Robert A. Heinlein - Nearly Complete Collection

Introduction

Contents (by Date of Publication)

Fiction

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"Misfit," *Astounding Science Fiction,* November 1939.
"Successful Operation", 1940
"Requiem," *Astounding Science Fiction,* January 1940.
"If This Goes On—," *Astounding Science Fiction,* February, March 1940.
" 'Let There Be Light,' " *Super Science Stones,* May, 1940 (under pseudonym Lyle Monroe).
"The Roads Must Roll," *Astounding Science Fiction,* June 1940.
"Coventry," *Astounding Science Fiction,* July 1940.
"Blowups Happen," *Astounding Science Fiction,* September 1940.
"The Devil Makes the Law," (AKA Magic, Inc) *Unknown,* September 1940, (under pseudonym Anson MacDonald).
"Sixth Column," *Astounding Science Fiction,* January, February, March 1941 (under pseudonym Anson MacDonald).
" '—And He Built a Crooked House—,' " *Astounding Science Fiction,* February 1941.
"Logic of Empire," *Astounding Science Fiction,* March 1941.
"Beyond Doubt," *Astonishing Stories,* April 1941 (under pseudonym Lyle Monroe and Elma Wentz).
"They," *Unknown,* April 1941.
"Universe," *Astounding Science Fiction,* May 1941.
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Introduction

Four point six million words written by Robert A Heinlein. What more do you need to know?

This release is everything I could find that Heinlein published. There are still a few minor works I couldn't track down, and if they turn up later I will release an updated version of Volume 1.

I'd like to thank everyone who has scanned and/or proofed some of Heinlein's writings, but I can't. For one thing, many of the proofed versions I found had no credits; for another many of the "proofed" versions I found were raw scans that weren't proofed. This release is an attempt to gather into one spot all of the e-texts out there with a common formatting scheme, and proofed to at least the point where they are readable. Credits have been removed from proofed versions I used in the interest of reducing clutter.

If you find anything by Heinlein that isn't here, email me at gorgon776@hotmail.com and let me know. I'd be delighted to add it to the release.

LifeLine

The chairman rapped loudly for order. Gradually the catcalls and boos died away as several self-appointed sergeants-at-arms persuaded a few hotheaded individuals to sit down. The speaker on the rostrum by the chairman seemed unaware of the disturbance. His bland, faintly insolent face was impassive. The chairman turned to the speaker, and addressed him, in a voice in which anger and annoyance were barely restrained.

“Doctor Pinero,”—the “Doctor” was faintly stressed—“I must apologize to you for the unseemly outburst during your remarks. I am surprised that my colleagues should so far forget the dignity proper to men of science as to interrupt a speaker, no matter,” he paused and set his mouth, “no matter how great the provocation.” Pinero smiled in his face, a smile that was in some way an open insult. The chairman visibly controlled his temper and continued, “I am anxious that the program be concluded decently and in order. I want you to finish your remarks. Nevertheless, I must ask you to refrain from affronting our intelligence with ideas that any educated man knows to be fallacious. Please confine yourself to your discovery—if you have made one.”

Pinero spread his fat white hands, palms down. “How can I possibly put a new idea into your heads, if I do not first remove your delusions?”

The audience stirred and muttered. Someone shouted from the rear of the hall, “Throw the charlatan out! We’ve had enough.” The chairman pounded his gavel.

“Gentlemen! Please!” Then to Pinero, “Must I remind you that you are not a member of this body, and that we did not invite you?”

Pinero’s eyebrows lifted. “So? I seem to remember an invitation on the letterhead of the Academy?”

The chairman chewed his lower lip before replying. “True. I wrote that invitation myself. But it was at the request of one of the trustees—a fine public-spirited gentleman, but not a scientist, not a member of the Academy.”

Pinero smiled his irritating smile. “So? I should have guessed. Old Bidwell, not so, of Amalgamated Life Insurance? And he wanted his trained seals to expose me as a fraud, yes? For if I can tell a man the day of his own death, no one will buy his pretty policies. But how can you expose me, if you will not listen to me first? Even supposing you had the wit to understand me? Bah! He has sent jackals to tear down a lion.” He deliberately turned his back on them. The muttering of the crowd swelled and took on a vicious tone. The chairman cried vainly for order. There arose a figure in the front row.

“Mister Chairman!”

The chairman grasped the opening and shouted, “Gentlemen! Doctor Van Rhein-Smitt has the floor.” The commotion died away.

The doctor cleared his throat, smoothed the forelock of his beautiful white hair, and thrust one hand into a side pocket of his smartly tailored trousers. He assumed his women’s-club manner.

“Mister Chairman, fellow members of the Academy of Science, let us have tolerance. Even a murderer has the right to say his say before the state exacts its tribute. Shall we do less? Even though one may be intellectually certain of the verdict? I grant Doctor Pinero every consideration that should be given by this august body to any unaffiliated colleague, even though”— he bowed slightly in Pinero’s direction—“we may not be familiar with the university which bestowed his degree. If what he has to say is false, it can not harm us. If what he has to say is true, we should know it.” His mellow cultivated voice rolled on, soothing and calming. “If the eminent doctor’s manner appears a trifle inurbane for our tastes, we must bear in mind that the doctor may be from a place, or a stratum, not so meticulous in these little matters. Now our good friend and benefactor has asked us to hear this person and carefully assess the merit of his claims. Let us do so with dignity and decorum.”

He sat down to a rumble of applause, comfortably aware that he had enhanced his reputation as an intellectual leader. Tomorrow the papers would again mention the good sense and persuasive personality of “America’s Handsomest University President”. Who knew? Perhaps old Bidwell would come through with that swimming pool donation.

When the applause had ceased, the chairman turned to where the center of the disturbance sat, hands folded over his little round belly, face serene.

“Will you continue, Doctor Pinero?”

“Why should I?”

The chairman shrugged his shoulders. “You came for that purpose.”

Pinero arose. “So true. So very true. But was I wise to come? Is there anyone here who has an open mind, who can stare a bare fact in the face without blushing? I think not. Even that so beautiful gentleman who asked you to hear me out has already judged me and condemned me. He seeks order, not truth. Suppose truth defies order, will he accept it? Will you? I think not. Still, if I do not speak, you will win your point by default. The little man in the street will think that you little men have exposed me, Pinero, as a hoaxer, a pretender. That does not suit my plans. I will speak."

“I will repeat my discovery. In simple language I have invented a technique to tell how long a man will live. I can give you advance billing of the Angel of Death. I can tell you when the Black Camel will kneel at your door. In five minutes time with my apparatus I can tell any of you how many grains of sand are still left in your hourglass.” He paused and folded his arms across his chest. For a moment no one spoke. The audience grew restless. Finally the chairman intervened.

“You aren’t finished, Doctor Pinero?”

“What more is there to say?”

“You haven’t told us how your discovery works.”

Pinero’s eyebrows shot up. “You suggest that I should turn over the fruits of my work for children to play with. This is dangerous knowledge, my friend. I keep it for the man who understands it, myself.” He tapped his chest.

“How are we to know that you have anything back of your wild claims?”

“So simple. You send a committee to watch me demonstrate. If it works, fine. You admit it and tell the world so. If it does not work, I am discredited, and will apologize. Even I, Pinero, will apologize.”

A slender stoop-shouldered man stood up in the back of the hall. The chair recognized him and he spoke:

“Mr. Chairman, how can the eminent doctor seriously propose such a course? Does he expect us to wait around for twenty or thirty years for some one to die and prove his claims?”

Pinero ignored the chair and answered directly:

“Pfui! Such nonsense! Are you so ignorant of statistics that you do not know that in any large group there is at least one who will die in the immediate future? I make you a proposition; let me test each one of you in this room and I will name the man who will die within the fortnight, yes, and the day and hour of his death.” He glanced fiercely around the room. “Do you accept?”

Another figure got to his feet, a portly man who spoke in measured syllables. “I, for one, can not countenance such an experiment. As a medical man, I have noted with sorrow the plain marks of serious heart trouble in many of our elder colleagues. If Doctor Pinero knows those symptoms, as he may, and were he to select as his victim one of their number, the man so selected would be likely to die on schedule, whether the distinguished speaker’s mechanical egg-timer works or not.”

Another speaker backed him up at once. “Doctor Shepard is right. Why should we waste time on voodoo tricks? It is my belief that this person who calls himself Doctor Pinero wants to use this body to give his statements authority. If we participate in this farce, we play into his hands. I don’t know what his racket is, but you can bet that he has figured out some way to use us for advertising for his schemes. I move, Mister Chairman, that we proceed with our regular business.”

The motion carried by acclamation, but Pinero did not sit down. Amidst cries of “Order! Order!” he shook his untidy head at them, and had his say:

“Barbarians! Imbeciles! Stupid dolts! Your kind have blocked the recognition of every great discovery since time began. Such ignorant canaille are enough to start Galileo spinning in his grave. That fat fool down there twiddling his elk’s tooth calls himself a medical man. Witch doctor would be a better term! That little baldheaded runt over there— You! You style yourself a philosopher, and prate about life and time in your neat categories. What do you know of either one? How can you ever learn when you won’t examine the truth when you have a chance? Bah!” He spat upon the stage. “You call this an Academy of Science. I call it an undertaker’s convention, interested only in embalming the ideas of your red-blooded predecessors.”

He paused for breath and was grasped on each side by two members of the platform committee and rushed out the wings. Several reporters arose hastily from the press table and followed him. The chairman declared the meeting adjourned.

The newspapermen caught up with him as he was going out by the stage door. He walked with a light springy step, and whistled a little tune. There was no trace of the belligerence he had shown a moment before. They crowded about him. “—How about an interview, doc?”

“What d'yu think of Modern Education?”

“You certainly told ‘em. What are your views on Life after Death?”

“Take off your hat, doc, and look at the birdie.”

He grinned at them all. “One at a time, boys, and not so fast. I used to be a newspaperman myself. How about coming up to my place, and we’ll talk about it?”

A few minutes later they were trying to find places to sit down in Pinero’s messy bed-living-room, and lighting his cigars. Pinero looked around and beamed. “What’ll it be, boys? Scotch, or Bourbon?” When that was taken care of he got down to business. “Now, boys, what do you want to know?”

“Lay it on the line, doc. Have you got something, or haven’t you?”

“Most assuredly I have something, my young friend.”

“Then tell us how it works. That guff you handed the profs won’t get you anywhere now.”

“Please, my dear fellow. It is my invention. I expect to make some money with it. Would you have me give it away to the first person who asks for it?”

“See here, doc, you’ve got to give us something if you expect to get a break in the morning papers. What do you use? A crystal ball?”

“No, not quite; Would you like to see my apparatus?”

“Sure. Now we are getting somewhere.”

He ushered them into an adjoining room, and waved his hand. “There it is, boys.” The mass of equipment that met their eyes vaguely resembled a medico’s office x-ray gear. Beyond the obvious fact that it used electrical power, and that some of the dials were calibrated in familiar terms, a casual inspection gave no clue to its actual use.

“What’s the principle, doc?”

Pinero pursed his lips and considered. “No doubt you are all familiar with the truism that life is electrical in nature? Well, that truism isn’t worth a damn, but it will help to give you an idea of the principle. You have also been told that time is a fourth dimension. Maybe you believe it, perhaps not. It has been said so many times that it has ceased to have any meaning. It is simply a cliche that windbags use to impress fools. But I want you to try to visualize it now and try to feel it emotionally.”

He stepped up to one of the reporters. “Suppose we take you as an example. Your name is Rogers, is it not? Very well, Rogers, you are a spacetime event having duration four ways. You are not quite six feet tall, you are about twenty inches wide and perhaps ten inches thick. In time, there stretches behind you more of this spacetime event reaching to perhaps nineteen-sixteen, of which we see a cross-section here at right angles to the time axis, and as thick as the present. At the far end is a baby, smelling of sour milk and drooling its breakfast on its bib. At the other end lies, perhaps, an old man someplace in the nineteen-eighties. Imagine this spacetime event which we call Rogers as a long pink worm, continuous through the years, one end at his mother’s womb, the other at the grave. It stretches past us here and the cross-section we see appears as a single discrete body. But that is illusion. There is physical continuity to this pink worm, enduring through the years. As a matter of fact there is physical continuity in this concept to the entire race, for these pink worms branch off from other pink worms. In this fashion the race is like a vine whose branches intertwine and send out shoots. Only by taking a cross-section of the vine would we fall into the error of believing that the shootlets were discrete individuals."

He paused and looked around at their faces. One of them, a dour hardbitten chap, put in a word.

"That's all very pretty, Pinero, if true, but where does that get you?"

Pinero favored him with an unresentful smile. "Patience, my friend. I asked you to think of life as electrical. Now think of our long pink worm as a conductor of electricity. You have heard, perhaps, of the fact that electrical engineers can, by certain measurements, predict the exact location of a break in a trans-Atlantic cable without ever leaving the shore. I do the same with our pink worms. By applying my instruments to the cross-section here in this room I can tell where the break occurs, that is to say, when death takes place. Or, if you like, I can reverse the connections and tell you the date of your birth. But that is uninteresting; you already know it."

The dour individual sneered. "I've caught you, doc. If what you said about the race being like a vine of pink worms is true, you can't tell birthdays because the connection with the race is continuous at birth. Your electrical conductor reaches on back through the mother into a man's remotest ancestors."

Pinero beamed. "True, and clever, my friend. But you have pushed the analogy too far. It is not done in the precise manner in which one measures the length of an electrical conductor. In some ways it is more like measuring the length of a long corridor by bouncing an echo off the far end. At birth there is a sort of twist in the corridor, and, by proper calibration, I can detect the echo from that twist. There is just one case in which I can get no determinant reading; when a woman is actually carrying a child, I can't sort out her lifeline from that of the unborn infant."

"Let's see you prove it."

"Certainly, my dear friend. Will you be a subject?"

One of the others spoke up. "He's called your bluff, Luke. Put up, or shut up."

"I'm game. What do I do?"

"First write the date of your birth on a sheet of paper, and hand it to one of your colleagues."

Luke complied. "Now what?"

"Remove your outer clothing and step upon these scales. Now tell me, were you ever very much thinner, or very much fatter, than you are now. No? What did you weigh at birth? Ten pounds? A fine bouncing baby boy. They don't come so big any more."

“What is all this flubdubbery?”

“I am trying to approximate the average cross-section of our long pink conductor, my dear Luke. Now will you seat yourself here. Then place this electrode in your mouth. No, it will not hurt you; the voltage is quite low, less than one micro-volt, but I must have a good connection.” The doctor left him and went behind his apparatus, where he lowered a hood over his head before touching his controls. Some of the exposed dials came to life and a low humming came from the machine. It stopped and the doctor popped out of his little hideaway.

“I get sometime in February, nineteen-twelve. Who has the piece of paper with the date?”

It was produced and unfolded. The custodian read, “February 22nd, 1912.”

The stillness that followed was broken by a voice from the edge of the little group. “Doc, can I have another drink?”

The tension relaxed, and several spoke at once, “Try it on me, doc.”

“Me first, doc, I’m an orphan and really want to know.”

“How about it, doc. Give us all a little loose play.”

He smilingly complied, ducking in and out of the hood like a gopher from its hole. When they all had twin slips of paper to prove the doctor’s skill, Luke broke a long silence:

“How about showing how you predict death, Pinero.”

“If you wish. Who will try it?”

No one answered. Several of them nudged Luke forward. “Go ahead, smart guy. You asked for it.” He allowed himself to be seated in the chair. Pinero changed some of the switches, then entered the hood. When the humming ceased, he came out, rubbing his hands briskly together.

“Well, that’s all there is to see, boys. Got enough for a story?”

“Hey, what about the prediction? When does Luke get his ‘thirty’?”

Luke faced him. “Yes, how about it? What’s your answer?”

Pinero looked pained. “Gentlemen, I am surprised at you. I give that information for a fee. Besides, it is a professional confidence. I never tell anyone but the client who consults me.”

“I don’t mind. Go ahead and tell them.”

“I am very sorry. I really must refuse. I agreed only to show you how, not to give the results.”

Luke ground the butt of his cigaret into the floor. “It’s a hoax, boys. He probably looked up the age of every reporter in town just to be ready to pull this. It won’t wash, Pinero.”

Pinero gazed at him sadly. “Are you married, my friend?”

“No.”

“Do you have any one dependent on you? Any close relatives?”

“No. Why, do you want to adopt me?”

Pinero shook his head sadly. “I am very sorry for you, my dear Luke. You will die before tomorrow.”

“SCIENCE MEET ENDS IN RIOT”

“SAVANTS SAPS SAYS SEER”

“DEATH PUNCHES TIMECLOCK”

“SCRIBE DIES PER DOC’S DOPE”

“‘HOAX’ CLAIMS SCIENCE HEAD”

“… within twenty minutes of Pinero’s strange prediction, Timons was struck by a falling sign while walking down Broadway toward the offices of the *Daily Herald* where he was employed.

“Doctor Pinero declined to comment but confirmed the story that he had predicted Timons’ death by means of his so-called chronovitameter. Chief of Police Roy…”

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Legal goitre

To whom it may concern, greetings; I, John Cabot Winthrop III, of the firm Winthrop, Winthrop, Ditmars & Winthrop, Attorneys-at-Law, do affirm that Hugo Pinero of this city did hand to me ten thousand dollars in lawful money of the United States, and instruct me to place it in escrow with a chartered bank of my selection with escrow instructions as follows:

The entire bond shall be forfeit, and shall forthwith be paid to the first client of Hugo Pinero and/or Sands of Time, Inc. who shall exceed his life tenure as predicted by Hugo Pinero by one per centum, or to the estate of the first client who shall fail of such predicted tenure in a like amount, whichever occurs first in point of time.

I do further affirm that I have this day placed this bond in escrow with the above related instructions with the Equitable-First National Bank of this city.

Subscribed and sworn, John Cabot Winthrop III

Subscribed and sworn to before me this 2nd day of April, 1951. Albert M. Swanson

Notary Public in and for this county and state
My commission expires June 17, 1951.

"Good evening Mr. and Mrs. Radio Audience, let's go to Press! Flash! Hugo Pinero, The Miracle Man from Nowhere, has made his thousandth death prediction without a claimant for the reward he posted for anyone who catches him failing to call the turn. With thirteen of his clients already dead it is mathematically certain that he has a private line to the main office of the Old Man with the Scythe. That is one piece of news I don't want to know before it happens. Your Coast-to-Coast Correspondent will *not* be a client of Prophet Pinero…"

The judge's watery baritone cut through the stale air of the courtroom. "Please, Mr. Weems, let us return to our muttons. This court granted your prayer for a temporary restraining order, and now you ask that it be made permanent. In rebuttal, Mr. Pinero claims that you have presented no cause and asks that the injunction be lifted, and that I order your client to cease from attempts to interfere with what Pinero describes as a simple lawful business. As you are not addressing a jury, please omit the rhetoric and tell me in plain language why I should not grant his prayer."

Mr. Weems jerked his chin nervously, making his flabby grey dewlap drag across his high stiff collar, and resumed:

"May it please the honorable court, I represent the public—"

"Just a moment. I thought you were appearing for Amalgamated Life Insurance."

"I am, Your Honor, in a formal sense. In a wider sense I represent several other of the major assurance, fiduciary, and financial institutions; their stockholders, and policy holders, who constitute a majority of the citizenry. In addition we feel that we protect the interests of the entire population; unorganized, inarticulate, and otherwise unprotected."

"I thought that I represented the public," observed the judge drily. "I am afraid I must regard you as appearing for your client-of-record. But continue; what is your thesis?"

The elderly barrister attempted to swallow his Adam's apple, then began again. "Your Honor, we contend that there are two separate reasons why this injunction should be made permanent, and, further, that each reason is sufficient alone. In the first place, this person is engaged in the practice of soothsaying, an occupation proscribed both in common law and statute. He is a common fortune teller, a vagabond charlatan who preys on the gullibility of the public. He is cleverer than the ordinary gypsy palm-reader, astrologer, or table tipper, and to the same extent more dangerous. He makes false claims of modern scientific methods to give a spurious dignity to his thaumaturgy. We have here in court leading representatives of the

Academy of Science to give expert witness as to the absurdity of his claims.

"In the second place, even if this person's claims were true-granting for the sake of argument such an absurdity"—Mr. Weems permitted himself a thin-lipped smile—"we contend that his activities are contrary to the public interest in general, and unlawfully injurious to the interests of my client in particular. We are prepared to produce numerous exhibits with the legal custodians to prove that this person did publish, or cause to have published, utterances urging the public to dispense with the priceless boon of life insurance to the great detriment of their welfare and to the financial damage of my client."

Pinero arose in his place. "Your Honor, may I say a few words?"

"What is it?"

"I believe I can simplify the situation if permitted to make a brief analysis."

"Your Honor," cut in Weems, "this is most irregular."

"Patience, Mr. Weems. Your interests will be protected. It seems to me that we need more light and less noise in this matter. If Dr. Pinero can shorten the proceedings by speaking at this time, I am inclined to let him. Proceed, Dr. Pinero."

"Thank you, Your Honor. Taking the last of Mr. Weems' points first, I am prepared to stipulate that I published the utterances he speaks of—"

"One moment, Doctor. You have chosen to act as your own attorney. Are you sure you are competent to protect your own interests?"

"I am prepared to chance it, Your Honor. Our friends here can easily prove what I stipulate."

"Very well. You may proceed."

"I will stipulate that many persons have cancelled life insurance policies as a result thereof, but I challenge them to show that anyone so doing has suffered any loss or damage therefrom. It is true that the Amalgamated has lost business through my activities, but that is the natural result of my discovery, which has made their policies as obsolete as the bow and arrow. If an injunction is granted on that ground, I shall set up a coal oil lamp factory, then ask for an injunction against the Edison and General Electric companies to forbid them to manufacture incandescent bulbs.

"I will stipulate that I am engaged in the business of making predictions of death, but I deny that I am practicing magic, black, white, or rainbow colored. If to make predictions by methods of scientific accuracy is illegal, then the actuaries of the Amalgamated have been guilty for years in that they predict the exact percentage that will die each year in any given large group. I predict death retail;

the Amalgamated predicts it wholesale. If their actions are legal, how can mine be illegal?

“I admit that it makes a difference whether I can do what I claim, or not; and I will stipulate that the so-called expert witnesses from the Academy of Science will testify that I cannot. But they know nothing of my method and cannot give truly expert testimony on it—”

“Just a moment, Doctor. Mr. Weems, is it true that your expert witnesses are not conversant with Dr. Pinero’s theory and methods?”

Mr. Weems looked worried. He drummed on the table top, then answered, “Will the Court grant me a few moments indulgence?”

“Certainly.”

Mr. Weems held a hurried whispered consultation with his cohorts, then faced the bench. “We have a procedure to suggest, Your Honor. If Dr. Pinero will take the stand and explain the theory and practice of his alleged method, then these distinguished scientists will be able to advise the Court as to the validity of his claims.”

The judge looked inquiringly at Pinero, who responded, “I will not willingly agree to that. Whether my process is true or false, it would be dangerous to let it fall into the hands of fools and quacks—” he waved his hand at the group of professors seated in the front row, paused and smiled maliciously “—as these gentlemen know quite well. Furthermore it is not necessary to know the process in order to prove that it will work. Is it necessary to understand the complex miracle of biological reproduction in order to observe that a hen lays eggs? Is it necessary for me to re-educate this entire body of self-appointed custodians of wisdom—cure them of their ingrown superstitions—in order to prove that my predictions are correct? There are but two ways of forming an opinion in science. One is the scientific method; the other, the scholastic. One can judge from experiment, or one can blindly accept authority. To the scientific mind, experimental proof is all important and theory is merely a convenience in description, to be junked when it no longer fits. To the academic mind, authority is everything and facts are junked when they do not fit theory laid down by authority.

“It is this point of view—academic minds clinging like oysters to disproved theories—that has blocked every advance of knowledge in history. I am prepared to prove my method by experiment, and, like Galileo in another court, I insist, ‘It still moves!’

“Once before I offered such proof to this same body of self-styled experts, and they rejected it. I renew my offer; let me measure the life lengths of the members of the Academy of Science. Let them appoint a committee to judge the results. I will seal my findings in two sets of envelopes; on the outside of each envelope in one set will appear the name of a member, on the inside the date of his death. In the other envelopes I will place names, on the outside I will place dates. Let the committee place the envelopes in a vault, then meet from time to time to open the appropriate envelopes. In such a large body of men some deaths may be expected, if Amalgamated actuaries can be trusted, every week or two. In such a fashion they will accumulate data very rapidly to prove that Pinero is a liar, or no."

He stopped, and pushed out his little chest until it almost caught up with his little round belly. He glared at the sweating savants. "Well?"

The judge raised his eyebrows, and caught Mr. Weems' eye. "Do you accept?"

"Your Honor, I think the proposal highly improper—"

The judge cut him short. "I warn you that I shall rule against you if you do not accept, or propose an equally reasonable method of arriving at the truth."

Weems opened his mouth, changed his mind, looked up and down the faces of learned witnesses, and faced the bench. "We accept, Your Honor."

"Very well. Arrange the details between you. The temporary injunction is lifted, and Dr. Pinero must not be molested in the pursuit of his business. Decision on the petition for permanent injunction is reserved without prejudice pending the accumulation of evidence. Before we leave this matter I wish to comment on the theory implied by you, Mr. Weems, when you claimed damage to your client. There has grown up in the minds of certain groups in this country the notion that because a man or corporation has made a profit out of the public for a number of years, the government and the courts are charged with the duty of guaranteeing such profit in the future, even in the face of changing circumstances and contrary public interest. This strange doctrine is not supported by statute nor common law. Neither individuals nor corporations have any right to come into court and ask that the clock of history be stopped, or turned back, for their private benefit. That is all."

Bidwell grunted in annoyance. "Weems, if you can't think up anything better than that, Amalgamated is going to need a new chief attorney. It's been ten weeks since you lost the injunction, and that little wart is coining money hand over fist. Meantime every insurance firm in the country is going broke. Hoskins, what's our loss ratio?"

"It's hard to say, Mr. Bidwell. It gets worse every day. We've paid off thirteen big policies this week; all of them taken out since Pinero started operations."

A spare little man spoke up. "I say, Bidwell, we aren't accepting any new applications for United until we have time to check and be sure that they have not consulted Pinero. Can't we afford to wait until the scientists show him up?"

Bidwell snorted. "You blasted optimist! They won't show him up. Aldrich, can't you face a fact? The fat little blister has got something; how I don't know. This is a fight to the finish. If we wait, we're licked." He threw his cigar into a cuspidor, and bit savagely into a fresh one. "Clear out of here, all of you! I'll handle this my own way. You too, Aldrich. United may wait, but Amalgamated won't."

Weems cleared his throat apprehensively. "Mr. Bidwell, I trust you will consult with me before embarking on any major change in policy?"

Bidwell grunted. They filed out. When they were all gone and the door closed, Bidwell snapped the switch of the interoffice announcer. "O.K.; send him in."

The outer door opened; a slight dapper figure stood for a moment at the threshold. His small dark eyes glanced quickly about the room before he entered, then he moved up to Bidwell with a quick soft tread. He spoke to Bidwell in a flat emotionless voice. His face remained impassive except for the live animal eyes. "You wanted to talk to me?"

"Yes."

"What's the proposition?"

"Sit down, and we'll talk."

Pinero met the young couple at the door of his inner office.

"Come in, my dears, come in. Sit down. Make yourselves at home. Now tell me, what do you want of Pinero? Surely such young people are not anxious about the final roll call?"

The boy's honest young face showed slight confusion. "Well, you see, Dr. Pinero, I'm Ed Hartley and this is my wife, Betty. We're going to have-that is, Betty is expecting a baby and, well—"

Pinero smiled benignly. "I understand. You want to know how long you will live in order to make the best possible provision for the youngster. Quite wise. Do you both want readings, or just yourself?"

The girl answered, "Both of us, we think."

Pinero beamed at her. "Quite so. I agree. Your reading presents certain technical difficulties at this time, but I can give you some information now, and more later after your baby arrives. Now come into my laboratory, my dears, and we'll commence." He rang for their case histories, then showed them into his workshop. "Mrs. Hartley first, please. If you will go behind that screen and remove your shoes and your outer clothing, please. Remember, I am an old man, whom you are consulting as you would a physician."

He turned away and made some minor adjustments of his apparatus. Ed nodded to his wife who slipped behind the screen and reappeared almost at once, clothed in two wisps of silk. Pinero glanced up, noted her fresh young prettiness and her touching shyness.

“This way, my dear. First we must weigh you. There. Now take your place on the stand. This electrode in your mouth. No, Ed, you mustn’t touch her while she is in the circuit. It won’t take a minute. Remain quiet.”

He dove under the machine’s hood and the dials sprang into life. Very shortly he came out with a perturbed look on his face. “Ed, did you touch her?”

“No, Doctor.” Pinero ducked back again, remained a little longer. When he came out this time, he told the girl to get down and dress. He turned to her husband.

“Ed, make yourself ready.”

“What’s Betty’s reading, Doctor?”

“There is a little difficulty. I want to test you first.”

When he came out from taking the youth’s reading, his face was more troubled than ever. Ed inquired as to his trouble. Pinero shrugged his shoulders, and brought a smile to his lips.

“Nothing to concern you, my boy. A little mechanical misadjustment, I think. But I shan’t be able to give you two your readings today. I shall need to overhaul my machine. Can you come back tomorrow?”

“Why, I think so. Say, I’m sorry about your machine. I hope it isn’t serious.”

“It isn’t, I’m sure. Will you come back into my office, and visit for a bit?”

“Thank you, Doctor. You are very kind.”

“But Ed, I’ve got to meet Ellen.”

Pinero turned the full force of his personality on her. “Won’t you grant me a few moments, my dear young lady? I am old and like the sparkle of young folk’s company. I get very little of it. Please.” He nudged them gently into his office, and seated them. Then he ordered lemonade and cookies sent in, offered them cigarets, and lit a cigar.

Forty minutes later Ed listened entranced, while Betty was quite evidently acutely nervous and anxious to leave, as the doctor spun out a story concerning his adventures as a young man in Tierra del Fuego. When the doctor stopped to relight his cigar, she stood up.

“Doctor, we really must leave. Couldn’t we hear the rest tomorrow?”

“Tomorrow? There will not be time tomorrow.”

“But you haven’t time today either. Your secretary has rung five times.”

“Couldn’t you spare me just a few more minutes?”

“I really can’t today, doctor. I have an appointment. There is someone waiting for me."

"There is no way to induce you?"

"I'm afraid not. Come, Ed."

After they had gone, the doctor stepped to the window and stared out over the city. Presently he picked out two tiny figures as they left the office building. He watched them hurry to the corner, wait for the lights to change, then start across the street. When they were part way across, there came the scream of a siren. The two little figures hesitated, started back, stopped, and turned. Then the car was upon them. As the car slammed to a stop, they showed up from beneath it, no longer two figures, but simply a limp unorganized heap of clothing.

Presently the doctor turned away from the window. Then he picked up his phone, and spoke to his secretary.

"Cancel my appointments for the rest of the day… No… No one… I don't care; cancel them."

Then he sat down in his chair. His cigar went out. Long after dark he held it, still unlighted.

Pinero sat down at his dining table and contemplated the gourmet's luncheon spread before him. He had ordered this meal with particular care, and had come home a little early in order to enjoy it fully.

Somewhat later he let a few drops of Fiori d'Alpini roll around his tongue and trickle down his throat. The heavy fragrant syrup warmed his mouth, and reminded him of the little mountain flowers for which it was named. He sighed. It had been a good meal, an exquisite meal and had justified the exotic liqueur. His musing was interrupted by a disturbance at the front door. The voice of his elderly maidservant was raised in remonstrance. A heavy male voice interrupted her. The commotion moved down the hall and the dining room door was pushed open.

"Madonna! Non si puo entrare! The Master is eating!"

"Never mind, Angela. I have time to see these gentlemen. You may go." Pinero faced the surly-faced spokesman of the intruders. "You have business with me; yes?"

"You bet we have. Decent people have had enough of your damned nonsense."

"And so?"

The caller did not answer at once. A smaller dapper individual moved out from behind him and faced Pinero.

"We might as well begin." The chairman of the committee placed a key in the lockbox and opened it. "Wenzell, will you help me pick out today's envelopes?" He was interrupted by a touch on his arm.

"Dr. Baird, you are wanted on the telephone."

"Very well. Bring the instrument here."

When it was fetched he placed the receiver to his ear. "Hello… Yes; speaking… What?… No, we have heard nothing… Destroyed the machine, you say… Dead! How?… No! No statement. None at all… Call me later…"

He slammed the instrument down and pushed it from him.

"What's up?" "Who's dead now?"

Baird held up one hand. "Quiet, gentlemen, please! Pinero was murdered a few moments ago at his home."

"Murdered?!"

"That isn't all. About the same time vandals broke into his office and smashed his apparatus."

No one spoke at first. The committee members glanced around at each other. No one seemed anxious to be the first to comment.

Finally one spoke up. "Get it out."

"Get what out?"

"Pinero's envelope. It's in there too. I've seen it."

Baird located it and slowly tore it open. He unfolded the single sheet of paper, and scanned it.

"Well? Out with it!"

"One thirteen p.m.—today."

They took this in silence.

Their dynamic calm was broken by a member across the table from Baird reaching for the lockbox. Baird interposed a hand.

"What do you want?"

"My prediction—it's in there—we're all in there."

"Yes, yes. We're all in here. Let's have them."

Baird placed both hands over the box. He held the eye of the man opposite him but did not speak. He licked his lips. The corner of his mouth twitched. His hands shook. Still he did not speak. The man opposite relaxed back into his chair.

"You're right, of course," he said.

"Bring me that waste basket." Baird's voice was low and strained but steady.

He accepted it and dumped the litter on the rug. He placed the tin basket on the table before him. He tore half a dozen envelopes across, set a match to them, and dropped them in the basket. Then he started tearing a double handful at a time, and fed the fire steadily. The smoke made him cough, and tears ran out of his smarting eyes. Someone got up and opened a window. When he was through, he pushed the basket away from him, looked down, and spoke.

"I'm afraid I've ruined this table top."

Misfit

"… for the purpose of conserving and improving our interplanetary resources, and providing useful, healthful occupations for the youth of this planet."

Excerpt from the enabling act, H.R. 7118, setting up the Cosmic Construction Corps.

"Attention to muster!" The parade ground voice of a First Sergeant of Space Marines cut through the fog and drizzle of a nasty New Jersey morning. "As your names are called, answer 'Here', step forward with your baggage, and embark. Atkins!"

"Here!"

"Austin!"

"Hyar!"

"Ayres!"

"Here!"

One by one they fell out of ranks, shouldered the hundred and thirty pounds of personal possessions allowed them, and trudged up the gangway. They were young—none more than twentytwo—in some cases luggage outweighed the owner.

"Kaplan!"

"Here!"

"Keith!"

"Heah!"

"Libby!"

"Here!" A thin gangling blonde had detached himself from the line, hastily wiped his nose, and grabbed his belongings. He slung a fat canvas bag over his shoulder, steadied it, and lifted a suitcase with his free hand. He started for the companionway in an unsteady dog trot. As he stepped on the gangway his suitcase swung against his knees. He staggered against a short wiry form dressed in the powder-blue of the Space Navy. Strong fingers grasped his arm and checked his fall.

"Steady, son. Easy does it." Another hand readjusted the canvas bag.

"*Oh*, excuse me, uh"—the embarrassed youngster automatically counted the four bands of silver braid below the shooting star —"Captain. I didn't—"

"Bear a hand and get aboard, son."

"Yes, sir."

The passage into the bowels of the transport was gloomy. When the lad's eyes adjusted he saw a gunner's mate wearing the brassard of a Master-at-Arms, who hooked a thumb towards an open airtight door.

"In there. Find your locker and wait by it." Libby hurried to obey. Inside he found a jumble of baggage and men in a wide low-ceilinged compartment. A line of glowtubes ran around the junction of bulkhead and ceiling and trisected the overhead; the soft roar of blowers made a background to the voices of his shipmates. He picked his way through heaped luggage and located his locker, seven-ten, on the far wall outboard. He broke the seal on the combination lock, glanced at the combination, and opened it. The locker was very small, the middle of a tier of three. He considered what he should keep in it. A loudspeaker drowned out the surrounding voices and demanded his attention:

"Attention! Man all space details; first section. Raise ship in twelve minutes. Close airtight doors. Stop blowers at minus two minutes. Special orders for passengers; place all gear on deck, and lie down on red signal light. Remain down until release is sounded. Masters-at-Arms check compliance."

The gunner's mate popped in, glanced around and immediately commenced supervising rearrangement of the baggage. Heavy items were lashed down. Locker doors were closed. By the time each boy had found a place on the deck and the Master-at-Arms had okayed the pad under his head, the glowtubes turned red and the loudspeaker brayed out.

"All hands—Up Ship! Stand by for acceleration." The Master-at-Arms hastily reclined against two cruise bags, and watched the room. The blowers sighed to a stop. There followed two minutes of dead silence. Libby felt his heart commence to pound. The two minutes stretched interminably. Then the deck quivered and a roar like escaping high-pressure steam beat at his ear drums. He was suddenly very heavy and a weight lay across his chest and heart. An indefinite time later the glowtubes flashed white, and the announcer bellowed:

"Secure all getting underway details; regular watch, first section." The blowers droned into life. The Master-at-Arms stood up, rubbed his buttocks and pounded his arms, then said:

"Okay, boys." He stepped over and undogged the airtight door to the passageway. Libby got up and blundered into a bulkhead, nearly falling. His legs and arms had gone to sleep, besides which he felt alarmingly light, as if he had sloughed off at least half of his inconsiderable mass.

For the next two hours he was too busy to think, or to be homesick. Suitcases, boxes, and bags had to be passed down into the lower hold and lashed against angular acceleration. He located and learned how to use a waterless water closet. He found his assigned bunk and learned that it was his only eight hours in twenty-four; two other boys had the use of it too. The three sections ate in three shifts, nine shifts in all—twenty-four youths and a master-at-arms at one long table which jam-filled a narrow compartment off the galley.

After lunch Libby restowed his locker. He was standing before it, gazing at a photograph which he intended to mount on the inside of the locker door, when a command filled the compartment:

"Attention!"

Standing inside the door was the Captain flanked by the Master-at-Arms. The Captain commenced to speak. "At rest, men. Sit down. McCoy, tell control to shift this compartment to smoke filter." The gunner's mate hurried to the communicator on the bulkhead and spoke into it in a low tone. Almost at once the hum of the blowers climbed a half-octave and stayed there. "Now light up if you like. I'm going to talk to you.

"You boys are headed out on the biggest thing so far in your lives. From now on you're men, with one of the hardest jobs ahead of you that men have ever tackled. What we have to do is part of a bigger scheme. You, and hundreds of thousands of others like you, are going out as pioneers to fix up the solar system so that human beings can make better use of it.

"Equally important, you are being given a chance to build yourselves into useful and happy citizens of the Federation. For one reason or another you weren't happily adjusted back on Earth. Some of you saw the jobs you were trained for abolished by new inventions. Some of you got into trouble from not knowing what to do with the modern leisure. In any case you were misfits. Maybe you were called bad boys and had a lot of black marks chalked up against you.

"But everyone of you starts even today. The only record you have in this ship is your name at the top of a blank sheet of paper. It's up to you what goes on that page.

"Now about our job—We didn't get one of the easy repair-and-recondition jobs on the Moon, with weekends at Luna City, and all the comforts of home. Nor did we draw a high-gravity planet where a man can eat a full meal and expect to keep it down. Instead we've got to go out to Asteroid HS-5388 and turn it into Space Station E-M3. She has no atmosphere at all, and only about two per cent Earth-surface gravity. We've got to play human fly on her for at least six months, no girls to date, no television, no recreation that you don't devise yourselves, and hard work every day. You'll get space sick, and so homesick you can taste it, and agoraphobia. If you aren't careful you'll get ray-burnt. Your stomach will act up, and you'll wish to God you'd never enrolled.

"But if you behave yourself, and listen to the advice of the old spacemen, you'll come out of it strong and healthy, with a little credit stored up in the bank, and a lot of knowledge and experience that you wouldn't get in forty years on Earth. You'll be men, and you'll know

it.

"One last word. It will be pretty uncomfortable to those that aren't used to it. Just give the other fellow a little consideration, and you'll get along all right. If you have any complaint and can't get satisfaction any other way, come see me. Otherwise, that's all. Any questions?"

One of the boys put up his hand. "Captain?" he enquired timidly.

"Speak up, lad, and give your name."

"Rogers, sir. Will we be able to get letters from home?"

"Yes, but not very often. Maybe every month or so. The chaplain will carry mail, and any inspection and supply ships."

The ship's loudspeaker blatted out, "All hands! Free flight in ten minutes. Stand by to lose weight." The Master-at-Arms supervised the rigging of grablines. All loose gear was made fast, and little cellulose bags were issued to each man. Hardly was this done when Libby felt himself get light on his feet—a sensation exactly like that experienced when an express elevator makes a quick stop on an upward trip, except that the sensation continued and became more intense. At first it was a pleasant novelty, then it rapidly became distressing. The blood pounded in his ears, and his feet were clammy and cold. His saliva secreted at an abnormal rate. He tried to swallow, choked, and coughed. Then his stomach shuddered and contracted with a violent, painful, convulsive reflex and he was suddenly, disastrously nauseated. After the first excruciating spasm, he heard McCoy's voice shouting.

"Hey! Use your sick-kits like I told you. Don't let that stuff get in the blowers." Dimly Libby realized that the admonishment included him. He fumbled for his cellulose bag just as a second temblor shook him, but he managed to fit the bag over his mouth before the eruption occurred. When it subsided, he became aware that he was floating near the overhead and facing the door. The chief Master-at-Arms slithered in the door and spoke to McCoy.

"How are you making out?"

"Well enough. Some of the boys missed their kits."

"Okay. Mop it up. You can use the starboard lock." He swam out.

McCoy touched Libby's arm. "Here, Pinkie, start catching them butterflies." He handed him a handful of cotton waste, then took another handful himself and neatly dabbed up a globule of the slimy filth that floated about the compartment. "Be sure your sick-kit is on tight. When you get sick, just stop and wait until it's over." Libby imitated him as best as he could. In a few minutes the room was free of the worst of the sickening debris. McCoy looked it over, and spoke:

"Now peel off them dirty duds, and change your kits. Three or four of you bring everything along to the starboard lock."

At the starboard spacelock, the kits were put in first, the inner door closed, and the outer opened. When the inner door was opened again the kits were gone-blown out into space by the escaping air. Pinkie addressed McCoy, “Do we have to throw away our dirty clothes too?”

“Huh uh, we’ll just give them a dose of vacuum. Take ‘em into the lock and stop ’em to those hooks on the bulkheads. Tie ‘em tight.”

This time the lock was left closed for about five minutes. When the lock was opened the garments were bone dry—all the moisture boiled out by the vacuum of space. All that remained of the unpleasant rejecta was a sterile powdery residue. McCoy viewed them with approval. “They’ll do. Take them back to the compartment. Then brush them—hard—in front of the exhaust blowers.”

The next few days were an eternity of misery. Homesickness was forgotten in the all-engrossing wretchedness of spacesickness. The Captain granted fifteen minutes of mild acceleration for each of the nine meal periods, but the respite accentuated the agony. Libby would go to a meal, weak and ravenously hungry. The meal would stay down until free flight was resumed, then the sickness would hit him all over again.

On the fourth day he was seated against a bulkhead, enjoying the luxury of a few remaining minutes of weight while the last shift ate, when McCoy walked in and sat down beside him. The gunner’s mate fitted a smoke filter over his face and lit a cigarette. He inhaled deeply and started to chat.

“How’s it going, bud?”

“All right, I guess. This spacesickness— Say, McCoy, how do you ever get used to it?”

“You get over it in time. Your body acquires new reflexes, so they tell me. Once you learn to swallow without choking, you’ll be all right. You even get so you like it. It’s restful and relaxing. Four hours sleep is as good as ten.”

Libby shook his head dolefully. “I don’t think I’ll ever get used to it.”

‘Yes, you will. You’d better anyway. This here asteroid won’t have any surface gravity to speak of; the Chief Quartermaster says it won’t run over two per cent Earth normal. That ain’t enough to cure spacesickness. And there won’t be any way to accelerate for meals either.“

Libby shivered and held his head between his hands.

Locating one asteroid among a couple of thousand is not as easy as finding Trafalgar Square in London—especially against the star-crowded backdrop of the galaxy. You take off from Terra with its orbital speed of about nineteen miles per second. You attempt to settle into a composite conoid curve that will not only intersect the orbit of the tiny fast-moving body, but also accomplish an exact rendezvous.

Asteroid HS-5388, ‘Eighty-eight,’ lay about two and two-tenths astronomical units out from the sun, a little more than two hundred million miles; when the transport took off it lay beyond the sun better than three hundred million miles. Captain Doyle instructed the navigator to plot the basic ellipsoid to tack in free flight around the sun through an elapsed distance of some three hundred and forty million miles. The principle involved is the same as used by a hunter to wing a duck in flight by ‘leading’ the bird in flight. But suppose that you face directly into the sun as you shoot; suppose the bird can not be seen from where you stand, and you have nothing to aim by but some old reports as to how it was flying when last seen?

On the ninth day of the passage Captain Doyle betook himself to the chart room and commenced punching keys on the ponderous integral calculator. Then he sent his orderly to present his compliments to the navigator and to ask him to come to the chartroom. A few minutes later a tall heavyset form swam through the door, steadied himself with a grabline and greeted the captain.

“Good morning, Skipper.”

“Hello, Blackie.” The Old Man looked up from where he was strapped into the integrator’s saddle. “I’ve been checking your corrections for the meal time accelerations.”

“It’s a nuisance to have a bunch of groundlubbers on board, sir.”

“Yes, it is, but we have to give those boys a chance to eat, or they couldn’t work when we got there. Now I want to decelerate starting about ten o’clock, ship’s time. What’s our eight o’clock speed and coordinates?”

The Navigator slipped a notebook out of his tunic. “Three hundred fifty-eight miles per second; course is right ascension fifteen hours, eight minutes, twenty-seven seconds, declination minus seven degrees, three minutes; solar distance one hundred and ninety-two million four hundred eighty thousand miles. Our radial position is twelve degrees above course, and almost dead on course in R.A. Do you want Sol’s coordinates?”

“No, not now.” The captain bent over the calculator, frowned and chewed the tip of his tongue as he worked the controls. “I want you to kill the acceleration about one million miles inside Eighty-eight’s orbit. I hate to waste the fuel, but the belt is full of junk and this damned rock is so small that we will probably have to run a search curve. Use twenty hours on deceleration and commence changing course to port after eight hours. Use normal asymptotic approach. You should have her in a circular trajectory abreast of Eighty-eight, and paralleling her orbit by six o’clock tomorrow morning. I shall want to be called at three.”

“Aye aye, sir.”

"Let me see your figures when you get 'em. I'll send up the order book later."

The transport accelerated on schedule. Shortly after three the Captain entered the control room and blinked his eyes at the darkness. The sun was still concealed by the hull of the transport and the midnight blackness was broken only by the dim blue glow of the instrument dials, and the crack of light from under the chart hood. The Navigator turned at the familiar tread.

"Good morning, Captain."

"Morning, Blackie. In sight yet?"

"Not yet. We've picked out half a dozen rocks, but none of them checked."

"Any of them close?"

"Not uncomfortably. We've overtaken a little sand from time to time."

"That can't hurt us—not on a stern chase like this. If pilots would only realize that the asteroids flow in fixed directions at computable speeds nobody would come to grief out here." He stopped to light a cigarette. "People talk about space being dangerous. Sure, it used to be; but I don't know of a case in the past twenty years that couldn't be charged up to some fool's recklessness."

"You're right, Skipper. By the way, there's coffee under the chart hood."

"Thanks; I had a cup down below." He walked over by the lookouts at stereoscopes and radar tanks and peered up at the star-flecked blackness. Three cigarettes later the lookout nearest him called out.

"Light ho!"

"Where away?"

His mate read the exterior dials of the stereoscope. "Plus point two, abaft one point three, slight drift astern." He shifted to radar and added, "Range seven nine oh four three."

"Does that check?"

"Could be, Captain. What is her disk?" came the Navigator's muffled voice from under the hood. The first lookout hurriedly twisted the knobs of his instrument, but the Captain nudged him aside.

"I'll do this, son." He fitted his face to the double eye guards and surveyed a little silvery sphere, a tiny moon. Carefully he brought two illuminated crosshairs up until they were exactly tangent to the upper and lower limbs of the disk. "Mark!"

The reading was noted and passed to the Navigator, who shortly ducked out from under the hood.

"That's our baby, Captain."

"Good."

“Shall I make a visual triangulation?”

“Let the watch officer do that. You go down and get some sleep. I’ll ease her over until we get close enough to use the optical range finder.”

“Thanks, I will.”

Within a few minutes the word had spread around the ship that Eighty-eight had been sighted. Libby crowded into the starboard troop deck with a throng of excited mess mates and attempted to make out their future home from the view port. McCoy poured cold water on their excitement.

“By the time that rock shows up big enough to tell anything about it with your naked eye we’ll all be at our grounding stations. She’s only about a hundred miles thick, yuh know.”

And so it was. Many hours later the ship’s announcer shouted:

“All hands! Man your grounding stations. Close all airtight doors. Stand by to cut blowers on signal.”

McCoy forced them to lie down throughout the ensuing two hours. Short shocks of rocket blasts alternated with nauseating weightlessness. Then the blowers stopped and check valves clicked into their seats. The ship dropped free for a few moments—a final quick blast—five seconds of falling, and a short, light, grinding bump. A single bugle note came over the announcer, and the blowers took up their hum.

McCoy floated lightly to his feet and poised, swaying, on his toes. “All out, troops—this is the end of the line.”

A short chunky lad, a little younger than most of them, awkwardly emulated him, and bounded toward the door, shouting as he went, “Come on, fellows! Let’s go outside and explore!”

The Master-at-Arms squelched him. “Not so fast, kid. Aside from the fact that there is no air out there, go right ahead. You’ll freeze to death, burn to death, and explode like a ripe tomato. Squad leader, detail six men to break out spacesuits. The rest of you stay here and stand by.”

The working party returned shortly loaded down with a couple of dozen bulky packages. Libby let go the four he carried and watched them float gently to the deck. McCoy unzipped the envelope from one suit, and lectured them about it.

“This is a standard service type, general issue, Mark IV, Modification 2.” He grasped the suit by the shoulders and shook it out so that it hung like a suit of long winter underwear with the helmet lolling helplessly between the shoulders of the garment. “It’s self-sustaining for eight hours, having an oxygen supply for that period. It also has a nitrogen trim tank and a carbon-dioxide-water-vapor cartridge filter.”

He droned on, repeating practically verbatim the description and instructions given in training regulations. McCoy knew these suits like his tongue knew the roof of his mouth; the knowledge had meant his life on more than one occasion.

"The suit is woven from glass fibre laminated with non-volatile asbesto-cellutite. The resulting fabric is flexible, very durable; and will turn all rays normal to solar space outside the orbit of Mercury. It is worn over your regular clothing, but notice the wire-braced accordion pleats at the major joints. They are so designed as to keep the internal volume of the suit nearly constant when the arms or legs are bent. Otherwise the gas pressure inside would tend to keep the suit blown up in an erect position, and movement while wearing the suit would be very fatiguing.

"The helmet is moulded from a transparent silicone, leaded and polarized against too great ray penetration. It may be equipped with external visors of any needed type. Orders are to wear not less than a number-two amber on this body. In addition, a lead plate covers the cranium and extends on down the back of the suit, completely covering the spinal column.

"The suit is equipped with two-way telephony. If your radio quits, as these have a habit of doing, you can talk by putting your helmets in contact. Any questions?"

"How do you eat and drink during the eight hours?"

"You don't stay in 'em any eight hours. You can carry sugar balls in a gadget in the helmet, but you boys will always eat at the base. As for water, there's a nipple in the helmet near your mouth which you can reach by turning your head to the left. It's hooked to a builtin canteen. But don't drink any more water when you're wearing a suit than you have to. These suits ain't got any plumbing."

Suits were passed out to each lad, and McCoy illustrated how to don one. A suit was spread supine on the deck, the front zipper that stretched from neck to crotch was spread wide and one sat down inside this opening, whereupon the lower part was drawn on like long stockings. Then a wiggle into each sleeve and the heavy flexible gauntlets were smoothed and patted into place. Finally an awkward backward stretch of the neck with shoulders hunched enabled the helmet to be placed over the head.

Libby followed the motions of McCoy and stood up in his suit. He examined the zipper which controlled the suit's only opening. It was backed by two soft gaskets which would be pressed together by the zipper and sealed by internal air pressure. Inside the helmet a composition mouthpiece for exhalation led to the filter.

McCoy bustled around, inspecting them, tightening a belt here and there, instructing them in the use of the external controls. Satisfied, he reported to the conning room that his section had received basic instruction and was ready to disembark. Permission was received to take them out for thirty minutes acclimatization.

Six at a time, he escorted them through the air lock, and out on the surface of the planetoid. Libby blinked his eyes at the unaccustomed luster of sunshine on rock. Although the sun lay more than two hundred million miles away and bathed the little planet with radiation only one fifth as strong as that lavished on mother Earth, nevertheless the lack of atmosphere resulted in a glare that made him squint. He was glad to have the protection of his amber visor. Overhead the sun, shrunk to penny size, shone down from a dead black sky in which unwinking stars crowded each other and the very sun itself.

The voice of a mess mate sounded in Libby's earphones, "Jeepers! That horizon looks close. I'll bet it ain't more'n a mile away."

Libby looked out over the flat bare plain and subconsciously considered the matter. "It's less," he commented, "than a third of a mile away."

"What the hell do you know about it, Pinkie? And who asked you, anyhow?"

Libby answered defensively, "As a matter of fact, it's one thousand six hundred and seventy feet, figuring that my eyes are five feet three inches above ground level."

"Nuts. Pinkie, you are always trying to show off how much you think you know."

"Why, I am not," Libby protested. "If this body is a hundred miles thick and as round as it looks: why, naturally the horizon *has* to be just that far away."

"Says *who*?"

McCoy interrupted.

"Pipe down! Libby is a lot nearer right than you were."

"He is exactly right," put in a strange voice. "I had to look it up for the navigator before I left control."

"Is that so?"—McCoy's voice again—"If the Chief Quartermaster says you're right, Libby, you're right. How did you know?"

Libby flushed miserably. "I—I don't know. That's the only way it could be."

The gunner's mate and the quartermaster stared at him but dropped the subject.

By the end of the 'day' (ship's time, for Eighty-eight had a period of eight hours and thirteen minutes), work was well under way. The transport had grounded close by a low range of hills. The Captain selected a little bowl-shaped depression in the hills, some thousand feet long and half as broad, in which to establish a permanent camp. This was to be roofed over, sealed, and an atmosphere provided.

In the hill between the ship and the valley, quarters were to be excavated; dormitories, mess hall, officers' quarters, sick bay, recreation room, offices, store rooms, and so forth. A tunnel must be bored through the hill, connecting the sites of these rooms, and connecting with a ten foot airtight metal tube sealed to the ship's portside airlock. Both the tube and tunnel were to be equipped with a continuous conveyor belt for passengers and freight.

Libby found himself assigned to the roofing detail. He helped a metalsmith struggle over the hill with a portable atomic heater, difficult to handle because of a mass of eight hundred pounds, but weighing here only sixteen pounds. The rest of the roofing detail were breaking out and preparing to move by hand the enormous translucent tent which was to be the 'sky' of the little valley.

The metalsmith located a landmark on the inner slope of the valley, set up his heater, and commenced cutting a deep horizontal groove or step in the rock. He kept it always at the same level by following a chalk mark drawn along the rock wall. Libby enquired how the job had been surveyed so quickly.

"Easy," he was answered, "two of the quartermasters went ahead with a transit, leveled it just fifty feet above the valley floor, and clamped a searchlight to it. Then one of 'em ran like hell around the rim, making chalk marks at the height at which the beam struck."

"Is this roof going to be just fifty feet high?"

"No, it will average maybe a hundred. It bellies up in the middle from the air pressure."

"Earth normal?"

"Half Earth normal."

Libby concentrated for an instant, then looked puzzled. "But look — This valley is a thousand feet long and better than five hundred wide. At half of fifteen pounds per square inch, and allowing for the arch of the roof, that's a load of one and an eighth billion pounds. What fabric can take that kind of a load?"

"Cobwebs."

"Cobwebs?"

"Yeah, cobwebs. Strongest stuff in the world, stronger than the best steel. Synthetic spider silk. This gauge we're using for the roof has a tensile strength of four thousand pounds a running inch."

Libby hesitated a second, then replied, "I see. With a rim about eighteen hundred thousand inches around, the maximum pull at the point of anchoring would be about six hundred and twenty-five pounds per inch. Plenty safe margin."

The metalsmith leaned on his tool and nodded. "Something like that. You're pretty quick at arithmetic, aren't you, bud?"

Libby looked startled. "I just like to get things straight."

They worked rapidly around the slope, cutting a clean smooth groove to which the ‘cobweb’ could be anchored and sealed. The white-hot lava spewed out of the discharge vent and ran slowly down the hillside. A brown vapor boiled off the surface of the molten rock, arose a few feet and sublimed almost at once in the vacuum to white powder which settled to the ground. The metalsmith pointed to the powder.

“That stuff ‘ud cause silicosis if we let it stay there, and breathed it later.”

“What do you do about it?”

“Just clean it out with the blowers of the air conditioning plant.”

Libby took this opening to ask another question. “Mister—?”

“Johnson’s my name. No mister necessary.”

“Well, Johnson, where do we get the air for this whole valley, not to mention the tunnels? I figure we must need twenty-five million cubic feet or more. Do we manufacture it?”

“Naw, that’s too much trouble. We brought it with us.”

“On the transport?”

“Uh huh, at fifty atmospheres.”

Libby considered this. “I see—that way it would go into a space eighty feet on a side.”

“Matter of fact it’s in three specially constructed holds—giant air bottles. This transport carried air to Ganymede. I was in her then—a recruit, but in the air gang even then.”

In three weeks the permanent camp was ready for occupancy and the transport cleared of its cargo. The storerooms bulged with tools and supplies. Captain Doyle had moved his administrative offices underground, signed over his command to his first officer, and given him permission to proceed on ‘duty assigned’—in this case; return to Terra with a skeleton crew.

Libby watched them take off from a vantage point on the hillside. An overpowering homesickness took possession of him. Would he ever go home? He honestly believed at the time that he would swap the rest of his life for thirty minutes each with his mother and with Betty.

He started down the hill toward the tunnel lock. At least the transport carried letters to them, and with any luck the chaplain would be by soon with letters from Earth. But tomorrow and the days after that would be no fun. He had enjoyed being in the air gang, but tomorrow he went back to his squad. He did not relish that—the boys in his squad were all right, he guessed, but he just could not seem to fit in.

This company of the C.C.C. started on its bigger job; to pockmark Eighty-eight with rocket tubes so that Captain Doyle could push this hundred-mile marble out of her orbit and herd her in to a new orbit between Earth and Mars, to be used as a space station—a refuge for ships in distress, a haven for life boats, a fueling stop, a naval outpost.

Libby was assigned to a heater in pit H-16. It was his business to carve out carefully calculated emplacements in which the blasting crew then set off the minute charges which accomplished the major part of the excavating. Two squads were assigned to H-16, under the general supervision of an elderly marine gunner. The gunner sat on the edge of the pit, handling the plans, and occasionally making calculations on a circular slide rule which hung from a lanyard around his neck.

Libby had just completed a tricky piece of cutting for a three-stage blast, and was waiting for the blasters, when his phones picked up the gunner's instructions concerning the size of the charge. He pressed his transmitter button.

"Mr. Larsen! You've made a mistake!"

"Who said that?"

"This is Libby. You've made a mistake in the charge. If you set off that charge, you'll blow this pit right out of the ground, and us with it."

Marine Gunner Larsen spun the dials on his slide rule before replying, "You're all het up over nothing, son. That charge is correct."

"No, I'm not, sir," Libby persisted, "you've multiplied where you should have divided."

"Have you had any experience at this sort of work?"

"No, sir."

Larsen addressed his next remark to the blasters. "Set the charge."

They started to comply. Libby gulped, and wiped his lips with his tongue. He knew what he had to do, but he was afraid. Two clumsy stiff-legged jumps placed him beside the blasters. He pushed between them and tore the electrodes from the detonator. A shadow passed over him as he worked, and Larsen floated down beside him. A hand grasped his arm.

"You shouldn't have done that, son. That's direct disobedience of orders. I'll have to report you." He commenced reconnecting the firing circuit.

Libby's ears burned with embarrassment, but he answered back with the courage of timidity at bay. "I had to do it, sir. You're still wrong."

Larsen paused and ran his eyes over the dogged face. "Well—it's a waste of time, but I don't like to make you stand by a charge you're afraid of. Let's go over the calculation together."

Captain Doyle sat at his ease in his quarters, his feet on his desk. He stared at a nearly empty glass tumbler.

"That's good beer, Blackie. Do you suppose we could brew some more when it's gone?"

"I don't know, Cap'n. Did we bring any yeast?"

"Find out, will you?" He turned to a massive man who occupied the third chair. "Well, Larsen, I'm glad it wasn't any worse than it was."

"What beats me, Captain, is how I could have made such a mistake. I worked it through twice. If it had been a nitro explosive, I'd have known off hand that I was wrong. If this kid hadn't had a hunch, I'd have set it off."

Captain Doyle clapped the old warrant officer on the shoulder. "Forget it, Larsen. You wouldn't have hurt anybody; that's why I require the pits to be evacuated even for small charges. These isotope explosives are tricky at best. Look what happened in pit A-9. Ten days' work shot with one charge, and the gunnery officer himself approved that one. But I want to see this boy. What did you say his name was?"

"Libby, A. J."

Doyle touched a button on his desk. A knock sounded at the door. A bellowed "Come in!" produced a stripling wearing the brassard of Corpsman Mate-of-the-Deck.

"Have Corpsman Libby report to me."

"Aye aye, sir."

Some few minutes later Libby was ushered into the Captain's cabin. He looked nervously around, and noted Larsen's presence, a fact that did not contribute to his peace of mind. He reported in a barely audible voice, "Corpsman Libby, sir."

The Captain looked him over. "Well, Libby, I hear that you and Mr. Larsen had a difference of opinion this morning. Tell me about it."

"I—I didn't mean any harm, sir."

"Of course not. You're not in any trouble; you did us all a good turn this morning. Tell me, how did you know that the calculation was wrong? Had any mining experience?"

"No, sir. I just saw that he had worked it out wrong."

"But how?"

Libby shuffled uneasily. "Well, sir, it just seemed wrong—It didn't fit."

"Just a second, Captain. May I ask this young man a couple of questions?" It was Commander "Blackie" Rhodes who spoke.

"Certainly. Go ahead."

"Are you the lad they call 'Pinkie'?"

Libby blushed. "Yes, sir."

"I've heard some rumors about this boy." Rhodes pushed his big frame out of his chair, went over to a bookshelf, and removed a thick volume. He thumbed through it, then with open book before him, started to question Libby.

"What's the square root of ninety-five?"

"Nine and seven hundred forty-seven thousandths."

"What's the cube root?"

"Four and five hundred sixty-three thousandths."

"What's its logarithm?"

"Its what, sir?"

"Good Lord, can a boy get through school today without knowing?"

The boy's discomfort became more intense. "I didn't get much schooling, sir. My folks didn't accept the Covenant until Pappy died, and we had to."

"I see. A logarithm is a name for a power to which you raise a given number, called the base, to get the number whose logarithm it is. Is that clear?"

Libby thought hard. "I don't quite get it, sir."

"I'll try again. If you raise ten to the second power—square it—it gives one hundred. Therefore the logarithm of a hundred to the base ten is two. In the same fashion the logarithm of a thousand to the base ten is three. Now what is the logarithm of ninety-five?"

Libby puzzled for a moment. "I can't make it come out even. It's a fraction."

"That's okay."

"Then it's one and nine hundred seventy-eight thousandths—just about."

Rhodes turned to the Captain. "I guess that about proves it, sir."

Doyle nodded thoughtfully. "Yes, the lad seems to have intuitive knowledge of arithmetical relationships. But let's see what else he has."

"I am afraid we'll have to send him back to Earth to find out properly."

Libby caught the gist of this last remark. "Please, sir, you aren't going to send me home? Maw 'ud be awful vexed with me."

"No, no, nothing of the sort. When your time is up, I want you to be checked over in the psychometrical laboratories. In the meantime I wouldn't part with you for a quarter's pay. I'd give up smoking first. But let's see what else you can do."

In the ensuing hour the Captain and the Navigator heard Libby: one, deduce the Pythagorean proposition; two, derive Newton's laws of motion and Kepler's laws of ballistics from a statement of the conditions in which they obtained; three, judge length, area, and volume by eye with no measurable error. He had jumped into the idea of relativity and non-rectilinear spacetime coritinua, and was beginning to pour forth ideas faster than he could talk, when Doyle held up a hand.

"That's enough, son. You'll be getting a fever. You run along to bed now, and come see me in the morning. I'm taking you off field work."

"Yes, sir."

"By the way, what is your full name?"

"Andrew Jackson Libby, sir."

"No, your folks wouldn't have signed the Covenant. Good night."

"Good night, sir."

After he had gone, the two older men discussed their discovery.

"How do you size it up, Captain?"

"Well, he's a genius, of course—one of those wild talents that will show up once in a blue moon. I'll turn him loose among my books and see how he shapes up. Shouldn't wonder if he were a page-at-aglance reader, too."

"It beats me what we turn up among these boys—and not a one of 'em any account back on Earth."

Doyle nodded. "That was the trouble with these kids. They didn't feel needed."

Eighty-eight swung some millions of miles further around the sun. The pockmarks on her face grew deeper, and were lined with durite, that strange close-packed laboratory product which (usually) would confine even atomic disintegration. Then Eighty-eight received a series of gentle pats, always on the side headed along her course. In a few weeks' time the rocket blasts had their effect and Eighty-eight was plunging in an orbit toward the sun.

When she reached her station one and threetenths the distance from the sun of Earth's orbit, she would have to be coaxed by another series of pats into a circular orbit. Thereafter she was to be known as E-M3, Earth-Mars Space Station Spot Three.

Hundreds of millions of miles away two other C.C.C. companies were inducing two other planetoids to quit their age-old grooves and slide between Earth and Mars to land in the same orbit as Eighty-eight. One was due to ride this orbit one hundred and twenty degrees ahead of Eighty-eight, the other one hundred and twenty degrees behind. When E-M1, E-M2, and E-M3 were all on station no hard-pushed traveler of the spaceways on the Earth-Mars passage would ever again find himself far from land—or rescue.

During the months that Eighty-eight fell free toward the sun, Captain Doyle reduced the working hours of his crew and turned them to the comparatively light labor of building a hotel and converting the little roofed-in valley into a garden spot. The rock was broken down into soil, fertilizers applied, and cultures of anaerobic bacteria planted. Then plants, conditioned by thirty-odd generations of low gravity at Luna City, were set out and tenderly cared for. Except for the low gravity, Eighty-eight began to feel like home.

But when Eighty-eight approached a tangent to the hypothetical future orbit of E-M3, the company went back to maneuvering routine, watch on and watch off, with the Captain living on black coffee and catching catnaps in the plotting room.

Libby was assigned to the ballistic calculator, three tons of thinking metal that dominated the plotting room. He loved the big machine. The Chief Fire Controlman let him help adjust it and care for it. Libby subconsciously thought of it as a person—his own kind of person.

On the last day of the approach, the shocks were more frequent. Libby sat in the righthand saddle of the calculator and droned out the predictions for the next salvo, while gloating over the accuracy with which the machine tracked. Captain Doyle fussed around nervously, occasionally stopping to peer over the Navigator's shoulder. Of course the figures were right, but what if it didn't work? No one had ever moved so large a mass before. Suppose it plunged on and on—and on. Nonsense! It couldn't. Still he would be glad when they were past the critical speed.

A marine orderly touched his elbow. "Helio from the Flagship, sir."

"Read it."

"Flag to Eighty-eight; private message, Captain Doyle; am lying off to watch you bring her in.—Kearney."

Doyle smiled. Nice of the old geezer. Once they were on station, he would invite the Admiral to ground for dinner and show him the park.

Another salvo cut loose, heavier than any before. The room trembled violently. In a moment the reports of the surface observers commenced to trickle in. "Tube nine, clear!"

"Tube ten, clear!"

But Libby's drone ceased.

Captain Doyle turned on him. "What's the matter, Libby? Asleep? Call the polar stations. I have to have a parallax."

"Captain—" The boy's voice was low and shaking.

"Speak up, man!"

"Captain—the machine isn't tracking."

"Spiers!" The grizzled head of the Chief Fire Controlman appeared from behind the calculator.

"I'm already on it, sir. Let you know in a moment."

He ducked back again. After a couple of long minutes he reappeared. "Gyros tumbled. It's a twelve hour calibration job, at least."

The Captain said nothing, but turned away, and walked to the far end of the room. The Navigator followed him with his eyes. He returned, glanced at the chronometer, and spoke to the Navigator.

"Well, Blackie, if I don't have that firing data in seven minutes, we're sunk. Any suggestions?"

Rhodes shook his head without speaking.

Libby timidly raised his voice. "Captain—"

Doyle jerked around. "Yes?"

"The firing data is tube thirteen, seven point six three; tube twelve, six point nine oh; tube fourteen, six point eight nine."

Doyle studied his face. "You sure about that, son?"

"It *has* to be that, Captain."

Doyle stood perfectly still. This time he did not look at Rhodes but stared straight ahead. Then he took a long pull on his cigarette, glanced at the ash, and said in a steady voice,

"Apply the data. Fire on the bell."

Four hours later, Libby was still droning out firing data, his face grey, his eyes closed. Once he had fainted but when they revived him he was still muttering figures. From time to time the Captain and the Navigator relieved each other, but there was no relief for him.

The salvos grew closer together, but the shocks were lighter.

Following one faint salvo, Libby looked up, stared at the ceiling, and spoke.

"That's all, Captain."

"Call polar stations!"

The reports came back promptly, "Parallax constant, sidereal-solar rate constant."

The Captain relaxed into a chair. "Well, Blackie, we did it—thanks to Libby!" Then he noticed a worried, thoughtful look spread over Libby's face. "What's the matter, man? Have we slipped up?"

"Captain, you know you said the other day that you wished you had Earth-normal gravity in the park?"

"Yes. What of it?"

"If that book on gravitation you lent me is straight dope, I think I know a way to accomplish it."

The Captain inspected him as if seeing him for the first time. "Libby, you have ceased to amaze me. Could you stop doing that sort of thing long enough to dine with the Admiral?"

"Gee, Captain, that would be swell!"

The audio circuit from Communications cut in.

"Helio from Flagship: 'Well done, Eighty-eight.'"

Doyle smiled around at them all. "That's pleasant confirmation."

The audio brayed again.

"Helio from Flagship: 'Cancel last signal, stand by for correction.'"

A look of surprise and worry sprang into Doyle's face—then the audio continued:

"Helio from Flagship: 'Well done, E-M3.'"

The Roads Must Roll

"Who makes the roads roll?"

The speaker stood still on the rostrum and waited for his audience to answer him. The reply came in scattered shouts that cut through the ominous, discontented murmur of the crowd.

"We do!" - "We do!" - "Damn right!"

"Who does the dirty work 'down inside' - so that Joe Public can ride at his ease?"

This time it was a single roar, "We do!"

The speaker pressed his advantage, his words tumbling out in a rasping torrent. He leaned toward the crowd, his eyes picking out individuals at whom to fling his words. "What makes business? The roads! How do they move the food they eat? The roads! How do they get to work? The roads! How do they get home to their wives? The roads!" He paused for effect, then lowered his voice. "Where would the public be if you boys didn't keep them roads rolling? Behind the eight ball and everybody knows it. But do they appreciate it? Pfui! Did we ask for too much? Were our demands unreasonable? 'The right to resign whenever we want to.' Every working stiff in other lines of work has that. 'The same pay as the engineers.' Why not? Who are the real engineers around here? D'yuh have to be a cadet in a funny little hat before you can learn to wipe a bearing, or jack down a rotor? Who earns his keep: The 'gentlemen' in the control offices, or the boys 'down inside'? What else do we ask? 'The right to elect our own engineers.' Why the hell not? Who's competent to pick engineers? The technicians? - or some damn, dumb examining board that's never been 'down inside', and couldn't tell a rotor bearing from a field coil?"

He changed his pace with natural art, and lowered his voice still further. "I tell you, brother, it's time we quit fiddlin' around with petitions to the Transport Commission, and use a little direct action. Let 'em yammer about democracy; that's a lot of eye wash - we've got the power, and we're the men that count!"

A man had risen in the back of the hall while the speaker was haranguing. He spoke up as the speaker paused. "Brother Chairman," he drawled, "may I stick in a couple of words?"

"You are recognized, Brother Harvey."

"What I ask is: what's all the shootin' for? We've got the highest hourly rate of pay of any mechanical guild, full insurance and retirement, and safe working conditions, barring the chance of going deaf." He pushed his anti-noise helmet further back from his ears. He was still in dungarees, apparently just up from standing watch. "Of course we have to give ninety days notice to quit a job, but, cripes, we knew that when we signed up. The roads have got to roll - they can't stop every time some lazy punk gets bored with his billet.

"And now Soapy-" The crack of the gavel cut him short. "Pardon me, I mean Brother Soapy - tells us how powerful we are, and how we should go in for direct action. Rats! Sure we could tie up the roads, and play hell with the whole community-but so could any screwball with a can of nitroglycerine, and he wouldn't have to be a technician to do it, neither.

"We aren't the only frogs in the puddle. Our jobs are important, sure, but where would we be without the farmers - or the steel workers - or a dozen other trades and professions?"

He was interrupted by a sallow little man with protruding upper teeth, who said, "Just a minute, Brother Chairman, I'd like to ask Brother Harvey a question," then turned to Harvey and inquired in a sly voice, "Are you speaking for the guild, Brother - or just for yourself? Maybe you don't believe in the guild? You wouldn't by any chance be" - he stopped and slid his eyes up and down Harvey's lank frame - "a spotter, would you?"

Harvey looked over his questioner as if he had found something filthy in a plate of food. "Sikes," he told him, "if you weren't a runt, I'd stuff your store teeth down your throat. I helped found this guild. I was on strike in 'sixty-six. Where were you in 'sixty-six? With the finks?"

The chairman's gavel pounded. "There's been enough of this," he said. "Nobody who knows anything about the history of this guild doubts the loyalty of Brother Harvey. We'll continue with the regular order of business." He stopped to clear his throat. "Ordinarily we don't open our floor to outsiders, and some of you boys have expressed a distaste for some of the engineers we work under, but there is one engineer we always like to listen to whenever he can get away from his pressing duties. I guess maybe it's because he's had dirt under his nails the same as us. Anyhow, I present at this time Mr. Shorty Van Kleeck-"

A shout from the floor stopped him. "Brother Van Kleeck!"

"O.K.-Brother Van Kleeck, Chief Deputy Engineer of this roadtown."

"Thanks, Brother Chairman." The guest speaker came briskly forward, and grinned expansively at the crowd, seeming to swell under their approval. "Thanks, Brothers. I guess our chairman is right. I always feel more comfortable here in the Guild Hall of the Sacramento Sector - or any guild hail, for that matter - than I do in the engineers' dubhouse. Those young punk cadet engineers get in my hair. Maybe I should have gone to one of the fancy technical institutes, so I'd have the proper point of view, instead of coming up from 'down inside'.

"Now about those demands of yours that the Transport Commission just threw back in your face - Can I speak freely?"

"Sure you can, Shorty!" - "You can trust us!"

"Well, of course I shouldn't say anything, but I can't help but understand how you feel. The roads are the big show these days, and you are the men that make them roll. It's the natural order of things that your opinions should be listened to, and your desires met. One would think that even politicians would be bright enough to see that. Sometimes, lying awake at night, I wonder why we technicians don't just take things over, and-"

"Your wife is calling, Mr. Gaines."

"Very well." He picked up the handset and turned to the visor screen.

"Yes, darling, I know I promised, but ... You're perfectly right, darling, but Washington has especially requested that we show Mr. Blekinsop anything be wants to see. I didn't know he was arriving today.... No, I can't turn him over to a subordinate. It wouldn't be courteous. He's Minister of Transport for Australia. I told you that.... Yes, darling, I know that courtesy begins at home, but the roads must roll. It's my job; you knew that when you married me. And this is part of my job. That's a good girl. We'll positively have breakfast together. Tell you what, order horses and a breakfast pack and we'll make it a picnic. I'll meet you in Bakersfield - usual place.... Goodbye, darling. Kiss Junior goodnight for me."

He replaced the handset on the desk whereupon the pretty, but indignant, features of his wife faded from the visor screen. A young woman came into his office. As she opened the door she exposed momentarily the words printed on its outer side; "DIEGO-RENO ROADTOWN, Office of the Chief Engineer." He gave her a harassed glance.

"Oh, it's you. Don't marry an engineer, Dolores, marry an artist. They have more home life."

"Yes, Mr. Gaines. Mr. Blekinsop is here, Mr. Gaines."

"Already? I didn't expect him so soon. The Antipodes ship must have grounded early."

"Yes, Mr. Gaines."

"Dolores, don't you ever have any emotions?"

"Yes, Mr. Gaines."

"Hmmm, it seems incredible, but you are never mistaken. Show

Mr. Blekinsop in."

"Very good, Mr. Gaines."

Larry Gaines got up to greet his visitor. Not a particularly impressive little guy, he thought, as they shook hands and exchanged formal amenities. The rolled umbrella, the bowler hat were almost too good to be true.

An Oxford accent partially masked the underlying clipped, flat, nasal twang of the native Australian. "It's a pleasure to have you here, Mr. Blekinsop, and I hope we can make your stay enjoyable."

The little man smiled. "I'm sure it will be. This is my first visit to your wonderful country. I feel at home already. The eucalyptus trees, you know, and the brown hills-"

"But your trip is primarily business?"

"Yes, yes. My primary purpose is to study your roadcities, and report to my government on the advisability of trying to adapt your startling American methods to our social problems Down Under. I thought you understood that such was the reason I was sent to you."

"Yes, 1 did, in a general way. I don't know just what it is that you wish to find out. I suppose that you have heard about our road towns, how they came about, how they operate, and so forth."

"I've read a good bit, true, but I am not a technical man, Mr. Gaines, not an engineer. My field is social and political. I want to see how this remarkable technical change has affected your people. Suppose you tell me about the roads as if I were entirely ignorant. And I will ask questions."

"That seems a practical plan. By the way, how many are there in your party?"

"Just myself. I sent my secretary on to Washington."

"I see." Gaines glanced at his wrist watch. "It's nearly dinner time. Suppose we run up to the Stockton strip for dinner. There is a good Chinese restaurant up there that I'm partial to. It will take us about an hour and you can see the ways in operation while we ride."

"Excellent."

Gaines pressed a button on his desk, and a picture formed on a large visor screen mounted on the opposite wall. It showed a strong-boned, angular young man seated at a semicircular control desk, which was backed by a complex instrument board. A cigarette was tucked in one corner of his mouth.

The young man glanced up, grinned, and waved from the screen. "Greetings and salutations, Chief. What can I do for you?"

"Hi, Dave. You've got the evening watch, eh? I'm running up to the Stockton sector for dinner. Where's Van Kleeck?"

"Gone to a meeting somewhere. He didn't say."

"Anything to report?"

"No, sir. The roads are rolling, and all the little people are going ridey-ridey home to their dinners."

"O.K.-keep 'em rolling."

"They'll roll, Chief."

Gaines snapped off the connection and turned to Blekinsop. "Van Kleeck is my chief deputy. I wish he'd spend more time on the road and less on politics. Davidson can handle things, however. Shall we go?"

They glided down an electric staircase, and debauched on the walkway which bordered the northbound five mile-an-hour strip. After skirting a stairway trunk marked OVERPASS TO SOUTHBOUND ROAD, they paused at the edge of the first strip. "Have you ever ridden a conveyor strip before?" Gaines inquired. "It's quite simple. Just remember to face against the motion of the strip as you get on."

They threaded their way through homeward-bound throngs, passing from strip to strip. Down the center of the twenty-mile-an-hour strip ran a glassite partition which reached nearly to the spreading roof. The Honorable Mister Blekinsop raised his eyebrows inquiringly as

he looked at it.

"Oh, that?" Gaines answered the unspoken inquiry as he slid back a panel door and ushered his guest through.

"That's a wind break. If we didn't have some way of separating the air currents over the strips of different speeds, the wind would tear our clothes off on the hundred-mile-an-hour strip." He bent his head to Blekinsop's as he spoke, in order to cut through the rush of air against the road surfaces, the noise of the crowd, and the muted roar of the driving mechanism concealed beneath the moving strips. The combination of noises inhibited further conversation as they proceeded toward the middle of the roadway. After passing through three more wind screens located at the forty, sixty, and eighty-mile-an-hour strips respectively, they finally reached the maximum speed strip, the hundred-mile-an-hour strip, which made the round trip, San Diego to Reno and back, in twelve hours.

Blekinsop found himself on a walkway twenty feet wide facing another partition. Immediately opposite him an illuminated show window proclaimed:

JAKE'S STEAK HOUSE No. 4
The Fastest Meal on the Fastest Road!
"To dine on the fly Makes the miles roll by!!"

"Amazing!" said Mr. Blekinsop. "It would be like dining in a tram. Is this really a proper restaurant?"

"One of the best. Not fancy, but sound."

"Oh, I say, could we-"

Gaines smiled at him. "You'd like to try it, wouldn't you, sir?"

"I don't wish to interfere with your plans-"

"Quite all right. I'm hungry myself, and Stockton is a long hour away. Let's go in."

Gaines greeted the manageress as an old friend. "Hello, Mrs. McCoy. How are you tonight?"

"If it isn't the chief himself! It's a long time since we've had the pleasure of seeing your face." She led them to a booth somewhat detached from the crowd of dining commuters. "And will you and your friend be having dinner?"

"Yes, Mrs. McCoy-suppose you order for us-but be sure it includes one of your steaks."

"Two inches thick-from a steer that died happy." She glided away, moving her fat frame with surprising grace.

With sophisticated foreknowledge of the chief engineer's needs, Mrs. McCoy had left a portable telephone at the table. Gaines plugged it in to an accommodation jack at the side of the booth, and dialed a number.

"Hello-Davidson? Dave, this is the chief. I'm in Jake's beanery number four for supper. You can reach me by calling ten-six-six."

He replaced the handset, and Blekinsop inquired politely: "Is it necessary for you to be available at all times?"

"Not strictly necessary," Gaines told him, "but I feel safer when I am in touch. Either Van Kleeck, or myself, should be where the senior engineer of the watch - that's Davidson this shift - can get hold of us in a pinch. If it's a real emergency, I want to be there, naturally."

"What would constitute a real emergency?"

"Two things, principally. A power failure on the rotors would bring the road to a standstill, and possibly strand millions of people a hundred miles, or more, from their homes. If it happened during a rush hour we would have to evacuate those millions from the road-not too easy to do."

"You say millions-as many as that?"

"Yes, indeed. There are twelve million people dependent on this roadway, living and working in the buildings adjacent to it, or within five miles of each side."

The Age of Power blends into the Age of Transportation almost imperceptibly, but two events stand out as landmarks in the change: the achievement of cheap sun power and the installation of the first mechanized road.

The power resources of oil and coal of the United States had - save for a few sporadic outbreaks of common sense - been shamefully wasted in their development all through the first half of the twentieth century. Simultaneously, the automobile, from its humble start as a one-lunged horseless carriage, grew into a steel-bodied monster of over a hundred horsepower and capable of making more than a hundred miles an hour. They boiled over the countryside, like yeast in ferment. In 1955 it was estimated that there was a motor vehicle for every two persons in the United States.

They contained the seeds of their own destruction. Eighty million steel juggernauts, operated by imperfect human beings at high speeds, are more destructive than war. In the same reference year the premiums paid for compulsory liability and property damage insurance by automobile owners exceeded in amount the sum paid that year to purchase automobiles. Safe driving campaigns were chronic phenomena, but were mere pious attempts to put Humpty-Dumpty together again. It was not physically possible to drive safely in those crowded metropolises. Pedestrians were sardonically divided into two classes, the quick, and the dead.

But a pedestrian could be defined as a man who had found a place to park his car. The automobile made possible huge cities, then choked those same cities to death with their numbers. In 1900 Herbert George Wells pointed out that the saturation point in the size of a city might be mathematically predicted in terms of its transportation facilities. From a standpoint of speed alone the automobile made possible cities two hundred miles in diameter, but traffic congestion, and the inescapable, inherent danger of high-powered, individually operated vehicles cancelled out the possibility.

In 1955 Federal Highway #66 from Los Angeles to Chicago, "The Main Street of America", was transformed into a superhighway for motor vehicles, with an underspeed limit of sixty miles per hour. It was planned as a public works project to stimulate heavy industry; it had an unexpected byproduct. The great cities of Chicago and St. Louis stretched out urban pseudopods toward each other, until they met near Bloomington, Illinois. The two parent cities actually shrunk in population.

That same year the city of San Francisco replaced its antiquated cable cars with moving stairways, powered with the Douglas-Martin Solar Reception Screens. The largest number of automobile licenses in history had been issued that calendar year, but the end of the automobile era was in sight, and the National Defense Act of 1957 gave fair warning.

This act, one of the most bitterly debated ever to be brought out of committee, declared petroleum to be an essential and limited material of war. The armed forces had first call on all oil, above or below the ground, and eighty million civilian vehicles faced short and expensive rations. The "temporary" conditions during World War II had become permanent.

Take the superhighways of the period, urban throughout their length. Add the mechanized streets of San Francisco's hills. Heat to boiling point with an imminent shortage of gasoline. Flavor with Yankee ingenuity. The first mechanized road was opened in 1960 between Cincinnati and Cleveland.

It was, as one would expect, comparatively primitive in

design, being based on the ore belt conveyors of ten years earlier. The fastest strip moved only thirty miles per hour and was quite narrow, for no one had thought of the possibility of locating retail trade on the strips themselves. Nevertheless, it was a prototype of social pattern which was to dominate the American scene within the next two decades-neither rural, nor urban, but partaking equally of both, and based on rapid, safe, cheap, convenient transportation.

Factories - wide, low buildings whose roofs were covered with solar power screens of the same type that drove the road-lined the roadway on each side. Back of them and interspersed among them were commercial hotels, retail stores, theatres, apartment houses. Beyond this long, thin, narrow strip was the open countryside, where the bulk of the population lived. Their homes dotted the hills, hung on the banks of creeks, and nestled between the farms. They worked in the "city" but lived in the "country" - and the two were not ten minutes apart.

Mrs. McCoy served the chief and his guest in person. They checked their conversation at the sight of the magnificent steaks.

Up and down the six hundred mile line, Sector Engineers of the Watch were getting in their hourly reports from their subsector technicians. "Subsector one-check!" "Subsector two-check!" Tensionometer readings, voltage, load, bearing temperatures, synchrotachometer readings-"Subsector seven-check!" Hardbitten, able men in dungarees, who lived much of their lives 'down inside' amidst the unmuted roar of the hundred mile strip, the shrill whine of driving rotors, and the complaint of the relay rollers.

Davidson studied the moving model of the road, spread out before him in the main control room at Fresno Sector. He watched the barely perceptible crawl of the miniature hundred mile strip and subconsciously noted the reference number on it which located Jake's Steak House No. 4. The chief would be getting in to Stockton soon; he'd give him a ring after the hourly reports were in. Everything was quiet; traffic tonnage normal for rush hour; he would be sleepy before this watch was over. He turned to his Cadet Engineer of the Watch.

"Mr. Barnes."

"Yes, sir."

"I think we could use some coffee."

"Good idea, sir. I'll order some as soon as the hourlies are in."

The minute hand of the control board chronometer reached twelve. The cadet watch officer threw a switch. "All sectors, report!" he said, in crisp, selfconscious tones.

The faces of two men flicked into view on the visor Screen. The younger answered him with the same air of acting under supervision. "Diego Circle - rolling!"

They were at once replaced by two more. Angeles Sector - rolling!"

Then:"Bakersfield Sector - rolling!"

And:"Fresno Sector - rolling!".

Finally, when Reno Circle had reported, the cadet turned to Davidson and reported: "Rolling, sir."

"Very well-keep them rolling!"

The visor screen flashed on once more. "Sacramento Sector, supplementary report."

"Proceed."

"Cadet Guenther, while on visual inspection as cadet sector engineer of the watch, found Cadet Alec Jeans, on watch as cadet subsector technician, and R. J. Ross, technician second class, on watch as technician for the same subsector, engaged in playing cards. It was not possible to tell with any accuracy how long they had neglected to patrol their subsector."

"Any damage?"

"One rotor running hot, but still synchronized. It was jacked down, and replaced."

"Very well. Have the paymaster give Ross his time, and turn him over to the civil authorities. Place Cadet Jeans under arrest and order him to report to me."

"Very well, sir."

"Keep them rolling!"

Davidson turned back to the control desk and dialed Chief Engineer Gaines' temporary number.

"You mentioned that there were two things that could cause major trouble on the road, Mr. Gaines, but you spoke only of power failure to the rotors."

Gaines pursued an elusive bit of salad before answering. "There really isn't a second major trouble-it won't happen. However - we are travelling along here at one hundred miles per hour. Can you visualize what would happen if this strip under us should break?"

Mr. Blekinsop shifted nervously in his chair. "Hmm - rather a disconcerting idea, don't you think? I mean to say, one is hardly aware that one is travelling at high speed, here in this snug room. What would the result be?"

"Don't let it worry you; the strip can't part. It is built

up of overlapping sections in such a fashion that it has a safety factor of better than twelve to one. Several miles of rotors would have to shut down all at once, and the circuit breakers for the rest of the line fail to trip out before there could possibly be sufficient tension on the strip to cause it to part.

"But it happened once, on the Philadelphia-Jersey City Road, and we aren't likely to forget it. It was one of the earliest high speed roads, carrying a tremendous passenger traffic, as well as heavy freight, since it serviced a heavily industrialized area. The strip was hardly more than a conveyor belt, and no one had foreseen the weight it would carry. It happened under maximum load, naturally, when the high speed way was crowded. The part of the strip behind the break buckled for miles, crushing passengers against the roof at eighty miles per hour. The section forward of the break cracked like a whip, spilling passengers onto the slower ways, dropping them on the exposed rollers and rotors down inside, and snapping them up against the roof.

"Over three thousand people were killed in that one accident, and there was much agitation to abolish the roads. They were even shut down for a week by presidential order, but he was forced to reopen them again. There was no alternative."

"Really? Why not?"

"The country bad become economically dependent on the roads. They were the principal means of transportation in the industrial areas-the only means of economic importance. Factories were shut down; food didn't move; people got hungry-and the President was forced to let them roll again. It was the only thing that could be done; the social pattern had crystallized in one form, and it couldn't be changed overnight. A large, industrialized population must have large-scale transportation, not only for people, but for trade."

Mr. Blekinsop fussed with his napkin, and rather diffidently suggested, "Mr., Gaines, I do not intend to disparage the ingenious accomplishments of your great people, but isn't it possible that you may have put too many eggs in one basket in allowing your whole economy to become dependent on the functioning of one type of machinery?"

Gaines considered this soberly. "I see your point. Yes-and no. Every civilization above the peasant and village type is dependent on some key type of machinery. The old South was based on the cotton gin. Imperial England was made possible by the steam engine. Large populations have to have machines for power, for transportation, and for manufacturing in order to live. Had it not been for machinery the large populations could never have grown up. That's not a fault of the machine; that's its virtue.

"But it is true that whenever we develop machinery to the point where it will support large populations at a high standard of living we are then bound to keep that machinery running, or suffer the consequences. But the real hazard in that is not the machinery, but the men who run the machinery. These roads, as machines, are all right. They are strong and safe and will do everything they were designed to do. No, it's not the machines, it's the men.

"When a population is dependent on a machine, they are hostages of the men who tend the machines. If their morale is high, their sense of duty strong-"

Someone up near the front of the restaurant had turned up the volume control of the radio, letting out a blast of music that drowned out Gaines' words. When the sound had been tapered down to a more nearly bearable volume, he was saying:

"Listen to that. It illustrates my point."

Blekinsop turned an ear to the music. It was a swinging march of compelling rhythm, with a modern interpretive arrangement. One could hear the roar of machinery, the repetitive clatter of mechanisms. A pleased smile of recognition spread over the Australian's face. "It's your Field Artillery Song, The Roll of the Caissons, isn't-it? But I don't see the connection."

"You're right; it was the Roll of the Caissons, but we

adapted it to our own purposes. It's the Road Song of the Transport Cadets. Wait."

The persistent throb of the march continued, and seemed to blend with the vibration of the roadway underneath into a single tympani. Then a male chorus took up the verse:

"Hear them hum!
Watch them run!
Oh, our job is never done,
For our roadways go rolling along!
While you ride;
While you glide;
We are watching 'down inside',
So your roadways keep rolling along!

"Oh, it's Hie! Hie! Hee!
The rotor men are we—
Check off the sectors loud and strong!

(spoken) One! Two! Three!
Anywhere you go
You are bound to know
That your roadways are rolling along!
(Shouted) KEEP THEM ROLLING!
That your roadways are rolling along!"

"See said Gaines, with more animation in his voice, "See? That is the real purpose of the United States Academy of Transport. That is the reason why the transport engineers are a semi-military profession, with strict discipline. We are the bottle neck, the sine qua non, of all industry, all economic life. Other industries can go on strike, and only create temporary and partial dislocations. Crops can fail here and there, and the country takes up the slack. But if the roads stop rolling, everything else must stop; the effect would be the same as a general strike-with this important difference: It takes a majority of the population, fired by a real feeling of grievance, to create a general strike; but the men that run the roads, few as they are, can create the same complete paralysis.

"We had just one strike on the roads, back in 'sixty-six. It was justified, I think, and it corrected a lot of real, abuses-but it mustn't happen again."

"But what is to prevent it happening again, Mr. Gaines?"

"Morale-esprit de corps. The technicians in the road service are indoctrinated constantly with the idea that their job is a sacred trust. Besides which we do everything we can to build up their social position. But even more important is the Academy. We try to turn out graduate engineers imbued with the same loyalty, the same iron self-discipline, and determination to perform their duty to the community at any cost, that Annapolis and West Point and Goddard are so successful in inculcating in their graduates."

"Goddard? Oh, yes, the rocket field. And have you been successful, do you think?"

"Not entirely, perhaps, but we will be. It takes time to build up a tradition. When the oldest engineer is a man who entered the Academy in his teens, we can afford to relax a little and treat it as a solved problem."

"I suppose you are a graduate?"

Gaines grinned. "You flatter me-I must look younger than I am. No, I'm a carry-over from the army. You see, the Department of Defense operated the roads for some three months during reorganization after the strike in 'sixty-six. I served on the conciliation board that awarded pay increases and adjusted working conditions, then I was assigned-"

The signal light of the portable telephone glowed red. Gaines said, "Excuse me," and picked up the handset.'

"Yes?"

Blekinsop could overhear the voice at the other end. "This is Davidson, Chief. The roads are rolling."

"Very well. Keep them rolling!"

"Had another trouble report from the Sacramento Sector."

"Again? What this time?"

Before Davidson could reply he was cut off. As Gaines reached out to dial him back, his coffee cup, half full, landed in his lap. Blekinsop was aware, even as he was rocked against the edge of the table, of a disquieting change in the hum of the roadway.

"What has happened, Mr. Gaines?"

"Don't know. Emergency stop-God knows why." He was dialing furiously. Shortly he flung the phone down, without bothering to return the handset to its cradle. "Phones are out. Come on! No-You'll be safe here. Wait."

"Must I?"

"Well, come along then, and stick close to me." He turned away, having dismissed the Australian cabinet minister from his mind. The strip ground slowly to a stop, the giant rotors and myriad rollers acting as fly wheels in preventing a disastrous sudden stop. Already a little knot of commuters, disturbed at their evening meal, were attempting to crowd out the door of the restaurant.

"Halt!"

There is something about a command issued by one who is used to being obeyed which enforces compliance. It may be intonation, or possibly a more esoteric power, such as animal tamers are reputed to be able to exercise in controlling ferocious beasts. But it does exist, and can be used to compel even those not habituated to obedience.

The commuters stopped in their tracks.

Gaines continued, "Remain in the restaurant until we are ready to evacuate you. I am the Chief Engineer. You will be in no danger here. You!" He pointed to a big fellow near the door. "You're deputized. Don't let anyone leave without proper authority. Mrs. McCoy, resume serving dinner."

Gaines strode out the door, Blekinsop tagging along. The situation outside permitted no such simple measures.

The hundred mile strip alone had stopped; a few feet away the next strip flew by at an unchecked ninety-five miles an hour. The passengers on it flickered past, unreal cardboard figures.

The twenty-foot walkway of the maximum speed strip had been crowded when the breakdown occurred. Now the customers of shops, of lunchstands, and of other places of business, the occupants of lounges, of television theatres-all came crowding out onto the walkway to see what had happened. The first disaster struck almost immediately.

The crowd surged, and pushed against a middle-aged woman on its outer edge. In attempting to recover her balance she put one foot over the edge of the flashing ninety-five mile strip. She realized her gruesome error, for she screamed before her foot touched the ribbon.

She spun around, and landed heavily on the moving strip, and was rolled by it, as the strip attempted to impart to her mass, at one blow, a velocity of ninety-five miles per hour-one hundred and thirty-nine feet per second: As she rolled she mowed down some of the cardboard figures as a sickle strikes a stand of grass. Quickly, she was out of sight, her identity, her injuries, and her fate undetermined, and already remote.

But the consequences of her mishap were not done with. One of the flickering cardboard figures bowled over by her relative momentum fell toward the hundred mile strip, slammed into the shockbound crowd, and suddenly appeared as a live man-but broken and bleeding, amidst the luckless, fallen victims whose bodies had checked his wild flight.

Even there it did not end. The disaster spread from its source, each hapless human ninepin more likely than not to knock down others so that they fell over the danger-laden boundary, and in turn ricocheted to a dearly bought equilibrium.

But the focus of calamity sped out of sight, and Blekinsop could see no more. His active mind, accustomed to dealing with large' numbers of individual human beings, multiplied the tragic sequence he had witnessed by twelve hundred miles of thronged conveyor strip, and his stomach chilled.

To Blekinsop's surprise, Gaines made no effort to succor the fallen, nor to quell the fear-infected mob, but turned an expressionless face back to the restaurant. When Blekinsop saw that he was actually reentering the restaurant, he plucked at his sleeve. "Aren't we going to help those poor people?"

The cold planes of the face of the man who answered him bore no resemblance to his genial, rather boyish, host of a few minutes before. "No. Bystanders can help them - I've got the whole road to think of. Don't bother me."

Crushed, and somewhat indignant, the politician did as he was ordered. Rationally, he knew that the Chief Engineer was right-a man responsible for the safety of millions cannot turn aside from his duty to render personal service to one-but the cold detachment of such viewpoint was repugnant to him.

Gaines was back in the restaurant "Mrs. McCoy, where is your getaway?"

"In the pantry, sir."

Gaines hurried there, Blekinsop at his heels. A nervous Filipino salad boy shrank out of his way as he casually swept a supply of prepared green stuffs onto the floor and stepped up on the counter where they had rested. Directly above his head and within reach was a circular manhole, counterweighted and operated by a handwheel set in its center. A short steel ladder, hinged to the edge of the opening was swung up flat to ceiling and secured by a hook.

Blekinsop lost his hat in his endeavor to clamber quickly enough up the ladder after Gaines. When he emerged on the roof of the building. Gaines was searching the ceiling of the roadway with a pocket flashlight He was shuffling along, stooped double in the awkward four feet of space between the roof underfoot and ceiling.

He found what he sought, some fifty feet away-another manhole similar to the one they had used to escape

from below. He spun the wheel of the lock and stood up in the space, then rested his hands on the sides of the opening and with a single. lithe movement vaulted to the roof of the roadways. His companion followed him with more difficulty.

They stood in darkness, a fine, cold rain feeling at their faces. But underfoot, and stretching beyond sight on each hand, the sun power screens glowed with a faint opalescent radiance, their slight percentage of inefficiency as transformers of radiant sun power to available electrical power being evidenced as a mild phosphorescence. The effect was not illumination, but rather like the ghostly sheen of a snow covered plain seen by starlight.

The glow picked out the path they must follow to reach the rain-obscured wall of buildings bordering the ways. The path was a narrow black stripe which arched away into the darkness over the low curve of the roof. They started away on this path at a dog trot, making as much speed as the slippery footing and the dark permitted, while Blekinsop's mind still fretted at the problem of Gaines' apparently callous detachment. Although possessed of a keen intelligence his nature was dominated by a warm, human sympathy, without which no politician, irrespective of other virtues or shortcomings, is long successful.

Because of this trait he distrusted instinctively any mind which was guided by logic alone. He was aware that, from a standpoint of strict logic, no reasonable case could be made out for the continued existence of the human race, still less for the human values he served.

Had he been able to pierce the preoccupation of his companion, he would have been reassured. On the surface Gaines' exceptionally intelligent mind was clicking along with the facile ease of an electronic integrator-arranging data at hand, making tentative decisions, postponing judgments without prejudice until necessary data were available, exploring alternatives. Underneath, in a compartment insulated by stern self-discipline from the acting theatre of his mind, his emotions were a torturing storm

of self-reproach. He was heartsick at suffering he had seen, and which he knew too well was duplicated up and down the line. Although he was not aware of any personal omission, nevertheless, the fault was somehow his, for authority creates responsibility.

He had carried too long the superhuman burden of kingship - which no sane mind can carry lightheartedly - and was at this moment perilously close to the frame of mind which sends captains down with their ships. Only the need for immediate, constructive action sustained him.

But no trace of this conflict reached his features.

At the wall of buildings glowed a green line of arrows, pointing to the left. Over them, at the terminus of the narrow path, shone a sign: "ACCESS DOWN." They pursued this, Blekinsop puffing in Gaines' wake, to a door let in the wall, which gave in to a narrow stairway lighted by a single glowtube. Gaines plunged down this, still followed, and they emerged on the crowded, noisy, stationary walkway adjoining the northbound road.

Immediately adjacent to the stairway, on the right, was a public tele-booth. Through the glassite door they could see a portly, well-dressed man speaking earnestly to his female equivalent, mirrored in the visor screen. Three other citizens were waiting outside the booth.

Gaines pushed past them, flung open the door, grasped the bewildered and indignant man by the shoulders, and hustled him outside, kicking the door closed after him. He cleared the visor screen with one sweep of his hand, before the matron pictured therein could protest, and pressed the emergency-priority button.

He dialed his private code number, and was shortly looking into the troubled face of his Engineer of the Watch, Davidson.

"Report!"

"It's you, Chief! Thank God! Where are you?" Davidson's' relief was pathetic.

"Report!"

The Senior Watch Officer repressed his emotion and complied in direct, clipped phrases, "At seven-oh-nine p.m. the consolidated tension reading, strip twenty, Sacramento Sector, climbed suddenly. Before action could be taken, tension on strip twenty passed emergency level; the interlocks acted, and power to subject strip cut out. Cause of failure, unknown. Direct communication to Sacramento control office has failed. They do not answer the auxiliary, nor the commercial line. Effort to reestablish communication continues. Messenger dispatched from Stockton Subsector Ten.

"No casualties reported. Warning broadcast by public announcement circuit to keep clear of strip nineteen.

Evacuation has commenced."

"There are casualties," Gaines cut in. "Police and hospital emergency routine. Move!"

"Yes, sir!" Davidson snapped back, and hooked a thumb over his shoulder-but his Cadet Officer of the Watch had already jumped to comply. "Shall I cut out the rest of the road, Chief?"

"No. No more casualties are likely after the first disorder. Keep up the broadcast warnings. Keep, those other strips rolling, or we will have a traffic jam the devil himself couldn't untangle." - Gaines had in mind the impossibility of bringing the strips up to speed under load. The rotors were not powerful enough to do this. If the entire road was stopped, he would have to evacuate every strip, correct the trouble on strip twenty, bring all strips up to speed, and then move the accumulated peak load traffic. In the meantime, over five million stranded passengers would, constitute a tremendous police problem. It was simpler to evacuate passengers on strip twenty over the roof, and allow them to return home via the remaining strips. "Notify the Mayor and the Governor that I have assumed emergency authority. Same to the Chief of Police and place him under your orders. Tell the Commandant to arm all cadets available and await orders. Move!"

"Yes, sir. Shall I recall technicians off watch?"

"No. This isn't an engineering failure. Take a look at your readings; that entire sector went out simultaneously. Somebody cut out those rotors by hand. Place offwatch technicians on standby status-but don't arm them, and don't send them down inside. Tell the Commandant to rush all available senior-class cadets to Stockton Subsector Office number ten to report in. I want them equipped with tumblebugs, pistols, and sleepy bombs."

"Yes, sir." A clerk leaned over Davidson's shoulder and said something in his ear. "The Governor wants to talk to you, Chief."

"Can't do it-nor can you. Who's your relief? Have you sent for him?"

"Hubbard-he's just come in."

"Have him talk to the Governor, the Mayor, the press - anybody that calls - even the White House. You stick to your watch. I'm cutting off. I'll be back in communication as quickly as I can locate a reconnaissance car." He was out of the booth almost before the screen cleared.

Blekinsop did not venture to speak, but followed him out to the northbound twenty-mile strip. There Gaines stopped, short of the wind break, turned, and kept his eyes on the wall beyond the stationary walkway. He picked out some landmark, or sign - not apparent to his companion - and did an Eliza-crossing-the-ice back to the walkway, so rapidly that Blekinsop was carried some hundred feet beyond him, and almost failed to follow when Gaines ducked into a doorway and ran down a flight of stairs.

They came out on a narrow lower walkway, 'down inside'. The pervading din claimed them, beat upon their bodies as well as their ears. Dimly, Blekinsop perceived their surroundings, as he struggled to face that wall of sound. Facing him, illuminated by the yellow monochrome of a sodium arc, was one of the rotors that drove the five-mile strip, its great, drum-shaped armature revolving slowly around the stationary field coils in its core. The upper surface of the drum pressed against the under side of the moving way and imparted to it its stately progress.

To the left and right, a hundred yards each way, and

beyond at similar intervals, farther than he could see, were other rotors. Bridging the gaps between the rotors were the slender rollers, crowded together like cigars in a

box, in order that the strip might have a continuous rolling support. The rollers were supported by steel girder arches through the gaps of which he saw row after row of rotors in staggered succession, the rotors in each succeeding row turning over more rapidly than the last.

Separated from the narrow walkway by a line of supporting steel pillars, and lying parallel to it on the side away from the rotors, ran a shallow paved causeway, joined to the walk at this point by a ramp. Gaines peered up and down this tunnel in evident annoyance. Blekinsop started to ask him what troubled him, but found his voice snuffed out by the sound: He could not cut through the roar of thousands of rotors and the whine of hundreds of thousands of rollers.

Gaines saw his lips move and guessed at the question.'

He cupped his hands around Blekinsop's right ear, and shouted, "No car - I expected to find a car here."

The Australian, wishing to be helpful, grasped Gaines' arm and pointed back into the jungle of machinery.

Gaines' eye followed the direction indicated and picked out something that he had missed in his preoccupation - a half dozen men working around a rotor several strips away. They had jacked down a rotor until it was no longer in contact with the road surface and were preparing to replace it in toto. The replacement rotor was standing by on a low, heavy truck.

The Chief Engineer gave a quick smile of acknowledgment and thanks and aimed his flashlight at the group, the beam focused down to a slender, intense needle of light.

One of the technicians looked up, and Gaines snapped the light on and off in a repeated, irregular pattern. A figure detached itself from the group, and ran toward them.

It was a slender young man, dressed in dungarees and topped off with earpads and an incongruous, pillbox cap, bright with gold braid and Insignia. He recognized the Chief Engineer and saluted, his face falling into humorless, boyish intentness.

Gaines stuffed his torch into a pocket and commenced to gesticulate rapidly with both hands-clear, clean gestures, as involved and as meaningful as deaf-mute language. Blekinsop dug into his own dilettante knowledge of anthropology and decided that it was most like American Indian sign language, with some of the finger movements of hula. But it was necessarily almost entirely strange, being adapted for a particular terminology.

The cadet answered him in kind, stepped to the edge of the causeway, and flashed his torch to the south. He picked out a car, still some distance away, but approaching at headlong speed. It braked, and came to a stop alongside them.

It was a small affair, ovoid in shape, and poised on two centerline wheels. The forward, upper surface swung up and disclosed the driver, another cadet. Gaines addressed him briefly in sign language, then hustled Blekinsop ahead of him into the cramped passenger compartment.

As the glassite hood was being swung back into place, a blast of wind smote them, and the Australian looked up in time to glimpse the last of three much larger vehicles hurtle past them. They were headed north, at a speed of not less than two hundred miles per hour. Blekinsop thought that he had made out the little hats of cadets through the windows of the last of the three, but he could not be sure.

He had no time to wonder - so violent was the driver's getaway. Gaines ignored the accelerating surge; he was already calling Davidson on the builtin communicator. Comparative silence had settled down once the car was closed. The face of a female operator at the relay station showed on the screen.

"Get me Davidson-Senior Watch Office!"

"Oh! It's Mr. Gaines! The Mayor wants to talk to you, Mr. Gaines."

"Refer him-and get me Davidson. Move!"

"Yes, sir!"

"And see here-leave this circuit hooked in to Davidson's board until I tell you personally to cut it."

"Right." Her face gave way to the Watch Officer's.

"That you, Chief? We're moving-progress O.K.-no change."

"Very well You'll be able to raise me on this circuit, or at Subsector

Ten office. Clearing now." Davidson's face gave way to the relay operator.

"Your wife is calling, Mr. Gaines. Will you take it?"

Gaines muttered something not quite gallant, and answered, "Yes."

Mrs. Gaines flashed into facsimile. He burst into speech before she could open her mouth. "Darling I'm all right don't worry I'll be home when I get there I've go to go now." It was all out in one breath, and he slapped the control that cleared the screen.

They slammed to a breathtaking stop alongside the stair leading to the watch office of Subsector Ten, and piled out. Three big lorries were drawn up on the ramp, and three platoons of cadets were ranged in restless ranks alongside them.

A cadet trotted up to Gaines, and saluted. "Lindsay, sir-Cadet Engineer of the Watch. The Engineer of the Watch requests that you come at once to the control room."

The Engineer of the Watch looked up as they came in. "Chief-Van Kleeck is calling you."

"Put him on."

When Van Kleeck appeared in the big visor, Gaines greeted him with, "Hello, Van. Where are you?"

"Sacramento Office. Now, listen-"

"Sacramento? That's good! Report."

Van Kleeck looked disgruntled. "Report, hell! I'm not your deputy any more, Gaines. Now, you-"

"What the hell are you talking about?"

"Listen, and don't interrupt me, and you'll find out. You're through, Gaines. I've been picked as Director of the Provisional Central Committee for the New Order."

"Van, have you gone off your rocker? What do you mean-the New Order?"

"You'll find out. This is it-the functionalist revolution. We're in; you're out. We stopped strip twenty just to give you a little taste of what we can do."

Concerning Function: A Treatise on the Natural Order

in Society, the bible of the functionalist movement, was first published in 1930. It claimed to be a scientifically accurate theory of social relations. The author, Paul Decker, disclaimed the "outworn and futile" ideas of democracy and human equality, and substituted a system in which human beings were evaluated "functionally" - that is to say, by the role each filled in the economic sequence. The underlying thesis was that it was right and proper for a man to exercise over his fellows whatever power was inherent in his function, and that any other form of social organization was silly, visionary, and contrary to the "natural order."

The complete interdependence of modern economic life seems to have escaped him entirely.

His ideas were dressed up with a glib mechanistic psendopsychology based on the observed orders of precedence among barnyard fowls, and on the famous Pavlov conditioned-reflex experiments on dogs. He failed to note that human beings are neither dogs, nor chickens. Old Doctor Pavlov ignored him entirely, as he had ignored so many others who had, blindly and unscientifically dogmatized about the meaning of his important, but strictly limited, experiments.

Functionalism did not take hold at once-during the thirties almost everyone, from truckdriver to hatcheck girl, had a scheme for setting the world right in six easy lessons; and a surprising percentage managed to get their schemes published. But it gradually spread. Functionalism was particularly popular among little people everywhere who could persuade themselves that their particular jobs were the indispensable ones, and that, therefore, under the "natural order" they would be top dog. With so many different functions actually indispensable such self-persuasion was easy.

Gaines stared at Van Kleeck for a moment before replying. "Van," he said slowly, "you don't really think you can get away with this, do you?"

The little man puffed out his chest. "Why not? We have gotten away with it. You can't start strip twenty until I am ready to let you, and I can stop the whole road, if necessary."

Gaines was becoming uncomfortably aware that he was dealing with unreasonable conceit, and held himself patiently in check. "Sure you can, Van-but how about the rest of the country? Do you think the United States Army will sit quietly by and let you run California as your private kingdom?"

Van Kleeck looked sly. "I've planned for that. I've just finished broadcasting a manifesto to all the road technicians in the country, telling them what we have done, and telling them to arise, and claim their rights. With every road in the country stopped, and people getting hungry, I reckon the President will think twice before sending the army to tangle with us. Oh, he could send a force to capture, or kill me - I'm not afraid to die! - but he doesn't dare start shooting down road technicians as a class, because the country can't get along without us - consequently, he'll have to get along with us - on our terms!"

There was much bitter truth in what he said. If an uprising of the road technicians became general, the government could no more attempt to settle it by force than a man could afford to cure a headache by blowing out his brains. But was the uprising general?

"Why do you think that the technicians in the rest of the country will follow your lead?"

"Why not? It's the natural order of things. This is an age of machinery; the real power everywhere is in the technicians, but they have been kidded into not using their power with a lot of obsolete catch-phrases. And of all the classes of technicians, the most important, the absolutely essential, are the road technicians. From now on they run the show - it's the natural order of things!" He turned away for a moment, and fussed with some papers on the desk before him, then be added, "That's all for now, Gaines - I've got to call the White House, and let the President know how things stand. You carry on, and behave yourself, and you won't get hurt."

Gaines sat quite still for some minutes after the screen cleared. So that's how it was. He wondered what effect, if any, Van Kleeck's invitation to strike had had on road technicians elsewhere. None, he thought - but then he had not dreamed that it could happen among his own technicians. Perhaps he had made a mistake in refusing. to take time to talk to anyone outside the road. No - if he had stopped to talk to the Governor, or the newspapermen, he would still be talking. Still - He dialed Davidson.

"Any trouble in any other sectors, Dave?"

"No, Chief."

"Or on any other road?"

"None reported."

"Did you hear my talk with Van Kleeck?"

"I was cut in-yes."

"Good. Have Hubbard call the President and the Governor, and tell them that I am strongly opposed to the use of military force as long as the outbreak is limited to this road. Tell them that I will not be responsible if they move in before I ask for help."

Davidson looked dubious. "Do you think that is wise, Chief?"

"I do! If we try to blast Van and his red-hots out of their position, we may set off a real, countrywide uprising. Furthermore, he could wreck the road so that God himself couldn't put it back together. What's your rolling tonnage now?"

"Fifty-three percent under evening peak."

"How about strip twenty?"

"Almost evacuated."

"Good. Get the road clear of all traffic as fast as possible. Better have the Chief of Police place a guard on all entrances to the road to keep out new traffic. Van may stop all strips at any time - or I may need to, myself. Here is my plan: I'm going 'down inside' with these armed cadets. We will work north, overcoming any resistance we meet. You arrange for watch technicians and maintenance crews to follow immediately behind us. Each rotor, as they come to it, is to be cut out, then hooked in to the Stockton control board. It will be a haywire rig, with no safety interlocks, so use enough watch technicians to be able to catch trouble before it happens.

"If this scheme works, we can move control of the Sacramento Sector right out from under Van's feet, and he can stay in this Sacramento control office until he gets hungry enough to be reasonable."

He cut off and turned to the Subsector Engineer of the Watch. "Edmunds, give me a helmet - and a pistol."

"Yes, sir." He opened a drawer, and handed his chief a slender, deadly looking weapon. Gaines belted it on, and accepted a helmet, into which he crammed his head, leaving the anti-noise ear flaps up. Blekinsop cleared his throat.

"May - uh - may I have one of those helmets?" he inquired.

"What?" Gaines focused his attention. "Oh - You won't need one, Mr. Blekinsop. I want you to remain right here until you hear from me."

"But-" The Australian statesman started to speak, thought better of it, and subsided.

From the doorway the Cadet Engineer of the Watch demanded the Chief Engineer's attention. "Mr. Gaines, there is a technician out here who insists on seeing you - a man named Harvey."

"Can't do it."

"He's from the Sacramento Sector, sir."

"Oh! Send him in."

Harvey quickly advised Gaines of what he had seen and heard at the guild meeting that afternoon. "I got disgusted and left while they were still jawin', Chief. I didn't think any more about it until twenty stopped rolling. Then I heard that the trouble was in Sacramento Sector, and decided to look you up."

"How long has this been building up?"

"Quite some time, I guess. You know how it is - there are a few soreheads everywhere and a lot of them are functionalists. But you can't refuse to work with a man just because he holds different political views. It's a free country."

"You should have come to me before, Harvey." Harvey looked stubborn. Gaines studied his face. "No, I guess you are right. It's my business to keep tab on your mates, not yours. As you say, it's a free country. Anything else?"

"Well - now that it has come to this, I thought maybe I could help you pick out the ringleaders."

"Thanks. You stick with me. We're going 'down inside' and try to clear up this mess."

The office door opened suddenly, and a technician and a cadet appeared, lugging a burden between them. They deposited it on the floor, and waited.

It was a young man, quite evidently dead. The front of his dungaree jacket was soggy with blood. Gaines looked at the watch officer. "Who is he?"

Edmunds broke his stare and answered, "Cadet Hughes-he's the messenger I sent to Sacramento when communication failed. When he didn't report, I sent Marston and Cadet Jenkins after him."

Gaines muttered something to himself, and turned away. "Come along, Harvey."

The cadets waiting below had changed in mood. Gaines noted that the boyish intentness for excitement had been replaced by something uglier. 'There was much exchange of hand signals and several appeared to be checking the loading of their pistols.

He sized them up, then signaled to the cadet leader. There was a short interchange of signals. The cadet saluted, turned to his men, gesticulated - briefly, and brought his arm down smartly. They filed upstairs and into an empty standby room, Gaines following.

Once inside, and the noise shut out, he addressed them,

"You saw Hughes brought in-how many of you want a chance to kill the louse that did it?"

Three of the cadets reacted almost at once, breaking ranks and striding forward. Gaines looked at them coldly. "Very well. You three turn in your weapons, and return to your quarters. Any of the rest of you that think this is a matter of private revenge, or, a hunting party, may join them." He permitted a short silence to endure before continuing. "Sacramento Sector has been seized by unauthorized persons. We are going to retake it - if possible, without loss of life on either side, and, if possible, without stopping the roads. The plan is to take over 'down inside', rotor by rotor, and cross-connect through Stockton, The task assignment of this group is to proceed north 'down inside', locating and overpowering all persons in your path. You will bear in mind the probability that most of the persons you will arrest are completely innocent. Consequently, you will favor the use of sleep gas bombs, and will shoot to kill only as a last resort.

"Cadet Captain, assign your men in squads of ten each, with a squad leader. Each squad is to form a skirmish line across 'down inside', mounted on tumblebugs, and will proceed north at fifteen miles per hour. Leave an interval of one hundred yards between successive waves of skirmishers. Whenever a man is sighted, the entire leading wave will converge on him, arrest him, and deliver him to a transport car and then fall in as the last wave. You will assign the transports that delivered you here to receive prisoners. Instruct the drivers to keep abreast of the second wave.

"You will assign an attack group to recapture subsector control offices, but no office is to be attacked until its subsector has been cross-connected with Stockton. Arrange liaison accordingly.

"Any questions?" He let his eyes run over the faces of the young men. When no one spoke up, he turned back to the cadet in charge. "Very well, sir. Carry out your orders!"

By the time the dispositions bad been completed, the follow-up crew of technicians had arrived, and Gaines had given the engineer in charge his instructions. The cadets "stood to horse" alongside their poised tumblebugs. The Cadet Captain looked expectantly at Gaines. He nodded, the cadet brought his arm down smartly, and the first wave mounted and moved out.

Gaines and Harvey mounted tumblebugs, and kept abreast of the Cadet Captain, some twenty-five yards behind the leading wave. It had been a long time since the Chief Engineer had ridden one of these silly-looking little vehicles, and he felt awkward. A tumblebug does not give a man dignity, since it is about the size and shape of a kitchen stool, gyro-stabilized on a single wheel. But it is perfectly adapted to patrolling the maze of machinery 'down inside', since it can go through an opening the width of a man's shoulders, is easily controlled, and will stand patiently upright, waiting, should its rider dismount.

The little reconnaissance car followed Gaines at a short interval, weaving in and out among the rotors, while the television and audio communicator inside continued as Gaines' link to his other manifold responsibilities.

The first two hundred yards of the Sacramento Sector passed without incident, then one of the skirmishers sighted a tumblebug parked by a rotor. The technician it served was checking the gauges at the rotor's base, and did not see them approach. He was unarmed and made no resistance, but seemed surprised and indignant, as well as very bewildered.

The little command group dropped back and permitted the new leading wave to overtake them.

Three miles farther along the score stood thirty-seven men arrested, none killed. Two of the cadets had received minor wounds, and had been directed to retire. Only four of the prisoners had been armed, one of these Harvey had been able to identify definitely as a ringleader. Harvey expressed a desire to attempt to parley with the outlaws, if any occasion arose. Gaines agreed tentatively. He knew of Harvey's long and honorable record as a labor leader, and was willing to try anything that offered a hope of success with a minimum of violence.

Shortly thereafter the first wave flushed another technician. He was on the far side of a rotor; they were almost on him before he was, seen. He did not attempt to resist, although he was armed, and the incident would not have been worth recording, had he not been talking into a hush-a-phone which he had plugged into the telephone jack at the base of the rotor.

Gaines reached the group as the capture was being effected. He snatched at the soft rubber mask of the phone, jerking it away from the man's mouth so violently that he could feel the bone-conduction receiver grate between the man's teeth. The prisoner spat out a piece of broken tooth and glared, but ignored attempts to question him.

Swift as Gaines had been, it was highly probable that they had lost the advantage of surprise. It was necessary to assume that the prisoner had succeeded in reporting the attack going on beneath the ways. Word was passed down the line to proceed with increased caution.

Gaines' pessimism was justified shortly. Riding toward them appeared a group of men, as yet several hundred feet away. There were at least a score, but their exact strength could not be determined, as they took advantage of the rotors for cover as they advanced. Harvey looked at Gaines, who nodded, and signaled the Cadet Captain to halt his forces.

Harvey went on ahead, unarmed, his hands held high above his head, and steering by balancing the weight of his body. The outlaw party checked its speed uncertainly, and finally stopped. Harvey approached within a couple of rods of them and stopped likewise. One of them, apparently the leader, spoke to him in sign language, to which he replied.

They were too far away and the yellow light too uncertain to follow the discussion. It continued for several minutes, then ensued a pause. The leader seemed uncertain what to do. One of his party rolled forward, returned his pistol to its holster, and conversed with the leader. The leader shook his head at the man's violent gestures.

The man renewed his argument, but met the same negative response. With a final disgusted wave of his hands, he desisted, drew his pistol, and shot at Harvey. Harvey grabbed at his middle and leaned forward. The man shot again; Harvey jerked, and slid to the ground.

The Cadet Captain beat Gaines to the draw. The killer looked up as the bullet bit him. He looked as if he were puzzled by some strange occurrence-being too freshly dead to be aware of it.

The cadets came in shooting. Although the first wave was outnumbered better than two to one, they were helped by the comparative demoralization of the enemy. The odds were nearly even after the first ragged volley. Less than thirty seconds after the first treacherous shot all of the insurgent party were dead, wounded, or under arrest. Gaines' losses were two dead (including the murder of Harvey) and two wounded.

Gaines modified his tactics to suit the changed conditions. Now that secrecy was gone, speed and striding power were of first importance. The second wave was directed to close in practically to the heels of the first. The third wave was brought up to within twenty-five yards of the second. These three waves were to ignore unarmed men, leaving them to be picked up by the fourth wave, but they were directed to shoot on sight any person carrying arms.

Gaines cautioned them to shoot to wound, rather than to kill, but he realized that his admonishment was almost impossible to obey. There would be killing. Well, he had not wanted it, but he felt that he had no choice. Any armed outlaw was a potential killer - he could not, in fairness to his own men, lay too many restrictions on them.

When the arrangements for the new marching order were completed, he signed the Cadet Captain to go ahead, and the first and second waves started off together at the top speed of which the tumblebugs were capable - not quite eighteen miles per hour. Gaines followed them.

He swerved to avoid Harvey's body, glancing involuntarily down as he did so. The face was an ugly jaundiced yellow under the sodium arc, but it was set in a death mask of rugged beauty in which the strong fibre of the dead man's character was evident. Seeing this, Gaines did not regret so much his order to shoot, but the deep sense of loss of personal honor lay more heavily on him than before.

They passed several technicians during the next few minutes, but had no occasion to shoot. Gaines was beginning to feel somewhat hopeful of a reasonably bloodless victory, when he noticed a change in the pervading throb of machinery which penetrated even through the heavy anti-noise pads of his helmet. He lifted an ear pad in time to hear the end of a rumbling diminuendo as the rotors and rollers slowed to rest.

The road was stopped.

He shouted, "Halt your men!" to the Cadet Captain. His words echoed hollowly in the unreal silence.

The top of the reconnaissance car swung up as he turned and hurried to it. "Chief!" the cadet within called out, "relay station calling you."

The girl in the visor screen gave way to Davidson as soon as she recognized Gaines' face. "Chief," Davidson said at once, "Van Kleeck's calling you."

"Who stopped the road?"

"He did."

"Any other major change in the situation?"

"No-the road was practically empty when he stopped it."

"Good. Give me Van Kleeck."

The chief conspirator's face was livid with uncurbed anger when he identified Gaines. He burst into speech. "So! You thought I was fooling, eh? What do you think now, Mister Chief Engineer Gaines?"

Gaines fought down an impulse to tell him exactly what

he thought, particularly about Van Kleeck. Everything about the short man's manner affected him like a squeaking slate pencil.

But he could not afford the luxury of speaking his mind. He strove to get just the proper tone into his voice which would soothe the other man's vanity. "I've got to admit that you've won this trick, Van - the roadway is stopped - but don't think I didn't take you seriously. I've watched your work too long to underrate you. I know you mean what you say."

Van Kleeck was pleased by the tribute, but tried not to show it. "Then why don't you get smart, and give up?" he demanded belligerently. "You can't win."

"Maybe not, Van, but you know I've got to try. Besides," he went on, "why can't I win? You said yourself that I could call on the whole United States Army."

Van Kleeck grinned triumphantly. "You see that?" He held up a pear-shaped electric push button, attached to a long cord. "If I push that, it will blow a path right straight across the ways-blow it to Kingdom Come. And just for good measure I'll take an ax, and wreck this control station before I leave."

Gaines wished wholeheartedly that he knew more about psychiatry. Well - he'd just have to do his best, and trust to horse sense to give him the right answers. "That's pretty drastic, Van, but I don't see how we can give up."

"No? You'd better have another think. If you force me to blow up the road, how about all the people that will be blown up along with it?"

Gaines thought furiously. He did not doubt that Van Kleeck would carry out his threat; his very phraseology, the childish petulance of "If you force me to do this-" betrayed the dangerous irrationality of his mental processes. And such an explosion anywhere in the thickly populated Sacramento Sector would be likely to wreck one, or more, apartment houses, and would be certain to kill shopkeepers on the included segment of strip twenty, as well as chance bystanders. Van was absolutely right; he dare not risk the lives of bystanders who were not aware of the issue and had not consented to the hazard - even if the road never rolled again.

For that matter, he did not relish chancing major damage to the road itself-but it was the danger to innocent life that left him helpless.

A tune ran through his head-"Hear them hum; watch them run. Oh, our work is never done-" What to do? What to do? "While you ride; while you glide; we are-"

This wasn't getting anyplace.

He turned back to the screen. "Look, Van, you don't want to blow up the road unless you have to, I'm sure. Neither do I. Suppose I come up to your headquarters, and we talk this thing over. Two reasonable men ought to be able to make a settlement."

Van Kleeck was suspicious. "Is this some sort of a trick?"

"How can it be? I'll come alone, and unarmed, just as fast as my car can get there."

"How about your men?"

"They will sit where they are until I'm back. You can put out observers to make sure of it."

Van Kleeck stalled for a moment, caught between the fear of a trap, and the pleasure of having his erstwhile superior come to him to sue for terms. At last he grudgingly consented.

Gaines left his instructions and told Davidson what he intended to do. "If I'm not back within an hour, you're on your own, Dave."

"Be careful, Chief."

"I will."

He evicted the cadet driver from the reconnaissance car and ran it down the ramp into the causeway, then headed north and gave it the gun. Now he would have a chance to collect his thoughts, even at two hundred miles per hour. Suppose he pulled off this trick-there would still have to be some changes made. Two lessons stood out like sore thumbs: First, the strips must be cross-connected with safety interlocks so that adjacent strips would slow down, or stop, if a strip's speed became dangerously different from those adjacent. No repetition of what happened on twenty!

But that was elementary, a mere mechanical detail. The real failure had been in men, Well, the psychological classification tests must be improved to insure that the roads employed only conscientious, reliable men. But hell's bells - that was just exactly what the present classification tests were supposed to insure beyond question. To the best of his knowledge there had never been a failure from the improved Hunim-Wadsworth-Burton method - not until today in the Sacramento Sector. How had Van Kleeck gotten one whole sector of temperament - classified men to revolt?

It didn't make sense.

Personnel did not behave erratically without a reason. One man might be unpredictable, but in large numbers, they were as dependable as machines, or figures. They could be measured, examined, classified. His inner eye automatically pictured the personnel office, with its rows of filing cabinets, its clerks - He'd got it! He'd got it! Van Kleeck, as Chief Deputy, was ex officio personnel officer for the entire road!

It was the only solution that covered all the facts. The personnel officer alone had the perfect opportunity to pick out all the bad apples and concentrate them in one barrel. Gaines was convinced beyond any reasonable doubt that there had been skullduggery, perhaps for years, with the temperament classification tests, and that Van Kleeck had deliberately transferred the kind of men he needed to one sector, after falsifying their records.

And that taught another lesson-tighter tests for officers, and no officer to be trusted with classification and assignment without close supervision and inspection. Even he, Gaines, should be watched in that respect. Qui custodiet ipsos custodes? Who will guard those selfsame guardians? Latin might be obsolete, but those old Romans weren't dummies.

He at last knew wherein he had failed, and he derived

melancholy pleasure from the knowledge. Supervision and inspection, check and recheck, was the answer. It would be cumbersome and inefficient, but it seemed that adequate safeguards always involved some loss of efficiency.

He should not have entrusted so much authority to Van Kleeck without knowing more about him. He still should know more about him-He touched the emergency-stop button, and brought the car to a dizzying halt. "Relay station! See if you can raise my office."

Dolores' face looked out from the screen. "You're still there-good!" he told her. "I was afraid you'd gone home."

"I came back, Mr. Gaines."

"Good girl. Get me Van Kleeck's personal file jacket. I want to see his classification record."

She was back with it in exceptionally short order and read from it the symbols and percentages. He nodded repeatedly as the data checked his hunches - masked introvert-inferiority complex. It checked.

"'Comment of the Board:'" she read, "'In spite of the potential instability shown by maxima A, and D on the consolidated profile curve, the Board is convinced that this officer is, nevertheless, fitted for duty. He has an exceptionally fine record, and is especially adept in handling men. He is therefore recommended for retention and promotion."

"That's all, Dolores. Thanks."

"Yes, Mr. Gaines!"

"I'm off for a showdown. Keep your fingers crossed."

"But Mr. Gaines-" Back in Fresno, Dolores stared wide-eyed at an empty screen.

"Take me to Mr. Van Kleeck!"

The man addressed took his gun out of Gaines' ribs - reluctantly, Gaines thought - and indicated that the Chief Engineer should precede him up the stairs. Gaines climbed out of the car, and complied.

Van Kleeck had set himself up in the sector control room proper, rather than the administrative office. With him were half a dozen men, all armed.

"Good evening, Director Van Kleeck." The little man swelled visibly at Gaines' acknowledgment of his assumed rank.

"We don't go in much around here for titles," he said, with ostentatious casualness. "Just call me Van. Sit down, Gaines."

Gaines did so. It was necessary to get those other men out. He looked at them with an expression of bored amusement. "Can't you handle one unarmed man by yourself, Van? Or don't the functionalists trust each other?"

Van Kleeck's face showed his annoyance, but Gaines' smile was undaunted. Finally the smaller man picked up a pistol from his desk, and motioned toward the door. "Get out, you guys!"

"But Van-"

"Get out, I said!"

When they were alone, Van Kleeck picked up the electric push button which Gaines had seen in the visor screen, and pointed his pistol at his former chief. "O.K.," he growled, "try any funny stuff, and off it goes! What's your proposition?"

Gaines' irritating smile grew broader. Van Kleeck scowled. "What's so damn funny?" he said.

Gaines granted him an answer. "You are, Van - honest, this is rich. You start a functionalist revolution, and the only function you can think of to perform is to blow up the road that justifies your title. Tell me," he went on, "what is it you are so scared of?"

"I am not afraid!"

"Not afraid? You? Sifting there, ready to commit hara-kari with that toy push button, and you tell me that you aren't afraid. If your buddies knew how near you are to throwing away what they've fought for, they'd shoot you in a second. You're afraid of them, too, aren't you?"

Van Kleek thrust the push button away from him, and stood up; "I am not afraid!" he screamed, and came around the desk toward Gaines.

Gaines sat where he was, and laughed. "But you are! You're afraid of me, this minute. You're afraid I'll have you on the carpet for the way you do your job. You're afraid the cadets won't salute you. You're afraid they are laughing behind your back. You're afraid of using the wrong fork at dinner. You're afraid people are looking at you - and you are afraid that they won't notice you."

"I am not!" he protested. "You - You dirty, stuckup snob! Just because you went to a high-hat school you think you're better than anybody." He choked, and became incoherent, fighting to keep back tears of rage. "You, and your nasty little cadets-"

Gaines eyed him cautiously. The weakness in the man's character was evident now - he wondered why he had not seen it before. He recalled how ungracious Van Kleeck had been one time when he had offered to help him with an intricate piece of figuring.

The problem now was to play on his weakness, to keep him so preoccupied that he would not remember the peril-laden push button. He must be caused to center the venom of his twisted outlook on Gaines, to the exclusion of every other thought.

But he must not goad him too carelessly, or a shot from across the room might put an end to Gaines, and to any chance of avoiding a bloody, wasteful struggle for control of the road.

Gaines chuckled. "Van," he said, "you are a pathetic little shrimp. That was a dead giveaway. I understand you perfectly; you're a third-rater, Van, and all your life you've been afraid that someone would see through you, and send you back to the foot of the class. Director - phiu! If you are the best the functionalists can offer, we can afford to ignore them - they'll fold up from their own rotten inefficiency." He swung around in his chair, deliberately turning his back on Van Kleeck and his gun.

Van Kleeck advanced on his tormentor, halted a few feet away, and shouted: "You - I'll show you. - I'll put a bullet in you; that's what I'll do!"

Gaines swung back around, got up, and walked steadily toward him. "Put that popgun down before you hurt yourself."

Van Kleeck retreated a step. "Don't you come near me!" he screamed. "Don't you come near me - or I'll shoot you - see if I don't!"

This is it, thought Gaines, and dived.

The pistol went off alongside his ear. Well, that one didn't get him. They were on the floor. Van Kleeck was hard to hold, for a little man. Where was the gun? There! He had it. He broke away.

Van Kleeck did not get up. He lay sprawled on the floor, tears streaming out of his closed eyes, blubbering like a frustrated child.

Gaines looked at him with something like compassion in his eyes, and hit him carefully behind the ear with the butt of the pistol. He walked over to the door, and listened for a moment, then locked it cautiously.

The cord from the push button led to the control board. He examined the hookup, and disconnected it carefully. That done, he turned to the televisor at the control desk, and called Fresno.

"Okay, Dave," he said, "Let 'em attack now - and for the love of Pete, hurry!" Then he cleared the screen, not wishing his watch officer to see how he was shaking.

Back in Fresno the next morning Gaines paced around the Main Control Room with a fair degree of contentment in his heart. The roads were rolling - before long they would be up to speed again. It had been a long night. Every engineer, every available cadet, had been needed to, make the inch-by-inch inspection of Sacramento Sector which he had required. Then they had to cross-connect around two wrecked subsector control boards. But the roads were rolling - he could feel their rhythm up through the floor.

He stopped beside a haggard, stubbly-bearded man. "Why don't you go home, Dave?" be asked. "McPherson can carry on from here."

"How about yourself, Chief? You don't look like a June bride."

"Oh, I'll catch a nap in my office after a bit. I called my wife, and told her I couldn't make it. She's coming down here to meet me."

"Was she sore?"

"Not very. You know how women are." He turned back to the instrument board, and watched the clicking 'busybodies' assembling the data from six sectors. San Diego Circle, Angeles Sector, Bakersfield Sector, Fresno Sector, Stockton-Stockton? Stockton! Good grief! - Blekinsop! He had left a cabinet minister of Australia cooling his heels in the Stockton office all night long!

He started for the door, while calling over his shoulder, "Dave, will you order a car for me? Make it a fast one!" He was across the hail, and had his head inside his private office before Davidson could acknowledge the order.

"Dolores!"

"Yes, Mr. Gaines."

"Call my wife, and tell her I had to go to Stockton. If she's already left home, just have her wait here. And Dolores-"

"Yes, Mr. Gaines?"

"Calm her down."

She bit her lip, but her face was impassive. "Yes, Mr. Gaines."

"That's a good girl." He was out and started down the stairway. When he reached road level, the sight of the rolling strips warmed him inside and made him feel almost cheerful.

He strode briskly away toward a door marked ACCESS DOWN, whistling softly to himself. He opened the door, and the rumbling, roaring rhythm from 'down inside' seemed to pick up the tune even as it drowned out the sound of his whistling.

"Hie! Hie! Hee!
The rotor men are we—
Check off your sectors loud and strong! One! Two! Three!
Anywhere you go
You are bound to know
That your roadways are rolling along!"

Requiem

On a high hill in Samoa there is a grave. Inscribed on the marker are these words:

"Under the wide and starry sky
Dig my grave and let me lie
Glad did I live and gladly die
And I lay me down with a will!

"This be the verse which you grave for me:
'Here he lies where he longed to be,
Home is the sailor, home from the sea,
And the hunter home from the hill.'"

These lines appear another place—scrawled on a shipping tag torn from a compressed-air container, and pinned to the ground with a knife.

It wasn't much of a fair, as fairs go. The trottin' races didn't promise much excitement, even though several entries claimed the blood of the immortal Dan Patch. The tents and concession booths barely covered the circus grounds, and the pitchmen seemed discouraged.

D.D. Harriman's chauffeur could not see any reason for stopping. They were due in Kansas City for a directors' meeting, that is to say, Harriman was. The chauffeur had private reasons for promptness, reasons involving darktown society on Eighteenth Street. But the Boss not only stopped, but hung around.

Bunting and a canvas arch made the entrance to a large enclosure beyond the race track. Red and gold letters announced:

This way to the MOON ROCKET!!!!

See it in actual flight!
Public Demonstration Flights
Twice Daily
This is the ACTUAL TYPE used by the
First Man to reach the MOON!!!
YOU can ride in it!!—$50.OO

A boy, nine or ten years old, hung around the entrance and stared at the posters.

"Want to see the ship, son?"

The kid's eyes shone. "Gee, mister. I sure would."

"So would I. Come on." Harriman paid out a dollar for two pink tickets which entitled them to enter the enclosure and examine the rocket ship. The kid took his and ran on ahead with the single-mindedness of youth. Harriman looked over the stubby curved lines of the ovoid body. He noted with a professional eye that she was a single-jet type with fractional controls around her midriff. He squinted through his glasses at the name painted in gold on the carnival red of the body, *Care Free*. He paid another quarter to enter the control cabin.

When his eyes had adjusted to the gloom caused by the strong ray filters of the ports he let them rest lovingly on the keys of the console and the semicircle of dials above. Each beloved gadget was in its proper place. He knew them, graven in his heart.

While he mused over the instrument board, with the warm liquid of content soaking through his body, the pilot entered and touched his arm.

"Sorry, sir. We've got to cast loose for the flight."

"Eh?" Harriman started, then looked at the speaker. Handsome devil, with a good skull and strong shoulders, reckless eyes and a self-indulgent mouth, but a firm chin. "Oh, excuse me, Captain."

"Quite all right."

"Oh, I say, Captain, er, uh. . ."

"McIntyre."

"Captain McIntyre, could you take a passenger this trip?" The old man leaned eagerly toward him.

"Why, yes, if you wish. Come along with me." He ushered Harriman into a shed marked OFFICE which stood near the gate. "Passenger for a check over, doc."

Harriman looked startled but permitted the medico to run a stethoscope over his thin chest, and to strap a rubber bandage around his arm. Presently he unstrapped it, glanced at McIntyre, and shook his head.

"No go, doc?"

"That's right, Captain."

Harriman looked from face to face. "My heart's all right—that's just a flutter."

The physician's brows shot up. "Is it? But it's not just your heart; at your age your bones are brittle, too brittle to risk a takeoff."

"Sorry, sir," added the pilot, "but the Bates County Fair Association pays the doctor here to see to it that I don't take anyone up who might be hurt by the acceleration."

The old man's shoulders drooped miserably. "I rather expected it."

"Sorry, sir." McIntyre turned to go, but Harriman followed him out.

"Excuse me, Captain--"

"Yes?"

"Could you and your, uh, engineer have dinner with me after your flight?"

The pilot looked at him quizzically. "I don't see why not. Thanks."

"Captain McIntyre, it is difficult for me to see why anyone would quit the EarthMoon run." Fried chicken and hot biscuits in a private dining room of the best hotel the little town of Butler afforded, three-star Hennessey and Corona-Coronas had produced a friendly atmosphere in which three men could talk freely.

"Well, I didn't like it."

"Aw, don't give him that, Mac—you know damn well it was Rule G that got you." McIntyre's mechanic poured himself another brandy as he spoke.

McIntyre looked sullen. "Well, what if I did take a couple o' drinks? Anyhow, I could have squared that—it was the damn persnickety regulations that got me fed up. Who are you to talk?—Smuggler!"

"Sure I smuggled! Who wouldn't with all those beautiful rocks just aching to be taken back to Earth. I had a diamond once as big as... But if I hadn't been caught I'd be in Luna City tonight. And so would you, you drunken blaster ... with the boys buying us drinks, and the girls smiling and making suggestions..." He put his face down and began to weep quietly.

McIntyre shook him. "He's drunk."

"Never mind." Harriman interposed a hand. "Tell me, are you really satisfied not to be on the run any more?"

McIntyre chewed his lip. "No, he's right of course. This barnstorming isn't what it's all cracked up to be. We've been hopping junk at every pumpkin doin's up and down the Mississippi valley—sleeping in tourist camps, and eating at grease burners. Half the time the sheriff has an attachment on the ship, the other half the Society for the Prevention of Something or Other gets an injunction to keep us on the ground. It's no sort of a life for a rocket man."

"Would it help any for you to get to the Moon?"

"Well. . . Yes. I couldn't get back on the EarthMoon run, but if I was in Luna City, I could get a job hopping ore for the Company—they're always short of rocket pilots for that, and they wouldn't mind my record. If I kept my nose clean, they might even put me back on the run, in time."

Harriman fiddled with a spoon, then looked up. "Would you young gentlemen be open to a business proposition?"

"Perhaps. What is it?"

"You own the *Care Free*?"

"Yeah. That is, Charlie and I do—barring a couple of liens against her. What about it?"

"I want to charter her... for you and Charlie to take me to the Moon!"

Charlie sat up with a jerk. "D'joo hear what he said, Mac? He wants us to fly that old heap to the Moon!"

McIntyre shook his head. "Can't do it, Mister Harriman. The old boat's worn out. You couldn't convert to escape fuel. We don't even use standard juice in her—just gasoline and liquid air. Charlie spends all of his time tinkering with her at that She's going to blow up some day."

"Say, Mister Harriman," put in Charlie, "what's the matter with getting an excursion permit and going in a Company ship?"

"No, son," the old man replied, "I can't do that. You know the conditions under which the U. N. granted the Company a monopoly on lunar exploitation—no one to enter space who was not physically qualified to stand up under it. Company to take full responsibility for the safety and health of all citizens beyond the stratosphere. The official reason for granting the franchise was to avoid unnecessary loss of life during the first few years of space travel."

"And you can't pass the physical exam?" Harriman shook his head.

"Well, what the hell—if you can afford to hire us, why don't you just bribe yourself a brace of Company docs? It's been done before."

Harriman smiled ruefully. "I know it has, Charlie, but it won't work for me. You see, I'm a tad too prominent. My full name is Delos D.

Harriman."

"What? You are old D.D.? But hell's bells, you own a big slice of the Company yourself—you practically are the Company; you ought to be able to do anything you like, rules or no rules."

"That is a not unusual opinion, son, but it is incorrect. Rich men aren't more free than other men; they are less free, a good deal less free. I tried to do what you suggest, but, the other directors would not permit me. They are afraid of losing their franchise. It costs them a good deal in—uh—political contact expenses to retain it, as it is."

"Well, I'll be a-- Can you tie that, Mac? A guy with lots of dough, and he can't spend it the way he wants to." McIntyre did not answer, but waited for Harriman to continue.

"Captain McIntyre, if you had a ship, would you take me?"

McIntyre rubbed his chin. "It's against the law."

"I'd make it worth your while."

"Sure he would, Mr. Harriman. Of course you would, Mac. Luna City! Oh, baby!"

"Why do you want to go to the Moon so badly, Mister Harriman?"

"Captain, it's the one thing I've really wanted to do all my life—ever since I was a young boy. I don't know whether I can explain it to you, or not. You young fellows have grown up to rocket travel the way I grew up to aviation. I'm a great deal older than you are, at least fifty years older. When I was a kid practically nobody believed that men would ever reach the Moon. You've seen rockets all your lives, and the first to reach the Moon got there before you were a young boy. When I was a boy they laughed at the idea.

"But I believed—I believed. I read Verne, and Wells, and Smith, and I believed that we could do it—that we would do it. I set my heart on being one of the men to walk the surface of the Moon, to see her other side, and to look back on the face of the Earth, hanging in the sky.

"I used to go without my lunches to pay my dues in the American Rocket Society, because I wanted to believe that I was helping to bring the day nearer when we would reach the Moon. I was already an old man when that day arrived. I've lived longer than I should, but I would not let myself die... I will not!—until I have set foot on the Moon."

McIntyre stood up and put out his hand. "You find a ship, Mister Harriman. I'll drive 'er."

"Atta' boy, Mac! I told you he would, Mister Harriman."

Harriman mused and dozed during the half-hour run to the north into Kansas City, dozed in the light troubled sleep of old age. Incidents out of a long life ran through his mind in vagrant dreams. There was that time... oh, yes, 1910 ... A little boy on a warm spring night;

"What's that, Daddy?"—"That's Halley's comet, Sonny."—"Where did it come from?"—"I don't know, Son. From way out in the sky somewhere."—"It's *beyoootiful*, Daddy. I want to touch it."—"'Fraid not, Son."

"Delos, do you mean to stand there and tell me you put the money we had saved for the house into that crazy rocket company?"—"Now, Charlotte, please! It's not crazy; it's a sound business investment. Someday soon rockets will fill the sky. Ships and trains will be obsolete. Look what happened to the men that had the foresight to invest in Henry Ford."—"We've been all over this before."—"Charlotte, the day will come when men will rise up off the Earth and visit the Moon, even the planets. This is the beginning."—"Must you shout?"—"I'm sorry, but--"—"I feel a headache coming on. Please try to be a little quiet when you come to bed."

He hadn't gone to bed. He had sat out on the veranda all night long, watching the full Moon move across the sky. There would be the devil to pay in the morning, the devil and a thin-lipped silence. But he'd stick by his guns. He'd given in on most things, but not on this. But the night was his. Tonight he'd be alone with his old friend. He searched her face. Where was Mare Crisium? Funny, he couldn't make it out. He used to be able to see it plainly when he was a boy. Probably needed new glasses—this constant office work wasn't good for his eyes.

But he didn't need to see, he knew where they all were; Crisium, Mare Fecunditatis, Mare Tranquilitatis—that one had a satisfying roll! —the Apennines, the Carpathians, old Tycho with it's mysterious rays.

Two hundred and forty thousand miles—ten times around the Earth. Surely men could bridge a little gap like that. Why, he could almost reach out and touch it, nodding there behind the elm trees. Not that he could help. He hadn't the education.

"Son, I want to have a little serious talk with you."—"Yes, Mother."—"I know you had hoped to go to college next year--" (Hoped! He had lived for it. The University of Chicago to study under Moulton, then on to the Yerkes Observatory to work under the eye of Dr. Frost himself)—"and I had hoped so too. But with your father gone, and the girls growing up, it's harder to make ends meet. You've been a good boy, and worked hard to help out. I know you'll understand."—"Yes, Mother."

"Extra! Extra! STRATOSPHERE ROCKET REACHES PARIS. Read aaaaalllll about 't." The the little man in the bifocals snatched at the paper and hurried back to the office.—"Look at this, George."—"Huh?

Hmm, interesting, but what of it?"—"Can't you see? The next stage is to the Moon!"—"God, but you're a sucker, Delos. The trouble with you is, you read too many of those trashy magazines. Now I caught my boy reading one of 'em just last week, *Stunning Stories*, or some such title, and dressed him down proper. Your folks should have done you the same favor."—Harriman squared his narrow, middle-aged shoulders. "They will so reach the Moon!"—His partner laughed. "Have it your own way. If baby wants the Moon, papa bring it for him. But you stick to your discounts and commissions; that's where the money is."

The big car droned down the Paseo, and turned off on Armour Boulevard. Old Harriman stirred uneasily in his sleep and muttered to himself.

"But Mister Harriman--" The young man with the notebook was plainly perturbed. The old man grunted.

"You heard me. Sell 'em. I want every share I own realized in cash as rapidly as possible; Spaceways, Spaceways Provisioning Company, Artemis Mines, Luna City Recreations, the whole lot of them."

"It will depress the market. You won't realize the full value of your holdings."

"Don't you think I know that? I can afford it."

"What about the shares you had earmarked for Richardson Observatory, and for the Harriman Scholarships?"

"Oh, yes. Don't sell those. Set up a trust. Should have done it long ago. Tell young Kamens to draw up the papers. He knows what I want"

The interoffice visor flashed into life. "The gentlemen are here, Mr. Harriman."

"Send 'em in. That's all, Ashley. Get busy." Ashley went out as McIntyre and Charlie entered. Harriman got up and trotted forward to greet them.

"Come in, boys, come in. I'm so glad to see you. Sit down. Sit down. Have a cigar."

"Mighty pleased to see you, Mr. Harriman," acknowledged Charlie. "In fact, you might say we need to see you."

"Some trouble, gentlemen?" Harriman glanced from face to face. McIntyre answered him.

"You still mean that about a job for us, Mr. Harriman?"

"Mean it? Certainly, I do. You're not backing out on me?"

"Not at all. We need that job now. You see the *Care Free* is lying in the middle of the Osage River, with her jet split clear back to the injector."

"Dear me! You weren't hurt?"

"No, aside from sprains and bruises. We jumped."

Charlie chortled. "I caught a catfish with my bare teeth."

In short order they got down to business. "You two will have to buy a ship for me. I can't do it openly; my colleagues would figure out what I mean to do and stop me. I'll supply you with all the cash you need. You go out and locate some sort of a ship that can be refitted for the trip. Work, up some good story about how you are buying it for some playboy as a stratosphere yacht, or that you plan to establish an arctic-antarctic tourist route. Anything as long as no one suspects that she is being-outfitted for space flight.

"Then, after the Department of Transport licenses her for strato flight, you move out to a piece of desert out west—I'll find a likely parcel of land and buy it—and then I'll join you. Then we'll install the escape-fuel tanks, change the injectors, and timers, and so forth, to fit her for the hop. How about it?"

McIntyre looked dubious. "It'll take a lot of doing. Charlie, do you think you can accomplish that changeover without a dockyard and shops?"

"Me? Sure I can—with your thick-fingered help. Just give me the tools and materials I want, and don't hurry me too much. Of course, it won't be fancy--"

"Nobody wants it to be fancy. I just want a ship that won't blow when I start slapping the keys. Isotope fuel is no joke."

"It won't blow, Mac."

"That's what you thought about the *Care Free*."

"That ain't fair, Mac. I ask you, Mr. Harriman—That heap was junk, and we knew it. This'll be different. We're going to spend some dough and do it right. Ain't we, Mr. Harriman?"

Harriman patted him on the shoulder. "Certainly we are, Charlie. You can have all the money you want. That's the least of our worries. Now do the salaries and bonuses I mentioned suit you? I don't want you to be short."

"--as you know, my clients are his nearest relatives and have his interests at heart. We contend that Mr. Harriman's conduct for the past several weeks, as shown by the evidence here adduced, gives clear indication that a mind, once brilliant in the world of finance, has become senile. It is, therefore, with the deepest regret that we pray this honorable court, if it pleases, to declare Mr. Harriman incompetent and to assign a conservator to protect his financial interests and those of his future heirs and assigns." The attorney sat down, pleased with himself.

Mr. Kamens took the floor. "May it please the court, if my esteemed friend is quite through, may I suggest that in his last few words be gave away his entire thesis. '--the financial interests of future heirs and assigns.' It is evident that the petitioners believe that my client should conduct his affairs in such a fashion as to insure that his nieces and nephews, and their issue, will be supported in unearned luxury for the rest of their lives. My client's wife has passed on, he has no children. It is admitted that he has provided generously for his sisters and their children in times past, and that he has established annuities for such near kin as are without means of support.

"But now like vultures, worse than vultures, for they are not content to let him die in peace, they would prevent my client from enjoying his wealth in whatever manner best suits him for the few remaining years of his life. It is true that he has sold his holdings; is it strange that an elderly man should wish to retire? It is true that he suffered some paper losses in liquidation. 'The value of a thing is what that thing will bring.' He was retiring and demanded cash. Is there anything strange about that?

"It is admitted that he refused to discuss his actions with his so-loving kinfolk. What law, or principle, requires a man to consult with his nephews on anything?

"Therefore, we pray that this court will confirm my client in his right to do what he likes with his own, deny this petition, and send these meddlers about their business."

The judge took off his spectacles .and polished them thoughtfully.

"Mr. Kamens, this court has as high a regard for individual liberty as you have, and you may rest assured that any action taken will be solely in the interests of your client. Nevertheless, men do grow old, men do become senile, and in such cases must be protected.

"I shall take this matter under advisement until tomorrow. Court is adjourned."

From the Kansas City Star:

"ECCENTRIC MILLIONAIRE DISAPPEARS"

"--failed to appear for the adjourned hearing. The bailiffs returned from a search of places usually frequented by Harriman with the report that he had not been seen since the previous day. A bench warrant under contempt proceedings has been issued and--"

A desert sunset is a better stimulant for the appetite than a hot dance orchestra. Charlie testified to this by polishing the last of the ham gravy with a piece of bread. Harriman handed each of the younger men cigars and took one himself.

"My doctor claims that these weeds are bad for my heart condition," he remarked as he lighted it, "but I've felt so much better since I joined you boys here on the ranch that I am inclined to doubt him." He exhaled a cloud of blue-grey smoke and resumed. "I don't think a man's health depends so much on what he does as on whether he wants to do it. I'm doing what I want to do."

"That's all a man can ask of life," agreed McIntyre.

"How does the work look now, boys?"

"My end's in pretty good shape," Charlie answered. "We finished the second pressure tests on the new tanks and the fuel lines today. The ground tests are all done, except the calibration runs. Those won't take long—just the four hours to make the runs if I don't run into some bugs. How about you, Mac?"

McIntyre ticked them off on his fingers. "Food supplies and water on board. Three vacuum suits, a spare, and service kits. Medical supplies. The buggy already had all the standard equipment for strato flight. The late lunar ephemerides haven't arrived as yet."

"When do you expect them?"

"Any time—they should be here now. Not that it matters. This guff about how hard it is to navigate from here to the Moon is hokum to impress the public. After all you can see your destination—it's not like ocean navigation. Gimme a sextant and a good radar and I'll set you down any place on the Moon you like, without cracking an almanac or a star table, just from a general knowledge of the relative speeds involved."

"Never mind the personal buildup, Columbus," Charlie told him, "we'll admit you can hit the floor with your hat. The general idea is, you're ready to go now. Is that right?"

"That's it."

"That being the case, I could run those tests tonight. I'm getting jumpy—things have been going too smoothly. If you'll give me a hand, we ought to be in bed by midnight."

"O.K., when I finish this cigar."

They smoked in silence for a while, each thinking about the coming trip and what it meant to him. Old Harriman tried to repress the excitement that possessed him at the prospect of immediate realization of his lifelong dream.

"Mr. Harriman--"

"Eh? What is it, Charlie?"

"How does a guy go about getting rich, like you did?"

"Getting rich? I can't say; I never tried to get rich. I never wanted to be rich, or well known, or anything like that."

"Huh?"

"No, I just wanted to live a long time and see it all happen. I wasn't unusual; there were lots of boys like me—radio hams, they were, and telescope builders, and airplane amateurs. We had science clubs, and basement laboratories, and sciencefiction leagues—the kind of boys who thought there was more romance in one issue of the *Electrical Experimenter* than in all the books Dumas ever wrote. We didn't want to be one of Horatio Alger's Get-Rich heroes either, we wanted to build space ships. Well, some of us did."

"Jeez, Pop, you make it sound exciting."

"It was exciting, Charlie. This has been a wonderful, romantic century, for all of its bad points. And it's grown more wonderful and more exciting every year. No, I didn't want to be rich; I just wanted to live long enough to see men rise up to the stars, and, if God was good to me, to go as far as the Moon myself." He carefully deposited an inch of white ash in a saucer. "It has been a good life. I haven't any complaints."

McIntyre pushed back his chair. "Come on, Charlie, if you're ready."

They all got up. Harriman started to speak, then grabbed at his chest, his face a dead grey-white. "Catch him, Mac!"

"Where's his medicine?"

"In his vest pocket."

They eased him over to a couch, broke a small glass capsule in a handkerchisf, and held it under his nose. The volatile released by the capsule seemed to bring a little color into his face. They did what little they could for him, then waited for him to regain consciousness.

Charlie broke the uneasy silence. "Mac, we ain't going through with this."

"Why not?"

"It's murder. He'll never stand up under the initial acceleration."

"Maybe not, but it's what he wants to do. You heard him."

"But we oughtn't to let him."

"Why not? It's neither your business, nor the business of this damn paternalistic government, to tell a man not to risk his life doing what he really wants to do."

"All the same, I don't feel right about it. He's such a swell old duck."

"Then what d'yuh want to do with him—send him back to Kansas City so those old harpies can shut him up in a laughing academy till he dies of a broken heart?"

"N-no-o-o—not that."

"Get out there, and make your set-up for those test runs. I'll be along."

A wide-tired desert runabout rolled in the ranch yard gate the next morning and stopped in front of the house. A heavyset man with a firm, but kindly, face climbed out and spoke to McIntyre, who approached to meet him.

"You James Mcintyre?"

"What about it?"

"I'm the deputy federal marshal hereabouts. I got a warrant for your arrest."

"What's the charge?"

"Conspiracy to violate the Space Precautionary Act."

Charlie joined the pair. "What's up, Mac?"

The deputy answered. "You'd be Charles Cummings, I guess. Warrant here for you. Got one for a man named Harriman, too, and a court order to put seals on your space ship."

"We've no space ship."

"What d'yuh keep in that big shed?"

"Strato yacht."

"So? Well, I'll put seals on her until a space ship comes along. Where's Harriman?"

"Right in there." Charlie obliged by pointing, ignoring McIntyre's scowl.

The deputy turned his head. Charlie couldn't have missed the button by a fraction of an inch for the deputy collapsed quietly to the ground. Charlie stood over him, rubbing his knuckles and mourning.

"Damn it to hell—that's the finger I broke playing shortstop. I'm always hurting that finger."

"Get Pop into the cabin," Mac cut him short, "and strap him into his hammock."

"Aye aye, Skipper."

They dragged the ship by tractor out of the hangar, turned, and went out the desert plain to find elbow room for the takeoff. They climbed in. McIntyre saw the deputy from his starboard conning port. He was staring disconsolately after them.

Mcintyre fastened his safety belt, settled his corset, and spoke into the engineroom speaking tube. "All set, Charlie?"

"All set, Skipper. But you can't raise ship yet, Mac—*She ain't named!* "

"No time for your superstitions!"

Harriman's thin voice reached them. "Call her the *Lunatic*-- It's the only appropriate name!"

McIntyre settled his head into the pads, punched two keys, then three more in rapid succession, and the *Lunatic* raised ground.

"How are you, Pop?"

Charlie searched the old man's face anxiously. Harriman licked his lips and managed to speak. "Doing fine, son. Couldn't be better."

"The acceleration is over; it won't be so bad from here on. I'll unstrap you so you can wiggle around a little. But I think you'd better stay in the hammock." He tugged at buckles. Harriman partially repressed a groan.

"What is it, Pop?"

"Nothing. Nothing at all. Just go easy on that side."

Charlie ran his fingers over the old man's side with the sure, delicate touch of a mechanic. "You ain't foolin' me none, Pop. But there isn't much I can do until we ground."

"Charlie--"

"Yes, Pop?"

"Can't I move to a port? I want to watch the Earth."

"Ain't nothin' to see yet; the ship hides it. As soon as we turn ship, I'll move you. Tell you what; I'll give you a sleepy pill, and then wake you when we do."

"No!"

"Huh?"

"I'll stay awake."

"Just as you say, Pop."

Charlie clambered monkey fashion to the nose of the ship, and anchored to the gymbals of the pilot's chair. McIntyre questioned him with his eyes.

"Yeah, he's alive all right," Charlie told him, "but he's in bad shape."

"How bad?"

"Couple of cracked ribs anyhow. I don't know what else. I don't know whether he'll last out the trip, Mac. His heart was pounding something awful."

"He'll last, Charlie. He's tough."

"Tough? He's delicate as a canary."

"I don't mean that. He's tough way down inside where it counts."

"Just the same you'd better set her down awful easy if you want to ground with a full complement aboard."

"I will. I'll make one full swing around the Moon and ease her in on an involute approach curve. We've got enough fuel, I think."

They were now in a free orbit; after McIntyre turned ship, Charlie went back, unslung the hammock, and moved Harriman, hammock and all, to a side port. Mcliityre steadied the ship about a transverse axis so that the tail pointed toward the sun, then gave a short blast on two tangential jets opposed in couple to cause the ship to spin slowly about her longitudinal axis, and thereby create a slight artificial gravity. The initial weightlessness when coasting commenced had knotted the old man with the characteristic nausea of free flight, and the pilot wished to save his passenger as much discomfort as possible.

But Harriman was not concerned with the condition of his stomach. There it was, all as he had imagined it so many times.

The Moon swung majestically past the view port, wider than he had ever seen it before, all of her familiar features cameo clear. She gave way to the Earth as the ship continued its slow swing, the Earth itself as he had envisioned her, appearing like a noble moon, many times as wide as the Moon appears to the Earthbound, and more luscious, more sensuously beautiful than the silver Moon could be. It was sunset near the Atlantic seaboard—the line of shadow cut down the coast line of North America, slashed through Cuba, and obscured all but the west coast of South America. He savored the mellow blue of the Pacific Ocean, felt the texture of the soft green and brown of the continents, admired the blue-white cold of the polar caps. Canada and the northern states were obscured by cloud, a vast low pressure area that spread across the continent. It shone with an even more satisfactory dazzling white than the polar caps.

As the ship swung slowly, around, Earth would pass from view, and the stars would march across the port the same stars he had always known, but steady, brighter, and unwinking against a screen of perfect, live black. Then the Moon would swim into view again to claim his thoughts.

He was serenely happy in a fashion not given to most men, even in a long lifetime. He felt as if he were every man who has ever lived, looked up at the stars, and longed.

As the long hours came and went he watched and dozed and dreamed. At least once he must have fallen into deep sleep, or possibly delirium, for he came to with a start, thinking that his wife, Charlotte, was calling to him. "Delos!" the voice had said. "Delos! Come in from there! You'll catch your death of cold in that night air."

Poor Charlotte! She had been a good wife to him, a good wife. He was quite sure that her only regret in dying had been her fear that he could not take proper care of himself. It had not been her fault that she had not shared his dream, and his need.

Charlie rigged the hammock in such a fashion that Harriman could watch from the starboard port when they swung around the far face of the Moon. He picked out the landmarks made familiar to him by a thousand photographs with nostalgic pleasure, as if he were returning to his own country. Mcintyre brought her slowly down as they came back around to the Earthward face, and prepared to land east of Mare Fecunditatis, about ten miles from Luna City.

It was not a bad landing, all things considered. He had to land without coaching from the ground, and he had no second pilot to watch the radar for him. In his anxiety to make it gentle he missed his destination by some thirty miles, but he did his cold-sober best. But at that it was bumpy. As they grounded and the pumice dust settled around them, Charlie came up to the control station.

"How's our passenger?" Mac demanded.

"I'll see, but I wouldn't make any bets. That landing stunk, Mac."

"Damn it, I did my best."

"I know you did, Skipper. Forget it."

But the passenger was alive and conscious although bleeding from the nose and with a pink foam on his lips. He was feebly trying to get himself out of his cocoon. They helped him, working together.

"Where are the vacuum suits?" was his first remark.

"Steady, Mr. Harriman. You can't go out there yet. We've got to give you some first aid."

"*Get me that suit!* First aid can wait."

Silently they did as he ordered. His left leg was practically useless, and they had to help him through the lock, one on each side. But with his inconsiderable mass having a lunar weight of only twenty pounds, he was no burden.. They found a place some fifty yards from the ship where they could prop him up and let him look, a chunk of scoria supporting his head.

Mcintyre put his helmet against the old man's and spoke. "We'll leave you here to enjoy the view while we get ready for the trek into town. It's a forty-miler, pretty near, and we'll have to break out spare air bottles and rations and stuff. We'll be back soon."

Harriman nodded without answering, and squeezed their gauntlets with a grip that was surprisingly strong.

He sat very quietly, rubbing his hands against the soil of the Moon and sensing the curiously light pressure of his body against the ground. At long last there was peace in his heart. His hurts had ceased to pain him. He was where he had longed to be—he had followed his need.

Over the western horizon hung the Earth at last quarter, a green-blue giant moon. Overhead the Sun shone down from a black and starry sky. And underneath the Moon, the soil of the Moon itself. He was on the Moon!

He lay back still while a bath of content flowed over him like a tide at flood, and soaked to his very marrow.

His attention strayed momentarily, and he thought once again that his name was called. Silly, he thought, I'm getting old—my mind wanders.

Back in the cabin Charlie and Mac were rigging shoulder yokes on a stretcher. "There. That will do," Mac commented. "We'd better stir Pop out; we ought to be going."

"I'll get him," Charlie replied. "I'll just pick him up and carry him. He don't weigh nothing."

Charlie was gone longer than Mcintyre had expected him to be. He returned alone. Mac waited for him to close the lock, and swing back his helmet. "Trouble?"

"Never mind the stretcher, Skipper. We won't be needin' it.

"Yeah, I mean it," he continued. "Pop's done for. I did what was necessary."

Mcintyre bent down without a word and picked up the wide skis necessary to negotiate the powdery ash. Charlie followed his example. Then they swung the spare air bottles over their shoulders, and passed out through the lock.

They didn't bother to close the outer door of the lock behind them.

Coventry

“Have you anything to say before sentence is pronounced on you?” The mild eyes of the Senior Judge studied the face of the accused. His question was answered by a sullen silence.

“Very well—the jury has determined that you have violated a basic custom agreed to under the Covenant, and that through this act did damage another free citizen. It is the opinion of the jury and of the court that you did so knowingly, and aware of the probability of damage to a free citizen. Therefore, you are sentenced to choose between the Two Alternatives.”

A trained observer might have detected a trace of dismay breaking through the mask of indifference with which the young man had faced his trial. Dismay was unreasonable; in view of his offence, the sentence was inevitable—but reasonable men do not receive the sentence.

After waiting a decent interval, the judge turned to the bailiff. “Take him away.”

The prisoner stood up suddenly, knocking over his chair. He glared wildly around at the company assembled and burst into speech.

“Hold on!” he yelled. “I’ve got something to say first!” In spite of his rough manner there was about him the noble dignity of a wild animal at bay. He stared at those around him, breathing heavily, as if they were dogs waiting to drag him down.

“Well?” he demanded, “Well? Do I get to talk, or don’t I? It ‘ud be the best joke of this whole comedy, if a condemned man couldn’t speak his mind at the last!”

“You may speak,” the Senior Judge told him, in the same unhurried tones with which he had pronounced sentence, “David MacKinnon, as long as you like, and in any manner that you like. There is no limit to that freedom, even for those who have broken the Covenant. Please speak into the recorder.”

MacKinnon glanced with distaste at the microphone near his face. The knowledge that any word he spoke would be recorded and analyzed inhibited him. “I don’t ask for records,” he snapped.

“But we must have them,” the judge replied patiently, “in order that others may determine whether, or not, we have dealt with you fairly, and according to the Covenant. Oblige us, please.”

“Oh—very well!” He ungraciously conceded the requirement and directed his voice toward the instrument. “There’s no sense in me talking at all-but, just the same, I’m going to talk and you’re going to listen… You talk about your precious ‘Covenant’ as if it were something holy. I don’t agree to it and I don’t accept it. You act as if it had been sent down from Heaven in a burst of light. My grandfathers fought in the Second Revolution—but they fought to abolish superstition… not to let sheep-minded fools set up new ones.

“There were men in those days!” He looked contemptuously around him. “What is there left today? Cautious, compromising ‘safe’ weaklings with water in their veins. You’ve planned your whole world so carefully that you’ve planned the fun and zest right out of it. Nobody is ever hungry, nobody ever gets hurt. Your ships can’t crack up and your crops can’t fail. You even have the weather tamed so it rains politely—after midnight. Why wait till midnight, I don’t know… you all go to bed at nine o’clock!

“If one of you safe little people *should* have an unpleasant emotion-perish the thought!—you’d trot right over to the nearest psychodynamics clinic and get your soft little minds readjusted. Thank God I never succumbed to that dope habit. I’ll keep my own feelings, thanks, no matter how bad they taste.

“You won’t even make love without consulting a psychotechnician — Is her mind as flat and insipid as mine? Is there any emotional instability in her family? It’s enough to make a man gag. As for fighting over a woman— if any one had the guts to do that, he’d find a proctor at his elbow in two minutes, looking for the most convenient place to paralyze him, and inquiring with sickening humility, ‘May I do you a service, sir?’”

The bailiff edged closer to MacKinnon. He turned on him. “Stand back, you. I’m not through yet.” He turned and added, “You’ve told me to choose between the Two Alternatives. Well, it’s no hard choice for me. Before I’d submit to treatment, before I’d enter one of your neat little, safe little, pleasant little reorientation homes and let my mind be pried into by a lot of soft-fingered doctors—before I did anything like that, I'd choose a nice, clean death. Oh, no—there is just one choice for me, not two. I take the choice of going to Coventry—and glad of it, too… I hope I never hear of the United States again!

"But there is just one thing I want to ask you before I go—Why do you bother to live anyhow? I would think that anyone of you would welcome an end to your silly, futile lives just from sheer boredom. That's all." He turned back to the bailiff. "Come on, you."

"One moment, David MacKinnon." The Senior Judge held up a restraining hand. "We have listened to you. Although custom does not compel it, I am minded to answer some of your statements. Will you listen?"

Unwilling, but less willing to appear loutish in the face of a request so obviously reasonable, the younger man consented.

The judge commenced to speak in gentle, scholarly words appropriate to a lecture room. "David MacKinnon, you have spoken in a fashion that doubtless seems wise to you. Nevertheless, your words were wild, and spoken in haste. I am moved to correct your obvious misstatements of fact. The Covenant is not a superstition, but a simple temporal contract entered into by those same revolutionists for pragmatic reasons. They wished to insure the maximum possible liberty for every person.

"You yourself have enjoyed that liberty. No possible act, nor mode of conduct, was forbidden to you, as long as your action did not damage another. Even an act specifically prohibited by law could not be held against you, unless the state was able to prove that your particular act damaged, or caused evident danger of damage, to a particular individual.

"Even if one should willfully and knowingly damage another—as you have done-the state does not attempt to sit in moral judgment, nor to punish. We have not the wisdom to do that, and the chain of injustices that have always followed such moralistic coercion endanger the liberty of all. Instead, the convicted is given the choice of submitting to psychological readjustment to correct his tendency to wish to damage others, or of having the state withdraw itself from him—of sending him to Coventry.

"You complain that our way of living is dull and unromantic, and imply that we have deprived you of excitement to which you feel entitled. You are free to hold and express your esthetic opinion of our way of living, but you must not expect us to live *to* suit your tastes. You are free to seek danger and adventure if you wish—there is danger still in experimental laboratories; there is hardship in the mountains of the Moon, and death in the jungles of Venus—but you are not free to expose us to the violence of your nature."

"Why make so much of it?" MacKinnon protested contemptuously.

"You talk as if I had committed a murder—I simply punched a man in the nose for offending me outrageously!"

"I agree with your esthetic judgment of that individual," the judge continued calmly, "and am personally rather gratified that you took a punch at him—but your psychometrical tests show that you believe yourself capable of judging morally your fellow citizens and feel justified in personally correcting and punishing their lapses. You are a dangerous individual, David MacKinnon, a danger to all of us, for we can not predict what damage you may do next. From a social standpoint, your delusion makes you as mad as the March Hare.

"You refuse treatment—therefore we withdraw our society from you, we cast you out, we divorce you. To Coventry with you." He turned to the bailiff. "Take him away."

MacKinnon peered out of a forward port of the big transport helicopter with repressed excitement in his heart. There! That must be it—that black band in the distance. The helicopter drew closer, and he became certain that he was seeing the Barrier—the mysterious, impenetrable wall that divided the United States from the reservation known as Coventry.

His guard looked up from the magazine he was reading and followed his gaze. "Nearly there, I see," he said pleasantly. "Well, it won't be long now."

"It can't be any too soon for me!"

The guard looked at him quizzically, but with tolerance. "Pretty anxious to get on with it, eh?"

MacKinnon held his head high. "You've never brought a man to the Gateway who was more anxious to pass through!"

"Mmm—maybe. They all say that, you know. Nobody goes through the Gate against his own will."

"I mean it!"

"They all do. Some of them come back, just the same."

"Say—maybe you can give me some dope as to conditions inside?"

"Sorry," the guard said, shaking his head, "but that is no concern of the United States, nor of any of its employees. You'll know soon enough."

MacKinnon frowned a little. "It seems strange-I tried inquiring, but found no one who would admit that they had any notion about the inside. And yet you say that some come out. Surely some of them must talk…"

"That's simple," smiled the guard, "part of their reorientation is a subconscious compulsion not to discuss their experiences."

"That's a pretty scabby trick. Why should the government deliberately conspire to prevent me, and people like me, from knowing what we are going up against?"

"Listen, buddy," the guard answered, with mild exasperation, "you've told the rest of us to go to the devil. You've told us that you could get along without us. You are being given plenty of living room in some of the best land on this continent, and you are being allowed to take with you everything that you own, or your credit could buy. What the deuce else do you expect?"

MacKinnon's face settled in obstinate lines. "What assurance have I that there will be any land left for me?"

"That's your problem. The government sees to it that there is plenty of land for the population. The divvy-up is something you rugged individualists have to settle among yourselves. You've turned down our type of social cooperation; why should you expect the safeguards of our organization?" The guard turned back to his reading and ignored him.

They landed on a small field which lay close under the blank black wall. No gate was apparent, but a guardhouse was located at the side of the field. MacKinnon was the only passenger. While his escort went over to the guardhouse, he descended from the passenger compartment and went around to the freight hold. Two members of the crew were letting down a ramp from the cargo port. When he appeared, one of them eyed him, and said, "Okay, there's your stuff. Help yourself."

He sized up the job, and said, "It's quite a lot, isn't it? I'll need some help. Will you give me a hand with it?"

The crew member addressed paused to light a cigarette before replying,

"It's your stuff. If you want it, get it out. We take off in ten minutes." The two walked around him and reentered the ship.

"Why, you—" MacKinnon shut up and kept the rest of his anger to himself. The surly louts! Gone was the faintest trace of regret at leaving civilization. He'd show them! He could get along without them.

But it was twenty minutes and more before he stood beside his heaped up belongings and watched the ship rise. Fortunately the skipper had not been adamant about the time limit. He turned and commenced loading his steel tortoise. Under the romantic influence of the classic literature of a bygone day he had considered using a string of burros, but had been unable to find a zoo that would sell them to him. It was just as well—he was completely ignorant of the limits, foibles, habits, vices, illnesses, and care of those useful little beasts, and unaware of his own ignorance. Master and servant would have vied in making each other unhappy.

The vehicle he had chosen was not an unreasonable substitute for burros. It was extremely rugged, easy to operate, and almost foolproof. It drew its power from six square yards of sunpower screens on its low curved roof. These drove a constant-load motor, or, when halted, replenished the storage battery against cloudy weather, or night travel. The bearings were “everlasting,” and every moving part, other than the caterpillar treads and the controls, were sealed up, secure from inexpert tinkering.

It could maintain a steady six miles per hour on smooth, level pavement. When confronted by hills, or rough terrain, it did not stop, but simply slowed until the task demanded equalled its steady power output.

The steel tortoise gave MacKinnon a feeling of Crusoe-like independence. It did not occur to him his chattel was the end product of the cumulative effort and intelligent cooperation of hundreds of thousands of men, living and dead. He had been used all his life to the unfailing service of much more intricate machinery, and honestly regarded the tortoise as a piece of equipment of the same primitive level as a woodsman’s axe, or a hunting knife. His talents had been devoted in the past to literary criticism rather than engineering, but that did not prevent him from believing that his native intelligence and the aid of a few reference books would be all that he would really need to duplicate the tortoise, if necessary.

Metal ores were necessary, he knew, but saw no obstacle in that, his knowledge of the difficulties of prospecting, mining, and metallurgy being as sketchy as his knowledge of burros.

His goods filled every compartment of the compact little freighter. He checked the last item from his inventory and ran a satisfied eye down the list. Any explorer or adventurer of the past might well be pleased with such equipment, he thought. He could imagine showing Jack London his knock-down cabin. See, Jack, he would say, it’s proof against any kind of weather-perfectly insulated walls and floor—and can’t rust. It’s so light that you can set it up in five minutes by yourself, yet it’s so strong that you can sleep sound with the biggest grizzly in the world snuffling right outside your door.

And London would scratch his head, and say, Dave, you’re a wonder. If I’d had that in the Yukon, it would have been a cinch!

He checked over the list again. Enough concentrated and desiccated food and vitamin concentrates to last six months. That would give him time enough to build hothouses for hydroponics, and get his seeds started. Medical supplies—he did not expect to need those, but foresight was always best. Reference books of all sorts. A light sporting rifle-vintage: last century. His face clouded a little at this. The War Department had positively refused to sell him a portable blaster. When he had claimed the right of common social heritage, they had grudgingly provided him with the plans and specifications, and told him to build his own. Well, he would, the first spare time he got.

Everything else was in order. MacKinnon climbed into the cockpit, grasped the two hand controls, and swung the nose of the tortoise toward the guardhouse. He had been ignored since the ship had landed; he wanted to have the gate opened and to leave.

Several soldiers were gathered around the guardhouse. He picked out a legate by the silver stripe down the side of his kilt and spoke to him. "I'm ready to leave. Will you kindly open the Gate?"

"Okay," the officer answered him, and turned to a soldier who wore the plain grey kilt of a private's field uniform. "Jenkins, tell the power house to dilate—about a number three opening, tell them," he added, sizing up the dimensions of the tortoise.

He turned to MacKinnon. "It is my duty to tell you that you may return to civilization, even now, by agreeing to be hospitalized for your neurosis."

"I have no neurosis!"

"Very well. If you change your mind at any future time, return to the place where you entered. There is an alarm there with which you may signal to the guard that you wish the gate opened."

"I can't imagine needing to know that."

The legate shrugged. "Perhaps not—but we send refugees to quarantine all the time. If I were making the rules, it might be harder to get out again." He was cut off by the ringing of an alarm. The soldiers near them moved smartly away, drawing their blasters from their belts as they ran. The ugly snout of a fixed blaster poked out over the top of the guardhouse and pointed toward the Barrier.

The legate answered the question on MacKinnon's face. "The power house is ready to open up." He waved smartly toward that building, then turned back. "Drive straight through the center of the opening. It takes a lot of power to suspend the stasis; if you touch the edge, we'll have to pick up the pieces."

A tiny, bright dot appeared in the foot of the barrier opposite where they waited. It spread into a half circle across the lampblack nothingness. Now it was large enough for MacKinnon to see the countryside beyond through the arch it had formed. He peered eagerly.

The opening grew until it was twenty feet wide, then stopped. It framed a scene of rugged, barren hills. He took this in, and turned angrily on the legate. "I've been tricked!" he exclaimed. "That's not fit land to support a man."

"Don't be hasty," he told MacKinnon. "There's good land beyond. Besides —you don't have to enter. But if you are going, go!"

MacKinnon flushed, and pulled back on both hand controls. The treads bit in and the tortoise lumbered away, straight for the Gateway to Coventry.

When he was several yards beyond the Gate, he glanced back. The Barrier loomed behind him, with nothing to show where the opening had been. There was a little sheetmetal shed adjacent to the point where he had passed through. He supposed that it contained the alarm the legate had mentioned, but he was not interested and turned his eyes back to his driving.

Stretching before him, twisting between rocky hills, was a road of sorts. It was not paved and the surface had not been repaired recently, but the grade averaged downhill and the tortoise was able to maintain a respectable speed. He continued down it, not because he fancied it, but because it was the only road which led out of surroundings obviously unsuited to his needs.

The road was untravelled. This suited him; he had no wish to encounter other human beings until he had located desirable land to settle on, and had staked out his claim. But the hills were not devoid of life; several times he caught glimpses of little dark shapes scurrying among the rocks, and occasionally bright, beady eyes stared back into his.

It did not occur to him at first that these timid little animals, streaking for cover at his coming, could replenish his larder—he was simply amused and warmed by their presence. When he did happen to consider that they might be used as food, the thought was at first repugnant to him-the custom of killing for “sport” had ceased to be customary long before his time; and inasmuch as the development of cheap synthetic proteins in the latter half of the preceding century had spelled the economic ruin of the business of breeding animals for slaughter, it is doubtful if he had ever tasted animal tissue in his life.

But once considered, it was logical to act. He expected to live off the country; although he had plenty of food on hand for the immediate future, it would be wise to conserve it by using what the country offered. He suppressed his esthetic distaste and ethical misgivings, and determined to shoot one of the little animals at the first opportunity.

Accordingly, he dug out the rifle, loaded it, and placed it handy. With the usual perversity of the world-as-it-is, no game was evident for the next half hour. He was passing a little shoulder of rocky outcropping when he saw his prey. It peeked at him from behind a small boulder, its sober eyes wary but unperturbed. He stopped the tortoise and took careful aim, resting and steadying the rifle on the side of the cockpit. His quarry accommodated him by hopping out into full view.

He pulled the trigger, involuntarily tensing his muscles and squinting his eyes as he did so. Naturally, the shot went high and to the right.

But he was much too busy just then to be aware of it. It seemed that the whole world had exploded. His right shoulder was numb, his mouth stung as if he had been kicked there, and his ears rang in a strange and unpleasant fashion. He was surprised to find the gun still intact in his hands and apparently none the worse for the incident.

He put it down, clambered out of the car, and rushed up to where the small creature had been. There was no sign of it anywhere. He searched the immediate neighborhood, but did not find it. Mystified, he returned to his conveyance, having decided that the rifle was in some way defective, and that he should inspect it carefully before attempting to fire it again.

His recent target watched his actions cautiously from a vantage point yards away, to which it had stampeded at the sound of the shot. It was equally mystified by the startling events, being no more used to firearms than was MacKinnon.

Before he started the tortoise again, MacKinnon had to see to his upper lip, which was swollen and tender and bleeding from a deep scratch. This increased his conviction that the gun was defective. Nowhere in the romantic literature of the nineteenth and twentieth centuries, to which he was addicted, had there been a warning that, when firing a gun heavy enough to drop a man in his tracks, it is well not to hold the right hand in such a manner that the recoil will cause the right thumb and thumb nail to strike the mouth.

He applied an antiseptic and a dressing of sorts, and went on his way, somewhat subdued. The arroyo by which he had entered the hills had widened out, and the hills were greener. He passed around one sharp turn in the road, and found a broad fertile valley spread out before him. It stretched away until it was lost in the warm day's haze.

Much of the valley was cultivated, and he could make out human habitations. He continued toward it with mixed feelings. People meant fewer hardships, but it did not look as if staking out a claim would be as simple as he had hoped. However—Coventry was a big place.

He had reached the point where the road gave onto the floor of the valley, when two men stepped out into his path. They were carrying weapons of some sort at the ready. One of them called out to him:

"Halt!"

MacKinnon did so, and answered him as they came abreast. "What do you want?"

"Customs inspection. Pull over there by the office." He indicated a small building set back a few feet from the road, which MacKinnon had not previously noticed. He looked from it back to the spokesman, and felt a slow, unreasoning heat spread up from his viscera. It rendered his none too stable judgment still more unsound.

"What the deuce are you talking about?" he snapped. "Stand aside and let me pass."

The one who had remained silent raised his weapon and aimed it at MacKinnon's chest. The other grabbed his arm and pulled the weapon out of line. "Don't shoot the dumb fool, Joe," he said testily. "You're always too anxious." Then to MacKinnon, "You're resisting the law. Come on—be quick about it!"

"The law?" MacKinnon gave a bitter laugh and snatched his rifle up from the seat. It never reached his shoulder-the man who had done all the talking fired casually, without apparently taking time to aim. MacKinnon's rifle was smacked from his grasp and flew into the air, landing in the roadside ditch behind the tortoise.

The man who had remained silent followed the flight of the gun with detached interest, and remarked, "Nice shot, Blackie. Never touched him."

"Oh, just luck," the other demurred, but grinned his pleasure at the compliment. "Glad I didn't nick him, though-saves writing out a report." He reassumed an official manner, spoke again to MacKinnon, who had been sitting dumbfounded, rubbing his smarting hands. "Well, tough guy? Do you behave, or do we come up there and get you?"

MacKinnon gave in. He drove the tortoise to the designated spot, and waited sullenly for orders. "Get out and start unloading," he was told.

He obeyed, under compulsion. As he piled his precious possessions on the ground, the one addressed as Blackie separated the things into two piles, while Joe listed them on a printed form. He noticed presently that Joe listed only the items that went into the first pile. He understood this when Blackie told him to reload the tortoise with the items from that pile, and commenced himself to carry goods from the other pile into the building. He started to protest-Joe punched him in the mouth, coolly and without rancor. MacKinnon went down, but got up again, fighting. He was in such a blind rage that he would have tackled a charging rhino. *Joe* timed his rush, and clipped him again. This time he could not get up at once.

Blackie stepped dver to a washstand in one corner of the office. He came back with a wet towel and chucked it at MacKinnon. "Wipe your face on that, bud, and get back in the buggy. We got to get going."

MacKinnon had time to do a lot of serious thinking as he drove Blackie into town. Beyond a terse answer of "Prize court" to MacKinnon's inquiry as to their destination, Blackie did not converse, nor did MacKinnon press him, anxious as he was to have information. His mouth pained him from repeated punishment, his head ached, and he was no longer tempted to precipitate action by hasty speech.

Evidently Coventry was not quite the frontier anarchy he had expected it to be. There was a government of sorts, apparently, but it resembled nothing that he had ever been used to. He had visualized a land of noble, independent spirits who gave each other wide berth and practised mutual respect. There would be villains, of course, but they would be treated to summary, and probably lethal, justice as quickly as they demonstrated their ugly natures. He had a strong, though subconscious, assumption that virtue is necessarily triumphant.

But having found government, he expected it to follow the general pattern that he had been used to all his life—honest, conscientious, reasonably efficient, and invariably careful of a citizen's rights and liberties. He was aware that government had not always been like that, but he had never experienced it—the idea was as remote and implausible as cannibalism, or chattel slavery.

Had he stopped to think about it, he might have realized that public servants in Coventry would never have been examined psychologically to determine their temperamental fitness for their duties, and, since every inhabitant of Coventry was there—as he was —for violating a basic custom and refusing treatment thereafter, it was a foregone conclusion that most of them would be erratic and arbitrary.

He pinned his hope on the knowledge that they were going to court. All he asked was a chance to tell his story to the judge.

His dependence on judicial procedure may appear inconsistent in view of how recently he had renounced all reliance on organized government, but while he could renounce government verbally, but he could not do away with a lifetime of environmental conditioning. He could curse the court that had humiliated him by condemning him to the Two Alternatives, but he expected courts to dispense justice. He could assert his own rugged independence, but he expected persons he encountered to behave as if they were bound by the Covenant—he had met no other sort. He was no more able to discard his past history than he would have been to discard his accustomed body.

But he did not know it yet.

MacKinnon failed to stand up when the judge entered the court room. Court attendants quickly set him right, but not before he had provoked a glare from the bench. The judge's appearance and manner were not reassuring. He was a well-fed man, of ruddy complexion, whose sadistic temper was evident in face and mien. They waited while he dealt drastically with several petty offenders. It seemed to MacKinnon, as he listened, that almost everything was against the law.

Nevertheless, he was relieved when his name was called. He stepped up and undertook at once to tell his story. The judge's gavel cut him short.

"What is this case?" the judge demanded, his face set in grim lines. "Drunk and disorderly, apparently. I shall put a stop to this slackness among the young if it takes the last ounce of strength in my body!" He turned to the clerk. "Any previous offences?"

The clerk whispered in his ear. The judge threw MacKinnon a look of mixed annoyance and suspicion, then told the customs' guard to come forward. Blackie told a clear, straightforward tale with the ease of a man used to giving testimony. MacKinnon's condition was attributed to resisting an officer in the execution of his duty. He submitted the inventory his colleague had prepared, but failed to mention the large quantity of goods which had been abstracted before the inventory was made.

The judge turned to MacKinnon. "Do you have anything to say for yourself?"

"I certainly have, Doctor," he began eagerly. "There isn't a word of —"

Bang! The gavel cut him short. A court attendant hurried to MacKinnon's side and attempted to explain to him the proper form to use in addressing the court. The explanation confused him. In his experience, "judge" naturally implied a medical man—a psychiatrist skilled in social problems. Nor had he heard of any special speech forms appropriate to a courtroom. But he amended his language as instructed,

"May it please the Honorable Court, this man is lying. He and his companion assaulted and robbed me. I was simply—"

"Smugglers generally think they are being robbed when customs officials catch them," the judge sneered. "Do you deny that you attempted to resist inspection?"

"No, Your Honor, but-"

"That will do. Penalty of fifty per cent is added to the established scale of duty. Pay the clerk."

"But, Your Honor, I can't—"

"Can't you pay it?"

"I haven't any money. I have only my possessions."

"So?" He turned to the clerk. "Condemnation proceedings. Impound his goods. Ten days for vagrancy. The community can't have these immigrant paupers roaming at large, and preying on law-abiding citizens. Next easel"

They hustled him away. It took the sound of a key grating in a barred door behind him to make him realize his predicament.

"Hi, pal, how's the weather outside?" The detention cell had a prior inmate, a small, well-knit man who looked up from a game of solitaire to address MacKinnon. He sat astraddle a bench on which he had spread his cards, and studied the newcomer with unworried, bright, beady eyes.

“Clear enough outside—but stormy in the courtroom,” MacKinnon answered, trying to adopt the same bantering tone and not succeeding very well. His mouth hurt him and spoiled his grin.

The other swung a leg over the bench and approached him with a light, silent step. “Say, pal, you must ‘a’ caught that in a gear box,” he commented, inspecting MacKinnon’s mouth. “Does it hurt?”

“Like the devil,” MacKinnon admitted.

“We’ll have to do something about that.” He went to the cell door and rattled it. “Hey! Lefty! The house is on fire! Come arunnin’!”

The guard sauntered down and stood opposite their cell door. “Wha‘ d’yuh want, Fader?” he said noncommittally.

“My old school chum has been slapped in the face with a wrench, and the pain is inordinate. Here’s a chance for you to get right with Heaven by oozing down to the dispensary, snagging a dressing and about five grains of neoanodyne.”

The guard’s expression was not encouraging. The prisoner looked grieved. “Why, Lefty,” he said, “I thought you would jump at a chance to do a little pure charity like that.” He waited for a moment, then added, “Tell you what —you do it, and I’ll show you how to work that puzzle about ‘How old is Ann?’ Is it a go?”

“Show me first.”

“It would take too long. I’ll write it out and give it to you.”

When the guard returned, MacKinnon’s cellmate dressed his wounds with gentle deftness, talking the while. “They call me Fader Magee. What’s your name, pal?”

“David MacKinnon. I’m sorry, but I didn’t quite catch your first name.”

“Fader. It isn’t,” he explained with a grin, “the name my mother gave me. It’s more a professional tribute to my shy and unobtrusive nature.”

MacKinnon looked puzzled. “Professional tribute? What is your profession?”

Magee looked pained. “Why, Dave,” he said, “I didn’t ask *you* that. However,” he went on, “it’s probably the same as yours—self-preservation.”

Magee was a sympathetic listener, and MacKinnon welcomed the chance to tell someone about his troubles. He related the story of how he had decided to enter Coventry rather than submit to the sentence of the court, and how he had hardly arrived when he was hijacked and hauled into court. Magee nodded. “I’m not surprised,” he observed. “A man has to have larceny in his heart, or he wouldn’t be a customs guard."

"But what happens to my belongings?"

"They auction them off to pay the duty."

"I wonder how much there will be left for me?"

Magee stared at him. "Left over? There won't be anything left over. You'll probably have to pay a deficiency judgment."

"Huh? What's that?"

"It's a device whereby the condemned pays for the execution," Magee explained succinctly, if somewhat obscurely. "What it means to you is that when your ten days is up, you'll still be in debt to the court. Then it's the chain gang for you, my lad—you'll work it off at a dollar a day."

"Fader-you're kidding me."

"Wait and see. You've got a lot to learn, Dave."

Coventry was an even more complex place than MacKinnon had gathered up to this time. Magee explained to him that there were actually three sovereign, independent jurisdictions. The jail where they were prisoners lay in the so-called New America. It had the forms of democratic government, but the treatment he had already received was a fair sample of the fashion in which it was administered.

"This place is heaven itself compared with the Free State," Magee maintained. "I've been there—" The Free State was an absolute dictatorship; the head man of the ruling clique was designated the "Liberator." Their watchwords were Duty and Obedience; an arbitrary discipline was enforced with a severity that left no room for any freedom of opinion. Governmental theory was vaguely derived from the old functionalist doctrines. The state was thought of as a single organism with a single head, a single brain, and a single purpose. Anything not compulsory was forbidden. "Honest so help me," claimed Magee, "you can't go to bed in that place without finding one of their damned secret police between the sheets."

"But at that," he continued, "it's an easier place to live than with the Angels."

"The Angels?"

"Sure. We still got 'em. Must have been two or three thousand diehards that chose to go to Coventry after the Revolution—you know that. There's still a colony up in the hills to the north, complete with Prophet Incarnate and the works. They aren't bad hombres, but they'll pray you into heaven even if it kills you."

All three states had one curious characteristic in common—each one claimed to be the only legal government of the entire United States, and each looked forward to some future day when they would reclaim the "unredeemed" portion; i.e., outside Coventry. To the Angels, this was an event which would occur when the First Prophet returned to earth to lead them again. In New America it was hardly more than a convenient campaign plank, to be forgotten after each election. But in the Free State it was a fixed policy.

Pursuant to this purpose there had been a whole series of wars between the Free State and New America. The Liberator held, quite logically, that New America was an unredeemed section, and that it was necessary to bring it under the rule of the Free State before the advantages of their culture could be extended to the outside.

Magee's words demolished MacKinnon's dream of finding an anarchistic Utopia within the barrier, but he could not let his fond illusion die without a protest. "But see here, Fader," he persisted, "isn't there some place where a man can live quietly by himself without all this insufferable interference?"

"No—" considered Fader, "no… not unless you took to the hills and hid. Then you 'ud be all right, as long as you steered clear of the Angels. But it would be pretty slim pickin's, living off the country. Ever tried it?"

"No… not exactly-but I've read all the classics: Zane Grey, and Emerson Hough, and so forth."

"Well… maybe you could do it. But if you really want to go off and be a hermit, you 'ud do better to try it on the Outside, where there aren't so many objections to it."

"No"-MacKinnon's backbone stiffened at once—"no, I'll never do that. I'll never submit to psychological reorientation just to have a chance to be let alone. If I could go back to where I was before a couple of months ago, before I was arrested, it might be all right to go off to the Rockies, or look up an abandoned farm somewhere… But with that diagnosis staring me in the face… after being told I wasn't fit for human society until I had had my emotions retailored to fit a cautious little pattern, I couldn't face it. Not if it meant going to a sanatarium—"

"I see," agreed Fader, nodding, "you want to go to Coventry, but you don't want the Barrier to shut you off from the rest of the world."

"No, that's not quite fair… Well, maybe, in a way. Say, you don't think I'm not fit to associate with, do you?"

"You look all right to me," Magee reassured him, with a grin, "but I'm in Coventry too, remember. Maybe I'm no judge."

"You don't talk as if you liked it much. Why are you here?"

Magee held up a gently admonishing finger. "Tut! Tut! That is the one question you must never ask a man here. You must assume that he came here because he knew how swell everything is here."

"Still… you don't seem to like it."

"I didn't say I didn't like it. I do like it; it has flavor. Its little incongruities are a source of innocent merriment. And anytime they turn on the heat I can always go back through the Gate and rest up for a while in a nice quiet hospital, until things quiet down."

MacKinnon was puzzled again. "Turn on the heat? Do they supply too hot weather here?"

"Huh? Oh, I didn't mean weather control—there isn't any of that here, except what leaks over from outside. I was just using an old figure of speech."

"What does it mean?"

Magee smiled to himself. "You'll find out."

After supper—bread, stew in a metal dish, a small apple—Magee introduced MacKinnon to the mysteries of cribbage. Fortunately, MacKinnon had no cash to lose. Presently Magee put the cards down without shuffling them. "Dave," he said, "are you enjoying the hospitality offered by this institution?"

"Hardly-Why?"

"I suggest that we check out."

"A good idea, but how?"

"That's what I've been thinking about. Do you suppose you could take another poke on that battered phiz of yours, in a good cause?"

MacKinnon cautiously fingered his face. "I suppose so—if necessary. It can't do me much more harm, anyhow."

"That's mother's little man! Now listen—this guard, Lefty, in addition to being kind o' unbright, is sensitive about his appearance. When they turn out the lights, you—"

"Let me out of here! Let me out of herel" MacKinnon beat on the bars and screamed. No answer came. He renewed the racket, his voice an hysterical falsetto. Lefty arrived to investigate, grumbling.

"What the hell's eating on you?" he demanded, peering through the bars.

MacKinnon changed to tearful petition. "Oh, Lefty, please let me out of here. Please! I can't stand the dark. It's dark in here-please don't leave me alone." He flung himself, sobbing, on the bars.

The guard cursed to himself. "Another slugnutty. Listen, you—shut up, and go to sleep, or I'll come in there, and give you something to yelp for!" He started to leave.

MacKinnon changed instantly to the vindictive, unpredictable anger of the irresponsible. "You big ugly baboon! You rat-faced idiot! Where'd you get that nose?"

Lefty turned back, fury in his face. He started to speak. MacKinnon cut him short. "Yah! Yah! Yah!" he gloated, like a nasty little boy, "Lefty's mother was scared by a warthog—"

The guard swung at the spot where MacKinnon's face was pressed between the bars of the door. MacKinnon ducked and grabbed simultaneously. Off balance at meeting no resistance, the guard rocked forward, thrusting his forearm between the bars. MacKinnon's fingers slid along his arm, and got a firm purchase on Lefty's wrist.

He threw himself backwards, dragging the guard with him, until Lefty was jammed up against the outside of the barred door, with one arm inside, to the wrist of which MacKinnon clung as if welded.

The yell which formed in Lefty's throat miscarried; Magee had already acted. Out of the darkness, silent as death, his slim hands had snaked between the bars and imbedded themselves in the guard's fleshy neck. Lefty heaved, and almost broke free, but MacKinnon threw his weight to the right and twisted the arm he gripped in an agonizing, bonebreaking leverage.

It seemed to MacKinnon that they remained thus, like some grotesque game of statues, for an endless period. His pulse pounded in his ears until he feared that it must be heard by others, and bring rescue to Lefty. Magee spoke at last:

"That's enough," he whispered. "Go through his pockets."

He made an awkward job of it, for his hands were numb and trembling from the strain, and it was anything but convenient to work between the bars. But the keys were there, in the last pocket he tried. He passed them to Magee, who let the guard slip to the floor, and accepted them.

Magee made a quick job of it. The door swung open with a distressing creak. Dave stepped over Lefty's body, but Magee kneeled down, unhooked a truncheon from the guard's belt, and cracked him behind the ear with it. MacKinnon paused.

"Did you kill him?" he asked.

"Cripes, no," Magee answered softly, "Lefty is a friend of mine. Let's go."

They hurried down the dimly lighted passageway between cells toward the door leading to the administrative offices—their only outlet. Lefty had carelessly left it ajar, and light shone through the crack, but as they silently approached it, they heard ponderous footsteps from the far side. Dave looked hurriedly for cover, but the best he could manage was to slink back into the corner formed by the cell block and the wall. He glanced around for Magee, but he had disappeared.

The door swung open; a man stepped through, paused, and looked around. MacKinnon saw that he was carrying a blacklight, and wearing its complement—rectifying spectacles. He realized then that the darkness gave him no cover. The blacklight swung his way; he tensed to spring-He heard a dull "*clunkl"* The guard sighed, swayed gently, then collapsed into a loose pile. Magee stood over him, poised on the balls of his feet, and surveyed his work, while caressing the business end of the truncheon with the cupped fingers of his left hand.

“That will do,” he decided. “Shall we go, Dave?”

He eased through the door without waiting for an answer; MacKinnon was close behind him. The lighted corridor led away to the right and ended in a large double door to the street. On the left wall, near the street door, a smaller office door stood open.

Magee drew MacKinnon to him. “It’s a cinch,” he whispered. “There’ll be nobody in there now but the desk sergeant. We get past him, then out that door, and into the ozone—” He motioned Dave to keep behind him, and crept silently up to the office door. After drawing a small mirror from a pocket in his belt, he lay down on the floor, placed his head near the door frame, and cautiously extended the tiny mirror an inch or two past the edge.

Apparently he was satisfied with the reconnaissance the improvised periscope afforded, for he drew himself back onto his knees and turned his head so that MacKinnon could see the words shaped by his silent lips. “It’s all right,” he breathed, “there is only—”

Two hundred pounds of uniformed nemesis landed on his shoulders. A clanging alarm sounded through the corridor. Magee went down fighting, but he was outclassed and caught off guard. He jerked his head free and shouted, “Run for it, kid!”

MacKinnon could hear running feet somewhere, but could see nothing but the struggling figures before him. He shook his head and shoulders like a dazed animal, then kicked the larger of the two contestants in the face. The man screamed and let go his hold. MacKinnon grasped his small companion by the scruff of the neck and hauled him roughly to his feet.

Magee’s eyes were still merry. “Well played, my lad,” he commended in clipped syllables, as they burst out the street door, “—if hardly cricketl Where did you learn *La Savate*?”

MacKinnon had not time to answer, being fully occupied in keeping up with Magee’s weaving, deceptively rapid progress. They ducked across the street, down an alley, and between two buildings.

The succeeding minutes, or hours, were confusion to MacKinnon. He remembered afterwards crawling along a roof top and letting himself down to crouch in the blackness of an interior court, but he could not remember how they had gotten on the roof. He also recalled spending an interminable period alone, compressed inside a most unsavory refuse bin, and his terror when footsteps approached the bin and a light flashed through a crack.

A crash and the sound of footsteps in flight immediately thereafter led him to guess that Fader had drawn the pursuit away from him. But when Fader did return, and open the top of the bin, MacKinnon almost throttled him before identification was established.

When the active pursuit had been shaken off, Magee guided him across town, showing a sophisticated knowledge of back ways and shortcuts, and a genius for taking full advantage of cover. They reached the outskirts of the town in a dilapidated quarter, far from the civic center. Magee stopped. “I guess this is the end of the line, kid,” he told Dave. “If you follow this street, you’ll come to open country shortly. That’s what you wanted, wasn’t it?”

“I suppose so,” MacKinnon replied uneasily, and peered down the street. Then he turned back to speak again to Magee.

But Magee was gone. He had faded away into the shadows. There was neither sight nor sound of him.

MacKinnon started in the suggested direction with a heavy heart. There was no possible reason to expect Magee to stay with him; the service Dave had done him with a lucky kick had been repaid with interest—yet he had lost the only friendly companionship he had found in a strange place. He felt lonely and depressed.

He continued along, keeping to the shadows, and watching carefully for shapes that might be patrolmen. He had gone a few hundred yards, and was beginning to worry about how far it might be to open countryside, when he was startled into gooseflesh by a hiss from a dark doorway.

He did his best to repress the panic that beset him, and was telling himself that policemen never hiss, when a shadow detached itself from the blackness and touched him on the arm.

“Dave,” it said softly.

MacKinnon felt a childlike sense of relief and wellbeing. “Fader!”

“I changed my mind, Dave. The gendarmes would have you in tow before morning. You don’t know the ropes… so I came back.”

Dave was both pleased and crestfallen. “Hell’s bells, Fader,” he protested, “you shouldn’t worry about me. I’ll get along.”

Magee shook him roughly by the arm. “Don’t be a chump. Green as you are, you’d start to holler about your civil rights, or something, and get clipped in the mouth again.

“Now see here,” he went on, “I’m going to take you to some friends of mine who will hide you until you’re smartened up to the tricks around here. But they’re on the wrong side of the law, see? You’ll have to be all three of the three sacred monkeys—see no evil, hear no evil, tell no evil. Think you can do it?”

“Yes, but-”

“No ‘buts’ about it. Come along!”

The entrance was in the rear of an old warehouse. Steps led down into a little sunken pit. From this open areaway—foul with accumulated refuse— a door let into the back wall of the building. Magee tapped lightly but systematically, waited and listened. Presently he whispered, “Pssst! It’s the Fader.”

The door opened quickly, and Magee was encircled by two great, fat arms. He was lifted off his feet, while the owner of those arms planted a resounding buss on his cheek. “Fader!” she exclaimed, “are you all right, lad? We’ve missed you.”

“Now that’s a proper welcome, Mother,” he answered, when he was back on his own feet, “but I want you to meet a friend of mine. Mother Johnston, this is David MacKinnon.”

“May I do you a service?” David acknowledged, with automatic formality, but Mother Johnston’s eyes tightened with instant suspicion.

“Is he stooled?” she snapped.

“No, Mother, he’s a new immigrant-but I vouch for him. He’s on the dodge, and I’ve brought him here to cool.”

She softened a little under his sweetly persuasive tones. “Well—”

Magee pinched her cheek. “That’s a good girl! When are you going to marry me?”

She slapped his hand away. “Even if I were forty years younger, I’d not marry such a scamp as you! Come along then,” she continued to MacKinnon, “as long as you’re a friend of the Fader—though it’s no credit to you!” She waddled quickly ahead of them, down a flight of stairs, while calling out for someone to open the door at its foot.

The room was poorly lighted and was furnished principally with a long table and some chairs, at which an odd dozen people were seated, drinking and talking. It reminded MacKinnon of prints he had seen of old English pubs in the days before the Collapse.

Magee was greeted with a babble of boisterous welcome. “Fader!”—“It’s the kid himself!”—“How d’ja do it this time, Fader? Crawl down the drains?” -“Set ‘em up, Mother-the Fader’s back!”

He accepted the ovation with a wave of his hand and a shout of inclusive greeting, then turned to MacKinnon. “Folks,” he said, his voice cutting through the confusion, “I want you to know Dave-the best pal that ever kicked a jailer at the right moment. If it hadn’t been for Dave, I wouldn’t be here.”

Dave found himself seated between two others at the table and a stein of beer thrust into his hand by a not uncomely young woman. He started to thank her, but she had hurried off to help Mother Johnston take care of the sudden influx of orders. Seated opposite him was a rather surly young man who had taken little part in the greeting to Magee. He looked MacKinnon over with a face expressionless except for a recurrent tic which caused his right eye to wink spasmodically every few seconds.

“What’s your line?” he demanded.

“Leave him alone, Alec,” Magee cut in swiftly, but in a friendly tone. “He’s just arrived inside; I told you that. But he’s all right,” he continued, raising his voice to include the others present, “he’s been here less than twenty-four hours, but he’s broken jail, beat up two customs busies, and sassed old Judge Fleishacker right to his face. How’s that for a busy day?”

Dave was the center of approving interest, but the party with the tic persisted. “That’s all very well, but I asked him a fair question: What’s his line? If it’s the same as mine, I won’t stand for it—it’s too crowded now.”

“That cheap racket you’re in is always crowded, but he’s not in it. Forget about his line.”

“Why don’t he answer for himself,” Alec countered suspiciously. He half stood up. “I don’t believe he’s stooled—”

It appeared that Magee was cleaning his nails with the point of a slender knife. “Put your nose back in your glass, Alec,” he remarked in a conversational tone, without looking up, “—or must I cut it off and put it there?”

The other fingered something nervously in his hand. Magee seemed not to notice it, but nevertheless told him, “If you think you can use a vibrator on me faster than I use steel, go ahead—it will be an interesting experiment.”

The man facing him stood uncertainly for a moment longer, his tic working incessantly. Mother Johnston came up behind him and pushed him down by the shoulders, saying, “Boys! Boys! Is that any way to behave?—and in front of a guest, too! Fader, put that toadsticker away-I’m ashamed of you.”

The knife was gone from his hands. “You’re right as always, Mother,” he grinned. “Ask Molly to fill up my glass again.”

An old chap sitting on MacKinnon’s right had followed these events with alcoholic uncertainty, but he seemed to have gathered something of the gist of it, for now he fixed Dave with serum-filled eye, and enquired, “Boy, are you stooled to the rogue?” His sweetly sour breath reached MacKinnon as the old man leaned toward him and emphasized his question with a trembling, joint-swollen finger.

Dave looked to Magee for advice and enlightenment. Magee answered for him. “No, he’s not—Mother Johnston knew that when she let him in. He’s here for sanctuary—as our customs provide!”

An uneasy stir ran around the room. Molly paused in her serving and listened openly. But the old man seemed satisfied. “True… true enough,” he agreed, and took another pull at his drink, “sanctuary may be given when needed, if—” His words were lost in a mumble.

The nervous tension slackened. Most of those present were subconsciously glad to follow the lead of the old man, and excuse the intrusion on the score of necessity. Magee turned back to Dave. “I thought that what you didn’t know couldn’t hurt you—or us—but the matter has been opened.”

“But what did he mean?”

“Gramps asked you if you had been stooled to the rogue-whether or not you were a member of the ancient and honorable fraternity of thieves, cutthroats, and pickpockets!”

Magee stared into Dave’s face with a look of sardonic amusement. Dave looked uncertainly from Magee to the others, saw them exchange glances, and wondered what answer was expected of him. Alec broke the pause. “Well,” he sneered, “what are you waiting for? Go ahead and put the question to him-or are the great Fader’s friends free to use this club without so much as a by-your-leave?”

“I thought I told you to quiet down, Alec,” the Fader replied evenly. “Besides—you’re skipping a requirement. All the comrades present must first decide whether or not to put the question at all.”

A quiet little man with a chronic worried look in his eyes answered him. “I don’t think that quite applies, Fader. If he had come himself, or fallen into our hands—in that case, yes. But you brought him here. I think I speak for all when I say he should answer the question. Unless someone objects, I will ask him myself.” He allowed an interval to pass. No one spoke up. “Very well then… Dave, you have seen too much and heard too much. Will you leave us now-or will you stay and take the oath of our guild? I must warn you that once stooled you are stooled for life—and there is but one punishment for betraying the rogue.”

He drew his thumb across his throat in an age-old deadly gesture. Gramps made an appropriate sound effect by sucking air wetly through his teeth, and chuckled.

Dave looked around. Magee’s face gave him no help. “What is it that I have to swear to?” he temporized.

The parley was brought to an abrupt ending by the sound of pounding outside. There was a shout, muffled by two closed doors and a stairway, of “Open up down there!” Magee got lightly to his feet and beckoned to Dave.

“That’s for us, kid,” he said. “Come along.”

He stepped over to a ponderous, old-fashioned radio-phonograph which stood against j:he wall, reached under it, fiddled for a moment, then swung out one side panel of it. Dave saw that the mechanism had been cunningly rearranged in such a fashion that a man could squeeze inside it. Magee urged him into it, slammed the panel closed, and left him.

His face was pressed up close to the slotted grill which was intended to cover the sound box. Molly had cleared off the two extra glasses from the table, and was dumping one drink so that it spread along the table top and erased the rings their glasses had made.

MacKinnon saw the Fader slide under the table, and reach up. Then he was gone. Apparently he had, in some fashion, attached himself to the underside of the table.

Mother Johnston made a greatto-do of opening up. The lower door she opened at once, with much noise. Then she clumped slowly up the steps, pausing, wheezing, and complaining aloud. He heard her unlock the outer door.

“A fine time to be waking honest people up!” she protested. “It’s hard enough to get the work done and make both ends meet, without dropping what I’m doing every five minutes, and—”

“Enough of that, old girl,” a man’s voice answered, “just get along downstairs. We have business with you.”

“What sort of business?” she demanded.

“It might be selling liquor without a license, but it’s not-this time.”

“I dfSfyt—this is a private club. The members own the liquor; I simply serve it to them.”

“That’s as may be. It’s those members I want to talk to. Get out of the way now, and be spry about it.”

They came pushing into the room with Mother Johnston, still voluble, carried along in by the van. The speaker was a sergeant of police; he was accompanied by a patrolman. Following them were two other uniformed men, but they were soldiers. MacKinnon judged by the markings on their kilts that they were corporal and private—provided the insignia in New America were similar to those used by the United States Army.

The sergeant paid no attention to Mother Johnston. “All right, you men,” he called out, “line up!”

They did so, ungraciously but promptly. Molly and Mother Johnston watched them, and moved closer to each other. The police sergeant called out, “All right, corporal—take charge!”

The boy who washed up in the kitchen had been staring round-eyed. He dropped a glass. It bounced around on the hard floor, giving out bell-like sounds in the silence.

The man who had questioned Dave spoke up. “What’s all this?”

The sergeant answered with a pleased grin. “Conscription—that’s what it is. You are all enlisted in the army for the duration.”

“Press gang!” It was an involuntary gasp that came from no particular source.

The corporal stepped briskly forward. “Form a column of twos,” he directed. But the little man with the worried eyes was not done.

“I don’t understand this,” he objected. “We signed an armistice with the Free State three weeks ago.”

“That’s not your worry,” countered the sergeant, “nor mine. We are picking up every able-bodied man not in essential industry. Come along."

"Then you can't take me." *em*>

"Why not?" —<

He held up the stump of a missing hand. The sergeant glanced from it to the corporal, who nodded grudgingly, and said, "Okay—but report to the office in the morning, and register."

He started to march them out when Alec broke ranks and backed up to the wall, screaming, "You can't do this to me! I won't go!" His deadly little vibrator was exposed in his hand, and the right side of his face was drawn up in a spastic wink that left his teeth bare.

"Get him, Steeves," ordered the corporal. The private stepped forward, but stopped when Alec brandished the vibrator at him. He had no desire to have a vibroblade between his ribs, and there was no doubt as to the uncontrolled dangerousness of his hysterical opponent.

The corporal, looking phlegmatic, almost bored, levelled a small tube at a spot on the wall over Alec's head. Dave heard a soft *pop*!, and a thin tinkle. Alec stood motionless for a few seconds, his face even more strained, as if he were exerting the limit of his will against some unseen force, then slid quietly to the floor. The tonic spasm in his face relaxed, and his features smoothed into those of a tired and petulant, and very bewildered, little boy.

"Two of you birds cany him," directed the corporal. "Let's get going."

The sergeant was the last to leave. He turned at the door and spoke to Mother Johnston. "Have you seen the Fader lately?"

"The Fader?" She seemed puzzled. "Why, he's in jail."

"Ah, yes… so he is." He went out.

Magee refused the drink that Mother Johnston offered him.

Dave was surprised to see that he appeared worried for the first time. "I don't understand it," Magee muttered, half to himself, then addressed the one-handed man. "Ed—bring me up to date."

"Not much news since they tagged you, Fader. The armistice was before that. I thought from the papers that things were going to be straightened out for once."

"So did I. But the government must expect war if they are going in for general conscription." He stood up. "I've got to have more data. Al!" The kitchen boy stuck his head into the room.

"What 'cha want, Fader?"

"Go out and make palaver with five or six of the beggars. Look up their 'king.' You know where he makes his pitch?"

"Sure—over by the auditorium."

"Find out what's stirring, but don't let them know I sent you."

"Right, Fader. It's in the bag." The boy swaggered out.

"Molly."

“Yes, Fader?”

“Will you go out, and do the same thing with some of the business girls? I want to know what they hear from their customers.” She nodded agreement. He went on, “Better look up that little redhead that has her beat up on Union Square. She can get secrets out of a dead man. Here—” He pulled a wad of bills out of his pocket and handed her several. “You better take this grease… You might have to pay off a cop to get back out of the district.”

Magee was not disposed to talk, and insisted that Dave get some sleep.

He was easily persuaded, not having slept since he entered Coventry. That seemed like a lifetime past; he was exhausted. Mother Johnston fixed him a shakedown in a dark, stuffy room on the same underground level. It had none of the hygienic comforts to which he was accustomed—airconditioning, restful music, hydraulic mattress, nor soundproofing—and he missed his usual relaxing soak and automassage, but he was too tired to care. He slept in clothing and under covers for the first time in his life.

He woke up with a headache, a taste in his mouth like tired sin, and a sense of impending disaster. At first he could not remember where he was —he thought he was still in detention Outside. His surroundings were inexplicably sordid; he was about to ring for the attendant and complain, when his memory pieced in the events of the day before. Then he got up and discovered that his bones and muscles were painfully sore, and—which was worse—that he was, by his standards, filthy dirty. He itched.

He entered the common room, and found Magee sitting at the table. He greeted Dave. “Hi, kid. I was about to wake you. You’ve slept almost all day. We’ve got a lojˆto talk about.”

“Okay-shortly. Where’s the ‘fresher?”

“Over there.” ,

It was not Dave’s idea of a refreshing chamber, but he managed to take a sketchy shower in spite of the slimy floor. Then he discovered that there was no air blast installed, and he was forced to dry himself unsatisfactorily with his handkerchief. He had no choice in clothes. He must put back on the ones he had taken off, or go naked. He recalled that he had seen no nudity anywhere in Coventry, even at sports—a difference in customs, no doubt.

He put his clothes back on, though his skin crawled at the touch of the once-used linen.

But Mother Johnston had thrown together an appetizing breakfast for him. He let coffee restore his courage as Magee talked. It was, according to Fader, a serious situation. New America and the Free State had compromised their differences and had formed an alliance.

They quite seriously proposed to break out of Coventry and attack the United States.

MacKinnon looked up at this. “That’s ridiculous, isn’t it? They would be outnumbered enormously. Besides, how about the Barrier?”

“I don’t know—yet. Btrt they have some reason to think that they can break through the Barrier… and there are rumors that whatever it is can be used as a weapon, too, so that a small army might be able to whip the whole United States.”

MacKinnon looked puzzled. “Well,” he observed, “I haven’t any opinion of a weapon I know nothing about, but as to the Barrier… I’m not a mathematical physicist, but I was always told that it was theoretically impossible to break the Barrier—that it was just a nothingness that there was no way to touch. Of course, you can fly over it, but even that is supposed to be deadly to life.”

“Suppose they had found some way to shield from the effects of the Barrier’s field?” suggested Magee. “Anyhow, that’s not the point, for us. The point is: they’ve made this combine; the Free State supplies the techniques and most of the officers; and New America, with its bigger population, supplies most of the men. And that means to us that we don’t dare show our faces any place, or we are in the army before you can blink.

“Which brings me to what I was going to suggest. I’m going to duck out of here as soon as it gets dark, and light out for the Gateway, before they send somebody after me who is bright enough to look under a table. I thought maybe you might want to come along.”

“Back to the psychologists?” MacKinnon was honestly aghast.

“Sure-why not? What have you got to lose? This whole damn place is going to be just like the Free State in a couple of days—and a Joe of your temperament would be in hot water all the time. What’s so bad about a nice, quiet hospital room as a place to hide out until things quiet down? You don’t have to pay any attention to the psych boys—just make animal noises at ‘em every time one sticks his nose into your room, until they get discouraged.”

Dave shook his head. “No,” he said slowly, “I can’t do that.”

“Then what will you do?”

“I don’t know yet. Take to the hills I guess. Go live with the Angels if it comes to a showdown. I wouldn’t mind them praying for my soul as long as they left my mind alone.”

They were each silent for a while. Magee was mildly annoyed at MacKinnon’s bullheaded stubbornness in the face of what seemed to him a reasonable offer. Dave continued busily to stow away grilled ham, while considering his position. He cut off another bite. “My, but this is good,” he remarked, to break the awkward silence, “I don’t know when I’ve had anything taste so good—Say!”

"What?" inquired Magee, looking up, and seeing the concern written on MacKinnon's face.

"This ham-is it synthetic, or is it *real meat*?"

"Why, it's real. What about it?"

Dave did not answer. He managed to reach the refreshing room before that which he had eaten departed from him.

Before he left, Magee gave Dave some money with which he could have purchased for him things that he would need in order to take to the hills. MacKinnon protested, but the Fader cut him short. "Quit being a damn fool, Dave. I can't use New American money on the Outside, and you can't stay alive in the hills without proper equipment. You lie doggo here for a few days while Al, or Molly, picks up what you need, and you'll stand a chance—unless you'll change your mind and come with me?"

Dave shook his head at this, and accepted the money.

It was lonely after Magee left. Mother Johnston and Dave were alone in the club, and the empty chairs reminded him depressingly of the men who had been impressed. He wished that Gramps or the one-handed man would show up. Even Alec, with his nasty temper, would have been company—he wondered if Alec had been punished for resisting the draft.

Mother Johnston inveigled him into playing checkers in an attempt to relieve his evident low spirits. He felt obligated to agree to her gentle conspiracy, but his mind wandered. It was all very well for the Senior Judge to tell him to seek adventure in interplanetary exploration, but only engineers and technicians were eligible for such billets. Perhaps he should have gone in for science, or engineering, instead of literature; then he might now be on Venus, contending against the forces of nature in high adventure, instead of hiding from uniformed bullies. It wasn't fair. No—he must not kid himself; there was no room for an expert in literary history in the raw frontier of the planets; that was not human injustice, that was a hard fact of nature, and he might as well face it.

He thought bitterly of the man whose nose he had broken, and thereby landed himself in Coventry. Maybe he was an "upholstered parasite" after all—but the recollection of the phrase brought back the same unreasoning anger that had gotten him into trouble. He was *glad* that he had socked that so-and-so! What right had he to go around sneering and calling people things like that?

He found himself thinking in the same vindictive spirit of his father, although he would have been at a loss to explain the connection. The connection was not superficially evident, for his father would never have stooped to name-calling. Instead, he would have offered the sweetest of smiles, and quoted something nauseating in the way of sweetness-and-light. Dave's father was one of the nastiest little tyrants that ever dominated a household under the guise of lovingkindness. He was of the more-in-sorrow-than-in-anger, this-hurts-me-more-than-it-does-you school, and all his life had invariably been able to find an altruistic rationalization for always having his own way. Convinced of his own infallible righteousness, he had never valued his son's point of view on anything, but had dominated him in everything —always from the highest moralistic motives.

He had had two main bad effects on his son: the boy's natural independence, crushed at home, rebelled blindly at every sort of discipline, authority, or criticism which he encountered elsewhere and subconsciously identified with the not-to-be-criticized paternal authority. Secondly, through years of association Dave imitated his father's most dangerous social vice-that of passing unself-critical moral judgments on the actions of others.

When Dave was arrested for breaking a basic custom; to wit, atavistic violence; his father washed his hands of him with the statement that he had tried his best to "make a man of him," and could not be blamed for his son's failure to profit by his instruction.

A faint knock caused them to put away the checker board in a hurry. Mother Johnston paused before answering. "That's not our knock," she considered, "but it's not loud enough to be the nosies. Be ready to hide."

MacKinnon waited by the fox hole where he had hidden the night before, while Mother Johnston went to investigate. He heard her unbar and unlock the upper door, then she called out to him in a low but urgent voice, "Davel Come here, Dave—hurry!"

It was Fader, unconscious, with his own bloody trail behind him.

Mother Johnston was attempting to pick up the limp form. MacKinnon crowded in, and between the two of them they managed to get him downstairs and to lay him on the long table. He came to for a moment as they straightened his limbs. "Hi, Dave," he whispered, managing to achieve the ghost of his debonair grin. "Somebody trumped my ace."

"You keep quietl" Mother Johnston snapped at him, then in a lower voice to Dave, "Oh, the poor darling—Dave, we must get him to the Doctor."

"Can't… do… that," muttered the Fader. "Got… to get to the… Gate—" His voice trailed off. Mother Johnston's fingers had been busy all the while, as if activated by some separate intelligence. A small pair of scissors, drawn from some hiding place about her large person, clipped away at his clothing, exposing the superficial extent of the damage. She examined the trauma critically.

"This is no job for me," she decided, "and he must sleep while we move him. Dave, get that hypodermic kit out of the medicine chest in the ‘fresher.”

“No, Mother!” It was Magee, his voice strong and vibrant.

“Get me a pepper pill,” he went on. “There’s—”

“But Fader-”

He cut her short. “I’ve got to get to the Doctor all right, but how the devil will I get there if I don’t walk?”

“We would carry you.”

“Thanks, Mother,” he told her, his voice softened, “I know you would— but the police would be curious. Get me that pill.”

Dave followed her into the ‘fresher, and questioned her while she rummaged through the medicine chest. “Why don’t we just send for a doctor?”

“There is only one doctor we can trust, and that’s *the* Doctor. Besides, none of the others are worth the powder to blast them.”

Magee was out again when they came back into the room. Mother Johnston slapped hi face until he came around, blinking and cursing. Then she fed him the pill.

The powerful stimulant, improbable offspring of common coal tar, took hold almost at once. To all surface appearance Magee was a well man. He sat up and tried his own pulse, searching it out in his left wrist with steady, sensitive fingers. “Regular as a metronome,” he announced, “the old ticker can stand that dosage all right.”

He waited while Mother Johnston applied sterile packs to his wounds, then said goodbye. MacKinnon looked at Mother Johnston. She nodded.

“I’m going with you,” he told the Fader.

“What for? It will just double the risk.”

“You’re in no fit shape to travel alone—stimulant, or no stimulant.”

“Nuts. *I’d* have to look after *you.*”

“I’m going with you.”

Magee shrugged his shoulders and capitulated.

Mother Johnston wiped her perspiring face, kissed both of them.

Until they were well out of town their progress reminded MacKinnon of their nightmare flight of the previous evening. Thereafter they continued to the north-northwest by a highway which ran toward the foothills, and they left the highway only when necessary to avoid the sparse traffic. Once they were almost surprised by a police patrol car, equipped with blacklight and almost invisible, but the Fader sensed it in time and they crouched behind a low wall which separated the adjacent field from the road.

Dave inquired how he had known the patrol was near. Magee chuckled. “Damned if I know,” he said, “but I believe I could smell a cop staked out in a herd of goats."

The Fader talked less and less as the night progressed. His usually untroubled countenance became lined and old as the effect of the drug wore off. It seemed to Dave as if this unaccustomed expression gave him a clearer insight into the man's character-that the mask of pain was his true face rather than the unworried features Magee habitually showed the world. He wondered for the ninth time what the Fader had done to cause a court to adjudge him socially insane.

This question was uppermost in his mind with respect to every person he met in Coventry. The answer was obvious in most cases; their types of instability were gross and showed up at once. Mother Johnston had been an enigma until she had explained it herself. She had followed her husband into Coventry. Now that she was a widow, she preferred to remain with the friends she knew and the customs and conditions she was adjusted to, rather than change for another and possibly less pleasing environment.

Magee sat down beside the road. "It's no use, kid," he admitted, "I can't make it."

"The hell we can't. I'll carry you."

Magee grinned faintly. "No, I mean it." Dave persisted. "How much farther is it?"

"Matter of two or three miles, maybe."

"Climb aboard." He took Magee pickaback and started on. The first few hundred yards were not too difficult; Magee was forty pounds lighter than Dave. After that the strain of the additional load began to tell. His arms cramped from supporting Magee's knees; his arches complained at the weight and the unnatural load distribution; and his breathing was made difficult by the clasp of Magee's arms around his neck.

Two miles to go—maybe more. Let your weight fall forward, and your foot must follow it, else you fall to the ground. It's automatic—as automatic as pulling teeth. How long is a mile? Nothing in a rocket ship, thirty seconds in a pleasure car, a ten minute crawl in a steel snail, fifteen minutes to trained troops in good condition. How far is it with a man on your back, on a rough road, when you are tired to start with?

Five thousand, two hundred, and eighty feet-a meaningless figure. But every step takes twenty-four inches off the total. The remainder is still incomprehensible—an infinity. Count them. Count them till you go crazy-till the figures speak themselves outside your head, and the jar!… jarl… jar!… of your enormous, benumbed feet beats in your brain. Count them backwards, subtracting two each time—no, that's worse; each remainder is still an unattainable, inconceivable figure.

His world closed in, lost its history and held no future. There was nothing, nothing at all, but the torturing necessity of picking up his foot again and placing it forward. No feeling but the heartbreaking expenditure of will necessary to achieve that meaningless act.

He was brought suddenly to awareness when Magee's arms relaxed from around his neck. He leaned forward, and dropped to one knee to keep from spilling his burden, then eased it slowly to the ground. He thought for a moment that the Fader was dead—he could not locate his pulse, and the slack face and limp body were sufficiently corpselike, but he pressed an ear to Magee's chest, and heard with relief the steady *flubdub* of his heart.

He tied Magee's wrists together with his handkerchief, and forced his own head through the encircled arms. But he was unable, in his exhausted condition, to wrestle the slack weight into position on his back. Fader regained consciousness while MacKinnon was struggling. His first words were, "Take it easy, Dave. What's the trouble?"

Dave explained. "Better untie my wrists," advised the Fader, "I think I can walk for a while."

And walk he did, for nearly three hundred yards, before he was forced to give up again. "Look, Dave," he said, after he had partially recovered, "did you bring along any more of those pepper pills?"

"Yes-but you can't take any more dosage. It would kill you."

"Yeah, I know—so they say. But that isn't the idea-yet. I was going to suggest that you might take one."

"Why, of course! Good grief, Fader, but I'm dumb."

Magee seemed no heavier than a light coat, the morning star shone brighter, and his strength seemed inexhaustible. Even when they left the highway and started up the cart trail that led to the Doctor's home in the foothills, the going was tolerable and the burden not too great. MacKinnon knew that the drugs burned the working tissue of his body long after his proper reserves were gone, and that it would take him days to recover from the reckless expenditure, but he did not mind. No price was too high to pay for the moment when he at last arrived at the gate of the Doctor's home —on his own two feet, his charge alive and conscious.

MacKinnon was not allowed to see Magee for four days. In the meantime, he was encouraged to keep the routine of a semi-invalid himself in order to recover the twenty-five pounds he had lost in two days and two nights, and to make up for the heavy strain on his heart during the last night. A high-caloric diet, sun baths, rest, and peaceful surroundings plus his natural good health caused him to regain weight and strength rapidly, but he "enjoyed ill health" exceedingly because of the companionship of the Doctor himself-and Persephone.

Persephone's calendar age was fifteen. Dave never knew whether to think of her as much older, or much younger. She had been born in

Coventry, and had lived her short life in the house of the Doctor, her mother having died in childbirth in that same house. She was completely childlike in many respects, being without experience in the civilized world Outside, and having had very little contact with the inhabitants of Coventry, except when she saw them as patients of the Doctor. But she had been allowed to read unchecked from the library of a sophisticated and protean-minded man of science. MacKinnon was continually being surprised at the extent of her academic and scientific knowledge—much greater than his own. She made him feel as if he were conversing with some aged and omniscient matriarch, then she would come out with some naive concept of the outer world, and he would be brought up sharply with the realization that she was, in fact, an inexperienced child.

He was mildly romantic about her. Not seriously, of course, in view of her barely nubile age, but she was pleasant to see, and he was hungry for feminine companionship. He was quite young enough himself to feel continual interest in the delightful differences, mental and physical, between male and female.

Consequently, it was a blow to his pride as sharp as had been the sentence to Coventry to discover that she classed him with the other inhabitants of Coventry as a poor unfortunate who needed help and sympathy because he was not quite right in his head.

He was furious and for one whole day he sulked alone, but the human necessity for self-justification and approval forced him to seek her out and attempt to reason with her. He explained carefully and with emotional candor the circumstances leading up to his trial and conviction, and embellished the account with his own philosophy and evaluations, then confidently awaited her approval.

It was not forthcoming. “I don’t understand your viewpoint,” she said. “You broke his nose, yet he had done you no harm of any sort. You expect me to approve that?”

“But Persephone,” he protested, “you ignore the fact that he called me a most insulting name.”

“I don’t see the connection,” she said. “He made a noise with his mouth —a verbal label. If the label does not fit you, the noise is meaningless. If the label is true in your case—if you *are* the thing that the noise refers to, you are neither more, nor less, that thing by reason of some one uttering the verbal label. In short, he did not damage you.

“But what you did to him was another matter entirely. You broke his nose. That is damage. In self-protection the rest of society must seek you out, and determine whether or not you are so unstable as to be likely to damage some one else in the future. If you are, you must be quarantined for treatment, or leave society—whichever you prefer.”

"You think I'm crazy, don't you?" he accused.

"Crazy? Not the way you mean it. You haven't paresis, or a brain tumor, or any other lesion that the Doctor could find. But from the viewpoint of your semantic reactions you are as socially *unsane* as any fanatic witchburner."

"Come now—that's not justl"

"What is justice?" She picked up the kitten she had been playing with. "I'm going in-it's getting chilly." Off she went into the house, her bare feet noiseless in the grass.

Had the science of semantics developed as rapidly as psychodynamics and its implementing arts of propaganda and mob psychology, the United States might never have fallen into dictatorship, then been forced to undergo the Second Revolution. All of the scientific principles embodied in the Covenant which marked the end of the revolution were formulated as far back as the first quarter of the twentieth century.

But the work of the pioneer semanticists, C. K. Ogden, Alfred Korzybski, and others, were known to but a handful of students, whereas psychodynamics, under the impetus of repeated wars and the frenzy of high-pressure merchandising, progressed by leaps and bounds.

Semantics, "the meaning of meaning," gave a method for the first time of applying the scientific method to every act of everyday life. Because semantics dealt with spoken and written words as a determining aspect of human behavior it was at first mistakenly thought by many to be concerned *only* with words and of interest only to professional word manipulators, such as advertising copy writers and professors of etymology. A handful of unorthodox psychiatrists attempted to apply it to personal human problems, but their work was[1] swept away by the epidemic mass psychoses that destroyed Europe and returned the United States to the Dark Ages.

The Covenant was the first scientific social document ever drawn up by man, and due credit must be given to its principal author, Dr. Micah Novak, the same Novak who served as staff psychologist in the revolution. The revolutionists wished to establish maximum personal liberty. How could they accomplish that to a degree of high mathematical probability?

First they junked the concept of "justice." Examined semantically "justice" has no referent—there is no observable phenomenon in the spacetime-matter continuum to which one can point, and say, "This is justice." Science can deal only with that which can be observed and measured. Justice is not such a matter; therefore it can never have the same meaning to one as to another; any "noises" said about it will only add to confusion.

But damage, physical or economic, can be pointed to and measured. Citizens were forbidden by the Covenant to damage another. Any act not leading to damage, physical or economic, to some particular person, they declared to be lawful.

Since they had abandoned the concept of “justice,” there could be no rational standards of punishment. Penology took its place with lycanthropy and other forgotten witchcrafts. Yet, since it was not practical to permit a source of danger to remain in the community, social offenders were examined and potential repeaters were given their choice of psychological readjustment, or of having society withdraw itself from them—Coventry.

Early drafts of the Covenant contained the assumption that the socially unsane would naturally be hospitalized and readjusted, particularly since current psychiatry was quite competent to cure all nonlesional psychoses and cure or alleviate lesional psychoses, but Novak set his face against this.

“*No*!” he protested. “The government must never again be permitted to tamper with the mind of any citizen without his consent, or else we set up a greater tyranny than we had before. Every man must be free to accept, or reject, the Covenant, even though we think him insane!”

The next time David MacKinnon looked up Persephone he found her in a state of extreme agitation. His own wounded pride was forgotten at once. “Why, my dear,” he said, “whatever in the world is the matter?”

Gradually he gathered that she had been present at a conversation between Magee and the Doctor, and had heard, for the first time, of the impending military operation against the United States. He patted her hand. “So that’s all it is,” he observed in a relieved voice. “I thought something was wrong with you yourself.”

“ ‘That’s all—’ David MacKinnon, do you mean to stand there and tell me that you knew about this, and don’t consider it worth worrying about?”

“Me? Why should I? And for that matter, what could I do?”

“What could you do? You could go outside and warn them—that’s what you could do… As to why you should-Dave, you’re impossible!” She burst into tears and ran from the room.

He stared after her, mouth open, then borrowed from his remotest ancestor by observing to himself that women are hard to figure out.

Persephone did not appear at lunch. MacKinnon asked the Doctor where she was.

“Had her lunch,” the Doctor told him, between mouthfuls. “Started for the Gateway.”

|‘What! Why did you let her do that?“

“Free agent. Wouldn’t have obeyed me anyway. She’ll be all right.”

Dave did not hear the last, being already out of the room and running out of the house. He found her just backing her little monocycle runabout out of its shed. “Persephone!”

“What do you want?” she asked with frozen dignity beyond her years.

“You mustn’t do this! That’s where the Fader got hurtl”

“I am going. Please stand aside.”

“Then I’m going with you.”

“Why should you?”

“To take care of you.”

She sniffed. “As if anyone would dare to touch me.”

There was a measure of truth in what she said. The Doctor, and every member of his household, enjoyed a personal immunity unlike that of anyone else in Coventry. As a natural consequence of the set-up, Coventry had almost no competent medical men. The number of physicians who committed social damage was small. The proportion of such who declined psychiatric treatment was negligible, and this negligible remainder were almost sure to be unreliable bunglers in their profession. The Doctor was a natural healer, in voluntary exile in order that he might enjoy the opportunity to practice his art in the richest available field. He cared nothing for dry research; what he wanted was patients, the sicker the better, that he might make them well again.

He was above custom and above law. In the Free State the Liberator depended on him for insulin to hold his own death from diabetes at arm’s length. In New America his beneficiaries were equally powerful. Even among the Angels of the Lord the Prophet himself accepted the dicta of the Doctor without question.

But MacKinnon was not satisfied. Some ignorant fool, he was afraid, might do the child some harm without realizing her protected status. He got no further chance to protest; she started the little runabout suddenly, and forced him to jump out of its path. When he had recovered his balance, she was far down the lane. He could not catch her.

She was back in less than four hours. He had expected that; if a person as elusive as Fader had not been able to reach the Gate at night, it was not likely that a young girl could do so in daylight.

His first feeling was one of simple relief, then he eagerly awaited an opportunity to speak to her. During her absence he had been turning over the situation in his mind. It was a foregone conclusion that she would fail; he wished to rehabilitate himself in her eyes; therefore, he would help her in the project nearest her heart—he himself would carry the warning to the Outside!

Perhaps she would ask for such help. In fact, it seemed likely. By the time she returned he had convinced himself that she was certain to ask his help. He would agree—with simple dignity—and off he would go, perhaps to be wounded, or killed, but an heroic figure, even if he failed.

He pictured himself subconsciously as a blend of Sydney Carton, the

White Knight, the man who carried the message to Garcia—and just a dash of d'Artagnan.

But she did not ask him—she would not even give him a chance to talk with her.

She did not appear at dinner. After dinner she was closeted with the Doctor in his study. When she reappeared she went directly to her room. He finally concluded that he might as well go to bed himself.

To bed, and then to sleep, and take it up again in the morning-But it's not as simple as that. The unfriendly walls stared back at him, and the other, critical half of his mind decided to make a night of it. Fool! She doesn't want your help. Why should she? What have you got that Fader hasn't got?-and better. To her, you are just one of the screwloose multitude you've seen all around you in this place.

But I'm not crazyl—just because I choose not to submit to the dictation of others doesn't make me *crazy*. Doesn't it, though? All the rest of them in here are lamebrains, what's so fancy about you? Not all of them—how about the Doctor, and— Don't kid yourself, chump, the Doctor and Mother Johnston are here for their own reasons; they weren't sentenced. And Persephone was born here.

How about Magee?—He was certainly rational—or seemed so. He found himself resenting, with illogical bitterness, Magee's apparent stability. Why should he be any different from the rest of us?

The rest of us? He had classed himself with the other inhabitants of Coventry. All right, all right, admit it, you fool—you're just like the rest of them; turned out because the decent people won't have you—and too damned stubborn to admit that you need treatment.

But the thought of treatment turned him cold, and made him think of his father again. Why should that be? He recalled something the Doctor had said to him a couple of days before: "What you need, son, is to stand up to your father and tell him off. Pity more children don't tell their parents to go to hell!"

He turned on the light and tried to read. But it was no use. Why should Persephone care what happened to the people Outside?-She didn't know them; she had no friends there. If *he* had no obligations to them, how could *she* possibly care? No obligations? You had a soft, easy life for many years —all they asked was that you behave yourself. For that matter, where would you be now, if the Doctor had stopped to ask whether or not he owed you anything?

He was still wearily chewing the bitter cud of self-examination when the first cold and colorless light of morning filtered in. He got up, threw a robe around him, and tiptoed down the hall to Magee's room. The door was ajar. He stuck his head in, and whispered, "Fader — Are you awake?"

"Come in, kid," Magee answered quietly. "What's the trouble? No can sleep?"

"No-"

"Neither can I. Sit down, and we'll carry the banner together."

"Fader, I'm going to make a break for it. I'm going Outside."

"Huh? When?"

"Right away."

"Risky business, kid. Wait a few days, and I'll try it with you."

"No, I can't wait for you to get well. I'm going out to warn the United States!"

Magee's eyes widened a little, but his voice was unchanged. "You haven't let that spindly kid sell you a bill of goods, Dave?"

"No. Not exactly. I'm doing this for myself—It's something I need to do. See here, Fader, what about this weapon? Have they really got something that could threaten the United States?"

"I'm afraid so," Magee admitted. "I don't know much about it, but it makes blasters look sick. More range— I don't know what they expect to do about the Barrier, but I saw 'em stringing heavy power lines before I got winged. Say, if you do get outside, here's a chap you might look up; in fact, be sure to. He's got influence." Magee scrawled something on a scrap of paper, folded the scrap, and handed it to MacKinnon, who pocketed it absentmindedly and went on:

"How closely is the Gate guarded, Fader?"

"You can't get out the Gate; that's out of the question. Here's what you will have to do—" He tore off another piece of paper and commenced sketching and explaining.

Dave shook hands with Magee before he left. "You'll say goodbye for me, won't you? And thank the Doctor? I'd rather just slide out before anyone is up."

"Of course, kid," the Fader assured him.

MacKinnon crouched behind bushes and peered cautiously at the little band of Angels filing into the bleak, ugly church. He shivered, both from fear and from the icy morning air. But his need was greater than his fear. Those zealots had food—and he must have it.

The first two days after he left the house of the Doctor had been easy enough. True, he had caught cold from sleeping on the ground; it had settled in his lungs and slowed him down. But he did not mind that now if only he could refrain from sneezing or coughing until the little band of faithful were safe inside the temple. He watched them pass—dour-looking men, women in skirts that dragged the ground and whose work-lined faces were framed in shawls—sallow drudges with too many children. The light had gone out of their faces. Even the children were sober.

The last of them filed inside, leaving only the sexton in the churchyard, busy with some obscure duty. After an interminable time, during which MacKinnon pressed a finger against his upper lip in a frantic attempt to forestall a sneeze, the sexton entered the grim building and closed the doors.

MacKinnon crept out of his hiding place and hurried to the house he had previously selected, on the edge of the clearing, farthest from the church.

The dog was suspicious, but he quieted him. The house was locked, but the rear door could be forced. He was a little giddy at the sight of food when he found it—hard bread, and strong, unsalted butter made from goats' milk. A misstep two days before had landed him in a mountain stream. The mishap had not seemed important until he discovered that his food tablets were a pulpy mess. He had eaten them the rest of the day, then mold had taken them, and he had thrown the remainder away.

The bread lasted him through three more sleeps, but the butter melted and he was unable to carry it. He soaked as much of it as he could into the bread, then licked up the rest, after which he was very thirsty.

Some hours after the last of the bread was gone, he reached his first objective—the main river to which all other streams in Coventry were tributary. Some place, down stream, it dived under the black curtain of the Barrier, and continued seaward. With the gateway closed and guarded, its outlet constituted the only possible egress to a man unassisted.

In the meantime it was water, and thirst was upon him again, and his cold was worse. But he would have to wait until dark to drink;

there were figures down there by the bank—some in uniform, he thought. One of them made fast a little skiff to a landing. He marked it for his own and watched it with jealous eyes. It was still there when the sun went down.

The early morning sun struck his nose and he sneezed. He came wide awake, raised his head, and looked around. The little skiff he had appropriated floated in midstream. There were no oars. He could not remember whether or not there had been any oars. The current was fairly strong; it seemed as if he should have drifted clear to the Barrier in the night. Perhaps he had passed under it—no, that was ridiculous.

Then he saw it, less than a mile away, black and ominous-but the most welcome sight he had seen in days. He was too weak and feverish to enjoy it, but it renewed the determination that kept him going.

The little boat scraped against bottom. He saw that the current at a bend had brought him to the bank. He hopped awkwardly out, his congealed joints complaining, and drew the bow of the skiff up onto the sand. Then he thought better of it, pushed it out once more, shoved as hard as he was able and watched it disappear around the meander. No need to advertise where he had landed.

He slept most of that day, rousing himself once to move out of the sun when it grew too hot. But the sun had cooked much of the cold out of his bones, and he felt much better by nightfall.

Although the Barrier was only a mile or so away, it took most of the night to reach it by following the river bank. He knew when he had reached it by the clouds of steam that rose from the water. When the sun came up, he considered the situation. The Barrier stretched across the water, but the juncture between it and the surface of the stream was hidden by billowing clouds. Someplace, down under the surface of the water—how far down he did not know—somewhere down there, the Barrier ceased, and its raw edge turned the water it touched to steam.

Slowly, reluctantly and most unheroically, he commenced to strip off his clothes. The time had come and he did not relish it. He came across the scrap of paper that Magee had handed him, and attempted to examine it. But it had been pulped by his involuntary dip in the mountain stream and was quite illegible. He chucked it away. It did not seem to matter.

He shivered as he stood hesitating on the bank, although the sun was warm. Then his mind was made up for him; he spied a patrol on the far bank.

Perhaps they had seen him, perhaps not. He dived.

Down, down, as far as his strength would take him. Down and try to touch bottom, to be sure of avoiding that searing, deadly base. He felt mud with his hands. Now to swim under it. Perhaps it was death to pass under it, as well as over it; he would soon know. But which way was it? There was no direction down here.

He stayed down until his congested lungs refused. Then he rose part way, and felt scalding water on his face. For a timeless interval of unutterable sorrow and loneliness he realized that he was trapped between heat and water—trapped under the Barrier.

Two private soldiers gossiped idly on a small dock which lay under the face of the Barrier. The river which poured out from beneath it held no interest for them, they had watched it for many dull tours of guard duty. An alarm clanged behind them and brought them to alertness. "What sector, Jack?"

"This bank. There he is now—see!"

They fished him out and had him spread out on the dock by the time the sergeant of the guard arrived. "Alive, or dead?" he enquired.

"Dead, I think," answered the one who was not busy giving artificial resuscitation.

The sergeant clucked in a manner incongruous to his battered face, and said, "Too bad. I've ordered the ambulance; send him up to the infirmary anyhow."

The nurse tried to keep him quiet, but MacKinnon made such an uproar that she was forced to get the ward surgeon. "Here! Here! What's all this nonsense?" the medico rebuked him, while reaching for his pulse. Dave managed to convince him that he would not quiet down, not accept a soporific until he had told his story. They struck a working agreement that MacKinnon was to be allowed to talk— "But keep it short, mind you!"— and the doctor would pass the word along to his next superior, and in return Dave would submit to a hypodermic.

The next morning two other men, unidentified, were brought to MacKinnon by the surgeon. They listened to his full story and questioned him in detail. He was transferred to corps area headquarters that afternoon by ambulance. There he was questioned again. He was regaining his strength rapidly, but he was growing quite tired of the whole rigamarole, and wanted assurance that his warning was being taken seriously. The latest of his interrogators reassured him. "Compose yourself," he told Dave, "you are to see the commanding officer this afternoon."

The corps area commander, a nice little chap with a quick, birdlike manner and a most unmilitary appearance, listened gravely while MacKinnon recited his story for what seemed to him the fiftieth time. He nodded agreement when David finished. "Rest assured, David MacKinnon, that all necessary steps are being taken."

"But how about their weapon?"

"That is taken care of—and as for the Barrier, it may not be as easy to break as our neighbors think. But your efforts are appreciated. May I do you some service?"

"Well, no—not for myself, but there are two of my friends in there—" He asked that something be done to rescue Magee, and that Persephone be enabled to come out, if she wished.

"I know of that girl," the general remarked. "We will get in touch with her. If at any time she wishes to become a citizen, it can be arranged. As for Magee, that is another matter—" He touched the stud of his desk visiphone. "Send Captain Randall in."

A neat, trim figure in the uniform of a captain of the United States Army entered with a light step. MacKinnon glanced at him with casual, polite interest, then his expression went to pieces. "Fader!" he yelled.

Their mutual greeting was hardly sufficiently decorous for the private office of a commanding general, but the general did not seem to mind. When they had calmed down, MacKinnon had to ask the question uppermost in his mind. "But see here, Fader, all this doesn't make sense—" He paused, staring, then pointed a finger accusingly, "I know! You're in the secret service!"

The Fader grinned cheerfully. "Did you think," he observed, "that the United States Army would leave a plague spot like that unwatched?"

The general cleared his throat. "What do you plan to do now, David MacKinnon?"

"Eh? Me? Why, I don't have any plans—" He thought for a moment, then turned to his friend. "Do you know, Fader, I believe I'll turn in for psychological treatment after all. You're on the Outside—"

"I don't believe that will be necessary," interrupted the general gently.

"No? Why not, sir?"

"You have cured yourself. You may not be aware of it, but four psychotechnicians have interviewed you. Their reports agree. I am authorized to tell you that your status as a free citizen has been restored, if you wish it."

The general and Captain "the Fader" Randall managed tactfully between them to terminate the interview. Randall walked back to the infirmary with his friend. Dave wanted a thousand questions answered at once. "But Fader," he demanded, "you must have gotten out before I did."

"A day or two."

"Then my job was unnecessary!"

"I wouldn't say that," Randall contradicted. "I might not have gotten through. As a matter of fact, they had all the details even before I reported. There are others—Anyhow," he continued, to change the subject, "now that you are here, what will you do?"

"Me? It's too soon to say… It won't be classical literature, that's a cinch. If I wasn't such a dumbie in math, I might still try for interplanetary."

"Well, we can talk about it tonight," suggested Fader, glancing at his chrono. "I've got to run along, but I'll stop by later, and we'll go over to the mess for dinner."

He was out the door with speed reminiscent of the thieves' kitchen. Dave watched him, then said suddenly, "Hey! Fader! Why couldn't I get into the secret ser—"

But the Fader was gone—he must ask himself.

BLOWUPS HAPPEN

"Put down that wrench!"

The man addressed turned slowly around and faced the speaker. His expression was hidden by a grotesque helmet, part of a heavy, leaden armor which shielded his entire body, but the tone of voice in which he answered showed nervous exasperation.

"What the hell's eating on you, Doc?" He made no move to replace the tool in question.

They faced each other like two helmeted, arrayed fencers, watching for an opening. The first speaker's voice came from behind his mask a shade higher in key and more peremptory in tone. "You heard me, Harper. Put down that wrench at once, and come away from that 'trigger.' Erickson!"

A third armored figure came around the shield which separated the uranium bomb proper from the control room in which the first two stood. "Whatcha want, Doc?"

"Harper is relieved from watch. You take over as engineer-of-thewatch. Send for the standby engineer."

"Very well." His voice and manner were phlegmatic as he accepted the situation without comment. The atomic engineer whom he had just relieved glanced from one to the other, then carefully replaced the wrench in its rack.

"Just as you say, Dr. Silard—but send for your relief, too. I shall demand an immediate hearing!" Harper swept indignantly out, his lead-sheathed boots clumping on the floor plates.

Dr. Silard waited unhappily for the ensuing twenty minutes until his own relief arrived. Perhaps he had been hasty. Maybe he was wrong in thinking that Harper had at last broken under the strain of tending the most dangerous machine in the world—an atomic power plant. But if he had made a mistake, it had to be on the safe side—slips *must not happen* in this business; not when a slip might result in the atomic detonation of two and a half tons of uranium.

He tried to visualize what that would mean, and failed. He had been told that uranium was potentially forty million times as explosive as TNT. The figure was meaningless that way. He thought of it, instead, as a hundred million tons of high explosive, two hundred million aircraft bombs as big as the biggest ever used. It still did not mean anything. He had once seen such a bomb dropped, when he had been serving as a temperament analyst for army aircraft pilots. The bomb had left a hole big enough to hide an apartment house. He could not imagine the explosion of a thousand such bombs, much less a hundred million of them.

Perhaps these atomic engineers could. Perhaps, with their greater mathematical ability and closer comprehension of what actually went on inside the nuclear fission chamber—the "bomb"—they had some vivid glimpse of the mind-shattering horror locked up beyond that shield. If so, no wonder they tended to blow up—

He sighed. Erickson looked up from the linear resonant accelerator on which he had been making some adjustment. "What's the trouble, Doc?"

"Nothing. I'm sorry I had to relieve Harper."

Silard could feel the shrewd glance of the big Scandinavian. "Not getting the jitters yourself, are you, Doc? Sometimes you squirrel sleuths blow up, too—"

"Me? I don't think so. I'm scared of that thing in there—I'd be crazy if I weren't."

"So am I," Erickson told him soberly, and went back to his work.

The accelerator's snout disappeared in the shield between them and the bomb, where it fed a steady stream of terrifically speeded up subatomic bullets to the beryllium target located within the bomb itself. The tortured beryllium yielded up neutrons, which shot out in all directions through the uranium mass. Some of these neutrons struck uranium atoms squarely on their nuclei and split them in two. The fragments were new elements, barium, xenon, rubidium—depending on the proportions in which each atom split. The new elements were usually unstable isotopes and broke down into a dozen more elements by radioactive disintegration in a progressive chain reaction.

But these chain reactions were comparatively unimportant; it was the original splitting of the uranium nucleus, with the release of the awe-inspiring energy that bound it together—an incredible two hundred million electron-volts—that was important—and perilous.

For, while uranium isotope 235 may be split by bombarding it with neutrons from an outside source, the splitting itself gives up more neutrons which, in turn, may land in other uranium nuclei and split them. If conditions are favorable to a progressively increasing reaction of this sort, it may get out of hand, build up in an unmeasurable fraction of a microsecond into a complete atomic explosion—an explosion which would dwarf the eruption of Krakatoa to popgun size; an explosion so far beyond all human experience as to be as completely incomprehensible as the idea of personal death. It could be feared, but not understood.

But a self-perpetuating sequence of nuclear splitting *just under the level of complete explosion* was necessary to the operation of the power plant. To split the first uranium nucleus by bombarding it with neutrons from the beryllium target took more power than the death of the atom gave up. In order that the output of power from the system should exceed the power input in useful proportion it was imperative that each atom split by a neutron from the beryllium target should cause the splitting of many more.

It was equally imperative that this chain of reactions should always tend to dampen, to die out. It must not build up, or the entire mass would explode within a time interval too short to be measured by any means whatsoever.

Nor would there be anyone left to measure it.

The atomic engineer on duty at the bomb could control this reaction by means of the "trigger," a term the engineers used to include the linear resonant accelerator, the beryllium target, and the adjacent controls, instrument board, and power sources. That is to say, he could vary the bombardment on the beryllium target to increase or decrease the power output of the plant, and he could tell from his instruments that the internal reaction was dampened—or, rather, that it had been dampened the split second before. He could not possibly know what was actually happening now within the bomb—subatomic speeds are too great and the time intervals too small. He was like the bird that flew backward; he could see where he had been, but he never knew where he was going.

Nevertheless, it was his responsibility, and his alone, not only to maintain the bomb at a high input-output efficiency, but to see that the reaction never passed the critical point and progressed into mass explosion.

But that was impossible. He could not be sure; he could never be sure.

He could bring to the job all of the skill and learning of the finest technical education, and use it to reduce the hazard to the lowest mathematical probability, but the blind laws of chance which appear to rule in subatomic action might turn up a royal flush against him and defeat his most skillful play.

And each atomic engineer knew it, knew that he gambled not only with his own life, but with the lives of countless others, perhaps with the lives of every human being on the planet. Nobody knew quite what such an explosion would do. The most conservative estimate assumed that, in addition to destroying the plant and its personnel completely, it would tear a chunk out of the populous and heavily traveled Los Angeles–Oklahoma Road City a hundred miles to the north.

That was the official, optimistic viewpoint on which the plant had been authorized, and based on mathematics which predicted that a mass of uranium would itself be disrupted on a molar scale, and thereby rendered comparatively harmless, before progressive and accelerated atomic explosion could infect the entire mass.

The atomic engineers, by and large, did not place faith in the official theory. They judged theoretical mathematical prediction for what it was worth—precisely nothing, until confirmed by experiment.

But even from the official viewpoint, each atomic engineer while on watch carried not only his own life in his hands, but the lives of many others—how many, it was better not to think about. No pilot, no general, no surgeon ever carried such a daily, inescapable, everpresent weight of responsibility for the lives of other people as these men carried every time they went on watch, every time they touched a vernier screw or read a dial.

They were selected not alone for their intelligence and technical training, but quite as much for their characters and sense of social responsibility. Sensitive men were needed—men who could fully appreciate the importance of the charge intrusted to them; no other sort would do. But the burden of responsibility was too great to be borne indefinitely by a sensitive man.

It was, of necessity, a psychologically unstable condition. Insanity was an occupational disease.

Dr. Cummings appeared, still buckling the straps of the armor worn to guard against stray radiation. "What's up?" he asked Silard.

"I had to relieve Harper."

"So I guessed. I met him coming up. He was sore as hell—just glared at me."

"I know. He wants an immediate hearing. That's why I had to send for you."

Cummings grunted, then nodded toward the engineer, anonymous in all-inclosing armor. "Who'd I draw?"

"Erickson."

"Good enough. Squareheads can't go crazy—eh, Gus?"

Erickson looked up momentarily and answered, "That's your problem," and returned to his work.

Cummings turned back to Silard and commented: "Psychiatrists don't seem very popular around here. O.K.—I relieve you, sir."

"Very well, sir."

Silard threaded his way through the zigzag in the tanks of water which surrounded the disintegration room. Once outside this outer shield, he divested himself of the cumbersome armor, disposed of it in the locker room provided, and hurried to a lift. He left the lift at the tube station, underground, and looked around for an unoccupied capsule. Finding one, he strapped himself in, sealed the gasketed door, and settled the back of his head into the rest against the expected surge of acceleration.

Five minutes later he knocked at the door of the office of the general superintendent, twenty miles away.

The power plant proper was located in a bowl of desert hills on the Arizona plateau. Everything not necessary to the immediate operation of the plant—administrative offices, television station and so forth—lay beyond the hills. The buildings housing these auxiliary functions were of the most durable construction technical ingenuity could devise. It was hoped that, if *Der Tag* ever came, occupants would stand approximately the chance of survival of a man going over Niagara Falls in a barrel.

Silard knocked again. He was greeted by a male secretary. Steinke. Silard recalled reading his case history. Formerly one of the most brilliant of the young engineers, he had suffered a blanking out of the ability to handle mathematical operations. A plain case of *fugue,* but there had been nothing that the poor devil could do about it—he had been anxious enough with his conscious mind to stay on duty. He had been rehabilitated as an office worker.

Steinke ushered him into the superintendent's private office. Harper was there before him, and returned his greeting with icy politeness. The superintendent was cordial, but Silard thought he looked tired, as if the twenty-four-hour-a-day strain was too much for him.

"Come in, Doctor, come in. Sit down. Now tell me about this. I'm a little surprised. I thought Harper was one of my steadiest men."

"I don't say he isn't, sir."

"Well?"

"He may be perfectly all right, but your instructions to me are not to take any chances."

"Quite right." The superintendent gave the engineer, silent and tense in his chair, a troubled glance, then returned his attention to

Silard. "Suppose you tell me about it."

Silard took a deep breath. "While on watch as psychological observer at the control station I noticed that the engineer of the watch seemed preoccupied and less responsive to stimuli than usual. During my offwatch observation of this case, over a period of the past several days, I have suspected an increasing lack of attention. For example, while playing contract bridge, he now occasionally asks for a review of the bidding, which is contrary to his former behavior pattern.

"Other similar data are available. To cut it short, at 3:11 today, while on watch, I saw Harper, with no apparent reasonable purpose in mind, pick up a wrench used only for operating the valves of the water shield and approach the trigger. I relieved him of duty and sent him out of the control room."

"Chief!" Harper calmed himself somewhat and continued: "If this witch doctor knew a wrench from an oscillator, he'd know what I was doing. The wrench was on the wrong rack. I noticed it, and picked it up to return it to its proper place. On the way, I stopped to check the readings!"

The superintendent turned inquiringly to Dr. Silard.

"That may be true. Granting that it is true," answered the psychiatrist doggedly, "my diagnosis still stands. Your behavior pattern has altered; your present actions are unpredictable, and I can't approve you for responsible work without a complete checkup."

General Superintendent King drummed on the desk top and sighed. Then he spoke slowly to Harper: "Cal, you're a good boy, and, believe me, I know how you feel. But there is no way to avoid it—you've got to go up for the psychometricals, and accept whatever disposition the board makes of you." He paused, but Harper maintained an expressionless silence. "Tell you what, son—why don't you take a few days leave? Then, when you come back, you can go up before the board, or transfer to another department away from the bomb, whichever you prefer." He looked to Silard for approval, and received a nod.

But Harper was not mollified. "No, chief," he protested. "It won't do. Can't you see what's wrong? It's this constant supervision. Somebody always watching the back of your neck, *expecting* you to go crazy. A man can't even shave in private. We're jumpy about the most innocent acts, for fear some head doctor, half batty himself, will see it and decide it's a sign we're slipping. Good grief, what do you expect?" His outburst having run its course, he subsided into a flippant cynicism that did not quite jell. "O.K.—never mind the straitjacket; I'll go quietly. You're a good Joe in spite of it, chief," he added, "and I'm glad to have worked under you. Goodbye."

King kept the pain in his eyes out of his voice. "Wait a minute, Cal

—you're not through here. Let's forget about the vacation. I'm transferring you to the radiation laboratory. You belong in research, anyhow; I'd never have spared you from it to stand watches if I hadn't been short on Number One men.

"As for the constant psychological observation, I hate it as much as you do. I don't suppose you know that they watch me about twice as hard as they watch you duty engineers." Harper showed his surprise, but Silard nodded in sober confirmation. "But we have to have this supervision. Do you remember Manning? No, he was before your time. We didn't have psychological observers then. Manning was able and brilliant. Furthermore, he was always cheerful; nothing seemed to bother him.

"I was glad to have him on the bomb, for he was always alert, and never seemed nervous about working with it—in fact, he grew more buoyant and cheerful the longer he stood control watches. I should have known that was a very bad sign, but I didn't, and there was no observer to tell me so.

"His technician had to slug him one night. He found him dismounting the safety interlocks on the trigger. Poor old Manning never pulled out of it—he's been violently insane ever since. After Manning cracked up we worked out the present system of two qualified engineers and an observer for every watch. It seemed the only thing to do."

"I suppose so, chief," Harper mused, his face no longer sullen, but still unhappy. "It's a hell of a situation just the same."

"That's putting it mildly." King rose and put out his hand. "Cal, unless you're dead set on leaving us, I'll expect to see you at the radiation laboratory tomorrow. Another thing—I don't often recommend this, but it might do you good to get drunk tonight."

King had signed to Silard to remain after the young man left. Once the door was closed he turned back to the psychiatrist. "There goes another one—and one of the best. Doctor, what am I going to do?"

Silard pulled at his cheek. "I don't know," he admitted. "The hell of it is, Harper's absolutely right. It does increase the strain on them to know that they are being watched—and yet they have to be watched. Your psychiatric staff isn't doing too well, either. It makes us nervous to be around the bomb—the more so because we don't understand it. And it's a strain on us to be hated and despised as we are. Scientific detachment is difficult under such conditions; I'm getting jumpy myself."

King ceased pacing the floor and faced the doctor. "But there must be *some* solution—" he insisted.

Silard shook his head. "It's beyond me, Superintendent. I see no solution from the standpoint of psychology."

"No? Hm-m-m. Doctor, who is the top man in your field?"

"Eh?"

"Who is the recognized Number One man in handling this sort of thing?"

"Why, that's hard to say. Naturally, there isn't any one leading psychiatrist in the world; we specialize too much. I know what you mean, though. You don't want the best industrial-temperament psychometrician; you want the best all-around man for psychoses nonlesional and situational. That would be Lentz."

"Go on."

"Well—he covers the whole field of environmental adjustment. He's the man who correlated the theory of optimum tonicity with the relaxation technique that Korzybski had developed empirically. He actually worked under Korzybski himself, when he was a young student—it's the only thing he's vain about."

"He did? Then he must be pretty old; Korzybski died in— What year did he die?"

"I started to say that you must know his work in symbology—theory of abstraction and calculus of statement, all that sort of thing—because of its applications to engineering and mathematical physics."

"*That* Lentz—yes, of course. But I had never thought of him as a psychiatrist."

"No, you wouldn't, in your field. Nevertheless, we are inclined to credit him with having done as much to check and reduce the pandemic neuroses of the Crazy Years as any other man, and more than any man left alive."

"Where is he?"

"Why, Chicago, I suppose. At the Institute."

"Get him here."

"Eh?"

"Get him down here. Get on that visiphone and locate him. Then have Steinke call the port of Chicago, and hire a stratocar to stand by for him. I want to see him as soon as possible—before the day is out." King sat up in his chair with the air of a man who is once more master of himself and the situation. His spirit knew that warming replenishment that comes only with reaching a decision. The harassed expression was gone.

Silard looked dumbfounded. "But, Superintendent," he expostulated, "You can't ring for Dr. Lentz as if he were a junior clerk. He's . . . he's *Lentz.*"

"Certainly—that's why I want him. But I'm not a neurotic clubwoman looking for sympathy, either. He'll come. If necessary, turn on the heat from Washington. Have the White House call him. But get him here at once. Move!" King strode out of the office.

When Erickson came off watch he inquired around and found that Harper had left for town. Accordingly, he dispensed with dinner at the base, shifted into "drinkin' clothes," and allowed himself to be dispatched via tube to Paradise.

Paradise, Arizona, was a hard little boom town, which owed its existence to the power plant. It was dedicated exclusively to the serious business of detaching the personnel of the plant from their inordinate salaries. In this worthy project they received much cooperation from the plant personnel themselves, each of whom was receiving from twice to ten times as much money each pay day as he had ever received in any other job, and none of whom was certain of living long enough to justify saving for old age. Besides, the company carried a sinking fund in Manhattan for their dependents; why be stingy?

It was said, with some truth, that any entertainment or luxury obtainable in New York City could be purchased in Paradise. The local chamber of commerce had appropriated the slogan of Reno, Nevada, "Biggest Little City in the World." The Reno boosters retaliated by claiming that, while any town that close to the atomic power plant undeniably brought thoughts of death and the hereafter, Hell's Gates would be a more appropriate name than Paradise.

Erickson started making the rounds. There were twenty-seven places licensed to sell liquor in the six blocks of the main street of Paradise. He expected to find Harper in one of them, and, knowing the man's habits and tastes, he expected to find him in the first two or three he tried.

He was not mistaken. He found Harper sitting alone at a table in the rear of DeLancey's Sans Souci Bar. DeLancey's was a favorite of both of them. There was an old-fashioned comfort about its chrome-plated bar and red leather furniture that appealed to them more than did the spectacular fittings of the up-to-the-minute places. DeLancey was conservative; he stuck to indirect lighting and soft music; his hostesses were required to be fully clothed, even in the evening.

The fifth of Scotch in front of Harper was about two thirds full. Erickson shoved three fingers in front of Harper's face and demanded, "Count!"

"Three," announced Harper. "Sit down, Gus."

"That's correct," Erickson agreed, sliding his big frame into a low-slung chair. "You'll do—for now. What was the outcome?"

"Have a drink. Not," he went on, "that this Scotch is any good. I think Lance has taken to watering it. I surrendered, horse and foot."

"Lance wouldn't do that—stick to that theory and you'll sink in the sidewalk up to your knees. How come you capitulated? I thought you planned to beat 'em about the head and shoulders, at least."

"I did," mourned Harper, "but, cripes, Gus, the chief is right. If a brain mechanic says you're punchy, he has *got* to back him up and take you off the bomb. The chief can't afford to take a chance."

"Yeah, the chief's all right, but I can't learn to love our dear psychiatrists. Tell you what—let's find us one, and see if he can feel pain. I'll hold him while you slug 'im."

"Oh, forget it, Gus. Have a drink."

"A pious thought—but not Scotch. I'm going to have a martini; we ought to eat pretty soon."

"I'll have one, too."

"Do you good." Erickson lifted his blond head and bellowed, "Israfel!"

A large, black person appeared at his elbow. "Mistuh Erickson! Yes, suh!"

"Izzy, fetch two martinis. Make mine with Italian." He turned back to Harper. "What are you going to do now, Cal?"

"Radiation laboratory."

"Well, that's not so bad. I'd like to have a go at the matter of rocket fuels myself. I've got some ideas."

Harper looked mildly amused. "You mean atomic fuel for interplanetary flight? The problem's pretty well exhausted. No, son, the stratosphere is the ceiling until we think up something better than rockets. Of course, you *could* mount the bomb in a ship, and figure out some jury rig to convert its radiant output into push, but where does that get you? One bomb, one ship—and twenty years of mining in Little America has only produced enough pitchblende to make one bomb. That's disregarding the question of getting the company to lend you their one bomb for anything that doesn't pay dividends."

Erickson looked balky. "I don't concede that you've covered all the alternatives. What have we got? The early rocket boys went right ahead trying to build better rockets, serene in the belief that, by the time they could build rockets good enough to fly to the Moon, a fuel would be perfected that would do the trick. And they did build ships that were good enough—you could take any ship that makes the antipodes run, and refit it for the Moon—*if* you had a fuel that was sufficiently concentrated to maintain the necessary push for the whole run. But they haven't got it.

"And why not? Because we let 'em down, that's why. Because they're still depending on molecular energy, on chemical reactions, with atomic power sitting right here in our laps. It's not their fault—old D. D. Harriman had Rockets Consolidated underwrite the whole first issue of Antarctic Pitchblende, and took a big slice of it himself, in the expectation that we would produce something usable in the way of a concentrated rocket fuel. Did we do it? Like hell! The company went hog-wild for immediate commercial exploitation, and there's no fuel yet."

"But you haven't stated it properly," Harper objected. "There are just two forms of atomic power available—radioactivity and atomic disintegration. The first is too slow; the energy is there, but you can't wait years for it to come out—not in a rocketship. The second we can only manage in a large mass of uranium. There you are—stymied."

Erickson's Scandinavian stubbornness was just gathering for another try at the argument when the waiter arrived with the drinks. He set them down with a triumphant flourish. "There you are, suh!"

"Want to roll for them, Izzy?" Harper inquired.

"Don' mind if I do."

The Negro produced a leather dice cup, and Harper rolled. He selected his combinations with care and managed to get four aces and a jack in three rolls. Israfel took the cup. He rolled in the grand manner with a backward twist to his wrist. His score finished at five kings, and he courteously accepted the price of six drinks. Harper stirred the engraved cubes with his forefinger.

"*Izzy,*" he asked, "are these the same dice I rolled with?"

"Why, Mistuh Harper!" The Negro's expression was pained.

"Skip it," Harper conceded. "I should know better than to gamble with you. I haven't won a roll from you in six weeks. What did you start to say, Gus?"

"I was just going to say that there ought to be a better way to get energy out of—"

But they were joined again, this time by something very seductive in an evening gown that appeared to have been sprayed on her lush figure. She was young, perhaps nineteen or twenty. "You boys lonely?" she asked as she flowed into a chair.

"Nice of you to ask, but we're not," Erickson denied with patient politeness. He jerked a thumb at a solitary figure seated across the room. "Go talk to Hannigan; he's not busy."

She followed his gesture with her eyes, and answered with faint scorn: "Him? He's no use. He's been like that for three weeks—hasn't spoken to a soul. If you ask me, I'd say that he was cracking up."

"That so?" he observed noncommittally. "Here"—he fished out a five-dollar bill and handed it to her—"buy yourself a drink. Maybe we'll look you up later."

"Thanks, boys." The money disappeared under her clothing, and she stood up. "Just ask for Edith."

"Hannigan does look bad," Harper considered, noting the brooding stare and apathetic attitude, "and he has been awfully standoffish lately, for him. Do you suppose we're obliged to report him?"

"Don't let it worry you," advised Erickson. "There's a spotter on the job now. Look." Harper followed his companion's eyes and recognized Dr. Mott of the psychological staff. He was leaning against the far end of the bar, and nursing a tall glass, which gave him protective coloration. But his stance was such that his field of vision included not only Hannigan, but Erickson and Harper as well.

"Yeah, and he's studying us as well," Harper added. "Damn it to hell, why does it make my back hair rise just to lay eyes on one of them?"

The question was rhetorical; Erickson ignored it. "Let's get out of here," he suggested, "and have dinner somewhere else."

"O.K."

DeLancey himself waited on them as they left. "Going so soon, gentlemen?" he asked, in a voice that implied that their departure would leave him no reason to stay open. "Beautiful lobster thermidor tonight. If you do not like it, you need not pay." He smiled brightly.

"Not sea food, Lance," Harper told him, "not tonight. Tell me—why do you stick around here when you know that the bomb is bound to get you in the long run? Aren't you afraid of it?"

The tavernkeeper's eyebrows shot up. "Afraid of the bomb? But it is my friend!"

"Makes you money, eh?"

"Oh, I do not mean that." He leaned toward them confidentially. "Five years ago I come here to make some money quickly for my family before my cancer of the stomach, it kills me. At the clinic, with the wonderful new radiants you gentlemen make with the aid of the bomb, I am cured—I live again. No, I am not afraid of the bomb, it is my good friend."

"Suppose it blows up?"

"When the good Lord needs me, He will take me." He crossed himself quickly.

As they turned away, Erickson commented in a low voice to Harper, "There's your answer, Cal—if all us engineers had his faith, the bomb wouldn't get us down."

Harper was unconvinced. "I don't know," he mused. "I don't think it's faith; I think it's lack of imagination—and knowledge."

Notwithstanding King's confidence, Lentz did not show up until the next day. The superintendent was subconsciously a little surprised at his visitor's appearance. He had pictured a master psychologist as wearing flowing hair, an imperial, and having piercing black eyes. But this man was not very tall, was heavy in his framework, and fat—almost gross. He might have been a butcher. Little, piggy, faded-blue eyes peered merrily out from beneath shaggy blond brows. There was no hair anywhere else on the enormous skull, and the apelike jaw was smooth and pink. He was dressed in mussed pajamas of unbleached linen. A long cigarette holder jutted permanently from one corner of a wide mouth, widened still more by a smile with suggested unmalicious amusement at the worst that life, or men, could do. He had gusto.

King found him remarkably easy to talk to.

At Lentz's suggestion the superintendent went first into the history of the atomic power plant, how the fission of the uranium atom by Dr. Otto Hahn in December, 1938, had opened up the way to atomic power. The door was opened just a crack; the process to be self-perpetuating and commercially usable required an enormously greater mass of uranium than there was available in the entire civilized world at that time.

But the discovery, fifteen years later, of enormous deposits of pitchblende in the old rock underlying Little America removed that obstacle. The deposits were similar to those previously worked at Great Bear Lake in the arctic north of Canada, but so much more extensive that the eventual possibility of accumulating enough uranium to build an atomic power plant became evident.

The demand for commercially usable, cheap power had never been satiated. Even the Douglas-Martin sunpower screens, used to drive the roaring road cities of the period and for a myriad other industrial purposes, were not sufficient to fill the ever-growing demand. They had saved the country from impending famine of oil and coal, but their maximum output of approximately one horsepower per square yard of sun-illuminated surface put a definite limit to the power from that source available in any given geographical area.

Atomic power was needed—was demanded.

But theoretical atomic physics predicted that a uranium mass sufficiently large to assist in its own disintegration might assist too well—blow up instantaneously, with such force that it would probably wreck every manmade structure on the globe and conceivably destroy the entire human race as well. They dared not build the bomb, even though the uranium was available.

"It was Destry's mechanics of infinitesimals that showed a way out of the dilemma," King went on. "His equations appeared to predict that an atomic explosion, once started, would disrupt the molar mass inclosing it so rapidly that neutron loss through the outer surface of the fragments would dampen the progression of the atomic explosion to zero before complete explosion could be reached.

"For the mass we use in the bomb, his equations predict a possible force of explosion one seventh of one percent of the force of complete explosion. That alone, of course, would be incomprehensibly destructive—about the equivalent of a hundred and forty thousand tons of TNT—enough to wreck this end of the State. Personally, I've never been sure that is all that would happen."

"Then why did you accept this job?" inquired Lentz.

King fiddled with items on his desk before replying. "I couldn't turn it down, Doctor—I *couldn't.* If I had refused, they would have gotten someone else—and it was an opportunity that comes to a physicist once in history."

Lentz nodded. "And probably they would have gotten someone not as competent. I understand, Dr. King—you were compelled by the 'truth-tropism' of the scientist. He must go where the data is to be found, even if it kills him. But about this fellow Destry, I've never liked his mathematics; he postulates too much."

King looked up in quick surprise, then recalled that this was the man who had refined and given rigor to the calculus of statement. "That's just the hitch," he agreed. "His work is brilliant, but I've never been sure that his predictions were worth the paper they were written on. Nor, apparently," he added bitterly, "do my junior engineers."

He told the psychiatrist of the difficulties they had had with personnel, of how the most carefully selected men would, sooner or later, crack under the strain. "At first I thought it might be some degenerating effect from the hard radiation that leaks out of the bomb, so we improved the screening and the personal armor. But it didn't help. One young fellow who had joined us after the new screening was installed became violent at dinner one night, and insisted that a pork chop was about to explode. I hate to think of what might have happened if he had been on duty at the bomb when he blew up."

The inauguration of the system of constant psychological observation had greatly reduced the probability of acute danger resulting from a watch engineer cracking up, but King was forced to admit that the system was not a success; there had actually been a marked increase in psychoneuroses, dating from that time.

"And that's the picture, Dr. Lentz. It gets worse all the time. It's getting me now. The strain is telling on me; I can't sleep, and I don't think my judgment is as good as it used to be—I have trouble making up my mind, of coming to a decision. Do you think you can do anything for us?"

But Lentz had no immediate relief for his anxiety. "Not so fast, superintendent," he countered. "You have given me the background, but I have no real data as yet. I must look around for a while, smell out the situation for myself, talk to your engineers, perhaps have a few drinks with them, and get acquainted. That is possible, is it not? Then in a few days, maybe, we'll know where we stand."

King had no alternative but to agree.

"And it is well that your young men do not know what I am here for. Suppose I am your old friend, a visiting physicist, eh?"

"Why, yes—of course. I can see to it that the idea gets around. But say—" King was reminded again of something that had bothered him from the time Silard had first suggested Lentz's name—"may I ask a personal question?"

The merry eyes were undisturbed.

"Go ahead."

"I can't help but be surprised that one man should attain eminence in two such widely differing fields as psychology and mathematics. And right now I'm perfectly convinced of your ability to pass yourself off as a physicist. I don't understand it."

The smile was more amused, without being in the least patronizing, nor offensive. "Same subject, symbology. You are a specialist; it would not necessarily come to your attention."

"I still don't follow you."

"No? Man lives in a world of ideas. Any phenomenon is so complex that he cannot possibly grasp the whole of it. He abstracts certain characteristics of a given phenomenon as an idea, then represents that idea as a symbol, be it a word or a mathematical sign. Human reaction is almost entirely reaction to symbols, and only negligibly to phenomena. As a matter of fact," he continued, removing the cigarette holder from his mouth and settling into his subject, "it can be demonstrated that the human mind can think only in terms of symbols.

"When we think, we let symbols operate on other symbols in certain, set fashions—rules of logic, or rules of mathematics. If the symbols have been abstracted so that they are structurally similar to the phenomena they stand for, and if the symbol operations are similar in structure and order to the operations of phenomena in the real world, we think sanely. If our logic-mathematics, or our word-symbols, have been poorly chosen, we do not think sanely.

"In mathematical physics you are concerned with making your symbology fit physical phenomena. In psychiatry I am concerned with precisely the same thing, except that I am more immediately concerned with the man who does the thinking than with the phenomena he is thinking about. But the same subject, always the same subject."

"We're not getting anyplace, . . . Gus." Harper put down his slide rule and frowned.

"Seems like it, Cal," Erickson grudgingly admitted. "Damn it, though—there ought to be some reasonable way of tackling the problem. What do we need? Some form of concentrated, controllable power for rocket fuel. What have we got? Power galore in the bomb.

There must be some way to bottle that power, and serve it out when we need it—and the answer is someplace in one of the radioactive series. I *know* it." He stared glumly around the laboratory as if expecting to find the answer written somewhere on the lead-sheathed walls.

"Don't be so down in the mouth about it. You've got me convinced there is an answer; let's figure out how to find it. In the first place the three natural radioactive series are out, aren't they?"

"Yes—at least we had agreed that all that ground had been fully covered before."

"O.K.; we have to assume that previous investigators have done what their notes show they have done—otherwise we might as well not believe anything, and start checking on everybody from Archimedes to date. Maybe that is indicated, but Methuselah himself couldn't carry out such an assignment. What have we got left?"

"Artificial radioactives."

"All right. Let's set up a list of them, both those that have been made up to now, and those that might possibly be made in the future. Call that our group—or rather, field, if you want to be pedantic about definitions. There are a limited number of operations that can be performed on each member of the group, and on the members taken in combination. Set it up."

Erickson did so, using the curious curlicues of the calculus of statement. Harper nodded. "All right—expand it."

Erickson looked up after a few moments, and asked, "Cal, have you any idea how many terms there are in the expansion?"

"No—hundreds, maybe thousands, I suppose."

"You're conservative. It reaches four figures without considering possible new radioactives. We couldn't finish such a research in a century." He chucked his pencil down and looked morose.

Cal Harper looked at him curiously, but with sympathy. "Gus," he said gently, "the bomb isn't getting you, too, is it?"

"I don't think so. Why?"

"I never saw you so willing to give up anything before. Naturally you and I will never finish any such job, but at the very worst we will have eliminated a lot of wrong answers for somebody else. Look at Edison—sixty years of experimenting, twenty hours a day, yet he never found out the one thing he was most interested in knowing. I guess if he could take it, we can."

Erickson pulled out of his funk to some extent. "I suppose so," he agreed. "Anyhow, maybe we could work out some techniques for carrying on a lot of experiments simultaneously."

Harper slapped him on the shoulder. "That's the ol' fight. Besides—we may not need to finish the research, or anything like it, to find a satisfactory fuel. The way I see it, there are probably a dozen, maybe a hundred, right answers. We may run across one of them any day. Anyhow, since you're willing to give me a hand with it in your offwatch time, I'm game to peck away at it till hell freezes."

Lentz puttered around the plant and the administration center for several days, until he was known to everyone by sight. He made himself pleasant and asked questions. He was soon regarded as a harmless nuisance, to be tolerated because he was a friend of the superintendent. He even poked his nose into the commercial power end of the plant, and had the mercury-steam-turbogenerator sequence explained to him in detail. This alone would have been sufficient to disarm any suspicion that he might be a psychiatrist, for the staff psychiatrists paid no attention to the hardbitten technicians of the power-conversion unit. There was no need to; mental instability on their part could not affect the bomb, nor were they subject to the man-killing strain of social responsibility. Theirs was simply a job personally dangerous, a type of strain strong men have been inured to since the jungle.

In due course he got around to the unit of the radiation laboratory set aside for Calvin Harper's use. He rang the bell and waited. Harper answered the door, his antiradiation helmet shoved back from his face like a grotesque sunbonnet. "What is it?" he asked. "Oh—it's you, Dr. Lentz. Did you want to see me?"

"Why, yes and no," the older man answered. "I was just looking around the experimental station, and wondered what you do in here. Will I be in the way?"

"Not at all. Come in. Gus!"

Erickson got up from where he had been fussing over the power leads to their trigger—a modified cyclotron rather than a resonant accelerator. "Hello."

"Gus, this is Dr. Lentz—Gus Erickson."

"We've met," said Erickson, pulling off his gauntlet to shake hands. He had had a couple of drinks with Lentz in town and considered him a "nice old duck." "You're just between shows, but stick around and we'll start another run—not that there is much to see."

While Erickson continued with the setup, Harper conducted Lentz around the laboratory, explaining the line of research they were conducting, as happy as a father showing off twins. The psychiatrist listened with one ear and made appropriate comments while he studied the young scientist for signs of the instability he had noted to be recorded against him.

"You see," Harper explained, oblivious to the interest in himself, "we are testing radioactive materials to see if we can produce disintegration of the sort that takes place in the bomb, but in a minute, almost microscopic, mass. If we are successful, we can use the power of the bomb to make a safe, convenient, atomic fuel for rockets." He went on to explain their schedule of experimentation.

"I see," Lentz observed politely. "What metal are you examining now?"

Harper told him. "But it's not a case of examining one element—we've finished Isotope II with negative results. Our schedule calls next for running the same test on Isotope V. Like this." He hauled out a lead capsule, and showed the label to Lentz, who saw that it was, indeed, marked with the symbol of the fifth isotope. He hurried away to the shield around the target of the cyclotron, left open by Erickson. Lentz saw that he had opened the capsule, and was performing some operation on it in a gingerly manner, having first lowered his helmet. Then he closed and clamped the target shield.

"O.K., Gus?" he called out. "Ready to roll?"

"Yeah, I guess so," Erickson assured him, coming around them. They crowded behind a thick metal shield that cut them off from direct sight of the setup.

"Will I need to put on armor?" inquired Lentz.

"No," Erickson reassured him, "we wear it because we are around the stuff day in and day out. You just stay behind the shield and you'll be all right. It's lead—backed up by eight inches of case-hardened armor plate."

Erickson glanced at Harper, who nodded, and fixed his eyes on a panel of instruments mounted behind the shield. Lentz saw Erickson press a push button at the top of the board, then heard a series of relays click on the far side of the shield. There was a short moment of silence.

The floor slapped his feet like some incredible bastinado. The concussion that beat on his ears was so intense that it paralyzed the auditory nerve almost before it could be recorded as sound. The airconducted concussion wave flailed every inch of his body with a single, stinging, numbing blow. As he picked himself up, he found he was trembling uncontrollably and realized, for the first time, that he was getting old.

Harper was seated on the floor and had commenced to bleed from the nose. Erickson had gotten up; his cheek was cut. He touched a hand to the wound, then stood there, regarding the blood on his fingers with a puzzled expression on his face.

"Are you hurt?" Lentz inquired inanely. "What happened?"

Harper cut in. "Gus, we've done it! We've done it! Isotope V's turned the trick!"

Erickson looked still more bemused. "Five?" he said stupidly. "But that wasn't Five; that was Isotope II. I put it in myself."

"*You* put it in? *I* put it in! It was Five, I tell you!"

They stood staring at each other, still confused by the explosion, and each a little annoyed at the boneheaded stupidity the other displayed in the face of the obvious. Lentz diffidently interceded.

"Wait a minute, boys," he suggested. "Maybe there's a reason—Gus, you placed a quantity of the second isotope in the receiver?"

"Why, yes, certainly. I wasn't satisfied with the last run, and I wanted to check it."

Lentz nodded. "It's my fault, gentlemen," he admitted ruefully. "I came in and disturbed your routine, and both of you charged the receiver. I know Harper did, for I saw him do it—with Isotope V. I'm sorry."

Understanding broke over Harper's face, and he slapped the older man on the shoulder. "Don't be sorry," he laughed; "you can come around to our lab and help us make mistakes any time you feel in the mood. Can't he, Gus? This is the answer, Dr. Lentz; this is it!"

"But," the psychiatrist pointed out, "you don't know which isotope blew up."

"Nor care," Harper supplemented. "Maybe it was both, taken together. But we *will* know—this business is cracked now; we'll soon have it open." He gazed happily around at the wreckage.

In spite of Superintendent King's anxiety, Lentz refused to be hurried in passing judgment on the situation. Consequently, when he did present himself at King's office, and announced that he was ready to report, King was pleasantly surprised as well as relieved. "Well, I'm delighted," he said. "Sit down, Doctor, sit down. Have a cigar. What do we do about it?"

But Lentz stuck to his perennial cigarette and refused to be hurried. "I must have some information first. How important," he demanded, "is the power from your plant?"

King understood the implication at once. "If you are thinking about shutting down the bomb for more than a limited period, it can't be done."

"Why not? If the figures supplied me are correct, your output is less than thirteen percent of the total power used in the country."

"Yes, that is true, but you haven't considered the items that go into making up the total. A lot of it is domestic power, which householders get from sunscreens located on their own roofs. Another big slice is power for the moving roadways—that's sunpower again. The portion we provide here is the main power source for most of the heavy industries—steel, plastics, lithics, all kinds of manufacturing and processing. You might as well cut the heart out of a man—"

"But the food industry isn't basically dependent on you?" Lentz persisted.

"No. Food isn't basically a power industry—although we do supply a certain percentage of the power used in processing. I see your point, and will go on and concede that transportation—that is to say, distribution of food—could get along without us. But, good heavens, Doctor, you can't stop atomic power without causing the biggest panic this country has ever seen. It's the keystone of our whole industrial system."

"The country has lived through panics before, and we got past the oil shortage safely."

"Yes—because atomic power came along to take the place of oil. You don't realize what this would mean, Doctor. It would be worse than a war; in a system like ours, one thing depends on another. If you cut off the heavy industries all at once, everything else stops, too."

"Nevertheless, you had better dump the bomb." The uranium in the bomb was molten, its temperature being greater than twenty-four hundred degrees centigrade. The bomb could be dumped into a group of small containers, when it was desired to shut it down. The mass in any one container was too small to maintain progressive atomic disintegration.

King glanced involuntarily at the glass-inclosed relay mounted on his office wall, by which he, as well as the engineer on duty, could dump the bomb, if need be. "But I couldn't do that—or rather, if I did, the plant wouldn't stay shut down. The Directors would simply replace me with someone who *would* operate the bomb."

"You're right, of course." Lentz silently considered the situation for some time, then said, "Superintendent, will you order a car to fly me back to Chicago?"

"You're going, Doctor?"

"Yes." He took the cigarette holder from his face, and, for once, the smile of Olympian detachment was gone completely. His entire manner was sober, even tragic. "Short of shutting down the bomb, there is no solution to your problem—none whatsoever!

"I owe you a full explanation." Lentz continued, at length. "You are confronted here with recurring instances of situational psychoneurosis. Roughly, the symptoms manifest themselves as anxiety neurosis or some form of hysteria. The partial amnesia of your secretary, Steinke, is a good example of the latter. He might be cured with shock technique, but it would hardly be a kindness, as he has achieved a stable adjustment which puts him beyond the reach of the strain he could not stand.

"That other young fellow, Harper, whose blowup was the immediate cause of your sending for me, is an anxiety case. When the cause of the anxiety was eliminated from his matrix, he at once regained full sanity. But keep a close watch on his friend, Erickson—

"However, it is the cause, and prevention, of situational psychoneurosis we are concerned with here, rather than the forms in which it is manifested. In plain language, psychoneurosis situational simply refers to the common fact that, if you put a man in a situation that worries him more than he can stand, in time he blows up, one way or another.

"That is precisely the situation here. You take sensitive, intelligent young men, impress them with the fact that a single slip on their part, or even some fortuitous circumstance beyond their control, will result in the death of God knows how many other people, and then expect them to remain sane. It's ridiculous—impossible!"

"But, good heavens, Doctor, there must be some answer! There must!" He got up and paced around the room. Lentz noted, with pity, that King himself was riding the ragged edge of the very condition they were discussing.

"No," he said slowly. "No. Let me explain. You don't dare intrust the bomb to less sensitive, less socially conscious men. You might as well turn the controls over to a mindless idiot. And to psychoneurosis situational there are but two cures. The first obtains when the psychosis results from a misevaluation of environment. That cure calls for semantic readjustment. One assists the patient to evaluate correctly his environment. The worry disappears because there never was a real reason for worry in the situation itself, but simply in the wrong meaning the patient's mind had assigned to it.

"The second case is when the patient has correctly evaluated the situation, and rightly finds in it cause for extreme worry. His worry is perfectly sane and proper, but he cannot stand up under it indefinitely; it drives him crazy. The only possible cure is to change the situation. I have stayed here long enough to assure myself that such is the condition here. Your engineers have correctly evaluated the public danger of this bomb, and it will, with dreadful certainty, drive all of you crazy!

"The only possible solution is to dump the bomb—and leave it dumped."

King had continued his nervous pacing of the floor, as if the walls of the room itself were the cage of his dilemma. Now he stopped and appealed once more to the psychiatrist. "Isn't there *anything* I can do?"

"Nothing to cure. To alleviate—well, possibly."

"How?"

"Situational psychosis results from adrenaline exhaustion. When a man is placed under a nervous strain, his adrenal glands increase their secretion to help compensate for the strain. If the strain is too great and lasts too long, the adrenals aren't equal to the task, and he cracks. That is what you have here. Adrenaline therapy might stave off a mental breakdown, but it most assuredly would hasten a physical breakdown. But that would be safer from a viewpoint of public welfare—even though it assumes that physicists are expendable!

"Another thing occurs to me: If you selected any new watch engineers from the membership of churches that practice the confessional, it would increase the length of their usefulness."

King was plainly surprised. "I don't follow you."

"The patient unloads most of his worry on his confessor, who is not himself actually confronted by the situation, and can stand it. That is simply an ameliorative, however. I am convinced that, in this situation, eventual insanity is inevitable. But there is a lot of good sense in the confessional," he added. "It fills a basic human need. I think that is why the early psychoanalysts were so surprisingly successful, for all their limited knowledge." He fell silent for a while, then added, "If you will be so kind as to order a stratocab for me—"

"You've nothing more to suggest?"

"No. You had better turn your psychological staff loose on means of alleviation; they're able men, all of them."

King pressed a switch and spoke briefly to Steinke. Turning back to Lentz, he said, "You'll wait here until your car is ready?"

Lentz judged correctly that King desired it and agreed. Presently the tube delivery on King's desk went *ping!* The Superintendent removed a small white pasteboard, a calling card. He studied it with surprise and passed it over to Lentz. "I can't imagine why he should be calling on me," he observed, and added, "Would you like to meet him?"

Lentz read:

THOMAS P. HARRINGTON
captain (mathematics)
united states navy

director
u.s. naval observatory

"But I do know him," he said. "I'd be very pleased to see him."

Harrington was a man with something on his mind. He seemed relieved when Steinke had finished ushering him in, and had returned to the outer office. He commenced to speak at once, turning to Lentz, who was nearer to him than King. "You're King? . . . Why, Dr. Lentz! What are you doing here?"

"Visiting," answered Lentz, accurately but incompletely, as he shook hands. "This is Superintendent King over here. Superintendent King—Captain Harrington."

"How do you do, Captain—it's a pleasure to have you here."

"It's an honor to be here, sir."

"Sit down?"

"Thanks." He accepted a chair and laid a briefcase on a corner of King's desk. "Superintendent, you are entitled to an explanation as to why I have broken in on you like this—"

"Glad to have you." In fact, the routine of formal politeness was an anodyne to King's frayed nerves.

"That's kind of you, but— That secretary chap, the one that brought me in here, would it be too much to ask you to tell him to forget my name? I know it seems strange—"

"Not at all." King was mystified, but willing to grant any reasonable request of a distinguished colleague in science. He summoned Steinke to the interoffice visiphone and gave him his orders.

Lentz stood up and indicated that he was about to leave. He caught Harrington's eye. "I think you want a private palaver, Captain."

King looked from Harrington to Lentz and back to Harrington. The astronomer showed momentary indecision, then protested: "I have no objection at all myself; it's up to Dr. King. As a matter of fact," he added, "it might be a very good thing if you did sit in on it."

"I don't know what it is, Captain," observed King, "that you want to see me about, but Dr. Lentz is already here in a confidential capacity."

"Good! Then that's settled. I'll get right down to business. Dr. King, you know Destry's mechanics of infinitesimals?"

"Naturally." Lentz cocked a brow at King, who chose to ignore it.

"Yes, of course. Do you remember theorem six and the transformation between equations thirteen and fourteen?"

"I think so, but I'd want to see them." King got up and went over to a bookcase. Harrington stayed him with a hand.

"Don't bother. I have them here." He hauled out a key, unlocked his briefcase, and drew out a large, much-thumbed, looseleaf notebook. "Here. You, too, Dr. Lentz. Are you familiar with this development?"

Lentz nodded. "I've had occasion to look into them."

"Good—I think it's agreed that the step between thirteen and fourteen is the key to the whole matter. Now, the change from thirteen to fourteen looks perfectly valid—and would be, in some fields. But suppose we expand it to show every possible phase of the matter, every link in the chain of reasoning."

He turned a page and showed them the same two equations broken down into nine intermediate equations. He placed a finger under an associated group of mathematical symbols. "Do you see that? Do you see what that implies?" He peered anxiously at their faces.

King studied it, his lips moving. "Yes . . . I believe I do see. Odd . . . I never looked at it just that way before—yet I've studied those equations until I've dreamed about them." He turned to Lentz. "Do you agree, Doctor?"

Lentz nodded slowly. "I believe so. . . . Yes, I think I may say so."

Harrington should have been pleased; he wasn't. "I had hoped you could tell me I was wrong," he said, almost petulantly, "but I'm afraid there is no further doubt about it. Dr. Destry included an assumption valid in molar physics, but for which we have absolutely no assurance in atomic physics. I suppose you realize what this means to you, Dr. King?"

King's voice was dry whisper. "Yes," he said, "yes— It means that if that bomb out there ever blows up, we must assume that it will go up all at once, rather than the way Destry predicted—and God help the human race!"

Captain Harrington cleared his throat to break the silence that followed. "Superintendent," he said, "I would not have ventured to call had it been simply a matter of disagreement as to interpretation of theoretical predictions—"

"You have something more to go on?"

"Yes and no. Probably you gentlemen think of the Naval Observatory as being exclusively preoccupied with ephemerides and tide tables. In a way you would be right—but we still have some time to devote to research as long as it doesn't cut into the appropriation. My special interest has always been lunar theory.

"I don't mean lunar ballistics," he continued. "I mean the much more interesting problem of its origin and history, the problem the younger Darwin struggled with, as well as my illustrious predecessor, Captain T. J. J. See. I think that it is obvious that any theory of lunar origin and history must take into account the surface features of the Moon—especially the mountains, the craters, that mark its face so prominently."

He paused momentarily, and Superintendent King put in: "Just a minute, Captain—I may be stupid, or perhaps I missed something, but —is there a connection between what we were discussing before and lunar theory?"

"Bear with me for a few moments, Dr. King," Harrington apologized. "There is a connection—at least, I'm *afraid* there is a connection—but I would rather present my points in their proper order before making my conclusions." They granted him an alert silence; he went on:

"Although we are in the habit of referring to the 'craters' of the Moon, we know they are not volcanic craters. Superficially, they follow none of the rules of terrestrial volcanoes in appearance or distribution, but when Rutter came out in 1952 with his monograph on the dynamics of vulcanology, he proved rather conclusively that the lunar craters could not be caused by anything that we know as volcanic action.

"That left the bombardment theory as the simplest hypothesis. It looks good, on the face of it, and a few minutes spent throwing pebbles into a patch of mud will convince anyone that the lunar craters could have been formed by falling meteors.

"But there are difficulties. If the Moon was struck so repeatedly, why not the Earth? It hardly seems necessary to mention that the Earth's atmosphere would be no protection against masses big enough to form craters like Endymion or Plato. And if they fell after the Moon was a dead world while the Earth was still young enough to change its face and erase the marks of bombardment, why did the meteors avoid so nearly completely the great dry basins we call lunar seas?

"I want to cut this short; you'll find the data and the mathematical investigations from the data here in my notes. There is one other major objection to the meteor-bombardment theory: the great rays that spread from Tycho across almost the entire surface of the Moon. It makes the Moon look like a crystal ball that had been struck with a hammer, and impact from outside seems evident, but there are difficulties. The striking mass, our hypothetical meteor, must be small enough to have formed the crater of Tycho, but it must have the mass and speed to crack an entire planet.

"Work it out for yourself—you must either postulate a chunk out of the core of a dwarf star, or speeds such as we have never observed within the system. It's conceivable but a farfetched explanation."

He turned to King. "Doctor, does anything occur to you that might account for a phenomenon like Tycho?"

The Superintendent grasped the arms of his chair, then glanced at his palms. He fumbled for a handkerchief, and wiped them. "Go ahead," he said, almost inaudibly.

"Very well then." Harrington drew out of his briefcase a large photograph of the Moon—a beautiful full-Moon portrait made at Lick. "I want you to imagine the Moon as she might have been sometime in the past. The dark areas we call the 'seas' are actual oceans. It has an atmosphere, perhaps a heavier gas than oxygen and nitrogen, but an active gas, capable of supporting some conceivable form of life.

"For this is an inhabited planet, inhabited by intelligent beings, beings capable of discovering atomic power and exploiting it!"

He pointed out on the photograph, near the southern limb, the lime-white circle of Tycho, with its shining, incredible, thousand-mile-long rays spreading, thrusting, jutting out from it. "Here . . . here at Tycho was located their main power plant." He moved his fingers to a point near the equator and somewhat east of meridian—the point where three great dark areas merged, *Mare Nubium, Mare Imbrium,* *Oceanus Procellarum*—and picked out two bright splotches surrounded, also, by rays, but shorter, less distinct, and wavy. "And here at Copernicus and at Kepler, on islands at the middle of a great ocean, were secondary power stations."

He paused, and interpolated soberly: "Perhaps they knew the danger they ran, but wanted power so badly that they were willing to gamble the life of their race. Perhaps they were ignorant of the ruinous possibilities of their little machines, or perhaps their mathematicians assured them that it could not happen.

"But we will never know—no one can ever know. For it blew up and killed them—and it killed their planet.

"It whisked off the gassy envelope and blew it into outer space. It blasted great chunks off the planet's crust. Perhaps some of that escaped completely, too, but all that did not reach the speed of escape fell back down in time and splashed great ring-shaped craters in the land.

"The oceans cushioned the shock; only the more massive fragments formed craters through the water. Perhaps some life still remained in those ocean depths. If so, it was doomed to die—for the water, unprotected by atmospheric pressure, could not remain liquid and must inevitably escape in time to outer space. Its lifeblood drained away. The planet was dead—dead by suicide!"

He met the grave eyes of his two silent listeners with an expression almost of appeal. "Gentlemen . . . this is only a theory, I realize . . . only a theory, a dream, a nightmare . . . but it has kept me awake so many nights that I had to come tell you about it, and see if you saw it the same way I do. As for the mechanics of it, it's all in there in my notes. You can check it—and I pray that you find some error! But it is the only lunar theory I have examined which included all of the known data and accounted for all of them."

He appeared to have finished. Lentz spoke up. "Suppose, Captain, suppose we check your mathematics and find no flaw—what then?"

Harrington flung out his hands. "That's what I came here to find out!"

Although Lentz had asked the question, Harrington directed the appeal to King. The Superintendent looked up; his eyes met the astronomer's, wavered and dropped again. "There's nothing to be done," he said dully, "nothing at all."

Harrington stared at him in open amazement. "But good God, man!" he burst out. "Don't you see it? That bomb has *got* to be disassembled—at once!"

"Take it easy, Captain." Lentz's calm voice was a spray of cold water. "And don't be too harsh on poor King—this worries him even more than it does you. What he means is this: We're not faced with a problem in physics, but with a political and economic situation. Let's put it this way: King can no more dump the bomb than a peasant with a vineyard on the slopes of Mount Vesuvius can abandon his holdings and pauperize his family simply because there will be an eruption some day.

"King doesn't own that bomb out there; he's only the custodian. If he dumps it against the wishes of the legal owners, they'll simply oust him and put in someone more amenable. No, we have to convince the owners."

"The President could do it," suggested Harrington. "I could get to the President—"

"No doubt you could, through the Navy Department. And you might even convince him. But could he help much?"

"Why, of course he could. He's the *President*!"

"Wait a minute. You're Director of the Naval Observatory; suppose you took a sledge hammer and tried to smash the big telescope—how far would you get?"

"Not very far," Harrington conceded. "We guard the big fellow pretty closely."

"Nor can the President act in an arbitrary manner," Lentz persisted. "He's not an unlimited monarch. If he shuts down this plant without due process of law, the Federal courts will tie him in knots. I admit that Congress isn't helpless but—would you like to try to give a congressional committee a course in the mechanics of infinitesimals?"

Harrington readily stipulated the point. "But there is another way," he pointed out. "Congress is responsive to public opinion. What we need to do is to convince the public that the bomb is a menace to everybody. That could be done without ever trying to explain things in terms of higher mathematics."

"Certainly it could," Lentz agreed. "You could go on the air with it and scare everybody half to death. You could create the damnedest panic this slightly slugnutty country has ever seen. No, thank you. I, for one, would rather have us all take the chance of being quietly killed than bring on a mass psychosis that would destroy the culture we are building up. I think one taste of the Crazy Years is enough."

"Well, then, what *do you* suggest?"

Lentz considered shortly, then answered: "All I see is a forlorn hope. We've got to work on the Board of Directors and try to beat some sense into their heads."

King, who had been following the discussion with attention in spite of his tired despondence, interjected a remark: "How would you go about that?"

"I don't know," Lentz admitted. "It will take some thinking. But it seems the most fruitful line of approach. If it doesn't work, we can always fall back on Harrington's notion of publicity—I don't insist that the world commit suicide to satisfy my criteria of evaluation."

Harrington glanced at his wristwatch—a bulky affair—and whistled. "Good heavens!" he exclaimed. "I forgot the time! I'm supposed officially to be at the Flagstaff Observatory."

King had automatically noted the time shown by the Captain's watch as it was displayed. "But it can't be that late," he had objected. Harrington looked puzzled, then laughed.

"It isn't—not by two hours. We are in zone plus-seven; this shows zone plus-five—it's radio-synchronized with the master clock at Washington."

"Did you say radio-synchronized?"

"Yes. Clever, isn't it?" He held it out for inspection. "I call it a telechronometer; it's the only one of its sort to date. My nephew designed it for me. He's a bright one, that boy. He'll go far. That is"—his face clouded, as if the little interlude had only served to emphasize the tragedy that hung over them—"if any of us live that long!"

A signal light glowed at King's desk, and Steinke's face showed on the communicator screen. King answered him, then said, "Your car is ready, Dr. Lentz."

"Let Captain Harrington have it."

"Then you're not going back to Chicago?"

"No. The situation has changed. If you want me, I'm stringing along."

The following Friday, Steinke ushered Lentz into King's office. King looked almost happy as he shook hands. "When did you ground, Doctor? I didn't expect you back for another hour or so."

"Just now. I hired a cab instead of waiting for the shuttle."

"Any luck?"

"None. The same answer they gave you: 'The Company is assured by independent experts that Destry's mechanics is valid, and sees no reason to encourage an hysterical attitude among its employees.'"

King tapped on his desk top, his eyes unfocused. Then, hitching himself around to face Lentz directly, he said, "Do you suppose the Chairman is right?"

"How?"

"Could the three of us—you, me and Harrington—have gone off the deep end—slipped mentally?"

No.

"You're sure?"

"Certainly. I looked up some independent experts of my own, not retained by the Company, and had them check Harrington's work. It checks." Lentz purposely neglected to mention that he had done so partly because he was none too sure of King's present mental stability.

King sat up briskly, reached out and stabbed a push button. "I am going to make one more try," he explained, "to see if I can't throw a scare into Dixon's thick head. Steinke," he said to the communicator, "get me Mr. Dixon on the screen."

"Yes, sir."

In about two minutes the visiphone screen came to life and showed the features of Chairman Dixon. He was transmitting, not from his office, but from the board room of the Company in Jersey City. "Yes?" he said. "What is it, Superintendent?" His manner was somehow both querulous and affable.

"Mr. Dixon," King began, "I've called to try to impress on you the seriousness of the Company's action. I stake my scientific reputation that Harrington has proved completely that—"

"Oh, that? Mr. King, I thought you understood that that was a closed matter."

"But, Mr. Dixon—"

"Superintendent, please! If there were any possible legitimate cause to fear, do you think I would hesitate? I have children, you know, and grandchildren."

"That is just why—"

"We try to conduct the affairs of the company with reasonable wisdom and in the public interest. But we have other responsibilities, too. There are hundreds of thousands of little stockholders who expect us to show a reasonable return on their investment. You must not expect us to jettison a billion-dollar corporation just because you've taken up astrology! Moon theory!" He sniffed.

"Very well, Mr. Chairman." King's tone was stiff.

"Don't take it that way, Mr. King. I'm glad you called—the Board has just adjourned a special meeting. They have decided to accept you for retirement—with full pay, of course."

"I did not apply for retirement!"

"I know, Mr. King, but the Board feels that—"

"I understand. Good-by!"

"Mr. King—"

"Good-by!" He switched him off, and turned to Lentz. "'—with full pay,'" he quoted, "which I can enjoy in any way that I like for the rest of my life—just as happy as a man in the death house!"

"Exactly," Lentz agreed. "Well, we've tried our way. I suppose we should call up Harrington now and let him try the political and publicity method."

"I suppose so," King seconded absentmindedly. "Will you be leaving for Chicago now?"

"No," said Lentz. "No . . . I think I will catch the shuttle for Los Angeles and take the evening rocket for the antipodes."

King looked surprised, but said nothing. Lentz answered the unspoken comment. "Perhaps some of us on the other side of the Earth will survive. I've done all that I can here. I would rather be a live sheepherder in Australia than a dead psychiatrist in Chicago."

King nodded vigorously, "That shows horse sense. For two cents, I'd dump the bomb now and go with you."

"Not horse sense, my friend—a horse will run back into a burning barn, which is exactly *not* what I plan to do. Why don't you do it and come along? If you did, it would help Harrington to scare 'em to death."

"I believe I will!"

Steinke's face appeared again on the screen. "Harper and Erickson are here, chief."

"I'm busy.

"They are pretty urgent about seeing you."

"Oh . . . all right," King said in a tired voice. "Show them in. It doesn't matter."

They breezed in, Harper in the van. He commenced talking at once, oblivious to the Superintendent's morose preoccupation. "We've got it, chief, we've got it—and it all checks out to the umpteenth decimal!"

"You've got what? Speak English."

Harper grinned. He was enjoying his moment of triumph, and was stretching it out to savor it. "Chief, do you remember a few weeks back when I asked for an additional allotment—a special one without specifying how I was going to spend it?"

"Yes. Come on—get to the point."

"You kicked at first, but finally granted it. Remember? Well, we've got something to show for it, all tied up in pink ribbon. It's the greatest advance in radioactivity since Hahn split the nucleus. Atomic fuel, chief, atomic fuel, safe, concentrated, and controllable. Suitable for rockets, for power plants, for any damn thing you care to use it for."

King showed alert interest for the first time. "You mean a power source that doesn't require the bomb?"

"The bomb? Oh, no. I didn't say that. You use the bomb to make the fuel, then you use the fuel anywhere and anyhow you like, with something like ninety-two percent recovery of the energy of the bomb. But you could junk the mercury-steam sequence, if you wanted to."

King's first wild hope of a way out of his dilemma was dashed; he subsided. "Go ahead. Tell me about it."

"Well—it's a matter of artificial radioactives. Just before I asked for that special research allotment, Erickson and I—Dr. Lentz had a finger in it, too—found two isotopes of a radioactive that seemed to be mutually antagonistic. That is, when we goosed 'em in the presence of each other they gave up their latent energy all at once—blew all to hell. The important point is, we were using just a gnat's whisker of mass of each—the reaction didn't require a big mass like the bomb to maintain it."

"I don't see," objected King, "how that could—"

"Neither do we, quite—but it works. We've kept it quiet until we were sure. We checked on what we had, and we found a dozen other fuels. Probably we'll be able to tailormake fuels for any desired purpose. But here it is." Harper handed King a bound sheaf of typewritten notes which he had been carrying under the arm. "That's your copy. Look it over."

King started to do so. Lentz joined him, after a look that was a silent request for permission, which Erickson had answered with his only verbal contribution, "Sure, Doc."

As King read, the troubled feeling of an acutely harassed executive left him. His dominant personality took charge, that of the scientist. He enjoyed the controlled and cerebral ecstasy of the impersonal seeker for the elusive truth. The emotions felt in the throbbing thalamus were permitted only to form a sensuous obligato for the cold flame of cortical activity. For the time being, he was sane, more nearly completely sane than most men ever achieve at any time.

For a long period there was only an occasional grunt, the clatter of turned pages, a nod of approval. At last he put it down.

"It's the stuff," he said. "You've done it, boys. It's great; I'm proud of you."

Erickson glowed a bright pink and swallowed. Harper's small, tense figure gave the ghost of a wriggle, reminiscent of a wire-haired terrier receiving approval. "That's fine, chief. We'd rather hear you say that than get the Nobel Prize."

"I think you'll probably get it. However"—the proud light in his eyes died down—"I'm not going to take any action in this matter."

"Why not, chief?" Harper's tone was bewildered.

"I'm being retired. My successor will take over in the near future; this is too big a matter to start just before a change in administration."

"*You* being retired! What the hell! *Why?*"

"About the same reason I took you off the bomb—at least, the Directors think so."

"But that's nonsense! You were right to take me off the bomb; I *was* getting jumpy. But you're another matter—we all depend on you."

"Thanks, Cal—but that's how it is; there's nothing to be done about it." He turned to Lentz. "I think this is the last ironical touch needed to make the whole thing pure farce," he observed bitterly. "This thing is big, bigger than we can guess at this stage—and I have to give it a miss."

"Well," Harper burst out, "I can think of something to do about it!" He strode over to King's desk and snatched up the manuscript. "Either you superintend the exploitation or the company will damn well get along without our discovery!" Erickson concurred belligerently.

"Wait a minute." Lentz had the floor. "Dr. Harper, have you already achieved a practical rocket fuel?"

"I said so. We've got it on hand now."

"An escape-speed fuel?" They understood his verbal shorthand—a fuel that would lift a rocket free of the Earth's gravitational pull.

"Sure. Why, you could take any of the Clipper rockets, refit them a trifle, and have breakfast on the Moon."

"Very well. Bear with me—" He obtained a sheet of paper from King and commenced to write. They watched in mystified impatience. He continued briskly for some minutes, hesitating only momentarily. Presently he stopped and spun the paper over to King. "Solve it!" he demanded.

King studied the paper. Lentz had assigned symbols to a great number of factors, some social, some psychological, some physical, some economical. He had thrown them together into a structural relationship, using the symbols of calculus of statement. King understood the paramathematical operations indicated by the symbols, but he was not as used to them as he was to the symbols and operations of mathematical physics. He plowed through the equations, moving his lips slightly in unconscious subvocalization.

He accepted a pencil from Lentz and completed the solution. It required several more lines, a few more equations, before the elements canceled out, or rearranged themselves, into a definite answer.

He stared at this answer while puzzlement gave way to dawning comprehension and delight.

He looked up. "Erickson! Harper!" he rapped out. "We will take your new fuel, refit a large rocket, install the bomb in it, and throw it into an orbit around the Earth, far out in space. There we will use it to make more fuel, safe fuel, for use on Earth, with the danger from the bomb itself limited to the operators actually on watch!"

There was no applause. It was not that sort of an idea; their minds were still struggling with the complex implications.

"But, chief," Harper finally managed, "how about your retirement? We're still not going to stand for it."

"Don't worry," King assured him. "It's all in there, implicit in those equations, you two, me, Lentz, the Board of Directors—and just what we all have to do to accomplish it."

"All except the matter of time," Lentz cautioned.

"Eh?"

"You'll note that elapsed time appears in your answer as an undetermined unknown."

"Yes . . . yes, of course. That's the chance we have to take. Let's get busy!"

Chairman Dixon called the Board of Directors to order. "This being a special meeting, we'll dispense with minutes and reports," he announced. "As set forth in the call we have agreed to give the retiring superintendent three hours of our time."

"Mr. Chairman—"

"Yes, Mr. Thornton?"

"I thought we had settled that matter."

"We have, Mr. Thornton, but in view of Superintendent King's long and distinguished service, if he asks a hearing, we are honor bound to grant it. You have the floor, Dr. King."

King got up and stated briefly, "Dr. Lentz will speak for me." He sat down.

Lentz had to wait till coughing, throat clearing and scraping of chairs subsided. It was evident that the board resented the outsider.

Lentz ran quickly over the main points in the argument which contended that the bomb presented an intolerable danger anywhere on the face of the Earth. He moved on at once to the alternative proposal that the bomb should be located in a rocketship, an artificial moonlet flying in a free orbit around the Earth at a convenient distance—say, fifteen thousand miles—while secondary power stations on earth burned a safe fuel manufactured by the bomb.

He announced the discovery of the Harper-Erickson technique and dwelt on what it meant to them commercially. Each point was presented as persuasively as possible, with the full power of his engaging personality. Then he paused and waited for them to blow off steam.

They did. "Visionary—" "Unproved—" "No essential change in the situation—" The substance of it was that they were very happy to hear of the new fuel, but not particularly impressed by it. Perhaps in another twenty years, after it had been thoroughly tested and proved commercially, and provided enough uranium had been mined to build another bomb, they might consider setting up another power station outside the atmosphere. In the meantime there was no hurry.

Lentz patiently and politely dealt with their objections. He emphasized the increasing incidence of occupational psychoneurosis among the engineers and grave danger to everyone near the bomb even under the orthodox theory. He reminded them of their insurance and indemnity-bond costs, and of the "squeeze" they paid State politicians.

Then he changed his tone and let them have it directly and brutally. "Gentlemen," he said, "we believe that we are fighting for our lives—our own lives, our families and every life on the globe. If you refuse this compromise, we will fight as fiercely and with as little regard for fair play as any cornered animal." With that he made his first move in attack.

It was quite simple. He offered for their inspection the outline of a propaganda campaign on a national scale, such as any major advertising firm should carry out as matter of routine. It was complete to the last detail, television broadcasts, spot plugs, newspaper and magazine coverage and—most important—a supporting whispering campaign and a letters-to-Congress organization. Every businessman there knew from experience how such things worked.

But its object was to stir up fear of the bomb and to direct that fear, not into panic, but into rage against the Board of Directors personally, and into a demand that the government take action to have the bomb removed to outer space.

"This is blackmail! We'll stop you!"

"I think not," Lentz replied gently. "You may be able to keep us out of some of the newspapers, but you can't stop the rest of it. You can't even keep us off the air—ask the Federal Communications Commission." It was true. Harrington had handled the political end and had performed his assignment well; the President was convinced.

Tempers were snapping on all sides; Dixon had to pound for order. "Dr. Lentz," he said, his own temper under taut control, "you plan to make every one of us appear a blackhearted scoundrel with no other thought than personal profit, even at the expense of the lives of others. You know that is not true; this is a simple difference of opinion as to what is wise."

"I did not say it was true," Lentz admitted blandly, "but you will admit that I can convince the public that you are deliberate villains. As to it being a difference of opinion—you are none of you atomic physicists; you are not entitled to hold opinions in this matter.

"As a matter of fact," he went on callously, "the only doubt in my mind is whether or not an enraged public will destroy your precious power plant before Congress has time to exercise eminent domain and take it away from you!"

Before they had time to think up arguments in answer and ways of circumventing him, before their hot indignation had cooled and set as stubborn resistance, he offered his gambit. He produced another layout for a propaganda campaign—an entirely different sort.

This time the Board of Directors was to be built up, not torn down. All of the same techniques were to be used; behind-the-scenes feature articles with plenty of human interest would describe the functions of the company, describe it as a great public trust, administered by patriotic, unselfish statesmen of the business world. At the proper point in the campaign, the Harper-Erickson fuel would be announced, not as a semi-accidental result of the initiative of two employees, but as the long-expected end product of years of systematic research conducted under a fixed policy growing naturally out of their humane determination to remove forever the menace of explosion from even the sparsely settled Arizona desert.

No mention was to be made of the danger of complete, planet-embracing catastrophe.

Lentz discussed it. He dwelt on the appreciation that would be due them from a grateful world. He invited them to make a noble sacrifice and, with subtle misdirection, tempted them to think of themselves as heroes. He deliberately played on one of the most deep-rooted of simian instincts, the desire for approval from one's kind, deserved or not.

All the while he was playing for time, as he directed his attention from one hard case, one resistant mind, to another. He soothed and he tickled and he played on personal foibles. For the benefit of the timorous and the devoted family men, he again painted a picture of the suffering, death and destruction that might result from their well-meant reliance on the unproved and highly questionable predictions of Destry's mathematics. Then he described in glowing detail a picture of a world free from worry but granted almost unlimited power, safe power from an invention which was theirs for this one small concession.

It worked. They did not reverse themselves all at once, but a committee was appointed to investigate the feasibility of the proposed spaceship power plant. By sheer brass Lentz suggested names for the committee and Dixon confirmed his nominations, not because he wished to, particularly, but because he was caught off guard and could not think of a reason to refuse without affronting the colleagues.

The impending retirement of King was not mentioned by either side. Privately, Lentz felt sure that it never would be mentioned.

It worked, but there was left much to do. For the first few days after the victory in committee, King felt much elated by the prospect of an early release from the soul-killing worry. He was buoyed up by pleasant demands of manifold new administrative duties. Harper and Erickson were detached to Goddard Field to collaborate with the rocket engineers there in design of firing chambers, nozzles, fuel stowage, fuel metering and the like. A schedule had to be worked out with the business office to permit as much power of the bomb as possible to be diverted to making atomic fuel, and a giant combustion chamber for atomic fuel had to be designed and ordered to replace the bomb itself during the interim between the time it was shut down on

Earth and the later time when sufficient local, smaller plants could be built to carry the commercial load. He was busy.

When the first activity had died down and they were settled in a new routine, pending the shutting down of the bomb and its removal to outer space, King suffered an emotional reaction. There was, by then, nothing to do but wait, and tend the bomb, until the crew at Goddard Field smoothed out the bugs and produced a spaceworthy rocketship.

They ran into difficulties, overcame them, and came across more difficulties. They had never used such high reaction velocities; it took many trials to find a nozzle shape that would give reasonably high efficiency. When that was solved, and success seemed in sight, the jets burned out on a time-trial ground test. They were stalemated for weeks over that hitch.

Back at the power plant Superintendent King could do nothing but chew his nails and wait. He had not even the release of running over to Goddard Field to watch the progress of the research, for, urgently as he desired to, he felt an even stronger, an overpowering compulsion to watch over the bomb lest it—heartbreakingly!—blow up at the last minute.

He took to hanging around the control room. He had to stop that; his unease communicated itself to his watch engineers; two of them cracked up in a single day—one of them on watch.

He must face the fact—there had been a grave upswing in psychoneurosis among his engineers since the period of watchful waiting had commenced. At first, they had tried to keep the essential facts of the plan a close secret, but it had leaked out, perhaps through some member of the investigating committee. He admitted to himself now that it had been a mistake ever to try to keep it secret—Lentz had advised against it, and the engineers not actually engaged in the changeover were bound to know that something was up.

He took all of the engineers into confidence at last, under oath of secrecy. That had helped for a week or more, a week in which they were all given a spiritual lift by the knowledge, as he had been. Then it had worn off, the reaction had set in, and psychological observers had started disqualifying engineers for duty almost daily. They were even reporting each other as mentally unstable with great frequency; he might even be faced with a shortage of psychiatrists if that kept up, he thought to himself with bitter amusement. His engineers were already standing four hours in every sixteen. If one more dropped out, he'd put himself on watch. That would be a relief, to tell himself the truth.

Somehow, some of the civilians around about and the nontechnical employees were catching on to the secret. That mustn't go on—if it spread any farther there might be a nationwide panic. But how the hell could he stop it? He couldn't.

He turned over in bed, rearranged his pillow, and tried once more to get to sleep. No soap. His head ached, his eyes were balls of pain, and his brain was a ceaseless grind of useless, repetitive activity, like a disk recording stuck in one groove.

God! This was unbearable! He wondered if he were cracking up—if he already had cracked up. This was worse, many times worse, than the old routine when he had simply acknowledged the danger and tried to forget it as much as possible. Not that the bomb was any different—it was this five-minutes-to-armistice feeling, this waiting for the curtain to go up, this race against time with nothing to do to help.

He sat up, switched on his bed lamp, and looked at the clock. Three thirty. Not so good. He got up, went into his bathroom, and dissolved a sleeping powder in a glass of whiskey and water, half and half. He gulped it down and went back to bed. Presently he dozed off.

He was running, fleeing down a long corridor. At the end lay safety—he knew that, but he was so utterly exhausted that he doubted his ability to finish the race. The thing pursuing him was catching up; he forced his leaden, aching legs into greater activity. The thing behind him increased its pace, and actually touched him. His heart stopped, then pounded again. He became aware that he was screaming, shrieking in mortal terror.

But he had to reach the end of that corridor; more depended on it than just himself. He had to. He had to! *He had to!*

Then the sound hit him, and he realized that he had lost, realized it with utter despair and utter, bitter defeat. He had failed; the bomb had blown up.

The sound was the alarm going off; it was seven o'clock. His pajamas were soaked, dripping with sweat, and his heart still pounded. Every ragged nerve throughout his body screamed for release. It would take more than a cold shower to cure this case of the shakes.

He got to the office before the janitor was out of it. He sat there, doing nothing, until Lentz walked in on him, two hours later. The psychiatrist came in just as he was taking two small tablets from a box in his desk.

"Easy . . . easy, old man," Lentz said in a slow voice. "What have you there?" He came around and gently took possession of the box.

"Just a sedative."

Lentz studied the inscription on the cover. "How many have you had today?"

"Just two, so far."

"You don't need a sedative; you need a walk in the fresh air. Come, take one with me."

"You're a fine one to talk—you're smoking a cigarette that isn't lighted!"

"Me? Why, so I am! We both need that walk. Come."

Harper arrived less than ten minutes after they had left the office. Steinke was not in the outer office. He walked on through and pounded on the door of King's private office, then waited with the man who accompanied him—a hard young chap with an easy confidence to his bearing. Steinke let them in.

Harper brushed on past him with a casual greeting, then checked himself when he saw that there was no one else inside.

"Where's the chief?" he demanded.

"Gone out. Should be back soon."

"I'll wait. Oh—Steinke, this is Greene. Greene—Steinke."

The two shook hands. "What brings you back, Cal?" Steinke asked, turning back to Harper.

"Well . . . I guess it's all right to tell you—"

The communicator screen flashed into sudden activity, and cut him short. A face filled most of the frame. It was apparently too close to the pickup, as it was badly out of focus. "Superintendent!" it yelled in an agonized voice. "The bomb—"

A shadow flashed across the screen, they heard a dull *smack,* and the face slid out of the screen. As it fell it revealed the control room behind it. Someone was down on the floor plates, a nameless heap. Another figure ran across the field of pickup and disappeared.

Harper snapped into action first. "That was Silard!" he shouted, "In the control room! Come on, Steinke!" He was already in motion himself.

Steinke went dead-white, but hesitated only an unmeasurable instant. He pounded sharp on Harper's heels. Greene followed without invitation, in a steady run that kept easy pace with them.

They had to wait for a capsule to unload at the tube station. Then all three of them tried to crowd into a two-passenger capsule. It refused to start, and moments were lost before Greene piled out and claimed another car.

The four-minute trip at heavy acceleration seemed an interminable crawl. Harper was convinced that the system had broken down, when the familiar click and sigh announced their arrival at the station under the bomb. They jammed each other trying to get out at the same time.

The lift was up; they did not wait for it. That was unwise; they gained no time by it, and arrived at the control level out of breath. Nevertheless, they speeded up when they reached the top, zigzagged frantically around the outer shield, and burst into the control room.

The limp figure was still on the floor, and another, also inert, was near it. The second's helmet was missing.

The third figure was bending over the trigger. He looked up as they came in, and charged them. They hit him together, and all three went down. It was two to one, but they got in each other's way. The man's heavy armor protected him from the force of their blows. He fought with senseless, savage violence.

Harper felt a bright, sharp pain; his right arm went limp and useless. The armored figure was struggling free of them.

There was a shout from somewhere behind them, "Hold still!"

Harper saw a flash with the corner of one eye, a deafening crack hurried on top of it, and re-echoed painfully in the restricted space.

The armored figure dropped back to his knees, balanced there, and then fell heavily on his face. Greene stood in the entrance, a service pistol balanced in his hand.

Harper got up and went over to the trigger. He tried to reduce the dampening adjustment, but his right hand wouldn't carry out his orders, and his left was too clumsy. "Steinke," he called, "come here! Take over."

Steinke hurried up, nodded as he glanced at the readings, and set busily to work.

It was thus that King found them when he bolted in a very few minutes later.

"Harper!" he shouted, while his quick glance was still taking in the situation. "What's happened?"

Harper told him briefly. He nodded. "I saw the tail end of the fight from my office—Steinke!" He seemed to grasp for the first time who was on the trigger. "He can't manage the controls—" He hurried toward him.

Steinke looked up at his approach. "Chief!" he called out. "Chief! *I've got my mathematics back!*"

King looked bewildered, then nodded vaguely, and let him be. He turned back to Harper. "How does it happen you're here?"

"Me? I'm here to report—we've done it, chief!"

"Eh?"

"We've finished; it's all done. Erickson stayed behind to complete the power-plant installation on the big ship. I came over in the ship we'll use to shuttle between Earth and the big ship, the power plant. Four minutes from Goddard Field to here in her. That's the pilot over there." He pointed to the door, where Greene's solid form partially hid Lentz.

"Wait a minute. You say that everything is ready to install the bomb in the ship? You're sure?"

"Positive. The big ship has already flown with our fuel—longer and faster than she will have to fly to reach station in her orbit; I was in it

—out in space, chief! We're all set, six ways from zero."

King stared at the dumping switch, mounted behind glass at the top of the instrument board. "There's fuel enough," he said softly, as if he were alone and speaking only to himself; "there's been fuel enough for weeks."

He walked swiftly over to the switch, smashed the glass with his fist, and pulled it.

The room rumbled and shivered as two and a half tons of molten, massive metal, heavier than gold, coursed down channels, struck against baffles, split into a dozen streams, and plunged to rest in leaden receivers—to rest, safe and harmless, until it could be reassembled far out in space.

“If This Goes On—”

Chapter 1

It was cold on the rampart. I slapped my numbed hands together, then stopped hastily for fear of disturbing the Prophet. My post that night was just outside his personal apartments—a post that I had won by taking more than usual care to be neat and smart at guard mount… but I had no wish to call attention to myself now.

I was young then and not too bright—a legate fresh out of West Point, and a guardsman in the Angels of the Lord, the personal guard of the Prophet Incarnate. At birth my mother had consecrated me to the Church and at eighteen my Uncle Absolom, a senior lay censor, had prayed an appointment to the Military Academy for me from the Council of Elders.

West Point had suited me. Oh, I had joined in the usual griping among classmates, the almost ritualistic complaining common to all military life, but truthfully I enjoyed the monastic routine—up at five, two hours of prayers and meditation, then classes and lectures in the endless subjects of a military education, strategy and tactics, theology, mob psychology, basic miracles. In the afternoons we practiced with vortex guns and blasters, drilled with tanks, and hardened our bodies with exercise.

I did not stand very high on graduation and had not really expected to be assigned to the Angels of the Lord, even though I had put in for it. But I had always gotten top marks in piety and stood well enough in most of the practical subjects; I was chosen. It made me almost sinfully proud —the holiest regiment of the Prophet's hosts, even the privates of which were commissioned officers and whose Colonel-in-Chief was the Prophet's Sword Triumphant, marshal of all the hosts. The day I was invested in the shining buckler and spear worn only by the Angels I vowed to petition to study for the priesthood as soon as promotion to captain made me eligible.

But this night, months later, though my buckler was still shining bright, there was a spot of tarnish in my heart. Somehow, life at New Jerusalem was not as I had imagined it while at West Point. The Palace and Temple were shot through with intrigue and politics; priests and deacons, ministers of state, and Palace functionaries all seemed engaged in a scramble for power and favor at the hand of the Prophet. Even the officers of my own corps seemed corrupted by it. Our proud motto "*Non Sibi, Sed Dei*" now had a wry flavor in my mouth.

Not that I was without sin myself. While I had not joined in the struggle for worldly preference, I had done something which I knew in my heart to be worse: I had looked with longing on a consecrated female.

Please understand me better than I understood myself. I was a grown man in body, an infant in experience. My own mother was the only woman I had ever known well. As a kid in junior seminary before going to the Point I was almost afraid of girls; my interests were divided between my lessons, my mother, and our parish's troop of Cherubim, in which I was a patrol leader and an assiduous winner of merit badges in everything from woodcraft to memorizing scripture. If there had been a merit badge to be won in the subject of girls—but of course there was not.

At the Military Academy I simply saw no females, nor did I have much to confess in the way of evil thoughts. My human feelings were pretty much still in freeze, and my occasional uneasy dreams I regarded as temptations sent by Old Nick. But New Jerusalem is not West Point and the Angels were neither forbidden to marry nor were we forbidden proper and sedate association with women. True, most of my fellows did not ask permission to marry, as it would have meant transferring to one of the regular regiments and many of them cherished ambitions for the military priesthood—but it was not forbidden.

Nor were the lay deaconesses who kept house around the Temple and the Palace forbidden to marry. But most of them were dowdy old creatures who reminded me of my aunts, hardly subjects for romantic thoughts. I used to chat with them occasionally around the corridors, no harm in that. Nor was I attracted especially by any of the few younger sisters—until I met Sister Judith.

I had been on watch in this very spot more than a month earlier. It was the first time I had stood guard outside the Prophet's apartments and, while I was nervous when first posted, at that moment I had been no more than alert against the possibility of the warden-of-thewatch making his rounds.

That night a light had shone briefly far down the inner corridor opposite my post and I had heard a sound of people moving; I had glanced at my wrist chrono-yes, that would be the Virgins ministering to the Prophet… no business of mine. Each night at ten o'clock their watch changed —their "guard mount" I called it, though I had never seen the ceremony and never would. All that I actually knew about it was that those coming on duty for the next twenty-four hours drew lots at that time for the privilege of personal attendance in the sacred presence of the Prophet Incarnate.

I had listened briefly and had turned away. Perhaps a quarter of an hour later a slight form engulfed in a dark cloak had slipped past me to the parapet, there to stand and"look at the stars. I had had my blaster out at once, then had returned it sheepishly, seeing that it was a deaconess.

I had assumed that she was a lay deaconess; I swear that it did not occur to me that she might be a holy deaconess. There was no rule in my order book telling me to forbid them to come outside, but I had never heard of one doing so.

I do not think that she had seen me before I spoke to her. "Peace be unto you, sister."

She had jumped and suppressed a squeal, then had gathered her dignity to answer, "And to you, *little* brother."

It was then that I had seen on her forehead the Seal of Solomon, the mark of the personal family of the Prophet. "Your pardon, Elder Sister. I did not see."

"I am not annoyed." It had seemed to me that she invited conversation. I knew that it was not proper for us to converse privately; her mortal being was dedicated to the Prophet just as her soul was the Lord's, but I was young and lonely—and she was young and very pretty.

"Do you attend the Holy One this night, Elder Sister?"

She had shaken her head at that. "No, the honor passed me by. My lot was not drawn."

"It must be a great and wonderful privilege to serve him directly."

"No doubt, though I cannot say of my own knowledge. My lot has never yet been drawn." She had added impulsively, "I'm a little nervous about it. You see, I haven't been here long."

Even though she was my senior in rank, her display of feminine weakness had touched me. "I am sure that you will deport yourself with credit."

"Thank you."

We had gone on chatting. She had been in New Jerusalem, it developed, even less time than had I. She had been reared on a farm in upper New York State and there she had been sealed to the Prophet at the Albany Seminary. In turn I had told her that I had been bom in the middle west, not fifty miles from the Well of Truth, where the First Prophet was incarnated. I then told her that my name was John Lyle and she had answered that she was called Sister Judith.

I had forgotten all about the warden-of-thewatch and his pesky rounds and was ready to chat all night, when my chrono had chimed the quarter hour. "Oh, dear!" Sister Judith had exclaimed. "I should have gone straight back to my cell." She had started to hurry away, then had checked herself. "You wouldn't tell on me… John Lyle?"

"Me? Oh, never!"

I had continued to think about her the rest of the watch. When the warden did make rounds I was a shade less than alert.

A mighty little on which to found a course of folly, eh? A single drink is a great amount to a teetotaler; I was not able to get Sister Judith out of my mind. In the month that followed I saw her half a dozen times. Once I passed her on an escalator; she was going down as I was going up. We did not even speak, but she had recognized me and smiled. I rode that escalator all night that night in my dreams, but I could never get off and speak to her. The other encounters were just as trivial. Another time I heard her voice call out to me quietly, "Hello, John Lyle," and I turned just in time to see a hooded figure go past my elbow through a door. Once

I watched her feeding the swans in the moat; I did not dare approach her but I think that she saw me.

The *Temple Herald* printed the duty lists of both Tny service and hers. I was standing a watch in five; the Virgins drew lots once a week. So it was just over a month later that our watches again matched. I saw her name—and vowed that I would win the guard mount that evening and again be posted at the post of honor before the Prophet's own apartments. I had no reason to think that Judith would seek me out on the rampart-but I was sure in my heart that she would. Never at West Point had I ever expended more spit-and-polish; I could have used my buckler for a shaving mirror.

But here it was nearly half past ten and no sign of Judith, although I had heard the Virgins gather down the corridor promptly at ten. All I had to show for my efforts was the poor privilege of standing watch at the coldest post in the Palace.

Probably, I thought glumly, she comes out to flirt with the guardsmen on watch everytime she has a chance. I recalled bitterly that all women were vessels of iniquity and had always been so since the Fall of Man. Who was I to think that she had singled me out for special friendship? She had probably considered the night too cold to bother.

I heard a footstep and my heart leaped with joy. But it was only the warden making his rounds. I brought my pistol to the ready and challenged him; his voice came back, "Watchman, what of the night?"

I answered mechanically, "Peace on Earth," and added, "It is cold, Elder Brother."

"Autumn in the air," he agreed. "Chilly even in the Temple." He passed on by with his pistol and his bandolier of paralysis bombs slapping his armor to his steps. He was a nice old duffer and usually stopped for a few friendly words; tonight he was probably eager to get back to the warmth of the guardroom. I went back to my sour thoughts.

"Good evening, John Lyle."

I almost jumped out of my boots. Standing in the darkness just inside the archway was Sister Judith. I managed to splutter, "Good evening, Sister Judith," as she moved toward me.

"Sssh!" she cdutioned me. "Someone might hear us. John… John Lyle— it finally happened. My lot was drawn!"

I said, "Huh?" then added lamely, "Felicitations, Elder Sister. May God make his face to shine on your holy service."

"Yes, yes, thanks," she answered quickly, "but John… I had intended to steal a few moments to chat with you. Now I can't—I must be at the robing room for indoctrination and prayer almost at once. I must run."

"You'd better hurry," I agreed. I was disappointed that she could not stay, happy for her that she was honored, and exultant that she had not forgotten me. "God go with you."

"But I just had to tell you that I had been chosen." Her eyes were shining with what I took to be holy joy; her next words startled me. "I'm scared, John Lyle."

"Eh? Frightened?" I suddenly recalled how I had felt, how my voice had cracked, the first time I ever drilled a platoon. "Do not be. You will be sustained."

"Oh, I hope so! Pray for me, John." And she was gone, lost in the dark corridor.

I did pray for her and I tried to imagine where she was, what she was doing. But since I knew as little about what went on inside the Prophet's private chambers as a cow knows about courts-martial, I soon gave it up and simply thought about Judith. Later, an hour or more, my revery was broken by a high scream inside the Palace, followed by a commotion, and running footsteps. I dashed down the inner corridor and found a knot of women gathered around the portal to the Prophet's apartments. Two or three others were carrying someone out the portal; they stopped when they reached the corridor and eased their burden to the floor.

"What's the trouble?" I demanded and drew my side arm clear.

An elderly Sister stepped in front of me. "It is nothing. Return to your post, legate."

"I heard a scream."

"No business of yours. One of the Sisters fainted when the Holy One required service of her."

"Who was it?"

"You are rather nosy, little brother." She shrugged. "Sister Judith, if it matters."

I did not stop to think but snapped, "Let me help her!" and started forward. She barred my way.

"Are you out of your mind? Her sisters will return her to her cell. Since when do the Angels minister to nervous Virgins?"

I could easily have pushed her aside with one finger, but she was right. I backed down and went unwillingly back to my post.

For the next few days I could not get Sister Judith out of my mind. Off watch, I prowled the parts of the Palace I was free to visit, hoping to catch sight of her. She might be ill, or she might be confined to her cell for what must certainly have been a major breach of discipline. But I never saw her.

My roommate, Zebadiah Jones, noticed my moodiness and tried to rouse me out of it. Zeb was three classes senior to me and I had been one of his plebes at the Point; now he was my closest friend and my only confidant. "Johnnie old son, you look like a corpse at your own wake. What's eating on you?"

"Huh? Nothing at all. Touch of indigestion, maybe."

"So? Come on, let's go for a walk. The air will do you good."

I let him herd me outside. He said nothing but banalities until we were on the broad terrace surrounding the south turret and free of the danger of eye and ear devices. When we were well away from anyone else he said softly, "Come on. Spill it."

"Shucks, Zeb, I can't burden anybody else with it."

"Why not? What's a friend for?"

"Uh, you'd be shocked."

"I doubt it. The last time I was shocked was when I drew four of a kind to an ace kicker. It restored my faith in miracles and I've been relatively immune ever since. Come on—we'll call this-a privileged communication—elder adviser and all that sort of rot."

I let him persuade me. To my surprise Zeb was not shocked to find that I let myself become interested in a holy deaconess. So I told him the whole story and added to it my doubts and troubles, the misgivings that had been growing in me since the day I reported for duty at New Jerusalem.

He nodded casually. "I can see how it would affect you that way, knowing you. See here, you haven't admitted any of this at confession, have you?"

"No," I admitted with embarrassment.

"Then don't. Nurse your own fox. Major Bagby is broadminded, you wouldn't shock him—but he might find it necessary to pass it on to his superiors. You wouldn't want to face Inquisition even if you were alabaster innocent. In fact, especially since you are innocent—and you *are*, you know; everybody has impious thoughts at times. But the Inquisitor expects to find sin; if he doesn't find it, he keeps on digging."

At the suggestion that I might be put to the Question my stomach almost turned over. I tried not to show it for Zeb went on calmly, "Johnnie my lad, I admire your piety and your innocence, but I don't envy it. Sometimes too much piety is more of a handicap than too little. You find yourself shocked at the idea that it takes politics as well as psalm singing to run a big country. Now take me; I noticed the same things when I was new here, but I hadn't expected anything different and wasn't shocked."

"But—" I shut up. His remarks sounded painfully like heresy; I changed the subject. "Zeb, what do you suppose it could have been that upset Judith so and caused her to faint the night she served the Prophet?"

"Eh? How should I know?" He glanced at me and looked away.

"Well, I just thought you might. You generally have all the gossip around the Palace." '

"Well… oh, forget it, old son. It's really not important."

"Then you *do* know?"

"I didn't say that. Maybe I could make a close guess, but you don't want guesses. So forget it."

I stopped strolling, stepped in front of him and faced him. "Zeb, anything you know about it-or can guess-I want to hear. It's important to me."

"Easy now! You were afraid of shocking me; it could be that I don't want to shock you."

"What do you mean? Tell me!"

"Easy, I said. We're out strolling, remember, without a care in the world, talking about our butterfly collections and wondering if we'll have stewed beef again for dinner tonight."

Still fuming, I let him take me along with him. He went on more quietly, "John, you obviously aren't the type to learn things just by keeping your ear to the ground—and you've not yet studied any of the Inner Mysteries, now have you?"

"You know I haven't. The psych classification officer hasn't cleared me for the course. I don't know why."

"I should have let you read some of the installments while I was boning it. No, that was before you graduated. Too bad, for they explain things in much more delicate language than I know how to use—and justify every bit of it thoroughly, if you care for the dialectics of religious theory. John, what is your notion of the duties of the Virgins?"

"Why, they wait on him, and cook his food, and so forth."

"They surely do. And so forth. This Sister Judith-an innocent little country girl the way you describe her. Pretty devout, do you think?"

I answered somewhat stiffly that her devoutness had first attracted me to her. Perhaps I believed it.

"Well, it could be that she simply became shocked at overhearing a rather worldly and cynical discussion between the Holy One and, oh, say the High Bursar-taxes and tithes and the best way to squeeze them out of the peasants. It might be something like that, although the scribe for such a conference would hardly be a grass-green Virgin on her first service. No, it was almost certainly the 'And so forth.'"

"Huh? I don't follow you."

Zeb sighed. "You really are one of God's innocents, aren't you? Holy Name, I thought you knew and were just too stubbornly straight-laced to admit it. Why, even the Angels carry on with the Virgins at times, after the Prophet is through with them. Not to mention the priests and the deacons. I remember a time when—" He broke off suddenly, catching sight of my face. "Wipe that look off your face! Do you want somebody to notice us?"

I tried to do so, with terrible thoughts jangling around inside my head. Zeb went on quietly, "It's my guess, if it matters that much to you, that your friend Judith still merits the title 'Virgin' in the purely physical sense as well as the spiritual. She might even stay that way, if the Holy One is as angry with her as he probably was. She is probably as dense as you are and failed to understand the symbolic explanations given her—then blew her top when it came to the point where she couldn't fail to understand, so he kicked her out. Small wonder!"

I stopped again, muttering to myself biblical expressions I hardly thought I knew. Zeb stopped, too, and stood looking at me with a smile of cynical tolerance. "Zeb," I said, almost pleading with him, "these are terrible things. Terrible! Don't tell me that you approve?"

"Approve? Man, it's all part of the Plan. I'm sorry you haven't been cleared for higher study. See here, I'll give you a rough briefing. God wastes not. Right?"

"That's sound doctrine."

"God requires nothing of man beyond his strength. Right?"

"Yes, but-"

"Shut up. God commands man to be fruitful. The Prophet Incarnate, being especially holy, is required to be especially fruitful. That's the gist of it; you can pick up the fine points when you study it. In the meantime, if the Prophet can humble himself to the flesh in order to do his plain duty, who are you to raise a ruction? Answer me that."

I could not answer, of course, and we continued our walk in silence. I had to admit the logic of what he had said and that the conclusions were built up from the revealed doctrines. The trouble was that I wanted to eject the conclusions, throw them up as if they had been something poisonous I had swallowed.

Presently I was consoling myself with the thought that Zeb felt sure that Judith had not been harmed. I began to feel better, telling myself that Zeb was right, that it was not my place, most decidedly not my place, to sit in moral judgment on the Holy Prophet Incarnate.

My mind was just getting around to worrying the thought that my relief over Judith arose solely from the fact that I had looked on her sinfully, that there could not possibly be one rule for one holy deaconess, another rule for all the rest, and I was beginning to be unhappy again—when Zeb stopped suddenly. “What was that?”

We hurried to the parapet of the terrace and looked down the wall. The south wall lies close to the city proper. A crowd of fifty or sixty people was charging up the slope that led to the Palace walls. Ahead of them, running with head averted, was a man dressed in a long gabardine. He was headed for the Sanctuary gate.

Zebadiah looked down and answered himself. “That’s what the racket is—some of the rabble stoning a pariah. He probably was careless enough to be caught outside the ghetto after five.” He stared down and shook his head. “I don’t think he is going to make it.”

Zeb’s prediction was realized at once; a large rock caught the man between the shoulder blades, he stumbled and went down. They were on him at once. He struggled to his knees, was struck by a dozen stones, went down in a heap. He gave a broken highpitched wail, then drew a fold of the gabardine across his dark eyes and strong Roman nose.

A moment later there was nothing to be seen but a pile of rocks and a protruding slippered foot. It jerked and was still.

I turned away, nauseated. Zebediah caught my expression.

“Why,” I said defensively, “do these pariahs persist in their heresy? They seem such harmless fellows otherwise.”

He cocked a brow at me. “Perhaps it’s not heresy to them. Didn’t you see that fellow resign himself to his God?”

“But that is not the true God.”

“He must have thought otherwise.”

“But they all know better; we’ve told them often enough.”

He smiled in so irritating a fashion that I blurted out, “I don’t understand you, Zeb-blessed if I do! Ten minutes ago you were instructing me in correct doctrine; now you seem to be defending heresy. Reconcile that.”

He shrugged. “Oh, I can play the Devil’s advocate. I made the debate team at the Point, remember? I’ll be a famous theologian someday-if the Grand Inquisitor doesn’t get me first.”

“Well… Look-you *do* think it’s right to stone the ungodly? Don’t you?”

He changed the subject abruptly. “Did you notice who cast the first stone?” I hadn’t and told him so; all I remembered was that it was a man in country clothes, rather than a woman or a child.

“It was Snotty Fassett.” Zeb’s lip curled.

I recalled Fassett too well; he was two classes senior to me and had made my plebe year something I want to forget. “So that’s how it was,” I answered slowly. “Zeb, I don’t think I could stomach intelligence work.”

“Certainly not as an *agent provocateur*,” he agreed. “Still, I suppose the Council needs these incidents occasionally. These rumors about the Cabal and all…”

I caught up this last remark. “Zeb, do you really think there is anything to this Cabal? I can’t believe that there is any organized disloyalty to the Prophet.”

“Well—there has certainly been some trouble out on the West Coast. Oh, forget it; our job is to keep the watch here.”

Chapter 2

But we were not allowed to forget it; two days later the inner guard was doubled. I did not see how there could be any real danger, as the Palace was as strong a fortress as ever was built, with its lower recesses immune even to fission bombs. Besides that, a person entering the Palace, even from the Temple grounds, would be challenged and identified a dozen times before he reached the Angel on guard outside the Prophet's own quarters. Nevertheless people in high places were getting jumpy; there must be something to it.

But I was delighted to find that I had been assigned as Zebadiah's partner. Standing twice as many hours of guard was almost offset by having him to talk with—for me at least. As for poor Zeb, I banged his ear endlessly through the long night watches, talking about Judith and how unhappy I was with the way things were at New Jerusalem. Finally he turned on me.

"See here. Mr. Dumbjohn," he snapped, reverting to my plebe year designation, "are you in love with her?"

I tried to hedge. I had not yet admitted to myself that my interest was more than in her welfare. He cut me short.

"You do or you don't. Make up your mind. If you do, we'll talk practical matters. If you don't, then shut up about her."

I took a deep breath and took the plunge. "I guess I do, Zeb. It seems impossible and I know it's a sin, but there it is."

"All of that and folly, too. But there is no talking sense to you. Okay, so you are in love with her. What next?"

"Eh?"

"What do you want to do? Marry her?"

I thought about it with such distress that I covered my face with my hands. "Of course I do," I admitted. "But how can I?"

"Precisely. You can't. You can't marry without transferring away from here; her service can't marry at all. Nor is there any way for her to break her vows, since she is already sealed. But if you can face up to bare facts without blushing, there is plenty you can do. You two could be very cozy— if you could get over being such an infernal bluenose."

A week earlier I would not have understood what he was driving at. But now I knew. I could not even really be angry with him at making such a dishonorable and sinful suggestion; he meant well—and some of the tarnish was now in my own soul. I shook my head. "You shouldn't have said that, Zeb. Judith is not that sort of a woman."

"Okay. Then forget it. And her. And shut up about her."

I sighed wearily. “Don’t be rough on me, Zeb. This is more than I know how to manage.” I glanced up and down, then took a chance and sat down on the parapet. We were not on watch near the Holy One’s quarters but at the east wall; our warden, Captain Peter van Eyck, was too fat to get that far oftener than once a watch, so I took a chance. I was bone tired from not having slept much lately.

“Sorry.”

“Don’t be angry, Zeb. That sort of thing isn’t for me and it certainly isn’t for Judith-for Sister Judith.” I knew what I wanted for us: a little farm, about a hundred and sixty acres, like the one I had been born on. Pigs and chickens and barefooted kids with happy dirty faces and Judith to have her face light up when I came in from the fields and then wipe the perspiration from her face with her apron so that I could kiss her… no more connection with the Church and the Prophet than Sunday meeting and tithes.

But it could not be, it could never be. I put it out of my mind. “Zeb,” I went on, “just as a matter of curiosity— You have intimated that these things go on all the time. How? We live in a goldfish bowl here. It doesn’t seem possible.”

He grinned at me so cynically that I wanted to slap him, but his voice had no leer in it. “Well, just for example, take your own case—”

“Out of the question!”

“Just for example, I said. Sister Judith isn’t available right now; she is confined to her cell. But—”

“Huh? She’s been *arrested*?” I thought wildly of the Question and what Zeb had said about the inquisitors.

“No, no, no! She isn’t even locked in. She’s been told to stay there, that’s all, with prayer and bread-and-water as company. They are purifying her heart and instructing her in her spiritual duties. When she sees things in their true light, her lot will be drawn again—and this time she won’t faint and make an adolescent fool of herself.”

I pushed back my first reaction and tried to think about it calmly. “No,” I said. “Judith will never do it. Not if she stays in her cell forever.”

“So? I wouldn’t be too sure. They can be very persuasive. How would you like to be prayed over in relays? But assume that she does see the light, just so that I can finish my story.”

“Zeb, how do you know about this?”

“Sheol, man! I’ve been here going on three years. Do you think I wouldn’t be hooked into the grapevine? You were worried about her —and making yourself a tiresome nuisance if I may say so. So I asked the birdies. But to continue. She sees the light, her lot is drawn, she performs her holy service to the Prophet. After that she is called once a week like the rest and her lot is drawn maybe once a month or less.

Inside of a year—unless the Prophet finds some very exceptional beauty in her soul—they stop putting her name among the lots entirely. But it isn't necessary to wait that long, although it is more discreet."

"The whole thing is shameful!"

"Really? I imagine King Solomon had to use some such system; he had even more women on his neck than the Holy One has. Thereafter, if you can come to some mutual understanding with the Virgin involved, it is just a case of following well known customs. There is a present to be made to the Eldest Sister, and to be renewed as circumstances dictate. There are some palms to be brushed-I can tell you which ones. And this great pile of masonry has lots of dark back stairs in it. With all customs duly observed, there is no reason why, almost any night I have the watch and you don't, you should not find something warm and cuddly in your bed."

I was about to explode at the calloused way he put it when my mind went off at a tangent. "Zeb—now I know you are telling an untruth. You were just pulling my leg, admit it. There is an eye and an ear somewhere in our room. Why, even if I tried to find them and cut them out, I'd simply have the security watch banging on the door in three minutes."

"So what? There is an eye and an ear in every room in the place. You ignore them."

I simply let my mouth sag open.

"Ignore them," he went on. "Look, John, a little casual fornication is no threat to the Church—treason and heresy are. It will simply be entered in your dossier and nothing will be said about it—unless they catch you in something really important later, in which case they might use it to hang you instead of preferring the real charges. Old son, they *like* to have such peccadilloes in the files; it increases security. They are probably uneasy about you; you are too perfect; such men are dangerous. Which is probably why you've never been cleared for higher study."

I tried to straighten out in my mind the implied cross purposes, the wheels within wheels, and gave up. "I just don't get it. Look, Zeb, all this doesn't have anything to do with me… or with Judith. But I know what I've *got* to do. Somehow I've got to get her out of here."

"Hmm… a mighty strait gate, old son."

"I've got to."

"Well… I'd like to help you. I suppose I could get a message to her," he added doubtfully.

I caught his arm. "Would you, Zeb?"

He sighed. "I wish you would wait. No, that wouldn't help, seeing the romantic notions in your mind. But it is risky now. Plenty risky, seeing that she is under discipline by order of the Prophet. You'd look funny staring down the table of a courtmartial board, looking at your own spear."

"I'll risk even that. Or even the Question."

He did not remind me that he himself was taking even more of a risk than I was; he simply said, "Very well, what is the message?"

I thought for a moment. It would have to be short. "Tell her that the legate she talked to the night her lot was drawn is worried about her."

"Anything else?"

"Yes! Tell her that I am hers to command!"

It seems flamboyant in recollection. No doubt it was—but it was exactly the way I felt.

At luncheon the next day I found a scrap of paper folded into my napkin. I hurried through the meal and slipped out to read it.

J *need your help,* it read, *and am so very grateful. Will you meet me tonight*? It was unsigned and had been typed in the script of a common voicewriter, used anywhere in the Palace, or out. When Zeb returned to our room, I showed it to him; he glanced at it and remarked in idle tones:

"Let's get some air. I ate too much, I'm about to fall asleep."

Once we hit the open terrace and were free of the hazard of eye and ear he cursed me out in low, dispassionate tones. "You'll never make a conspirator. Half the mess must know that you found something in your napkin. Why in God's name did you gulp your food and rush off? Then to top it off you handed it to me upstairs. For all you know the eye read it and photostated it for evidence. Where in the world were you when they were passing out brains?"

I protested but he cut me off. "Forget it! I know you didn't mean to put both of our necks in a bight—but good intentions are no good when the trial judge-advocate reads the charges. Now get this through your head: the first principle of intrigue is never to be seen doing anything unusual, no matter how harmless it may seem. You wouldn't believe how small a deviation from pattern looks significant to a trained analyst. You should have stayed in the refectory the usual time, hung around and gossiped as usual afterwards, then waited until you were safe to read it. Now where is it?"

"In the pocket of my corselet," I answered humbly. "Don't worry, I'll chew it up and swallow it."

"Not so fast. Wait here." Zeb left and was back in a few minutes. "I have a piece of paper the same size and shape; I'll pass it to you quietly. Swap the two, and then you can eat the real note—but don't be seen making the swap or chewing up the real one."

"All right. But what is the second sheet of paper?"

"Some notes on a system for winning at dice."

"Huh? But that's non-reg, too!"

"Of course, you hammer head. If they catch you with evidence of gambling, they won't suspect you of a much more serious sin. At worst, the skipper will eat you out and fine you a few days pay and a few hours contrition. Get this, John: if you are ever suspected of something, try to make the evidence point to a lesser offense. Never try to prove lily-white innocence. Human nature being what it is, your chances are better."

I guess Zeb was right; my pockets must have been searched and the evidence photographed right after I changed uniforms for parade, for half an hour afterwards I was called into the Executive Officer's office. He asked me to keep my eyes open for indications of gambling among the junior officers. It was a sin, he said, that he hated to have his younger officers fall into. He clapped me on the shoulder as I was leaving. "You're a good boy, John Lyle. A word to the wise, eh?"

Zeb and I had the midwatch at the south Palace portal that night. Half the watch passed with no sign of Judith and I was as nervous as a cat in a strange house, though Zeb tried to keep me calmed down by keeping me strictly to routine. At long last there were soft footfalls in the inner corridor and a shape appeared in the doorway. Zebadiah motioned me to remain on tour and went to check. He returned almost at once and motioned me to join him, while putting a finger to his lips. Trembling, I went in. It was not Judith but some woman strange to me who waited there in the darkness. I started to speak but Zeb put his hand over my mouth.

The woman took my arm and urged me down the corridor. I glanced back and saw Zeb silhouetted in the portal, covering our rear. My guide paused and pushed me into an almost pitchblack alcove, then she took from the folds of her robes a small object which I took to be a pocket ferretscope, from the small dial that glowed faintly on its side. She ran it up and down and around, snapped it off and returned it to her person. "Now you can talk," she said softly. "It's safe." She slipped away.

I felt a gentle touch at my sleeve. "Judith?" I whispered.

"Yes," she answered, so softly that I could hardly hear her.

Then my arms were around her. She gave a little startled cry, then her own arms went around my neck and I could feel her breath against my face. We kissed clumsily but with almost frantic eagerness.

It is no one's business what we talked about then, nor could I give a coherent account if I tried. Call our behavior romantic nonsense, call it delayed puppy love touched off by ignorance and unnatural lives—do puppies hurt less than grown dogs? Call it what you like and laugh at us, but at that moment we were engulfed in that dear madness more precious than rubies and fine gold, more to be desired than sanity. If you have never experienced it and do not know what I am talking about, I am sorry for you.

Presently we quieted down somewhat and talked more reasonably. When she tried to tell me about the night her lot had been drawn she began to cry. I shook her and said, “Stop it, my darling. You don’t have to tell me about it. I know.”

She gulped and said, “But you don’t know. You can’t know. I… he…”

I shook her again. “Stop it. Stop it at once. No more tears. I do know, exactly. And I know what you are in for still—unless we get you out of here. So there is no time for tears or nerves; we have to make plans.”

She was dead silent for a long moment, then she said slowly, “You mean for me to… desert? I’ve thought of that. Merciful God, how I’ve thought about it! But how can I?”

“I don’t know—yet. But we will figure out a way. We’ve got to.” We discussed possibilities. Canada was a bare three hundred miles away and she knew the upstate New York country; in fact it was the only area she did know. But the border there was more tightly closed than it was anywhere else, patrol boats and radar walls by water, barbed wire and sentries by land… and sentry dogs. I had trained with such dogs; I wouldn’t urge my worst enemy to go up against them.

But Mexico was simply impossibly far away. If she headed south she would probably be arrested in twenty-four hours. No one would knowingly give shelter to an unveiled Virgin; under the inexorable rule of associative guilt any such good Samaritan would be as guilty as she of the same personal treason against the Prophet and would die the same death. Going north would be shorter at least, though it meant the same business of traveling by night, hiding by day, stealing food or going hungry. Near Albany lived an aunt of Judith’s; she felt sure that her aunt would risk hiding her until some way could be worked out to cross the border. “She’ll keep us safe. I know it.”

“Us?” I must have sounded stupid. Until she spoke I had had my nose so close to the single problem of how she was to escape that it had not yet occurred to me that she would expect both of us to go.

“Did you mean to send me *alone*?”

“Why… I guess I hadn’t thought about it any other way.”

“No!”

“But—look, Judith, the urgent thing, the thing that must be done at once, is to get you out of here. Two people trying to travel and hide are many times more likely to be spotted than one. It just doesn’t make sense to—”

“No! I won’t go.”

I thought about it, hurriedly. I still hadn't realized that "A" implies "B" and that I myself in urging her to desert her service was as much a deserter in my heart as she was. I said, "We'll get you out first, that's the important thing. You tell me where your aunt lives-then wait for me."

"Not without you."

"But you *must.* The Prophet-"

"Better that than to lose you now!"

I did not then understand women—and I still don't. Two minutes before she had been quietly planning to risk death by ordeal rather than submit her body to the Holy One. Now she was almost casually willing to accept it rather than put up with even a temporary separation. I don't understand women; I sometimes think there is no logic in them at all.

I said, "Look, my dear one, we have not yet even figured out how we are to get you out of the Palace. It's likely to be utterly impossible for us both to escape the same instant. You see that, don't you?"

She answered stubbornly, "Maybe. But I don't like it. Well, how do I get out? And when?"

I had to admit again that I did not know. I intended to consult Zeb as soon as possible, but I had no other notion.

But Judith had a suggestion. "John, you know the Virgin who guided you here? No? Sister Magdalene. I know it is safe to tell her and she *might* be willing to help us. She's very clever."

I started to comment doubtfully but we were interrupted by Sister Magdalene herself. "Quick!" she snapped at me as she slipped in beside us. "Back to the rampartl"

I rushed out and was barely in time to avoid being caught by the warden, making his rounds. He exchanged challenges with Zeb and myself—and then the old fool wanted to chat. He settled himself down on the steps of the portal and started recalling boastfully a picayune fencing victory of the week before. I tried dismally to help Zeb with chitchat in a fashion normal for a man bored by a night watch.

At last he got to his feet. "I'm past forty and getting a little heavier, maybe. I'll admit frankly it warms me to know that I still have a wrist and eye as fast as you young blades." He straightened his scabbard and added, "I suppose I had better take a turn through the Palace. Can't take too many precautions these days. They do say the Cabal has been active again." He took out his torch light and flashed it down the corridor.

I froze solid. If he inspected that corridor, it was beyond hope that he would miss two women crouching in an alcove.

But Zebadiah spoke up calmly, casually. "Just a moment, Elder Brother. Would you show me that time riposte you used to win that last match? It was too fast for me to follow it."

He took the bait. "Why, glad to, son!" He moved off the steps, came out to where there was room. "Draw your sword. En garde! Cross blades in line of sixte. Disengage and attack me. There! Hold the lunge and I'll demonstrate it slowly. As your point approaches my chest—" (Chest indeedl Captain van Eyck was as potbellied as a kangaroo!) "—I catch it with the forte of my blade and force it over yours in riposte seconde. Just like the book, so far. But I do not complete the riposte. Strong as it is, you might parry or counter. Instead, as my point comes down, I beat your blade out of line—" He illustrated and the steel sang, "—and attack you anywhere, from chin to ankle. Come now, try it on me."

Zeb did so and they ran through the phrase; the warden retreated a step. Zeb asked to do it again to get it down pat. They ran through it repeatedly, faster each time, with the warden retreating each time to avoid by a hair Zeb's unbated point. It was strictly against regulations to fence with real swords and without mask and plastron, but the warden really was good… a swordsman so precise that he was confident of his own skill not to blind one of Zeb's eyes, not to let Zeb hurt him. In spite of my own galloping jitters I watched it closely; it was a beautiful demonstration of a once-useful military art. Zeb pressed him hard.

They finished up fifty yards away from the portal and that much closer to the guardroom. I could hear the warden puffing from the exercise. "That was fine, Jones," he gasped. "You caught on handsomely." He puffed again and added, "Lucky for me a real bout does not go on as long. I think I'll let you inspect the corridor." He turned away toward the guardroom, adding cheerfully, "God keep you."

"God go with you, sir," Zeb responded properly and brought his hilt to his chin in salute.

As soon as the warden turned the corner Zeb stood by again and I hurried back to the alcove. The women were still there, making themselves small against the back wall. "He's gone," I reassured them. "Nothing to fear for a while."

Judith had told Sister Magdalene of our dilemma and we discussed it in whispers. She advised us strongly not to try to reach any decisions just then. "I'm in charge of Judith's purification; I can stretch it out for another week, perhaps, before she has to draw lots again."

I said, "We've got to act before then!"

Judith seemed over her fears, now that she had laid her troubles in Sister Magdalene's lap. "Don't worry, John," she said softly, "the chances are my lot won't be drawn soon again in any case. We must do what she advises.‘’

Sister Magdalene sniffed contemptuously. “You’re wrong about that, Judy, when you are returned to duty, your lot will be drawn, you can be sure ahead of time. Not,” she added, “but what you could live through it-the rest of us have. If it seems safer to—” She stopped suddenly and listened. “Sssh! Quiet as death.” She slipped silently out of our circle.

A thin pencil of light flashed out and splashed on a figure crouching outside the alcove. I dived and was on him before he could get to his feet. Fast as I had been, Sister Magdalene was just as fast; she landed on his shoulders as he went down. He jerked and was still.

Zebadiah came running in, checked himself at our sides. “John! Maggie!” came his tense whisper. “What is it?”

“We’ve caught a spy, Zeb,” I answered hurriedly. “What’ll we do with him?”

Zeb flashed his light. “You’ve knocked him out?”

“He won’t come to,” answered Magdalene’s calm voice out of the darkness. “I slipped a vibroblade in his ribs.”

“Sheol!”

“Zeb, I had to do it. Be glad I didn’t use steel and mess up the floor with blood. But what do we do now?”

Zeb cursed her softly, she took it. “Turn him over, John. Let’s take a look.” I did so and his light flashed again. “Hey, Johnnie—it’s Snotty Fassett.” He paused and I could almost hear him think. “Well, we’ll waste no tears on *him*. John!”

“Yeah, Zeb?”

“Keep the watch outside. If anyone comes, I am inspecting the corridor. I’ve got to dump this carcass somewhere.”

Judith broke the silence. “There’s an incinerator chute on the floor above. I’ll help you.”

“Stout girl. Get going, John.”

I wanted to object that it was no work for a woman, but I shut up and turned away. Zeb took his shoulders, the women a leg apiece and managed well enough. They were back in minutes, though it seemed endless to me. No doubt Snotty’s body was reduced to atoms before they were back —we might get away with it. It did not seem like murder to me then, and still does not; we did what we had to do, rushed along by events.

Zeb was curt. “This tears it. Our reliefs will be along in ten minutes; we’ve got to figure this out in less time than that. Well?”

Our suggestions were all impractical to the point of being ridiculous, but Zeb let us make them-then spoke straight to the point. “Listen to me, it’s no longer just a case of trying to help Judith and you out of your predicament. As soon as Snotty is missed, we—all four of us—are in mortal danger of the Question. Right?"

"Right," I agreed unwillingly. "But nobody has a plan?"

None of us answered. Zeb went on, "Then we've got to have help… and there is only one place we can get it. The Cabal."

Chapter 3

"The Cabal?" I repeated stupidly. Judith gave a horrified gasp. "Why… why, that would mean our immortal soulsl They worship Satan!"

Zeb turned to her. "I don't believe so."

She stared at him. "Are *you* a Cabalist?"

"No."

"Then how do you know?"

"And how," I insisted, "can *you* ask them for help?"

Magdalene answered. "I am a member—as Zebadiah knows."

Judith shrank away from her, but Magdalene pressed her with words. "Listen to me, Judith. I know how you feel—and once I was as horrified as you are at the idea of anyone opposing the Church. Then I learned—as you are learning—what really lies behind this sham we were brought up to believe in." She put an arm around the younger girl. "We aren't devil worshipers, dear, nor do we fight against God. We fight only against this self-styled Prophet who pretends to be the voice of God. Come with us, help us fight him—and we will help you. Otherwise we can't risk it."

Judith searched her face by the faint light from the portal. "You swear that this is true? The Cabal fights only against the Prophet and not against the Lord Himself?"

"I swear, Judith."

Judith took a deep shuddering breath. "God guide me," she whispered. "I go with the Cabal."

Magdalene kissed her quickly, then faced us men. "Well?"

I answered at once, "I'm in it if Judith is," then whispered to myself, "Dear Lord, forgive me my oath—I must!"

Magdalene was staring at Zeb. He shifted uneasily and said angrily, "I suggested it, didn't I? But we are all damned fools and the Inquisitor will break our bones."

There was no more chance to talk until the next day. I woke from bad dreams of the Question and worse, and heard Zeb's shaver buzzing merrily in the bath. He came in and pulled the covers off me, all the while running off at the mouth with cheerful nonsense. I hate having bed clothes dragged off me even when feeling well and I can't stand cheerfulness before breakfast; I dragged them back and tried to ignore him, but he grabbed my wrist. "Up you come, old son! God's sunshine is wasting. It's a beautiful day. How about two fast laps around the Palace and in for a cold shower?"

I tried to shake his hand loose and called him something that would lower my mark in piety if the ear picked it up. He still hung on and his forefinger was twitching against my wrist in a nervous fashion; I began to wonder if Zeb were cracking under the strain. Then I realized that he was tapping out code.

"B-E-N-A-T-U-R-A-L," the dots and dashes said, "S-H-0-W-N-O-S-U-R-P-R-I-S-E - W-E - W-I-L-L - BE - C-A-L-L-E-D - F-O-R -E-X-A-M-I-N-A-T-I-O-N - D-U-R-I-N-G - T-H-E - R-E-C-R-E-A-T-I-O-N -P-E-R-I-O-D-T-H-I-S-A-F-T-E-R-N-O-O-N"

I hope I showed no surprise. I made surly answers to the stream of silly chatter he had kept up all through it, and got up and went about the mournful tasks of putting the body back in shape for another day. After a bit I found excuse to lay a hand on his shoulder and twitched out an answer: "O-K-I-U-N-D-E-R-S-T-A-N-D"

The day was a misery of nervous monotony. I made a mistake at dress parade, a thing I haven't done since beast barracks. When the day's duty was finally over I went back to our room and found Zeb there with his feet on the air conditioner, working an acrostic in the New York *Times*. "Johnnie my lamb," he asked, looking up, "what is a six-letter word meaning 'Pure in Heart'?"

"You'll never need to know," I grunted and sat down to remove my armor.

"Why, John, don't you think I will reach the Heavenly City?"

"Maybe-after ten thousand years penance."

There came a brisk knock at our door, it was shoved open, and Timothy Klyce, senior legate in the mess and brevet captain, stuck his head in. He sniffed and said in nasal Cape Cod accents, "Hello, you chaps want to take a walk?"

It seemed to me that he could not have picked a worse time. Tim was a hard man to shake and the most punctiliously devout man in the corps. I was still trying to think of an excuse when Zeb spoke up. "Don't mind if we do, provided we walk toward town. I've got some shopping to do."

I was confused by Zeb's answer and still tried to hang back, pleading paper work to do, but Zeb cut me short. "Pfui with paper work. I'll help you with it tonight. Come on." So I went, wondering if he had gotten cold feet about going through with it.

We went out through the lower tunnels. I walked along silently, wondering if possibly Zeb meant to try to shake Klyce in town and then hurry back. We had just entered a little jog in the passageway when Tim raised his hand in a gesture to emphasize some point in what he was saying to

Zeb. His hand passed near my face, I felt a slight spray on my eyes —and I was blind.

Before I could cry out, even as I suppressed the impulse to do so, he grasped my upper arm hard, while continuing his sentence without a break. His grip on my arm guided me to the left, whereas my memory of the jog convinced me that the turn should have been to the right. But we did not bump into the wall and after a few moments the blindness wore off. We seemed to be walking in the same tunnel with Tim in the middle and holding each of us by an arm. He did not say anything and neither did we; presently he stopped us in front of a door. Klyce knocked once, then listened.

I could not make out an answer but he replied, “Two pilgrims, duly guided.”

The door opened. He led us in, it closed silently behind us, and we were facing a masked and armored guard, with his blast pistol leveled on us. Reaching behind him, he rapped once on an inner door; immediately another man, armed and masked like the first, came out and faced us. He asked Zeb and myself separately:

“Do you seriously declare, upon your honor, that, unbiased by friends and uninfluenced by mercenary motives, you freely and voluntarily offer yourself to the service of this order?”

We each answered, “I do.”

“Hoodwink and prepare them.”

Leather helmets that covered everything but our mouths and noses were slipped over our heads and fastened under our chins. Then we were ordered to strip off all our clothing. I did so while the goose bumps popped out on me. I was losing my enthusiasm rapidly—there is nothing that makes a man feel as helpless as taking his pants away from him. Then I felt the sharp prick of a hypodermic in my forearm and shortly, though I was awake, things got dreamy and I was no longer jittery. Something cold was pressed against my ribs on the left side of my back and I realized that it was almost certainly the hilt of a vibroblade, needing only the touch of the stud to make me as dead as Snotty Fassett—but it did not alarm me. Then there were questions, many questions, which I answered automatically, unable to lie or hedge if I had wanted to. I remember them in snatches:

“—of your own free will and accord?”

“—conform to the ancient established usages—”

“—a man, free born, of good repute, and well recommended.”

Then, for a long time I stood shivering on the cold tile floor while a spirited discussion went on around me; it had to do with my motives in seeking admission. I could hear it all and I knew that my life hung on it, with only a word needed to cause a blade of cold energy to spring into my heart. And I knew that the argument was going against me.

Then a contralto voice joined the debate. I recognized Sister Magdalene and knew that she was vouching for me, but doped as I was I did not care; I simply welcomed her voice as a friendly sound.

But presently the hilt relaxed from my ribs and I again felt the prick of a hypodermic. It brought me quickly out of my dazed state and I heard a strong bass voice intoning a prayer:

“Vouchsafe thine aid, Almighty Father of the Universe… love, relief, and truth to the honor of Thy Holy Name. Amen.”

And the answering chorus, “So mote it be!”

Then I was conducted around the room, still hoodwinked, while questions were again put to me. They were symbolic in nature and were answered for me by my guide. Then I was stopped and was asked if I were willing to take a solemn oath pertaining to this degree, being assured that it would in no material way interfere with duty that I owed to God, myself, family, country, or neighbor.

I answered, “I am.”

I was then required to kneel on my left knee, with my left hand supporting the Book, my right hand steadying certain instruments thereon.

The oath and charge was enough to freeze the blood of anyone foolish enough to take it under false pretenses. Then I was asked what, in my present condition, I most desired. I answered as I had been coached to answer: “Light!”

And the hoodwink was stripped from my head.

It is not necessary and not proper to record the rest of my instruction as a newly entered brother. It was long and of solemn beauty and there was nowhere in it any trace of the blasphemy or devil worship that common gossip attributed to us; quite the contrary it was filled with reverence for God, brotherly love, and uprightness, and it included instruction in the principles of an ancient and honorable profession and the symbolic meaning of the working tools thereof.

But I must mention one detail that surprised me almost out of the shoes I was not wearing. When they took the hoodwink off me, the first man I saw, standing in front of me dressed in the symbols of his office and wearing an expression of almost inhuman dignity, was Captain Peter van Eyck, the fat ubiquitous warden of my watch—*Master* of this lodge!

The ritual was long and time was short. When the lodge was closed we gathered in a council of war. I was told that the senior brethren had already decided not to admit Judith to the sister order of our lodge at this time even though the lodge would reach out to protect her. She was to be spirited away to Mexico and it was better, that being the case, for her not to know any secrets she did not need to know. But Zeb and I, being of the Palace guard, could be of real use; therefore we were admitted.

Judith had already been given hypnotic instructions which—it was hoped —would enable her to keep from telling what little she already knew if she should be put to the Question. I was told to wait and not to worry; the senior brothers would arrange to get Judith out of danger before she next was required to draw lots. I had to be satisfied with that.

For three days running Zebadiah and I reported during the afternoon recreation period for instruction, each time being taken by a different route and with different precautions. It was clear that the architect who had designed the Palace had been one of us; the enormous building had hidden in it traps and passages and doors which certainly did not appear in the official plans.

At the end of the third day we were fully accredited senior brethren, qualified with a speed possible only in time of crisis. The effort almost sprained my brain; I had to bone harder than I ever had needed to in school. Utter letter-perfection was required and there was an amazing lot to memorize—which was perhaps just as well, for it helped to keep me from worrying. We had not heard so much as a rumor of a kickback from the disappearance of Snotty Fassett, a fact much more ominous than would have been a formal investigation.

A security officer can't just drop out of sight without his passing being noticed. It was remotely possible that Snotty had been on a roving assignment and was not expected to check in daily with his boss, but it was much more likely that he had been where we had found him and killed him because some one of us was suspected and he had been ordered to shadow. If that was the case, the calm silence could only mean that the chief security officer was letting us have more rope, while his psychotechnicians analyzed our behavior—in which case the absence of Zeb and myself from any known location during our free time for several days running was almost certainly a datum entered on a chart. If the entire regiment started out equally suspect, then our personal indices each gained a fractional point each of those days.

I never boned savvy in such matters and would undoubtedly have simply felt relieved as the days passed with no overt trouble had it not been that the matter was discussed and worried over in the lodge room. I did not even know the name of the Guardian of Morals, nor even the location of his security office—we weren't supposed to know. I knew that he existed and that he reported to the Grand Inquisitor and perhaps to the Prophet himself, but that was all. I discovered that my lodge brothers, despite the almost incredible penetration of the Cabal throughout the Temple and Palace, knew hardly more than I did —for the reason that we had no brothers, not one, in the staff of'the Guardian of Morals. The reason was simple; the Cabal was every bit as careful in evaluating the character, *persona*, and psychological potentialities of a prospective brother as the service was in measuring a prospective intelligence officer—and the two types were as unlike as geese and goats. The Guardian would never accept the type of personality who would be attracted by the ideals of the Cabal; my brothers would never pass a—well, a man like Fassett.

I understand that, in the days before psychological measurement had become a mathematical science, an espionage apparatus could break down through a change in heart on the part of a key man—well, the Guardian of Morals had no such worry; his men *never* suffered a change in heart. I understand, too, that our own fraternity, in the early days when it was being purged and tempered for the ordeal to come, many times had blood on the floors of lodge rooms—I don't know; such records were destroyed.

On the fourth day we were not scheduled to go to the lodge room, having been told to show our faces where they would be noticed to offset our unwonted absences. I was spending my free time in the lounge off the mess room, leafing through magazines, when Timothy Klyce came in. He glanced at me, nodded, then started thumbing through a stack of magazines himself. Presently he said, "These antiques belong in a dentist's office. Have any of you chaps seen this week's time?"

His complaint was addressed to the room as a whole; no one answered. But he turned to me. "Jack, I think you are sitting on it. Raise up a minute."

I grunted and did so. As he reached for the magazine his head came close to mine and he whispered, "Report to the Master."

I had learned a little at least so I went on reading. After a bit I put my magazine aside, stretched and yawned, then got up and ambled out toward the washroom. But I walked on past and a few minutes later entered the lodge room. I found that Zeb was already there, as were several other brothers; they were gathered around Master Peter and Magdalene. I could feel the tension in the room.

I said, "You sent for me, Worshipful Master?"

He glanced at me, looked back at Magdalene. She said slowly, "Judith has been arrested."

I felt my knees go soft and I had trouble standing. I am not unusually timid and physical bravery is certainly commonplace, but if you hit a man through his family or his loved ones you almost always get him where he is unprotected. "The Inquisition?" I managed to gasp.

Her eyes were soft with pity. "We think so. They took her away this morning and she has been incommunicado ever since."

"Has any charge been filed?" asked Zeb.

"Not publicly."

"Hm-m-m-That looks bad."

"And good as well," Master Peter disagreed. "If it is the matter we think it is—Fassett, I mean—and had they had any evidence pointing to the rest of you, all four of you would have been arrested at once. At least, that is in accordance with their methods."

"But what can we *do*?" I demanded.

Van Eyck did not answer. Magdalene said soothingly, "There is nothing for you to do, John. You couldn't get within several guarded doors of her."

"But we can't just do nothing!"

The lodge Master said, "Easy, son. Maggie is the only one of us with access to that part of the inner Palace. We must leave it in her hands."

I turned again to her; she sighed and said, "Yes, but there is probably little I can do." Then she left.

We waited. Zeb suggested that he and I should leave the lodge room and continue with being seen in our usual haunts; to my relief van Eyck vetoed it. "No. We can't be sure that Sister Judith's hypnotic protection is enough to see her through the ordeal. Fortunately you two and Sister Magdalene are the only ones she can jeopardize—but I want you here, safe, until Magdalene finds out what she can. Or fails to return," he added thoughtfully.

I blurted out, "Oh, Judith will never betray us!"

He shook his head sadly. "Son, *anyone* will betray *anything* under the Question—unless adequately guarded by hypno compulsion. We'll see."

I had paid no attention to Zeb, being busy with my own very self-centered thoughts. He now surprised me by saying angrily, "Master, you are keeping us here like pet hens-but you have just sent Maggie back to stick her head in a trap. Suppose Judith *has* cracked? They'll grab Maggie at once."

Van Eyck nodded. "Of course. That is the chance we must take since she is the only spy we have. But don't you worry about her. They'll never arrest her-she'll suicide first."

The statement did not shock me; I was too numbed by the danger to Judith. But Zeb burst out with, "The swine! Master, you shouldn't have sent her."

Van Eyck answered mildly, "Discipline, son. Control yourself. This is war and she is a soldier." He turned away.

So we waited… and waited… and waited. It is hard to tell anyone who has not lived in the shadow of the Inquisition how we felt about it. We knew no details but we sometimes saw those unlucky enough to live through it. Even if the inquisitors did not require the auto da fe",
the mind of the victim was usually damaged, often shattered.

Presently Master Peter mercifully ordered the Junior Warden to examine both of us as to our progress in memorizing ritual. Zeb and I sullenly did as we were told and were forced with relentless kindness to concentrate on the intricate rhetoric. Somehow nearly two hours passed.

At last came three raps at the door and the Tyler admitted Magdalene. I jumped out of my chair and rushed to her. “Well?” I demanded. “Well?”

“Peace, John,” she answered wearily. “I’ve seen her.”

“How is she? Is she all right?”

“Better than we have any right to expect. Her mind is still intact and she hasn’t betrayed us, apparently. As for the rest, she may keep a scar or two —but she’s young and healthy; she’ll recover.”

I started to demand more facts but the Master cut me off. “Then they’ve already put her to the Question. In that case, how did you get in to see her?”

“Oh, that!” Magdalene shrugged it off as something hardly worth mentioning. “The inquisitor prosecuting her case proved to be an old acquaintance of mine; we arranged an exchange of favors.”

Zeb started to interrupt; the Master snapped, “Quietl” then added sharply, “The Grand Inquisitor isn’t handling it himself? In that case I take it they don’t suspect that it could be a Cabal matter?”

Maggie frowned. “I don’t know. Apparently Judith fainted rather early in the proceedings; they may not have had time to dig into that possibility. In any case I begged a respite for her until tomorrow. The excuse is to let her recover strength for more questioning, of course. They will start in on her again early tomorrow morning.”

Van Eyck pounded a fist, into a palm. “They must not start again—we can’t risk it! Senior Warden, attend me! The rest of you get out! Except you, Maggie.”

I left with something unsaid. I had wanted to tell Maggie that she could have my hide for a door mat any time she lifted her finger.

Dinner that night was a trial. After the chaplain droned through his blessing I tried to eat and join in the chatter but there seemed to be a hard ring in my throat that kept me from swallowing. Seated next to me was Grace-of-God Bearpaw, half Scottish, half Cherokee. Grace was a classmate but no friend of mine; we hardly ever talked and tonight he was as taciturn as ever.

During the meal he rested his boot on mine; I impatiently moved my foot away. But shortly his foot was touching mine again and he started to tap against my boot:

“—hold still, you idiot—” he spelled out. “You have been chosen—it will be on your watch tonight—details later—eat and start talking—take a strip of adhesive tape on watch with you—six inches by a foot

—repeat message back.”

I managed somehow to tap out my confirmation while continuing to pretend to eat.

Chapter 4

We relieved the watch at midnight. As soon as the watch section had marched away from our post I told Zeb what Grace had passed on to me at chow and asked him if he had the rest of my instructions. He had not. I wanted to talk but he cut me short; he seemed even more edgy than I was. So I walked my post and tried to look alert. We were posted that night at the north end of the west rampart; our tour covered one of the Palace entrances. About an hour had passed when I heard a hiss from the dark doorway. I approached cautiously and made out a female form. She was too short to be Magdalene and I never knew who she was, for she shoved a piece of paper in my hand and faded back into the dark corridor.

I rejoined Zeb. “What shall I do? Read it with my flash? That seems risky.”

“Open it up.”

I did and found that it was covered with fine script that glowed in the darkness. I could read it but it was too dim to be picked up by any electronic eye. I read it:

At the middle of the watch exactly on the bell you will enter the Palace by the door where you received this. Forty paces inside, take the stair on your left; climb two flights. Proceed north fifty paces. The lighted doorway on your right leads to the Virgins’ quarters; there will be a guard at this door. He will not resist you but you must use a paralysis bomb on him to give him an alibi. The cell you seek is at the far end of the central east (5[1]*west corridor of the quarters. There will be a light over the door and a Virgin on guard. She is not one of us. You must disable her completely but you are forbidden to injure or kill her. Use the adhesive tape as gag and blindfold and tie her up with her clothes. Take her keys, enter the cell, and remove Sister Judith. She will probably be unconscious. Bring her to your post and hand her over to the warden of your watch.*

You must make all haste from the time you paralyze the guard, as an eye may see you when you pass the lighted doorway and the alarm may sound at once.

Do not swallow this note; the ink is poisonous. Drop it in the incinerator chute at the head of the stairs.

Go with God.

Zeb read it over my shoulder. “All you need,” he said grimly, “is the ability to pass miracles at will. Scared?”

“Yes.”

“Want me to go along?”

“No. I guess we had better carry out the orders as given.”

“Yes, we had—if I know the Lodge Master. Besides, it just might happen that I might need to kill somebody rather suddenly while you are gone. I'll be covering your rear."

"I suppose so."

"Now let's shut up and bone military." We went back to walking our post.

At the two muted strokes of the middle of the watch I propped my spear against the wall, took off my sword and corselet and helmet and the rest of the ceremonial junk we were required to carry but which would hamper me on this job. Zeb shoved a gauntleted hand in mine and squeezed. Then I was off.

Two—four—six—forty paces. I groped in the dark along the left wall and found the opening, felt around with my foot. Ah, there were the steps! I was already in a part of the Palace I had never been in; I moved by dead reckoning in the dark and hoped the person who had written my orders understood that. One flight, two flights—I almost fell on my face when I stepped on a 'top' step that wasn't there.

Where was the refuse chute? It should be at hand level and the instructions said "head of the stairs." I was debating frantically whether to show a light or chance keeping it when my left hand touched its latch; with a sigh of relief I chucked away the evidence that could have incriminated so many others. I started to turn away, then was immediately filled with panic. Was that really an incinerator chute? Could it have been the panel for a delivery lift instead? I groped for it in the dark again, opened it and shoved my hand in.

My hand was scorched even through my gauntlet; I jerked it back with relief and decided to trust my instructions, have no more doubts. But forty paces north the passageway jogged and that was not mentioned in my orders; I stopped and reconnoitered very cautiously, peering around the jog at floor level.

Twenty-five feet away was the guard and the doorway. He was supposed to be one of us but I took no chances. I slipped a bomb from my belt, set it by touch to minimum intensity, pulled the primer and counted off five seconds to allow for point blank range. Then I threw it and ducked back into the jog to protect myself from the rays.

I waited another five seconds and stuck my head around. The guard was slumped down on the floor, with his forehead bleeding slightly where it had struck a fragment of the bomb case. I hurried out and stepped over him, trying to run and keep quiet at the same time. The central passage of the Virgins' quarters was dim, with only blue night lights burning, but I could see and I reached the end of the passage quickly—then jammed on the brakes. The female guard at the cell there, instead of walking a post, was seated on the floor with her back to the door.

Probably she was dozing, for she did not look up at once. Then she did so, saw me, and I had no time to make plans; I dove for her. My left hand muffled her scream; with the edge of my left hand I chopped the side of her neck—not a killing stroke but I had no time to be gentle; she went limp.

Half the tape across her mouth first, then the other half across her eyes, then tear clothing from her to bind her—and hurry, hurry, hurry all the way, for a security man might already have monitored the eye that was certainly at the main doorway and have seen the unconscious guard. I found her keys on a chain around her waist and straightened up with a silent apology for what I had done to her. Her little body was almost childlike; she seemed even more helpless than Judith.

But I had no time for soft misgivings; I found the right key, got the door open—and then my darling was in my arms.

She was deep in a troubled sleep and probably drugged. She moaned as I picked her up but did not wake. But her gown slipped and I saw some of what they had done to her—I made a life vow, even as I ran, to pay it back seven times, if the man who did it could live that long.

The guard was still where I had left him. I thought I had gotten away with it without being monitored or waking anyone and was just stepping over him, when I heard a gasp from the cqrridor behind me. Why are women restless at night? If this woman hadn't gotten out of bed, no doubt to attend to something she should have taken care of before retiring, I might never have been seen at all.

It was too late to silence her, I simply ran. Once around the jog I was in welcome darkness but I overran the stair head, had to come back, and feel for it—then had to grope my way down step by step. I could hear shouts and highpitched voices somewhere behind me.

Just as I reached ground level, turned and saw the portal outlined against the night sky before me, all the lights came on and the alarms began to clang. I ran the last few paces headlong and almost fell into the arms of Captain van Eyck. He scooped her out of my arms without a word and trotted away toward the corner of the building.

I stood staring after them half-wittedly when Zeb brought me to my senses by picking up my corselet and shoving it out for me to put in my arms. "Snap out of it, man!" he hissed. "That general alarm is for us. You're supposed to be on guard duty."

He strapped on my sword as I buckled the corselet, then slapped my helmet on my head and shoved my spear into my left hand. Then we stood back to back in front of the portal, pistols drawn, safeties off, in drill-manual full alert. Pending further orders, we were not expected nor permitted to do anything else, since the alarm had not taken place on our post.

We stood like statues for several minutes. We could hear sounds of running feet and of challenges. The Officer of the Day ran past us into the Palace, buckling his corselet over his night clothes as he ran. I almost blasted him out of existence before he answered my challenge. Then the relief watch section swung past at double time with the relief warden at its head.

Gradually the excitement died away; the lights remained on but someone thought to shut off the alarm. Zeb ventured a whisper. “What in Sheol happened? Did you muff it?”

“Yes and no.” I told him about the restless Sister.

“Hmmph! Well, son, this ought to teach you not to fool around with women when you are on duty.”

“Confound it, I wasn’t fooling with her. She just popped out of her cell.”

“I didn’t mean tonight,” he said bleakly.

I shut up.

About half an hour later, long before the end of the watch, the relief section tramped back. Their warden halted them, our two reliefs fell out and we fell in the empty places. We marched back to the guardroom, stopping twice more on the way to drop reliefs and pick up men from our own section.

Chapter 5

We were halted in the inner parade facing the guardroom door and left at attention. There we stood for fifty mortal minutes while the Officer of the Day strolled around and looked us over. Once a man in the rear rank shifted his weight. It would have gone unnoticed at dress parade, even in the presence of the Prophet, but tonight the Officer of the Day bawled him out at once and Captain van Eyck noted down his name.

Master Peter looked just as angry as his superior undoubtedly was. He passed out several more gigs, even stopped in front of me and told the guardroom orderly to put me down for "boots not properly shined"—which was a libel, unless I had scuffed them in my efforts. I dared not look down to see but stared him in the eye and said nothing, while he stared back coldly.

But his manner recalled to me Zeb's lecture about intrigue. Van Eyck's manner was perfectly that of a subordinate officer let down and shamed by his own men; how should I feel if I were in fact newborn innocent?

Angry, I decided—angry and self-righteous. Interested and stimulated by the excitement at first, then angry at being kept standing at attention like a plebe. They were trying to soften us up by the strained wait; how would I have felt about it, say two months ago? Smugly sure of my own virtue, it would have offended me and humiliated me—to be kept standing like a pariah waiting to whine for the privilege of a ration card—to be placed on the report like a cadet with soup on his jacket.

By the time the Commander of the Guard arrived almost an hour later I was white-lipped with anger. The process was synthetic but the emotion was real. I had never really liked our Commander anyway. He was a short, supercilious little man with a cold eye and a way of looking through his junior officers instead of at them. Now he stood in front of us with his priest's robes thrown back over his shoulders and his thumbs caught in his sword belt.

He glared at us. "Heaven help me, Angels of the Lord indeed," he said softly into the dead silence-then barked, "Well?"

No one answered.

"Speak up!" he shouted. "Some one of you knows about this. Answer me! Or would you all rather face the Question?"

A murmur ran down our ranks—but no one spoke.

He ran his eyes over us again. His eye caught mine and I stared back truculently. "Lylel"

"Yes, reverend sir?"

“What do you know of this?” s

“I know that I would like to sit down, reverend sir!”

He scowled at me, then his eye got a gleam of cold amusement. “Better to stand before me, my son, than to sit before the Inquisitor.” But he passed on and heckled the man next to me.

He badgered us endlessly, but Zeb and I seemed to receive neither more nor less attention than the others. At last he seemed to give up and directed the Officer of the Day to dismiss us. I was not fooled; it was a certainty that every word spoken had been recorded, every expression cinemographed, and that analysts were plotting the data against each of our past behavior patterns before we reached our quarters.

But Zeb is a wonder. He was gossiping about the night’s events, speculating innocently about what could have caused the hurrah, even before we reached our room. I tried to answer in what I had decided was my own “proper” reaction and groused about the way we had been treated. “We’re officers and gentlemen,” I complained. “If he thinks we are guilty of something, he should prefer formal charges.”

I went to bed still griping, then lay awake and worried. I tried to tell myself that Judith must have reached a safe place, or else the brass would not be in the dark about it. But I dropped off to sleep still fretting.

I felt someone touch me and I woke instantly. Then I relaxed when I realized that my hand was being gripped in the recognition grip of the lodge. “Quiet,” a voice I did not recognize whispered in my ear. “I must give you certain treatment to protect you.” I felt the bite of a hypodermic in my arm; in a few seconds I was relaxed and dreamy. The voice whispered, “You saw nothing unusual on watch tonight. Until the alarm was sounded your watch was quite without incident —” I don’t know how long the voice droned on.

I was awakened a second time by someone shaking me roughly. I burrowed into my pillow and said, “Go ‘way! I’m going to skip breakfast.”

Somebody struck me between my shoulder blades; I turned and sat up, blinking. There were four armed men in the room, blasters drawn and pointed at me. “Come along!” ordered the one nearest to me.

They were wearing the uniform of Angels but without unit insignia. Each head was covered by a black mask that exposed only the eyes-and by these masks I knew them: proctors of the Grand Inquisitor.

I hadn’t really believed it could happen to me. Not to me… not to Johnnie Lyle who had always behaved himself, been a credit to his parish and a pride to his mother. No! The Inquisition was a bogieman, but a bogieman for sinners—not for John Lyle.

But I knew with sick horror when I saw those masks that I was already a dead man, that my time had come and here at last was the nightmare that I could not wake up from.

But I was not dead yet. From somewhere I got the courage to pretend anger. "What are you doing here?"

"Come along," the faceless voice repeated.

"Show me your order. You can't just drag an officer out of his bed any time you feel—"

The leader gestured with his pistol; two of them grabbed my arms and hustled me toward the door, while the fourth fell in behind. But I am fairly strong; I made it hard for them while protesting, "You've got to let me get dressed, at least. You've no right to haul me away half naked, no matter what the emergency is. I've a right to appear in the uniform of my rank."

Surprisingly the appeal worked. The leader stopped. "Okay. But snap into it!"

I stalled as much as I dared while going through the motions of hurrying —jamming a zipper on my boot, fumbling clumsily with all my dressing. How could I leave some sort of a message for Zeb? Any sort of a sign that would show the brethren what had happened to me?

At last I got a notion, not a good one but the best I could manage. I dragged clothing out of my wardrobe, some that I would need, some that I did not, and with the bunch a sweater. In the course of picking out what I must wear I managed to arrange the sleeves of the sweater in the position taken by a lodge brother in giving the Grand Hailing Sign of Distress. Then I picked up loose clothing and started to put some of it back in the wardrobe; the leader immediately shoved his blaster in my ribs and said, "Never mind that. You're dressed."

I gave in, dropping the meaningless clothing on the floor. The sweater remained spread out as a symbol to him who could read it. As they led me away I prayed that our room servant would not arrive and "tidy" it out of meaning before Zeb spotted it.

They blindfolded me as soon as we reached the inner Palace. We went down six flights, four below ground level as I figured it, and reached a compartment filled with the breathless silence of a vault. The hoodwink was stripped from my eyes. I blinked.

"Sit down, my boy, sit down and make yourself comfortable." I found myself looking into the face of the Grand Inquisitor himself, saw his warm friendly smile and his collie-dog eyes.

His gentle voice continued, "I'm sorry to get you so rudely out of a warm bed, but there is certain information needed by our Holy Church. Tell me, my son, do you fear the Lord? Oh, of course you do; your piety is well known. So you won't mind helping me with this little matter even though it makes you late for breakfast. It's to the greater glory of God." He turned to his masked and black-robed assistant questioner, hovering behind him. "Make him ready—and pray be gentle."

I was handled quickly and roughly, but not painfully. They touched me as if they regarded me as so much lifeless matter to be manipulated as impersonally as machinery. They stripped me to the waist and fastened things to me, a rubber bandage tight around my right arm, electrodes in my fists which they taped closed, another pair of electrodes to my wrists, a third pair at my temples, a tiny mirror to the pulse in my throat. At a control board on the left wall one of them made some adjustments, then threw a switch and on the opposite wall a shadow show of my inner workings sprang into being.

A little light danced to my heart beat, a wiggly line on an iconoscope display showed my blood pressure's rise and fall, another like it moved with my breathing, and there were several others that I did not understand. I turned my head away and concentrated on remembering the natural logarithms from one to ten.

"You see our methods, son. Efficiency and kindness, those are our watch words. Now tell me—*Where did you put her*?"

I broke off with the logarithm of eight. "Put who?"

"Why did you do it?"

"I am sorry, Most Reverend Sir. I don't know what it is I am supposed to have done."

Someone slapped me hard, from behind. The lights on the wall jiggled and the Inquisitor studied them thoughtfully, then spoke to an assistant. "Inject him."

Again my skin was pricked by a hypodermic. They let me rest while the drug took hold; I spent the time continuing with the effort of recalling logarithms. But that soon became too difficult; I grew drowsy and lackadaisical, nothing seemed to matter. I felt a mild and childish curiosity about my surroundings but no fear. Then the soft voice of the Inquisitor broke into my reverie with a question. I can't remember what it was but I am sure I answered with the first thing that came into my head.

I have no way of telling how long this went on. In time they brought me back to sharp reality with another injection. The Inquisitor was examining a slight bruise and a little purple dot on my right forearm. He glanced up. "What caused this, my boy?"

"I don't know, Most Reverend Sir." At the instant it was truth.

He shook his head regretfully. "Don't be naive, my son—and don't assume that I am‘. Let me explain something to you. What you sinners never realize is that the Lord always prevails. Always. Our methods are based in lovingkindness but they proceed with the absolute certainty of a falling stone, and with the result equally preordained.

"First we ask the sinner to surrender himself to the Lord and answer from the goodness that remains in his heart. When that loving appeal fails— as it did with youthen we use the skills God has given us to open the unconscious mind. That is usually as far as the Question need go—unless some agent of Satan has been there before us and has tampered with the sacred tabernacle of the mind.

"Now, my son, I have just returned from a walk through your mind. I

found much there that was commendable, but I found also, in murky darkness, a wall that had been erected by some other sinner, and what I want— what the Church needs-is behind that wall."

Perhaps I showed a trace of satisfaction or perhaps the lights gave me away, for he smiled sadly and added, "No wall of Satan can stop the Lord. When we find such an obstacle, there are two things to do: given time enough I could remove that wall gently, delicately, stone by stone, without any damage to your mind. I wish I had time to, I really do, for you are a good boy at heart, John Lyle, and you do not belong with the sinners.

"But while eternity is long, time is short; there is the second way. We can disregard the false barrier in the unconscious mind and make a straightforward assault on the conscious mind, with the Lord's banners leading us." He glanced away from me. "Prepare him."

His faceless crew strapped a metal helmet on my head, some other arrangements were made at the control board. "Now look here, John Lyle." He pointed to a diagram on the wall. "No doubt you know that the human nervous system is partly electrical in nature. There is a schematic representation of a brain, that lower part is the thalamus; covering it is the cortex. Each of the sensory centers is marked as you can see. Your own electro-dynamic characteristics have been analyzed; I am sorry to say that it will now be necessary to heterodyne your normal senses."

He started to turn away, turned back. "By the way, John Lyle, I have taken the trouble to minister to you myself because, at this stage, my assistants through less experience in the Lord's work than my humble self sometimes mistake zeal for skill and transport the sinner unexpectedly to his reward. I don't want that to happen to you. You are merely a strayed lamb and I purpose saving you."

I said, "Thank you, Most Reverend Sir."

"Don't thank me, thank the Lord I serve. However," he went on, frowning slightly, "this frontal assault on the mind, while necessary, is unavoidably painful. You will forgive me?"

I hesitated only an instant. "I forgive you, holy sir."

He glanced at the lights and said wryly, "A falsehood. But you are forgiven that falsehood; it was well intended.” He nodded at his silent helpers. “Commence.”

A light blinded me, an explosion crashed in my ears. My right leg jerked with pain, then knotted in an endless cramp. My throat contracted; I choked and tried to throw up. Something struck me in the solar plexus; I doubled up and could not catch my breath. “Where did you put her?” A noise started low and soft, climbed higher and higher, increasing in pitch and decibels, until it was a thousand dull saws, a million squeaking slate pencils, then wavered in a screeching ululation that tore at the thin wall of reason. “Who helped you?” Agonizing heat was at my crotch; I could not get away from it. “Why did you do it?” I itched all over, intolerably, and tried to tear at my skin—but my arms would not work. The itching was worse than pain; I would have welcomed pain in lieu of scratching. “Where is she?”

Light… sound… pain… heat… convulsions… cold… falling… light and pain… cold and falling… nausea and sound. “Do you love the Lord?” Searing heat and shocking cold… pain and a pounding in my head that made me scream—“Where did you take her? Who else was in it? Give up and save your immortal soul.” Pain and an endless nakedness to the outer darkness.

I suppose I fainted.

Some one was slapping me across the mouth. “Wake up, John Lyle, and confess! Zebadiah Jones has given you away.”

I blinked and said nothing. It was not necessary to simulate a dazed condition, nor could I have managed it. But the words had been a tremendous shock and my brain was racing, trying to get into gear. Zeb? Old Zeb? Poor old Zebl Hadn’t they had time to give him hypnotic treatment, too? It did not occur to me even then to suspect that Zeb had broken under torture alone; I simply assumed that they had been able to tap his unconscious mind. I wondered if he were already dead and remembered that I had gotten him into this, against his good sense. I prayed for his soul and prayed that he would forgive me.

My head jerked to another roundhouse slap. “Wake up! You can hear me— Jones has revealed your sins.”

“Revealed what?” I mumbled.

The Grand Inquisitor motioned his assistants aside and leaned over me, his kindly face full of concern. “Please, my son, do this for the Lord—and for me. You have been brave in trying to protect your fellow sinners from the fruits of their folly, but they failed you and your stiff-necked courage no longer means anything. But don’t go to judgment with this on your soul. Confess, and let death come with your sins forgiven.”

“So you mean to kill me?”

He looked faintly annoyed. “I did not say that. I know that you do not fear death. What you should fear is to meet your Maker with your sins still on your soul. Open your heart and confess.”

“Most Reverend Sir, I have nothing to confess.”

He turned awky from me and gave orders in low, gentle tones. “Continue. The mechanicals this time; I don’t wish to burn out his brain.”

There is no point in describing what he meant by “the mechanicals” and no sense in making this account needlessly grisly. His methods differed in no important way from torture techniques used in the Middle Ages and even more recently—except that his knowledge of the human nervous system was incomparably greater and his knowledge of behavior psychology made his operations more adroit. In addition, he and his assistants behaved as if they were completely free of any sadistic pleasure in their work; it made them coolly efficient.

But let’s skip the details.

I have no notion of how long it took. I must have passed out repeatedly, for my clearest memory is’of catching a bucket of ice water in the face not once but over and over again, like a repeating nightmare—each time followed by the inevitable hypo. I don’t think I told them anything of any importance while I was awake and the hypno instructions to my unconscious may have protected me while I was out of my head. I seem to remember trying to make up a lie about sins I had never committed; I don’t remember what came of it.

I recall vaguely coming semi-awake once and hearing a voice say, “He can take more. His heart is strong.”

I was pleasantly dead for a long time, but finally woke up as if from a long sleep. I was stiff and when I tried to shift in bed my side hurt me. I opened my eyes and looked around; I was in bed in a small, windowless but cheerful room. A sweet-faced young woman in a nurse’s uniform came quickly to my side and felt my pulse.

“Hello.”

“Hello,” she answered. “How are we now? Better?”

“What happened?” I asked. “Is it over? Or is this just a rest?”

“Quiet,” she admonished. “You are still too weak to talk. But it’s over-you are safe among the brethren.”

“I was rescued?”

“Yes. Now be quiet.” She held up my head and gave me something to drink. I went back to sleep.

It took me days to convalesce and catch up with events. The infirmary in which I woke up was part of a series of sub-basements under the basement proper of a department store in New Jerusalem; there was some sort of underground connection between it and the lodge room under the Palace-just where and how I could not say; I was never in it. While conscious, I mean.

Zeb came to see me as soon as I was allowed to have visitors. I tried to raise up in bed. “Zeb! Zeb boy—I thought you were dead!” ‘

“Who? Me?” He came over and shook my left hand. “What made you think that?”

I told him about the dodge the Inquisitor had tried to pull on me. He shook his head. “I wasn’t even arrested. Thanks to you, pal. Johnnie, I’ll never call you stupid again. If you hadn’t had that flash of genius to rig your sweater so that I could read the sign in it, they might have pulled us both in and neither one of us have gotten out of it alive. As it was, I went straight to Captain van Eyck. He told me to lie doggo in the lodge room and then planned your rescue.”

I wanted to ask how that had been pulled off but my mind jumped to a more important subject. “Zeb, where is Judith? Can’t you find her and bring her to see me? My nurse just smiles and tells me to rest.”

He looked surprised. “Didn’t they tell you?”

“Tell me what? No, I haven’t seen anybody but the nurse and the doctor and they treat me like an idiot. Don’t keep me in suspense, Zeb. Did anything go wrong? She’s all right—*isn’t she*?”

“Oh, sure! But she’s in Mexico by now—we got a report by sensitive circuit two days ago.”

In my physical weakness I almost wept. “Gone! Why, what a dirty, scabby trick! Why couldn’t they have waited until I was well enough to tell her good-by?”

Zeb said quickly, “Hey, look, stupid—no, forget that ‘stupid’; you aren’t. Look, old man, your calendar is mixed up. She was on her way before you were rescued, before we were even sure you could be rescued. You don’t think the brethren could bring her back just to let you two bill and coo, do you?”

I thought about it and calmed down. It made sense, even though I was bitterly disappointed. He changed the subject. “How do you feel?”

“Oh, pretty good.”

“They tell me you get that cast off your leg tomorrow.”

“So? They haven’t told me.” I twisted, trying to get comfortable. “I’m almost more anxious to get shut of this corset, but the doc says I’ll have to wear it for several weeks yet.”

“How about your hand? Can you bend your fingers?”

I tried it. “Fairly well. I may have to write lefthanded for a while.”

“All in all, it looks like you’re too mean to die, old son. By the way, if it’s any consolation to you, the laddy boy who worked on Judith got slightly dead in the raid in which you were rescued.”

“He was? Well, I’m sorry. I had planned to save him for myself.”

“No doubt, but you would have had to take your place in line, if he had lived. Lots of people wanted him. Me, for example.”

“But I had thought of something special for him—I was going to make him bite his nails.”

“Bite his nails?” Zeb looked puzzled.

“Until he reached his elbows. Follow me?”

“Oh.” Zeb grinned sourly. “Not nearly imaginative enough, boy. But he’s dead, we can’t touch him.”

“He’s infernally lucky. Zeb, why didn’t you arrange to get him yourself? Or did you, and things were just too hurried to let you do a proper job?”

“Me? Why, I wasn’t on the rescue raid. I haven’t been back in the Palace at all.”

“Huh?”

“You didn’t think I was still on duty, did you?”

“I haven’t had time to think about it.”

“Well, naturally I couldn’t go back after I ducked out to avoid arrest; I was through. No, my fine fellow, you and I are both deserters from the

United States Army—with every cop and every postmaster in the country anxious to earn a deserter’s reward by turning us in.“ I whistled softly and let the implications of his remark sink in.

Chapter 6

I had joined the Cabal on impulse. Certainly, under the stress of falling in love with Judith and in the excitement of the events that had come rushing over me as a result of meeting her, I had no time for calm consideration. I had not broken with the Church as a result of philosophical decision.

Of course I had known logically that to join the Cabal was to break with all my past ties, but it had not yet hit me emotionally. What was it going to be like never again to wear the uniform of an officer and a gentleman? I had been proud to walk down the street, to enter a public place, aware that all eyes were on me.

I put it out of my mind. The share was in the furrow, my hand was on the plow; there could be no turning back. I was in this until we won or until we were burned for treason.

I found Zeb looking at me quizzically. “Cold feet, Johnnie?”

“No. But I’m still getting adjusted. Things have moved fast.”

“I know. Well, we can forget about retired pay, and our class numbers at the Point no longer matter.” He took off his Academy ring, chucked it in the air, caught it and shoved it into his pocket. “But there is work to be done, old lad, and you will find that this is a military outfit, too-a real one. Personally, I’ve had my fill of spit-and-polish and I don’t care if I never again hear that ‘Sound off’ and ‘Officers, center!’ and ‘Watchman, what of the night?’ manure again. The brethren will make full use of our best talents—and the fight really matters.”

Master Peter van Eyck came to see me a couple of days later. He sat on the edge of my bed and folded his hands over his paunch and looked at me. “Feeling better, son?”

“I could get up if the doctor would let me.”

“Good. We’re shorthanded; the less time a trained officer spends on the sick list the better.” He paused and chewed his lip. “But, son, I don’t know just what to do with you.”

“Eh? Sir?”

“Frankly, you should never have been admitted to the Order in the first place—a military command should not mess around with affairs of the heart. It confuses motivations, causes false decisions. Twice, because we took you in, we have had to show our strength in sorties that—from a strictly military standpoint—should never have happened.”

I did not answer, there was no answer—he was right. My face was hot with embarrassment.

"Don't blush about it," he added kindly. "Contrariwise, it is good for the morale of the brethren to strike back occasionally. The point is, what to do with you? You are a stout fellow, you stood up well-but do you really understand the ideals of freedom and human dignity we are fighting for?"

I barely hesitated. "Master—I may not be much of a brain, and the Lord knows it's true that I've never thought much about politics. But I know which side I'm onl"

He nodded. "That's enough. We can't expect each man to be his own Tom Paine."

"His own what?"

"Thomas Paine. But then you've never heard of him, of course. Look him up in our library when you get a chance. Very inspiring stuff. Now about your assignment. It would be easy enough to put you on a desk job here—your friend Zebadiah has been working sixteen hours a day trying to straighten out our filing system. But I can't waste you two on clerical jobs. What is your savvy subject, your specialty?"

"Why, I haven't had any P.G. work yet, sir."

"I know. But what did you stand high in? How were you in applied miracles, and mob psychology?"

"I was fairly good in miracles, but I guess I'm too wooden for psychodynamics. Ballistics was my best subject."

"Well, we can't have everything. I could use a technician in morale and propaganda, but if you can't, you can't."

"Zeb stood one in his class in mob psychology, Master. The Commandant urged him to aim for the priesthood."

"I know and we'll use him, but not here. He is too much interested in Sister Magdalene; I don't believe in letting couples work together. It might distort their judgments in a pinch. Now about you. I wonder if you wouldn't make a good assassin?"

He asked the question seriously but almost casually; I had trouble believing it. I had been taught—I had always taken it for granted that assassination was one of the unspeakable sins, like incest, or blasphemy. I blurted out, "The brethren use *assassination*?"

"Eh? Why not?" Van Eyck studied my face. "I keep forgetting. John, would you kill the Grand Inquisitor if you got a chance?"

"Well—yes, of course. But I'd want to do it in a fair fight."

"Do you think you will ever be given that chance? Now let's suppose we are back at the day Sister Judith was arrested by him. Suppose you could stop him by killing him—but only by poisoning him, or knifing him in the back. What would you do?"

I answered savagely, "I would have killed himl"

"Would you have felt any shame, any guilt?"

"None!"

"So. But he is only one of many in this foulness. The man who eats meat cannot sneer at the butcher—and every bishop, every minister of state, every man who benefits from this tyranny, right up to the Prophet himself, is an accomplice before the fact in every murder committed by the inquisitors. The man who condones a sin because he enjoys the result of the sin is equally guilty of the sin. Do you see that?"

Oddly enough, I did see it, for it was orthodox doctrine as I had learned it. I had choked over its new application. But Master Peter was still talking: "But we don't indulge in vengeance—vengeance still belongs to the Lord. I would never send you against the Inquisitor because you might be tempted to exult in it personally. We don't tempt a man with sin as a bait. What we do do, what we are doing, is engaging in a calculated military operation in a war already commenced. One key man is often worth a regiment; we pick out that key man and kill him. The bishop in one diocese may be such a man; the bishop in the next state may be just a bungler, propped up by the system. We kill the first, let the second stay where he is. Gradually we are eliminating their best brains. Now—" He leaned toward me. "—do you want a job picking off those key men? It's very important work."

It seemed to me that, in this business, someone was continually making me face up to facts, instead of letting me dodge unpleasant facts the way most people manage to do throughout their lives. Could I stomach such an assignment? Could I refuse it—since Master Peter had implied at least that assassins were volunteers—refuse it and try to ignore in my heart that it was going on and that I was condoning it?

Master Peter was right; the man who buys the meat is brother to the butcher. It was squeamishness, not morals… like the man who favors capital punishment but is himself too "good" to fit the noose or swing the axe. Like the person who regards war as inevitable and in some circumstances moral, but who avoids military service because he doesn't like the thought of killing.

Emotional infants, ethical morons—the left hand *must* know what the right hand doeth, and the heart is responsible for both. I answered almost at once, "Master Peter, I am ready to. serve… that way or whatever the brethren decide I can do best."

"Good man!" He relaxed a bit and went on, "Between ourselves, it's the job I offer to every new recruit when I'm not sure that he understands that this is not a ball game, but a cause to which he must commit himself without any reservation—his life, his fortune, his sacred honor. We have no place for the man who wants to give orders but who won't clean the privy."

I felt relieved. "Then you weren't seriously picking me out for assassination work?"

"Eh? Usually I am not; few men are fitted for it. But in your case I am quite serious, because we already know that you have an indispensable **and** not very common qualification."

I tried to think what was so special about me and could not. "Sir?"

"Well, you'll get caught eventually, of course. Three point seven accomplished missions per assassin is what we are running now—a good score, but we ought to do better as suitable men are so scarce. But with you we know already that when they do catch you and put you to the Question, you won't crack."

My face must have shown my feelings. The Question? Again? I was still half dead from the first time. Master Peter said kindly, "Of course you won't have to go up against it again to the fullest. We always protect assassins; we fix it so that they can suicide easily. You don't need to worry."

Believe me, having once suffered the Question, his assurance to me did not seem calloused; it was a real comfort. "How, sir?"

"Eh? A dozen different ways. Our surgeons can boobytrap you so that you can die at will in the tightest bonds anyone can put on you. There is the old hollow tooth, of course, with cyanide or such—but the proctors are getting wise to that; sometimes they gag a man's mouth open. But there are many ways. For example—" He stretched his arms wide and bent them back, but not far. "—if I were to cramp my arms backward in a position a man never assumes without very considerable conscious effort, a little capsule between my shoulder blades would rupture and I would make my last report. Yet you could pound me on the back all day and never break it."

"Uh… were you an assassin, sir?"

"Me? How could I be, in my job? But all of our people in positions of maximum exposure are loaded—it's the least we can do for them. Besides that, I've got a bomb in my belly—" He patted his paunch, "—that will take a roomful of people with me if it seems desirable."

"I could have used one of those last week," I said emphatically.

"You're here, aren't you? Don't despise your luck. If you need one, you'll have one." He stood up and prepared to leave. "In the meantime, don't give any special thought to being selected as an executioner. The psychological evaluation group will still have to pass on you and they are hard men to convince."

Despite his words, I did think about it, of course, though it ceased to worry me. I was put on light duty shortly thereafter and spent several days reading proof on the *Iconoclast*, a smug, mildly critical, little reform-from-within paper which the Cabal used to pave the way for its field missionaries. It was a "Yes, but—" paper, overtly loyal to the Prophet but just the sort of thing to arouse doubt in the minds of the stiff-necked and intolerant. Its acid lay in how a thing was said, not what was said. I had even seen copies of it around the Palace.

I also got acquainted with some of the ramifications of the amazing underground headquarters at New Jerusalem. The department store above us was owned by a Past Grand Master and was an extremely important means of liaison with the outside world. The shelves of the store fed us and clothed us; through taps into the visiphone circuits serving the store commercially we had connection with the outside and could even put in transcontinental calls if the message could be phrased or coded to allow for the likelihood that it would be monitored. The owner's delivery trucks could be used to Spirit fugitives to or from our clandestine quarters—I learned that Judith started her flight that way, with a bill of lading that described her as gum boots. The store's manifold commercial operations were a complete and plausible blind for our extensive operations.

Successful revolution is Big Business—make no mistake about that. In a modern, complex, and highly industrialized state, revolution is not accomplished by a handful of conspirators whispering around a guttering candle in a deserted ruin. It requires countless personnel, supplies, modern machinery and modern weapons. And to handle these factors successfully there must be loyalty, secrecy, and superlative staff organization.

I was kept busy but my work was fill-in work, since I was awaiting assignment. I had time to dig into the library and I looked up Tom Paine, which led me to Patrick Henry and Thomas Jefferson and others—a whole new world was opened up to me. I had trouble at first in admitting the possibility of what I read; I think perhaps of all the things a police state can do to its citizens, distorting history is possibly the most pernicious. For example, I learned for the first time that the United States had not been ruled by a bloodthirsty emissary of Satan before the First Prophet arose in his wrath and cast him out—but had been a community of free men, deciding their own affairs by peaceful consent. I don't mean that the first republic had been a scriptural paradise, but it hadn't been anything like what I had learned in school.

For the first time in my life I was reading things which had not been approved by the Prophet's censors, and the impact on my mind was devastating. Sometimes I would glance over my shoulder to see who was watching me, frightened in spite of myself. I began to sense faintly that secrecy is the keystone of all tyranny. Not force, but secrecy… censorship. When any government, or any church for that matter, undertakes to say to its subjects, "This you may not read, this you must not see, this you are forbidden to know," the end result is tyranny and oppression, no matter how holy the motives. Mighty little force is needed to control a man whose mind has been hoodwinked; contrariwise, no amount of force can control a free man, a man whose mind is free. No, not the rack, not fission bombs, not anything— you can't conquer a free man; the most you can do is kill him.

My thoughts did not then fall into syllogisms; my head was filled with an inchoate spate of new ideas, each more exciting than the last. I discovered that travel between the planets, almost a myth in my world, had not stopped because the First Prophet had forbidden it as a sin against the omnipotence of God; it had ceased because it had gone into the red financially and the Prophet's government would not subsidize it. There was even an implied statement that the "infidels" (I still used that word in my mind) still sent out an occasional research ship and that there were human beings even now on Mars and Venus.

I grew so excited at that notion that I almost forgot the plight we were all in. If I had not been chosen for the Angels of the Lord, I would probably have gone into rocketry. I was good at anything of that sort, the things that called for quick reflexes combined with knowledge of the mathematical and mechanical arts. Maybe someday the United States would have space ships again. Perhaps I…

But the thought was crowded out by a dozen new ones. Foreign newspapers—why, I had not even been sure the infidels could read and write. The London *Times* made unbelievable and exciting reading. I gradually got it through my head that the Britishers apparently did not now eat human flesh, if indeed they ever had. They seemed remarkably like us, except that they were shockingly prone to do as they pleased—there were even letters in the *Times* criticizing the government. And there was another letter signed by a bishop of their infidel church, criticizing the people for not attending services. I don't know which one puzzled me the more; both of them seemed to indicate a situation of open anarchy.

Master Peter informed me that the psych board had turned me down for assassination duty. I found myself both relieved and indignant. What was wrong with me that they would not trust me with the job? It seemed like a slur on my character—by then.

"Take it easy," Van Eyck advised dryly. "They made a dummy run based on your personality profile and it figured almost an even chance that you would be caught your first time out. We don't like to expend men that fast."

"But-"

"Peace, lad. I'm sending you out to General Headquarters for assignment."

"General Headquarters? Where is that?"

"You'll know when you get there. Report to the staff metamorphist."

Dr. Mueller was the staff face-changer; I asked him what he had in mind for me. “How do I know until I find out what you are?” He had me measured and photographed, recorded my voice, analyzed my walk, and had a punched card made up of my physical characteristics. “Now we’ll find your twin brother.” I watched the card sorter go through several thousand cards and I was beginning to think I was a unique individual, resembling no one else sufficiently to permit me to be disguised successfully, when two cards popped out almost together. Before the machine whirred to a stop there were five cards in the basket.

“A nice assortment,” Dr. Mueller mused as he looked them over, “one synthetic, two live ones, a deader, and one female. We can’t use the woman for this job, but we’ll keep it in mind; it might come in very handy someday to know that there is a female citizen you could impersonate successfully.”

“What’s a synthetic?” I enquired.

“Eh? Oh, it’s a composite personality, very carefully built from faked records and faked backgrounds. A risky business—it involves tampering with the national archives. I don’t like to use a synthetic, for there really isn’t any way to fill in completely the background of a man who doesn’t exist. I’d much rather patch into the real background of a real person.”

“Then why use synthetics at all?”

“Sometimes we have to. When we have to move a refugee in a hurry, for example, and there is no real person we can match him with. So we try to keep a fairly broad assortment of synthetics built up. Now let me see,” he added, shuffling the cards, “we have two to choose from—”

“Just a second, Doctor,” I interrupted, “why do you keep dead men in the file?”

“Oh, they aren’t legally dead. When one of the brethren dies and it is possible to conceal the fact, we maintain his public personality for possible future use. Now then,” he continued, “can you sing?”

“Not very well.”

“This one is out, then. He’s a concert baritone. I can make a lot of changes in you, but I can’t make a trained singer of you. It’s Hobson’s choice. How would you like to be Adam Reeves, commercial traveler in textiles?” He held up a card.

“Do you think I could get away with it?”

“Certainly—when I get through with you.”

A fortnight later my own mother wouldn’t have known me. Nor, I believe, could Reeves’ mother have told me from her son. The second week Reeves himself was available to work with me. I grew to like him very much while I was studying him. He was a mild, quiet man with a retiring disposition, which always made me think of him as small although he was, of course, my height, weight, and bony structure. We resembled each other only superficially in the face.

At first, that is. A simple operation made my ears stand out a little more than nature intended; at the same time they trimmed my ear lobes. Reeves' nose was slightly aquiline; a little wax under the skin at the bridge caused mine to match. It was necessary to cap several of my teeth to make mine match his dental repair work; that was the only part I really minded. My complexion had to be bleached a shade or two; Reeves' work did not take him out into the sun much.

But the most difficult part of the physical match was artificial fingerprints. An opaque, flesh-colored flexible plastic was painted on my finger pads, then my fingers were sealed into molds made from Reeves' fingertips. It was touchy work; one finger was done over seven times before Dr. Mueller would pass it.

That was only the beginning; now I had to learn to act like Reeves—his walk, his gestures, the way he laughed, his table manners. I doubt if I could ever make a living as an actor—my coach certainly agreed and said so.

"Confound it, Lyle, won't you ever get it? Your life will depend on it. You've *got* to learn!"

"But I thought I was acting just like Reeves," I objected feebly.

"Acting! That's just the trouble—you were *acting* like Reeves. And it was as phony as a false leg. You've got to *be* Reeves. Try it. Worry about your sales record, think about your last trip, think about commissions and discounts and quotas. Go on. Try it."

Every spare minute I studied the current details of Reeves' business affairs, for I would actually have to sell textiles in his place. I had to learn a whole trade and I discovered that there was more to it than carrying around samples and letting a retailer make his choice—and I didn't know a denier from a continuous fibre. Before I finished I acquired a new respect for business men. I had always thought that buying and selling was simple; I was wrong again. I had to use the old phonographic tutor stunt and wear earphones to bed. I never sleep well that way and would wake up each morning with a splitting head and with my ears, still tender from the operations, sore as two boils.

But it worked, all of it. In two short weeks I *was* Adam Reeves, commercial traveler, right down to my thoughts.

Chapter 7

“Lyle,” Master Peter van Eyck said to me, “Reeves is due to catch the *Comet* for Cincinnati this afternoon. Are you ready?”

“Yes, sir.”

“Good. Repeat your orders.”

“Sir, I am to carry out my—I mean his—selling schedule from here to the coast. I check in at the San Francisco office of United Textiles, then proceed on his vacation. In Phoenix, Arizona, I am to attend church services at the South Side Tabernacle. I am to hang around afterwards and thank the priest for the inspiration of his sermon; in the course of which I am to reveal myself to him by means of the accustomed usages of our order. He will enable me to reach General Headquarters.”

“All correct. In addition to transferring you for duty, I am going to make use of you as a messenger. Report to the psychodynamics laboratory at once. The chief technician will instruct you.”

“Very well, sir.”

The lodge Master got up and came around his desk to me. “Good-by, John. Watch yourself, and may the Great Architect help you.”

“Thank you, sir. Uh, is this message I am to carry important?”

“Quite important.”

He let it go at that and I was a bit irked; it seemed silly to be mysterious about it when I would find out just what it was in a few minutes. But I was mistaken. At the laboratory I was told to sit down, relax, and prepare myself for hypnosis.

I came out of it with the pleasant glow that usually follows hypnosis. “That’s all,” I was told. “Carry out your orders.”

“But how about the message I was to carry?”

“You have it.”

“Hypnotically? But if I’m arrested, I’ll be at the mercy of any psycho-investigator who examines me!”

“No, you won’t. It’s keyed to a pair of signal words; you can’t possibly remember until they are spoken to you. The chance that an examiner would hit on both words and in the right order is negligible. You can’t give the message away, awake or asleep.”

I had rather expected to be “loaded” for suicide, if I was to carry an important message—though I hadn’t seen how they could do it at the last minute, other than supplying me with a pill, I mean, a method almost useless if the policeman knows his business. But if I couldn’t give away the message I carried, then I preferred to take my chances; I didn’t ask for poison. I’m not the suiciding type anyhow—when Satan comes for me, he’ll have to drag me…

The rocket port serving New Jerusalem is easier to get to than is the case at most of the older cities. There was a tube station right across from the department store that hid our headquarters. I simply walked out of the Store, took the bridge across the street, found the tube stall marked “Rocket Port,” waited for an empty cartridge, and strapped myself and my luggage in. The attendant sealed me and almost at once I was at the port.

I bought my ticket and took my place at the end of the queue outside the port police station. I’ll admit I was nervous; while I didn’t anticipate having any trouble getting my travel pass validated, the police officers who must handle it were no doubt on the lookout for John Lyle, renegade army officer. But they were always looking for someone and I hoped the list of wanted faces was too long to make the search for me anything other than routine.

The line moved slowly and that looked like a bad sign—especially so when I noticed that several people had been thumbed out of line and sent to wait behind the station railing. I got downright jittery. But the wait itself gave me time to get myself in hand. I shoved my papers at the sergeant, glanced at my chrono, up at the station clock, and back at my wrist.

The sergeant had been going through my papers in a leisurely, thorough manner. He looked up. “Don’t worry about catching your ship,” he said not unkindly. “They can’t leave until we clear their passenger list.” He pushed a pad across the counter. “Your fingerprints, please.”

I gave them without comment. He compared them with the prints on my travel pass and then with the prints Reeves had left there on his arrival a week earlier. “That’s all, Mr. Reeves. A pleasant trip.”

I thanked him and left.

The *Comet* was not too crowded. I picked a seat by a window, well forward, and had just settled down and was unfolding a late-afternoon copy of the *Holy City*, when I felt a touch on my arm.

It was a policeman.

“Will you step outside, please?”

I was herded outside with four other male passengers. The sergeant was quite decent about it. “I’m afraid I’ll have to ask you four to return to the station for further identification. I’ll order your baggage removed and have the passenger list changed. Your tickets will be honored on the next flight.”

I let out a yelp. “But I’ve got to be in Cincinnati tonight!”

“I’m sorry.” He turned to me. “You’re Reeves, aren’t you? Hmm… you are the right size and build. Still… let me see your pass again. Didn’t you arrive in town just last week?”

“That’s right.”

He went through my papers again. "Uh, yes, I remember now; you came in Tuesday morning on the *Pilgrim*. Well, you can't be in two places at once, so I guess that clears you." He handed my papers back to me. "Go aboard again. Sorry we bothered you. The rest of you come along."

I returned to my seat and picked up my newspaper. A few minutes later the first heavy surge of the rockets threw us to the west. I continued reading the paper to cover up my agitation and relief, but soon got interested. I had been reading a Toronto paper only that morning, underground; the contrast was startling. I was back in a world for which the outside world hardly existed; the "foreign affairs" news, if you could call it that, consisted of glowing reports of our foreign missions and some accounts of atrocities among the infidels. I began to wonder where all that money went that was contributed each year for missionary work; the rest of the world, if you could believe *their* newspapers, didn't seem much aware that our missions existed.

Then I began going through the paper, picking out items that I knew to be false. By the time I was through we were down out of the ionosphere and gliding into Cincy. We had overtaken the sun and had sunset all over again.

There must be a peddler's pack in my family tree. I not only covered Reeves' territory in Cincinnati, but bettered his quota. I found that I got as much pleasure out of persuading some hard-boiled retailer that he should increase his line of yard goods as I ever had from military work. I stopped worrying about my disguise and thought only about textiles. Selling isn't just a way to eat; it's a game, it's fun.

I left for Kansas City on schedule and had no trouble with the police in getting a visa for my travel pass. I decided that New Jerusalem had been the only ticklish check point; from here west nobody would expect to pick up John Lyle, formerly officer and gentleman; he would be one of thousands of wanted men, lost in the files.

The rocket to K.C. was well filled; I had to sit beside another passenger, a well-built chap in his middle thirties. We looked each other over as I sat down, then each busied himself with his own affairs. I called for a lap table and started straightening out the order blanks and other papers I had accumulated during busy, useful days in Cincinnati. He lounged back and watched the news broadcast in the TV tank at the forward end of the car.

I felt a nudge about ten minutes later and looked around. My seatmate flicked a thumb toward the television tank; in it there was displayed a large public square filled with a mob. It was surging toward the steps of a massive temple, over which floated the Prophet's gold-and-crimson banner and the pennant of a bishopric. As I watched, the first wave of the crowd broke against the temple steps.

A squad of temple guards trotted out a side door near the giant front doors and set up their tripods on the terrace at the head of the wide stairs. The scene cut to another viewpoint; we were looking down right into the faces of the mob hurrying toward us—apparently from a telephoto pick-up somewhere on the temple roof.

What followed made me ashamed of the uniform I had once worn. Instead of killing them quickly, the guards aimed low and burned off their legs. One instant the first wave was running toward me up the steps—then they fell, the cauterized stumps of their legs jerking convulsively. I had been watching a youngish couple right in the center of the pick-up; they had been running hand in hand. As the beam swept across them they went down together.

She stayed down. He managed to lift himself on what had been his knees, took two awkward dying steps toward her and fell across her. He pulled her head to his, then the scene cut away from them to the wide view of the square.

I snatched the earphones hanging on the back of the seat in front of me and listened: "—apolis, Minnesota. The situation is well in hand and no additional troops will be needed. Bishop Jennings has declared martial law while the agents of Satan are rounded up and order restored. A period of prayer and fasting will commence at once.

"The Minnesota ghettos have been closed and all local pariahs will be relocated in the reservations in Wyoming and Montana in order to prevent future outbreaks. Let this be a warning to the ungodly everywhere who might presume to dispute the divine rule of the Prophet Incarnate.

"This on-the-spot cast by the No-Sparrow-Shall-Fall News Service is coming to you under the sponsorship of the Associated Merchants of the Kingdom, dealers in the finest of household aids toward grace. Be the first in your parish to possess a statuette of the Prophet that miraculously *glows in the darkl* Send one dollar, care of this station—"

I switched off the phones and hung them up. Why blame the pariahs? That mob wasn't made up of pariahs.

But I kept my lip zipped and let my companion speak first—which he did, with vehemence. "Serves them right, the bloody fools! Imagine charging against a fortified position with your bare hands." He kept his voice down and spoke almost in my ear.

"I wonder why they rioted?" was all that I answered.

"Eh? No accounting for the actions of an heretic. They aren't sane."

"You can sing that in church," I agreed firmly. "Besides, even a sane heretic—if there could be such a thing, I mean—could see that the government is doing a good job of running the country. Business is good." I patted my brief case happily. "For me, at least, praise the Lord."

We talked business conditions and the like for some time. As we talked I looked him over. He seemed to be the usual leading-citizen type, conventional and conservative, yet something about him made me uneasy. Was it just my guilty nerves? Or some sixth sense of the hunted?

My eyes came back to his hands and I had a vague feeling that I should be noticing something. But there was nothing unusual about them. Then I finally noticed a very minor thing, a calloused ridge on the bottom joint of the third finger of his left hand, the sort of a mark left by wearing a heavy ring for years and just the sort I carried myself from wearing my West Point class ring. It meant nothing, of course, since lots of men wear heavy seal rings on that finger. I was wearing one myself—not my West Point ring naturally, but one belonging to Reeves.

But why would this conventional-minded oaf wear such a ring habitually, then stop? A trifling thing, but it worried me; a hunted animal lives by noticing trifles. At the Point I had never been considered bright in psychology; I had missed cadet chevrons on that issue alone. But now seemed a good time to use what little I had learned… so I ran over in my mind all I had noticed about him.

The first thing he had noticed, the one thing he had commented on, was the foolhardiness of charging into a fortified position. That smacked of military orientation in his thinking. But that did not prove he was a Pointer. On the contrary, an Academy man wears his ring at all times, even into his grave, even on leave and wearing mufti… unless for some good reason he does not wish to be recognized.

We were still chatting sociably and I was worrying over how to evaluate insufficient data when the stewardess served tea. The ship was just beginning to bite air as we came down out of the fringes of space and entered the long glide into Kansas City; it was somewhat bumpy and she slopped a little hot tea on his thigh. He yelped and uttered an expletive under his breath. I doubt if she caught what he said.

But I did catch it—and I thought about it furiously while I dabbed at him with a handkerchief. "B. J. idiot!" was the term he used and it was strictly West Point slang.

Ergo, the ring callus was no coincidence; he was a West Pointer, an army officer, pretending to be a civilian. Corollary: he was almost certainly on a secret service assignment. Was I his assignment?

Oh, come now, John! His ring might be at a jeweller's, being repaired; he might be going home on thirty days. But in the course of a long talk he had let me think that he was a business man. No, he was an undercover agent.

But even if he was not after *me*, he had made two bad breaks in my presence. But even the clumsiest tyro (like myself, say) does not make two such slips in maintaining an assumed identity—and the army secret service was not clumsy; it was run by some of the most subtle brains in the country. Very well, then-they were not accidental slips but calculated acts; I was intended to notice them and *think* that they were accidents. Why?

It could not be simply that he was not sure I was the man he wanted. In such case, under the old and tested principle that a man was sinful until proved innocent, he would simply have arrested me and I would have been put to the Question.

Then *why*?

It could only be that they wanted me to run free for a while yet—but to be scared out of my wits and run for cover… and thereby lead them to my fellow conspirators. It was a farfetched hypothesis, but the only one that seemed to cover all the facts.

When I first concluded that my companion must be an agent on my trail I was filled with that cold, stomach-twisting fear that can be compared only with seasickness. But when I thought I had figured out their motives I calmed down. What would Zebadiah do? “The first principle of intrigue is not to be stampeded into any unusual act—” Sit tight and play dumb. If this cop wanted to follow me, I’d lead him into every department store in K.C.— and let him watch while I peddled yard goods.

Nevertheless my stomach felt right as we got off the ship in Kansas City. I expected that gentle touch on the shoulder which is more frightening than a fist in the face. But nothing happened. He tossed me a perfunctory God-keep-you, pushed ahead of me, and headed for the lift to the taxicab platform while I was still getting my pass stamped. It did not reassure me, as he could have pointed me out half a dozen ways to a relief. But I went on over to the New Muehlbach by tube as casually as I could manage.

I had a fair week in K.C., met my quota and picked up one new account of pretty good size. I tried to spot any shadow that might have been placed on me, but I don’t know to this day whether or not I was being trailed. If I was, somebody spent an awfully dull week. But, although I had about concluded that the incident had been nothing but imagination and my jumpy nerves, I was happy at last to be aboard the ship for Denver and to note that my companion of the week before was not a passenger.

We landed at the new field just east of Aurora, many miles from downtown Denver. The police checked my papers and fingerprinted me in the routine fashion and I was about to shove my wallet back into my pocket when the desk sergeant said, “Bare your left arm, please, Mr. Reeves.”

I rolled up my sleeve while trying to show the right amount of fretful annoyance. A white-coated orderly took a blood sample. “Just a normal precaution,” the sergeant explained. “The Department of Public Health is trying to stamp out spotted fever.”

It was a thin excuse, as I knew from my own training in P.H.—but Reeves, textiles salesman, might not realize it. But the excuse got thinner yet when I was asked to wait in a side room of the station while my blood sample was run. I sat there fretting, trying to figure out what harm they could do me with ten c.c. of my blood—and what I could do about it even if I did know.

I had plenty of time to think. The situation looked anything but bright. My time was probably running out as I sat there—yet the excuse on which they were holding me was just plausible enough that I didn’t dare cut and run; that might be what they wanted. So I sat tight and sweated.

The building was a temporary structure and the wall between me and the sergeant’s office was a thin laminate; I could hear voices through it without being able to make out the words. I did not dare press my ear to it for fear of being caught doing so. On the other hand I felt that I just had to do it. So I moved my chair over to the wall, sat down again, leaned back on two legs of the chair so that my shoulders and the back of my neck were against the wall. Then I held a newspaper I had found there up in front of my face and pressed my ear against the wall.

I could hear every word then. The sergeant told a story to his clerk which would have fetched him a month’s penance if a morals proctor had been listening—still, I had heard the same story, only slightly cleaned up, right in the Palace, so I wasn’t really shocked, nor was I in any mood to worry about other people’s morals. I listened to several routine reports and an inquiry from some semi-moron who couldn’t find the men’s washroom, but not a word about myself. I got a crick in my neck from the position.

Just opposite me was an open window looking out over the rocket field. A small ship appeared in the sky, braked with nose units, and came in to a beautiful landing about a quarter of a mile away. The pilot taxied toward the administration building and parked outside the window, not twenty-five yards away.

It was the courier version of the *Sparrow Hawk*, ram jet with rocket takeoff and booster, as sweet a little ship as was ever built. I knew her well; I had pushed one just like her, playing number-two position for Army in sky polo—that was the year we had licked both Navy and

Princeton.

The pilot got out and walked away. I eyed the distance to the ship. If the ignition were not locked—Sheol! what if it was? Maybe I could short around it, I looked at the open window. It might be equipped with vibrobolts; if so, I would never know what hit me. But I could not spot any power leads or trigger connections and the flimsy construction of the building would make it hard to hide them. Probably there was nothing but contact alarms; there might not be so much as a selenium circuit.

While I was thinking about it I again heard voices next door; I flattened my ear and strained to listen.

“What’s the blood type?”

“Type one, sergeant.”

“Does it check?”

“No, Reeves is type three.”

“Oho! Phone the main lab. We’ll take him into town for a retinal.”

I was caught cold and knew it. They knew positively that I wasn’t Reeves. Once they photographed the pattern of blood vessels in the retina of either eye they would know just as certainly who I really was, in no longer time than it took to radio the picture to the Bureau of Morals & Investigation-less, if copies had been sent out to Denver and elsewhere with the tab on me.

I dove out the window.

I lit on my hands, rolled over in a ball, was flung to my feet as I unwound. If I set off an alarm I was too busy to hear it. The ship’s door was open and the ignition was not locked—there was help indeed for the Son of a Widowl I didn’t bother to taxi clear, but blasted at once, not caring if my rocket flame scorched my pursuers. We bounced along the ground, the little darling and I, then I lifted her nose by gyro and scooted away to the west.

Chapter 8

I let her reach for the sky, seeking altitude and speed where the ram jets would work properly. I felt exulted to have a good ship under me and those cops far behind. But I snapped out of that silly optimism as I leveled off for jet flight.

If a cat escapes up a tree, he must stay there until the dog goes away. That was the fix I was in and in my case the dog would not go away, nor could I stay up indefinitely. The alarm would be out by now; behind me, on all sides of me, police pilots would be raising ship in a matter of minutes, even seconds. I was being tracked, that was sure, and the blip of my craft on several screens was being fed as data into a computer that would vector them in on me no matter where I turned. After that—well, it was land on command or be shot down.

The miracle of my escape began to seem a little less miraculous. Or *too* miraculous, perhaps? Since when were the police so sloppy that they would leave a prisoner in a room with an unguarded window? Wasn't it just a little too much of a coincidence that a ship I knew how to herd should come to that window and be left there—with the ignition unlocked—just as the sergeant said loudly the one thing that would be sure to make me try for it?

Maybe this was a second, and successful, attempt to panic me. Maybe somebody else knew my liking for the *Sparrow Hawk* courier, knew it because he had my dossier spread out in front of him and was as familiar with my sky polo record as I was. In which case they might not shoot me down just yet; they might be counting on me to lead them straight to my comrades.

Or perhaps, just possibly, it was a real escape—if I could exploit it. Either way, I was neither ready to be caught again, nor to lead them to my brethren —nor to die. I had an important message (I told myself); I was too busy to oblige them by dying just now.

I flipped the ship's commer to the police & traffic frequency and listened. There was some argument going on between the Denver port and a transport in the air but no one as yet was shouting for me to ground or get my pants shot off. Later perhaps—I left it switched on and thought.

The deadreckoner showed me some seventy-five miles from Denver and headed north of west; I was surprised to see that I had been in the air less than ten minutes… so hopped up with adrenalin, no doubt, that my time sense was distorted. The ram-jet tanks were nearly full; I had nearly ten hours and six thousand miles at economy cruising—but of course at that speed they could almost throw rocks at me.

A plan, silly and perhaps impossible and certainly born of desperation but even so better than no plan at all, was beginning to form in my brain. I consulted the great-circle indicator and set a course for the Republic of Hawaii; my baby nosed herself slightly south of west. Then I turned to the fuel-speed-distance gnomograph and roughed a problem—3100 miles about, at around 800 mph, ending with dry tanks and depending on rocket juice and the nose units to cushion a cold-jet landing. Risky.

Not that I cared. Somewhere below me, shortly after I set the autopilot on the indicated course and speed, analyzers in the cybernetwork would be telling their human operators that I was attempting to escape to the Free State of Hawaii, on such a course, such an altitude, and at max speed for that range… and that I would pass over the Pacific coast between San Francisco and Monterey in sixty-odd minutes unless intercepted. But interception was certain. Even if they were still playing with me, cat and mouse, ground-to-air snarlers would rise up from the Sacramento Valley. If they missed (most unlikely!), manned ships as fast or faster than my baby, with full tanks and no need to conserve radius, would be waiting at altitude at the coast. I had no hope of running that gauntlet.

Nor did I intend to. I *wanted* them to destroy the little honey I was pushing, destroy her completely and in the air—because I had no intention of being aboard when it happened.

Operation Chucklehead, phase two: how to get out of the durn thing!

Leaving a jet plane in powered flight has all been figured out by careful engineers; you slap the jetison lever and pray; the rest is done for you. The survival capsule closes down on you and seals, then the capsule with you in it is shot clear of the ship. In due course, at proper pressure and terminal air speed, the drogue is fired; it pulls your chute open, and there you are, floating comfortably toward God's good earth, with your emergency oxygen bottle for company.

There is only one hitch: both the capsule and the abandoned ship start sending out radio signals, dots for the capsule, dashes for the ship, and, for good measure, the capsule has a builtin radar-beacon.

The whole thing is about as inconspicuous as a cow in church.

I sat there chewing my thumb and staring out ahead. It seemed to me that the yonder was looking even wilder and bluer than usual—my own mood, no doubt, for I knew that thirteen ground miles were slipping out from under me each minute and that it was high time for me to find my hat and go home. Of course, there was a door right alongside me; I could strap on a chute and leave. But you can't open a door in a ram-jet plane in powered flight; nor do you jettison it—to do so will cause the plane to behave like a kicked pup. Nor is an eight-hundred-mile-an-hour breeze to be ignored even at 60,000 feet; I'd be sliced like butter on the door frame.

The answer depended on how good an autopilot this buggy had. The better robopilots could do everything but sing hymns; some of the cheaper ones could hold course, speed, and altitude but there their talents ended. In particular I wanted to know whether or not this autopilot had an emergency circuit to deal with a case of “fire out,” for I intended to stop the ship, step out, and let the ship continue on in the direction of Hawaii by itself—if it could.

A ram jet won’t operate at all except at high speed; that’s why ram ships have rocket power as well, else they could never take off. If you drop below the critical speed of your jet engines your fire goes out, then you must start it again, either by rocket power or by diving to gain speed. It is a touchy business and a number of ram-jet pilots have been gathered to their heavenly reward through an unexpected case of “fire out.”

My earlier experience with the courier *Sparrow Hawk* told me nothing, as you don’t use autopilots in sky polo. Believe me, you don’t. So I looked for the instruction manual in the glove compartment, failed to find it, then looked over the pilot itself. The data plate failed to say. No doubt, with a screw driver and plenty of time, I could have opened it, worried out the circuits and determined the fact—say in about a day and a half; those autopilots are a mass of transistors and spaghetti.

So I pulled the personal chute out of its breakaway clips and started shrugging my way into it while sighing, “Pal, I *hope* you have the necessary gimmick built into your circuits.” The autopilot didn’t answer, though I wouldn’t have been much surprised if it had. Then I squeezed back into place and proceeded to override the autopilot manually. I didn’t have too much time;

I was already over the Deseret basin and I could see the setting sun glinting on the waters of the Great Salt Lake ahead and to the right.

First I took her down some, because 60,000 feet is thin and chilly —too little partial pressure of oxygen for the human lung. Then I started up in a gentle curving climb that would neither tear her wings off nor gee me into a blackout. I had to take her fairly high, because I intended to cut out the rocket motors entirely and force my best girl to light her stovepipes by diving for speed, it being my intention to go into a vertical stall, which would create “fire out”—and get off in a hurry at that point. For obvious reasons I did not want the rocket motors to cut loose just as I was trying to say good-by.

I kept curving her up until I was lying on my back with the earth behind me and sky ahead. I nursed it along, throttling her down, with the intention of stalling with the fire dead at thirty thousand feet—still thin but within jumping distance of breathable air and still high enough to give my lady a chance to go into her dive without cracking up on the Utah plateau. At about 28,000 I got that silly, helpless feeling you get when the controls go mushy and won't bite. Suddenly a light flashed red on the instrument board and both fires were out. It was time to leave.

I almost forgot the seat bottle. I was still stuffing the mouthpiece between my teeth and snapping the nosepiece over my nose while I was trying with the other hand to get the door open—all of this greatly impeded by the fact that the ship and I together were effectively in free fall; the slight air drag at the top of the stall trajectory made me weigh a few ounces, no more.

The door would not open. I finally remembered to slap the spill valve, then it came open and I was almost snatched outside. I hung there for a second or two, while the ground spun crazily overhead, then the door slammed shut and latched—and I shoved myself away from the plane. I didn't jump—we were falling together, I shoved.

I may have banged my head against a wing. In any case there is a short blank in my memory before I found myself sitting on space about twenty-five yards from the ship. She was spinning slowly and earth and sky were revolving lazily around me. There was a thin cold wind as I fell but I was not yet aware of the cold. We stayed pretty well together for a few moments— or hours; time had stopped—then the ship straightened out into a dive and pulled away fr6m me.

I tried to follow her down by eye and became aware of the icy wind of my fall. My eyes hurt and I remembered something I had read about frozen eyeballs; I covered them with both hands. It helped a lot.

Suddenly I became frightened, panicky at the thought that I had delayed the jump too long and was about to smash into the desert floor. I uncovered my eyes and sneaked a look.

No, the ground was still a long way off, two or three miles perhaps. My guess was not worth much as it was already dark down there. I tried to catch sight of the ship, could not see it, then suddenly spotted it as her fires came on. I risked frozen eyes and watched, exultation in my heart. The autopilot did indeed have built into it the emergency circuit for "fire out" and everything was proceeding according to plan. The little sweetheart leveled off, headed west on course, and began to climb for the altitude she had been told to use. I sent a prayer after her that she would win through and end up in the clean Pacific, rather than be shot down.

I watched her glowing tailpipes out of sight while I continued to fall.

The triumph of my little ship had made me forget to be scared. I had known when I bailed out that it would have to be a delayed jump. My own body, in leaving the ship, would make a secondary blip on the screen of anything tracking the ship; my only hope of convincing the trackers that what they had witnessed was a real emergency—"fire out"—lay in getting away from the ship quickly and then in not being spotted on the way down. That meant that I must fall rapidly right out of the picture and not pull the rip cord until I was close to the ground, in visual darkness and in ground radar shadow.

But I had never made a delayed jump before; in fact I had jumped only twice, the two easy practice jumps under a jumpmaster which are required of every cadet in order to graduate. I wasn't especially uncomfortable as long as I kept my eyes closed, but I began to get a truly overpowering urge to pull that rip cord. My hand went to the handle and gripped it. I told myself to let go but I couldn't make myself do it. I was still much too high, dead sure to be spotted if I broke out that great conspicuous bumbershoot and floated down the rest of the way.

I had intended to rip the chute out somewhere between one thousand and five hundred feet above ground, but my nerve played out and I couldn't wait that long. There was a large town almost under me-Provo, Utah, by what I remembered of the situation from higher up. I convinced myself that I had to pull the rip cord to keep from landing right in the city.

I remembered just in time to remove the oxygen face piece, thereby avoiding a mouthful of broken teeth most likely, for I had never gotten around to strapping the bottle to me; I had been holding it in my left hand all the way down. I suppose I could have taken time even then to secure it, but what I did was to throw it in the general direction of a farm, hoping that it would land on plowed ground rather than on some honest citizen's skull. Then I pulled the handle.

For the horrible split second I thought that I had a faultily-packed chute. Then it opened and knocked me out-or I fainted with fright. I came to, hanging in the harness with the ground swinging and turning slowly beneath me. I was still too high up and I seemed to be floating toward the lights of Provo. So I took a deep breath—real air tasted good after the canned stuff-gathered a double handful of shrouds and spilled some wind.

I came down fast then and managed to let go just in time to get full support for the landing. I couldn't see the ground well in the evening darkness but I knew it was close; I gathered up my knees just as it says in the manual, then took it rather unexpectedly, stumbling, falling, and getting tangled in the chute. It is supposed to be equal to a fourteen-foot free jump; all I can say is it seems like more.

Then I was sitting on my tail in a field of sugar beets, and rubbing my left ankle.

Spies always bury their parachutes so I suppose I should have buried mine. But I didn't feel up to it and I didn't have any tools; I stuffed it into a culvert I found running under the road that edged the field, then started slogging that road toward the lights of Provo. My nose and right ear had been bleeding and the blood was dry on my face; I was covered with dirt, I had split my trousers, my hat was the Lord knows where—Denver, maybe, or over Nevada—, my left ankle seemed slightly sprained, my right hand was badly skinned, and I had had a childish accident. I felt swell.

I could hardly keep from whistling as I walked, I felt so good. Sure, I was still hunted, but the Prophet's proctors thought I was still high in the sky and headed for Hawaii. At least I hoped they believed that and, in any case, I was still free, alive, and reasonably intact. If one has to be hunted, Utah was a better place for it than most; it had been a center of heresy and schism ever since the suppression of the Mormon church, back in the days of the First Prophet. If I could keep out of the direct sight of the Prophet's police, it was unlikely that any of the natives would turn me in.

Nevertheless I lay flat in the ditch every time a truck or a ground car came along and I left the road and took to the fields again before it entered the city proper. I swung wide and entered by a dimly lighted side street. It lacked two hours of curfew; I needed to carry out the first part of my plan before the night patrol took to the streets.

I wandered around dark residential streets and avoided any direct encounters with people for most of an hour before finding what I wanted— some sort of a flier I could steal. It turned out to be a Ford family skycar, parked in a vacant lot. The house next to it was dark.

I sneaked up to it, keeping to the shadows, and broke my penknife jimmying the door—but I got it open. The ignition was locked, but I had not expected that sort of luck twice. I had had an extremely practical education at taxpayers' expense which included detailed knowledge of I.C. engines, and this time there was no hurry; it took me twenty minutes, working in the dark, to short around the lock.

After a quick reconnoitre of the street I got in and started the electric auxiliary and glided quietly into the street, then rounded a corner before turning on the car's lights. Then I drove away as openly as a farmer returning from prayer meeting in town. Nevertheless I was afraid of running into a police check point at the city limits, so as soon as the houses thinned out I ran the car into the first open field and went on well away from the road-then unexpectedly dropped a front wheel into an irrigation ditch. That determined my takeoff point.

The main engine coughed and took hold; the rotor unfolded its airfoils with a loud creak. She was sloppy on the takeoff, being canted over into the ditch, but she made it. The ground dropped away.

Chapter 9

The car I had stolen was a jalopy, old, not properly kept up, a bad valve knock in the engine, and a vibration in the rotor that I didn't like at all. But she would run and she had better than half a tank of fuel, enough to get me to Phoenix. I couldn't complain.

Worst was a complete lack of any navigating equipment other than an oldstyle uncompensated Sperry robot and a bundle of last year's strip maps of the sort the major oil companies give away. There was radio, but it was out of order.

Well, Columbus got by with less. Phoenix was almost due south and almost five hundred miles away. I estimated my drift by crossing my eyes and praying, set the robot on course and set her to hold real altitude of five hundred feet. Any more might get me into the cybernetwork; any less might get some local constable annoyed with me. I decided that running lights were safer than no running lights, this being no time to pick up a ticket, so I switched them on to "dim." After that I took a look around.

No sign of pursuit to the north—apparently my latest theft had not been noticed as yet. As for my first—well, the sweet darling was either shot down by now or far out over the Pacific. It occurred to me that I was hanging up quite a record for a mother's boy—accessory before and after the fact in murder, perjury before the Grand Inquisitor, treason, impersonation, grand larceny twice. There was still arson, and barratry, whatever that was, and rape. I decided I could avoid rape, but barratry I might manage, if I could find out what it meant. I still felt swell even though my nose was bleeding again.

It occurred to me that marrying a holy deaconess might be considered statutory rape under the law and that made me feel better; by then I didn't want to miss anything.

I stayed at the controls, overriding the pilot and avoiding towns, until we were better than a hundred miles south of Provo. From there south, past the Grand Canyon and almost to the ruins of the old "66" roadcity, people are awfully scarce; I decided that I could risk some sleep. So I set the pilot on eight hundred feet, ground altitude, told it firmly to watch out for trees and bluffs, went back to the after passenger bench and went at once to sleep.

I dreamt that the Grand Inquisitor was trying to break my nerve by eating juicy roast beef in my presence. "Confess!" he said, as he stabbed a bite and chewed. "Make it easy on yourself. Will you have some rare, or the slice off the end?" I was about to confess, too, when I woke up.

It was bright moonlight and we were just approaching the Grand

Canyon. I went quickly to the controls and overrode the order about altitude—I was afraid that the simple little robot might have a nervous breakdown and start shedding capacitances in lieu of tears if it tried to hold the ship just eight hundred feet away from that Gargantuan series of ups and downs and pinnacles.

In the meantime I was enjoying the view so much that I forgot that I was starving. If a person hasn't seen the Canyon, there is no point in describing it—but I strongly recommend seeing it by moonlight from the air.

We sliced across it in about twenty minutes and I turned the ship back to automatic and started to forage, rummaging through the instrument panel compartment and the lockers. I turned up a chocolate almond bar and a few peanuts, which was a feast as I was ready for raw skunk… I had eaten last in Kansas City. I polished them off and went back to sleep.

I don't recall setting the pilot alarm but must have done so for it woke me up just before dawn. Dawn over the desert was another highpriced tourist item but I had navigating to do and could not spare it more than a glance. I turned the crate at right angles for a few minutes to check drift and speed made good over ground to south, then figured a bit on the edge of a strip map. With luck and assuming that my guesses about wind were about right, Phoenix should show up in about half an hour.

My luck held. I passed over some mighty rough country, then suddenly, spread out to the right, was a wide flat desert valley, green with irrigated crops and with a large city in it—the Valley of the Sun and Phoenix. I made a poor landing in a boxed-in, little dry arroyo leading into the Salt River Canyon; I tore off one wheel and smashed the rotor but I didn't care—the important thing was that it wasn't likely to be found there very soon, it and my fingerprints… Reeves' prints, I mean. Half an hour later, after picking my way around enormous cacti and still bigger red boulders, I came out on the highway that leads down the canyon and into Phoenix.

It was going tp be a long walk into Phoenix, especially with one sore ankle, but I decided not to risk hitching a ride. Traffic was light and I managed to get off the road and hide each time for the first hour. Then I was caught on a straight up-and-down piece by a freighter; there was nothing to do but give the driver a casual wave as I flattened myself to the rock wall and pretend to be nonchalant. He brought his heavy vehicle to a quick, smooth stop. "Want a lift, bud?"

I made up my mind in a hurry. "Yes, thanks!"

He swung a dural ladder down over the wide tread and I climbed into the cab. He looked me over. "Brother!" he said admiringly. "Was it a mountain lion, or a bear?"

I had forgotten how I looked. I glanced down at myself. “Both,” I answered solemnly. “Strangled one in each hand.”

“I believe it.”

“Fact is,” I added, “I was riding a unicycle and bounced it off the road. On the high side, luckily, but I wrecked it.”

“A unicycle? On *this* road? Not all the way from Globe?”

“Well, I had to get off and push at times. It was the down grade that got me, though.”

He shook his head. “Let’s go back to the lion-and-bear theory. I like it better.” He didn’t question me further, which suited me. I was beginning to realize that offhand fictions led to unsuspected ramifications; I had never been over the road from Globe.

Nor had I ever been inside a big freighter before and I was interested to see how much it resembled, inside, the control room of an Army surface cruiser—the same port and starboard universal oleo speed gears controlling the traction treads, much the same instrument board giving engine speed, port and starboard motor speeds, torque ratios, and so forth. I could have herded it myself.

Instead I played dumb and encouraged him to talk. “I’ve never been in one of these big babies before. Tell me how it works, will you?”

That set him off and I listened with half an ear while thinking about how I should tackle Phoenix. He demonstrated how he applied both power and steering to the treads simply by tilting the two speed bars, one in each fist, and then discussed the economy of letting the diesel run at constant speed while he fed power as needed to the two sides. I let him talk— my first need was a bath and a shave and a change of clothes, that was sure; else I’d be picked up on sight for suspected vagrancy.

Presently I realized he had asked a question. “I think I see,” I answered. “The Waterburies drive the treads.”

“Yes and no,” he went on. “It’s a diesel-electric hook up. The Waterburies just act like a gear system, although there aren’t any gears in them; they’re hydraulic. Follow me?”

I said I thought so (I could have sketched them)—and filed away in my mind the idea that, if the Cabal should ever need cruiser pilots in a hurry, freighter jacks could be trained for the job in short order.

We were going downhill slightly even after we left the canyon; the miles flowed past. My host pulled off the road and ground to a stop by a roadside restaurant and oil station. “All out,” he grunted. “Breakfast for us and go-juice for the go-buggy.”

“Sounds good.” We each consumed a tall stack with eggs and bacon and big, sweet Arizona grapefruit. He wouldn’t let me pay for his and tried to pay for mine. As we went back to the freighter he stopped at the ladder and looked me over.

“The police gate is about three-quarters of a mile on in,” he said softly.

“I suppose that’s as good a spot to check in as any.” He looked at me and glanced away.

“Mmm…” I said. “I think I could stand to walk the rest of the way, to settle my breakfast. Thanks a lot for the lift.”

“Don’t mention it. Uh, there’s a side road about two hundred yards back. It swings south and then west again, into town. Better for walking. Less traffic.”

“Uh, thanks.”

I walked back to the side road, wondering if my criminal career was that plain to everyone. One thing sure, I *had* to improve my appearance before tackling the city. The side road led through ranches and I passed several ranch houses without having the nerve to stop. But I came presently to a little house occupied by a Spanish-Indian family with the usual assortment of children and dogs. I took a chance; many of these people were clandestine Catholics, I knew, and probably hated the proctors as much as I did.

The Sefiora was home. She was fat and kindly and mostly Indian by her appearance. We couldn’t talk much as my Spanish is strictly classroom quality, but I could ask for *agua*, and *agua* I got, both to drink and to wash myself. She sewed up the rip in my trousers while I stood foolishly in my shorts with the children making comments; she brushed me off and she even let me use her husband’s razor. She protested over letting me pay her but I was firm about it. I left there looking passable.

The road swung back into town as the freighter jack had said—and without benefit of police. Eventually I found a neighborhood shopping center and in it a little tailor shop. There I waited while the rest of my transformation back to respectability was completed. With my clothes freshly pressed, the spots removed, a brand-new shirt and hat I was then able to walk down the street and exchange a blessing with any proctor I might meet while looking him calmly in the eye. A phone book gave me the address of the South Side Tabernacle; a map on the wall of the tailor shop got me oriented without asking questions. It was within walking distance.

I hurried down the street and reached the church just as eleven o’clock services were starting. Sighing with relief I slipped into a back pew and actually enjoyed i the services, just as I had as a boy, before I had learned what was back of them. I felt peaceful and secure; in spite of everything I had made it safely. I let the familiar music soak into my soul while I looked forward to revealing myself to the priest afterwards and then let him do the worrying for a while.

To tell the truth I went to sleep during the sermon. But I woke up in time and I doubt if anyone noticed. Afterwards I hung around, waited for a chance to speak to the priest, and told him how much I had enjoyed his sermon. He shook hands and I gave him the recognition grip of the brethren.

But he did not return it. I was so upset by that that I almost missed what he was saying. “Thank you, my boy. It’s always good news to a new pastor to hear that his ministrations are appreciated.”

I guess my face gave me away. He added, “Something wrong?”

I stammered, “Oh, no, reverend sir. You see, I’m a stranger myself. Then you aren’t the Reverend Baird?” I was in cold panic. Baird was my only contact with the brethren short of New Jerusalem; without someone to hide me I would be picked up in a matter of hours. Even as I answered I was making wild plans to steal another ship that night and then try to run the border patrol into Mexico.

His voice cut into my thoughts as if from a great distance. “No, I’m afraid not, my son. Did you wish to see the Reverend Baird?”

“Well, it wasn’t terribly important, sir. He is an old friend of my uncle. I was to look him up while I was here and pay my respects.” Maybe that nice Indian woman would hide me until dark?

“That won’t be difficult. He’s here in town. I’m just supplying his pulpit while he is laid up.”

My heart made a full turn at about twelve gee; I tried to keep it out of my face. “Perhaps if he is sick I had better not disturb him.”

“Oh, not at all. A broken bone in his foot—he’ll enjoy a bit of company. Here.” The priest fumbled under his robes, found a piece of paper and a pencil and wrote out the address. “Two streets over and half a block down. You can’t miss it.”

Of course I did miss it, but I doubled back and found it, an old vine-grown house with a suggestion of New England about it. It was set well back in a large, untidy garden—eucalyptus, palms, shrubs, and flowers, all in pleasant confusion. I pressed the announcer and heard the whine of an oldstyle scanner; a speaker inquired: “Yes?”

“A visitor to see the Reverend Baird, if he so pleases.”

There was a short silence while he looked me over, then: “You’ll have to let yourself in. My housekeeper has gone to the market. Straight through and out into the back garden.” The door clicked and swung itself open.

I blinked at the darkness, then went down a central hallway and out through the back door. An old man was lying in a swing there, with one foot propped up on pillows. He lowered his book and peered at me over his glasses.

“What do you want of me, son?”

“Light.”

An hour later I was washing down the last of some superb enchiladas with cold, sweet milk. As I reached for a cluster of muscatel grapes Father Baird concluded his instructions to me. “Nothing to do until dark, then. Any questions?”

“I don’t think so, sir. Sanchez takes me out of town and delivers me to certain others of the brethren who will see to it that I get to General Headquarters. My end of it is simple enough.”

“True. You won’t be comfortable however.”

I left Phoenix concealed in a false bottom of a little vegetable truck. I was stowed like cargo, with my nose pressed against the floor boards. We were stopped at a police gate at the edge of town; I could hear brusque voices with that note of authority, and Sanchez‘ impassioned Spanish in reply. Someone rummaged around over my head and the cracks in the false bottom gleamed with light.

Finally a voice said, “It’s okay, Ezra. That’s Father Baird’s handyman. Makes a trip out to the Father’s ranch every night or so.”

“Well, why didn’t he say so?”

“He gets excited and loses his English. Okay. Get going, chico. Vaya usted con Dios.”

“Gracias, senores. Buenas noches.”

At the Reverend Baird’s ranch I was transferred to a helicopter, no rickety heap this time, but a new job, silent and well equipped. She was manned by a crew of two, who exchanged pass grips with me but said nothing other than to tell me to get into the passenger compartment and stay there. We took off at once.

The windows of the passenger space had been covered; I don’t know which way we went, nor how far. It was a rough ride, as the pilot seemed dead set on clipping daisies the whole way. It was a reasonable precaution to avoid being spotted in a scope, but I hoped he knew what he was doing—I wouldn’t want to herd a heli that way in broad daylight. He must have scared a lot of coyotes—I know he frightened me.

At last I heard the squeal of a landing beam. We slid along it, hovered, and bumped gently to a stop. When I got out I found myself staring into the maw of a tripod-mounted blaster backed up by two alert and suspicious men.

But my escort gave the password, each of the guards questioned me separately, and we exchanged recognition signals. I got the impression that they were a little disappointed that they couldn’t let me have it; they seemed awfully eager. When they were satisfied, a hoodwink was slipped over my head and I was led away. We went through a door, walked maybe fifty yards, and crowded into a compartment. The floor dropped away.

My stomach ‘caught up with me and I groused to myself because I hadn't been warned that it was an elevator, but I kept my mouth shut. We left the lift, walked a way, and I was nudged onto a platform of some sort, told to sit down and hang on—whereupon we lurched away at breakneck speed. It felt like a rollercoaster—not a good thing to ride blindfolded. Up to then I hadn't really been scared. I began to think that the hazing was intentional, for they could have warned me.

We made another elevator descent, walked several hundred paces, and my hoodwink was removed. I caught my first sight of General Headquarters.

I didn't recognize it as such; I simply let out a gasp. One of my guards smiled. "They all do that," he said dryly.

It was a limestone cavern so big that one felt outdoors rather than underground and so magnificently lavish in its formations as to make one think of fairyland, or the Gnome King's palace. I had assumed that we were underground from the descents we had made, but nothing had prepared me for what I saw.

I have seen photographs of what the Carlsbad Caverns used to be, before the earthquake of '96 destroyed them; General Headquarters was something like that, although I can't believe that the Carlsbad Caverns were as big or half as magnificent. I could not at first grasp the immensity of the room I was in; underground there is nothing to judge size by and the builtin range-finder of a human's two-eyed vision is worthless beyond about fifty feet without something in the distance to give him scale—a house, a man, a tree, even the horizon itself. Since a natural cave contains nothing at all that is well known, customary, the human eye can't size it.

So, while I realized that the room I stood in was big, I could not guess just how big; my brain scaled it down to fit my prejudices. We were standing higher than the main floor and at one end of the room; the whole thing was softly floodlighted.. I got through craning my neck and ofting and dhing, looked down and saw a toy village some distance away below us. The little buildings seemed to be about a foot high.

Then I saw tiny people walking around among the buildings—and the whole thing suddenly snapped into scale. The toy village was at least a quarter of a mile away; the whole room was not less than a mile long and many hundreds of feet high. Instead of the fear of being shut in that people normally experience in caves I was suddenly hit by the other fear, the fear of open spaces, agoraphobia. I wanted to slink along close to the walls, like a timid mouse.

The guide who had spoken touched my arm. "You'll have plenty of time for rubbernecking later. Let's get going." They led me down a path which meandered between stalagmites, from baby-finger size to Egyptian pyramids, around black pools of water with lilypads of living stone growing on them, past dark wet domes that were old when man was new, under creamy translucent curtains of onyx and sharp rosy-red and dark green stalactites. My capacity to wonder began to be overloaded and presently I quit trying.

We came out on a fairly level floor of bat droppings and made good time to the village. The buildings, I saw as I got closer, were not buildings in the outdoors sense, but were mere partitions of that honeycomb plastic used for sound-deadening—space separators for efficiency and convenience. Most of them were not roofed. We stopped in front of the largest of these pens; the sign over its door read ADMINISTRATION. We entered and I was taken into the personnel office. This room almost made me homesick, so matter of fact, so professionally military was it in its ugly, efficient appointments. There was even the elderly staff clerk with the nervous sniff who seems to be general issue for such an office since the time of Caesar. The sign on his desk described him as Warrant Officer R. E. Giles and he had quite evidently come back to his office after working hours to check me in.

“Pleased to meet you, Mr. Lyle,” he said, shaking hands and exchanging recognition. Then he scratched his nose and sniffed. “You’re a week or so early and your quarters aren’t ready. Suppose we billet you tonight with a blanket roll in the lounge of B.O.Q. and get you squared away in the morning?”

I said that would be perfectly satisfactory and he seemed relieved.

Chapter 10

I guess I had been expecting to be treated as some sort of a conquering hero on my arrival—you know, my new comrades hanging breathlessly on every word of my modest account of my adventures and hairbreadth escapes and giving thanks to the Great Architect that I had been allowed to win through with my all-important message.

I was wrong. The personnel adjutant sent for me before I had properly finished breakfast, but I didn't even see him; I saw Mr. Giles. I was a trifle miffed and interrupted him to ask how soon it would be convenient for me to pay my formal call on the commanding officer.

He sniffed. "Oh, yes. Well, Mr. Lyle, the C.G. sends his compliments to you and asks you to consider that courtesy calls have been made, not only on him but on department heads. We're rather pushed for time right now. He'll send for you the first spare moment he has."

I knew quite well that the general had not sent me any such message and that the personnel clerk was simply following a previously established doctrine. It didn't make me feel better.

But there was nothing I could do about it; the system took me in hand. By noon I had been permanently billeted, had had my chest thumped and so forth, and had made my reports. Yes, I got a chance to tell my story— to a recording machine. Flesh-and-blood men did receive the message I carried, but I got no fun out of that; I was under hypnosis at the time, just as I had been when it was given to me.

This was too much for me; I asked the psychotechnician who operated me what the message was I carried. He answered stiffly, "We aren't permitted to tell couriers what they carry." His manner suggested that my question was highly improper.

I lost my temper a bit. I didn't know whether he was senior to me or not as he was not in uniform, but I didn't care. "For pity's sake! What is this? Don't the brethren *trust* me? Here I risk my neck—"

He cut in on me in a much more conciliatory manner. "No, no, it's not that at all. It's for your protection."

"Huh?"

"Doctrine. The less you know that you don't need to know the less you can spill if you are ever captured—and the safer it is for you and for everybody. For example, do you know where you are now? Could you point it out on a map?"

"No."

"Neither do I. We don't need to know so we weren't told. However," he went on, "I don't mind telling you, in a general way, what you were carrying—just routine reports, confirming stuff we already had by sensitive circuits mostly. You were coming this way, so they dumped a lot of such stuff into you. I took three spools from you."

"Just routine stuff? Why, the Lodge Master told me I was carrying a message of vital importance. That fat old joker!"

The technician grudged a smile. "I'm afraid he was pulling— Oh!"

"Eh?"

"I know what he meant. You were carrying a message of vital importance —to you. You carried your own credentials hypnotically. If you had not been, you would never have been allowed to wake up."

I had nothing to say. I left quietly.

My rounds of the medical office, psych office, quartermaster, and so forth had begun to give me a notion of the size of the place. The "toy village" I had first seen was merely the administrative group. The power plant, a packaged pile, was in a separate cavern with many yards of rock wall as secondary shielding. Married couples were quartered where they pleased— about a third of us were female—and usually chose to set up their houses (or pens) well away from the central grouping. The armory and ammo dump were located in a side passage, a safe distance from offices and quarters.

There was fresh water in abundance, though quite hard, and the same passages that carried the underground streams appeared to supply ventilation—at least the air was never stale. It stayed at a temperature of 69.6 Fahrenheit and a relative humidity of 32%, winter and summer, night and day.

By lunchtime I was hooked into the organization, and found myself already hard at work at a temporary job immediately after lunch—in the armory, repairing and adjusting blasters, pistols, squad guns, and assault guns. I could have been annoyed at being asked, or ordered, to do what was really gunnery sergeant work, but the whole place seemed to be run with a minimum of protocol—we cleared our own dishes away at mess, for example. And truthfully it felt good to sit at a bench in the armory, safe and snug, and handle calipers and feather gauges and drifts again—good, useful work.

Just before dinner that first day I wandered into the B.O.Q. lounge and looked around for an unoccupied chair. I heard a familiar baritone voice behind me: "Johnnie! John Lylel" I whirled around and there, hurrying toward me, was Zebadiah Jones—good old Zeb, large as life and his ugly face split with a grin.

We pounded each other on the back and swapped insults. "When did you get here?" I finally asked him.

"Oh, about two weeks ago."

"You did? You were still at New Jerusalem when I left. How did you do it?"

“Nothing to it. I was shipped as a corpse—in a deep trance. Sealed up in a coffin and marked ‘contagious’.”

I told him about my own mixed-up trip and Zeb seemed impressed, which helped my morale. Then I asked him what he was doing.

“I’m in the Psych & Propaganda Bureau,” he told me, “under Colonel Novak. Just now I’m writing a series of oh-so-respectful articles about the private life of the Prophet and his acolytes and attending priests, how many servants they have, how much it costs to run the Palace, all about the fancy ceremonies and rituals, and such junk. All of it perfectly true, of course, and told with unctuous approval. But I lay it on a shade too thick. The emphasis is on the jewels and the solid gold trappings and how much it all costs, and I keep telling the yokels what a privilege it is for them to be permitted to pay for such frippery and how flattered they should feel that God’s representative on earth lets them take care of him.”

“I guess I don’t get it,” I said, frowning. “People like that circusy stuff. Look at the way the tourists to New Jerusalem scramble for tickets to a Temple ceremony.”

“Sure, sure—but we don’t peddle this stuff to people on a holiday to New Jerusalem; we syndicate it to little local papers in poor farming communities in the Mississippi Valley, and in the Deep South, and in the back country of New England. That is to say, we spread it among some of the poorest and most puritanical elements of the population, people who are emotionally convinced that poverty and virtue are the same thing. It grates on their nerves; in time it should soften them up and make doubters of them.”

“Do you serioüsly expect to start a rebellion with picayune stuff like that?”

“It’s not picayune stuff, because it acts directly on their emotions, below the logical level. You can sway a thousand men by appealing to their prejudices quicker than you can convince one man by logic. It doesn’t have to be a prejudice about an important matter either. Johnnie, you savvy how to use connotation indices, don’t you?”

“Well, yes and no. I know what they are; they are supposed to measure the emotional effects of words.”

“That’s true, as far as it goes. But the index of a word isn’t fixed like the twelve inches in a foot; it is a complex variable function depending on context, age and sex and occupation of the listener, the locale and a dozen other things. An index is a particular solution of the variable that tells you whether a particular word used in a particular fashion to a particular reader or type of reader will affect that person favorably, unfavorably, or simply leave him cold. Given proper measurements of the group addressed it can be as mathematically exact as any branch of engineering. We never have all the data we need so it remains an art—but a very precise art, especially as we employ ‘feedback’ through field sampling. Each article I do is a little more annoying than the last—and the reader never knows why.”

“It sounds good, but I don’t see quite how it’s done.”

“I’ll give you a gross case. Which would you rather have? A nice, thick, juicy, tender steak—or a segment of muscle tissue from the corpse of an immature castrated bull?”

I grinned at him. “You can’t upset me. I’ll take it by either name… not too well done. I wished they would announce chow around here; I’m starved.”

“You think you aren’t affected because you were braced for it. But how long would a restaurant stay in business if it used that sort of terminology? Take another gross case, the Anglo-Saxon monosyllables that naughty little boys write on fences. You can’t use them in polite company without offending, yet there are circumlocutions or synonyms for every one of them which may be used in any company.”

I nodded agreement. “I suppose so. I certainly see how it could work on other people. But personally, I guess I’m immune to it. Those taboo words don’t mean a thing to me—except that I’m reasonably careful not to offend other people. I’m an educated man, Zeb—‘Sticks and stones may break my bones, et cetera.’ But I see how you could work on the ignorant.”

Now I should know better than to drop my guard with Zeb. The good Lord knows he’s tripped me up enough times. He smiled at me quietly and made a short statement involving some of those taboo words.

“You leave my mother out of this!”

I was the one doing the shouting and I came up out of my chair like a dog charging into battle. Zeb must have anticipated me exactly and shifted his weight before he spoke, for, instead of hanging one on his chin, I found my wrist seized in his fist and his other arm around me, holding me in a clinch that stopped the fight before it started. “Easy, Johnnie,” he breathed in my ear. “I apologize. I most humbly apologize and ask your forgiveness. Believe me, I wasn’t insulting you.”

“So you say!”

“So I say, most humbly. Forgive me?”

As I simmered down I realized that my outbreak had been very conspicuous. Although we had picked a quiet corner to talk, there were already a dozen or more others in the lounge, waiting for dinner to be announced. I could feel the dead silence and sense the question in the minds of others as to whether or not it was going to be necessary to intervene. I started to turn red with embarrassment rather than anger. “Okay. Let me go.”

He did so and we sat down again. I was still sore and not at all inclined to forget Zeb’s unpardonable breach of good manners, but the crisis was past. But he spoke quietly, “Johnnie, believe me, I was not insulting you nor any member of your family. That was a scientific demonstration of the dynamics of connotational indices, and that is all it was.”

“Well-you didn’t have to make it so personal.”

“Ah, but I did have to. We were speaking of the psychodynamics of emotion… and emotions are personal, subjective things which must be experienced to be understood. You were of the belief that you, as an educated man, were immune to this form of attack-so I ran a lab test to show you that no one is immune. Now just what did I say to you?”

“You said-Never mind. Okay, so it was a test. But I don’t care to repeat it. You’ve made your point: I don’t like it.”

“But what did I say? All I said, in fact, was that you were the legitimate offspring of a legal marriage. Right? What is insulting about that?”

“But—” I stopped and ran over in my mind the infuriating, insulting, and degrading things he had said—and, do you know, that is absolutely all they added up to. I grinned sheepishly. “It was the *way* you said it.”

“Exactly, exactly! To put it technically, I selected terms with high negative indices, for this situation and for this listener. Which is precisely what we do with this propaganda, except that the emotional indices are lesser quantitatively to avoid arousing suspicion and to evade the censors—slow poison, rather than a kick in the belly. The stuff we write is all about the Prophet, lauding him to the skies… so the irritation produced in the reader is transferred to him. The method cuts below the reader’s conscious thought and acts on the taboos and fetishes that infest his subconscious.”

I remembered sourly my own unreasoned anger. “I’m convinced. It sounds like heap big medicine.”

“It is, chum, it is. There is magic in words, black magic—if you know how to invoke it.”

After dinner Zeb and I went to his cubicle and continued to bat the breeze. I felt warm and comfortable and very, very contented. The fact that we were part of a revolutionary plot, a project most unlikely to succeed and which would most probably end with us both dead in battle or burned for treason, affected< me not at all. Good old Zeb! What if he did get under my guard and hit me where it hurt? He was my “family”—all the family that I had. To be with him now made me feel the way I used to feel when my mother would sit me down in the kitchen and feed me cookies and milk.

We talked about this and that, in the course of which I learned more about the organization and discovered—was very surprised to discover—that not all of our comrades were brethren. Lodge Brothers, I mean. "But isn't that dangerous?"

"What isn't? And what did you expect, old son? Some of our most valuable comrades can't join the Lodge; their own religious faith forbids it. But we don't have any monopoly on hating tyranny and loving freedom and we need all the help we can get. Anybody going our direction is a fellow traveler. Anybody."

I thought it over. The idea was logical, though somehow vaguely distasteful. I decided to gulp it down quickly. "I suppose so. I imagine even the pariahs will be of some use to us, when it comes to the fighting, even if they aren't eligible for membership."

Zeb gave me a look I knew too well. "Oh, for Pete's sake, John! When are you going to give up wearing diapers?"

"Huh?"

"Haven't you gotten it through your head yet that the whole 'pariah' notion is this tyranny's scapegoat mechanism that every tyranny requires?"

"Yes, but-"

"Shut up. Take sex away from people. Make it forbidden, evil, limit it to ritualistic breeding. Force it to back up into suppressed sadism. Then hand the people a scapegoat to hate. Let them kill a scapegoat occasionally for cathartic release. The mechanism is ages old. Tyrants used it centuries before the word 'psychology' was ever invented. It works, too. Look at yourself."

"Look, Zeb, I don't have anything against the pariahs."

"You had better not have. You'll find a few dozen of them in the Grand Lodge here. And by the way, forget that word 'pariah.' It has, shall we say, a very high negative index."

He shut up and so did I; again I needed time to get my thoughts straight. Please understand me—it is easy to be free when you have been brought up in freedom; it is *not* easy otherwise. A zoo tiger, escaped, will often slink back into the peace and security of his bars. If he can't get back, they tell me he will pace back and forth within the limits of bars that are no longer there. I suppose I was still pacing in my conditioned pattern.

The human mind is a tremendously complex thing; it has compartments in it that its owner himself does not suspect. I had thought that I had given my mind a thorough housecleaning already and had rid it of all the dirty superstitions I had been brought up to believe. I was learning that the "housecleaning" had been no more than a matter of sweeping the dirt under the rugs—it would be years before the cleansing would be complete, before the clean air of reason blew through every room.

All right, I told myself, if I meet one of these par— no, "comrades," I'll exchange recognition with him and be polite—as long as he is polite to me! At the time I saw nothing hypocritical in the mental reservation.

Zeb lay back, smoking, and let me stew. I knew that he smoked and he knew that I disapproved. But it was a minor sin and, when we were rooming together in the Palace barracks, I would never have thought of reporting him. I even knew which room servant was his bootlegger. "Who is sneaking your smokes in now?" I asked, wishing to change the subject.

"Eh? Why, you buy them at the P.X., of course." He held the dirty thing out and looked at it. "These Mexican cigarettes are stronger than I like. I

suspect that they use real tobacco in them, instead of the bridge sweepings I'm used to. Want one?“

"Huh? Oh, no, thanks!"

He grinned wryly. "Go ahead, give me your usual lecture. It'll make you feel better."

"Now look here, Zeb, I wasn't criticizing. I suppose it's just one of the many things I've been wrong about."

"Oh, no. It's a dirty, filthy habit that ruins my wind and stains my teeth and may eventually kill me off with lung cancer." He took a deep inhalation, let the smoke trickle out of the corners of his mouth, and looked profoundly contented. "But it just happens that I *like* dirty, filthy habits."

He took another puff. "But it's not a sin and my punishment for it is here and now, in the way my mouth tastes each morning. The Great Architect doesn't give a shout in Sheol about it. Catch on, old son? He isn't even watching."

"There is no need to be sacrilegious."

"I wasn't being so."

"You weren't, eh? You were scoffing at one of the most fundamental— perhaps the one fundamental—proposition in religion: the certainty that God is watching!"

"*Who* told *you*?"

For a moment all I could do was to sputter. "Why, it isn't necessary. It's an axiomatic certainty. It's—"

"I repeat, *who* told *you*? See here, I retract what I said. Perhaps the Almighty is watching me smoke. Perhaps it is a mortal sin and I will burn for it for eons. Perhaps. But who told *you*? Johnnie, you've reached the point where you are willing to kick the Prophet out and hang him to a tall, tall tree. Yet you are willing to assert your own religious convictions and to use them as a touchstone to judge my conduct. So I repeat: who told you? What hill were you standing on when the lightning came down from Heaven and illuminated you? Which archangel carried the message?"

I did not answer at once. I could not. When I did it was with a feeling of shock and cold loneliness. "Zeb… I think I understand you at last. You are an—atheist. Aren't you?"

Zeb looked at me bleakly. "Don't call me an atheist," he said slowly, "unless you are really looking for trouble."

"Then you aren't one?" I felt a wave of relief, although I still didn't understand him.

"No, I am not. Not that it is any of your business. My religious faith is a private matter between me and my God. What my inner beliefs are you will have to judge by my actions… for you are not invited to question me about them. I decline to explain them nor to justify them to you. Nor to anyone… not the Lodge Master… nor to the Grand Inquisitor, if it comes to that."

"But you do believe in God?"

"I told you so, didn't I? Not that you had any business asking me."

"Then you must believe in other things?"

"Of course I do! I believe that a man has an obligation to be merciful to the weak… patient with the stupid… generous with the poor. I think he is obliged to lay down his life for his brothers, should it be required of him. But I don't propose to prove any of those things; they are beyond proof. And I don't demand that you believe as I do."

I let out my breath. "I'm satisfied, Zeb."

Instead of looking pleased he answered, "That's mighty kind of you, brother, mighty kind! Sorry—I shouldn't be sarcastic. But I had no intention of asking for your approval. You goaded me—accidentally, I'm sure-into discussing matters that I never intend to discuss." He stopped to light up another of those stinking cigarettes and went on more quietly. "John, I suppose that I am, in my own cantankerous way, a very narrow man myself. I believe very strongly in freedom of religion—but I think that that freedom is best expressed as freedom to keep quiet. From my point of view, a great deal of openly expressed piety is insufferable conceit."

"Huh?"

"Not every case—I've known the good and the humble and the devout. But how about the man who claims to know what the Great Architect is thinking? The man who claims to be privy to His Inner Plans? It strikes me as sacrilegious conceit of the worst sort-this character probably has never been any closer to His Trestle Board than you or I. But it makes him feel good to claim to be on chummy terms with the Almighty, it builds his ego, and lets him lay down the law to you and me. Pfui! Along comes a knothead with a loud voice, an I.Q. around 90, hair in his ears, dirty underwear, and a lot of ambition. He's too lazy to be a farmer, too stupid to be an engineer, too unreliable to be a banker—but, brother, can he pray! After a while he has gathered around him other knotheads who don't have his vivid imagination and self-assurance but like the idea of having a direct line to Omnipotence. Then this character is no longer Nehemiah Scudder but the First Prophet."

I was going along with him, feeling shocked but rather pleasantly so, until he named the First Prophet. Perhaps my own spiritual state at that time could have been described as that of a "primitive" follower of the First Prophet—that is to say, I had decided that the Prophet Incarnate was the devil himself and that all of his works were bad, but that belief did not affect the basics of the faith I had learned from my mother. The thing to do was to purge and reform the Church, not to destroy it. I mention this because my own case paralleled a very serious military problem that was to develop later.

I found that Zeb was studying my face. "Did I get you on the raw again, old fellow? I didn't mean to."

"Not at all," I answered stiffly, and went on to explain that, in my opinion, the sinfulness of the present gang of devils that had taken over the Church in no way invalidated the true faith. "After all, no matter what you think nor how much you may like to show off your cynicism, the doctrines are a matter of logical necessity. The Prophet Incarnate and his cohorts can pervert them, but they can't destroy them—and it doesn't matter whether the real Prophet had dirty underwear or not."

Zeb sighed as if he were very tired. "Johnnie, I certainly did not intend to get into an argument about religion with you. I'm not the aggressive type—you know that. I had to be pushed into the Cabal." He paused. "You say the doctrines are a matter of logic?"

"You've explained the logic to me yourself. It's a perfect, consistent structure."

"So it is. Johnnie, the nice thing about citing God as an authority is that you can prove anything you set out to prove. It's just a matter of selecting the proper postulates, then insisting that your postulates are 'inspired.' Then no one can possibly prove that you are wrong."

"You are asserting that the First Prophet was *not* inspired?"

"I am asserting nothing. For all you know, I am the First Prophet, come back to kick out the defilers of my temple."

"Don't be—" I was all wound up to kick it around further when there came a knock at Zeb's door. I stopped and he called out, "Come in!"

It was Sister Magdalene.

She nodded at Zeb, smiled sweetly at my open-mouthed surprise and said, “Hello, John Lyle. Welcome.” It was the first time I had ever seen her other than in the robes of a holy deaconess. She seemed awfully pretty and much younger.

“Sister Magdalene!”

“No. Staff Sergeant Andrews. ‘Maggie,’ to my friends.”

“But what happened? Why are you here?”

“Right at the moment I’m here because I heard at dinner that you had arrived. When I didn’t find you in your own quarters I concluded that you would be with Zeb. As for the rest, I couldn’t go back, any more than you or Zeb—and our hideout back in New Jerusalem was getting overcrowded, so they transferred me.”

“Well, it’s good to see you!”

“It’s good to see you, John.” She patted me on the cheek and smiled again. Then she climbed on Zeb’s bed and squatted tailor-fashion, showing a rather immodest amount of limb in the process. Zeb lit another cigarette and handed it to her; she accepted it, drew smoke deep into her lungs, and let it go as if she had been smoking all her life.

I had never seen a woman smoke—never. I could see Zeb watching me, confound him!—and I most carefully ignored it. Instead I grinned and said, “This is a *wonderful* reunion! If only—”

“I know,” agreed Maggie. “If only Judith were here. Have you heard from her yet, John?”

“Heard from her? How could I?”

“That’s right, you couldn’t—not yet. But you can write to her now.”

“Huh? How?”

“I don’t know the code number off hand, but you can drop it at my desk—I’m in G-2. Don’t bother to seal it; all personal mail has to be censored and paraphrased. I wrote to her last week but I haven’t had an answer yet.”

I thought about excusing myself at once and writing a letter, but I didn’t. It was wonderful to be with both of them and I didn’t want to cut the evening short. I decided to write before I went to bed-while realizing, with surprise, that I had been so much on the go that, so far as I could remember, I hadn’t even had time to think about Judith since… well, since Denver, at least.

But I did not get to write to her even later that night. It was past eleven o’clock and Maggie was saying something about reveille coming early when an orderly showed up: “The Commanding General’s compliments and will Legate Lyle see him at once, sir.”

I gave my hair a quick brush with Zeb’s gear and hurried away, while wishing mightily that I had something fit to report in, rather than a civilian suit much the worse for wear.

The inner sanctum was deserted and dark except for a light that I could see in the far inner office—even Mr. Giles was not at his desk. I found my way in, knocked on the door frame, stepped inside, clicked my heels and saluted. “Legate Lyle reports to the Commanding General as ordered, sir.”

An elderly man seated at a big desk with his back to me turned and looked up, and I got another surprise. “Ah, yes, John Lyle,” he said gently. He got up and came toward me, with his hand out. “It’s been a long time, hasn’t it?”

It was Colonel Huxley, head of the Department of Applied Miracles when I was a cadet—and almost my only friend among the officers at that time. Many was the Sunday afternoon that I had relaxed in his quarters, my stock unhooked, free for the moment from the pressure of discipline.

I took his hand. “Colonel—I mean ‘General,’ sir… I thought you were dead!”

“Dead colonel into live general, eh! No, Lyle, though I was listed as dead when I went underground. They usually do that when an officer disappears; it looks better. You’re dead, too-did you know?”

“Uh, no, I didn’t, sir. Not that it matters. This is wonderful, sir!”

“Good.”

“But— I mean, how did you ever—well—” I shut up.

“How did I land here and in charge at that? I’ve been a Brother since I was your age, Lyle. But I didn’t go underground until I had to —none of us do. In my case the pressure for me to join the priesthood became a bit too strong; the Superintendent was quite restless about having a lay officer know too much about the more abstruse branches of physics and chemistry. So I took a short leave and died. Very sad.” He smiled. “But sit down. I’ve been meaning to send for you all day, but it’s been a busy day. They all are.

It wasn’t until now that I’ve had time to listen to the record of your report.“

We sat down and chatted, and I felt that my cup runneth over. Huxley I respected more than any officer I had ever served under. His very presence resolved any residual doubts I might have—if the Cabal was right for him, it was right for me, and never mind the subtleties of doctrine.

At last he said, “I didn’t call you in at this late hour just to chat, Lyle. I’ve a job for you.”

“Yes, sir?”

“No doubt you’ve already noticed what a raw militia we have here. This is between ourselves and I’m not criticizing our comrades—every one of them has pledged his life to our cause, a harder thing for them to do than for you and me, and they have all placed themselves under military discipline, a thing still harder. But I haven't enough trained soldiers to handle things properly. They mean well but I am tremendously handicapped in trying to turn the organization into an efficient fighting machine. I'm swamped with administrative details. Will you help me?"

I stood up. "I shall be honored to serve with the General to the best of my ability."

"Fine! We'll call you my personal aide for the time being. That's all for tonight, Captain. I'll see you in the morning."

I was halfway out the door before his parting designation sunk in —then I decided that it was a slip of the tongue.

But it was not. I found my own office the next morning by the fact that a sign had been placed on it reading: "CAPTAIN LYLE." From the standpoint of a professional military man there is one good thing about revolutions: the opportunities for swift promotion are excellent… even if the pay is inclined to be irregular.

My office adjoined General Huxley's and from then on I almost lived in it—eventually I had a cot installed back of my desk. The very first day I was still fighting my way down a stack of papers in my incoming basket at ten at night. I had promised myself that I would find the bottom, then write a long letter to Judith. But it turned out to be a very short note, as there was a memorandum addressed to me personally, rather than to the General, at the bottom.

It was addressed to "Legate J. Lyle," then someone had scratched out "Legate" and written "Captain." It went on:

MEMORANDUM FOR ALL PERSONNEL NEWLY REPORTED

SUBJECT: Personal Conversion Report

1. You are requested and directed to write out, as fully as possible, all of the events, thoughts, considerations, and incidents which led up to your decision to join our fight for freedom. This account should be as detailed as possible and as subjective as possible. A report written hastily, too briefly, or too superficially will be returned to be expanded and corrected and may be supplemented by hypno examination.

2. This report will be treated as confidential as a whole and any portion of it may be classified secret by the writer. You may substitute letters or numbers for proper names if this will help you to speak freely, but the report must be complete.

3. No time off from regular duties is allotted for this purpose, but this report must be treated as extra-duty of highest priority. A draft of your report will be expected by *(here some one had written in a date and hour less than fortyeight hours away; I used some profane expressions under my breath.)*

BY ORDER OF THE COMMANDING GENERAL (s) M. Novak, Col., F.U.S.A. Chief of Psychology

I was considerably annoyed by this demand and decided to write to Judith first anyway. The note didn't go very well—how can one write a love letter when you know that one or more strangers will read it and that one of them will rephrase your tenderest words? Besides that, while writing to Judith, my thoughts kept coming back to that night on the rampart of the Palace when I had first met her. It seemed to me that my own personal conversion, as the nosy Colonel Novak called it, started then… although I had begun to have doubts before then. Finally I finished the note, decided not to go to bed at once but to tackle that blasted report.

After a while I noticed that it was one o'clock in the morning and I still hadn't carried my account up to the point where I was admitted to the Brotherhood. I stopped writing rather reluctantly (I found that I had grown interested) and locked it in my desk.

At breakfast the next morning I got Zebadiah aside, showed him the memorandum, and asked him about it. "What's the big idea?" I asked. "You work for this particular brass. Are they still suspicious of us, even after letting us in here?"

Zeb barely glanced at it. "Oh, that— Shucks, no. Although I might add that a spy, supposing one could get this far, would be bound to be caught when his personal story went through semantic analysis. Nobody can tell a lie that long and that complicated."

"But what's it for?"

"What do you care? Write it out—and be sure you do a thorough job. Then turn it in."

I felt myself grow warm. "I don't know as I will. I rather think I'll ask the General about it first."

"Do so, if you want to make a ruddy fool of yourself. But look, John, the psychomathematicians who will read that mess of bilge you will write, won't have the slightest interest in you as an individual. They don't even want to know who you are—a girl goes through your report and deletes all personal names, including your own, if you haven't done so yourself, and substitutes numbers… all this before an analyst sees it. You're just data, that's all; the Chief has some heap big project on the fire-I don't know what it is myself-and he is trying to gather together a large enough statistical universe to be significant."

I was mollified. "Well, why don't they say so, then? This memo is just a bald order—irritating."

Zeb shrugged. "That is because it was prepared by the semantics division. If the propaganda division had written it, you would have gotten up early and finished the job before breakfast." He added, "By the way, I hear you've been promoted. Congratulations."

"Thanks." I grinned at him slyly. "How does it feel to be junior to me, Zeb?"

"Huh? Did they bump you that far? I thought you were a captain."

"I am."

"Well, excuse me for breathing—but I'm a major."

"Oh. Congratulations."

"Think nothing of it. You have to be at least a colonel around here, or you make your own bed."

I was too busy to make my bed very often. More than half the time I slept on the couch in my office and once I went a week without bathing. It was evident at once that the Cabal was bigger and had more complicated ramifications to it than I had ever dreamed and furthermore that it was building to a crescendo. I was too close to the trees to see the woods, even though everything but the utter top-secret, burn-after-reading items passed across my desk.

I simply endeavored to keep General Huxley from being smothered in pieces of paper—and found myself smothered instead. The idea was to figure out what he would do, if he had time, and then do it for him. A person who has been trained in the principles of staff or doctrinal command can do this; the trick is to make your mind work like your boss's mind in all routine matters, and to be able to recognize what is routine and what he must pass on himself. I made my share of mistakes, but apparently not too many for he didn't fire me, and three months later I was a major with the fancy title of assistant chief of staff. Chalk most of it up to the West Point ring, of course—a professional has a great advantage.

I should add that Zeb was a short-tailed colonel by then and acting chief of propaganda, his section chief having been transferred to a regional headquarters I knew only by the code name JERICHO.

But I am getting ahead of my story. I heard from Judith about two weeks later—a pleasant-enough note but with the juice pressed out of it through rephrasing. I meant to answer her at once but actually delayed a week—it was so pesky hard to know what to say. I could not possibly tell her any news except that I was well and busy. If I had told her I loved her three times in one letter some idiot in cryptography would have examined it for "pattern" and rejected it completely when he failed to find one.

The mail went to Mexico through a long tunnel, partly artificial but mostly natural, which led right under the international border. A little electric railroad of the sort used in mines ran through this tunnel and carried not only my daily headaches in the way of official mail but also a great deal of freight to supply our fair-sized town. There were a dozen other entrances to GHQ on the Arizona side of the border, but I never knew where any of them were—it was not my pidgin. The whole area overlay a deep layer of paleozoic limestone and it may well be honeycombed from California to Texas. The area known as GHQ had been in use for more than twenty years as a hideout for refugee brethren. Nobody knew the extent of the caverns we were in; we simply lighted and used what we needed. It was a favorite sport of us troglodytes—permanent residents were “trogs”; transients were ‘T)ats“ because they flew by night—we trogs liked to go on ”spelling bees,“ picnics which included a little amateur speleology in the unexplored parts.

It was permitted by regulations, but just barely and subject to stringent safety precautions, for you could break a leg awfully easily in those holes. But the General permitted it because it was necessary; we had only such recreations as we could make ourselves and some of us had not seen daylight in years.

Zeb and Maggie and I went on a number of such outings when I could get away. Maggie always brought another woman along. I protested at first but she pointed out to me that it was necessary in order to avoid gossip… mutual chaperonage. She assured me that she was certain that Judith would not mind, under the circumstances. It was a different girl each time and it seemed to work out that Zeb always paid a lot of attention to the other girl while I talked with Maggie. I had thought once that Maggie and Zeb would marry, but now I began to wonder. They seemed to suit each other like ham and eggs, but Maggie did not seem jealous and I can only describe Zeb, in honesty, as shameless-that is, if he thought Maggie would care.

One Saturday morning Zeb stuck his head in my sweat box and said, “Spelling bee. Two o’clock. Bring a towel.”

I looked up from a mound of papers. “I doubt if I can make it,” I answered. “And why a towel?”

But he was gone. Maggie came through my office later to take the weekly consolidated intelligence report in to the Old Man, but I did not attempt to question her, as Maggie was all business during working hours—the perfect office sergeant. I had lunch at my desk, hoping to finish up, but knowing it was impossible. About a quarter of two I went in to get General Huxley’s signature on an item that was to go out that night by hypnoed courier and therefore had to go at once to psycho in order that the courier might be operated. He glanced at it and signed it, then said, “Sergeant Andy tells me you have a date.”

“Sergeant Andrews is mistaken,” I said stiffly. “There are still the weekly reports from Jericho, Nod, and Egypt to be gone over.”

“Place them on my desk and get out. That’s an order. I can’t have you going stale from overwork.”

I did not tell him that he had not even been to lodge himself in more than a month; I got out.

I dropped the message with Colonel Novak and hurried to where we always met near the women's mess. Maggie was there with the other girl—a blonde named Miriam Booth who was a clerk in Quartermaster's stores. I knew her by sight but had never spoken to her. They had our picnic lunch and Zeb arrived while I was being introduced. He was carrying, as usual, the portable flood we would use when we picked out a spot and a blanket to sit on and use as a table. "Where's your towel?" he demanded.

"Were you serious? I forgot it."

"Run get it. We'll start off along Appian Way. You can catch up. Come on, kids."

They started off, which left me with nothing but to do as I was told. After grabbing a towel from my room I dogtrotted until I had them in sight, then slowed to a walk, puffing. Desk work had ruined my wind. They heard me and waited.

We were all dressed alike, with the women in trousers and each with a safety line wrapped around the waist and torch clipped to the belt. I had gotten used to women in men's clothes, much as I disliked it—and, after all, it is impractical and quite immodest to climb around in caves wearing skirts.

We left the lighted area by taking a turn that appeared to lead into a blind wall; instead it led into a completely concealed but easily negotiated tunnel. Zeb tied our labyrinth string and started paying it out as soon as we left permanent and marked paths, as required by the standing order; Zeb was always careful about things that mattered.

For perhaps a thousand paces we could see blazes and other indications that others had been this way before, such as a place where someone had worked a narrow squeeze wider with a sledge. Then we left the obvious path and turned into a blind wall. Zeb put down the flood and turned it on. "Sling your torches. We climb this one."

"Where are we going?"

"A place Miriam knows about. Give me a leg up, Johnnie."

The climb wasn't much. I got Zeb up all right and the girls could have helped each other up, but we took them up roped, for safety's sake. We picked up our gear and Miriam led us away, each of us using his torch.

We went down the other side and there was another passage so well hidden that it could have been missed for ten thousand years. We stopped once while Zeb tied on another ball of string. Shortly Miriam said, "Slow up, everybody. I think we're there."

Zeb flashed his torch around, then set up the portable flood and switched it on. He whistled. "Whew! This is all right!"

Maggie said softly, "It's lovely." Miriam just grinned triumphantly.

I agreed with them all. It was a perfect small domed cavern, perhaps eighty feet wide and much longer. How long, I could not tell, as it curved gently away in a gloom-filled turn. But the feature of the place was a quiet, inky-black pool that filled most of the floor. In front of us was a tiny beach of real sand that might have been laid down a million years ago for all I know.

Our voices echoed pleasantly and a little bit spookily in the chamber, being broken up and distorted by stalactites and curtains hanging from the roof. Zeb walked down to the water's edge, squatted and tested it with his hand. "Not too cold," he announced. "Well, the last one in is a proctor's nark."

I recognized the old swimming hole call, even though the last time I had heard it, as a boy, it had been "last one in is a dirty pariah." But here I could not believe it.

Zeb was already unbuttoning his shirt. I stepped up to him quickly and said privately, "Zeb! Mixed bathing? You must be joking?"

"Not a bit of it." He searched my face. "Why not? What's the matter with you, boy? Afraid someone will make you do penance? They won't, you know. That's all over with."

"But-"

"But what?"

I could not answer. The only way I could make the words come out would have been in the terms we had been taught in the Church, and I knew that Zeb would laugh at me—in front of the women. Probably they would laugh, too, since they had known and I hadn't. "But Zeb," I insisted, "I *can't*. You didn't tell me… and I don't even have a bathing outfit."

"Neither do I. Didn't you ever go in raw as a kid-and get paddled for it?" He turned away without waiting for me to answer this enormity and said, "Are you frail vessels waiting on something?"

"Just for you two to finish your debate," Maggie answered, coming closer. "Zeb, I think Mimi and I will use the other side of that boulder. All right?"

"Okay. But wait a second. No diving, you both understand. And a safety man on the bank at all times—John and I will take turns."

"Pooh!" said Miriam. "I dove the last time I was here."

"You weren't with me, that's sure. No diving—or I'll warm your pants where they are tightest."

She shrugged. "All right, Colonel Crosspatch. Come on, Mag." They went on past us and around a boulder half as big as a house. Miriam stopped, looked right at me, and waggled a finger. "No peeking, now!" I blushed to my ears.

They disappeared and we heard no more of them, except for giggles. I said hurriedly, "Look. You do as you please—and on your own head be it. But I'm not going in. I'll sit here on the bank and be safety man."

"Suit yourself. I was going to match you for first duty, but nobody is twisting your arm. Pay out a line, though, and have it ready for heaving. Not that we'll need it; both the girls are strong swimmers."

I said desperately, "Zeb, I'm sure the General would forbid swimming in these underground pools."

"That's why we didn't mention it. 'Never worry the CO. unnecessarily' —standing orders in Joshua's Army, circa 1400 B.C." He went right on peeling off his clothes.

I don't know why Miriam warned me not to peek—not that I would!-for when she was undressed she came straight out from behind that boulder, not toward us but toward the water. But the flood light was full on her and she even turned toward us for an instant, then shouted, "Come on, Maggie! Zeb is going to be last if you hurry."

I did not want to look and I could not take my eyes off her. I had never seen anything remotely resembling the sight she was in my life —and only once a picture, one in the possession of a boy in my parish school and on that occasion I had gotten only a glimpse and then had promptly reported him.

But I could not stop looking, burning with shame as I was.

Zeb beat Maggie into the water—I don't think she cared. He went into the water quickly, almost breaking his own injunction against diving. Sort of a surface dive I would call it, running into the water and then breaking into a racing start. His powerful crawl was soon overtaking Miriam, who had started to swim toward the far end.

Then Maggie came out from behind the boulder and went into the water. She did not make a major evolution of it, the way Miriam had, but simply walked quickly and with quiet grace into the water. When she was waist deep, she let herself sink forward and struck out in a strong breast stroke, then shifted to a crawl and followed the others, whom I could hear but hardly see in the distance.

Again I could not take my eyes away if my eternal soul had depended on it. What is it about the body of a human woman that makes it the most terribly beautiful sight on earth? Is it, as some claim, simply a necessary instinct to make sure that we comply with God's will and replenish the earth? Or is it some stranger, more wonderful thing?

I found myself quoting: "How fair and how pleasant art thou, O love, for delights! 1

"This thy stature is like to a palm tree, and thy breasts to clusters of grapes."

Then I broke off, ashamed, remembering that the Song of Songs which is Solomon's was a chaste and holy allegory having nothing to do with such things.

I sat down on the sand and tried to compose my soul. After a while I felt better and my heart stopped pounding so hard. When they all came swimming back with Zeb in the lead, racing Miriam, I even managed to throw them a smile. It no longer seemed quite so terrible and as long as they stayed in the water the women were not shockingly exposed. Perhaps evil was truly in the eye of the beholder—in which case the idea was to keep it out of mine.

Zeb called out, "Ready to be relieved?"

I answered firmly, "No. Go ahead and have your fun."

"Okay." He turned like a dolphin and started back the other way. Miriam followed him. Maggie came in to where it was shallow, rested her finger tips on the bottom, and held facing me, with just her head and her ivory shoulders out of the inky water, while her waist-length mane of hair floated around her.

"Poor John," she said softly. "I'll come out and spell you."

"Oh, no, really!"

"Are you sure?"

"Quite sure."

"All right." She turned, flipped herself over, and started after the others. For one ghostly, magic instant she was partly out of the water.

Maggie came back to my end of the cavern about ten minutes later. "I'm cold," she said briefly, climbed out and strode quickly to the protection of the boulder. Somehow she was not naked, but merely unclothed, like Mother Eve. There is a difference—Miriam had been naked.

With Maggie out of the water and neither one of us speaking I noticed for the first time that there was no other sound. Now there is nothing so quiet as a cave; anywhere else at all there is noise, but the complete zero decibel which obtains underground if one holds still and says nothing is very different.

The point is that I should have been able to hear Zeb and Miriam swimming. Swimming need not be noisy but it can't be as quiet as a cave. I sat up suddenly and started forward—then stopped with equal suddenness as I did not want to invade Maggie's dressing room, which another dozen steps would have accomplished.

But I was really worried and did not know what to do. Throw a line? Where? Peel down and search for them? If necessary. I called out softly, "Maggie!"

"What is it, John?"

"Maggie, I'm worried."

She came at once from behind the rock. She had already pulled on her trousers, but held her towel so that it covered her from the waist up; I had the impression she had been drying her hair. "Why, John?"

"Keep very quiet and listen."

She did so. “I don’t hear anything.”

“That’s just it. We should. I could hear you all swimming even when you were down at the far end, out of my sight. Now there isn’t a sound, not a splash. Do you suppose they possibly could both have hit their heads on the bottom at the same time?”

“Oh. Stop worrying, John. They’re all right.”

“But I *am* worried.”

“They’re just resting, I’m sure. There is another little beach down there, about half as big as this. That’s where they are. I climbed up on it with them, then I came back. I was cold.”

I made up my mind, realizing that I had let my modesty hold me back from my plain duty. “Turn your back. No, go behind the boulder —I want to undress.”

“What? I tell you it’s not necessary.” She did not budge.

I opened my mouth to shout. Before I got it out Maggie had a hand over my mouth, which caused her towel to be disarranged and flustered us both. “Oh, heavens!” she said sharply. “Keep your big mouth shut.” She turned suddenly and flipped the towel; when she turned back she had it about her like a stole, covering her front well enough, I suppose, without the need to hold it.

“John Lyle, come here and sit down. Sit down by me.” She sat on the sand and patted the place by her-and such was the firmness with which she spoke that I did as I was told.

“By me,” she insisted. “Come closer. I don’t want to shout.” I inched gingerly closer until my sleeve brushed her bare arm. “That’s better,” she agreed, keeping her voice low so that it did not resound around the cavern. “Now listen to me. There are two people down there, of their own free will. They are entirely safe—I saw them. And they are both excellent swimmers. The thing for you to do, John Lyle, is to mind your own business and restrain that nasty itch to interfere.”

“I’m afraid I don’t understand you.” Truthfully, I was afraid I did.

“Oh, goodness me! See here, does Miriam mean anything to you?”

“Why, no, not especially.”

“I should think not, since you haven’t addressed six words to her since we started out. Very well, then—since you have no cause to be jealous, if two people choose to be alone, why should you stick your nose in? Understand me now?”

“Uh, I guess so.”

“Then just be quiet.”

I was quiet. She didn’t move. I was acutely aware of her nakedness-for now she was naked, though covered—and I hoped that she was not aware that I was aware.‘ Besides that I was acutely aware of being almost a participant in-well, I don’t know what. I told myself angrily that I had no right to assume the worst, like a morals proctor.

Presently I said, "Maggie…"

"Yes, John?"

"I don't understand you."

"Why not, John? Not that it is really needful."

"Uh, you don't seem to give a hoot that Zeb is down there, with Miriam -alone."

"Should I give a hoot?"

Confound the woman! She was deliberately misunderstanding me. "Well

… look, somehow I had gotten the impression that you and Zeb—I mean… well, I suppose I sort of expected that you two meant to get married, when you could."

She laughed a low chuckle that had little mirth in it. "I suppose you could have gotten that impression. But, believe me, the matter is all settled and for the best."

"Huh?"

"Don't misunderstand me. I am very fond of Zebadiah and I know he is equally fond of me. But we are both dominant types psychologically—you should see my profile chart; it looks like the Rocky Mountains! Two such people should not marry. Such marriages are *not* made in Heaven, believe me! Fortunately we found it out in time."

"Oh."

"Oh, indeed."

Now I don't know just how the next thing happened. I was thinking that she seemed rather forlorn—and the next thing I knew I was kissing her. She lay back in my arms and returned the kiss with a fervor I would not have believed possible. As for me, my head was buzzing and my eyeballs were knocking together and I couldn't have told you whether I was a thousand feet underground or on dress parade.

Then it was over. She looked up for a bare moment into my eyes and whispered, "Dear John…" Then she got suddenly to her feet, leaned over me, careless of the towel, and patted my cheek. "Judith is a very lucky girl. I wonder if she knows it."

"Maggie!" I said.

She turned away and said, without looking back, "I really must finish dressing. I'm cold."

She had not felt cold to me.

She came out shortly, fully dressed and towelling her hair vigorously. I got my dry towel and helped her. I don't believe I suggested it; the idea just took care of itself. Her hair was thick and lovely and I enjoyed doing it. It sent goose pimples over me.

Zeb and Miriam came back while I was doing so, not racing but swimming slowly; we could hear them laughing long before they were in sight. Miriam climbed out of the water as shamelessly as any harlot of Gomorrah, but I hardly noticed her. Zeb looked me in the eye and said aggressively, “Ready for your swim, chum?”

I started to say that I did not believe that I would bother and was going to make some excuse about my towel already being wet—when I noticed Maggie watching me… not saying anything but watching. I answered, “Why, surely! You two took long enough.” I called out, “Miriam! Get out from behind that rock! I want to use it.”

She squealed and giggled and came out, still arranging her clothes. I went behind it with quiet dignity.

I hope I still had quiet dignity when I came out. In any case I set my teeth, walked out and straight into the water. It was bitingly cold at first, but only for a moment. I was never varsity but I swam on my class team and I’ve even been in the Hudson on New Year’s Day. I liked that black pool, once I was in.

I just had to swim down to the other end. Sure enough, there was a little shelf beach there. I did not go up on it.

On the way back I tried to swim down to the bottom. I could not find . it, but it must have been over twenty feet down. I liked it down there-black and utterly still. Had I the breath for it, or gills, it seemed to me that it would have been a good place to stay, away from Prophets, away from Cabals, and paperwork, and worries, and problems too subtle for me.

I came up gasping, then struck out hard for our picnic beach. The girls already had the food laid out and Zeb shouted for me to hurry. Zeb and Maggie did not look up as I got out of the water, but I caught Miriam eyeing me. I don’t think I blushed. I never did like blondes anyhow. I think Lilith must have been a blonde.

Chapter 11

The Supreme Council, consisting of heads of departments, General Huxley, and a few others, met weekly or oftener to advise the General, exchange views, and consider the field reports. About a month after our rather silly escapade in the underground pool they were in session and I was with them, not as a member but as recorder. My own girl was ill and I had borrowed Maggie from G-2 to operate the voicewriter, since she was cleared for top secret. We were always terribly shorthanded of competent personnel. My nominal boss, foriexample, was Wing General Penoyer, who carried the title of Chief of Staff. But I hardly ever saw him, as he was also Chief of Ordnance. Huxley was his own chief of staff and I was sort of a glorified aide —"midshipmite, and bosun tite, and crew of the captain's gig." I even tried to see to it that Huxley took his stomach medicine regularly.

This meeting was bigger than usual. The regional commanders of Gath, Canaan, Jericho, Babylon, and Egypt were present in person; Nod and Damascus were represented by deputies—every Cabal district of the United States except Eden and we were holding a sensitive hook-up to Louisville for that command, using idea code that the sensitives themselves would not understand. I could feel the pressure of something big coming up, although

Huxley had not taken me into his confidence. The place was tyled so that a mouse couldn't have got in.

We droned through the usual routine reports. It was duly recorded that we now had eighty-seven hundred and nine accepted members, either lodge brethren or tested and bound members of the parallel military organization. There were listed as recruited and instructed more than ten times that number of fellow travelers who could be counted on to rise against the Prophet, but who had not been intrusted with knowledge of the actual conspiracy.

The figures themselves were not encouraging. We were always in the jaws of a dilemma; a hundred thousand men was a handful to conquer a continent-wide country whereas the less than nine thousand party to the conspiracy itself were 'way too many to keep a secret. We necessarily relied on the ancient cell system wherein no man knew more than he had to know and could not give away too much no matter what an inquisitor did to him— no, not even if he had been a spy. But we had our weekly losses even at this passive stage.

One entire lodge had been surprised in session and arrested in Seattle four days earlier; it was a serious loss but only three of the chairs had possessed critical knowledge and all three had suicided successfully. Prayers would be said for all of them at a grand session that night, but here it was a routine report. We had lost four hatchet men that week but twentythree assassinations had been accomplished —one of them the Elder Inquisitor for the entire lower Mississippi Valley.

The Chief of Communications reported that the brethren were prepared to disable 91% (figured on population coverage) of the radio & TV stations in the country, and that with the aid of assault groups we could reasonably hope to account for the rest—with the exception of the Voice of God station at New Jerusalem, which was a special problem.

The Chief of Combat Engineering reported readiness to sabotage the power supply of the forty-six largest cities, again with the exception of New Jerusalem, the supply of which was self-contained with the pile located under the Temple. Even there major interruption could be accomplished at distribution stations if the operation warranted the expenditure of sufficient men. Major surface transportation and freight routes could be sabotaged sufficiently with present plans and personnel to reduce traffic to 12% of normal.

The reports went on and on—newspapers, student action groups, rocket field seizure or sabotage, miracles, rumor propagation, water supply, incident incitement, counterespionage, long-range weather prediction, weapons distribution. War is a simple matter compared with revolution. War is an applied science, with well-defined principles tested in history; analogous solutions may be found from ballista to H-bomb. But every revolution is a freak, a mutant, a monstrosity, its conditions never to be repeated and its operations carried out by amateurs and individualists.

While Maggie recorded the data I was arranging it and transmitting it to the calculator room for analysis. I was much too busy even to attempt a horseback evaluation in my head. There was a short wait while the analysts finished programming and let the “brain” have it-then the remote-printer in front of me chattered briefly and stopped. Huxley leaned across me and tore off the tape before I could reach it.

He glanced at it, then cleared his throat and waited for dead silence. “Brethren,” he began, “comrades—we agreed long ago on our doctrine of procedure. When every predictable factor, calculated, discounted for probable error, weighted and correlated with all other significant factors, gave a calculated risk of two to one in our favor, we would strike. Today’s solution of the probability equation, substituting this week’s data for the variables, gives an answer of two point one three. I propose to set the hour of execution. How say you?”

It was a delayed shock; no one said anything. Hope delayed too long makes reality hard to believe—and all of these men had waited for years, some for most of a lifetime. Then they were on their feet, shouting, sobbing, cursing, pounding each others' backs.

Huxley sat still until they quieted, an odd little smile on his face. Then he stood up and said quietly, "I don't think we need poll the sentiment. I will set the hour after I have—"

"General! If you pleasel I do not agree." It was Zeb's boss, Sector General Novak, Chief of Psych. Huxley stopped speaking and the silence fairly ached. I was as stunned as the rest.

Then Huxley said quietly, "This council usually acts by unanimous consent. We have long since arrived at the method for setting the date… but I know that you would not disagree without good reason. We will listen now to Brother Novak."

Novak came slowly forward and faced them. "Brethren," he began, running his eyes over bewildered and hostile faces, "you know me, and you know I want this thing as much as you do. I have devoted the last seventeen years to it-it has cost me my family and my home. But I can't let you go ahead without warning you, when I am sure that the time is not yet. I think-no, I *know* with mathematical certainty that we are not ready for revolution." He had to wait and hold up both hands for silence; they did not want to hear him. "Hear me out! I concede that all military plans are ready. I admit that if we strike now we have a strong probability of being able to seize the country. Nevertheless we are not ready—"

"Why not?"

"—because a majority of the people still believe in the established religion, they believe in the Divine authority of the Prophet. We can seize power but we can't hold it."

"The Devil we won't!"

"*Listen* to me! No people was ever held in subjection long except through their own consent. For three generations the American people have been conditioned from cradle to grave by the cleverest and most thorough psychotechnicians in the world. They *believe*! If you turn them loose now, without adequate psychological preparation, they will go back to their chains… like a horse returning to a burning barn. We can win the revolution but it will be followed by a long and bloody civil war—which we will lose!"

He stopped, ran a trembling hand across his eyes, then said to Huxley, "That's all."

Several were on their feet at once. Huxley pounded for order, then recognized Wing General Penoyer.

Penoyer said, "I'd like to ask Brother Novak a few questions."

"Go ahead."

"Can his department tell us what percentage of the population is sincerely devout?"

Zebadiah, present to assist his chief, looked up; Novak nodded and he answered, “Sixty-two per cent, plus-or-minus three per cent.”

“And the percentage who secretly oppose the government whether we have enlisted them or not?”

“Twenty-one per cent plus, proportional error. The balance can be classed as conformists, not devout but reasonably contented.”

“By what means were the data obtained?”

“Surprise hypnosis of representative types.”

“Can you state the trend?”

“Yes, sir. The government lost ground rapidly during the first years of the present depression, then the curve flattened out. The new tithing law and to some extent the vagrancy decrees were unpopular and the government again lost ground before the curve again flattened at a lower level. About that time business picked up a little but we simultaneously started our present intensified propaganda campaign; the government has been losing ground slowly but steadily the past fifteen months.”

“And what does the first derivative show?”

Zeb hesitated and Novak took over. “You have to figure the second derivative,” he answered in a strained voice; “the rate is accelerating.”

“Well?”

The Psych Chief answered firmly but reluctantly, “On extrapolation, it will be three years and eight months before we can risk striking.”

Penoyer turned back to Huxley. “I have my answer, sir. With deep respect to General Novak and his careful scientific work, I say—win while we can! We may never have another chance.”

He had the crowd with him. “Penoyer is right! If we wait, we’ll be betrayed.”—“You can’t hold a thing like this together forever.”—“I’ve been underground ten years; I don’t want to be buried here.”—“Win… and worry about making converts when we control communications.”—“Strike now! Strike now!”

Huxley let them carry on, his own face expressionless, until they had it out of their systems. I kept quiet myself, since I was too junior to be entitled to a voice here, but I went along with Penoyer; I couldn’t see waiting nearly four years.

I saw Zeb talking earnestly with Novak. They seemed to be arguing about something and were paying no attention to the racket. But when Huxley at last held up a hand for silence Novak left his place and hurried up to Huxley’s elbow. The General listened for a moment, seemed almost annoyed, then undecided. Novak crooked a finger at Zeb, who came running up. The three whispered together for several moments while the council waited.

Finally Huxley faced them again. “General Novak has proposed a scheme which may change the whole situation. The Council is recessed until tomorrow."

Novak's plan (or Zeb's, though he never admitted authorship) required a delay of nearly two months, to the date of the annual Miracle of the Incarnation. For what was contemplated was no less than tampering with the Miracle itself. In hindsight it was an obvious and probably essential stratagem; the psych boss was right. In essence, a dictator's strength depends not upon guns but on the faith his people place in him. This had been true of Caesar, of Napoleon, of Hitler, of Stalin. It was necessary to strike first at the foundation of the Prophet's power: the popular belief that he ruled by direct authority of God.

Future generations will undoubtedly find it impossible to believe the importance, the extreme importance both to religious faith and political power, of the Miracle of Incarnation. To comprehend it even intellectually it is necessary to realize that the people literally believed that the First Prophet actually and physically returned from Heaven once each year to judge the stewardship of his Divinely appointed successor and to confirm him in his office. The people *believed* this—the minority of doubters dared not open their faces to dispute it for fear of being torn limb from limb… and I am speaking of a rending that leaves blood on the pavement, not some figure of speech. Spitting on the Flag would have been much safer.

I had believed it myself, all my life; it would never have occurred to me to doubt such a basic article of faith—and I was what is called an educated man, one who had been let into the secrets of and trained in the production of lesser miracles. I believed it.

The ensuing'two months had all the endless time-stretching tension of the waiting period while coming into range and before "Commence firing!" —yet we were so busy that each day and each hour was too short. In addition to preparing the still-more-miraculous intervention in the Miracle we used the time to whet our usual weapons to greater fineness. Zeb and his boss, Sector General Novak, were detached almost at once. Novak's orders read "-proceed to BEULAHLAND and take charge of OPERATION BEDROCK." I cut the orders myself, not trusting them to a clerk, but no one told me where Beulahland might be found on a map.

Huxley himself left when they did and was gone for more than a week, leaving Penoyer as acting C.-in-C. He did not tell me why he was leaving, of course, nor where he was going, but I could fill in. Operation Bedrock was a psychological maneuver but the means must be physical—and my boss had once been head of the Department of Applied Miracles at the Point. He may have been the best physicist in the entire Cabal; in any case I could guess with certainty that he intended at the very least to see for himself that the means were adequate and the techniques foolproof. For all I know he may actually have used soldering iron and screwdriver and electronic micrometer himself that week—the General did not mind getting his hands dirty.

I missed Huxley personally. Penoyer was inclined to reverse my decisions on minor matters and waste my time and his on details a top CO. can't and should not cope with. But he was gone part of the time, too. There was much coming and going and more than once I had to chase down the senior department head present, tell him that he was acting, and get him to sign where I had initialed. I took to scrawling "I. M. Dumbjohn, Wing General F.U.S.A., Acting" as indecipherably as possible on all routine internal papers—I don't think anybody ever noticed.

Before Zeb left another thing happened which really has nothing to do with the people of the United States and the struggle to regain their freedoms—but my own personal affairs are so tied into this account that I mention it. Perhaps the personal angle really is important; certainly the order under which this journal was started called for it to be "personal" and "subjective"—however I had retained a copy and added to it because I found it helped me to get my own confused thoughts straight while going through a metamorphosis as drastic as that from caterpillar into moth. I am typical, perhaps, of the vast majority, the sort of person who has to have his nose rubbed in a thing before he recognizes it, while Zeb and Maggie and General Huxley were of the elite minority of naturally free souls… the original thinkers, the leaders.

I was at my desk, trying to cope with the usual spate of papers, when I received a call to see Zeb's boss at my earliest convenience. Since he already had his orders, I left word with Huxley's orderly and hurried over.

He cut short the formalities. "Major, I have a letter for you which Communications sent over for analysis to determine whether it should be rephrased or simply destroyed. However, on the urgent recommendation of one of my division heads I am taking the responsibility of letting you read it without paraphrasing. You will have to read it here."

I said, "Yes, sir," feeling quite puzzled.

He handed it to me. It was fairly long and I suppose it could have held half a dozen coded messages, even idea codes that could come through paraphrasing. I don't remember much of it—just the impact it had on me. It was from Judith.

"My dear John… I shall always think of you fondly and I shall never forget what you have done for me… never meant for each other… Mr. Mendoza has been most considerate… I know you will forgive me.

… he needs me; it must have been fate that brought us together… if you ever visit Mexico City, you must think of our home as yours… I will always think of you as my strong and wise older brother and I will always be a sister—“ There was more, lots more, all of the same sort—I think the process is known as ”breaking it gently.“

Novak reached out and took the letter from me. “I didn’t intend for you to have time to memorize it,” he said dryly, then dropped it at once into his desk incinerator. He glanced back at me. “Maybe you had better sit down, Major. Do you smoke?”

I did not sit down, but I was spinning so fast that I accepted the cigarette and let him light it for me. Then I choked on tobacco smoke and the sheer physical discomfort helped to bring me back to reality. I thanked him and got out—went straight to my room, called my office and left word where I could be found if the General really wanted me. But I told my secretary that I was suddenly quite ill and not to disturb me if it could possibly be helped.

I may have been there about an hour—I wouldn’t know—lying face down and doing nothing, not even thinking. There came a gentle tap at the door, then it was pushed open; it was Zeb. “How do you feel?” he said.

“Numb,” I answered. It did not occur to me to wonder how he knew and at the time I had forgotten the “division head” who had prevailed upon Novak to let me see it in the clear.

He came on in, sprawled in a chair, and looked at me. I rolled over and sat on the edge of the bed. “Don’t let it throw you, Johnnie,” he said quietly. “ ‘Men have died and worms have eaten them-but not for love.’”

“You don’t know!”

“No, I don’t,” he agreed. “Each man is his own prisoner, in solitary confinement for life. Nevertheless on this particular point the statistics are fairly reliable. Try something for me. Visualize Judith in your mind. See her features. Listen to her voice.”

“Huh?”

“Do it.”

I tried, I really tried—and, do you know, I couldn’t. I had never had a picture of her; her face now eluded me.

Zeb was watching me. “You’ll get well,” he said firmly. “Now look here, Johnnie… I could have told you. Judith is a very female sort of woman, all gonads and no brain. And she’s quite attractive. Turned loose, she was bound to find a man, as sure as nascent oxygen will recombine. But there is no use in talking to a man in love.”

He stood up. “Johnnie, I’ve got to go. I hate like the mischief to walk out and leave you in the shape you are in, but I’ve already checked out and Grandfather Novak is ready to leave. He'll eat me out as it is, for holding him up this long. But one more word of advice before I go—"

I waited. "I suggest," he continued, "that you see a lot of Maggie while I'm away. She's good medicine."

He started to leave; I said sharply, "Zeb—what happened to you and Maggie? Something like this?"

He looked back at me sharply. "Huh? No. Not at all the same thing. It wasn't… well, it wasn't similar."

"I don't understand you—I guess I just don't understand people. You're urging me to see a lot of Maggie—and I thought she was your girl. Uh, wouldn't you be jealous?"

He stared at me, laughed, and clapped me on the shoulder. "She's a free citizen, Johnnie, believe me. If you ever did anything to hurt Maggie, I'd tear off your head and beat you to death with it. Not that you ever would. But jealous of her? No. It doesn't enter the picture. I think she's the greatest gal that ever trod shoe leather—but I would rather marry a mountain lioness."

He left on that, leaving me again with my mouth open. But I took his advice, or Maggie took it for me. Maggie knew all about it—Judith, I mean— and I assumed that Zeb had told her. He hadn't; it seemed that Judith had written to her first. In any case I didn't have to look her up; she looked me up right after dinner that night. I talked with her a while and felt much better, so much so that I went back to my office and made up for time lost that afternoon.

Maggie and I made a habit thereafter of taking a walk together after dinner. We went on no more spelling bees; not only was there no time for such during those last days but also neither one of us felt like trying to work up another foursome with Zeb away. Sometimes I could spare only twenty minutes or even less before I would have to be back at my desk—but it was the high point of the day; I looked forward to it.

Even without leaving the floodlighted main cavern, without leaving the marked paths, there were plenty of wonderfully beautiful walks to take. If I could afford to be away as much as an hour, there was one place in particular we liked to go—north in the big room, a good half mile from the buildings. The path meandered among frozen limestone mushrooms, great columns, domes, and fantastic shapes that have no names and looked equally like souls in torment or great exotic flowers, depending on the mood one was in. At a spot nearly a hundred feet higher than the main floor we had found a place only a few feet off the authorized path where nature had contrived a natural stone bench. We could sit there and stare down at the toy village, talk, and Maggie would smoke. I had taken to lighting her cigarettes for her, as I had seen Zeb do. It was a little attention she liked and I had learned to avoid getting smoke caught in my throat.

About six weeks after Zeb had left and only days before M-Hour we were doing this and were talking about what it would be like after the revolution and what we would do with ourselves. I said that I supposed I would stay in the regular army, assuming that there was such and that I was eligible for it. "What will you do, Maggie?"

She exhaled smoke slowly. "I haven't thought that far, John. I haven't any profession—that is to say, we are trying our best to make the one I did have obsolete." She smiled wryly. "I'm not educated in anything useful. I can cook and I can sew and I can keep house; I suppose I should try to find a job as a housekeeper—competent servants are always scarce, they say."

The idea of the courageous and resourceful Sister Magdalene, so quick with a vibroblade when the need arose, tramping from one employment bureau to another in search of menial work to keep her body fed was an idea at once distasteful to me—"General Housework & Cooking, live in, Thur. eve. & alternate Sundays off; references required." Maggie? Maggie who had saved my own probably worthless life at least twice and never hesitated nor counted the cost. Not Maggie!

I blurted out, "Look, you don't have to do *that.*"

"It's what I know."

"Yes, but—well, why don't you cook and keep house for *me*? I'll be drawing enough to support both of us, even if I have to go back to my permanent rank. Maybe it isn't much but—shucks! you're welcome to it."

She looked up. "Why, John, how very generous!" She crushed out the cigarette and threw it aside. "I do appreciate it—but it wouldn't work. I imagine there will be just as many gossips after we have won as before. Your colonel would not like it."

I blushed red and almost shouted, "That wasn't what I meant at all!"

"What? Then what did you mean?"

I had not really known until the words came out. Now I knew but not how to express it. "I meant— Look, Maggie, you seem to like me well enough… and we get along well together. That is, why don't we—" I halted, hung up.

She stood up and faced me. "John, are you proposing marriage—to *me*?"

I said gruffly, "Uh, that was the general idea." It bothered me to have her standing in front of me, so I stood up, too.

She looked at me gravely, searching my face, then said humbly, "I'm honored… and grateful… and I am deeply touched. But—oh, *no,* *Johnl"* The tears started out of her eyes and she started to bawl. She stopped as quickly, wiping her face with her sleeve, and said brokenly, "Now you've made me cry. I haven't cried in years."

I started to put my arms around her; she pushed me back. "No, John! Listen to me first. I'll accept that job as your housekeeper, but I won't marry you."

"Why not?"

" 'Why not?' Oh, my dear, my very dear— Because I am an old, tired woman, that's why."

"Old? You can't be more than a year or two older than I am—three, at the outside. It doesn't matter."

"I'm a thousand years older than you are. Think who I am—where I've been—what I've known. First I was 'bride/ if you care to call it that, to the Prophet."

"Not your fault!"

"Perhaps. Then I was mistress to your friend Zebadiah. You knew that?"

"Well… I was pretty sure of it."

"That isn't all. There were other men. Some because it was needful and a woman has few bribes to offer. Some from loneliness, or even boredom. After the Prophet has tired of her, a woman doesn't seem very valuable, even to herself."

"I don't care. I don't care! It doesn't matter!"

"You say that now. Later it would matter to you, dreadfully. I think I know you, my dear."

"Then you don't know me. We'll start fresh."

She sighed deeply. "You think that you love me, John?"

"Uh? Yes, I guess that's it."

"You loved Judith. Now you are hurt—so you think you love me."

"But— Oh, I don't know what love is! I know I want you to marry me and live with me."

"Neither do I know," she said so softly that I almost missed it. Then she moved into my arms as easily and naturally as if she had always lived there.

When we had finished kissing each other I said, "You will marry me, then?"

She threw her head back and stared as if she were frightened. "Oh, no!"

"Huh? But I thought-"

"No, dear, no! I'll keep your house and cook your food and make your bed-and sleep in it, if you want me to. But you don't need to marry me."

"But-Sheol! Maggie, I won't have it that way."

"You won't? We'll see." She was out of my arms although I had not let go. “I’ll see you tonight. About one—after everyone is asleep. Leave your door unlatched.”

“Maggie!” I shouted.

She was headed down the path, running as if she were flying. I tried to catch up, tripped on a stalagmite and fell. When I picked myself up she was out of sight.

Here is an odd thing—I had always thought of Maggie as quite tall, stately, almost as tall as I was. But when I held her in my arms, she was short. I had to lean way over to kiss her.

Chapter 12

On the night of the Miracle all that were left of us gathered in the main communications room—my boss and myself, the chief of communications and his technical crew, a few staff officers. A handful of men and a few dozen women, too many to crowd into the comm shack, were in the main mess-hall where a relay screen had been rigged for them. Our underground city was a ghost town now, with only a skeleton crew to maintain communications for the commanding general; all the rest had gone to battle stations. We few who were left had no combat stations in this phase. Strategy had been settled; the hour of execution was set for us by the Miracle. Tactical decisions for a continent could not be made from headquarters and Huxley was too good a general to try. His troops had been disposed and his subordinate commanders were now on their own; all he could do was wait and pray.

All that we could do, too—I didn't have any fingernails left to bite.

The main screen in front of us showed, in brilliant color and perfect perspective, the interior of the Temple. The services had been going on all day—processional, hymns, prayers and more prayers, sacrifice, genuflexion, chanting, endless monotony of colorful ritual. My old regiment was drawn up in two frozen ranks, helmets shining, spears aligned like the teeth of a comb. I made out Peter van Eyck, Master of my home lodge, his belly corseted up, motionless before his platoon.

I knew, from having handled the despatch, that Master Peter had stolen a print of the film we had to have. His presence in the ceremonies was reassuring; had his theft even been suspected our plans could not possibly succeed. But there he was.

Around the other three walls of the comm room were a dozen smaller screens, scenes from as many major cities—crowds in Rittenhouse Square, the Hollywood Bowl jampacked, throngs in local temples. In each case the eyes of all were riveted on a giant television screen showing the same scene in the Great Temple that we were watching. Throughout all America it would be the same—every mortal soul who could possibly manage it was watching some television screen somewhere—waiting, waiting, waiting for the Miracle of the Incarnation.

Behind us a psychoperator bent over a sensitive who worked under hypnosis. The sensitive, a girl about nineteen, stirred and muttered; the operator bent closer.

Then he turned to Huxley and the communications chief. "The Voice of God Station has been secured, sir."

Huxley merely nodded; I felt like turning handsprings, if my knees had not been so weak. This was the key tactic and one that could not possibly be executed until minutes before the Miracle. Since television moves only on line-of-sight or in its own special cable the only possible way to tamper with this nationwide broadcast was at the station of origin. I felt a wild burst of exultation at their success—followed by an equally sudden burst of sorrow, knowing that not one of them could hope to live out the night.

Never mind—if they could hold out for a few more minutes their lives would have counted. I commended their souls to the Great Architect. We had men for such jobs where needed, mostly brethren whose wives had faced an inquisitor.

The comm chief touched Huxley's sleeve. "It's coming, sir." The scene panned slowly up to the far end of the Temple, passed over the altar, and settled in closeup on an ivory archway above and behind the altar—the entrance to the Sanctum Sanctorum. It was closed with heavy cloth-of-gold drapes.

The pick-up camera held steady with the curtained entranceway exactly filling the screen. "They can take over any time now, sir."

Huxley turned his head to the psychoperator. "Is that ours yet? See if you can get a report from the Voice of God."

"Nothing, sir. I'll let you know."

I could not take my eyes off the screen. After an interminable wait, the curtains stirred and slowly parted, drawn up and out on each side-and there, standing before us almost life size and so real that I felt he could step out of the screen, was the Prophet Incarnate!

He turned his head, letting his gaze rove from side to side, then looked right at me, his eyes staring right into mine. I wanted to hide. I gasped and said involuntarily, "You mean we can duplicate *that*?"

The comm chief nodded. "To the millimeter, or I'll eat the difference. Our best impersonator, prepared by our best plastic surgeons. That may be our film already."

"But it's real."

Huxley glanced at me. "A little less talk, please, Lyle." It was the nearest he had ever come to bawling me out; I shut up and studied the screen. That powerful, totally unscrupulous face, that burning gaze—an actor? No! I knew that face; I had seen it too many times in too many ceremonies. Something had gone wrong and this was the Prophet Incarnate himself. I began to sweat that stinking sweat of fear. I very much believe that had he called me by name out of that screen I would have confessed my treasons and thrown myself on his mercy.

Huxley said crossly, "Can't you raise New Jerusalem?"

The psychoperator answered, "No, sir. I'm sorry, sir."

The Prophet started his invocation.

His compelling, organlike voice rolled through magnificent periods. Then he asked the blessings of Eternal God for the people this coming year. He paused, looked at me again, then rolled his eyes up to Heaven, lifted his hands and commenced his petition to the First Prophet, asking him to confer on his people the priceless bounty of seeing and hearing him in the flesh, and offering for that purpose the flesh of the present prophet as an instrument. He waited.

The transformation started-and my hackles stood up. I knew now that we had lost; something had gone wrong… and God alone knew how many men had died through the error.

The features of the Prophet began to change; he stretched an inch or two in height; his rich robes darkened—and there standing in his place, dressed in a frock coat of a bygone era, was the Reverend Nehemiah Scudder, First Prophet and founder of the New Crusade. I felt my stomach tighten with fear and dread and I was a little boy again, watching it for the first time in my parish church.

He spoke to us first with his usual yearly greeting of love and concern for his people. Gradually he worked himself up, his face sweating and his hands clutching in the style that had called down the Spirit in a thousand Mississippi Valley camp meetings; my heart began to beat faster. He was preaching against sin in all its forms—the harlot whose mouth is like honey, the sins of the flesh, the sins of the spirit, the money changers.

At the height of his passion he led into a new subject in a fashion that caught me by surprise: "But I did not return to you this day to speak to you of the little sins of little people. No! I come to tell you of a truly hellish thing and to bid you to gird on your armor and fight. Armageddon is upon you! Rise up, mine hosts, and fight you the Battle of the Lord! For Satan is upon you! He is here! Here among you! Here tonight in the flesh! With the guile of the serpent he has come among you, taking on the form of the Vicar of the Lord! Yea! He has disguised himself falsely, taken on the shape of the *Prophet Incarnate*!

"Smite him! Smite his hirelings! In the Name of God destroy them all!"

Chapter 13

“Bruehler from Voice of God,” the psychoperator said quietly. “The station is now off the air and demolition will take place in approximately thirty seconds. An attempt will be made to beat a retreat before the building goes up. Good luck. Message ends.”

Huxley muttered something and left the now-dark big screen. The smaller screens, monitoring scenes around the country, were confusing but heartening. There was fighting and rioting everywhere. I watched it, still stunned, and tried to figure out which was friend and which was foe. In the Hollywood Bowl the crowd boiled up over the stage and by sheer numbers overran and trampled the officials and clergy seated there. There were plenty of guards stationed around the edges of the bowl and it should not have happened that way. But instead of the murderous enfilading fire one would have expected, there was one short blast from a tripod mounted on the hillside northeast of the stage, then the guard was shot-apparently by another of the guards.

Apparently the chancy tour de force against the Prophet himself was succeeding beyond all expectations. If government forces were everywhere as disorganized as they were at the Hollywood Bowl, the job would not be one of fighting but of consolidating an accomplished fact.

The monitor from Hollywood went dead and I shifted to another screen, Portland, Oregon. More fighting. I could see men with white armbands, the only uniform we had allowed ourselves for M-Hour—but not all the violence came from our brethren in the armbands. I saw an armed proctor go down before bare fists and not get up.

Testing messages and early reports were beginning to come in, now that it was feasible to use our own radio-now that we had at long, long last shown our hand. I stopped looking and went back to help my boss keep track of them. I was still dazed and could still see in my mind the incredible face of the Prophet—both Prophets. If I had been emotionally battered by it, what did the people think? The devout, the believers?

The first clear-cut report other than contact messages was from Lucas in New Orleans:

HAVE TAKEN CONTROL OF CITY CENTER, POWER AND COMM STATIONS. MOP-UP SQUADS SEIZING WARD POLICE STATIONS. FEDERAL GUARDS HERE DEMORALIZED BY STEREOCAST. SPORADIC FIGHTING BROKE OUT AMONG GUARDS THEMSELVES. LITTLE ORGANIZED RESISTANCE. ESTABLISHING ORDER UNDER MARTIAL LAW. SO MOTE IT BEl-LUCAS.

Then reports started pouring in-Kansas City, Detroit, Philadelphia, Denver, Boston, Minneapolis—all the major cities. They varied but told the same story; our synthetic Prophet's call to arms, followed at once by a cutting of all regular methods of communication, had made of the government forces a body without a head, flopping around and fighting itself. The power of the Prophet was founded on superstition and fraud; we had turned superstition back on him to destroy him.

Lodge that night was the grandest I have ever attended. We tyled the communications room itself, with the comm chief sitting as secretary and passing incoming messages to General Huxley, sitting as Master in the east, as fast as they came in. I was called on to take a chair myself, Junior

Warden, an honor I had never had before. The General had to borrow a hat and it was ridiculously too small for him, but it didn't matter—I have never seen ritual so grand, before or since. We all spake the ancient words from our hearts, as if we were saying them for the first time. If the stately progress was interrupted to hear that Louisville was ours, what better interruption? We were building anew; after an endless time of building in speculation we were at last building operatively.

Chapter 14

Temporary capital was set up at St. Louis, for its central location. I piloted Huxley there myself. We took over the Prophet's proctor base there, restoring to it its old name of Jefferson Barracks. We took over the buildings of the University, too, and handed back to it the name of Washington. If the people no longer recalled the true significance of those names, they soon would and here was a good place to start. (I learned for the first time that Washington had been one of us.)

However, one of Huxley's first acts as military governor—he would not let himself be called even "Provisional President"—was to divorce all official connection between the Lodge and the Free United States Army. The Brotherhood had served its purpose, had kept alive the hopes of free men; now it was time to go back to its ancient ways and let public affairs be handled publicly. The order was not made public, since the public had no real knowledge of us, always a secret society and for three generations a completely clandestine one. But it was read and recorded in all lodges and, so far as I know, honored.

There was one necessary exception: my home lodge at New Jerusalem and the cooperating sister order there of which Maggie had been a member. For we did not yet hold New Jerusalem although the country as a whole was ours.

This was more serious than it sounds. While we had the country under military control, with all communication centers in our hands, with the Federal Forces demoralized, routed, and largely dispersed or disarmed and captured, we did not hold the country's heart in our hands. More than half of the population were not with us; they were simply stunned, confused, and unorganized. As long as the Prophet was still alive, as long as the Temple was still a rallying point, it was still conceivably possible for him to snatch back the victory from us.

A fraud, such as we had used, has only a temporary effect; people revert to their old thinking habits. The Prophet and his cohorts were not fools; they included some of the shrewdest applied psychologists this tired planet has ever seen. Our own counterespionage became disturbingly aware that they were rapidly perfecting their own underground, using the still devout and that numerous minority, devout or not, who had waxed fat under the old regime and saw themselves growing leaner under the new. We could not stop this counterrevolution—Sheol! the Prophet had not been able to stop *us* and we had worked under much greater handicaps. The Prophet's spies could work almost openly in the smaller towns and the country; we had barely enough men to guard the television stations—we could not possibly put a snooper under every table.

Soon it was an open secret that we had faked the call to Armageddon. One would think that this fact in itself would show to anyone who knew it that *all* of the Miracles of Incarnation had been frauds—trick television and nothing more. I mentioned this to Zebadiah and got laughed at for being naive. People believe what they want to believe and logic has no bearing on it, he a“ssured me. In this case they wanted to believe in their old time religion as they learned it at their mothers' knees; it restored security to their hearts. I could sympathize with that, I understood it.

In any case, New Jerusalem must fall—and time was against us.

While we were worrying over this, a provisional constitutional convention was being held in the great auditorium of the university. Huxley opened it, refused again the title, offered by acclamation, of president—then told them bluntly that all laws since the inauguration of President Nehemiah Scudder were of no force, void, and that the old constitution and bill of rights were effective as of now, subject to the exigencies of temporary military control. Their single purpose, he said, was to work out orderly methods of restoring the old free democratic processes; any permanent changes in the constitution, if needed, would have to wait until after free elections.

Then he turned the gavel over to Novak and left.

I did not have time for politics, but I hid out from work and caught most of one afternoon session because Zebadiah had tipped me off that significant fireworks were coming up. I slipped into a back seat and listened. One of Novak's bright young men was presenting a film. I saw the tail end of it only, but it seemed to be more or less a standard instruction film, reviewing the history of the United States, discussing civil liberty, explaining the duties of a citizen in a free democracy—not the sort of thing ever seen in the Prophet's schools but making use of the same techniques which had long been used in every school in the country. The film ended and the bright young man —I could never remember his name, perhaps because I disliked him. Stokes? Call him Stokes, anyway. Stokes began to speak.

“This reorientation film,” he began, “is of course utterly useless in re-canalizing an adult. His habits of thought are much too set to be affected by anything as simple as this.”

“Then why waste our time with it?” someone called out.

“Please! Nevertheless this film was prepared for adults-provided the adult has been placed in a receptive frame of mind. Here is the prologue—” the screen lighted up again. It was a simple and beautiful pastoral scene with very restful music. I could not figure what he was getting at, but it was soothing; I remembered that I had not had much sleep the past four nights-come to think about it, I couldn't remember when I had had a good night's sleep. I slouched back and relaxed.

I didn't notice the change from scenery to abstract patterns. I think the music continued but it was joined by a voice, warm, soothing, monotonous. The patterns were going round and around and I was beginning to bore… right… into… the… screen…

Then Novak had left his chair and switched off the projector with a curse. I jerked awake with that horrid shocked feeling that makes one almost ready to cry. Novak was speaking sharply but quietly to Stokes —then Novak faced the rest of us. "Up on your feet!" he ordered. "Seventh inning stretch. Take a deep breath. Shake hands with the man next to you. Slap him on the back, hard!"

We did so and I felt foolish. Also irritated. I had felt so good just a moment before and now I was reminded of the mountain of work I must move if I were to have ten minutes with Maggie that evening. I thought about leaving but the b. y. m. had started talking again.

"As Dr. Novak has pointed out," he went on, not sounding quite so sure of himself, "it is not necessary to use the prologue on this audience, since you don't need reorientation. But this film, used with the preparatory technique and possibly in some cases with a light dose of one of the hypnotic drugs, can be depended on to produce an optimum political temperament in 83% of the populace. This has been demonstrated on a satisfactory test group. The film itself represents several years of work analyzing the personal conversion reports of almost everyone—surely everyone in this audience!— who joined our organization while it was still underground. The irrelevant has been eliminated; the essential has been abstracted. What remains will convert a devout follower of the Prophet to free manhood—provided he is in a state receptive to suggestion when he is exposed to it."

So *that* was why we had each been required to bare our souls. It seemed logical to me. Cod knew that we were sitting on a time bomb, and we couldn't wait for every lunk to fall in love with a holy deaconess and thereby be shocked out of his groove; there wasn't time. But an elderly man whom I did not know was on his feet on the other side of the hall—he looked like the pictures of Mark Twain, an angry Mark Twain. "Mr. Chairman!"

"Yes, comrade? State your name and district."

"You know what my name is, Novak—Winters, from Vermont. Did you okay this scheme?"

"No." It was a simple declarative.

"He's one of your boys."

"He's a free citizen. I supervised the preparation of the film itself and the research which preceded it. The use of null-vol suggestion techniques came from the research group he headed. I disapproved the proposal, but agreed to schedule time to present it. I repeat, he is a free citizen, free to speak, just as you are."

“May I speak now?”

“You have the floor.”

The old man drew himself up and seemed to swell up. “I shall! Gentlemen… ladies… comrades! I have been in this for more than forty years—more years than that young pup has been alive. I have a brother, as good a man as I am, but we haven’t spoken in many years—because he is honestly devout in the established faith and he suspects me of heresy. Now this cub, with his bulging forehead and his whirling lights, would ‘condition’ my brother to make him ‘politically reliable.’”

He stopped to gasp asthmatically and went on. “Free men aren’t ‘conditioned!’ Free men are free because they are ornery and cussed and prefer to arrive at their own prejudices in their own way—not have them spoonfed by a self-appointed mind tinkerer! We haven’t fought, our brethren haven’t bled and died, fust to change bosses, no matter how sweet their motives. I tell you, we got into the mess we are in through the efforts of those same mind tinkerers. They’ve studied for years how to saddle a man and ride him. They started with advertising and propaganda and things like that, and they perfected it to the point where what used to be simple, honest swindling such as any salesman might use became a mathematical science that left the ordinary man helpless.” He pointed his finger at Stokes. “I tell you that the American citizen needs no protection from anything—except the likes of him.”

“This is ridiculous,” Stokes snapped, his voice rather high. “You wouldn’t turn high explosives over to children. That is what the franchise would be now.”

“The American people are not children.”

“They might as well be!-most of them.”

Winters turned his eyes around the hall. “You see what I mean, friends? He’s as ready to play God as the Prophet was. I say give ‘em their freedom, give ’em their clear rights as men and free men and children under God. If they mess it up again, that’s their doing—but we have no right to operate on their minds.” He stopped and labored again to catch his breath; Stokes looked contemptuous. “We *can’t* make the world safe for children, nor for men either—and God didn’t appoint us to do it.”

Novak said gently, “Are you through, Mr. Winters?”

“I’m through.”

“And you’ve had *your* say, too, Stokes. Sit down.”

Then I had to leave, so I slipped out—and missed what must have been a really dramatic event if you care for that sort of thing; I don’t. Old Mr. Winters dropped dead about the time I must have been reaching the outer steps.

Novak did not let them recess on that account. They passed two resolutions; that no citizen should be subjected to hypnosis or other psychomanip-ulative technique without his written consent, and that no religious or political test should be used for franchise in the first elections.

I don't know who was right. It certainly would have made life easier in the next few weeks if we had known that the people were solidly behind us. Temporarily rulers we might be, but we hardly dared go down a street in uniform at night in groups of less than six.

Oh yes, we had uniforms now—almost enough for one for each of us, of the cheapest materials possible and in the standard army sizes, either too large or too small. Mine was too tight. They had been stockpiled across the Canadian border and we got our own people into uniform as quickly as possible. A handkerchief tied around the arm is not enough.

Besides our own simple powder-blue dungarees there were several other uniforms around, volunteer brigades from outside the country and some native American outfits. The Mormon Battalions had their own togs and they were all growing beards as well—they went into action singing the long-forbidden "Come, Come, Ye Saints!" Utah was one state we didn't have to worry about, now that the Saints had their beloved temple back. The Catholic Legion had its distinctive uniform, which was just as well since hardly any of them spoke English. The Onward Christian Soldiers dressed differently from us because they were a rival underground and rather resented our coup d'etat—we should have waited. Joshua's Army from the pariah reservations in the northwest (plus volunteers from all over the world) had a get-up that can only be described as outlandish.

Huxley was in tactical command of them all. But it wasn't an army; it was a rabble.

The only thing that was hopeful about it was that the Prophet's army had not been large, less than two hundred thousand, more of an internal police than an army, and of that number only a few had managed to make their way back to New Jerusalem to augment the Palace garrison. Besides that, since the United States had not had an external war for more than a century, the Prophet could not recruit veteran soldiers from the remaining devout.

Neither could we. Most of our effectives were fit only to guard communication stations and other key installations around the country and we were hard put to find enough of them to do that. Mounting an assault on New Jerusalem called for scraping the bottom of the barrel.

Which we did, while smothering under a load of paperwork that made the days in the old GHQ seem quiet and untroubled. I had thirty clerks under me now and I don't know what half of them did. I spent a lot of my time just keeping Very Important Citizens who Wanted to Help from getting in to see Huxley.

I recall one incident which, while not important, was not exactly routine and was important to me. My chief secretary came in with a very odd look on her face. "Colonel," she said, "your twin brother is out there."

"Eh? I have no brothers."

"A Sergeant Reeves," she amplified.

He came in, we shook hands, and exchanged inanities. I really was glad to see him and told him about all the orders I had sold and then lost for him. I apologized, pled exigency of war and added, "I landed one new account in K.C.—Emery, Bird, Thayer. You might pick it up some day."

"I will. Thanks."

"I didn't know you were a soldier."

"I'm not, really. But I've been practicing at it ever since my travel permit, uh-got itself lost."

"I'm sorry about that."

"Don't be. I've learned to handle a blaster and I'm pretty good with a grenade now. I've been okayed for Operation Strikeout."

"Eh? That code word is supposed to be confo."

"It is? Better tell the boys; they don't seem to realize it. Anyhow, I'm in. Are you? Or shouldn't I ask that?"

I changed the subject.'"How do you like soldiering? Planning to make a career of it?"

"Oh, it's all right-but not *that* all right. But what I came in to ask you, Colonel, are you?"

"Eh?"

"Are you staying in the army afterwards? I suppose you can make a good thing out of it, with your background—whereas they wouldn't let me shine brightwork, once the fun is over. But if by any chance you aren't, what do you think of the textile business?"

I was startled but I answered, "Well, to tell the truth I rather enjoyed it—the selling end, at least."

"Good. I'm out of a job where I was, of course-and I've been seriously considering going in on my own, a jobbing business and manufacturers' representative. I'll need a partner. Eh?"

I thought it over. "I don't know," I said slowly. "I haven't thought ahead any farther than Operation Strikeout. I might stay in the army —though soldiering does not have the appeal for me it once had… too many copies to make out and certify. But I don't know. I think what I really want is simply to sit under my own vine and my own fig tree."

" '-and none shall make you afraid,'" he finished. "A good thought.

But there is no reason why you shouldn’t unroll a few bolts of cloth while you are sitting there. The fig crop might fail. Think it over.”

“I will. I surely will.”

Chapter 15

Maggie and I were married the day before the assault on New Jerusalem. We had a twenty-minute honeymoon, holding hands on the fire escape outside my office, then I flew Huxley to the jump-off area. I was in the flagship during the attack. I had asked permission to pilot a rocket-jet as my combat assignment but he had turned me down.

"What for, John?" he had asked. "This isn't going to be won in the air; it will be settled on the ground."

He was right, as usual. We had few ships and still fewer pilots who could be trusted. Some of the Prophet's air force had been sabotaged on the ground; a goodly number had escaped to Canada and elsewhere and been interned. With what planes we had we had been bombing the Palace and Temple regularly, just to make them keep their heads down.

But we could not hurt them seriously that way and both sides knew it. The Palace, ornate as it was above ground, was probably the strongest bombproof ever built. It had been designed to stand direct impact of a fission bomb without damage to personnel in its deepest tunnels—and that was where the Prophet was spending his days, one could be sure. Even the part above ground was relatively immune to ordinary HE bombs such as we were using.

We weren't using atomic bombs for three reasons: we didn't have any; the United States was not known to have had any since the Johannesburg Treaty after World War III. We could not get any. We might have negotiated a couple of bombs from the Federation had we been conceded to be the legal government of the United States, but, while Canada had recognized us, Great Britain had not and neither had the North African Confederacy. Brazil was teetering; she had sent a charge d'affaires to St. Louis. But even if we had actually been admitted to the Federation, it is most unlikely that a mass weapon would have been granted for an internal disorder.

Lastly, we would not have used one if it had been laid in our laps. No, we weren't chicken hearted. But an atom bomb, laid directly on the Palace, would certainly have killed around a hundred thousand or more of our fellow citizens in the surrounding city—and almost as certainly would not have killed the Prophet.

It was going to be necessary to go in and dig him out, like a holed-up badger.

Rendezvous was made on the east shore of the Delaware River. At one minute after midnight we moved east, thirty-four land cruisers, thirteen of them modern battlewagons, the rest light cruisers and obsolescent craft-all that remained of the Prophet's mighty East

Mississippi fleet; the rest had been blown up by their former commanders. The heavy ships would be used to breach the walls; the light craft were escort to ten armored transports carrying the shock troops-five thousand fighting men handpicked from the whole country. Some of them had had some military training in addition to what we had been able to give them in the past few weeks; all of them had taken part in the street fighting.

We could hear the bombing at New Jerusalem as we started out, the dull *Crrumpl*, the gooseflesh shiver of the concussion wave, the bass rumble of the ground sonic. The bombing had been continuous the last thirty-six hours; we hoped that no one in the Palace had had any sleep lately, whereas our troops had just finished twelve hours impressed sleep.

None of the battlewagons had been designed as a flagship, so we had improvised a flag plot just abaft the conning tower, tearing out the long-range televisor to make room for the battle tracker and concentration plot. I was sweating over my jury-rigged tracker, hoping to Heaven that the makeshift shock absorbers would be good enough when we opened up. Crowded in behind me was a psychoperator and his crew of sensitives, eight women and a neurotic fourteen-year-old boy. In a pinch, each would have to handle four circuits. I wondered if they could do it. One thin blonde girl had a dry, chronic cough and a big thyroid patch on her throat.

We lumbered along in approach zigzag. Huxley wandered from comm to plot and back again, calm as a snail, looking over my shoulder, reading despatches casually, watching the progress of the approach on the screens.

The pile of despatches at my elbow grew. The *Cherub* had fouled her starboard tread; she had dropped out of formation but would rejoin in thirty minutes. Penoyer reported his columns extended and ready to deploy. Because of the acute shortage of command talent, we were using broad-command organization; Penoyer commanded the left wing and his own battlewagon; Huxley was force commander, right wing commander, and skipper of his own flagship.

At 12:32 the televisors went out. The enemy had analyzed our frequency variation pattern, matched us and blown every tube in the circuits. It is theoretically impossible; they did it. At 12:37 racuo wentout.

Huxley seemed unperturbed. “Shift to light-phone circuits,” was all he said.

The communications officer had anticipated him; our audio circuits were now on infrared beams, ship to ship. Huxley hung over my shoulder most of the next hour, watching the position plot lines grow. Presently he said, “I think we will deploy now, John. Some of those pilots aren’t any too steady; I think we will give them time to settle down in their positions before anything more happens."

I passed the order and cut my tracker out of circuit for fifteen minutes; it wasn't built for so many variables at such high speeds and there was no sense in overloading it. Nineteen minutes later the last transport had checked in by phone, I made a preliminary set up, threw the starting switch and let the correction data feed in. For a couple of minutes I was very busy balancing data, my hands moving among knobs and keys; then the machine was satisfied with its own predictions and I reported, "Tracking, sir."

Huxley leaned over my shoulder. The line was a little ragged but I was proud of them-some of those pilots had been freighter jacks not four weeks earlier.

At three a.m. we made the precautionary signal, "Coming on the range," and our own turret rumbled as they loaded it.

At 3:31 Huxley gave the command, "Concentration Plan III, open fire."

Our own big fellow let go. The first shot shook loose a lot of dust and made my eyes water. The craft rolled back on her treads to the recoil and I nearly fell out of my saddle. I had never ridden one of the big booster guns before and I hadn't expected the long recoil. Our big rifle had secondary firing chambers up the barrel, electronically synchronized with the progress of the shell; it maintained max pressure all the way up and gave a much higher muzzle velocity and striking power. It also gave a boneshaking recoil. But the second time I was ready for it.

Huxley was at the periscope between shots, trying to observe the effects of our fire. New Jerusalem had answered our fire but did not yet have us ranged. We had the advantage of firing at a stationary target whose range we knew to the meter; on the other hand even a heavy land cruiser could not show the weight of armor that underlay the Palace's gingerbread.

Huxley turned from the scope and remarked, "Smoke, John."

I turned to the communications officer. "Stand by, sensitives; all craft!"

The order never got through. Even as I gave it the comm officer reported loss of contact. But the psychoperator was already busy and I knew the same thing was happening in all the ships; it was normal casualty routine.

Of our nine sensitives, three—the boy and two women—were wide-awakes; the other six were hypnos. The technician hooked the boy first to one in Penoyer's craft. The kid established rapport almost at once and Penoyer got through a report:‘

"BLANKETED BY SMOKE. HAVE SHIFTED LEFT WING TO PSYCHO. WHAT HOOK-UP7-PENOYER."

I answered, “Pass down the line.” Doctrine permitted two types of telepathic hook-up: relay, in which a message would be passed along until it reached its destination; and command mesh, in which there was direct hookup from flag to each ship under that flag, plus ship-to-ship for adjacent units. In the first case each sensitive carries just one circuit, that is, is in rapport with just one other telepath; in the second they might have to handle as many as four circuits. I wanted to hold off overloading them as long as possible.

The technician tied the other two wide-awakes into our flanking craft in the battle line, then turned his attention to the hypnos. Four of them required hypodermics; the other two went under in response to suggestion. Shortly we were hooked up with the transports and second-line craft, as well as with the bombers and the rocket-jet spotting the fall of shot. The jet reported visibility zero and complained that he wasn’t getting anything intelligible by radar. I told him to stand by; the morning breeze might clear the smoke away presently.

We weren’t dependent on him anyway; we knew our positions almost to the inch. We had taken departure from a benchmark and our deadreckoning was checked for the whole battle line every time any skipper identified a map-shown landmark. In addition, the deadreckoners of a tread-driven cruiser are surprisingly accurate; the treads literally measure every yard of ground as they pass over it and a little differential gadget compares the treads and keeps just as careful track of direction. The smoke did not really bother us and we could keep on firing accurately even if radar failed. On the other hand, if the Palace commander kept us in smoke he himself was entirely dependent on radar.

His radar was apparently working; shot was falling all around us. We hadn’t been hit yet but we could feel the concussions when shells struck near us and some of the reports were not cheerful. Penoyer reported the *Martyr* hit; the shell had ruptured her starboard engine room. The skipper had tried to cross connect and proceed at half speed, but the gear train was jammed; she was definitely out of action. The *Archangel* had overheated her gun. She was in formation but would be harmless until the turret captain got her straightened out.

Huxley ordered them to shift to Formation E, a plan which used changing speeds and apparently random courses—carefully planned to avoid collision between ships, however. It was intended to confuse the fire control of the enemy.

At 4:11 Huxley sent the bombers back to base. We were inside the city now and the walls of the Palace lay just beyond-too close to target for comfort; we didn’t want to lose ships to our own bombs.

At 4:17 we were struck. The port upper tread casing was split, the barbette was damaged so that the gun would no longer train, and the conning tower was cracked along its after surface. The pilot was killed at his controls.

I helped the psychoperator get gas helmets over the heads of the hypnos. Huxley picked himself up off the floor plates, put on his own helmet, and studied the set-up on my battle tracker, frozen at the instant the shell hit us.

“The *Benison* should pass by this point in three minutes, John. Tell them to proceed dead slow, come along starboard side, and pick us up. Tell Penoyer I am shifting my flag.”

We made the transfer without mishap, Huxley, myself, the psychoperator, and his sensitives. One sensitive was dead, killed by a flying splinter. One went into a deep trance and we could not rouse her. We left her in the disabled battlewagon; she was as safe there as she could be.

I had torn the current plot from my tracker and brought it along. It had the time-predicted plots for Formation E. We would have to struggle along with those, as the tracker could not be moved and was probably beyond casual repair in any case. Huxley studied the chart.

“Shift to full communication mesh, John. I plan to assault shortly.”

I helped the psychoperator get his circuits straightened out. By dropping the *Martyr* out entirely and by using “Pass down the line” on Penoyer’s auxiliaries, we made up for the loss of two sensitives. All carried four circuits now, except the boy who had five, and the girl with the cough, who was managing six. The psychoperator was worried but there was nothing to do about it.

I turned back to General Huxley. He had seated himself and at first I thought he was in deep thought; then I saw that he was unconscious. It was not until I tried to rouse him and failed that I saw the blood seeping down the support column of his chair and wetting the floor plates. I moved him gently and found, sticking out from between his ribs near his spine, a steel splinter.

I felt a touch at my elbow, it was the psychoperator. “Penoyer reports that he will be within assault radius in four minutes. Requests permission to change formation and asks time of execution.”

Huxley was out. Dead or wounded, he would fight no more this battle. By all rules, command devolved on Penoyer, and I should tell him so at once. But rime was pressing hard, it would involve a drastic change of set-up, and we had been forced to send Penoyer into battle with only three sensitives. It was a physical impossibility.

What should I do? Turn the flag over to the skipper of the *Benison*? I knew the man, stolid, unimaginative, a gunner by disposition. He was not even in his conning tower but had been fighting his ship from the fire control station in the turret. If I called him down here, he would take many minutes to comprehend the situation—and then give the wrong orders.

With Huxley out I had not an ounce of real authority. I was a brevet short-tailed colonel, only days up from major and a legate by rights; I was what I was as Huxley's flunky. Should I turn command over to Penoyer-and lose the battle with proper military protocol? *What would Huxley have me do, if he could make the decision*?

It seemed to me that I worried that problem for an hour. The chronograph showed thirteen seconds between reception of Penoyer's despatch and my answer:

"Change formation at will. Stand by for execution signal in six minutes." The order given, I sent word to the forward dressing station to attend to the General.

I shifted the right wing to assault echelon, then called the transport

Sweet Chariot: "Subplan D; leave formation and proceed on duty assigned." The psychoperator eyed me but transmitted my orders. Subplan D called for five hundred light infantry to enter the Palace through the basement of the department store that was connected with the lodge room. From the lodge room they would split into squads and proceed on assigned tasks. All of our shock troops had all the plans of the Palace graven into their brains; these five hundred had had additional drill as to just where they were to go, what they were to do.

Most of them would be killed, but they should be able to create confusion during the assault. Zeb had trained them and now commanded them.

We were ready. "All units, stand by to assault. Right wing, outer flank of right bastion; left wing, outer flank of left bastion. Zigzag emergency full speed until within assault distance. Deploy for full concentration fire, one salvo, and assault. Stand by to execute. Acknowledge."

The acknowledgments were coming in and I was watching my chronometer preparatory to giving the command of execution when the boy sensitive broke off in the middle of a report and shook himself. The technician grabbed the kid's wrist and felt for his pulse; the boy shook him off.

"Somebody new," he said. "I don't quite get it." Then he commenced in a singsong, "To commanding general from Lodge Master Peter van Eyck: assault center bastion with full force. I will create a diversion."

"Why the center?" I asked.

"It is much more damaged."

If this were authentic, it was crucially important. But I was suspicious. If Master Peter had been detected, it was a trap. And I didn't see how he, in his position, had been able to set up a sensitive circuit in the midst of battle.

"Give me the word," I said.

"Nay, you give me."

"Nay, I will not."

"I will spell it, or halve it."

"Spell it, then."

We did so. I was satisfied. "Cancel last signal. Heavy cruisers assault center bastion, left wing to left flank, right wing to right flank. Odd numbered auxiliaries make diversion assaults on right and left bastions. Even numbers remain with transports. Acknowledge."

Nineteen seconds later I gave the command to execute, then we were off. It was like riding a rocket plane with a dirty, overheated firing chamber. We crashed through walls of masonry, lurched sickeningly on turns, almost overturned when we crashed into the basement of some large demolished building and lumbered out again. It was out of my hands now, up to each skipper.

As we slewed into firing position, I saw the psychoperator peeling back the boy's eyelids. "I'm afraid he's gone," he said tonelessly. "I had to overload him too much on that last hook-up." Two more of the women had collapsed.

Our big gun cut loose for the final salvo; we waited for an interminable period—all of ten seconds. Then we were moving, gathering speed as we rolled. The *Benison* hit the Palace wall with a blow that I thought would wreck her, but she did not mount. But the pilot had his forward hydraulic jacks down as soon as we hit; her bow reared slowly up. We reached an angle so steep that it seemed she must turn turtle, then the treads took hold, we ground forward and slid through the breach in the wall.

Our gun spoke again, at point-blank range, right into the inner Palace. A thought flashed through my head-this was the exact spot where I had first laid eyes on Judith. I had come full circle.

The *Benison* was rampaging around, destroying by her very weight. I waited until the last cruiser had had time to enter, then gave the order, "Transports, assault." That done, I called Penoyer, informed him that Huxley was wounded and that he was now in command.

I was all through. I did not even have a job, a battle station. The battle surged around me, but I was not part of it—I, who two minutes ago had been in usurped full command.

I stopped to light a cigarette and wondered what to do with myself. I put it out after one soul-satisfying drag and scrambled up into the fire control tower of the turret and peered out the after slits. A breeze had come up and the smoke was clearing; the transport *Jacob's Ladder* I could see just pulling out of the breach. Her sides fell away and ranks of infantry sprang out, blasters ready. A sporadic fire met them; some fell but most returned the fire and charged the inner Palace. The *Jacob's Ladder* cleared the breach and the *Ark* took her place.

The troops commander in the *Ark* had orders to take the Prophet alive. I hurried down ladders from the turret, ran down the passageway between the engine rooms, and located the escape hatch in the floor plates, clear at the stern of the *Benison*. Somehow I got it undamped, swung up the hatch cover, and stuck my head down. I could see men running, out beyond the treads. I drew my blaster, dropped to the ground, and tried to catch up with them, running out the stern between the big treads.

They were men from the *Ark*, right enough. I attached myself to a platoon and trotted along with them. We swarmed into the inner Palace.

But the battle was over; we encountered no organized resistance. We went on down and down and down and found the Prophet's bombproof. The door was open and he was there.

But we did not arrest him. The Virgins had gotten to him first; he no longer looked imperious. They had left him barely something to identify at an inquest.

"Let There Be Light"

ARCHIBALD DOUGLAS, Sc.D., Ph.D., B.S., read the telegram with unconcealed annoyance.

"ARRIVING CITY LATE TODAY STOP DESIRE CONFERENCE COLD LIGHT YOUR LABORATORY TEN P M (signed) DR. M. L MARTIN"

He was, was he? He did, did he? What did he think this lab was; a hotel? And did Martin think that his time was at the disposal of any Joe Doakes who had the price of a telegram? He had framed in his mind an urbanely discouraging reply when he noticed that the message had been filed at a midwestern airport. Very well, let him arrive. Douglas had no intention of meeting him.

Nevertheless, his natural curiosity caused him to take down his copy of Who's Who in Science and look up the offender. There it was: Martin, M. L., biochemist and ecologist, P.D.Q., X.Y.Z., N.R.A., C.I.O. —enough degrees for six men. Hmmm...—Director Guggenheim Orinoco Fauna Survey, Author; Co-Lateral Symbiosis of the Boll Weevil, and so on, through three inches of fine print The old boy seemed to be a heavyweight.

A little later Douglas surveyed himself in the mirror of the laboratory washroom. He took off a dirty laboratory smock, removed a comb from his vest pocket, and put a careful polish on his sleek black hair. An elaborately tailored checked jacket, a snap-brim hat and he was ready for the street. He fingered the pale scar that stenciled the dark skin of one cheek. Not bad, he thought, in spite of the scar. If it weren't for the broken nose he would look O.K.

The restaurant where he dined alone was only partly filled. It wouldn't become lively until after the theatres were out, but Douglas appreciated the hot swing band and the good food. Toward the end of his meal, a young woman walked past his table and sat down, facing him, one table away. He sized her up with care. Pretty fancy!

Figure like a strip dancer, lots of corn-colored hair, nice complexion, and great big soft blue eyes. Rather dumb pan, but what could you expect?

He decided to invite her over for a drink. If things shaped up, Dr. Martin could go to the devil. He scribbled a note on the back of a menu, and signaled the waiter.

"Who is she, Leo? One of the entertainers?"

"No, m'sieur, I have not seen her before."

Douglas relaxed, and waited for results. He knew the come-hither look when he saw it, and he was sure of the outcome. The girl read his note and glanced over at him with a little smile. He returned it with interest. She borrowed a pencil from the waiter, and wrote on the menu. Presently Leo handed it to him.

"Sorry,"—it read—"and thanks for the kind offer, but I am otherwise engaged."

Douglas paid his bill, and returned to the laboratory.

His laboratory was located on the top floor of his father's factory. He left the outer door open and the elevator down in anticipation of Doctor Marth's arrival, then he busied himself by trying to locate the cause of an irritating vibration in his centrifuge. Just at ten o'clock he heard the whir of the elevator. He reached the outer door of his office just as his visitor arrived.

Facing him was the honey-colored babe be had tried to pick up in the restaurant

He was immediately indignant "How the hell did you get here? Follow me?"

She froze up at once. "I have an appointment with Doctor Douglas. Please tell him that I am here."

"The hell you have. What kind of a game is this?"

She controlled herself, but her face showed the effort.

"I think Doctor Douglas is the best judge of that. Tell him I'm here —at once."

“You’re looking at him. I'm Doctor Douglas.”

“You! I don’t believe it. You look more like a—a gangster.”

“I am, nevertheless. Now cut out the clowning, sister, and tell me what the racket is. What’s your name?”

“I am Doctor M. L. Martin.”

He looked completely astounded, then bellowed his amusement. “No foolin’? You wouldn’t kid your country cousin, would you? Come in, doc, come in.”

She followed him, suspicious as a strange dog; ready to fight at any provocation. She accepted a chair, then addressed him again. “Are you really Doctor Douglas?”

He grinned at her. “In the flesh—and I can prove it. How about you? I still think this is some kind of a badger game.”

She froze up again. “What do you want—my birth certificate?”

“You probably murdered Dr. Martin in the elevator, and stuffed the old boy’s body down the shaft”

She arose, gathered up her gloves and purse, and prepared to leave. “I came fifteen hundred miles for this meeting. I am sorry I bothered. Good evening, Doctor Douglas.”

He was instantly soothing. “Aw, don’t get sore—I was just needling you. It just tickled me that the distinguished Doctor Martin should look so much like Betty Grable. Now sit back down”—he gently disengaged her hands from her gloves—”and let me buy you that drink you turned down earlier.”

She hesitated, still determined to be angry, then her natural good nature came to his aid, and she relaxed.

“O.K., Butch.”

“That’s better. What’ll it be; Scotch or Bourbon?”

“Make mine Bourbon—and not too much water.”

By the time the drinks were fixed and cigarets lighted the tension was lifted. “Tell me,” he began, “to what do I owe this visit? I don’t know a damn thing about biology.”

She blew a smoke ring and poked a carmine finger nail through it. “You remember that article you had in the April Physical Review? The one about cold light, and possible ways of achieving it?”

He nodded. “Electroluminescence vs. Chemiluminescence: not much in that to interest a biologist.”

“Nevertheless I’ve been working on the same problem.”

‘From what angle?”

“I’ve been trying to find out how a lightning bug does the trick. I saw some gaudy ones down in South America, and it got me to thinking.”

“Hmm— Maybe you got something. What have you found out?”

“Not much that wasn’t already known. As you probably know, the firefly is an almost incredibly efficient source of light—at least 96% efficient. Now how efficient would you say the ordinary commercial tungsten-filament incandescent lamp is?"

"Not over two percent at the best."

"That's fair enough. And a stupid little beetle does fifty times as well without turning a hair. We don't look so hot, do we?"

"Not very," he acknowledged. "Go on about the bug."

"Well, the firefly has in his tummy an active organic compound—very complex—called luciferin. When this oxidizes in the presence of a catalyst, luciferase, the entire energy of oxidation is converted into green light— no heat. Reduce it with hydrogen and it's ready to go again. I've learned how to do it in the laboratory."

"The hell you have! Congratulations! You don't need me. I can close up shop."

"Not so fast. It isn't commercially feasible; it takes too much gear to make it work; it's too messy; and I can't get an intense light. Now I came to see you to see if we might combine forces, pool our information, and work out something practical."

Three weeks later at four in the morning Doctor M. L. Martin—Mary Lou to her friends—was frying an egg over a bunsen burner. She was dressed in a long rubber shop apron over shorts and a. sweater. Her long corn colored hair hung in loose ripples. The expanse of shapely leg made her look like something out of a cheesecake magazine.

She turned to where Douglas lay sprawled, a wretched exhausted heap, in a big arm chair. "Listen, Ape, the percolator seems to have burnt out. Shall I make the coffee in the fractional distillator?"

"I thought you had snake venom in it."

"So I have. I'll rinse it out."

"Good God, woman! Don't you care what chances you take with yourself?—or with me?"

"Pooh—snake venom wouldn't hurt you even if you did drink it—unless that rotgut you drink has given your stomach ulcers. Soup's on!"

She chucked aside the apron, sat down and crossed her legs. He automatically took in the display.

"Mary Lou, you lewd wench, why don't you wear some clothes around the shop? You arouse my romantic nature."

"Nuts. You haven't any. Let's get down to cases. Where do we stand?"

He ran a hand through his hair and chewed his lip. "Up against a stone wall, I think. Nothing we've tried so far seems to offer any promise."

“The problem seems to be essentially one of confining radiant energy to the visible band of frequency.”

“You make it sound so simple, bright eyes.”

“Stow the sarcasm. That is, nevertheless, where the loss comes in with ordinary electric light. The filament is white hot, maybe two percent of the power is turned into light, the rest goes into infrared and ultraviolet.”

“So beautiful. So true.”

“Pay attention, you big ape I know you’re tired, but listen to mama. There should be some way of sharply tuning the wave length. How about the way they do it in radio?”

He perked up a little. “Wouldn’t apply to the case. Even if you could manage to work out an inductance-capacitance circuit with a natural resonant frequency within the visual band, it would require too much gear for each lighting unit, and if it got out of tune, it wouldn’t give any light at all.”

‘Is that the only way frequency is controlled?”

“Yes—well, practically. Some transmitting stations, especially amateurs, use a specially cut quartz crystal that has a natural frequency of its own to control wave length.”

“Then why can’t we cut a crystal that would have a natural frequency in the octave of visible light?”

He sat up very straight. “Great Scott, kid!—I think you’ve hit it.”

He got up; and strode up and down, talking as he went.

“They use ordinary quartz crystal for the usual frequencies, and tourmaline for short wave broadcasting. The frequency of vibration depends directly on the way the crystal is cut. There is a simple formula—” He stopped, and took down a thick India-paper handbook “Hmm—yes, here it is. For quartz, every millimetre of thickness of the crystal gives one hundred metres of wave length. Frequency is, of course, the reciprocal of wave length. Tourmaline has a similar formula for shorter wave lengths.”

He continued to read. “These crystals have the property of flexing when electric charges are applied to them, and, vice versa, show an electric charge when flexed. The period of flexure is an inherent quality of the crystal, depending on its geometrical proportions. Hooked Into a radio transmitting circuit, such a crystal requires the circuit to operate at one, and only one, frequency, that of the crystal. That’s it, kid, that’s it! Now if we can find a crystal that can be cut to vibrate at the frequency of visible light, we’ve got it—a way to turn electrical energy into light without heat losses!”

Mary Lou cluck-clucked admiringly. “Mama’s good boy. Mama knew he could do it, if he would only try.”

Nearly six months later Douglas invited his father up to the laboratory to see the results. He ushered the mild, silver-haired old gentleman into the sanctum sanctorum and waved to Mary Lou to draw the shades. Then he pointed to the ceiling.

"There it is, Dad—cold light—at a bare fraction of the cost of ordinary lighting."

The elder man looked up and saw, suspended from the ceiling, a grey screen, about the size and shape of the top of a card table. Then Mary Lou threw a switch. The screen glowed brilliantly, but not dazzlingly, and exhibited a mother-of-pearl iridescence. The room was illuminated by strong white light without noticeable glare.

The young scientist grinned at his father, as pleased as a puppy who expects a pat "How do you like it, Dad?

One hundred candle power—that'ud take about a hundred watts with ordinary bulbs, and we're doing it with two watts—half an ampere at four volts."

The old man blinked absentmindedly at the display. "Very nice, son, very nice indeed. I'm pleased that you have perfected it."

"Look, Dad—do you know what that screen up there is made out of? Common, ordinary clay. It's a form of aluminum silicate; cheap and easy to make from any clay, or ore, that contains aluminum. I can use bauxite, or cryolite, or most anything. You can gather up the raw materials with a steam shovel in any state in the union."

"Is your process all finished, son, and ready to be patented?"

"Why, yes, I think so, Dad."

"Then let's go into your office, and sit down. I've something I must discuss with you. Ask your young lady to come, too."

Young Douglas did as he was told, his mood subdued by his father's solemn manner. When they were seated, he spoke up.

"What's the trouble, Dad? Can I help?"

"I wish you could, Archie, but Fm afraid not. I'm going to have to ask you to close your laboratory."

The younger man took it without flinching. "Yes, Dad?"

"You know I've always been proud of your work, and since your mother passed on my major purpose has been to supply you with the money and equipment you needed for your work."

"You've been very generous, Dad."

"I wanted to do it. But now a time has come when the factory won't support your research any longer. In fact, I may have to close the doors of the plant."

"As bad as that, Dad? I thought that orders had picked up this last quarter."

"We do have plenty of orders, but the business isn't making a profit on them. Do you remember I mentioned something to you about the public utilities bill that passed at the last session of the legislature?”

“I remember it vaguely, but I thought the Governor vetoed it.”

“He did, but they passed it over his veto. It was as bold a case of corruption as this state has ever seen—the power lobbyists had both houses bought, body and soul.” The old man’s voice trembled with impotent auger.

“And just how does it affect us, Dad?”

“This bill pretended to equalize power rates according to circumstances. What it actually did was to permit the commission to discriminate among consumers as they saw fit. You know what that commission is—I’ve always been on the wrong side of the fence politically. Now they are forcing me to the wall with power rates that prevent me from competing.”

“But good heavens, Dad— they can’t do that. Get an injunction!”

“In this state, son?” His white eyebrows raised.

“No, I guess not.” He got to his feet and started walking the floor. “There must be something we can do.”

His father shook his head. “The thing that really makes me bitter is that they can do this with power that actually belongs to the people. The federal government’s program has made plenty of cheap power possible—the country should be rich from it—but these local pirates have gotten hold of it, and use it as a club to intimidate free citizens.”

After the old gentleman had left, Mary Lou slipped over and laid a hand on Douglas’ shoulder and looked down into his face.

“You poor boy!”

His face showed the upset he had concealed from his father. “Cripes, Mary Lou. Just when we were going good. But I mind it most for Dad.”

“Yes, I know.”

“And not a damn thing I can do about it. It’s politics, and those potbellied racketeers own this state.”

She looked disappointed and faintly scornful. “Why, Archie Douglas, you great big pantywaist! You aren’t going to let those mugs get away with this without a fight, are you?”

He looked up at her dully. “No, of course not. I’ll fight. But I know when I'm licked. This is way out of my field.”

She flounced across the room. “I'm surprised at you. You’ve invented one of the greatest things since the dynamo, and you talk about being licked.”

“Your invention, you mean.”

“Nuts! Who worked out the special forms? Who blended them to get the whole spectrum? And besides, you aren’t out of your field. What’s the problem?— Power! They’re squeezing you for power.

You’re a physicist. Dope out some way to get power without buying from them.”

“What would you like? Atomic power?”

“Be practical. You aren’t the Atomic Energy Commission.,,

“I might stick a windmill on the roof.”

“That’s better, but still not good. Now get busy with that knot in the end of your spinal cord. I'll start some coffee. This is going to be another all night job.”

He grinned at her. “O.K., Carrie Nation. I'm coming.”

She smiled happily at him. “That’s the way to talk.”

He rose and went over to her, slipped an arm about her waist and kissed her. She relaxed to his embrace, but when their lips parted, she pushed him away.

“Archie, you remind me of the Al G. Barnes Circus; ‘Every Act an Animal Act.’”

As the first light of dawn turned their faces pale and sickly, they were rigging two cold light screens face to face. Archie adjusted them until they were an inch apart.

“There now—practically all the light from the first screen should strike the second. Turn the power on the first screen, Sex Appeal.”

She threw the switch. The first screen glowed with light, and shed its radiance on the second.

“Now to see if our beautiful theory is correct.” He fastened a voltmeter across the terminals of the second screen and pressed the little black button in the base of the voltmeter. The needle sprang over to two volts.

She glanced anxiously over his shoulder. “How about it, guy?”

“It works! There’s no doubt about it. These screens work both ways. Put juice in 'em; out comes light. Put light in ‘em; out comes electricity.”

“What’s the power loss, Archie?”

“Just a moment.” He hooked in an ammeter, read it, and picked up his slide rule. “Let me see— Loss is about thirty percent. Most of that would be the leakage of light around the edges of the screens.”

“The sun’s coming up, Archie. Let’s take screen number two up on the roof, and try it out in the sunlight.”

Some minutes later they had the second screen and the electrical measuring instruments on the roof. Archie propped the screen up against a skylight so that it faced the rising sun, fastened the voltmeter across its terminals and took a reading. The needle sprang at once to two volts.

Mary Lou jumped up and down. “It works!”

“Had to work,” commented Archie. “If the light from another screen will make it pour out juice, then sunlight is bound to. Hook in the ammeter. Let's see how much power we get."

The ammeter showed 18.7 amperes.

Mary Lou worked out the result on the slide rule.

"Eighteen-point-seven times two gives thirty-seven-point-four watts or about five hundredths of a horsepower. That doesn't seem like very much. I had hoped for more."

"That's as it should be, kid. We are using only the visible light rays. As a light source the sun is about fifteen percent efficient; the other eighty-five percent are infrared and ultraviolet. Gimme that slipstick." She passed him the slide rule. "The sun pours out about a horsepower and a half, or one and one eighth kilowatts on every square yard of surface on the earth that is faced directly towards the sun. Atmospheric absorption cuts that down about a third, even at high noon over the Sahara desert. That would give one horsepower per square yard. With the sun just rising we might not get more than one-third horsepower per square yard here. At fifteen percent efficiency that would be about five hundredths of a horsepower. It checks—Q.ED.— What are you looking so glum about?"

"Well—I had hoped that we could get enough sunpower off the roof to run the factory, but if it takes twenty square yards to get one horsepower, it won't be enough."

"Cheer up, Baby Face. We doped out a screen that would vibrate only in the band of visible light; I guess we can dope out another that will be atonic—one that will vibrate to any wave length. Then it will soak up any radiant energy that hits it, and give it up again as electrical power. With this roof surface we can get maybe a thousand horsepower at high noon. Then we'll have to set tip banks of storage batteries so that we can store power for cloudy days and night shifts."

She blinked her big blue eyes at him. "Archie, does your head ever ache?"

Twenty minutes later he was back at his desk, deep in the preliminary calculations, while Mary Lou threw together a scratch breakfast. She interrupted his study to ask:

"Where'd'ja hide that bottle, Lug?"

He looked up and replied, "It's immoral for little girls to drink in broad daylight."

"Come out of the gutter, chum. I want to turn these hotcakes into crepes Suzette, using corn liquor instead of brandy."

"Never mind the creative cookery, Dr. Martin. I'll take mine straight I need my health to finish this job."

She turned around and brandished the skillet at him. "To hear is to obey, my Lord. However, Archie, you are an overeducated Neanderthal, with no feeling for the higher things of life."

"I won't argue the point, Blonde Stuff, bit take a gander at this. I've got the answer—a screen that vibrates all down the scale."

"No foolin', Archie?"

"No foolin', kid. It was already implied in our earlier experiments, but we were so busy trying to build a screen that wouldn't vibrate at random, we missed it. I ran into something else, too."

"Tell mama!"

"We can build screens to radiate in the infrared just as easily as cold light screens. Get it? Heating units of any convenient size or shape, economical and with no high wattage or extreme temperatures to make 'em fire hazards or dangerous to children. As I see it, we can design these screens to, one—" he ticked the points off on his fingers —"take power from the sun at nearly one hundred percent efficiency; two, deliver it as cold light; or three, as heat; or four, as electrical power. We can bank 'em in series to get any required voltage; we can bank in parallel to get any required current, and the power is absolutely free, except for the installation costs."

She stood and watched him in silence for several seconds before speaking. "All that from trying to make a cheaper light. Come eat your breakfast, Steinmetz. You men can't do your work on mush."

They ate in silence, each busy with new thoughts. Finally Douglas spoke. "Mary Lou, do you realize just how big a thing this is?"

"I've been thinking about it."

"It's enormous. Look, the power that can be tapped is incredible. The sun pours over two hundred and thirty trillion horsepower onto the earth all the time and we use almost none of it."

"As much as that, Archie?"

"I didn't believe my own figures when I worked it out, so I looked it up in Richardson's Astronomy. Why, we could recover more than twenty thousand horsepower in any city block. Do you know what that means? Free power! Riches for everybody! It's the greatest thing since the steam engine." He stopped suddenly, noticing her glum face. "What's the matter, kid, am I wrong someplace?"

She fiddled with her fork before replying. "No, Archie—you're not wrong. I've been thinking about it, too. Decentralized cities, laborsaving machinery for everybody, luxuries—it's all possible, but I've a feeling that we're staring right into a mess of trouble. Did you ever hear of 'Breakages Ltd.'?'

"What is it, a salvage concern?"

"Not by a hell of a sight. You ought to read something besides the 'Proceedings of the American Society of Physical Engineers.' George Bernard Shaw, for instance. It's from the preface of Back to Methuselah, and is a sardonic way of describing the combined power of corporate industry to resist any change that might threaten their dividends. You threaten the whole industrial set-up, son, and you're in danger right where you're sitting. What do you think happened to atomic power?"

He pushed back his chair. "Oh, surely not. You're just tired and jumpy. Industry welcomes invention. Why, all the big corporations have their research departments with some of the best minds in the country working in them. And they are in atomics up to their necks."

"Sure—and any bright young inventor can get a job with them. And then he's a kept man—the inventions belong to the corporation, and only those that fit into the pattern of the powers-that-be ever see light. The rest are shelved. Do you really think that they'd let a free lance like you upset investments of billions of dollars?"

He frowned, then relaxed and laughed. "Oh, forget it, kid, it's not that serious."

"That's what you think. Did you ever hear of celanese voile? Probably not. It's a synthetic dress material used in place of chiffon. But it wore better and was washable, and it only cost about forty cents a yard, while chiffon costs four times as much. You can't buy it any more.

"And take razor blades. My brother bought one about five years ago that never had to be re-sharpened. He's still using it, but if he ever loses it, he'll have to go back to the old kind. They took 'em off the market.

"Did you ever hear of guys who had found a better, cheaper fuel than gasoline? One showed up about four years ago and proved his claims—but he drowned a couple of weeks later in a swimming accident. I don't say that he was murdered, but it's damn funny that they never found his formula.

"And that reminds me—I once saw a clipping from the Los Angeles Daily News. A man bought a heavy standard make car in San Diego, filled her up and drove her to Los Angeles. He only used two gallons. Then he drove to Agua Caliente and back to San Diego, and only used three gallons. About a week later the sales company found him and bribed him to make an exchange. By mistake they had let him have a car that wasn't to be sold— one with a trick carburetor.

"Do you know any big heavy cars that get seventy miles to the gallon? You're not likely to—not while 'Breakages Ltd.' rules the roost. But the story is absolutely kosher—you can look it up in the files.

"And of course, everybody knows that automobiles aren't built to wear, they're built to wear out, so you will buy a new one. They build 'em just as bad as the market will stand. Steamships take a worse beating than a car, and they last thirty years or more."

Douglas laughed it off. "Cut 'out the gloom, Sweetie Pie. You've got a persecution complex. Let's talk about something more cheerful—

you and me, for instance. You make pretty good coffee. How about us taking out a license to live together?”

She ignored him.

‘Well, why not. I’m young and healthy. You could do worse.”

“Archie, did I ever tell you about the native chief that got a yen for me down in South America?”

“I don’t think so. What about him?”

“He wanted me to marry him. He even offered to kill off his seventeen current wives and have them served up for the bridal feast.”

“What’s that got to do with my proposition?”

“I should have taken him up. A girl can’t afford to turn down a good offer these days.”

Archie walked up and down the laboratory, smoking furiously. Mary Lou perched on a workbench and watched him with troubled eyes. When he stopped to light another cigaret from the butt of the last, she bid for attention.

“Well, Master Mind, how does it look to you now?”

He finished lighting his cigaret, burned himself, cursed in a monotone, then replied, “oh, you were right, Cassandra. We’re in more trouble than I ever knew existed. First when we build an electric runabout that gets its power from the sun while it’s parked at the curb, somebody pours kerosene over it and burns it up. I didn’t mind that so much—it was just a side issue. But when I refuse to sell out to them, they slap all those phoney law suits on us, and tie us up like a kid with the colic.”

“They haven’t a legal leg to stand on.”

“I know that, but they’ve got unlimited money and we haven’t. They can run these suits out for months—maybe years—only we can’t last that long.”

“What’s our next move? Do you keep this appointment?”

“I don’t want to. They’ll try to buy me off again, and probably threaten me, in a refined way. I’d tell ‘em to go to hell, if it wasn’t for Dad. Somebody’s broken into his house twice now, and he’s too old to stand that sort of thing.”

“I suppose all this labor trouble in the plant worries him, too.”

“Of course it does. And since it dates from the time we started manufacturing the screens on a commercial scale, I’m sure it’s part of the frameup. Dad never had any labor trouble before. He always ran a union shop and treated his men like members of his own family. I don’t blame him for being nervous. I’m getting tired of being followed everywhere I go, myself. It makes me jumpy.”

Mary Lou puffed out a cloud of smoke. “I’ve been tailed the past couple of weeks.”

"The hell you have! Mary Lou, that tears it. I'm going to settle this thing today."

"Going to sell out?"

"No." He walked over to his desk, opened a side drawer, took out a .38 automatic, and slipped it in his pocket. Mary Lou jumped down from the bench and ran to him. She put her hands on his shoulders, and looked up at him, fear in her face.

"Archie!"

He answered gently. "Yes, kid."

"Archie, don't do anything rash. If anything happened to you, you know damn well I couldn't get along with a normal man."

He patted her hair. "Those are the best words I've heard in weeks, kid."

Douglas returned about one P.M. Mary Lou met him at the elevator. "Well?"

"Same old song-and-dance. Nothing done in spite of my brave promises."

"Did they threaten you?"

"Not exactly. They asked me how much life insurance I carried."

"What did you tell them?"

"Nothing. I reached for my handkerchief and let them see that I was carrying a gun. I thought it might cause them to revise any immediate plans they might have in mind. After that the interview sort of fizzled out and I left. Mary's little lamb followed me home, as usual."

"Same plug-ugly that shadowed you yesterday?"

"Him, or his twin. He couldn't be a twin, though, come to think about it. They'd have both died of fright at birth."

"True enough. Have you had lunch?"

"Not yet. Let's ease down to the shop lunch room and take on some groceries. We can do our worrying later."

The lunch room was deserted. They talked very little. Mary Lou's blue eyes stared vacantly over his head. At the second cup of coffee she reached out and touched him.

"Archie, do you know the ancient Chinese advice to young ladies about to undergo criminal assault?"

"No, what is it?"

"Just one word: 'Relax.' That's what we've got to do!"

"Speak English."

"I'll give you a blueprint Why are we under attack?"

"We've got something they want."

"Not at all. We've got something they want to quarantine—they don't want anyone else to have it. So they try to buy you off, or scare you into quitting. If these don't work, they'll try something stronger. Now you're dangerous to them and in danger from them because you've got a secret. What happens if it isn't a secret? Suppose everybody knows it?"

"They'd be sore as hell."

"Yes, but what would they do? Nothing. Those big tycoons are practical men. They won't waste a dime on heckling you if it no longer serves their pocketbooks."

"What do you propose that we do?"

"Give away the secret. Tell the world how it's done.

Let anybody manufacture power screens and light screens who wants to. The heat process on the mix is so simple that any commercial chemist can duplicate it once you tell 'em how, and there must be a thousand factories, at least, that could manufacture them with their present machinery from materials at their very doorsteps."

"But, good Lord, Mary Lou, we'd be left in the lurch."

"What can you lose? We've made a measly couple of thousand dollars so far, keeping the process secret. If you turn it loose, you still hold the patent, and you could charge a nominal royalty—one that it wouldn't be worth while trying to beat, say ten cents a square yard on each screen manufactured. There would be millions of square yards turned out the fist year—hundreds of thousands of dollars to you the first year, and a big income for life. You can have the finest research laboratory in the country."

He slammed his napkin down on the table. "Kid, I believe you're right."

"Don't forget, too, what you'll be doing for the country. There'll be factories springing up right away all over the Southwest—every place where there's iota of sunshine. Free power! You'll be the new emancipator."

He stood up, his eyes shining. "Kid, we'll do it! Half a minute while I tell Dad our decision, then we'll beat it for town."

Two hours later the teletype in every news service office in the country was clicking out the story. Douglas insisted that the story include the technical details of the process as a condition of releasing it. By the time he and Mary Lou walked out of the Associated Press building the first extra was on the street: "GENIUS GRANTS GRATIS POWER TO PUBLIC." Archie bought one and beckoned to the muscle man who was shadowing him.

"Come here, Sweetheart. You can quit pretending to be a fireplug. I've an errand for you." He handed the lunk the newspaper. It was accepted uneasily. In all his long and unsavory career he had never had the etiquette of shadowing treated in so cavalier a style. "Take this paper to your boss and tell him Archie Douglas sent him a valentine. Don’t stand there staring at me! Beat it, before I break your fat head!”

As Archie watched him disappear in the crowd, Mary Lou slipped a hand in his. “Feel better, son?”

“Lots.”

“All your worries over?”

“All but one.” He grabbed her shoulders and swung her ‘around. “I’ve got an argument to settle with you. Come along!” He grabbed her wrist and pulled her out into the crosswalk.

“What the hell, Archie! Let go my wrist.”

“Not likely. You see that building over there? That’s the court house. Right next to the window where they issue dog licenses, there’s one where we can get a wedding permit.”

“I’m not going to marry you!”

“The’ hell you aren’t. You’ve stayed all night in my laboratory a dozen times. I’m compromised. You’ve got to make an honest man of me—or I’ll start to scream right here in the street.”

“This is blackmail!”

As they entered the building, she was still dragging her feet—but not too hard.

Magic, Inc.

"Whose spells are you using, buddy?"

That was the first thing this bird said after coming into my place of business. He had hung around maybe twenty minutes, until I was alone, looking at samples of waterproof pigment, fiddling with plumbing catalogues, and monkeying with the hardware display.

I didn't like his manner. I don't mind a legitimate business inquiry from a customer, but I resent gratuitous snooping.

"Various of the local licensed practitioners of thaumaturgy," I told him in a tone that was chilly but polite. "Why do you ask?"

"You didn't answer my question," he pointed out. "Come on—speak up. I ain't got all day."

I restrained myself. I require my clerks to be polite, and, while I was pretty sure this chap would never be a customer, I didn't want to break my own rules. "If you are thinking of buying anything," I said, "I will be happy to tell you what magic, if any, is used in producing it, and who the magician is."

"Now you're not being cooperative," he complained. "We like for people to be cooperative. You never can tell what bad luck you may run into not cooperating."

"Who d'you mean by 'we,'" I snapped, dropping all pretense of politeness, "and what do you mean by `bad luck'?"

"Now we're getting somewhere," he said with a nasty grin, and settled himself on the edge of the counter so that he breathed into my face. He was short and swarthy—Sicilian, I judged—and dressed in a suit that was overtailored. His clothes and haberdashery matched perfectly in a color scheme that I didn't like. "I'll tell you what I mean by 'we'; I'm a field representative for an organization that protects people from bad luck—if they're smart, and cooperative. That's why I asked you whose charms you're usin'. Some of the magicians around here aren't cooperative; it spoils their luck, and that bad luck follows their products."

"Go on," I said. I wanted him to commit himself as far as he would.

"I knew you were smart," he answered. "F'r instance—how would you like for a salamander to get loose in your shop, setting fire to your goods and maybe scaring your customers? Or you sell the materials to build a house, and it turns out there's a poltergeist living in it, breaking the dishes and souring the milk and kicking the furniture around. That's what can come of dealing with the wrong magicians. A little of that and your business is ruined. We wouldn't want that to happen, *would we?"* He favored me with another leer.

I said nothing, he went on, "Now, we maintain a staff of the finest demonologists in the business, expert magicians themselves, who can report on how a magician conducts himself in the Half World, and whether or not he's likely to bring his clients bad luck. Then we advise our clients whom to deal with, and keep them from having bad luck. See?"

I saw all right. I wasn't born yesterday. The magicians I dealt with were local men that I had known for years, men with established reputations both here and in the Half World. They didn't do anything to stir up the elementals against them, and they did not have bad luck.

What this slimy item meant was that I should deal only with the magicians they selected at whatever fees they chose to set, and they would take a cut on the fees and also on the profits of my business. If I didn't choose to "cooperate," I'd be persecuted by elementals they had an arrangement with—renegades, probably, with human vices—my stock in trade spoiled and my customers frightened away. If I still held out, I could expect some really dangerous black magic that would injure or kill me. All this under the pretense of selling me protection from men I knew and liked. A neat racket!

I had heard of something of the sort back East, but had not expected it in a city as small as ours.

He sat there, smirking at me, waiting for my reply, and twisting his neck in his collar, which was too tight. That caused me to notice something. In spite of his foppish clothes a thread showed on his neck just above the collar in back. It seemed likely that it was there to support something next to his skin—an amulet. If so, he was superstitious, even in this day and age.

"There's something you've omitted," I told him. "I'm a seventh son, born under a caul, and I've got second sight. My luck's all right, but I can see bad luck hovering over you like cypress over a grave!" I reached out and snatched at the thread. It snapped and came loose in my hand. There was an amulet on it, right enough, an unsavory little wad of nothing in particular and about as appetizing as the bottom of a bird cage. I dropped it on the floor and ground it into the dirt.

He had jumped off the counter and stood facing me, breathing hard. A knife showed up in his right hand; with his left hand he was warding off the evil eye, the first and little fingers pointed at me, making the horns of Asmodeus. I knew I had him for the time being.

"Here's some magic you may not have heard of," I rapped out, and reached into a drawer behind the counter. I hauled out a pistol and pointed it at his face. "Cold iron! Now go back to your owner and tell him there's cold iron waiting for him, too—both ways!"

He backed away, never taking his eyes off my face. If looks could kill, and so forth. At the door he paused and spat on the doorsill, then got out of sight very quickly.

I put the gun away and went about my work, waiting on two customers who came in just as Mr. Nasty Business left. But I will admit that I was worried. A man's reputation is his most valuable asset. I've built up a name, while still a young man, for dependable products. It was certain that this bird and his pals would do all they could to destroy that name—which might be plenty if they were hooked in with black magicians!

Of course the building-materials game does not involve as much magic as other lines dealing in less durable goods. People like to know, when they are building a home, that the bed won't fall into the basement some night, or the roof disappear and leave them out in the rain.

Besides, building involves quite a lot of iron, and there are very few commercial sorcerers who can cope with cold iron. The few that can are so expensive it isn't economical to use them in building. Of course if one of the café-society crowd, or somebody like that, wants to boast that they have a summerhouse or a swimming pool built entirely by magic, I'll accept the contract, charging accordingly, and sublet it to one of the expensive, first-line magicians. But by and large my business uses magic only in the side issues—perishable items and doodads which people like to buy cheap and change from time to time.

So I was not worried about magic *in* my business, but about what magic could *do* to my business—if someone set out deliberately to do me mischief. I had the subject of magic on my mind anyhow, because of an earlier call from a chap named Ditworth—not a matter of vicious threats, just a business proposition that I was undecided about. But it worried me, just the same....

I closed up a few minutes early and went over to see Jedson— a friend of mine in the cloak-and-suit business. He is considerably older than I am, and quite a student, without holding a degree, in all forms of witchcraft, white and black magic, necrology, demonology, spells, charms, and the more practical forms of divination. Besides that, Jedson is a shrewd, capable man in every way, with a long head on him. I set a lot of store by his advice.

I expected to find him in his office, and more or less free, at that hour, but he wasn't. His office boy directed me up to a room he used for sales conferences. I knocked and then pushed the door.

"Hello, Archie," he called out as soon as he saw who it was. "Come on in. I've got something." And he turned away.

I came in and looked around. Besides Joe Jedson there was a handsome, husky woman about thirty years old in a nurse's uniform, and a fellow named August Welker, Jedson's foreman. He was a handy all-around man with a magician's license, third class. Then I noticed a fat little guy, Zadkiel Feldstein, who was agent for a good many of the second-rate magicians along the street, and some few of the first-raters. Naturally, his religion prevented him from practicing magic himself, but, as I understand it, there was no theological objection to his turning an honest commission. I had had dealings with him; he was all right.

This ten-percenter was clutching a cigar that had gone out, and watching intently Jedson and another party, who was slumped in a chair.

This other party was a girl, not over twenty-five, maybe not that old. She was blond, and thin to the point that you felt that light would shine through her. She had big, sensitive hands with long fingers, and a big, tragic mouth: Her hair was silver-white, but she was not an albino. She lay back in the chair, awake but apparently done in. The nurse was chafing her wrists.

"What's up?" I asked. "The kid faint?"

"Oh no," Jedson assured me, turning around. "She's a white witch—works in a trance. She's a little tired now, that's all."

"What's her specialty?" I inquired.

"Whole garments."

"Huh?" I had a right to be surprised. It's one thing to create yard goods; another thing entirely to turn out a dress, or a suit, all finished and ready to wear. Jedson produced and merchandised a full line of garments in which magic was used throughout. They were mostly sportswear, novelty goods, ladies' fashions, and the like, in which style, rather than wearing qualities, was the determining factor. Usually they were marked "One Season Only," but they were perfectly satisfactory for that one season, being backed up by the consumers' groups.

But they were not turned out in one process. The yard goods involved were made first, usually by Welker. Dyes and designs were added separately. Jedson had some very good connections among the Little People, and could obtain shades and patterns from the Half World that were exclusive with him. He used both the old methods and magic in assembling garments, and employed some of the most talented artists in the business. Several of his dress designers freelanced their magic in Hollywood under an arrangement with him. All he asked for was screen credit.

But to get back to the blond girl—

"That's what I said," Jedson answered, "whole garments, with good wearing qualities too. There's no doubt that she is the real McCoy; she was under contract to a textile factory in Jersey City. But I'd give a thousand dollars to see her do that whole-garment stunt of hers just once. We haven't had any luck, though I've tried everything but red-hot pincers."

The kid looked alarmed at this, and the nurse looked indignant. Feldstein started to expostulate, but Jedson cut him short. "That was just a figure of speech; you know I don't hold with black magic. Look, darling," he went on, turning back to the, girl, "do you feel like trying again?" She nodded and he added, "All right—sleepy time now!"

And she tried again, going into her act with a minimum of groaning and spitting. The ectoplasm came out freely and sure enough, it formed into a complete dress instead of yard goods. It was a neat little dinner frock, about a size sixteen, sky blue in a watered silk. It had class in a refined way, and I knew that any jobber who saw it would be good for a sizable order.

Jedson grabbed it, cut off a swatch of cloth and applied his usual tests, finishing by taking the swatch out of the microscope and touching a match to it.

He swore. "Damn it," he said, "there's no doubt about it. It's not a new integration at all; she's just reanimated an old rag!"

"Come again," I said. "What of it?"

"Huh? Archie, you really ought to study up a bit. What she just did isn't really creative magic at all. This dress"—he picked it up and shook it—"had a real existence someplace at some time. She's gotten hold of a piece of it, a scrap or maybe just a button, and applied the laws of homeopathy and contiguity to produce a simulacrum of it."

I understood him, for I had used it in my own business. I had once had a section of bleachers, suitable for parades and athletic events, built on my own grounds by old methods, using skilled master mechanics and the best materials—no iron, of course. Then I cut it to pieces. Under the law of contiguity, each piece remained part of the structure it, had once been in. Under the law of homeopathy, each piece was potentially the entire structure. I would contract to handle a Fourth of July crowd, or the spectators for a circus parade, and send out a couple of magicians armed with as many fragments of the original stands as we needed sections of bleachers. They would bind a spell to last twenty-four hours around each piece. That way the stands cleared themselves away automatically.

I had had only one mishap with it; an apprentice magician, who had the chore of being on hand as each section vanished and salvaging the animated fragment for further use, happened one day to pick up the wrong piece of wood from where one section had stood. The next time we used it, for the Shrine convention, we found we had thrown up a brand-new four-room bungalow at the corner of Fourteenth and Vine instead of a section of bleachers. It could have been embarrassing, but I stuck a sign on it

MODEL HOME NOW ON DISPLAY

and ran up another section on the end.

An out-of-town concern tried to chisel me out of the business one season, but one of their units fell, either through faulty workmanship on the pattern or because of unskilled magic, and injured several people. Since then I've had the field pretty much to myself.

I could not understand Joe Jedson's objection to reanimation. "What difference does it make?" I persisted. "It's a dress, isn't it?"

"Sure it's a dress, but it's not a new one. That style is registered somewhere and doesn't belong to me. And even if it were one of my numbers she had used, reanimation isn't what I'm after. I can make better merchandise cheaper without it; otherwise I'd be using it now."

The blond girl came to, saw the dress, and said, "Oh, Mr. Jedson, did I do it?"

He explained what had happened. Her face fell, and the dress melted away at once. "Don't you feel bad about it, kid," he added, patting her on the shoulder, "you were tired. We'll try again tomorrow. I know you can do it when you're not nervous and overwrought."

She thanked him and left with the nurse. Feldstein was full of explanations, but Jedson told him to forget it, and to have them all back there at the same time tomorrow. When we were alone I told him what had happened to me.

He listened in silence, his face serious, except when I told him how I had kidded my visitor into thinking I had second sight. That seemed to amuse him.

"You may wish that you really had it—second sight, I mean," he said at last, becoming solemn again. "This is an, unpleasant prospect. Have you notified the Better Business Bureau?"

I told him I hadn't.

"Very well then. I'll give them a ring and the Chamber of Commerce too. They probably can't help much, but they are entitled to notification, so they can be on the lookout for it."

I asked him if he thought I ought to notify the police. He shook his head. "Not just yet. Nothing illegal has been done, and, anyhow, all the chief could think of to cope with the situation would be to haul in all the licensed magicians in town and sweat them. That wouldn't do any good, and would just cause hard feelings to be directed against you by the legitimate members of the profession. There isn't a chance in ten that the sorcerers connected with this outfit are licensed to perform magic; they are almost sure to be clandestine. If the police knew about them, it's because they are protected. If they don't know about them, then they probably can't help you."

"What do you think I ought to do?"

"Nothing just yet. Go home and sleep on it. This Charlie may be playing a lone hand, making smalltime shakedowns purely on bluff. I don't really think so; his type sounds like a mobster. But we need more data; we can't do anything until they expose their hand a little more."

We did not have long to wait. When I got down to my place of business the next morning I found a surprise waiting for me—several of them, all unpleasant.

It was as if it had been ransacked by burglars, set fire to, then gutted by a flood. I called up Jedson at once. He came right over. He didn't have anything to say at first, but went poking through the ruins, examining a number of things. He stopped at the point where the hardware storeroom had stood, reached down and gathered up a handful of the wet ashes and muck. "Notice anything?" he asked, working his fingers so that the debris sloughed off and left in the hand some small metal objects—nails, screws, and the like.

"Nothing in particular. This is where the hardware bins were located; that's some of the stuff that didn't burn."

"Yes, I know," he said impatiently, "but don't you see anything else? Didn't you stock a lot of brass fittings?"

"Yes."

"Well, find one!"

I poked around with my toe in a spot where there should have been a lot of brass hinges and drawer pulls mixed in with the ashes. I did not find anything but the nails that had held the bins together. I oriented myself by such landmarks as I could find and tried again. There were plenty of nuts and bolts, casement hooks, and similar junk, but no brass.

Jedson watched me with a sardonic grin on his face.

"Well?" I said, somewhat annoyed at his manner.

"Don't you see?" he answered. "It's magic, all right. In this entire yard there is not one scrap of metal left, *except cold iron!"*

It was plain enough. I should have seen it myself. He messed around awhile longer. Presently we came across an odd thing. It was a slimy, wet track that meandered through my property, and disappeared down one of the drains. It looked as if a giant slug, about the size of a Crosley car, had wandered through the place.

"Undine," Jedson announced, and wrinkled his nose at the smell. I once saw a movie, a Megapix superproduction called the *Water King's Daughter.* According to it undines were luscious enough to have interested Earl Carroll, but if they left trails like that I wanted none of them.

He took out his handkerchief and spread it for a clean place to sit down on what had been sacks of cement—a fancy, quick-setting variety, with a trade name of Hydrolith, I had been getting eighty cents a sack for the stuff, now it was just so many big boulders.

He ticked the situation off on his fingers. "Archie, you've been kicked in the teeth by at least three of the four different types of elements—earth, fire, and water. Maybe there was a sylph of the air in on it, too, but I can't prove it. First the gnomes came and cleaned out everything you had that came out of the ground, except cold iron. A salamander followed them and set fire to the place, burning everything that was burnable, and scorching and smoke-damaging the rest. Then the undine turned the place into a damned swamp, ruining anything that wouldn't burn, like cement and lime. You're insured?"

"Naturally." But then I started to think. I carried the usual fire, theft, and flood insurance, but business-risk insurance comes pretty high: I was not covered against the business I would lose in the meantime, nor did I have any way to complete current contracts. It was going to cost me quite a lot to cover those contracts; if I let them slide it would ruin the good will of my business, and lay me open to suits for damage.

The situation was worse than I had thought, and looked worse still the more I thought about it. Naturally I could not accept any new business until the mess was cleaned up, the place rebuilt, and new stock put it. Luckily most of my papers were in a fireproof steel safe;

but not all, by any means. There would be accounts receivable that I would never collect because I had nothing to show for them. I work on a slim margin of profit, with all of my capital at work. It began to look as if the Firm of Archibald Fraser, Merchant and Contractor, would go into involuntary bankruptcy.

I explained the situation to Jedson.

"Don't get your wind up too fast," he reassured me. "What magic can do, magic can undo. What we need is the best wizard in town."

"Who's going to pay the fee?" I objected. "Those boys don't work for nickels, and I'm cleaned out."

"Take it easy, son," he advised, "the insurance outfit that carries your risks is due to take a bigger loss than you are. If we can show them a way to save money on this, we can do business. Who represents them here?"

I told him— a firm of lawyers downtown in the Professional Building.

I got hold of my office girl and told her to telephone such of our customers as were due for deliveries that day. She was to stall where possible and pass on the business that could not wait to a firm that I had exchanged favors with in the past. I sent the rest of my help home —they had been standing around since eight o'clock, making useless remarks and getting in the way—and told them not to come back until I sent for them. Luckily it was Saturday; we had the best part of fortyeight hours to figure out some answer.

We flagged a magic carpet that was cruising past and headed for the Professional Building. I settled back and determined to enjoy the ride and forget my troubles. I like taxicabs—they give me a feeling of luxury—and I've liked them even better since they took the wheels off them. This happened to be one of the new Cadillacs with the teardrop shape and air cushions. We went scooting down the boulevard, silent as thought, not six inches off the ground.

Perhaps I should explain that we have a local city ordinance against apportation unless it conforms to traffic regulations— ground traffic, I mean, not air. That may surprise you, but it came about as a result of a mishap to a man in my own line of business. He had an order for eleven-odd tons of glass brick to be delivered to a restaurant being remodeled on the other side of town from his yard. He employed a magician with a common carrier's license to deliver for him. I don't know whether he was careless or just plain stupid, but he dropped those eleven tons of brick through the roof the Prospect Boulevard Baptist Church. Anybody knows that magic won't work over consecrated ground; if he had consulted a map he would have seen that the straight-line route took his load over the church. Anyhow, the janitor was killed, and it might just as well have been the whole congregation. It caused such a commotion that apportation was limited to the streets, near the ground.

It's people like that who make it inconvenient for everybody else.

Our man was in—Mr. Wiggin, of the firm Wiggin, Snead, McClatchey & Wiggin. He had already heard about my "fire," but when Jedson explained his conviction that magic was at the bottom of it he balked. It was, he said most irregular. Jedson was remarkably patient.

"Are you an expert in magic, Mr. Wiggin?" he asked.

"I have not specialized in the thaumaturgic jurisprudence, if that is what you mean, sir."

"Well, I don't hold a license myself, but it has been my hobby for a good many years. I'm sure of what I say in this case; you can call in the independent experts you wish—they'll confirm my opinion. Now suppose we stipulate, for the sake of argument, that this damage was caused by magic. If that is true, there is a possibility that we may be able to save much of the loss. You have authority to settle claims, do you not?"

"Well, I think I may say yes to that—bearing in mind the legal restrictions and the terms of the contract." I don't believe he would have conceded that he had five fingers on his right hand without an auditor to back him up.

"Then it is your business to hold your company's losses down to a minimum. If I find a wizard who can undo a part, or all, of the damage, will you guarantee the fee, on behalf of your company, up to a reasonable amount, say 25 percent of the indemnity?"

He hemmed and hawed some more, and said he did not see how he could possibly do it, and that if the fire had been magic, then to restore by magic might be compounding a felony, as we could not be sure what the connections of the magicians involved might be in the Half World. Besides that, my claim had not been allowed as yet; I had failed to notify the company of my visitor of the day before, which possibly might prejudice my claim. In any case, it was a very serious precedent to set; he must consult the home office.

Jedson stood up. "I can see that we are simply wasting each other's time, Mr. Wiggin. Your contention about Mr. Fraser's possible responsibility is ridiculous, and you know it. There is no reason under the contract to notify you, and even if there were, he is within the twenty-four hours allowed for any notification. I think it best that we consult the home office ourselves." He reached for his hat.

Wiggin put up his hand. "Gentlemen, gentlemen, please! Let's not be hasty. Will Mr. Fraser agree to pay half of the fee?"

"No. Why should he? It's your loss, not his. *You* insured *him."*

Wiggin tapped his teeth with his spectacles, then said, "We must make the fee contingent on results."

"Did you ever hear of anyone in his right mind dealing with a wizard on any other basis?"

Twenty minutes later we walked out with a document which enabled us to hire any witch or wizard to salvage my place of business on a contingent fee not to exceed 25 percent of the value reclaimed. "I thought you were going to throw up the whole matter," I told Jedson with a sigh of relief.

He grinned. "Not in the wide world, old son. He was simply trying to horse you into paying the cost of saving them some money. I just let him know that I knew."

It took some time to decide whom to consult. Jedson admitted frankly that he did not know of a man nearer than New York who could, with certainty, be trusted to do the job, and that was out of the question for the fee involved. We stopped in a bar, and he did some telephoning while I had a beer. Presently he came back and said, "I think I've got the man. I've never done business with him before, but he has the reputation and the training, and everybody I talked to seemed to think that he was the one to see."

"Who is it?" I wanted to know.

"Dr. Fortescue Biddle. He's just down the street—the Railway Exchange Building. Come on, we'll walk it."

I gulped down the rest of my beer and followed him.

Dr. Biddle's place was impressive. He had a corner suite on the fourteenth floor, and he had not spared expense in furnishing and decorating it. The style was modern; it had the austere elegance of a society physician's layout. There was a frieze around the wall of the signs of the zodiac done in intaglio glass, backed up by aluminum. That was the only decoration of any sort, the rest of the furnishing being very plain, but rich, with lots of plate glass and chromium.

We had to wait about thirty minutes in the outer office; I spent the time trying to estimate what I could have done the suite for, subletting what I had to and allowing 10 percent. Then a really beautiful girl with a hushed voice ushered us in. We found ourselves in another smaller room, alone, and had to wait about ten minutes more. It was much like the waiting room, but had some glass bookcases and an old print of Aristotle. I looked at the bookcases with Jedson to kill time. They were filled with a lot of rare old classics on magic. Jedson had just pointed out the *Red Grimoire* when we heard a voice behind us.

"Amusing, aren't they? The ancients knew a surprising amount. Not scientific, of course, but remarkably clever—" The voice trailed off. We turned around; he introduced himself as Dr. Biddle.

He was a nice enough looking chap, really handsome in a spare, dignified fashion. He was about ten years older than I am—fortyish; maybe—with iron-gray hair at the temples and a small, stiff, British major's mustache. His clothes could have been out of the style pages of *Esquire.* There was no reason for me not to like him; his manners were pleasant enough. Maybe it was the supercilious twist to his expression.

He led us into his private office, sat us down, and offered us cigarettes before business was mentioned. He opened up with, "You're Jedson, of course. I suppose Mr. Ditworth sent you?"

I cocked an ear at him; the name was familiar. But Jedson simply answered, "Why, no. Why would you think that he had?"

Biddle hesitated for a moment, then said half to himself, "That's strange. I was certain that I had heard him mention your name. Does either one of you," he added, "know Mr. Ditworth?"

We both nodded at once and surprised each other. Biddle seemed relieved and said, "No doubt that accounts for it. Still—I need some more information. Will you gentlemen excuse me while I call him?"

With that he vanished. I had never seen it done before. Jedson says there are two ways to do it, one is hallucination, the other is an actual exit through the Half World. Whichever way it's done, I think it's bad manners.

"About this chap Ditworth," I started to say to Jedson. "I had intended to ask you—"

"Let it wait," he cut me off, "there's not time now."

At this Biddle reappeared. "It's all right," he announced, speaking directly to me. "I can take your case. I suppose you've come about the trouble you had last night with your establishment?"

"Yes," I agreed. "How did you know?"

"Methods," he replied, with a deprecatory little smile. "My profession has its means. Now, about your problem. What is it you desire?"

I looked at Jedson; he explained what he thought had taken place and why he thought so. "Now I don't know whether you specialize in demonology or not," he concluded, "but it seems to me that it should be possible to evoke the powers responsible and force them to repair the damage. If you can do it, we are prepared to pay any reasonable fee."

Biddle smiled at this and glanced rather selfconsciously at the assortment of diplomas hanging on the walls of his office. "I feel that there should be reason to reassure you," he purred. "Permit me to look over the ground—" And he was gone again.

I was beginning to be annoyed. It's all very well for a man to be good at his job, but there is no reason to make a side show out of it. But I didn't have time to grouse about it before he was back.

"Examination seems to confirm Mr. Jedson's opinion; there should be no unusual difficulties," he said. "Now as to the ... ah ... business arrangements—" He coughed politely and gave a little smile, as if he regretted having to deal with such vulgar matters.

Why do some people act as if making money offended their delicate minds? I am out for a legitimate profit, and not ashamed of it; the fact that people will pay money for my goods and services shows that my work is useful.

However, we made a deal without much trouble, then Biddle told us to meet him at my place in about fifteen minutes. Jedson and I left the building and flagged another cab. Once inside I asked him about Ditworth.

"Where'd you run across him?" I said.

"Came to me with a proposition."

"Hm-m-m—" This interested me; Ditworth had made me a proposition, too, and it had worried me. "What kind of a proposition?"

Jedson screwed up his forehead. "Well, that's hard to say—there was so much impressive sales talk along with it. Briefly, he said he was the local executive secretary of a nonprofit association which had as its purpose the improvement of standards of practicing magicians."

I nodded. It was the same story I had heard. "Go ahead."

"He dwelt on the inadequacy of the present licensing laws and pointed out that anyone could pass the examinations and hang out his shingle after a couple of weeks' study of a *grimoire* or black book without any fundamental knowledge of the arcane laws at all. His organization would be a sort of bureau of standards to improve that, like the American Medical Association, or the National Conference of Universities and Colleges, or the Bar Association. If I signed an agreement to patronize only those wizards who complied with their requirements, I could display their certificate of quality and put their seal of approval on my goods."

"Joe, I've heard the same story," I cut in, "and I didn't know quite what to make of it. It sounds all right, but I wouldn't want to stop doing business with men who have given me good value in the past, and I've no way of knowing that the association would approve them."

"What answer did you give him?"

"I stalled him 'a bit—told him that I couldn't sign anything as binding as that without discussing it with my attorney."

"Good boy! What did he say to that?"

"Well, he was really quite decent about it, and honestly seemed to want to be helpful. Said he thought I was wise and left me some stuff to look over. Do you know anything about him? Is he a wizard himself?"

"No, he's not. But I did find out some things about him. I knew vaguely that he was something in the Chamber of Commerce; what I didn't know is that he is on the board of a dozen or more blue-ribbon corporations. He's a lawyer, but not in practice. Seems to spend all his time on his business interests."

"He sounds like a responsible man."

"I would say so. He seems to have had considerably less publicity than you would expect of a man of his business importance—probably a retiring sort. I ran across something that seemed to confirm that."

"What was it?" I asked.

"I looked up the incorporation papers for his association on file with the Secretary of State. There were just three names, his own and two others. I found that both of the others were employed in his office—his secretary and his receptionist."

"Dummy setup?"

"Undoubtedly. But there is nothing unusual about that. What interested me was this: I recognized one of the names."

"Huh?"

"You know, I'm on the auditing committee for the state committee of my party. I looked up the name of his secretary where I thought I had seen it. It was there all right. His secretary, a chap by the name of Mathias, was down for a whopping big contribution to the governor's personal campaign fund."

We did not have any more time to talk just then, as the cab had pulled up at my place. Dr. Biddle was there before us and had already started his preparations. He had set up a little crystal pavilion, about ten feet square, to work in. The entire lot was blocked off from spectators on the front by an impalpable screen. Jedson warned me not to touch it.

I must say he worked without any of the usual hocus-pocus. He simply greeted us and entered the pavilion, where he sat down on a chair and took a looseleaf notebook from a pocket and commenced to read. Jedson says he used several pieces of paraphernalia too. If so, I didn't see them. He worked with his clothes on.

Nothing happened for a few minutes. Gradually the walls of the shed became cloudy, so that everything inside was indistinct. It was about then that I became aware that there was something else in the pavilion besides Biddle. I could not see clearly what it was, and, to tell the truth, I didn't want to.

We could not hear anything that was said on the inside, but there was an argument going on—that was evident. Biddle stood up and began sawing the air with his hands. The thing threw back its head and laughed. At that Biddle threw a worried look in our direction and made a quick gesture with his right hand. The walls of the pavilion became opaque at once and we didn't see any more.

About five minutes later Biddle walked out of his workroom, which promptly disappeared behind him. He was a sight—his hair all mussed, sweat dripping from his face, and his collar wrinkled and limp. Worse than that, his aplomb was shaken.

"Well?" said Jedson.

"There is nothing to be done about it, Mr. Jedson—nothing at all."

"Nothing you can do about it, eh?"

He stiffened a bit at this. "Nothing *anyone can* do about it, gentlemen. Give it up. Forget about it. That is my advice."

Jedson said nothing, just looked at him speculatively. I kept quiet. Biddle was beginning to regain his self-possession. He straightened his hat, adjusted his necktie, and added, "I must return to my office. The survey fee will be five hundred dollars."

I was stonkered speechless at the barefaced gall of the man, but Jedson acted as if he hadn't understood him. "No doubt it would be," he observed. "Too bad you didn't earn it. I'm sorry."

Biddle turned red, but preserved his urbanity. "Apparently you misunderstood me, sir. Under the agreement I have signed with Mr. Ditworth, thaumaturgists approved by the association are not permitted to offer free consultation. It lowers the standards of the profession. The fee I mentioned is the minimum fee for a magician of my classification, irrespective of services rendered."

"I see," Jedson answered calmly; "that's what it costs to step inside your office. But you didn't tell us that, so it doesn't apply. As for Mr. Ditworth, an agreement you sign with him does not bind us in any way. I advise you to return to your office and reread our contract. We owe you nothing."

I thought this time that Biddle would lose his temper, but all he answered was, "I shan't bandy words with you. You will hear from me later." He vanished then without so much as a by-your-leave.

I heard a snicker behind me and whirled around, ready to bite somebody's head off. I had had an upsetting day and didn't like to be laughed at behind my back. There was a young chap there, about my own age. "Who are you, and what are you laughing at?" I snapped. "This is private property."

"Sorry, bud," he apologized with a disarming grin. "I wasn't laughing at you; I was laughing at the stuffed shirt. Your friend ticked him off properly."

"What are you doing here?" asked Jedson.

"Me? I guess I owe you an explanation. You see, I'm in the business myself "

"Building?"

"No—magic. Here's my card." He handed it to Jedson, who glanced at it and passed it on to me. It read:

JACK BODIE
LICENSED MAGICIAN, 1ST CLASS
TELEPHONE CREST 3840

"You see, I heard a rumor in the Half World that one of the big shots was going to do a hard one here today. I just stopped in to see the fun. But how did you happen to pick a false alarm like Biddle? He's not up to this sort of thing."

Jedson reached over and took the card back. "Where did you take your training, Mr. Bodie?"

"Huh? I took my bachelor's degree at Harvard and finished up postgraduate at Chicago. But that's not important; my old man taught me everything I know, but he insisted on my going to college because he said a magician can't get a decent job these days without a degree. He was right."

"Do you think you could handle this job?" I asked.

"Probably not, but I wouldn't have made the fool of myself that Biddle did. Look here—you want to find somebody who *can* do this job?"

"Naturally," I said. "What do you think we're here for?"

"Well, you've gone about it the wrong way. Biddle's got a reputation simply because he's studied at Heidelberg and Vienna. That doesn't mean a thing. I'll bet it never occurred to you to look up an oldstyle witch for the job."

Jedson answered this one. 'That's not quite true. I inquired around among my friends in the business, but didn't find anyone who was willing to take it on. But I'm willing to learn; whom do you suggest?"

"Do you know Mrs. Amanda Todd Jennings? Lives over in the old part of town, beyond the Congregational cemetery."

"Jennings ... Jennings. Hm-m-m—no, can't say that I do. Wait a minute! Is she the old girl they call Granny Jennings? Wears Queen Mary hats and does her own marketing?"

"That's the one."

"But she's not a witch; she's a fortuneteller."

"That's what you think. She's not in regular commercial practice, it's true, being ninety years older than Santy Claus, and feeble to boot. But she's got more magic in her little finger than you'll find in Solomon's Book."

Jedson looked at me. I nodded, and he said: "Do you think you could get her to attempt this case?"

"Well, I think she might do it, if she liked you." "What arrangement do you want?" I asked. "Is 10 per cent satisfactory?"

He seemed rather put out at this. "Hell," he said, "I couldn't take a cut; she's been good to me all my life."

"If the tip is good, it's worth paying for," I insisted.

"Oh, forget it. Maybe you boys will have some work in my line someday. That's enough."

Pretty soon we were off again, without Bodie, He was tied up elsewhere, but promised to let Mrs. Jennings know that we were coming.

The place wasn't too hard to find. It was an old street, arched over with elms, and the house was a one-story cottage, set well back. The verande had a lot of that old scroll-saw gingerbread. The yard was not very well taken care of, but there was a lovely old climbing rose arched over the steps.

Jedson gave a twist to the hand bell set in the door, and we waited for several minutes. I studied the colored-glass triangles set in the door's side panels and wondered if there was anyone left who could do that sort of work.

Then she let us in. She really was something incredible. She was so tiny that I found myself staring down at the crown of her head, and noting that the clean pink scalp showed plainly through the scant, neat threads of hair. She couldn't have weighed seventy pounds dressed for the street, but stood proudly erect in lavender alpaca and white collar, and sized us up with lively black eyes that would have fitted Catherine the Great or Calamity Jane.

"Good morning to you," she said. "Come in."

She led us through a little hall, between beaded portieres, said, "Scat, Seraphin!" to a cat on a chair, and sat us down in her parlor. The cat jumped down, walked away with an unhurried dignity, then sat down, tucked his tail neatly around his carefully placed feet, and stared at us with the same calm appraisal as his mistress.

"My boy Jack told me that you were coming," she began. "You are Mr. Fraser and you are Mr. Jedson," getting us sorted out correctly. It was not a question; it was a statement. "You want your futures read, I suppose. What method do you prefer—your palms, the stars, the sticks?"

I was about to correct her misapprehension when Jedson cut in ahead of me. "I think we'd best leave the method up to you, Mrs. Jennings."

"All right, we'll make it tea leaves then. I'll put the kettle on; 'twon't take a minute." She bustled out. We could hear her in the kitchen, her light footsteps clicking on the linoleum, utensils scraping and clattering in a busy, pleasant disharmony.

When she returned I said, "I hope we aren't putting you out, Mrs. Jennings."

"Not a bit of it," she assured me. "I like a cup of tea in the morning;

it does a body comfort. I just had to set a love philter off the fire—that's what took me so long."

"I'm sorry—"

"'Twon't hurt it to wait."

"The Zekerboni formula?" Jedson inquired.

"My goodness gracious, no!" She was plainly upset by the suggestion. "I wouldn't kill all those harmless little creatures. Hares and swallows and doves—the very idea! I don't know what Pierre Mora was thinking about when he set that recipe down. I'd like to box his ears!

"No, I use Emula campana, orange, and ambergris. It's just as effective."

Jedson then asked if she had ever tried the juice of vervain. She looked closely into his face before replying, "You have the sight yourself, son. Am I not right?"

"A little, mother," he answered soberly, "a little, perhaps."

"It will grow. Mind how you use it. As for vervain, it is efficacious, as you know."

"Wouldn't it be simpler?"

"Of course it would. But if that easy a method became generally known, anyone and everyone would be making it and using it promiscuously — a bad thing. And witches would starve for want of clients—perhaps a good thing!" She flicked up one white eyebrow. "But if it is simplicity you want, there is no need to bother even with vervain. Here—" she reached out and touched me on the hand. *"Testarberto corrumpit viscera ejus virilus*." That is as near as I can reproduce her words. I may have misquoted it.

But I had no time to think about the formula she had pronounced. I was fully occupied with the startling thing that had come over me. I was in love, ecstatically, deliciously in love—with Granny Jennings! I don't mean that she suddenly looked like a beautiful young girl—she didn't. I still saw her as a little, old, shriveled-up woman with the face of a shrewd monkey, and ancient enough to be my great-grandmother. It didn't matter. She was she—the Helen that all men desire, the object of romantic adoration.

She smiled into my face with a smile that was warm and full of affectionate understanding. Everything was all right, and I was perfectly happy. Then she said, "I would not mock you, boy," in a gentle voice, and touched my hand a second time while whispering something else.

At once it was all gone. She was just any nice old woman, the sort that would bake a cake for a grandson or sit up with a sick neighbor. Nothing was changed, and the cat had not even blinked. The romantic fascination was an emotionless memory. But I was poorer for the, difference.

The kettle was boiling. She trotted out to attend to it, and returned shortly with a tray of tea things, a plate of seed cake, and thin slices of homemade bread spread with sweet butter.

When we had drunk a cup apiece with proper ceremony, she took Jedson's cup from him and examined the dregs. "Not much money there," she announced, "but you shan't need much; it's a fine full life." She touched the little pool of tea with the tip of her spoon and sent, tiny ripples across it. "Yes, you have the sight, and the need for understanding that should go with it, but I find you in business instead of pursuing the great art, or even the lesser arts. Why is that?"

Jedson shrugged his shoulders and answered half apologetically, "There is work at hand that needs to be done. I do it."

She nodded. "That is well. There is understanding to be gained in any job, and you will gain it. There is no hurry; time is long. When your own work comes you will know it and be ready for it. Let me see your cup," she finished, turning to me.

I handed it to her. She studied it for a moment and said, "Well, you have not the clear sight such as your friend has, but you have the insight you need for your proper work. And more would make you dissatisfied, for I see money here. You will make much money, Archie Fraser."

"Do you see any immediate setback in my business?" I said quickly.

"No. See for yourself." She motioned toward the cup. I leaned forward and stared at it. For a matter of seconds it seemed as if I looked through the surface of the dregs into a living scene beyond. I recognized it readily enough. It was my own place of business, even to the scars on the driveway gateposts where clumsy truck drivers had clipped the corner too closely.

But there was a new annex wing on the east side of the lot, and there were two beautiful new five-ton dump trucks drawn up in the yard with my name painted on them!

While I watched I saw myself step out of the office door and go walking down the street. I was wearing a new hat, but the suit was the one I was wearing in Mrs. Jennings's parlor, and so was the necktie—a plaid one from the tartan of my clan. I reached up and touched the original.

Mrs. Jennings said, "That will do for now," and I found myself staring at the bottom of the teacup. "You have seen," she went on, "your business need not worry you. As for love and marriage and children, sickness and health and death—let us look." She touched the surface of the dregs with a finger tip; the tea leaves moved gently. She regarded them closely for a moment. Her brow puckered; she started to speak, apparently thought better of it, and looked again. Finally she said, "I do not fully understand this. It is not clear; my own shadow falls across it."

"Perhaps I can see," offered Jedson.

"Keep your peace!" She surprised me by speaking tartly, and placed her hand over the cup. She turned back to me with compassion in her eyes. "It is not clear. You have two possible futures. Let your head rule your heart, and do not fret your soul with that which cannot be. Then you will marry, have children, and be content." With that she dismissed the matter, for she said at once to both of us, "You did not come here for divination; you came here for help of another sort." Again it was a statement, not a question.

"What sort of help, mother?" Jedson inquired.

"For this." She shoved my cup under his nose. He looked at it and answered, "Yes, that is true. Is there help?" I looked into the cup, too, but saw nothing but tea leaves.

She answered, "I think so. You should not have employed Biddle, but the mistake was natural. Let us be going." Without further parley she fetched her gloves and purse and coat, perched a ridiculous old hat on the top of her head, and bustled us out of the house. There was no discussion of terms; it didn't seem necessary.

When we got back to the lot her workroom was already up. It was not anything fancy like Biddle's, but simply an old, square tent, like a gypsy's pitch, with a peaked top and made in several gaudy colors. She pushed aside the shawl that closed the door and invited us inside.

It was gloomy, but she took a big candle, lighted it and stuck it in the middle of the floor. By its light she inscribed five circles on the ground—first a large one, then a somewhat smaller one in front of it. Then she drew two others, one on each side of the first and biggest circle. These were each big enough for a man to stand in, and she told us to do so. Finally she made one more circle off to one side and not more than a foot across.

I've never paid much attention to the methods of magicians, feeling about them the way Thomas Edison said he felt about mathematicians —when he wanted one he could hire one. But Mrs. Jennings was different. I wish I could understand the things she did—and why—

I know she drew a lot of cabalistic signs in the dirt within the circles. There were pentacles of various shapes, and some writing in what I judged to be Hebraic script, though Jedson says not. In particular there was, I remember, a sign like a long flat Z, with a loop in it, woven in and out of a Maltese cross. Two more candles were lighted and placed on each side of this.

Then she jammed the dagger— athame, Jedson called it—with which she had scribed the figures into the ground at the top of the big circle so hard that it quivered. It continued to vibrate the whole time.

She placed a little folding stool in the center of the biggest circle, sat down on it, drew out a small book, and commenced to read aloud in a voiceless whisper. I could not catch the words, and presume I was not meant to. This went on for some time. I glanced around and saw that the little circle off to one side was now occupied—by Seraphin, her cat. We had left him shut up in her house. He sat quietly, watching everything that took place with dignified interest.

Presently she shut the book and threw a pinch of powder into the flame of the largest candle. It flared up and threw out a great puff of smoke. I am not quite sure what happened next, as the smoke smarted my eyes and made me blink, besides which, Jedson says I don't understand the purpose of fumigations at all. But I prefer to believe my eyes. Either that cloud of smoke solidified into a body or it covered up an entrance, one or the other.

Standing in the middle of the circle in front of Mrs. Jennings was a short, powerful man about four feet high or less. His shoulders were inches broader than mine, and his upper arms were thick as my thighs, knotted and bowed with muscle. He was dressed in a breechcloth, buskins, and a little hooded cap. His skin was hairless, but rough and earthy in texture. It was dull, lusterless. Everything about him was the same dull monotone, except his eyes, which shone green with repressed fury.

"Well!" said Mrs. Jennings crisply, "you've been long enough getting here! What have you to say for yourself?"

He answered sullenly, like an incorrigible boy caught but not repentant, in a language filled with rasping gutturals and sibilants. She listened awhile, then cut him off.

"I don't care who told you to; you'll account to me! I require this harm repaired— in less time than it takes to tell it!"

He answered back angrily, and she dropped into his language, so that I could no longer follow the meaning. But it was clear that I was concerned in it; he threw me several dirty looks, and finally glared and spat in my direction.

Mrs. Jennings reached out and cracked him across the mouth with the back of her hand. He looked at her, killing in his eyes, and said something.

"So?" she answered, put out a hand and grabbed him by the nape of the neck and swung him across her lap, face down. She snatched off a shoe and whacked him soundly with it. He let out one yelp, then kept silent, but jerked every time she struck him.

When she was through she stood up, spilling him to the ground. He picked himself up and hurriedly scrambled back into his own circle, where he stood, rubbing himself. Mrs. Jennings's eyes snapped and her voice crackled; there was nothing feeble about her now. "You gnomes are getting above yourselves," she scolded. "I never heard of such a thing! One more slip on your part and I'll fetch your people to see you spanked! Get along with you. Fetch your people for your task, and summon your brother and your brother's brother. By the great-Tetragrammaton, get hence to the place appointed for you!"

He was gone.

Our next visitant came almost at once. It appeared first as a tiny spark hanging in the air. It grew into a living flame, a fireball, six inches or more across. It floated above the center of the second circle at the height of Mrs. Jennings's eyes. It danced and whirled and flamed, feeding on nothing. Although I had never seen one, I knew it to be a salamander. It couldn't be anything else.

Mrs. Jennings watched it for a little time before speaking. I could see that she was enjoying its dance, as I was. It was a perfect and beautiful thing, with no fault in it. There was life in it, a singing joy, with no concern for—with no *relation* to—matters of right and wrong, or anything human. Its harmonies of color and curve were their own reason for being.

I suppose I'm pretty matter-of-fact. At least I've always lived by the principle of doing my job and letting other things take care of themselves. But here was something that was worthwhile in itself, no matter what harm it did by my standards. Even the cat was purring.

Mrs. Jennings spoke to it in a clear, singing soprano that had no words to it. It answered back in pure liquid notes while the colors of its nucleus varied to suit the pitch. She turned to me and said, "It admits readily enough that it burned your place, but it was invited to do so and is not capable of appreciating your point of view. I dislike to compel it against its own nature. Is there any boon you can offer it?"

I thought for a moment. "Tell it that it makes me happy to watch it dance." She sang again to it. It spun and leaped, its flame tendrils whirling and floating in intricate, delightful patterns.

"That was good, but not sufficient. Can you think of anything else?"

I thought hard. "Tell it that if it likes, I will build a fireplace in my house where it will be welcome to live whenever it wishes."

She nodded approvingly and spoke to it again.

I could almost understand its answer, but Mrs. Jennings translated. "It likes you. Will you let it approach you?"

"Can it hurt me?"

"Not here."

"All right then."

She drew a T between our two circles. It followed closely behind the athame, like a cat at an opening door. Then it swirled about me and touched me lightly on my hands and face. Its touch did not burn, but tingled, rather, as if I felt its vibrations directly instead of sensing them as heat. It flowed over my face. I was plunged into a world of light, like the heart of the aurora borealis. I was afraid to breathe at first, finally had to. No harm came to me, though the tingling was increased.

It's an odd thing, but I have not had a single cold since the salamander touched me. I used to sniffle all winter.

"Enough, enough," I heard Mrs. Jennings saying. The cloud of flame withdrew from me and returned to its circle. The musical discussion resumed, and they reached an agreement almost at once, for Mrs. Jennings nodded with satisfaction and said:

"Away with you then, fire child, and return when you are needed. Get hence —" She repeated the formula she had used on the gnome king.

The undine did not show up at once. Mrs. Jennings took out her book again and read from it in a monotonous whisper. I was beginning to be a bit sleepy—the tent was stuffy—when the cat commenced to spit. It was glaring at the center circle, claws out, back arched, and tail made big.

There was a shapeless something in that circle, a thing that dripped and spread its slimy moisture to the limit of the magic ring. It stank of fish and kelp and iodine, and shone with a wet phosphorescence.

"You're late," said Mrs. Jennings. "You got my message; why did you wait until I compelled you?"

It heaved with a sticky, sucking sound, but made no answer.

"Very well," she said firmly, "I shan't argue with you. You know what I want. You will do it!" She stood up and grasped the big center candle. Its flame flared up into a torch a yard high, and hot. She thrust it past her circle at the undine.

There was a hiss, as when water strikes hot iron, and a burbling scream. She jabbed at it again and again. At last she stopped and stared down at it, where it lay, quivering and drawing into itself. "That will do," she said. "Next time you will heed your mistress. Get hence!" It seemed to sink into the ground, leaving the dust dry behind it.

When it was gone she motioned for us to enter her circle, breaking our own with the dagger to permit us. Seraphin jumped lightly from his little circle to the big one and rubbed against her ankles, buzzing loudly. She repeated a meaningless series of syllables and clapped her hands smartly together.

There was a rushing and roaring. The sides of the tent billowed and cracked. I heard the chuckle of water and the crackle of flames, and, through that, the bustle of hurrying footsteps. She looked from side to side, and wherever her gaze fell the wall of the tent became transparent. I got hurried glimpses of unintelligible confusion.

Then it all ceased with a suddenness that was startling. The silence rang in our ears. The tent was gone; we stood in the loading yard outside my main warehouse.

It was there! It was back—back unharmed, without a trace of damage by fire or water. I broke away and ran out the main gate to where my business office had faced on the street. It was there, just as it used to be, the show windows shining in the sun, the Rotary Club emblem in one corner, and up on the roof my big two-way sign:

ARCHIBALD FRASER
BUILDING MATERIALS & GENERAL CONTRACTING

Jedson strolled out presently and touched me on the arm. "What are you bawling about, Archie?" I stared at him. I wasn't aware that I had been.

We were doing business as usual on Monday morning. I thought everything was back to normal and that my troubles were over. I was too hasty in my optimism.

It was nothing you could put your finger on at first—just the ordinary vicissitudes of business, the little troubles that turn up in any line of work and slow up production. You expect them and charge them off to overhead. No one of them would be worth mentioning alone, except for one thing: they were happening too frequently.

You see, in any business run under a consistent management policy the losses due to unforeseen events should average out in the course of a year to about the same percentage of total cost. You allow for that in your estimates. But I started having so many small accidents and little difficulties that my margin of profit was eaten up.

One morning two of my trucks would not start. We could not find the trouble; I had to put them in the shop and rent a truck for the day to supplement my one remaining truck. We got our deliveries made, but I was out the truck rent, the repair bill, and four hours' overtime for drivers at time and a half. I had a net loss for the day.

The very next day I was just closing a deal with a man I had been trying to land for a couple of years. The deal was not important, but it would lead to a lot more business in the future, for he owned quite a bit of income property—some courts and an apartment house or two, several commercial corners, and held title or options on well-located lots all over town. He always had repair jobs to place and very frequently new building jobs. If I satisfied him, he would be a steady customer with prompt payment, the kind you can afford to deal with on a small margin of profit.

We were standing in the showroom just outside my office and talking, having about reached an agreement. There was a display of Sunprufe paint about three feet from us, the cans stacked in a neat pyramid. I swear that neither one of us touched it, but it came crashing to the floor, making a din that would sour milk.

That was nuisance enough, but not the pay-off. The cover flew off one can, and my prospect was drenched with red paint. He let out a yelp; I thought he was going to faint. I managed to get him back into my office, where I dabbed futilely at his suit with my handkerchief, while trying to calm him down.

He was in a state, both mentally and physically. "Fraser," he raged, "you've got to fire the clerk that knocked over those cans! Look at me! Eighty-five dollars worth of suit ruined!"

"Let's not be hasty," I said soothingly, while holding my own temper in. I won't discharge a man to suit a customer, and don't like to be told to do so. "There wasn't anyone near those cans but ourselves."

"I suppose you think I did it?"

"Not at all. I know you didn't." I straightened up, wiped my hands, and went over to my desk and got out my checkbook.

"Then you must have done it!"

"I don't think so," I answered patiently. "How much did you say your suit was worth?"

"Why?"

"I want to write you a check for the amount." I was quite willing to; I did not feel to blame, but it had happened through no fault of his in my shop.

"You can't get out of it as easily as that!" he answered unreasonably. "It isn't the cost of the suit I mind—" He jammed his hat on his head and stumped out. I knew his reputation; I'd seen the last of him.

This is the sort of thing I mean. Of course it could have been an accident caused by clumsy stacking of the cans. But it might have been a poltergeist. Accidents don't make themselves.

Ditworth came to see me a day or so later about Biddle's phony bill. I had been subjected night and morning to this continuous stream of petty annoyances, and my temper was wearing thin. Just that day a gang of colored bricklayers had quit one of my jobs because some moron had scrawled some chalk marks on some of the bricks. "Voodoo marks," they said they were, and would not touch a brick. I was in no mood to be held up by Mr. Ditworth; I guess I was pretty short with him.

"Good day to you, Mr. Fraser," he said quite pleasantly, "can you spare me a few minutes?"

"Ten minutes, perhaps," I conceded, glancing at my wrist watch.

He settled his brief case against the legs of his chair and took out some papers. "I'll come to the point at once then. It's about Dr. Biddle's claim against you. You and I are both fair men; I feel sure that we can come to some equitable agreement."

"Biddle has no claim against me."

Henodded. "I know just how you feel. Certainly there is nothing in the written contract obligating you to pay him. But there can be implied contracts just as binding as written contracts."

"I don't follow you. All my business is done in writing."

"Certainly," he agreed; "that's because you are a businessman. In the professions the situation is somewhat different. If you go to a dental surgeon and ask him to pull an aching tooth, and he does, you are obligated to pay his fee, even though a fee has never been mentioned—" '

"That's true," I interrupted, "but there is no parallel. Biddle didn't 'pull the tooth."

'In a way he did," Ditworth persisted. "The claim against you is for the survey, which was a service rendered you before this contract was written."

"But no mention was made of a service fee."

"That is where the implied obligation comes in, Mr. Fraser; you told Dr. Biddle that you had talked with me. He assumed quite correctly that I hadpreviously explained to you the standard system of fees under the association—"

"But I did not join the association!"

"I know, I know. And I explained that to the other directors, but they insist that some sort of an adjustment must be made. I don't feel myself that you are fully to blame, but you will understand our position, I am sure. We are unable to accept you for membership in the association until this matter is adjusted—in fairness to Dr. Biddle."

"What makes you think I intend to join the association?"

He looked hurt. "I had not expected you to take that attitude, Mr. Fraser. The association needs men of your caliber. But in your own interest, you will necessarily join, for presently it will be very difficult to get efficient thaumaturgy except from members of the association. We want to help you. Please don't make it difficult for us."

I stood up. "I am afraid you had better sue me and let a court decide the matter, Mr. Ditworth. That seems to be the only satisfactory solution."

"I am sorry," he said, shaking his head. "It will prejudice your position when you come up for membership."

"Then it will just have to do so," I said shortly, and showed him out.

After he had gone I crabbed at my office girl for doing something I had told her to do the day before, and then had to apologize. I walked up and down a bit, stewing, although there was plenty of work I should have been doing. I was nervous; things had begun to get my goat—a dozen things that I haven't mentioned—and this last unreasonable demand from Ditworth seemed to be the last touch needed to upset me completely. Not that he could collect by suing me—that was preposterous—but it was an annoyance just the same. They say the Chinese have a torture that consists in letting one drop of water fall on the victim every few minutes. That's the way I felt.

Finally I called up Jedson and asked him to go to lunch with me.

I felt better after lunch. Jedson soothed me down, as he always does, and I was able to forget and put in the past most of the things that had been annoying me simply by telling him about them. By the time I had had a second cup of coffee and smoked a cigarette I was almost fit for polite society.

We strolled back toward my shop, discussing his problems for a change. It seems the blond girl, the white witch from Jersey City, had finally managed to make her synthesis stunt work on footgear. But there was still a hitch; she had turned out over eight hundred left shoes—and no right ones.

We were just speculating as to the probable causes of such a contretemps when Jedson said, "Look, Archie. The candid-camera fans are beginning to take an interest in you."

I looked. There was a chap standing at the curb directly across from my place of business and focusing a camera on the shop.

Then I looked again. "Joe," I snapped, "that's the bird I told you about, the one that came into my shop and started the trouble!"

"Are you sure?" he asked, lowering his voice.

"Positive." There was no doubt about it; he was only a short distance away on the same side of the street that we were. It was the same racketeer who had tried to blackmail me into buying "protection," the same Mediterranean look to him, the same flashy clothes.

"We've got to grab him," whispered Jedson.

But I had already thought of that. I rushed at him and had grabbed him by his coat collar and the slack of his pants before he knew what was happening, and pushed him across the street ahead of me. We were nearly run down, but I was so mad I didn't care. Jedson came pounding after us.

The yard door of my office was open. I gave the mug a final heave that lifted him over the threshold and sent him sprawling on the floor. Jedson was right behind; I bolted the door as soon as we were both inside.

Jedson strode over to my desk, snatched open the middle drawer, and rummaged hurriedly through the stuff that accumulates in such places. He found what he wanted, a carpenter's blue pencil, and was back alongside our gangster before he had collected himself sufficiently to scramble to his feet. Jedson drew a circle around him on the floor, almost tripping over his own feet in his haste, and closed the circle with an intricate flourish.

Our unwilling guest screeched when he saw what Joe was doing, and tried to throw himself out of the circle before it could be finished. But Jedson had been too fast for him—the circle was closed and sealed; he bounced back from the boundary as if he had struck a glass wall, and stumbled again to his knees. He remained so for the time, and cursed steadily in a language that I judged to be Italian, although I think there were bad words in it from several other languages—certainly some English ones.

He was quite fluent.

Jedson pulled out a cigarette, lighted it, and handed me one. "Let's sit down, Archie," he said, "and rest ourselves until our boy friend composes himself enough to talk business."

I did so, and we smoked for several minutes while the flood of invective continued. Presently Jedson cocked one eyebrow at the chap and said, "Aren't you beginning to repeat yourself?"

That checked him. He just sat and glared. "Well," Jedson continued, "haven't you anything to say for yourself?"

He growled under his breath and said, "I want to call my lawyer."

Jedson looked amused. "You don't understand the situation," he told him. "You're not under arrest, and we don't give a damn about your legal rights. We might just conjure up a hole and drop you in it, then let it relax." The guy paled a little under his swarthy skin. "Oh yes," Jedson went on, "we are quite capable of doing that—or worse. You see, we don't like you."

"Of course," he added meditatively, "we might just turn you over to the police. I get a soft streak now and then." The chap looked sour. "You don't like that either? Your fingerprints, maybe?" Jedson jumped to his feet and in two quick strides was standing over him, just outside the circle. "All right then," he rapped, "answer up and make 'em good! Why were you taking photographs?"

The chap muttered something, his eyes lowered. Jedson brushed it aside. "Don't give me that stuff—we aren't children! Who told you to do it?"

He looked utterly panic-stricken at that and shut up completely.

"Very well," said Jedson and turned to me. "Have you some wax, or modeling clay, or anything of the sort?"

"How would putty do?" I suggested.

"Just the thing." I slid out to the shed where we stow glaziers' supplies and came back with a five-pound can. Jedson pried it open and dug out a good big handful, then sat at my desk and worked the linseed oil into it until it was soft and workable. Our prisoner watched him with silent apprehension.

"There! That's about right," Jedson announced at and slapped the soft lump down on my blotter pad. He commenced to fashion it with his fingers, and it took shape slowly as a little doll about ten inches high. It did not look like much of anything or anybody. Jedson is no artist—but Jedson kept glancing from the figurine to the man in the circle and back again, like a sculptor making a clay sketch directly from a model. You could see the chap's nervous terror increase by the minute.

"Now!" said Jedson, looking once more from the putty figure to his model. "It's just as ugly as you are. Why did you take that picture?"

He did not answer, but slunk farther back in the circle, his face nastier than ever.

"Talk!" snorted Jedson, and twisted a foot of the doll between a thumb and forefinger. The corresponding foot of our prisoner jerked out from under him and twisted violently. He fell heavily to the floor with a yelp of pain.

"You were going to cast a spell on this place, weren't you?"

He made his first coherent answer. "No, no, mister! Not me!"

"Not you? I see. You were just the errand boy. Who was to do the magic?"

"I don't know—Ow! Oh, God!" He grabbed at his left calf and nursed it. Jedson had jabbed a pen point into the leg of the dolly. "I really *don't* know. Please, please!"

"Maybe you don't," Jedson grudged, "but at least you know who gives you your orders, and who some of the other members of your gang are. Start talking."

He rocked back and forth and covered his face with his hands. "I don't dare, mister," he groaned. "Please don't try to make me—" Jedson jabbed the doll with the pen again; he jumped and flinched, but this time he bore it silently with a look of gray determination.

"O.K.," said Jedson, "if you insist—" He took another drag from his cigarette, then brought the lighted end slowly toward the face of the doll. The man in the circle tried to shrink away from it, his hands up to protect his face, but his efforts were futile. I could actually see the skin turn red and angry and the blisters blossom under his hide. It made me sick to watch it, and, while I didn't feel any real sympathy for the rat, I turned to Jedson and was about to ask him to stop when he took the cigarette away from the doll's face.

"Ready to talk?" he asked. The man nodded feebly, tears pouring down his scorched cheeks. He seemed about to collapse. "Here—don't faint," Jedson added, and slapped the face of the doll with a finger tip. I could hear the smack land, and the chap's head rocked to the blow, but he seemed to take a brace from it.

"All right, Archie, you take it down." He turned back. "And you, my friend, talk—and talk lots. Tell us everything you know. If you find your memory failing you, stop to think how you would like my cigarette poked into dolly's eyes!"

And he did talk—babbled, in fact. His spirit seemed to be completely broken, and he even seemed anxious to talk, stopping only occasionally to sniffle, or wipe at his eyes. Jedson questioned him to bring out points that were not clear.

There were five others in the gang that he knew about, and the setup was roughly as we had guessed. It was their object to levy tribute on everyone connected with magic in this end of town, magicians and their customers alike. No, they did not have any real protection to offer except from their own mischief. Who was his boss? He told us. Was his boss the top man in the racket? No, but he did not know who the top man was. He was quite sure that his boss worked for someone else, but he did not know who. Even if we burned him again he could not tell us. But it was a big organization—he was sure of that. He himself had been brought from a city in the East to help organize here.

Was he a magician? So help him, no! Was his section boss one? No—he was sure; all that sort of thing was handled from higher up. That was all he knew, and could he go now? Jedson pressed him to remember other things; he added a number of details, most of them insignificant, but I took them all down. The last thing he said was that he thought both of us had been marked down for special attention because we had been successful in overcoming our first "lesson."

Finally, Jedson let up on him. 'I'm going to let you go now," he told him. "You'd better get out of town. Don't let me see you hanging around again. But don't go too far; I may want you again. See this?" He held up the doll and squeezed it gently around the middle. The poor devil immediately commenced to gasp for breath as if he were being compressed in a strait jacket. "Don't forget that I've got you anytime I want you." He let up on the pressure, and his victim panted his relief. "I'm going to put your alter ego—doll to you!—where it will be safe, behind cold iron. When I want you, you'll feel a pain like that"— he nipped the doll's left shoulder with his fingernails; the man yelped—"then you telephone me, no matter where you are."

Jedson pulled a penknife from his vest pocket and cut the circle three times, then joined the cuts. "Now get out!"

I thought he would bolt as soon as he was released, but he did not. He stepped hesitantly over the pencil mark, stood still for a moment, and shivered. Then he stumbled toward the door. He turned just before he went through it and looked back at us, his eyes wide with fear. There was a look of appeal in them, too, and he seemed about to speak. Evidently he thought better of it, for he turned and went on out.

When he was gone I looked back at Jedson. He had picked up my notes and was glancing through them. "I don't know," he mused, "whether it would be better to turn his stuff at once over to the Better Business Bureau and let them handle it, or whether to have a go at it ourselves. It's a temptation."

I was not interested just then. "Joe," I said, "I wish you hadn't burned him!"

"Eh? How's that?" He seemed surprised and stopped scratching his chin. "I didn't burn him."

"Don't quibble," I said, somewhat provoked. "You burned him through the doll, I mean with magic."

"But I didn't, Archie. Really I didn't. He did that to himself—and it wasn't magic. I didn't do a thing!"

"What the hell do you mean?"

"Sympathetic magic isn't really magic at all, Archie. It's just an application of neuropsychology and colloidal chemistry. He did all that to himself, because he believed in it. I simply correctly judged his mentality."

The discussion was cut short; we heard an agony-loaded scream from somewhere outside the building. It broke off sharply, right at the top. "What was that?" I said, and gulped.

"I don't know," Jedson answered, and stepped to the door. He looked up and down before continuing. "It must be some distance away. I didn't see anything." He came back into the room. "As I was saying, it would be a lot of fun to—"

This time it was a police siren. We heard it from far away, but it came rapidly nearer, turned a corner, and yowled down our street. We looked at each other. "Maybe we'd better go see," we both said, right together, then laughed nervously.

It was our gangster acquaintance. We found him half a block down the street, in the middle of a little group of curious passers-by who were being crowded back by cops from the squad car at the curb.

He was quite dead.

He lay on his back, but there was no repose in the position. He had been raked from forehead to waist, laid open to the bone in three roughly parallel scratches, as if slashed by the talons of a hawk or an eagle. But the bird that made those wounds must have been the size of a five-ton truck.

There was nothing to tell from his expression. His face and throat were covered by, and his mouth choked with, a yellowish substance shot with purple. It was about the consistency of thin cottage cheese, but it had the most sickening smell I have ever run up against.

I turned to Jedson, who was not looking any too happy himself, and said, "Let's get back to the office."

We did.

We decided at last to do a little investigating on our own before taking up what we had learned with the Better Business Bureau or with the police. It was just as well that we did; none of the gang whose names we had obtained was any longer to be found in the haunts which we had listed. There was plenty of evidence that such persons had existed and that they had lived at the addresses which Jedson had sweated out of their pal. But all of them, without exception, had done a bunk for parts unknown the same afternoon that their accomplice had been killed.

We did not go to the police, for we had no wish to be associated with an especially unsavory sudden death. Instead, Jedson made a cautious verbal report to a friend of his at the Better Business Bureau, who passed it on secondhand to the head of the racket squad and elsewhere, as his judgment indicated.

I did not have any more trouble with my business for some time thereafter, and I was working very hard, trying to show a profit for the quarter in spite of setbacks. I had put the whole matter fairly well out of my mind, except that I dropped over to call on Mrs. Jennings occasionally and that I had used her young friend Jack Bodie once or twice in my business, when I needed commercial magic. He was a good workman—no monkey business and value received.

I was beginning to think I had the world on a leash when I ran into another series of accidents. This time they did not threaten my business; they threatened me—and I'm just as fond of my neck as the next man.

In the house where I live the water heater is installed in the kitchen. It is a storage type, with a pilot light and a thermostatically controlled main flame. Right alongside it is a range with a pilot light.

I woke up in the middle of the night and decided that I wanted a drink of water. When I stepped into the kitchen—don't ask me why I did not look for a drink in the bathroom, because I don't know—I was almost gagged by the smell of gas. I ran over and threw the window wide open, then ducked back out the door and ran into the living room, where I opened a big window to create a cross draft.

At that point there was a dull *whoosh* and a *boom,* and I found myself sitting on the livingroom rug.

I was not hurt, and there was no damage in the kitchen except for a few broken dishes. Opening the windows had released the explosion, cushioned the effect. Natural gas is not an explosive unless it is confined. What had happened was clear enough when I looked over the scene. The pilot light on the heater had gone out; when the water in the tank cooled, the thermostat turned on the main gas jet, which continued immediately to pour gas into the room. When an explosive mixture was reached, the pilot light of the stove was waiting, ready to set it off.

Apparently I wandered in at the zero hour.

I fussed at my landlord about it, and finally we made a dicker whereby he installed one of the electrical water heaters which I supplied at cost and for which I donated the labor.

No magic about the whole incident, eh? That is what I thought. Now I am not so sure.

The next thing that threw a scare into me occurred the same week with no apparent connection. I keep dry mix—sand, rock, gravel—in the usual big bins set up high on concrete stanchions so that the trucks can drive under the hoppers for loading. One evening after closing time I was walking past the bins when I noticed that someone had left a scoop shovel in the driveway pit under the hoppers.

I have had trouble with my men leaving tools out at night; I decided to put this one in my car and confront someone with it in the morning. I was about to jump down into the pit when I heard my name called.

"Archibald!" it said—and it sounded remarkably like Mrs. Jennings's voice. Naturally I looked around. There was no one there. I turned back to the pit in time to hear a cracking sound and to see that scoop covered with twenty tons of medium gravel.

A man can live through being buried alive, but not when he has to wait overnight for someone to miss him and dig him out. A crystallized steel forging was the prima-facie cause of the mishap. I suppose that will do.

There was never anything to point to but natural causes, yet for about two weeks I stepped on banana peels both figuratively and literally. I saved my skin with a spot of fast footwork at least a dozen times. I finally broke down and told Mrs. Jennings about it.

"Don't worry too much about it, Archie," she reassured me. "It is not too easy to kill a man with magic unless he himself is involved with magi, and sensitive to it."

"Might as well kill a man as scare him to death!" I protested.

She smiled that incredible smile of hers and said, "I don't think you have been really frightened, lad. At least you have not shown it."

I caught an implication in that remark and taxed her with it. "You've been watching me and pulling me out of jams, haven't you?"

She smiled more broadly and replied, "That's my business, Archie. It is not well for the young to depend on the old for help. Now get along with you. I want to give this matter more thought."

A couple of days later a note came in the mail addressed to me in a spidery, Spencerian script. The penmanship had the dignified flavor of the last century, and was the least bit shaky, as if the writer were unwell or very elderly. I had never seen the hand before, but guessed who it was before I opened it. It read:

My dear Archibald: This is to introduce my esteemed friend, Dr. Royce Worthington. You will find him staying at the Belmont Hotel; he is expecting to hear from you. Dr. Worthington is exceptionally well qualified to deal with the matters that have been troubling you these few weeks past. You may repose every confidence in his judgment, especially where unusual measures are required.

Please to include your friend, Mr. Jedson, in this introduction, if you wish.

I am, sir,
Very sincerely yours,
Amanda Todd Jennings

I rang up Joe Jedson and read the letter to him. He said that he would be over at once, and for me to telephone Worthington.

"Is Dr. Worthington there?" I asked as soon as the room clerk had put me through.

"Speaking," answered a cultured British voice with a hint of Oxford in it.

"This is Archibald Fraser, Doctor. Mrs. Jennings has written to me, suggesting that I look you up."

"Oh yes!" he replied, his voice warming considerably: "I shall be delighted. When will be a convenient time?"

"If you are free, I could come right over."

"Let me see —" He paused about long enough to consult a watch. "I have occasion to go to your side of the city. Might I stop by your office in thirty minutes, or a little later?"

"That will be fine, Doctor, if it does not discommode you—"

"Not at all. I will be there."

Jedson arrived a little later and asked me at once about Dr. Worthington. "I haven't seen him yet," I said, "but he sounds like something pretty swank in the way of an English-university don. He'll be here shortly."

My office girl brought in his card a half hour later. I got up to greet him and saw a tall, heavyset man with a face of great dignity and evident intelligence. He was dressed in rather conservative, expensively tailored clothes and carried gloves, stick, and a large brief case. But he was black as draftsman's ink!

I tried not to show surprise. I hope I did not, for I have an utter horror of showing that kind of rudeness. There was no reason why the man should not be a Negro. I simply had not been expecting it.

Jedson helped me out. I don't believe he would show surprise if a fried egg winked at him. He took over the conversation for the first couple of minutes after I introduced him; we all found chairs, settled down, and spent a few minutes in the polite, meaningless exchanges that people make when they are sizing up strangers.

Worthington opened the matter. "Mrs. Jennings gave me to believe," he observed, "that there was some fashion in which I might possibly be of assistance to one, or both, of you—"

I told him that there certainly was, and sketched out the background for him from the time the racketeer contact man first showed up at my shop. He asked a few questions, and Jedson helped me out with some details. I got the impression that Mrs. Jennings had already told him most of it, and that he was simply checking.

"Very well," he said at last, his voice a deep, mellow rumble that seemed to echo in his big chest before it reached the air, "I am reasonably sure that we will find a way to cope with your problems, but first I must make a few examinations before we can complete the diagnosis." He leaned over and commenced to unstrap his brief case.

"Uh ... Doctor," I suggested, "hadn't we better complete our arrangements before you start to work?"

"Arrangements?" He looked momentarily puzzled, then smiled broadly. "Oh, you mean payment. My dear sir, it is a privilege to do a favor for Mrs. Jennings."

"But ... but ... see here, Doctor, I'd feel better about it. I assure you I am quite in the habit of paying for magic—"

He held up a hand. "It is not possible, my young friend, for two reasons: In the first place, I am not licensed to practice in your state. In the second place, I am not a magician."

I suppose I looked as inane as I sounded. "Huh? What's that? Oh! Excuse me, Doctor, I guess I just naturally assumed that since Mrs. Jennings had sent you, and your title, and all —"

He continued to smile, but it was a smile of understanding rather than amusement at my discomfiture. "That is not surprising; even some of your fellow citizens of my blood make that mistake. No, my degree is an honorary doctor of laws of Cambridge University. My proper pursuit is anthropology, which I sometimes teach at the University of South Africa. But anthropology has some odd bypaths; I am here to exercise one of them."

"Well, then, may I ask—"

"Certainly, sir. My avocation, freely translated from its quite unpronounceable proper name, is `witch smeller.'"

I was still puzzled. "But doesn't that involve magic?"

"Yes and no. In Africa the hierarchy and the categories in these matters are not the same as in this continent. I am not considered a wizard, or witch doctor, but rather an antidote for such."

Something had been worrying Jedson. "Doctor," he inquired, "you were not originally from South Africa?"

Worthington gestured toward his own face, I suppose that Jedson read something there that was beyond my knowledge. "As you have discerned. No, I was born in a bush tribe south of the Lower Congo."

"From there, eh? That's interesting. By any chance, are you nganga?"

"Of the Ndembo, but not by chance." He turned to me and explained courteously. "Your friend asked me if I was a member of an occult fraternity which extends throughout Africa, but which has the bulk of its members in my native territory. Initiates are called nganga."

Jedson persisted in his interest. "It seems likely to me, Doctor, that Worthington is a name of convenience—that you have another name."

"You are again, right—naturally. My tribal name—do you wish to know it?"

"If you will."

"It is"—I cannot reproduce the odd clicking, lip-smacking noise he uttered—"or it is just as proper to state it in English, as the meaning is what counts—Man-Who-Asks-Inconvenient-Questions. Prosecuting attorney is another reasonably idiomatic, though not quite literal, translation, because of the tribal function implied. But it seems to me," he went on, with a smile of unmalicious humor, "that the name fits you even better than it does me. May I give it to you?"

Here occurred something that I did not understand, except that it must have its basis in some African custom completely foreign to our habits of thought. I was prepared to laugh at the doctor's witticism, and I am sure he meant it to be funny, but Jedson answered him quite seriously:

"I am deeply honored to accept."

"It is you who honor me, brother."

From then on, throughout our association with him, Dr. Worthington invariably addressed Jedson by the African name he had formerly claimed as his own, and Jedson called him "brother" or "Royce." Their whole attitude toward each other underwent a change, as if the offer and acceptance of a name had in fact made them brothers, with all the privileges and obligations of the relationship.

"I have not left you without a name," Jedson added. "You had a third name, your real name?"

"Yes, of course," Worthington acknowledged, "a name which we need not mention."

"Naturally," Jedson agreed, "a name which must not be mentioned. Shall we get to work, then?"

"Yes, let us do so." He turned to me. "Have you someplace here where I may make my preparations? It need not be large—"

"Will this do?" I offered, getting up and opening the door of a cloak-and washroom which adjoins my office.

"Nicely, thank you," he said, and took himself and his brief case inside, closing the door after him. He was gone ten minutes at least.

Jedson did not seem disposed to talk, except to suggest that I caution my girl not to disturb us or let anyone enter from the outer office. We sat and waited.

Then he came out of the cloakroom, and I got my second big surprise of the day. The urbane Dr. Worthington was gone. In his place was an African personage who stood over six feet tall in his bare black feet, and whose enormous, arched chest was overlaid with thick, sleek muscles of polished obsidian. He was dressed in a loin skin of leopard, and carried certain accouterments, notably a pouch, which hung at his waist.

But it was not his equipment that held me, nor yet the John Henrylike proportions of that warrior frame, but the face. The eyebrows were painted white and the hairline had been outlined in the same color, but I hardly noticed these things. It was the expression—humorless, implacable, filled with a dignity and strength which must be felt to be appreciated. The eyes gave a conviction of wisdom beyond my comprehension, and there was no pity in them—only a stern justice that I myself would not care to face.

We white men in this country are inclined to underestimate the black man—I know I do—because we see him out of his cultural matrix. Those we know have had their own culture wrenched from them some generations back and a servile pseudo culture imposed on them by force. We forget that the black man has a culture of his own, older than ours and more solidly grounded, based on character and the power of the mind rather than the cheap, ephemeral tricks of mechanical gadgets. But it is a stern, fierce culture with no sentimental concern for the weak and the unfit, and it never quite dies out.

I stood up in involuntary respect when Dr. Worthington entered the room.

"Let us begin," he said in a perfectly ordinary voice, and squatted down, his great toes spread and grasping the floor. He took several things out of the pouch—a dog's tail, a wrinkled black object the size of a man's fist, and other things hard to identify. He fastened the tail to his waist so that it hung down behind. Then he picked up one of the things that he had taken from the pouch— a small item, wrapped and tied in red silk—and said to me, "Will you open your safe?"

I did so, and stepped back out of his way. He thrust the little bundle inside, clanged the door shut, and spun the knob. I looked inquiringly at Jedson.

"He has his ... well ... soul in that package, and has sealed it away behind cold iron. He does not know what dangers he may encounter," Jedson whispered. "See?" I looked and saw him pass his thumb carefully all around the crack that joined the safe to its door.

He returned to the middle of the floor and picked up the wrinkled black object and rubbed it affectionately. "This is my mother's father," he announced. I looked at it more closely and saw that it was a mummified human head with a few wisps of hair still clinging to the edge of the scalp! "He is very wise," he continued in a matter-of-fact voice, "and I shall need his advice. Grandfather, this is your new son and his friend." Jedson bowed, and I found myself doing so. "They want our help."

He started to converse with the head in his own tongue listening from time to time, and then answering. Once they seemed to get into an argument, but the matter must have been settled satisfactorily, for the palaver soon quieted down. After a few minutes he ceased talking and glanced around the room. His eye lit on a bracket shelf intended for an electric fan, which was quite high off the floor.

"There!" he said. "That will do nicely. Grandfather needs a high place from which to watch." He went over and placed the little head on the bracket so that it faced out into the room.

When he returned to his place in the middle of the room he dropped to all fours and commenced to cast around with his nose like a hunting dog trying to pick up a scent. He ran back and forth, snuffling and whining, exactly like a pack leader worried by mixed trails. The tail fastened to his waist stood up tensely and quivered, as if still part of a live animal. His gait and his mannerisms mimicked those of a hound so convincingly that I blinked my eyes when he sat down suddenly and announced:

"I've never seen a place more loaded with traces of magic. I can pick out Mrs. Jennings' very strongly and your own business magic. But after I eliminate them the air is still crowded. You must have had everything but a rain dance and a sabbat going on around you!"

He dropped back into his character of a dog without giving us a chance to reply, and started making his casts a little wider. Presently he appeared to come to some sort of an impasse, for he settled back, looked at the head, and whined vigorously. Then he waited.

The reply must have satisfied him; he gave a sharp bark and dragged open the bottom drawer of a file cabinet, working clumsily, as if with paws instead of hands. He dug into the back of the drawer eagerly and hauled out something which he popped into his pouch.

After that he trotted very cheerfully around the place for a short time, until he had poked his nose into every odd corner. When he had finished he returned to the middle of the floor, squatted down again, and said, "That takes care of everything here for the present. This place is the center of their attack, so grandfather has agreed to stay and watch here until I can bind a cord around your place to keep witches out."

I was a little perturbed at that. I was sure the head would scare my office girl half out of her wits if she saw it. I said so as diplomatically as possible.

"How about that?" he asked the head, then turned back to me after a moment of listening. "Grandfather says it's all right; he won't let anyone see him he has not been introduced to." It turned out that he was perfectly correct; nobody noticed it, not even the scrubwoman.

"Now then," he went on, "I want to check over my brother's place of business at the earliest opportunity, and I want to smell out both of your homes and insulate them against mischief. In the meantime, here is some advice for each of you to follow carefully: Don't let anything of yourself fall into the hands of strangers—nail parings, spittle, hair cuttings—guard it all. Destroy them by fire, or engulf them in running water. It will make our task much simpler. I am finished." He got up and strode back into the cloakroom.

Ten minutes later the dignified and scholarly Dr. Worthington was smoking a cigarette with us. I had to look up at his grandfather's head to convince myself that a jungle lord had actually been there.

Business was picking up at that time, and I had no more screwy accidents after Dr. Worthington cleaned out the place. I could see a net profit for the quarter and was beginning to feel cheerful again. I received a letter from Ditworth, dunning me about Biddle's phony claim, but I filed it in the wastebasket without giving it a thought.

One day shortly before noon Feldstein, the magicians' agent, dropped into my place. "Hi, Zack!" I said cheerfully when he walked in. "How's business?"

"Mr. Fraser, of all questions, that you should ask me that one," he said, shaking his head mournfully from side to side. "Business—it is terrible."

"Why do you say that?" I asked. "I see lots of signs of activity around—"

"Appearances are deceiving," he insisted, "especially in my business. Tell me—have you heard of a concern calling themselves

'Magic, Incorporated'?"

"That's funny," I told him. "I just did, for the first time. This just came in the mail"—and I held up an unopened letter. It had a return address on it of "Magic, Incorporated, Suite 700, Commonwealth Building."

Feldstein took it gingerly, as if he thought it might poison him, and inspected it. "That's the parties I mean," he confirmed. "The gonophs!"

"Why, what's the trouble, Zack?"

"They don't want that a man should make an honest living Mr. Fraser," he interrupted himself anxiously, "you wouldn't quit doing business with an old friend who had always done right by you?"

"Of course not, Zack, but what's it all about?"

"Read it. Go ahead." He shoved the letter back to me.

I opened it. The paper was a fine quality, watermarked, rag bond, and the letterhead was chaste and dignified. I glanced over the stuffed-shirt committee and was quite agreeably impressed by the caliber of men they had as officers and directors—big men, all of them, except for a couple of names among the executives that I did not recognize.

The letter itself amounted to an advertising prospectus. It was a new idea; I suppose you could call it a holding company for magicians. They offered to provide any and all kinds of magical service. The customer could dispense with shopping around; he could call this one number, state his needs, and the company would supply the service and bill him. It seemed fair enough—no more than an incorporated agency.

I glanced on down. "—fully guaranteed service, backed by the entire assets of a responsible company ---" "—surprisingly low standard fees, made possible by elimination of fee splitting with agents and by centralized administration " "The gratifying response from the members of the great profession enables us to predict that Magic, Incorporated, will be the natural source to turn to for competent thaumaturgy in any line—probably the only source of truly first-rate magic—"

I put it down. "Why worry about it, Zack? It's just another agency. As for their claims—I've heard you say that you have all the best ones in your stable. You didn't expect to be believed, did you?"

"No," he conceded, "not quite, maybe—among us two. But this is really serious, Mr. Fraser. They've hired away most of my really first-class operators with salaries and bonuses I can't match. And now they offer magic to the public at a price that undersells those I've got left. It's ruin, I'm telling you."

It was hard lines. Feldstein was a nice little guy who grabbed the nickels the way he did for a wife and five beady-eyed kids, to whom he was devoted. But I felt he was exaggerating; he has a tendency to dramatize himself. "Don't worry," I said. "I'll stick by you, and so, I imagine, will most of your customers. This outfit can't get all the magicians together; they're too independent. Look at Ditworth. He tried with his association. What did it get him?"

"Ditworth—aagh!" He started to spit, then remembered he was in my office. "This is Ditworth—this company!"

"How do you figure that? He's not on the letterhead."

"I found out. You think he wasn't successful because you held out. They held a meeting of the directors of the association—that's Ditworth and his two secretaries—and voted the contracts over to the new corporation. Then Ditworth resigns and his stooge steps in as front for the nonprofit association, and Ditworth runs both companies. You will see! If we could open the books of Magic, Incorporated, you will find he has voting control, I know it!"

"It seems unlikely." I said slowly.

"You'll see! Ditworth with all his fancy talk about a no-profit service for the improvement of standards shouldn't be any place around Magic, Incorporated, should he, now? You call up and ask for him—"

I did not answer, but dialed the number on the letterhead. When a girl's voice said, "Good morning—Magic, Incorporated," I said:

"Mr. Ditworth, please."

She hesitated quite a long time, then said, "Who is calling, please?"

That made it my turn to hesitate. I did not want to talk to Ditworth; I wanted to establish a fact. I finally said, "Tell him it's Dr. Biddle's office."

Whereupon she answered readily enough, but with a trace of puzzlement in her voice, "But Mr. Ditworth is not in the suite just now; he was due in Dr. Biddle's office half an hour ago. Didn't he arrive?"

"Oh," I said, "perhaps he's with the chief and I didn't see him come in. Sorry." And I rang off.

"I guess you are right," I admitted, turning back to Feldstein.

He was too worried to be pleased about it. "Look," he said, "I want you should have lunch with me and talk about it some more."

"I was just on my way to the Chamber of Commerce luncheon. Come along and we'll talk on the way. You're a member."

"All right," he agreed dolefully. "Maybe I can't afford it much longer."

We were a little late and had to take separate seats. The treasurer stuck the kitty under my nose and "twisted her tail." He wanted a tencent fine from me for being late. The kitty is an ordinary frying pan with a mechanical bicycle bell mounted on the handle. We pay all fines on the spot, which is good for the treasury and a source of innocent amusement. The treasurer shoves the pan at you and rings the bell until you pay up.

I hastily produced a dime and dropped it in. Steve Harris, who has an automobile agency, yelled, "That's right! Make the Scotchman pay up!" and threw a roll at me.

"Ten cents for disorder," announced our chairman, Norman Somers, without looking up. The treasurer put the bee on Steve. I heard the coin clink into the pan, then the bell was rung again.

"What's the trouble?" asked Somers.

"More of Steve's tricks," the treasurer reported in a tired voice. "Fairy gold, this time." Steve had chucked in a synthetic coin that some friendly magician had made up for him. Naturally, when it struck cold iron it melted away.

"Two bits more for counterfeiting," decided Somers, "then handcuff him and ring up the United States attorney." Steve is quite a card, but he does not put much over on Norman.

"Can't I finish my lunch first?" asked Steve, in tones that simply dripped with fake selfpity. Norman ignored him and he paid up.

"Steve, better have fun while you can," commented Al Donahue, who runs a string of drive-in restaurants. "When you sign up with Magic, Incorporated, you will have to cut out playing tricks with magic." I sat up and listened.

"Who said I was going to sign up with them?"

"Huh? Of course you are. It's the logical thing to do. Don't be a dope."

"Why should I?"

"Why should you? Why, it's the direction of progress, man. Take my case: I put out the fanciest line of vanishing desserts of any eating place in town. You can eat three of them if you like, and not feel full and not gain an ounce. Now I've been losing money on them, but kept them for advertising because of the way they bring in the women's trade. Now Magic, Incorporated, comes along and offers me the same thing at a price I can make money with them too. Naturally, I signed up."

"You would. Suppose they raise the prices on you after they have hired, or driven out of business, every competent wizard in town?"

Donahue laughed in a superior, irritating way. "I've got a contract."

"So? How long does it run? And did you read the cancellation clause?"

I knew what he was talking about, even if Donahue didn't; I had been through it. About five years ago a Portland cement firm came into town and began buying up the little dealers and cutting prices against the rest. They ran sixty-cent cement down to thirty-five cents a sack and broke their competitors. Then they jacked it back up by easy stages until cement sold for a dollar twenty-five. The boys took a whipping before they knew what had happened to them.

We all had to shut up about then, for the guest speaker, old B. J. Timken, the big subdivider, started in. He spoke on "Cooperation and Service." Although he is not exactly a scintillating speaker, he had some very inspiring things to say about how businessmen could serve the community and help each other; I enjoyed it.

After the clapping died down, Norman Somers thanked B.J. and said, "That's all for today, gentlemen, unless there is some new business to bring before the house—"

Jedson got up. I was sitting with my back to him, and had not known he was present. "I think there is, Mr. Chairman—a very important matter. I ask the indulgence of the Chair for a few minutes of informal discussion."

Somers answered, "Certainly, Joe, if you've go something important."

'Thanks. I think it is. This is really an extension of the discussion between Al Donahue and Steve Harris earlier in the meeting. I think there has been a major change in business conditions going on in this city right under our noses and we haven't noticed it, except where it directly affected our own business. I refer to the trade in commercial magic. How many of you use magic in your business? Put your hands up." All the hands went up, except for a couple of lawyers'. Personally, I had always figured they were magicians themselves.

"O.K.," Jedson went on, "put them down. We knew that; we all use it. I use it for textiles. Hank Maiming here uses nothing else for cleaning and pressing, and probably uses it for some of his dye jobs too. Wally Haight's Maple Shop uses it to assemble and finish fine furniture. Stan Robertson will tell you that Le Bon Marche's slick window displays are thrown together with spells, as well as two thirds of the merchandise in his store, especially in the kids' toy department. Now I want to ask you another question: In how many cases is the percentage of your cost charged to magic greater than your margin of profit? Think about it for a moment before answering." He paused, then said: "All right—put up your hands."

Nearly as many hands went up as before.

"That's the point of the whole matter. We've got to have magic to stay in business. If anyone gets a strangle hold on magic in this community, we are all at his mercy. We would have to pay any prices that are handed us, charge the prices we are told to, and take what profits we are allowed to—or go out of business!"

The chairman interrupted him. "Just a minute, Joe. Granting that what you say is true—it is, of course—do you have any reason to feel that we are confronted with any particular emergency in the matter?"

"Yes, I do have." Joe's voice was low and very serious. "Little reasons, most of them, but they add up to convince me that someone is engaged in a conspiracy in restraint of trade." Jedson ran rapidly over the history of Ditworth's attempt to organize magicians and their clients into an association, presumably to raise the standards of the profession, and how alongside the nonprofit association had suddenly appeared a capital corporation which was already in a fair way to becoming a monopoly.

"Wait a second, Joe," put in Ed Parmelee, who has a produce jobbing business. "I think that association is a fine idea. I was threatened by some rat who tried to intimidate me into letting him pick my magicians. I took it up with the association, and they took care of it; I didn't have any more trouble. I think an organization which can clamp down on racketeers is a pretty fine thing."

"You had to sign with the association to get their help, didn't you?"

"Why, yes, but that's entirely reasonable—"

"Isn't it possible that your gangster got what he wanted when you signed up?"

"Why, that seems pretty farfetched."

"I don't say," persisted Joe, "that is the explanation, but it is a distinct possibility. It would not be the first time that monopolists used goon squads with their left hands to get by coercion what their right hands could not touch. I wonder whether any of the rest of you have had similar experiences?"

It developed that several of them had. I could *see* them beginning to think.

One of the lawyers present formally asked a question through the chairman. "Mr. Chairman, passing for the moment from the association to Magic, Incorporated, is this corporation anything more than a union of magicians? If so, they have a legal right to organize."

Norman turned to Jedson. "Will you answer that, Joe?"

"Certainly. It is not a union at all. It is a parallel to a situation in which all the carpenters in town are employees of one contractor; you deal with that contractor or you don't build."

"Then it's a simple case of monopoly—if it is a monopoly. This state has a Little Sherman Act; you can prosecute."

"I think you will find that it is a monopoly. Have any of you noticed that there are no magicians present at today's meeting?"

We all looked around. It was perfectly true. "I think you can expect," he added, "to find magicians represented hereafter in this chamber by some executive of Magic, Incorporated. With respect to the possibility of prosecution"— he hauled a folded newspaper out of his hip pocket—"have any of you paid any attention to the governor's call for a special session of the legislature?"

Al Donahue remarked superciliously that he was too busy making a living to waste any time on the political game. It was a deliberate dig at Joe, for everybody knew that he was a committeeman, and spent quite a lot of time on civic affairs. The dig must have gotten under Joe's skin, for he said pityingly, "Al, it's a damn good thing for you that some of us are willing to spend a little time on government, or you would wake up some morning to find they had stolen the sidewalks in front of your house."

The chairman rapped for order; Joe apologized. Donahue muttered something under his breath about the whole political business being dirty, and that anyone associated with it was bound to turn crooked. I reached out for an ash tray and knocked over a glass of water, which spilled into Donahue's lap. It diverted his mind. Joe went on talking.

"Of course we knew a special session was likely for several reasons, but when they published the agenda of the call last night, I found tucked away toward the bottom an item 'Regulation of Thaumaturgy.' I couldn't believe that there was any reason to deal with such a matter in a special session unless something was up. I got on the phone last night and called a friend of mine at the capitol, a fellow committee member. She did not know anything about it, but she called me back later. Here's what she found out: The item was stuck into the agenda at the request of some of the governor's campaign backers; he has no special interest in it himself. Nobody seems to know what it is all about, but one bill on the subject has already been dropped in the hopper—" There was an interruption; somebody wanted to know what the bill said.

"I'm trying to tell you," Joe said patiently. "The bill was submitted by title alone; we won't be likely to know its contents until it is taken up in committee. But here is the title: 'A Bill to Establish Professional Standards for Thaumaturgists, Regulate the Practice of the Thaumaturgic. Profession, Provide for the Appointment of a Commission to Examine, License, and Administer ' and so on.

"As you can see, it isn't even a proper title; it's just an omnibus onto which they can hang any sort of legislation regarding magic, including an abridgement of antimonopoly regulation if they choose."

There was a short silence after this. I think all of us were trying to make up our minds on a subject that we were not really conversant with—politics. Presently someone spoke up and said, "What do you think we ought to do about it?"

"Well," he answered, "we at least ought to have our own representative at the capitol to protect us in the clinches. Besides that, we at least ought to be prepared to submit our own bill, if this one has any tricks in it, and bargain for the best compromise we can get. We should at least get an implementing amendment out of it that would put some real teeth into the state antitrust act, at least in so far as magic is concerned." He grinned. "That's four 'at leasts,' I think."

"Why can't the state Chamber of Commerce handle it for us? They maintain a legislative bureau."

"Sure, they have a lobby, but you know perfectly well that the state chamber doesn't see eye to eye with us little businessmen. We can't depend on them; we may actually be fighting them."

There was quite a powwow after Joe sat down. Everybody had his own ideas about what to do and tried to express them all at once. It became evident that there was no general agreement, whereupon Somers adjourned the meeting with the announcement that those interested in sending a representative to the capitol should stay. A few of the diehards like Donahue left, and the rest of us reconvened with Somers again in the chair. It was suggested that Jedson should be the one to go, and he agreed to do it.

Feldstein got up and made a speech with tears in his eyes. He wandered and did not seem to be getting anyplace, but finally he managed to get out that Jedson would need a good big war chest to do any good at the capitol, and also should be compensated for his expenses and loss of time. At that he astounded us by pulling out a roll of bills, counting out one thousand dollars, and shoving it over in front of Joe.

That display of sincerity caused him to be made finance chairman by general consent, and the subscriptions came in very nicely. I held down my natural impulses and matched Feldstein's donation, though I did wish he had not been quite so impetuous. I think Feldstein had a slight change of heart a little later, for he cautioned Joe to be economical and not to waste a lot of money buying liquor for "those schlemiels at the capitol."

Jedson shook his head at this, and said that while he intended to pay his own expenses, he would have to have a free hand in the spending of the fund, particularly with respect to entertainment. He said the time was too short to depend on sweet reasonableness and disinterested patriotism alone—that some of those lunkheads had no more opinions than a weather vane and would vote to favor the last man they had had a drink with.

Someone made a shocked remark about bribery. "I don't intend to bribe anyone," Jedson answered with a brittle note in his voice. "If it comes to swapping bribes, we're licked to start with. I am just praying that there are still enough unpledged votes up there to make a little persuasive talking and judicious browbeating worth while."

He got his own way, but I could not help agreeing privately with Feldstein. And .I made a resolution to pay a little more attention to politics thereafter; I did not even know the name of my own legislator. How did I know whether or not he was a high-caliber man or just a cheap opportunist?

And that is how Jedson, Bodie, and myself happened to find ourselves on the train, headed for the capitol.

Bodie went along because Jedson wanted a first-rate magician to play bird dog for him. He said he did not know what might turn up. I went along because I wanted to. I had never been to the capitol before, except to pass through, and was interested to see how this lawmaking business is done.

Jedson went straight to the Secretary of State's office to register as a lobbyist, while Jack and I took our baggage to the Hotel Constitution and booked some rooms. Mrs. Logan, Joe's friend the committeewoman, showed up before he got back.

Jedson had told us a great deal about Sally Logan during the train trip. He seemed to feel that she combined the shrewdness of Machiavelli with the greathearted integrity of Oliver Wendell Holmes. I was surprised at his enthusiasm, for I have often heard him grouse about women in politics.

"But you don't understand, Archie," he elaborated. "Sally isn't a woman politician, she is simply a politician, and asks no special consideration because of her sex. She can stand up and trade punches with the toughest manipulators on the Hill. What I said about women politicians is perfectly true, as a statistical generalization, but it proves nothing about any particular woman.

"It's like this: Most women in the United States have a shortsighted, peasant individualism resulting from the male-created romantic tradition of the last century. They were told that they were superior creatures, a little nearer to the angels than their menfolks. They were not encouraged to think, nor to assume social responsibility. It takes a strong mind to break out of that sort of conditioning, and most minds simply aren't up to it, male or female.

"Consequently, women as electors are usually suckers for romantic nonsense. They can be flattered into misusing their ballot even more easily than men. In politics their self-righteous feeling of virtue, combined with their essentially peasant training, resulted in their introducing a type of cut-rate, petty chiseling that should make Boss Tweed spin in his coffin.

"But Sally's not like that. She's got a tough mind which could reject the hokum."

"You're not in love with her, are you?"

"Who, me? Sally's happily married and has two of the best kids I know."

"What does her husband do?"

"Lawyer. One of the governor's supporters. Sally got started in politics through pinch-hitting for her husband one campaign."

"What is her official position up here?"

"None. Right hand for the governor. That's her strength. Sally has never held a patronage job, nor been paid for her services."

After this buildup I was anxious to meet the paragon. When she called I spoke to her over the house phone and was about to say that I would come down to the lobby when she announced that she was coming up, and hung up. I was a little startled at the informality, not yet realizing that politicians did not regard hotel rooms as bedrooms, but as business offices.

When I let her in she said, "You're Archie Fraser, aren't you? I'm Sally Logan. Where's Joe?"

"He'll be back soon. Won't you sit down and wait?"

"Thanks." She plopped herself into a chair, took off her hat and shook out her hair. I looked her over.

I had unconsciously expected something pretty formidable in the way of a mannish matron. What I saw was a young, plump, cheerful-looking blonde, with an untidy mass of yellow hair and frank blue eyes. She was entirely feminine, not over thirty at the outside, and there was something about her that was tremendously reassuring.

She made me think of county fairs and well water and sugar cookies.

"I'm afraid this is going to be a tough proposition," she began at once. "I didn't think so, but just the same someone has a solid bloc lined up for Assembly Bill 22—that's the bill I wired Joe about. What do you boys plan to do, make a straight fight to kill it or submit a substitute bill?"

"Jedson drew up a fair-practices act with the aid of some of our Half World friends and a couple of lawyers. Would you like to see it?"

"Please. I stopped by the State Printing Office and got a few copies of the bill you are against—AB 22. We'll swap."

I was trying to translate the foreign language lawyers use when they write statutes when Jedson came in. He patted Sally's cheek without speaking, and she reached up and squeezed his hand and went on with her reading. He commenced reading over my shoulder. I gave up and let him have it. It made a set of building specifications look simple.

Sally asked, "What do you think of it, Joe?"

"Worse than I expected," he replied. "Take Paragraph 7 —"

"I haven't read it yet."

"So? Well, in the first place it recognizes the association as a semipublic body like the Bar Association or the. Community Chest, and permits it to initiate actions before the commission. That means that every magician had better by a damn sight belong to Ditworth's association and be careful not to offend it."

"But how can that be legal?" I asked. "It sounds unconstitutional to me—a private association like that

"Plenty of precedent, son. Corporations to promote world's fairs, for example. They're recognized, and even voted tax money. As for unconstitutionality, you'd have to prove that the law was not equal in application—which it isn't!—but awfully hard to prove."

"But, anyhow, a witch gets a hearing before the commission?"

"Sure, but there is the rub. The commission has very broad powers, almost unlimited powers over everything connected with magic. The bill is filled with phrases like 'reasonable and proper,' which means the sky's the limit, with nothing but the good sense and decency of the commissioners to restrain them. That's my objection to commissions in government—the law can never be equal in application under them. They have delegated legislative powers, and the law is what they say it is. You might as well face a drumhead courtmartial.

"There are nine commissioners provided for in this case, six of which must be licensed magicians, first-class. I don't suppose it is necessary to point out that a few ill-advised appointments to the original commission will turn it into a tight little self-perpetuating oligarchy—through its power to license."

Sally and Joe were going over to see a legislator whom they thought might sponsor our bill, so they dropped me off at the capitol. I wanted to listen to some of the debate.

It gave me a warm feeling to climb up the big, wide steps of the statehouse. The old, ugly mass of masonry seemed to represent something tough in the character of the American people, the determination of free men to manage their own affairs. Our own current problem seemed a little smaller, not quite so overpoweringly important—still worth working on, but simply one example in a long history of the general problem of self-government.

I noticed something else as I was approaching the great bronze doors; the contractor for the outer construction of the building must have made his pile; the mix for the mortar was not richer than one to six!

I decided on the Assembly rather than the Senate because Sally said they generally put on a livelier show. When I entered the hall they were discussing a resolution to investigate the tarring and feathering the previous month of three agricultural-worker organizers up near the town of Six Points. Sally had remarked that it was on the calendar for the day, but that it would not take long because the proponents of the resolution did not really want it. However, the Central Labor Council had passed a resolution demanding it, and the labor-supported members were stuck with it.

The reason why they could only go through the motions of asking for an investigation was that the organizers were not really human beings at all, but mandrakes, a fact that the state council had, not been aware of when they asked for an investigation. Since the making of mandrakes is the blackest kind of black magic, and highly illegal, they needed some way to drop it quietly. The use of mandrakes has always been opposed by organized labor, because it displaces real men —men with families to support. For the same reasons they oppose synthetic facsimiles and homunculi. But it is well known that the unions are not above using mandrakes, or mandragoras, as well as facsimiles, when it suits their purpose, such as for pickets, pressure groups, and the like. I suppose they feel justified in fighting fire with fire.

Homunculi they can't use on account of their size, since they are too small to be passed off as men.

If Sally had not primed me, I would not have understood what took place. Each of the labor members got up and demanded in forthright terms a resolution to investigate. When they were all through, someone proposed that the matter be tabled until the grand jury of the county concerned held its next meeting. This motion was voted on without debate and without a roll call; although practically no members were present except those who had spoken in favor of the original resolution, the motion passed easily.

There was the usual crop of oil-industry bills on the agenda, such as you read about in the newspapers every time the legislature is in session. One of them was the next item on the day's calendar — a bill which proposed that the governor negotiate a treaty with the gnomes, under which the gnomes would aid the petroleum engineers in prospecting and, in addition, would advise humans in drilling methods so as to maintain the natural gas pressure underground needed to raise the oil to the surface. I think that is the idea, but I am no petroleum engineer.

The proponent spoke first. "Mr. Speaker," he said, "I ask for a 'Yes' vote on this bill, AB 79. It's purpose is quite simple and the advantages obvious. A very large part of the overhead cost of recovering crude oil from the ground lies in the uncertainties of prospecting and drilling. With the aid of the Little People this item can be reduced to an estimated 7 per cent of its present dollar cost, and the price of gasoline and other petroleum products to the people can be greatly lessened.

"The matter of underground gas pressure is a little more technical, but suffice it to say that it takes, in round numbers, a thousand cubic feet of natural gas to raise one barrel of oil to the surface. If we can get intelligent supervision of drilling operations far underground, where no human being can go, we can make the most economical use of this precious gas pressure.

"The only rational objection to this bill lies in whether or not we can deal with the gnomes on favorable terms. I believe that we can, for the Administration has some excellent connections in the Half World. The gnomes are willing to negotiate in order to put a stop to the present condition of chaos in which human engineers drill blindly, sometimes wrecking their homes and not infrequently violating their sacred places. They not unreasonably claim everything under the surface as their kingdom, but are willing to make any reasonable concession to abate what is to them an intolerable nuisance.

"If this treaty works out well, as it will, we can expect to arrange other treaties which will enable us to exploit all of the metal and mineral resources of this state under conditions highly advantageous to us and not hurtful to the gnomes. Imagine, if you please, having a gnome with his X-ray eyes peer into a mountainside and locate a rich vein of gold for you!"

It seemed very reasonable, except that, having once seen the king of the gnomes, I would not trust him very far, unless Mrs. Jennings did the negotiating.

As soon as the proponent sat down, another member jumped up and just as vigorously denounced it. He was older than most of the members, and I judged him to be a country lawyer. His accent placed him in the northern part of the state, well away from the oil country. "Mr. Speaker," he bellowed, "I ask for a vote of `No'! Who would dream that an American legislature would stoop to such degrading nonsense? Have any of you ever seen a gnome? Have you any reason to believe that gnomes exist? This is just a cheap piece of political chicanery to do the public out of its proper share of the natural resources of our great state—"

He was interrupted by a question. "Does the honorable member from Lincoln County mean to imply that he has no belief in magic? Perhaps he does not believe in the radio or the telephone either."

"Not at all. If the Chair will permit, I will state my position so clearly that even my respected colleague on the other side of the house will understand it. There are certain remarkable developments in human knowledge in general use which are commonly referred to by the laity as magic. These principles are well understood and are taught, I am happy to say, in our great publicly owned institutions for higher learning. I have every respect for the legitimate practitioners thereof. But, as I understand it, although I am not myself a practitioner of the great science, there is nothing in it that requires a belief in the Little People.

"But let us stipulate, for the sake of argument, that the Little People do exist. Is that any reason to pay them blackmail? Should the citizens of this commonwealth pay cumshaw to the denizens of the underworld—" He waited for his pun to be appreciated. It wasn't. "—for that which is legally and rightfully ours? If this ridiculous principle is pushed to its logical conclusion, the farmers and dairymen I am proud to number among my constituents will be required to pay toll to the elves before they can milk their cows!"

Someone slid into the seat beside me. I glanced around, saw that it was Jedson, and questioned him with my eyes. "Nothing doing now," he whispered. "We've got some time to kill and might as well do it here"—and he turned to the debate.

Somebody had gotten up to reply to the old duck with the Daniel Webster complex. "Mr. Speaker, if the honored member is quite through with his speech—I did not quite catch what office he is running for!—I would like to invite the attention of this body to the precedented standing in jurisprudence of elements of every nature, not only in Mosaic law, Roman law, the English common law, but also in the appellate court of our neighboring state to the south. I am confident that anyone possessing even an elementary knowledge of the law will recognize the case I have in mind without citation, but for the benefit of—"

"Mr. Speaker! I move to amend by striking out the last word."

"A strategem to gain the floor," Joe whispered. "Is it the purpose of the honorable member who preceded me to imply—"

It went on and on. I turned to Jedson and asked, "I can't figure out this chap who is speaking; awhile ago he was hollering about cows. What's he afraid of, religious prejudices?"

"Partly that; he's from a very conservative district. But he's lined up with the independent oilmen. They don't want the state setting the terms; they think they can do better dealing with the gnomes directly."

"But what interest has he got in oil? There's no oil in his district."

"No. But there is outdoor advertising. The same holding company that controls the so-called independent oilmen holds a voting trust in the Countryside Advertising Corporation. And that can be awfully important to him around election time."

The Speaker looked our way, and an assistant sergeant at arms threaded his way toward us. We shut up. Someone moved the order of the day, and the oil bill was put aside for one of the magic bills that had already come out of committee. This was a bill to outlaw every sort of magic, witchcraft, thaumaturgy.

No one spoke for it but the proponent, who launched into a diatribe that was more scholarly than logical. He quoted extensively from Blackstone's *Commentaries* and the records of the Massachusetts trials, and finished up with his head thrown back, one finger waving wildly to heaven and shouting, "'Thou shalt not suffer a witch to live!'

No one bothered to speak against it; it was voted on immediately without roll call, and, to my complete bewilderment, passed without a single nay! I turned to Jedson and found him smiling at the expression on my face.

"It doesn't mean a thing, Archie," he said quietly.

"Huh?"

"He's a party wheel horse who had to introduce that bill to please a certain bloc of his constituents."

"You mean he doesn't believe in the bill himself?"

"Oh no, he believes in it all right, but he also knows it is hopeless. It has evidently been agreed to let him pass it over here in the Assembly this session so that he would have something to take home to his people. Now it will go to the senate committee and die there; nobody will ever hear of it again."

I guess my voice carries too well, for my reply got us a really dirty look from the Speaker. We got up hastily and left.

Once outside I asked Joe what had happened that he was back so soon. "He would not touch it," he told me. "Said that he couldn't afford to antagonize the association."

"Does that finish us?"

"Not at all. Sally and I are going to see another member right after lunch. He's tied up in a committee meeting at the moment."

We stopped in a restaurant where Jedson had arranged to meet Sally Logan. Jedson ordered lunch, and I had a couple of cans of devitalized beer, insisting on their bringing it to the booth in the unopened containers. I don't like to get even a little bit tipsy, although I like to drink. On another occasion I had paid for the wizard-processed liquor and had received intoxicating liquor instead. Hence the unopened containers.

I sat there, staring into my glass and thinking about what I had heard that morning, especially about the bill to outlaw all magic. The more I thought about it the better the notion seemed. The country had gotten along all right in the old days before magic had become popular and commercially widespread. It was unquestionably a headache in many ways, even leaving out our present troubles with racketeers and monopolists. Finally I expressed my opinion to Jedson.

But he disagreed. According to him prohibition never does work in any field. He said, that anything which can be supplied and which people want will be supplied—law or no law. To prohibit magic would simply be to turn over the field to the crooks and the black magicians.

"I see the drawbacks of magic as well as you do," he went on, "but it is like firearms. Certainly guns made it possible for almost anyone to commit murder and get away with it. But once they were invented the damage was done. All you can do is to try to cope with it. Things like the Sullivan Act—they didn't keep the crooks from carrying guns and using them; they simply took guns out of the hands of honest people.

"It's the same with magic. If you prohibit it, you take from decent people the enormous boons to be derived from a knowledge of the great arcane laws, while the nasty, harmful secrets hidden away in black grimoires and red grimoires will still be bootlegged to anyone who will pay the price and has no respect for law.

"Personally, I don't believe there was any less black magic practiced between, say, 1750 and 1950 than there is now, or was before then. Take a look at Pennsylvania and the hex country. Take a look at the Deep South. But since that time we have begun to have the advantages of white magic too."

Sally came in, spotted us, and slid into one side of the booth. "My," she said with a sigh of relaxation, "I've just fought my way across the lobby of the Constitution. The 'third house' is certainly out in full force this trip. I've never seen 'em so thick, especially the women."

"Third house?" I said.

"She means lobbyists, Archie," Jedson explained. "Yes, I noticed them. I'd like to make a small bet that two thirds of them are synthetic."

"I *thought* I didn't recognize many of them," Sally commented. "Are you sure, Joe?"

"Not entirely. But Bodie agrees with me. He says that the women are almost all mandrakes, or androids of some sort. Real women are never quite so perfectly beautiful—nor so tractable. I've got him checking on them now."

"In what way?"

"He says he can spot the work of most of the magicians capable of that high-powered stuff. If possible we want to prove that all these androids were made by Magic, Incorporated—though I'm not sure just what use we can make of the fact.

"Bodie has even located some zombies," he added.

"Not really!" exclaimed Sally. She wrinkled her nose and looked disgusted. "Some people have odd tastes."

They started discussing aspects of politics that I know nothing about, while Sally put away a very sizable lunch topped off by a fudge ice-cream cake slice. But I noticed that she ordered from the lefthand side of the menu—all vanishing items, like the alcohol in my beer.

I found out more about the situation as they talked. When a bill is submitted to the legislature, it is first referred to a committee for hearings. Ditworth's bill, AB 22, had been referred to the Committee on Professional Standards. Over in the Senate an identical bill had turned up and had been referred by the lieutenant governor, who presides in the Senate, to the Committee on Industrial Practices.

Our immediate object was to find a sponsor for our bill; if possible, one for each house, and preferably sponsors who were members, in their respective houses, of the committees concerned. All of this needed to be done before Ditworth's bills came up for hearing.

I went with them to see their second-choice sponsor for the Assembly. He was not on the Professional Standards Committee, but he was on the Ways and Means Committee, which meant that he carried a lot of weight in any committee.

He was a pleasant chap named Spence—Luther B. Spence—and I could see that he was quite anxious to please Sally—for past favors, I suppose. But they had no more luck with him than with their first-choice man. He said that he did not have time to fight for our bill, as the chairman of the Ways and Means Committee was sick and he was chairman pro tem.

Sally put it to him flatly. "Look here, Luther, when you have needed a hand in the past, you've gotten it from me. I hate to remind a man of obligations, but you will recall that matter of the vacancy last year on the Fish and Game Commission. Now I want action on this matter, and not excuses!"

Spence was plainly embarrassed. "Now, Sally, please don't feel like that. You're getting your feathers up over nothing. You know I'll always do anything I can for you, but you don't really need this, and it would necessitate my neglecting things that I can't afford to neglect."

"What do you mean, I don't need it?"

"I mean you should not worry about AB 22. It's a cinch bill."

Jedson explained that term to me later. A cinch bill, he said, was a bill introduced for tactical reasons. The sponsors never intended to try to get it enacted into law, but simply used it as a bargaining point. It's like an "asking price" in a business deal.

"Are you sure of that?"

"Why, yes, I think so. The word has been passed around that there is another bill coming up that won't have the bugs in it that this bill has."

After we left Spence's office, Jedson said, "Sally, I hope Spence is right, but I don't trust Ditworth's intentions. He's out to get a strangle hold on the industry. I know it!"

"Luther usually has the correct information, Joe."

"Yes, that is no doubt true, but this is a little out of his line. Anyhow, thanks, kid. You did your best."

"Call on me if there is anything else, Joe. And come out to dinner before you go; you haven't seen Bill or the kids yet."

"I won't forget."

Jedson finally gave up as impractical trying to submit our bill, and concentrated on the committees handling Ditworth's bills. I did not see much of him. He would go out at four in the afternoon to a cocktail party and get back to the hotel at three in the morning, bleary-eyed, with progress to report.

He woke me up the fourth night and announced jubilantly, "It's in the bag, Archie!"

"You killed those bills?"

"Not quite. I couldn't manage that. But they will be reported out of committee so amended that we won't care if they do pass. Furthermore, the amendments are different in each committee."

"Well, what of that?"

"That means that even if they do pass their respective houses they will have to go to conference committee to have their differences ironed out, then back for final passage in each house. The chances of that this late in a short session are negligible. Those bills are dead."

Jedson's predictions were justified. The bills came out of committee with a "do pass" recommendation late Saturday evening. That was the actual time; the statehouse clock had been stopped fortyeight hours before to permit first and second readings of an administration "must" bill. Therefore it was officially Thursday. I know that sounds cockeyed, and it is, but I am told that every legislature in the country does it toward the end of a crowded session.

The important point is that, Thursday or Saturday, the session would adjourn sometime that night. I watched Ditworth's bill come up in the Assembly. It was passed, without debate, in the amended form. I sighed with relief. About midnight Jedson joined me and reported that the same thing had happened in the Senate. Sally was on watch in the conference committee room, just to make sure that the bills stayed dead.

Joe and I remained on watch in our respective houses. There was probably no need for it, but it made us feel easier. Shortly before two in the morning Bodie came in and said we were to meet Jedson and Sally outside the conference committee room.

"What's that?" I said, immediately all nerves. "Has something slipped?"

"No, it's all right and it's all over. Come on."

Joe answered my question, as I hurried up with Bodie trailing, before I could ask it. "It's O.K., Archie. Sally was present when the committee adjourned *sine die,* without acting on those bills. It's all over; we've won!"

We went over to the bar across the street to have a drink in celebration.

In spite of the late hour the bar was moderately crowded. Lobbyists, local politicians, legislative attaches, all the swarm of camp followers who throng the capitol whenever the legislature is sitting—all such were still up and around, and many of them had picked this bar as a convenient place to wait for news of adjournment.

We were lucky to find a stool at the bar for Sally. We three men made a tight little cluster around her and tried to get the attention of the overworked bartender. We had just managed to place our orders when a young man tapped on the shoulder the customer on the stool to the right of Sally. He immediately got down and left. I nudged Bodie to tell him to take the seat.

Sally turned to Joe. "Well, it won't be long now. There go the sergeants at arms." She nodded toward the young man, who was repeating the process farther down the line.

"What does that mean?" I asked Joe.

"It means they are getting along toward the final vote on the bill they were waiting on. They've gone to 'call of the house' now, and the Speaker has ordered the sergeant at arms to send his deputies out to arrest absent members."

"Arrest them?" I was a little bit shocked.

"Only technically. You see, the Assembly has had to stall until the Senate was through with this bill, and most of the members have wandered out for a bite to eat, or drink. Now they are ready to vote, so they round them up."

A fat man took a stool near us which had just been vacated by a member. Sally said, "Hello, Don."

He took a cigar from his mouth and said, "How are yuh, Sally? What's new? Say, I thought you were interested in that bill on magic?"

We were all four alert at once. "I am," Sally admitted. "What about it?"

"Well, then, you had better get over there. They're voting on it right away. Didn't you notice the 'call of the house'?"

I think we set a new record getting across the street, with Sally leading the field in spite of her plumpness. I was asking Jedson how it could be possible, and he shut me up with, "I don't know, man! We'll have to see."

We managed to find seats on the main floor back of the rail. Sally beckoned to one of the pages she knew and sent him up to the clerk's desk for a copy of the bill that was pending. In front of the rail the Assemblymen gathered in groups. There was a crowd around the desk of the administration floor leader and a smaller cluster around the floor leader of the opposition. The whips had individual members buttonholed here and there, arguing with them in tense whispers.

The page came back with the copy of the bill. It was an appropriation bill for the Middle Counties Improvement Project—the last of the "must" bills for which the session had been called—but pasted to it, as a rider, *was Ditworth's bill in its original, most damnable form!*

It had been added as an amendment in the Senate, probably as a concession to Ditworth's stooges in order to obtain their votes to make up the two-thirds majority necessary to pass the appropriation bill to which it had been grafted.

The vote came almost at once. It was evident, early in the roll call, that the floor leader had his majority in hand and that the bill would pass. When the clerk announced its passage, a motion to adjourn *sine die* was offered by the opposition floor leader and it was carried unanimously. The Speaker called the two floor leaders to his desk and instructed them to wait on the governor and the presiding officer of the Senate with notice of adjournment.

The crack of his gavel released us from stunned immobility. We shambled out.

We got in to see the governor late the next morning. The appointment, squeezed into an overcrowded calendar, was simply a concession to Sally and another evidence of the high regard in which she was held around the capitol. For it was evident that he did not want to see us and did not have time to see us.

But he greeted Sally affectionately and listened patiently while Jedson explained in a few words why we thought the combined Ditworth-Middle Counties bill should be vetoed.

The circumstances were not favorable to reasoned exposition. The governor was interrupted by two calls that he had to take, one from his director of finance and one from Washington. His personal secretary came in once and shoved a memorandum under his eyes, at which the old man looked worried, then scrawled something on it and handed it back. I could tell that his attention was elsewhere for some minutes after that.

When Jedson stopped talking, the governor sat for a moment, looking down at his blotter pad, an expression of deep-rooted weariness on his face. Then he answered in slow words, "No, Mr. Jedson, I can't see it. I regret as much as you do that this business of the regulation of magic has been tied in with an entirely different matter. But I cannot veto part of a bill and sign the rest—even though the bill includes two widely separated subjects.

"I appreciate the work you did to help elect my administration"—I could see Sally's hand in that remark—"and wish that we could agree in this.

But the Middle Counties Project is something that I have worked toward since my inauguration. I hope and believe that it will be the means whereby the most depressed area in our state can work out its economic problems without further grants of public money. If I thought that the amendment concerning magic would actually do a grave harm to the state —"

He paused for a moment. "But I don't. When Mrs. Logan called me this morning I had my legislative counsel analyze the bill. I agree that the bill is unnecessary, but it seems to do nothing more than add a little more bureaucratic red tape. That's not good, but we manage to do business under a lot of it; a little more can't wreck things."

I butted in—rudely, I suppose—but I was all worked up. "But, Your Excellency, if you would just take time to examine this matter yourself, in detail, you would see how much damage it will do!"

I would not have been surprised if he had flared back at me. Instead, he indicated a file basket that was stacked high and spilling over. "Mr. Fraser, there you see fifty-seven bills passed by this session of the legislature. Every one of them has some defect. Every one of them is of vital importance to some, or all, of the people of this state. Some of them are as long to read as an ordinary novel. In the next nine days I must decide what ones shall become law and what ones must wait for revision at the next regular session. During that nine days at least a thousand people will want me to see them about some one of those bills —"

His aide stuck his head in the door. "Twelve-twenty, chief! You're on the air in forty minutes."

The governor nodded absently and stood up. "You will excuse me? I'm expected at a luncheon." He turned to his aide, who was getting out his hat and gloves from a closet. "You have the speech, Jim?"

"Of course, sir."

"Just a minute!" Sally had cut in. "Have you taken your tonic?"

"Not yet."

"You're not going off to one of those luncheons without it!" She ducked into his private washroom and came out with a medicine bottle. Joe and I bowed out as quickly as possible.

Outside I started fuming to Jedson about the way we had been given the run-around, as I saw it. I made some remark about dunderheaded, compromising politicians when Joe cut me short.

"Shut up, Archie! Try running a state sometime instead of a small business and see how easy you find it!"

I shut up.

Bodie was waiting for us in the lobby of the capitol. I could see that he was excited about something, for he flipped away a cigarette and rushed toward us. "Look!" he commanded. "Down there!"

We followed the direction of his finger and saw two figures just going out the big doors. One was Ditworth, the other was a well-known lobbyist with whom he had worked. "What about it?" Joe demanded.

"I was standing here behind this phone booth, leaning against the wall and catching a cigarette. As you can see, from here that big mirror reflects the bottom of the rotunda stairs. I kept an eye on it for you fellows. I noticed this lobbyist, Sims, coming downstairs by himself, but he was gesturing as if he were talking to somebody. That made me curious, so I looked around the corner of the booth and saw him directly. He was not alone; he was with Ditworth. I looked back at the mirror and he appeared to be alone. *Ditworth cast no reflection in the mirror!"*

Jedson snapped his fingers. "A demon!" he said in an amazed voice. "And I never suspected it!"

I am surprised that more suicides don't occur on trains. When a man is down, I know of nothing more depressing than staring at the monotonous scenery and listening to the maddening *licketytock* of the rails. In a way I was glad to have this new development of Ditworth's inhuman status to think about; it kept my mind off poor old Feldstein and his thousand dollars.

Startling as it was to discover that Ditworth was a demon, it made no real change in the situation except to explain the efficiency and speed with which we had been outmaneuvered and to confirm as a certainty our belief that the racketeers and Magic, Incorporated, were two heads of the same beast. But we had no way of proving that Ditworth was a Half World monster. If we tried to haul him into court for a test, he was quite capable of lying low and sending out a facsimile, or a mandrake, built to look like him and immune to the mirror test.

We dreaded going back and reporting our failure to the committee—at least I did. But at least we were spared that. The Middle Counties Act carried an emergency clause which put it into effect the day it was signed. Ditworth's bill, as an amendment, went into action with the same speed. The newspapers on sale at the station when we got off the train carried the names of the new commissioners for thaumaturgy.

Nor did the commission waste any time in making its power felt. They announced their intention of raising the standards of magical practice in all fields, and stated that new and more thorough examinations would be prepared at once. The association formerly headed by Ditworth opened a coaching school in which practicing magicians could take a refresher course in thaumaturgic principles and arcane law. In accordance with the high principles set forth in their charter, the school was not restricted to members of the association.

That sounds bighearted of the association. It wasn't. They managed to convey a strong impression in their classes that membership in the association would be a big help in passing the new examinations. Nothing you could put your finger on to take into court—just a continuous impression. The association grew.

A couple of weeks later all licenses were canceled and magicians were put on a day-to-day basis in their practice, subject to call for reexamination at a day's notice. A few of the outstanding holdouts against signing up with Magic, Incorporated, were called up, examined, and licenses refused them. The squeeze was on. Mrs. Jennings quietly withdrew from any practice. Bodie came around to see me; I had an uncompleted contract with him involving some apartment houses.

"Here's your contract, Archie," he said bitterly. "I'll need some time to pay the penalties for non-completion; my bond was revoked when they canceled the licenses."

I took the contract and tore in two. "Forget that talk about penalties," I told him. "You take your examinations and we'll write a new contract."

He laughed unhappily. "Don't be a Pollyanna."

I changed my tack. "What are you going to do? Sign up with Magic, Incorporated?"

He straightened himself up. "I've never temporized with demons; I won't start now."

"Good boy," I said. "Well, if the eating gets uncertain, I reckon we can find a job of some sort here for you."

It was a good thing that Bodie had some money saved, for I was a little too optimistic in my offer. Magic, Incorporated, moved quickly into the second phase of their squeeze, and it began to be a matter of speculation as to whether I myself would eat regularly. There were still quite a number of licensed magicians in town who were not employed by Magic, Incorporated—it would have been an evident, actionable frameup to freeze out everyone—but those available were all incompetent bunglers, not fit to mix a philter. There was no competent, legal magical assistance to be gotten at any price—except through Magic, Incorporated.

I was forced to fall back on old-fashioned methods in every respect. Since I don't use much magic in any case, it was possible for me to do that, but it was the difference between making money and losing money.

I had put Feldstein on as a salesman after his agency folded up under him. He turned out to be a crackajack and helped to reduce the losses. He could smell a profit even farther than I could—farther than Dr. Worthington could smell a witch.

But most of the other businessmen around me were simply forced to capitulate. Most of them, used magic in at least one phase of their business; they had their choice of signing a contract with Magic, Incorporated, or closing their doors. They had wives and kids—they signed.

The fees for thaumaturgy were jacked up until they were all the traffic would bear, to the point where it was just cheaper to do business with magic than without it. The magicians got none of the new profits; it all stayed with the corporation. As a matter of fact, the magicians got less of the proceeds than when they had operated independently, but they took what they could get and were glad of the chance to feed their families.

Jedson was hard hit—disastrously hit. He held out, naturally, preferring honorable bankruptcy to dealing with demons, but he used magic throughout his business. He was through. They started by disqualifying August Welker, his foreman, then cut off the rest of his resources. It was intimated that Magic, Incorporated, did not care to deal with him, even had he wished it.

We were all over at Mrs. Jennings's late one afternoon for tea—myself, Jedson, Bodie, and Dr. Royce Worthington, the witch smeller. We tried to keep the conversation away from our troubles, but we just could not do it. Anything that was said led back somehow to Ditworth and his damnable monopoly.

After Jack Bodie had spent ten minutes explaining carefully and mendaciously that he really did not mind being out of witchcraft, that he did not have any real talent for it, and had only taken it up to please his old man, I tried to change the subject. Mrs. Jennings had been listening to Jack with such pity and compassion in her eyes that I wanted to bawl myself.

I turned to Jedson and said inanely, "How is Miss Megeath?"

She was the white witch from Jersey City, the one who did creative magic in textiles. I had no special interest in her welfare.

He looked up with a start. "Ellen? She's ... she's all right. They took her license away a month ago," he finished lamely.

That was not the direction I wanted the talk to go. I turned it again. "Did she ever manage to do what whole-garment stunt?"

He brightened a little. "Why, yes, she did—once. Didn't I tell you about it?" Mrs. Jennings showed polite curiosity, for which I silently thanked her. Jedson explained to the others what they had been trying to accomplish. "She really succeeded too well," he continued. "Once she had started, she kept right on, and we could not bring her out of her trance. She turned out over thirty thousand little striped sports dresses, all the same size and pattern. My lofts were loaded with them. Nine tenths of them will melt away before I dispose of them.

"But she won't try it again," he added. "Too hard on her health."

"How?" I inquired.

"Well, she lost ten pounds doing that one stunt. She's not hardy enough for magic. What she really needs is to go out to Arizona and lie around in the sun for a year. I wish to the Lord I had the money. I'd send her."

I cocked an eyebrow at him. "Getting interested, Joe?" Jedson is an inveterate bachelor, but it pleases me to pretend otherwise. He generally plays up, but this time he was downright surly. It showed the abnormal state of nerves he was in.

"Oh, for cripes' sake, Archie! Excuse me, Mrs. Jennings! But can't I take a normal humane interest in a person without you seeing an ulterior motive in it?"

"Sorry."

"That's all right." He grinned. "I shouldn't be so touchy. Anyhow, Ellen and I have cooked up an invention between us that might be a solution for all of us. I'd been intending to show it to all of you just as soon as we had a working model. Look, folks!" He drew what appeared to be a fountain pen out of a vest pocket and handed it to me.

"What is it? A pen?"

"No."

"A fever thermometer?"

"No. Open it up."

I unscrewed the cap and found that it contained a miniature parasol. It opened and closed like a real umbrella, and was about three inches across when opened. It reminded me of one of those clever little Japanese favors one sometimes gets at parties, except that it seemed to be made of oiled silk and metal instead of tissue paper and bamboo.

"Pretty," I said, "and very clever. What's it good for?"

"Dip it in water."

I looked around for some. Mrs. Jennings poured some into an empty cup, and I dipped it in. It seemed to crawl in my hands.

In less than thirty seconds I was holding a full-sized umbrella in my hands and looking as silly as I felt. Bodie smacked a palm with a fist.

"It's a lulu, Joe! I wonder why someone didn't think of it before."

Jedson accepted congratulations with a fatuous grin, then added, "That's not all—look." He pulled a small envelope out of a pocket and produced a tiny transparent raincoat, suitable for a six-inch doll. "This is the same gag. And this." He hauled out a pair of rubber overshoes less than an inch long. "A man could wear these as a watch fob, or a woman could carry them on a charm bracelet. Then, with either the umbrella or the raincoat, one need never be caught in the rain. The minute the rain hits them, presto!—full size. When they dry out they shrink up."

We passed them around from hand to hand and admired them. Joe went on. "Here's what I have in mind. This business needs a magician—that's you, Jack—and a merchandiser—that's you, Archie. It has two major stockholders: that's Ellen and me. She can go take the rest cure she needs, and I'll retire and resume my studies, same as I always wanted to do."

My mind immediately started turning over the commercial possibilities, then I suddenly saw the hitch. "Wait a minute, Joe. We can't set up business in this state."

"No."

"It will take some capital to move out of the state. How are you fixed? Frankly, I don't believe I could raise a thousand dollars if I liquidated."

He made a wry face. "Compared with me you are rich."

I got up and began wandering nervously around the room. We would just have to raise the money somehow. It was too good a thing to be missed, and would rehabilitate all of us. It was clearly patentable, and I could see commercial possibilities that would never occur to Joe. Tents for camping, canoes, swimming suits, traveling gear of every sort. We had a gold mine.

Mrs Jennings interrupted in her sweet and gentle voice. "I am not sure it will be too easy to find a state in which to operate."

"Excuse me, what did you say?'

"Dr. Royce and I have been making some inquiries. I am afraid you will find the rest of the country about as well sewed up as this state."

"What! Fortyeight states?"

"Demons don't have the same limitations in time that we have."

That brought me up short. Ditworth again.

Gloom settled down on us like fog. We discussed it from every angle and came right back to where we had started. It was no help to have a clever, new business; Ditworth had us shut out of every business. There was an awkward silence.

I finally broke it with an outburst that surprised myself. "Look here!" I exclaimed. "This situation is intolerable. Let's quit kidding ourselves and admit it. As long as Ditworth is in control we're whipped. Why don't we do something?"

Jedson gave me a pained smile. "God knows I'd like to, Archie, if I could think of anything useful to do."

"But we know who our enemy is—Ditworth! Let's tackle him—legal or not, fair means or dirty!"

"But that is just the point. Do we know our enemy? To be sure, we know he is a demon, but what demon, and where? Nobody has seen him in weeks."

"Huh? But I thought just the other day—"

"Just a dummy, a hollow shell. The real Ditworth is somewhere out of sight."

"But, look, if he is a demon, can't he be invoked, and compelled—"

Mrs. Jennings answered this time. "Perhaps—though it's uncertain and dangerous. But we lack one essential—his name. To invoke a demon you must know his real name, otherwise he will not obey you, no matter how powerful the incantation. I have been searching the Half World for weeks, but I have not learned that necessary name."

Dr. Worthington cleared his throat with a rumble as deep as a cement mixer, and volunteered, "My abilities are at your disposal, if I can help abate this nuisance —"

Mrs. Jennings thanked him. "I don't see how we can use you as yet, Doctor. I knew we could depend on you."

Jedson said suddenly, "White prevails over black."

She answered, "Certainly."

"Everywhere?"

"Everywhere, since darkness is the absence of light."

He went on, "It is not good for the white to wait on the black."

"It is not good."

"With my brother Royce to help, we might carry light into darkness."

She considered this. "It is possible, yes. But very dangerous."

"You have been there?"

"On occasion. But you are not I, nor are these others."

Everyone seemed to be following the thread of the conversation but me. I interrupted with, "Just a minute, please. Would it be too much to explain what you are talking about?"

"There was no rudeness intended, Archibald," said Mrs. Jennings in a voice that made it all right. "Joseph has suggested that, since we are stalemated here, we make a sortie into the Half World, smell out this demon, and attack him on his home ground."

It took me a moment to grasp the simple audacity of the scheme. Then I said, "Fine! Let's get on with it. When do we start?"

They lapsed back into a professional discussion that I was unable to follow. Mrs. Jennings dragged out several musty volumes and looked up references on points that were sheer Sanskrit to me. Jedson borrowed her almanac, and he and the doctor stepped out into the back yard to observe the moon.

Finally it settled down into an argument—or rather discussion; there could be no argument, as they all deferred to Mrs. Jennings's judgment concerning liaison. There seemed to be no satisfactory way to maintain contact with the real world, and Mrs. Jennings was unwilling to start until it was worked out. The difficulty was this: not being black magicians, not having signed a compact with Old Nick, they were not citizens of the Dark Kingdom and could not travel through it with certain impunity.

Bodie turned to Jedson. "How about Ellen Megeath?" he inquired doubtfully.

"Ellen? Why, yes, of course. She would do it. I'll telephone her. Mrs. Jennings, do any of your neighbors have a phone?"

"Never mind," Bodie told him, "just think about her for a few minutes so that I can get a line —" He stared at Jedson's face for a moment, then disappeared suddenly.

Perhaps three minutes later Ellen Megeath dropped lightly out of nothing. "Mr. Bodie will be along in a few minutes," she said. "He stopped to buy a pack of cigarettes." Jedson took her over and presented her to Mrs. Jennings. She did look sickly, and I could understand Jedson's concern. Every few minutes she would swallow and choke a little, as if bothered by an enlarged thyroid.

As soon as Jack was back they got right down to details. He had explained to Ellen what they planned to do, and she was entirely willing. She insisted that one more session of magic would do her no harm. There was no advantage in waiting; they prepared to depart at once. Mrs. Jennings related the marching orders. "Ellen, you will need to follow me in trance, keeping in close rapport. I think you will find that couch near the fireplace a good place to rest your body. Jack, you will remain here and guard the portal." The chimney of Mrs. Jennings's livingroom fireplace was to be used as most convenient. "You will keep in touch with us through Ellen."

"But, Granny, I'll be needed in the Half—"

"No, Jack." She was gently firm. "You are needed here much more. Someone has to guard the way and help us back, you know. Each to his task."

He muttered a bit, but gave in. She went on, "I think that is all. Ellen and Jack here; Joseph, Royce, and myself to make the trip. You will have nothing to do but wait, Archibald, but we won't be longer than ten minutes, world time, if we are to come back." She bustled away toward the kitchen, saying something about the unguent and calling back to Jack to have the candles ready. I hurried after her.

"What do you mean," I demanded, "about me having nothing to do but wait? I'm going along!"

She turned and looked at me before replying, troubled concern in her magnificent eyes. "I don't see how that can be, Archibald."

Jedson had followed us and now took me by the arm. "See here, Archie, do be sensible. It's utterly out of the question. You're not a magician."

I pulled away from him. "Neither are you."

"Not in a technical sense, perhaps, but I know enough to be useful. Don't be a stubborn fool, man; if you come, you'll simply handicap us."

That kind of argument is hard to answer and manifestly unfair. "How?" I persisted.

"Hell's bells, Archie, you're young and strong and willing, and there is no one I would rather have at my back in a roughhouse, but this is not a job for courage, or even intelligence alone. It calls for special knowledge and experience."

"Well," I answered, "Mrs. Jennings has enough of that for a regiment. But—if you'll pardon me, Mrs. Jennings!—she is old and feeble. I'll be her muscles if her strength fails."

Joe looked faintly amused, and I could have kicked him. "But that is not what is required—"

Dr. Worthington's double-bass rumble interrupted him from somewhere behind us. "It occurs to me, brother, that there may possibly be a use for our young friend's impetuous ignorance. There are times when wisdom is too cautious."

Mrs. Jennings put a stop to it. "Wait—all of you," she commanded, and trotted over to a kitchen cupboard. This she opened, moved aside a package of rolled oats, and took down a small leather sack. It was filled with slender sticks.

She cast them on the floor, and the three of them huddled around the litter, studying the patterns. "Cast them again," Joe insisted. She did so.

I saw Mrs. Jennings and the doctor nod solemn agreement to each other. Jedson shrugged and turned away. Mrs. Jennings addressed me, concern in her eyes. "You will go," she said softly. "It is not safe, but you will go."

We wasted no more time. The unguent was heated and we took turns rubbing it on each other's backbone. Bodie, as gatekeeper, sat in the midst of his pentacles, mekagrans, and runes, and intoned monotonously from the great book. Worthington elected to go in his proper person, ebony in a breechcloth, parasymbols scribed on him from head to toe, his grandfather's head cradled in an elbow.

There was some discussion before they could decide on a final form for Joe, and the metamorphosis was checked and changed several times. He finished up with paper-thin gray flesh stretched over an obscenely distorted skull, a sloping back, the thin flanks of an animal, and a long, bony tail, which he twitched incessantly. But the whole composition was near enough to human to create a revulsion much greater than would be the case for a more outlandish shape. I gagged at the sight of him, but he was pleased. "There!" he exclaimed in a voice like scratched tin. "You'd done a beautiful job, Mrs. Jennings. Asmodeus would not know me from his own nephew."

"I trust not," she said. "Shall we go?"

"How about Archie?"

"It suits me to leave him as he is."

"Then how about your own transformation?"

"I'll take care of that," she answered, somewhat tartly. "Take your places."

Mrs. Jennings and I rode double on the same broom, with me in front, facing the candle stuck in the straws. I've noticed All Hallow's Eve decorations which show the broom with the handle forward and the brush trailing. That is a mistake.

Custom is important in these matters. Royce and Joe were to follow close behind us. Seraphin leaped quickly to his mistress' shoulder and settled himself, his whiskers quivering with eagerness.

Bodie pronounced the word, our candle flared up high, and we were off. I was frightened nearly to panic, but tried not to show it as I clung to the broom. The fireplace gaped at us, and swelled to a monster arch. The fire within roared up like a burning forest and swept us along with it. As we swirled up I caught a glimpse of a salamander dancing among the flames, and felt sure that it was my own—the one that had honored me with its approval and sometimes graced my new fireplace. It seemed a good omen.

We had left the portal far behind—if the word "behind" can be used in a place where directions are symbolic—the shrieking din of the fire was no longer with us, and I was beginning to regain some part of my nerve. I felt a reassuring hand at my waist, and turned my head to speak to Mrs. Jennings.

I nearly fell off the broom.

When we left the house there had mounted behind me an old, old woman, a shrunken, wizened body kept alive by an indomitable spirit. She whom I now saw was a young woman, strong, perfect, and vibrantly beautiful. There is no way to describe her; she was without defect of any sort, and imagination could suggest no improvement.

Have you ever seen the bronze Diana of the Woods? She was something like that, except that metal cannot catch the live, dynamic beauty that I saw.

But it was the same woman!

Mrs. Jennings—Amanda Todd, that was—at perhaps her twenty-fifth year, when she had reached the full maturity of her gorgeous womanhood, and before time had softened the focus of perfection.

I forgot to be afraid. I forgot everything except that I was in the presence of the most compelling and dynamic female I had ever known. I forgot that she was at least sixty years older than myself, and that her present form was simply a triumph of sorcery. I suppose if anyone had asked me at that time if I were I love with Amanda Jennings, I would have answered, "Yes!" But at the time my thoughts were much too confused to be explicit. She was there, and that was sufficient.

She smiled, and her eyes were warm with understanding. She spoke, and her voice was the voice I knew, even though it was rich contralto in place of the accustomed clear, thin soprano. "Is everything all right, Archie?"

"Yes," I answered in a shaky voice. "Yes, Amanda, everything is all right!"

As for the Half World How can I describe a place that has no single matching criterion with what I have known? How can I speak of things for which no words have been invented? One tells of things unknown in terms of things which are known. Here there is no relationship by which to link; all is irrelevant. All I can hope to do is tell how matters affected my human senses, how events influenced my human emotions, knowing that there are two falsehoods involved—the falsehood I saw and felt, and the falsehood that I tell.

I have discussed this matter with Jedson, and he agrees with me that the difficulty is insuperable, yet some things may be said with a partial element of truth—truth of a sort, with respect to how the Half World impinged on me.

There is one striking difference between the real world and the Half World. In the real world there are natural laws which persist through changes of custom and culture; in the Half World only custom has any degree of persistence, and of natural law there is none. Imagine, if you please, a condition in which the head of a state might repeal the law of gravitation and have his decree really effective—a place where King Canute could order back the sea and have the waves obey him. A place where "up" and "down" were matters of opinion, and directions might read as readily in days or colors as in miles.

And yet it was not a meaningless anarchy, for they were constrained to obey their customs as unavoidably as we comply with the rules of natural phenomena.

We made a sharp turn to the left in the formless grayness that surrounded us in order to survey the years for a sabbat meeting. It was Amanda's intention to face the Old One with the matter directly rather than to search aimlessly through ever changing mazes of the Half World for a being hard to identify at best.

Royce picked out the sabbat, though I could see nothing until we let the ground come up to meet us and proceeded on foot. Then there was light and form. Ahead of us, perhaps a quarter of a mile away, was an eminence surmounted by a great throne which glowed red through the murky air. I could not make out clearly the thing seated there, but I knew it was "himself"—our ancient enemy.

We were no longer alone. Life—sentient, evil undeadness—boiled around us and fogged the air and crept out of the ground. The ground itself twitched and pulsated as we walked over it. Faceless things sniffed and nibbled at our heels. We were aware of unseen presences about us in the fog-shot gloom: beings that squeaked, grunted, and sniggered; voices that were slobbering whimpers, that sucked and retched and bleated.

They seemed vaguely disturbed by our presence—Heaven knows that I was terrified by them!—for I could hear them flopping and shuffling out of our path, then closing cautiously in behind, as they bleated warnings to one another.

A shape floundered into our path and stopped, a shape with a great bloated head and moist, limber arms. "Back!" it wheezed. "Go back! Candidates for witchhood apply on the lower level." It did not speak English, but the words were clear.

Royce smashed it in the face and we stamped over it, its chalky bones crunching underfoot. It pulled itself together again, whining its submission, then scurried out in front of us and thereafter gave us escort right up to the great throne.

"That's the only way to treat these beings," Joe whispered in my ear. "Kick 'em in the teeth first, and they'll respect you."

There was a clearing before the throne which was crowded with black witches, black magicians, demons in every foul guise, and lesser unclean things. On the left side the caldron boiled. On the right some of the company were partaking of the witches' feast. I turned my head away from that. Directly before the throne, as custom calls for, the witches' dance was being performed for the amusement of the Goat. Some dozens of men and women, young and old, comely and hideous, cavorted and leaped in impossible acrobatic adagio.

The dance ceased and they gave way uncertainly before us as we pressed up to the throne. "What's this? What's this?" came a husky, phlegm-filled voice. "It's my little sweetheart! Come up and sit beside me, my sweet! Have you come at last to sign my compact?"

Jedson grasped my arm; I checked my tongue.

"I'll stay where I am," answered Amanda in a voice crisp with contempt. "As for your compact, you know better."

"Then why are you here? And why such *odd* companions." He looked down at us from the vantage of his throne, slapped his hairy thigh and laughed immoderately. Royce stirred and muttered; his grandfather's head chattered in wrath. Seraphin spat.

Jedson and Amanda put their heads together for a moment, then she answered, "By the treaty with Adam, I claim the right to examine."

He chuckled, and the little devils around him covered their ears. "You claim privileges here? With no compact?"

"Your customs," she answered sharply.

"Ah yes, the customs! Since you invoke them, so let it be. And whom would you examine?"

"I do not know his name. He is one of your demons who has taken improper liberties outside your sphere."

"One of my demons, and you know not his name? I have seven million demons, my pretty. Will you examine them one by one, or all together?" His sarcasm was almost the match of her contempt.

"All together."

"Never let it be said that I would not oblige a guest. If you will go forward—let me see—exactly five months and three days, you will find my gentlemen drawn up for inspection."

I do not recollect how we got there. There was a great, brown plain, and no sky. Drawn up in military order for review by their evil lord were all the fiends of the Half World, legion on legion, wave after wave. The Old One was attended by his cabinet; Jedson pointed them out to me—Lucifugê, the prime minister; Sataniacha, field marshal; Beelzebub and Leviathan, wing commanders; Ashtoreth, Abaddon, Mammon, Theutus, Asmodeus, and Incubus, the Fallen Thrones. The seventy princes each commanded a division, and each remained with his command, leaving only the dukes and the thrones to attend their lord, Satan Mekratrig.

He himself still appeared as the Goat, but his staff took every detestable shape they fancied. Asmodeus sported three heads, each evil and each different, rising out of the hind quarters of a swollen dragon. Mammon resembled, very roughly, a particularly repulsive tarantula. Ashtoreth I cannot describe at all. Only the Incubus affected a semblance of human form, as the only vessel adequate to display his lecherousness.

The Goat glanced our way. "Be quick about it," he demanded. "We are not here for your amusement."

Amanda ignored him, but led us toward the leading squadron. "Come back!" he bellowed. And indeed we were back; our steps had led us no place. "You ignore the customs. Hostages first!"

Amanda bit her lip. "Admitted," she retorted, and consulted briefly with Royce and Jedson. I caught Royce's answer to some argument.

"Since I am to go," he said, "it is best that I choose my companion, for reasons that are sufficient to me. My grandfather advises me to take the youngest. That one, of course, is Fraser."

"What's that?" I said when my name was mentioned. I had been rather pointedly left out of all the discussions, but this was surely my business,

"Royce wants you to go with him to smell out Ditworth," explained Jedson.

"And leave Amanda here with these fiends? I don't like it."

"I can look out for myself, Archie," she said quietly. "If Dr.

Worthington wants you, you can help me most by going with him."

"What is this hostage stuff?"

"Having demanded the right of examination," she explained, "you must bring back Ditworthor the hostages are forfeit."

Jedson spoke up before I could protest. "Don't be a hero, son. This is serious. You can serve us all best by going. If you two don't come back, you can bet that they'll have a fight on their hands before they claim their forfeit!"

I went. Worthington and I had hardly left them before I realized acutely that what little peace of mind I had came from the nearness of Amanda. Once out of her immediate influence the whole mind-twisting horror of the place and its grisly denizens hit me. I felt something rub against my ankles and nearly jumped out of my shoes. But when I looked down I saw that Seraphin, Amanda's cat, had chosen to follow me. After that things were better with me.

Royce assumed his dog pose when we came to the first rank of demons. He first handed me his grandfather's head. Once I would have found that mummified head repulsive to touch; it seemed a friendly, homey thing here.. Then he was down on all fours, scalloping in and out of the ranks of infernal warriors. Seraphin scampered after him, paired up and hunted with him. The hound seemed quite content to let the cat do half the work, and I have no doubt he was justified. I walked as rapidly as possible down the aisles between adjacent squadrons while the animals cast out from side to side.

It seems to me that this went on for many hours, certainly so long that fatigue changed to a wooden automatism and horror died down to a dull unease. I learned not to look at the eyes of the demons, and was no longer surprised at any *outré* shape.

Squadron by squadron, division by division, we combed them, until at last, coming up the left wing, we reached the end. The animals had been growing increasingly nervous. When they had completed the front rank of the leading squadron, the hound trotted up to me and whined. I suppose he sought his grandfather, but I reached down and patted his head.

"Don't despair, old friend," I said, "we have still these." I motioned toward the generals, princes all,' who were posted before their divisions. Coming up from the rear as we had, we had yet to examine the generals of the leading divisions on the left wing. But despair already claimed me; what were half a dozen possibilities against an eliminated seven million?

The dog trotted away to the post of the nearest general, the cat close beside him, while I followed *as* rapidly as possible. He commenced to yelp before he was fairly up to the demon, and I broke into a run. The demon stirred and commenced to metamorphose. But even in this strange shape there was something familiar about it. "Ditworth!" I yelled, and dived for him.

I felt myself buffeted by leather wings, raked by claws. Royce came to my aid, a dog no longer, but two hundred pounds of fighting Negro. The cat was a ball of fury, teeth and claws. Nevertheless, we would have been lost, done in completely, had not an amazing thing happened. A demon broke ranks and shot toward us. , I sensed him rather than saw him, and thought that he had come to succor his master, though I had been assured that their customs did not permit it. But he helped us—us, his natural enemies—and attacked with such vindictive violence that the gage was turned to our favor.

Suddenly it was all over. I found myself on the ground, clutching at not a demon prince but Ditworth in his pseudohuman form—a little mild businessman, dressed with restrained elegance, complete to brief case, spectacles, and thinning hair.

"Take that thing off me," he said testily. "That thing" was grandfather, who was clinging doggedly with toothless gums to his neck.

Royce spared a hand from the task of holding Ditworth and resumed possession of his grandfather. Seraphin stayed where he was, claws dug into our prisoner's leg.

The demon who had rescued us was still with us. He had Ditworth by the shoulders, talons dug into their bases. I cleared my throat and said, "I believe we owe this to you—" I had not the slightest notion of the proper thing to say. I think the situation was utterly without precedent.

The demon made a grimace that may have been intended to be friendly, but which I found frightening. "Let me introduce myself," he said in English. "I'm Federal Agent William Kane, Bureau of Investigation."

I think that was what made me faint.

I came to, lying on my back. Someone had smeared a salve on my wounds and they were hardly stiff, and not painful in the least, but I was mortally tired. There was talking going on somewhere near me. I turned my head and saw all the members of my party gathered together. Worthington and the friendly demon who claimed to be a G-man held Ditworth between them, facing Satan. Of all the mighty infernal army I saw no trace.

"So it was my nephew Nebiros," mused the Goat, shaking his head and clucking. "Nebiros, you are a bad lad and I'm proud of you. but I'm afraid you will have to try your strength against their champion now that they have caught you." He addressed Amanda. "Who is your champion, my dear?"

The friendly demon spoke up. "That sounds like my job."

"I think not," countered Amanda. She drew him to one side and whispered intently. Finally he shrugged his wings and gave in.

Amanda rejoined the group. I struggled to my feet and came up to them. "A trial to the death, I think," she was saying. "Are you ready, Nebiros?"

I was stretched between heartstopping fear for Amanda and a calm belief that she could do anything she attempted. Jedson saw my face and shook his head. I was not to interrupt.

"But Nebiros had no stomach for it. Still in his Ditworth form and looking ridiculously human, he turned to the Old One. "I dare not, Uncle. The outcome is certain. Intercede for me."

"Certainly, Nephew. I had rather hoped she would destroy you. You'll trouble me someday." Then to Amanda, "Shall we say ... ah ... ten thousand thousand years?"

Amanda gathered our votes with her eyes, including me, to my proud pleasure, and answered, "So be it." It was not a stiff sentence as such things go, I'm told—about equal to six months in jail in the real world—but he had not offended their customs; he had simply been defeated by white magic.

Old Nick brought down one arm in an emphatic gesture. There was a crashing roar and a burst of light and Ditworth-Nebiros was spread-eagled before us on a mighty boulder, his limbs bound with massive iron chains. He was again in demon form. Amanda and Worthington examined the bonds. She pressed a seal ring against each hasp and nodded to the Goat. At once the boulder receded with great speed into the distance until it was gone from sight.

"That seems to be about all, and I suppose you will be going now," announced the Goat. "All except this one—" He smiled at the demon G-man. "I have plans for him."

"No." Amanda's tone was flat.

"What's that, my little one? He has not the protection of your party, and he has offended our customs."

"No!"

"Really, I must insist."

"Satan Mekratrig," she said slowly, "do you wish to try your strength with me?"

"With you, madame?" He looked at her carefully, as if inspecting her for the first time. "Well, it's been a trying day, hasn't it? Suppose we say no more about it. Till another time, then…"

He was gone.

The demon faced her. "Thanks," he said simply. "I wish I had a hat to take off." He added anxiously, "Do you know your way out of here?"

"Don't you?"

"No, that's the trouble. Perhaps I should explain myself. I'm assigned to the antimonopoly division; we got a line on this chap Ditworth, or Nebiros. I followed him in here, thinking he was simply a black wizard and that I could use his portal to get back. By the time I knew better it was too late, and I was trapped. I had about resigned myself to an eternity as a fake demon."

I was very much interested in his story. I knew, of course, that all G-men are either lawyers, magicians, or accountants, but all that I had ever met were accountants. This calm assumption of incredible dangers impressed me and increased my already high opinion of Federal agents.

"You may use our portal to return," Amanda said. "Stick close to us." Then to the rest of us, "Shall we go now?"

Jack Bodie was still intoning the lines from the book when we landed. "Eight and a half minutes," he announced, looking at his wrist watch. "Nice work. Did you turn the trick?"

"Yes, we did," acknowledged Jedson, his voice muffled by the throes of his remetamorphosis. "Everything that—"

But Bodie interrupted. "Bill Kane—you old scoundrel!" he shouted. "How did you get in on this party?" Our demon had shucked his transformation on the way and landed in his natural form—lean, young, and hardbitten, in a quiet gray suit and snap-brim hat.

"Hi, Jack," he acknowledged. "I'll look you up tomorrow and tell you all about it. Got to report in now." With which he vanished.

Ellen was out of her trance, and Joe was bending solicitously over her to see how she had stood up under it. I looked around for Amanda.

Then I heard her out in the kitchen and hurried out there. She looked up and smiled at me, her lovely face serene and coolly beautiful. "Amanda," I said, "Amanda—"

I suppose I had the subconscious intention of kissing her, making love to her. But it is very difficult to start anything of that sort unless the woman in the case in some fashion indicates her willingness. She did not. She was warmly friendly, but there was a barrier of reserve I could not cross. Instead, I followed her around the kitchen, talking unconsequentially, while she made hot cocoa and toast for all of us.

When we rejoined the others I sat and let my cocoa get cold, staring at her with vague frustration in my heart while Jedson told Ellen and Jack about our experiences. He took Ellen home shortly thereafter, and Jack followed them out.

When Amanda came back from telling them good night at the door, Dr. Royce was stretched out on his back on the hearthrug, with Seraphin curled up on his broad chest. They were both snoring softly. I realized suddenly that I was wretchedly tired. Amanda saw it, too, and said, "Lie down on the couch for a little and nap if you can."

I needed no urging. She came over and spread a shawl over me and kissed me tenderly. I heard her going upstairs as I fell asleep.

I was awakened by sunlight striking my face. Seraphin was sitting in the window, cleaning himself. Dr. Worthington was gone, but must have just left, for the nap on the hearthrug had not yet straightened up. The house seemed deserted. Then I heard her light footsteps in the kitchen. I was up at once and quickly out there.

She had her back toward me and was reaching up to the old-fashioned pendulum clock that hung on her kitchen wall. She turned as I came in—tiny, incredibly aged, her thin white hair brushed neatly into a bun.

It was suddenly clear to me why a motherly goodnight kiss was all that I had received the night before; she had had enough sense for 'two of us, and had refused to permit me to make a fool of myself.

She looked up at me and said in a calm, matter-of-fact voice, "See, Archie, my old clock stopped yesterday"— she reached up and touched the pendulum—"but it is running again this morning."

There is not anything more to tell. With Ditworth gone, and Kane's report, Magic, Incorporated, folded up almost overnight. The new licensing laws were an unenforced dead letter even before they were repealed.

We all hang around Mrs. Jennings's place just as much as she will let us. I'm really grateful that she did not let me get involved with her younger self, for our present relationship is something solid, something to tie to. Just the same, if I had been born sixty years sooner, Mr. Jennings would have had some rivalry to contend with.

I helped Ellen and Joe organize their new business, then put Bodie in as manager, for I decided that I did not want to give up my old line. I've built the new wing and bought those two trucks, just as Mrs. Jennings predicted. Business is good.

SUCCESSFUL OPERATION

"How dare you make such a suggestion!"

The State Physician doggedly stuck by his position. "I would not make it, sire, if your life were not at stake. There is no other surgeon in the Fatherland who can transplant a pituitary gland but Doctor Lans."

"You will operate!"

The medico shook his head. "You would die, Leader. My skill is not adequate."

The Leader stormed about the apartment. He seemed about to give way to one of the girlish bursts of anger that even the inner state clique feared so much. Surprisingly he capitulated.

"Bring him here!" he ordered.

Doctor Lans faced the Leader with inherent dignity, a dignity and presence that three years of "protective custody" had been unable to shake. The pallor and gauntness of the concentration camp lay upon him, but his race was used to oppression. "I see," he said. "Yes, I see . . . I can perform that operation. What are your terms?"

"Terms?" The Leader was aghast. "Terms, you filthy swine? You are being given a chance to redeem in part the sins of your race!"

The surgeon raised his brows. "Do you not think that I *know* that you would not have sent for me had there been any other course available to you? Obviously, my services have become valuable."

"You'll do as you are told! You and your kind are lucky to be alive."

"Nevertheless I shall not operate without my fee."

"I said you are lucky to be alive—" The tone was an open threat.

Lans spread his hands, did not answer.

"Well—I am informed that you have a family . . ."

The surgeon moistened his lips. His Emma—they would hurt his Emma . . . and his little Rose. But he must be brave, as Emma would have him be. He was playing for high stakes—for all of them. "They cannot be worse off dead," he answered firmly, "than they are now."

It was many hours before the Leader was convinced that Lans could not be budged. He should have known—the surgeon had learned fortitude at his mother's breast.

"What is your fee?"

"A passport for myself and my family."

"Good riddance!"

"My personal fortune restored to me—"

"Very well."

"—to be paid in gold before I operate!"

The Leader started to object automatically, then checked himself. Let the presumptuous fool think so! It could be corrected after the operation.

"And the operation to take place in a hospital on foreign soil."

"Preposterous!"

"I must insist."

"You do not trust me?"

Lans stared straight back into his eyes without replying. The Leader struck him, hard, across the mouth. The surgeon made no effort to avoid the blow, but took it, with no change of expression. . . .

"You are willing to go through with it, Samuel?" The younger man looked at Doctor Lans without fear as he answered,

"Certainly, Doctor."

"I can not guarantee that you will recover. The Leader's pituitary gland is diseased; your younger body may or may not be able to stand up under it—that is the chance you take."

"I know it—but I am out of the concentration camp!"

"Yes. Yes, that is true. And if you do recover, you are free. And I will attend you myself, until you are well enough to travel."

Samuel smiled. "It will be a positive joy to be sick in a country where there are no concentration camps!"

"Very well, then. Let us commence."

They returned to the silent, nervous group at the other end of the room. Grimly, the money was counted out, every penny that the famous surgeon had laid claim to before the Leader had decided that men of his religion had no need for money. Lans placed half of the gold in a money belt and strapped it around his waist. His wife concealed the other half somewhere about her ample person.

It was an hour and twenty minutes later that Lans put down the last instrument, nodded to the surgeons assisting him, and commenced to strip off operating gloves. He took one last look at his two patients before he left the room. They were anonymous under the sterile gowns and dressings. Had he not known, he could not have told dictator from oppressed. Come to think about it, with the exchange of those two tiny glands there was something of the dictator in his victim, and something of the victim in the dictator.

Doctor Lans returned to the hospital later in the day, after seeing his wife and daughter settled in a first class hotel. It was an extravagance, in view of his uncertain prospects as a refugee, but they had enjoyed no luxuries for years back *there*—he did not think of it as his home country—and it was justified this once.

He enquired at the office of the hospital for his second patient. The clerk looked puzzled. "But he is not here."

"Not here?"

"Why, no. He was moved at the same time as His Excellency—back to your country."

Lans did not argue. The trick was obvious; it was too late to do anything for poor Samuel. He thanked his God that he had had the foresight to place himself and his family beyond the reach of such brutal injustice before operating. He thanked the clerk and left.

The Leader recovered consciousness at last. His brain was confused

—then he recalled the events before he had gone to sleep. The operation!—it must be over! And he was alive! He had never admitted to anyone how terribly frightened he had been at the prospect. But he had lived—he had lived!

He groped around for the bell cord, and, failing to find it, gradually forced his eyes to focus on the room. What outrageous nonsense was this? This was no sort of a room for the Leader to convalesce in. He took in the dirty whitewashed ceiling, and the bare wooden floor with distaste. And the bed! It was no more than a cot!

He shouted. Someone came in, a man wearing the uniform of a trooper in his favorite corps. He started to give him the tongue-lashing of his life, before having him arrested. But he was cut short.

"Cut out that racket, you unholy pig!"

At first he was too astounded to answer, then he shrieked, "Stand at attention when you address your Leader! Salute!"

The man looked dumbfounded, then guffawed. "Like this, maybe?" He stepped to the side of the cot, struck a pose with his right arm raised in salute. He carried a rubber truncheon in it. "Hail to the Leader!" he shouted, and brought his arm down smartly. The truncheon crashed into the Leader's cheekbone.

Another trooper came in to see what the noise was while the first was still laughing at his witticism. "What's up, Jon? Say, you'd better not handle that monkey too rough—he's still carried on the hospital list." He glanced casually at the Leader's bloody face.

"Him? Didn't you know?" He pulled him to one side and whispered.

The second's eyes widened; he grinned. "So? They don't want him to get well, eh? Well, I could use some exercise this morning—"

"Let's get Fats," the other suggested. "He always has such amusing ideas."

"Good idea." He stepped to the door, and bellowed, "Hey, Fats!"

They didn't really start in on him until Fats was there to help.

They

They would not let him alone.

They never would let him alone. He realized that that was part of the plot against him—never to leave him in peace, never to give him a chance to mull over the lies they had told him, time enough to pick out the flaws, and to figure out the truth for himself.

That damned attendant this morning! He had come busting in with his breakfast tray, waking him, and causing him to forget his dream. If only he could remember that dream—

Someone was unlocking the door. He ignored it.

"Howdy, old boy. They tell me you refused your breakfast?" Dr. Hayward's professionally kindly mask hung over his bed.

"I wasn't hungry."

"But we can't have that. You'll get weak, and then I won't be able to get you well completely. Now get up and get your clothes on and I'll order an eggnog for you. Come on, that's a good fellow!"

Unwilling, but still willing at that moment to enter into any conflict of wills, he got out of bed and slipped on his bathrobe. "That's better," Hayward approved. "Have a cigarette?"

"No, thank you."

The doctor shook his head in a puzzled fashion. "Darned if I can figure you out. Loss of interest in physical pleasure does not fit your type of case."

"What is my type of case?" he inquired in flat tones.

"Tut! Tut!" Hayward tried to appear roguish. "If medicos told their professional secrets, they might have to work for a living."

"What is my type of case?"

"Well—the label doesn't matter, does it? Suppose you tell me. I really know nothing about your case as yet. Don't you think it is about time you talked?"

"I'll play chess with you."

"All right, all right." Hayward made a gesture of impatient concession. "We've played chess every day for a week. If you will talk, I'll play chess."

What could it matter? If he was right, they already understood perfectly that he had discovered their plot; there was nothing to be gained by concealing the obvious. Let them try to argue him out of it. Let the tail go with the hide! To hell with it!

He got out the chessmen and commenced setting them up. "What do you know of my case so far?"

"Very little. Physical examination, negative. Past history, negative. High intelligence, as shown by your record in school and your success in your profession. Occasional fits of moodiness, but nothing exceptional. The only positive information was the incident that caused you to come here for treatment."

"To be brought here, you mean. Why should it cause comment?"

"Well, good gracious, man—if you barricade yourself in your room and insist that your wife is plotting against you, don't you expect people to notice?"

"But she was plotting against me—and so are you. White, or black?"

"Black—it's your turn to attack. Why do you think we are plotting against you?"

"It's an involved story, and goes way back into my early childhood. There was an immediate incident, however—" He opened by advancing the white king's knight to KB3. Hayward's eyebrows raised.

"You make a piano attack?"

"Why not? You know that it is not safe for me to risk a gambit with you."

The doctor shrugged his shoulders and answered the opening. "Suppose we start with your early childhood. It may shed more light than more recent incidents. Did you feel that you were being persecuted as a child?"

"No!" He half rose from his chair. "When I was a child I was sure of myself. I knew then, I tell you; I knew! Life was worthwhile, and I knew it. I was at peace with myself and my surroundings. Life was good and I was good and I assumed that the creatures around me were like myself."

"And weren't they?"

"Not at all! Particularly the children. I didn't know what viciousness was until I was turned loose with other children. The little devils! And I was expected to be like them and play with them."

The doctor nodded. "I know. The herd compulsion. Children can be pretty savage at times."

"You've missed the point. This wasn't any healthy roughness; these creatures were different—not like myself at all. They looked like me, but they were not like me. If I tried to say anything to one of them about anything that mattered to me, all I could get was a stare and a scornful laugh. Then they would find some way to punish me for having said it."

Hayward nodded. "I see what you mean. How about grownups?"

"That is somewhat different. Adults don't matter to children at first—or, rather they did not matter to me. They were too big, and they did not bother me, and they were busy with things that did not enter into my considerations. It was only when I noticed that my presence affected them that I began to wonder about them."

"How do you mean?"

"Well, they never did the things when I was around that they did when I was not around."

Hayward looked at him carefully. "Won't that statement take quite a lot of justifying? How do you know what they did when you weren't around?"

He acknowledged the point. "But I used to catch them just stopping. If I came into a room, the conversation would stop suddenly, and then it would pick up about the weather or something equally inane. Then I took to hiding and listening and looking. Adults did not behave the same way in my presence as out of it."

"Your move, I believe. But see here, old man—that was when you were a child. Every child passes through that phase. Now that you are a man, you must see the adult point of view. Children are strange creatures and have to be protected—at least, we do protect them—from many adult interests. There is a whole code of conventions in the matter that—"

"Yes, yes," he interrupted impatiently, "I know all that. Nevertheless, I noticed enough and remembered enough that was never clear to me later. And it put me on my guard to notice the next thing."

"Which was?" He noticed that the doctor's eyes were averted as he adjusted a castle's position.

"The things I saw people doing and heard them talking about were never of any importance. They must be doing something else."

"I don't follow you."

"You don't choose to follow me. I'm telling this to you in exchange for a game of chess."

"Why do you like to play chess so well?"

"Because it is the only thing in the world where I can see all the factors and understand all the rules. Never mind—I saw all around me this enormous plant, cities, farms, factories, churches, schools, homes, railroads, luggage, roller coaster, trees, saxophones, libraries, people, and animals. People that looked like me and who should have felt very much like me, if what I was told was the truth. But what did they appear to be doing? `They went to work to earn the money to buy the food to get the strength to go to work to earn the money to buy the food to get the strength to go to work to get the strength to buy the food to earn the money to go to—until they fell over dead. Any slight variation in the basic pattern did not matter, for they always fell over dead. And everybody tried to tell me that I should be doing the same thing. I knew better!"

The doctor gave him a look apparently intended to denote helpless surrender and laughed. "I can't argue with you. Life does look like that, and maybe it is just that futile. But it is the only life we have. Why not make up your mind to enjoy it as much as possible?"

"Oh, no!" He looked both sulky and stubborn. "You can't peddle nonsense to me by claiming to be fresh out of sense. How do I know? Because all this complex stage setting, all these swarms of actors, could not have been put here just to make idiot noises at each other. Some other explanation, but not that one. An insanity as enormous, as complex, as the one around me had to be planned. I've found the plan!"

"Which is?"

He noticed that the doctor's eyes again averted.

"It is a play intended to divert me, to occupy my mind and confuse me, to keep me so busy with details that I will not have time to think about the meaning. You are all in it, every one of you." He shook his finger in the doctor's face. "Most of them may be helpless automatons, but you're not. You are one of the conspirators. You've been sent in as a troubleshooter to try to force me to go back to playing the role assigned to me!"

He saw that the doctor was waiting for him to quiet down.

"Take it easy," Hayward finally managed to say. "Maybe it is all a conspiracy, but why do you think that you have been singled out for special attention? Maybe it is a joke on all of us. Why couldn't I be one of the victims as well as yourself?"

"Got you!" He pointed a long finger at Hayward. "That is the essence of the plot. All of these creatures have been set up to look like me in order to prevent me from realizing that I was the center of the arrangements. But I have noticed the key fact, the mathematically inescapable fact, that I am unique. Here am I, sitting on the inside. The world extends outward from me. I am the center—"

"Easy, man, easy! Don't you realize that the world looks that way to me, too. We are each the center of the universe—"

"Not so! That is what you have tried to make me believe, that I am just one of millions more just like me. Wrong! If they were like me, then I could get into communication with them. I can't. I have tried and tried and I can't. I've sent out my inner thoughts, seeking some one other being who has them, too. What have I gotten back? Wrong answers, jarring incongruities, meaningless obscenity. I've tried, I tell you. God!—how I've tried! But there is nothing out there to speak to me—nothing but emptiness and otherness!"

"Wait a minute. Do you mean to say that you think there, is nobody home at my end of the line? Don't you believe that I am alive and conscious?"

He regarded the doctor soberly. "Yes, I think you are probably alive, but you are one of the others—my antagonists. But you have set thousands of others around me whose faces are blank, not lived in, and whose speech is a meaningless reflex of noise."

"Well, then, if you concede that I am an ego, why do you insist that I am so very different from yourself?"

"Why? Wait!" He pushed back from the chess table and strode over to the wardrobe, from which he took out a violin case.

While he was playing, the lines of suffering smoothed out of his face and his expression took on a relaxed beatitude. For a while he recaptured the emotions, but not the knowledge, which he had possessed in dreams. The melody proceeded easily from proposition to proposition with inescapable, unforced logic. He finished with a triumphant statement of the essential thesis and turned to the doctor. "Well?"

"Hmmm." He seemed to detect an even greater degree of caution in the doctor's manner. "It's an odd bit, but remarkable. `S pity you didn't take up the violin seriously. You could have made quite a reputation. You could even now. Why don't you do it? You could afford to, I believe."

He stood and stared at the doctor for a long moment, then shook his head as if trying to clear it. "It's no use," he said slowly, "no use at all. There is no possibility of communication. I am alone." He replaced the instrument in its case and returned to the chess table. "My move, I believe?"

"Yes. Guard your queen."

He studied the board. "Not necessary. I no longer need my queen. Check."

The doctor interposed a pawn to parry the attack.

He nodded. "You use your pawns well, but I have learned to anticipate your play. Check again—and mate, I think."

The doctor examined the new situation. "No," he decided, "no—not quite." He retreated from the square under attack. "Not checkmate—stalemate at the worst. Yes, another stalemate."

He was upset by the doctor's visit. He couldn't be wrong, basically, yet the doctor had certainly pointed out logical holes in his position. From a logical standpoint the whole world might be a fraud perpetrated on everybody. But logic meant nothing—logic itself was a fraud, starting with unproved assumptions and capable of proving anything. The world is what it is!—and carries its own evidence of trickery.

But does it? What did he have to go on? Could he lay down a line between known facts and everything else and then make a reasonable interpretation of the world, based on facts alone—an interpretation free from complexities of logic and no hidden assumptions of points not certain. Very well—

First fact, himself. He knew himself directly. He existed.

Second facts, the evidence of his "five senses," everything that he himself saw and heard and smelled and tasted with his physical senses. Subject to their limitations, he must believe his senses. Without them he was entirely solitary, shut up in a locker of bone, blind, deaf, cut off, the only being in the world.

And that was not the case. He knew that he did not invent the information brought to him by his senses. There had to be something else out there, some otherness that produced the things his senses recorded. All philosophies that claimed that the physical world around him did not exist except in his imagination were sheer nonsense.

But beyond that, what? Were there any third facts on which he could rely? No, not at this point. He could not afford to believe anything that he was told, or that he read, or that was implicitly assumed to be true about the world around him. No, he could not believe any of it, for the sum total of what he had been told and read and been taught in school was so contradictory, so senseless, so wildly insane that none of it could be believed unless he personally confirmed it.

Wait a minute—The very telling of these lies, these senseless contradictions, was a fact in itself, known to him directly. To that extent they were data, probably very important data.

The world as it had been shown to him was a piece of unreason, an idiot's dreams. Yet it was on too mammoth a scale to be without some reason. He came wearily back to his original point: Since the world could not be as crazy as it appeared to be, it must necessarily have been arranged to appear crazy in order to deceive him as to the truth.

Why had they done it to him? And what was the truth behind the sham? There must be some clue in the deception itself. What thread ran through it all? Well, in the first place he had been given a superabundance of explanations of the world around him, philosophies, religions, "commonsense" explanations. Most of them were so clumsy, so obviously inadequate, or meaningless, that they could hardly have expected him to take them seriously. They must have intended them simply as misdirection.

But there were certain basic assumptions running through all the hundreds of explanations of the craziness around him. It must be these basic assumptions that he was expected to believe. For example, there was the deepseated assumption that he was a "human being," essentially like millions of others around him and billions more in the past and the future.

That was nonsense! He had never once managed to get into real communication with all those things that looked so much like him but were so different. In the agony of his loneliness, he had deceived himself that Alice understood him and was a being like him. He knew now that he had suppressed and refused to examine thousands of little discrepancies because he could not bear the thought of returning to complete loneliness. He had needed to believe that his wife was a living, breathing being of his own kind who understood his inner thoughts. He had refused to consider the possibility that she was simply a mirror, an echo—or something unthinkably worse.

He had found a mate, and the world was tolerable, even though dull, stupid, and full of petty annoyance. He was moderately happy and had put away his suspicions. He had accepted, quite docilely, the treadmill he was expected to use, until a slight mischance had momentarily cut through the fraud—then his suspicions had returned with impounded force; the bitter knowledge of his childhood had been confirmed.

He supposed that he had been a fool to make a fuss about it. If he had kept his mouth shut they would not have locked him up. He should have been as subtle and as shrewd as they, kept his eyes and ears open and learned the details of and the reasons for the plot against him. He might have learned how to circumvent it.

But what if they had locked him up—the whole world was an asylum and all of them his keepers.

A key scraped in the lock, and he looked up to see an attendant entering with a tray. "Here's your dinner, sir."

"Thanks, Joe," he said gently. "Just put it down."

"Movies tonight, sir," the attendant went on. "Wouldn't you like to go? Dr Hayward said you could—"

"No, thank you. I prefer not to."

"I wish you would, sir." He noticed with amusement the persuasive intentness of the attendant's manner. "I think the doctor wants you to. It's a good movie. There's a Mickey Mouse cartoon—"

"You almost persuade me, Joe," he answered with passive agreeableness. "Mickey's trouble is the same as mine, essentially. However, I'm not going. They need not bother to hold movies tonight."

"Oh, there will be movies in any case, sir. Lots of our other guests will attend."

"Really? Is that an example of thoroughness, or are you simply keeping up the pretense in talking to me? It isn't necessary, Joe, if it's any strain on you. I know the game. If I don't attend, there is no point in holding movies."

He liked the grin with which the attendant answered this thrust. Was it possible that this being was created just as he appeared to be—big muscles, phlegmatic disposition, tolerant, doglike? Or was there nothing going on behind those kind eyes, nothing but robot reflex? No, it was more likely that he was one of them, since he was so closely in attendance on him.

The attendant left and he busied himself at his supper tray, scooping up the already-cut bites of meat with a spoon, the only implement provided. He smiled again at their caution and thoroughness. No danger of that—he would not destroy this body as long as it served him in investigating the truth of the matter. There were still many different avenues of research available before taking that possibly irrevocable step.

After supper he decided to put his thoughts in better order by writing them; obtained paper. He should start with a general statement of some underlying postulate of the credos that had been drummed into him all his "life." Life? Yes, that was a good one. He wrote:

"I am told that I was born a certain number of years ago and that I will die a similar number of years hence. Various clumsy stories have been offered me to explain to me where I was before birth and what becomes of me after death, but they are rough lies, not intended to deceive, except as misdirection. In every other possible way the world around me assures me that I am mortal, here but a few years, and a few years hence gone completely—nonexistent.

"WRONG—I am immortal. I transcend this little time axis; a seventy-year span on it is but a casual phase in my experience. Second only to the prime datum of my own existence is the emotionally convincing certainty of my own continuity. I may be a closed curve, but closed or open, I neither have a beginning nor an end. Self-awareness is not relational; it is absolute, and cannot be reached to be destroyed, or created. Memory, however, being a relational aspect of consciousness, may be tampered with and possibly destroyed.

"It is true that most religions which have been offered me teach immortality, but note the fashion in which they teach it. The surest way to lie convincingly is to tell the truth unconvincingly. They did not wish me to believe.

"Caution: Why have they tried so hard to convince me that I am going to die in a few years? There must be a very important reason. I infer that they are preparing me for some sort of a major change. It may be crucially important for me to figure out their intentions about this—probably I have several years in which to reach a decision. Note: Avoid using the types of reasoning they have taught me."

The attendant was back. "Your wife is here, sir."

"Tell her to go away."

"Please, sir—Dr. Hayward is most anxious that you should see her."

"Tell Dr. Hayward that I said that he is an excellent chess player."

"Yes, sir." The attendant waited for a moment. "Then you won't see her, sir?"

"No, I won't see her."

He wandered around the room for some minutes after the attendant had left, too distrait to return to his recapitulation. By and large they had played very decently with him since they had brought him here. He was glad that they had allowed him to have a room alone, and he certainly had more time free for contemplation than had ever been possible on the outside. To be sure, continuous effort to keep him busy and to distract him was made, but, by being stubborn, he was able to circumvent the rules and gain some hours each day for introspection.

But, damnation!—he did wish they would not persist in using Alice in their attempts to divert his thoughts. Although the intense terror and revulsion which she had inspired in him when he had first rediscovered the truth had now aged into a simple feeling of repugnance and distaste for her company, nevertheless it was emotionally upsetting to be reminded of her, to be forced into making decisions about her.

After all, she had been his wife for many years. Wife? What was a wife? Another soul like one's own, a complement, the other necessary pole to the couple, a sanctuary of understanding and sympathy in the boundless depths of aloneness. That was what he had thought, what he had needed to believe and had believed fiercely for years. The yearning need for companionship of his own kind had caused him to see himself reflected in those beautiful eyes and had made him quite uncritical of occasional incongruities in her responses.

He sighed. He felt that he had sloughed off most of the typed emotional reactions which they had taught him by precept and example, but Alice had gotten under his skin, way under, and it still hurt. He had been happy—what if it had been a dope dream? They had given him an excellent, a beautiful mirror to play with—the more fool he to have looked behind it!

Wearily he turned back to his summing up:

"The world is explained in either one of two ways; the commonsense way which says that the world is pretty much as it appears to be and that ordinary human conduct and motivations are reasonable, and the religio-mystic solution, which states that the world is dream stuff, unreal, insubstantial, with reality somewhere beyond.

"WRONG—both of them. The commonsense scheme has no sense to it of any sort. Life is short and full of trouble. Man born of woman is born to trouble as the sparks fly upward. His days are few and they are numbered. All is vanity and vexation. Those quotations may be jumbled and incorrect, but that is a fair statement of the commonsense world-is-as-it-seems in its only possible evaluation. In such a world, human striving is about as rational as the blind dartings of a moth against a light bulb. The commonsense world is a blind insanity, out of nowhere, going nowhere, to no purpose.

"As for the other solution, it appears more rational on the surface, in that it rejects the utterly irrational world of common sense. But it is not a rational solution, it is simply a flight from reality of any sort, for it refuses to believe the results of the only available direct communication between the ego and the Outside. Certainly the `five senses' are poor enough channels of communication, but they are the only channels."

He crumpled up the paper and flung himself from the chair. Order and logic were no good—his answer was right because it smelled right. But he still did not know all the answer. Why the grand scale to the deception, countless creatures, whole continents, an enormously involved and minutely detailed matrix of insane history, insane tradition, insane culture? Why bother with more than a cell and a straitjacket?

It must be, it had to be, because it was supremely important to deceive him completely, because a lesser deception would not do. Could it be that they dare not let him suspect his real identity no matter how difficult and involved the fraud?

He had to know. In some fashion he must get behind the deception and see what went on when he was not looking. He had had one glimpse; this time he must see the actual workings, catch the puppet masters in their manipulations.

Obviously the first step must be to escape from this asylum, but to do it so craftily that they would never see him, never catch up with him, not have a chance to set the stage before him. That would be hard to do. He must excel them in shrewdness and subtlety.

Once decided, he spent the rest of the evening in considering the means by which he might accomplish his purpose. It seemed almost impossible—he must get away without once being seen and remain in strict hiding. They must lose track of him completely in order that they would not know where to center their deceptions. That would mean going without food for several days. Very well—he could do it. He must not give them any warning by unusual action or manner.

The lights blinked twice. Docilely he got up and commenced preparations for bed. When the attendant looked through the peephole he was already in bed, with his face turned to the wall.

Gladness! Gladness everywhere! It was good to be with his own kind, to hear the music swelling out of every living thing, as it always had and always would—good to know that everything was living and aware of him, participating in him, as he participated in them. It was good to be, good to know the unity of many and the diversity of one. There had been one bad thought—the details escaped him—but it was gone—it had never been; there was no place for it.

The early-morning sounds from the adjacent ward penetrated the sleep-laden body which served him here and gradually recalled him to awareness of the hospital room. The transition was so gentle that he carried over full recollection of what he had been doing and why. He lay still, a gentle smile on his face, and savored the uncouth but not unpleasant languor of the body he wore. Strange that he had ever forgotten despite their tricks and stratagems. Well, now that he had recalled the key, he would quickly set things right in this odd place.

He would call them in at once and announce the new order. It would be amusing to see old Glaroon's expression when he realized that the cycle had ended—

The click of the peephole and the rasp of the door being unlocked guillotined his line of thought. The morning attendant pushed briskly in with the breakfast tray and placed it on the tip table. "Morning, sir. Nice, bright day—want it in bed, or will you get up?"

Don't answer! Don't listen! Suppress this distraction! This is part of their plan—

But it was too late, too late. He felt himself slipping, falling, wrenched from reality back into the fraud world in which they had kept him. It was gone, gone completely, with no single association around him to which to anchor memory. There was nothing left but the sense of heartbreaking loss and the acute ache of unsatisfied catharsis.

"Leave it where it is. I'll take care of it."

"Okey-doke." The attendant bustled out, slamming the door, and noisily locked it.

He lay quite still for a long time, every nerve end in his body screaming for relief.

At last he got out of bed, still miserably unhappy, and attempted to concentrate on his plans for escape. But the psychic wrench he had received in being recalled so suddenly from his plane of reality had left him bruised and emotionally disturbed. His mind insisted on rechewing its doubts, rather than engage in constructive thought. Was it possible that the doctor was right, that he was not alone in his miserable dilemma? Was he really simply suffering from paranoia, delusions of self-importance?

Could it be that each unit in this yeasty swarm around him was the prison of another lonely ego—helpless, blind, and speechless—condemned to an eternity of miserable loneliness? Was the look of suffering which he had brought to Alice's face a true reflection of inner torment and not simply a piece of play-acting intended to maneuver him into compliance with their plans?

A knock sounded at the door. He said "Come in," without looking up. Their comings and goings did not matter to him.

"Dearest—" A well-known voice spoke slowly and hesitantly.

"Alice!" He was on his feet at once, and facing her. "Who let you in here?"

"Please, dear, please—I had to see you."

"It isn't fair. It isn't fair." He spoke more to himself than to her. Then: "Why did you come?"

She stood up to him with a dignity he had hardly expected. The beauty of her childlike face had been marred by line and shadow, but it shone with an unexpected courage. "I love you," she answered quietly. "You can tell me to go away, but you can't make me stop loving you and trying to help you."

He turned away from her in an agony of indecision. Could it be possible that he had misjudged her? Was there, behind that barrier of flesh and sound symbols, spirit that truly yearned toward his? Lovers whispering in the dark—" `*You do understand, don't you*?"

"Yes, dear heart, I understand."

"Then nothing that happens to us can matter, as long as we are together and understand—" Words, words, rebounding hollowly from an unbroken wall—

No, he couldn't be wrong! Test her again—"Why did you keep me on that job n Omaha?"

"But I didn't make you keep that job. I simply pointed out that we should think twice before—"

"Never mind. Never mind." Soft hands and a sweet face preventing him with mild stubbornness from ever doing the thing that his heart told him to do. Always with the best of intentions, the best of intentions, but always so that he had never quite managed to do the silly, unreasonable things that he knew were worthwhile. Hurry, hurry, hurry, and strive, with an angelfaced jockey to see that you don't stop long enough to think for yourself—

"Why did you try to stop me from going back upstairs that day?"

She managed to smile, although her eyes were already spilling over with tears.

"I didn't know it really mattered to you. I didn't want us to miss the train."

It had been a small thing, an unimportant thing. For some reason not clear to him he had insisted on going back upstairs to his study when they were about to leave the house for a short vacation. It was raining, and she had pointed out that there was barely enough time to get to the station. He had surprised himself and her, too, by insisting on his own way in circumstances in which he had never been known to be stubborn.

He had actually pushed her to one side and forced his way up the stairs. Even then nothing might have come of it had he not—quite unnecessarily—raised the shade of the window that faced toward the rear of the house.

It was a very small matter. It had been raining, hard, out in front. From this window the weather was clear and sunny, with no sign of rain.

He had stood there quite a long while, gazing out at the impossible sunshine and rearranging his cosmos in his mind. He reexamined long-suppressed doubts in the light of this one small but totally unexplainable discrepancy. Then he had turned and had found that she was standing behind him.

He had been trying ever since to forget the expression that he had surprised on her face.

"What about the rain?"

"The rain?" she repeated in a small, puzzled voice. "Why, it was raining, of course. What about it?"

"But it was not raining out my study window."

"What? But of course it was. I did notice the sun break through the clouds for a moment, but that was all."

"Nonsense!"

"But darling, what has the weather to do with you and me? What difference does it make whether it rains or not—to us?" She approached him timidly and slid a small hand between his arm and side. "Am I responsible for the weather?"

"I think you are. Now please go."

She withdrew from him, brushed blindly at her eyes, gulped once, then said in a voice held steady: "All right. I'll go. But remember—you can come home if you want to. And I'll be there, if you want me." She waited a moment, then added hesitantly: "Would you . . . would you kiss me goodbye?"

He made no answer of any sort, neither with voice nor eyes. She looked at him, then turned, fumbled blindly for the door, and rushed through it.

The creature he knew as Alice went to the place of assembly without stopping to change form. "It is necessary to adjourn this sequence. I am no longer able to influence his decisions."

They had expected it, nevertheless they stirred with dismay.

The Glaroon addressed the First for Manipulation. "Prepare to graft the selected memory track at once."

Then, turning to the First for Operations, the Glaroon said: "The extrapolation shows that he will tend to escape within two of his days. This sequence degenerated primarily through your failure to extend that rainfall all around him. Be advised."

"It would be simpler if we understood his motives."

"In my capacity as Dr. Hayward, I have often thought so," commented the Glaroon acidly, "but it we understood his motives, we would be part of him. Bear in mind the Treaty! He almost remembered."

The creature known as Alice spoke up. "Could he not have the Taj Mahal next sequence? For some reason he values it."

"You are becoming assimilated!"

"Perhaps. I am not in fear. Will he receive it?"

"It will be considered."

The Glaroon continued with orders: "Leave structures standing until adjournment. New York City and Harvard University are now dismantled. Divert him from those sectors.

"Move!"

Logic of Empire

“Don’t be a sentimental fool, Sam!”

“Sentimental, or not,” Jones persisted, “I know human slavery when I see it. That’s what you’ve got on Venus.”

Humphrey Wingate snorted. “That’s utterly ridiculous. The company’s labor clients are employees, working under legal contracts, freely entered into.”

Jones’ eyebrows raised slightly. “So? What kind of a contract is it that throws a man into jail if he quits his job?”

“That’s not the case. Any client can quit his job on the usual two weeks notice—I ought to know; I—”

“Yes, I know,” agreed Jones in a tired voice. “You’re a lawyer. You know all about contracts. But the trouble with you, you dunderheaded fool, is that all you understand is legal phrases. Free contract—nuts! What I’m talking about is *facts,* not legalisms. I don’t care what the contract says— those people are slaves!”

Wingate emptied his glass and set it down. “So I’m a dunderheaded fool, am I? Well, I’ll tell you what you are, Sam Houston Jones-you are a half-baked parlor pink. You’ve never had to work for a living in your life and you think it’s just too dreadful that anyone else should have to. No, wait a minute,” he continued, as Jones opened his mouth, ‘listen to me. The company’s clients on Venus are a damn sight better off than most people of their own class here on Earth. They are certain of a job, of food, and a place to sleep. If they get sick, they’re certain of medical attention. The trouble with people of that class is that they don’t want to work—“

“Who does?”

“Don’t be funny. The trouble is, if they weren’t under a fairly tight contract, they’d throw up a good job the minute they got bored with it and expect the company to give ‘em a free ride back to Earth. Now it may not have occurred to your fine, free charitable mind, but the company has obligations to its stockholders—you, for instance!—and it can’t afford to run an interplanetary ferry for the benefit of a class of people that feel that the world owes them a living.”

“You got me that time, pal,” Jones acknowledged with a wry face, “—that crack about me being a stockholder. I’m ashamed of it.”

“Then why don’t you sell?”

Jones looked disgusted. “What kind of a solution is that? Do you think I can avoid the responsibility of *knowing* about it just unloading my stock?”

“Oh, the devil with it,” said Wingate. “Drink up.”

“Righto,” agreed Jones. It was his first night aground after a practice cruise as a reserve officer; he needed to catch up on his drinking. Too bad, thought Wingate, that the cruise should have touched at Venus—

“All out! All out! Up *aaaall* you idlers! Show a leg there! Show a leg and grab a sock!” The raucous voice sawed its way through Wingate’s aching head. He opened his eyes, was blinded by raw white light, and shut them hastily. But the voice would not let him alone. “Ten minutes till breakfast,” it rasped. “Come and get it, or we’ll throw it out!”

He opened his eyes again, and with trembling willpower forced them to track. Legs moved past his eyes, denim clad legs mostly, though some were bare—repulsive hairy nakedness. A confusion of male voices, from which he could catch words but not sentences, was accompanied by an obbligato of metallic sounds, muffled but pervasive—shrrg, shrrg, thump! Shrrg, shrrg, thump! The thump with which the cycle was completed hurt his aching head but was not as nerve stretching as another noise, a toneless whirring sibilance which he could neither locate nor escape.

The air was full of the odor of human beings, too many of them in too small a space. There was nothing so distinct as to be fairly termed a stench, nor was the supply of oxygen inadequate. But the room was filled with the warm, slightly musky smell of bodies still heated by bedclothes, bodies not dirty but not freshly washed. It was oppressive and unappetizing—in his present state almost nauseating.

He began to have some appreciation of the nature of his surroundings; he was in a bunkroom of some sort. It was crowded with men, men getting up, shuffling about, pulling on clothes. He lay on the bottommost of a tier of four narrow bunks. Through the interstices between the legs which crowded around him and moved past his face he could see other such tiers around the walls and away from the walls, stacked floor to ceiling and supported by stanchions.

Someone sat down on the foot of Wingate’s bunk, crowding his broad fundament against Wingate’s ankles while he drew on his socks. Wingate squirmed his feet away from the intrusion. The stranger turned his face toward him. “Did I crowd ‘ja, bud? Sorry.” Then he added, not unkindly, “Better rustle out of there. The Master-at-Arms’ll be riding you to get them bunks up.” He yawned hugely, and started to get up, quite evidently having dismissed Wingate and Wingate’s affairs from his mind.

“Wait a minute!” Wingate demanded hastily.

“Huh?”

“Where am I? In jail?”

The stranger studied Wingate’s bloodshot eyes and puffy, unwashed face with detached but unmalicious interest. “Boy, oh boy, you must ‘a’ done a good job of drinking up your bounty money.”

“Bounty money? What the hell are you talking about?”

“Honest to God, don’t you know where you are?”

“No.”

“Well…” The other seemed reluctant to proclaim a truth made silly by its self-evidence until Wingate’s expression convinced him that he really wanted to know. “Well, you’re in the *Evening Star*, headed for Venus.”

A couple of minutes later the stranger touched him on the arm. “Don’t take it so hard, bud. There’s nothing to get excited about.”

Wingate took his hands from his face and pressed them against his temples. “It’s not real,” he said, speaking more to himself than to the other. “It can’t be real-”

“Stow it. Come and get your breakfast.”

“I couldn’t eat anything.”

“Nuts. Know how you feel… felt that way sometimes myself. Food is just the ticket.” The Master-at-Arms settled the issue by coming up and prodding Wingate in the ribs with his truncheon.

“What d’yuh think this is—sickbay, or first class? Get those bunks hooked up.”

“Easy, mate, easy,” Wingate’s new acquaintance conciliated, “our pal’s not himself this morning.” As he spoke he dragged Wingate to his feet with one massive hand, then with the other shoved the tier of bunks up and against the wall. Hooks clicked into their sockets, and the tier stayed up, flat to the wall.

“He’ll be a damn sight less himself if he interferes with my routine,” the petty officer predicted. But he moved on. Wingate stood barefooted on the floorplates, immobile and overcome by a feeling of helpless indecision which was reinforced by the fact that he was dressed only in his underwear. His champion studied him.

“You forgot your pillow. Here—” He reached down into the pocket formed by the lowest bunk and the wall and hauled out a flat package covered with transparent plastic. He broke the seal and shook out the contents, a single coverall garment of heavy denim. Wingate put it on gratefully. “You can get the squeezer to issue you a pair of slippers after breakfast,” his friend added. “Right now we gotta eat.”

The last of the queue had left the galley window by the time they reached it and the window was closed. Wingate’s companion pounded on it. “Open up in there!”

It slammed open. “No seconds,” a face announced.

The stranger prevented the descent of the window with his hand. “We don’t want seconds, shipmate, we want firsts.”

“Why the devil can’t you show up on time?” the galley functionary groused. But he slapped two ration cartons down on the broad sill of the issuing window. The big fellow handed one to Wingate, and sat down on the floorplates, his back supported by the galley bulkhead.

“What’s your name, bud?” he enquired, as he skinned the cover off his ration. “Mine’s Hartley-‘Satchel’ Hartley.”

“Mine is Humphrey Wingate.”

“Okay, Hump. Pleased to meet ‘cha. Now what’s all this song and dance you been giving me?” He spooned up an impossible bite of baked eggs and sucked coffee from the end of his carton.

“Well,” said Wingate, his face twisted with worry, “I guess I’ve been shanghaied.” He tried to emulate Hartley’s method of drinking, and got the brown liquid over his face.

“Here-that’s no way to do,” Hartley said hastily. “Put the nipple in your mouth, then don’t squeeze any harder than you suck. Like this.” He illustrated. “Your theory don’t seem very sound to me. The company don’t need crimps when there’s plenty of guys standing in line for a chance to sign up. What happened? Can’t you remember?”

Wingate tried. “The last thing I recall,” he said, “is arguing with a gyro driver over his fare.”

Hartley nodded. “They’ll gyp you every time. D’you think he put the slug on you?”

“Well… no, I guess not. I seem to be all right, except for the damndest hangover you can imagine.”

“You’ll feel better. You ought to be glad the *Evening Star* is a high-gravity ship instead of a trajectory job. Then you’d really be sick, and no foolin‘.”

“How’s that?”

“I mean that she accelerates or decelerates her whole run. Has to, because she carries cabin passengers. If we had been sent by a freighter, it’d be a different story. They gun ‘em into the right trajectory, then go weightless for the rest of the trip. Man, how the new chums do suffer!” He chuckled.

Wingate was in no condition to dwell on the hardships of space sickness. “What I can’t figure out,” he said, “is how I landed here. Do you suppose they could have brought me aboard by mistake, thinking I was somebody else?”

“Can’t say. Say, aren’t you going to finish your breakfast?”

“I’ve had all I want.” Hartley took his statement as an invitation and quickly finished off Wingate’s ration. Then he stood up, crumpled the two cartons into a ball, stuffed them down a disposal chute, and said,

"What are you going-to do about it?"

"What am I going to do about it?" A look of decision came over Wingate's face. "I'm going to march right straight up to the Captain and demand an explanation, that's what I'm going to do!"

"I'd take that by easy stages, Hump," Hartley commented doubtfully.

"Easy stages, hell!" He stood up quickly. "Owl My head!"

The Master-at-Arms referred them to the Chief Master-at-Arms in order to get rid of them. Hartley waited with Wingate outside the stateroom of the Chief Master-at-Arms to keep him company. "Better sell 'em your bill of goods pretty pronto," he advised.

"Why?"

"We'll ground on the Moon in a few hours. The stop to refuel at Luna City for deep space will be your last chance to get out, unless you want to walk back."

"I hadn't thought of that," Wingate agreed delightedly. "I thought I'd have to make the round trip in any case."

"Shouldn't be surprised but what you could pick up the *Morning Star* in a week or two. If it's their mistake, they'll have to return you."

"I can beat that," said Wingate eagerly. "I'll go right straight to the bank at Luna City, have them arrange a letter of credit with my bank, and buy a ticket on the EarthMoon shuttle."

Hartley's manner underwent a subtle change. He had never in his life "arranged a letter of credit." Perhaps such a man *coidd* walk up to the Captain and lay down the law.

The Chief Master-at-Arms listened to Wingate's story with obvious impatience, and interrupted him in the middle of it to consult his roster of emigrants. He thumbed through it to the Ws, and pointed to a line. Wingate read it with a sinking feeling. There was his own name, correctly spelled. "Now get out," ordered the official, "and quit wasting my time."

But Wingate stood up to him. "You have no authority in this matter-none whatsoever. I insist that you take me to the Captain."

"Why, you—" Wingate thought momentarily that the man was going to strike him. He interrupted.

"Be careful what you do. You are apparently the victim of an honest mistake—but your legal position will be very shaky indeed, if you disregard the requirements of spacewise law under which this vessel is licensed. I don't think your Captain would be pleased to have to explain such actions on your part in federal court."

That he had gotten the man angry was evident. But a man does not get to be chief police officer of a major transport by jeopardizing his superior officers. His jaw muscles twitched but he pressed a button, saying nothing. A junior master-gt-arms appeared. “Take this man to the Purser.” He turned his back in dismissal and dialed a number on the ship’s intercommunication system.

Wingate was let in to see the Purser, ex-officio company business agent, after only a short wait. “What’s this all about?” that officer demanded. “If you have a complaint, why can’t you present it at the morning hearings in the regular order?”

Wingate explained his predicament as clearly, convincingly, and persuasively as he knew how. “And so you see,” he concluded, “I want to be put aground at Luna City. I’ve no desire to cause the company any embarrassment over what was undoubtedly an unintentional mishap—particularly as I am forced to admit that I had been celebrating rather freely and, perhaps, in some manner, contributed to the mistake.”

The Purser, who had listened noncommittally to his recital, made no answer. He shuffled through a high stack of file folders which rested on one corner of his desk, selected one, and opened it. It contained a sheaf of legal-size papers clipped together at the top. These he studied leisurely for several minutes, while Wingate stood waiting.

The Purser breathed with an asthmatic noisiness while he read, and, from time to time, drummed on his bared teeth with his fingernails. Wingate had about decided, in his none too steady nervous condition, that if the man approached his hand to his mouth just once more that he, Wingate, would scream and start throwing things. At this point the Purser chucked the dossier across the desk toward Wingate. “Better have a look at these,” he said.

Wingate did so. The main exhibit he found to be a contract, duly entered into, between Humphrey Wingate and the Venus Development Company for six years of indentured labor on the planet Venus.

“That your signature?” asked the Purser.

Wingate’s professional caution stood him in good stead. He studied the signature closely in order to gain time while he tried to collect his wits. “Well,” he said at last, “I will stipulate that it looks very much like my signature, but I will not concede that it is my signature—I’m not a handwriting expert.”

The Purser brushed aside the objection with an air of annoyance. “I haven’t time to quibble with you. Let’s check the thumbprint. Here.” He shoved an impression pad across his desk. For a moment Wingate considered standing on his legal rights by refusing, but no, that would prejudice his case. He had nothing to lose; it *couldn’t* be his thumbprint on the contract. Unless—

But it was. Even his untrained eye could see that the two prints matched. He fought back a surge of panic. This was probably a nightmare, inspired by his argument last night with Jones. Or, if by some wild chance it were real, it was a frameup in which he must find the flaw. Men of his sort were not framed; the whole thing was ridiculous. He marshalled his words carefully.

"I won't dispute your position, my dear sir. In some fashion both you and I have been made the victims of a rather sorry joke. It seems hardly necessary to point out that a man who is unconscious, as I must have been last night, may have his thumbprint taken without his knowledge. Superficially this contract is valid and I assume naturally your good faith in the matter. But, in fact, the instrument lacks one necessary element of a contract."

"Which is?"

"The intention on the part of both parties to enter into a contractual relationship. Notwithstanding signature and thumbprint I had no intention of contracting which can easily be shown by other factors. I am a successful lawyer with a good practice, as my tax returns will show. It is not reasonable to believe-and no court *will* believe-that I voluntarily gave up my accustomed life for six years of indenture at a much lower income."

"So you're a lawyer, eh? Perhaps there has been chicanery—on your part. How does it happen that you represent yourself here as a radio technician?"

Wingate again had to steady himself at this unexpected flank attack. He was in truth a radio expert—it was his cherished hobby—but how had they known? Shut up, he told himself. Don't admit anything. "The whole thing is ridiculous," he protested. "I insist that I be taken to see the Captain— I can break that contract in ten minutes time."

The Purser waited before replying. "Are you through speaking your piece?"

"Yes."

"Very well. You've had your say, now I'll have mine. You listen to me, Mister Spacelawyer. That contract was drawn up by some of the shrewdest legal minds in two planets. They had specifically in mind that worthless bums would sign it, drink up their bounty money, and then decide that they didn't want to go to work after all. That contract has been subjected to every sort of attack possible and revised so that it can't be broken by the devil himself.

"You're not peddling your curbstone law to another stumblebum in this case; you are talking to a man who knows just where he stands, legally. As for seeing the Captain—if you think the commanding officer of a major vessel has nothing more to do than listen to the r/üw-dreams of a self-appointed word artist, you've got another think coming! Return to your quarters!"

Wingate started to speak, thought better of it, and turned to go. This would require some thought. The Purser stopped him. "Wait. Here's your copy of the contract." He chucked it, the flimsy white sheets riffled to the deck. Wingate picked them up and left silently.

Hartley was waiting for him in the passageway. "How d'ja make out, Hump?"

"Not so well.' No, I don't want to talk about it. I've got to think." They walked silently back the way they had come toward the ladder which gave access to the lower decks. A figure ascended from the ladder and came toward them. Wingate noted it without interest.

He looked again. Suddenly the whole preposterous chain of events fell into place; he shouted in relief. "Sam!" he called out. "Sam—you cockeyed old so-and-so. I should have spotted your handiwork." It was all clear now; Sam had framed him with a phony shanghai. Probably the skipper was a pal of Sam's—a reserve officer, maybe-and they had cooked it up between them. It was a rough sort of a joke, but he was too relieved to be angry. Just the same he would make Jones pay for his fun, somehow, on the jump back from Luna City.

It was then that he noticed that Jones was not laughing.

Furthermore he was dressed—most unreasonably—in the same blue denim that the contract laborers were. "Hump," he was saying, "are you still drunk?"

"Me? No. What's the i-"

"Don't you realize we're in a jam?"

"Oh hell, Sam, a joke's a joke, but don't keep it up any longer. I've caught on, I tell you. I don't mind—it was a good gag."

"Gag, eh?" said Jones bitterly. "I suppose it was just a gag when you talked me into signing up."

"I persuaded *you* to sign up?"

"You certainly did. You were so damn sure you knew what you were talking about. You claimed that we could sign up, spend a month or so, on Venus, and come home. You wanted to bet on it. So we went around to the docks and signed up. It seemed like a good idea then—the only way to settle the argument."

Wingate whistled softly. "Well, I'll be-Sam, I haven't the slightest recollection of it. I must have drawn a blank before I passed out."

"Yeah, I guess so. Too bad you didn't pass out sooner. Not that I'm blaming you; you didn't drag me. Anyhow, I'm on my way up to try to straighten it out."

"Better wait a minute till you hear what happened to me. Oh yes-Sam, this is, uh, Satchel Hartley. Good sort." Hartley had been waiting uncertainly near them; he stepped forward and shook hands.

Wingate brought Jones up to date, and added, "So you see your reception isn’t likely to be too friendly. I guess I muffed it. But we are sure to break the contract as soon as we can get a hearing on time alone.”

“How do you mean?”

“We were signed up less than twelve hours before ship lifting. That’s contrary to the Space Precautionary Act.”

“Yes-yes, I see what you mean. The Moon’s in her last quarter; they would lift ship some time after midnight to take advantage of favorable earthswing. I wonder what time it was when we signed on?”

Wingate took out his contract copy. The notary’s stamp showed a time of eleven thirty-two. “Great Dayl” he shouted. “I knew there would be a flaw in it somewhere. This contract is invalid on its face. The ship’s log will prove it.”

Jones studied it. “Look again,” he said. Wingate did so. The stamp showed eleven thirty-two, but A.M., not P.M.

“But that’s impossible,” he protested.

“Of course it is. But it’s official. I think we will find that the story is that we were signed on in the morning, paid our bounty money, and had one last glorious luau before we were carried aboard. I seem to recollect some trouble in getting the recruiter to sign us up. Maybe we convinced him by kicking in our bounty money.”

“But we *didn’t* sign up in the morning. It’s not true and I can prove it.”

“Sure you can prove it—*but how can you prove it without going back to Earth first!*“

“So you see it’s this way,” Jones decided after some minutes of somewhat fruitless discussion, “there is no sense in trying to break our contracts here and now; they’ll laugh at us. The thing to do is to make money talk, and talk loud. The only way I can see to get us off at Luna City is to post non-performance bonds with the company bank there—cash, and damn big ones, too.”

“How big?”

“Twenty thousand credits, at least, I should guess.”

“But that’s not equitable—it’s all out of proportion.”

“Quit worrying about equity, will you? Can’t you realize that they’ve got us where the hair is short? This won’t be a bond set by a court ruling; it’s got to be big enough to make a minor company official take a chance on doing something that’s not in the book.”

“I can’t raise such a bond.”

“Don’t worry about that. I’ll take care of it.”

Wingate wanted to argue the point, but did not. There are times when it is very convenient to have a wealthy friend.

“I’ve got to get a radiogram off to my sister,” Jones went on, “to get this done-”

“Why your sister? Why not your family firm?”

“Because we need fast action, that’s why. The lawyers that handle our family finances would fiddle and fume around trying to confirm the message. They’d send a message back to the Captain, asking if Sam Houston Jones were really aboard, and he would answer ‘No’, as I’m signed up as Sam Jones. I had some silly idea of staying out of the news broadcasts, on account of the family.”

“You can’t blame them,” protested Wingate, feeling an obscure clannish loyalty to his colleagues in law, “they’re handling other people’s money.”

“I’m not blaming them. But I’ve got to have fast action and Sis’ll do what I ask her. I’ll phrase the message so she’ll know it’s me. The only hurdle now is to persuade the Purser to let me send a message on tick.”

He was gone for a long time on this mission. Hartley waited with Wingate, both to keep him company and because of a strong human interest in unusual events. When Jones finally appeared he wore a look of tight-lipped annoyance. Wingate, seeing the expression, felt a sudden, chilling apprehension. “Couldn’t you send it? Wouldn’t he let you?”

“Oh, he let me—finally,” Jones admitted, “but that Purser—man, is he tight!”

Even without the alarm gongs Wingate would have been acutely aware of the grounding at Luna .City. The sudden change from the high gravity deceleration of their approach to the weak surface gravity—one-sixth earth normal—of the Moon took immediate toll on his abused stomach. It was well that he had not eaten much. Both Hartley and Jones were deepspace men and regarded enough acceleration to permit normal swallowing as adequate for any purpose. There is a curious lack of sympathy between those who are subject to spacesickness and those who are immune to it. Why the spectacle of a man regurgitating, choked, eyes streaming with tears, stomach knotted with pain, should seem funny is difficult to see, but there it is. It divides the human race into two distinct and antipathetic groups-amused contempt on one side, helpless murderous hatred on the other.

Neither Hartley nor Jones had the inherent sadism which is too frequently evident on such occasions—for example the great wit who suggests salt pork as a remedy—but, feeling no discomfort themselves, they were simply unable to comprehend (having forgotten the soul-twisting intensity of their own experience as new chums) that Wingate was literally suffering “a fate worse than death”—much worse, for it was stretched into a sensible eternity by a distortion of the time sense known only to sufferers from spacesicknesses, seasicknesses, and (we are told) smokers of hashish.

As a matter of fact, the stop on the Moon was less than four hours long. Toward the end of the wait Wingate had quieted down sufficiently again to take an interest in the expected reply to Jones' message, particularly after Jones had assured him that he would be able to spend the expected lay-over under bond at Luna City in a hotel equipped with a centrifuge.

But the answer was delayed. Jones had expected to hear from his sister within an hour, perhaps before the *Evening Star* grounded at the Luna City docks. As the hours stretched out he managed to make himself very unpopular at the radio room by his repeated inquiries. An overworked clerk had sent him brusquely about his business for the seventeenth time when he heard the alarm sound preparatory to raising ship; he went back and admitted to Wingate that his scheme had apparently failed.

"Of course, we've got ten minutes yet," he finished unhopefully, "if the message should arrive before they raise ship, the Captain could still put us aground at the last minute. We'll go back and haunt 'em some more right up to the last. But it looks like a thin chance."

"Ten minutes—" said Wingate, "couldn't we manage somehow to slip outside and run for it?"

Jones looked exasperated. "Have you ever tried running in a total vacuum?"

Wingate had very little time in which to fret on the passage from Luna City to Venus. He learned a great deal about the care and cleaning of washrooms, and spent ten hours a day perfecting his new skill. Masters-at-Arms have long memories.

The *Evening Star* passed beyond the limits of ship-to-Terra radio communication shortly after leaving Luna City; there was nothing to do but wait until arrival at Adonis, port of the north polar colony. The company radio there was strong enough to remain in communication at all times except for the sixty days bracketing superior conjunction and a shorter period of solar interference at inferior conjunction. "They will probably be waiting for us with a release order when we ground," Jones assured Wingate, "and we'll go back on the return trip of the *Evening Star*—first class, this time. Or, at the very worst, we'll have to wait over for the *Morning Star*. That wouldn't be so bad, once I get some credit transferred; we could spend it at Venusburg."

"I suppose you went there on your cruise," Wingate said, curiosity showing in his voice. He was no Sybarite, but the lurid reputation of the most infamous, or famous-depending on one's evaluations—pleasure city of three planets was enough to stir the imagination of the least hedonistic.

"No—worse luck!" Jones denied. "I was on a hull inspection board the while time. Some of my messmates went, though… boy!" He whistled softly and shook his head.

But there was no one awaiting their arrival, nor was there any message. Again they stood around the communication office until told sharply and officially to get on back to their quarters and stand by to'disembark, "—and be quick about it!"

"I'll see you in the receiving barracks, Hump," were Jones' last words before he hurried off to his own compartment.

The Master-at-Arms responsible for the compartment in which Hartley and Wingate were billeted lined his charges up in a rough column of two's and, when ordered to do so by the metallic bray of the ship's loudspeaker, conducted them through the central passageway and down four decks to the lower passenger port. It stood open; they shuffled through the lock and out of the ship—not into the free air of Venus, but into a sheetmetal tunnel which joined it, after some fifty yards, to a building.

The air within the tunnel was still acrid from the atomized antiseptic with which it had been flushed out, but to Wingate it was nevertheless fresh and stimulating after the stale flatness of the repeatedly reconditioned air of the transport. That, plus the surface gravity of Venus, five-sixths of earth-normal, strong enough to prevent nausea yet low enough to produce a feeling of lightness and strength —these things combined to give him an irrational optimism, an up-and-at-'em frame of mind.

The exit from the tunnel gave into a moderately large room, windowless but brilliantly and glarelessly lighted from concealed sources. It contained no furniture.

"Squaaad—HALT!" called out the Master-at-Arms, and handed papers to a slight, clerkish-appearing man who stood near an inner doorway. The man glanced at the papers, counted the detachment, then signed one sheet, which he handed back to the ship's petty officer who accepted it and returned through the tunnel.

The clerkish man turned to the immigrants. He was dressed, Wingate noted, in nothing but the briefest of shorts, hardly more than a strap, and his entire body, even his feet, was a smooth mellow tan. "Now men," he said in a mild voice, "strip off your clothes and put them in the hopper." He indicated a fixture set in one wall.

"Why?" asked Wingate. His manner was uncontentious but he made no move to comply.

"Come now," he was answered, still mildly but with a note of annoyance, "don't argue. It's for your own protection. We can't afford to import disease."

Wingate checked a reply and unzipped his coverall. Several who had paused to hear the outcome followed his example. Suits, shoes, underclothing, socks, they all went into the hopper. “Follow me,” said their guide.

In the next room the naked herd were confronted by four “barbers” armed with electric clippers and rubber gloves who proceeded to clip them smooth. Again Wingate felt disposed to argue, but decided the issue was not worth it. But he wondered if the female labor clients were required to submit to such drastic quarantine precautions. It would be a shame, it seemed to him, to sacrifice a beautiful head of hair that had been twenty years in growing.

The succeeding room was a shower room. A curtain of warm spray completely blocked passage through the room. Wingate entered it unreluctantly, even eagerly, and fairly wallowed in the first decent bath he had been able to take since leaving Earth. They were plentifully supplied with liquid green soap, strong and smelly, but which lathered freely. Half a dozen attendants, dressed as skimpily as their guide, stood on the far side of the wall of water and saw to it that the squad remained under the shower a fixed time and scrubbed. In some cases they made highly personal suggestions to insure thoroughness. Each of them wore a red cross on a white field affixed to his belt which lent justification to their officiousness.

Blasts of warm air in the exit passageway dried them quickly and completely.

“Hold still.” Wingate complied, the bored hospital orderly who had spoken dabbed at Wingate’s upper arm with a swab which felt cold to touch, then scratched the spot. “That’s all, move on.” Wingate added himself to the queue at the next table. The experience was repeated on the other arm. By the time he had worked down to the far end of the room the outer sides of each arm were covered with little red scratches, more than twenty of them.

“What’s this all about?” he asked the hospital clerk at the end of the line, who had counted his scratches and checked his name off a list.

“Skin tests… to check your resistances and immunities.”

“Resistance to what?”

“Anything. Both terrestrial and Venerian diseases. Fungoids, the Venus ones are, mostly. Move on, you’re holding up the line.” He heard more about it later. It took from two to three weeks to recondition the ordinary terrestrial to Venus conditions. Until that reconditioning was complete and immunity was established to the new hazards of another planet it was literally death to an Earth man to expose his skin and particularly his mucous membranes to the ravenous invisible parasites of the surface of Venus.

The ceaseless fight of life against life which is the dominant characteristic of life anywhere proceeds with especial intensity, under conditions of high metabolism, in the steamy jungles of Venus. The general bacteriophage which has so nearly eliminated disease caused by pathogenic microorganisms on Earth was found capable of a subtle modification which made it potent against the analogous but different diseases of Venus. The hungry fungi were another matter.

Imagine the worst of the fungoid-type skin diseases you have ever encountered—ringworm, dhobie itch, athlete's foot, Chinese rot, saltwater itch, seven year itch. Add to that your conception of mold, of damp rot, of scale, of toadstools feeding on decay. Then conceive them speeded up in their processes, visibly crawling as you watch—picture them attacking your eyeballs, your armpits, the soft wet tissues inside your mouth, working down into your lungs.

The first Venus expedition was lost entirely. The second had a surgeon with sufficient imagination to provide what seemed a liberal supply of salicylic acid and mercury salicylate as well as a small ultraviolet radiator. Three of them returned.

But permanent colonization depends on adaptation to environment, not insulating against it. Luna City might be cited as a case which denies this proposition but it is only superficially so. While it is true that the 'lunatics" are absolutely dependent on their citywide hermetically-sealed air bubble, Luna City is not a self-sustaining colony; it is an outpost, useful as a mining station, as an observatory, as a refueling stop beyond the densest portion of Terra's gravitational field.

Venus is a colony. The colonists breathe the air of Venus, eat its food, and expose their skins to its climate and natural hazards. Only the cold polar regions—approximately equivalent in weather conditions to an Amazonian jungle on a hot day in the rainy season-are tenable by terrestrials, but here they slop barefooted on the marshy soil in a true ecological balance. •

Wingate ate the meal that was offered him—satisfactory but roughly served and dull, except for Venus sweet-sour melon, the portion of which he ate would have fetched a price in a Chicago gourmets' restaurant equivalent to the food budget for a week of a middle-class family—and located his assigned sleeping billet. Thereafter he attempted to locate Sam Houston Jones. He could find no sign of him among the other labor clients, nor any one who remembered having seen him. He was advised by one of the permanent staff of the conditioning station to enquire of the factor's clerk.

This he did, in the ingratiating manner he had learned it was wise to use in dealing with minor functionaries.

"Come back in the morning. The lists will be posted."

"Thank you, sir. Sorry to have bothered you, but I can't find him and I was afraid he might have taken sick or something. Could you tell me if he is on the sick list."

"Oh, well— Wait a minute." The clerk thumbed through his records. "Hmmm… you say he was in the *Evening Star*?"

"Yes, sir."

"Well, he's not… Mmmm, no— Oh, yes, here he is. He didn't disembark here."

"What did you say! ?"

"He went on with the *Evening Star* to New Auckland, South Pole. He's stamped in as a machinist's helper. If you had told me that, I'd 'a' known. All the metal workers in this consignment were sent to work on the new South Power Station."

After a moment Wingate pulled himself together enough to murmur, "Thanks for your trouble."

" 'S all right. Don't mention it." The clerk turned away.

South Pole Colony! He muttered it to himself. South Pole Colony, his only friend twelve thousand miles away. At last Wingate felt alone, '*Aone* and trapped, abandoned. During the short interval between waking up aboard the transport and finding Jones also aboard he had not had time fully to appreciate his predicament, nor had he, then, lost his upper class arrogance, the innate conviction that it could not be serious—such things just don't happen to people, not to people one *knows*!

But in the meantime he had suffered such assaults to his human dignity (the Chief Master-at-Arms had seen to some of it) that he was no longer certain of his essential inviolability from unjust or arbitrary treatment. But now, shaved and bathed without his consent, stripped of his clothing and attired in a harnesslike breechclout, transported millions of miles from his social matrix, subject to the orders of persons indifferent to his feelings and who claimed legal control over his person and actions, and now, most bitterly, cut off from the one human contact which had given him support and courage and hope, he realized at last with chilling thoroughness that anything could happen to him, to *him*, Humphrey Belmont Wingate, successful attorney-at-law and member of all the right clubs.

"Wingate!"

"That's you, Jack. Go on in, don't keep them waiting." Wingate pushed through the doorway and found himself in a fairly crowded room. Thirty-odd men were seated around the sides of the room. Near the door a clerk sat at a desk, busy with papers. One brisk-mannered individual stood in the cleared space between the chairs near a low platform on which all the illumination of the room was concentrated. The clerk at the door looked up to say, "Step up where they can see you.” He pointed a stylus at the platform.

Wingate moved forward and did as he was bade, blinking at the brilliant light. “Contract number 482-23-06,” read the clerk, “client Humphrey Wingate, six years, radio technician non-certified, pay grade six-D, contract now available for assignment.” Three weeks it had taken them to condition him, three weeks with no word from Jones. He had passed his exposure test without infection; he was about to enter the active period of his indenture. The brisk man spoke up close on the last words of the clerk:

“Now here, patrons, if you please—we have an exceptionally promising man. I hardly dare tell you the ratings he received on his intelligence, adaptability, and general information tests. In fact I won’t, except to tell you that Administration has put in a protective offer of a thousand credits. But it would be a shame to use any such client for the routine work of administration when we need good men so badly to wrest wealth from the wilderness. I venture to predict that the lucky bidder who obtains the services of this client will be using him as a foreman within a month. But look him over for yourselves, talk to him, and see for yourselves.”

The clerk whispered something to the speaker. He nodded and added, “I am required to notify you, gentlemen and patrons, that this client has given the usual legal notice of two weeks, subject of course to liens of record.” He laughed jovially, and cocked one eyebrow as if there were some huge joke behind his remarks. No one paid attention to the announcement; to a limited extent Wingate appreciated wryly the nature of the jest. He had given notice the day after he found out that Jones had been sent to South Pole Colony, and had discovered that while he was free theoretically to quit, it was freedom to starve on Venus, unless he first worked out his bounty, and his passage both ways.

Several of the patrons gathered around the platform and looked him over, discussing him as they did so. “Not too well muscled.”

“I’m not overeager to bid on these smart boys; they’re troublemakers.”

“No, but a stupid client isn’t worth his keep.”

“What can he *do*? I’m going to have a look at his record.” They drifted over to the clerk’s desk and scrutinized the results of the many tests and examinations that Wingate had undergone during his period of quarantine. All but one beady-eyed individual who sidled up closer to Wingate, and, resting one foot on the platform so that he could bring his face nearer, spoke in confidential tones.

“I’m not interested in those phony puff-sheets, bub. Tell me about yourself.”

“There’s not much to tell.”

"Loosen up. You'll like my place. Just like a home—I run a free crock to Venusburg for my boys. Had any experience handling niggers?"

"No."

"Well, the natives ain't niggers anyhow, except in a manner of speaking. You look like you could boss a gang. Had any experience?"

"Not much."

"Well… maybe you're modest. I like a man who keeps his mouth shut. And my boys like me. I never let my pusher take kickbacks."

"No," put in another patron who had returned to the side of the platform, "you save that for yourself, Rigsbee."

"You stay out o‘ this, Van Huysen!"

The newcomer, a heavyset, middle-aged man, ignored the other and addressed Wingate himself. "You have given notice. Why?"

"The whole thing was a mistake. I was drunk."

"Will you do honest work in the meantime?"

Wingate considered this. "Yes," he said finally. The heavyset man nodded and walked heavily back to his chair, settling his broad girth with care and giving his harness a hitch.

When the others were seated the spokesman announced cheerfully, "Now, gentlemen, if you are quite through— Let's hear an opening offer for this contract. I wish I could afford to bid him in as my assistant, by George, I do! Now… do I hear an offer?"

"Six hundred."

"Please, patrons! Did you not hear me mention a protection of one thousand?"

"I don't think you mean it. He's a sleeper."

The company agent raised his eyebrows. "I'm sorry. I'll have to ask the client to step down from the platform."

But before Wingate could do so another voice said, "One thousand."

"Now that's better!" exclaimed the agent. "I should have known that you gentlemen wouldn't let a real opportunity escape you. But a ship can't fly on one jet. Do I hear eleven hundred? Come, patrons, you can't make your fortunes without clients. Do I hear—"

"Eleven hundred."

"Eleven hundred from Patron Rigsbee! And a bargain it would be at that price. But I doubt if you will get it. Do I hear twelve?"

The heavyset man flicked a thumb upward. "Twelve hundred from Patron van Huysen. I see I've made a mistake and am wasting your time; the intervals should be not less than two hundred. Do I hear fourteen? Do I hear fourteen? Going once for twelve… going twi—"

"Fourteen," Rigsbee said sullenly.

"Seventeen," Van Huysen added at once.

"Eighteen," snapped Rigsbee.

"Nooo," said the agent, "no interval of less than two, please."

"All right, dammit, nineteen!"

"Nineteen I hear. It's a hard number to write; who'll make it twenty-one?" Van Huysen's thumb flicked again. "Twenty-one it is. It takes money to make money. What do I hear? What do I hear?" He paused. "Going once for twenty-one… going twice for twenty-one. Are you giving up so easily, Patron Rigsbee?"

"Van Huysen is a—" The rest was muttered too indistinctly to hear.

"One more chance, gentlemen. Going, going… GONE!—" He smacked his palms sharply together, "—and sold to Patron van Huysen for . twenty-one hundred credits. My congratulations, sir, on a shrewd deal."

Wingate followed his new master out the far door. They were stopped in the passageway by Rigsbee. "All right, Van, you've had your fun. I'll cut your losses for two thousand."

"Out of my way."

"Don't be a fool. He's no bargain. You don't know how to sweat a man— I do." Van Huysen ignored him, pushing on past. Wingate followed him out into warm winter drizzle to the parking lot where steel crocodiles were drawn up in parallel rows. Van Huysen paused beside a thirty-foot Remington. "Get in."

The long boxlike body of the crock was stowed to its load line with supplies Van Huysen had purchased at the base. Sprawled on the tarpaulin which covered the cargo were half a dozen men. One of them stirred as Wingate climbed over the side. "Hump! Oh, Hump!"

It was Hartley. Wingate was surprised at his own surge of emotion. He gripped Hartley's hand and exchanged friendly insults. "Chums," said Hartley, "meet Hump Wingate. He's a right guy. Hump, meet the gang. That's Jimmie right behind you. He rassles this velocipede."

The man designated gave Wingate a bright nod and moved forward into the operator's seat. At a wave from Van Huysen, who had seated his bulk in the little sheltered cabin aft, he pulled back on both control levers and the crocodile crawled away, its caterpillar treads clanking and chunking through the mud.

Three of the six were oldtimers, including Jimmie, the driver. They had come along to handle cargo, the ranch products which the patron had brought in to market and the supplies he had purchased to take back. Van Huysen had bought the contracts of two other clients in addition to Wingate and Satchel Hartley. Wingate recognized them as men he had known casually in the *Evening Star* and at the assignment and conditioning station. They looked a little woebegone, which Wingate could thoroughly understand, but the men from the ranch seemed to be enjoying themselves. They appeared to regard the opportunity to ride a load to and from town as an outing. They sprawled on the tarpaulin and passed the time gossiping and getting acquainted with the new chums.

But they asked no personal questions. No labor client on Venus ever asked anything about what he had been before he shipped with the company unless he first volunteered information. It “wasn’t done.”

Shortly after leaving the outskirts of Adonis the car slithered down a sloping piece of ground, teetered over a low bank, and splashed logily into water. Van Huysen threw up a window in the bulkhead which separated the cabin from the hold and shouted, “Dumkopf! How many times do I tell you to take those launchings slowly?”

“Sorry, Boss,” Jimmie answered. “I missed it.”

“You keep your eyes peeled, or I get me a new Crocker!” He slammed the port. Jimmie glanced around and gave the other clients a sly wink. He had his hands full; the marsh they were traversing looked like solid ground, so heavily was it overgrown with rank vegetation. The crocodile now functioned as a boat, the broad flanges of the treads acting as paddle wheels. The wedge-shaped prow pushed shrubs and marsh grass aside, or struck and ground down small trees. Occasionally the lugs would bite into the mud of a shoal bottom, and, crawling over a bar, return temporarily to the status of a land vehicle. Jimmie’s slender, nervous hands moved constantly over the controls, avoiding large trees and continually seeking the easiest, most nearly direct route, while he split his attention between the terrain and the craft’s compass.

Jimmie drew applause and enthusiastic support in the choruses with a ditty entitled *That Redheaded Venusburg Gal*, but Wingate considered it inexcusably vulgar. He did not have time to dwell on the matter; it was followed by a song which drove it out of his mind.

The tenor started it, slowly and softly. The others sang the refrains while he rested—all but Wingate; he was silent and thoughtful throughout. In the triplet of the second verse the tenor dropped out and the others sang in his place.

“Oh, you stamp your paper and you sign your name,
(“Come away! Come away!) ”They pay your bounty and you drown your shame.
(Txue *the day! Rue the day!)*
“They land you down at Ellis Isle and put you in a pen; ”There you see what happens to the Six-Year men— “They haven’t paid their bounty and they sign ‘em up again!
(“Here to stay! Here to stay!) ”But me I’ll save my bounty and a ticket on the ship,
(“So you say! So you say!) ”And then you’ll see me leavin‘ on the very next trip.

("Come the day! Come the day!)

"Oh, we've heard that kinda story just a thousand times and one. "Now we wouldn't say you're lyin' but we'd like to see it done. "We'll see you next at Venusburg apayin' for your fun!

It left Wingate with a feeling of depression not entirely accounted for by the tepid drizzle, the unappetizing landscape, nor by the blanket of pale mist which is the invariable Venerian substitute for the open sky. He withdrew to one corner of the hold and kept to himself, until, much later, Jimmie shouted, "Lights ahead!"

Wingate leaned out and peered eagerly toward his new home.

Four weeks and no word from Sam Houston Jones. Venus had turned once on its axis, the fortnight long Venerian "winter" had given way to an equally short "summer"-indistinguishable from "winter" except that the rain was a trifle heavier and a little hotter-and now it was "winter" again. Van Huysen's ranch, being near the pole, was, like most of the tenable area of Venus, never in darkness. The miles-thick, everpresent layer of clouds tempered the light of the low-hanging sun during the long day, and, equally, held the heat and diffused the light from a sun just below the horizon to produce a continuing twilight during the two-week periods which were officially "night", or "winter".

Four weeks and no word. Four weeks and no sun, no moon, no stars, no dawn. No clean crisp breath of morning air, no life-quickening beat of noonday sun, no welcome evening shadows, nothing, nothing at all to distinguish one sultry, sticky hour from the next but the treadmill routine of sleep and work and food and sleep again—nothing but the gathering ache in his heart for the cool blue skies of Terra.

He had acceded to the invariable custom that new men should provide a celebration for the other clients and had signed the Squeezer's chits to obtain happywater—*rhira*—for the purpose—to discover, when first he signed the pay book, that his gesture of fellowship had cost him another four months of delay before he could legally quit his "job." Thereupon he had resolved never again to sign a chit, had foresworn the prospect of brief holidays at Venusburg, had promised himself to save every possible credit against his bounty and transportation liens.

Whereupon he discovered that the mild alcoholoid drink was neither a vice nor a luxury, but a necessity, as necessary to human life on Venus as the ultraviolet factor present in all colonial illuminating systems. It produces, not drunkenness, but lightness of heart, freedom from worry, and without it he could not *get to sleep*. Three nights of self-recrimination and fretting, three days of fatigue-drugged uselessness under the unfriendly eye of the Pusher, and he had signed for his bottle with the rest, even though dully aware that the price of the bottle had washed out more than half of the day's microscopic progress toward freedom.

Nor had he been assigned to radio operation. Van Huysen had an operator. Wingate, although listed on the books as standby operator, went to the swamps with the rest. He discovered on rereading his contract a clause which permitted his patron to do this, and he admitted with half his mind —the detached judicial and legalistic half —that the clause was reasonable and proper, not inequitable.

He went to the swamps. He learned to wheedle and bully the little, mild amphibian people into harvesting the bulbous underwater growth of *Hya-cinthus veneris johnsoni*—Venus swamproot—and to bribe the cooperation of their matriarchs with promises “of bonuses in the form of ”thigarek“, a term which meant not only cigarette, but tobacco in any form, the staple medium in trade when dealing with the natives.

He took his turn in the chopping sheds and learned, clumsily and slowly, to cut and strip the spongy outer husk from the pea-sized kernel which alone had commercial value and which must be removed intact, without scratch or bruise. The juice from the pods made his hands raw and the odor made him cough and stung his eyes, but he enjoyed it more than the work in the marshes, for it threw him into the company of the female labor clients. Women were quicker at the work than men and their smaller fingers more dextrous in removing the valuable, easily damaged capsule. Men were used for such work only when accumulated crops required extra help.

He learned his new trade from a motherly old person whom the other women addressed as Hazel. She talked as she worked, her gnarled old hands moving steadily and without apparent direction or skill. He could close his eyes and imagine that he was back on Earth and a boy again, hanging around his grandmother's kitchen while she shelled peas and rambled on. “Don't you fret yourself, boy,” Hazel told him. “Do your work and shame the devil. There's a great day coming.”

“What kind of a great day, Hazel?”

“The day when the Angels of the Lord will rise up and smite the powers of evil. The day when the Prince of Darkness will be cast down into the pit and the Prophet shall reign over the children of Heaven. So don't you worry; it doesn't matter whether you are here or back home when the great day comes; the only thing that matters is your state of grace.”

“Are you sure we will live long enough to see the day?”

She glanced around, then leaned over confidentially. “The day is almost upon us. Even now the Prophet moves up and down the land gathering his forces. Out of the clean farm country of the Mississippi

Valley there comes the Man, known in this world"—she lowered her voice still more—"as *Nehemiah Scudder*!"

Wingate hoped that his start of surprise and amusement did not show externally. He recalled the name. It was that of a pipsqueak, backwoods evangelist, an unimportant nuisance back on Earth, the butt of an occasional guying news story, but a man of no possible consequence.

The chopping shed Pusher moved up to their bench. "Keep your eyes on your work, you! You're way behind now." Wingate hastened to comply, but Hazel came to his aid.

"You leave him be, Joe Tompson. It takes time to learn chopping."

"Okay, Mom," answered the Pusher with a grin, "but keep him pluggin'. See?"

"I will. You worry about the rest of the shed. This bench'll have its quota." Wingate had been docked two days running for spoilage. Hazel was lending him poundage now and the Pusher knew it, but everybody liked her, even pushers, who are reputed to like no one, not even themselves.

Wingate stood just outside the gate of the bachelors' compound. There was yet fifteen minutes before lock-up roll call; he had walked out in a subconscious attempt to rid himself of the pervading feeling of claustrophobia which he had had throughout his stay. The attempt was futile; there was no "outdoorness" about the outdoors on Venus, the bush crowded the clearing in on itself, the leaden misty sky pressed down on his head, and the steamy heat sat on his bare chest. Still, it was better than the bunkroom in spite of the dehydrators.

He had not yet obtained his evening ration of *rhira* and felt, consequently, nervous and despondent, yet residual self-respect caused him to cherish a few minutes clear thinking before he gave in to the cheerful soporific. It's getting me, he thought, in a few more months I'll be taking every chance to get to Venusburg, or, worse yet, signing a chit for married quarters and condemning myself and my kids to a life-sentence. When he first arrived the women clients, with their uniformly dull minds and usually commonplace faces, had seemed entirely unattractive. Now, he realized with dismay, he was no longer so fussy. Why, he was even beginning to lisp, as the other clients did, in unconscious imitation of the amphibians.

Early, he had observed that the clients could be divided roughly into two categories, the child of nature and the broken men. The first were those of little imagination and simple standards. In all probability they had known nothing better back on Earth; they saw in the colonial culture, not slavery, but freedom from responsibility, security, and an occasional spree. The others were the broken men, the outcasts, they who had once been somebody, but, 'through some defect of character, or some accident, had lost their places in society. Perhaps the judge had said, “Sentence suspended if you ship for the colonies.”

He realized with sudden panic that his own status was crystallizing; he was becoming one of the broken men. His background on Earth was becoming dim in his mind; he had put off for the last three days the labor of writing another letter to Jones; he had spent all the last shift rationalizing the necessity for taking a couple of days holiday at Venusburg. Face it, son, face it, he told himself. You’re slipping, you’re letting your mind relax into slave psychology. You’ve unloaded the problem of getting out of this mess onto Jones—how do you know he *can* help you? For all you know he may be dead. Out of the dimness of his memory he recaptured a phrase which he had read somewhere, some philosopher of history: “No slave is ever freed, *save he free himself*.”

All right, all right-pull up your socks, old son. Take a brace. No more *rhira*—no, that wasn’t practical; a man had to have sleep. Very well, then, no *rhira* until lights-out, keep your mind clear in the evenings and *plan*. Keep your eyes open, find out all you can, cultivate friendships, and watch for a chance.

Through the gloom he saw a human figure approaching the gate of the compound. As it approached he saw that it was a woman and supposed it to be one of the female clients. She came closer, he saw that he was mistaken. It was Annek van Huysen, daughter of the patron.

She was a husky, overgrown blond girl with unhappy eyes. He had seen her many times, watching the clients as they returned from their labor, or wandering alone around the ranch clearing. She was neither unsightly, nor in anywise attractive; her heavy adolescent figure needed more to flatter it than the harness which all colonists wore as the maximum tolerable garment.

She stopped before him, and, unzipping the pouch at her waist which served in lieu of pockets, took out a package of cigarettes. “I found this back there. Did you lose it?”

He knew that she lied; she had picked up nothing since she had come into sight. And the brand was one smoked on Earth and by patrons; no client could afford such. What was she up to?

He noted the eagerness in her face and the rapidity of her breathing, and realized, with confusion, that this girl was trying indirectly to make him a present. Why?

Wingate was not particularly conceited about his own physical beauty, or charm, nor had he any reason to be. But what he had not realized was that among the common run of the clients he stood out like a cock pheasant in a barnyard. But that Annek found him pleasing he was forced to admit; there could be no other explanation for her trumped-up story and her pathetic little present.

His first impulse was to snub her. He wanted nothing of her and resented the invasion of his privacy, and he was vaguely aware that the situation could be awkward, even dangerous to him, involving, as it did, violations of custom which jeopardized the whole social and economic structure. From the viewpoint of the patrons, labor clients were almost as much beyond the pale as the amphibians. A liaison between a labor client and one of the womenfolk of the patrons could easily wake up old Judge Lynch.

But he had not the heart to be brusque with her. He could see the dumb adoration in her eyes; it would have required cold heartlessness to have repulsed her. Besides, there was nothing coy or provocative in her attitude; her manner was naive, almost childlike in its unsophistication. He recalled his determination to make friends; here was friendship offered, a dangerous friendship, but one which might prove useful in winning free.

He felt a momentary wave of shame that he should be weighing the potential usefulness of this defenseless child, but he suppressed it by affirming to himself that he would do her no harm, and, anyhow, there was the old saw about the vindictiveness of a woman scorned.

“Why, perhaps I did lose it,” he evaded, then added, “It’s my favorite brand.”

“Is it?” she said happily. “Then do take it, in any case.”

“Thank you. Will you smoke one with me? No, I guess that wouldn’t do; your father would not want you to stay here that long.”

“Oh, he’s busy with his accounts. I saw that before I came out,” she answered, and seemed unaware that she had given away her pitiful little deception. “But go ahead, I-I hardly ever smoke.”

“Perhaps you prefer a meerschaum pipe, like your father.”

She laughed more than the poor witticism deserved. After that they talked aimlessly, both agreeing that the crop was coming in nicely, that the weather seemed a little cooler than last week, and that there was nothing like a little fresh air after supper.

“Do you ever walk for exercise after supper?” she asked.

He did not say that a long day in the swamps offered more than enough exercise, but agreed that he did.

“So do I,” she blurted out. “Lots of times up near the water tower.”

He looked at her. “Is that so? I’ll remember that.” The signal for roll call gave him a welcome excuse to get away; three more minutes, he thought, and I would have had to make a date with her.

Wingate found himself called for swamp work the next day, the rush in the chopping sheds having abated. The crock lumbered and splashed its way around the long, meandering circuit, leaving one or more Earthmen at each supervision station. The car was down to four occupants, Wingate, Satchel, the Pusher, and Jimmie the Crocker, when the Pusher signalled for another stop. The flat, bright-eyed heads of amphibian natives broke water on three sides as soon as they were halted. “All right, Satchel,” ordered the Pusher, “this is your billet. Over the side.”

Satchel looked around. “Where’s my skiff?” The ranchers used small flat-bottomed duralumin skiffs in which to collect their day’s harvest. There was not one left in the crock.

“You won’t need one. You goin‘ to clean this field for planting.”

“That’s okay. Still—I don’t see nobody around, and I don’t see no solid ground.” The skiffs had a double purpose; if a man were working out of contact with other Earthmen and at some distance from safe dry ground, the skiff became his life boat. If the crocodile which was supposed to collect him broke down, or if for any other reason he had need to sit down or lie down while on station, the skiff gave him a place to do so. The older clients told grim stories of men who had stood in eighteen inches of water for twenty-four, fortyeight, seventy-two hours, and then drowned horribly, out of their heads from sheer fatigue.

“There’s dry ground right over there.” The Pusher waved his hand in the general direction of a clump of trees which lay perhaps a quarter of a mile away.

“Maybe so,” answered Satchel equably. “Let’s go see.” He glanced at Jimmie, who turned to the Pusher for instructions.

“Damnation! Don’t argue with me! Get over the side!”

“Not,” said Satchel, “until I’ve seen something better than two feet of slime to squat on in a pinch.”

The little water people had been following the argument with acute interest. They clucked and lisped in their own language; those who knew some pidgin English appeared to be giving newsy and undoubtedly distorted explanations of the events to their less sophisticated brethren. Fuming as he was, this seemed to add to the Pusher’s anger.

“For the last time-get out there!”

“Well,” said Satchel, settling his gross frame more comfortably on the floorplates, “I’m glad we’ve finished with that subject.”

Wingate was behind the Pusher. This circumstance probably saved Satchel Hartley at least a scalp wound, for he caught the arm of the Pusher as he struck. Hartley closed in at once; the three wrestled for a few seconds on the bottom of the craft.

Hartley sat on the Pusher’s chest while Wingate pried a blackjack away from the clenched fingers of the Pusher’s right fist. “Glad you saw him reach for that, Hump,” Satchel acknowledged, “or I’d be needin‘ an aspirin about now.”

“Yeah, I guess so,” Wingate answered, and threw the weapon as far as he could out into the marshy waste. Several of the amphibians streaked after it and dived. “I guess you can let him up now.”

The Pusher said nothing to them as he brushed himself off, but he turned to the Crocker who had remained quietly in his saddle at the controls the whole time. “Why the hell didn’t you help me?”

“I supposed you could take care of yourself, Boss,” Jimmie answered noncommittally.

Wingate and Hartley finished that work period as helpers to labor clients already stationed. The Pusher had completely ignored them except for curt orders necessary to station them. But while they were washing up for supper back at the compound they received word to report to the Big House.

When they were ushered into the Patron’s office they found the Pusher already there with his employer and wearing a self-satisfied smirk while Van Huysen’s expression was black indeed.

“What’s this I hear about you two?” he burst out. “Refusing work. Jumping my foreman. By Joe, I show you a thing or two!”

“Just a moment, Patron van Huysen,” began Wingate quietly, suddenly at home in the atmosphere of a trial court, “no one refused duty. Hartley simply protested doing dangerous work without reasonable safeguards. As for the fracas, your foreman attacked us; we acted simply in self-defense, and desisted as soon as we had disarmed him.”

The Pusher leaned over Van Huysen and whispered in his ear. The Patron looked more angry than before. “You did this with natives watching. Natives! You know colonial law? I could send you to the mines for this.”

“No,” Wingate denied, “your foreman did it in the presence of natives. Our role was passive and defensive throughout-”

“You call jumping my foreman peaceful? Now you listen to me—Your job here is to work. My foreman’s job is to tell you where and how to work. He’s not such a dummy as to lose me my investment in a man. He judges what work is dangerous, not you.” The Pusher whispered again to his chief. Van Huysen shook his head. The other persisted, but the Patron cut him off with a gesture, and turned back to the two labor clients.

“See here—I give every dog one bite, but not two. For you, no supper tonight and no *rhira*. Tomorrow we see how you behave.”

“But Patron van Huys-”

“That’s all. Get to your quarters.”

At lights out Wingate found, on crawling into his bunk, that someone had hidden therein a foodbar. He munched it gratefully in the dark and wondered who his friend could be. The food stayed the complaints of his stomach but was not sufficient, in the absence of *rhira*, to permit him to go to sleep. He lay there, staring into the oppressive blackness of the bunkroom and listening to the assorted irritating noises that men can make while sleeping, and considered his position. It had been bad enough but barely tolerable before; now, he was logically certain, it would be as near hell as a vindictive overseer could make it. He was prepared to believe, from what he had seen and the tales he had heard, that it would be very near indeed!

He had been nursing his troubles for perhaps an hour when he felt a hand touch his side. “Hump! Hump!” came a whisper, “come outside. Something’s up.” It was Jimmie.

He felt his way cautiously through the stacks of bunks and slipped out the door after Jimmie. Satchel was already outside and with him a fourth figure. <

It was Annek van Huysen. He wondered how she had been able to get into the locked compound. Her eyes were puffy, as if she had been crying.

Jimmie started to speak at once, in cautious, low tones. “The kid tells us that I am scheduled to haul you two lugs back into Adonis tomorrow.”

“What for?”

“She doesn’t know. But she’s afraid it’s to sell you South. That doesn’t seem likely. The Old Man has never sold anyone South—but then nobody ever jumped his pusher before. I don’t know.”

They wasted some minutes in fruitless discussion, then, after a bemused silence, Wingate asked Jimmie, “Do you know where they keep the keys to the crock?”

“No. Why do y-”

“I could get them for you,” offered Annek eagerly.

“You can’t drive a crock.”

“I’ve watched you for some weeks.”

“Well, suppose you can,” Jimmie continued to protest, “suppose you run for it in the crock. You’d be lost in ten miles. If you weren’t caught, you’d starve.”

Wingate shrugged. “I’m not going to be sold South.”

“Nor am I,” Hartley added.

“Wait a minute.”

“Well, I don’t see any bet-”

“Wait a minute,” Jimmie reiterated snappishly. ‘Can’t you see I’m trying to think?“

The other three kept silent for several long moments. At last Jimmie said, “Okay. Kid, you’d better run along and let us talk. The less you know about this the better for you.” Annek looked hurt, but complied docilely to the extent of withdrawing out of earshot. The three men conferred for some minutes. At last Wingate motioned for her to rejoin them.

“That’s all, Annek,” he told her. “Thanks a lot for everything you’ve done. We’ve figured a way out.” He stopped, and then said awkwardly, “Well, good night.”

She looked up at him.

Wingate wondered what to do or say next. Finally he led her around the corner of the barracks and bade her good night again. He returned very quickly, looking shamefaced. They reentered the barracks.

Patron van Huysen also was having trouble getting to sleep. He hated having to discipline his people. By damn, why couldn’t they all be good boys and leave him in peace? Not but what there was precious little peace for a rancher these days. It cost more to make a crop than the crop fetched in Adonis—at least it did after the interest was paid.

He had turned his attention to his accounts after dinner that night to try to get the unpleasantness out of his mind, but he found it hard to concentrate on his figures. That man Wingate, now… he had bought him as much to keep him away from that slavedriver Rigsbee as to get another hand. He had too much money invested in hands as it was in spite of his foreman always complaining about being short of labor. He would either have to sell some, or ask the bank to refinance the mortgage again.

Hands weren’t worth their keep any more. You didn’t get the kind of men on Venus that used to come when he was a boy. He bent over his books again. If the market went up even a little, the bank should be willing to discount his paper for a little more than last season. Maybe that would do it.

He had been interrupted by a visit from his daughter. Annek he was always glad to see, but this time what she had to say, what she finally blurted out, had only served to make him angry. She, preoccupied with her own thoughts, could not know that she hurt her father’s heart, with a pain that was actually physical.

But that had settled the matter insofar as Wingate was concerned. He would get rid of the troublemaker. Van Huysen ordered his daughter to bed with a roughness he had never before used on her.

Of course it was all his own fault, he told himself after he had gone to bed. A ranch on Venus was no place to raise a motherless girl. His Annekchen was almost a woman grown now; how was she to find a husband here in these outlands? What would she do if he should die? She did not know it, but there would be nothing left, nothing, not even a ticket to Terra. No, she would not become a labor client’s vrouw; no, not while there was a breath left in his old tired body.

Well, Wingate would have to go, and the one they called Satchel,-too. But he would not sell them South. No, he had never done that to one of his people. He thought with distaste of the great, factorylike plantations a few hundred miles further from the pole, where the temperature was always twenty to thirty degrees higher than it was in his marshes and mortality among labor clients was a standard item in cost accounting. No, he would take them in and trade them at the assignment station; what happened to them at auction there would be none of his business. But he would not sell them directly South.

That gave him an idea; he did a little computing in his head and estimated that he might be able to get enough credit on the two unexpired labor contracts to buy Annek a ticket to Earth. He was quite sure that his sister would take her in, reasonably sure anyway, even though she had quarreled with him over marrying Annek's mother. He could send her a little money from time to time. And perhaps she could learn to be a secretary, or one of those other fine jobs a girl could get on Earth.

But what would the ranch be like without Annekchen?

He was so immersed in his own troubles that he did not hear his daughter slip out of her room and go outside.

Wingate and Hartley tried to appear surprised when they were left behind at muster for work. Jimmie was told to report to the Big House; they saw him a few minutes later, backing the big Remington out of its shed. He picked them up, then trundled back to the Big House and waited for the Patron to appear. Van Huysen came out shortly and climbed into his cabin with neither word nor look for anyone.

The crocodile started toward Adonis, lumbering a steady ten miles an hour. Wingate and Satchel conversed in subdued voices, waited, and wondered. After an interminable time the crock stopped. The cabin window flew open. "What's the matter?" Van Huysen demanded. "Your engine acting up?"

Jimmie grinned at him. "No, I stopped it."

"For what?"

"Better come up here and find out."

"By damn, I do!" The window slammed; presently Van Huysen reappeared, warping his ponderous bulk around the side of the little cabin. "Now what this monkeyshines?"

"Better get out and walk, Patron. This is the end of the line."

Van Huysen seemed to have no remark suitable in answer, but his expression spoke for him.

"No, I mean it," Jimmie went on. "This is the end of the line for you. I've stuck to solid ground the whole way, so you could walk back. You'll be able to follow the trail I broke; you ought to be able to make it in three or four hours, fat as you are."

The Patron looked from Jimmie to the others. Wingate and Satchel closed in slightly, eyes unfriendly. "Better get goin', Fatty," Satchel said softly, "before you get chucked out headfirst."

Van Huysen pressed back against the rail of the crock, his hands gripping it. "I won't get out of my own crock," he said tightly.

Satchel spat in the palm of one hand, then rubbed the two together. "Okay, Hump. He asked for it-"

"Just a second." Wingate addressed Van Huysen, "See here, Patron van Huysen—we don't want to rough you up unless we have to. But there are three of us and we are determined. Better climb out quietly."

The older man's face was dripping with sweat which was not entirely due to the muggy heat. His chest heaved, he seemed about to defy them. Then something went out inside him. His figure sagged, the defiant lines in his face gave way to a whipped expression which was not good to see.

A moment later he climbed quietly, listlessly, over the side into the ankle-deep mud and stood there, stooped, his legs slightly bent at the knees.

When they were out of sight of the place where they had dropped their patron Jimmie turned the crock off in a new direction. "Do you suppose he'll make it?" asked Wingate.

"Who?" asked Jimmie. "Van Huysen? Oh, sure, he'll make it-probably." He was very busy now with his driving; the crock crawled down a slope and lunged into navigable water. In a few minutes the marsh grass gave way to open water. Wingate saw that they were in a broad lake whose further shores were lost in the mist. Jimmie set a compass course.

The far shore was no more than a strand; it concealed an overgrown bayou. Jimmie followed it a short distance, stopped the crock, and said, "This must be just about the place," in an uncertain voice. He dug under the tarpaulin folded up in one corner of the empty hold and drew out a broad flat paddle. He took this to the rail, and, leaning out, he smacked the water loudly with the blade: Slap!… slap, slap… Slap!

He waited.

The flat head of an amphibian broke water near the side; it studied Jimmie with bright, merry eyes. "Hello," said Jimmie.

It answered in its own language. Jimmie replied in the same tongue, stretching his mouth to reproduce the uncouth clucking syllables. The native listened, then slid underwater again.

He-or, more probably, she-was back in a few minutes, another with her. "Thigarek?" the newcomer said hopefully.

"Thigarek when we get there, old girl," Jimmie temporized. "Here… climb aboard." He held out a hand, which the native accepted and wriggled gracefully inboard. It perched its unhuman, yet oddly pleasing, little figure on the rail near the driver's seat. Jimmie got the car underway.

How long they were guided by their little pilot Wingate did not know, as the timepiece on the control panel was out of order, but his stomach informed him that it was too long. He rummaged through the cabin and dug out an iron ration which he shared with Satchel and Jimmie. He offered some to the native, but she smelled at it and drew her head away.

Shortly after that there was a sharp hissing noise and a column of steam rose up ten yards ahead of them. Jimmie halted the crock at once. "Cease firing!" he called out. "It's just us chickens."

"Who are you?" came a disembodied voice.

"Fellow travelers."

"Climb out where we can see you."

"Okay."

The native poked Jimmie in the ribs. "Thigarek," she stated positively.

"Huh? Oh, sure." He parceled out trade tobacco until she acknowledged the total, then added one more package for good will. She withdrew a piece of string from her left cheek pouch, tied up her pay, and slid over the side. They saw her swimming away, her prize carried high out of the water.

"Hurry up and show yourself!"

"Coming!" They climbed out into waist-deep water and advanced holding their hands overhead. A squad of four broke cover and looked them over, their weapons lowered but ready. The leader searched their harness pouches and sent one of his men on to look over the crocodile.

"You keep a qlose watch," remarked Wingate.

The leader glanced at him. "Yes," he said, "and no. The little people told us you were coming. They're worth all the watch dogs that were ever littered."

They got underway again with one of the scouting party driving. Their captors were not unfriendly but not disposed to talk. "Wait till you see the Governor," they said.

Their destination turned out to be a wide stretch of moderately high ground. Wingate was amazed at the number of buildings and the numerous population. "How in the world can they keep a place like this a secret?" he asked Jimmie.

"If the state of Texas were covered with fog and had only the population of Waukegan, Illinois, you could hide quite a lot of things."

"But wouldn't it show on a map?"

"How well mapped do you think Venus is? Don't be a dope."

On the basis of the few words he had had with Jimmie beforehand Wingate had expected no more than a camp where fugitive clients lurked in the bush while squeezing a precarious living from the country. What he found was a culture and a government. True, it was a rough frontier culture and a simple government with few laws and an unwritten constitution, but a framework of customs was in actual operation and its gross offenders were punished—with no higher degree of injustice than one finds anywhere.

It surprised Humphrey Wingate that fugitive slaves, the scum of Earth, were able to develop an integrated society. It had surprised his ancestors that the transported criminals of Botany Bay should develop a high civilization in Australia. Not that Wingate found the phenomenon of Botany Bay surprising—that was history, and history is never surprising—after it happens.

The success of the colony was more credible to Wingate when he came to know more of the character of the Governor, who was also generalissimo, and administrator of the low and middle justice. (High justice was voted on by the whole community, a procedure that Wingate considered outrageously sloppy, but which seemed to satisfy the community.) As magistrate the Governor handed out decisions with a casual contempt for rules of evidence and legal theory that reminded Wingate of stories he had heard of the apocryphal Old Judge Bean, "The Law West of Pecos," but again the people seemed to like it.

The great shortage of women in the community (men outnumbered them three to one) caused incidents which more than anything else required the decisions of the Governor. Here, Wingate was forced to admit, was a situation in which traditional custom would have been nothing but a source of trouble; he admired the shrewd common sense and understanding of human nature with which the Governor sorted out conflicting strong human passions and suggested *modus operandi* for getting along together. A man who could maintain a working degree of peace in such matters did not need a legal education.

The Governor held office by election and was advised by an elected council. It was Wingate's private opinion that the Governor would have risen to the top in any society. The man had boundless energy, great gusto for living, a ready thunderous laugh—and the courage and capacity for making decisions. He was a "natural."

The three runaways were given a couple of weeks in which to get their bearings and find some job in which they could make themselves useful and self-supporting. Jimmie stayed with his crock, now confiscated for the community, but which still required a driver. There were other crackers available who probably would have liked the job, but there was tacit consent that the man who brought it in should drive it, if he wished. Satchel found a billet in the fields, doing much the same work he had done for Van Huysen. He told Wingate that he was actually having to work harder; nevertheless he liked it better because the conditions were, as he put it, "looser."

Wingate detested the idea of going back to agricultural work. He had no rational excuse, it was simply that he hated it. His radio experience at last stood him in good stead. The community had a jury-rigged, low-power radio on which a constant listening watch was kept, but which was rarely used for transmission, because of the danger of detection. Earlier runaway slave camps had been wiped out by the company police through careless use of radio. Nowadays they hardly dared use it, except in extreme emergency.

But they needed radio. The grapevine telegraph maintained through the somewhat slaphappy help of the little people enabled them to keep some contact with the other fugitive communities with which they were loosely confederated, but it was not really fast, and any but the simplest of messages were distorted out of recognition.

Wingate was assigned to the community radio when it was discovered that he had appropriate technical knowledge. The previous operator had been lost in the bush. His opposite number was a pleasant old codger, known as Doc, who could listen for signals but who knew nothing of upkeep and repair.

Wingate threw himself into the job of overhauling the antiquated installation. The problems presented by lack of equipment, the necessity for "making do," gave him a degree of happiness he had not known since he was a boy, but he was not aware of it.

He was intrigued by the problem of safety in radio communication. An idea, derived from some account of the pioneer days in radio, gave him a lead. His installation, like all others, communicated by frequency modulation. Somewhere he had seen a diagram for a totally obsolete type of transmitter, an amplitude modulator. He did not have much to go on, but he worked out a circuit which he believed would oscillate in that fashion and which could be hooked up from the gear at hand.

He asked the Governor for permission to attempt to build it. "Why not? Why not?" the Governor roared at him. "I haven't the slightest idea what you are talking about, son, but if you think you can build a radio that the company can't detect, go right ahead. You don't have to ask me; it's your pigeon."

"I'll have to put the station out of commission for sending."

"Why not?"

The problem had more knots in it than he had thought. But he labored at it with the clumsy but willing assistance of Doc. His first hookup failed; his forty-third attempt five weeks later worked. Doc, stationed some miles out in the bush, reported himself able to hear the broadcast via a small receiver constructed for the purpose, whereas Wingate picked up nothing whatsoever on the conventional receiver located in the same room with the experimental transmitter.

In the meantime he worked on his book.

Why he was writing a book he could not have told you. Back on Earth it could have been termed a political pamphlet against the colonial system. Here there was no one to convince of his thesis, nor had he any expectation of ever being able to present it to a reading public. Venus was his home. He knew that there was no chance for him ever to return; the only way lay through Adonis, and there, waiting for him, were warrants for half the crimes in the calendar, contract-jumping, theft, kidnapping, criminal abandonment, conspiracy, subverting government. If the company police ever laid hands on him, they would jail him and lose the key.

No, the book arose, not from any expectation of publication, but from a half-subconscious need to arrange his thoughts. He had suffered a complete upsetting of all the evaluations by which he had lived; for his mental health it was necessary that he formulate new ones. It was natural to his orderly, if somewhat unimaginative, mind that he set his reasons and conclusions forth in writing.

Somewhat diffidently he offered the manuscript to Doc. He had learned that the nickname title had derived from the man's former occupation on Earth; he had been a professor of economics and philosophy in one of the smaller universities. Doc had even offered a partial explanation of his presence on Venus. "A little matter involving one of my women students," he confided. "My wife took an unsympathetic view of the matter and so did the board of regents. The board had long considered my opinions a little too radical."

"Were they?"

"Heavens, no! I was a rockbound conservative. But I had an unfortunate tendency to express conservative principles in realistic rather than allegorical language."

"I suppose you're a radical now."

Doc's eyebrows lifted slightly. "Not at all. Radical and conservative are terms for emotional attitudes, not sociological opinions."

Doc accepted the manuscript, read it through, and returned it without comment. But Wingate pressed him for an opinion. "Well, my boy, if you insist—"

"I do."

"—I would say that you have fallen into the commonest fallacy of all in dealing with social and economic subjects—the 'devil theory.'"

“Huh?”

“You have attributed conditions to villainy that simply result from stupidity. Colonial slavery is nothing new; it is the inevitable result of imperial expansion, the automatic result of an antiquated financial structure—”

“I pointed out the part the banks played in my book.”

“No, no, no! You think bankers are scoundrels. They are not. Nor are company officials, nor patrons, nor the governing classes back on Earth. Men are constrained by necessity and build up rationalizations to account for their acts. It is not even cupidity. Slavery is economically unsound, nonproductive, but men drift into it whenever the circumstances compel it. A different financial system—but that’s another story.”

“I still think it’s rooted in human cussedness,” Wingate said stubbornly.

“Not cussedness—simply stupidity. I can’t prove it to you, but you will learn.”

The success of the “silent radio” caused the Governor to send Wingate on a long swing around the other camps of the free federation to help them rig new equipment and to teach them how to use it. He spent four hardworking and soul-satisfying weeks, and finished with the warm knowledge that he had done more to consolidate the position of the free men against their enemies than could be done by winning a pitched battle.

When he returned to his home community, he found Sam Houston Jones waiting there.

Wingate broke into a run. “Sam!” he shouted. “Sam! *Saml”* He grabbed his hand, pounded him on the back, and yelled at him the affectionate insults that sentimental men use in attempting to cover up their weakness. “Sam, you old scoundrel! When did you get here? How did you escape? And how the devil did you manage to come all the way from South Pole? Were you transferred before you escaped?”

“Howdy, Hump,” said Sam. “Now one at a time, and not so fast.”

But Wingate bubbled on. “My, but it’s good to see your ugly face, fellow. And am I glad you came here—this is a great place. We’ve got the most up-and-coming little state in the whole federation. You’ll like it. They’re a great bunch—”

“What are you?” Jones asked, eyeing him. “President of the local chamber of commerce?”

Wingate looked at him, and then laughed. “I get it. But seriously, you will like it. Of course, it’s a lot different from what you were used to back on Earth—but that’s all past and done with. No use crying over spilt milk, eh?”

“Wait a minute. You are under a misapprehension, Hump. Listen.

I'm not an escaped slave. *I'm here to take you back.*"

Wingate opened his mouth, closed it, then opened it again. "But Sam," he said, "that's impossible. You don't know."

"I think I do."

"But you don't. There's no going back for me. If I did, I'd have to face trial, and they've got me dead to rights. Even if I threw myself on the mercy of the court and managed to get off with a light sentence, it would be twenty years before I'd be a free man. No, Sam, it's impossible. You don't know the things I'm charged with."

"I don't, eh? It's cost me a nice piece of change to clear them up."

"Huh?"

"I know how you escaped. I know you stole a crock and kidnapped your patron and got two other clients to run with you. It took my best blarney and plenty of folding money to fix it. So help me, Hump-why didn't you pull something mild, like murder, or rape, or robbing a post office?"

"Well, now, Sam-I didn't do any of those things to cause you trouble. I had counted you out of my calculations. I was on my own. I'm sorry about the money."

"Forget it. Money isn't an item with me. I'm filthy with the stuff. You know that. It comes from exercising care in the choice of parents. I was just pulling your leg and it came off in my hand."

"Okay. Sorry." Wingate's grin was a little forced. Nobody likes charity. "But tell me what happened. I'm still in the dark."

"Right." Jones had been as much surprised and distressed at being separated from Wingate on grounding as Wingate had been. But there had been nothing for him to do about it until he received assistance from Earth. He had spent long weeks as a metal worker at South Pole, waiting and wondering why his sister did not answer his call for help. He had written letters to her to supplement his first radiogram, that being the only type of communication he could afford, but the days crept past with no answer.

When a message did arrive from her the mystery was cleared up. She had not received his radio to Earth promptly, because she too, was aboard the *Evening Star*—in the first class cabin, traveling, as was her custom, in a stateroom listed under her maid's name. "It was the family habit of avoiding publicity that stymied us," Jones explained. "If I hadn't sent the radio to her rather than to the family lawyers, or if she had been known by name to the purser, we would have gotten together the first day."

The message had not been relayed to her on Venus because the bright planet had by that time crawled to superior opposition on the far side of the sun from the Earth. For a matter of sixty earth days there was no communication, Earth to Venus. The message had rested, recorded but still scrambled, in the hands of the family firm, until she could be reached.

When she received it, she started a small tornado. Jones had been released, the liens against his contract paid, and ample credit posted to his name on Venus, in less than twenty-four hours. “So that was that,” concluded Jones, “except that I’ve got to explain to big sister when I get home just how I got into this mess. She’ll burn my ears.”

Jones had chartered a rocket for North Pole and had gotten on Wingate’s trail at once. “If you had held on one more day, I would have picked you up. We retrieved your ex-patron about a mile from his gates.”

“So the old villain made it. I’m glad of that.”

“And a good job, too. If he hadn’t I might never have been able to square you. He was pretty well done in, and his heart was kicking up plenty. Do you know that abandonment is a capital offense on this planet—with a mandatory death sentence if the victim dies?”

Wingate nodded. “Yeah, I know. Not that I ever heard of a patron being gassed for it, if the corpse was a client. But that’s beside the point. Go ahead.”

“Well, he was plenty sore. I don’t blame him, though I don’t blame you, either. Nobody wants to be sold South, and I gather that was what you expected. Well, I paid him for his crock, and I paid him for your contract—take a look at me, I’m your new owner!-and I paid for the contracts of your two friends as well. Still he wasn’t satisfied. I finally had to throw in a first-class passage for his daughter back to Earth, and promise to find her a job. She’s a big dumb ox, but I guess the family can stand another retainer. Anyhow, old son, you’re a free man. The only remaining question is whether or not the Governor will let us leave here. It seems it’s not done.”

“No, that’s a point. Which reminds me—how did you locate the place?”

“A spot of detective work too long to go into now. That’s what took me so long. Slaves don’t like to talk. Anyhow, we’ve a date to talk to the Governor tomorrow.”

Wingate took a long time to get to sleep. After his first burst of jubilation he began to wonder. Did he want to go back? To return to the law, to citing technicalities in the interest of whichever side employed him, to meaningless social engagements, to the empty, sterile, bunkum-fed life of the fat and prosperous class he had moved among and served—did he want that, he, who had fought and worked with *men*? It seemed to him that his anachronistic little “invention” in radio had been of more worth than all he had ever done on Earth.

Then he recalled his book.

Perhaps he could get it published. Perhaps he could expose this disgraceful, inhuman system which sold men into legal slavery. He was really wide awake now. *There* was a thing to do! That was his job —to go back to Earth and plead the cause of the colonists. Maybe there was destiny that shapes men's lives after all. He was just the man to do it, the right social background, the proper training. *He* could make himself heard.

He fell asleep, and dreamt of cool, dry breezes, of clear blue sky. Of moonlight…

Satchel and Jimmie decided to stay, even though Jones had been able to fix it up with the Governor. "It's like this," said Satchel. "There's nothing for us back on Earth, or we wouldn't have shipped in the first place. And you can't undertake to support a couple of deadheads. And this isn't such a bad place. It's going to be something someday. We'll stay and grow up with it."

They handled the crock which carried Jones and Wingate to Adonis. There was no hazard in it, as Jones was now officially their patron. What the authorities did not know they could not act on. The crock returned to the refugee community loaded with a cargo which Jones insisted on calling their ransom. As a matter of fact, the opportunity to send an agent to obtain badly needed supplies—one who could do so safely and without arousing the suspicions of the company authorities—had been the determining factor in the Governor's unprecedented decision to risk compromising the secrets of his constituency. He had been frankly not interested in Wingate's plans to agitate for the abolishment of the slave trade.

Saying goodbye to Satchel and Jimmie was something Wingate found embarrassing and unexpectedly depressing.

For the first two weeks after grounding on Earth both Wingate and Jones were too busy to see much of each other. Wingate had gotten his manuscript in shape on the return trip and had spent the time getting acquainted with the waiting rooms of publishers. Only one had shown any interest beyond a form letter of rejection.

"I'm sorry, old man," that one had told him. "I'd like to publish your book, in spite of its controversial nature, if it stood any chance at all of success. But it doesn't. Frankly, it has no literary merit whatsoever. I would as soon read a brief."

"I think I understand," Wingate answered sullenly. "A big publishing house can't afford to print anything which might offend the powers-that-be."

The publisher took his cigar from his mouth and looked at the younger man before replying. "I suppose I should resent that," he said quietly, "but I won't. That's a popular misconception. The powers-that-be, as you call them, do not resort to suppression in this country. We publish what the public will buy. We're in business for that purpose.

"I was about to suggest, if you will listen, a means of making your book saleable. You need a collaborator, somebody that knows the writing game and can put some guts in it."

Jones called the day that Wingate got his revised manuscript back from his ghost writer. "Listen to this, Sam," he pleaded. "Look, what the dirty so-and-so has done to my book. Look. '—I heard again the crack of the overseer's whip. The frail body of my mate shook under the lash. He gave one cough and slid slowly under the waist-deep water, dragged down by his chains.' Honest, Sam, did you ever see such drivel? And look at the new title: 'I *Was a Slave on Venus*.' It sounds like a confession magazine."

Jones nodded without replying. "And listen to this," Wingate went on, "'—crowded like cattle in the enclosure, their naked bodies gleaming with sweat, the women slaves shrank from the—' Oh, hell, I can't go on!"

"Well, they did wear nothing but harnesses."

"Yes, yes—but that has nothing to do with the case. Venus costume is a necessary concomitant of the weather. There's no excuse to leer about it.

He's turned my book into a damned sex show. And he had the nerve to defend his actions. He claimed that social pamphleteering is dependent on extravagant language."

"Well, maybe he's got something. *Gulliver's Travels* certainly has some racy passages, and the whipping scenes in *Uncle Tom's Cabin* aren't anything to hand a kid to read. Not to mention *Grapes of Wrath*."

"Well, I'm damned if I'll resort to that kind of cheap sensationalism. I've got a perfectly straightforward case that any one can understand."

"Have you now?" Jones took his pipe out of his mouth. "I've been wondering how long it would take you to get your eyes opened. What is your case? It's nothing new; it happened in the Old South, it happened again in California, in Mexico, in Australia, in South Africa. Why? Because in any expanding free-enterprise economy which does not have a money system designed to fit its requirements the use of mother-country capital to develop the colony inevitably results in subsistence-level wages at home and slave labor in the colonies. The rich get richer and the poor get poorer, and all the good will in the world on the part of the so-called ruling classes won't change it, because the basic problem is one requiring scientific analysis and a mathematical mind. Do you think you can explain those issues to the general public?"

"I can try."

“How far did I get when I tried to explain them to you—before you had seen the results? And you are a smart hombre. No, Hump, these things are too difficult to explain to people and too abstract to interest them. You spoke before a women’s club the other day, didn’t you?”

“Yes.”

“How did you make out?”

“Well… the chairwoman called me up beforehand and asked me to hold my talk down to ten minutes, as their national president was to be there and they would be crowded for time.”

“Hmm… you see where your great social message rates in competition. But never mind. Ten minutes is long enough to explain the issue to a person if they have the capacity to understand it. Did you sell anybody?”

“Well… I’m not sure.”

“You’re darp tootin‘ you’re not sure. Maybe they clapped for you but how many of them came up afterwards and wanted to sign checks? No, Hump, sweet reasonableness won’t get you anywhere in this racket. To make yourself heard you have to be a demagogue, or a rabble-rousing political preacher like this fellow Nehemiah Scudder. We’re going merrily to hell and it won’t stop until it winds up in a crash.”

“But— Oh, the devil! What can we *do* about it?”

“Nothing. Things are bound to get a whole lot worse before they can get any better. Let’s have a drink.”

UNIVERSE

The Proxima Centauri Expedition, sponsored by the Jordan Foundation in 2119, was the first recorded attempt to reach the nearer stars of this galaxy. Whatever its unhappy fate we can only conjecture.

—Quoted from The Romance of Modern Astrography, by Franklin Buck, published by Lux Transcriptions, Ltd., 3.50 cr.

"THERE'S A MUTIE! Look out!"

At the shouted warning, Hugh Hoyland ducked, with nothing to spare. An egg-sized iron missile clanged against the bulkhead just above his scalp with force that promised a fractured skull. The speed with which he crouched had lifted his feet from the floor plates. Before his body could settle slowly to the deck, he planted his feet against the bulkhead behind him and shoved. He went shooting down the passageway in a long, flat dive, his knife drawn and ready.

He twisted in the air, checked himself with his feet against the opposite bulkhead at the turn in the passage from which the mutie had attacked him, and floated lightly to his feet. The other branch of the passage was empty. His two companions joined him, sliding awkwardly across the floor plates.

"Is it gone?" demanded Alan Mahoney.

"Yes," agreed Hoyland. "I caught a glimpse of it as it ducked down that hatch. A female, I think. Looked like it had four legs."

"Two legs or four, we'll never catch it now," commented the third man.

"Who the Huff wants to catch it?" protested Mahoney.

"I don't."

"Well, I do, for one," said Hoyland. "By Jordan, if its aim had been two inches better, I'd be ready for the Converter."

"Can't either one of you two speak three words without swearing?" the third man disapproved. "What if the Captain could hear you?" He touched his forehead reverently as he mentioned the Captain.

"Oh, for Jordan's sake," snapped Hoyland, "don't be so stuffy, Mort Tyler. You're not a scientist yet. I reckon I'm as devout as you are; there's no grave sin in occasionally giving vent to your feelings. Even the scientists do it. I've heard 'em."

Tyler opened his mouth as if to expostulate, then apparently thought better of it. Mahoney touched Hoyland on the arm. "Look, Hugh," he pleaded, "let's get out of here. We've never been this high before. I'm jumpy; I want to get back down to where I can feel some weight on my feet."

Hoyland looked longingly toward the hatch through which his assailant had disappeared while his hand rested on the grip of his knife, then be turned to Mahoney. "OK, kid," he agreed, "It's along trip down anyhow."

He turned and slithered back toward the hatch, whereby they had reached the level where they now were, the other two following him. Disregarding the ladder by which they had mounted, he stepped off into the opening and floated slowly down to the deck fifteen feet below, Tyler and Mahoney close behind him. Another hatch, staggered a few feet from the first, gave access to a still lower deck. Down, down, down, and still farther down they dropped, tens and dozens of decks, each silent, dimly lighted, mysterious. Each time they fell a little faster, landed a little harder. Mahoney protested at last, "Let's walk the rest of the way, Hugh. That last jump hurt my feet."

"All right. But it will take longer. How far have we got to go? Anybody keep count?"

"We've got about seventy decks to go to reach farm country," answered Tyler.

"How d'you know?" demanded Mahoney suspiciously.

"I counted them, stupid. And as we came down I took one away for each deck."

"You did not. Nobody but a scientist can do numbering like that. Just because you're learning to read and write you think you know everything."

Hoyland cut in before it could develop into a quarrel. "Shut up, Alan. Maybe he can do it. He's clever about such things. Anyhow, it feels like about seventy decks—I'm heavy enough."

"Maybe he'd like to count the blades on my knife."

"Stow it, I said. Dueling is forbidden outside the village. That is the Rule." They proceeded in silence, running lightly down the stairways until increasing weight on each succeeding level forced them to a more pedestrian pace. Presently they broke through into a level that was quite brilliantly lighted and more than twice as deep between decks as the ones above it. The air was moist and warm; vegetation obscured the view.

"Well, down at last," said Hugh. "I don't recognize this farm; we must have come down by a different line than we went up."

"There's a farmer," said Tyler. He put his little fingers to his lips and whistled, then called, "Hey! Shipmate! Where are we?"

The peasant looked them over slowly, then directed them in reluctant monosyllables to the main passageway which would lead them back to their own village.

A brisk walk of a mile and a half down a wide tunnel moderately crowded with traffic: travelers, porters, an occasional pushcart, a dignified scientist swinging in a litter borne by four husky orderlies and preceded by his master-at-arms to clear the common crew out of the way. A mile and a half of this brought them to the common of their own village, a spacious compartment three decks high and perhaps ten times as wide. They split up and went their own ways, Hugh to his quarters in the barracks of the cadets, young bachelors who do not live with their parents. He washed himself and went thence to the compartments of his uncle, for whom he worked for his meals. His aunt glanced up as he came in, but said nothing, as became a woman.

His uncle said, "Hello, Hugh. Been exploring again?"

"Good eating, Uncle. Yes."

His uncle, a stolid, sensible man, looked tolerantly amused. "Where did you go and what did you find?"

Hugh's aunt had slipped silently out of the compartment, and now returned with his supper which she placed before him. He fell to; it did not occur to him to thank her. He munched a bite before replying.

"Up. We climbed almost to the level-of-no-weight. A mutie tried to crack my skull."

His uncle chuckled. "You'll find your death In those passageways, lad. Better you should pay more attention to my business against the day when I die and get out of your way."

Hugh looked stubborn. "Don't you have any curiosity, Uncle?"

"Me? Oh, I was prying enough when I was a lad. I followed the main passage all the way around and back to the village. Right through the Dark Sector I went, with muties tagging my heels. See that scar?"

Hugh glanced at it perfunctorily. He had seen it many times before and heard the story repeated to boredom. Once around the Ship, pfft! He wanted to go everywhere, see everything, and find out the why of things. Those upper levels now: if men were not intended to climb that high, why had Jordan created them?

But he kept his own counsel and went on with his meal. His uncle changed the subject. "I've occasion to visit the Witness. John Black claims I owe him three swine. Want to come along?"

"Why, no, I guess not—Wait! I believe I will."

"Hurry up, then."

They stopped at the cadets' barracks, Hugh claiming an errand. The Witness lived in a small, smelly compartment directly across the Common from the barracks, where he would be readily accessible to any who had need of his talents. They found him leaning in his doorway, picking his teeth with a fingernail. His apprentice, a pimply-faced adolescent with an intent nearsighted expression, squatted behind him.

"Good eating." said Hugh's uncle.

"Good eating to you, Edard Hoyland. D'you come on business, or to keep an old man company?"

"Both," Hugh's uncle returned diplomatically, then explained his errand.

"So," said the Witness. "Well, the contract's clear enough. Black John delivered ten bushels of oats, Expecting his pay in a pair of shoats; Ed brought his sow to breed for pig; John gets his pay when the pigs grow big.

"How big are the pigs now, Edard Hoyland?"

"Big enough," acknowledged Hugh's uncle, "but Black John claims three instead of two."

"Tell him to go soak his head. The Witness has spoken."

He laughed in a thin, high cackle.

The two gossiped for a few minutes, Edard Hoyland digging into his recent experiences to satisfy the old man's insatiable liking for details. Hugh kept decently silent while the older men talked. But when his uncle turned to go he spoke up. "I'll stay awhile, Uncle."

"Eh? Suit yourself. Good eating, Witness."

"Good eating, Edard Hoyland."

"I've brought you a present, Witness," said Hugh, when his uncle had passed out of hearing.

"Let me see it."

Hugh produced a package of tobacco which he had picked up from his locker at the barracks. The Witness accepted it without acknowledgment, then tossed it to his apprentice, who took charge of it.

"Come inside," invited the Witness, then directed his speech to his apprentice. "Here, you, fetch the cadet a chair."

"Now, lad," he added as they sat themselves down, "tell me what you have been doing with yourself."

Hugh told him, and was required to repeat In detail all the incidents of his more recent explorations, the Witness complaining the meanwhile over his inability to remember exactly everything he saw.

"You youngsters have no capacity," he pronounced. "No capacity. Even that lout--" he jerked his head toward the apprentice, "he has none, though he's a dozen times better than you. Would you believe it, he can't soak up a thousand lines a day, yet he expects to sit in my seat when I am gone. Why, when I was apprenticed, I used to sing myself to sleep on a mere thousand lines. Leaky vessels—that's what you are."

Hugh did not dispute the charge, but waited for the old man to go on, which he did in his own time.

"You had a question to put to me, lad?"

"In a way, Witness."

"Well? Out with it. Don't chew your tongue."

"Did you ever climb all the way up to no-weight?"

"Me? Of course not. I was a Witness, learning my calling. I had the lines of all the Witnesses before me to learn, and no time for boyish amusements."

"I had hoped you could tell me what I would find there."

"Well, now, that's another matter. I've never climbed, but I hold the memories of more climbers than you will ever see. I'm an old man. I knew your father's father, and his grandsire before that. What is it you want to know?"

"Well..." What was it be wanted to know? How could he ask a question that was no more than a gnawing ache in his breast? Still... "What is it all for, Witness? Why are there all those levels above us?"

"Eh? How's that? Jordan's name, son, I'm a Witness, not a scientist."

"Well ... I thought you must know. I'm sorry."

"But I do know. What you want is the Lines from the Beginning."

"I've heard them."

"Hear them again. All your answers are in there, if you've the wisdom to see them. Attend me. No, this is a chance for my apprentice to show off his learning. Here, you! The Lines from the Beginning—and mind your rhythm."

The apprentice wet his lips with his tongue and began:

"In the Beginning there was Jordan, thinking His lonely thoughts alone. In the Beginning there was darkness, formless, dead, and Man unknown. Out of the loneness came a longing, out of the longing came a vision, Out of the dream there came a planning, out of the plan there came decision: Jordan's hand was lifted and the Ship was born.

Mile after mile of snug compartments, tank by tank for the golden corn, Ladder and passage, door and locker, fit for the needs of the yet unborn. He looked on His work and found it pleasing, meet for a race that was yet to be. He thought of Man; Man came into being; checked his thought and searched for the key. Man untamed would shame his Maker, Man unruled would spoil the Plan; So Jordan made the Regulations, orders to each single man, Each to a task and each to a station, serving a purpose beyond their ken, Some to speak and some to listen; order came to the ranks of men. Crew He created to work at their stations, scientists to guide the Plan. Over them all He created the Captain, made him judge of the race of Man. Thus it was in the Golden Age!

Jordan is perfect, all below him lack perfection in their deeds.

Envy, Greed, and Pride of Spirit sought for minds to lodge their seeds. One there was who gave them lodging: accursed Huff, the first to sin! His evil counsel stirred rebellion, planted doubt where it had not been; Blood of martyrs stained the floor plates, Jordan's Captain made the Trip. Darkness swallowed up--"

The old man gave the boy the back of his hand, sharp across the mouth. "Try again!"

"From the beginning?"

"No! From where you missed."

The boy hesitated, then caught his stride: "Darkness swallowed ways of virtue, Sin prevailed through out the Ship . ."

The boy's voice droned on, stanza after stanza, reciting at great length but with little sharpness of detail the dim, old story of sin, rebellion, and the time of darkness. How wisdom prevailed at last and the bodies of the rebel leaders were fed to the Converter. How some of the rebels escaped making the Trip and lived to father the muties. How a new Captain was chosen, after prayer and sacrifice. Hugh stirred uneasily, shuffling his feet. No doubt the answers to his questions were there, since these were the Sacred Lines, but he had not the wit to understand them. Why? What was it all about? Was there really nothing more to life than eating and sleeping and finally the long Trip? Didn't Jordan intend for him to understand? Then why this ache in his breast? This hunger that persisted in spite of good eating?

While he was breaking his fast after sleep an orderly came to the door of his uncle's compartments. "The scientist requires the presence of Hugh Hoyland," be recited glibly.

Hugh knew that the scientist referred to was lieutenant Nelson, in charge of the spiritual and physical welfare of the Ship's sector which included Hugh's flative vilage. He bolted the last of his breakfast and hurried after the messenger.

"Cadet Hoyland!" he was announced. The scientist locked up from his own meal and said:

"Oh, yes. Come in, my boy. Sit down. Have you eaten?"

Hugh acknowjedged that he had, but his eyes rested with interest on the fancy fruit In front of his superior. Nelson followed his glance. "Try some of these figs. They're a new mutation; I had them brought all the way from the far side. Go ahead—a man your age always has somewhere to stow a few more bites."

Hugh accepted with much selfconsciousness. Never before had he eaten in the presence of a scientist. The elder leaned back in his chair, wiped his fingers on his shirt, arranged his beard, and started in.

"I haven't seen you lately, son. Tell me what you have been doing with yourself." Before Hugh could reply he went on: "No, don't tell me; I will tell you. For one thing you have been exploring, climbing, without too much respect for the forbidden areas. Is it not so?" He held the young man's eye. Hugh fumbled for a reply.

But he was let off again. "Never mind. I know, and you know that I know. I am not too displeased. But it has brought it forcibly to my attention that it is time that you decided what you are to do with your life. Have you any plans?"

"Well, no definite ones, sir."

"How about that girl, Edris Baxter? D'you intend to marry her?"

"Why, uh—I don't know, sir. I guess I want to, and her father is willing, I think. Only..."

"Only what?"

"Well, he wants me to apprentice to his farm. I suppose it's a good idea. His farm together with my uncle's business would make a good property."

"But you're not sure?"

"Well, I don't know."

"Correct. You're not for that. I have other plans. Tell me, have you ever wondered why I taught you to read and write? Of course, you have. But you've kept your own counsel. That is good.

"Now attend me. I've watched you since you were a small child. You have more imagination than the common run, more curiosity, more go. And you are a born leader. You were different even as a baby. Your head was too large, for one thing, and there were some who voted at your birth inspection to put you at once into the Converter. But I held them off. I wanted to see how you would turn out.

"A peasant life is not for the likes of you. You are to be a scientist."

The old man paused and studied his face. Hugh was confused, speechless. Nelson went on, "Oh, yes. Yes, indeed. For a man of your temperament, there are only two things to do with him: Make him one of the custodians, or send him to the Converter."

"Do you mean, sir, that I have nothing to say about it?"

"If you want to put it that bluntly, yes. To leave the bright ones among the ranks of the Crew is to breed heresy. We can't have that. We had it once and it almost destroyed tbe human race. You have marked yourself out by your exceptional ability; you must now be instructed in right thinking, be initiated into the mysteries, in order that you may be a conserving force rather than a focus of infection and a source of trouble." The orderly reappeared loaded down with bundles which he dumped on the deck. Hugh glanced at them, then burst out, "Why, those are my things!"

"Certainly," acknowledged Nelson. "I sent for them. You're to sleep here henceforth. I'll see you later and start you on your studies, unless you have something more on your mind?"

"Why, no, sir. I guess not. I must admit I am a little confused. I suppose ... I suppose this means you don't want me to marry?"

"Oh, that," Nelson answered indifferently. "Take her if you like; her father can't protest now. But let me warn you, you'll grow tired of her."

Hugh Hoyland devoured the ancient books that his mentor permitted him to read, and felt no desire for many, many sleeps to go climbing, or even to stir out of Nelson's cabin. More than once he felt that he was on the track of the secret—a secret as yet undefined, even as a question—but again he would find himself more confused than ever. It was evidently harder to reach the wisdom of scientisthood than he had thought.

Once, while he was worrying away at the curious twisted characters of the ancients and trying to puzzle out their odd rhetoric and unfamiliar terms, Nelson came into the little compartment that had been set aside for him, and, laying a fatherly hand on his shoulder, asked, "How goes it, boy?"

"Why, well enough, sir, I suppose," he answered, laying the book aside. "Some of it is not quite clear to me—not clear at all, to tell the truth."

"That is to be expected," the old man said equably. "I've let you struggle along by yourself at first in order that you may see the traps that native wit alone will fall into. Many of these things are not to be understood without instruction. What have you there?" He picked up the book and glanced at it. It was inscribed Basic Modern Physics. "So? This is one of the most valuable of the sacred writings, yet the uninitiate could not possibly make good use of it without help. The first thing that you must understand, my boy, is that our forefathers, for all their spiritual perfection, did not look at things in the fashion in which we do.

"They were incurable romantics, rather than rationalists, as we are, and the truths which they handed down to us, though strictly true, were frequently clothed in allegorical language. For example, have you come to the Law of Gravitation?"

"I read about it."

"Did you understand it? No, I can see that you didn't."

"Well," said Hugh defensively, "it didn't seem to mean anything. It just sounded silly, if you will pardon me, sir."

"That illustrates my point. You were thinking of it in literal terms, like the laws governing electrical devices found elsewhere in this same book. 'Two bodies attract each other directly as the product of their masses and inversely as the square of their distance.' It sounds like a rule for simple physical facts, does it not? Yet it is nothing of the sort; it was the poetical way the old ones bad of expressing the rule of propinquity which governs the emotion of love. The bodies referred to are human bodies, mass is their capacity for love. Young people have a greater capacity for love than the elderly; when they are thrown together, they fall in love, yet when they are separated they soon get over it. 'Out of sight, out of mind.' It's as simple as that. But you were seeking some deep meaning for it."

Hugh grinned. "I never thought of looking at it that way. I can see that I am going to need a lot of help."

"Is there anything else bothering you just now?"

"Well, yes, lots of things, though I probably can't remember them offhand. I mind one thing: Tell me, Father, can muties be considered as being people?"

"I can see you have been listening to idle talk. The answer to that is both yes and no. It is true that the niuties originally descended from people but they are no longer part of the Crew; they cannot now be considered as members of the human race, for they have flouted Jordan's Law.

"This is a broad subject," he went on, settling down to it. "There is even some question as to the original meaning of the word 'mutie.' Certainly they number among their ancestors the mutineers who escaped death at the time of the rebellion. But they also have in their blood the blood of many of the mutants who were born during the dark age. You understand, of course, that during that period our present wise rule of inspecting each infant for the mark of sin and returning to the Converter any who are found to be mutations was not in force. There are strange and horrible things crawling through the dark passageways and lurking in the deserted levels."

Hugh thought about it for a while, then asked, "Why is it that mutations still show up among us, the people?"

"That is simple. The seed of sin is still in us. From time to time it still shows up, incarnate. In destroying those monsters we help to cleanse the stock and thereby bring closer the culmination of Jordan's Plan, the end of the Trip at our heavenly home, Far Centaurus."

Hoyland's brow wrinkled again. "That is another thing that I don't understand. Many of these ancient writings speak of the Trip as if it were an actual moving, a going somewhere, as if the Ship itself were no more than a pushcart. How can that be?"

Nelson chuckled. "How can it, indeed? How can that move which is the background against which all else moves? The answer, of course, is plain. You have again mistaken allegorical language for the ordinary usage of everyday speech. Of course, the Ship is solid, immovable, in a physical sense. How can the whole universe move? Yet, it does move, in a spiritual sense. With every righteous act we move closer to the sublime destination of Jordan's Plan."

Hugh nodded. "I think I see."

"Of course, it is conceivable that Jordan could have fashioned the world in some other shape than the Ship, had it suited His purpose. When man was younger and more poetical, holy men vied with one another in inventing fanciful worlds which Jordan might have created. One school invented an entire mythology of a topsy-turvy world of endless reaches of space, empty save for pinpoints of light and bodiless mythological monsters. They called it the heavenly world, or heaven, as if to contrast it with the solid reality of the Ship. They seemed never to tire of speculating about it, inventing details for it, and of outlining pictures of what they conceived it to be like. I suppose they did it to the greater glory of Jordan, and who is to say that He found their dreams unacceptable? But in this modern age we have more serious work to do."

Hugh was not interested In astronomy. Even his untutored mind had been able to see in its wild extravagance an intention not literal. He turned to problems nearer at hand.

"Since the muties are the seed of sin, why do we make no effort to wipe them out? Would not that be an act that would speed the Plan?"

The old man considered a while before replying. "That is a fair question and deserves a straight answer. Since you are to be a scientist you will need to know the answer. Look at it this way. There is a definite limit to the number of Crew the Ship can support. If our numbers increase without limit, there comes a time when there will not be good eating for all of us. Is it not better that some should die in brushes with the muties than that we should grow in numbers until we killed each other for food?.

"The ways of Jordan are inscrutable. Even the muties have a part in His Plan."

It seemed reasonable, but Hugh was not sure.

But when Hugh was transferred to active work as a junior scientist in the operation of the Ship's functions, he found there were other opinions. As was customary, he put in a period serving the Converter. The work was not onerous; he had principally to check in the waste materials brought in by porters from each of the villages, keep books of their contributions, and make sure that no redemable metal was introduced into the first-stage hopper. But it brought him into contact with Bill Ertz, the Assistant Chief Engineer, a man not much older than himself.

He discussed with him the things he had learned from Nelson, and was shocked at Ertz's attitude.

"Get this through your head, kid," Ertz told him. "This is a practical job for practical men. Forget all that romantic nonsense. Jordan's Plan! That stuff is all right to keep the peasants quiet and in their place, but don't fall for it yourself. There is no Plan, other than our own plans for looking out for ourselves. The Ship has to have light and heat and power for cooking and irrigation. The Crew can't get along without those things and that makes us boss of the Crew.

"As for this softheaded tolerance toward the muties, you're going to see some changes made! Keep your mouth shut and string along with us."

It impressed on him that he was expected to maintain a primary loyalty to the bloc of younger men among the scientists. They were a well-knit organization within an organization and were made up of practical, hardheaded men who were working toward improvement of conditions throughout the Ship, as they saw them. They were well knit because an apprentice who failed to see things their way did not last long. Either he failed to measure up and soon found himself back in the ranks of the peasants, or, as was more likely, suffered some mishap and wound up in the Converter.

And Hoyland began to see that they were right.

They were realists. The Ship was the Ship. It was a fact, requiring no explanation. As for Jordan, who had ever seen Him, spoken to Him? What was this nebulous Plan of His? The object of life was living. A man was born, lived his life, and then went to the Converter. It was as simple as that, no mystery to it, no sublime Trip and no Centaurus. These romantic stories were simply hangovers from the childhood of the race before men gained the understanding and the courage to look facts in the face.

He ceased bothering his head about astronomy and mystical physics and all the other mass of mythology he bad been taught to revere. He was still amused, more or less, by the Lines from the Beginning and by all the old stories about Earth (what the Huff was 'Earth,' anyhow?) but now realized that such things could be taken seriously only by children and dullards.

Besides, there was work to do. The younger men, while still maintaining the nominal authority of their elders, had plans of their own, the first of which was a systematic extermination of the muties. Beyond that, their intentions were still fluid, but they contemplated making full use of the resources of the Ship, including the upper levels. The young men were able to move ahead with their plans without an open breach with their elders because the older scientists simply did not bother to any great extent with the routine of the Ship. The present Captain had grown so fat that he rarely stirred from his cabin; his aide, one of the young men's bloc, attended to affairs for him.

Hoyland never laid eyes on the Chief Engineer save once, when he showed up for the purely religious ceremony of manning landing stations.

The project of cleaning out the muties required reconnaissance of the upper levels to be done systematically. It was in carrying out such scouting that Hugh Hoyland was again ambushed by a mutie.

This mutie was more accurate with his slingshot. Hoyland's companions, forced to retreat by superior numbers, left him for dead.

Joe-Jim Gregory was playing himself a game of checkers. Time was when they had played cards together, but Joe, the head on the right, had suspected Jim, the lefthand member of the team, of cheating. They had quarreled about it, then given it up, for they both learned early in their joint career that two heads on one pair of shoulders must necessarily find ways of getting along together.

Checkers was better. They could both see the board, and disagreement was impossible.

A loud metallic knocking at the door of the oompartment interrupted the game. Joe-Jim unsheathed his throwing knife and cradled it, ready for quick use. "Come in!" roared Jim.

The door opened, the one who had knocked backed into the room —the only safe way, as everyone knew, to enter Joe-Jim's presence. The newcomer was squat and rugged and powerful, not over four feet in height. The relaxed body of a man hung across one shoulder and was steadied by a hand.

Joe-Jim returned the knife to its sheath. "Put it down, Bobo," Jim ordered.

"And close the door," added Joe. "Now what have we got here?"

It was a young man, apparently dead, though no wound appeared on him. Bobo patted a thigh. "Eat 'im?" he said hopefully. Saliva spilled out of his still-opened lips.

"Maybe," temporized Jim. "Did you kill him?"

Bobo shook his undersized head.

"Good Bobo," Joe approved. "Where did you hit him?"

"Bobo hit him there." The microcephalic shoved a broad thumb against the supine figure in the area between the umbilicus and the breasthone.

"Good shot," Joe approved. "We couldn't have done better with a knife."

"Bobo good shot," the dwarf agreed blandly. "Want see?" He twitched his slingshot invitingly.

"Shut up," answered Joe, not unkindly. "No, we don't want to see;

we want to make him talk."

"Bobo fix," the short one agreed, and started with simple brutality to carry out his purpose.

Joe-Jim slapped him away, and applied other methods, painful but considerably less drastic than those of the dwarf. The younger man jerked and opened his eyes.

"Eat 'im?" repeated Bobo.

"No," said Joe. "When did you eat last?" inquired Jim.

Bobo shook his head and rubbed his stomach, indicating with graphic pantomime that it had been a long time, too long. Joe-Jim went over to a locker, opened it, and withdrew a haunch of meat. He held it up. Jim smelled it and Joe drew his head away in nose-wrinkling disgust Joe-Jim threw, it to Bobo, who snatched it happily out of the air. "Now, get out," ordered Jim.

Bobo trotted away, closing the door behind him. JoeJim turned to the captive and prodded him with his foot. "Speak up," said Jim. "Who the Huff are you?"

The young man shivered, put a hand to his head, then seemed suddenly to bring his surroundings into focus, for be scrambled to his feet, moving awkwardly. against the low weight conditions of this level, and reached for his knife.

It was not at his belt.

Joe-Jim had his own out and brandished it. "Be good and you won't get hurt. What do they call you?" The young man wet his lips, and his eyes hurried about the room. "Speak up," said Joe.

"Why bother with him?" inquired Jim. "I'd say he was only good for meat. Better call Bobo back."

"No hurry about that," Joe answered. "I want to talk to him. What's your name?"

The prisoner looked again at the kife and muttered, "Hugh Hoyland."

"That doesn't tell us much," Jim commented. "What d'you do? What village do you come from? And what were you doing in mutie country?" But this time Hoyland was sullen. Even the prick of the knife against his ribs caused him only to bite his lips. "Shucks," said Joe, "he's only a stupid peasant. Let's drop it."

"Shall we finish him off?"

"No. Not now. Shut him up."

Joe-Jim opened the door of a small side compartment, and urged Hugh in with the knife. He then closed and fastened the door and went back to his game. "Your move, Jim."

The compartment in which Hugh was locked was dark. He soon satisfied himself by touch that the smooth steel walls were entirely featureless save for the solid, securely fastened door. Presently he lay down on the deck and gave himself up to fruitless thinking.

He had plenty of time to think, time to fall asleep and awaken more than once. And time to grow very hungry and very, very thirsty.

When Joe-Jim next took sufficient interest in his prisoner to open the door of the cell, Hoyland was not immediately in evidence. He had planned many times what he would do when the door opened and his chance came, but when the event arrived, he was too weak, semi-comatose. Joe-Jim dragged him out. , The disturbance roused him to partial comprehension. He sat up and stared around him. "Ready to talk?" asked Jim. Hoyland opened his mouth but no words came out.

"Can't you see he's too dry to talk?" Joe told his twin. Then to Hugh: "Will you talk if we give you some water?"

Hoyland looked puzzled, then nodded vigorously.

Joe-Jim returned in a moment with a mug of water. Hugh drank greedily, paused, and seemed about to faint.

Joe-Jim took the mug from him. "That's enough for now," said Joe. "Tell us about yourself."

Hugh did so. In detail, being prompted from time to time by questions from one of the twins, or a kick against his shin.

Hugh accepted a de facto condition of slavery with no particular resistance and no great disturbance of soul. The word 'slave' was not in his vocabulary, but the condition was a commonplace in everything he had ever known. There had always been those who gave orders and those who carried them out; he could imagine no other condition, no other type of social organization. It was a fact of life.

Though naturally he thought of escape.

Thinking about it was as far as he got. Joe-Jim guessed his thoughts and brought the matter out into the open. Joe told him, "Don't go getting ideas, youngster. Without a knife you wouldn't get three levels away in this part of the Ship. If you managed to steal a knife from me, you still wouldn't make it down to high-weight. Besides, there's Bobo."

Hugh waited a moment, as was fitting, then said, "Bobo?"

Jim grinned and replied, "We told Bobo that you were his to butcher, if he liked, if you ever stuck your head out of our compartments without us. Now he sleeps outside the door and spends a lot of his time there."

"It was only fair," put in Joe. "He was disappointed when we decided to keep you."

"Say," suggested Jim, turning his bead toward his brother's, "how about some fun?" He turned back to Hugh. "Can you throw a knife?"

"Of course," Hugh answered.

"Let's see you. Here." Joe-Jim handed him their own knife. Hugh accepted it, jiggling it in his band to try its balance. "Try my mark."

Joe-Jim had a plastic target. set up at the far end of the room from his favorite chair, on which he was wont to practice his own skill. Hugh eyed it, and, with an arm motion too fast to follow, let fly. He used the economical underhand stroke, thumb on the blade, fingers together. The blade shivered in the target, well centered in the chewed-up area which marked Joe-Jim's best efforts. "Good boy!" Joe approved. "What do you have in mind, Jim?"

"Let's give him the knife and see how far he gets."

"No," said Joe, "I don't agree."

"Why not?"

"If Bobo wins, we're out one servant. If Hugh wins, we lose both Bobo and him. It's wasteful."

"Oh, well, if you insist."

"I do. Hugh, fetch the knife."

Hugh did so. It had not occurred to him to turn the knife against Joe-Jim. The master was the master. For servant to attack master was not simply repugnant to good morals, it was an idea so wild that it did not occur to him at all.

Hugh had expected that Joe-Jim would be impressed by his learning as a scientist. It did not work out that way. Joe-Jim, especially Jim, loved to argue. They sucked Hugh dry in short order and figuratively cast him aside. Hoyland felt humiliated. After all, was he not a scientist? Could he not read and write?

"Shut up," Jim told Hugh. "Reading is simple. I could do it before your father was born. D'you think you're the first scientist that has served me? Scientists--bah! A pack of ignoramuses!" In an attempt to reestablish his own intellectual conceit, Hugh expounded the theories of the younger scientists, the strictly matter-of-fact, hard-boiled realism which rejected all religious interpretation and took the Ship as it was. He confidently expected Joe-Jim to approve such a point of view; it seemed to fit their temperaments. They laughed in his face.

"Honest," Jim insisted, when be bad ceased snorting, "are you young punks so stupid as all that? Why you're worse than your elders."

"But you just got through saying," Hugh protested in hurt tones, "that all our accepted religious notions are so much bunk. That is just what my friends think. They want to junk all that old nonsense."

Joe started to speak; Jim cut in ahead of him. "Why bother with him, Joe? He's hopeless."

"No, he's not. I'm enjoying this. He's the first one I've talked with in I don't know how long who stood any chance at all of seeing the truth. Let us be—I want to see whether that's a head he has on his shoulders, or just a place to hang his ears."

"O.K.," Jim agreed, "but keep it quiet. I'm going to take a nap." The lefthand head closed its eyes, soon it was snoring. Joe and Hugh continued their discussion in whispers.

"The trouble with you youngsters," Joe said, "is that if you can't understand a thing right off, you think it can't be true. The trouble with your elders is, anything they didn't understand they reinterpreted to mean something else and then thought they understood it. None of you has tried believing clear words the way they were written and then tried to understand them on that basis. Oh, no, you're all too bloody smart for that! If you can't see it right off, it ain't so; it must mean something different."

"What do you mean?" Hugh asked suspiciously.

"Well, take the Trip, for instance. What does it mean to you?

"Well, to my mind, it doesn't mean anything. It's just a piece of nonsense to impress the peasants."

"And what is the accepted meaning?"

"Well, it's where you go when you die, or rather what you do. You make the Trip to Centaurus."

"And what is Centaurus?"

"It's—mind you, I'm just telling you the orthodox answers; I don't really believe this stuff—it's where you arrive when you've made the Trip, a place where everybody's happy and there's always good eating." Joe snorted. Jim broke the rhythm of his snoring, opened one eye, and settled back again with a grunt.

"That's just what I mean," Joe went on in a lower whisper. "You don't use your head. Did it over occur to you that the Trip was just what the old books said It was: the Ship and all the Crew actually going somewhere, moving?" Hoyland thought about it. "You don't mean for me to take you seriously. Physically, it's an impossibility. The Ship can't go anywhere. It already is everywhere. We can make a trip through it, but the Trip, that has to have a spiritual meaning, if it has any."

Joe called on Jordan to support him. "Now, listen," he said, "get this through that thick head of yours. Imagine a place a lot bigger than the Ship, a lot bigger, with the Ship inside it, moving. D'you get it?"

Hugh tried. He tried very hard. He shook his bead. "It doesn't make sense," he said. "There can't be anything bigger than the Ship. There wouldn't be any place for it to be."

"Oh, for Huff's sake! Listen. Outside the Ship, get that? Straight down beyond the level in every direction. Emptiness out there. Understand me?"

"But there isn't anything below the lowest level. That's why it's the lowest level."

"Look. If you took a knife and started digging a hole in the floor of the lowest level, where would it get you?"

"But you can't. It's too hard."

"But suppose you did and it made a hole. Where would that hole go? Imagine it."

Hugh shut his eyes and tried to imagine digging a hole in the lowest level. Digging as if it were soft, soft as cheese. He began to get some glimmering of a possibility, a possibility that was unsettling, soul-shaking. He was falling, falling into a hole that he had dug which had no levels under it. He opened his eyes very quickly. "That's awful!" he ejaculated. "I won't believe it."

Joe-Jim got up. "I'll make you believe it," he said grimly, "if I have to break your neck to do it." He strode over to the outer door and opened it. "Bobo!" he shouted.

"Bobo!"

Jim's head snapped erect. "Wassa matter? Wha's going on?"

"We're going to take Hugh to no-weight."

"What for?"

"To pound some sense into his silly head."

"Some other time."

"No, I want to do it now."

"All right, all right. No need to shake. I'm awake now anyhow."

Joe-Jim Gregory was almost as nearly unique in his—or their—mental ability as he was in his bodily construction. Under any circumstances he would have been a dominant personality; among the muties it was inevitable that he should bully them, order them about, and live on their services. Had he had the will-to-power, it is conceivable that he could have organized the muties to fight and overcome the Crew proper.

But he lacked that drive. He was by native temperament an intellectual, a bystander, an observer. He was interested in the 'how' and the 'why,' but his will to action was satisfied with comfort and convenience alone.

Had he been born two normal twins and among the Crew, it is likely that he would have drifted into scientisthood as the easiest and most satisfactory answer to the problem of living and as such would have entertained himself mildly with conversation and administration. As it was, he lacked mental companionship and had whiled away three generations reading and rereading books stolen for him by his stooges.

The two halves of his dual person had argued and discussed what they had read, and had almost inevitably arrived at a reasonably coherent theory of history and the physical world, except in one respect. The concept of fiction was entirely foreign to them; they treated the novels that had been provided for the Jordan expedition in exactly the same fashion that they did text and reference books.

This led to their one major difference of opinion. Jim regarded Allan Quartermain as the greatest man who had ever lived; Joe held out for John Henry.

They were both inordinately fond of poetry; they could recite page after page of Kipling, and were nearly as fond of Rhysling, the blind singer of the spaceways. Bobo backed in. Joe-Jim hooked a thumb toward Hugh. "Look," said Joe, "he's going out."

"Now?" said Bobo happily, and grinned, slavering.

"You and your stomach!" Joe answered, rapping Bobo's pate with his knuckles. "No, you don't eat him. You and him, blood brothers. Get it?"

"Not eat 'im?"

"No. Fight for him. He fights for you."

"O.K." The pinhead shrugged his shoulders at the inevitable. "Blood brothers. Bobo know."

"All right. Now we go up to the place-where-everybody-flies. You go ahead and make lookout."

They climbed in single file, the dwarf running ahead to spot the lie of the land, Hoyland behind him, Joe-Jim bringing up the rear, Joe with eyes to the front, Jim watching their rear, head turned over his shoulder.

Higher and higher they went, weight slipping imperceptibly from them with each successive deck. They emerged finally into a level beyond which there was no further progress, no opening above them. The deck curved gently, suggesting that the true shape of the space was a giant cylinder, but overhead a metallic expanse which exhibited a similar curvature obstructed the view and prevented one from seeing whether or not the deck in truth curved back on itself.

There were no proper bulkheads; great stanchions, so huge and squat as to give an impression of excessive, unnecessary strength, grew thickly about them, spacing deck and overhead evenly apart.

Weight was imperceptible. If one remained quietly in one place, the undetectable residuum of weight would bring the body in a gentle drift down to the 'floor,' but 'up' and 'down' were terms largely lacking in meaning. Hugh did not like it; it made him gulp, but Bobo seemed delighted by it and not unused to it. He moved through the air like an uncouth fish, banking off stanchion, floor plate, and overhead as suited his convenience.

Joe-Jim set a course parallel to the common axis of the inner and outer cylinders, following a passageway formed by the orderly spacing of the stanchions. There were handrails set along the passage, one of which he followed like a spider on its thread. He made remarkable speed, which Hugh floundered to maintain. In time, be caught the trick of the easy, effortless, overhand pull, the long coast against nothing but air resistance, and the occasional flick of the toes or the hand against the floor. But he was much too busy to tell how far they went before they stopped. Miles, he guessed it to be, but he did not know.

When they did stop, it was because the passage, had terminated. A solid bulkhead, stretching away to right and left, barred their way. Joe-Jim moved along it to the right, searching.

He found what he sought, a man-sized door, closed, its presence distinguishable only by a faint crack which marked its outline and a cursive geometrical design on its surface. Joe-Jim studied this and scratched his righthand head. The two heads whispered to each other. Joe-Jim raised his hand in an awkward gesture.

"No, no!" said Jim. Joe-Jim checked himself. "How's that?" Joe answered. They whispered together again, Joe nodded, and Joe-Jim again raised his hand.

He traced the design on the door without touching It, moving his forefinger through the air perhaps four inches from the surface of the door. The order of succession in which his finger moved over the lines of the design appeared simple but certainly not obvious.

Finished, he shoved a palm against the adjacent bulkhead, drifted back from the door, and waited.

A moment later there was a soft, almost inaudible insufflation; the door stirred and moved outward perhaps six inches, then stopped. Joe-Jim appeared puzzled. He ran his hands cautiously into the open crack and pulled. Nothing happened. He called to Bobo, "Open it."

Bobo looked the situation over, with a scowl on his forehead which wrinkled almost to his crown. He then placed his feet against the bulkhead, steadying himself by grasping the door with one hand. He took hold of the edge of the door with both hands, settled his feet firmly, bowed his body, and strained.

He held his breath, chest rigid, back bent, sweat breaking out from the effort. The great cords in his neck stood out, making of his head a misshapen pyramid. Hugh could hear the dwarf's joints crack. It was easy to believe that he would kill himself with the attempt, too stupid to give up.

But the door gave suddenly, with a plaint of binding metal. As the door, in swinging out, slipped from Bobo's fingers, the unexpectedly released tension in his legs shoved him heavily away from the bulkhead; he plunged down the passageway, floundering for a handhold. But he was back in a moment, drifting awkwardly through the air as he massaged a cramped calf.

Joe-Jim led the way inside, Hugh close behind him. "What is this place?" demanded Hugh, his curiosity overcoming his servant manners.

"The Main Control Room," said Joe.

Main Control Room! The most sacred and taboo place in the Ship, its very location a forgotten mystery. In the credo of the young men it was nonexistent. The older scientists varied in their attitude between fundamentalist acceptance and mystical belief. As enlightened as Hugh believed himself to be, the very words frightened him. The Control Room! Why, the very spirit of Jordan was said to reside there. He stopped.

Joe-Jim stopped and Joe looked around. "Come on," he said. "What's the matter?"

"Why, uh ... uh ..."

"Speak up."

"But ... but this place is haunted ... this is Jordan's..."

"Oh, for Jordan's sake!" protested Joe, with slow exasperation. "I thought you told me you young punks didn't take any stock in Jordan."

"Yes, but ... but this is..."

"Stow it. Come along, or I'll have Bobo drag you." He turned away. Hugh followed, reluctantly, as a man climbs a scaffold. They threaded through a passageway just wide enough for two to use the handrails abreast. The passage curved in a wide sweeping arc of full ninety degrees, then opened into the control room proper. Hugh peered past Joe-Jim's broad shoulders, fearful but curious.

He stared into a well-lighted room, huge, quite two hundred feet across. It was spherical, the interior of a great globe. The surface of the globe was featureless, frosted silver. In the geometrical center of the sphere, Hugh saw a group of apparatus about fifteen feet across. To his inexperienced eye, it was completely unintelligible; he could not have described it, but he saw that it floated steadily, with no apparent support.

Running from the end of the passage to the mass at the center of the globe was a tube of metal latticework, wide as the passage itself. It offered the only exit from the passage. Joe-Jim turned to Bobo, and ordered him to remain in the passageway, then entered the tube.

He pulled himself along it, hand over hand, the bars of the latticework making a ladder. Hugh followed him; they emerged into the mass of apparatus occupying the center of the sphere. Seen close up, the gear of the control station resolved itself into its individual details, but it still made no sense to him. He glanced away from it to the inner surface of the globe which surrounded them.

That was a mistake. The surface of the globe, being featureless silvery white, had nothing to lend it perspective. It might have been a hundred feet away, or a thousand, or, many miles. He had never experienced an unbroken height greater than that between two decks, nor an open space larger than the village common. He was panic-stricken, scared out of his wits, the more so in that he did not know what it was he feared. But the ghost of long-forgotten jungle ancestors possessed him and chilled his stomach with the basic primitive fear of falling.

He clutched at the control gear, clutched at Joe-Jim.

Joe-Jim let him have one, hard across the mouth with the flat of his hand. "What's the matter with you?" growled Jim.

"I don't know," Hugh presently managed to get out. "I don't know, but I don't like this place. Let's get out of here!"

Jim lifted his eyebrows to Joe, looked disgusted, and said, "We might as well. That weak-bellied baby will never understand anything you tell him."

"Oh, he'll be all right," Joe replied, dismissing the matter. "Hugh, climb into one of the chairs; there, that one."

In the meantime, Hugh's eyes had fallen on the tube whereby they had reached the control center and had followed it back by eye to the passage door. The sphere suddenly shrank to its proper focus and the worst of his panic was over. He complied with the order, still trembling, but able to obey. The control center consisted of a rigid framework, made up of chairs, or frames, to receive the bodies of the operators, and consolidated instrument and report panels, mounted in such a fashion as to be almost in the laps of the operators, where they were readily visible but did not obstruct the view. The chairs had high supporting sides, or arms, and mounted in these aims were the controls appropriate to each officer on watch, but Hugh was not yet aware of that. He slid under the instrument panel into his seat and settled back, glad of its enfolding stability. It fitted him in a semi-reclining position, footrest to head support.

But something was happening on the panel in front of Joe-Jim; he caught it out of the corner of his eye and turned to look. Bright red letters glowed near the top of the board: 2ND ASTROGATOR POSTED. What was a second astrogator? He didn't know; then he noticed that the extreme top of his own board was labeled 2ND ASTROGATOR and concluded it must be himself, or rather, the man who should be sitting there. He felt momentarily uncomfortable that the proper second astrogator might come in and find him usurping his post, but he put it out of his mind; it seemed unlikely.

But what was a second astrogator, anyhow?

The letters faded from Joe-Jim's board, a red dot appeared on the lefthand edge and remained. Joe-Jim did something with his right hand; his board reported: ACCELERATION: ZERO, then MAIN DRIVE. The last two words blinked several times, then were replaced with NO REPORT. These words faded out, and a bright green dot appeared near the righthand edge.

"Get ready," said Joe, looking toward Hugh; "the light is going out."

"You're not going to turn out the light?" protested Hugh.

"No, you are. Take a look by your left hand. See those little white lights?"

Hugh did so, and found, shining up through the surface the chair arm, little beads of light arrayed to form two squares, one above the other. "Each one controls the light of one quadrant," explained Joe. "Cover them with your hand to turn Out the light. Go ahead, do it."

Reluctantly, but fascinated, Hugh did as he was directed. He placed a palm over the tiny lights, and waited. The silvery sphere turned to dull lead, faded still more, leaving them in darkness complete save for the silent glow from the instrument panels. Hugh felt nervous but exhilarated. He withdrew his palm; the sphere remained dark, the eight little lights had turned blue.

"Now," said Joe, "I'm going to show you the Stars!"

In the darkness, Joe-Jim's right hand slid over another pattern of eight lights.

Creation.

Faithfully reproduced, shining as steady and serene from the walls of the stellarium as did their originals from the black deeps of space, the mirrored stars looked down on him. Light after jeweled light, scattered in careless bountiful splendor across the simulacrum sky, the countless suns lay before him; before him, over him, under him, behind him, in every direction from him. He hung alone in the center of the stellar universe.

"Oooooh!" It was an involuntary sound, caused by his indrawn breath. He clutched the chair arms hard enough to break fingernails, but he was not aware of it. Nor was he afraid at the moment; there was room in his being for but one emotion. Life within the Ship, alternately harsh and workaday, had placed no strain on his innate capacity to experience beauty; for the first time in his life he knew the intolerable ecstasy of beauty unalloyed. It shook him and hurt him, like the first trembling intensity of sex.

It was some time before Hugh sufficiently recovered from the shock and the ensuing intense preoccupation to be able to notice Jim's sardonic laugh, Joe's dry chuckle. "Had enough?" inquired Joe. Without waiting for a reply, Joe-Jim turned the lights back on, using the duplicate controls mounted in the left arm of his chair.

Hugh sighed. His chest ached and his heart pounded. He realized suddenly that he had been holding his breath the entire time that the lights had been turned out. "Well, smart boy," asked Jim, "are you convinced?"

Hugh sighed again, not knowing why. With the lights back on, he felt safe and snug again, but was possessed of a deep sense of personal loss. He knew, subconsciously, that, having seen the stars, he would never be happy again. The dull ache in his breast, the vague inchoate yearning for his lost heritage of open sky and stars, was never to be silenced, even though he was yet too ignorant to be aware of it at the top of his mind. "What was it?" he asked in a hushed voice.

"That's," answered Joe. "That's the world. That's the universe. That's what we've been trying to tell you about."

Hugh tried furiously to force his inexperienced mind to comprehend. "That's what you mean by Outside?" he asked. "All those beautiful little lights?"

"Sure," said Joe, "only they aren't little. They're a long way off, you see; maybe thousands of miles."

"What?"

"Sure, sure," Joe persisted. "There's lots of room out there. Space. It's big. Why, some of those stars may be as big as the Ship, maybe bigger."

Hugh's face was a pitiful study in overstrained imagination. "Bigger than the Ship?" he repeated. "But ... but ..."

Jim tossed his head impatiently and said to Joe, "Wha'd' I tell you? You're wasting our time on this lunk. He hasn't got the capacity."

"Easy, Jim," Joe answered mildly; "don't expect him to run before he can crawl. It took us a long time. I seem to remember that you were a little slow to believe your own eyes." "That's a lie," said Jim nastily. "You were the one that had to be convinced."

"O.K., O.K.," Joe conceded, "let it ride. But it was a long time before we both had it all straight."

Hoyland paid little attention to the exchange between the two brothers. It was a usual thing; his attention was centered on matters decidedly not usual. "Joe," he asked, "what became of the Ship while we were looking at the Stars? Did we stare right through it?"

"Not exactly," Joe told him. "You weren't looking directly at the stars at all, but at a kind of picture of them. It's like... Well, they do it with mirrors, sort of. I've got a book that tells about it."

"But you can see 'em directly," volunteered Jim, his momentary pique forgotten. "There's a compartment forward of here..."

"Oh, yes," put in Joe, "it slipped my mind. The Captain's veranda. He's got one all of glass; you can look right out."

"The Captain's veranda? But--"

"Not this Captain. He's never been near the place. That's the name over the door of the compartment."

"What's a 'veranda'?"

"Blessed if I know. It's just the name of the place."

"Will you take me up there?"

Joe appeared to be about to agree, but Jim cut in. "Some other time. I want to get back; I'm hungry."

They passed back through the tube, woke up Bobo, and made the long trip back down.

It was long before Hugh could persuade Joe-Jim to take him exploring again, but the time intervening was well spent. Joe-Jim turned him loose on the largest collection of books that Hugh had ever seen. Some of them were copies of books Hugh had seen before, but even these he read with new meanings. He read incessantly, his mind soaking up new ideas, stumbling over them, struggling, striving to grasp them. He begrudged sleep, he forgot to eat until his breath grew sour and compelling pain in his midriff forced him to pay attention to his body. Hunger satisfied, he would be back at it until his head ached and his eyes refused to focus.

Joe-Jim's demands for service were few. Although Hugh was never off duty, Joe-Jim did not mind his reading as long as he was within earshot and ready to jump when called. Playing checkers with one of the pair when the other did not care to play was the service which used up the most time, and even this was not a total loss, for, if the player were Joe, he could almost always be diverted into a discussion of the Ship, its history, its machinery as equpment, the sort of people who had built it and then manned it and their history, back on Earth, Earth the incredible, that strange place where people had lived on the outside instead of the inside.

Hugh wondered why they did not fall off.

He took the matter up with Joe and at last gained some notion of gravitation. He never really understood it emotionally; it was too wildly improbable; but as an intellectual concept he was able to accept it and use it, much later, in his first vague glimmerings of the science of ballistics: and the art of astrogation and ship maneuvering. And it led in time to his wondering about weight in the Ship, a matter that had never bothered him before. The lower the level the greater the weight had been to his mind simply the order of nature, and nothing to wonder at. He was familiar with centrifugal force as it applied to slingshots. To apply it also to the whole Ship, to think of the Ship as spinning like a slingshot and thereby causing weight, was too much of a hurdle; he never really believed it.

Joe-Jim took him back once more to the Control Room and showed him what little Joe-Jim knew about the manipulation of the controls and the reading of the astrogation instruments.

The long-forgotten engineer-designers employed by the Jordan Foundation had been instructed to design a ship that would not—could not—wear out, even though the Trip were protracted beyond the expected sixty years. They builded better than they knew. In planning the main drive engines and the auxiliary machinery, largely automatic, which would make the Ship habitable, and in designing the controls necessary to handle all machinery not entirely automatic, the very idea of moving parts had been rejected. The engines and auxiliary equipment worked on a level below mechanical motion, on a level of pure force, as electrical transformers do. Instead of push buttons, levers, cams, and shafts, the controls and the machinery they served were planned in terms of balance between static fields, bias of electronic flow, circuits broken or closed by a hand placed over a light.

On this level of action, friction lost its meaning, wear and erosion took no toll. Had all hands been killed in the mutiny, the Ship would still have plunged on through space, still lighted, its air still fresh and moist, its engines ready and waiting. As it was, though elevators and conveyor belts fell into disrepair, disuse, and finally into the oblivion of forgotten function, the essential machinery of the Ship continued its automatic service to its ignorant human freight, or waited, quiet and ready, for someone bright enough to puzzle out its key.

Genius had gone into the building of the Ship. Far too huge to be assembled on Earth, it had been put together piece by piece in its own orbit out beyond the Moon. There it had swung for fifteen silent years while the problems presented by the decision to make its machinery foolproof and enduring had been formulated and solved. A whole new field of submolar action had been conceived in the process, struggled with, and conquered.

So, when Hugh placed an untutored, questing hand over the first of a row of lights marked ACCELERATION, POSITIVE, he got an immediate response, though not in terms of acceleration. A red light at the top of the chief pilot's board blinked rapidly and the annunciator panel glowed with a message: MAIN ENGINES: NOT MANNED.

"What does that mean?" he asked Joe-Jim.

"There's no telling," said Jim. "We've done the same thing in the main engine room," added Joe. "There, when you try it, it says 'Control Room Not Manned.'"

Hugh thought a moment. "What would happen," he persisted, "if all the control stations had somebody at 'em at once, and then I did that?"

"Can't say," said Joe. "Never been able to try it."

Hugh said nothing. A resolve which had been growing, formless, in his mind was now crystalizing into decision. He was busy with it for some time, weighing it, refining it, and looking for the right moment to bring it into the open.

He waited until he found Joe-Jim in a mellow mood, both of him, before broaching his idea. They were in the Captain's veranda at the time Hugh decided the moment was due. Joe-Jim rested gently in the Captain's easy chair, his belly full of food, and gazed out through the heavy glass of the view port at the serene stars. Hugh floated beside him. The spinning of the Ship caused the stars to cross the circle of the port in barely perceptible arcs.

Presently he said, "Joe-Jim ..."

"Eh? What's that, youngster?" It was Joe who had replied.

"It's pretty swell, isn't it?"

"What is?"

"All that. The stars." Hugh indicated the view through the port with a sweep of his arm, then caught at the chair to stop his own backspin.

"Yeah, it sure is. Makes you feel good." Surprisingly, it was Jim who offered this.

Hugh knew the time was right. He waited a moment, then said, "Why don't we finish the job?"

Two heads turned simultaneously, Joe leaning out a little to see past Jim. "What job?"

"The Trip. Why don't we start up the main drive and go on with it? Somewhere out there," be said hurriedly to finish before he was interrupted, "there are planets like Earth, or so the First Crew thought. Let's go find them."

Jim looked at him, then laughed. Joe shook his head.

"Kid," he said, "you don't know what you are talking about. You're as balmy as Bobo. "No," he went on, "that's all over and done with. Forget it."

"Why is it over and done with, Joe?"

"Well, because. It's too big a job. It takes a crew that understands what it's all about, trained to operate the Ship."

"Does it take so many? You have shown me only about a dozen places, all told, for men actually to be at the controls. Couldn't a dozen men run the Ship ... if they knew what you know," he added slyly.

Jim chuckled. "He's got you, Joe. He's right"

Joe brushed it aside. "You overrate our knowledge. Maybe we could operate the Ship, but we wouldn't get anywhere. We don't know where we are. The Ship has been drifting for I don't know how many generations. We don't know where we're headed, or how fast we're going."

"But look," Hugh pleaded, "there are instruments. You showed them to me. Couldn't we learn how to use them? Couldn't you figure them out, Joe, if you really wanted to?"

"Oh, I suppose so," Jim agreed.

"Don't boast, Jim," said Joe.

"I'm not boasting," snapped Jim. "If a thing'll work, I can figure it out."

"Humph!" said Joe. The matter rested in delicate balance. Hugh had got them disagreeing among themselves—which was what he wanted—with the less tractable of the pair on his side. Now, to consolidate his gain, "I had an idea," he said quickly, "to get you men to work with, Jim, if you were able to train them."

"What's your idea?" demanded Jim suspiciously. "Well, you remember what I told you about a bunch of the younger scientists?"

"Those fools!"

"Yes, yes, sure; but they didn't know what you know. In their way they were trying to be reasonable. Now, if I could go back down and tell them what you've taught me, I could get you enough men to work with."

Joe cut in. "Take a good look at us, Hugh. What do you see?"

"Why ... why, I see you. Joe-Jim."

"You see a mutie," corrected Joe, his voice edged with sarcasm. "We're a mutie. Get that? Your scientists won't work with us."

"No, no," protested Hugh, "that's not true. I'm not talking about peasants. Peasants wouldn't understand, but these are scientists, and the smartest of the lot. They'll understand. All you need to do is to arrange safe conduct for them through mutie country. You can do that, can't you?" he added, instinctively shifting the point of the argument to firmer ground.

"Why, sure," said Jim.

"Forget it," said Joe.

"Well, O.K.," Hugh agreed, sensing that Joe really was annoyed at his persistence, "but it would be fun." He withdrew some distance from the brothers.

He could hear Joe-Jim continuing the discussion with himself in low tones. He pretended to ignore it. Joe-Jim had this essential defect in his joint nature: being a committee, rather than a single individual, he was hardly fitted to be a man of action, since all decisions were necessarily the result of discussion and compromise. Several moments later Hugh heard Joe's voice raised. "All right, all right, have it your own way!" He then called out, "Hugh! Come here!" Hugh kicked himself away from an adjacent bulkhead and shot over to the immediate vicinity of Joe-Jim, arresting his flight with both hands against the framework of the Captain's chair.

"We've decided," said Joe without preliminaries, "to let you go back down to the high-weight and try to peddle your goods. But you're a fool," he added sourly.

Bobo escorted Hugh down through the dangers of the levels frequented by muties and left him in the uninhabited zone above high-weight "Thanks, Bobo," Hugh said in parting. "Good eating." The dwarf grinned, ducked his head, and sped away, swarming up the ladder they had just descended. Hugh turned and started down, touching his knife as he did so. It was good to feel it against him again.

Not that it was his original knife. That had been Bobo's prize when he was captured, and Bobo had been unable to return it, having inadvertently left it sticking in a big one that got away. But the replacement Joe-Jim had given him was well balanced and quite satisfactory.

Bobo had conducted him, at Hugh's request and by Joe-Jim's order, down to the area directly over the auxiliary Converter used by the scientists. He wanted to find Bill Ertz, Assistant Chief Engineer and leader of the bloc of younger scientists, and he did not want to have to answer too many questions before he found him. Hugh dropped quickly down the remaining levels and found himself in a main passageway which he recognized. Good! A turn to the left, a couple of hundred yards walk and he found himself at the door of the compartment which housed the Converter. A guard lounged in front of it. Hugh started to push on past, was stopped. "Where do you think you're going?"

"I want to find Bill Ertz."

"You mean the Chief Engineer? Well, he's not here."

"Chief? What's happened to the old one?" Hoyland regretted the remark at once, but it was already out.

"Huh? The old Chief? Why, he's made the Trip long since." The guard looked at him suspiciously. "What's wrong with you?"

"Nothing," denied Hugh. "Just a slip."

"Funny sort of a slip. Well, you'll find Chief Ertz around his office probably."

"Thanks. Good eating."

"Good eating."

Hugh was admitted to see Ertz after a short wait Ertz looked up from his desk as Hugh came in. "Well," he said, "so you're back, and not dead after all. This is a surprise. We had written you off, you know, as making the Trip."

"Yes, I suppose so."

"Well, sit down and tell me about it; I've a little time to spare at the moment. Do you know, though, I wouldn't have recognized you. You've changed a lot, all that gray hair. I imagine you had some pretty tough times."

Gray hair? Was his hair gray? And Ertz had changed a lot, too, Hugh now noticed. He was paunchy and the lines in his face had set. Good Jordan! How long had he been gone? Ertz drummed on his desk top, and pursed his lips. "It makes a problem, your coming back like this. I'm afraid I can't just assign you to your old job; Mort Tyler has that. But we'll find a place for you, suitable to your rank."

Hugh recalled Mort Tyler and not too favorably. A precious sort of a chap, always concerned with what was proper and according to regulations. So Tyler had actually made scientisthood, and was on Hugh's old job at the Converter. Well, it didn't matter. "That's all right, he began. "I wanted to talk to you about--"

"Of course, there's the matter of seniority," Ertz went on, "Perhaps the Council had better consider the matter. I don't know of a precedent. We've lost a number of scientists to the muties in the past, but you are the first to escape with his life in my memory."

"That doesn't matter," Hugh broke in. "I've something much more pressing to talk about. While I was away I found out some amazing things, Bill, things that it is of paramount importance for you to know about. That's why I came straight to you. Listen. I--"

Ertz was suddenly alert. "Of course you have! I must be slowing down. You must have had a marvelous opportunity to study the muties and scout out their territory. Come on, man, spill it! Give me your report."

Hugh wet his lips. "It's not what you think," he said. "It's much more important than just a report on the muties, though it concerns them, too. In fact, we may have to change our whole policy with respect to the mu--"

"Well, go ahead, go ahead! I'm listening."

"All right." Hugh told him of his tremendous discovery as to the actual nature of the Ship, choosing his words carefully and trying very hard to be convincing. He dwelt lightly on the difficulties presented by an attempt to reorganize the Ship in accordance with the new concept and bore down heavily on the prestige and honor that would accrue to the man who led the effort.

He watched Ertz's face as he talked. After the first start of complete surprise when Hugh launched his key idea, the fact that the Ship was actually a moving body in a great outside space, his face became impassive and Hugh could read nothing in it, except that he seemed to detect a keener interest when Hugh spoke of how Ertz was just the man for the job because of his leadership of the younger, more progressive scientists.

When Hugh concluded, he waited for Ertz's response. Ertz said nothing at first, simply continued with his annoying habit of drumming on the top of his desk. Finally he said, "These are important matters, Hoyland, much too important to be dealt with casually. I must have time to chew it over."

"Yes, certainly," Hugh agreed. "I wanted to add that I've made arrangements for safe passage up to no-weight. I can take you up and let you see for yourself."

"No doubt that is best," Ertz replied. "Well, are you hungry?"

"No."

"Then we'll both sleep on it. You can use the compartment at the back of my office. I don't want you discussing this with anyone else until I've had time to think about it; it might cause unrest if it got out without proper prepartion."

"Yes, you're right"

"Very well, then." Ertz ushered him into a compartment behind his office which he very evidently used for a lounge. "Have a good rest," he said, "and we'll talk later."

"Thanks," Hugh acknowledged. "Good eating."

"Good eating."

Once he was alone, Hugh's excitement gradually dropped away from him, and he realized that he was fagged out and very sleepy. He stretched out on a builtin couch and fell asleep.

When he awoke he discovered that the only door to the compartment was barred from the other side. Worse than that, his knife was gone.

He had waited an indefinitely long time when he heard activity at the door. It opened; two husky, unsmiling men entered. "Come along," said one of them. He sized them up, noting that neither of them carried a knife. No chance to snatch one from their belts, then. On the other hand he might be able to break away from them.

But beyond them, a wary distance away in the outer room, were two other equally formidable men, each armed with a knife. One balanced his for throwing; the other held his by the grip, ready to stab at close quarters. He was boxed in and be knew it. They had anticipated his possible moves.

He had long since learned to relax before the inevitable. He composed his face and marched quietly out. Once through the door he saw Ertz, waiting and quite evidently in charge of the party of men. He spoke to him, being careful to keep his voice calm. "Hello, Bill. Pretty extensive preparations you've made. Some trouble, maybe?"

Ertz seemed momentarily uncertain of his answer, then said, "You're going before the Captain."

"Good!" Hugh answered. "Thanks, Bill. But do you think it's wise to try to sell the idea to him without laying a little preliminary foundation with the others?"

Ertz was annoyed at his apparent thickheadedness and showed it. "You don't get the idea," he growled. "You're going before the Captain to stand trial for heresy!"

Hugh considered this as if the idea had not before occurred to him. He answered mildly, "You're off down the wrong passage, Bill. Perhaps a charge and trial is the best way to get at the matter, but I'm not a peasant, simply to be hustled before the Captain. I must be tried by the Council. I am a scientist."

"Are you now?" Ertz said softly. "I've had advice about that. You were written off the lists. Just what you are is a matter for the Captain to determine."

Hugh held his peace. It was against him, he could see, and there was no point in antagonizing Ertz. Ertz made a signal; the two unarmed men each grasped one of Hugh's arms. He went with them quietly.

Hugh looked at the Captain with new interest. The old man had not changed much, a little fatter, perhaps. The Captain settled himself slowly down in his chair, and picked up the memorandum before him. "What's this all about?" he began irritably. "I don't understand it."

Mort Tyler was there to present the case against Hugh, a circumstance which Hugh had had no way of anticipating and which added to his misgivings. He searched his boyhood recollections for some handle by which to reach the man's sympathy, found none. Tyler cleared his throat and commenced: "This is the case of one Hugh Hoyland, Captain, formerly one of your junior scientists--"

"Scientist, eh? Why doesn't the Council deal with him?"

"Because he is no longer a scientist, Captain. He went over to the muties. He now returns among us, preaching heresy and seeking to undermine your authority."

The Captain looked at Hugh with the ready belligerency of a man jealous of his prerogatives. "Is that so?" he bellowed. "What have you to say for yourself?"

"It is not true, Captain," Hugh answered. "All that I have said to anyone has been an affirmation of the absolute truth of our ancient knowledge. I have not disputed the truths under which we live; I have simply affirmed them more forcibly than is the ordinary custom. I--"

"I still don't understand this," the Captain interrupted, shaking his head. "You're charged with heresy, yet you say you believe the Teachings. If you aren't guilty, why are you here?"

"Perhaps I can clear the matter up," put in Ertz. "Hoyland--"

"Well, I hope you can," the Captain went on. "Come, let's hear it."

Ertz proceeded to give a reasonably correct, but slanted, version of Hoyland's return and his strange story. The Captain listened, with an expression that varied between puzzlement and annoyance. When Ertz had concluded, the Captain turned to Hugh. "Humph!" he said.

Hugh spoke immediately. "The gist of my contention, Captain, is that there is a place up at no-weight where you can actually see the truth of our faith that the Ship is moving, where you can actually see Jordan's Plan in operation. That is not a denial of faith; that affirms it. There is no need to take my word for it. Jordan Himself will prove it."

Seeing that the Captain appeared to be in a state of indecision, Tyler broke in: "Captain, there is a possible explanation of this incredible situation which I feel duty bound that you should hear. Offhand, there are two obvious interpretations of Hoyland's ridiculous story He may simply be guilty of extreme heresy, or he may be a mutie at heart and engaged in a scheme to lure you into their hands. But there is a third, more charitable explanation and one which I feel within me is probably the true one.

"There is record that Hoyland was seriously considered for the Converter at his birth inspection, but that his deviation from normal was slight, being simply an overlarge head, and he was passed. It seems to me that the terrible experiences he has undergone at the hands of the muties have finally unhinged an unstable mind. The poor chap is simply not responsible for his own actions."

Hugh looked at Tyler with new respect. To absolve him of guilt and at the same time to make absolutely certain that Hugh would wind up making the Trip: how neat!

The Captain shook a palm at them. "This has gone on long enough." Then, turning to Ertz, "Is there recommendation?"

"Yes, Captain. The Converter."

"Very well, then. I really don't see, Ertz," he continued testily, "why I should be bothered with these details. It seems to me that you should be able to handle discipline in your department without my help."

"Yes, Captain."

The Captain shoved back from his desk, started to get up. "Recommendation confirmed. Dismissed."

Anger flooded through Hugh at the unreasonable injustice of it. They had not even considered looking at the only real evidence he had in his defense. He heard a shout: "Wait!"—then discovered it was his own voice. The Captain paused, looking at him.

"Wait a moment," Hugh went on, his words spilling out of their own accord. "This won't make any difference, for you're all so damn sure you know all the answers that you won't consider a fair offer to come see with your own eyes. Nevertheless ... Nevertheless, it still moves!"

Hugh had plenty of time to think, lying in the compartment where they confined him to await the power needs of the Converter, time to think, and to second-guess his mistakes. Telling his tale to Ertz immediately, that had been mistake number one. He should have waited, become reacquainted with the man and felt him out, instead of depending on a friendship which had never been very close.

Second mistake, Mort Tyler. When he heard his name he should have investigated and found out just how much influence the man had with Ertz. He had known him of old, he should have known better.

Well, here he was, condemned as a mutant, or maybe as a heretic. It came to the same thing. He considered whether or not he should have tried to explain why mutants happened. He had learned about it himself in some of the old records in Joe-Jim's possession. No, it wouldn't wash. How could you explain about radiations from the Outside causing the birth of mutants when the listeners did not believe there was such a place as Outside? No, he had messed it up before he was ever taken before the Captain.

His self-recriminations were disturbed at last by the sound of his door being unfastened. It was too soon for another of the infrequent meals; he thought that they had come at last to take him away, and renewed his resolve to take someone with him.

But he was mistaken. He heard a voice of gentle dignity: "Son, son, how does this happen?" It was Lieutenant Nelson, his first teacher, looking older than ever and frail.

The interview was distressing for both of them. The old man, childless himself, had cherished great hopes for his protegé, even the ambition that he might eventually aspire to the captaincy, though he had kept his vicarious ambition to himself, believing it not good for the young to praise them too highly. It had hurt his heart when the youth was lost.

Now he had returned, a man, but under disgraceful conditions and under sentence of death. The meeting was no less unhappy for Hugh. He had loved the old man, in his way, wanted to please him and needed his approval. But he could see, as he told his story, that Nelson was not capable of treating the the story as anything but an aberration of Hugh's mind, and he suspected that Nelson would rather see him meet a quick death in the Converter, his atoms smashed to hydrogen and giving up clean useful power, than have him live to make a mock of the ancient teachings.

In that.he did the old man an injustice; he underrated Nelson's mercy, but not his devotion to 'science.' But let it be said for Hugh that, had there been no more at issue than his own personal welfare, he might have preferred death to breaking the heart of his benefactor, being a romantic and more than a bit foolish. Presently the old man got up to leave, the visit having grown unendurable to each of them. "Is there anything I can do for you, son? Do they feed you well enough?"

"Quite well, thanks," Hugh lied.

"Is there anything else?"

"No ... yes, you might send me some tobacco. I haven't had a chew in a long time."

"I'll take care of it. Is there anyone you would like to see?"

"Why, I was under the impression that I was not permitted visitors ... ordinary visitors."

"You are right, but I think perhaps I may be able to get the rule relaxed. But you will have to give me your promise not to speak of your heresy," he added anxiously. Hugh thought quickly. This was a new aspect, a new possibility. His uncle? No, while they had always got along well, their minds did not meet; they would greet each other as strangers. He had never made friends easily; Ertz had been his obvious next friend and now look at the damned thing! Then he recalled his village chum, Alan Mahoney, with whom he had played as a boy. True, he had seen practically nothing of him since the time he was apprenticed to Nelson. Still... "Does Alan Mahoney still live in our village?"

"Why, yes."

"I'd like to see him, if he'll come."

Alan arrived, nervous, ill at ease, but plainly glad to see Hugh and very much upset to find him under sentence to make the Trip. Hugh pounded him on the back. "Good boy," he said. "I knew you would come."

"Of course, I would," protested Alan, "once I knew. But nobody in the village knew it. I don't think even the Witnesses knew it."

"Well, you're here, that's what matters. Tell me about yourself. Have you married?"

"Huh, uh, no. Let's not waste time talking about me. Nothing ever happens to me anyhow. How in Jordan's name did you get in this jam, Hugh?"

"I can't talk about that, Alan. I promised Lieutenant Nelson that I wouldn't."

"Well, what's a promise, that kind of a promise? You're in a jam, fellow."

"Don't I know it!"

"Somebody have it in for you?"

"Well, our old pal Mort Tyler didn't help any; I think I can say that much."

Alan whistled and nodded his head slowly. "That explains a lot."

"How come? You know something?"

"Maybe,—maybe not. After you went away he married Edris Baxter."

"So? Hmm-m-m ... yes, that clears up a lot." He remained silent for a time.

Presently Alan spoke up: "Look, Hugh. You're not going to sit here and take it, are you? Particularly with Tyler mixed in it. We gotta get you outa here."

"How?"

"I don't know. Pull a raid, maybe. I guess I could get a few knives to rally round and help us; all good boys, spoiling for a fight."

"Then, when it's over, we'd all be for the Converter. You, me, and your pals. No, it won't wash."

"But we've got to do something. We can't just sit here and wait for them to burn you."

"I know that." Hugh studied Alan's face. Was it a fair thing to ask? He went on, reassured by what he had seen. "Listen. You would do anything you could to get me out of this, wouldn't you?"

"You know that." Alan's tone showed hurt.

"Very well, then. There is a dwarf named Bobo. I'll tell you how to find him..."

Alan climbed, up and up, higher than he had ever been since Hugh had led him, as a boy, into foolhardy peril. He was older now, more conservative; he had no stomach for it. To the very real danger of leaving the well-traveled lower levels was added his superstitious ignorance. But still he climbed.

This should be about the place, unless he had lost count. But he saw nothing of the dwarf Bobo saw him first. A slingshot load caught Alan in the pit of the stomach, even as he was shouting, "Bobo!"

Bobo backed into Joe-Jim's compartment and dumped his load at the feet of the twins. "Fresh meat," he said proudly.

"So it is," agreed Jim indifferently. "Well, it's yours; take it away."

The dwarf dug a thumb into a twisted ear, "Funny," he said, "he knows Bobo's name."

Joe looked up from the book he was reading: Browning's Collected Poems_, L-Press, New York, London, Luna City, cr. 35. "That's interesting. Hold on a moment."

Hugh had prepared Alan for the shock of Joe-Jim's appearance. In reasonably short order he collected his wits sufficiently to be able to tell his tale. Joe-Jim listened to it without much comment, Bobo with interest but little comprehension.

When Alan concluded, Jim remarked, "Well, you win, Joe. He didn't make it." Then, turning to Alan, he added, "You can take

Hoyland's place. Can you play checkers?"

Alan looked from one head to the other. "But you don't understand," he said. "Aren't you going to do anything about it?"

Joe looked puzzled. "Us? Why should we?"

"But you've got to. Don't you see? He's depending on you. There's nobody else he can look to. That's why I came. Don't you see?"

"Wait a moment," drawled Jim, "wait a moment. Keep your belt on. Supposing we did want to help him, which we don't, how in Jordan's Ship could we? Answer me that."

"Why, why," Alan stumbled in the face of such stupidity. "Why, get up a rescue party, of course, and go down and get him out!"

"Why should we get ourselves killed in a fight to rescue your friend?" Bobo pricked his ears. "Fight?" he inquired eagerly. "No, Bobo," Joe denied. "No fight. Just talk." "Oh," said Bobo and returned to passivity.

Alan looked at the dwarf. "If you'd even let Bobo and me--"

"No," Joe said shortly. "It's out of the question. Shut up about it."

Alan sat in a corner, hugging his knees in despair. If only he could get out of there. He could still try to stir up some help down below. The dwarf seemed to be asleep, though it was difficult to be sure with him. If only Joe-Jim would sleep, too.

Joe-Jim showed no indication of sleepiness. Joe tried to continue reading, but Jim interrupted him from time to time. Alan could not hear what they were saying.

Presently Joe raised his voice. "Is that your idea of fun?" he demanded.

"Well," said Jim, "it beats checkers."

"It does, does it? Suppose you get a knife in your eye; where would I be then?"

"You're getting old, Joe. No juice in you any more."

"You're as old as I am."

"Yeah, but I got young ideas."

"Oh, you make me sick. Have it your own way, but don't blame me. Bobo!"

The dwarf sprang up at once, alert. "Yeah, Boss."

"Go out and dig up Squatty and Long Arm and Pig."

Joe-Jim-got up, went to a locker, and started pulling knives out of their racks.

Hugh heard the commotion in the passageway outside his prison. It could be the guards coming to take him to the Converter, though they probably wouldn't be so noisy. Or it could be just some excitement unrelated to him. On the other hand it might be ...

It was. The door burst open, and Alan was inside, shouting at him and thrusting a brace of knives into his hands. He was hurried out of the door, while stuffing the knives in his belt and accepting two more.

Outside he saw Joe-Jim, who did not see him at once, as he was methodically letting fly, as calmly as if he had been engaging in target practice in his own study. And Bobo, who ducked his head and grinned with a mouth widened by a bleeding cut, but continued the easy flow of the motion whereby he loaded and let fly. There were three others, two of whom Hugh recognized as belonging to Joe-Jim's privately owned gang of bullies, muties by definition and birthplace; they were not deformed.

The count does not include still forms on the floor plates.

"Come on!" yelled Alan. "There'll be more in no time." He hurried down the passage to the right

Joe-Jim desisted and followed him. Hugh let one blade go for luck at a figure running away to the left. The target was poor, and he had no time to see if he had thrown 01000. They scrambled along the passage, Bobo bringing up the rear, as if reluctant to leave the fun, and came to a point where a side passage crossed the main one.

Alan led them to the right again. "Stairs ahead," he shouted.

They did not reach them. An airtight door, rarely used, clanged in their faces ten yards short of the stairs. Joe-Jim's bravoes checked their flight and they looked doubtfully at their master. Bobo broke his thickened nails trying to get a purchase on the door.

The sounds of pursuit were clear behind them.

"Boxed in," said Joe softly. "I hope you like it, Jim."

Hugh saw a head appear around the corner of the passage they had quitted. He threw overhand but the distance was too great; the knife clanged harmlessly against steel. The head disappeared. Long Arm kept his eye on the spot, his sling loaded and ready.

Hugh grabbed Bobo's shoulder. "Listen! Do you see that light?"

The dwarf blinked stupidly. Hugh pointed to the intersection of the glowtubes where they crossed in the overhead directly above the junction of the passages. "That light. Can you hit them where they cross?"

Bobo measured the distance with his eye. It would be a hard shot under any conditions at that range. Here, constricted as he was by the low passageway, it called for a fast, flat trajectory, and allowance for higher weight then he was used to.

He did not answer. Hugh felt the wind of his swing but did not see the shot. There was a tinkling crash; the passage became dark.

"Now!" yelled Hugh, and led them away at a run. As they neared the intersection he shouted, "Hold your breaths! Mind the gas!" The radioactive vapor poured lazily out from the broken tube above and filled the crossing with a greenish mist.

Hugh ran to the right, thankful for his knowledge as an engineer of the lighting circuits. He had picked the right direction; the passage ahead was black, being serviced from beyond the break. He could hear footsteps around him; whether they were friend or enemy he did not know.

They burst into light. No one was in sight but a scared and harmless peasant who scurried away at an unlikely pace. They took a quick muster. All were present, but Bobo was making heavy going of it.

Joe looked at him. "He sniffed the gas, I think. Pound his back."

Pig did so with a will. Bobo belched deeply, was suddenly sick, then grinned.

"He'll do," decided Joe.

The slight delay had enabled one at least to catch up with them. He came plunging out of the dark, unaware of, or careless of, the strength against him. Alan knocked Pig's arm down, as he raised it to throw. "Let me at him!" he demanded. "He's mine!" It was Tyler.

"Man-fight?" Alan challenged, thumb on his blade.

Tyler's eyes darted from adversary to adversary and accepted the invitation to individual duel by lunging at Alan. The quarters were too cramped for throwing; they closed, each achieving his grab in parry, fist to wrist.

Alan was stockier, probably stronger; Tyler was slippery. He attempted to give Alan a knee to the crotch. Alan evaded it, stamped on Tyler's planted foot. They went clown. There was a crunching crack.

A moment later, Alan was wiping his knife against his thigh. "Let's get goin'," he complained. "I'm scared."

They reached a stairway, and raced up it, Long Arm and Pig ahead to fan out on each level and cover their flanks, and the third of the three choppers (Hugh heard him called Squatty) covering the rear. The others bunched in between.

Hugh thought they had won free, when he heard shouts and the clatter of a thrown knife just above him.

He reached the level above in time to be cut not deeply but jaggedly by a ricocheted blade.

Three men were down. Long Arm bad a blade sticking in the fleshy part of his upper arm, but it did not seem to bother him. His slingshot was still spinning. Pig was scrambling after a thrown knife, his own armament exhausted. But there were signs of his work; one man was down on one knee some twenty feet away. He was bleeding from a knife wound in the thigh.

As the figure steadied himself with one hand against the bulkhead and reached towards an empty belt with the other, Hugh recognized

him.

Bill Ertz.

He had led a party up another way, and flanked them, to his own ruin. Bobo crowded behind Hugh and got his mighty arm free for the cast. Hugh caught at it. "Easy, Bobo," he directed. "In the stomach, and easy."

The dwarf looked puzzled, but did as he was told.

Ertz folded over at the middle and slid to the deck. "Well placed," said Jim. "Bring him along, Bobo," directed Hugh, "and stay in the middle." He ran his eye over their party, now huddled at the top of that flight of stairs. "All right, gang; up we go again! Watch it."

Long Arm and Pig swarmed up the next flight, the others disposing themselves as usual. Joe looked annoyed. In some fashion, a fashion by no means clear at the moment, he had been eased out as leader of this gang, his gang, and Hugh was giving orders. He reflected as there was no time now to make a fuss. It might get them all killed.

Jim did not appear to mind. In fact, he seemed to be enjoying himself.

They put ten more levels behind them with no organized opposition. Hugh directed them not to kill peasants unnecessarily. The three bravoes obeyed; Bobo was too loaded down with Ertz to constitute a problem in discipline. Hugh saw to it that they put thirty-odd more decks below them and were well into no man's land before he let vigilance relax at all. Then he called a halt and they examined wounds.

The only deep ones were to Long Arm's arm and Bobo's face. Joe-Jim examined them and applied presses with which he had outfitted himself before starting. Hugh refused treatment for his flesh wound. "It's stopped bleeding," he insisted, "and I've got a lot to do."

"You've got nothing to do but to get up home," said Joe, "and that will be an end to this foolishness." "Not quite," denied Hugh. "You may be going home, but Alan and I and Bobo are going up to no-weight; to the Captain's veranda."

"Nonsense," said Joe. "What for?"

"Come along if you like, and see. All right, gang. Let's go."

Joe started to speak, stopped when Jim kept still. Joe-Jim followed along. They floated gently through the door of the veranda, Hugh, Alan, Bobo with his still-passive burden, and Joe-Jim. "That's it," said Hugh to Alan, waving his hand at the splendid stars, "that's what I've been telling you about."

Alan looked and clutched at Hugh's arm. "Jordan!" he moaned. "We'll fall out!" He closed his eyes tightly.

Hugh shook him. "It's all right," he said. "It's grand. Open your eyes."

Joe-Jim touched Hugh's arm. "What's it all about?" he demanded. "Why did you bring him up here?" He pointed to Ertz.

"Oh, him. Well, when he wakes up I'm going to show him the stars, prove to him that the Ship moves."

"Well? What for?"

"Then I'll send him back down to convince some others."

"Hm-m-m, suppose he doesn't have any better luck than you had?"

"Why, then," Hugh shrugged his shoulders "why, then we shall just have to do it all over, I suppose, till we do convince them.

"We've got to do it, you know."

SOLUTION UNSATISFACTORY

In 1903 the Wright brothers flew at Kitty Hawk.

In December, 1938, in Berlin, Dr. Hahn split the uranium atom.

In April, 1943, Dr. Estelle Karst, working under the Federal Emergency Defense Authority, perfected the Karst-Obre technique for producing artificial radioactives.

So American foreign policy had to change.

Had to. *Had to.* It is very difficult to tuck a bugle call back into a bugle. Pandora's Box is a one-way proposition. You can turn pig into sausage, but not sausage into pig. Broken eggs stay broken. "All the King's horses and all the King's men can't put Humpty together again."

I ought to know—I was one of the King's men.

By rights I should not have been. I was not a professional military man when World War II broke out, and when Congress passed the draft law I drew a high number, high enough to keep me out of the army long enough to die of old age.

Not that very many died of old age that generation!

But I was the newly appointed secretary to a freshman congressman; I had been his campaign manager and my former job had left me. By profession, I was a highschool teacher of economics and sociology—school boards don't like teachers of social subjects actually to deal with social problems—and my contract was not renewed. I jumped at the chance to go to Washington.

My congressman was named Manning. Yes, *the* Manning, Colonel Clyde C. Manning, U.S. Army retired—Mr. Commissioner Manning. What you may not know about him is that he was one of the Army's No. 1 experts in chemical warfare before a leaky heart put him on the shelf. I had picked him, with the help of a group of my political associates, to run against the two-bit chiseler who was the incumbent in our district. We needed a strong liberal candidate and Manning was tailormade for the job. He had served one term in the grand jury, which cut his political eye teeth, and had stayed active in civic matters thereafter.

Being a retired army officer was a political advantage in vote-getting among the more conservative and well-to-do citizens, and his record was O.K. for the other side of the fence. I'm not primarily concerned with vote-getting; what I liked about him was that, though he was liberal, he was toughminded, which most liberals aren't. Most liberals believe that water runs downhill, but, praise God, it'll never reach the bottom.

Manning was not like that. He could see a logical necessity and act on it, no matter how unpleasant it might be.

We were in Manning's suite in the House Office Building, taking a little blow from that stormy first session of the Seventy-eighth Congress and trying to catch up on a mountain of correspondence, when the War Department called. Manning answered it himself.

I had to overhear, but then I was his secretary. "Yes," he said, "speaking. Very well, put him on. Oh . . . hello, General . . . Fine, thanks. Yourself?" Then there was a long silence. Presently, Manning said, "But I can't do that, General, I've got this job to take care of. . . . What's that? . . . Yes, who is to do my committee work and represent my district? . . . I think so." He glanced at his wrist watch. "I'll be right over."

He put down the phone, turned to me, and said, "Get your hat, John. We are going over to the War Department."

"So?" I said, complying.

"Yes," he said with a worried look, "the Chief of Staff thinks I ought to go back to duty." He set off at a brisk walk, with me hanging back to try to force him not to strain his bum heart. "It's impossible, of course." We grabbed a taxi from the stand in front of the office building and headed for the Department.

But it *was* possible, and Manning agreed to it, after the Chief of Staff presented his case. Manning had to be convinced, for there is no way on earth for anyone, even the President himself, to order a congressman to leave his post, even though he happens to be a member of the military service, too.

The Chief of Staff had anticipated the political difficulty and had been forehanded enough to have already dug up an opposition congressman with whom to pair Manning's vote for the duration of the emergency. This other congressman, the Honorable Joseph T. Brigham, was a reserve officer who wanted to go to duty himself—or was willing to; I never found out which. Being from the opposite political party, his vote in the House of Representatives could be permanently paired against Manning's and neither party would lose by the arrangement.

There was talk of leaving me in Washington to handle the political details of Manning's office, but Manning decided against it, judging that his other secretary could do that, and announced that I must go along as his adjutant. The Chief of Staff demurred, but Manning was in a position to insist, and the Chief had to give in.

A chief of staff can get things done in a hurry if he wants to. I was sworn in as a temporary officer before we left the building; before the day was out I was at the bank, signing a note to pay for the sloppy service uniforms the Army had adopted and to buy a dress uniform with a beautiful shiny belt—a dress outfit which, as it turned out, I was never to need.

We drove over into Maryland the next day and Manning took charge of the Federal nuclear research laboratory, known officially by the hush-hush title of War Department Special Defense Project No. 347. I didn't know a lot about physics and nothing about modern atomic physics, aside from the stuff you read in the Sunday supplements. Later, I picked up a smattering, mostly wrong, I suppose, from associating with the heavyweights with whom the laboratory was staffed.

Colonel Manning had taken an Army p.g. course at Massachusetts Tech and had received a master of science degree for a brilliant thesis on the mathematical theories of atomic structure. That was why the Army had to have him for this job. But that had been some years before; atomic theory had turned several cartwheels in the meantime; he admitted to me that he had to bone like the very devil to try to catch up to the point where he could begin to understand what his highbrow charges were talking about in their reports.

I think he overstated the degree of his ignorance; there was certainly no one else in the United States who could have done the job. It required a man who could direct and suggest research in a highly esoteric field, but who saw the problem from the standpoint of urgent military necessity. Left to themselves, the physicists would have reveled in the intellectual luxury of an unlimited research expense account, but, while they undoubtedly would have made major advances in human knowledge, they might never have developed anything of military usefulness, or the military possibilities of a discovery might be missed for years.

It's like this: It takes a smart dog to hunt birds, but it takes a hunter behind him to keep him from wasting time chasing rabbits. And the hunter needs to know nearly as much as the dog.

No derogatory reference to the scientists is intended—by no means! We had all the genius in the field that the United States could produce, men from Chicago, Columbia, Cornell, M.I.T., Cal Tech, Berkeley, every radiation laboratory in the country, as well as a couple of broad-A boys lent to us by the British. And they had every facility that ingenuity could think up and money could build. The five-hundred-ton cyclotron which had originally been intended for the University of California was there, and was already obsolete in the face of the new gadgets these brains had thought up, asked for, and been given. Canada supplied us with all the uranium we asked for—tons of the treacherous stuff—from Great Bear Lake, up near the Yukon, and the fractional-residues technique of separating uranium isotope 235 from the commoner isotope 238 had already been worked out, by the same team from Chicago that had worked up the earlier expensive mass spectrograph method.

Someone in the United States government had realized the terrific potentialities of uranium 235 quite early and, as far back as the summer of 1940, had rounded up every atomic research man in the country and had sworn them to silence. Atomic power, if ever developed, was planned to be a government monopoly, at least till the war was over. It might turn out to be the most incredibly powerful explosive ever dreamed of, and it might be the source of equally incredible power. In any case, with Hitler talking about secret weapons and shouting hoarse insults at democracies, the government planned to keep any new discoveries very close to the vest.

Hitler had lost the advantage of a first crack at the secret of uranium through not taking precautions. Dr. Hahn, the first man to break open the uranium atom, was a German. But one of his laboratory assistants had fled Germany to escape a pogrom. She came to this country, and told us about it.

We were searching, there in the laboratory in Maryland, for a way to use U235 in a controlled explosion. We had a vision of a one-ton bomb that would be a whole air raid in itself, a single explosion that would flatten out an entire industrial center. Dr. Ridpath, of Continental Tech, claimed that he could build such a bomb, but that he could not guarantee that it would not explode as soon as it was loaded and as for the force of the explosion—well, he did not believe his own figures; they ran out to too many ciphers.

The problem was, strangely enough, to find an explosive which would be weak enough to blow up only one county at a time, and stable enough to blow up only on request. If we could devise a really practical rocket fuel at the same time, one capable of driving a war rocket at a thousand miles an hour, or more, then we would be in a position to make most anybody say "uncle" to Uncle Sam.

We fiddled around with it all the rest of 1943 and well into 1944. The war in Europe and the troubles in Asia dragged on. After Italy folded up, England was able to release enough ships from her Mediterranean fleet to ease the blockade of the British Isles. With the help of the planes we could now send her regularly and with the additional overage destroyers we let her have, England hung on somehow, digging in and taking more and more of her essential defense industries underground. Russia shifted her weight from side to side as usual, apparently with the policy of preventing either side from getting a sufficient advantage to bring the war to a successful conclusion. People were beginning to speak of "permanent war."

I was killing time in the administrative office, trying to improve my typing—a lot of Manning's reports had to be typed by me personally—when the orderly on duty stepped in and announced Dr. Karst. I flipped the interoffice communicator. "Dr. Karst is here, chief. Can you see her?"

"Yes," he answered, through his end.

I told the orderly to show her in.

Estelle Karst was quite a remarkable old girl and, I suppose, the first woman ever to hold a commission in the Corps of Engineers. She was an M.D. as well as an Sc.D. and reminded me of the teacher I had had in fourth grade. I guess that was why I always stood up instinctively when she came into the room—I was afraid she might look at me and sniff. It couldn't have been her rank; we didn't bother much with rank.

She was dressed in white coveralls and a shop apron and had simply thrown a hooded cape over herself to come through the snow. I said, "Good morning, ma'am," and led her into Manning's office.

The Colonel greeted her with the urbanity that had made him such a success with women's clubs, seated her, and offered her a cigarette.

"I'm glad to see you, Major," he said. "I've been intending to drop around to your shop."

I knew what he was getting at; Dr. Karst's work had been primarily physiomedical; he wanted her to change the direction of her research to something more productive in a military sense.

"Don't call me 'major,'" she said tartly.

"Sorry, Doctor—"

"I came on business, and must get right back. And I presume you are a busy man, too. Colonel Manning, I need some help."

"That's what we are here for."

"Good. I've run into some snags in my research. I think that one of the men in Dr. Ridpath's department could help me, but Dr. Ridpath doesn't seem disposed to be cooperative."

"So? Well, I hardly like to go over the head of a departmental chief, but tell me about it; perhaps we can arrange it. Whom do you want?"

"I need Dr. Obre."

"The spectroscopist. Hm-m-m. I can understand Dr. Ridpath's reluctance, Dr. Karst, and I'm disposed to agree with him. After all, the high-explosives research is really our main show around here."

She bristled and I thought she was going to make him stay in after school at the very least. "Colonel Manning, do you realize the importance of artificial radioactives to modern medicine?"

"Why, I believe I do. Nevertheless, Doctor, our primary mission is to perfect a weapon which will serve as a safeguard to the whole country in time of war—"

She sniffed and went into action. "Weapons—fiddlesticks! Isn't there a medical corps in the Army? Isn't it more important to know how to heal men than to know how to blow them to bits? Colonel Manning, you're not a fit man to have charge of this project! You're a . . . you're a, a warmonger, that's what you are!"

I felt my ears turning red, but Manning never budged. He could have raised Cain with her, confined her to her quarters, maybe even have courtmartialed her, but Manning isn't like that. He told me once that every time a man is courtmartialed, it is a sure sign that some senior officer hasn't measured up to his job.

"I am sorry you feel that way, Doctor," he said mildly, "and I agree that my technical knowledge isn't what it might be. And, believe me, I do wish that healing were all we had to worry about. In any case, I have not refused your request. Let's walk over to your laboratory and see what the problem is. Likely there is some arrangement that can be made which will satisfy everybody."

He was already up and getting out his greatcoat. Her set mouth relaxed a trifle and she answered, "Very well. I'm sorry I spoke as I did."

"Not at all," he replied. "These are worrying times. Come along, John."

I trailed after them, stopping in the outer office to get my own coat and to stuff my notebook in a pocket.

By the time we had trudged through mushy snow the eighth of a mile to her lab they were talking about gardening!

Manning acknowledged the sentry's challenge with a wave of his hand and we entered the building. He started casually on into the inner lab, but Karst stopped him. "Armor first, Colonel."

We had trouble finding overshoes that would fit over Manning's boots, which he persisted in wearing, despite the new uniform regulations, and he wanted to omit the foot protection, but Karst would not hear of it. She called in a couple of her assistants who made jury-rigged moccasins out of some soft-lead sheeting.

The helmets were different from those used in the explosives lab, being fitted with inhalers. "What's this?" inquired Manning.

"Radioactive dust guard," she said. "It's absolutely essential."

We threaded a lead-lined meander and arrived at the workroom door which she opened by combination. I blinked at the sudden bright illumination and noticed the air was filled with little shiny motes.

"Hm-m-m—it *is* dusty," agreed Manning. "Isn't there some way of controlling that?" His voice sounded muffled from behind the dust mask.

"The last stage has to be exposed to air," explained Karst. "The hood gets most of it. We could control it, but it would mean a quite expensive new installation."

"No trouble about that. We're not on a budget, you know. It must be very annoying to have to work in a mask like this."

"It is," acknowledged Karst. "The kind of gear it would take would enable us to work without body armor, too. That would be a comfort."

I suddenly had a picture of the kind of thing these researchers put up with. I am a fair-sized man, yet I found that armor heavy to carry around. Estelle Karst was a small woman, yet she was willing to work maybe fourteen hours, day after day, in an outfit which was about as comfortable as a diving suit. But she had not complained.

Not all the heroes are in the headlines. These radiation experts not only ran the chance of cancer and nasty radioaction burns, but the men stood a chance of damaging their germ plasm and then having their wives present them with something horrid in the way of offspring—no chin, for example, and long hairy ears. Nevertheless, they went right ahead and never seemed to get irritated unless something held up their work.

Dr. Karst was past the age when she would be likely to be concerned personally about progeny, but the principle applies.

I wandered around, looking at the unlikely apparatus she used to get her results, fascinated as always by my failure to recognize much that reminded me of the physics laboratory I had known when I was an undergraduate, and being careful not to touch anything. Karst started explaining to Manning what she was doing and why, but I knew that it was useless for me to try to follow that technical stuff. If Manning wanted notes, he would dictate them. My attention was caught by a big boxlike contraption in one corner of the room. It had a hopperlike gadget on one side and I could hear a sound from it like the whirring of a fan with a background of running water. It intrigued me.

I moved back to the neighborhood of Dr. Karst and the Colonel and heard her saying, "The problem amounts to this, Colonel: I am getting a much more highly radioactive end product than I want, but there is considerable variation in the half-life of otherwise equivalent samples.

That suggests to me that I am using a mixture of isotopes, but I haven't been able to prove it. And frankly, I do not know enough about that end of the field to be sure of sufficient refinement in my methods. I need Dr. Obre's help on that."

I think those were her words, but I may not be doing her justice, not being a physicist. I understood the part about "half-life." All radioactive materials keep right on radiating until they turn into something else, which takes theoretically forever. As a matter of practice their periods, or "lives," are described in terms of how long it takes the original radiation to drop to one-half strength. That time is called a "half-life" and each radioactive isotope of an element has its own specific characteristic half-lifetime.

One of the staff—I forget which one—told me once that any form of matter can be considered as radioactive in some degree; it's a question of intensity and period, or half-life.

"I'll talk to Dr. Ridpath," Manning answered her, "and see what can be arranged. In the meantime you might draw up plans for what you want to reequip your laboratory."

"Thank you, Colonel."

I could see that Manning was about ready to leave, having pacified her; I was still curious about the big box that gave out the odd noises.

"May I ask what that is, Doctor?"

"Oh, that? That's an air conditioner."

"Odd-looking one. I've never seen one like it."

"It's not to condition the air of this room. It's to remove the radioactive dust before the exhaust air goes outdoors. We wash the dust out of the foul air."

"Where does the water go?"

"Down the drain. Out into the bay eventually, I suppose."

I tried to snap my fingers, which was impossible because of the lead mittens. "That accounts for it, Colonel!"

"Accounts for what?"

"Accounts for those accusing notes we've been getting from the Bureau of Fisheries. This poisonous dust is being carried out into Chesapeake Bay and is killing the fish."

Manning turned to Karst. "Do you think that possible, Doctor?"

I could see her brows draw together through the window in her helmet. "I hadn't thought about it," she admitted. "I'd have to do some figuring on the possible concentrations before I could give you a definite answer. But it is possible—yes. However," she added anxiously, "it would be simple enough to divert this drain to a sink hole of some sort."

"Hm-m-m—yes." He did not say anything for some minutes, simply stood there, looking at the box.

Presently he said, "This dust is pretty lethal?"

"Quite lethal, Colonel." There was another long silence.

At last I gathered he had made up his mind about something for he said decisively, "I am going to see to it that you get Obre's assistance, Doctor—"

"Oh, good!"

"—but I want you to help me in return. I am very much interested in this research of yours, but I want it carried on with a little broader scope. I want you to investigate for maxima both in period and intensity as well as for minima. I want you to drop the strictly utilitarian approach and make an exhaustive research along lines which we will work out in greater detail later."

She started to say something but he cut in ahead of her. "A really thorough program of research should prove more helpful in the long run to your original purpose than a more narrow one. And I shall make it my business to expedite every possible facility for such a research. I think we may turn up a number of interesting things."

He left immediately, giving her no time to discuss it. He did not seem to want to talk on the way back and I held my peace. I think he had already gotten a glimmering of the bold and drastic strategy this was to lead to, but even Manning could not have thought out that early the inescapable consequences of a few dead fish—otherwise he would never have ordered the research.

No, I don't really believe that. He would have gone right ahead, knowing that if he did not do it, someone else would. He would have accepted the responsibility while bitterly aware of its weight.

1944 wore along with no great excitement on the surface. Karst got her new laboratory equipment and so much additional help that her department rapidly became the largest on the grounds. The explosives research was suspended after a conference between Manning and Ridpath, of which I heard only the end, but the meat of it was that there existed not even a remote possibility at that time of utilizing U235 as an explosive. As a source of power, yes, sometime in the distant future when there had been more opportunity to deal with the extremely ticklish problem of controlling the nuclear reaction. Even then it seemed likely that it would not be a source of power in prime movers such as rocket motors or mobiles, but would be used in vast power plants at least as large as the Boulder Dam installation.

After that Ridpath became a sort of co-chairman of Karst's department and the equipment formerly used by the explosives department was adapted or replaced to carry on research on the deadly artificial radioactives. Manning arranged a division of labor and Karst stuck to her original problem of developing techniques for tailormaking radioactives. I think she was perfectly happy, sticking with a one-track mind to the problem at hand. I don't know to this day whether or not Manning and Ridpath ever saw fit to discuss with her what they intended to do.

As a matter of fact, I was too busy myself to think much about it. The general elections were coming up and I was determined that Manning should have a constituency to return to, when the emergency was over. He was not much interested, but agreed to let his name be filed as a candidate for reelection. I was trying to work up a campaign by remote control and cursing because I could not be in the field to deal with the thousand and one emergencies as they arose.

I did the next best thing and had a private line installed to permit the campaign chairman to reach me easily. I don't think I violated the Hatch Act, but I guess I stretched it a little. Anyhow, it turned out all right; Manning was elected as were several other members of the citizen-military that year. An attempt was made to smear him by claiming that he was taking two salaries for one job, but we squelched that with a pamphlet entitled "For Shame!" which explained that he got *one* salary for *two* jobs. That's the Federal law in such cases and people are entitled to know it.

It was just before Christmas that Manning first admitted to me how much the implications of the Karst-Obre process were preying on his mind. He called me into his office over some inconsequential matter, then did not let me go. I saw that he wanted to talk.

"How much of the K-O dust do we now have on hand?" he asked suddenly.

"Just short of ten thousand units," I replied. "I can look up the exact figures in half a moment." A unit would take care of a thousand men, at normal dispersion. He knew the figure as well as I did, and I knew he was stalling.

We had shifted almost imperceptibly from research to manufacture, entirely on Manning's initiative and authority. Manning had never made a specific report to the Department about it, unless he had done so orally to the Chief of Staff.

"Never mind," he answered to my suggestion, then added, "Did you see those horses?"

"Yes," I said briefly.

I did not want to talk about it. I like horses. We had requisitioned six broken-down old nags, ready for the bone yard, and had used them experimentally. We knew now what the dust would do. After they had died, any part of their carcasses would register on a photographic plate and tissue from the apices of their lungs and from the bronchia glowed with a light of its own.

Manning stood at the window, staring out at the dreary Maryland winter for a minute or two before replying, "John, I wish that radioactivity had never been discovered. Do you realize what that devilish stuff amounts to?"

"Well," I said, "it's a weapon, about like poison gas—maybe more efficient."

"Rats!" he said, and for a moment I thought he was annoyed with me personally. "That's about like comparing a sixteen-inch gun with a bow and arrow. We've got here the first weapon the world has ever seen against which there is no defense, none whatsoever. It's death itself, C.O.D.

"Have you seen Ridpath's report?" he went on.

I had not. Ridpath had taken to delivering his reports by hand to Manning personally.

"Well," he said, "ever since we started production I've had all the talent we could spare working on the problem of a defense against the dust. Ridpath tells me and I agree with him that there is no means whatsoever to combat the stuff, once it's used."

"How about armor," I asked, "and protective clothing?

"Sure, sure," he agreed irritatedly, "provided you never take it off to eat, or to drink or for any purpose whatever, until the radioaction has ceased, or you are out of the danger zone. That is all right for laboratory work; I'm talking about war."

I considered the matter. "I still don't see what you are fretting about, Colonel. If the stuff is as good as you say it is, you've done just exactly what you set out to do—develop a weapon which would give the United States protection against aggression."

He swung around. "John, there are times when I think you are downright stupid!"

I said nothing. I knew him and I knew how to discount his moods. The fact that he permitted me to see his feelings is the finest compliment I have ever had.

"Look at it this way," he went on more patiently; "this dust, as a weapon, is not just simply sufficient to safeguard the United States, it amounts to a loaded gun held at the head of every man, woman, and child on the globe!"

"Well," I answered, "what of that? It's our secret, and we've got the upper hand. The United States can put a stop to this war, and any other war. We can declare a *Pax Americana,* and enforce it."

"Hm-m-m—I wish it were that easy. But it won't remain our secret; you can count on that. It doesn't matter how successfully we guard it; all that anyone needs is the hint given by the dust itself and then it is just a matter of time until some other nation develops a technique to produce it. You can't stop brains from working, John; the reinvention of the method is a mathematical certainty, once they know what it is they are looking for. And uranium is a common enough substance, widely distributed over the globe—don't forget that!

"It's like this: Once the secret is out—and it will be out if we ever use the stuff!—the whole world will be comparable to a room full of men, each armed with a loaded .45. They can't get out of the room and each one is dependent on the good will of every other one to stay alive. All offense and no defense. See what I mean?"

I thought about it, but I still didn't guess at the difficulties. It seemed to me that a peace enforced by us was the only way out, with precautions taken to see that we controlled the sources of uranium. I had the usual American subconscious conviction that our country would never use power in sheer aggression. Later, I thought about the Mexican War and the Spanish-American War and some of the things we did in Central America, and I was not so sure—

It was a couple of weeks later, shortly after inauguration day, that Manning told me to get the Chief of Staff's office on the telephone. I heard only the tail end of the conversation. "No, General, I won't," Manning was saying. "I won't discuss it with you, or the Secretary, either. This is a matter the Commander in Chief is going to have to decide in the long run. If he turns it down, it is imperative that no one else ever knows about it. That's my considered opinion. . . . What's that? . . . I took this job under the condition that I was to have a free hand. You've got to give me a little leeway this time. . . . Don't go brass hat on me. I knew you when you were a plebe. . . . O.K., O.K., sorry. . . . If the Secretary of War won't listen to reason, you tell him I'll be in my seat in the House of Representatives tomorrow, and that I'll get the favor I want from the majority leader. . . . All right. Goodbye."

Washington rang up again about an hour later. It was the Secretary of War. This time Manning listened more than he talked. Toward the end, he said, "All I want is thirty minutes alone with the President. If nothing comes of it, no harm has been done. If I convince him, then you will know all about it. . . . No. sir, I did not mean that you would avoid responsibility. I intended to be helpful. . . . Fine! Thank you, Mr. Secretary."

The White House rang up later in the day and set a time.

We drove down to the District the next day through a nasty cold rain that threatened to turn to sleet. The usual congestion in Washington was made worse by the weather; it very nearly caused us to be late in arriving. I could hear Manning swearing under his breath all the way down Rhode Island Avenue. But we were dropped at the west wing entrance to the White House with two minutes to spare. Manning was ushered into the Oval Office almost at once and I was left cooling my heels and trying to get comfortable in civilian clothes. After so many months of uniform they itched in the wrong places.

The thirty minutes went by.

The President's reception secretary went in, and came out very promptly indeed. He stepped on out into the outer reception room and I heard something that began with, "I'm sorry, Senator, but—" He came back in, made a penciled notation, and passed it out to an usher.

Two more hours went by.

Manning appeared at the door at last and the secretary looked relieved. But he did not come out, saying instead, "Come in, John. The President wants to take a look at you."

I fell over my feet getting up.

Manning said, "Mr. President, this is Captain DeFries." The President nodded, and I bowed, unable to say anything. He was standing on the hearth rug, his fine head turned toward us, and looking just like his pictures—but it seemed strange for the President of the United States not to be a tall man.

I had never seen him before, though, of course, I knew something of his record the two years he had been in the Senate and while he was Mayor before that.

The President said, "Sit down, DeFries. Care to smoke?" Then to Manning, "You think he can do it?"

"I think he'll have to. It's Hobson's choice."

"And you are sure of him?"

"He was my campaign manager."

"I see."

The President said nothing more for a while and God knows I didn't!—though I was bursting to know what they were talking about. He commenced again with, "Colonel Manning, I intend to follow the procedure you have suggested, with the changes we discussed. But I will be down tomorrow to see for myself that the dust will do what you say it will. Can you prepare a demonstration?"

"Yes, Mr. President,"

"Very well, we will use Captain DeFries unless I think of a better procedure." I thought for a moment that they planned to use me for a guinea pig! But he turned to me and continued, "Captain, I expect to send you to England as my representative."

I gulped. "Yes, Mr. President." And that is every word I had to say in calling on the President of the United States.

After that, Manning had to tell me a lot of things he had on his mind. I am going to try to relate them as carefully as possible, even at the risk of being dull and obvious and of repeating things that are common knowledge.

We had a weapon that could not be stopped. Any type of K-O dust scattered over an area rendered that area uninhabitable for a length of time that depended on the half-life of the radioactivity.

Period. Full stop.

Once an area was dusted there was nothing that could be done about it until the radioactivity had fallen off to the point where it was no longer harmful. The dust could not be cleaned out; it was everywhere. There was no possible way to counteract it—burn it, combine it chemically; the radioactive isotope was still there, still radioactive, still deadly. Once used on a stretch of land, for a predetermined length of time that piece of earth *would not tolerate life.*

It was extremely simple to use. No complicated bombsights were needed, no care need be taken to hit "military objectives." Take it aloft in any sort of aircraft, attain a position more or less over the area you wish to sterilize, and drop the stuff. Those on the ground in the contaminated area are dead men, dead in an hour, a day, a week, a month, depending on the degree of the infection—but *dead.*

Manning told me that he had once seriously considered, in the middle of the night, recommending that every single person, including himself, who knew the Karst-Obre technique be put to death, in the interests of all civilization. But he had realized the next day that it had been sheer funk; the technique was certain in time to be rediscovered by someone else.

Furthermore, it would not do to wait, to refrain from using the grisly power, until someone else perfected it and used it. The only possible chance to keep the world from being turned into one huge morgue was for us to use the power first and drastically—get the upper hand and keep it.

We were not at war, legally, yet we had been in the war up to our necks with our weight on the side of democracy since 1940. Manning had proposed to the President that we turn a supply of the dust over to Great Britain, under conditions we specified, and enable them thereby to force a peace. But the terms of the peace would be dictated by the United States—for we were not turning over the secret.

After that, the *Pax Americana.*

The United States was having power thrust on it, willy-nilly. We had to accept it and enforce a worldwide peace, ruthlessly and drastically, or it would be seized by some other nation. There could not be co-equals in the possession of this weapon. The factor of time predominated.

I was selected to handle the details in England because Manning insisted, and the President agreed with him, that every person technically acquainted with the Karst-Obre process should remain on the laboratory reservation in what amounted to protective custody—imprisonment. That included Manning himself. I could go because I did not have the secret—I could not even have acquired it without years of schooling—and what I did not know I could not tell, even under, well, drugs. We were determined to keep the secret as long as we could to consolidate the *Pax*; we did not distrust our English cousins, but they were Britishers, with a first loyalty to the British Empire. No need to tempt them.

I was picked because I understood the background if not the science, and because Manning trusted me. I don't know why the President trusted me, too, but then my job was not complicated.

We took off from the new field outside Baltimore on a cold, raw afternoon which matched my own feelings. I had an all-gone feeling in my stomach, a runny nose, and, buttoned inside my clothes, papers appointing me a special agent of the President of the United States. They were odd papers, papers without precedent; they did not simply give me the usual diplomatic immunity; they made my person very nearly as sacred as that of the President himself.

At Nova Scotia we touched ground to refuel, the F.B.I, men left us, we took off again, and the Canadian transfighters took their stations around us. All the dust we were sending was in my plane; if the President's representative were shot down, the dust would go to the bottom with him.

No need to tell of the crossing. I was airsick and miserable, in spite of the steadiness of the new six-engined jobs. I felt like a hangman on the way to an execution, and wished to God that I were a boy again, with nothing more momentous than a debate contest, or a track meet, to worry me.

There was some fighting around us as we neared Scotland, I know, but I could not see it, the cabin being shuttered. Our pilot-captain ignored it and brought his ship down on a totally dark field, using a beam, I suppose, though I did not know nor care. I would have welcomed a crash. Then the lights outside went on and I saw that we had come to rest in an underground hangar.

I stayed in the ship. The Commandant came to see me to his quarters as his guest. I shook my head. "I stay here," I said. "Orders. You are to treat this ship as United States soil, you know."

He seemed miffed, but compromised by having dinner served for both of us in my ship.

There was a really embarrassing situation the next day. I was commanded to appear for a Royal audience. But I had my instructions and I stuck to them. I was sitting on that cargo of dust until the President told me what to do with it. Late in the day I was called on by a member of Parliament—nobody admitted out loud that it was the Prime Minister—and a Mr. Windsor. The M.P. did most of the talking and I answered his questions. My other guest said very little and spoke slowly with some difficulty. But I got a very favorable impression of him. He seemed to be a man who was carrying a load beyond human strength and carrying it heroically.

There followed the longest period in my life. It was actually only a little longer than a week, but every minute of it had that splitsecond intensity of imminent disaster that comes just before a car crash. The President was using the time to try to avert the need to use the dust. He had two face-to-face television conferences with the new Fuehrer. The President spoke German fluently, which should have helped. He spoke three times to the warring peoples themselves, but it is doubtful if very many on the Continent were able to listen, the police regulations there being what they were.

The Ambassador from the Reich was given a special demonstration of the effect of the dust. He was flown out over a deserted stretch of Western prairie and allowed to see what a single dusting would do to a herd of steers. It should have impressed him and I think that it did—*nobody* could ignore a visual demonstration!—but what report he made to his leader we never knew.

The British Isles were visited repeatedly during the wait by bombing attacks as heavy as any of the war. I was safe enough but I heard about them, and I could see the effect on the morale of the officers with whom I associated. Not that it frightened them—it made them coldly angry. The raids were not directed primarily at dockyards or factories, but were ruthless destruction of anything, particularly villages.

"I don't see what you chaps are waiting for," a flight commander complained to me. "What the Jerries need is a dose of their own *shrecklichkeit,* a lesson in their own Aryan culture."

I shook my head. "We'll have to do it our own way."

He dropped the matter, but I knew how he and his brother officers felt. They had a standing toast, as sacred as the toast to the King: "Remember Coventry!"

Our President had stipulated that the R.A.F. was not to bomb during the period of negotiation, but their bombers were busy nevertheless. The continent was showered, night after night, with bales of leaflets, prepared by our own propaganda agents. The first of these called on the people of the Reich to stop a useless war and promised that the terms of peace would not be vindictive. The second rain of pamphlets showed photographs of that herd of steers. The third was a simple direct warning to get out of cities and to stay out.

As Manning put it, we were calling "Halt!" three times before firing. I do not think that he or the President expected it to work, but we were morally obligated to try.

The Britishers had installed for me a televisor, of the Simonds-Yarley nonintercept type, the sort whereby the receiver must "trigger" the transmitter in order for the transmission to take place at all. It made assurance of privacy in diplomatic rapid communication for the first time in history, and was a real help in the crisis. I had brought along my own technician, one of the F.B.I.'s new corps of specialists, to handle the scrambler and the trigger.

He called to me one afternoon. "Washington signaling."

I climbed tiredly out of the cabin and down to the booth on the hangar floor, wondering if it were another false alarm.

It was the President. His lips were white. "Carry out your basic instructions, Mr. DeFries."

"Yes, Mr. President!"

The details had been worked out in advance and, once I had accepted a receipt and token payment from the Commandant for the dust, my duties were finished. But, at our instance, the British had invited military observers from every independent nation and from the several provisional governments of occupied nations. The United States Ambassador designated me as one at the request of Manning.

Our task group was thirteen bombers. One such bomber could have carried all the dust needed, but it was split up to insure most of it, at least, reaching its destination. I had fetched forty percent more dust than Ridpath calculated would be needed for the mission and my last job was to see to it that every canister actually went on board a plane of the flight. The extremely small weight of dust used was emphasized to each of the military observers.

We took off just at dark, climbed to twenty-five thousand feet, refueled in the air, and climbed again. Our escort was waiting for us, having refueled thirty minutes before us. The flight split into thirteen groups, and cut the thin air for middle Europe. The bombers we rode had been stripped and hiked up to permit the utmost maximum of speed and altitude.

Elsewhere in England, other flights had taken off shortly before us to act as a diversion. Their destinations were every part of Germany; it was the intention to create such confusion in the air above the Reich that our few planes actually engaged in the serious work might well escape attention entirely, flying so high in the stratosphere.

The thirteen dust carriers approached Berlin from different directions, planning to cross Berlin as if following the spokes of a wheel. The night was appreciably clear and we had a low moon to help us. Berlin is not a hard city to locate, since it has the largest square-mile area of any modern city and is located on a broad flat alluvial plain. I could make out the River Spree as we approached it, and the Havel. The city was blacked out, but a city makes a different sort of black from open country. Parachute flares hung over the city in many places, showing that the R.A.F. had been busy before we got there and the A.A. batteries on the ground helped to pick out the city.

There was fighting below us, but not within fifteen thousand feet of our altitude as nearly as I could judge.

The pilot reported to the captain, "On line of bearing!" The chap working the absolute altimeter steadily fed his data into the fuse pots of the canister. The canisters were equipped with a light charge of black powder, sufficient to explode them and scatter the dust at a time after release predetermined by the fuse pot setting. The method used was no more than an efficient expedient. The dust would have been almost as effective had it simply been dumped out in paper bags, although not as well distributed.

The Captain hung over the navigator's board, a slight frown on his thin sallow face. "Ready one!" reported the bomber.

"Release!"

"Ready two!"

The Captain studied his wristwatch. "Release!"

"Ready three!"

"Release!"

When the last of our ten little packages was out of the ship we turned tail and ran for home.

No arrangements had been made for me to get home; nobody had thought about it. But it was the one thing I wanted to do. I did not feel badly; I did not feel much of anything. I felt like a man who has at last screwed up his courage and undergone a serious operation; it's over now, he is still numb from shock but his mind is relaxed. But I wanted to go home.

The British Commandant was quite decent about it; he serviced and manned my ship at once and gave me an escort for the offshore war zone. It was an expensive way to send one man home, but who cared? We had just expended some millions of lives in a desperate attempt to end the war; what was a money expense? He gave the necessary orders absentmindedly.

I took a double dose of nembutal and woke up in Canada. I tried to get some news while the plane was being serviced, but there was not much to be had. The government of the Reich had issued one official news bulletin shortly after the raid, sneering at the much vaunted "secret weapon" of the British and stating that a major air attack had been made on Berlin and several other cities, but that the raiders had been driven off with only minor damage. The current Lord Haw-Haw started one of his sarcastic speeches but was unable to continue it. The announcer said that he had been seized with a heart attack, and substituted some recordings of patriotic music. The station cut off in the middle of the "Horst Wessel" song. After that there was silence.

I managed to promote an Army car and a driver at the Baltimore field which made short work of the Annapolis speedway. We almost overran the turnoff to the laboratory.

Manning was in his office. He looked up as I came in, said, "Hello, John," in a dispirited voice, and dropped his eyes again to the blotter pad. He went back to drawing doodles.

I looked him over and realized for the first time that the chief was an old man. His face was gray and flabby, deep furrows framed his mouth in a triangle. His clothes did not fit.

I went up to him and put a hand on his shoulder. "Don't take it so hard, chief. It's not your fault. We gave them all the warning in the world."

He looked up again. "Estelle Karst suicided this morning."

Anybody could have anticipated it, but nobody did. And somehow I felt harder hit by her death than by the death of all those strangers in Berlin. "How did she do it?" I asked.

"Dust. She went into the canning room, and took off her armor."

I could picture her—head held high, eyes snapping, and that set look on her mouth which she got when people did something she disapproved of. One little old woman whose lifetime work had been turned against her.

"I wish," Manning added slowly, "that I could explain to her why we *had* to do it."

We buried her in a lead-lined coffin, then Manning and I went on to Washington.

While we were there, we saw the motion pictures that had been made of the death of Berlin. You have not seen them; they never were made public, but they were of great use in convincing the other nations of the world that peace was a good idea. I saw them when Congress did, being allowed in because I was Manning's assistant.

They had been made by a pair of R.A.F. pilots, who had dodged the *Luftwaffe* to get them. The first shots showed some of the main streets the morning after the raid. There was not much to see that would show up in telephoto shots, just busy and crowded streets, but if you looked closely you could see that there had been an excessive number of automobile accidents.

The second day showed the attempt to evacuate. The inner squares of the city were practically deserted save for bodies and wrecked cars, but the streets leading out of town were boiling with people, mostly on foot, for the trams were out of service. The pitiful creatures were fleeing, not knowing that death was already lodged inside them. The plane swooped down at one point and the cinematographer had his telephoto lens pointed directly into the face of a young woman for several seconds. She stared back at it with a look too woebegone to forget, then stumbled and fell.

She may have been trampled. I hope so. One of those six horses had looked like that when the stuff was beginning to hit his vitals.

The last sequence showed Berlin and the roads around it a week after the raid. The city was dead; there was not a man, a woman, a child—nor cats, nor dogs, not even a pigeon. Bodies were all around, but they were safe from rats. There were no rats.

The roads around Berlin were quiet now. Scattered carelessly on shoulders and in ditches, and to a lesser extent on the pavement itself, like coal shaken off a train, were the quiet heaps that had been the citizens of the capital of the Reich. There is no use in talking about it.

But, so far as I am concerned, I left what soul I had in that projection room and I have not had one since.

The two pilots who made the pictures eventually died—systemic, cumulative infection, dust in the air over Berlin. With precautions it need not have happened, but the English did not believe, as yet, that our extreme precautions were necessary.

The Reich took about a week to fold up. It might have taken longer if the new Fuehrer had not gone to Berlin the day after the raid to "prove" that the British boasts had been hollow. There is no need to recount the provisional governments that Germany had in the following several months; the only one we are concerned with is the so-called restored monarchy which used a cousin of the old Kaiser as a symbol, the one that sued for peace.

Then the trouble started.

When the Prime Minister announced the terms of the private agreement he had had with our President, he was met with a silence that was broken only by cries of "Shame! Shame! Resign!" I suppose it was inevitable; the Commons reflected the spirit of a people who had been unmercifully punished for four years. They were in a mood to enforce a peace that would have made the Versailles Treaty look like the Beatitudes.

The vote of no confidence left the Prime Minister no choice.

Fortyeight hours later the King made a speech from the throne that violated all constitutional precedent, for it had not been written by a Prime Minister. In this greatest crisis in his reign, his voice was clear and unlabored; it sold the idea to England and a national coalition government was formed.

I don't know whether we would have dusted London to enforce our terms or not; Manning thinks we would have done so. I suppose it depended on the character of the President of the United States, and there is no way of knowing about that since we did not have to do it.

The United States, and in particular the President of the United States, was confronted by two inescapable problems. First, we had to consolidate our position at once, use our temporary advantage of an overwhelmingly powerful weapon to insure that such a weapon would not be turned on us. Second, some means had to be worked out to stabilize American foreign policy so that it could handle the tremendous power we had suddenly had thrust upon us.

The second was by far the most difficult and serious. If we were to establish a reasonably permanent peace—say a century or so—through a monopoly on a weapon so powerful that no one dare fight us, it was imperative that the policy under which we acted be more lasting than passing political administrations. But more of that later—

The first problem had to be attended to at once—time was the heart of it. The emergency lay in the very simplicity of the weapon. It required nothing but aircraft to scatter it and the dust itself, which was easily and quickly made by anyone possessing the secret of the Karst-Obre process and having access to a small supply of uranium-bearing ore.

But the Karst-Obre process was simple and might be independently developed at any time. Manning reported to the President that it was Ridpath's opinion, concurred in by Manning, that the staff of any modern radiation laboratory should be able to work out an equivalent technique in six weeks, working from the hint given by the events in Berlin alone, and should then be able to produce enough dust to cause major destruction in another six weeks.

Ninety days—ninety days *provided* they started from scratch and were not already halfway to their goal. Less than ninety days—perhaps no time at all—

By this time Manning was an unofficial member of the Cabinet; "Secretary of Dust," the President called him in one of his rare jovial moods. As for me, well, I attended Cabinet meetings, too. As the only layman who had seen the whole show from beginning to end, the President wanted me there.

I am an ordinary sort of man who, by a concatenation of improbabilities, found himself shoved into the councils of the rulers.

But I found that the rulers were ordinary men, too, and frequently as bewildered as I was.

But Manning was no ordinary man. In him ordinary hard sense had been raised to the level of genius. Oh, yes, I know that it is popular to blame everything on him and to call him everything from traitor to mad dog, but I still think he was both wise and benevolent. I don't care how many second-guessing historians disagree with me.

"I propose," said Manning, "that we begin by immobilizing all aircraft throughout the world."

The Secretary of Commerce raised his brows. "Aren't you," he said, "being a little fantastic, Colonel Manning?"

"No, I'm not," answered Manning shortly. "I'm being realistic. The key to this problem is aircraft. Without aircraft the dust is an inefficient weapon. The only way I see to gain time enough to deal with the whole problem is to ground all aircraft and put them out of operation. All aircraft, that is, not actually in the service of the United States Army. After that we can deal with complete world disarmament and permanent methods of control."

"Really now," replied the Secretary, "you are not proposing that commercial airlines be put out of operation. They are an essential part of world economy. It would be an intolerable nuisance."

"Getting killed is an intolerable nuisance, too," Manning answered stubbornly. "I do propose just that. All aircraft. *All.*"

The President had been listening without comment to the discussion. He now cut in. "How about aircraft on which some groups depend to stay alive, Colonel, such as the Alaskan lines?"

"If there are such, they must be operated by American Army pilots and crews. No exceptions."

The Secretary of Commerce looked startled. "Am I to infer from that last remark that you intended this prohibition to apply to the *United States* as well as other nations?"

"Naturally."

"But that's impossible. It's unconstitutional. It violates civil rights."

"Killing a man violates his civil rights, too," Manning answered stubbornly.

"You can't do it. Any Federal Court in the country would enjoin you in five minutes."

"It seems to me," said Manning slowly, "that Andy Jackson gave us a good precedent for that one when he told John Marshall to go fly a kite." He looked slowly around the table at faces that ranged from undecided to antagonistic. "The issue is sharp, gentlemen, and we might as well drag it out in the open. We can be dead men, with everything in due order, constitutional, and technically correct; or we can do what has to be done, stay alive, and try to straighten out the legal aspects later." He shut up and waited.

The Secretary of Labor picked it up. "I don't think the Colonel has any corner on realism. I think I see the problem, too, and I admit it is a serious one. The dust must never be used again. Had I known about it soon enough, it would never have been used on Berlin. And I agree that some sort of worldwide control is necessary. But where I differ with the Colonel is in the method. What he proposes is a military dictatorship imposed by force on the whole world. Admit it, Colonel. Isn't that what you are proposing?"

Manning did not dodge it. "That is what I am proposing."

"Thanks. Now we know where we stand. I, for one, do not regard democratic measures and constitutional procedure as of so little importance that I am willing to jettison them any time it becomes convenient. To me, democracy is more than a matter of expediency, it is a faith. Either it works, or I go under with it."

"What do you propose?" asked the President.

"I propose that we treat this as an opportunity to create a worldwide democratic commonwealth! Let us use our present dominant position to issue a call to all nations to send representatives to a conference to form a world constitution."

"League of Nations," I heard someone mutter.

"No!" he answered the side remark. "Not a League of Nations. The old League was helpless because it had no real existence, no power. It was not implemented to enforce its decisions; it was just a debating society, a sham. This would be different *for we would turn over the dust to it!*"

Nobody spoke for some minutes. You could see them turning it over in their minds, doubtful, partially approving, intrigued but dubious.

"I'd like to answer that," said Manning.

"Go ahead," said the President.

"I will. I'm going to have to use some pretty plain language and I hope that Secretary Larner will do me the honor of believing that I speak so from sincerity and deep concern and not from personal pique.

"I think a world democracy would be a very fine thing and I ask that you believe me when I say I would willingly lay down my life to accomplish it. I also think it would be a very fine thing for the lion to lie down with the lamb, but I am reasonably certain that only the lion would get up. If we try to form an actual world democracy, we'll be the lamb in the setup.

"There are a lot of good, kindly people who are internationalists these days. Nine out of ten of them are soft in the head and the tenth is ignorant. If we set up a worldwide democracy, what will the electorate be? Take a look at the facts: Four hundred million Chinese with no more concept of voting and citizen responsibility than a flea; three hundred million Hindus who aren't much better indoctrinated; God knows how many in the Eurasian Union who believe in God knows what; the entire continent of Africa only semicivilized; eighty million Japanese who really believe that they are Heaven-ordained to rule; our Spanish-American friends who might trail along with us and might not, but who don't understand the Bill of Rights the way we think of it; a quarter of a billion people of two dozen different nationalities in Europe, all with revenge and black hatred in their hearts.

"No, it won't wash. It's preposterous to talk about a world democracy for many years to come. If you turn the secret of the dust over to such a body, you will be arming the whole world to commit suicide."

Larner answered at once. "I could resent some of your remarks, but I won't. To put it bluntly, I consider the source. The trouble with you, Colonel Manning, is that you are a professional soldier and have no faith in people. Soldiers may be necessary, but the worst of them are martinets and the best are merely paternalistic." There was quite a lot more of the same.

Manning stood it until his turn came again. "Maybe I am all those things, but you haven't met my argument. *What are you going to do about the hundreds of millions of people who have no experience in, nor love for, democracy?* Now, perhaps, I don't have the same concept of democracy as yourself, but I do know this: Out West there are a couple of hundred thousand people who sent me to Congress; I am *not* going to stand quietly by and let a course be followed which I think will result in their deaths or utter ruin.

"Here is the probable future, as I see it, potential in the smashing of the atom and the development of lethal artificial radioactives. Some power makes a supply of the dust. They'll hit us first to try to knock us out and give them a free hand. New York and Washington overnight, then all of our industrial areas while we are still politically and economically disorganized. But our army would not be in those cities; we would have planes and a supply of dust somewhere where the first dusting wouldn't touch them. Our boys would bravely and righteously proceed to poison their big cities. Back and forth it would go until the organization of each country had broken down so completely that they were no longer able to maintain a sufficiently high level of industrialization to service planes and manufacture dust. That presupposes starvation and plague in the process. You can fill in the details.

"The other nations would get in the game. It would be silly and suicidal, of course, but it doesn't take brains to take a hand in this. All it takes is a very small group, hungry for power, a few airplanes and a supply of dust. *It's a vicious circle that cannot possibly be stopped until the entire planet has dropped to a level of economy too low to support the techniques necessary to maintain it.* My best guess is that such a point would be reached when approximately three-quarters of the world's population were dead of dust, disease, or hunger, and culture reduced to the peasant-and-village type.

"Where is your Constitution and your Bill of Rights if you let that happen?"

I've shortened it down, but that was the gist of it. I can't hope to record every word of an argument that went on for days.

The Secretary of the Navy took a crack at him next. "Aren't you getting a bit hysterical, Colonel? After all, the world has seen a lot of weapons which were going to make war an impossibility too horrible to contemplate. Poison gas, and tanks, and airplanes—even firearms, if I remember my history."

Manning smiled wryly. "You've made a point, Mr. Secretary. 'And when the wolf *really* came, the little boy shouted in vain.' I imagine the Chamber of Commerce in Pompeii presented the same reasonable argument to any early vulcanologist so timid as to fear Vesuvius. I'll try to justify my fears. The dust differs from every earlier weapon in its deadliness and ease of use, but most importantly in that we have developed no defense against it. For a number of fairly technical reasons, I don't think we ever will, at least not this century."

"Why not?"

"Because there is no way to counteract radioactivity short of putting a lead shield between yourself and it, an *airtight* lead shield. People might survive by living in sealed underground cities, but our characteristic American culture could not be maintained."

"Colonel Manning," suggested the Secretary of State, "I think you have overlooked the obvious alternative."

"Have I?"

"Yes—to keep the dust as our own secret, go our own way, and let the rest of the world look out for itself. That is the only program that fits our traditions." The Secretary of State was really a fine old gentleman, and not stupid, but he was slow to assimilate new ideas.

"Mr. Secretary," said Manning respectfully, "I wish we could afford to mind our own business. I do wish we could. But it is the best opinion of all the experts that we can't maintain control of this secret except by rigid policing. The Germans were close on our heels in nuclear research; it was sheer luck that we got there first. I ask you to imagine Germany a year hence—with a supply of dust."

The Secretary did not answer, but I saw his lips form the word

Berlin.

They came around. The President had deliberately let Manning bear the brunt of the argument, conserving his own stock of goodwill to coax the obdurate. He decided against putting it up to Congress; the dusters would have been overhead before each senator had finished his say. What he intended to do might be unconstitutional, but if he failed to act there might not be any Constitution shortly. There was precedent—the Emancipation Proclamation, the Monroe Doctrine, the Louisiana Purchase, suspension of habeas corpus in the War between the States, the Destroyer Deal.

On February 22nd the President declared a state of full emergency internally and sent his Peace Proclamation to the head of every sovereign state. Divested of its diplomatic surplusage, it said: *The United States is prepared to defeat any power, or combination of powers, in jig time. Accordingly, we are outlawing war and are calling on every nation to disarm completely at once. In other words, "Throw down your guns, boys; we've got the drop on you!"*

A supplement set forth the procedure: All aircraft capable of flying the Atlantic were to be delivered in one week's time to a field, or rather a great stretch of prairie, just west of Fort Riley, Kansas. For lesser aircraft, a spot near Shanghai and a rendezvous in Wales were designated. Memoranda would be issued later with respect to other war equipment. Uranium and its ores were not mentioned; that would come later.

No excuses. Failure to disarm would be construed as an act of war against the United States.

There were no cases of apoplexy in the Senate; why not, I don't know.

There were only three powers to be seriously worried about, England, Japan, and the Eurasian Union. England had been forewarned, we had pulled her out of a war she was losing, and she—or rather her men in power—knew accurately what we could and would do.

Japan was another matter. They had not seen Berlin and they did not really believe it. Besides, they had been telling each other for so many years that they were unbeatable, they believed it. It does not do to get too tough with a Japanese too quickly, for they will die rather than lose face. The negotiations were conducted very quietly indeed, but our fleet was halfway from Pearl Harbor to Kobe, loaded with enough dust to sterilize their six biggest cities, before they were concluded. Do you know what did it? This never hit the newspapers but it was the wording of the pamphlets we proposed to scatter before dusting.

The Emperor was pleased to declare a New Order of Peace. The official version, built up for home consumption, made the whole matter one of collaboration between two great and friendly powers, with Japan taking the initiative.

The Eurasian Union was a puzzle. After Stalin's unexpected death in 1941, no western nation knew very much about what went on in there. Our own diplomatic relations had atrophied through failure to replace men called home nearly four years before. Everybody knew, of course, that the new group in power called themselves Fifth Internationalists, but what that meant, aside from ceasing to display the pictures of Lenin and Stalin, nobody knew.

But they agreed to our terms and offered to cooperate in every way. They pointed out that the Union had never been warlike and had kept out of the recent world struggle. It was fitting that the two remaining great powers should use their greatness to insure a lasting peace.

I was delighted; I had been worried about the E.U.

They commenced delivery of some of their smaller planes to the receiving station near Shanghai at once. The reports on the number and quality of the planes seemed to indicate that they had stayed out of the war through necessity; the planes were mostly of German make and in poor condition, types that Germany had abandoned early in the war.

Manning went west to supervise certain details in connection with immobilizing the big planes, the transoceanic planes, which were to gather near Fort Riley. We planned to spray them with oil, then dust from a low altitude, as in crop dusting, with a low concentration of one-year dust. Then we could turn our backs on them and forget them, while attending to other matters.

But there were hazards. The dust must not be allowed to reach Kansas City, Lincoln, Wichita—any of the nearby cities. The smaller towns roundabout had been temporarily evacuated. Testing stations needed to be set up in all directions in order that accurate tab on the dust might be kept. Manning felt personally responsible to make sure that no bystander was poisoned.

We circled the receiving station before landing at Fort Riley. I could pick out the three landing fields which had hurriedly been graded. Their runways were white in the sun, the twenty-four-hour cement as yet undirtied. Around each of the landing fields were crowded dozens of parking fields, less perfectly graded. Tractors and bulldozers were still at work on some of them. In the easternmost fields, the German and British ships were already in place, jammed wing to body as tightly as planes on the flight deck of a carrier—save for a few that were still being towed into position, the tiny tractors looking from the air like ants dragging pieces of leaf many times larger than themselves.

Only three flying fortresses had arrived from the Eurasian Union. Their representatives had asked for a short delay in order that a supply of high-test aviation gasoline might be delivered to them. They claimed a shortage of fuel necessary to make the long flight over the Arctic safe. There was no way to check the claim and the delay was granted while a shipment was routed from England.

We were about to leave, Manning having satisfied himself as to safety precautions, when a dispatch came in announcing that a flight of E.U. bombers might be expected before the day was out. Manning wanted to see them arrive; we waited around for four hours. When it was finally reported that our escort of fighters had picked them up at the Canadian border, Manning appeared to have grown fidgety and stated that he would watch them from the air. We took off, gained altitude and waited.

There were nine of them in the flight, cruising in column of echelons and looking so huge that our little fighters were hardly noticeable. They circled the field and I was admiring the stately dignity of them when Manning's pilot, Lieutenant Rafferty, exclaimed, "What the devil! They are preparing to land downwind!"

I still did not tumble, but Manning shouted to the copilot, "Get the field!"

He fiddled with his instruments and announced, "Got 'em, sir!"

"General alarm! Armor!"

We could not hear the sirens, naturally, but I could see the white plumes rise from the big steam whistle on the roof of the Administration Building—three long blasts, then three short ones. It seemed almost at the same time that the first cloud broke from the E.U. planes.

Instead of landing, they passed low over the receiving station, jampacked now with ships from all over the world. Each echelon picked one of three groups centered around the three landing fields and streamers of heavy brown smoke poured from the bellies of the E.U. ships. I saw a tiny black figure jump from a tractor and run toward the nearest building. Then the smoke screen obscured the field.

"Do you still have the field?" demanded Manning.

"Yes, sir."

"Cross connect to the chief safety technician. Hurry!"

The copilot cut in the amplifier so that Manning could talk directly. "Saunders? This is Manning. How about it?"

"Radioactive, chief. Intensity seven point four."

They had paralleled the Karst-Obre research.

Manning cut him off and demanded that the communication office at the field raise the Chief of Staff. There was nerve-stretching delay, for it had to be routed over land wire to Kansas City, and some chief operator had to be convinced that she should commandeer a trunk line that was in commercial use. But we got through at last and Manning made his report. "It stands to reason," I heard him say, "that other flights are approaching the border by this time. New York, of course, and Washington. Probably Detroit and Chicago as well. No way of knowing."

The Chief of Staff cut off abruptly, without comment. I knew that the U.S. air fleets, in a state of alert for weeks past, would have their orders in a few seconds, and would be on their way to hunt out and down the attackers, if possible before they could reach the cities.

I glanced back at the field. The formations were broken up. One of the E.U. bombers was down, crashed, half a mile beyond the station. While I watched, one of our midget dive bombers screamed down on a behemoth E.U. ship and unloaded his eggs. It was a center hit, but the American pilot had cut it too fine, could not pull out, and crashed before his victim.

There is no point in rehashing the newspaper stories of the Four-Days War. The point is that we should have lost it, and we would have, had it not been for an unlikely combination of luck, foresight, and good management. Apparently, the nuclear physicists of the Eurasian Union were almost as far along as Ridpath's crew when the destruction of Berlin gave them the tip they needed. But we had rushed them, forced them to move before they were ready, because of the deadline for disarmament set forth in our Peace Proclamation.

If the President had waited to fight it out with Congress before issuing the proclamation, there would not be any United States.

Manning never got credit for it, but it is evident to me that he anticipated the possibility of something like the Four-Days War and prepared for it in a dozen different devious ways. I don't mean military preparation; the Army and the Navy saw to that. But it was no accident that Congress was adjourned at the time. I had something to do with the vote-swapping and compromising that led up to it, and I know.

But I put it to you—would he have maneuvered to get Congress out of Washington at a time when he feared that Washington might be attacked if he had had dictatorial ambitions?

Of course, it was the President who was back of the ten-day leaves that had been granted to most of the civil-service personnel in Washington and he himself must have made the decision to take a swing through the South at that time, but it must have been Manning who put the idea in his head. It is inconceivable that the President would have left Washington to escape personal danger.

And then, there was the plague scare. I don't know how or when Manning could have started that—it certainly did not go through my notebook—but I simply do not believe that it was accidental that a completely unfounded rumor of bubonic plague caused New York City to be semideserted at the time the E.U. bombers struck.

At that, we lost over eight hundred thousand people in Manhattan alone.

Of course, the government was blamed for the lives that were lost and the papers were merciless in their criticism at the failure to anticipate and force an evacuation of all the major cities.

If Manning anticipated trouble, why did he not ask for evacuation?

Well, as I see it, for this reason:

A big city will not be, never has been, evacuated in response to rational argument. London never was evacuated on any major scale and we failed utterly in our attempt to force the evacuation of Berlin. The people of New York City had considered the danger of air raids since 1940 and were long since hardened to the thought.

But the fear of a nonexistent epidemic of plague caused the most nearly complete evacuation of a major city ever seen.

And don't forget what we did to Vladivostok and Irkutsk and Moscow—those were innocent people, too. War isn't pretty.

I said luck played a part. It was bad navigation that caused one of our ships to dust Ryazan instead of Moscow, but that mistake knocked out the laboratory and plant which produced the only supply of military radioactives in the Eurasian Union. Suppose the mistake had been the other way around—suppose that one of the E.U. ships in attacking Washington, D.C., by mistake had included Ridpath's shop fortyfive miles away in Maryland?

Congress reconvened at the temporary capital in St. Louis, and the American Pacification Expedition started the job of pulling the fangs of the Eurasian Union. It was not a military occupation in the usual sense; there were two simple objectives: to search out and dust all aircraft, aircraft plants, and fields, and to locate and dust radiation laboratories, uranium supplies, and lodes of carnotite and pitchblende. No attempt was made to interfere with, or to replace, civil government.

We used a two-year dust, which gave a breathing spell in which to consolidate our position. Liberal rewards were offered to informers, a technique which worked remarkably well not only in the E.U., but in most parts of the world.

The "weasel," an instrument to smell out radiation, based on the electroscope-discharge principle and refined by Ridpath's staff, greatly facilitated the work of locating uranium and uranium ores. A grid of weasels, properly spaced over a suspect area, could locate any important mass of uranium almost as handily as a direction-finder can spot a radio station.

But, notwithstanding the excellent work of General Bulfinch and the Pacification Expedition as a whole, it was the original mistake of dusting Ryazan that made the job possible of accomplishment.

Anyone interested in the details of the pacification work done in 1945–6 should see the "Proceedings of the American Foundation for Social Research" for a paper entitled *A Study of the Execution of the American Peace Policy from February, 1945*. The *de facto* solution of the problem of policing the world against war left the United States with the much greater problem of perfecting a policy that would insure that the deadly power of the dust would never fall into unfit hands.

The problem is as easy to state as the problem of squaring the circle and almost as impossible of accomplishment. Both Manning and the President believed that the United States must of necessity keep the power for the time being, until some permanent institution could be developed fit to retain it. The hazard was this: Foreign policy is lodged jointly in the hands of the President and the Congress. We were fortunate at the time in having a good President and an adequate Congress, but that was no guarantee for the future. We have had unfit Presidents and power-hungry Congresses—oh, yes! Read the history of the Mexican War.

We were about to hand over to future governments of the United States the power to turn the entire globe into an empire, our empire. And it was the sober opinion of the President that our characteristic and beloved democratic culture would not stand up under the temptation. Imperialism degrades both oppressor and oppressed.

The President was determined that our sudden power should be used for the absolute minimum of maintaining peace in the world—the simple purpose of outlawing war and nothing else. It must not be used to protect American investments abroad, to coerce trade agreements, for any purpose but the simple abolition of mass killing.

There is no science of sociology. Perhaps there will be, some day, when a rigorous physics gives a finished science of colloidal chemistry and that leads in turn to a complete knowledge of biology, and from there to a definitive psychology. After that we may begin to know something about sociology and politics. Sometime around the year 5000 A.D., maybe—if the human race does not commit suicide before then.

Until then, there is only horse sense and rule of thumb and observational knowledge of probabilities. Manning and the President played by ear.

The treaties with Great Britain, Germany and the Eurasian Union, whereby we assumed the responsibility for world peace and at the same time guaranteed the contracting nations against our own misuse of power, were rushed through in the period of relief and goodwill that immediately followed the termination of the Four-Days War. We followed the precedents established by the Panama Canal treaties, the Suez Canal agreements, and the Philippine Independence policy.

But the purpose underneath was to commit future governments of the United States to an irrevocable benevolent policy.

The act to implement the treaties by creating the Commission of World Safety followed soon after, and Colonel Manning became Mr. Commissioner Manning. Commissioners had a life tenure and the intention was to create a body with the integrity, permanence and freedom from outside pressure possessed by the Supreme Court of the United States. Since the treaties contemplated an eventual joint trust, commissioners need not be American citizens—and the oath they took was *to preserve the peace of the world.*

There was trouble getting the clause past the Congress! Every other similar oath had been to the Constitution of the United States.

Nevertheless the Commission was formed. It took charge of world aircraft, assumed jurisdiction over radioactives, natural and artificial, and commenced the long slow task of building up the Peace Patrol.

Manning envisioned a corps of world policemen, an aristocracy which, through selection and indoctrination, could be trusted with unlimited power over the life of every man, every woman, every child on the face of the globe. For the power *would* be unlimited; the precautions necessary to insure the unbeatable weapon from getting loose in the world again made it axiomatic that its custodians would wield power that is safe only in the hands of Deity. There would be no one to guard those selfsame guardians. Their own characters and the watch they kept on each other would be all that stood between the race and disaster.

For the first time in history, supreme political power was to be exerted with no possibility of checks and balances from the outside. Manning took up the task of perfecting it with a dragging subconscious conviction that it was too much for human nature.

The rest of the Commission was appointed slowly, the names being sent to the Senate after long joint consideration by the President and Manning. The director of the Red Cross, an obscure little professor of history from Switzerland, Dr. Igor Rimski who had developed the Karst-Obre technique independently and whom the A.P.F. had discovered in prison after the dusting of Moscow—those three were the only foreigners. The rest of the list is well known.

Ridpath and his staff were of necessity the original technical crew of the Commission; United States Army and Navy pilots its first patrolmen. Not all of the pilots available were needed; their records were searched, their habits and associates investigated, their mental processes and emotional attitudes examined by the best psychological research methods available—which weren't good enough. Their final acceptance for the Patrol depended on two personal interviews, one with Manning, one with the President.

Manning told me that he depended more on the President's feeling for character than he did on all the association and reaction tests the psychologists could think up. "It's like the nose of a bloodhound," he said. "In his forty years of practical politics he has seen more phonies than you and I will ever see and each one was trying to sell him something. He can tell one in the dark."

The long-distance plan included the schools for the indoctrination of cadet patrolmen, schools that were to be open to youths of any race, color, or nationality, and from which they would go forth to guard the peace *of every country but their own.* To that country a man would never return during his service. They were to be a deliberately expatriated band of Janizaries, with an obligation only to the Commission and to the race, and welded together with a carefully nurtured esprit de corps.

It stood a chance of working. Had Manning been allowed twenty years without interruption, the original plan might have worked.

The President's running mate for reelection was the result of a political compromise. The candidate for Vice President was a confirmed isolationist who had opposed the Peace Commission from the first, but it was he or a party split in a year when the opposition was strong. The President sneaked back in but with a greatly weakened Congress; only his power of veto twice prevented the repeal of the Peace Act. The Vice President did nothing to help him, although he did not publicly lead the insurrection. Manning revised his plans to complete the essential program by the end of 1952, there being no way to predict the temper of the next administration.

We were both overworked and I was beginning to realize that my health was gone. The cause was not far to seek; a photographic film strapped next to my skin would cloud in twenty minutes. I was suffering from cumulative minimal radioactive poisoning. No well-defined cancer that could be operated on, but a systemic deterioration of function and tissue. There was no help for it, and there was work to be done. I've always attributed it mainly to the week I spent sitting on those canisters before the raid on Berlin.

February 17, 1951. I missed the televue flash about the plane crash that killed the President because I was lying down in my apartment. Manning, by that time, was requiring me to rest every afternoon after lunch, though I was still on duty. I first heard about it from my secretary when I returned to my office, and at once hurried into

Manning's office.

There was a curious unreality to that meeting. It seemed to me that we had slipped back to that day when I returned from England, the day that Estelle Karst died. He looked up. "Hello, John," he said.

I put my hand on his shoulder. "Don't take it so hard, chief," was all I could think of to say.

Fortyeight hours later came the message from the newly sworn-in President for Manning to report to him. I took it in to him, an official despatch which I decoded. Manning read it, face impassive.

"Are you going, chief?" I asked.

"Eh? Why, certainly."

I went back into my office, and got my topcoat, gloves, and briefcase.

Manning looked up when I came back in. "Never mind, John," he said. "You're not going." I guess I must have looked stubborn, for he added, "You're not to go because there is work to do here. Wait a minute."

He went to his safe, twiddled the dials, opened it and removed a sealed envelope which he threw on the desk between us. "Here are your orders. Get busy."

He went out as I was opening them. I read them through and got busy. There was little enough time.

The new President received Manning standing and in the company of several of his bodyguards and intimates. Manning recognized the senator who had led the movement to use the Patrol to recover expropriated holdings in South America and Rhodesia, as well as the chairman of the committee on aviation with whom he had had several unsatisfactory conferences in an attempt to work out a *modus operandi* for reinstituting commercial airlines.

"You're prompt, I see," said the President. "Good."

Manning bowed.

"We might as well come straight to the point," the Chief Executive went on. "There are going to be some changes of policy in the administration. I want your resignation."

"I am sorry to have to refuse, sir."

"We'll see about that. In the meantime, Colonel Manning, you are relieved from duty."

"Mr. Commissioner Manning, if you please."

The new President shrugged. "One or the other, as you please. You are relieved, either way."

"I am sorry to disagree again. My appointment is for life."

"That's enough," was the answer. "This is the United States of America. There can be no higher authority. You are under arrest."

I can visualize Manning staring steadily at him for a long moment, then answering slowly, "You are physically able to arrest me, I will concede, but I advise you to wait a few minutes." He stepped to the window. "Look up into the sky."

Six bombers of the Peace Commission patrolled over the Capitol. "None of those pilots is American born," Manning added slowly. "If you confine me, none of us here in this room will live out the day."

There were incidents thereafter, such as the unfortunate affair at Fort Benning three days later, and the outbreak in the wing of the Patrol based in Lisbon and its resultant wholesale dismissals, but for practical purposes, that was all there was to the *coup d'etat.*

Manning was the undisputed military dictator of the world.

Whether or not any man as universally hated as Manning can perfect the Patrol he envisioned, make it self-perpetuating and trustworthy, I don't know, and—because of that week of waiting in a buried English hangar—I won't be here to find out. Manning's heart disease makes the outcome even more uncertain—he may last another twenty years; he may keel over dead tomorrow—and there is no one to take his place. I've set this down partly to occupy the short time I have left and partly to show there is another side to any story, even world dominion.

Not that I would like the outcome, either way. If there is anything to this survival-after-death business, I am going to look up the man who invented the bow and arrow and take him apart with my bare hands. For myself, I can't be happy in a world where any man, or group of men, has the power of death over you and me, our neighbors, every human, every animal, every living thing. I don't like anyone to have that kind of power.

And neither does Manning.

“—We Also Walk Dogs"

“General Services—Miss Cormet speaking!” She addressed the view screen with just the right balance between warm hospitable friendliness and impersonal efficiency. The screen flickered momentarily, then built up a stereo-picture of a dowager, fat and fretful, overdressed and underexercised.

“Oh, my dear,” said the image, “I’m *so* upset. I wonder if you *can* help me.”

“I’m sure we can,” Miss Cormet purred as she quickly estimated the cost of the woman’s gown and jewels (if real-she made a mental reservation) and decided that here was a client that could be profitable. “Now tell me your trouble. Your name first, if you please.”

She touched a button on the horseshoe desk which enclosed her, a button marked CREDIT DEPARTMENT.

“But it’s all so *involved*,” the image insisted. “Peter *would* go and break his hip.” Miss Cormet immediately pressed the button marked MEDICAL. “I’ve *told* him that polo is dangerous. You’ve no idea, my dear, how a mother suffers. And just at this time, too. It’s *so* inconvenient—”

“You wish us to attend him? Where is he now?”

“Attend him? Why, how silly! The Memorial Hospital will do that. We’ve endowed them enough, I’m sure. It’s my dinner party I’m worried about. The Principessa will be so annoyed.”

The answer light from the Credit Department was blinking angrily. Miss Cormet headed her off. “Oh, I see. We’ll arrange it for you. Now, your name, please, and your address and present location.”

“But don’t you *know* my name?”

“One might guess,” Miss Cormet diplomatically evaded, “but General Services always, respects the privacy of its clients.”

“Oh, yes, of course. How considerate. I am Mrs. Peter van Hogbein Johnson.” Miss Cormet controlled her reaction. No need to consult the Credit Department for this one. But its transparency flashed at once, rating AAA—unlimited. “But I don’t see what you can *do*,” Mrs. Johnson continued. “I can’t be two places at once.”

“General Services likes difficult assignments,” Miss Cormet assured her. “Now—if you will let me have the details…”

She wheedled and nudged the woman into giving a fairly coherent story. Her son, Peter III, a slightly shopworn Peter Pan, whose features were familiar to Grace Cormet through years of stereogravure, dressed in every conceivable costume affected by the richly idle in their pastimes, had been so thoughtless as to pick the afternoon before his mother’s most important social function to bung himself up-seriously. Furthermore, he had been so thoughtless as to do so half a continent away from his mater.

Miss Cormet gathered that Mrs. Johnson’s technique for keeping her son safely under thumb required that she rush to his bedside at once, and, incidentally, to select his nurses. But her dinner party that evening represented the culmination of months of careful maneuvering. What was she to *do*?

Miss Cormet reflected to herself that the prosperity of General Services and her own very substantial income was based largely on the stupidity, lack of resourcefulness, and laziness of persons like this silly parasite, as she explained that General Services would see that her party was a smooth, social success while arranging for a portable full-length stereo screen to be installed in her drawing room in order that she might greet her guests and make her explanations while hurrying to her son's side. Miss Cormet would see that a most adept social manager was placed in charge, one whose own position in society was irreproachable and whose connection with General Services was known to no one. With proper handling the disaster could be turned into a social triumph, enhancing Mrs. Johnson's reputation as a clever hostess and as a devoted mother.

"A sky car will be at your door in twenty minutes," she added, as she cut in the circuit marked TRANSPORTATION, "to take you to the rocket port. One of our young men will be with it to get additional details from you on the way to the port. A compartment for yourself and a berth for your maid will be reserved on the 16:45 rocket for Newark. You may rest easy now. General Services will do your worrying."

"Oh, thank you, my dear. You've been such a help. You've no idea of the *responsibilities* a person in my position has."

Miss Cormet cluck-clucked in professional sympathy while deciding that this particular old girl was good for still more fees. "You *do* look exhausted, madame," she said anxiously. "Should I not have a masseuse accompany you on the trip? Is your health at all delicate? Perhaps a physician would be still better."

"How thoughtful you are!"

"I'll send both," Miss Cormet decided, and switched off, with a faint regret that she had not suggested a specially chartered rocket. Special service, not listed in the master price schedule, was supplied on a cost-plus basis. In cases like this "plus" meant all the traffic would bear.

She switched to EXECUTIVE; an alert-eyed young man filled the screen. "Stand by for transcript, Steve," she said. "Special service, triple-A. I've started the immediate service."

His eyebrows lifted. "Triple-A-bonuses?"

"Undoubtedly. Give this old battleaxe the works—smoothly. And look-the client's son is laid up in a hospital. Check on his nurses. If any one of them has even a shred of sex-appeal, fire her out and put a zombie in."

"Gotcha, kid. Start the transcript."

She cleared her screen again; the "available-for-service" light in her booth turned automatically to green, then almost at once turned red again and a new figure built up in her screen.

No stupid waster this. Grace Cormet saw a well-kempt man in his middle forties, flat-waisted, shrewd-eyed, hard but urbane. The cape of his formal morning clothes was thrown back with careful casualness. "General Services," she said. "Miss Cormet speaking."

"Ah, Miss Cormet," he began, "I wish to see your chief."

"Chief of switchboard?"

"No, I wish to see the President of General Services."

"Will you tell me what it is you wish? Perhaps I can help you."

"Sorry, but I can't make explanations. I must see him, at once."

"And General Services is sorry. Mr. Clare is a very busy man; it is impossible to see him without appointment and without explanation."

"Are you recording?"

"Certainly."

"Then please cease doing so."

Above the console, in sight of the client, she switched off the recorder. Underneath the desk she switched it back on again. General Services was sometimes asked to perform illegal acts; its confidential employees took no chances. He fished something out from the folds of his chemise and held it out to her. The stereo effect made it appear as if he were reaching right out through the screen.

Trained features masked her surprise—it was the sigil of a planetary official, and the color of the badge was green.

"I will arrange it," she said.

"Very good. Can you meet me and conduct me in from the waiting room? In ten minutes?"

"I will be there, Mister… Mister-" But he had cut off.

Grace Cormet switched to the switchboard chief and called for relief. Then, with her board cut out of service, she removed the spool bearing the clandestine record of the interview, stared at it as if undecided, and after a moment, dipped it into an opening in the top of the desk where a strong magnetic field wiped the unfixed patterns from the soft metal.

A girl entered the booth from the rear. She was blond, decorative, and looked slow and a little dull. She was neither. "Okay, Grace," she said. "Anything to turn over?"

"No. Clear board."

"'S matter? Sick?"

"No." With no further explanation Grace left the booth, went on out past the other booths housing operators who handled unlisted services and into the large hall where the hundreds of catalogue operators worked. These had no such complex equipment as the booth which Grace had quitted. One enormous volume, a copy of the current price list of all of General Services' regular price-marked functions, and an ordinary look-and-listen enabled a catalogue operator to provide for the public almost anything the ordinary customer could wish for. If-a call was beyond the scope of the catalogue it was transferred to the aristocrats of resourcefulness, such as Grace.

She took a short cut through the master files room, walked down an alleyway between dozens of chattering punched-card machines, and entered the foyer of that level. A pneumatic lift bounced her up to the level of the President's office. The President's receptionist did not stop her, nor, apparently, announce her. But Grace noted that the girl's hands were busy at the keys of her voder.

Switchboard operators do not walk into the office of the president of a billion-credit corporation. But General Services was not organized like any other business on the planet. It was a *sui generis* business in which special training was a commodity to be listed, bought, and sold, but general resourcefulness and a ready wit were all important. In its hierarchy Jay Clare, the president, came first, his handyman, Saunders Francis, stood second, and the couple of dozen operators, of which Grace was one, who took calls on the unlimited switchboard came immediately after. They, and the field operators who handled the most difficult unclassified commissions-one group in fact, for the unlimited switchboard operators and the unlimited field operators swapped places indiscriminately.

After them came the tens of thousands of other employees spread over the planet, from the chief accountant, the head of the legal department, the chief clerk of the master files on down through the local managers, the catalogue operators to the last classified part time employee-stenographers prepared to take dictation when and where ordered, gigolos ready to fill an empty place at a dinner, the man who rented both armadillos and trained fleas.

Grace Cormet walked into Mr. Clare's office. It was the only room in the building not cluttered up with electromechanical recording and communicating equipment. It contained nothing but his desk (bare), a couple of chairs, and a stereo screen, which, when not in use, seemed to be Krantz‘ famous painting "The Weeping Buddha". The original was in fact in the sub-basement, a thousand feet below.

"Hello, Grace," he greeted her, and shoved a piece of paper at her. "Tell me what you think of that. Sance says it's lousy." Saunders Francis turned his mild pop eyes from his chief to Grace Cormet, but neither confirmed nor denied the statement.

Miss Cormet read:

CAN YOU AFFORD IT? Can You Afford GENERAL SERVICES? Can You Afford NOT to have General Services ? ? ? ? ? In *this jet-speed age can you afford to go on wasting time doing your own shopping, paying bilk yourself, taking care of your living compartment*?

We'll spank the baby and feed the cat.

We'll rent you a house and buy your shoes.

We'll write to your motherin-law and add up your check stubs.

No job too large; No job too small— and all amazingly Cheap I

GENERAL SERVICES

Dial H-U-R-R-Y-U-P

P.S. WE *ALSO WALK DOGS*

“Well?” said Clare.

“Sance is right. It smells.”

“Why?”

“Too logical. Too verbose. No drive.”

“What’s your idea of an ad to catch the marginal market?”

She thought a moment, then borrowed his stylus and wrote:

DO YOU WANT SOMEBODY MURDERED?

(Then *don’t* call GENERAL SERVICES)

But for *any* other job dial HURRY-UP-Ir *pays*!

P.S. We also walk dogs.

“Mmmm… well, maybe,” Mr. Clare said cautiously. “We’ll try it. Sance, give this a type B coverage, two weeks, North America, and let me know how it takes.” Francis put it away in his kit, still with no change in his mild expression. “Now as I was saying—”

“Chief,” broke in Grace Cormet. “I made an appointment for you in —” She glanced at her watchfinger. “—exactly two minutes and forty seconds. Government man.”

“Make him happy and send him away. I’m busy.”

“Green Badge.”

He looked up sharply. Even Francis looked interested. “So?” Clare remarked. “Got the interview transcript with you?”

“I wiped it.”

“You did? Well, perhaps you know best. I like your hunches. Bring him in.”

She nodded thoughtfully and left.

She found her man just entering the public reception room and escorted him past half a dozen gates whose guardians would otherwise have demanded his identity and the nature of his business. When he was seated in

Clare’s office, he looked around. “May I speak with you in private, Mr. Clare?”

“Mr. Francis is my right leg. You’ve already spoken to Miss Cormet.”

“Very well.” He produced the green sigil again and held it out. “No names are necessary just yet. I am sure of your discretion.”

The President of General Services sat up impatiently. “Let’s get down to business. You are Pierre Beaumont, Chief of Protocol. Does the administration want a job done?”

Beaumont was unperturbed by-the change in pace. “You know me. Very well. We’ll get down to business. The government may want a job done. In any case our discussion must not be permitted to leak out —”

“All of General Services relations are confidential.”

“This is not confidential; this is secret.” He paused.

"I understand you," agreed Clare. "Go on."

"You have an interesting organization here, Mr. Clare. I believe it is your boast that you will undertake any commission whatsoever—for a price."

"If it is legal."

"Ah, yes, of course. But legal is a word capable of interpretation. I admired the way your company handled the outfitting of the Second Plutonian Expedition. Some of your methods were, ah, ingenious."

"If you have any criticism of our actions in that case they are best made to our legal department through the usual channels."

Beaumont pushed a palm in his direction. "Oh, no, Mr. Clare—please! You misunderstand me. I was not criticising; I was admiring. Such resource! What a diplomat you would have made!"

"Let's quit fencing. What do you want?"

Mr. Beaumont pursed his lips. "Let us suppose that you had to entertain a dozen representatives of each intelligent race in this planetary system and you wanted to make each one of them completely comfortable and happy. Could you do it?"

Clare thought aloud. "Air pressure, humidity, radiation densities, atmosphere, chemistry, temperatures, cultural conditions—those things are all simple. But how about acceleration? We could use a centrifuge for the Jovians, but Martians and Titans—that's another matter. There is no way to reduce earth-normal gravity. No, you would have to entertain them out in space, or on Luna. That makes it not our pigeon; we never give service beyond the stratosphere."

Beaumont shook his head. "It won't be beyond the stratosphere. You may take it as an absolute condition that you are to accomplish your results on the surface of the Earth."

"Why?"

"Is it the custom of General Services to inquire why a client wants a particular type of service?"

"No. Sorry."

"Quite all right. But you do need more information in order to understand what must be accomplished and why it must be secret. There will be a conference, held on this planet, in the near future—ninety days at the outside. Until the conference is called no suspicion that it is to be held must be allowed to leak out. If the plans for it were to be anticipated in certain quarters, it would be useless to hold the conference at all. I suggest that you think of this conference as a roundtable of leading, ah, scientists of the system, about of the same size and makeup as the session of the Academy held on Mars last spring. You are to make all preparations for the entertainments of the delegates, but you are to conceal these preparations in the ramifications of your organization until needed. As for the details—"

But Clare interrupted him. “You appear to have assumed that we will take on this commission. As you have explained it, it would involve us in a ridiculous failure. General Services does not like failures. You know and I know that low-gravity people cannot spend more than a few hours in high gravity without seriously endangering their health. Interplanetary get-togethers are always held on a low-gravity planet and always will be.”

“Yes,” answered Beaumont patiently, “they always have been. Do you realize the tremendous diplomatic handicap which Earth and Venus labor under in consequence?”

“I don’t get it.”

“It isn’t necessary that you should. Political psychology is not your concern. Take it for granted that it does and that the Administration is determined that *this* conference shall take place on Earth.”

“Why not Luna?”

Beaumont shook his head. “Not the same thing at all. Even though we administer it, Luna City is a treaty port. Not the same thing, psychologically.”

Clare shook his head. “Mr. Beaumont, I don’t believe that you understand the nature of General Services, even as I fail to appreciate the subtle requirements of diplomacy. We don’t work miracles and we don’t promise to. We are just the handyman of the last century, gone speed-lined and corporate. We are the latter day equivalent of the old servant class, but we are not Aladdin’s genie. We don’t even maintain research laboratories in the scientific sense. We simply make the best possible use of modern advances in communication and organization to do what already *can* be done.” He waved a hand at the far wall, on which there was cut in intaglio the time-honored trademark of the business—a Scottie dog, pulling against a leash and sniffing at a post. “*There* is the spirit of the sort of work we do. We walk dogs for people who are too busy to walk ‘em themselves. My grandfather worked his way through college walking dogs. I’m still walking them. I don’t promise miracles, nor monkey with politics.”

Beaumont fitted his fingertips carefully together. “You walk dogs for a fee. But of course you do-you walk my pair. Five minim-credits seems rather cheap.”

“It is. But a hundred thousand dogs, twice a day, soon runs up the gross take.”

“The ‘take’ for walking this ‘dog’ would be considerable.”

“How much?” asked Francis. It was his first sign of interest.

Beaumont turned his eyes on him. “My dear sir, the outcome of this, ah, roundtable should make a difference of literally hundreds of billions of credits to this planet. We will not bind the mouth of the kine that tread the corn, if you pardon the figure of speech.”

“How much?”

“Would thirty percent over cost be reasonable?”

Francis shook his head. “Might not come to much.”

“Well, I certainly won’t haggle. Suppose we leave it up to you gentlemen —your pardon, Miss Cormetl—to decide what the service is worth. I think I can rely on your planetary and racial patriotism to make it reasonable and proper.”

Francis sat back, said nothing, but looked pleased.

“Wait a minute,” protested Clare. “We haven’t taken this job.”

“We have discussed the fee,” observed Beaumont.

Clare looked from Francis to Grace Cormet, then examined his fingernails. “Give me twenty-four hours to find out whether or not it is possible,” he said finally, “and I’ll tell you whether or not we will walk your dog.”

“I feel sure,” answered Beaumont, “that you will.” He gathered his cape about him.

“Okay, masterminds,” said Clare bitterly, “you’ve bought it.”

“I’ve been wanting to get back to field work,” said Grace.

“Put a crew on everything but the gravity problem,” suggested Francis. “It’s the only catch. The rest is routine.”

“Certainly,” agreed Clare, “but you had better deliver on that. If you can’t, we are out some mighty expensive preparations that we will never be paid for. Who do you want? Grace?”

“I suppose so,” answered Francis. “She can count up to ten.”

Grace Cormet looked at him coldly. “There are times, Sance Francis, when I regret having married you.”

“Keep your domestic affairs out of the office,” warned Clare. “Where do you start?”

“Let’s find out who knows most about gravitation,” decided Francis. “Grace, better get Doctor Krathwohl on the screen.”

“Right,” she acknowledged, as she stepped to the stereo controls. “That’s the beauty about this business. You don’t have to know anything; you just have to know where to find out.”

Dr. Krathwohl was a part of the permanent staff of General Services. He had no assigned duties. The company found it worthwhile to support him in comfort while providing him with an unlimited drawing account for scientific journals and for attendance at the meetings which the learned hold from time to time. Dr. Krathwohl lacked the single-minded drive of the research scientist; he was a dilettante by nature.

Occasionally they asked him a question. It paid.

“Oh, hello, my dear!” Doctor Krathwohl’s gentle face smiled out at her from the screen. “Look—I’ve just come across the most amusing fact in the latest issue of *Nature*. It throws a most interesting sidelight on Brownlee's theory of-"

"Just a second, Doc," she interrupted. "I'm kinda in a hurry."

"Yes, my dear?"

"Who knows the most about gravitation?"

"In what way do you mean that? Do you want an astrophysicist, or do you want to deal with the subject from a standpoint of theoretical mechanics? Farquarson would be the man in the first instance, I suppose."

"I want to know what makes it tick."

"Field theory, eh? In that case you don't want Farquarson. He is a descriptive ballistician, primarily. Dr. Julian's work iri that subject is authoritative, possibly definitive."

"Where can we get hold of him?"

"Oh, but you can't. He died last year, poor fellow. A great loss."

Grace refrained from telling him how great a loss and asked, "Who stepped into his shoes?"

"Who what? Oh, you were jesting! I see. You want the name of the present top man in field theory. I would say O'Neil."

"Where is he?" , "I'll have to find out. I know him slightly—a difficult man."

"Do, please. In the meantime who could coach us a bit on what it's all about?"

"Why don't you try young Carson, in our engineering department? He was interested in such things before he took a job with us. Intelligent chap— I've had many an interesting talk with him."

"I'll do that. Thanks, Doc. Call the Chief's office as soon as you have located O'Neil. Speed." She cut off.

Carson agreed with Krathwohl's opinion, but looked dubious. "O'Neil is arrogant and noncooperative. I've worked under him. But he undoubtedly knows more about field theory and space structure than any other living man."

Carson had been taken into the inner circle, the problem explained to him. He had admitted that he saw no solution. "Maybe we are making something hard out of this," Clare suggested. "I've got some ideas. Check me if I'm wrong, Carson."

"Go ahead, Chief."

"Well, the acceleration of gravity is produced by the proximity of a mass —right? Earth-normal gravity being produced by the proximity of the Earth. Well, what would be the effect of placing a large mass just over a particular point on the Earth's surface. Would not that serve to counteract the pull of the Earth?"

"Theoretically, yes. But it would have to be a damn big mass."

"No matter."

"You don't understand, Chief. To offset fully the pull of the Earth at a given point would require another planet the size of the Earth in contact with the Earth at that point. Of course since you don't want to cancel the pull completely, but simply to reduce it, you gain a certain advantage through using a smaller mass which would have its center of gravity closer to the point in question than would be the center of gravity of the Earth. Not enough, though. While the attraction builds up inversely as the square of the distance—in this case the half-diameter—the mass and the consequent attraction drops off directly as the *cube* of the diameter."

"What does that give us?"

Carson produced a sliderule and figured for a few moments. He looked up. "I'm almost afraid to answer. You would need a good-sized asteroid, of lead, to get anywhere at all."

"Asteroids have been moved before this."

"Yes, but what is to *hold it up*? No, Chief, there is no conceivable source of power, or means of applying it, that would enable you to hang a big planetoid over a particular spot on the Earth's surface and keep it there."

"Well, it was a good idea while it lasted," Clare said pensively.

Grace's smooth brow had been wrinkled as she followed the discussion. Now she put in, "I gathered that you could use an extremely heavy small mass more effectively. I seem to have read somewhere about some stuff that weighs *tons* per cubic inch."

"The core of dwarf stars," agreed Carson. "All we would need for that would be a ship capable of going lightyears in a few days, some way to mine the interior of a star, and a new spacetime theory."

"Oh, well, skip it."

"Wait a minute," Francis observed. "Magnetism is a lot like gravity, isn't it?"

"Well-yes."

"Could there be some way to *magnetize* these gazebos from the little planets? Maybe something odd about their body chemistry?"

"Nice idea," agreed Carson, "but while their internal economy is odd, it's not that odd. They are still organic."

"I suppose not. If pigs had wings they'd be pigeons."

The stereo annunciator blinked. Doctor Krathwohl announced that O'Neil could be found at his summer home in Portage, Wisconsin. He had not screened him and would prefer not to do so, unless the Chief insisted.

Clare thanked him and turned back to the others. "We are wasting time," he announced. "After years in this business we should know better than to try to decide technical questions. I'm not a physicist and I don't give a damn how gravitation works. That's O'Neil's business. And Carson's. Carson, shoot up to Wisconsin and get O'Neil on the job."

"Me?"

"You. You're an operator for this job—with pay to match. Bounce over to the port—there will be a rocket and a credit facsimile waiting for you. You ought to be able to raise ground in seven or eight minutes."

Carson blinked. "How about my job here?"

"The engineering department will be told, likewise the accounting. Get going."

Without replying Carson headed for the door. By the time he reached it he was hurrying.

Carson's departure left them with nothing to do until he reported back —nothing to do, that is, but to start action on the manifold details of reproducing the physical and cultural details of three other planets and four major satellites, exclusive of their characteristic surface-normal gravitational accelerations. The assignment, although new, presented no real difficulties —to General Services. Somewhere there were persons' who knew all the answers to these matters. The vast loose organization called General Services was geared to find them, hire them, put them to work. Any of the unlimited operators and a considerable percent of the catalogue operators could take such an assignment and handle it without excitement nor hurry.

Francis called in one unlimited operator. He did not even bother to select him, but took the first available on the ready panel—they were all "Can do!" people. He explained in detail the assignment, then promptly forgot about it. It would be done, and on time. The punched-card machines would chatter a bit louder, stereo screens would flash, and bright young people in all parts of the Earth would drop what they were doing and dig out the specialists who would do the actual work.

He turned back to Clare, who said, "I wish I knew what Beaumont is up to. Conference of scientists—phooeyl"

"I thought you weren't interested in politics, Jay."

"I'm not. I don't give a hoot in hell about politics, interplanetary or otherwise, except as it affects this business. But if I knew what was being planned, we might be able to squeeze a bigger cut out of it."

"Well," put in Grace, "I think you can take it for granted that the real heavyweights from all the planets are about to meet and divide Gaul into three parts."

"Yes, but who gets cut out?"

"Mars, I suppose."

"Seems likely. With a bone tossed to the Venerians. In that case we might speculate a little in Pan-Jovian Trading Corp."

"Easy, son, easy," Francis warned. "Do that, and you might get people interested. This is a hush-hush job."

"I guess you're right. Still, keep your eyes open. There ought to be some way to cut a slice of pie before this is over."

Grace Cormet's telephone buzzed. She took it out of her pocket and said, "Yes?"

"A Mrs. Hogbein Johnson wants to speak to you."

"You handle her. I'm off the board."

"She won't talk to anyone but you."

"All right. Put her on the Chief's stereo, but stay in parallel yourself. You'll handle it after I've talked to her."

The screen came to life, showing Mrs. Johnson's fleshy face alone, framed in the middle of the screen in flat picture. "Oh, Miss Cormet," she moaned, "some dreadful mistake has been made. There is no stereo on this ship."

"It will be installed in Cincinnati. That will be in about twenty minutes."

"You are *sure*?"

"Quite sure."

"Oh, thank you! It's such a relief to talk with you. Do you know, I'm *thinking* of making you my social secretary."

"Thank you," Grace replied evenly, "but I am under contract."

"But how stupidly tiresome! You can break it."

"No, I'm sorry Mrs. Johnson. Good-by." She switched off the screen and spoke again into her telephone. "Tell Accounting to double her fee. And I *won't* speak with her again." She cut off and shoved the little instrument savagely back into her pocket. "Social secretary!"

It was after dinner and Clare had retired to his living apartment before Carson called back. Francis took the call in his own office.

"Any luck?" he asked, when Carson's image had built up.

"Quite a bit. I've seen O'Neil."

"Well? Will he do it?"

"You mean can he do it, don't you?"

"Well-can he?"

"Now that is a funny thing—I didn't think it was theoretically possible. But after talking with him, I'm convinced that it is. O'Neil has a new outlook on field theory—stuff he's never published. The man is a genius."

"I don't care," said Francis, "whether he's a genius or a Mongolian idiot —can he build some sort of a gravity thinner-outer?"

"I believe he can. I really do believe he can."

"Fine. You hired him?"

"No. That's the hitch. That's why I called back. It's like this: I happened to catch him in a mellow mood, and because we had worked together once before and because I had not aroused his ire quite as frequently as his other assistants he invited me to stay for dinner. We talked about a lot of things (you can't hurry him) and I broached the proposition. It interested him mildly-the idea, I mean; not the proposition—and he discussed the theory with me, or, rather, at me. But he won't work on it."

"Why not? You didn't offer him enough money. I guess I'd better tackle him."

"No, Mr. Francis, no. You don't understand. He's not interested in money. He's independently wealthy and has more than he needs for his research, or anything else he wants. But just at present he is busy on wave mechanics theory and he just won't be bothered with anything else."

"Did you make him realize it was important?"

"Yes and no. Mostly no. I tried to, but there isn't anything important to him but what *he* wants. It's a sort of intellectual snobbishness. Other people simply don't count."

"All right," said Francis. "You've done well so far. Here's what you do: After I switch off, you call EXECUTIVE and make a transcript of everything you can remember of what he said about gravitational theory. We'll hire the next best men, feed it to them, and see if it gives them any ideas to work on. In the meantime I'll put a crew to work on the details of Dr. O'Neil's background. He'll have a weak point somewhere; it's just a matter of finding it. Maybe he's keeping a woman somewhere—"

"He's long past that."

"—or maybe he has a by-blow stashed away somewhere. We'll see. I want you to stay there in Portage. Since you can't hire him, maybe you can persuade him to hire you. You're our pipeline, I want it kept open. We've got to find something he wants, or something he is afraid of."

"He's not afraid of *anything*. I'm positive of that."

Then he wants something. If it's not money, or women, it's something else. It's a law of nature."

"I doubt it," Carson replied slowly. "Say! Did I tell you about his hobby?"

"No. What is it?"

"It's china. In particular, Ming china. He has the best collection in the world, I'd guess. But I know what he wants!"

"Well, spill it, man, spill it. Don't be dramatic."

"It's a little china dish, or bowl, about four inches across and two inches high. It's got a Chinese name that means 'Flower of Forgetfulness.'"

"Hmmm—doesn't seem significant. You think he wants it pretty bad?"

"I *know* he does. He has a solid colorgraph of it in his study, where he can look at it. But it hurts him to talk about it."

"Find out who owns it and where it is."

"I know. British Museum. That's why he can't buy it."

"So?" mused Francis. "Well, you can forget it. Carry on."

Clare came down to Francis' office and the three talked it over. "I guess we'll need Beaumont on this," was his comment when he had heard the report. "It will take the Government to get anything loose from the British Museum." Francis looked morose. "Well—what's eating you? What's wrong with that?"

"I know," offered Grace. "You remember the treaty under which Great Britain entered the planetary confederation?"

"I was never much good at history."

"It comes to this: I doubt if the planetary government can touch anything that belongs to the Museum without asking the British Parliament."

"Why not? Treaty or no treaty, the planetary government is sovereign. That was established in the Brazilian Incident."

"Yeah, sure. But it could cause questions to be asked in the House of Commons and that would lead to the one thing Beaumont wants to avoid at all costs—publicity."

"Okay. What do you propose?"

"I'd say that Sance and I had better slide over to England and find out just how tight they have the 'Flower of Forgetfulness' nailed down —and who does the nailing and what his weaknesses are."

Clare's eyes travelled past her to Francis, who was looking blank in the fashion that indicated assent to his intimates. "Okay," agreed Clare, "it's your baby. Taking a special?"

"No, we've got time to get the midnight out of New York. By-by."

"By. Call me tomorrow."

When Grace screened the Chief the next day he took one look at her and exclaimed, "Good Grief, kid! What have you done to your hair?"

"We located the guy," she explained succinctly. "His weakness is blondes."

"You've had your skin bleached, too."

"Of course. How do you like it?"

"It's stupendous—though I preferred you the way you were. But what does Sance think of it?"

"He doesn't mind-it's business. But to get down to cases, Chief, there isn't much to report. This will have to be a lefthanded job. In the ordinary way, it would take an earthquake to get anything out of that tomb."

"Don't do anything that can't be fixed!"

"You know me, Chief. I won't get you in trouble. But it will be expensive."

"Of course."

"That's all for now. I'll screen tomorrow."

She was a brunette again the next day. "What is this?" asked Clare. "A masquerade?"

"I wasn't the blonde he was weak for," she explained, "but I found the one he was interested in."

"Did it work out?"

"I think it will. Sance is having a facsimile integrated now. With luck, we'll see you tomorrow."

They showed up the next day, apparently empty handed. "Well?" said Clare, "well?"

"Seal the place up, Jay," suggested Francis. "Then we'll talk."

Clare flipped a switch controlling an interference shield which rendered his office somewhat more private than a coffin. "How about it?" he demanded. "Did you get it?"

"Show it to him, Grace."

Grace turned her back, fumbled at her clothing for a moment, then turned around and placed it gently on the Chief's desk.

It was not that it was beautiful—it *was* beauty. Its subtle simple curve had no ornamentation, decoration would have sullied it. One spoke softly in its presence, for fear a sudden noise would shatter it.

Clare reached out to touch, then thought better of it and drew his hand back. But he bent his head over it and stared down into it. It was strangely hard to focus-to allocate—the bottom of the bowl. It seemed as if his sight sank deeper and ever deeper into it, as if he were drowning in a pool of light.

He jerked up his head and blinked. "God," he whispered, "God—I didn't know such things existed."

He looked at Grace and looked away to Francis. Francis had tears in his eyes, or perhaps his own were blurred.

"Look, Chief," said Francis. "Look—couldn't we just keep it and call the whole thing off?"

"There's no use talking about it any longer," said Francis wearily. "We can't keep it, Chief. I shouldn't have suggested it and you shouldn't have listened to me. Let's screen O'Neil."

"We might just wait another day before we do anything about it," Clare ventured. His eyes returned yet again to the "Flower of Forgetfulness."

Grace shook her head. "No good. It will just be harder tomorrow. I *know*." She walked decisively over to the stereo and manipulated the controls.

O'Neil was annoyed at being disturbed and twice annoyed that they had used the emergency signal to call him to his disconnected screen.

“What is this?” he demanded. “What do you mean by disturbing a private citizen when he has disconnected? Speak up—and it had better be good, or, so help me, I’ll sue youl”

“We want you to do a little job of work for us, Doctor,” Clare began evenly.

“WhatI” O’Neil seemed almost too surprised to be angry. “Do you mean to stand there, sir, and tell me that you have invaded the privacy of my home to ask *me* to work for *you*?”

“The pay will be satisfactory to you.”

O’Neil seemed to be counting up to ten before answering. “Sir,” he said carefully, “there are men in the world who seem to think they can buy anything, or anybody. I grant you that they have much to go on in that belief. But I am not for sale. Since you seem to be one of those persons,

I will do my best to make this interview expensive for you. You will hear from my attorneys. Good night!“

“Wait a moment,” Clare said urgently. “I believe that you are interested in china—”

“What if I am?”

“Show it to him, Grace.” Grace brought the “Flower of Forgetfulness” up near the screen, handling it carefully, reverently.

O’Neil said nothing. He leaned forward and stared. He seemed to be about to climb through the screen. “Where did you get it?” he said at last.

“That doesn’t matter.”

“I’ll buy it from you—at your own price.”

“It’s not for sale. But you may have it-if we can reach an agreement.”

O’Neil eyed him. “It’s stolen property.”

“You’re mistaken. Nor will you find anyone to take an interest in such a charge. Now about this job—”

O’Neil pulled his eyes away from the bowl. “What is it you wish me to do?”

Clare explained the problem to him. When he had concluded O’Neil shook his head. “That’s ridiculous,” he said.

“We have reason to feel that it is theoretically possible.”

“Oh, certainly! It’s theoretically possible to live forever, too. But no one has ever managed it.”

“We think you can do it.”

“Thank you for nothing. Say!” O’Neil stabbed a finger at him out of the screen. “You set that young pup Carson on me!”

“He was acting under my orders.”

"Then, sir, I do not like your manners."

"How about the job? And this?" Clare indicated the bowl.

O'Neil gazed at it and chewed his whiskers. "Suppose," he said, at last, "I make an honest attempt, to the full extent of my ability, to supply what you want-and I fail."

Clare shook his head. "We pay only for results. Oh, your salary, of course, but not *this*. This is a bonus in addition to your salary, *if* you are successful."

O'Neil seemed about to agree, then said suddenly, "You may be fooling me with a colorgraph. I can't tell through this damned screen."

Clare shrugged. "Come see for yourself."

"I shall. I will. Stay where you are. Where are you? Damn it, sir, what's your *name*?"

He came storming in two hours later. "You've tricked mel The 'Flower' is still in England. I've investigated. I'll… I'll *punish* you, sir, with my own two hands."

"See for yourself," answered Clare. He stepped aside, so that his body no longer obscured O'Neil's view of Clare's desk top.

They let him look. They respected his need for quiet and let him look. After a long time he turned to them, but did not speak.

"Well?" asked Clare.

"I'll build your damned gadget," he said huskily. "I figured out an approach on the way here."

Beaumont came in person to call the day before the first session of the conference. "Just a social call, Mr. Clare," he stated. "I simply wanted to express to you my personal appreciation for the work you have done. And to deliver this."

"This" turned out to be a draft on the Bank Central for the agreed fee. Clare accepted it, glanced at it, nodded, and placed it on his desk.

"I take it, then," he remarked, "that the Government is satisfied with the service rendered."

"That is putting it conservatively," Beaumont assured him. "To be perfectly truthful, I did not think you could do so much. You seem to have thought of everything. The Callistan delegation is out now, riding around and seeing the sights in one of the little tanks you had prepared. They are delighted. Confidentially, I think we can depend on their vote in the coming sessions."

"Gravity shields working all right, eh?"

"Perfectly. I stepped into their sightseeing tank before we turned it over to them. I was as light as the proverbial feather. Too light—I was very nearly spacesick." He smiled in wry amusement. "I entered the Jovian apartments, too. That was quite another matter."

"Yes, it would be," Clare agreed. "Two and a half times normal weight is oppressive to say the least."

"It's a happy ending to a difficult task. I must be going. Oh, yes, one other little matter—I've discussed with Doctor O'Neil the possibility that the Administration may be interested in other uses for his new development. In order to simplify the matter it seems desirable that you provide me with a quitclaim to the O'Neil effect from General Services."

Clare gazed thoughtfully at the "Weeping Buddha" and chewed his thumb. "No," he said slowly, "no. I'm afraid that would be difficult."

"Why not?" asked Beaumont. "It avoids the necessity of adjudication and attendant waste of time. We are prepared to recognize your service and recompense you." '

"Hmmm. I don't believe you fully understand the situation, Mr. Beaumont. There is a certain amount of open territory between our contract with Doctor O'Neil and your contract with us. You asked of us certain services and certain chattels with which to achieve that service. We provided them-for a fee. All done. But our contract with Doctor O'Neil made him a full-time employee for the period of his employment. His research results and the patents embodying them are the property of General Services."

"Really?" said Beaumont. "Doctor O'Neil has a different impression."

"Doctor O'Neil is mistaken. Seriously, Mr. Beaumont-you asked us to develop a siege gun, figuratively speaking, to shoot a gnat. Did you expect us, as businessmen, to throw away the siege gun after one shot?"

"No, I suppose not. What do you propose to do?"

"We expect to exploit the gravity modulator commercially. I fancy we could get quite a good price for certain adaptations of it on Mars."

"Yes. Yes, I suppose you could. But to be brutally frank, Mr. Clare, I am afraid that is impossible. It is a matter of imperative public policy that this development be limited to terrestrials. In fact, the administration would find it necessary to intervene and make it government monopoly."

"Have you considered how to keep O'Neil quiet?"

"In view of the change in circumstances, no. What is your thought?"

"A corporation, in which he would hold a block of stock and be president. One of our bright young men would be chairman of the board." Clare thought of Carson. "There would be stock enough to go around," he added, and watched Beaumont's face.

Beaumont ignored the bait. "I suppose that this corporation would be under contract to the Government—its sole customer?"

"That is the idea."

"Mmmm… yes, it seems feasible. Perhaps I had better speak with

Doctor O’Neil.”

“Help yourself.”

Beaumont got O’Neil on the screen and talked with him in low tones. Or, more properly, Beaumont’s tones were low. O’Neil displayed a tendency to blast the microphone. Clare sent for Francis and Grace and explained to them what had taken place.

Beaumont turned away from the screen. “The Doctor wishes to speak with you, Mr. Clare.”

O’Neil looked at him frigidly. “What is this claptrap I’ve had to listen to, sir? What’s this about the O’Neil effect being your property?”

“It was in your contract, Doctor. Don’t you recall?”

“Contract! I never read the damned thing. But I can tell you this: I’ll take you to court. I’ll tie you in knots before I’ll let you make a fool of me that way.”

“Just a moment, Doctor, please!” Clare soothed. “We have no desire to take advantage of a mere legal technicality, and no one disputes your interest. Let me outline what I had in mind—” He ran rapidly over the plan. O’Neil listened, but his expression was still unmollified at the conclusion.

“I’m not interested,” he said gruffly. “So far as I am concerned the Government can have the whole thing. And I’ll see to it.”

“I had not mentioned one other condition,” added Clare.

“Don’t bother.”

“I must. This will be just a matter of agreement between gentlemen, but it is essential. You have custody of the ‘Flower of Forgetfulness.’”

O’Neil was at once on guard. “What do you mean, ‘custody.’ I own it. Understand me—*own* it.”

"'Own it,'“ repeated Clare. ”Nevertheless, in return for the concessions we are making you with respect to your contract, we want something in return.“

“What?” asked O’Neil. The mention of the bowl had upset his confidence.

“You own it and you retain possession of it. But I want your word that I, or Mr. Francis, or Miss Cormet, may come look at it from time to time-frequently.”

O’Neil looked unbelieving. “You mean that you simply want to come to *look* at it?”

“That’s all.”

“Simply to *enjoy* it?”

“That’s right.”

O’Neil looked at him with new respect. “I did not understand you before, Mr. Clare. I apologize. As for the corporation nonsense—do as you like. I don’t care. You and Mr. Francis and Miss Cormet may come to see the 'Flower' whenever you like. You have my word."

"Thank you, Doctor O'Neil—for all of us." He switched off as quickly as could be managed gracefully.

Beaumont was looking at Clare with added respect, too. "I think," he said, "that the next time I shall not interfere with your handling of the details. I'll take my leave. Adieu, gentlemen—and Miss Cormet."

When the door had rolled down behind him Grace remarked, "That seems to polish it off."

"Yes," said Clare. "We've 'walked his dog' for him; O'Neil has what he wants; Beaumont got what he wanted, and more besides."

"Just what is he after?"

"I don't know, but I suspect that he would like to be first president of the Solar System Federation, if and when there is such a thing. With the aces we have dumped in his lap, he might make it. Do you realize the potentialities of the O'Neil effect?"

"Vaguely," said Francis.

"Have you thought about what it will do to space navigation? Or the possibilities it adds in the way of colonization? Or its recreational uses? There's a fortune in that alone."

"What do we get'out of it?"

"What do we get out of it? Money, old son. Gobs and gobs of money. There's always money in giving people what they want." He glanced up at the Scottie dog trademark.

"Money," repeated Francis. "Yeah, I suppose so."

"Anyhow," added Grace, "we can always go look at the 'Flower.'"

ELSEWHEN

Excerpt from the Evening, STANDARD:

SOUGHT SAVANT EVADES POLICE City Hall Scandal Looms

Professor Arthur Frost, wanted for questioning in connection with the mysterious disappearance from his home of five of his students, escaped today from under the noses of a squad of police sent to arrest him. Police Sergeant Izowski claimed that Frost disappeared from the interior of the Black Maria under conditions which leave the police puzzled. District Attorney Kames labeled Izowsld's story as preposterous and promised the fullest possible investigation.

"But, Chief, I didn't leave him alone for a second!" "Nuts!" answered the Chief of Police. "You claim you put Frost in the Wagon, stopped with one foot on the tailboard to write in your notebook, and when you looked up he was gone. D'yuh expect the Grand Jury to believe that? D'yuh expect me to believe that?"

"Honest, Chief," persisted Izowski, "I just stopped to write down-"

"Write down what?"

"Something he said. I said to him, 'Look, Doc, why don't you tell us where you hid 'em? You know we're bound to dig 'em up in time.' And he just gives me a funny faraway look, and says, Time-ah, time . . . yes, you could dig them up, in Time.' I thought it was an important admission and stops to write it down. But I was standing in the only door he could use to get out of the Wagon. You know, I ain't little;

I kinda fill up a door."

"That's all you do," commented the Chief bitterly. "Izowski, you were either drunk, or crazy-or somebody got to you. The way you tell it, it's impossible!"

Izowski was honest, nor was he drunk, nor crazy.

Four days earlier Doctor Frost's class in speculative metaphysics had met as usual for their Friday evening seminar at the professor's home. Frost was saying, "And why not? Why shouldn't time be a fifth as well as a fourth dimension?"

Howard Jenkins, hardheaded engineering student, answered, "No harm in speculating, I suppose, but the question is meaningless."

"Why?" Frost's tones were deceptively mild.

"No question is meaningless," interrupted Helen Fisher.

"Oh, yeah? How high is up?"

"Let him answer," meditated Frost.

"I will," agreed Jenkins. "Human beings are constituted to perceive three spatial dimensions and one time dimension. Whether there are more of either is meaningless to us for there is no possible way for us to know-ever. Such speculation is a harmless waste of time."

"So?" said Frost. "Ever run across J. W. Dunne's theory of serial universe with serial time? And he's an engineer, like yourself. And don't forget Ouspensky. He regarded time as multidimensional."

"Just a second, Professor," put in Robert Monroe. "I've seen their writings-but I still think Jenkins offered a legitimate objection. How can the question mean anything to us if we aren't built to perceive more dimensions? It's like in mathematics-you can invent any mathematics you like, on any set of axioms, but unless it can be used to describe some sort of phenomena, it's just so much hot air."

Fairly put," conceded Frost. "I'll give a fair answer. Scientific belief is based on observation, either one's own or that of a competent observer. I believe in a two-dimensional time because I have actually observed it."

The clock ticked on for several seconds.

Jenkins said, "But that is impossible. Professor. You aren't built to observe two time dimensions."

"Easy, there ..." answered Frost. "I am built to perceive them one at a time-and so are you. I'll tell you about it, but before I do so, I must explain the theory of time I was forced to evolve in order to account for my experience. Most people think of time as a track that they run on from birth to death as inexorably as a train follows its rails-they feel instinctively that time follows a straight line, the past lying behind, the future lying in front. Now I have reason to believe-to know-that time is analogous to a surface rather than a line, and a rolling hilly surface at that. Think of this track we follow over the surface of time as a winding road cut through hills. Every little way the road branches and the branches follow side canyons. At these branches the crucial decisions of your life take place. You can turn right or left into entirely different futures. Occasionally there is a switchback where one can scramble up or down a bank and skip over a few thousand or million years-if you don't have your eyes so fixed on the road that you miss the short cut.

"Once in a while another road crosses yours. Neither its past nor its future has any connection whatsoever with the world we know. If you happened to take that turn you might find yourself on another planet in another spacetime with nothing left of you or your world but the continuity of your ego.

"Or, if you have the necessary intellectual strength and courage, you may leave the roads, or paths of high probability, and strike out over the hills of possible time, cutting through the roads as you come to them, following them for a little way, even following them backwards, with the past ahead of you, and the future behind you. Or you might roam around the hilltops doing nothing but the extremely improbable. I cannot imagine what that would be like-perhaps a bit like Alice-through-the-Looking-Glass.

"Now as to my evidence-When I was eighteen I had a decision to make. My father suffered financial reverses and I decided to quit college. Eventually I went into business for myself, and, to make a long story short, in nineteen-fifty-eight I was convicted of fraud and went to prison."

Martha Ross interrupted. "Nineteen-fifty-eight, Doctor? You mean fortyeight?"

"No, Miss Ross. I am speaking of events that did not take place on this time track."

"Oh." She looked blank, then muttered, "With the Lord all things are possible."

"While in prison I had time to regret my mistakes. I realized that I had never been cut out for a business career, and I earnestly wished that I had stayed in school many years before. Prison has a peculiar effect on a man's mind. I drifted further and further away from reality, and lived more and more in an introspective world of my own. One night, in a waynot then clear to me, my ego left my cell, went back along the time track, and I awoke in my room at my college fraternity house.

"This time I was wiser-Instead of leaving school, I found parttime work, graduated, continued as a graduate fellow, and eventually arrived where you now see me." He paused and glanced around.

"Doctor," asked young Monroe, "can you give us any idea as to how the stunt was done?"

'Yes, I can," Frost assented- "I worked on that problem for many years, trying to recapture the conditions. Recently I have succeeded and have made several excursions into possibility."

Up to this time the third woman, Estelle Martin, had made no comment, although she had listened with close attention. Now she leaned forward and spoke in an intense whisper.

"Tell us how, Professor Frost!"

"The means is simple. The key lies in convincing the subconscious mind that it can be done-"

"Then the Berkeleian idealism is proved!"

"In a way. Miss Martin. To one who believes in Bishop Berkeley's philosophy the infinite possibilities of two-dimensional time offer proof that the mind creates its own world, but a Spencerian determinist, such as good friend Howard Jenkins, would never leave the road of maximum probability. To him the world would be mechanistic and real. An orthodox freewill Christian, such as Miss Ross, would have her choice of several of the side roads, but would probably remain in a physical environment similar to Howard's.

"I have perfected a technique which will enable others to travel about in the pattern of times as I have done. I have the apparatus ready and any who wish can try it. That is the real reason why these Friday evening meetings have been held in my home-so that when the time came you all might try it, if you wished." He got up and went to a cabinet at the end of the room. "You mean we could go tonight. Doctor?" "Yes, indeed. The process is one of hypnotism and suggestion. Neither is necessary, but that is the quickest way of teaching the subconscious to break out of its groove and go where it pleases. I use a revolving ball to tire the conscious mind into hypnosis. During that period the subject listens to a recording which suggests the time-road to be followed, whereupon he does. It is as simple as that. Do any of you care to try it?"

"Is it likely to be dangerous. Doctor?" He shrugged his shoulders. "The process isn't-just a deep sleep and a phonograph record-But the world of the time track you visit will be as real as the world of this time track. You are all over twenty-one. I am not urging you, I am merely offering you the opportunity."

Monroe stood up. "I'm going, Doctor." "Good! Sit here and use these earphones. Anyone else?"

"Count me in." It was Helen Fisher.

Estelle Martin joined them. Howard Jenkins went hastily to her side. "Are you going to try this business?"

"Most certainly."

He turned to Frost. "I'm in. Doc."

Martha Ross finally joined the others. Frost seated them where they could wear the earphones and then asked, "You will remember the different types of things you could do; branch off into a different world, skip over into the past or the future, or cut straight through the maze of probable tracks on a path of extreme improbability. I have records for all of those."

Monroe was first again. "I'll take a right angle turn and a brand new world."

Estelle did not hesitate. "I want to-How did you put it?-climb up a bank to a higher road somewhere in the future."

"I'll try that, too." It was Jenkins.

"I'll take the remote-possibilities track," put in Helen Fisher.

"That takes care of everybody but Miss Ross," commented the professor. "I'm afraid you will have to take a branch path in probability. Does that suit you?"

She nodded. "I was going to ask for it."

"That's fine. All of these records contain the suggestion for you to return to this room two hours from now, figured along this time track. Put on your earphones. The records run thirty minutes. I'll start them and the ball together."

He swung a glittering many-faceted sphere from a hook in the ceiling, started it whirling, and turned a small spotlight on it. Then he turned off the other lights, and started all the records by throwing a master switch. The scintillating ball twirled round and round, slowed and reversed and twirled back again. Doctor Frost turned his eyes away to keep from being fascinated by it. Presently he slipped out into the hall for a smoke. Half an hour passed and there came the single note of a gong. He hurried back and switched on the light.

Four of the five had disappeared.

The remaining figure was Howard Jenkins, who opened his eyes and blinked at the light. "Well, Doctor, I guess it didn't work."

The Doctor raised his eyebrows. "No? Look around you."

The younger man glanced about him. "Where are the others?"

"Where? Anywhere," replied Frost, with a shrug, "and way when."

Jenkins jerked off his earphones and jumped to his feet. "Doctor, what have you done to Estelle?"

Frost gently disengaged a hand from his sleeve. "I haven't done anything, Howard. She's out on another time track."

"But I meant to go with her!"

"And I tried to send you with her."

"But why didn't I go?"

"I can't say-probably the suggestion wasn't strong enough to overcome your skepticism. But don't be alarmed, son-we expect her back in a couple of hours, you know."

"Don't be alarmed!-that's easy to say. I didn't want her to try this damn fool stunt in the first place, but I knew I couldn't change her mind, so I wanted to go along to look out for her-she's so impractical! But see here, Doc-where are their bodies? I thought we would just stay here in the room in a trance."

"Apparently you didn't understand me. These other time tracks are real, as real as this one we are in. Their whole beings have gone off on other tracks, as if they had turned down a side street."

"But that's impossible-it contradicts the law of the conservation of energy!"

"You must recognize a fact when you see one-they are gone. Besides, it doesn't contradict the law; it simply extends it to include the total universe."

Jenkins rubbed a hand over his face. "I suppose so. But in that case, anything can happen to her-she could even be killed out there. And I can't do a damn thing about it. Oh, I wish we had never seen this damned seminar!"

The professor placed an arm around his shoulders. "Since you can't help her, why not calm down? Besides, you have no reason to believe that she is in any danger. Why borrow trouble? Let's go out to the kitchen and open a bottle of beer while we wait for them." He gently urged him toward the door.

After a couple of beers and a few cigarettes, Jenkins was somewhat calmed down. The professor made conversation.

"How did you happen to sign up for this course, Howard?"

"It was the only course I could take with Estelle."

"I thought so. I let you take it for reasons of my own. I knew you weren't interested in speculative philosophy, but I thought that your hardheaded materialism would hold down some of the loose thinking that is likely to go on in such a class. You've been a help to me. Take Helen Fisher for example. She is prone to reason brilliantly from insufficient data. You help to keep her down to earth."

"To be frank. Doctor Frost, I could never see the need for all this highfalutin discussion. I like facts."

"But you engineers are as bad as metaphysicians-you ignore any fact that you can't weigh in scales. If you can't bite it, it's not real. You believe in a mechanistic, deterministic universe, and ignore the facts of human consciousness, human will, and human freedom of choice-facts that you have directly experienced."

'But those things can be explained in terms of reflexes."

The professor spread his Rands. "You sound just like Martha Ross-she can explain anything in terms of Bible-belt fundamentalism. Why don't both of you admit that there a few things you don't understand?" He paused and cocked his head. "Did you hear something?"

"I think I did."

"Let's check. It's early, but perhaps one of them is back."

They hurried to the study, where they were confronted by an incredible and awe-inspiring sight.

Floating in the air near the fireplace was a figure robed in white and shining with a soft mother-of- pearl radiance. While they stood hesitant at the door, the figure turned its face to them and they saw that it had the face of Martha Ross, cleansed and purified to an unhuman majesty. Then it spoke.

"Peace be unto you, my brothers." A wave of peace and lovingldndness flowed over them like a mother's blessing. The figure approached them, and they saw, curving from its shoulders, the long, white, sweeping wings of a classical angel. Frost cursed under his breath in a dispassionate monotone.

"Do not be afraid, I have come back, as you asked me to. To explain and to help you."

The Doctor found his voice. "Are you Martha Ross?"

"I answer to that name."

"What happened after you put on the earphones?"

"Nothing. I slept for a while. When I woke, I went home."

"Nothing else? How do you explain your appearance?"

"My appearance is what you earthly children expect of the Lord's Redeemed. In the course of time I served as a missionary in South America. There it was required of me that I give up my mortal me in the service of the Lord. And so I entered the Eternal City."

"You went to Heaven?"

"These many eons I have sat at the foot of the Golden Throne and sung hosannas to His name."

Jenkins interrupted them. "Tell me, Martha-or Saint Martha-Where is Estelle? Have you seen her?"

The figure turned slowly and faced him. "Fear not."

"But tell me where she is!"

"It is not needful."

"That's no help," he answered bitterly.

"I will help you. Listen to me; Love the Lord thy God with all thy heart, and Love thy neighbor as thyself. That is all you need to know."

Howard remained silent, at a loss for an answer, but unsatisfied. Presently the figure spoke again. "I must go. God's blessing on you." It flickered and was gone.

The professor touched the young man's arm. "Let's get some fresh air." He led Jenkins, mute and unresisting, out into the garden. They walked for some minutes in silence. Finally Howard asked a question,

"Did we see an angel in there?"

"I think so, Howard."

"But that's insane!"

There are millions of people who wouldn't think so-unusual certainly, but not insane."

"But it's contrary to all modem beliefs-Heaven- Hell-a personal God-Resurrection. Everything I've believed in must be wrong, or I've gone screwy."

"Not necessarily-not even probably. I doubt very much if you will ever see Heaven or Hell. You'll follow a time track in accordance with your nature."

"But she seemed real."

"She was real. I suspect that the conventional hereafter is real to any one who believes in it wholeheartedly, as Martha evidently did, but I expect you to follow a pattern in accordance with die beliefs of an agnostic-except in one respect; when you die, you won't die all over, no matter how intensely you may claim to expect to. It is an emotional impossibility for any man to believe in his own death. That sort of self-annihilation can't be done. You'll have a hereafter, but it will be one appropriate to a materialist."

But Howard was not listening. He pulled at his under lip and frowned. "Say, doc, why wouldn't Martha tell me what happened to Estelle? That was a dirty trick."

"I doubt if she knew, my boy. Martha followed a time track only slightly different from that we are in;

Estelle chose to explore one far in the past or in the distant future. For all practical purposes, each is nonexistent to the other."

They heard a call from the house, a clear contralto voice, "Doctor! Doctor Frost!"

Jenkins whirled around. "That's Estelle!" They ran back into the house, the Doctor endeavoring manfully to keep up.

But it was not Estelle. Standing in the hallway was Helen Fisher, her sweater torn and dirty, her stockings missing, and a barely-healed scar puckering one cheek. Frost stopped and surveyed her. "Are you all right, child?" he demanded.

She grinned boyishly. "I'm okay. You should see the other guy."

Tell us about it."

"In a minute. How about a cup of coffee for the prodigal? And I wouldn't turn up my nose at scrambled eggs and some-lots-of toast. Meals are inclined to be irregular where I've been."

"Yes, indeed. Right away." answered Frost, "but where have you been?"

"Let a gal eat, please," she begged. "I won't hold out on you. What is Howard looking so sour about?"

The professor whispered an explanation. She gave Jenkins a compassionate glance. "Oh, she hasn't? I thought I'd be the last man in; I was away so long. What day is this?"

Frost glanced at his wrist watch. "You're right on time; it's just eleven o'clock."

"The hell you say! Oh, excuse me. Doctor. 'Curiouser and curiouser, said Alice.' All in a couple of hours. Just for the record, I was gone several weeks at least.'"

When her third cup of coffee had washed down the last of the toast, she began:

"When I woke up I was falling upstairs-through a nightmare, several nightmares. Don't ask me to describe that-nobody could. That went on for a week, maybe, then things started to come into focus. I don't know in just what order things happened, but when I first started to notice clearly I was standing in a little barren valley. It was cold, and the air was thin and acrid. It burned my throat. There were two suns in the sky, one big and reddish, the other smaller and too bright to look at."

'Two suns!" exclaimed Howard. "That's not possible-binary stars don't have planets."

She looked at him. "Have it your own way-I was there. Just as I was taking this all in, something whizzed overhead and I ducked. That was the last I saw of that place.

"I slowed down next back on earth-at least it looked like it-and in a city. It was a big and complicated city. I was in trafficway with a lot of fast moving traffic. I stepped out and tried to flag one of the vehicles-a long crawling caterpillar thing with about fifty wheels-when I caught sight of what was driving it and dodged back in a hurry. It wasn't a man and it wasn't an animal either-not one I've ever seen or heard of. It wasn't a bird, or a fish, nor an insect. The god that thought up the inhabitants of that city doesn't deserve worship. I don't know what they were, but they crawled and they crept and they stank. Ugh!"

"I slunk around holes in that place," she continued, "for a couple of weeks before I recovered the trick of jumping the time track. I was desperate, for I thought that the suggestion to return to now hadn't worked. I couldn't find much to eat and I was lightheaded part of the time. I drank out of what I suspect was their drainage system, but there was nobody to ask and I didn't want to know. I was thirsty."

"Did you see any human beings?"

"I'm not sure. I saw some shapes that might have been men squatting in a circle down in the tunnels under the city, but something frightened them, and they scurried away before I could get close enough to look."

"What else happened there?"

"Nothing. I found the trick again that same night and got away from there as fast as I could-I am afraid I lost the scientific spirit. ProfessorI didn't care how the other half lived.

'This time I had better luck. I was on earth again, but in pleasant rolling hills, like the Blue Ridge Mountains. It was summer, and very lovely. I found a little stream and took off my clothes and bathed. It was wonderful. After I had found some ripe berries, I lay down in the sun and went to sleep.

"I woke wide awake with a start. Someone was bending over me. It was a man, but no beauty. He was a Neanderthal. I should have run, but I tried to grab my clothes first, so he grabbed me. I was led back into camp, a Sabine woman, with my new spring sports outfit tucked fetchingly under one arm.

"I wasn't so bad off. It was the Old Man who had found me, and he seemed to regard me as a strange pet, about on a par with the dogs that snarled around the bone heap, rather than as a member of his harem. I fed well enough, if you aren't fussy-I wasn't fussy after living in the bowels of that awful city.

"The Neanderthal isn't a bad fellow at heart, rather good-natured, although inclined to play rough. That's how I got this." She fingered the scar on her cheek, "I had about decided to stay a while and study them, when one day I made a mistake. It was a chilly morning, and I put on my clothes for the first time since I had arrived. One of the young bucks saw me, and I guess it aroused his romantic nature. The Old Man was away at the time and there was no one to stop him.

' He grabbed me before I knew what was happening and tried to show his affection. Have you ever been nuzzled by a cave man, Howard? They have halitosis, not to mention B.O. I was too startled to concentrate on the time trick, or else I would have slipped right out into spacetime and left him clutching air."

Doctor Frost was aghast. "Dear God, child! What did you do?"

"I finally showed him a jiu jitsu trick I learned in Phys. Ed. II, then I ran like hell and skinned up a tree. I counted up to a hundred and tried to be calm. Pretty soon I was shooting upstairs in a nightmare again and very happy to be doing it."

"Then you came back here?"

"Not by a whole lot-worse luck! I landed in this present all right, and apparently along this time dimension, but there was plenty that was wrong about it-I was standing on the south side of Forty-second street in New York. I knew where I was for the first thing I noticed was the big lighted letters that chase around the TIMES building and spell out news flashes. It was running backwards. I was trying to figure out DETROIT BEAT TO HITS NINE GET YANKEES' when I saw two cops close to me running as hard as they could-backwards, away from me." Doctor Frost smothered an ejaculation. "What did you say?"

"Reversed entropy-you entered the track backwards-your time arrow was pointing backwards."

"I figured that out, when I had time to think about it. Just then I was too busy. I was in a clearing in the crowd, but the ring of people-was closing in on me, all running backwards. The cops disappeared in the crowd, and the crowd ran right up to me, stopped, and started to scream. Just as that happened, the traffic lights changed, cars charged out from both directions, driving backwards. It was too much for little Helen. I fainted.

"Following that I seemed to slant through a lot of places-"

"Just a second," Howard interrupted, "just what happened before that? I thought I savvied entropy, but that got me licked."

"Well," explained Frost, "the easiest way to explain it is to say that she was travelling backwards in time. Her future was their past, and vice versa. I'm glad she got out in a hurry. I'm not sure that human metabolism can be maintained in such conditions."

"Hmm-Go ahead, Helen."

"This slanting through the axes would have been startling, if I hadn't been emotionally exhausted. I sat back and watched it, like a movie. I think Salvador Dali wrote the script. I saw landscapes heave and shift like a stormy sea. People melted into plants-I think my own body changed at times, but I can't be sure. Once I found myself in a place that was all insides, instead of outsides. Some of the things we'll skip-I don't believe them myself.

"Then I slowed down in a place that must have had an extra spatial dimension. Everything looked three dimensional to me, but they changed their shapes when I thought about them. I found I could look inside solid objects simply by wanting to. When I tired of prying into the intimate secrets of rocks and plants, I took a look at myself, and it worked Just as well. I know more about anatomy and physiology now than an M.D. It's fun to watch your heart beat-kind o'cute.

"But my appendix was swollen and inflamed. I found I could reach in and touch it-it was tender. I've had trouble with it so I decided to perform an emergency operation, I nipped it off with my nails. It didn't hurt at all, bled a couple of drops and closed right up."

"Good Heavens, child! You might have gotten peritonitis and died."

"I don't think so. I believe that ultraviolet was pouring all through me and killing the bugs. I had a fever for a while, but I think what caused it was a bad case of internal sunburn.

"I forgot to mention that I couldn't walk around in this place, for I couldn't seem to touch anything but myself. I sliced right through anything I tried to get a purchase on. Pretty soon I quit trying and relaxed. It was comfortable and I went into a warm happy dope, like a hibernating bear.

"After a long time-a long, long time, I went sound asleep and came to in your big easy-chair. That's all."

Helen answered Howard's anxious inquiries by telling him that she had seen nothing of Estelle. "But why don't you calm down and wait? She isn't really overdue."

They were interrupted by the opening of the door from the hallway. A short wiry figure in a hooded brown tunic and tight brown breeches strode into the room.

"Where's Doctor Frost? Oh-Doctor, I need help!"

It was Monroe, but changed almost beyond recognition. He had been short and slender before, but was now barely five feet tall, and stocky, with powerful shoulder muscles. The brown costume with its peaked hood, or helmet, gave him a strong resemblance to the popular notion of gnome.

Frost hurried to him. "What is it, Robert? How can I help?"

"This first." Monroe hunched forward for inspection of his left upper arm. The fabric was tattered and charred, exposing an ugly burn. "He just grazed me, but it had better be fixed. If I am to save the arm."

Frost examined it without touching it. "We must rush you to a hospital."

"No time. I've got to get back. They need me-and the help I can bring."

The Doctor shook his head. "You've got to have treatment. Bob. Even if there is strong need for you to go back wherever you have been, you are in a different time track now. Time lost here isn't necessarily lost there."

Monroe cut him short. "I think this world and my world have connected time rates. I must hurry."

Helen Fisher placed herself between them. "Let me see that arm. Bob. Hm-pretty nasty, but I think I can fix it. Professor, put a kettle on the fire with about a cup of water in it. As soon as it boils, chuck in a handful of tea leaves."

She rummaged through the kitchen cutlery drawer, found a pair of shears, and did a neat job of cutting away the sleeve and cleaning the burned flesh for dressing. Monroe talked as she worked.

"Howard, I want you to do me a favor. Get a pencil and paper and take down a list. I want a flock of things to take back-all of them things that you can pick up at the fraternity house. You'll have to go for me-I'd be thrown out with my present appearance-What's the matter? Don't you want to?'

Helen hurriedly explained Howard's preoccupation. He listened sympathetically. "Oh! Say, that's tough lines, old man." His brow wrinkled- "But look-You can't do Estelle any good by waiting here, and I really do need your help for the next half hour. Will you do it?"

Jenkins reluctantly agreed. Monroe continued,

"Fine! I do appreciate it. Co to my room first and gather up my reference books on math-also my slide rule. You'll find an India-paper radio manual, too. I want that. And I want your twenty-inch log-log duplex slide rule, as well. You can have my Rabelais and the Droll Stories. I want your Marks' Mechanical Engineers Handbook, and any other technical reference books that you have and I haven't. Take anything you like in exchange.

"Then go up to Stinky Beanfield's room, and get his Military Engineers Handbook, his Chemical Warfare, and his texts on ballistics and ordnance. Yes, and Miller's Chemistry of Explosives, if he has one. If not, pick up one from some other of the R.O.T.C. boys; it's important." Helen was deftly applying a poultice to his arm. He winced as the tea leaves, still warm, touched his seared flesh, but went ahead.

"Stinky keeps his service automatic in his upper bureau drawer. Swipe it, or talk him out of it. Bring as much ammunition as you can find-I'll write out a bill of sale for my car for you to leave for him. Now get going. I'll tell Doc all about it, and he can tell you later. Here. Take my car." He fumbled at his thigh, then looked annoyed. "Cripes! I don't have my keys."

Helen came to the rescue. "Take mine-The keys are in my bag on the hall table."

Howard got up. "OK, I'll do my damndest. If I get flung in the can, bring me cigarettes." He went out.

Helen put the finishing touches on the bandages. 'There! I think that will do. How does it feel?"

He flexed his arm cautiously. "Okay. It's a neat job. kid. It takes the sting out,"

"I believe it will heal if you keep tannin solution on it. Can you get tea leaves where you are going?"

"Yes, and tannic acid, too. I'll be all right. Now you deserve an explanation. Professor, do you have a cigaret on you? I could use some of that coffee, too."

"Surely, Robert." Frost hastened to serve him.

Monroe accepted a light and began,

"It's all pretty cockeyed. When I came out of the sleep, I found myself, dressed as I am now and looking as I now look, marching down a long, deep fosse. I was one of a column of threes in a military detachment. The odd part about it is that I felt perfectly natural. I knew where I was and why I was there-and who I was. I don't mean Robert Monroe; my name over there is Igor." Monroe pronounced the gutteral deep in his throat and trilled the "r." "I hadn't forgotten Monroe; it was more as if I had suddenly remembered him. I had one identity and two pasts. It was something like waking up from a clearly remembered dream, only the dream was perfectly real. I knew Monroe was real, just as I knew Igor was real.

"My world is much like earth; a bit smaller, but much the same surface gravity. Men like myself are the dominant race, and we are about as civilized as you folks, but our culture has followed a difficult course-We live underground about half the time. Our homes are there and a lot of our industry. You see it's warm underground in our world, and not entirely dark. There is a mild radioactivity; it doesn't harm us.

"Nevertheless we are a surface-evolved race, and can't be healthy nor happy if we stay underground all the time. Now there is a war on and we've been driven underground for eight or nine months. The war is going against us. As it stands now, we have lost control of the surface and my race is being reduced to the status of hunted vermin,

"You see, we aren't fighting human beings. I don't know just what it is we are fighting-maybe beings from outer space. We don't know. They attacked us several places at once from great flying rings the like of which we had never seen. They burned us down without warning. Many of us escaped underground where they haven't followed us. They don't operate at night either-seem to need sunlight to be active. So it's a stalemate-or was until they started gassing our tunnels.

"We've never captured one and consequently don't know what makes them tick. We examined a ring that crashed, but didn't learn much. There was nothing inside that even vaguely resembled animal life, nor was there anything to support animal life. I mean there were no food supplies, nor sanitary arrangements. Opinion is divided between the idea that the one we examined was remotely controlled and the idea that the enemy are some sort of non-protoplasmic intelligence, perhaps force patterns, or something equally odd.

"Our principal weapon is a beam which creates a stasis in the ether, and freezes 'em solid. Or rather it should, but it will destroy all life and prevent molar action-but the rings are simply put temporarily out of control. Unless we can keep a beam on a ring right to the moment it crashes, it recovers and gets away. Then its pals come and burn out our position.

"We've had better luck with mining their surface camps, and blowing them up at night. We're accomplished sappers, of course. But we need better weapons. That's what I sent Howard after. I've got two ideas. If the enemy are simply some sort of intelligent force patterns, or something like that, radio may be the answer. We might be able to fill up the ether with static and jam them right out of existence. If they are too tough for that, perhaps some good old-fashioned antiaircraft fire might make them say 'Uncle.' In any case there is a lot of technology here that we don't have, and which may have the answer. I wish I had time to pass on some of our stuff in return for what I'm taking with me."

"You are determined to go back, Robert?"

"Certainly. It's where I belong. I've no family here. I don t know how to make you see it. Doc, but those are my people-that is my world. I suppose if conditions were reversed, I'd feel differently.'

"I see," said Helen, "you're fighting for the wife and kids." "

He turned a weary face toward her. "Not exactly. I'm a bachelor over there, but I do have a family to think about; my sister is in command of the attack unit I'm in. Oh, yes, the women are in it-they're little and tough, like you, Helen."

She touched his arm lightly. "How did you pick up this?"

"That bum? You remember we were on the march. We were retreating down that ditch from a surface raid. I thought we had made good our escape when all of a sudden a ring swooped down on us. Most of the detachment scattered, but I'm a junior technician armed with the stasis ray. I tried to get my equipment unlimbered to fight back, but I was burned down before I could finish. Luckily it barely grazed me. Several of the others were fried. I don't know yet whether or not Sis got hers. That's one of the reasons why I'm in a hurry.

"One of the other techs who wasn't hit got his gear set up and covered our retreat. I was dragged underground and taken to a dressing station. The medicos were about to work on me when I passed out and came to in the Professor's study."

The doorbell rang and the Professor got up to answer it. Helen and Robert followed him. It was Howard, bearing spoils.

"Did you get everything?" Robert asked anxiously.

"I think so. Stinky was in, but I managed to borrow his books. The gun was harder, but I telephoned a friend of mine and had him call back and ask for Stinky. While he was out of the room, I lifted it. Now I'm a criminal-government property, too."

"You're a pal, Howard. After you hear the explanation, youll agree that it was worth doing. Won't he, Helen?"

"Absolutely!"

"Well, I hope you're right," he answered dubiously. "I brought along something else, just in case. Here it is." He handed Robert a book.

"Aerodynamics and Principles of Aircraft Construction," Robert read aloud. "My God, yes! Thanks, Howard."

In a few minutes, Monroe had his belongings assembled and fastened to his person. He had announced that he was ready when the Professor checked him:

"One moment, Robert. How do you know that these books will go with you?"

"Why not? That's why I'm fastening them to me."

"Did your earthly clothing go through the first time?"

"Noo-" His brow furrowed. "Good grief. Doc, what can I do? I couldn't possibly memorize what I need to know."

"I don't know. Son. Let's think about it a bit." He broke off and stared at the ceiling. Helen touched his hand.

"Perhaps I can help. Professor."

"In what way, Helen?"

"Apparently I don't metamorphize when I change time tracks, I had the same clothes with me everywhere I went. Why couldn't I ferry this stuff over for Bob?"

"Hm, perhaps you could."

"No, I couldn't let you do that," interposed Monroe. "You might get killed or badly hurt."

"I'll chance it.'

"I've got an idea," put in Jenkins. "Couldn't Doctor Frost set his instructions so that Helen would go over and come right back? How about it. Doc?"

"Mmm, yes, perhaps." But Helen held up a hand.

"No good. The boodle might come bouncing back with me. I'll go over without any return instructions. I like the sound of this world of

Bob's anyway. I may stay there. Cut out the chivalry. Bob. One of the things I liked about your world was the notion of treating men and women alike. Get unstuck from that stuff and start hanging it on me. I'm going."

She looked like a Christmas tree when the dozen-odd books had been tied to various parts of her solid little figure, the automatic pistol strapped on, and the two slide rules, one long and one short, stuck in the pistol belt.

Howard fondled the large slide rule before he fastened it on. "Take good care of this slipstick, Bob," he said, "I gave up smoking for six months to pay for it."

Frost seated the two side by side on the sofa in the study. Helen slipped a hand into Bob's. When the shining ball had been made to spin. Frost motioned for Jenkins to leave, closed the door after him and switched out the light. Then he started repeating hypnotic suggestions in a monotone.

Ten minutes later he felt a slight swish of air and ceased. He snapped the light switch. The sofa was empty, even of books.

Frost and Jenkins kept an uneasy vigil while awaiting Estelle's return. Jenkins wandered nervously around the study, examining objects that didn't interest him and smoking countless cigarets. The Professor sat quietly in his easy chair, simulating a freedom from anxiety that he did not feel. They conversed in desultory fashion.

"One thing I don't see," observed Jenkins, "is why in the world Helen could go a dozen places and not change, and Bob goes just one place and comes back almost unrecognizable-shorter, heavier, decked out in outlandish clothes. What happened to his ordinary clothes anyhow? How do you explain those things, Professor?"

"Eh? I don't explain them-I merely observe them. I think perhaps he changed, while Helen didn't, because Helen was just a visitor to the places she went to, whereas Monroe belonged over thereas witness he fitted into the pattern of that world. Perhaps the Great Architect intended for him to cross over."

"Huh? Good heavens, Doctor, surely you don't believe in divine predestination!"

"Perhaps not in those terms. But, Howard, you mechanistic skeptics make me tired. Your naive ability to believe that things 'jest growed' approaches childishness. According a you a fortuitous accident of entropy produced Beethoven's Ninth Symphony."

"I think that's unfair. Doctor. You certainly don't expect a man to believe in things that run contrary to his good sense without offering him any reasonable explanation."

Frost snorted. "I certainly do-if he has observed it with his own eyes and ears, or gets it from a source known to be credible. A fact doesn't have to be understood to be true. Sure, any reasonable mind wants explanations, but it's silly to reject facts that don't fit your philosophy.

"Now these events tonight, which you are so anxious to rationalize in orthodox terms, famish a clue to a lot of things that scientists have been rejecting because they couldn't explain them. Have you ever heard the tale of the man who walked around the horses? No? Around 1810 Benjamin Bathurst, British Ambassador to Austria, arrived in his carriage at an inn in Perleberg, Germany. He had his valet and secretary with him. They drove into the lighted courtyard of the inn. Bathurst got out, and, in the presence of bystanders and his two attaches, walked around the horses. He hasn't been seen since."

"What happened?"

"Nobody knows. I think he was preoccupied and inadvertently wandered into another time track. But there are literally hundreds of similar cases, way too many to laugh off. The two-time-dimensions theory accounts for most of them. But I suspect that there are other as-yet-undreamed-of natural principles operating in some of the rejected cases."

Howard stopped pacing and pulled at his lower hp. "Maybe so. Doctor. I'm too upset to think. Look here-it's one o'clock. Oughtn't she to be back by now?"

"Fm afraid so. Son."

"You mean she's not coming back."

"It doesn't look like it."

The younger man gave a broken cry and collapsed on the sofa. His shoulders heaved. Presently he calmed down a little. Frost saw his lips move and suspected that he was praying. Then he showed a drawn face to the Doctor.

"Isn't there anything we can do?"

"That's hard to answer, Howard. We don't know where she's gone; all we do know is that she left here under hypnotic suggestion to cross over into some other loop of the past or future."

"Can't we go after her the same way and trace her?"

"I don't know. I haven't had any experience with such a job."

"I've got to do something or I'll go nuts."

"Take it easy, son. Let me think about it." He smoked in silence while Howard controlled an impulse to scream, break furniture, anything!

Frost knocked the ash off his cigar and placed it carefully in a tray. "I can think of one chance. It's a remote one."

"Anything!"

"I'm going to listen to the record that Estelle heard, and cross over. I'll do it wide awake, while concentrating on her. Perhaps I can establish some rapport, some extra-sensory connection, that will serve to guide me to her." Frost went immediately about his preparations as he spoke. "I want you to remain in the room when I go so that you will really believe that it can be done."

In silence Howard watched him don the headphones. The Professor stood still, eyes closed. He remained so for nearly fifteen minutes, then took a short step forward. The earphones clattered to the floor. He was gone.

Frost felt himself drift off into the timeless limbo which precedes transition. He noticed again that it was exactly like the floating sensation that ushers in normal sleep, and wondered idly, for the hundredth time, whether or not the dreams of sleep were real experiences. He was inclined to think they were. Then he recalled his mission with a guilty start, and concentrated hard on Estelle.

He was walking along a road, white in the sunshine. Before him were the gates of a city. The gateman stared at his odd attire, but let him pass. He hurried down the broad tree-lined avenue which (he knew) led from the space port to Capitol Hill. He turned aside into the Way of me Gods and continued until he reached the Grove of the Priestesses. There he found the house which he sought, its marble walls pink in the sun, its fountains tinkling in the morning breeze. He turned in.

The ancient janitor, nodding in the sun, admitted him to the house. The slender maidservant, barely nubile, ushered him into the inner chamber, where her mistress raised herself on one elbow and regarded her visitor through languid eyes. Frost addressed her,

"It is time to return, Estelle."

Her eyesbrows showed her surprise. "You speak a strange and barbarous tongue, old man, and yet, here is a mystery, for I know it. What do you wish of me?"

Frost spoke impatiently. "Estelle, I say it is time to return!"

"Return? What idle talk is this? Return where? And my name is StarLight, not Ess Tell. Who are you, and from where do you come?" She searched his face, then pointed a slender finger at him. "I know you nowl You are out of my dreams. You were a Master and instructed me in the ancient wisdom."

"Estelle, do you remember a youth in those dreams?"

"That odd name again! Yes, there was a youth. He was sweet-sweet and straight and tall like pine on the mountain. I have dreamed of him often," She swung about with a flash of long white limbs. "What of this youth?"

"He waits for you. It is time to return."

"Return!-There is no return to the place of dreams!"

"I can lead you there."

"What blasphemy is this? Are you a priest, that you should practice magic? Why should a sacred courtesan go to the place of dreams?"

"There is no magic in it. He is heartsick at your loss. I will lead you back to him."

She hesitated, doubt in her eyes, then she replied, "Suppose you could; why should I leave my honorable sacred station for the cold nothingness of that dream?"

He answered her gently, "What does your heart tell you, Estelle?"

She stared at him, eyes wide, and seemed about to burst into tears. Then she flung herself across the couch, and showed him her back. A muffled voice answered him, "Be off with you! There is no youth, except in my dreams. I'll seek him there!"

She made no further reply to his importunities. Presently he ceased trying and left with a heavy heart.

Howard seized him by the arm as he returned. "Well, Professor? Well? Did you find her?"

Frost dropped wearily into his chair. "Yes, I found her."

"Was she all right? Why didn't she come back with you?"

"She was perfectly well, but I couldn't persuade her to return."

Howard looked as if he had been slapped across the mouth. "Didn't you tell her I wanted her to come back?"

"I did, but she didn't believe me."

"Not believe you?"

"You see she's forgotten most of this life, Howard. She thinks you are simply a dream."

"But that's not possible!"

Frost looked more weary than ever. "Don't you think it is about time you stopped using that term, son?"

Instead of replying he answered, "Doctor, you must take me to her!" Frost looked dubious.

"Can't you do it?"

"Perhaps I could, if you have gotten over your disbelief, but still-"

"Disbelief^-I've been forced to believe. Let's get busy."

Frost did not move. "I'm not sure that I agree. Howard, conditions are quite different where Estelle has gone. It suits her, but I'm not sure that it would be a kindness to take you through to her." "Why not? Doesn't she want to see me?" "Yes-I think she does. I'm sure she would welcome you, but conditions are very different."

"I don't give a damn what the conditions are. Let's go."

Frost got up. "Very well. It shall be as you wish." He seated Jenkins in the easy chair and held the young man's eyes with his gaze. He spoke slowly in calm, unmodulated tones-Frost assisted Howard to his feet and brushed him off. Howard laughed and wiped the white dust of the road from his hands.

"Quite a tumble. Master. I feel as if some lout had pulled a stool from under me."

"I shouldn't have had you sit down." "I guess not." He pulled a'large multi-flanged pistol from his belt and examined it. "Lucky the safety catch was set on my blaster or we might have been picking ourselves out of the stratosphere. Shall we be on our way?"

Frost looked his companion over; helmet, short military kilt, short sword and accoutrements slapping at his thighs. He blinked and answered, "Yes. Yes, of course."

As they swung into the city gates. Frost inquired, 'Do you know where you are headed?" "Yes, certaintiy. To StarLight's villa in the Grove." "And you know what to expect there?" "Oh, you mean our discussion. I know the customs here. Master, and am quite undismayed, I assure you. StarLight and I understand each other. She's one of these 'Out of sight, out of mind' girls. Now that I'm back from Ultima Thule, she'll give up the priesthood and we'll settle down and raise a lot of fat babies."

"Ultima Thule? Do you remember my study?"

"Of course I do-and Robert and Helen and all the rest."

"Is that what you meant by Ultima Thule?"

"Not exactly. I can't explain it. Master. I'm a practical military man. I'll leave such things to you priests and teachers."

They paused in front of Estelle's house. "Coming in, Master?"

"No, I think not. I must be getting back."

"You know best." Howard clapped him on the shoulder. "You have been a true friend. Master. Our first brat shall be named for you."

"Thank you, Howard. Goodbye, and good luck to both of you."

"And to you." He entered the house with a confident stride.

Frost walked slowly back toward the gates, his mind preoccupied with myriad thoughts. There seemed to be no end to the permutations and combinations; either of matter, or of mind. Martha, Robert, Helen-now Howard and Estelle. It should be possible to derive a theory that would cover them all.

As he mused, his heel caught on a loose paving block and he stumbled across his easy chair.

The absence of the five students was going to be hard to explain. Frost knew-so he said nothing to anyone. The weekend passed before anyone took the absences seriously. On Monday a policeman came to his house, asking questions.

His answers were not illuminating, for he had reasonably refrained from trying to tell the true story. The District Attorney smelled a serious crime, kidnapping or perhaps a mass murder. Or maybe one of these love cults-you can never tell about these professors!

He caused a warrant to be issued Tuesday morning, Sergeant

Izowski was sent to pick him up.

The professor came quietly and entered the black wagon without protest, "Look, Doc," said the sergeant, encouraged by his docile manner, "why don't you tell us where you hid 'em? You know we're bound to dig them up in time."

Frost turned, looked him in the eyes, and smiled, "Time," he said softly, "ah, time . . . yes, you could dig them up, in Time." He then got into the wagon and sat down quietly, closed his eyes, and placed his mind in the necessary calm receptive condition.

The sergeant placed one foot on the tailboard, braced his bulk in the only door, and drew out his notebook. When he finished writing he looked up.

Professor Frost was gone.

Frost had intended to look up Howard and Estelle. Inadvertently he let his mind dwell on Helen and Robert at the crucial moment. When he "landed" it was not in the world of the future he had visited twice before. He did not know where he was-on earth apparently, somewhere and somewhen.

It was wooded rolling country, like the hills of southern Missouri, or New Jersey. Frost had not sufficient knowledge of botany to be able to tell whether the species of trees he saw around him were familiar or not. But he was given no time to study the matter.

He heard a shout, an answering shout. Human figures came bursting out of the trees in a ragged line. He thought that they were attacking him, looked wildly around for shelter, and found none. But they kept on past him, ignoring him, except that the one who passed closest to him glanced at him hastily, and shouted something. Then he, too, was gone.

Frost was left standing, bewildered, in the small natural clearing in which he had landed.

Before he had had time to integrate these events one of the fleeing figures reappeared and yelled to him, accompanying the words with a gesture unmistakable-he was to come along.

Frost hesitated. The figure ran toward and hit him with a clean tackle. The next few seconds were very confused, but he pulled himself together sufficiently to realize that he was seeing the world upside down;

the stranger was carrying him at a strong dogtrot, thrown over one shoulder.

Bushes whipped at his face, then the way led downward for several yards, and he was dumped casually to the ground. He sat up and rubbed himself.

He found himself in a tunnel which ran upwards to daylight and downward the Lord knew where. Figures milled around him but ignored him. Two of them were setting up some apparatus between the group and the mouth of the tunnel. They worked with extreme urgency, completing what they were doing in seconds, and stepped back. Frost heard a soft gentle hum.

The mouth of the tunnel became slightly cloudy. He soon saw why-the apparatus was spinning a web from wall to wall, blocking the exit. The web became less tenuous, translucent, opaque. The hum persisted for minutes thereafter and the strange machine continued to weave and thicken the web. One of the figures glanced at its belt, spoke one word in the tone of command, and the humming ceased.

Frost could feel relief spread over the group like a warm glow. He felt it himself and relaxed, knowing intuitively that some acute danger had been averted.

The member of the group who had given the order to shut off the machine turned around, happened to see Frost, and approached him, asking some questions in a sweet but peremptory soprano. Frost was suddenly aware of three things; the leader was a woman, it was the leader who had rescued him, and the costume and general appearance of these people matched that of the transformed Robert Monroe.

A smile spread over his face. Everything was going to be all right!

The question was repeated with marked impatience. Frost felt that an answer was required, though he did not understand the language and was sure that she could not possibly know English. Nevertheless-

"Madame," he said in English, getting to his feet and giving her a courtly bow, "I do not know your language and do not understand your question, but I suspect that you have saved my life. I am grateful."

She seemed puzzled and somewhat annoyed, and demanded something else-at least Frost thought it was a different question; he could not be sure. This was getting nowhere. The language difficulty was almost insuperable, he realized. It might take days, weeks, months to overcome it. In the meantime these people were busy with a war, and would be in no frame of mind to bother with a useless incoherent stranger.

He did not want to be turned out on the surface.

How annoying, he thought, how stupidly annoying! Probably Monroe and Helen were somewhere around, but he could die of old age and never find them. They might be anywhere on the planet. How would an American, dumped down in Tibet, make himself understood if his only possible interpreter were in South America? Or whereabouts unknown? How would he make the Tibetans understand that there even was an interpreter? Botheration!

Still, he must make a try. What was it Monroe had said his name was here? Egan-no, Igor. That was it-Igor.

"Igor," he said.

The leader cocked her head. "Igor?" she said,

Frost nodded vigorously. "Igor."

She turned and called out, "Igor!" giving it the marked gutteral, the liquid "r" that Monroe had given it. A man came forward. The professor looked eagerly at him, but he was a stranger, like the rest. The leader pointed to the man and stated, "Igor."

This is growing complicated, thought Frost, apparently Igor is a common name here-too common. Then he had a sudden idea:

If Monroe and Helen got through, their badly-needed chattels might have made them prominent. "Igor," he said, "Helen Fisher."

The leader was attentive at once, her face alive. "Elen Feesher?" she repeated.

"Yes, yes-Helen Fisher."

She stood quiet, thinking. It was plain that the words meant something to her. She clapped her hands together and spoke, commandingly. Two men stepped forward. She addressed them rapidly for several moments.

The two men stepped up to Frost, each taking an arm-They started to lead him away. Frost held back for a moment and said over his shoulder, "Helen Fisher?"

" 'Elen Feesher'!" the leader assured him. He had to be content with that.

Two hours passed, more or less. He had not been mistreated and the room in which they had placed him was comfortable but it was a cell-at least the door was fastened. Perhaps he had said the wrong thing, perhaps those syllables meant something quite different here from a simple proper name.

The room in which he found himself was bare and lighted only by a dim glow from the walls, as had all of this underground world which he had seen so far. He was growing tired of the place and was wondering whether or not it would do any good to set up a commotion when he heard someone at the door.

The door slid back; he saw the leader, a smile on her rather grim, middle-aged features. She spoke in her own tongue, then added, "Igor. . . Ellenfeesher."

He followed her.

Glowing passageways, busy squares where he was subjected to curious stares, an elevator which startled him by dropping suddenly when he was not aware that it was an elevator, and finally a capsule-like vehicle in which they were sealed airtight and which went somewhere very fast indeed to judge by the sudden surge of weight when it started and again when it stopped-through them all he followed his guide, not understanding and lacking means of inquiring.

He tried to relax and enjoy the passing moment, as his companion seemed to bear him no ill-will, though her manner was brusque-that of a person accustomed to giving orders and not in the habit of encouraging casual intimacy.

They arrived at a door which she opened and strode in. Frost followed and was almost knocked off his feet by a figure which charged into him and grasped him with both arms. "Doctor! Doctor Frost!"

It was Helen Fisher, dresser in the costume worn by both sexes here. Behind her. stood Robert-or Igor, his gnome-like face widened with a grin.

He detached Helen's arms gently. "My dear." he said inanely, "imagine finding you here."

"Imagine finding you here," she retorted. "Why, professor-you're crying!"

"Oh, no, not at all," he said hastily, and turned to Monroe. "It's good to see you, too, Robert."

"That goes double for me. Doc," Monroe agreed.

The leader said something to Monroe. He answered her rapidly in their tongue and turned to Frost. "Doctor, this is my elder sister, Margri, Actoon Margri-Major Margri, you might translate it roughly,"

"She has been very kind to me," said Frost, and bowed to her, acknowledging the introduction. Margri clapped her hands smartly together at the waist and ducked her head, features impassive.

"She gave the salute of equals," explained Robert-Igor. "I translated the title doctor as best I could which causes her to assume that your rank is the same as hers."

"What should I do?"

"Return it."

Frost did so, but awkwardly.

Doctor Frost brought his erstwhile students up to "date"-using a term which does not apply, since they were on a different time axis. His predicament with the civil authorities brought a cry of dismay from Helen. "Why, you poor thingi How awful of them!"

"Oh, I wouldn't say so," protested Frost. "It was reasonable so far as they knew. But I'm afraid I can't go back."

"You don't need to," Igor assured him. "You're more than welcome here."

"Perhaps I can help out in your war."

"Perhaps-but you've already done more than anyone here by what you've enabled me to do. We are working on it now." He swung his arm in a gesture which took in the whole room.

Igor had been detached from combat duty and assigned to staff work, in order to make available earth techniques. Helen was helping.

"Nobody believes my story but my sister," he admitted, "But I've been able to show them enough for them to realize that what I've got is important, so they've given me a free hand and are practically hanging over my shoulder, waiting to see what we can produce. I've already got them started on a jet fighter and attack rockets to arm it."

Frost expressed surprise. How could so much be done so fast? Were the time rates different? Had Helen and Igor crossed over many weeks before, figured along this axis?

No, he was told, but Igor's countrymen, though lacking many earth techniques, were far ahead of earth in manufacturing skill. They used a single general type of machine to manufacture almost anything. They fed into it a plan which Igor called for want of a better term the blueprints-it was in fact, a careful scale model of the device to be manufactured; the machine retooled itself and produced the artifact. One of them was, at that moment, moulding the bodies of fighting planes out of plastic, all in one piece and in one operation.

"We are going to arm these jobs with both the stasis ray and rockets," said Igor. "Freeze 'em and then shoot the damn things down while they are out of control."

They talked a few minutes, but Frost could see that Igor was getting fidgety. He guessed the reason. and asked to be excused. Igor seized on the suggestion. "We will see you a little later," he said with relief. "I'll have some one dig up quarters for you. We are pretty rushed. War work-I know you'll understand."

Frost fell asleep that night planning how he could help his two young friends, and their friends, in their struggle.

But it did not work out that way. His education had been academic rather than practical; he discovered that the reference books which Igor and Helen had brought along were so much Greek to him-worse, for he understood Greek. He was accorded all honor and a comfortable living because of Igor's affirmation that he had been the indispensable agent whereby this planet had received the invaluable new weapons, but he soon realized that for the job at hand he was useless, not even fit to act as an interpreter.

He was a harmless nuisance, a pensioner-and he knew it.

And underground life got on his nerves. The ever present light bothered him. He had an unreasoned fear of radioactivity, born of ignorance, and Igor's reassurances did not stifle the fear. The war depressed him. He was not temperamentally cut out to stand up under the nervous tension of war. His helplessness to aid in the war effort, his lack of companionship, and his idleness all worked to increase the malaise.

He wandered into Igor and Helen's workroom one day, hoping for a moment's chat, if they were not too busy. They were not. Igor was pacing up and down, Helen followed them with worried eyes.

He cleared his throat- "Uh-I say, something the matter?"

Igor nodded, answered, "Quite a lot," and dropped back into his preoccupation.

"It's like this," said Helen. "In spite of the new weapons, things are still going against us. Igor is trying to figure out what to try next."

"Oh, I see. Sorry." He started to leave.

"Don't go. Sit down." He did so, and started mulling the matter over in his mind. It was annoying, very annoying!

"I'm afraid I'm not much use to you." he said at last to Helen. "Too bad Howard Jenkins isn't here."

"I don't suppose it matters," she answered, "We have the cream of modern earth engineering in these books."

"I don't mean that. I mean Howard himself, as he is where he's gone. They had a little gadget there in the future called a blaster. I gathered that it was a very powerful weapon indeed."

Igor caught some of this and whirled around. "What was it? How did it work?"

"Why, really," said Frost, "I can't say. I'm not up on such things, you know. I gathered that it was sort of a disintegrating ray."

"Can you sketch it? Think, man, think!"

Frost tried. Presently he stopped and said, "I'm afraid this isn't any good. I don't remember clearly and anyhow I don't know anything about the inside of it."

Igor sighed, sat down, and ran his hand through his hair.

After some minutes of gloomy silence, Helen said, "Couldn't we go get it?"

"Eh? How's that? How would you find him?"

"Could you find him. Professor?"

Frost sat up. "I don't know," he said slowly, "-but I'll try!"

There was the city. Yes, and there was the same gate he had passed through once before. He hurried on.

Star Light was glad to see him, but not particularly surprised. Frost wondered if anything could surprise this dreamy girl. But Howard more than made up for her lack of enthusiasm. He pounded Frost's back hard enough to cause pleurisy. "Welcome home, Master! Welcome home! I didn't know whether or not you would ever come, but we are ready for you. I had a room built for you and you alone, in case you ever showed up. What do you think of that? You are to live with us, you know. No sense in ever going back to that grubby school."

Frost thanked him, but added, "I came on business. I need your help, urgently."

"You do? Well, tell me, man, tell me!"

Frost explained. "So you see, I've got to take the secret of your blaster back to them. They need it. They must have it."

"And they shall have it," agreed Howard.

Some time later the problem looked more complicated. Try as he would Frost was simply not able to soak up the technical knowledge necessary to be able to take the secret back. The pedagogical problem presented was as great as if an untutored savage were to be asked to comprehend radio engineering sufficiently to explain to engineers unfamiliar with radio how to build a major station. And Frost was by no means sure that he could take a blaster with him through the country of Time.

"Well," said Howard at last, "I shall simply have to go with you."

Star Light, who had listened quietly, showed her first acute interest. "Darling! You must not-"

"Stop it," said Howard, his chin set stubbornly. "This is a matter of obligation and duty. You keep out of it."

Frost felt the acute embarrassment one always feels when forced to overhear a husband and wife having a difference of opinion.

When they were ready. Frost took Howard by the wrist. "Look me in the eyes," he said, "You remember how we did it before?"

Howard was trembling. "I remember. Master, do you think you can do it-and not lose me?"

"I hope so," said Frost, "now relax."

They got back to the chamber from which Frost had started, a circumstance which Frost greeted with relief. It would have been awkward to have to cross half a planet to find his friends. He was not sure yet just how the spatial dimensions fitted into the time dimensions. Someday he would have to study the matter, work out an hypothesis and try to check it.

Igor and Howard wasted little time on social amenities. They were deep into engineering matters before Helen had finished greeting the professor.

At long last- "There," said Howard, "I guess that covers everything. I'll leave my blaster for a model. Any more questions?"

"No," said Igor, "I understand it, and I've got every word you've said recorded. I wonder if you know what this means to us, old man? It unquestionably will win the war for us."

"I can guess," said Howard. "This little gadget is the mainstay of our systemwide pax. Ready, Doctor. I'm getting kinda anxious,"

"But you're not going, Doctor?" cried Helen. It was both a question and a protest.

"I've got to guide him back," said Frost.

"Yes," Howard confirmed, "but he is staying to live with us. Aren't you. Master?"

"Oh, no!" It was Helen again.

Igor put an arm around her. "Don't coax him," he told her. "You know he has not been happy here-I gather that Howard's home would suit him better. If so, he's earned it."

Helen thought about it, then came up to Frost, placed both hands on his shoulders, and kissed him, standing on tiptoe to do so. "Goodbye, Doc," she said in a choky voice, "or anyhow, au revoir!"

He reached up and patted one of her hands.

Frost lay in the sun, letting the rays soak into his old bones. It was certainly pleasant here. He missed Helen and Igor a little, but he suspected that they did not really miss him. And-life with Howard and Star Light was more to his liking. Officially he was tutor to their children, if and when. Actually he was just as lazy and useless as he had always wanted to be, with time on his hands. Time . . . Time.

There was just one thing that he would liked to have known: What did Sergeant Izowsld say when he looked up and saw that the police wagon was empty? Probably thought it was impossible.

It did not matter. He was too lazy and sleepy to care. Time enough for a little nap before lunch. Time enough . . .

Time.

By His Bootstraps

Bob Wilson did not see the circle grow.

Nor, for that matter, did he see the stranger who stepped out of the circle and stood staring at the back of Wilson's neck—stared, and breathed heavily, as if laboring under strong and unusual emotion.

Wilson had no reason to suspect that anyone else was in his room; he had every reason to expect the contrary. He had locked himself in his room for the purpose of completing his thesis in one sustained drive. He *had* to—tomorrow was the last day for submission, yesterday the thesis had been no more than a title: "An Investigation Into Certain Mathematical Aspects of a Rigor of Metaphysics."

Fiftytwo cigarettes, four pots of coffee and thirteen hours of continuous work had added seven thousand words to the title. As to the validity of his thesis he was far too groggy to give a damn. Get it done, was his only thought, get it done, turn it in, take three stiff drinks and sleep for a week.

He glanced up and let his eyes rest on his wardrobe door, behind which he had cached a gin bottle, nearly full. No, he admonished himself, one more drink and you'll never finish it, Bob, old son.

The stranger behind him said nothing.

Wilson resumed typing. "—nor is it valid to assume that a conceivable proposition is necessarily a possible proposition, even when it is possible to formulate mathematics which describes the proposition with exactness.

A case in point is the concept 'time travel.' Time travel may be imagined and its necessities may be formulated under any and all theories of time, formulae which resolve the paradoxes of each theory. Nevertheless, we know certain things about the empirical nature of time which preclude the possibility of the conceivable proposition. Duration is an attribute of consciousness and not of the plenum. It has no *Ding an Sich.* Therefore—"

A key of the typewriter stuck, three more jammed up on top of it. Wilson swore dully and reached forward to straighten out the cantankerous machinery. "Don't bother with it," he heard a voice say. "It's a lot of utter hogwash anyhow."

Wilson sat up with a jerk, then turned his head slowly around. He fervently hoped that there was someone behind him. Otherwise— He perceived the stranger with relief. “Thank God,” he said to himself.

“For a moment I thought I had come unstuck.” His relief turned to extreme annoyance. “\Vhat the devil are you doing in my room?” he demanded. He shoved back his chair, got up and strode over to the one door. It was still locked, and bolted on the inside.

The windows were no help; they were adjacent to his desk and three stories above a busy street. “How *did* you get in?” he added.

“Through that,” answered the stranger, hooking a thumb toward the circle. Wilson noticed it for the first time, blinked his eyes and looked again. There it hung between them and the wall, a great disk of nothing, of the color one sees when the eyes are shut tight.

Wilson shook his head vigorously. The circle remained. “Gosh,” he thought, “I was right the first time. I wonder when I slipped my trolley?” He advanced toward the disk, put out a hand to touch it.

“Don’t!” snapped the stranger.

“Why not?” said Wilson edgily. Nevertheless he paused.

“I’ll explain. But let’s have a drink first.” He walked directly to the wardrobe, opened it, reached in and took out the bottle of gin without looking.

“Hey!” yelled Wilson. “What are you doing there? That’s *my* liquor.”

“Your liquor—” The stranger paused for a moment. “Sorry. You don’t mind if I have a drink, do you?”

“I suppose not,” Bob Wilson conceded in a surly tone. “Pour me one while you’re about it.”

“Okay,” agreed the stranger, “then I’ll explain.”

“It had better be good,” Wilson said ominously. Nevertheless he drank his drink and looked the stranger over.

He saw a chap about the same size as himself and much the same age—perhaps a little older, though a three-clay growth of beard may have accounted for that impression. The stranger had a black eye and a freshly cut and badly swollen upper lip. Wilson decided he did not like the chaps’ face. Still, there was something familiar about the face; he felt that he should have recognized it, that he had seen it many times before under different circumstances.

“Who are you?” he asked suddenly.

“Me?” said his guest. “Don’t you recognize me?”

“I’m not sure,” admitted Wilson. “Have I ever seen you before?”

“Well—not exactly,” the other temporized. “Skip it—you wouldn’t know about it.”

“What’s your name?”

“My name? Uh . . . just call me Joe.”

Wilson set down his glass. “Okay, Joe Whatever-your-name-is, trot out that explanation and make it snappy."

"I'll do that," agreed Joe. "That dingus I came through"—he pointed to the circle—"that's a Time Gate."

"A what?"

"A Time Gate. Time flows along side by side on each side of the Gate, but some thousands of years apart—just how many thousands I don't know. But for the next couple of hours that Gate is open. You can walk into the future just by stepping through that circle." The stranger paused.

Bob drummed on the desk. "Go ahead. I'm listening. It's a nice story."

"You don't believe me, do you? I'll show you." Joe got up, went again to the wardrobe and obtained Bob's hat, his prized and only hat, which he had mistreated into its present battered grandeur through six years of undergraduate and graduate life. Joe chucked it toward the impalpable disk.

It struck the surface, went on through with no apparent resistance, disappeared from sight.

Wilson got up, walked carefully around the circle and examined the bare floor. "A neat trick," he conceded. "Now I'll thank you to return to me my hat."

The stranger shook his head. "You can get it for yourself when you pass through"

"That's right. Listen—" Briefly the stranger repeated his explanation about the Time Gate. Wilson, he insisted, had an opportunity that comes once in a millennium—if he would only hurry up and climb through that circle. Furthermore, though Joe could not explain in detail at the moment, it was very important that Wilson go through.

Bob Wilson helped himself to a second drink, and then a third. He was beginning to feel both good and argumentative. "Why?" he said flatly.

Joe looked exasperated. "Dammit, if you'd just step through once, explanations wouldn't be necessary. However—" According to Joe, there was an old guy on the other side who needed Wilson's help. With Wilson's help the three of them would run the country. The exact nature of the help Joe could not or would not specify. Instead he bore down on the unique possibilities for high adventure. "You don't want to slave your life away teaching numskulls in some freshwater college," he insisted. "This is your chance. Grab it!"

Bob Wilson admitted to himself that a Ph.D. and an appointment as an instructor was not his idea of existence. Still, it beat working for a living. His eye fell on the gin bottle, its level now deplorably lowered. That explained it. He got up unsteadily.

“No, my dear fellow,” he stated, “I’m not going to climb on your merry-go-round. You know why?”

“Why?”

“Because I’m drunk, that’s why. You’re not there at all. *That* ain’t there.” He gestured widely at the circle. “There ain’t anybody here but me, and I’m drunk. Been working too hard,” he added apologetically. “I’m goin’ to bed.”

“You’re not drunk.”

“I *am* drunk. Peter Piper pepped a pick of pippered peckles.” He moved toward his bed.

Joe grabbed his arm. “You can’t do that,” he said.

“Let him alone!”

They both swung around. Facing them, standing directly in front of the circle was a third man. Bob looked at the newcomer, looked back at Joe, blinked his eyes and tried to focus them. The two looked a good bit alike, he thought, enough alike to be brothers. Or maybe he was seeing double. Bad stuff, gin. Should ‘ave switched to rum a long time ago. Good stuff, rum. You could drink it, or take a bath in it. No, that was gin—he meant Joe.

How silly! Joe was the one with the black eye. He wondered why he had ever been confused.

Then who was this other lug? Couldn’t a couple of friends have a quiet drink together without people butting in?

“Who are you?” he said with quiet dignity.

The newcomer turned his head, then looked at Joe. *“He* knows me,” he said meaningly.

Joe looked him over slowly. “Yes,” he said, “yes, I suppose I do. But what the deuce are you here for? And why are you trying to bust up the plan?”

“No time for long-winded explanations. I know more about it than you do—you’ll concede that—and my judgment is bound to be better than yours. He doesn’t go through the Gate.”

“I don’t concede anything of the sort—”

The telephone rang.

“Answer it!” snapped the newcomer.

Bob was about to protest the peremptory tone, but decided he wouldn’t. He lacked the phlegmatic temperament necessary to ignore a ringing telephone. “Hello?”

“Hello,” he was answered. “Is that Bob Wilson?”

“Yes. Who is this?”

“Never mind. I just wanted to be sure you were there. I *thought* you would be. You’re right in the groove, kid, right in the groove.”

Wilson heard a chuckle, then the click of the disconnection. “Hello,” he said. “Hello!” He jiggled the bar a couple of times, then hung up.

“What was it?” asked Joe.

“Nothing. Some nut with a misplaced sense of humor.” The telephone bell rang again. Wilson added, “There he is again,” and picked up the receiver. “Listen, you butterfly-brained ape! I’m a busy man, and this is *not* a public telephone.”

“Why, Bob!” came a hurt feminine voice.

“Huh? Oh, it’s you, Genevieve. Look—I’m sorry. I apologize—”

“Well, I should think you would!”

“You don’t understand, honey. A guy has been pestering me over the phone and I thought it was him. You know I wouldn’t talk that way to you, babe.”

“Well, I should think not. Particularly after all you said to me this afternoon, and all we *meant* to each other”

“Huh? This afternoon? Did you say *this* afternoon?”

“Of course. But what I called up about was this: you left your hat in my apartment. I noticed it a few minutes after you had gone and just thought I’d call and tell you where it is. Anyhow,” she added coyly, “it gave me an excuse to hear your voice again.”

“Sure. Fine,” he said mechanically. “Look, babe, I’m a little mixed up about this. Trouble I’ve had all day long, and more trouble now. I’ll look you up tonight and straighten it out. But I *know* I didn’t leave your hat in my apartment—”

“Your hat, silly!”

“Huh? Oh, sure! Anyhow, I’ll see you tonight. ‘By.” He rang off hurriedly. Gosh, he thought, that woman is getting to be a problem. Hallucinations. He turned to his two companions.

“Very well, Joe. I’m ready to go if you are.” He was not sure just when or why he had decided to go through the time gadget, but he had. Who did this other mug think he was, anyhow, trying to interfere with a man’s freedom of choice?

“Fine!” said Joe, in a relieved voice. “Just step through. That’s all there is to it.”

“No, you don’t!” It was the ubiquitous stranger. He stepped between Wilson and the Gate.

Bob Wilson faced him. “Listen, you! You come butting in here like you think I was a bum. If you don’t like it, go jump in the lake—and I’m just the kind of guy who can do it! You and who else?”

The stranger reached out and tried to collar him. Wilson let go a swing, but not a good one. It went by nothing faster than parcel post. The stranger walked under it and let him have a mouthful of knuckles —large, hard ones. Joe closed in rapidly, coming to Bob’s aid. They traded punches in a free-for-all, with Bob joining in enthusiastically but inefficiently. The only punch he landed was on Joe, theoretically his ally. However, he had intended it for the third man.

It was this faux pas which gave the stranger an opportunity to land a clean left jab on Wilson's face. It was inches higher than the button, but in Bob's bemused condition it was sufficient to cause him to cease taking part in the activities.

Bob Wilson came slowly to awareness of his surroundings. He was seated on a floor which seemed a little unsteady. Someone was bending over him. "Are you all right?" the figure inquired.

"I guess so," he answered thickly. His mouth pained him; he put his hand to it, got it sticky with blood. "My head hurts."

"I should think it would. You came through head over heels. I think you hit your head when you landed."

Wilson's thoughts were coming back into confused focus. Came through? He looked more closely at his succorer. He saw a middle-aged man with gray-shot bushy hair and a short, neatly trimmed beard. He was dressed in what Wilson took to be purple lounging pajamas.

But the room in which he found himself bothered him even more. It was circular and the ceiling was arched so subtly that it was difficult to say how high it was. A steady glareless light filled the room from no apparent source. There was no furniture save for a high dais or pulpit-shaped object near the wall facing him. "Came through? Came through what?"

"The Gate, of course." There was something odd about the man's accent. Wilson could not place it, save for a feeling that English was not a tongue he was accustomed to speaking.

Wilson looked over his shoulder in the direction of the other's gaze, and saw the circle.

That made his head ache even more. "Oh, Lord," he thought, "now I really am nuts. Why don't I wake up?" He shook his head to clear it.

That was a mistake. The top of his head did not quite come off—not quite. And the circle stayed where it was, a simple locus hanging in the air, its flat depth filled with the amorphous colors and shapes Of novision. "Did I come through that?"

"Yes."

"Where am I?"

"In the Hall of the Gate in the High Palace of Norkaal. But what is more important is *when* you are. You have gone forward a little more than thirty thousand years."

"Now I know I'm crazy," thought Wilson. He got up unsteadily and moved toward the Gate.

The older man put a hand on his shoulder. “Where are you going?”

“Back!”

“Not so fast. You will go back all right—I give you my word on that. But let me dress your wounds first. And you should rest. I have some explanations to make to you, and there is an errand you can do for me when you get back—to our mutual advantage. There is a great future in store for you and me, my boy—a great future!”

Wilson paused uncertainly. The elder man’s insistence was vaguely disquieting. “I don’t like this.”

The other eyed him narrowly. “Wouldn’t you like a drink before you go?”

Wilson most assuredly would. Right at the moment a stiff drink seemed the most desirable thing on Earth—or in time. “Okay.”

“Come with me.” The older man led him back of the structure near the wall and through a door which led into a passageway. He walked briskly; Wilson hurried to keep up.

“By the way,” he asked, as they continued down the long passage, “what is your name?”

“My name? You may call me Diktor—everyone else does.

“Okay, Diktor. Do you want my name?”

“Your name?” Diktor chuckled. “I know your name. It’s Bob Wilson.”

“Huh? Oh—I suppose Joe told you.”

“Joe? I know no one by that name.”

“You don’t? He seemed to know you. Say—maybe you aren’t that guy I was supposed to see.”

“But I am. I have been expecting you—in a way. Joe . . . Joe—Oh!” Diktor chuckled. “It had slipped my mind for a moment. He told you to call him Joe, didn’t he?”

“Isn’t it his name?”

“It’s as good a name as any other. Here we are.” He ushered Wilson into a small, but cheerful, room. It contained no furniture of any sort, but the floor was soft and warm as live flesh. “Sit down. I’ll be back in a moment.”

Bob looked around for something to sit on, then turned to ask Diktor for a chair. But Diktor was gone, furthermore the door through which they had entered was gone. Bob sat down on the comfortable floor and tried not to worry.

Diktor returned promptly. Wilson saw the door dilate to let him in, but did not catch on to how it was done. Diktor was carrying a carafe, which gurgled pleasantly, and a cup. “Mud *n your eye,” he said heartily and poured a good four fingers. “Drink up.”*

Bob accepted the cup. “Aren’t you drinking?”

“Presently. I want to attend to your wounds first.”

"Okay." Wilson tossed off the first drink in almost indecent haste—it was good stuff, a little like Scotch, he decided, but smoother and not as dry—while Diktor worked deftly with salves that smarted at first, then soothed. "Mind if I have another?"

"Help yourself."

Bob drank more slowly the second cup. He did not finish it; it slipped from relaxed fingers, spilling a ruddy, brown stain across the floor. He snored.

Bob Wilson woke up feeling fine and completely rested. He was cheerful without knowing why. He lay relaxed, eyes still closed, for a few moments and let his soul snuggle back into his body. This was going to be a good day, he felt. Oh, yes—he had finished that double-damned thesis. No, he hadn't either! He sat up with a start.

The sight of the strange walls around him brought him back into continuity. But before he had time to worry—at once, in fact—the door relaxed and Diktor stepped in. "Feeling better?"

"Why, yes, I do. Say, what is this?"

"We'll get to that. How about some breakfast?"

In Wilson's scale of evaluations breakfast rated just after life itself and ahead of the chance of immortality. Diktor conducted him to another room—the first that he had seen possessing windows. As a matter of fact half the room was open, a balcony hanging high over a green countryside. A soft, warm, summer breeze wafted through the place. They broke their fast in luxury, Roman style, while Diktor explained.

Bob Wilson did not follow the explanations as closely as he might have done, because his attention was diverted by the maidservants who served the meal. The first came in bearing a great tray of fruit on her head. The fruit was gorgeous. So was the girl. Search as he would he could discern no fault in her.

Her costume lent itself to the search.

She came first to Diktor, and with a single, graceful movement dropped to one knee, removed the tray from her head, and offered it to him. He helped himself to a small, red fruit and waved her away. She then offered it to Bob in the same delightful manner.

"As I was saying," continued Diktor, "it is not certain where the High Ones came from or where they went when they left Earth. I am inclined to think they went away into Time. In any case they ruled more than twenty thousand years and completely obliterated human culture as you knew it. What is more important to you and to me is the effect they had on the human psyche. One twentieth-century style go-getter can accomplish just about anything he wants to accomplish around here—Aren't you listening?"

"Huh? Oh, yes, sure. Say, that's one mighty pretty girl." His eyes still rested on the exit through which she had disappeared.

"Who? Oh, yes, I suppose so. She's not exceptionally beautiful as women go around here."

"That's hard to believe. I could learn to get along with a girl like that."

"You like her? Very well, she is yours."

"Huh?"

"She's a slave. Don't get indignant. They are slaves by nature. If you like her, I'll make you a present of her. It will make her happy." The girl had just returned. Diktor called to her in a language strange to Bob. "Her name is Arma," he said in an aside, then spoke to her briefly.

Arma giggled. She composed her face quickly, and, moving over to where Wilson reclined, dropped on both knees to the floor and lowered her head, with both hands cupped before her. "Touch her forehead," Diktor instructed.

Bob did so. The girl arose and stood waiting placidly by his side. Diktor spoke to her. She looked puzzled, but moved out of the room. "I told her that, notwithstanding her new status, you wished her to continue serving breakfast."

Diktor resumed his explanations while the service of the meal continued. The next course was brought in by Arma and another girl. When Bob saw the second girl he let out a low whistle. He realized he had been a little hasty in letting Diktor give him Arma. Either the standard of pulchritude had gone up incredibly, he decided, or Diktor went to a lot of trouble in selecting his servants.

"—for that reason," Diktor was saying, "it is necessary that you go back through the Time Gate at once. Your first job is to bring this other chap back. Then there is one other task for you to do, and we'll be sitting pretty. After that it is share and share alike for you and me. And there is plenty to share, I—You aren't listening!"

"Sure I was, chief. I heard every word you said." He fingered his chin. "Say, have you got a razor I could borrow? I'd like to shave."

Diktor swore softly in two languages. "Keep your eyes off those wenches and listen to me! There's work to be done."

"Sure, sure. I understand that—and I'm your man. When do we start?" Wilson had made up his mind some time ago—just shortly after Arma had entered with the tray of fruit, in fact. He felt as if he had walked into some extremely pleasant dream. If cooperation with Diktor would cause that dream to continue, so be it. To hell with an academic career!

Anyhow, all Diktor wanted was for him to go back where he started and persuade another guy to go through the Gate. The worst that could happen was for him to find himself back in the twentieth century. What could he lose?

Diktor stood up. “Let’s get on with it,” he said shortly, “before you get your attention diverted again. Follow me.” He set off at a brisk pace with Wilson behind him.

Diktor took him to the Hall of the Gate and stopped. “All you have to do,” he said, “is to step through the Gate. You will find yourself back in your own room, in your own time. Persuade the man you find there to go through the Gate. We have need of him. Then come back yourself.”

Bob held up a hand and pinched thumb and forefinger together. “It’s in the bag, boss. Consider it done.” He started to step through the Gate.

“Wait!” commanded Diktor. “You are not used to time travel. I warn you that you are going to get one hell of a shock when you step through. This other chap—you’ll recognize him.”

“Who is he?”

“I won’t tell you because you wouldn’t understand. But you will when you see him. Just remember this—There are some very strange paradoxes connected with time travel. Don’t let anything you see throw you. You do what I tell you to and you’ll be all right.”

“Paradoxes don’t worry me,” Bob said confidently. “Is that all? I’m ready.”

“One minute.” Diktor stepped behind the raised dais. His head appeared above the side a moment later. “I’ve set the controls. Okay. Go!”

Bob Wilson stepped through the locus known as the Time Gate. There was no particular sensation connected with the transition. It was like stepping through a curtained doorway into a darker room. He paused for a moment on the other side and let his eyes adjust to the dimmer light. He was, he saw, indeed in his own room.

There was a man in it, seated at his own desk. Diktor had been right about that. This, then, was the chap he was to send back through the Gate. Diktor had said he would recognize him. Well, let’s see who it is.

He felt a passing resentment at finding someone at *his* desk in *his* room, then thought better of it. After all, it was just a rented room; when he disappeared, no doubt it had been rented again. He had no way of telling how long he had been gone—shucks, it might be the middle of next week! The chap did look vaguely familiar, although all he could see was his back. Who was it? Should he speak to him, cause him to turn around? He felt vaguely reluctant to do so until he knew who it was. He rationalized the feeling by telling himself that it was desirable to know with whom he was dealing before he attempted anything as outlandish as persuading this man to go through the Gate.

The man at the desk continued typing, paused to snuff out a cigarette by laying it in an ash tray, then stamping it with a paper weight.

Bob Wilson knew that gesture.

Chills trickled down his back. “If he lights his next one,” he whispered to himself, “the way I think he is going to—”

The man at the desk took out another cigarette, tamped it on one end, turned it and tamped the other, straightened and crimped the paper on one end carefully against his left thumbnail and placed that end in his mouth.

Wilson felt the blood beating in his neck. *Sitting there with his back to him was himself, Bob Wilson!*

He felt that he was going to faint. He closed his eyes and steadied himself on a chair back. “I knew it,” he thought, “the whole thing is absurd. I’m crazy. I know I’m crazy. Some sort of split personality. I shouldn’t have worked so hard.”

The sound of typing continued.

He pulled himself together, and reconsidered the matter. Diktor had warned him that he was due for a shock, a shock that could not be explained ahead of time, because it could not be believed. “All right— suppose I’m not crazy. If time travel can happen at all, there is no reason why I can’t come back and see myself doing something I did in the past. If I’m sane, that is what I’m doing.

“And if I am crazy, it doesn’t make a damn bit of difference what I do!

“And furthermore,” he added to himself, “if I’m crazy, maybe I can stay crazy and go back through the Gate! No, that does not make sense. Neither does anything else—the hell with it!”

He crept forward softly and peered over the shoulder of his double. “Duration is an attribute of the consciousness,” he read, “and not of the plenum.”

“That tears it,” he thought, “right back where I started, and watching myself write my thesis.”

The typing continued. “It has no *Ding an Sich.* Therefore—” A key stuck, and others piled up on top of it. His double at the desk swore and reached out a hand to straighten the keys.

“Don’t bother with it,” Wilson said on sudden impulse. “It’s a lot of utter hogwash anyhow.”

The other Bob Wilson sat up with a jerk, then looked slowly around. An expression of surprise gave way to annoyance. “What the devil are you doing in my room?” he demanded. Without waiting for an answer he got up, went quickly to the door and examined the lock.

"How did you get in?"

"This," thought Wilson, "is going to be difficult."

"Through that," Wilson answered, pointing to the Time Gate. His double looked where he had pointed, did a double take, then advanced cautiously and started to touch it.

"Don't!" yelled Wilson.

The other checked himself. "Why not?" he demanded.

Just why he must not permit his other self to touch the Gate was not clear to Wilson, but he had had an unmistakable feeling of impending disaster when he saw it about to happen. He temporized by saying, "I'll explain. But let's have a drink." A drink was a good idea in any case. There had never been a time when he needed one more than he did right now. Quite automatically he went to his usual cache of liquor in the wardrobe and took out the bottle he expected to find there.

"Hey!" protested the other. "What are you doing there? That's *my* liquor."

"Your liquor—" Hell's bells! It was *his* liquor. No, it wasn't; it was — *their* liquor. Oh, the devil! It was much too mixed up to try to explain. "Sorry. You don't mind if I have a drink, do you?"

"I suppose not," his double said grudgingly. "Pour me one while you're about it."

"Okay," Wilson assented, "then I'll explain." It was going to be much, much too difficult to explain until he had had a drink, he felt. As it was, he couldn't explain it fully to himself.

"It had better be good," the other warned him, and looked Wilson over carefully while he drank his drink.

Wilson watched his younger self scrutinizing him with confused and almost insupportable emotions. Couldn't the stupid fool recognize his own face when he saw it in front of him? If he could not *see* what the situation was, how in the world was he ever going to make it clear to him? It had slipped his mind that his face was barely recognizable in any case, being decidedly battered and unshaven. Even more important, he failed to take into account the fact that a person does not look at his own face, even in mirrors, in the same frame of mind with which he regards another's face. No sane person ever expects to see his own face hanging on another.

Wilson could see that his companion was puzzled by his appearance, but it was equally clear that no recognition took place. "Who are you?" the other man asked suddenly.

"Me?" replied Wilson. "Don't you recognize me?"

"I'm not sure. Have I ever seen you before?"

"Well—not exactly," Wilson stalled. How did you go about telling another guy that the two of you were a trifle closer than twins? "Skip it—you wouldn't know about it."

"What's your name?"

"My name? Uh—" Oh, oh! This was going to be sticky! The whole situation was utterly ridiculous. He opened his mouth, tried to form the words "Bob Wilson," then gave up with a feeling of utter futility. Like many a man before him, he found himself forced into a lie because the truth simply would not be believed. "Just call me Joe," he finished lamely.

He felt suddenly startled at his own words. It was at this point that he realized that he was *in fact,* "Joe," the Joe whom he had encountered once before. That he had landed back in his own room at the very time at which he had ceased working on his thesis he already realized, but he had not had time to think the matter through. Hearing himself refer to himself as Joe slapped him in the face with the realization that this was not simply a similar scene, but the *same* scene he had lived through once before—save that he was living through it from a different viewpoint.

At least he thought it was the same scene. Did it differ in any respect? He could not be sure as he could not recall, word for word, what the conversation had been.

For a complete transcript of the scene that lay dormant in his memory he felt willing to pay twenty-five dollars cash, plus sales tax.

Wait a minute now—he was under no compulsion. He was sure of that. Everything he did and said was the result of his own free will. Even if he couldn't remember the script, there were some things he *knew* "Joe" hadn't said. "Mary had a little lamb," for example. He would recite a nursery rhyme and get off this damned repetitious treadmill. He opened his mouth— "Okay, Joe Whatever-your-name-is," his alter ego remarked, setting down a glass which had contained, until recently, a quarter pint of gin, "trot out that explanation and make it snappy."

He opened his mouth again to answer the question, then closed it. "Steady, son, steady," he told himself. "You're a free agent. You want to recite a nursery rhyme—go ahead and do it. Don't answer him; go ahead and recite it—and break this vicious circle."

But under the unfriendly, suspicious eye of the man opposite him he found himself totally unable to recall any nursery rhyme. His mental processes stuck on dead center.

He capitulated. "I'll do that. That dingus I came through—that's a Time Gate."

"A what?"

"A Time Gate. Time flows along side by side on each side—" As he talked he felt sweat breaking out on him; he felt reasonably sure that he was explaining in exactly the same words in which explanation had first been offered to *him.* "—into the future just by stepping through that circle." He stopped and wiped his forehead.

"Go ahead," said the other implacably. "I'm listening. It's a nice story."

Bob suddenly wondered if the other man *could* be himself. The stupid arrogant dogmatism of the man's manner infuriated him. All right, all right! He'd show him. He strode suddenly over to the wardrobe, took out his hat and threw it through the Gate.

His opposite number watched the hat snuff out of existence with expressionless eyes, then stood up and went around in back of the Gate, walking with the careful steps of a man who is a little bit drunk, but determined not to show it. "A neat trick," he applauded, after satisfying himself that the hat was gone, "now I'll thank you to return to me my hat."

Wilson shook his head. "You can get it for yourself when you pass through," he answered absentmindedly. He was pondering the problem of how many hats there were on the other side of the Gate.

"Huh?"

"That's right. Listen—" Wilson did his best to explain persuasively what it was he wanted his earlier *persona* to do. Or rather to cajole. Explanations were out of the question, in any honest sense of the word. He would have preferred attempting to explain tensor calculus to an Australian aborigine, even though he did not understand that esoteric mathematics himself.

The other man was not helpful. He seemed more interested in nursing the gin than he did in following 'Wilson's implausible protestations.

"Why?" he interrupted pugnaciously.

"Dammit," Wilson answered, "if you'd just step through once, explanations wouldn't be necessary. However—" He continued with a synopsis of Diktor's proposition. He realized with irritation that Diktor had been exceedingly sketchy with *his* explanations. He was forced to hit only the high spots in the logical parts of his argument, and bear down on the emotional appeal. He was on safe ground there—no one knew better than he did himself how fed up the earlier Bob Wilson had been with the petty drudgery and stuffy atmosphere of an academic career. "You don't want to slave your life away teaching numskulls in some freshwater college," he concluded. "This is your chance. Grab it!"

Wilson watched his companion narrowly and thought he detected a favorable response. He definitely seemed interested. But the other set his glass down carefully, stared at the gin bottle and at last replied:

"My dear fellow, I am not going to climb on your merry-go-round.

You know why?"

"Why?"

"Because I'm drunk, that's why. You're not there at all. *That* ain't there." He gestured widely at the Gate, nearly fell and recovered himself with effort. "There ain't anybody here but me, and I'm drunk. Been working too hard," he mumbled, "'m goin' to bed."

"You're not drunk," Wilson protested unhopefully. "Damnation," he thought, "a man who can't hold his liquor shouldn't drink."

"I *am* drunk. Peter Piper pepped a pick of pippered peckles." He lumbered over toward the bed.

Wilson grabbed his arm. "You can't do that."

"Let him alone!"

Wilson swung around, saw a third man standing in front of the Gate—recognized him with a sudden shock. His own recollection of the sequence of events was none too clear in his memory, since he had been somewhat intoxicated—damned near boiled, he admitted—the first time he had experienced this particular busy afternoon. He realized that he should have anticipated the arrival of a third party. But his memory had not prepared him for who the third party would turn out to be.

He recognized himself—another carbon copy.

He stood silent for a minute, trying to assimilate this new fact and force it into some reasonable integration. He closed his eyes helplessly. This was just a little too much. He felt that he wanted to have a few plain words with Diktor.

"Who the hell are you?" He opened his eyes to find that his other self, the drunk one, was addressing the latest edition. The newcomer turned away from his interrogator and looked sharply at Wilson.

"He knows me."

Wilson took his time about replying. This thing was getting out of hand. "Yes," he admitted, "yes, I suppose I do. But what the deuce are you here for? And why are you trying to bust up the plan?"

His facsimile cut him short. "No time for long-winded explanations. I know more about it than you do—you'll concede that—and my judgment is bound to be better than yours. He doesn't go through the Gate."

The offhand arrogance of the other antagonized Wilson. "I don't concede anything of the sort—" he began.

He was interrupted by the telephone bell. "Answer it!" snapped Number Three.

The tipsy Number One looked belligerent but picked up the handset. "Hello. . .Yes. Who is this?...Hello . . . Hello!" He tapped the bar of the instrument, then slammed the receiver back into its cradle.

"Who was that?" Wilson asked, somewhat annoyed that he had not had a chance to answer it himself.

"Nothing. Some nut with a misplaced sense of humor." At that instant the telephone rang again. "There he is again!" Wilson tried to answer it, but his alcoholic counterpart beat him to it, brushed him aside. "Listen, you butterfly-brained ape! I'm a busy man and this is *not* a public telephone. . . . Huh? Oh, it's you, Genevieve. Look—I'm sorry. I apologize. . . You don't understand, honey. A guy has been pestering me over the phone and I thought it was him. You know I wouldn't talk to you that way, babe. . . . Huh? This afternoon? Did you say *this* afternoon? Sure. Fine. Look, babe, I'm a little mixed up about this. Trouble I've had all day long and more trouble now. I'll look you up tonight and straighten it out. But I *know* I didn't leave your hat in my apartment—. . . Huh? Oh, sure! Anyhow, I'll see you tonight. 'By."

It almost nauseated Wilson to hear his earlier self catering to the demands of that clinging female. Why didn't he just hang up on her? The contrast with Arma—there was a dish!—was acute; it made him more determined than ever to go ahead with the plan, despite the warning of the latest arrival.

After hanging up the phone his earlier self faced him, pointedly ignoring the presence of the third copy. "Very well, Joe," he announced. "I'm ready to go if you are."

"Fine!" Wilson agreed with relief. "Just step through. That's all there is to it."

"No, you don't!" Number Three barred the way.

Wilson started to argue, but his erratic comrade was ahead of him. "Listen, you! You come butting in here like you think I was a bum. If you don't like it, go jump in the lake—and I'm just the kind of a guy who can do it! You and who else?"

They started trading punches almost at once. Wilson stepped in warily, looking for an opening that would enable him to put the slug on Number Three with one decisive blow.

He should have watched his drunken ally as well. A wild swing from that quarter glanced off his already damaged features and caused him excruciating pain. His upper lip, cut, puffy and tender from his other encounter, took the blow and became an area of pure agony. He flinched and jumped back.

A sound cut through his fog of pain, a dull *smack!* He forced his eyes to track and saw the feet of a man disappear through the Gate. Number Three was still standing by the Gate. "Now you've done it!" he said bitterly to Wilson, and nursed the knuckles of his left hand.

The obviously unfair allegation reached Wilson at just the wrong moment. His face still felt like an experiment in sadism. "Me?" he said angrily. *"You* knocked him through. I never laid a finger on him."

"Yes, but it's your fault. If you hadn't interfered, I wouldn't have had to do it."

'Me interfere? Why, you bald faced hypocrite—you butted in and tried to queer the pitch. Which reminds me—you owe me some explanations and I damn well mean to have 'em. What's the idea of—"

But his opposite number cut in on him. "Stow it," he said gloomily. "It's too late now. He's gone through."

"Too late for what?" Wilson wanted to know.

"Too late to put a stop to this chain of events."

"Why should we?"

"Because," Number Three said bitterly, "Diktor has played me—I mean has played you. . . us—for a dope, for a couple of dopes. Look, he told you that he was going to set you up as a big shot over *there"—he* indicated the Gate—"didn't he?"

"Yes," Wilson admitted.

"Well, that's a lot of malarkey. All he means to do is to get us so incredibly tangled up in this Time Gate thing that we'll never get straightened out again."

Wilson felt a sudden doubt nibbling at his mind. It *could* be true. Certainly there had not been much sense to what had happened so far. After all, why should Diktor want his help, want it bad enough to offer to split with him, even-steven, what was obviously a cushy spot? "How do you know?" he demanded.

"Why go into it?" the other answered wearily. "Why don't you just take my word for it?"

"Why should I?"

His companion turned a look of complete exasperation on him. "If you can't take my word, whose word can you take?"

The inescapable logic of the question simply annoyed Wilson. He resented this interloping duplicate of himself anyhow; to be asked to follow his lead blindly irked him. "I'm from Missouri," he said. "I'll see for myself." He moved toward the Gate.

"Where are you going?"

"Through! I'm going to look up Diktor and have it out with him."

"Don't!" the other said. "Maybe we can break the chain even now." Wilson felt and looked stubborn. The other sighed. "Go ahead," he surrendered. "It's your funeral. I wash my hands of you."

Wilson paused as he was about to step through the Gate. "It is, eh? H-m-m-m—how can it be *my* funeral unless it's *your* funeral, too?"

The other man looked blank, then an expression of apprehension raced over his face. That was the last Wilson saw of him as he stepped through.

The Hall of the Gate was empty of other occupants when Bob Wilson came through on the other side. He looked for his hat, but did not find it, then stepped around back of the raised platform, seeking the exit he remembered. He nearly bumped into Diktor.

“Ah, there you are!” the older man greeted him. “Fine! Fine! Now there is just one more little thing to take care of, then we will be all squared away. I must say I am pleased with you, Bob, very pleased indeed.”

“Oh, you are, are you?” Bob faced him truculently. “Well, it’s too bad I can’t say the same about you! I’m not a damn bit pleased. What was the idea of shoving me into that. . . that daisy chain without warning me? What’s the meaning of all this nonsense? Why didn’t you warn me?”

“Easy, easy,” said the older man, “don’t get excited. Tell the truth now—if I had told you that you were going back to meet yourself face to face, would you have believed me? Come now, ‘fess up.”

Wilson admitted that he would not have believed it.

“Well, then,” Diktor continued with a shrug, “there was no point in me telling you, was there? If I had told you, you would not have believed me, which is another way of saying that you would have believed false data. Is it not better to be in ignorance than to believe falsely?”

“I suppose so, but—”

“Wait! I did not intentionally deceive you. I did not deceive you at all. But had I told you the full truth, you would have been deceived because you would have rejected the truth. It was better for you to learn the truth with your own eyes. Otherwise—”

“Wait a minute! Wait a minute!” Wilson cut in. “You’re getting me all tangled up. I’m willing t’o let bygones be bygones, if you’ll come clean with me. Why did you send me back at all?”

“‘Let bygones be bygones,’” Diktor repeated. “Ah, if we only could! But we can’t. That’s why I sent you back—in order that you might come through the Gate in the first place.”

“Huh? Wait a minute—I already *had* come through the Gate.”

Diktor shook his head. “Had you, now? Think a moment. When you got back into your own time and your own place you found your earlier self there, didn’t you?”

“Mmmm—yes.”

He--your earlier self—had not yet been through the Gate, had he?” No.— “How could you have *been* through the Gate, unless you persuaded him to *go* through the Gate?”

Bob Wilson’s head was beginning to whirl. He was beginning to wonder who did what to whom and who got paid. “But that’s impossible! You are telling me that I did something because I was going to do something.”

“Well, didn’t you? You were there.”

“No, I didn’t—no . . . well, maybe I did, but it didn’t *feel* like it.”

“Why should you expect it to? It was something totally new to your experience.”

“But. . . but—” Wilson took a deep breath and got control of himself. Then he reached back into his academic philosophical concepts and produced the notion he had been struggling to express. “It denies all reasonable theories of causation. You would have me believe that causation can be completely circular. I went through because I came back from going through to persuade myself to go through. That’s silly.”

“Well, didn’t you?”

Wilson did not have an answer ready for that one. Diktor continued with, “Don’t worry about it. The causation you have been accustomed to is valid enough in its own field but is simply a special case under the general case. *Causation in a plenum need not be and is not limited by a man* i *perception of duration.”*

Wilson thought about that for a moment. It sounded nice, but there was something slippery about it. “Just a second,” he said. “How about entropy? You can’t get around entropy.”

“Oh, for heaven’s sake,” protested Diktor, “shut up, will you? You remind me of the mathematician who proved that airplanes couldn’t fly.” He turned and started out the door. “Come on. There’s work to be done.”

Wilson hurried after him. “Dammit, you can’t do this to me. What happened to the other two?”

“The other two what?”

“The other two of me? Where are they? How am I ever going to get unsnarled?”

“You aren’t snarled up. You don’t feel like more than one person, do you?”

“No, but—”

“Then don’t worry about it.”

“But I’ve got to worry about it. What happened to the guy that came through just ahead of me?”

“You remember, don’t you? However—” Diktor hurried on ahead, led him down a passageway, and dilated a door. “Take a look inside,” he directed.

Wilson did so. He found himself looking into a small windowless unfurnished room, a room that he recognized. Sprawled on the floor, snoring steadily, was another edition of himself.

“When you first came through the Gate,” explained Diktor at his elbow, “I brought you in here, attended to your hurts and gave you a drink. The drink contained a soporific which will cause you to sleep about thirty-six hours, sleep that you badly needed. When you wake up, I will give you breakfast and explain to you what needs to be done.”

Wilson’s head started to ache again. “Don’t do that,” he pleaded. “Don’t refer to that guy as if he were me. *This* is *me,* standing here.”

“Have it your own way,” said Diktor. “That is the man you *were.* You remember the things that are about to happen to him, don’t you?”

“Yes, but it makes me dizzy. Close the door, please.”

“Okay,” said Diktor, and complied. “We’ve got to hurry, anyhow. Once a sequence like this is established there is no time to waste. Come on.” He led the way back to the Hall of the Gate.

“I want you to return to the twentieth century and obtain certain things for us, things that can’t be obtained on this side but which will be very useful to us in, ah, developing—yes, that is the word—developing this country.”

“What sort of things?”

“Quite a number of items. I’ve prepared a list for you—certain reference books, certain items of commerce. Excuse me, please. I must adjust the controls of the Gate.” He mounted the raised platform from the rear. Wilson followed him and found that the structure was boxlike, open at the top and had a raised floor. The Gate could be seen by looking over the high sides.

The controls were unique.

Four colored spheres the size of marbles hung on crystal rods arranged with respect to each other as the four major axes of a tetrahedron. The three spheres which bounded the base of the tetrahedron were red, yellow and blue; the fourth at the apex was white. “Three spatial controls, one time control,” explained Diktor. “It’s very simple. Using here-and-now as zero reference, displacing any control away from the center moves the other end of the Gate farther from here-and-now. Forward or back, right or left, up or down, past or future—they are all controlled by moving the proper sphere in or out on its rod.”

Wilson studied the system. “Yes,” he said, “but how do you tell where the other end of the Gate is? Or when? I don’t see any graduations.”

“You don’t need them. You can see where you are. Look.” He touched a point under the control framework on the side toward the Gate. A panel rolled back and Wilson saw there was a small image of the Gate itself. Diktor made another adjustment and Wilson found that he could see through the image.

He was gazing into his own room, as if through the wrong end of a telescope. He could make out two figures, but the scale was too small for him to see clearly what they were doing, nor could he tell which editions of himself were there present—if they were in truth himself! He found it quite upsetting. “Shut it off,” he said.

Diktor did so and said, “I must not forget to give you your list.” He fumbled in his sleeve and produced a slip of paper which he handed to Wilson. “Here—take it.”

Wilson accepted it mechanically and stuffed it into his pocket. “See here,” he began, “everywhere I go I keep running into myself. I don’t like it at all. It’s disconcerting. I feel like a whole batch of guinea pigs. I don’t half-understand what this is all about and now you want to rush me through the Gate again with a bunch of half-baked excuses. Come clean. Tell me what it’s all about.”

Diktor showed temper in his face for the first time. “You are a stupid and ignorant young fool. I’ve told you all that you are able to understand. This is a period in history entirely beyond your comprehension. It would take weeks before you would even begin to understand it. I am offering you half a world in return for a few hours’ cooperation and you stand there arguing about it. Stow it, I tell you. Now—where shall we set you down?” He reached for the controls.

“Get away from those controls!” Wilson rapped out. He was getting the glimmering of an idea.

“Who are you, anyhow?”

“Me? I’m Diktor.”

“That’s not what I mean and you know it. How did you learn English?”

Diktor did not answer. His face became expressionless.

“Go on,” Wilson persisted. “You didn’t learn it here; that’s a cinch. You’re from the twentieth century, *aren’t you?”*

Diktor smiled sourly. “I wondered how long it would take you to figure that out.”

Wilson nodded. “Maybe I’m not bright, but I’m not as stupid as you think I am. Come on. Give me the rest of the story.”

Diktor shook his head. “It’s immaterial. Besides, we’re wasting time.”

Wilson laughed. “You’ve tried to hurry me with that excuse once too often. How can we waste time when we have *that?”* He pointed to the controls and to the Gate beyond it. “Unless you lied to me, we can use any slice of time we want to, any time. No, I think I know why you tried to rush me. Either you want to get me out of the picture here, or there is something devilishly dangerous about the job you want me to do. And I know how to settle it—you’re going with me!”

“You don’t know what you’re saying,” Diktor answered slowly. “That’s impossible. I’ve got to stay here and manage the controls.”

“That’s just what you aren’t going to do. You could send me through and lose me. I prefer to keep you in sight.”

“Out of the question,” answered Diktor. “You’ll have to trust me.” He bent over the controls again.

“Get away from there!” shouted Wilson. “Back out of there before I bop you one.” Under Wilson’s menacing fist Diktor withdrew from the control pulpit entirely. “There. That’s better,” he added when both of them were once more on the floor of the hall.

The idea which had been forming in his mind took full shape. The controls, he knew, were still set on his room in the boardinghouse where he lived—or had lived—back in the twentieth century. From what he had seen through the speculum of the controls, the time control was set to take him right back to the day in 1952 from which he had started. “Stand there,” he commanded Diktor, “I want to see something.”

He walked over to the Gate as if to inspect it. Instead of stopping when he reached it, he stepped on through.

He was better prepared for what he found on the other side than he had been on the two earlier occasions of time translation—”earlier” in the sense of sequence in his memory track. Nevertheless it is never too easy on the nerves to catch up with one’s self.

For he had done it again. He was back in his own room, but there were two of himself there before him. They were very much preoccupied with each other; he had a few seconds in which to get them straightened out in his mind. One of them had a beautiful black eye and a badly battered mouth. Beside that he was very much in need of a shave. That tagged him. He had been through the Gate at least once. The other, though somewhat in need of shaving himself, showed no marks of a fist fight.

He had them sorted out now, and knew where and *when* he was. It was all still mostly damnably confusing, but after former—no, not *former,* he amended-other experiences with time translation he knew better what to expect. He was back at the beginning again; this time he would put a stop to the crazy nonsense once and for all.

The other two were arguing. One of them swayed drunkenly toward the bed. The other grabbed him by the arm. “You can’t do that,” he said.

“Let him alone!” snapped Wilson.

The other two swung around and looked him over. Wilson watched the more sober of the pair size him up, saw his expression of amazement change to startled recognition. The other, the earliest Wilson, seemed to have trouble in focusing on him at all. “This going to be a job,” thought Wilson. “The man is positively stinking.” He wondered why anyone would be foolish enough to drink on an empty stomach. It was not only stupid, it was a waste of good liquor.

He wondered if they had left a drink for him.

"Who are you?" demanded his drunken double.

Wilson turned to "Joe." "He knows me," he said significantly.

"Joe," studied him. "Yes," he conceded, "yes, I suppose I do. But what the deuce are you here for? And why are you trying to bust up the plan?"

Wilson interrupted him. "No time for long-winded explanations, I know more about it than you do-you'll concede that—and my judgment is bound to be better than yours. He doesn't go through the Gate."

"I don't concede anything of the sort—"

The ringing of the telephone checked the argument. Wilson greeted the interruption with relief, for he realized that he had started out on the wrong tack. Was it possible that he was really as dense himself as this lug appeared to be? Did *he* look that way to other people? But the time was too short for self-doubts and soul-searching. "Answer it!" he commanded Bob (Boiled) Wilson.

The drunk looked belligerent, but acceded when he saw that Bob (Joe) Wilson was about to beat him to it. "Hello. . . . Yes. Who is this? Hello. . . . Hello!"

"Who was that?" asked "Joe."

"Nothing. Some nut with a misplaced sense of humor." The telephone rang again. "There he is again." The drunk grabbed the phone before the others could reach it. "Listen, you butterfly-brained ape! I'm a busy man and this is *not* a public telephone. . . . Huh? Oh, it's you, Genevieve—" Wilson paid little attention to the telephone conversation—he had heard it too many times before, and he had too much on his mind. His earliest *persona* was much too drunk to be reasonable, he realized; he must concentrate on some argument that would appeal to "Joe"—otherwise he was outnumbered. "—Huh? Oh, sure!" the call concluded. "Anyhow, I'll see you tonight. 'By."

Now was the time, thought Wilson, before this dumb yap can open his mouth. What would he say? What would sound convincing?

But the boiled edition spoke first. "Very well, Joe," he stated, "I'm ready to go if you are."

"Fine!" said "Joe." "Just step through. That's all there is to it."

This was getting out of hand, not the way he had planned it at all. "No, you don't!" he barked and jumped in front of the Gate. He would have to make them realize, and quickly.

But he got no chance to do so. The drunk cussed him out, then swung on him; his temper snapped. He knew with sudden fierce exultation that he had been wanting to take a punch at someone for some time. Who did they think they were to be taking chances with his future?

The drunk was clumsy; Wilson stepped under his guard and hit him hard in the face. It was a solid enough punch to have convinced a sober man, but his opponent shook his head and came back for more. "Joe" closed in. Wilson decided that he would have to put his original opponent away in a hurry, and give his attention to "Joe"—by far the more dangerous of the two.

A slight mix-up between the two allies gave him his chance. He stepped back, aimed carefully and landed a long jab with his left, one of the hardest blows he had ever struck in his life. It lifted his target right off his feet.

As the blow landed Wilson realized his orientation with respect to the Gate, knew with bitter certainty that he had again played through the scene to its inescapable climax.

He was alone with "Joe;" their companion had disappeared through the Gate.

His first impulse was the illogical but quite human and very common feeling of look-what-you-made-me-do. "Now you've done it!" he said angrily.

"Me?" "Joe" protested. "You knocked him through. I never laid a finger on him."

"Yes," Wilson was forced to admit. "But it's your fault," he added, "if you hadn't interfered, I wouldn't have had to do it."

'Me interfere? Why, you bald faced hypocrite, you butted in and tried to queer the pitch. Which reminds me—you owe me some explanations and I damn well mean to have them. What's the idea of —"

"Stow it," Wilson headed him off. He hated to be wrong and he hated still more to have to admit that he was wrong. It had been hopeless from the start, he now realized. He felt bowed down by the utter futility of it. "It's too late now. He's gone through."

"Too late for what?"

"Too late to put a stop to this chain of events." He was aware now that it always had been too late, regardless of what time it was, what year it was or how many times he came back and tried to stop it. He *remembered* having gone through the first time, he had *seen* himself asleep on the other side. Events would have to work out their weary way.

"Why should we?"

It was not worthwhile to explain, but he felt the need for self - justification. "Because," he said, "Diktor has played me—I mean has played *you*—us—for a dope, for a couple of dopes. Look, he told you that he was going to set you up as a big shot over there, didn't he?"

"Yes—"

"Well, that's a lot of malarkey. All he means to do is to get us so incredibly tangled up in this Gate thing that we'll never get straightened out again."

"Joe" looked at him sharply. "How do you know?"

Since it was largely hunch, he felt pressed for reasonable explanation. "Why go into it?" he evaded. "Why don't you just take my word for it?"

"Why should I?"

"Why should you? Why, you lunk, can't you see? I'm yourself, older and more experienced—you *have* to believe me." Aloud he answered, "If you can't take my word, whose word can you take?"

"Joe" grunted. "I'm from Missouri," he said. "I'll see for myself."

Wilson was suddenly aware that "Joe" was about to step through the Gate. "Where are you going?"

"Through! I'm going to look up Diktor and have it out with him."

"Don't!" Wilson pleaded. "Maybe we can break the chain even now." But the stubborn sulky look on the other's face made him realize how futile it was. He was still enmeshed in inevitability; it *had* to happen. "Go ahead," he shrugged. "It's your funeral. I wash my hands of you."

"Joe" paused at the Gate. "It is, eh? H—m-m-m—how can it be *my* funeral unless it's *your* funeral, too?"

Wilson stared speechlessly while "Joe" stepped through the Gate. Whose funeral? He had not thought of it in quite that way. He felt a sudden impulse to rush through the Gate, catch up with his alter ego and watch over him. The stupid fool might do anything. Suppose he got himself killed? Where would that leave Bob Wilson? Dead, of course.

Or would it? Could the death of a man thousands of years in the future kill *him* in the year 1952? He saw the absurdity of the situation suddenly, and felt very much relieved. "Joe's" actions could not endanger him; he remembered everything that "Joe" had done—was going to do. "Joe" would get into an argument with Diktor and, in due course of events, would come back through the Time Gate. No, *had* come back through the Time Gate. He was "Joe." It was hard to remember that.

Yes, he was "Joe." As well as the first guy. They would thread their courses, in and out and roundabout and end up here, with *him.* Had to.

Wait a minute—in that case the whole crazy business was straightened out. He had gotten away from Diktor, had all of his various personalities sorted out and was back where he started from, no worse for the wear except for a crop of whiskers and, possibly, a scar on his lip. Well, he knew when to let well enough alone. Shave, and get back to work, kid.

As he shaved he stared at his face and wondered why he had failed to recognize it the first time. He had to admit that he had never looked at it objectively before. He had always taken it for granted.

He acquired a crick in his neck from trying to look at his own profile through the corner of one eye.

On leaving the bathroom the Gate caught his eye forcibly. For some reason he had assumed that it would be gone. It was not. He inspected it, walked around it, carefully refrained from touching it. Wasn't the damned thing ever going to go away? It had served its purpose; why didn't Diktor shut it off?

He stood in front of it, felt a sudden surge of the compulsion that leads men to jump from high places. What would happen if he went through? What would he find? He thought of Arma. And the other one —what was her name? Perhaps Diktor had not told him. The other maidservant, anyhow, the second one.

But he restrained himself and forced himself to sit back down at the desk. If he was going to stay here—and of course he was, he was resolved on that point—he must finish the thesis. He had to eat; he needed the degree to get a decent job. Now where was he?

Twenty minutes later he had come to the conclusion that the thesis would have to be rewritten from one end to the other. His prime theme, the application of the empirical method to the problems of speculative metaphysics and its expression in rigorous formulae, was still valid, he decided, but he had acquired a mass of new and not yet digested data to incorporate in it. In rereading his manuscript he was amazed to find how dogmatic he had been. Time after time he had fallen into the Cartesian fallacy, mistaking clear reasoning for correct reasoning.

He tried to brief a new version of the thesis, but discovered that there were two problems he was forced to deal with which were decidedly not clear in his mind: the problem of the ego and the problem of free will. When there had been three of him in the room, which one was the ego—was *himself?* And how was it that he had been unable to change the course of events?

An absurdly obvious answer to the first question occurred to him at once. The ego was himself. Self is self, an unproved and unprovable first statement, directly experienced. What, then, of the other two? Surely they had been equally sure of ego-being—he remembered it. He thought of a way to state it: ego is the point of consciousness, the latest term in a continuously expanding series along the line of memory duration. That sounded like a general statement, but he was not sure; he would have to try to formulate it mathematically before he could trust it. Verbal language had such queer booby traps in it.

The telephone rang.

He answered it absent mindedly. “Yes?”

“Is that you, Bob?”

“Yes. Who is this?”

“Why, it’s Genevieve, of course, darling. What’s come over you today? That’s the second time you’ve failed to recognize my voice.”

Annoyance and frustration rose up in him. Here was another problem he had failed to settle—well, he’d settle it now. He ignored her complaint. “Look here, Genevieve, I’ve told you not to telephone me while I’m working. Good-by!”

“Well, of all the—You can’t talk that way to me, Bob Wilson! In the first place, you weren’t working today. In the second place, what makes you think you can use honey and sweet words on me and two hours later snarl at me? I’m not any too sure I want to marry you.”

“Marry you? What put that silly idea in your head?”

The phone sputtered for several seconds. When it had abated somewhat he resumed with, “Now just calm down. This isn’t the Gay Nineties, you know. You can’t assume that a fellow who takes you out a few times intends to marry you.”

There was a short silence. “So that’s the game, is it?” came an answer at last in a voice so cold and hard and completely shrewish that he almost failed to recognize it. “Well, there’s a way to handle men like you. A woman isn’t unprotected in this state!”

“You ought to know,” he answered savagely. “You’ve hung around the campus enough years.”

The receiver clicked in his ear.

He wiped the sweat from his forehead. That dame, he knew, was quite capable of causing him lots of trouble. He had been warned before he ever started running around with her, but he had been so sure of his own ability to take care of himself. He should have known better—but then he had not expected anything quite as raw as this.

He tried to get back to work on his thesis, but found himself unable to concentrate. The deadline of ten AM. the next morning seemed to be racing toward him. He looked at his watch. It had stopped. He set it by the desk clock—four fifteen in the afternoon. Even if he sat up all night he could not possibly finish it properly.

Besides there was Genevieve— The telephone rang again. He let it ring. It continued; he took the receiver off the cradle. He would *not* talk to her again.

He thought of Arma. There was a proper girl with the right attitude. He walked over to the window and stared down into the dusty, noisy street. Half-subconsciously he compared it with the green and placid countryside he had seen from the balcony where he and Diktor had breakfasted. This was a crummy world full of crummy people. He wished poignantly that Diktor had been on the up-and-up with him.

An idea broke surface in his brain and plunged around frantically. The Gate was still open. *The Gate was still open!* Why worry about Diktor? He was his own master. Go back and play it out—everything to gain, nothing to lose.

He stepped up to the Gate, then hesitated. Was he wise to do it? After all, how much did he know about the future?

He heard footsteps climbing the stairs, coming down the hall, no-yes, stopping at his door. He was suddenly convinced that it was Genevieve; that decided him. He stepped through.

The Hall of the Gate was empty on his arrival. He hurried around the control box to the door and was just in time to hear, "Come on. There's work to be done." Two figures were retreating down the corridor. He recognized both of them and stopped suddenly.

That was a near thing, he told himself; I'll just have to wait until they get clear. He looked around for a place to conceal himself, but found nothing but the control box. That was useless; they were coming back. Still— He entered the control box with a plan vaguely forming in his mind.

If he found that he could dope out the controls, the Gate might give him all the advantage he needed. First he needed to turn on the speculum gadget. He felt around where he recalled having seen Diktor reach to turn it on, then reached in his pocket for a match.

Instead he pulled out a piece of paper. It was the list that Diktor had given him, the things he was to obtain in the twentieth century. Up to the present moment there had been too much going on for him to look it over.

His eyebrows crawled up his forehead as he read. It was a funny list, he decided. He had subconsciously expected it to call for technical reference books, samples of modern gadgets, weapons. There was nothing of the sort. Still, there was a sort of mad logic to the assortment. After all, Diktor knew these people better than he did. It might be just what was needed.

He revised his plans, subject to being able to work the Gate. He decided to make one more trip back and do the shopping Diktor's list called for—but for his own benefit, not Diktor's. He fumbled in the semi-darkness of the control booth, seeking the switch or control for the speculum. His hand encountered a soft mass. He grasped it, and pulled it out.

It was his hat.

He placed it on his head, guessing idly that Diktor had stowed it there, and reached again. This time he brought forth a small notebook. It looked like a find—very possibly Diktor's own notes on the operation of the controls. He opened it eagerly.

It was not what he had hoped. But it did contain page after page of handwritten notes. There were three columns to the page; the first was in English, the second in international phonetic symbols, the third in a completely strange sort of writing. It took no brilliance for him to identify it as a vocabulary. He slipped it into a pocket with a broad smile; it might have taken Diktor months or even years to work out the relationship between the two languages; he would be able to ride on Diktor's shoulders in the matter.

The third try located the control and the speculum lighted up. He felt again the curious uneasiness he had felt before, for he was gazing again into his own room and again it was inhabited by two figures. He did not want to break into that scene again, he was sure. Cautiously he touched one of the colored beads.

The scene shifted, panned out through the walls of the boardinghouse and came to rest in the air, three stories above the campus. He was pleased to have gotten the Gate out of the house, but three stories was too much of a jump. He fiddled with the other two colored beads and established that one of them caused the scene in the speculum to move toward him or away from him while the other moved it up or down.

He wanted a reasonably inconspicuous place to locate the Gate, some place where it would not attract the attention of the curious. This bothered him a bit; there was no ideal place, but he compromised on a blind alley, a little court formed by the campus powerhouse and the rear wall of the library. Cautiously and clumsily he maneuvered his flying eye to the neighborhood he wanted and set it down carefully between the two buildings. He then readjusted his position so that he stared right into a blank wall. Good enough!

Leaving the controls as they were, he hurried out of the booth and stepped unceremoniously back into his own period.

He bumped his nose against the brick wall. "I cut that a little too fine," he mused as he slid cautiously out from between the confining limits of the wall and the Gate. The Gate hung in the air, about fifteen inches from the wall and roughly parallel to it. But there was room enough, he decided

—no need to go back and readjust the controls. He ducked out of the areaway and cut across the campus toward the Students' Co-op, wasting no time. He entered and went to the cashier's window.

"Hi, Bob."

"H'lo, Soupy. Cash a check for me?" "How much?"

"Twenty dollars."

"Well—I suppose so. Is it a good check?"

"Not very. It's my own."

“Well, I might invest in it as a curiosity.” He counted out a ten, a five and five ones.

“Do that,” advised Wilson. “My autographs are going to be rare collectors’ items.” He passed over the check, took the money and proceeded to the bookstore in the same building. Most of the books on the list were for sale there. Ten minutes later he had acquired title to:

The Prince, by Niccolô Machiavelli.
Behind the Ballots, by James Farley.
Mein Kampf (unexpurgated), by Adolf Schicklgruber.
How to Make Friends and Influence People, by Dale Carnegie.

The other titles he wanted were not available in the bookstore; he went from there to the university library where he drew out *Real Estate Broker‘s Manual, History of Musical Instruments* and a quarto titled *Evolution of Dress Styles.* The latter was a handsome volume with beautiful colored plates and was classified as reference. He had to argue a little to get a twenty-four hour permission for it.

He was fairly well-loaded down by then; he left the campus, went to a pawnshop and purchased two used, but sturdy, suitcases into one of which he packed the books. From there he went to the largest music store in the town and spent fortyfive minutes in selecting and rejecting phonograph records, with emphasis on swing and torch—highly emotional stuff, all of it. He did not neglect classical and semi-classical, but he applied the same rule to those categories—a piece of music had to be sensuous and compelling, rather than cerebral. In consequence his collection included such strangely assorted items as the “Marseillaise,” Ravel’s “Bolero,” four Cole Porters and “L’Après-midi d’un Faune.”

He insisted on buying the best mechanical reproducer on the market in the face of the clerk’s insistence that what he needed was an electrical one. But he finally got his own way, wrote a check for the order, packed it all in his suitcases and had the clerk get a taxi for him.

He had a bad moment over the check. It was pure rubber, as the one he had cashed at the Students’ Co-op had cleaned out his balance. He had urged them to phone the bank, since that was what he wished them not to do. It had worked. He had established, he reflected, the alltime record for kiting checks—thirty thousand years.

When the taxi drew up opposite the court where he had located the Gate, he jumped out and hurried in.

The Gate was gone.

He stood there for several minutes, whistling softly and assessing—unfavorably—his own abilities, mental processes, et cetera. The consequences of writing bad checks no longer seemed quite so hypothetical.

He felt a touch at his sleeve. “See here, Bud, do you want my hack, or don’t you? The meter’s still clicking.”

“Huh? Oh, sure.” He followed the driver, climbed back in.

“Where to?”

That was a problem. He glanced at his watch, then realized that the usually reliable instrument had been through a process which rendered its reading irrelevant. “What time is it?”

“Two fifteen.” He reset his watch.

Two fifteen. There would be a jamboree going on in his room at that time of a particularly confusing sort. He did not want to go *there* —*not* yet. Not until his blood brothers got through playing happy fun games with the Gate.

The Gate!

It would be in his room until sometime after four fifteen. If he timed it right—”Drive to the corner of Fourth and McKinley,” he directed, naming the intersection closest to his boardinghouse.

He paid off the taxi driver there, and lugged his bags into the filling station at that corner, where he obtained permission from the attendant to leave them and assurance that they would be safe. He had nearly two hours to kill. He was reluctant to go very far from the house for fear some hitch would upset his timing.

It occurred to him that there was one piece of unfinished business in the immediate neighborhood—and time enough to take care of it. He walked briskly to a point two streets away, whistling cheerfully and turned in at an apartment house.

In response to his knock the door of Apartment 211 was opened a crack, then wider. “Bob darling! I thought you were working today.”

“Hi, Genevieve. Not at all—I’ve got time to burn.”

She glanced back over her shoulder. “I don’t know whether I should let you come in—I wasn’t expecting you. I haven’t washed the dishes, or made the bed. I was just putting on my make-up.”

“Don’t be coy.” He pushed the door open wide, and went on in.

When he came out he glanced at his watch. Three thirty—plenty of time. He went down the street wearing the expression of the canary that ate the cat.

He thanked the service station salesman and gave him a quarter for his trouble, which left him with a lone dime. He looked at this coin, grinned to himself and inserted it in the pay phone in the office of the station. He dialed his own number.

“Hello,” he heard.

“Hello,” he replied. “Is that Bob Wilson?”

“Yes. Who ‘is this?”

"Never mind," he chuckled. "I just wanted to be sure you were there. I *thought* you would be. You're right in the groove, kid, right in the groove." He replaced the receiver with a grin.

At four ten he was too nervous to wait any longer. Struggling under the load of the heavy suitcases he made his way to the boardinghouse. He let himself in and heard a telephone ringing upstairs. He glanced at his watch—four fifteen. He waited in the hall for three interminable minutes, then labored up the stairs and down the upper hallway to his own door. He unlocked the door and let himself in.

The room was empty, the Gate still there.

Without stopping for anything, filled with apprehension lest the Gate should flicker and disappear while he crossed the floor, he hurried to it, took a firm grip on his bags and strode through it.

The Hall of the Gate was empty, to his great relief. What a break, he told himself thankfully. Just five minutes, that's all I ask. Five uninterrupted minutes. He set the suitcases down near the Gate to be ready for a quick departure. As he did so he noticed that a large chunk was missing from a corner of one case. Half a book showed through the opening, sheared as neatly as with a printer's trimmer. He identified it as "Mein Kampf."

He did not mind the loss of the book but the implications made him slightly sick at his stomach. Suppose he had not described a clear arc when he had first been knocked through the Gate, had hit the edge, half in and half out? Man Sawed in Half—and no illusion!

He wiped his face and went to the control booth. Following Diktor's simple instructions he brought all four spheres together at the center of the tetrahedron. He glanced over the side of the booth and saw that the Gate had disappeared entirely. "Check!" he thought. "Everything on zero—no Gate." He moved the white sphere slightly. The Gate reappeared. Turning on the speculum he was able to see that the miniature scene showed the inside of the Hall of the Gate itself. So far so good—but he would not be able to tell what time the Gate was set for by looking into the hall. He displaced a space control slightly; the scene flickered past the walls of the palace and hung in the open air. Returning the white time control to zero he then displaced it very, very slightly. In the miniature scene the sun became a streak of brightness across the sky; the days flickered past like light from a low frequency source of illumination. He increased the displacement a little, saw the ground become sear and brown, then snow covered and finally green again.

Working cautiously, steadying his right hand with his left, he made the seasons march past. He had counted ten winters when he became aware of voices somewhere in the distance. He stopped and listened, then very hastily returned the space controls to zero, leaving the time control as it was—set for ten years in the past—and rushed out of the booth.

He hardly had time to grasp his bags, lift them and swing them through the Gate, himself with them. This time he was exceedingly careful not to touch the edge of the circle.

He found himself, as he had planned to, still in the Hall of the Gate, but, if he had interpreted the controls correctly, ten years away from the events he had recently participated in. He had intended to give Diktor a wider berth than that, but there had been no time for it. However, he reflected, since Diktor was, by his own statement and the evidence of the little notebook Wilson had lifted from him, a native of the twentieth century, it was quite possible that ten years was enough. Diktor might not be in this era. If he was, there was always the Time Gate for a getaway. But it was reasonable to scout out the situation first before making any more jumps.

It suddenly occurred to him that Diktor might be looking at him through the speculum of the Time Gate. Without stopping to consider that speed was no protection—since the speculum could be used to view *any* time sector—he hurriedly dragged his two suitcases into the cover of the control booth. Once inside the protecting walls of the booth he calmed down a bit. Spying could work both ways. He found the controls set at zero; making use of the same process he had used once before, he ran the scene in the speculum forward through ten years, then cautiously hunted with the space controls on zero. It was a very difficult task; the time scale necessary to hunt through several months in a few minutes caused any figure which might appear in the speculum to flash past at an apparent speed too fast for his eye to follow. Several times he thought he detected flitting shadows which might be human beings but he was never able to find them when he stopped moving the time control.

He wondered in great exasperation why whoever had built the double-damned gadget had failed to provide it with graduations and some sort of delicate control mechanism—a vernier, or the like. It was not until much later that it occurred to him that the creator of the Time Gate might have no need of such gross aids to his senses. He would have given up, was about to give up, when, purely by accident, one more fruitless scanning happened to terminate with a figure in the field.

It was himself, carrying two suitcases. He saw himself walking directly into the field of view, grow large, disappear. He looked over the rail, half expecting to see himself step out of the Gate.

But nothing came out of the Gate. It puzzled him, until he recalled that it was the setting at *that* end, ten years in the future, which controlled the time of egress. But he had what he wanted; he sat back and watched. Almost immediately Diktor and another edition of himself appeared in the scene. He recalled the situation when he saw it portrayed in the speculum. It was Bob Wilson Number Three, about to quarrel with Diktor and make his escape back to the twentieth century.

That was that—Diktor had not seen him, did not know that he had made unauthorized use of the Gate, did not know that he was hiding ten years in the "past," would not look for him there. He returned the controls to zero, and dismissed the matter.

But other matters needed his attention—food, especially. It seemed obvious, in retrospect, that he should have brought along food to last him for a day or two at least. And maybe a gun. He had to admit that he had not been very foresighted. But he easily forgave himself—it was hard to be foresighted when the future kept slipping up behind one. "All right, Bob, old boy," he told himself aloud, "let's see if the natives are friendly—as advertised."

A cautious reconnoiter of the small part of the palace with which he was acquainted turned up no human beings or life of any sort, not even insect life. The place was dead, sterile, as static and unlived-in as a window display. He shouted once just to hear a voice. The echoes caused him to shiver; he did not do it again.

The architecture of the place confused him. Not only was it strange to his experience—he had expected that—but the place, with minor exceptions, seemed totally unadapted to the uses of human beings. Great halls large enough to hold ten thousand people at once—had there been floors for them to stand on. For there frequently were no floors in the accepted meaning of a level or reasonably level platform. In following a passageway he came suddenly to one of the great mysterious openings in the structure and almost fell in before he realized that his path had terminated. He crawled gingerly forward and looked over the edge. The mouth of the passage debouched high up on a wall of the place; below him the wall was cut back so that there was not even a vertical surface for the eye to follow. Far below him, the wall curved back and met its mate of the opposite side—not decently, in a horizontal plane, but at an acute angle.

There were other openings scattered around the walls, openings as unserviceable to human beings as the one in which he crouched. "The High Ones," he whispered to himself. All his cockiness was gone out of him. He retraced his steps through the fine dust and reached the almost friendly familiarity of the Hall of the Gate.

On his second try he attempted only those passages and compartments which seemed obviously adapted to men. He had already decided what such parts of the palace must be—servants' quarters, or, more probably, slaves' quarters. He regained his courage by sticking to such areas. Though deserted completely, by contrast with the rest of the great structure a room or a passage which seemed to have been built for men was friendly and cheerful. The sourceless everpresent illuminations and the unbroken silence still bothered him, but not to the degree to which he had been upset by the gargantuan and mysteriously convoluted chambers of the "High Ones."

He had almost despaired of finding his way out of the palace and was thinking of retracing his steps when the corridor he was following turned and he found himself in bright sunlight.

He was standing at the top of a broad steep ramp which spread fanlike down to the base of the building. Ahead of him and below him, distant at least five hundred yards, the pavement of the ramp met the green of sod and bush and tree. It was the same placid, lush and familiar scene he had looked out over when he breakfasted with Diktor—a few hours ago and ten years in the future.

He stood quietly for a short time, drinking in the sunshine, soaking up the heartlifting beauty of the warm, spring day. "This is going to be all right," he exulted. "It's a grand place."

He moved slowly down the ramp, his eyes searching for human beings. He was halfway down when he saw a small figure emerge from the trees into a clearing near the foot of the ramp. He called out to it in joyous excitement. The child—it was a child he saw—looked up, stared at him for a moment, then fled back into the shelter of the trees.

"Impetuous, Robert—that's what you are," he chided himself. "Don't scare 'em. Take it easy." But he was not made downhearted by the incident. Where there were children there would be parents, society, opportunities for a bright, young fellow who took a broad view of things. He moved on down at a leisurely pace.

A man showed up at the point where the child had disappeared. Wilson stood still. The man looked him over and advanced hesitantly a step or two. "Come here!" Wilson invited in a friendly voice. "I won't hurt you."

The man could hardly have understood his words, but he advanced slowly. At the edge of the pavement he stopped, eyed it and would not proceed farther.

Something about the behavior pattern clicked in Wilson's brain, fitted in with what he had seen in the palace and with the little that Diktor had told him. "Unless," he told himself, "the time I spent in 'Anthropology I' was totally wasted, this palace is tabu, the ramp I'm standing on is tabu, and, by contagion, I'm tabu. Play your cards, son, play your cards!"

He advanced to the edge of the pavement, being careful not to step off it. The man dropped to his knees and cupped his hands in front of him, head bowed. Without hesitation Wilson touched him on the forehead. The man got back to his feet, his face radiant.

“This isn’t even sporting,” Wilson said. “I ought to shoot him on the rise.

His Man Friday cocked his head, looked puzzled and answered in a deep, melodious voice. The words were liquid and strange and sounded like a phrase from a song. “You ought to commercialize that voice,” Wilson said admiringly. “Some stars get by on less. However—Get along now, and fetch something to eat. Food.” He pointed to his mouth.

The man looked hesitant, spoke again. Bob Wilson reached into his pocket and took out the stolen notebook. He looked up *eat,* then looked up *food.* It was the same word. “Blellan,” he said carefully.

“Blellaaaan?”

“Blellaaaaaaaan,” agreed Wilson. “You’ll have to excuse my accent. Hurry up.” He tried to find *hurry* in the vocabulary, but it was not there. Either the language did not contain the idea or Diktor had not thought it worthwhile to record it. But we’ll soon fix that, Wilson thought—if there isn’t such a word, I’ll give ‘em one.

The man departed.

Wilson sat himself down Turk-fashion and passed the time by studying the notebook. The speed of his rise in these parts, he decided, was limited only by the time it took him to get into full communication. But he had only time enough to look up a few common substantives when his first acquaintance returned, in company.

The procession was headed by an extremely elderly man, white-haired but beardless. All of the men were beardless. He walked under a canopy carried by four male striplings. Only he of all the crowd wore enough clothes to get by anywhere but on a beach. He was looking uncomfortable in a sort of toga effect which appeared to have started life as a Roman-striped awning. That he was the head man was evident.

Wilson hurriedly looked up the word for *chief.*

The word for chief was *Diktor.*

It should not have surprised him, but it did. It was, of course, a logical probability that the word *Diktor* was a title rather than a proper name. It simply had not occurred to him.

Diktor—the Diktor—had added a note under the word. “One of the few words,” Wilson read, “which shows some probability of having been derived from the dead languages. This word, a few dozen others and the grammatical structure of the language itself, appear to be the only link between the language of the ‘Forsaken Ones’ and the English language." The chief stopped in front of Wilson, just short of the pavement.

"Okay, Diktor," Wilson ordered, "kneel down. You're not exempt." He pointed to the ground. The chief knelt down. Wilson touched his forehead.

The food that had been fetched along was plentiful and very palatable. Wilson ate slowly and with dignity, keeping in mind the importance of face. While he ate he was serenaded by the entire assemblage. The singing was excellent he was bound to admit. Their ideas of harmony he found a little strange and the performance, as a whole, seemed primitive, but their voices were all clear and mellow and they sang as if they enjoyed it.

The concert gave Wilson an idea. After he had satisfied his hunger he made the chief understand, with the aid of the indispensable little notebook, that he and his flock were to wait where they were. He then returned to the Hall of the Gate and brought back from there the phonograph and a dozen assorted records. He treated them to a recorded concert of "modern" music.

The reaction exceeded his hopes. "Begin the Beguine" caused tears to stream down the face of the old chief. The first movement of Tschaikowsky's "Concerto Number One in B Flat Minor" practically stampeded them. They jerked. They held their heads and moaned. They shouted their applause. Wilson refrained from giving them the second movement, tapered them off instead with the compelling monotony of the "Bolero."

"Diktor," he said—he was not thinking of the old chief—"Diktor, old chum, you certainly had these people doped out when you sent me shopping. By the time you show up-if you ever do-I'll own the place."

Wilson's rise to power was more in the nature of a triumphal progress than a struggle for supremacy; it contained little that was dramatic. Whatever it was that the High Ones had done to the human race it had left them with only physical resemblance and with temperament largely changed. The docile friendly children with whom Wilson dealt had little in common with the brawling, vulgar, lusty, dynamic swarms who had once called themselves the people of the United States.

The relationship was like that of Jersey cattle to longhorns, or cocker spaniels to wolves. The fight was gone out of them. It was not that they lacked intelligence, or civilized arts; it was the competitive spirit that was gone, the will-to-power.

Wilson had a monopoly on that.

But even he lost interest in playing a game that he always won. Having established himself as boss man by taking up residence in the palace and representing himself as the viceroy of the departed High

Ones, he, for a time, busied himself in organizing certain projects intended to bring the, culture "up-to-date"—the reinvention of musical instruments, establishment of a systematic system of mail service, redevelopment of the idea of styles in dress and a tabu against wearing the same fashion more than one season. There was cunning in the latter project. He figured that arousing a hearty interest in display in the minds of the womenfolk would force the men to hustle to satisfy their wishes. What the culture lacked was drive—it was slipping downhill. He tried to give them the drive they lacked.

His subjects cooperated with his wishes, but in a bemused fashion, like a dog performing a trick, not because he understands it, but because his master and god desires it.

He soon tired of it.

But the mystery of the High Ones, and especially the mystery of their Time Gate, still remained to occupy his mind. His was a mixed nature, half-hustler, half-philosopher. The philosopher had his inning.

It was intellectually necessary to him that he be able to construct in his mind a physio-mathematical model for the phenomena exhibited by the Time Gate. He achieved one, not a good one perhaps, but one which satisfied all of the requirements. Think of a plane surface, a sheet of paper or, better yet, a silk handkerchief—silk, because it has no rigidity, folds easily, while maintaining all of the relative attributes of a two-dimensional continuum on the surface of the silk itself. Let the threads of the woof be the dimension—.or direction—.of time; let the threads of the woof represent all three of the space dimensions.

An ink spot on the handkerchief becomes the Time Gate. By folding the handkerchief that spot may be superposed on any other spot on the silk. Press the two spots together between thumb and forefinger; the controls are set, the Time Gate is open, a microscopic inhabitant of this piece of silk may crawl from one fold to the other without traversing any other part of the cloth.

The model is imperfect; the picture is static—but a physical picture is necessarily limited by the sensory experience of the person visualizing it.

He could not make up his mind whether or not the concept of folding the four-dimensional continuum—three of space, one of time —back on itself so that the Gate was "open" required the concept of higher dimensions through which to fold it. It seemed so, yet it might simply be an intellectual shortcoming of the human mind. Nothing but empty space was required for the "folding," but "empty space" was itself a term totally lacking in meaning—he was enough of a mathematician to know that.

If higher dimensions were required to "hold" a four-dimensional continuum, then the number of dimensions of space and of time were necessarily infinite; each order requires the next higher order to maintain it.

But “infinite” was another meaningless term. “Open series” was a little better, but not much.

Another consideration forced him to conclude that there was probably at least one more dimension than the four his senses could perceive—the Time Gate itself. He became quite skilled in handling its controls, but he never acquired the foggiest notion of how it worked, or how it had been built. It seemed to him that the creatures who built it must necessarily have been able to stand outside the limits that confined him in order to anchor the Gate to the structure of space time. The concept escaped him.

He suspected that the controls he saw were simply the ones that stuck through into the space he knew. The very palace itself might be no more than a three-dimensional section of a more involved structure. Such a condition would help to explain the otherwise inexplicable nature of its architecture.

He became possessed of an overpowering desire to know more about these strange creatures, the “High Ones,” who had come and ruled the human race and built this palace and this Gate, and gone away again— and in whose backwash he had been flung out of his setting some thirty millennia. To the human race they were no more than a sacred myth, a contradictory mass of tradition. No picture of them remained, no trace of their writing, nothing of their works save the High Palace of Norkaal and the Gate. And a sense of irreparable loss in the hearts of the race they had ruled, a loss expressed by their own term for themselves—the Forsaken Ones.

With controls and speculum he hunted back through time, seeking the Builders. It was slow work, as he had found before. A passing shadow, a tedious retracing—and failure.

Once he was sure that he had seen such a shadow in the speculum. He set the controls back far enough to be sure that he had repassed it, armed himself with food and drink and waited.

He waited three weeks.

The shadow might have passed during the hours he was forced to take out for sleep. But he felt sure that he was in the right period; he kept up the vigil.

He saw it.

It was moving toward the Gate.

When he pulled himself together he was halfway down the passageway leading away from the hall. He realized that he had been screaming. He still had an attack of the shakes.

Somewhat later he forced himself to return to the hall, and, with eyes averted, enter the control booth and return the spheres to zero. He backed out hastily and left the hall for his apartment. He did not touch the controls or enter the hall for more than two years.

It had not been fear of physical menace that had shaken his reason, nor the appearance of the creature—he could recall nothing of *how* it looked. It had been a feeling of sadness infinitely compounded which had flooded through him at the instant, a sense of tragedy, of grief insupportable and unescapable, of infinite weariness. He had been flicked with emotions many times too strong for his spiritual fiber and which he was no more fitted to experience than an oyster is to play a violin.

He felt that he had learned all about the High Ones a man could learn and still endure. He was no longer curious. The shadow of that vicarious emotion ruined his sleep, brought him sweating out of dreams.

One other problem bothered him—the problem of himself and his meanders through time. It still worried him that he had met himself coming back, so to speak, had talked with himself, fought with himself.

Which one was *himself?*

He was all of them, he knew, for he remembered being each one. How about the times when there had been more than one present?

By sheer necessity he was forced to expand the principle of nonidentity—"Nothing is identical with anything else, not even with itself"—to include the ego. In a four-dimensional continuum each event is an absolute individual, it has its space coordinates and its date. The Bob Wilson he was right now was *not* the Bob Wilson he had been ten minutes ago. Each was a discrete section of a four-dimensional process. One resembled the other in many particulars, as one slice of bread resembles the slice next to it. But they were *not* the same Bob Wilson—they differed by a length of time.

When he had doubled back on himself, the difference had become apparent, for the separation was now in space rather than in time, and he happened to be so equipped as to be able to *see* a space length, whereas he could only remember a time difference. Thinking back he could remember a great many different Bob Wilsons, baby, small child, adolescent, young man. They were all different—he knew that. The only thing that bound them together into a feeling of identity was continuity of memory.

And that was the same thing that bound together the three—no, four, Bob Wilsons on a certain crowded afternoon, a memory track that ran through all of them. The only thing about it that remained remarkable was time travel itself.

And a few other little items—the nature of "free will," the problem of entropy, the law of the conservation of energy and mass. The last two, he now realized, needed to be extended or generalized to include the cases in which the Gate, or something like it, permitted a leak of mass, energy or entropy from one neighborhood in the continuum to another. They were otherwise unchanged and valid. Free will was another matter. It could not be laughed off, because it could be directly experienced—yet his own free will had worked to create the same scene over and over again. Apparently human will must be considered as one of the, factors which make up the processes in the continuum—”free” to the ego, mechanistic from the outside.

And yet his last act of evading Diktor had apparently changed the course of events. He was here and running the country, had been for many years, but Diktor had not showed up. Could it be that each act of “true” free will created a new and different future? Many philosophers had thought so.

This future appeared to have no such person as Diktor—the Diktor — in it, anywhere or anywhen.

As the end of his first ten years in the future approached, he became more and more nervous, less and less certain of his opinion. Damnation, he thought, if Diktor is going to show up it was high time that he did so. He was anxious to come to grips with him, establish which was to be boss.

He had agents posted throughout the country of the Forsaken Ones with instructions to arrest any man with hair on his face and fetch him forthwith to the palace. The Hall of the Gate he watched himself.

He tried fishing the future for Diktor, but had no significant luck. He thrice located a shadow and tracked it down; each time it was himself. From tedium and partly from curiosity he attempted to see the other end

of the process; he tried to relocate his original home, thirty thousand years in the past.

It was a long chore. The further the time button was displaced from the center, the poorer the control became. It took patient practice to be able to stop the image within a century or so of the period he wanted. It was in the course of this experimentation that he discovered what he had once looked for, a fractional control—a vernier, in effect. It was as simple as the primary control, but twist the bead instead of moving it directly.

He steadied down on the twentieth century, approximated the year by the models of automobiles, types of architecture and other gross evidence, and stopped in what he believed to be 1952. Careful displacement of the space controls took him to the university town where he had started— after several false tries; the image did not enable him to read road signs.

He located his boardinghouse, brought the Gate into his own room. It was vacant, no furniture in it.

He panned away from the room, and tried again, a year earlier. Success—his own room, his own furniture, but empty. He ran rapidly back, looking for shadows.

There! He checked the swing of the image. There were three figures in the room, the image was too small, the light too poor for him to be sure whether or not one of them was himself. He leaned over and studied the scene.

He heard a dull thump outside the booth. He straightened up and looked over the side. Sprawled on the floor was a limp human figure. Near it lay a crushed and battered hat.

He stood perfectly still for an uncounted time, staring at the two redundant figures, hat and man, while the winds of unreason swept through his mind and shook it. He did not need to examine the unconscious form to identify it. He knew…*he knew—it* was his younger self, knocked willy-nilly through the Time Gate.

It was not that fact in itself which shook him. He had not particularly expected it to happen, having come tentatively to the conclusion that he was living in a different, an alternative, future from the one in which he had originally transitted the Time Gate. He had been aware that it might happen nevertheless, that it did happen did not surprise him.

When it did happen, *he himself had been the only spectator!*

He was Diktor. He was *the* Diktor. He was *the only* Diktor!

He would never find Diktor, or have it out with him. He need never fear his coming. There never had been, never would be, any other person called Diktor, because Diktor never had been or ever would be anyone but himself.

In review, it seemed obvious that he must be Diktor, there were so many bits of evidence pointing to it. And yet it had not been obvious. Each point of similarity between himself and the Diktor, he recalled, had arisen from rational causes—usually from his desire to ape the gross characteristics of the "other" and thereby consolidate his own position of power and authority before the "other" Diktor showed up. For that reason he had established himself in the very apartments that "Diktor" had used—so that they would be "his" first.

To be sure his people called him Diktor, but he had thought nothing of that—they called anyone who ruled by that title, even the little sub-chieftains who were his local administrators.

He had grown a beard, such as Diktor had worn, partly in imitation of the "other" man's precedent, but more to set him apart from the hairless males of the Forsaken Ones. It gave him prestige, increased his tabu. He fingered his bearded chin. Still, it seemed strange that he had not recalled that his own present appearance checked with the appearance of "Diktor." "Diktor" had been an older man. He himself was only thirty-two, ten here, twentytwo *there.*

Diktor he had judged to be about fortyfive. Perhaps an unprejudiced witness would believe himself to be that age. His hair and beard were shot with gray—had been, ever since the year he had succeeded too well in spying on the High Ones. His face was lined. Uneasy lies the head and so forth. Running a country, even a peaceful Arcadia, will worry a man, keep him awake nights.

Not that he was complaining—it had been a good life, a grand life, and it beat anything the ancient past had to offer.

In any case, he had been looking for a man in his middle forties, whose face he remembered dimly after ten years and whose picture he did not have. It had never occurred to him to connect that blurred face with his present one. Naturally not.

But there were other little things. Arma, for example. He had selected a likely-looking lass some three years back and made her one of his household staff, renaming her Arma in sentimental memory of the girl he had once fancied. It was logically necessary that they were the same girl, not two Armas, but one.

But, as he recalled her, the "first" Arma had been much prettier.

H—m-m-m—it must be his own point of view that had changed. He admitted that he had had much more opportunity to become bored with exquisite female beauty than his young friend over there on the floor. He recalled with a chuckle how he had found it necessary to surround himself with an elaborate system of tabus to keep the nubile daughters of his subjects out of his hair—most of the time. He had caused a particular pool in the river adjacent to the palace to be dedicated to his use in order that he might swim without getting tangled up in mermaids.

The man on the floor groaned, but did not open his eyes.

Wilson, the Diktor, bent over him but made no effort to revive him. That the man was not seriously injured he had reason to be certain. He did not wish him to wake up until he had had time to get his own thoughts entirely in order.

For he had work to do, work which must be done meticulously, without mistake. Everyone, he thought with a wry smile, makes plans to provide for their future.

He was about to provide for his past.

There was the matter of the setting of the Time Gate when he got around to sending his early self back. When he had tuned in on the scene in his room a few minutes ago, he had picked up the action just before his early self had been knocked through. In sending him back he must make a slight readjustment in the time setting to an instant around two o'clock of that particular afternoon. That would be simple enough; he need only search a short sector until he found his early self alone and working at his desk.

But the Time Gate had appeared in that room at a later hour; he had just caused it to do so. He felt confused.

Wait a minute, now—if he changed the setting of the time control, the Gate would appear in his room at the earlier time, remain there and simply blend into its "reappearance" an hour or so later. Yes, that was right. To a person in the room it would simply be as if the Time Gate had been there all along, from about two o'clock.

Which it had been. He would see to that.

Experienced as he was with the phenomena exhibited by the Time Gate, it nevertheless required a strong and subtle intellectual effort to think other than in durational terms, to take an *eternal* viewpoint.

And there was the hat. He picked it up and tried it on. It did not fit very well, no doubt because he was wearing his hair longer now. The hat must be placed where it would be found—Oh, yes, in the control booth. And the notebook, too.

The notebook, the notebook—Mm-m-m—Something funny, there. When the notebook he had stolen had become dog-eared and tattered almost to illegibility some four years back, he had carefully recopied its contents in a new notebook—to refresh his memory of English rather than from any need for it as a guide. The wornout notebook he had destroyed; it was the new one he intended to obtain, and leave to be found.

In that case, *there never had been two notebooks.* The one he had now would become, after being taken through the Gate to a point ten years in the past, the notebook from which he had copied it. They were simply different segments of the same physical process, manipulated by means of the Gate to run concurrently, side by side, for a certain length of time.

As he had himself-one afternoon.

He wished that he had not thrown away the wornout notebook: If he had it at hand, he could compare them and convince himself that they were identical save for the wear and tear of increasing entropy.

But when had he learned the language, in order that he might prepare such a vocabulary? To be sure, when he copied it he then *knew* the language—copying had not actually been necessary.

But he *had* copied it.

The physical process he had all straightened out in his mind, but the intellectual process it represented was completely circular. His older self had taught his younger self a language which the older self knew because the younger self, after being taught, grew up to be the older self and was, therefore, capable of teaching.

But where had it started?

Which comes first, the hen or the egg?

You feed the rats to the cats, skin the cats, and feed the carcasses of the cats to the rats who are in turn fed to the cats. The perpetual motion fur farm.

If God created the world, who created God?

Who wrote the notebook? Who started the chain?

He felt the intellectual desperation of any honest philosopher. He knew that he had about as much chance of understanding such problems as a collie has of understanding how dog food gets into cans. Applied psychology was more his size—which reminded him that there were certain books which his early self would find very useful in learning how to deal with the political affairs of the country he was to run. He made a mental note to make a list.

The man on the floor stirred again, sat up. Wilson knew that the time had come when he must insure his past. He was not worried; he felt the sure confidence of the gambler who is "hot," who *knows* what the next roll of the dice will show.

He bent over his alter ego. "Are you all right?" he asked.

"I guess so," the younger man mumbled. He put his hand to his bloody face. "My head hurts."

"I should think it would," Wilson agreed. "You came through head over heels. I think you hit your head when you landed."

His younger self did not appear fully to comprehend the words at first. He looked around dazedly, as if to get his bearings. Presently he said, "Came through? Came through what?"

"The Gate, of course," Wilson told him. He nodded his head toward the Gate, feeling that the sight of it would orient the still groggy younger Bob.

Young Wilson looked over his shoulder in the direction indicated, sat up with a jerk, shuddered and closed his eyes. He opened them again after what seemed to be a short period of prayer, looked again, and said, "Did I come through that?"

"Yes," Wilson assured him.

"Where am I?"

"In the Hall of the Gate in the High Palace of Norkaal. But what is more important," Wilson added, "is *when* you are. You have gone forward a little more than thirty thousand years."

The knowledge did not seem to reassure him. He got up and stumbled toward the Gate. Wilson put a restraining hand on his shoulder. "Where are you going?"

"Back!"

"Not so fast." He did not dare let him go back yet, not until the Gate had been reset. Besides he was still drunk—his breath was staggering. “You will go back all right—I give you my word on that. But let me dress your wounds first. And you should rest. I have some explanations to make to you, and there is an errand you can do for me when you get back— to our mutual advantage. There is a great future in store for you and me, my boy—a great future!”

A great future!

COMMON SENSE

JOE, THE RIGHT HAND head of Joe-Jim, addressed his words to Hugh Hoyland. "All right, smart boy, you've convinced the Chief Engineer." He gestured toward Bill Ertz with the blade of his knife, then resumed picking Jim's teeth with it. "So what? Where does it get you?"

"I've explained that," Hugh Hoyland answered irritably. "We keep on, until every scientist in the Ship, from the Captain to the greenest probationer, knows that the Ship moves and believes that we can make it move. Then we'll finish the Trip, as Jordan willed. How many knives can you muster?" he added.

"Well, for the love of Jordan! Listen, have you got some fool idea that we are going to help you with this crazy scheme?"

"Naturally. You're necessary to it."

"Then you had better think up another think. That's out. Bobo! Get out the checkerboard."

"O.K., Boss." The microcephalic dwarf hunched himself up off the floor plates and trotted across Joe-Jim's apartment.

"Hold it, Bobo." Jim, the lefthand head, had spoken. The dwarf stopped dead, his narrow forehead wrinkled. The fact that his two-headed master occasionally failed to agree as to what Bobo should do was the only note of insecurity in his tranquil bloodthirsty existence.

"Let's hear what he has to say," Jim continued. "There may be some fun in this."

"Fun! The fun of getting a knife in your ribs. Let me point out that they are my ribs, too. I don't agree to it."

"I didn't ask you to agree; I asked you to listen. Leaving fun out of it, it may be the only way to keep a knife out of our ribs."

"What do you mean?" Joe demanded suspiciously. "You heard what Ertz had to say." Jim flicked a thumb toward the prisoner. "The Ship's officers are planning to clean out the upper levels. How would you like to go into the Converter, Joe? You can't play checkers after we're broken down into hydrogen."

"Bunk! The Crew can't exterminate the muties; they've tried before."

Jim turned to Etrz. "How about it?"

Ertz answered somewhat diffidently, being acutely aware of his own changed status from a senior Ship's officer to prisoner of war. He felt befuddled anyhow; too much had happened and too fast. He had been kidnaped, hauled up to the Captain's veranda, and had there gazed out at the stars. The stars.

His hard-boiled rationalism included no such concept. If an Earth astronomer had had it physically demonstrated to him that the globe spun on its axis because someone turned a crank, the upset in evaluations could have been no greater.

Besides that, he was acutely aware that his own continued existence hung in fine balance. Joe-Jim was the first upper-level mutie he had ever met other than in combat, knife to knife. A word from him to that great ugly dwarf sprawled on the deck-- He chose his words. "I think the Crew would be successful, this time. We . . . they have organized for it. Unless there are more of you than we think there are and better organized, I think it could be done. You see . . . well, uh, I organized it."

"You?"

"Yes. A good many of the Council don't like the policy of letting the muties alone. Maybe it's sound religious doctrine and maybe it isn't, but we lose a child here and a couple of pigs there. It's annoying."

"What do you expect muties to eat?" demanded Jim belligerently. "Thin air?"

"No, not exactly. Anyhow, the new policy was not entirely destructive. Any muties that surrendered and could be civilized we planned to give to masters and put them to work as part of the Crew. That is, any that weren't, uh . . . that were--" He broke off in embarrassment, and shifted his eyes from the two-headed monstrosity before him.

"You mean any that weren't physical mutations, like me," Joe filled in nastily. "Don't you?" he persisted. "For the likes of me it's the Converter, isn't it?" He slapped the blade of his knife nervously on the palm of his hand.

Ertz edged away, his own hand shifting to his belt. But no knife was slung there; he felt naked and helpless without it. "Just a minute," he said defensively, "you asked me; that's the situation. It's out of my hands. I'm just telling you."

"Let him alone, Joe. He's just handing you the straight dope. It's like I was telling you: either go along with Hugh's plan, or wait to be hunted down. And don't get any ideas about killing him; we're going to need him." As Jim spoke he attempted to return the knife to its sheath. There was a brief and silent struggle between the twins for control of the motor nerves to their right arm, a clash of will below the level of physical activity. Joe gave in.

"All right," he agreed surlily, "but if I go to the Converter, I want to take this one with me for company."

"Stow it," said Jim. "You'll have me for company."

"Why do you believe him?"

"He has nothing to gain by lying. Ask Alan."

Alan Mahoney, Hugh's friend and boyhood chum, had listened to the argument round-eyed, without joining it. He, too, had suffered the nerve-shaking experience of viewing the outer stars, but his ignorant peasant mind had not the sharply formulated opinions of Ertz, the Chief Engineer. Ertz had been able to see almost at once that the very existence of a world outside the Ship changed all his plans and everything he had believed in; Alan was capable only of wonder.

"What about this plan to fight the muties, Alan?"

"Huh? Why, I don't know anything about it. Shucks, I'm not a scientist. Say, wait a minute; there was a junior officer sent in to help our village scientist, Lieutenant Nelson." He stopped and looked puzzled.

"What about it? Go ahead."

"Well, he has been organizing the cadets in our village, and the married men, too, but not so much. Making 'em practice with their blades and slings. Never told us what for, though."

Ertz spread his hands. "You see?"

Joe nodded. "I see," he admitted grimly.

Hugh Hoyland looked at him eagerly. "Then you're with me?"

"I suppose so," Joe admitted. "Right!" added Jim.

Hoyland looked back to Ertz. "How about you, Bill Ertz?"

"What choice have I got?"

"Plenty. I want you with me wholeheartedly. Here's the layout: The Crew doesn't count; it's the officers we have to convince. Any that aren't too addlepated and stiff-necked to understand after they've seen the stars and the Control Room, we keep. The others--" he drew a thumb across his throat while making a harsh sibilance in his cheek, "the Converter."

Bobo grinned happily and imitated the gesture and the sound.

Ertz nodded. "Then what?"

"Muties and Crew together, under a new Captain, we move the Ship to Far Centaurus! Jordan's Will be done!"

Ertz stood up and faced Hoyland. It was a heady notion, too big to be grasped at once, but, by Jordan! he liked it. He spread his hands on the table and leaned across it. "I'm with you, Hugh Hoyland!"

A knife clattered on the table before him, one from the brace at Joe-Jim's belt. Joe looked startled, seemed about to speak to his brother, then appeared to think better of it. Ertz looked his thanks and stuck the knife in his belt.

The twins whispered to each other for a moment, then Joe spoke up. "Might as well make it stick," he said. He drew his remaining knife and, grasping the blade between thumb and forefinger so that only the point was exposed, he jabbed himself in the fleshly upper part of his left arm. "Blade for blade!"

Ertz's eyebrows shot up. He whipped out his newly acquired blade and cut himself in the same location. The blood spurted and ran down to the crook of his arm. "Back to back!" He shoved the table aside and pressed his gory shoulder against the wound on Joe-Jim.

Alan Mahoney, Hugh Hoyland, Bobo: all had their blades out, all nicked their arms till the skin ran red and wet. They crowded in, bleeding shoulders pushed together so that the blood dripped united to the death.

"Blade for blade!"

"Back to back!"

"Blood to blood!"

"Blood brothers, to the end of the Trip!"

An apostate scientist, a kidnaped scientist, a dull peasant, a two-headed monster, a apple-brained moron; five knives, counting Joe-Jim as one; five brains, counting Joe-Jim as two and Bobo as none; five brains and five knives to overthrow an entire culture.

"But I don't want to go back, Hugh." Alan shuffled his feet and looked dogged. "Why can't I stay here with you? I'm a good blade."

"Sure you are, old fellow. But right now you'll be more useful as a spy."

"But you've got Bill Ertz for that."

"So we have, but we need you too. Bill is a public figure; he can't duck out and climb to the upper levels without it being noticed and causing talk. That's where you come in; you're his go-between."

"I'll have a Huff of a time explaining where I've been."

"Don't explain any more than you have to. But stay away from the Witness." Hugh had a sudden picture of Alan trying to deceive the old village historian, with his searching tongue and lust for details. "Keep clear of the Witness. The old boy would trip you up."

"Him? You mean the old one; he's dead. Made the Trip long since. The new one don't amount to nothing."

"Good. If you're careful, you'll be safe." Hugh raised his voice. "Bill! Are you ready to go down?"

"I suppose so." Ertz picked himself up and reluctantly put aside the book he had been reading *The Three Musketeers*, illustrated, one of Joe-Jim's carefully stolen library. "Say, that's a wonderful book. Hugh, is

Earth really like that?"

"Of course. Doesn't it say so in the book?"

Ertz chewed his lip and thought about it. "What is a house?"

"A house? A house is a sort of a. . . a sort of a compartment."

"That's what I thought at first, but how can you ride on a compartment?"

"Huh? What do you mean?"

"Why, all through the book they keep climbing on their houses and riding away."

"Let me see that book," Joe ordered. Ertz handed it to him. Joe-Jim thumbed through it rapidly. "I see what you mean. Idiot! They ride horses, not houses."

"Well, what's a horse?"

"A horse is an animal, like a big hog, or maybe like a cow. You squat up on top of it and let it carry you along."

Ertz considered this. "It doesn't seem practical. Look, when you ride in a litter, you tell the chief porter where you want to go. How can you tell a cow where you want to go?"

"That's easy. You have a porter lead it."

Ertz conceded the point. "Anyhow, you might fall off. It isn't practical. I'd rather walk."

"It's quite a trick," Joe explained. "Takes practice."

"Can you do it?"

Jim sniggered. Joe looked annoyed. "There are no horses in the Ship."

"OK, O.K. But look. These guys Athos, Porthos, and Aramis, they had something--"

"We can discuss that later," Hugh interrupted. "Bobo is back. Are you ready to go, Bill?"

"Don't get in a hurry, Hugh. This is important. These chaps had knives."

"Sure. Why not?"

"But they were better than our knives. They had knives as long as your arm, maybe longer. If we are going to fight the whole Crew, think what an advantage that would be."

"Hm-m-m." Hugh drew his knife and looked at it, cradling it in his palm. "Maybe. You couldn't throw it as well."

"We could have throwing knives, too."

"Yes, I suppose we could."

The twins had listened Without comment. "He's right," put in Joe. "Hugh, you take care of placing the knives. Jim and I have some reading to do." Both of Joe-Jim's heads were busy thinking of other books they owned, books. that discussed in saguinary detail the infinitely varied methods used by mankind to shorten the lives of enemies. He was about to institute a War College Department of Historical Research, although he called his project by no such fancy term.

"O.K.," Hugh agreed, "but you will have to say the word to them."

"Right away." Joe-Jim stepped out of his apartment into the passageway where Bobo had assembled a couple of dozen of Joe-Jim's henchmen among the muties. Save for Long Arm, Pig, and Squatty, who had taken part in the rescue of Hugh, they were all strangers to Hugh, Alan, and Bill, and they were all sudden death to strangers.

Joe-Jim motioned for the three from the lower decks to join him. He pointed them out to the muties, and ordered them to look closely and not to forget: these three were to have safe passage and protection wherever they went. Furthermore, in Joe-Jim's absence his men were to take orders from any of them.

They stirred and looked at each other. Orders they were used to, but from Joe-Jim only.

A big-nosed individual rose up from his squat and addressed them. He looked at Joe-Jim, but his words were intended for all. "I am Jack-of-the-Nose. My blade is sharp and my eye is keen. Joe-Jim with the two wise heads is my Boss and my knife fights for him. But Joe is my Boss, not strangers from heavy decks. What do say, knives? Is that not the Rule?"

He paused. The others had listened to him stealing glances at Joe-Jim. Joe muttered something of the corner of his mouth to Bobo. Jack O'Nose opened his mouth to continue. There was a smash of splintering teeth, a crack from a broken neck; his mouth stopped with a missile.

Bobo reloaded his slingshot. The body, not yet still, settled slowly to the deck. Joe-Jim waved a hand it. "Good eating!" Joe announced. "He's yours." The muties converged on the body as if they had suddenly been unleashed. They concealed it completely in a busy grunting pile-up. Knives out, they cuffed and crowded each other for a piece of the prize.

Joe-Jim waited patiently for the undoing to be over, then, when the place where Jack O'Nose had been was no more than a stain on the deck and the several polite arguments over the sharing had died down, he started again; Joe spoke. "Long Arm, you and Forty-one and the Ax go down with Bobo, Alan and Bill. The rest here."

Bobo trotted away in the long loping strides, sped on by the low pseudogravity near the axis of rotation of Ship. Three of the muties detached themselves from pack and followed. Ertz and Alan Mahoney hurried catch up.

When he reached the nearest staircase trunk, he skipped out into space without breaking his stride letting centrifugal force carry him down to the next. Alan and the muties followed; but Ertz paused on the edge and looked back. "Jordan keep you, brother!" he sang out.

Joe-Jim waved to him. "And you," acknowledged Joe.

"Good eating!" Jim added.

"Good eating!"

Bobo led them down forty-odd decks, well into no man's land inhabited neither by mutie nor crew, stopped. He pointed in succession to Long Arm, Forty-one, and the Ax. "Two Wise Heads say for you to watch here. You first," he added, pointing again to Forty-one. "It's like this," Ertz amplified. "Alan and I are going down to heavyweight level. You three are to keep a guard here, one at a time, so that I will be able to send messages back up to Joe-Jim. Get it?"

"Sure. Why not?" Long Arm answered.

"Joe-Jim says it," Forty-one commented with a note of finality in his voice. The Ax grunted agreeably.

"O.K.," said Bobo. Forty-one sat down at the stairwell, letting his feet hang over, and turned his attention to food which he had been carrying tucked under his left arm.

Bobo slapped Ertz and Alan on their backs. "Good eating," he bade them, grinning. When he could get his breath, Ertz acknowledged the courteous thought, then dropped at once to the next lower deck, Alan close after him. They had still many decks to go to 'civilization.'

Commander Phineas Narby, Executive Assistant to Jordan's Captain, in rummaging through the desk of the Chief Engineer was amused to find that Bill Ertz had secreted therein a couple of Unnecessary books. There were the usual Sacred books, of course, including the priceless *Care and Maintenance of the Auxiliary Fourstage Converter* and the *Handbook of Power, Light, and Conditioning, Starship Vanguard*. These were Sacred books of the first order, bearing the imprint of Jordan himself, and could lawfully be held only by the Chief Engineer.

Narby considered himself a skeptic and rationalist. Belief in Jordan was a good thing—for the Crew. Nevertheless the sight of a title page with the words 'Jordan Foundation' on it stirred up within him a trace of religious awe such as he had not felt since before he was admitted to scientisthood.

He knew that the feeling was irrational; probably there had been at some time in the past some person or persons called Jordan. Jordan might have been an early engineer or captain who codified the common sense and almost instinctive rules for running the Ship. Or, as seemed more likely, the Jordan myth went back much farther than this book in his hand, and its author had simply availed himself of the ignorant superstitions of the Crew to give his writings authority. Narby knew how such things were done; he planned to give the new policy with respect to the muties the same blessing of Jordan when the time was ripe for it to be put into execution. Yes, order and discipline and belief in authority were good things, for the Crew. It was equally evident that a rational, coolheaded common sense was a proper attribute for the scientists who were custodians of the Ship's welfare, common sense and a belief in nothing but facts.

He admired the exact lettering on the pages of the book he held. They certainly had excellent clerks in those ancient times; not the sloppy draftsmen he was forced to put up with, who could hardly print two letters alike.

He made a mental note to study these two indispensable handbooks of the engineering department before turning them over to Ertz's successor. It would be well, he thought, not to be too dependent on the statements of the Chief Engineer when he himself succeeded to the captaincy. Narby had no particular respect for engineers, largely because he had no particular talent for engineering. When he had first reached scientisthood and had been charged to defend the spiritual and material welfare of the Crew, had sworn to uphold the Teachings of Jordan, he soon discovered that administration and personnel management were more in his lines than tending the converter or servicing the power lines. He had served as clerk, village administrator, recorder to the Council, personnel officer, and was now chief executive for Jordan's Captain himself, ever since an unfortunate and rather mysterious accident had shortened the life of Narby's predecessor in that post.

His decision to study up on engineering before a new Chief Engineer was selected brought to mind the problem of choosing a new chief. Normally the Senior Watch Officer for the Converter would become Chief Engineer when a chief made the Trip, but in this case, Mort Tyler, the Senior Watch, had made the Trip at the same time; his body had been found, stiff and cold, after the mutie raid which had rescued that heretic, Hugh Hoyland. That left the choice wide open and Narby was a bit undecided as to whom he should suggest to the Captain.

One thing was certain; the new chief must not be a man with as much aggressive initiative as Ertz. Narby admitted that Ertz had done a good job in organizing the Crew for the proposed extermination of the muties, but his very efficiency had made him too strong a candidate for succession to the captaincy, if and when. Had he thought about it overtly Narby might have admitted to himself that the present Captain's life span had extended unduly because Narby was not absolutely certain that Ertz would not be selected. What he did think was that this might be a good time for the old Captain to surrender his spirit to Jordan. The fat old fool had long outlived his usefulness; Narby was tired of having to wheedle him into giving the proper orders. If the Council were faced with the necessity of selecting a new Captain at this time, there was but one candidate available. Narby put the book down, his mind made up.

The simple decision to eliminate the old Captain carried with it in Narby's mind no feeling of shame, nor sin, nor disloyalty. He felt contempt but not dislike for the Captain, and no mean spirit colored his decision to kill him. Narby's plans were made on the noble level of statesmanship. He honestly believed that his objective was the welfare of the entire Crew; commonsense administration, order and discipline, good eating for everyone. He selected himself because it was obvious to him that he was best fitted to accomplish those worthy ends. That some must make the Trip in order that these larger interests be served he did not find even mildly regrettable, but he bore them no malice.

"What in the Huff are you doing at my desk?"

Narby looked up to see the late Bill Ertz standing over him, not looking pleased. He looked again, then as an afterthought closed his mouth. He had been so certain, when Ertz failed to reappear after the raid, that he had made the Trip and was in all probability butchered and eaten; so certain that it was now a sharp wrench to his mind to see Ertz standing before him, aggressively alive. But he pulled himself together.

"Bill! Jordan bless you, man, we thought you had made the Trip! Sit down, sit down, and tell me what happened to you."

"I will if you will get out of my chair," Ertz answered bitingly.

"Oh, sorry!" Narby hastily vacated the chair at Ertz's desk and found another.

"And now," Ertz continued, taking the seat Narby had left, "you might explain why you were going through my writings."

Narby managed to look hurt. "Isn't that obvious? We assumed you were dead. Someone had to take over and attend to your department until a new chief was designated. I was acting on behalf of the Captain."

Ertz looked him in the eyes. "Don't give me that guff, Narby. You know and I know who puts words in the Captain's mouth; we've planned it often enough. Even if you did think I was dead, it seems to me you could wait longer than the time between two sleeps to pry through my desk."

"Now really, old man, when a person is missing after a mutie raid, it's a commonsense assumption that he has made the Trip."

"O.K., O.K., skip it. Why didn't Mort Tyler take over in the meantime?"

"He's in the Converter."

"Killed, eh? But who ordered him put in the Converter? That much mass will make a terrific peak in the load."

"I did, in place of Hugh Hoyland. Their masses were nearly the same, and your requisition for the mass of Hugh Hoyland was unfilled."

"Nearly the same isn't good enough in handling the Converter. I'll have to check on it." He started to rise.

"Don't get excited," said Narby. "I'm not an utter fool in engineering, you know. I ordered his mass to be trimmed according to the same schedule you had laid out for Hoyland."

"Well, all right. That will do for now. But I will have to check it. We can't afford to waste mass."

"Speaking of waste mass," Narby said sweetly, "I found a couple of Unnecessary books in your desk."

"Well?"

"They are classed as mass available for power, you know."

"So? And who is the custodian of mass allocated for power?"

"You are certainly. But what were they doing in your desk?"

"Let me point out to you, my dear Captain's Best Boy, that it lies entirely within my discretion where I choose to store mass available for power."

"Hm-m-m. I suppose you are right. By the way, if you don't need them for the power schedule at once, would you mind letting me read them?"

"Not at all, if you want to be reasonable about it. I'll check them out to you: have to do that; they've already been centrifuged. Just be discreet about it."

"Thanks. Some of those ancients had vivid imaginations. Utterly crazy, of course, but amusing for relaxation."

Ertz got out the two volumes and prepared a receipt for Narby to sign. He did this absentmindedly, being preoccupied with the problem of how and when to tackle Narby. Phineas Narby he knew to be a key man in the task he and his blood brothers had undertaken, perhaps the key man. If he could be won over... "Fine," he said, when Narby had signed, "I wonder if we followed the wisest policy in Hoyland's case." Narby looked surprised, but said nothing.

"Oh, I don't mean that I put any stock in his story," Ertz added hastily, "but I feel that we missed an opportunity. We should have kidded him along. He was a contact with the muties. The worst handicap we work under in trying to bring mutie country under the rule of the Council is the fact that we know very little about them. We don't know how many of them there are, nor how strong they are, or how well organized. Besides that, we will have to carry the fight to them and that's a big disadvantage. We don't really know our way around the upper decks. If we had played along with him and pretended to believe his story, we might have learned a lot of things."

"But we couldn't rely on what he told us," Narby pointed out

"We didn't need to. He offered us an opportunity to go all the way to no-weight, and look around."

Narby looked astounded. "You surely aren't serious? A member of the Crew that trusted the muties' promise not to harm him wouldn't get up to no-weight; he'd make the Trip—fast!"

"I'm not so certain about that," Ertz objected. "Hoyland believed his own story, I'm sure of that. And--"

"What! All that utter nonsense about the Ship being capable of moving. The solid Ship." He pounded the bulkhead. "No one could believe that."

"But I tell you he did. He's a religious fanatic, granted. But he saw something up there, and that was how he interpreted it. We could have gone up to see whatever it was he was raving about and used the chance to scout out the muties."

"Utterly foolhardy!"

"I don't think so. He must have a great deal of influence among the muties; look at the trouble they went to just to rescue him. If he says he can give us safe passage up to no-weight, I think he can."

"Why this sudden change of opinion?"

"It was the raid that changed my mind. If anyone had told me that a gang of muties would come clear down to high-weight and risk their necks to save the life of one man I would not have believed him. But it happened. I'm forced to revise my opinions. Quite aside from his story, it's evident that the muties will fight for him and probably take orders from him. If that is true, it would be worth while to pander to his religious convictions if it would enable us to gain control over the muties without having to fight for it."

Narby shrugged it off. "Theoretically you may have something there. But why waste time over might-have-beens? If there was such an opportunity, we missed it."

"Maybe not. Hoyland is still alive and back with the muties. If I could figure out some way of getting a message to him, we might still be able to arrange it."

"But how could you?"

"I don't know exactly. I might take a couple of the boys and do some climbing. If we could capture a mutie without killing him, it might work out."

"A slim chance."

"I'm willing to risk it"

Narby turned the matter over in his mind. The whole plan seemed to him to be filled with long chances and foolish assumptions. Nevertheless if Ertz were willing to take the risk and it did work, Narby's dearest ambition would be much nearer realization. Subduing the unities by force would be a long and bloody job, perhaps an impossible job. He was clearly aware of its difficulty.

If it did not work, nothing was lost, but Ertz. Now that he thought it over, Ertz would be no loss at this point in the game. Hm-m-m.

"Go ahead," he said. "You are a brave man, but its a worthwhile venture."

"O.K.," Ertz agreed. "Good eating."

Narby took the hint. "Good eating," he answered, gathered up the books, and left. It did not occur to him until later that Ertz had not told him where he had been for so long.

And Ertz was aware that Narby had not been entirely frank with him, but, knowing Narby, he was not surprised. He was pleased enough that his extemporaneous groundwork for future action had been so well received. It never did occur to him that it might have been simpler and more effective to tell the truth.

Ertz busied himseif for a short time in making a routine inspection of the Converter and appointed an acting Senior Watch Officer. Satisfied that his department could then take care of itself during a further absence, he sent for his chief porter and told the servant to fetch Alan Mahoney from his village. He had considered ordering his litter and meeting Mahoney halfway, but he decided against it as being too conspicuous.

Alan greeted him with enthusiasm. To him, still an unmarried cadet and working for more provident men when his contemporaries were all heads of families and solid men of property, the knowledge that he was blood brother to a senior scientist was quite the most important thing that had ever happened to him, even overshadowing his recent adventures, the meaning of which he was hardly qualified to understand anyway.

Ertz cut him short, and hastily closed the door to the outer engineering office. "Walls have ears," he said quietly, "and certainly clerks have ears, and tongues as well. Do you want us both to make the Trip?"

"Aw, gosh, Bill . . . I didn't mean to--"

"Never mind. I'll meet you on the same stair trunk we came down by, ten decks above this one. Can you count?"

"Sure, I can count that much. I can count twice that much. One and one makes two, and one more makes three, and one more makes four, and one makes five, and--"

"That's enough. I see you can. But I'm relying more on your loyalty and your knife than I am on your mathematical ability. Meet me there as soon as you can. Go up somewhere where you won't be noticed."

Forty-one was still on watch when they reached the rendezvous. Ertz called him by name while standing out of range of slingshot or thrown knife, a reasonable precaution in dealing with a creature who had grown to man size by being fast with his weapons. Once identification had been established, he directed the guard to find Hugh Hoyland. He and Alan sat down to wait.

Forty-one failed to find Hugh Hoyland at Joe-Jim's apartment. Nor was Joe-Jim there. He did find Bobo, but the pinhead was not very helpful. Hugh, Bobo told him, had gone up where-everybody-flies. That meant very little to Forty-one; he had been up to no-weight only once in his life. Since the level of weightlessness extended the entire length of the Ship, being in fact the last concentric cylinder around the Ship's axis, not that Forty-one could conceive it in those terms, the information that Hugh. had headed for no-weight was not helpful.

Forty-one was puzzled. An order from Joe-Jim was not to be ignored and he had got it through his not overbright mind that an order from Ertz carried the same weight. He woke Bobo up again. "Where is the Two Wise Heads?"

"Gone to see knifemaker." Bobo closed his eyes again.

That was better. Forty-one knew where the knifemaker lived. Every mutie had dealings with her; she was the indispensable artisan and tradesman of mutie country. Her person was necessarily taboo; her workshop and the adjacent neighborhood were neutral territory for all. He scurried up two decks and hurried thence.

A door reading THERMODYNAMIC LABORATORY: KEEP OUT was standing open. Forty-one could not read; neither the name nor the injunction mattered to him. But he could hear voices, one of which be identified as coming from the twins, the other from the knifemaker. He walked in. "Boss," be began.

"Shut up," said Joe. Jim did not look around but continued his argument with the Mother of Blades. "You'll make knives," he said, "and none of your lip."

She faced him, her four calloused hands set firmly on her broad hips. Her eyes were reddened from staring into the furnace in which she heated her metal; sweat ran down her wrinkled face into the sparse gray mustache which disfigured her upper lip, and dripped onto her bare chest. "Sure I make knives," she snapped. "Honest knives. Not pig-stickers like you want me to make. Knives as long as your arm, ptui!" She spat at the cherry-red lip of the furnace.

"Listen, you old Crew bait," Jim replied evenly, "you'll make knives the way I tell you to, or I'll toast your feet in your own furnace. Hear me?"

Forty-one was struck speechless. No one ever talked back to the Mother of Blades; the Boss was certainly a man of power!

The knifemaker suddenly cracked. "But that's not the right way to make knives," she complained shrilly. "They wouldn't balance right. I'll show you." She snatched up two braces of knives from her workbench and let fly at a cross-shaped target across the room—not in succession, but all four arms swinging together, all four blades in the air at once. They spwiged into the target, a blade at the extreme end of each arm of the cross. "See? You couldn't do that with a long knife. It would fight with itself and not go straight."

"Boss--" Forty-one tried again. Joe-Jim handed him a mouthful of knuckles without looking around.

"I see your point," Jim told the knifemaker, "but we don't want these knives for throwing. We want them for cutting and stabbing up close. Get on with it; I want to see the first one before you eat again."

The old woman bit her lip. "Do I get my usuals?" she said sharply.

"Certainly you get your usuals," he assured her. "A tithe on every kill till the blades are paid for, and good eating all the time you work."

She shrugged her misshapen shoulders. "O.K." She turned, tonged up a long flat fragment of steel with her two left hands and clanged the stock into the furnace. Joe-Jim turned to Forty-one.

"What is it?" Joe asked.

"Boss, Ertz sent me to get Hugh."

"Well, why didn't you do it?"

"I don't find him. Bobo says he's gone up to no-weight."

"Well, go get him. No, that won't do; you wouldn't know where to find him. I'll have to do it myself. Go back to Ertz and tell him to wait."

Forty-one hurried off. The Boss was all right, but it was not good to tarry in his presence.

"Now you've got us running errands," Jim commented sourly. "How do you like being a blood brother, Joe?"

"You got us into this."

"So? The blood-swearing was your idea."

"Damn it, you know why I did that. They took it seriously. And we are going to need all the help we can get, if we are to get out of this with a skin that will hold water."

"Oh? So you didn't take it seriously?"

"Did you?"

Jim smiled cynically. "Just about as seriously as you do, my dear, deceitful brother. As matters stand now, it is much, much healthier for you and me to keep to the bargain right up to the hilt. 'All for one and one for all!'"

"You've been reading Dumas again."

"And why not?"

"That's O.K. But don't be a damn fool about it."

"I won't be. I know which side of the blade is edged."

Joe-Jim found Squatty and Pig sleeping outside the door which led to the Control Room. He knew then that Hugh must be inside, for he had assigned the two as personal bodyguards to Hugh. It was a foregone conclusion anyhow; if Hugh had gone up to no-weight, he would be heading either for Main Drive, or the Control Room, more probably the Control Room. The place held a tremendous fascination for Hugh. Ever since the earlier time when Joe-Jim had almost literally dragged him into the Control Room and had forced him to see with his own eyes that the Ship was not the whole world but simply a vessel adrift in a much larger world—a vessel that could be driven and moved—ever since that time and throughout the period that followed while he was still a captured slave of Joe-Jim's, he had been obsessed with the idea of moving the Ship, of sitting at the controls and making it go!

It meant more to him than it could possibly have meant to a space pilot from Earth. From the time that the first rocket made the little jump from Terra to the Moon, the spaceship pilot has been the standard romantic hero whom every boy wished to emulate. But Hugh's ambition was of no such picayune caliber; he wished to move his world. In Earth standards and concepts it would be less ambitious to dream of equipping the Sun with jets and go gunning it around the Galaxy.

Young Archimedes had his lever; he sought a fulcrum.

Joe-Jim paused at the door of the great silver stellarium globe which constituted the Control Room and peered in. He could not see Hugh, but he knew that he must be at the controls in the chair of the chief astrogator, for the lights were being manipulated. The images of the stars were scattered over the inner surface of the sphere producing a simulacrum of the heavens outside the Ship. The illusion was not fully convincing from the door where Joe-Jim rested; from the center of the sphere it would be complete.

Sector by sector the stars snuffed out, as Hugh manipulated the controls from the center of the sphere. A sector was left shining on the far side forward. It was marked by a large and brilliant orb, many times as bright as its companions. Joe-Jim ceased watching and pulled himself hand over hand up to the control chairs. "Hugh!" Jim called out.

"Who's there?" demanded Hugh and leaned his head out of the deep chair. "Oh, it's you. Hello."

"Ertz wants to see you. Come on out of there."

"O.K. But come here first. I want to show you something."

"Nuts to him," Joe said to his brother. But Jim answered, "Oh, come on and see what it is. Won't take long."

The twins climbed into the control station and settled down in the chair next to Hugh's. "What's up?"

"That star out there," said Hugh, pointing at the brilliant one. "It's grown bigger since the last time I was here."

"Huh? Sure it has. It's been getting brighter for a long time. Couldn't see it at all first time I was ever in here."

"Then we're closer to it."

"Of course," agreed Joe. "I knew that. It just goes to prove that the Ship is moving."

"But why didn't you tell me about this?"

"About what?"

"About that star. About the way it's been growing bigger."

"What difference does it make?"

"What difference does it make! Why, good Jordan, man, that's it. That's where we're going. That's the End of the Trip!"

Joe-Jim, both of him, was momentarily startled. Not being himself concerned with any objective other than his own safety and comfort, it was hard for him to realize that Hugh, and perhaps Bill Ertz as well, held as their first objective the recapturing of the lost accomplishments of their ancestors' high order to complete the long-forgotten, half-mythical Trip to Far Centaurus.

Jim recovered himself. "Hm-m-m. Maybe. What makes you think that star is Far Centaurus?"

"Maybe it isn't. I don't care. But it's the star we are closest to and we are moving toward it. When we don't know which star is which, one is as good as another. Joe-Jim, the ancients must have had some way of telling the stars apart."

"Sure they did," Joe confirmed, "but what of it? You've picked the one you want to go to. Come on. I want to get back down."

"All right," Hugh agreed reluctantly. They began the long trip down.

Ertz sketched out to Joe-Jim and Hugh his interview with Narby. "Now my idea in coming up," he continued, "is this: I'll send Alan back down to heavyweight with a message to Narby, telling him that I've been able to get in contact with you, Hugh, and urging him to meet us somewhere above Crew country to hear what I've found out."

"Why don't you simply go back and fetch him yourself?" objected Hugh.

Ertz looked slightly sheepish. "Because you tried that method on me, and it didn't work. You returned from mutie country and told me the wonders you had seen. I didn't believe you and had you tried for heresy. If Joe-Jim hadn't rescued you, you would have gone to the Converter. If you had not hauled me up to no-weight and forced me to see with my own eyes, I never would have believed you. I assure you Narby won't be any easier a lock to force than I was. I want to get him up here, then show him the stars and make him see, peacefully if we can; by force if we must."

"I don't get it," said Joe. "Why wouldn't it be simpler to cut his throat?"

"It would be a pleasure. But it wouldn't be smart. Narby can be a tremendous amount of help to us. Jim, if you knew the Ship's organization the way I do, you would see why. Narby carries more weight in the Council than any other Ship's officer and he speaks for the Captain. If we win him over, we may never have to fight at all. if we don't ... well, I'm not sure of the outcome, not if we have to fight."

"I don't think he'll come up. He'll suspect a trap."

"Which is another reason why Alan must go rather than myself. He would ask me a lot of embarrassing questions and be dubious about the answers. Alan he won't expect so much of." Ertz turned to Alan and continued, "Alan, you don't know anything when he asks you but just what I'm about to tell you. Savvy?"

"Sure. I don't know nothing, I ain't seen nothing, I ain't heard nothing." With frank simplicity he added, "I never did know much."

"Good. You've never laid eyes on Joe-Jim, you've never heard of the stars. You're just my messenger, a knife I took along to help me. Now here's what you are to tell him." He gave Alan the message for Narby, couched in simple but provocative terms, then made sure that Alan had it all straight. "All right, on your way! Good eating."

Alan slapped the grip of his knife, answered, "Good eating!" and sped away.

It is not possible for a peasant to burst precipitously into the presence of the Captain's Executive; Alan found that out. He was halted by the master-at-arms on watch outside Narby's suite, cuffed around a bit for his insistence on entering, referred to a boredly unsympathetic clerk who took his name and told him to return to his village and wait to be summoned. He held his ground and insisted that he had a message of immediate importance from the Chief Engineer to Commander Narby. The clerk looked up again. "Give me the writing."

"There is no writing."

"What? That's ridiculous. There is always a writing. Regulations."

"He had no time to make a writing. He gave me a word message."

"What is it?"

Alan shook his head. "It is private, for Commander Narby only. I have orders."

The clerk looked his exasperation.

But, being only a probationer, he forewent the satisfaction of direct and immediate disciplining of the recalcitrant churl in favor of the safer course of passing the buck higher up.

The chief clerk was brief. "Give me the message."

Alan braced himself and spoke to a scientist in a fashion be had never used in his life, even to one as junior, as this passed clerk. "Sir, all I ask is for you to tell Commrnder Narby that I have a message for him from Chief Engineer Ertz. If the message is not delivered, I won't be the one to go to the Converter! But I don't dare give the message to anyone else."

The under official pulled at his lip, and decided to take a chance on disturbing his superior.

Alan delivered his message to Narby in a low voice in order that the orderly standing just outside the door might not overhear. Narby stared at him. "Ertz wants me to come along with you up to mutie country?"

"Not all the way up to mutie country, sir. To a point in between, where Hugh Hoyland can meet you."

Narby exhaled noisily. "It's preposterous. I'll send a squad of knives up to fetch him down to me."

Alan delivered the balance of his message. This time he carefully raised his voice to ensure that the orderly, and, if possible, others might hear his words. "Ertz said to tell you that if you were afraid to go, just to forget the whole matter. He will take it up with the Council himself."

Alan owed his continued existence thereafter to the fact that Narby was the sort of man who lived by shrewdness rather than by direct force. Narby's knife was at his belt; Alan was painfully aware that he had been required to deposit his own with the master-at-arms.

Narby controlled his expression. He was too intelligent to attribute the insult to the oaf before him, though he promised himself to give said oaf a little special attention at a more convenient time. Pique, curiosity, and potential loss of face all entered into his decision. "I'm coming with you," he said savagely. "I want to ask him if you got his message straight."

Narby considered having a major guard called out to accompany him, but he discarded the idea. Not only would it make the affair extremely public before he had an opportunity to judge its political aspects, but also it would cost him almost as much face as simply refusing to go. But he inquired nervously of Alan as Alan retrieved his weapon from the master-at-arms, "You're a good knife?"

"None better," Alan agreed cheerfully.

Narby hoped that the man was not simply boasting. Muties! Narby wished that he himself had found more time lately for practice in the manly arts.

Narby gradually regained his composure as he followed Alan up toward low-weight. In the first place nothing happened, no alarms; in the second place Alan was obviously a cautious and competent scout, one who moved alert and noiselessly and never entered a deck without pausing to peer cautiously around before letting his body follow his eye. Narby might have been more nervous had be hearing what Alan did hear: little noises from the depths of the great dim passageways, rustlings which told him that their progress was flanked on all sides. This worried Alan subconsciously, although he had expected something of the sort; he knew that both Hugh and Joe-Jim were careful captains who would not neglect to cover an approach. He would have worried more if he had not been able detect a reconnaissance which should have been present.

When he approached the rendezvous some twenty decks above the highest civilized level, he stopped and whistled. A whistle answered him. "It's Alan," he called out.

"Come up and show yourself?" Alan did so, without neglecting his usual caution. When be saw no one but his friends: Ertz, Hugh, Joe-Jim, and Bobo, be motioned for Narby to foflow him.

The sight of Joe-Jim and Bobo broke Narby's unsteady calm with a sudden feeling that he had been trapped. He snatched at his knife and backed clumsily down the stair then turned. Bobo's knife was out even faster. For a split moment the outcome hung balanced, ready to fall either way. But Joe-Jim slapped Bobo across the face, took his knife from him and let it clatter to the deck, then relieved him of his slingshot.

Narby was in full flight, with Hugh and Ertz calling vainly after him. "Fetch him, Bobo!" Jim commanded, "and do not hurt him." Bobo lumbered away.

He was back in fairly short order. "Run fast," be commented. He dropped Narby to the deck where the officer lay almost quiet while he fought to catch his breath. Bobo took Narby's knife from his own belt and tried it by shaving coarse black hairs from his left forearm. "Good blade," he approved.

"Give it back to him," Jim ordered. Bobo looked extremely startled but complied wistfully. Joe-Jim returned Bobo's own weapons to him.

Narby matched Bobo's surprise at regaining his sidearm, but he concealed it better. He even managed to accept it with dignity.

"Look," Ertz began in worried tones, "I'm sorry you got your wind up, Fin. Bobo's not a bad sort. It was the only way to get you back."

Narby fought with himself to regain the cool self-discipline with which he habitually met the world. Damn! he told himself, this situation is preposterous. Well... "Forget it," he said shortly. "I was expecting to meet you; I didn't expect a bunch of armed muties. You have an odd taste in playmates, Ertz."

"Sorry," Bill Ertz replied, "I guess I should have warned you." a piece of mendacious diplomacy. "But they're all right. Bobo you've met. This is Joe-Jim. He's a. . . a sort of a Ship's officer among the muties."

"Good eating," Joe acknowledged politely.

"Good eating," Narby replied mechanically.

"Hugh you know, I think." Narby agreed that he did.

An embarrassed pause followed. Narby broke it.

"Well," he said, "you must have had some reason to send word for me to come up here. Or was it just to play games?"

"I did," Ertz agreed. "I—Shucks, I hardly know where to start. See here, Narby, you won't believe this, but I've seen. Everything Hugh told us was true. I've been in the Control Room. I've seen the stars. I know?"

Narby stared at him. "Ertz," he said slowly, "you've gone out of your mind."

Hugh Hoyland spoke up excitedly. "That's because you haven't seen. It moves, look you. The Ship moves like a--"

"Fit handle this," Ertz cut in. "listen to me, Narby. What it all means you will soon decide for yourself, but I can tell you what I saw. They took me up to no-weight and into the Captain's veranda. That's a compartment with a glass wall. You can stare right out through into a great black empty space: big, bigger than anything could be. Bigger than the Ship. And there were lights out there, stars, just like the ancient myths said."

Narby looked both amazed and disgusted. "Where's your logic, man? I thought you were a scientist. What do you mean, 'bigger than the Ship'? That's an absurdity, a contradiction in terms. By definition, the Ship is the Ship. All else is a part of it."

Ertz shrugged helplessly. "I know it sounds that way. I can't explain it; it defies all logic. It's—Oh, Huff! You'll know what I mean when you see it."

"Control yourself," Narby advised him. "Don't talk nonsense. A thing is logical or it isn't. For a thing to be it must occupy space. You've seen, or thought you saw, something remarkable, but whatever it was, it can be no larger than the compartment it was in. You can't show me anything that contradicts an obvious fact of nature."

"I told you I couldn't explain it."

"Of course you can't."

The twins had been whispering disgustedly, one head to the other. "Stop the chatter," Joe said in louder tones. "We're ready to go. Come on."

"Sure," Ertz agreed eagerly, "let's drop it, Narby, until you have seen it. Come on now; it's a long climb."

"What?" Narby demanded. "Say, what is this? Go where?"

"Up to the Captain's veranda, and the Control Room."

"Me? Don't be ridiculous. I'm going down at once."

"No, Narby," Ertz denied. "That's why I sent for you. You've got to see."

"Don't be silly. I don't need to see; common sense gives sufficient answer. However," he went on, "I do want to congratulate you on making a friendly contact with the muties. We should be able to work out some means of cooperation. I think--"

Joe-Jim took one step forward. "You're wasting time," he said evenly. "We're going up; you, too. I really do insist."

Narby shook his head. "It's out of the question. Some other time, perhaps, after we have worked out a method of cooperation."

Hugh stepped in closer to him from the other side. "You don't seem to understand. You're going now."

Narby glanced the other way at Ertz. Ertz nodded. "That's how it is, Narby."

Narby cursed himself silently. Great Jordan! What in the Ship was he thinking of to let himself get into such a position? He had a distinct feeling that the two-headed man would rather that he showed fight. Impossible, preposterous situation. He cursed again to himself, but gave way as gracefully as he could. "Oh, well! Rather than cause an argument I'll go now. Let's get on with it. Which way?"

"Just stick with me," advised Ertz. Joe-Jim whistled loudly in a set pattern. Muties seemed to grow out of the floor plates, the bulkheads, the overhead, until six or eight more had been added to the party. Narby was suddenly sick with the full realization of just how far he had strayed from the way of caution. The party moved up.

It took them a long time to get up to no-weight, as Narby was not used to climbing. The steady reduction in weight as they rose from deck to deck relieved him somewhat but the help afforded was more than offset by the stomach qualms he felt as weight dropped away from him. He did not have a true attack of spacesickness; like all born in the Ship, muties and Crew, he was more or less acclimated to lessened weight, but he had done practically no climbing since reckless adolescence. By the time they reached the innermost deck of the Ship he was acutely uncomfortable and hardly able to proceed.

Joe-Jim sent the added members of the party back below and told Bobo to carry Narby. Narby waved him away. "I can make it," he protested, and by sheer stubborn will forced his body to behave. Joe-Jim looked him over and countermanded the order. By the time a long series of gliding dives had carried them as far forward as the transverse bulkhead beyond which lay the Control Room, he was reasonably comfortable again.

They did not stop first at the Control Room, but, in accordance with a plan of Hugh's, continued on to. the Captain's veranda. Narby was braced for what he saw there, not only by Ertz's confused explanation, but because Hugh had chattered buoyantly to him about it all the latter part of the trip. Hugh was feeling warmly friendly to Narby by the time they arrived; it was wonderful to have somebody to listen!

Hugh floated in through the door ahead of the others, executed a neat turn in mid-air, and steadied himself with one hand on the back of the Captain's easy chair. With the other he waved at the great view port and the starry firmament beyond it. "There it is!" he exulted. "There it is. Look at it, isn't it wonderful?"

Narby's face, showed no expression, but he looked long and intently at the brilliant display. "Remarkable," he conceded at last, "remarkable. I've never seen anything like it."

"Remarkable ain't half," protested Hugh. "Wonderful is the word."

"O.K., 'wonderful,'" Narby assented. "Those bright little lights ... you say those are the stars that the ancients talked about?"

"Why, yes," agreed Hugh, feeling slightly disconcerted without knowing why, "only they're not little. They're big, enormous things, like the Ship. They just look little because they are so far away. See that very bright one, that big one, down to the left? It looks big because it's closer. I think that is Far Centaurus, but I'm not sure," he admitted in a burst of frankness.

Narby glanced quickly at him, then back to the big star. "How far away is it?"

"I don't know. But we'll find out. There are instruments to measure such things in the Control Room, but I haven't got the hang of them entirely. It doesn't matter, though. We'll get there yet!"

"Huh?"

"Sure. Finish the Trip."

Narby looked blank, but said nothing. His was a careful and orderly mind, logical to a high degree. He was a capable executive and could make rapid decisions when necessary, but he was by nature inclined to reserve his opinions when possible, until he had had time to chew over the data and assess it.

He was even more taciturn, in the Control Room. He listened and looked, but asked very few questions. Hugh did not care. This was his toy, his gadget, his baby. To show it off to someone who had never seen it and who would listen was all he asked.

At Ertz's suggestion the party stopped at Joe-Jim's apartment on the way back down. Narby must be committed to the same course of action as the blood brotherhood and plans must be made to carry out such action, if the stratagem which brought Narby to them was to be fruitful. Narby agreed to stop unreluctantly, having become convinced of the reality of the truce under which he made this unprecedented sortie into mutie country. He listened quietly while Ertz outlined what they had in mind. He was still quiet when Ertz had finished.

"Well?" said Ertz at last, when the silence had dragged on long enough to get on his nerves.

"You expect some comment from me?"

"Yes, of course. You figure into it." Narby knew that he did and knew that an answer was expected from him; he was stalling for time.

"Well..." Narby pursed his lips and fitted his fingertips together. "It seems to me that this problem divides itself into two parts. Hugh Hoyland, as I understand it, your purpose of carrying out the ancient Plan of Jordan cannot be realized until the Ship as a whole is pacified and brought under one rule; you need order and discipline for your purpose from Crew country clear to the Control Room. Is that right?"

"Certainly. We have to man the Main Drive and that means--"

"Please. Frankly, I am not qualified to understand things that I have seen so recently and have had no opportunity to study. As to your chances of success in that project, I would prefer to rely on the opinion of the Chief Engineer. Your problem is the second phase; it appears that you are necessarily interested in the first phase."

"Of course."

"Then let's talk about the first phase only. It involves matters of public policy and administration. I feel more at home there; perhaps my advice will be useful. Joe-Jim, I understand that you ate looking for an opportunity to effect a peace between the muties and the members of the Crew; peace and good eating? Right?"

"That's correct," Jim agreed.

"Good. It has been my purpose for a long time and that of many of the Ship's officers. Frankly it never occurred to me that it could be achieved other than by sheer force. We had steeled ourselves to the prospect of a long and difficult and bloody war. The records of the oldest Witness, handed down to him by his predecessors clear back to the time of the mythical Mutiny, make no mention of anything but war between muties and the Crew. But this is a better way; I am delighted."

"Then you're with us!" exclaimed Ertz.

"Steady, there are many other things to be considered. Ertz, you and I know, and Hoyland as well I should think, that not all of the Ship's officers will agree with us. What of that?"

"That's easy," put in Hugh Hoyland. "Bring them up to no-weight one at a time, let them see the stars and learn the truth."

Narby shook his head. "You have the litter carrying the porters. I told you this problem is in two phases. There is no point in trying to convince a man of something he won't believe when you need him to agree to something he can understand. After the Ship is consolidated it will be simple enough then to let the officers experience the Control Room and the stars."

"But--"

"He's right," Ertz stopped him. "No use getting cluttered up with a lot of religious issues when the immediate problem is a practical one. There are numerous officers whom we could get on our side for the purpose of pacifying the Ship who would raise all kinds of fuss if we tackled them first on the idea that the Ship moves."

"But--"

"No 'buts' about it. Narby is right. It's common sense. Now, Narby, about this matter of those officers who may not be convinced, here's how we see it: In the first place it's your business and mine to win over as many as we can. Any who hold out against us—well, the Converter is always hungry."

Narby nodded, completely undismayed by the idea of assassination as a policy. "That seems the safest plan. Mightn't it be a little bit difficult?"

"That is where Joe-Jim comes in. We'll have the best knives in the Ship to back us up."

"I see. Joe-Jim is, I take it, Boss of all the muties?"

"What gave you that idea?" growled Joe, vexed without knowing why.

"Why, I supposed . . . I was given to understand--" Narby stopped. No one had told him that Joe-Jim was king of the upper decks; he had assumed it from appearances. He felt suddenly very uneasy. Had he been negotiating uselessly? What was the point in a pact with this two-headed monstrosity if he did not speak for the muties?

"I should have made that clear," Ertz said hastily. "Joe-Jim helps us to establish a new administration, then we will be able to back him up with knives to pacify the rest of the muties. Joe-Jim isn't Boss of all the muties, but he has the largest, strongest gang. With our help he soon will be Boss of all of them."

Narby quickly adjusted his mind to the new data. Muties against muties, with only a little help from the cadets of the Crew, seemed to him a good way to fight. On second thoughts, it was better than an outright truce at once, for there would be fewer muties to administer when it was all over, less chance of another mutiny. "I see," he agreed. "So ... Have you considered what the situation will be afterwards?"

"What do you mean?" inquired Hoyland.

"Can you picture the present Captain carrying out these plans?"

Ertz saw what he was driving at, and so did Hoyland vaguely.

"Go on," said Ertz.

"Who is to be the new Captain?" Narby looked squarely at Ertz.

Ertz had not thought the matter through; he realized now that the question was very pertinent, if the coup d'etat was not to be followed by a bloody scramble for power. He had permitted himself to dream of being selected as Captain, sometime. But he knew that Narby was pointed that way, too.

Ertz had been as honestly struck by the romantic notion of moving the Ship as Hoyland. He realized that his old ambition stood in the way of the plan; he renounced the old with only a touch of wistfulness.

"You will have to be Captain, Fin. Are you willing to be?"

Phineas Narby accepted gracefully. "I suppose so, if that's the way you want it. You would make a fine Captain, yourself, Ertz."

Ertz shook his head, understanding perfectly that Narby's full cooperation turned on this point. "I'll continue Chief Engineer. I want to handle the Main Drive of the Trip."

"Slow down!" Joe interrupted. "I don't agree to this. Why should he be Captain?"

Narby faced him. "Do you want to be Captain?" He kept his voice carefully free of sarcasm. A mutie for Captain!

"Huff's name, no! But why should you be? Why not Ertz or Hugh?"

"Not me," Hugh disclaimed. "I'll have no time for administration. I'm the astrogator."

"Seriously, Joe-Jim," Ertz explained, "Narby is the one of the group who can get the necessary cooperation out of the Ship's officers."

"Damn it, if they won't cooperate we can slit their throats."

"With Narby as Captain we won't have to slit throats."

"I don't like it," groused Joe. His brother shushed, "Why get excited about it, Joe? Jordan knows we don't want the responsibility."

"I quite understand your misgivings," Narby suggested suavely, "but I don't think you need worry. I would forced to depend on you, of course, to administer the muties. I would administer the lower decks, a job I am used to and you would be Vice-Captain, if you are willing serve, for the muties. It would be folly for me to attempt to administer directly a part of the Ship I'm not familiar with and people whose customs I don't know. I really can't accept the captaincy unless you are willing to help me in that fashion. Will you do it?"

"I don't want any part of it," protested Joe.

"I'm sorry. Then I must refuse to be Captain. I really can't undertake it if you won't help me that much."

"Oh, go ahead, Joe," Jim insisted. "Let's take it, for the time being at least. The job has to be done."

"All right," Joe capitulated, "but I don't like it."

Narby ignored the fact that Joe-Jim had not specifically agreed to Narby's elevation to the captaincy; no further mention was made of it.

The discussion of ways and means was tedious and need not be repeated. It was agreed that Ertz, Alan, and Narby should all return to their usual haunts and occupations while preparations were made to strike.

Hugh detailed a guard to see them safely down to high-weight. "You'll send Alan up when you are ready?" he said to Narby as they were about to leave.

"Yes," Narby agreed, "but don't expect him soon. Ertz and I will have to have time to feel out friends, and there's the matter of the old Captain. I'll have to persuade him to call a meeting of all the Ship's officers; he's never too easy to handle."

"Well, that's your job. Good eating!"

"Good eating."

On the few occasions when the scientist priests who ruled the Ship under Jordan's Captain met in full assembly they gathered in a great hall directly above the Ship's offices on the last civilized deck. Forgotten generations past, before the time of the mutiny led by Ship's Metalsmith Roy Huff, the hall had been a gymnasium, a place for fun and healthy exercise, as planned by the designers of the great starship; but the present users knew nothing of that.

Narby watched the roster clerk check off the Ship's Officers as they arrived, worried under a bland countenance. There were only a few more to arrive; he would soon have no excuse not to notify the Captain that the meeting was ready, but he had received no word from Joe-Jim and Hoyland. Had that fool Alan managed to get himself killed on the way up to deliver the word? Had he fallen and broken his worthless neck? Was he dead with a mutie's knife in his belly?

Ertz came in, and before seeking his seat among the department heads, went up to where Narby sat in front of the Captain's chair. "How about it?" he inquired softly.

"All right," Narby told him, "but no word yet."

"Hm-m-m." Ertz turned around and assayed his support in the crowd. Narby did likewise. Not a majority, not a certain majority, for anything as drastic as this. Still, the issue would not depend on voting.

The roster clerk touched his arm. "All present, sir, except those excused for sickness, and one on watch at the Converter."

Narby directed that the Captain be notified, with a sick feeling that something had gone wrong. The Captain, as usual, with complete disregard for the comfort and convenience of others, took his time about appearing. Narby was glad of the delay, but miserable in enduring it. When the old man finally waddled in, flanked by his orderlies, and settled heavily into his chair, he was, again as usual, impatient to get the meeting over. He waved for the others to be seated and started in on Narby.

"Very well, Commander Narby, let's have the agenda. You have an agenda, I hope?"

"Yes, Captain, there is an agenda."

"Then have it read, man, have it read! Why are you delaying?"

"Yes, sir." Narby turned to the reading clerk and handed him a sheaf of writings. The clerk glanced at them, looked puzzled, but, receiving no encouragement from Narby, commenced to read: "Petition, to Council and Captain: Lieutenant Braune, administrator of the village of Sector 9, being of frail health and advanced age, prays that he be relieved of all duty and retired." The clerk continued, setting forth the recommendations of the officers and departments concerned.

The Captain twisted impatiently in his chair, finally interrupted the reading. "What is this, Narby? Can't you handle routine matters without all this fuss?"

"I understood that the Captain was displeased with the fashion in which a similar matter was lately handled. I have no wish to trespass on the Captain's prerogatives."

"Nonsense, man! Don't read Regulations to me. Let the Council act, then bring their decision to me for review."

"Yes, sir." Narby took the writing from the clerk and gave him another. The clerk read.

It was an equally fiddling matter. Sector 3 village, because of an unexplained blight which had infected their hydroponic farms, prayed for relief and a suspension of taxes. The Captain put up with still less of this item before interrupting. Narby would have been sorely pressed for any excuse to continue the meeting had not the word he awaited arrived at that moment. It was a mere scrap of parchment, brought in from outside the hall by one of his own men. It contained the single word, "Ready." Narby looked at it, nodded to Ertz, and addressed the Captain:

"Sir, since you have no wish to listen to the petitions of your Crew, I will continue at once with the main business of this meeting." The veiled insolence of the statement caused the Captain to stare at him suspiciously, but Narby went on. "For many generations, through the lives of a succession of Witnesses, the Crew has suffered from the depredations of the muties. Our livestock, our children, even our own persons, have been in constant jeopardy. Jordan's Regulations are not honored above the levels where we live. Jordan's Captain himself is not free to travel in the upper levels of the Ship.

"It has been an article of faith that Jordan so ordained it, that the children pay with blood for the sins of their ancestors. It was the will of Jordan, we were told.

"I, for one, have never been reconciled to this constant drain on the Ship's mass." He paused.

The old Captain had been having some difficulty in believing his ears. But he found his voice. Pointing, he squealed, "Do you dispute the Teachings?"

"I do not. I maintain that the Teachings do not command us to leave the muties outside the Regulations, and never did. I demand that they be brought under the Regulations!"

"You . . . you! You are relieved of duty, sir!"

"Not," answered Narby, his insolence now overt, "until I have had my say."

"Arrest that man!" But the Captain's orderlies stood fast, though they shuffled and looked unhappy. Narby himself had selected them.

Narby turned back to the amazed Council, and caught the eye of Ertz. "All right," he said. "Now!" Ertz got up and trotted toward the door. Narby continued, "Many of you think as I do, but we always supposed that we would have to fight for it. With the help of Jordan, I have been able to achieve contact with the muties and propose terms of a truce. Their leaders are coming here to negotiate with us. There!" He pointed dramatically at the door.

Ertz reappeared; following him came Hugh Hoyland, Joe-Jim, and Bobo. Hoyland turned to the right along the wall and circled the company. He was followed single file by a string of muties: Joe-Jim's best butcher boys. Another such column trailed after Joe-Jim and Bobo to the left.

Joe-Jim, Hugh, and half a dozen more in each wing were covered with crude armor which extended below their waists. The armor was topped off with clumsy helms, latticeworks of steel, which protected their heads without greatly interfering with vision. Each of the armored ones, a few of the others, carried unheard-of knives, long as a man's arm!

The startled officers might have stopped the invasion at the bottleneck through which it entered had they been warned and led. But they were disorganized, helpless, and their strongest leaders had invited the invaders in. They shifted in their chairs, reached for their knives, and glanced anxiously from one to another. But no one made the first move which would start a general bloodletting.

Narby turned to the Captain. "What about it? Do you receive this delegation in peace?"

It seemed likely that age and fat living would keep the Captain from answering, from ever answering anything again. But he managed to croak, "Get 'em out of here! Get 'em out! You--You'll make the Trip for this!"

Narby turned back to Joe-Jim and jerked his thumb upward. Jim spoke to Bobo and a knife was buried to the grip in the Captain's fat belly. He squawked, rather than screamed, and a look of utter bewilderment spread over his features. He plucked awkwardly at the hilt as if to assure himself that it was really there. "Mutiny." he stated. "Mutiny--" The word trailed off as he collapsed into his chair, and fell heavily forward to the deck on his face.

Narby shoved it with his foot and spoke to the two orderlies. "Carry it outside," he commanded. They obeyed, seeming relieved at having something to do and someone to tell them to do it. Narby turned back to the silent watching mass. "Does anyone else object to a peace with the muties?"

An elderly officer, one who had dreamed away his life as judge and spiritual adviser to a remote village, stood up and pointed a bony finger at Narby, while his white beard jutted indignantly. "Jordan will punish you for this! Mutiny and sin, the spirit of Huff!"

Narby nodded to Joe-Jim; the old man's words gurgled in his throat, the point of a blade sticking out under one ear. Bobo looked pleased with himself.

"There has been enough talk," Narby announced. "It is better to have a little blood now than much blood later. Let those who stand with me in this matter get up and come forward."

Ertz set the precedent by striding forward and urging his surest personal supporters to come with him. Reaching the front of the room, he pulled out his knife and raised the point. "I salute Phineas Narby, Jordan's Captain!"

His own supporters were left with no choice. "Phineas Narby, Jordan's Captain!"

The hard young men in Narby's clique, the backbone of the dissident rationalist bloc among the scientist priests, joined the swing forward en masse, points raised high and shouting for the new Captain. The undecided and the opportunists hastened to join, as they saw which side of the blade was edged. When the division was complete, there remained a handful only of Ship's officers still hanging back, almost all of whom were either elderly or hyperreligious.

Ertz watched Captain Narby look them over, then pick up Joe-Jim with his eyes. Ertz put a hand on his arm. "There are few of them and practically helpless," he pointed out. "Why not disarm them and let them retire?"

Narby gave him an unfriendly look. "Let them stay alive and breed mutiny. I am quite capable of making my own decisions, Ertz."

Ertz bit his lip. "Very well, Captain."

"That's better." He signaled to Joe-Jim.

The long knives made short work of it.

Hugh hung back from the slaughter. His old teacher, Lieutenant Nelson, the village scientist who had seen his ability and selected him for scientisthood, was one of the group. It was a factor he had not anticipated.

World conquest and consolidation. Faith, or the Sword. Joe-Jim's bullies, amplified by hot-blooded young cadets supplied by Captain Narby, combed the middle decks and the upper decks. The muties, individualists by the very nature of their existence and owing no allegiance higher than that to the leaders of their gangs, were no match for the planned generalship of Joe-Jim, nor did their weapons match the strange, long knives that bit before a man was ready.

The rumor spread through mutie country that it was better to surrender quietly to the gang of the Two Wise Heads; good eating for those who surrendered, death inescapable for those who did not.

But it was nevertheless a long slow process. There were so many, many decks, so many miles of gloomy corridors, so many countless compartments in which unsubdued muties might lurk. Furthermore, the process grew slower as it advanced, as Joe-Jim attempted to establish a police patrol, an interior guard, over each sector, deck, and stair way trunk, as fast as his striking groups mopped them up.

To Narby's disappointment, the two-headed man was not killed in his campaigns. Joe-Jim had learned from his own books that a general need not necessarily expose himself to direct combat.

Hugh buried himself in the Control Room. Not only was he more interested in the subtle problems of mastering the how and why of the complex controls and the parallel complexity of starship ballistics, but also the whole matter of the blood purge was distasteful to him because of Lieutenant Nelson. Violence and death he was used to; they were commonplace even on the lower levels, but that incident made him vaguely unhappy, even though his own evaluations were not sufficiently clean-cut for him to feel personal responsibility for the old man's death.

He just wished it had not happened.

But the controls: ahh. There was something a man could put his heart into. He was attempting a task that an Earthman would have rejected as impossible; an Earthmaa would have known that the piloting and operation of an interstellar ship was a task so difficult that the best possible technical education combined with extensive experience in the handling of lesser spacecraft would constitute a barely adequate grounding for the additional intensive highly specialized training necessary for the task.

Hugh Hoyland did not know that. So he went ahead and did it anyhow.

In which attempt he was aided by the genius of the designers. The controls of most machinery may be considered under the head of simple pairs, stop-and-go, push-and-pull, up-and-down, in-and-out, on-and-off, right-and-left, their permutations and combinations. The real difficulties have to do with upkeep and repair, adjustment and replacements.

But the controls and main drive machinery of the starship Vanguard required no upkeep and no repair; their complexities were below the molar level, they contained no moving parts, friction took no toil and they did not fall out of adjustment. Had it been necessary for him to understand and repair the machines he dealt with, it would have been impossible. A fourteen-year-old child may safely be entrusted with a family skycar and be allowed to make thousand-mile jaunts overnight unaccompanied; it is much more probable that he will injure himself on the trip by overeating than by finding some way to mismanage or damage the vehicle. But if the skycar should fall out of adjustment, ground itself, and signal for a repair crew, the repair crew is essential; the child cannot fix it himself.

The Vanguard needed no repair crew, save for nonessential ancilliary machinery such as transbelts, elevators, automassagers, dining services, and the like. Such machinery which necessarily used moving parts had worn out before the time of the first Witness; the useless mass involved had gone into the auxiliary Converter, or had been adapted to other simpler purposes. Hugh was not even aware that there ever had been such machinery; the stripped condition of most compartments was a simple fact of nature to him, no cause for wonder.

Hugh was aided in his quest for understanding by two other facts:

First, spaceship ballistics is a very simple subject, being hardly more than the application of the second law of motion to an inverse-square field. That statement runs contrary to our usual credos; It happens to be true. Baking a cake calls for much greater, though subconscious, knowledge of engineering; knitting a sweater requires a subconscious understanding of much more complex mathematical relationships: topology of a knitted garment, but try it yourself sometime!

For a complex subject, consider neurology, or catalysts, but don't mention ballistics.

Second, the designers had clearly in mind that the Vanguard would reach her destination not sooner than generations after her departure; they wished to make it easy for the then-not-yet-born pilots who would command her on arrival. Although they anticipated no such hiatus in technical culture as took place, they did their best to make the controls simple and self-explanatory. The sophisticated fourteen-year-old mentioned, oriented as he would be to the concept of space, would doubtless have figured them out in a few minutes. Hugh, reared in a culture which believed that the Ship was the whole world, made no such quick job of it.

He was hampered by two foreign concepts, distance and metrical time. He had to learn to operate the finder, a delayed-action, long-base, parallax type designed for the Vanguard, and had taken measurements on a couple of dozen stellar bodies before it occurred him that the results he was getting could possibly stand for anything. The readings were in parsecs and without meaning emotionally. The attempt with the aid of the Sacred to translate his readings into linear units he could stand resulted in figures which he felt sure were were obviously preposterous. Check and recheck, followed long periods of brooding forced him unwillingly into some dim comprehension of astronomical magnitudes.

The concepts frightened him and bewildered him. For a period of several sleeps he stayed away from the Control Room, and gave way to a feeling of futility and depression. He occupied the time in sorting over the women captives, it being the first time since his capture by Joe-Jim long ago that he had had both the opportunity and the mood to consider the subject. The candidates were numerous, for, in addition to the usual crop of village maidens, Joe-Jim's military operations had produced a number of prime widows. Hugh availed himself of his leading position in the Ship's new setup to select two women. The first was a widow, a strong competent woman, adept at providing a man with domestic comforts. He set her up in his new apartment high up in low-weight, gave her a free hand, and allowed her to retain her former name of Chloe.

The other was a maiden, untrained and wild as a mutie. Hugh could not have told himself why he picked her. Certainly she had no virtues, but she made him feel funny. She had bitten him while he was inspecting her; he had slapped her, naturally, and that should have been an end to the matter. But he sent word back later for her father to send her along.

He had not got around to naming her.

Metrical time caused him as much mental confusion as astronomical distances, but no emotional upset The trouble was again the lack of the concept in the Ship. The Crew had the notion of topological time; they understood "now," "before," "after," "has been," "will be," even such notions as long time and short time, but the notion of measured time had dropped out of the culture. The lowest of earthbound cultures has some idea of measured time, even if limited to days and seasons, but every earthly concept of measured time originates in astronomical phenomena; the Crew had been insulated from all astronomical phenomena for uncounted generations.

Hugh had before him, on the control consoles, the only working timepieces in the Ship, but it was a long, long time before he grasped what they were for and what bearing they had on other instruments. But until did, he could not control the Ship. Speed, and its derivatives, acceleration and flexure, are based on measured time.

But when these two new concepts were finally grasped, chewed over, and ancient books reread in the light of these concepts, he was, in a greatly restricted and theoretical sense, an astrogator.

Hugh sought out Joe-Jim to ask him a question. Joe-Jim's minds were brilliantly penetrating when he cared to exert himself; he remained a superficial dilettante because he rarely cared.

Hugh found Narby just leaving. In order to conduct the campaign of pacification of the muties it had been necessary for Narby and Joe-Jim to confer frequently; to their mutual surprise they got along well together. Narby was a capable administrator, able to delegate authority and not given to useless elbow jogging; Joe-Jim surprised and pleased Narby by being more able than any subordinate he had ever dealt with before. There was no love wasted. between them, but each recognized in the other both intelligence and a hard self-interest which matched his own. There was respect and grudging contemptuous liking.

"Good eating, Captain," Hugh greeted Narby formally.

"Oh, hello, Hugh," Narby answered, then turned back to Joe-Jim. "I'll expect a report, then."

"You'll get it," Joe agreed. "There can't be more than a few dozen stragglers. We'll hunt them out, or starve them."

"Am I butting in?" Hugh asked.

"No, I'm just leaving. How goes the great work, my dear fellow?" He smiled irritatingly.

"Well enough, but slowly. Do you wish a report?"

"No hurry. Oh, by the bye, I've made the Control Room and Main Drive, in fact the entire level of no-weight, taboo for everyone, muties and Crew alike."

"So? I see your point, I guess. There is no need for any but officers to go up there."

"You don't understand me. It is a general taboo, applying to officers as well. Not to ourselves, of course."

"But . .. but, that won't work. The only effective way to convince the officers of the truth is to take them up and show them the stars!"

"That's exactly my point. I can't have any officers upset by disturbing ideas while I am consolidating my administration. It will, create religious differences and impair discipline."

Hugh was too upset and astounded to answer at once. "But," he said at last, "but that's the point. That's why you were made Captain."

"And as Captain I will have to be the final judge of policy. The matter is closed. You are not to take anyone to the Control Room, nor any part of no-weight, until I deem it advisable. You'll have to wait."

"It's a good idea, Hugh," Jim commented. "We shouldn't stir things up while we've got a war to attend to."

"Let me get this straight," Hugh persisted. "You mean this is a temporary policy?"

"You could put it that way."

"Well, all right," Hugh conceded. "But wait—Ertz and I need to train assistants at once."

"Very well. Nominate them to me and I'll pass on them. Whom do you have in mind?"

Hugh thought. He did not actually need assistance himself; although the Control Room contained acceleration chairs for half a dozen, one man, seated in the chief astrogator's chair, could pilot the Ship. The same applied to Ertz in the Main Drive station, save in one respect. "How about Ertz? He needs porters to move mass to the Main Drive."

"Let him. I'll sign the writing. See that he uses porters from the former muties; but no one goes to the Control Room save those who have been there before." Narby turned and left with an air of dismissal.

Hugh watched him leave, then said, "I don't like this, Joe-Jim."

"Why not?" Jim asked. "It's reasonable."

"Perhaps it is. But ... well, damn it! It seems to me, somehow, that truth ought to be free to anyone, any time!" He threw up his hands in a gesture of baffled exasperation.

Joe-Jim looked at him oddly. "What a curious idea," said Joe.

"Yeah, I know. It's not common sense, but it seems like it ought to be. Oh, well, forget it! That's not what I came to see you about."

"What's on your mind, Bud?"

"How do we ... Look, we finish the Trip, see? We've got the Ship touching a planet, like this--" He brought his two fists together.

"Yes. Go on."

"Well, when that's done, how do we get out of the Ship?"

The twins looked confused, started to argue between themselves. Finally Joe interrupted his brother. "Wait a bit, Jim. Let's be logical about this. It was intended for us to get out; that implies a door, doesn't it?"

"Yeah. Sure."

"There's no door up here. It must be down in high weight."

"But it isn't," objected Hugh. "All that country is known. There isn't any door. It has to be up in mutie country."

"In that case," Joe continued, "it should be either all the way forward, or all the way aft, otherwise it would not go anywhere. It isn't aft. There's nothing back of Main Drive but solid bulkheads. It would need to be forward."

"That's silly," Jim commented. "There's the Control Room and the Captain's veranda. That's all."

"Oh, yeah? How about the locked compartments?"

"Those aren't doors, not to the Outside anyway. Just bulkheads abaft the Control Room."

"No, stupid, but they might lead to doors."

"Stupid, eh? Even so, how are you going to open them; answer me that, bright boy?"

"What," demanded Hugh, "are the 'locked compartments'?"

"Don't you know? There are seven doors, spaced on the main shaft in the same bulkhead as the door to Main Control Room. We've never been able to open them."

"Well, maybe that's what we're looking for. Let's see!"

"It's a waste of time," Jim insisted. But they went.

Bobo was taken along to try his monstrous strength on the doors. But even his knotted swollen muscles couldn't budge the levers which appeared to be intended to actuate the doors. "Well?" Jim sneered to his brother. "You see?"

Joe shrugged. "O.K., you win. Let's go down."

"Wait a little," Hugh pleaded. "The second door back the handle seemed to turn a little. Let's try it again."

"I'm afraid it's useless," Jim commented. But Joe said, "Oh, all right, as long as we're here."

Bobo tried again, wedging his shoulder under the lever and pushing from his knees. The lever gave suddenly, but the door did not open. "He's broken it," Joe announced.

"Yeah," Hugh acknowledged. "I guess that's that." He placed his hand against the door. It swung open easily.

The door did not lead to outer space, which was well for the three, for nothing in their experience warned them against the peril of the outer vacuum. Instead a very short and narrow vestibule led them to another door which was just barely ajar. The door stuck on its hinges, but the fact that it was slightly ajar prevented it from binding anywhere else. Perhaps the last man to use it left it so as a precaution against the metal surfaces freezing together, but no one would ever know.

Bobo's uncouth strength opened it easily. Another door lay six feet beyond. "I don't understand this," complained Jim as Bobo strained at the third door. "What's the sense in an endless series of doors?"

"Wait and find out," advised his brother.

Beyond the third door lay, not another door, but an apartment, a group of compartments, odd ones, small, crowded together and of unusual shapes. Bobo shot on. ahead and explored the place, knife in teeth, his ugly body almost graceful in flight. Hugh and Joe-Jim proceeded more slowly, their eyes caught by the strangeness Of the place.

Bobo returned, killed his momentum skillfully against a bulkhead, took his blade from his teeth, and reported, "No door. No more door any place. Bobo look."

"There has to be," Hugh insisted, irritated at the dwarf for demolishing his hopes.

The moron shrugged. "Bobo look."

"We'll look." Hugh and the twins moved off in different directions, splitting the reconnaissance between them.

Hugh found no door, but what he did find interested him even more: an impossibility. He was about to shout for Joe-Jim, when he heard his own name called. "Hugh! Come here!"

Reluctantly he left his discovery, and sought out the twins. "Come see what I've found," he began.

"Nevermind," Joe cut him short. "Look at that."

Hugh looked. "That" was a Converter. Quite impossibly but indubitably a Converter. "It doesn't make sense," Jim protested. "An apartment this size doesn't need a Converter. That thing would supply power and light for half the Ship. What do you make of it, Hugh?"

Hugh examined it. "I don't know," he admitted, "but if you think this is strange, come see what I've found."

"What have you found?"

"Come see."

The twins followed him, and saw a small compartment, one wall of which appeared to be of glass, black as if the far side were obscured. Facing the wall were two acceleratlon chairs, side by side. The arms and the lap desks of the chairs were covered with patterns of little white lights of the same sort as the control lights on the chairs in the Main Control Room.

Joe-Jim made no comment at first, save for a low whistle from Jim. He sat down in one of the chairs and started experimenting cautiously with the controls. Hugh sat down beside him. Joe-Jim covered a group of white lights on the righthand arm of his chair; the lights in the compartment went out. When he lifted his hand the tiny control lights were blue instead of white. Neither Joe-Jim nor Hugh was startled. When the lights went out; they had expected it, for the control involved corresponded to similar controls in the Control Room.

Joe-Jim fumbled around, trying to find controls which would produce a simulacrum of the heavens on the blank glass before him. There were no such controls and he had no way of knowing that the glass was an actual view port, obscured by the hull of the Ship proper, rather than a view screen.

But he did manage to actuate the controls that occupied the corresponding position. These controls were labeled LAUNCHING; Joe-Jim had disregarded the label because he did not understand it. Actuating them produced no very remarkable results, except that a red light blinked rapidly and a transparency below the label came into life. It read: AIRLOCK OPEN.

Which was very lucky for Joe-Jim, Hugh, and Bobo. Had they closed the doors behind them and had the little Converter contained even a few grams of mass available for power, they would have found themselves launched suddenly into space, in a Ship's boat unequipped for a trip and whose controls they understood only by analogy with those in the Control Room. Perhaps they could have maneuvered the boat back into its cradle; more likely they would have crashed attempting it.

But Hugh and Joe-Jim were not yet aware that the "apartment" they had entered was a spacecraft; the idea of a Ship's boat was still foreign to them.

"Turn on the lights," Hugh requested. Joe-Jim did so.

"Well?" Hugh went on. "What do you make of it?"

"It seems pretty obvious," answered Jim. "This is another Control Room. We didn't guess it was here because we couldn't open the door."

"That doesn't make sense," Joe objected. "Why should there be two Control Rooms for one Ship?"

"Why should a man have two heads?" his brother reasoned. "From my point of view, you are obviously a supernumerary."

"It's not the same thing; we were born that way. But this didn't just happen; the Ship was built."

"So what?" Jim argued. "We carry two knives, don't we? And we weren't born with 'em. It's a good idea to have a spare."

"But you can't control the Ship from here," Joe protested. "You can't see anything from here. If you wanted a second set of controls, the place to put them would be the Captain's veranda, where you can see the stars."

"How about that?" Jim asked, indicating the wall of glass.

"Use your head," his brother advised. "It faces the wrong direction. It looks into the Ship, not out. And it's not an arrangement like the Control Room; there isn't any way to mirror the stars on it."

"Maybe we haven't located the controls for it."

"Even so, you've forgotten something. How about that little Converter?"

"What about it?"

"It must have some significance. It's not here by accident. I'll bet you that these controls have something to do with that Converter."

"Why?"

"Why not? Why are they here together if there isn't some connection?"

Hugh broke his puzzled silence. Everything the twins had said seemed to make sense, even the contradictions. It was all very confusing. But the Converter, the little Conver-- "Say, look," he burst out.

"Look at what?"

"Do you suppose—Do you think that maybe this part of the Ship could move?"

"Naturally. The whole Ship moves."

"No," said Hugh, "no, no. I don't mean that at all. Suppose it moved by itself. These controls and the little Converter, suppose it could move right away from the Ship."

"That's pretty fantastic."

"Maybe so ... but if it's true, this is the way out."

"Huh?" said Joe. "Nonsense. No door to the Outside here either."

"But there would be if this apartment were moved away from the Ship: the way we came in!"

The two heads snapped simultaneously toward him as if jerked by the same string. Then they looked at each other and fell to arguing. Joe-Jim repeated his experiment witit the controls. "See?" Joe pointed out "'Launching.' It means to start something, to push something away."

"Then why doesn't it?"

"'Air Lock Open.' The doors we came through; it has to be that. Everything else is closed."

"Let's try it."

"We would have to start the Converter first."

"O.K."

"Not so fast. Get out, and maybe you can't come back. We'd starve."

"Hm-m-m, we'll wait a while."

Hugh listened to the discussion while snooping around the control panels, trying to figure them out. There was a stowage space under the lap desk of his chair; he fished into it, encountered something, and hauled it out. "See what I've found!"

"What Is it?" asked Joe. "Oh, a book. Lot of them back in the room next to the Converter." "Let's see it," said Jim.

But Hugh had opened it himself. "Log, Starship Vanguard," he spelled out, "2 June, 2172. Cruising as before--"

"What!" yelled Joe. "Let me see that!"

"3 June. Cruising as before. 4 June. Cruising as before. Captain's mast for rewards and punishments held at 1300. See Administration Log. 5 June. Cruising as before."

"Gimme that!"

"Wait!" said Hugh. "6 June. Mutiny broke out at 0431. The watch became aware of it by visiplate. Hull, Metalsmith Ordinary, screened the control station and called on the watch to surrender, designating himself as 'Captain.' The officer of the watch ordered him to consider himself under arrest and signaled the Captain's cabin. No answer.

"0435. Communications failed. The officer of the watch dispatched a party of three to notify the Captain, turn out the chief proctor, and assist in the arrest of Huff.

"0441. Converter power off; free flight

"0502. Lacy, Crewman Ordinary, messenger-of-thewatch, one of the party of three sent below, returned to the control station alone. He reported verbally that the other two, Malcolm Young and Arthur Sears, were dead and that he had been permitted to return in order to notify the watch to surrender. The mutineers gave 0515 as a--"

The next entry was in a different hand: "0545. I have made every attempt to get into communication with other stations and officers in the Ship, without success. I conceive it as my duty, under the circumstances, to leave the control station without being properly relieved, and attempt to restore order down below. My decision may be faulty, since we are unarmed, but I see no other course open to me.

"Jean Baldwin, Pilot Officer Third Class, Officer of the Watch."

"Is that all?" demanded Joe.

"No," said Hugh. "1 October (approximately), 2172. I, Theodor Mawson, formerly Storekeeper Ordinary, have been selected this date as Captain of the Vanguard. Since the last entry in this log there have been enormous changes. The mutiny has been suppressed, or more properly, has died out, but with tragic cost. Every pilot officer, every navigation officer is dead, or believed to be dead. I would not have been chosen Captain had there been a qualified man left.

"Approximately ninety per cent of the personnel are dead. Not all of that number died in the original outbreak; no crops have been planted since the mutiny; our food stocks are low. There seems to be clear evidence of cannibalism among the mutineers who have not surrendered.

"My immediate task must be to restore some semblance of order and discipline among the Crew. Crops must be planted. A regular watch must be instituted at the auxiliary Converter on which we are dependent for heat and light and power."

The next entry was undated. "I have been far too busy to keep this log up properly. Truthfully, I do not know the date even approximately. The Ship's clocks no longer run. That may be attributable to the erratic operation of the auxiliary Converter, or it may possibly be an effect of radiations from outer space. We no longer have an antiradiation shield around the Ship, since the Main Converter is not in operation. My Chief Engineer assures me that the Main Converter could be started, but we have no one fitted to astrogate. I have tried to teach myself astrogation from the books at hand, but the mathematics involved are very difficult.

"About one newborn child out of twenty is deformed. I have instituted a Spartan code: such children are not permitted to live. It is harsh, but necessary.

"I am growing very old and feeble and must consider the selection of my successor. I am the last member of the crew to be born on Earth, and even I have little recollection of it. I was five when my parents embarked. I do not know my own age, but certain unmistakable signs tell me that the time is not far away when I, too, must make the Trip to the Converter.

"There has been a curious change in orientation in my people. Never having lived on a planet, it becomes more difficult as time passes for them to comprehend anything not connected with the Ship. I have ceased trying to talk to them about it; it is hardly a kindness anyhow, as I have no hope of leading them out of the darkness. Theirs is a hard life at best: they strive for a crop only to have it raided by the outlaws who still flourish on the upper levels. Why speak to them of better things?

"Rather than pass this on to my successor I have decided to attempt to hide it, if possible, in the single Ship's boat left by the mutineers who escaped. It will be safe there a long time, otherwise some witless fool may decide to use it for fuel for the Converter. I caught the man on watch feeding it with the last of a set of Encyclopaedia Terresriana: priceless books. The idiot had never been taught to read! Some rule must be instituted concerning books.

"This is my last entry. I have put off making the attempt to place this log in safekeeping, because it is very perilous to ascend above the lower decks. But my life is no longer valuable; I wish to die knowing that a true record is left.

"Theodor Mawson, Captain."

Even the twins were silent for a long time after Hugh stopped reading. At last Joe heaved a long sigh and said, "So that's how it happened."

"The poor guy," Hugh said softly.

"Who? Captain Mawson? Why so?"

"No, not Captain Mawson. That other guy, Pilot Officer Baldwin. Think of him going out through that door, with Huff on the other side." Hugh shivered. In spite of his enlightenment, he subconsciously envisioned Huff, 'Huff the Accursed, first to sin,' as about twice as high as Joe-Jim, twice as strong as Bobo, and having fangs rather than teeth.

Hugh borrowed a couple of porters from Ertz, porters whom Ertz was using to fetch the pickled bodies of the war casualties to the Main Converter for fuel, and used them to provision the Ship's boat: water, breadstuffs, preserved meats, mass for the Converter. He did not report the matter to Narby, nor did he report the discovery of the boat itself. He had no conscious reason; Narby irritated him.

The star of their destination grew and grew, swelled until it showed a visible disc and was too bright to be stared at long. Its bearing changed rapidly, for a star; it pulled across the backdrop of the stellariwn dome. Left uncontrolled, the Ship would have swung part way around it in a wide hyperbolic arc, accelerated as it flipped around the star, then sped off again into the darkness. It took Hugh the equivalent of many weeks to calculate the elements of the trajectory; it took still longer for Ertz and Joe-Jim to check his figures and satisfy themselves that the preposterous answers were right. It took even longer to convince Ertz that the way to rendezvous in space was to apply a force that pushed one away from where one wished to go, that is to say, dig in the heels, put on the brakes, kill the momentum.

In fact it took a series of experiments in free flight on the level of weightlessness to sell him the idea, otherwise he would have favored finishing the Trip by the simple expedient of crashing headlong into the star at top Speed. Thereafter Hugh and Joe-Jim calculated how to apply acceleration to kill the speed of the Vanguard and warp her into an eccentric ellipse around the star. After that, they would search for planets.

Ertz bad a little trouble understanding the difference between a planet and a star. Alan never did get it.

"If my numbering is correct," Hugh informed Ertz, "we should start accelerating any time now."

"O.K.," Ertz told him. "Main Drive is ready: over two hundred bodies and a lot of waste mass. What are waiting for?"

"Let's see Narby and get permission to start."

"Why ask him?"

Hugh shrugged. "He's Captain. He'll want to know."

"All right. Let's pick up Joe-Jim and get on with it." They left Hugh's apartment and went to Joe-Jim's. Joe-Jim was not there, but they found Alan looking for him, too.

"Squatty says he's gone down to the Captain's office," Alan informed him.

"So? It's just as well. We'll see him there. Alan, old boy, you know what?"

"What?"

"The time has arrived. We're going to do it! Start moving the Ship!" Alan looked round-eyed. "Gee! Right now?"

"Just as soon as we can notify the Captain. Come along, if you like."

"You bet! Wait while I tell my woman." He darted away to his own quarters nearby.

"He pampers that wench," remarked Ertz.

"Sometimes you can't help it," said Hugh with a faraway look.

Alan returned promptly, although it was evident that he had taken time to change to a fresh breechcloth. "O.K.," he bubbled. "Let's go!"

Alan approached the Captain's office with a proud step. He was an important guy now, he exulted to himself. He'd march on through with his friends while the guards saluted; no more of this business of being pushed around.

But the doorkeeper did not stand aside, although he did salute, while placing himself so that he filled the door. "Gangway, man!" Ertz said gruffly.

"Yes, sir," acknowledged the guard, without moving. "Your weapons, please."

"What! Don't you know me, you idiot? I'm the Chief Engineer."

"Yes, sir. Leave your weapons with me, please. Regulations."

Ertz put a hand on the man's shoulder and shoved. The guard stood firm. "I'm sorry, sir. No one approaches the Captain wearing weapons. No one."

"Well, I'll be damned!"

"He remembers what happened to the old Captain," Hugh observed sotto voce. "He's smart." He drew his own knife and tossed it to the guard, who caught it neatly by the hilt. Ertz looked; shrugged, and handed over his own. Alan, considerably crestfallen, passed his own pair over with a look that should have shortened the guard's life.

Narby was talking; Joe-Jim was scowling on both his faces; Bobo looked puzzled, and naked, unfinished, without his ubiquitous knives and slingshot. "The matter is closed, Joe-Jim. That is my decision. I've granted you the faver of explaining my reasons, but it does not matter whether you like them or not."

"What's the trouble?" inquired Hugh.

Narby looked up. "Oh. I'm glad you came in. Your mutie friend seems to be in doubt as to who is Captain."

"What's up?"

"He," growled Jim, hooking a thumb toward Narby, "seems to think he's going to disarm all the muties."

"Well, the war's over, isn't it?"

"It wasn't agreed on. The muties were to become part of the Crew. Take the knives away from the muties and the Crew will kill them off in no time. It's not fair. The Crew have knives."

"The time will come when they won't," Narby predicted, "but I'll do it at my own time in my own way. This is the first step. What did you want to see me about, Ertz?"

"Ask Hugh." Narby turned to Hugh.

"I've come to notify you, Captain Narby," Hugh stated formally, "that we are about to start the Main Converter and move the Ship."

Narby looked surprised but not disconcerted. "I'm afraid you will have to postpone that. I am not yet ready to permit officers to go up to no-weight."

"It won't be necessary," Hugh explained. "Ertz and I can handle the first maneuvers alone. But we can't wait. If the Ship is not moved at once, the Trip won't be in your lifetime nor mine."

"Then it must," Narby replied evenly, "wait."

"What?" cried Hugh. "Narby, don't you want to the Trip?"

"I'm in no hurry."

"What sort of damn foolishness is this?" Ertz demanded. "What's got into you, Fin? Of course we move the Ship."

Narby drummed on his desk top before replying. Then: he said, "Since there seems to be some slight misunderstanding as to who gives orders around here, I might as well let you have it straight. Hoyland, as long as your pastimes did not interfere with the administration of the Ship, I was willing for you to amuse yourself. I granted that willingly, for you have been very useful in your own way. But when your crazy beliefs become a possible source of corruption to good morals and a danger to the peace and security of the Ship, I have to crack down."

Hugh had opened and closed his mouth several times during this speech. Finally he managed to get out: "Crazy? Did you say crazy?"

"Yes, I did. For a man to believe that the solid Ship can move means that he is either crazy, or an ignorant religious fanatic. Since both of you have the advantage of a scientist's training, I assume that you have lost your minds."

"Good Jordan!" said Hugh. "The man has seen with his own eyes, he's seen the immortal stars, yet he sits there and calls us crazy!"

"What's the meaning of this, Narby?" Ertz inquired coldly. "Why the razzle-dazzle? You aren't kidding anyone; you've been to the Control Room, you've been to the Captain's veranda, you know the Ship moves."

"You interest me, Ertz," commented Narby, looking him over. "I've wondered whether you were playing up to Hoyland's delusions, or were deluded yourself. Now I see that you are crazy too."

Ertz kept his temper. "Explain yourself. You've seen the Control Room; how can you contend that the Ship does not move?"

Narby smiled. "I thought you were a better engineer than you appear to be, Ertz. The Control Room is an enormous hoax. You know yourself that those lights are turned on and off by switches—a very clever piece of engineering. My theory is that it was used to strike awe in the minds of the superstitious and make them believe in the ancient myths. But we don't need it any more, the Crew believe without it. It's a source of distraction now I'm going to have it destroyed and the door sealed up."

Hugh went all to pieces at this, sputtered incoherently, and would have grappled with Narby had not Ertz restrained him. "Easy, Hugh," he admonished. Joe-Jim took Hugh by the arm, his own faces stony masks.

Ertz went on quietly, "Suppose what you say is true. Suppose that the Main Converter and the Main Drive itself are nothing but dummies and that we can never start them, what about the Captain's veranda? You've seen the stars there, not just an engineered shadow show."

Narby laughed. "Ertz, you are stupider than I've guessed. I admit that the display in the veranda had me mystified at first, not that I ever believed in it! Then the Control Room gave the clue: it's an Illusion, a piece of skillful engineering. Behind that glass is another compartment, about the same size and unlighted. Against its darkness those tiny moving lights give the effect of a bottomless hole. It's essentially the same trick as they used in the Control Room.

"It's obvious," he went on. "I'm surprised that you did not see it. When an apparent fact runs contrary to logic and common sense, it's obvious that you have failed to interpret the fact correctly. The most obvious fact of nature is the reality of the Ship itself, solid, immutable, complete. Any so-called fact which appears to disprove that is bound to be an illusion. Knowing that, I looked for the trick behind the illusion and found it."

"Wait," said Ertz. "Do you mean that you have been on the other side of the glass in the Captain's veranda and seen these trick lights you talk about?"

"No," admitted Narby, "it wasn't necessary. Not that it wouldn't be easy enough to do so, but it isn't necessary. I don't have to cut myself to know that knives are sharp."

"So..." Ertz paused and thought a moment. "I'll strike a deal with you. If Hugh and I are crazy in our beliefs, no harm is done as long as we keep our mouths shut. We try to move the Ship. If we fail, we're wrong and you're right."

"The Captain does not bargain," Narby pointed out. "However, I'll consider it. That's all. You may go." Ertz turned to go, unsatisfied but checked for moment. He caught sight of Joe-Jim's faces, and turned back. "One more thing," he said. "What's this about the muties? Why are you shoving Joe-Jim around? He and his boys made you Captain; you've got to fair about this."

Narby's smiling superiority cracked for amoment.

"Don't interfere, Ertz! Groups of armed savages are not going to threaten this Ship!"

"You can do what you like with the prisoners," Jim stated, "but my own gang keep their knives. They were promised good eating forever if they fought for you. They keep their knives. And that's flnal!"

Narby looked him up and down. "Joe-Jim," he remarked, "I have long believed that the only good mutie was a dead mutie. You do much to confirm my opinion. It will interest you to know that, by this time, your gang is already disarmed, and dead in the bargain. That's why I sent for you!"

The guards piled in, whether by signal or previous arrangement it was impossible to say. Caught flatfooted, naked, weaponless, the five found themselves each with an armed man at his back before they could rally. "Take them away," ordered Narby.

Bobo whined and looked to Joe-Jim for guidance. Joe caught his eye. "Up, Bobo!"

The dwarf jumped straight for Joe-Jim's captor, careless of the knife at his back. Forced to split his attention, the man lost a vital half second. Joe-Jim kicked him in the stomach, and appropriated his blade.

Hugh was on the deck, deadlocked with his man, his fist clutched around the knife wrist. Joe-Jim thrust and the struggle ceased. The two-headed man looked around, saw a mixed pile-up of four bodies, Ertz, Alan, two others. Joe-Jim used his knife judiciously, being careful to match the faces with the bodies. Presently his men emerged. "Get their knives," he ordered superfluously.

His words were drowned by a high, agonized scream. Bobo, still without a knife, had resorted to his primal weapons. His late captor's face was a bloody mess, half bitten away.

"Get his knife," said Joe.

"Can't reach it," Bobo admitted guiltily. The reason was evident: the hilt protruded from Bobo's ribs, just below his right shoulder blade.

Joe-Jim examined it, touched it gently. It was stuck. "Can you walk?"

"Sure," grunted Bobo, and grimaced.

"Let it stay where it is. Alan! With me. Hugh and Bill, cover rear. Bobo In the middle."

"Where's Narby?" demanded Ertz, dabbing at a round on his cheekbone.

But Narby was gone, ducked out through the rear door behind his desk. And it was locked.

Clerks scattered before them in the outer office; Joe-Jim knifed the guard at the outer door while he was still raising his whistle. Hastily they retrieved their own weapons and added them to those they had seized. They fled upward.

Two decks above inhabited levels Bobo stumbled and fell. Joe-Jim picked him up. "Can you make it?" The dwarf nodded dumbly, blood on his lips. They climbed. Twenty decks or so higher it became evident that Bobo could no longer climb, though they had taken turns in boosting him from the rear. But weight was lessened appreciably at that level; Alan braced himself and picked up the solid form as if it were a child. They climbed. Joe-Jim relieved Alan. They climbed.

Ertz relieved Joe-Jim. Hugh relieved Ertz.

They reached the level on which they lived forward of their group apartments. Hugh turned in that direction. "Put him down," commanded Joe. "Where do you think you are going?"

Hugh settled the wounded man to the deck. "Homes. Where else?"

"Fool! That's where they will look for us first."

"Where do we go?"

"Nowhere, in the Ship. We go out of the Ship!"

"Huh?"

"The Ship's boat."

"He's right," agreed Ertz. "The whole Ship's against us, now."

"But . . . but--" Hugh surrendered. "It's a long chance—but we'll try it." He started again in the direction of their homes.

"Hey!" shouted Jim. "Not that way."

"We have to get our women."

"To Huff with the women! You'll get caught. There's no time." But Ertz and Alan started off without question. "Oh, all right!" Jim snorted. "But hurry! I'll stay with Bobo" Joe-Jim turned his attention to the dwarf, gently rolled him to his side and made a careful examination. His skin was gray and damp; a long red stain ran down from his right shoulder. Bobo sighed bubblingly and rubbed his head against Joe-Jim's thigh. "Bobo tired, Boss."

Joe-Jim patted his head. "Easy," said Jim, "this is going to hurt." Lifting the wounded man slightly, he cautiously worked the blade loose and withdrew it from the wound. Blood poured out freely.

Joe-Jim examined the knife, noted the deadly length of steel, and measured it against the wound. "He'll never make it," whispered Joe.

Jim caught his eye. "Well?"

Joe nodded slowly. Joe-Jim tried the blade he had just extracted from the wound against his own thigh, and discarded it in favor of one of his own razor-edged tools. He took the dwarf's chin in his left hand and Joe commanded, "Look at me, Bobo!"

Bobo looked up, answered inaudibly. Joe held his eye. "Good Bobo! Strong Bobo!" The dwarf grinned as if he heard and understood, but made no attempt to reply. His master pulled his head a little to one side; the blade bit deep, snicking the jugular vein without touching the windpipe. "Good Bobo!" Joe repeated. Bobo grinned again.

When the eyes were glassy and breathing had unquestionably stopped, Joe-Jim stood up, letting the head and shoulders roll from him. He shoved the body with his foot to the side of the passage, and stared down the direction in which the others had gone. They should be back by now.

He stuck the salvaged blade in his belt and made sure that all his weapons were loose and ready.

They arrived on a dead run. "A little trouble," Hugh explained breathlessly. "Squatty's dead. No more of your men around. Dead maybe. Narby probably meant it. Here." He handed him a long knife and the body armor that had been built for Joe-Jim, with its great wide cage of steel, fit to cover two heads.

Ertz and Alan wore armor, as did Hugh. The women did not; none had been built for them. Joe-Jim noted that Hugh's younger wife bore a fresh swelling on her lip, as if someone had persuaded her with a heavy hand. Her eyes were stormy though her manner was docile. The older wife, Chloe, seemed to take the events in her stride. Ertz's was crying softly; Alan's wench reflected the bewilderment of her master.

"How's Bobo?" Hugh inquired, as he settled Joe-Jim's armor in place.

"Made the Trip," Joe informed him.

"So? Well, that's that; let's go."

They stopped short of the level of no-weight and worked forward, because the women were not adept at weightless flying. When they reached the bulkhead which separated the Control Room and boat pockets from the body of the Ship, they went up. There was neither alarm nor ambush, although Joe thought that he saw a head show as they reached one deck. He mentioned it to his brother but not to the others.

The door to the boat pocket stuck and Bobo was not there to free it. The men tried it in succession, sweating big with the strain. Joe-

Jim tried it a second time, Joe relaxing and letting Jim control their muscles, that they might not fight each other. The door gave. "Get them inside!" snapped Jim.

"And fast!" Joe confirmed. "They're on us." He had kept lookout while his brother strove. A shout from down the line reinforced his warning.

The twins faced around to meet the threat while the men shoved the women in. Alan's fuzzy-headed mate chose that moment to go to pieces, squalled, and tried to run but weightlessness defeated her. Hugh nabbed her, shoved her inside and booted her heartily with his foot.

Joe-Jim let a blade go at long throwing range to slow down the advance. It accomplished its purpose; their opponents, half a dozen of them, checked their advance. Then, apparently on signal, six knives cut the air simultaneonsly.

Jim felt something strike him, felt no pain, and concluded that the armor had saved him. "Missed us, Joe," he exulted.

There was no answer. Jim turned his bead, tried to look at his brother. A few inches from his eye a knife stuck through the bars of the helmet, its point was buried deep inside his left eye.

His brother was dead.

Hugh stuck his head back out of the door. "Come on, Joe-Jim," he shouted. "We're all in."

"Get inside," ordered Jim. "Close the door."

"But--"

"Get inside!" Jim turned, and shoved him in the face, closing the door as he did so. Hugh had one startled glimpse of the knife and the sagging, lifeless face it pinned. Then the door closed against him, and he heard the lever turn.

Jim turned back at the attackers. Shoving himself away from the bulkhead with legs which were curiously heavy, he plunged toward them, his great arm-long knife, more a bob than a sword, grasped with both hands. Knives sang toward him, clattered against his breastplate, bit into his legs. He swung a wide awkward twohanded stroke which gutted an opponent, nearly cutting him in two. "That's for Joe!"

The blow stopped him. He turned in the air, steadied himself, and swung again. "That's for Bobo!"

They closed on him; he swung widely caring not where he hit as long as his blade met resistance. "And that's for me!" A knife planted itself in his thigh. It did not even slow him up; legs were dispensable in no-weight. "'One for all!'"

A man was on his back now he could feel him. No matter; here was one before him, too, one who could feel steel. As be swung, he shouted, "All for o--" The words trailed off, but the stroke was finished.

Hugh tried to open the door which had been slammed in his face. He was unable to do so; if there were means provided to do so, he was unable to figure them out. He pressed an ear against the steel and listened, but the airtight door gave back no clue.

Ertz touched him on the shoulder. "Come on," be said. "Where's Joe-Jim?"

"He stayed behind."

"Open up the door! Get him."

"I can't, it won't open. He meant to stay, he closed it himself."

"But we've got to get him; we're blood-sworn."

"I think," said Hugh, with a sudden flash of insight, "that's why he stayed behind." He told Ertz what he had seen.

"Anyhow," he concluded, "it's the End of the Trip to him. Get on back and feed mass to that Converter. I want power." They entered the Ship's boat proper. Hugh closed the airlock doors behind them. "Alan!" he called out. "We're going to start. Keep those damned women out of the way."

He settled himself in the pilot's chair, and cut the lights.

In the darkness he covered a pattern of green lights. A transparency flashed on the lap desk: DRIVE READY. Ertz was on the job. Here goes! he thought, and actuated the launching combination. There was a short pause, a short and sickening lurch, a twist. It frightened him, since he had no way of knowing that the launching tracks were pitched to offset the normal spinning of the Ship.

The glass of the view port before him was speckled with stars; they were free—moving!

But the spread of jeweled lights was not unbroken, as it invariably had been when seen from the veranda, or seen mirrored on the Control Room walls; a great, gross, ungainly shape gleamed softly under the light of the star whose system they had entered. At first he could not account for it. Then with a rush of superstitious awe he realized that he was looking at the Ship itself, the true Ship, seen from the Outside. In spite of his long intellectual awareness of the true nature of the Ship; he had never visualized looking at it. The stars, yes; the surface of a planet, he had struggled with that concept; but the outer surface of the Ship, no.

When he did see it, it shocked him.

Alan touched him. "Hugh, what is it?"

Hoyland tried to explain to him. Alan shook his head, and blinked his eyes. "I don't get it."

"Never mind. Bring Ertz up here. Fetch the women, too; we'll let them see it."

"All right. But," he added, with sound intuition, "it's a mistake to show the women. You'll scare 'em silly; they ain't even seen the stars."

Luck, sound engineering design, and a little knowledge. Good design, ten times that much luck, and a precious little knowledge. It was luck that had placed the Ship near a star with a planetary system, luck that the Ship arrived there with a speed low enough for Hugh to counteract it in a ship's auxiliary craft, luck that he learned to handle it after a fashion before they starved or lost themselves in deep space.

It was good design that provided the little craft with a great reserve of power and speed. The designers had anticipated that the pioneers might need to explore the far-flung planets of a solar system; they had provided for it in the planning of the Ship's boats, with a large factor of safety. Hugh strained that factor to the limit.

It was luck that placed them near the plane of planetary motion, luck that, when Hugh did manage to gun the tiny projectile into a closed orbit, the orbit agreed in direction with the rotation of the planets.

Luck that the eccentric ellipse he achieved should cause them to crawl up on a giant planet so that he was eventually able to identify it as such by sight.

For otherwise they might have spun around that star until they all died of old age, ignoring for the moment the readier hazards of hunger and thirst, without ever coming close enough to a planet to pick it out from the stars.

There is a misconception, geocentric and anthropomorphic, common to the large majority of the earthbound, which causes them to visualize a planetary system stereoscopically. The mind's eye sees a sun, remote from a backdrop of stars, and surrounded by spinning apples: the planets. Step out on your balcony and look. Can you tell the planets from the stars? Venus you may pick out with ease, but could you tell it from Canopus, if you had not previously been introduced? That little red speck: is it Mars, or is it Antares? How would you know, if you were as ignorant as Hugh Hoyland? Blast for Antares, believing it to be a planet, and you will never live to have grandchildren.

The great planet that they crawled up on, till it showed a visible naked-eye disc, was larger than Jupiter, a companion to the star, somewhat younger and larger the the Sun, around which it swung at a lordly distance. Hugh blasted back, killing his speed over many sleeps, to bring the Ship into a path around the planet. The maneuver brought him close enough to see its moons.

Luck helped him again. He had planned to ground the great planet, knowing no better. Had he been able do so they would have lived just long enough to open the airlock.

But he was short of mass, after the titanic task of pulling them out of the headlong hyperbolic plunge around an arc past the star and warping them into a closed orbit about the star, then into a subordinate orbit around the giant planet. He pored over the ancient books, substituted endlessly in the equations the ancients had set down as the laws for moving bodies, figured and refigured, and tested even the calm patience of Chloe. The other wife, the unnamed one, kept out of his way after losing a tooth, quite suddenly.

But he got no answer that did not require him to sacrifice some, at least, of the precious, irreplaceable ancient books for fuel. Yes, even though they stripped themselves naked and chucked in their knives, the mass of the books would still be needed.

He would have preferred to dispense with one of his wives. He decided to ground on one of the moons.

Luck again. Coincidence of such a colossal proportion that one need not be expected to believe it, for the moon of that planet was suitable for human terrestrial life. Never mind, skip over it, rapidly; the combination of circumstances is of the same order needed to produce such a planet in the first place. Our own planet, under our own sun is of the "There ain't no such animal" variety. It is a ridiculous improbability.

Hugh's luck was a ridiculous improbability.

Good design handled the next phase. Although he learned to maneuver the little Ship out in space where there is elbow room, landing is another and a ticklish matter. He would have crashed any spacecraft designed before the designing of the Vanguard. But the designers of the Vanguard had known that the Ship's auxiliary craft would be piloted and grounded by at least the second generation of explorers; green pilots must make those landings unassisted. They planned for it.

Hugh got the vessel down into the stratosphere and straightened it triumphantly into a course that would with certainty kill them all.

The autopilots took over.

Hugh stormed and swore, producing some words which diverted Alan's attention and admiration from the view out of the port. But nothing he could do would cause the craft to respond. It settled in its own way and leveled off at a thousand feet, an altitude which it maintained regardless of changing contour.

"Hugh, the stars are gone!"

"I know it."

"But Jordan! Hugh, what happened to them?"

Hugh glared at Alan. "I don't know and I don't care! You get aft with the women and stop asking silly questions."

Alan departed reluctantly with a backward look at the surface of the planet and the bright sky; It interested him, but he did not marvel much at it; his ability to marvel had been overstrained.

It was some hours before Hugh discovered that a hitherto ignored group of control lights set in motion a chain of events whereby the autopilot would ground the Ship. Since he found this out experimentally he did not exactly choose the place of landing. But the unwinking stereo-eyes of the autopilot fed its data to the 'brain'; the submolar mechanism selected and rejected; the Ship grounded gently on a rolling high prairie near a clump of vegetation.

Ertz came forward. "What's happened, Hugh?"

Hugh waved at the view port. "We're there." He was too tired to make much of it, too tired and too emotionally exhausted. His weeks of fighting a fight he understood but poorly, hunger, and lately thirst, years of feeding on a consuming ambition, these left him with little ability to enjoy his goal when it arrived.

But they had landed, they had finished Jordan's Trip. He was not unhappy, at peace rather, and very tired. Ertz stared out. "Jordan!" he muttered. Then, "Let's go out."

"All right."

Alan came forward, as they were opening the airlock, and the women pressed after him. "Are we there, Captain?"

"Shut up," said Hugh.

The women crowded up to the deserted view port; Alan explained to them, importantly and incorrectly, the scene outside. Ertz got the last door open.

They sniffed at the air. "It's cold," said Ertz. In fact the temperature was perhaps five degrees less than the steady monotony of the Ship's temperature, but Ertz was experiencing weather for the first time.

"Nonsense," said Hugh, faintly annoyed that any fault should be found with *his* planet. "It's just your imagination."

"Maybe," Ertz conceded. He paused uneasily. "Going out?" he added.

"Of course." Mastering his own reluctance, Hugh pushed him aside and dropped five feet to the ground "Come on; it's fine."

Ertz joined him, and stood close to him. Both of them remained close to the Ship. "It's big, isn't it?" Ertz said in a hushed voice.

"Well, we knew it would be," Hugh snapped, annoyed with himself for having the same lost feeling.

"Hi!" Alan peered cautiously out of the door. "Can I comedown? Is it alright?"

"Come ahead."

Alan eased himself gingerly over the edge and joined them. He looked around and whistled. "Gosh!"

Their first sortie took them all of fifty feet from the Ship. They huddled close together for silent comfort, and watched their feet to keep from stumbling on this strange uneven deck. They made it without incident until Alan looked up from the ground and found himself for the first time in his life with nothing close to him. He was hit by vertigo and acute agoraphobia; he moaned, closed his eyes and fell.

"What in the Ship?" demanded Ertz, looking around. Then it hit him.

Hugh fought against it. It pulled him to his knees, but be fought it, steadying himself with one hand on the ground. However, he had the advantage of having stared out through the view port for endless time; neither Alan nor Ertz were cowards.

"Alan!" his wife shrilled from the open door. "Alan! Come back here!" Alan opened one eye, managed to get it focused on the Ship, and started inching back on his belly.

"Man!" commanded Hugh. "Stop that! Situp."

Alan did so, with the air of a man pushed too far. "Open your eyes!" Alan obeyed cautiously, reclosed them hastily.

"Just sit still and you'll be all right," Hugh added. "I'm all right already." To prove it he stood up. He was still dizzy, but he made it. Ertz sat up.

The sun had crossed a sizable piece of the sky, enough time had passed for a well-fed man to become hungry, and they were not well fed. Even the women were outside; that had been accomplished by the simple expedient of going back in and pushing them out. They had not ventured away from the side of the Ship, but sat huddled against it. But their menfolk had even learned to walk singly, even in open spaces. Alan thought nothing of strutting a full fifty yards away from the shadow of the Ship, and did so more than once, in full sight of the women.

It was on one such journey that a small animal native to the planet let his curiosity exceed his caution. Alan's knife knocked him over and left him kicking. Alan scurried to the spot, grabbed his fat prize by one leg, and bore it proudly back to Hugh. "Look, Hugh, look! Good eating!"

Hugh looked with approval. His first strange fright of the place had passed and had been replaced with a deep warm feeling, a feeling that he had come at last to his long home. This seemed a good omen.

"Yes," he agreed. "Good eating. From now on, Alan, always Good Eating."

“—AND HE BUILT A CROOKED HOUSE—”

Americans are considered crazy anywhere in the world.

They will usually concede a basis for the accusation but point to California as the focus of the infection. Californians stoutly maintain that their bad reputation is derived solely from the acts of the inhabitants of Los Angeles County. Angelenos will, when pressed, admit the charge but explain hastily, “It’s Hollywood. It’s not our fault—we didn’t ask for it; Hollywood just grew.”

The people in Hollywood don’t care; they glory in it. If you are interested, they will drive you up Laurel Canyon “—where we keep the violent cases.” The Canyonites—the brown-legged women, the trunks-clad men constantly busy building and rebuilding their slaphappy unfinished houses—regard with faint contempt the dull creatures who live down in the flats, and treasure in their hearts the secret knowledge that they, and only they, know how to live.

Lookout Mountain Avenue is the name of a side canyon which twists up from Laurel Canyon. The other Canyonites don’t like to have it mentioned; after all, one must draw the line somewhere!

High up on Lookout Mountain at number 8775, across the street from the Hermit—the original Hermit of Hollywood—lived Quintus Teal, graduate architect.

Even the architecture of southern California is different. Hot dogs are sold from a structure built like and designated “The Pup.” Ice cream cones come from a giant stucco ice cream cone, and neon proclaims “Get the Chili Bowl Habit!” from the roofs of buildings which are indisputably chili bowls. Gasoline, oil, and free road maps are dispensed beneath the wings of tri-motored transport planes, while the certified rest rooms, inspected hourly for your comfort, are located in the cabin of the plane itself. These things may surprise, or amuse, the tourist, but the local residents, who walk bareheaded in the famous California noonday sun, take them as a matter of course.

Quintus Teal regarded the efforts of his colleagues in architecture as fainthearted, fumbling, and timid.

“What is a house?” Teal demanded of his friend, Homer Bailey.

“Well—” Bailey admitted cautiously, “speaking in broad terms, I’ve always regarded a house as a gadget to keep off the rain.”

“Nuts! You’re as bad as the rest of them.”

“I didn’t say the definition was complete—”

“Complete! It isn’t even in the right direction. From that point of view we might just as well be squatting in caves. But I don’t blame you,” Teal went on magnanimously, “you’re no worse than the lugs you find practicing architecture. Even the Moderns—all they've done is to abandon the Wedding Cake School in favor of the Service Station School, chucked away the gingerbread and slapped on some chromium, but at heart they are as conservative and traditional as a county courthouse. Neutra! Schindler! What have those bums got? What's Frank Lloyd Wright got that I haven't got?"

"Commissions," his friend answered succinctly.

"Huh? Wha' d'ju say?" Teal stumbled slightly in his flow of words, did a slight double take, and recovered himself. "Commissions. Correct. And why? Because I don't think of a house as an upholstered cave; I think of it as a machine for living, a vital process, a live dynamic thing, changing with the mood of the dweller—not a dead, static, oversized coffin. Why should we be held down by the frozen concepts of our ancestors? Any fool with a little smattering of descriptive geometry can design a house in the ordinary way. Is the static geometry of Euclid the only mathematics? Are we to completely disregard the Picard-Vessiot theory? How about modular systems?—to say nothing of the rich suggestions of stereochemistry. Isn't there a place in architecture for transformation, for homomorphology, for actional structures?"

"Blessed if I know," answered Bailey. "You might just as well be talking about the fourth dimension for all it means to me."

"And why not? Why should we limit ourselves to the— Say!" He interrupted himself and stared into distances. "Homer, I think you've really got something. After all, why not? Think of the infinite richness of articulation and relationship in four dimensions. What a house, what a house—" He stood quite still, his pale bulging eyes blinking thoughtfully.

Bailey reached up and shook his arm. "Snap out of it. What the hell are you talking about, four dimensions? Time is the fourth dimension; you can't drive nails into *that.*"

Teal shrugged him off. "Sure. Sure. Time is *a* fourth dimension, but I'm thinking about a fourth spatial dimension, like length, breadth and thickness. For economy of materials and convenience of arrangement you couldn't beat it. To say nothing of the saving of ground space—you could put an eight-room house on the land now occupied by a one-room house. Like a tesseract—"

"What's a tesseract?"

"Didn't you go to school? A tesseract is a hypercube, a square figure with four dimensions to it, like a cube has three, and a square has two. Here, I'll show you." Teal dashed out into the kitchen of his apartment and returned with a box of toothpicks which he spilled on the table between them, brushing glasses and a nearly empty Holland gin bottle carelessly aside. "I'll need some plasticine. I had some around here last week." He burrowed into a drawer of the littered desk which crowded one corner of his dining room and emerged with a lump of oily sculptor's clay. "Here's some."

"What are you going to do?"

"I'll show you." Teal rapidly pinched off small masses of the clay and rolled them into pea-sized balls. He stuck toothpicks into four of these and hooked them together into a square. "There! That's a square."

"Obviously."

"Another one like it, four more toothpicks, and we make a cube." The toothpicks were now arranged in the framework of a square box, a cube, with the pellets of clay holding the corners together. "Now we make another cube just like the first one, and the two of them will be two sides of the tesseract."

Bailey started to help him roll the little balls of clay for the second cube, but became diverted by the sensuous feel of the docile clay and started working and shaping it with his fingers.

"Look," he said, holding up his effort, a tiny figurine, "Gypsy Rose Lee."

"Looks more like Gargantua; she ought to sue you. Now pay attention. You open up one corner of the first cube, interlock the second cube at the corner, and then close the corner. Then take eight more toothpicks and join the bottom of the first cube to the bottom of the second, on a slant, and the top of the first to the top of the second, the same way." This he did rapidly, while he talked.

"What's that supposed to be?" Bailey demanded suspiciously.

"That's a tesseract, eight cubes forming the sides of a hypercube in four dimensions."

"It looks more like a cat's cradle to me. You've only got two cubes there anyhow. Where are the other six?"

"Use your imagination, man. Consider the top of the first cube in relation to the top of the second; that's cube number three. Then the two bottom squares, then the front faces of each cube, the back faces, the right hand, the left hand—eight cubes." He pointed them out.

"Yeah, I see 'em. But they still aren't cubes; they're whatchamucallems—prisms. They are not square, they slant."

"That's just the way you look at it, in perspective. If you drew a picture of a cube on a piece of paper, the side squares would be slaunchwise, wouldn't they? That's perspective. When you look at a four-dimensional figure in three dimensions, naturally it looks crooked. But those are all cubes just the same."

"Maybe they are to you, brother, but they still look crooked to me."

Teal ignored the objections and went on. "Now consider this as the framework of an eight-room house; there's one room on the ground floor—that's for service, utilities, and garage. There are six rooms opening off it on the next floor, living room, dining room, bath, bedrooms, and so forth. And up at the top, completely enclosed and with windows on four sides, is your study. There! How do you like it?"

"Seems to me you have the bathtub hanging out of the living room ceiling. Those rooms are interlaced like an octopus."

"Only in perspective, only in perspective. Here, I'll do it another way so you can see it." This time Teal made a cube of toothpicks, then made a second of halves of toothpicks, and set it exactly in the center of the first by attaching the corners of the small cube to the large cube by short lengths of toothpick. "Now—the big cube is your ground floor, the little cube inside is your study on the top floor. The six cubes joining them are the living rooms. See?"

Bailey studied the figure, then shook his head. "I still don't see but two cubes, a big one and a little one. Those other six things, they look like pyramids this time instead of prisms, but they still aren't cubes."

"Certainly, certainly, you are seeing them in different perspective. Can't you see that?"

"Well, maybe. But that room on the inside, there. It's completely surrounded by the thingamujigs. I thought you said it had windows on four sides."

"It has—it just looks like it was surrounded. That's the grand feature about a tesseract house, complete outside exposure for every room, yet every wall serves two rooms and an eight-room house requires only a one-room foundation. It's revolutionary."

"That's putting it mildly. You're crazy, bud; you can't build a house like that. That inside room is on the inside, and there she stays."

Teal looked at his friend in controlled exasperation. "It's guys like you that keep architecture in its infancy. How many square sides has a cube?"

"Six."

"How many of them are inside?"

"Why, none of 'em. They're all on the outside."

"All right. Now listen—a tesseract has eight cubical sides, *all on the outside.* Now watch me. I'm going to open up this tesseract like you can open up a cubical pasteboard box, until it's flat. That way you'll be able to see all eight of the cubes." Working very rapidly he constructed four cubes, piling one on top of the other in an unsteady tower. He then built out four more cubes from the four exposed faces of the second cube in the pile. The structure swayed a little under the loose coupling of the clay pellets, but it stood, eight cubes in an inverted cross, a double cross, as the four additional cubes stuck out in four directions. "Do you see it now? It rests on the ground floor room, the next six cubes are the living rooms, and there is your study, up at the top."

Bailey regarded it with more approval than he had the other figures. "At least I can understand it. You say that is a tesseract, too?"

"That is a tesseract unfolded in three dimensions. To put it back together you tuck the top cube onto the bottom cube, fold those side cubes in till they meet the top cube and there you are. You do all this folding through a fourth dimension of course; you don't distort any of the cubes, or fold them into each other."

Bailey studied the wobbly framework further. "Look here," he said at last, "why don't you forget about folding this thing up through a fourth dimension—you can't anyway—and build a house like this?"

"What do you mean, I can't? It's a simple mathematical problem —"

"Take it easy, son. It may be simple in mathematics, but you could never get your plans approved for construction. There isn't any fourth dimension; forget it. But this kind of a house—it might have some advantages."

Checked, Teal studied the model. "Hm-m-m— Maybe you got something. We could have the same number of rooms, and we'd save the same amount of ground space. Yes, and we would set that middle cross-shaped floor northeast, southwest, and so forth, so that every room would get sunlight all day long. That central axis lends itself nicely to central heating. We'll put the dining room on the northeast and the kitchen on the southeast, with big view windows in every room. O.K., Homer, I'll do it! Where do you want it built?"

"Wait a minute! Wait a minute! I didn't say you were going to build it for me—"

"Of course I am. Who else? Your wife wants a new house; this is it."

"But Mrs. Bailey wants a Georgian house—"

"Just an idea she has. Women don't know what they want—"

"Mrs. Bailey does."

"Just some idea an out-of-date architect has put in her head. She drives a new car, doesn't she? She wears the very latest styles—why should she live in an eighteenth century house? This house will be even later than this year's model; it's years in the future. She'll be the talk of the town."

"Well—I'll have to talk to her."

"Nothing of the sort. We'll surprise her with it. Have another drink."

"Anyhow, we can't do anything about it now. Mrs. Bailey and I are driving up to Bakersfield tomorrow. The company's bringing in a couple of wells tomorrow."

"Nonsense. That's just the opportunity we want. It will be a surprise for her when you get back. You can just write me a check right now, and your worries are over."

"I oughtn't to do anything like this without consulting her. She won't like it."

"Say, who wears the pants in your family anyhow?"

The check was signed about halfway down the second bottle.

Things are done fast in southern California. Ordinary houses there are usually built in a month's time. Under Teal's impassioned heckling the tesseract house climbed dizzily skyward in days rather than weeks, and its cross-shaped second story came jutting out at the four corners of the world. He had some trouble at first with the inspectors over those four projecting rooms but by using strong girders and folding money he had been able to convince them of the soundness of his engineering.

By arrangement, Teal drove up in front of the Bailey residence the morning after their return to town. He improvised on his two-tone horn. Bailey stuck his head out the front door. "Why don't you use the bell?"

"Too slow," answered Teal cheerfully. "I'm a man of action. Is Mrs. Bailey ready? Ah, there you are, Mrs. Bailey! Welcome home, welcome home. Jump in, we've got a surprise for you!"

"You know Teal, my dear," Bailey put in uncomfortably.

Mrs. Bailey sniffed. "I know him. We'll go in our own car, Homer."

"Certainly, my dear."

"Good idea," Teal agreed; " 'sgot more power than mine; we'll get there faster. I'll drive, I know the way." He took the keys from Bailey, slid into the driver's seat, and had the engine started before Mrs. Bailey could rally her forces.

"Never have to worry about my driving," he assured Mrs. Bailey, turning his head as he did so, while he shot the powerful car down the avenue and swung onto Sunset Boulevard, "it's a matter of power and control, a dynamic process, just my meat—I've never had a serious accident."

"You won't have but one," she said bitingly. "Will you *please* keep your eyes on the traffic?"

He attempted to explain to her that a traffic situation was a matter, not of eyesight, but intuitive integration of courses, speeds, and probabilities, but Bailey cut him short. "Where is the house, Quintus?"

"House?" asked Mrs. Bailey suspiciously. "What's this about a house, Homer? Have you been up to something without telling me?"

Teal cut in with his best diplomatic manner. "It certainly is a house, Mrs. Bailey. And what a house! It's a surprise for you from a devoted husband. Just wait till you see it—"

"I shall," she agreed grimly. "What style is it?"

"This house sets a new style. It's later than television, newer than next week. It must be seen to be appreciated. By the way," he went on rapidly, heading off any retort, "did you folks feel the earthquake last night?"

"Earthquake? What earthquake? Homer, was there an earthquake?"

"Just a little one," Teal continued, "about two A.M. If I hadn't been awake, I wouldn't have noticed it."

Mrs. Bailey shuddered. "Oh, this awful country! Do you hear that, Homer? We might have been killed in our beds and never have known it. Why did I ever let you persuade me to leave Iowa?"

"But my dear," he protested hopelessly, "you wanted to come out to California; you didn't like Des Moines."

"We needn't go into that," she said firmly. "You are a man; you should anticipate such things. Earthquakes!"

"That's one thing you needn't fear in your new home, Mrs. Bailey," Teal told her. "It's absolutely earthquakeproof; every part is in perfect dynamic balance with every other part."

"Well, I hope so. Where is this house?"

"Just around this bend. There's the sign now." A large arrow sign of the sort favored by real estate promoters proclaimed in letters that were large and bright even for southern California:

THE HOUSE OF THE FUTURE!!!

COLOSSAL—AMAZING—

REVOLUTIONARY

See How Your Grandchildren
Will Live!

Q. Teal, Architect

"Of course that will be taken down," he added hastily, noting her expression, "as soon as you take possession." He slued around the corner and brought the car to a squealing halt in front of the House of the Future. *"Voilà!"* He watched their faces for response.

Bailey stared unbelievingly, Mrs. Bailey in open dislike. They saw a simple cubical mass, possessing doors and windows, but no other architectural features, save that it was decorated in intricate mathematical designs. "Teal," Bailey asked slowly, "what have you been up to?"

Teal turned from their faces to the house. Gone was the crazy tower with its jutting second-story rooms. No trace remained of the seven rooms above ground floor level. Nothing remained but the single room that rested on the foundations. “Great jumping cats!” he yelled, “I’ve been robbed!”

He broke into a run.

But it did him no good. Front or back, the story was the same: the other seven rooms had disappeared, vanished completely. Bailey caught up with him, and took his arm. “Explain yourself. What is this about being robbed? How come you built anything like this—it’s not according to agreement.”

“But I didn’t. I built just what we had planned to build, an eight-room house in the form of a developed tesseract. I’ve been sabotaged, that’s what it is! Jealousy! The other architects in town didn’t dare let me finish this job; they knew they’d be washed up if I did.”

“When were you last here?”

“Yesterday afternoon.”

“Everything all right then?”

“Yes. The gardeners were just finishing up.”

Bailey glanced around at the faultlessly manicured landscaping. “I don’t see how seven rooms could have been dismantled and carted away from here in a single night without wrecking this garden.”

Teal looked around, too. “It doesn’t look it. I don’t understand it.”

Mrs. Bailey joined them. “Well? Well? Am I to be left to amuse myself? We might as well look it over as long as we are here, though I’m warning you, Homer, I’m not going to like it.”

“We might as well,” agreed Teal, and drew a key from his pocket with which he let them in the front door. “We may pick up some clues.”

The entrance hall was in perfect order, the sliding screens that separated it from the garage space were back, permitting them to see the entire compartment. “This looks all right,” observed Bailey. “Let’s go up on the roof and try to figure out what happened. Where’s the staircase? Have they stolen that, too?”

“Oh, no,” Teal denied, “look—” He pressed a button below the light switch; a panel in the ceiling fell away and a light, graceful flight of stairs swung noiselessly down. Its strength members were the frosty silver of duralumin, its treads and risers transparent plastic. Teal wriggled like a boy who has successfully performed a card trick, while Mrs. Bailey thawed perceptibly.

It was beautiful.

“Pretty slick,” Bailey admitted. “Howsomever it doesn’t seem to go any place—”

“Oh, that—” Teal followed his gaze. “The cover lifts up as you approach the top. Open stair wells are anachronisms. Come on." As predicted, the lid of the staircase got out of their way as they climbed the flight and permitted them to debouch at the top, but not, as they had expected, on the roof of the single room. They found themselves standing in the middle one of the five rooms which constituted the second floor of the original structure.

For the first time on record Teal had nothing to say. Bailey echoed him, chewing on his cigar. Everything was in perfect order. Before them, through open doorway and translucent partition lay the kitchen, a chefs dream of up-to-the-minute domestic engineering, monel metal, continuous counter space, concealed lighting, functional arrangement. On the left the formal, yet gracious and hospitable dining room awaited guests, its furniture in parade-ground alignment.

Teal knew before he turned his head that the drawing room and lounge would be found in equally substantial and impossible existence.

"Well, I must admit this is charming," Mrs. Bailey approved, "and the kitchen is just *too* quaint for words—though I would never have guessed from the exterior that this house had so much room upstairs. Of course *some* changes will have to be made. That secretary now—if we moved it over *here* and put the settle over *there*—"

"Stow it, Matilda," Bailey cut in brusquely. "Wha'd' yuh make of it, Teal?"

"Why, Homer Bailey! The very id—"

"Stow it, I said. Well, Teal?"

The architect shuffled his rambling body. "I'm afraid to say. Let's go on up."

"How?"

"Like this." He touched another button; a mate, in deeper colors, to the fairy bridge that had let them up from below offered them access to the next floor. They climbed it, Mrs. Bailey expostulating in the rear, and found themselves in the master bedroom. Its shades were drawn, as had been those on the level below, but the mellow lighting came on automatically. Teal at once activated the switch which controlled still another flight of stairs, and they hurried up into the top floor study.

"Look, Teal," suggested Bailey when he had caught his breath, "can we get to the roof above this room? Then we could look around."

"Sure, it's an observatory platform." They climbed a fourth flight of stairs, but when the cover at the top lifted to let them reach the level above, they found themselves, not on the roof, but *standing in the ground floor room where they had entered the house.*

Mr. Bailey turned a sickly gray. "Angels in heaven," he cried, "this place is haunted. We're getting out of here." Grabbing his wife he threw open the front door and plunged out.

Teal was too much preoccupied to bother with their departure. There was an answer to all this, an answer that he did not believe. But he was forced to break off considering it because of hoarse shouts from somewhere above him. He lowered the staircase and rushed upstairs. Bailey was in the central room leaning over Mrs. Bailey, who had fainted. Teal took in the situation, went to the bar built into the lounge, and poured three fingers of brandy, which he returned with and handed to Bailey. “Here—this’ll fix her up.”

Bailey drank it.

“That was for Mrs. Bailey,” said Teal.

“Don’t quibble,” snapped Bailey. “Get her another.” Teal took the precaution of taking one himself before returning with a dose earmarked for his client’s wife. He found her just opening her eyes.

“Here, Mrs. Bailey,” he soothed, “this will make you feel better.”

“I never touch spirits,” she protested, and gulped it.

“Now tell me what happened,” suggested Teal. “I thought you two had left.”

“But we did—we walked out the front door and found ourselves up here, in the lounge.”

“The hell you say! Hm-m-m—wait a minute.” Teal went into the lounge. There he found that the big view window at the end of the room was open. He peered cautiously through it. He stared, not out at the California countryside, but into the ground floor room—or a reasonable facsimile thereof. He said nothing, but went back to the stair well which he had left open and looked down it. The ground floor room was still in place. Somehow, it managed to be in two different places at once, on different levels.

He came back into the central room and seated himself opposite Bailey in a deep, low chair, and sighted him past his upthrust bony knees. “Homer,” he said impressively, “do you know what has happened?”

“No, I don’t—but if I don’t find out pretty soon, something is going to happen and pretty drastic, too!”

“Homer, this is a vindication of my theories. This house is a real tesseract.”

“What’s he talking about, Homer?”

“Wait, Matilda—now Teal, that’s ridiculous. You’ve pulled some hankypanky here and I won’t have it—scaring Mrs. Bailey half to death, and making me nervous. All I want is to get out of here, with no more of your trapdoors and silly practical jokes.”

“Speak for yourself, Homer,” Mrs. Bailey interrupted, “I was *not* frightened; I was just took all over queer for a moment. It’s my heart; all of my people are delicate and highstrung. Now about this tessy thing—explain yourself, Mr. Teal. Speak up."

He told her as well as he could in the face of numerous interruptions the theory back of the house. "Now as I see it, Mrs. Bailey," he concluded, "this house, while perfectly stable in three dimensions, was not stable in four dimensions. I had built a house in the shape of an unfolded tesseract; something happened to it, some jar or side thrust, and it collapsed into its normal shape—it folded up." He snapped his fingers suddenly. "I've got it! The earthquake!"

"Earthquake?"

"Yes, yes, the little shake we had last night. From a four-dimensional standpoint this house was like a plane balanced on edge. One little push and it fell over, collapsed along its natural joints into a stable four-dimensional figure."

"I thought you boasted about how safe this house was."

"It *is* safe—three-dimensionally."

"I don't call a house safe," commented Bailey edgily, "that collapses at the first little temblor."

"But look around you, man!" Teal protested. "Nothing has been disturbed, not a piece of glassware cracked. Rotation through a fourth dimension can't affect a three-dimensional figure any more than you can shake letters off a printed page. If you had been sleeping in here last night, you would never have awakened."

"That's just what I'm afraid of. Incidentally, has your great genius figured out any way for us to get out of this booby trap?"

"Huh? Oh, yes, you and Mrs. Bailey started to leave and landed back up here, didn't you? But I'm sure there is no real difficulty—we came in, we can go out. I'll try it." He was up and hurrying downstairs before he had finished talking. He flung open the front door, stepped through, and found himself staring at his companions, down the length of the second floor lounge. "Well, there does seem to be some slight problem," he admitted blandly. "A mere technicality, though—we can always go out a window." He jerked aside the long drapes that covered the deep French windows set in one side wall of the lounge. He stopped suddenly.

"Hm-m-m," he said, "this is interesting—very."

"What is?" asked Bailey, joining him.

"This." The window stared directly into the dining room, instead of looking outdoors. Bailey stepped back to the comer where the lounge and the dining room joined the central room at ninety degrees.

"But that can't be," he protested, "that window is maybe fifteen, twenty feet from the dining room."

"Not in a tesseract," corrected Teal. "Watch." He opened the window and stepped through, talking back over his shoulder as he did so.

From the point of view of the Baileys he simply disappeared.

But not from his own viewpoint. It took him some seconds to catch his breath. Then he cautiously disentangled himself from the rosebush to which he had become almost irrevocably wedded, making a mental note the while never again to order landscaping which involved plants with thorns, and looked around him.

He was outside the house. The massive bulk of the ground floor room thrust up beside him. Apparently he had fallen off the roof.

He dashed around the corner of the house, flung open the front door and hurried up the stairs. "Homer!" he called out. "Mrs. Bailey! I've found a way out!"

Bailey looked annoyed rather than pleased to see him. "What happened to you?"

"I fell out. I've been outside the house. You can do it just as easily —just step through those French windows. Mind the rosebush, though —we may have to build another stairway."

"How did you get back in?"

"Through the front door."

"Then we shall leave the same way. Come, my dear." Bailey set his hat firmly on his head and marched down the stairs, his wife on his arm.

Teal met them in the lounge. "I could have told you that wouldn't work," he announced. "Now here's what we have to do: As I see it, in a four-dimensional figure a three-dimensional man has two choices every time he crosses a line of juncture, like a wall or a threshold. Ordinarily he will make a ninety-degree turn through the fourth dimension, only he doesn't feel it with his three dimensions. Look." He stepped through the very window that he had fallen out of a moment before. Stepped through and arrived in the dining room, where he stood, still talking.

"I watched where I was going and arrived where I intended to." He stepped back into the lounge. "The time before I didn't watch and I moved on through normal space and fell out of the house. It must be a matter of subconscious orientation."

"I'd hate to depend on subconscious orientation when I step out for the morning paper."

"You won't have to; it'll become automatic. Now to get out of the house this time—Mrs. Bailey, if you will stand here with your back to the window, and jump backward, I'm pretty sure you will land in the garden."

Mrs. Bailey's face expressed her opinion of Teal and his ideas. "Homer Bailey," she said shrilly, "are you going to stand there and let him suggest such—"

"But Mrs. Bailey," Teal attempted to explain, "we can tie a rope on you and lower you down eas—"

"Forget it, Teal," Bailey cut him off brusquely. "We'll have to find a better way than that. Neither Mrs. Bailey nor I are fitted for jumping."

Teal was temporarily nonplused; there ensued a short silence. Bailey broke it with, "Did you hear that, Teal?"

"Hear what?"

"Someone talking off in the distance. D'you s'pose there could be someone else in the house, playing tricks on us, maybe?"

"Oh, not a chance. I've got the only key."

"But I'm sure of it," Mrs. Bailey confirmed. "I've heard them ever since we came in. Voices. Homer, I can't stand much more of this. Do something."

"Now, now, Mrs. Bailey," Teal soothed, "don't get upset. There can't be anyone else in the house, but I'll explore and make sure. Homer, you stay here with Mrs. Bailey and keep an eye on the rooms on this floor." He passed from the lounge into the ground floor room and from there to the kitchen and on into the bedroom. This led him back to the lounge by a straight-line route, that is to say, by going straight ahead on the entire trip he returned to the place from which he started.

"Nobody around," he reported. "I opened all of the doors and windows as I went—all except this one." He stepped to the window opposite the one through which he had recently fallen and thrust back the drapes.

He saw a man with his back toward him, four rooms away. Teal snatched open the French window and dived through it, shouting, "There he goes now! Stop thief!"

The figure evidently heard him; it fled precipitately. Teal pursued, his gangling limbs stirred to unanimous activity, through drawing room, kitchen, dining room, lounge—room after room, yet in spite of Teal's best efforts he could not seem to cut down the four-room lead that the interloper had started with.

He saw the pursued jump awkwardly but actively over the low sill of a French window and in so doing knock off his hat. When he came up to the point where his quarry had lost his headgear, he stopped and picked it up, glad of an excuse to stop and catch his breath. He was back in the lounge.

"I guess he got away from me," he admitted. "Anyhow, here's his hat. Maybe we can identify him."

Bailey took the hat, looked at it, then snorted, and slapped it on Teal's head. It fitted perfectly. Teal looked puzzled, took the hat off, and examined it. On the sweat band were the initials "Q.T." It was his own.

Slowly comprehension filtered through Teal's features. He went back to the French window and gazed down the series of rooms through which he had pursued the mysterious stranger. They saw him wave his arms semaphore fashion. "What are you doing?" asked Bailey.

"Come see." The two joined him and followed his stare with their own. Four rooms away they saw the backs of three figures, two male and one female. The taller, thinner of the men was waving his arms in a silly fashion.

Mrs. Bailey screamed and fainted again.

Some minutes later, when Mrs. Bailey had been resuscitated and somewhat composed, Bailey and Teal took stock. "Teal," said Bailey, "I won't waste any time blaming you; recriminations are useless and I'm sure you didn't plan for this to happen, but I suppose you realize we are in a pretty serious predicament. How are we going to get out of here? It looks now as if we would stay until we starve; every room leads into another room."

"Oh, it's not that bad. I got out once, you know."

"Yes, but you can't repeat it—you tried."

"Anyhow we haven't tried all the rooms. There's still the study."

"Oh, yes, the study. We went through there when we first came in, and didn't stop. Is it your idea that we might get out through its windows?"

"Don't get your hopes up. Mathematically, it ought to look into the four side rooms on this floor. Still we never opened the blinds; maybe we ought to look."

" 'Twon't do any harm anyhow. Dear, I think you had best just stay here and rest—"

"Be left alone in this horrible place? I should say not!" Mrs. Bailey was up off the couch where she had been recuperating even as she spoke.

They went upstairs. "This is the inside room, isn't it, Teal?" Bailey inquired as they passed through the master bedroom and climbed on up toward the study. "I mean it was the little cube in your diagram that was in the middle of the big cube, and completely surrounded."

"That's right," agreed Teal. "Well, let's have a look. I figure this window ought to give into the kitchen." He grasped the cords of Venetian blinds and pulled them.

It did not. Waves of vertigo shook them. Involuntarily they fell to the floor and grasped helplessly at the pattern on the rug to keep from falling. "Close it! Close it!" moaned Bailey.

Mastering in part a primitive atavistic fear, Teal worked his way back to the window and managed to release the screen. The window had looked *down* instead of *out,* down from a terrifying height.

Mrs. Bailey had fainted again.

Teal went back after more brandy while Bailey chafed her wrists. When she had recovered, Teal went cautiously to the window and raised the screen a crack. Bracing his knees, he studied the scene. He turned to Bailey. “Come look at this, Homer. See if you recognize it.”

“You stay away from there, Homer Bailey!”

“Now, Matilda, I’ll be careful.” Bailey joined him and peered out.

“See up there? That’s the Chrysler Building, sure as shooting. And there’s the East River, and Brooklyn.” They gazed straight down the sheer face of an enormously tall building. More than a thousand feet away a toy city, very much alive, was spread out before them. “As near as I can figure it out, we are looking down the side of the Empire State Building from a point just above its tower.

“What is it? A mirage?”

“I don’t think so—it’s too perfect. I think space is folded over through the fourth dimension here and we are looking past the fold.”

“You mean we aren’t really seeing it?”

“No, we're seeing it all right. I don’t know what would happen if we climbed out this window, but I for one don’t want to try. But what a view! Oh, boy, what a view! Let’s try the other windows.”

They approached the next window more cautiously, and it was well that they did, for it was even more disconcerting, more reason-shaking, than the one looking down the gasping height of the skyscraper. It was a simple seascape, open ocean and blue sky—but the ocean was where the sky should have been, and contrariwise. This time they were somewhat braced for it, but they both felt seasickness about to overcome them at the sight of waves rolling overhead; they lowered the blind quickly without giving Mrs. Bailey a chance to be disturbed by it.

Teal looked at the third window. “Game to try it, Homer?”

“Hrrumph—well, we won’t be satisfied if we don’t. Take it easy.” Teal lifted the blind a few inches. He saw nothing, and raised it a little more—still nothing. Slowly he raised it until the window was fully exposed. They gazed out at—nothing.

Nothing, nothing at all. What color is nothing? Don’t be silly! What shape is it? Shape is an attribute of *something.* It had neither depth nor form. It had not even blackness. It was *nothing.*

Bailey chewed at his cigar. “Teal, what do you make of that?”

Teal’s insouciance was shaken for the first time. “I don’t know, Homer, I don’t rightly know—but I think that window ought to be walled up.” He stared at the lowered blind for a moment. “I think maybe we looked at a place where space *isn’t.* We looked around a fourth-dimensional corner and there wasn’t anything there.” He rubbed his eyes. "I've got a headache."

They waited for a while before tackling the fourth window. Like an unopened letter, it might *not* contain bad news. The doubt left hope. Finally the suspense stretched too thin and Bailey pulled the cord himself, in the face of his wife's protests.

It was not so bad. A landscape stretched away from them, right side up, and on such a level that the study appeared to be a ground floor room. But it was distinctly unfriendly.

A hot, hot sun beat down from a lemon-colored sky. The flat ground seemed burned a sterile, bleached brown and incapable of supporting life. Life there was, strange stunted trees that lifted knotted, twisted arms to the sky. Little clumps of spiky leaves grew on the outer extremities of these misshapen growths.

"Heavenly day," breathed Bailey, "where is that?"

Teal shook his head, his eyes troubled. "It beats me."

"It doesn't look like anything on Earth. It looks more like another planet—Mars, maybe."

"I wouldn't know. But, do you know, Homer, it might be worse than that, worse than another planet, I mean."

"Huh? What's that you say?"

"It might be clear out of our space entirely. I'm not sure that that is our sun at all. It seems too bright."

Mrs. Bailey had somewhat timidly joined them and now gazed out at the outré scene. "Homer," she said in a subdued voice, "those hideous trees—they frighten me."

He patted her hand.

Teal fumbled with the window catch.

"What are you doing?" Bailey demanded.

"I thought if I stuck my head out the window I might be able to look around and tell a bit more."

"Well—all right," Bailey grudged, "but be careful."

"I will." He opened the window a crack and sniffed. "The air is all right, at least." He threw it open wide.

His attention was diverted before he could carry out his plan. An uneasy tremor, like the first intimation of nausea, shivered the entire building for a long second, and was gone.

"Earthquake!" They all said it at once. Mrs. Bailey flung her arms around her husband's neck.

Teal gulped and recovered himself, saying:

"It's all right, Mrs. Bailey. This house is perfectly safe. You know you can expect settling tremors after a shock like last night." He had just settled his features into an expression of reassurance when the second shock came. This one was no mild shimmy but the real seasick roll.

In every Californian, native born or grafted, there is a deep-rooted primitive reflex. An earthquake fills him with soul-shaking claustrophobia which impels him blindly to *get outdoors!* Model Boy Scouts will push aged grandmothers aside to obey it. It is a matter of record that Teal and Bailey landed on top of Mrs. Bailey. Therefore, she must have jumped through the window first. The order of precedence cannot be attributed to chivalry; it must be assumed that she was in readier position to spring.

They pulled themselves together, collected their wits a little, and rubbed sand from their eyes. Their first sensations were relief at feeling the solid sand of the desert land under them. Then Bailey noticed something that brought them to their feet and checked Mrs. Bailey from bursting into the speech that she had ready.

"Where's the house?"

It was gone. There was no sign of it at all. They stood in the center of flat desolation, the landscape they had seen from the window. But, aside from the tortured, twisted trees, there was nothing to be seen but the yellow sky and the luminary overhead, whose furnacelike glare was already almost insufferable.

Bailey looked slowly around, then turned to the architect. "Well, Teal?" His voice was ominous.

Teal shrugged helplessly. "I wish I knew. I wish I could even be sure that we were on Earth."

"Well, we can't stand here. It's sure death if we do. Which direction?"

"Any, I guess. Let's keep a bearing on the sun."

They had trudged on for an undetermined distance when Mrs. Bailey demanded a rest. They stopped. Teal said in an aside to Bailey, "Any ideas?"

"No . . . no, none. Say, do you hear anything?"

Teal listened. "Maybe—unless it's my imagination."

"Sounds like an automobile. Say, it *is* an automobile!"

They came to the highway in less than another hundred yards. The automobile, when it arrived, proved to be an elderly, puffing light truck, driven by a rancher. He crunched to a stop at their hail. "We're stranded. Can you help us out?"

"Sure. Pile in."

"Where are you headed?"

"Los Angeles."

"Los Angeles? Say, where is this place?"

"Well, you're right in the middle of the Joshua-Tree National Forest."

The return was as dispiriting as the Retreat from Moscow. Mr. and Mrs. Bailey sat up in front with the driver while Teal bumped along in the body of the truck, and tried to protect his head from the sun. Bailey subsidized the friendly rancher to detour to the tesseract house, not because they wanted to see it again, but in order to pick up their car.

At last the rancher turned the corner that brought them back to where they had started. But the house was no longer there.

There was not even the ground floor room. It had vanished. The Baileys, interested in spite of themselves, poked around the foundations with Teal.

“Got any answers for this one, Teal?” asked Bailey.

“It must be that on that last shock it simply fell through into another section of space. I can see now that I should have anchored it at the foundations.”

“That’s not all you should have done.”

“Well, I don’t see that there is anything to get downhearted about. The house was insured, and we’ve learned an amazing lot. There are possibilities, man, possibilities! Why, right now I’ve got a great new revolutionary idea for a house—”

Teal ducked in time. He was always a man of action.

Lost Legacy

Chapter One

"Ye Have Eyes to See With!"

"Hi-yah, Butcher!" Doctor Philip Huxley put down the dice cup he had been fiddling with as he spoke, and shoved out a chair with his foot. "Sit down."

The man addressed ostentatiously ignored the salutation while handing a yellow slicker and soggy felt hat to the Faculty Clubroom attendant, but accepted the chair. His first words were to the negro attendant.

"Did you hear that, Pete? A witch doctor, passing himself off as a psychologist, has the effrontery to refer to me-to me, a licensed physician and surgeon, as a butcher." His voice was filled with gentle reproach.

"Don't let him kid you, Pete. If Doctor Coburn ever got you into an operating theatre, he'd open up your head just to see what makes you tick. He'd use your skull to make an ashtray."

The man grinned as he wiped the table, but said nothing.

Coburn clucked and shook his head. "That from a witch doctor. Still looking for the Little Man Who Wasn't There, Phil?"

"If you mean parapsychology, yes."

"How's the racket coming?"

"Pretty good. I've got one less lecture this semester, which is just as well-I get awfully tired of explaining to the wide-eyed innocents how little we really know about what goes on inside their think-tanks. I'd rather do research."

"Who wouldn't? Struck any pay dirt lately?"

"Some. I'm having a lot of fun with a law student just now, chap named Valdez."

Coburn lifted his brows. "So? E.S.P.?"

"Kinda. He's sort of a clairvoyant; if he can see one side of an object, he can see the other side, too."

"Nuts!"

" 'If you're so smart, why ain't you rich?' I've tried him out under carefully controlled conditions, and he can do it-see around comers."

"Hmmmm-well, as my Grandfather Stonebender used to say, 'God has more aces up his sleeve than were ever dealt in the game.' He would be a menace at stud poker."

"Matter of fact, he made his stake for law school as a professional gambler."

"Found out how he does it?"

"No, damn it." Huxley drummed on the table top, a worried look on his face. "If I just had a little money for research I might get enough data to make this sort of thing significant. Look at what Rhine accomplished at Duke."

"Well, why don't you holler? Go before the Board and bite 'em in the ear for it. Tell 'em how you're going to make Western University famous."

Huxley looked still more morose. "Fat chance. I talked with my dean and he wouldn't even let me take it up with the President. Scared that the old fathead will clamp down on the.department even more than he has. You see, officially, we are supposed to be behaviorists. Any suggestion that there might be something to consciousness that can't be explained in terms of physiology and mechanics is about as welcome as a Saint Bernard in a telephone booth."

The telephone signal glowed red back of the attendant's counter. He switched off the newscast and answered the call. "Hello . . . Yes, ma'am, he is. I'll call him. Telephone for you, Doctuh Coburn."

"Switch it over here." Coburn turned the telephone panel at the table around so that it faced him; as he did so it lighted up with the face of a young woman. He picked up the handset.

"What is it? . . . What's that? How long ago did it happen? . . . Who made the diagnosis? . . .

Read that over again . . . Let me see the chart." He inspected its image reflected in the panel, then added, "Very well. I'll be right over. Prepare the patient for operating." He switched off the instrument and turned to Huxley. "Got to go, Phil-emergency."

"What sort?"

"It'll interest you. Trephining. Maybe some cerebral excision. Car accident. Come along and watch it, if you have time." He was putting on his slicker as he spoke. He turned and swung out the west door with a long, loose-limbed stride. Huxley grabbed his own raincoat and hurried to catch up with him.

"How come," he asked as he came abreast, "they had to search for you?"

"Left my pocketphone in my other suit," Coburn returned briefly. "On purpose-I wanted a little peace and quiet. No luck."

They worked north and west through the arcades and passages that connected the Union with the Science group, ignoring the moving walkways as being too slow. But when they came to the conveyor subway under Third Avenue opposite the Pottenger Medical School, they found it flooded, its machinery stalled, and were forced to detour west to the Fairfax Avenue conveyor.

Coburn cursed impartially the engineers and the planning commission for the fact that spring brings torrential rains to Southern California, Chamber of Commerce or no.

They got rid of their wet clothes in the Physicians' Room and moved on to the gowning room for surgery. An orderly helped Huxley into white trousers and cotton shoe covers, and they moved to the next room to scrub. Coburn invited Huxley to scrub also in order that he might watch the operation close up. For three minutes by the little sand glass they scrubbed away with strong green soap, then stepped through a door and were gowned and gloved by silent, efficient nurses. Huxley felt rather silly to be helped on with his clothes by a nurse who had to stand on tip-toe to get the sleeves high enough. They were ushered through the glass door into Surgery III, rubber-covered hands held out, as if holding a skein of yarn.

The patient was already in place on the table, head raised up and skull clamped immobile.

Someone snapped a switch and a merciless circle of blue-white lights beat down on the only portion of him that was exposed, the right side of his skull. Coburn glanced quickly around the room, Huxley following his glance-light green walls, two operating nurses, gowned, masked, and hooded into sexlessness, a 'dirty' nurse, busy with something in the corner, the anesthetist, the instruments that told Coburn the state of the patient's heart action and respiration.

A nurse held the chart for the surgeon to read. At a word from Coburn, the anesthetist uncovered the patient's face for a moment. Lean brown face, acquiline nose, closed sunken eyes.

Huxley repressed an exclamation. Coburn raised his eyebrows at Huxley.

"What's the trouble?"

"It's Juan Valdez!"

"Who's he?"."The one I was telling you about-the law student with the trick eyes."

"Hmm-Well, his trick eyes didn't see around enough corners this time. He's lucky to be alive. You'll see better, Phil, if you stand over there."

Coburn changed to impersonal efficiency, ignored Huxley's presence and concentrated the whole of his able intellect on the damaged flesh before him. The skull had been crushed, or punched, apparently by coming into violent contact with some hard object with moderately sharp edges. The wound lay above the right ear, and was, superficially, two inches, or more, across. It was impossible, before exploration, to tell just how much damage had been suffered by the bony structure and the grey matter behind.

Undoubtedly there was some damage to the brain itself. The wound had been cleaned up on the surface and the area around it shaved and painted. The trauma showed up as a definite hole in the cranium. It was bleeding slightly and was partly filled with a curiously nauseating conglomerate of clotted purple blood, white tissue, grey tissue, pale yellow tissue.

The surgeon's lean slender fingers, unhuman in their pale orange coverings, moved gently, deftly in the wound, as if imbued with a separate life and intelligence of their own. Destroyed tissue, too freshly dead for the component cells to realize it, was cleared away-chipped fragments of bone, lacerated mater dura, the grey cortical tissue of the cerebrum itself.

Huxley became fascinated by the minuscule drama, lost track of time, and of the sequence of events. He remembered terse orders for assistance, "Clamp!" "Retractor!" "Sponge!" The sound of the tiny saw, a muffled whine, then the toothtingling grind it made in cutting through solid living bone. Gently a spatulate instrument was used to straighten out the tortured convolutions.

Incredible and unreal, he watched a scalpel whittle at the door of the mind, shave the thin wall of reason.

Three times a nurse wiped sweat from the surgeon's face.

Wax performed its function. Vitallium alloy replaced bone, dressing shut out infection.

Huxley had watched uncounted operations, but felt aga in that almost insupportable sense of relief and triumph that comes when the surgeon turns away, and begins stripping off his gloves as he heads for the gowning room.

When Huxley joined Coburn, the surgeon had doused his mask and cap, and was feeling under his gown for cigarets. He looked entirely human again. He grinned at Huxley and inquired, "Well, how did you like it?"

"Swell. It was the first time I was able to watch that type of thing so closely. You can't see so well from behind the glass, you know. Is he going to be all right?"

Coburn's expression changed. "He is a friend of yours, isn't he? That had slipped my mind for the moment. Sorry. He'll be all right, I'm pretty sure. He's young and strong, and he came through the operation very nicely. You can come see for yourself in a couple of days."

"You excised quite a lot of the speech center, didn't you? Will he be able to talk when he gets well? Isn't he likely to have aphasia, or some other speech disorder?"

"Speech center? Why, I wasn't even close to the speech centers."

"Huh?"

"Put a rock in your right hand, Phil, so you'll know it next time. You're turned around a hundred and eighty degrees. I was working in the right cerebral lobe, not the left lobe."

Huxley looked puzzled, spread both hands out in front of him, glanced from one to the other, then his face cleared and he laughed. "You're right. You know, I have the damndest time with that. I never can remember which way to deal in a bridge game. But wait a minute-I had it so.firmly fixed in my mind that you were on the left side in the speech centers that I am confused.

What do you think the result will be on his neurophysiology?"

"Nothing-if past experience is any criterion. What I took away he'll never miss. I was working in terra incognito, pal-No Man's Land. If that portion of the brain that I was in has any function, the best physiologists haven't been able to prove it."

Chapter Two

Three Blind Mice

BRRRNNG!

Joan Freeman reached out blindly with one hand and shut off the alarm clock, her eyes jammed shut in the vain belief that she could remain asleep if she did. Her mind wondered.

Sunday. Don't have to get up early on Sunday. Then why had she set the alarm? She remembered suddenly and rolled out of bed, warm feet on a floor cold in the morning air. Her pajamas landed on that floor as she landed in the shower, yelled, turned the shower to warm, then back to cold again.

The last item from the refrigerator had gone into a basket, and a thermos jug was filled by the time she beard the sound of a car on the hill outside, the crunch of tires on granite in the driveway. She hurriedly pulled on short boots, snapped the loops of her jodphurs under them, and looked at herself in the mirror. Not bad, she thought. Not Miss America, but she wouldn't frighten any children.

A banging at the door was echoed by the doorbell, and a baritone voice, "Joan! Are you decent?"

"Practically. Come on in, Phil."

Huxley, in slacks and polo shirt, was followed by another figure. He turned to him. "Joan, this is Ben Coburn, Doctor Ben Coburn. Doctor Coburn, Miss Freeman."

"Awfully nice of you to let me come, Miss Freeman."

"Not at all, Doctor. Phil had told me so much about you that I have been anxious to meet you." The conventionalities flowed with the ease of all long-established tribal taboo.

"Call him Ben, Joan. It's good for his ego."

While Joan and Phil loaded the car Coburn looked over the young woman's studio house. A single large room, panelled in knotty pine and dominated by a friendly field-stone fireplace set about with untidy bookcases, gave evidence of her personality. He had stepped through open french doors into a tiny patio, paved with mossy bricks and fitted with a barbecue pit and a little fishpond, brilliant in the morning sunlight, when he heard himself called.

"Doc! Stir your stumps! Time's awastin'!"

He glanced again around the patio, and rejoined the others at the car. "I like your house. Miss Freeman. Why should we bother to leave Beachwood Drive when Griffith Park can't be any pleasanter?"

"That's easy. If you stay at home, it's not a picnic-it's just breakfast.

My name's Joan."

"May I put in a request for 'just breakfast' here some morning-Joan?"

"Lay off o' that mug, Joan," advised Phil in a stage whisper. "His intentions ain't honorable."

Joan straightened up the remains of what had recently been a proper-sized meal. She chucked into the fire three well-picked bones to which thick sirloin steaks were no longer attached, added.some discarded wrapping paper and one lonely roll. She shook the thermos jug. It gurgled slightly. "Anybody want some more grapefruit juice?" she called.

"Any more coffee?" asked Coburn, then continued to Huxley, "His special talents are gone completely?"

"Plenty," Joan replied. "Serve yourselves."

The Doctor filled his own cup and Huxley's. Phil answered, "Gone entirely, I'm reasonably certain. I thought it might be hysterical shock from the operation, but I tried him under hypnosis, and the results were still negative-completely. Joan, you're some cook. Will you adopt me?"

"You're over twenty-one."

"I could easily have him certified as incompetent," volunteered Coburn.

"Single women aren't favored for adoption."

"Marry me, and it will be all right-we can both adopt him and you can cook for all of us."

"Well, I won't say that I won't and I won't say that I will, but I will say that it's the best offer I've had today. What were you guys talking about?"

"Make him put it in writing, Joan. We were talking about Valdez."

"Oh! You were going to run those last tests yesterday, weren't you? How did you come out?"

"Absolutely negative insofar as his special clairvoyance was concerned. It's gone."

"Hmm-How about the control tests?"

"The Humm-Wadsworth Temperament Test showed exactly the same profile as before the accident, within the inherent limits of accuracy of the technique. His intelligence quotient came within the technique limit, too. Association tests didn't show anything either. By all the accepted standards of neuropsychology he is the same individual, except in two respects; he's minus a chunk of his cortex, and he is no longer able to see around corners. Oh, yes, and he's annoyed at losing that ability."

After a pause she answered, "That's pretty conclusive, isn't it?"

Huxley turned to Coburn. "What do you think, Ben?"

"Well, I don't know. You are trying to get me to admit that that piece of grey matter I cut out of his head gave him the ability to see in a fashion not possible to normal sense organs and not accounted for by orthodox medical theory, aren't you?"

"I'm not trying to make you admit anything. I'm trying to find out something."

"Well, since you put it that way, I would say if we stipulate that all your primary data were obtained with care under properly controlled conditions-"

"They were."

"-and that you have exercised even greater care in obtaining your negative secondary data."

"I have. Damn it, I tried for three weeks under all conceivable conditions."

"Then we have the inescapable conclusions, first-" He ticked them off on his fingers. "that this subject could see without the intervention of physical sense organs; and second, that this unusual, to put it mildly, ability was in some way related to a portion of his cerebrum in the dexter lobe."

"Bravo!" This was Joan's contribution.

"Thanks, Ben," acknowledged Phil. "I had reached the same conclusions, of course, but it's very encouraging to have someone else agree with me."

"Well, now that you are there, where are you?"

"I don't know exactly. Let me put it this way; I got into psychology for the same reason a person joins a church-because he feels an overpowering need to understand himself and the world around him. When I was a young student, I thought modern psychology could tell me the.answers, but I soon found out that the best psychologists didn't know a damn thing about the real core of the matter. Oh, I am not disparaging the work that has been done; it was badly needed and has been very useful in its way. None of 'em know what life is, what thought is, whether free will is a reality or an illusion, or whether that last question means anything. The best of 'em admit their ignorance; the worst of them make dogmatic assertions that are obvio us absurdities-for example some of the mechanistic behaviorists that think just because Pavlov could condition a dog to drool at the sound of a bell that, therefore, they knew all about how Paderewski made music!"

Joan, who had been lying quietly in the shade of the big liveoaks and listening, spoke up.

"Ben, you are a brain surgeon, aren't you?"

"One of the best," certified Phil.

"You've seen a lot of brains, furthermore you've seen 'em while they were alive, which is more than most psychologists have. What do you believe thought is? What do you think makes us tick?"

He grinned at her. "You've got me, kid. I don't pretend to know. It's not my business; I'm just a tinker."

She sat up. "Give me a cigaret, Phil. I've arrived just where Phil is, but by a different road.

My father wanted me to study law. I soon found out that I was more interested in the principles behind law and I changed over to the School of Philosophy. But philosophy wasn't the answer.

There really isn't anything to philosophy. Did you ever eat that cotton-candy they sell at fairs?

Well, philosophy is like that-it looks as if it were really something, and it's awfully pretty, and it tastes sweet, but when you go to bite it you can't get your teeth into it, and when you try to swallow, there isn't anything there. Philosophy is word-chasing, as significant as a puppy chasing its tail."

"I was about to get my Ph.D. in the School of Philosophy, when I chucked it and came to the science division and started taking courses in psyc hology. I thought that if I was a good little girl and patient, all would be revealed to me. Well, Phil has told us what that leads to. I began to think about studying medicine, or biology. You just gave the show away on that. Maybe it was a mistake to teach women to read and write."

Ben laughed. "This seems to be experience meeting at the village church; I might as well make my confession. I guess most medical men start out with a desire to know all about man and what makes him tick, but it's a big field, the final answers are elusive and there is always so much work that needs to be done right now, that we quit worrying about the final problems. I'm as interested as I ever was in knowing what life, and thought, and so forth, really are, but I have to have an attack of insomnia to find time to worry about them. Phil, are you seriously proposing to tackle such things?"

"In a way, yes. I've been gathering data on all sorts of phenomena that run contrary to orthodox psychological theory-all the junk that goes under the general name of metapsychics-telepathy, clairvoyance, so-called psychic manifestations, clairaudience, levitation, yoga stuff, stigmata, anything of that sort I can find."

"Don't you find that most of that stuff can be explained in an ordinary fashion?"

"Quite a lot of it, sure. Then you can strain orthodox theory all out of shape and ignore the statistical laws of probability to account for most of the rest. Then by attributing anything that is left over to charlatanism, credulity, and self-hypnosis, and refuse to investigate it, you can go peacefully back to sleep."

"Occam's razor," murmured Joan.."Huh?"

"William of Occam's Razor. It's a name for a principle in logic; whenever two hypotheses both cover the facts, use the simpler of the two. When a conventional scientist has to strain his orthodox theories all out of shape, 'til they resemble something thought up by Rube Goldberg, to account for unorthodox phenomena, he's ignoring the principle of Occam's Razor. It's simpler to draw up a new hypothesis to cover all the facts than to strain an old one that was never intended to cover the non-conforming data. But scientists are more attached to their theories than they are to their wives and families."

"My," said Phil admiringly, "to think that that came out from under a permanent wave."

"If you'll hold him, Ben, I'll beat him with this here thermos jug."

"I apologize. You're absolutely right, darling. I decided to forget about theories, to treat these outcast phenomena like any ordinary data, and to see where it landed me."

"What sort of stuff," put in Ben, "have you dug up, Phil?"

"Quite a variety, some verified, some mere rumor, a little of it carefully checked under laboratory conditions, like Valdez. Of course, you've heard of all the stunts attributed to Yoga.

Very little of it has been duplicated in the Western Hemisphere, which counts against it, nevertheless a lot of odd stuff in India has been reported by competent, cool-minded observers-telepathy, accurate soothsaying, clairvoyance, fire walking, and so forth."

"Why do you include fire walking in metapsychics?"

"On the chance that the mind can control the body and other material objects in some esoteric fashion."

"Hmm."

"Is the idea any more marvelous than the fact that you can cause your hand to scratch your head? We haven't any more idea of the actual workings of volition on matter in one case than in the other. Take the Tierra del Fuegans. They slept on the ground, naked, even in zero weather.

Now the body can't make any such adjustment in its economy. It hasn't the machinery; any physiologist will tell you so. A naked human being caught outdoors in zero weather must exercise, or die. But the Tierra del Fuegans didn't know about metabolic rates and such. They just slept-nice, and warm, and cozy."

"So far you haven't mentioned anything close to home. If you are going to allow that much latitude, my Grandfather Stonebender had much more wonderful experiences."

"I'm coming to them. Don't forget Valdez."

"What's this about Ben's grandfather?" asked Joan.

"Joan, don't ever boast about anything in Ben's presence. You'll find that his Grandfather Stonebender did it faster, easier, and better."

A look of more-in-sorrow-than-in-anger shone out of Coburn's pale blue eyes. "Why, Phil, I'm surprised at you. If I weren't a Stonebender myself, and tolerant, I'd be inclined to resent that remark. But your apology is accepted."

"Well, to bring matters closer home, besides Valdez, there was a man in my home town, Springfield, Missouri, who had a clock in his head."

"What do you mean?"

"I mean he knew the exact time without looking at a clock. If your watch disagreed with him, your watch was wrong. Besides that, he was a lightning calculator-knew the answer instantly to the most complicated problems in arithmetic you cared to put to him. In other ways he was feebleminded."

Ben nodded. "It's a common phenomenon-idiots savant."."But giving it a name doesn't explain it. Besides which, while a number of the people with erratic talents are feebleminded, not all of them are. I believe that by far the greater per cent of them are not, but that we rarely hear of them because the intelligent ones are smart enough to know that they would be annoyed by the crowd, possibly persecuted, if they let the rest of us suspect that they were different."

Ben nodded again. "You got something there, Phil. Go ahead."

"There have been a lot of these people with impossible talents who were not subnormal in other ways and who were right close to home. Boris Sidis, for example-"

"He was that child prodigy, wasn't he? I thought he played out?"

"Maybe. Personally, I think he grew cagy and decided not to let the other monkeys know that he was different. In any case he had a lot of remarkable talents, in intensity, if not in kind. He must have been able to read a page of print just by glancing at it, and he undoubtedly had complete memory. Speaking of complete memory, how about Blind Tom, the negro pianist who could play any piece of music he had ever heard once? Nearer home, there was this boy right here in Los Angeles County not so very many years ago who could play ping-pong blindfolded, or anything else, for which normal people require eyes. I checked him myself, and he could do it. And there was the Instantaneous Echo."

"You never told me about him, Phil," commented Joan. "What could he do?"

"He could talk along with you, using your words and intonations, in any language whether he knew the language or not. And he would keep pace with you so accurately that anyone listening wouldn't be able to tell the two of you apart. He could imitate your speech and words as immediately, as accurately, and as effortlessly as your shadow follows the movements of your body."

"Pretty fancy, what? And rather difficult to explain by behaviorist theory. Ever run across any cases of levitation, Phil?"

"Not of human beings. However I have seen a local medium-a nice kid, nonprofessional, used to live next door to me-make articles of furniture in my own house rise up off the floor and float. I was cold sober. It either happened or I was hypnotized; have it your own way.

Speaking of levitating, you know the story they tell about Nijinsky?"

"Which one?"

"About him floating. There are thousands of people here and in Europe (unless they died in the Collapse) who testify that in Le Spectre de la Rose he used to leap up into the air, pause for a while, then come down when he got ready. Call it mass hallucination-I didn't see it."

"Occam's Razor again," said Joan.

"So?"

"Mass hallucination is harder to explain than one man floating in the air for a few seconds.

Mass hallucination not proved-mustn't infer it to get rid of a troublesome fact. It's comparable to the 'There aint no sech animal' of the yokel who saw the rhinoceros for the first time."

"'Maybe so. Any other sort of trick stuff you want to hear about, Ben? I got a million of'em."

"How about forerunners, and telepathy?"

"Well, telepathy is positively proved, though still unexplained, by Dr. Rhine's experiments.

Of course a lot of people had observed it before then, with such frequency as to make questioning it unreasonable. Mark Twain, for example. He wrote about it fifty years before Rhine, with documentation and circumstantial detail. He wasn't a scientist, but he had hard common sense and shouldn't have been ignored. Upton Sinclair, too. Forerunners are a little harder. Every one has heard dozens of stories of hunches that came true, but they are hard to.follow up in most cases. You might try J. W. Dunne's Experiment with Time for a scientific record under controlled conditions of forerunners in dreams."

"Where does all this get you, Phil? You aren't just collecting Believe-It-Or-Nots?"

"No, but I had to assemble a pile of data-you ought to look over my notebooks-before I could formulate a working hypothesis. I have one now."

"Well?"

"You gave it to me-by operating on Valdez. I had begun to suspect sometime ago that these people with odd and apparently impossible mental and physical abilities were no different from the rest of us in any sense of abnormality, but that they had stumbled on potentialities inherent in all of us. Tell me, when you had Valdez' cranium open did you notice anything abnormal in its appearance?"

"No. Aside from the wound, it presented no special features."

"Very well. Yet when you excised that damaged portion, he no longer possessed his strange clairvoyant power. You took that chunk of his brain out of an uncharted area-no known function. Now it is a primary datum of psychology and physiology that large areas of the brain have no known function. It doesn't seem reasonable that the most highly developed and highly specialized part of the body should have large areas with no function; it is more reasonable to assume that the functions are unknown. And yet men have had large pieces of their cortices cut out without any apparent loss in their mental powers-as long as the areas controlling the normal functions of the body were left untouched.

"Now in this one case, Valdez, we have established a direct connection between an uncharted area of the brain and an odd talent, to wit, clairvoyance. My working hypothesis comes directly from that: All normal people are potentially able to exercise all (or possibly most) of the odd talents we have referred to-telepathy, clairvoyance, special mathematical ability, special control over the body and its functions, and so forth. The potential ability to do these things is lodged in the unassigned areas of the brain."

Coburn pursed his lips. "Mmm-I don't know. If we all have these wonderful abilities, which isn't proved, how is it that we don't seem able to use them?"

"I haven't proved anything-yet. This is a working hypothesis. But let me give you an analogy. These abilities aren't like sight, hearing, and touch which we can't avoid using from birth; they are more like the ability to talk, which has its own special centers in the brain from birth, but which has to be trained into being. Do you think a child raised exclusively by deaf-mutes would ever learn to talk? Of course not. To outward appearance he would be a deaf-mute."

"I give up," conceded Coburn. "You set up an hypothesis and made it plausible. But how are you going to check it? I don't see any place to get hold of it. It's a very pretty speculation, but without a working procedure, it's just fantasy."

Huxley rolled over and stared unhappily up through the branches. "That's the rub. I've lost my best wild talent case. I don't know where to begin."

"But, Phil," protested Joan. "You want normal subjects, and then try to develop special abilities in them. I think it's wonderful. When do we start?"

"When do we start what?"

"On me, of course. Take that ability to do lightning calculations, for example. If you could develop that in me, you'd be a magician. I got bogged down in first year algebra. I don't know the multiplication tables even now!"

Chapter Three

"Every Man His Own Genius"

"Shall we get busy?" asked Phil.

"Oh, let's not," Joan objected. "Let's drink our coffee in peace and let dinner settle. We haven't seen Ben for two weeks. I want to hear what he's been doing up in San Francisco."

"Thanks, darling," the doctor answered, "but I'd much rather hear about the Mad Scientist and his Trilby."

"Trilby, hell," Huxley protested, "She's as independent as a hog on ice. However, we've got something to show you this time, Doc."

"Really? That's good. What?"

"Well, as you know, we didn't make much progress for the first couple of months. It was all up hill. Joan developed a fair telepathic ability, but it was erratic and unreliable. As for mathematical ability, she had learned her multiplication tables, but as for being a lightning calculator, she was a washout."

Joan jumped up, crossed between the men and the fireplace, and entered her tiny Pullman kitchen. "I've got to scrape these dishes and put them to soak before the ants get at 'em. Talk loud, so I can hear you.

"What can Joan do now, Phil?"

"I'm not going to tell you. You wait and see. Joan! Where's the card table?"

"Back of the couch. No need to shout. I can hear plainly since I got my Foxy Grandma Streamlined Ear Trumpet."

"Okay, wench, I found it. Cards in the usual place?"

"Yes, I'll be with you in a moment." She reappeared whisking off a giddy kitchen apron, and sat down on the couch, hugging her knees. "The Great Gaga, the Ghoul of Hollywood is ready.

Sees all, knows all, and tells a darnsight more. Fortunetelling, teethpulling, and refined entertainment for the entire family."

"Cut out the clowning. We'll start out with a little straight telepathy. Throw every thing else out of gear. Shuffle the cards, Ben."

Coburn did so. "Now what?"

"Deal 'em off, one at a time, letting you and me see 'em, but not Joan. Call 'em off, kid."

Ben dealt them out slowly. Joan commenced to recite in a singsong voice, "Seven of diamonds; jack of hearts; ace of hearts; three of spades; ten of diamonds; six of clubs; nine of spades; eight of clubs-"

"Ben, that's the first time I've ever seen you look amazed."

"Right through the deck without a mistake. Grandfather

Stonebender couldn't have done better."

"That's high praise, chum. Let's try a variation. and sit out this one. Don't let me see them. I don't know how it will work, as we never worked with anyone else. Try it."

A few minutes later Coburn put down the last card. "Perfect! Not a mistake.".Joan got up and came over to the table. "How come this deck has two tens of hearts in it?"

She riffled through the deck, and pulled out one card. "Oh! You thought the seventh card was the ten of hearts; it was the ten of diamonds. See?"

"I guess I did," Ben admitted, "I'm sorry I threw you a curve. The light isn't any too good."

"Joan prefers artistic lighting effects to saving her eyes," explained Phil. "I'm glad it happened; it shows she was using telepathy, not clairvoyance. Now for a spot of mathematics. We'll skip the usual stunts like cube roots, instantaneous addition, logarithms of hyperbolic functions, and stuff. Take my word for it; she can do 'em. You can try her later on those simple tricks. Here's a little honey I shot in my own kitchen. It involves fast reading, complete memory, handling of unbelievable number of permutations and combinations, and mathematical investigation of alternatives. You play solitaire, Ben?"

"Sure."

"I want you to shuffle the cards thoroughly, then lay out a Canfield solitaire, dealing from left to right, then play it out, three cards at a time, going through the deck again and again, until you are stuck and can't go any farther."

"Okay. What's the gag?"

"After you have shuffled and cut, I want you to riffle the cards through once, holding them up so that Joan gets a quick glimpse of the index on each card. Then wait a moment.' Silently he did what he had been asked to do. Joan checked him. "You'll have to do it again, Ben. I saw only fifty-one cards."

"Two of them must have stuck together. I'll do it more carefully." He repeated it.

"Fiftytwo that time. That's fine."

"Are you ready, Joan?"

"Yes, Phil. Take it down; hearts to the six, diamonds to the four, spades to the deuce, no clubs."

Coburn looked incredulous. "Do you mean that is the way this game is going to come out?"

"Try it and see."

He dealt the cards out from left to right, then played the game out slowly. Joan stopped him at one point. "No, play the king of hearts' stack into that space, rather than the king of spades.

The king of spades play would have gotten the ace of clubs out, but three less hearts would play out if you did so." Coburn made no comment, but did as she told him to do. Twice more she stopped him and indicated a different choice of alternatives.

The game played out exactly as she had predicted.

Coburn ran his hand through his hair and stared at the cards. "Joan," he said meekly, "does your head ever ache?"

"Not from doing that stuff. It doesn't seem to be an effort at all."

"You know," put in Phil, seriously, "there isn't any real reason why it should be a strain. So far as we know, thinking requires no expenditure of energy at all. A person ought to be able to think straight and accurately with no effort. I've a notion that it is faulty thinking that makes headaches."

"But how in the devil does she do it, Phil? It makes my head ache just to try to imagine the size of that problem, if it were worked out long hand by conventional mathematics."

"I don't know how she does it. Neither does she."

"Then how did she learn to do it?"

"We'll take that up later. First, I want to show you our piece de resistance."

"I can't take much more. I'm groggy now."."You'll like this."

"Wait a minute, Phil. I want to try one of my own. How fast can Joan read?"

"As fast as she can see."

"Hmm-". The doctor hauled a sheaf of typewritten pages out of his inside coat pocket. "I've got the second draft of a paper I've been working on. Let's try Joan on a page of it. Okay, Joan?"

He separated an inner page from the rest and handed it to her. She glanced at it and handed it back at once. He looked puzzled and said: "What's the matter?"

"Nothing. Check me as I read back." She started in a rapid singsong, "page four.-now according to Cunningham, fifth edition, page 547: "Another strand of fibres, videlicet, the fasciculus spinocerebellaris (posterior), prolonged upwards in the lateral fumiculus of the medulla spinallis, gradually leaves this portion of the medulla oblongata. This tract lies on the surface, and is-"

"That's enough, Joan, hold it. God knows how you did it, but you read and memorized that page of technical junk in a split second." He grinned slyly. "But your pronunciation was a bit spotty. Grandfather Stonebender's would have been perfect."

"What can you expect? I don't know what half of the words mean."

"Joan, how did you learn to do all this stuff?"

"Truthfully, Doctor, I don't know. It's something like learning to ride a bicycle-you take one spill after another, then one day you get on and just ride away, easy as you please. And in a week you are riding without handlebars and trying stunts. It's been like that-I knew what I wanted to do, and one day I could. Come on, Phil's getting impatient."

Ben maintained a puzzled silence and permitted Phil to lead him to a little desk in the corner.

"Joan, can we use any drawer? OK. Ben, pick out a drawer in this desk, remove any articles you wish, add anything you wish. Then, without looking into the drawer, stir up the contents and remove a few articles and drop them into another drawer. I want to eliminate the possibility of telepathy."

"Phil, don't worry about my housekeeping. My large staff of secretaries will be only too happy to straighten out that desk after you get through playing with it."

"Don't stand in the way of science, little one. Besides," he added, glancing into a drawer, "this desk obviously hasn't been straightened for at least six months. A little more stirring up won't hurt it."

"Humph! What can you expect when I spend all my time learning parlor tricks for you?

Besides, I know where everything is."

"That's just what I am afraid of, and why I want Ben to introduce a little more of the random element-if possible. Go ahead, Ben."

When the doctor had complied and closed the drawer, Phil continued, "Better use pencil and paper on this one, Joan. First list everything you see in the drawer, then draw a little sketch to show approximate locations and arrangement."

"OK." She sat down at the desk and commenced to write rapidly: One large black leather handbag, six-inch ruler... Ben stopped her. "Wait a minute. This is all wrong. I would have noticed anything as big as a handbag."

She wrinkled her brow. "Which drawer did you say?"

'The second on the right."

"I thought you said the top drawer."."Well, perhaps I did." She started again: Brass paper knife, six assorted pencils and a red pencil, thirteen rubber bands, pearl-handled penknife... 'That must be your knife, Ben. It's very pretty; why haven't I seen it before?"

"I bought it in San Francisco. Good God, girl. You haven't seen it yet."

One paper of matches, advertising the Sir Francis Drake Hotel, eight letters and two bills, two ticket stubs, the Follies Burlesque Theatre-"Doctor, I'm surprised at you."

"Get on with your knitting."

"Provided you promise to take me the next time you go."

One fever thermometer with a pocket clip, art gum and a typewriter eraser, three keys, assorted, one lipstick. Max Factor #3, a scratch pad and some file cards, used on one side, one small brown paper sack containing one pair stockings, size nine, shade Creole.-"I'd forgotten that I had bought them; I searched all through the house for a decent pair this morning."

"Why didn't you just use your X-ray eyes, Mrs. Houdini?"

She looked startled. "Do you know, it just didn't occur to me. I haven't gotten around to trying to use this stuff yet."

"Anything else in the drawer?"

"Nothing but a box of notepaper. Just a sec: I'll make the sketch." She sketched busily for a couple of minutes, her tongue between her teeth, her eyes darting from the paper toward the closed drawer and back again. Ben inquired, "Do you have to look in the direction of the drawer to see inside it?"

"No, but it helps. It makes me dizzy to see a thing when I am looking away from it."

The contents and arrangement of the drawer were checked and found to be exactly as Joan had stated they were. Doctor Coburn sat quietly, making no comment, when they had finished.

Phil, slightly irked at his lack of demonstrativeness, spoke to him.

"Well, Ben, what did you think of it? How did you like it?"

"You know what I thought of it. You've proved your theory up to the hilt-but I'm thinking about the implications, some of the possibilities. I think we've just been handed the greatest boon a surgeon ever had to work with. Joan, can you see inside a human body?"

"I don't know. I've never-"

"Look at me."

She stared at him for a silent moment. "Why-why, I can see your heart beat! I can see-"

"Phil, can you teach me to see the way she does?"

Huxley rubbed his nose. "I don't know. Maybe-"

Joan bent over the big chair in which the doctor was seated. "Won't he go under, Phil?"

"Hell, no. I've tried everything but tapping his skull with a bungstarter. I don't believe there's any brain there to hypnotize."

"Don't be pettish. Let's try again. How do you feel, Ben?"

"All right, but wide awake." I'm going out of the room this time. Maybe I'm a distracting factor. Now be a good boy and go sleepy-bye." She left them.

Five minutes later Huxley called out to her, "Come on back in, kid. He's under." She came in and looked at Coburn where he lay sprawled in her big easy chair, quiet, eyes half closed.

"Ready for me?" she asked, turning to Huxley.

"Yes. Get ready." She lay down on the couch. "You know what I want; get in rapport with Ben as soon as you go under. Need any persuasion to get to sleep?".No.

"Very well, then-Sleep!"

She became quiet, lax.

"Are you under, Joan?"

"Yes, Phil."

"Can you reach Ben's mind?"

A short pause: "Yes."

"What do you find?"

"Nothing. It's like an empty room, but friendly. Wait a moment-he greeted me."

"Just a greeting. It wasn't in words."

"Can you hear me, Ben?"

"Sure, Phil."

"You two are together?"

"Yes. Yes, indeed."

"Listen to me, both of you, I want you to wake up slowly, remaining in rapport. Then Joan is to teach Ben how to perceive that which is not seen. Can you do it?"

"Yes, Phil, we can." It was as if one voice had spoken.

Chapter Four

Holiday

"Frankly, Mr. Huxley, I can't understand your noncooperative attitude." The President of Western University let the stare from his slightly bulging eyes rest on the second button of Phil's vest. "You have been given every facility for sound useful research along lines of proven worth. Your program of instructing has been kept light in order that you might make use of your undoubted ability. You have been acting chairman of your sub-department this past semester.

Yet instead of profiting by your unusual opportunities, you have, by your own admission, been, shall we say, frittering away your time in the childish pursuit of old wives' tales and silly superstitions. Bless me, man, I don't understand it!"

Phil answered, with controlled exasperation, "But Doctor Brinckley, if you would permit me to show you-"

The president interposed a palm. "Please, Mr. Huxley. It is not necessary to go over that ground again. One more thing, it has come to my attention that you have been interfering in the affairs of the medical school."

"The medical school! I haven't set foot inside it in weeks."

"It has come to me from unquestioned authority that you have influenced Doctor Coburn to disregard the advice of the staff diagnosticians in performing surgical operations-the best diagnosticians, let me add, on the West Coast."

Huxley maintained his voice at toneless politeness. "Let us suppose for the moment that I have influenced Doctor Coburn-I do not concede the point-has there been any case in which Coburn's refusal to follow diagnosis has failed to be justified by the subsequent history of the case?"

'That is beside the point. The point is-I can't have my staff from one school interfering in the affairs of another school. You see the justice of that, I am sure."

"I do not admit that I have interfered. In fact, I deny it."

"I am afraid I shall have to be the judge of that." Brinckley rose from his desk and came around to where Huxley stood. "Now Mr. Huxley-may I call you Philip? I like to have my juniors in our institution think of me as a friend. I want to give you the same advice that I would give to my son. The semester will be over in a day or two. I think you need a vacation. The Board has made some little difficulty over renewing your contract inasmuch as you have not yet completed your doctorate. I took the liberty of assuring them that you would submit a suitable thesis this coming academic year-and I feel sure that you can if you will only devote your efforts to sound, constructive work. You take your vacatio n, and when you come back you can outline your proposed thesis to me. I am quite sure the Board will make no difficulty about your contract then."

"I had intended to write up the results of my current research for my thesis.".Brinckley's brows raised in polite surprise. "Really? But that is out of the question, my boy, as you know. You do need a vacation. Goodbye then; if I do not see you again before commencement, let me wish you a pleasant holiday now."

When a stout door separated him from the president, Huxley dropped his pretense of good manners and hurried across the campus, ignoring students and professors alike. He found Ben and Joan waiting for him at their favorite bench, looking across the La Brea Tar Pits toward Wilshire Boulevard.

He flopped down on the seat beside them. Neither of the men spoke, but Joan was unable to control her impatience. "Well, Phil? What did the old fossil have to say?"

"Gimme a cigaret." Ben handed him a pack and waited. "He didn't say much-just threatened me with the loss of my job and the ruination of my academic reputation if I didn't knuckle under and be his tame dog-all in the politest of terms of course."

"But Phil, didn't you offer to bring me in and show him the progress you had already made?"

"I didn't bring your name into it; it was useless. He knew who you were well enough-he made a sidelong reference to the inadvisability of young instructors seeing female students socially except under formal, fully chaperoned conditions-talked about the high moral tone of the university, and our obligation to the public!"

"Why, the dirty minded old so-and-so! I'll tear him apart for that!"

"Take it easy, Joan." Ben Coburn's voice was mild and thoughtful. "Just how did he threaten you, Phil?"

"He refused to renew my contract at this time. He intends to keep me on tenterhooks all summer, then if I come back in the fall and make a noise like a rabbit, he might renew-if he feels like it. Damn him! The thing that got me the sorest was a suggestion that I was slipping and needed a rest."

"What are you going to do?"

"Look for a job, I guess. I've got to eat."

"Teaching job?"

"I suppose so, Ben."

"Your chances aren't very good, are they, without a formal release from Western? They can blacklist you pretty effectively. You've actually got about as much freedom in the matter as a professional ballplayer."

Phil looked glum and said nothing. Joan sighed and looked out across the marshy depression surrounding the tar pits. Then she smiled and said, "We could lure old Picklepuss down here and push him in."

Both men smiled but did not answer. Joan muttered to herself something about sissies. Ben addressed Phil. "You know, Phil, the old boy's idea about a vacation wasn't too stupid; I could do with one myself."

"Anything in particular in mind?"

"Why, yes, more or less. I've been out here seven years and never really seen the state. I'd like to start out and drive, with no particular destination in mind.

Then we could go on up past Sacramento and into northern California. They say it's magnificent country up there. We could take in the High Sierras and the Big Trees on the way back."

"That certainly sounds inviting."

"You could take along your research notes and we could talk about your ideas as we drove. If you decided you wanted to write up some phase, we could just lay over while you did it.".Phil stuck out his hand. "It's a deal, Ben. When do we start?"

"As soon as the term closes."

"Let's see-we ought to be able to get underway late Friday afternoon then. Which car will we use, yours or mine?"

"My coupe ought to be about right. It has lots of baggage space."

Joan, who had followed the conversation with interest, broke in on them. "Why use your car, Ben? Three people can't be comfortable in a coupe."

"Three people? Wha' d'yu mean, three people? You aren't going, bright eyes."

"So? That's what you think. You can't get rid of me at this point; I'm the laboratory case. Oh no, you can't leave me behind."

"But Joan, this is a stag affair."

"Oh, so you want to get rid of me?"

"Now Joan, we didn't say that. It just would look like the devil for you to be barging about the country with a couple of men-"

"Sissies! Tissyprissles! Pantywaists! Worried about your reputations."

"No, we're not. We're worried about yours."

"It won't wash. No girl who lives alone has any reputation. She can be as pure as Ivory soap and the cats on the campus, both sexes, will take her to pieces anyway. What are you so scared of? We aren't going to cross any state lines." Coburn and Huxley exchanged the secret look that men employ when confronted by the persistence of an unreasonable woman.

"Look out, Joan!" A big red Santa Fe bus took the shoulder on the opposite side of the highway and slithered past. Joan switched the tail of the grey sedan around an oil tanker truck and trailer on their own side of the road before replying. When she did, she turned her head to speak directly to Phil who was riding in the back seat.

"What's the matter, Phil?"

"You darn near brought us into a head on collision with about twenty tons of the Santa Fe's best rolling stock!"

"Don't be nervous; I've been driving since I was sixteen and I've never had an accident."

"I'm not surprised; you'll never have but one. Anyhow," Phil went on, "can't you keep your eyes on the road? That's not too much to ask, is it?"

"I don't need to watch the road. Look." She turned her head far around and showed him that her eyes were jammed shut. The needle of the speedometer hovered around ninety.

"Joan! Please!"

She opened her eyes and faced front once more. "But I don't have to look in order to see.

You taught me that yourself, Smarty. Don't you remember?"

"Yes, yes, but I never thought you'd apply it to driving a car!"

"Why not? I'm the safest driver you ever saw; I can see everything that's on the road, even around a blind curve. If I need to, I read the other drivers' minds to see what they are going to do next."

"She's right, Phil. The few times I've paid attention to her driving she's been doing just exactly what I would have done in the same circumstances. That's why I haven't been nervous."

"All right. All right," Phil answered, "but would you two supermen keep in mind that there is a slightly nervous ordinary mortal in the back seat who can't see around corners?"

"I'll be good," said Joan soberly. "I didn't mean to scare you, Phil."."I'm interested," resumed Ben, "in what you said about not looking toward anything you wanted to see. I can't do it too satisfactorily. I remember once you said it made you dizzy to look away and still use direct perception."

"It used to, Ben, but I got over it, and so will you. It's just a matter of breaking old habits. To me, every direction is in 'front'-all around and up and down. I can focus my attention in any direction, or two or three directions at once. I can even pick a point of away from where I am physically, and look at the other side of things-but that is harder."

"You two make me feel like the mother of the Ugly Duckling," said Phil bitterly. "Will you still think of me kindly when you have passed beyond human communication?"

"Poor Phil!" exclaimed Joan, with sincere sympathy in her voice. "You taught us, but no one has bothered to teach you. Tell you what, Ben, let's stop tonight at an auto camp-pick a nice quiet one on the outskirts of Sacramento-and spend a couple of days doing for Phil what he has done for us."

"Okay by me. It's a good idea."

"That's mighty white of you, pardner," Phil conceded, but it was obvious that he was pleased and mollified. "After you get through with me will I be able to drive a car on two wheels, too?"

"Why not learn to levitate?" Ben suggested. "It's simpler-less expensive and nothing to get out of order."

"Maybe we will some day," returned Phil, quite seriously, "there's no telling where this line of investigation may lead."

"Yeah, you're right," Ben answered him with equal sobriety. "I'm getting so that I can believe seven impossible things before breakfast. What were you saying just before we passed that oil tanker?"

"I was just trying to lay before you an idea I've been mulling over in my mind the past several weeks. It's a big idea, so big that I can hardly believe it myself."

"Well, spill it."

Phil commenced checking points off on his fingers. "We've proved, or tended to prove, that the normal human mind has powers previously unsuspected, haven't we?"

"Tentatively-yes. It looks that way."

"Powers way beyond any that the race as a whole makes regular use of."

"Yes, surely. Go on."

"And we have reason to believe that these powers exist, have their being, by virtue of certain areas of the brain to which functions were not previously assigned by physiologists? That is to say, they have organic basis, just as the eye and the sight centers in the brain are the organic basis for normal sight?"

"Yes, of course."

"You can trace the evolution of any organ from a simple beginning to a complex, highly developed form. The organ develops through use. In an evolutiona ry sense function begets organ."

"Yes. That's elementary."

"Don't you see what that implies?"

Coburn looked puzzled, then a look of comprehension spread over his face. Phil continued, with delight in his voice, "You see it, too?" The conclusion is inescapable: there must have been a time when the entire race used these strange powers as easily as they heard, or saw, or smelled.

And there must have been a long, long period-hundreds of thousands, probably millions of years-during which these powers were developed as a race. Individuals couldn't do it, any.more than I could grow wings. It had to be done racially, over a long period of time. Mutation theory is no use either-mutation goes by little jumps, with use confirming the change. No indeed-these strange powers are vestigial-hangovers from a time when the whole race had 'em and used 'em."

Phil stopped talking, and Ben did not answer him, but sat in a brown study while some ten miles spun past. Joan started to speak once, then thought better of it. Finally Ben commenced to speak slowly.

"I can't see any fault in your reasoning. It's not reasonable to assume that whole areas of the brain with complex functions 'jest growed'. But, brother, you've sure raised hell with modern anthropology."

"That worried me when I first got the notion, and that's why I kept my mouth shut. Do you know anything about anthropology?"

"Nothing except the casual glance that any medical student gets."

"Neither did I, but I had quite a lot of respect for it. Professor Whoosistwitehell would reconstruct one of our great granddaddies from his collar bone and his store teeth and deliver a long dissertation on his most intimate habits, and I would swallow it, hook, line, and sinker, and be much impressed. But I began to read up on the subject. Do you know what I found?"

"Go ahead."

"In the first place there isn't a distinguished anthropologist in the world but what you'll find one equally distinguished who will call him a diamond-studded liar. They can't agree on the simplest elements of their alleged science. In the second place, there isn't a corporal's guard of really decent exhibits to back up their assertions about the ancestry of mankind. I never saw so much stew from one oyster. They write book after book and what have they got to go on?-The Dawson Man, the Pelkin Man, the Heidelberg Man and a couple of others. And those aren't complete skeletons, a damaged skull, a couple of teeth, maybe another bone or two."

"Oh now, Phil, there were lots of specimens found of Cro-Magnon men."

"Yes, but they were true men. I'm talking about submen, our evolutionary predecessors. You see, I was trying to prove myself wrong. If man's ascent had been a long steady climb, submen into savages, savages to barbarians, barbarians perfecting their cultures into civilization ... all this with only minor setbacks of a few centuries, or a few thousand years at the most ... and with our present culture the highest the race had ever reached ... If all that was true, then my idea was wrong.

"You follow me, don't you? The internal evidence of the brain proves that mankind, sometime in its lost history, climbed to heights undreamed of today. In some fashion the race slipped back. And this happened so long ago that we have found no record of it anywhere.

These brutish submen, that the anthropologists set such store by, can't be our ancestors; they are too new, too primitive, too young. They are too recent; they allow for no time for the race to develop these abilities whose existence we have proved. Either anthropology is all wet, or Joan can't do the things we have seen her do."

The center of the controversy said nothing. She sat at the wheel, as the big car sped along, her eyes closed against the slanting rays of the setting sun, seeing the road with an inner impossible sight.

Five days were spent in coaching Huxley and a sixth on the open road. Sacramento lay far behind them. For the past hour Mount Shasta had been visible from time to time through.openings in the trees. Phil brought the car to a stop on a view point built out from the pavement of U.S. Highway 99. He turned to his passengers. "All out, troops," he said. "Catch a slice of scenery."

The three stood and stared over the canyon of the Sacramento River at Mount Shasta, thirty miles away.

It was sweater weather and the air was as clear as a child's gaze. The peak was framed by two of the great fir trees which marched down the side of the canyon. Snow still lay on the slopes of the cone and straggled down as far as the timberline.

Joan muttered something. Ben turned his head, "What did you say, Joan?"

"Me? Nothing-I was saying over a bit of poetry to myself."

"What was it?"

"Tietjens' Most Sacred Mountain: " 'Space and the twelve clean winds are here; And with them broods eternity-a swift white peace, a presence manifest. The rhythm ceases here. Time has no place. This is the end that has no end.' "

Phil cleared his throat and selfconsciously broke the silence. "I think I see what you mean."

Joan faced them. "Boys," she stated, "I am going to climb Mount Shasta."

Ben studied her dispassionately. "Joan," he pronounced, "You are full of hop."

"I mean it. I didn't say you were going to-I said I was.

"But we are responsible for your safety and welfare-and I for one don't relish the thought of a fourteen-thousand foot climb."

"You are not responsible for my safety; I'm a free citizen. Anyhow a climb wouldn't hurt you any; it would help to get rid of some of that fat you've been storing up against winter."

"Why," inquired Phil, "are you so determined so suddenly to make this climb?"

"It's really not a sudden decision, Phil. Ever since we left Los Angeles I've had a recurring dream that I was climbing, climbing, up to some high place ... and that I was very happy because of it. Today I know that it was Shasta I was climbing."

"How do you know it?"

"I know it."

"Ben, what do you think?"

The doctor picked up a granite pebble and shied it out in the general direction of the river. He waited for it to come to rest several hundred feet down the slope. "I guess," he said, "we'd better buy some hobnailed boots."

Phil paused and the two behind him on the narrow path were forced to stop, too. "Joan," he asked, with a worried tone, "is this the way we came?"

They huddled together, icy wind cutting at their faces like rusty razor blades and gusts of snow eddying about them and stinging their eyes, while Joan considered her answer. "I think so," she ventured at last, "but even with my eyes closed this snow makes everything look different."

"That's my trouble, too. I guess we pulled a boner when we decided against a guide . . . but who would have thought that a beautiful summer day could end up in a snow storm?"

Ben stamped his feet and clapped his hands together. "Let's get going," he urged. "Even if this is the right road, we've got the worst of it ahead of us before we reach the rest cabin. Don't forget that stretch of glacier we crossed."."I wish I could forget it," Phil answered him soberly. "I don't fancy the prospect of crossing it in this nasty weather."

"Neither do I, but if we stay here we freeze." With Ben now in the lead they resumed their cautious progress, heads averted to the wind, eyes half closed. Ben checked them again after a couple of hundred yards. "Careful, gang," he warned, "the path is almost gone here, and it's slippery," He went forward a few steps. "It's rather-" They heard him make a violent effort to recover his balance, then fall heavily. "Ben! Ben!," Phil called out, "are you all right?"

"I guess so," he gasped. "I gave my left leg an awful bang. Be careful."

They saw that he was on the ground, hanging part way over the edge of the path. Cautiously they approached until they were alongside him. "Lend me a hand, Phil. Easy, now," Phil helped him wiggle back onto the path. "Can you stand up?"

"I'm afraid not. My left leg gave me the devil when I had to move just now. Take a look at it, Phil. No, don't bother to take the boot off; look right through it."

"Of course. I forgot." Phil studied the limb for a moment. "It's pretty bad, fella-a fracture of the shin bone about four inches below the knee."

Coburn whistled a couple of bars of Suwannee River, then said, "Isn't that just too, too lovely?

Simple or compound fracture, Phil?"

"Seems like a clean break, Ben."

"Not that it matters much one way or the other just now. What do we do next?"

Joan answered him. "We must build a litter and get you down the mountain!"

"Spoken like a true girl scout, kid. Have you figured how you and Phil can maneuver a litter, with me in it, over that stretch of ice?"

"We'll have to-somehow." But her voice lacked confidence.

"It won't work, kid. You two will have to straighten me out and bed me down, then go on down the mountain and stir out a rescue party with proper equipment. I'll get some sleep while you're gone. I'd appreciate it if you'd leave me some cigarets."

"No!" Joan protested. "We won't leave you here alone."

Phil added his objections. "Your plan is as bad as Joan's, Ben. It's all very well to talk about sleeping until we get back, but you know as well as I do that you would die of exposure if you spent a night like this on the ground with no protection."

"I'll just have to chance it. What better plan can you suggest"

"Wait a minute. Let me think." He sat down on the ledge beside his friend and pulled at his left ear. This is the best I can figure out: We'll have to get you to some place that is a little more sheltered, and build a fire to keep you warm. Joan can stay with you and keep the fire going while I go down after help."

"That's all right," put in Joan, "except that I will be the one to go after help. You couldn't find your way in the dark and the snow, Phil. You know yourself that your direct perception isn't reliable as yet-you'd get lost."

Both men protested. "Joan, you're not going to start off alone."-"We can't permit that, Joan."

"That's a lot of gallant nonsense. Of course I'm going."

"No." It was a duet.

"Then we all stay here tonight, and huddle around a fire. I'll go down in the morning."

"That might do," Ben conceded, "if-"."Good evening, friends." A tall, elderly man stood on the ledge behind them. Steady blue eyes regarded them from under shaggy white eyebrows. He was smooth shaven but a mane of white hair matched the eyebrows. Joan thought he looked like Mark Twain.

Coburn recovered first. "Good evening," he answered, "if it is a good evening-which I doubt."

The stranger smiled with his eyes. "My name is Ambrose, ma'am. But your friend is in need of some assistance. If you will permit me, sir-" He knelt down and examined Ben's leg, without removing the boot. Presently he raised his head. "This will be somewhat painful. I suggest, son, that you go to sleep." Ben smiled at him, closed his eyes, and gave evidence by his slow, regular breathing that he was asleep.

The man who called himself Ambrose slipped away into the shadows. Joan tried to follow him with perception, but this she found curiously hard to do. He returned in a few minutes with several straight sticks which he broke to a uniform length of about twenty inches. These he proceeded to bind firmly to Ben's left shin with a roll of cloth which he had removed from his trouser pocket.

When he was satisfied that the primitive splint was firm, he picked Coburn up in his arms, handling the not inconsiderable mass as if it were a child. "Come," he said.

They followed him without a word, back the way they had come, single file through the hurrying snowflakes. Five hundred yards, six hundred yards, then he took a turn that had not been on the path followed by Joan and the two men, and strode confidently away in the gloom.

Joan noticed that he was wearing a light cotton shirt with neither coat nor sweater, and wondered that he had come so far with so little protection against the weather. He spoke to her over his shoulder, "I like cold weather, ma'am."

He walked between two large boulders, apparently disappeared into the side of the mountain.

They followed him and found themselves in a passageway which led diagonally into the living rock. They turned a corner and were in an octagonal living room, high ceilinged and panelled in some mellow, light-colored wood. It was softly illuminated by indirect lighting, but possessed no windows. One side of the octagon was a fireplace with a generous hearth in which a wood fire burned hospitably. There was no covering on the flagged floor, but it was warm to the feet.

The old man paused with his burden and indicated the comfortable fittings of the room-three couches.

Chapter Five

"-Through a Glass, Darkly"

When Phil entered the living room the next morning he found a small table set with a very sound breakfast for three. While he was lifting plate covers and wondering whether good manners required him to wait until joined by others, Joan entered the room. He looked up.

"Oh! It's you. Good morning, and stuff. They set a proper table here. Look." He lifted a plate cover. "Did you sleep well?"

"Like a corpse." She joined his investigations. "They do understand food, don't they? When do we start?"

"When number three gets here, I guess. Those aren't the clothes you had on last night."

"Like it?" She turned around slowly with a swaying mannequin walk. She had on a pearl grey gown that dropped to her toes. It was high waisted; two silver cords crossed between her breasts and encircled her waist, making a girdle. She was shod in silver sandals. There was an air of ancient days about the whole costume.

"It's swell. Why is it a girl always looks prettier in simple clothes?"

"Simple-hmmf! If you can buy this for three hundred dollars on Wilshire Boulevard, I'd like to have the address of the shop."

"Hello, troops." Ben stood in the doorway. They both stared at him. "What's the trouble?"

Phil ran his eye down Ben's frame. "How's your leg, Ben?"

"I wanted to ask you about that. How long have I been out? The leg's all well. Wasn't it broken after all?"

"How about it, Phil?" Joan seconded. "You examined it, I didn't."

Phil pulled his ear. "It was broken-or I've gone completely screwy. Let's have a look at it."

Ben was dressed in pajamas and bathrobe. He slid up the pajama leg, and exposed a shin that was pink and healthy. He pounded it with his fist. "See that? Not even a bruise."

"Hmm-You haven't been out long, Ben. Just since last night. Maybe ten or eleven hours."

"Huh?"

"That's right."

"Impossible."

"Maybe so. Let's eat breakfast."

They ate in thoughtful silence, each under pressing necessity of taking stock and reaching some reasonable reorientation. Toward the end of the meal they all happened to look up at once.

Phil broke the silence, "Well . . . How about it?"

"I've just doped it out," volunteered Joan. "We all died in the snow storm and went to Heaven. Pass the marmalade, will you, please?"

"That can't be right," objected Phil, as he complied, "else Ben wouldn't be here. He led a sinful life. But seriously, things have happened which require explanation. Let's tick 'em off: One; Ben breaks a leg last night, it's all healed this morning."."Wait a minute-are we sure he broke his leg?"

"I'm sure. Furthermore, our host acted as if he thought so too-else why did he bother to carry him? Two; our host has direct perception, or an uncanny knowledge of the mountainside."

"Speaking of direct perception," said Joan, "have either of you tried to look around you and size up the place?"

"No, why?"

"Neither have I."

"Don't bother to. I tried, and it can't be done. I can't perceive past the walls of the room."

"Hmm-we'll put that down as point three. Four, our host says that his name is Ambrose Bierce. Does he mean that he is the Ambrose Bierce? You know who Ambrose Bierce was, Joan?"

"Of course I do-I got eddication. He disappeared sometime before I was born."

"That's right-at the time of the outbreak of the first World War. If this is the same man, he must be over a hundred years old."

"He didn't look that old by forty years."

"Well, we'll put it down for what it's worth. Point five-We'll make this one an omnibus point-why does our host live up here? How come this strange mixture of luxury hotel and cliff dwellers cave anyhow? How can one old man run such a joint? Say, have either of you seen anyone else around the place?"

"I haven't,' said Ben. "Someone woke me, but I think it was Ambrose."

"I have," offered Joan. "It was a woman who woke me. She offered me this dress."

"Mrs. Bierce, maybe?"

"I don't think so-she wasn't more than thirty-five. I didn't really get acquainted-she was gone before I was wide awake."

Phil looked from Joan to Ben. "Well, what have we got? Add it up and give us an answer."

"Good morning, young friends!" It was Bierce, standing in the doorway, his rich, virile voice resounding around the many-sided room. The three started as if caught doing something improper.

Coburn recovered first. He stood up and bowed. "Good morning, sir. I believe that you saved my life. I hope to be able to show my gratitude."

Bierce bowed formally. "What service I did I enjoyed doing, sir. I hope that you are all rested?"

"Yes, thank you, and pleasantly filled from your table."

"That is good. Now, if I may join you, we can discuss what you wish to do next. Is it your pleasure to leave, or may we hope to have your company for a while longer?'"

"I suppose, said Joan, rather nervously, that we should get started down as soon as possible.

How is the weather?"

"The weather is fair, but you are welcome to remain here as long as you like. Perhaps you would like to see the rest of our home and meet the other members of our household?"

"Oh, I think that would be lovely!"

"It will be my pleasure, ma'am."

"As a matter of fact, Mr. Bierce-" Phil leaned forward a little, his face and manner serious.

"-we are quite anxious to see more of your place here and to know more about you. We were speaking of it when you came in."

"Curiosity is natural and healthy. Please ask any question you wish."."Well-" Phil plunged in. "Ben had a broken leg last night. Or didn't he? It's well this morning."

"He did indeed have a broken leg. It was healed in the night."

Coburn cleared his throat. "Mr. Bierce, my name is Coburn I am a physician and surgeon, but my knowledge does not extend to such healing as that. Will you tell me more about it?"

"Certainly. You are familiar with regeneration as practiced by the lower life forms. The principle used is the same, but it is consciously controlled by the will and the rate of healing is accelerated. I placed you in hypnosis last night, then surrendered control to one of our surgeons who directed your mind in exerting its own powers to heal its body."

Coburn looked baffled. Bierce continued, "There is really nothing startling about it. The mind and will have always the possibility of complete domination over the body. Our operator simply directs your will to master its body. The technique is simple; you may learn it, if you wish. I assure you that to learn it is easier than to explain it in our cumbersome and imperfect language. I spoke of mind and will as if they were separate. Language forced me to that ridiculous misstatement. There is neither mind, nor will, as entities; there is only-" His voice stopped. Ben felt a blow within his mind like the shock of a sixteen inch rifle, yet it was painless and gentle. What ever it was, it was as alive as a hummingbird, or a struggling kitten, yet it was calm and untroubled.

He saw Joan nodding her head in agreement, her eyes on Bierce.

Bierce went on in his gentle, resonant voice. "Was there any other matter troubling any one of you?"

"Why, yes, Mr. Bierce," replied Joan, "several things. What is this place where we are?"

"It is my home, and the home of several of my friends. You will understand more about us as you become better acquainted with us."

"Thank you. It is difficult for me to understand how such a community could exist on this mountaintop without its being a matter of common knowledge."

"We have taken certain precautions, ma'am, to avoid notoriety. Our reasons, and the precautions they inspired will become evident to you."

"One more question; this is rather personal; you may ignore it if you like. Are you the Ambrose Bierce who disappeared a good many years ago?"

"I am. I first came up here in 1880 in search of a cure for asthma. I retired here in 1914 because I wished to avoid direct contact with the tragic world events which I saw coming and was powerless to stop." He spoke with some reluctance, as if the subject were distasteful, and turned the conversation.

"Perhaps you would like to meet some of my friends now?"

The apartments extended for a hundred yards along the face of the mountain and for unmeasured distances into the mountain. The thirty-odd persons in residence were far from crowded; there were many rooms not in use. In the course of the morning Bierce introduced them to most of the inhabitants.

They seemed to be of all sorts and ages and of several nationalities. Most of them were occupied in one way, or another, usually with some form of research, or with creative art. At least Bierce assured them in several cases that research was in progress-cases in which no apparatus, no recording device, nothing was evident to indicate scientific research.

Once they were introduced to a group of three, two women and a man, who were surrounded by the physical evidence of their work-biological research. But the circumstances were still confusing; two of the trio sat quietly by, doing nothing, while the third labored at a bench..Bierce explained that they were doing some delicate experiments in the possibility of activating artificial colloids. Ben inquired, "Are the other two observing the work?" Bierce shook his head. "Oh, no. They are all three engaged actively in the work, but at this particular stage they find it expedient to let three brains in rapport direct one set of hands."

Rapport, it developed, was the usual method of collaboration.

Bierce had led them into a room occupied by six persons. One or two of them looked up and nodded, but did not speak.

Bierce motioned for the three to come away. "They were engaged in a particularly difficult piece of reconstruction; it would not be polite to disturb them."

"But Mr. Bierce," Phil commented, "two of them were playing chess."

"Yes. They did not need that part of their brains, so they left it out of rapport. Nevertheless they were very busy."

It was easier to see what the creative artists were doing. In two instances, however, their methods were startling. Bierce had taken them to the studio of a little gnome of a man, a painter in oil, who was introduced simply as Charles. He seemed glad to see them and chatted vivaciously, without ceasing his work. He was doing, with meticulous realism but with a highly romantic effect, a study of a young girl dancing, a wood nymph, against a pine forest background.

The young people each made appropriate appreciative comments. Coburn commented that it was remarkable that he should be able to be so accurate in his anatomical detail without the aid of a model.

"But I have a model," he answered. "She was here last week. See?" He glanced toward the empty model's throne. Coburn and his companions followed the glance, and saw, poised on the throne, a young girl, obviously the model for the picture, frozen in the action of the painting.

She was as real as bread and butter.

Charles glanced away. The model's throne was again vacant.

The second instance was not so dramatic, but still less comprehensible. They had met, and chatted with, a Mrs. Draper, a comfortable, matronly soul, who knitted and rocked as they talked.

After they had left her Phil inquired about her.

"She is possibly our most able and talented artist," Bierce told him.

"In what field?"

Bierce's shaggy eyebrows came together as he chose his words. "I don't believe I can tell you adequately at this time. She composes moods-arranges emotional patterns in harmonic sequences. It's our most advanced and our most completely human form of art, and yet, until you have experienced it, it is very difficult for me to tell you about it."

"How is it possible to arrange emotions?"

"Your great grandfather no doubt thought it impossible to record music. We have a technique for it. You will understand later."

"Is Mrs. Draper the only one who does this?"

"Oh no. Most of us try our hand at it. It's our favorite art form. I work at it myself but my efforts aren't popular-too gloomy."

The three talked it over that night in the living room they had first entered. This suite had been set aside for their use, and Bierce had left them with the simple statement that he would call on them on the morrow.

They felt a pressing necessity to exchange views, and yet each was reluctant to express opinion. Phil broke the silence.."What kind of people are these? They make me feel as if I were a child who had wandered in where adults were working, but that they were too polite to put me out."

"Speaking of working-there's something odd about the way they work. I don't mean what it is they do-that's odd, too, but it's something else, something about their attitude, or the tempo at which they work."

"I know what you mean, Ben," Joan agreed, "they are busy all the time, and yet they act as if they had all eternity to finish it. Bierce was like that when he was strapping up your leg. They never hurry." She turned to Phil. "What are you frowning about?"

"I don't know. There is something else we haven't mentioned yet. They have a lot of special talents, sure, but we three know something about special talents-that ought not to confuse us.

But there is something else about them that is different."

The other two agreed with him but could offer no help. Sometime later Joan said that she was going to bed and left the room. The two men stayed for a last cigaret.

Joan stuck her head back in the room. "I know what it is that is so different about these people," she anounced,-"They are so alive."

Chapter Six

Ichabod!

Philip Huxley went to bed and to sleep as usual. From there on nothing was usual.

He became aware that he was inhabiting another's body, thinking with another's mind. The Other was aware of Huxley, but did not share Huxley's thoughts.

The Other was at home, a home never experienced by Huxley, yet familiar. It was on Earth, incredibly beautiful, each tree and shrub fitting into the landscape as if placed there in the harmonic scheme of an artist. The house grew out of the ground.

The Other left the house with his wife and prepared to leave for the capital of the planet.

Huxley thought of the destination as a "capital" yet he knew that the idea of government imposed by force was foreign to the nature of these people. The "capital" was merely the accustomed meeting place of the group whose advice was followed in matters affecting the entire race.

The Other and his wife, accompanied by Huxley's awareness, stepped into the garden, shot straight up into the air, and sped over the countryside, flying hand in hand. The country was green, fertile, parklike, dotted with occasional buildings, but nowhere did Huxley see the jammed masses of a city.

They passed rapidly over a large body of water, perhaps as large as the modern Mediterranean, and landed in a clearing in a grove of olive trees.

The Young Men-so Huxley thought of them-demanded a sweeping change in custom, first, that the ancient knowledge should henceforth be the reward of ability rather than common birthright, and second, that the greater should rule the lesser. Loki urged their case, his arrogant face upthrust and crowned with bright red hair. He spoke in words, a method which disturbed Huxley's host, telepathic rapport being the natural method of mature discussion. But Loki had closed his mind to it.

Jove answered him, speaking for all: "My son, your words seem vain and without serious meaning. We can not tell your true meaning, for you and your brothers have decided to shut your minds to us. You ask that the ancient knowledge be made the reward of ability. Has it not always been so? Does our cousin, the ape, fly through the air? Is not the infant soul bound by hunger, and sleep, and the ills of the flesh? Can the oriole level the mountain with his glance? The powers of our kind that set us apart from the younger spirits on this planet are now exercised by those who possess the ability, and none other. How can we make that so which is already so?

"You demand that the greater shall rule the lesser. Is it not so now? Has it not always been so? Are you ordered about by the babe at the breast? Does the waving of the grass cause the wind? What dominion do you desire other than over yourself? Do you wish to tell your brother when to sleep and when to eat? If so, to what purpose?"

Vulcan broke in while the old man was still speaking. Huxley felt a stir of shocked repugnance go through the council at this open disregard of good manners.."Enough of this playing with words. We know what we want; you know what we want. We are determined to take it, council or no. We are sick of this sheeplike existence. We are tired of this sham equality. We intend to put on end to it. We are the strong and the able, the natural leaders of mankind. The rest shall follow us and serve us, as is the natural order of things."

Jove's eyes rested thoughtfully on Vulcan's crooked leg. "You should let me heal that twisted limb, my son.

"No one can heal my limb!"

"No. No one but yourself. And until you heal the twist in your mind, you can not heal the twist in your limb."

"There is no twist in my mind!"

"Then heal your limb."

The young man stirred uneasily. They could see that Vulcan was making a fool of himself.

Mercury separated himself from the group and came forward.

"Hear me. Father. We do not purpose warring with you. Rather it is our intention to add to your glory. Declare yourself king under the sun. Let us be your legates to extend your rule to every creature that walks, or crawls, or swims. Let us create for you the pageantry of dominion, the glory of conquest. Let us conserve the ancient knowledge for those who understand it, and provide instead for lesser beings the drama they need. There is no reason why every way should be open to everyone. Rather, if the many serve the few, then will our combined efforts speed us faster on our way, to the profit of master and servant alike. Lead us. Father! Be our King!"

Slowly the elder man shook his head. "Not so. There is no knowledge, other than knowledge of oneself, and that should be free to every man who has the wit to learn. There is no power, other than the power to rule oneself, and that can be neither given, nor taken away. As for the poetry of empire, that has all been done before. There is no need to do it again. If such romance amuses you, enjoy it in the records-there is no need to bloody the planet again."

"That is the final word of the council. Father?"

"That is our final word." He stood up and gathered his robe about him, signifying that the session had ended. Mercury shrugged his shoulders and joined his fellows.

There was one more session of the council-the last-called to decide what to do about the ultimatum of the Young Men. Not every member of the council thought alike; they were as diverse as any group of human beings. They were human beings-not supermen. Some held out for opposing the Young Men with all the forces at their command-translate them to another dimension, wipe their minds clean, even crush them by major force.

But to use force on the Young Men was contrary to their whole philosophy. "Free will is the primary good of the Cosmos. Shall we degrade, destroy, all that we have worked for by subverting the will of even one man?"

Huxley became aware that these Elders had no need to remain on Earth. They were anxious to move on to another place, the nature of which escaped Huxley, save that it was not of the time and space he knew.

The issue was this: Had they done what they could to help the incompletely developed balance of the race? Were they justified in abdicating?

The decision was yes, but a female member of the council, whose name, it seemed to Huxley, was Demeter, argued that records should be left to help those who survived the inevitable collapse. "It is true that each member of the race must make himself strong, must make himself wise. We cannot make them wise. Yet, after famine and war and hatred have stalked the earth, should there not be a message, telling them of their heritage?".The council agreed, and Huxley's host, recorder for the council, was ordered to prepare records and to leave them for those who would come after. Jove added an injunction: "Bind the force patterns so that they shall not dissipate while this planet endures. Place them where they will outlast any local convulsions of the crust, so that some at least will carry down through time."

So ended that dream. But Huxley did not wake-he started at once to dream another dream, not through the eyes of another, but rather as if he watched a stereo-movie, every scene of which was familiar to him.

The first dream, for all its tragic content, had not affected him tragically; but throughout the second dream he was oppressed by a feeling of heartbreak and overpowering weariness.

After the abdication of the Elders, the Young Men carried out their purpose, they established their rule. By fire and sword, searing rays and esoteric forces, chicanery and deception.

Convinced of their destiny to rule, they convinced themselves that the end justified the means.

The end was empire-Mu, mightiest of empires and mother of empires.

Huxley saw her in her prime and felt almost that the Young Men had been right-for she was glorious! The heart-choking magnificence filled his eyes with tears; he mourned for the glory, the beautiful breathtaking glory that was hers, and is no more.

Gargantuan silent liners in her skies, broadbeamed vessels at her wharves, loaded with grain and hides and spices, procession of priest and acolyte and humble believer, pomp and pageantry of power-he saw her intricate patterns of beauty and mourned her passing.

But in her swelling power there was decay. Inevitably Atlantis, her richest colony, grew to political maturity and was irked by subordinate status. Schism and apostasy, disaffection and treason, brought harsh retaliation-and new rebellion.

Rebellions rose, were crushed. At last one rose that was not crushed. In less than a month two-thirds of the people of the globe were dead; the remainder were racked by disease and hunger, and left with germ plasm damaged by the forces they had loosed. But priests still held the ancient knowledge.

Not priests secure in mind and proud of their trust, but priests hunted and fearful, who had seen their hierarchy totter. There were such priests on both sides-and they unchained forces compared with which the previous fighting had been gentle.

The forces disturbed the isostatic balance of the earth's crust.

Mu shuddered and sank some two thousand feet. Tidal waves met at her middle, broke back, surged twice around the globe, climbed the Chinese plains, lapped the feet of Alta Himalaya.

Atlantis shook and rumbled and split for three days before the water covered it. A few escaped by air, to land on ground still wet with the ooze of exposed seabottom, or on peaks high enough to fend off the tidal waves. There they had still to wring a living from the bare soil, with minds unused to primitive art-but some survived.

Of Mu there was not a trace. As for Atlantis, a few islands, mountaintops short days before, marked the spot. Waters rolled over the twin Towers of the Sun and fish swam through the gardens of the viceroy.

The woebegone feeling which had pursued Huxley now overwhelmed him. He seemed to hear a voice in his head: "Woe! Cursed be Loki! Cursed be Venus! Cursed be Vulcan! Thrice cursed am I, their apostate servant, Orab, Archpriest of the Isles of the Blessed. Woe is me! Even as I curse I long for Mu, mighty and sinful. Twenty-one years ago, seeking a place to die, on this mountaintop I stumbled on this record of the mighty ones who were before us. Twenty-one years I have.labored to make the record complete, searching the dim recesses of my mind for knowledge long unused, roaming the other planes for knowledge I never had. Now in the eight hundred and ninety-second year of my life, and of the destruction of Mu the three hundred and fifth, I, Orab, return to my fathers." Huxley was very happy to wake up.

Chapter Seven

"The Fathers Have Eaten Sour Grapes, and the Children's Teeth Are Set on Edge"

Ben was in the living room when Phil came in to breakfast. Joan arrived almost on Phil's heels. There were shadows under her eyes and she looked unhappy. Ben spoke in a tone that was almost surly, "What's troubling you, Joan? You look like the wrath to come."

"Please, Ben," she answered, in a tired voice, "don't heckle me. I've had bad dreams all night,"

"That so? Sorry-but if you think you had bad dreams all night, you should have seen the cute little nightmares I've been riding."

Phil looked at the two of them. "Listen-have you both had odd dreams all night?"

"Wasn't that what we were just saying?" Ben sounded exasperated.

"What did you dream about?"

Neither one answered him.

"Wait a minute. I had some very strange dreams myself." He pulled his notebook out of a pocket and tore out three sheets. "I want to find out something. Will you each write down what your dreams were about, before anyone says anything more? Here's a pencil, Joan."

They balked a little, but complied.

"Read them aloud, Joan."

She picked up Ben's slip and read, " 'I dreamed that your theory about the degeneracy of the human race was perfectly correct.' "

She put it down and picked up Phil's slip. " 'dreamt that I was present at the Twilight of the Gods, and that I saw the destruction of Mu and Atlantis.' "

There was dead silence as she took the last slip, her own.

"My dream was about how the people destroyed themselves by rebelling against Odin."

Ben was first to commit himself. "Anyone of those slips could have applied to my dreams."

Joan nodded. Phil got up again, went out, and returned at once with his diary. He opened it and handed it to Joan.

"Kid, will you read that aloud-starting with 'June sixteenth'?"

She read it through slowly, without looking up from the pages. Phil waited until she had finished and closed the book before speaking. "Well," he said, "well?"

Ben crushed out a cigaret which had burned down to his fingers. "It's a remarkably accurate description of my dream, except that the elder you call Jove, I thought of as Ahuramazda."

"And I thought Loki was Lucifer."

"You're both right," agreed Phil. "I don't remember any spoken names for any of them. It just seemed that I knew what their names were."

"Me, too."."Say," interjected Ben, "we are talking as if these dreams were real-as if we had all been to the same movie."

Phil turned on him. "Well, what do you think?"

"Oh, the same as you do, I guess. I'm stumped. Does anybody mind if I eat breakfast-or drink some coffee, at least?"

Bierce came in before they had a chance to talk it over after breakfast-by tacit consent they had held their tongues during a sketchy meal.

"Good morning, ma'am. Good morning, gentlemen."

"Good morning, Mr. Bierce."

"I see," he said, searching their faces, "that none of you look very happy this morning. That is not surprising; no one does immediately after experiencing the records."

Ben pushed back his chair and leaned across the table at Bierce. "Those dreams were deliberately arranged for us?"

"Yes, indeed-but we were sure that yo u were ready to profit by them. But I have come to ask you to interview the Senior. If you can hold your questions for him, it will be simpler."

"The Senior?"

"You haven't met him as yet. It is the way we refer to the one we judge best fitted to coordinate our activities."

Ephraim Howe had the hills of New England in his face, lean gnarled cabinetmaker's hands.

He was not young. There was courtly grace in his lanky figure. Everything about him-the twinkle in his pale blue eyes, the clasp of his hand, his drawl-bespoke integrity.

"Sit yourselves down," he said, "I'll come straight to the point"-he called it 'pint.' "You've been exposed to a lot of curious things and you've a right to know why. You've seen the Ancient Records now-part of 'em. I'll tell you how this institution came about, what it's for, and why you are going to be asked to join us."

"Wait a minute, Waaaait a minute," he added, holding up a hand. "Don't say anything just yet..."

When Fra Junipero Serra first laid eyes on Mount Shasta in 1781, the Indians told him it was a holy place, only for medicine men. He assured them that he was a medicine man, serving a greater Master, and to keep face, dragged his sick, frail old body up to the snow line, where he slept before returning.

The dream he had thereof the Garden of Eden, the Fall, and the Deluge-convinced him that it was indeed a holy place. He returned to

San Francisco, planning to found a mission at Shasta. But there was too much for one old man to do-so many souls to save, so many mouths to feed. He surrendered his soul to rest two years later, but laid an injunction on a fellow monk to carry out his intention, It is recorded that this friar left the northernmost mission in 1785 and did not return.

The Indians fed the holy man who lived on the mountain until 1843, by which time he had gathered about him a group of neophytes, three Indians, a Russian, a Yankee mountainman. The Russian carried on after the death of the friar until joined by a Chinese, fled from his indenture.

The Chinese made more progress in a few weeks than the Russian had in half of a lifetime; the Russian gladly surrendered first place to him.

The Chinese was still there over a hundred years later, though long since retired from administration. He tutored in esthetics and humor.."And this establishment has just one purpose," continued Ephraim Howe. "We aim to see to it that Mu and Atlantis don't happen again. Everything that the Young Men stood for, we are against.

"We see the history of the world as a series of crises in a conflict between two opposing philosophies. Ours is based on the notion that life, consciousness, intelligence, ego is the important thing in the world." For an instant only he touched them telepathically; they felt again the vibrantly alive thing that Ambrose Bierce had showed them and been unable to define in words. "That puts us in conflict with every force that tends to destroy, deaden, degrade the human spirit, or to make it act contrary to its nature. We see another crisis approaching; we need recruits. You've been selected.

"This crisis has been growing on us since Napoleon. Europe has gone, and Asia-surrendered to authoritarianism, nonsense like the 'leader principle,' totalitarianism, all the bonds placed on liberty which treat men as so many economic and political units with no importance as individuals. No dignity-do what you're told, believe what you are told and shut your mouth!

Workers, soldiers, breeding units . . . "

"If that were the object of life, the re would have been no point in including consciousness in the scheme at all!"

"This continent," Howe went on, "has been a refuge of freedom, a place where the soul could grow. But the forces that killed enlightenment in the rest of the world are spreading here. Little by little they have whittled away at human liberty and human dignity. A repressive law, a bullying school board, a blind dogma to be accepted under pain of persecution-doctrines that will shackle men and put blinders on their eyes so that they will never regain their lost heritage."

"We need help to fight it."

Huxley stood up. "You can count on us."

Before Joan and Coburn could speak the Senior interposed. "Don't answer yet. Go back to your chambers and think about it. Sleep on it. We'll talk again."

Chapter Eight

"Precept Upon Precept . . ."

Had the place on Mount Shasta been a university and possessed a catalog (which it did not), the courses offered therein might have included the following; TELEPATHY. Basic course required of all students not qualified by examination. Practical instruction up to and including rapport. Prerequisite in all departments. Laboratory.

RATIOCINATION, I, II, III, IV. R.I. Memory. R.II. Perception; clairvoyance, clairaudience, discretion of mass, -time, -and-space, nonmathematical relation, order, and structure, harmonic form and interval. R.III. Dual and parallel thought processes. Detachment. R.IV. Meditation (seminar) AUTOKINETICS. Discrete kinesthesia. Endocrine control with esp. application to the affective senses and to suppression of fatigue, regeneration, transformation (clinical aspects of lycanthropy), sex determination, inversion, autoanaesthesia, rejuvenation.

TELEKINETICS. Life-mass-spacetime continua. Prerequisite; autokinetics. Teleportation and general action at a distance. Projection. Dynamics. Statics. Orientation.

HISTORY. Courses by arrangement. Special discussions of psychometry with reference to telepathic records, and of metempsychosis. Evaluation is a prerequisite for all courses in this department.

HUMAN ESTHETICS. Seminar. Autokinetics and technique of telepathic recording (psychometry) a prerequisite.

HUMAN ETHICS. Seminar. Given concurrently with all other courses. Consult with instructor.

Perhaps some of the value of the instruction would have been lost had it been broken up into disjointed courses as outlined above. In any case the adepts on Mount Shasta could and did instruct in all these subjects. Huxley, Coburn, and Joan Freeman learned from tutors who led them to teach themselves, and they took it as an eel seeks the sea, with a sense of returning home after a long absence.

All three made rapid progress; being possessed of rudimentary perception and some knowledge of telepathy, their instructors could teach them directly. First they learned to control their bodies. They regained the control over each function, each muscle each tissue, each gland, that a man should possess but has largely forgotten-save a few obscure students in the far east.

There was a deep, welling delight in willing the body to obey and having it comply. They became intimately aware of their bodies, but their bodies no longer tyrannized them. Fatigue, hunger, cold, pain-these things no longer drove them, but rather were simply useful signals that a good engine needed attention.

Nor did the engine need as much attention as before; the body was driven by a mind that knew precisely both the capacity and its limitations. Furthermore, through understanding their bodies, they were enabled to increase those capacities to their full potential. A week of sustained activity, without rest, or food, or water, was as easy as a morning's work had been. As for.mental labor, it did not cease at all, save when they willed it-despite sleep, digestive languor, ennui, external stimuli, or muscular activity.

The greatest delight was levitation.

To fly through the air, to hang suspended in the quiet heart of a cloud, to sleep, like Mohamet, floating between ceiling and floor-these were sensuous delights unexpected, and never before experienced, except in dreams, dimly. Joan in particular drank this new joy with lusty abandon.

Once she remained away two days, never setting foot to ground, sharing the sky and wind and swallow, the icy air of the heights smoothing her bright body. She dove and soared, looped and spiralled, and dropped, a dead weight, knees drawn up to forehead, from stratosphere to treetop.

During the night she paced a transcontinental plane, flying unseen above it for a thousand miles. When she grew bored with this, she pressed her face for a moment against the one lighted port of the plane, and looked inside. The startled wholesale merchant who stared back into her eyes thought that he had been vouchsafed a glimpse of an angel. He went promtly from the airport of his destination to the office of his lawyer, who drew up for him a will establishing scholarships for divinity students.

Huxley found it difficult to learn to levitate. His inquiring mind demanded a reason why the will should apparently be able to set at naught the inexorable "law" of gravitation, and his doubt dissipated his volition. His tutor reasoned with him patiently.

"You know that intangible will can affect the course of mass in the continuum; you experience it whenever you move your hand. Are you powerless to move your hand because you can not give a full rational explanation of the mystery? Life has power to affect matter; you know that-you have experienced it directly. It is a fact. Now there is no 'why' about any fact in the unlimited sense in which you ask the question. There it stands, serene, demonstrating itself.

One may observe relations between facts, the relations being other facts, but to pursue those relations back to final meanings is not possible to a mind which is itself relative. First you tell me why you are . . .then I will tell you why levitation is possible.

"Now come," he continued, "place yourself in rapport with me, and try to feel how I do, as I levitate."

Phil tried again. "I don't get it," he concluded miserably.

"Look down."

Phil did so, gasped, and fell three feet to the floor. That night he joined Ben and Joan in a flight over the High Sierras.

Their tutor enjoyed with quiet amusement the zest with which they entered into the sport made possible by the newly acquired mastery of their bodies. He knew that their pleasure was natural and healthy, suited to their stage of development, and he knew that they would soon learn, of themselves, its relative worth, and then be ready to turn their minds to more serious work.

"Oh, no. Brother Junipero wasn't the only man to stumble on the records," Charles assured them, talking as he painted. "You must have noticed how high places have significance in the religions of every race. Some of them must be repositories of the ancient records."

"Don't you know for certain?" asked Phil.

"Indeed yes, in many cases-Alta Himalaya, for example. I was speaking of what an intelligent man might infer from matters of common knowledge. Consider how many mountains are of prime importance in as many different religions. Mount Olympus, Popocatepetl, Mauna.Loa, Everest, Sinai, Tai Shan, Ararat, Fujiyama, several places in the Andes. And in every religion there are accounts of a teacher bringing back inspired messages from high places-Gautama, Jesus, Joseph Smith, Confucius, Moses. They all come down from high places and tell stories of creation, and downfall, and redemption.

"Of all the old accounts the best is found in Genesis. Making allowance for the fact that it was first written in the language of uncivilized nomads, it is an exact, careful account."

Huxley poked Coburn in the ribs. "How do you like that, my skeptical friend?" Then to Charles, "Ben has been a devout atheist since he first found out that Santa Claus wore false whiskers; it hurts him to have his fondest doubts overturned."

Coburn grinned, unperturbed. "Take it easy, son, I can express my own doubts, unassisted.

You've brought to mind another matter, Charles. Some of these mountains don't seem old enough to have been used for the ancient records-Shasta, for example. It's volcanic and seems a little new for the purpose.

Charles went rapidly ahead with his painting as he replied. "You are right. It seems likely that Orab made copies of the original record which he found, and placed the copies with his supplement on several hiding places around the globe. And it is possible that others after Orab, but long before our time, read the records and moved them for safekeeping. The copy that Junipero Serra found may have been here a mere twenty thousand years, or so."

Chapter Nine

Fledglings Fly

"We could hang around here for fifty years, learning new things, but in the mean time we wouldn't be getting anywhere. I, for one, am ready to go back." Phil crushed out a cigaret and looked around at his two friends.

Coburn pursed his lips and slowly nodded his head. "I feel the same way, Phil. There is no limit to what we could learn here, of course, but there comes a time when you just have to use some of the things you learn, or it just boils up inside. I think we had better tell the Senior, and get about doing it."

Joan nodded vigorously. "Uh huh. I think so, too. There's work to be done, and the place to do it is Western U.-not up here in NeverNever land. Boy, I can hardly wait to see old Brinckley's face when we get through with him!"

Huxley sought out the mind of Ephraim Howe. The other two waited for him to confer, courteously refraining from attempting to enter the telepathic conversation. "He says he had been expecting to hear from us, and that he intends to make it a full conference. He'll meet us here."

"Full conference? Everybody on the mountain?"

"Everybody-on the mountain, or not. I gather it's customary when new members decide what their work will be."

"Whew!" exclaimed Joan, "that gives me stage fright just to think about it. Who's going to speak for us? It won't be little Joan."

"How about you, Ben?"

"Well. . . if you wish."

"Take over."

They meshed into rapport. As long as they remained so, Ben's voice would express the combined thought of the trio. Ephraim Howe entered alone but they were aware that he was in rapport with, and spokesman for, not only the adepts on the mountainside, but also the two-hundred- odd full-geniuses scattered about the country.

The conference commenced with direct mind-to- mind exchange: -"We feel that it is time we were at work. We have not learned all that there is to learn, it is true; ne vertheless, we need to use our present knowledge."

-"That is well and entirely as it should be, Benjamin. You have learned all that we can teach you at this time. Now you must take what you have learned out into the world, and use it, in order that knowledge may mature into wisdom."

-"Not only for that reason do we wish to leave, but for another more urgent. As you yourself have taught us, the crisis approaches. We want to fight it"

-"How do you propose to fight the forces bringing on the crisis?"

-"Well . . ." Ben did not use the word, but the delay in his thought produced the impression.

"As we see it, in order to make men free, free so that they may develop as men and not as.animals; it is necessary that we undo what the Young Men did. The Young Men refused to permit any but their own select few to share in the racial heritage of ancient knowledge. For men again to become free and strong and independent it is necessary to return to each man his ancient knowledge and his ancient powers."

-"That is true; what do you intend to do about it?"

-"We will go out and tell about it. We all three are in the educational system; we can make ourselves heard-I, in the medical school at Western; Phil and Joan in the department of psychology. With the training you have given us we can overturn the traditional ideas in short order. We can start a renaissance in education that will prepare the way for everyone to receive the wisdom that you, our elders, can offer them."

-"Do you think that it will be as simple as that?"

-"Why not? Oh, we don't expect it to be simple. We know that we will run head on into some of the most cherished misconceptions of everyone, but we can use that very fact to help. It will be spectacular; we can get publicity through it that will call attention to our work. You have taught us enough that we can prove that we are right. For example-suppose we put on a public demonstration of levitation, and proved before thousands of people that human mind could do the things we know it can? Suppose we said that anyone could learn such things who first learned the techniques of telepathy? Why, in a year, or two, the whole nation could be taught telepathy, and be ready for the reading of the records, and all that that implies!"

Howe's mind was silent for several long minutes-no message reached them. The three stirred uneasily under his thoughtful, sober gaze. Finally,-"If it were as simple as that, would we not have done it before?"

It was the turn of the three to be silent. Howe continued kindly,-"Speak up, my children.

Do not be afraid. Tell us your thoughts freely. You will not offend us.

The thought that Coburn sent in answer was hesitant-"If is difficult . . . Many of you are very old, and we know that all of you are wise.

Nevertheless, it seems to us, in our youth, that you have waited overly long in acting. We feel-we feel that you have allowed the pursuit of understanding to son your will to action. From our standpoint, you have waited from year to year, perfecting an organization that will never be perfected, while the storm that overturns the world is gathering its force."

The elders pondered before Ephraim Howe answered.-"It may be that you are right, dearly beloved children, yet it does not seem so to us. We have not attempted to place the ancient knowledge in the hands of all men because few are ready for it. It is no more safe in childish minds than matches in childish hands.

-"And yet . . . you may be right. Mark Twain thought so, and was given permission to tell all that he had learned. He did so, writing so that anyone ready for the knowledge could understand. No one did. In desperation he set forth specifically how to become telepathic. Still no one took him seriously. The more seriously he spoke, the more his readers laughed. He died embittered.

-"We would not have you believe that we have done nothing. This republic, with its uncommon emphasis on personal freedom and human dignity, would not have endured as long as it has had we not helped. We chose Lincoln. Oliver Wendell Holmes was one of us. Walt Whitman was our beloved brother. In a thousand ways we have supplied help, when needed, to avert a setback toward slavery and darkness."

The thought paused, then continued.-"Yet each must act as he sees it. It is still your decision to do this?".Ben spoke aloud, in a steady voice, "It is!"

-"So let it be! Do you remember the history of Salem?"

-"Salem? Where the witchcraft trials were held? ... Do you mean to warn us that we may be persecuted as witches?"

-"No. There are no laws against witchcraft today, of course. It would be better if there were. We hold no monopoly on the power of knowledge; do not expect an easy victory. Beware of those who hold, some portion of the ancient knowledge and use it to a base purpose-witches -black magicians!"

The conference concluded and rapport loosed, Ephraim Howe shook hands solemnly all around and bade them goodby.

"I envy you kids," he said, "going off like Jack the Giant Killer to tackle the whole educatio nal system. You've got your work cut out for you. Do you remember what Mark Twain said? 'God made an idiot for practice, then he made a school board.' Still, I'd like to come along."

"Why don't you, sir?"

"Eh? No, 'twouldn't do. I don't really believe in your plan. F'r instance-it was frequently a temptation during the years I spent peddlin' hardware in the State of Maine to show people better ways of doing things. But I didn't do it; people are used to paring knives and ice cream freezers, and they won't thank you to show them how to get along without them, just by the power of the mind. Not all at once, anyhow. They'd read you out of meetin'-and lynch you, too, most probably.

"Still, I'll be keeping an eye on you."

Joan reached up and kissed him goodbye. They left.

Chapter Ten

Lions Mouth

PHIL PICKED HIS LARGEST CLASS to make the demonstration which was to get the newspapers interested in them.

They had played safe to the extent of getting back to Los Angeles and started with the fall semester before giving anyone cause to suspect that they possessed powers out of ordinary. Joan had been bound over not to levitate, not to indulge in practical jokes involving control over inanimate objects, not to startle strangers with weird abilities of any sort. She had accepted the injunctions meekly, so meekly that Coburn claimed to be worried.

"It's not normal," he objected. "She can't grow up as fast as all that. Let me see your tongue, my dear."

'Pooh," she answered, displaying that member in a most undiagnostic manner, "Master Ling said I was further advanced along the Way than either one of you."

"The heathen Chinee is peculiar. He was probably just encouraging you to grow up.

Seriously, Phil, hadn't we better put her into a deep hypnosis and scoot her back up the mountain for diagnosis and readjustment?"

"Ben Coburn, you cast an eye in my direction and I'll bung it out!"

Phil built up to his key demonstration with care. His lectures were sufficiently innocuous that he could afford to have his head of department drop in without fear of reprimand or interference.

But the combined effect was to prepare the students emotionally for what was to come.

Carefully selected assignments for collateral reading heightened his chances.

"Hypnosis is a subject but vaguely understood," he began his lecture on the selected day, "and formerly classed with witchcraft, magic, and so forth, as silly superstition. But it is a commonplace thing today and easily demonstrated. Consequently the most conservative psychologists must recognize its existence and try to observe its characteristics." He went on cheerfully uttering bromides and commonplaces, while he sized up the emotional attitude of the class.

When he felt that they were ready to accept the ordinary phenomena of hypnosis without surprise, he called Joan, who had attended for the purpose, up to the front of the room. She went easily into a state of light hypnosis. They ran quickly through the small change of hypnotic phenomena-catalepsy, compulsion, posthypnotic suggestion-while he kept up a running chatter about the relation between the minds of the operator and the subject, the possibility of direct telepathic control, the Rhine experiments, and similar matters, orthodox in themselves, but close to the borderline of heterodox thought.

Then he offered to attempt to reach the mind of the subject telepathically.

Each student was invited to write something on a slip of paper. A volunteer floor committee collected the slips, and handed them to Huxley one at a time. He solemnly went through the hocus-pocus of glancing at each one, while Joan read them off as his eyes rested on them. She stumbled convincingly once or twice.-"Nice work, kid."-"Thanks, pal. Can't I pep it up a.little?"-"None of your bright ideas. Just keep on as you are. They're eating out of our hands now."

By such easy stages he led them around to the idea that mind and will could exercise control over the body much more complete than that ordinarily encountered. He passed lightly over the tales of Hindu holy men who could lift themselves up into the air and even travel from place to place.

"We have an exceptional opportunity to put such tales to practical test," he told them. "The subject believes fully any statement made by the operator. I shall tell Miss Freeman that she is to exert her will power, and rise up off the floor. It is certain that she will believe that she can do it.

Her will will be in an optimum condition to carry out the order, if it can be done. Miss Freeman!"

"Yes, Mr. Huxley."

"Exert your will. Rise up in the air!"

Joan rose straight up into the air, some six feet-until her head nearly touched the high ceiling.

-"How'm doin,' pal?"

-Swell, kid, you're wowin 'em. Look at 'em stare!"

At that moment Brinkley burst into the room, rage in his eyes.

"Mr. Huxley, you have broken your word to me, and disgraced this university!"

It was some ten minutes after the fiasco ending the demonstration. Huxley faced the president in Brinkley's private office.

"I made you no promise. I have not disgraced the school," Phil answered with equal pugnacity.

"You have indulged in cheap tricks of fake magic to bring your department into disrepute."

"So I'm a faker, am I? You stiff-necked old fossil-explain this one!" Huxley levitated himself until he floated three feet above the rug.

"Explain what?" To Huxley's amazement Brinckley seemed unaware that anything unusual was going on. He continued to stare at the point where Phils head had been. His manner showed nothing but a slight puzzlement and annoyance at Huxley's apparently irrelevant remark.

Was it possible that the doddering old fool was so completely self-deluded that he could not observe anything that ran counter to his own preconceptions even when it happened directly under his eyes? Phil reached out with his mind and attempted to see what went on inside Brinckley's head. He got one of the major surprises of his life. He expected to find the floundering mental processes of near senility; he found cold calculation, keen ability, set in a matrix of pure evil that sickened him.

It was just a glimpse, then he was cast out with a wrench that numbed his brain. Brinckley had discovered his spying and thrown up his defences-the hard defences of a disciplined mind.

Phil dropped back to the floor, and left the room, without a word, nor a backward glance.

From THE WESTERN STUDENT, October 3rd: PSYCH PROF FIRED FOR FRAUD . . . students' accounts varied, but all agreed that it had been a fine show. Fullback 'Buzz' Arnold told your reporter, "I hated to see it happen; Prof Huxley is a nice guy and he certainly.put on a clever skit with some good deadpan acting. I could see how it was done, of course-it was the same the Great Arturo used in his turn at the Orpheum last spring. But I can see Doctor Brinckley's viewpoint; you can't permit monkey shines at a serious center of learning."

President Brinckley gave the STUDENT the following official statement: "It is with real regret that I announce the termination of Mr. Huxley's association with the institution-for the good of the University. Mr. Huxley had been repeatedly warned as to where his steps were leading him. He is a young man of considerable ability. Let us devoutly hope that this experience will serve as a lesson to him in whatever line of endeavor-"

Coburn handed the paper back to Huxley. "You know what happened to me?" he inquired.

"Something new?"

"Invited to resign-No publicity-just a gentle hint. My patients got well too fast; I'd quit using surgery, you know."

"How perfectly stinking!" This from Joan.

"Well," Ben considered, "I don't blame the medical director; Brinckley forced his hand. I guess we underrated the old cuss."

"Rather! Ben, he's every bit as capable as any one of us, and as for his motives-I gag when I think about it."

"And I thought he was just a were-mouse," grieved Joan. "We should have pushed him into the tar pits last spring. I told you to.

What do we do now?"

"Go right ahead." Phil's reply was grim. "Well turn the situation to our own advantage; we've gotten some publicity-we'll use it."

"What's the gag?"

"Levitation again. It's the most spectacular thing we've got for a crowd. Call in the papers, and tell 'em that we will publicly demonstrate levitation at noon tomorrow in Pershing Square."

"Won't the papers fight shy of sticking their necks out on anything that sounds as fishy as that?"

"Probably they would, but here's how we'll handle that: Make the whole thing just a touch screwball and give 'em plenty of funny angles to write up. Then they can treat it as a feature rather than as straight news. The lid's off, Joan-you can do anything you like; the screwier the better. Let's get going, troops-I'll call the News Service. Ben, you and Joan split up the dailies between you."

The reporters were interested, certainly. They were interested in Joan's obvious good looks, cynically amused by Phil's flowing tie and bombastic claims, and seriously impressed by his taste in whiskey. They began to take notice when Coburn courteously poured drinks for them without bothering to touch the bottle.

But when Joan floated around the room while Phil rode a nonexistent bicycle across the ceiling, they balked. "Honest, doc," as one of them put it, "we've got to eat-you don't expect us to go back and tell a city editor anything like this. Come clean; is it the whiskey, or just plain hypnotism?"

"Put it any way you like, gentlemen. Just be sure that you say that we will do it all over again in Pershing Square at noon tomorrow.".Phil's diatribe against Brinckley came as an anticlimax to the demonstration, but the reporters obligingly noted it.

Joan got ready for bed that night with a feeling of vague depression. The exhilaration of entertaining the newspaper boys had worn off. Ben had proposed supper and dancing to mark their last night of private life, but it had not been a success. To start with, they had blown a tire while coming down a steep curve on Beachwood Drive, and Phil's gray sedan had rolled ove r and over. They would have all been seriously injured had it not been for the automatic body control which they possessed.

When Phil examined the wreck, he expressed puzzlement as to its cause. "Those tires were perfectly all right, he maintained. "I had examined them all the way through this morning." But he insisted on continuing with their evening of relaxation.

The floor show seemed dull, the jokes crude and callous after the light, sensitive humor they had learned to enjoy through association with Master Ling. The ponies in the chorus were young and beautiful.

Joan had enjoyed watching them, but she made the mistake of reaching out to touch their minds. The incongruity of the vapid, insensitive spirits she found -almost every instance-added to her malaise.

She was relieved when the floor show ended and Ben asked her to dance. Both of the men were good dancers, especially Coburn, and she fitted herself into his arms contentedly. Her pleasure didn't last; a drunken couple bumped into them repeatedly. The man was quarrelsome, the woman shrilly vitriolic. Joan asked her escorts to take her home.

These things bothered her as she prepared for bed. Joan, who had never known acute physical fear in her life, feared just one thing-the corrosive, dirty emotions of the poor in spirit. Malice, envy, spite, the snide insults of twisted, petty minds; these things could hurt her, just by being in her presence, even if she were not the direct object of the attack. She was not yet sufficiently mature to have acquired a smooth armor of indifference to the opinions of the unworthy.

After a summer in the company of men of good will, the incident with the drunken couple dismayed her. She felt dirtied by the contact. Worse still, she felt an outlander, a stranger in a strange land.

She awakened sometime in the night with the sense of loneliness increased to overwhelming proportions. She was acutely aware of the three-million-odd living beings around her, but the whole city seemed alive only with malignant entities, jealous of her, anxious to drag her down to their own ignoble status. This attack on her spirit, this attempt to despoil the sanctity of her inner being, assumed an almost corporate nature. It seemed to her that it was nibbling at the edges of her mind, snuffling at her defences.

Terrified, she called out to Ben and Phil. There was no answer; her mind could not find them.

The filthy thing that threatened her was aware of her failure; she could feel it leer. In open panic she called to the Senior.

No answer. This time the thing spoke-"That way, too, is closed."

As hysteria claimed her, as her last defences crumbled, she was caught in the arms of a stronger spirit, whose calm, untroubled goodness encysted her against the evil thing that stalked her.

"Ling!" she cried, "Master Ling!" before racking sobs claimed her.

She felt the quiet, reassuring humor of his smile while the fingers of his mind reached out and smoothed away the tensions of her fear. Presently she slept.

His mind stayed with her all through the night, and talked with her, until she awakened..Ben and Phil listened to her account of the previous night with worried faces. "That settles it, Phil decided. "We've been too careless. From now on until this thing is finished, we stay in rapport day and night, awake and asleep. As a matter of fact, I had a bad time of it myself last night, though nothing equal to what happened to Joan."

"So did I, Phil. What happened to you?"

"Nothing very much-just a long series of nightmares in which I kept losing confidence in my ability to do any of the things we learned on Shasta. What about you?"

"Same sort of thing, with variations. I operated all night long, and all of my patients died on the table. Not very pleasant-but something else happened that wasn't a dream. You know I still use an old-fashioned straight-razor; I was shaving away, paying no attention to it, when it jumped in my hand and cut a big gash in my throat. See? It's not entirely healed yet." He indicated a thin red line which ran diagonally down the right side of his neck.

"Why, Ben!" squealed Joan, "you might have been killed."

"That's what I thought," he agreed dryly.

"You know, kids," Phil said slowly, "these things aren't accidental-"

Open up in there!" The order was bawled from the other side of the door. As one mind, their senses of direct perception jumped through solid oak and examined the speaker. Plainclothes did not conceal the profession of the oversize individual waiting there even had they not been able to see the gold shield on his vest. A somewhat smaller, but equally officious, man waited with him.

Ben opened the door and inquired gently, "What do you want?"

The larger man attempted to come in. Coburn did not move.

"I asked you your business."

"Smart guy, eh? I'm from police headquarters. You Huxley?"

No.

"Coburn?" Ben nodded.

"You'll do. That Huxley behind you? Don't either of you ever stay home? Been here all night?"

"No," said Coburn frostily, "not that it is any of your business."

"I'll decide about that. I want to talk to you two. I'm from the bunco squad. What's this game you were giving the boys yesterday?"

"No game, as you call it. Come down to Pershing Square at noon today, and see for yourself."

"You won't be doing anything in Pershing Square today, Bud."

"Why not?"

"Park Commission's orders."

"What authority?"

"Huh?"

"By what act, or ordinance, do they deny the right of private citizens to make peaceful use of a public place? Who is that with you?"

The smaller man identified himself. "Name's Ferguson, D.A.'s office. I want your pal Huxley on a criminal libel complaint. I want you two's witnesses.

Ben's stare became colder, if possible. "Do either of you," he inquired, in gently snubbing tones, "have a warrant?"

They looked at each other and failed to reply. Ben continued, "Then it is hardly profitable to continue this conversation, is it?" and closed the door in their faces..He turned around to his companions and grinned. "Well, they are closing in. Let's see what the papers gave us."

They found just one story. It said nothing about their proposed demonstration, but related that Doctor Brinckley had sworn a complaint charging Phil with criminal libel. "That's the first time I ever heard of four metropolitan papers refusing a juicy news story," was Ben's comment, "what are you going to do about Brinckley's charge?"

"Nothing," Phil told him, "except possibly libel him again. If he goes through with it, it will be a beautiful opportunity to prove our claims in court. Which reminds me-we don't want our plans interfered with today; those bird dogs may be back with warrants most any time. Where'll we hide out?"

On Ben's suggestion they spent the morning buried in the downtown public library. At five minutes to twelve, they flagged a taxi, and rode to Pershing Square.

They stepped out of the cab into the arms of six sturdy policemen.

-"Ben, Phil, how much longer do I have to put up with this?"

-"Steady, kid. Don't get upset."

-"I'm not, but why should we stay pinched when we can duck out anytime?"

-"That's the point; we can escape anytime. We've never been arrested before; let's see what it's like"

They were gathered that night late around the fireplace in Joan's house. Escape had presented no difficulties, but they had waited until an hour when the jail was quiet to prove that stone walls do not a prison make for a person adept in the powers of the mind.

Ben was speaking, "I'd say we had enough data to draw a curve now.' "Which is?"

"You state it."

"All right. We came down from Shasta thinking that all we had to overcome was stupidity, ignorance and a normal amount of human contrariness and cussedness. Now we know better.

Any attempt to place the essentials of the ancient knowledge in the hands of the common people is met by a determined, organized effort to prevent it, and to destroy, or disable the one who tries it."

"It's worse than that," amended Ben, "I spent our rest in the clink looking over the city. I wondered why the district attorney should take such an interest in us, so I took a look into his mind. I found out who his boss was, and took a look at his mind. What I found there interested me so much that I had to run up to the state capital and see what made things tick there. That took me back to Spring Street and the financial district. Believe it or not, from there I had to look up some of the most sacred cows in the community-clergymen, clubwomen, business leaders, and stuff." He paused.

"Well, what about it? Don't tell me everybody is out of step but Willie-I'll break down and cry."

"No-that was the odd part about it. Nearly all of these heavyweights were good Joes, people you'd like to know. But usually-not always, but usually-the good Joes were dominated by someone they trusted, someone who had helped them to get where they were, and these dominants were not good Joes, to state it gently. I couldn't get into all of their minds, but where I was able to get in, I found the same sort of thing that Phil found in Brinckle y-cold calculated awareness that their power lay in keeping the people in ignorance."

Joan shivered. "That's a sweet picture you paint, Ben-just the right thing for a bedtime story. What's our next move?."What do you suggest?

"Me? I haven't reached any conclusion. Maybe we should take on these tough babies one at a time, and smear em"

"How about you, Phil-?"

"I haven't anything better to offer. We'll have to plan a shrewd campaign, however."

"Well, I do have something to suggest myself."

"Let's have it."

"Admit that we blindly took on more than we could handle. Go back to Shasta and ask for help."

"Why, Ben!" Joan's dismay was matched by Phil's unhappy face. Ben went on stubbornly, "Sure, I know it's grovelling, but pride is too expensive and the job is too-"

He broke off when he noticed Joan's expression. "What is it kid?"

"We'll have to make some decision quickly-that is a police car that just stopped out in front."

Ben turned back to Phil. "What'll it be; stay and fight, or go back for reinforcements?"

"Oh, you're right. I've known it ever since I got a look at Brinckley's mind-but I hated to admit it."

The three stepped out into the patio, joined hands, and shot straight up into the air.

Chapter Eleven

"A Little Child Shall Lead Them"

"Welcome home!" Ephraim Howe met them when they landed. "Glad to have you back." He led them into his own private apartment. "Rest yourselves while I stir up the fire a mite." He chucked a wedge of pinewood into the wide grate, pulled his homely old rocking chair around so that it faced the fire and his guests, and settled down. "Now suppose you tell me all about it. No, I'm not hooked in with the others-you can make a full report to the council when you're ready."

"As a matter of fact, don't you already know everything that happened to us, Mr. Howe?"

Phil looked directly at the Senior as he spoke.

"No, I truly don't. We let you go at it your own way, with Ling keeping an eye out to see that you didn't get hurt. He has made no report to me."

"Very well, sir." They took turns telling him all that had happened to them, occasionally letting him see directly through their minds the events they had taken part in.

When they were through Howe gave them his quizzical smile and inquired, "So you've come around to the viewpoint of the council?"

"No, sir!" It was Phil who answered him. "We are more convinced of the need for positive, immediate action than we were when we left-but we are convinced, too, that we aren't strong enough nor wise enough to handle it alone. We've come back to ask for help, and to urge the council to abandon its policy of teaching only those who show that they are ready, and, instead, to reach out and teach as many minds as can accept your teachings.

"You see, sir, our antagonists don't wait. They are active all the time. They've won in Asia, they are in the ascendancy in Europe, they may win here in America, while we wait for an opportunity."

"Have you any method to suggest for tackling the problem?"

"No, that's why we came back. When we tried to teach others what we knew, we were stopped."

"That's the rub," Howe agreed. "I've been pretty much of your opinion for a good many years, but it is hard to do. What we have to give can't be printed in a book, nor broadcast over the air.

It must be passed directly from mind to mind, wherever we find a mind ready to receive it."

They finished the discussion without finding a solution. Howe told them not to worry. "Go along," he said, "and spend a few weeks in meditation and rapport. When you get an idea that looks as if it might work, bring it in and we'll call the council together to consider it."

"But, Senior," Joan protested for the trio, "you see-Well, we had hoped to have the advice of the council in working out a plan. We don't know where to start, else we wouldn't have come back."

He shook his head. "You are the newest of the brethren, the youngest, the least experienced.

Those are your virtues, not your disabilities. The very fact that you have not spent years of this.life in thinking in terms of eons and races gives you an advantage. Too broad a viewpoint, too philosophical an outlook paralyzes the will. I want you three to consider it alone."

They did as he asked. For weeks they discussed it; in rapport as a single mind, hammered at it in spoken conversation, meditated its ramifications. They roamed the nation with their minds, examining the human spirits that lay behind political and social action. With the aid of the archives they learned the techniques by which the brotherhood of adepts had interceded in the past when freedom of thought and action in America had been threatened. They proposed and rejected dozens of schemes.

"We should go into politics," Phil told the other two, "as our brothers did in the past. If we had a Secretary of Education, appointed from among the elders, he could found a national academy in which freedom of thought would really prevail, and it could be the source from which the ancient knowledge could spread."

Joan put in an objection.

"Suppose you lose the election?"

"Huh?"

"Even with all the special powers that the adepts have, it 'ud be quite a chore to line up delegates for a national convention to get our candidate nominated, then get him elected in the face of all the political machines, pressure groups, newspapers, favorite sons, et cetera, et cetera, et cetera.

"And remember this, the opposition can fight as dirty as it pleases, but we have to fight fair, or we defeat our own aims."

Ben nodded. "I am afraid she is right, Phil. But you are absolutely right in one thing, this is a problem of education." He stopped to meditate, his mind turned inward.

Presently he resumed. "I wonder if we have been tackling this job from the right end? We've been thinking of reeducating adults, already set in their ways. How about the children? They haven't crystallized, wouldn't they be easier to teach?"

Joan sat up, her eyes bright. "Ben, you've got it!"

Phil shook his head doggedly. "No. I hate to throw cold water, but there is no way to go about it. Children are constantly in the care of adults; we couldn't get to them. Don't think for a moment that you could get past local school boards; they are the tightest little oligarchies in the whole political system."

They were sitting in a group of pine trees on the lower slopes of Mount Shasta. A little group of human figures came into view below them and climbed steadily toward the spot where the three rested. The discussion was suspended until the group moved beyond earshot. The trio watched them with casual, friendly interest.

They were all boys, ten to fifteen years old, except the leader, who bore his sixteen years with the serious dignity befitting one who is responsible for the safety and wellbeing of younger charges. They were dressed in khaki shorts and shirts, campaign hats, neckerchiefs embroidered with a conifer and the insignia ALPINE PATROL, TROOP I. Each carried a staff and a knapsack.

As the procession came abreast of the adults, the patrol leader gave them a wave in greeting, the merit badges on his sleeve flashing in the sun. The three waved back and watched them trudge out of sight up the slope..Phil watched them with a faraway look. "Those were the good old days," he said, "I almost envy them."

"Were you one?" Ben said, his eyes still on the boys. "I remember how proud I was the day I got my merit badge in first aid."

"Born to be a doctor, eh, Ben?" commented Joan, her eyes maternal, approving. "I didn't-say!"

"What's up?"

"Phil! That's your answer! That's how to reach the children in spite of parents and school boards."

She snapped into telepathic contact, her ideas spilling excitedly into their minds. They went into rapport and ironed out the details. After a time Ben nodded and spoke aloud.

"It might work," he said, "let's go back and talk it over with Ephraim."

"Senator Moulton, these are the young people I was telling you about." Almost in awe, Joan looked at the face of the little white-haired, old man whose name had become a synonym for integrity. She felt the same impulse to fold her hands across her middle and bow which Master Ling inspired. She noted that Ben and Phil were having trouble not to seem gawky and coltish.

Ephraim Howe continued, "I have gone into their scheme and I think it is practical. If you do too, the council will go ahead with it. But it largely depends on you.

The Senator took them to himself with a smile, the smile that had softened the hearts of two generations of hard politicians. "Tell me about it," he invited.

They did so-how they had tried and failed at Western University, how they had cudgeled their brains for a way, how a party of boys on a hike up the mountain had given them an inspiration. "You see Senator, if we could just get enough boys up here all at once, boys too young to have been corrupted by their environment, and already trained, as these boys are, in the ideals of the ancients-human dignity, helpfulness, self-reliance, kindness, all those things set forth in their code-if we could get even five thousand such boys up here all at once, we could train them in telepathy, and how to impart telepathy to others.

"Once they were taught, and sent back to their homes, each one would be a center for spreading the knowledge. The antagonists could never stop it; it would be too wide spread, epidemic. In a few years every child in the country would be telepathic, and they would even teach their elders-those that haven't grown too calloused to learn.

"And once a human being is telepathic, we can lead him along the path of the ancient wisdom!"

Moulton was nodding, and talking to himself. "Yes. Yes indeed. It could be done.

Fortunately Shasta is a national park. Let me see, who is on that committee? It would take a joint resolution and a small appropriation. Ephraim, old friend, I am afraid I shall have to practice a little logrolling to accomplish this, will you forgive me?"

Howe grinned broadly.

"Oh, I mean it," Moulton continued, "people are so cynical, so harsh, about political expediency-even some of our brothers. Let me see, this will take about two years, I think, before the first camp can be held-"

"As long as that?" Joan was disappointed.

"Oh, yes, my dear. There are two bills to get before Congress, and much arranging to do to get them passed in the face of a full legislative calendar. There are arrangements to be made with.the railroads and bus companies to give the boys special rates so that they can afford to come.

We must start a publicity campaign to make the idea popular. Then there must be time for as many of our brothers as possible to get into the administration of the movement in order that the camp executives may be liberally interspersed with adepts. Fortunately I am a national trustee of the organization. Yes, I can manage it in two years' time, I believe."

"Good heavens!" protested Phil, "why wouldn't it be more to the point to teleport them here, teach them, and teleport them back?"

"You do not know what you are saying, my son. Can we abolish force by using it? Every step must be voluntary, accomplished by reason and persuasion. Each human being must free himself; freedom cannot be thrust on him. Besides, is two years long to wait to accomplish a job that has been waiting since the Deluge?"

"I'm sorry, sir."

"Do not be. Your youthful impatience has made it possible to do the job at all."

Chapter Twelve

"Ye Shall Know the Truth- "

On the lower slopes of Mount Shasta, down near McCloud, the camp grew up. When the last of the spring snow was still hiding in the deeper gullies and on the north sides of ridges, U.S. Army Quartermaster trucks came lumbering over a road built the previous fall by the army engineers. Pyramid tents were broken out and were staked down in rows on the bosom of a gently rolling alp. Cook shacks, an infirmary, a headquarters building took shape. Camp Mark Twain was changing from blueprint to actuality Senator Moulton, his toga laid aside for breeches leggings, khaki shirt, and a hat marked CAMP DIRECTOR, puttered around the field, encouraging, making decisions for the straw bosses, and searching. ever searching the minds of all who came into or near the camp for any purpose. Did anyone suspect? Had anyone slipped in who might be associated with partial adepts who opposed the real purpose of the camp? Too late to let anything slip now-too late and too much at stake.

In the middle west, in the deep south, in New York City and New England, in the mountains and on the coast, boys were packing suitcases, buying special Shasta Camp roundtrip tickets, talking about it with their envious contemporaries.

And all over the country the antagonists of human liberty, of human dignity-the racketeers, the crooked political figures, the shysters, the dealers in phony religions, the sweat-shoppers, the petty authoritarians, all of the key figures among the traffickers in human misery and human oppression, themselves somewhat adept in the arts of the mind and acutely aware of the danger of free knowledge-all of this unholy breed stirred uneasily and wondered what was taking place. Moulton had never been associated with anything but ill for them; Mount Shasta was one place they had never been able to touch-they hated the very name of the place. They recalled old stories, and shivered.

They shivered, but they acted. Special transcontinental buses loaded with the chosen boys-could the driver be corrupted? Could his mind be taken over? Could tires, or engine, be tampered with? Trains were taken over by the youngsters. Could a switch be thrown? Could the drinking water be polluted? Other eyes watched. A trainload of boys moved westward; in it, or flying over it, his direct perception blanketing the surrounding territory, and checking the motives of every mind within miles of his charges, was stationed at least one adept whose single duty it was to see that those boys reached Shasta safely.

Probably some of the boys would never have reached there had not the opponents of human freedom been caught off balance, doubtful, unorganized. For vice has this defect; it cannot be truly intelligent. Its very motives are its weakness. The attempts made to prevent the boys reaching Shasta were scattered and abortive. The adepts had taken the offensive for once, and their moves were faster and more rationally conceived than their antagonists.

Once in camp a tight screen surrounded the whole of Mount Shasta National Park. The Senior detailed adepts to point patrol night and day to watch with every sense at their command.for mean or malignant spirits. The camp itself was purged. Two of the councilors, and some twenty of the boys, were sent home when examination showed them to be damaged souls. The boys were not informed of their deformity, but plausible excuses were found for the necessary action.

The camp resembled superficially a thousand other such camps. The courses in woodcraft were the same. The courts of honor met as usual to examine candidates. There were the usual sings around the campfire in the evening, the same setting-up exercises before breakfast. The slightly greater emphasis on the oath and the law of the organization was not noticeable.

Each one of the boys made at least one overnight hike in the course of the camp. In groups of fifteen or twenty they would set out in the morning in company of a councilor. That each councilor supervising such hikes was an adept was not evident, but it so happened. Each boy carried his blanket roll, and knapsack of rations, his canteen, knife, compass and hand axe.

They camped that night on the bank of a mountain stream, fed by the glaciers, whose rush sounded in their ears as they ate supper.

Phil started out with such a group one morning during the first week of the camp. He worked around the mountain to the east in order to keep well away from the usual tourist haunts.

After supper they sat around the campfire. Phil told them stories of the holy men of the east and their reputed powers, and of Saint Francis and the birds. He was in the middle of one of his yarns when a figure appeared within the circle of firelight.

Or rather figures. They saw an old man, in clothes that Davy Crockett might have worn, flanked by two beasts, on his left side a mountain lion, who purred when he saw the fire, on his right a buck of three points, whose soft brown eyes stared calmly into theirs. Some of the boys were alarmed at first, but Phil told them quietly to widen their circle and make room for the strangers. They sat in decent silence for a while, the boys getting used to the presence of the animals. In time one of the boys timidly stroked the big cat, who responded by rolling over and presenting his soft belly. The boy looked up at the old man and asked, "What is his name, Mister-"

"Ephraim. His name is Freedom."

"My, but he's tame! How do you get him to be so tame?"

"He reads my thoughts and trusts me. Most things are friendly when they know you-and most people."

The boy puzzled for moment. "How can he read your thoughts?"

"It's simple. You can read his, too. Would you like to learn how?"

"Jiminy!"

"Just look into my eyes for a moment. There! Now look into his."

"Why-Why-I really believe I can!"

-"Of course you can. And mine too. I'm not talking out loud. Had you noticed?"

-"Why, so you're not. I'm reading your thoughts!"

-"And I'm reading yours. Easy, isn't it?"

With Phil's help Howe had them all conversing by thought transference inside an hour. Then to calm them down he told them stories for another hour, stories that constituted an important part of their curriculum. He helped Phil get them to sleep, then left, the animals following after him. The next morning Phil was confronted at once by a young sceptic. "Say, did I dream all that about an old man and a puma and a deer?"

-'Did you?"

-"You're doing it now!".-"Certainly I am. And so are you. Now go tell the other boys the same thing."

Before they got back to camp, he advised them not to speak about it to any other of the boys who had not as yet had their overnight hike, but that they test their new powers by trying it on any boy who had had his first all-night hike.

All was well until one of the boys had to return home in answer to a message that his father was ill. The elders would not wipe his mind clean of his new knowledge; instead they kept careful track of him. In time he talked, and the word reached the antagonists almost at once.

Howe ordered the precautions of the telepathic patrol redoubled.

The patrol was able to keep out malicious persons, but it was not numerous enough to keep everything out. Forest fire broke out on the windward side of the camp late one night. No human being had been close to the spot; telekinetics was the evident method.

But what control over matter from a distance can do, it can also undo. Moulton squeezed the flame out with his will, refused it permisson to burn, bade its vibrations to stop.

For the time being the enemy appeared to cease attempts to do the boys physical harm. But the enemy had not given up. Phil received a frantic call from one of the younger boys to come at once to the tent the boy lived in; his patrol leader was very sick. Phil found the lad in a state of hysteria, and being restrained from doing himself an injury by the other boys in the tent. He had tried to cut his throat with his jack knife and had gone berserk when one of the other boys had grabbed his hand.

Phil took in the situation quickly and put in a call to Ben.

-"Ben! Come at once. I need you." Ben did so, zipping through the air and flying in through the door of the tent almost before Phil had time to lay the boy on his cot and start forcing him into a trance. The lad's startled tent mates did not have time to decide that Dr. Ben had been flying before he was standing in a normal fashion alongside their councilor.

Ben greeted him with tight communication, shutting the boys out of the circuit.-"What's up?"

-"They've gotten to him . . . and damn near wrecked him."

-"How?"

-"Preyed on his mind. Tried to make him suicide-But I tranced back the hookup. Who do you think tried to do him in?-Brinckley!"

-"No!"

-"Definitely. You take over here; I'm going after Brinckley. Tell the Senior to have a watch put on all the boys who have been trained to be sensitive to telepathy. I'm afraid that any of them may be gotten at before we can teach them how to defend themselves." With that he was gone, leaving the boys half convinced of levitation.

He had not gone very far, was still gathering speed, when he heard a welcome voice in his head, -"Phil! Phil! Wait for me."

He slowed down for a few seconds. A smaller figure flashed alongside his and grasped his hand. "It's a good thing I stay hooked in with you two. You'd have gone off to tackle that dirty old so-and-so without me."

He tried to maintain his dignity. "If I had thought that you should be along on this job, I'd have called you, Joan."

"Nonsense! And also fiddlesticks! You might get hurt, tackling him all alone. Besides, I'm going to push him into the tar pits."

He sighed and gave up. "Joan, my dear, you are a bloodthirsty wench with ten thousand incarnations to go before you reach beatitude."."I don't want to reach beatitude; I want to do old Brinckley in."

"Come along, then. Let's make some speed."

They were south of the Tehachapi by now and rapidly approaching Los Angeles. They flitted over the Sierra Madre range, shot across San Fernando Valley, clipped the top of Mount Hollywood, and landed on the lawn of the President's Residence at Western University.

Brinckley saw, or felt, them coming and tried to run for it, but Phil grappled with him.

He shot one thought to Joan.-"You stay out of this, kid, unless I yell for help."

Brinckley did not give up easily. His mind reached out and tried to engulf Phil's. Huxley felt himself slipping, giving way before the evil onslaught. It seemed as though he were being dragged down, drowned, in filthy quicksand.

But he steadied himself and fought back.

When Phil had finished that which was immediately necessary with Brinckley, he stood up and wiped his hands, as if to cleanse himself of the spiritual slime he had embraced. "Let's get going," he said to Joan, "we're pushed for time."

"What did you do to him, Phil?" She stared with fascinated disgust at the thing on the ground.

"Little enough. I placed him in stasis. I've got to save him for use-for a time. Up you go, girl. Out of here-before we're noticed."

Up they shot, with Brinckley's body swept along behind by tight telekinetic bond. They stopped above the clouds. Brinckley floated beside them, starfished eyes popping, mouth loose, his smooth pink face expressionless.

-"Ben!" Huxley was sending, "Ephraim Howe! Ambrose! To me! To me! Hurry!"

-"Coming, Phil!" came Coburn's answer.

-"I hear." The strong calm thought held the quality of the Senior. "What is it, son? Tell me."

-"No time!" snapped Phil. "Yourself, Senior, and all others that can. Rendezvous! Hurry!"

-"We come." The thought was still calm, unhurried. But there were two ragged holes in the roof of Moulton's tent. Moulton and Howe were already out of sight of Camp Mark Twain.

Slashing, slicing through the air they came, the handful of adepts who guarded the fire. From five hundred miles to the north they came, racing pigeons hurrying home. Camp councilors, two-thirds of the small group of camp matrons, some few from scattered points on the continent, they came in response to Huxley's call for help and the Senior's unprecedented tocsin. A housewife turned out the fire in the oven and disappeared into the sky. A taxi driver stopped his car and left his fares without a word. Research groups on Shasta broke their tight rapport, abandoned their beloved work, and came-fast!

"And now, Philip?" Howe spoke orally as he arrested his trajectory and hung beside Huxley.

Huxley flung a hand toward Brinckley. "He has what we need to know to strike now! Where's Master Ling?

"He and Mrs. Draper guard the Camp."

"I need him. Can she do it alone?" Clear and mellow, her voice rang in his head from half a state away.

-"I can!"

-"The tortoise flies." The second thought held the quality of deathless merriment which was the unmistakable characteristic of the ancient Chinese..Joan felt a soft touch at her mind, then Master Ling was among them, seated carefully tailor-fashion on nothingness. "I attend; my body follows," he announced. "Can we not proceed?"

Whereupon Joan realized that he had borrowed the faculties of her mind to project himself into their presence more quickly than he could levitate the distance. She felt unreasonably flattered by the attention.

Huxley commenced at once. "Through his mind -" He indicated Brinckley, "I have learned of many others with whom there can be no truce. We must search them out, deal with them at once, before they can rally from what has happened to him. But I need help. Master, will you extend the present and examine him?"

Ling had tutored them in discrimination of time and perception of the present, taught them to stand off and perceive duration from eternity. But he was incredibly more able than his pupils.

He could split the beat of a fly's wing into a thousand discrete instants, or grasp a millenium as a single flash of experience. His discrimination of time and space was bound neither by his metabolic rate nor by his molar dimensions.

Now he poked gingerly at Brinckley's brain like one who seeks a lost jewel in garbage. He felt out the man's memory patterns and viewed his life as one picture. Joan, with amazement, saw his everpresent smile give way to a frown of distaste. His mind had been left open to any who cared to watch. She peered through his mind, then cut off. If there were that many truly vicious spirits in the world she preferred to encounter them one at a time, as necessary, not experience them all at once.

Master Ling's body joined the group, melted into his projection.

Huxley, Howe, Moulton, and Bierce followed the Chinese's delicate work with close attention. Howe's face was bleakly impassive; Moulton's face, aged to androgynous sensitivity, moved from side to side while he clucked disapproval of such wickedness. Bierce looked more like Mark Twain than ever. Twain in an implacable, lowering rage. Master Ling looked up.

"Yes, yes," said Moulton, "I suppose we must act, Ephraim."

"We have no choice," Huxley stated, with a completely unconscious disregard of precedent.

"Will you assign the tasks, Senior?"

Howe glanced sharply at him. "No, Philip. No. Go ahead. Carry on."

Huxley checked himself in surprise for the briefest instant, then took his cue. "You'll help me. Master Ling. Ben!"

"Waiting!" He meshed mind to mind, had Ling show him his opponent and the data he needed.-"Got it? Need any help?"

-"Grandfather Stonebender is enough."

-"Okay. Nip off and attend to it."

-"Chalk it up." He was gone, a rush of air in his wake.

-"This one is yours, Senator Moulton"

-"I know." And Moulton was gone. By ones and twos he gave them their assignments, and off they went to do that which must be done.

There was no argument. Many of them had been aware long before Huxley was that a day of action must inevitably come to pass, but they had waited with quiet serenity, busy with the work at hand, till time should incubate the seed.

In a windowless study of a mansion on Long Island, soundproofed, cleverly locked and guarded, ornately furnished, a group of five was met-three men, one woman, and a thing in a.wheel chair. It glared at the other four in black fury, glared without eyes, for its forehead dropped unbroken to its cheekbones, a smooth sallow expanse.

A lap robe, tucked loosely across the chair masked, but did not hide, the fact that the creature had no legs.

It gripped the arms of the chair. "Must I do all the thinking for you fools?" it asked in a sweet gentle voice. "You, Arthurson-you let Moulton slip that Shasta Bill past the Senate. Moron."

The epithet was uttered caressingly.

Arthurson shifted in his chair. "I examined his mind. The bill was harmless. It was a swap on the Missouri Valley deal. I told you."

"You examined his mind, eh? Hmm-he led you on a personally conducted tour, you fool. A Shasta bill! When will you mindless idiots learn that no good ever came out of Shasta?" It smiled approvingly.

"Well, how was I to know? I thought a camp near the mountain might confuse . . . them. "

"Mindless idiot. The time will come when I will find you dispensable." The thing did not wait for the threat to sink in, but continued, "Enough of that now. We must move to repair the damage. They are on the offensive now. Agnes-"

"Yes." The woman answered.

"Your preaching has got to pick up-"

I've done my best." Not good enough. I've got to have a wave of religious hysteria that will wash out the Bill of Right before the Shasta camp breaks up for the summer. We will have to act fast before that time and we can't be hampered by a lot of legalisms."

"It can't be done."

"Shut up. It can be done. Your temple will receive endowments this week which you are to use for countrywide television hookups. At the proper time you will discover a new messiah."

"Who?"

"Brother Artemis."

"That cornbelt pipsqueak? Where do I come in on this?"

"You'll get yours. But you can't head this movement; the country won't take a woman in the top spot. The two of you will lead a march on Washington and take over. The Sons of '76 will fill out your ranks and do the street fighting. Weems, that's your job.

The man addressed demurred. "It will take three, maybe four months to indoctrinate them."

"You have three weeks. It would be well not to fail."

The last of the three men broke his silence. "What's the hurry. Chief? Seems to me that you are getting yourself in a panic over a few kids."

"I'll be the judge. Now you are to time an epidemic of strikes to tie the country up tight at the time of the march on Washington."

"I'll need some incidents."

"You'll get them. You worry about the unions; I'll take care of the Merchants' and Commerce League myself. You give me one small strike tomorrow. Get your pickets out and I will have four or five of them shot. The publicity will be ready. Agnes, you preach a sermon about it."

"Slanted which way?"

It rolled its nonexistent eyes up to the ceiling.

"Must I think of everything? It's elementary. Use your minds."

The last man to speak laid down his cigar carefully and said, "What's the real rush, Chief?"

"I've told you."."No, you haven't. You've kept your mind closed and haven't let us read your thoughts once.

You've known about the Shasta camp for months. Why this sudden excitement? You aren't slipping, are you? Come on, spill it. You can't expect us to follow if you are slipping."

The eyeless one looked him over carefully. "Hanson," he said, in still sweeter tones, "you have been feeling your size for months. Would you care to match your strength with mine?"

The other looked at his cigar. "I don't mind if I do."

"You will. But not tonight. I haven't time to select and train new lieutenants. Therefore I will tell you what the urgency is. I can't raise Brinckley. He's fallen out of communication.

There is no time-"

"You are correct," said a new voice. "There is no time."

The five jerked puppetlike to face its source. Standing side by side in the study were Ephraim Howe and Joan Freeman.

Howe looked at the thing. "I've waited for this meeting," he said cheerfully, "and I've saved you for myself."

The creature got out of its wheelchair and moved through the air at Howe. Its height and position gave an unpleasant sensation that it walked on invisible legs. Howe signalled to Joan- "It starts. Can you hold the others, my dear?"

-"I think so."

-"Now!" Howe brought to bear everything he had learned in one hundred and thirty busy years, concentrated on the single problem of telekinetic control. He avoided, refused contact with the mind of the evil thing before him and turned his attention to destroying its physical envelope.

The thing stopped.

Slowly, slowly, like a deepsea diver caught in an implosion, like an orange in a squeezer, the spatial limits in which it existed were reduced. A spherical locus in space enclosed it, diminished.

The thing was drawn in and in. The ungrown stumps of its legs folded against its thick torso.

The head ducked down against the chest to escape the unrelenting pressure. For a single instant it gathered its enormous perverted power and fought back. Joan was disconcerted, momentarily nauseated, by the backwash of evil.

But Howe withstood it without change of expression; the sphere shrank again. The eyeless skull split. At once, the sphere shrank to the least possible dimension. A twenty-inch ball hung in the air, a ball whose repulsive superficial details did not invite examination.

Howe held the harmless, disgusting mess in place with a fraction of his mind, and inquired- "Are you all right, my dear?"

-"Yes, Senior. Master Ling helped me once when I needed it."

-"That I anticipated. Now for the others." Speaking aloud he said, "Which do you prefer: To join your leader, or to forget what you know?" He grasped air with his fingers and made a squeezing gesture.

The man with the cigar screamed.

"I take that to be an answer," said Howe. "Very well, Joan, pass them to me, one at a time."

He operated subtly on their minds, smoothing out the patterns of colloidal gradients established by their corporal experience.

A few minutes later the room contained four sane, but infant adults-and a gory mess on the rug..Coburn stepped into a room to which he had not been invited. "School's out, boys," he announced cheerfully. He pointed a finger at one occupant. "That goes for you." Flame crackled from his finger tip, lapped over his adversary. "Yes, and for you." The flames spouted forth a second time. "And for you." A third received his final cleansing.

Brother Artemis, "God's Angry Man," faced the television pick-up. "And if these things be not true," he thundered, "then may the Lord strike me down dead!"

The coroner's verdict of heart failure did not fully account for the charred condition of his remains.

A political rally adjourned early because the principal speaker failed to show up. An anonymous beggar was found collapsed over his pencils and chewing gum. A director of nineteen major corporatons caused his secretary to have hysterics by breaking off in the midst of dictating to converse with the empty air before lapsing into cheerful idiocy. A celebrated stereo and television star disappeared. Obituary stories were hastily dug out and completed for seven members of Congress, several judges, and two governors.

The usual evening sing at Camp Mark Twain took place that night without the presence of Camp Director Moulton. He was attending a full conference of the adepts, assembled all in the flesh for the first time in many years.

Joan looked around as she entered the hall. "Where is Master Ling?" she inquired of Howe.

He studied her face for a moment. For the first time since she had first met him nearly two years before she thought he seemed momentarily at a loss. My dear," he said gently, "you must have realized that Master Ling remained with us, not for his own benefit, but for ours. The crisis for which he waited has been met; the rest of the work we must do alone."

A hand went to her throat. "You-you mean-?"

"He was very old and very weary. He had kept his heart beating, his body functioning, by continuous control for these past forty-odd years."

"But why did he not renew and regenerate?"

"He did not wish it. We could not expect him to remain here indefinitely after he had grown up."

"No." She bit her trembling lip. "No. That is true. We are children and he has other things to do-but-Oh, Ling! Ling! Master Ling!" She buried her head on Howe's shoulder.

-"Why are you weeping, Little Flower?" Her head jerked up.-"Master Ling!"

-"Can that not be which has been? Is there past or future? Have you learned my lessons so poorly? Am I not now with you, as always?"

She felt in the thought the vibrant timeless merriment, the gusto for living which was the hallmark of the gentle Chinese. With a part of her mind she squeezed Howe's hand. "Sorry," she said. "I was wrong." She relaxed as Ling had taught her, let her consciousness flow in the revery which encompasses time in a single deathless now.

Howe, seeing that she was at peace, turned his attention to the meeting.

He reached out with his mind and gathered them together into the telepathic network of full conference..-"I think that you all know why we meet," he thought.-"I have served my time; we enter another and more active period when other qualities than mine are needed. I have called you to consider and pass on my selection of a successor."

Huxley was finding the thought messages curiously difficult to follow. I must be exhausted from the effort, he thought to himself.

But Howe was thinking aloud again.-"So be it; we are agreed." He looked at Huxley.

"Philip, will you accept the trust?"

"What?!!"

"You are Senior now-by common consent"

"But. . . but-I am not ready."

"We think so," answered Howe evenly. "Your talents are needed now. You will grow under responsibility."

-"Chin up, pal!" It was Coburn, in private message.

-"It's all right, Phil." Joan, that time.

For an instant he seemed to hear Ling's dry chuckle, his calm acceptance.

"I will try!" he answered.

On the last day of camp Joan sat with Mrs. Draper on a terrace of the Home on Shasta, overlooking the valley. She sighed. Mrs. Draper looked up from her knitting and smiled. "Are you sad that the camp is over?"

"Oh, no! I'm glad it is."

"What is it, then?"

"I was just thinking . . . we go to all this effort and trouble to put on this camp. Then we have to fight to keep it safe. Tomorrow those boys go home-then they must be watched, each one of them, while they grow strong enough to protect themselves against all the evil things there are still in the world. Next year there will be another crop of boys, and then another, and then another. Isn't there any end to it?"

"Certainly there is an end to it. Don't you remember, in the ancient records, what became of the elders? When we have done what there is for us to do here, we move on to where there is more to do. The human race was not meant to stay here forever."

It still seems endless."

"It does, when you think of it that way, my dear. The way to make it seem short and interesting is to think about what you are going to do next. For example, what are you going to do next?"

"Me?" Joan looked perplexed. Her face cleared, "Why . . . why I'm going to get married!"

"I thought so. " Mrs. Draper's needles clicked away.

Chapter Thirteen

"-and the Truth Shall Make You Free!"

The globe still swung around the sun. The seasons came and the seasons went. The sun still shone on the mountainsides, the hills were green, and the valleys lush. The river sought the bosom of the sea, then rode the cloud, and found the hills as rain. The cattle cropped in the brown plains, the fox stalked the hare through the brush. The tides answered the sway of the moon, and the gulls picked at the wet sand in the wake of the tide. The earth was fair and the earth was full; it teemed with life, swarmed with life, overflowed with life-a stream in spate.

Nowhere was man. Seek the high hills; search him in the plains. Hunt for his spoor in the green jungles; call for him; shout for him. Follow where he has been in the bowels of the earth; plumb the dim deeps of the sea.

Man is gone; his house stands empty; the door open.

A great ape, with a brain too big for his need and a spirit that troubled him, left his tribe and sought the quiet of the high place that lay above the jungle. He climbed it, hour after hour, urged on by a need that he half understood. He reached a resting place, high above the green trees of his home, higher than any of his tribe had ever climbed. There he found a broad flat stone, warm in the sun. He lay down upon it and slept. But his sleep was troubled. He dreamed strange dreams, unlike anything he knew. They woke him and left him with an aching head.

It would be many generations before one of his line could understand what was left there by those who had departed.

Methuselah’s Children

PART ONE

Chapter 1

“Mary Sperling, you’re a fool not to marry him!”

Mary Sperling added up her losses and wrote a check before answering, “There’s too much difference in age.” She passed over her credit voucher. “I shouldn’t gamble with you—sometimes I think you’re a sensitive.”

“Nonsense! You’re just trying to change the subject. You must be nearly thirty… and you won’t be pretty forever.”

Mary smiled wryly. “Don’t I know it!”

“Bork Vanning can’t be much over forty and he’s a plus citizen. You should jump at the chance.”

“You jump at it. I must run now. Service, Ven.”

“Service,” Ven answered, then frowned at the door as it contracted after Mary Sperling. She itched to know why Mary would not marry a prime catch like the Honorable Bork Vanning and was almost as curious as to why and where Mary was going, but the custom of privacy stopped her.

Mary had no intention of letting anyone know where she was going. Outside her friend’s apartment she dropped down a bounce tube to the basement, claimed her car from the robopark, guided it up the ramp and set the controls for North Shore. The car waited for a break in the traffic, then dived into the highspeed stream and hurried north. Mary settled back for a nap.

When its setting was about to run out, the car beeped for instructions; Mary woke up and glanced out. Lake Michigan was a darker band of darkness on her right. She signaled traffic control to let her enter the local traffic lane; it sorted out her car and placed her there, then let her resume manual control. She fumbled in the glove compartment.

The license number which traffic control automatically photographed as she left the controlways was not the number the car had been wearing.

She followed a side road uncontrolled for several miles, turned into a narrow dirt road which led down to the shore, and stopped. There she waited, lights out, and listened. South of her the lights of Chicago glowed; a few hundred yards inland the controlways whined, but here there was nothing but the little timid noises of night creatures. She reached into the glove compartment, snapped a switch; the instrument panel glowed, uncovering other dials behind it. She studied these while making adjustments. Satisfied that no radar watched her and that nothing was moving near her, she snapped off the instruments, sealed the window by her and started up again.

What appeared to be a standard Camden speedster rose quietly up, moved out over the lake, skimming it—dropped into the water and sank. Mary waited until she was a quarter mile off shore in fifty feet of water, then called a station. “Answer,” said a voice.

“‘Life is short—’”

“‘—but the years are long.’”

“ ‘Not,’” Mary responded, “ ‘while the evil days come not.’”

“I sometimes wonder,” the voice answered conversationally. “Okay, Mary. I’ve checked you.”

“Tommy?”

“No-Cecil Hedrick. Are your controls cast loose?”

“Yes. Take over.”

Seventeen minutes later the car surfaced in a pool which occupied much of an artificial cave. When the car was beached, Mary got out, said hello to the guards and went on through a tunnel into a large underground room where fifty or sixty men and women were seated. She chatted until a clock announced midnight, then she mounted a rostrum and faced them.

“I am,” she stated, “one hundred and eighty-three years old. Is there anyone here who is older?”

No one spoke. After a decent wait she went on, “Then in accordance with our customs I declare this meeting opened. Will you choose a moderator?”

Someone said, “Go ahead, Mary.” When no one else spoke up, she said, “Very well.” She seemed indifferent to the honor and the group seemed to share her casual attitude—an air of never any hurry, of freedom from the tension of modern life.

“We are met as usual,” she announced, “to discuss our welfare and that of our sisters and brothers. Does any Family representative have a message from his family? Or does anyone care to speak for himself?”

A man caught her eye and spoke up. “Ira Weatheral, speaking for the Johnson Family. We’ve met nearly two months early. The trustees must have a reason. Let’s hear it.”

She nodded and turned to a prim little man in the first row. “Justin… if you will, please.”

The prim little man stood up and bowed stiffly. Skinny legs stuck out below his badly-cut kilt. He looked and acted like an elderly, dusty civil servant, but his black hair and the firm, healthy tone of his skin said that he was a man in his prime. “Justin Foote,” he said precisely, “reporting for the trustees. It has been eleven years since the Families decided on the experiment of letting the public know that there were, living among them, persons who possessed a probable life expectancy far in excess of that anticipated by the average man, as well as other persons who had proved the scientific truth of such expectation by having lived more than twice the normal life span of human beings."

Although he spoke without notes he sounded as if he were reading aloud a prepared report. What he was saying they all knew but no one hurried him; his audience had none of the febrile impatience so common elsewhere. "In deciding," he droned on, "to reverse the previous longstanding policy of silence and concealment as to the peculiar aspect in which we differ from the balance of the human race, the Families were moved by several considerations. The reason for the original adoption of the policy of concealment should be noted:

"The first offspring resulting from unions assisted by the Howard Foundation were born in 1875. They aroused no comment, for they were in no way remarkable. The Foundation was an openly-chartered nonprofit corporation—"

On March 17, 1874, Ira Johnson, medical student, sat in the law offices of Deems, Wingate, Alden, & Deems and listened to an unusual proposition. At last he interrupted the senior partner. "Just a moment! Do I understand that you are trying to *hire* me to marry one of these women?"

The lawyer looked shocked. "Please, Mr. Johnson. Not at all."

"Well, it certainly sounded like it."

"No, no, such a contract would be void, against public policy. We are simply informing you, as administrators of a trust, that should it come about that you *do* marry one of the young ladies on this list it would then be our pleasant duty to endow each child of such a union according to the scale here set forth. But there would be no contract with us involved, nor is there any 'proposition' being made to you-and we certainly do not urge any course of action on you. We are simply informing you of certain facts."

Ira Johnson scowled and shuffled his feet. "What's it all about? Why?"

"That is the business of the Foundation. One might put it that we approve of your grandparents."

"Have you discussed me with them?" Johnson said sharply. He felt no affection for his grandparents. A tight-fisted foursome—if any one of them had had the grace to die at a reasonable age he would not now be worried about money enough to finish medical school.

"We have talked with them, yes. But not about you."

The lawyer shut off further discussion and young Johnson accepted gracelessly a list of young women, all strangers, with the intention of tearing it up the moment he was outside the office. Instead, that night he wrote seven drafts before he found the right words in which to start cooling off the relation between himself and his girl back home. He was glad that he had never actually popped the question to her—it would have been deucedly awkward.

When he did marry (from the list) it seemed a curious but not too remarkable coincidence that his wife as well as himself had four living, healthy, active grandparents.

“—an openly chartered nonprofit corporation,” Foote continued, “and its avowed purpose of encouraging births among persons of sound American stock was consonant with the customs of that century. By the simple expedient of being close-mouthed about the true purpose of the Foundation no unusual methods of concealment were necessary until late in that period during the World Wars sometimes loosely termed ‘The Crazy Years—’”

Selected headlines April to June 1969:

BABY BILL BREAKS BANK 2-year toddler youngest winner $1,000,000 TV jackpot

White House phones congrats

COURT ORDERS STATEHOUSE SOLD

Colorado Supreme Bench Rules State Old Age Pension Has First Lien

All State Property

N.Y. YOUTH MEET DEMANDS UPPER LIMIT ON FRANCHISE

“U.S. BIRTH RATE ‘TOP SECRET’”—DEFENSE SEC

CAROLINA CONGRESSMAN COPS BEAUTY CROWN

“Available for draft for President” she announces while starting tour to show

her qualifications IOWA RAISES VOTING AGE TO FORTY-ONE

Rioting on Des Moines **Campus EARTH-EATING FAD MOVES WEST: CHICAGO PARSON EATS**

CLAY SANDWICH IN PULPIT “Back to simple things,” he advises flock.

LOS ANGELES HI-SCHOOL MOB DEFIES SCHOOL BOARD “Higher Pay, Shorter Hours, no Homework—We Demand Our Right to

Elect Teachers, Coaches.“

SUICIDE RATE UP NINTH SUCCESSIVE YEAR AEC Denies FallOut to Blame

“ ‘-The Crazy Years.’ The trustees of that date decided-correctly, we now believe—that any minority during that period of semantic disorientation and mass hysteria was a probable target for persecution, discriminatory legislation, and even of mob violence. Furthermore the disturbed financial condition of the country and in particular the forced exchange of trust securities for government warrants threatened the solvency of the trust.

"Two courses of action were adopted: the assets of the Foundation were converted into real wealth and distributed widely among members of the Families to be held by them as owners-of-record; and the so-called 'Masquerade' was adopted as a permanent policy. Means were found to simulate the death of any member of the Families who lived to a socially embarrassing age and to provide him with a new identity in another part of the country.

"The wisdom of this later policy, though irksome to some, became evident at once during the Interregnum of the Prophets. The Families at the beginning of the reign of the First Prophet had ninety-seven per cent of their members with publicly avowed ages of less than fifty years. The close public registration enforced by the secret police of the Prophets made changes of public identity difficult, although a few were accomplished with the aid of the revolutionary Cabal.

"Thus, a combination of luck and foresight saved our secret from public disclosure. This was well—we may be sure that things would have gone harshly at that time for any group possessing a prize beyond the power of the Prophet to confiscate.

"The Families took no part as such in the events leading up to the Second American Revolution, but many members participated and served with credit in the Cabal and in the fighting which preceded the fall of New Jerusalem. We took advantage of the period of disorganization which followed to readjust the ages of our kin who had grown conspicuously old. In this we were aided by certain members of the Families who, as members of the Cabal, held key posts in the Reconstruction.

"It was argued by many at the Families' meeting of 2075, the year of the Covenant, that we should reveal ourselves, since civil liberty was firmly reestablished. The majority did not agree at that time… perhaps through long habits of secrecy and caution. But the renascence of culture in the ensuing fifty years, the steady growth of tolerance and good manners, the semantically sound orientation of education, the increased respect for the custom of privacy and for the dignity of the individual-all of these things led us to believe that the time had at last come when it was becoming safe to reveal ourselves and to take our rightful place as an odd but nonetheless respected minority in society.

"There were compelling reasons to do so. Increasing numbers of us were finding the 'Masquerade' socially intolerable in a new and better society. Not only was it upsetting to pull up roots and seek a new background every few years but also it grated to have to live a lie in a society where frank honesty and fair dealing were habitual with most people. Besides that, the Families as a group had learned many things through our researches in the bio-sciences, things which could be of great benefit to our poor short-lived brethren. We needed freedom to help them.

"These and similar reasons were subject to argument. But the resumption of the custom of positive physical identification made the 'Masquerade' almost untenable. Under the new orientation a sane and peaceful citizen welcomes positive identification under appropriate circumstances even though jealous of his right of privacy at all other times—so we dared not object; it would have aroused curiosity, marked us as an eccentric group, set apart, and thereby have defeated the whole purpose of the 'Masquerade.'

"We necessarily submitted to personal identification. By the time of the meeting of 2125, eleven years ago, it had become extremely difficult to counterfeit new identities for the ever-increasing number of us holding public ages incompatible with personal appearance; we decided on the experiment of letting volunteers from this group up to ten per cent of the total membership of the Families reveal themselves for what they were and observe the consequences, while maintaining all other secrets of the Families' organization.

"The results were regrettably different from our expectations."

Justin Foote stopped talking. The silence had gone on for several moments when a solidly built man of medium height spoke up. His hair was slightly grizzled—unusual in that group—and his face looked space tanned. Mary Sperling had noticed him and had wondered who he was-his live face and gusty laugh had interested her. But any member was free to attend the conclaves of the Families' council; she had thought no more of it.

He said, "Speak up, Bud. What's your report?"

Foote made his answer to the chair. "Our senior psychometrician should give the balance of the report. My remarks were prefatory."

"For the love o'—" the grizzled stranger exclaimed. "Bud, do you mean to stand there and admit that all you had to say were things we already knew?"

"My remarks were a foundation… and my name is Justin Foote, not 'Bud.'"

Mary Sperling broke in firmly. "Brother," she said to the stranger, "since you are addressing the Families, will you please name yourself? I am sorry to say that I do not recognize you."

"Sorry, Sister. Lazarus Long, speaking for myself."

Mary shook her head. "I still don't place you."

"Sorry again-that's a 'Masquerade' name I took at the time of the First Prophet… it tickled me. My Family name is Smith… Woodrow Wilson Smith."

" 'Woodrow Wilson Sm—' *How old are you*?"

"Eh? Why, I haven't figured it lately. One hun… no, two hundred and —thirteen years. Yeah, that's right, two hundred and thirteen."

There was a sudden, complete silence. Then Mary said quietly, "Did you hear me inquire for anyone older than myself?"

"Yes. But shucks, Sister, you were doing all right. I ain't attended a meeting of the Families in over a century. Been some changes."

"I'll ask you to carry on from here." She started to leave the platform.

"Oh no!" he protested. But she paid no attention and found a seat. He looked around, shrugged and gave in. Sprawling one hip over a corner of the speaker's table he announced, "All right, let's get on with it. Who's next?"

Ralph Schultz of the Schultz Family looked more like a banker than a psychometrician. He was neither shy nor absentminded and he had a flat, underemphasized way of talking that carried authority. "I was part of the group that proposed ending the 'Masquerade.' I was wrong. I believed that the great majority of our fellow citizens, reared under modern educational methods, could evaluate any data without excessive emotional disturbance. I anticipated that a few abnormal people would dislike us, even hate us; I even predicted that most people would envy us—everybody who enjoys life would like to live a long time. But I did not anticipate any serious trouble. Modern attitudes have done away with interracial friction; any who still harbor race prejudice are ashamed to voice it. I believed that our society was so tolerant that we could live peacefully and openly with the short-lived.

"I was wrong.

"The Negro hated and envied the white man as long as the white man enjoyed privileges forbidden the Negro by reason of color. This was a sane, normal reaction. When discrimination was removed, the problem solved itself and cultural assimilation took place. There is a similar tendency on the part of the short-lived to envy the long-lived. We assumed that this expected reaction would be of no social importance in most people once it was made clear that we owe our peculiarity to our genes—no fault nor virtue of our own, just good luck in our ancestry.

"This was mere wishful thinking. By hindsight it is easy to see that correct application of mathematical analysis to the data would have given a different answer, would have spotlighted the false analogy. I do not defend the misjudgment, no defense is possible. We were led astray by our hopes.

"What actually happened was this: we showed our short-lived cousins the greatest boon it is possible for a man to imagine… then we told them it could never be theirs. This faced them with an unsolvable dilemma. They have rejected the unbearable facts, they refuse to believe us. Their envy now turns to hate, with an emotional conviction that we are depriving them of their rights… deliberately, maliciously.

“That rising hate has now swelled into a flood which threatens the welfare and even the lines of all our revealed brethren… and which is potentially as dangerous to the rest of us. The danger is very great and very pressing.” He sat down abruptly.

They took it calmly, with the unhurried habit of years. Presently a female delegate stood up. “Eve Barstow, for the Cooper Family. Ralph Schultz, I am a hundred and nineteen years old, older, I believe, than you are. I do not have your talent for mathematics and human behavior but I have known a lot of people. Human beings are inherently good and gentle and kind. Oh, they have their weaknesses but most of them are decent enough if you give them half a chance. I cannot believe that they would hate me and destroy me simply because I have lived a long time. What have you to go on? You admit one mistake—why not two?”

Schultz looked at her soberly and smoothed his kilt. “You’re right, Eve. I could easily be wrong again. That’s the trouble with psychology; it is a subject so terribly complex, so many unknowns, such involved relationships, that our best efforts sometimes look silly in the bleak light of later facts.” He stood up again, faced the others, and again spoke with flat authority. “But I am not making a long-range prediction this time; I am talking about facts, no guesses, not wishful thinking—and with those facts a prediction so short-range that it is like predicting that an egg will break when you see it already on its way to the floor. But Eve is right… as far as she went. Individuals *are* kind and decent… as individuals and to other individuals. Eve is in no danger from her neighbors and friends, and I am in no danger from mine. But she is in danger from *my* neighbors and friends—and I from hers. Mass psychology is not simply a summation of individual psychologies; that is a prime theorem of social psychodynamics-not just my opinion; no exception has ever been found to this theorem. It is the social massaction rule, the mob-hysteria law, known and used by military, political, and religious leaders, by advertising men and prophets and propagandists, by rabble rousers and actors and gang leaders, for generations before it was formulated in mathematical symbols. It works. It is working now.

“My colleagues and I began to suspect that a mob-hysteria trend was building up against us several years ago. We did not bring our suspicions to the council for action because we could not prove anything. What we observed then could have been simply the mutterings of the crackpot minority present in even the healthiest society. The trend was at first so minor that we could not be sure it existed, for all social trends are intermixed with other social trends, snarled together like a plate of spaghetti-worse than that, for it takes an abstract topological space of many dimensions (ten or twelve are not uncommon and hardly adequate) to describe mathematically the interplay of social forces. I cannot overemphasize the complexity of the problem.

“So we waited and worried and tried statistical sampling, setting up our statistical universes with great care.

“By the time we were sure, it was almost too late. Sociopsychological trends grow or die by a ‘yeast growth’ law, a complex power law. We continued to hope that other favorable factors would reverse the trend—Nelson’s work in symbiotics, our own contributions to geriatrics, the great public interest in the opening of the Jovian satellites to immigration. Any major breakthrough offering longer life and greater hope to the short-lived could end the smouldering resentment against us.

“Instead the smouldering has burst into flame, into an uncontrolled forest fire. As nearly as we can measure it, the rate has doubled in the past thirty-seven days and the rate itself is accelerated. I can’t guess how far or how fast it will go-and that’s why we asked for this emergency session. Because we can expect trouble at any moment.” He sat down hard, looking tired.

Eve did not argue with him again and no one else argued with him at all; not only was Ralph Schultz considered expert in his own field but also every one of them, each from his own viewpoint, had seen the grosser aspects of the trend building up against their revealed kin. But, while the acceptance of the problem was unanimous, there were as many opinions about what to do about it as there were people present. Lazarus let the discussion muddle along for two hours before he held up a hand. “We aren’t getting anywhere,” he stated, “and it looks like we won’t get anywhere tonight. Let’s take an overall look at it, hitting just the high spots:

“We can—” He started ticking plans ofi on his fingers-“do nothing, sit tight, and see what happens.

“We can junk the ‘Masquerade’ entirely, reveal our full numbers, and demand our rights politically.

“We can sit tight on the surface and use our organization and money to protect our revealed brethren, maybe haul ‘em back into the ’Masquerade.‘

“We can reveal ourselves and ask for a place to colonize where we can live by ourselves.

“Or we can do something else. I suggest that you sort yourselves out according to those four major points of view-say in the corners of the room, starting clockwise in that far right hand corner—each group hammer out a plan and get it ready to submit to the Families. And those of you who don't favor any of those four things gather in the middle of the room and start scrappin' over just what it is you do think. Now, if I hear no objection, I am going to declare this lodge recessed until midnight tomorrow night. How about it?"

No one spoke up. Lazarus Long's streamlined version of parliamentary procedure had them somewhat startled; they were used to long, leisurely discussions until it became evident that one point of view had become unanimous. Doing things in a hurry was slightly shocking.

But the man's personality was powerful, his years gave him prestige, and his slightly archaic way of speaking added to his patriarchal authority; nobody argued.

"Okay," Lazarus announced, clapping his hands once. "Church is out until tomorrow night." He stepped down from the platform.

Mary Sperling came up to him. "I would like to know you better," she said, looking him in the eyes.

"Sure, Sis. Why not?"

"Are you staying for discussion?"

"No."

"Could you come home with me?"

"Like to. I've'no pressing business elsewhere."

"Come then." She led him through the tunnel to the underground pool connecting with Lake Michigan. He widened his eyes at the pseudo-Camden but said nothing until they were submerged.

"Nice little car you've got."

"Yes."

"Has some unusual features."

She smiled. "Yes. Among other things, it blows up—quite thoroughly—if anyone tries to investigate it."

"Good." He added, "You a designing engineer, Mary?"

"Me? Heavens, no! Not this past century, at least, and I no longer try to keep up with such things. But you can order a car modified the way this one is through the Families, if you want one. Talk to—"

"Never mind, I've no need for one. I just like gadgets that do what they were designed to do and do it quietly and efficiently. Some good skull sweat in this one."

"Yes." She was busy then, surfacing, making a radar check, and getting them back ashore without attracting notice.

When they reached her apartment she put tobacco and drink close to him, then went to her retiring room, threw off her street clothes and put on a soft loose robe that made her look even smaller and younger than she had looked before. When she rejoined Lazarus, he stood up, struck a cigarette for her, then paused as he handed it to her and gave a gallant and indelicate whistle.

She smiled briefly, took the cigarette, and sat down in a large chair, pulling her feet under her. "Lazarus, you reassure me."

"Don't you own a mirror, girl?"

"Not that," she said impatiently. "You yourself. You know that I have passed the reasonable life expectancy of our people—I've been expecting to die, been resigned to it, for the past ten years. Yet there you sit… years and *years* older than I am. You give me hope."

He sat up straight. "You expecting to die? Good grief, girl—you look good for another century."

She made a tired gesture. "Don't try to jolly me. You know that appearance has nothing to do with it. Lazarus, I don't *want* to die!"

Lazarus answered soberly, "I wasn't trying to kid you, Sis. You simply don't look like a candidate for corpse."

She shrugged gracefully. "A matter of biotechniques. I'm holding my appearance at the early thirties."

"Or less, I'd say. I guess I'm not up on the latest dodges, Mary. You heard me say that I had not attended a get-together for more than a century. As a matter of fact I've been completely out of touch with the Families the whole time."

"Really? May I ask why?"

"A long story and a dull one. What it amounts to is that I got bored with them. I used to be a delegate to the annual meetings. But they got stuffy and set in their ways—or so it seemed to me. So I wandered off. I spent the Interregnum on Venus, mostly. I came back for a while after the Covenant was signed but I don't suppose I've spent two years on Earth since then. I like to move around."

Her eyes lit up. "Oh, tell me about it! I've never been out in deep space. Just Luna City, once."

"Sure," he agreed. "Sometime. But I want to hear more about this matter of your appearance. Girl, you sure don't look your age."

"I suppose not. Or, rather, of course I don't. As to how it's done, I can't tell you much. Hormones and symbiotics and gland therapy and some psychotherapy—things like that. What it adds up to is that, for members of the Families, senility is postponed and that senescence can be arrested at least cosmetically." She brooded for a moment. "Once they thought they were on the track of the secret of immortality, the true Fountain of Youth. But it was a mistake. Senility is simply postponed… and shortened. About ninety days from the first clear warning—then death from old age." She shivered. "Of course, most of our cousins don't wait—a couple of weeks to make certain of the diagnosis, then euthanasia."

"The hell you say! Well, I won't go that way. When the Old Boy comes to get me, he'll have to drag me—and I'll be kicking and gouging eyes every step of the way!"

She smiled lopsidedly. "It does me good to hear you talk that way. Lazarus, I wouldn't let my guards down this way with anyone younger than myself. But your example gives me courage."

"We'll outlast the lot of 'em, Mary, never you fear. But about the meeting tonight: I haven't paid any attention to the news and I've only recently come earthside—does this chap Ralph Schultz know what he is talking about?"

"I think he must. His grandfather was a brilliant man and so is his father."

"I take it you know Ralph."

"Slightly. He is one of my grandchildren."

"That's amusing. He looks older than you do."

"Ralph found it suited him to arrest his appearance at about forty, that's all. His father was my twenty-seventh child. Ralph must be—let me see— oh, eighty or ninety years younger than I am, at least. At that, he is older than some of my children."

"You've done well by the Families, Mary."

"I suppose so. But they've done well by me, too. I've enjoyed having children and the trust benefits for my thirty-odd come to quite a lot. I have every luxury one could want." She shivered again. "I suppose that's why I'm in such a funk—I enjoy life."

"Stop it! I thought my sterling example and boyish grin had cured you of that nonsense!"

"Well… you've helped."

"Mmm… look, Mary, why don't you marry again and have some more squally brats? Keep you too busy to fret."

"What? At my age? Now, really, Lazarus!"

"Nothing wrong with your age. You're younger than I am."

She studied him for a moment. "Lazarus, are you proposing a contract? If so, I wish you would speak more plainly."

His mouth opened and he gulped. "Hey, wait a minute! Take it easy! I was speaking in general terms… I'm not the domestic type. Why, every time I've married my wife has grown sick of the sight of me inside of a few years. Not but what I—well, I mean you're a very pretty girl and a man ought to—"

She shut him off by leaning forward and putting a hand over his mouth, while grinning impishly. "I didn't mean to panic you, cousin. Or perhaps I did—men are so funny when they think they are about to be trapped."

"Well—" he said glumly.

"Forget it, dear. Tell me, what plan do you think they will settle on?"

"That bunch tonight?"

"Yes."

"None, of course. They won't get anywhere. Mary, a committee is the only known form of life with a hundred bellies and no brain. But presently somebody with a mind of his own will bulldoze them into accepting his plan. I don't know what it will be."

"Well… what course of action do you favor?"

"Me? Why, none. Mary, if there is any one thing I have learned in the past couple of centuries, it's this: These things *pass*. Wars and depressions and Prophets and Covenants—they pass. The trick is to stay alive through them."

She nodded thoughtfully. "I think you are right."

"Sure I'm right. It takes a hundred years or so to realize just how good life is." He stood up and stretched. "But right now this growing boy could use some sleep."

"Me, too."

Mary's flat was on the top floor, with a sky view. When she had come back to the lounge she had cut the inside lighting and let the ceiling shutters fold back; they had been sitting, save for an invisible sheet of plastic, under the stars. As Lazarus raised his head in stretching, his eye had rested on his favorite constellation. "Odd," he commented. "Orion seems to have added a fourth star to his belt."

She looked up. "That must be the big ship for the Second Centauri Expedition. See if you can see it move."

"Couldn't tell without instruments."

"I suppose not," she agreed. "Clever of them to build it out in space, isn't it?"

"No other way to do it. It's too big to assemble on Earth. I can doss down right here, Mary. Or do you have a spare room?"

"Your room is the second door on the right. Shout if you can't find everything you need." She put her face up and kissed him goodnight, a quick peck. "'Night."

Lazarus followed her and went into his own room.

Mary Sperling woke at her usual hour the next day. She got up quietly to keep from waking Lazarus, ducked into her 'fresher, showered and massaged, swallowed a grain of sleep surrogate to make up for the short night, followed it almost as quickly with all the breakfast she permitted her waistline, then punched for the calls she had not bothered to take the night before. The phone played back several calls which she promptly forgot, then she recognized the voice of Bork Vanning. "'Hello,'" the instrument said. "'Mary, this is Bork, calling at twenty-one o'clock. I'll be by at ten o'clock tomorrow morning, for a dip in the lake and lunch somewhere. Unless I hear from you it’s a date. ‘Bye, my dear. Service.’”

“Service,” she repeated automatically. Drat the man! Couldn’t he take no for an answer? Mary Sperling, you’re slipping!—a quarter your age and yet you can’t seem to handle him.

Call him and leave word that—no, too late; he’d be here any minute. Botherl

Chapter 2

When Lazarus went to bed he stepped out of his kilt and chucked it toward a wardrobe… which snagged it, shook it out, and hung it up neatly. “Nice catch,” he commented, then glanced down at his hairy thighs and smiled wryly; the kilt had concealed a blaster strapped to one thigh, a knife to the other. He was aware of the present gentle custom against personal weapons, but he felt naked without them. Such customs were nonsense anyhow, foolishment from old women—there was no such thing as a “dangerous weapon,” there were only dangerous men.

When he came out of the ‘fresher, he put his weapons where he could reach them before sprawling in sleep.

He came instantly wide awake with a weapon in each hand… then remembered where he was, relaxed, and looked around to see what had wakened him.

It was a murmur of voices through the air duct. Poor soundproofing he decided, and Mkry must be entertaining callers—in which case he should not be slug-a-bed. He got up, refreshed himself, strapped his best friends back on his thighs, and went looking for his hostess.

As the door to the lounge dilated noiselessly in front of him the sound of voices became loud and very interesting. The lounge was el-shaped and he was out of sight; he hung back and listened shamelessly. Eavesdropping had saved his skin on several occasions; it worried him not at all—he enjoyed it.

A man was saying, “Mary, you’re completely unreasonable! You know you’re fond of me, you admit that marriage to me would be to your advantage. So why *won’t* you?”

“I told you, Bork. Age difference.”

“That’s foolish. What do you expect? Adolescent romance? Oh, I admit that I’m not as young as you are… but a woman needs an older man to look up to and keep her steady. I’m not too old for you; I’m just at my prime.”

Lazarus decided that he already knew this chap well enough to dislike him. Sulky voice—

Mary did not answer. The man went on: “Anyhow, I have a surprise for you on that point. I wish I could tell you now, but… well, it’s a state secret.”

“Then don’t tell me. It can’t change my mind in any case, Bork.”

“Oh, but it wouldl Mmm… I *will* tell you-I know *you* can be trusted.”

“Now, Bork, you shouldn’t assume that—”

"It doesn't matter; it will be public knowledge in a few days anyhow. Mary… *I'll never grow old on you*!"

"What do you mean?" Lazarus decided that her tone was suddenly suspicious.

"Just what I said. Mary, they've found the secret of eternal youth!"

"*What*? Who? How? When?"

"Oh, so now you're interested, eh? Well, I won't keep you waiting. You know these old Johnnies that call themselves the Howard Families?"

"Yes… I've heard of them, of course," she admitted slowly. "But what of it? They're fakes."

"Not at all. I *know*. The Administration has been quietly investigating their claims. Some of them are unquestionably more than a hundred years old—and *still young*!"

"That's very hard to believe."

"Nevertheless it's true."

"Well… how do they do it?"

"Ah! That's the point. They claim that it is a simple matter of heredity, that they live a long time because they come from long lived stock. But that's preposterous, scientifically incompatible with the established facts. The Administration checked most carefully and the answer is certain: they have the secret of staying young."

"You can't be sure of that."

"Oh, come, Mary! You're a dear girl but you're questioning the expert opinion of the best scientific brains in the world. Never mind. Here's the part that is confidential. We don't have their secret yet—but we will have it shortly. Without any excitement or public notice, they are to be picked up and questioned. We'll get the secret—and you and I will never grow old! What do you think of *that*? Eh?"

Mary answered very slowly, almost inaudibly, "It would be nice if everyone could live a long time."

"Huh? Yes, I suppose it would. But in any case you and I will receive the treatment, whatever it is. Think about us, dear. Year after year after year of happy, youthful marriage. Not less than a century. Maybe even—"

"Wait a moment, Bork. This 'secret.' It wouldn't be for everybody?"

"Well, now… that's a matter of high policy. Population pressure is a pretty unwieldy problem even now. In practice it might be necessary to restrict it to essential personnel—and their wives. But don't fret your lovely head about it; you and I will have it."

"You mean I'll have it *if* I marry you."

"Mmm… that's a nasty way to put it, Mary. I'd do anything in the world for you that I could-because I *love* you. But it would be utterly simple if you were married to me. So say you will."

“Let’s let that be for the moment. How do you propose to get this ‘secret’ out of them?”

Lazarus could almost hear his wise nod. “Oh, they’ll talk!”

“Do you mean to say you’d send them to Coventry if they didn’t?”

“Coventry? Hm! You don’t understand the situation at all, Mary; this isn’t any minor social offense. This is treason—treason against the whole human race. We’ll use means! Ways that the Prophets used… if they don’t cooperate willingly.”

“Do you mean that? Why, that’s against the Covenant!”

“Covenant be damned! This is a matter of life and death—do you think we’d let a scrap of paper stand in our way? You can’t bother with petty legalities in the fundamental things men live by—not something they will fight to the death for. And that is precisely what this is. These… these dog-in-the-manger scoundrels are trying to keep life itself from us. Do you think we’ll bow to ‘custom’ in an emergency like this?”

Mary answered in a hushed and horrified voice: “Do you really think the Council will violate the Covenant?”

“*Think* so? The Action-in-Council was recorded last night. We authorized the Administrator to use ‘full expediency.’”

Lazarus strained his ears through a long silence. At last Mary spoke. “Bork—”

“Yes, my dear?”

“You’ve got to do something about this. You must stop it.”

“Stop it? You don’t know what you’re saying. I couldn’t… and I would not if I could.”

“But you *must*. You must convince the Council. They’re making a mistake, a tragic mistake. There is nothing to be gained by trying to coerce those poor people. *There is no secret*!”

“What? You’re getting excited, my dear. You’re setting your judgment up against some of the best and wisest men on the planet. Believe me, we know what we are doing. We don’t relish using harsh methods any more than you do, but it’s for the general welfare. Look, I’m sorry I ever brought it up. Naturally you are soft and gentle and warmhearted and I love you for it. Why not marry me and not bother your head about matters of public policy?”

“Marry *you*? Never!”

“Aw, Mary—you’re upset. Give me just one good reason why not?”

“I’ll tell you why! Because J am one of those people you want to persecute!”

There was another pause. “Mary… you’re not well.”

“Not well, am I? I am as well as a person can be at my age. Listen to me, you fool! I have grandsons twice your age. I was here when the First Prophet took over the country. I was here when Harriman launched the first Moon rocket. You weren't even a squalling brat—your *grandparents* hadn't even met, when I was a woman grown and married. And you stand there and glibly propose to push around, even to torture, me and my kind. Marry *you*? I'd rather marry one of my own grandchildren!"

Lazarus shifted his weight and slid his right hand inside the flap of his kilt; he expected trouble at once. You can depend on a woman, he reflected, to blow her top at the wrong moment.

He waited. Bork's answer was cool; the tones of the experienced man of authority replaced those of thwarted passion. "Take it easy, Mary. Sit down, I'll look after you. First I want you to take a sedative. Then I'll get the best psychotherapist in the city—in the whole country. You'll be all right."

"Take your hands off mel"

"Now, Mary…"

Lazarus stepped out into the room and pointed at Vanning with his blaster. "This monkey giving you trouble, Sis?"

Vanning jerked his head around. "Who are you?" he demanded indignantly. "What are you doing here?"

Lazarus still addressed Mary. "Say the word, Sis, and I'll cut him into pieces small enough to hide."

"No, Lazarus," she answered with her voice now under control. "Thanks just the same. Please put your gun away. I wouldn't want anything like that to happen."

"Okay." Lazarus holstered the gun but let his hand rest on the grip.

"Who are you?" repeated Vanning. "What's the meaning of this intrusion?"

"I was just about to ask you that, Bud," Lazarus said mildly, "but we'll let it ride. I'm another one of those old Johnnies you're looking for… like Mary here."

Vanning looked at him keenly. "I wonder—" he said. He looked back at Mary. "It can't be, it's preposterous. Still… it won't hurt to investigate your story. I've plenty to detain you on, in any event, I've never seen a clearer case of antisocial atavism." He moved toward the videophone.

"Better get away from that phone, Bud," Lazarus said quickly, then added to Mary, "I won't touch my gun, Sis. Ill use my knife."

Vanning stopped. "Very well," he said in annoyed tones, "put away that vibroblade. I won't call from here."

"Look again, it ain't a vibroblade. It's steel. Messy."

Vanning turned to Mary Sperling. "I'm leaving. If you are wise, you'll come with me." She shook her head. He looked annoyed, shrugged, and faced Lazarus Long. "As for you, sir, your primitive manners have led you into serious trouble. You will be arrested shortly.”

Lazarus glanced up at the ceiling shutters. “Reminds me of a patron in Venusburg who wanted to have me arrested.”

“Well?”

“I’ve outlived him quite a piece.”

Vanning opened his mouth to answer—then turned suddenly and left so quickly that the outer door barely had time to clear the end of his nose. As the door snapped closed Lazarus said musingly, “Hardest man to reason with I’ve met in years. I’ll bet he never used an unsterilized spoon in his life.”

Mary looked startled, then giggled. He turned toward her. “Glad to see you sounding perky, Mary. Kinda thought you were upset.”

“I was. I hadn’t known you were listening. I was forced to improvise as I went along.”

“Did I queer it?”

“No. I’m glad you came in—thanks. But we’ll have to hurry now.”

“I suppose so. I think he meant it-there’U be a proctor looking for me soon. You, too, maybe.”

“That’s what I meant. So let’s get out of here.”

Mary was ready to leave in scant minutes but when they stepped out into the public hall they met a man whose brassard and hypo kit marked him as a proctor. “Service,” he said. “I’m looking for a citizen in company with Citizen Mary Sperling. Could you direct me?”

“Sure,” agreed Lazarus. “She lives right down there.” He pointed at the far end of the corridor. As the peace officer looked in that direction, Lazarus tapped him carefully on the back of the head, a little to the left, with the butt of his blaster, and caught him as he slumped.

Mary helped Lazarus wrestle the awkward mass into her apartment. He knelt over the c<5p, pawed through his hypo kit, took a loaded injector and gave him a shot. “There,” he said, “that’ll keep him sleepy for a few hours.” Then he blinked thoughtfully at the hypo kit, detached it from the proctor’s belt. “This might come in handy again. Anyhow, it won’t hurt to take it.” As an afterthought he removed the proctor’s peace brassard and placed it, too, in his pouch.

They left the apartment again and dropped to the parking level. Lazarus noticed as they rolled up the ramp that Mary had set the North Shore combination. “Where are we going?” he asked.

“The Families’ Seat. No place else to go where we won’t be checked on. But we’ll have to hide somewhere in the country until dark.”

Once the car was on beamed control headed north Mary asked to be excused and caught a few minutes sleep. Lazarus watched a few miles of scenery, then nodded himself.

They were awakened by the jangle of the emergency alarm and by the speedster slowing to a stop. Mary reached up and shut off the alarm. “All cars resume local control,” intoned a voice. “Proceed at speed twenty to the nearest traffic control tower for inspection. All cars resume local control. Proceed at—”

She switched that off, too. “Well, that’s us,” Lazarus said cheerfully. “Got any ideas?”

Mary did not answer. She peered out and studied their surroundings. The steel fence separating the highspeed control way they were on from the uncontrolled local-traffic strip lay about fifty yards to their right but no changeover ramp broke the fence for at least a mile ahead—where it did, there would be, of course, the control tower where they were ordered to undergo inspection. She started the car again, operating it manually, and wove through stopped or slowly moving traffic while speeding up. As they got close to the barrier Lazarus felt himself shoved into the cushions; the car surged and lifted, clearing the barrier by inches. She set it down rolling on the far side.

A car was approaching from the north and they were slashing across his lane. The other car was moving no more than ninety but its driver was taken by surprise—he had no reason to expect another car to appear out of nowhere against him on a clear road. Mary was forced to duck left, then right, and left again; the car slewed and reared up on its hind wheel, writhing against the steel grip of its gyros. Mary fought it back into control to the accompaniment of a teeth-shivering grind of herculene against glass as the rear wheel fought for traction.

Lazarus let his jaw muscles relax and breathed out gustily. “*Whewl”* he sighed. “I hope we won’t have to do *that* again.”

Mary glanced at him, grinning. “Women drivers make you nervous?”

“Oh, no, no, not at all! I just wish you would warn me when something like that is about to happen.”

“I didn’t know myself,” she admitted, then went on worriedly, “I don’t know quite what to do now. I thought we could lie quiet out of town until dark… but I had to show my hand a little when I took that fence. By now somebody will be reporting it to the tower. Mmm…”

“Why wait until dark?” he asked. “Why not just bounce over to the lake in this Dick Dare contraption of yours and let it swim us home?”

“I don’t like to,” she fretted. “I’ve attracted too much attention already. A trimobile faked up to look like a groundster is handy, but… well, if anyone sees us taking it under water and the proctors hear of-it, somebody is going to guess the answer. Then they’ll start fishing-everything from seismo to sonar and Heaven knows what else.”

“But isn’t the Seat shielded?”

“Of course. But anything that big they can find—if they know what they’re looking for and keep looking.”

“You’re right, of course,” Lazarus admitted slowly. “Well, we certainly don’t want to lead any nosy proctors to the Families’ Seat. Mary, I think we had better ditch your car and get lost.” He frowned. “Anywhere but the Seat.”

“No, it has to be the Seat,” she answered sharply.

“Why? If you chase a fox, he—”

“Quiet a moment! I want to try something.” Lazarus shut up; Mary drove with one hand while she fumbled in the glove compartment.

“Answer,” a voice said.

“Life is short—” Mary replied.

They completed the formula. “Listen,” Mary went on hurriedly, “I’m in trouble—get a fix on me.”

“Okay.”

“Is there a sub in the pool?”

“Yes.”

“Good! Lock on me and home them in.” She explained hurriedly the details of what she wanted, stopping once to ask Lazarus if he could swim. “That’s all,” she said at last, “but move! We’re short on minutes.”

“Hold it, Mary!” the voice protested. “You know I can’t send a sub out in the daytime, certainly not on a calm day. It’s too easy to—”

“Will you, or won’t you!”

A third voice cut in. “I was listening, Mary—Ira Barstow. We’ll pick you up.”

“But—” objected the first voice.

“Stow it, Tommy. Just mind your burners and home me in. See you, Mary.”

“Right, Ira!”

While she had been talking to the Seat, Mary had turned off from the local-traffic strip into the unpaved road she had followed the night before, without slowing and apparently without looking. Lazarus gritted his teeth and hung on. They passed a weathered sign reading contaminated area-proceed at your own risk and graced with the conventional purple trefoil. Lazarus blinked at it and shrugged—he could not see how, at the moment, his hazard could be increased by a neutron or so.

Mary slammed the car to a stop in a clump of stunted trees near the abandoned road. The lake lay at their feet, just beyond a low bluff. She unfastened her safety belt, struck a cigarette, and relaxed. “Now we wait. It’ll take at least half an hour for them to reach us no matter how hard Ira herds it. Lazarus, do you think we were seen turning off into here?”

“To tell the truth, Mary, I was too busy to look.”

“Well… nobody ever comes here, except a few reckless boys.”

(“—and girls,” Lazarus added to himself.) Then he went on aloud, “I noted a ‘hot’ sign back there. How high is the count?”

“That? Oh, pooh. Nothing to worry about unless you decided to build a house here. We’re the ones who are hot. If we didn’t have to stay close to the communicator, we—”

The communicator spoke. “Okay, Mary. Right in front of you.”

She looked startled. “Ira?”

“This is Ira speaking but I’m still at the Seat. Pete Hardy was available in the Evanston pen, so we homed him in on you. Quicker.”

“Okay—thanks!” She was turning to speak to Lazarus when he touched her arm.

“Look behind us.”

A helicopter was touching down less than a hundred yards from them. Three men burst out of it. They were dressed as proctors.

Mary jerked open the door of the car and threw off her gown in one unbroken motion. She turned and called, “Come on!” as she thrust a hand back inside and tore a stud loose from the instrument panel. She ran.

Lazarus unzipped the belt of his kilt and ran out of it as he followed her to the bluff. She went dancing down it; he came after with slightly more caution, swearing at sharp stones. The blast shook them as the car exploded, but the bluff saved them.

They hit the water together.

The lock in the little submarine was barely big enough for one at a time; Lazarus shoved Mary into it first and tried to slap her when she resisted, and discovered that slapping will not work under water. Then he spent an endless time, or so it seemed, wondering whether or not he could breathe water. “What’s a fish got that I ain’t got?” he was telling himself, when the outer latch moved under his hand and he was able to wiggle in.

Eleven dragging seconds to blow the lock clear of water and he had a chance to see what damage, if any, the water had done to his blaster.

Mary was speaking urgently to the skipper. “Listen, Pete—there are three proctors back up there with a whirly. My car blew up in their faces just as we hit the water. But if they aren’t all dead or injured, there will be a smart boy who will figure out that there was only one place for us to go-under water. We’ve got to be away from here before they take to the air to look for us.”

“It’s a losing race,” Pete Hardy complained, slapping his controls as he spoke. “Even if it’s only a visual search, I’ll have to get outside and stay outside the circle of total reflection faster than he can gain altitude-and I can't." But the little sub lunged forward reassuringly.

Mary worried about whether or not to call the Seat from the sub. She decided not to; it would just increase the hazard both to the sub and to the Seat itself. So she calmed herself and waited, huddled small in a passenger seat too cramped for two. Peter Hardy swung wide into deep water, hugging the bottom, picking up the Muskegon-Gary • bottom beacons and conned himself in blind.

By the time they surfaced in the pool inside the Seat she had decided against any physical means of communication, even the carefully shielded equipment at the Seat. Instead she hoped to find a telepathic sensitive ready and available among the Families' dependents cared for there. Sensitives were as scarce among healthy members of the Howard Families as they were in the rest of the population, but the very inbreeding which had conserved and reinforced their abnormal longevity had also conserved and reinforced bad genes as well as good; they had an unusually high percentage of physical and mental defectives. Their board of genetic control plugged away at the problem of getting rid of bad strains while conserving the longevity strain, but for many generations they would continue to pay for their long lives with an excess of defectives.

But almost five per cent of these defectives were telepathically sensitive.

Mary went straight to the sanctuary in the Seat where some of these dependents were cared for, with Lazarus Long at her heels. She braced the matron. "Where's Little Stephen? I need him."

"Keep your voice down," the matron scolded. "Rest hour—you can't."

"Janice, I've got to see him," Mary insisted. "This won't wait. I've got to get a message out to all the Families—at once."

The matron planted her hands on her hips. "Take it to the communication office. You can't come here disturbing my children at all hours. I won't have it."

"Janice, please! I don't dare use anything but telepathy. You know I wouldn't do this unnecessarily. Now take me to Stephen."

"It wouldn't do you any good if I did. Little Stephen has had one of his bad spells today."

"Then take me to the strongest sensitive who can possibly work. Quickly, Janice! The safety of every member may depend on it."

"Did the trustees send you?"

"No, no! There wasn't time!"

The matron still looked doubtful. While Lazarus was trying to recall how long it had been since he had socked a lady, she gave in. "All right—you can see Billy, though I shouldn't let you. Mind you, don’t tire him out.” Still bristling, she led them along a corridor past a series of cheerful rooms and into one of them. Lazarus looked at the thing on the bed and looked away.

The matron went to a cupboard and returned with a hypodermic injector. “Does he work under a hypnotic?” Lazarus asked.

“No,” the matron answered coldly, “he has to have a stimulant to be aware of us at all.” She swabbed skin on the arm of the gross figure and made the injection. “Go ahead,” she said to Mary and lapsed into grim-mouthed silence.

The figure on the bed stirred, its eyes rolled loosely, then seemed to track. It grinned. “Aunt Maryl” it said. “Oooh! Did you bring Billy Boy something?”

“No,” she said gently. “Not this time, hon. Aunt Mary was in too much of a hurry. Next time? A surprise? Will that do?”

“All right,” it said docilely.

“That’s a good boy.” She reached out and tousled its hair; Lazarus looked away again. “Now will Billy Boy do something for Aunt Mary? A big, *big* favor?”

“Sure.”

“Can you hear your friends?”

“Oh, sure.”

“All of them?”

“Uh huh. Mostly they don’t say anything,” it added.

“Call to them.”

There was a very short silence. “They heard me.”

“Fine! Now listen carefully, Billy Boy: All the Families-urgent warning! Elder Mary Sperling speaking. Under an Action-in-Council the Administrator is about to arrest every revealed member. The Council directed him to use ‘full expedience’—and it is my sober judgment that they are determined to use any means at all, regardless of the Covenant, to try to squeeze out of us the so-called secret of our long lives. They even intend to use the tortures developed by the inquisitors of the Prophets!” Her voice broke. She stopped and pulled herself together. “Now get busy! Find them, warn them, hide them! You may have only minutes left to save them!”

Lazarus touched her arm and whispered; she nodded and went on:

“If any cousin is arrested, rescue him *by any means at all*! Don’t try to appeal to the Covenant, don’t waste time arguing about justice… rescue him! Now *move*!”

She stopped and then spoke in a tired, gentle voice, “Did they hear us, Billy Boy?”

“Sure.”

“Are they telling their folks?”

“Uh huh. All but Jimmie-the-Horse. He’s mad at me,” it added confidentially.

" 'Jimmie-the-Horse'? Where is he?"

"Oh, where he lives."

"In Montreal," put in the matron. "There are two other sensitives there —your message got through. Are you finished?"

"Yes…" Mary said doubtfully. "But perhaps we had better have some other Seat relay it back."

"No!"

"But, Janice—"

"I won't permit it. I suppose you had to send it but I want to give Billy the antidote now. So get out."

Lazarus took her arm. "Come on, kid. It either got through or it didn't; you've done your best. A good job, girl."

Mary went on to make a full report to the Resident Secretary; Lazarus left her on business of his own. He retraced his steps, looking for a man who was not too busy to help him; the guards at the pool entrance were the first he found. "Service—" he began.

"Service to you," one of them answered. "Looking for someone?" He glanced curiously at Long's almost complete nakedness, glanced away again —how anybody dressed, or did not dress, was a private matter.

"Sort of," admitted Lazarus. "Say, Bud, do you know of anyone around here who would lend me a kilt?"

"You're looking at one," the guard answered pleasantly. "Take over, Dick —back in a minute." He led Lazarus to bachelors' quarters, outfitted him, helped him to dry his pouch and contents, and made no comment about the arsenal strapped to his hairy thighs. How elders behaved was no business of his and many of them were even touchier about their privacy than most people. He had seen Aunt Mary Sperling arrive stripped for swimming but had not been surprised as he had heard Ira Barstow briefing Pete for the underwater pickup; that the elder with her chose to take a dip in the lake weighed down by hardware did surprise him but not enough to make him forget his manners.

"Anything else you need?" he asked. "Do those shoes fit?"

"Well enough. Thanks a lot, Bud." Lazarus smoothed the borrowed kilt. It was a little too long for him but it comforted him. A loin strap was okay, he supposed—if you were on Venus. But he had never cared much for Venus customs. Damn it, a man liked to be *dressed. "1* feel better," he admitted. "Thanks again. By the way, what's your name?"

"Edmund Hardy, of the Foote Family."

"That so? What's your line?"

"Charles Hardy and Evelyn Foote. Edward Hardy-Alice Johnson and Terence Briggs-Eleanor Weatheral. Oliver—"

"That's enough. I sorta thought so. You're one of my great-great-grandsons."

"Why, that's interesting," commented Hardy agreeably. "Gives us a sixteenth of kinship, doesn't it—not counting convergence. May I ask your name?"

"Lazarus Long."

Hardy shook his head. "Some mistake. Not in my line."

"Try Woodrow Wilson Smith instead. It was the one I started with."

"Oh, that one! Yes, surely. But I thought you were… uh—"

"Dead? Well, I ain't."

"Oh, I didn't mean that at all," Hardy protested, blushing at the blunt Anglo-Saxon monosyllable. He hastily added, "I'm glad to have run across you, Gran'ther. I've always wanted to hear the straight of the story about the Families' Meeting in 2012."

"That was before you were born, Ed," Lazarus said gruffly, "and don't call me'Gran'ther.'"

"Sorry, sir—I mean 'Sorry, Lazarus.' Is there any other service I can do for you?"

"I shouldn't have gotten shirty. No—yes, there is, too. Where can I swipe a bite of breakfast? I was sort of rushed this morning."

"Certainly." Hardy took him to the bachelors' pantry, operated the auto-chef for him, drew coffee for his watch mate and himself, and left. Lazarus consumed his "bite of breakfast"—about three thousand calories of sizzling sausages, eggs, jam, hot breads, coffee with cream, and ancillary items, for he worked on the assumption of always topping off his reserve tanks because you never knew how far you might have to lift before you had another chance to refuel. In due time he sat back, belched, gathered up his dishes and shoved them in the incinerator, then went looking for a newsbox.

He found one in the bachelors' library, off their lounge. The room was empty save for one man who seemed to be about the same age as that suggested by Lazarus' appearance. There the resemblance stopped; the stranger was slender, mild in feature, and was topped off by finespun carroty hair quite unlike the grizzled wiry bush topping Lazarus. The stranger was bending over the news receiver with his eyes pressed to the microviewer.

Lazarus cleared his throat loudly and said, "Howdy."

The man jerked his head up and exclaimed, "Ohl Sorry—I was startled. Do y' a service?"

"I was looking for the newsbox. Mind if we throw it on the screen?"

"Not at all." The smaller man stood up, pressed the rewind button, and set the controls for projection. "Any particular subject?"

“I wanted to see,” said Lazarus, “if there was any news about us-the Families.”

“I’ve been watching for that myself. Perhaps we had better use the sound track and let it hunt.”

“Okay,” agreed Lazarus, stepping up and changing the setting to audio. “What’s the code word?”

“‘Methuselah.’”

Lazarus punched in the setting; the machine chattered and whined as it scanned and rejected the track speeding through it, then it slowed with a triumphant click. “The daily data,” it announced. “The only midwest news service subscribing to every major grid. Leased videochannel to Luna City. Tri-S correspondents throughout the System. First, Fast, and Most! Lincoln, Nebraska—Savant Denounces Oldsters! Dr. Witwell Oscarsen, President Emeritus of Bryan Lyceum, calls for official reconsideration of the status of the kin group styling themselves the ‘Howard Families.’ ‘It is proved,’ he says, ‘that these people have solved the age-old problem of extending, perhaps indefinitely, the span of human life. For that they are to be commended; it is a worthy and potentially fruitful research. But their claim that their solution is no more than hereditary predisposition defies both science and common sense. Our modern knowledge of the established laws of genetics enables us to deduce with certainty that they are withholding from the public some secret technique or techniques whereby they accomplish their results.

“ ‘It is contrary to our customs to permit scientific knowledge to be held as a monopoly for the few. When concealing such knowledge strikes at life itself, the action becomes treason to the race. As a citizen, I call on the Administration to act forcefully in this matter and I remind them that the situation is not one which could possibly have been foreseen by the wise men who drew up the Covenant and codified our basic customs. Any custom is manmade and is therefore a finite attempt to describe an infinity of relationships. It follows as the night from day that any custom necessarily has its exceptions. To be bound by them in the face of new—’”

Lazarus pressed the hold button. “Had enough of that guy?”

“Yes, I had already heard it.” The stranger sighed. “I have rarely heard such complete lack of semantic rigor. It surprises me—Dr. Oscarsen has done sound work in the past.”

“Reached his dotage,” Lazarus stated, as he told the machine to try again. “Wants what he wants when he wants it—and thinks that constitutes a natural law.”

The machine hummed and clicked and again spoke up. “The daily data, the only midwest news—”

“Can’t we scramble that commercial?” suggested Lazarus.

His companion peered at the control panel. “Doesn’t seem to be equipped for it.”

“Ensenada, Baja California. Jeffers and Lucy Weatheral today asked for special proctor protection, alleging that a group of citizens had broken into their home, submitted them to personal indignity and committed other asocial acts. The Weatherals are, by their own admission, members of the notorious Howard Families and claim that the alleged incident could be traced to that supposed fact. The district provost points out that they have offered no proof and has taken the matter under advisement. A town mass meeting has been announced for tonight which will air—”

The other man turned toward Lazarus. “Cousin, did we hear what I thought we heard? That is the first case of asocial group violence in more than twenty yea*rs… yet they reported it like a breakdown in a weather integrator.”

“Not quite,” Lazarus answered grimly. “The connotations of the words used in describing us were loaded.”

“Yes, true, but loaded cleverly. I doubt if there was a word in that dispatch with an emotional index, taken alone, higher than one point five. The newscasters are allowed two zero, you know.”

“You a psychometrician?”

“Uh, no. I should have introduced myself. I’m Andrew Jackson Libby.”

“Lazarus Long.”

“I know. I was at the meeting last night.”

“‘Libby… Libby,’” Lazarus mused. “Don’t seem to place it in the Families. Seems familiar, though.”

“My case is a little like yours—”

“Changed it during the Interregnum, eh?”

“Yes and no. I was bom after the Second Revolution. But my people had been converted to the New Crusade and had broken with the Families and changed their name. I was a grown man before I knew I was a Member.”

“The deuce you say! That’s interesting—how did you come to be located… if you don’t mind my asking?”

“Well, you see I was in the Navy and one of my superior officers —”

“Got it! Got it! I *thought* you were a spaceman. You’re Slipstick Libby, the Calculator.”

Libby grinned sheepishly. “I have been called that.”

“Sure, sure. The last can I piloted was equipped with your paragravitic rectifier. And the control bank used your fractional differential on the steering jets. But I installed that myself—kinda borrowed your patent.”

Libby seemed undisturbed by the theft. His face lit up. “You are interested in symbolic logic?”

“Only pragmatically. But look, I put a modification on your gadget that derives from the rejected alternatives in your thirteenth equation. It helps like this: suppose you are cruising in a field of density ‘x’ with an n-order gradient normal to your course and you want to set your optimum course for a projected point of rendezvous capital ‘A’ at matching-in vector ‘rho’ using automatic selection the entire jump, then if—”

They drifted entirely away from Basic English as used by earthbound laymen. The newsbox beside them continued to hunt; three times it spoke up, each time Libby touched the rejection button without consciously hearing it.

“I see your point,” he said at last. “I had considered a somewhat similar modification but concluded that it was not commercially feasible, too expensive for anyone but enthusiasts such as yourself. But your solution is cheaper than mine.”

“How do you figure that?”

“Why, it’s obvious from the data. Your device contains sixty-two moving parts, which should require, if we assume standardized fabrication processes, a probable—” Libby hesitated momentarily as if he were programing the problem, “—a probable optimax of five thousand two hundred and eleven operation in manufacture assuming null-therblig automation, whereas mine—”

Lazarus butted in. “Andy,” he inquired solicitously, “does your head ever ache?”

Libby looked sheepish again. “There’s nothing abnormal about my talent,” he protested. “It is theoretically possible to develop it in any normal person.”

“Sure,” agreed Lazarus, “and you can teach a snake to tap dance once you get shoes on him. Never mind, I’m glad to have fallen in with you.

I heard stories about you way back when you were a kid. You were in the Cosmic Construction Corps, weren’t you?“

Libby nodded. “Earth-Mars Spot Three.”

“Yeah, that was it—chap on Mars gimme the yarn. Trader at Drywater. I knew your maternal grandfather, too. Stiff-necked old coot.”

“I suppose he was.”

“He was, all right. I had quite a set-to with him at the Meeting in 2012. He had a powerful vocabulary.” Lazarus frowned slightly. “Funny thing, Andy… I recall that vividly, I’ve always had a good memory—yet it seems to be getting harder for me to keep things straight. Especially this last century.”

“Inescapable mathematical necessity,” said Libby.

“Huh? Why?”

“Life experience is linearly additive, but the correlation of memory impressions is an unlimited expansion. If mankind lived as long as a thousand years, it would be necessary to invent some totally different method of memory association in order to be eclectively time-binding. A man would otherwise flounder helplessly in the wealth of his own knowledge, unable to evaluate. Insanity, or feeblemindedness.”

“That so?” Lazarus suddenly looked worried. “Then we’d better get busy on it.”

“Oh, it’s quite possible of solution.”

“Let’s work on it. Let’s not get caught short.”

The newsbox again demanded attention, this time with the buzzer and flashing light of a spot bulletin: “Hearken to the data. Flash! High Council Suspends Covenant! Under the Emergency Situation clause of the Covenant an unprecedented Action-in-Council was announced today directing the Administrator to detain and question all members of the so-called Howard Families—*by any means expedient*! The Administrator authorized that the following statement be released by all licensed news outlets: (I quote) ‘The suspension of the Covenant’s civil guarantees applies only to the group known as the Howard Families except that government agents are empowered to act as circumstances require to apprehend speedily the persons affected by the Action-in-Council. Citizens are urged to tolerate cheerfully any minor incdnvenience this may cause them; your right of privacy will be respected in every way possible; your right of free movement may be interrupted temporarily, but full economic restitution will be made.’

“Now, Friends and Citizens, what does this mean?—to you and you and also you! The daily data brings you now your popular commentator, Albert Reif snider:

“Reifsnider reporting: Service, Citizens! There is no cause for alarm. To the average free citizen this emergency will be somewhat less troublesome than a low-pressure minimum too big for the weather machines. Take it easy! Relax! Help the proctors when requested and tend to your private affairs. If inconvenienced, don’t stand on custom-cooperate with Service!

“That’s what it means today. What does it mean tomorrow and the day after that? Next year? It means that your public servants have taken a forthright step to obtain for you the boon of a longer and happier life! Don’t get your hopes too high… but it looks like the dawn of a new day. Ah, indeed it does! The jealously guarded secret of a selfish few will soon—”

Long raised an eyebrow at Libby, then switched it off.

“I suppose that,” Libby said bitterly, “is an example of ‘factual detachment in news reporting.’”

Lazarus opened his pouch and struck a cigarette before replying. “Take it easy, Andy. There are bad times and good times. We’re overdue for bad times. The people are on the march again… this time at us.”

Chapter 3

The burrow known as the Families' Seat became jammed as the day wore on. Members kept trickling in, arriving by tunnels from downstate and from Indiana. As soon as it was dark a traffic jam developed at the underground pool entrance—sporting subs, fake ground cars such as Mary's, ostensible surface cruisers modified to dive, each craft loaded with refugees some half suffocated from lying in hiding on deep bottom most of the day while waiting for a chance to sneak in.

The usual meeting room was much too small to handle the crowd; the resident staff cleared the largest room, the refectory, and removed partitions separating it from the main lounge. There at midnight Lazarus climbed onto a temporary rostrum. "Okay," he announced, "let's pipe it down. You down in front sit on the floor so the rest can see. I was born in 1912. Anybody older?"

He paused, then added, "Nominations for chairman… speak up."

Three were proposed; before a fourth could be offered the last man nominated got to his feet. "Axel Johnson, of the Johnson Family. I want my name withdrawn and I suggest that the others do likewise. Lazarus cut through the fog last night; let him handle it. This is no time for Family politics."

The other names were withdrawn; no more were offered. Lazarus said, "Okay if that's the way you want it. Before we get down to arguing, I want a report from the Chief Trustee. How about it, Zack? Any of our kinfolk get nabbed?"

Zaccur Barstow did not need to identify himself; he simply said, "Speaking for the Trustees: our report is not complete, but we do not as yet know that any Member has been arrested. Of the nine thousand two hundred and eighty-five revealed Members, nine thousand one hundred and six had been reported, when I left the communication office ten minutes ago, as having reached hiding, in other Family strongholds, or in the homes of unrevealed Members, or elsewhere. Mary Sperling's warning was amazingly successful in view of how short the time was from the alarm to the public execution of the Action-in-Council—but we still have one hundred and seventy-nine revealed cousins unreported. Probably most of these will trickle in during the next few days. Others are probably safe but unable to get in touch with us."

"Get to the point, Zack," Lazarus insisted. "Any reasonable chance that all of them will make it home safe?"

"Absolutely none."

"Why?"

“Because three of them are known to be in public conveyances between here and the Moon, traveling under their revealed identities. Others we don’t know about are almost certainly caught in similar predicaments.”

“Question!” A cocky little man near the front stood up and pointed his finger at the Chief Trustee. “Were all those Members now in jeopardy protected by hypnotic injunction?”

“No. There was no—”

“I demand to know why not!”

“Shut up!” bellowed Lazarus. “You’re out of order. Nobody’s on trial here and we’ve got no time to waste on spilled milk. Go ahead, Zack.”

“Very well. But I will answer the question to this extent: everyone knows that a proposal to protect our secrets by hypnotic means was voted down at the Meeting which relaxed the ‘Masquerade.’ I seem to recall that the cousin now objecting helped then to vote it down.”

“That is not true! And I insist that—”

“PIPE DOWN/” Lazarus glared at the heckler, then looked him over carefully. “Bud, you strike me as a clear proof that the Foundation should ‘a’ bred for brains instead of age.” Lazarus looked around at the crowd. “Everybody will get his say, but in order as recognized by the chair. If he butts in again, I’m going to gag him with his own teeth-is my ruling sustained?”

There was a murmur of mixed shock and approval; no one objected. Zaccur Barstow went on, “On the advice of Ralph Schultz the trustees have been proceeding quietly for the past three months to persuade revealed Members to undergo hypnotic instruction. We were largely successful.” He paused.

“Make it march, Zack,” Lazarus urged. “Are we covered? Or not?”

“We are *not.* At least two of our cousins certain to be arrested are not so protected.”

Lazarus shrugged. “That tears it. Kinfolk, the game’s over. One shot in the arm of babble juice and the ‘Masquerade’ is over. It’s a new situation—or will be in a few hours. What do you propose to do about it?”

In the control room of the Antipodes Rocket *Wallaby*, South Flight, the telecom hummed, went *spring*! and stuck out a tab like an impudent tongue. The copilot rocked forward in his gymbals, pulled out the message and tore it off.

He read it, then reread it. “Skipper, brace yourself.”

“Trouble?”

“Read it.”

The captain did so, and whistled. “Bloody! I’ve never arrested anybody. I don’t believe I’ve even *seen* anybody arrested. How do we start?”

“I bow to your superior authority.”

“That so?” the captain said in nettled tones. “Now that you’re through bowing you can tool aft and make the arrest.”

“Uh? That’s not what I meant. You’re the bloke with the authority. I’ll relieve you at the conn.”

“You didn’t read me. I’m delegating the authority. Carry out your orders.”

“Just a moment, Al, I didn’t sign up for—”

“Carry out your orders!”

“Aye aye, sir!”

The copilot went aft. The ship had completed its reentry, was in its long, flat, screaming approach-glide; he was able to walk—he wondered what an arrest in free-fall would be like? Snag him with a butterfly net? He located the passenger by seat check, touched his arm. “Service, sir. There’s been a clerical error. May I see your ticket?”

“Why, certainly.”

“Would you mind stepping back to the reserve stateroom? It’s quieter there and we can both sit down.”

“Not at all.”

Once they were in the private compartment the chief officer asked the passenger to sit down, then looked annoyed. “Stupid of me!—I’ve left my lists in the control room.” He turned and left. As the door slid to behind him, the passenger heard an unexpected click. Suddenly suspicious, he tried the door. It was locked.

Two proctors came for him at Melbourne. As they escorted him through the skyport he could hear remarks from a curious and surprisingly unfriendly crowd: “There’s one of the laddies now!”

“Him? My word, he doesn’t look

old.“

“What price ape glands?”

“Don’t stare, Herbert.”

“Why not? Not

. half bad enough for him.“

They took him to the office of the Chief Provost, who invited him to sit down with formal civility. “Now then, sir,” the Provost said with a slight local twang, “if you will help us by letting the orderly make a slight injection in your arm—”

“For what purpose?”

“You want to be socially cooperative, I’m sure. It won’t hurt you.”

“That’s beside the point. I insist on an explanation. I am a citizen of the United States.”

“So you are, but the Federation has concurrent jurisdiction in any member state—and I am acting under its authority. Now bare your arm, please."

"I refuse. I stand on my civil rights."

"Grab him, lads."

It took four men to do it. Even before the injector touched his skin, his jaw set and a look of sudden agony came into his face. He then sat quietly, listlessly, while the peace officers waited for the drug to take effect. Presently the Provost gently rolled back one of the prisoner's eyelids and said, "I think he's ready. He doesn't weigh over ten stone; it has hit him rather fast. Where's that list of questions?"

A deputy handed it to him; he began, "Horace Foote, do you hear me?"

The man's lips twitched, he seemed about to speak. His mouth opened and blood gushed down his chest.

The Provost bellowed and grabbed the prisoner's head, made quick examination. "*Surgeon*! He's bitten his tongue half out of his head!"

The captain of the Luna City Shuttle *Moonbeam* scowled at the message in his hand. "What child's play is this?" He glared at his third officer. "Tell me that, Mister."

The third officer studied the overhead. Fuming, the captain held the message at arm's length, peered at it and read aloud: "—imperative that subject persons be prevented from doing themselves injury. You are directed to render them unconscious without warning them." He shoved the flimsy away from him. "What do they think I'm running? Coventry? Who do they think they are?—telling *me* in *my* ship what I must do with *my* passengers! I won't—so help me, I won't! There's no rule requiring me to… is there, Mister?"

The third officer went on silently studying the ship's structure.

The captain stopped pacing. "Purser! *Purserl* Why is that man never around when I want him?"

"I'm here, Captain."

"About timer

"I've been here all along, sir."

"Don't argue with me. Here—attend to this." He handed the despatch to the purser and left.

A shipfitter, supervised by the purser, the hull officer, and the medical officer, made a slight change in the airconditioning ducts to one cabin; two worried passengers sloughed off their cares under the influence of a non-lethal dose of sleeping gas.

"Another report, sir."

"Leave it," the Administrator said in a tired voice.

"And Councilor Bork Vanning presents his compliments and requests an interview."

"Tell him that I regret that I am too busy."

"He insists on seeing you, sir."

Administrator Ford answered snappishly, “Then you may tell the Honorable Mr. Vanning that he does not give orders in this office!” The aide said nothing; Administrator Ford pressed his fingertips wearily against his forehead and went on slowly, “No, Gerry, don’t tell him that. Be diplomatic… but don’t let him in.”

“Yes, sir.”

When he was alone, the Administrator picked up the report. His eye skipped over official heading, date line, and file number: “Synopsis of Interview with Conditionally Proscribed Citizen Arthur Sperling, full transcript attached. Conditions of Interview: Subject received normal dosage of neo-sco., having previously received unmeasured dosage of gaseous hypnotal. Antidote—” How the devil could you cure subordinates of wordiness? Was there something in the soul of a career civil servant that cherished red tape? His eye skipped on down:

“—stated that his name was Arthur Sperling of the Foote Family and gave his age as one hundred thirty-seven years. (Subject’s apparent age is fortyfive plus-or-minus four: see bio report attached.) Subject admitted that he was a member of the Howard Families. He stated that the Families numbered slightly more than one hundred thousand members. He was asked to correct this and it was suggested to him that the correct number was nearer ten thousand. He persisted in his original statement.”

The Administrator stopped and reread this part.

He skipped on down, looking for the key part: “—insisted that his long life was the result of his ancestry and had no other cause. Admitted that artificial means had been used to preserve his youthful appearance but maintained firmly that his life expectancy was inherent, not acquired. It was suggested to him that his elder relatives had subjected him without his knowledge to treatment in his early youth to increase his life span. Subject admitted possibility. On being pressed for names of persons who might have performed, or might be performing, such treatments he returned to his original statement that no such treatments exist.

“He gave the names (surprise association procedure) and in some cases the addresses of nearly two hundred members of his kin group not previously identified as such in our records. (List attached) His strength ebbed under this arduous technique and he sank into full apathy from which he could not be roused by any stimuli within the limits of his estimated tolerance (see Bio Report).

“Conclusions under Expedited Analysis, Kelly-Holmes Approximation Method: Subject does not possess and does not believe in the Search Object. Does not remember experiencing Search Object but is mistaken. Knowledge of Search Object is limited to a small group, of the order of twenty. A mem-ber of this star group will be located through not more than triple-concatenation elimination search. (Probability of unity, subject to assumptions: first, that topologic social space is continuous and is included in the physical space of the Western Federation and, second, that at least one concatenative path exists between apprehended subjects and star group. Neither assumption can be verified as of this writing, but the first assumption is strongly supported by statistical analysis of the list of names supplied by Subject of previously unsuspected members of Howard kin group, which analysis also supports Subject's estimate of total size of group, and second assumption when taken negatively postulates that star group holding Search Object has been able to apply it with no social-space of contact, an absurdity.)

"Estimated Time for Search: *ji* hrs, plus-or-minus 20 hrs. Prediction but not time estimate vouched for by cognizant bureau. Time estimate will be re—"

Ford slapped the report on a stack cluttering his old-fashioned control desk. The dumb fools! Not to recognize a negative report when they saw one—yet they called themselves *psychographersl*

He buried his face in his hands in utter weariness and frustration.

Lazarus rapped on the table beside him, using the butt of his blaster as a gavel. "Don't interrupt the speaker," he boomed, then added, "Go ahead but cut it short."

Bertram Hardy nodded curtly. "I say again, these mayflies we see around us have no rights that we of the Families are bound to respect. We should deal with them with stealth, with cunning, with guile, and when we eventually consolidate our position… with *force*! We are no more obligated to respect their welfare than a hunter is obliged to shout a warning at his quarry. The—"

There was a catcall from the rear of the room. Lazarus again banged for order and tried to spot the source. Hardy ploughed steadily on. "The so-called human race has split in two; it is time we admitted it. On one side, *Homo vivens*, ourselves… on the other—*Homo moriturusl* With the great lizards, with the sabertooth tiger and the bison, their day is done. We would no more mix our living blood with theirs than we would attempt to breed with apes. I say(temporize with them, tell them any tale, assure them that we will bathe them in the fountain of youth-gain time, so that when these two naturally antagonistic races join battle, *as they inevitably must*, the victory will be ours!"

There was no applause but Lazarus could see wavering uncertainty in many faces. Bertram Hardy's ideas ran counter to thought patterns of many years of gentle living yet his words seemed to ring with destiny. Lazarus did not believe in destiny; he believed in… well, never mind—but he wondered how Brother Bertram would look with both arms broken.

Eve Barstow got up. “If that is what Bertram means by the survival of the fittest,” she said bitterly, “I’ll go live with the asocials in Coventry. However, he has offered a plan; I’ll have to offer another plan if I won’t take his. I won’t accept any plan which would have us live at the expense of our poor transient neighbors. Furthermore it is clear to me now that our mere presence, the simple fact of our rich heritage of life, is damaging to the spirit of our poor neighbor. Our longer years and richer opportunities make his best efforts seem futile to him—any effort save a hopeless struggle against an appointed death. Our mere presence saps his strength, ruins his judgment, fills him with panic fear of death.

“So I propose a plan. Let’s disclose ourselves, tell *all* the truth, and ask for our share of the Earth, some little corner where we may live apart. If our poor friends wish to surround it with a great barrier like that around Coventry, so be it—it is better that we never meet face to face.”

Some expressions of doubt changed to approval. Ralph Schultz stood up. “Without prejudice to Eve’s basic plan, I must advise you that it is my professional opinion that the psychological insulation she proposes cannot be accomplished that easily. As long as we’re on this planet they won’t be able to put us out of their minds. Modern communications—”

“Then we must move to another planet!” she retorted.

“Where?” demanded Bertram Hardy. “Venus? I’d rather live in a steam bath. Mars? Wornout and worthless.”

“We will rebuild it,” she insisted.

“Not in your lifetime nor mine. No, my dear Eve, your tenderheartedness sounds well but it doesn’t make sense. There is only one planet in the System fit to live on—we’re standing on it.”

Something in Bertram Hardy’s words set off a response in Lazarus Long’s brain, then the thought escaped him. Something… something that he had heard of said just a day or two ago… or was it longer than? Somehow it seemed to be associated with his first trip out into space, too, well over a century ago. Thunderation! it was maddening to have his memory play tricks on him like that—

Then he had it—the starship! The interstellar ship they were putting the finishing touches on out there between Earth and Luna. “Folks,” he drawled, “before we table this idea of moving to another planet, let’s consider all the possibilities.” He waited until he had their full attention. “Did you ever stop to think that not all the planets swing around this one Sun?”

Zaccur Barstow broke the silence. “Lazarus… are you making a serious suggestion?"

"Dead serious."

"It does not sound so. Perhaps you had better explain."

"I will." Lazarus faced the crowd. "There's a spaceship hanging out there in the sky, a roomy thing, built to make the long jumps between stars. Why don't we take it and go looking for our own piece of real estate?"

Bertram Hardy was first to recover. "I don't know whether our chairman is lightening the gloom with another of his wisecracks or not, but, assuming that he is serious, I'll answer. My objection to Mars applies to this wild scheme ten times over. I understand that the reckless fools who are actually intending to man that ship expect to make the jump in about a century—then maybe their grandchildren will find something, or maybe they won't. Either way, I'm not interested. I don't care to spend a century locked up in a steel tank, nor do I expect to live that long. I won't buy it."

"Hold it," Lazarus told him. "Where's Andy Libby?"

"Here," Libby answered, standing up.

"Come on down front. Slipstick, did you have anything to do with designing the new Centarus ship?"

"No. Neither this one nor the first one."

Lazarus spoke to the crowd. "That settles it. If that ship didn't have Slipstick's finger in the drive design, then she's not as fast as she could be, not by a good big coefficient. Slipstick, better get busy on the problem, son. We're likely to need a solution."

"But, Lazarus, you mustn't assume that—"

"Aren't there theoretical possibilities?"

"Well, you know there are, but—"

"Then get that carrot top of yours working on it."

"Well… all right." Libby blushed as pink as his hair.

"Just a moment, Lazarus." It was Zaccur Barstow. "I like this proposal and I think we should discuss it at length… not let ourselves be frightened off by Brother Bertram's distaste for it. Even if Brother Libby fails to find a better means of propulsion—and frankly, I don't think he will; I know a little something of field mechanics-even so, I shan't let a century frighten me. By using cold-rest and manning the ship in shifts, most of us should be able to complete one hop. There is —"

"What makes you think," demanded Bertram Hardy, "that they'll let *us* man the ship anyhow?"

"Bert," Lazarus said coldly, "address the chair when you want to sound off. You're not even a Family delegate. Last warning."

"As I was saying," Barstow continued, "there is an appropriateness in the long-lived exploring the stars. A mystic might call it our true vocation." He pondered. "As for the ship Lazarus suggested, perhaps they will not let us have that… but the Families are rich. If we need a starship—or ships— we can build them, we can pay for them. I think we had better hope that they will let us do this… for it may be that there is no way, not another way of any sort, out of our dilemma which does not include our own extermination."

Barstow spoke these last words softly and slowly, with great sadness. They bit into the company like damp chill. To most of them the problem was so new as not yet to be real; no one had voiced the possible consequence of failing to find a solution satisfactory to the short-lived majority. For their senior trustee to speak soberly of his fear that the Families might be exterminated—hunted down and killed—stirred up in each one the ghost they never mentioned.

"Well," Lazarus said briskly when the silence had grown painful, "before we work this idea over, let's hear what other plan anyone has to offer. Speak up."

A messenger hurried in and spoke to Zaccur Barstow. He looked startled and seemed to ask to have the message repeated. He then hurried across the rostrum to Lazarus, whispered to him. Lazarus looked startled. Barstow hurried out.

Lazarus looked back at the crowd. "We'll take a recess," he announced. "Give you time to think about other plans… and time for a stretch and a smoke." He reached for his pouch.

"What's up?" someone called out.

Lazarus struck a cigarette, took a long drag, let it drift out. "We'll have to wait and see," he said. "I don't know. But at least half a dozen of the plans put forward tonight we won't have to bother to vote on. The situation has changed again—how much, I couldn't say."

"What do you mean?"

"Well," Lazarus drawled, "it seems the Federation Administrator wanted to talk to Zack Barstow right away. He asked for him by name… *and he called over our secret Families' circuit.*"

"Huh? That's impossible!"

"Yep. So is a baby, son."

Chapter 4

Zaccur Barstow tried to quiet himself down as he hurried into the phone booth.

At the other end of the same videophone circuit the Honorable Slayton Ford was doing the same thing—trying to calm his nerves. He did not underrate himself. A long and brilliant public career crowned by years as Administrator for the Council and under the Covenant of the Western Administration had made Ford aware of his own superior ability and unmatched experience; no ordinary man could possibly make him feel at a disadvantage in negotiation.

But this was different.

What would a man be like who had lived more than two ordinary lifetimes? Worse than that-a man who had had four or five times the adult experience that Ford himself had had? Slayton Ford knew that his own opinions had changed and changed again since his own boyhood; he knew that the boy he had been, or even the able young man he had been, would be no match for the mature man he had become. So what would this Barstow be like? Presumably he was the most able, the most astute, of a group all of whom had had much more experience than Ford could possibly have—how could he guess such a man's evaluations, intentions, ways of thinking, his possible resources?

Ford was certain of only one thing: he did not intend to trade Manhattan Island for twenty-four dollars and a case of whisky, nor sell humanity's birthright for a mess of pottage.

He studied Barstow's face as the image appeared in his phone. A good face and strong… it would be useless to try to bully this man. And the man looked young—why, he looked younger than Ford himself! The subconscious image of the Administrator's own stern and implacable grandfather faded out of his mind and his tension eased off. He said quietly, "You are Citizen Zaccur Barstow?"

"Yes, Mister Administrator."

"You are chief executive of the Howard Families?"

"I am the current speaker trustee of our Families' Foundation. But I am responsible to my cousins rather than in authority over them."

Ford brushed it aside. "I assume that your position carries with it leadership. I can't negotiate with a hundred thousand people."

Barstow did not blink. He saw the power play in the sudden admission that the administration knew the true numbers of the Families and discounted it. He had already adjusted himself to the shock of learning that the Families' secret headquarters was no longer secret and the still more upsetting fact that the Administrator knew how to tap into their private communication system; it simply proved that one or more Members had been caught and forced to talk.

So it was now almost certain that the authorities already knew every important fact about the Families.

Therefore it was useless to try to bluff—just the same, don’t volunteer any information; they might not have all the facts this soon.

Barstow answered without noticeable pause. “What is it you wish to discuss with me, sir?”

“The policy of the Administration toward your kin group. The welfare of yourself and your relatives.”

Barstow shrugged. “What can we discuss? The Covenant has been tossed aside and you have been given power to do as you like with us—to squeeze a secret out of us that we don’t have. What can we do but pray for mercy?”

“Please!” The Administrator gestured his annoyance. “Why fence with me? We have a problem, you and I. Let’s discuss it openly and try to reach a solution. Yes?”

Barstow answered slowly, “I would like to… and I believe that you would like to, also. But the problem is based on a false assumption, that we, the Howard Families, know how to lengthen human life. We don’t.”

“Suppose I tell you that I know there is no such secret?”

“Mmm… I would like to believe you. But how can you reconcile that with the persecution of my people? You’ve been harrying us like rats.”

Ford made a wry face. “There is an old, old story about a theologian who was asked to reconcile the doctrine of Divine mercy with the doctrine of infant damnation. ”The Almighty,‘ he explained, ’finds it necessary to do things in His official and public capacity which in His private and personal capacity He deplores.‘“

Barstow smiled in spite of himself. “I see the analogy. Is it actually pertinent?”

“I think it is.”

“So. You didn’t call me simply to make a headsman’s apology?”

“No. I hope not. You keep in touch with politics? I’m sure you must; your position would require it.” Barstow nodded; Ford explained at length:

Ford’s administration had been the longest since the signing of the Covenant; he had lasted through four Councils. Nevertheless his control was now so shaky that he could not risk forcing a vote of confidence—certainly not over the Howard Families. On that issue his nominal majority was already a minority. If he refused the present decision of the Council, forced it to a vote of confidence, Ford would be out of office and the present minority leader would take over as administrator. “You follow me? I can either stay in office and try to cope with this problem while restricted by a Council directive with which I do not agree… or I can drop out and let my successor handle it.”

“Surely you’re not asking my advice?”

“No, no! Not on that. I’ve made my decision. The Action-in-Council would have been carried out in any case, either by me or by Mr. Vanning —so I decided to do it. The question is: will I have your help, or will I not?”

Barstow hesitated, while rapidly reviewing Ford’s political career in his mind. The earlier part of Ford’s long administration had been almost a golden age of statesmanship. A wise and practical man, Ford had shaped into workable rules the principles of human freedom set forth by Novak in the language of the Covenant. It had been a period of good will, of prosperous expansion, of civilizing processes which seemed to be permanent, irreversible.

Nevertheless a setback had come and Barstow understood the reasons at least as well as Ford did. Whenever the citizens fix their attention on one issue to the exclusion of others, the situation is ripe for scalawags, demagogues, ambitious men on horseback. The Howard Families, in all innocence, had created the crisis in public morals from which they now suffered, through their own action, taken years earlier, in letting the short-lived learn of their existence. It mattered not at all that the “secret” did not exist; the corrupting effect did exist.

Ford at least understood the true situation—

“We’ll help,” Barstow answered suddenly.

“Good. What do you suggest?”

Barstow chewed his lip. “Isn’t there some way you can stall off this drastic action, this violation of the Covenant itself?”

Ford shook his head. “It’s too late.”

“Even if you went before the public and told the citizens, face to face, that you knew that—”

Ford cut him short. “I wouldn’t last in office long enough to make the speech. Nor would I be believed. Besides that—understand me clearly, Zac-cur Barstow—no matter what sympathy I may have personally for you and your people, I would not do so if I could. This whole matter is a cancer eating into vitals of our society; it must be settled. I have had my hand forced, true… but there is no turning back. It must be pressed on to a solution.”

In at least one respect Barstow was a wise man; he knew that another man could oppose him and not be a villain. Nevertheless he protested, “My people are being persecuted.”

“Your people,” Ford said forcefully, “are a fraction of a tenth of one per cent of all the people… and I must find a solution for all! I’ve called on you to find out if you have any suggestions toward a solution for everyone. Do you?"

"I'm not sure," Barstow answered slowly. "Suppose I concede that you must go ahead with this ugly business of arresting my people, of questioning them by unlawful means-I suppose I have no choice about that—"

"You have no choice. Neither have I." Ford frowned. "It will be carried out as humanely as I can manage it—I am not a free agent."

"Thank you. But, even though you tell me it would be useless for you yourself to go to the people, nevertheless you have enormous propaganda means at your disposal. Would it be possible, while we stall along, to build up a campaign to convince the people of the true facts? Prove to them that there *is* no secret?"

Ford answered, "Ask yourself: will it work?"

Barstow sighed. "Probably not."

"Nor would I consider it a solution even if it would! The people—even my trusted assistants—are clinging to their belief in a fountain of youth because the only alternative is too bitter to think about. Do you know what it would mean to them? For them to believe the bald truth?"

"Go on."

"Death has been tolerable to me only because Death has been the Great Democrat, treating all alike. But now Death plays favorites. Zaccur Barstow, can you understand the bitter, bitter jealousy of the ordinary man of—oh, say 'fifty'—who looks on one of your sort? Fifty years… twenty of them he is a child, he is well past thirty before he is skilled in his profession. He is forty before he is established and respected. For not more than the last ten years of his fifty he has really amounted to something."

Ford leaned forward in the screen and spoke with sober emphasis: "And now, when he has reached his goal, what is his prize? His eyes are failing him, his bright young strength is gone, his heart and wind are 'not what they used to be.' He is not senile yet… but he feels the chill of the first frost. He knows what is in store for him. He knows—he knows!

"But it was inevitable and each man learned to be resigned to it.

"Now *you* come along," Ford went on bitterly. "You shame him in his weakness, you humble him before his children. He dares not plan for the future; you blithely undertake plans that will not mature for fifty years-for a hundred. No matter what success he has achieved, what excellence he has attained, you will catch up with him, pass him—outlive him. In his weakness you are *kind* to him.

"Is it any wonder that he hates you?"

Barstow raised his head wearily. "Do *you* hate me, Slayton Ford?"

“No. No, I cannot afford to hate anyone. But I can tell you this,” Ford added suddenly, “had there been a secret, I would have it out of you if I had to tear you to pieces!”

“Yes. I understand that.” Barstow paused to think. “There is little that we of the Howard Families can do. We did not plan it this way; it was planned for us. But there is one thing we can offer.”

“Yes?”

Barstow explained.

Ford shook his head. “Medically what you suggest is feasible and I have no doubt that a half interest in your heritage would lengthen the span of human life. But even if women were willing to accept the germ plasm of your men-I do not say that they would-it would be psychic death for all other men. There would be an outbreak of frustration and hatred that would split the human race to ruin. No, no matter what we wish, our customs are what they are. We can’t breed men like animals; they won’t stand for it.”

“I know it,” agreed Barstow, “but it is all we have to offer… a share in our fortune through artificial impregnation.”

“Yes. I suppose I should thank you but I feel no thanks and I shan’t. Now let’s be practical. Individually you old ones are doubtless honorable, lovable men. But as a group you are as dangerous as carriers of plague. So you must be quarantined.”

Barstow nodded. “My cousins and I had already reached that conclusion.”

Ford looked relieved. “I’m glad you’re being sensible about it.”

“We can’t help ourselves. Well? A segregated colony? Some remote place that would be a Coventry of our own? Madagascar, perhaps? Or we might take the British Isles, build them up again and spread from there into Europe as the radioactivity died down.”

Ford shook his head. “Impossible. That would simply leave the problem for my grandchildren to solve. By that time you and yours would have grown in strength; you might defeat us. No, Zaccur Barstow, you and your kin must leave this planet entirely!”

Barstow looked bleak. “I knew it would come to that. Well, where shall we go?”

“Take your choice of the Solar System. Anywhere you like.”

“But *where*? Venus is no prize, but even if we chose it, would they accept us? The Venerians won’t take orders from Earth; that was settled in 2020. Yes, they now accept screened immigrants under the Four Planets Convention… but would they accept a hundred thousand whom Earth found too dangerous to keep? I doubt it.”

“So do I. Better pick another planet.”

“What planet? In the whole system there is not another body that will support human life as it is. It would take almost superhuman effort, even with unlimited money and the best of modem engineering, to make the most promising of them fit for habitation."

"Make the effort. We will be generous with help."

"I am sure you would. But is that any better solution in the long run than giving us a reservation on Earth? Are you going to put a stop to space travel?"

Ford sat up suddenly. "Oh! I see your thought. I had not followed it through, but let's face it. Why not? Would it not be better to give up space travel than to let this situation degenerate into open war? It was given up once before."

"Yes, when the Venerians threw off their absentee landlords. But it started up again and Luna City is rebuilt and ten times more tonnage moves through the sky than ever did before. Can you stop it? If you can, will it stay stopped?"

Ford turned it over and over in his mind. He could not stop space travel, no administration could. But could an interdict be placed on whatever planet these oldsters were shipped to? And would it help? One generation, two, three… what difference would it make? Ancient Japan had tried some solution like that; the foreign devils had come sailing in anyhow. Cultures could not be kept apart forever, and when they did come in contact, the hardier, displaced the weaker; that was a natural law.

A permanent and effective quarantine was impossible. That left only one answer—an ugly one. But Ford was toughminded; he could accept what was necessary. He started making plans, Barstow's presence in the screen forgotten. Once he gave the Chief Provost the location of the Howard Families headquarters it should be reduced in an hour, two at the most… unless they had extraordinary defenses—but anywise it was just a matter of time. From those who would be arrested at their headquarters it should be possible to locate and arrest every other member of their group. With luck he would have them all in twenty-four to fortyeight hours.

The only point left undecided in his mind was whether to liquidate them all, or simply to sterilize them. Either would be a final solution and there was no third solution. But which was the more humane?

Ford knew that this would end his career. He would leave office in disgrace, perhaps be sent to Coventry, but he gave it no thought; he was so constituted as to be unable to weigh his own welfare against his concept of his public duty.

Barstow could not read Ford's mind but he did sense that Ford had reached a decision and he surmised correctly how bad that decision must be for himself and his kin. Now was the time, he decided, to risk his one lone trump.

"Mister Administrator—"

"Eh? Oh, sorry! I was preoccupied." That was a vast understatement; he was shockingly embarrassed to find himself still facing a man he had just condemned to death. He gathered formality about him like a robe. "Thank you, Zaccur Barstow, for talking with me. I am sorry that—"

"Mister Administrator!"

"Yes?"

"I propose that you move us entirely out of the Solar System."

"*What*?" Ford blinked. "Are you speaking seriously?"

Barstow spoke rapidly, persuasively, explaining Lazarus Long's half-conceived scheme, improvising details as he went along, skipping over obstacles and emphasizing advantages.

"It might work," Ford at last said slowly. "There are difficulties you have not mentioned, political difficulties and a terrible hazard of time. Still, it might." He stood up. "Go back to your people. Don't spring this on them yet. I'll talk with you later."

Barstow walked back slowly while wondering what he could tell the Members. They would demand a full report; technically he had no right to refuse. But he was strongly inclined to cooperate with the Administrator as long as there was any chance of a favorable outcome. Suddenly making up his mind, he turned, went to his office, and sent for Lazarus.

"Howdy, Zack," Long said as he came in. "How'd the palaver go?"

"Good and bad," Barstow replied. "Listen—" He gave him a brief, accurate resume". "Can you go back in there and tell them something that will hold them?"

"Mmm… reckon so."

"Then do it and hurry back here."

They did not like the stall Lazarus gave them. They did not want to keep quiet and they did not want to adjourn the meeting. "Where is Zaccur?"— "We demand a report!"-"Why all the mystification?"

Lazarus shut them up with a roar. "Listen to me, you damned idiots I Zack'll talk when he's ready—don't joggle his elbow. He knows what he's doing."

A man near the back stood up. "I'm going home!"

"Do that," Lazarus urged sweetly. "Give my love to the proctors."

The man looked startled and sat down.

"Anybody else want to go home?" demanded Lazarus. "Don't let me stop you. But it's time you bird-brained dopes realized that you have been outlawed. The only thing that stands between you and the proctors is Zack Barstow's ability to talk sweet to the Administrator. So do as you like… the meeting's adjourned."

"Look, Zack," said Lazarus a few minutes later, "let's get this straight. Ford is going to use his extraordinary powers to help us glom onto the big ship and make a getaway. Is that right?”

“He’s practically committed to it.”

“Hmmm— He’ll have to do this while pretending to the Council that everything he does is just a necessary step in squeezing the ‘secret’ out of us—he’s going to double-cross ‘em. That right?”

“I hadn’t thought that far ahead. I—”

“But that’s true, isn’t it?”

“Well… yes, it must be true.”

“Okay. Now, is our boy Ford bright enough to realize what he is letting himself in for and tough enough to go through with it?”

Barstow reviewed what he knew of Ford and added his impressions from the interview. “Yes,” he decided, “he knows and he’s strong enough to face it.”

“All right. Now how about you, pal? Are *you* up to it, too?” Lazarus’ voice was accusing.

“Me? What do you mean?”

“You’re planning on double-crossing *your* crowd, too, aren’t you? Have you got the guts to go through with it when the going gets tough?”

“I don’t understand you, Lazarus,” Barstow answered worriedly. “I’m not planning to deceive anyone—at least, no member of the Families.”

“Better look at your cards again,” Lazarus went on remorselessly. ‘Tour part of the deal is to see to it that every man, woman and child takes part in this exodus. Do you expect to sell the idea to each one of them separately and get a hundred thousand people to agree? *Unanimously*? Shucks, you couldn’t get that many to whistle ’Yankee Doodle‘ unanimously.“

“But they will‘ *have* to agree,” protested Barstow. “They have no choice. We either emigrate, or they hunt us down and kill us. I’m certain that is what Ford intends to do. And he will.”

“Then why didn’t you walk into the meeting and tell ‘em that? Why did you send me in to give ’em a stall?”

Barstow rubbed a hand across his eyes. “I don’t know.”

“I’ll tell you why,” continued Lazarus. “You think better with your hunches than most men do with the tops of their minds. You sent me in there to tell ‘em a tale because you knew damn’ well the truth wouldn’t serve. If you told ‘em it was get out or get killed, some would get panicky and some would get stubborn. And some old-woman-in-kilts would decide to go home and stand on his Covenant rights. Then he’d spill the scheme before it ever dawned on him that the government was playing for keeps. That’s right, isn’t it?”

Barstow shrugged and laughed unhappily. “You’re right. I didn’t have it figured out but you’re absolutely right.”

“But you did have it figured out,” Lazarus assured him. “You had the right answers. Zack, I like your hunches; that’s why I’m stringing along. All right, you and Ford are planning to pull a whizzer on every man jack on this globe—I’m asking you again: *have you got the guts to see it through*?”

Chapter 5

The Members stood around in groups, fretfully. “I can’t understand it,” the Resident Archivist was saying to a worried circle around her. “The Senior Trustee never interfered in my work before. But he came bursting into my office with that Lazarus Long behind him and ordered me out.”

“What did he say?” asked one of her listeners.

“Well, I said, ‘May I do you a service, Zaccur Barstow?’ and he said, ‘Yes, you may. Get out and take your girls with you.’ Not a word of ordinary courtesy!”

“A lot you’ve got to complain about,” another voice added gloomily. It was Cecil Hedrick, of the Johnson Family, chief communications engineer. “Lazarus Long paid a call on me, and he was a damned sight less polite.”

“What did he do?”

“He walks into the communication cell and tells me he is going to take over my board—Zaccur’s orders. I told him that nobody could touch my burners but me and my operators, and anyhow, where was his authority? You know what he did? You won’t believe it but he pulled a blaster on me.”

“You don’t mean it!”

“I certainly do. I tell you, that man is dangerous. He ought to go for psycho adjustment. He’s an atavism if I ever saw one.”

Lazarus Long’s face stared out of the screen into that of the Administrator. “Got it all canned?” he demanded.

Ford cut the switch on the facsimulator on his desk. “Got it all,” he confirmed.

“Okay,” the image of Lazarus replied. “I’m clearing.” As the screen went blank Ford spoke into his interoffice circuit.

“Have the High Chief Provost report to me at once—in corpus.”

The public safety boss showed up as ordered with an expression on his lined face in which annoyance struggled with discipline. He was having the busiest night of his career, yet the Old Man had sent orders to report in the flesh. What the devil were viewphones for, anyway, he thought angrily— and asked himself why he had ever taken up police work. He rebuked his boss by being coldly formal and saluting unnecessarily. “You sent for me, sir.”

Ford ignored it. ‘Tes, thank you. Here.“ He pressed a stud; a film spool popped out of the facsimulator. ”This is a complete list of the Howard Families. Arrest them.“

‘Tes, sir.“ The Federation police chief stared at the spool and debated whether or not to ask how it had been obtained—it certainly hadn’t come through *his* office… did the Old Man have an intelligence service he didn’t even know about?

“It’s alphabetical, but keyed geographically,” the Administrator was saying. “After you put it through sorters, send the—no, *bring* the original back to me. You can stop the psycho interviews, too,” he added. “Just bring them in and hold them. I’ll give you more instructions later.”

The High Chief Provost decided that this was not a good time to show curiosity. “Yes, sir.” He saluted stiffly and left.

Ford turned back to his desk controls and sent word that he wanted to see the chiefs of the bureaus of land resources and of transportation control. On afterthought he added the chief of the bureau of consumption logistics.

Back in the Families’ Seat a rump session of the trustees was meeting; Barstow was absent. “I don’t like it,” Andrew Weatherall was saying. “I could understand Zaccur deciding to delay reporting to the Members but I had supposed that he simply wanted to talk to us first. I certainly did expect him to consult us. What do you make of it, Philip?”

Philip Hardy chewed his lip. “I don’t know. Zaccur’s got a head on his shoulders… but it certainly seems to me that he should have called us together and advised with us. Has he spoken with you, Justin?”

“No, he has not,” Justin Foote answered frigidly.

“Well, what should we do? We can’t very well call him in and demand an accounting unless we are prepared to oust him from office and if he refuses. I, for one, am reluctant to do that.”

They were still discussing it when the proctors arrived.

Lazarus heard the commotion and correctly interpreted it—no feat, since he had information that his brethren lacked. He was aware that he should submit peacefully and conspicuously to arrest—set a good example. But old habits die hard; he postponed the inevitable by ducking into the nearest men’s ‘fresher.

It was a dead end. He glanced at the air duct—no, too small. While thinking he fumbled in his pouch for a cigarette; his hand found a strange object, he pulled it out. It was the brassard he had “borrowed” from the proctor in Chicago.

When the proctor working point of the mop-squad covering that wing of the Seat stuck his head into that ‘fresher, he found another “proctor” already there. “Nobody in here,” announced Lazarus. “I’ve checked it.”

“How the devil did you get ahead of me?”

“Around your flank. Stoney Island Tunnel and through their air vents.” Lazarus trusted that the real cop would be unaware that there was no Stoney Island Tunnel. “Got a cigarette on you?”

"Huh? This is no time to catch a smoke."

"Shucks," said Lazarus, "my legate is a good mile away."

"Maybe so," the proctor replied, "but mine is right behind us."

"So? Well, skip it—I've got something to tell him anyhow." Lazarus started to move past but the proctor did not get out of his way. He was glancing curiously at Lazarus' kilt. Lazarus had turned it inside out and its blue lining made a fair imitation of a proctor's service uniform—if not inspected closely.

"What station did you say you were from?" inquired the proctor.

"This one," answered Lazarus and planted a short jab under the man's breastbone. Lazarus' coach in rough-and-tumble had explained to him that a solar plexus blow was harder to dodge than one to the jaw; the coach had been dead since the roads strike of 1966, his skill lived on.

Lazarus felt more like a cop with a proper uniform kilt and a bandolier of paralysis bombs slung under his left arm. Besides, the proctor's kilt was a better fit. To the right the passage outside led to the Sanctuary and a dead end; he went to the left by Hobson's choice although he knew he would run into his unconscious benefactor's legate. The passage gave into a hall which was crowded with Members herded into a group of proctors. Lazarus ignored his kin and sought out the harassed officer in charge. "Sir," he reported, saluting smartly, "There's sort of a hospital back there. You'll need fifty or sixty stretchers."

"Don't bother me, tell your legate. We've got our hands full."

Lazarus almost did not answer; he had caught Mary Sperling's eye in the crowd—she stared at him and looked away. He caught himself and answered, "Can't tell him, sir. Not available."

"Well, go on outside and tell the first-aid squad."

"Yes, sir." He moved away, swaggering a little, his thumbs hooked in the band of his kilt. He was far down the passage leading to the transbelt tunnel serving the Waukegan outlet when he heard shouts behind him. Two proctors were running to overtake him.

Lazarus stopped in the archway giving into the transbelt tunnel and waited for them. "What's the trouble?" he asked easily as they came up.

"The legate—" began one. He got no further; a paralysis bomb tinkled and popped at his feet. He looked surprised as the radiations wiped all expression from his face; his mate fell across him.

Lazarus waited behind a shoulder of the arch, counted seconds up to fifteen: "Number one jet firel Number two jet fire! Number three jet fire!" —added a couple to be sure the paralyzing effect had died away. He had cut it finer than he liked. He had not ducked quite fast enough and his left foot tingled from exposure.

He then checked. The two were unconscious, no one else was in sight. He mounted the transbelt. Perhaps they had not been looking for him in his proper person, perhaps no one had given him away. But he did not hang around to find out. One thing he was damn‘ well certain of, he told himself, if anybody had squealed on him, it wasn’t Mary Sperling.

It took two more parabombs and a couple of hundred words of pure fiction to get him out into the open air. Once he was there and out of immediate observation the brassard and the remaining bombs went into his pouch and the bandolier ended up behind some bushes; he then looked up a clothing store in Waukegan.

He sat down in a sales booth and dialed the code for kilts. He let cloth designs flicker past in the screen while he ignored the persuasive voice of the catalogue until a pattern showed up which was distinctly unmilitary and not blue, whereupon he stopped the display and punched an order for his size. He noted the price, tore an open-credit voucher from his wallet, stuck it into the machine and pushed the switch. Then he enjoyed a smoke while the tailoring was done.

Ten minutes later he stuffed the proctor’s kilt into the refuse hopper of the sales booth and left, nattily and loudly attired. He had not been in Waukegan the past century but he found a middle-priced autel without drawing attention by asking questions, dialed its registration board for a standard suite and settled down for seven hours of sound sleep.

He breakfasted in his suite, listening with half an ear to the news box; he was interested, in a mild way, in hearing what might be reported concerning the raid on the Families. But it was a detached interest; he had already detached himself from it in his own mind. It had been a mistake, he now realized, to get back in touch with the Families—a dam good thing he was clear of it all with his present public identity totally free of any connection with the whingding.

A phrase caught his attention: “—including Zaccur Barstow, alleged to be their tribal chief.

“The prisoners are being shipped to a reservation in Oklahoma, near the ruins of the Okla-Orleans road city about twenty-five miles east of Harriman Memorial Park. The Chief Provost describes it as a ‘Little Coventry,’ and has ordered all aircraft to avoid it by ten miles laterally. The Administrator could not be reached for a statement but a usually reliable source inside the administration informs us that the mass arrest was accomplished in order to speed up the investigations whereby the administration expects to obtain the ‘Secret of the Howard Families’—their techniques for indefinitely prolonging life. This forthright action in arresting and transporting every member of the outlaw group is expected to have a salutary effect in breaking down the resistance of their leaders to the legitimate demands of society. It will bring home forcibly to them that the civil rights enjoyed by decent citizens must not be used as a cloak behind which to damage society as a whole.

“The chattels and holdings of the members of this criminal conspiracy have been declared subject to the Conservator General and will be administered by his agents during the imprisonment of—”

Lazarus switched it off. “Damnation!” he thought. “Don’t fret about things you can’t help.” Of course, he had expected to be arrested himself… but he had escaped. That was that. It wouldn’t do the Families any good for him to turn himself in—and besides, he owed the Families nothing, not a tarnation thing.

Anyhow, they were better off all arrested at once and quickly placed under guard. If they had been smelled out one at a time, anything could have happened—lynchings, even pogroms. Lazarus knew from hard experience how close under the skin lay lynch law and mob violence in the most sweetly civilized; that was why he had advised Zack to rig it—that and the fact that Zack and the Administrator had to have the Families in one compact group to stand a chance of carrying out their scheme. They were well off… and no skin off his nose.

But he wondered how Zack was getting along, and what he would think of Lazarus’ disappearance. And what Mary Sperling thought—it must have been a shock to her when he turned up making a noise like a proctor. He wished he could straighten that out with her.

Not that it mattered what any of them thought. They would all either be lightyears away very soon… or dead. A closed book.

He turned to the phone and called the post office. “Captain Aaron Sheffield,” he announced, and gave his postal number. “Last registered with Goddard Field post office. Will you please have my mail sent to —” He leaned closer and read the code number from the suite’s mail receptacle.

“Service,” assented the voice of the clerk. “Right away, Captain.”

“Thank you.”

It would take a couple of hours, he reflected, for his mail to catch up with him—a half hour in trajectory, three times that in fiddle-faddle. Might as well wait here… no doubt the search for him had lost itself in the distance but there was nothing in Waukegan he wanted. Once the mail showed up he would hire a U-push-it and scoot down to —

To where? What was he going to do now?

He turned several possibilities over in his mind and came at last to the blank realization that there was nothing, from one end of the Solar System to the other, that he really wanted to do.

It scared him a little. He had once heard, and was inclined to credit, that a loss of interest in living marked the true turning point in the battle between anabolism and catabolism-old age. He suddenly envied normal short-lived people—at least they could go make nuisances of themselves to their children. Filial affection was not customary among Members of the Families; it was not a feasible relationship to maintain for a century or more. And friendship, except between Members, was bound to be regarded as a passing and shallow matter. There was no one whom Lazarus wanted to see.

Wait a minute… who was that planter on Venus? The one who knew so many folk songs and who was so funny when he was drunk? He'd go look him up. It would make a nice hop and it would be fun, much as he disliked Venus.

Then he recalled with cold shock that he had not seen the man for —how long? In any case, he was certainly dead by now.

Libby had been right, he mused glumly, when he spoke of the necessity for a new type of memory association for the long-lived. He hoped the lad would push ahead with the necessary research and come up with an answer before Lazarus was reduced to counting on his fingers. He dwelt on the notion for a minute or two before recalling that he was most unlikely ever to see Libby again.

The mail arrived and contained nothing of importance. He was not surprised; he expected no personal letters. The spools of advertising went into the refuse chute; he read only one item, a letter from Pan-Terra Docking Corp. telling him that his convertible cruiser I *Spy* had finished her overhaul and had been moved to a parking dock, rental to start forthwith. As instructed, they had not touched the ship's astrogational controls—was that still the Captain's pleasure?

He decided to pick her up later in the day and head out into space. Anything was better than sitting Earthbound and admitting that he was bored.

Paying his score and finding a jet for hire occupied less than twenty minutes. He took off and headed for Goddard Field, using the low local-traffic level to avoid entering the control pattern with a flight plan. He was not consciously avoiding the police because he had no reason to think that they could be looking for "Captain Sheffield"; it was simply habit, and it would get him 'to Goddard Field soon enough.

But long before he reached there, while over eastern Kansas, he decided to land and did so.

He picked the field of a town so small as to be unlikely to rate a full-time proctor and there he sought out a phone booth away from the field. Inside it, he hesitated. How did you go about calling up the head man of the entire Federation—and get him? If he simply called

Novak Tower and asked for Administrator Ford, he not only would not be put through to him but his call would be switched to the Department of Public Safety for some unwelcome inquiries, sure as taxes.

Well, there was only one way to beat that, and that was to call the Department of Safety himself and, somehow, get the Chief Provost on the screen—after that he would play by ear.

“Department of Civil Safety,” a voice answered. “What service, citizen?”

“Service to you,” he began in his best control-bridge voice. “I am Captain Sheffield. Give me the Chief.” He was not overbearing; his manner simply assumed obedience.

Short silence— “What is it about, please?”

“I said I was *Captain Sheffield*.” This time Lazarus’ voice showed restrained annoyance.

Another short pause— “I’ll connect you with the Chief Deputy’s office,” the voice said doubtfully.

This time the screen came to life. “Yes?” asked the Chief Deputy, looking him over.

“Get me the Chief-hurry.”

“What’s it about?”

“Good Lord, man-get me the Chief! I’m *Captain Sheffieldl”*

The Chief Deputy must be excused for connecting him; he had had no sleep and more confusing things had happened in the last twenty-four hours than he had been able to assimilate. When the High Chief Provost appeared in the screen, Lazarus spoke first. “Oh, there you are! I’ve had the damnedest time cutting through your red tape. Get me the Old Man and *move*! Use your closed circuit.”

“What the devil do you mean? Who are you?”

“Listen, brother,” said Lazarus in tones of slow exasperation, “I would not have routed through your damned hide-bound department if I hadn’t been in a jam. Cut me in to the Old Man. *This is about the Howard Families*.”

The police chief was instantly alert. “Make your report.”

“Look,” said Lazarus in tired tones, “I know you would like to look over the Old Man’s shoulder, but this isn’t a good time to try. If you obstruct me and force me to waste two hours by reporting in corpus, I will. But the Old Man will want to know why and you can bet your pretty parade kit, I’ll tell him.”

The Chief Provost decided to take a chance—cut this character in on a three-way; then, if the Old Man didn’t burn this joker off the screen in about three seconds, he’d know he had played safe and guessed lucky. If he did—well, you could always blame it on a cross-up in communications. He set the combo.

Administrator Ford looked flabbergasted when he recognized Lazarus in the screen. "You?" he exclaimed. "How on Earth—Did Zaccur Barstow—"

"*Seal your circuit*!" Lazarus cut in.

The Chief Provost blinked as his screen went dead and silent. So the Old Man *did* have secret agents outside the department… interesting-and not to be forgotten.

Lazarus gave Ford a quick and fairly honest account of how he happened to be at large, then added, "So you see, I could have gone to cover and escaped entirely. In fact I still can. But I want to know this: is the deal with Zaccur Barstow to let us emigrate still on?"

"Yes, it is."

"Have you figured out how you are going to get a hundred thousand people inboard the *New Frontiers* without tipping your hand? You can't trust your own people, you know that."

"I know. The present situation is a temporary expedient while we work it out."

"And I'm the man for the job. I've got to be, I'm the only agent on the loose that either one of you can afford to trust. Now listen—"

Eight minutes later Ford was nodding his head slowly and saying, "It might work. It might. Anyway, you start your preparations. I'll have a letter of credit waiting for you at Goddard."

"Can you cover your tracks on that? I can't flash a letter of credit from the Administrator; people would wonder."

"Credit me with some intelligence. By the time it reaches you it will appear to be a routine banking transaction."

"Sorry. Now how can I get through to you when I need to?"

"Oh, yes—note this code combination." Ford recited it slowly. "That puts you through to my desk without relay. No, don't write it down; memorize it."

"And how can I talk to Zack Barstow?"

"Call me and I'll hook you in. You can't call him directly unless you can arrange a sensitive circuit."

"Even if I could, I can't cart a sensitive around with me. Well, cheerio— I'm clearing."

"Good luck!"

Lazarus left the phone booth with restrained haste and hurried back to reclaim his hired ship. He did not know enough about current police practice to guess whether or not the High Chief Provost had traced the call to the Administrator; he simply took it for granted because he himself would have done so in the Provost's shoes. Therefore the nearest available proctor was probably stepping on his heels—time to move, time to mess up the trail a little.

He took off again and headed west, staying in the local, uncontrolled low level until he reached a cloud bank that walled the western horizon. He then swung back and cut air for Kansas City, staying carefully under the speed limit and flying as low as local traffic regulations permitted. At Kansas City he turned his ship in to the local U-push-it agency and flagged a ground taxi, which carried him down the controlway to Joplin. There he boarded a local jet bus from St. Louis without buying a ticket first, thereby insuring that his flight would not be recorded until the bus's trip records were turned in on the west coast.

Instead of worrying he spent the time making plans.

One hundred thousand people with an average mass of a hundred and fifty—no, make it a hundred and sixty pounds, Lazarus reconsidered—a hundred and sixty each made a load of sixteen million pounds, eight thousand tons. The I *Spy* could boost such a load against one gravity but she would be as logy as baked beans. It was out of the question anyhow; people did not stow like cargo; the J *Spy* could lift that dead weight-but "dead" was the word, for that was what they would be.

He needed a transport.

Buying a passenger ship big enough to ferry the Families from Earth up to where the *New Frontiers* hung in her construction orbit was not difficult; Four Planets Passenger Service would gladly unload such a ship at a fair price. Passenger trade competition being what it was, they were anxious to cut their losses on older ships no longer popular with tourists. But a passenger ship would not do; not only would there be unhealthy curiosity in what he intended to do with such a ship, but —and this settled it—he could not pilot it singlehanded. Under the Revised Space Precautionary Act, passenger ships were required to be built for human control throughout on the theory that no automatic safety device could replace human judgment in an emergency.

It would have to be a freighter.

Lazarus knew the best place to find one. Despite efforts to make the Moon colony ecologically self-sufficient, Luna City still imported vastly more tonnage than she exported. On Earth this would have resulted in "empties coming back"; in space transport it was sometimes cheaper to let empties accumulate, especially on Luna where an empty freighter was worth more as metal than it had cost originally as a ship back Earthside.

He left the bus when it landed at Goddard City, went to the space field, paid his bills, and took possession of the I *Spy*, filed a request for earliest available departure for Luna. The slot he was assigned was two days from then, but Lazarus did not let it worry him; he simply went back to the docking company and indicated that he was willing to pay liberally for a swap in departure time. In twenty minutes he had oral assurance that he could boost for Luna that evening.

He spent the remaining several hours in the maddening red tape of interplanetary clearance. He first picked up the letter of credit Ford had promised him and converted it into cash. Lazarus would have been quite willing to use a chunk of the cash to speed up his processing just as he had paid (quite legally) for a swap in slot with another ship. But he found himself unable to do so. Two centuries of survival had taught him that a bribe must be offered as gently and as indirectly as a gallant suggestion is made to a proud lady; in a very few minutes he came to the glum conclusion that civic virtue and public honesty could be run into the ground—the functionaries at Goddard Field seemed utterly innocent of the very notion of cumshaw, squeeze, or the lubricating effect of money in routine transactions. He admired their incorruptibility; he did not have to like it—most especially when filling out useless forms cost him the time he had intended to devote to a gourmet's feast in the Skygate Room.

He even let himself be vaccinated again rather than go back to the *I Spy* and dig out the piece of paper that showed he had been vaccinated on arrival Earthside a few weeks earlier.

Nevertheless, twenty minutes before his revised slot time, he lay at the controls of the I *Spy*, his pouch bulging with stamped papers and his stomach not bulging with the sandwich he had managed to grab. He had worked out the "Hohmann's-S" trajectory he would use; the results had been fed into the autopilot. All the lights on his board were green save the one which would blink green when field control started his count down. He waited in the warm happiness that always filled him when about to boost.

A thought hit him and he raised up against his straps. Then he loosened the chest strap and sat up, reached for his copy of the current *Terra Pilot and Traffic Hazards Supplement*. Mmm…

New Frontiers hung in a circular orbit of exactly twenty-four hours, keeping always over meridian 106° west at declination zero at a distance from Earth center of approximately twenty-six thousand miles.

Why not pay her a call, scout out the lay of the land?

The I *Spy*, with tanks topped off and cargo spaces empty, had many mile-seconds of reserve boost. To be sure, the field had cleared him for Luna City, not for the interstellar ship… but, with the Moon in its present phase, the deviation from his approved flight pattern would hardly show on a screen, probably would not be noticed until the film record was analyzed at some later time—at which time Lazarus would receive a traffic citation, perhaps even have his license suspended. But traffic tickets had never worried him… and it was certainly worthwhile to reconnoitre.

He was already setting up the problem in his ballistic calculator. Aside from checking the orbit elements of the *New Frontiers* in the *Terra Pilot* Lazarus could have done it in his sleep; satellite-matching maneuvers were old hat for any pilot and a doubly-tangent trajectory for a twenty-four hour orbit was one any student pilot knew by heart.

He fed the answers into his autopilot during the count down, finished with three minutes to spare, strapped himself down again and relaxed as the acceleration hit him. When the ship went into free fall, he checked his position and vector via the field's transponder. Satisfied, he locked his board, set the alarm for rendezvous, and went to sleep.

Chapter 6

About four hours later the alarm woke him. He switched it off; it continued to ring—a glance at his screen showed him why. The Gargantuan cylindrical body of the New *Frontiers* lay close aboard. He switched off the radar alarm circuit as well and completed matching with her by the seat of his pants, not bothering with the ballistic calculator. Before he had completed the maneuver the communications alarm started beeping. He slapped a switch; the rig hunted frequencies and the vision screen came to life. A man looked at him. “New *Frontiers* calling: what ship are you?”

“Private vessel I *Spy*, Captain Sheffield. My compliments to your commanding officer. May I come inboard to pay a call?”

They were pleased to have visitors. The ship was completed save for inspection, trials, and acceptance; the enormous gang which had constructed her had gone to Earth and there was no one aboard but the representatives of the Jordan Foundation and a half dozen engineers employed by the corporation which had been formed to build the ship for the foundation. These few were bored with inactivity, bored with each other, anxious to quit marking time and get back to the pleasures of Earth; a visitor was a welcome diversion.

When the I *Spy’s* airlock had been sealed to that of the big ship, Lazarus was met by the engineer in charge—technically “captain” since the New *Frontiers* was a ship under way even though not under power. He introduced himself and took Lazarus on a tour of the ship. They floated through miles of corridors, visited laboratories, storerooms, libraries containing hundreds of thousands of spools, acres of hydroponic tanks for growing food and replenishing oxygen, and comfortable, spacious, even luxurious quarters for a crew colony of ten thousand people. “We believe that the *Vanguard* expedition was somewhat undermanned,” the skipper-engineer explained. “The socio-dynamicists calculate that this colony will be able to maintain the basics of our present level of culture.”

“Doesn’t sound like enough,” Lazarus commented. “Aren’t there more than ten thousand types of specialization?”

“Oh, certainly! But the idea is to provide experts in all basic arts and indispensable branches of knowledge. Then, as the colony expands, additional specializations can be added through the aid of the reference libraries —anything from tap-dancing to tapestry weaving. That’s the general idea though it’s out of my line. Interesting subject, no doubt, for those who like it.”

“Are you anxious to get started?” asked Lazarus.

The man looked almost shocked. “Me? D’you mean to suggest that

I would go in this thing? My dear sir, I'm an engineer, not a damn' fool."

"Sorry."

"Oh, I don't mind a reasonable amount of spacing when there's a reason for it—I've been to Luna City more times than I can count and I've even been to Venus. But you don't think the man who built the *Mayflower* sailed in her, do you? For my money the only thing that will keep these people who signed up for it from going crazy before they get there is that it's a dead cinch they're all crazy before they start."

Lazarus changed the subject. They did not dally in the main drive space, nor in the armored cell housing the giant atomic converter, once Lazarus learned that they were unmanned, fully-automatic types. The total absence of moving parts in each of these divisions, made possible by recent developments in parastatics, made their inner workings of intellectual interest only, which could wait. What Lazarus did want to see was the control room, and there he lingered, asking endless questions until his host was plainly bored and remaining only out of politeness.

Lazarus finally shut up, not because he minded imposing on his host but because he was confident that he had learned enough about the controls to be willing to chance conning the ship.

He picked up two other important data before he left the ship: in nine Earth days the skeleton crew was planning a weekend on Earth, following which the acceptance trials would be held. But for three days the big ship would be empty, save possibly for a communications operator—Lazarus was too wary to be inquisitive on this point. But there would be no guard left in her because no need for a guard could be imagined. One might as well guard the Mississippi River.

The other thing he learned was how to enter the ship from the outside without help from the inside; he picked that datum up through watching the mail rocket arrive just as he was about to leave the ship.

At Luna City, Joseph McFee, factor for Diana Terminal Corp., subsidiary of Diana Freight Lines, welcomed Lazarus warmly. "Well! Come in, Cap'n, and pull up a chair. What'll you drink?" He was already pouring as he talked—tax-free paint-remover from his own amateur vacuum still. "Haven't seen you in… well, too long. Where d'you raise from last and what's the gossip there? Heard any new ones?"

"From Goddard," Lazarus answered and told him what the skipper had said to the V.I.P. McFee answered with the one about the old maid in free fall, which Lazarus pretended not to have heard. Stories led to politics, and McFee expounded his notion of the "only possible solution" to the European questions, a solution predicated on a complicated theory of Mc-Fee's as to why the Covenant could not be extended to any culture below a certain level of industrialization. Lazarus did not give a hoot either way but he knew better than to hurry McFee; he nodded at the right places, accepted more of the condemned rocket juice when offered, and waited for the right moment to come to the point.

"Any company ships for sale now, Joe?"

"Are there? I should hope to shout. I've got more steel sitting out on that plain and cluttering my inventory that I've had in ten years. Looking for some? I can make you a sweet price."

"Maybe. Maybe not. Depends on whether you've got what I want."

"You name it, I've got it. Never saw such a dull market. Some days you can't turn an honest credit." McFee frowned. "You know what the trouble is? Well, I'll tell you—it's this Howard Families commotion. Nobody wants to risk any money until he knows where he stands. How can a man make plans when he doesn't know whether to plan for ten years or a hundred? You mark my words: if the administration manages to sweat the secret loose from those babies, you'll see the biggest boom in long-term investments ever. But if not… well, long-term holdings won't be worth a peso a dozen and there will be an eat-drink-and-be-merry craze that will make the Reconstruction look like a tea party."

He frowned again. "What kind of metal you looking for?"

"I don't want metal, I want a ship."

McFee's frown disappeared, his eyebrows shot up. "So? What sort?"

"Can't say exactly. Got time to look 'em over with me?"

They suited up and left the dome by North Tunnel, then strolled around grounded ships in the long, easy strides of low gravity. Lazarus soon saw that just two ships had both the lift and the air space needed. One was a tanker and the better buy, but a mental calculation showed him that it lacked deck space, even including the floor plates of the tanks, to accommodate eight thousand tons of passengers. The other was an older ship with cranky piston-type injection meters, but she was fitted for general merchandise and had enough deck space. Her pay load was higher than necessary for the job, since passengers weigh little for the cubage they clutter—but that would make her lively, which might be critically important.

As for the injectors, he could baby them—he had herded worse junk than this.

Lazarus haggled with McFee over terms, not because he wanted to save money but because failure to do so would have been out of character. They finally reached a complicated three-cornered deal in which McFee bought the I *Spy* for himself, Lazarus delivered clear title to it unmortgaged and accepted McFee's unsecured note in payment, then purchased the freighter by endorsing McFee's note back to him and adding cash. McFee in turn would be able to mortgage the I *Spy* at the Commerce Clearance Bank in Luna City, use the proceeds plus cash or credit of his own to redeem his own paper—presumably before his accounts were audited, though Lazarus did not mention that.

It was not quite a bribe. Lazarus merely made use of the fact that McFee had long wanted a ship of his own and regarded the I *Spy* as the ideal bachelor's go-buggy for business or pleasure; Lazarus simply held the price down to where McFee could swing the deal. But the arrangements made certain that McFee would not gossip about the deal, at least until he had had time to redeem his note. Lazarus further confused the issue by asking McFee to keep his eyes open for a good buy in trade tobacco… which made McFee sure that Captain Sheffield's mysterious new venture involved Venus, that being the only major market for such goods.

Lazarus got the freighter ready for space in only four days through lavish bonuses and overtime payments. At last he dropped Luna City behind him, owner and master of the *City of Chillicothe*. He shortened the name in his mind to *Chili* in honor of a favorite dish he had not tasted in a long time—fat red beans, plenty of chili powder, chunks of meat… real meat, not the synthetic pap these youngsters called "meat." He thought about it and his mouth watered.

He had not a care in the world.

As he approached Earth, he called traffic control and asked for a parking orbit, as he did not wish to put the *Chili* down; it would waste fuel and attract attention. He had no scruples about orbiting without permission but there was a chance that the *Chili* might be spotted, charted, and investigated as a derelict during his absence; it was safer to be legal.

They gave him an orbit; he matched in and steadied down, then set the *Chili's* identification beacon to his own combination, made sure that the radar of the ship's gig could trip it, and took the gig down to the auxiliary small-craft field at Goddard. He was careful to have all necessary papers with him this time; by letting the gig be sealed in bond he avoided customs and was cleared through the space port quickly. He had no destination in mind other than to find a public phone and check in with Zack and Ford-then, if there was time, try to find some real chili. He had not called the Administrator from space because ship-to-ground required relay, and the custom of privacy certainly would not protect them if the mixer who handled the call overheard a mention of the Howard Families.

The Administrator answered his call at once, although it was late at night in the longitude of Novak Tower. From the puffy circles under Ford's eyes Lazarus judged that he had been living at his desk. "Hi," said Lazarus, "better get Zack Barstow on a three-way. I've got things to report."

"So it's you," Ford said grimly. "I thought you had run out on us. Where have you been?"

"Buying a ship," Lazarus answered. "As you knew. Let's get Barstow."

Ford frowned, but turned to his desk. By split screen, Barstow joined them. He seemed surprised to see Lazarus and not altogether relieved. Lazarus spoke quickly:

"What's the matter, pal? Didn't Ford tell you what I was up to7"

"Yes, he did," admitted Barstow, "but we didn't know where you were or what you were doing. Time dragged on and you didn't check in… so we decided we had seen the last of you."

"Shucks," complained Lazarus, "you know I wouldn't ever do anything like *that*. Anyhow, here I am and here's what I've done so far —" He told them of the *Chili* and of his reconnaissance of the New *Frontiers*. "Now here's how I see it: sometime this weekend, while the *New Frontiers* is sitting out there with nobody inboard her, I set the *Chili* down in the prison reservation, we load up in a hurry, rush out to the *New Frontiers*, grab her, and scoot. Mr. Administrator, that calls for a lot of help from you. Your proctors will have to look the other way while I land and load. Then we need to sort of slide past the traffic patrol. After that it would be a whole lot better if no naval craft was in a position to do anything drastic about the *New Frontiers—it* there is a communication watch left in her, they may be able to holler for help before we can silence them."

"Give me credit for some foresight," Ford answered sourly. "I know you will have to have a diversion to stand any chance of getting away with it. The scheme is fantastic at the best."

"Not too fantastic," Lazarus disagreed, "if you are willing to use your emergency powers to the limit at the last minute."

"Possibly. But we can't wait four days."

"Why not?"

"The situation won't hold together that long."

"Neither will mine," put in Barstow.

Lazarus looked from one to the other. "Huh? What's the trouble? What's up?"

They explained:

Ford and Barstow were engaged in a preposterously improbable task, that of putting over a complex and subtle fraud, a triple fraud with a different face for the Families, for the public, and for the Federation Council. Each aspect presented unique and apparently insurmountable difficulties.

Ford had no one whom he dared take into his confidence, for even his most trusted personal staff member might be infected with the mania of the delusional Fountain of Youth… or might not be, but there was no way to know without compromising the conspiracy. Despite this, he had to convince the Council that the measures he was taking were the best for achieving the Council's purpose.

Besides that, he had to hand out daily news releases to convince the citizens that their government was just about to gain for them the "secret" of living forever. Each day the statements had to be more detailed, the lies more tricky. The people were getting restless at the delay; they were sloughing off the coat of civilization, becoming mob.

The Council was feeling the pressure of the people. Twice Ford had been forced to a vote of confidence; the second he had won by only two votes. "I won't win another one—we've got to *move*."

Barstow's troubles were different but just as sticky. He had to have confederates, because his job was to prepare all the hundred thousand members for the exodus. They had to know, before the time came to embark, if they were to leave quietly and quickly. Nevertheless he did not dare tell them the truth too soon because among so many people there were bound to be some who were stupid and stubborn… and it required just one fool to wreck the scheme by spilling it to the proctors guarding them.

Instead he was forced to try to find leaders whom he could trust, convince them, and depend on them to convince others. He needed almost a thousand dependable "herdsmen" to be sure of getting his people to follow him when the time came. Yet the very number of confederates he needed was so great as to make certain that somebody would prove weak.

Worse than that, he needed other confederates for a still touchier purpose. Ford and he had agreed on a scheme, weak at best, for gaining time. They were doling out the techniques used by the Families in delaying the symptoms of senility under the pretense that the sum total of these techniques was the "secret." To put over this fraud Barstow had to have the help of the biochemists, gland therapists, specialists in symbiotics and in metabolism, and other experts among the Families, and these in turn had to be prepared for police interrogation by the Families' most skilled psychotechnicians… because they had to be able to put over the fraud even under the influence of babble drugs. The hypnotic false indoctrination required for this was enormously more complex than that necessary for a simple block against talking. Thus far the swindle had worked… fairly well. But the discrepancies became more hard to explain each day.

Barstow could not keep these matters juggled much longer. The great mass of the Families, necessarily kept in ignorance, were getting out of hand even faster than the public outside. They were rightfully angry at what had been done to them; they expected anyone in authority to do something about it—and do it now!

Barstow's influence over his kin was melting away as fast as that of Ford over the Council.

"It can't be four days," repeated Ford. "More like twelve hours… twenty-four at the outside. The Council meets again tomorrow afternoon."

Barstow looked worried. "I'm not sure I can prepare them in so short a time. I may have trouble getting them aboard."

"Don't worry about it," Ford snapped.

"Why not?"

"Because," Ford said bluntly, "any who stay behind will be dead—if they're lucky."

Barstow said nothing and looked away. It was the first time that either one of them had admitted explicitly that this was no relatively harmless piece of political chicanery but a desperate and nearly hopeless attempt to avoid a massacre… and that Ford himself was on both sides of the fence.

"Well," Lazarus broke in briskly, "now that you boys have settled that, let's get on with it. I can ground the *Chili* in—" He stopped and estimated quickly where she would be in orbit, how long it would take him to rendezvous, "—well, by twentytwo Greenwich. Add an hour to play safe. How about seventeen o'clock Oklahoma time tomorrow afternoon? That's today, actually."

The other two seemed relieved. "Good enough," agreed Barstow. "I'll have them in the best shape I can manage."

"All right," agreed Ford, "if that's the fastest it can be done." He thought for a moment. "Barstow, I'll withdraw at once all proctors and government personnel now inside the reservation barrier and shut you off. Once the gate contracts, you can tell them all."

"Right. I'll do my best."

"Anything else before we clear?" asked Lazarus. "Oh, yes—Zack, we'd better pick a place for me to land, or I may shorten a lot of lives with my blast."

"Uh, yes. Make your approach from the west. I'll rig a standard berth marker. Okay?"

"Okay."

"Not okay," denied Ford. "We'll have to give him a pilot beam to come in on."

"Nonsense," objected Lazarus. "I could set her down on top of the Washington Monument."

"Not this time, you couldn't. Don't be surprised at the weather."

As Lazarus approached his rendezvous with the *Chili* he signalled from the gig; the *Chili's* transponder echoed, to his relief-he had little faith in gear he had not personally overhauled and a long search for the *Chili* at this point would have been disastrous.

He figured the relative vector, gunned the gig, flipped, and gunned to brake—homed-in three minutes off estimate, feeling smug. He cradled the gig, hurried inside, and took her down.

Entering the stratosphere and circling two-thirds of the globe took no longer than he had estimated. He used part of the hour's leeway he had allowed himself by being very stingy in his maneuvers in order to spare the worn, obsolescent injection meters. Then he was down in the troposphere and making his approach, with skin temperatures high but not dangerously so. Presently he realized what Ford had meant about the weather. Oklahoma and half of Texas were covered with deep, thick clouds. Lazarus was amazed and somehow pleased; it reminded him of other days, when weather was something experienced rather than controlled. Life had lost some flavor, in his opinion, when the weather engineers had learned how to harness the elements. He hoped that their planet—if they found one!—would have some nice, lively weather.

Then he was down in it and too busy to meditate. In spite of her size the freighter bucked and complained. Whew! Ford must have ordered this little charivari the minute the time was set-and, at that, the integrators must have had a big low-pressure area close at hand to build on.

Somewhere a pattern controlman was shouting at him; he switched it off and gave all his attention to his approach radar and the ghostly images in the infrared rectifier while comparing what they told him with his inertial tracker. The ship passed over a miles-wide scar on the landscape-the ruins of the Okla-Orleans Road City. When Lazarus had last seen it, it had been noisy with life. Of all the mechanical monstrosities the human race had saddled themselves with, he mused, those dinosaurs easily took first prize.

Then the thought was cut short by a squeal from his board; the ship had picked up the pilot beam.

He wheeled her in, cut his last jet as she scraped, and slapped a series of switches; the great cargo ports rumbled open and rain beat in.

Eleanor Johnson huddled into herself, half crouching against the storm, and tried to draw her cloak more tightly about the baby in the crook of her left arm. When the storm had first hit, the child had cried endlessly, stretching her nerves taut. Now it was quiet, but that seemed only new cause for alarm.

She herself had wept, although she had tried not to show it. In all her twenty-seven years she had never been exposed to weather like this; it seemed symbolic of the storm that had overturned her life, swept her away from her cherished first home of her own with its homey old-fashioned fireplace, its shiny service cell, its thermostat which she could set to the temperature she liked without consulting others—a tempest which had swept her away between two grim proctors, arrested like some poor psychotic, and landed her after terrifying indignities here in the cold sticky red clay of this Oklahoma field.

Was it true? Could it possibly be true? Or had she not yet borne her baby at all and this was another of the strange dreams she had while carrying it?

But the rain was too wetly cold, the thunder too loud; she could never have slept through such a dream. Then what the Senior Trustee had told them must be fine, too—it had to be true; she had seen the ship ground with her own eyes, its blast bright against the black of the storm. She could no longer see it but the crowd around her moved slowly forward; it must be in front of her. She was close to the outskirts of the crowd; she would be one of the last to get aboard.

It was very necessary to board the ship—Elder Zaccur Barstow had told them with deep solemnness what lay in store for them if they failed to board. She had believed his earnestness; nevertheless she wondered how it could possibly be true—could anyone be so wicked, so deeply and terribly wicked as to want to kill anyone as harmless and helpless as herself and her baby?

She was struck by panic terror—suppose there was no room left by the time she got up to the ship? She clutched her baby more tightly; the child cried again at the pressure.

A woman in the crowd moved closer and spoke to her. “You must be tired. May I carry the baby for a while?”

“No. No, thank you. I’m all right.” A flash of lightning showed the woman’s face; Eleanor Johnson recognized her—Elder Mary Sperling.

But the kindness of the offer steadied her. She knew now what she must do. If they were filled up and could take no more, she must pass her baby forward, hand to hand over the heads of the crowd. They could not refuse space to anything as little as her baby.

Something brushed her in the dark. The crowd was moving forward again.

When Barstow could see that loading would be finished in a few more minutes he left his post at one of the cargo doors and ran as fast as he could through the splashing sticky mud to the communications shack. Ford had warned him to give notice just before they raised ship; it was necessary to Ford’s plan for diversion. Barstow fumbled with an awkward unpowered door, swung it open and rushed in. He set the private combination which should connect him directly to Ford's control desk and pushed the key.

He was answered at once but it was not Ford's face on the screen. Barstow burst out with, "Where is the Administrator? I want to talk with him," before he recognized the face in front of him.

It was a face well known to all the public-Bork Vanning, Leader of the Minority in the Council. "You're talking to the Administrator," Vanning said and grinned coldly. "The new Administrator. Now who the devil are you and why are you calling?"

Barstow thanked all gods, past and present, that recognition was onesided. He cut the connection with one unaimed blow and plunged out of the building.

Two cargo ports were already closed; stragglers were moving through the other two. Barstow hurried the last of them inside with curses and followed them, slammed pell-mell to the control room. "Raise ship!" he shouted to Lazarus. "Fast!"

"What's all the shootin' fer?" asked Lazarus, but he was already closing and sealing the ports. He tripped the acceleration screamer, waited a scant ten seconds… and gave her power.

"Well," he said conversationally six minutes later, "I hope everybody was lying down. If not, we've got some broken bones on our hands. What's that you were saying?"

Barstow told him about his attempt to report to Ford.

Lazarus blinked and whistled a few bars of *Turkey in the Straw*. "It looks like we've run out of minutes. It does look like it." He shut up and gave his attention to his instruments, one eye on his ballistic track, one on radar-aft.

Chapter 7

Lazarus had his hands full to jockey the *Chili* into just the right position against the side of the New *Frontiers;* the overstrained meters made the smaller craft skittish as a young horse. But he did it. The magnetic anchors clanged home; the gastight seals slapped into place; and their ears popped as the pressure in the *Chili* adjusted to that in the giant ship. Lazarus dived for the drop hole in the deck of the control room, pulled himself rapidly hand over hand to the port of contact, and reached the passenger lock of the *New Frontiers* to find himself facing the skipper-engineer.

The man looked at him and snorted. “You again, eh? Why the deuce didn’t you answer our challenge? You can’t lock onto us without permission; this is private property. What do you mean by it?”

“It means,” said Lazarus, “that you and your boys are going back to Earth a few days early—in this ship.”

“Why, that’s ridiculous!”

“Brother,” Lazarus said gently, his blaster suddenly growing out his left fist, “I’d sure hate to hurt you after you were so nice to me… but I sure will, unless you knuckle under awful quick.”

The official simply stared unbelievingly. Several of his juniors had gathered behind him; one of them sunfished in the air, started to leave. Lazarus winged him in the leg, at low power; he jerked and clutched at nothing. “Now you’ll have to take care of him,” Lazarus observed.

That settled it. The skipper called together his men from the announcing system microphone at the passenger lock; Lazarus counted them as they arrived—twenty-nine, a figure he had been careful to learn on his first visit. He assigned two men to hold each of them. Then he took a look at the man he had shot.

“You aren’t really hurt, bub,” he decided shortly and turned to the skipper-engineer. “Soon as we transfer you, get some radiation salve on that burn. The Red Cross kit’s on the after bulkhead of the control room.”

“This is piracy! You can’t get away with this.”

“Probably not,” Lazarus agreed thoughtfully. “But I sort of hope we do.” He turned his attention back to his job. “Shake it up there! Don’t take all day.”

The *Chili* was slowly being emptied. Only the one exit could be used but the pressure of the half hysterical mob behind them forced along those in the bottleneck of the trunk joining the two ships; they came boiling out like bees from a disturbed hive.

Most of them had never been in free fall before this trip; they burst out into the larger space of the giant ship and drifted helplessly, completely disoriented. Lazarus tried to bring order into it by grabbing anyone he could see who seemed to be able to handle himself in zero gravity, ordered him to speed things up by shoving along the helpless ones—shove them anywhere, on back into the big ship, get them out of the way, make room for the thousands more yet to come. When he had conscripted a dozen or so such herdsmen he spotted Barstow in the emerging throng, grabbed him and put him in charge. “Keep ‘em moving, just anyhow. I’ve got to get for’ard to the control room. If you spot Andy Libby, send him after me.”

A man broke loose from the stream and approached Barstow. “There’s a ship trying to lock onto ours. I saw it through a port.”

“Where?” demanded Lazarus.

The man was handicapped by slight knowledge of ships and shipboard terms, but he managed to make himself understood. “I’ll be back,” Lazarus told Barstow. “Keep ‘em moving—and don’t let any of those babies get away—our guests there.” He holstered his blaster and fought his way back through the swirling mob in the bottleneck.

Number three port seemed to be the one the man had meant. Yes, there was something there. The port had an armor-glass bull’s-eye in it, but instead of stars beyond Lazarus saw a lighted space. A ship of some sort had locked against it.

Its occupants either had not tried to open the *Chili’s* port or just possibly did not know how. The port was not locked from the inside; there had been no reason to bother. It should have opened easily from either side once pressure was balanced… which the telltale, shining green by the latch, showed to be the case.

Lazarus was mystified.

Whether it was a traffic control vessel, a Naval craft, or something else, its presence was bad news. But why didn’t they simply open the door and walk in? He was tempted to lock the port from the inside, hurry and lock all the others, finish loading and try to run for it.

But his monkey ancestry got the better of him; he could not leave alone something he did not understand. So he compromised by kicking the blind latch into place that would keep them from opening the port from outside, then slithered cautiously alongside the bull’s-eye and sneaked a peep with one eye.

He found himself staring at Slay ton Ford.

He pulled himself to one side, kicked the blind latch open, pressed the switch to open the port. He waited there, a toe caught in a handihold, blaster in one hand, knife in the other.

One figure emerged. Lazarus saw that it was Ford, pressed the switch again to close the port, kicked the blind latch into place, while never taking his blaster off his visitor. “Now what the hell?” he demanded. “What are you doing here? And who else is here? Patrol?”

“I’m alone.”

“Huh?”

“I want to go with you… if you’ll have me.”

Lazarus looked at him and did not answer. Then he went back to the bull’s-eye and inspected all that he could see. Ford appeared to be telling the truth, for no one else was in sight. But that was not what held Lazarus’ eye.

Why, the ship wasn’t a proper deepspace craft at all. It did not have an airlock but merely a seal to let it fasten to a larger ship; Lazarus was staring right into the body of the craft. It looked like—yes, it was a “Joy-boat Junior,” a little private strato-yacht, suitable only for point-to-point trajectory, or at the most for rendezvous with a satellite provided the satellite could refuel it for the return leg.

There was no fuel for it here. A lightning pilot possibly could land that tin toy without power and still walk away from it… provided he had the skill to play Skip-to-M’Lou in and out of the atmosphere while nursing his skin temperatures—but Lazarus wouldn’t want to try it. No, sir! He turned to Ford. “Suppose we turned you down. How did you figure on getting back?”

“I didn’t figure on it,” Ford answered simply.

“Mmm— Tell me about it, but make it march; we’re minus on minutes.”

Ford had burned all bridges. Turned out of office only hours earlier, he had known that, once all the facts came out, lifelong imprisonment in Coventry was the best he could hope for—if he managed to avoid mob violence or mind-shattering interrogation.

Arranging the diversion was the thing that finally lost him his thin margin of control. His explanations for his actions were not convincing to the Council. He had excused the storm and the withdrawing of proctors from the reservation as a drastic attempt to break the morale of the Families —a possible excuse but not too plausible. His orders to Naval craft, intended to keep them away from the New *Frontiers*, had apparently not been associated in anyone’s mind with the Howard Families affair; nevertheless the apparent lack of sound reason behind them had been seized on by the opposition as another weapon to bring him down. They were watching for anything to catch him out—one question asked in Council concerned certain monies from the Administrator’s discretionary fund which had been paid indirectly to one Captain Aaron Sheffield; were these monies in fact expended in the public interest?

Lazarus’ eyes widened. “You mean they were onto me?”

“Not quite. Or you wouldn’t be here. But they were close behind you. I think they must have had help from a lot of my people at the last."

"Probably. But we made it, so let's not fret. Come on. The minute everybody is out of this ship and into the big girl, we've got to boost." Lazarus turned to leave.

"You're going to let me go along?"

Lazarus checked his progress, twisted to face Ford. "How else?" He had intended at first to send Ford down in the *Chili*. It was not gratitude that changed his mind, but respect. Once he had lost office Ford had gone straight to Huxley Field north of Novak Tower, cleared for the vacation satellite *Monte Carlo*, and had jumped for the New *Frontiers* instead. Lazarus liked that. "Go for broke" took courage and character that most people didn't have. Don't grab a toothbrush, don't wind the cat—just do it! "Of course you're coming along," he said easily. "You're my kind of boy, Slayton."

The *Chili* was more than half emptied now but the spaces near the interchange were still jammed with frantic mobs. Lazarus cuffed and shoved his way through, trying not to bruise women and children unnecessarily but not letting the possibility slow him up. He scrambled through the connecting trunk with Ford hanging onto his belt, pulled aside once they were through and paused in front of Barstow.

Barstow stared past him. "Yeah, it's him," Lazarus confirmed. "Don't stare—it's rude. He's going with us. Have you seen Libby?"

"Here I am, Lazarus." Libby separated himself from the throng and approached with the ease of a veteran long used to free fall. He had a small satchel strapped to one wrist.

"Good. Stick around. Zack, how long till you're all loaded?"

"God knows. I can't count them. An hour, maybe."

"Make it less. If you put some husky boys on each side of the hole, they can snatch them through faster than they are coming. We've got to shove out of here a little sooner than is humanly possible. I'm going to the control room. Phone me there the instant you have everybody in, our guests here out, and the *Chili* broken loose. Andy! Slayton! Let's go."

"Lazarus—"

"Later, Andy. We'll talk when we get there."

Lazarus took Slayton Ford with him because he did not know what else to do with him and felt it would be better to keep him out of sight until some plausible excuse could be dreamed up for having him along. So far no one seemed to have looked at him twice, but once they quieted down, Ford's well-known face would demand explanation.

The control room was about a half mile forward of where they had entered the ship. Lazarus knew that there was a passenger belt leading to it but he didn't have time to look for it; he simply took the first passageway leading forward. As soon as they got away from the crowd they made good time even though Ford was not as skilled in the fishlike maneuvers of free fall as were the other two.

Once there, Lazarus spent the enforced wait in explaining to Libby the extremely ingenious but unorthodox controls of the star ship. Libby was fascinated and soon was putting himself through dummy runs. Lazarus turned to Ford. "How about you, Slayton? Wouldn't hurt to have a second relief pilot."

Ford shook his head. "I've been listening but I could never learn it. I'm not a pilot."

"*Huh*? How did you get here?"

"Oh. I do have a license, but I haven't had time to keep in practice. My chauffeur always pilots me. I haven't figured a trajectory in many years."

Lazarus looked him over. "And yet you plotted an orbit rendezvous? With no reserve fuel?"

"Oh, that. I had to."

"I see. The way the cat learned to swim. Well, that's one way." He turned back to speak to Libby, was interrupted by Barstow's voice over the announcing system:

"Five minutes, Lazarus! Acknowledge."

Lazarus found the microphone, covered the light under it with his hand and answered, "Okay, Zack! Five minutes." Then he said, "Cripes, I haven't even picked a course. What do you think, Andy? Straight out from Earth to shake the busies off our tail? Then pick a destination? How about it, Slayton? Does that fit with what you ordered Navy craft to do?"

"No, Lazarus, no!" protested Libby.

"Huh? Why not?"

"You should head right straight down for the Sun."

"For the Sun? For Pete's sake, why?"

"I tried to tell you when I first saw you. It's because of the space drive you asked me to develop."

"But, Andy, we haven't got it."

"Yes, we have. Here." Libby shoved the satchel he had been carrying toward Lazarus.

Lazarus opened it.

Assembled from odd bits of other equipment, looking more like the product of a boy's workshop than the output of a scientist's laboratory, the gadget which Libby referred to as a "space drive" underwent Lazarus' critical examination. Against the polished sophisticated perfection of the control room it looked uncouth, pathetic, ridiculously inadequate.

Lazarus poked at it tentatively. “What is it?” he asked. “Your model?”

“No, no. That’s *it*. That’s the space drive.”

Lazarus looked at the younger man not unsympathetically. “Son,” he asked slowly, “have you come unzipped?”

“No, no, no!” Libby sputtered. “I’m as sane as you are. This is a radically new notion. That’s why I want you to take us down near the Sun. If it works at all, it will work best where light pressure is strongest.”

“And if it doesn’t work,” inquired Lazarus, “what does that make us? Sunspots?”

“Not straight down into the Sun. But head for it now and as soon as I

can work out the data, I’ll give you corrections to warp you into your proper trajectory. I want to pass the Sun in a very flat hyperbola, well inside the orbit of Mercury, as close to the photosphere as this ship can stand. I don’t know how close that is, so I couldn’t work it out ahead of time. But the data will be here in the ship and there will be time to correlate them as we go.“

Lazarus looked again at the giddy little cat’s cradle of apparatus. “Andy… if you are sure that the gears in your head are still meshed, I’ll take a chance. Strap down, both of you.” He belted himself into the pilot’s couch and called Barstow. “How about it, Zack?”

“Right now!”

“Hang on tight!” With one hand Lazarus covered a light in his leftside control panel; acceleration warning shrieked throughout the ship. With the other he covered another; the hemisphere in front of them was suddenly spangled with the starry firmament, and Ford gasped.

Lazarus studied it. A full twenty degrees of it was blanked out by the dark circle of the nightside of Earth. “Got to duck around a corner, Andy. We’ll use a little Tennessee windage.” He started easily with a quarter gravity, just enough to shake up his passengers and make them cautious, while he started a slow operation of precessing the enormous ship to the direction he needed to shove her in order to get out of Earth’s shadow. He raised acceleration to a half gee, then to a gee.

Earth changed suddenly from a black silhouette to a slender silver crescent as the half-degree white disc of the Sun came out from behind her. “I want to clip her about a thousand miles out, Slipstick,” Lazarus said tensely, “at two gees. Gimme a temporary vector.”

Libby hesitated only momentarily and gave it to him. Lazarus again sounded acceleration warning and boosted to twice Earth-normal gravity. Lazarus was tempted to raise the boost to emergency-full but he dared not do so with a shipload of groundlubbers; even two gees sustained for a long period might be too much of a strain for some of them. Any Naval pursuit craft ordered to intercept them could boost at much higher gee and their selected crews could stand it. But it was just a chance they would have to take… and anyhow, he reminded himself, a Navy ship could not maintain a high boost for long; her mile-seconds were strictly limited by her reaction-mass tanks.

The New *Frontiers* had no such old-fashioned limits, no tanks; her converter accepted any mass at all, turned it into pure radiant energy. Anything would serve—meteors, cosmic dust, stray atoms gathered in by her sweep field, or anything from the ship herself, such as garbage, dead bodies, deck sweepings, anything at all. Mass was energy. In dying, each tortured gram gave up nine hundred million trillion ergs of thrust.

The crescent of Earth waxed and swelled and slid off toward the left edge of the hemispherical screen while the Sun remained dead ahead. A little more than twenty minutes later, when they were at closest approach and the crescent, now at half phase, was sliding out of the bowl screen, the ship-to-ship circuit came to life. "*New Frontiers*!" a forceful voice sounded. "Maneuver to orbit and lay to! This is an official traffic control order."

Lazarus shut it off. "Anyhow," he said cheerfully, "if they try to catch us, they won't like chasing us down into the Sun! Andy, it's a clear road now and time we corrected, maybe. You want to compute it? Or will you feed me the data?"

"I'll compute it," Libby answered. He had already discovered that the ship's characteristics pertinent to astrogation, including her "black body" behavior, were available at both piloting stations. Armed with this and with the running data from instruments he set out to calculate the hyperboloid by which he intended to pass the Sun. He made a halfhearted attempt to use the ship's ballistic calculator but it baffled him; it was a design he was not used to, having no moving parts of any sort, even in the exterior controls. So he gave it up as a waste of time and fell back on the strange talent for figures lodged in his brain. His brain had no moving parts, either, but he was used to it.

Lazarus decided to check on their popularity rating. He switched on the ship-to-ship again, found that it was still angrily squawking, although a little more faintly. They knew his own name now—one of his names—which caused him to decide that the boys in the *Chili* must have called traffic control almost at once. He tut-tutted sadly when he learned that "Captain Sheffield's" license to pilot had been suspended. He shut it off and tried the Naval frequencies… then shut them off also when he was able to raise nothing but code and scramble, except that the words "New Frontiers" came through once in clear.

He said something about "Sticks and stones may break my bones —" and tried another line of investigation. Both by long-range radar and by paragravitic detector he could tell that there were ships in their neighborhood but this alone told him very little; there were bound to be ships this close to Earth and he had no easy way to distinguish, from these data alone, an unarmed liner or freighter about her lawful occasions from a Naval cruiser in angry pursuit.

But the *New Frontiers* had more resources for analyzing what was around her than had an lOrdinary ship; she had been specially equipped to cope unassisted with any imaginable strange conditions. The hemispherical control room in which they lay was an enormous multi-screened television receiver which could duplicate the starry heavens either in view-aft or view-forward at the selection of the pilot. But it also had other circuits, much more subtle; simultaneously or separately it could act as an enormous radar screen as well, displaying on it the blips of any body within radar range.

But that was just a starter. Its inhuman senses could apply differential analysis to doppler data and display the result in a visual analog. Lazarus studied his lefthand control bank, tried to remember everything he had been told about it, made a change in the set up.

The simulated stars and even the Sun faded to dimness; about a dozen lights shined brightly.

He ordered the board to check them for angular rate; the bright lights turned cherry red, became little comets trailing off to pink tails-all but one, which remained white and grew no tail. He studied the others for a moment, decided that their vectors were such that they would remain forever strangers, and ordered the board to check the line-of-sight doppler on the one with a steady bearing.

It faded to violet, ran halfway through the spectrum and held steady at blue-green. Lazarus thought a moment, subtracted from the inquiry their own two gees of boost; it turned white again. Satisfied he tried the same tests with view-aft.

"Lazarus—"

"Yeah, Lib?"

"Will it interfere with what you are doing if I give you the corrections now?"

"Not at all. I was just taking a looksee. If this magic lantern knows what it's talking about, they didn't manage to get a pursuit job on our tail in time."

"Good. Well, here are the figures…"

"Feed 'em in yourself, will you? Take the conn for a while. I want to see about some coffee and sandwiches. How about you? Feel like some breakfast?"

Libby nodded absentmindedly, already starting to revise the ship's trajectory. Ford spoke up eagerly, trie first word he had uttered in a long time. "Let me get it. I'd be glad to." He seemed pathetically anxious to be useful.

"Mmm… you might get into some kind of trouble, Slayton. No matter what sort of a selling job Zack did, your name is probably 'Mud' with most of the members. I'll phone aft and raise somebody."

"Probably nobody would recognize me under these circumstances," Ford argued. "Anyway, it's a legitimate errand—I can explain that."

Lazarus saw from his face that it was necessary to the man's morale. "Okay… if you can handle yourself under two gees."

Ford struggled heavily up out of the acceleration couch he was in. "I've got space legs. What kind of sandwiches?"

"I'd say corned beef, but it would probably be some damned substitute. Make mine cheese, with rye if they've got it, and use plenty of mustard. And a gallon of coffee. What are you having, Andy?"

"Me? Oh, anything that is convenient."

Ford started to leave, bracing himself heavily against double weight, then he added, "Oh—it might save time if you could tell me where to go."

"Brother," said Lazarus, "if this ship isn't pretty well crammed with food, we've all made a terrible mistake. Scout around. You'll find some."

Down, down, down toward the Sun, with speed increasing by sixty-four feet per second for every second elapsed. Down and still down for fifteen endless hours of double weight. During this time they traveled seventeen million miles and reached the inconceivable speed of six hundred and forty miles per second. The figures mean little—think instead of New York to Chicago, a half hour's journey even by stratomail, done in a single heartbeat.

Barstow had a rough time during heavy weight. For all of the others it was a time to lie down, try hopelessly to sleep, breathe painfully and seek new positions in which to try to rest from the burdens of their own bodies. But Zaccur Barstow was driven by his sense of responsibility; he kept going though the Old Man of the Sea sat on his neck and raised his weight to three hundred and fifty pounds.

Not that he could do anything for them, except crawl wearily from one compartment to another and ask about their welfare. Nothing could be done, no organization to relieve their misery was possible, while high boost continued. They lay where they could, men, women, and children crowded together like cattle being shipped, without even room to stretch out, in spaces never intended for such extreme overcrowding.

The only good thing about it, Barstow reflected wearily, was that they were all too miserable to worry about anything but the dragging minutes. They were too beaten down to make trouble. Later on there would be doubts raised, he was sure, about the wisdom of fleeing; there would be embarrassing questions asked about Ford's presence in the ship, about Lazarus' peculiar and sometimes shady actions, about his own contradictory role. But not yet.

He really must, he decided reluctantly, organize a propaganda campaign before trouble could grow. If it did—and it surely would if he didn't move to offset it, and… well, that would be the last straw. It would be.

He eyed a ladder in front of him, set his teeth, and struggled up to the next deck. Picking his way through the bodies there he almost stepped on a woman who was clutching a baby too tightly to her. Barstow noticed that the infant was wet and soiled and he thought of ordering its mother to take care of the matter, since she seemed to be awake. But he let it go— so far as he knew there was not a clean diaper in millions of miles. Or there might be ten thousand of them on the deck above… which seemed almost as far away.

He plodded on without speaking to her. Eleanor Johnson had not been aware of his concern. After the first great relief at realizing that she and her baby were safe inside the ship she had consigned all her worries to her elders and now felt nothing but the apathy of emotional reaction and of inescapable weight. Baby had cried when that awful weight had hit them, then had become quiet, too quiet. She had roused herself enough to listen for its heartbeat; then, sure that he was alive, she had sunk back into stupor.

Fifteen hours out, with the orbit of Venus only four hours away, Libby cut the boost. The ship plunged on, in free fall, her terrific speed still mounting under the steadily increasing pull of the Sun. Lazarus was awakened by no weight. He glanced at the copilot's couch and said, "On the curve?"

"As plotted."

Lazarus looked him over. "Okay, I've got it. Now get out of here and get some sleep. Boy, you look like a used towel."

"I'll just stay here and rest."

"You will like hell. You haven't slept even when I had the conn; if you stay here, you'll be watching instruments and figuring. So beat it! Slayton, chuck him out."

Libby smiled shyly and left. He found the spaces abaft the control room swarming with floating bodies but he managed to find an unused corner, passed his kilt belt through a handihold, and slept at once.

Free fall should have been as great a relief to everyone else; it was not, except to the fraction of one per cent who were salted spacemen. Free-fall nausea, like seasickness, is a joke only to those not affected; it would take a Dante to describe a hundred thousand cases of it. There were antinausea drugs aboard, but they were not found at once; there were medical men among the Families, but they were sick, too. The misery went on.

Barstow, himself long since used to free flight, floated forward to the control room to pray relief for the less fortunate. “They’re in bad shape,” he told Lazarus. “Can’t you put spin on the ship and give them some let-up? It would help a lot.”

“And it would make maneuvering difficult, too. Sorry. Look, Zack, a lively ship will be more important to them in a pinch than just keeping their suppers down. Nobody dies from seasickness anyhow… they just wish they could.”

The ship plunged on down, still gaining speed as it fell toward the Sun. The few who felt able continued slowly to assist the enormous majority who were ill.

Libby continued to sleep, the luxurious return-to-the-womb sleep of those who have learned to enjoy free fall. He had had almost no sleep since the day the Families had been arrested; his overly active mind had spent all its time worrying the problem of a new space drive.

The big ship precessed around him; he stirred gently and did not awake. It steadied in a new attitude and the acceleration warning brought him instantly awake. He oriented himself, placed himself flat against the after bulkhead, and waited; weight hit him almost at once —three gees this time and he knew that something was badly wrong. He had gone almost a quarter mile aft before he found a hideaway; nevertheless he struggled to his feet and started the unlikely task of trying to climb that quarter mile— now straight up—at three times his proper weight, while blaming himself for having let Lazarus talk him into leaving the control room.

He managed only a portion of the trip… but an heroic portion, one about equal to climbing the stairs of a ten-story building while carrying a man on each shoulder… when resumption of free fall relieved him. He zipped the rest of the way like a salmon returning home and was in the control room quickly. “What happened?”

Lazarus said regretfully, “Had to vector, Andy.” Slayton Ford said nothing but looked worried.

“Yes, I know. But why?” Libby was already strapping himself against the copilot’s couch while studying the astrogational situation.

“Red lights on the screen.” Lazarus described the display, giving coordinates and relative vectors.

Libby nodded thoughtfully. “Naval craft. No commercial vessels would be in such trajectories. A minelaying bracket.”

“That’s what I figured. I didn’t have time to consult you; I had to use enough mile-seconds to be sure they wouldn’t have boost enough to reposition on us.”

“Yes, you had to.” Libby looked worried. “I thought we were free of any possible Naval interference.”

“They’re not ours,” put in Slayton Ford. “They can’t be ours no matter what orders have been given since I—uh, since I left. They must be Venerian craft.”

“Yeah,” agreed Lazarus, “they must be. Your pal, the new Administrator, hollered to Venus for help and they gave it to him—just a friendly gesture of interplanetary good will.”

Libby was hardly listening. He was examining data and processing it through the calculator inside his skull. “Lazarus… this new orbit isn’t too good.”

“I know,” Lazarus agreed sadly. “I had to duck… so I ducked the only direction they left open to me—closer to the Sun.”

“Too close, perhaps.”

The Sun is not a large star, nor is it very hot. But it is hot with reference to men, hot enough to strike them down dead if they are careless about tropic noonday ninety-two million miles away from it, hot enough that we who are reared under its rays nevertheless dare not look directly at it.

At a distance of two and a half million miles the Sun beats out with a flare fourteen hundred times as bright as the worst ever endured in Death Valley, the Sahara, or Aden. Such radiance would not be perceived as heat or light; it would be death more sudden than the full power of a blaster. The Sun is a hydrogen bomb, a naturally occurring one; the New *Frontiers* was skirting the limits of its circle of total destruction.

It was hot inside the ship. The Families were protected against instant radiant death by the armored walls but the air temperature continued to mount. They were relieved of the misery of free fall but they were doubly uncomfortable, both from heat and from the fact that the bulkheads slanted crazily; there was no level place to stand or lie. The ship was both spinning on its axis and accelerating now; it was never intended to do both at once and the addition of the two accelerations, angular and linear, make “down” the direction where outer and after bulkheads met. The ship was being spun through necessity to permit some of the impinging radiant energy to re-radiate on the “cold” side. The forward acceleration was equally from necessity, a forlorn-hope maneuver to pass the Sun as far out as possible and as fast as possible, in order to spend least time at perihelion, the point of closest approach.

It was hot in the control room. Even Lazarus had voluntarily shed his kilt and shucked down to Venus styles. Metal was hot to the touch. On the great stellarium screen an enormous circle of blackness marked where the Sun’s disc should have been; the receptors had cut out automatically at such a ridiculous demand.

Lazarus repeated Libby’s last words. ‘“Thirty-seven minutes to perihelion.’ We can’t take it, Andy. The ship can’t take it.”

“I know. I never intended us to pass this close.”

“Of course you didn’t. Maybe I shouldn’t have maneuvered. Maybe we would have missed the mines anyway. Oh, well—” Lazarus squared his shoulders and filed it with the might-have-beens. “It looks to me, son, about time to try out your gadget.” He poked a thumb at Libby’s uncouth-looking “space drive.”

“You say that all you have to do is to hook up that one connection?”

“That is what is intended. Attach that one lead to any portion of the mass to be affected. Of course I don’t really know that it will work,” Libby admitted. “There is no way to test it.”

“Suppose it doesn’t?”

“There are three possibilities,” Libby answered methodically. “In the first place, nothing may happen.”

“In which case we fry.”

“In the second place, we and the ship may cease to exist as matter as we know it.”

“Dead, you mean. But probably a pleasanter way.”

“I suppose so. I don’t know what death is. In the third place, if my hypotheses are correct, we will recede from the Sun at a speed just under that of light.”

Lazarus eyed the gadget and wiped sweat from his shoulders. “It’s getting hotter, Andy. Hook it up—and it had better be good!”

Andy hooked it up.

“Go ahead,” urged Lazarus. “Push the button, throw the switch, cut the beam. Make it march.”

“I have,” Libby insisted. “Look at the Sun.”

“Huh? *Ohl”*

The great circle of blackness which had marked the position of the Sun on the star-speckled stellarium was shrinking rapidly. In a dozen heartbeats it lost half its diameter; twenty seconds later it had dwindled to a quarter of its original width.

“It worked,” Lazarus said softly. “Look at it, Slayton! Sign me up as a purple baboon—it *worked*!”

“I rather thought it would,” Libby answered seriously. “It should, you know.”

"Hmm— That may be evident to you, Andy. It's not to me. How fast are we going?"

"Relative to what?"

"Uh, relative to the Sun."

"I haven't had opportunity to measure it, but it seems to be just under the speed of light. It can't be greater."

"Why not? Aside from theoretical considerations."

"We still see." Libby pointed at the stellarium bowl.

"Yeah, so we do," Lazarus mused. "Hey! We shouldn't be able to. I ought to doppler out."

Libby looked blank, then smiled. "But it dopplers right back in. Over on that side, toward the Sun, we're seeing by short radiations stretched to visibility. On the opposite side we're picking up something around radio wavelengths dopplered down to light."

"And in between?"

"Quit pulling my leg, Lazarus. I'm sure you can work out relatively vector additions quite as well as I can."

"*You* work it out," Lazarus said firmly. "I'm just going to sit here and admire it. Eh, Slayton?"

"Yes. Yes indeed."

Libby smiled politely. "We might as well quit wasting mass on the main drive." He sounded the warner, then cut the drive. "Now we can return to normal conditions." He started to disconnect his gadget.

Lazarus said hastily, "Hold it, Andy! We aren't even outside the orbit of Mercury yet. Why put on the brakes?"

"Why, this won't stop us. We have acquired velocity; we will keep it."

Lazarus pulled at his cheek and stared. "Ordinarily I would agree with you. First Law of Motion. But with this pseudo-speed I'm not so sure. We got it for nothing and we haven't paid for it—in energy, I mean. You seem to have declared a holiday with respect to inertia; when the holiday is over, won't all that free speed go back where it came from?"

"I don't think so," Libby answered. "Our velocity isn't 'pseudo' anything; it's as real as velocity can be. You are attempting to apply verbal anthropomorphic logic to a field in which it is not pertinent. You would not expect us to be transported instantaneously back to the lower gravitational potential from which we started, would you?"

"Back to where you hooked in your space drive? No, we've moved."

"And we'll keep on moving. Our newly acquired gravitational potential energy of greater height above the Sun is no more real than our present kinetic energy of velocity. They both exist."

Lazarus looked baffled. The expression did not suit him. "I guess you've got me, Andy. No matter how I slice it, we seemed to have picked up energy from somewhere. But *where*? When I went to school, they taught me to honor the Flag, vote the straight party ticket, and believe in the law of conservation of energy. Seems like you've violated it. How about it?"

"Don't worry about it," suggested Libby. "The so-called law of conservation of energy was merely a working hypothesis, unproved and unprovable, used to describe gross phenomena. Its terms apply only to the older, dynamic concept of the world. In a plenum conceived as a static grid of relationships, a 'violation' of that 'law' is nothing more startling than a discontinuous function, to be noted and described. That's what I did. I saw a discontinuity in the mathematical model of the aspect of mass-energy called inertia. I applied it. The mathematical model turned out to be similar to the real world. That was the only hazard, really-one never knows that a mathematical model is similar to the real world until you try it."

"Yeah, yeah, sure, you can't tell the taste till you bite it—but, Andy, I still don't see what *caused* it!" He turned toward Ford. "Do you, Slayton?"

Ford shook his head. "No. I would like to know… but I doubt if I could understand it."

"You and me both. Well, Andy?"

Now Libby looked baffled. "But, Lazarus, causality has nothing to do with the real plenum. A fact simply *is*. Causality is merely an old-fashioned postulate of a prescientific philosophy."

"I guess," Lazarus said slowly, "I'm old-fashioned."

Libby said nothing. He disconnected his apparatus.

The disc of black continued to shrink. When it had shrunk to about one sixth its greatest diameter, it changed suddenly from black to shining white, as the ship's distance from the Sun again was great enough to permit the receptors to manage the load.

Lazarus tried to work out in his head the kinetic energy of the ship —one-half the square of the velocity of light (minus a pinch, he corrected) times the mighty tonnage of the *New Frontiers*. The answer did not comfort him, whether he called it ergs or apples.

Chapter 8

"First things first," interrupted Barstow. "I'm as fascinated by the amazing scientific aspects of our present situation as any of you, but we've got work to do. We've got to plan a pattern for daily living at once. So let's table mathematical physics and talk about organization."

He was not speaking to the trustees but to his own personal lieutenants, the key people in helping him put over the complex maneuvers which had made their escape possible—Ralph Schultz, Eve Barstow, Mary Sperling, Justin Foote, Clive Johnson, about a dozen others.

Lazarus and Libby were there. Lazarus had left Slayton Ford to guard the control room, with orders to turn away all visitors and, above all, not to let anyone touch the controls. It was a makework job, it being Lazarus' notion of temporary occupational therapy. He had sensed in Ford a mental condition that he did not like. Ford seemed to have withdrawn into himself. He answered when spoken to, but that was all. It worried Lazarus.

"We need an executive," Barstow went on, "someone who, for the time being, will have very broad powers to give orders and have them carried out. He'll have to make decisions, organize us, assign duties and responsibilities, get the internal economy of the ship working. It's a big job and I would like to have our brethren hold an election and do it democratically. That'll have to wait; somebody has to give orders now. We're wasting food and the ship is—well, I wish you could have seen the 'fresher I tried to use today."

"Zaccur…"

"Yes, Eve?"

"It seems to me that the thing to do is to put it up to the trustees. We haven't any authority; we were just an emergency group for something that is finished now."

"Ahrrumph—" It was Justin Foote, in tones as dry and formal as his face. "I differ somewhat from our sister. The trustees are not conversant with the full background; it would take time we can ill afford to put them into the picture, as it were, before they would be able to judge the matter. Furthermore, being one of the trustees myself, I am able to say without bias that the trustees, as an organized group, can have no jurisdiction because legally they no longer exist."

Lazarus looked interested. "How do you figure that, Justin?"

"Thusly: the board of trustees were the custodians of a foundation which existed as a part of and in relation to a society. The trustees were never a government; their sole duties had to do with relations between the Families and the rest of that society. With the ending of relationship between the Families and terrestrial society, the board of trustees, *ipso jacto*, ceases to exist. It is one with history. Now we in this ship are not yet a society, we are an anarchistic group. This present assemblage has as much—or as little—authority to initiate a society as has any part group."

Lazarus cheered and clapped. "Justin," he applauded, "that is the neatest piece of verbal juggling I've heard in a century. Let's get together sometime and have a go at solipsism."

Justin Foote looked pained. "Obviously—" he began.

"Nope! Not another word! You've convinced me, don't spoil it. If that's how it is, let's get busy and pick a bull moose. How about you, Zack? You look like the logical candidate."

Barstow shook his head. "I know my limitations. I'm an engineer, not a political executive; the Families were just a hobby with me. We need an expert in social administration."

When Barstow had convinced them that he meant it, other names were proposed and their qualifications debated at length. In a group as large as the Families there were many who had specialized in political science, many who had served in public office with credit.

Lazarus listened; he knew four of the candidates. At last he got Eve Barstow aside and whispered with her. She looked startled, then thoughtful, finally nodded.

She asked for the floor. "I have a candidate to propose," she began in her always gentle tones, "who might not ordinarily occur to you, but who is incomparably better fitted, by temperament, training, and experience, to do this job than is anyone as yet proposed. For civil administrator of the ship I nominate Slayton Ford."

They were flabbergasted into silence, then everybody tried to talk at once. "Has Eve lost her mind? Ford is back on Earth!"—"No, no, he's not. I've seen him—*here*—in the ship."—"But it's out of the question!"—"Him? The Families would never accept him!"—"Even so, he's not one of us."

Eve patiently kept the floor until they quieted. "I know my nomination sounds ridiculous and I admit the difficulties. But consider the advantages. We all know Slayton Ford by reputation and by performance. You know, every member of the Families knows, that Ford is a genius in his field. It is going to be hard enough to work out plans for living together in this badly overcrowded ship; the best talent we can draw on will be no more than enough."

Her words impressed them because Ford was that rare thing in history, a statesman whose worth was almost universally acknowledged in his own lifetime. Contemporary historians credited him with having saved the Western Federation in at least two of its major development crises; it was his misfortune rather than his personal failure that his career was wrecked on a crisis not solvable by ordinary means.

"Eve," said Zaccur Barstow, "I agree with your opinion of Ford and I myself would be glad to have him as our executive. But how about all of the others? To the Families—everyone except ourselves here present—Mr. Administrator Ford symbolizes the persecution they have suffered. I think that makes him an impossible candidate."

Eve was gently stubborn. "I don't think so. We've already agreed that we will have to work up a campaign to explain away a lot of embarrassing facts about the last few days. Why don't we do it thoroughly and convince them that Ford is a martyr who sacrificed himself to save them? He is, you know."

"Mmm… yes, he is. He didn't sacrifice himself primarily on our account, but there is no doubt in my mind that his personal sacrifice saved us. But whether or not we can convince the others, convince them strongly enough that they will accept him and take orders from him… when he is now a sort of personal devil to them—well, I just don't know. I think we need expert advice. How about it, Ralph? Could it be done?"

Ralph Schultz hesitated. "The truth of a proposition has little or nothing to do with its psychodynamics. The notion that 'truth will prevail' is merely a pious wish; history doesn't show it. The fact that Ford really is a martyr to whom we owe gratitude is irrelevant to the purely technical question you put to me." He stopped to think. "But the proposition *per se* has certain sentimentally dramatic aspects which lend it to propaganda manipulation, even in the face of the currently accepted strong counterproposition. Yes… yes, I think it could be sold."

"How long would it take you to put it over?"

"Mmm… the social space involved is both 'tight' and 'hot' in the jargon we use; I should be able to get a high positive 'k' factor on the chain reaction—if it works at all. But it's an unsurveyed field and I don't know what spontaneous rumors are running around the ship. If you decide to do this, I'll want to prepare some rumors before we adjourn, rumors to repair Ford's reputation-then about twelve hours from now I can release another one that Ford is actually aboard… because he intended from the first to throw his lot in with us."

"Uh, I hardly think he did, Ralph."

"Are you *sure*, Zaccur?"

"No, but— Well…"

"You see? The truth about his original intentions is a secret between him and his God. You don't know and neither do I. But the dynamics of the proposition are a separate matter. Zaccur, by the time my rumor gets back to you three or four times, even you will begin to wonder." The psychometrician paused to stare at nothing while he consulted an intuition refined by almost a century of mathematical study of human behavior. "Yes, it will work. If you all want to do it, you will be able to make a public announcement inside of twenty-four hours."

"I so move!" someone called out.

A few minutes later Barstow had Lazarus fetch Ford to the meeting place. Lazarus did not explain to him why his presence was required; Ford entered the compartment like a man come to judgment, one with a bitter certainty that the outcome will be against him. His manner showed fortitude but not hope. His eyes were unhappy.

Lazarus had studied those eyes during the long hours they had been shut up together in the control room. They bore an expression Lazarus had seen many times before in his long life. The condemned man who has lost his final appeal, the fully resolved suicide, little furry things exhausted and defeated by struggle with the unrelenting steel of traps—the eyes of each of these hold a single expression, born of hopeless conviction that his time has run out.

Ford's eyes had it.

Lazarus had seen it grow and had been puzzled by it. To be sure, they were all in a dangerous spot, but Ford no more than the rest. Besides, awareness of danger brings a *live* expression; why should Ford's eyes hold the signal of death?

Lazarus finally decided that it could only be because Ford had reached the dead-end state of mind where suicide is necessary. But why? Lazarus mulled it over during the long watches in the control room and reconstructed the logic of it to his own satisfaction. Back on Earth, Ford had been important among his own kind, the short-lived. His paramount position had rendered him then almost immune to the feeling of defeated inferiority which the long-lived stirred up in normal men. But now he was the *only* ephemeral in a race of Methuselahs.

Ford had neither the experience of the elders nor the expectations of the young; he felt inferior to them both, hopelessly outclassed. Correct or not, he felt himself to be a useless pensioner, an impotent object of charity.

To a person of Ford's busy useful background the situation was intolerable. His very pride and strength of character were driving him to suicide.

As he came into the conference room Ford's glance sought out Zaccur Barstow. "You sent for me, sir?"

"Yes, Mr. Administrator." Barstow explained briefly the situation and the responsibility they wanted him to assume. "You are under no compulsion," he concluded, "but we need your services if you are willing to serve. Will you?"

Lazarus' heart felt light as he watched Ford's expression change to amazement. "Do you really mean that?" Ford answered slowly. "You're not joking with me?"

"Most certainly we mean it!"

Ford did not answer at once and when he did, his answer seemed irrelevant. "May I sit down?"

A place was found for him; he settled heavily into the chair and covered his face with his hands. No one spoke. Presently he raised his head and said in a steady voice, "If that is your will, I will do my best to carry out your wishes."

The ship required a captain as well as a civil administrator. Lazarus had been, up to that time, her captain in a very practical, piratical sense but he balked when Barstow proposed that it be made a formal title. "Huh *uhl* Not me. I may just spend this trip playing checkers. Libby's your man. Serious-minded, conscientious, former naval officer—just the type for the job."

Libby blushed as eyes turned toward him. "Now, really," he protested, "while it is true that I have had to command ships in the course of my duties, it has never suited me. I am a staff officer by temperament. I don't *feel* like a commanding officer."

"Don't see how you can duck out of it," Lazarus persisted. "You invented the go-fast gadget and you are the only one who understands how it works. You've got yourself a job, boy."

"But that does not follow at all," pleaded Libby. "I am perfectly willing to be astrogator, for that is consonant with my talents. But I very much prefer to serve under a commanding officer."

Lazarus was smugly pleased then to see how Slayton Ford immediately moved in and took charge; the sick man was gone, here again was the executive. "It isn't a matter of your personal preference, Commander Libby; we each must do what we can. I have agreed to direct social and civil organization; that is consonant with *my* training. But I can't command the ship as a ship; I'm not trained for it. You are. You must do it."

Libby blushed pinker and stammered. "I would if I were the only one. But there are hundreds of spacemen among the Families and dozens of them certainly have more experience and talent for command than I have. If you'll look for him, you'll find the right man."

Ford said, "What do you think, Lazarus?"

"Urn. Andy's got something. A captain puts spine into his ship… or doesn't, as the case may be. If Libby doesn't hanker to command, maybe we'd better look around."

Justin Foote had a microed roster with him but there was no scanner at hand with which to sort it. Nevertheless the memories of the dozen and more present produced many candidates. They finally settled on Captain Rufus "Ruthless" King.

Libby was explaining the consequences of his light-pressure drive to his new commanding officer. "The loci of our attainable destinations is contained in a sheaf of paraboloids having their apices tangent to our present course. This assumes that acceleration by means of the ship's normal drive will always be applied so that the magnitude our present vector, just under the speed of light, will be held constant. This will require that the ship be slowly precessed during the entire maneuvering acceleration. But it will not be too fussy because of the enormous difference in magnitude between our present vector and the maneuvering vectors being impressed on it. One may think of it roughly as accelerating at right angles to our course."

"Yes, yes, I see that," Captain King cut in, "but why do you assume that the resultant vectors must always be equal to our present vector?"

"Why, it need n,ot be if the Captain decides otherwise," Libby answered, looking puzzled, "but to apply a component that would reduce the resultant vector below our present speed would simply be to cause us to backtrack a little without increasing the scope of our present loci of possible destinations. The effect would only increase our flight time, to generations, even to centuries, if the resultant—"

"Certainly, certainly! I understand basic ballistics, Mister. But why do you reject the other alternative? Why not increase our speed? Why can't I accelerate directly along my present course if I choose?"

Libby looked worried. "The Captain may, if he so orders. But it would be an attempt to exceed the speed of light. That has been assumed to be impossible—"

"That's exactly what I was driving at. 'Assumed.' I've always wondered if that assumption was justified. Now seems like a good time to find out."

Libby hesitated, his sense of duty struggling against the ecstatic temptations of scientific curiosity. "If this were a research ship, Captain, I would be anxious to try it. I can't visualize what the conditions would be if we did pass the speed of light, but it seems to me that we would be cut off entirely from the electromagnetic spectrum insofar as other bodies are concerned. How could we see to astrogate?" Libby had more than theory to worry him; they were "seeing" now only by electronic vision. To the human eye itself the hemisphere behind them along their track was a vasty black; the shortest radiations had dopplered to wavelengths too long for the eye. In the forward direction stars could still be seen but their visible "light" was made up of longest Hertzian waves crowded in by the ship's incomprehensible speed. Dark "radio stars" shined at first magnitude; stars poor in radio wavelengths had faded to obscurity. The familiar constellations were changed beyond easy recognition. The fact that they were seeing by vision distorted by Doppler's effect was confirmed by spectrum analysis; Fraunhofer's lines had not merely shifted toward the violet end, they had passed beyond, out of sight, and previously unknown patterns replaced them.

"Hmm…" King replied. "I see what you mean. But I'd certainly like to try it, damme if I wouldn't! But I admit it's out of the question with passengers inboard. Very well, prepare for me roughed courses to type 'G' stars lying inside this trumpet-flower locus of yours and not too far away. Say ten lightyears for your first search."

"Yes, sir. I have. I can't offer anything in that range in the 'G' types."

"So? Lonely out here, isn't it? Well?"

"We have Tau Ceti inside the locus at eleven lightyears."

"A G5, eh? Not too good."

"No, sir. But we have a true Sol type, a G2-catalog ZD9817. But it's more than twice as far away."

Captain King chewed a knuckle. "I suppose I'll have to put it up to the elders. How much subjective time advantage are we enjoying?"

"I don't know, sir."

"Eh? Well, work it out! Or give me the data and I will. I don't claim to be the mathematician you are, but any cadet could solve that one. The equations are simple enough."

"So they are, sir. But I don't have the data to substitute in the time-contraction equation… because I have no way now to measure the ship's speed. The violet shift is useless to use; we don't know what the lines mean. I'm afraid we must wait until we have worked up a much longer baseline."

King sighed. "Mister, I sometimes wonder why I got into this business. Well, are you willing to venture a best guess? Long time? Short time?"

"Uh… a long time, sir. Years."

"So? Well, I've sweated it out in worse ships. Years, eh? Play any chess?"

"I have, sir." Libby did not mention that he had given up the game long ago for lack of adequate competition.

"Looks like we'd have plenty of time to play. King's pawn to king four."

"King's knight to bishop three."

"An unorthodox player, eh? Well, I'll answer you later. I suppose I had better try to sell them the G2 even though it takes longer… and I suppose I had better caution Ford to start some contests and things.

Can't have 'em getting coffin fever."

"Yes, sir. Did I mention deceleration time? It works out to just under one Earth year, subjective, at a negative one gee, to slow us to stellar speeds."

"Eh? We'll decelerate the same way we accelerated—with your light-pressure drive."

Libby shook his head. "I'm sorry, sir. The drawback of the light-pressure drive is that it makes no difference what your previous course and speed may be; if you go inertialess in the near neighborhood of a star, its light pressure kicks you away from it like a cork hit by a stream of water. Your previous momentum is canceled out when you cancel your inertia."

"Well," King conceded, "let's assume that we will follow your schedule. I can't argue with you yet; there are still some things about that gadget of yours that I don't understand."

"There are lots of things about it," Libby answered seriously, "that I don't understand either."

The ship had flicked by Earth's orbit less than ten minutes after Libby cut in his space drive. Lazarus and he had discussed the esoteric physical aspects of it all the way to the orbit of Mars—less than a quarter hour. Jupiter's path was far distant when Barstow called the organization conference. But it killed an hour to find them all in the crowded ship; by the time he called them to order they were a billion miles out, beyond the orbit of Saturn—elapsed time from "*Go*!" less than an hour and a half.

But the blocks get longer after Saturn. Uranus found them still in discussion. Nevertheless Ford's name was agreed on and he had accepted before the ship was as far from the Sun as is Neptune. King had been named captain, had toured his new command with Lazarus as guide, and was already in conference with his astrogator when the ship passed the orbit of Pluto nearly four billion miles deep into space, but still less than six hours after the Sun's light had blasted them away.

Even then they were not outside the Solar System, but between them and the stars lay nothing but the winter homes of Sol's comets and hiding places of hypothetical trans-Plutonian planets—space in which the Sun holds options but can hardly be said to own in fee simple. But even the nearest stars were still lightyears away. New *Frontiers* was headed for them at a pace which crowded the heels of light—weather cold, track fast.

Out, out, and still farther out… out to the lonely depths where world lines are almost straight, undistorted by gravitation. Each day, each month… each year… their headlong flight took them farther from all humanity.

PART TWO

Chapter 1

The ship lunged on, alone in the desert of night, each lightyear as empty as the last. The Families built up a way of life in her.

The New *Frontiers* was approximately cylindrical. When not under acceleration, she was spun on her axis to give pseudo-weight to passengers near the outer skin of the ship; the outer or “lower” compartments were living quarters while the innermost or “upper” compartments were storerooms and so forth. ‘Tween compartments were shops, hydroponic farms and such. Along the axis, fore to aft, were the control room, the converter, and the main drive.

The design will be recognized as similar to that of the larger free-flight interplanetary ships in use today, but it is necessary to bear in mind her enormous size. She was a city, with ample room for a colony of twenty thousand, which would have allowed the planned complement of ten thousand to double their numbers during the long voyage to Proxima Centauri.

Thus, big as she was, the hundred thousand and more of the Families found themselves overcrowded fivefold.

They put up with it only long enough to rig for coldsleep. By converting some recreation space on the lower levels to storage, room was squeezed out for the purpose. Somnolents require about one per cent the living room needed by active, functioning humans; in time the ship was roomy enough for those still awake. Volunteers for coldsleep were not numerous at first —these people were more than commonly aware of death because of their unique heritage; coldsleep seemed too much like the Last Sleep. But the great discomfort of extreme overcrowding combined with the equally extreme monotony of the endless voyage changed their minds rapidly enough to provide a steady supply for the little death as fast as they could be accommodated.

Those who remained awake were kept humping simply to get the work done—the ship’s housekeeping, tending the hydroponic farms and the ship’s auxiliary machinery and, most especially, caring for the somnolents themselves. Biomechanicians have worked out complex empirical formulas describing body deterioration and the measures which must be taken to offset it under various conditions of impressed acceleration, ambient temperature, the drugs used, and other factors such as metabolic age, body mass, sex, and so forth. By using the upper, low-weight compartments, deterioration caused by acceleration (that is to say, the simple weight of body tissues on themselves, the wear that leads to flat feet or bed sores) could be held to a minimum. But all the care of the somnolents had to be done by hand— turning them, massaging them, checking on blood sugar, testing the slow-motion heart actions, all the tests and services necessary to make sure that extremely reduced metabolism does not slide over into death. Aside from a dozen stalls in the ship's infirmary she had not been designed for coldsleep passengers; no automatic machinery had been provided. All this tedious care of tens of thousands of somnolents had to be done by hand.

Eleanor Johnson ran across her friend, Nancy Weatheral, in Refectory 9-D—called "The Club" by its habitues, less flattering things by those who avoided it. Most of its frequenters were young and noisy. Lazarus was the only elder who ate there often. He did not mind noise, he enjoyed it.

Eleanor swooped down on her friend and kissed the back of her neck. "Nancy! So you are awake again! My, I'm glad to see you!"

Nancy disentangled herself. "H'lo, babe. Don't spill my coffee."

"Well! Aren't you glad to see *me*?"

"Of course I am. But you forget that while it's been a year to you, it's only yesterday to me. And I'm still sleepy."

"How long have you been awake, Nancy?"

"A couple of hours. How's that kid of yours?"

"Oh, he's fine!" Eleanor Johnson's face brightened. "You wouldn't know him—he's shot up fast this past year. Almost up to my shoulder and looking more like his father every day."

Nancy changed the subject. Eleanor's friends made a point of keeping Eleanor's deceased husband out of the conversation. "What have you been doing while I was snoozing? Still teaching primary?"

"Yes. Or rather 'No.' I stay with the age group my Hubert is in. He's in junior secondary now."

"Why don't you catch a few months' sleep and skip some of that drudgery, Eleanor? You'll make an old woman out of yourself if you keep it up."

"No," Eleanor refused, "not until Hubert is old enough not to need me."

"Don't be sentimental. Half the female volunteers are women with young children. I don't blame 'em a bit. Look at me—from my point of view the trip so far has lasted only seven months. I could do the rest of it standing on my head."

Eleanor looked stubborn. "No, thank you. That may be all right for you, but I am doing very nicely as I am."

Lazarus had been sitting at the same counter doing drastic damage to a sirloin steak surrogate. "She's afraid she'll miss something," he explained. “I don’t blame her. So am I.”

Nancy changed her tack. “Then have another child, Eleanor. That’ll get you relieved from routine duties.”

“It takes two to arrange that,” Eleanor pointed out.

“That’s no hazard. Here’s Lazarus, for example. He’d make a plus father.”

Eleanor dimpled. Lazarus blushed under his permanent tan. “As a matter of fact,” Eleanor stated evenly, “I proposed to him and was turned down.”

Nancy sputtered into her coffee and looked quickly from Lazarus to Eleanor. “Sorry. I didn’t know.”

“No harm,” answered Eleanor. “It’s simply because I am one of his granddaughters, four times removed.”

“But…” Nancy fought a losing fight with the custom of privacy. “Well, goodness me, that’s well within the limits of permissible consanguinity. What’s the hitch? Or should I shut up?”

“You should,” Eleanor agreed.

Lazarus shifted uncomfortably. “I know I’m old-fashioned,” he admitted, “but I soaked up some of my ideas a long time ago. Genetics or no genetics, I just wouldn’t feel *right* marrying one of my own grandchildren.”

Nancy looked amazed. “I’ll say you’re old-fashioned!” She added, “Or maybe you’re just shy. I’m tempted to propose to you myself and find out.”

Lazarus glared at her. “Go ahead and see what a surprise you get!”

Nancy looked him over coolly. “Mmm…” she meditated.

Lazarus tried to outstare her, finally dropped his eyes. “I’ll have to ask you ladies to excuse me,” he said nervously. “Work to do.”

Eleanor laid a gentle hand on his arm. “Don’t go, Lazarus. Nancy is a cat and can’t help it. Tell her about the plans for landing.”

“What’s that? Are we going to land? When? Where?”

Lazarus, willing to be mollified, told her. The type G2, or Sol-type star, toward which they had bent their course years earlier was now less than a lightyear away—a little over seven light-months—and it was now possible to infer by parainterferometric methods that the star (ZD9817, or simply “our” star) had planets of some sort.

In another month, when the star would be a half lightyear away, deceleration would commence. Spin would be taken off the ship and for one year she would boost backwards at one gravity, ending near the star at interplanetary rather than interstellar speed, and a search would be made for a planet fit to support human life. The search would be quick and easy as the only planets they were interested in would shine out brilliantly then, like Venus from Earth; they were not interested in elusive cold planets, like Neptune or Pluto, lurking in distant shadows, nor in scorched cinders like Mercury, hiding in the flaming skirts of the mother star.

If no Earthlike planet was to be had, then they must continue on down really close to the strange sun and again be kicked away by light pressure, to resume hunting for a home elsewhere—with the difference that this time, not harassed by police, they could select a new course with care.

Lazarus explained that the *New Frontiers* would not actually land in either case; she was too big to land, her weight would wreck her. Instead, if they found a planet, she would be thrown into a parking orbit around her and exploring parties would be sent down in ship's boats.

As soon as face permitted Lazarus left the two young women and went to the laboratory where the Families continued their researches in metabolism and gerontology. He expected to find Mary Sperling there; the brush with Nancy Weatheral had made him feel a need for her company. If he ever did marry again, he thought to himself, Mary was more his style. Not that he seriously considered it; he felt that a liaison between Mary and himself would have a ridiculous flavor of lavender and old lace.

Mary Sperling, finding herself cooped up in the ship and not wishing to accept the symbolic death of coldsleep, had turned her fear of death into constructive channels by volunteering to be a laboratory assistant in the continuing research into longevity. She was not a trained biologist but she had deft fingers and an agile mind; the patient years of the trip had shaped her into a valuable assistant to Dr. Gordon Hardy, chief of the research.

Lazarus found her servicing the deathless tissue of chicken heart known to the laboratory crew as "Mrs. 'Awkins." Mrs. 'Awkins was older than any member of the Families save possibly Lazarus himself; she was a growing piece of the original tissue obtained by the Families from the Rockefeller Institute in the twentieth century, and the tissues had been alive since early in the twentieth century even then. Dr. Hardy and his predecessors had kept their bit of it alive for more than two centuries now, using the Carrel-Lindbergh-O'Shaug techniques—and still Mrs. 'Awkins flourished.

Gordon Hardy had insisted on taking the tissue and the apparatus which cherished it with him to the reservation when he was arrested; he had been equally stubborn about taking the living tissue along during the escape in the *Chili*. Now Mrs. 'Awkins still lived and grew in the *New Frontiers*, fifty or sixty pounds of her—blind, deaf, and brainless, but still alive.

Mary Sperling was reducing her size. "Hello, Lazarus," she greeted him. "Stand back. I've got the tank open."

He watched her slice off excess tissue. “Mary,” he mused, “what keeps that silly thing alive?”

“You’ve got the question inverted,” she answered, not looking up; “the proper form is: why should it die? Why shouldn’t it go on forever?”

“I wish to the Devil it would die!” came the voice of Dr. Hardy from behind them. “Then we could observe and find out why.”

“You’ll never i find out why from Mrs. ‘Awkins, boss,” Mary answered, hands and eyes still busy. “The key to the matter is in the gonads—she hasn’t any.”

“Hummph! What do you know about it?”

“A woman’s intuition. What do *you* know about it?”

“Nothing, absolutely nothing!—which puts me ahead of you and your intuition.”

“Maybe. At least,” Mary added slyly, “I knew you before you were housebroken.”

“A typical female argument. Mary, that lump of muscle cackled and laid eggs before either one of us was born, yet it doesn’t know anything.” He scowled at it. “Lazarus, I’d gladly trade it for one pair of carp, male and female.”

“Why carp?” asked Lazarus.

“Because carp don’t seem to die. They get killed, or eaten, or starve to death, or succumb to infection, but so far as we know they don’t die.”

“Why not?”

“That’s what I was trying to find out when we were rushed off on this damned safari. They have unusual intestinal flora and it may have something to do with that. But I think it has to do with the fact that they never stop growing.”

Mary said something inaudibly. Hardy said, “What are you muttering about? Another intuition?”

“I said, ‘Amebas don’t die.’ You said yourself that every ameba now alive has been alive for, oh, fifty million years or so. Yet they don’t grow indefinitely larger and they certainly can’t have intestinal flora.”

“No guts,” said Lazarus and blinked.

“What a terrible pun, Lazarus. But what I said is true. They don’t die. They just twin and keep on living.”

“Guts or no guts,” Hardy said impatiently, “there may be a structural parallel. But I’m frustrated for lack of experimental subjects. Which reminds me: Lazarus, I’m glad you dropped in. I want you to do me a favor.”

“Speak up. I might be feeling mellow.”

“You’re an interesting case yourself, you know. You didn’t follow our genetic pattern; you anticipated it. I don't want your body to go into the converter; I want to examine it."

Lazarus snorted. "'Sail right with me, bud. But you'd better tell your successor what to look for—you may not live that long. And I'll bet you anything that you like that nobody'll find it by poking around in my cadaver!"

The planet they had hoped for was there when they looked for it, green, lush, and young, and looking as much like Earth as another planet could. Not only was it Earthlike but the rest of the system duplicated roughly the pattern of the Solar System—small terrestrial planets near this sun, large Jovian planets farther out. Cosmologists had never been able to account for the Solar System; they had alternated between theories of origin which had failed to stand up and "sound" mathematico-physical "proofs" that such a system could never have originated in the first place. Yet here was another enough like it to suggest that its paradoxes were not unique, might even be common.

But more startling and even more stimulating and certainly more disturbing was another fact brought out by telescopic observation as they got close to the planet. The planet held life… intelligent life… civilized life.

Their cities could be seen. Their engineering works, strange in form and purpose, were huge enough to be seen from space just as ours can be seen.

Nevertheless, though it might mean that they must again pursue their weary hegira, the dominant race did not appear to have crowded the available living space. There might be room for their little colony on those broad continents. If a colony was welcome—

"To tell the truth," Captain King fretted, "I hadn't expected anything like this. Primitive aborigines perhaps, and we certainly could expect dangerous animals, but I suppose I unconsciously assumed that man was the only really civilized race. We're going to have to be very cautious."

King made up a scouting party headed by Lazarus; he had come to have confidence in Lazarus' practical sense and will to survive. King wanted to head the party himself, but his concept of his duty as a ship's captain forced him to forego it. But Slayton Ford could go; Lazarus chose him and Ralph Schultz and his lieutenants. The rest of the party were specialists-biochemist, geologist, ecologist, stereographer, several sorts of psychologists and sociologists to study the natives including one authority in McKelvy's structural theory of communication whose task would be to find some way to talk with the natives.

No weapons—

King flatly refused to arm them. “Your scouting party is expendable,” he told Lazarus bluntly; “for we cannot risk offending them by any sort of fighting for any reason, even in self-defense. You are ambassadors, not soldiers. Don’t forget it.”

Lazarus returned to his stateroom, came back and gravely delivered to King one blaster. He neglected to mention the one still strapped to his leg under his kilt.

As King was about to tell them to man the boat and carry out their orders they were interrupted by Janice Schmidt, chief nurse to the Families’ congenital defectives. She pushed her way past and demanded the Captain’s attention.

Only a nurse could have obtained it at that moment; she had professional stubbornness to match his and half a century more practice at being balky. He glared at her. “What’s the meaning of this interruption?”

“Captain, I must speak with you about one of my children.”

“Nurse, you are decidedly out of order. Get out. See me in my office-after taking it up with the Chief Surgeon.”

She put her hands on her hips. “You’ll see me now. This is the landing party, isn’t it? I’ve got something you have to hear before they leave.”

King started to speak, changed his mind, merely said, “Make it brief.”

She did so. Hans Weatheral, a youth of some ninety years and still adolescent in appearance through a hyper-active thymus gland, was one of her charges. He had inferior but not moronic mentality, a chronic apathy, and a neuro-muscular deficiency which made him too weak to feed himself—and an acute sensitivity to telepathy.

He had told Janice that he knew all about the planet around which they orbited. His friends on the planet had told him about it… and they were expecting him.

The departure of the landing boat was delayed while King and Lazarus investigated. Hans was matter of fact about his information and what little they could check of what he said was correct. But he was not too helpful about his “friends.”

“Oh, just people,” he said, shrugging at their stupidity. “Much like back home. Nice people. Go to work, go to school, go to church. Have kids and enjoy themselves. You’ll like them.”

But he was quite clear about one point: his friends were expecting him; therefore he must go along.

Against his wishes and his better judgment Lazarus saw added to his party Hans Weatheral, Janice Schmidt, and a stretcher for Hans.

When the party returned three days later Lazarus made a long private report to King while the specialist reports were being analyzed and combined. “It’s amazingly like Earth, Skipper, enough to make you homesick. But it’s also different enough to give you the willies—like looking at your own face in the mirror and having it turn out to have three eyes and no nose. Unsettling.”

“But how about the natives?”

“Let me tell it. We made a quick swing of the day side, for a bare eyes look. Nothing you haven’t seen through the ‘scopes. Then I put her down where Hans told me to, in a clearing near the center of one of their cities. I wouldn’t have picked the place myself; I would have preferred to land in the bush and reconnoitre. But you told me to play Hans’ hunches.”

“You were free to use your judgment,” King reminded him.

“Yes, yes. Anyhow we did it. By the time the techs had sampled the air and checked for hazards there was quite a crowd around us. They—well, you’ve seen the stereographs.”

“Yes. Incredibly android.”

“Android, hell! They’re *men*. Not humans, but men just the same.” Lazarus looked puzzled. “I don’t like it.”

King did not argue. The pictures had shown bipeds seven to eight feet tall, bilaterally symmetric, possessed of internal skeletal framework, distinct heads, lens-and-camera eyes. Those eyes were their most human and appealing features; they were large, limpid, and tragic, like those of a Saint Bernard dog.

It was well to concentrate on the eyes; their other features were not as tolerable. King looked away from the loose, toothless mouths, the bifurcated upper lips. He decided that it might take a long, long time to learn to be fond of these creatures. “Go ahead,” he told Lazarus.

“We opened up and I stepped out alone, with my hands empty and trying to look friendly and peaceable. Three of them stepped forward-eagerly, I would say. But they lost interest in me at once; they seemed to be waiting for somebody else to come out. So I gave orders to carry Hans out.

“Skipper, you wouldn’t believe it. They fawned over Hans like a long lost brother. No, that doesn’t describe it. More like a king returning home in triumph. They were polite enough with the rest of us, in an offhand way, but they fairly slobbered over Hans.” Lazarus hesitated. “Skipper? Do you believe in reincarnation?”

“Not exactly. I’m open-minded about it. I’ve read the report of the Fraw-ling Committee, of course.”

“I’ve never had any use for the notion myself. But how else could you account for the reception they gave Hans?”

“I don’t account for it. Get on with your report. Do you think it is going to be possible for us to colonize here?”

“Oh,” said Lazarus, “they left no doubt on that point. You see, Hans really can talk to them, telepathically. Hans tells us that their gods have authorized us to live here and the natives have already made plans to receive us.”

“Eh?”

“That’s right. They want us.”

“Well! That’s a relief.”

“Is it?”

King studied Lazarus’ glum features. “You’ve made a report favorable on every point. Why the sour look?”

“I don’t know. I’d just rather we found a planet of our own. Skipper, anything this easy has a hitch in it.”

Chapter 2

The Jockaira (or Zhacheira, as some prefer) turned an entire city over to the colonists.

Such astounding cooperation, plus the sudden discovery by almost every member of the Howard Families that he was sick for the feel of dirt under foot and free air in his lungs, greatly speeded the removal from ship to ground. It had been anticipated that at least an Earth year would be needed for such transition and that somnolents would be waked only as fast as they could be accommodated dirtside. But the limiting factor now was the scanty ability of the ship's boats to transfer a hundred thousand people as they were roused.

The Jockaira city was not designed to fit the needs of human beings. The Jockaira were not human beings, their physical requirements were somewhat different, and their cultural needs as expressed in engineering were vastly different. But a city, any city, is a machine to accomplish certain practical ends: shelter, food supply, sanitation, communication; the internal logic of these prime requirements, as applied by different creatures to different environments, will produce an unlimited number of answers. But, as applied by any race of warm-blooded, oxygen-breathing androidal creatures to a particular environment, the results, although strange, are necessarily such that Terran humans can use them. In some ways the Jockaira city looked as wild as a pararealist painting, but humans have lived in igloos, grass shacks, and even in the cybernautomated burrow under Antarctica; these humans could and did move into the Jockaira city—and of course at once set about reshaping it to suit them better.

It was not difficult even though there was much to be done. There were buildings already standing-shelters with roofs on them, the artificial cave basic to all human shelter requirements. It did not matter what the Jockaira had used such a structure for; humans could use it for almost anything: sleeping, recreation, eating, storage, production. There were actual "caves" as well, for the Jockaira dig in more than we do. But humans easily turn troglodyte on occasion, in New York as readily as in Antarctica.

There was fresh potable water piped in for drinking and for limited washing. A major lack lay in plumbing; the city had no overall drainage system. The "Jocks" did not water-bathe and their personal sanitation requirements differed from ours and were taken care of differently. A major effort had to be made to jury-rig equivalents of shipboard refreshers and adapt them to hook in with Jockaira disposal arrangements. Minimum necessity ruled; baths would remain a rationed luxury until water supply and disposal could be increased at least tenfold. But baths are not a necessity.

But such efforts at modification were minor compared with the crash program to set up hydroponic farming, since most of the somnolents could not be waked until a food supply was assured. The do-it-now crowd wanted to tear out every bit of hydroponic equipment in the *New Frontiers* at once, ship it down dirtside, set it up and get going, while depending on stored supplies during the changeover; a more cautious minority wanted to move only a pilot plant while continuing to grow food in the ship; they pointed out that unsuspected fungus or virus on the strange planet could result in disaster… starvation.

The minority, strongly led by Ford and Barstow and supported by Captain King, prevailed; one of the ship's hydroponic farms was drained and put out of service. Its machinery was broken down into parts small enough to load into ship's boats.

But even this never reached dirtside. The planet's native farm products turned out to be suitable for human food and the Jockaira seemed almost pantingly anxious to give them away. Instead, efforts were turned to establishing Earth crops in native soil in order to supplement Jockaira foodstuffs with sorts the humans were used to. The Jockaira moved in and almost took over that effort; they were superb "natural" farmers (they had no need for synthetics on their undepleted planet) and seemed delighted to attempt to raise anything their guests wanted.

Ford transferred his civil headquarters to the city as soon as a food supply for more than a pioneer group was assured, while King remained in the ship. Sleepers were awakened and ferried to the ground as fast as facilities were made ready for them and their services could be used. Despite assured food, shelter, and drinking water, much needed to be done to provide minimum comfort and decency. The two cultures were basically different. The Jockaira seemed always anxious to be endlessly helpful but they were often obviously baffled at what the humans tried to do. The Jockaira culture did not seem to include the idea of privacy; the buildings of the city had no partitions in them which were not loadbearing—and few that were; they tended to use columns or posts. They could not understand why the humans would break up these lovely open spaces into cubicles and passageways; they simply could not comprehend why any individual would ever wish to be alone for any purpose whatsoever.

Apparently (this is not certain for abstract communication with them never reached a subtle level) they decided eventually that being alone held a religious significance for Earth people. In any case they were again helpful; they provided thin sheets of material which could be shaped into partitions —with their tools and only with their tools. The stuff frustrated human engineers almost to nervous collapse. No corrosive known to our technology affected it; even the reactions that would break down the rugged fluorine plastics used in handling uranium compounds had no effect on it. Diamond saws went to pieces on it, heat did not melt it, cold did not make it brittle. It stopped light, sound, and all radiation they were equipped to try on it. Its tensile strength could not be defined because they could not break it. Yet Jockaira tools, even when handled by humans, could cut it, shape it, re-weld it.

The human engineers simply had to get used to such frustrations. From the criterion of control over environment through technology the Jockaira were as civilized as humans. But their developments had been along other lines.

The importarft differences between the two cultures went much deeper than engineering technology. Although ubiquitously friendly and helpful the Jockaira were *not* human. They thought differently, they evaluated differently; their social structure and language structure reflected their unhuman quality and both were incomprehensible to human beings.

Oliver Johnson, the semantician who had charge of developing a common language, found his immediate task made absurdly easy by the channel of communication through Hans Weatheral. “Of course,” he explained to Slayton Ford and to Lazarus, “Hans isn’t exactly a genius; he just misses being a moron. That limits the words I can translate through him to ideas he can understand. But it does give me a basic vocabulary to build on.”

“Isn’t that enough?” asked Ford. “It seems to me that I have heard that eight hundred words will do to convey any idea.”

“There’s some truth in that,” admitted Johnson. “Less than a thousand words will cover all ordinary situations. I have selected not quite seven hundred of their terms, operationals and substantives, to give us a working *lingua franca*. But subtle distinctions and fine discriminations will have to wait until we know them better and understand them. A short vocabulary cannot handle high abstractions.”

“Shucks,” said Lazarus, “seven hundred words ought to be enough. Me, I don’t intend to make love to ‘em, or try to discuss poetry.”

This opinion seemed to be justified; most of the members picked up basic Jockairan in two weeks to a month after being ferried down and chattered in it with their hosts as if they had talked it all their lives. All of the Earthmen had had the usual sound grounding in mnemonics and semantics; a short-vocabulary auxiliary language was quickly learned under the stimulus of need and the circumstance of plenty of chance to practice—except, of course, by the usual percentage of unshakable provincials who felt that it was up to "the natives" to learn English.

The Jockaira did not learn English. In the first place not one of them showed the slightest interest. Nor was it reasonable to expect their millions to learn the language of a few thousand. But in any case the split upper lip of a Jockaira could not cope with "m."

"p," and "b," whereas the gutturals, sibilants, dentals, and clicks they did use could be approximated by the human throat.

Lazarus was forced to revise his early bad impression of the Jockaira. It was impossible not to like them once the strangeness of their appearance had worn off. They were so hospitable, so generous, so friendly, so anxious to please. He became particularly attached to Kreel Sarloo, who acted as a sort of liaison officer between the Families and the Jockaira. Sarloo held a position among his own people which could be translated roughly as "chief," "father," "priest," or "leader" of the Kreel family or tribe. He invited Lazarus to visit him in the Jockaira city nearest the colony. "My people will like to see you and smell your skin," he said. "It will be a happy-making thing. The gods will be pleased."

Sarloo seemed almost unable to form a sentence without making reference to his gods. Lazarus did not mind; to another's religion he was tolerantly indifferent. "I will come, Sarloo, old bean. It will be a happy-making thing for me, too."

Sarloo took him in the common vehicle of the Jockaira, a wheelless wain shaped much like a soup bowl, which moved quietly and rapidly over the ground, skimming the surface in apparent contact. Lazarus squatted on the floor of the vessel while Sarloo caused it to speed along at a rate that made Lazarus' eyes water.

"Sarloo," Lazarus asked, shouting to make himself heard against the wind, "how does this thing work? What moves it?"

"The gods breathe on the—" Sarloo used a word not in their common language, "—and cause it to need to change its place."

Lazarus started to ask for a fuller explanation, then shut up. There had been something familiar about that answer and he now placed it; he had once given a very similar answer to one of the water people of Venus when he was asked to explain the diesel engine used in an early type of swamp tractor. Lazarus had not meant to be mysterious; he had simply been tongue-tied by inadequate common language.

Well, there was a way to get around that—

"Sarloo, I want to see pictures of what happens inside," Lazarus persisted, pointing. "You have pictures?"

"Pictures are," Sarloo acknowledged, "in the temple. You must not enter the temple." His great eyes looked mournfully at Lazarus, giving him a strong feeling that the Jockaira chief grieved over his friend's lack of grace. Lazarus hastily dropped the subject.

But the thought of Venerians brought another puzzler to mind. The water people, cut off from the outside world by the eternal clouds of Venus, simply did not believe in astronomy. The arrival of Earthmen had caused them to readjust their concept of the cosmos a little, but there was reason to believe that their revised explanation was no closer to the truth. Lazarus wondered what the Jockaira thought about visitors from space. They had shown no surprise—or had they?

"Sarloo," he asked, "do you know where my brothers and I come from?"

"I know," Sarloo answered. "You come from a distant sun—so distant that many seasons would come and go while light traveled that long journey."

Lazarus felt mildly astonished. "Who told you that?"

"The gods tell us. Your brother Libby spoke on it."

Lazarus was willing to lay long odds that the gods had not got around to mentioning it until after Libby explained it to Kreel Sarloo. But he held his peace. He still wanted to ask Sarloo if he had been surprised to have visitors arrive from the skies but he could think of no Jockairan term for surprise or wonder. He was still trying to phrase the question when Sarloo spoke again:

"The fathers of my people flew through the skies as you did, but that was before the coming of the gods. The gods, in their wisdom, bade us stop."

And that, thought Lazarus, is one damn‘ big lie, from pure swank. There was not the slightest indication that the Jockaira had ever been off the surface of their planet.

At Sarloo's home that evening Lazarus sat through a long session of what he assumed was entertainment for the guest of honor, himself. He squatted beside Sarloo on a raised portion of the floor of the vast common room of the clan Kreel and listened to two hours of howling that might have been intended as singing. Lazarus felt that better music would result from stepping on the tails of fifty assorted dogs but he tried to take it in the spirit in which it seemed to be offered.

Libby, Lazarus recalled, insisted that this mass howling which the Jockaira were wont to indulge in was, in fact, music, and that men could learn to enjoy it by studying its interval relationships.

Lazarus doubted it.

But he had to admit that Libby understood the Jockaira better than he did in some ways. Libby had been delighted to discover that the Jockaira were excellent and subtle mathematicians. In particular they had a grasp of number that paralleled his own wild talent. Their arithmetics were incredibly involved for normal humans. A number, any number large or small, was to them a unique entity, to be grasped in itself and not merely as a grouping of smaller numbers. In consequence they used any convenient positional or exponential notation with any base, rational, irrational, or variable—or none at all.

It was supreme luck, Lazarus mused, that Libby was available to act as mathematical interpreter between the Jockaira and the Families, else it would have been impossible to grasp a lot of the new technologies the Jockaira were showing them.

He wondered why the Jockaira showed no interest in learning human technologies they were offered in return?

The howling discords died away and Lazarus brought his thoughts back to the scene around him. Food was brought in; the Kreel family tackled it with the same jostling enthusiasm with which Jockaira did everything. Dignity, thought Lazarus, is an idea which never caught on here. A large bowl, fully two feet across and brimful of an amorphous mess, was placed in front of Kreel Sarloo. A dozen Kreels crowded around it and started grabbing, giving no precedence to their senior. But Sarloo casually slapped a few of them out of the way and plunged a hand into the dish, brought forth a gob of the ration and rapidly kneaded it into a ball in the palm of his double-thumbed hand. Done, he shoved it towards Lazarus' mouth.

Lazarus was not squeamish but he had to remind himself, first, that food for Jockaira was food for men, and second, that he could not catch anything from them anyhow, before he could bring himself to try the proffered morsel.

He took a large bite. Mmmm… not too bad-rather bland and sticky, no particular flavor. Not good, either, but it could be swallowed. Grimly determined to uphold the honor of his race, he ate on, while promising himself a proper meal in the near future. When he felt that to swallow another mouthful would be to invite physical and social disaster, he thought of a possible way out. Reaching into the common plate he scooped up a large handful of the stuff, molded it into a ball and offered it to Sarloo.

It was inspired diplomacy. For the rest of the meal Lazarus fed Sarloo, fed him until his arms were tired, until he marveled at his host's ability to tuck it away.

After eating they slept and Lazarus slept with the family, literally. They slept where they had eaten, without beds and disposed as casually as leaves on a path or puppies in a pen. To his surprise, Lazarus slept well and did not wake until false suns in the cavern roof glowed in mysterious sympathy to new dawn. Sarloo was still asleep near him and giving out most humanlike snores. Lazarus found that one infant Jockaira was cuddled spoon fashion against his own stomach.

He felt a movement behind his back, a rustle at his thigh. He turned cautiously and found that another Jockaira—a six-year-old in human equivalence—had extracted his blaster from its holster and was now gazing curiously into its muzzle.

With hasty caution Lazarus removed the deadly toy from the child's unwilling fingers, noted with relief that the safety was still on, and reholstered it. Lazarus received a reproachful look; the kid seemed about to cry. "Hush," whispered Lazarus, "you'll wake your old man. Here—" He gathered the child into his left arm and cradled it against his side. The little Jockaira snuggled up to him, laid a soft moist mouth against his hide, and promptly went to sleep.

Lazarus looked down at him. "You're a cute little devil," he said softly. "I could grow right fond of you if I could ever get used to your smell."

Some of the incidents between the two races would have been funny had they not been charged with potential trouble: for example, the case of Eleanor Johnson's son Hubert. This gangling adolescent was a confirmed sidewalk superintendent. One day he was watching two technicians, one human and one Jockaira, adapt a Jockaira power source to the needs of Earth-type machinery. The Jockaira was apparently amused by the boy and, in an obviously friendly spirit, picked him up.

Hubert began to scream.

His mother, never far from him, joined battle. She lacked strength and skill to do the utter destruction she was bent on; the big nonhuman was unhurt, but it created a nasty situation.

Administrator Ford and Oliver Johnson tried very hard to explain the incident to the amazed Jockaira. Fortunately, they seemed grieved rather than vengeful. '

Ford then called in Eleanor Johnson. "You have endangered the entire colony by your stupidity—"

"But I—"

"Keep *quiet*! If you hadn't spoiled the boy rotten, he would have behaved himself. If you weren't a maudlin fool, you would have kept your hands to yourself. The boy goes to the regular development classes henceforth and you are to let him alone. At the slightest sign of animosity on your part toward any of the natives, I'll have you subjected to a few years' cold-rest. Now get out!"

Ford was forced to use almost as strong measures on Janice Schmidt. The interest shown in Hans Weatheral by the Jockaira extended to all of the telepathic defectives. The natives seemed to be reduced to a state of quivering adoration by the mere fact that these could communicate with them directly. Kreel Sarloo informed Ford that he wanted the sensitives to be housed separately from the other defectives in the evacuated temple of the Earthmen's city and that the Jockaira wished to wait on them personally. It was more of an order than a request.

Janice Schmidt submitted ungracefully to Ford's insistence that the Jockaira be humored in the matter in return for all that they had done, and Jockaira nurses took over under her jealous eyes.

Every sensitive of intelligence level higher than the semi-moronic Hans Weatheral promptly developed spontaneous and extreme psychoses while being attended by Jockaira.

So Ford had another headache to straighten out. Janice Schmidt was more powerfully and more intelligently vindictive than was Eleanor Johnson. Ford was forced to bind Janice over to keep the peace under the threat of retiring her completely from the care of her beloved "children." Kreel Sarloo, distressed and apparently shaken to his core, accepted a compromise whereby Janice and her junior nurses resumed care of the poor psychotics while Jockaira continued to minister to sensitives of moron level and below.

But the greatest difficulty arose over… surnames.

Jockaira each had an individual name and a surname. Surnames were limited in number, much as they were in the Families. A native's surname referred equally to his tribe and to the temple jn which he worshipped.

Kreel Sarloo took up the matter with Ford. "High Father of the Strange Brothers," he said, "the time has come for you and your children to choose your surnames." (The rendition of Sarloo's speech into English necessarily contains inherent errors.)

Ford was used to difficulties in understanding the Jockaira. "Sarloo, brother and friend," he answered, "I hear your words but I do not understand. Speak more fully."

Sarloo began over. "Strange brother, the seasons come and the seasons go and there is a time of ripening. The gods tell us that you, the Strange Brothers, have reached the time in your education (?) when you must select your tribe and your temple. I have come to arrange with you the preparations (ceremonies?) by which each will choose his surname. I speak for the gods in this. But let me say for myself that it would make me happy if you, my brother Ford, were to choose the temple Kreel."

Ford stalled while he tried to understand what was implied. "I am happy that you wish me to have your surname. But my people already have their own surnames."

Sarloo dismissed that with a flip of his lips. "Their present surnames are words and nothing more. Now they must choose their real surnames, each the name of his temple and of the god whom he will worship. Children grow up and are no longer children."

Ford decided that he needed advice. "Must this be done at once?"

"Not today, but in the near future. The gods are patient."

Ford called in Zaccur Barstow, Oliver Johnson, Lazarus Long, and Ralph Schultz, and described the interview. Johnson played back the recording of the conversation and strained to catch the sense of the words. He prepared several possible translations but failed to throw any new light on the matter.

"It looks," said Lazarus, "like a case of join the church or get out."

"Yes," agreed Zaccur Barstow, "that much seems to come through plainly. Well, I think we can afford to go through the motions. Very few of our people have religious prejudices strong enough to forbid their paying lip service to the native gods in the interests of the general welfare."

"I imagine you are correct," Ford said. "I, for one, have no objection to adding Kreel to my name and taking part in their genuflections if it will help us to live in peace." He frowned. "But I would not want to see our culture submerged in theirs."

"You can forget that," Ralph Schultz assured him. "No matter what we have to do to please them, there is absolutely no chance of any real cultural assimilation. Our brains are not like theirs—just how different I am only beginning to guess."

"Yeah," said Lazarus, " 'just how different.'"

Ford turned to Lazarus. "What do you mean by that? What's troubling you?"

"Nothing. Only," he added, "I never did share the general enthusiasm for this place."

They agreed that one man should take the plunge first, then report back. Lazarus tried to grab the assignment on seniority, Schultz claimed it as a professional right; Ford overruled them and appointed himself, asserting that it was his duty as the responsible executive.

Lazarus went with him to the doors of the temple where the induction was to take place. Ford was as bare of clothing as the Jockaira, but Lazarus, since he was not to enter the temple, was able to wear his kilt. Many of the colonists, sunstarved after years in the ship, went bare when it suited them, just as the Jockaira did. But Lazarus never did. Not only did his habits ran counter to it, but a blaster is an extremely conspicuous object on a bare thigh.

Kreel Sarloo greeted them and escorted Ford inside. Lazarus called out after them, "Keep your chin up, pal!"

He waited. He struck a cigarette and smoked it. He walked up and down. He had no way to judge how long it would be; it seemed, in consequence, much longer than it was.

At last the doors slid back and natives crowded out through them. They seemed curiously worked up about something and none of them came near Lazarus. The press that still existed in the great doorway separated, formed an aisle, and a figure came running headlong through it and out into the open.

Lazarus recognized Ford.

Ford did not stop where Lazarus waited but plunged blindly on past. He tripped and fell down. Lazarus hurried to him.

Ford made no effort to get up. He lay sprawled face down, his shoulders heaving violently, his frame shaking with sobs.

Lazarus knelt by him and shook him. “Slayton,” he demanded, “what’s happened? What’s wrong with you?” Ford turned wet and horror-stricken eyes to him, checking his sobs momentarily. He did not speak but he seemed to recognize Lazarus. He flung himself on Lazarus, clung to him, wept more violently than before.

Lazarus wrenched himself free and slapped Ford hard. “Snap out of itl” he ordered. “Tell me what’s the matter.”

Ford jerked his head at the slap and stopped his outcries but he said nothing. His eyes looked dazed. A shadow fell across Lazarus’ line of sight; he spun around, covering with his blaster. Kreel Sarloo stood a few feet away and did not come closer—not because of the weapon; he had never seen one before.

“You!” said Lazarus. “For the— What did you do to him?”

He checked himself and switched to speech that Sarloo could understand. “What has happened to my brother Ford?”

“Take him away,” said Sarloo, his lips twitching. “This is a bad thing. This is a very bad thing.”

“You’re telling me!” said Lazarus. He did not bother to translate.

Chapter 3

The same conference as before, minus its chairman, met as quickly as possible. Lazarus told his story, Shultz reported on Ford's condition. "The medical staff can't find anything wrong with him. All I can say with certainty is that the Administrator is suffering from an undiagnosed extreme psychosis. We can't get into communication with him."

"Won't he talk at all?" asked Barstow.

"A word or two, on subjects as simple as food or water. Any attempt to reach the cause of his trouble drives him into incoherent hysteria."

"No diagnosis?"

"Well, if you want an unprofessional guess in loose language, I'd say he was scared out of his wits. But," Schultz added, "I've seen fear syndromes before. Never anything like this."

"I have," Lazarus said suddenly.

"You have? Where? What were the circumstances?"

"Once," said Lazarus, "when I was a kid, a couple of hundred years back, I caught a grown coyote and penned him up. I had a notion I could train him to be a hunting dog. It didn't work.

"Ford acts just the way that coyote did."

An unpleasant silence followed. Schultz broke it with, "I don't quite see what you mean. What is the parallel?"

"Well," Lazarus answered slowly, "this is just my guess. Slayton is the only one who knows the true answer and he can't talk. But here's my opinion: we've had these Jockaira doped out all wrong from scratch. We made the mistake of thinking that because they looked like us, in a general way, and were about as civilized as we are, that they were *people*. But they aren't people at all. They are… *domestic animals*.

"Wait a minute now!" he added. "Don't get in a rush. There are people on this planet, right enough. Real people. They lived in the temples and the Jockaira called them gods. They *are* gods!"

Lazarus pushed on before anyone could interrupt. "I know what you're thinking. Forget it. I'm not going metaphysical on you; I'm just putting it the best I can. I mean that there is something living in those temples and whatever it is, it is such heap big medicine that it can pinch-hit for gods, so you might as well call 'em that. Whatever they are, they are the true dominant race on this planet-its *people*! To them, the rest of us, Jocks or us, are just animals, wild or tame. We made the mistake of assuming that a local religion was merely superstition. It ain't."

Barstow said slowly, “And you think this accounts for what happened to Ford?”

“I do. He met one, the one called Kreel, and it drove him crazy.”

“I take it,” said Schultz, “that it is your theory that any man exposed to this… this *presence*… would become psychotic?”

“Not exactly,” answered Lazarus. “What scares me a damn‘ sight more is the fear that I might *not* go crazy!”

That same day the Jockaira withdrew all contact with the Earthmen. It was well that they did so, else there would have been violence. Fear hung over the city, feat of horror worse than death, fear of some terrible nameless thing, the mere knowledge of which would turn a man into a broken mindless animal. The Jockaira no longer seemed harmless friends, rather clownish despite their scientific attainments, but puppets, decoys, bait for the unseen potent beings who lurked in the “temples.”

There was no need to vote on it; with the single-mindedness of a crowd stampeding from a burning building the Earthmen wanted to leave this terrible place. Zaccur Barstow assumed command. “Get King on the screen. Tell him to send down every boat at once. We’ll get out of here as fast as we can.” He ran his fingers worriedly through his hair. “What’s the most we can load each trip, Lazarus? How long will the evacuation take?”

Lazarus muttered.

“What did you say?”

“I said, ‘It ain’t a case of how long; it’s a case of will we be let.’ Those things in the temples may want more domestic animals—usl”

Lazarus was needed as a boat pilot but he was needed more urgently for his ability to manage a crowd. Zaccur Barstow was telling him to conscript a group of emergency police when Lazarus looked past Zaccur’s shoulder and exclaimed, “Oh oh! Hold it, Zack—school’s out.”

Zaccur turned his head quickly and saw, approaching with stately dignity across the council hall, Kreel Sarloo. No one got in his way.

They soon found out why. Zaccur moved forward to greet him, found himself stopped about ten feet from the Jockaira. No clue to the cause; just that—stopped.

“I greet you, unhappy brother,” Sarloo began.

“I greet you, Kreel Sarloo.”

“The gods have spoken. Your kind can never be civilized (?). You and your brothers are to leave this world.”

Lazarus let out a deep sigh of relief.

“We are leaving, Kreel Sarloo,” Zaccur answered soberly.

“The gods require that you leave. Send your brother Libby to me.”

Zaccur sent for Libby, then turned back to Sarloo. But the Jockaira had nothing more to say to them; he seemed indifferent to their presence. They waited.

Libby arrived. Sarloo held him in a long conversation. Barstow and Lazarus were both in easy earshot and could see their lips move, but heard nothing. Lazarus found the circumstance very disquieting. Damn my eyes, he thought, I could figure several ways to pull that trick with the right equipment but I'll bet none of 'em is the right answer—and I don't see any equipment.

The silent discussion ended, Sarloo stalked off without farewell. Libby turned to the others and spoke; now his voice could be heard. "Sarloo tells me," he began, brow wrinkled in puzzlement, "that we are to go to a planet, uh, over thirty-two lightyears from here. The gods have decided it." He stopped and bit his lip.

"Don't fret about it," advised Lazarus. "Just be glad they want us to leave. My guess is that they could have squashed us flat just as easily. Once we're out in space we'll pick our own destination."

"I suppose so. But the thing that puzzles me is that he mentioned a time about three hours away as being our departure from this system."

"Why, that's utterly unreasonable," protested Barstow. "Impossible. We haven't the boats to do it."

Lazarus said nothing. He was ceasing to have opinions.

Zaccur changed his opinion quickly. Lazarus acquired one, born of experience. While urging his cousins toward the field where embarkation was proceeding, he found himself lifted up, free of the ground. He struggled, his arms and legs met no resistance but the ground dropped away. He closed his eyes, counted ten jets, opened them again. He was at least two miles in the air.

Below him, boiling up from the city like bats from a cave, were uncountable numbers of dots and shapes, dark against the sunlit ground. Some were close enough for him to see that they were men, Earthmen, the Families.

The horizon dipped down, the planet became a sphere, the sky turned black. Yet his breathing seemed normal, his blood vessels did not burst.

They were sucked into clusters around the open ports of the *New Frontiers* like bees swarming around a queen. Once inside the ship Lazarus gave himself over to a case of the shakes. *Whew*! he sighed to himself, watch that first step-it's a honey!

Libby sought out Captain King as soon as he was inboard and had recovered his nerve. He delivered Sarloo's message.

King seemed undecided. "I don't know," he said. "You know more about the natives than I do, inasmuch as I have hardly put foot to ground. But between ourselves, Mister, the way they sent my passengers back has me talking to myself. That was the most remarkable evolution I have ever seen performed."

"I might add that it was remarkable to experience, sir," Libby answered unhumorously. "Personally I would prefer to take up ski jumping. I'm glad you had the ship's access ports open."

"I didn't,"-said King tersely. "They were opened for me."

They went to the control room with the intention of getting the ship under boost and placing a long distance between it and the planet from which they had been evicted; thereafter they would consider destination and course. "This planet that Sarloo described to you," said King, "does it belong to a G-type star?"

"Yes," Libby confirmed, "an Earth-type planet accompanying a Sol-type star. I have its coordinates and could identify from the catalogues. But we can forget it; it is too far away."

"So…" King activated the vision system for the stellarium. Then neither of them said anything for several long moments. The images of the heavenly bodies told their own story.

With no orders from King, with no hands at the controls, the *New Frontiers* was on her long way again, headed out, as if she had a mind of her own.

"I can't tell you much," admitted Libby some hours later to a group consisting of King, Zaccur Barstow, and Lazarus Long. "I was able to determine, before we passed the speed of light—or appeared to—that our course then was compatible with the idea that we have been headed toward the star named by Kreel Sarloo as the destination ordered for us by his gods. We continued to accelerate and the stars faded out. I no longer have any astrogational reference points and I am unable to say where we are or where we are going."

"Loosen up, Andy," suggested Lazarus. "Make a guess."

"Well… if our world line is a smooth function—if it is, and I have no data—then we may arrive in the neighborhood of star PK3722, where Kreel Sarloo said we were going."

"Rummph!" Lazarus turned to King. "Have you tried slowing down?"

"Yes," King said shortly. "The controls are dead."

"Mmmm… Andy, when do we get there?"

Libby shrugged helplessly. "I have no frame of reference. What is time without a space reference?"

Time and space, inseparable and one— Libby thought about it long after the others had left. To be sure, he had the space framework of the ship itself and therefore there necessarily was ship's time. Clocks in the ship ticked or hummed or simply marched; people grew hungry, fed themselves, got tired, rested. Radioactives deteriorated, physio-chemical processes moved toward states of greater entropy, his own consciousness perceived duration.

But the background of the stars, against which every timed function in the history of man had been measured, was gone. So far as his eyes or any instrument in the ship could tell him, they had become unrelated to the rest of the universe.

What universe?

There was no universe. It was gone.

Did they move? Can there be motion when there is nothing to move past?

Yet the false weight achieved by the spin of the ship persisted. Spin with reference to *what*? thought Libby. Could it be that space held a true, absolute, nonrelational texture of its own, like that postulated for the long-discarded "ether" that the classic Michelson-Morley experiments had failed to detect? No, more than that—had denied the very possibility of its existence?

—had for that matter denied the possibility of speed greater than light. Had the ship actually passed the speed of light? Was it not more likely that this was a coffin, with ghosts as passengers, going nowhere at no time?

But Libby itched between his shoulder blades and was forced to scratch; his left leg had gone to sleep; his stomach was beginning to speak insistently for food—if this was death, he decided, it did not seem materially different from life.

With renewed tranquility, he left the control room and headed for his favorite refectory, while starting to grapple with the problem of inventing a new mathematics which would include all the new phenomena. The mystery of how the hypothetical gods of the Jockaira had teleported the Families from ground to ship he discarded. There had been no opportunity to obtain significant data, *measured* data; the best that any honest scientist could do, with epistemological rigor, was to include a note that recorded the fact and stated that it was unexplained. It *was* a fact; here he was who shortly before had been on the planet; even now Schultz's assistants were overworked trying to administer depressant drugs to the thousands who had gone to pieces emotionally under the outrageous experience.

But Libby could not explain it and, lacking data, felt no urge to try. What he did want to do was to deal with world lines in a plenum, the basic problem of field physics.

Aside from his penchant for mathematics Libby was a simple person. He preferred the noisy atmosphere of the "Club," refectory 9-D, for reasons different from those of Lazarus. The company of people younger than himself reassured him; Lazarus was the only elder he felt easy with.

Food, he learned, was not immediately available at the Club; the commissary was still adjusting to the sudden change. But Lazarus was there and others whom he knew; Nancy Weatheral scrunched over and made room for him. “You’re just the man I want to see,” she said. “Lazarus is being most helpful. Where are we going this time and when do we get there?”

Libby explained the dilemma as well as he could. Nancy wrinkled her nose. “That’s a pretty prospect, I must say! Well, I guess that means back to the grind for little Nancy.”

“What do you mean?”

“Have you ever taken care of a somnolent? No, of course you haven’t. It gets tiresome. Turn them over, bend their arms, twiddle their tootsies, move their heads, close the tank and move on to the next one. I get so sick of human bodies that I’m tempted to take a vow of chastity.”

“Don’t commit yourself too far,” advised Lazarus.

“Why would you care, you old false alarm?”

Eleanor Johnson spoke up. “I’m *glad* to be in the ship again. Those slimy Jockaira—ugh!”

Nancy shrugged. “You’re prejudiced, Eleanor. The Jocks are okay, in their way. Sure, they aren’t exactly like us, but neither are dogs. You don’t dislike dogs, do you?”

“That’s what they are,” Lazarus said soberly. “Dogs.”

“Huh?”

“I don’t meam that they are anything like dogs in most ways—they aren’t even vaguely canine and they certainly are our equals and possibly our superiors in some things… but they are dogs just the same. Those things they call their ‘gods’ are simply their masters, their owners. We couldn’t be domesticated, so the owners chucked us out.”

Libby was thinking of the inexplicable telekinesis the Jockaira—or their masters—had used. “I wonder what it would have been like,” he said thoughtfully, “if they had been able to domesticate us. They could have taught us a lot of wonderful things.”

“Forget it,” Lazarus said sharply. “It’s not a man’s place to be property.”

“What is a man’s place?”

“It’s a man’s business to be what he is… and be it in stylel” Lazarus got up. “Got to go.”

Libby started to leave also, but Nancy stopped him. “Don’t go. I want to ask you some questions. What year is it back on Earth?”

Libby started to answer, closed his mouth. He started to answer a second time, finally said, “I don’t know how to answer that question. It’s like saying, ‘How high is up?’”

“I know I probably phrased it wrong,” admitted Nancy. “I didn’t do very well in basic physics, but I did gather the idea that time is relative and simultaneity is an idea which applies only to two points close together in the same framework. But just the same, I want to know something. We've traveled a lot faster and farther than anyone ever did before, haven't we? Don't our clocks slow down, or something?"

Libby got that completely baffled look which mathematical physicists wear whenever laymen try to talk about physics in nonmathematical language. "You're referring to the Lorentz-FitzGerald contraction. But, if you'll pardon me, anything one says about it in words is necessarily nonsense."

"Why?" she insisted.

"Because… well, because the language is inappropriate. The formulae used to describe the effect loosely called a contraction presuppose that the observer is part of the phenomenon. But verbal language contains the implicit assumption that we can stand outside the whole business and watch what goes on. The mathematical language denies the very possibility of any such outside viewpoint. Every observer has his own world line; he can't get outside it for a detached viewpoint."

"But suppose he did? Suppose we could see Earth right now?"

"There I go again," Libby said miserably. "I tried to talk about it in words and all I did was to add to the confusion. There is no way to measure time in any absolute sense when two events are separated in a continuum. All you can measure is interval."

"Well, what is interval? So much space and so much time."

"No, no, no! It isn't that at all. Interval is… well, it's interval. I can write down formulae about it and show you how we use it, but it can't be defined in words. Look, Nancy, can you write the score for a full orchestration of a symphony in words?"

"No. Well, maybe you could but it would take thousands of times as long."

"And musicians still could not play it until you put it back into musical notation. That's what I meant," Libby went on, "when I said that the language was inappropriate. I got into a difficulty like this once before in trying to describe the light-pressure drive. I was asked why, since the drive depends on loss of inertia, we people inside the ship had felt no loss of inertia. There was no answer, in words. Inertia isn't a word; it is a mathematical concept used in *mathematically* certain aspects of a plenum. I was stuck."

Nancy looked baffled but persisted doggedly. "My question still means something, even if I didn't phrase it right. You can't just tell me to run along and play. Suppose we turned around and went back the way we came, all the way to Earth, exactly the same trip but in reverse-just double the ship's time it has been so far. All right, what year would it be on Earth when we got there?"

"It would be… let me see, now—" The almost automatic processes of Libby's brain started running off the unbelievably huge and complex problem in accelerations, intervals, difform motion. He was approaching the answer in a warm glow of mathematical revery when the problem suddenly fell to pieces on him, became indeterminate. He abruptly realized that the problem had an unlimited number of equally valid answers.

But that was impossible. In the real world, not the fantasy world of mathematics, such a situation was absurd. Nancy's question had to have just one answer, unique and real.

Could the whole beautiful structure of relativity be an absurdity? Or did it mean that it was physically impossible ever to backtrack an interstellar distance?

"I'll have to give some thought to that one," Libby said hastily and left before Nancy could object.

But solitude and contemplation gave him no clue to the problem. It was not a failure of his mathematical ability; he was capable, he knew, of devising a mathematical description of any group of facts, whatever they might be. His difficulty lay in having too few facts. Until some observer traversed interstellar distances at speeds approximating the speed of light *and returned to the planet from which he had started* there could be no answer. Mathematics alone has no content, gives no answers.

Libby found himself wondering if the hills of his native Ozarks were still green, if the smell of wood smoke still clung to the trees in the autumn, then he recalled that the question lacked any meaning by any rules he knew of. He surrendered to an attack of homesickness such as he had not experienced since he was a youth in the Cosmic Construction Corps, making his first deepspace jump.

This feeling of doubt and uncertainty, the feeling of lostness and nostalgia, spread throughout the ship. On the first leg of their journey the Families had had the incentive that had kept the covered wagons crawling across the plains. But now they were going nowhere, one day led only to the next. Their long lives were become a meaningless burden.

Ira Howard, whose fortune established the Howard Foundation, was born in 1825 and died in 1873—of old age. He sold groceries to the Forty-niners in San Francisco, became a wholesale sutler in the American War of the Secession, multiplied his fortune during the tragic Reconstruction.

Howard was deathly afraid of dying. He hired the best doctors of his time to prolong his life. Nevertheless old age plucked him when most men are still young. But his will commanded that his money be used "to lengthen human life." The administrators of the trust found no way to carry out his wishes other than by seeking out persons whose family trees showed congenital predispositions toward long life and then inducing them to reproduce in kind. Their method anticipated the work of Burbank; they may or may not have known of the illuminating researches of the Monk Gregor Mendel.

Mary Sperling put down the book she had been reading when Lazarus entered her stateroom. He picked it up. “What are you reading, Sis? ‘Ecclesiastes.’ Hmm… I didn’t know you were religious.” He read aloud:

“ ‘Yea, though he live a thousand years twice told, yet hath he seen no good: do not all go to one place?’

“Pretty grim stuff, Mary. Can’t you find something more cheerful? Even in The Preacher?” His eyes skipped on down. “How about this one? ‘For to him that is joined to all the living there is hope—’ Or… mmmm, not too many cheerful spots. Try this: ”Therefore remove sorrow from thy heart, and put away evil from thy flesh: for childhood and youth are vanity.‘ That’s more my style; I wouldn’t be young again for overtime wages.“

“I would.”

“Mary, what’s eating you? I find you sitting here, reading the most depressing book in the Bible, nothing but death and funerals. Why?”

She passed a hand wearily across her eyes. “Lazarus, I’m getting old. What else is there to think about?”

“You? Why, you’re fresh as a daisy!”

She looked at him. She knew that he lied; her mirror showed her the greying hair, the relaxed skin; she felt it in her bones. Yet Lazarus was older than she… although she knew, from what she had learned of biology during the years she had assisted in the longevity research, that Lazarus should never have lived to be as old as he was now. When he was born the program had reached only the third generation, too few generations to eliminate the less durable strains—except through some wildly unlikely chance shuffling of genes.

But there he stood. “Lazarus,” she asked, “how long do you expect to live?”

“Me? Now that’s an odd question. I mind a time when I asked a chap that very same question—about me, I mean, not about him. Ever hear of Dr. Hugo Pinero?”

“Pinero… Pinero…‘ Oh, yes, ’Pinero the Charlatan.‘”

“Mary, he was no charlatan. He could do it, no foolin‘. He could predict accurately when a man would die.”

“But— Go ahead. What did he tell you?”

“Just a minute. I want you to realize that he was no fake. His predictions checked out right on the button—if he hadn’t died, the life insurance companies would have been ruined. That was before you were bom, but I was there and I know. Anyhow, Pinero took my reading and it seemed to bother him. So he took it again. Then he returned my money."

"What did he say?"

"Couldn't get a word out of him. He looked at me and he looked at his machine and he just frowned and clammed up. So I can't rightly answer your question."

"But what do *you* think about it, Lazarus? Surely you don't expect just to go on forever?"

"Mary," he said softly, "I'm not planning on dying. I'm not giving it any thought at all."

There was silence. At last she said, "Lazarus, I don't want to die. **But** what is the purpose of our long lives? We don't seem to grow wiser as we grow older. Are we simply hanging on after our time has passed? Loitering in the kindergarten when we should be moving on? Must we die and be born again?"

"I don't know," said Lazarus, "and I don't have any way to find out… and I'm damned if I see any sense in my worrying about it. Or you either. I propose to hang onto this life as long as I can and learn as much as I can. Maybe wisdom and understanding are reserved for a later existence and maybe they aren't for us at all, ever. Either way, I'm satisfied to be living and enjoying it. Mary my sweet, carpe that old diem!—it's the only game in town."

The ship slipped back into the same monotonous routine that had obtained during the weary years of the first jump. Most of the Members went into cold-rest; the others tended them, tended the ship, tended the hydroponds. Among the somnolents was Slayton Ford; cold-rest was a common last-resort therapy for functional psychoses.

The flight to star PK3722 took seventeen months and three days, ship's time.

The ship's officers had as little choice about the journey's end as about its beginning. A few hours before their arrival star images flashed back into being in the stellarium screens and the ship rapidly decelerated to interplanetary speeds. No feeling of slowing down was experienced; whatever mysterious forces were acting on them acted on all masses alike. The *New Frontiers* slipped into an orbit around a live green planet some hundred million miles from its sun; shortly Libby reported to Captain King that they were in a stable parking orbit.

Cautiously King tried the controls, dead since their departure. The ship surged; their ghostly pilot had left them.

Libby decided that the simile was incorrect; this trip had undoubtedly been planned for them but it was not necessary to assume that anyone or anything had shepherded them here. Libby suspected that the “gods” of the dog-people saw the plenum as static; their deportation was an accomplished fact to them before it happened—a concept regrettably studded with unknowns—but there were no appropriate words. Inadequately and incorrectly put into words, his concept was that of a “cosmic cam,” a world line shaped for them which ran out of normal space and back into it; when the ship reached the end of its “cam” it returned to normal operation.

He tried to explain his concept to Lazarus and to the Captain, but he did not do well. He lacked data and also had not had time to refine his mathematical description into elegance; it satisfied neither him nor them.

Neither King nor Lazarus had time to give the matter much thought. Barstow’s face appeared on an interstation viewscreen. “Captain!” he called out. “Can you come aft to lock seven? We have visitors!”

Barstow had exaggerated; there was only one. The creature reminded Lazarus of a child in fancy dress, masqueraded as a rabbit. The little thing was more android than were the Jockaira, though possibly not mammalian. It was unclothed but not naked, for its childlike body was beautifully clothed in short sleek golden fur. Its eyes were bright and seemed both merry and intelligent.

But King was too bemused to note such detail. A voice, a thought, was ringing in his head: “… so you are the group leader…” it said. “… welcome to our world… we have been expecting you… the *(blank)* told us of your coming…”

Controlled telepathy—

A creature, a race, so gentle, so civilized, so free from enemies, from all danger and strife that they could afford to share their thoughts with others—to share more than their thoughts; these creatures were so gentle and so generous that they were offering the humans a homestead on their planet. This was why this messenger had come: to make that offer.

To King’s mind this seemed remarkably like the prize package that had been offered by the Jockaira; he wondered what the boobytrap might be in this proposition.

The messenger seemed to read his thought. “… look into our hearts… we hold no malice toward you… we share your love of life and we love the life in you…”

“We thank you,” King answered formally and aloud. “We will have to confer.” He turned to speak to Barstow, glanced back. The messenger was gone.

The Captain said to Lazarus, “Where did he go?”

“Huh? Don’t ask me.”

“But you were in front of the lock.”

“I was checking the telltales. There’s no boat sealed on outside this lock —so they show. I was wondering if they were working right. They are. How did he get into the ship? Where’s his rig?”

“How did he *leave*?”

“Not past me!”

“Zaccur, he came in through this lock, didn’t he?”

“I don’t know.”

“But he certainly went out through it.”

“Nope,” denied Lazarus. “This lock hasn’t been opened. The deepspace seals are still in place. See for yourself.”

King did. “You don’t suppose,” he said slowly, “that he can pass through—”

“Don’t look at me,” said Lazarus. “I’ve got no more prejudices in the matter than the Red Queen. Where does a phone image go when you cut the circuit?” He left, whistling softly to himself. King did not recognize the tune. Its words, which Lazarus did not sing, started with:

“*Last night* I *saw upon the stair A little man who wasn’t there—*”

Chapter 4

There was no catch to the offer. The people of the planet—they had no name since they had no spoken language and the Earthmen simply called them "The Little People"—the little creatures really did welcome them and help them. They convinced the Families of this without difficulty for there was no trouble in communication such as there had been with the Jockaira. The Little People could make even subtle thoughts known directly to the Earthmen and in turn could sense correctly any thought directed at them. They appeared either to ignore or not to be able to read any thought not directed at them; communication with them was as controlled as spoken speech. Nor did the Earthmen acquire any telepathic powers among themselves.

Their planet was even more like Earth than was the planet of the Jockaira. It was a little larger than Earth but had a slightly lower surface gravitation, suggesting a lower average density—the Little People made slight use of metals in their culture, which may be indicative.

The planet rode upright in its orbit; it had not the rakish tilt of Earth's axis. Its orbit was nearly circular; aphelion differed from perihelion by less than one per cent. There were no seasons.

Nor was there a great heavy moon, such as Earth has, to wrestle its oceans about and to disturb the isostatic balance of its crust. Its hills were low, its winds were gentle, its seas were placid. To Lazarus' disappointment, their new home had no lively weather; it hardly had weather at all; it had climate, and that of the sort that California patriots would have the rest of the Earth believe exists in their part of the globe.

But on the planet of the Little People it really exists.

They indicated to the Earth people where they were to land, a wide sandy stretch of beach running down to the sea. Back of the low break of the bank lay mile on mile of lush meadowland, broken by irregular clumps of bushes and trees. The landscape had a careless neatness, as if it were a planned park, although there was no evidence of cultivation.

It was here, a messenger told the first scouting party, that they were welcome to live.

There seemed always to be one of the Little People present when his help might be useful—not with the jostling inescapable overhelpfulness of the Jockaira, but with the unobtrusive readiness to hand of a phone or a pouch knife. The one who accompanied the first party of explorers confused Lazarus and Barstow by assuming casually that he had met them before, that he had visited them in the ship.

Since his fur was rich mahogany rather than golden, Barstow attributed the error to misunderstanding, with a mental reservation that these people might possibly be capable of chame-leonlike changes in color. Lazarus reserved his judgment.

Barstow asked their guide whether or not his people had any preferences as to where and how the Earthmen were to erect buildings. The question had been bothering him because a preliminary survey from the ship had disclosed no cities. It seemed likely that the natives lived underground—in which case he wanted to avoid getting off on the wrong foot by starting something which the local government might regard as a slum.

He spoke aloud in words directed at their guide, they having learned already that such was the best way to insure that the natives would pick up the thought.

In the answer that the little being flashed back Barstow caught the emotion of surprise. "… must you sully the sweet countryside with interruptions?… to what purpose do you need to form buildings?…"

"We need buildings for many purposes," Barstow explained. "We need them as daily shelter, as places to sleep at night. We need them to grow our food and prepare it for eating." He considered trying to explain the processes of hydroponic farming, of food processing, and of cooking, then dropped it, trusting to the subtle sense of telepathy to let his "listener" understand. "We need buildings for many other uses, for workshops and laboratories, to house the machines whereby we communicate, for almost everything we do in our everyday life."

"… be patient with me…" the thought came, "… since I know so little of your ways… but tell me… do you prefer to sleep in such as *that*?…" He gestured toward the ship's boats they had come down in, where their bulges showed above the low bank. The thought he used for the boats was too strong to be bound by a word; to Lazarus' mind came a thought of a dead, constricted space—a jail that had once harbored him, a smelly public phone booth.

"It is our custom."

The creature leaned down and patted the turf. "… is this not a good place to sleep?…"

Lazarus admitted to himself that it was. The ground was covered with a soft spring turf, grasslike but finer than grass, softer, more even, and set more closely together. Lazarus took off his sandals and let his bare feet enjoy it, toes spread and working. It was, he decided, more like a heavy fur rug than a lawn.

"… as for food…" their guide went on, "… why struggle for that which the good soil gives freely?… come with me…"

He took them across a reach of meadow to where low bushy trees hung over a meandering brook. The "leaves" were growths the size of a man’s hand, irregular in shape, and an inch or more in thickness. The little person broke off one and nibbled at it daintily.

Lazarus plucked one and examined it. It broke easily, like a well-baked cake. The inside was creamy yellow, spongy but crisp, and had a strong pleasant odor, reminiscent of mangoes.

“Lazarus, don’t eat that!” warned Barstow. “It hasn’t been analyzed.”

“… it is harmonious with your body…”

Lazarus sniffed it again. “I’m willing to be a test case, Zack.”

“Oh, well—” Barstow shrugged. “I warned you. You will anyhow.”

Lazarus did. The stuff was oddly pleasing, firm enough to suit the teeth, piquant though elusive in flavor. It settled down happily in his stomach and made itself at home.

Barstow refused to let anyone else try the fruit until its effect on Lazarus was established. Lazarus took advantage of his exposed and privileged position to make a full meal—the best, he decided, that he had had in years.

“… will you tell me what you are in the habit of eating?…” inquired their little friend. Barstow started to reply but was checked by the creature’s thought: “… all of you… think about it…” no further thought message came from him for a few moments, then he flashed, “… that is enough… my wives will take care of it…”

Lazarus was not sure the image meant “wives” but some similar close relationship was implied. It had not yet been established that the Little People were bisexual—or what.

Lazarus slept that night out under the stars and let their clean impersonal light rinse from him the claustrophobia of the ship. The constellations here were distorted out of easy recognition, although he could recognize, he decided, the cool blue of Vega and the orange glow of Antares. The one certainty was the Milky Way, spilling its cloudy arch across the sky just as at home. The Sun, he knew, could not be visible to the naked eye even if he knew where to look for it; its low absolute magnitude would not show up across the lightyears. Have to get hold of Andy, he thought sleepily, work out its coordinates and pick it out with instruments. He fell asleep before it could occur to him to wonder why he should bother.

Since no shelter was needed at night they landed everyone as fast as boats could shuttle them down. The crowds were dumped on the friendly soil and allowed to rest, picnic fashion, until the colony could be organized. At first they ate supplies brought down from the ship, but Lazarus’ continued good health caused the rule against taking chances with natural native foods to be relaxed shortly. After that they ate mostly of the boundless largesse of the plants and used ship’s food only to vary their diets.

Several days after the last of them had been landed Lazarus was exploring alone some distance from the camp. He came across one of the Little People; the native greeted him with the same assumption of earlier acquaintance which all of them seemed to show and led Lazarus to a grove of low trees still farther from base. He indicated to Lazarus that he wanted him to eat.

Lazarus was not particularly hungry but he felt compelled to humor such friendliness, so he plucked and ate.

He almost choked in his astonishment. Mashed potatoes and brown gravy!

"… didn't we get it right?…" came an anxious thought.

"Bub," Lazarus said solemnly, "I don't know what you planned to do, but this is just fine!"

A warm burst of pleasure invaded his mind. "… try the next tree…"

Lazarus did so, with cautious eagerness. Fresh brown bread and sweet butter seemed to be the combination, though a dash of ice cream seemed to have crept in from somewhere. He was hardly surprised when the third tree gave strong evidence of having both mushrooms and charcoal-broiled steak in its ancestry. "… we used your thought images almost entirely…" explained his companion. "… they were much stronger than those of any of your wives…"

Lazarus did not bother to explain that he was not married. The little person added, "… there has not yet been time to simulate the appearances and colors your thoughts showed… does it matter much to you?…"

Lazarus gravely assured him that it mattered very little.

When he returned to the base, he had considerable difficulty in convincing others of the seriousness of his report.

One who benefited greatly from the easy, lotus-land quality of their new home was Slayton Ford. He had awakened from cold rest apparently recovered from his breakdown except in one respect: he had no recollection of whatever it was he had experienced in the temple of Kreel. Ralph Schultz considered this a healthy adjustment to an intolerable experience and dismissed him as a patient.

Ford seemed younger and happier than he had appeared before his breakdown. He no longer held formal office among the Members—indeed there was little government of any sort; the Families lived in cheerful easygoing anarchy on this favored planet—but he was still addressed by his title and continued to be treated as an elder, one whose advice was sought, whose judgment was deferred to, along with Zaccur Barstow, Lazarus, Captain

King, and others. The Families paid little heed to calendar ages; close friends might differ by a century. For years they had benefited from his skilled administration; now they continued to treat him as an elder statesman, even though two-thirds of them were older than was he.

The endless picnic stretched into weeks, into months. After being long shut up in the ship, sleeping or working, the temptation to take a long vacation was too strong to resist and there was nothing to forbid it. Food in abundance, ready to eat and easy to handle, grew almost everywhere; the water in the numerous streams was clean and potable. As for clothing, they had plenty if they wanted to dress but the need was esthetic rather than utilitarian; the Elysian climate made clothing for protection as silly as suits for swimming. Those who liked clothes wore them; bracelets and beads and flowers in the hair were quite enough for most of them and not nearly so much nuisance if one chose to take a dip in the sea.

Lazarus stuck to his kilt.

The culture and degree of enlightenment of the Little People was dim-cult to understand all at once, because their ways were subtle. Since they lacked outward signs, in Earth terms, of high scientific attainment—no great buildings, no complex mechanical transportation machines, no throbbing power plants—it was easy to mistake them for Mother Nature's children, living in a Garden of Eden.

Only one-eighth of an iceberg shows above water.

Their knowledge of physical science was not inferior to that of the colonists; it was incredibly superior. They toured the ship's boats with polite interest, but confounded their guides by inquiring why things were done *this* way rather than *that?*—and the way suggested invariably proved to be simpler and more efficient than Earth technique… when the astounded human technicians managed to understand what they were driving at.

The Little People understood machinery and all that machinery implies, but they simply had little use for it. They obviously did not need it for communication and had little need for it for transportation (although the full reason for that was not at once evident), and they had very little need for machinery in any of their activities. But when they had a specific need for a mechanical device they were quite capable of inventing, building it, using it once, and destroying it, performing the whole process with a smooth cooperation quite foreign to that of men.

But in biology their preeminence was the most startling. The Little People were masters in the manipulation of life forms. Developing plants in a matter of days which bore fruit duplicating not only in flavor but in nutrition values the foods humans were used to was not a miracle to them but a routine task any of their biotechnicians could handle. They did it more easily than an Earth horticulturist breeds for a certain strain of color or shape in a flower.

But their methods were different from those of any human plant breeder. Be it said for them that they did try to explain their methods, but the explanations simply did not come through. In our terms, they claimed to "think" a plant into the shape and character they desired. Whatever they meant by that, it is certainly true that they could take a dormant seedling plant and, without touching it or operating on it in any way perceptible to their human students, cause it to bloom and burgeon into maturity in the space of a few hours—with new characteristics not found in the parent line… and which bred true thereafter.

However the Little People differed from Earthmen only in degree with respect to scientific attainments. In an utterly basic sense they differed from humans in kind.

They were not individuals.

No single body of a native housed a discrete individual. Their individuals were multi-bodied; they had group "souls." The basic unit of their society was a telepathic rapport group of many parts. The number of bodies and brains housing one individual ran as high as ninety or more and was never less than thirty-odd.

The colonists began to understand much that had been utterly puzzling about the Little People only after they learned this fact. There is much reason to believe that the Little People found the Earthmen equally puzzling, that they, too, had assumed that their pattern of existence must be mirrored in others. The eventual discovery of the true facts on each side, brought about mutual misunderstandings over identity, seemed to arouse horror in the minds of the Little People. They withdrew themselves from the neighborhood of the Families' settlement and remained away for several days.

At length a messenger entered the camp site and sought out Barstow. "… we are sorry we shunned you… in our haste we mistook your fortune for your fault… we wish to help you… we offer to teach you that you may become like ourselves…"

Barstow pondered how to answer this generous overture. "We thank you for your wish to help us," he said at last, "but what you call our misfortune seems to be a necessary part of our makeup. Our ways are not your ways. I do not think we could understand your ways."

The thought that came back to him was very troubled. "… we have aided the beasts of the air and of the ground to cease their strife… but if you do not wish our help we will not thrust it on you…"

The messenger went away, leaving Zaccur Barstow troubled in his mind. Perhaps, he thought, he had been hasty in answering without taking time to consult the elders. Telepathy was certainly not a gift to be scorned; perhaps the Little People could train them in telepathy without any loss of human individualism. But what he knew of the sensitives among the Families did not encourage such hope; there was not a one of them who was emotionally healthy, many of them were mentally deficient as well—it did not seem like a safe path for humans.

It could be discussed later, he decided; no need to hurry.

"No need to hurry" was the spirit throughout the settlement. There was no need to strive, little that had to be done and rarely any rush about that little. The sun was warm and pleasant, each day was much like the next, and there was always the day after that. The Members, predisposed by their inheritance to take a long view of things, began to take an eternal view. Time no longer mattered. Even the longevity research, which had continued throughout their memories, languished. Gordon Hardy tabled his current experimentation to pursue the vastly more fruitful occupation of learning what the Little People knew of the nature of life. He was forced to take it slowly, spending long hours in digesting new knowledge. As time trickled on, he was hardly aware that his hours of contemplation were becoming longer, his bursts of active study less frequent.

One thing he did learn, and its implications opened up whole new fields of thought: the Little People had, in one sense, conquered death.

Since each of their egos was shared among many bodies, the death of one body involved no death for the ego. All memory experiences of that body remained intact, the personality associated with it was not lost, and the physical loss could be made up by letting a young native "marry" into the group. But a group ego, one of the personalities which spoke to the Earthmen, could not die, save possibly by the destruction of every body it lived in. They simply went on, apparently forever.

Their young, up to the time of "marriage" or group assimilation, seemed to have little personality and only rudimentary or possibly instinctive mental processes. Their elders expected no more of them in the way of intelligent behavior than a human expects of a child still in the womb. There were always many such uncompleted persons attached to any ego group; they were cared for like dearly beloved pets or helpless babies, although they were often as large and as apparently mature to Earth eyes as were their elders.

Lazarus grew bored with paradise more quickly than did the majority of his cousins. "It can't always," he complained to Libby, who was lying near him on the fine grass, "be time for tea."

"What's fretting you, Lazarus?"

"Nothing in particular." Lazarus set the point of his knife on his right elbow, flipped it with his other hand, watched it bury its point in the ground. “It’s just that this place reminds me of a well-run zoo. It’s got about as much future.” He grunted scornfully. “It’s ‘NeverNever Land.’”

“But what in particular is worrying you?”

“Nothing. That’s what worries me. Honest to goodness, Andy, don’t you see anything wrong in being turned out to pasture like this?”

Libby grinned sheepishly. “I guess it’s my hillbilly blood. ‘When it don’t rain, the roof don’t leak; when it rains, I cain’t fix it nohow,’” he quoted. “Seems to me we’re doing tolerably well. What irks you?”

“Well—” Lazarus’ pale-blue eyes stared far away; he paused in his idle play with his knife. “When I was a young man a long time ago, I was beached in the South Seas—”

“Hawaii?”

“No. Farther south. Damned if I know what they call it today. I got hard up, mighty hard up, and sold my sextant. Pretty soon—or maybe quite a while—I could have passed for a native. I lived like one. It didn’t seem to matter. But one day I caught a look at myself in a mirror.” Lazarus sighed gustily. “I beat my way out of that place shipmate to a cargo of green hides, which may give you some idea how scared and desperate I was!”

Libby did not comment. “What do *you* do with your time, Lib?” Lazarus persisted.

“Me? Same as always. Think about mathematics. Try to figure out a dodge for a space drive like the one that got us here.”

“Any luck on that?” Lazarus was suddenly alert.

“Not yet. Gimme time. Or I just watch the clouds integrate. There are amusing mathematical relationships everywhere if you are on the lookout for them. In the ripples on the water, or the shapes of busts—elegant fifth-order functions.”

“Huh? You mean ‘fourth order.’”

“Fifth order. You omitted the time variable. I like fifth-order equations,” Libby said dreamily. “You find ‘em in fish, too.”

“Hummph!” said Lazarus, and stood up suddenly. “That may be all right for you, but it’s not my pidgin.”

“Going some place?”

“Goin‘ to take a walk.”

Lazarus walked north. He walked the rest of that day, slept on the ground as usual that night, and was up and moving, still to the north, at dawn. The next day was followed by another like it, and still another. The going was easy, much like strolling in a park… too easy, in Lazarus’ opinion. For the sight of a volcano, or a really worthwhile waterfall, he felt willing to pay four bits and throw in a jackknife.

The food plants were sometimes strange, but abundant and satisfactory. He occasionally met one or more of the Little People going about their mysterious affairs. They never bothered him nor asked why he was traveling but simply greeted him with the usual assumption of previous acquaintanceship. He began to long for one who would turn out to be a stranger; he felt watched.

Presently the nights grew colder, the days less balmy, and the Little People less numerous. When at last he had not seen one for an entire day, he camped for the night, remained there the next day—took out his soul and examined it.

He had to admit that he could find no reasonable fault with the planet nor its inhabitants. But just as definitely it was not to his taste. No philosophy that he had ever heard or read gave any reasonable purpose for man's existence, nor any rational clue to his proper conduct. Basking in the sunshine might be as good a thing to do with one's life as any other—but it was not for him and he knew it, even if he could not define how he knew it.

The hegira of the Families had been a mistake. It would have been a more human, a more mature and manly thing, to have stayed and fought for their rights, even if they had died insisting on them. Instead they had fled across half a universe (Lazarus was reckless about his magnitudes) looking for a place to light. They had found one, a good one—but already occupied by beings so superior as to make them intolerable for men… yet so supremely indifferent in their superiority to men that they had not even bothered to wipe them out, but had whisked them away to this—this over-manicured country club.

And that in itself was the unbearable humiliation. The *New Frontiers* was the culmination of five hundred years of human scientific research, the best that men could do—but it had been flicked across the deeps of space as casually as a man might restore a baby bird to its nest.

The Little People did not seem to want to kick them out but the Little People, in their own way, were as demoralizing to men as were the gods of the Jockaira. One at a time they might be morons but taken as groups each rapport group was a genius that threw the best minds that men could offer into the shade. Even Andy. Human beings could not hope to compete with that type of organization any more than a back-room shop could compete with an automated cybernated factory. Yet to form any such group identities, even if they could which he doubted, would be, Lazarus felt very sure, to give up whatever it was that made them *men*.

He admitted that he was prejudiced in favor of men. He *was* a man.

The uncounted days slid past while he argued with himself over the things that bothered him—problems that had made sad the soul of his breed since the first apeman had risen to self-awareness, questions never solved by full belly nor fine machinery. And the endless quiet days did no more to give him final answers than did all the soul searchings of his ancestors. Why? What shall it profit a man? No answer came back—save one: a firm unreasoned conviction that he was not intended for, or not ready for, this timeless snug harbor of ease.

His troubled reveries were interrupted by the appearance of one of the Little People. "… greetings, old friend… your wife King wishes you to return to your home… he has need of your advice…"

"What's the trouble?" Lazarus demanded.

But the little creature either could or would not tell him. Lazarus gave his belt a hitch and headed south. "… there is no need to go slowly…" a thought came after him.

Lazarus let himself be led to a clearing beyond a clump of trees. There he found an egg-shaped object about six feet long, featureless except for a door in the side. The native went in through the door, Lazarus squeezed his larger bulk in after him; the door closed.

It opened almost at once and Lazarus saw that they were on the beach just below the human settlement. He had to admit that it was a good trick.

Lazarus hurried to the ship's boat parked on the beach in which Captain King shared with Barstow a semblance of community headquarters. "You sent for me, Skipper. What's up?"

King's austere face was grave. "It's about Mary Sperling."

Lazarus felt a sudden cold tug at his heart. "Dead?"

"No. Not exactly. She's gone over to the Little People. 'Married' into one of their groups."

"*What*? But that's impossible!"

Lazarus was wrong. There was no faint possibility of interbreeding between Earthmen and natives but there was no barrier, if sympathy existed, to a human merging into one of their rapport groups, drowning his personality in the ego of the many.

Mary Sperling, moved by conviction of her own impending death, saw in the deathless group egos a way out. Faced with the eternal problem of life and death, she had escaped the problem by choosing neither… selflessness. She had found a group willing to receive her, she had crossed over.

"It raises a lot of new problems," concluded King. "Slayton and Zaccur and I all felt that you had better be here."

"Yes, yes, sure—but where is Mary?" Lazarus demanded and then ran out of the room without waiting for an answer. He charged through the settlement ignoring both greetings and attempts to stop him. A short distance outside the camp he ran across a native. He skidded to a stop. "Where is Mary Sperling?"

"… I am Mary Sperling…"

"For the love of— You *can't* be."

"… I am Mary Sperling and Mary Sperling is myself… do you not know me, Lazarus?… I know you…"

Lazarus waved his hands. "No! I want to see Mary Sperling who looks like an Earthman—like me!"

The native hesitated. "… follow me, then…"

Lazarus found her a long way from the camp; it was obvious that she had been avoiding the other colonists. "Mary!"

She answered him mind to mind: "… I am sorry to see you troubled… Mary Sperling is gone except in that she is part of us…"

"Oh, come off it, Mary! Don't give me that stuff! Don't you know me?"

"… of course I know you, Lazarus… it is you who do not know *me* … do not trouble your soul or grieve your heart with the sight of this body in front of you… I am not one of your kind… I am native to this planet…"

"Mary," he insisted, "you've got to undo this. You've got to come out of there!"

She shook her head, an oddly human gesture, for the face no longer held any trace of human expression; it was a mask of otherness. "… that is impossible… Mary Sperling is gone… the one who speaks with you is inextricably *myself* and not of your kind…" The creature who had been Mary Sperling turned and walked away.

"*Mary*!" he cried. His heart leapt across the span of centuries to the night his mother had died. He covered his face with his hands and wept the unconsolable grief of a child.

Chapter 5

Lazarus found both King and Barstow waiting for him when he returned. King looked at his face. “I could have told you,” he said soberly, “but you wouldn’t wait.”

“Forget it,” Lazarus said harshly. “What now?”

“Lazarus, there is something else you have to see before we discuss anything,” Zaccur Barstow answered.

“Okay. What?”

“Just come and see.” They led him to a compartment in the ship’s boat which was used as a headquarters. Contrary to Families’ custom it was locked; King let them in. There was a woman inside, who, when she saw the three, quietly withdrew, locking the door again as she went out.

“Take a look at that,” directed Barstow.

It was a living creature in an incubator—a child, but no such child as had ever been seen before. Lazarus stared at it, then said angrily, “What the devil is it?”

“See for yourself. Pick it up. You won’t hurt it.”

Lazarus did so, gingerly at first, then without shrinking from the contact as his curiosity increased. What it was, he could not say. It was not human; it was just as certainly not offspring of the Little People. Did this planet, like the last, contain‘ some previously unsuspected race? It was manlike, yet certainly not a man child. It lacked even the button nose of a baby, nor were there evident external ears. There were organs in the usual locations of each but flush with the skull and protected with bony ridges. Its hands had too many fingers and there was an extra large one near each wrist which ended in a cluster of pink worms.

There was something odd about the torso of the infant which Lazarus could not define. But two other gross facts were evident: the legs ended not in human feet but in horny, toeless pediments—hoofs. And the creature was hermaphroditic—not in deformity but in healthy development, an androgyne.

“What is it?” he repeated, his mind filled with lively suspicion.

“That,” said Zaccur, “is Marion Schmidt, bom three weeks ago.”

“Huh? What do you mean?”

“It means that the Little People are just as clever in manipulating us as they are in manipulating plants.”

“What? But they agreed to leave us alone!”

“Don’t blame them too quickly. We let ourselves in for it. The original idea was simply a few improvements.”

“ ‘Improvements!’ That thing’s an obscenity.”

"Yes and no. My stomach turns whenever I have to look at it… but actually-well, it's sort of a superman. Its body architecture has been redesigned for greater efficiency, our useless simian hangovers have been left out, and its organs have been rearranged in a more sensible fashion. You can't say it's not human, for it *is*… an improved model. Take that extra appendage at the wrist. That's another hand, a miniature one… backed up by a microscopic eye. You can see how useful that would be, once you get used to the idea." Barstow stared at it. "But it looks horrid, to me."

"It'd look horrid to anybody," Lazarus stated. "It may be an improvement, but damn it, I say it ain't human."

"In any case it creates a problem."

"I'll say it does!" Lazarus looked at it again. "You say it has a second set of eyes in those tiny hands? That doesn't seem possible."

Barstow shrugged. "I'm no biologist. But every cell in the body contains a full bundle of chromosomes. I suppose that you could grow eyes, or bones, or anything you liked anywhere, if you knew how to manipulate the genes in the chromosomes. And they know."

"I don't want to be manipulated!"

"Neither do I."

Lazarus stood on the bank and stared out over the broad beach at a full meeting of the Families. "I am—" he started formally, then looked puzzled. "Come here a moment, Andy." He whispered to Libby; Libby looked pained and whispered back. Lazarus looked exasperated and whispered again. Finally he straightened up and started over.

"I am two hundred and forty-one years old—at least," he stated. "Is there anyone here who is older?" It was empty formality; he knew that he was the eldest; he felt twice that old. "The meeting is opened," he went on, his big voice rumbling on down the beach assisted by speaker systems from the ship's boats. "Who is your chairman?"

"Get on with it," someone called from the crowd.

"Very well," said Lazarus. "Zaccur Barstow!"

Behind Lazarus a technician aimed a directional pickup at Barstow. "Zaccur Barstow," his voice boomed out, "speaking for myself. Some of us have come to believe that this planet, pleasant as it is, is not the place for us. You all know about Mary Sperling, you've seen stereos of Marion Schmidt; there have been other things and I won't elaborate. But emigrating again poses another question, the question of where? Lazarus Long proposes that we return to Earth. In such a—" His words were drowned by noise from the crowd.

Lazarus shouted them down. "Nobody is going to be forced to leave. But if enough of us want to leave to justify taking the ship, then we can. I say go back to Earth. Some say look for another planet. That'll have to be decided. But first—how many of you think as I do about leaving here?"

"I do!" The shout was echoed by many others. Lazarus peered toward the first man to answer, tried to spot him, glanced over his shoulder at the tech, then pointed. "Go ahead, bud," he ruled. "The rest of you pipe down."

"Name of Oliver Schmidt. I've been waiting for months for somebody to suggest this. I thought I was the only sorehead in the Families. I haven't any real reason for leaving—I'm not scared out by the Mary Sperling matter, nor Marion Schmidt. Anybody who likes such things is welcome to them-live and let live. But I've got a deep-down urge to see Cincinnati again. I'm fed up with this place. I'm tired of being a lotus eater. Damn it, I want to *work* for my living! According to the Families' geneticists I ought to be good for another century at least. I can't see spending that much time lying in the sun and daydreaming."

When he shut up, at least a thousand more tried to get the floor. "Easy! Easy!" bellowed Lazarus. "If everybody wants to talk, I'm going to have to channel it through your Family representatives. But let's get a sample here and there." He picked out another man, told him to sound off.

"I won't take long," the new speaker said, "as I agree with Oliver Schmidt. I just wanted to mention my own reason. Do any of you miss the Moon? Back home I used to sit out on my balcony on warm summer nights and smoke and look at the Moon. I didn't know it was important to me, but it is. I want a planet with a moon."

The next speaker said only, "This case of Mary Sperling has given me a case of nerves. I get nightmares that I've gone over myself."

The arguments went on and on. Somebody pointed out that they had been chased off Earth; what made anybody think that they would be allowed to return? Lazarus answered that himself. "We learned a lot from the Jockaira and now we've learned a lot more from the Little People—things that put us way out ahead of anything scientists back on Earth had even dreamed of. We can go back to Earth loaded for bear. We'll be in shape to demand our rights, strong enough to defend them."

"Lazarus Long—" came another voice.

"Yes," acknowledged Lazarus. "You over there, go ahead."

"I am too old to make any more jumps from star to star and much too old to fight at the end of such a jump. Whatever the rest of you do, I'm staying."

"In that case," said Lazarus, "there is no need to discuss it, is there?"

"I am entitled to speak."

"All right, you've spoken. Now give someone else a chance."

The sun set and the stars came out and still the talk went on. Lazarus knew that it would never end unless he moved to end it. "All right," he shouted, ignoring the many who still wanted to speak. "Maybe we'll have to turn this back to the Family councils, but let's take a trial vote and see where we are. Everybody who wants to go back to Earth move way over to my right. Everybody who wants to stay here move down the beach to my left. Everybody who wants to go exploring for still another planet gather right here in front of me." He dropped back and said to the sound tech, "Give them some music to speed 'em up."

The tech nodded and the homesick strains of *Valse Triste* sighed over the beach. It was followed by *The Green Hills of Earth*. Zaccur Barstow turned toward Lazarus. "You picked that music."

"Me?" Lazarus answered with bland innocence. "You know I ain't musical, Zack."

Even with music the separation took a long time. The last movement of the immortal Fifth had died away long before they at last had sorted themselves into three crowds.

On the left about a tenth of the total number were gathered, showing thereby their intention of staying. They were mostly the old and the tired, whose sands had run low. With them were a few youngsters who had never seen Earth, plus a bare sprinkling of other ages.

In the center was a very small group, not over three hundred, mostly men and a few younger women, who voted thereby for still newer frontiers.

But the great mass was on Lazarus' right. He looked at them and saw new animation in their faces; it lifted his heart, for he had been bitterly afraid that he was almost alone in his wish to leave.

He looked back at the small group nearest him. "It looks like you're outvoted," he said to them alone, his voice unamplified. "But never mind, there always comes another day." He waited.

Slowly the group in the middle began to break up. By ones and twos and threes they moved away. A very few drifted over to join those who were staying; most of them merged with the group on the right.

When this secondary division was complete Lazarus spoke to the smaller group on his left. "All right," he said very gently, "You… you old folks might as well go back up to the meadows and get your sleep. The rest of us have plans to make."

Lazarus then gave Libby the floor and let him explain to the majority crowd that the trip home would not be the weary journey the flight from Earth had been, nor even the tedious second jump. Libby placed all of the credit where most of it belonged, with the Little

People. They had straightened him out with his difficulties in dealing with the problem of speeds which appeared to exceed the speed of light. If the Little People knew what they were talking about—and Libby was sure that they did—there appeared to be no limits to what Libby chose to call "para-acceleration"— "para-" because, like Libby's own light-pressure drive, it acted on the whole mass uniformly and could no more be perceived by the senses than can gravitation, and "para-" also because the ship would not go "through" but rather around or "beside" normal space. "It is not so much a matter of driving the ship as it is a selection of appropriate potential level in an n-dimensional hyperplenum of n-plus-one possible—"

Lazarus firmly cut him off. "That's your department, son, and everybody trusts you in it. We ain't qualified to discuss the fine points."

"I was only going to add—"

"I know. But you were already out of the world when I stopped you."

Someone from the crowd shouted one more question. "When do we get there?"

"I don't know," Libby admitted, thinking of the question the way Nancy Weatheral had put it to him long ago. "I can't say what year it will be… but it will seem like about three weeks from now."

The preparations consumed days simply because many round trips of the ship's boats were necessary to embark them. There was a marked lack of ceremonious farewell because those remaining behind tended to avoid those who were leaving. Coolness had sprung up between the two groups; the division on the beach had split friendships, had even broken up contemporary marriages, had caused many hurt feelings, unresolvable bitterness. Perhaps the only desirable aspect of the division was that the parents of the mutant Marion Schmidt had elected to remain behind.

Lazarus was in charge of the last boat to leave. Shortly before he planned to boost he felt a touch at his elbow. "Excuse me," a young man said. "My name's Hubert Johnson. I want to go along but I've had to stay back with the other crowd to keep my mother from throwing fits. If I show up at the last minute, can I still go along?"

Lazarus looked him over. "You look old enough to decide without asking me."

"You don't understand. I'm an only child and my mother tags me around. I've got to sneak back before she misses me. How much longer —"

"I'm not holding this boat for anybody. And you'll never break away any younger. Get into the boat."

"But—"

"Git!" The young man did so, with one worried backward glance at the bank. There was a lot, thought Lazarus, to be said for ectogenesis.

Once inboard the *New Frontiers* Lazarus reported to Captain King in the control room. "All inboard?" asked King.

"Yeah. Some late deciders, pro and con, and one more passenger at the last possible split second-woman named Eleanor Johnson. Let's go!"

King turned to Libby. "Let's go, Mister."

The stars blinked out.

They flew blind, with only Libby's unique talent to guide them. If he had doubts as to his ability to lead them through the featureless blackness of other space he kept them to himself. On the twenty-third ship's day of the reach and the eleventh day of para-deceleration the stars reappeared, all in their old familiar ranges—the Big Dipper, giant Orion, lopsided Crux, the fairy Pleiades, and dead ahead of them, blazing against the frosty backdrop of the Milky Way, was a golden light that had to be the Sun.

Lazarus had tears in his eyes for the second time in a month.

They could not simply rendezvous with Earth, set a parking orbit, and disembark; they had to throw their hats in first. Besides that, they needed first to know what time it was.

Libby was able to establish quickly, through proper motions of nearest stars, that it was not later than about 3700 a.d.; without precise observatory instruments he refused to commit himself further. But once they were close enough to see the Solar planets he had another clock to read; the planets themselves make a clock with nine hands.

For any date there is a unique configuration of those "hands" since no planetary period is exactly commensurate with another. Pluto marks off an "hour" of a quarter of a millennium; Jupiter's clicks a cosmic minute of twelve years; Mercury whizzes a "second" of about ninety days. The other "hands" can refine these readings—Neptune's period is so cantankerously different from that of Pluto that the two fall into approximately repeated configuration only once in seven hundred and fifty-eight years. The great clock can be read with any desired degree of accuracy over any period— but it is not easy to read.

Libby started to read it as soon as any of the planets could be picked out. He muttered over the problem. "There's not a chance that we'll pick up Pluto," he complained to Lazarus, "and I doubt if we'll have Neptune. The inner planets give me an infinite series of approximations—you know as well as I do that "infinite" is a question-begging term. Annoying!"

"Aren't you looking at it the hard way, son? You can get a practical answer. Or move over and I'll get one."

"Of course I can get a practical answer," Libby said petulantly, "if you're satisfied with that. But—"

"But me no 'buts'—*what year is it, man?"*

"Eh? Let's put it this way. The time rate in the ship and duration on Earth have been unrelated three times. But now they are effectively synchronous again, such that slightly over seventy-four years have passed since we left."

Lazarus heaved a sigh. "Why didn't you say so?" He had been fretting that Earth might not be recognizable… they might have torn down New York or something like that. "Shucks, Andy, you shouldn't have scared me like that."

"Mmm…" said Libby. It was one of no further interest to him. There remained only the delicious problem of inventing a mathematics which would describe elegantly two apparently irreconcilable groups of facts: the Michelson-Morley experiments and the log of the *New Frontiers*. He set happily about it. Mmm… what was the least number of para-dimensions indispensably necessary to contain the augmented plenum using a sheaf of postulates affirming—

It kept him contented for a considerable time—subjective time, of course.

The ship was placed in a temporary orbit half a billion miles from the Sun with a radius vector normal to the plane of the ecliptic. Parked thus at right angles to and far outside the flat pancake of the Solar System they were safe from any long chance of being discovered. A ship's boat had been fitted with the neo-Libby drive during the jump and a negotiating party was sent down.

Lazarus wanted to go along; King refused to let him, which sent Lazarus into sulks. King had said curtly, "This isn't a raiding party, Lazarus; this is a diplomatic mission."

"Hell, man, I can be diplomatic when it pays!"

"No doubt. But we'll send a man who doesn't go armed to the 'fresher."

Ralph Schultz headed the party, since psychodynamic factors back on Earth were of first importance, but he was aided by legal, military, and technical specialists. If the Families were going to have to fight for living room it was necessary to know what sort of technology, what sort of weapons, they would have to meet—but it was even more necessary to find out whether or not a peaceful landing could be arranged. Schultz had been authorized by the elders to offer a plan under which the Families would colonize the thinly settled and retrograded European continent. But it was possible, even likely, that this had already been done in their absence, in view of the radioactive half-lifes involved. Schultz would probably have to improvise some other compromise, depending on the conditions he found.

Again there was nothing to do but wait.

Lazarus endured it in nail-chewing uncertainty. He had claimed publicly that the Families had such great scientific advantage that they could meet and defeat the best that Earth could offer. Privately, he knew that this was sophistry and so did any other Member competent to judge the matter. Knowledge alone did not win wars. The ignorant fanatics of Europe's Middle Ages had defeated the incomparably higher Islamic culture; Archimedes had been strucjc down by a common soldier; barbarians had sacked Rome. Libby, or some one, might devise an unbeatable weapon from their mass of new knowledge—or might not. And who knew what strides military art had made on earth in three quarters of a century?

King, trained in military art, was worried by the same thing and still more worried by the personnel he would have to work with. The Families were anything but trained legions; the prospect of trying to whip those cranky individualists into some semblance of a disciplined fighting machine ruined his sleep.

These doubts and fears King and Lazarus did not mention even to each other; each was afraid that to mention such things would be to spread a poison of fear through the ship. But they were not alone in their worries; half of the ship's company realized the weaknesses of their position and kept silent only because a bitter resolve to go home, no matter what, made them willing to accept the dangers.

"Skipper," Lazarus said to King two weeks after Schultz's party had headed Earthside, "have you wondered how they're going to feel about the *New Frontiers* herself?"

"Eh? What do you mean?"

"Well, we hijacked her. Piracy."

King looked astounded. "Bless me, so we did! Do you know, it's been so long ago that it is hard for me to realize that she was ever anything but my ship… or to recall that I first came into her through an act of piracy." He looked thoughtful, then smiled grimly. "I wonder how conditions are in Coventry these days?"

"Pretty thin rations, I imagine," said Lazarus. "But we'll team up and make out. Never mind—they haven't caught us yet."

"Do you suppose that Slayton Ford will be connected with the matter? That would be hard lines after all he has gone through."

"There may not be any trouble about it at all," Lazarus answered soberly. "While the way we got this ship was kind of irregular, we *have* used it for the purpose for which it was built—to explore the stars. And we're returning it intact, long before they could have expected any results, and with a slick new space drive to boot. It's more for their money than they had any reason to expect—so they may just decide to forget it and trot out the fatted calf."

"I hope so," King answered doubtfully.

The scouting party was two days late. No signal was received from them until they emerged into normal spacetime, just before rendezvous, as no method had yet been devised for signalling from para-space to ortho-space. While they were maneuvering to rendezvous, King received Ralph Schultz's face on the control-room screen. "Hello, Captain! We'll be boarding shortly to report."

"Give me a summary now!"

"I wouldn't know where to start. But it's all right—we *can* go *home!"*

"Huh? How's that? Repeat!"

"Everything's all right. We are restored to the Covenant. You see, there isn't any difference any more. *Everybody is a member of the Families now*."

"What do you mean?" King demanded.

"They've got it."

"Got what?"

"Got the secret of longevity."

"Huh? Talk sense. There isn't any secret. There never was any secret."

"We didn't have any secret—but they thought we had. So they found it."

"Explain yourself," insisted Captain King.

"Captain, can't this wait until we get back into the ship?" Ralph Schultz protested. "I'm no biologist. We've brought along a government representative—you can quiz him, instead."

Chapter 6

King received Terra's representative in his cabin. He had notified Zaccur Barstow and Justin Foote to be present for the Families and had invited Doctor Gordon Hardy because the nature of the startling news was the biologist's business. Libby was there as the ship's chief officer; Slayton Ford was invited because of his unique status, although he had held no public office in the Families since his breakdown in the temple of Kreel.

Lazarus was there because Lazarus wanted to be there, in his own strictly private capacity. He had not been invited, but even Captain King was somewhat diffident about interfering with the assumed prerogatives of the eldest Member.

Ralph Schultz introduced Earth's ambassador to the assembled company. "This is Captain King, our commanding officer-and this is Miles Rodney, representing the Federation Council—minister plenipotentiary and ambassador extraordinary, I guess you would call him."

"Hardly that," said Rodney, "although I can agree to the 'extraordinary' part. This situation is quite without precedent. It is an honor to know you, Captain."

"Glad to have you inboard, sir."

"And this is Zaccur Barstow, representing the trustees of the Howard Families, and Justin Foote, secretary to the trustees—"

"Service."

"Service to you, gentlemen."

"—Andrew Jackson Libby, chief astrogational officer, Doctor Gordon Hardy, biologist in charge of our research into the causes of old age and death."

"May I do you a service?" Hardy acknowledged formally.

"Service to you, sir. So you are the chief biologist—there was a time when you could have done a service to the whole human race. Think of it, sir-think how different things could have been. But, happily, the human race was able to worry out the secret of extending life without the aid of the Howard Families."

Hardy looked vexed. "What do you mean, sir? Do you mean to say that you are still laboring under the delusion that we had some miraculous secret to impart, if we chose?"

Rodney shrugged and spread his hands. "Really, now, there is no need to keep up the pretense, is there? Your results have been duplicated, independently."

Captain King cut in. "Just a moment— Ralph Schultz, is the Federation still under the impression that there is some 'secret' to our long lives? Didn't you tell them?"

Schultz was looking bewildered. "Uh—this is ridiculous. The subject hardly came up. They themselves had achieved controlled longevity; they were no longer interested in us in that respect. It is true that there still existed a belief that our long lives derived from manipulation rather than from heredity, but I corrected that impression."

"Apparently not very thoroughly, from what Miles Rodney has just said."

"Apparently not. I did not spend much effort on it; it was beating a dead dog. The Howard Families and their long lives are no longer an issue on Earth. Interest, both public and official, is centered on the fact that we have accomplished a successful interstellar jump."

"I can confirm that," agreed Miles Rodney. "Every official, every news service, every citizen, every scientist in the system is waiting with utmost eagerness the arrival of the *New Frontiers*. It's the greatest, most sensational thing that has happened since the first trip to the Moon. You are famous, gentlemen—all of you."

Lazarus pulled Zaccur Barstow aside and whispered to him. Barstow looked perturbed, then nodded thoughtfully. "Captain—" Barstow said to King.

"Yes, Zack?"

"I suggest that we ask our guest to excuse us while we receive Ralph Schultz‘ report."

"Why?"

Barstow glanced at Rodney. "I think we will be better prepared to discuss matters if we are briefed by our own representative."

King turned to Rodney. "Will you excuse us, sir?"

Lazarus broke in. "Never mind, Skipper. Zack means well but he's too polite. Might as well let Comrade Rodney stick around and we'll lay it on the line. Tell me this, Miles; what proof have you got that you and your pals have figured out a way to live as long as we do?"

"Proof?" Rodney seemed dumbfounded. "Why do you ask— Whom am I addressing? Who are you, sir?"

Ralph Schultz intervened. "Sorry—I didn't get a chance to finish the introductions. Miles Rodney, this is Lazarus Long, the Senior."

"Service. 'The Senior' what?"

"He just means 'The Senior,' period," answered Lazarus. "I'm the oldest Member. Otherwise I'm a private citizen."

"The oldest one of the Howard Families! Why—why, you must be the oldest man alive—think of that!"

"You think about it," retorted Lazarus. "I quit worrying about it a couple o‘ centuries ago. How about answering my question?"

"But I can't help being impressed. You make me feel like an infant

—and I'm not a young man myself; I'll be a hundred and five this coming June."

"If you can prove that's your age, you can answer my question. I'd say you were about forty. How about it?"

"Well, dear me, I hardly expected to be interrogated on this point. Do you wish to see my identity card?"

"Are you kidding? I've had fifty-odd identity cards in my time, all with phony birth dates. What else can you offer?"

"Just a minute, Lazarus," put in Captain King. "What is the purpose of your question?"

Lazarus Long turned away from Rodney. "It's like this, Skipper—we hightailed it out of the Solar System to save our necks, because the rest of the yokels thought we had invented some way to live forever and proposed to squeeze it out of us if they had to kill every one of us. Now everything is sweetness and light—so they say. But it seems mighty funny that the bird they send up to smoke the pipe of peace with us should still be convinced that we have that so-called secret.

"It got me to wondering.

"Suppose they hadn't figured out a way to keep from dying from old age but were still clinging to the idea that we had? What better way to keep us calmed down and unsuspicious than to tell us they had until they could get us where they wanted us in order to put the question to us again?"

Rodney snorted. "A preposterous idea! Captain, I don't think I'm called on to put up with this."

Lazarus stared coldly. "It was preposterous the first time, bub-but it happened. The burnt child is likely to be skittish."

"Just a moment, both of you," ordered King. "Ralph, how about it? Could you have been taken in by a put-up job?"

Schultz thought about it, painfully. "I don't think so." He paused. "It's rather difficult to say. I couldn't tell from appearance of course, any more than our own Members could be picked out from a crowd of normal persons."

"But you are a psychologist. Surely you could have detected indications of fraud, if there had been one."

"I may be a psychologist, but I'm not a miracle man and I'm not telepathic. I wasn't looking for fraud." He grinned sheepishly. "There was another factor. I was so excited over being home that I was not in the best emotional condition to note discrepancies, if there were any."

"Then you aren't sure?"

"No. I am emotionally convinced that Miles Rodney is telling the truth—"

"I am!"

"—and I believe that a few questions could clear the matter up. He claims to be one hundred and five years old. We can test that."

"I see," agreed King. "Hmm… you put the questions, Ralph?"

"Very well. You will permit, Miles Rodney?"

"Go ahead," Rodney answered stiffly.

"You must have been about thirty years old when we left Earth, since we have been gone nearly seventy-five years, Earth time. Do you remember the event?"

"Quite clearly. I was a clerk in Novak Tower at the time, in the offices of the Administrator."

Slayton Ford had remained in the background throughout the discussion, and had done nothing to call attention to himself. At Rodney's answer he sat up. "Just a moment, Captain—"

"Eh? Yes?"

"Perhaps I can cut this short. You'll pardon me, Ralph?" He turned to Terra's representative. "Who am I?"

Rodney looked at him in some puzzlement. His expression changed from one of simple surprise at the odd question to complete and unbelieving bewilderment. "Why, you… you are *Administrator Ford!"*

Chapter 7

“One at a time! One at a time,” Captain King was saying. “Don’t everybody try to talk at once. Go on, Slayton; you have the floor. You know this man?” Ford looked Rodney over. “No, I can’t say that I do.”

“Then it *is* a frame up.” King turned to Rodney. “I suppose you recognized Ford from historical stereos—is that right?”

Rodney seemed about to burst. “No! I recognized him. He’s changed but I knew him. Mr. Administrator—look at me, please! Don’t you know me? I *worked* for you!”

“It seems fairly obvious that he doesn’t,” King said dryly.

Ford shook his head. “It doesn’t prove anything, one way or the other, Captain. There were over two thousand civil service employes in my office. Rodney might have been one of them. His face looks vaguely familiar, but so do most faces.”

“Captain—” Master Gordon Hardy was speaking. “If I can question Miles Rodney I might be able to give an opinion as to whether or not they actually have discovered anything new about the causes of old age and death.”

Rodney shook his head. “I am not a biologist. You could trip me up in no time. Captain King, I ask you to arrange my return to Earth as quickly as possible. I’ll not be subjected to any more of this. And let me add that I do not care a minim whether you and your—your pretty crew ever get back to civilization or not. I came here to help you, but I’m disgusted.” He stood up.

Slayton Ford went toward him. “Easy, Miles Rodney, please! Be patient. Put yourself in their place. You would be just as cautious if you had been through what they have been through.”

Rodney hesitated. “Mr. Administrator, what are *you* doing here?”

“It’s a long and complicated story. I’ll tell you later.”

“You are a member of the Howard Families—you must be. That accounts for a lot of odd things.”

Ford shook his head. “No, Miles Rodney, I am not. Later, please—I’ll explain it. You worked for me once—when?”

“From 2109 until you, uh, disappeared.”

“What was your job?”

“At the time of the crisis of 2113 I was an assistant correlation clerk in the Division of Economic Statistics, Control Section.”

“Who was your section chief?”

“Leslie Waldron.”

“Old Waldron, eh? What was the color of his hair?”

“His hair? The Walrus was bald as an egg.”

Lazarus whispered to Zaccur Barstow, “Looks like I was off base,

Zack."

"Wait a moment," Barstow whispered back. "It still could be thorough preparation—they may have known that Ford escaped with us."

Ford was continuing, "What was *The Sacred Cow*?"

"*The Sacred*— Chief, you weren't even supposed to know that there was such a publication!"

"Give my intelligence staff credit for some activity, at least," Ford said dryly. "I got my copy every week."

"But what was it?" demanded Lazarus.

Rodney answered, "An office comic and gossip sheet that was passed from hand to hand."

"Devoted to ribbing the bosses," Ford added, "especially me." He put an arm around Rodney's shoulders. "Friends, there is no doubt about it. Miles and I were fellow workers."

"I still want to find out about the new rejuvenation process," insisted Master Hardy some time later.

"I think we all do," agreed King. He reached out and refilled their guest's wine glass. "Will you tell us about it, sir?"

"I'll try," Miles Rodney answered, "though I must ask Master Hardy to bear with me. It's not one process, but several-one basic process and several dozen others, some of them purely cosmetic, especially for women. Nor is the basic process truly a rejuvenation process. You can arrest the progress of old age, but you can't reverse it to any significant degree—you can't turn a senile old man into a boy."

"Yes, yes," agreed Hardy. "Naturally-but what is the basic process?"

"It consists largely in replacing the entire blood tissue in an old person with new, young blood. Old age, so they tell me, is primarily a matter of the progressive accumulation of the waste poisons of metabolism. The blood is supposed to carry them away, but presently the blood gets so clogged with the poisons that the scavenging process doesn't take place properly. Is that right, Doctor Hardy?"

"That's an odd way of putting it, but—"

"I told you I was no biotechnician."

"—essentially correct. It's a matter of diffusion pressure deficit—the d.p.d. on the blood side of a cell wall must be such as to maintain a fairly sharp gradient or there will occur progressive autointoxication of the individual cells. But I must say that I feel somewhat disappointed, Miles Rodney. The basic idea of holding off death by insuring proper scavenging of waste products is not new—I have a bit of chicken heart which has been alive for two and one half centuries through equivalent techniques. As to the use of young blood—yes, that will work. I've kept experimental animals alive by such blood donations to about twice their normal span." He stopped and looked troubled.

"Yes, Doctor Hardy?"

Hardy chewed his lip. "I gave up that line of research. I found it necessary to have several young donors in order to keep one beneficiary from growing any older. There was a small, but measurable, unfavorable effect on each of the donors. Racially it was self-defeating; there would never be enough donors to go around. Am I to understand, sir that this method is thereby limited to a small, select part of the population?"

"Oh, no! I did not make myself clear, Master Hardy. There are no donors."

"Huh?"

"New blood, enough for everybody, grown outside the body—the Public Health and Longevity Service can provide any amount of it, any type."

Hardy looked startled. "To think we came so close… so that's it." He paused, then went on. "We tried tissue culture of bone marrow *in vitro*. We should have persisted."

"Don't feel badly about it. Billions of credits and tens of thousands of technicians engaged in this project before there were any significant results. I'm told that the mass of accumulated art in this field represents more effort than even the techniques of atomic engineering." Rodney smiled. "You see, they *had* to get some results; it was politically necessary—so there was an all-out effort." Rodney turned to Ford. "When the news about the escape of the Howard Families reached the public, Chief, your precious successor had to be protected from the mobs."

Hardy persisted with questions about subsidiary techniques—tooth budding, growth inhibiting, hormone therapy, many others-until King came to Rodney's rescue by pointing out that the prime purpose of the visit was to arrange details of the return of the Families to Earth.

Rodney nodded. "I think we should get down to business. As I understand it, Captain, a large proportion of your people are now in reduced-temperature somnolence?"

("Why can't he say 'cold-rest'?" Lazarus said to Libby.)

'Yes, that is so."

"Then it would be no hardship on them to remain in that state for a time."

"Eh? Why do you say that, sir?"

Rodney spread his hands. "The administration finds itself in a somewhat embarrassing position. To put it bluntly, there is a housing shortage. Absorbing one hundred and ten thousand displaced persons can't be done overnight."

Again King had to hush them. He then nodded to Zaccur Barstow, who addressed himself to Rodney. “I fail to see the problem, sir. What is the present population of the North American continent?”

“Around seven hundred million.”

“And you can’t find room to tuck away one-seventieth of one per cent of that number? It sounds preposterous.”

“You don’t understand, sir,” Rodney protested. “Population pressure has become our major problem. Coincident with it, the right to remain undisturbed in the enjoyment of one’s own homestead, or one’s apartment, has become the most jealously guarded of all civil rights. Before we can find you adequate living room we must make over some stretch of desert, or make other major arrangements.”

“I get it,” said Lazarus. “Politics. You don’t dast disturb anybody for fear they will squawk.”

“That’s hardly an adequate statement of the case.”

“It’s not, eh? could be you’ve got a general election coming up, maybe?”

“As a matter of fact we have, but that has nothing to do with the case.”

Lazarus snorted.

Justin Foote spoke up. “It seems to me that the administration has looked at this problem in the most superficial light. It is not as if we were homeless immigrants. Most of the Members own their own homes. As you doubtless know, the Families were well-to-do, even wealthy, and for obvious reasons we built our homes to endure. I feel sure that most of those structures are still standing.”

“No doubt,” Rodney conceded, ‘but you will find them occupied.“

Justin Foote shrugged. “What has that to do with us? That is a problem for the government to settle with the persons it has allowed illegally to occupy our homes. As for myself, I shall land as soon as possible, obtain an eviction order from the nearest court, and repossess my home.”

“It’s not that easy. You can make omelet from eggs, but not eggs from omelet. You have been legally dead for many years; the present occupant of your house holds a good title.”

Justin Foote stood up and glared at the Federation’s envoy, looking, as Lazarus thought, “like a cornered mouse.”

“Legally dead! By whose act, sir, by whose act? Mine? I was a respected solicitor, quietly and honorably pursuing my profession, harming no one, when I was arrested without cause and forced to flee for my life. Now I am blandly told that my property is confiscated and my very legal existence as a person and as a citizen has been taken from me because of that sequence of events. What manner of justice is this? Does the Covenant still stand?”

“You misunderstand me. I—”

“I misunderstood nothing. If justice is measured out only when it is convenient, then the Covenant is not worth the parchment it is written on. I shall make of myself a test case, sir, a test case for every Member of the Families. Unless my property is returned to me in full and at once I shall bring personal suit against every obstructing official. I will make of it a *cause celebre*. For many years I have suffered inconvenience and indignity and peril; I shall not be put off with words. I will shout it from the housetops.” He paused for breath.

“He’s right, Miles,” Slayton Ford put in quietly. “The government had better find some adequate way to handle this—and quickly.”

Lazarus caught Libby’s eye and silently motioned toward the door. The two slipped outside. “Justin’ll keep ‘em busy for the next hour,” he said. “Let’s slide down to the Club and grab some calories.”

“Do you really think we ought to leave?”

“Relax. If the skipper wants us, he can holler.”

Chapter 8

Lazarus tucked away three sandwiches, a double order of ice cream, and some cookies while Libby contented himself with somewhat less. Lazarus would have eaten more but he was forced to respond to a barrage of questions from the other habitues of the Club.

"The commissary department ain't really back on its feet," he complained, as he poured his third cup of coffee. "The Little People made life too easy for them. Andy, do you like chili con carne?"

"It's all right."

Lazarus wiped his mouth. "There used to be a restaurant in Tijuana that served the best chili I ever tasted. I wonder if it's still there?"

"Where's Tijuana?" demanded Margaret Weatheral.

"You don't remember Earth, do you, Peggy? Well, darling, it's in Lower California. You know where that is?"

"Don't you think I studied geography? It's in Los Angeles."

"Near enough. Maybe you're right—by now." The ship's announcing system blared out:

"Chief Astrogator-report to the Captain in the Control Room!"

"That's me!" said Libby, and hurriedly got up.

The call was repeated, then was followed by, "All hands—prepare for acceleration! All hands—prepare for acceleration!"

"Here we go again, kids." Lazarus stood up, brushed off his kilt, and followed Libby, whistling as he went:

"*California, here I come, Right back where I started from—*"

The ship was underway, the stars had faded out. Captain King had left the control room, taking with him his guest, the Earth's envoy. Miles Rodney had been much impressed; it seemed likely that he would need a drink.

Lazarus and Libby remained in the control room. There was nothing to do; for approximately four hours, ship's time, the ship would remain in para-space, before returning to normal space near Earth.

Lazarus struck a cigaret. "What d'you plan to do when you get back, Andy?"

"Hadn't thought about it."

"Better start thinking. Been some changes."

"I'll probably head back home for a while. I can't imagine the Ozarks having changed very much."

"The hills will look the same, I imagine. You may find the people changed."

"How?"

"You remember I told you that I had gotten fed up with the

Families and had kinda lost touch with them for a century? By and large, they had gotten so smug and sot in their ways that I couldn't stand them. I'm afraid we'll find most everybody that way, now that they expect to live forever. Long term investments, be sure to wear your rubbers when it rains… that sort of thing."

"It didn't affect you that way."

"My approach is different. I never did have any real reason to last forever—after all, as Gordon Hardy has pointed out, I'm only a third generation result of the Howard plan. I just did my living as I went along and didn't worry my head about it. But that's not the usual attitude. Take Miles Rodney—scared to death to tackle a new situation with both hands for fear of upsetting precedent and stepping on established privileges."

"I was glad to see Justin stand up to him." Libby chuckled. "I didn't think Justin had it in him."

"Ever see a little dog tell a big dog to get the hell out of the little dog's yard?"

"Do you think Justin will win his point?"

"Sure he will, with your help."

"Mine?"

"Who knows anything about the para-drive, aside from what you've taught me?"

"I've dictated full notes into the records."

"But you haven't turned those records over to Miles Rodney. Earth *needs* your starship drive, Andy. You heard what Rodney said about population pressure. Ralph was telling me you have to get a government permit now before you can have a baby."

"The hell you say!"

"Fact. You can count on it that there would be tremendous emigration if there were just some decent planets to emigrate to. And that's where your drive comes in. With it, spreading out to the stars becomes really practical. They'll have to dicker."

"It's not really my drive, of course. The Little People worked it out."

"Don't be so modest. You've got it. And you want to back up Justin, don't you?"

"Oh, sure."

"Then we'll use it to bargain with. Maybe I'll do the bargaining, personally. But that's beside the point. Somebody is going to have to do a little exploring before any large-scale emigration starts. Let's go into the real estate business, Andy. We'll stake out this corner of the Galaxy and see what it has to offer."

Libby scratched his nose and thought about it. "Sounds all right, I guess-after I pay a visit home."

"There's no rush. I'll find a nice, clean little yacht, about ten thousand tons and we'll refit with your drive."

"What'll we use for money?"

"We'll have money. I'll set up a parent corporation, while I'm about it, with a loose enough charter to let us do anything we want to do. There will be daughter corporations for various purposes and we'll unload the minor interest in each. Then—"

"You make it sound like work, Lazarus. I thought it was going to be fun."

"Shucks, we won't fuss with that stuff. I'll collar somebody to run the home office and worry about the books and the legal end—somebody about like Justin. Maybe Justin himself."

"Well, all right then."

"You and I will rampage around and see what there is to be seen. It'll be fun, all right."

They were both silent for a long time, with no need to talk. Presently Lazarus said, "Andy—"

"Yeah?"

"Are you going to look into this new-blood-for-old caper?"

"I suppose so, eventually."

"I've been thinking about it. Between ourselves, I'm not as fast with my fists as I was a century back. Maybe my natural span is wearing out. I do know this: I didn't start planning our real estate venture till I heard about this new process. It gave me a new perspective. I find myself thinking about thousands of years—and I never used to worry about anything further ahead than a week from next Wednesday."

Libby chuckled again. "Looks like you're growing up."

"Some would say it was about time. Seriously, Andy, I think that's just what I have been doing. The last two and a half centuries have just been my adolescence, so to speak. Long as I've hung around, I don't know any more about the final answers, the *important* answers, than Peggy Weatheral does. Men—*our* kind of men—Earth men—never have had enough time to tackle the important questions. Lots of capacity and not time enough to use it properly. When it came to the important questions we might as well have still been monkeys."

"How do you propose to tackle the important questions?"

"How should I know? Ask me again in about five hundred years."

"You think that will make a difference?"

"I do. Anyhow it'll give me time to poke around and pick up some interesting facts. Take those Jockaira gods—"

"They weren't gods, Lazarus. You shouldn't call them that."

"Of course they weren't—I think. My guess is that they are creatures who have had time enough to do a little hard thinking.

Someday, about a thousand years from now, I intend to march straight into the temple of Kreel, look him in the eye, and say, 'Howdy, bub—what do *you* know that I don't know?'"

"It might not be healthy."

"We'll have a showdown, anyway. I've never been satisfied with the outcome there. There ought not to be anything in the whole universe that man can't poke his nose into-that's the way we're built and I assume that there's some reason for it."

"Maybe there aren't any reasons."

"Yes, maybe it's just one colossal big joke, with no point to it." Lazarus stood up and stretched and scratched his ribs. "But I can tell you this, Andy, whatever the answers are, here's one monkey that's going to keep on climbing, and looking around him to see what he can see, as long as the tree holds out."

Beyond Doubt

SAVANT SOLVES SECRET OF EASTER ISLAND IMAGES According to Professor J. Howard Erlenmeyer, Sc.D., Ph.D., F.R.S., director of the Archeological Society's Easter Island Expedition. Professor Erlenmeyer was quoted as saying, "There can no longer be any possible doubt as to the significance of the giant monolithic images which are found in Easter Island. When one considers the primary place held by religious matters in all primitive cultures, and compares the design of these images with artifacts used in the rites of present day Polynesian tribes, the conclusion is inescapable that these images have a deep esoteric religious significance. Beyond doubt, their large size, their grotesque exaggeration of human form, and the seemingly aimless, but actually systematic, distribution gives evidence of the use for which they were carved, to wit; the worship of. . . ."

WARM, and incredibly golden, the late afternoon sun flooded the white-and-green city of Nuria, gilding its maze of circular crisscrossed streets. The Towers of the Guardians, rising high above the lushly verdant hills gleamed like translucent ivory. The hum from the domed buildings of the business district was muted while merchants rested in the cool shade of luxuriant, moistly green trees, drank refreshing okrada, and gazed out at the great hook-prowed green-and-crimson ships riding at anchor in the harbor-ships from Hindos, from Cathay, and from the far-flung colonies of Atlantis.

In all the broad continent of Mu there was no city more richly beautiful than Muria, capital of the province of Lac.

But despite the smiling radiance of sun, and sea, and sky, there was an undercurrent of atmospheric tenseness -as though the air itself were a tight coil about to be sprung, as though a small spark would set off a cosmic explosion.

Through the city moved the sibilant whispering of a name-the name was everywhere, uttered in loathing and fear, or in high hope, according to the affiliations of the utterer-but in any mouth the name had the potency of thunder.

The name was Talus.

Talus, apostle of the common herd; Talus, on whose throbbing words hung the hopes of a million eager citizens; Talus, candidate for governor of the province of Lac.

In the heart of the tenement district, near the smelly waterfront, between a narrow side street and a garbage alley was the editorial office of Mu Regenerate, campaign organ of the Talus-for-Governor organization. The office was as quiet as the rest of Nuria, but with the quiet of a spent cyclone. The floor was littered with twisted scraps of parchment, overturned furniture, and empty beer flagons. Three young men were seated about a great, round, battered table in attitudes that spoke their gloom. One of them was staring cynically at an enormous poster which dominated one wall of the room. It was a portrait of a tall, majestic man with a long, curling white beard. He wore a green toga. One hand was raised in a gesture of benediction. Over the poster, under the crimson-and-purple of crossed Murian banners, was the legend:

TALUS FOR GOVERNOR!

The one who stared at the poster let go an unconscious sigh. One of his companions looked up from scratching at a sheet of parchment with a stubby stylus. "What's eating on you, Robar?"

THE one addressed waved a hand at the wall. "I was just looking at our white hope. Ain't he beautiful? Tell me, Dolph, how can anyone look so noble, and be so dumb?"

"God knows. It beats me."

"That's not quite fair, fellows," put in the third, "the old boy ain't really dumb; he's just unworldly. You've got to admit that the Plan is the most constructive piece of statesmanship this country has seen in a generation."

Robar turned weary eyes on him. "Sure. Sure. And he'd make a good governor, too. I won't dispute that; if I didn't think the Plan would work, would I be here, living from hand to mouth and breaking my heart on this bloody campaign? Oh, he's noble all right. Sometimes he's so noble it gags me. What I mean is: Did you ever work for a candidate that was so bullheaded stupid about how to get votes and win an election?"

"Well . . . no."

"What gets me, Clevum," Robar went on, "is that he could be elected so easily. He's got everything; a good sound platform that you can stir people *up* with, the correct background, a grand way of speaking, and the most beautiful appearance that a candidate ever had. Compared with Old Bat Ears, he's a natural. It ought to be just one-two-three. But Bat Ears will be reelected, sure as shootin'."

"I'm afraid you're right," mourned Clevum. "We're going to take such a shellacking as nobody ever saw. 1 thought for a while that we would make the grade, but now-Did you see what the *King's Men* said about him this morning?"

"That dirty little sheet-What was it?"

"Besides some nasty cracks about Atlantis gold, they accused him of planning to destroy the Murian home and defile the sanctity of Murian womanhood. They called upon every red-blooded one hundred per cent Murian to send this subversive monster back where he came from. Oh, it stank! But the yokels were eating it up."

"Sure they do. That's just what I mean. The governor's gang slings mud all the time, but if we sling any mud about governor Vortus, Talus throws a fit. His idea of a news story is a nifty little number about comparative statistics of farm taxes in the provinces of Mu . . . What are you drawing now, Dolph?"

"This." He held up a ghoulish caricature of Governor Vortus himself, with his long face, thin lips, and high brow, atop of which rested the tall crimson governor's cap. Enormous ears gave this sinister face the appearance of a vulture about to take flight. Beneath the cartoon was the simple caption:

BAT EARS FOR GOVERNOR

"There!" exclaimed Robar, "that's what this campaign needs. Humor! If we could plaster that cartoon on the front page of *Mu Regenerate* and stick one under the door of every voter in the province, it 'ud be a landslide. One look at that mug and they'd laugh themselves sick-and vote for our boy Talus!"

HE held the sketch at arm's length and studied it, frowning: Presently he locked up. "Listen, dopes-Why not do it? Give me one last edition with some guts in it. Are you game?"

Clevum looked worried. "Well ... I don't know . . . What are you going to use for money? Besides, even if Oric would crack loose from the dough, how would we get an edition of that size distributed that well? And even if we did get it done, it might boomerang on us-the opposition would have the time and money to answer it."

Robar looked disgusted. "That's what a guy gets for having ideas in this campaign-nothing but objections, objections!"

"Wait a minute, Robar," Dolph interposed. "Clevum's kicks have some sense to them, but maybe you got something. The idea is to make Joe Citizen laugh at Vortus, isn't it? Well, why not fix up some dodgers of my cartoon and hand 'em out at the polling places on election day?"

Robar drummed on the table as he considered this. "Umm, no, it wouldn't do. Vortus' goon squads would beat the hell out of our workers and highjack our literature."

"Well, then how about painting some big banners with old Bat Ears on them? We could stick them up near each polling place where the voters couldn't fail to see them."

"Same trouble. The goon squads would have them down before the polls open."

"Do you know what, fellows," put in Clevum, "what we need is something big enough to be seen and too solid for Governor's plug-uglies to wreck. Big stone statues about two stories high would be about right."

Robar looked more pained than ever. "Clevum, il you can't be helpful, why not keep quiet? Sure, statues would be fine-if we had forty years and ten million simoleons."

"Just think, Robar." Dolph jibed, with an irritating smile, "if your mother had entered you for the priesthood, you could integrate all the statues you want-no worry, no trouble, no expense."

"Yeah, wise guy, but in that case I wouldn't be in politics-Say!"

" 'S trouble?"

"Integration! Suppose we *could* integrate enough statues of old Picklepuss-"

"How?"

"Do you know Kondor?"

"The moth-eaten old duck that hangs around the Whirling Whale?"

"That's him. I'll bet he could do it!"

"That old stumblebum? Why, he's no adept; he's just a cheap unlicensed sorcerer. Reading palms in saloons and a little jackleg horoscopy is about all he's good for. He can't even mix a potent love philter. I know; I've tried him."

"Don't be too damn certain you know all about him. He got all tanked up one night and told me the story of his life. He used to be a priest back in Egypt."

"Then why isn't he now?"

"That's the point. He didn't get along with the high priest. One night he got drunk and integrated a statue of the high priest right where it would show up best and too big to be missed-only he stuck the head of the high priest on the body of an animal."

"Whew!"

"Naturally when he sobered up the next morning and saw what he had done all he could do was to run for it. He shipped on a freighter in the Red Sea and that's how come he's here."

Clevum's face had been growing longer and longer all during the discussion. He finally managed to get in an objection. "I don't suppose you two red hots have stopped to think about the penalty for unlawful use of priestly secrets?"

"Oh, shut up, Clevum. If we win the election, Talus'll square it. If we lose the election-Well, if we lose, Mu won't be big enough to hold us whether we pull this stunt or not."

ORIC was hard to convince. As a politician he was always affable; as campaign manager for Talus, and consequently employer of Robar, Dolph, and Clevum, the boys had sometimes found him elusive, even though chummy.

"Ummm, well, I don't know-" He had said, "I'm afraid Talus wouldn't like it."

"Would he need to know until it's all done?"

"Now, boys, really, ah, you wouldn't want me to keep him in ignorance . . ."

"But Oric, you know perfectly well that we are going to lose unless we do something, and do it quick."

"Now, Robar, you are too pessimistic." Oric's pop eyes radiated synthetic confidence.

"How about that straw poll? We didn't look so good; we were losing two to one in the back country."

"Well . . . perhaps you are right, my boy." Oric laid a hand on the younger man's shoulder. "But suppose we do lose this election; Mu wasn't built in a day. And I want you to know that we appreciate the hard, unsparing work that you boys have done, regardless of the outcome. Talus won't forget it, and neither shall, uh, I ... It's young men like you three who give me confidence in the future of Mu-"

"We don't want appreciation; we want to win this election."

"Oh, to be sure! To be sure! So do we all-none more than myself. Uh-how much did you say this scheme of yours would cost?"

"The integration won't cost much. We can offer Kondor a contingent fee and cut him in on a spot of patronage. Mostly we'll need to keep him supplied with wine. The big item will be getting the statues to the polling places. We had planned on straight commercial apportation."

"Well, now, that will be expensive."

"Dolph called the temple and got a price-"

"Good heavens, you haven't told the priests what you plan to do?"

"No, sir. He just specified tonnage and distances."

"What was the bid?"

Robar told him. Oric looked as if his first born were being ravaged by wolves. "Out of the question, out of the question entirely," he protested.

But Robar pressed the matter. "Sure it's expensive-but it's not half as expensive as a campaign that is just good enough to lose. Besides-I know the priesthood isn't supposed to be political, but isn't it possible with your connections for you to find one who would do it on the side for a smaller price, or even on credit? It's a safe thing for him; if we go through with this we'll *win*-it's a cinch."

Oric looked really interested for the first time. "You might be right. Mmmm-yes." He fitted the tips of his fingers carefully together. "You boys go ahead with this. Get the statues made. Let me worry about the arrangements for apportation." He started to leave, a preoccupied look on his face.

"Just a minute," Robar called out, "we'll need some money to oil up old Kondor."

Oric paused. "Oh, yes, yes. How stupid of me." He pulled out three silver pieces and handed them to Robar. "Cash, and no records, eh?" He winked.

"While you're about it, sir," added Clevum, "how about my salary? My landlady's getting awful temperamental."

Oric seemed surprised. "Oh, haven't I paid you yet?" He fumbled at his robes. "You've been very patient; most patriotic. You know how it is-so many details on my mind, and some of our sponsors haven't been prompt about meeting their pledges." He handed Clevum one piece of silver. "See me the first of the week, my boy. Don't let me forget it." He hurried out.

THE three picked their way down the narrow crowded street, teeming with vendors, sailors, children, animals, while expertly dodging refuse of one kind or another, which was unceremoniously tossed from balconies. The Whirling Whale tavern was apparent by its ripe, gamey odor some little distance before one came to it. They found Kondor draped over the bar, trying as usual to cadge a drink from the seafaring patrons.

He accepted their invitation to drink with them with alacrity. Robar allowed several measures of beer to mellow the old man before he brought the conversation around to the subject. Kondor drew himself up with drunken dignity in answer to a direct question.

"Can I integrate simulacra? My son you are looking at the man who created the Sphinx." He hiccoughed politely.

"But can you still do it, here and now?" Robar pressed him, and added, "For a fee, of course."

Kondor glanced cautiously around. "Careful, my son. Some one might be listening . . . Do you want original integration, or simply re-integration?"

"What's the difference?"

Kondor rolled his eyes up, and inquired of the ceiling, "What do they teach in these modern schools? Full integration requires much power, for one must disturb the very heart of the aether itself; re-integration is simply a rearrangement of the atoms in a predetermined pattern. If you want stone statues, any waste stone will do."

"Re-integration, I guess. Now here's the proposition-"

"THAT will be enough for the first run. Have the porters desist." Kondor turned away and buried his nose in a crumbling roll of parchment, his rheumy eyes scanning faded hieroglyphs. They were assembled in an abandoned gravel pit on the rear of a plantation belonging to Dolph's uncle. They had obtained the use of the pit without argument, for, as Robar had reasonably pointed out, if the old gentleman did not know that his land was being used for illicit purposes, he could not possibly have any objection.

Their numbers had been augmented by six red—skinned porters from the Land of the Inca-porters who were not only strong and untiring but possessed the desirable virtue of speaking no Murian. The porters had filled the curious ventless hopper with grey gravel and waited impassively for more toil to do. Kondor put the parchment away somewhere in the folds of his disreputable robe, and removed from the same mysterious recesses a tiny instrument of polished silver.

"Your pattern, son."

Dolph produced a small waxen image, modeled from his cartoon of Bat Ears. Kondor placed it in front of him, and stared through the silver instrument at it. He was apparently satisfied with what he saw, for he commenced humming to himself in a tuneless monotone, his bald head weaving back and forth in time.

Some fifty lengths away, on a stone pedestal, a wraith took shape. First was an image carved of smoke. The smoke solidified, became translucent. It thickened, curdled. Kondor ceased his humming and surveyed his work. Thrice as high as a man stood an image of Bat Ears-good honest stone throughout. "Clevum, my son," he said, as he examined the statue, "will you be so good as to hand me that jug?" The gravel hopper was empty.

ORIC called on them two days before the election. Robar was disconcerted to find that he had brought with him a stranger who was led around through the dozens of rows of giant statues. Robar drew Oric to one side before he left, and asked in a whisper, "Who is this chap?"

Oric smiled reassuringly. "Oh, he's all right. Just one of the boys-a friend of mine."

"But can he be trusted? I don't remember seeing him around campaign headquarters."

"Oh, sure! By the way, you boys are to be congratulated on the job of work you've done here. Well, I must be running on-I'll drop in on you again."

"Just a minute, Oric. Are you all set on the apportation?"

"Oh, yes. Yes indeed. They'll all be distributed around to the polling places in plenty of time-every statue."

"When are you going to do it?"

"Why don't you let me worry about those details, Robar?"

"Well . . . you are the boss, but I still think I ought to know when to be ready for the apportation."

"Oh, well, if you feel that way, shall we say, ah, midnight before election day?"

"That's fine. We'll be ready."

ROBAR watched the approach of the midnight before election with a feeling of relief. Kondor's work was all complete, the ludicrous statues were lined up, row on row, two for every polling place in the province of Lac, and Kondor himself was busy getting reacquainted with the wine jug. He had almost sobered up during the sustained effort of creating the statues.

Robar gazed with satisfaction at the images. "I wish I could see the Governor's face when he first catches sight of one of these babies. Nobody could possibly mistake who they were. Dolph, you're a genius; I never saw anything sillier looking in my life."

"That's high praise, pal," Dolph answered. "Isn't it about time the priest was getting here? I'll feel easier when we see our little dollies flying through the air on their way to the polling places."

"Oh, I wouldn't worry. Oric told me positively that the priest would be here in plenty of time. Besides, apportation is fast. Even the images intended for the back country and the far northern peninsula will get there in a few minutes-once he gets to work."

But as the night wore on it became increasingly evident that something was wrong. Robar returned from his thirteenth trip to the highway with a report of no one in sight on the road from the city.

"What'll we do?" Clevum asked.

"I don't know. Something's gone wrong; that's sure."

"Well, we've got to do something. Let's go back to the temple and try to locate him."

"We can't do that; we don't know what priest Oric hired. We'll have to find Oric."

They left Kondor to guard the statues and hurried back into town. They found Oric just leaving campaign headquarters. With him was the visitor he had brought with him two days before. He seemed surprised to see them. "Hello, boys. Finished with the job so soon?"

"He never showed up," Robar panted.

"Never showed up? Well, imagine that! Are you sure?"

"Of course we're sure; we were there!"

"Look," put in Dolph, "what is the name of the priest you hired to do this job? We want to go up to the temple and find him."

"His name? Oh, no, don't do that. You might cause all sorts of complications. I'll go to the temple myself."

"We'll go with you."

"That isn't necessary," he told them testily. "You go on back to the gravel pit, and be sure everything is ready."

"Good grief, Oric, everything has been ready for hours. Why not take Clevum along with you to show the priest the way?"

"I'll see to that. Now get along with you."

Reluctantly they did as they were ordered. They made the trip back in moody silence. As they approached their destination Clevum spoke up, "You know, fellows-"

"Well? Spill it."

"That fellow that was with Oric-wasn't he the guy he had out here, showing him around?"

"Yes; why?"

"I've been trying to place him. I remember now-1 saw him two weeks ago, coming out of Governor Vortus' campaign office."

AFTER a moment of stunned silence Robar said bitterly, "Sold out. There's no doubt about it; Oric has sold us out."

"Well, what do we do about it?"

"What can we do?"

"Blamed if I know."

"Wait a minute, fellows,'" came Clevum's pleading voice, "Kondor used to be a priest. Maybe he can do apportation."

"Say! There's a chance! Let's get going."

But Kondor was dead to the world.

They shook him. They poured water in his face. They walked him up and down. Finally they got him sober enough to answer questions.

Robar tackled him. "Listen, pop, this is important; Can you perform apportation?"

"Huh? Me? Why, of course. How else did we build the pyramids?"

"Never mind the pyramids. Can you move these statues here tonight?"

Kondor fixed his interrogator with a bloodshot eye. "My son, the great Arcane laws are the same for all time and space. What was done in Egypt in the Golden Age can be done in Mu tonight."

Dolph put in a word. "Good grief, pop, why didn't you tell us this before."

The reply was dignified and logical. "No one asked me."

KONDOR set about his task at once, but with such slowness that the boys felt they would scream just to watch him. First, he drew a large circle in the dust. "This is the house of darkness," he announced solemnly, and added the crescent of Astarte. Then he drew another large circle tangent to the first. "And this is the house of light." He added the sign of the sun god.

When he was done, he walked widdershins about the whole three times the wrong way. His feet nearly betrayed him twice, but he recovered, and continued his progress. At the end of the third lap he hopped to the center of the house of darkness and stood facing the house of light.

The first statue on the left in the front row quivered on its base, then rose into the air and shot over the horizon to the east.

The three young men burst out with a single cheer, and tears streamed down Robar's face.

Another statue rose up. It was just poised for flight when old Kondor hiccoughed. It fell, a dead weight, back to its base, and broke into two pieces. Kondor turned his head.

"I am truly sorry," he announced; "I shall be more careful with the others."

And try he did-but the liquor was regaining its hold. He wove to and fro on his feet, his aim with the images growing more and more erratic. Stone figures flew in every direction, but none travelled any great distance. One group of six flew off together and landed with a high splash in the harbor. At last, with more than three fourths of the images still untouched he sank gently to his knees, keeled over, and remained motionless.

Dolph ran up to him, and shook him. There was no response. He peeled back one of Kondor's eyelids and examined the pupil. "It's no good," he admitted. "He won't come to for hours."

Robar gazed heartbrokenly at the shambles around him. There they are, he thought, worthless! Nobody will ever see them-just so much left over campaign material, wasted ! My biggest idea!

Clevum broke the uncomfortable silence. "Sometimes," he said, "I think what this country needs is a good earthquake."

"*. . . the worship of their major deity.*

Beyond doubt, while errors are sometimes made in archeology, this is one case in which no chance of error exists. The statues are clearly religious in significance. With that sure footing on which to rest the careful scientist may deduce with assurance the purpose of . . ."

Goldfish Bowl

On the horizon lay the immobile cloud which capped the incredible waterspouts known as the Pillars of Hawaii.

Captain Blake lowered his binoculars. "There they stand, gentlemen."

In addition to the naval personnel of the watch, the bridge of the hydrographic survey ship U. S. S. *Mahan* held two civilians; the captain's words were addressed to them. The elder and smaller of the pair peered intently through a spyglass he had borrowed from the quartermaster. "I can't make them out," he complained.

"Here—try my glasses, doctor," Blake suggested, passing over his binoculars. He turned to the officer of the deck and added, "Have the forward range finder manned, if you please, Mr. Mott." Lieutenant Mott caught the eye of the bos'n's mate of the watch, listening from a discreet distance, and jerked a thumb upward. The petty officer stepped to the microphone, piped a shrill standby, and the metallic voice of the loudspeaker filled the ship, drowning out the next words of the captain: "Raaaaange one! Maaaaaaaan and cast loose!"

"I asked," the captain repeated, "if that was any better."

"I think I see them," Jacobson Graves acknowledged. "Two dark vertical stripes, from the cloud to the horizon."

"That's it."

The other civilian, Bill Eisenberg, had taken the telescope when Graves had surrendered it for the binoculars. "I got 'em too," he announced. "There's nothing wrong with this 'scope, Doc. But they don't look as big as I had expected," he admitted.

"They are still beyond the horizon," Blake explained. "You see only the upper segments. But they stand just under eleven thousand feet from water line to cloud-if they are still running true to form."

Graves looked up quickly. "Why the mental reservation? Haven't they been?"

Captain Blake shrugged. "Sure. Right on the nose. But they ought not to be there at all-four months ago they did not exist. How do I know what they will be doing today-or tomorrow?"

Graves nodded. "I see your point-and agree with it. Can we estimate their height from the distance?"

"I'll see." Blake stuck his head into the charthouse. "Any reading, Archie?"

"Just a second, captain." The navigator stuck his face against a voice tube and called out, "Range!"

A muffled voice replied, "Range one-no reading."

"Something greater than twenty miles," Blake told Graves cheerfully. "You'll have to wait, doctor."

Lieutenant Mott directed the quartermaster to make three bells; the captain left the bridge, leaving word that he was to be informed when the ship approached the critical limit of three miles from the Pillars. Somewhat reluctantly, Graves and Eisenberg followed him down; they had barely time enough to dress before dining with the captain.

Captain Blake's manners were old-fashioned; he did not permit the conversation to turn to shop talk until the dinner had reached the coffee and cigars stage. "Well, gentlemen," he began, as he lit up, "just what is it you propose to do?

"Didn't the Navy Department tell you?" Graves asked with a quick look.

"Not much. I have had one letter, directing me to place my ship and command at your disposal for research concerning the Pillars, and a dispatch two days ago telling me to take you aboard this morning. No details."

Graves looked nervously at Eisenberg, then back to the captain. He cleared his throat. "Uh-we propose, captain, to go up the Kanaka column and down the Wahini."

Blake gave him a sharp look, started to speak, reconsidered, and started again. "Doctor-you'll forgive me, I hope; I don't mean to be rude-but that sounds utterly crazy. A fancy way to commit suicide."

"It may be a little dangerous-"

"Hummph!"

"-but we have the means to accomplish it, if, as we believe to be true, the Kanaka column supplies the water which becomes the Wahini column on the return trip." He outlined the method. He and Eisenberg totaled between them nearly twenty-five years of bathysphere experience, eight for Eisenberg, seventeen for himself. They had brought aboard the *Mahan*, at present in an uncouth crate on the fantail, a modified bathysphere. Externally it was a bathysphere with its anchor weights removed; internally it much more nearly resembled some of the complicated barrels in which foolhardy exhibitionists have essayed the spectacular, useless trip over Niagara

Falls. It would supply air, stuffy but breathable, for fortyeight hours; it held water and concentrated food for at least that period; there were even rude but adequate sanitary arrangements.

But its principal feature was an anti-shock harness, a glorified corset, a strait jacket, in which a man could hang suspended clear of the walls by means of a network of Gideon cord and steel springs. In it, a man might reasonably hope to survive most violent pummeling. He could perhaps be shot from a cannon, bounced down a hillside, subjected to the sadistic mercy of a baggage smasher, and still survive with bones intact and viscera unruptured.

Blake poked a finger at a line sketch with which Graves had illustrated his description. "You actually intend to try to ascend the Pillars in that?"

Eisenberg replied. "Not him, captain. Me."

Graves reddened. "My damned doctor-"

"*And* your colleagues," Eisenberg added. "It's this way, captain: There's nothing wrong with Doc's nerve, but he has a leaky heart, a pair of submarine ears, and a set of not-so-good arteries. So the Institute has delegated me to kinda watch over him."

"Now look here," Graves protested, "Bill, you're not going to be stuffy about this. I'm an old man; I'll never have another such chance."

"No go," Eisenberg denied. "Captain, I wish to inform you that the Institute vested title of record to that gear we brought aboard in me, just to keep the old war horse from doing anything foolish."

"That's your pidgin," Blake answered testily. "My instructions are to facilitate Dr. Graves' research. Assuming that one or the other of you wish to commit suicide in that steel coffin, how do you propose to enter the Kanaka Pillar?"

"Why, that's your job, captain. You put the sphere into the up column and pick it up again when it comes down the down column."

Blake pursed his lips, then slowly shook his head. "I can't do that."

"Huh? Why not?"

"I will not take my ship closer than three miles to the Pillars. The *Mahan* is a sound ship, but she is not built for speed. She can't make more than twelve knots. Some place inside that circle the surface current which feeds the Kanaka column will exceed twelve knots. I don't care to find out where, by losing my ship.

"There have been an unprecedented number of unreported fishing vessels out of the islands lately. I don't care to have the *Mahan* listed."

"You think they went up the column?"

"I do."

"But, look, captain," suggested Bill Eisenberg, "you wouldn't have to risk the ship. You could launch the sphere from a power boat."

Blake shook his head. "Out of the question," he said grimly. "Even if the ship's boats were built for the job, which they aren't, I will not risk naval personnel. This isn't war."

"I wonder," said Graves softly.

"What's that?"

Eisenberg chuckled. "Doc has a romantic notion that all the odd phenomena turned up in the past few years can be hooked together into one smooth theory with a single, sinister cause-everything from the Pillars to LaGrange's fireballs."

"LaGrange's fireballs? How could there be any connection there? They are simply static electricity, allee samee heat lightning. I know; I've seen 'em."

The scientists were at once attentive, Graves' pique and Eisenberg's amusement alike buried in truth-tropism. "You did? When? Where?"

"Golf course at Hilo. Last March. I was-"

"*That* case! That was one of the disappearance cases!"

"Yes, of course. I'm trying to tell you. I was standing in a sand trap near the thirteenth green, when I happened to look up-" A clear, balmy island day. No clouds, barometer normal, light breeze. Nothing to suggest atmospheric disturbance, no maxima of sunspots, no static on the radio. Without warning a half dozen, or more, giant fireballs-ball "lightning" on a unprecedented scale-floated across the golf course in a sort of skirmish line, a line described by some observers as mathematically even-an assertion denied by others.

A woman player, a tourist from the mainland, screamed and began to run. The flanking ball nearest her left its place in line and danced after her. No one seemed sure that the ball touched her-Blake could not say although he had watched it happen-but when the ball had passed on, there she lay on the grass, dead.

A local medico of somewhat flamboyant reputation insisted that he found evidence in the cadaver of both coagulation and electrolysis, but the jury that sat on the case followed the coroner's advice in calling it heart failure, a verdict heartily approved by the local chamber of commerce and tourist bureau.

The man who disappeared did not try to run; his fate came to meet him. He was a caddy, a Japanese-Portygee-Kanata mixed breed, with no known relatives, a fact which should have made it easy to leave his name out of the news reports had not a reporter smelled it out. "He was standing on the green, not more than twenty-five yards away from me," Blake recounted, "when the fireballs approached. One passed on each side of me. My skin itched, and my hair stood up. I could smell ozone. I stood still-"

"That saved you," observed Graves.

"Nuts," said Eisenberg. "Standing in the dry sand of the trap was what saved him."

"Bill, you're a fool," Graves said wearily. "These fireball things perform with intelligent awareness."

Blake checked his account. "Why do you assume that, doctor?"

"Never mind, for the moment, please. Go on with your story."

"Hm-m-m. Well, they passed on by me. The caddy fellow was directly in the course of one of them. I don't believe he saw it-back toward it, you see. It reached him, enveloped him, passed on-but the boy was gone."

Graves nodded. "That checks with the accounts I have seen. Odd that I did not recall your name from the reports."

"I stayed in the background," Blake said shortly. "Don't like reporters."

"Hm-m-m. Anything to add to the reports that did come out? Any errors in them?"

"None that I can recall. Did the reports mention the bag of golf clubs he was carrying?"

"I think not."

"They were found on the beach, six miles away."

Eisenberg sat up. "That's news," he said. "Tell me: Was there anything to suggest how far they had fallen? Were they smashed or broken?"

Blake shook his head. "They weren't even scratched, nor was the beach sand disturbed. But they were-ice-cold."

Graves waited for him to go on; when the captain did not do so he inquired, "What do you make of it?"

"Me? I make nothing of it."

"How do you explain it?"

"I don't. Unclassified electrical phenomena. However, if you want a rough guess, I'll give you one. This fireball is a static field of high potential. It englobes the caddy and charges him, whereupon he bounces away like a pith ball-electrocuted, incidentally. When the charge dissipates, he falls into the sea."

"So? There was a case like it in Kansas, rather too far from the sea."

"The body might simply never have been found."

"They never are. But even so-how do you account for the clubs being deposited so gently? And why were they cold?"

"Dammit, man, I don't know! I'm no theoretician; I'm a maritime engineer by profession, an empiricist by disposition. Suppose you tell me."

"All right-but bear in mind that my hypothesis is merely tentative, a basis for investigation. I see in these several phenomena, the Pillars, the giant fireballs, a number of other assorted phenomena which should never have happened, but did-including the curious case of a small mountain peak south of Boulder, Colorado, which had its tip leveled off 'spontaneously'-I see in these things evidence of intelligent direction, a single conscious cause." He shrugged. "Call it the 'X' factor. I'm looking for X."

Eisenberg assumed a look of mock sympathy. "Poor old Doc," he sighed. "Sprung a leak at last."

The other two ignored the crack. Blake inquired, "You are primarily an ichthyologist, aren't you?"

"Yes."

"How did you get started along this line?"

"I don't know. Curiosity, I suppose. My boisterous young friend here would tell you that ichthyology is derived from 'icky.' "

Blake turned to Eisenberg. "But aren't *you* an ichthyologist?"

"Hell, no! I'm an oceanographer specializing in ecology."

"He's quibbling," observed Graves. "Tell Captain Blake about Cleo and Pat."

Eisenberg looked embarrassed. "They're damned nice pets," he said defensively.

Blake looked puzzled; Graves explained. "He kids me, but *his* secret shame is a pair of goldfish. Goldfish! You'll find 'em in the washbasin in his stateroom this minute."

"Scientific interest?" Blake inquired with a dead pan.

"Oh, no! He thinks they are devoted to him."

"They're damned nice pets," Eisenberg insisted. "They don't bark, they don't scratch, they don't make messes. And Cleo does so have expression!"

In spite of his initial resistance to their plans Blake Cooperated actively in trying to find a dodge whereby the proposed experiment could be pertormed without endangering naval personnel or material. He liked these two; he understood their curious mixture of selfless recklessness and extreme caution; it matched his own-it was professionalism, as distinguished from economic motivation.

He offered the services of his master diver, an elderly commissioned warrant officer, and his technical crew in checking their gear. "You know," he added, "there is some reason to believe that your bathysphere could make the round trip, aside from the proposition that what goes up must come down. You know of the *VJ-14*?"

"Was that the naval plane lost in the early investigation?"

"Yes." He buzzed for his orderly. "Have my writer bring up the jacket on the *VJ-14*," he directed.

Attempts to reconnoiter the strange "permanent" cloud and its incredible waterspouts had been made by air soon after its discovery. Little was learned. A plane would penetrate the cloud. Its ignition would fail; out it would glide, unharmed, whereupon the engines would fire again. Back into the cloud

-engine failure. The vertical reach of the cloud was greater than the ceiling of any plane.

"The *VJ-14*," Blake stated, referring occasionally to the file jacket which bad been fetched, "made an air reconnaissance of the Pillars themselves on 12 May, attended by the U. S. S. *Pelican*. Besides the pilot and radioman she carried a cinematographer and a chief aerographer. Mm-m-m--only the last two entries seem to be pertinent: 'Changing course. Will fly between the Pillars-14,' and '0913-Ship does not respond to controls-14.' Telescopic observation from the *Pelican* shows that she made a tight upward spiral around the Kanaka Pillar, about one and a half turns, and was sucked into the column itself. Nothing was seen to fall.

"Incidentally the pilot, Lieutenant-m-m-m-m, yes-Mattson-Lieutenant Mattson was exonerated posthumously by the court of inquiry. Oh, yes, here's the point pertinent to our question: From the log of the Pelican. '1709-Picked up wreckage identified as part of VJ-14. See additional sheet for itemized description.' We needn't bother with that. Point is, they picked it up four miles from the base of the Wahini Pilha on the side away from the Kanaka, The inference is obvious and your scheme might work. Not that you'd live through it."

"I'll chance it," Eisenberg stated.

"Mm-m-m-yes. But I was going to suggest we send up a dead load, say a crate of eggs packed into a hogshead." The buzzer from the bridge sounded; Captain Blake raised his voice toward the brass funnel of a voice tube in the overhead. "Yes?"

"Eight o'clock, Captain. Eight o'clock lights and galley fires out; prisoners secured."

"Thank you, sir." Blake stood up. "We can get together on the details in the morning."

A fifty-foot motor launch bobbed listlessly astern the *Mahan*. A nine-inch coir line joined it to its mother ship; bound to it at fathom intervals was a telephone line ending in a pair of headphones worn by a signalman seated in the stern sheets of the launch. A pair of flags and a spyglass lay on the thwart beside him; his blouse had crawled up, exposing part of the lurid cover of a copy of *Dynamic Tales*, smuggled along as a precaution against boredom.

Already in the boat were the coxswain, the engineman, the boat officer, Graves, and Eisenberg. With them, forward in the boat, was a breaker of water rations, two fifty-gallon drums of gasoline-and a hogshead. It contained not only a carefully packed crate of eggs but also a jury-rigged smoke-signal device, armed three ways-delayed action set for eight, nine and ten hours; radio relay triggered from the ship; and simple saltwater penetration to complete an electrical circuit. The torpedo gunner in charge of diving hoped that one of them might work and thereby aid in locating the hogshead. He was busy trying to devise more nearly foolproof gear for the bathysphere.

The boat, officer signaled ready to the bridge. A megaphoned bellow responded, "Pay her out handsomely!" The boat drifted slowly away from the ship and directly toward the Kanaka Pillar, three miles away.

The Kanaka Pillar loomed above them, still nearly a mile away but loweringly impressive nevertheless. The place where it disappeared in cloud seemed almost overhead, falling toward them. Its five-hundred-foot-thick trunk gleamed purplish-black, more like polished steel than water.

"Try your engine again, coxswain."

"Aye, aye, sir!" The engine coughed, took hold; the engineman eased in the clutch, the screw bit in, and the boat surged forward, taking the strain off the towline. "Slack line, sir."

"Stop your engine." The boat officer turned to his passengers. "What's the trouble, Mr. Eisenberg? Cold feet?"

"No, dammit-seasick. I *hate* a small boat."

"Oh, that's too bad. I'll see if we haven't got a pickle in that chow up forward."

"Thanks, but pickles don't help me. Never mind, I can stand it."

The boat officer shrugged, turned and let his eye travel up the dizzy length of. the column. He whistled, something which he had done every time he had looked at it. Eisenberg, made nervous by his nausea, was beginning to find it cause for homicide. "*Whew*! You really intend to try to go up that thing, Mr. Eisenberg?"

"I do!"

The boat officer looked startled at the tone, laughed uneasily, and added, "Well, you'll be worse than seasick, if you ask me."

Nobody had. Graves knew his friend's temperament; he made conversation for the next few minutes.

"Try your engine, coxswain." The petty officer acknowledged, and reported back quickly:

"Starter doesn't work, sir."

"Help the engineman get a line on the flywheel. I'll take the tiller."

The two men cranked the engine over easily, but got no answering cough. "Prime it!" Still no results.

The boat officer abandoned the useless tiller and jumped down into the engine space to lend his muscle to heaving on the cranking line. Over his shoulder he ordered the signalman to notify the ship.

"Launch Three, calling bridge. Launch Three, calling bridge. Bridge-reply! Testing-testing." The signalman slipped a phone off one ear. "Phone's dead, sir."

"Get busy with your flags. Tell 'em to haul us in!" The officer wiped sweat from his face and straightened up. He glanced nervously at the current *slap-slapping* against the boat's side.

Graves touched his arm. "How about the barrel?"

"Put it over the side if you like. I'm busy. Can't you raise them, Sears?"

"I'm trying, sir."

"Come on, Bill," Graves said to Eisenberg. The two of them slipped forward in the boat, threading their way past the engine on the side away from the three men sweating over the flywheel. Graves cut the hogshead loose from its lashings, then the two attempted to get-a purchase on the awkward, unhandy object. It and its light load weighed less than two hundred pounds, but it was hard to manage, especially on the uncertain footing of heaving floorboards.

They wrestled it outboard somehow, with one smashed finger for Eisenberg, a badly banged shin for Graves. It splashed heavily, drenching them with sticky salt water, and bobbed astern, carried rapidly toward the Kanaka Pillar by the current which fed it.

"Ship answers, sir!"

"Good! Tell them to haul us in-*carefully*." The boat officer jumped out of the engine space and ran forward, where he checked again the secureness with which the towline was fastened.

Graves tapped him on the shoulder. "Can't we stay here until we see the barrel enter the column?"

"No! Right now you had better pray that that line holds, instead of worrying about the barrel-or we go up the column, too. Sears, has the ship acknowledged?"

"Just now, sir."

"Why a coir line, Mr. Parker?' Eisenberg inquired, his1 nausea forgotten in the excitement. "I'd rather depend on steel, or even good stout Manila."

"Because coir floats, and the others don't," the officer answered snappishly. "Two miles of line would drag us to the bottom. *Sears*! Tell them to ease the strain. We're shipping water."

"Aye, aye, sir!"

The hogshead took less than four minutes to reach the column, enter it, a fact which Graves ascertained by borrowing the signalman's glass to follow it on the last leg of its trip-which action won him a dirty look from the nervous boat officer. Some minutes later, when the boat was about five hundred yards farther from the Pillar than it had been at nearest approach, the telephone came suddenly to life. The starter of the engine was tested immediately; the engine roared into action.

The trip back was made with engine running to take the strain off the towline-at half speed and with some maneuvering, in order to avoid fouling the screw with the slack bight of the line.

The smoke signal worked-one circuit or another. The plume of smoke was sighted two miles south of the Wahini Pillar, elapsed time from the moment the vessel had entered the Kanaka column just over eight hours.

Bill Eisenberg climbed into the saddle of the exerciser in which he was to receive antibends treatment-thirty minutes of hard work to stir up his circulation while breathing an atmosphere of helium and oxygen, at the end of which time the nitrogen normally dissolved in his blood stream would be largely replaced by helium. The exerciser itself was simply an old bicycle mounted on a stationary platform. Blake looked it over. "You needn't have bothered to bring this," he remarked. "We've a better one aboard. Standard practice for diving operations these days."

"We didn't know that," Graves answered. "Anyhow, this one will do. All set, Bill?"

"I guess so." He glanced over his shoulder to where the steel bulk of the bathysphere lay, uncrated, checked and equipped, ready to be swung outboard by the boat crane. "Got the gasket-sealing compound?"

"Sure. The Iron Maiden is all right. The gunner and I will seal you in. Here's your mask."

Eisenberg accepted the inhaling mask, started to strap it on, checked himself. Graves noticed the look on his face. "What's the trouble, son?"

"Doc. . .

"Yes?"

"I say-you'll look out for Cleo and Pat, won't you?"

"Why, sure. But they won't need anything in the length of time you'll be gone."

"Um-m-m, no, I suppose not. But you'll look out for 'em?"

"Sure."

"O.K." Eisenberg slipped the inhaler over his face, waved his hand to the gunner waiting by the gas bottles. The gunner eased open the cut-off valves, the gas lines hissed, and Eisenberg began to pedal like a six-day racer.

With thirty minutes to kill, Blake invited Graves to go forward with him for a smoke and a stroll on the fo'c's'le. They had completed about twenty turns when Blake paused by the wildcat, took his cigar from his mouth and remarked, "Do you know, I believe he has a good chance of completing the trip."

"So? I'm glad to hear that."

"Yes, I do, really. The success of the trial with the dead load convinced me. And whether the smoke gear works or not, if that globe comes back down the Wahini Pillar, *I'll find it.*"

"I know you will. It was a good idea of yours, to paint it yellow."

"Help us to spot it, all right. I don't think he'll learn anything, however. He won't see a thing through those ports but blue water, from the time he enters the column to the time we pick him up."

"Perhaps so."

"What else *could* he see?"

"I don't know. Whatever it is that *made* those Pillars, perhaps."

Blake dumped the ashes from his cigar carefully over the rail before replying. "Doctor, I don't understand you. To my mind, those Pillars are a natural, even though strange, phenomenon."

"And to me it's equally obvious that they are not 'natural.' They exhibit intelligent interference with the ordinary processes of nature as clearly as if they had a sign saying so hung on them."

"I don't see how you can say that. Obviously, they are not manmade."

"No."

"Then who did make them-if they were made?"

"I don't know."

Blake started to speak, shrugged, and held his tongue. They resumed their stroll. Graves turned aside to chuck his cigarette overboard, glancing outboard as he did so.

He stopped, stared, then called out: "Captain Blake!"

"Eh?" The captain turned and looked where Graves pointed. "Great God! Fireballs!"

"That's what I thought."

"They're some distance away," Blake observed, more to himself than to Graves. He turned decisively. "Bridge!" he shouted. "Bridge! Bridge ahoy!"

"Bridge, aye aye!"

"Mr. Weems-pass the word: 'All hands, below decks.' Dog down all ports. Close all hatches. And close up the bridge itself! Sound the general alarm."

"Aye aye, sir!"

"Move!" Turning to Graves, he added, "Come inside."

Graves followed him; the captain stopped to dog down the door by which they entered himself. Blake pounded up the inner ladders to the bridge, Graves in his train. The ship was filled with whine of the bos'n pipe, the raucous voice of the loudspeaker, the clomp of hurrying feet, and the monotonous, menacing *cling-cling-cling*! of the general alarm.

The watch on the bridge were still struggling with the last of the heavy glass shutters of the bridge when the captain burst into their midst. "I'll take it, Mr. Weems," he snapped.

In one continuous motion he moved from one side of the bridge to the other, letting his eye sweep the port side aft, the fo'c's'le, the starboard side aft, and finally rest on the fireballs-distinctly nearer and heading straight for the ship. He cursed. "Your friend did not get the news," he said to Graves.

He grasped the crank which could open or close the after starboard shutter of the bridge.

Graves looked past his shoulder, saw what he meant-the afterdeck was empty, save for one lonely figure pedaling away on the stationary bicycle. The LaGrange fireballs were closing in.

The shutter stuck, jammed tight, would not open. Blake stopped trying, swung quickly to the loudspeaker control panel, and cut in the whole board without bothering to select the proper circuit. "Eisenberg! *Get below*!"

Eisenberg must have heard his name called, for be turned his head and looked over his shoulder-Graves saw distinctly-just as the fireball reached him. It passed on, and the saddle of the exerciser was empty.

The exerciser was undamaged, they found, when they were able to examine it. The rubber hose to the inhaler mask had been cut smoothly. There was no blood, no marks. Bill Eisenberg was simply gone.

'Tm going up."

"You are in no physical shape to do so, doctor."

"You are in no way responsible, Captain Blake."

"I know that. You may go if you like-after we have searched for your friend's body."

"Search be damned! I'm going up to *look* for him."

"Huh? Eh? How's that?"

"If you are right, he's dead, and there is no point in searching for his body. If I'm right, there is just an outside chance of finding him-up there!" He pointed toward the cloud cap of the Pillars.

Blake looked him over slowly, then turned to the master diver. "Mr. Hargreave, find an inhaler mask for Dr. Graves."

They gave him thirty minutes of conditioning against the caisson disease while Blake looked on with expressionless Silence. The ship's company, bluejackets and officers alike, stood back and kept quiet;

they walked on eggs when the Old Man had that look.

Exercise completed, the diver crew dressed Graves rapidly and strapped him into the bathysphere with dispatch, in order not to expose him too long to the nitrogen in the air. Just before the escape port was dogged down Graves spoke up.

"Captain Blake."

"Yes, doctor?"

"Bill's goldfish-will you look out for them?"

"Certainly, doctor."

"Thanks."

"Not at all. Are you ready?"

"Ready."

Blake stepped forward, stuck an arm through the port of the sphere and shook hands with Graves. "Good luck." He withdrew his arm. "Seal it up."

They lowered it over the side; two motor launches nosed it half a mile in the direction of the Kanaka Pillar where the current was strong enough to carry it along. There they left it and bucked the current back to the ship, were hoisted in.

Blake followed it with his glasses from the bridge. It drifted slowly at first, then with increased speed as it approached the base of the column. It whipped into rapid motion the last few hundred yards; Blake saw a flash of yellow just above the water line, then nothing more.

Eight hours-no plume of smoke. Nine hours, ten hours, nothing. After twenty-four hours of steady patrol in the vicinity of the Wahini Pillar, Blake radioed the Bureau.

Four days of vigilance-Blake knew that the bathysphere's passenger must be dead; whether by suffocation, drowning, implosion, or other means was not important. He so reported and received orders to proceed on duty assigned. The ship's company was called to quarters; Captain Blake read the service for the dead aloud in a harsh voice, dropped over the side some rather wilted hibiscus blooms-all that his steward could produce at the time-and went to the bridge to set his course for Pearl Harbor.

On the way to the bridge he stopped for a moment at his cabin and called to his steward: "You'll find some goldfish in the stateroom occupied by Mr. Eisenberg. Find an appropriate container and place them in my cabin."

"Yes, suh, Cap'n."

When Bill Eisenberg came to his senses he was in a Place. Sorry, but no other description is suitable; it lacked features. Oh, not entirely, of course-it was not dark where he was, nor was it in a state of vacuum, nor was it cold, nor was it too small for comfort. But it did lack features to such a remarkable extent that he had difficulty in estimating the size of the place. Consider stereo vision, by which we estimate the size of things *directly*, does not work beyond twenty feet or so. At greater distances we depend on previous knowledge of the true size of familiar objects, usually making our estimates subconsciously-a man *so high* is about *that far* away, and vice versa.

But the Place contained no familiar objects. The ceiling was a considerable distance over his head, too far to touch by jumping. The floor curved up to join the ceiling and thus prevented further lateral progress of more than a dozen paces or so. He would become aware of the obstacle by losing his balance. (He had no reference lines by which to judge the vertical; furthermore, his sense of innate balance was affected by the mistreatment his inner ears had undergone through years of diving. It was easier to sit than to walk, nor was there any reason to walk, after the first futile attempt at exploration.)

When he first woke up he stretched and opened his eyes, looked around. The lack of detail confused him. It was as if he were on the inside of a giant eggshell, illuminated from without by a soft, mellow, slightly amber light. The formless vagueness bothered him; he closed his eyes, shook his head, and opened them again-no better.

He was beginning to remember his last experience before losing consciousness-the fireball swooping down, his frenzied, useless attempt to duck, the "Hold your hats, boys!" thought that-flashed through his mind in the long-drawn-out split second before contact. His orderly mind began to look for explanations. Knocked cold, he thought, and my optic nerve paralyzed. Wonder if I'm blind for good.

Anyhow, they ought not to leave him alone like this in his present helpless condition. "Doc!" he shouted. "Doc Graves!"

No answer, no echo-he became aware that there was no sound, save for his own voice, none of the random little sounds that fill completely the normal "dead" silence. This place was as silent as the inside of a sack of flour. Were his ears shot, too?

No, he had heard his own voice. At that moment he realized that he was looking at his own hands. Why, there was nothing wrong with his eyes-he could see them plainly!

And the rest of himself, too. He was naked.

It might have been several hours later, it might have been moments, when he reached the conclusion that he was dead. It was the only hypothesis which seemed to cover the facts. A dogmatic agnostic by faith, he had expected no survival after death; he had expected to go out like a light, with a sudden termination of consciousness. However, he had been subjected to a charge of static electricity more than sufficient to kill a man; when he regained awareness, he found himself without all the usual experience which mates up living.

Therefore-he was dead. Q.E.D.

To be sure, he seemed to have a body, but he was acquainted with the subjective-objective paradox. He still had memory, the strongest pattern in one's memory is body awareness. This was not his body, but his detailed sensation memory of it. So he reasoned. Probably, he thought, my dream-body will slough away as my memory of the object-body fades.

There was nothing to do, nothing to experience, nothing to distract his mind. He fell asleep at last, thinking that, if this were death, it was damned dull!

He awoke refreshed, but quite hungry and extremely thirsty. The matter of dead, or not-dead, no longer concerned him; he was interested in neither theology nor metaphysics.

He was hungry.

Furthermore, he experienced on awakening a phenomenon which destroyed most of the basis fur his intellectual belief in his own death-it had never reached the stage of emotional conviction. Present there with him in the Place he found material objects other than himself, objects which could be seen and touched.

And eaten.

Which last was not immediately evident, for they did not look like food. There were two sorts. The first was an amorphous lump of nothing in particular, resembling a grayish cheese in appearance, slightly greasy to the touch, and not appetizing. The second sort was a group of objects of uniform and delightful appearance. They were spheres, a couple of dozen; each one seemed to Bill Eisenberg to be a duplicate of a crystal ball he had once purchased-true Brazilian rock crystal the perfect beauty of which he had not been able to resist; he had bought it and smuggled it home to gloat over in private.

The little spheres were like that in appearance. He touched one. It was smooth as crystal and had the same chaste coolness, but it was soft as jelly. It quivered like jelly, causing the lights within it to dance delightfully, before resuming its perfect roundness.

Pleasant as they were, they did not look like food, whereas the cheesy, soapy lump might be. He broke off a small piece, sniffed it, and tasted it tentatively. It was sour, nauseating, unpleasant. He spat it out, made a wry face, and wished heartily that he could brush his teeth. If that was food, he would have to be much hungrier.

He turned his attention back to the delightful little spheres of crystallike jelly. He balanced them in his palms, savoring their soft, smooth touch. In the heart of each he saw his own reflection, imagined in miniature, made elfin and graceful. He became aware almost for the first time of the serene beauty of the human figure, almost any human figure, when viewed as a composition and not as a mass of colloidal detail.

But thirst became more pressing than narcissist admiration. It occurred to him that the smooth, cool spheres, if held in the mouth, might promote salivation, as pebbles will. He tried it; the sphere he selected struck against his lower teeth as he placed it in his mouth, and his lips and chin were suddenly wet, while drops trickled down his chest. The spheres were water, nothing but water, no cellophane skin, no container of any sort. Water had been delivered to him, neatly packaged, by some esoteric trick of surface tension.

He tried another, handling it more carefully to insure that it was not pricked by his teeth until he had it in his mouth. It worked; his mouth was filled with cool, pure water-too quickly; he choked. But he had caught on to the trick; he drank four of the spheres.

His thirst satisfied, he became interested in the strange trick whereby water became its own container. The spheres were tough; he could not squeeze them into breaking down, nor did smashing them hard against the floor disturb their precarious balance. They bounced like golf balls and came up for more. He managed to pinch the surface of one between thumb and fingernail. It broke down at once, and the water trickled between his fingers-water alone, no skin nor foreign substance. It seemed that a cut alone could disturb the balance of tensions; even wetting had no effect, for he could hold one carefully in his mouth, remove it, and dry it off on his own skin.

He decided that, since his supply was limited, and no more water was in prospect, it would be wise to conserve what he had and experiment no further.

The relief of thirst increased the demands of hunger. He turned his attention again to the other substance and found that he could force himself to chew and swallow. It might not be food, it might even be poison, but it filled his stomach and stayed the pangs. He even felt well fed, once he had cleared out the taste with another sphere of water.

After eating he rearranged his thoughts. He was not dead, or, if he were, the difference between living and being dead was imperceptible, verbal. OK, he was alive. But he was shut up alone. Somebody knew where he was and was aware of him, for he had been supplied with food and drink-mysteriously but cleverly. *Ergo*-he was a prisoner, a word which implies a warden.

Whose prisoner? He had been struck by a LaGrange fireball and had awakened in his cell. It looked, he was forced to admit, as if Doc

Graves had been right; the fireballs were intelligently controlled. Furthermore, the person or persons behind them had novel ideas as to how to care for prisoners as well as strange ways of capturing them.

Eisenberg was a brave man, as brave as the ordinary run of the race from which he sprang-a race as foolhardy as Pekingese dogs. He had the high degree of courage so common in the human race, a race capable of conceiving death, yet able to face its probability daily, on the highway, on the obstetrics table, on the battlefield, in the air, in the subway and to face lightheartedly the certainty of death in the end.

Eisenberg was apprehensive, but not, panic-stricken. His situation was decidedly interesting; he was no longer bored.

If he were a prisoner, it seemed likely that his captor would come to investigate him presently, perhaps to question him, perhaps to attempt to use him in some fashion. The fact that, he had been saved and not killed implied some sort of plans for his future. Very well, he would concentrate on meeting whatever exigency might come with a calm and resourceful mind. In the meantime, there was nothing he could do toward freeing himself; he had satisfied himself of that. This was a prison which would baffle Houdini-smooth continuous walls, no way to get a purchase.

He had thought once that he had a clue to escape; the cells had sanitary arrangements of some sort, for that which his body rejected went elsewhere. But he got no further with that lead; the cage was self-cleaning-and that was that. He could not tell how it was done. It baffled him.

Presently he slept again.

When he awoke, one element only was changed-the food and water had been replenished. The "day" passed without incident, save for his own busy fruitless thoughts.

And the next "day." And the next.

He determined to stay awake long enough to find out how food and water were placed in his cell. He made a colossal effort to do so, using drastic measures to stimulate his body into consciousness. He bit his lips, he bit his tongue. He nipped the lobes of his ears viciously with his nails. He concentrated on difficult mental feats.

Presently he dozed off; when he awoke, the food and water had been replenished.

The waking periods were followed by sleep, renewed hunger and thirst, the-satisfying of same, and more sleep. It was after the sixth or seventh sleep that he decided that some sort of a calendar was necessary to his mental health. He had no means of measuring time except by his sleeps; he arbitrarily designated them as days. He had no means of keeping records, save his own body. He made that do. A thumbnail shred, torn off, made a rough tattooing needle. Continued scratching of the same area on his thigh produced a red welt which persisted for a day or two, and could be renewed.

Seven welts made a week. The progression of such welts along ten fingers and ten toes gave him the means to measure twenty weeks-which was a much longer period than he anticipated any need to measure.

He had tallied the second set of seven thigh welts on the ring finger of his left hand when the next event occurred to disturb his solitude. When he awoke from the sleep following said tally, he became suddenly and overwhelmingly aware that he was not alone!

There was a human figure sleeping beside him. When he had convinced himself that he was truly wide awake-his dreams were thoroughly populated-he grasped the figure by the shoulder and shook it. "Doc!" he yelled. "Doc! Wake up!"

Graves opened his eyes, focused them, sat up, and put out his hand. "Hi, Bill," he remarked. "I'm damned glad to see you."

"Doc!" He pounded the older man on the back. "Doc! For Criminy sake! You don't know how glad *I* am to see *you*."

"I can guess."

"Look, Doc-where have you been? How did you get here?

Did the fireballs snag you, too?"

"One thing at a time, son. Let's have breakfast." There was a double ration of food and water on the "floor" near them. Graves picked up a sphere, nicked it expertly, and drank it without losing a drop. Eisenberg watched him knowingly.

"You've been here for some time."

"That's right."

"Did the fireballs get you the same time they got me?"

"No." He reached for the food. "I came up the Kanaka Pillar."

"What!"

"That's right. Matter of fact, I was looking for you."

"The hell you say!"

"But I do say. It looks as if my wild hypothesis was right; the Pillars and the fireballs are different manifestations of the same cause-X!"

It seemed almost possible to hear the wheels whir in Eisenberg's head. "But, Doc.. . . look here, Doc, that means your whole hypothesis was correct. Somebody *did* the whole thing. Somebody has us locked up here now."

"That's right." He munched slowly. He seemed tired, older and thinner than the way Eisenberg remembered him. "Evidence of intelligent control Always was. No other explanation."

"But *who*?"

"Ah!"

"Some foreign power? Are we up against something utterly new in the way of an attack?" -

"Hummph! Do you think the Russians, for instance, would bother to serve us water like *this*?" He held up one of the dainty little spheres.

"Who, then?"

"I wouldn't know. Call 'em Martians-that's a convenient way to think of them."

"Why Martians?"

"No reason. I said that was a convenient way to think of them."

"Convenient how?"

"Convenient because it keeps you from thinking of them as human beings-which they obviously aren't. Nor animals. Something very intelligent, but not animals, because they are smarter than we are. Martians."

"But. . . but-Wait a minute. Why do you assume that your X people aren't human? Why not humans who have a lot of stuff on the ball that we don't have? New scientific advances?"

"That's a fair question," Graves answered, picking his teeth with a forefinger. "I'll give you a fair answer. Because in the-present state of the world we know pretty near where alt the best minds are and what they are doing. Advances, like these couldn't be hidden and would be a long time in developing. X indicates evidence of a half a dozen different lines of development that are clear beyond our ken and which would require years of work by hundreds of researchers, to say the very least. *Ipso facto*, nonhuman science.

"Of course," he continued, "if you want to postulate a mad scientist and a secret laboratory, I can't argue with you. But I'm not writing Sunday supplements."

Bill Eisenberg kept very quiet for some time, while he considered what Graves said in the light of his own experience.

"You're right, Doc," he finally admitted. "Shucks-you're usually right when we have an argument. It has to be Martians. Oh, I don't mean inhabitants of Mars; I mean some form of intelligent life from outside this planet."

"Maybe."

"But you just said so!"

"No, I said it was a convenient way to look at it."

"But it has to be by elimination."

"Elimination is a tricky line of reasoning."

"What else could it be?"

"Mm-m-m. I'm not prepared to say just what I do think-yet. But there are stronger reasons than we have mentioned for concluding that we are up against nonhumans. Psychological reasons."

"What sort?"

"X doesn't treat prisoners in any fashion that arises out of human behavior patterns. Think it over."

They had a lot to talk about; much more than X, even though X was a subject they were bound to return to. Graves gave Bill a simple bald account of how he happened to go up the Pillar-an account which Bill found very moving for what was left out, rather than told. He felt suddenly very humble and unworthy as he looked at his elderly, frail friend.

"Doc, you don't look well."

"I'll do."

"That trip up the Pillar was hard on you. You shouldn't have tried it."

Graves shrugged. "I made out all right." But he had not, and Bill could see that he had not. The old man was "poorly."

They slept and they ate and they talked and they slept again. The routine that Eisenberg had grown used to alone continued, save with company. But Graves grew no stronger.

"Doc, it's up to us to do something about it."

"About what?"

"The whole situation. This thing that has happened to us is an intolerable menace to the whole human race. We don't know what may have happened down below-"

"Why do you say 'down below'?"

'Why, you came up the Pillar."

"Yes, true-but I don't know when or how I was taken out of -the bathysphere, nor where they may have taken me. But go ahead. Let's have your idea."

"Well, but-OK-we don't know what may have happened to the rest of the human race. The fireballs may be picking them off one at a time, with no chance to fight back and no way of guessing what has been going on. We have some idea of the answer. It's up to us to escape and warn them. There may be some way of fighting back. It's our duty; the whole future of the human race may depend on it."

Graves was silent so long after Bill had finished his tocsin that Bill began to feel embarrassed, a bit foolish. But when he finally spoke it was to agree. "I think you are right, Bill. I think it quite possible that you are right. Not necessarily, but distinctly possible. And that possibility does place an obligation on us to all mankind. I've known it. I knew it before we got into this mess, but I did not have enough data to justify shouting. 'Wolf!'

"The question is," he went on, "how can we give such a warning-now?"

"We've got to escape!"

"Ah."

"There *must* be some way."

"Can you suggest one?"

"Maybe. We haven't been able to find any way in or out of this place, but there must be a way-has to be; we were brought in. Furthermore, our rations are put inside every day-somehow. I tried once to stay awake long enough to see how it was done, but I fell asleep-"

"So did I."

"Uh-huh. I'm not surprised. But there are two of us now; we could take turns, watch on and watch off, until something happened."

Graves nodded. "It's worth trying."

Since they had no way of measuring the watches, each kept the vigil until sleepiness became intolerable, then awakened the other. But nothing happened. Their food ran out, was not replaced. They conserved their water balls with care, were finally reduced to one, which was not drunk because each insisted on being noble about it-the other must drink it! But still no manifestation of any sort from their unseen Captors.

After an unmeasured and unestimated length of time-but certainly long, almost intolerably long-at a time when Eisenberg was in a light, troubled sleep, he was suddenly awakened by a touch and the sound of his name. He sat up, blinking, disoriented. "Who? What? Wha'sa matter?"

"I must have dozed off," Graves said miserably. "I'm sorry, Bill." Eisenberg looked where -Graves pointed. Their food and water had been renewed.

Eisenberg did not suggest a renewal of the experiment. In the first place, it seemed evident that their keepers did not intend for them to learn the combination to their cell and were quite intelligent enough to outmaneuver their necessarily feeble attempts. In the second place, Graves was an obviously sick man; Eisenberg did not have the heart to suggest another long, grueling, half-starved vigil.

But, lacking knowledge of the combination, it appeared impossible to break jail. A naked man is a particularly helpless creature; lacking materials wherewith to fashion tools, he can do little. Eisenberg would have swapped his chances for eternal bliss for a diamond drill, an acetylene torch, or even a rusty, secondhand chisel. Without tools of some sort it was impressed on him that he stood about as much chance of breaking out of his cage as his goldfish, Cleo and Patra, had of chewing their way out of a glass bowl.

"Doc?"

"Yes, son."

"We've tackled this the wrong way. We know that X is intelligent; instead of trying to escape, we should be trying to establish communication."

"How?"

"I don't know. But there must be *some* way."

But if there was, he could never conjure it up. Even if he assumed that his captors could see and hear him, how was he to convey intelligence to them by word or gesture? Was it theoretically possible for any nonhuman being, no matter how intelligent, to find a pattern of meaning in human speech symbols, if he encountered them without context, without background, without pictures, without *pointing*? It is certainly true that the human race, working under much more favorable circumstances, has failed almost utterly to learn the languages of the other races of animals.

What should he do to attract their attention, stimulate their interest? Recite the "Gettysburg Address"? Or the multiplication table? Or, if he used gestures, would deaf-and-dumb language mean any more, or any less, to his captors than the sailor's hornpipe?

"Doc?"

"What is it, Bill?" Graves was sinking; he rarely initiated a conversation these "days."

"Why are we here? I've had it in the back of my mind that *eventually* they would take us out and do something with us. Try to question us, maybe. But it doesn't look like they meant to."

"No, it doesn't."

"Then why are we here? Why do they take care of us?"

Graves paused quite a long time before answering: "I think that they are expecting us to reproduce."

"What!"

Graves shrugged.

"But that's ridiculous."

"Surely. But would they know it?"

"But they are intelligent."

Graves chuckled, the first time he had done so in many sleeps. "Do you know Roland Young's little verse about the flea:

"A funny creature is the Flea
You cannot tell the She from He.
But He can tell-and so can She."

"After all, the visible differences between men and women are quite superficial and almost negligible-except to men and women!"

Eisenberg found the suggestion repugnant, almost revolting; he struggled against it. "But look, Doc-even a little study would show them that the human race is divided up into sexes. After all, we aren't the first specimens they've studied."

"Maybe they don't study us."

"Huh?"

"Maybe we are just-pets."

Pets! Bill Eisenberg's morale had stood up well in the face of danger and uncertainty. This attack on it was more subtle. Pets! He had thought of Graves and himself as prisoners of war, or, possibly, objects of scientific research. But pets!

"I know how you feel," Graves went on, watching his face, "It's . . . it's *humiliating* from an anthropocentric viewpoint. But I think it may be true. I may as well tell you my own private theory as to the possible nature of X, and the relation of X to the human race. I haven't up to now, as it is almost sheer conjecture, based on very little data. But it does cover the known facts.

"I conceive of the X creatures as being just barely aware of the existence of men, unconcerned by them, and almost completely uninterested in them."

"But they hunt us!"

"Maybe. Or maybe they just pick us up occasionally by accident. A lot of men have dreamed about an impingement of nonhuman intelligences on the human race. Almost without exception the dream has taken one of two forms, invasion and war, or exploration and mutual social intercourse.

Both concepts postulate that nonhumans are enough like us either to fight with us or talk to us-treat us as equals, one way or the other. I don't believe that X is sufficiently interested in human beings to want to enslave them, or even exterminate them. They may not even study us, even when we come under their notice. They may lack the scientific spirit in the sense of having a monkeylike curiosity about everything that moves. For that matter, how thoroughly do *we* study other life forms? Did you ever ask your goldfish for their views on goldfish poetry or politics? Does a termite think that a woman's place is in the home? Do beavers prefer blondes or brunettes?"

"You are joking."

"No, I'm not! Maybe the life forms I mentioned don't have such involved ideas. My point is: if they did, or do, we'd never guess it. I don't think X conceives of the human race as intelligent."

Bill chewed this for a while, then added: "Where do you think they came from, Doc? Mars, maybe? Or clear out of the Solar System?"

"Not necessarily. Not even probably. It's my guess that they came from the same place we did-*from up out of the slime of this planet*."

"Really, Doc-"

"I mean it. And don't give me that funny look. I may be sick, but I'm not balmy. *Creation took eight days!"*

"Huh?"

"I'm using biblical-language. 'And God blessed them, and God said unto them, Be fruitful and multiply, and replenish the earth, and subdue it: and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth.' And so it came to pass. But nobody mentioned the stratosphere."

"Doc-are you sure you feel all right?"

"Dammit-quit trying to psychoanalyze me! I'll drop the allegory. What I mean is: We aren't the latest nor the highest stage in evolution. First the oceans were populated. Then lungfish to amphibian, and so on up, until the continents were populated, and, in time, man ruled the surface of the earth-or thought he did. But did evolution stop there? I think not. Consider-from a fish's point of view air is a hard vacuum. From our point of view the upper reaches of the atmosphere, sixty, seventy, maybe a hundred thousand feet up seem like a vacuum and unfit to sustain life. But it's not vacuum. It's thin, yes, but there is matter there and radiant energy. Why not life, intelligent life, highly evolved as it would have to be-but evolved from the same ancestry as ourselves and fish? We wouldn't see it happen; man hasn't been aware, in a scientific sense, that long. When our granddaddies were swinging in the trees, it had already happened."

Eisenberg took a deep breath. "Just wait a minute, Doc. I'm not disputing the theoretical possibility of your thesis, but it seems to me it is out on direct evidence alone. We've never seen them, had no direct evidence of them. At least, not until lately. And we *should* have seen them."

"Not necessarily. Do ants see men? I doubt it."

"Yes-but, consarn it, a man has better eyes than an ant."

"Better eyes for what? For his own needs. Suppose the X-creatures are too high up, or too tenuous, or too fast-moving! for us to notice them. Even a thing as big and as solid and as slow as an airplane can go up high enough to go out of sight, even on a clear day. If X is tenuous and even semitransparent, we never *would* see them-not even as occultations of stars, or shadows against the moon-though as a matter of fact there have been some very strange stories of just that sort of thing."

Eisenberg got up and stomped up and down. "Do you mean to suggest," he demanded, "that creatures so insubstantial they can float in a soft vacuum built the Pillars?"

"Why not? Try explaining how a half-finished, naked embryo like *homo sapiens* built the Empire State Building."

Bill shook his head. "I don't get it."

"You don't try. Where do you think *this* came from? Graves held up one of the miraculous little water spheres.

"My guess is that life on this planet is split three ways, with almost no intercourse between the three. Ocean culture, Ian culture, and another-call it stratoculture. Maybe a fourth down under the crust-but we don't know. We know a little about life under the sea, because we are curious. But how much do they know of us? Do a few dozen bathysphere descents constitute an invasion? A fish that sees our bathysphere might go home and take to his bed with a sick headache, but he wouldn't talk about it, and he wouldn't be believed if he did. If a lot of fish see us and swear out affidavits, along comes a fish-psychologist and explains it as mass hallucination.

"No, it takes something at least as large and solid and permanent as the Pillars to have any effect on orthodox conceptions. Casual visitations have no real effect."

Eisenberg let his thoughts simmer for some time before commenting further. When he did, it was half to himself. "I don't believe it. I won't believe it!"

"Believe what?"

"Your theory. Look, Doc-if you are right, don't you see what it means? We're helpless, we're outclassed."

"I don't think they will bother much with human beings. They haven't, up till now."

"But that isn't it. Don't you see? We've had some dignity as a race. We've striven and accomplished things. Even when we failed, we had the tragic satisfaction of knowing that we were, nevertheless, superior and more able than the other animals. We've had faith in the race-we would accomplish great things yet. But if we are just one of the lower animals ourselves, what does our great work amount to? Me, I couldn't go on pretending to be a 'scientist' if I thought I was just a fish, mucking around in the bottom of a pool. My work wouldn't *signify* anything."

"Maybe it doesn't."

"No, maybe it doesn't." Eisenberg got up and paced the constricted area of their prison. "Maybe not. But I won't surrender to it. I *won't*! Maybe you're right. Maybe you're wrong. It doesn't seem to matter very much *where* the X people came from. One way or the other, they are a threat to our own kind. Doc, we've got to get out of here and warn them!"

"How?"

Graves was comatose a large part of the time before he died. Bill maintained an almost continuous watch over him, catching only occasional cat naps. There was little he could do for his friend, even though he did watch over him, but the spirit behind it was comfort to them both.

But he was dozing when Graves called his name. He woke at once, though the sound was a bare whisper. "Yes, Doc?"

"I can't talk much more, son. Thanks for taking care of me."

"Shucks, Doc."

"Don't forget what you're here for. Some day you'll get a break. Be ready for it and don't muff it. People have to be warned."

"I'll do it, Doc. I swear it."

"Good boy." And then, almost inaudibly, "G'night, son."

Eisenberg watched over the body until it was quite cold and had begun to stiffen. Then, exhausted by his long vigil and emotionally drained, he collapsed into a deep sleep.

When he woke up the body was gone.

It was hard to maintain his morale, after Graves was gone. It was all very well to resolve to warn the rest of mankind at the first possible chance, but there was the endless monotony to contend with. He had not even the relief from boredom afforded the condemned prisoner-the checking off of limited days. Even his "calendar" was nothing but a counting of his sleeps.

He was not quite sane much of the time, and it was the twice-tragic insanity of intelligence, aware of its own instability. He cycled between periods of elation and periods of extreme depression, in which he would have destroyed himself, had he the means.

During the periods of elation he made great plans for fighting against the X creatures-after he escaped. He was not sure how or when, but, momentarily, he was sure. He would lead the crusade himself; rockets could withstand the dead zone of the Pillars and the cloud; atomic bombs could destroy the dynamic balance of the Pillars. They would harry them and hunt them down; the globe would once again be the kingdom of man, to whom it belonged.

During the bitter periods of relapse he would realize clearly that the puny engineering of mankind would be of no force against the powers and knowledge of the creatures who built the Pillars, who kidnapped himself and Graves in such a casual and mysterious a fashion. They were outclassed.

Could codfish plan a sortie against the city of Boston? Would it matter if the chattering monkeys in Guatemala passed a resolution to destroy the navy?

They were outclassed. The human race had reached its highest point-the point at which it began to be aware that it was not the highest race, and the knowledge was death to it, one way or the other-the mere knowledge alone, even as the knowledge was now destroying him, Bill Eisenberg, himself. Eisenberg-*homo piscis*. Poor fish!

His overstrained mind conceived a means by which he might possibly warn his fellow beings. He could not escape as long as his surroundings remained unchanged. That was established and he accepted it; he no longer paced his cage. But certain things *did* leave his cage: leftover food, refuse-and Graves' body. If he died, his own body would be removed, he felt sure. Some, at least, of the things which had gone up the Pillars had come down again-he knew that. Was it not likely that the X creatures disposed of any heavy mass for which they had no further use by dumping it down the Wahini Pillar? He convinced himself that it was so.

Very well, his body would be returned to the surface, eventually. How could he use it to give a message to his fellow men, if it were found? He had no writing materials, nothing but his own body.

But the same make-do means which served him as a calendar gave him a way to write a message. He could make welts on his skin with a shred of thumbnail. If the same spot were irritated over and over again, not permitted to heal, scar tissue would form. By such means he was able to create permanent tattooing.

The letters had to be large; he was limited in space to the fore part of his body; involved argument was impossible. He was limited to a fairly simple warning. If he had been quite right in his mind, perhaps be would have been able to devise a more cleverly worded warning-but then he was not.

In time, he had covered his chest and belly with cicatrix tattooing worthy of a bushman chief. He was thin by then and of an unhealthy color; the welts stood out plainly.

His body was found floating in the Pacific, by Portuguese fishermen who could not read the message, but who turned it in to the harbor police of Honolulu. They, in turn, photographed the body, fingerprinted it, and disposed of it. The fingerprints were checked in Washington, and William Eisenberg, scientist, fellow of many distinguished societies, and high type of *homo sapiens,* was officially dead for the second time, with a new mystery attached to his name.

The cumbersome course of official correspondence unwound itself and the record of his reappearance reached the desk of Captain Blake, at a port in the South Atlantic. Photographs of the body were attached to the record, along with a short official letter telling the captain that, in view of his connection with the case, it was being provided for his information and recommendation.

Captain Blake looked at the photographs for the dozenth time. The message told in scar tissue was plain enough:

"BEWARE-CREATION TOOK EIGHT DAYS."

But what did it mean?

Of one thing he was sure-Eisenberg had not had those scars on his body when he disappeared from the *Mahan*. The man had lived for a considerable period after he was grabbed up by the fireball-that was certain. And he had learned something. What? The reference to the first chapter of Genesis did not escape him; it was not such as to be useful.

He turned to his desk and resumed making a draft in painful longhand of his-report to the bureau. "-the message in scar tissue adds to the mystery, rather than clarifying it. I am now forced to the opinion that the Pillars and the-La-Grange fireballs are connected in some way. The patrol around the Pillars should not be relaxed. If new opportunities or methods for investigating the nature of the Pillars should develop, they should be pursued thoroughly. I regret to say that I have nothing of the sort to suggest-"

He got up from his desk and walked to a small aquarium supported by gimbals from the inboard bulkhead, and stirred up the two goldfish therein with a forefinger. Noticing the level of the water, he turned to the pantry door. "Johnson, you've filled this bowl too full again. Pat's trying to jump out again!"

"I'll fix it, captain." The steward came out of the pantry with a small pan. ("Don't know why the Old Man keeps these tarnation fish. He ain't interested in 'em-*that's certain*.") Aloud he added: "That Pat fish don't want to stay in there, captain. Always trying to jump out. And he don't *like* me, captain."

"What's that?" Captain Blake's thoughts had already left the fish; he was worrying over the mystery again.

"I say that fish don't *like* me, captain. Tries to bite my finger every time I clean out the bowl"

"Don't be silly, Johnson."

Waldo

The act was billed as ballet tap—which does not describe it.

His feet created an intricate tympany of crisp, clean taps. There was a breath-catching silence as he leaped high into the air, higher than a human being should—and performed, while floating there, a fantastically improbable entrechats douze.

He landed on his toes, apparently poised, yet producing a fortissimo of thunderous taps.

The spotlights cut, the stage lights came up. The audience stayed silent a long moment, then realized it was time to applaud, and gave.

He stood facing them, letting the wave of their emotion sweep through him. He felt as if he could lean against it; it warmed him through to his bones.

It was wonderful to dance, glorious to be applauded, to be liked, to be wanted.

When the curtain rang down for the last time he let his dresser lead him away. He was always a little bit drunk at the end of a performance; dancing was a joyous intoxication even in rehearsal, but to have an audience lifting him, carrying him along, applauding him—he never grew jaded to it. It was always new and heartbreakingly wonderful.

"This way, chief. Give us a little smile." The flash bulb flared. "Thanks."

"Thank you. Have a drink." He motioned toward one end of his dressing room. They were all such nice fellows, such grand guys—the reporters, the photographers—all of them.

"How about one standing up?" He started to comply, but his dresser, busy with one slipper, warned him:

"You operate in half an hour."

"Operate?" the news photographer said. "What's it this time?"

"A left cerebrectomy," he answered.

"Yeah? How about covering it?"

"Glad to have you—if the hospital doesn't mind."

"We'll fix that."

Such grand guys.

"—trying to get a little different angle on a feature article." It was a feminine voice, near his ear. He looked around hastily, slightly confused. "For example, what made you decide to take up dancing as a career?"

"I'm sorry," he apologized. "I didn't hear you. I'm afraid it's pretty noisy in here."

"I said, why did you decide to take up dancing?"

"Well, now, I don't quite know how to answer that. I'm afraid we would have to go back quite a way—"

***

James Stevens scowled at his assistant engineer. "What have you got to look happy about?" he demanded.

"It's just the shape of my face," his assistant apologized. "Try laughing at this one: there's been another crash."

"Oh, cripes! Don't tell me—let me guess. Passenger or freight?"

"A Climax duo-freighter on the Chicago-Salt Lake shuttle, just west of North Platte. And, chief—"

"Yes?"

"The Big Boy wants to see you."

"That's interesting. That's very, very interesting. Mac—"

"Yeah, chief."

"How would you like to be Chief Traffic Engineer of North American Power-Air? I hear there's going to be a vacancy."

Mac scratched his nose. "Funny that you should mention that, chief. I was just going to ask you what kind of a recommendation you could give me in case I went back into civil engineering. Ought to be worth something to you to get rid of me."

"I'll get rid of you—right now. You bust out to Nebraska, find that heap before the souvenir hunters tear it apart, and bring back its deKalbs and its control board."

"Trouble with cops, maybe?"

"You figure it out. Just be sure you come back."

Stevens's office was located immediately adjacent to the zone power plant; the business offices of North American were located in a hill, a good three quarters of a mile away. There was the usual interconnecting tunnel; Stevens entered it and deliberately chose the low-speed slide in order to have more time to think before facing the boss.

By the time he arrived he had made up his mind, but he did not like the answer.

The Big Boy—Stanley F. Gleason, Chairman of the Board—greeted him quietly. "Come in, Jim. Sit down. Have a cigar."

Stevens slid into a chair, declined the cigar and pulled out a cigarette, which he lit while looking around. Besides the chief and himself, there were present Harkness, head of the legal staff, Dr. Rambeau, Stevens's opposite number for research, and Striebel, the chief engineer for city power. Us five and no more, he thought grimly —all the heavyweights and none of the middleweights. Heads will roll!—starting with mine.

"Well," he said, almost belligerently, "we're all here. Who's got the cards? Do we cut for deal?"

Harkness looked faintly distressed by the impropriety; Rambeau seemed too sunk in some personal gloom to pay any attention to wisecracks in bad taste. Gleason ignored it. "We've been trying to figure a way out of our troubles, James. I left word for you on the chance that you might not have left."

"I stopped by simply to see if I had any personal mail," Stevens said bitterly. "Otherwise I'd be on the beach at Miami, turning sunshine into vitamin D."

"I know," said Gleason, "and I'm sorry. You deserve that vacation, Jimmie. But the situation has gotten worse instead of better. Any ideas?"

"What does Dr. Rambeau say?"

Rambeau looked up momentarily. "The deKalb receptors can't fail," he stated.

"But they do."

"They can't. You've operated them improperly." He sunk back into his personal prison.

Stevens turned back to Gleason and spread his hands. "So far as I know, Dr. Rambeau is right—but if the fault lies in the engineering department, I haven't been able to locate it. You can have my resignation."

"I don't want your resignation," Gleason said gently. "What I want is results. We have a responsibility to the public."

"And to the stockholders," Harkness put in.

"That will take care of itself if we solve the other," Gleason observed. "How about it, Jimmie? Any suggestions?"

Stevens bit his lip. "Just one," he announced, "and one I don't like to make. Then I look for a job peddling magazine subscriptions."

"So? Well, what is it?"

"We've got to consult Waldo."

Rambeau suddenly snapped out of his apathy. "What! That charlatan? This is a matter of science."

Harkness said, "Really, Dr. Stevens—"

Gleason held up a hand. "Dr. Stevens' suggestion is logical. But I'm afraid it's a little late, Jimmie. I talked with him last week."

Harkness looked surprised; Stevens looked annoyed as well. "Without letting me know?"

"Sorry, Jimmie. I was just feeling him out. But it's no good. His terms, to us, amount to confiscation."

"Still sore over the Hathaway patents?"

"Still nursing his grudge."

"You should have let me handle the matter," Harkness put in. "He can't do this to us—there is public interest involved. Retain him, if need be, and let the fee be adjudicated in equity. I'll arrange the details."

"I'm afraid you would," Gleason said dryly. "Do you think a court order will make a hen lay an egg?"

Harkness looked indignant, but shut up.

Stevens continued, "I would not have suggested going to Waldo if I had not had an idea as how to approach him. I know a friend of his—"

"A friend of Waldo? I didn't know he had any."

"This man is sort of an uncle to him—his first physician. With his help I might get on Waldo's good side."

Dr. Rambeau stood up. "This is intolerable," he announced. "I must ask you to excuse me." He did not wait for an answer, but strode out, hardly giving the door time to open in front of him.

Gleason followed his departure with worried eyes. "Why does he take it so hard, Jimmie? You would think he hated Waldo personally."

"Probably he does, in a way. But it's more than that; his whole universe is toppling. For the last twenty years, ever since Pryor's reformulation of the General Field Theory did away with Heisenberg's Uncertainty Principle, physics has been considered an exact science. The power failures and transmission failures we have been suffering are a terrific nuisance to you and to me, but to Dr. Rambeau they amount to an attack on his faith. Better keep an eye on him."

"Why?"

"Because he might come unstuck entirely. It's a pretty serious matter for a man's religion to fail him."

"Hm-m-m. How about yourself? Doesn't it hit you just as hard?"

"Not quite. I'm an engineer—from Rambeau's point of view just a highpriced tinker. Difference in orientation. Not but what I'm pretty upset."

The audio circuit of the communicator on Gleason's desk came to life. "Calling Chief Engineer Stevens—calling Chief Engineer Stevens." Gleason flipped the tab.

"He's here. Go ahead."

"Company code, translated. Message follows: 'Cracked up four miles north of Cincinnati. Shall I go on to Nebraska, or bring in the youknow-what from my own crate?' Message ends. Signed 'Mac.'"

"Tell him to walk back!" Stevens said savagely.

"Very well, sir." The instrument cut off.

"Your assistant?" asked Gleason.

"Yes. That's about the last straw, chief. Shall I wait and try to analyze this failure, or shall I try to see Waldo?"

"Try to see Waldo."

"O.K. If you don't hear from me, just send my severance pay care of Palmdale Inn, Miami. I'll be the fourth beachcomber from the right."

Gleason permitted himself an unhappy smile. "If you don't get results, I'll be the fifth. Good luck."

"So long."

When Stevens had gone, Chief Stationary Engineer Striebel spoke up for the first time. "If the power to the cities fails," he said softly, "you know where I'll be, don't you?"

"Where? Beachcomber number six?"

"Not likely. I'll be number one in my spot—first man to be lynched."

"But the power to the cities can't fail. You've got too many cross-connects and safety devices."

"Neither can the deKalbs fail, supposedly. Just the same—think about Sublevel 7 in Pittsburgh, with the lights out. Or, rather, don't think about it!"

***

Doc Grimes let himself into the aboveground access which led into his home, glanced at the announcer, and noted with mild, warm interest that someone close enough to him to possess his house combination was inside. He moved ponderously downstairs, favoring his game leg, and entered the lounging room.

"Hi, Doc!" James Stevens got up when the door snapped open and came forward to greet him.

"H'lo, James. Pour yourself a drink. I see you have. Pour me one."

"Right."

While his friend complied, Grimes shucked himself out of the outlandish anachronistic greatcoat he was wearing and threw it more or less in the direction of the robing alcove. It hit the floor heavily, much more heavily than its appearance justified, despite its unwieldy bulk. It clunked.

Stooping, he peeled off thick overtrousers as massive as the coat. He was dressed underneath in conventional business tights in blue and sable. It was not a style that suited him. To an eye unsophisticated in matters of civilized dress—let us say the mythical man-from-Antares—he might have seemed uncouth, even unsightly. He looked a good bit like an elderly fat beetle.

James Stevens's eye made no note of the tights, but he looked with disapproval on the garments which had just been discarded. "Still wearing that fool armor," he commented.

"Certainly."

"Damn it, Doc—you'll make yourself sick, carrying that junk around. It's unhealthy."

"Danged sight sicker if I don't."

"Rats! *I* don't get sick, and *I* don't wear armor—outside the lab."

"You should." Grimes walked over to where Stevens had reseated himself. "Cross your knees." Stevens complied; Grimes struck him smartly below the kneecap with the edge of his palm. The reflex jerk was barely perceptible. "Lousy," he remarked, then peeled back his friend's right eyelid.

"You're in poor shape," he added after a moment.

Stevens drew away impatiently. "I'm all right. It's you we're talking about."

"What about me?"

"Well—Damnation, Doc, you're throwing away your reputation. They talk about you."

Grimes nodded. "I know. 'Poor old Gus Grimes—a slight touch of cerebral termites.' Don't worry about my reputation; I've always been out of step. What's your fatigue index?"

"I don't know. It's all right."

"It is, eh? I'll wrestle you, two falls out of three."

Stevens rubbed his eyes. "Don't needle me, Doc. I'm rundown. I know that, but it isn't anything but overwork."

"Humph! James, you are a fair-to-middlin' radiation physicist—"

"Engineer."

"—engineer. But you're no medical man. You can't expect to pour every sort of radiant energy through the human system year after year and not pay for it. It wasn't designed to stand it."

"But I wear armor in the lab. You know that."

"Surely. But how about outside the lab?"

"But—Look, Doc—I hate to say it, but your whole thesis is ridiculous. Sure there is radiant energy in the air these days, but nothing harmful. All the colloidal chemists agree—"

"Colloidal, fiddlesticks!"

"But you've got to admit that biological economy is a matter of colloidal chemistry."

"I've got to admit nothing. I'm not contending that colloids are not the fabric of living tissue—they are. But I've maintained for forty years that it was dangerous to expose living tissue to assorted radiation without being sure of the effect. From an evolutionary standpoint the human animal is habituated to and adapted to only the natural radiation of the sun—and he can't stand that any too well, even under a thick blanket of ionization. Without that blanket—Did you ever see a solar-X type cancer?"

"Of course not."

"No, you're too young. *I* have. Assisted at the autopsy of one, when I was an intern. Chap was on the Second Venus Expedition. Four hundred and thirty-eight cancers we counted in him, then gave up."

"Solar-X is whipped."

"Sure it is. But it ought to be a warning. You bright young squirts can cook up things in your labs that we medicos can't begin to cope with. We're behind—bound to be. We usually don't know what's happened until the damage is done. This time you've torn it." He sat down heavily and suddenly looked as tired and whipped as did his younger friend.

Stevens felt the sort of tongue-tied embarrassment a man may feel when a dearly beloved friend falls in love with an utterly worthless person. He wondered what he could say that would not seem rude.

He changed the subject. "Doc, I came over because I had a couple of things on my mind—"

"Such as?"

"Well, a vacation for one. I know I'm rundown. I've been overworked, and a vacation seems in order. The other is your pal, Waldo."

"Huh?"

"Yeah. Waldo Farthingwaite-Jones, bless his stiff-necked, bad-tempered heart."

"Why Waldo? You haven't suddenly acquired an interest in myasthenia gravis, have you?"

"Well, no. I don't care what's wrong with him physically. He can have hives, dandruff, or the galloping never-get-overs, for all I care. I hope he has. What I want is to pick his brains."

"So?"

"I can't do it alone. Waldo doesn't help people; he uses them. You're his only normal contact with people."

"That is not entirely true—"

"Who else?"

"You misunderstand me. He has no normal contacts. I am simply the only person who dares to be rude to him."

"But I thought—Never mind. D'you know, this is an inconvenient setup? Waldo is the man we've got to have. Why should it come about that a genius of his caliber should be so unapproachable, so immune to ordinary social demands? Oh, I know his disease has a lot to do with it, but why should this man have this disease? It's an improbable coincidence."

"It's not a matter of his infirmity," Grimes told him. "Or, rather, not in the way you put it. His weakness is his genius, in a way—"

"Huh?"

"Well—" Grimes turned his sight inward, let his mind roam back over his long association—lifelong, for Waldo—with this particular patient. He remembered his subliminal misgivings when he delivered the child. The infant had been sound enough, superficially, except for a slight blueness. But then lots of babies were somewhat cyanotic in the delivery room. Nevertheless, he had felt a slight reluctance to give it the tunk on the bottom, the slap which would shock it into taking its first lungful of air.

But he had squelched his own feelings, performed the necessary "laying on of hands," and the freshly born human had declared its independence with a satisfactory squall. There was nothing else he could have done; he was a young G.P. then, who took his Hippocratic oath seriously. He still took it seriously, he supposed, even though he sometimes referred to it as the "hypocritical" oath. Still, he had been right in his feelings; there *had* been something rotten about that child —something that was not entirely *myasthenia gravis.*

He had felt sorry for the child at first, as well as having an irrational feeling of responsibility for its condition. Pathological muscular weakness is an almost totally crippling condition, since the patient has no unaffected limbs to retrain into substitutes. There the victim must lie, all organs, limbs, and functions present, yet so pitifully, completely weak as to be unable to perform any normal function. He must spend his life in a condition of exhausted collapse, such as you or I might reach at the finish line of a grueling cross-country run. No help for him, and no relief.

During Waldo's childhood he had hoped constantly that the child would die, since he was so obviously destined for tragic uselessness, while simultaneously, as a physician, doing everything within his own skill and the skill of numberless consulting specialists to keep the child alive and cure it.

Naturally, Waldo could not attend school; Grimes ferreted out sympathetic tutors. He could indulge in no normal play; Grimes invented sickbed games which would not only stimulate Waldo's imagination but encourage him to use his flabby muscles to the full, weak extent of which he was capable.

Grimes had been afraid that the handicapped child, since it was not subjected to the usual maturing stresses of growing up, would remain infantile. He knew now—had known for a long time—that he need not have worried. Young Waldo grasped at what little life was offered him, learned thirstily, tried with a sweating tenseness of will to force his undisciplined muscles to serve him.

He was clever in thinking of dodges whereby to circumvent his muscular weakness. At seven he devised a method of controlling a spoon with two hands, which permitted him—painfully—to feed himself. His first mechanical invention was made at ten.

It was a gadget which held a book for him, at any angle, controlled lighting for the book, and turned its pages. The gadget responded to finger tip pressure on a simple control panel. Naturally, Waldo could not build it himself, but he could conceive it, and explain it; the Farthingwaite-Joneses could well afford the services of a designing engineer to build the child's conception.

Grimes was inclined to consider this incident, in which the child Waldo acted in a role of intellectual domination over a trained mature adult neither blood relation nor servant, as a landmark in the psychological process whereby Waldo eventually came to regard the entire human race as his servants, his *hands*, present or potential.

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"What's eating you, Doc?"

"Eh? Sorry, I was daydreaming. See here, son—you mustn't be too harsh on Waldo. I don't *like* him myself. But you must take him as a whole."

"*You* take him."

"*Shush*. You spoke of needing his genius. He wouldn't have a genius if he had not been crippled. You didn't know his parents. They were good stock—fine, intelligent people—but nothing spectacular. Waldo's potentialities weren't any greater than theirs, but he had to do more with them to accomplish anything. He had to do everything the hard way. He *had* to be clever."

"Sure. Sure, but why should he be so utterly poisonous? Most big men aren't."

"Use your head. To get anywhere in his condition he had to develop a will, a driving one-track mind, with a total disregard for any other considerations. What would you expect him to be but stinking selfish?"

"I'd—Well, never mind. We need him and that's that."

"Why?"

Stevens explained.

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It may plausibly be urged that the shape of a culture—its mores, evaluations, family organizations, eating habits, living patterns, pedagogical methods, institutions, forms of government, and so forth—arise from the economic necessities of its technology. Even though the thesis be too broad and much oversimplified, it is nonetheless true that much which characterized the long peace which followed the constitutional establishment of the United Nations grew out of the technologies which were hothouse-forced by the needs of the belligerents in the war of the forties. Up to that time broadcast and beamcast were used only for commercial radio, with rare exceptions. Even telephony was done almost entirely by actual metallic connection from one instrument to another. If a man in Monterey wished to speak to his wife or partner in Boston, a physical, copper neuron stretched bodily across the continent from one to the other.

Radiant power was then a hop dream, found in Sunday supplements and comic books.

A concatenation—no, a meshwork—of new developments was necessary before the web of copper covering the continent could be dispensed with. Power could not be broadcast economically; it was necessary to wait for the coaxial beam—a direct result of the imperative military shortages of the Great War. Radio telephony could not replace wired telephony until ultra microwave techniques made room in the ether, so to speak, for the traffic load. Even then it was necessary to invent a tuning device which could be used by a nontechnical person—a ten-year-old child, let us say—as easily as the dial selector which was characteristic of the commercial wired telephone of the era then terminating.

Bell Laboratories cracked that problem; the solution led directly to the radiant power receptor, domestic type, keyed, sealed, and metered. The way was open for commercial radio power transmission—except in one respect: efficiency. Aviation waited on the development of the Otto-cycle engine; the Industrial Revolution waited on the steam engine; radiant power waited on a really cheap, plentiful power source. Since radiation of power is inherently wasteful, it was necessary to have power cheap and plentiful enough to waste.

The same year brought atomic energy. The physicists working for the United States Army—the United States of North America had its own army then—produced a superexplosive; the notebooks recording their tests contained, when properly correlated, everything necessary to produce almost any other sort of nuclear reaction, even the so-called Solar Phoenix, the hydrogen-helium cycle, which is the source of the sun's power.

Radiant power became economically feasible—and inevitable.

The reaction whereby copper is broken down into phosphorus, silicon29 and helium3, plus degenerating chain reactions, was one of the several cheap and convenient means developed for producing unlimited and practically free power.

Of course Stevens included none of this in his explanation to Grimes. Grimes was absentmindedly aware of the whole dynamic process; he had seen radiant power grow up, just as his grandfather had seen the development of aviation. He had seen the great transmission lines removed from the sky—"mined" for their copper; he had seen the heavy cables being torn from the dug-up streets of Manhattan. He might even recall his first independent-unit radiotelephone with its somewhat disconcerting double dial—he had gotten a lawyer in Buenos Aires on it when attempting to reach his neighborhood delicatessen. For two weeks he made all his local calls by having them relayed back from South America before he discovered that it made a difference which dial he used first.

At that time Grimes had not yet succumbed to the new style in architecture. The London Plan did not appeal to him; he liked a house aboveground, where he could see it. When it became necessary to increase the floor space in his offices, he finally gave in and went subsurface, not so much for the cheapness, convenience, and general all-around practicability of living in a tri-conditioned cave, but because he had already become a little worried about the possible consequences of radiation pouring through the human body. The fused-earth walls of his new residence were covered with lead; the roof of the cave had a double thickness. His hole in the ground was as near radiation proof as he could make it.

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"—the meat of the matter," Stevens was saying, "is that the delivery of power to transportation units has become erratic as the devil. Not enough yet to tie up traffic, but enough to be very disconcerting. There have been some nasty accidents; we can't keep hushing them up forever. I've got to do something about it."

"Why?"

"'Why?' Don't be silly. In the first place as traffic engineer for NAPA my bread and butter depends on it. In the second place the problem is upsetting in itself. A properly designed piece of mechanism ought to work—all the time, every time. These don't, and we can't find out why not. Our staff mathematical physicists have about reached the babbling stage."

Grimes shrugged. Stevens felt annoyed by the gesture. "I don't think you appreciate the importance of this problem, Doc. Have you any idea of the amount of horsepower involved in transportation? Counting both private and commercial vehicles and common carriers, North American Power-Air supplies more than half the energy used in this continent. We have to be right. You can add to that our city-power affiliate. No trouble there—yet. But we don't dare think what a city-power breakdown would mean."

"I'll give you a solution."

"Yeah? Well, give."

"Junk it. Go back to oil-powered and steam-powered vehicles. Get rid of these damned radiant-powered deathtraps."

"Utterly impossible. You don't know what you're saying. It took more than fifteen years to make the changeover. Now we're geared to it. Gus, if NAPA closed up shop, half the population of the northwest seaboard would starve, to say nothing of the lake states and the Philly-Boston axis."

"Hrrmph—Well, all I've got to say is that that might be better than the slow poisoning that is going on now."

Stevens brushed it away impatiently. "Look, Doc, nurse a bee in your bonnet if you like, but don't ask me to figure it into my calculations. Nobody else sees any danger in radiant power."

Grimes answered mildly. "Point is, son, they aren't looking in the right place. Do you know what the high jump record was last year?"

"I never listen to the sport news."

"Might try it sometime. The record leveled off at seven foot two, 'bout twenty years back. Been dropping ever since. You might try graphing athletic records against radiation in the air—artificial radiation. Might find some results that would surprise you."

"Shucks, everybody knows there has been a swing away from heavy sports. The sweat-and-muscles fad died out, that's all. We've simply advanced into a more intellectual culture."

"Intellectual, hogwash! People quit playing tennis and such because they are tired all the time. Look at you. You're a mess."

"Don't needle me, Doc."

"Sorry. But there has been a clear deterioration in the performance of the human animal. If we had decent records on such things I could prove it, but any physician who's worth his salt can see it, if he's got eyes in him and isn't wedded to a lot of fancy instruments. I can't prove what causes it, not yet, but I've a damned good hunch that it's caused by the stuff you peddle."

"Impossible. There isn't a radiation put on the air that hasn't been tested very carefully in the bio labs. We're neither fools nor knaves."

"Maybe you don't test 'em long enough. I'm not talking about a few hours, or a few weeks; I'm talking about the cumulative effects of years of radiant frequencies pouring through the tissues. What does that do?"

"Why, nothing—I believe."

"You believe, but you don't know. Nobody has ever tried to find out. F'rinstance—what effect does sunlight have on silicate glass? Ordinarily you would say 'none,' but you've seen desert glass?"

"That bluish-lavender stuff? Of course."

"Yes. A bottle turns colored in a few months in the Mojave Desert. But have you ever seen the window panes in the old houses on Beacon Hill?"

"I've never been on Beacon Hill."

"O.K., then I'll tell you. Same phenomena—only it takes a century or more, in Boston. Now tell me—you savvy physics—could you measure the change taking place in those Beacon Hill windows?"

"Mm-m-m—probably not."

"But it's going on just the same. Has anyone ever tried to measure the changes produced in human tissue by thirty years of exposure to ultra shortwave radiation?"

"No, but—"

"No 'buts.' I see an effect. I've made a wild guess at a cause. Maybe I'm wrong. But I've felt a lot more spry since I've taken to invariably wearing my lead overcoat whenever I go out."

Stevens surrendered the argument. "Maybe you're right, Doc. I won't fuss with you. How about Waldo? Will you take me to him and help me handle him?"

"When do you want to go?"

"The sooner the better."

"Now?"

"Suits."

"Call your office."

"Are you ready to leave right now? It would suit me. As far as the front office is concerned, I'm on vacation; nevertheless, I've got this on my mind. I want to get at it."

"Quit talking and git."

They went topside to where their cars were parked. Grimes headed toward his, a big-bodied, old-fashioned Boeing family landau. Stevens checked him. "You aren't planning to go in that? It 'u'd take us the rest of the day."

"Why not? She's got an auxiliary space drive, and she's tight. You could fly from here to the Moon and back."

"Yes, but she's so infernal slow. We'll use my 'broomstick.'"

Grimes let his eyes run over his friend's fusi-formed little speedster. Its body was as nearly invisible as the plastic industry could achieve. A surface layer, two molecules thick, gave it a refractive index sensibly identical with that of air. When perfectly clean it was very difficult to see. At the moment it had picked up enough casual dust and water vapor to be faintly seen—a ghost of a soap bubble of a ship.

Running down the middle, clearly visible through the walls, was the only metal part of the ship—the shaft, or, more properly, the axis core, and the spreading sheaf of deKalb receptors at its terminus. The appearance was enough like a giant witch's broom to justify the nickname. Since the saddles, of transparent plastic, were mounted tandem over the shaft so that the metal rod passed between the legs of the pilot and passengers, the nickname was doubly apt.

"Son," Grimes remarked, "I know I ain't pretty, nor am I graceful. Nevertheless, I retain a certain residuum of self-respect and some shreds of dignity. I am not going to tuck that thing between my shanks and go scooting through the air on it."

"Oh, rats! You're old-fashioned."

"I may be. Nevertheless, any peculiarities I have managed to retain to my present age I plan to hang onto. No."

"Look—I'll polarize the hull before we raise. How about it?"

"Opaque?"

"Opaque."

Grimes slid a regretful glance at his own frumpish boat, but assented by fumbling for the barely visible port of the speedster. Stevens assisted him; they climbed in and straddled the stick.

"Atta boy, Doc," Stevens commended, "I'll have you there in three shakes. That tub of yours probably won't do over five hundred, and Wheelchair must be all of twenty-five thousand miles up."

"I'm never in a hurry," Grimes commented, "and don't call Waldo's house 'Wheelchair'—not to his face."

"I'll remember," Stevens promised. He fumbled, apparently in empty air; the hull suddenly became dead black, concealing them. It changed as suddenly to mirror bright; the car quivered, then shot up out of sight.

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Waldo F. Jones seemed to be floating in thin air at the center of a spherical room. The appearance was caused by the fact that he was indeed floating in air. His house lay in a free orbit, with a period of just over twenty-four hours. No spin had been impressed on his home; the pseudo gravity of centrifugal force was the thing he wanted least. He had left earth to get away from its gravitational field; he had not been down to the surface once in the seventeen years since his house was built and towed into her orbit; he never intended to do so for any purpose whatsoever.

Here, floating free in space in his own airconditioned shell, he was almost free of the unbearable lifelong slavery to his impotent muscles. What little strength he had he could spend economically, in movement, rather than in fighting against the tearing, tiring weight of the Earth's thick field.

Waldo had been acutely interested in space flight since early boyhood, not from any desire to explore the depths, but because his boyish, overtrained mind had seen the enormous advantage—to him—in weightlessness. While still in his teens he had helped the early experimenters in space flight over a hump by supplying them with a control system which a pilot could handle delicately while under the strain of two or three gravities.

Such an invention was no trouble at all to him; he had simply adapted manipulating devices which he himself used in combating the overpowering weight of one gravity. The first successful and safe rocket ship contained relays which had once aided Waldo in moving himself from bed to wheelchair.

The deceleration tanks, which are now standard equipment for the lunar mail ships, traced their parentage to a flotation tank in which Waldo habitually had eaten and slept up to the time when he left the home of his parents for his present, somewhat unique, home. Most of his basic inventions had originally been conceived for his personal convenience, and only later adapted for commercial exploitation. Even the ubiquitous and grotesquely humanoid gadgets known universally as "waldoes"—Waldo F. Jones's Synchronous Reduplicating Pantograph, Pat. #296,001,437, new series, et al—passed through several generations of development and private use in Waldo's machine shop before he redesigned them for mass production. The first of them, a primitive gadget compared with the waldoes now to be found in every shop, factory, plant, and warehouse in the country, had been designed to enable Waldo to operate a metal lathe.

Waldo had resented the nickname the public had fastened on them —it struck him as overly familiar—but he had coldly recognized the business advantage to himself in having the public identify him verbally with a gadget so useful and important.

When the newscasters tagged his spacehouse "Wheelchair," one might have expected him to regard it as more useful publicity. That he did not so regard it, that he resented it and tried to put a stop to it, arose from another and peculiarly Waldo-ish fact: Waldo did not think of himself as a cripple.

He saw himself not as a crippled human being, but as something higher than human, the next step up, a being so superior as not to need the coarse, brutal strength of the smooth apes. Hairy apes, smooth apes, then Waldo—so the progression ran in his mind. A chimpanzee, with muscles that hardly bulge at all, can tug as high as fifteen hundred pounds with one hand. This Waldo had proved by obtaining one and patiently enraging it into full effort. A well-developed man can grip one hundred and fifty pounds with one hand. Waldo's own grip, straining until the sweat sprang out, had never reached fifteen pounds.

Whether the obvious inference were fallacious or true, Waldo believed in it, evaluated by it. Men were over-muscled canaille, smooth chimps. He felt himself at least ten times superior to them.

He had much to go on.

Though floating in air, he was busy, quite busy. Although he never went to the surface of the Earth his business was there. Aside from managing his many properties he was in regular practice as a consulting engineer, specializing in motion analysis. Hanging close to him in the room were the paraphernalia necessary to the practice of his profession. Facing him was a four-by-five color-stereo television receptor. Two sets of coordinates, rectilinear and polar, crosshatched it. Another smaller receptor hung above it and to the right. Both receptors were fully recording, by means of parallel circuits conveniently out of the way in another compartment.

The smaller receptor showed the faces of two men watching him. The larger showed a scene inside a large shop, hangarlike in its proportions. In the immediate foreground, almost full size, was a grinder in which was being machined a large casting of some sort. A workman stood beside it, a look of controlled exasperation on his face.

"He's the best you've got," Waldo stated to the two men in the smaller screen. "To be sure, he is clumsy and does not have the touch for fine work, but he is superior to the other morons you call machinists."

The workman looked around, as if trying to locate the voice. It was evident that he could hear Waldo, but that no vision receptor had been provided for him. "Did you mean that crack for me?" he said harshly.

"You misunderstand me, my good man," Waldo said sweetly. "I was complimenting you. I actually have hopes of being able to teach you the rudiments of precision work. Then we shall expect you to teach those butterbrained oafs around you. The gloves, please."

Near the man, mounted on the usual stand, were a pair of primary waldoes, elbow length and human digited. They were floating on the line, in parallel with a similar pair physically in front of Waldo. The secondary waldoes, whose actions could be controlled by Waldo himself by means of his primaries, were mounted in front of the power tool in the position of the operator.

Waldo's remark had referred to the primaries near the workman. The machinist glanced at them, but made no move to insert his arms in them. "I don't take no orders from nobody I can't see," he said flatly. He looked sidewise out of the scene as he spoke.

"Now, Jenkins," commenced one of the two men in the smaller screen.

Waldo sighed. "I really haven't the time or the inclination to solve your problems of shop discipline. Gentlemen, please turn your pickup, so that our petulant friend may see me."

The change was accomplished; the workman's face appeared in the background of the smaller of Waldo's screens, as well as in the larger. "There—is that better?" Waldo said gently. The workman grunted.

"Now... your name, please?"

"Alexander Jenkins."

"Very well, friend Alec—the gloves."

Jenkins thrust his arms into the waldoes and waited. Waldo put his arms into the primary pair before him; all three pairs, including the secondary pair mounted before the machine, came to life. Jenkins bit his lip, as if he found unpleasant the sensation of having his fingers manipulated by the gauntlets he wore.

Waldo flexed and extended his fingers gently; the two pairs of waldoes in the screen followed in exact, simultaneous parallelism. "Feel it, my dear Alec," Waldo advised. "Gently, gently—the sensitive touch. Make your muscles work for you." He then started hand movements of definite pattern; the waldoes at the power tool reached up, switched on the power, and began gently, gracefully, to continue the machining of the casting. A mechanical hand reached down, adjusted a vernier, while the other increased the flow of oil cooling the cutting edge. "Rhythm, Alec, rhythm. No jerkiness, no unnecessary movement. Try to get in time with me."

The casting took shape with deceptive rapidity, disclosed what it was—the bonnet piece for an ordinary three-way nurse. The chucks drew back from it; it dropped to the belt beneath, and another rough casting took its place. Waldo continued with unhurried skill, his finger motions within his waldoes exerting pressure which would need to be measured in fractions of ounces, but the two sets of waldoes, paralleled to him thousands of miles below, followed his motions accurately and with force appropriate to heavy work at hand.

Another casting landed on the belt—several more. Jenkins, although not called upon to do any work in his proper person, tired under the strain of attempting to anticipate and match Waldo's motions. Sweat dripped down his forehead, ran off his nose, accumulated on his chin. Between castings he suddenly withdrew his arms from the paralleled primaries. "That's enough," he announced.

"One more, Alec. You are improving."

"No!" He turned as if to walk off. Waldo made a sudden movement—so sudden as to strain him, even in his weight-free environment. One steel hand of the secondary waldoes lashed out, grasped Jenkins by the wrist.

"Not so fast, Alec."

"Let go of me!"

"Softly, Alec, softly. You'll do as you are told, won't you?" The steel hand clamped down hard, twisted. Waldo had exerted all of two ounces of pressure.

Jenkins grunted. The one remaining spectator—one had left soon after the lesson started—said, "Oh, I say, Mr. Jones!"

"Let him obey, or fire him. You know the terms of my contract."

There was a sudden cessation of stereo and sound, cut from the Earth end. It came back on a few seconds later. Jenkins was surly, but no longer recalcitrant. Waldo continued as if nothing had happened. "Once more, my dear Alec."

When the repetition had been completed, Waldo directed, "Twenty times, wearing the wrist and elbow lights with the chronanalyzer in the picture. I shall expect the superposed strips to match, Alec." He cut off the larger screen without further words and turned to the watcher in the smaller screen. "Same time tomorrow, McNye. Progress is satisfactory. In time we'll turn this madhouse of yours into a modern plant." He cleared that screen without saying good-by.

Waldo terminated the business interview somewhat hastily, because he had been following with one eye certain announcements on his own local information board. A craft was approaching his house. Nothing strange about that; tourists were forever approaching and being pushed away by his autoguardian circuit. But this craft had the approach signal, was now clamping to his threshold flat. It was a broomstick, but he could not place the license number. Florida license. Whom did he know with a Florida license?

He immediately realized that he knew no one who possessed his approach signal—that list was very short—and who could also reasonably be expected to sport a Florida license. The suspicious defensiveness with which he regarded the entire world asserted itself; he cut in the circuit whereby he could control by means of his primary waldoes the strictly illegal but highly lethal inner defenses of his home. The craft was opaqued; he did not like that.

A youngish man wormed his way out. Waldo looked him over. A stranger—face vaguely familiar perhaps. An ounce of pressure in the primaries and the face would cease to be a face, but Waldo's actions were under cold cortical control; he held his fire. The man turned, as if to assist another passenger. Yes, there was another. Uncle Gus!—but the doddering old fool had brought a stranger with him. He knew better than that. He knew how Waldo felt about strangers!

Nevertheless, he released the outer lock of the reception room and let them in.

Gus Grimes snaked his way through the lock, pulling himself from one handrail to the next, and panting a little as he always did when forced to move weight free. Matter of diaphragm control, he told himself as he always did; can't be the exertion. Stevens streaked in after him, displaying a groundhog's harmless pride in handling himself well in space conditions. Grimes arrested himself just inside the reception room, grunted, and spoke to a man-sized dummy waiting there. "Hello, Waldo."

The dummy turned his eyes and head slightly. "Greetings, Uncle Gus. I do wish you would remember to phone before dropping in. I would have had your special dinner ready."

"Never mind. We may not be here that long. Waldo, this is my friend, Jimmie Stevens."

The dummy faced Stevens. "How do you do, Mr. Stevens," the voice said formally. "Welcome to Freehold."

"How do you do, Mr. Jones," Stevens replied, and eyed the dummy curiously. It was surprisingly lifelike; he had been taken in by it at first, A "reasonable facsimile." Come to think of it, he had heard of this dummy. Except in vision screen few had seen Waldo in his own person. Those who had business at Wheelchair—no, "Freehold," he must remember that—those who had business at Freehold heard a voice and saw this simulacrum.

"But you must stay for dinner, Uncle Gus," Waldo continued. "You can't run out on me like that; you don't come often enough for that. I can stir something up."

"Maybe we will," Grimes admitted. "Don't worry about the menu. You know me. I can eat a turtle with the shell."

It had really been a bright idea, Stevens congratulated himself, to get Doc Grimes to bring him. Not here five minutes and Waldo was insisting on them staying for dinner. Good omen!

He had not noticed that Waldo had addressed the invitation to Grimes alone, and that it had been Grimes who had assumed the invitation to be for both of them.

"Where are you, Waldo?" Grimes continued. "In the lab?" He made a tentative movement, as if to leave the reception room.

"Oh, don't bother," Waldo said hastily. "I'm sure you will be more comfortable where you are. Just a moment and I will put some spin on the room so that you may sit down."

"What's eating you, Waldo?" Grimes said testily. "You know I don't insist on weight. And I don't care for the company of your talking doll. I want to see you." Stevens was a little surprised by the older man's insistence; he had thought it considerate of Waldo to offer to supply acceleration. Weightlessness put him a little on edge.

Waldo was silent for an uncomfortable period. At last he said frigidly, "Really, Uncle Gus, what you ask is out of the question. You must be aware of that."

Grimes did not answer him. Instead, he took Stevens's arm. "Come on, Jimmie. We're leaving."

"Why, Doc! What's the matter?"

"Waldo wants to play games. I don't play games."

"But—"

"Ne' mind! Come along. Waldo, open the lock."

"Uncle Gus!"

"Yes, Waldo?"

"Your guest—you vouch for him?"

"Naturally, you dumb fool, else I wouldn't have brought him."

"You will find me in my workshop. The way is open."

Grimes turned to Stevens. "Come along, son."

Stevens trailed after Grimes as one fish might follow another, while taking in with his eyes as much of Waldo's fabulous house as he could see. The place was certainly unique, he conceded to himself—unlike anything he had ever seen. It completely lacked up-and-down orientation. Space craft, even space stations, although always in free fall with respect to any but internally impressed accelerations, invariably are designed with up-and-down; the up-and-down axis of a ship is determined by the direction of its accelerating drive; the up-and-down of a space station is determined by its centrifugal spin.

Some few police and military craft use more than one axis of acceleration; their up-and-down shifts, therefore, and their personnel, must be harnessed when the ship maneuvers. Some space stations apply spin only to living quarters. Nevertheless, the rule is general; human beings are used to weight; all their artifacts have that assumption implicit in their construction—except Waldo's house.

It is hard for a groundhog to dismiss the notion of weight. We seem to be born with an instinct which demands it. If one thinks of a vessel in a free orbit around the Earth, one is inclined to think of the direction toward the Earth as "down," to think of oneself as standing or sitting on that wall of the ship, using it as a floor. Such a concept is completely mistaken. To a person inside a freely falling body there is no sensation of weight whatsoever and no direction of up-and-down, except that which derives from the gravitational field of the vessel itself. As for the latter, neither Waldo's house nor any space craft as yet built is massive enough to produce a field dense enough for the human body to notice it. Believe it or not, that is true. It takes a mass as gross as a good-sized planetoid to give the human body a feeling of weight.

It may be objected that a body in a free orbit around the Earth is not a freely falling body. The concept involved is human, Earth surface in type, and completely erroneous. Free flight, free fall, and free orbit are equivalent terms. The Moon falls constantly toward the Earth; the Earth falls constantly toward the Sun, but the sidewise vector of their several motions prevents them from approaching their primaries. It is free fall nonetheless. Consult any ballistician or any astrophysicist.

When there is free fall there is no sensation of weight. A gravitational field must be opposed to be detected by the human body.

Some of these considerations passed through Stevens's mind as he handwalked his way to Waldo's workshop. Waldo's home had been constructed without any consideration being given to up-and-down. Furniture and apparatus were affixed to any wall; there was no "floor." Decks and platforms were arranged at any convenient angle and of any size or shape, since they had nothing to do with standing or walking. Properly speaking, they were bulkheads and working surfaces rather than decks. Furthermore, equipment was not necessarily placed close to such surfaces; frequently it was more convenient to locate it with space all around it, held in place by light guys or slender stanchions.

The furniture and equipment was all odd in design and frequently odd in purpose. Most furniture on Earth is extremely rugged, and at least 90 per cent of it has a single purpose—to oppose, in one way or another, the acceleration of gravity. Most of the furniture in an Earth-surface—or subsurface—house is stator machines intended to oppose gravity. All tables, chairs, beds, couches, clothing racks, shelves, drawers, et cetera, have that as their one purpose. All other furniture and equipment have it as a secondary purpose which strongly conditions design and strength.

The lack of need for the rugged strength necessary to all terrestrial equipment resulted in a fairylike grace in much of the equipment in Waldo's house. Stored supplies, massive in themselves, could be retained in convenient order by compartmentation of eggshell-thin transparent plastic. Ponderous machinery, which on Earth would necessarily be heavily cased and supported, was here either open to the air or covered by gossamerlike envelopes and held stationary by light elastic lines.

Everywhere were pairs of waldoes, large, small and lifesize, with vision pickups to match. It was evident that Waldo could make use of the compartments through which they were passing without stirring out of his easy chair—if he used an easy chair. The ubiquitous waldoes, the insubstantial quality of the furniture, and the casual use of all walls as work or storage surfaces, gave the place a madly fantastic air. Stevens felt as if he were caught in a Disney.

So far the rooms were not living quarters. Stevens wondered what Waldo's private apartments could be like and tried to visualize what equipment would be appropriate. No chairs, no rugs, no bed. Pictures, perhaps. Something pretty clever in the way of indirect lighting, since the eyes might be turned in any direction. Communication instruments might be much the same. But what could a washstand be like? Or a water tumbler? A trap bottle for the last—or would any container be necessary at all? He could not decide and realized that even a competent engineer may be confused in the face of mechanical conditions strange to him.

What constitutes a good ash tray when there is no gravity to hold the debris in place? Did Waldo smoke? Suppose he played solitaire; how did he handle the cards? Magnetized cards, perhaps, and a magnetized playing surface.

"In through here, Jim." Grimes steadied himself with one hand, gesturing with the other. Stevens slid through the manhole indicated. Before he had had time to look around he was startled by a menacing bass growl. He looked up; charging through the air straight at him was an enormous mastiff, lips drawn back, jaws slavering. Its front legs were spread out stiffly as if to balance in flight; its hind legs were drawn up under its lean belly. By voice and manner it announced clearly its intention of tearing the intruder into pieces, then swallowing the pieces.

"Baldur!" A voice cut through the air from some point beyond. The dog's ferocity wilted, but it could not check its lunge. A waldo snaked out a good thirty feet and grasped it by the collar. "I am sorry, sir," the voice added. "My friend was not expecting you."

Grimes said, "Howdy, Baldur. How's your conduct?" The dog looked at him, whined, and wagged his tail. Stevens looked for the source of the commanding voice, found it.

The room was huge and spherical; floating in its center was a fat man—Waldo.

He was dressed conventionally enough in shorts and singlet, except that his feet were bare. His hands and forearms were covered by metallic gauntlets—primary waldoes. He was softly fat, with double chin, dimples, smooth skin; he looked like a great, pink cherub, floating attendance on a saint. But the eyes were not cherubic, and the forehead and skull were those of a man. He looked at Stevens. "Permit me to introduce you to my pet," he said in a high, tired voice. "Give the paw, Baldur."

The dog offered a foreleg, Stevens shook it gravely. "Let him smell you, please."

The dog did so, as the waldo at his collar permitted him to come closer. Satisfied, the animal bestowed a wet kiss on Stevens's wrist. Stevens noted that the dog's eyes were surrounded by large circular patches of brown in contrast to his prevailing white, and mentally tagged it the Dog with Eyes as Large as Saucers, thinking of the tale of the soldier and the flint box. He made noises to it of "Good boy!" and "That's a nice old fellow!" while Waldo looked on with faint distaste.

"Heel, sir!" Waldo commanded when the ceremony was complete. The dog turned in midair, braced a foot against Stevens's thigh, and shoved, projecting himself in the direction of his master. Stevens was forced to steady himself by clutching at the handgrip. Grimes shoved himself away from the manhole and arrested his flight on a stanchion near their host. Stevens followed him.

Waldo looked him over slowly. His manner was not overtly rude, but was somehow, to Stevens, faintly annoying. He felt a slow flush spreading out from his neck; to inhibit it he gave his attention to the room around him. The space was commodious, yet gave the impression of being cluttered because of the assemblage of, well, junk which surrounded Waldo. There were half a dozen vision receptors of various sizes around him at different angles, all normal to his line of sight. Three of them had pickups to match. There were control panels of several sorts, some of which seemed obvious enough in their purpose—one for lighting, which was quite complicated, with little ruby telltales for each circuit, one which was the keyboard of a voder, a multiplex television control panel, a board which seemed to be power relays, although its design was unusual. But there were at least half a dozen which stumped Stevens completely.

There were several pairs of waldoes growing out of a steel ring which surrounded the working space. Two pairs, mere monkey fists in size, were equipped with extensors. It had been one of these which had shot out to grab Baldur by his collar. There were waldoes rigged near the spherical wall, too, including one pair so huge that Stevens could not conceive of a use for it. Extended, each hand spread quite six feet from little finger tip to thumb tip.

There were books in plenty on the wall, but no bookshelves. They seemed to grow from the wall like so many cabbages. It puzzled Stevens momentarily, but he inferred—correctly it turned out later—that a small magnet fastened to the binding did the trick.

The arrangement of lighting was novel, complex, automatic, and convenient for Waldo. But it was not so convenient for anyone else in the room. The lighting was of course, indirect; but, furthermore, it was subtly controlled, so that none of the lighting came from the direction in which Waldo's head was turned. There was no glare—for Waldo. Since the lights behind his head burned brightly in order to provide more illumination for whatever he happened to be looking at, there was glare aplenty for anyone else. An electric eye circuit, obviously. Stevens found himself wondering just how simple such a circuit could be made.

Grimes complained about it. "Damn it, Waldo; get those lights under control. You'll give us headaches."

"Sorry, Uncle Gus." He withdrew his right hand from its gauntlet and placed his fingers over one of the control panels. The glare stopped. Light now came from whatever direction none of them happened to be looking, and much more brightly, since the area source of illumination was much reduced. Lights rippled across the walls in pleasant patterns. Stevens tried to follow the ripples, a difficult matter, since the setup was made not to be seen. He found that he could do so by rolling his eyes without moving his head. It was movement of the head which controlled the lights; movement of an eyeball was a little too much for it.

"Well, Mr. Stevens, do you find my house interesting?" Waldo was smiling at him with faint superciliousness.

"Oh—quite! Quite! I believe that it is the most remarkable place I have ever been in."

"And what do you find remarkable about it?"

"Well—the lack of definite orientation, I believe. That and the remarkable mechanical novelties. I suppose I am a bit of a groundlubber, but I keep expecting a floor underfoot and a ceiling overhead."

"Mere matters of functional design, Mr. Stevens; the conditions under which I live are unique; therefore, my house is unique. The novelty you speak of consists mainly in the elimination of unnecessary parts and the addition of new conveniences.

"To tell the truth, the most interesting thing I have seen yet is not a part of the house at all."

"Really? What is it, pray?"

"Your dog, Baldur." The dog looked around at the mention of his name. "I've never before met a dog who could handle himself in free flight."

Waldo smiled; for the first time his smile seemed gentle and warm. "Yes, Baldur is quite an acrobat. He's been at it since he was a puppy." He reached out and roughed the dog's ears, showing momentarily his extreme weakness, for the gesture had none of the strength appropriate to the size of the brute. The finger motions were flaccid, barely sufficient to disturb the coarse fur and to displace the great ears. But he seemed unaware, or unconcerned, by the disclosure. Turning back to Stevens, he added, "But if Baldur amuses you, you must see Ariel."

"Ariel?"

Instead of replying, Waldo touched the keyboard of the voder, producing a musical whistling pattern of three notes. There was a rustling near the wall of the room "above" them; a tiny yellow shape shot toward them—a canary. It sailed through the air with wings folded, bullet fashion. A foot or so away from Waldo it spread its wings, cupping the air, beat them a few times with tail down and spread, and came to a dead stop, hovering in the air with folded wings. Not quite a dead stop, perhaps, for it drifted slowly, came within an inch of Waldo's shoulder, let down its landing gear, and dug its claws into his singlet.

Waldo reached up and stroked it with a fingertip. It preened. "No earth-hatched bird can learn to fly in that fashion," he stated. "I know. I lost half a dozen before I was sure that they were incapable of making the readjustment. Too much thalamus."

"What happened to them?"

"In a man you would call it acute anxiety psychosis. They try to fly; their own prime skill leads them to disaster. Naturally, everything they do is wrong and they don't understand it. Presently they quit trying; a little later they die. Of a broken heart, one might say, poetically." He smiled thinly. "But Ariel is a genius among birds. He came here as an egg; he invented, unassisted, a whole new school of flying." He reached up a finger, offering the bird a new perch, which it accepted.

"That's enough, Ariel. Fly away home."

The bird started the "Bell Song" from *Lakmé*.

He shook it gently. "No, Ariel. Go to bed."

The canary lifted its feet clear of the finger, floated for an instant, then beat its wings savagely for a second or two to set course and pick up speed, and bulleted away whence he had come, wings folded, feet streamlined under.

"Jimmie's got something he wants to talk with you about," Grimes commenced.

"Delighted," Waldo answered lazily, "but shan't we dine first? Have you an appetite, sir?"

Waldo full, Stevens decided, might be easier to cope with than Waldo empty. Besides, his own midsection informed him that wrestling with a calorie or two might be pleasant. "Yes, I have."

"Excellent." They were served.

Stevens was never able to decide whether Waldo had prepared the meal by means of his many namesakes, or whether servants somewhere out of sight had done the actual work. Modern food-preparation methods being what they were, Waldo could have done it alone; he, Stevens, batched it with no difficulty, and so did Gus. But he made a mental note to ask Doc Grimes at the first opportunity what resident staff, if any, Waldo employed. He never remembered to do so.

The dinner arrived in a small food chest, propelled to their midst at the end of a long, telescoping, pneumatic tube. It stopped with a soft sigh and held its position. Stevens paid little attention to the food itself—it was adequate and tasty, he knew—for his attention was held by the dishes and serving methods. Waldo let his own steak float in front of him, cut bites from it with curved surgical shears, and conveyed them to his mouth by means of dainty tongs. He made hard work of chewing.

"You can't get good steaks any more," he remarked. "This one is tough. God knows I pay enough—and complain enough."

Stevens did not answer. He thought his own steak had been tenderized too much; it almost fell apart. He was managing it with knife and fork, but the knife was superfluous. It appeared that Waldo did not expect his guests to make use of his own admittedly superior methods and utensils. Stevens ate from a platter clamped to his thighs, making a lap for it after Grimes's example by squatting in mid air. The platter itself had been thoughtfully provided with sharp little prongs on its service side.

Liquids were served in small flexible skins, equipped with nipples. Think of a baby's plastic nursing bottle.

The food chest took the utensils away with a dolorous insufflation. "Will you smoke, sir?"

"Thank you." He saw what a weight-free ash tray necessarily should be: a long tube with a bell-shaped receptacle on its end. A slight suction in the tube, and ashes knocked into the bell were swept away, out of sight and mind.

"About the matter—" Grimes commenced again. "Jimmie here is Chief Engineer for North American Power-Air."

"What?" Waldo straightened himself, became rigid; his chest rose and fell. He ignored Stevens entirely. "Uncle Gus, do you mean to say that you have introduced an officer of that company into my—home?"

"Don't get your dander up. Relax. Damn it, I've warned you not to do anything to raise your blood pressure." Grimes propelled himself closer to his host and took him by the wrist in the age-old fashion of a physician counting pulse. "Breathe slower. Whatcha trying to do? Go on an oxygen jag?"

Waldo tried to shake himself loose. It was a rather pitiful gesture; the old man had ten times his strength. "Uncle Gus, you—"

"Shut up!"

The three maintained a silence for several minutes, uncomfortable for at least two of them. Grimes did not seem to mind it.

"There," he said at last. "That's better. Now keep your shirt on and listen to me. Jimmie is a nice kid, and he has never done anything to you. And he has behaved himself while he's been here. You've got no right to be rude to him, no matter who he works for. Matter of fact, you owe him an apology."

"Oh, really now, Doc," Stevens protested. "I'm afraid I have been here somewhat under false colors. I'm sorry, Mr. Jones. I didn't intend it to be that way. I tried to explain when we arrived."

Waldo's face was hard to read. He was evidently trying hard to control himself. "Not at all, Mr. Stevens. I am sorry that I showed temper. It is perfectly true that I should not transfer to you any animus I feel for your employers... though God knows I bear no love for them."

"I know it. Nevertheless, I am sorry to hear you say it."

"I was cheated, do you understand? Cheated—by as rotten a piece of quasilegal chicanery as has ever—"

"Easy, Waldo!"

"Sorry, Uncle Gus." He continued, his voice less shrill. "You know of the so-called Hathaway patents?"

"Yes, of course."

"'So-called' is putting it mildly. The man was a mere machinist. Those patents are mine."

Waldo's version, as he proceeded to give it, was reasonably factual, Stevens felt, but quite biased and unreasonable. Perhaps Hathaway had been working, as Waldo alleged, simply as a servant—a hired artisan, but there was nothing to prove it, no contract, no papers of any sort. The man had filed certain patents, the only ones he had ever filed and admittedly Waldo-ish in their cleverness. Hathaway had then promptly died, and his heirs, through their attorneys, had sold the patents to a firm which had been dickering with Hathaway.

Waldo alleged that this firm had put Hathaway up to stealing from him, had caused him to hire himself out to Waldo for that purpose. But the firm was defunct; its assets had been sold to North American Power-Air. NAPA had offered a settlement; Waldo had chosen to sue. The suit went against him.

Even if Waldo were right, Stevens could not see any means by which the directors of NAPA could, legally, grant him any relief. The officers of a corporation are trustees for other people's money; if the directors of NAPA should attempt to give away property which had been adjudicated as belonging to the corporation, any stockholder could enjoin them before the act or recover from them personally after the act.

At least so Stevens thought. But he was no lawyer, he admitted to himself. The important point was that he needed Waldo's services, whereas Waldo held a bitter grudge against the firm he worked for.

He was forced to admit that it did not look as if Doc Grimes's presence was enough to turn the trick. "All that happened before my time," he began, "and naturally I know very little about it. I'm awfully sorry it happened. It's pretty uncomfortable for me, for right now I find myself in a position where I need your services very badly indeed."

Waldo did not seem displeased with the idea. "So? How does this come about?"

Stevens explained to him in some detail the trouble they had been having with the deKalb receptors. Waldo listened attentively. When Stevens had concluded he said, "Yes, that is much the same story your

Mr. Gleason had to tell. Of course, as a technical man you have given a much more coherent picture than that money manipulator was capable of giving. But why do you come to me? I do not specialize in radiation engineering, nor do I have any degrees from fancy institutions."

"I come to you," Stevens said seriously, "for the same reason everybody else comes to you when they are really stuck with an engineering problem. So far as I know, you have an unbroken record of solving any problem you cared to tackle. Your record reminds me of another man—"

"Who?" Waldo's tone was suddenly sharp.

"Edison. He did not bother with degrees either, but solved all the hard problems of his day."

"Oh, Edison—I thought you were speaking of a contemporary. No doubt he was all right in his day," he added with overt generosity.

"I was not comparing him to you. I was simply recalling that Edison was reputed to prefer hard problems to easy ones. I've heard the same about you; I had hopes that this problem might be hard enough to interest you."

"It is mildly interesting," Waldo conceded. "A little out of my line, but interesting. I must say, however, that I am surprised to hear you, an executive of North American Power-Air, express such a high opinion of my talents. One would think that, if the opinion were sincere, it would not have been difficult to convince your firm of my indisputable handiwork in the matter of the so-called Hathaway patents."

Really, thought Stevens, the man is impossible. A mind like a weasel. Aloud, he said, "I suppose the matter was handled by the business management and the law staff. They would hardly be equipped to distinguish between routine engineering and inspired design."

The answer seemed to mollify Waldo. He asked, "What does your own research staff say about the problem?"

Stevens looked wry. "Nothing helpful. Dr. Rambeau does not really seem to believe the data I bring him. He says it's impossible, but it makes him unhappy. I really believe that he has been living on aspirin and Nembutal for a good many weeks."

"Rambeau," Waldo said slowly. "I recall the man. A mediocre mind. All memory and no intuition. I don't think I would feel discouraged simply because Rambeau is puzzled."

"You really feel that there is some hope?"

"It should not be too difficult. I had already given the matter some thought, after Mr. Gleason's phone call. You have given me additional data, and I think I see at least two new lines of approach which may prove fruitful. In any case, there is always some approach—the correct one."

"Does that mean you will accept?" Stevens demanded, nervous with relief.

"Accept?" Waldo's eyebrows climbed up. "My dear sir, what in the world are you talking about? We were simply indulging in social conversation. I would not help your company under any circumstances whatsoever. I hope to see your firm destroyed utterly, bankrupt and ruined. This may well be the occasion."

Stevens fought to keep control of himself. Tricked! The fat slob had simply been playing with him, leading him on. There was no decency in him. In careful tones he continued, "I do not ask that you have any mercy on North American, Mr. Jones, but I appeal to your sense of duty. There is public interest involved. Millions of people are vitally dependent on the service we provide. Don't you see that the service must continue, regardless of you or me?"

Waldo pursed his lips. "No," he said, "I'm afraid that does not affect me. The welfare of those nameless swarms of Earth crawlers is, I fear, not my concern. I have done more for them already than there was any need to do. They hardly deserve help. Left to their own devices, most of them would sink back to caves and stone axes. Did you ever see a performing ape, Mr. Stevens, dressed in a man's clothes and cutting capers on roller skates? Let me leave you with this thought: I am not a roller-skate mechanic for apes."

If I stick around here much longer, Stevens advised himself, there will be hell to pay. Aloud, he said, "I take it that is your last word?"

"You may so take it. Good day, sir. I enjoyed your visit. Thank you."

"Good-by. Thanks for the dinner."

"Not at all."

As Stevens turned away and prepared to shove himself toward the exit, Grimes called after him, "Jimmie, wait for me in the reception room."

As soon as Stevens was out of earshot, Grimes turned to Waldo and looked him up and down. "Waldo," he said slowly, "I always did know that you were one of the meanest, orneriest men alive, but—"

"Your compliments don't faze me, Uncle Gus."

"Shut up and listen to me. As I was saying, I knew you were too rotten selfish to live with, but this is the first time I ever knew you to be a four-flusher to boot."

"What do you mean by that? Explain yourself."

"Shucks! You haven't any more idea of how to crack the problem that boy is up against than I have. You traded on your reputation as a miracle man just to make him unhappy. Why, you cheap tinhorn bluffer, if you—"

"Stop it!"

"Go ahead," Grimes said quietly. "Run up your blood pressure. I won't interfere with you. The sooner you blow a gasket the better."

Waldo calmed down. "Uncle Gus—what makes you think I was bluffing?"

"Because I know you. If you had felt able to deliver the goods, you would have looked the situation over and worked out a plan to get NAPA by the short hair, through having something they had to have. That way you would have proved your revenge."

Waldo shook his head. "You underestimate the intensity of my feeling in the matter."

"I do like hell! I hadn't finished. About that sweet little talk you gave him concerning your responsibility to the race. You've got a head on you. You know damned well, and so do I, that of all people you can least afford to have anything serious happen to the setup down on Earth. That means you don't see any way to prevent it."

"Why, what do you mean? I have no interest in such troubles; I'm independent of such things. You know me better than that."

"Independent, eh? Who mined the steel in these walls? Who raised that steer you dined on tonight? You're as independent as a queen bee, and about as helpless."

Waldo looked startled. He recovered himself and answered, "Oh no, Uncle Gus. I really am independent. Why, I have supplies here for years."

"How many years?"

"Why... uh, five, about."

"And then what? You may live another fifty—if you have regular supply service. How do you prefer to die—starvation or thirst?"

"Water is no problem," Waldo said thoughtfully; "as for supplies, I suppose I could use hydroponics a little more and stock up with some meat animals—"

Grimes cut him short with a nasty laugh. "Proved my point. You don't know how to avert it, so you are figuring some way to save your own skin. I know you. You wouldn't talk about starting a truck garden if you knew the answers."

Waldo looked at him thoughtfully. "That's not entirely true. I don't know the solution, but I do have some ideas about it. I'll bet you a half interest in hell that I can crack it. Now that you have called my attention to it, I must admit I am rather tied in with the economic system down below, and"—he smiled faintly—"I was never one to neglect my own interests. Just a moment—I'll call your friend."

"Not so fast. I came along for another reason, besides introducing Jimmie to you. It can't be just any solution; it's got to be a particular solution."

"What do you mean?"

"It's got to be a solution that will do away with the need for filling up the air with radiant energy."

"Oh, that. See here, Uncle Gus, I know how interested you are in theory, and I've never disputed the possibility that you may be right, but you can't expect me to mix that into another and very difficult problem."

"Take another look. You're in this for self-interest. Suppose everybody was in the shape you are in."

"You mean my physical condition?"

"I mean just that. I know you don't like to talk about it, but we blamed well need to. If everybody was as weak as you are—presto! No coffee and cakes for Waldo. And that's just what I see coming. You're the only man I know of who can appreciate what it means."

"It seems fantastic."

"It is. But the signs are there for anybody to read who wants to. Epidemic myasthenia, not necessarily acute, but enough to raise hell with our mechanical civilization. Enough to play hob with your supply lines. I've been collating my data since I saw you last and drawing some curves. You should see 'em."

"Did you bring them?"

"No, but I'll send 'em up. In the meantime, you can take my word for it." He waited. "Well, how about it?"

"I'll accept it as a tentative working hypothesis," Waldo said slowly, "until I see your figures. I shall probably want you to conduct some further research for me, on the ground—if your data is what you say it is."

"Fair enough. G'by." Grimes kicked the air a couple of times as he absentmindedly tried to walk.

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Stevens's frame of mind as he waited for Grimes is better left undescribed. The mildest thought that passed through his mind was a plaintive one about the things a man had to put up with to hold down what seemed like a simple job of engineering. Well, he wouldn't have the job very long. But he decided not to resign—he'd wait until they fired him; he wouldn't run out.

But he would damn well get that vacation before he looked for another job.

He spent several minutes wishing that Waldo were strong enough for him to be able to take a poke at him. Or kick him in the belly—that would be more fun!

He was startled when the dummy suddenly came to life and called him by name. "Oh, Mr. Stevens."

"Huh? Yes?"

"I have decided to accept the commission. My attorneys will arrange the details with your business office."

He was too surprised to answer for a couple of seconds; when he did so the dummy had already gone dead. He waited impatiently for Grimes to show up.

"Doc!" he said, when the old man swam into view. "What got into him. How did you do it?"

"He thought it over and reconsidered," Grimes said succinctly. "Let's get going."

Stevens dropped Dr. Augustus Grimes at the doctor's home, then proceeded to his office. He had no more than parked his car and entered the tunnel leading toward the zone plant when he ran into his assistant. McLeod seemed a little out of breath. "Gee, chief," he said, "I hoped that was you. I've had 'em watching for you. I need to see you."

"What's busted now?" Stevens demanded apprehensively. "One of the cities?"

"No. What made you think so?"

"Go ahead with your story."

"So far as I know ground power is humming sweet as can be. No trouble with the cities. What I had on my mind is this: I fixed my heap."

"Huh? You mean you fixed the ship you crashed in?"

"It wasn't exactly a crash. I had plenty of power in the reserve banks; when reception cut off, I switched to emergency and landed her."

"But you fixed it? Was it the deKalbs? Or something else?"

"It was the deKalbs all right. And they're fixed. But I didn't exactly do it myself. I got it done. You see—"

"What was the matter with them?"

"I don't know exactly. You see I decided that there was no point in hiring another skycar and maybe having another forced landing on the way home. Besides, it was my own crate I was flying, and I didn't want to dismantle her just to get the deKalbs out and have her spread out all over the countryside. So I hired a crawler, with the idea of taking her back all in one piece. I struck a deal with a guy who had a twelve-ton semitractor combination, and we—"

"For criminy's sake, make it march! What happened?"

"I'm trying to tell you. We pushed on into Pennsylvania and we were making pretty fair time when the crawler broke down. The right lead wheel, ahead of the treads. Honest to goodness, Jim, those roads are something fierce."

"Never mind that. Why waste taxes on roads when 90 per cent of the traffic is in the air? You messed up a wheel. So then what?"

"Just the same, those roads are a disgrace," McLeod maintained stubbornly. "I was brought up in that part of the country. When I was a kid the road we were on was six lanes wide and smooth as a baby's fanny. They ought to be kept up; we might need 'em someday." Seeing the look in his senior's eye, he went on hastily: "The driver mugged in with his home office, and they promised to send a repair car out from the next town. All told, it would take three, four hours—maybe more. Well, we were laid up in the county I grew up in. I says to myself, 'McLeod, this is a wonderful chance to return to the scenes of your childhood and the room where the sun came peeping in the morn.' Figuratively speaking, of course. Matter of fact, our house didn't have any windows."

"I don't care if you were raised in a barrel!"

"Temper... temper—" McLeod said imperturbably. "I'm telling you this so you will understand what happened. But you aren't going to like it."

"I don't like it now."

"You'll like it less. I climbed down out of the cab and took a look around. We were about five miles from my home town—too far for me to want to walk it. But I thought I recognized a clump of trees on the brow of a little rise maybe a quarter of a mile off the road, so I walked over to see. I was right; just over the rise was the cabin where Gramps Schneider used to live."

"Gramps Snyder?"

"Not Snyder—Schneider. Old boy we kids used to be friendly with. Ninety years older than anybody. I figured he was dead, but it wouldn't hurt any to walk down and see. He wasn't. 'Hello, Gramps,' I said. 'Come in, Hugh Donald,' he said. 'Wipe the feet on the mat.'

"I came in and sat down. He was fussing with something simmering in a stewpan on his baseburner. I asked him what it was. 'For morning aches,' he said. Gramps isn't exactly a hex doctor."

"Huh?"

"I mean he doesn't make a living by it. He raises a few chickens and garden truck, and some of the Plain People—House Amish, mostly—give him pies and things. But he knows a lot about herbs and such.

"Presently he stopped and cut me a slice of shoo-fly pie. I told him danke. He said, 'You've been up-growing, Hugh Donald,' and asked me how I was doing in school. I told him I was doing pretty well. He looked at me again and said, 'But you have trouble fretting you.' It wasn't a question; it was a statement. While I finished the pie I found myself trying to tell him what kind of troubles I had.

"It wasn't easy. I don't suppose Gramps has ever been off the ground in his life. And modern radiation theory isn't something you can explain in words of one syllable. I was getting more and more tangled up when he stood up, put on his hat and said, 'We will see this car you speak about.'

"We walked over to the highway. The repair gang had arrived, but the crawler wasn't ready yet. I helped Gramps up onto the platform and we got into my bus. I showed him the deKalbs and tried to explain what they did—or rather what they were supposed to do. Mind you, I was just killing time.

"He pointed to the sheaf of antennae and asked, 'These fingers—they reach out for the power?' It was as good an explanation as any, so I let it ride. He said, 'I understand,' and pulled a piece of chalk out of his trousers, and began drawing lines on each antenna, from front to back. I walked up front to see how the repair crew were doing. After a bit Gramps joined me. 'Hugh Donald,' he says, 'the fingers—now they will make.'

"I didn't want to hurt his feelings, so I thanked him plenty. The crawler was ready to go; we said good-by, and he walked back toward his shack. I went back to my car, and took a look in, just in case. I didn't think he could hurt anything, but I wanted to be sure. Just for the ducks of it. I tried out the receptors. They worked!"

"What!" put in Stevens. "You don't mean to stand there and tell me an old witch doctor fixed your deKalbs?"

"Not witch doctor—hex doctor. But you get the idea."

Stevens shook his head. "It's simply a coincidence. Sometimes they come back into order as spontaneously as they go out."

"That's what you think. Not this one. I've just been preparing you for the shock you're going to get. Come take a look."

"What do you mean? Where?"

"In the inner hangar." While they walked to where McLeod had left his broomstick, he continued, "I wrote out a credit for the crawler pilot and flew back. I haven't spoken to anyone else about it. I've been biting my nails down to my elbows waiting for you to show up."

The skycar seemed quite ordinary. Stevens examined the deKalbs and saw some faint chalk marks on their metal sides—nothing else unusual. "Watch while I cut in reception," McLeod told him.

Stevens waited, heard the faint hum as the circuits became activized, and looked.

The antennae of the deKalbs, each a rigid pencil of metal, were bending, flexing, writhing like a cluster of worms. They were reaching out, like fingers.

Stevens remained squatting down by the deKalbs, watching their outrageous motion. McLeod left the control saddle, came back, and joined him. "Well, chief," he demanded, "tell me about it. Whaduh yuh make of it?"

"Got a cigarette?"

"What are those things sticking out of your pocket?"

"Oh! Yeah—sure." Stevens took one out, lighted it, and burned it halfway down, unevenly, with two long drags.

"Go on," McLeod urged. "Give us a tell. What makes it do that?"

"Well," Stevens said slowly, "I can think of three things to do next —"

"Yeah?"

"The first is to fire Dr. Rambeau and give his job to Gramps Schneider."

"That's a good idea in any case."

"The second is to just wait here quietly until the boys with the straitjackets show up to take us home."

"And what's the third?"

"The third," Stevens said savagely, "is to take this damned heap out and sink it in the deepest part of the Atlantic Ocean and pretend like it never happened!"

A mechanic stuck his head in the door of the car. "Oh, Dr. Stevens —"

"Get out of here!"

The head hastily withdrew; the voice picked up in aggrieved tones. "Message from the head office."

Stevens got up, went to the operator's saddle, cleared the board, then assured himself that the antennae had ceased their disturbing movements. They had; in fact, they appeared so beautifully straight and rigid that he was again tempted to doubt the correctness of his own senses. He climbed out to the floor of the hangar, McLeod behind him. "Sorry to have blasted at you, Whitey," he said to the workman in placating tones. "What is the message?"

"Mr. Gleason would like for you to come into his office as soon as you can."

"I will at once. And, Whitey, I've a job for you."

"Yeah?"

"This heap here—seal up its doors and don't let anybody monkey with it. Then have it dragged, dragged, mind you; don't try to start it —have it dragged over into the main lab."

"O.K."

Stevens started away; McLeod stopped him. "What do I go home in?"

"Oh yes, it's your personal property, isn't it? Tell you what, Mac— the company needs it. Make out a purchase order and I'll sign it."

"Weeeell, now—I don't rightly know as I want to sell it. It might be the only job in the country working properly before long."

"Don't be silly. If the others play out, it won't do you any good to have the only one in working order. Power will be shut down."

"I suppose there's that," McLeod conceded. "Still," he said, brightening visibly, "a crate like that, with its special talents, ought to be worth a good deal more than list. You couldn't just go out and buy one."

"Mac," said Stevens, "you've got avarice in your heart and thievery in your finger tips. How much do you want for it?"

"Suppose we say twice the list price, new. That's letting you off easy."

"I happen to know you bought that job at a discount. But go ahead. Either the company can stand it, or it won't make much difference in the bankruptcy."

***

Gleason looked up as Stevens came in. "Oh, there you are, Jim. You seemed to have pulled a miracle with our friend Waldo the Great. Nice work."

"How much did he stick us for?"

"Just his usual contract. Of course his usual contract is a bit like robbery with violence. But it will be worth it if he is successful. And it's on a straight contingent basis. He must feel pretty sure of himself. They say he's never lost a contingent fee in his life. Tell me—what is he like? Did you really get into his house?"

"I did. And I'll tell you about it—sometime. Right now another matter has come up which has me talking to myself. You ought to hear about it at once."

"So? Go ahead."

Stevens opened his mouth, closed it again, and realized that it had to be seen to be believed. "Say, could you come with me to the main lab? I've got something to show you."

"Certainly."

Gleason was not as perturbed by the squirming metal rods as Stevens had been. He was surprised, but not upset. The truth of the matter is that he lacked the necessary technical background to receive the full emotional impact of the inescapable implications of the phenomenon. "That's pretty unusual, isn't it?" he said quietly.

"Unusual! Look, chief, if the sun rose in the west, what would you think?"

"I think I would call the observatory and ask them why."

"Well, all I can say is that I would a whole lot rather that the sun rose in the west than to have this happen."

"I admit it is pretty disconcerting," Gleason agreed. "I can't say that I've ever seen anything like it. What is Dr. Rambeau's opinion?"

"He hasn't seen it."

"Then perhaps we had better send for him. He may not have gone home for the night as yet."

"Why not show it to Waldo instead?"

"We will. But Dr. Rambeau is entitled to see it first. After all, it's his bailiwick, and I'm afraid the poor fellow's nose is pretty well out of joint as it is. I don't want to go over his head."

Stevens felt a sudden flood of intuition. "Just a second, chief. You're right, but if it's all the same to you I would rather that you showed it to him than for me to do it."

"Why so, Jimmie? You can explain it to him."

"I can't explain a damn thing to him I haven't already told you. And for the next few hours I'm going to be very, very busy indeed."

Gleason looked him over, shrugged his shoulders, and said mildly, "Very well, Jim, if you prefer it that way."

***

Waldo was quite busy, and therefore happy. He would never have admitted—he did not admit even to himself, that there were certain drawbacks to his self-imposed withdrawal from the world and that chief among these was boredom. He had never had much opportunity to enjoy the time-consuming delights of social intercourse; he honestly believed that the smooth apes had nothing to offer him in the way of companionship. Nevertheless, the pleasure of the solitary intellectual life can pall.

He repeatedly urged Uncle Gus to make his permanent home in Freehold, but he told himself that it was a desire to take care of the old man which motivated him. True—he enjoyed arguing with Grimes, but he was not aware how much those arguments meant to him. The truth of the matter was that Grimes was the only one of the human race who treated him entirely as another human and an equal—and Waldo wallowed in it, completely unconscious that the pleasure he felt in the old man's company was the commonest and most precious of all human pleasures.

But at present he was happy in the only way he knew how to be happy—working.

There were two problems: that of Stevens and that of Grimes. Required: a single solution which would satisfy each of them. There were three stages to each problem; first, to satisfy himself that the problems really did exist, that the situations were in fact as they had been reported to him verbally; second, to undertake such research as the preliminary data suggested; and third, when he felt that his data was complete, to invent a solution.

"Invent," not "find." Dr. Rambeau might have said "find," or "search for." To Rambeau the universe was an inexorably ordered cosmos, ruled by unvarying law. To Waldo the universe was the enemy, which he strove to force to submit to his will. They might have been speaking of the same thing, but their approaches were different.

There was much to be done. Stevens had supplied him with a mass of data, both on the theoretical nature of the radiated power system and the deKalb receptors which were the keystone of the system, and also on the various cases of erratic performance of which they had lately been guilty. Waldo had not given serious attention to power radiation up to this time, simply because he had not needed to. He found it interesting but comparatively simple. Several improvements suggested themselves to his mind. That standing wave, for example, which was the main factor in the coaxial beam—the efficiency of reception could be increased considerably by sending a message back over it which would automatically correct the aiming of the beam. Power delivery to moving vehicles could be made nearly as efficient as the power reception to stationary receivers.

Not that such an idea was important at present. Later, when he had solved the problem at hand, he intended to make NAPA pay through the nose for the idea; or perhaps it would be more amusing to compete with them. He wondered when their basic patents ran out—must look it up.

Despite inefficiencies the deKalb receptors should work every time, all the time, without failure. He went happily about finding out why they did not.

He had suspected some obvious—obvious to him—defect in manufacture. But the inoperative deKalbs which Stevens had delivered to him refused to give up their secret. He X-rayed them, measured them with micrometer and interferometer, subjected them to all the usual tests and some that were quite unusual and peculiarly Waldo-ish. They would not perform.

He built a deKalb in his shop, using one of the inoperative ones as a model and using the reworked metal of another of the same design, also inoperative, as the raw material. He used his finest scanners to see with and his smallest waldoes—tiny pixy hands, an inch across—for manipulation in the final stages. He created a deKalb which was as nearly identical with its model as technology and incredible skill could produce.

It worked beautifully.

Its elder twin still refused to work. He was not discouraged by this. On the contrary, he was elated. He had proved, proved with certainty, that the failure of the deKalbs was not a failure of workmanship, but a basic failure in theory. The problem was real.

Stevens had reported to him the scandalous performance of the deKalbs in McLeod's skycar, but he had not yet given his attention to the matter. Presently, in proper order, when he got around to it, he would look into the matter. In the meantime he tabled the matter. The smooth apes were an hysterical lot; there was probably nothing to the story. Writhing like Medusa's locks, indeed!

He gave fully half his time to Grimes's problem.

He was forced to admit that the biological sciences—if you could call them science!—were more fascinating than he had thought. He had shunned them, more or less; the failure of expensive "experts" to do anything for his condition when he was a child had made him contemptuous of such studies. Old wives' nostrums dressed up in fancy terminology! Grimes he liked and even respected, but Grimes was a special case.

Grimes's data had convinced Waldo that the old man had a case. Why, this was serious! The figures were incomplete, but nevertheless convincing. The curve of the third decrement, extrapolated not too unreasonably, indicated that in twenty years there would not be a man left with strength enough to work in heavy industries. Button pushing would be all they would be good for.

It did not occur to him that all he was good for was button pushing; he regarded weakness in the smooth apes as an oldstyle farmer might regard weakness in a draft animal. The farmer did not expect to pull the plow—that was the horse's job.

Grimes's medical colleagues must be utter fools.

Nevertheless, he sent for the best physiologists, neurologists, brain surgeons, and anatomists he could locate, ordering them as one might order goods from a catalogue. He must understand this matter.

He was considerably annoyed when he found that he could not make arrangements, by any means, to perform vivisection on human beings. He was convinced by this time that the damage done by ultra shortwave radiation was damage to the neurological system, and that the whole matter should be treated from the standpoint of electromagnetic theory. He wanted to perform certain delicate manipulations in which human beings would be hooked up directly to apparatus of his own design to find out in what manner nerve impulses differed from electrical current. He felt that if he could disconnect portions of a man's nervous circuit, replace it in part with electrical hookups, and examine the whole matter in situ, he might make illuminating discoveries. True, the man might not be much use to himself afterward.

But the authorities were stuffy about it; he was forced to content himself with cadavers and with animals.

Nevertheless, he made progress. Extreme shortwave radiation had a definite effect on the nervous system—a double effect: it produced "ghost" pulsations in the neurons, insufficient to accomplish muscular motor response, but, he suspected, strong enough to keep the body in a continual state of inhibited nervous excitation; and, secondly, a living specimen which had been subjected to this process for any length of time showed a definite, small but measurable, lowering in the efficiency of its neural impulses. If it had been an electrical circuit, he would have described the second effect as a decrease in insulating efficiency.

The sum of these two effects on the subject individual was a condition of mild tiredness, somewhat similar to the malaise of the early stages of pulmonary tuberculosis. The victim did not feel sick; he simply lacked pep. Strenuous bodily activity was not impossible; it was simply distasteful; it required too much effort, too much will power.

But an orthodox pathologist would have been forced to report that the victim was in perfect health—a little rundown, perhaps, but nothing wrong with him. Too sedentary a life, probably. What he needed was fresh air, sunshine, and healthy exercise.

Doc Grimes alone had guessed that the present, general, marked preference for a sedentary life was the effect and not the cause of the prevailing lack of vigor. The change had been slow, at least as slow as the increase in radiation in the air. The individuals concerned had noticed it, if at all, simply as an indication that they were growing a little bit older, "slowing down, not so young as I used to be." And they were content to slow down; it was more comfortable than exertion.

Grimes had first begun to be concerned about it when he began to notice that all of his younger patients were "the bookish type." It was all very well for a kid to like to read books, he felt, but a normal boy ought to be out doing a little hell raising too. What had become of the sand-lot football games, the games of scrub, the clothes-tearing activity that had characterized his own boyhood?

Damn it, a kid ought not to spend all his time poring over a stamp collection.

Waldo was beginning to find the answer.

The nerve network of the body was not dissimilar to antennae. Like antennae, it could and did pick up electromagnetic waves. But the pickup was evidenced not as induced electrical current, but as nerve pulsation—impulses which were maddeningly similar to, but distinctly different from, electrical current. Electromotive force could be used in place of nerve impulses, to activate muscle tissue, but e.m.f. was not nerve impulse. For one thing they traveled at vastly different rates of speed. Electrical current travels at a speed approaching that of light; neural impulse is measured in feet per second.

Waldo felt that somewhere in this matter of speed lay the key to the problem.

He was not permitted to ignore the matter of McLeod's fantastic skycar as long as he had intended to. Dr. Rambeau called him up. Waldo accepted the call, since it was routed from the laboratories of NAPA. "Who are you and what do you want?" he demanded of the image.

Rambeau looked around cautiously. "Sssh! Not so loud," he whispered. "They might be listening."

"Who might be? And who are you?"

"'They' are the ones who are doing it. Lock your doors at night. I'm Dr. Rambeau."

"Dr. Rambeau? Oh yes. Well, Doctor, what is the meaning of this intrusion?"

The doctor leaned forward until he appeared about to fall out of the stereo picture. "I've learned how to do it," he said tensely.

"How to do what?"

"Make the deKalbs work. The dear, dear deKalbs." He suddenly thrust his hands at Waldo, while clutching frantically with his fingers. "They go like this: Wiggle, wiggle, wiggle!"

Waldo felt a normal impulse to cut the man off, but it was overruled by a fascination as to what he would say next. Rambeau continued. "Do you know why? Do you? Riddle me that."

"Why?"

Rambeau placed a finger beside his nose and smiled roguishly. "Wouldn't you like to know? Wouldn't you give a pretty to know? But I'll tell you!"

"Tell me, then."

Rambeau suddenly looked terrified. "Perhaps I shouldn't. Perhaps they are listening. But I will, I will! Listen carefully: Nothing is certain."

"Is that all?" inquired Waldo, now definitely amused by the man's antics.

"'Is that all?' Isn't that enough? Hens will crow and cocks will lay. You are here and I am there. Or maybe not. Nothing is certain. Nothing, nothing, NOTHING is certain! Around and around the little ball goes, and where it stops nobody knows. Only I've learned how to do it."

"How to do what?"

"How to make the little ball stop where I want it to. Look." He whipped out a penknife. "When you cut yourself, you bleed, don't you? Or do you?" He sliced at the forefinger of his left hand. "See?" He held the finger close to the pickup; the cut, though deep, was barely discernible and it was bleeding not at all.

Capital! thought Waldo. Hysteric vascular control—a perfect clinical case. "Anybody can do that," he said aloud. "Show me a hard one."

"Anybody? Certainly anybody can—if they know how. Try this one." He jabbed the point of the penknife straight into the palm of his left hand, so that it stuck out the back of his hand. He wiggled the blade in the wound, withdrew it, and displayed the palm. No blood, and the incision was closing rapidly. "Do you know why? The knife is only probably there, and I've found the improbability!"

Amusing as it had been, Waldo was beginning to be bored by it. "Is that all?"

"There is no end to it," pronounced Rambeau, "for nothing is certain any more. Watch this." He held the knife flat on his palm, then turned his hand over.

The knife did not fall, but remained in contact with the underside of his hand.

Waldo was suddenly attentive. It might be a trick; it probably was a trick—but it impressed him more, much more, than Rambeau's failure to bleed when cut. One was common to certain types of psychosis; the other should not have happened. He cut in another viewphone circuit. "Get me Chief Engineer Stevens at North American Power-Air," he said sharply. "At once!"

Rambeau paid no attention, but continued to speak of the penknife. "It does not know which way is down," he crooned, "for nothing is certain any more. Maybe it will fall—maybe not. I think it will. There—it has. Would you like to see me walk on the ceiling?"

"You called me, Mr. Jones?" It was Stevens.

Waldo cut his audio circuit to Rambeau. "Yes. That jumping jack, Rambeau. Catch him and bring him to me at once. I want to see him."

"But Mr. Jo—"

"Move!" He cut Stevens off, and renewed the audio to Rambeau.

"—uncertainty. Chaos is King, and Magic is loose in the world!" Rambeau looked vaguely at Waldo, brightened, and added, "Good day, Mr. Jones. Thank you for calling."

The screen went dead.

Waldo waited impatiently. The whole thing had been a hoax, he told himself. Rambeau had played a gigantic practical joke. Waldo disliked practical jokes. He put in another call for Stevens and left it in.

When Stevens did call back his hair was mussed and his face was red. "We had a bad time of it," he said.

"Did you get him?"

"Rambeau? Yes, finally."

"Then bring him up."

"To Freehold? But that's impossible. You don't understand. He's blown his top; he's crazy. They've taken him away to a hospital."

"You assume too much," Waldo said icily. "I know he's crazy, but I meant what I said. Arrange it. Provide nurses. Sign affidavits. Use bribery. Bring him to me at once. It is necessary."

"You really mean that?"

"I'm not in the habit of jesting."

"Something to do with your investigations? He's in no shape to be useful to you, I can tell you that."

"That," pronounced Waldo, "is for me to decide."

"Well," said Stevens doubtfully, "I'll try."

"See that you succeed."

Stevens called back thirty minutes later. "I can't bring Rambeau."

"You clumsy incompetent."

Stevens turned red, but held his temper. "Never mind the personalities. He's gone. He never got to the hospital."

"What?"

"That's the crazy part about it. They took him away in a confining stretcher, laced up like a corset. I saw them fasten him in myself. But when they got there he was gone. And the attendants claim the straps weren't even unbuckled."

Waldo started to say, "Preposterous," thought better of it. Stevens went on.

"But that's not the half of it. I'd sure like to talk to him myself. I've been looking around his lab. You know that set of deKalbs that went nuts—the ones that were hexed?"

"I know to what you refer."

"Rambeau's got a second set to doing the same thing!"

Waldo remained silent for several seconds, then said quietly, "Dr. Stevens—"

"Yes."

"I want to thank you for your efforts. And will you please have both sets of receptors, the two sets that are misbehaving, sent to Freehold at once?"

There was no doubt about it. Once he had seen them with his own eyes, watched the inexplicable squirming of the antennae, applied such tests as suggested themselves to his mind, Waldo was forced to conclude that he was faced with new phenomena, phenomena for which he did not know the rules.

If there were rules—

For he was honest with himself. If he saw what he thought he saw, then rules were being broken by the new phenomena, rules which he had considered valid, rules to which he had never previously encountered exceptions. He admitted to himself that the original failures of the deKalbs should have been considered just as overwhelmingly upsetting to physical law as the unique behavior of these two; the difference lay in that one alien phenomenon was spectacular, the other was not.

Quite evidently Dr. Rambeau had found it so; he had been informed that the doctor had been increasingly neurotic from the first instance of erratic performance of the deKalb receptors.

He regretted the loss of Dr. Rambeau. Waldo was more impressed by Rambeau crazy than he had ever been by Rambeau sane. Apparently the man had had some modicum of ability after all; he had found out something—more, Waldo admitted, than he himself had been able to find out so far, even though it had driven Rambeau insane.

Waldo had no fear that Rambeau's experience, whatever it had been, could unhinge his own reason. His own self-confidence was, perhaps, fully justified. His own mild paranoid tendency was just sufficient to give him defenses against an unfriendly world. For him it was healthy, a necessary adjustment to an otherwise intolerable situation, no more pathological than a callus, or an acquired immunity.

Otherwise he was probably more able to face disturbing facts with equanimity than 99 per cent of his contemporaries. He had been born to disaster; he had met it and had overcome it, time and again. The very house which surrounded him was testimony to the calm and fearless fashion in which he had defeated a world to which he was not adapted.

He exhausted, temporarily, the obvious lines of direct research concerning the strangely twisting metal rods. Rambeau was not available for questioning. Very well, there remained one other man who knew more about it than Waldo did. He would seek him out. He called Stevens again.

"Has there been any word of Dr. Rambeau?"

"No word, and no sign. I'm beginning to think the poor old fellow is dead."

"Perhaps. That witch doctor friend of your assistant—was Schneider his name?"

"Gramps Schneider."

"Yes indeed. Will you please arrange for him to speak with me?"

"By phone, or do you want to see him in person?"

"I would prefer for him to come here, but I understand that he is old and feeble; it may not be feasible for him to leave the ground. If he is knotted up with spacesickness, he will be no use to me."

"I'll see what can be done."

"Very good. Please expedite the matter. And, Dr. Stevens—"

"Well?"

"If it should prove necessary to use the phone, arrange to have a portable full stereo taken to his home. I want the circumstances to be as favorable as possible."

"O.K."

"Imagine that," Stevens added to McLeod when the circuit had been broken. "The Great-I-Am's showing consideration for somebody else's convenience."

"The fat boy must be sick," McLeod decided.

"Seems likely. This chore is more yours than mine, Mac. Come along with me; we'll take a run over into Pennsylvania."

"How about the plant?"

"Tell Carruthers he's 'It.' If anything blows, we couldn't help it anyway."

Stevens mugged back later in the day. "Mr. Jones—"

"Yes, Doctor?"

"What you suggest can't be arranged."

"You mean that Schneider can't come to Freehold?"

"I mean that and I mean that you can't talk with him on the viewphone."

"I presume that you mean he is dead."

"No, I do not. I mean that he will not talk over the viewphone under any circumstances whatsoever, to you or to anyone. He says that he is sorry not to accommodate you, but that he is opposed to everything of that nature—cameras, cinecams, television, and so forth. He considers them dangerous. I am afraid he is set in his superstition."

"As an ambassador, Dr. Stevens, you leave much to be desired."

Stevens counted up to ten, then said, "I assure you that I have done everything in my power to comply with your wishes. If you are dissatisfied with the quality of my cooperation, I suggest that you speak to Mr. Gleason." He cleared the circuit.

"How would you like to kick him in the teeth?" McLeod said dreamily.

"Mac, you're a mind reader."

Waldo tried again through his own agents, received the same answer. The situation was, to him, almost intolerable; it had been years since he had encountered a man whom he could not buy, bully, nor—in extremity—persuade. Buying had failed; he had realized instinctively that Schneider would be unlikely to be motivated by greed. And how can one bully, or wheedle, a man who cannot be seen to be talked with?

It was a dead end—no way out. Forget it.

Except, of course, for a means best classed as a Fate-Worse-Than-Death.

No. No, not that. Don't think about it. Better to drop the whole matter, admit that it had him licked, and tell Gleason so. It had been seventeen years since he had been at Earth surface; nothing could induce him to subject his body to the intolerable demands of that terrible field. Nothing!

It might even kill him. He might choke to death, suffocate. No.

He sailed gracefully across his shop, an over-padded Cupid. Give up this freedom, even for a time, for that torturous bondage? Ridiculous! It was not worth it.

Better to ask an acrophobe to climb Half Dome, or demand that a claustrophobe interview a man in the world's deepest mine.

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"Uncle Gus?"

"Oh, hello, Waldo. Glad you called."

"Would it be safe for me to come down to Earth?"

"Eh? How's that? Speak up, man. I didn't understand you."

"I said would it hurt me to make a trip down to Earth."

"This hookup," said Grimes, "is terrible. It sounded just like you were saying you wanted to come down to Earth."

"That's what I did say."

"What's the matter, Waldo? Do you feel all right?"

"I feel fine, but I have to see a man at Earth surface. There isn't any other way for me to talk to him, and I've got to talk to him. Would the trip do me any harm?"

"Ought not to, if you're careful. After all, you were born there. Be careful of yourself, though. You've laid a lot of fat around your heart."

"Oh dear. Do you think it's dangerous!"

"No. You're sound enough. Just don't overstrain yourself. And be careful to keep your temper."

"I will. I most certainly will. Uncle Gus?"

"Yes?"

"Will you come along with me and help me see it through?"

"Oh, I don't think that's necessary."

"Please, Uncle Gus. I don't trust anybody else."

"Time you grew up, Waldo. However, I will, this once."

"Now remember," Waldo told the pilot, "the absolute acceleration must never exceed one and one tenth gs, even in landing. I'll be watching the accelograph the whole time."

"I've been driving ambulances," said the pilot, "for twelve years, and I've never given a patient a rough ride yet."

"That's no answer. Understand me? One and one tenth; and it should not even approach that figure until we are under the stratosphere. Quiet, Baldur! Quit snuffling."

"I get you."

"Be sure that you do. Your bonuses depend on it."

"Maybe you'd like to herd it yourself."

"I don't like your attitude, my man. If I should die in the tank, you would never get another job."

The pilot muttered something.

"What was that?" Waldo demanded sharply.

"Well, I said it might be worth it."

Waldo started to turn red, opened his mouth.

Grimes cut in, "Easy, Waldo! Remember your heart."

"Yes, Uncle Gus."

Grimes snaked his way forward, indicated to the pilot that he wanted him to join him there.

"Don't pay any attention to anything he says," he advised the man quietly, "except what he said about acceleration. He really can't stand much acceleration. He might die in the tank."

"I still don't think it would be any loss. But I'll be careful."

"Good."

"I'm ready to enter the tank," Waldo called out. "Will you help me with the straps, Uncle Gus?"

The tank was not a standard deceleration type, but a modification built for this one trip. The tank was roughly the shape of an oversized coffin and was swung in gimbals to keep it always normal to the axis of absolute acceleration. Waldo floated in water—the specific gravity of his fat hulk was low—from which he was separated by the usual flexible, gasketed tarpaulin. Supporting his head and shoulders was a pad shaped to his contour. A mechanical artificial resuscitator was built into the tank, the back pads being under water, the breast pads out of the water but retracted out of the way.

Grimes stood by with neoadrenalin; a saddle had been provided for him on the left side of the tank. Baldur was strapped to a shelf on the right side of the tank; he acted as a counterweight to Grimes.

Grimes assured himself that all was in readiness, then called out to the pilot, "Start when you're ready."

"O.K." He sealed the access port; the entry tube folded itself back against the threshold flat of Freehold, freeing the ship. Gently they got under way.

Waldo closed his eyes; a look of seraphic suffering came over his face.

"Uncle Gus, suppose the deKalbs fail?"

"No matter. Ambulances store six times the normal reserve."

"You're sure?"

When Baldur began to feel weight, he started to whimper. Grimes spoke to him; he quieted down. But presently—days later, it seemed to Waldo—as the ship sank farther down into the Earth's gravitational field, the absolute acceleration necessarily increased, although the speed of the ship had not changed materially. The dog felt the weary heaviness creeping over his body. He did not understand it and he liked it even less; it terrified him. He began to howl.

Waldo opened his eyes. "Merciful heavens!" he moaned. "Can't you do something about that? He must be dying."

"I'll see." Grimes undid his safety belt and swung himself across the tank. The shift in weight changed the balance of the load in the gimbals; Waldo was rocked against the side of the tank.

"Oh!" he panted. "Be careful."

"Take it easy." Grimes caressed the dog's head and spoke to him. When he had calmed down, Grimes grabbed a handful of hide between the dog's shoulders, measured his spot, and jabbed in a hypo. He rubbed the area. "There, old fellow! That will make you feel better."

Getting back caused Waldo to be rocked again, but he bore it in martyred silence.

The ambulance made just one jerky maneuver after it entered the atmosphere. Both Waldo and the dog yelped. "Private ship," the pilot yelled back. "Didn't heed my right-of-way lights." He muttered something about women drivers.

"It wasn't his fault," Grimes told Waldo. "I saw it."

The pilot set them down with exquisite gentleness in a clearing which had been prepared between the highway and Schneider's house. A party of men was waiting for them there; under Grimes's supervision they unslung the tank and carried Waldo out into the open air. The evolution was performed slowly and carefully, but necessarily involved some degree of bumping and uneven movement. Waldo stood it with silent fortitude, but tears leaked out from under his lowered lids.

Once outside he opened his eyes and asked, "Where is Baldur?"

"I unstrapped him," Grimes informed him, "but he did not follow us out."

Waldo called out huskily, "Here, Baldur! Come to me, boy."

Inside the car the dog heard his boss's voice, raised his head, and gave a low bark. He still felt that terrifying sickness, but he inched forward on his belly, attempting to comply. Grimes reached the door in time to see what happened.

The dog reached the edge of his shelf and made a grotesque attempt to launch himself in the direction from which he had heard Waldo's voice. He tried the only method of propulsion he knew; no doubt he expected to sail through the door and arrest his flight against the tank on the ground. Instead he fell several feet to the inner floor plates, giving one agonized yelp as he did so, and breaking his fall most clumsily with stiffened forelegs.

He lay sprawled where he had landed, making no noise, but not attempting to move. He was trembling violently.

Grimes came up to him and examined him superficially, enough to assure him that the beast was not really hurt, then returned to the outside. "Baldur's had a little accident," he told Waldo; "he's not hurt, but the poor devil doesn't know how to walk. You had best leave him in the ship."

Waldo shook his head slightly. "I want him with me. Arrange a litter."

Grimes got a couple of the men to help him, obtained a stretcher from the pilot of the ambulance, and undertook to move the dog. One of the men said, "I don't know as I care for this job. That dog looks vicious. Look't those eyes."

"He's not," Grimes assured him. "He's just scared out of his wits. Here, I'll take his head."

"What's the matter with him? Same thing as the fat guy?"

"No, he's perfectly well and strong; he's just never learned to walk. This is his first trip to Earth."

"Well, I'll be a crosseyed owl!"

"I knew a case like it," volunteered the other. "Dog raised in Lunopolis—first week he was on Earth he wouldn't move—just squatted down, and howled, and made messes on the floor."

"So has this one," the first said darkly.

They placed Baldur alongside Waldo's tub. With great effort Waldo raised himself on one elbow, reached out a hand, and placed it on the creature's head. The dog licked it; his trembling almost ceased. "There! There!" Waldo whispered. "It's pretty bad, isn't it? Easy, old friend, take it easy."

Baldur thumped his tail.

It took four men to carry Waldo and two more to handle Baldur. Gramps Schneider was waiting for them at the door of his house. He said nothing as they approached, but indicated that they were to carry Waldo inside. The men with the dog hesitated. "Him, too," he said.

When the others had withdrawn—even Grimes returned to the neighborhood of the ship—Schneider spoke again. "Welcome, Mr. Waldo Jones."

"I thank you for your welcome, Grandfather Schneider."

The old man nodded graciously without speaking. He went to the side of Baldur's litter. Waldo felt impelled to warn him that the beast was dangerous with strangers, but some odd restraint—perhaps the effect of that enervating gravitational field—kept him from speaking in time. Then he saw that he need not bother.

Baldur had ceased his low whimpering, had raised his head, and was licking Gramps Schneider's chin. His tail thumped cheerfully. Waldo felt a sudden tug of jealousy; the dog had never been known to accept a stranger without Waldo's specific injunction. This was disloyalty—treason! But he suppressed the twinge and coolly assessed the incident as a tactical advantage to him.

Schneider pushed the dog's face out of the way and went over him thoroughly, prodding, thumping, extending his limbs. He grasped

Baldur's muzzle, pushed back his lips, and eyed his gums. He peeled back the dog's eyelids. He then dropped the matter and came to Waldo's side. "The dog is not sick," he said; "his mind confuses. What made it?"

Waldo told him about Baldur's unusual background. Schneider nodded acceptance of the matter—Waldo could not tell whether he had understood or not—and turned his attention to Waldo. "It is not good for a sprottly lad to lie abed. The weakness—how long has it had you?"

"All my life, Grandfather."

"That is not good." Schneider went over him as he had gone over Baldur. Waldo, whose feeling for personal privacy was much more intense than that of the ordinarily sensitive man, endured it for pragmatic reasons. It was going to be necessary, he felt, to wheedle and cajole this strange old creature. It would not do to antagonize him.

To divert his own attention from the indignity he chose to submit to, and to gain further knowledge of the old quack, Waldo let his eyes rove the room. The room where they were seemed to be a combination kitchen-living room. It was quite crowded, rather narrow, but fairly long. A fireplace dominated the kitchen end, but it had been bricked up, and a hole for the flue pipe of the baseburner had been let into the chimney. The fireplace was lopsided, as an oven had been included in its left side. The corresponding space at the right was occupied by a short counter which supported a tiny sink. The sink was supplied with water by a small hand pump which grew out of the counter.

Schneider, Waldo decided, was either older than he looked, which seemed incredible, or he had acquired his house from someone now long dead.

The living room end was littered and crowded in the fashion which is simply unavoidable in constricted quarters. Books filled several cases, were piled on the floor, hung precariously on chairs. An ancient wooden desk, crowded with papers and supporting a long-obsolete mechanical typewriter, filled one corner. Over it, suspended from the wall, was an ornate clock, carved somewhat like a house. Above its face were two little doors; while Waldo looked at it, a tiny wooden bird painted bright red popped out of the lefthand door, whistled "Th-wu th-woo!" four times, and popped frantically back into its hole. Immediately thereafter a little gray bird came out of the righthand door, said "Cuckoo" three times in a leisurely manner, and returned to its hole. Waldo decided that he would like to own such a clock; of course its pendulum-and-weight movement would not function in Freehold, but he could easily devise a one-g centrifuge frame to enclose it, wherein it would have a pseudo Earth-surface environment.

It did not occur to him to fake a pendulum movement by means of a concealed power source; he liked things to work properly.

To the left of the clock was an old-fashioned static calendar of paper. The date was obscured, but the letters above the calendar proper were large and legible: New York World's Fair—Souvenir of the World of Tomorrow. Waldo's eyes widened a little and went back to something he had noticed before, sticking into a pincushion on the edge of the desk. It was a round plastic button mounted on a pin whereby it could be affixed to the clothing. It was not far from Waldo's eyes; he could read the lettering on it:

FREE SILVER
SIXTEEN TO ONE

Schneider must be—old!

There was a narrow archway, which led into another room. Waldo could not see into it very well; the arch was draped with a fringe curtain of long strings of large ornamental beads.

The room was rich with odors, many of them old and musty, but not dirty.

Schneider straightened up and looked down at Waldo. "There is nought wrong with your body. Up get yourself and walk."

Waldo shook his head feebly. "I am sorry, Grandfather, I cannot."

"You must reach for the power and make it serve you. Try."

"I am sorry. I do not know how."

"That is the only trouble. All matters are doubtful, unless one knows. You send your force into the Other World. You must reach into the Other World and claim it."

"Where is this 'Other World,' Grandfather?"

Schneider seemed a little in doubt as to how to answer this. "The Other World," he said presently, "is the world you do not see. It is here and it is there and it is everywhere. But it is especially here." He touched his forehead. "The mind sits in it and sends its messages through it to the body. Wait." He shuffled away to a little cupboard, from which he removed a small jar. It contained a salve, or unguent, which he rubbed on his hands.

He returned to Waldo and knelt down beside him. Grasping one of Waldo's hands in both of his, he began to knead it very gently. "Let the mind be quiet," he directed. "Feel for the power. The Other World is close and full of power. Feel it."

The massage was very pleasant to Waldo's tired muscles. The salve, or the touch of the old man's hand, produced a warm, relaxing tingle. If he were younger, thought Waldo, I would hire him as a masseur. He has a magnetic touch.

Schneider straightened up again and said, "There—that betters you? Now you rest while I some coffee make."

Waldo settled back contentedly. He was very tired. Not only was the trip itself a nervous strain, but he was still in the grip of this damnable, thick gravitational field, like a fly trapped in honey. Gramps Schneider's ministrations had left him relaxed and sleepy.

He must have dozed, for the last thing he remembered was seeing Schneider drop an eggshell into the coffeepot. Then the old man was standing before him, holding the pot in one hand and a steaming cup in the other. He set them down, got three pillows, which he placed at Waldo's back, then offered him the coffee. Waldo laboriously reached out both hands to take it.

Schneider held it back. "No," he reproved, "one hand makes plenty. Do as I showed. Reach into the Other World for the strength." He took Waldo's right hand and placed it on the handle of the cup, steadying Waldo's hand with his own. With his other hand he stroked Waldo's right arm gently, from shoulder to finger tips. Again the warm tingle.

Waldo was surprised to find himself holding the cup alone. It was a pleasant triumph; at the time he left Earth, seventeen years before, it had been his invariable habit never to attempt to grasp anything with only one hand. In Freehold, of course, he frequently handled small objects one-handed, without the use of waldoes. The years of practice must have improved his control. Excellent!

So, feeling rather cocky, he drank the cupful with one hand, using extreme care not to slop it on himself. It was good coffee, too, he was bound to admit—quite as good as the sort he himself made from the most expensive syrup extract—better, perhaps.

When Schneider offered him coffeecake, brown with sugar and cinnamon and freshly rewarmed, he swaggeringly accepted it with his left hand, without asking to be relieved of the cup. He continued to eat and drink, between bites and sips resting and steadying his forearms on the edges of the tank.

The conclusion of the Kaffeeklatsch seemed a good time to broach the matter of the deKalbs. Schneider admitted knowing McLeod and recalled, somewhat vaguely it seemed, the incident in which he had restored to service McLeod's broomstick. "Hugh Donald is a good boy," he said. "Machines I do not like, but it pleasures me to fix things for boys."

"Grandfather," asked Waldo, "will you tell me how you fixed Hugh Donald McLeod's ship?"

"Have you such a ship you wish me to fix?"

"I have many such ships which I have agreed to fix, but I must tell you that I have been unable to do so. I have come to you to find out the right way."

Schneider considered this. "That is difficult. I could show you, but it is not so much what you do as how you think about it. That makes only with practice."

Waldo must have looked puzzled, for the old man looked at him and added, "It is said that there are two ways of looking at everything. That is true and less than true, for there are many ways. Some of them are good ways and some are bad. One of the ancients said that everything either is, or is not. That is less than true, for a thing can both be and not be. With practice one can see it both ways. Sometimes a thing which is for this world is a thing which is not for the Other World. Which is important, since we live in the Other World."

"We live in the Other World?"

"How else could we live? The mind—not the brain, but the mind—is in the Other World, and reaches this world through the body. That is one true way of looking at it, though there are others."

"Is there more than one way of looking at deKalb receptors?"

"Certainly."

"If I had a set which is not working right brought in here, would you show me how to look at it?"

"It is not needful," said Schneider, "and I do not like for machines to be in my house. I will draw you a picture."

Waldo felt impelled to insist, but he squelched his feeling. "You have come here in humility," he told himself, "asking for instruction. Do not tell the teacher how to teach."

Schneider produced a pencil and a piece of paper, on which he made a careful and very neat sketch of the antennae sheaf and main axis of a skycar. The sketch was reasonably accurate as well, although it lacked several essential minor details.

"These fingers," Schneider said, "reach deep into the Other World to draw their strength. In turn it passes down this pillar"—he indicated the axis—"to where it is used to move the car."

A fair allegorical explanation, thought Waldo. By considering the "Other World" simply a term for the hypothetical ether, it could be considered correct if not complete. But it told him nothing. "Hugh Donald," Schneider went on, "was tired and fretting. He found one of the bad truths."

"Do you mean," Waldo said slowly, "that McLeod's ship failed because he was worried about it?"

"How else?"

Waldo was not prepared to answer that one. It had become evident that the old man had some quaint superstitions; nevertheless, he might still be able to show Waldo what to do, even though Schneider did not know why. "And what did you do to change it?"

"I made no change; I looked for the other truth."

"But how? We found some chalk marks—"

"Those? They were but to aid me in concentrating my attention in the proper direction. I drew them down so"—he illustrated with pencil on the sketch—"and thought how the fingers reached out for power. And so they did."

"That is all? Nothing more?"

"That is enough."

Either, Waldo considered, the old man did not know how he had accomplished the repair, or he had had nothing to do with it—sheer and amazing coincidence.

He had been resting the empty cup on the rim of his tank, the weight supported by the metal while his fingers merely steadied it. His preoccupation caused him to pay too little heed to it; it slipped from his tired fingers, clattered and crashed to the floor.

He was much chagrined. "Oh, I'm sorry, Grandfather. I'll send you another."

"No matter. I will mend." Schneider carefully gathered up the pieces and placed them on the desk. "You have tired," he added. "That is not good. It makes you lose what you have gained. Go back now to your house, and when you have rested, you can practice reaching for the strength by yourself."

It seemed a good idea to Waldo; he was growing very tired, and it was evident that he was to learn nothing specific from the pleasant old fraud. He promised, emphatically and quite insincerely, to practice "reaching for strength," and asked Schneider to do him the favor of summoning his bearers.

The trip back was uneventful. Waldo did not even have the spirit to bicker with the pilot.

Stalemate. Machines that did not work but should, and machines that did work but in an impossible manner. And no one to turn to but one foggy-headed old man. Waldo worked lackadaisically for several days, repeating, for the most part, investigations he had already made rather than admit to himself that he was stuck, that he did not know what to do, that he was, in fact, whipped and might as well call Gleason and admit it.

The two "bewitched" sets of deKalbs continued to work whenever activated, with the same strange and incredible flexing of each antenna. Other deKalbs which had failed in operation and had been sent to him for investigation still refused to function. Still others, which had not yet failed, performed beautifully without the preposterous fidgeting.

For the umpteenth time he took out the little sketch Schneider had made and examined it. There was, he thought, just one more possibility: to return again to Earth and insist that Schneider actually do, in his presence, whatever it was he had done which caused the deKalbs to work. He knew now that he should have insisted on it in the first place, but he had been so utterly played out by having to fight that devilish thick field that he had not had the will to persist.

Perhaps he could have Stevens do it and have the process stereophotoed for a later examination. No, the old man had a superstitious prejudice against artificial images.

He floated gently over to the vicinity of one of the inoperative deKalbs. What Schneider had claimed to have done was preposterously simple. He had drawn chalk marks down each antenna so, for the purpose of fixing his attention. Then he had gazed down them and thought about them "reaching out for power," reaching into the Other World, stretching—

Baldur began to bark frantically.

"Shut up, you fool!" Waldo snapped, without taking his eyes off the antennae.

Each separate pencil of metal was wiggling, stretching. There was the low, smooth hum of perfect operation.

Waldo was still thinking about it when the televisor demanded his attention. He had never been in any danger of cracking up mentally as Rambeau had done; nevertheless, he had thought about the matter in a fashion which made his head ache. He was still considerably bemused when he cut in his end of the sound-vision. "Yes?"

It was Stevens. "Hello, Mr. Jones. Uh, we wondered ... that is—"

"Speak up, man!"

"Well, how close are you to a solution?" Stevens blurted out. "Matters are getting pretty urgent."

"In what way?"

"There was a partial breakdown in Great New York last night. Fortunately it was not at peak load and the ground crew were able to install spares before the reserves were exhausted, but you can imagine what it would have been like during the rush hour. In my own department the crashes have doubled in the past few weeks, and our underwriters have given notice. We need results pretty quick."

"You'll get your results," Waldo said loftily. "I'm in the final stages of the research." He was actually not that confident, but Stevens irritated him even more than most of the smooth apes.

Doubt and reassurance mingled in Stevens's face. "I don't suppose you could care to give us a hint of the general nature of the solution?"

No, Waldo could not. Still—it would be fun to pull Stevens's leg. "Come close to the pickup, Dr. Stevens. I'll tell you." He leaned forward himself, until they were almost nose to nose—in effect. "Magic is loose in the world!"

He cut the circuit at once.

Down in the underground labyrinth of North America's home plant, Stevens stared at the black screen. "What's the trouble, chief?" McLeod inquired.

"I don't know. I don't rightly know. But I think that Fatty has slipped his cams, just the way Rambeau did."

McLeod grinned delightedly. "How sweet! I always did think he was a hoot owl."

Stevens looked very sober. "You had better pray that he hasn't gone nuts. We're depending on him. Now let me see those operation reports."

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Magic loose in the world. It was as good an explanation as any, Waldo mused. Causation gone haywire; sacrosanct physical laws no longer operative. Magic. As Gramps Schneider had put it, it seemed to depend on the way one looked at it.

Apparently Schneider had known what he was talking about, although he naturally had no real grasp of the physical theory involved in the deKalbs.

Wait a minute now! Wait a minute. He had been going at this problem wrongly perhaps. He had approached it with a certain point of view himself, a point of view which had made him critical of the old man's statements—an assumption that he, Waldo, knew more about the whole matter than Schneider did. To be sure he had gone to see Schneider, but he had thought of him as a back-country hex doctor, a man who might possess one piece of information useful to Waldo, but who was basically ignorant and superstitious.

Suppose he were to review the situation from a different viewpoint. Let it be assumed that everything Schneider had to say was coldly factual and enlightened, rather than allegorical and superstitious—

He settled himself to do a few hours of hard thinking.

In the first place Schneider had used the phrase "the Other World" time and again. What did it mean, literally? A "world" was a spacetime-energy continuum; an "Other World" was, therefore, such a continuum, but a different one from the one in which he found himself. Physical theory found nothing repugnant in such a notion; the possibility of infinite numbers of continua was a familiar, orthodox speculation. It was even convenient in certain operations to make such an assumption.

Had Gramps Schneider meant that? A literal physical "Other World"? On reflection, Waldo was convinced that he must have meant just that, even though he had not used conventional scientific phraseology. "Other World" sounds poetical, but to say an "additional continuum" implies physical meaning. The terms had led him astray.

Schneider had said that the Other World was all around, here, there, and everywhere. Well, was not that a fair description of a space superposed and in one-to-one correspondence? Such a space might be so close to this one that the interval between them was an infinitesimal, yet unnoticed and unreachable, just as two planes may be considered as coextensive and separated by an unimaginably short interval, yet be perfectly discrete, one from the other.

The Other Space was not entirely unreachable; Schneider had spoken of reaching into it. The idea was fantastic, yet he must accept it for the purposes of this investigation. Schneider had implied—no—stated that it was a matter of mental outlook.

Was that really so fantastic? If a continuum were an unmeasurably short distance away, yet completely beyond one's physical grasp, would it be strange to find that it was most easily reached through some subtle and probably subconscious operation of the brain? The whole matter was subtle—and Heaven knew that no one had any real idea of how the brain works. No idea at all. It was laughably insufficient to try to explain the writing of a symphony in terms of the mechanics of colloids. No, nobody knew how the brain worked; one more inexplicable ability in the brain was not too much to swallow.

Come to think of it, the whole notion of consciousness and thought was fantastically improbable.

All right, so McLeod disabled his skycar himself by thinking bad thoughts; Schneider fixed it by thinking the correct thoughts. Then what?

He reached a preliminary conclusion almost at once; by extension, the other deKalb failures were probably failures on the part of the operators. The operators were probably rundown, tired out, worried about something, and in some fashion still not clear they infected, or affected, the deKalbs with their own troubles. For convenience let us say that the deKalbs were short-circuited into the Other World. Poor terminology, but it helped him to form a picture.

Grimes's hypothesis! "Rundown, tired out, worried about something!" Not proved yet, but he felt sure of it. The epidemic of crashes though material was simply an aspect of the general myasthenia caused by shortwave radiation.

If that were true—

He cut in a sight-sound circuit to Earth and demanded to talk with Stevens.

"Dr. Stevens," he began at once, "there is a preliminary precautionary measure which should be undertaken right away."

"Yes?"

"First, let me ask you this: Have you had many failures of deKalbs in private ships? What is the ratio?"

"I can't give you exact figures at the moment," Stevens answered, somewhat mystified, "but there have been practically none. It's the commercial lines which have suffered."

"Just as I suspected. A private pilot won't fly unless he feels up to it, but a man with a job goes ahead no matter how he feels. Make arrangements for special physical and psycho examinations for all commercial pilots flying deKalb-type ships. Ground any who are not feeling in tiptop shape. Call Dr. Grimes. He'll tell you what to look for."

"That's a pretty tall order, Mr. Jones. After all, most of those pilots, practically all of them, aren't our employees. We don't have much control over them."

"That's your problem," Waldo shrugged. "I'm trying to tell you how to reduce crashes in the interim before I submit my complete solution."

"But—"

Waldo heard no more of the remark; he had cut off when he himself was through. He was already calling over a permanently energized, leased circuit which kept him in touch with his terrestrial business office—with his "trained seals." He gave them some very odd instructions—orders for books, old books, rare books. Books dealing with magic.

Stevens consulted with Gleason before attempting to do anything about Waldo's difficult request. Gleason was dubious. "He offered no reason for the advice?"

"None. He told me to look up Dr. Grimes and get his advice as to what specifically to look for."

"Dr. Grimes?"

"The M.D. who introduced me to Waldo—mutual friend."

"I recall. Mm-m-m... it will be difficult to go about grounding men who don't work for us. Still, I suppose several of our larger customers would cooperate if we asked them to and gave them some sort of a reason. What are you looking so odd about?"

Stevens told him of Waldo's last, inexplicable statement. "Do you suppose it could be affecting him the way it did Dr. Rambeau?"

"Mm-m-m. Could be, I suppose. In which case it would not be well to follow his advice. Have you anything else to suggest?"

"No—frankly."

"Then I see no alternative but to follow his advice. He's our last hope. A forlorn one, perhaps, but our only one."

Stevens brightened a little. "I could talk to Doc Grimes about it. He knows more about Waldo than anyone else."

"You have to consult him anyway, don't you? Very well—do so."

Grimes listened to the story without comment. When Stevens had concluded he said, "Waldo must be referring to the symptoms I have observed with respect to shortwave exposure. That's easy; you can have the proofs of the monograph I've been preparing. It'll tell you all about it."

The information did not reassure Stevens; it helped to confirm his suspicion that Waldo had lost his grip. But he said nothing. Grimes continued, "As for the other, Jim, I can't visualize Waldo losing his mind that way."

"He never did seem very stable to me."

"I know what you mean. But his paranoid streak is no more like what Rambeau succumbed to than chicken pox is like mumps. Matter of fact, one psychosis protects against the other. But I'll go see."

"You will? Good!"

"Can't go today. Got a broken leg and some children's colds that'll bear watching. Been some polio around. Ought to be able to make it the end of the week though."

"Doc, why don't you give up G.P. work! It must be deadly."

"Used to think so when I was younger. But about forty years ago I quit treating diseases and started treating people. Since then I've enjoyed it."

Waldo indulged in an orgy of reading, gulping the treatises on magic and related subjects as fast as he could. He had never been interested in such subjects before; now, in reading about them with the point of view that there might be—and even probably was—something to be learned, he found them intensely interesting.

There were frequent references to another world; sometimes it was called the Other World, sometimes the Little World. Read with the conviction that the term referred to an actual, material, different continuum, he could see that many of the practitioners of the forbidden arts had held the same literal viewpoint. They gave directions for using this other world; sometimes the directions were fanciful, sometimes they were baldly practical.

It was fairly evident that at least 90 per cent of all magic, probably more, was balderdash and sheer mystification. The mystification extended even to the practitioners, he felt; they lacked the scientific method; they employed a single-valued logic as faulty as the two-valued logic of the obsolete Spencer determinism; there was no suggestion of modern extensional, many-valued logic.

Nevertheless, the laws of contiguity, of sympathy, and of homeopathy had a sort of twisted lightness to them when considered in relation to the concept of another, different, but accessible, world. A man who had some access to a different space might well believe in a logic in which a thing could be, not be, or be anything with equal ease.

Despite the nonsense and confusion which characterized the treatments of magic which dated back to the period when the art was in common practice, the record of accomplishment of the art was impressive. There was curare and digitalis, and quinine, hypnotism, and telepathy. There was the hydraulic engineering of the Egyptian priests. Chemistry itself was derived from alchemy; for that matter, most modern science owed its origins to the magicians. Science had stripped off the surplusage, run it through the wringer of two-valued logic, and placed the knowledge in a form in which anyone could use it.

Unfortunately, that part of magic which refused to conform to the neat categories of the nineteenth-century methodologists was lopped off and left out of the body of science. It fell into disrepute, was forgotten save as fable and superstition.

Waldo began to think of the arcane arts as aborted sciences, abandoned before they had been clarified.

And yet the manifestations of the sort of uncertainty which had characterized some aspects of magic and which he now attributed to hypothetical additional continua had occurred frequently, even in modern times. The evidence was overwhelming to anyone who approached it with an open mind: Poltergeisten, stones falling from the sky, apportation, "bewitched" persons—or, as he thought of them, persons who for some undetermined reason were loci of uncertainty—"haunted" houses, strange fires of the sort that would have once been attributed to salamanders. There were hundreds of such cases, carefully recorded and well vouched for, but ignored by orthodox science as being impossible. They were impossible, by known law, but considered from the standpoint of a coextensive additional continuum, they became entirely credible.

He cautioned himself not to consider his tentative hypothesis of the Other World as proved; nevertheless, it was an adequate hypothesis even if it should develop that it did not apply to some of the cases of strange events.

The Other Space might have different physical laws—no reason why it should not. Nevertheless, he decided to proceed on the assumption that it was much like the space he knew.

The Other World might even be inhabited. That was an intriguing thought! In which case anything could happen through "magic." Anything!

Time to stop speculating and get down to a little solid research. He had previously regretfully given up trying to apply the formulas of the medieval magicians. It appeared that they never wrote down all of a procedure; some essential—so the reports ran and so his experience confirmed—was handed down verbally from master to student. His experience with Schneider confirmed this; there were things, attitudes, which must needs be taught directly.

He regretfully set out to learn what he must unassisted.

"Gosh, Uncle Gus, I'm glad to see you!"

"Decided I'd better look in on you. You haven't phoned me in weeks."

"That's true, but I've been working awfully hard, Uncle Gus."

"Too hard, maybe. Mustn't overdo it. Lemme see your tongue."

"I'm O.K." But Waldo stuck out his tongue just the same; Grimes looked at it and felt his pulse.

"You seem to be ticking all right. Learning anything?"

"Quite a lot. I've about got the matter of the deKalbs whipped."

"That's good. The message you sent Stevens seemed to indicate that you had found some hookup that could be used on my pet problem too."

"In a way, yes; but around from the other end. It begins to seem as if it was your problem which created Stevens's problem."

"Huh?"

"I mean it. The symptoms caused by ultra shortwave radiation may have had a lot to do with the erratic behavior of the deKalbs."

"How?"

"I don't know myself. But I've rigged up a working hypothesis and I'm checking it."

"Hm-m-m. Want to talk about it?"

"Certainly—to you." Waldo launched into an account of his interview with Schneider, concerning which he had not previously spoken to Grimes, even though Grimes had made the trip with him. He never, as Grimes knew, discussed anything until he was ready to.

The story of the third set of deKalbs to be infected with the incredible writhings caused Grimes to raise his eyebrows. "Mean to say you caught on to how to do that?"

"Yes indeed. Not 'how,' maybe, but I can do it. I've done it more than once. I'll show you." He drifted away toward one side of the great room where several sets of deKalbs, large and small, were mounted, with their controls, on temporary guys. "This fellow over on the end, it just came in today. Broke down. I'll give it Gramps Schneider's hocus-pocus and fix it. Wait a minute. I forgot to turn on the power."

He returned to the central ring which constituted his usual locus and switched on the beamcaster. Since the ship itself effectively shielded anything in the room from outer radiation, he had installed a small power plant and caster similar in type to NAPA's giant ones; without it he would have had no way to test the reception of the deKalbs.

He rejoined Grimes and passed down the line of deKalbs, switching on the activizing circuits. All save two began to display the uncouth motions he had begun to think of as the Schneider flex. "That one on the far end," he remarked, "is in operation but doesn't flex. It has never broken down, so it's never been treated. It's my control; but this one"—he touched the one in front of him—"needs fixing. Watch me."

"What are you going to do?"

"To tell the truth, I don't quite know. But I'll do it." He did not know. All he knew was that it was necessary to gaze down the antennae, think about them reaching into the Other World, think of them reaching for power, reaching—

The antennae began to squirm.

"That's all there is to it—strictly between ourselves. I learned it from Schneider." They had returned to the center of the sphere, at Grimes's suggestion, on the pretext of wanting to get a cigarette. The squirming deKalbs made him nervous, but he did not want to say so.

"How do you explain it?"

"I regard it as an imperfectly understood phenomenon of the Other Space. I know less about it than Franklin knew about lightning. But I will know—I will! I could give Stevens a solution right now for his worries if I knew some way to get around your problem too."

"I don't see the connection."

"There ought to be some way to do the whole thing through the Other Space. Start out by radiating power into the Other Space and pick up it up from there. Then the radiation could not harm human beings. It would never get at them; it would duck around them. I've been working on my caster, but with no luck so far. I'll crack it in time."

"I hope you do. Speaking of that, isn't the radiation from your own caster loose in this room?"

"Yes."

"Then I'll put on my shield coat. It's not good for you either."

"Never mind. I'll turn it off." As he turned to do so there was the sound of a sweet, chirruping whistle. Baldur barked. Grimes turned to see what caused it.

"What," he demanded, "have you got there?"

"Huh? Oh, that's my cuckoo clock. Fun, isn't it?" Grimes agreed that it was, although he could not see much use for it. Waldo had mounted it on the edge of a light metal hoop which spun with a speed just sufficient to produce a centrifugal force of one g.

"I rigged it up," Waldo continued, "while I was bogged down in this problem of the Other Space. Gave me something to do."

"This 'Other Space' business—I still don't get it."

"Think of another continuum much like our own and superposed on it the way you might lay one sheet of paper on another. The two spaces aren't identical, but they are separated from each other by the smallest interval you can imagine—coextensive but not touching—usually. There is an absolute one-to-one, point-for-point correspondence, as I conceive it, between the two spaces, but they are not necessarily the same size or shape."

"Hey? Come again—they would have to be."

"Not at all. Which has the larger number of points in it? A line an inch long, or a line a mile long?"

"A mile long, of course."

"No. They have exactly the same number of points. Want me to prove it?"

"I'll take your word for it. But I never studied that sort of math."

"All right. Take my word for it then. Neither size nor shape is any impediment to setting up a full, point-for-point correspondence between two spaces. Neither of the words is really appropriate. 'Size' has to do with a space's own inner structure, its dimensions in terms of its own unique constants. 'Shape' is a matter which happens inside itself—or at least not inside our space—and has to do with how it is curved, open or closed, expanding or contracting."

Grimes shrugged. "It all sounds like gibberish to me." He returned to watching the cuckoo clock swing round and round its wheel.

"Sure it does," Waldo assented cheerfully. "We are limited by our experience. Do you know how I think of the Other World?" The question was purely rhetorical. "I think of it as about the size and shape of an ostrich egg, but nevertheless a whole universe, existing side by side with our own, from here to the farthest star. I know that it's a false picture, but it helps me to think about it that way."

"I wouldn't know," said Grimes, and turned himself around in the air. The compound motion of the clock's pendulum was making him a little dizzy. "Say! I thought you turned off the caster?"

"I did," Waldo agreed, and looked where Grimes was looking. The deKalbs were still squirming. "I thought I did," he said doubtfully, and turned to the caster's control board. His eyes then opened wider. "But I did. It is turned off."

"Then what the devil—"

"Shut up!" He had to think—think hard. Was the caster actually out of operation? He floated himself over to it, inspected it. Yes, it was dead, dead as the dinosaurs. Just to make sure he went back, assumed his primary waldoes, cut in the necessary circuits, and partially disassembled it. But the deKalbs still squirmed.

The one deKalb set which had not been subjected to the Schneider treatment was dead; it gave out no power hum. But the others were working frantically, gathering power from—where?

He wondered whether or not McLeod had said anything to Gramps

Schneider about the casters from which the deKalbs were intended to pick up their power. Certainly he himself had not. It simply had not come into the conversation. But Schneider had said something. "The Other World is close by and full of power!"

In spite of his own intention of taking the old man literally he had ignored that statement. The Other World is full of power. "I am sorry I snapped at you, Uncle Gus," he said.

"'S all right."

"But what do you make of that?"

"Looks like you've invented perpetual motion, son."

"In a way, perhaps. Or maybe we've repealed the law of conservation of energy. Those deKalbs are drawing energy that was never before in this world!"

"Hm-m-m!"

To check his belief he returned to the control ring, donned his waldoes, cut in a mobile scanner, and proceeded to search the space around the deKalbs with the most sensitive pickup for the radio power band he had available. The needles never jumped; the room was dead in the wave lengths to which the deKalbs were sensitive. The power came from Other Space.

The power came from Other Space. Not from his own beamcaster, not from NAPA's shiny stations, but from Other Space. In that case he was not even close to solving the problem of the defective deKalbs; he might never solve it. Wait, now—just what had he contracted to do? He tried to recall the exact words of the contract.

There just might be a way around it. Maybe. Yes, and this newest cockeyed trick of Gramps Schneider's little pets could have some very tricky aspects. He began to see some possibilities, but he needed to think about it.

"Uncle Gus—"

"Yes, Waldo?"

"You can go back and tell Stevens that I'll be ready with the answers. We'll get his problem licked, and yours too. In the meantime I've got to do some really heavy thinking, so I want to be by myself, please."

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"Greetings, Mr. Gleason. Quiet, Baldur! Come in. Be comfortable. How do you do, Dr. Stevens."

"How do you do, Mr. Jones."

"This," said Gleason, indicating a figure trailing him, "is Mr. Harkness, head of our legal staff."

"Ah, yes indeed. There will be matters of contract to be discussed. Welcome to Freehold, Mr. Harkness."

"Thank you," Harkness said coldly. "Will your attorneys be present?"

"They are present." Waldo indicated a stereo screen. Two figures showed in it; they bowed and murmured polite forms.

"This is most irregular," Harkness complained. "Witnesses should be present in person. Things seen and heard by television are not evidence."

Waldo drew his lips back. "Do you wish to make an issue of it?"

"Not at all," Gleason said hastily. "Never mind, Charles." Harkness subsided.

"I won't waste your time, gentlemen," Waldo began. "We are here in order that I may fulfill my contract with you. The terms are known—we will pass over them." He inserted his arms into his primary waldoes. "Lined up along the far wall you will see a number of radiant power receptors, commonly called deKalbs. Dr. Stevens may, if he wishes, check their serial numbers—"

"No need to."

"Very well. I shall start my local beamcaster, in order that we may check the efficiency of their operation." His waldoes were busy as he spoke. "Then I shall activate the receptors, one at a time." His hands pawed the air; a little pair of secondaries switched on the proper switches on the control board of the last set in line. "This is an ordinary type, supplied to me by Dr. Stevens, which has never failed in operation. You may assure yourself that it is now operating in the normal manner, if you wish, Doctor."

"I can see that it is."

"We will call such a receptor a 'deKalb' and its operation 'normal.'" The small waldoes were busy again. "Here we have a receptor which I choose to term a 'Schneider-deKalb' because of certain treatment it has received"—the antennae began to move—"and its operation 'Schneider-type' operation. Will you check it, Doctor?"

"O.K."

"You fetched with you a receptor set which has failed?"

"As you can see."

"Have you been able to make it function?"

"No, I have not."

"Are you sure? Have you examined it carefully?"

"Quite carefully," Stevens acknowledged sourly. He was beginning to be tired of Waldo's pompous flubdubbery.

"Very well. I will now proceed to make it operative." Waldo left his control ring, shoved himself over to the vicinity of the defective deKalb, and placed himself so that his body covered his exact actions from the sight of the others. He returned to the ring and, using waldoes, switched on the activating circuit of the deKalb.

It immediately exhibited Schneider-type activity.

"That is my case, gentlemen," he announced. "I have found out how to repair deKalbs which become spontaneously inoperative. I will undertake to apply the Schneider treatment to any receptors which you may bring to me. That is included in my fee. I will undertake to train others in how to apply the Schneider treatment. That is included in my fee, but I cannot guarantee that any particular man will profit by my instruction. Without going into technical details I may say that the treatment is very difficult, much harder than it looks. I think that Dr. Stevens will confirm that." He smiled thinly. "I believe that completes my agreement with you."

"Just a moment, Mr. Jones," put in Gleason. "Is a deKalb foolproof, once it has received the Schneider treatment?"

"Quite. I guarantee it."

They went into a huddle while Waldo waited. At last Gleason spoke for them. "These are not quite the results we had expected, Mr. Jones, but we agree that you have fulfilled your commission—with the understanding that you will Schneider-treat any receptors brought to you and instruct others, according to their ability to learn."

"That is correct."

"Your fee will be deposited to your account at once."

"Good. That is fully understood and agreed? I have completely and successfully performed your commission?"

"Correct."

"Very well then. I have one more thing to show you. If you will be patient—" A section of the wall folded back; gigantic waldoes reached into the room beyond and drew forth a large apparatus, which resembled somewhat in general form an ordinary set of deKalbs, but which was considerably more complicated. Most of the complications were sheer decoration, but it would have taken a skilled engineer a long time to prove the fact.

The machine did contain one novel feature: a builtin meter of a novel type, whereby it could be set to operate for a predetermined time and then destroy itself, and a radio control whereby the time limit could be varied. Furthermore, the meter would destroy itself and the receptors if tampered with by any person not familiar with its design. It was Waldo's tentative answer to the problem of selling free and unlimited power.

But of these matters he said nothing. Small waldoes had been busy attaching guys to the apparatus; when they were through he said, "This gentlemen, is an instrument which I choose to call a Jones-Schneider-deKalb. And it is the reason why you will not be in the business of selling power much longer."

"So?" said Gleason. "May I ask why?"

"Because," he was told, "I can sell it more cheaply and conveniently and under circumstances you cannot hope to match."

"That is a strong statement."

"I will demonstrate. Dr. Stevens, you have noted that the other receptors are operating. I will turn them off." The waldoes did so. "I will now stop the beamcast and I will ask you to assure yourself, by means of your own instruments, that there is no radiant power, other than ordinary visible light in this room."

Somewhat sullenly Stevens did so. "The place is dead," he announced some minutes later.

"Good. Keep your instruments in place, that you may be sure it remains dead. I will now activate my receptor." Little mechanical hands closed the switches. "Observe it, Doctor. Go over it thoroughly."

Stevens did so. He did not trust the readings shown by its instrument board; he attached his own meters in parallel. "How about it, James?" Gleason whispered.

Stevens looked disgusted. "The damn thing draws power from nowhere?"

They all looked at Waldo. "Take plenty of time, gentlemen," he said grandly. "Talk it over."

They withdrew as far away as the room permitted and whispered. Waldo could see that Harkness and Gleason were arguing, that Stevens was noncommittal. That suited him. He was hoping that Stevens would not decide to take another look at the fancy gadget he had termed a Jones-Schneider-deKalb. Stevens must not learn too much about it—yet. He had been careful to say nothing but the truth about it, but perhaps he had not said all of the truth; he had not mentioned that all Schneider-treated deKalbs were sources of free power.

Rather embarrassing if Stevens should discover that!

The meter-and-destruction device Waldo had purposely made mysterious and complex, but it was not useless. Later he would be able to point out, quite correctly, that without such a device NAPA simply could not remain in business.

Waldo was not easy. The whole business was a risky gamble; he would have much preferred to know more about the phenomena he was trying to peddle, but—he shrugged mentally while preserving a smile of smug confidence—the business had dragged on several months already, and the power situation really was critical. This solution would do—if he could get their names on the dotted line quickly enough.

For he had no intention of trying to compete with NAPA.

Gleason pulled himself away from Stevens and Harkness, came to Waldo. "Mr. Jones, can't we arrange this amicably?"

"What have you to suggest?"

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It was quite an hour later that Waldo, with a sigh of relief, watched his guests' ship depart from the threshold flat. A fine caper, he thought, and it had worked; he had gotten away with it. He had magnanimously allowed himself to be persuaded to consolidate, provided—he had allowed himself to be quite temperamental about this—the contract was concluded at once, no fussing around and fencing between lawyers. Now or never—put up or shut up. The proposed contract, he had pointed out virtuously, gave him nothing at all unless his allegations about the Jones-Schneider-deKalb were correct.

Gleason considered this point and had decided to sign, had signed.

Even then Harkness had attempted to claim that Waldo had been an employee of NAPA. Waldo had written that first contract himself—a specific commission for a contingent fee. Harkness did not have a leg to stand on; even Gleason had agreed to that.

In exchange for all rights to the Jones-Schneider-deKalb, for which he agreed to supply drawings—wait till Stevens saw, and understood, those sketches!—for that he had received the promise of senior stock in NAPA, nonvoting, but fully paid up and nonassessable. The lack of active participation in the company had been his own idea. There were going to be more headaches in the power business, headaches aplenty. He could see them coming—bootleg designs, means of outwitting the metering, lots of things. Free power had come, and efforts to stop it would in the long run, he believed, be fruitless.

Waldo laughed so hard that he frightened Baldur, who set up an excited barking.

He could afford to forget Hathaway now.

His revenge on NAPA contained one potential flaw; he had assured Gleason that the Schneider-treated deKalbs would continue to operate, would not come unstuck. He believed that to be true simply because he had faith in Gramps Schneider. But he was not prepared to prove it. He knew himself that he did not know enough about the phenomena associated with the Other World to be sure that something would, or would not, happen. It was still going to be necessary to do some hard, extensive research.

But the Other World was a devilishly difficult place to investigate!

Suppose, he speculated, that the human race were blind, had never developed eyes. No matter how civilized, enlightened, and scientific the race might have become, it is difficult to see how such a race could ever have developed the concepts of astronomy. They might know of the Sun as a cyclic source of energy having a changing, directional character, for the Sun is so overpowering that it may be "seen" with the skin. They would notice it and invent instruments to trap it and examine it.

But the pale stars, would they ever notice them? It seemed most unlikely. The very notion of the celestial universe, its silent depths and starlit grandeur, would be beyond them. Even if one of their scientists should have the concept forced on him in such a manner that he was obliged to accept the fantastic, incredible thesis as fact, how then would he go about investigating its details?

Waldo tried to imagine an astronomical phototelescope, conceived and designed by a blind man, intended to be operated by a blind man, and capable of collecting data which could be interpreted by a blind man. He gave it up; there were too many hazards. It would take a subtlety of genius far beyond his own to deal with the inescapably tortuous concatenations of inferential reasoning necessary to the solution of such a problem. It would strain him to invent such instruments for a blind man; he did not see how a blind man could ever overcome the difficulties unassisted.

In a way that was what Schneider had done for him; alone, he would have bogged down.

But even with Schneider's hints the problem of investigating the Other World was still much like the dilemma of the blind astronomer. He could not see the Other World; only through the Schneider treatment had he been able to contact it. Damnation! how could he design instruments to study it?

He suspected that he would eventually have to go back to Schneider for further instruction, but that was an expedient so distasteful that he refused to think much about it. Furthermore, Gramps Schneider might not be able to teach him much; they did not speak the same language.

This much he did know: the Other Space was there and it could be reached sometimes by proper orientation of the mind, deliberately as Schneider had taught him, or subconsciously as had happened to McLeod and others.

He found the idea distasteful. That thought and thought alone should be able to influence physical phenomena was contrary to the whole materialistic philosophy in which he had grown up. He had a prejudice in favor of order and invariable natural laws. His cultural predecessors, the experimental philosophers who had built up the world of science and its concomitant technology, Galileo, Newton, Edison, Einstein, Steinmetz, Jeans, and their myriad colleagues—these men had thought of the physical universe as a mechanism proceeding by inexorable necessity. Any apparent failure to proceed thus was regarded as an error in observation, an insufficient formulation of hypothesis, or an insufficiency of datum.

Even the short reign of the Heisenberg uncertainty principle had not changed the fundamental orientation toward Order and Cosmos;

the Heisenberg uncertainty was one they were certain of! It could be formulated, expressed, and a rigorous statistical mechanics could be built from it. In 1958 Horowitz's reformulation of wave mechanics had eliminated the concept. Order and causation were restored.

But this damned business! One might as well pray for rain, wish on the Moon, go to faith healers, surrender whole hog to Bishop Berkely's sweetly cerebral world-in-your-head. "—the tree's not a tree, when there's no one about the quad!"

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Waldo was not emotionally wedded to Absolute Order as Rambeau had been; he was in no danger of becoming mentally unbalanced through a failure of his basic conceptions; nevertheless, consarn it, it was convenient for things to work the way one expected them to. On order and natural law was based predictability; without predictability it was impossible to live. Clocks should run evenly; water should boil when heat is applied to it; food should nourish, not poison; deKalb receptors should work, work the way they were designed to; Chaos was insupportable—it could not be lived with.

Suppose Chaos were king and the order we thought we detected in the world about us a mere phantasm of the imagination; where would that lead us? In that case, Waldo decided, it was entirely possible that a ten-pound weight did fall ten times as fast as a one-pound weight until the day the audacious Galileo decided in his mind that it was not so. Perhaps the whole meticulous science of ballistics derived from the convictions of a few firm-minded individuals who had sold the notion to the world. Perhaps the very stars were held firm in their courses by the unvarying faith of the astronomers. Orderly Cosmos, created out of Chaos—by Mind!

The world was flat before geographers decided to think of it otherwise. The world was flat, and the Sun, tub size, rose in the east and set in the west. The stars were little lights, studding a pellucid dome which barely cleared the tallest mountains. Storms were the wrath of gods and had nothing to do with the calculus of air masses. A Mind-created animism dominated the world then.

More recently it had been different. A prevalent convention of materialistic and invariable causation had ruled the world; on it was based the whole involved technology of a machine-served civilization. The machines worked, the way they were designed to work, because everybody believed in them.

Until a few pilots, somewhat debilitated by overmuch exposure to radiation, had lost their confidence and infected their machines with uncertainty—and thereby let magic loose in the world.

He was beginning, he thought, to understand what had happened to magic. Magic was the erratic law of an animistic world; it had been steadily pushed back by the advancing philosophy of invariant causation. It was gone now—until this new outbreak—and its world with it, except for backwaters of "superstition." Naturally an experimental scientist reported failure when investigating haunted houses, apportations, and the like; his convictions prevented the phenomena from happening.

The deep jungles of Africa might be very different places—when there was no white man around to see! The strangely slippery laws of magic might still obtain.

Perhaps these speculations were too extreme; nevertheless, they had one advantage which orthodox concepts had not: they included Gramps Schneider's hexing of the deKalbs. Any working hypothesis which failed to account for Schneider's—and his own—ability to *think* a set of deKalbs into operation was not worth a continental. This one did, and it conformed to Gramps's own statements: "All matters are doubtful" and "A thing can both *be*, *not be*, and *be anything*. There are many true ways of looking at the same thing. Some ways are good, some are bad."

Very well. Accept it. Act on it. The world varied according to the way one looked at it. In that case, thought Waldo, he knew how he wanted to look at it. He cast his vote for order and predictability!

He would *set* the style. He would impress his *own* concept of the Other World on the Cosmos!

It had been a good start to assure Gleason that the Schneider-treated deKalbs were foolproof. Good. So let it be. They were foolproof. They would never get out of order.

He proceeded to formulate and clarify his own concept of the Other World in his mind. He would think of it as orderly and basically similar to this space. The connection between the two spaces lay in the neurological system; the cortex, the thalamus, the spinal cord, and the appended nerve system were closely connected with both spaces. Such a picture was consistent with what Schneider had told him and did not conflict with phenomena as he knew it.

Wait. If the neurological system lay in both spaces, then that might account for the relatively slow propagation of nerve impulses as compared with electromagnetic progression. Yes! If the other space had a *c* constant relatively smaller than that of this space, such would follow.

He began to feel a calm assurance that it was so.

Was he merely speculating—or creating a universe?

Perhaps he would have to abandon his mental picture of the Other Space as being the size and shape of an ostrich egg, since a space with a slower propagation of light is not smaller, but larger, than the space he was used to. No... no, wait a second, the *size* of a space did not depend on its c constant, but on its radius of curvature in terms of its c constant. Since c was a velocity, size was dependent on the notion of time—in this case time as entropy rate. Therein lay a characteristic which could be compared between the two spaces: they exchanged energy; they affected each other's entropy. The one which degenerated the more rapidly toward a state of level entropy was the "smaller."

He need not abandon his picture of the ostrich egg—good old egg! The Other World was a closed space, with a slow c, a high entropy rate, a short radius, and an entropy state near level—a perfect reservoir of power at every point, ready to spill over into this space wherever he might close the interval.To its inhabitants, if any, it might seem to be hundreds of millions of light years around; to him it was an ostrich egg, turgid to bursting with power.

He was already beginning to think of ways of checking his hypothesis. If, using a Schneider-deKalb, he were to draw energy at the highest rate he could manage, would he affect the local potential? Would it establish an entropy gradient? Could he reverse the process by finding a way to pump power into the Other World? Could he establish different levels at different points and thereby check for degeneration toward level, maximum entropy?

Did the speed of nerve impulse propagation furnish a clue to the c of the Other Space? Could such a clue be combined with the entropy and potential investigations to give a mathematical picture of the Other Space, in terms of its constants and its age?

He set about it. His untrammeled, wild speculations had produced some definite good: he'd tied down at least one line of attack on that Other Space; he'd devised a working principle for his blind man's telescope mechanism. Whatever the truth of the thing was, it was more than a truth; it was a complete series of new truths. It was the very complexity of that series of new truths—the truths, the characteristic laws, that were inherent properties of the Other Space, plus the new truth laws resultant from the interaction of the characteristics of the Other Space with Normal Space. No wonder Rambeau had said anything could happen! Almost anything could, in all probability, by a proper application and combination of the three sets of laws: the laws of Our Space, the laws of Other Space, and the coordinate laws of Both Spaces.

But before theoreticians could begin work, new data were most desperately needed. Waldo was no theoretician, a fact he admitted lefthandedly in thinking of theory as impractical and unnecessary, time waste for him as a consulting engineer. Let the smooth apes work it out.

But the consulting engineer had to find out one thing: would the Schneider-deKalbs continue to function uninterruptedly as guaranteed? If not, what must be done to assure continuous function?

The most difficult and the most interesting aspect of the investigation had to do with the neurological system in relation to Other Space. Neither electromagnetic instruments nor neural surgery was refined enough to do accurate work on the levels he wished to investigate.

But he had waldoes.

The smallest waldoes he had used up to this time were approximately half an inch across their palms—with microscanners to match, of course. They were much too gross for his purpose. He wished to manipulate living nerve tissue, examine its insulation and its performance in situ.

He used the tiny waldoes to create tinier ones.

The last stage was tiny metal blossoms hardly an eighth of an inch across. The helices in their stems, or forearms, which served them as pseudo muscles, could hardly be seen by the naked eye—but, then, he used scanners.

His final team of waldoes used for nerve and brain surgery varied in succeeding stages from mechanical hands nearly lifesize down to these fairy digits which could manipulate things much too small for the eye to see. They were mounted in bank to work in the same locus. Waldo controlled them all from the same primaries; he could switch from one size to another without removing his gauntlets. The same change in circuits which brought another size of waldoes under control automatically accomplished the change in sweep of scanning to increase or decrease the magnification so that Waldo always saw before him in his stereo receiver a "lifesize" image of his other hands.

Each level of waldoes had its own surgical instruments, its own electrical equipment.

Such surgery had never been seen before, but Waldo gave that aspect little thought; no one had told him that such surgery was unheard-of.

He established, to his own satisfaction, the mechanism whereby shortwave radiation had produced a deterioration in human physical performance. The synapses between dendrites acted as if they were points of leakage. Nerve impulses would sometimes fail to make the jump, would leak off—to where? To Other Space, he was sure. Such leakage seemed to establish a preferred path, a canalization, whereby the condition of the victim became steadily worse. Motor action was not lost entirely, as both paths were still available, but efficiency was lost. It reminded him of a metallic electrical circuit with a partial ground.

An unfortunate cat, which had become dead undergoing the experimentation, had supplied him with much of his data. The kitten had been born and raised free from exposure to power radiation. He subjected it to heavy exposure and saw it acquire a. myasthenia nearly as complete as his own—while studying in minute detail what actually went on in its nerve tissues.

He felt quite sentimental about it when it died.

***

Yet, if Gramps Schneider were right, human beings need not be damaged by radiation. If they had the wit to look at it with the proper orientation, the radiation would not affect them; they might even draw power out of the Other World.

That was what Gramps Schneider had told him to do.

That was what Gramps Schneider had told him to do!

Gramps Schneider had told him he need not be weak!

That he could be strong—

Strong!

STRONG!

He had never thought of it. Schneider's friendly ministrations to him, his advice about overcoming the weakness, he had ignored, had thrown off as inconsequential. His own weakness, his own peculiarity which made him different from the smooth apes, he had regarded as a basic implicit fact. He had accepted it as established when he was a small child, a final unquestioned factor.

Naturally he had paid no attention to Schneider's words in so far as they referred to him.

To be strong!

To stand alone—to work, to run!

Why, he... he could, he could go down to Earth surface without fear. He wouldn't mind the field. They said they didn't mind it; they even carried things—great, heavy things. Everybody did. They threw things.

He made a sudden convulsive movement in his primary waldoes, quite unlike his normal, beautifully economical rhythm. The secondaries were oversize, as he was making a new setup. The guys tore loose, a brace plate banged against the wall. Baldur was snoozing nearby; he pricked up his ears, looked around, then turned his face to Waldo, questioning him.

Waldo glared at him and the dog whined. "Shut up!"

The dog quieted and apologized with his eyes.

Automatically he looked over the damage—not much, but he would have to fix it. Strength. Why, if he were strong, he could do anything—anything! No. 6 extension waldoes and some new guys—Strong! Absentmindedly he shifted to the No. 6 waldoes.

Strength!

He could even meet women—be stronger than they were!

***

He could swim. He could ride. He could fly a ship—run, jump. He could handle things with his bare hands. He could even learn to dance!

Strong!

He would have muscles! He could break things.

He could—He could—

He switched to the great waldoes with hands the size of a man's body. Strong—they were strong! With one giant waldo he hauled from the stock pile a quarter-inch steel plate, held it up, and shook it. A booming rumble. He shook it again. Strong!

He took it in both waldoes, bent it double. The metal buckled unevenly. Convulsively he crumpled it like wastepaper between the two huge palms. The grinding racket raised hackles on Baldur; he himself had not been aware of it.

He relaxed for a moment, gasping. There was sweat on his forehead; blood throbbed in his ears. But he was not spent; he wanted something heavier, stronger. Cutting to the adjoining storeroom he selected an L-beam twelve feet long, shoved it through to where the giant hands could reach it, and cut back to them.

The beam was askew in the port; he wrenched it loose, knocking a big dent in the port frame. He did not notice it.

The beam made a fine club in the gross fist. He brandished it. Baldur backed away, placing the control ring between himself and the great hands.

Power! Strength! Smashing, unbeatable strength—

With a spastic jerk he checked his swing just before the beam touched the wall. No—But he grabbed the other end of the club with the left waldo and tried to bend it. The big waldoes were built for heavy work, but the beam was built to resist. He strained inside the primaries, strove to force the great fists to do his will. A warning light flashed on his control board. Blindly he kicked in the emergency overload and persisted.

The hum of the waldoes and the rasp of his own breath were drowned out by the harsh scrape of metal on metal as the beam began to give way. Exulting, he bore down harder in the primaries. The beam was bending double when the waldoes blew out. The righthand tractors let go first; the fist flung open. The left fist, relieved of the strain, threw the steel from it.

It tore its way through the thin bulkhead, making a ragged hole, crashed and clanged in the room beyond.

But the giant waldoes were inanimate junk.

He drew his soft pink hands from the waldoes and looked at them. His shoulders heaved, and racking sobs pushed up out of him. He covered his face with his hands; the tears leaked out between his fingers. Baldur whimpered and edged in closer. On the control board a bell rang persistently.

***

The wreckage had been cleared away and an adequate, neat patch covered the place where the L-beam had made its own exit. But the giant waldoes had not yet been replaced; their frame was uninhabited. Waldo was busy rigging a strength tester.

It had been years since he had paid any attention to the exact strength of his body. He had had so little use for strength; he had concentrated on dexterity, particularly on the exact and discriminating control of his namesakes. In the selective, efficient, and accurate use of his muscles he was second to none; he had control—he had to have. But he had had no need for strength.

With the mechanical equipment at hand it was not difficult to jerry-rig a device which would register strength of grip as pounds-force on a dial. A springloaded scale and a yoke to act on it sufficed. He paused and looked at the contrivance.

He need only take off the primary waldoes, place his bare hand on the grip, bear down—and he would know. Still he hesitated.

It felt strange to handle anything so large with his bare hand. Now. Reach into the Other World for power. He closed his eyes and pressed. He opened them. Fourteen pounds—less than he used to have.

But he had not really tried yet. He tried to imagine Gramps Schneider's hands on his arm, that warm tingle. Power. Reach out and claim it.

Fourteen pounds, fifteen—seventeen, eighteen, twenty, twenty-one! He was winning! He was winning!

Both his strength and his courage failed him, in what order he could not say. The needle spun back to zero; he had to rest.

Had he really shown exceptional strength—or was twenty-one pounds of grip simply normal for him at his present age and weight? A normally strong and active man, he knew, should have a grip on the order of one hundred and fifty pounds.

Nevertheless, twenty-one pounds of grip was six pounds higher than he had ever before managed on test.

Try, again. Ten, eleven—twelve. Thirteen. The needle hesitated. Why, he had just started—this was ridiculous. Fourteen.

There it stopped. No matter how he strained and concentrated his driving will he could not pass that point. Slowly, he dropped back from it.

***

Sixteen pounds was the highest he managed in the following days. Twenty-one pounds seemed to have been merely a fluke, a good first effort. He ate bitterness.

But he had not reached his present position of wealth and prominence by easy surrender. He persisted, recalling carefully just what Schneider had said to him, and trying to feel the touch of Schneider's hands. He told himself now that he really had been stronger under Schneider's touch. But that he had failed to realize it because of the Earth's heavy field. He continued to try.

In the back of his mind he knew that he must eventually seek out Gramps Schneider and ask his help, if he did not find the trick alone. But he was extremely reluctant to do so, not because of the terrible trip it entailed—though that would ordinarily have been more than enough reason—but because if he did so and Schneider was not able to help him, then there would be no hope, no hope at all.

It was better to live with disappointment and frustration than to live without hope. He continued to postpone it.

***

Waldo paid little attention to Earth time; he ate and slept when he pleased. He might catch a cat nap at any time; however, at fairly regular intervals he slept for longer periods. Not in a bed, of course. A man who floats in air has no need for a bed. But he did make it a habit to guy himself into place before undertaking eight hours of solid sleep, as it prevented him from casual drifting in random air currents which might carry him, unconscious, against controls or switches.

Since the obsession to become strong had possessed him he had frequently found it necessary to resort to soporifics to insure sleep.

Dr. Rambeau had returned and was looking for him. Rambeau—crazy and filled with hate. Rambeau, blaming his troubles on Waldo. He was not safe, even in Freehold, as the crazy physicist had found out how to pass from one space to another. There he was now! Just his head, poked through from the Other World. "I'm going to get you, Waldo!" He was gone—no, there he was behind him! Reaching, reaching out with hands that were writhing antennae. "You, Waldo!" But Waldo's own hands were the giant waldoes; he snatched at Rambeau.

The big waldoes went limp.

Rambeau was at him, was on him; he had him around the throat.

Gramps Schneider said in his ear, in a voice that was calm and strong, "Reach out for the power, my son. Feel it in your fingers." Waldo grabbed at the throttling fingers, strained, tried.

They were coming loose. He was winning. He would stuff Rambeau back into the Other World and keep him there. There! He had one hand free. Baldur was barking frantically; he tried to tell him to shut up, to bite Rambeau, to help—

The dog continued to bark.

***

He was in his own home, in his own great room. Baldur let out one more yipe. "Quiet!" He looked himself over.

When he had gone to sleep he had been held in place by four light guys, opposed like the axes of a tetrahedron. Two of them were still fastened to his belt; he swung loosely against the control ring. Of the other two, one had snapped off at his belt; its end floated a few feet away. The fourth had been broken in two places, near his belt and again several feet out; the severed piece was looped loosely around his neck.

He looked the situation over. Study as he might, he could conceive no way in which the guys could have been broken save by his own struggles in the nightmare. The dog could not have done it; he had no way to get a purchase. He had done it himself. The lines were light, being intended merely as stays. Still—

It took him a few minutes to rig a testing apparatus which would test pull instead of grip; the yoke had to be reversed. When it was done he cut in a medium waldo pair, fastened the severed pieces of line to the tester, and, using the waldo, pulled.

The line parted at two hundred and twelve pounds.

Hastily, but losing time because of nervous clumsiness, he rerigged the tester for grip. He paused, whispered softly, "Now is the time, Gramps!" and bore down on the grip.

Twenty pounds—twenty-one. Twenty-five!

Up past thirty. He was not even sweating! Thirty-five—forty, -one, -two, -three. Fortyfive! And -six! And a half. Forty-seven pounds!

With a great sigh he let his hand relax. He was strong. Strong.

When he had somewhat regained his composure, he considered what to do next. His first impulse was to call Grimes, but he suppressed it. Soon enough when he was sure of himself.

He went back to the tester and tried his left hand. Not as strong as his right, but almost—nearly fortyfive pounds. Funny thing, he didn't feel any different. Just normal, healthy. No sensation.

He wanted to try all of his muscles. It would take too long to rig testers for kick, and shove, and back lift, and, oh, a dozen others. He needed a field, that was it, a one-g field. Well, there was the reception room; it could be centrifuged.

But its controls were in the ring and it was long corridors away. There was a nearer one, the centrifuge for the cuckoo clock. He had rigged the wheel with a speed control as an easy way to regulate the clock. He moved back to the control ring and stopped the turning of the big wheel; the clockwork was disturbed by the sudden change; the little red bird popped out, said, "Th-wu th-woo" once, hopefully, and subsided.

Carrying in his hand a small control panel radio hooked to the motor which impelled the centrifuge wheel, he propelled himself to the wheel and placed himself inside, planting his feet on the inner surface of the rim and grasping one of the spokes, so that he would be in a standing position with respect to the centrifugal force, once it was impressed. He started the wheel slowly.

Its first motion surprised him and he almost fell off. But he recovered himself and gave it a little more power. All right so far. He speeded it up gradually, triumph spreading through him as he felt the pull of the pseudo gravitational field, felt his legs grow heavy, but still strong.

He let it out, one full g. He could take it. He could, indeed! To be sure, the force did not affect the upper part of his body so strongly as the lower, as his head was only a foot or so from the point of rotation. He could fix that; he squatted down slowly, hanging on tight to the spoke. It was all right.

But the wheel swayed and the motor complained. His unbalanced weight, that far out from the center of rotation, was putting too much of a strain on a framework intended to support a cuckoo clock and its counterweight only. He straightened up with equal caution, feeling the fine shove of his thigh muscles and calves. He stopped the wheel.

Baldur had been much perturbed by the whole business. He had almost twisted his neck off trying to follow the motions of Waldo.

He still postponed calling Grimes. He wanted to arrange for some selective local controls on the centrifuging of the reception room, in order to have a proper place in which to practice standing up. Then he had to get the hang of this walking business; it looked easy, but he didn't know. Might be quite a trick to learn it.

Thereafter he planned to teach Baldur to walk. He tried to get Baldur into the cuckoo-clock wheel, but the dog objected. He wiggled free and retreated to the farthest part of the room. No matter—when he had the beast in the reception room he would damn well have to learn to walk. Should have seen to it long ago. A big brute like that, and couldn't walk!

He visualized a framework into which the dog could be placed which would force him to stand erect. It was roughly equivalent to a baby's toddler, but Waldo did not know that. He had never seen a baby's toddler.

***

"Uncle Gus—"

"Oh, hello, Waldo. How you been?"

"Fine. Look, Uncle Gus, could you come up to Freehold—right away?"

Grimes shook his head. "Sorry. My bus is in the shop."

"Your bus is too slow anyhow. Take a taxi, or get somebody to drive you."

"And have you insult 'em when we get there? Huh-uh."

"I'll be sweet as sugar."

"Well, Jimmie Stevens said something yesterday about wanting to see you."

Waldo grinned. "Get him. I'd like to see him."

"I'll try."

"Call me back. Make it soon."

Waldo met them in the reception room, which he had left uncentrifuged. As soon as they came in he started his act. "My, I'm glad you're here. Dr. Stevens—could you fly me down to Earth right away? Something's come up."

"Why—I suppose so."

"Let's go."

"Wait a minute, Waldo. Jimmie's not prepared to handle you the way you have to be handled."

"I'll have to chance it, Uncle Gus. This is urgent."

"But—"

"No "buts.' Let's leave at once."

They hustled Baldur into the ship and tied him down. Grimes saw to it that Waldo's chair was tilted back in the best approximation of a deceleration rig. Waldo settled himself into it and closed his eyes to discourage questions. He sneaked a look and found Grimes grimly silent.

Stevens made very nearly a record trip, but set them down quite gently on the parking flat over Grimes's home. Grimes touched Waldo's arm. "How do you feel? I'll get someone and we'll get you inside. I want to get you to bed."

"Can't do that, Uncle Gus. Things to do. Give me your arm, will you?"

"Huh?" But Waldo reached for the support requested and drew himself up.

"I'll be all right now, I guess." He let go the physician's arm and started for the door. "Will you untie Baldur?"

"Waldo!"

He turned around, grinning happily. "Yes, Uncle Gus, it's true. I'm not weak any more. *I* can walk."

Grimes took hold of the back of one of the seats and said shakily, "Waldo, I'm an old man. You ought not to do things like this to me." He wiped at his eyes.

"Yes," agreed Stevens, "it's a damn dirty trick."

Waldo looked blankly from one face to the other. "I'm sorry," he said humbly. "I just wanted to surprise you."

"It's all right. Let's go downside and have a drink. You can tell us about it then."

"All right. Come on, Baldur." The dog got up and followed after his master. He had a very curious gait; Waldo's trainer gadget had taught him to pace instead of trot.

***

Waldo stayed with Grimes for days, gaining strength, gaining new reflex patterns, building up his flabby muscles. He had no setbacks; the myasthenia was gone. All he required was conditioning.

Grimes had forgiven him at once for his unnecessarily abrupt and spectacular revelation of his cure, but Grimes had insisted that he take it easy and become fully readjusted before he undertook to venture out unescorted. It was a wise precaution. Even simple things were hazards to him. Stairs, for example. He could walk on the level, but going downstairs had to be learned. Going up was not so difficult.

Stevens showed up one day, let himself in, and found Waldo alone in the living room, listening to a stereo show. "Hello, Mr. Jones."

"Oh—hello, Dr. Stevens." Waldo reached down hastily, fumbled for his shoes, zipped them on. "Uncle Gus says I should wear them all the time," he explained. "Everybody does. But you caught me unawares."

"Oh, that's no matter. You don't have to wear them in the house. Where's Doc?"

"Gone for the day. Don't you, really? Seems to me my nurses always wore shoes."

"Oh yes, everybody does—but there's no law to make you."

"Then I'll wear them. But I can't say that I like them. They feel dead, like a pair of disconnected waldoes. But I want to learn how."

"How to wear shoes?"

"How to act like people act. It's really quite difficult," he said seriously.

Stevens felt a sudden insight, a welling of sympathy for this man with no background and no friends. It must be odd and strange to him. He felt an impulse to confess something which had been on his mind with respect to Waldo. "You really are strong now, aren't you?"

Waldo grinned happily. "Getting stronger every day. I gripped two hundred pounds this morning. And see how much fat I've worked off."

"You're looking fit, all right. Here's a funny thing. Every since I first met you I've wished to high heaven that you were as strong as an ordinary man."

"You really did? Why?"

"Well... I think you will admit that you used some pretty poisonous language to me, one time and another. You had me riled up all the time. I wanted you to get strong so that I could just beat the hell out of you."

Waldo had been walking up and down, getting used to his shoes. He stopped and faced Stevens. He seemed considerably startled. "You mean you wanted to fistfight me?"

"Exactly. You used language to me that a man ought not to use unless he is prepared to back it up with his fists. If you had not been an invalid I would have pasted you one, oh, any number of times."

Waldo seemed to be struggling with a new concept. "I think I see," he said slowly. "Well—all right." On the last word he delivered a roundhouse swipe with plenty of power behind it. Stevens was not in the least expecting it; it happened to catch him on the button. He went down, out cold.

When he came to he found himself in a chair. Waldo was shaking him. "Wasn't that right?" he said anxiously.

"What did you hit me with?"

"My hand. Wasn't that right? Wasn't that what you wanted?"

"Wasn't that what I—" He still had little bright lights floating in front of his eyes, but the situation began to tickle him. "Look here—is that your idea of the proper way to start a fight?"

"Isn't it?"

Stevens tried to explain to him the etiquette of fisticuffs, contemporary American. Waldo seemed puzzled, but finally he nodded. "I get it. You have to give the other man warning. All right—get up, and we'll do it over."

"Easy, easy! Wait a minute. You never did give me a chance to finish what I was saying. I was sore at you, but I'm not any more. That is what I was trying to tell you. Oh, you were utterly poisonous; there is no doubt about that. But you couldn't help being."

"I don't mean to be poisonous," Waldo said seriously.

"I know you don't, and you're not. I rather like you now—now that you're strong."

"Do you really?"

"Yes, I do. But don't practice any more of those punches on me."

"I won't. But I didn't understand. But, do you know, Dr. Stevens, it's —"

"Call me Jim."

"Jim. It's a very hard thing to know just what people do expect. There is so little pattern to it. Take belching; I didn't know it was forbidden to burp when other people are around. It seems obviously necessary to me. But Uncle Gus says not."

Stevens tried to clear up the matter for him—not too well, as he found that Waldo was almost totally lacking in any notion, even theoretical, of social conduct. Not even from fiction had he derived a concept of the intricacies of mores, as he had read almost no fiction. He had ceased reading stories in his early boyhood, because he lacked the background of experience necessary to appreciate fiction.

He was rich, powerful, and a mechanical genius, but he still needed to go to kindergarten.

Waldo had a proposition to make. "Jim, you've been very helpful. You explain these things better than Uncle Gus does. I'll hire you to teach me."

Stevens suppressed a slight feeling of pique. "Sorry. I've got a job that keeps me busy."

"Oh, that's all right. I'll pay you better than they do. You can name your own salary. It's a deal."

Stevens took a deep breath and sighed. "You don't understand. I'm an engineer and I don't hire out for personal service. You can't hire me. Oh, I'll help you all I can, but I won't take money for it."

"What's wrong with taking money?"

The question, Stevens thought, was stated wrongly. As it stood it could not be answered. He launched into a long, involved discussion of professional and business conduct. He was really not fitted for it; Waldo soon bogged down. "I'm afraid I don't get it. But see here—could you teach me how to behave with girls? Uncle Gus says he doesn't dare take me out in company."

"Well, I'll try. I'll certainly try. But, Waldo, I came over to see you about some of the problems we're running into at the plant. About this theory of the two spaces that you were telling me about—"

"It's not theory; it's fact."

"All right. What I want to know is this: When do you expect to go back to Freehold and resume research? We need some help."

"Go back to Freehold? I haven't any idea. I don't intend to resume research."

"You don't? But, my heavens, you haven't finished half the investigations you outlined to me."

"You fellows can do 'em. I'll help out with suggestions, of course."

"Well—maybe we could interest Gramps Schneider," Stevens said doubtfully.

"I would not advise it," Waldo answered. "Let me show you a letter he sent me." He left and fetched it back. "Here."

Stevens glanced through it. "—your generous offer of your share in the new power project I appreciate, but, truthfully, I have no interest in such things and would find the responsibility a burden. As for the news of your new strength I am happy, but not surprised. The power of the Other World is his who would claim it—" There was more to it. It was written in a precise Spencerian hand, a trifle shaky; the rhetoric showed none of the colloquialisms with which Schneider spoke.

"Hm-m-m—I think I see what you mean."

"I believe," Waldo said seriously, "that he regards our manipulations with gadgets as rather childish."

"I suppose. Tell me, what do you intend to do with yourself?"

"Me? I don't know, exactly. But I can tell you this: I'm going to have fun. I'm going to have lots of fun. I'm just beginning to find out how much fun it is to be a man!"

***

His dresser tackled the other slipper. "To tell you just why I took up dancing would be a long story," he continued.

"I want details."

"Hospital calling," someone in the dressing room said.

"Tell 'em I'll be right there, fast. Suppose you come in tomorrow afternoon?" he added to the woman reporter. "Can you?"

"Right."

A man was shouldering his way through the little knot around him. Waldo caught his eye. "Hello, Stanley. Glad to see you."

"Hello, Waldo." Gleason pulled some papers out from under his cape and dropped them in the dancer's lap. "Brought these over myself as I wanted to see your act again."

"Like it?"

"Swell!"

Waldo grinned and picked up the papers. "Where is the dotted line?"

"Better read them first," Gleason cautioned him.

"Oh shucks, no. If it suits you, it suits me. Can I borrow your stylus?"

A worried little man worked his way up to them. "About that recording, Waldo—"

"We've discussed that," Waldo said flatly. "I only perform before audiences."

"We've combined it with the Warm Springs benefit."

"That's different. O.K."

"While you're about it, take a look at this layout." It was a reduction, for a twenty-four sheet:

THE GREAT WALDO
AND HIS TROUPE

with the opening date and theater left blank, but with a picture of Waldo, as Harlequin, poised high in the air.

"Fine, Sam, fine!" Waldo nodded happily.

"Hospital calling again!"

"I'm ready now," Waldo answered, and stood up. His dresser draped his street cape over his lean shoulders. Waldo whistled sharply. "Here, Baldur! Come along." At the door he stopped an instant, and waved. "Good night, fellows!"

"Good night, Waldo."

They were all such grand guys.

THE UNPLEASANT PROFESSION OF JONATHAN HOAG

I

—the end it is not well.
From too much love of living,
From hope and fear set free,
We thank with brief thanksgiving
Whatever gods may be
That no life lives forever;
That dead men rise up never;
That even the weariest river
Winds somewhere safe to sea.
—SWINBURNE

"Is it blood, doctor?" Jonathan Hoag moistened his lips with his tongue and leaned forward in the chair, trying to see what was written on the slip of paper the medico held.

Dr. Potbury brought the slip of paper closer to his vest and looked at Hoag over his spectacles. "Any particular reason," he asked, "why you should find blood under your fingernails?"

"No. That is to say— Well, no—there isn't. But it *is* blood—isn't it?"

"No," Potbury said heavily. "No, it isn't blood."

Hoag knew that he should have felt relieved. But he was not. He knew in that moment that he had clung to the notion that the brown grime under his fingernails was dry blood rather than let himself dwell on other, less tolerable, ideas.

He felt sick at his stomach. But he had to know—

"What is it, doctor? Tell me."

Potbury looked him up and down. "You asked me a specific question. I've answered it. You did not ask me what the substance was; you asked me to find out whether or not it was blood. It is not."

"But— You are playing with me. Show me the analysis." Hoag half rose from his chair and reached for the slip of paper.

The doctor held it away from him, then tore it carefully in two. Placing the two pieces together he tore them again, and again.

"Why, you!"

"Take your practice elsewhere," Potbury answered. "Never mind the fee. Get out. And don't come back."

Hoag found himself on the street, walking toward the elevated station. He was still much shaken by the doctor's rudeness. He was afraid of rudeness as some persons are of snakes, or great heights, or small rooms. Bad manners, even when not directed at him personally but simply displayed to others in his presence, left him sick and helpless and overcome with shame.

If he himself were the butt of boorishness he had no defense save flight.

He set one foot on the bottom step of the stairs leading up to the elevated station and hesitated. A trip by elevated was a trying thing at best, what with the pushing and the jostling and the grimy dirt and the everpresent chance of uncouth behavior; he knew that he was not up to it at the moment. If he had to listen to the cars screaming around the curve as they turned north toward the Loop, he suspected that he would scream, too.

He turned away suddenly and was forced to check himself abruptly, for he was chest to chest with a man who himself was entering the stairway. He shied away. "Watch your step, buddy," the man said, and brushed on past him.

"Sorry," Hoag muttered, but the man was already on by.

The man's tone had been brisk rather than unkind; the incident should not have troubled Hoag, but it did. The man's dress and appearance, his very odor, upset Hoag. Hoag knew that there was no harm in well-worn dungarees and leather windbreaker, no lack of virtue in a face made a trifle greasy by sweat dried in place in the course of labor. Pinned to the bill of the man's cap was an oval badge, with a serial number and some lettering. Hoag guessed that he was a truck driver, a mechanic, a rigger, any of the competent, muscular crafts which keep the wheels turning over. Probably a family man as well, a fond father and a good provider, whose greatest lapse from virtue might be an extra glass of beer and a tendency to up it a nickel on two pairs.

It was sheer childishness for Hoag to permit himself to be put off by such appearance and to prefer a white shirt, a decent topcoat, and gloves. Yet if the man had smelled of shaving lotion rather than sweat the encounter would not have been distasteful.

He told himself so and told himself that he was silly and weak. Still —could such a coarse and brutal face really be the outward mark of warmth and sensitivity? That shapeless blob of nose, those piggish eyes?

Never mind, he would go home in a taxi, not looking at anyone. There was a stand just ahead, in front of the delicatessen.

"Where to?" The door of the cab was open; the hackman's voice was impersonally insistent.

Hoag caught his eye, hesitated and changed his mind. That brutishness again—eyes with no depth to them and a skin marred by blackheads and enlarged pores.

"Unnh . . . excuse me. I forgot something." He turned away quickly and stopped abruptly, as something caught him around the waist. It was a small boy on skates who had bumped into him. Hoag steadied himself and assumed the look of paternal kindliness which he used to deal with children. "Whoa, there, young fellow!" He took the boy by the shoulder and gently dislodged him.

"Maurice!" The voice screamed near his ear, shrill and senseless. It came from a large woman, smugly fat, who had projected herself out of the door of the delicatessen. She grabbed the boy's other arm, jerking him away and aiming a swipe at his ear with her free hand as she did so. Hoag started to plead on the boy's behalf when he saw that the woman was glaring at him. The youngster, seeing or sensing his mother's attitude, kicked at Hoag.

The skate clipped him in the shin. It hurt. He hurried away with no other purpose than to get out of sight. He turned down the first side street, his shin causing him to limp a little, and his ears and the back of his neck burning quite as if he had indeed been caught mistreating the brat. The side street was not much better than the street he had left. It was not lined with shops nor dominated by the harsh steel tunnel of the elevated's tracks, but it was solid with apartment houses, four stories high and crowded, little better than tenements.

Poets have sung of the beauty and innocence of childhood. But it could not have been this street, seen through Hoag's eyes, that they had in mind. The small boys seemed rat-faced to him, sharp beyond their years, sharp and shallow and snide. The little girls were no better in his eyes. Those of eight or nine, the shapeless stringy age, seemed to him to have tattletale written in their pinched faces—mean souls, born for troublemaking and cruel gossip. Their slightly older sisters, gutter-wise too young, seemed entirely concerned with advertising their arrogant new sex—not for Hoag's benefit, but for their pimply counterparts loafing around the drugstore.

Even the brats in baby carriages—Hoag fancied that he liked babies, enjoyed himself in the role of honorary uncle. Not these. Snotty-nosed and sour-smelling, squalid and squalling—

The little hotel was like a thousand others, definitely third rate without pretension, a single bit of neon reading: "Hotel Manchester, Transient & Permanent," a lobby only a half lot wide, long and narrow and a little dark. They are stopped at by drummers careful of their expense accounts and are lived in by bachelors who can't afford better. The single elevator is an iron-grille cage, somewhat disguised with bronze paint. The lobby floor is tile, the cuspidors are brass. In addition to the clerk's desk there are two discouraged potted palms and eight leather armchairs. Unattached old men, who seem never to have had a past, sit in these chairs, live in the rooms above, and every now and then one is found hanging in his room, necktie to light fixture.

Hoag backed into the door of the Manchester to avoid being caught in a surge of children charging along the sidewalk. Some sort of game, apparently—he caught the tail end of a shrill chant, "—give him a slap to shut his trap; the last one home's a dirty Jap!"

"Looking for someone, sir? Or did you wish a room?"

He turned quickly around, a little surprised. A room? What he wanted was his own snug apartment but at the moment a room, any room at all, in which he could be alone with a locked door between himself and the world seemed the most desirable thing possible. "Yes, I do want a room."

The clerk turned the register around. "With or without? Five fifty with, three and a half without."

"With."

The clerk watched him sign, but did not reach for the key until Hoag counted out five ones and a half. "Glad to have you with us. Bill! Show Mr. Hoag up to 412."

The lone bellman ushered him into the cage, looked him up and down with one eye, noting the expensive cut of his topcoat and the absence of baggage. Once in 412 he raised the window a trifle, switched on the bathroom light, and stood by the door.

"Looking for something?" he suggested. "Need any help?"

Hoag tipped him. "Get out," he said hoarsely.

The bellman wiped off the smirk. "Suit yourself," he shrugged.

The room contained one double bed, one chest of drawers with mirror, one straight chair and one armchair. Over the bed was a framed print titled "The Colosseum by Moonlight." But the door was lockable and equipped with a bolt as well and the window faced the alley, away from the street. Hoag sat down in the armchair. It had a broken spring, but he did not mind.

He took off his gloves and stared at his nails. They were quite clean. Could the whole thing have been hallucination? Had he ever gone to consult Dr. Potbury? A man who has had amnesia may have it again, he supposed, and hallucinations as well.

Even so, it could not all be hallucinations; he remembered the incident too vividly. Or could it be? He strained to recall exactly what had happened.

Today was Wednesday, his customary day off. Yesterday he had returned home from work as usual. He had been getting ready to dress for dinner—somewhat absentmindedly, he recalled, as he had actually been thinking about where he would dine, whether to try a new Italian place recommended by his friends, the Robertsons, or whether it would be more pleasing to return again for the undoubtedly sound goulash prepared by the chef at the Buda-Pesth.

He had about decided in favor of the safer course when the telephone had rung. He had almost missed it, as the tap was running in the washbasin. He had thought that he heard something and had turned off the tap. Surely enough, the phone rang again.

It was Mrs. Pomeroy Jameson, one of his favorite hostesses—not only a charming woman for herself but possessed of a cook who could make clear soups that were not dishwater. And sauces. She had offered a solution to his problem. “I’ve been suddenly left in the lurch at the last moment and I’ve just got to have another man for dinner. Are you free? Could you help me? Dear Mr. Hoag!”

It had been a very pleasant thought and he had not in the least resented being asked to fill in at the last minute. After all, one can’t expect to be invited to every small dinner. He had been delighted to oblige Edith Pomeroy. She served an unpretentious but sound dry white wine with fish and she never committed the vulgarism of serving champagne at any time. A good hostess and he was glad she felt free to ask him for help. It was a tribute to him that she felt he would fit in, unplanned.

He had had such thoughts on his mind, he remembered, as he dressed. Probably, in his preoccupation, what with the interruption of the phone call breaking his routine, he had neglected to scrub his nails.

It must have been that. Certainly there had been no opportunity to dirty his nails so atrociously on the way to the Pomeroys’. After all, one wore gloves.

It had been Mrs. Pomeroy’s sister-in-law—a woman he preferred to avoid!—who had called his attention to his nails. She had been insisting with the positiveness called “modern” that every man’s occupation was written on his person. “Take my husband—what could he be but a lawyer? Look at him. And you, Dr. Fitts—the bedside manner!”

“Not at dinner, I hope.”

“You can’t shake it.”

“But you haven’t proved your point. You *knew* what we are.”

Whereupon that impossible woman had looked around the table and nailed him with her eye. “Mr. Hoag can test me. I don’t know what he does. No one does.”

“Really, Julia.” Mrs. Pomeroy had tried hopelessly to intervene, then had turned to the man on her left with a smile. “Julia has been studying psychology this season.”

The man on her left, Sudkins, or Snuggins—Stubbins, that was his name. Stubbins had said, “What does Mr. Hoag do?”

“It’s a minor mystery. He never talks shop.”

“It’s not that,” Hoag had offered. “I do not consider—”

“Don’t tell me!” that woman had commanded. “I’ll have it in a moment. Some profession. I can see you with a brief case.” He had not intended to tell her. Some subjects were dinner conversation; some were not. But she had gone on.

“You might be in finance. You might be an art dealer or a book fancier. Or you might be a writer. Let me see your hands.”

He was mildly put off by the demand, but he had placed his hands on the table without trepidation. That woman had pounced on him. “Got you! You are a chemist.”

Everyone looked where she pointed. Everyone saw the dark mourning under his nails. Her husband had broken the brief silence by saying, “Nonsense, Julia. There are dozens of things that will stain nails. Hoag may dabble in photography, or do a spot of engraving. Your inference wouldn’t stand up in court.”

“That’s a lawyer for you! I know I’m right. Aren’t I, Mr. Hoag?”

He himself had been staring unbrokenly at his hands. To be caught at a dinner party with untidy manicure would have been distressing enough—*if* he had been able to understand it.

But he had no slightest idea how his nails had become dirtied. At his work? Obviously—but what did he *do* in the daytime?

He did not know.

“Tell us, Mr. Hoag. I was right, was I not?”

He pulled his eyes away from those horrid fingernails and said faintly, “I must ask to be excused.” With that he had fled from the table. He had found his way to the lavatory where, conquering an irrational revulsion, he had cleaned out the gummy reddish-brown filth with the blade of his penknife. The stuff stuck to the blade; he wiped it on cleansing tissue, wadded it up, and stuck it into a pocket of his waistcoat. Then he had scrubbed his nails, over and over again.

He could not recall when he had become convinced that the stuff was blood, was human blood.

He had managed to find his bowler, his coat, gloves, and stick without recourse to the maid. He let himself out and got away from there as fast as he could.

Thinking it over in the quiet of the dingy hotel room he was convinced that his first fear had been instinctive revulsion at the sight of the darkred under his nails. It was only on second thought that he had realized that he did not remember where he had dirtied his nails because he had no recollection of where he had been that day, nor the day before, nor any of the days before that. He did not know what his profession was.

It was preposterous, but it was terribly frightening.

He skipped dinner entirely rather than leave the dingy quiet of the hotel room; about ten o'clock he drew a tub of water just as hot as he could get it and let himself soak. It relaxed him somewhat and his twisted thoughts quieted down. In any case, he consoled himself, if he could not remember his occupation, then he certainly could not return to it. No chance again of finding that grisly horror under his fingernails.

He dried himself off and crawled under the covers. In spite of the strange bed he managed to get to sleep.

A nightmare jerked him awake, although he did not realize it at first, as the tawdry surroundings seemed to fit the nightmare. When he did recall where he was and why he was there the nightmare seemed preferable, but by that time it was gone, washed out of his mind. His watch told him that it was his usual getting-up time; he rang for the bellman and arranged for a breakfast tray to be fetched from around the corner.

By the time it arrived he was dressed in the only clothes he had with him and was becoming anxious to get home. He drank two cups of indifferent coffee standing up, fiddled with the food, then left the hotel.

After letting himself into his apartment he hung up his coat and hat, took off his gloves, and went as usual straight to his dressing room. He had carefully scrubbed the nails of his left hand and was just commencing on his right when he noticed what he was doing.

The nails of his left hand were white and clean; those of the right were dark and dirty. Carefully holding himself in check he straightened up, stepped over and examined his watch where he had laid it on his dresser, then compared the time with that shown by the electric clock in his bedroom. It was ten minutes past six P.M.—his usual time for returning home in the *evening.*

He might not recall his profession; his profession had certainly not forgotten him.

II

The firm of Randall & Craig, Confidential Investigation, maintained its night phone in a double apartment. This was convenient, as Randall had married Craig early in their association. The junior partner had just put the supper dishes to soak and was trying to find out whether or not she wanted to keep the book-of-the-month when the telephone rang. She reached out, took the receiver, and said, “Yes?” in noncommittal tones.

To this she added, “Yes.”

The senior partner stopped what he was doing—he was engaged in a ticklish piece of scientific research, involving deadly weapons, ballistics and some esoteric aspects of aerodynamics; specifically he was trying to perfect his overhand throw with darts, using a rotogravure likeness of café society’s latest glamour girl thumbtacked to the bread board as a target. One dart had nailed her left eye; he was trying to match it in the right.

“Yes,” his wife said again.

“Try saying ‘No,’” he suggested.

She cupped the mouthpiece. “Shut up and hand me a pencil.” She made a long arm across the breakfast-nook table and obtained a stenographer’s pad from a hook there. “Yes. Go ahead.” Accepting the pencil she made several lines of the hooks and scrawls that stenographers use in place of writing. “It seems most likely,” she said at last. “Mr. Randall is not usually in at this hour. He much prefers to see clients during office hours. Mr. Craig? No, I’m sure Mr. Craig couldn’t help you. Positive. So? Hold the line and I’ll find out.”

Randall made one more try at the lovely lady; the dart stuck in the leg of the radio-record player. “Well?”

“There is a character on the other end of this who wants to see you very badly tonight. Name of Hoag, Jonathan Hoag. Claims that it is a physical impossibility for him to come to see you in the daytime. Didn’t want to state his business and got all mixed up when he tried to.”

“Gentleman or lug?”

“Gentleman.”

“Money?”

“Sounds like it. Didn’t seem worried about it. Better take it, Teddy. April 15th is coming up.”

“O.K. Pass it over.”

She waved him back and spoke again into the phone. “I’ve managed to locate Mr. Randall. I think he will be able to speak with you in a moment or two. Will you hold the line, please?” Still holding the phone away from her husband she consulted her watch, carefully counted off thirty seconds, then said, “Ready with Mr. Randall. Go ahead, Mr. Hoag,” and slipped the instrument to her husband.

“Edward Randall speaking. What is it, Mr. Hoag?

"Oh, really now, Mr. Hoag, I think you had better come in in the morning. We are all human and we like our rest—I do, anyhow.

"I must warn you, Mr. Hoag, my prices go up when the sun goes down.

"Well, now, let me see—I was just leaving for home. Matter of fact, I just talked with my wife so she's expecting me. You know how women are. But if you could stop by my home in twenty minutes, at . . . uh . . . seventeen minutes past eight, we could talk for a few minutes. All right—got a pencil handy? Here is the address—" He cradled the phone.

"What am I this time? Wife, partner, or secretary?"

"What do you think? You talked to him."

"'Wife,' I'd guess. His voice sounded prissy."

"O.K."

"I'll change to a dinner gown. And you had better get your toys up off the floor, Brain."

"Oh, I don't know. It gives a nice touch of eccentricity."

"Maybe you'd like some shag tobacco in a carpet slipper. Or some Regie cigarettes." She moved around the room, switching off the overhead lights and arranging table and floor lamps so that the chair a visitor would naturally sit in would be well lighted.

Without answering he gathered up his darts and the bread board, stopping as he did so to moisten his finger and rub the spot where he had marred the radio, then dumped the whole collection into the kitchen and closed the door. In the subdued light, with the kitchen and breakfast nook no longer visible, the room looked serenely opulent.

"How do you do, sir? Mr. Hoag, my dear. Mr. Hoag . . . Mrs. Randall."

"How do you do, madame."

Randall helped him off with his coat, assuring himself in the process that Mr. Hoag was not armed, or— if he was—he had found somewhere other than shoulder or hip to carry a gun. Randall was not suspicious, but he was pragmatically pessimistic.

"Sit down, Mr. Hoag. Cigarette?"

"No. No, thank you."

Randall said nothing in reply. He sat and stared, not rudely but mildly, nevertheless thoroughly. The suit might be English or it might be Brooks Brothers. It was certainly not Hart, Schaffner & Marx. A tie of that quality had to be termed a cravat, although it was modest as a nun. He upped his fee mentally. The little man was nervous—he wouldn't relax in his chair. Woman's presence, probably. Good—let him come to a slow simmer, then move him off the fire.

"You need not mind the presence of Mrs. Randall," he said presently. "Anything that I may hear, she may hear also."

"Oh . . . oh, yes. Yes, indeed." He bowed from the waist without getting up. "I am very happy to have Mrs. Randall present." But he did not go on to say what his business was.

"Well, Mr. Hoag," Randall added presently, "you wished to consult me about something, did you not?"

"Uh, yes."

"Then perhaps you had better tell me about it."

"Yes, surely. It— That is to say— Mr. Randall, the whole business is preposterous."

"Most businesses are. But go ahead. Woman trouble? Or has someone been sending you threatening letters?"

"Oh, no! Nothing as simple as that. But I'm afraid."

"Of what?"

"I don't know," Hoag answered quickly with a little intake of breath. "I want you to find out."

"Wait a minute, Mr. Hoag," Randall said. "This seems to be getting more confused rather than less. You say you are afraid and you want me to find out what you are afraid of. Now I'm not a psychoanalyst; I'm a detective. What is there about this business that a detective can do?"

Hoag looked unhappy, then blurted out, "I want you to find out what I do in the daytime."

Randall looked him over, then said slowly, "You want *me* to find out what *you* do in the daytime?"

"Yes. Yes, that's it."

"Mm-m-m. Wouldn't it be easier for you to *tell* me what you do?"

"Oh, I couldn't tell you!"

"Why not?"

"I don't know."

Randall was becoming somewhat annoyed. "Mr. Hoag," he said, "I usually charge double for playing guessing games. If you won't tell me what you do in the daytime, it seems to me to indicate a lack of confidence in me which will make it very difficult indeed to assist you. Now come clean with me—what is it you do in the daytime and what has it to do with the case? What *is* the case?"

Mr. Hoag stood up. "I might have known I couldn't explain it," he said unhappily, more to himself than to Randall. "I'm sorry I disturbed you. I—"

"Just a minute, Mr. Hoag." Cynthia Craig Randall spoke for the first time. "I think perhaps you two have misunderstood each other. You mean, do you not, that you really and literally do not *know* what you do in the daytime?"

"Yes," he said gratefully. "Yes, that is exactly it."

"And you want us to find out what you do? Shadow you, find out where you go, and tell you what you have been doing?"

Hoag nodded emphatically. "That is what I have been trying to say."

Randall glanced from Hoag to his wife and back to Hoag. "Let's get this straight," he said slowly. "You really don't know what you do in the daytime and you want me to find out. How long has this been going on?"

"I . . . I don't know."

"Well— what *do* you know?"

Hoag managed to tell his story, with prompting. His recollection of any sort ran back about five years, to the St. George Rest Home in Dubuque. Incurable amnesia—it no longer worried him and he had regarded himself as completely rehabilitated. They—the hospital authorities—had found a job for him when he was discharged.

"What sort of a job?"

He did not know that. Presumably it was the same job he now held, his present occupation. He had been strongly advised, when he left the rest home, never to worry about his work, never to take his work home with him, even in his thoughts. "You see," Hoag explained, "they work on the theory that amnesia is brought on by overwork and worry. I remember Dr. Rennault telling me emphatically that I must never talk shop, never let my mind dwell on the day's work. When I got home at night I was to forget such things and occupy myself with pleasant subjects. So I tried to do that."

"Hm-m-m. You certainly seem to have been successful, almost too successful for belief. See here—did they use hypnosis on you in treating you?"

"Why, I really don't know."

"Must have. How about it, Cyn? Does it fit?"

His wife nodded, "It fits. Posthypnosis. After five years of it he couldn't possibly think about his work after hours no matter how he tried. Seems like a very odd therapy, however."

Randall was satisfied. She handled matters psychological. Whether she got her answers from her rather extensive formal study, or straight out of her subconscious, he neither knew nor gave a hang. They seemed to work. "Something still bothers me," he added. "You go along for five years, apparently never knowing where or how you work. Why this sudden yearning to know?"

He told them the story of the dinner-table discussion, the strange substance under his nails, and the non-co-operative doctor. "I'm frightened," he said miserably. "I thought it was blood. And now I know it's something—worse."

Randall looked at him. "Why?"

Hoag moistened his lips. "Because—" He paused and looked helpless. "You'll help me, won't you?"

Randall straightened up. "This isn't in my line," he said. "You need help all right, but you need help from a psychiatrist. Amnesia isn't in my line. I'm a detective."

"But I *want* a detective. I want you to watch me and find out what I do."

Randall started to refuse; his wife interrupted. "I'm sure we can help you, Mr. Hoag. Perhaps you should see a psychiatrist—"

"Oh, no!"

"—but if you wish to be shadowed, it will be done."

"I don't like it," said Randall. "He doesn't need us."

Hoag laid his gloves on the side table and reached into his breast pocket. "I'll make it worth your while." He started counting out bills. "I brought only five hundred," he said anxiously. "Is it enough?"

"It will do," she told him.

"As a retainer," Randall added. He accepted the money and stuffed it into his side pocket. "By the way," he added, "if you don't know what you do during business hours and you have no more background than a hospital, where do you get the money?" He made his voice casual.

"Oh, I get paid every Sunday. Two hundred dollars, in bills."

When he had gone Randall handed the cash over to his wife. "Pretty little tickets," she said, smoothing them out and folding them neatly. "Teddy, why did you try to queer the pitch?"

"Me? I didn't—I was just running up the price. The old 'getaway-closer.' "

"That's what I thought. But you almost overdid it."

"Not at all. I knew I could depend on you. You wouldn't let him out of the house with a nickel left on him."

She smiled happily. "You're a nice man, Teddy. And we have so much in common. We both like money. How much of his story did you believe?"

"Not a damned word of it."

"Neither did I. He's rather a horrid little beast— I wonder what he's up to."

"I don't know, but I mean to find out."

"You aren't going to shadow him yourself, are you?"

"Why not? Why pay ten dollars a day to some ex-flattie to muff it?"

"Teddy, I don't like the set-up. Why should he be willing to pay this much"—she gestured with the bills—"to lead you around by the nose?”

“That is what I’m going to find out.”

“You be careful. You remember ‘The Redheaded League.’ ”

“The ‘Redheaded—’ Oh, Sherlock Holmes again. Be your age, Cyn.”

“I am. You be yours. That little man is *evil.”*

She left the room and cached the money. When she returned he was down on his knees by the chair in which Hoag had sat, busy with an insufflator. He looked around as she came in.

“Cyn—”

“Yes, Brain.”

“You haven’t touched this chair?”

“Of course not. I polished the arms as usual before he showed up.”

“That’s not what I mean. I meant since he left. Did he ever take off his gloves?”

“Wait a minute. Yes, I’m sure he did. I looked at his nails when he told his yarn about them.”

“So did I, but I wanted to make sure I wasn’t nuts. Take a look at that surface.”

She examined the polished chair arms, now covered with a thin film of gray dust. The surface was unbroken—no fingerprints. “He must never have touched them— But he did. I saw him. When he said, ‘I’m frightened,’ he gripped both arms. I remember noticing how blue his knuckles looked.”

“Collodion, maybe?”

“Don’t be silly. There isn’t even a smear. You shook hands with him. Did he have collodion on his hands?”

“I don’t think so. I think I would have noticed it. The Man with No Fingerprints. Let’s call him a ghost and forget it.”

“Ghosts don’t pay out hard cash to be watched.”

“No, they don’t. Not that I ever heard of.” He stood up and marched out into the breakfast nook, grabbed the phone and dialed long distance. “I want the Medical Exchange in Dubuque, uh—” He cupped the phone and called to his wife. “Say, honey, what the hell state *is* Dubuque in?”

Fortyfive minutes and several calls later he slammed the instrument back into its cradle. “That tears it,” he announced. “There is no St. George Rest Home in Dubuque. There never was and probably never will be. And no Dr. Rennault.”

III

“There he is!” Cynthia Craig Randall nudged her husband.

He continued to hold the *Tribune* in front of his face as if reading it. “I see him,” he said quietly. “Control yourself. Yuh’d think you had never tailed a man before. Easy does it.”

“Teddy, do be careful.”

“I will be.” He glanced over the top of the paper and watched Jonathan Hoag come down the steps of the swank Gotham Apartments in which he made his home. When he left the shelter of the canopy he turned to the left. The time was exactly seven minutes before nine in the morning.

Randall stood up, folded his paper with care, and laid it down on the bus-station bench on which he had been waiting. He then turned toward the drugstore behind him, dropped a penny in the slot of a gum-vending machine in the shop’s recessed doorway. In the mirror on the face of the machine he watched Hoag’s unhurried progress down the far side of the street. With equal lack of rush he started after him, without crossing the street.

Cynthia waited on the bench until Randall had had time enough to get a half block ahead of her, then got up and followed him.

Hoag climbed on a bus at the second corner. Randall took advantage of a traffic-light change which held the bus at the corner, crossed against the lights, and managed to reach the bus just as it was pulling out. Hoag had gone up to the open deck; Randall seated himself down below.

Cynthia was too late to catch the bus, but not too late to note its number. She yoohooed at the first cruising taxi that came by, told the driver the number of the bus, and set out. They covered twelve blocks before the bus came in sight; three blocks later a red light enabled the driver to pull up alongside the bus. She spotted her husband inside; it was all she needed to know. She occupied the time for the rest of the ride in keeping the exact amount shown by the meter plus a quarter tip counted out in her hand.

When she saw them get out of the bus she told the driver to pull up. He did so, a few yards beyond the bus stop. Unfortunately they were headed in her direction; she did not wish to get out at once. She paid the driver the exact amount of the tariff while keeping one eye—the one in the back of her head—on the two men. The driver looked at her curiously.

“Do you chase after women?” she said suddenly.

“No, lady. I gotta family.”

“My husband does,” she said bitterly and untruthfully. “Here.” She handed him the quarter.

Hoag and Randall were some yards past by now. She got out, headed for the shop just across the walk, and waited. To her surprise she saw Hoag turn and speak to her husband. She was too far away to hear what was said.

She hesitated to join them. The picture was wrong; it made her apprehensive—yet her husband seemed unconcerned. He listened quietly to what Hoag had to say, then the two of them entered the office building in front of which they had been standing.

She closed in at once. The lobby of the office building was as crowded as one might expect at such an hour in the morning. Six elevators, in bank, were doing rushing business. No. 2 had just slammed its doors. No. 3 had just started to load. They were not in No. 3; she posted herself near the cigar stand and quickly cased the place.

They were not in the lobby. Nor were they, she quickly made sure, in the barber shop which opened off the lobby. They had probably been the last passengers to catch Elevator No. 2 on its last trip. She had been watching the indicator for No. 2 without learning anything useful from it; the car had stopped at nearly every floor.

No. 2 was back down by now; she made herself one of its passengers, not the first nor the last, but one of the crowd. She did not name a floor, but waited until the last of the others had gotten off.

The elevator boy raised his eyebrows at her. "Floor, please!" he commanded.

She displayed a dollar bill. "I want to talk to you."

He closed the gates, accomplishing an intimate privacy. "Make it snappy," he said, glancing at the signals on his board.

"Two men got on together your last trip." She described them quickly and vividly. "I want to know what floor they got off at."

He shook his head. "I wouldn't know. This is the rush hour."

She added another bill. "Think. They were probably the last two to get aboard. Maybe they had to step out to let others off. The shorter one probably called out the floor."

He shook his head again. "Even if you made it a fin I couldn't tell you. During the rush Lady Godiva *and* her horse could ride this cage and I wouldn't know it. Now—do you want to get out or go down?"

"Down." She handed him one of the bills. "Thanks for trying."

He looked at it, shrugged, and pocketed it.

There was nothing to do but to take up her post in the lobby. She did so, fuming. Done in, she thought, done in by the oldest trick known for shaking a tail. Call yourself a dick and get taken in by the office-building trick! They were probably out of the building and gone by now, with Teddy wondering where she was and maybe needing her to back up his play.

She ought to take up tatting! Damn!

She bought a bottle of Pepsi-Cola at the cigar stand and drank it slowly, standing up. She was just wondering whether or not she could stand another, in the interest of protective coloration, when Randall appeared.

It took the flood of relief that swept over her to make her realize how much she had been afraid. Nevertheless, she did not break character. She turned her head away, knowing that her husband would see her and recognize the back of her neck quite as well as her face.

He did not come up and speak to her, therefore she took position on him again. Hoag she could not see anywhere; had she missed him herself, or what?

Randall walked down to the corner, glanced speculatively at a stand of taxis, then swung aboard a bus which had just drawn up to its stop. She followed him, allowing several others to mount it before her. The bus pulled away. Hoag had certainly not gotten aboard; she concluded that it was safe to break the routine.

He looked up as she sat down beside him. “Cyn! I thought we had lost you.”

“You darn near did,” she admitted. “Tell me—what’s cookin’?”

“Wait till we get to the office.”

She did not wish to wait, but she subsided. The bus they had entered took them directly to their office, a mere half-dozen blocks away. When they were there he unlocked the door of the tiny suite and went at once to the telephone. Their listed office phone was connected through the PBX of a secretarial service.

“Any calls?” he asked, then listened for a moment. “O.K. Send up the slips. No hurry.”

He put the phone down and turned to his wife. “Well, babe, that’s just about the easiest five hundred we ever promoted.”

“You found out what he does with himself?”

“Of course.”

“What does he do?”

“Guess.”

She eyed him. “How would you like a paste in the snoot?”

“Keep your pants on. You wouldn’t guess it, though it’s simple enough. He works for a commercial jeweler—polishes gems. You know that stuff he found under his fingernails, that got him so upset?”

“Yes?”

“Nothing to it. Jeweler’s rouge. With the aid of a diseased imagination he jumps to the conclusion it’s dried blood. So we make half a grand.”

“Mm-m-m. And that seems to be that. This place he works is somewhere in the Acme Building, I suppose.”

“Room 1310. Or rather Suite 1310. Why didn’t you tag along?”

She hesitated a little in replying. She did not want to admit how clumsy she had been, but the habit of complete honesty with each other was strong upon her. “I let myself get misled when Hoag spoke to you outside the Acme Building. I missed you at the elevator.”

“I see. Well, I— Say! What did you say? Did you say Hoag *spoke* to me?”

“Yes, certainly.”

“But he didn’t speak to me. He never laid eyes on me. What are you talking about?”

“What am *I* talking about? What are *you* talking about! Just before the two of you went into the Acme Building, Hoag stopped, turned around and spoke to you. The two of you stood there chinning, which threw me off stride. Then you went into the lobby together, practically arm in arm.

He sat there, saying nothing, looking at her for a long moment. At last she said, “Don’t sit there staring like a goon! That’s what happened.”

He said, “Cyn, listen to my story. I got off the bus after he did and followed him into the lobby. I used the old heel-and-toe getting into the elevator and swung behind him when he faced the front of the car. When he got out, I hung back, then fiddled around, half in and half out, asking the operator simpleton questions, and giving him long enough to get clear. When I turned the corner he was just disappearing into 1310. He never spoke to me. He never saw my face. I’m sure of that.”

She was looking white, but all she said was, “Go on.”

“When you go in this place there is a long glass partition on your right, with benches built up against it. You can look through the glass and see the jewelers, or jewelsmiths, or whatever you call ‘em at work. Clever—good salesmanship. Hoag ducked right on in and by the time I passed down the aisle he was already on the other side, his coat off and a smock on, and one of those magnifying dinguses screwed into his eye. I went on past him to the desk—he never looked up—and asked for the manager. Presently a little birdlike guy shows up and I ask him if they have a man named Jonathan Hoag in their employ. He says yes and asks if I want to speak to him. I told him no, that I was an investigator for an insurance company. He wants to know if there is anything wrong and I told him that it was simply a routine investigation of what he had said on his application for a life policy, and how long had he worked there? Five years, he told me. He said that Hoag was one of the most reliable and skillful employees. I said fine, and asked if he thought Mr. Hoag could afford to carry as much as ten thousand. He says certainly and that they were always glad to see their employees invest in life insurance. Which was what I figured when I gave him the stall.

"As I went out I stopped in front of Hoag's bench and looked at him through the glass. Presently he looked up and stared at me, then looked down again. I'm sure I would have spotted it if he had recognized me. A case of complete skeezo, sheezo . . . how do you pronounce it?"

"Schizophrenia. Completely split personalities. But look, Teddy—"

"Yeah?"

"You *did* talk with him. I saw you."

"Now slow down, puss. You may think you did, but you must have been looking at two other guys. How far away were you?"

"Not *that* far. I was standing in front of Beecham's Bootery. Then comes *Chez Louis,* and then the entrance to the Acme Building. You had your back to the newspaper stand at the curb and were practically facing me. Hoag had his back to me, but I couldn't have been mistaken, as I had him in full profile when the two of you turned and went into the building together."

Randall looked exasperated. "I didn't speak with him. And I didn't go in with him; I followed him in."

"Edward Randall, don't give me that! I admit I lost the two of you, but that's no reason to rub it in by trying to make a fool of me."

Randall had been married too long and too comfortably not to respect danger signals. He got up, went to her, and put an arm around her. "Look, kid," he said, seriously and gently, "I'm not pulling your leg. We've got our wires crossed somehow, but I'm giving it to you just as straight as I can, the way I remember it."

She searched his eyes, then kissed him suddenly, and pulled away. "All right. We're both right and it's impossible. Come on."

" 'Come on' where?"

"To the scene of the crime. If I don't get this straightened out I'll never sleep again."

The Acme Building was just where they had left it. The Bootery was where it belonged, likewise *Chez Louis,* and the newsstand. He stood where she had stood and agreed that she could not have been mistaken in her identification unless blind drunk. But he was equally positive as to what he had done.

"You didn't pick up a snifter or two on the way, did you?" he suggested hopefully.

"Certainly not."

"What do we do now?"

"I don't know. Yes, I do, too! We're finished with Hoag, aren't we? You've traced him down and that's that."

"Yes . . . why?"

"Take me up to where he works. I want to ask his daytime personality whether or not he spoke to you getting off the bus."

He shrugged. "O.K., kid. It's your party."

They went inside and entered the first free elevator. The starter clicked his castanets, the operator slammed his doors and said, "Floors, please."

Six, three, and nine. Randall waited until all those had been served before announcing, "Thirteen."

The operator looked around. "I can give you twelve and fourteen, buddy, and you can split 'em."

"Huh?"

"There ain't no thirteenth floor. If there was, nobody would rent on it."

"You must be mistaken. I was on it this morning."

The operator gave him a look of marked restraint. "See for yourself." He shot the car upward and halted it. "Twelve." He raised the car slowly, the figure 12 slid out of sight and was quickly replaced by another. "Fourteen. Which way will you have it?"

"I'm sorry," Randall admitted. "I've made a silly mistake. I really was in here this morning and I thought I had noted the floor."

"Might ha' been eighteen," suggested the operator. "Sometimes an eight will look like a three. Who you lookin' for?"

"Detheridge & Co. They're manufacturing jewelers."

The operator shook his head. "Not in this building. No jewelers, and no Detheridge."

"You're sure?"

Instead of answering, the operator dropped his car back to the tenth floor. "Try 1001. It's the office of the building."

No, they had no Detheridge. No, no jewelers, manufacturing or otherwise. Could it be the Apex Building the gentleman wanted, rather than the Acme? Randall thanked them and left, considerably shaken.

Cynthia had maintained complete silence during the proceedings. Now she said, "Darling—"

"Yeah. What is it?"

"We could go up to the top floor, and work down."

"Why bother? If they were here, the building office would know about it."

"So they would, but they might not be telling. There is something fishy about this whole business. Come to think about it, you could hide a whole floor of an office building by making its door look like a blank wall."

"No, that's silly. I'm just losing my mind, that's all. You better take me to a doctor."

"It's not silly and you're not losing your grip. How do you count height in an elevator? By floors. If you didn't see a floor, you would never realize an extra one was tucked in. We may be on the trail of something big." She did not really believe her own arguments, but she knew that he needed something to do.

He started to agree, then checked himself. "How about the stairways? You're bound to notice a floor from a staircase."

"Maybe there is some hankypanky with the staircases, too. If so, we'll be looking for it. Come on."

But there was not. There were exactly the same number of steps—eighteen—between floors twelve and fourteen as there were between any other pair of adjacent floors. They worked, down from the top floor and examined the lettering on each frosted-glass door. This took them rather long, as Cynthia would not listen to Randall's suggestion that they split up and take half a floor apiece. She wanted him in her sight.

No thirteenth floor and nowhere a door which announced the tenancy of a firm of manufacturing jewelers, neither Detheridge & Co. nor any other name. There was no time to do more than read the firm names on the doors; to have entered each office, on one pretext or another, would have taken much more than a day.

Randall stared thoughtfully at a door labeled: "Pride, Greenway, Hamilton, Steinbolt, Carter & Greenway, Attorneys at Law." "By this time," he mused, "they could have changed the lettering on the door."

"Not on *that* one," she pointed out. "Anyhow, if it was a set-up, they could have cleaned out the whole joint, too. Changed it so you wouldn't recognize it." Nevertheless she stared at the innocent-seeming letters thoughtfully. An office building was a terribly remote and secret place. Soundproof walls, Venetian blinds—and a meaningless firm name. Anything could go in such a place—anything. Nobody would know. Nobody would care. No one would ever notice. No policeman on his beat, neighbors as remote as the moon, not even scrub service if the tenant did not wish it. As long as the rent was paid on time, the management would leave a tenant alone. Any crime you fancied and park the bodies in the closet.

She shivered. "Come on, Teddy. Let's hurry."

They covered the remaining floors as quickly as possible and came out at last in the lobby. Cynthia felt warmed by the sight of faces and sunlight, even though they had not found the missing firm. Randall stopped on the steps and looked around. "Do you suppose we *could* have been in a different building?" he said doubtfully.

"Not a chance. See that cigar stand? I practically lived there. I know every flyspeck on the counter."

"Then what's the answer?"

"Lunch is the answer. Come on."

"O.K. But I'm going to drink mine."

She managed to persuade him to encompass a plate of corned-beef hash after the third whiskey sour. That and two cups of coffee left him entirely sober, but unhappy. "Cyn—"

"Yes, Teddy."

"What happened to me?"

She answered slowly. "I think you were made the victim of an amazing piece of hypnosis."

"So do I—now. Either that, or I've finally cracked up. So call it hypnosis. I want to know why."

She made doodles with her fork. "I'm not sure that I want to know. You know what I would like to do, Teddy?"

"What?"

"I would like to send Mr. Hoag's five hundred dollars back to him with a message that we can't help him, so we are returning his money."

He stared at her. "Send the money back? Good heavens!"

Her face looked as if she had been caught making an indecent suggestion, but she went on stubbornly. "I know. Just the same, that's what I would like to do. We can make enough on divorce cases and skiptracing to eat on. We don't have to monkey with a thing like this."

"You talk like five hundred was something you'd use to tip a waiter."

"No, I don't. I just don't think it's enough to risk your neck—or your sanity—for. Look, Teddy, somebody is trying to get us in the nine hole; before we go any further, I want to know *why.*"

"And I want to know why, too. Which is why I'm not willing to drop the matter. Damn it, I don't like having shenanigans put over on me."

"What are you going to tell Mr. Hoag?"

He ran a hand through his hair, which did not matter as it was already mussed. "I don't know. Suppose you talk to him. Give him a stall."

"That's a *fine* idea. That's a *swell* idea. I'll tell him you've broken your leg but you'll be all right tomorrow."

"Don't be like that, Cyn. You know you can handle him."

"All right. But you've got to promise me this, Teddy."

"Promise what?"

"As long as we're on this case we do everything together."

"Don't we always?"

"I mean really together. I don't want you out of my sight *any* of the time."

"But see here, Cyn, that may not be practical."

"Promise."

"O.K., O.K. I promise."

"That's better." She relaxed and looked almost happy. "Hadn't we better get back to the office?"

"The hell with it. Let's go out and take in a triple feature."

"O.K., Brain." She gathered up her gloves and purse.

The movies failed to amuse him, although they had selected an all-Western bill, a fare of which he was inordinately fond. But the hero seemed as villainous as the foreman, and the mysterious masked riders, for once, appeared really sinister. And he kept seeing the thirteenth floor of the Acme Building, the long glass partition behind which the craftsmen labored, and the little dried-up manager of Detheridge & Co. Damn it—could a man be hypnotized into believing that he had seen anything as detailed as that?

Cynthia hardly noticed the pictures. She was preoccupied with the people around them. She found herself studying their faces guardedly whenever the lights went up. If they looked like this when they were amusing themselves, what were they like when they were unhappy? With rare exceptions the faces looked, at the best, stolidly uncomplaining. Discontent, the grim marks of physical pain, lonely unhappiness, frustration, and stupid meanness, she found in numbers, but rarely a merry face. Even Teddy, whose habitual debonair gaiety was one of his chief virtues, was looking dour—with reason, she conceded. She wondered what were the reasons for those other unhappy masks.

She recalled having seen a painting entitled "Subway." It showed a crowd pouring out the door of an underground train while another crowd attempted to force its way in. Getting on or getting off, they were plainly in a hurry, yet it seemed to give them no pleasure. The picture had no beauty in itself; it was plain that the artist's single purpose had been to make a bitter criticism of a way of living.

She was glad when the show was over and they could escape to the comparative freedom of the street. Randall flagged a taxi and they started home.

"Teddy—"

"Uh?"

"Did you notice the faces of the people in the theater?"

"No, not especially. Why?"

"Not a one of them looked as if they got any fun out of life."

"Maybe they don't."

"But why don't they? Look—we have fun, don't we?"

"You bet."

"We always have fun. Even when we were broke and trying to get the business started we had fun. We went to bed smiling and got up happy. We still do. What's the answer?"

He smiled for the first time since the search for the thirteenth floor and pinched her. “It’s fun living with you, kid.”

“Thanks. And right back at you. You know, when I was a little girl, I had a funny idea.”

“Spill it.”

“I was happy myself, but as I grew up I could see that my mother wasn’t. And my father wasn’t. My teachers weren’t—most of the adults around me weren’t happy. I got an idea in my head that when you grew up you found out something that kept you from ever being happy again. You know how a kid is treated: ‘You’re not old enough to understand, dear,’ and ‘Wait till you grow up, darling, and then you’ll understand.’ I used to wonder what the secret was they were keeping from me and I’d listen behind doors to try and see if I couldn’t find out.”

“Born to be a detective!”

“Shush. But I could see that, whatever it was, it didn’t make the grownups happy; it made ‘em sad. Then I used to pray never to find out.” She gave a little shrug. “I guess I never did.”

He chuckled. “Me neither. A professional Peter Pan, that’s me. Just as happy as if I had good sense.”

She placed a small gloved hand on his arm. “Don’t laugh, Teddy. That’s what scares me about this Hoag case. I’m afraid that if we go ahead with it we really will find out what it is the grownups know. And then we’ll never laugh again.”

He started to laugh, then looked at her hard. “Why, you’re really serious, aren’t you?” He chucked her under the chin. “Be your age, kid. What you need is dinner—and a drink.”

IV

After dinner, Cynthia was just composing in her mind what she would say to Mr. Hoag on telephoning him when the house buzzer rang. She went to the entrance of their apartment and took up the house phone. “Yes?”

Almost immediately she turned to her husband and voicelessly shaped the words, “It’s Mr. Hoag.” He raised his brows, put a cautioning finger to his lips, and with an exaggerated tiptoe started for the bedroom. She nodded.

“Just a moment, please. There—that’s better. We seem to have had a bad connection. Now who is it, please?

“Oh . . . Mr. Hoag. Come up, Mr. Hoag.” She punched the button controlling the electrical outer lock.

He came in bobbing nervously. “I trust this is not an intrusion, but I have been so upset that I felt I couldn’t wait for a report.”

She did not invite him to sit down. “I am sorry,” she said sweetly, “to have to disappoint you. Mr. Randall has not yet come home.”

“Oh.” He seemed pathetically disappointed, so much so that she felt a sudden sympathy. Then she remembered what her husband had been put through that morning and froze up again.

“Do you know,” he continued, “when he will be home?”

“That I couldn’t say. Wives of detectives, Mr. Hoag, learn not to wait up.”

“Yes, I suppose so. Well, I presume I should not impose on you further. But I *am* anxious to speak with him.”

“I’ll tell him so. Was there anything in particular you had to say to him? Some new data, perhaps?”

“No—” he said slowly. “No, I suppose . . . it all seems so silly!”

“What does, Mr. Hoag?”

He searched her face. “I wonder— Mrs. Randall, do you believe in possession?”

“Possession?”

“Possession of human souls—by devils.”

“I can’t say that I’ve thought much about it,” she answered cautiously. She wondered if Teddy were listening, if he could reach her quickly if she screamed.

Hoag was fumbling strangely at his shirt front; he got a button opened; she whiffed an acrid, unclean smell, then he was holding out something in his hand, something fastened by a string around his neck under his shirt.

She forced herself to look at it and with intense relief recognized it for what it was—a cluster of fresh cloves of garlic, worn as a necklace. “Why do you wear it?” she asked.

“It does seem silly, doesn’t it?” he admitted. “Giving way to superstition like that—but it comforts me. I’ve had the most frightening feeling of being watched—”

“Naturally. We’ve been— Mr. Randall has been watching you, by your instructions.”

“Not that. A man in a mirror—” He hesitated.

“A man in a mirror?”

“Your reflection in a mirror watches you, but you expect it; it doesn’t worry you. This is something new, as if someone were trying to get at me, waiting for a chance. Do you think I’m crazy?” he concluded suddenly.

Her attention was only half on his words, for she had noticed something when he held out the garlic which had held her attention. His fingertips were ridged and grooved in whorls and loops and arches like anyone else's—and they were certainly not coated with collodion tonight. She decided to get a set of prints for Teddy. "No, I don't think you're crazy," she said soothingly, "but I think you've let yourself worry too much. You should relax. Wouldn't you like a drink?"

"I would be grateful for a glass of water."

Water or liquor, it was the glass she was interested in. She excused herself and went out to the kitchen where she selected a tall glass with smooth, undecorated sides. She polished it carefully, added ice and water with equal care not to wet the sides. She carried it in, holding it near the bottom.

Intentionally or unintentionally, he had outmaneuvered her. He was standing in front of the mirror near the door, where he had evidently been straightening his tie and tidying himself and returning the garlic to its hideaway. When he turned around at her approach she saw that he had put his gloves back on.

She invited him to sit down, thinking that if he did so he would remove his gloves. But he said, "I've imposed on you too long as it is." He drank half the glass of water, thanked her, and left silently.

Randall came in. "He's gone?"

She turned quickly. "Yes, he's gone. Teddy, I wish you would do your own dirty work. He makes me nervous. I wanted to scream for you to come in."

"Steady, old girl."

"That's all very well, but I wish we had never laid eyes on him." She went to a window and opened it wide.

"Too late for Herpicide. We're in it now." His eye rested on the glass. "Say—did you get his prints?"

"No such luck. I think he read my mind."

"Too bad."

"Teddy, what do you intend to do about him now?"

"I've got an idea, but let me work it out first. What was this song and dance he was giving you about devils and a man in a mirror watching him?"

"That wasn't what he said."

"Maybe I was the man in the mirror. I watched him in one this morning."

"Huh-uh. He was just using a metaphor. He's got the jumps." She turned suddenly, thinking that she had seen something move over her shoulder. But there was nothing there but the furniture and the wall. Probably just a reflection in the glass, she decided, and said nothing about it. "I've got 'em, too," she added. "As for devils, he's all the devil I want. You know what I'd like?"

"What?"

“A big stiff drink and early to bed.”

“Good idea.” He wandered out into the kitchen and started mixing the prescription. “Want a sandwich too?”

Randall found himself standing in his pajamas in the living room of their apartment, facing the mirror that hung near the outer door. His reflection—no, not his reflection, for the image was properly dressed in conservative clothes appropriate to a solid man of business—the image spoke to him.

“Edward Randall.”

“Huh?”

“Edward Randall, you are summoned. Here—take my hand. Pull up a chair and you will find you can climb through easily.”

It seemed a perfectly natural thing to do, in fact the only reasonable thing to do. He placed a straight chair under the mirror, took the hand offered him, and scrambled through. There was a washstand under the mirror on the far side, which gave him a leg down. He and his companion were standing in a small, white tiled washroom such as one finds in office suites.

“Hurry,” said his companion. “The others are all assembled.”

“Who are you?”

“The name is Phipps,” the other said, with a slight bow. “This way, please.”

He opened the door of the washroom and gave Randall a gentle shove. He found himself in a room that was obviously a board room—with a meeting in session, for the long table was surrounded by about dozen men. They all had their eyes on him.

“Up you go, Mr. Randall.”

Another shove, not quite so gentle and he was sitting in the middle of the polished table. Its hard top felt cold through the thin cotton of his pajama trousers.

He drew the jacket around him tightly and shivered. “Cut it out,” he said. “Let me down from here. I’m not dressed.” He tried to get up, but he seemed unable to accomplish that simple movement.

Somebody behind him chuckled. A voice said, “He’s not very fat.” Someone answered, “That doesn’t matter, for this job.”

He was beginning to recognize the situation—the last time it had been Michigan Boulevard without his trousers. More than once it had found him back in school again, not only undressed, but lessons unprepared, and late in the bargain. Well, he knew how to beat it—close your eyes and reach down for the covers, then wake up safe in bed.

He closed his eyes.

“No use to hide, Mr. Randall. We can see you and you are simply wasting time."

He opened his eyes. "What's the idea?" he said savagely. "Where am I? Why'dju bring me here? What's going on?"

Facing him at the head of the table was a large man. Standing, he must have measured six feet two at least, and he was broadshouldered and heavy-boned in proportion. Fat was laid over his huge frame liberally. But his hands were slender and well shaped and beautifully manicured; his features were not large and seemed smaller, being framed in fat jowls and extra chins. His eyes were small and merry; his mouth smiled a good deal and he had a trick of compressing his lips and shoving them out.

"One thing at a time, Mr. Randall," he answered jovially. "As to where you are, this is the thirteenth floor of the Acme Building—you remember." He chuckled, as if they shared a private joke. "As to what goes on, this is a meeting of the board of Detheridge & Co. I"—he managed to bow sitting down, over the broad expanse of his belly—"am R. Jefferson Stoles, chairman of the board, at your service, sir."

"But—"

"Please, Mr. Randall—introductions first. On my right. Mr. Townsend."

"How do you do, Mr. Randall."

"How do you do," Randall answered mechanically. "Look here, this has gone far—"

"Then Mr. Gravesby, Mr. Wells, Mr. Yoakum, Mr. Printemps, Mr. Jones. Mr. Phipps you have met. He is our secretary. Beyond him is seated Mr. Reifsnider and Mr. Snyder—no relation. And finally Mr. Parker and Mr. Crewes. Mr. Potiphar, I am sorry to say, could not attend, but we have a quorum."

Randall tried to get up again, but the table top seemed unbelievably slippery. "I don't care," he said bitterly, "whether you have a quorum or a gang fight. Let me out of here."

"Tut, Mr. Randall. *Tut.* Don't you want your questions answered?"

"Not that bad. Damn it, let me—"

"But they really must be answered. This is a business session and you are the business at hand."

"Me?"

"Yes, you. You are, shall we say, a minor item on the agenda, but one which must be cleared up. We do not like your activity, Mr. Randall. You really must cease it."

Before Randall could answer, Stoles shoved a palm in his direction. "Don't be hasty, Mr. Randall. Let me explain. Not all of your activities. We do not care how many blondes you plant in hotel rooms to act as complacent correspondents in divorce cases, nor how many wires you tap, nor letters you open. There is only one activity of yours we are concerned with. I refer to Mr. Hoag." He spat out the last word.

Randall could feel a stir of uneasiness run through the room.

"What about Mr. Hoag?" he demanded. There was the stir again. Stoles' face no longer even pretended to smile.

"Let us refer to him hereafter," he said, "as 'your client.' It comes to this, Mr. Randall. We have other plans for Mr. . . . for your client. You must leave him alone. You must forget him, you must never see him again."

Randall stared back, uncowed. "I've never welshed on a client yet. I'll see you in hell first."

"That," admitted Stoles, shoving out his lips, "is a distinct possibility, I grant you, but one that neither you nor I would care to contemplate, save as a bombastic metaphor. Let us be reasonable. You *are* a reasonable man, I know, and my confreres and I, we are reasonable creatures, too. Instead of trying to coerce or cajole you I want to tell you a story, so that you may understand why."

"I don't care to listen to any stories. I'm leaving."

"Are you really? I think not. And you will listen!"

He pointed a finger at Randall; Randall attempted to reply, found that he could not. "This," he thought, "is the damnedest no-pants dream I ever had. Shouldn't eat before going to bed—knew better."

"In the Beginning," Stoles stated, "there was the Bird." He suddenly covered his face with his hands; all the others gathered around the table did likewise.

The Bird—Randall felt a sudden vision of what those two simple words meant when mouthed by this repulsive fat man; no soft and downy chick, but a bird of prey, strong-winged and rapacious—unwinking eyes, whey-colored and staring—purple wattles—but most especially he saw its feet, bird feet, covered with yellow scales, fleshless and taloned and foul from use. Obscene and terrible—

Stoles uncovered his face. "The Bird was alone. Its great wings beat the empty depths of space where there was none to see. But deep within It was the Power and the Power was Life. It looked to the north when there was no north; It looked to the south when there was no south; east and west It looked, and up and down. Then out of the nothingness and out of Its Will It wove the nest.

"The nest was broad and deep and strong. In the nest It laid one hundred eggs. It stayed on the nest and brooded the eggs, thinking Its thoughts, for ten thousand thousand years. When the time was ripe It left the nest and hung it about with lights that the fledglings might see. It watched and waited.

"From each of the hundred eggs a hundred Sons of the Bird were hatched—ten thousand strong. Yet so wide and deep was the nest there was room and to spare for each of them—a kingdom apiece and each was a king—king over the things that creep and crawl and swim and fly and go on all fours, things that had been born from the crevices of the nest, out of the warmth and the waiting.

“Wise and cruel was the Bird, and wise and cruel were the Sons of the Bird. For twice ten thousand thousand years they fought and ruled and the Bird was pleased. Then there were some who decided that they were as wise and strong as the Bird Itself. Out of the stuff of the nest they created creatures like unto themselves and breathed in their nostrils, that they might have sons to serve them and fight for them. But the sons of the Sons were not wise and strong and cruel, but weak and soft and stupid. The Bird was not pleased.

“Down It cast Its Own Sons and let them be chained by the softly stupid— Stop fidgeting, Mr. Randall! I know this is difficult for your little mind, but for once you really must think about something longer than your nose and wider than your mouth, believe me!

“The stupid and the weak could not hold the Sons of the Bird; therefore, the Bird placed among them, here and there, others more powerful, more cruel, and more shrewd, who by craft and cruelty and deceit could circumvent the attempts of the Sons to break free. Then the Bird sat back, well content, and waited for the game to play itself out.

“The game is being played. Therefore, we cannot permit you to interfere with your client, nor to assist him in any way. You see that, don’t you?”

“I don’t see,” shouted Randall, suddenly able to speak, “a damn thing! To hell with the bunch of you! This joke has gone far enough.”

“Silly and weak and stupid,” Stoles sighed. “Show him, Mr. Phipps.”

Phipps got up, placed a brief case on the table, opened it, and drew something from it, which he shoved under Randall’s nose—a mirror.

“Please look this way, Mr. Randall,” he said politely.

Randall looked at himself in the mirror.

“What are you thinking of, Mr. Randall?”

The image faded, he found himself staring into his own bedroom, as if from a slight height. The room was dark, but he could plainly see his wife’s head on her pillow. His own pillow was vacant.

She stirred, and half turned over, sighing softly. Her lips were parted a trifle and smiling faintly, as if what she dreamed were pleasant.

“See, Mr. Randall?” said Stoles. “You wouldn’t want anything to happen to her, now, would you?”

“Why, you dirty, low-down—”

"Softly, Mr. Randall, softly. And that will be enough from you. Remember your own interests—and *hers.*" Stoles turned away from him. "Remove him, Mr. Phipps."

"Come, Mr. Randall." He felt again that undignified shove from behind, then he was flying through the air with the scene tumbling to pieces around him.

He was wide-awake in his own bed, flat on his back and covered with cold sweat.

Cynthia sat up. "What's the matter, Teddy?" she said sleepily. "I heard you cry out."

"Nothing. Bad dream, I guess. Sorry I woke you."

" 'S all right. Stomach upset?"

"A little, maybe."

"Take some bicarb."

"I will." He got up, went to the kitchen and fixed himself a small dose. His mouth was a little sour, he realized, now that he was awake; the soda helped matters.

Cynthia was already asleep when he got back; he slid into bed quietly. She snuggled up to him without waking, her body warming his. Quickly he was asleep, too.

" 'Never mind trouble! Fiddlede-dee!' " He broke off singing suddenly, turned the shower down sufficiently to permit ordinary conversation, and said, "Good morning, beautiful!"

Cynthia was standing in the door of the bathroom, rubbing one eye and looking blearily at him with the other. "People who sing before breakfast—good morning."

"Why shouldn't I sing? It's a beautiful day and I've had a beautiful sleep. I've got a new shower song. Listen."

"Don't bother."

"This is a song," he continued, unperturbed, "dedicated to a Young Man Who Has Announced His Intention of Going Out into the Garden to Eat Worms."

"Teddy, you're nasty."

"No, I'm not. Listen." He turned the shower on more fully. "You have to have the water running to get the full effect," he explained. "First verse:

"I don't think I'll go out in the garden;
I'll make the worms come in to me!
If I have to be miser'ble,
I might as well be so comjort'bly!"

He paused for effect. "Chorus," he announced.

“Never mind trouble! Fiddlede-dee!
Eat your worms with Vitamin B!
Follow this rule and you will be
Still eating worms at a hundred ‘n’ three!”

He paused again. “Second verse,” he stated. “Only I haven’t thought up a second verse yet. Shall I repeat the first verse?”

“No, thanks. Just duck out of that shower and give me a chance at it.”

“You don’t like it,” he accused her.

“I didn’t say I didn’t.”

“Art is rarely appreciated,” he mourned. But he got out.

He had the coffee and the orange juice waiting by the time she appeared in the kitchen. He handed her a glass of the fruit juice. “Teddy, you’re a darling. What do you want in exchange for all this coddling?”

“You. But not now. I’m not only sweet, I’m brainy.”

“So?”

“Uh-huh. Look— I’ve figured out what to do with friend Hoag.”

“Hoag? Oh, dear!”

“Look out—you’ll spill it!” He took the glass from her and set it down. “Don’t be silly, babe. What’s gotten into you?”

“I don’t know, Teddy. I just feel as if we were tackling the kingpin of Cicero with a pea shooter.”

“I shouldn’t have talked business before breakfast. Have your coffee—you’ll feel better.”

“All right. No toast for me, Teddy. What’s your brilliant idea?”

“It’s this,” he explained, while crunching toast. “Yesterday we tried to keep out of his sight in order not to shake him back into his nighttime personality. Right?”

“Uh-huh.”

“Well, today we don’t have to. We can stick to him like a leech, both of us, practically arm in arm. If it interferes with the daytime half of his personality, it doesn’t matter, because we can lead him to the Acme Building. Once there, habit will take him where he usually goes. Am I right?”

“I don’t know, Teddy. Maybe. Amnesia personalities are funny things. He might just drift into a confused state.”

“You don’t think it will work?”

“Maybe it will, maybe it won’t. But as long as you plan for us to stay close together, I’m willing to try it—if you won’t give up the whole matter.”

He ignored the condition she placed on it. “Fine. I’ll give the old buzzard a ring and tell him to wait for us at his apartment." He reached across the breakfast table and grabbed the phone, dialed it and talked with Hoag. "He's certainly a June bug, that one," he said as he put the phone down. "At first he couldn't place me at all. Then all of a sudden he seemed to click and everything was all right. Ready to go, Cyn?"

"Half a sec."

"O. K." He got up and went into the living room, whistling softly.

The whistling broke off; he came quickly back into the kitchen. "Cyn—"

"What's the matter, Teddy?"

"Come into the living room—please!"

She hurried to do so, suddenly apprehensive at the sight of his face. He pointed to a straight chair which had been pulled over to a point directly under the mirror near the outer door. "Cyn—how did that get where it is?"

"That chair? Why, I pulled a chair over there to straighten the mirror just before I went to bed. I must have left it there."

"Mm-m-m— I suppose you must have. Funny I didn't notice it when I turned out the light."

"Why does it worry you? Think somebody might have gotten into the apartment last night?"

"Yeah. Yeah, sure—that's what I was thinking." But his brow was still wrinkled.

Cynthia looked at him, then went back into the bedroom. There she gathered up her purse, went through it rapidly, then opened a small, concealed drawer in her dressing table. "If anyone *did* manage to get in, they didn't get much. Got your wallet? Everything in it? How about your watch?"

He made a quick check and reported, "They're all right. You must have left the chair there and I just didn't notice it. Ready to go?"

"Be right with you."

He said no more about it. Privately he was thinking what an involved mess a few subconscious memories and a club sandwich just before turning in could make. He must have noticed the chair just before turning out the light—hence its appearance in the nightmare. He dismissed the matter.

V

Hoag was waiting for them. "Come in," he said. "Come in.

Welcome, madame, to my little hideaway. Will you sit down? Have we time for a cup of tea? I'm afraid, he added apologetically, "that I haven't coffee in the house."

"I guess we have," agreed Randall. "Yesterday you left the house at eight fifty-three and it's only eight thirty-five now. I think we ought to leave at the same time."

"Good." Hoag bustled away, to return at once with a tea service on a tray, which he placed on a table at Cynthia's knees. "Will you pour, Mrs. Randall? It's Chinese tea," he added. "My own blend."

"I'd be pleased." He did not look at all sinister this morning, she was forced to admit. He was just a fussy little bachelor with worry lines around his eyes—and a most exquisite apartment. His pictures were good, just how good she had not the training to tell, but they looked like originals. There were not too many of them, either, she noticed with approval. Arty little bachelors were usually worse than old maids for crowding a room full of too much.

Not Mr. Hoag's flat. It had an airy perfection to it as pleasing, in its way, as a Brahms waltz. She wanted to ask him where he had gotten his drapes.

He accepted a cup of tea from her, cradled it in his hand and sniffed the aroma before sipping from it. He then turned to Randall. "I'm afraid, sir, that we are off on a wild-goose chase this morning."

"Perhaps. Why do you think so?"

"Well, you see, I really am at a loss as to what to do next. Your telephone call— I was preparing my morning tea—I don't keep a servant—as usual, when you called. I suppose I am more or less in a brown fog in the early mornings—absentminded, you know, just doing the things one does when one gets up, making one's toilet and all that with one's thoughts elsewhere. When you telephoned I was quite bemused and it took me a moment to recall who you were and what business we had with each other. In a way the conversation cleared my head, made me consciously aware of myself, that is to say, but now—" He shrugged helplessly. "Now I haven't the slightest idea of what I am to do next."

Randall nodded. "I had that possibility in mind when I phoned you. I don't claim to be a psychologist but it seemed possible that your transition from your nighttime self to your daytime self took place as you left your apartment and that any interruption in your routine might throw you off."

"Then why—"

"It won't matter. You see, we shadowed you yesterday; we know where you go."

"You *do?* Tell me, sir! Tell me."

"Not so fast. We lost track of you at the last minute. What I had in mind is this; We could guide you along the same track, right up to the point where we lost track of you yesterday. At that point I am hoping that your habitual routine will carry you on through—and we will be in right at your heels."

"You say 'we.' Does Mrs. Randall assist you in this?"

Randall hesitated, realizing that he had been caught out in a slight prevarication. Cynthia moved in and took over the ball.

"Not ordinarily, Mr. Hoag, but this seemed like an exceptional case. We felt that you would not enjoy having your private affairs looked into by the ordinary run of hired operator, so Mr. Randall has undertaken to attend to your case personally, with my help when necessary."

"Oh, I say, that's awfully kind of you!"

"Not at all."

"But it is—it is. But, uh, in that case—I wonder if I have paid you enough. Do not the services of the head of the firm come a little higher?"

Hoag was looking at Cynthia; Randall signaled to her an emphatic "Yes"—which she chose to ignore. "What you have already paid, Mr. Hoag, seems sufficient. If additional involvements come up later, we can discuss them then."

"I suppose so." He paused and pulled at his lower lip. "I do appreciate your thoughtfulness in keeping my affairs to yourselves. I shouldn't like—" He turned suddenly to Randall. "Tell me—what would your attitude be if it should develop that my daytime life is—scandalous?" The word seemed to hurt him.

"I can keep scandal to myself."

"Suppose it were worse than that. Suppose it were—criminal. Beastly."

Randall stopped to choose his words. "I am licensed by the State of Illinois. Under that license I am obliged to regard myself as a special police officer in a limited sense. I certainly could not cover up any major felony. But it's not my business to turn clients in for any ordinary peccadillo. I can assure you that it would have to be something pretty serious for me to be willing to turn over a client to the police."

"But you can't assure me that you would not do so?"

"No," he said flatly.

Hoag sighed. "I suppose I'll just have to trust to your good judgment." He held up his right hand and looked at his nails. "No. No, I can't risk it. Mr. Randall, suppose you did find something you did not approve of—couldn't you just call me up and tell me that you were dropping the case?"

“No.”

He covered his eyes and did not answer at once. When he did his voice was barely audible. “You’ve found nothing—yet?” Randall shook his head. “Then perhaps it is wiser to drop the matter now. Some things are better never known.”

His evident distress and helplessness, combined with the favorable impression his apartment had made on her, aroused in Cynthia a sympathy which she would have thought impossible the evening before. She leaned toward him. “Why should you be so distressed, Mr. Hoag? You have no reason to think that you have done anything to be afraid of—have you?”

“No. No, nothing really. Nothing but an overpowering apprehension."

“But why?”

“Mrs. Randall, have you ever heard a noise behind you and been afraid to look around? Have you ever awakened in the night and kept your eyes tightly shut rather than find out what it was that had startled you? Some evils reach their full effect only when acknowledged and faced.

“I don’t dare face this one,” he added. “I thought that I did, but I was mistaken.”

“Come now,” she said kindly, “facts are never as bad as our fears —”

“Why do you say so? Why shouldn’t they be much worse?”

“Why, because they just aren’t.” She stopped, suddenly conscious that her Pollyanna saying had no truth in it, that it was the sort of thing adults use to pacify children. She thought of her own mother, who had gone to the hospital, fearing an appendectomy—which her friends and loving family privately diagnosed as hypochondria—there to *die,* of cancer.

No, the facts were frequently worse than our most nervous fears.

Still, she could not agree with him. “Suppose we look at it in the worst possible light,” she suggested. “Suppose you *have* been doing something criminal, while in your memory lapses. No court in the State would hold you legally responsible for your actions.”

He looked at her wildly. “No. No, perhaps they would not. But you know what they would do? You do, don’t you? Have you any idea what they do with the criminally insane?”

“I certainly do,” she answered positively. “They receive the same treatment as any other psycho patient. They aren’t discriminated against. I know; I’ve done field work at the State Hospital.”

“Suppose you have—you looked at it from the *outside.* Have you any idea what it feels like from the inside? Have you ever been placed in a wet pack? Have you ever had a guard put you to bed? Or force you to eat? Do you know what it's like to have a key turned in a lock every time you make a move? Never to have *any* privacy no matter how much you need it?"

He got up and began to pace. "But that isn't the worst of it. It's the other patients. Do you imagine that a man, simply because his own mind is playing him tricks, doesn't recognize insanity in others? Some of them drool and some of them have habits too beastly to tell of. And they talk, they talk, they *talk*. Can you imagine lying in a bed, with the sheet bound down, and a *thing* in the next bed that keeps repeating, 'The little bird flew up and then flew away; the little bird flew up and then flew away; the little bird flew up, and then flew away—' "

"Mr. Hoag!" Randall stood up and took him by the arm. "Mr. Hoag —control yourself! That's no way to behave."

Hoag stopped, looking bewildered. He looked from one face to the other and an expression of shame came over him. "I . . . I'm sorry, Mrs. Randall," he said. "I quite forgot myself. I'm not myself today. All this worry—"

"It's all right, Mr. Hoag," she said stiffly. But her earlier revulsion had returned.

"It's not entirely all right," Randall amended. "I think the time has come to get a number of things cleared up. There has been entirely too much going on that I don't understand and I think it is up to you, Mr. Hoag, to give me a few plain answers."

The little man seemed honestly at a loss. "I surely will, Mr. Randall, if there is anything I can answer. Do you feel that I have not been frank with you?"

"I certainly do. First—when were you in a hospital for the criminally insane?"

"Why, I never was. At least, I don't *think* I ever was. I don't remember being in one."

"Then why all this hysterical balderdash you have been spouting the past five minutes? Were you just making it up?"

"Oh, no! That . . . that was . . . that referred to St. George Rest Home. It had nothing to do with a . . . with such a hospital."

"St. George Rest Home, eh? We'll come back to that. Mr. Hoag, tell me what happened yesterday."

"Yesterday? During the day? But Mr. Randall, you *know* I can't tell you what happened during the day."

"I think you can. There has been some damnable skulduggery going on and you're the center of it. When you stopped me in front of the Acme Building—*what did you say to me?"*

"The Acme Building? I know nothing of the Acme Building. Was I there?"

"You're damned right you were there and you pulled some sort of a shenanigan on me, drugged me or doped me, or something. *Why?"*

Hoag looked from Randall's implacable face to that of his wife. But her face was impassive; she was having none of it. He turned hopelessly back to Randall. "Mr. Randall, believe me—I don't know what you are talking about. I may have been at the Acme Building. If I were and if I did anything to you, I know nothing of it."

His words were so grave, so solemnly sincere in their sound that Randall was unsettled in his own conviction. And yet—damn it, *somebody* had led him up an alley. He shifted his approach. "Mr. Hoag, if you have been as sincere with me as you claim to be, you won't mind what I'm going to do next." He drew from the inner pocket of his coat a silver cigarette case, opened it, and polished the mirrorlike inner surface of the cover with his handkerchief. "Now, Mr. Hoag, if you please."

"What do you want?"

"I want your fingerprints."

Hoag looked startled, swallowed a couple of times, and said in a low voice, "Why should you want my fingerprints?"

"Why not? If you haven't done anything, it can't do any harm, can it?"

"You're going to turn me over to the police!"

"I haven't any reason to. I haven't anything on you. Let's have your prints."

"No!"

Randall got up, stepped toward Hoag and stood over him. "How would you like both your arms broken?" he said savagely.

Hoag looked at him and cringed, but he did not offer his hands for prints. He huddled himself together, face averted and his hands drawn in tight to his chest.

Randall felt a touch on his arm. "That's enough, Teddy. Let's get out of here."

Hoag looked up. "Yes," he said huskily. "Get out. Don't come back."

"Come on, Teddy."

"I will in a moment. I'm not quite through. Mr. Hoag!"

Hoag met his eye as if it were a major effort.

"Mr. Hoag, you've mentioned St. George Rest Home twice as being your old *alma mater*. I just wanted you to know that *I* know that there is no such place!"

Again Hoag looked genuinely startled. "But there is," he insisted. "Wasn't I there for— At least they told me that was its name," he added doubtfully.

"Humph!" Randall turned toward the door. "Come on, Cynthia."

Once they were alone in the elevator she turned to him. “How did you happen to play it that way, Teddy?”

“Because,” he said bitterly, “while I don’t mind opposition, it makes me sore when my own client crosses me up. He dished us a bunch of lies, and obstructed us, and pulled some kind of sleight of hand on me in that Acme Building deal. I don’t like for a client to pull stunts like that; I don’t need their money that bad.”

“Well,” she sighed, “I, for one, will be very happy to give it back to him. I’m glad it’s over.”

“What do you mean, ‘give it back to him’? I’m not going to give it back to him; I’m going to earn it.”

The car had arrived at the ground floor by now, but she did not touch the gate. “Teddy! What do you mean?”

“He hired me to find out what he does. Well, damn it, I’m going to *find* out—with or without his cooperation.”

He waited for her to answer, but she did not. “Well,” he said defensively, “you don’t have to have anything to do with it.”

“If you are going on with it, I certainly am. Remember what you promised me?”

“What did I promise?” he asked, with a manner of complete innocence.

“You know.”

“But look here, Cyn—all I’m going to do is to hang around until he comes out, and then tail him. It may take all day. He may decide not to come out.”

“All right. I’ll wait with you.”

“Somebody has to look out for the office.”

“You look out for the office,” she suggested. “I’ll shadow Hoag.”

“Now that’s ridiculous. You—” The car started to move upward. “Woops! Somebody wants to use it.” He jabbed the button marked “Stop,” then pushed the one which returned the car to the ground floor. This time they did not wait inside; he immediately opened the gate and the door.

Adjacent to the entrance of the apartment house was a little lounge or waiting room. He guided her into it. “Now let’s get this settled,” he commenced.

“It *is* settled.”

“O.K., you win. Let’s get ourselves staked out.”

“How about right here? We can sit down and he can’t possibly get out without us seeing him.”

“O.K.”

The elevator had gone up immediately after they had quitted it; soon they heard the typical clanging grunt which announced its return to the ground floor. “On your toes, kid.”

She nodded and drew back into the shadows of the lounge. He placed himself so that he could see the elevator door by reflection in an ornamental mirror hanging in the lounge. “Is it Hoag?” she whispered.

“No,” he answered in a low voice, “it’s a bigger man. It looks like —” He shut up suddenly and grabbed her wrist.

Past the open door of the lounge she saw the hurrying form of Jonathan Hoag go by. The figure did not turn its eyes in their direction but went directly through the outer door. When it swung closed Randall relaxed the hold on her wrist. “I darn near muffed that one,” he admitted.

“What happened?”

“Don’ know. Bum glass in the mirror. Distortion. Tallyho, kid.”

They reached the door as their quarry got to the sidewalk and, as on the day before, turned to the left.

Randall paused uncertainly. “I think we’ll take a chance on him seeing us. I don’t want to lose him.”

“Couldn’t we follow him just as effectively in a cab? If he gets on a bus where he did before, we’ll be better off than we would be trying to get on it with him.” She did not admit, even to herself, that she was trying to keep them away from Hoag.

“No, he might not take a bus. Come on.”

They had no difficulty in following him; he was heading down the street at a brisk, but not a difficult, pace. When he came to the bus stop where he had gotten on the day before, he purchased a paper and sat down on the bench. Randall and Cynthia passed behind him and took shelter in a shop entrance.

When the bus came he went up to the second deck as before; they got on and remained on the lower level. “Looks like he was going right where he went yesterday,” Randall commented. “We’ll get him today, kid.”

She did not answer.

When the bus approached the stop near the Acme Building they were ready and waiting—but Hoag failed to come down the steps. The bus started up again with a jerk; they sat back down. “What do you suppose he is up to?” Randall fretted. “Do you suppose he saw us?”

“Maybe he gave us the slip,” Cynthia suggested hopefully.

“How? By jumping off the top of the bus? Hm-m-m!”

“Not quite, but you’re close. If another bus pulled alongside us at a stop light, he could have done it by stepping across, over the railing. I saw a man do that once. If you do it toward the rear, you stand a good chance of getting away with it entirely.”

He considered the matter. “I’m pretty sure no bus has pulled up by us. Still, he could do it to the top of a truck, too, though Lord knows how he would get off again.” He fidgeted. “Tell you what—I’m going back to the stairs and sneak a look.”

“And meet him coming down? Be your age, Brain.”

He subsided; the bus went on a few blocks. “Coming to our own corner,” he remarked.

She nodded, naturally having noticed as soon as he did that they were approaching the corner nearest the building in which their own office was located. She took out her compact and powdered her nose, a routine she had followed eight times since getting on the bus. The little mirror made a handy periscope whereby to watch the passengers getting off the rear of the bus. “There he is, Teddy!”

Randall was up out of his seat at once and hurrying down the aisle, waving at the conductor. The conductor looked annoyed but signaled the driver not to start. “Why don’t you watch the streets?” he asked.

“Sorry, buddy. I’m a stranger here myself. Come on, Cyn.”

Their man was just turning into the door of the building housing their own office. Randall stopped. “Something screwy about this, kid.”

“What do we do?”

“Follow him,” he decided.

They hurried on; he was not in the lobby. The Midway-Copton is not a large building, nor swank—else they could not have rented there. It has but two elevators. One was down and empty; the other, by the indicator, had just started up.

Randall stepped up to the open car, but did not enter. “Jimmie,” he said, “how many passengers in that other car?”

“Two,” the elevator pilot answered.

“Sure?”

“Yeah. I was breezin’ with Bert when he closed the door. Mr. Harrison and another bird. Why?”

Randall passed him a quarter. “Never mind,” he said, his eyes on the slowly turning arrow of the indicator. “What floor does Mr. Harrison go to?”

“Seven.” The arrow had just stopped at seven.

“Swell.” The arrow started up again, moved slowly past eight and nine, stopped at ten. Randall hustled Cynthia into the car. “Our floor, Jimmie,” he snapped, “and step on it!”

An “up” signal flashed from the fourth floor; Jimmie reached for his controls; Randall grabbed his arm. “Skip it this time, Jim.”

The operator shrugged and complied with the request.

The corridor facing the elevators on the tenth floor was empty. Randall saw this at once and turned to Cynthia. “Give a quick gander down the other wing, Cyn,” he said, and headed to the right, in the direction of their office.

Cynthia did so, with no particular apprehension. She was sure in her own mind that, having come this far, Hoag was certainly heading for their office. But she was in the habit of taking direction from Teddy when they were actually doing something; if he wanted the other corridor looked at, she would obey, of course.

The floor plan was in the shape of a capital H, with the elevators located centrally on the cross bar. She turned to the left to reach the other wing, then glanced to the left—no one in that alley. She turned around and faced the other way—no one down there. It occurred to her that just possibly Hoag could have stepped out on the fire escape; as a matter of fact the fire escape was in the direction she had first looked, toward the rear of the building—but habit played a trick on her; she was used to the other wing in which their office was located, in which, naturally, everything was swapped right for left from the way in which it was laid out in this wing.

She had taken three or four steps toward the end of the corridor facing the street when she realized her mistake—the open window certainly had no fire escape beyond it. With a little exclamation of impatience at her own stupidity she turned back.

Hoag was standing just behind her.

She gave a most unprofessional squeak.

Hoag smiled with his lips. “Ah, Mrs. Randall!”

She said nothing—she could think of nothing to say. There was a .32 pistol in her handbag; she felt a wild desire to snatch it out and fire. On two occasions, at a time when she was working as a decoy for the narcotics squad, she had been commended officially for her calm courage in a dangerous pinch—she felt no such calm now.

He took a step toward her. “You wanted to see me, did you not?”

She gave way a step. “No,” she said breathlessly. “No!”

“Ah, but you did. You expected to find me at your office, but I chose to meet you—here!”

The corridor was deserted; she could not even hear a sound of typing or conversation from any of the offices around them. The glazed doors stared sightlessly; the only sounds, other than their own sparse words, were the street noises ten stories below, muted, remote and unhelpful.

He came closer. “You wanted to take my fingerprints, didn’t you? You wanted to check them—find out things about me. You and your meddlesome husband.”

“Get away from me!”

He continued to smile. “Come, now. You wanted my fingerprints—you shall have them.” He raised his arms toward her and spread his fingers, reaching. She backed away from the clutching hands. He no longer seemed small; he seemed taller, and broader—bigger than Teddy. His eyes stared down at her.

Her heel struck something behind her; she knew that she had backed to the very end of the passage—dead end.

His hands came closer. “Teddy!” she screamed. “Oh, Teddy!”

Teddy was bending over her, slapping her face. “Stop that,” she said indignantly. “It hurts!”

He gave a sigh of relief. “Gee, honey,” he said tenderly. “You sure gave me a turn. You’ve been out for minutes.”

“Unnnh!”

“Do you know where I found you? There!” He pointed to the spot just under the open window. “If you hadn’t fallen just right, you would have been hamburger by now. What happened? Lean out and get dizzy?”

“Didn’t you catch him?”

He looked at her admiringly. “Always the professional! No, but I damn near did. I saw him, from down the corridor. I watched a moment to see what he was up to. If you hadn’t screamed, I would have had him.”

“If I *hadn’t* screamed?”

“Sure. He was in front of our office door, apparently trying to pick the lock, when—”

“Who was?”

He looked at her in surprise. “Why, Hoag, of course—*Baby!* Snap out of it! You aren’t going to faint again, are you?”

She took a deep breath. “I’m all right,” she said grimly, “—now. Just as long as you’re here. Take me to the office.”

“Shall I carry you?”

“No, just give me your hand.” He helped her up and brushed at her dress. “Never mind that now.” But she did stop to moisten, ineffectively, a long run in what had been until that moment brand-new stockings.

He let them into the office and sat her carefully in an armchair, then fetched a wet towel with which he bathed her face. “Feel better?”

“I’m all right—physically. But I want to get something straight. You say you saw Hoag trying to get into this office?”

“Yeah. Damned good thing we’ve special locks.”

“This was going on when I screamed?”

“Yeah, sure.”

She drummed on the arms of the chair.

“ ’S matter, Cyn?”

"Nothing. Nothing at all—only this: The reason I screamed was because Hoag was trying to choke me!"

It took him some time even to say, "Hunh?"

She replied, "Yes, I know, darling. That's how it is and it's nuts. Somehow or other, he's done it to us again. But I swear to you that he was about to choke me. Or I thought he was." She rehearsed her experience, in detail. "What does it add up to?"

"I wish I knew," he told her, rubbing his face. "I wish I did. If it hadn't been for that business in the Acme Building, I would say that you were sick and had fainted and when you came to you were still kinda lightheaded. But now I don't know which one of us is batty. I surely thought I saw him."

"Maybe we're both crazy. It might be a good idea if we both went to see a good psychiatrist."

"Both of us? Can two people go crazy the same way? Wouldn't it be one or the other of us?"

"Not necessarily. It's rare, but it does happen. *Folie à deux."*

"Folee adooh?"

"Contagious insanity. Their weak points match up and they make each other crazier." She thought of the cases she had studied and recalled that usually one was dominant and the other subordinate, but she decided not to bring it up, as she had her own opinion as to who was dominant in their family, an opinion kept private for reasons of policy.

"Maybe," Randall said thoughtfully, "what we need is a nice, long rest. Down on the Gulf, maybe, where we could lie around in the sunshine."

"That," she said, "is a good idea in any case. Why in the world anyone chooses to live in a dismal, dirty, ugly spot like Chicago is beyond me."

"How much money have we?"

"About eight hundred dollars, after the bills and taxes are paid. And there's the five hundred from Hoag, if you want to count that."

"I think we've earned it," he said grimly. "Say! *Do* we have that money? Maybe that was a hoax, too."

"You mean maybe there never was any Mr. Hoag and pretty soon the nurse will be in to bring us our nice supper."

"Mm-m-m—that's the general idea. Have you got it?"

"I *think* I have. Wait a minute." She opened her purse, in turn opened a zippered compartment, and felt in it. "Yes, it's here. Pretty green bills. Let's take that vacation, Teddy. I don't know why we stay in Chicago, anyway."

"Because the business is here," he said practically. "Coffee and cakes. Which reminds me, slaphappy or not, I'd better see what calls have come in." He reached across her desk for the phone; his eye fell on a sheet of paper in her typewriter. He was silent for a moment, then said in a strained voice, "Come here, Cyn. Take a look at this."

She got up at once, came around and looked over his shoulder. What she saw was one of their letterheads, rolled into the typewriter; on it was a single line of typing:

CURIOSITY KILLED THE CAT.

She said nothing at all and tried to control the quivering at the pit of her stomach.

Randall asked, "Cyn, did you write that?"

"No."

"Positive?"

"Yes." She reached out to take it out of the machine; he checked her.

"Don't touch it. Fingerprints."

"All right. But I have a notion," she said, "that you won't find any fingerprints on *that.*"

"Maybe not."

Nevertheless, he took his outfit out of the lower drawer of his desk and dusted the paper and the machine—with negative results on each. There were not even prints of Cynthia to confuse the matter; she had a business-college neatness in her office habits and made a practice of brushing and wiping her typewriter at the end of each day.

While watching him work she remarked, "Looks as if you saw him getting *out* rather than *in.*"

"Huh? How?"

"Picked the lock, I suppose."

"Not that lock. You forget, baby, that that lock is one of Mr. Yale's proudest achievements. You could break it, maybe, but you couldn't pick it."

She made no answer—she could think of none. He stared moodily at the typewriter as if it should tell him what had happened, then straightened up, gathered up his gear, and returned it to its proper drawer. "The whole thing stinks," he said, and commenced to pace the room.

Cynthia took a rag from her own desk and wiped the print powder from the machine, then sat down and watched him. She held her tongue while he fretted with the matter. Her expression was troubled but she was not worried for herself—nor was it entirely maternal. Rather was she worried for them.

"Cyn," he said suddenly, "this has got to stop!"

"All right," she agreed. "Let's stop it."

"How?"

"Let's take that vacation."

He shook his head. "I can't run away from it. I've got to know."

She sighed. "I'd rather not know. What's wrong with running away from something too big for us to fight?"

He stopped and looked at her. "What's come over you, Cyn? You never went chicken before."

"No," she answered slowly, "I never did. But I never had reason to. Look at me, Teddy—you know I'm not a *female* female. I don't expect you to pick fights in restaurants when some lug tries to pick me up. I don't scream at the sight of blood and I don't expect you to clean up your language to fit my ladylike ears. As for the job, did I ever let you down on a case? Through timidity, I mean. Did I ever?"

"Hell, no. I didn't say you did."

"But this is a different case. I had a gun in my bag a few minutes ago, but I couldn't use it. Don't ask me why. I *couldn't.*"

He swore, with emphasis and considerable detail. "I wish I had seen him then. I would have used mine!"

"Would you have, Teddy?" Seeing his expression, she jumped up and kissed him suddenly, on the end of his nose. "I don't mean you would have been afraid. You know I didn't mean that. You're brave and you're strong and *I* think you're brainy. But look, dear—yesterday he led you around by the nose and made you believe you were seeing things that weren't there. Why didn't you use your gun then?"

"I didn't see any occasion to use it."

"That's exactly what I mean. You saw what was intended for you to see. How can you fight when you can't believe your own eyes?"

"But, damn it, he can't do this to us—"

"Can't he? Here's what he *can* do." She ticked them off on her fingers. "He can be two places at once. He can make you see one thing and me another, at the same time—outside the Acme Building, remember? He can make you think you went to an office suite that doesn't exist on a floor that doesn't exist. He can pass through a locked door to use a typewriter on the other side. And he doesn't leave fingerprints. What does that add up to?"

He made an impatient gesture. "To nonsense. Or to magic. And I don't believe in magic."

"Neither do I."

"Then," he said, "we've both gone bats." He laughed, but it was not merry.

"Maybe. If it's magic, we had best see a priest—"

"I told you I don't believe in magic."

"Skip it. If it's the other, it won't do us any good to try to tail Mr.

Hoag. A man with the D.T.'s can't catch the snakes he thinks he sees and take them to a zoo. He needs a doctor—and maybe we do, too."

Randall was suddenly alert. "Say!"

"Say what?"

"You've just reminded me of an angle that I had forgotten—Hoag's doctor. We never checked on *him."*

"Yes, you did, too. Don't you remember? There wasn't any such doctor."

"I don't mean Dr. Rennault; I mean Dr. Potbury—the one he went to see about the stuff under his fingernails."

"Do you think he really did that? I thought it was just part of the string of lies he told us."

"So do I. But we ought to check up on it."

"I'll bet you there isn't any such doctor."

"You're probably right, but we ought to *know.* Gimme the phone book." She handed it to him; he thumbed through it, searching for the P's. "Potbury—Potbury. There's half a column of them. But no M.D.'s, though," he announced presently. "Let's have the yellow section; sometimes doctors don't list their home addresses." She got it for him and he opened it. " 'Physical Culture Studios'--'Physicians & Surgeons.' What a slog of 'em! More doctors than saloons—half the town must be sick most of the time. Here we are: 'Potbury, P.T., M.D.' "

"That *could* be the one," she admitted.

"What are we waiting for? Let's go find out."

"Teddy!"

"Why not?" he said defensively. "Potbury isn't Hoag—"

"I wonder."

"Huh? What do you mean? Do you mean that Potbury might be mixed up in this huggermugger, too?"

"I don't know. I'd just like to forget all about our Mr. Hoag."

"But there's no harm in this, bright eyes. I'll just pop into the car, slide down there, ask the worthy doctor a few pertinent questions, and be back for you in time for lunch."

"The car is laid up for a valve grind; you know that."

"O.K., I'll take the el. Quicker, anyway."

"If you insist on going, we'll both take the el. We stick together, Teddy."

He pulled at his lip. "Maybe you're right. We don't know where Hoag is. If you prefer it—"

"I certainly do. I got separated from you for just three minutes a little while ago and look what happened."

"Yeah, I guess so. I sure wouldn't want anything to happen to you, kid."

She brushed it away. "It's not me; it's *us.* If anything happens to us, I want it to be the same thing."

"All right," he said seriously. "From now on, we stick together. I'll handcuff us together, if you'd rather."

"You won't need to. I'm going to hang on."

VI

Potbury's office was to the south, beyond the university. The tracks of the elevated ran between familiar miles of apartment houses. There were sights which one ordinarily sees without any impression registering on the brain; today she looked at them and saw them, through her own brown mood.

Four-and five-story walk-up apartment houses, with their backs to the tracks, at least ten families to a building, more usually twenty or more, and the buildings crushed together almost wall to wall. Wood-construction back porches which proclaimed the firetrap nature of the warrens despite the outer brick shells, family wash hung out to dry on those porches, garbage cans, and trash bins. Mile after mile of undignified and unbeautiful squalor, seen from the rear.

And over everything a film of black grime, old and inescapable, like the dirt on the window sill beside her.

She thought of that vacation, clean air and clear sunshine. Why stay in Chicago? What did the town have to justify its existence? One decent boulevard, one decent suburb to the north, priced for the rich, two universities and a lake. As for the rest, endless miles of depressing, dirty streets. The town was one big stockyard.

The apartments gave way to elevated-train yards; the train turned left and headed east. After a few minutes they got off at Stoney Island station; she was glad to be off it and free of that too-frank back view of everyday life, even though she exchanged it for the noise and seedy commercialism of Sixty-third Street.

Potbury's office faced on the street, with an excellent view of the elevated and the trains. It was the sort of location in which a G. P. could be sure of a busy practice and equally sure of never being bothered by riches or fame. The stuffy little waiting room was crowded but the turnover was fast; they did not have long to wait.

Potbury looked them over as they came in. "Which one of you is the patient?" he asked. His manner was slightly testy.

They had planned to lead up to the subject of Hoag by using Cynthia's fainting spell as an excuse for consultation; Potbury's next remark queered the scheme, from Cynthia's viewpoint. "Whichever one it is, the other can wait outside. I don't like holding conventions."

"My wife—" Randall began. She clutched his arm.

"My wife and I," he went on smoothly, "want to ask you a couple of questions, doctor."

"Well? Speak up."

"You have a patient—a Mr. Hoag."

Potbury got up hastily, went to the reception-room door, and assured himself that it was closed tightly. He then stood and faced them, his back to the only exit. "What about—Hoag?" he said forebodingly.

Randall produced his credentials. "You can see for yourself that I am a proper inquiry agent," he said. "My wife is licensed, too."

"What do you have to do with—the man you mentioned?"

"We are conducting an investigation for him. Being a professional man yourself, you can appreciate that I prefer to be frank—"

"You *work* for him?"

"Yes and no. Specifically, we are trying to find out certain things about him, but he is aware that we are doing so; we aren't going around behind his back. If you like, you can phone him and find out for yourself." Randall made the suggestion because it seemed necessary to make it; he hoped that Potbury would disregard it.

Potbury did so, but not in any reassuring manner. "Talk with *him?* Not if I can help it! What did you want to know about him?"

"A few days ago," Randall said carefully, "Hoag brought to you a substance to be analyzed. I want to find out what that substance was."

"Hrrumph! You reminded me a moment ago that we were both professional men; I am surprised that you should make such a request."

"I appreciate your viewpoint, doctor, and I know that a doctor's knowledge of his patients is privileged. But in this case there is—"

"You wouldn't want to know!"

Randall considered this. "I've seen a good deal of the seamy side of life, doctor, and I don't think there is anything that can shock me any more. Do you hesitate to tell me in Mrs. Randall's presence?"

Potbury looked him over quizzically, then surveyed Mrs. Randall. "You look like decent enough people," he conceded. "I suppose you do think you are beyond being shocked. But let me give you some advice. Apparently you are connected in some way with this man. *Stay away from him!* Don't have anything to do with him. And don't ask me what he had under his fingernails."

Cynthia suppressed a start. She had been keeping out of the conversation but following it carefully. As she remembered it, Teddy had made no mention of fingernails.

"Why, doctor?" Randall continued insistently.

Potbury was beginning to be annoyed. “You are a rather stupid young man, sir. Let me tell you this: If you know no more of this person than you appear to know, then you have no conception of the depths of beastliness possible in this world. In that you are lucky. It is much, much better never to know.”

Randall hesitated, aware that the debate was going against him. Then he said, “Supposing you are right, doctor—how is it, if he is so vicious, you have not turned Hoag over to the police?”

“How do you know I haven’t? But I will answer that one, sir. No, I have not turned him over to the police, for the simple reason that it would do no good. The authorities have not had the wit nor the imagination to conceive of the possibility of the peculiar evil involved. No law can touch him—not in this day and age.”

“What do you mean, ‘not in this day and age’?”

“Nothing. Disregard it. The subject is closed. You said something about your wife when you came in; did she wish to consult me about something?”

“It was nothing,” Cynthia said hastily. “Nothing of importance.”

“Just a pretext, eh?” He smiled almost jovially. “What was it?”

“Nothing. I fainted earlier today. But I’m all right now.”

“Hm-m-m. You’re not expecting, are you? Your eyes don’t look like it. You look sound enough. A little anemic, perhaps. Fresh air and sunshine wouldn’t do any harm.” He moved away from them and opened a white cabinet on the far wall; he busied himself with bottles for a moment. Presently he returned with a medicine glass filled with amber-brown liquid. “Here—drink this.”

“What is it?”

“A tonic. It contains just enough of What Made the Preacher Dance to make you enjoy it.”

Still she hesitated, looking to her husband. Potbury noticed it and remarked, “Don’t like to drink alone, eh? Well, one wouldn’t do us any harm, either.” He returned to the cabinet and came back with two more medicine glasses, one of which he handed to Randall. “Here’s to forgetting all unpleasant matters,” he said. “Drink up!” He lifted his own glass to his lips and tossed it off.

Randall drank, Cynthia followed suit. It was not bad stuff, she thought. Something a little bitter in it, but the whiskey—it *was* whiskey, she concluded—covered up the taste. A bottle of that tonic might not do you any real good but it would make you feel better.

Potbury ushered them out. “If you have another fainting spell, Mrs. Randall, come back and see me and we’ll give you a thorough going over. In the meantime, don’t worry about matters you can’t help.”

They took the last car of the train in returning and were able to pick a seat far away enough from other passengers for them to talk freely. “Whatja make of it?” he asked, as soon as they were seated.

She wrinkled her brow. “I don’t know, quite. He certainly doesn’t like Mr. Hoag, but he never said why.”

“Um-m-m.”

“What do you make of it, Teddy?”

“First, Potbury knows Hoag. Second, Potbury is very anxious that we know nothing about Hoag. Third, Potbury hates Hoag—and is afraid of him!”

“Huh? How do you figure that out?”

He smiled maddeningly. “Use the little gray cells, my sweet. I think I’m on to friend Potbury—and if he thinks he can scare me out of looking into what Hoag does with his spare time he’s got another think coming!”

Wisely, she decided not to argue it with him just then—they had been married quite some time.

At her request they went home instead of back to the office. “I don’t feel up to it. Teddy. If *he* wants to play with my typewriter, let him!”

“Still feeling rocky from the Brodie you pulled?” he asked anxiously.

“Kinda.”

She napped most of the afternoon. The tonic, she reflected, that Dr. Potbury had given her did not seem to have done her any good—left her dizzy, if anything, and with a furry taste in her mouth.

Randall let her sleep. He fiddled around the apartment for a few minutes, set up his dart board and tried to develop an underhand shot, then desisted when it occurred to him that it might wake Cynthia. He looked in on her and found that she was resting peacefully. He decided that she might like a can of beer when she woke up—it was a good excuse to go out; he wanted a beer himself. Bit of a headache, nothing much, but he hadn’t felt really chipper since he left the doctor’s office. A couple of beers would fix it up.

There was a taproom just this side of the nearest delicatessen. Randall decided to stop for one on draught before returning. Presently he found himself explaining to the proprietor just *why* the reform amalgamation would never turn out the city machine.

He recalled, as he left the place, his original intention. When he got back to their apartment, laden with beer and assorted cold cuts, Cynthia was up and making domestic noises in the kitchen. “Hi, babe!”

“Teddy!”

He kissed her before he put down the packages. “Were you scared when you woke up and found me gone?"

"Not really. But I would rather you had left a note. What have you got there?"

"Suds and cold cuts. Like?"

"Swell. I didn't want to go out for dinner and I was trying to see what I could stir up. But I hadn't any meat in the house." She took them from him.

"Anybody call?"

"Huh-uh. I called the exchange when I woke up. Nothing of interest. But the mirror came."

"Mirror?"

"Don't play innocent. It was a nice surprise, Teddy. Come see how it dresses up the bedroom."

"Let's get this straight," he said. "I don't know anything about a mirror."

She paused, puzzled. "I thought you bought it for me for a surprise. It came prepaid."

"Whom was it addressed to; you or me?"

"I didn't pay much attention; I was half asleep. I just signed something and they unpacked it and hung it for me."

It was a very handsome piece of glass, beveled plate, without a frame, and quite large. Randall conceded that it did things for her dressing table. "If you want a glass like that, honey, I'll get one for you. But this isn't ours. I suppose I'd better call up somebody and tell 'em to take it back. Where's the tag?"

"They took it off, I think. Anyhow it's after six o'clock."

He grinned at her indulgently. "You like it, don't you? Well, it looks like it's yours for tonight—and tomorrow I'll see about getting you another."

It *was* a beautiful mirror; the silvering was well-nigh perfect and the glass was air-clear. She felt as if she could push her hand through it.

He went to sleep, when they turned in, a little more readily than she did—the nap, no doubt. She rested on one elbow and looked at him for a long time after his breathing had become regular. Sweet Teddy! He was a good boy—good to her certainly. Tomorrow she would tell him not to bother about the other mirror—she didn't need it. All she really wanted was to be with him, for nothing ever to separate them. *Things* did not matter; just being together was the only thing that really mattered.

She glanced at the mirror. It certainly was handsome. So beautifully clear—like an open window. She felt as if she could climb through it, like Alice Through the Looking Glass.

He awoke when his name was called. “Up out of there, Randall! You’re late!”

It wasn’t Cynthia; that was sure. He rubbed the sleep out of his eyes and managed to focus them. “Wha’s up?”

“You,” said Phipps, leaning out through the beveled glass. “Get a move on! Don’t keep us waiting.”

Instinctively he looked toward the other pillow. Cynthia was gone.

Gone! Then he was up out of bed at once, wide awake, and trying frantically to search everywhere at once. Not in the bathroom. “Cyn!” Not in the living room, not in the kitchen-breakfast room. “Cyn! Cynthia! Where are you?” He pawed frantically in each of the closets. “Cyn!”

He returned to the bedroom and stood there, not knowing where to look next—a tragic, barefooted figure in rumpled pajamas and tousled hair.

Phipps put one hand on the lower edge of the mirror and vaulted easily into the room. “This room should have had a place to install a full-length mirror,” he remarked curtly as he settled his coat and straightened his tie. “Every room should have a full-length mirror. Presently we will require it—I shall see to it.”

Randall focused his eyes on him as if seeing him for the first time. “Where is she?” he demanded. “What have you done with her?” He stepped toward Phipps menacingly.

“None of your business,” retorted Phipps. He inclined his head toward the mirror. “Climb through it.”

“Where is she?” he screamed and attempted to grab Phipps by the throat.

Randall was never clear as to just what happened next. Phipps raised one hand—and he found himself tumbled against the side of the bed. He tried to struggle up again—fruitlessly. His efforts had a helpless, nightmare quality. “Mr. Crewes!” Phipps called out. “Mr. Reifsnider—I need your help.”

Two more faces, vaguely familiar, appeared in the mirror. “On this side, Mr. Crewes, if you please,” Phipps directed. Mr. Crewes climbed through. “Fine! We’ll put him through feet first, I think.”

Randall had nothing to say about it; he tried to resist, but his muscles were water. Vague twitchings were all he could accomplish. He tried to bite a wrist that came his way and was rewarded with a faceful of hard knuckles—a stinging rap rather than a blow.

“I’ll add to that later,” Phipps promised him.

They poked him through and dumped him on a table—*the* table. It was the same room he had been in once before, the board room of Detheridge & Co. There were the same pleasant, icy faces around the table, the same jovial, pig-eyed fat man at the head. There was one minor difference; on the long wall was a large mirror which did not reflect the room, but showed their bedroom, his and Cynthia's, as if seen in a mirror, with everything in it swapped left for right.

But he was not interested in such minor phenomena. He tried to sit up, found that he could not, and was forced to make do with simply raising his head. "Where did you put her?" he demanded of the huge chairman.

Stoles smiled at him sympathetically. "Ah, Mr. Randall! So you've come to see us again. You do get around, don't you? Entirely too much, in fact."

"Damn you—tell me what you did with her!"

"Silly and weak and stupid," Stoles mused. "To think that my own brothers and I could create nothing better than you. Well, you shall pay for it. The Bird is cruel!"

At his last emphatic remark he covered his face briefly. The others present followed his motions; someone reached out and clapped a hand roughly over Randall's eyes, then took it away.

Stoles was speaking again; Randall tried to interrupt him—once again Stoles thrust a finger at him and said sternly, "Enough!" Randall found himself unable to talk; his throat choked up and nauseated him whenever he tried it.

"One would suppose," Stoles continued urbanely, "that even one of your poor sort would understand the warning you were given, and heed it." Stoles stopped for a moment and shoved out his lips, pressing them tightly together. "I sometimes think that my only weakness lies in not realizing the full depths of the weakness and stupidity of men. As a reasonable creature myself I seem to have an unfortunate tendency to expect others unlike myself to be reasonable."

He stopped and turned his attention away from Randall and toward one of his colleagues. "Don't raise up any false hopes, Mr. Parker," he said, smiling sweetly. "I do not underrate *you.* And if you should wish to wrestle for my right to sit where I sit, I shall oblige you—later. I wonder," he added thoughtfully, "what your blood tastes like."

Mr. Parker was equally courteous. "Much the same as yours, Mr. Chairman, I imagine. It's a pleasant idea, but I am satisfied with the present arrangements."

"I'm sorry to hear it. I like you, Mr. Parker; I had hoped you were ambitious."

"I am patient—like our Ancestor."

"So? Well—back to business. Mr. Randall, I tried before to impress you with the necessity of having nothing to do with—your client. You know the client I mean. What do *you* think would impress you with the fact that the Sons of the Bird will tolerate no interference with their plans? Speak up—tell me."

Randall had heard little of what had taken place and had understood none of it. His whole being was engrossed with a single terrible thought. When he found he could speak again, it spilled forth. "Where is she?" he demanded in a hoarse whisper. "What have you done with her?"

Stoles gestured impatiently. "Sometimes," he said pettishly, "it is almost impossible to get into communication with one of them—almost no mind at all. Mr. Phipps!"

"Yes, sir."

"Will you please see that the other one is fetched in?"

"Certainly, Mr. Stoles." Phipps gathered up an assistant with his eye; the two left the room to return shortly with a burden which they dumped casually on the table beside Randall. It was Cynthia.

The surge of relief was almost more than he could stand. It roared through him, choking him, deafening him, blinding him with tears, and leaving him nothing with which to weigh the present danger of their situation. But gradually the throbbing of his being slowed down enough for him to see that something was wrong; she was quiet. Even if she had been asleep when they carried her in, the rough handling she had received should have been enough to waken her.

His alarm was almost as devastating as his joy had been. "What have you done to her?" he begged. "Is she—"

"No," Stoles answered in disgusted tones, "she is not dead. Control yourself, Mr. Randall." With a wave of his hand he directed his colleagues, "Wake her up."

One of them poked her in the ribs with a forefinger. "Don't bother to wrap it," he remarked; "I'll eat it on the way."

Stoles smiled. "Very witty, Mr. Printemps—but I said to wake her up. Don't keep me waiting."

"Certainly, Mr. Chairman." He slapped her stingingly across the face; Randall felt it on his own face—in his helpless condition it almost unhinged his reason. "In the Name of the Bird—wake up!"

He saw her chest heave under the silk of her nightgown; her eyes fluttered and she said one word, "Teddy?"

"Cyn! Here, darling, here!"

She turned her head toward him and exclaimed, "Teddy!" then added, "I had such a bad dream—*Oh!"* She had caught sight of them staring greedily at her. She looked slowly around her, wide-eyed and serious, then turned back to Randall. "Teddy—is this still a dream?"

"I'm afraid not, darling. Chin up."

She looked once more at the company, then back to him. "I'm not afraid," she said firmly. "Make your play, Teddy. I won't faint on you again.” Thereafter she kept her eyes on his.

Randall stole a glance at the fat chairman; he was watching them, apparently amused by the sight, and showed no present disposition to interfere. “Cyn,” Randall said in an urgent whisper, “they’ve done something to me so I can’t move. I’m paralyzed. So don’t count on me too much. If you get a chance to make a break for it, take it!”

“I can’t move, either,” she whispered back. “We’ll have to wait.” She saw his agonized expression and added, “ ‘Chin up,’ you said. But I wish I could touch you.” The fingers of her right hand trembled slightly, found some traction on the polished table top, and began a slow and painful progress across the inches that separated them.

Randall found that he could move his own fingers a little; he started his left hand on its way to join hers, a half inch at a time, his arm a dead weight against the movement, At last they touched and her hand crept into his, pressing it faintly. She smiled.

Stoles rapped loudly on the table. “This little scene is very touching,” he said in sympathetic tones, “but there is business to attend to. We must decide the best thing to do with them.”

"Hadn't we better eliminate them entirely?" suggested the one who had jabbed Cynthia in the ribs.

"That would be a pleasure," Stoles conceded, "but we must remember that these two are merely an incident in our plans for . . . for Mr. Randall's client. He is the one who must be destroyed!"

"I don't see—"

"Of course you don't see and that is why I am chairman. Our immediate purpose must be to immobilize these two in a fashion which will cause no suspicion on *his* part. The question is merely one of method and of the selection of the subject."

Mr. Parker spoke up. "It would be very amusing," he suggested, "to return them as they are. They would starve slowly, unable to answer the door, unable to answer the telephone, helpless."

"So it would be," Stoles said approvingly. "That is about the caliber of suggestion I expected from you. Suppose he attempted to see them, found them so. Do you think he would not understand their story? No, it must be something which seals their tongues. I intend to send them back with one of them—dead-alive!"

The whole business was so preposterous, so utterly unlikely, that Randall had been telling himself that it could not be real. He was in the clutches of a nightmare; if he could just manage to wake up, everything would be all right. The business of not being able to move —he had experienced that before in dreams. Presently you woke up from it and found that the covers had become wound around you, or you had been sleeping with both hands under your head. He tried biting his tongue so that the pain might wake him, but it did no good.

Stoles' last words brought his attention sharply to what was going on around him, not because he understood them—they meant very little to him, though they were fraught with horror—but because of the stir of approval and anticipation which went around the table.

The pressure of Cynthia's hand in his increased faintly. "What are they going to do, Teddy?" she whispered.

"I don't know, darling."

"The man, of course," Parker commented.

Stoles looked at him. Randall had a feeling that Stoles had intended the—whatever it was that was coming!—for the man, for him, until Parker had suggested it. But Stoles answered, "I'm always grateful for your advice. It makes it so easy to know just what one *should* do." Turning to the others he said, "Prepare the woman."

"Now," thought Randall. "It's got to be *now."* Summoning all the will he possessed he attempted to raise himself up from the table—rise up and fight!

He might just as well not have made the effort.

He let his head sink back, exhausted by the effort. "It's no use, kid," he said miserably.

Cynthia looked at him. If she felt any fear, it was masked by the concern she showed for him. "Chin up, Brain," she answered with the mere suggestion of increased pressure of her hand in his.

Printemps stood up and leaned over her. "This is properly Potiphar's job," he objected.

"He left a prepared bottle," Stoles answered. "You have it, Mr. Phipps?"

Phipps answered by reaching into his brief case and producing it. At a nod from Stoles he passed it over; Printemps accepted it. "The wax?" he added.

"Here you are," Phipps acknowledged, dipping into his brief case again.

"Thank you, sir. Now, if someone will get *that* out of the way"—indicating Randall as he spoke—"we seem to be ready." Half a dozen savagely willing hands manhandled Randall to the extreme far edge of the table; Printemps bent over Cynthia, bottle in hand.

"One moment," Stoles interrupted. "I want them both to understand what is happening and why. Mrs. Randall," he continued, bowing gallantly, "in our short interview earlier I believe I made you understand that the Sons of the Bird will brook no interference from such as you two. You understood that, did you not?"

"I understood you," she answered. But her eyes were defiant.

"Good. Be it understood that it is our wish that your husband have nothing more to do with . . . a certain party. In order to insure that result we are about to split you into two parts. The part that keeps you going, that which you rather amusingly call the soul, we will squeeze into this bottle and keep. As for the rest, well, your husband may have that to keep with him, as a reminder that the Sons of the Birds have you in pawn. You understand me?"

She ignored the question. Randall tried to answer, found that his throat was misbehaving again.

"Listen to me, Mrs. Randall; if you are ever to see your husband again it is imperative that he obey us. He must not, on pain of your death, see his client again. Under the same penalty he must hold his tongue concerning us and all that has transpired. If he does not—well, we will make your death very interesting, I assure you."

Randall tried to cry out that he would promise anything they wanted to spare her, but his voice was still silenced—apparently Stoles wanted to hear from Cynthia first. She shook her head. "He'll do as he thinks wise."

Stoles smiled. "Fine," he said. "That was the answer I wanted. You, Mr. Randall—do you promise?"

He wanted to agree, he was about to agree—but Cynthia was saying, “No!” with her eyes. From her expression he knew that *her* speech was now being blocked. Inside his head, clear as speech, he seemed to hear her say, “It’s a trick, Brain. Don’t promise!”

He kept quiet.

Phipps dug a thumb into his eye. “Answer when you are spoken to!”

He had to squint the injured eye in order to see Cynthia, but her expression still approved; he kept his mouth shut.

Presently Stoles said, “Never mind. Get on with it, gentlemen.”

Printemps stuck the bottle under Cynthia’s nose, held it against her left nostril. “Now!” he directed. Another of them pressed down on her short ribs vigorously, so that her breath was expelled suddenly. She grunted.

“Teddy,” she said, “they’re pulling me apar—*Ugh!*”

The process had been repeated with the bottle at the other nostril. Randall felt the soft warm hand in his suddenly relax. Printemps held up the bottle with his thumb over its top. “Let’s have the wax,” he said briskly. Having sealed it he passed it over to Phipps.

Stoles jerked a thumb toward the big mirror. “Put them back,” he directed.

Phipps superintended the passing of Cynthia back through the glass, then turned to Stoles. “Couldn’t we give him something to make him remember us?” he inquired.

“Help yourself,” Stoles answered indifferently, as he stood up to go, “but try not to leave any permanent marks.”

“Fine!” Phipps smiled, and hit Randall a backhanded swipe that loosened his teeth. “We’ll be careful!”

He remained conscious through a considerable portion of it, though, naturally, he had no way of judging what proportion. He passed out once or twice, only to come to again under the stimulus of still greater pain. It was the novel way Phipps found of holding a man down without marking him which caused him to pass out for the last time.

He was in a small room, every side of which was a mirror—four walls, floor, and ceiling. Endlessly he was repeated in every direction and every image was himself—selves that hated him but from which there was no escape. “Hit him again!” they yelled—*he* yelled—and struck himself in the teeth with his closed fist. They—*he*—cackled.

They were closing in on him and he could not run fast enough. His muscles would not obey him, no matter how urgently he tried. It was because he was handcuffed—handcuffed to the treadmill they had put him on. He was blindfolded, too, and the handcuffs kept him from reaching his eyes. But he had to keep on—Cynthia was at the top of the climb; he had to reach her.

Only, of course, there is no top when you are on a treadmill.

He was terribly tired, but every time he slowed down the least little bit they hit him again. And he was required to count the steps, too, else he got no credit for it—ten thousand ninety-one, ten thousand ninety-two, ten thousand ninety-three, up and down, up and down—if he could only *see* where he was going.

He stumbled; they clipped him from behind and he fell forward on his face.

When he woke his face was pressed up against something hard and lumpy and cold. He shifted away from it and found that his whole body was stiff. His feet did not work as they should—he investigated by the uncertain light from the window and found that he had dragged the sheet half off the bed and had it tangled around his ankles.

The hard cold object was the steam radiator; he had been huddled in a heap against it. He was beginning to regain his orientation; he was in his own familiar bedroom. He must have walked in his sleep—he hadn't pulled that stunt since he was a kid! Walked in his sleep, tripped, and smashed his head into the radiator. Must 'a' knocked him silly, colder'n a coot—damn lucky he hadn't killed himself.

He was beginning to pull himself together, and to crawl painfully to his feet, when he noticed the one unfamiliar thing in the room—the new big mirror. It brought the rest of his dream back with a rush; he leaped toward the bed. "Cynthia!"

But she was there where she belonged, safe and unharmed. She had not awakened at his outcry, of which he was glad; he did not want to frighten her. He tiptoed away from the bed and let himself quietly into the bathroom, closing the door behind him before he turned on the light.

A pretty sight! he mused. His nose had been bloodied; it had long since stopped bleeding and the blood had congealed. It made a gory mess of the front of his pajama jacket. Beside that, he had apparently lain with the right side of his face in the stuff—it had dried on, messily, making him appear much more damaged than he was, as he discovered when he bathed his face.

Actually, he did not seem to be much damaged, except that—*Wow!*—the whole right side of his body was stiff and sore—probably banged it and wrenched it when he fell, then caught cold in it. He wondered how long he had been out.

He took off the jacket, decided that it would be too much effort to try to wash it out then, rolled it into a ball and chucked it behind the toilet seat. He didn't want Cyn to see it until he had had a chance to explain to her what had happened. "Why, Teddy, what in the world have you done to yourself?" "Nothing, kid, nothing at all—just ran into a radiator!"

That sounded worse than the old one about running into a door.

He was still groggy, groggier than he had thought—he had almost pitched on his head when he threw the jacket down, had been forced to steady himself by grabbing the top of the tank. And his head was pounding like a Salvation Army drum. He fiddled around in the medicine cabinet, located some aspirin and took three tablets, then looked thoughtfully at the prescription box of Amytal Cynthia had obtained some months before. He had never needed anything of the sort before; he slept soundly—but this was a special case. Nightmares two nights running and now sleepwalking and damn near breaking his silly neck.

He took one of the capsules, thinking as he did so that the kid had something when she thought they needed a vacation—he felt all shot.

Clean pajamas were too hard to find without turning on the bedroom light—he slipped into bed, waited a moment to see if Cyn would stir, then closed his eyes and tried to relax. Inside of a few minutes the drugs began to take hold, the throbbing in his head eased up, and soon he was sound asleep.

VII

Sunlight in his face woke him up; he focused one eye on the clock on the dressing table and saw that it was past nine o'clock, whereupon he got out of bed hastily. It was, he found, not quite a bright thing to do—his right side gave him fits. Then he saw the brown stain under the radiator and recalled his accident.

Cautiously he turned his head and took a look at his wife. She was still sleeping quietly, showing no disposition to stir. That suited him; it would be better, he thought, to tell her what had happened *after* he had dosed her with orange juice. No point in scaring the kid.

He groped on his slippers, then hung his bathrobe around him, as his bare shoulders felt cold and the muscles were sore. His mouth tasted better after he had brushed his teeth; breakfast began to seem like a good idea.

His mind dwelt absentmindedly on the past night, fingering his recollections rather than grasping them. These nightmares, he thought as he squeezed the oranges—not so good. Maybe not crazy, but definitely not so good, neurotic. Got to put a stop to 'em. Man couldn't work if he spent the night chasing butterflies, even if he didn't fall over his feet and break his neck. Man had to have sleep—definitely.

He drank his own glass of juice, then carried the other into the bedroom. “Come on, bright eyes—*reveille!”* When she did not stir at once he began to sing. “Up with the buttercup, come on, get up, get up! Here comes the sun!”

Still she did not budge. He set the glass down carefully on the bedside table, sat down on the edge of the bed, and took her by the shoulder. “Wake up, kid! They’re movin’ hell—two loads have gone by already!”

She did not move. Her shoulder was cold.

“Cyn!” he yelled. “Cyn! *Cyn!”* he shook her violently.

She flopped lifelessly. He shook her arm. “Cyn darling— Oh, God!”

Presently the shock itself steadied him; he blew his fuses, so to speak, and was ready, with a sort of ashy dead calmness to do whatever might be necessary. He was convinced without knowing why, nor yet fully appreciating it, that she was dead. He could not find her pulse—perhaps he was too clumsy, he told himself, or perhaps it was too weak; all the while a chorus in the back of his mind shouted, “She’s dead . . . dead . . . dead—and you let her die!”

He placed an ear over her heart. It seemed that he could hear her heart beat, but he could not be sure; it might have been only the pounding of his own. He gave up presently and looked around for a small mirror.

He found what he wanted in Cynthia’s handbag, a little makeup glass. He polished it carefully on the sleeve of his robe and held it to her half-opened mouth.

It fogged faintly.

He took it away in a bemused fashion, not letting himself hope, polished it again, and put it back to her mouth. Again it fogged, lightly but definitely.

She was alive—she was *alive!*

He wondered a moment later why he could not see her clearly and discovered that his face was wet. He wiped his eyes and went on with what he had to do. There was that needle business—if he could find a needle. He did find one in a pincushion on her dressing table. He brought it back to the bed, took a pinch of skin on her forearm, said, “Excuse me, kid,” in a whisper, and jabbed it in.

The puncture showed a drop of blood, then closed at once—alive. He wished for a fever thermometer, but they had none—they were both too healthy. But he did remember something he had read somewhere, something about the invention of the stethoscope. You rolled up a piece of paper—

He found one of suitable size and rolled it into a one-inch tube which he pushed against the bare skin just over her heart. He put his ear to the other end and listened.

Lubadup—lubadup—lubadup—lubadup—Faint, but steady and strong. No doubt about it this time; she was alive; her heart was beating.

He had to sit down for a moment.

Randall forced himself to consider what to do next. Call a doctor, obviously. When people were sick, you called a doctor. He had not thought of it up to this time because Cyn and he just never did, never needed to. He could not recall that either one of them had had occasion to do so since they had been married.

Call the police and ask for an ambulance maybe? No, he'd get some police surgeon more used to crash cases and shootings than anything like this. He wanted the best.

But who? They didn't have a family physician. There was Smyles—a rum dum, no good. And Hartwick—hell, Hartwick specialized in very private operations for society people. He picked up the phone book.

Potbury! He didn't know anything about the old beezer, but he looked competent. He looked up the number, misdialed three times, then got the operator to call it for him.

"Yes, this is Potbury. What do you want? Speak up, man."

"I said this is Randall. Randall. R-A-N-D-Adouble L. My wife and I came to see you yesterday, remember? About—"

"Yes, I remember. What is it?"

"My wife is sick."

"What's the trouble? Did she faint again?"

"No . . . yes. That is, she's unconscious. She woke up unconscious—I mean she never did wake up. She's unconscious now; she looks like she's dead."

"Is she?"

"I don't think so—but she's awful bad off, doctor. I'm scared. Can you come over right away?"

There was a short silence, then Potbury said gruffly, "I'll be over."

"Oh, good! Look—what should I do before you get here?"

"Don't do anything. Don't touch her. I'll be right over." He hung up.

Randall put the phone down and hurried back to the bedroom. Cynthia was just the same. He started to touch her, recalled the doctor's instructions, and straightened up with a jerk. But his eye fell on the piece of paper from which he had improvised a stethoscope and he could not resist the temptation to check up on his earlier results.

The tube gave back a cheering *lubadup;* he took it away at once and put it down.

Ten minutes of standing and looking at her with nothing more constructive to do than biting his nails left him too nervous to continue the occupation. He went out to the kitchen and removed a bottle of rye from the top shelf from which he poured a generous three fingers into a water glass. He looked at the amber stuff for a moment, then poured it down the sink, and went back into the bedroom.

She was still the same.

It suddenly occurred to him that he had not given Potbury the address. He dashed into the kitchen and snatched the phone. Controlling himself, he managed to dial the number correctly. A girl answered the phone. “No, the doctor isn’t in the office. Any message?”

“My name is Randall. I—”

“Oh—Mr. Randall. The doctor left for your home about fifteen minutes ago. He should be there any minute now.”

“But he doesn’t have my address!”

“What? Oh, I’m sure he has—if he didn’t have he would have telephoned me by now.”

He put the phone down. It was damned funny—well, he would give Potbury three more minutes, then try another one.

The house phone buzzed; he was up out of his chair like a punch-drunk welterweight. “Yes?”

“Potbury. That you, Randall?”

“Yes, yes—come on up!” He punched the door release as he spoke.

Randall was waiting with the door open when Potbury arrived. “Come in, doctor! Come in, come in!” Potbury nodded and brushed on by him.

“Where’s the patient?”

“In here.” Randall conducted him with nervous haste into the bedroom and leaned over the other side of the bed while Potbury took his first look at the unconscious woman. “How is she? Will she be all right? Tell me, doctor—”

Potbury straightened up a little, grunting as he did so, and said, “If you will kindly stand away from the bed and quit crowding me, perhaps we will find out.”

“Oh, sorry!” Randall retreated to the doorway. Potbury took his stethoscope from his bag, listened for a while with an inscrutable expression on his face which Randall tried vainly to read, shifted the instrument around, and listened again. Presently he put the stethoscope back in the bag, and Randall stepped forward eagerly.

But Potbury ignored him. He peeled up an eyelid with his thumb and examined her pupil, lifted an arm so that it swung free over the side of the bed and tapped it near the elbow, then straightened himself up and just looked at her for several minutes.

Randall wanted to scream.

Potbury performed several more of the strange, almost ritualistic things physicians do, some of which Randall thought he understood, others which he definitely did not. At last he said suddenly, “What did she do yesterday—after you left my office?”

Randall told him; Potbury nodded sagely. “That’s what I expected—it all dates back to the shock she had in the morning. All your fault, if I may say so!”

“My fault, doctor?”

“You were warned. Should never have let her get close to a man like that.”

“But . . . but . . . you didn’t warn me until *after* he had frightened her.”

Potbury seemed a little vexed at this. “Perhaps not, perhaps not. Thought you told me someone had warned you before I did. Should know better, anyhow, with a creature like that.”

Randall dropped the matter. “But how is she, doctor? Will she get well? She will, won’t she?”

“You’ve got a very sick woman on your hands, Mr. Randall.”

“Yes, I know she is—but what’s the matter with her?”

“Lethargica gravis, brought on by psychic trauma.”

“Is that—serious?”

“Quite serious enough. If you take proper care of her, I expect she will pull through.”

“Anything, doctor, anything. Money’s no object. What do we do now? Take her to a hospital?”

Potbury brushed the suggestion aside. “Worst thing in the world for her. If she wakes up in strange surroundings, she may go off again. Keep her here. Can you arrange your affairs so as to watch her yourself?”

“You bet I can.”

“Then do so. Stay with her night and day. If she wakes up, the most favorable condition will be for her to find herself in her own bed with you awake and near her.”

“Oughtn’t she to have a nurse?”

“I wouldn’t say so. There isn’t much that can be done for her, except to keep her covered up warm. You might keep her feet a little higher than her head. Put a couple of books under each of the lower feet of the bed.”

“Right away.”

“If this condition persists for more than a week or so, we’ll have to see about glucose injections, or something of the sort.” Potbury stooped over, closed his bag and picked it up. “Telephone me if there is any change in her condition."

"I will. I—" Randall stopped suddenly; the doctor's last remark reminded him of something he had forgotten. "Doctor—how did you find your way over here?"

Potbury looked startled. "What do you mean? This place isn't hard to find."

"But I didn't give you the address."

"Eh? Nonsense."

"But I didn't. I remembered the oversight just a few minutes later and called your office back, but you had already left."

"I didn't say you gave it to me today," Potbury said testily; "you gave it to me yesterday."

Randall thought it over. He *had* offered Potbury his credentials the day before, but they contained only his business address. True, his home telephone was listed, but it was listed simply as a night business number, without address, both in his credentials and in the phone book. Perhaps Cynthia—

But he could not ask Cynthia and the thought of her drove minor considerations out of his mind. "Are you sure there is nothing else I should do, doctor?" he asked anxiously.

"Nothing. Stay here and watch her."

"I will. But I surely wish I were twins for a while," he added emphatically.

"Why?" Potbury inquired, as he gathered up his gloves and turned toward the door.

"That guy Hoag. I've got a score to settle with him. Never mind—I'll put somebody else on his tail until I have a chance to settle his hash myself."

Potbury had wheeled around and was looking at him ominously. "You'll do nothing of the sort. Your place is here."

"Sure, sure—but I want to keep him on ice. One of these days I'm going to take him apart to see what makes him tick!"

"Young man," Potbury said slowly, "I want you to promise me that you will have nothing to do *in any way* with . . . with this man you mentioned."

Randall glanced toward the bed. "In view of what has happened," he said savagely, "do you think I'm going to let him get away scotfree?"

"In the name of— Look. I'm older than you are and I've learned to expect silliness and stupidity. Still—how much does it take to teach you that some things are too dangerous to monkey with?" He gestured toward Cynthia. "How can you expect me to be responsible for her recovery if you insist on doing things that might bring on a catastrophe?"

"But—listen, Dr. Potbury, I told you that I intended to follow your instructions about *her.* But I'm not going to just forget what he has done. If she dies . . . if she dies, so help me, I'll take him apart with a rusty ax!"

Potbury did not answer at once. When he did all he said was, "And if she doesn't die?"

"If she doesn't die, my first business is here, taking care of her. But don't expect me to promise to forget Hoag. I won't—and that's final."

Potbury jammed his hat on his head. "We'll let it go at that—and trust she doesn't die. But let me tell you, young man, you're a fool." He stomped out of the apartment.

The lift he had gotten from tangling wills with Potbury wore off in a few minutes after the doctor had gone, and a black depression settled down on him. There was nothing to do, nothing to distract his mind from the aching apprehension he felt over Cynthia. He did make the arrangements to raise the foot of the bed a little as suggested by Potbury, but it takes only a few minutes to perform such a trifling chore; when it was done he had nothing to occupy him.

In raising the foot of the bed he had been very cautious at first to avoid jarring the bed for fear of waking her; then he realized that waking her was just what he wanted most to do. Nevertheless he could not bring himself to be rough and noisy about it—she looked so helpless lying there.

He pulled a chair up close to the bed, where he could touch one of her hands and watch her closely for any change. By holding rigidly still he found that he could just perceive the rise and fall of her breast. It reassured him a little; he spent a long time watching for it—the slow, unnoticeable intake, the much quicker spilling of the breath.

Her face was pale and frighteningly deathlike, but beautiful. It wrung his heart to look at her. So fragile—she had trusted him so completely—and now there was nothing he could do for her. If he had listened to her, if he had only listened to what she had said, this would not have happened to her. She had been afraid, but she had done what he asked her to do.

Even the Sons of the Bird had not been able to frighten her—

What was he saying? Get a grip on yourself, Ed—*that* didn't happen; that was part of your nightmare. Still, if anything like that had happened, that was just what she would do—stick in there and back up his play, no matter how badly things were going.

He got a certain melancholy satisfaction out of the idea that, even in his dreams, he was sure of her, sure of her courage and her devotion to him. Guts—more than most men. There was the time she knocked the acid bottle out of the hands of that crazy old biddy he had caught out in the Midwell case. If she hadn't been quick and courageous then, he would probably be wearing smoked glasses now, with a dog to lead him around.

He displaced the covers a little and looked at the scar on her arm she had picked up that day. None of the acid had touched him, but some had touched her—it still showed, it always would show. But she didn't seem to care.

"Cynthia! Oh, Cyn, my darling!"

There came a time when even he could not remain in one position any longer. Painfully—the cold he had caught in his muscles after the accident last night made his cramped legs ache like fury—he got himself up and prepared to cope with necessities. The thought of food was repugnant but he knew that he had to feed himself if he were to be strong enough to accomplish the watching and waiting that was going to be necessary.

Rummaging through the kitchen shelves and the icebox turned up some oddments of food, breakfast things, a few canned goods, staples, some tired lettuce. He had no stomach for involved cooking; a can of soup seemed as good a bet as anything. He opened a can of Scotch broth, dumped it into a saucepan and added water. When it had simmered for a few minutes he took it off the fire and ate it from the pan, standing up. It tasted like stewed cardboard.

He went back to the bedroom and sat down again to resume the endless watching. But it soon developed that his feelings with respect to food were sounder than his logic; he bolted hastily for the bathroom and was very sick for a few minutes. Then he washed his face, rinsed out his mouth, and came back to his chair, weak and pale, but feeling sound enough physically.

It began to grow dusky outside; he switched on the dressing-table lamp, shaded it so that it would not shine directly in her eyes, and again sat down. She was unchanged.

The telephone rang.

It startled him almost out of rational response. He and his sorrow had been sitting there watching for so long that he was hardly aware that there could be anything else in the world. But he pulled himself together and answered it.

"Hello? Yes, this is Randall, speaking."

"Mr. Randall, I've had time to think it over and I feel that I owe you an apology—and an explanation."

"Owe me what? Who is this speaking?"

"Why, this is Jonathan Hoag, Mr. Randall. When you—"

"Hoag! Did you say *'Hoag'?"*

"Yes, Mr. Randall. I want to apologize for my peremptory manner yesterday morning and to beg your indulgence. I trust that Mrs. Randall was not upset by my— By this time Randall was sufficiently recovered from his first surprise to express himself. He did so, juicily, using words and figures of speech picked up during years of association with the sort of characters that a private detective inevitably runs into. When he had finished there was a gasp from the other end of the line and then a dead silence.

He was not satisfied. He wanted Hoag to speak so that he could interrupt him and continue the tirade. “Are you there, Hoag?”

“Uh, yes.”

“I wanted to add this: Maybe you think that it is a joke to catch a woman alone in a hallway and scare the daylights out of her. I don’t! But I’m not going to turn you over to the police—no, indeed! Just as soon as Mrs. Randall gets well, I’m going to look you up myself and then—God help you, Hoag. You’ll need it.”

There followed such a long silence that Randall was sure that his victim had hung up. But it seemed that Hoag was merely collecting his wits. “Mr. Randall, this is terrible—”

“You bet it is!”

“Do you mean to tell me that I accosted Mrs. Randall and frightened her?”

“You should know!”

“But I don’t know, truly I don’t.” He paused, and then continued in an unsteady voice. “This is the sort of thing I have been afraid of, Mr. Randall, afraid that I might discover that during my lapses of memory I might have been doing terrible things. But to have harmed Mrs. Randall—she was so good to me, so kind to me. This is horrible.”

“You’re telling me!”

Hoag sighed as if he were tired beyond endurance.

“Mr. Randall?” Randall did not answer. “Mr. Randall—there is no use in my deluding myself; there is only one thing to be done. You’ve got to turn me over to the police.”

“Huh?”

“I’ve known it ever since our last conversation; I thought about it all day yesterday, but I did not have the courage. I had hoped that I was through with my . . . my *other* personality, but today it happened again. The whole day is a blank and I just came to myself this evening, on getting home. Then I knew that I *had* to do something about it, so I called you to ask you to resume your investigations. But I never suspected that I could possibly have done anything to Mrs. Randall.” He seemed most convincingly overcome by shock at the idea. “When did . . . did *this* happen, Mr. Randall?”

Randall found himself in a most bewildered state of mind. He was torn between the desire to climb through the phone and wring the neck of the man he held responsible for his wife’s desperate condition and the necessity for remaining where he was to care for her. In addition to that he was bothered by the fact that Hoag refused to talk like a villain. While speaking with him, listening to his mild answers and his worried tones, it was difficult to maintain the conception of him as a horrid monster of the Jack-the-Ripper type—although he knew consciously that villains were often mild in manner.

Therefore his answer was merely factual. “Nine thirty in the morning, about.”

“Where was I at nine thirty this morning?”

“Not *this* morning, you so-and-so; yesterday morning.”

“Yesterday morning? But that’s not possible. Don’t you remember? I was at home yesterday morning.”

“Of course I remember, and I saw you leave. Maybe you didn’t know *that.”* He was not being very logical; the other events of the previous morning had convinced him that Hoag knew that they were shadowing him—but he was in no state of mind to be logical.

“But you couldn’t have seen me. Yesterday morning was the only morning, aside from my usual Wednesdays, on which I can be sure where I was. I was at home, in my apartment. I didn’t leave it until nearly one o’clock when I went to my club.”

“Why, that’s a—”

“Wait a minute, Mr. Randall, please! I’m just as confused and upset about this as you are, but you’ve got to listen to me. You broke my routine—remember? And my other personality did not assert itself. After you left I remained my . . . my *proper* self. That’s why I had had hopes that I was free at last.”

“The hell you did. What makes you think you did?”

“I know my own testimony doesn’t count for much,” Hoag said meekly, “but I wasn’t alone. The cleaning woman arrived just after you left and was here all morning.”

“Damned funny I didn’t see her go up.”

“She works in the building,” Hoag explained. “She’s the wife of the janitor—her name is Mrs. Jenkins. Would you like to talk with her? I can probably locate her and get her on the line.”

“But—” Randall was getting more and more confused and was beginning to realize that he was at a disadvantage. He should never have discussed matters with Hoag at all; he should have simply saved him up until there was opportunity to take a crack at him. Potbury was right; Hoag was a slick and insidious character. Alibi indeed!

Furthermore he was becoming increasingly nervous and fretful over having stayed away from the bedroom as long as he had. Hoag must have had him on the phone at least ten minutes; it was not possible to see into the bedroom from where he sat at the breakfast table. “No, I don’t want to talk to her,” he said roughly. “You lie in circles!” He slammed the phone back into its cradle and hurried into the bedroom.

Cynthia was just as he had left her, looking merely asleep and heartbreakingly lovely. She was breathing, he quickly determined; her respiration was light but regular. His homemade stethoscope rewarded him with the sweet sound of her heartbeat.

He sat and watched her for a while, letting the misery of his situation soak into him like a warm and bitter wine. He did not want to forget his pain; he hugged it to him, learning what countless others had learned before him, that even the deepest pain concerning a beloved one is preferable to any surcease.

Later he stirred himself, realizing that he was indulging himself in a fashion that might work to her detriment. It was necessary to have food in the house for one thing, and to manage to eat some and keep it down. Tomorrow, he told himself, he would have to get busy on the telephone and see what he could do about keeping the business intact while he was away from it. The Night Watch Agency might do as a place to farm out any business that could not be put off; they were fairly reliable and he had done favors for them—but that could wait until tomorrow.

Just now—He called up the delicatessen on the street below and did some very desultory telephone shopping. He authorized the proprietor to throw in anything else that looked good and that would serve to keep a man going for a day or two. He then instructed him to find someone who would like to earn four bits by delivering the stuff to his apartment.

That done, he betook himself to the bathroom and shaved carefully, having a keen appreciation of the connection between a neat toilet and morale. He left the door open and kept one eye on the bed. He then took a rag, dampened it, and wiped up the stain under the radiator. The bloody pajama jacket he stuffed into the dirty-clothes hamper in the closet.

He sat down and waited for the order from the delicatessen to arrive. All the while he had been thinking over his conversation with Hoag. There was only one thing about Hoag that was clear, he concluded, and that was that everything about him was confusing. His original story had been wacky enough—imagine coming in and offering a high fee to have himself shadowed! But the events since made that incident seem downright reasonable. There was the matter of the thirteenth floor—damn it! He *had* seen that thirteenth floor, been on it, watched Hoag at work with a jeweler's glass screwed in his eye.

Yet he could not possibly have done so.

What did it add up to? Hypnotism, maybe? Randall was not naïve about such things; he knew that hypnotism existed, but he knew also that it was not nearly as potent as the Sunday-supplement feature writers would have one believe. As for hypnotizing a man in a split second on a crowded street so that he believed in and could recall clearly a sequence of events that had never taken place—well, he just didn't believe in it. If a thing like that were true, then the whole world might be just a fraud and an illusion.

Maybe it was.

Maybe the whole world held together only when you kept your attention centered on it and believed in it. If you let discrepancies creep in, you began to doubt and it began to go to pieces. Maybe this had happened to Cynthia because he had doubted her reality. If he just closed his eyes and *believed* in her alive and well, then she would be—

He tried it. He shut out the rest of the world and concentrated on Cynthia—Cynthia alive and well, with that little quirk to her mouth she had when she was laughing at something he had said—Cynthia, waking up in the morning, sleepy-eyed and beautiful—Cynthia in a tailored suit and a pert little hat, ready to start out with him anywhere. Cynthia—

He opened his eyes and looked at the bed. There she still lay, unchanged and deathly. He let himself go for a while, then blew his nose and went in to put some water on his face.

VIII

The house buzzer sounded. Randall went to the hall door and jiggled the street-door release without using the apartment phone—he did not want to speak to anyone just then, certainly not to whoever it was that Joe had found to deliver the groceries.

After a reasonable interval there was a soft knock at the door. He opened it, saying, "Bring 'em in," then stopped suddenly.

Hoag stood just outside the door.

Neither of them spoke at first. Randall was astounded; Hoag seemed diffident and waiting for Randall to commence matters. At last he said shyly, "I *had* to come, Mr. Randall. May I . . . come in?"

Randall stared at him, really at a loss for words. The brass of the man—the sheer gall!

"I came because I had to prove to you that I would not willingly harm Mrs. Randall," he said simply. "If I have done so unknowingly, I want to do what I can to make restitution."

"It's too late for restitution!"

"But, Mr. Randall—why do you think that *I* have done anything to your wife? I don't see how I could have—not yesterday morning." He stopped and looked hopelessly at Randall's stony face. "You wouldn't shoot a dog without a fair trial—would you?"

Randall chewed his lip in an agony of indecision. Listening to him, the man seemed so damned decent— He threw the door open wide. "Come in," he said gruffly.

"Thank you, Mr. Randall." Hoag came in diffidently. Randall started to close the door.

"Your name Randall?" Another man, a stranger, stood in the door, loaded with bundles.

"Yes," Randall admitted, fishing in his pocket for change. "How did you get in?"

"Came in with *him,"* the man said, pointing at Hoag, "but I got off at the wrong floor. The beer is cold, chief," he added ingratiatingly. "Right off the ice."

"Thanks." Randall added a dime to the half dollar and closed the door on him. He picked the bundles up from the floor and started for the kitchen. He would have some of that beer now, he decided; there was never a time when he needed it more. After putting the packages down in the kitchen he took out one of the cans, fumbled in the drawer for an opener, and prepared to open it.

A movement caught his eye—Hoag, shifting restlessly from one foot to the other. Randall had not invited him to sit down; he was still standing. "Sit down!"

"Thank you." Hoag sat down.

Randall turned back to his beer. But the incident had reminded him of the other's presence; he found himself caught in the habit of good manners; it was almost impossible for him to pour himself a beer and offer none to a guest, no matter how unwelcome.

He hesitated just a moment, then thought, Shucks, it can't hurt either Cynthia or me to let him have a can of beer. "Do you drink beer?"

"Yes, thank you." As a matter of fact Hoag rarely drank beer, preferring to reserve his palate for the subtleties of wines, but at the moment he would probably have said yes to synthetic gin, or ditch water, if Randall had offered it.

Randall brought in the glasses, put them down, then went into the bedroom, opening the door for the purpose just enough to let him slip in. Cynthia was just as he had come to expect her to be. He shifted her position a trifle, in the belief that any position grows tiring even to a person unconscious, then smoothed the coverlet. He looked at her and thought about Hoag and Potbury's warnings against Hoag. Was Hoag as dangerous as the doctor seemed to think? Was he, Randall, even now playing into his hands?

No, Hoag could not hurt him now. When the worst has happened any change is an improvement. The death of both of them—or even Cyn's death alone, for then he would simply follow her. That he had decided earlier in the day—and he didn't give a damn who called it cowardly!

No—if Hoag were responsible for this, at least he had shot his bolt. He went back into the living room.

Hoag's beer was still untouched. "Drink up," Randall invited, sitting down and reaching for his own glass. Hoag complied, having the good sense not to offer a toast nor even to raise his glass in the gesture of one. Randall looked him over with tired curiosity. "I don't understand you, Hoag."

"I don't understand myself, Mr. Randall."

"Why did you come here?"

Hoag spread his hands helplessly. "To inquire about Mrs. Randall. To find out what it is that I have done to her. To make up for it, if I can."

"You admit you did it?"

"No, Mr. Randall. No. I don't see how I could possibly have done anything to Mrs. Randall *yesterday* morning—"

"You forget that I saw you."

"But— What did I do?"

"You cornered Mrs. Randall in a corridor of the Midway-Copton Building and tried to choke her."

"Oh, dear! But—you *saw* me do this?"

"No, not exactly. I was—" Randall stopped, realizing how it was going to sound to tell Hoag that he had not seen him in one part of the building because he was busy watching Hoag in another part of the building.

"Go on, Mr. Randall, please."

Randall got nervously to his feet. "It's no use," he snapped. "I don't know what you did. I don't know that you did anything! All I know is this: Since the first day you walked in that door, odd things have been happening to my wife and me—*evil* things—and now she's lying in there as if she were dead. She's—" He stopped and covered his face with his hands.

He felt a gentle touch on his shoulder. "Mr. Randall . . . please, Mr. Randall. I'm sorry and I would like to help."

"I don't know how anyone can help—unless you know some way of waking up my wife. Do you, Mr. Hoag?"

Hoag shook his head slowly. "I'm afraid I don't. Tell me—what is the matter with her? I don't know yet."

"There isn't much to tell. She didn't wake up this morning. She acts as if she never would wake up."

"You're sure she's not . . . dead?"

"No, she's not dead."

"You had a doctor, of course. What did he say?"

"He told me not to move her and to watch her closely."

"Yes, but what did he say was the matter with her?"

"He called it *lethargica gravis."*

"Lethargica gravis! Was that all he called it?"

"Yes—why?"

"But didn't he attempt to diagnose it?"

"That was his diagnosis—*lethargica gravis."*

Hoag still seemed puzzled. "But, Mr. Randall, that isn't a diagnosis; it is just a pompous way of saying 'heavy sleep.' It really doesn't mean anything. It's like telling a man with skin trouble that he has *dermatitis,* or a man with stomach trouble that he has *gastritis.* What tests did he make?"

"Uh . . . I don't know. I—"

"Did he take a sample with a stomach pump?"

"No."

"X ray?"

"No, there wasn't any way to."

"Do you mean to tell me, Mr. Randall, that a doctor just walked in, took a look at her, and walked out again, without doing anything for her, or applying any tests, or bringing in a consulting opinion? Was he your family doctor?"

"No," Randall said miserably. "I'm afraid I don't know much about doctors. We never need one. But you ought to know whether he's any good or not—it was Potbury."

"Potbury? You mean the Dr. Potbury I consulted? How did you happen to pick him?"

"Well, we didn't *know* any doctors—and we had been to see him, checking up on your story. What have you got against Potbury?"

"Nothing, really. He was rude to me—or so I thought."

"Well, then, what's he got against you?"

"I don't see how he could have anything against me," Hoag answered in puzzled tones. "I only saw him once. Except, of course, the matter of the analysis. Though why he should—" He shrugged helplessly.

"You mean about the stuff under your nails? I thought that was just a song and dance."

"No."

"Anyhow it couldn't be just that. After all the things he said about you."

"What did he say about me?"

"He said—" Randall stopped, realizing that Potbury had not said anything specific against Hoag; it had been entirely what he did not say. “It wasn’t so much what he said; it was how he felt about you. He hates you, Hoag—and he is afraid of you.”

“Afraid of me?” Hoag smiled feebly, as if he were sure Randall must be joking.

“He didn’t *say* so, but it was plain as daylight.”

Hoag shook his head. “I don’t understand it. I’m more used to being afraid of people than of having them afraid of me. Wait—did he tell *you* the results of the analysis he made for me?”

“No. Say, that reminds me of the queerest thing of all about you, Hoag.” He broke off, thinking of the impossible adventure of the thirteenth floor. “Are you a hypnotist?”

“Gracious, no! Why do you ask?”

Randall told him the story of their first attempt to shadow him. Hoag kept quiet through the recital, his face intent and bewildered. “And that’s the size of it,” Randall concluded emphatically. “No thirteenth floor, no Detheridge & Co., no nothing! And yet I remember every detail of it as plainly as I see your face.”

“That’s all?”

“Isn’t that enough? Still, there is one more thing I might add. It can’t be of real importance, except in showing the effect the experience had on me.”

“What is it?”

“Wait a minute.”

Randall got up and went again into the bedroom. He was not quite so careful this time to open the door the bare minimum, although he did close it behind him. It made him nervous, in one way, not to be constantly at Cynthia’s side; yet had he been able to answer honestly he would have been forced to admit that even Hoag’s presence was company and some relief to his anxiety. Consciously, he excused his conduct as an attempt to get to the bottom of their troubles.

He listened for her heartbeats again. Satisfied that she still was in this world, he plumped her pillow and brushed vagrant hair up from her face. He leaned over and kissed her forehead lightly, then went quickly out of the room.

Hoag was waiting. “Yes?” he inquired.

Randall sat down heavily and rested his head on his hands. “Still the same.” Hoag refrained from making a useless answer; presently Randall commenced in a tired voice to tell him of the nightmares he had experienced the last two nights. “Mind you, I don’t say they are significant,” he added, when he had done. “I’m not superstitious.”

“I wonder,” Hoag mused.

“What do you mean?”

“I don’t mean anything supernatural, but isn’t it possible that the dreams were not entirely accidental ones, brought on by your experiences? I mean to say, if there is someone who can make you dream the things you dreamed in the Acme Building in broad daylight, why couldn't they force you to dream at night as well?"

"Huh?"

"Is there anyone who hates you, Mr. Randall?"

"Why, not that I know of. Of course, in my business, you sometimes do things that don't exactly make friends, but you do it for somebody else. There's a crook or two who doesn't like me any too well, but—well, they couldn't do anything like this. It doesn't make sense. Anybody hate you? Besides Potbury?"

"Not that I know of. And I don't know why he should. Speaking of him, you're going to get some other medical advice, aren't you?"

"Yes. I guess I don't think very fast. I don't know just what to do, except to pick up the phone book and try another number."

"There's a better way. Call one of the big hospitals and ask for an ambulance."

"I'll do that!" Randall said, standing up.

"You might wait until morning. You wouldn't get any useful results until morning, anyway. In the meantime she *might* wake up."

"Well . . . yes, I guess so. I think I'll take another look at her."

"Mr. Randall?"

"Eh?"

"Uh, do you mind if— May I see her?"

Randall looked at him. His suspicions had been lulled more than he had realized by Hoag's manner and words, but the suggestion brought him up short, making him recall Potbury's warnings vividly. "I'd rather you didn't," he said stiffly.

Hoag showed his disappointment but tried to cover it. "Certainly. I quite understand, sir."

When Randall returned he was standing near the door with his hat in his hand. "I think I had better go," he said. When Randall did not comment he added, "I would sit with you until morning if you wished it."

"No. Not necessary. Good night."

"Good night, Mr. Randall."

When Hoag had gone he wandered around aimlessly for several minutes, his beat ever returning him to the side of his wife. Hoag's comments about Potbury's methods had left him more uneasy than he cared to admit; in addition to that Hoag had, by partly allaying his suspicions of the man, taken from him his emotional whipping boy—which did him no good.

He ate a cold supper and washed it down with beer—and was pleased to find it remained in place. He then dragged a large chair into the bedroom, put a footstool in front of it, got a spare blanket, and prepared to spend the night. There was nothing to do and he did not feel like reading—he tried it and it didn't work. From time to time he got up and obtained a fresh can of beer from the icebox. When the beer was gone he took down the rye. The stuff seemed to quiet his nerves a little, but otherwise he could detect no effect from it. He did not want to become drunk.

He woke with a terrified start, convinced for the moment that Phipps was at the mirror and about to kidnap Cynthia. The room was dark; his heart felt as if it would burst his ribs before he could find the switch and assure himself that it was not so, that his beloved, waxy pale, still lay on the bed.

He had to examine the big mirror and assure himself that it did reflect the room and not act as a window to some other, awful place before he was willing to snap off the light. By the dim reflected light of the city he poured himself a bracer for his shaken nerves.

He thought that he caught a movement in the mirror, whirled around, and found that it was his own reflection. He sat down again and stretched himself out, resolving not to drop off to sleep again.

What was that?

He dashed into the kitchen in pursuit of it. Nothing—nothing that he could find. Another surge of panic swept him back into the bedroom—it could have been a ruse to get him away from her side.

They were laughing at him, goading him, trying to get him to make a false move. He *knew* it—they had been plotting against him for days, trying to shake his nerve. They watched him out of every mirror in the house, ducking back when he tried to catch them at it. The Sons of the Bird—

"The Bird is Cruel!"

Had he said that? Had someone shouted it at him? The Bird is Cruel. Panting for breath, he went to the open window of the bedroom and looked out. It was still dark, pitch-dark. No one moved on the streets below. The direction of the lake was a lowering bank of mist. What time was it? Six o'clock in the morning by the clock on the table. Didn't it *ever* get light in this Godforsaken city?

The Sons of the Bird. He suddenly felt very sly; they thought they had him, but he would fool them—they couldn't do this to him and to Cynthia. He would smash every mirror in the place. He hurried out to the kitchen, where he kept a hammer in the catch-all drawer. He got it and came back to the bedroom. First, the big mirror—

He hesitated just as he was about to swing on it. Cynthia wouldn't like this—seven years' bad luck! He wasn't superstitious himself, but—Cynthia wouldn't like it! He turned to the bed with the idea of explaining it to her; it seemed so obvious—just break the mirrors and then they would be safe from the Sons of the Bird.

But he was stumped by her still face.

He thought of a way around it. They had to use a mirror. What was a mirror? A piece of glass that reflects. Very well—fix 'em so they wouldn't reflect! Furthermore he knew how he could do it; in the same drawer with the hammer were three or four dime-store cans of enamel, and a small brush, leftovers from a splurge of furniture refinishing Cynthia had once indulged in.

He dumped them all into a small mixing bowl; together they constituted perhaps a pint of heavy pigment—enough, he thought, for his purpose. He attacked the big beveled glass first, slapping enamel over it in quick careless strokes. It ran down his wrists and dripped onto the dressing table; he did not care. Then the others—

There was enough, though barely enough, to finish the livingroom mirror. No matter—it was the last mirror in the house—except, of course, the tiny mirrors in Cynthia's bags and purses, and he had already decided that they did not count. Too small for a man to crawl through and packed away out of sight, anyhow.

The enamel had been mixed from a small amount of black and perhaps a can and a half, net, of red. It was all over his hands now; he looked like the central figure in an ax murder. No matter—he wiped it, or most of it, off on a towel and went back to his chair and his bottle.

Let 'em try now! Let 'em try their dirty, filthy black magic! He had them stymied.

He prepared to wait for the dawn.

The sound of the buzzer brought him up out of his chair, much disorganized, but convinced that he had not closed his eyes. Cynthia was all right—that is to say, she was still asleep, which was the best he had expected. He rolled up his tube and reassured himself with the sound of her heart.

The buzzing continued—or resumed; he did not know which. Automatically he answered it.

"Potbury," came a voice. "What's the matter? You asleep? How's the patient?"

"No change, doctor," he answered, striving to control his voice.

"That so? Well, let me in."

Potbury brushed on by him when he opened the door and went directly to Cynthia. He leaned over her for a moment or two, then straightened up. "Seems about the same," he said. "Can't expect much change for a day or so. Crisis about Wednesday, maybe." He looked Randall over curiously. "What in the world have you been doing? You look like a four-day bender."

"Nothing," said Randall. "Why didn't you have me send her to a hospital, doctor?"

"Worst thing you could do for her."

"What do you know about it? You haven't really examined her. You don't know what's wrong with her. *Do you?"*

"Are you crazy? I told you yesterday."

Randall shook his head. "Just double talk. You're trying to kid me about her. And I want to know why."

Potbury took a step toward him. "You *are* crazy—and drunk, too." He looked curiously at the big mirror. *"I* want to know what's been going on around here." He touched a finger to smeared enamel.

"Don't touch it!"

Potbury checked himself. "What's it for?"

Randall looked sly. "I foxed 'em."

"Who?"

"The Sons of the Bird. They come in through mirrors—but I stopped them."

Potbury stared at him. "I know them," Randall said. "They won't fool me again. The Bird is Cruel."

Potbury covered his face with his hands.

They both stood perfectly still for several seconds. It took that long for a new idea to percolate through Randall's abused and bemused mind. When it did he kicked Potbury in the crotch. The events of the next few seconds were rather confused. Potbury made no outcry, but fought back. Randall made no attempt to fight fair, but followed up his first panzer stroke with more dirty work.

When matters straightened out, Potbury was behind the bathroom door, whereas Randall was on the bedroom side with the key in his pocket. He was breathing hard but completely unaware of such minor damage as he had suffered.

Cynthia slept on.

"Mr. Randall—let me out of here!"

Randall had returned to his chair and was trying to think his way out of his predicament. He was fully sobered by now and made no attempt to consult the bottle. He was trying to get it through his head that there really were "Sons of the Bird" and that he had one of them locked up in there right now.

In that case Cynthia was unconscious because—God help them!—the Sons had stolen her soul. Devils—they had fallen afoul of devils.

Potbury pounded on the door. "What's the meaning of this, Mr. Randall? Have you lost your mind? Let me out of here!"

"What'll you do if I do? Will you bring Cynthia back to life?"

"I'll do what a physician can for her. Why did you do it?"

"You know why. Why did you cover your face?"

"What do you mean? I started to sneeze and you kicked me."

"Maybe I should have said, *'Gesundheit!'* You're a devil, Potbury. You're a Son of the Bird!"

There was a short silence. "What nonsense is this?"

Randall thought about it. Maybe it was nonsense; maybe Potbury *had* been about to sneeze. No! This was the only explanation that made sense. Devils, devils and black magic. Stoles and Phipps and Potbury and the others.

Hoag? That would account for—wait a minute, now. Potbury hated Hoag. Stoles hated Hoag. All the Sons of the Bird hated Hoag. Very well, devil or whatever, he and Hoag were on the same side.

Potbury was pounding on the door again, no longer with his fists, but with a heavier, less frequent blow which meant the shoulder with the whole weight of the body behind it. The door was no stronger than interior house doors usually are; it was evident that it could take little of such treatment.

Randall pounded on his side. "Potbury! Potbury! Do you hear me?"

"Yes."

"Do you know what I'm going to do now? I'm going to call up Hoag and get him to come over here. Do you hear that, Potbury? He'll kill you, Potbury, he'll kill you!"

There was no answer, but presently the heavy pounding resumed. Randall got his gun. "Potbury!" No answer. "Potbury, cut that out or I'll shoot." The pounding did not even slacken.

Randall had a sudden inspiration. "Potbury—*in the Name of the Bird*—get away from that door!"

The noise stopped as if chopped off.

Randall listened and then pursued his advantage. "In the Name of the Bird, don't touch that door again. Hear me, Potbury?" There was no answer, but the quiet continued.

It was early; Hoag was still at his home. He quite evidently was confused by Randall's incoherent explanations, but he agreed to come over, at once, or a little quicker.

Randall went back into the bedroom and resumed his double vigil. He held his wife's still, cool hand with his left hand; in his right he carried his gun, ready in case the invocation failed to bind. But the pounding was not resumed; there was a deathly silence in both rooms for some minutes. Then Randall heard, or imagined he heard, a faint scraping sibilance from the bathroom—an unaccountable and ominous sound.

He could think of nothing to do about it, so he did nothing. It went on for several minutes and stopped. After that—nothing.

Hoag recoiled at the sight of the gun. “Mr. Randall!”

“Hoag,” Randall demanded, “are you a devil?”

“I don’t understand you.”

“ ‘The Bird is Cruel!’ ”

Hoag did not cover his face; he simply looked confused and a bit more apprehensive.

“O.K.,” decided Randall. “You pass. If you *are* a devil, you’re my kind of a devil. Come on—I’ve got Potbury locked up, and I want you to confront him.”

“Me? Why?”

“Because he *is* a devil—a Son of the Bird. And they’re afraid of you. Come on!” He urged Hoag into the bedroom, continuing with, “The mistake I made was in not being willing to believe in something when it happened to me. *Those weren’t dreams.”* He pounded on the door with the muzzle of the gun. “Potbury! Hoag is here. Do what I want and you *may* get out of it alive.”

“What do you want of him?” Hoag said nervously.

“*Her*—of course.”

“Oh—” Randall pounded again, then turned to Hoag and whispered, “If I open the door, will you confront him? I’ll be right alongside you.”

Hoag gulped, looked at Cynthia, and answered, “Of course.”

The bath was empty; it had no window, nor any other reasonable exit, but the means by which Potbury had escaped were evident. The surface of the mirror had been scraped free of enamel, with a razor blade.

They risked the seven years of bad luck and broke the mirror. Had he known how to do so, Randall would have swarmed through and tackled them all; lacking the knowledge it seemed wiser to close the leak.

After that there was nothing to do. They discussed it, over the silent form of Randall’s wife, but there was nothing to do. They were not magicians. Hoag went into the living room presently, unwilling to disturb the privacy of Randall’s despair but also unwilling to desert him entirely. He looked in on him from time to time. It was on one such occasion that he noticed a small black bag half under the bed and recognized it for what it was—a doctor’s kit. He went in and picked it up. “Ed,” he asked, “have you looked at this?”

“At what?” Randall looked up with dull eyes, and read the inscription, embossed in well-worn gold letters on the flap:

POTIPHAR T. POTBURY, M.D.

"Huh?"

"He must have left it behind."

"He didn't have a chance to take it." Randall took it from Hoag and opened it—a stethoscope, head forceps, clamps, needles, an assortment of vials in a case, the usual props of a G.P.'s work. There was one prescription bottle as well; Randall took it out and read the prescription. "Hoag, look at this."

POISON!
This Prescription Can Not Be Refilled
MRS. RANDALL—TAKE AS PRESCRIBED
BONTON CUTRATE PHARMACY

"Was he trying to poison her?" Hoag suggested. "I don't think so—that's the usual narcotic warning. But I want to see what it is." He shook it. It seemed empty. He started to break the seal.

"Careful!" Hoag warned.

"I will be." He held it well back from his face to open it, then sniffed it very cautiously. It gave up a fragrance, subtle and infinitely sweet.

"Teddy?" He whirled around, dropping the bottle. It was indeed Cynthia, eyelids fluttering. "Don't promise them anything, Teddy!" She sighed and her eyes closed again.

" 'The Bird is Cruel!' " she whispered.

IX

"Your memory lapses are the key to the whole thing," Randall was insisting. "If we knew what you do in the daytime, if we knew your profession, we would know why the Sons of the Bird are out to get you. More than that, we would know how to fight them—for they are obviously afraid of you."

Hoag turned to Cynthia. "What do you think, Mrs. Randall?"

"I think Teddy is right. If I knew enough about hypnotism, we would try that—but I don't, so scopolamine is the next best bet. Are you willing to try it?"

"If you say so, yes."

"Get the kit, Teddy." She jumped down from where she had been perched, on the edge of his desk. He put out a hand to catch her.

"You ought to take it easy, baby," he complained.

"Nonsense, I'm all right—now."

They had adjourned to their business office almost as soon as

Cynthia woke up. To put it plainly, they were scared—scared still, but not scared silly. The apartment seemed an unhealthy place to be. The office did not seem much better. Randall and Cynthia had decided to *get out of town*—the stop at the office was a penultimate stop, for a conference of war.

Hoag did not know what to do.

"Just forget you ever saw this kit," Randall warned him, as he prepared the hypodermic. "Not being a doctor, nor an anaesthetist, I shouldn't have it. But it's convenient, sometimes." He scrubbed a spot of Hoag's forearm with an alcohol swab. "Steady now—there!" He shoved the needle.

They waited for the drug to take hold. "What do you expect to get," Randall whispered to Cynthia.

"I don't know. If we're lucky, his two personalities will knit. Then we may find out a lot of things."

A little later Hoag's head sagged forward; he breathed heavily. She stepped forward and shook his shoulder. "Mr. Hoag—do you hear me?"

"Yes."

"What is your name?"

"Jonathan . . . Hoag."

"Where do you live?"

"Six-oh-two—Gotham Apartments."

"What do you do?"

"I . . . don't know."

"Try to remember. What is your profession?"

No answer. She tried again. "Are you a hypnotist?"

"No."

"Are you a—magician?"

The answer was delayed a little, but finally came. "No."

"What are you, Jonathan Haag?"

He opened his mouth, seemed about to answer—then sat up suddenly, his manner brisk and completely free of the lassitude normal to the drug. "I'm sorry, my dear, but this will have to stop—for the present."

He stood up, walked over to the window, and looked out. "Bad," he said, glancing up and down the street. "How distressingly bad." He seemed to be talking to himself rather than to them. Cynthia and Randall looked at him, then to each other for help.

"What is bad, Mr. Hoag?" Cynthia asked, rather diffidently. She did not have the impression analyzed, but he seemed like another person—younger, more vibrant.

"Eh? Oh, I'm sorry. I owe you an explanation. I was forced to, uh, dispense with the drug."

"Dispense with it?"

"Throw it off, ignore it, make it as nothing. You see, my dear, while you were talking I recalled my profession." He looked at them cheerily, but offered no further explanation.

Randall was the first to recover. "What *is* your profession?"

Hoag smiled at him, almost tenderly. "It wouldn't do to tell you," he said. "Not now, at least." He turned to Cynthia. "My dear, could I trouble you for a pencil and a sheet of paper?"

"Uh—why, certainly." She got them for him; he accepted them graciously and, seating himself, began to write.

When he said nothing to explain his conduct Randall spoke up, "Say, Hoag, look here—" Hoag turned a serene face to him; Randall started to speak, seemed puzzled by what he saw in Hoag's face, and concluded lamely, "Er . . . Mr. Hoag, what's this all about?"

"Are you not willing to trust me?"

Randall chewed his lip for a moment and looked at him; Hoag was patient and serene. "Yes . . . I suppose I am," he said at last.

"Good. I am making a list of some things I want you to buy for me. I shall be quite busy for the next two hours or so."

"You are leaving us?"

"You are worried about the Sons of the Bird, aren't you? Forget them. They will not harm you. I promise it." He resumed writing. Some minutes later he handed the list to Randall. "I've noted at the bottom the place where you are to meet me—a filling station outside Waukegan."

"Waukegan? Why Waukegan?"

"No very important reason. I want to do once more something I am very fond of doing and don't expect to be able to do again. You'll help me, won't you? Some of the things I've asked you to buy may be hard to get, but you will try?"

"I suppose so."

"Good." He left at once.

Randall looked from the closing door back to the list in his hand. "Well, I'll be a— Cyn, what do you suppose he wants us to get for him?—groceries!"

"Groceries? Let me see that list."

X

They were driving north in the outskirts of the city, with Randall at the wheel. Somewhere up ahead lay the place where they were to meet Hoag; behind them in the trunk of the car were the purchases he had directed them to make.

"Teddy?"

"Yeah, kid."

"Can you make a U-turn here?"

"Sure—if you don't get caught. Why?"

"Because that's just what I'd like to do. Let me finish," she went on hurriedly. "We've got the car; we've got all the money we have in the world with us; there isn't anything to stop us from heading south if we want to."

"Still thinking of that vacation? But we're going on it—just as soon as we deliver this stuff to Hoag."

"I don't mean a vacation. I mean go away and never come back—*now!"*

"With eighty dollars' worth of fancy groceries that Hoag ordered and hasn't paid for yet? No soap.

"We could eat them ourselves."

"Humph! Caviar and hummingbird wings. We can't afford it, kid. We're the hamburger type. Anyhow, even if we could, I want to see Hoag again. Some plain talk—and explanations."

She sighed. "That's just what I thought, Teddy, and that's why I want to cut and run. I don't want explanations; I'm satisfied with the world the way it is. Just you and me—and no complications. I don't *want* to know anything about Mr. Hoag's profession—or the Sons of the Bird—or anything like that."

He fumbled for a cigarette, then scratched a match under the instrument board, while looking at her quizzically out of the corner of his eye. Fortunately the traffic was light. "I think I feel the same way you do about it, kid, but I've got a different angle on it. If we drop it now, I'll be jumpy about the Sons of the Bird the rest of my life, and scared to shave, for fear of looking in a mirror. But there is a rational explanation for the whole thing—bound to be—and I'm going to get it. Then we can sleep."

She made herself small and did not answer.

"Look at it this way," Randall went on, somewhat irritated. "Everything that has happened could have been done in the ordinary way, without recourse to supernatural agencies. As for supernatural agencies—well, out here in the sunlight and the traffic it's a little too much to swallow. Sons of the Bird—rats!"

She did not answer. He went on. "The first significant point is that Hoag is a consummate actor. Instead of being a prissy little Milquetoast, he's a dominant personality of the first water. Look at the way I shut up and said, 'Yes, sir,' when he pretended to throw off the drug and ordered us to buy all those groceries."

"Pretended?"

"Sure. Somebody substituted colored water for my sleepy juice—probably done the same time the phony warning was stuck in the typewriter. But to get back to the point—he's a naturally strong character and almost certainly a clever hypnotist. Pulling that illusion about the thirteenth floor and Detheridge & Co. shows how skillful he is—or somebody is. Probably used drugs on me as well, just as they did on you."

"On me?"

"Sure. Remember that stuff you drank in Potbury's office? Some sort of a delayed-action Mickey Finn."

"But you drank it, too!"

"Not necessarily the same stuff. Potbury and Hoag were in cahoots, which is how they created the atmosphere that made the whole thing possible. Everything else was little stuff, insignificant when taken alone."

Cynthia had her own ideas about that, but she kept them to herself. However, one point bothered her. "How did Potbury get out of the bathroom? You told me he was locked in."

"I've thought about that. He picked the lock while I was phoning Hoag, hid in the closet and just waited his chance to walk out."

"Hm-m-m—" She let it go at that for several minutes.

Randall stopped talking, being busy with the traffic in Waukegan. He turned left and headed out of town.

"Teddy—if you are sure that the whole thing was just a hoax and there are no such things as the Sons, then why can't we drop it and head south? We don't need to keep this appointment."

"I'm sure of my explanation all right," he said, skillfully avoiding a suicide-bent boy on a bicycle, "in its broad outlines, but I'm *not* sure of the motivation—and *that's* why I have to see Hoag. Funny thing, though," he continued thoughtfully, "I don't think Hoag has anything against us; I think he had some reasons of his own and paid us five hundred berries to put up with some discomfort while he carried out his plans. But we'll see. Anyhow, it's too late to turn back; there's the filling station he mentioned—and there's Hoag!"

Hoag climbed in with no more than a nod and a smile; Randall felt again the compulsion to do as he was told which had first hit him some two hours before. Hoag told him where to go.

The way lay out in the country and, presently, off the pavement. In due course they came to a farm gate leading into pasture land, which Hoag instructed Randall to open and drive through. "The owner does not mind," he said. "I've been here many times, on my Wednesdays. A beautiful spot."

It *was* a beautiful spot. The road, a wagon track now, led up a gradual rise to a tree-topped crest. Hoag had him park under a tree, and they got out. Cynthia stood for a moment, drinking it in, and savoring deep breaths of the clean air. To the south Chicago could be seen and beyond it and east of it a silver gleam of the lake. “Teddy, isn’t it gorgeous?”

“It is,” he admitted, but turned to Hoag. “What I want to know is—why are we here?”

“Picnic,” said Hoag. “I chose this spot for my finale.”

“Finale?”

“Food first,” said Hoag. “Then, if you must, we’ll talk.”

It was a very odd menu for a picnic; in place of hearty foods there were some dozens of gourmets’ specialties—preserved cumquats, guava jelly, little potted meats, tea—made by Haag over a spirit lamp—delicate wafers with a famous name on the package. In spite of this both Randall and Cynthia found themselves eating heartily. Hoag tried everything, never passing up a dish—but Cynthia noticed that he actually ate very little, tasting rather than dining.

In due course Randall got his courage up to brace Hoag; it was beginning to appear that Hoag had no intention of broaching the matter himself. “Hoag?”

“Yes, Ed?”

“Isn’t it about time you took off the false face and quit kidding us?”

“I have not kidded you, my friend.”

“You know what I mean—this whole rat race that has been going on the past few days. You're mixed up in it and know more about it than we do—that’s evident. Mind you, not that I’m accusing you of anything,” he added hastily. “But I want to know what it means.”

“Ask yourself what it means.”

“O.K.,” Randall accepted the challenge. “I will.” He launched into the explanation which he had sketched out to Cynthia, Hoag encouraged him to continue it fully, but, when he was through, said nothing.

“Well,” Randall said nervously, “that’s how it happened—wasn’t it?”

“It seems like a good explanation.”

“I thought so. But you’ve still got to clear some things up. Why did you do it?”

Hoag shook his head thoughtfully. “I’m sorry, Ed. I cannot possibly explain my motives to you.”

“But, damn it, that’s not fair! The least you could—”

“When did you ever find fairness, Edward?”

“Well—I expected you to play fair with us. You encouraged us to treat you as a friend. You owe us explanations."

“I promised you explanations. But consider, Ed—do you want explanations? I assure you that you will have no more trouble, no more visitations from the Sons."

Cynthia touched his arm. "Don't ask for them, Teddy!"

He brushed her off, not unkindly but decisively. "I've got to *know*. Let's have the explanation."

"You won't like it."

"I'll chance it."

"Very well." Hoag settled back. "Will you serve the wine, my dear? Thank you. I shall have to tell you a little story first. It will be partly allegorical, as there are not the . . . the words, the concepts. Once there was a race, quite unlike the human race—quite. I have no way of describing to you what they looked like or how they lived, but they had one characteristic you can understand: they were creative. The creating and enjoying of works of art was their occupation and their reason for being. I say 'art' advisedly, for art is undefined, undefinable, and without limits. I can use the word without fear of misusing it, for it has no exact meaning. There are as many meanings as there are artists. But remember that these artists are not human and their art is not human.

"Think of one of this race, in your terms—young. He creates a work of art, under the eye and the guidance of his teacher. He has talent, this one, and his creation has many curious and amusing features. The teacher encourages him to go on with it and prepare it for the judging. Mind you, I am speaking in metaphorical terms, as if this were a human artist, preparing his canvases to be judged in the annual showing."

He stopped and said suddenly to Randall, "Are you a religious man? Did it ever occur to you that all this"—he included the whole quietly beautiful countryside in the sweep of his arm—"might have had a Creator? *Must* have had a Creator?"

Randall stared and turned red. "I'm not exactly a churchgoing man," he blurted, "but— Yes, I suppose I do believe it."

"And you, Cynthia?"

She nodded, tense and speechless.

"The Artist created this world, after His Own fashion and using postulates which seemed well to Him. His teacher approved on the whole, but—"

"Wait a minute," Randall said insistently. "Are you trying to describe the creation of the world—the Universe?"

"What else?"

"But—damn it, this is preposterous! I asked for an explanation of the things that have just happened to *us.*"

"I told you that you would not like the explanation." He waited for a moment, then continued. "The Sons of the Bird were the dominant feature of the world, at first."

Randall listened to him, feeling that his head would burst. He knew, with sick horror, that the rationalization he had made up on the way to the rendezvous had been sheerest moonshine, thrown together to still the fears that had overcome him. The Sons of the Bird—real, real and horrible—and potent. He felt that he knew now the sort of race of which Hoag spoke. From Cynthia's tense and horrified face she *knew,* also—and there would never again be peace for either of them. "In the Beginning there was the Bird—"

Hoag looked at him with eyes free of malice but without pity. "No," he said serenely, "there was never the Bird. They who call themselves Sons of the Bird there are. But they are stupid and arrogant. Their sacred story is so much superstition. But in their way and by the rules of this world they are powerful. The things, Edward, that you thought you saw you did see."

"You mean that—"

"Wait, let me finish. I must hasten. You saw what you thought you saw, with one exception. Until today you have seen *me* only in your apartment, or mine. The creatures you shadowed, the creature that frightened Cynthia—Sons of the Bird, all of them. Stoles and his friends.

"The teacher did not approve of the Sons of the Bird and suggested certain improvements in the creation. But the Artist was hasty or careless; instead of removing them entirely He merely—painted over them, made them appear to be some of the new creations with which He peopled His world.

"All of which might not have mattered if the work had not been selected for judging. Inevitably the critics noticed them; they were—bad art, and they disfigured the final work. There was some doubt in their minds as to whether or not the creation was worth preserving. That is why I am here."

He stopped, as if there were no more to say. Cynthia looked at him fearfully. "Are you . . . are you—"

He smiled at her. "No, Cynthia, I am not the Creator of your world. You asked me my profession once.

"I am an art critic."

Randall would like to have disbelieved. It was impossible for him to do so; the truth rang in his ears and would not be denied. Hoag continued, "I said to you that I would have to speak to you in terms you use. You must know that to judge a creation such as this, your world, is not like walking up to a painting and looking at it. This world is peopled with *men;* it must be looked at through the eyes of men. I am a man."

Cynthia looked still more troubled. "I don't understand. You act through the body of a man?"

"I *am* a man. Scattered around through the human race are the Critics—men. Each is the projection of a Critic, but each is a man—in every way a man, not knowing that he is also a Critic."

Randall seized on the discrepancy as if his reason depended on it—which, perhaps, it did. "But *you* know—or say you do. It's a contradiction."

Hoag nodded, undisturbed. "Until today, when Cynthia's questioning made it inconvenient to continue as I was—and for other reasons—this *persona"*—he tapped his chest—"had no idea of why he was here. He was a man, and no more. Even now, I have extended my present *persona* only as far as is necessary for my purpose. There are questions which I could not answer—as Jonathan Hoag.

"Jonathan Hoag came into being as a man, for the purpose of examining, *savoring,* certain of the artistic aspects of this world. In the course of that it became convenient to use him to smell out some of the activities of those discarded and painted-over creatures that call themselves the Sons of the Bird. You two happened to be drawn into the activity—innocent and unknowing, like the pigeons used by armies. But it so happened that I observed something else of artistic worth while in contact with you, which is why we are taking the trouble for these explanations."

"What do you mean?"

"Let me speak first of the matters I observed as a critic. Your world has several pleasures. There is eating." He reached out and pulled off from its bunch a muscat grape, fat and sugar-sweet, and ate it appreciatively. "An odd one, that. And very remarkable. No one ever before thought of making an art of the simple business of obtaining the necessary energy. Your Artist has very real talent.

"And there is sleeping. A strange reflexive business in which the Artist's own creations are allowed to create more worlds of their own. You see now, don't you," he said, smiling, "why the critic must be a *man* in truth—else he could not dream as a man does?

"There is drinking—which mixes both eating and dreaming.

"There is the exquisite pleasure of conversing together, friend with friend, as we are doing. That is not new, but it goes to the credit of the Artist that He included it.

"And there is sex. Sex is ridiculous. As a critic I would have disregarded it entirely had not you, my friends, let me see something which had not come to the attention of Jonathan Hoag, something which, in my own artistic creations, I had never had the wit to invent. As I said, your Artist has talent." He looked at them almost tenderly. "Tell me, Cynthia. what do you love in this world and what is it that you hate and fear?"

She made no attempt to answer him, but crept closer to her husband. Randall put a protecting arm around her. Hoag spoke then to Randall. “And you, Edward? Is there something in this world for which you’d surrender your life and your soul if need be? You need not answer—I saw in your face and in your heart, last night, as you bent over the bed. Good art, good art—both of you. I have found several sorts of good and original art in this world, enough to justify encouraging your Artist to try again. But there was so much that was bad, poorly drawn and amateurish, that I could not find it in me to approve the work as a whole until I encountered and savored this, the tragedy of human love.”

Cynthia looked at him wildly. “Tragedy? You say ‘tragedy’?”

He looked at her with eyes that were not pitying, but serenely appreciative. “What else could it be, my dear?”

She stared at him, then turned and buried her face on the lapel of her husband’s coat. Randall patted her head. “Stop it, Hoag!” he said savagely. “You’ve frightened her again.”

“I did not wish to.”

“You have. And I can tell you what I think of your story. It’s got holes in it you can throw a cat through. You made it up.”

“You do not believe that.”

It was true; Randall did not. But he went on bravely, his hand still soothing his wife. “The stuff under your nails—how about that? I noticed you left that out. And your fingerprints.”

“The stuff under my nails has little to do with the story. It served its purpose, which was to make fearful the Sons of the Bird. They knew what it was.”

“But what was it?”

“The ichor of the Sons—planted there by my other *persona.* But what is this about fingerprints? Jonathan Hoag was honestly fearful of having them taken; Jonathan Hoag is a man, Edward. You must remember that.”

Randall told him; Hoag nodded. “I see. Truthfully, I do not recall it, even today, although my full *persona* knows of it. Jonathan Hoag had a nervous habit of polishing things with his handkerchief; perhaps he polished the arm of your chair.”

“I don’t remember it.”

“Nor do I.”

Randall took up the fight again. “That isn’t all and that isn’t half of it. What about the rest home you said you were in? And who pays you? Where do you get your money? Why was Cynthia always so darned scared of you?”

Hoag looked out towards the city; a fog was rolling in from the lake. “There is little time for these things,” he said, “and it does not matter, even to you, whether you believe or not. But you do believe—you cannot help it. But you have brought up another matter. Here." He pulled a thick roll of bills from his pocket and handed them to Randall. "You might as well take them with you; I shall have no more use for them. I shall be leaving you in a few minutes."

"Where are you going?"

"Back to myself. After I leave, you must do this: Get into your car and drive at once, south, through the city. *Under no circumstances* open a window of your car until you are miles away from the city."

"Why? I don't like this."

"Nevertheless, do it. There will be certain—changes, readjustments going on."

"What do you mean?"

"I told you, did I not, that the Sons of the Bird are being dealt with? They, and all their works."

"How?"

Hoag did not answer, but stared again at the fog. It was creeping up on the city. "I think I must go now. Do as I have told you to do." He started to turn away. Cynthia lifted up her face and spoke to him.

"Don't go! Not yet."

"Yes, my dear?"

"You must tell me one thing: *Will Teddy and I be together?"*

He looked into her eyes and said. "I see what you mean. I don't know."

"But you *must* know!"

"I do not know. If you are both creatures of this world, then your patterns may run alike. But there are the Critics, you know."

"The Critics? What have *they* to do with *us?"*

"One, or the other, or both of you may *be* Critics. I would not know. Remember, the Critics are men—here. I did not even know myself as one until today." He looked at Randall meditatively. *"He* may be one. I suspected it once today."

"Am—I?"

"I have no way of knowing. It is most unlikely. You see, we can't know each other, for it would spoil our artistic judgment."

"But . . . but . . . if we *are* not the same, then—"

"That is all." He said it, not emphatically, but with such a sound of finality that they were both startled. He bent over the remains of the feast and selected one more grape, ate it, and closed his eyes.

He did not open them. Presently Randall said, "Mr. Hoag?" No answer. "Mr. Hoag!" Still no answer. He separated himself from Cynthia, stood up, and went around to where the quiet figure sat. He shook him. "Mr. Hoag!"

"But we can't just leave him there!" Randall insisted, some minutes later.

"Teddy, he knew what he was doing. The thing for us to do is to follow his instructions."

"Well—we can stop in Waukegan and notify the police."

"Tell them we left a dead man back there on a hillside? Do you think they would say, 'Fine,' and let us drive on? No, Teddy—just what he told us to do."

"Honey—you don't believe all that stuff he was telling us, do you?"

She looked him in his eyes, her own eyes welling with tears, and said, "Do you? Be honest with me, Teddy."

He met her gaze for a moment, then dropped his eyes and said, "Oh, never mind! We'll do what he said. Get in the car."

The fog which appeared to have engulfed the city was not visible when they got down the hill and had started back toward Waukegan, nor did they see it again after they had turned south and drove toward the city. The day was bright and sunny, as it had started to be that morning, with just enough nip in the air to make Hoag's injunction about keeping the windows rolled up tight seem like good sense.

They took the lake route south, skipping the Loop thereby, with the intention of continuing due south until well out of the city. The traffic had thickened somewhat over what it had been when they started out in the middle of the morning; Randall was forced to give his attention to the wheel. Neither of them felt like talking and it gave an excuse not to.

They had left the Loop area behind them when Randall spoke up, "Cynthia—"

"Yes."

"We ought to tell somebody. I'm going to ask the next cop we see to call the Waukegan station."

"Teddy!"

"Don't worry. I'll give him some stall that will make them investigate without making them suspicious of us. The old run-around—you know."

She knew his powers of invention were fertile enough to do such a job; she protested no more. A few blocks later Randall saw a patrolman standing on the sidewalk, warming himself in the sun, and watching some boys playing sand-lot football. He pulled up to the curb beside him. "Run down the window, Cyn."

She complied, then gave a sharp intake of breath and swallowed a scream. He did not scream, but he wanted to.

Outside the open window was no sunlight, no cops, no kids—nothing. Nothing but a gray and formless mist, pulsing slowly as if with inchoate life. They could see nothing of the city through it, not because it was too dense but because it was—empty. No sound came out of it; no movement showed in it.

It merged with the frame of the window and began to drift inside. Randall shouted, "Roll up the window!" She tried to obey, but her hands were nerveless; he reached across her and cranked it up himself, jamming it hard into its seat.

The sunny scene was restored; through the glass they saw the patrolman, the boisterous game, the sidewalk, and the city beyond. Cynthia put a hand on his arm. "Drive on, Teddy!"

"Wait a minute," he said tensely, and turned to the window beside him. Very cautiously he rolled it down—just a crack, less than an inch.

It was enough. The formless gray flux was out there, too; through the glass the city traffic and sunny street were plain, through the opening—nothing.

"Drive on, Teddy—*please!*"

She need not have urged him; he was already gunning the car ahead with a jerk.

Their house is not exactly on the Gulf, but the water can be seen from the hilltop near it. The village where they do their shopping has only eight hundred people in it, but it seems to be enough for them. They do not care much for company, anyway, except their own. They get a lot of that. When he goes out to the vegetable patch, or to the fields, she goes along, taking with her such woman's work as she can carry and do in her lap. If they go to town, they go together, hand in hand—always.

He wears a beard, but it is not so much a peculiarity as a necessity, for there is not a mirror in the entire house. They do have one peculiarity which would mark them as odd in any community, if anyone knew about it, but it is of such a nature that no one else *would* know.

When they go to bed at night, before he turns out the light, he handcuffs one of his wrists to one of hers.

THE WITCH'S DAUGHTERS

Have no truck with the
daughters of Lilith.
Pay no mind to the
redheaded creatures.
Man, be warned by their

sharp, white teeth;
Consider their skulls, and their
other queer features.

They're not of our tribe, with their
flame-colored hair;
They're no sib to us, with their
pale, white skins;
There's no soul behind those
wild green eyes
Man, when you meet one-
walk widdershins!

When they die, they pop,
like burst soap bubble
(Eight hundred years
is their usual span).
Loving such beings
leads only to trouble.
By Heaven, be warned,
you rash young man!

August 1946

"It's Great to Be Back!"

"Hurry up, Allan!" Home—back to Earth again! Her heart was pounding.

"Just a second." She fidgeted while her husband checked over a bare apartment. EarthMoon freight rates made it silly to ship their belongings; except for the bag he carried, they had converted everything to cash. Satisfied, he joined her at the lift; they went on up to the administration level and there to a door marked: LUNA CITY COMMUNITY ASSOCIATION-Annd *Stone, Service Manager*.

Miss Stone accepted their apartment keys grimly. "Mr. and Mrs. MacRae. So you're actually leaving us?"

Josephine bristled. "Think we'd change our minds?"

The manager shrugged. "No. I knew nearly three years ago that you would go back—from your complaints."

"From my comp— Miss Stone, I've been as patient about the incredible inconveniences of this, this pressurized rabbit warren as anyone. I don't blame you personally, but—"

"Take it easy, Jo!" her husband cautioned her.

Josephine flushed. "Sorry, Miss Stone."

"Never mind. We just see things differently. I was here when Luna City was three air-sealed Quonset huts connected by tunnels you crawled through, on your knees." She stuck out a square hand. "I hope you enjoy being groundhogs again, I honestly do. Hot jets, good luck, and a safe landing."

Back in the lift, Josephine sputtered. " 'Groundhogs' indeedl Just because we prefer our native planet, where a person can draw a breath of fresh air-"

"You use the term," Allan pointed out.

"But I use it about people who've never been off Terra."

"We've both said more than once that we wished we had had sense enough never to have left Earth. We're groundhogs at heart, Jo."

"Yes, but— Oh, Allan, you're being obnoxious. This is the happiest day of my life. Aren't you glad to be going home? Aren't you?"

"Of course I am. It'll be great to be back. Horseback riding. skiing."

"And opera. Real, live grand opera. Allan, we've simply got to have a week or two in Manhattan before we go to the country."

"I thought you wanted to feel rain on your face."

"I want that, too. I want it all at once and I can't wait. Oh, darling, it's like getting out of jail." She clung to him.

He unwound her as the lift stopped. "Don't blubber."

"Allan, you're a beast," she said dreamily. "I'm so happy."

They stopped again, in bankers' row. The clerk in the National City Bank office had their transfer of account ready. "Going home, eh? Just sign there, and your print. I envy you. Hunting, fishing."

"Surf bathing is more my style. And sailing."

"I," said Jo, "simply want to see green trees and blue sky."

The clerk nodded. "I know what you mean. It's long ago and far away. Well, have fun. Are you taking three months or six?"

"We're not coming back," Allan stated flatly. "Three years of living like a fish in an aquarium is enough."

"So?" The clerk shoved the papers toward him and added without expression, "Well-hot jets."

"Thanks." They went on up to the subsurface level and took the crosstown slidewalk out to the rocket port. The slidewalk tunnel broke the surface at one point, becoming a pressurized shed; a view window on the west looked out on the surface of the Moon—and, beyond the hills, the Earth.

The sight of it, great and green and bountiful, against the black lunar sky and harsh, unwinking stars, brought quick tears to Jo's eyes. Home—that lovely planet was hers! Allan looked at it more casually, noting the Greenwich. The sunrise line had just touched South

America—must be about eight-twenty; better hurry.

They stepped off the slidewalk into the arms of some of their friends, waiting to see them off. “Hey-where have you lugs been? The *Gremlin* blasts off in seven minutes.”

“But we aren’t going in it,” MacRae answered. “No, siree.”

“What? Not going? Did you change your minds?”

Josephine laughed. “Pay no attention to him, Jack. We’re going in the express instead; we swapped reservations. So we’ve got twenty minutes yet.”

“Well! A couple of rich tourists, eh?”

“Oh, the extra fare isn’t so much and I didn’t want to make two changes and spend a week in space when we could be home in two days.” She rubbed her bare middle significantly.

“She can’t take free flight, Jack,” her husband explained.

“Well, neither ,can I—I was sick the whole trip out. Still, I don’t think you’ll be sick, Jo; you’re used to Moon weight now.”

“Maybe,” she agreed, “but there is a lot of difference between one-sixth gravity and no gravity.”

Jack Crail’s wife cut in. “Josephine MacRae, are you going to risk your life in an atomic-powered ship?”

“Why not, darling? You work in an atomics laboratory.”

“Hummph! In the laboratory we take precautions. The Commerce Commission should never have licensed the expresses. I may be old-fashioned, but I’ll go back the way I came, via Terminal and Supra-New York, in good old reliable fuel-rockets.”

“Don’t try to scare her, Emma,” Crail objected. “They’ve worked the bugs out of those ships.”

“Not to my satisfaction. I—”

“Never mind,” Allan interrupted her. “The matter is settled, and we’ve still got to get over to the express launching site. Good-by, everybodyl Thanks for the sendoff. It’s been grand knowing you. If you come back to God’s country, look us up.”

“Good-by, kids!”

“Good-by, Jo—good-by, Allan.”

“Give my regards to Broadway!”

“So long-be sure to write.”

“Good-by.”

“Aloha-hot jets!” They showed their tickets, entered the air lock, and climbed into the pressurized shuttle between Leyport proper and the express launching site. “Hang on, folks,” the shuttle operator called back over his shoulder; Jo and Allan hurriedly settled into the cushions. The lock opened; the tunnel ahead was airless. Five minutes later they were climbing out twenty miles away, beyond the hills that shielded the lid of Luna City from the radioactive splash of the express ships.

In the *Sparrowhawk* they shared a compartment with a missionary family. The Reverend Doctor Simmons felt obliged to explain why he was traveling in luxury. “It’s for the child,” he told them, as his wife strapped the baby girl into a small acceleration couch rigged stretcher-fashion between her parents’ couches. “Since she’s never been in space, we daren’t take a chance of her being sick for days on end.” They all strapped down at the warning siren. Jo felt her heart begin to pound. At last… at long last!

The jets took hold, mashing them into the cushions. Jo had not known she could feel so heavy. This was worse, much worse, than the trip out. The baby cried as long as acceleration lasted, in wordless terror and discomfort.

After an interminable time they were suddenly weightless, as the ship went into free flight. When the terrible binding weight was free of her chest, Jo’s heart felt as light as her body. Allan threw off his upper strap and sat up. “How do you feel, kid?”

“Oh, I feel fine!” Jo unstrapped and faced him. Then she hiccoughed. “That is, I think I do.”

Five minutes later she was not in doubt; she merely wished to die. Allan swam out of the compartment and located the ship’s surgeon, who gave her an injection. Allan waited until she had succumbed to the drug, then left for the lounge to try his own cure for spacesickness—Mothersill’s Seasick Remedy washed down with champagne. Presently he had to admit that these two sovereign remedies did not work for him—or perhaps he should not have mixed them.

Little Gloria Simmons was not spacesick. She thought being weightless was fun, and went bouncing off floorplate, overhead, and bulkhead like a dimpled balloon. Jo feebly considered strangling the child, if she floated within reach—but it was too much effort.

Deceleration, logy as it made them feel, was welcome relief after nausea— except to little Gloria. She cried again, in fear and hurt, while her mother tried to explain. Her father prayed.

After a long, long time came a slight jar and the sound of the siren. Jo managed to raise her head. “What’s the matter? Is there an accident?”

“I don’t think so. I think we’ve landed.”

“We can’t have! We’re still braking-I’m heavy as lead.” Allan grinned feebly. “So am I. Earth gravity—remember?” The baby continued to cry.

They said good-by to the missionary family, as Mrs. Simmons decided to wait for a stewardess from the skyport. The MacRaes staggered out of the ship, supporting each other. “It can’t be just the gravity,” Jo protested, her feet caught in invisible quicksand. “I’ve taken Earth-normal acceleration in the centrifuge at the ‘Y’, back home—I mean back in Luna City. We’re weak from spacesickness.”

Allan steadied himself. “That’s it. We haven’t eaten anything for two days.”

“Allan—didn’t you eat anything either?”

“No. Not *permanently*, so to speak. Are you hungry?”

“Starving.”

“How about dinner at Kean’s Chophouse?”

“Wonderful. Oh, Allan, we’re back!” Her tears started again.

They glimpsed the Simmonses once more, after chuting down the Hudson Valley and into Grand Central Station. While they were waiting at the tube dock for their bag, Jo saw the Reverend Doctor climb heavily out of the next tube capsule, carrying his daughter and followed by his wife. He set the child down carefully. Gloria stood for a moment, trembling on her pudgy legs, then collapsed to the dock. She lay there, crying thinly.

A spaceman—pilot, by his uniform—stopped and looked pityingly at the child. “Born in the Moon?” he asked.

“Why yes, she was, sir.” Simmons’ courtesy transcended his troubles.

“Pick her up and carry her. She’ll have to leam to walk all over again.” The spaceman shook his head sadly and glided away. Simmons looked still more troubled, thefn sat down on the dock beside his child, careless of the dirt.

Jo felt too weak to help. She looked around for Allan, but he was busy; their bag had arrived. It was placed at his feet and he started to pick it up, and then felt suddenly silly. It seemed nailed to the dock. He knew what was in it, rolls of microfilm and colorfilm, a few souvenirs, toilet articles, various irreplaceables—fifty pounds of mass. It *couldn’t* weigh what it seemed to.

But it did. He had forgotten what fifty pounds weigh on Earth.

“Porter, mister?” The speaker was grey-haired and thin, but he scooped up the bag quite casually. Allan called out, “Come along, Jo,” and followed him, feeling foolish. The porter slowed to match Allan’s labored steps.

“Just down from the Moon?” he asked.

“Why, yes.”

“Got a reservation?”

“No.”

“You stick with me. I’ve got a friend on the desk at the Commodore.” He led them to the Concourse slidewalk and thence to the hotel.

They were too weary to dine out; Allan had dinner sent to their room. Afterward, Jo fell asleep in a hot tub and he had trouble getting her out—she liked the support the water gave her. But he persuaded her that a rubber-foam mattress was nearly as good. They got to sleep very early.

She woke up, struggling, about four in the morning. “Allan. AllanI”

“Huh? What’s the matter?” His hand fumbled at the light switch.

“Uh… nothing I guess. I dreamed I was back in the ship. The jets had run away with her. Allan, what makes it so stuffy in here? I’ve got a splitting headache.”

“Huh? It can’t be stuffy. This joint is airconditioned.” He sniffed the air. “I’ve got a headache, too,” he admitted.

“Well, do something. Open a window.”

He stumbled out of bed, shivered when the outer air hit him, and hurried back under the covers. He was wondering whether he could get to sleep with the roar of the city pouring in through the window when his wife spoke again. “Allan?”

“Yes. What is it?”

“Honey, I’m *cold*. May I crawl in with you?”

“Sure.”

The sunlight streamed in the window, warm and mellow. When it touched his eyes, he woke and found his wife awake beside him. She sighed and snuggled. “Oh, darling, look! Blue sky—we’re *home*. I’d forgotten how lovely it is.”

“It’s great to be back, all right. How do you feel?” ‘

“Much better. How are you?”

“Okay, I guess.” He pushed off the covers.

Jo squealed and jerked them back. “Don’t do that!”

“Huh?”

“Mamma’s great big boy is going to climb out and close that window while mamma stays here under the covers.”

“Well-all right.” He could walk more easily than the night before—but it was good to get back into bed. Once there, he faced the telephone and shouted at it, “Service!”

“Order, please,” it answered in a sweet contralto.

“Orange juice and coffee for two—extra coffee—six eggs, scrambled medium, and whole-wheat toast. And send up a *Times*, and the *Saturday Evening Post*.”

“Ten minutes.”

“Thank you.” The delivery cupboard buzzed while he was shaving. He answered it and served Jo breakfast in bed. Breakfast over, he laid down his newspaper and said, “Can you pull your nose out of that magazine?”

“Glad to. The darn thing is too big and heavy to hold.”

“Why don’t you have the stat edition mailed to you from Luna City? Wouldn’t cost more than eight or nine times as much.”

"Don't be silly. What's on your mind?"

"How about climbing out of that frowsty little nest and going with me to shop for clothes?"

"Unh-uh. No, I am not going outdoors in a moonsuit."

" 'Fraid of being stared at? Getting prudish in your old age?"

"No, me lord, I simply refuse to expose myself to the outer air in six ounces of nylon and a pair of sandals. I want some warm clothes first." She squirmed further down under the covers.

"The Perfect Pioneer Woman. Going to have fitters sent up?"

"We can't afford that. Look—you're going anyway. Buy me just any old rag so long as it's warm."

MacRae looked stubborn. "I've tried shopping for you before."

"Just this once—please. Run over to Saks and pick out a street dress in a blue wool jersey, size ten. And a pair of nylons."

"Well-all right."

"That's a lamb. I won't be loafing. I've a list as long as your arm of people I've promised to call up, look up, have lunch with."

He attended to his own shopping first; his sensible shorts and singlet seemed as warm as a straw hat in a snow storm. It was not really cold and was quite balmy in the sun, but it seemed cold to a man used to a never-failing seventy-two degrees. He tried to stay underground, or stuck to the roofed-over section of Fifth Avenue.

He suspected that the salesmen had outfitted him in clothes that made him look like a yokel. But they were warm. They were also heavy; they added to the pain across his chest and made him walk even more unsteadily. He wondered how long it would be before he got his ground-legs.

A motherly saleswoman took care of Jo's order and sold him a warm cape for her as well. He headed back, stumbling under his packages, and trying futilely to flag a ground-taxi. Everyone seemed in such a hurry! Once he was nearly knocked down by a teenaged boy who said, "Watch it, Gramps!" and rushed off, before he could answer.

He got back, aching all over and thinking about a hot bath. He did not get it; Jo had a visitor. "Mrs. Appleby, my husband—Allan, this is Emma Crail's mother."

"Oh, how do you do, Doctor—or should it be 'Professor'?"

"Mister-"

"—when I heard you were in town I just couldn't wait to hear all about my poor darling. How is she? Is she thin? Does she look well? These modern girls—I've told her time and again that she must get out of doors—I walk in the Park every day—and look at me. She sent me a picture-I have it here somewhere; at least I think I have—and she doesn't look a bit well, undernourished. Those synthetic foods—"

"She doesn't eat synthetic foods, Mrs. Appleby."

"—must be quite impossible, I'm sure, not to mention the taste. What were you saying?"

"Your daughter doesn't live on synthetic foods," Allan repeated. "Fresh fruits and vegetables are one thing we have almost too much of in Luna City. The airconditioning plant, you know."

"That's just what I was saying. I confess I don't see just how you get food out of airconditioning machinery on the Moon—"

"*In* the Moon, Mrs. Appleby."

"—but it can't be healthy. Our airconditioner at home is always breaking down and making the most horrible smells—simply unbearable, my dears— you'd think they could build a simple little thing like an airconditioner so that—though of course if you expect them to manufacture synthetic foods as well-"

"Mrs. Appleby-"

"Yes, Doctor? What were you saying? Don't let me—"

"Mrs. Appleby," MacRae said desperately, "the airconditioning plant in Luna City is a hydroponic farm, tanks of growing plants, green things. The plants take the carbon dioxide out of the air and put oxygen back in."

"But— Are you quite sure, Doctor? I'm sure Emma said—"

"Quite sure."

"Well… I don't pretend to understand these things, I'm the artistic type. Poor Herbert often said—Herbert was Emma's father; simply wrapped up in his engineering though I always saw to it that he heard good music and saw the reviews of the best books. Emma takes after her father, I'm afraid—I do wish she would give up that silly work she is in. Hardly the sort of work for a woman, do you think, Mrs. MacRae? All those atoms and neuters and things floating around in the air. I read all about it in the *Science Made Simple* column in the—"

"She's quite good at it and she seems to like it."

"Well, yes, I suppose. That's the important thing, to be happy at what you are doing no matter how silly it is. But I worry about the child—buried away from civilization, no one of her own sort to talk to, no theaters, no cultural life, no society—"

"Luna City has stereo transcriptions of every successful Broadway play." Jo's voice had a slight edge.

"Oh! Really? But it's not just going to the theater, my dear; it's the society of gentlefolk. Now when I was a girl, my parents—"

Allan butted in, loudly. "One o'clock. Have you had lunch, my dear?"

Mrs. Appleby sat up with a jerk. "Oh, heavenly days! I simply must fly. My dress designer-such a tyrant, but a genius; I must give you her address. It's been charming, my dears, and I can't thank you too much for telling me all about my poor darling. I do wish she would be sensible like you two; she knows I'm always ready to make a home for her-and her husband, for that matter. Now do come and see me, often. I love to talk to people who've been on the Moon—"

"In the Moon."

"It makes me feel closer to my darling. Good-by, then."

With the door locked behind her, Jo said, "Allan, I need a drink."

"I'll join you."

Jo cut her shopping short; it was too tiring. By four o'clock they were driving in Central Park, enjoying fall scenery to the lazy clopclop of horse's hoofs. The helicopters, the pigeons, the streak in the sky where the Antipodes rocket had passed, made a scene idyllic in beauty and serenity. Jo swallowed a lump in her throat and whispered, "Allan, isn't it beautiful?"

"Sure is. It's great to be back. Say, did you notice they've torn up 42nd Street again?"

Back in their room, Jo collapsed on her bed, while Allan took off his shoes. He sat, rubbing his feet, and remarked, "I'm going barefooted all evening. Golly, how my feet hurt!"

"So do mine. But we're going to your father's, my sweet."

"Huh? Oh, damn, I forgot. Jo, whatever possessed you? Call him up and postpone it. We're still half dead from the trip."

"But, Allan, he's invited a lot of your friends."

"Balls of fire and cold mush! I haven't any real friends in New York. Make it next week."

" 'Next week'… h'm'm… look, Allan, let's go out to the country right away." Jo's parents had left her a tiny place in Connecticut, a wornout farm.

"I thought you wanted a couple of weeks of plays and music first. Why the sudden change?"

"I'll show you." She went to the window, open since noon. "Look at that window sill." She drew their initials in the grime. "Allan, this city is *filthy*."

"You can't expe'ct ten million people not to kick up dust."

"But we're breathing that stuff into our lungs. What's happened to the smog-control laws?"

"That's not smog; that's normal city dirt."

"Luna City was never like this. I could wear a white outfit there till I got tired of it. One wouldn't last a day here."

"Manhattan doesn't have a roof—and precipitrons in every air duct."

"Well, it should have. I either freeze or suffocate."

"I thought you were anxious to feel rain on your face?"

"Don't be tiresome. I want it out in the clean, green country."

"Okay. I want to start my book anyhow. I'll call your real estate agent."

"*I* called him this morning. We can move in anytime; he started fixing up the place when he got my letter."

It was a standup supper at his father's home, though Jo sat down at once and let food be fetched. Allan wanted to sit down, but his status as guest of honor forced him to stay on his aching feet. His father buttonholed him at the buffet. "Here, son, try this goose liver. It ought to go well after a diet of green cheese."

Allan agreed that it was good.

"See here, son, you really ought to tell these folks about your trip."

"No speeches, Dad. Let 'em read the *National Geographic*."

"Nonsense!" He turned around. "Quiet, everybody! Allan is going to tell us how the Lunatics live."

Allan bit his lip. To be sure, the citizens of Luna City used the term to each other, but it did not sound the same here. "Well, really, I haven't anything to say. Go on and eat."

"You talk and we'll eat."

"Tell us about Looney City."

"Did you see the Man-in-theMoon?"

"Go on, Allan, what's it like to live on the Moon?"

"Not 'on the Moon'-in the Moon."

"What's the difference?"

"Why, none, I guess." He hesitated; there was really no way to explain why the Moon colonists emphasized that they lived under the surface of the satellite planet-but it irritated him the way "Frisco" irritates a San Franciscan. " 'In the Moon' is the way we say it. We don't spend much time on the surface, except for the staff at Richardson Observatory, and the prospectors, and so forth. The living quarters are underground, naturally."

"Why 'naturally'? Afraid of meteors?"

"No more than you are afraid of lightning. We go underground for insulation against heat and cold and as support for pressure sealing. Both are cheaper and easier underground. The soil is easy to work and the interstices act like vacuum in a thermos bottle. It is vacuum."

"But Mr. MacRae," a serious-looking lady inquired, "doesn't it hurt your ears to live under pressure?"

Allan fanned the air. "It's the same pressure here—fifteen pounds."

She looked puzzled, then said, "Yes, I suppose so, but it is a little hard to imagine. I think it would terrify me to be sealed up in a cave. Suppose you had a blowout?"

"Holding fifteen pounds pressure is no problem; engineers work in thousands of pounds per square inch. Anyhow, Luna City is compartmented like a ship. It's safe enough. The Dutch live behind dikes; down in Mississippi they have levees. Subways, ocean liners, aircraft—they're all artificial ways of living. Luna City seems strange just because it's far away."

She shivered. "It scares me."

A pretentious little man pushed his way forward. "Mr. MacRae-granted that it is nice for science and all that, why should taxpayers' money be wasted on a colony on the Moon?"

"You seem to have answered yourself," Allan told him slowly.

"Then how do you justify it? Tell me that, sir."

"It isn't necessary to justify it; the Lunar colony has paid for itself several times over. The Lunar corporations are all paying propositions. Artemis Mines, Spaceways, Spaceways Provisioning Corporation, Diana Recreations, Electronics Research Company, Lunar Biological Labs, not to mention all of Rutherford—look 'em up. I'll admit the Cosmic Research Project nicks the taxpayer a little, since it's a joint enterprise of the Harriman Foundation and the government."

"Then you admit it. It's the principle of the thing."

Allan's feet were hurting him very badly indeed. "What principle? Historically, research has always paid off." He turned his back and looked for some more goose liver.

A man touched him on the arm; Allan recognized an old schoolmate. "Allan, old boy, congratulations on the way you ticked off old Beetle. He's been needing it—I think he's some sort of a radical."

Allan grinned. "I shouldn't have lost my temper."

"A good job you did. Say, Allan, I'm going to take a couple of out-of-town buyers around to the hot spots tomorrow night. Come along."

"Thanks a lot, but we're going out in the country."

"Oh, you can't afford to miss this party. After all, you've been buried on the Moon; you owe yourself some relaxation after that deadly monotony."

Allan felt his cheeks getting warm. "Thanks just the same, but-ever seen the Earth View Room in Hotel Moon Haven?"

"No. Plan to take the trip when I've made my pile, of course."

"Well, there's a night club for you. Ever see a dancer leap thirty feet into the air and do slow rolls on the way down? Ever try a lunacy cocktail? Ever see a juggler work in low gravity?" Jo caught his eye across the room. "Er… excuse me, old man. My wife wants me." He turned away, then flung back over his shoulder, "Moon Haven itself isn't just a spaceman's dive, by the way-it's recommended by the Duncan Hines Association."

Jo was very pale. "Darling, you've got to get me out of here. I'm suffocating. I'm really ill.‘’

"Suits." They made their excuses.

Jo woke up with a stuffy cold, so they took a cab directly to her country place. There were lowlying clouds under them, but the weather was fine above. The sunshine and the drowsy beat of the rotors regained for them the joy of homecoming.

Allan broke the lazy revery. “Here’s a funny thing, Jo. You couldn’t hire me to go back to the Moon—but last night I found myself defending the Loonies every time I opened my mouth.”

She nodded. “I know. Honest to Heaven, Allan, some people act as if the

Earth were flat. Some of them don’t really believe in anything, and some of them are so matter-of-fact that you know they don’t really understand— and I don’t know which sort annoys me the more.“

It was foggy when they landed, but the house was clean, the agent had laid a fire and had stocked the refrigerator. They were sipping hot punch and baking the weariness out of their bones within ten minutes after the copter grounded. “This,” said Allan, stretching, “is all right. It really is great to be back.”

“Uh-huh. All except the highway.” A new express-and-freight superhighway now ran not fifty yards from the house. They could hear the big diesels growling as they struck the grade.

“Forget the highway. Turn your back and you stare straight into the woods.”

They regained their ground-legs well enough to enjoy short walks in the woods; they were favored with a long, warm Indian summer; the cleaning woman was efficient and taciturn. Allan worked on the results of three years research preparatory to starting his book. Jo helped him with the statistical work, got reacquainted with the delights of cooking, dreamed, and rested.

It was the day of the first frost that the toilet stopped up.

The village plumber was persuaded to show up the next day. Meanwhile they resorted to a homely little building, left over from another era and still standing out beyond the wood pile. It was spider-infested and entirely too well ventilated.

The plumber was not encouraging. “New septic tank. New sile pipe. Pay you to get new fixtures at the same time. Fifteen, sixteen hundred dollars. Have to do some calculating.”

“That’s all right,” Allan told him. “Can you start today?”

The man laughed. “I can see plainly, Mister, that you don’t know what it is to get materials and labor these days. Next spring—soon as the frost is out of the ground.”

“That’s impossible, man. Never mind the cost. Get it done.”

The native shrugged. “Sorry not to oblige you. Good day.”

When he left, Jo exploded. “Allan, he doesn’t want to help us.”

“Well—maybe. I’ll try to get someone from Norwalk, or even from the City. You can’t trudge through the snow out to that Iron Maiden all winter.”

"I hope not."

"You must not. You've already had one cold." He stared morosely at the fire. "I suppose I brought it on by my misplaced sense of humor."

"How?"

"Well, you know how we've been subjected to steady kidding ever since it got noised around that we were colonials. I haven't minded much, but some of it rankled. You remember I went into the village by myself last Saturday?"

"Yes. What happened?"

"They started in on me in the barbershop. I let it ride at first, then the worm turned. I started talking about the Moon, sheer doubletalk—corny old stuff like the vacuum worms and the petrified air. It was some time before they realized I was ribbing them—and when they did, nobody laughed. Our friend the rustic sanitary engineer was one of the group. I'm sorry."

"Don't be." She kissed him. "If I have to tramp through the snow, it will cheer me that you gave them back some of their sass."

The plumber from Norwalk was more helpful, but rain, and then sleet, slowed down the work. They both caught colds. On the ninth miserable day Allan was working at his desk when he heard Jo come in the back door, returning from a shopping trip. He turned back to his work, then presently became aware that she had not come in to say "hello." He went to investigate.

He found her collapsed on a kitchen chair, crying quietly. "Darling," he said urgently, "honey baby, whatever is the matter?"

She looked up. "I didn't bead to led you doe."

"Blow your nose. Then wipe your eyes. What do you mean, 'you didn't mean to let me know'. What happened?"

She let it out, punctuated with her handkerchief. First, the grocer had said he had no cleansing tissues; then, when she pointed to them, had stated that they were "sold". Finally, he had mentioned "bringing outside labor into town and taking the bread out of the mouths of honest folk".

Jo had blown up and had rehashed the incident of Allan and the barbershop wits. The grocer had simply grown more stiff. " 'Lady,' he said to me, 'I don't know whether you and your husband have been to the Moon or not, and I don't care. I don't take much stock in such things. In any case, I don't need your trade.' Oh, Allan, I'm so unhappy."

"Not as unhappy as he's going to be! Where's my hat?"

"Allan! You're not leaving this house. I won't have you fighting."

"I won't have him bullying you."

"He won't again. Oh my dear, I've tried so hard, but I can't stay here any longer. It's not just the villagers; it's the cold and the cockroaches and always having a ninny nose. I'm tired out and my feet hurt all the time." She started to cry again.

"There, there! We'll leave, honey. We'll go to Florida. I'll finish my book while you lie in the sun."

"Oh, I don't want to go to Florida. I *want to go homel"*

"Huh? You mean-back to Luna City?"

"Yes. Oh, dearest, I know you don't want to, but I can't stand it any longer. It's not just the dirt and the cold and the comic-strip plumbing—it's not being understood. It wasn't any better in New York. These groundhogs don't know *anything*."

He grinned at her. "Keep sending, kid; I'm on your frequency."

"Allan!"

He nodded. "I found out I was a Loony at heart quite a while ago—but I was afraid to tell you. My feet hurt, too—and I'm damn sick of being treated like a freak. I've tried to be tolerant, but I can't stand groundhogs. I miss the folks in dear old Luna. They're civilized."

She nodded. "I guess it's prejudice, but I feel the same way."

"It's *not* prejudice. Let's be honest. What does it take to get to Luna City?"

"A ticket."

"Smarty pants. I don't mean as a tourist; I mean to get a job there. You know the answer: Intelligence. It costs a lot to send a man to the Moon and more to keep him there. To pay off, he has to be worth a lot. High I.Q., good compatibility index, superior education—everything that makes a person pleasant and easy and interesting to have around. We've been spoiled; the ordinary human cussedness that groundhogs take for granted, we now find intolerable, because Loonies *are* different. The fact that Luna City is the most comfortable environment man ever built for himself is beside the point—it's the people who count. Let's go home."

He went to the telephone-an old-fashioned, speech-only rig—and called the Foundation's New York office. While he was waiting, truncheon-like "receiver" to his ear, she said, "Suppose they won't have us?"

"That's what worries me." They knew that the Lunar companies rarely rehired personnel who had once quit; the physical examination was reputed to be much harder the second time.

"Hello… hello. Foundation? May I speak to the recruiting office?… hello—I *can't* turn on my view plate; this instrument is a hangover from the dark ages. This is Allan MacRae, physical chemist, contract number 1340729. And my wife, Josephine MacRae, 1340730. We want to sign up again. I said we wanted to sign up again… okay, I'll wait."

"Pray, darling, pray!"

"I'm praying— How's that! My appointment's still vacant? Fine, fine! How about my wife?" He listened with a worried look; Jo held her breath. Then he cupped the speaker. "Hey, Jo—your job's filled. They want to know if you'll take an interim job as a junior accountant?"

"Tell 'em 'yes!'"

"That'll be fine. When can we take our exams? That's fine, thanks. Good-by." He hung up and turned to his wife. "Physical and psycho as soon as we like; professional exams waived."

"What are we waiting for?"

"Nothing." He dialed the Norwalk Copter Service. "Can you run us into Manhattan? Well, good grief, don't you have radar? All right, all right, g'-by!" He snorted. "Cabs all grounded by the weather. I'll call New York and try to get a modern cab."

Ninety minutes later they landed on top of Harriman Tower.

The psychologist was very cordial. "Might as well get this over before you have your chests thumped. Sit down. Tell me about yourselves." He drew them out, nodding from time to time. "I see. Did you ever get the plumbing repaired?"

"Well, it was being fixed."

"I can sympathize with your foot trouble, Mrs. MacRae; my arches always bother me here. That's your real reason, isn't it?"

"Oh, no!"

"Now, Mrs. MacRae-"

"Really it's not-truly. I want people to talk to who know what I mean. All that's really wrong with me is that I'm homesick for my own sort. I want to go home—and I've got to have this job to get there. I'll steady down, I know I will."

The doctor looked grave. "How about you, Mr. MacRae?"

"Well—it's about the same story. I've been trying to write a book, but I can't work. I'm homesick. I want to go back."

Feldman suddenly smiled. "It won't be too difficult."

"You mean we're in? If we pass the physical?"

"Never mind the physical—your discharge examinations are recent enough. Of course you'll have to go out to Arizona for reconditioning and quarantine. You're probably wondering why it seems so easy when it is supposed to be so hard. It's really simple: We don't want people lured back by the high pay. We do want people who will be happy and as permanent as possible— in short, we want people who think of Luna City as 'home.' Now that you're 'Moonstruck,' we want you back." He stood up and shoved out his hand.

Back in the Commodore that night, Jo was struck by a thought. "Allan-do you suppose we could get our own apartment back?"

“Why, I don’t know. We could send old lady Stone a radio.”

“Call her up instead, Allan. We can afford it.”

“All right! I will!”

It took about ten minutes to get the circuit through. Miss Stone’s face looked a trifle less grim when she recognized them.

“Miss Stone, we’re coming home!”

There was flie usual three-second lag, then—“Yes, I know. It came over the tape about twenty minutes ago.”

“Oh. Say, Miss Stone, is our old apartment vacant?” They waited.

“I’ve held it; I knew you’d come back—after a bit. Welcome home, Loonies.”

When the screen cleared, Jo said, “What did she mean, Allan?”

“Looks like we’re in, kid. Members of the Lodge.”

“I guess so—oh, Allan, look!” She had stepped to the window; scudding clouds had just uncovered the Moon. It was three days old and *Mare Fecunditatis—the* roll of hair at the back of the Lady-in-theMoon’s head—was cleared by the Sunrise line. Near the righthand edge of that great, dark “sea” was a tiny spot, visible only to their inner eyes-Luna City.

The crescent hung, serene and silvery, over the tall buildings. “Darling, isn’t it beautiful?”

“Certainly is. It’ll be great to be back. Don’t get your nose all runny.”

The Green Hills of Earth

Chapter 1

This is the story of Rhysling, the Blind Singer of the Spaceways—but not the official version. You sang his words in school:

"*I pray for one last landing On the globe that gave me birth; Let me rest* my *eyes on the fleecy skies And the cool, green hills of Earth*."

Or perhaps you sang in French, or German. Or it might have been Esperanto, while Terra's rainbow banner rippled over your head.

The language does not matter—it was certainly an *Earth* tongue. No one has ever translated "*Green Hills"* into the lisping Venerian speech; no Martian ever croaked and whispered it in the dry corridors. This is ours. We of Earth have exported everything from Hollywood crawlies to synthetic radioactives, but this belongs solely to Terra, and to her sons and daughters wherever they may be.

We have all heard many stories of Rhysling. You may even be one of the many who have sought degrees, or acclaim, by scholarly evaluations of his published works—*Songs of the Spaceways, The Grand Canal, and other Poems, High and Far*, and "UP *SHIP*!"

Nevertheless, although you have sung his songs and read his verses, in school and out your whole life, it is at least an even money bet—unless you are a spaceman yourself—that you have never even heard of most of Rhysling's unpublished songs, such items as *Since the Pusher Met My Cousin, That RedHeaded Venusburg Gal, Keep Your Pants On, Skipper*, or A *Space Suit Built for Two*.

Nor can we quote them in a family magazine.

Rhysling's reputation was protected by a careful literary executor and by the happy chance that he was never interviewed. *Songs of the Spaceways* appeared the week he died; when it became a best seller, the publicity stories about him were pieced together from what people remembered about him plus the highly colored handouts from his publishers.

The resulting traditional picture of Rhysling is about as authentic as George Washington's hatchet or King Alfred's cakes.

In truth you would not have wanted him in your parlor; he was not socially acceptable. He had a permanent case of sun itch, which he scratched continually, adding nothing to his negligible beauty.

Van der Voort's portrait of him for the Harriman Centennial edition of his works shows a figure of high tragedy, a solemn mouth, sightless eyes concealed by black silk bandage. He was never solemn! His mouth was always open, singing, grinning, drinking, or eating. The bandage was any rag, usually dirty. After he lost his sight he became less and less neat about his person.

"Noisy" Rhysling was a jetman, second class, with eyes as good as yours, when he signed on for a loop trip to the Jovian asteroids in the R.S. *Goshawk*. The crew signed releases for everything in those days; a Lloyd's associate would have laughed in your face at the notion of insuring a spaceman. The Space Precautionary Act had never been heard of, and the Company was responsible only for wages, if and when. Half the ships that went further than Luna City never came back. Spacemen did not care; by preference they signed for snares, and any one of them would have bet you that he could jump from the 200th floor of Harriman Tower and ground safely, if you offered him three to two and allowed him rubber heels for the landing.

Jetmen were the most carefree of the lot and the meanest. Compared with them the masters, the radarmen, and the astrogators (there were no supers nor stewards in those days) were gentle vegetarians. Jetmen knew too much. The others trusted the skill of the captain to get them down safely; jetmen knew that skill was useless against the blind and fitful devils chained inside their rocket motors.

The *Goshawk* was the first of Harriman's ships to be converted from chemical fuel to atomic power-piles—or rather the first that did not blow up. Rhysling knew her well; she was an old tub that had plied the Luna City run, Supra-New York space station to Leyport and back, before she was converted for deep space. He had worked the Luna run in her and had been along on the first deep space trip, Drywater on Mars—and back, to everyone's surprise.

He should have made chief engineer by the time he signed for the Jovian loop trip, but, after the Drywater pioneer trip, he had been fired, blacklisted, and grounded at Luna City for having spent his time writing a chorus and several verses at a time when he should have been watching his gauges. The song was the infamous *The Skipfier is a Father to his Crew*, with the uproariously unprintable final couplet.

The blacklist did not bother him. He won an accordion from a Chinese barkeep in Luna City by cheating at one-thumb and thereafter kept going by singing to the miners for drinks and tips until the rapid attrition in spacemen caused the Company agent there to give him another chance. He kept his nose clean on the Luna run for a year or two, got back into deep space, helped give Venusburg its original ripe reputation, strolled the banks of the Grand Canal when a second colony was established at the ancient Martian capital, and froze his toes and ears on the second trip to Titan.

Things moved fast in those days. Once the power-pile drive was accepted the number of ships that put out from the Luna-Terra system was limited only by the availability of crews. Jetmen were scarce; the shielding was cut to a minimum to save weight and few married men cared to risk possible exposure to radioactivity. Rhysling did not want to be a father, so jobs were always open to him during the golden days of the claiming boom. He crossed and recrossed the system, singing the doggerel that boiled up in his head and chording it out on his accordion.

The master of the *Goshawk* knew him; Captain Hicks had been astrogator on Rhysling's first trip in her. "Welcome home, Noisy," Hicks had greeted him. "Are you sober, or shall I sign the book for you?"

"You can't get drunk on the bug juice they sell here, Skipper." He signed and went below, lugging his accordion.

Ten minutes later he was back. "Captain," he stated darkly, "that number two jet ain't fit. The cadmium dampers are warped."

"Why tell me? Tell the Chief."

"I did, but he says they will do. He's wrong."

The captain gestured at the book. "Scratch out your name and scram. We raise ship in thirty minutes."

Rhysling looked at him, shrugged, and went below again.

It is a long climb to the Jovian planetoids; a Hawk-class clunker had to blast,for three watches before going into free flight. Rhysling had the second watch. Damping was done by hand then, with a multiplying vernier and a danger gauge. When the gauge showed red, he tried to correct it—no luck.

Jetmen don't wait; that's why they are jetmen. He slapped the emergency discover and fished at the hot stuff with the tongs. The lights went out, he went right ahead. A jetman has to know his power room the way your tongue knows the inside of your mouth.

He sneaked a quick look over the top of the lead baffle when the lights went out. The blue radioactive glow did not help him any; he jerked his head back and went on fishing by touch.

When he was done he called over the tube, "Number two jet out. And for crissake get me some light down here!"

There was light—the emergency circuit—but not for him. The blue radioactive glow was the last thing his optic nerve ever responded to.

Chapter 2

"As Time and Space come bending back to shape this star-specked scene,
The tranquil tears of tragic joy still spread their silver sheen;
Along the Grand Canal still soar the fragile
Towers of Truth;
Their fairy grace defends this place of
Beauty, calm and couth.
"Bone-tired the race that raised the Towers,
forgotten are their lores;
Long gone the gods who shed the tears that lap these crystal shores.
Slow beats the timeworn heart of
Mars beneath this icy sky;
The thin air whispers voicelessly that all who live must die—
"Yet still the lacy Spires of
Truth sing Beauty's madrigal
And she herself will ever dwell along the Grand Canal!"

—from *The Grand Canal*, by permission of Lux Transcriptions, Ltd., London and Luna City

On the swing back they set Rhysling down on Mars at Drywater; the boys passed the hat and the skipper kicked in a half month's pay. That was all—*finish*—just another space bum who had not had the good fortune to finish it off when his luck ran out. He holed up with the prospectors and archeologists at How-Far? for a month or so, and could probably have stayed forever in exchange for his songs and his accordion playing. But spacemen die if they stay in one place; he hooked a crawler over to Drywater again and thence to Marsopolis.

The capital was well into its boom; the processing plants lined the Grand Canal on both sides and roiled the ancient waters with the filth of the runoff. This was before the Tri-Planet Treaty forbade disturbing cultural relics for commerce; half the slender, fairylike towers had been torn down, and others were disfigured to adapt them as pressurized buildings for Earthmen.

Now Rhysling had never seen any of these changes and no one described them to him; when he "saw" Marsopolis again, he visualized it as it had been, before it was rationalized for trade. His memory was good. He stood on the riparian esplanade where the ancient great of Mars had taken their ease and saw its beauty spreading out before his blinded eyes—ice blue plain of water unmoved by tide, untouched by breeze, and reflecting serenely the sharp, bright stars of the Martian sky, and beyond the water the lacy buttresses and flying towers of an architecture too delicate for our rumbling, heavy planet.

The result was *Grand Canal.*

The subtle change in his orientation which enabled him to see beauty at Marsopolis where beauty was not now began to affect his whole life. All women became beautiful to him. He knew them by their voices and fitted their appearances to the sounds. It is a mean spirit indeed who will speak to a blind man other than in gentle friendliness; scolds who had given their husbands no peace sweetened their voices to Rhysling.

It populated his world with beautiful women and gracious men. *Dark Star Passing, Berenice's Hair, Death Song of a Wood's Colt*, and his other love songs of the wanderers, the womenless men of space, were the direct result of the fact that his conceptions were unsullied by tawdry truths. It mellowed his approach, changed his doggerel to verse, and sometimes even to poetry.

He had plenty of time to think now, time to get all the lovely words just so, and to worry a verse until it sang true in his head. The monotonous beat of *Jet Song*—

When the field is clear, the reports all seen,
When the lock sighs shut, when the lights wink green,
When the checkoff's done, when it's time to pray,
When the Captain nods, when she blasts away—
Hear the jets!
Hear them snarl at your back
When you're stretched on the rack;
Feel your ribs clamp your chest,
Feel your neck grind its rest.
Feel the pain in your ship,
Feel her strain in their grip.
Feel her rise! Feel her drivel
Straining steel, come alive,
On her jetsl

—came to him not while he himself was a jetman but later while he was hitchhiking from Mars to Venus and sitting out a watch with an old shipmate, i

At Venusburg he sang his new songs and some of the old, in the bars. Someone would start a hat around for him; it would come back with a minstrel's usual take doubled or tripled in recognition of the gallant spirit behind the bandaged eyes.

It was an easy life. Any space port was his home and any ship his private carriage. No skipper cared to refuse to lift the extra mass of blind Rhysling and his squeeze box; he shuttled from Venusburg to Leyport to Drywater to New Shanghai, or back again, as the whim took him.

He never went closer to Earth than Supra-New York Space Station. Even when signing the contract for *Songs of the Spaceways* he made his mark in a cabin-class liner somewhere between Luna City and Ganymede. Horowitz, the original publisher, was aboard for a second honeymoon and heard Rhysling sing at a ship's party. Horowitz knew a good thing for the publishing trade when he heard it; the entire contents of *Songs* were sung directly into the tape in the communications room of that ship before he let Rhysling out of his sight. The next three volumes were squeezed out of Rhysling at Venusburg, where Horowitz had sent an agent to keep him liquored up until he had sung all he could remember.

UP *SHIPl* is not certainly authentic Rhysling throughout. Much of it is Rhysling's, no doubt, and *Jet Song* is unquestionably his, but most of the verses were collected after his death from people who had known him during his wanderings.

The Green Hills of Earth grew through twenty years. The earliest form we know about was composed before Rhysling was blinded, during a drinking bout with some of the indentured men on Venus. The verses were concerned mostly with the things the labor clients intended to do back on Earth if and when they ever managed to pay their bounties and thereby be allowed to go home. Some of the stanzas were vulgar, some were not, but the chorus was recognizably that of *Green Hills*.

We know exactly where the final form of *Green Hills* came from, and when.

There was a ship in at Venus Ellis Isle which was scheduled for the direct jump from there to Great Lakes, Illinois. She was the old *Falcon*, youngest of the Hawk class and the first ship to apply the Harriman Trust's new policy of extra-fare express service between Earth cities and any colony with scheduled stops.

Rhysling decided to ride her back to Earth. Perhaps his own song had gotten under his skin—or perhaps he just hankered to see his native Ozarks one more time.

The Company no longer permitted deadheads; Rhysling knew this but it never occurred to him that the ruling might apply to him. He was getting old, for a spaceman, and just a little matter of fact about his privileges. Not senile—he simply knew that he-was one of the landmarks in space, along with Halley's Comet, the Rings, and Brewster's Ridge. He walked in the crew's port, went below, and made himself at home in the first empty acceleration couch.

The Captain found him there while making a last minute tour of his ship. "What are you doing here?" he demanded.

"Dragging it back to Earth, Captain." Rhysling needed no eyes to see a skipper's four stripes.

"You can't drag in this ship; you know the rules. Shake a leg and get out of here. We raise ship at once." The Captain was young; he had come up after Rhysling's active time, but Rhysling knew the type —five years at Harriman Hall with only cadet practice trips instead of solid, deep space experience. The two men did not touch in background nor spirit; space was changing.

"Now, Captain, you wouldn't begrudge an old man a trip home."

The officer hesitated-several of the crew had stopped to listen. "I can't do it. 'Space Precautionary Act, Clause Six: No one shall enter space save as a licensed member of a crew of a chartered vessel, or as a paying passenger of such a vessel under such regulations as may be issued pursuant to this act.' Up you get and out you go."

Rhysling lolled back, his hands under his head. "If I've got to go, I'm damned if I'll walk. Carry me."

The Captain bit his lip and said, "Master-at-Arms! Have this man removed."

The ship's policeman fixed his eyes on the overhead struts. "Can't rightly do it, Captain. I've sprained my shoulder." The other crew members, present a moment before, had faded into the bulkhead paint.

"Well, get a working partyl"

"Aye, aye, sir." He, too, went away.

Rhysling spoke again. "Now look, Skipper—let's not have any hard feelings about this. You've got an out to carry me if you want to—the 'Distressed Spaceman' clause."

"'Distressed Spaceman', my eye! You're no distressed spaceman; you're a space-lawyer. I know who you are; you've been bumming around the system for years. Well, you won't do it in my ship. That clause was intended to succor men who had missed their ships, not to let a man drag free all over space."

"Well, now, Captain, can you properly say I haven't missed my ship? I've never been back home since my last trip as a signed-on crew member. The law says I can have a trip back."

"But that was years ago. You've used up your chance."

"Have I now? The clause doesn't say a word about how soon a man has to take his trip back; it just says he's got it coming to him. Go look it up, Skipper. If I'm wrong, I'll not only walk out on my two legs, I'll beg your humble pardon in front of your crew. Go on—look it up. Be a sport."

Rhysling could feel the man's glare, but he turned and stomped out of the compartment. Rhysling knew that he had used his blindness to place the Captain in an impossible position, but this did not embarrass Rhysling —he rather enjoyed it.

Ten minutes later the siren sounded, he heard the orders on the bull horn for UpStations. When the soft sighing of the locks and the slight pressure change in his ears let him know that takeoff was imminent he got up and shuffled down to the power room, as he wanted to be near the jets when they blasted off. He needed no one to guide him in any ship of the Hawk class.

Trouble started during the first watch. Rhysling had been lounging in the inspector's chair, fiddling with the keys of his accordion and trying out a new version of *Green Hills*.

"Let me breathe unrationed air again
Where there's no lack nor dearth"

And "something, something, something 'Earth' "—it would not come out right. He tried again.

"Let the sweet fresh breezes heal me
As they rove around the girth
Of our lovely mother planet,
Of the cool green hills of Earth."

That was better, he thought. "How do you like that, Archie?" he asked over the muted roar.

"Pretty good. Give out with the whole thing." Archie Macdougal, Chief Jetman, was an old friend, both spaceside and in bars; he had been an apprentice under Rhysling many years and millions of miles back.

Rhysling obliged, then said, "You youngsters have got it soft. Everything automatic. When I was twisting her tail you had to stay awake."

"You still have to stay awake." They fell to talking shop and Macdougal showed him the direct response damping rig which had replaced the manual vernier control which Rhysling had used. Rhysling felt out the controls and asked questions until he was familiar with the new installation. It was his conceit that he was still a jetman and that his present occupation as a troubadour was simply an expedient during one of the fusses with the company that any man could get into.

"I see you still have the old hand damping plates installed," he remarked, his agile fingers flitting over the equipment.

"All except the links. I unshipped them because they obscure the dials."

"You ought to have them shipped. You might need them."

"Oh, I don't know. I think—" Rhysling never did find out what Macdougal thought for it was at that moment the trouble tore loose. Macdougal caught it square, a blast of radioactivity that burned him down where he stood.

Rhysling sensed what had happened. Automatic reflexes of old habit came out. He slapped the discover-and rang the alarm to the control room simultaneously. Then he remembered the unshipped links. He had to grope until he found them, while trying to keep as low as he could to get maximum benefit from the baffles. Nothing but the links bothered him as to location. The place was as light to him as any place could be; he knew every spot, every control, the way he knew the keys of his accordion.

"Power room! Power room! What's the alarm?"

"Stay out!" Rhysling shouted. "The place is 'hot.'" He could feel it on his face and in his bones, like desert sunshine.

The links he got into place, after cursing someone, anyone, for having failed to rack the wrench he needed. Then he commenced trying to reduce the trouble by hand. It was a long job and ticklish. Presently he decided that the jet would have to be spilled, pile and all.

First he reported. "Control!"

"Control aye aye!"

"Spilling jet three-emergency."

"Is this Macdougal?"

"Macdougal is dead. This is Rhysling, on watch. Stand by to record."

There was no answer; dumbfounded the Skipper may have been, but he could not interfere in a power room emergency. He had the ship to consider, and the passengers and crew. The doors had to stay closed.

The Captain must have been still more surprised at what Rhysling sent for record. It was:

"We rot in the molds of Venus,
We retch at her tainted breath.
Foul are her flooded jungles,
Crawling with unclean death."

Rhysling went on cataloguing the Solar System as he worked, "—harsh bright soil of Luna—", "—Saturn's rainbow rings—", "—the frozen night of Titan—", all the while opening and spilling the jet and fishing it clean. He finished with an alternate chorus—

"We've tried each spinning space mote
And reckoned its true worth:
Take us back again to the homes of men
On the cool, green hills of Earth."

—then, almost absentmindedly remembered to tack on his revised first verse:

"*The arching sky is calling*
Spacemen back to their trade.
All hands! Stand by! Free falling!
And the lights below us fade.

Out ride the sons of Terra,
Far drives the thundering jet,
Up leaps the race of Earthmen,
Out, far, and onward yet—"

The ship was safe now and ready to limp home shy one jet. As for himself, Rhysling was not so sure. That "sunburn" seemed sharp, he thought. He was unable to see the bright, rosy fog in which he worked but he knew it was there. He went on with the business of flushing the air out through the outer valve, repeating it several times to permit the level of radiation to drop to something a man might stand under suitable armor. While he did this he sent one more chorus, the last bit of authentic Rhysling that ever could be:

"We *pray for one last landing*
On the globe that gave us birth;
Let us rest our eyes on fleecy skies
And the cool, green hills of Earth."

Columbus Was a Dope

"I do like to wet down a sale," the fat man said happily, raising his voice above the sighing of the airconditioner. "Drink up, Professor, I'm two ahead of you."

He glanced up from their table as the elevator door opposite them opened. A man stepped out into the cool dark of the bar and stood blinking, as if he had just come from the desert glare outside.

"Hey, Fred—Fred Nolan," the fat man called out. "Come over!" He turned to his guest. "Man I met on the hop from New York. Siddown, Fred. Shake hands with Professor Appleby, Chief Engineer of the. Starship *Pegasus—or* will be when she's built. I just sold the Professor an order of bum steel for his crate. Have a drink on it."

"Glad to, Mr. Barnes," Nolan agreed. "I've met Dr. Appleby. On business—Climax Instrument Company."

"Huh?"

"Climax is supplying us with precision equipment," offered Appleby.

Barnes looked surprised, then grinned. "That's one on me. I took Fred for a government man, or one of your scientific johnnies. What'll it be, Fred? Old-fashioned? The same, Professor?"

"Right. But please don't call *me. 'Professor.' I'm not one and it ages me. I'm still young."*

"I'll say you are, uh—Doc, Pete! Two old-fashioneds and another double Manhattan! I guess I expected a comic book scientist, with a long white beard. But now that I've met you, I can't figure out one thing."

"Which is?"

"Well, at your age you bury yourself in this, godforsaken place—"

"We couldn't build the *Pegasus* on Long Island," Appleby pointed out, "and this is the ideal spot for the takeoff."

"Yeah, sure, but that's not it. It's—well, mind you, I sell steel. You want special alloys for a starship; I sell it to you. But just the same, now that business is out of the way, why do you want to do it? Why try to go to Proxima Centauri, or any other star?"

Appleby looked amused. "It can't be explained. Why do men try to climb Mount Everest? What took Perry to the North Pole? Why did Columbus get the Queen to hock her jewels? Nobody has ever been to Proxima Centauri—so we're going."

Barnes turned to Nolan. "Do you get it, Fred?"

Nolan shrugged. "I sell precision instruments. Some people raise chrysanthemums; some build starships. I sell instruments."

Barnes' friendly face looked puzzled. "Well—" The bartender put down their drinks. "Say, Pete, tell me something. Would you go along on the *Pegasus* expedition if you could?"

"Nope."

"Why not?"

"I like it here."

Dr. Appleby nodded. "There's your answer, Barnes, in reverse. Some have the Columbus spirit and some haven't."

"It's all very well to talk about Columbus," Barnes persisted, "but he expected to come back. You guys don't expect to. Sixty years—you told me it would take sixty years Why, you may not even live to get there."

"No, but our children will. And our grandchildren will come back."

—"But— Say, you're not *married?"*

"Certainly, I am. Family men only oh the expedition. It's a two-to-three generation job. You know that." He hauled out a wallet. "There's Mrs. Appleby with Diane. Diane is three and a half."

"She's a pretty baby," Barnes said soberly and passed it on to Nolan, who smiled at it and handed it back to Appleby. Barnes went on. "What happens to her?"

"She goes with us, naturally. You wouldn't want her put in an orphanage, would you?"

"No, but—" Barnes tossed off the rest of his drink, "I don't get it," he admitted. "Who'll have another drink?"

"Not for me, thanks," Appleby declined, finishing his more slowly and standing up. "I'm due home. Family man, you know." He smiled.

Barnes did not try to stop him. He said goodnight and watched Appleby leave.

"My round," said Nolan. "The same?"

"Huh? Yeah, sure." Barnes stood up. "Let's get up to the bar, Fred, where we can drink properly. I need about six."

"Okay," Nolan agreed, standing up. "What's the trouble?"

"Trouble? Did you see that picture?"

"Well?"

"Well, how do *you* feel about it? I'm a salesman too, Fred. I sell steel. It don't matter what the customer want to use it for; I sell it to him. I'd sell a man a rope to hang himself. But I do love kids. I can't stand to think of that cute little kid going along on that—that crazy expedition!

"Why not? She's better off with her parents. She'll get as used to steel decks as most kids are to sidewalks." "But look, Fred. You don't have any silly idea they'll make it, do you?"

"They might."

"Well, they won't. They don't stand a chance. I know. I talked it over with our technical staff before I left the home office. Nine chances out of ten they'll burn up on the takeoff. That's the best that can happen to them. If they get out of the solar system, which ain't likely, they'll still never make it. They'll never reach the stars."

Pete put another drink down in front of Barnes. He drained it and said: "Set up another one, Pete. They can't. It's a theoretical impossibility. They'll freeze—or they'll roast—or they'll starve. But they'll never get there."

"Maybe so."

"No maybe about it. They're *crazy*. Hurry up with that drink, Pete. Have one yourself."

"Coming up. Don't mind if I do, thanks." Pete mixed the cocktail, drew a glass of beer, and joined them.

"Pete, here, is a wise man," Barnes said confidentially. "You don't catch him monkeying around with any trips to the stars. Columbus—Pfui! Columbus was a dope. He shoulda stood in bed."

The bartender shook his head. "You got me wrong, Mr. Barnes. If it wasn't for men like Columbus, we wouldn't be here today—now, would we? I'm just not the explorer type. But I'm a believer. I got nothing against the *Pegasus* expedition."

"You don't approve of them taking kids on it, do you?"

"Well . . . there were kids on the *Mayflower,* so they tell me."'

"It's not the same thing." Barnes looked at Nolan, then back to the bartender. "If the Lord had intended us to go to the stars, he would have equipped us with jet propulsion. Fix me another drink, Pete."

"You've had about enough for a while, Mr. Barnes."

The troubled fat man seemed about to argue, thought better of it. "I'm going up to the Sky Room and find somebody that'll dance with me," he announced. "G'night." He swayed softly toward the elevator.

Nolan watched him leave. “Poor old Barnes.” He shrugged. “I guess you and I are hard-hearted, Pete.”

“No. I believe in progress, that’s all. I remember my old man wanted a law passed about flying machines, keep ‘em from breaking their fool necks. Claimed nobody ever could fly, and the government should put a stop to it. He was wrong. I’m not the adventurous type myself but I’ve seen enough people to know they’ll try anything once, and that’s how progress is made.”

“You don’t look old enough to remember when men couldn’t fly.”

“I’ve been around a long time. Ten years in this one spot.”

“Ten years, eh? Don’t you ever get a hankering for a job that’ll let you breathe a little fresh air?”

“Nope. I didn’t get any fresh air when I served drinks on Forty-second Street and I don’t miss it now. I like it here. Always something new going on here, first the atom laboratories and then the big observatory and now the Starship. But that’s not the real reason. I like it here. It’s my home.

Watch this.”

He picked up a brandy inhaler, a great fragile crystal globe, spun it and threw it, straight up, toward the ceiling. It rose slowly and gracefully, paused for a long reluctant wait at the top of its rise, then settled slowly, slowly, like a diver in a slow-motion movie. Pete watched it float past his nose, then reached out with thumb and forefinger, nipped it easily by the stem, and returned it to the rack.

“See that,” he said. “One-sixth gravity. When I was tending bar on earth my bunions gave me the dickens all the time. Here I weigh only thirty-five pounds. I like it on the Moon.”

JERRY WAS A MAN

DONT BLAME THE MARTIANS. The human race would have developed plasto-biology in any case.

Look at the older registered Kennel Club breeds-glandular giants like the St. Bernard and the Great Dane, silly little atrocities" like the Chihuahua and the Pekingese. Consider fancy goldfish.

The damage was done when Dr. Morgan produced new breeds of fruit flies by kicking around their chromosomes with X-ray. After that, the third generation of the Hiroshima survivors did not teach us anything new; those luckless monstrosities merely publicized standard genetic knowledge.

Mr. and Mrs. Bronson van Vogel did not have social reform in mind when they went to the Phoenix Breeding Ranch; Mr. van Vogel simply wanted to buy a Pegasus. He had mentioned it at breakfast. "Are you tied up this morning, my dear?"

"Not especially. Why?"

"I'd like to run out to Arizona and order a Pegasus designed."

"A Pegasus? A flying horse? Why, my sweet?"

He grinned. "Just for fun. Pudgy Dodge was around the Club yesterday with a six-legged dachshund-must have been over a yard long. It was clever, but he swanked so much I want to give him something to stare at. Imagine, Martha-me landing on the Club 'copter platform on a winged horse. That'll snap his eyes back!"

She turned her eyes from the Jersey shore to look indulgently at her husband. She was not fooled; this would be expensive. But Brownie was such a dear! "When do we start?"

They landed two hours earlier than they started. The airsign read, in letters fifty feet high:

PHOENIX BREEDING RANCH Controlled Genetics-licensed Labor Contractors

" 'Labor Contractors'?" she read, "I thought this place was used just to burbank new animals?"

"They both design and produce," he explained importantly. "They distribute through the mother corporation 'Workers.' You ought to know; you own a big chunk of Workers common."

"You mean I own a bunch of apes? Really?"

"Perhaps I didn't tell you. Haskell and I-" He leaned forward and informed the field that he would land manually; he was a bit proud of his piloting.

He switched off the robot and added, briefly as his attention was taken up by heading the ship down, "Haskell and I have been plowing your General Atomics dividends back into Workers, Inc. Good diversification-still plenty of dirty work for the anthropoids to do." He slapped the keys; the scream of the nose jets stopped conversation.

Bronson had called the manager in flight; they were met-not with red carpet, canopy, and footmen, though the manager strove to give that impression. "Mr. van Vogel? And Mrs. van Vogel! We are honored indeed!" He ushered them into a tiny, luxurious unicar; they jeeped off the field, up a ramp, and into the lobby of the administration building! The manager, Mr. Blakesly, did not relax until he had seated them around a fountain in the lounge of his offices, struck cigarettes for them, and provided tall, cool drinks.

Bronson van Vogel was bored by the attention, as it was obviously inspired by his wife's Dun & Bradstreet rating (ten stars, a sunburst, and heavenly music). He preferred people who could convince him that he had invented the Briggs fortune, instead of marrying it.

"This is business Blakesly. I've an order for you."

"So? Well, our facilities are at your disposal. What would you like, sir?"

"I want you to make me a Pegasus."

"A Pegasus? A flying horse?"

"Exactly."

Blakesly pursed his lips. "You seriously want a horse that will fly? An animal like the mythical Pegasus?"

"Yes, yes-that's what I said."

"You embarrass me, Mr. van Vogel. I assume you want a unique gift for your lady. How about a midget elephant, twenty inches high, perfectly housebroken, and able to read and write? He holds the stylus in his trunk-very cunning."

"Does he talk?" demanded Mrs. van Vogel.

"Well, now, my dear lady, his voice box, you know-and his tongue-he was not designed for speech. If you insist on it, I will see what our plasticians can do."

"Now, Martha-"

"You can have your Pegasus, Brownie, but I think I may want this toy elephant. May I see him?"

"Most surely. Hartstone!"

The air answered Blakesly. "Yes, boss?"

"Bring Napoleon to my lounge."

"Right away, sir."

"Now about your Pegasus, Mr. van Vogel ... I see difficulties but I need expert advice. Dr. Cargrew is the real heart of this organization, the most eminent bio-designer-of terrestrial origin, of course-on the world today." He raised his voice to actuate relays. "Dr. Cargrew!"

"What is it, Mr. Blakesly?"

"Doctor, will you favor me by coming to my office?"

"I'm busy. Later."

Mr. Blakesly excused himself, went into his inner office, then returned to say that Dr. Cargrew would be in shortly. In the mean time Napoleon showed up. The proportions of his noble ancestors had been preserved in miniature; he looked like a statuette of an elephant, come amazingly to life.

He took three measured steps into the lounge, then saluted them each with his trunk. In saluting Mrs. van Vogel he dropped on his knees as well.

"Oh, how cute!" she gurgled. "Come here. Napoleon."

The elephant looked at Blakesly, who nodded. Napoleon ambled over and laid his trunk across her lap. She scratched his ears; he moaned contentedly.

"Show the lady how you can write," ordered Blakesly. "Fetch your things from my room."

Napoleon waited while she finished treating a particularly satisfying itch, then oozed away to return shortly with several sheets of heavy white paper and an oversize pencil. He spread a sheet in front of Mrs. van Vogel. held it down daintily with a fore foot, grasped the pencil with his trunk finger, and printed in large, shaky letters, "I LIKE YOU."

"The darling!" She dropped to her knees and put her arms around his neck. "I simply must have him. How much is he?"

"Napoleon is part of a limited edition of six," Blakesly said carefully. "Do you want an exclusive model, or may the others be sold?"

"Oh, I don't care. I just want Nappie. Can I write him a note?"

"Certainly, Mrs. van Vogel. Print large letters and use Basic English. Napoleon knows most of it. His price, nonexclusive is $350,000. That includes five years salary for his attending veterinary."

"Give the gentleman a check. Brownie," she said over her shoulder.

"But Martha-"

"Don't be tiresome. Brownie." She turned back to her pet and began printing. She hardly looked up when Dr. Cargrew came in.

Cargrew was a chilly figure in white overalls and skull cap. He shook hands brusquely, struck a cigarette and sat down. Blakesly explained—

Cargrew shook his head. "It s a physical impossibility."

Van Vogel stood up. "I can see," he said distantly, "That I should have taken my custom to NuLife Laboratories, I came here because we have a financial interest in this firm and because I was naive enough to believe the claims of your advertisements."

"Siddown, young man!" Gargrew ordered. "Take your trade to those thumb-fingered idiots if you wish-but I warn you they couldn't grow wings on a grasshopper. First you listen to me.

"We can grow anything and make it live. I can make you a living thing-I won't call it an animal-the size and shape of that table over there. It wouldn't be good for anything, but it would be alive. It would ingest food, use chemical energy, give off excretions, and display irritability. But it would be a silly piece of manipulation. Mechanically a table and an animal are two different things. Their functions are different, so their shapes are different. Now I can make you a winged horse-"

"You just said you couldn't."

"Don't interrupt. I can make a winged horse that will look just like the pictures in the fairy stories. If you want to pay for it; we'll make it-we're in business. But it won't be able to fly."

"Why not?"

"Because it's not built for flying. The ancient who dreamed up that myth knew nothing about aerodynamics and still less about biology. He stuck wings on a horse, just stuck them on, thumb tacks and glue.

But that doesn't make a flying machine. Remember, son, that an animal is a machine, primarily a heat engine with a control system to operate levers and hydraulic systems, according to definite engineering laws. You savvy aerodynamics?"

"Well, I'm a pilot."

"Hummph! Well, try to understand this. A horse hasn't got the heat engine for flight. He's a hayburner and that's not efficient. We might mess around with a horse's insides so that he could live on a diet of nothing but sugar and then he might have enough energy to fly short distances. But he still would not look like the mythical Pegasus. To anchor his flying muscles he would need a breast bone maybe ten feet long. He might have to have as much as eighty feet wing spread. Folded, his wings would cover him like a tent. You're up against the cube-square disadvantage."

"Huh?'

Cargrew gestured impatiently- "Lift goes by the square of a given dimension; dead load by the cube of the same dimension, other things being equal. I might be able to make you a Pegasus the size of a cat without distorting the proportions too much."

"No, I want one I can ride. I don't mind the wing spread and I'll put up with the big breast bone. When can I have him?"

Cargrew looked disgusted, shrugged, and replied, "I'll have to consult with B'na Kreeth." He whistled and chirped; a portion of the wall facing them dissolved and they found themselves looking into alaboratory. A Martian, lifesize, showed in the fore-part of the three-dimensional picture.

When the creature chirlupped back at Cargrew, Mrs. van Vogel looked up, then quickly looked away. She knew it was silly but she simply could not stand the sight of Martians-and the ones who had modified themselves to a semi-manlike form disgusted her the most.

After they had twittered and gestured at each other for a minute or two Cargrew turned back to van Vogel. "B'na says that you should forget it; it would take too long. He wants to know how you'd like a fine unicorn, or a pair, guaranteed to breed true?"

"Unicorns are old hat. How long would the Pegasus take?"

After another squeaky-door conversation Cargrew answered, "Ten years probably, sixteen years on the guarantee."

"Ten years? That's ridiculous!"

Cargrew looked shirty. "1 thought it would take fifty, but if B*na says that he can do it three to five generations, then he can do it. B'na is the finest bio-micrurgist in two planets. His chromosome surgery is unequalled. After all, young man, natural processes would take upwards of a million years to achieve the same result, if it were achieved at all. Do you expect to be able to buy miracles?"

Van Vogel had the grace to look sheepish. "Excuse me. Doctor. Let's forget it. Ten years really is too long. How about the other possibility? You said you could make a picture-book Pegasus, as long as I did not insist on flight. Could I ride him? On the ground?"

"Oh, certainly. No good for polo, but you could ride him."

"I'll settle for that. Ask Benny creeth, or what ever his name is, how long it would take."

The Martian had faded out of the screens. "I don't need to ask him," Cargrew asserted. "This is my job-purely manipulation. B'na's collaboration is required only for rearrangement and transplanting of genes-true genetic work. I can let you have the beast in eighteen months."

"Can't you do better than that?"

"What do you expect, man? It takes eleven months to grow a newborn colt. I want one month of design and planning. The embryo will be removed on the fourth day and will be developed in an extrauterine capsule. I'll operate ten or twelve times during gestation, grafting and budding and other things you've heard of. One year from now we'll have a baby colt, with wings. Thereafter I'll deliver to you a six-months-old Pegasus."

"I'll take it."

Cargrew made some notes, then read, "One alate horse, not capable of flight and not to breed true. Basic breed your choice-I suggest a Palomino, or an Arabian. Wings designed after a condor, in white. Simulated pin feathers with a grafted fringe of quill feathers, or reasonable facsimile." He passed the sheet over. "Initial that and we'll start in advance of formal contract."

"It's a deal," agreed van Vogel. "What is the fee?" He placed his monogram under Cargrew's.

Cargrew made further notes and handed them to Blakesly-estimates of professional man-hours, technician man-hours, purchases, and overhead. He had padded the figures to subsidize his collateral research but even he raised his eyebrows at the dollars-and-cents interpretation Blakesly put on the data. "That will be an even two million dollars."

Van Vogel hesitated; his wife had looked up at the mention of money. But she turned her attention back to the scholarly elephant.

Blakesly added hastily, "That is for an exclusive creation, of course."

"Naturally," Van Vogel agreed briskly, and added die figure to the memorandum.

Van Vogel was ready to return, but his wife insisted on seeing the "apes," as she termed the anthropoid workers. The discovery that she owned a considerable share in these subhuman creatures had intrigued her. Blakesly eagerly suggested a trip through the laboratories in which the workers were developed from true apes.

They were arranged in seven buildings, the seven "Days of Creation.' "First Day" was a large building occupied by Cargrew, his staff, his operating rooms, incubators, and laboratories. Martha van Vogel stared in horrified fascination at living organs and even complete embryos, living artificial lives sustained by clever glass and metal recirculating systems and exquisite automatic machinery.

She could not appreciate the techniques; it seemed depressing. She had about decided against plasto-biology when Napoleon, by tugging at her skirts, reminded her that it produced good things as well as horrors.

The building "Second Day" they did not enter; it was occupied by B'na Kreeth and his racial colleagues. "We could not stay alive in it, you understand," Blakesly explained. Van Vogel nodded; his wife hurried on-she wanted no Martians, even behind plastiglass.

From there on the buildings were for development and production of commercial workers. "Third Day" was used for the development of variations in the anthropoids to meet constantly changing labor requirements. "Fourth Day" was a very large building devoted entirely to production-line incubators for commercial types of anthropoids. Blakesly explained that they had dispensed with normal birth. "The policy permits exact control of forced variations, such as for size, and saves hundreds of thousands of worker-hours on the part of the female anthropoids."

Martha van Vogel was delighted with "Fifth Day," the anthropoid kindergarten where the little tykes learned to talk and were conditioned to the social patterns necessary to their station in life. They worked at simple tasks such as sorting buttons and digging holes in sand piles, with pieces of candy given as incentives for fast and accurate work.

"Six Day" completed the anthropoids' educations. Each learned the particular sub-trade it would practice, cleaning, digging, and especially agricultural semi-skills such as weeding, thinning, and picking. "One Nisei farmer working three neo-chimpanzees can grow as many vegetables as a dozen oldstyle farm hands," Blakesly asserted. "They really like to work-when we get through with them." They admired the almost incredibly heavy tasks done by modified gorillas and stopped to gaze at the little neo-Capuchins doing high picking on prop trees, then moved on toward "Seventh Day."

This building was used for the radioactive mutation of genes and therefore located some distance away from the others. They had to walk, as the sidewalk was being repaired; the detour took them past workers' pens and barracks. Some of the anthropoids crowded up to the wire and began calling to them: "Sigret! Sigret! Preese, Missy! Preese, Boss!

Sigret!" "What are they saying?" Martha van Vogel inquired.

"They are asking for cigarettes," Blakesly answered in annoyed tones. "They know better, but they are like children. Here-I'll put a stop to it." He stepped up to the wire and shouted to an elderly male, "Hey! Strawboss!" The worker addressed wore, in addition to the usual short canvas kilt, a bedraggled arm band. He turned and shuffled toward the fence. "Strawboss," ordered Blakesly, "get those Joes away from here." "Okay, Boss," the old fellow acknowledged and started cuffing those nearest him. "Scram, you Joes!

Scram!" "But I have some cigarettes," protested Mrs. Van Vogel, "and I would gladly have given them some."

"It doesn't do to pamper them," the Manager told her. "They have been taught that luxuries come only from work. I must apologize for my poor children; those in these pens are getting old and forgetting their manners."

She did not answer but moved further along the fence to where one old neo-chimp was pressed up against the wire, staring at them with soft, tragic eyes, like a child at a bakery window. He had taken no part in the jostling demand for tobacco and had been let alone by the strawboss. "Would you like a cigarette?" she asked him.

"Preese, Missy."

She struck one which he accepted with fumbling grace, took a long, lung-filling drag, let the smoke trickle out his nostrils, and said shyly, "Sankoo, Missy. Me Jerry."

"How do you do. Jerry?"

"Howdy, Missy." He bobbed down, bending his knees, ducking his head, and clasping his hands to his chest, all in one movement.

"Come along, Martha." Her husband and Blakesly had moved in behind her.

"In a moment," she answered. "Brownie, meet my friend Jerry. Doesn't he look just like Uncle Albert? Except that he looks so sad. Why are you unhappy, Jerry?"

"They don't understand abstract ideas," put in Blakesly.

But Jerry surprised him. "Jerry sad," he announced in tones so doleful that Martha van Vogel did not know whether to laugh or to cry.

"Why, Jerry?" she asked gently. "Why are you so sad?" "No work," he stated. "No sigret. No candy. No work."

"These are all old workers who have passed their usefulness," Blakesly repeated. "Idleness upsets them, but we have nothing for them to do."

"Well!" she said. "Then why don't you have them sort buttons, or something like that, such as the baby ones do?"

"They wouldn't even do that properly," Blakesly answered her. "These workers are senile."

"Jerry isn't senile! You heard him talk."

"Well, perhaps not. Just a moment." He turned to the apeman, who was squatting down in order to scratch Napoleon's head with a long forefinger thrust through the fence. "You, Joe! Come here."

Blakesly felt around the worker's hairy neck and located a thin steel chain to which was attached a small metal tag. He studied it. "You're right," he admitted. "He's not really over age, but his eyes are bad. I remember the lot-cataracts as a result of an unfortunate linked mutation." He shrugged.

"But that's no reason to let him grieve his heart out in idleness."

"Really, Mrs. van Vogel, you should not upset yourself about it. They don't stay in these pens longonly a few days at the most."

"Oh," she answered, somewhat mollified, "you have some other place to retire them to, then. Do you give them something to do there? You should-Jerry wants to work. Don't you. Jerry?"

The neo-chimp had been struggling to follow the conversation. He caught the last idea and grinned. "Jerry work! Sure Mike! Good worker." He flexed his fingers, then made fists, displaying fully opposed thumbs.

Mr. Blakesly seemed somewhat nonplused. "Really, Mrs. van Vogel, there is no need. You see-" He stopped.

Van Vogel had been listening irritably. His wife's enthusiasms annoyed him, unless they were also his own. Furthermore he was beginning to blame Blakesly for his own recent extravagance and had a premonition that his wife would find some way to make him pay, very sweetly, for his indulgence.

Being annoyed with both of them, he chucked in the perfect wrong remark. "Don't be silly, Martha. They don't retire them; they liquidate them."

It took a little time for the idea to soak in, but when it did she was furious. "Why . . . why-I never heard of such a thing! You ought to be ashamed. You . . . you would shoot your own grandmother."

"Mrs. van Vogel-please!"

"Don't 'Mrs. van Vogel' me! It's got to stop-you hear me?" She looked around at the death pens, at the milling hundreds of old workers therein. "It's horrible. You work them until they can't work anymore, then you take away their little comforts, and you dispose of them. I wonder you don't eat them!"

"They do," her husband said brutally. "Dog food."

"What! Well, we'll put a stop to that!"

"Mrs. van Vogel," Blakesly pleaded. "Let me explain."

"Hummph! Go ahead. It had better be good."

"Well, it's like this-" His eye fell on Jerry, standing with worried expression at the fence. "Scram, Joe!" Jerry shuffled away.

"Wait, Jerry!" Mrs. van Vogel called out. Jerry paused uncertainly. "Tell him to come back,' she ordered Blakesly.

The Manager bit his lip, then called out, "Come back here."

He was beginning definitely to dislike Mrs. van Vogel, despite his automatic tendency to genuflect in the presence of a high credit rating. To be told how to run his own business-well, now, indeed! "Mrs. van Vogel, I admire your humanitarian spirit but you don't understand the situation. We understand our workers and do what is best for them. They die painlessly before their disabilities can trouble them. They live happy lives, happier than yours or mine. We trim off the bad part of their lives, nothing more. And don't forget, these poor beasts would never have been born had we not arranged it."

She shook her head. "Fiddlesticks! You'll be quoting the Bible at me next. There will be no more of it, Mr. Blakesly. I shall hold you personally responsible."

Blakesly looked bleak. "My responsibilities are to the directors,"

"You think so?" She opened her purse and snatched out her telephone. So great was her agitation that she did not bother to call through, but signalled the local relay operator instead. "Phoenix? Get me Great New York Murray Hill 9Q-4004, Mr. Haskell. Priority-star subscriber 777. Make it quick." She stood there, tapping her foot and glaring, until her business manager answered. "Haskell? This is Martha van Vogel. How much Workers, Incorporated, common do I own? No, no, never mind that-what percent? . . . so? Well, it's not enough. I want 51% by tomorrow morning ... all right, get proxies for the rest but get it ... I didn't ask you what it would cost; I said to get it. Get busy." She disconnected abruptly and turned to her husband. "We're leaving, Brownie, and we are taking Jerry with us. Mr. Blakesly, will you kindly have him taken out of that pen? Give him a check for the amount. Brownie."

"Now, Martha-"

"My mind is made up. Brownie."

Mr. Blakesly cleared his throat. It was going to be pleasant to thwart this woman. "The workers are never sold, I'm sorry. It's a matter of policy."

'*Very well then, I'll take a permanent lease."*

"This worker has been removed from the labor market. He is not for lease."

"Am I going to have more trouble with you?"

"If you please, Madame! This worker is not available under any terms-but, as a courtesy to you, I am willing to transfer to you indentures for him, gratis. I want you to know that the policies of this firm are formed from a very real concern for the welfare of our charges as well as from the standpoint of good business practice. We therefore reserve the right to inspect at any time to assure ourselves that you are taking proper care of this worker." There, he told himself savagely, that will stop her clock!

"Of course. Thank you, Mr. Blakesly. You are most gracious."

The trip back to Great New York was not jolly. Napoleon hated it and let it be known. Jerry was patient but airsick. By the time they grounded the van Vogels were not on speaking terms.

"I'm sorry, Mrs. van Vogel. The shares were simply not available. We should have had proxy on the O'Toole block but someone tied them up an hour before I reached them."

"Blakesly."

"Undoubtedly. You should not have tipped him off; you gave him time to warn his employers."

"Don't waste time telling me what mistakes I made yesterday. What are you going to do today?"

"My dear Mrs. van Vogel, what can I do? I'll carry out any instructions you care to give."

"Don't talk nonsense. You are supposed to be smarter than I am, that's why I pay you to do my thinking for me."

Mr. Haskell looked helpless.

His principal struck a cigarette so hard she broke it. "Why isn't Weinberg here?"

"Really, Mrs. van Vogel, there are no special legal aspects. You want the stock; we can't buy it nor bind it. Therefore-"

"I pay Weinberg to know the legal angles. Get him."

Weinberg was leaving his office; Haskell caught him on a chase-me circuit. "Sidney," Haskell called out. "Come to my office, will you? Oscar Haskell."

"Sorry. How about four o'clock?"

"Sidney, I want you-now!" cut in the client's voice. "This is Martha van Vogel."

The little man shrugged helplessly. "Right away," he agreed. That woman-why hadn't he retired on his one hundred and twenty-fifth birthday, as his wife had urged him to?

Ten minutes later he was listening to Haskell's explanations and his client's interruptions. When they had finished he spread his hands. "What do you expect, Mrs. van Vogel? These workers are chattels. You have not been able to buy the property rights involved; you are stopped. But I don't see what you are worked up about. They gave you the worker whose life you wanted preserved."

She spoke forcefully under her breath, then answered him- "That's not important. What is one worker among millions? I want to stop this killing, all of it."

Weinberg shook his head. "If you were able to prove that their methods of disposing of these beasts were inhumane, or that they were negligent of their physical welfare before destroying them, or that the destruction was wanton-"

"Wanton? It certain is!"

"Probably not in a legal sense, my dear lady. There was a case, Julius Hartman *et al.* vs. Hartman Estate, 1972, I believe, in which a permanent injunction was granted against carrying out a term of the will which called for the destruction of a valuable collection of Persian cats. But in order to use that theory you would have to show that these creatures, when superannuated, are notwithstanding more valuable alive than dead. You cannot compel a person to maintain chattels at a loss."

"See here, Sidney, I didn't get you over here to tell me how this can't be done. If what I want isn't legal, then get a law passed."

Weinberg looked at Haskell, who looked embarrassed and answered, "Well, the fact of the matter is, Mrs. van Vogel, that we have agreed with the other members of the Commonwealth Association not to subsidize any legislation during the incumbency of the present administration."

"How ridiculous! Why?"

"The Legislative Guild has brought out a new fair-practices code which we consider quite unfair, a sliding scale which penalizes the well-to-do-all very nice sounding, with special provisions for nominal fees for veterans' private bills and such things-but in fact the code is confiscatory. Even the Briggs Foundation can hardly afford to take a proper interest in public affairs under this so-called code."

"Hmmph! A fine day when legislators join unions-they are professional men. Bribes should be competitive, Get an injunction."

"Mrs. van Vogel," protested Weinberg, "how can you expect me to get an injunction against an organization which has no legal existence? In a legal sense, there is no Legislative Guild, Just as the practice of assisting legislation by subsidy has itself no legal existence."

"And babies come under cabbage leaves. Quit stalling me, gentlemen. What are you going to do?"

Weinberg spoke when he saw that Haskell did not intend to. "Mrs. van Vogel, I think we should retain a special shyster."

"I don't employ shysters, even-I don't understand the way they THink, I am a simple housewife, Sidney."

Mr. Weinberg flinched at her self-designation while noting that he must not let her find out that the salary of his own staff shyster was charged to her payroll. As convention required, he maintained the front of a simple, barefoot solicitor, but he had found out long ago that Martha van Vogel's problems required an occasional dose of the more exotic branch of the law. "The man I have in mind is a creative artist," he insisted. "It is no more necessary to understand him than it is to understand the composer in order to appreciate a symphony. I do recommend that you talk with him, at least."

"Oh, very well! Get him up here."

"Here? My dear lady!" Haskell was shocked at the suggestion; Weinberg looked amazed. "It would not only cause any action you bring to be thrown out of court if it were known that you had consulted this man, but it would prejudice any Briggs enterprise for years."

Mrs. van Vogel shrugged. "You men. I never will understand the way you think. Why shouldn't one consult a shyster as openly as one consults an astrologer?"

James Roderick McCoy was not a large man, but he seemed large. He managed to dominate even so large a room as Mrs. van Vogel's salon. His business card read;

J.R. McCOY

"THE REAL MCCOY"

Licensed Shyster-Fixing, Special Contacts, Angles. All Work Guaranteed.

TELEPHONE SKYLINE 9-8M4554 Ask for MAC

The number given was the pool room of the notorious Three Planets Club. He wasted no time on offices and kept his files in his head-the only safe place for them.

He was sitting on the floor, attempting to teach Jerry to shoot craps, while Mrs. van Vogel explained her problem. "What do you think, Mr. McCoy? Could we approach it through the SPCA? My public relations staff could give it a build up."

McCoy got to his feet. "Jerry's eyes aren't so bad; he caught me trying to palm box cars off on him as a natural. No," he continued, "the SPCA angle is no good. It's what 'Workers' will expect. They'll be ready to prove that the anthropoids actually enjoy being killed off."

Jerry rattled the dice hopefully. "That's all. Jerry. Scram."

"Okay, Boss." The ape man got to his feet and went to the big stereo which filled a comer of the room. Napoleon ambled after him and switched it on. Jerry punched a selector button and got a blues singer. Napoleon immediately punched another, then another and another until he got a loud but popular band. He stood there, beating out the rhythm with his trunk.

Jerry looked pained and switched it back to his blues singer. Napoleon stubbornly reached out with his prehensile nose and switched it off.

Jerry used a swear word.

"Boys!" called out Mrs. van Vogel. "Quit squabbling. Jerry, let Nappie play what he wants to. You can play the stereo when Nappie has to take his nap.

"Okay, Missy Boss."

McCoy was interested. "Jerry likes music?"

"Like it? He loves it. He's been learning to sing."

"Huh? This I gotta hear."

"Certainly. Nappie-turn off the stereo." The elephant complied but managed to look put upon. "Now Jerry-Jingle Bells.' " She led him in it:

"Jingie bells, jingle bells, jingle all the day-", and he followed,

"Jinger hez, jinger bez, jinger awrah day;
Oh, wot fun tiz to ride in one-hoss open sray."

He was flat, he was terrible. He looked ridiculous, patting out the time with one splay foot. But it was singing.

"Say, that's fast!" McCoy commented. "Too bad Nappie can't talk-we'd have a duet."

Jerry looked puzzled. "Nappie talk good," he stated. He bent over the elephant and spoke to him. Napoleon grunted and moaned back at him. "See, Boss?" Jerry said triumphantly.

"What did he say?"

"He say, 'Can Nappie pray stereo now?' "

"Very well. Jerry," Mrs. van Vogel interceded. The ape man spoke to his chum in whispers. Napoleon squealed and did not turn on the stereo.

"Jerry!" said his mistress. "I said nothing of the sort; he does not have to play your blues singer. Come away, Jerry. Nappie-play what you want to."

"You mean he tried to cheat?" McCoy inquired with interest.

"He certainly did."

"Hmm-Jerry's got the makings of a real citizen, Shave him and put shoes on him and he'd get by all right in the precinct I grew up in." He stared at the anthropoid. Jerry stared back, puzzled but patient. Mrs. van Vogel had thrown away the dirty canvas kilt which was both his badge of servitude and a concession to propriety and had replaced it with a kilt in the bright Cameron war plaid, complete to sporan, and topped off with a Glengarry.

"Do you suppose he could learn to play the bagpipes?" McCoy asked. "I'm beginning to get an angle."

"Why, I don't know. What s your idea?"

McCoy squatted down cross-legged and began practicing rolls with his dice. "Never mind," he answered when it suited him, "that angle's no good. But we're getting there." He rolled four naturals, one after the other. "You say Jerry still belongs to the Corporation?"

"In a titular sense, yes. I doubt if they will ever try to repossess him."

"I wish they would try." He scooped up the dice and stood up. "It's in the bag, Sis. Forget it. I'll want to talk to your publicity man but you can quit worrying about it."

Of course Mrs. van Vogel should have knocked before entering her husband's room-but then she would not have overheard what he was saying, nor to whom.

"That's right," she heard him say, "we haven't any further need for him. Take him away, the sooner the better. Just be sure the men you send have a signed order directing us to turn him over."

She was not apprehensive, as she did not understand the conversation, but merely curious. She looked over her husband's shoulder at the video screen.

There she saw Blakesly's face. His voice was saying, "Very well, Mr. van Vogel, the anthropoid will be picked up tomorrow."

She strode up to the screen. "Just a minute, Mr. Blakesly-" then, to her husband, "Brownie, what in the world do you think you are doing?"

The expression she surprised on his face was not one he had ever let her see before. "Why don't you knock?"

"Maybe it's a good thing I didn't. Brownie, did I hear you right. Were you telling Mr. Blakesly to pick up Jerry?" She turned to the screen. "Was that it, Mr. Blakesly?"

"That is correct, Mrs. van Vogel. And I must say I find this confusion most-"

"Stow it." She turned back. "Brownie, what have you to say for yourself?"

"Martha, you are being preposterous. Between that elephant and that ape this place is a zoo. I actually caught your precious Jerry smoking my special, personal cigars today . . . not to mention the fact that both of them play the stereo all day long until a man can't get a moment's peace. I certainly don't have to stand for such things in my own house."

"Whose house. Brownie?"

'That's beside the point. I will not stand for-"

"Never mind." She turned to the screen. "My husband seems to have lost his taste for exotic animals, Mr. Blakesly. Cancel the order for a Pegasus."

"Martha!"

"Sauce for the goose. Brownie-I'll pay for your whims; I'm damned if I'll pay for your tantrums. The contract is cancelled, Mr. Blakesly.

Mr. Haskell will arrange the details."

Blakesly shrugged. "Your capricious behavior will cost you, of course. The penalties-"

"I said Mr. Haskell would arrange the details. One more thing. Mister Manager Blakesly-have you done as I told you to?"

"What do you mean?"

"You know what I mean-are those poor creatures still alive and well?"

"That is not your business." He had, in fact, suspended the killings, the directors had not wanted to take any chances until they saw what the Briggs trust could manage, but Blakesly would not give her the satisfaction of knowing.

She looked at him as if he were a skipped dividend. "It's not, eh? Well, bear this in mind, you cold-blooded little pipsqueak: I'm holding you personally responsible. If just one of them dies from anything, I'II have your skin for a rug." She flipped off the connection and turned to her husband. "Brownie-"

"It's useless to say anything," he cut in, in the cold voice he normally used to bring her to heel. "I shall be at the Club. Goodbye!"

"That's just what I was going to suggest."

"What?"

"I'll have your clothes sent over. Do you have anything else in this house?"

He stared at her, "Don't talk like a fool, Martha."

"I'm not talking like a fool." She looked him up and down. "My, but you are handsome. Brownie. I guess I was a fool to think I could buy a big hunk of man with a checkbook. I guess a girl gets them free, or she doesn't get them at all. Thanks for the lesson." She turned and slammed out of the room and into her own suite.

Five minutes later, makeup repaired and nerves steadied by a few whiff's of Fly-Right, she called the pool room of the Three Planets Club. McCoy came to the screen carrying a cue. "Oh, it's you, sugar puss. Well, snap it up-I've got four bits on this game."

"This is business."

"Okay, okay-spill it."

She told him the essentials. "I'm sorry about cancelling the flying horse contract, Mr. McCoy. I hope it won't make your job any harder. I'm afraid I lost my temper,"

"Fine. Go lose it again."

"Huh!"

"You're barrelling down the groove, kid. Call Blakesly up again. Bawl him out. Tell him to keep his bailiffs away from you, or you'll stuff 'em and use them for hat racks. Dare him to take Jerry away from you."

"I don't understand you."

"You don't have to, girlie. Remember this; You can't have a bull fight until you get the bull mad enough to fight. Have Weinberg get a temporary injunction restraining Workers, Incorporated, from reclaiming Jerry. Have your boss press agent give me a buzz. Then you call in the newsboys and tell them what you think of Blakesly. Make it nasty. Tell them you intend to put a stop to this wholesale murder if it takes every cent you've got."

"Well ... all right. Will you come to see me before I talk to them?"

"Nope-gotta get back to my game. Tomorrow, maybe. Don't fret about having cancelled that silly winged-horse deal. I always did think your old man was weak in the head, and it's saved you a nice piece of change. You'll need it when I send in my bill. Boy, am I going to clip you! Bye now."

The bright letters trailed around the sides of the Times Building: "WORLD'S RICHEST WOMAN PUTS UP FIGHT FOR APE MAN." On the giant video screen above showed a transcribe of Jerry, in his ridiculous Highland chief outfit. A small army of police surrounded the Briggs town house, while Mrs. van Vogel informed anyone who would listen, including several news services, that she would defend Jerry personally and to the death.

The public relations office of Workers, Incorporated, denied any intention of seizing Jerry; the denial got nowhere.

In the meantime technicians installed extra audio and video circuits in the largest courtroom in town, for one Jerry (no surname), described as a legal, permanent resident of these United States, had asked for a permanent injunction against the corporate person "Workers," its officers, employees, successors, or assignees, forbidding it to do him any physical harm and in particular forbidding it to kill him.

Through his attorney, the honorable and distinguished and stuffily respectable Augustus Pomfrey, Jerry brought the action in his own name.

Martha van Vogel sat in the court room as a spectator only, but she was surrounded by secretaries, guards, maid, publicity men, and yes men, and had one television camera trained on her alone. She was nervous. McCoy had insisted on briefing Pomfrey through Weinberg, to keep Pomfrey from knowing that he was being helped by a shyster. She had her own opinion of Pomfrey—

The McCoy had insisted that Jerry not wear his beautiful new kilt but had dressed him in faded dungaree trousers and jacket. It seemed poor theater to her.

Jerry himself worried her. He seemed confused by the lights and the noise and the crowd, about to go to pieces.

And McCoy had refused to go to the trial with her. He had told her that it was quite impossible, that his mere presence would alienate the court, and Weinberg had backed him up. MenI Their minds were devious-they seemed to like twisted ways of doing things. It confirmed her opinion that men should not be allowed to vote.

But she felt lost without the immediate presence of McCoy's easy self-confidence. Away from him, she wondered why she had ever trusted such an important matter to an irresponsible, jumping jack, bird-brained clown as McCoy. She chewed her nails and wished he were present.

The panel of attorneys appearing for Worker's Incorporated, began by moving that the action be dismissed without trial, on the theory that Jerry was a chattel of the corporation, an integral part of it, and no more able to sue than the thumb can sue the brain.

The honorable Augustus Pomfrey looked every inch the statesman as he bowed to the court and to his opponents. "It is indeed strange," he began, "to hear the secondhand voice of a legal fiction, a soulless, imaginary quantity called a corporate 'person,' argue that a flesh-and-blood creature, a being of hopes and longings and passions, has not legal existence. I see here beside me my poor cousin Jerry." He patted Jerry on the shoulder; the ape man, needing reassurance, slid a hand into his. It went over well.

"But when I look for this abstract fancy 'Workers,' what do I find? Nothing-some words on paper, some signed bits of foolscap-"

"If the Court please, a question," put in the opposition chief attorney, "does the learned counsel contend that a limited liability stock company cannot own property?"

"Will the counsel reply?" directed the judge.

'Thank you. My esteemed colleague has set up a straw man; I contended only that the question as to whether Jerry is a chattel of Workers, Incorporated, is immaterial, nonessential, irrelevant. I am part of the corporate city of Great New York. Does that deny me my civil rights as a person of flesh and blood? In fact it does not even rob me of my right to sue that civic corporation of which I am a part, if, in my opinion, I am wronged by it. We are met today in the mellow light of equity, rather than in the cold and narrow confines of law. It seemed a fit time to dwell on the strange absurdities we live by, whereunder a nonentity of paper and legal fiction could deny the existence of this our poor cousin. I ask that the learned attorneys for the corporation stipulate that Jerry does, in fact, exist, and let us get on with the action."

They huddled; the answer was "No."

"Very well-My client asked to be examined in order that the court may determine his status and being."

"Objection! This anthropoid cannot be examined; he is a mere part and chattel of the respondent."

"That is what we are about to determine," the judge answered dryly. "Objection overruled."

"Go sit in that chair. Jerry."

"Objection! This beast cannot take an oath-it is beyond his comprehension."

"What have you to say to that, Counsel?"

"If it pleases the Court," answered Pomfrey, "the simplest thing to do is to put him in the chair and find out."

"Let him take the stand. The clerk will administer the oath." Martha van Vogel gripped the arms other chair; McCoy had spent a full week training him for this. Would the poor thing blow up without McCoy to guide him?

The clerk droned through the oath; Jerry looked puzzled but patient.

"Your honor," said Pomfrey, "when young children must give testimony, it is customary to permit a little leeway in the wording, to fit their mental attainments. May I be permitted?" He walked up to Jerry.

"Jerry, my boy, are you a good worker?"

"Sure mike! Jerry good worker!"

"Maybe bad worker, huh? Lazy. Hide from strawboss."

"No, no, no! Jerry good worker. Dig. Weed. Not dig up vegetaber. Dig up weed. Work hard."

"You will see," Pomfrey addressed the court, "that my client has very definite ideas of what is true and what is false. Now let us attempt to find out whether or not he has moral values which require him to tell the truth. Jerry-"

"Yes, Boss."

Pomfrey spread his hand in front of the anthropoid's face. ' How many fingers do you see?"

Jerry reached out and ticked them off. "One-two- sree-four, uh-five."

"Six fingers. Jerry."

"Five, Boss."

"Six fingers. Jerry. I give you cigarette. Six."

"Five, Boss. Jerry not cheat."

Pomfrey spread his hands. "Will the court accept him?"

The court did. Martha van Vogel sighed. Jerry could not count very well and she had been afraid that be would forget his lines and accept the bribe. But he had been promised all the cigarettes he wanted and chocolate as well if he would remember to insist that five was five.

"I suggest," Pomfrey went on, "that the matter has been established. Jerry is an entity; if he can be accepted as a witness, then surely he may have his day in court. Even a dog may have his day in court. Will my esteemed colleagues stipulate?"

Workers, Incorporated, through its battery of lawyers, agreed-just in time, for me judge was beginning to cloud up. He had been much impressed by the little performance.

The tide was with him; Pomfrey used it. "If it please the court and if the counsels for the respondent will permit, we can shorten these proceedings. I will state the theory under which relief is sought and then, by a few questions, it may be settled one way or another. I ask that it be stipulated that it was the intention of Workers, Incorporated, through its servants, to take the life of my client."

Stipulation was refused.

"So? Then I ask that the court take judicial notice of the well known fact that these anthropoid workers are destroyed when they no longer show a profit; thereafter I will call witnesses, starting with Horace Blakesly, to show that Jerry was and presumably is under such sentence of death."

Another hurried huddle resulted in the stipulation that Jerry had, indeed, been scheduled for euthanasia.

"Then," said Pomfrey, "I will state my theory. Jerry is not an animal, but a man. It is not legal to kill him-it is murder."

First there was silence, then the crowd gasped. People had grown used to animals that talked and worked, but they were no more prepared to think of them as persons, humans, men, than were the haughty Roman citizens prepared to concede human feelings to their barbarian slaves.

Pomfrey let them have it while they were still groggy. "What is a man? A collection of living cells and tissues? A legal fiction, like this corporate 'person' that would take poor Jerry's life? No, a man is none of these things. A man is a collection of hopes and fears, of human longings, of aspirations greater than himself-more than the clay from which he came; less than the Creator which lifted him up from the clay. Jerry has been taken from his jungle and made something more than the poor creatures who were his ancestors, even as you and I. We ask that this Court recognize his manhood."

The opposing attorneys saw that the Court was moved, they drove in fast. An anthropoid, they contended, could not be a man because he lacked human shape and human intelligence. Pomfrey called his first witness-Master B'na Kreeth.

The Martian's normal bad temper had not been improved by being forced to wait around for three days in a travel tank, to say nothing of the indignity of having to interrupt his researches to take part in the childish powwows of terrestrials.

There was further delay to irritate him while Pomfrey forced the corporation attorneys to accept B'na as an expert witness. They wanted to refuse but could not-he was their own Director of Research. He also held voting control of all Martian-held Workers' stock, a fact unmentioned but hampering.

More delay while an interpreter was brought in to help administer the oath-B na Kreeth, self-centered as all Martians, had never bothered to learn English.

He twittered and chirped in answer to the demand that he tell the truth, the whole truth, and so forth; the interpreter looked pained. "He says he can't do it," he informed the judge.

Pomfrey asked for exact translation.

The interpreter looked uneasily at the Judge. "He says that if he told the whole truth you fools-not 'fools' exactly; it's a Martian word meaning a sort of headless worm-would not understand it."

The court discussed the idea of contempt briefly. When die Martian understood that he was about to be forced to remain in a travel tank for thirty days he came down off his high horse and agreed to tell the truth as adequately as was possible; he was accepted as a witness.

"Are you a man?" demanded Pomfrey.

"Under your laws and by your standards I am a man.

"By what theory? Your body is unlike ours; you cannot even live in our air. You do not speak our language; your ideas are alien to us. How can you be a man?'

The Martian answered carefully: "I quote from the Terra-Martian Treaty, which you must accept as supreme law. 'All members of the Great Race, while sojourning on the Third Planet shall have all the rights and prerogatives of the native dominant race of the Third Planet.' This clause has been interpreted by the Bi-Planet Tribunal to mean that members of the Great Race are 'men' whatever that may be."

"Why do you refer to your sort as the 'Great Race'?"

"Because of our superior intelligence."

"Superior to men?"

"We are men."

"Superior to the intelligence of earth men?"

"That is self-evident."

"Just as we are superior in intelligence to this poor creature Jerry?"

"That is not self-evident."

"Finished with the witness," announced Pomfrey. The opposition counsels should have left bad enough alone; instead they tried to get B'na Kreeth to define the difference in intelligence between humans and worker-anthropoids. Master B'na explained meticulously that cultural differences masked the intrinsic differences, if any, and that, in any case, both anthropoids and men made so little use of their respective potential intelligences that it was really too early to tell which race would turn out to be the superior race in the Third Planet.

He had just begun to discuss how a truly superior race could be bred by combining the best features of anthropoids and men when he was hastily asked to "stand down."

"May it please the Court," said Pomfrey, "we have not advanced the theory; we have merely disposed of respondent's contention that a particular shape and a particular degree of intelligence are necessary to manhood. I now ask that the petitioner be recalled to the stand that the court may determine whether he is, in truth, human."

"If the learned court please-" The battery of lawyers had been in a huddle ever since B'na Kreeth's travel tank had been removed from the room; the chief counsel now spoke.

"The object of the petition appears to be to protect the life of this chattel. There is no need to draw out these proceedings; respondent stipulates that this chattel will be allowed to die a natural death in the hands of its present custodian and moves that the action be dismissed."

"What do you say to that?" the Court asked Pomfrey.

Pomfrey visibly gathered his toga about him. "We ask not for cold charity from this corporation, but for the justice of the court. We ask that Jerry's humanity be established as a matter of law. Not for him to vote, nor to hold property, nor to be relieved of special police regulations appropriate to his group-but we do ask that he be adjudged at least as human as that aquarium monstrosity just removed from this court room!"

The judge turned to Jerry. "Is that what you want, Jerry?"

Jerry looked uneasily at Pomfrey, then said, "Okay, Boss."

"Come up to the chair."

"One moment-" The opposition chief counsel seemed flurried. "I ask the Court to consider that a ruling in this matter may affect a long established commercial practice necessary to the economic life of-"

"Objection!" Pomfrey was on his feet, bristling. "Never have I heard a more outrageous attempt to prejudice a decision. My esteemed colleague might as well ask the Court to decide a murder case from political considerations. I protest-"

"Never mind," said the court. "The suggestion will be ignored. Proceed with your witness."

Pomfrey bowed. "We are exploring the meaning of this strange thing called 'manhood.' We have seen (hat it is not a matter of shape, nor race, nor planet of birth, nor of acuteness of mind. Truly, it cannot be defined, yet it may be experienced. It can reach from heart to heart, from spirit to spirit." He turned to Jerry. "Jerry-will you sing your new song for the judge?"

"Sure mike." Jerry looked uneasily up at the whirring cameras, the mikes, and the mikes, then cleared his throat:

"Way down upon de Suwannee Ribber
Far, far away;
Dere's where my heart is turning ebber-"

The applause scared him out of his wits; the banging of the gavel frightened him still more-but it mattered not; the issue was no longer in doubt-Jerry was a man.

Space Jockey

Just as they were leaving the telephone called his name. “Don’t answer it,” she pleaded. “We’ll miss the curtain.”

“Who is it?” he called out. The viewplate lighted; he recognized Olga Pierce, and behind her the Colorado Springs office of TransLunar Transit.

“Calling Mr. Pemberton. Calling—Oh, it’s you, Jake. You’re on. Flight 27, Supra-New York to Space Terminal. I’ll have a copter pick you up in twenty minutes.”

“How come?” he protested. “I’m fourth down on the call board.”

“You *were* fourth down. Now you are standby pilot to Hicks—and he just got a psycho downcheck.”

“Hicks got psychoed? That’s silly!”

“Happens to the best, chum. Be ready. ‘Bye now.”

His wife was twisting sixteen dollars worth of lace handkerchief to a shapeless mass. “Jake, this is ridiculous. For three months I haven’t seen enough of you to know what you look like.”

“Sony, kid. Take Helen to the show.”

“Oh, Jake, I don’t care about the show; I wanted to get you where they couldn’t reach you for once.”

“They would have called me at the theater.”

“Oh, no! I wiped out the record you’d left.”

“Phyllis! Are you trying to get me fired?”

“Don’t look at me that way.” She waited, hoping that he would speak, regretting the side issue, and wondering how to tell him that her own fretfulness was caused, not by disappointment, but by gnawing worry for his safety every time he went out into space.

She went on desperately, “You don’t have to take this flight, darling; you’ve been on Earth less than the time limit. Please, Jake!”

He was peeling off his tux. “I’ve told you a thousand times: a pilot doesn’t get a regular run by playing space-lawyer with the rule book. Wiping out my follow-up message—why did you do it, Phyllis? Trying to ground me?"

"No, darling, but I thought just this once—"

"When they offer me a flight I take it." He walked stiffly out of the room.

He came back ten minutes later, dressed for space and apparently in good humor; he was whistling: "—the caller called Casey at ha' past four; he kissed his—" He broke off when he saw her face, and set his mouth. "Where's my coverall?"

"I'll get it. Let me fix you something to eat."

"You know I can't take high acceleration on a full stomach. And why lose thirty bucks to lift another pound?"

Dressed as he was, in shorts, singlet, sandals, and pocket belt, he was already good for about minus-fifty pounds in weight bonus; she started to tell him the weight penalty on a sandwich and a cup of coffee did not matter to them, but it was just one more possible cause for misunderstanding.

Neither of them said much until the taxicab clumped on the roof. He kissed her goodbye and told her not to come outside. She obeyed—until she heard the helicopter take off. Then she climbed to the roof and watched it out of sight.

The traveling-public gripes at the lack of direct Earth-to-Moon service, but it takes three types of rocket ships and two space-station changes to make a fiddling quarter-million-mile jump for a good reason: Money.

The Commerce Commission has set the charges for the present three-stage lift from here to the Moon at thirty dollars a pound. Would direct service be cheaper?—a ship designed to blast off from Earth, make an airless landing on the Moon, return and make an atmosphere landing, would be so cluttered up with heavy special equipment used only once in the trip that it could not show a profit at a thousand dollars a pound! Imagine combining a ferry boat, a subway train, and an express elevator—

So TransLunar uses rockets braced for catapulting, and winged for landing on return to Earth to make the terrific lift from Earth to our satellite station Supra-New York. The long middle lap, from there to where Space Terminal circles the Moon, calls for comfort—but no landing gear. The *Flying Dutchman* and the *Philip Nolan* never land; they were even assembled in space, and they resemble winged rockets like the *Skysprite* and the *Firefly* as little as a Pullman train resembles a parachute.

The *Moonbat* and the *Gremlin* are good only for the jump from Space Terminal down to Luna… no wings, cocoon-like acceleration-and-crash hammocks, fractional controls on their enormous jets.

The changeover points would not have to be more than airconditioned tanks. Of course Space Terminal is quite a city, what with the Mars and Venus traffic, but even today Supra-New York is still rather primitive, hardly more than a fueling point and a restaurant-waiting room. It has only been the past five years that it has even been equipped to offer the comfort of one-gravity centrifuge service to passengers with queasy stomachs.

Pemberton weighed in at the spaceport office, then hurried over to where the *Skysprite* stood cradled in the catapult. He shucked off his coverall, shivered as he handed it to the gateman, and ducked inside. He went to his acceleration hammock and went to sleep; the lift to Supra-New York was not his worry—his job was deep space.

He woke at the surge of the catapult and the nerve-tingling rush up the face of Pikes Peak. When the *Skysprite* went into free flight, flung straight up above the Peak, Pemberton held his breath; if the rocket jets failed to fire, the ground-to-space pilot must try to wrestle her into a glide and bring her down, on her wings.

The rockets roared on time; Jake went back to sleep.

When the *Skysprite* locked in with Supra-New York, Pemberton went to the station's stellar navigation room. He was pleased to find Shorty Weinstein, the computer, on duty. Jake trusted Shorty's computations—a good thing when your ship, your passengers, and your own skin depend thereon. Pemberton had to be a better than average mathematician himself in order to be a pilot; his own limited talent made him appreciate the genius of those who computed the orbits.

"Hot Pilot Pemberton, the Scourge of the Spaceways—Hi!" Weinstein handed him a sheet of paper.

Jake looked at it, then looked amazed. "Hey, Shorty—you've made a mistake."

"Huh? Impossible. Mabel can't make mistakes." Weinstein gestured at the giant astrogation computer filling the far wall.

"You made a mistake. You gave me an easy fix—'Vega, Antares, Regulus.' You make things easy for the pilot and your guild'll chuck you out." Weinstein looked sheepish but pleased. "I see I don't blast oS for seventeen hours. I could have taken the morning freight." Jake's thoughts went back to Phyllis.

"UN canceled the morning trip."

"Oh—" Jake shut up, for he knew Weinstein knew as little as he did. Perhaps the flight would have passed too close to an A-bomb rocket, circling the globe like a policeman. The General Staff of the Security Council did not give out information about the top secrets guarding the peace of the planet.

Pemberton shrugged. "Well, if I'm asleep, call me three hours minus."

"Right. Your tape will be ready."

While he slept, the *Flying Dutchman* nosed gently into her slip, sealed her airlocks to the Station, discharged passengers and freight from Luna City. When he woke, her holds were filling, her fuel replenished, and passengers boarding. He stopped by the post office radio desk, looking for a letter from Phyllis. Finding none, he told himself that she would have sent it to Terminal. He went on into the restaurant, bought the facsimile *Herald-Tribune*, and settled down grimly to enjoy the comics and his breakfast.

A man sat down opposite him and proceeded to plague him with silly questions about rocketry, topping it by misinterpreting the insignia embroidered on Pemberton's singlet and miscalling him "Captain." Jake hurried through breakfast to escape him, then picked up the tape from his automatic pilot, and went aboard the *Flying Dutchman*.

After reporting to the Captain he went to the control room, floating and pulling himself along by the handgrips. He buckled himself into the pilot's chair and started his check off.

Captain Kelly drifted in and took the other chair as Pemberton was finishing his checking runs on the ballistic tracker. "Have a Camel, Jake."

"I'll take a rain check." He continued; Kelly watched him with a slight frown. Like captains and pilots on Mark Twain's Mississippi—and for the same reasons—a spaceship captain bosses his ship, his crew, his cargo, and his passengers, but the pilot is the final, legal, and unquestioned boss of how the ship is handled from blastoff to the end of the trip. A captain may turn down a given pilot—nothing more. Kelly fingered a slip of paper tucked in his pouch and turned over in his mind the words with which the Company psychiatrist on duty had handed it to him.

"I'm giving this pilot clearance, Captain, but you need not accept it."

"Pemberton's a good man. What's wrong?"

The psychiatrist thought over what he had observed while posing as a silly tourist bothering a stranger at breakfast. "He's a little more antisocial than his past record shows. Something on his mind. Whatever it is, he can tolerate it for the present. We'll keep an eye on him."

Kelly had answered, "Will you come along with him as pilot?"

"If you wish."

"Don't botherI'll take him. No need to lift a deadhead."

Pemberton fed Weinstein's tape into the robot-pilot, then turned to Kelly. "Control ready, sir."

"Blast when ready, Pilot." Kelly felt relieved when he heard himself make the irrevocable decision.

Pemberton signaled the Station to cast loose. The great ship was nudged out by an expanding pneumatic ram until she swam in space a thousand feet away, secured by a single line. He then turned the ship to its blastoff direction by causing a flywheel, mounted on gymbals at the ship's center of gravity, to spin rapidly. The ship spun slowly in the opposite direction, by grace of Newton's Third Law of Motion.

Guided by the tape, the robot-pilot tilted prisms of the pilot's periscope so that Vega, Antares, and Regulus would shine as one image when the ship was headed right; Pemberton nursed the ship to that heading… fussily; a mistake of one minute of arc here meant two hundred miles at destination.

When the three images made a pinpoint, he stopped the flywheels and locked in the gyros. He then checked the heading of his ship by direct observation of each of the stars, just as a saltwater skipper uses a sextant, but with incomparably more accurate instruments. This told him nothing about the correctness of the course Weinstein had ordered—he had to take that as Gospel-but it assured him that the robot and its tape were behaving as planned. Satisfied, he cast off the last line.

Seven minutes to go—Pemberton flipped the switch permitting the robot-pilot to blast away when its clock told it to. He waited, hands poised over the manual controls, ready to take over if the robot failed, and felt the old, inescapable sick excitement building up inside him.

Even as adrenalin poured into him, stretching his time sense, throbbing in his ears, his mind kept turning back to Phyllis.

He admitted she had a kick coming—spacemen shouldn't marry. Not that she'd starve if he messed up a landing, but a gal doesn't want insurance; she wants a husband—minus six minutes.

If he got a regular run she could live in Space Terminal.

No good—idle women at Space Terminal went bad. Oh, Phyllis wouldn't become a tramp or a rum bum; she'd just go bats.

Five minutes more—he didn't care much for Space Terminal himself. Nor for space! "The Romance of Interplanetary Travel"—it looked well in print, but he knew what it was: A job. Monotony. No scenery. Bursts of work, tedious waits. No home life.

Why didn't he get an honest job and stay home nights?

He knew! Because he was a space jockey and too old to change.

What chance has a thirty-year-old married man, used to important money, to change his racket? (Four minutes) He'd look good trying to sell helicopters on commission, now, wouldn't he?

Maybe he could buy a piece of irrigated land and— Be your age, chum! You know as much about farming as a cow knows about cube root! No, he had made his bed when he picked rockets during his training hitch. If he had bucked for the electronics branch, or taken a GI scholarship—too late now. Straight from the service into Harriman's Lunar Exploitations, hopping ore on Luna. That had torn it.

"How's it going, Doc?" Kelly's voice was edgy.

"Minus two minutes some seconds." Damnation—Kelly knew better than to talk to the pilot on minus time.

He caught a last look through the periscope. Antares seemed to have drifted. He unclutched the gyro, tilted and spun the flywheel, braking it savagely to a stop a moment later. The image was again a pinpoint. He could not have explained what he did: it was virtuosity, exact juggling, beyond textbook and classroom.

Twenty seconds… across the chronometer's face beads of light trickled the seconds away while he tensed, ready to fire by hand, or even to disconnect and refuse the trip if his judgment told him to. A too-cautious decision might cause Lloyds' to cancel his bond; a reckless decision could cost his license or even his life—and others.

But he was not thinking of underwriters and licenses, nor even of lives. In truth he was not thinking at all; he was feeling, feeling his ship, as if his nerve ends extended into every part of her. Five seconds… the safety disconnects clicked out. Four seconds… three seconds… two seconds…one—

He was stabbing at the hand-fire button when the roar hit him.

Kelly relaxed to the pseudogravity of the blast and watched. Pemberton was soberly busy, scanning dials, noting time, checking his progress by radar bounced off Supra-New York. Weinstein's figures, robot-pilot, the ship itself, all were clicking together.

Minutes later, the critical instant neared when the robot should cut the jets. Pemberton poised a finger over the hand cut-off, while splitting his attention among radarscope, accelerometer, periscope, and chronometer. One instant they were roaring along on the jets; the next split second the ship was in free orbit, plunging silently toward the Moon. So perfectly matched were human and robot that Pemberton himself did not know which had cut the power.

He glanced again at the board, then unbuckled. "How about that cigarette, Captain? And you can let your passengers unstrap."

No copilot is needed in space and most pilots would rather share a toothbrush than a control room. The pilot works about an hour at blast off, about the same before contact, and loafs during free flight, save for routine checks and corrections. Pemberton prepared to spend one hundred and four hours eating, reading, writing letters, and sleeping—especially sleeping.

When the alarm woke him, he checked the ship's position, then wrote to his wife. "Phyllis my dear," he began, "I don't blame you for being upset at missing your night out. I was disappointed, too. But bear with me, darling, I should be on a regular run before long. In less than ten years I'll be up for retirement and we'll have a chance to catch up on bridge and golf and things like that. I know it's pretty hard to—"

The voice circuit cut in. "Oh, Jake—put on your company face. I'm bringing a visitor to the control room."

"No visitors in the control room, Captain."

"Now, Jake. This lunkhead has a letter from Old Man Harriman himself. 'Every possible courtesy—' and so forth."

Pemberton thought quickly. He could refuse—but there was no sense in offending the big boss. "Okay, Captain. Make it short."

The visitor was a man, jovial, oversize—Jake figured him for an eighty pound weight penalty. Behind him a thirteen-year-old male counterpart came zipping through the door and lunged for the control console. Pemberton snagged him by the arm and forced himself to speak pleasantly. "Just hang on to that bracket, youngster. I don't want you to bump your head."

"Leggo me! Pop-make him let go."

Kelly cut in. "I think he had best hang on, Judge."

"Umm, uh—very well. Do as the Captain says, Junior."

"Aw, gee, Pop!"

"Judge Schacht, this is First Pilot Pemberton," Kelly said rapidly. "He'll show you around."

"Glad to know you, Pilot. Kind of you, and all that."

"What would you like to see, Judge?" Jake said carefully.

"Oh, this and that. It's for the boy—his first trip. I'm an old spacehound myself—probably more hours than half your crew." He laughed. Pemberton did not.

"There's not much to see in free flight."

"Quite all right. We'll just make ourselves at home-eh, Captain?"

"I wanna sit in the control seat," Schacht Junior announced.

Pemberton winced. Kelly said urgently, "Jake, would you mind outlining the control system for the boy? Then we'll go."

"He doesn't have to show me anything. I know all about it. I'm a Junior Rocketeer of America—see my button?" The boy shoved himself toward the control desk.

Pemberton grabbed him, steered him into the pilot's chair, and strapped him in. He then flipped the board's disconnect.

"Whatcha doing?"

"I cut off power to the controls so I could explain them."

"Aintcha gonna fire the jets?"

"No." Jake started a rapid description of the use and purpose of each button, dial, switch, meter, gimmick, and scope.

Junior squirmed. “How about meteors?” he demanded.

“Oh, that-maybe one collision in half a million EarthMoon trips. Meteors are scarce.”

“So what? Say you hit the jackpot? You’re in the soup.”

“Not at all. The anti-collision radar guards all directions five hundred miles out. If anything holds a steady bearing for three seconds, a direct hook-up starts the jets. First a warning gong so that everybody can grab something solid, then one second later—*Boom!*- We get out of there fast.”

“Sounds corny to me. Lookee, I’ll show you how Commodore Cartwright did it in *The Comet Busters-”*

“Don’t touch those controls!”

“You don’t own this ship. My pop says—”

“Oh, Jake!” Hearing his name, Pemberton twisted, fishlike, to face Kelly.

“Jake, Judge Schacht would like to know—” From the corner of his eye Jake saw the boy reach for the board. He turned, started to shout —acceleration caught him, while the jets roared in his ear.

An old spacehand can usually recover, catlike, in an unexpected change from weightlessness to acceleration. But Jake had been grabbing for the boy, instead of for anchorage. He fell back and down, twisted to try to avoid Schacht, banged his head on the frame of the open airtight door below, and fetched up on the next deck, out cold.

Kelly was shaking him. “You all right, Jake?”

He sat up. “Yeah. Sure.” He became aware of the thunder, the shivering deckplates. “The jets! Cut the power!”

He shoved Kelly aside and swarmed up into the control room, jabbed at the cut-off button. In sudden ringing silence, they were again weightless.

Jake turned, unstrapped Schacht Junior, and hustled him to Kelly. “Captain, please remove this menace from my control room.”

“Leggo! Pop—he’s gonna hurt me!”

The elder Schacht bristled at once. “What’s the meaning of this? Let go of my son!”

“Your precious son cut in the jets.”

“Junior—did you do that?”

The boy shifted his eyes. “No, Pop. It… it was a meteor.”

Schacht looked puzzled. Pemberton snorted. “I had just told him how the radar-guard can blast to miss a meteor. He’s lying.”

Schacht ran through the process he called “making up his mind”, then answered, “Junior never lies. Shame on you, a grown man, to try to put the blame on a helpless boy. I shall report you, sir. Come, Junior.”

Jake grabbed his arm. “Captain, I want those controls photographed for fingerprints before this man leaves the room. It was not a meteor; the controls were dead, until this boy switched them on. Furthermore the anti-collision circuit sounds an alarm."

Schacht looked wary. "This is ridiculous. I simply objected to the slur on my son's character. No harm has been done."

"No harm, eh? How about broken arms-or necks? And wasted fuel, with more to waste before we're back in the groove. Do you know, Mister 'Old SpaLehound,' just how precious a little fuel will be when we try to match orbits with Space Terminal—if we haven't got it? We may have to dump cargo to save the ship, cargo at $60,000 a ton on freight charges alone. Fingerprints will show the Commerce Commission whom to nick for it."

When they were alone again Kelly asked anxiously, "You won't really have to jettison? You've got a maneuvering reserve."

"Maybe we can't even get to Terminal. How long did she blast?"

Kelly scratched his head. "I was woozy myself."

"We'll open the accelerograph and take a look."

Kelly brightened. "Oh, sure! If the brat didn't waste too much, then we just swing ship and blast back the same length of time."

Jake shook his head. "You forgot the changed mass-ratio."

"Oh… oh, yes!" Kelly looked embarrassed. Mass-ratio… under power, the ship lost the weight of fuel burned. The thrust remained constant; the mass it pushed shrank. Getting back to proper position, course, and speed became a complicated problem in the calculus of ballistics. "But you can do it, can't you?"

"I'll have to. But I sure wish I had Weinstein here."

Kelly left to see about his passengers; Jake got to work. He checked his situation by astronomical observation and by radar. Radar gave him all three factors quickly but with limited accuracy. Sights taken of Sun, Moon, and Earth gave him position, but told nothing of course and speed, at that time—nor could he afford to wait to take a second group of sights for the purpose.

Dead reckoning gave him an estimated situation, by adding Weinstein's predictions to the calculated effect of young Schacht's meddling. This checked fairly well with the radar and visual observations, but still he had no notion of whether or not he could get back in the groove and reach his destination; it was now necessary to calculate what it would take and whether or not the remaining fuel would be enough to brake his speed and match orbits.

In space, it does no good to reach your journey's end if you flash on past at miles per second, or even crawling along at a few hundred miles per hour. To catch an egg on a plate—don't bump!

He started doggedly to work to compute how to do it using the least fuel, but his little Marchant electronic calculator was no match for the tons of IBM computer at Supra-New York, nor was he Weinstein. Three hours later he had an answer of sorts. He called Kelly. “Captain? You can start by jettisoning Schacht & Son.”

“I’d like to. No way out, Jake?”

“I can’t promise to get your ship in safely without dumping. Better dump now, before we blast. It’s cheaper.”

Kelly hesitated; he would as cheerfully lose a leg. “Give me time to pick out what to dump.”

“Okay.” Pemberton returned sadly to his figures, hoping to find a saving mistake, then thought better of it. He called the radio room. “Get me Weinstein at Supra-New York.”

“Out of normal range.”

“I know that. This is the Pilot. Safety priority—urgent. Get a tight beam on them and nurse it.”

“Uh… aye aye, sir. I’ll try.”

Weinstein was doubtful. “Cripes, Jake, I can’t pilot you.”

“Dammit, you can work problems for me!”

“What good is seven-place accuracy with bum data?”

“Sure, sure. But you know what instruments I’ve got; you know about how well I can handle them. Get me a better answer.”

“I’ll try.” Weinstein called back four hours later. “Jake? Here’s the dope: You planned to blast back to match your predicted speed, then made side corrections for position. Orthodox but uneconomical. Instead I had Mabel solve for it as one maneuver.”

“Good!”

“Not so fast. It saves fuel but not enough. You can’t possibly get back in your old groove and then match Terminal without dumping.”

Pemberton let it sink in, then said, “I’ll tell Kelly.”

“Wait a minute, Jake. Try this. Start from scratch.”

“Huh?”

“Treat it as a brand-new problem. Forget about the orbit on your tape.

With your present course, speed, and position, compute the cheapest orbit to match with Terminal’s. Pick a new groove.“

Pemberton felt foolish. “I never thought of that.”

“Of course not. With the ship’s little one-lung calculator it’d take you three weeks to solve it. You set to record?”

“Sure.”

“Here’s your data.” Weinstein started calling it oS.

When they had checked it, Jake said, “That’ll get me there?”

“Maybe. *If* the data you gave me is up to your limit of accuracy; *if* you can follow instructions as exactly as a robot, *if* you can blast off and make contact so precisely that you don’t need side corrections, then you might squeeze home. Maybe. Good luck, anyhow.” The wavering reception muffled their goodbyes.

Jake signaled Kelly. “Don’t jettison, Captain. Have your passengers strap down. Stand by to blast. Minus fourteen minutes.”

“Very well, Pilot.”

The new departure made and checked, he again had time to spare. He took out his unfinished letter, read it, then tore it up.

“Dearest Phyllis,” he started again, “I’ve been doing some hard thinking this trip and have decided that I’ve just been stubborn. What am I doing way out here? I like my home. I like to see my wife.

“Why should I risk my neck and your peace of mind to herd junk through the sky? Why hang around a telephone waiting to chaperon fatheads to the Moon—numbskulls who couldn’t pilot a rowboat and should have stayed at home in the first place?

“Money, of course. I’ve been afraid to risk a change. I won’t find another job that will pay half as well, but, if you are game, I’ll ground myself and we’ll start over. All my love,

“Jake”

He put it away and went to sleep, to dream that an entire troop of Junior Rocketeers had been quartered in his control room.

The closeup view of the Moon is second only to the spaceside view of the Earth as ‘a tourist attraction; nevertheless Pemberton insisted that all passengers strap down during the swing around to Terminal. With precious little fuel for the matching maneuver, he refused to hobble his movements to please sightseers.

Around the bulge of the Moon, Terminal came into sight—by radar only, for the ship was tail foremost. After each short braking blast Pemberton caught a new radar fix, then compared his approach with a curve he had plotted from Weinstein’s figures-with one eye on the time, another on the ‘scope, a third on the plot, and a fourth on his fuel gages.

“Well, Jake?” Kelly fretted. “Do we make it?”

“How should I know? You be ready to dump.” They had agreed on liquid oxygen as the cargo to dump, since it could be let boil out through the outer valves, without handling.

“Don’t say it, Jake.”

“Damn it—I won’t if I don’t have to.” He was fingering his controls again; the blast chopped off his words. When it stopped, the radio maneuvering circuit was calling him.

“*Flying Dutchman*, Pilot speaking,” Jake shouted back.

“Terminal Control—Supro reports you short on fuel.”

“Right.”

“Don’t approach. Match speeds outside us. We’ll send a transfer ship to refuel you and pick up passengers.”

“I think I can make it.”

"Don't try it. Wait for refueling."

"Quit telling me how to pilot my ship!" Pemberton switched off the circuit, then stared at the board, whistling morosely. Kelly filled in the words in his mind: "*Casey said to the fireman, 'Boy, you better jump, cause two locomotives are agoing to bumpl'"*

"You going in the slip anyhow, Jake?"

"Mmm—no, blast it. I can't take a chance of caving in the side of Terminal, not with passengers aboard. But I'm not going to match speeds fifty miles outside and wait for a piggyback."

He aimed for a near miss just outside Terminal's orbit, conning by instinct, for Weinstein's figures meant nothing by now. His aim was good; he did not have to waste his hoarded fuel on last minute side corrections to keep from hitting Terminal. When at last he was sure of sliding safely on past if unchecked, he braked once more. Then, as he started to cut off the power, the jets coughed, sputtered, and quit.

The *Flying Dutchman* floated in space, five hundred yards outside Terminal, speeds matched.

Jake switched on the radio. "Terminal-stand by for my line. I'll warp her in."

He had filed his report, showered, and was headed for the post office to radiostat his letter, when the bullhorn summoned him to the Commodore-Pilot's office. Oh, oh, he told himself, Schacht has kicked the Brass-I wonder just how much stock that bliffy owns? And there's that other matter—getting snotty with Control.

He reported stiffly. "First Pilot Pemberton, sir."

Commodore Soames looked up. "Pemberton—oh, yes. You hold two ratings, space-to-space and airless-landing."

Let's not stall around, Jake told himself. Aloud he said, "I have no excuses for anything this last trip. If the Commodore does not approve the way I run my control room, he may have my resignation."

ˆWhat are you talking about?"

"I,, well—don't you have a passenger complaint on me?"

"Oh, that!" Soames brushed it aside. "Yes, he's been here. But I have Kelly's report, too—and your chief jetman's, and a special from Supra-New York. That was crack piloting, Pemberton."

"You mean there's no beef from the Company?"

"When have I failed to back up my pilots? You were perfectly right; I would have stuffed him out the air lock. Let's get down to business: You're on the space-to-space board, but I want to send a special to Luna City. Will you take it, as a favor to me?"

Pemberton hesitated; Soames went on, "That oxygen you saved is for the Cosmic Research Project. They blew the seals on the north tunnel and lost tons of the stuff. The work is stopped-about $130,000 a day in overhead, wages, and penalties. The *Gremlin* is here, but no pilot until the *Moonbat* gets in—except you. Well?"

"But I-look, Commodore, you can't risk people's necks on a jet landing of mine. I'm rusty; I need a refresher and a check-out."

"No passengers, no crew, no captain—your neck alone."

"I'll take her."

Twentyeight minutes later, with the ugly, powerful hull of the *Gremlin* around him, he blasted away. One strong shove to kill her orbital speed and let her fall toward the Moon, then no more worries until it came time to "ride 'er down on her tail".

He felt good—until he hauled out two letters, the one he had failed to send, and one from Phyllis, delivered at Terminal.

The letter from Phyllis was aflectionate-and superficial. She did not mention his sudden departure; she ignored his profession completely. The letter was a model of correctness, but it worried him.

He tore up both letters and started another. It said, in part: "—never said so outright, but you resent my job.

"I have to work to support us. You've got a job, too. It's an old, old job that women have been doing a long time—crossing the plains in covered wagons, waiting for ships to come back from China, or waiting around a mine head after an explosion—kiss him goodbye with a smile, take care of him at home.

"You married a spaceman, so part of your job is to accept my job cheerfully. I think you can do it, when you realize it. I hope so, for the way things have been going won't do for either of us.

Believe me, I love you.

Jake"

He brooded on it until time to bend the ship down for his approach. From twenty miles altitude down to one mile he let the robot brake her, then shifted to manual while still falling slowly. A perfect airless-landing would be the reverse of the takeoff of a war rocket-free fall, then one long blast of the jets, ending with the ship stopped dead as she touches the ground. In practice a pilot must feel his way down, not too slowly; a ship could burn all the fuel this side of Venus fighting gravity too long.

Forty seconds later, falling a little more than 140 miles per hour, he picked up in his periscopes the thousand-foot static towers. At 300 feet he blasted five gravities for more than a second, cut it, and caught her with a one-sixth gravity, Moon-normal blast. Slowly he eased this off, feeling happy.

The *Gremlin* hovered, her bright jet splashing the soil of the Moon, then settled with dignity to land without a jar.

The ground crew took over; a sealed runabout jeeped Pemberton to the tunnel entrance. Inside Luna City, he found himself paged before he finished filing his report. When he took the call, Soames smiled at him from the viewplate. “I saw that landing from the field pick-up, Pemberton. You don’t need a refresher course.”

Jake blushed. “Thank you, sir.”

“Unless you are dead set on space-to-space, I can use you on the regular Luna City run. Quarters here or Luna City? Want it?”

He heard himself saying, “Luna City. I’ll take it.”

He tore up his third letter as he walked into Luna City post office. At the telephone desk he spoke to a blonde in a blue moonsuit. “Get me Mrs. Jake Pemberton, Suburb six-four-oh-three, Dodge City, Kansas, please.” She looked him over. “You pilots sure spend money.”

“Sometimes phone calls are cheap. Hurry it, will you?”

Phyllis was trying to phrase the letter she felt she should have written before. It was easier to say in writing that she was not complaining of loneliness nor lack of fun, but that she could not stand the strain of worrying about his safety. But then she found herself quite unable to state the logical conclusion. Was she prepared to face giving him up entirely if he would not give up space? She truly did not know… the phone call was a welcome interruption.

The viewplate stayed blank. “Long distance,” came a thin voice. “Luna City calling.”

Fear jerked at her heart. “Phyllis Pemberton speaking.”

An interminable delay—she knew it took nearly three seconds’ for radio waves to make the EarthMoon round trip, but she did not remember it and it would not have reassured her. All she could see was a broken home, herself a widow, and Jake, beloved Jake, dead in space.

“Mrs. Jake Pemberton?”

“Yes, yes! Go ahead.” Another wait—had she sent him away in a bad temper, reckless, his judgment affected? Had he died out there, remembering only that she fussed at him for leaving her to go to work? Had she failed him when he needed her? She knew that her Jake could not be tied to apron strings; men—grownup men, not mammas’ boys—had to break away from mother’s apron strings. Then why had she tried to tie him to hers?—she had known better; her own mother had warned her not to try it.

She prayed.

Then another voice, one that weakened her knees with relief: “That you, honey?”

“Yes, darling, yes! What are you doing on the Moon?”

“It’s a long story. At a dollar a second it will keep. What I want to know is—are you willing to come to Luna City?”

It was Jake’s turn to suffer from the inevitable lag in reply. He wondered if Phyllis were stalling, unable to make up her mind. At last he heard her say, “Of course, darling. When do I leave?”

“When—say, don’t you even want to know *why*?”

She started to say that it did not matter, then said, “Yes, tell me.” The lag was still present but neither of them cared. He told her the news, then added, “Run over to the Springs and get Olga Pierce to straighten out the red tape for you. Need my help to pack?”

She thought rapidly. Had he meant to come back anyhow, he would not have asked. “No. I can manage.”

“Good girl. I’ll radiostat you a long letter about what to bring and so forth. I love you. ‘Bye now!”

“Oh, I love you, too. Goodbye, darling.”

Pemberton came out of the booth whistling. Good girl, Phyllis. Staunch. He wondered why he had ever doubted her.

Water is for Washing

He judged that the Valley was hotter than usual—but, then, it usually was. Imperial Valley was a natural hothouse, two hundred and fifty feet below sea level, diked from the Pacific Ocean by the mountains back of San Diego, protected from the Gulf of Baja California by high ground on the south. On the east, the Chocolate Mountains walled off the rushing Colorado River.

He parked his car outside the. Barbara Worth Hotel in El Centro and went into the bar. “Scotch.”

The bartender filled a shot glass, then set a glass of ice Water beside it. “Thanks. Have one?”

“Don’t mind if I do.”

The customer sipped his drink, then picked up the chaser. “That’s just the right amount of water in the right place. I’ve got hydrophobia.”

“Huh?”

“I hate water. Darn near drowned when I was a kid. Afraid of it ever since.”

“Water ain’t fit to drink,” the bartender agreed, “but I do like to swim.”

“Not for me. That’s why I like the Valley. They restrict the stuff to irrigation ditches, washbowls, bathtubs, and glasses. I always hate to go back to Los Angeles.”

“If you’re afraid of drowning,” the barkeep answered, “you’re better off in L.A. than in the Valley. We’re below sea level here. Water all around us, higher than our heads. Suppose somebody pulled out the cork?”

“Go frighten your grandmother. The Coast Range is no cork.”

“Earthquake.”

“That’s crazy. Earthquakes don’t move mountain ranges.”

"Well, it wouldn't necessarily take a quake. You've heard about the 1905 flood, when the Colorado River spilled over and formed the Salton Sea? But don't be too sure about quakes; valleys below sea level don't just grow—*something* has to cause them. The San Andreas Fault curls around this valley like a question mark. Just imagine the shake-up it must have taken to drop thousands of square miles below the level of the Pacific."

"Quit trying to get my goat. That happened thousands of years ago. Here." He laid a bill on the bar and left. Joykiller! A man like that shouldn't be tending bar.

The thermometer in the shaded doorway showed 118 degrees. The solid heat beat against him, smarting his eyes and drying his lungs, even while he remained on the covered sidewalk. His car, he knew, would be too hot to touch; he should have garaged it. He walked around the end of it and saw someone bending over the left hand door. He stopped. "What the hell do you think you're doing?"

The figure turned suddenly, showing pale, shifty eyes. He was dressed in a business suit, dirty and unpressed. He was tieless. His hands and nails, were dirty, but not with the dirt of work; the palms were uncalloused. A weak mouth spoiled features otherwise satisfactory. "No harm intended," he apologized. "I just wanted to read your registration slip. You're from Los Angeles. Give me a lift back to the city, pal."

The car owner ignored him and glanced around inside the automobile. "Just wanted to see where I was from, eh? Then why did you open the glove compartment? I ought to run you in." He looked past the vagrant at two uniformed deputy sheriffs sauntering down the other side of the street. "On your way, bum."

The man followed the glance, then faded swiftly away in the other direction. The car's owner climbed in, swearing at the heat, then checked the glove compartment. The flashlight was missing.

Checking it off to profit-and-loss, he headed for Brawley, fifteen miles north. The heat was oppressive, even for Imperial Valley. Earthquake weather, he said to himself, giving vent to the Californian's favorite superstition, then sternly denied it—that dumb fool gin peddler had put the idea in his mind. Just an ordinary Valley day, a little hotter, maybe.

His business took him to several outlying ranchos between Brawley and the Salton Sea. He was heading back toward the main highway on a worn gravel mat when the car began to waltz around as if he were driving over corduroy. He stopped the car, but the shaking continued, accompanied by a bass grumble.

Earthquake! He burst out of the car possessed only by the primal urge to get out in the open, to escape the swaying towers, the falling bricks. But there were no buildings here— nothing but open desert and irrigated fields.

He went back to the car, his stomach lurching to every following temblor. The right front tire was flat. Stone-punctured, he decided, when the car was bounced around by the first big shock.

Changing that tire almost broke his heart. He was faint from heat and exertion when he straightened up from it.

Another shock, not as heavy as the first, but heavy, panicked him again and he began to run, but he fell, tripped by the crazy galloping of the ground. He got up and went back to the car.

It had slumped drunkenly, the jack knocked over by the quake.

He wanted to abandon it, but the dust from the shocks had closed in around him like fog, without fog's blessed coolness. He knew he was several miles from town and doubted his ability to make it on foot.

He got to work, sweating and gasping. One hour and thirteen minutes after the initial shock the spare tire was in place. The ground still grumbled and shook from time to time. He resolved to drive slowly and thereby keep the car in control if another bad shock came along. The dust forced him to drive slowly, anyhow.

Moseying back toward the main highway, he was regaining his calm, when he became aware of a train in the distance. The roar increased, over the noise, of the car—an express train, he decided, plunging down the valley. The thought niggled at the back of his mind for a moment, until he realized why the sound seemed wrong: Trains should not race after a quake; they should creep along, the crew alert for spread rails.

The sound was recast in his mind. *Water*!

Out of the nightmare depths of his subconscious, out of the fright of his childhood, he placed it. This was the sound after the darn broke, when, as a kid, he had been so nearly drowned. Water! A great wall of water, somewhere in the dust, hunting for him, hunting for *him*!

His foot jammed the accelerator down to the floorboards; the car bucked and promptly stalled. He started it again and strove to keep himself calm. With no spare tire and a bumpy road he could not afford the risk of too much speed. He held himself down to a crawling thirty-five miles an hour, tried to estimate the distance and direction of the water, and prayed.

The main highway jumped at him in the dust and he was almost run down by a big car roaring past to the north. A second followed it, then a vegetable truck, then the tractor unit of a semi-trailer freighter.

It was all he needed to know. He turned north.

He passed the vegetable truck and a jalopy-load of Okiestyle workers, a family. They shouted at him, but he kept going. Several cars more powerful than his passed him and he passed in turn several of the heaps used by the itinerant farm workers. After that he had the road to himself. Nothing came from the north.

The trainlike rumble behind him increased.

He peered into the rearview mirror but could see nothing through the dusty haze.

There was a child sitting beside the road and crying—a little girl about eight. He drove on past, hardly aware of her, then braked to a stop. He told himself that she must have folks around somewhere, that it was no business of his. Cursing himself, he backed and turned, almost drove past her in the dust, then managed to turn around without backing and pulled up beside her. “Get in!”

She turned a dirty, wet, tragic face, but remained seated.

“I can’t. My foot hurts.”

He jumped out, scooped her up and dumped her in the righthand seat, noting as he did so that her right foot was swollen. “How did you do it?” he demanded, as he threw in the car.

“When the *thing* happened. Is it broke?” She was not crying now. “Are you going to take me home?”

“I—I’ll take care of you. Don’t ask questions.”

“All right,” she said doubtfully. The roar behind them was increasing. He wanted to speed up but the haze and the need to nurse his unreliable spare tire held him back. He had to swerve suddenly when a figure loomed up in the dust—a Nisei boy, hurrying toward them.

The child beside him leaned out. “That’s Tommy!”

“Huh? Never mind. Just a goddam Jap.”

“That’s Tommy Hayakawa. He’s in my class.” She added. “Maybe he’s looking for me.”

He cursed again, under his breath, and threw the car into a turn that almost toppled it. Then he was heading back, into that awful sound.

“There he is,” the child shrieked. “Tommy! Oh, Tommy!”

“Get in,” he commanded, when he had stopped the car by the boy.

“Get in, Tommy,” his passenger added.

The boy hesitated; the driver reached past the little girl, grabbed the boy by his shirt and dragged him in. “Want to be drowned, you fool?”

He had just shifted into second, and was still accelerating, when another figure sprang up almost in front of the car—a man, waving his arms. He caught a glimpse of the face as the car gained speed. It was the sneak thief.

His conscience was easy about that one, he thought as he drove on. Good riddance! Let the water get him.

Then the horror out of his own childhood welled up in him and he saw the face of the tramp again, in a horrible fantasy. He was struggling in the water, his bloodshot eyes bulging with terror, his gasping mouth crying wordlessly for help.

The driver was stopping the car. He did not dare turn; he backed the car, at the highest speed he could manage. It was no great distance, or else the vagrant had run after them.

The door was jerked open and the tramp lurched in. "Thanks, pal," he gasped. "Let's get out of here!"

"Right!" He glanced into the mirror, then stuck his head out and looked behind. Through the haze he saw it, a lead black wall, thirty—or was it a hundred?—feet high, rushing down on them, overwhelming them. The noise of it pounded his skull.

He gunned the car in second, then slid into high and gave it all he had, careless of the tires. "How we doing?" he yelled.

The tramp looked out the rear window. "We're gaining. Keep it up"

He skidded around a wreck on the highway, then slowed a trifle, aware that the breakneck flight would surely lose them the questionable safety of the car if he kept it up. The little girl started to cry.

"Shut up!" he snapped.

The Nisei boy twisted around and looked behind. "What is it?" he asked in an awed voice.

The tramp answered him. "The Pacific Ocean has broken through."

"It can't be!" cried the driver. "It must be the Colorado River."

"That's no river, Mac. That's the Gulf. I was in a cantina in Centro when it came over the radio from Calexico. Warned us that the ground had dropped away to the south. Tidal wave coming. Then the station went dead." He moistened his lips. "That's why I'm here."

The driver did not answer. The vagrant went on nervously, "Guy I hitched with went on without me, when he stopped for gas in Brawley." He looked back again. "I can't see it any more."

"We've gotten away from it?"

"Hell, no. It's just as loud. I just can't see it through the murk."

They drove on. The road curved a little to the right and dropped away almost imperceptibly.

The bum looked ahead. Suddenly he yelled. "Hey! Where you going?"

"Huh?'

"You got to get off the highway, man! We're dropping back toward the Salton Sea—the lowest place in the Valley."

"There's no other place to go. We *can't* turn around."

"You can't go ahead. It's suicide!"

"We'll outrun it. North of the Salton, it's high ground again."

"Not a chance. Look at your gas gauge."

The gauge was fluttering around the left side of the dial. Two gallons, maybe less. Enough to strand them by the sunken shores of the Salton Sea. He Stared at it in an agony of indecision.

"Gotta cut off to the left," his passenger was saying. "Side road. Follow it up toward the hills."

"Where?"

"Coming up. I know this road. I'll watch for it."

When he turned into the side road, he realized sickly that his course was now nearly parallel to the hungry flood south of them. But the road climbed.

He looked to the left and tried to see the black wall of water, the noise of which beat loud in his ears, but the road demanded his attention. "Can you see it?" he yelled to the tramp.

"Yes! Keep trying, pal!"

He nodded and concentrated on the hills ahead. The hills must surely be above sea level, he told himself. On and on he drove, through a timeless waste of dust and heat and roar. The grade increased, then suddenly the car broke over a rise and headed down into a wash—a shallow arroyo that should have been dry, but was not.

He was into water before he knew it, hub high and higher. He braked and tried to back. The engine coughed and stalled.

The tramp jerked open the door, dragged the two children out, and, with one under each arm, splashed his way back to higher ground. The driver tried to start the car, then saw frantically that the rising water was up above the floorboards.

He jumped out, stumbled to his knees in water waist-deep, got to his feet, and struggled after them.

The tramp had set the children down on a little rise and was looking around. "We got to get out of here," the car owner gasped.

The tramp shook his head. "No good. Look around you."

To the south, the wall of water had broken around the rise on which they stood. A branch had sluiced between them and the hills, filling the wash in which the car lay stalled. The main body of the rushing waters had passed east of them, covering the highway they had left, and sweeping on toward the Salton Sea.

Even as he watched, the secondary flood down the wash returned to the parent body. They were cut off, surrounded by the waters.

He wanted to scream, to throw himself into the opaque turbulence and get it over. Perhaps he did scream. He realized that the tramp was shaking him by the shoulder.

“Take it easy, pal. We’ve got a couple of throws left.”

“Huh?” He wiped his eyes. “‘What do we do?”

“I want my mother,” the little girl said decisively.

The tramp reached down and patted her absentmindedly. Tommy Hayakawa put his arm around her. “I’ll take care of you, Laura,” he said gravely.

The water was already over the top of the car and rising. The boiling head of the flood was well past them; its thunder was lessening; the waters rose quietly—but they rose.

“We can’t stay here,” he persisted.

‘We’ll have to,” the tramp answered....

Their living space grew smaller, hardly thirty feet by fifty. They were not alone now. A coyote, jack rabbits, creepers, crawlers, and gnawers, all the poor relations of the desert, were forced equally back into the narrowing circle of dry land. The coyote ignored the rabbits; they ignored the coyote. The highest point of their island was surmounted by a rough concrete post about four feet high, an obelisk with a brass plate set in its side. He read it twice before the meaning of the words came to him.

It was a bench mark, stating, as well as latitude and longitude, that this spot, this line engraved in brass, was “sea level.” When it soaked into his confused brain he pointed it out to his companion. “Hey! Hey, look! We’re going to make it! The water won’t come any higher!”

The tramp looked. “Yes, I know. I read it. But it doesn’t mean anything. That’s the level it used to be before the earthquake.”

“But—”

“It may be higher—or lower. We’ll find out.”

The waters still came up. They were ankle-deep at sundown. The rabbits and the other small things were gradually giving up. They were in an unbroken waste of water, stretching from the Chocolate Mountains beyond where the Salton Sea had been, to the nearer hills on the west. The coyote slunk up against their knees, dog fashion, then appeared to make up its mind, for it slipped into the water and struck out toward the hills. They could see its out-thrust head for a long time, until it was just a dot on the water in the gathering darkness.

When the water was knee-deep, each man took one of the children in his arms. They braced themselves against the stability of the concrete post, and waited, too tired for panic. They did not talk. Even the children had not talked much since abandoning the car.

It was getting dark. The tramp spoke up suddenly. “Can you pray?”

“Uh—not very well.”

“Okay. I’ll try, then.” He took a deep breath. “Merciful Father, Whose all-seeing eye notes even the sparrow in its flight, have mercy on these Thy unworthy servants. Deliver them from this peril, if it be Thy will." He paused, and then added, "And make it as fast as You can, please. Amen."

The darkness closed in, complete and starless. They could not see the water, but they could feel it and hear it. It was warm—it felt no worse when it soaked their armpits than it had around their ankles. They had the kids on their shoulders now, with their backs braced against the submerged post. There was little current.

Once something bumped against them in the darkness—a dead steer, driftwood, a corpse—they had no way of knowing. It nudged them and was gone. Once he thought he saw a light, and said suddenly to the tramp, "Have you still got that flashlight you swiped from me?"

There was a long silence and a strained voice answered, "You recognized me."

"Of course. Where's the flashlight?"

"I traded it for a drink in Centro.

"But, look, Mac," the voice went on reasonably, "if I hadn't borrowed it, it would be in your car. It wouldn't be here. And if I *did* have it in my pocket, it'd be soaked and wouldn't work."

"Oh, forget it!"

"Okay." There was silence for a while, then the voice went on, "Pal, could you hold both the kids a while?"

"I guess so. Why?"

"This water is still coming up.. It'll be over our heads, maybe. You hang onta the kids; I'll boost myself up on the post. I'll sit on it and wrap my legs around it. Then you hand me the kids. That way we gain maybe eighteen inches or two feet."

"And what happens to me?"

"You hang onto my shoulders and float with your head out of the water."

"Well—we'll try it."

It worked. The kids clung to the tramp's sides, supported by water and by his arms. The driver hung onto~-the tramp where he could,' first to his belt, then, as the waters rose and his toes no longer touched bottom, to the collar of his coat.

They were still alive.

"I wish it would get light. It's worse in the darkness."

"Yeah," said the tramp. "If it was light, maybe somebody 'ud see us."

"How?"

"Airplane, maybe. They always send out airplanes, in floods."

He suddenly began to shake violently, as the horror came over him, and the memory of another flood when there had been no rescuing airplanes.

The tramp said sharply, “What’s the matter, Mac? Are you cracking up?”

“No, I’m all right. I just hate water.”

“Want to swap around? You hold the kids for a while and I’ll hang on and float.”

“Uh. . . No, we might drop one. Stay where you are.”

“We can make it. The change’ll do you good.” The tramp shook the children. “Hey, wake up! Wake up, honey—and hold tight.”

The kids were transferred to his shoulders while he gripped the post with his knees and the tramp steadied him with an arm. Then he eased himself cautiously onto the top of the post, as the tramp got off and floated free, save for one anchoring hand. “You all right?” he said to the tramp.

The hand squeezed his shoulder in the darkness. “Sure, Got a snootful of water.”

“Hang on.”

"Don't worry—I will!"

He was shorter than the tramp; he had to sit erect to keep his head out of water. The children clung tightly. He kept them boosted high.

Presently the tramp spoke. "You wearing a belt?"

"Yes. Why?"

"Hold still." He felt a second hand fumbling at his waist, then his trousers loosened as the belt came away. "I'm going to strap your legs to the post. That's the bad part about it; your legs cramp. Hold tight now. I'm going under."

He felt hands under water, fumbling at his legs. Then there was the tension of the belt being tightened around his knees. He relaxed to the pressure. It was a help; he found he could hold his position without muscular effort.

The tramp broke water near him. "Where are you?" the voice was panicky.

"Here! Over here!" he tried to peer into the inky darkness; it was hopeless. "Over this way!" The splashing seemed to come closer. He shouted again, but no hand reached out of the darkness. He continued to shout, then shouted and listened intermittently. It seemed to him that he heard splashing long after the sound had actually ceased.

He stopped shouting only when his voice gave out. Little Laura was sobbing on his shoulder. Tommy was trying to get her to stop. He could tell from their words that they had not understood what had happened and he did not try to explain.

When the water dropped down to his waist, he moved the kids so that they sat on his lap. This let him rest his arms, which had grown almost unbearably tired as the receding water ceased to support the weight of the children. The water dropped still more, and the half dawn showed him that the ground beneath him was, if not dry, at least free from flood.

He shook Tommy awake. "I can't get down, kid. Can you unstrap me?"

The boy blinked and rubbed his eyes. He looked around and seemed to recall his circumstances without dismay. "Sure. Put me down."

The boy loosened the buckle after some difficulty and the man cautiously unwound himself from his perch. His legs refused him when he tried to stand; they let him and the girl sprawl in the mud.

"Are you hurt?" he asked her as he sat up..

"No," she answered soberly.

He looked around. It was getting steadily lighter and he could see the hills to the west; it now appeared that the water no longer extended between the hills and themselves. To the east was another story; the Salton Sea no longer existed as such. An unbroken sheet of water stretched from miles to the north clear to the southern horizon.

His car was in sight; the wash was free of water except for casual pools. He walked down, toward the automobile, partly to take the knots out of his legs, pertly to see if the car could ever be salvaged. It was there that he found the tramp.

The body lay wedged against the right rear wheel, as if carried down there by undertow.

He walked back toward the kids. “Stay away from the car,” he ordered. “Wait here. I’ve got something to do.” He went back to the car and found the keys still in the ignition lock. He opened the trunk with some difficulty and got out a short spade he kept for desert mishaps.

It was not much of a grave, just a shallow trench in the wet sand, deep enough to receive and cover a man, but he promised himself that he would come back and do better. He had no time now. The waters, he thought, would be back with high tide. He must get himself and the children to the hills.

Once the body was out of sight, he called out to the boy and the girl, “You can come here now.” He had one more chore. There was drift about, yucca stalks, bits of wood. He selected two pieces of unequal length, then dug around in his tool chest for bits of wire. He wired the short piece across the longer, n a rough cross, then planted the cross in the sand near the head of the grave.

He stepped back and looked at it, the kids at his side.

His lips moved silently for a moment, then he said, “Come on, kids. We got to get out of here.” He picked up the little girl, took the boy by the hand, and they walked away to the west, the sun shining on their backs.

THEY DO IT WITH MIRRORS

An Edison Hill Crime Case

I was there to see beautiful naked women. So was everybody else. It's a common failing.

I climbed on a stool at the end of the bar in Jack Joy's Joint and spoke to Jack himself, who was busy setting up two old-fashioneds. "Make it three," I said. "No, make it four and have one with me. What's the pitch, Jack? I hear you set up a peep show for the suckers."

"Hi, Ed. Nope, it's not a peep show—it's Art."

"What's the difference?"

"If they hold still, it's Art. If they wiggle around, it's illegal. That's the ruling. Here." He handed me a program.

It read:

THE JOY CLUB
PRESENTS
The Magic Mirror
Beautiful Models in a series of Entertaining
and Artistic Pageants

10 p.m. "Aphrodite" — Estelle
11 p.m. "Sacrifice to the Sun" — Estelle and Hazel
12 p.m. "The High Priestess" — Hazel
1 a.m. "The Altar Victim" — Estelle
2 a.m. "Invocation to Pan" — Estelle and Hazel

(Guests are requested to refrain stomping, whistling, or otherwise disturbing the artistic serenity of the presentations)

The last was a giggle. Jack's place was strictly a joint. But on the other side of the program I saw a new schedule of prices which informed me that the drink in my hand was going to cost me just twice what I had figured. And the place was jammed. By suckers—including me.

I was about to speak to Jack, in a kindly way, promising to keep my eyes closed during the show and then pay the old price for my drink, when I heard two sharp *beeps!*—a high tension buzzer sound, like radio code—from a spot back of the bar. Jack turned away from me, explaining, "That's the eleven o'clock show." He busied himself underneath the bar.

Being at the end of the bar I could see under the long side somewhat. He had enough electrical gear there to make a happy Christmas for a Boy Scout—switches, a rheostat dingus, a turntable for recordings, and a hand microphone. I leaned over and sized it up. I have a weakness for gadgets, from my old man. He named me Thomas Alva Edison Hill in hopes that I would emulate his idol. I disappointed him—I didn't invent the atom bomb, but I do sometimes try to repair my own typewriter.

Jack flipped a switch and picked up the hand mike. His voice came out of the juke box: "We now present the Magic Mirror." Then the turntable picked up with *Hymn to the Sun* from *Coq d'Or,* and he started turning the rheostat slowly.

The lights went down in the joint and came up slowly in the Magic Mirror. The "Mirror" was actually a sheet of glass about ten feet wide and eight high which shut off a little balcony stage. When the house lights were on bright and the stage was dark, you could not see through the glass at all; it looked like a mirror. As the house lights went out and the stage lights came on, you could see through the glass and a picture slowly built up in the "Mirror."

Jack had a single bright light under the bar which lighted him and the controls and which did not go out with the house lights. Because of my position at the end of the bar it hit me square in the eye. I had to block it with my hand to see the stage.

It was something to see.

Two girls, a blonde and a brunette. A sort of altar or table, with the blonde sprawled across it, volup'. The brunette standing at the end of the altar, grabbing the blonde by the hair with one hand while holding a fancy dagger upraised with the other. There was a backdrop in gold and dark blue—a sunburst in a phony Aztec or Egyptian design, but nobody was looking at it; they were looking at the girls.

The brunette was wearing a high showgirl head dress, silver sandals, and a Gstring in glass jewels. Nothing more. No sign of a brassiere. The blonde was naked as an oyster, with her downstage knee drawn up just enough to get past sufficiently broadminded censors.

But I was not looking at the naked blonde; I was looking at the brunette.

It was not just the two fine upstanding breasts nor the long graceful legs nor the shape of her hips and thighs; it was the overall effect. She was so beautiful it hurt. I heard somebody say, "Great jumping jeepers!" and was about to shush him when I realized it was me.

Then the lights went down and I remembered to breathe.

I paid the clip price for my drink without a quiver and Jack assured me: "They are hostesses between shows." When they showed up at the stairway leading down from the balcony he signalled them to come over and then introduced me.

"Hazel Dorn, Estelle d'Arcy—meet Eddie Hill."

Hazel, the brunette, said, "How do you do?" but the blonde said,

"Oh, I've met the Ghost before. How's business? Rattled any chains lately?"

I said, "Good enough," and let it pass. I knew her all right—but as Audrey Johnson, not as Estelle d'Arcy. She had been a steno at the City Hall when I was doing an autobiography of the Chief of Police. I had not liked her much; she had an instinct for finding a sore point and picking at it.

I am not ashamed of being a ghost writer, nor is it a secret. You will find my name on the title page of *Forty Years a Cop* as well as the name of the Chief—in small print but it is there: "with Edison Hill."

"How did you like the show?" Hazel asked, when I had ordered a round.

"I liked *you,*" I said, softly enough to keep it private. "I can't wait for the next show to see more of you."

"You'll see more," she admitted and changed the subject. I gathered an impression that she was proud of her figure and liked to be told she was beautiful but was not entirely callused about exhibiting it in public.

Estelle leaned across the bar to Jack. "Jackie Boy," she said in sweetly reasonable tones, "you held the lights too long again. It doesn't matter to me in that pose, but you had poor old Hazel trembling like a leaf before you doused the glim."

Jack set a three-minute egg timer, like a little hourglass on the bar. "Three minutes it says—three minutes you did."

"I don't think it was more than three minutes," Hazel objected. "I wasn't tired."

"You were trembling, dear. I saw you. You mustn't tire yourself—it makes lines. Anyhow," she added, "I'll just keep this," and she put the egg timer in her purse. "We'll time it ourselves."

"It was three minutes," Jack insisted.

"Never mind," she answered. "From now on it'll be three minutes, or mamma will have to lock Jackie in the dark closet."

Jack started to answer, thought better of it, then walked away to the other end of the bar. Estelle shrugged, then threw down the rest of her drink and left us. I saw her speak to Jack again, then join some customers at one of the tables.

Hazel looked at her as she walked away. "I'd paddle that chippie's pants," she muttered, "if she wore any."

"A bum beef?"

"Not exactly. Maybe Jack is a friend of yours—"

"Just an acquaintance."

"Well . . . I've had worse bosses—but he is a bit of a jerk. Maybe he doesn't stretch the poses just out of meanness—I've never timed him—but some of those poses are too long for three minutes. Take Estelle's Aphrodite pose—you saw it?"

"No."

"She balances on the ball of one foot, no costume at all, but with one leg raised enough to furnish a fig leaf. Jack's got a blackout switch to cover her if she breaks, but, just the same, it's a strain."

"To cover himself with the cops, you mean."

"Well, yes. Jack wants us to make it just as strong as the vice squad will stand for."

"You ought not to be in a dive like this. You ought to have a movie contract."

She laughed without mirth. "Eddie, did you ever try to get a movie contract? I've tried."

"Just the same—oh, well! But why are you sore at Estelle? What you told me doesn't seem to cover it."

"She— Skip it. She probably means well."

"You mean she shouldn't have dragged you into it?"

"Partly."

"What else?"

"Oh, nothing—look, do you think I need any wrinkle remover?" I examined her quite closely, until she actually blushed a little, then assured her that she did not.

"Thanks," she said. "Estelle evidently thinks so. She's been advising me to take care of myself lately and has been bringing me little presents of beauty preparations. I thank her for them and it appears to be sheer friendliness on her part . . . but it makes me squirm."

I nodded and changed the subject. I did not want to talk about Estelle; I wanted to talk about *her*—and me. I mentioned an agent I knew (my own) who could help her and that got her really interested, if not in me, at least in what I was saying.

Presently she glanced at the clock back of the bar and squealed. "I've got to peel for the customers. 'Bye now!" It was five minutes to twelve. I shifted from the end of the bar to the long side, just opposite Jack's Magic Mirror controls. I did not want that bright light of his interfering with me seeing Hazel.

It was just about twelve straight up when Jack came up from the rear of the joint, elbowed his other barman out of the way, and took his place near the controls. "Just about that time," he said to me. "Has she rung the buzzer?"

"Not a buzz."

"Okay, then." He cleared dirty glasses off the top of the bar while we waited, changed the platter on the turntable, and generally messed around. I kept my eyes on the mirror.

I heard the two *beeps!* sharp and clear. When he did not announce the show at once, I glanced around and saw that, while he had the mike in his hand, he was staring past it at the door, and looking considerably upset.

There were two cops just inside the door, Hannegan and Feinstein, both off the beat. I supposed he was afraid of a raid, which was silly. Pavement pounders don't pull raids. I knew what they were there for, even before Hannegan gave Jack a broad grin and waved him the okay sign—they had just slipped in for a free gander at the flesh under the excuse of watching the public morals.

"We now present the Magic Mirror," said Jack's voice out of the juke box. Somebody climbed on the stool beside me and slipped a hand under my arm. I looked around. It was Hazel.

"You're not here; you're up there," I said foolishly.

"Huh-uh. Estelle said— I'll tell you after the show."

The lights were coming up in the Mirror and the juke box was cranking out *Valse Triste.* The altar was in this scene, too, and Estelle was sprawled over it much as she had been before. As it got lighter you could see a red stain down her side and the prop dagger. Hazel had told me what each of the acts were; this was the one called "The Altar Victim," scheduled for the one o'clock show.

I was disappointed not to be seeing Hazel, but I had to admit it was good—good theater, of the nasty sort, sadism and sex combined. The red stuff—catsup I guessed—trickling down her bare side and the handle of the prop dagger sticking up as if she had been stabbed through—the customers liked it. It was a natural follow-up to the "Sacrifice to the Sun."

Hazel screamed in my ear.

Her first scream was solo. The next thing I can recall it seemed as if every woman in the place was screaming—soprano, alto, and some tenor, but mostly screeching soprano. Through it came the bull voice of Hannegan. "Keep your seats, folks! Somebody turn on the lights!"

I grabbed Hazel by the shoulders and shook her. "What's the matter? What's up?"

She looked dazed, then pointed at the Mirror. "She's dead . . . she's dead . . . she's dead!" she chanted. She scrambled down from the stool and took out for the back of the house. I started after her. The house lights came on abruptly, leaving the Mirror lights still on.

We finished one, two, three, up the stairway, through a little dressing room, and onto the stage. I almost caught up with Hazel, and Feinstein was close on my heels.

We stood there, jammed in the door, blinking at the flood lights, and not liking what we saw under them. She was dead all right. The dagger, which should have been faked between her arm and her breast with catsup spilled around to maintain the illusion—this prop dagger, this slender steel blade, was three inches closer to her breastbone than it should have been. It had been stabbed straight into her heart.

On the floor at the side of the altar away from the audience, close enough to Estelle to reach it, was the egg timer. As I looked at it the last of the sand ran out.

I caught Hazel as she fell—she was a big armful—and spread her on the couch. "Eddie," said Feinstein, "call the Station for me. Tell Hannegan not to let anyone out. I'm staying here." I called the station but did not have to tell Hannegan anything. He had them all seated again and was jollying them along. Jack was still standing back of the bar, shock on his face, and the bright light at the control board making him look like a death's head.

By twelve-fifteen Spade Jones, Lieutenant Jones of Homicide, showed up and from there on things slipped into a smooth routine. He knew me well, having helped me work up some of the book I did for the Chief, and he grabbed onto me at once for some of the background. By twelve-thirty he was reasonably sure that none of the customers could have done it. "I won't say one of them *didn't* do it, Eddie my boy—anybody could have done it who knew the exact second to slip upstairs, grab the knife, and slide it into her ribs. But the chances are against any of them knowing just when and how to do it."

"Anybody inside or outside," I corrected.

"So?"

"There's a fire exit at the foot of the stairs."

"You think I haven't noticed that?" He turned away and gave Hannegan instructions to let anybody go who could give satisfactory identification with a local address. The others would have to go downtown to have closer ties as material witnesses put on them by the night court. Perhaps some would land in the tank for further investigation, but in any case—clear 'em out!

The photographers were busy upstairs and so were the fingerprint boys. The Assistant Medical Examiner showed up, followed by reporters. A few minutes later, after the house was cleared, Hazel came downstairs and joined me. Neither of us said anything, but I patted her on the back. When they carried down the basket stretcher a little later, with a blanket-wrapped shape in it, I put my arm around her while she buried her eyes in my shoulders.

Spade talked to us one at a time. Jack was not talking. "It ain't smart to talk without a lawyer," was all Spade could get out of him. I thought to myself that it would be better to talk to Spade now than to be sweated and maybe massaged a little under the lights. My testimony would clear him even though it would show that there was a spat between him and Estelle. Spade would not frame a man. He was an honest cop, as cops go. I've known honest cops. Two, I think.

Spade took my story, then he took Hazel's, and called me back. "Eddie my boy," he said, "help me dig into this thing. As I understand it, this girl Hazel should have had the twelve o'clock show."

"That's right."

He studied one of the Joy Club's programs. "Hazel says she went upstairs to undress for the show about eleven-fifty-five."

"Exactly that time."

"Yeah. She was with you, wasn't she? She says she went up and that Estelle followed her in with a song-and-dance that the boss said to swap the two shows around."

"I wouldn't know about that."

"Naturally not. She says she beefed a little but gave in and came on downstairs, where she joined you. Correct?"

"Correct."

"Mmmm . . . By the way, your remark about the fire door might lead to something. Hazel put me onto a boy friend for Estelle. Trumpeter in that rat race across the street. He could have ducked across and stabbed her. Wouldn't take long. Trumpet players can't be pushing wind all the time; they'd lose their lip."

"How would he know when to do it? It was supposed to be Hazel's show."

"Mmmm . . . Well, maybe he did know. Swapping shows sounds like Estelle had made a date, and that sounds like a man. In which case he'd know about it. One of the boys is looking into it. Now about the way these shows worked—do you suppose you could show me how they were staged? Hannegan tried it but all he got was a shock."

"I'll try it," I said, getting up. "It's nothing very fancy. Did you ask Jack about Hazel's statement that Estelle had permission from him to swap the shows?"

"That's the one thing he cracked on. He states flatly that he didn't know that the shows were swapped. He says he expected to see Hazel in the Mirror."

The controls looked complicated but weren't. I showed Jones the rheostat and told him it enabled Jack to turn either set of lights down slowly while the other set went up. I found a bypass switch back of the rheostat which accounted for the present condition—all lights burning brightly, house and stage. There was a blackout switch and there was a switch that cut the hand microphone and the turntable in through the juke box. Near the latter was the buzzer—a small black case with two binding posts—which the girls used to signal Jack. Centered on the under side of the bar was a hundred-and-fifty watt bulb hooked in on its own line separate from the rheostat. Except for the line to this light all the wires from all the equipment disappeared into a steel conduit underneath the bar. It was this light which had dazzled me during the eleven o'clock show. It seemed excessive; a peanut bulb would have been more appropriate. Apparently Jack liked lots of light.

I explained the controls to Spade, then gave him a dry run. First I switched the rheostat back to "House" and threw off the bypass switch, leaving the room brightly lighted and the Magic Mirror dark. "The time is five minutes of twelve. Hazel leaves me to go upstairs. I shift around to the bar stool just opposite where I am now standing. At midnight Jack comes up and asks me if I've heard the buzzer. I say 'No.' He fiddles around a bit, clearing away glasses and the like. Then come two beeps on the buzzer. He picks up the microphone but he doesn't announce the show for a few seconds—he's just noticed Hannegan and Feinstein. Hannegan gives him the high sign and he goes ahead." Then I picked up the mike myself and spoke into it:

"We now present the Magic Mirror!"

I put down the mike and flipped on the turntable switch. The same platter was on and the juke box started playing *Valse Triste.* Hazel looked up at me sharply, from where she had been resting her head on her arms a few tables away. She looked horrified, as if the reconstruction were too much for her stomach.

I turned the rheostat slowly from "House" to "Stage." The room darkened and the stage lit up. "That's all there was to it," I said. "Hazel sat down beside me just as Jack announced the show. As the lights came on she screamed."

Spade scratched his chin. "You say Joy was standing in front of you when the buzzer signal came from upstairs?"

"Positive."

"You gave him a motive—the war he was having with Estelle. But you've given him an alibi too."

"That's right. Either Estelle punched that buzzer herself, then lay down and stabbed herself, or she was murdered and the murderer punched it to cover up, then ducked out while everybody had their eyes on the Mirror. Either way I had Jack Joy in sight."

"It's an alibi all right," he conceded. "Unless you were in cahoots with him," he said hopefully.

"Prove it," I answered, grinning. "Not with him. I think he's a jerk."

"We're all jerks, more or less, Eddie my boy. Let's look around upstairs."

I switched the bypass on, leaving both stage and house lighted, and followed him. I pointed out the buzzer to him, after searching for it myself. A conduit came up through the floor and ended in a junction box on the wall, from which cords ran to the flood lights. The button was on the junction box. I wondered why it was not on the "altar," then saw that the altar was a movable prop. Apparently the girls punched the button, then fell quickly into their poses. Spade tried the button meditatively, then wiped print powder off on his trousers. "I can't hear it," he said.

"Naturally not. This stage is almost a soundproof booth."

He had seen the egg timer but I had not told him until then about seeing the last of the sand run out. He pursed his lips. "You're sure?"

"Call it hallucination. *I* think I saw it. I'll testify to it."

He sat down on the altar, avoiding the blood stain, and said nothing for quite a long time. Finally he said, "Eddie my boy—"

"Yes?"

"You've not only given Jack Joy an alibi, you've damn near made it impossible for anyone to have done it."

"I know it. Could it have been suicide?"

"Could be. Could be. From the mechanics angle but not from the psychological angle. Would she have started that egg timer for her own suicide? Another thing. Take a look at that blood. Taste it."

"Huh?"

"Don't throw up. Smell it then."

I did, very gingerly. Then I smelled it again. Two smells. Tomato. Blood. Blood and tomato catsup. I thought I could detect differences in appearance as well. "You see, son? If she's going to have blood on her chest she won't bother with catsup. Aside from that and the timer it's a perfect, dramatic, female-style suicide. But it won't wash. It's murder, Eddie."

Feinstein stuck his head in. "Lieutenant—"

"What is it?"

"That musician punk. He had a date with her all right."

"Oh, he did, eh?"

"But he's clear. The band was on the air at midnight, in a number that features him in a trumpet solo."

"Damn! Get out of here."

"That ain't all. I called the Assistant Medical Examiner, like you said. The motive you suggested won't go—she not only wasn't expecting; she hadn't ever been had. *Virgo intacta,*" he added in passable high school Latin.

"Feinstein, you'll be wanting to be a sergeant next," Spade answered placidly, "using big words like that. Get out."

"Okay, Lieutenant." I was more than a little surprised at the news. I would have picked Estelle as a case of round heels. Evidently she was a tease in more ways than one.

Spade sat a while longer, then said, "When it's light in here, it's dark out there; when it's light out there, it's dark in here."

"That's right. Ordinarily, that is. Right now we've got both sides lighted with the bypass."

"Ordinarily is what I mean. Light, dark; dark, light. Eddie my boy —"

"Yes?"

"Are you sweet on that Hazel girl?"

"I'm leaning that way," I admitted.

"Then keep an eye on her. The murderer was in here for just a few seconds—the egg timer and the buzzer prove that. He wasn't any of the few people who knew about the swap in the shows—not since the trumpet-playing boy friend got knocked out of the running. And it was dark. He murdered the wrong party, Eddie my boy. There's another murder coming up."

"Hazel," I said slowly.

"Yes, Hazel."

Spade Jones shooed us all home, me, Hazel, the two waiters, the other barman, and Jack Joy. I think he was tempted to hold Jack simply because he wouldn't talk but he compromised by telling him that if he stuck his head outside his hotel, he would find a nice policeman ready to take him down to a nice cell. He tipped me a wink and put a finger on his lips as he said good night to me.

But I didn't keep quiet. Hazel let me take her home readily enough. When I saw that she lived alone in a single apartment in a building without a doorman, I decided it called for an all night vigil and some explaining.

She stepped into the kitchenette and mixed me a drink. "One drink and out you go, Ed," she called to me. "You've been very sweet and I want to see you again and thank you, but tonight this girl goes to bed. I'm whipped."

"I'm staying all night," I announced firmly.

She came out with a drink in her hand and looked at me, both annoyed and a little puzzled. "Ed," she said, "aren't you working just a bit too fast? I didn't think you were that clumsy."

"Calm yourself, beautiful," I told her. "It's not necessarily a proposition. I'm going to watch over you. Somebody is trying to kill you."

She dropped the drink.

I helped her clean it up and explained the situation. "Somebody stabbed a girl in a dark room," I finished. "That somebody thought it was you. He knows better by now and he will be looking for a chance to finish the job. What you and I have got to figure out is: *Who wants to kill you?*"

She sat down and started to manhandle a handkerchief. "Nobody wants to kill me, Eddie. It was Estelle."

"No, it wasn't."

"But it couldn't have been me. I *know.*"

"What do you know?"

"I— Oh, it's impossible. Stay all night if you want to. You can sleep on the couch." She got up and pulled the bed down out of the wall, went in the bath, closed the door, and splashed around for a while. "That bath is too small to dress and undress in," she stated flatly. "Anyhow I sleep raw. If you want to get undressed you won't scare me."

"Thanks," I said. "I'll take my coat and tie and shoes off."

"Suit yourself." Her voice was a little bit smothered as she was already wiggling her dress over her head.

She wore pants, whether Estelle ever did or not—a plain, white knit that looked clean and neat. She did not wear a brassiere and did not need to. The conception I had gotten of her figure in the Magic Mirror was entirely justified. She was simply the most magnificently beautiful thing I had ever seen in my life. In street clothes she was a beautiful, well-built woman; in her skin—wars have started over less.

I was beginning to doubt my ability to stay on the couch. I must have showed it, for she snorted, "Wipe the drool off your chin!" and stepped out of her pants.

" 'Scuse, please," I answered and started unlacing my shoes. She stepped over and switched off the light, then went over to the one big window and raised the shade. It was closed but, with the light out, you could see outside easily. "Stand back from that window," I said. "You're too good a target."

"Huh? Oh, very well." She backed up a few steps but continued to stare thoughtfully out the window. I stared thoughtfully at her. There was a big neon sign across the street and the colored lights, pouring in the window, covered her from head to foot with a rosy liquid glow. She looked like something out of a dream of fairyland.

Presently I wasn't thinking how she looked; I was thinking about another room, where a girl had lain murdered, with the lights of a night club shining through a pane of glass, shining through like this neon.

My thoughts rearranged themselves rapidly and very painfully. I added them up a second time and still got the same answer. I did not like the answer. I was glad, damn glad, she was bare naked, with no way to conceal a gun, or a knife, or any other sort of deadly weapon. "Hazel," I said softly.

She turned to me. "Yes, Eddie?"

"I've just had a new idea . . . why should anyone want to kill you?"

"You said that before. There isn't any reason."

"I know. You're right; there isn't any. But put it this way—*why should you want to kill Estelle?*"

I thought she was going to faint again, but I didn't care—I wanted to shock her. Her lusciousness meant nothing to me now but a trap that had confused my thoughts. I had not wanted to think her guilty, so I had disregarded the fact that of all the persons involved she was the only one with the necessary opportunity, the knowledge of the swapped shows, and at least some motive. She had made it plain that she detested Estelle. She had covered it up but it was still evident.

But most important of all, the little stage had not been dark! True, it *looked* dark—from the outside. You can't see through glass when all the light comes from one side and you are on that same side—but light passes through the glass just the same. The neon on the street illuminated this room we were in fairly brightly; the brilliant lights of Jack's bar illuminated the little stage even when the stage floodlights were out.

She knew that. She knew it because she had been in there many times, getting ready to pose for the suckers. Therefore she knew that it was not a case of mistaken identity in the dark—there was no dark! And it would have to be nearly pitch black for anyone to mistake Hazel's blue-black mane for Estelle's peroxided mop.

She knew—why hadn't she said so? She was letting me stay all night, not wanting me around but risking her reputation and more, because I had propounded the wrong-girl-in-the-dark theory. She knew it would not hold water; why had she not said so?

"Eddie, have you gone crazy?" Her voice was frightened.

"No—gone sane. I'll tell you how you did it, my beautiful darling. You both were there—you admitted that. Estelle got in her pose, and asked you to punch the buzzer. You did—but first you grabbed the knife and slid it in her ribs. You wiped the handle, looked around, punched the buzzer, and lammed. About ten seconds later you were slipping your arm in mine. Me—your alibi!

"It *had* to be you," I went on, "for no one else would have had the guts to commit murder with nothing but glass between him and an audience. The stage was lighted—from the outside. You knew that, but it didn't worry you. You were used to parading around naked in front of that glass, certain you could not be seen while the house lights were on! No one else would have dared!"

She looked at me as if she could not believe her ears and her chin began to quiver. Then she squatted down on the floor and burst into tears. Real tears—they dripped. It was my cue to go soft, but I did not. I don't like killing.

I stood over her. "Why did you kill her? *Why did you kill her?*"

"Get out of here."

"Not likely. I'm going to see you fry, my big-busted angel." I headed for the telephone, keeping my eyes on her. I did not dare turn my back, even naked as she was.

She made a break, but it was not for me; it was for the door. How far she thought she could get in the buff I don't know.

I tripped her and fell on her. She was a big armful and ready to bite and claw, but I got a hammer lock on one arm and twisted it. "Be good," I warned her, "or I'll break it."

She lay still and I began to be aware that she was not only an armful but a very female armful. I ignored it. "Let me go, Eddie," she said in a tense whisper, "or I'll scream rape and get the cops in."

"Go right ahead, gorgeous," I told her. "The cops are just what I want, and quick."

"Eddie, Eddie, listen to reason—I didn't kill her, but *I know who did.*"

"Huh? Who?"

"I know . . . I do know—but he *couldn't* have. That's why I haven't said anything."

"Tell me."

She didn't answer at once; I twisted her arm. "Tell me!"

"*Oh!* It was Jack."

"Jack? Nonsense—I was watching him."

"I know. But he did it, just the same. I don't know how—but he did it."

I held her down, thinking. She watched my face. "Ed?"

"Huh?"

"If I punched the buzzer, wouldn't my fingerprint be on it?"

"Should be."

"Why don't you find out?"

It stonkered me. I thought I was right but she seemed quite willing to make the test. "Get up," I said. "On your knees and then on your feet. But don't try to get your arm free and don't try any tricks, or, so help me, I'll kick you in the belly."

She was docile enough and I moved us over to the phone, dialled it with one hand and managed to get to Spade Jones through the police exchange. "Spade? This is Eddie—Eddie Hill. Was there a fingerprint on the buzzer button?"

"Now I wondered when you would be getting around to thinking of that. There was."

"Whose?"

"The corpse's."

"Estelle's?"

"The same. And Estelle's on the egg timer. None on the knife—wiped clean. Lots from both girls around the room, and a few odd ones—old, probably."

"Uh . . . yes. . . . well, thanks."

"Not at all. Call me if you get any bright ideas, son."

I hung up the phone and turned to Hazel. I guess I had let go her arm when Spade told me the print was not hers, but I don't remember doing so. She was standing there, rubbing her arm and looking at me in a very odd way. "Well," I said, "you can twist my arm, or kick me anywhere you like. I was wrong. I'm sorry. I'll try to prove it to you."

She started to speak and then started to leak tears again. It finished up with her accepting my apology in the nicest way possible, smearing me with lipstick and tears. I loved it and I felt like a heel.

Presently I wiped her face with my handkerchief and said, "You put on a robe or something and sit on the bed and I'll sit on the couch. We've got to dope this out and I can think better with that lovely chassis of yours covered up."

She trotted obediently and I sat down. "You say Jack killed her, but you admit you don't know how he could have done it. Then why do you think he did?"

"The music."

"Huh?"

"The music he played for the show was *Valse Triste.* That's Estelle's music, for Estelle's act. My act, the regular twelve o'clock act, calls for *Bolero.* He must have known that Estelle was up there; he used the right music."

"Then you figure he must have been lying when he claimed Estelle never arranged with him to swap the shows. But it's a slim reason to hang a man—he might have gotten that record by accident."

"Could, but not likely. The records were kept in order and were the same ones for the same shows every night. Nobody touched them but him. He would fire a man for touching anything around the control box. However," she went on, "I knew it had to be him before I noticed the music. Only it couldn't be."

"Only it couldn't be. Go ahead."

"He hated her."

"Why?"

"She teased him."

"'She teased him.' Suppose she did. Lots of people get teased. She teased lots of people. She teased you. She teased me. So what?"

"It's not the same thing," she insisted. "Jack was afraid of the dark."

It was a nasty story. The lunk was afraid of total darkness, really afraid, the way some kids are. Hazel told me he would not go back of the building to get his parked car at night without a flashlight. But that would not have given away his weakness, nor the fact that he was ashamed of it—lots of people use flashlights freely, just to be sure of their footing. But he had fallen for Estelle and apparently made a lot of progress—had actually gotten into bed with her. It never came to anything because she had snapped out the lights. Estelle had told Hazel about it, gloating over the fact that she had found out about what she termed his cowardice "soon enough."

"She needled him after that," Hazel went on. "Nothing that anyone could tumble to, if they didn't know. But *he* knew. He was afraid of her, afraid to fire her for fear she would tell. He hated her—at the same time he wanted her and was jealous of her. There was one time in the dressing room. I was there—" He had come in while they were dressing, or undressing, and had picked a fight with Estelle over one of the customers. She told him to get out. When he did not do it, she snapped out the light. "He went out of there like a jack rabbit, falling over his feet." She stopped. "How about it, Eddie? Motive enough?"

"Motive enough," I agreed. "You've got me thinking he did it. Only he couldn't."

"'Only he couldn't.' That's the trouble."

I told her to get into bed and try to get some sleep—that I planned to sit right where I was till the pieces fitted. I was rewarded with another sight of the contours as she chucked the robe, then I helped myself to a goodnight kiss. I don't think she slept; at least she did not snore.

I started pounding my brain. The fact that the stage was not dark when it *seemed* dark changed the whole picture and eliminated, I thought, everyone not familiar with the mechanics of the Mirror. It left only Hazel, Jack, the other barman, the two waiters—and Estelle herself. It was physically possible for an Unknown Stranger to have slipped upstairs, slid the shiv in her, ducked downstairs, but psychologically—no. I made a mental note to find out what other models had worked in the Mirror.

The other barman and the two waiters Spade had eliminated—all of them had been fully alibied by one or more customers. *I* had alibied Jack. Estelle—but it wasn't suicide. And Hazel.

If Estelle's fingerprint meant what it seemed, Hazel was out—not time enough to commit a murder, arrange a corpse, wipe a handle, and get downstairs to my side before Jack started the show.

But in that case nobody could have done it—except a hypothetical sex maniac who did not mind a spot of butchery in front of a window full of people. Nonsense!

Of course the fingerprint was not conclusive. Hazel *could* have pushed the button with a coin or a bobby pin, without destroying an old print or making a new one. I hated to admit it but she was not clear yet.

Again, if Estelle did not push the button, then it looked still more like an insider; an outsider would not know where to find the button nor have any reason to push it.

For that matter, why should Hazel push it? It had not given her an alibi—it didn't make sense.

Round and round and round till my head ached.

It was a long time later that I went over and tugged at the covers. "Hazel—"

"Yes, Eddie?"

"Who punched the buzzer in the *eleven* o'clock show?"

She considered. "That show is both of us. She did—she always took charge."

"Mmmm. . . . What other girls have worked in the Mirror?"

"Why, none. Estelle and I opened the show."

"Okay. Maybe I've got it. Let's call Spade Jones."

Spade assured me he would be only too happy to get out of a warm bed to play games with me and would I like a job waking the bugler, too? But he agreed to come to the Joy Club, with Joy in tow, and to fetch enough flat feet, firearms, and muscles to cope.

I was standing back of the bar in the Joy Club, with Hazel seated where she had been when she screamed and a cop from the Homicide Squad in my seat. Jack and Spade were at the end of the bar, where Spade could see.

"We will now show how a man can be two places at one time," I announced. "I am now Mr. Jack Joy. The time is shortly before midnight. Hazel has just left the dressing room and come downstairs. She stops off for a moment at the little girls room at the foot of the stairs, and thereby misses Jack, who is headed for those same stairs. He goes up and finds Estelle in the dressing room, peeled and ready for her act—probably."

I took a glance at Jack. His face was a taut mask, but he was a long way from breaking. "There was an argument—what about, I don't know, but it might have been over the trumpet boy she had swapped shows to meet. In any case, I am willing to bet that she stopped it by switching out the dressing room light to chase him out."

First blood. He flinched at that—his mask cracked. "He didn't stay out more than a few moments," I went on. "Probably he had a flashlight in his pocket—he's probably got one on him now—and that let him go back into that terrible, dark room, and switch on the light. Estelle was already on the stage, anointing herself with catsup, and almost ready to push the buzzer. She must have been about to do so, for she had started the egg timer. He grabbed the prop dagger and stabbed her, stabbed her dead."

I stopped. No blood from Jack this time. His mask was on firmly. "He arranges her in the pose—ten seconds for that; it was nothing but a sprawl—wipes the handle and ducks out. Ten seconds more to this spot. Or make it twenty. He asks me if the buzzer has sounded and I tell him No. He really had to know, for Estelle might have punched it before he got to her."

"Hearing the answer he wanted, he bustles around a bit like this—" I monkeyed with some glassware and picked up a bar spoon and pointed with it to the stage. "Note that the Mirror is lighted and empty —I've got the bypass on. Imagine it dark, with Estelle on the altar, a knife in her heart." I dropped the spoon down and, while their eyes were still on the Mirror, I brought metal spoon across the two binding posts which carried the two leads to the push button on the stage. The buzzer gave out with a loud *beep!* I broke the connection by lifting the spoon for a split second, and brought it down again for a second *beep!* "And that is how a man can— *Catch him, Spade!*"

Spade was at him before I yelled. The three cops had him helpless in no time. He was not armed; it had been sheer reflex—a break for freedom. But he was not giving up, even now. "You've got nothing on me. No evidence. Anybody could have jimmied those wires anywhere along the line."

"No, Jack," I contradicted. "I checked for that. Those wires run through the same steel conduit as the power wires, all the way from the control box to the stage. It was here or there, Jack. It couldn't be there; it had to be here."

He shut up. "I want to see my lawyer," was his only answer.

"You'll see your lawyer," Spade assured him jovially. "Tomorrow, or the next day. Right now you're going to go downtown and sit under some nice hot lights for a few hours."

"No, Lieutenant!" It was Hazel.

"Eh? And why not, Miss Dorn?"

"Don't put him under lights. Shut him in a dark closet!"

"Eh? Well, I'll be— That's what I call a bright girl!"

It was the mop closet they used. He lasted thirteen minutes, then he started to whimper and then to scream. They let him out and took his confession.

I was almost sorry for him when they led him away. I should not have been—second degree was the most he could get as premeditation was impossible to prove and quite unlikely anyhow. "Not guilty by reason of insanity" was a fair bet. Whatever his guilt, that woman had certainly driven him to it. And imagine the nerve of the man, the pure colossal nerve, that enabled him to go through with lighting up that stage just after he looked up and saw two cops standing inside the door!

I took Hazel home the second time. The bed was still pulled down and she went straight for it, kicking off her shoes as she went. She unzipped the side of her dress and started to pull it over her head, when she stopped. "Eddie!"

"Yes, Beautiful?"

"If I take off my clothes again, are you going to accuse me of another murder?"

I considered this. "That depends," I informed her, "on whether you are really interested in me, or in that agent I was telling you about."

She grinned at me, then scooped up a shoe and threw it. "In you, you lug!" Then she went on shucking off her clothes. After a bit I unlaced my shoes.

OUR FAIR CITY

Pete Perkins turned into the all-nite parking lot and called out, "Hi, Pappy!"

The old parking lot attendant looked up and answered, "Be with you in a moment, Pete." He was tearing a Sunday comic sheet in narrow strips. A little whirlwind waltzed near him, picking up pieces of old newspaper and bits of dirt and flinging them in the faces of passing pedestrians. The old man held out to it a long streamer of the brightly colored funny-paper. "Here, Kitten," he coaxed. "Come, Kitten —"

The whirlwind hesitated, then drew itself up until it was quite tall, jumped two parked cars, and landed sur le point near him.

It seemed to sniff at the offering.

"Take it, Kitten," the old man called softly and let the gay streamer slip from his fingers. The whirlwind whipped it up and wound it around its middle. He tore off another and yet another; the whirlwind wound them in corkscrew through the loose mass of dirty paper and trash that constituted its visible body. Renewed by cold gusts that poured down the canyon of tall buildings, it swirled faster and even taller, while it lifted the colored paper ribbons in a fantastic upswept hair-do. The old man turned, smiling. "Kitten does like new clothes."

"Take it easy, Pappy, or you'll have me believing in it."

"Eh? You don't have to believe in Kitten-you can see her."

"Yeah, sure-but you act as if she-I mean 'it'—could understand what you say."

"You still don't think so?" His voice was gently tolerant.

"Now, Pappy!"

"Hmm...lend me your hat." Pappy reached up and took it. "Here, Kitten," he called. "Come back, Kitten!" The whirlwind was playing around over their heads, several stories high. It dipped down.

"Hey! Where you going with that chapeau?" demanded Perkins.

"Just a moment—Here, Kitten!" The whirlwind sat down suddenly, spilling its load. The old man handed it the hat. The whirlwind snatched it and started it up a fast, long spiral.

"Hey!" yelped Perkins. "What do you think you're doing? That's not funny-that hat cost me six bucks only three years ago."

"Don't worry," the old man soothed. "Kitten will bring it back."

"She will, huh? More likely she'll dump it in the river."

"Oh, no! Kitten never drops anything she doesn't want to drop. Watch." The old man looked up to where the hat was dancing near the penthouse of the hotel across the street. "Kitten! Oh, Kitten! Bring it back."

The whirlwind hesitated, the hat fell a couple of stories. It swooped, caught it, and juggled it reluctantly. "Bring it here, Kitten."

The hat commenced a downward spiral, finishing in a long curving swoop. It hit Perkins full in the face. "She was trying to put it on your head," the attendant explained. "Usually she's more accurate."

"She is, eh?" Perkins picked up his hat and stood looking at the whirlwind, mouth open.

"Convinced?" asked the old man.

" 'Convinced?' Oh, sho' sho'." He looked back at his hat, then again at the whirlwind. "Pappy, this calls for a drink."

They went inside the lot's little shelter shack; Pappy found glasses; Perkins produced a pint, nearly full, and poured two generous slugs. He tossed his down, poured another, and sat down. "The first was in honor of Kitten," he announced. "This one is to fortify me for the Mayor's banquet."

Pappy cluck-clucked sympathetically. "You have to cover that?"

"Have to write a column about something, Pappy. 'Last night Hizzoner the Mayor, surrounded by a glittering galaxy of highbinders, grifters, sycophants, and ballot thieves, was the recipient of a testimonial dinner celebrating—' Got to write something, Pappy, the cash customers expect it. Why don't I brace up like a man and go on relief?"

"Today's column was good, Pete," the old man comforted him. He picked up a copy of the Daily Forum; Perkins took it from him and ran his eye down his own column.

"OUR FAIR CITY by Peter Perkins," he read, and below that "What, No Horsecars? It is the tradition of our civic paradise that what was good enough for the founding fathers is good enough for us. We stumble over the very chuckhole in which Great-uncle Tozier broke his leg in '09. It is good to know that the bath water, running out, is not gone forever, but will return through the kitchen faucet, thicker and disguised with chlorine, but the same. (Memo-Hizzoner uses bottled spring water. Must look into this.)

"But I must report a dismaying change. Someone has done away with the horsecars!

"You may not believe this. Our public conveyances run so seldom and slowly that you may not have noticed it; nevertheless I swear that I saw one wobbling down Grand Avenue with no horses of any sort. It seemed to be propelled by some newfangled electrical device.

"Even in the atomic age some changes are too much. I urge all citizens—" Perkins gave a snort of disgust. "It's tackling a pillbox with a beanshooter, Pappy. This town is corrupt; it'll stay corrupt. Why should I beat out my brains on such piffle? Hand me the bottle."

"Don't be discouraged, Peter. The tyrant fears the laugh more than the assassin's bullet."

"Where'd you pick that up? Okay, so I'm not funny. I've tried laughing them out of office and it hasn't worked. My efforts are as pointless as the activities of your friend the whirling dervish."

The windows rattled under a gusty impact. "Don't talk that way about Kitten," the old man cautioned. "She's sensitive."

"I apologize." He stood up and bowed toward the door. "Kitten, I apologize. Your activities are more useful than mine." He turned to his host. "Let's go out and talk to her, Pappy. I'd rather do that than go to the Mayor's banquet, if I had my druthers."

They went outside, Perkins bearing with him the remains of the colored comic sheet. He began tearing off streamers. "Here, Kitty! Here, Kitty! Soup's on!"

The whirlwind bent down and accepted the strips as fast as he tore them. "She's still got the ones you gave her."

"Certainly," agreed Pappy. "Kitten is a pack rat. When she likes something she'll keep it indefinitely."

"Doesn't she ever get tired? There must be some calm days."

"It's never really calm here. It's the arrangement of the buildings and the way Third Street leads up from the river. But I think she hides her pet playthings on tops of buildings."

The newspaperman peered into the swirling trash. "I'll bet she's got newspapers from months back. Say, Pappy, I see a column in this, one about our trash collection service and how we don't clean our streets. I'll dig up some papers a couple of years old and claim that they have been blowing around town since publication."

"Why fake it?" answered Pappy, "let's see what Kitten has." He whistled softly. "Come, baby-let Pappy see your playthings." The whirlwind bulged out; its contents moved less rapidly. The attendant plucked a piece of old newspaper from it in passing. "Here's one three months old."

"We'll have to do better than that."

"I'll try again." He reached out and snatched another. "Last June."

"That's better."

A car honked for service and the old man hurried away. When he returned Perkins was still watching the hovering column. "Any luck?" asked Pappy.

"She won't let me have them. Snatches them away."

"Naughty Kitten," the old man said. "Pete is a friend of ours. You be nice to him." The whirlwind fidgeted uncertainly.

"It's all right," said Perkins. "She didn't know. But look, Pappy-see that piece up there? A front page."

"You want it?"

"Yes. Look closely-the headline reads 'DEWEY' something. You don't suppose she's been hoarding it since the '48 campaign?"

"Could be. Kitten has been around here as long as I can remember. And she does hoard things. Wait a second." He called out softly. Shortly the paper was m his hands. "Now we'll see."

Perkins peered at it. "I'll be a short-term Senator! Can you top that, Pappy?"

The headline read: DEWEY CAPTURES MANILA the date was "1898."

Twenty minutes later they were still considering it over the last of Perkins' bottle. The newspaperman stared at the yellowed, filthy sheet. "Don't tell me this has been blowing around town for the last half century."

"Why not?"

" 'Why not?' Well, I'll concede that the streets haven't been cleaned in that time, but this paper wouldn't last. Sun and rain and so forth."

"Kitten is very careful of her toys. She probably put it under cover during bad weather."

"For the love of Mike, Pappy, you don't really believe—But you do. Frankly, I don't care where she got it; the official theory is going to be that this particular piece of paper has been kicking around our dirty streets, unnoticed and uncollected, for the past fifty years. Boy, am I going to have fun!" He rolled the fragment carefully and started to put it in his pocket.

"Say, don't do that!" his host protested.

"Why not? I'm going to take it down and get a pic of it."

"You mustn't! It belongs to KittenI just borrowed it."

"Huh? Are you nuts?"

"She'll be upset if she doesn't get it back. Please, Pete-she'll let you look at it any time you want to."

The old man was so earnest that Perkins was stopped. "Suppose we never see it again? My story hangs on it."

"It's no good to you-she has to keep it, to make your story stand up. Don't worry-I'll tell her that she mustn't lose it under any circumstances."

"Well-okay." They stepped outside and Pappy talked earnestly to Kitten, then gave her the 1898 fragment. She promptly tucked it into the top column. Perkins said goodbye to Pappy, and started to leave the lot. He paused and turned around, looking a little befuddled. "Say, Pappy—"

"Yes, Pete?"

"You don't really think that whirlwind is alive, do you?"

"Why not?"

" 'Why not?' Why not, the man says?"

"Well," said Pappy reasonably, "how do you know you are alive?"

"But...why, because I-well, now if you put it—" He stopped. "I don't know. You got me, pal."

Pappy smiled. "You see?"

"Uh, I guess so. G'night, Pappy. G'night, Kitten." He tipped his hat to the whirlwind. The column bowed.

The managing editor sent for Perkins.

"Look, Pete," he said, chucking a sheaf of gray copy paper at him, "whimsy is all right, but I'd like to see some copy that wasn't dashed off in a gin mill."

Perkins looked over the pages shoved at him. "OUR FAIR CITY by Peter Perkins. Whistle Up The Wind. Walking our streets always is a piquant, even adventurous, experience. We pick our way through the assorted trash, bits of old garbage, cigarette butts, and other less appetizing items that stud our sidewalks while our faces are assaulted by more buoyant souvenirs, the confetti of last Hallowe'en, shreds of dead leaves, and other items too weather-beaten to be identified. However, I had always assumed that a constant turnover in the riches of our streets caused them to renew themselves at least every seven years—" The column then told of the whirlwind that contained the fifty-year-old newspaper and challenged any other city in the country to match it.

" 'Smatter with it?" demanded Perkins.

"Beating the drum about the filth in the streets is fine, Pete, but give it a factual approach."

Perkins leaned over the desk. "Boss, this is factual."

"Huh? Don't be silly, Pete."

"Silly, he says. Look—" Perkins gave him a circumstantial account of Kitten and the 1898 newspaper.

"Pete, you must have been drinking."

"Only Java and tomato juice. Cross my heart and hope to die."

"How about yesterday? I'll bet the whirlwind came right up to the bar with you."

"I was cold, stone—" Perkins stopped himself and stood on his dignity. "That's my story. Print it, or fire me."

"Don't be like that, Pete. I don't want your job; I just want a column with some meat. Dig up some facts on man-hours and costs for street cleaning, compared with other cities."

"Who'd read that junk? Come down the street with me. I'll show you the facts. Wait a moment-I'll pick up a photographer."

A few minutes later Perkins was introducing the managing editor and Clarence V. Weems to Pappy. Clarence unlimbered his camera.

"Take a pic of him?"

"Not yet, Clarence. Pappy, can you get Kitten to give us back the museum piece?"

"Why, sure." The old man looked up and whistled. "Oh, Kitten! Come to Pappy." Above their heads a tiny gust took shape, picked up bits of paper and stray leaves, and settled on the lot. Perkins peered into it.

"She hasn't got it," he said in aggrieved tones.

"She'll get it." Pappy stepped forward until the whirlwind enfolded him. They could see his lips move, but the words did not reach them.

"Now?" said Clarence.

"Not yet." The whirlwind bounded up and leapt over an adjoining building. The managing editor opened his mouth, closed it again.

Kitten was soon back. She had dropped everything else and had just one piece of paper-the paper. "Now!" said Perkins. "Can you get a shot of that paper, Clarence-while it's in the air?"

"Natch," said Clarence, and raised his Speed Graphic. "Back a little, and hold it," he ordered, speaking to the whirlwind.

Kitten hesitated and seemed about to skitter away. "Bring it around slow and easy, Kitten," Pappy supplemented, "and turn it over-no, no! Not that way-the other edge up." The paper flattened out and sailed slowly past them, the headline showing.

"Did you get it?" Perkins demanded.

"Natch," said Clarence. "Is that all?" he asked the editor.

"Natc-I mean, 'that's all.' "

"Okay," said Clarence, picked up his case, and left. The editor sighed. "Gentlemen," he said, "let's have a drink."

Four drinks later Perkins and his boss were still arguing. Pappy had left. "Be reasonable, Boss," Pete was saying, "you can't print an item about a live whirlwind. They'd laugh you out of town."

Managing Editor Gaines straightened himself.

"It's the policy of the Forum to print all the news, and print it straight. This is news-we print it." He relaxed. "Hey! Waiter! More of the same-and not so much soda."

"But it's scientifically impossible."

"You saw it, didn't you?"

"Yes, but—"

Gaines stopped him. "We'll ask the Smithsonian Institution to investigate it."

"They'll laugh at you," Perkins insisted. "Ever hear of mass hypnotism?"

"Huh? No, that's no explanation-Clarence saw it, too."

"What does that prove?"

"Obvious-to be hypnotized you have to have a mind. Ipso facto."

"You mean ipse dixit."

"Quit hiccuping. Perkins, you shouldn't drink in the daytime. Now start over and say it slowly."

"How do you know Clarence doesn't have a mind?"

"Prove it."

"Well, he's alive-he must have some sort of a mind, then."

"That's just what I was saying, the whirlwind is alive; therefore it has a mind. Perkins, if those long-beards from the Smithsonian are going to persist in their unscientific attitude, I for one will not stand for it. The Forum will not stand for it. You will not stand for it."

"Won't I?"

"Not for one minute. I want you to know the Forum is behind you, Pete. You go back to the parking lot and get an interview with that whirlwind."

"But I've got one. You wouldn't let me print it."

"Who wouldn't let you print it? I'll fire him! Come on, Pete. We're going to blow this town sky high. Stop the run. Hold the front page. Get busy!" He put on Pete's hat and strode rapidly into the men's room.

Pete settled himself at his desk with a container of coffee, a can of tomato juice, and the Midnight Final (late afternoon) edition. Under a 4-col. cut of Kitten's toy was his column, boxed and moved to the front page. 18-point boldface ordered SEE EDITORIAL PAGE 12. On page 12 another black line enjoined him to SEE "OUR FAIR CITY" PAGE ONE. He ignored this and read: MR. MAYOR-RESIGN!!!!

Pete read it and chuckled. "An ill wind—" "—symbolic of the spiritual filth lurking in the dark corners of the city hall." "—will grow to cyclonic proportions and sweep a corrupt and shameless administration from office." The editorial pointed out that the contract for street cleaning and trash removal was held by the Mayor's brother-in-law, and then suggested that the whirlwind could give better service cheaper.

"Pete-is that you?" Pappy's voice demanded. "They got me down at the station house."

"What for?"

"They claim Kitten is a public nuisance."

"I'll be right over." He stopped by the Art Department, snagged Clarence, and left. Pappy was seated in the station lieutenant's office, looking stubborn. Perkins shoved his way in. "What's he here for?" he demanded, jerking a thumb at Pappy.

The lieutenant looked sour. "What are you butting in for, Perkins? You're not his lawyer."

"Not yet, Clarence. For news, Dumbrosky-I work for a newspaper, remember? I repeat-what's he in for?"

"Obstructing an officer in the performance of his duty."

"That right, Pappy?"

The old man looked disgusted. "This character—" He indicated one of the policemen "—comes up to my lot and tries to snatch the Manila-Bay paper away from Kitten. I tell her to keep it up out of his way. Then he waves his stick at me and orders me to take it away from her. I tell him what he can do with his stick." He shrugged. "So here we are."

"I get it," Perkins told him, and turned to Dumbrosky. "You got a call from the city hall, didn't you? So you sent Dugan down to do the dirty work. What I don't get is why you sent Dugan. I hear he's so dumb you don't even let him collect the pay-off on his own beat."

"That's a lie!" put in Dugan. "I do so—"

"Shut up, Dugan!" his boss thundered. "Now, see here, Perkins-you clear out. There ain't no story here."

" 'No story'?" Perkins said softly. "The police force tries to arrest a whirlwind and you say there's no story?"

"Now?" said Clarence.

"Nobody tried to arrest no whirlwind! Now scram."

"Then how come you're charging Pappy with obstructing an officer? What was Dugan doing-flying a kite?"

"He's not charged with obstructing an officer."

"He's not, eh? Just what have you booked him for?"

"He's not booked. We're holding him for questioning."

"So? Not booked, no warrant, no crime alleged, just pick up a citizen and roust him around, Gestapo style." Perkins turned to Pappy. "You're not under arrest. My advice is to get up and walk out that door."

Pappy started to get up. "Hey!" Lieutenant Dumbrosky bounded out of his chair, grabbed Pappy by the shoulder and pushed him down. "I'm giving the orders around here. You stay—"

"Now!" yelled Perkins. Clarence's flashbulb froze them. Then Dumbrosky started up again.

"Who let him in here? Dugan-get that camera."

"Nyannh!" said Clarence and held it away from the cop. They started doing a little Maypole dance, with Clarence as the Maypole.

"Hold it!" yelled Perkins. "Go ahead and grab the camera, Dugan-I'm just aching to write the story. 'Police Lieutenant Destroys Evidence of Police Brutality.' "

"What do you want I should do, Lieutenant?" pleaded Dugan.

Dumbrosky looked disgusted. "Siddown and close your face. Don't use that picture, Perkins-I'm warning you."

"Of what? Going to make me dance with Dugan? Come on, Pappy.

Come on, Clarence." They left.

"OUR FAIR CITY" read the next day. "City Hall Starts Clean Up. While the city street cleaners were enjoying their usual siesta, Lieutenant Dumbrosky, acting on orders of Hizzoner's office, raided our Third Avenue whirlwind. It went sour, as Patrolman Dugan could not entice the whirlwind into the paddy wagon. Dauntless Dugan was undeterred; he took a citizen standing nearby, one James Metcalfe, parking lot attendant, into custody as an accomplice of the whirlwind. An accomplice in what, Dugan didn't say-everybody knows that an accomplice is something pretty awful. Lieutenant Dumbrosky questioned the accomplice. See cut. Lieutenant Dumbrosky weighs 215 pounds, without his shoes. The accomplice weighs 119.

"Moral: Don't get underfoot when the police department is playing games with the wind.

"P. S. As we go to press, the whirlwind is still holding the 1898 museum piece. Stop by Third and Main and take a look. Better hurry-Dumbrosky is expected to make an arrest momentarily."

Pete's column continued needling the administration the following day: "Those Missing Files. It is annoying to know that any document needed by the Grand Jury is sure to be mislaid before it can be introduced in evidence. We suggest that Kitten, our Third Avenue Whirlwind, be hired by the city as file clerk extraordinary and entrusted with any item which is likely to be needed later. She could take the special civil exam used to reward the faithful-the one nobody ever flunks.

"Indeed, why limit Kitten to a lowly clerical job? She is persistent-and she hangs on to what she gets. No one will argue that she is less qualified than some city officials we have had.

"Let's run Kitten for Mayor! She's an ideal candidate-she has the common touch, she doesn't mind hurly-burly, she runs around in circles, she knows how to throw dirt, and the opposition can't pin anything on her.

"As to the sort of Mayor she would make, there is an old story-Aesop told it-about King Log and King Stork. We're fed up with King Stork; King Log would be welcome relief.

"Memo to Hizzoner-what did become of those Grand Avenue paving bids?

"P. S. Kitten still has the 1898 newspaper on exhibit. Stop by and see it before our police department figures out some way to intimidate a whirlwind."

Pete snagged Clarence and drifted down to the parking lot. The lot was fenced now; a man at a gate handed them two tickets but waved away their money. Inside he found a large circle chained off for Kitten and Pappy inside it. They pushed their way through the crowd to the old man. "Looks like you're coining money, Pappy."

"Should be, but I'm not. They tried to close me up this morning, Pete. Wanted me to pay the $50-a-day circus-and-carnival fee and post a bond besides. So I quit charging for the tickets-but I'm keeping track of them. I'll sue 'em, by gee."

"You won't collect, not in this town. Never mind, we'll make 'em squirm till they let up."

"That's not all. They tried to capture Kitten this morning."

"Huh? Who? How?"

"The cops. They showed up with one of those blower machines used to ventilate manholes, rigged to run backwards and take a suction. The idea was to suck Kitten down into it, or anyhow to grab what she was carrying."

Pete whistled. "You should have called me."

"Wasn't necessary. I warned Kitten and she stashed the Spanish-War paper someplace, then came back. She loved it. She went through that machine about six times, like a merry-go-round. She'd zip through and come out more full of pep than ever. Last time through she took Sergeant Yancel's cap with her and it clogged the machine and ruined his cap. They got disgusted and left."

Pete chortled. "You still should have called me. Clarence should have gotten a picture of that."

"Got it," said Clarence.

"Huh? I didn't know you were here this morning, Clarence."

"You didn't ask me."

Pete looked at him. "Clarence, darling-the idea of a news picture is to print it, not to hide it in the art department."

"On your desk," said Clarence.

"Oh. Well, let's move on to a less confusing subject. Pappy, I'd like to put up a big sign here."

"Why not? What do you want to say?"

"Kitten-for-Mayor-Whirlwind Campaign Headquarters. Stick a 24-sheet across the corner of the lot, where they can see it both ways. It fits in with-oh, oh! Company, girls!" He jerked his head toward the entrance.

Sergeant Yancel was back. "All right, all right!" he was saying. "Move on! Clear out of here." He and three cohorts were urging the spectators out of the lot. Pete went to him.

"What goes on, Yancel?"

Yancel looked around. "Oh, it's you, huh? Well, you, too-we got to clear this place out. Emergency."

Pete looked back over his shoulder. "Better get Kitten out of the way, Pappy!" he called out. "Now, Clarence."

"Got it," said Clarence.

"Okay," Pete answered. "Now, Yancel, you might tell me what it is we just took a picture of, so we can title it properly."

"Smart guy. You and your stooge had better scram if you don't want your heads blown off. We're setting up a bazooka."

"You're setting up a what?" Pete looked toward the squad car, unbelievingly. Sure enough, two of the cops were unloading a bazooka. "Keep shooting, kid," he said to Clarence.

"Natch," said Clarence.

"And quit popping your bubble gum. Now, look, Yancel-I'm just a newsboy. What in the world is the idea?"

"Stick around and find out, wise guy." Yancel turned away. "Okay there! Start doing it-commence firing!"

One of the cops looked up. "At what, Sergeant?"

"I thought you used to be a marine-at the whirlwind, of course."

Pappy leaned over Pete's shoulder. "What are they doing?"

"I'm beginning to get a glimmering. Pappy, keep Kitten out of range-I think they mean to put a rocket shell through her gizzard. It might bust up her dynamic stability or something."

"Kitten's safe. I told her to hide. But this is crazy, Pete. They must be absolute, complete and teetotal nuts."

"Any law says a cop has to be sane to be on the force?"

"What whirlwind, Sergeant?" the bazooka man was asking. Yancel started to tell him, forcefully, then deflated when he realized that no whirlwind was available.

"You wait," he told him, and turned to Pappy. "You!" he yelled. "You chased away that whirlwind. Get it back here."

Pete took out his notebook. "This is interesting, Yancel. Is it your professional opinion that a whirlwind can be ordered around like a trained dog? Is that the official position of the police department?"

"I—No comment! You button up, or I'll run you in."

"By all means. But you have that Buck-Rogers cannon pointed so that, after the shell passes through the whirlwind, if any, it should end up just about at the city hall. Is this a plot to assassinate Hizzoner?"

Yancel looked around suddenly, then let his gaze travel an imaginary trajectory.

"Hey, you lugs!" he shouted. "Point that thing the other way. You want to knock off the Mayor?"

"That's better," Pete told the Sergeant. "Now they have it trained on the First National Bank. I can't wait."

Yancel looked over the situation again. "Point it where it won't hurt anybody," he ordered. "Do I have to do all your thinking?"

"But, Sergeant—"

"Well?"

"You point it. We'll fire it."

Pete watched them. "Clarence," he sighed, "you stick around and get a pic of them loading it back into the car. That will be in about five minutes. Pappy and I will be in the Happy Hour Bar-Grill. Get a nice picture, with Yancel's features."

"Natch," said Clarence.

The next installment of OUR FAIR CITY featured three cuts and was headed "Police Declare War on Whirlwind." Pete took a copy and set out for the parking lot, intending to show it to Pappy.

Pappy wasn't there. Nor was Kitten. He looked around the neighborhood, poking his nose in lunchrooms and bars. No luck.

He headed back toward the Forum building, telling himself that Pappy might be shopping, or at a movie. He returned to his desk, made a couple of false starts on a column for the morrow, crumpled them up and went to the art department. "Hey! Clarence! Have you been down to the parking lot today?"

"Nah."

"Pappy's missing."

"So what?"

"Well, come along. We got to find him."

"Why?" But he came, lugging his camera.

The lot was still deserted, no Pappy, no Kitten-not even a stray breeze. Pete turned away. "Come on, Clarence-say, what are you shooting now?"

Clarence had his camera turned up toward the sky. "Not shooting," said Clarence. "Light is no good."

"What was it?"

"Whirlwind."

"Huh? Kitten?"

"Maybe."

"Here, Kitten-come, Kitten." The whirlwind came back near him, spun faster, and picked up a piece of cardboard it had dropped. It whipped it around, then let him have it in the face.

"That's not funny, Kitten," Pete complained. "Where's Pappy?"

The whirlwind sidled back toward him. He saw it reach again for the cardboard. "No, you don't!" he yelped and reached for it, too.

The whirlwind beat him to it. It carried it up some hundred feet and sailed it back. The card caught him edgewise on the bridge of the nose. "Kitten!" Pete yelled. "Quit the horsing around."

It was a printed notice, about six by eight inches. Evidently it had been tacked up; there were small tears at all four corners. It read: "THE RITZ-CLASSIC" and under that, "Room 2013, Single Occupancy $6.00, Double Occupancy $8.00." There followed a printed list of the house rules.

Pete stared at it and frowned. Suddenly he chucked it back at the whirlwind. Kitten immediately tossed it back in his face.

"Come on, Clarence," he said briskly. "We're going to the Ritz-Classic-room 2013."

"Natch," said Clarence.

The Ritz-Classic was a colossal fleabag, favored by the bookie-and-madame set, three blocks away. Pete avoided the desk by using the basement entrance. The elevator boy looked at Clarence's camera and said, "No, you don't, Doc. No divorce cases in this hotel."

"Relax," Pete told him. "That's not a real camera. We peddle marijuana-that's the hay mow."

"Whyn't you say so? You hadn't ought to carry it in a camera. You make people nervous. What floor?"

"Twenty-one."

The elevator operator took them up non-stop, ignoring other calls. "That'll be two bucks. Special service."

"What do you pay for the concession?" inquired Pete.

"You gotta nerve to beef-with your racket."

They went back down a floor by stair and looked up room 2013. Pete tried the knob cautiously; the door was locked. He knocked on it-no answer. He pressed an ear to it and thought he could hear movement inside. He stepped back, frowning.

Clarence said, "I just remembered something," and trotted away. He returned quickly, with a red fire ax. "Now?" he asked Pete.

"A lovely thought, Clarence! Not yet." Pete pounded and yelled, "Pappy! Oh, Pappy!"

A large woman in a pink coolie coat opened the door behind them. "How do you expect a party to sleep?" she demanded.

Pete said, "Quiet, madame! We're on the air." He listened. This time there were sounds of struggling and then, "Pete! Pe—"

"Now!" said Pete. Clarence started swinging.

The lock gave up on the third swing. Pete poured in, with Clarence after him. He collided with someone coming out and sat down abruptly. When he got up he saw Pappy on a bed. The old man was busily trying to get rid of a towel tied around his mouth.

Pete snatched it away. "Get 'em!" yelled Pappy.

"Soon as I get you untied."

"I ain't tied. They took my pants. Boy, I thought you'd never come!"

"Took Kitten a while to make me understand."

"I got 'em," announced Clarence. "Both of 'em."

"Where?" demanded Pete.

"Here," said Clarence proudly, and patted his camera.

Pete restrained his answer and ran to the door. "They went thataway," said the large woman, pointing. He took off, skidded around the corner and saw an elevator door just closing.

Pete stopped, bewildered by the crowd just outside the hotel. He was looking uncertainly around when Pappy grabbed him. "There! That car!" The car Pappy pointed out was even then swinging out from the curb just beyond the rank of cabs in front of the hotel; with a deep growl it picked up speed, and headed away. Pete yanked open the door of the nearest cab.

"Follow that car!" he yelled. They all piled in.

"Why?" asked the hackie.

Clarence lifted the fire ax. "Now?" he asked.

The driver ducked. "Forget it," he said. "It was just a yak." He started after the car.

The hack driver's skill helped them in the downtown streets, but the driver of the other car swung right on Third and headed for the river. They streamed across it, fifty yards apart, with traffic snarled behind them, and then were on the no-speed-limit freeway. The cabbie turned his head. "Is the camera truck keeping up?"

"What camera truck?"

"Ain't this a movie?"

"Good grief, no! That car is filled with kidnappers. Faster!"

"A snatch? I don't want no part of it." He braked suddenly.

Pete took the ax and prodded the driver. "You catch 'em!"

The hack speeded up again but the driver protested, "Not in this wreck. They got more power than me."

Pappy grabbed Pete's arm. "There's Kitten!"

"Where? Oh, never mind that now!"

"Slow down!" yelled Pappy. "Kitten, oh, Kitten—over here!"

The whirlwind swooped down and kept pace with them. Pappy called to it. "Here, baby! Go get that car! Up ahead-get it!"

Kitten seemed confused, uncertain. Pappy repeated it and she took off-like a whirlwind. She dipped and gathered a load of paper and trash as she flew.

They saw her dip and strike the car ahead, throwing paper in the face of the driver. The car wobbled. She struck again. The car veered, climbed the curb, ricocheted against the crash rail, and fetched up against a lamp post.

Five minutes later Pete, having left Kitten, Clarence, and the fire ax to hold the fort over two hoodlums suffering from abrasion, multiple contusions and shock, was feeding a dime into a pay phone at the nearest filling station. He dialed long distance. "Gimme the FBI's kidnap number," he demanded. "You know-the Washington, D.C., snatch number."

"My goodness," said the operator, "do you mind if I listen in?"

"Get me that number!"

"Right away!"

Presently a voice answered, "Federal Bureau of Investigation."

"Lemme talk to Hoover! Huh? Okay, okay-I'll talk to you. Listen, this is a snatch case. I've got 'em on ice, for the moment, but unless you get one of your boys from your local office here pronto there won't be any snatch case-not if the city cops get here first. What?" Pete quieted down and explained who he was, where he was, and the more believable aspects of the events that had led up to the present situation. The government man cut in on him as he was urging speed and more speed and assured him that the local office was already being notified.

Pete got back to the wreck just as Lieutenant Dumbrosky climbed out of a squad car. Pete hurried up. "Don't do it, Dumbrosky," he yelled.

The big cop hesitated. "Don't do what?"

"Don't do anything. The FBI are on their way now-and you're already implicated. Don't make it any worse."

Pete pointed to the two hoodlums; Clarence was sitting on one and resting the spike of the ax against the back of the other. "Those birds have already sung. This town is about to fall apart. If you hurry, you might be able to get a plane for Mexico."

Dumbrosky looked at him. "Wise guy," he said doubtfully.

"Ask them. They confessed."

One of the hoods raised his head. "We was threatened," he announced. "Take 'em in, lieutenant. They assaulted us."

"Go ahead," Pete said cheerfully. "Take us all in-together. Then you won't be able to lose that pair before the FBI can question them. Maybe you can cop a plea."

"Now?" asked Clarence.

Dumbrosky swung around. "Put that ax down!"

"Do as he says, Clarence. Get your camera ready to get a picture as the G-men arrive."

"You didn't send for no G-men."

"Look behind you!"

A dark blue sedan slid quietly to a stop and four lean, brisk men got out. The first of them said, "Is there someone here named Peter Perkins?"

"Me," said Pete. "Do you mind if I kiss you?"

It was after dark but the parking lot was crowded and noisy. A stand for the new Mayor and distinguished visitors had been erected on one side, opposite it was a bandstand; across the front was a large illuminated sign: HOME OF KITTEN-HONORARY CITIZEN OF OUR FAIR CITY.

In the fenced-off circle in the middle Kitten herself bounced and spun and swayed and danced. Pete stood on one side of the circle with Pappy opposite him; at four-foot intervals around it children were posted. "All set?" called out Pete.

"All set," answered Pappy. Together, Pete, Pappy and the kids started throwing serpentine into the ring. Kitten swooped, gathered the ribbons up and wrapped them around herself.

"Confetti!" yelled Pete. Each of the kids dumped a sackful toward the whirlwind-little of it reached the ground.

"Balloons!" yelled Pete. "Lights!" Each of the children started blowing up toy balloons; each had a dozen different colors. As fast as they were inflated they fed them to Kitten. Floodlights and searchlights came on; Kitten was transformed into a fountain of boiling, bubbling color, several stories high.

"Now?" said Clarence.

"Now!"

The Black Pits of Luna

The morning after we got to the Moon we went over to Rutherford. Dad and Mr. Latham—Mr. Latham is the man from the Harriman Trust that Dad came to Luna City to see—Dad and Mr. Latham had to go anyhow, on business. I got Dad to promise I could go along because it looked like just about my only chance to get out on the surface of the Moon. Luna City is all right, I guess, but I defy you to tell a corridor in Luna City from the sublevels in New York—except that you’re light on your feet, of course.

When Dad came into our hotel suite to say we were ready to leave, I was down on the floor, playing mumblety-peg with my kid brother. Mother was lying down and had asked me to keep the runt quiet. She had been dropsick all the way out from Earth and I guess she didn’t feel very good. The runt had been fiddling with the lights, switching them from “dusk” to “desert suntan” and back again. I collared him and sat him down on the floor.

Of course, I don’t play mumblety-peg any more, but, on the Moon, it’s a right good game. The knife practically floats and you can do all kinds of things with it. We made up a lot of new rules.

Dad said, “Switch in plans, my dear. We’re leaving for Rutherford right away. Let’s pull ourselves together.”

Mother said, “Oh, mercy me—I don’t think I’m up to it. You and Dickie run along. Baby Darling and I will just spend a quiet day right here.”

Baby Darling is the runt.

I could have told her it was the wrong approach. He nearly put my eye out with the knife and said, “Who? What? I’m going too. Let’s go!”

Mother said, “Oh, now, Baby Darling—don’t cause Mother Dear any trouble. We’ll go to the movies, just you and I.”

The runt is seven years younger than I am, but don’t call him “Baby Darling” if you want to get anything out of him. He started to bawl. “You said I could go!” he yelled.

“No, Baby Darling. I haven’t mentioned it to you. I—”

“Daddy said I could go!”

“Richard, did you tell Baby he could go?”

“Why, no, my dear, not that I recall. Perhaps I—”

The kid cut in fast. “You said I could go anywhere Dickie went. You promised me you promised me you promised me.” Sometimes you have to hand it to the runt; he had them jawing about who told him what in nothing flat. Anyhow, that is how, twenty minutes later, the four of us were up at the rocket port with Mr. Latham and climbing into the shuttle for Rutherford.

The trip only takes about ten minutes and you don’t see much, just a glimpse of the Earth while the rocket is still near Luna City and then not even that, since the atom plants where we were going are all on the back side of the Moon, of course. There were maybe a dozen tourists along and most of them were dropsick as soon as we went into free flight. So was Mother. Some people never will get used to rockets.

But Mother was all right as soon as we grounded and were inside again. Rutherford isn’t like Luna City; instead of extending a tube out to the ship, they send a pressurized car out to latch on to the airlock of the rocket, then you jeep back about a mile to the entrance to underground. I liked that and so did the runt. Dad had to go off on business with Mr. Latham, leaving Mother and me and the runt to join up with the party of tourists for the trip through the laboratories.

It was all right but nothing to get excited about. So far as I can see, one atomics plant looks about like another; Rutherford could just as well have been the main plant outside Chicago. I mean to say everything that is anything is out of sight, covered up, shielded. All you get to see are some dials and instrument boards and people watching them. Remote control stuff, like Oak Ridge. The guide tells you about the experiments going on and they show you some movies—that’s all.

I liked our guide. He looked like Tom Jeremy in *The Space Troopers*. I asked him if he was a spaceman and he looked at me kind of funny and said, no, that he was just a Colonial Services ranger. Then he asked me where I went to school and if I belonged to the Scouts. He said he was scoutmaster of Troop One, Rutherford City, Moonbat Patrol.

I found out there was just the one patrol—not many scouts on the Moon, I suppose.

Dad and Mr. Latham joined us just as we finished the tour while Mr. Perrin-that's our guide—was announcing the trip outside. "The conducted tour of Rutherford," he said, talking as if it were a transcription, "includes a trip by spacesuit out on the surface of the Moon, without extra charge, to see the Devil's Graveyard and the site of the Great Disaster of 1984. The trip is optional. There is nothing particularly dangerous about it and we've never had any one hurt, but the Commission requires that you sign a separate release for your own safety if you choose to make this trip. The trip takes about one hour. Those preferring to remain behind will find movies and refreshments in the coffee shop."

Dad was rubbing his hands together. "This is for me," he announced. "Mr. Latham, I'm glad we got back in time.[1]1 wouldn't have missed this for the world."

"You'll enjoy it," Mr. Latham agreed, "and so will you, Mrs. Logan. I'm tempted to come along myself."

"Why don't you?" Dad asked.

"No, I want to have the papers ready for you and the Director to sign when you get back and before you leave for Luna City."

"Why knock yourself out?" Dad urged him. "If a man's word is no good, his signed contract is no better. You can mail the stuff to me at New York."

Mr. Latham shook his head. "No, really—I've been out on the surface dozens of times. But I'll come along and help you into your spacesuits."

Mother said, "Oh dear," she didn't think she'd better go; she wasn't sure she could stand the thought of being shut up in a spacesuit and besides glaring sunlight always gave her a headache.

Dad said, "Don't be silly, my dear; it's the chance of a lifetime," and Mr. Latham told her that the filters on the helmets kept the light from being glaring. Mother always objects and then gives in. I suppose women just don't have any force of character. Like the night before—earth-night, I mean, Luna City time—she had bought a fancy moonsuit to wear to dinner in the Earth-View room at the hotel, then she got cold feet. She complained to Dad that she was too plump to dare to dress like that.

Well, she did show an awful lot of skin. Dad said, "Nonsense, my dear. You look ravishing." So she wore it and had a swell time, especially when a pilot tried to pick her up.

It was like that this time. She came along. We went into the outfitting room and I looked around while Mr. Perrin was getting them all herded in and having the releases signed. There was the door to the airlock to the surface at the far end, with a bull's-eye window in it and another one like it in the door beyond. You could peek through and see the surface of the Moon beyond, looking hot and bright and sort of improbable, in spite of the amber glass in the windows. And there was a double row of spacesuits hanging up, looking like empty men. I snooped around until Mr. Perrin got around to our party.

"We can arrange to leave the youngster in the care of the hostess in the coffee shop," he was telling Mother. He reached down and tousled the runt's hair. The runt tried to bite him and he snatched his hand away in a hurry.

"Thank you, Mr. Perkins," Mother said, "I suppose that's best—though perhaps I had better stay behind with him."

"'Perrin' is the name," Mr. Perrin said mildly. "It won't be necessary. The hostess will take good care of him."

Why do adults talk in front of kids as if they couldn't understand English? They should have just shoved him into the coffee shop. By now the runt knew he was being railroaded. He looked around belligerently. "I go, too," he said loudly. "You promised me."

"Now Baby Darling," Mother tried to stop him. "Mother Dear didn't tell you—" But she was just whistling to herself; the runt turned on the sound effects.

"You said I could go where Dickie went; you promised me when I was sick. You promised me you promised me—" and on and on, his voice getting higher and louder all the time.

Mr. Perrin looked embarrassed. Mother said, "Richard, you'll just have to deal with your child. After all, you were the one who promised him."

"Me, dear?" Dad looked surprised. "Anyway, I don't see anything so complicated about it. Suppose we did promise him that he could do what Dickie does—we'll simply take him along; that's all."

Mr. Perrin cleared his throat. "I'm afraid not. I can outfit your older son with a woman's suit; he's tall for his age. But we just don't make any provision for small children."

Well, we were all tangled up in a mess in no time at all. The runt can always get Mother to running in circles. Mother has the same effect on Dad. He gets red in the face and starts laying down the law to me. It's sort of a chain reaction, with me on the end and nobody to pass it along to. They came out with a very simple solution—I was to stay behind and take care of Baby Darling brat!

"But, Dad, you said-" I started in.

"Never mind!" he cut in. "I won't have this family disrupted in a public squabble. You heard what your mother said."

I was desperate. "Look, Dad," I said, keeping my voice low, "if I go back to Earth without once having put on a spacesuit and set foot on the surface, you'll just have to find another school to send me to. I won't go back to Lawrenceville; I'd be the joke of the whole place."

"We'll settle that when we get home."

"But, Dad, you promised me specifically—"

"That'll be enough out of you, young man. The matter is closed."

Mr. Latham had been standing near by, taking it in but keeping his mouth shut. At this point he cocked an eyebrow at Dad and said very quietly, "Well, R.J.—I thought your word was your bond?"

I wasn't supposed to hear it and nobody else did-a good thing, too, for it doesn't do to let Dad know that you know that he's wrong; it just makes him worse. I changed the subject in a hurry. "Look, Dad, maybe we all can go out. How about that suit over there?" I pointed at a rack that was inside a railing with a locked gate on it. The rack had a couple of dozen suits on it and at the far end, almost out of sight, was a small suit—the boots on it hardly came down to the waist of the suit next to it.

"Huh?" Dad brightened up. "Why, just the thing! Mr. Perrin! Oh, Mr. Perrin—here a minute! I thought you didn't have any small suits, but here's one that I think will fit."

Dad was fiddling at the latch of the railing gate. Mr. Perrin stopped him. "We can't use that suit, sir."

"Uh? Why not?"

"All the suits inside the railing are private property, not for rent."

"What? Nonsense—Rutherford is a public enterprise. I want that suit for my child."

"Well, you can't have it."

"I'll speak to the Director."

"I'm afraid you'll have to. That suit was specially built for his daughter."

And that's just what they did. Mr. Latham got the Director on the line, Dad talked to him, then the Director talked to Mr. Perrin, then he talked to Dad again. The Director didn't mind lending the suit, not to Dad, anyway, but he wouldn't order Mr. Perrin to take a below-age child outside.

Mr. Perrin was feeling stubborn and I don't blame him, but Dad soothed his feathers down and presently we were all climbing into our suits and getting pressure checks and checking our oxygen supply and switching on our walkie-talkies. Mr. Perrin was calling the roll by radio and reminding us that we were all on the same circuit, so we had better let him do most of the talking and not to make casual remarks or none of us would be able to hear. Then we were in the airlock and he was warning us to stick close together and not try to see how fast we could run or how high we could jump. My heart was knocking around in my chest.

The outer door of the lock opened and we filed out on the face of the Moon. It was just as wonderful as I dreamed it would be, I guess, but I was so excited that I hardly knew it at the time. The glare of the sun was the brightest thing I ever saw and the shadows so inky black you could hardly see into them. You couldn't hear anything but voices over your radio and you could reach down and switch off that.

The pumice was soft and kicked up around our feet like smoke, settling slowly, falling in slow motion. Nothing else moved. It was the *deadest* place you can imagine.

We stayed on a path, keeping close together for company, except twice when I had to take out after the runt when he found out he could jump twenty feet. I wanted to smack him, but did you ever try to smack anybody wearing a spacesuit? It's no use.

Mr. Perrin told us to halt presently and started his talk. "You are now in the Devil's Graveyard. The twin spires behind you are five thousand feet above the floor of the plain and have never been scaled. The spires, or monuments, have 'been named for apocryphal or mythological characters because of the fancied resemblance of this fantastic scene to a giant cemetery. Beelzebub, Thor, Siva, Cain, Set —" He pointed around us. "Lunolo-gists are not agreed as to the origin of the strange shapes. Some claim to see indications of the action of air and water as well as volcanic action. If so, these spires must have been standing for an unthinkably long period, for today, as you see, the Moon—" It was the same sort of stuff you can read any month in *Spaceways Magazine*, only we were seeing it and that makes a difference, let me tell you.

The spires reminded me a bit of the rocks below the lodge in the Garden of the Gods in Colorado Springs when we went there last summer, only these spires were lots bigger and, instead of blue sky, there was just blackness and hard, sharp stars overhead. Spooky.

Another ranger had come with us, with a camera. Mr. Perrin tried to say something else, but the runt had started yapping away and I had to switch off his radio before anybody could hear anything. I kept it switched off until Mr. Perrin finished talking.

He wanted us to line up for a picture with the spires and the black sky behind us for a background. "Push your faces forward in your helmets so that your features will show. Everybody look pretty. There!" he added as the other guy snapped the shot. "Prints will be ready when you return, at ten dollars a copy."

I thought it over. I certainly needed one for my room at school and I wanted one to give to—anyhow, I needed another one. I had eighteen bucks left from my birthday money; I could sweettalk Mother for the balance. So I ordered two of them.

We climbed a long rise and suddenly we were staring out across the crater, the disaster crater, all that was left of the first laboratory. It stretched away from us, twenty miles across, with the floor covered with shiny, bubbly green glass instead of pumice. There was a monument. I read it:

HERE ABOUT YOU ARE THE MORTAL REMAINS
OF
Kurt Schaeffer
Maurice Feinstein
Thomas Dooley
Hazel Hayakawa
G. Washington Slappey
Sam Houston Adams WHO DIED FOR THE TRUTH
THAT MAKES MEN FREE On the Eleventh Day of August 1984

I felt sort of funny and backed away and went to listen to Mr. Perrin. Dad and some of the other men were asking him questions. “They don’t know exactly,” he was saying. “Nothing was left. Now we telemeter all the data back to Luna City, as it comes off the instruments, but that was before the line-of-sight relays were set up.”

“What would have happened,” some man asked, “if this blast had gone off on Earth?”

“I’d hate to try to tell you—but that’s why they put the lab here, back of the Moon.” He glanced at his watch. ‘Time to leave, everybody.“ They were milling around, heading back down toward the path, when Mother screamed.

“Baby! Where’s Baby Darling?”

I was startled but I wasn’t scared, not yet. The runt is always running around, first here and then there, but he doesn’t go far away, because he always wants to have somebody to yap to.

My father had one arm around Mother; he signalled to me with the other. “Dick,” he snapped, his voice sharp in my earphones, “what have you done with your brother?”

“Me?” I said. “Don’t look at me-the last I saw Mother had him by the hand, walking up the hill here.”

“Don’t stall around, Dick. Mother sat down to rest when we got here and sent him to you.”

“Well, if she did, he never showed up.” At that, Mother started to scream in earnest. Everybody had been listening, of course—they had to; there was just the one radio circuit. Mr. Perrin stepped up and switched off Mother’s talkie, making a sudden silence.

‘Take care of your wife, Mr. Logan,“ he ordered, then added, ”When did you see your child last?“

Dad couldn’t help him any; when they tried switching Mother back into the hook-up, they switched her right off again. She couldn’t help and she deafened us. Mr. Perrin addressed the rest of us. “Has anyone seen the small child we had with us? Don’t answer unless you have something to contribute. Did anyone see him wander away?”

Nobody had. I figured he probably ducked out when everybody was looking at the crater and had their backs to him. I told Mr. Perrin so. “Seems likely,” he agreed. “Attention, everybody! I’m going to search for the child. Stay right where you are. Don’t move away from this spot. I won’t be gone more than ten minutes.”

“Why don’t we all go?” somebody wanted to know.

“Because,” said Mr. Perrin, “right now I’ve only got one lost. I don’t want to make it a dozen.” Then he left, taking big easy lopes that covered fifty feet at a step.

Dad started to take out after him, then thought better of it, for Mother suddenly keeled over, collapsing at the knees and floating gently to the ground. Everybody started talking at once. Some idiot wanted to take her helmet off, but Dad isn’t crazy. I switched off my radio so I could hear myself think and started looking around, not leaving the crowd but standing up on the lip of the crater and trying to see as much as I could.

I was looking back the way we had come; there was no sense in looking at the crater—if he had been in there he would have shown up like a fly on a plate.

Outside the crater was different; you could have hidden a regiment within a block of us, rocks standing up every which way, boulders big as houses with blow holes all through them, spires, gulleys—it was a mess. I could see Mr. Perrin every now and then, casting around like a dog after a rabbit, and making plenty of time. He was practically flying. When he came to a big boulder he would jump right over it, leveling off face down at the top of his jump, so he could see better.

Then he was heading back toward us and I switched my radio back on. There was still a lot of talk. Somebody was saying, “We’ve got to find him before sundown,” and somebody else answered, “Don’t be silly; the sun won’t be down for a week. It’s his air supply, I tell you. These suits are only good for four hours.” The first voice said, “Oh!” then added softly, “like a fish out of water—” It was then I got scared.

A woman’s voice, sounding kind of choked, said, “The poor, poor darling! We’ve got to find him before he suffocates,” and my father’s voice cut in sharply, “Shut up talking that way!” I could hear somebody sobbing. It might have been Mother.

Mr. Perrin was almost up to us and he cut in, “Silence, everybody! I’ve got to call the base,” and he added urgently, “Perrin, calling airlock control; Pet in, calling airlock control!”

I woman’s voice answered, “Come in, Perrin.” He told her what was wrong and added, “Send out Smythe to take this party back in;

I'm staying. I wa it every ranger who's around and get me volunteers from among any of th1. experienced Moon hands. Send out a radio direction-finder by the first o.ies to leave."

We didn't wait long, for they came swarming toward us like grasshoppers. They must have been running forty or fifty miles an hour. It would have been something to see, if I hadn't been so sick at my stomach.

Dad put up an argument about going back, but Mr. Perrin shut him up. "If you hadn't been so confounded set on having your own way, we wouldn't be's,n a mess. If you had kept track of your kid, he wouldn't be lost. I've got kids of my own; I don't let 'em go out on the face of the Moon when they're too young to take care of themselves. You go on back— I can't be burdened by taking care of you, too."

I think Dad might even have gotten in a fight with him if Mother hadn't gotten faint again. We went on back with the party.

The next couple of hours were pretty awful. They let us sit just outside the control room where we could hear Mr. Perrin directing the search, over the loudspeaker. I thought at first that they would snag the runt as soon as they started using the radio direction-finder—pick up his power hum, maybe, even if he didn't say anything—but no such luck; they didn't get anything with it. And the searchers didn't find anything either.

A thing that made it worse was that Mother and Dad didn't even try to blame me. Mother was crying quietly and Dad was consoling her, when he looked over at me with an odd expression. I guess he didn't really see me at all, but I thought he was thinking that if I hadn't insisted on going out on the surface this wouldn't have happened. I said, "Don't go looking at me, Dad. Nobody told me to keep an eye on him. I thought he was with Mother."

Dad just shook his head without answering. He was looking tired and sort of shrunk up. But Mother, instead of laying in to me and yelling, stopped her crying and managed to smile. "Come here, Dickie," she said, and put her other arm around me. "Nobody blames you, Dickie. Whatever happens, you weren't at fault. Remember that, Dickie."

So I let her kiss me and then sat with them for a while, but I felt worse than before. I kept thinking about the runt, somewhere out there, and his oxygen running out. Maybe it wasn't my fault, but I could have prevented it and I knew it. I shouldn't have depended on Mother to look out for him; she's no good at that sort of thing. She's the kind of person that woul [mislay her head if it wasn't knotted on tight—the ornamental sort. Mothe:'s *good,* you understand, but she's not practical.

She would take it pretty hard if the runt didn't come back. And so would Dad—and so would I. The runt is an awful nuisance, but it was going to seem strange not to have him around underfoot. I got to thinking about that remark, “Like a fish out of water.” I accidentally busted an aquarium once; I remember yet how they looked. Not pretty. If the runt was going to die like that—

I shut myself up and decided I just had to figure out some way to help find him.

After a while I had myself convinced that I *could* find him if they *would . just let me help look. But they wouldn’t of course.*

Dr. Evans the Director showed up again—he’d met us when we first came in—and asked if there was anything he could do for us and how was Mrs. Logan feeling? “You know I wouldn’t have had this happen for the world,” he added. “We’re doing all we can. I’m having some ore-detectors shot over from Luna City. We might be able to spot the child by the metal in his suit.”

Mother asked how about bloodhounds and Dr. Evans didn’t even laugh at her. Dad suggested helicopters, then corrected himself and made it rockets. Dr. Evans pointed out that it was impossible to examine the ground closely from a rocket.

I got him aside presently and braced him to let me join the hunt. He was polite but unimpressed, so I insisted. “What makes you think you can find him?” he asked me. “We’ve got the most experienced Moon men available out there now. I’m afraid, son, that you would get yourself lost or hurt if you tried to keep up with them. In this country, if you once lose sight of landmarks, you can get hopelessly lost.”

“But look, Doctor,” I told him, “I know the runt-I mean my kid brother, better than anyone else in the world. I won’t get lost—I mean I will get lost but just the way he did. You can send somebody to follow me.”

He thought about it. “It’s worth trying,” he said suddenly. “I’ll go with you. Let’s suit up.”

We made a fast trip out, taking thirty-foot strides-the best I could manage even with Dr. Evans hanging on to my belt to keep me from stumbling. Mr. Perrin was expecting us. He seemed dubious about my scheme. “Maybe the old ‘lost mule’ dodge will work,” he admitted, “but I’ll keep the regular search going just the same. Here, Shorty, take this flashlight. You’ll need it in the shadows.”

I stood on the edge of the crater and tried to imagine I was the runt, feeling bored and maybe a little bit griped at the lack of attention. What would I do next?

I went skipping down the slope, not going anywhere in particular, the way the runt would have done. Then I stopped and looked back, to see if Mother and Daddy and Dickie had noticed me. I was being followed all right; Dr. Evans and Mr. Perrin were close behind me. I pretended that no one was looking and went on. I was pretty close to the first rock outcroppings by now and I ducked behind the first one I came to. It wasn't high enough to hide me but it would have covered the runt. It felt like what he would do; he loved to play hide-and-go-seek—it made him the center of attention.

I thought about it. When the runt played that game, his notion of hiding was always to crawl *under* something, a bed, or a sofa, or an automobile, or even under the sink. I looked around. There were a lot of good places; the rocks were filled with blow holes and overhangs. I started working them over. It seemed hopeless; there must have been a hundred such places right around close.

Mr. Perrin came up to me as I was crawling out of the fourth tight spot. "The men have shined flashlights around in every one of these places," he told me. "I don't think it's much use, Shorty."

"Okay," I said, but I kept at it. I knew I could get at spots a grown man couldn't reach; I just hoped the'runt hadn't picked a spot I couldn't reach.

It went on and on and I was getting cold and stiff and terribly tired. The direct sunlight is hot on the Moon, but the second you get in the shade, it's cold. Down inside those rocks it never got warm at all. The suits they gave us tourists are well enough insulated, but the extra insulation is in the gloves and the boots and the seats of the pants—and I had been spending most of my time down on my stomach, wiggling into tight places.

I was so numb I could hardly move and my whole front felt icy. Besides, it gave me one more thing to worry about—how about the runt? Was he cold, too?

If it hadn't been for thinking how those fish looked and how, maybe, the runt would be frozen stiff before I could get to him, I would have quit. I was about beat. Besides, it's rather scarey down inside those holes—you don't know what you'll come to next.

Dr. Evans took me by the arm as I came out of one of them, and touched his helmet to mine, so that I got his voice directly. "Might as well give up, son. You're knocking yourself out and you haven't covered an acre." I pulled away from him.

The next place was a little overhang, not a foot off the ground. I flashed a light into it. It was empty and didn't seem to go anywhere. Then I saw there was a turn in it. I got down flat and wiggled in. The turn opened out a little and dropped off. I didn't think it was worthwhile to go any deeper as the runt wouldn't have crawled very far in the dark, but I scrunched ahead a little farther and flashed the light down.

I saw a boot sticking out.

That's about all there is to it. I nearly bashed in my helmet getting out of there, but I was dragging the runt after me. He was limp as a cat and his face was funny. Mr. Perrin and Dr. Evans were all over me as I came out, pounding me on the back and shouting. "Is he *dead*, Mr. Perrin?" I asked, when I could get my breath. "He looks awful bad."

Mr. Perrin looked him over. "No… I can see a pulse in his throat. Shock and exposure, but this suit was specially built—we'll get him back fast." He picked the runt up in his arms and I took out after him.

Ten minutes later the runt was wrapped in blankets and drinking hot cocoa. I had some, too. Everybody was talking at once and Mother was crying again, but she looked normal and Dad had filled out.

He tried to write out a check for Mr. Perrin, but he brushed it off. "I don't need any reward; your boy found him. You can do me just one favor—"

"Yes?" Dad was all honey.

"Stay off the Moon. You don't belong here; you're not the pioneer type."

Dad took it. "I've already promised my wife that," he said without batting an eye. "You needn't worry."

I followed Mr. Perrin as he left and said to him privately, "Mr. Perrin—I just wanted to tell you that I'll be back, if you don't mind."

He shook hands with me and said, "I know you will, Shorty."

Gentlemen, Be Seated

It takes both agoraphobes and claustrophobes to colonize the Moon. Or make it agoraphiles and claustrophiles, for the men who go out into space had better not have phobias. If anything on a planet, in a planet, or in the empty reaches around the planets can frighten a man, he should stick to Mother Earth. A man who would make his living away from *terra firma* must be willing to be shut up in a cramped spaceship, knowing that it may become his coffin, and yet he must be undismayed by the wide-open spaces of space itself. Spacemen—men who *work* in space, pilots and jetmen and astrogators and such—are men who like a few million miles of elbow room. On the other hand the Moon colonists need to be the sort who feel cozy burrowing around underground like so many pesky moles.

On my second trip to Luna City I went over to Richardson Observatory both to see the Big Eye and to pick up a story to pay for my vacation. I flashed my Journalists' Guild card, sweettalked a bit, and ended with the paymaster showing me around. We went out the north tunnel, which was then being bored to the site of the projected coronascope.

It was a dull trip—climb on a scooter, ride down a completely featureless tunnel, climb off and go through an airlock, get on another scooter and do it all over again. Mr. Knowles filled in with sales talk. “This is temporary,” he explained. “When we get the second tunnel dug, we’ll cross-connect, take out the airlocks, put a northbound slidewalk in this one, a southbound slidewalk in the other one, and you’ll make the trip in less than three minutes. Just like Luna City-or Manhattan.”

“Why not take out the airlocks now?” I asked, as we entered another airlock—about the seventh. “So far, the pressure is the same on each side of each lock.”

Knowles looked at me quizzically. “You wouldn’t take advantage of a peculiarity of this planet just to work up a sensational feature story?”

I was irked. “Look here,” I told him. “I’m as reliable as the next word-mechanic, but if something is not kosher about this project let’s go back right now and forget it. I won’t hold still for censorship.”

‘Take it easy, Jack,“ he said mildly—it was the first time he had used my first name; I noted it and discounted it. ”Nobody’s going to censor you. We’re glad to cooperate with you fellows, but the Moon’s had too much bad publicity now—publicity it didn’t deserve.“

I didn’t say anything.

“Every engineering job has its own hazards,” he insisted, “and its advantages, too. Our men don’t get malaria and they don’t have to watch out for rattlesnakes. I can show you figures that prove it’s safer to be a sandhog in the Moon than it is to be a file clerk in Des Moines—all things considered. For example, we rarely have any broken bones in the Moon; the gravity is so low-while that Des Moines file clerk takes his life in his hands every time he steps in or out of his bathtub.”

“Okay, okay,” I interrupted, “so the place is safe. What’s the catch?”

“It *is* safe. Not company figures, mind you, nor Luna City Chamber of Commerce, but Lloyd’s of London.”

“So you keep unnecessary airlocks. Why?”

He hesitated before he answered, “Quakes.”

Quakes. Earthquakes—moonquakes, I mean. I glanced at the curving walls sliding past and I wished I were in Des Moines. Nobody wants to be buried alive, but to have it happen in the Moon—why, you wouldn’t stand a chance. No matter how quick they got to you, your lungs would be ruptured. No air.

“They don’t happen very often,” Knowles went on, “but we have to be prepared. Remember, the Earth is eighty times the mass of the

Moon, so the tidal stresses here are eighty times as great as the Moon's effect on Earth tides."

"Come again," I said. "There isn't any water on the Moon. How can there be tides?"

"You don't have to have water to have tidal stresses. Don't worry about it; just accept it. What you get is unbalanced stresses. They can cause quakes."

I nodded. "I see. Since everything in the Moon has to be sealed airtight, you've got to watch out for quakes. These airlocks are to confine your losses." I started visualizing myself as one of the losses.

"Yes and no. The airlocks would limit an accident all right, if there was one—which there won't be—this place is *safe*. Primarily they let us work on a section of the tunnel at no pressure without disturbing the rest of it. But they are more than that; each one is a temporary expansion joint. You can tie a compact Structure together and let it ride out a quake, but a thing as long as this tunnel has to give, or it will spring a leak. A flexible seal is hard to accomplish in the Moon."

"What's wrong with rubber?" I demanded. I was feeling jumpy enough to be argumentative. "I've got a groundcar back home with two hundred thousand miles on it, yet I've never touched the tires since they were sealed up in Detroit."

Knowles sighed. "I should have brought one of the engineers along, Jack. The volatiles that keep rubbers soft tend to boil away in vacuum and the stuff gets stiff. Same for the flexible plastics. When you expose them to low temperature as well they get brittle as eggshells."

The scooter stopped as Knowles was speaking and we got off just in time to meet half a dozen men coming out of the next airlock. They were wearing spacesuits, or, more properly, pressure suits, for they had hose connections instead of oxygen bottles, and no sun visors. Their helmets were thrown back and each man had his head pushed through the opened zipper in the front of his suit, giving him a curiously two-headed look. Knowles called out, "Hey, Konski!"

One of the men turned around. He must have been six feet two and fat for his size. I guessed him at three hundred pounds, earthside. "It's Mr. Knowles," he said happily. "Don't tell me I've gotten a raise."

"You're making too much money now, Fatso. Shake hands with Jack Arnold. Jack, this is Fatso Konski-the best sandhog in four planets."

"Only four?" inquired Konski. He slid his right arm out of his suit and stuck his bare hand into mine. I said I was glad to meet him and tried to get my hand back before he mangled it.

"Jack Arnold wants to see how you seal these tunnels," Knowles went on. "Come along with us."

Konski stared at the overhead. "Well, now that you mention it, Mr.

Knowles, I've just finished my shift."

Knowles said, "Fatso, you're a money grubber and inhospitable as well. Okay—time-and-a-half." Konski turned and started unsealing the airlock.

The tunnel beyond looked much the same as the section we had left except that they were no scooter tracks and the lights were temporary, rigged on extensions. A couple of hundred feet away the tunnel was blocked by a bulkhead with a circular door in it. The fat man followed my glance. "That's the movable lock," he explained. "No air beyond it. We excavate just ahead of it."

"Can I see where you've been digging?"

"Not without we go back and get you a suit."

I shook my head. There were perhaps a dozen bladder-like objects in the tunnel, the size and shape of toy balloons. They seemed to displace exactly their own weight of air; they floated without displaying much tendency to rise or settle. Konski batted one out of his way and answered me before I could ask. "This piece of tunnel was pressurized today," he told me. "These tag-alongs search out stray leaks. They're sticky inside. They get sucked up against a leak, break, and‘ the goo gets sucked in, freezes and seals the leak."

"Is that a permanent repair?" I wanted to know.

"Are you kidding? It just shows the follow-up man where to weld."

"Show him a flexible joint," Knowles directed.

"Coming up." We paused halfway down the tunnel and Konski pointed to a ring segment that ran completely around the tubular tunnel. "We put in a flex joint every hundred feet. It's glass cloth, gasketed onto the two steel sections it joins. Gives the tunnel a certain amount of springiness."

"Glass cloth? To make an airtight seal?" I objected.

"The cloth doesn't seal; it's for strength. You got ten layers of cloth, with a silicone grease spread between the layers. It gradually goes bad, from the outside in, but it'll hold five years or more before you have to put on another coat."

I asked Konski how he liked his job, thinking I might get some story. He shrugged. "It's all right. Nothing to it. Only one atmosphere of pressure. Now you take when I was working under the Hudson—"

"And getting paid a tenth of what you get here," put in Knowles.

"Mr. Knowles, you grieve me," Konski protested. "It ain't the money; it's the art of the matter. Take Venus. They pay as well on Venus and a man has to be on his toes. The muck is so loose you have to freeze it. It takes real caisson men to work there. Half of these punks here are just miners; a case of the bends would scare ‘em silly."

"Tell him why you left Venus, Fatso."

Konski expressed dignity. "Shall we examine the movable shield, gentlemen?” he asked.

We puttered around a while longer and I was ready to go back. There wasn’t much to see, and the more I saw of the place the less I liked it. Konski was undogging the door of the airlock leading back when something happened.

I was down on my hands and knees and the place was pitch dark. Maybe I screamed—I don’t know. There was a ringing in my ears. I tried to get up and then stayed where I was. It was the darkest dark I ever saw, complete blackness. I thought I was blind.

A torchlight beam cut through it, picked me out, and then moved on. “What was it?” I shouted. “What happened? Was it a quake?”

“Stop yelling,” Konski’s voice answered me casually. “That was no quake, it was some sort of explosion. Mr. Knowles—you all right?”

“I guess so.” He gasped for breath. “What happened?”

“Dunno. Let’s look around a bit.” Konski stood up and poked his beam around the tunnel, whistling softly. His light was the sort that has to be pumped; it flickered.

“Looks tight, but I hear— Oh, oh! Sister!” His beam was focused on a part of the flexible joint, near the floor.

The “tag-along” balloons were gathering at this spot. Three were already there; others were drifting in slowly. As we watched, one of them burst and collapsed in a sticky mass that marked the leak.

The hole sucked up the burst balloon and began to hiss. Another rolled onto the spot, joggled about a bit, then it, too, burst. It took a little longer this time for the leak to absorb and swallow the gummy mass.

Konski passed me the light. “Keep pumping it, kid.” He shrugged his right arm out of the suit and placed his bare hand over the spot where, at that moment, a third bladder burst.

“How about it, Fats?” Mr. Knowles demanded.

“Couldn’t say. Feels like a hole as big as my thumb. Sucks like the devil.”

“How could you get a hole like that?”

“Search me. Poked through from the outside, maybe.”

“You got the leak checked?”

“I think so. Go back and check the gage. Jack, give him the light.”

Knowles trotted back to the airlock. Presently he sang out, “Pressure steady!”

“Can you read the vernier?” Konski called to him.

“Sure. Steady by the vernier.”

“How much we lose?”

“Not more than a pound or two. What was the pressure before?”

“Earth-normal.”

“Lost a pound four tenths, then.”

"Not bad. Keep on going, Mr. Knowles. There's a tool kit just beyond the lock in the next section. Bring me back a number three patch, or bigger."

"Right." We heard the door open and clang shut, and we were again in total darkness. I must have made some sound for Konski told me to keep my chin up.

Presently we heard the door, and the blessed light shone out again. "Got it?" said Konski.

"No, Fatso. No…" Knowles' voice was shaking. "There's no air on the other side. The other door wouldn't open."

"Jammed, maybe?"

"No, I checked the manometer. There's no pressure in the next section."

Konski whistled again. "Looks like we'll wait till they come for us. In that case— Keep the light on me, Mr. Knowles. Jack, help me out of this suit."

"What are you planning to do?"

"If I can't get a patch, I got to make one, Mr. Knowles. This suit is the only thing around." I started to help him—a clumsy job since he had to keep his hand on the leak.

"You can stuff my shirt in the hole," Knowles suggested.

"I'd as soon bail water with a fork. It's got to be the suit; there's nothing else around that will hold the pressure." When he was free of the suit, he had me smooth out a portion of the back, then, as he snatched his hand away, I slapped the suit down over the leak. Konski promptly sat on it. "There," he said happily, "we've got it corked. Nothing to do but wait."

I started to ask him why he hadn't just sat down on the leak while wearing the suit; then I realized that the seat of the suit was corrugated with insulation-he needed a smooth piece to seal on to the sticky stuff left by the balloons.

"Let me see your hand," Knowles demanded.

"It's nothing much." But Knowles examined it anyway. I looked at it and got a little sick. He had a mark like a stigma on the palm, a bloody, oozing wound. Knowles made a compress of his handkerchief and then used mine to tie it in place.

"Thank you, gentlemen," Konski told us, then added, "we've got time to kill. How about a little pinochle?"

"With your cards?" asked Knowles.

"Why, Mr. Knowles! Well—never mind. It isn't right for paymasters to gamble anyhow. Speaking of paymasters, you realize this is pressure work now, Mr. Knowles?"

"For a pound and four tenths differential?"

"I'm sure the union would take that view—in the circumstances."

"Suppose I sit on the leak?"

"But the rate applies to helpers, too."

"Okay, miser—triple-time it is."

"That's more like your own sweet nature, Mr. Knowles. I hope it's a nice long wait."

"How long a wait do you think it will be, Fatso?"

"Well, it shouldn't take them more than an hour, even if they have to come all the way from Richardson."

"Hmm… what makes you think they will be looking for us?"

"Huh? Doesn't your office know where you are?"

"I'm afraid not. I told them I wouldn't be back today."

Konski thought about it. "I didn't drop my time card. They'll know I'm still inside."

"Sure they will-tomorrow, when your card doesn't show up at my office."

"There's that lunkhead on the gate. He'll know he's got three extra inside."

"Provided he remembers to tell his relief. And provided he wasn't caught in it, too."

"Yes, I guess so," Konski said thoughtfully. "Jack—better quit pumping that light. You just use up more oxygen."

We sat there in the darkness for quite a long time, speculating about what had happened. Konski was sure it was an explosion; Knowles said that it put him in mind of a time when he had seen a freight rocket crash on take off. When the talk started to die out, Konski told some stories. I tried to tell one, but I was so nervous-so *afraid*, I should say—that I couldn't remember the snapper. I wanted to scream.

After a long silence Konski said, "Jack, give us the light again. I got something figured out."

"What is it?" Knowles asked.

"If we had a patch, you could put on my suit and go for help."

"There's no oxygen for the suit."

"That's why I mentioned you. You're the smallest—there'll be enough air in the suit itself to take you through the next section."

"Well—okay. What are you going to use for a patch?"

"I'm sitting on it."

"Huh?"

"This big broad, round thing I'm sitting on. I'll take my pants off. If I

push one of my hams against that hole, I'll guarantee you it'll be sealed tight."

"But—No, Fats, it won't do. Look what happened to your hand. You'd hemorrhage through your skin and bleed to death before I could get back."

"I'll give you two to one I wouldn't—for fifty, say."

"If I win, how do I collect?"

"You're a cute one, Mr. Knowles. But look—I've got two or three inches of fat padding me. I won't bleed much—a strawberry mark, no more."

Knowles shook his head. "It's not necessary. If we keep quiet, there's air enough here for several days."

"It's not the air, Mr. Knowles. Noticed it's getting chilly?"

I had noticed, but hadn't thought about it. In my misery and funk being cold didn't seem anything more than appropriate. Now I thought about it. When we lost the power line, we lost the heaters, too. It would keep getting colder and colder… and colder.

Mr. Knowles saw it, too. "Okay, Fats. Let's get on with it."

I sat on the suit while Konski got ready. After he got his pants off he snagged one of the tag-alongs, burst it, and smeared the sticky insides on his right buttock. Then he turned to me. "Okay, kid—up off the nest." We made the swap-over fast, without losing much air, though the leak hissed angrily. "Comfortable as an easy chair, folks." He grinned.

Knowles hurried into the suit and left, taking the light with him. We were in darkness again.

After a while, I heard Konski's voice. "There a game we can play in the dark, Jack. You play chess?"

"Why, yes-play at it, that is."

"A good game. Used to play it in the decompression chamber when I was working under the Hudson. What do you say to twenty on a side, just to make it fun?"

"Uh? Well, all right." He could have made it a thousand; I didn't care.

"Fine. King's pawn to king three."

"Uh-king's pawn to king's four."

"Conventional, aren't you? Puts mr in mind of a girl I knew in Hoboken—" What he told about her had nothing to do with chess, although it did prove she was conventional, in a manner of speaking. "King's bishop to queen's bishop four. Remind me to tell you about her sister, too. Seems she hadn't always been a redhead, but she wanted people to think so. So she-sorry. Go ahead with your move."

I tried to think but my head was spinning. "Queen's pawn to queen three."

"Queen to king's bishop three. Anyhow, she—" He went on in great detail. It wasn't new and I doubt if it ever happened to him, but it cheered me up. I actually smiled, there in the dark. "It's your move," he added.

"Oh." I couldn't remember the board. I decided to get ready to castle, always fairly safe in the early game. "Queen's knight to queen's bishop three."

"Queen advances to capture your king's bishop's pawn—checkmate. You owe me twenty, Jack."

"Huh? Why that can't be!"

"Want to run over the moves?" He checked them off.

I managed to visualize them, then said, "Why, I'll be a dirty name! You hooked me with a fool's mate!"

He chuckled. "You should have kept your eye on my queen instead of on the redhead."

I laughed out loud. "Know any more stories?"

"Sure." He told another. But when I urged him to go on, he said, "I think I'll just rest a little while, Jack."

I got up. "You all right, Fats?" He didn't answer; I felt my way over to him in the dark. His face was cold and he didn't speak when I touched him. I could hear his heart faintly when I pressed an ear to his chest, but his hands and feet were like ice.

I had to pull him loose; he was frozen to the spot. I could feel the ice, though I knew it must be blood. I started to try to revive him by rubbing him, but the hissing of the leak brought me up short. I tore off my own trousers, had a panicky time before I found the exact spot in the dark, and sat down on it, with my right buttock pressed firmly against the opening.

It grabbed me like a suction cup, icy cold. Then it was fire spreading through my flesh. After a time I couldn't feel anything at all, except a dull ache and coldness.

There was a light someplace. It flickered on, then went out again. I heard a door clang. I started to shout.

"Knowles!" I screamed. "Mr. Knowles!"

The light flickered on again. "Coming, Jack—"

I started to blubber. "Oh, you made it! You made it."

"I didn't make it, Jack. I couldn't reach the next section. When I got back to the lock I passed out." He stopped to wheeze. "There's a crater—" The light flickered off and fell clanging to the floor. "Help me, Jack," he said querulously. "Can't you see I need help? I tried to—"

I heard him stumble and fall. I called to him, but he didn't answer.

I tried to get up, but I was stuck fast, a cork in a bottle…

I came to, lying face down—with a clean sheet under me. "Feeling better?" someone asked. It was Knowles/standing by my bed, dressed in a bathrobe.

"You're dead," I told him.

"Not a bit." He grinned. "They got to us in time."

“What happened?” I stared at him, still not believing my eyes.

“Just like we thought—a crashed rocket. An unmanned mail rocket got out of control and hit the tunnel.”

“Where’s Fats?”

“Hi!”

I twisted my head around; it was Konski, face down like myself. “You owe me twenty,” he said cheerfully.

“I owe you—” I found I was dripping tears for no good reason. “Okay, I owe you twenty. But you’ll have to come to Des Moines to collect it.”

The Long Watch

“Nine ships blasted off from Moon Base. Once in space, eight of them formed a globe around the smallest. They held this formation all the way to Earth.

“The small ship displayed the insignia of an admiral—yet there was no living thing of any sort in her. She was not even a passenger ship, but a drone, a robot ship intended for radioactive cargo. This trip she carried nothing but a lead coffin—and a Geiger counter that was never quiet.”

—from the editorial *After Ten Years*, film 38, 17 June 2009, Archives of the N. Y. *Times*

Chapter 1

Johnny Dahlquist blew smoke at the Geiger counter. He grinned wryly and tried it again. His whole body was radioactive by now. Even his breath, the smoke from his cigarette, could make the Geiger counter scream. How long had he been here? Time doesn't mean much on the Moon. Two days? Three? A week? He let his mind run back: the last clearly marked time in his mind was when the Executive Officer had sent for him, right after breakfast—

"Lieutenant Dahlquist, reporting to the Executive Officer." Colonel Towers looked up. "Ah, John Ezra. Sit down, Johnny. Cigarette?" Johnny sat down, mystified but flattered. He admired Colonel Towers, for his brilliance, his ability to dominate, and for his battle record. Johnny had no battle record; he had been commissioned on completing his doctor's degree in nuclear physics and was now junior bomb officer of Moon Base.

The Colonel wanted to talk politics; Johnny was puzzled. Finally Towers had come to the point; it was not safe (so he said) to leave control of the world in political hands; power must be held by a scientifically selected group. In short-the Patrol.

Johnny was startled rather than shocked. As an abstract idea, Towers' notion sounded plausible. The League of Nations had folded up; what would keep the United Nations from breaking up, too, and thus lead to another World War. "And you know how bad such a war would be, Johnny."

Johnny agreed. Towers said he was glad that Johnny got the point. The senior bomb officer could handle the work, but it was better to have both specialists.

Johnny sat up with a jerk. "You are going to *do* something about it?" He had thought the Exec was just talking.

Towers smiled. "We're not politicians; we don't just talk. We act."

Johnny whistled. "When does this start?"

Towers flipped a switch. Johnny was startled to hear his own voice, then identified the recorded conversation as having taken place in the junior officers' messroom. A political argument he remembered, which he had walked out on… a good thing, too! But being spied on annoyed him.

Towers switched it on. "We *have* acted," he said. "We know who is safe and who isn't. Take Kelly-" He waved at the loudspeaker. "Kelly is politically unreliable. You noticed he wasn't at breakfast?"

"Huh? I thought he was on watch."

"Kelly's watchstanding days are over. Oh, relax; he isn't hurt."

Johnny thought this over. "Which list am I on?" he asked. "Safe or unsafe?”

“Your name has a question mark after it. But I have said all along that you could be depended on.” He grinned engagingly. “You won’t make a liar of me, Johnny?”

Dahlquist didn’t answer; Towers said sharply, “Come now—what do you think of it? Speak up.”

“Well, if you ask me, you’ve bitten off more than you can chew. While it’s true that Moon Base controls the Earth, Moon Base itself is a sitting duck for a ship. One bomb—*blooie!”*

Towers picked up a message form and handed it over; it read: I HAVE YOUR CLEAN LAUNDRY-ZACK. “That means every bomb in the *Trygve Lie* has been put out of commission. I have reports from every ship we need worry about.” He stood up. “Think it over and see me after lunch. Major Morgan needs your help right away to change control frequencies on the bombs.”

“The control frequencies?”

“Naturally. We don’t want the bombs jammed before they reach their targets.”

“What? You said the idea was to *prevent* war.”

Towers brushed it aside. “There won’t be a war—just a psychological demonstration, an unimportant town or two. A little bloodletting to save an all-out war. Simple arithmetic.”

He put a hand on Johnny’s shoulder. “You aren’t squeamish, or you wouldn’t be a bomb officer. Think of it as a surgical operation. And think of your family.”

Johnny Dahlquist had been thinking of his family. “Please, sir, I want to see the Commanding Officer.”

Towers frowned. “The Commodore is not available. As you know, I speak for him. See me again-after lunch.”

The Commodore was decidedly not available; the Commodore was dead. But Johnny did not know that.

Dahlquist walked back to the messroom, bought cigarettes, sat down and had a smoke. He got up, crushed out the butt, and headed for the Base’s west airlock. There he got into his space suit and went to the lockmaster. “Open her up, Smitty.”

The marine looked surprised. “Can’t let anyone out on the surface without word from Colonel Towers, sir. Hadn’t you heard?”

“Oh, yes! Give me your order book.” Dahlquist took it, wrote a pass for himself, and signed it “by direction of Colonel Towers.” He added, “Better call the Executive Officer and check it.”

The lockmaster read it and stuck the book in his pocket. “Oh, no, Lieutenant. Your word’s good.”

“Hate to disturb the Executive Officer, eh? Don’t blame you.” He stepped in, closed the inner door, and waited for the air to be sucked out.

Out on the Moon’s surface he blinked at the light and hurried to the track-rocket terminus; a car was waiting. He squeezed in, pulled down the hood, and punched the starting button. The rocket car flung itself at the hills, dived through and came out on a plain studded with projectile rockets, like candles on a cake. Quickly it dived into a second tunnel through more hills. There was a stomach-wrenching deceleration and the car stopped at the underground atom-bomb armory.

As Dahlquist climbed out he switched on his walkie-talkie. The spacesuited guard at the entrance came to port-arms. Dahlquist said, “Morning, Lopez,” and walked by him to the airlock. He pulled it open.

The guard motioned him back. “Hey! Nobody goes in without the Executive Officer’s say-so.” He shifted his gun, fumbled in his pouch and got out a paper. “Read it, Lieutenant.”

Dahlquist waved it away. “I drafted that order myself. You read it; you’ve misinterpreted it.”

“I don’t see how, Lieutenant.”

Dahlquist snatched the paper, glanced at it, then pointed to a line. “See? ‘—except persons specifically designated by the Executive Officer.’ That’s the bomb officers, Major Morgan and me.”

The guard looked worried. Dahlquist said, “Damn it, look up ‘specifically designated’—it’s under ‘*Bomb Room, Security, Procedure for,*’ in your standing orders. Don’t tell me you left them in the barracks!”

“Oh, no, sir! I’ve got ‘em.” The guard reached into his pouch. Dahlquist gave him back the sheet; the guard took it, hesitated, then leaned his weapon against his hip, shifted the paper to his left hand, and dug into his pouch with his right.

Dahlquist grabbed the gun, shoved it between the guard’s legs, and jerked.

He threw the weapon away and ducked into the airlock. As he slammed the door he saw the guard struggling to his feet and reaching for his side arm. He dogged the outer door shut and felt a tingle in his fingers as a slug struck the door.

He flung himself at the inner door, jerked the spill lever, rushed back to the outer door and hung his weight on the handle. At once he could feel it stir. The guard was lifting up; the lieutenant was pulling down, with only his low Moon weight to anchor him. Slowly the handle raised before his eyes.

Air from the bomb room rushed into the lock through the spill valve. Dahlquist felt his space suit settle on his body as the pressure in the lock began to equal the pressure in the suit. He quit straining and let the guard raise the handle. It did not matter; thirteen tons of air pressure now held the door closed.

He latched open the inner door to the bomb room, so that it could not swing shut. As long as it was open, the airlock could not operate; no one could enter.

Before him in the room, one for each projectile rocket, were the atom bombs, spaced in rows far enough apart to defeat any faint possibility of spontaneous chain reaction. They were the deadliest things in the known universe, but they were his babies. He had placed himself between them and anyone who would misuse them.

But, now that he was here, he had no plan to use his temporary advantage.

The speaker on the wall sputtered into life. “Hey! Lieutenant! What goes on here? You gone crazy?” Dahlquist did not answer. Let Lopez stay confused—it would take him that much longer to make up his mind what to do. And Johnny Dahlquist needed as many minutes as he could squeeze. Lopez went on protesting. Finally he shut up.

Johnny had followed a blind urge not to let the bombs—*his* bombsl—be used for “demonstrations on unimportant towns.” But what to do next? Well, Towers couldn’t get through the lock. Johnny would sit tight until hell froze over.

Don’t kid yourself, John Ezra! Towers could get in. Some high explosive against the outer door—then the air would whoosh out, our boy Johnny would drown in blood from his burst lungs—and the bombs would be sitting there, unhurt. They were built to stand the jump from Moon to Earth; vacuum would not hurt them at all.

He decided to stay in his space suit; explosive decompression didn’t appeal to him. Come to think about it, death from old age was his choice.

Or they could drill a hole, let out the air, and open the door without wrecking the lock. Or Towers might even have a new airlock built outside the old. Not likely, Johnny thought; a *coup d’etat* depended on speed. Towers was almost sure to take the quickest way-blasting. And Lopez was probably calling the Base right now. Fifteen minutes for Towers to suit up and get here, maybe a short dicker—then *whoosh*! the party is over.

Fifteen minutes—

In fifteen minutes the bombs might fall back into the hands of the conspirators; in fifteen minutes he must make the bombs unusable.

An atom bomb is just two or more pieces of fissionable metal, such as plutonium. Separated, they are no more explosive than a pound of butter; slapped together, they explode. The complications lie in the gadgets and circuits and gun used to slap them together in the exact way and at the exact time and place required.

These circuits, the bomb's "brain," are easily destroyed-but the bomb itself is hard to destroy because of its very simplicity. Johnny decided to smash the "brains"—and quickly!

The only tools at hand were simple ones used in handling the bombs. Aside from a Geiger counter, the speaker on the walkie-talkie circuit, a television rig to the base, and the bombs themselves, the room was bare. A bomb to be worked on was taken elsewhere—not through fear of explosion, but to reduce radiation exposure for personnel. The radioactive material in a bomb is buried in a "tamper"—in these bombs, gold. Gold stops alpha, beta, and much of the deadly gamma radiation—but not neutrons.

The slippery, poisonous neutrons which plutonium gives off had to escape, or a chain reaction—explosion!—would result. The room was bathed in an invisible, almost undetectable rain of neutrons. The place was unhealthy; regulations called for staying in it as short a time as possible.

The Geiger counter clicked off the "background" radiation, cosmic rays, the trace of radioactivity in the Moon's crust, and secondary radioactivity set up all through the room by neutrons. Free neutrons have the nasty trait of infecting what they strike, making it radioactive, whether it be concrete wall or human body. In time the room would have to be abandoned.

Dahlquist twisted a knob on the Geiger counter; the instrument stopped clicking. He had used a suppressor circuit to cut out noise of "background" radiation at the level then present. It reminded him uncomfortably of the danger of staying here. He took out the radiation exposure film all radiation personnel carry; it was a direct-response type and had been fresh when he arrived. The most sensitive end was faintly darkened already. Half way down the film a red line crossed it. Theoretically, if the wearer was exposed to enough radioactivity in a week to darken the film to that line, he was, as Johnny reminded himself, a "dead duck".

Off came the cumbersome space suit; what he needed was speed. Do the job and surrender—better to be a prisoner than to linger in a place as "hot" as this.

He grabbed a ball hammer from the tool rack and got busy, pausing only to switch off the television pick-up. The first bomb bothered him. He started to smash the cover plate of the "brain," then stopped, filled with reluctance. All his life he had prized fine apparatus.

He nerved himself and swung; glass tinkled, metal creaked. His mood changed; he began to feel a shameful pleasure in destruction. He pushed on with enthusiasm, swinging, smashing, destroying!

So intent was he that he did not at first hear his name called.

"Dahlquist! Answer me! Are you there?"

He wiped sweat and looked at the TV screen. Towers' perturbed features stared out.

Johnny was shocked to find that he had wrecked only six bombs. Was he going to be caught before he could finish? Oh, no! He *had* to finish. Stall, son, stall! "Yes, Colonel? You called me?"

"I certainly did! What's the meaning of this?"

"I'm sorry, Colonel."

Towers' expression relaxed a little. "Turn on your pick-up, Johnny, I can't see you. What was that noise?"

"The pick-up is on," Johnny lied. "It must be out of order. That noise —uh, to tell the truth, Colonel, I was fixing things so that nobody could get in here."

Towers hesitated, then said firmly, "I'm going to assume that you are sick and send you to the Medical Officer. But I want you to come out of there, right away. That's an order, Johnny."

Johnny answered slowly. "I can't just yet, Colonel. I came here to make up my mind and I haven't quite made it up. You said to see you after lunch."

"I meant you to stay in your quarters."

"Yes, sir. But I thought I ought to stand watch on the bombs, in case I decided you were wrong."

"It's not for you to decide, Johnny. I'm your superior officer. You are sworn to obey me."

"Yes, sir." This was wasting time; the old fox might have a squad on the way now. "But I swore to keep the peace, too. Could you come out here and talk it over with me? I don't want to do the wrong thing."

Towers smiled. "A good idea, Johnny. You wait there. I'm sure you'll see the light." He switched off.

"There," said Johnny. "I hope you're convinced that I'm a halfwit —you slimy mistake!" iHe picked up the hammer, ready to use the minutes gained.

He stopped almost at once; it dawned on him that wrecking the "brains" was not enough. There were no spare "brains," but there was a well-stocked electronics shop. Morgan could jury-rig control circuits for bombs. Why, he could himself—not a neat job, but one that would work. Damnation! He would have to wreck the bombs themselves—and in the next ten minutes.

But a bomb was solid chunks of metal, encased in a heavy tamper, all tied in with a big steel gun. It couldn't be done—not in ten minutes.

Damn!

Of course, there was one way. He knew the control circuits; he also knew how to beat them. Take this bomb: if he took out the safety bar, unhooked the proximity circuit, shorted the delay circuit, and cut in the arming circuit by hand—then unscrewed *that* and reached in *there*, he could, with just a long, stiff wire, set the bomb off.

Blowing the other bombs and the valley itself to Kingdom Come.

Also Johnny Dahlquist. That was the rub.

All this time he was doing what he had thought out, up to the step of actually setting off the bomb. Ready to go, the bomb seemed to threaten, as if crouching to spring. He stood up, sweating.

He wondered if he had the courage. He did not want to funk-and hoped that he would. He dug into his jacket and took out a picture of Edith and the baby. "Honeychile," he said, "if I get out of this, I'll never even try to beat a red light." He kissed the picture and put it back. There was nothing to do but wait.

What was keeping Towers? Johnny wanted to make sure that Towers was in blast range. What a joke on the jerk! Me—sitting here, ready to throw the switch on him. The idea tickled him; it led to a better: why blow himself up—alive?

There was another way to rig it—a "dead man" control. Jigger up some way so that the last step, the one that set off the bomb, would not happen as long as he kept his hand on a switch or a lever or something. Then, if they blew open the door, or shot him, or anything—up goes the balloon!

Better still, if he could hold them off with the threat of it, sooner or later help would come—Johnny was sure that most of the Patrol was not in this stinking conspiracy—and then: Johnny comes marching home! What a reunion! He'd resign and get a teaching job; he'd stood his watch.

All the while, he was working. Electrical? No, too little time. Make it a simple‘ mechanical linkage. He had it doped out but had hardly begun to build it when the loudspeaker called him. "Johnny?"

"That you, Colonel?" His hands kept busy.

"Let me in."

"Well, now, Colonel, that wasn't in the agreement." Where in blue blazes was something to use as a long lever?

"I'll come in alone, Johnny, I give you my word. We'll talk face to face."

His word! "We can talk over the speaker, Colonel." Hey, that was it—a yardstick, hanging on the tool rack.

"Johnny, I'm warning you. Let me in,‘ or I'll blow the door off."

A wire-he needed a wire, fairly long and stiff. He tore the antenna from his suit. "You wouldn't do that, Colonel. It would ruin the bombs."

"Vacuum won't hurt the bombs. Quit stalling."

“Better check with Major Morgan. Vacuum won’t hurt them; explosive decompression would wreck every circuit.” The Colonel was not a bomb specialist; he shut up for several minutes. Johnny went on working.

“Dahlquist,” Towers resumed, “that was a clumsy lie. I checked with Morgan. You have sixty seconds to get into your suit, if you aren’t already. I’m going to blast the door.”

“No, you won’t,” said Johnny. “Ever hear of a ‘dead man’ switch?” Now for a counterweight—and a sling.

“Eh? What do you mean?”

“I’ve rigged number seventeen to set off by hand. But I put in a gimmick. It won’t blow while I hang on to a strap I’ve got in my hand. But if anything happens to me—*up she goesl* You are about fifty feet from the blast center. Think it over.”

There was a short silence. “I don’t believe you.”

“No? Ask Morgan. He’ll believe me. He can inspect it, over the TV pickup.” Johnny lashed the belt of his space suit to the end of the yardstick.

“You said the pick-up was out of order.”

“So I lied. This time I’ll prove it. Have Morgan call me.”

Presently Major Morgan’s face appeared. “Lieutenant Dahlquist?”

“Hi, Stinky. Wait a sec.” With great care Dahlquist made one last connection while holding down the end of the yardstick. Still careful, he shifted his grip to the belt, sat down on the floor, stretched an arm and switched on the TV pick-up. “Can you see me, Stinky?”

“I can see you,” Morgan answered stiffly. “What is this nonsense?”

“A little surprise I whipped up.” He explained it—what circuits he had cut out, what ones had been shorted, just how the jury-rigged mechanical sequence fitted in.

Morgan nodded. “But you’re bluffing, Dahlquist. I feel sure that you haven’t disconnected the ‘K’ circuit. You don’t have the guts to blow yourself up.”

Johnny chuckled. “I sure haven’t. But that’s the beauty of it. It can’t go off, *so long as I am alive*. If your greasy boss, ex-Colonel Towers, blasts the door, then I’m dead and the bomb goes off. It won’t matter to me, but it will to him. Better tell him.” He switched off.

Towers came on over the speaker shortly. “Dahlquist?”

“I hear you.”

“There’s no need to throw away your life. Come out and you will be retired on full pay. You can go home to your family. That’s a promise.”

Johnny got mad. “You keep my family out of this!”

“Think of them, man.”

“Shut up. Get back to your hole. I feel a need to scratch and this whole shebang might just explode in your lap.”

Chapter 2

Johnny sat up with a start. He had dozed, his hand hadn't let go the sling, but he had the shakes when he thought about it.

Maybe he should disarm the bomb and depend on their not daring to dig him out? But Towers' neck was already in hock for treason; Towers might risk it. If he did and the bomb were disarmed, Johnny would be dead and Towers would have the bombs. No, he had gone this far; he wouldn't let his baby girl grow up in a dictatorship just to catch some sleep.

He heard the Geiger counter clicking and remembered having used the suppressor circuit. The radioactivity in the room must be increasing, perhaps from scattering the "brain" circuits-the circuits were sure to be infected; they had lived too long too close to plutonium. He dug out his film.

The dark area was spreading toward the red line.

He put it back and said, "Pal, better break this deadlock or you are going to shine like a watch dial." It was a figure of speech; infected animal tissue does not glow—it simply dies, slowly.

The TV screen lit up; Towers' face appeared. "Dahlquist? I want to talk to you."

"Go" fly a kite."

"Let's admit you have us inconvenienced."

"Inconvenienced, hell—I've got you stopped."

"For the moment. I'm arranging to get more bombs—"

"Liar."

"—but you are slowing us up. I have a proposition."

"Not interested."

"Wait. When this is over I will be chief of the world government. If you cooperate, even now, I will make you my administrative head."

Johnny told him what to do with it. Towers said, "Don't be stupid. What do you gain by dying?"

Johnny grunted. "Towers, what a prime stinker you are. You spoke of my family. I'd rather see them dead than living under a two-bit Napoleon like you. Now go away—I've got some thinking to do."

Towers switched off.

Johnny got out his film again. It seemed no darker but it reminded him forcibly that time was running out. He was hungry and thirsty—and he could not stay awake forever. It took four days to get a ship up from Earth; he could not expect rescue any sooner. And he wouldn't last four days—once the darkening spread past the red line he was a goner.

His only chance was to wreck the bombs beyond repair, and get out— before that film got much darker.

He thought about ways, then got busy. He hung a weight on the sling, tied a line to it. If Towers blasted the door, he hoped to jerk the rig loose before he died.

There was a simple, though arduous, way to wreck the bombs beyond any capacity of Moon Base to repair them. The heart of each was two hemispheres of plutonium, their flat surfaces polished smooth to permit perfect contact when slapped together. Anything less would prevent the chain reaction on which atomic explosion depended.

Johnny started taking apart one of the bombs.

He had to bash off four lugs, then break the glass envelope around the inner assembly. Aside from that the bomb came apart easily. At last he had in front of him two gleaming, minor-perfect half globes.

A blow with the hammer—and one was no longer perfect. Another blow and the second cracked like glass; he had tapped its crystalline structure just right.

Hours later, dead tired, he went back to the armed bomb. Forcing himself to steady down, with extreme care he disarmed it. Shortly its silvery hemispheres too were useless. There was no longer a usable bomb in the room—but huge fortunes in the most valuable, most poisonous, and most deadly metal in the known world were spread around the floor.

Johnny looked at the deadly stuff. “Into your suit and out of here, son,” he said aloud. “I wonder what Towers will say?”

He walked toward the rack, intending to hang up the hammer. As he passed, the Geiger counter chattered wildly.

Plutonium hardly affects a Geiger counter; secondary infection from plutonium does. Johnny looked at the hammer, then held it closer to the Geiger counter. The counter screamed.

Johnny tossed it hastily away and started back toward his suit.

As he passed the counter it chattered again. He stopped short.

He pushed one hand close to the counter. Its clicking picked up to a steady roar. Without moving he reached into his pocket and took out his exposure film.

It was dead black from end to end.

Chapter 3

Plutonium taken into the body moves quickly to bone marrow. Nothing can be done; the victim is finished. Neutrons from it smash through the body, ionizing tissue, transmuting atoms into radioactive isotopes, destroying and killing. The fatal dose is unbelievably small; a mass a tenth the size of a grain of table salt is more than enough—a dose small enough to enter through the tiniest scratch. During the historic "Manhattan Project" immediate high amputation was considered the only possible first-aid measure.

Johnny knew all this but it no longer disturbed him. He sat on the floor, smoking a hoarded cigarette, and thinking. The events of his long watch were running through his mind.

He blew a puff of smoke at the Geiger counter and smiled without humor to hear it chatter more loudly. By now even his breath was "hot"—carbon-14, he supposed, exhaled from his blood stream as carbon dioxide. It did not matter.

There was no longer any point in surrendering, nor would he give Towers the satisfaction—he would finish out this watch right here. Besides, by keeping up the bluff that one bomb was ready to blow, he could stop them from capturing the raw material from which bombs were made. That might be important in the long run.

He accepted, without surprise, the fact that he was not unhappy. There was a sweetness about having no further worries of any sort. He did not hurt, he was not uncomfortable, he was no longer even hungry. Physically he still felt fine and his mind was at peace. He was dead—he knew that he was dead; yet for a time he was able to walk and breathe and see and feel.

He was not even lonesome. He was not alone; there were comrades with him-the boy with his finger in the dike, Colonel Bowie, too ill to move but insisting that he be carried across the line, the dying Captain of the *Chesapeake* still with deathless challenge on his lips, Rodger Young peering into the gloom. They gathered about him in the dusky bomb room.

And of course there was Edith. She was the only one he was aware of. Johnny wished that he could see her face more clearly. Was she angry? Or proud and happy?

Proud though unhappy—he could see her better now and even feel her hand. He held very still.

Presently his cigarette burned down to his fingers. He took a final puff, blew it at the Geiger counter, and put it out. It was his last. He gathered several butts and fashioned a roll-your-own with a bit of paper found in a pocket. He lit it carefully and settled back to wait for

Edith to show up again. He was very happy.

He was still propped against the bomb case, the last of his salvaged cigarettes cold at his side, when the speaker called out again. "Johnny? Hey, Johnny! Can you hear me? This is Kelly. It's all over. The *Lafayette* landed and Towers blew his brains out. Johnny? *Answer me.*"

When they opened the outer door, the first man in carried a Geiger counter in front of him on the end of a long pole. He stopped at the threshold and backed out hastily. "Hey, chief!" he called. "Better get some handling equipment—uh, and a lead coffin, too."

"*Four days it took the little ship and her escort to reach Earth. Four days while all of Earth's people awaited her arrival. For ninety-eight hours all commercial programs were off television; instead there was an endless dirge—the* Dead March *from* Saul, *the* Valhalla *theme,* Going Home, *the Patrol's own* Landing Orbit.

"The nine ships landed at Chicago Port. A drone tractor removed the casket from the small ship; the ship was then refueled and blasted off in an escape trajectory, thrown away into outer space, never again to be used for a lesser purpose.

"The tractor progressed to the Illinois town where Lieutenant Dahlquist had been born, while the dirge continued. There it placed the casket on a pedestal, inside a barrier marking the distance of safe approach. Space marines, arms reversed and heads bowed, stood guard around it; the crowds stayed outside this circle. And still the dirge continued.

"When enough time had passed, long, long after the heaped flowers had withered, the lead casket was enclosed in marble, just as you see it today."

Ordeal in Space

Maybe we should never have ventured out into space. Our race has but two basic, innate fears; noise and the fear of falling. Those terrible heights-Why should any man in his right mind let himself be placed where he could fall… and fall… and fall— But all spacemen are crazy. Everybody knows that.

The medicos had been very kind, he supposed. "You're lucky. You want to remember that, old fellow. You're still young and your retired pay relieves you of all worry about your future. You've got both arms and legs and are in fine shape."

"Fine shape!" His voice was unintentionally contemptuous.

"No, I mean it," the chief psychiatrist had persisted gently. "The little quirk you have does you no harm at all—except that you can't go out into space again. I can't honestly call acrophobia a neurosis; fear of falling is normal and sane. You've just got it a little more strongly than most—but that is not abnormal, in view of what you have been through."

The reminder set him to shaking again. He closed his eyes and saw the Stars wheeling below him again. He was falling… falling endlessly. The psychiatrist's voice came through to him and pulled him back. "Steady, old man! Look around you."

"Sorry."

"Not at all. Now tell me, what do you plan to do?"

"I don't know. Get a job, I suppose."

"The Company will give you a job, you know."

He shook his head. "I don't want to hang around a spaceport." Wear a little button in his shirt to show that he was once a man, be addressed by a courtesy title of captain, claim the privileges of the pilots' lounge on the basis of what he used to be, hear the shop talk die down whenever he approached a group, wonder what they were saying behind his back—no, thank you!

"I think you're wise. Best to make a clean break, for a while at least, until you are feeling better."

"You think I'll get over it?"

The psychiatrist pursed his lips. "Possible. It's functional, you know. No trauma."

"But you don't think so?"

"I didn't say that. I honestly don't know. We still know very little about what makes a man tick."

"I see. Well, I might as well be leaving."

The psychiatrist stood up and shoved out his hand. "Holler if you want anything. And come back to see us in any case."

"Thanks."

"You're going to be all right. I know it."

But the psychiatrist shook his head as his patient walked out. The man did not walk like a spaceman; the easy, animal self-confidence was gone.

Only a small part of Great New York was roofed over in those days; he stayed underground until he was in that section, then sought out a passageway lined with bachelor rooms. He stuck a coin in the slot of the first one which displayed a lighted "vacant" sign, chucked his jump bag inside, and left. The monitor at the intersection gave him the address of the nearest placement office. He went there, seated himself at an interview desk, stamped in his finger prints, and started filling out forms. It gave him a curious back-to-the-beginning feeling; he had not looked for a job since pre-cadet days.

He left filling in his name to the last and hesitated even then. He had had more than his bellyful of publicity; he did not want to be recognized; he certainly did not want to be throbbed over—and most of all he did not want anyone telling him he was a hero. Presently he printed in the name "William Saunders" and dropped the forms in the slot.

He was well into his third cigarette and getting ready to strike another when the screen in front of him at last lighted up. He found himself staring at a nice-looking brunette. "Mr. Saunders," the image said, "will you come inside, please? Door seventeen."

The brunette in person was there to offer him a seat and a cigarette. "Make yourself comfortable, Mr. Saunders. I'm Miss Joyce. I'd like to talk with you about your application."

He settled himself and waited, without speaking.

When she saw that he did not intend to speak, she added, "Now take this name 'William Saunders' which you have given us—we know who you are, of course, from your prints."

"I suppose so."

"Of course I know what everybody knows about you, but your action in calling yourself 'William Saunders', Mr.—"

"Saunders."

"—Mr. Saunders, caused me to query the files." She held up a microfilm spool, turned so that he might read his own name on it. "I know quite a lot about you now—more than the public knows and more than you saw fit to put into your application. It's a good record, Mr. Saunders."

"Thank you."

"But I can't use it in placing you in a job. I can't even refer to it if you insist on designating yourself as 'Saunders.'"

"The name is Saunders." His voice was flat, rather than emphatic.

"Don't be hasty, Mr. Saunders. There are many positions in which the factor of prestige can be used quite legitimately to obtain for a client a much higher beginning rate of pay than—"

"I'm not interested."

She looked at him and decided not to insist. "As you wish. If you will go to reception room B, you can start your classification and skill tests."

"Thank you."

"*If* you should change your mind later, Mr. Saunders, we will be glad to reopen the case. Through that door, please."

Three days later found him at work for a small firm specializing in custom-built communication systems. His job was calibrating electronic equipment. It was soothing work, demanding enough to occupy his mind, yet easy for a man of his training and experience. At the end of his three months probation he was promoted out of the helper category.

He was building himself a well-insulated rut, working, sleeping, eating, spending an occasional evening at the public library or working out at the YMCA—and never, under any circumstances, going out under the open sky nor up to any height, not even a theater balcony.

He tried to keep his past life shut out of his mind, but his memory of it was still fresh; he would find himself daydreaming—the star-sharp, frozen sky of Mars, or the roaring night life of Venusburg. He would see again the swollen, ruddy bulk of Jupiter hanging over the port on Ganymede, its oblate bloated shape impossibly huge and crowding the sky.

Or he might, for a time, feel again the sweet quiet of the long watches on the lonely reaches between the planets. But such reveries were dangerous; they cut close to the edge of his new peace of mind. It was easy to slide over and find himself clinging for life to his last handhold on the steel sides of the *Valkyrie*, fingers numb and failing, and nothing below him but the bottomless well of space.

Then he would come back to Earth, shaking uncontrollably and gripping his chair or the workbench.

The first time it had happened at work he had found one of his bench-mates, Joe Tully, staring at him curiously. "What's the trouble, Bill?" he had asked. "Hangover?"

"Nothing," he had managed to say. "Just a chill."

"You better take a pill. Come on—let's go to lunch."

Tully led the way to the elevator; they crowded in. Most of the employes-even the women-preferred to go down via the drop chute, but Tully always used the elevator. "Saunders", of course, never used the drop chute; this had eased them into the habit of lunching together. He knew that the chute was safe, that, even if the power should fail, safety nets would snap across at each floor level—but he could not force himself to step off the edge.

Tully said publicly that a drop-chute landing hurt his arches, but he confided privately to Saunders that he did not trust automatic machinery. Saunders nodded understandingly but said nothing. It warmed him toward Tully. He began feeling friendly and not on the defensive with another human being for the first time since the start of his new life. He began to want to tell Tully the truth about himself. If he could be sure that Joe would not insist on treating him as a hero-not that he really objected to the role of hero. As a kid, hanging around spaceports, trying to wangle chances to go inside the ships, cutting classes to watch takeoffs, he had dreamed of being a "hero" someday, a hero of the spaceways, returning in triumph from some incredible and dangerous piece of exploration. But he was troubled by the fact that he still had the same picture of what a hero should look like and how he should behave; it did not include shying away from open windows, being fearful of walking across an open square, and growing too upset to speak at the mere thought of boundless depths of space.

Tully invited him home for dinner. He wanted to go, but fended off the invitation while he inquired where Tully lived. The Shelton Homes, Tully told him, naming one of those great, boxlike warrens that used to disfigure the Jersey flats. “It’s a long way to come back,” Saunders said doubtfully, while turning over in his mind ways to get there without exposing himself to the things he feared.

“You won’t have to come back,” Tully assured him. “We’ve got a spare room. Come on. My old lady does her own cooking—that’s why I keep her.”

“Well, all right,” he conceded. “Thanks, Joe.” The La Guardia Tube would take him within a quarter of a mile; if he could not find a covered way he would take a ground cab and close the shades.

Tully met him in the hall and apologized in a whisper. “Meant to have a young lady for you, Bill. Instead we’ve got my brother-in-law. He’s a louse. Sorry.”

“Forget it, Joe. I’m glad to be here.” He was indeed. The discovery that Bill’s flat was on the thirty-fifth floor had dismayed him at first, but he was delighted to find that he had no feeling of height. The lights were on, the windows occulted, the floor under him was rock solid; he felt warm and safe. Mrs. Tully turned out in fact to be a good cook, to his surprise—he had the bachelor’s usual distrust of amateur cooking. He let himself go to the pleasure of feeling at home and safe and wanted; he managed not even to hear most of the aggressive and opinionated remarks of Joe’s in-law.

After dinner he relaxed in an easy chair, glass of beer in hand, and watched the video screen. It was a musical comedy; he laughed more heartily than he had in months. Presently the comedy gave way to a religious program, the National Cathedral Choir; he let it be, listening with one ear and giving some attention to the conversation with the other.

The choir was more than half way through *Prayer for Travelers* before he became fully aware of what they were singing:

“—hear us when we pray to Thee For those in peril on the sea.

“Almighty Ruler of the all Whose power extends to great and small, Who guides the stars with steadfast law, Whose least creation fills with awe; Oh, grant Thy mercy and Thy grace To those who venture into space.”

He wanted to switch it off, but he had to hear it out, he could not stop listening to it, though it hurt him in his heart with the unbearable homesickness of the hopelessly exiled. Even as a cadet this one hymn could fill his eyes with tears; now he kept his face turned away from the others to try to hide from them the drops wetting his cheeks.

When the choir's "amen" let him do so he switched quickly to some other—any other—program and remained bent over the instrument, pretending to fiddle with it, while he composed his features. Then he turned back to the company, outwardly serene, though it seemed to him that anyone could see the hard, aching knot in his middle.

The brother-in-law was still sounding off.

"We ought to annex 'em," he was saying. "That's what we ought to do. Three-Planets Treaty—what, a lot of ruddy rot! What right have they got to tell us what we can and can't do on Mars?"

"Well, Ed," Tully said mildly, "it's their planet, isn't it? They were there first."

Ed brushed it aside. "Did we ask the Indians whether or not they wanted us in North America? Nobody has any right to hang on to something he doesn't know how to use. With proper exploitation—"

"You been speculating, Ed?"

"Huh? It wouldn't be speculation if the government wasn't made up of a bunch of weak-spined old women. 'Rights of Natives,' indeed. What rights do a bunch of degenerates have?"

Saunders found himself contrasting Ed Schultz with Knath Sooth, the only Martian he himself had ever known well. Gentle Knath, who had been old before Ed was born, and yet was rated as young among his own kind. Knath… why, Knath could sit for hours with a friend or trusted acquaintance, saying nothing, needing to say nothing. "Growing together" they called it—his entire race had so grown together that they had needed no government, until the Earthman came.

Saunders had once asked his friend why he exerted himself so little, was satisfied with so little. More than an hour passed and Saunders was beginning to regret his inquisitiveness when Knath replied, "My fathers have labored and I am weary."

Saunders sat up and faced the brother-in-law. "They are not degenerate."

"Huh? I suppose *you* are an expert!"

"The Martians aren't degenerate, they're just tired," Saunders persisted.

Tully grinned. His brother-in-law saw it and became surly. "What gives you the right to an opinion? Have you ever been to Mars?"

Saunders realized suddenly that he had let his censors down. "Have you?" he answered cautiously.

"That's beside the point. The best minds all agree—" Bill let him go on and did not contradict him again. It was a relief when Tully suggested that, since they all had to be up early, maybe it was about time to think about beginning to get ready to go to bed.

He said goodnight to Mrs. Tully and thanked her for a wonderful dinner, then followed Tully into the guest room. “Only way to get rid of that family curse we’re saddled with, Bill,” he apologized. “Stay up as long as you like.” Tully stepped to the window and opened it. “You’ll sleep well here. We’re up high enough to get honest-to-goodness fresh air.” He stuck his head out and took a couple of big breaths. “Nothing like the real article,” he continued as he withdrew from the window. “I’m a country boy at heart. What’s the matter, Bill?”

“Nothing. Nothing at all.”

“I thought you looked a little pale. Well, sleep tight. I’ve already set your bed for seven; that’ll give us plenty of time.”

“Thanks, Joe. Goodnight.” As soon as Tully was out of the room he braced himself, then went over and closed the window. Sweating, he turned away and switched the ventilation back on. That done, he sank down on the edge of the bed.

He sat there for a long time, striking one cigarette after another. He knew too well that the peace of mind he thought he had regained was unreal. There was nothing left to him but shame and a long, long hurt. To have reached the point where he had to knuckle under to a tenth-rate knothead like Ed Schultz-it would have been better if he had never come out of the *Valkyrie* business.

Presently he took five grains of “Fly-Rite” from his pouch, swallowed it, and went to bed. He got up almost at once, forced himself to open the window a trifle, then compromised by changing the setting of the bed so that it would not turn out the lights after he got to sleep.

He had been asleep and dreaming for an indefinitely long time. He was back in space again—indeed, he had never been away from it. He was happy, with the full happiness of a man who has awakened to find it was only a bad dream.

The crying disturbed his serenity. At first it made him only vaguely uneasy, then he began to feel in some way responsible—he must do something about it. The transition to falling had only dream logic behind it, but it was real to him. He was grasping, his hands were slipping, had slipped—and there was nothing under him but the black emptiness of space—

He was awake and gasping, on Joe Tully’s guest-room bed; the lights burned bright around him.

But the crying persisted.

He shook his head, then listened. It was real all right. Now he had it identified-a cat, a kitten by the sound of it.

He sat up. Even if he had not had the spaceman's traditional fondness for cats, he would have investigated. However, he liked cats for themselves, quite aside from their neat shipboard habits, their ready adaptability to changing accelerations, and their usefulness in keeping the ship free of those other creatures that go wherever man goes. So he got up at once and looked for this one.

A quick look around showed him that the kitten was not in the room, and his ear led him to the correct spot; the sound came in through the slightly opened window. He shied off, stopped, and tried to collect his thoughts.

He told himself that it was unnecessary to do anything more; if the sound came in through his window, then it must be because it came out of some nearby window. But he knew that he was lying to himself; the sound was close by. In some impossible way the cat was just outside his window, thirty-five stories above the street.

He sat down and tried to strike a cigarette, but the tube broke in his fingers. He let the fragments fall to the floor, got up and took six nervous steps toward the window, as if he were being jerked along. He sank down to his knees, grasped the window and threw it wide open, then clung to the windowsill, his eyes tight shut.

After a time the sill seemed to steady a bit. He opened his eyes, gasped, and shut them again. Finally he opened them again, being very careful not to look out at the stars, not to look down at the street. He had half expected to find the cat on a balcony outside his room—it seemed the only reasonable explanation. But there was no balcony, no place at all where a cat could reasonably be.

However, the mewing was louder than ever. It seemed to come from directly under him. Slowly he forced his head out, still clinging to the sill, and made himself look down. Under him, about four feet lower than the edge of the window, a narrow ledge ran around the side of the building. Seated on it was a woebegone ratty-looking kitten. It stared up at him and meowed again.

It was barely possible that, by clinging to the sill with one hand and making a long arm with the other, he could reach it without actually going out the window, he thought—if he could bring himself to do it. He considered calling Tully, then thought better of it. Tully was shorter than he was, had less reach. And the kitten had to be rescued now, before the fluff-brained idiot jumped or fell.

He tried for it. He shoved his shoulders out, clung with his left arm and reached down with his right. Then he opened his eyes and saw that he was a foot or ten inches away from the kitten still. It sniffed curiously in the direction of his hand.

He stretched till his bones cracked. The kitten promptly skittered away from his clutching fingers, stopping a good six feet down the ledge. There it settled down and commenced washing its face.

He inched back inside and collapsed, sobbing, on the floor underneath the window. “I can’t do it,” he whispered. “I can’t do it. Not again—”

The Rocket Ship *Valkyrie* was two hundred and forty-nine days out from Earth-Luna Space Terminal and approaching Mars Terminal on Deimos, outer Martian satellite. William Cole, Chief Communications Officer and relief pilot, was sleeping sweetly when his assistant shook him. “Hey! Billl Wake up—we’re in a jam.”

“Huh? Wazzat?” But he was already reaching for his socks. “What’s the trouble, Tom?”

Fifteen minutes later he knew that his junior officer had not exaggerated; he was reporting the facts to the Old Man—the primary piloting radar was out of whack. Tom Sandburg had discovered it during a routine check, made as soon as Mars was inside the maximum range of the radar pilot. The captain had shrugged. “Fix it, Mister—and be quick about it. We need it.”

Bill Cole shook his head. “There’s nothing wrong with it, Captain—inside. She acts as if the antenna were gone completely.”

“That’s impossible. We haven’t even had a meteor alarm.”

“Might be anything, Captain. Might be metal fatigue and it just fell off. But we’ve got to replace that antenna. Stop the spin on the ship and I’ll go out and fix it. I can jury-rig a replacement while she loses her spin.”

The *Valkyrie* was a luxury ship, of her day. She was assembled long before anyone had any idea of how to produce an artificial gravity field. Nevertheless she had pseudogravity for the comfort of her passengers. She spun endlessly around her main axis, like a shell from a rifled gun; the resulting angular acceleration—miscalled “centrifugal force”—kept her passengers firm in their beds, or steady on their feet. The spin was started as soon as her rockets stopped blasting at the beginning of a trip and was stopped only when it was necessary to maneuver into a landing. It was accomplished, not by magic, but by reaction against the contrary spin of a flywheel located on her centerline.

The captain looked annoyed. “I’ve started to take the spin off, but I can’t wait that long. Jury-rig the astrogational radar for piloting.”

Cole started to explain why the astrogational radar could not be adapted to short-range work, then decided not to try. “It can’t be done, sir. It’s a technical impossibility.”

“When I was your age I could jury-rig anything! Well, find me an answer, Mister. I can’t take this ship down blind. Not even for the Harriman Medal.”

Bill Cole hesitated for a moment before replying, “I’ll have to go out while she's still got spin on her, Captain, and make the replacement. There isn't any other way to do it."

The captain looked away from him, his jaw muscles flexed. "Get the replacement ready. Hurry up about it."

Cole found the captain already at the airlock when he arrived with the gear he needed for the repair. To his surprise the Old Man was suited up. "Explain to me what I'm to do," he ordered Bill.

"You're not going out, sir?" The captain simply nodded.

Bill took a look at his captain's waist line, or where his waist line used to be. Why, the Old Man must be thirty-five if he were a day! "I'm afraid I can't explain too clearly. I had expected to make the repair myself."

"I've never asked a man to do a job I wouldn't do myself. Explain it to me."

"Excuse me, sir—but can you chin yourself with one hand?"

"What's that got to do with it?"

"Well, we've got fortyeight passengers, sir, and—"

"Shut up!"

Sandburg and he, both in space suits, helped the Old Man down the hole after the inner door of the lock was closed and the air exhausted. The space beyond the lock was a vast, star-flecked emptiness. With spin still on the ship, every direction outward was "down," down for millions of uncounted miles. They put a safety line on him, of course—nevertheless it gave him a sinking feeling to see the captain's head disappear in the bottomless, black hole.

The line paid out steadily for several feet, then stopped. When it had been stopped for several minutes, Bill leaned over and touched his helmet against Sandburg's. "Hang on to my feet. I'm going to take a look."

He hung head down out the lock and looked around. The captain was stopped, hanging by both hands, nowhere near the antenna fixture. He scrambled back up and reversed himself. "I'm going out."

It was no great trick, he found, to hang by his hands and swing himself along to where the captain was stalled. The *Valkyrie* was a space-to-space ship, not like the sleek-sided jobs we see around earthports; she was covered with handholds for the convenience of repairmen at the terminals. Once he reached him, it was possible, by grasping the same steel rung that the captain clung to, to aid him in swinging back to the last one he had quitted. Five minutes later Sandburg was pulling the Old Man up through the hole and Bill was scrambling after him.

He began at once to unbuckle the repair gear from the captain's suit and transfer it to his own. He lowered himself back down the hole and was on his way before the older man had recovered enough to object, if he still intended to.

Swinging out to where the antenna must be replaced was not too hard, though he had all eternity under his toes. The suit impeded him a **little— the** gloves were clumsy-but he was used to spacesuits. He was a little winded from helping the captain, but he could not stop to think about that. The increased spin bothered him somewhat; the airlock was nearer the axis of spin than was the antenna—he felt heavier as he moved out.

Getting the replacement antenna shipped was another matter. It was neither large nor heavy, but he found it impossible to fasten it into place. He needed one hand to cling by, one to hold the antenna, and one to handle the wrench. That left him shy one hand, no matter how he tried it.

Finally he jerked his safety line to signal Sandburg for more slack. Then he unshackled it from his waist, working with one hand, passed the end twice through a handhold and knotted it; he left about six feet of it hanging free. The shackle on the free end he fastened to another handhold. The result was a loop, a bight, an improvised bosun's chair, which would support his weight while he manhandled the antenna into place. The job went fairly quickly then.

He was almost through. There remained one bolt to fasten on the far side, away from where he swung. The antenna was already secured at two points and its circuit connection made. He decided he could manage it with one hand. He left his perch and swung over, monkey fashion.

The wrench slipped as he finished tightening the bolt; it slipped from his grasp, fell free. He watched it go, out and out and out, down and down and down, until it was so small he could no longer see it. It made him dizzy to watch it, bright in the sunlight against the deep black of space. He had been too busy to look down, up to now.

He shivered. "Good thing I was through with it," he said. "It would be a long walk to fetch it." He started to make his way back.

He found that he could not.

He had swung past the antenna to reach his present position, using a grip on his safety-line swing to give him a few inches more reach. Now the loop of line hung quietly, just out of reach. There was no way to reverse the process.

He hung by both hands and told himself not to get panicky—he must think his way out. Around the other side? No, the steel skin of the *Valkyrie* was smooth there—no handhold for more than six feet. Even if he were not tired-and he had to admit that he was, tired and getting a little cold—even if he were fresh, it was an impossible swing for anyone not a chimpanzee.

He looked dowh—and regretted it.

There was nothing below him but stars, down and down, endlessly. Stars, swinging past as the ship spun with him, emptiness of all time and blackness and cold.

He found himself trying to hoist himself bodily onto the single narrow rung he clung to, trying to reach it with his toes. It was a futile, strength-wasting excess. He quieted his panic sufficiently to Stop it, then hung limp.

It was easier if he kept his eyes closed. But after a while he always had to open them and look. The Big Dipper would swing past and then, presently, Orion. He tried to compute the passing minutes in terms of the number of rotations the ship made, but his mind would not work clearly, and, after a while, he would have to shut his eyes.

His hands were becoming stiff—and cold. He tried to rest them by hanging by one hand at a time. He let go with his left hand, felt pins-and-needles course through it, and beat it against his side. Presently it seemed time to spell his right hand.

He could no longer reach up to the rung with his left hand. He did not have the power left in him to make the extra pull; he was fully extended and could not shorten himself enough to get his left hand up.

He could no longer feel his right hand at all.

He could see it slip. It was slipping—

The sudden release in tension let him know that he was falling… falling. The ship dropped away from him.

He came to with the captain bending over him. “Just keep quiet, Bill.”

“Where-”

“Take it easy. The patrol from Deimos was already close by when you let go. They tracked you on the ‘scope, matched orbits with you, and picked you up. First time in history, I guess. Now keep quiet. You’re a sick man— you hung there more than two hours, Bill.”

The meowing started up again, louder than ever. He got up on his knees and looked out over the windowsill. The kitten was still away to the left on the ledge. He thrust his head cautiously out a little further, remembering not to look at anything but the kitten and the ledge. “Here, kitty!” he called. “Here, kit-kit-kitty! Here, kitty, come kitty!”

The kitten stopped washing and managed to look puzzled.

“Come, kitty,” he repeated softly. He let go the windowsill with his right hand and gestured toward it invitingly. The kitten approached about three inches, then sat down. “Here, kitty,” he pleaded and stretched his arm as far as possible.

The fluff ball promptly backed away again.

He withdrew his arm and thought about it. This was getting nowhere, he decided. If he were to slide over the edge and stand on the ledge, he could hang on with one arm and be perfectly safe. He knew that, he knew it would be safe-he needn't look down!

He drew himself back inside, reversed himself, and, with great caution, gripping the sill with both arms, let his legs slide down the face of the building. He focused his eyes carefully on the corner of the bed.

The ledge seemed to have been moved. He could not find it, and was beginning to be sure that he had reached past it, when he touched it with one toe—then he had both feet firmly planted on it. It seemed about six inches wide. He took a deep breath.

Letting go with his right arm, he turned and faced the kitten. It seemed interested in the procedure but not disposed to investigate more closely. If he were to creep along the ledge, holding on with his left hand, he could just about reach it from the corner of the window-He moved his feet one at a time, baby fashion, rather than pass one past the other. By bending his knees a trifle, and leaning, he could just manage to reach it. The kitten sniffed his groping fingers, then leaped backward. One tiny paw missed the edge; it scrambled and regained its footing. "You little idiot!" he said indignantly, "do you want to bash your brains out?

"If any," he added. The situation looked hopeless now; the baby cat was too far away to be reached from his anchorage at the window, no matter how he stretched. He called "Kitty, kitty" rather hopelessly, then stopped to consider the matter.

He could give it up.

He could prepare himself to wait all night in the hope that the kitten would decide to come closer. Or he could go get it.

The ledge was wide enough to take his weight. If he made himself small, flat to the wall, no weight rested on his left arm. He moved slowly forward, retaining the grip on the window as long as possible, inching so gradually that he hardly seemed to move. When the window frame was finally out of reach, when his left hand was flat to smooth wall, he made the mistake of looking down, down, past the sheer wall at the glowing pavement far below.

He pulled his eyes back and fastened them on a spot on the wall, level with his eyes and only a few feet away. He was still there!

And so was the kitten. Slowly he separated his feet, moving his right foot forward, and bent his knees. He stretched his right hand along the wall, until it was over and a little beyond the kitten.

He brought it down in a sudden swipe, as if to swat a fly. He found himself with a handful of scratching, biting fur.

He held perfectly still then, and made no attempt to check the minor outrages the kitten was giving him. Arms still outstretched, body flat to the wall, he started his return. He could not see where he was going and could not turn his head without losing some little of his margin of balance. It seemed a long way back, longer than he had come, when at last the fingertips of his left harid slipped into the window opening.

He backed up the rest of the way in a matter of seconds, slid both arms over the sill, then got his right knee over. He rested himself on the sill and took a deep breath. “Man!” he said aloud. “That was a tight squeeze. You’re a menace to traffic, little cat.”

He glanced down at the pavement. It was certainly a long way down-looked hard, too.

He looked up at the stars. Mighty nice they looked and mighty bright. He braced himself in the window frame, back against one side, foot pushed against the other, and looked at them. The kitten settled down in the cradle of his stomach and began to buzz. He stroked it absentmindedly and reached for a cigarette. He would go out to the port and take his physical and his psycho tomorrow, he decided. He scratched the kitten’s ears. “Little fluffhead,” he said, “how would you like to take a long, long ride with me?”

GULF

THE FIRST-QUARTER ROCKET from Moonbase put him down at Pied-a-Terre. The name he was traveling under began-by foresight-with the letter "A"; he was through port inspection and into the shuttle tube to the city ahead of the throng. Once in the tube car he went to the men's washroom and locked himself in.

Quickly he buckled on the safety belt he found there, snapped its hooks to the wall fixtures, and leaned over awkwardly to remove a razor from his bag. The surge caught him in that position; despite the safety belt he bumped his head-and swore. He straightened up and plugged in the razor. His moustache vanished; he shortened his sideburns, trimmed the comers of his eyebrows, and brushed them up.

He towelled his hair vigorously to remove the oil that had sleeked it down, combed it loosely into a wavy mane. The car was now riding in a smooth, unaccelerated 300 mph; he let himself out of the safety belt without unhooking it from the walls and, working very rapidly, peeled off his moonsuit, took from his bag and put on a tweedy casual outfit suited to outdoors on Earth and quite unsuited to Moon Colony's airconditioned corridors.

His slippers he replaced with walking shoes from the bag; he stood up. Joel Abner, commercial traveler, had disappeared; in his place was Captain Joseph Gilead, explorer, lecturer, and writer. Of both names he was the sole user; neither was his birth name.

He slashed the moonsuit to ribbons and flushed it down the water closet, added "Joel Abner's" identification card; then peeled a plastic skin off his travel bag and let the bits follow the rest— The bag was now pearl grey and rough, instead of dark brown and smooth. The slippers bothered him; he was afraid they might stop up the car's plumbing. He contented himself with burying them in the waste receptacle.

The acceleration warning sounded as he was doing this; he barely had time to get back into the belt. But, as the car plunged into the solenoid field and surged to a stop, nothing remained of Joel Abner but some unmarked underclothing, very ordinary toilet articles, and nearly two dozen spools of microfilm equally appropriate-until examined-to a commercial traveler or a lecturer-writer. He planned not to let them be examined as long as he was alive.

He waited in the washroom until he was sure of being last man out of the car, then went forward in-to the next car, left by its exit, and headed for the lift to the ground level.

"New Age Hotel, sir," a voice pleaded near his ear. He felt a hand fumbling at the grip of his travel bag.

He repressed a reflex to defend the bag and looked the speaker over. At first glance he seemed an undersized adolescent in a smart uniform and a pillbox cap. Further inspection showed premature wrinkles and the features of a man at least forty. The eyes were glazed. A pituitary case, he thought to himself, and on the hop as well. "New Age Hotel," the runner repeated. "Best mechanos in town, chief. There's a discount if you're just down from the moon."

Captain Gilead, when in town as Captain Gilead, always stayed at the old Savoy. But the notion of going to the New Age appealed to him; in that incredibly huge, busy, and ultramodern hostelry he might remain unnoticed until he had had time to do what had to be done.

He disliked mightily the idea of letting go his bag. Nevertheless it would be out of character not to let the runner carry the bag; it would call attention to himself-and the bag. He decided that this unhealthy runt could not outrun him even if he himself were on crutches; it would suffice to keep an eye on the bag.

"Lead on, comrade," he answered heartily, surrendering the bag. There had been no hesitation at all; he had let go the bag even as the hotel runner reached for it.

"Okay, chief." The runner was first man into an empty lift; he went to the back of the car and set the bag down beside him. Gilead placed himself so that his foot rested firmly against his bag and faced forward as other travelers crowded in. The car started.

The lift was jammed; Gilead was subjected to body pressures on every side-but he noticed an additional, unusual, and uncalled-for pressure behind him.

His right hand moved suddenly and clamped down on a skinny wrist and a hand clutching something. Gilead made no further movement, nor did the owner of the hand attempt to draw away or make any objection. They remained so until the car reached the surface. When the passengers had spilled out he reached behind him with his left hand, recovered his bag and dragged the wrist and its owner out of the car.

It was, of course, the runner; the object in his fist was Gilead's wallet. "You durn near lost that. chief," the runner announced with no show of embarrassment. "It was falling out of your pocket."

Gilead liberated the wallet and stuffed it into an inner pocket. "Fell right through the zipper," he answered cheerfully. "Well, let's find a cop.'

The runt tried to pull away, "You got nothing on me!"

Gilead considered the defense. In truth, he had nothing. His wallet was already out of sight. As to witnesses, the other lift passengers were already gone-nor had they seen anything. The lift itself was automatic. He was simply a man in the odd position of detaining another citizen by the wrist. And Gilead himself did not want to talk to the police.

He let go that wrist. "On your way, comrade. We'll call it quits."

The runner did not move. "How about my tip?"

Gilead was beginning to like this rascal. Locating a loose half credit in his change pocket he flipped it at the runner, who grabbed it out of the air but still didn't leave. "I'll take your bag now. Gimme."

"No, thanks, chum. I can find your delightful inn without further help. One side, please."

"Oh, yeah? How about my commission? I gotta carry your bag, else how they gonna know I brung you in? Gimme."

Gilead was delighted with the creature's unabashed insistence. He found a two-credit piece and passed it over. "There's your cumshaw. Now beat it, before I kick your tail up around your shoulders."

"You and who else?"

Gilead chuckled and moved away down the concourse toward the station entrance to the New Age Hotel. His subconscious sentries informed him immediately that the runner had not gone back toward the lift as expected, but was keeping abreast him in the crowd. He considered this. The runner might very well be what he appeared to be, common city riffraff who combined casual thievery with his overt occupation. On the other hand—

He decided to unload. He stepped suddenly off the sidewalk into the entrance of a drugstore and stopped Just inside the door to buy a newspaper. While his copy was being printed, he scooped up, apparently as an afterthought, three standard pneumo mailing tubes. As he paid for them he palmed a pad of gummed address labels.

A glance at the mirrored wall showed him that his shadow had hesitated outside but was still watching him. Gilead went on back to the shop's soda fountain and slipped into an unoccupied booth. Although the floor show was going on-a remarkably shapely ecdysiast was working down toward her last string of beads-he drew the booth's curtain.

Shortly the call light over the booth flashed discreetly; he called, "Come in!" A pretty and very young waitress came inside the curtain. Her plastic costume covered without concealing.

She glanced around. "Lonely?"

"No, thanks, I'm tired."

"How about a redhead, then? Real cute—"

"I really am tired. Bring me two bottles of beer, unopened, and some pretzels."

"Suit yourself, sport." She left.

With speed he opened the travel bag, selected nine spools of microfilm, and loaded them into the three mailing tubes, the tubes being of the common three-spool size. Gilead then took the filched pad of address labels, addressed the top one to "Raymond Calhoun, P. 0. Box 1060, Chicago" and commenced to draw with great care in the rectangle reserved for electric-eye sorter. The address he shaped in arbitrary symbols was intended not to be read, but to be scanned automatically. The handwritten address was merely a precaution, in case a robot sorter should reject his hand-drawn symbols as being imperfect and thereby turn the tube over to a human postal clerk for readdressing.

He worked fast, but with the care of an engraver. The waitress returned before he had finished. The call light warned him; he covered the label with his elbow and kept it covered.

She glanced at the mailing tubes as she put down the beer and a bowl of pretzels. "Want me to mail those?"

He had another instant of splitsecond indecision. When he had stepped out of the tube car he had been reasonably sure, first, that the persona of Joel Abner, commercial traveler, had not been penetrated, and, second, that the transition from Abner to Gilead had been accomplished without arousing suspicion. The pocket-picking episode had not alarmed him, but had caused him to reclassify those two propositions from calculated certainties to unproved variables. He had proceeded to test them at once; they were now calculated certainties again-of the opposite sort. Ever since he had spotted his erstwhile porter, the New Age runner, as standing outside this same drugstore his subconscious had been clanging like a burglar alarm-It was clear not only that he had been spotted but that they were organized with a completeness and shrewdness he had not believed possible.

But it was mathematically probable to the point of certainty that they were not operating through this girl. They had no way of knowing that he would choose to turn aside into this particular drugstore. That she could be used by them he was sure-and she had been out of sight since his first contact with her. But she was clearly not bright enough, despite her alleycat sophistication, to be approached, subverted, instructed and indoctrinated to the point where she could seize an unexpected opportunity, all in a space of time merely adequate to fetch two bottles of beer. No, this girl was simply after a tip. Therefore she was safe.

But her costume offered no possibility of concealing three mailing tubes, nor would she be safe crossing the concourse to the post office. He had no wish that she be found tomorrow morning dead in a ditch.

"No," he answered immediately. "I have to pass the post office anyway. But it was a kind thought. Here." He gave her a half credit.

"Thanks." She waited and stared meaningfully at the beer. He fumbled again in his change pocket, found only a few bits, reached for his wallet and took out a five-pluton note.

'Take it out of this."

She handed him back three singles and some change. He pushed the change toward her, then waited, frozen, while she picked it up and left. Only then did he hold the wallet closer to his eyes.

It was not his wallet.

He should have noticed it before, he told himself. Even though there had been only a second from the time he had taken it from?' the runner's clutched fingers until he had concealed it in a front pocket, he should have known it-known it and forced the runner to disgorge, even if he had had to skin him alive.

But why was he sure that it was not his wallet? It was the proper size and shape, the proper weight and feel-real ostrich skin in these days of synthetics. There was the weathered ink stain which had resulted from carrying a leaky stylus in the same pocket. There was a V-shaped scratch on the front which had happened so long ago he did not recall the circumstances.

Yet it was not his wallet.

He opened it again. There was the proper amount of money, there were what seemed to be his Explorers' Club card and his other identity cards, there was a dog-eared flat-photo of a mare he had once owned. Yet the more the evidence showed that it was his, the more certain he became that it was not his. These things were forgeries; they did not feel right.

There was one way to find out. He flipped a switch provided by a thoughtful management; the booth; became dark. He took out his penknife and carefully slit a seam back of the billfold pocket. He dipped a finger into a secret pocket thus disclosed and felt around; the space was empty-nor in this case had the duplication of his own wallet been quite perfect; the space should have been lined, but his fingers encountered rough leather.

He switched the light back on, put the wallet away, and resumed his interrupted drawing. The loss of the card which should have been in the concealed pocket was annoying, certainly awkward, and conceivably disastrous, but he did not judge that the information on it was jeopardized by the loss of the wallet. The card was quite featureless unless examined by black light; if exposed to visible light-by some one taking the real wallet apart, for example-it had the disconcerting quality of bursting explosively into flame.

He continued to work, his mind busy with the wider problem of why they had taken so much trouble to try to keep him from knowing that his wallet was being stolen-and the still wider and more disconcerting question of why they had bothered with his wallet. Finished, he stuffed the remainder of the pad of address labels into a crack between cushions in the booth, palmed the label he had prepared, picked up the bag and the three mailing tubes. One tube he kept separate from the others by a finger.

No attack would take place, he judged, in the drug store. The crowded concourse between himself and the post office he would ordinarily have considered equally safe-but not today. A large crowd of people, he knew, are equal to so many trees as witnesses if the dice were loaded with any sort of a diversion.

He slanted across the bordering slidewalk and headed directly across the middle toward the post office, keeping as far from other people as he could manage. He had become aware of two men converging on him when the expected diversion took place.

It was a blinding light and a loud explosion, followed by screams and startled shouts. The source of the explosion he could imagine; the screams and shouts were doubtless furnished free by the public. Being braced, not for this, but for anything, he refrained even from turning his head.

The two men closed rapidly, as on cue.

Most creatures and almost all humans fight only when pushed. This can lose them decisive advantage. The two men made no aggressive move of any sort, other than to come close to Gilead-nor did they ever attack.

Gilead kicked the first of them in the knee cap, using the side of his foot, a much more certain stroke than with the toe. He swung with his travel bag against the other at the same time, not hurting him but bothering him, spoiling his timing. Gilead followed it with a heavy kick to the man's stomach.

The man whose knee cap he had ruined was on the pavement, but still active-reaching for something, a gun or a knife. Gilead kicked him in the head and stepped over him, continued toward the post office.

Slow march-slow march all the way! He must not give the appearance of running away; he must be the perfect respectable citizen, going about his lawful occasions.

The post office came close, and still no tap on the shoulder, no denouncing shout, no hurrying footsteps. He reached the post office, was inside. The opposition's diversion had worked, perfectly-but for Gilead, not for them,

There was a short queue at the addressing machine. Gilead joined it, took out his stylus and wrote addresses on the tubes while standing. A man joined the queue almost at once; Gilead made no effort to keep him from seeing what address he was writing; it was "Captain Joseph Gilead, the Explorers' Club, New York." When it came his turn to use the symbol printing machine he still made no effort to conceal what keys he was punching-and die symbol address matched the address he had written on each tube.

He worked somewhat awkwardly as the previously prepared gummed label was still concealed in his left palm.

He went from the addressing machine to the mailing receivers; the man who had been behind him in line followed him without pretending to address anything.

Thwonk! and the first tube was away with a muted implosion of compressed air. Thwonk! again and the second was gone-and at the same time Gilead grasped the last one in his left hand, sticking the gummed label down firmly over the address he had just printed on it- Without looking at it he made sure by touch that it was in place, all comers sealed, then thwonk! it joined its mates.

Gilead turned suddenly and trod heavily on the feet of the man crowded close behind him. "WupsI pardon me," he said happily and turned away. He was feeling very cheerful; not only had he turned his dangerous charge over into the care of a mindless, utterly reliable, automatic machine which could not be coerced, bribed, drugged, nor subverted by any other means and in whose complexities the tube would be perfectly hidden until it reached a destination known only to Gilead, but also he had just stepped on the corns of one of the opposition.

On the steps of the post office he paused beside a policeman who was picking his teeth and staring out at a cluster of people and an ambulance in the middle of the concourse. "What's up?" Gilead demanded.

The cop shifted his toothpick. "First some damn fool sets off fireworks," he answered, "then two guys get in a fight and blame near ruin each other."

"My goodness!" Gilead commented and set off diagonally toward the New Age Hotel.

He looked around for his pickpocket friend in the lobby, did not see him. Gilead strongly doubted if the runt were on the hotel's staff. He signed in as Captain Gilead, ordered a suite appropriate to the persona he was wearing, and let himself be conducted to the lift.

Gilead encountered the runner coming down just as he and his bellman were about to go up. "Hi, Shorty!" he called out while deciding not to eat anything in this hotel. "How's business?"

The runt looked startled, then passed him without answering, his eyes blank. It was not likely, Gilead considered, that the runt would be used after being detected; therefore some sort of drop box, call station, or headquarters of the opposition was actually inside the hotel. Very well, that would save everybody a lot of useless commuting-and there would be fun for all!

In the meantime he wanted a bath.

In his suite he tipped the bellman who continued to linger.

"Want some company?"

"No, thanks, I'm a hermit."

"Try this then." The bellman inserted Gilead's room key in the stereo panel, fiddled with the controls, the entire wall lighted up and faded away. A svelte blonde creature, backed by a chorus line, seemed about to leap into Gilead's lap. "That's not a tape," the bellman went on, "that's a live transmission direct from the Tivoli. We got the best equipment in town."

"So you have," Gilead agreed, and pulled out his key. The picture blanked; the music stopped. "But I want a bath, so get out-now that you've spent four credits of my money."

The bellman shrugged and left. Gilead threw off his clothes and stepped into the 'fresher. Twenty minutes later, shaved from ear to toe, scrubbed, soaked, sprayed, pummeled, rubbed, scented, powdered, and feeling ten years younger, he stepped out. His clothes were gone.

His bag was still there; he looked it over. It seemed okay, itself and contents. There were the proper number of microfilm spools-not that it mattered. Only three of the spools mattered and they were already in the mail. The rest were just shrubbery, copies of his own public lectures. Nevertheless he examined one of them, unspooling a few frames.

It was one of his own lectures all right-but not one he had had with him. It was one of his published transcriptions, available in any large book store. "Pixies everywhere," he remarked and put it back. Such attention to detail was admirable.

"Room service!"

The service panel lighted up. "Yes, sir?"

"My clothes are missing. Chase 'em up for me."

"The valet has them, sir."

"I didn't order valet service. Get 'em back."

The girl's voice and face were replaced, after a slight delay, by those of a man. "It is not necessary to order valet service here, sir. 'A New Age guest receives the best.' "

"Okay, get 'em back-chop, chop! I've got a date with the Queen of Sheba."

"Very good, sir." The image faded.

With wry humor he reviewed his situation. He had already made the possibly fatal error of underestimating his opponent through-he now knew-visualizing that opponent in the unimpressive person of "the runt." Thus he had allowed himself to be diverted; he should have gone anywhere rather than to the New Age, even to the old Savoy, although that hotel, being a known stamping ground of Captain Gilead, was probably as thorougly booby-trapped by now as this palatial dive.

He must not assume that he had more than a few more minutes to live. Therefore he must use those few minutes to tell his boss the destination of the three important spools of microfilm. Thereafter, if he still were alive, he must replenish his cash to give him facilities for action—the amount of money in "his" wallet, even if it were returned, was useless for any major action. Thirdly, he must report in, close the present assignment, and be assigned to his present antagonists as a case in themselves, quite aside from the matter of the microfilm.

Not that he intended to drop Runt & Company even if not assigned to them. True artists were scarce-nailing him down by such a simple device as stealing his pants! He loved them for it and wanted to see more of them, as violently as possible.

Even as the image on the room service panel faded he was punching the scrambled keys on the room's communicator desk. It was possible—certain— that the scramble code he used would be repeated elsewhere in the hotel and the supposed privacy attained by scrambling thereby breached at once. This did not matter; he would have his boss disconnect and call back with a different scramble from the other end. To be sure, the call code of the station to which he was reporting would thereby be breached, but it was more than worthwhile to expend and discard one relay station to get this message through.

Scramble pattern set up, he coded—not New Washington, but the relay station he had selected. A girl's face showed on the screen. "New Age service, sir— Were you scrambling?"

"Yes."

"I am veree sorree, sir. The scrambling circuits are being repaired, I can scramble for you from the main board."

"No, thanks, I'll call in clear."

"I yam ve-ree sor-ree, sir."

There was one clear-code he could use-to be used only for crash priority. This was crash priority. Very well—

He punched the keys again without scrambling and waited. The same girl's face appeared presently. "I am verree soiree, sir; that code does not reply. May I help you?"

"You might send up a carrier pigeon." He cleared the board.

The cold breath on the back of his neck was stronger now; he decided to do what he could to make it awkward to kill him just yet. He reached back into his mind and coded in clear the Star-Times.

No answer.

He tried the Clarion-again no answer.

No point in beating his head against it; they did not intend to let him talk outside to anyone. He rang for a bellman, sat down in an easy chair, switched it to "shallow massage," and luxuriated happily in the chair's tender embrace. No doubt about it; the New Age did have the best mechanos in town-his bath had been wonderful; this chair was superb. Both the recent austerities of Moon Colony and the probability that this would be his last massage added to his pleasure.

The door dilated and a bellman came in-about his own size, Gilead noted. The man's eyebrows went up a fraction of an inch on seeing Gilead's oyster-naked condition. "You want company?"

Gilead stood up and moved toward him. "No, dearie," he said grinning, "I want you"-at which he sank three stiffened fingers in the man's solar plexus.

As the man grunted and went down Gilead chopped him in the side of the neck with the edge of his hand.

The shoulders of the jacket were too narrow and the shoes too large; nevertheless two minutes later

"Captain Gilead" had followed "Joel Abner" to oblivion and Joe, temporary and freelance bellman, let himself out of the room. He regretted not being able to leave a tip with his predecessor.

He sauntered past the passengers lifts, firmly misdirected a guest who had stopped him, and found the service elevator. By it was a door to the "quick drop." He opened it, reached out and grasped a waiting pulley belt, and, without stopping to belt himself into it, contenting himself with hanging on, he stepped off the edge. In less time than it would have taken him to parachute the drop he was picking himself up off the cushions in the hotel basement and reflecting that lunar gravitation surely played hob with a man's leg muscles.

He left the drop room and started out in an arbitrary direction, but walking as if he were on business and belonged where he was-any exit would do and he would find one eventually.

He wandered in and out of the enormous pantry, then found the freight door through which the pan-try was supplied.

When he was thirty feet from it, it closed and an alarm sounded. He turned back.

He encountered two policemen in one of the many corridors under the giant hotel and attempted to brush on past them-One of them stared at him, then caught his arm. "Captain Gilead-"

Gilead tried to squirm away, but without showing any skill in the attempt. "What's the idea?"

"You are Captain Gilead."

"And you're my Aunt Sadie. Let go of my arm, copper."

The policeman fumbled in his pocket with his other hand, pulled out a notebook, Gilead noted that the other officer had moved a safe ten feet away and had a Markheim gun trained on him.

"You, Captain Gilead," the first officer droned, "are charged on a sworn complaint with offering a counterfeit five-pluton note at or about thirteen hours this date at the Grand Concourse drugstore in this city. You are cautioned to come peacefully and are advised that you need not speak at this time. Come along."

The charge might or might not have something to it, thought Gilead; he had not examined closely the money in the substituted wallet. He did not mind being booked, now that the microfilm was out of his possession; to be in an ordinary police station with nothing more sinister to cope with than crooked cops and dumb desk sergeants would be easy street compared with Runt & Company searching for him.

On the other hand the situation was too pat, unless the police had arrived close on his heels and found the stripped bellman, gotten his story and started searching.

The second policeman kept his distance and did not lower the Markheim gun. That made other consideration academic. "Okay, I'll go," he protested. "You don't have to twist my arm that way.

They went up to the weather level and out to the street-and not once did the second cop drop his guard. Gilead relaxed and waited. A police car was balanced at the curb. Gilead stopped. "I'll walk," he said. "The nearest station is just around the comer. I want to be booked in my own precinct."

He felt a teeth-chattering chill as the blast from the Markheim hit him; he pitched forward on his face.

He was coming to, but still could not coordinate, as they lifted him out of the car. By the time he found himself being half-carried, half-marched down a long corridor he was almost himself again, but with a gap in his memory. He was shoved through a door which clanged behind him. He steadied himself and looked around.

"Greetings, friend," a resonant voice called out. "Drag up a chair by the fire."

Gilead blinked, deliberately slowed himself down, and breathed deeply. His healthy body was fighting off the effects of the Markheim bolt; he was almost himself.

The room was a cell, old-fashioned, almost primitive. The front of the cell and the door were steel bars; the walls were concrete. Its only furniture, a long wooden bench, was occupied by the man who had spoken. He was fiftyish, of ponderous frame, heavy features set in a shrewd, good-natured expression. He was lying back on the bench, head pillowed on his hands, in animal ease. Gilead had seen him before.

"Hello, Dr. Baldwin."

The man sat up with a flowing economy of motion that moved his bulk as little as possible. "I'm not Dr. Baldwin-I'm not Doctor anything, though my name is Baldwin." He stared at Gilead. "But I know you-seen some of your lectures,"

Gilead cocked an eyebrow. "A man would seem naked around the Association of Theoretical Physicists without a doctor's degree-and you were at their last meeting."

Baldwin chuckled boomingly. "That accounts for it-that has to be my cousin on my father's side, Hartley M.-stuffy citizen Hartley. I'll have to try to take the curse off the family name, now that I've met you. Captain." He stuck out a huge hand. "Gregory Baldwin, 'Kettle Belly' to my friends. New and used helicopters is as close as I come to theoretical physics. 'Kettle Belly Baldwin, King of the Kopters'-you must have seen my advertising."

"Now that you mention it, I have."

Baldwin pulled out a card. "Here. If you ever need one, 111 give you a ten percent off for knowing old Hartley, Matter of fact, I can do right well by you in a year-old Curtiss, a family car without a mark on it."

Gilead accepted the card and sat down. "Not at the moment, thanks. You seem to have an odd sort of office, Mr. Baldwin."

Baldwin chuckled again. "In the course of a long life these things happen. Captain. I won't ask you why you are here or what you are doing in that monkey suit. Call me Kettle Belly."

"Okay." Gilead got up and went to the door. Opposite the cell was a blank wall; there was no one in sight. He whistled and shouted-no answer.

"What's itching you, Captain?" Baldwin asked gently.

Gilead turned. His cellmate had dealt a solitaire hand on the bench and was calmly playing.

"I've got to raise the turnkey and send for a lawyer."

"Don't fret about it. Let's play some cards." He reached in a pocket. "I've got a second deck; how about some Russian bank?"

"No, thanks. I've got to get out of here." He shouted again-still no answer.

"Don't waste your lung power. Captain," Baldwin advised him. "They'll come when it suits them and not a second before. I know. Come play with me; it passes the time." Baldwin appeared to be shuffling the two decks; Gilead could see that he was actually stacking the cards. The deception amused him; he decided to play-since the truth of Baldwin's advice was so evident.

"If you don't like Russian bank," Kettle Belly went on, "here is a game I learned as a kid." He paused and stared into Gilead's eyes. "It's instructive as well as entertaining, yet it's simple, once you catch on to it." He started dealing out the cards. "It makes a better game with two decks, because the black cards don't mean anything-Just the twenty-six red cards in each deck count-with the heart suit coming first. Each card scores according to its position in that sequence, the ace of hearts is one and the king of hearts counts thirteen; the ace of diamonds is next at fourteen and so on. Savvy?"

"Yes"

"And the blacks don't count. They're blanks . . . spaces. Ready to play?"

"What are the rules?"

"We'll deal out one hand for free; you'll learn faster as you see it. Then, when you've caught on, I'll play you for a half interest in the atomics trust-or ten bits in cash." He resumed dealing, laying the cards out rapidly in columns, five to a row. He paused, finished. "It's my deal, so it's your count. See what you get."

It was evident that Baldwin's stacking had brought the red cards into groups, yet there was no evident advantage to it, nor was the count especially high-nor low. Gilead stared at it, trying to figure out the man's game. The cheating, as cheating seemed too bold to be probable.

Suddenly the cards jumped at him, arranged themselves in a meaningful array. He read:

XTHXY
CANXX
XXXSE
HEARX
XUSXX

The fact that there were only two fives-of-hearts available had affected the spelling but the meaning was clear. Gilead reached for the cards. "I'll try one. I can beat that score." He dipped into the tips belonging to the suit's owner. "Ten bits it is."

Baldwin covered it. Gilead shuffled, making even less attempt to cover up than had Baldwin. He dealt:

WHATS
XXXXX
XYOUR
GAMEX
XXXXX

Baldwin shoved the money toward him and anted again. "Okay, my turn for revenge." He laid out:

XXIMX
XONXX
YOURX
XXXXX
XSIDEX

"I win again," Gilead announced gleefully. "Ante up." He grabbed the cards and manipulated them:

YEAHX
XXXXX
PROVE
XXITX
XXXXX

Baldwin counted and said, "You're too smart for me. Gimme the cards." He produced another ten-bit piece and dealt again:

XXILX
HELPX
XXYOU
XGETX
OUTXX

"I should have cut the cards," Gilead complained, pushing the money over. "Let's double the bets." Baldwin grunted and Gilead dealt again:

XNUTS
IMXXX
SAFER
XXINX
XGAOL

"I broke your luck," Baldwin gloated. "We'll double it again?"

XUXRX
XNUTS
THISX
NOXXX
XJAIL

The deal shifted:

KEEPX
XTALK
INGXX
XXXXX
XBUDX

Baldwin answered:

THISX
XXXXX
XXNEW
AGEXX
XHOTL

As he stacked the cards again Gilead considered these new factors. He was prepared to believe that he was hidden somewhere in the New Age Hotel; in fact the counterproposition that his opponents had permitted two ordinary cops to take him away to a normal city jail was most unlikely-unless they had the jail as fully under control as they quite evidently had the hotel. Nevertheless the point was not proven. As for Baldwin, he might be on Gilead's side; more probably he was planted as an agent provocateur-or he might be working for himself.

The permutations added up to six situations, only one of which made it desirable to accept Baldwin's offer for help in a Jail break-said situation being the least likely of the six.

Nevertheless, though he considered Baldwin a liar, net, he tentatively decided to accept. A static situation brought him no advantage; a dynamic situation-any dynamic situation-he might turn to his advantage. But more data were needed. "These cards are sticky as candy," he complained. "You letting your money ride?" "Suits." Gilead dealt again:

XXXXX
WHYXX
AMXXX
XXXXI
XHERE

"You have the damnedest luck," Baldwin commented:

FILMS
ESCAP
BFORE
XUXXX
KRACK

Gilead swept up the cards, was about to "shuffle," when Baldwin said, "Oh oh, school's out." Footsteps could be heard in the passage. "Good luck, boy," Baldwin added.

Baldwin knew about the films, but had not used any of the dozen ways to identify himself as part of Gilead's own organization. Therefore he was planted by the opposition, or he was a third factor.

More important, the fact that Baldwin knew about the films proved his assertion that this was not a jail. It followed with bitter certainty that he, Gilead. stood no computable chance of getting out alive. The footsteps approaching the cell could be ticking off the last seconds of his life.

He knew now that he should have found means to report the destination of the films before going to the New Age. But Humpty Dumpty was off the wall, entropy always increases-but the films must be delivered.

The footsteps were quite close.

Baldwin might get out alive.

But who was Baldwin?

All the while he was "shuffling" the cards. The action was not final; he had only to give them one true shuffle to destroy the message being set up in them. A spider settled from the ceiling, landed on the other man's hand. Baldwin, instead of knocking it off and crushing it, most carefully reached his arm out toward the wall and encouraged it to lower itself to the floor. "Better stay out of the way, shorty," he said gently, "or one of the big boys is likely to step on you."

The incident, small as it was, determined Gilead's decision-and with it, the fate of a planet. He stood up and handed the stacked deck to Baldwin. "I owe you exactly ten-sixty," he said carefully. "Be sure to remember it-I'll see who our visitors are."

The footsteps had stopped outside the cell door.

There were two of then, dressed neither as police nor as guards; the masquerade was over. One stood well back, covering the maneuver with a Markheim, the other unlocked the door. "Back against the wall, Fatso," he ordered. "Gilead, out you come. And take it easy, or after we freeze you, I'll knock out your teeth just for fun."

Baldwin shuffled back against the wall; Gilead came out slowly. He watched for any opening but the leader backed away from him without once getting between him and the man with the Markheim. "Ahead of us and take it slow," he was ordered. He complied, helpless under the precautions, unable to run, unable to fight.

Baldwin went back to the bench when they had gone. He dealt out the cards as if playing solitaire, swept them up again, and continued to deal himself solitaire hands. Presently he "shuffled" the cards back to the exact order Gilead had left them in and pocketed them.

The message had read;

XTELL
XFBSX
POBOX
DEBTX
XXCHI.

His two guards marched Gilead into a room and locked the door behind him, leaving themselves outside. He found himself in a large window overlooking the city and a reach of the river; balancing it on the left hung a solid portraying a lunar landscape in convincing color and depth. In front of him was a rich but not ostentatious executive desk.

The lower part of his mind took in these details; his attention could be centered only on the person who sat at that desk. She was old but not senile, frail but not helpless. Her eyes were very much alive, her expression serene. Her translucent, well-groomed hands were busy with a frame of embroidery.

On the desk in front of her were two pneumo mailing tubes, a pair of slippers, and some tattered, soiled remnants of cloth and plastic.

She looked up. "How do you do. Captain Gilead?" she said in a thin, sweet soprano suitable for singing hymns.

Gilead bowed. "Well, thank you-and you, Mrs. Keithley?"

"You know me, I see."

"Madame would be famous if only for her charities."

"You are kind. Captain, I will not waste your time. I had hoped that we could release you without fuss, but-" She indicated the two tubes in front of her. "-you can see for yourself that we must deal with you further."

"So?"

"Come, now. Captain. You mailed three tubes. These two are only dummies, and the third did not reach its apparent destination. It is possible that it was badly addressed and has been rejected by the sorting machines. If so, we shall have it in due course. But it seems much more likely that you found some way to change its address-likely to the point of pragmatic certainty."

"Or possibly I corrupted your servant."

She shook her head slightly. "We examined him quite thoroughly before-"

"Before he died?"

"Please, Captain, let's not change the subject. I must know where you sent that other tube. You cannot be hypnotized by ordinary means; you have an acquired immunity to hypnotic drugs. Your tolerance for pain extends beyond the threshold of unconsciousness. All of these things have already been proved, else you would not be in the job you are in;

I shall not put either of us to the inconvenience of proving them again. Yet I must have that tube. What is your price?"

"You assume that I have a price."

She smiled. "If the old saw has any exceptions, history does not record them-Be reasonable, Captain. Despite your admitted immunity to ordinary forms of examination, there are ways of breaking down-of changing-a man's character so that he becomes really quite pliant under examination . . . ways that we learned from the commissars-But those ways take time and a woman my age has no time to waste-"

Gilead lied convincingly, "It's not your age, ma'am; it is the fact that you know that you must obtain that tube at once or you will never get it." He was hoping-more than that, he was wishing-that Baldwin would have sense enough to examine the cards for one last message . . . and act on it. If Baldwin failed and he, Gilead, died, the tube would eventually come to rest in a dead-letter office and would in time be destroyed.

"You are probably right. Nevertheless, Captain, I will go ahead with the Mindszenty technique if you insist upon it. What do you say to ten million plutonium credits?"

Gilead believed her first statement. He reviewed in his mind the means by which a man bound hand and foot, or worse, could kill himself unassisted. “Ten million plutons and a knife 'in my back?" he answered. "Let's be practical."

"Convincing assurance would be given before you need talk."

"Even so, it is not my price. After all, you are worth at least five hundred million plutons."

She leaned forward. "I like you. Captain. You are a man of strength. I am an old woman, without heirs. Suppose you became my partner-and my successor?"

'Pie in the sky,"

"No, no! I mean it. My age and sex do not permit me actively to serve myself; I must rely on others. Captain, I am very tired of inefficient tools, of men who can let things be spirited away right from under their noses. Imagine!" She made a little gesture of exasperation, clutching her hand into a claw. "You and I could go far. Captain. I need you."

"But I do not need you, madame. And I won't have you."

She made no answer, but touched a control on her desk. A door on the left dilated; two men and a girl came in. The girl Gilead recognized as the waitress from the Grand Concourse Drug Store-They had stripped her bare, which seemed to him an unnecessary indignity since her working uniform could not possibly have concealed a weapon.

The girl, once inside, promptly blew her top, protesting, screaming, using language unusual to her age and sex-an hysterical, thalamic outburst of volcanic proportions.

"Quiet, child!"

The girl stopped in midstream, looked with surprise at Mrs. Keithley, and shut up. Nor did she start again, but stood there, looking even younger than she was and somewhat aware of and put off stride by her nakedness. She was covered now with goose flesh, one tear cut a white line down her dust-smeared face, stopped at her lip. She licked at it and sniffled.

"You were out of observation once. Captain," Mrs. Keithley went on, "during which time this person saw you twice. Therefore we will examine her."

Gilead shook his head. "She knows no more than a goldfish. But go ahead-five minutes of hypno will convince you.'

"Oh, no. Captain! Hypno is sometimes fallible; if she is a member of your bureau, it is certain to be fallible." She signalled to one of the men attending the girl; he went to a cupboard and opened it. "I am old-fashioned," the old woman went on. "I trust simple mechanical means much more than I do the cleverest of clinical procedures."

Gilead saw the implements that the man was removing from cupboard and started forward. "Stop that!" he commanded. "You can't do that-"

He bumped his nose quite hard.

The man paid him no attention. Mrs. Keithley said, "Forgive me, Captain. I should have told you that this room is not one room, but two. The partition is merely glass, but very special glass-I use the room for difficult interviews. There is no need to hurt yourself by trying to reach us."

"Just a moment!"

"Yes, Captain?"

"Your time is already running out. Let the girl and me go free now. You are aware that there are several hundred men searching this city for me even now-and that they will not stop until they have taken it apart panel by panel."

"I think not. A man answering your description to the last factor caught the South Africa rocket twenty minutes after you registered at the New Age hotel. He was carrying your very own identifications. He will not reach South Africa, but the manner of his disappearance will point to desertion rather than accident or suicide."

Gilead dropped the matter. "What do you plan to gain by abusing this child? You have all she knows; certainly you do not believe that we could afford to trust in such as she?"

Mrs. Keithley pursed her lips. "Frankly, I do not expect to learn anything from her. I may learn something from you."

"I see."

The leader of the two men looked questioningly at his mistress; she motioned him to go ahead. The girl stared blankly at him, plainly unaware of the uses of the equipment he had gotten out. He and his partner got busy.

Shortly the girl screamed, continued to scream for a few moments in a high ululation. Then it stopped as she fainted.

They roused her and stood her up again. She stood, swaying and staring stupidly at her poor hands, forever damaged even for the futile purposes to which she had been capable of putting them. Blood spread down her wrists and dripped on a plastic tarpaulin, placed there earlier by the second of the two men.

Gilead did nothing and said nothing. Knowing as he did that the tube he was protecting contained matters measured in millions of lives, the problem of the girl, as a problem, did not even arise. It disturbed a deep and very ancient part of his brain, but almost automatically he cut that part off and lived for the time in his forebrain.

Consciously he memorized the faces, skulls, and figures of the two men and filed the data under "personal." Thereafter he unobtrusively gave his attention to the scene out the window. He had been noting it all through the interview but he wanted to give it explicit thought. He recast what he saw in terms of what it would look like had be been able to look squarely out the window and decided that he was on the ninety-first floor of the New Age hotel and approximately one hundred and thirty meters from the north end. He filed this under "professional."

When the girl died, Mrs. Keithley left the room without speaking to him. The men gathered up what was left in the tarpaulin and followed her. Presently the two guards returned and, using the same foolproof methods, took him back to his cell.

As soon as the guards had gone and Kettle Belly was free to leave his position against the wall he came forward and pounded Gilead on the shoulders. "Hi, boy! I'm sure glad to see you-I was scared I would never lay eyes on you again. How was it? Pretty rough?"

"No, they didn't hurt me; they just asked some questions."

"You're lucky. Some of those crazy damn cops play mean when they get you alone in a back room. Did they let you call your lawyer?"

"No."

"Then they ain' t through with you. You want to watch it, kid."

Gilead sat down on the bench. "The hell with them. Want to play some more cards?"

"Don't mind if I do. I feel lucky." Baldwin pulled out the double deck, riffled through it. Gilead took them and did the same. Good! they were in the order he had left them in. He ran his thumb across the edges again-yes, even the black nulls were unchanged in sequence; apparently Kettle Belly had simply stuck them in his pocket without examining them, without suspecting that a last message had been written in to them. He felt sure that Baldwin would not have left the message set up if he had read it. Since he found himself still alive, he was much relieved to think this.

He gave the cards one true shuffle, then started stacking them. His first lay-out read:

XXXXX
ESCAP
XXATX
XXXXX,
XONCE

"Gotcha that time!" Baldwin crowed. "Ante up;"

DIDXX
XYOUX
XXXXX
XXXXX

CRACK

"Let it ride," announced Gilead and took the deal;

XXNOX

BUTXX

XXXXX

XLETS

XXGOX

"You're too damned lucky to live," complained Baldwin. "Look-we'll leave the bets doubled and double the lay-out. I want a fair chance to get my money back."

His next lay-out read:

XXXXX

XTHXN

XXXXX

THXYX

NEEDX

XXXXX

ALIVX

XXXXX

PLAYX

XXXUP

"Didn't do you much good, did it?" Gilead commented, took the cards and started arranging them.

"There's something mighty funny about a man that wins all the time," Baldwin grumbled. He watched Gilead narrowly. Suddenly his hand shot out, grabbed Gilead's wrist- "I thought so," he yelled. "A goddam card sharp-"

Gilead shook his hand off. "Why, you obscene fat slug!"

"Caught you! Caught you?" Kettle Belly reclaimed his hold, grabbed the other wrist as well. They struggled and rolled to the floor.

Gilead discovered two things: this awkward, bulky man was an artist at every form of dirty fighting and he could simulate it convincingly without damaging his partner. His nerve holds were an inch off the nerve; his kneeings were to thigh muscle rather than to the crotch.

Baldwin tried for a chancery strangle; Gilead let him take it. The big man settled the flat of his forearm against the point of Gilead's chin rather than against his Adam's apple and proceeded to "strangle" him.

There were running footsteps in the corridor.

Gilead caught a glimpse of the guards as they reached the door- They stopped momentarily; the bell of the Markheim was too big to use through the steel grating, the charge would be screened and grounded. Apparently they did not have pacifier bombs with them, for they hesitated. Then the leader quickly unlocked the door, while the man with the Markheim dropped back to the cover position.

Baldwin ignored them, while continuing his stream of profanity and abuse at Cilead. He let the first man almost reach them before he suddenly said in Gilead's ear, "Close your eyes!" At which he broke just as suddenly.

Gilead sensed an incredibly dazzling flash of light even through his eyelids. Almost on top of it he heard a muffled crack; he opened his eyes and saw that the first man was down, his head twisted at a grotesque angle.

The man with the Markheim was shaking his head; the muzzle of his weapon weaved around. Baldwin was charging him in a waddle, back and knees bent until he was hardly three feet tall. The blinded guard could hear him, let fly a charge in the direction of the noise; it passed over Baldwin.

Baldwin was on him; the two went down. There was another cracking noise of ruptured bone and another dead man. Baldwin stood up, grasping the Markheim, keeping it pointed down the corridor. "How are your eyes, kid?" he called out anxiously.

"They're all right."

"Then come take this chiller." Gilead moved up, took the Markheim. Baldwin ran to the dead end of the corridor where a window looked out over the city-The window did not open; there was no "copter step" beyond it. It was merely a straight drop. He came running back.

Gilead was shuffling possibilities in his mind. Events had moved by Baldwin's plan, not by his. As a result of his visit to Mrs. Keithley's "interview room" he was oriented in space. The corridor ahead and a turn to the left should bring him to the quick-drop shaft. Once in the basement and armed with a Markheim, he felt sure that he could fight his way out-with Baldwin in trail if the man would follow. If not-well, there was too much at stake.

Baldwin was into the cell and out again almost at once. "Come along!" Gilead snapped. A head showed at the bend in the corridor; he let fly at it and the owner of the head passed out on the floor.

"Out of my way, kid!" Baldwin answered. He was carrying the heavy bench on which they had "played" cards. He started up the corridor with it, toward the sealed window, gaining speed remarkably as he went.

His makeshift battering ram struck the window heavily. The plastic bulged, ruptured, and snapped like a soap bubble. The bench went on through, disappeared from sight, while Baldwin teetered on hands and knees, a thousand feet of nothingness under his chin.

"Kid!" he yelled. "Close in! Fall back!"

Gilead backed towards him, firing twice more as he did so. He still did not see how Baldwin planned to get out but the big man had demonstrated that he had resourcefulness-and resources.

Baldwin was whistling through his fingers and waving. In violation of all city traffic rules a helicopter separated itself from the late afternoon throng, cut through a lane, and approached the window. It hovered just far enough away to keep from fouling its blades. The driver opened the door, a line snaked across and Kettle Belly caught it. With great speed he made it fast to the window's polarizer knob, then grabbed the Markheim. "You first," he snapped. "Hurry!"

Gilead dropped to his knees and grasped the line; the driver immediately increased his tip speed and tilted his rotor; the line tautened. Gilead let it take his weight, then swarmed across it. The driver gave him a hand up while controlling his craft like a highschool horse with his other hand.

The 'copter bucked; Gilead turned and saw Baldwin coming across, a fat spider on a web. As he himself helped the big man in, the driver reached down and cut the line. The ship bucked again and slid away—

There were already men standing in the broken window. "Get lost, Steve!" Baldwin ordered. The driver gave his tip jets another notch and tilted the rotor still more; the 'copter swooped away. He eased it into the traffic stream and inquired, "Where to?"

"Set her for home-and tell the other boys to go home, too. No-you've got your hands full; I'll tell them!" Baldwin crowded up into the other pilot's seat, slipped on phones and settled a quiet-mike over his mouth. The driver adjusted his car to the traffic, set up a combination on his pilot, then settled back and opened a picture magazine.

Shortly Baldwin took off the phones and came back to the passenger compartment. 'Takes a lot of 'copters to be sure you have one cruising by when you need it," he said conversationally. "Fortunately, I've got a lot of 'em. Oh, by the way, this is Steve Halliday. Steve, meet Joe-Joe, what is your last name?"

"Greene," answered Gilead.

"Howdy," said the driver and let his eyes go back to his magazine.

Gilead considered the situation. He was not sure that it had been improved. Kettle Belly, whatever he was, was more than a used 'copter dealer-and he knew about the films. This boy Steve looked like a harmless young extrovert but, then. Kettle Belly himself looked like a lunk. He considered trying to overpower both of them, remembered Kettle Belly's virtuosity in rough-and-tumble fighting, and decided against it. Perhaps Kettle Belly really was on his side, completely and utterly. He heard rumors that the Department used more than one echelon of operatives and he had no way of being sure that he himself was at the top level.

"Kettle Belly," he went on, "could you set me down at the airport first? I'm in one hell of a hurry."

Baldwin looked him over. "Sure, if you say so. But I thought you would want to swap those duds? You're as conspicuous as a preacher at a stag party. And how are you fixed for cash?"

With his fingers Gilead counted the change that had come with the suit. A man without cash had one arm in a sling. "How long would it take?"

"Ten minutes extra, maybe."

Gilead thought again about Kettle Belly's fighting ability and decided that there was no way for a fish in water to get any wetter. "Okay." He settled back and relaxed completely.

Presently he turned again to Baldwin. "By the way, how did you manage to sneak in that dazzle bomb?"

Kettle Belly chuckled. "I'm a large man, Joe; there's an awful lot of me to search." He laughed again. "You'd be amazed at where I had that hidden."

Gilead changed the subject. "How did you happen to be there in the first place?"

Baldwin sobered. "That's a long and complicated story. Come back some day when you're not in such a rush and I'll tell you all about it."

"I'll do that-soon."

"Good. Maybe I can sell you that used Curtiss at the same time."

The pilot alarm sounded; the driver put down his magazine and settled the craft on the roof of Baldwin's establishment.

Baldwin was as good as his word. He took Gilead to his office, sent for clothes-which showed up with great speed-and handed Gilead a wad of bills suitable to stuff a pillow. "You can mail it back," he said.

"I'll bring it back in person," promised Gilead.

"Good. Be careful out on the street. Some of our friends are sure to be around."

"I'll be careful." He left, as casually as if he had called there on business, but feeling less sure of himself than usual. Baldwin himself remained a mystery and, in his business, Gilead could not afford mysteries.

There was a public phone booth in the lobby of Baldwin's building. Gilead went in, scrambled, then coded a different relay station from the one he had attempted to use before. He gave his booth's code and instructed the operator to scramble back. In a matter of minutes he was talking to his chief in New Washington.

"Joe! Where the hell have you been?"

"Later, boss-get this." In departmental oral code as an added precaution, he told his chief that the films were in post office box 1060, Chicago, and insisted that they be picked up by a major force at once.

His chief turned away from the view plate, then returned, "Okay, it's done-Now what happened to you?"

"Later, boss, later. I think I've got some friends outside who are anxious to rassle with me. Keep me here and I may get a hole in my head."

"Okay-but head right back here. I want a fall report; I'll wait here for you."

"Right." He switched off.

He left the booth lightheartedly, with the feeling of satisfaction that comes from a hard job successfully finished. He rather hoped that some of his "friends' would show up; he felt like kicking somebody who needed kicking.

But they disappointed him. He boarded the transcontinental rocket without alarms and slept all the way to New Washington.

He reached the Federal Bureau of Security by one of many concealed routes and went to his boss's office. After scan and voice check he was let in. Bonn looked up and scowled.

Gilead ignored the expression; Bonn usually scowled.

"Agent Joseph Briggs, threefour-oh-nine-seven-two, reporting back from assignment, sir," he said evenly.

Bonn switched a desk control to "recording" and another to "covert," "You are, eh? Why, thumb-fingered idiot! How do you dare to show your face around here?"

"Easy now, boss-what's the trouble?"

Bonn famed incoherently for a time, then said, "Briggs, twelve star men covered that pickup-and the box was empty. Post office box ten-sixty, Chicago, indeed! Where are those films? Was it a coverup? Have you got them with you?"

Gilead-Briggs restrained his surprise. "No. I mailed them at the Grand Concourse post office to the address you just named." He added, "The machine may have kicked them out; I was forced to letter by hand the machine symbols."

Bonn looked suddenly hopeful. He touched another control and said, "Carruthersi On that Briggs matter: Check the rejection stations for that routing." He thought and then added, "Then try a rejection sequence on the assumption that the first symbol was acceptable to the machine but mistaken. Also for each of the other symbols; run diem simultaneously-crash priority for all agents and staff. After that try combinations of symbols taken two at a time, then three at a time, and so on." He switched off.

'The total of that series you just set up is every postal address in the continent," Briggs suggested mildly. "It can't be done."

"It s got to be done! Man, have you any idea of the importance of those films you were guarding?"

"Yes. The director at Moon Base told me what I was carrying."

"You don t act as if you did. You've lost the most valuable thing this or any other government can possess-the absolute weapon. Yet you stand there blinking at me as if you had mislaid a pack of cigarettes."

"Weapon?" objected Briggs. "I wouldn't call the nova effect that, unless you class suicide as a weapon. And I don't concede that I've lost it. As an agent acting alone and charged primarily with keeping it out of die hands of others, I used the best means available in an emergency to protect it. That is well within the limits of my authority. I was spotted, by some means-"

"You shouldn't have been spotted!"

"Granted. But I was. I was unsupported and my estimate of the situation did not include a probability of staying alive. Therefore I had to protect my charge by some means which did not depend on my staying alive."

"But you did stay alive-you're here."

"Not my doing nor yours, I assure you. I should have been covered. It was your order, you will remember, that I act alone."

Bonn looked sullen. "That was necessary."

"So? In any case, I don't see what all the shooting is about. Either the films show up, or they are lost and will be destroyed as unclaimed mail. So I go back to the Moon and get another set of prints."

Bonn chewed his lip. "You can't do that."

"Why not?"

Bonn hesitated a long time. "There were just two sets. You had the originals, which were to be placed in a vault in the Archives-and the others were to be destroyed at once when the originals were known to be secure."

"Yes? What's the hitch?"

"You don't see the importance of the procedure. Every working paper, every file, every record was destroyed when these films were made. Every technician, every assistant, received hypno. The intention was not only to protect the results of the research but to wipe out the very fact that the research had taken place. There aren't a dozen people in the system who even know of the existence of the nova effect."

Briggs had his own opinions on this point, based on recent experience, but he kept still about them. Bonn went on, "The Secretary has been after me steadily to let him know when the originals were secured. He has been quite insistent, quite critical. When you called in, I told him that the films were safe and that he would have them in a few minutes."

"Well?"

"Don't you see, you fool-he gave the order at once to destroy the other copies."

Briggs whistled. "Jumped the gun, didn't he?"

"That's not the way he'll figure it-mind you, the President was pressuring him. He'll say that I jumped the gun."

"And so you did."

"No, you jumped the gun. You told me the films were in that box."

"Hardly. I said I had sent them there."

"No, you didn't."

"Get out the tape and play it back."

"There is no tape-by the President's own order no records are kept on this operation."

"So? Then why are you recording now?"

"Because," Bonn answered sharply, "some one is going to pay for this and it is not going to be me."

"Meaning," Briggs said slowly, "that it is going to be me."

"I didn't say that. It might be the Secretary."

"If his head rolls, so will yours. No, both of you are figuring on using me. Before you plan on that, hadn't you better hear my report? It might affect your plans. I've got news for you, boss."

Bonn drummed the desk. "Go ahead. It had better be good."

In a passionless monotone Briggs recited all events as recorded by sharp memory from receipt of the films on the Moon to the present moment. Bonn listened impatiently.

Finished, Briggs waited. Bonn got up and strode around the room. Finally he stopped and said. "Briggs, I never heard such a fantastic pack of lies in my life. A fat man who plays cards! A wallet that wasn't your wallet-your clothes stolen! And Mrs. Keithley-Mrs. Keithley! Don't you know that she is one of the strongest supporters of the Administration?"

Briggs said nothing. Bonn went on, "Now I'll tell you what actually did happen. Up to the time you grounded at Pied-a-Terre your report is correct, but-"

"How do you know?"

"Because you were covered, naturally. You don't think I would trust this to one man, do you?"

"Why didn't you tell me? I could have hollered for help and saved all this."

Bonn brushed it aside. "You engaged a runner, dismissed him, went in that drugstore, came out and went to the post office. There was no fight in the concourse for the simple reason that no one was following you. At the post office you mailed three tubes, one of which may or may not have contained the films. You went from there to the New

Age hotel, left it twenty minutes later and caught the transrocket for Cape Town. You-"

"Just a moment," objected Briggs. "How could I have done that and still be here now?"

"Eh?" For a moment Bonn seemed stumped. "That's just a detail; you were positively identified. For that matter, it would have been a far, fair better thing for you if you had stayed on that rocket. In fact-" The bureau chief got a faraway look in his eyes. "-you'll be better off for the time being if we assume officially that you did stay on that rocket. You are in a bad spot, Briggs, a very bad spot. You did not muff this assignment-you sold out!"

Briggs looked at him levelly. "You are preferring charges?"

"Not just now. That is why it is best to assume that you stayed on that rocket-until matters settle down, clarify."

Briggs did not need a graph to show him what solution would come out when "matters clarified." He took from a pocket a memo pad, scribbled on it briefly, and handed it to Bonn.

It read: "I resign my appointment effective immediately." He had added signature, thumbprint, date, and hour.

"So long, boss," he added. He turned slightly, as if to go.

Bonn yelled, "Stop! Briggs, you are under arrest." He reached toward his desk.

Briggs cuffed him in the windpipe, added one to the pit of Bonn's stomach. He slowed down then and carefully made sure that Bonn would remain out for a satisfactory period. Examination of Bonn's desk produced a knockout kit; he added a two-hour hypodermic, placing it inconspicuously beside a mole near the man's backbone. He wiped the needle, restored everything to its proper place, removed the current record from the desk and wiped the tape of all mention of himself, including door check. He left the desk set to "covert" and "do not disturb" and left by another of the concealed routes to the Bureau.

He went to the rocket port, bought a ticket, unreserved, for the first ship to Chicago. There was twenty minutes to wait; he made a couple of minor purchases from clerks rather than from machines, letting his face be seen. When the Chicago ship was called he crowded forward with the rest.

At the inner gate, just short of the weighing-in platform, he became part of the crowd present to see passengers off, rather than a passenger himself. He waved at some one in the line leaving the weighing station beyond the gate, smiled, called out a good-by, and let the crowd carry him back from the gate as it closed. He peeled off from the crowd at the men's washroom. When he came out there were several hasty but effective changes in his appearance.

More important, his manner was different.

A short, illicit transaction in a saloon near a hiring hall provided the work card he needed; fifty-five minutes later he was headed across country as Jack Gillespie, loader and helper-driver on a diesel freighter,

Could his addressing of the pneumo tube have been bad enough to cause the automatic postal machines to reject it? He let the picture of the label, as it had been when he had completed it, build in his mind until it was as sharp as the countryside flowing past him. No, his lettering of the symbols had been perfect and correct; the machines would accept it.

Could the machine have kicked out the tube for another cause, say a turned-up edge of the gummed label? Yes, but the written label was sufficient to enable a postal clerk to get it back in the groove. One such delay did not exceed ten minutes, even during the rush hour. Even with five such delays the tube would have reached Chicago more than one hour before he reported to Bonn by phone.

Suppose the gummed label had peeled off entirely; in such case the tube would have gone to the same destination as the two coverup tubes.

In which case Mrs. Keithley would have gotten it, since she had been able to intercept or receive the other two.

Therefore the tube had reached the Chicago post office box.

Therefore Kettle Belly had read the message in the stacked cards, had given instructions to some one in Chicago, had done so while at the helicopter's radio. After an event, "possible" and "true" are equivalent ideas, whereas "probable" becomes a measure of one's ignorance. To call a conclusion "improbable" after the event was self-confusing amphigory.

Therefore Kettle Belly Baldwin had the films-a conclusion he had reached in Bonn's office.

Two hundred miles from New Washington he worked up an argument with the top driver and got himself fired. From a local booth in the town where he dropped he scrambled through to Baldwin's business office. "Tell him I'm a man who owes him money."

Shortly the big man's face built up on the screen. "Hi, kid! How's tricks?"

"I'm fired."

"I thought you would be."

"Worse than that-I'm wanted."

"Naturally."

"I'd like to talk with you,"

"Swell. Where are you?"

Gilead told him.

"You're clean?"

"For a few hours, at least."

"Go to the local air port. Steve will pick you up."

Steve did so, nodded a greeting, jumped his craft into the air, set his pilot, and went back to his reading. When the ship settled down on course, Gilead noted it and asked, "Where are we going?"

"The boss's ranch. Didn't he tell you?"

"No." Gilead knew it was possible that he was being taken for a one-way ride. True, Baldwin had enabled him to escape an otherwise pragmatically certain death-it was certain that Mrs. Keithley had not intended to let him stay alive longer than suited her uses, else she would not have had the girl killed in his presence. Until he had arrived at Bonn's office, he had assumed that Baldwin had saved him because he knew something that Baldwin most urgently wanted to know-whereas now it looked as if Baldwin had saved him for altruistic reasons.

Gilead conceded the existence in this world of altruistic reasons, but was inclined not to treat them as "least hypothesis" until all other possible hypotheses had been eliminated; Baldwin might have had his own reasons for wishing him to live long enough to report to New Washington and nevertheless be pleased to wipe him out now that he was a wanted man whose demise would cause no comment.

Baldwin might even be a partner in these dark matters of Mrs. Keithley. In some ways that was the simplest explanation though it left other factors unexplained. In any case Baldwin was a key actor-and he had the films. The risk was necessary.

Gilead did not worry about it. The factors known to him were chalked up on the blackboard of his mind, there to remain until enough variables become constants to permit a solution by logic. The ride was very pleasant.

Steve put him down on the lawn of a large rambling ranch house, introduced him to a motherly old party named Mrs. Garver, and took off. "Make yourself at home, Joe," she told him, "Your room is the last one in the east wing-shower across from it, Supper in ten minutes."

He thanked her and took the suggestion, getting back to the living room with a minute or two to spare. Several others, a dozen or more of both sexes, were there. The place seemed to be a sort of a dude ranch-not entirely dude, as he had seen Herefords on the spread as Steve and he were landing.

The other guests seemed to take his arrival as a matter of course. No one asked why he was there. One of the women introduced herself as Thalia Wagner and then took him around the group. Ma Garver came in swinging a dinner bell as this was going on and they all filed into a long, low dining room. Gilead could not remember when he had had so good a meal in such amusing company.

After eleven hours of sleep, his first real rest in several days, he came fully, suddenly awake at a group of sounds his subconscious could not immediately classify and refused to discount. He opened his eyes, swept the room with them, and was at once out of bed, crouching on the side away from the door. There were hurrying footsteps moving past his bedroom door. There were two voices, one male, one female, outside the door; the female was Thalia Wagner, the man he could not place.

Male: "tsamaeq?"

Female: "ntSt"

Male: "zutntst."

Female: "tpbit" New Jersey."

These are not precisely the sounds that Gilead heard, first because of the limitations of phonetic symbols, and second because his ears were not used to the sounds. Hearing is a function of the brain, not of the ear; his brain, sophisticated as it was, nevertheless insisted on forcing the sounds that reached his ears into familiar pockets rather than stop to create new ones.

Thalia Wagner identified, he relaxed and stood up. Thalia was part of the unknown situation he accepted in coming here; a stranger known to her he must accept also. The new unknowns, including the odd language, he filed under "pending" and put aside.

The clothes he had had were gone, but his money-Baldwin's money, rather-was where his clothes had been and with it his work card as Jack Gillespie and his few personal articles. By them some one had laid out a fresh pair of walking shorts and new sneakers, in his size.

He noted, with almost shocking surprise, that some one had been able to serve him thus without waking him.

He put on his shorts and shoes and went out. Thalia and her companion had left while he dressed. No one was about and he found the dining room empty, but three places were set, including his own of supper, and hot dishes and facilities were on the sideboard. He selected baked ham and hot rolls, fried four eggs, poured coffee. Twenty minutes later, warmly replenished and still alone, he stepped out on the veranda.

It was a beautiful day. He was drinking it in and eyeing with friendly interest a desert lark when a young woman came around the side of the house. She was dressed much as he was, allowing for difference in sex, and she was comely, though not annoyingly so. "Good morning," he said.

She stopped, put her hands on her hips, and looked him up and down. "Well!" she said. "Why doesn't somebody tell me these things?"

Then she added, "Are you married?"

"No."

"I'm shopping around. Object: matrimony. Let's get acquainted."

"I'm a hard man to marry. I've been avoiding it for years."

"They're all hard to marry." she said bitterly. "There's a new colt down at the corral. Come on."

They went. The colt's name was War Conqueror of Baldwin; hers was Gail. After proper protocol with mare and son they left. "Unless you have pressing engagements," said Gail, "now is a salubrious time to go swimming."

"If salubrious means what I think it does, yes."

The spot was shaded by cottonwoods, the bottom was sandy; for a while he felt like a boy again, with all such matters as lies and nova effects and death and violence away in some improbable, remote dimension. After a long while he pulled himself up on the bank and said, "Gail, what does 'tsumaeq' mean?"

"Come again?" she answered. "I had water in my ear."

He repeated all of the conversation he had heard. She looked incredulous, then laughed. "You didn't hear that, Joe, you just didn't." She added "You got the 'New Jersey,' part right."

"But I did."

"Say it again."

He did so, more carefully, and giving a fair imitation of the speakers' accents.

Gail chortled. "I got the gist of it that time. That Thalia; someday some strong man is going to wring her neck."

"But what does it mean?"

Gail gave him a long, sidewise look. "If you ever find out, I really will marry you, in spite of your protests."

Some one was whistling from the hilltop. "Joe! Joe Greene-the boss wants you."

"Gotta go," he said to Gail. "G'bye."

"See you later," she corrected him.

Baldwin was waiting in a study as comfortable as himself. "Hi, Joe," he greeted him. "Grab a seatful of chair. They been treating you right?"

"Yes, indeed. Do you always set as good a table as I've enjoyed so far?"

Baldwin patted his middle. "How do you think I came by my nickname?"

"Kettle Belly, I'd like a lot of explanations."

"Joe, I'm right sorry you lost your job. If I'd had my druthers, it wouldn't have been the way it was."

"Are you working with Mrs. Keithley?"

"No. I'm against her."

"I'd like to believe that, but I've no reason to-yet. What were you doing where I found you?"

'They had grabbed me-Mrs. Keithley and her boys."

"They just happened to grab you-and just happened to stuff you in the same cell with me-and you just happened to know about the films I was supposed to be guarding-and you just happened to have a double deck of cards in your pocket? Now, really!"

"If I hadn't had the cards, we would have found some other way to talk," Kettle Belly said mildly. "Wouldn't we, now?"

"Yes. Granted."

"I didn't mean to suggest that the set up was an accident. We had you covered from Moon Base; when you were grabbed-or rather as soon as you let them suck you into the New Age, I saw to it that they grabbed me too; I figured I might have a chance to lend you a hand, once I was inside." He added, "I kinda let them think that I was an FBS man, too."

"I see. Then it was just luck that they locked us up together."

"Not luck," Kettle Belly objected. "Luck is a bonus that follows careful planning-it's never free. There was a computable probability that they would put us together in hopes of finding out what they wanted to know. We hit the jackpot because we paid for the chance. If we hadn't, I would have had to crush out of that cell and look for you-but I had to be inside to do it."

"Who is Mrs. Keithley?"

"Other than what she is publicly, I take it. She is the queen bee-or the black widow-of a gang. 'Gang' is a poor word-power group, maybe. One of several such groups, more or less tied together where their interests don't cross. Between them they divvy up the country for whatever they want like two cats splitting a gopher."

Gilead nodded; he knew what Baldwin meant, though he had not known that the enormously respected Mrs. Keithley was in such matters-not until his nose had been rubbed in the fact. "And what are you. Kettle Belly?"

"Now, Joe-I like you and I'm truly sorry you're in a jam. You led wrong a couple of times and I was obliged to trump, as the stakes were high. See here, I feel that I owe you something; what do you say to this: we'll fix you up with a brand-new personality. vacuum tight-even new fingerprints if you want them. Pick any spot on the globe you like and any occupation; we'll supply all the money you need to start over-or money enough to retire and play with the cuties the rest of your life. What do you say?"

"No." There was no hesitation.

"You've no close relatives, no intimate trends. Think about it. I can't put you back in your job; this is the best I can do."

"I've thought about it. The devil with the job, I want to finish my case! You're the key to it."

"Reconsider, Joe. This is your chance to get out of affairs of state and lead a normal, happy life."

" 'Happy,' he says!"

"Well, safe, anyhow. If you insist on going further your life expectancy becomes extremely problematical. "

"I don't recall ever having tried to play safe."

"You're the doctor, Joe. In that case-" A speaker on Baldwin's desk uttered: "cenie B hdg rylp."

Baldwin answered, "nu," and sauntered quickly to the fireplace. An early-morning fire still smouldered in it. He grasped the mantel piece, pulled it toward him. The entire masonry assembly, hearth, mantel, and grate, came toward him, leaving an arch in the wall. "Duck down stairs, Joe," he said. "It's a raid."

"A real priest's hole!"

"Yeah, corny, ain't it? This joint has more bolt holes than a rabbit's nest-and booby-trapped, too. Too many gadgets, if you ask me." He went back to his desk, opened a drawer, removed three film spools and dropped them in a pocket.

Gilead was about to go down the staircase; seeing the spools, he stopped. "Go ahead, Joe," Baldwin said urgently. "You're covered and outnumbered. With this raid showing up we wouldn't have time to fiddle; we'd just have to kill you."

They stopped in a room well underground, another study much like the one above, though lacking sunlight and view. Baldwin said something in the odd language to the mike on the desk, was answered.

Gilead experimented with the idea that the lingo might be reversed English, discarded the notion.

"As I was saying," Baldwin went on, "if you are dead set on knowing all the answers-"

"Just a moment. What about this raid?"

"Just the government boys. They won't be rough and not too thorough. Ma Garver can handle them. We won't have to hurt anybody as long as they don't use penetration radar."

Gilead smiled wryly at the disparagement of his own former service. "And if they do?"

"That gimmick over there squeals like a pig, if it's touched by penetration frequencies. Even then we're safe against anything short of an A-bomb. They won't do that; they want the films, not a hole in the ground. Which reminds me-here, catch."

Gilead found himself suddenly in possession of the films which were at the root of the matter. He unspooled a few frames and made certain that they were indeed the right films. He sat still and considered how he might get off this limb and back to the ground without dropping the eggs. The speaker again uttered something; Baldwin did .not answer it but said, "We won't be down here long."

"Bonn seems to have decided to check my report." Some of his-former-comrades were upstairs. If he did Baldwin in, could he locate the inside control for the door?

"Bonn is a poor sort. He'll check me-but not too thoroughly; I'm rich. He won't check Mrs. Keithley at all; she's too rich. He thinks with his political ambitions instead of his head. His late predecessor was a better man-he was one of us."

Gilead's tentative plans underwent an abrupt reversal. His oath had been to a government; his personal loyalty had been given to his former boss. "Prove that last remark and I shall be much interested. "

"No, you'll come to learn that it's true-if you still insist on knowing the answers. Through checking those films, Joe? Toss 'em back."

Gilead did not do so. "I suppose you have made copies in any case?"

"Wasn't necessary; I looked at them. Don't get ideas, Joe; you're washed up with the FBS, even if you brought the films and my head back on a platter. You slugged your boss-remember?"

Gilead remembered that he had not told Baldwin so. He began to believe that Baldwin did have men inside the FBS, whether his late bureau chief had been one of them or not.

"I would at least be allowed to resign with a clear record. I know Bonn-officially he would be happy to forget it." He was simply stalling for time, waiting for Baldwin to offer an opening.

"Chuck them back, Joe. I don't want to rassle. One of us might get killed-both of us, if you won the first round. You can't prove your case, because I can prove I was home teasing the cat. I sold 'copters to two very respectable citizens at the exact time you would claim I was somewhere else." He listened again to the speaker, answered it in the same gibberish.

Gilead's mind evaluated his own tactical situation to the same answer that Baldwin had expressed. Not being given to wishful thinking he at once tossed the films to Baldwin.

"Thanks, Joe." He went to a small oubliette set in the wall, switched if to full power, put the films in the hopper, waited a few seconds, and switched it off. "Good riddance to bad rubbish."

Gilead permitted his eyebrows to climb. "Kettle Belly, you've managed to surprise me."

"How?"

"I thought you wanted to keep the nova effect as a means to power."

"Nuts! Scalping a man is a hell of a poor way to cure him of dandruff. Joe, how much do you know about the nova effect?"

"Not much. I know it's a sort of atom bomb powerful enough to scare the pants off anybody who gets to thinking about it."

"It's not a bomb. It's not a weapon. It's a means of destroying a planet and everything on it completely-by turning that planet into a nova. If that's a weapon, military or political, then I'm Samson and you're Delilah.

"But I'm not Samson," he went on, "and I don't propose to pull down the Temple-nor let anybody else do so. There are moral lice around who would do just that, if anybody tried to keep them from having their own way. Mrs. Keithley is one such. Your boy friend Bonn is another such, if only he had the guts and the savvy-which he ain't. I'm bent on frustrating such people. What do you know about ballistics, Joe?"

"Grammar school stuff."

"Inexcusable ignorance." The speaker sounded again; he answered it without breaking his flow. "The problem of three bodies still lacks a neat general solution, but there are several special solutions-the asteroids that chase Jupiter in Jupiter's own orbit at the sixty degree position, for example. And there's the straight-line solution-you've heard of the asteroid 'Earth-Anti'?"

"That's the chunk of rock that is always on the other side of the Sun, where we never see it."

"That's right-only it ain't there any more. It's been novaed."

Gilead, normally immune to surprise, had been subjected to one too many. "Huh? I thought this nova effect was theory?"

"Nope. If you had had time to scan through the films you would have seen pictures of it. It's a plutonium, lithium, and heavy water deal, with some flourishes we won't discuss. It adds up to the match that can set afire a world. It did-a little world flared up and was gone.

"Nobody saw it happen. No one on Earth could see it, for it was behind the Sun. It couldn't have been seen from Moon Colony; the Sun still blanked it off from there-visualize the geometry. All that ever saw it were a battery of cameras in a robot ship. All who knew about it were the scientists who rigged it-and all of them were with us, except the director-If he had been, too, you would never have been in this mix up,"

"Dr. Finnley?"

"Yep. A nice guy, but a mind like a pretzel. A 'political' scientist, second-rate ability. He doesn't matter; our boys will ride herd on him until he's pensioned off. But we couldn't keep him from reporting and sending the films down. So I had to grab 'em and destroy them."

"Why didn't you simply save them? All other considerations aside, they are unique in science."

"The human race doesn't need that bit of science, not this millenium. I saved all that mattered, Joe-in my head."

"You are your cousin Hartley, aren't you?"

"Of course. But I'm also Kettle Belly Baldwin, and several other guys."

"You can be Lady Godiva, for all of me."

"As Hartley, I was entitled to those films, Joe. It was my project. I instigated it, through my boys."

"I never credited Finnley with it. I'm not a physicist, but he obviously isn't up to it."

"Sure, sure. I was attempting to prove that an artificial nova could not be created; the political-the racial-importance of establishing the point is obvious. It backfired on me-so we had to go into emergency action."

"Perhaps you should have left well enough alone."

"No. It s better to know the worst; now we can be alert for it, divert research away from it." The speaker growled again; Baldwin went on. "There may be a divine destiny, Joe, unlikely as it seems, that makes really dangerous secrets too difficult to be broached until intelligence reaches the point where it can cope with them-if said intelligence has the will and me good intentions. Ma Garver says to come up now."

They headed for the stairs. "I'm surprised that you leave it up to an old gal like Ma to take charge during an emergency."

"She's competent, I assure you. But I was running things-you heard me."

"Oh."

They settled down again in die above-surface study. "I give you one more chance to back out, Joe. It doesn't matter that you know all about the films, since they are gone and you can't prove anything-but beyond that-you realize that if you come in with us, are told what is going on, you will be killed deader than a duck at the first suspicious move?"

Gilead did; he knew in fact that he was already beyond the point of no return. With the destruction of the films went his last chance of rehabilitating his former main persona. This gave him no worry; the matter was done. He had become aware that from the time he had admitted that he understood the first message this man had offered him concealed in a double deck of cards he had no longer been a free actor, his moves had been constrained by moves made by Baldwin. Yet there was no help for it; his future lay here or nowhere.

"I know it; go ahead."

"I know what your mental reservations are, Joe; you are simply accepting risk; not promising loyalty."

"Yes-but why are you considering taking a chance on me?"

Baldwin was more serious in manner than he usually allowed himself to be. '*You're an able man, Joe. You have the savvy and the moral courage to do what is reasonable in an odd situation rather than what is conventional."*

'That's why you want me?"

"Partly that. Partly because I like the way you catch on to a new card game." He grinned. "And even partly because Gail likes the way you behave with a colt."

"Gail? What's she got to do with it?"

"She reported on you to me about five minutes ago, during the raid."

"Hmm-go ahead."

"You've been warned." For a moment Baldwin looked almost sheepish. "I want you to take what I say next at its face value, Joe-don't laugh."

"Okay."

"You asked what I was. I'm sort of the executive secretary of this branch of an organization of supermen."

"I thought so."

"Eh? How long have you known?"

"Things added up. The card game, your reaction time. I knew it when you destroyed the films.'

"Joe, what is a superman?"

Gilead did not answer.

"Very well, let's chuck the term," Baldwin went on. "It's been overused and misused and beat up until it has mostly comic connotations. I used it for shock value and I didn't shock you. The term 'supermen' has come to have a fairy tale meaning, conjuring up pictures of x-ray eyes, odd sense or senses, double hearts, uncuttable skin, steel muscles-an adolescent's dream of the dragon-killing hero. Tripe, of course. Joe, what is a man? What is man that makes him more than an animal? Settle that and we'll take a crack at defining a superman-or New Man, homo novis, who must displace homo sapiens-is displacing him-because he is better able to survive than is homo sap. I'm not trying to define myself, I'll leave it up to my associates and the inexorable processes of time as to whether or not I am a superman, a member of the new species of man-same test to apply to you."

"Me?"

"You. You show disturbing symptoms of being homo novis, Joe, in a sloppy, ignorant, untrained fashion. Not likely, but you just might be one of the breed. Now-what is man? What is the one thing he can do better than animals which is so strong a survival factor that it outweighs all the things that animals of one sort or another can do much better than he can?"

"He can think,"

"I fed you that answer; no prize for it. Okay, you pass yourself off a man; let's see you do something, What is the one possible conceivable factor-or factors, if you prefer-which the hypothetical superman could have, by mutation or magic or any means, and which could be added to this advantage which man already has and which has enabled him to dominate this planet against the unceasing opposition of a million other species of fauna? Some factor that would make the domination of man by his successor, as inevitable as your domination over a hound dog? Think, Joe. What is the necessary direction of evolution to the next dominant species?"

Giiead engaged in contemplation for what was for him a long time. There were so many lovely attributes that a man might have: to be able to see both like a telescope and microscope, to see the insides of things, to see throughout the spectrum, to have hearing of the same order, to be immune to disease, to grow a new arm or leg, to fly through the air without bothering with silly gadgets like helicopters or jets, to walk unharmed the ocean bottom, to work without tiring—

Yet the eagle could fly and he was nearly extinct, even though his eyesight was better than man's. A dog has better smell and hearing; seals swim better,balance better, and furthermore can store oxygen. Bats can survive where men would starve or die of hardship; they are smart and pesky hard to kill. Rats could—

Wait! Could tougher, smarter rats displace man? No, it Just wasn't in them; too small a brain.

"To be able to think better," Gilead answered almost instantly. "Hand the man a cigar! Supermen are superthinkers;anything else is a side issue. I'll allow the possibility of super-somethings which might exterminate or dominate mankind other than by outsmarting him in his own racket-thought. But I deny that it is possible for a man to conceive in discrete terms what such a super-something would be or how this something would win out. New Man will beat out homo sap in homo sap's own specialty-rational thought, the ability to recognize data, store them, integrate them, evaluate correctly the result, and arrive at a correct decision. That is how man got to be champion; the creature who can do it better is the coming champion. Sure, there are other survival factors, good health, good sense organs, fast reflexes, but they aren't even comparable, as the long, rough history of mankind has proved over and over-Marat in his bath, Roosevelt in his wheelchair, Caesar with his epilepsy and his bad stomach. Nelson with one eye and one arm, blind Milton; when the chips are down it's brain that wins, not the body's tools.'

"Stop a moment," said Gilead. "How about E.S.P.?"

Baldwin shrugged. "I'm not sneering at extra-sensory perception any more than I would at exceptional eyesight-E.S.P. is not in the same league with the ability to think correctly. E.S.P. is a grab bag name for the means other than the known sense organs by which the brain may gather data-but the trick that pays off with first prize is to make use of that data, to reason about it. If you would like a telepathic hookup to Shanghai, I can arrange it; we've got operators at both ends-but you can get whatever data you might happen to need from Shanghai by phone with less trouble, less chance of a bad connection, and less danger of somebody listening in. Telepaths can't pick up a radio message; it's not the same wave band."

"What wave band is it?"

"Later, later. You've got a lot to learn."

"I wasn't thinking especially of telepathy. I was thinking of all parapsychological phenomena."

"Same reasoning. Appellation would be nice, if telekinetics had gotten that far-which it ain't. But a pick-up truck moves things handily enough. Television in the hands of an intelligent man counts for more than clairvoyance in a moron. Quit wasting my time, Joe."

"Sorry."

"We defined thinking as integrating data and arriving at correct answers. Look around you. Most people do that stunt just well enough to get to the corner store and back without breaking a leg. If the average man thinks at all, he does silly things like generalizing from a single datum. He uses one-valued logics. If he is exceptionally bright, he may use two-valued, 'either-or' logic to arrive at his wrong answers. If he is hungry, hurt, or personally interested in the answer, he can't use any sort of logic and will discard an observed fact as blithely as he will stake his life on a piece of wishful thinking. He uses the technical miracles created by superior men without wonder nor surprise, as a kitten accepts a bowl of milk. Far from aspiring to higher reasoning, he is not even aware that higher reasoning exists. He classes his own mental process as being of the same sort as the genius of an Einstein. Man is not a rational animal; he is a rationalizing animal.

"For explanations of a universe that confuses him he seizes onto numerology, astrology, hysterical religions, and other fancy ways to go crazy. Having accepted such glorified nonsense, facts make no impression on him, even if at the cost of his own life. Joe, one of the hardest things to believe is the abysmal depth of human stupidity.

"That is why there is always room at the top, why a man with just a leetle more on the ball can so easily become governor, millionaire, or college president-and why homo sap is sure to be displaced by New Man, because there is so much room for improvement and evolution never stops.

"Here and there among ordinary men is a rare individual who really thinks, can and does use logic in at least one field-he's often as stupid as the rest outside his study or laboratory-but he can think, if he's not disturbed or sick or frightened. This rare individual is responsible for all the progress made by the race; the others reluctantly adopt his results. Much as the ordinary man dislikes and distrusts and persecutes the process of thinking he is forced to accept the results occasionally, because thinking is efficient compared with his own maunderings. He may still plant his corn in the dark of the Moon but he will plant better corn developed by better men than he.

"Still rarer is the man who thinks habitually, who applies reason, rather than habit pattern, to aU his activity. Unless he masques himself, his is a dangerous life; he is regarded as queer, untrustworthy, subversive of public morals; he is a pink monkey among brown monkeys-a fatal mistake. Unless the pink monkey can dye himself brown before he is caught.

"The brown monkey's instinct to kill is correct; such men are dangerous to all monkey customs.

"Rarest of all is the man who can and does reason at all times, quickly, accurately, inclusively, despite hope or fear or bodily distress, without egocentric bias or thalmic disturbance, with correct memory, with clear distinction between fact, assumption, and nonfact. Such men exist, Joe; they are 'New Man’-human in all respects, indistinguishable in appearance or under the scalpel from homo sap, yet as unlike him in action as the Sun is unlike a single candle."

Gilead said, "Are you that sort?"

"You will continue to form your own opinions."

"And you think I may be, too?"

"Could be. I'll have more data in a few days."

Gilead laughed until the tears came. "Kettle Belly, if I'm the future hope of the race, they had better send in the second team quick. Sure I'm brighter than most of the jerks I run into, but, as you say, the competition isn't stiff. But I haven't any sublime aspirations. I've got as lecherous an eye as the next man. I enjoy wasting time over a glass of beer. I just don't feel like a superman."

"Speaking of beer, let's have some." Baldwin got up and obtained two cans of the brew. "Remember that Mowgli felt like a wolf. Being a New Man does not divorce you from human sympathies and pleasures. There have been New Men all through history; I doubt if most of them suspected that their difference entitled them to call themselves a different breed. Then they went ahead and bred with the daughters of men, diffusing their talents through the racial organism, preventing them from effectuating until chance brought the genetic factors together again."

"Then I take it that New Man is not a special mutation?"

"Huh? Who isn't a mutation, Joe? All of us are a collection of millions of mutations. Around the globe hundreds of mutations have taken place in our human germ plasm while we have been sitting here. No, homo novis didn't come about because great grandfather stood too close to a cyclotron; homo novis was not even a separate breed until he became aware of himself, organized, and decided to hang on to what his genes had handed him. You could mix New Man back into the race today and lose him; he's merely a variation becoming a species. A million years from now is another matter; I venture to predict that New Man, of that year and model, won't be able to interbreed with homo sap-no viable offspring."

"You don't expect present man-homo sapiens-to disappear?"

"Not necessarily. The dog adapted to man. Probably more dogs now than in umpteen B.C.-and better fed."

"And man would be New Man's dog."

"Again not necessarily. Consider the cat."

'The idea is to skim the cream of the race's germ plasm and keep it biologically separate until the two races are permanently distinct. You chaps sound like a bunch of stinkers. Kettle Belly."

"Monkey talk,"

"Perhaps. The new race would necessarily run things-"

"Do you expect New Man to decide grave matters by counting common man's runny noses?"

"No, that was my point. Postulating such a new race, the result is inevitable. Kettle Belly, I confess to a monkey prejudice in favor of democracy, human dignity, and freedom. It goes beyond logic; it is the kind of a world I like. In my job I have mingled with the outcasts of society, snared their slumgullion. Stupid they may be, bad they are not-I have no wish to see them become domestic animals."

For the first time the big man showed concern. His persona as "King of the Kopsters," master merchandiser, slipped away; he sat in brooding majesty, a lonely and unhappy figure. "I know, Joe. They are of us; their little dignities, their nobilities, are not lessened by their sorry state. Yet it must be."

"Why? New Man will come-granted. But why hurry the process?"

"Ask yourself." He swept a hand toward the oubliette. 'Ten minutes ago you and I saved this planet, all our race. It's the hour of the knife. Some one must be on guard if the race is to live; there is no one but us. To guard effectively we New Men must be organized, must never fumble any crisis like this-and must increase our numbers. We are few now, Joe; as the crises increase, we must increase to meet them. Eventually-and it's a dead race with time-we must take over and make certain that baby never plays with matches."

He stopped and brooded. "I confess to that same affection for democracy, Joe. But it's like yearning for the Santa Claus you believed in as a child. For a hundred and fifty years or so democracy, or something like it, could flourish safely. The issues were such as to be settled without disaster by the votes of common men, befogged and ignorant as they were. But now, if the race is simply to stay alive, political decisions depend on real knowledge of such things as nuclear physics, planetary ecology, genetic theory, even system mechanics. They aren't up to it, Joe. With goodness and more will than they possess less than one in a thousand could stay awake over one page of nuclear physics; they can't learn what they must know."

Gilead brushed it aside. "It's up to us to brief them. Their hearts are all right; tell them the score-they'll come down with the right answers."

"No, Joe. We've tried it; it does not work. As you say, most of them are good, the way a dog can be noble and good. Yet there are bad ones-Mrs. Keithley and company and more like her. Reason is poor propaganda when opposed by the yammering, unceasing lies of shrewd and evil and self-serving men. The little man has no way to judge and the shoddy lies are packaged more attractively. There is no way to offer color to a colorblind man, nor is there any way for us to give the man of imperfect brain the canny skill to distinguish a lie from a truth.

"No, Joe. The gulf between us and them is narrow, but it is very deep. We cannot close it."

"I wish," said Gilead, "that you wouldn't class me with your 'New Man', I feel more at home on the other side."

"You will decide for yourself which side you are on, as each of us has done."

Gilead forced a change in subject. Ordinarily immune to thalamic disturbance this issue upset him; his brain followed Baldwin's argument and assured him that it was true; his inclinations fought it. He was confronted with the sharpest of all tragedy; two equally noble and valid rights, utterly opposed. "What do you people do, aside from stealing films?"

"Mmm-many things." Baldwin relaxed, looked again like a jovial sharp businessman. "Where a push here and a touch there will keep things from going to pot, we apply the pressure, by many and devious means. And we scout for suitable material and bring it into the fold when we can-we've had our eye on you for ten years."

“So?"

"Yep. That is a prime enterprise. Through public data we eliminate all but about one tenth of one per cent; that thousandth individual we watch. And then there are our horticultural societies." He grinned.

"Finish your joke."

"We weed people."

"Sorry, I'm slow today."

"Joe, didn't you ever feel a yen to wipe out some evil, obscene, rotten jerk who infected everything he touched, yet was immune to legal action? We treat them as cancers; we excise them from die body social. We keep a 'Better Dead' list; when a man is clearly morally bankrupt we close his account at the first opportunity."

Gilead smiled. "If you were sure what you were doing, it could be fun."

"We are always sure, though our methods would be no good in a monkey law court. Take Mrs. Keithley-is there doubt in your mind?"

"None."

"Why don't you have her indicted? Don't bother to answer. For example, two weeks from tonight there will be giant pow-wow of the new, rejuvenated, bigger-and-better-than-ever Ku Klux Klan on a mountain top down Carolina way-When the fun is at its height, when they are mouthing obscenities, working each other up to the pogrom spirit, an act of God is going to wipe out the whole kit and kaboodle. Very sad."

"Could I get in on that?"

"You aren't even a cadet as yet." Baldwin went on. "There is the project to increase our numbers, but that is thousand-year program; you'd need a perpetual calendar to check it. More important is keeping matches away from baby. Joe, it's been eighty-five years since we beheaded the last commissar: have you wondered why so little basic progress in science has been made in that time?"

"Eh? There have been a lot of changes."

"Minor adaptations-some spectacular, almost none of them basic. Of course there was very little progress made under communism; a totalitarian political religion is incompatible with free investigation. Let me digress: the communist interregnum was responsible for the New Men getting together and organizing. Most New Men are scientists, for obvious reasons. When the commissars started ruling on natural laws by political criteria-Lysenkoism and similar nonsense-it did not sit well; a lot of us went underground.

"I'll skip the details. It brought us together, gave us practice in underground activity, and gave a backlog of new research, carried out underground. Some of it was obviously dangerous; we decided to hang onto it for a while. Since then such secret knowledge has grown, for we never give out an item until it has been scrutinized for social hazards. Since much of it is dangerous and since very few indeed outside our organization are capable of real original thinking, basic science has been almost at a public standstill.

"We hadn't expected to have to do it that way. We helped to see to it that the new constitution was liberal and-we thought-workable. But the new Republic turned out to be an even poorer thing than the old. The evil ethic of communism had corrupted, even after the form was gone. We held off. Now we know that we must hold off until we can revise the whole society."

"Kettle Belly," Joe said slowly, "you speak as if you had been on the spot. How old are you?"

"I'll tell you when you are the age I am now. A man has lived long enough when he no longer longs to live. I ain't there yet. Joe, I must have your answer, or this must be continued in our next."

"You had it at the beginning-but, see here. Kettle Belly, there is one job I want promised to me."

"Which is?"

"I want to kill Mrs. Keithley."

"Keep your pants on. When you're trained, and if she's still alive then, you’ll be used for that purpose-"

"Thanks!"

"-provided you are the proper tool for it." Baldwin turned toward the mike, called out, "Gail!" and added one word in the strange tongue.

Gail showed up promptly. "Joe," said Baldwin, "when this young lady gets through with you, you will be able to sing, whistle, chew gum, play chess, hold your breath, and fly a kite simultaneously-and all this while riding a bicycle under water. Take him, sis, he's all yours."

Gail rubbed her hands. "Oh, boy!"

"First we must teach you to see and to hear, then to remember, then to speak, and then to think."

Joe looked at her. "What's this I'm doing with my mouth at this moment?"

"It's not talking, it's a sort of grunting. Furthermore English is not structurally suited to thinking. Shut up and listen."

In their underground classroom Gail had available several types of apparatus to record and manipulate light and sound. She commenced throwing groups of figures on a screen, in flashes. "What was it, Joe?"

"Nine-six-ohseven-two-That was as far as I got."

"It was up there a full thousandth of a second. Why did you get only the left hand side of the group?"

"That's all the farther I had read."

"Look at all of it. Don't make an effort of will; just look at it." She flashed another number.

Joe's memory was naturally good; his intelligence was high-just how high he did not yet know. Unconvinced that the drill was useful, he relaxed and played along. Soon he was beginning to grasp a nine-digit array as a single gestalt; Gail reduced the flash time.

"What is this magic lantern gimmick?" he inquired.

"It's a Renshaw tachistoscope. Back to work."

Around World War II Dr. Samuel Renshaw at the Ohio State University was proving that most people are about one-fifth efficient in using their capacities to see, hear, taste, feel and remember. His research was swallowed in the morass of communist pseudoscience that obtained after World War III, but, after his death, his findings were preserved underground. Gail did not expose Gilead to the odd language he had heard until he had been rather thoroughly Renshawed.

However, from the time of his interview with Baldwin the other persons at the ranch used it in his presence-Sometimes someone-usually Ma Carver-would translate, sometimes not. He was flattered to feel accepted, but gravelled to know that it was at the lowest cadetship. He was a child among adults.

Gail started teaching him to hear by speaking to him single words from the odd language, requiring him to repeat them back. "No, Joe. Watch.' This time when she spoke the word it appeared on the screen in sound analysis, by a means basically like one long used to show the deaf-and-dumb their speech mistakes. "Now you try it."

He did, the two arrays hung side by side. "How's that, teacher?" he said triumphantly.

“Terrible, by several decimal places. You held the final guttural too long-" She pointed. "-the middle vowel was formed with your tongue too high and you pitched it too low and you failed to let the pitch rise. And six other things. You couldn't possibly have been understood. I heard what you said, but it was gibberish. Try again. And don't call me 'teacher.' "

"Yes, ma'am," he answered solemnly.

She shifted the controls; he tried again. This time his analysis array was laid down on top of hers; where the two matched, they cancelled. Where they did not match, his errors stood out in contrasting colors. The screen looked like a sun burst.

"Try again, Joe." She repeated the word without letting it affect the display.

"Confound it, if you would tell me what the words mean instead of treating me the way Milton treated his daughters about Latin, I could remember them easier."

She shrugged. "I can't, Joe. You must learn to hear and to speak first. Speedtalk is a flexible language; the same word is not likely to recur. This practice word means: The far horizons draw no nearer.'

That's not much help, is it?"

The definition seemed improbable, but he was learning not to doubt her. He was not used to women who were always two jumps ahead of him. He ordinarily felt sorry for the poor little helpless cuddly creatures; this one he often wanted to slug. He wondered if this response were what the romancers meant by "love"; he decided that it couldn't be.

"Try again, Joe." Speedtalk was a structurally different speech from any the race had ever used. Long before, Ogden and Richards bad shown that eight hundred and fifty words were sufficient vocabulary to express anything that could be expressed by "normal" human vocabularies, with the aid of a handful of special words-a hundred odd-for each special field, such as horse racing or ballistics. About the same time phoneticians had analyzed all human tongues into about a hundred-odd sounds, represented by the letters of a general phonetic alphabet.

On these two propositions Speedtalk was based.

To be sure, the phonetic alphabet was much less in number than the words in Basic English. But the letters representing sound in the phonetic alphabet were each capable of variation several different ways-length, stress, pitch, rising, falling. The more trained an ear was the larger the number of possible variations; there was no limit to variations, but, without much refinement of accepted phonetic practice, it was possible to establish a one-to-one relationship with Basic English so that one phonetic symbol was equivalent to an entire word in a "normal" language, one Speedtalk word was equal to an entire sentence. The language consequently was learned by letter units rather than by word units-but each word was spoken and listened to as a single structured gestalt.

But Speedtalk was not "shorthand" Basic English. "Normal" languages, having their roots in days of superstition and ignorance, have in them inherently and unescapably wrong structures of mistaken ideas about the universe. One can think logically in English only by extreme effort so bad it is as a mental tool. For example, the verb "to be" in English has twenty-one distinct meanings, every single one of which is false-to-fact.

A symbolic structure, invented instead of accepted without question, can be made similar in structure to the real world to which it refers. The structure of Speedtalk did not contain the hidden errors of English; it was structured as much like the real world as the New Men could make it. For example, it did not contain the unreal distinction between nouns and verbs found in most other languages. The world-the continuum known to science and including all human activity-does not contain "noun things" and "verb things"; it contains spacetime events and relationships between them. The advantage for achieving truth, or something more nearly like truth, was similar to the advantage of keeping account books in Arabic numerals rather than Roman.

All other languages made scientific, multivalued logic almost impossible to achieve; in Speedtalk it was as difficult not to be logical. Compare die pellucid Boolean logic with the obscurities of the Aristotelean logic it supplanted.

Paradoxes are verbal, do not exist in the real world-and Speedtalk did not have such built into it. Who shaves the Spanish Barber? Answer: follow him around and see. In the syntax of Speedtalk the paradox of the Spanish Barber could not even be expressed, save as a self-evident error.

But Joe Greene-Gilead-Briggs could not learn it until he had learned to hear, by learning to speak. He slaved away; the screen continued to remain lighted with his errors.

Came finally a time when Joe's pronunciation of a sentence-word blanked out Gail's sample; the screen turned dark. He felt more triumph over that than anything be could remember.

His delight was short. By a circuit Gail had thoughtfully added somedays earlier the machine answered with a flourish of trumpets, loud applause, and then added in a cooing voice, "Mama's good boy!"

He turned to her. "Woman, you spoke of matrimony. If you ever do manage to marry me, I'll beat you.'

"I haven't made up my mind about you yet," she answered evenly. "Now try this word, Joe-"

Baldwin showed up that evening called him aside. "Joel C'mere. Listen, lover boy, you keep your animal nature out of your work, or I'll have to find you a new teacher."

“But-“

"You heard me. Take her swimming, take her riding, after hours you are on your own. Work time-strictly business. I've got plans for you; I want you to get smarted up."

"She complained about me?"

"Don't be silly. It's my business to know what's going on."

"Hmm. Kettle Belly, what is this shopping-for-a" husband she kids about? Is she serious, or is it just intended to rattle me?"

“Ask her. Not that it matters, as you won't have any choice if she means it. She has the calm persistence of the law of gravitation."

"Ouch! I had had the impression that the 'New Men' did not bother with marriage and such like, as you put it, 'monkey customs.' "

"Some do, some don't. Me, I've been married quite a piece, but I mind a mousy little member of our lodge who had had nine kids by nine fathers-all wonderful genius-plus kids. On the other hand I can point out one with eleven kids-Thalia Wagner-who has never so much as looked at another man. Geniuses make their own rules in such matters, Joe; they always have. Here are some established statistical facts about genius, as shown by Armatoe's work-"

He ticked them off. "Geniuses are usually long lived. They are not modest, not honestly so. They have infinite capacity for taking pains. They are emotionally indifferent to accepted codes of morals-they make their own rules. You seem to have the stigmata, by the way."

'Thanks for nothing. Maybe I should have a new teacher, is there anyone else available who can do it."

"Any of us can do it, just as anybody handy teaches a baby to talk. She's actually a biochemist, when she has time for it."

"When she has time?"

"Be careful of that kid, son. Her real profession is the same as yours-honorable hatchet man. She's killed upwards of three hundred people." Kettle Belly grinned- "If you want to switch teachers, just drop me a wink."

Gilead-Greene hastily changed the subject. "You were speaking of work for me; how about Mrs. Keithley? Is she still alive?"

"Yes, blast her."

"Remember, I've got dibs on her."

"You may have to go to the Moon to get her. She's reported to be building a vacation home there. Old age seems to be telling on her; you had better get on with your home work if you want a crack at her." Moon Colony even then was a center of geriatrics for the rich. The low gravity was easy on their hearts, made them feel young-and possibly extended their lives.

"Okay, I will."

Instead of asking for a new teacher Joe took a highly polished apple to their next session. Gail ate it, leaving him very little core, and put him harder to work than ever. While perfecting his hearing and pronunciation, she started him on the basic thousand-letter vocabulary by forcing him to start to talk simple three and four-letter sentences, and by answering him in different word-sentences using the same phonetic letters. Some of the vowel and consonant sequences were very difficult to pronounce.

Master them he did-He had been used to doing most things easier than could those around him; now he was in very fast company. He stretched himself and began to achieve part of his own large latent capacity. When he began to catch some of the dinner-table conversation and to reply in simple Speedtalk-being forbidden by Gail to answer in English-she started him on the ancillary vocabularies.

An economical language cannot be limited to a thousand words; although almost every idea can be expressed somehow in a short vocabulary, higher orders of abstraction are convenient. For technical words Speedtalk employed an open expansion of sixty of the thousand-odd phonetic letters. They were the letters ordinarily used as numerals; by preceding a number with a letter used for no other purpose, the symbol was designated as having a word value.

New Men numbered to the base sixty-three times four times five, a convenient, easily factored system, most economical, i. e., the symbol "100" identified the number described in English as thirty-six hundred-yet permitting quick, in-the-head translation from common notation to Speedtalk figures and vice versa.

By using these figures, each prefaced by the indicator-a voiceless Welsh or Burmese "1"-a pool of 215,999 words (one less than the cube of sixty) were available for specialized meaning without using more than four letters including the indicator. Most of them could be pronounced as one syllable. These had not the stark simplicity of basic Speedtalk; nevertheless words such as "ichthyophagous" and "constitutionality" were thus compressed to monosyllables. Such shortcuts can best be appreciated by anyone who has heard a long speech in Cantonese translated into a short speech in English. Yet English is not the most terse of "normal" languages-and expanded Speedtalk is many times more economical than the briefest of "normal" tongues.

By adding one more letter (sixty to the fourth power) just short of thirteen million words could be added if needed-and most of them could still be pronounced as one syllable.

When Joe discovered that Gail expected him to learn a couple of hundred thousand new words in a matter of days, he balked. "Damn it. Fancy Pants, I am not a superman. I'm in here by mistake."

"Your opinion is worthless; I think you can do it. Now listen."

"Suppose I flunk; does that put me safely off your list of possible victims?"

"If you flunk, I wouldn't have you on toast. Instead I'd tear your head off and stuff it down your throat. But you won't flunk; I know. However," she added, "I'm not sure you would be a satisfactory husband; you argue too much."

He made a brief and bitter remark in Speedtalk;

She answered with one word which described his shortcomings in detail. They got to work.

Joe was mistaken; he learned the expanded vocabulary as fast as he heard it. He had a latent eidetic memory; the Renshawing process now enabled him to use it fully. And his mental processes, always fast, had become faster than he knew.

The ability to learn Speedtalk at all is proof of supernormal intelligence; the use of it by such intelligence renders that mind efficient. Even before World War II Alfred Korzybski had shown that human thought was performed, when done efficiently, only in symbols; the notion of "pure" thought, free of abstracted speech symbols, was merely fantasy. The brain was so constructed as to work without symbols only on the animal level; to speak of "reasoning" without symbols was to speak nonsense.

Speedtalk did not merely speed up communication-by its structures it made thought more logical; by its economy it made thought processes enormously fester, since it takes almost as long to think a word as it does to speak it.

Korzybsld's monumental work went fallow during the communist interregnum; Das Kapital is a childish piece of work, when analyzed by semantics, so the politburo suppressed semantics-and replaced it by ersatz under me same name, as Lysenkoism replaced the science of genetics.

Having Speedtalk to help him leam more Speedtalk, Joe learned very rapidly. The Renshawing had continued; he was now able to grasp a gestalt or configuration in many senses at once, grasp it, remember it, reason about it with great speed.

Living time is not calendar time; a man's life is the thought that flows through his brain. Any man capable of learning Speedtalk had an association time at least three times as fast as an ordinary man. Speedtalk itself enabled him to manipulate symbols approximately seven times as fast as English symbols could be manipulated. Seven times three is twenty-one; a new man had an effective life time of at least sixteen hundred years, reckoned in flow of ideas.

They had time to become encyclopedic synthesists, something denied any ordinary man by the straitjacket of his sort of time.

When Joe had learned to talk. to read and write and cipher, Gail turned him over to others for his real education. But before she checked him out she played him several dirty tricks.

For three days she forbade him to eat. When it was evident that he could think and keep his temper despite low blood-sugar count, despite hunger reflex, she added sleeplessness and pain-intense, long, continued, and varied pain. She tried subtly to goad him into irrational action; he remained bedrock steady, his mind clicking away at any assigned task as dependably as an electronic computer.

"Who's not a superman?" she asked at the end of their last session.

"Yes, teacher."

"Come here, lug." She grabbed him by the ears, kissed him soundly. "So long." He did not see her again for many weeks.

His tutor in E.S,P. was an ineffectual-looking little man who had taken the protective coloration of the name Weems. Joe was not very good at producing E.S.P. phenomena. Clairvoyance he did not appear to have. He was better at precognition, but he did not improve with practice. He was best at telekinesis; he could have made a soft living with dice. But, as Kettle Belly had pointed out, from affecting the roll of dice to moving tons of freight was quite a gap-and one possibly not worth bridging.

"It may have other uses, however," Weems had said softly, lapsing into English. "Consider what might be done if one could influence the probability that a neutron would reach a particular nucleus-or change the statistical probability in a mass."

Gilead let it ride; it was an outrageous thought.

At telepathy he was erratic to exasperation. He called the Rhine cards once without a miss, then had poor scores for three weeks. More highly structured communication seemed quite beyond him, until one day without apparent cause but during an attempt to call the cards by telepathy, he found himself hooked in with Weems for all of ten seconds-time enough for a thousand words by Speedtalk standards.

-it comes out us speech!

-why not? thought is speech.

-how do we do it?

-if we knew it would not be so unreliable, as it is, some can do it by volition, some by accident, and some never seem to be able to do it. we do know this: while thought may not be of the physical world in any fashion we can now define and manipulate, it is similar to events in continuum in its quantal nature. You are now studying the extension of the quantum concept to all features of the continuum, you know the chronon, the mensum, and the viton, as quanta, as well as the action units of quanta such as the photon. The continuum has not only structure but texture in all its features. The least unit of thought we term the psychon.

-define it. put salt on its tail.

-some day, some day. I can tell you this; the fastest possible rate of thought is one psychon per chronon; this is a basic, universal constant.

-how close do we come to that?

-less than sixty-to-the-minus-third-power of the possibility.

-! ! ! ! ! !

-better creatures than ourselves will follow us. We pick pebbles at a boundless ocean.

-what can we do to improve it?

-gather our pebbles with serene minds. Gilead paused for a long split second of thought.

-can psychons be destroyed?

-citons may be transferred, psychons areThe connection was suddenly destroyed. "As I was saying," Weems went on quietly, "psychons are as yet beyond our comprehension in many respects.

Theory indicates that they may not be destroyed, that thought, like action, is persistent. Whether or not such theory, if true, means that personal identity is also persistent must remain an open question. See the daily papers-a few hundred years from now-or a few hundred thousand." He stood up.

"I'm anxious to try tomorrow's session, Doc," Gilead-Greene almost bubbled. "Maybe-"

"I'm finished with you."

"But, Doctor Weems, that connection was clear as a phone hook-up. Perhaps tomorrow-"

"We have established that your talent is erratic. We have no way to train it to dependability. Time is too short to waste, mine and yours." Lapsing suddenly into English, he added, "No."

Gilead left.

During his training in other fields Joe was exposed to many things best described as impressive gadgets. There was an integrating pantograph, a factory-in-a-box, which the New Men planned to turn over to ordinary men as soon as the social system was no longer dominated by economic wolves. It could and did reproduce almost any prototype placed on its stage, requiring thereto only materials and power. Its power came from a little nucleonics motor the size of Joe's thumb; its theory played hob with conventional notions of entropy. One put in "sausage"; one got out "pig."

Latent in it was the shape of an economic system as different from the current one as the assembly-line economy differed from the family-shop system-and in such a system lay possibilities of human freedom and dignity missing for centuries, if they had ever existed.

In the meantime New Men rarely bought more than one of anything-a pattern. Or they made a pattern.

Another useful but hardly wonderful gadget was a dictaphone-typewriter-printing-press combination. The machine's analysers recognized each of the thousand-odd phonetic symbols; there was a typebar for each sound. It produced one or many copies. Much of Gilead's education came from pages printed by this gadget, saving the precious time of others.

The arrangement, classification, and accessibility of knowledge remains in all ages the most pressing problem. With the New Men, complete and organized memory licked most of the problem and rendered record keeping, most reading and writing-and most especially the time-destroying trouble of rereading-unnecessary. The autoscriber gadget, combined with a "librarian" machine that could "hear" that portion of Speedtalk built into it as a filing system, covered most of the rest of the problem. New Men were not cluttered with endless bits of paper. They never wrote memoranda.

The area under the ranch was crowded with technological wonders, all newer than next week. Incredibly tiny manipulators for micrurgy of all sorts, surgical, chemical, biological manipulation, oddities of cybernetics only less complex than the human brain-the list is too long to describe. Joe did not study all of them; an encyclopedic synthesist is concerned with structured shapes of knowledge; he cannot, even with Speedtalk, study details in every field.

Early in his education, when it was clear that he had had the potential to finish the course, plastic surgery was started to give him a new identity and basic appearance. His height was reduced by three inches; his skull was somewhat changed; his complexion was permanently darkened. Gail picked the facial appearance he was given; he did not object. He rather liked it; it seemed to fit his new inner personality.

With a new face, a new brain, and-a new outlook, he was almost in fact a new man. Before he had been a natural genius; now he was a trained genius.

"Joe, how about some riding?"

"Suits."

"I want to give War Conqueror some gentle exercise. He's responding to the saddle; I don't want him to forget."

"Right with you."

Kettle Belly and Gilead-Greene rode out from the ranch buildings. Baldwin let the young horse settle to a walk and began to talk. "I figure you are about ready for work, son." Even in Speedtalk Kettle Belly's speech retained his own flavor.

"I suppose so, but I still have those mental reservations."

"Not sure we are on the side of the angels?"

"I'm sure you mean to be. It's evident that the organization selects for good will and humane intentions quite as carefully as for ability. I wasn't sure at one time-"

"Yes?"

"That candidate who came here about six months ago, the one who broke his neck in a riding accident."

"Oh, yes! Very sad."

"Very opportune, you mean. Kettle Belly,"

"Damn it, Joe, if a bad apple gets in this far, we can't let him out." Baldwin reverted to English for swearing purposes; he maintained that it had "more juice,"

"I know it. That's why I'm sure about the quality of our people."

"So it's 'our people' now?"

"Yes. But I'm not sure we are on the right track."

"What's your notion of the right track?"

"We should come out of hiding and teach the ordinary man what he can learn of what we know. He could learn a lot of it and could use it. Properly briefed and trained, he could run his affairs pretty well. He would gladly kick out the nogoods who ride on his shoulders, if only he knew how. We could show him. That would be more to the point than this business of spot assassination, now and then, here and there-mind you, I don't object to lolling any man who merits killing; I simply say it's inefficient. No doubt we would have to continue to guard against such crises as the one that brought you and me together, but, in the main, people could run their own affairs if we would just stop pretending that we are so scared we can't mix with people, come out of our hole, and lend a hand."

Baldwin reined up. "Don't say that I don't mix with the common people, Joe; I sell used 'copters for a living. You can t get any commoner. And don't imply that my heart is not with them. We are not like them, but we are tied to them by the strongest bond of all, for we are all, each every one, sickening with the same certainly fetal disease-we are alive.

"As for our killings, you don't understand the principles of assassination as a political weapon. Read-" He named a Speedtalk library designation. "If I were knocked off, our organization wouldn't even hiccup, 1 but organizations for bad purposes are different. They are personal empires; if you pick the time and the method, you can destroy such an organization by killing one man-the parts that remain will be almost harmless until assimilated by another leader-then you kill him. It is not inefficient; it's quite efficient, if planned with the brain and not with the emotions.

"As for keeping ourselves separate, we are about like the U-235 in U-238, not effective unless separated out. There have been potential New Men in every generation, but they were spread too thin.

"As for keeping our existence secret, it is utterly necessary if we are to survive and increase. There is nothing so dangerous as being the Chosen People-and in the minority. One group was persecuted for two thousand years merely for making the claim."

He again shifted to English to swear. "Damn it, Joe, face up to it. This world is run the way my great aunt Susie flies a 'copter. Speedtalk or no Speedtalk, common man can't learn to cope with modern problems. No use to talk about the unused potential of his brain, he has not got the will to learn what he would have to know. We can't fit him out with new genes, so we have to lead him by the hand to keep him from killing himself-and us. We can give him personal liberty, we can give him autonomy in most things, we can give him a great measure of personaldignity-and we will, because we believe that individual freedom, at all levels, is the direction of evolution, of maximum survival value. But we can't let him fiddle with issues of racial life and death; he ain't up to it.

"No help for it. Each shape of society develops its own ethic. We are shaping this the way we are inexorably forced to, by the logic of events. We think we are shaping it toward survival."

"Are we?" mused Greene-Gilead.

"Remains to be seen. Survivors survive. We'll know-Wup! Meeting's adjourned."

The radio on Baldwin's pommel was shrilling his personal emergency call. He listened, then spoke one sharp word in Speedtalk. "Back to the house, Joe!" He wheeled and was away. Joe's mount came of less selected stock; he was forced to follow.

Baldwin sent for Joe soon after he got back. Joe went in; Gail was already there,

Baldwin's face was without expression. He said in English, "I've work for you, Joe, work you won't have any doubt about. Mrs. Keithley."

"Good."

"Not good." Baldwin shifted to Speedtalk. "We have been caught flatfooted. Either the second set of films was never destroyed, or there was a third set. We do not know; the man who could tell us is dead. But Mrs. Keithley obtained a set and has been using them.

“This is the situation. The 'fuse' of the nova effect has been installed in the New Age hotel. It has been sealed off and can be triggered only by radio signal from the Moon-her signal. The 'fuse' has been rigged so that any attempt to break in, as long as the firing circuit is still armed, will trigger it and set it off. Even an attempt to examine it by penetration wavelengths will set it off. Speaking as a physicist, it is my considered opinion that no plan for tackling the 'nova' fuse bomb itself will work unless the arming circuit is first broken on the Moon and that no attempt should be made to get at the fuse before then, because of extreme danger to the entire planet.

'The arming circuit and the radio relay to the Earthside trigger is located on the Moon in a building inside her private dome. The triggering control she keeps with her. From the same control she can disarm the arming circuit temporarily; it is a combination deadman switch and time-clock arrangement. It can be set to disarm for a maximum of twelve hours, to let her sleep, or possibly to permit her to order rearrangements. Unless it is switched off any attempt to enter the building in which the arming circuit is housed will also trigger the 'Nova' bomb circuit. While it is disarmed, the housing on the Moon may be broached by force but this will set off alarms which will warn her to rearm and then to trigger at once. The set up is such that the following sequence of events must take place:

"First, she must be killed, and the circuit disarmed.

"Second, the building housing the arming circuit and radio relay to the trigger must be broken open and the circuits destroyed before the time clock can rearm and trigger-This must be done with speed, not only because of guards, but because her surviving lieutenants will attempt to seize power by possessing themselves of the controls.

"Third, as soon as word is received on Earth that the arming circuit is destroyed, the New Age will be attacked in force and the 'Nova' bomb destroyed.

"Fourth, as soon as the bomb is destroyed, a general round up must be made of all persons technically capable of setting up the 'Nova' effect from plans. This alert must be maintained until it is certain that no plans remain in existence, including the third set of films, and further established by hypno that no competent person possesses sufficient knowledge to set it up without plans. This alert may compromise our secret status; the risk must be taken.

"Any questions?"

"Kettle Belly," said Joe, "doesn't she know that if the Earth becomes a nova, the Moon will be swallowed up in the disaster?"

"Crater walls shield her dome from line-of-sight with Earth; apparently she believes she is safe. Evil is essentially stupid, Joe; despite her brilliance, she believes what she wishes to believe. Or it may be that she is willing to risk her own death against the tempting prize of absolute power. Her plan is to proclaim power with some pious nonsense about being high priestess of peace-a euphemism for Empress of Earth. It is a typical paranoid deviation; the proof of the craziness lies in the fact that the physical arrangements make it certain-if we do not intervene-that Earth will be destroyed automatically a few hours after her death; a thing that could happen any time-and a compelling reason for all speed. No one has ever quite managed to conquer all of Earth, not even the commissars. Apparently she wishes not only to conquer it, but wants to destroy it after she is gone, lest anyone else ever manage to do so again. Any more questions?"

He went on. "The plan is this;

"'You two will go to the Moon to become domestic servants to Mr. and Mrs. Alexander Copley, a rich, elderly couple living at the Elysian Rest Homes, Moon Colony. They are of us. Shortly they will decide to return to Earth; you two will decide to remain, you like it. You will advertise, offering to work for anyone who will post your return bond. About this time Mrs. Keithley will have lost, through circumstances that will be arranged, two or more of her servants; she will probably hire you, since domestic service is the scarcest commodity on the Moon. If not, a variation will be arranged for you.

"When you are inside her dome, you'll maneuver yourselves into positions to carry out your assignments. When both of you are so placed, you will carry out procedures one and two with speed.

"A person named McGinty, already inside her dome, will help you in communication. He is not one of us but is our agent, a telepath. His ability does not extend past that. Your communication hook up will probably be, Gail to McGinty by telepathy, McGinty to Joe by concealed radio."

Joe glanced at Gail; it was the first that he had known that she was a telepath. Baldwin went on, "Gail will kill Mrs. Keithley; Joe will break into the housing and destroy the circuits. Are you ready to go?"

Joe was about to suggest swapping the assignments when Gait answered, "Ready"; he echoed her.

"Good. Joe, you will carry your assumed I.Q. at about 85, Gail at 95; she will appear to be the dominant member of a married couple-" Gail grinned at Joe. "-but you, Joe, will be in charge. Your personalities and histories are now being made up and will be ready with your identifications. Let me say again that the greatest of speed is necessary; government security forces here may attempt a foolhardy attack on the New Age hotel. We shall prevent or delay such efforts, but act with speed. Good luck."

Operation Black Widow, first phase, went off as planned. Eleven days later Joe and Gail were inside Mrs. Keithley's dome on the moon and sharing a room in the servants' quarters. Gail glanced around when first they entered it and said in Speedtalk, "Now you'll have to marry me; I'm compromised."

"Shut that up, idiot! Some one might hear you."

"Pooh! They'd just think I had asthma. Don't you think it's noble of me, Joe, to sacrifice my girlish reputation for home and country?"

"What reputation?"

"Come closer so I can slug you."

Even the servants' quarter were luxurious. The dome was a sybarite's dream. The floor of it was gardened in real beauty save where Mrs, Keithley's mansion stood. Opposite it, across a little lake-certainly the only lake on the Moonwas the building housing the circuits; it was disguised as a little Doric Grecian shrine. The dome itself was edge-lighted fifteen hours out of each twenty-four, shutting out the black sky and the harsh stars. At "night" the lighting was gradually withdrawn.

McGinty was a gardener and obviously enjoyed his work. Gail established contact with him, got out of him what little he knew. Joe left him alone save for contacts in character.

There was a staff of over two hundred, having its own social hierarchy, from engineers for dome and equipment, Mrs. Keithley's private pilot, and so on down to gardeners' helpers. Joe and Gail were midway, being inside servants. Gail made herself popular as the harmlessly flirtatious but always helpful and sympathetic wife of a meek and older husband. She had been a beauty parlor operator, so it seemed, before she "married" and had great skill in massaging aching backs and stiff necks, relieving headaches and inducing sleep. She was always ready to demonstrate.

Her duties as a maid had not yet brought her into dose contact with their employer. Joe, however, had acquired the job of removing all potted plants to the "outdoors" during "night"; Mrs. Keithley, according to Mr. James, the butler, believed that plants should be outdoors at "night." Joe was thus in a position to get outside the house when the dome was dark; he had already reached the point where the night guard at the Grecian temple would sometimes get Joe to "jigger" for him while the guard snatched a forbidden cigarette.

McGinty had been able to supply one more important fact: in addition to the guard at the temple building, and the locks and armor plate of the building itself, the arming circuit was booby-trapped. Even if it were inoperative as an arming circuit for the 'Nova' bomb on Earth, it itself would blow up if tampered with. Gail and Joe discussed it in their room, Gail sitting on his lap like an affectionate wife, her lips close to his left ear. "Perhaps you could wreck it from the door, without exposing yourself."

"I've got to be sure. There is certainly some way of switching that gimmick off. She has to provide for possible repairs or replacements."

"Where would it be?"

"Just one place that matches the pattern of the rest of her planning. Right under her hand, along with die disarming switch and the trigger switch." He rubbed his other ear; it contained his short-range radio hook-up to McGinty and itched almost constantly.

"Hmm-then there's just one thing to be done; I'll have to wring it out of her before I kill her."

"Well see."

Just before dinner the following "evening" she found him in their room. "It worked, Joe, it worked!"

"What worked?"

"She fell for the bait. She heard from her secretary about my skill as a masseuse; I -was ordered up for a demonstration this afternoon. Now I am under strict instructions to come to her tonight and rub her to sleep."

"It's tonight,' then."

McGinty waited in his room, behind a locked door.

Joe stalled in the back hall, spinning out endlessly adull tale to Mr. James.

A voice in his ear said, "She's in her room now." "-and that's how my brother got married to two women at once," Joe concluded. "Sheer bad luck. I better get these plants outside before the missus happens to ask about ‘em."

'I suppose you had. Goodnight."

"Goodnight, Mr. James." He picked up two of the pots and waddled out.

He put them down outside and heard, "She says she's started to massage. She's spotted the radio switching unit; it's on the belt that the old gal keeps at her bedside table when she's not wearing it."

'Tell her to kill her and grab it."

"She says she wants to make her tell how to unswitch the boobytrap gimmick first."

"Tell her not to delay.'

Suddenly, inside his head, clear and sweet as a bell as if they were her own spoken tones, he heard her.

-Joe, I can hear you. Can you hear me?

-yes, yes! Aloud he added, "Stand by the phones anyhow, Mac."

-it wont he long. I have her in intense pain; she'll crack soon.

-hurt her plenty! He began to run toward the temple building.-Gad, are you still shopping for a husband?

-I've found him.

-marry me and I'll beat you every Saturday night.

-the man who can beat me hasn't been born.

-I'd like to try. He slowed down before he came near the guard's station. "Hi, Jim!"

-it's a deal.

"Well, if it taint Joey boy! Got a match?"

"Here." He reached out a hand-then, as the guard fell. he eased him to the ground and made sure that he would stay out.

-Gail! It's got to be now!

The voice in his head came back in great consternation:

-Joe! She was too tough, she wouldn't crack. She's dead!

-good! get that belt, break the arming circuit, then see what else you find. I'm going to break in. He went toward the door of the temple.

-it's disarmed, Joe. I could spot it; it has a time set on it. I can't tell about the others, they aren't marked and they all look alike.

He took from his pocket a small item provided by Baldwin's careful planning.-twist them all from where they are to the other way. You'll probably hit it.

-oh, Joe, I hope so!

He had placed the item against the lock; the metal around it turned red and now was melting away. An alarm clanged somewhere.

Gail's voice came again in his head; there was urgency in it but no fear:

-Joe! they're beating on the door. I'm trapped.

-McCinty! be our witness! He went on:

-I, Joseph, take thee. Gail, to be my lawfully wedded wife—

He was answered in tranquil rhythm:

-I, Gail, take thee, Joseph, to be my lawfully wedded husband-

-to have and to hold, he went on.

-to have and to hold, my beloved!

-for better, for worse-

-for better, for worse-Her voice in his head was singing . . . -till death do us part. I've got it open, darling, I am going in.

-till death do us part! They are breaking down the bedroom door, Joseph my dearest.

-hang on! I'm almost through here.

-they have broken it down, Joe. They are coming toward me. Goodbye my darling! I am very happy. Abruptly her "voice ' stopped.

He was facing the box that housed the disarming circuit, alarms clanging in his ears; he took from his pocket another gadget and tried it.

The blast that shattered the box caught him full in the chest.

The letters on the metal marker read:

TO THE MEMORY OF MR. AND MRS. JOSEPH GREENE WHO, NEAR THIS SPOT, DIED FOR ALL THEIR FELLOW MEN

Delilah and the SpaceRigger

Sure, we had trouble building Space Station One—but the trouble was people.

Not that building a station twentytwo thousand three hundred miles out in space is a breeze. It was an engineering feat bigger than the Panama Canal or the Pyramids—or even the Susquehanna Power Pile. But "Tiny" Larsen built her—and a job Tiny tackles gets built.

I first saw Tiny playing guard on a semi-pro team, working his way through Oppenheimer Tech. He worked summers for me thereafter till he graduated. He stayed in construction and eventually I went to work for him.

Tiny wouldn't touch a job unless he was satisfied with the engineering. The Station had jobs designed into it that called for six-armed monkeys instead of grown men in space suits. Tiny spotted such boners; not a ton of material went into the sky until the specs and drawings suited him.

But it was people that gave us the headaches. We had a sprinkling of married men, but the rest were wild kids, attracted by high pay and adventure. Some were busted spacemen. Some were specialists, like electricians and instrument men. About half were deepsea divers, used to working in pressure suits. There were sandhogs and riggers and welders and shipfitters and two circus acrobats.

We fired four of them for being drunk on the job; Tiny had to break one stiff's arm before he would stay fired. What worried us was where did they get it? Turned out a shipfitter had rigged a heatless still, using the vacuum around us. He was making vodka from potatoes swiped from the commissary. I hated to let him go, but he was too smart.

Since we were falling free in a 24-hour circular orbit, with everything weightless and floating, you'd think that shooting craps was impossible. But a radioman named Peters figured a dodge to substitute steel dice and a magnetic field. He also eliminated the element of chance, so we fired him.

We planned to ship him back in the next supply ship, the R. S. *Half Moon*. I was in Tiny's office when she blasted to match our orbit. Tiny swam to the view port. "Send for Peters, Dad," he said, "and give him the old heave ho. Who's his relief?"

"Party named G. Brooks McNye," I told him.

A line came snaking over from the ship. Tiny said, “I don’t believe she’s matched.” He buzzed the radio shack for the ship’s motion relative to the

Station. The answer didn’t please him and he told them to call the *Half Moon.*

Tiny waited until the TV screen showed the rocket ship’s CO. “Good morning, Captain. Why have you placed a line on us?”

“For cargo, naturally. Get your hopheads over here. I want to blast off before we enter the shadow.” The Station spent about an hour and a quarter each day passing through Earth’s shadow; we worked two eleven-hour shifts and skipped the dark period, to avoid rigging lights and heating suits.

Tiny shook his head. “Not until you’ve matched course and speed with us.”

“I *am* matched!”

“Not to specification, by my instruments.”

“Have a heart, Tiny! I’m short on maneuvering fuel. If I juggle this entire ship to make a minor correction on a few lousy tons of cargo, I’ll be so late I’ll have to put down on a secondary field. I may even have to make a deadstick landing/‘ In those days all ships had landing wings.

“Look, Captain,” Tiny said sharply, “the only purpose of your lift was to match orbits for those same few lousy tons. I don’t care if you land in Little America on a pogo stick. The first load here was placed with loving care in the proper orbit and I’m making every other load match. Get that covered wagon into the groove.”

“Very well, Superintendent!” Captain Shields said stiffly.

“Don’t be sore, Don,” Tiny said softly. “By the way, you’ve got a passenger for me?”

“Oh, yes, so I have!” Shields’ face broke out in a grin.

“Well, keep him aboard until we unload. Maybe we can beat the shadow yet.”

“Fine, fine! After all, why should I add to your troubles?” The skipper switched off, leaving my boss looking puzzled.

We didn’t have time to wonder at his words. Shields whipped his ship around on gyros, blasted a second or two, and put her dead in space with us pronto—and used very little fuel, despite his bellyaching. I grabbed every man we could spare and managed to get the cargo clear before we swung into Earth’s shadow. Weightlessness is an unbelievable advantage in handling freight; we gufted the *Half Moon*—by hand, mind you—in fifty-four minutes.

The stuff was oxygen tanks, loaded, and aluminum mirrors to shield them, panels of outer skin-sandwich stuff of titanium alloy sheet with foamed glass filling—and cases of jato units to spin the living quarters. Once it was all out and snapped to our cargo line I sent the men back by the same line—I won't let a man work outside without a line no matter how space happy he figures he is. Then I told Shields to send over the passenger and cast off.

This little guy came out the ship's air lock, and hooked on to the ship's line. Handling himself like he was used to space, he set his feet and dived, straight along the stretched line, his snap hook running free. I hurried back and motioned him to follow me. Tiny, the new man, and I reached the air locks together.

Besides the usual cargo lock we had three G. E. Kwikloks. A Kwiklok is an Iron Maiden without spikes; it fits a man in a suit, leaving just a few pints of air to scavenge, and cycles automatically. A big time saver in changing shifts. I passed through the middlesized one; Tiny, of course, used the big one. Without hesitation the new man pulled himself into the small one.

We went into Tiny's office. Tiny strapped down, and pushed his helmet back. "Well, McNye," he said. "Glad to have you with us."

The new radio tech opened his helmet. I heard a low, pleasant voice answer, "Thank you."

I stared and didn't say anything. From where I was I could see that the radio tech was wearing a hair ribbon.

I thought Tiny would explode. He didn't need to see the hair ribbon; with the helmet up it was clear that the new "man" was as female as Venus de Milo. Tiny sputtered, then he was unstrapped and diving for the view port. "Dad!" he yelled. "Get the radio shack. Stop that ship!"

But the *Half Moon* was already a ball of fire in the distance. Tiny looked dazed. "Dad," he said, "who else knows about this?"

"Nobody, so far as I know."

He thought a bit. "We've got to keep her out of sight. That's it-we keep her locked up and out of sight until the next ship matches in." He didn't look at her.

"What in the world are you talking about?" McNye's voice was higher and no longer pleasant.

Tiny glared. "You, that's what. What are you—a stowaway?"

"Don't be silly! I'm G. B. McNye, electronics engineer. Don't you have my papers?"

Tiny turned to me. "Dad, this is your fault. How in Chr—pardon me, Miss. How did you let them send you a woman? Didn't you even read the advance report on her?"

"Me?" I said. "Now see here, you big squarehead! those forms don't show sex; the Fair Employment Commission won't allow it except where it's pertinent to the job."

"You're telling *me* it's not pertinent to the job *here*?"

"Not by job classification it ain't. There's lots of female radio and radar men, back Earthside."

"This isn't Earthside." He had something. He was thinking of those two-legged wolves swarming over the job outside. And G. B. McNye was pretty. Maybe eight months of no women at all affected my judgment, but she would pass.

"I've even heard of female rocket pilots," I added, for spite.

"I don't care if you've heard of female archangels; I'll have no women here!"

"Just a minute!" If I was riled, *she* was plain sore. "You're the construction superintendent, are you not?"

"Yes," Tiny admitted.

"Very well, then, how do you know what sex I am?"

"Are you trying to deny that you are a woman?"

"Hardly! I'm proud of it. But officially you don't know what sex G. Brooks McNye is. That's why I use 'G' instead of Gloria. I don't ask favors."

Tiny grunted. "You won't get any. I don't know how you sneaked in, but get this, McNye, or Gloria, or whatever-you're fired. You go back on the next ship. Meanwhile we'll try to keep the men from knowing we've got a woman aboard."

I could see her count ten. "May I speak," she said finally, "or does your Captain Bligh act extend to that, too?"

"Say your say."

"I didn't sneak in. I am on the permanent staff of the Station, Chief Communications Engineer. I took this vacancy myself to get to know the equipment while it was being installed. I'll live here eventually; I see no reason not to start now."

Tiny waved it away. "There'll be men and women both here—some day. Even kids. Right now it's stag and it'll stay that way."

"We'll see. Anyhow, you can't fire me; radio personnel don't work for you." She had a point; communicators and some other specialists were lent to the contractors, Five Companies, Incorporated, by Harriman Enterprises.

Tiny snorted. "Maybe I can't fire you; I can send you home. 'Requisitioned personnel must be satisfactory to the contractor.'—meaning me. Paragraph Seven, clause M; I wrote that clause myself."

"Then you know that if requisitioned personnel are refused without cause the contractor bears the replacement cost."

"I'll risk paying your fare home, but I won't have you here."

"You are most unreasonable!"

"Perhaps, but I'll decide what's good for the job. I'd rather have a dope peddler than have a woman sniffing around my boys!"

She gasped. Tiny knew he had said too much; he added, "Sorry, Miss. But that’s it. You’ll stay under cover until I can get rid of you.”

Before she could speak I cut in. “Tiny—look behind you!”

Staring in the port was one of the riggers, his eyes bugged out. Three or four more floated up and joined him.

Then Tiny zoomed up to the port and they scattered like minnows. He scared them almost out of their suits; I thought he was going to shove his fists through the quartz.

He came back looking whipped. “Miss,” he said, pointing, “wait in my room.” When she was gone he added, “Dad, what’ll we do?”

I said, “I thought you had made up your mind, Tiny.”

“I have,” he answered peevishly. “Ask the Chief Inspector to come in, will you?”

That showed how far gone he was. The inspection gang belonged to Harriman Enterprises, not to us, and Tiny rated them mere nuisances. Besides, Tiny was an Oppenheimer graduate; Dalrymple was from M.I.T.

He came in, brash and cheerful. “Good morning, Superintendent. Mom-ing, Mr. Witherspoon. What can I do for you?”

Glumly, Tiny told the story. Dalrymple looked smug. “She’s right, old man. You can send her back and even specify a male relief. But I can hardly endorse ‘for proper cause’ now, can I?”

“Damnation. Dalrymple, we can’t have a woman around here!”

“A moot point. Not covered by contract, y’know.”

“If your office hadn’t sent us a crooked gambler as her predecessor I wouldn’t be in this jam!”

“There, there! Remember the old blood pressure. Suppose we leave the endorsement open and arbitrate the cost. That’s fair, eh?”

“I suppose so. Thanks.”

“Not at all. But consider this: when you rushed Peters off before interviewing the newcomer, you cut yourself down to one operator. Hammond can’t stand watch twenty-four hours a day.”

“He can sleep in the shack. The alarm will wake him.”

“I can’t accept that. The home office and ships’ frequencies must be guarded at all times. Harriman Enterprises has supplied a qualified operator; I am afraid you must use her for the time being.”

Tiny will always cooperate with the inevitable; he said quietly, “Dad, she’ll take first shift. Better put the married men on that shift.”

Then he called her in. “Go to the radio shack and start makeelearnee, so that Hammond can go off watch soon. Mind what he tells you. He’s a good man.”

“I know,” she said briskly. “I trained him.”

Tiny bit his lip. The C.I. said, “The Superintendent doesn’t bother with trivia—I’m Robert Dalrymple, Chief Inspector. He probably didn’t introduce his assistant either—Mr. Witherspoon.”

“Call me Dad,” I said.

She smiled and said, “Howdy, Dad.” I felt warm clear through. She went on to Dalrymple, “Odd that we haven’t met before.”

Tiny butted in. “McNye, you’ll sleep in my room—”

She raised her eyebrows; he went on angrily, “Oh, I’ll get my stuff out— at once. And get this: keep the door locked, off shift.”

“You’re darn tootin‘ I will!”

Tiny blushed.

I was teo busy to see much of Miss Gloria. There was cargo to stow, the new tanks to install and shield. That left the most worrisome task of all: putting spin on the living quarters. Even the optimists didn’t expect much interplanetary traffic for some years; nevertheless Harriman Enterprises wanted to get some activities moved in and paying rent against their enormous investment.

I.T.&T. had leased space for a microwave relay station—several million a year from television alone. The Weather Bureau was itching to set up its hemispheric integrating station; Palomar Observatory had a concession (Harriman Enterprises donated that space); the Security Council had some hush-hush project; Fermi Physical Labs and Kettering Institute each had space— a dozen tenants wanted to move in now, or sooner, even if we never completed accommodations for tourists and travelers.

There were time bonuses in it for Five Companies, Incorporated—and their help. So we were in a hurry to get spin on the quarters.

People who have never been out have trouble getting through their heads —at least I had—that there is no feeling of weight, no up and down, in a free orbit in space. There’s Earth, round and beautiful, only twenty-odd thousand miles away, close enough to brush your sleeve. You know it’s pulling you towards it. Yet you feel no weight, absolutely none. You float.

Floating is fine for some types of work, but when it’s time to eat, or play cards, or bathe, it’s good to feel weight on your feet. Your dinner stays quiet and you feel more natural.

You’ve seen pictures of the Station—a huge cylinder, like a bass drum, with ships’ nose pockets dimpling its sides. Imagine a snare drum, spinning around inside the bass drum; that’s the living quarters, with centrifugal force pinch-hitting for gravity. We could have spun the whole Station but you can’t berth a ship against a whirling dervish.

So we built a spinning part for creature comfort and an outer, stationary part for docking, tanks, storerooms, and the like. You pass from one to the other at the hub. When Miss Gloria joined us the inner part was closed in and pressurized, but the rest was a skeleton of girders.

Mighty pretty though, a great network of shiny struts and ties against black sky and stars—titanium alloy 1403, light, strong, and non-corrodible. The Station is flimsy compared with a ship, since it doesn't have to take blastoff stresses. That meant we didn't dare put on spin by violent means— which is where jato units come in.

"Jato"—Jet Assisted TakeOff—rocket units invented to give airplanes a boost. Now we use them wherever a controlled push is needed, say to get a truck out of the mud on a dam job. We mounted four thousand of them around the frame of the living quarters, each one placed just so. They were wired up and ready to fire when Tiny came to me looking worried. "Dad," he said, 'let's drop everything and finish compartment D-113."

"Okay," I said. D-113 wasm tt>e non-spin part.

"Rig an air lock and stock it with two weeks supplies."

"That'll change your mass distribution for spin," I suggested.

"I'll refigure it next dark period. Then we'll shift jatos."

When Dalrymple heard about it he came charging around. It meant a delay in making rental space available. "What's the idea?"

Tiny stared at him. They had been cooler than ordinary lately; Dalrymple had been finding excuses to seek out Miss Gloria. He had to pass through

Tiny's office to reach her temporary room, and Tiny had finally told him to get out and stay out. "The idea," Tiny said slowly, "is to have a pup tent in case the house burns."

"What do you mean?"

"Suppose we fire up the jatos and the structure cracks? Want to hang around in a space suit until a ship happens by?"

"That's silly. The stresses have been calculated."

"That's what the man said when the bridge fell. We'll do it my way."

Dalrymple stormed off.

Tiny's efforts to keep Gloria fenced up were sort of pitiful. In the first place, the radio tech's biggest job was repairing suit walkie-talkies, done on watch. A rash of such troubles broke out—on her shift. I made some shift transfers and docked a few for costs, too; it's not proper maintenance when a man deliberately busts his aerial.

There were other symptoms. It became stylish to shave. Men started wearing shirts around quarters and bathing increased to where I thought I would have to rig another water still.

Came the shift when D-113 was ready and the jatos readjusted. I don't mind saying I was nervous. All hands were ordered out of the quarters and into suits. They perched around the girders and waited.

Men in space suits all look alike; we used numbers and colored armbands. Supervisors had two antennas, one for a gang frequency, one for the supervisors' circuit. With Tiny and me the second antenna hooked back through the radio shack and to all the gang frequencies—a broadcast.

The supervisors had reported their men clear of the fireworks and I was about to give Tiny the word, when this figure came climbing through the girders, inside the danger zone. No safety line. No armband. One antenna.

Miss Gloria, of course. Tiny hauled her out of the blast zone, and anchored her with his own safety line. I heard his voice, harsh in my helmet: "Who do you think you are? A sidewalk superintendent?"

And her voice: "What do you expect me to do? Go park on a star?"

"I told you to stay away from the job. If you can't obey orders, I'll lock you up."

I reached him, switched off my radio and touched helmets. "Boss! Boss!" I said. "You're broadcasting!"

"Oh—" he says, switches off, and touches helmets with her.

We could still hear her; she didn't switch off. "Why, you big baboon, I came outside because you sent a search party to clear everybody out," and, "How would I know about a safety line rule? You've kept me penned up." And finally, "We'll see!"

I dragged him away and he told the boss electrician to go ahead. Then we forgot the row for we were looking at the prettiest fireworks ever seen, a giant St. Catherine's wheel, rockets blasting all over it. Utterly soundless, out there in space—but beautiful beyond compare.

The blasts died away and there was the living quarters, spinning true as a flywheel—Tiny and I both let out sighs of relief. We all went back inside then to see what weight tasted like.

It tasted funny. I went through the shaft and started down the ladders, feeling myself gain weight as I neared the rim. I felt seasick, like the first time I experienced no weight. I could hardly walk and my calves cramped.

We inspected throughout, then went to the office and sat down. It felt good, just right for comfort, one-third gravity at the rim. Tiny rubbed his chair arms and grinned, "Beats being penned up in D-113."

"Speaking of being penned up," Miss Gloria said, walking in, "may I have a word with you, Mr. Larsen?"

"Uh? Why, certainly. Matter of fact, I wanted to see you. I owe you an apology, Miss McNye. I was—"

"Forget it," she cut in. "You were on edge. But I want to know this: how long are you going to keep up this nonsense of trying to chaperone me?"

He studied her. "Not long. Just till your relief arrives."

"So? Who is the shop steward around here?"

"A shipfitter named McAndrews. But you can't use him. You're a staff member."

"Not in the job I'm filling. I am going to talk to him. You're discriminating against me, and in my off time at that."

"Perhaps, but you will find I have the authority. Legally I'm a ship's captain, while on this job. A captain in space has wide discriminatory powers."

"Then you should use them with discrimination!"

He grinned. "Isn't that what you just said I was doing?"

We didn't hear from the shop steward, but Miss Gloria started doing as she pleased. She showed up at the movies, next off shift, with Dalrymple. Tiny left in the middle-good show, too; *Lysistrata Goes to Town*, relayed up from New York.

As she was coming back alone he stopped her, having seen to it that I was present. "Umm—Miss McNye…"

"Yes?"

"I think you should know, uh, well… Chief Inspector Dalrymple is a married man."

"Are you suggesting that my conduct has been improper?"

"No, but-"

"Then mind your own business!" Before he could answer she added, "It might interest you that he told me about your four children."

Tiny sputtered. "Why… why, I'm not even married!"

"So? That makes it worse, doesn't it?" She swept out.

Tiny quit trying to keep her in her room, but told her to notify him whenever she left it. It kept him busy riding herd on her. I refrained from suggesting that he get Dalrymple to spell him.

But I was surprised when he told me to put through the order dismissing her. I had been pretty sure he was going to drop it.

"What's the charge?" I asked.

"Insubordination!"

I kept mum. He said, "Well, she won't take orders."

"She does her work okay. You give her orders you wouldn't give to one of the men—and that a man wouldn't take."

"You disagree with my orders?"

"That's not the point. You can't prove the charge, Tiny."

"Well, charge her with being female! I can prove *that*."

I didn't say anything. "Dad," he added wheedlingly, "you know how to write it. 'No personal animus against Miss McNye, but it is felt that as a matter of policy, and so forth and so on.'"

I wrote it and gave it to Hammond privately. Radio techs are sworn to secrecy but it didn't surprise me when I was stopped by O'Connor, one of our best metalsmiths. "Look, Dad, is it true that the Old Man is getting rid of Brooksie?"

"Brooksie?"

"Brooksie McNye—she says to call her Brooks. Is it true?"

I admitted it, then went on, wondering if I should have lied.

It takes four hours, about, for a ship to lift from Earth. The shift before the *Pole Star* was due, with Miss Gloria's relief, the timekeeper brought me two separation slips. Two men were nothing; we averaged more each ship. An hour later he reached me by supervisors' circuit, and asked me to come to the time office. I was out on the rim, inspecting a weld job; I said no. "*Please*, Mr. Witherspoon," he begged, "you've *got* to." When one of the boys doesn't call me 'Dad,' it means something. I went.

There was a queue like mail call outside his door; I went in and he shut the door on them. He handed me a double handful of separation slips. "What in the great depths of night is this?" I asked.

"There's dozens more I ain't had time to write up yet."

None of the slips had any reason given—just "own choice."

"Look, Jimmie —what goes on here?"

"Can't you dope it out, Dad? Shucks, I'm turning in one, too."

I told him my guess and he admitted it. So I took the slips, called Tiny and told him for the love of Heaven to come to his office.

Tiny chewed his lip considerable. "But, Dad, they *can't* strike. It's a non-strike contract with bonds from every union concerned."

"It's no strike, Tiny. You can't stop a man from quitting."

"They'll pay their own fares back, so help me!"

"Guess again. Most of 'em have worked long enough for the free ride."

"We'll have to hire others quick, or we'll miss our date."

"Worse than that, Tiny—we won't finish. By next dark period you won't even have a maintenance crew."

"I've never had a gang of men quit me. I'll talk to them."

"No good, Tiny. You're up against something too strong for you."

"You're against me, Dad?"

"I'm never against you, Tiny."

He said, "Dad, you think I'm pigheaded, but I'm *right*. You can't have one woman among several hundred men. It drives 'em nutty."

I didn't say it affected him the same way; I said, "Is that bad?"

"Of course. I can't let the job be ruined to humor one woman."

"Tiny, have you looked at the progress charts lately?"

"I've hardly had time to-what about them?"

I knew why he hadn't had time. "You'll have trouble proving Miss Gloria interfered with the job. We're ahead of schedule."

"We *are*?"

While he was studying the charts I put an arm around his shoulder. "Look, son," I said, "sex has been around our planet a long time.

Earthside, they never get away from it, yet some pretty big jobs get built anyhow. Maybe we'll just have to learn to live with it here, too. Matter of fact, you had the answer a minute ago."

"I did? I sure didn't know it."

"You said, 'You can't have *one* woman among several hundred men.' Get me?"

"Huh? No, I don't. Wait a minute! Maybe I do."

"Ever tried jiu jitsu? Sometimes you win by relaxing."

"Yes. Yes!"

"When you can't beat 'em, you jine 'em."

He buzzed the radio shack. "Have Hammond relieve you, McNye, and come to my office."

He did it handsomely, stood up and made a speech—he'd been wrong, taken him a long time to see it, hoped there were no hard feelings, *etc.* He was instructing the home office to see how many jobs could be filled at once with female help. "Don't forget married couples," I put in mildly, "and better ask for some older women, too."

"I'll do that," Tiny agreed. "Have I missed anything, Dad?"

"Guess not. We'll have to rig quarters, but there's time."

"Okay. I'm telling them to hold the *Pole Star*, Gloria, so they can send us a few this trip."

"That's fine!" She looked really happy.

He chewed his lip. "I've a feeling I've missed something. Hmm—I've got it. Dad, tell them to send up a chaplain for the Station, as soon as possible. Under the new policy we may need one anytime." I thought so, too.

NOTHING EVER HAPPENS ON THE MOON

"I never knew a boy from Earth who wasn't cocky."

Mr. Andrews frowned at his Senior Patrol Leader. "That's childish, Sam. And no answer. I arrive expecting to find the troop ready to hike. Instead I find you and our visitor about to fight. And both of you Eagle Scouts! What started it?"

Sam reluctantly produced a clipping. "This, I guess."

It was from the Colorado Scouting News and read: "Troop 48, Denver—LOCAL SCOUT SEEKS SKYHIGH HONOR. Bruce Hollifield, Eagle Scout, is moving with his family to South Pole, Venus. Those who know Bruce—and who doesn't—expect him to qualify as Eagle (Venus) in jig time. Bruce will spend three weeks at Luna City, waiting for the Moon-Venus transport. Bruce has been boning up lately on lunar Scouting, and he has already qualified in space suit operation in the vacuum chamber at the Pike's Peak space port. Cornered, Bruce admitted that he hopes to pass the tests for Eagle Scout (Luna) while on the Moon.

"If he does—and we're betting on Bruce!—he's a dead cinch to become the first Triple Eagle in history.

"Go to it, Bruce! Denver is proud of you. Show those Moon Scouts what real Scouting is like."

Mr. Andrews looked up. "Where did this come from?"

"Uh, somebody sent it to Peewee."

"Yes?"

"Well, we all read it and when Bruce came in, the fellows ribbed him. He got sore."

"Why didn't you stop it?"

"Uh . . . well, I was doing it myself."

"Humph! Sam, this item is no sillier than the stuff our own Scribe turns in for publication. Bruce didn't write it, and you yahoos had no business making his life miserable. Send him in. Meantime call the roll."

"Yes, sir. Uh, Mr. Andrews—"

"Yes?"

"What's *your* opinion? Can this kid possibly qualify for lunar Eagle in three weeks?"

"No—and I've told him so. But he's durn well going to have his chance. Which reminds me: you're his instructor."

"Me?" Sam looked stricken.

"You. You've let me down, Sam; this is your chance to correct it. Understand me?"

Sam swallowed. "I guess I do."

"Send Hollifield in."

Sam found the boy from Earth standing alone, pretending to study the bulletin board. Sam touched his arm. "The Skipper wants you."

Bruce whirled around, then stalked away. Sam shrugged and shouted, "Rocket Patrol—fall in!"

Speedy Owens echoed, "Crescent Patrol—fall in!" As muster ended Mr. Andrews came out of his office, followed by Bruce. The Earth Scout seemed considerably chastened.

"Mr. Andrews says I'm to report to you."

"That's right." They eyed each other cautiously. Sam said, "Look, Bruce—let's start from scratch."

"Suits me."

"Fine. Just tag along with me." At a sign from the Scoutmaster Sam shouted, "By twos! Follow me." Troop One jostled out the door, mounted a crosstown slidewalk and rode to East Air Lock.

Chubby Schneider, troop quartermaster, waited there with two assistants, near a rack of space suits. Duffel was spread around in enormous piles—packaged grub, tanks of water, huge air bottles, frames of heavy wire, a great steel drum, everything needed for pioneers on the airless crust of the Moon.

Sam introduced Bruce to the Quartermaster. "We've got to outfit him, Chubby."

"That new G.E. job might fit him."

Sam got the suit and spread it out. The suit was impregnated glass fabric, aluminum-sprayed to silvery whiteness. It closed from crotch to collar with a zippered gasket. It looked expensive; Bruce noticed a plate on the collar: DONATED BY THE LUNA CITY KIWANIS KLUB.

The helmet was a plastic bowl, silvered except where swept by the eyes of the wearer. There it was transparent, though heavily filtered.

Bruce's uniform was stowed in a locker; Chubby handed him a loose-knit coverall. Sam and Chubby stuffed him into the suit and Chubby produced the instrument belt.

Both edges of the belt zipped to the suit; there were several rows of grippers for the top edge; thus a pleat could be taken. They fastened it with maximum pleat. "How's that?" asked Sam.

"The collar cuts my shoulders."

"It won't under pressure. If we leave slack, your head will pull out of the helmet like a cork." Sam strapped the air, water, radio, and duffel-rack backpack to Bruce's shoulders. "Pressure check, Chubby."

"We'll dress first." While Chubby and Sam dressed, Bruce located his intake and exhaust valves, the spill valve inside his collar, and the water nipple beside it. He took a drink and inspected his belt.

Sam and Bruce donned helmets. Sam switched on Bruce's walkie-talkie, clipped a blood-oxygen indicator to Bruce's ear, and locked his helmet on. "Stand by for pressure," he said, his words echoing in Bruce's helmet. Chubby hooked hose from a wall gauge to Bruce's air intake.

Bruce felt the collar lift. The air in the suit grew stuffy, the helmet fogged. At thirty pounds Chubby cut the intake, and watched the gauge. Mr. Andrews joined them, a Gargantuan helmeted figure, toting a pack six feet high. "Pressure steady, sir," Chubby reported.

Sam hooked up Bruce's air supply. "Open your intake and kick your chin valve before you smother," he ordered. Bruce complied. The stale air rushed out and the helmet cleared. Sam adjusted Bruce's valves. "Watch that needle," he ordered, pointing to the blood-oxygen dial on Bruce's belt. "Keep your mix so that reads steady in the white without using your chin valve."

"I know."

"So I'll say it again. Keep that needle out of the red, or you'll explain it to Saint Peter."

The Scoutmaster asked, "What load are you giving him?"

"Oh," replied Sam, "just enough to steady him—say three hundred pounds, total."

Bruce figured—at one-sixth gravity that meant fifty pounds weight including himself, his suit, and his pack. "I'll carry my full share," he objected.

"We'll decide what's best for you," the Scoutmaster snapped. "Hurry up; the troop is ready." He left.

Sam switched off his radio and touched helmets. "Forget it," he said quietly. "The Old Man is edgy at the start of a hike." They loaded Bruce rapidly—reserve air and water bottles, a carton of grub, short, wide skis and ski poles—then hung him with field gear, first-aid kit, prospector's hammer, two climbing ropes, a pouch of pitons and snap rings, flashlight, knife. The Moon Scouts loaded up; Sam called, "Come on!"

Mr. Andrews handed the lockmaster a list and stepped inside; the three Scouts followed. Bruce felt his suit expand as the air sucked back into the underground city. A light blinked green; Mr. Andrews opened the outer door and Bruce stared across the airless lunar plain.

It dazzled him. The plain was bright under a blazing Sun. The distant needle-sharp hills seemed painted in colors too flat and harsh. He looked at the sky to rest his eyes.

It made him dizzy. He had never seen a whole skyful of stars undimmed by air. The sky was blacker than black, crowded with hard, diamond lights.

"Route march!" the Scoutmaster's voice rang in his helmet. "Heel and toe. Jack Wills out as pathfinder." A boy left the group in long, floating strides, fifteen feet at a bound. He stopped a hundred yards ahead; the troop formed single column fifty yards behind him. The Pathfinder raised his arm, swung it down, and the troop moved out.

Mr. Andrews and a Scout joined Sam and Bruce. "Speedy will help you," he told Sam, "until Bruce gets his legs. Move him along. We can't heel-and-toe and still make our mileage."

"We'll move him."

"Even if we have to carry him," added Speedy.

The Scoutmaster overtook the troop in long leaps. Bruce wanted to follow. It looked easy—like flying. He had not liked the crack about carrying him. But Sam grasped him by his left belt grip while Speedy seized the one on his right. "Here we go," Sam warned. "Feet on the ground and try to swing in with us."

Bruce started off confidently. He felt that three days of low gravity in the corridors of Luna City had given him his "legs"; being taught to walk, like a baby, was just hazing.

Nothing to it—he was light as a bird! True, it was hard to keep heel-and-toe; he wanted to float. He gained speed on a downgrade; suddenly the ground was not there when he reached for it. He threw up his hands.

He hung head down on his belt and could hear his guides laughing. "Wha' happened?" he demanded, as they righted him.

"Keep your feet on the ground."

"I know what you're up against," added Speedy, "I've been to Earth. Your mass and weight don't match and your muscles aren't used to it. You weigh what a baby weighs, Earthside, but you've got the momentum of a fat man."

Bruce tried again. Some stops and turns showed him what Speedy meant. His pack felt like feathers, but unless he banked his turns, it would throw him, even at a walk. It *did* throw him, several times, before his legs learned.

Presently, Sam asked, "Think you're ready for a slow lope?"

"I guess so."

"Okay—but remember, if you want to turn, you've *got* to slow down first—or you'll roll like a hoop. Okay, Speedy. An eight-miler."

Bruce tried to match their swing. Long, floating strides, like flying. It *was* flying! Up! . . . float . . . brush the ground with your foot and up again. It was better than skating or skiing.

"Wups!" Sam steadied him. "Get your feet out in front."

As they swung past, Mr. Andrews gave orders for a matching lope.

The unreal hills had moved closer; Bruce felt as if he had been flying all his life. "Sam," he said, "do you suppose I can get along by myself?"

"Shouldn't wonder. We let go a couple o' miles back."

"Huh?" It was true; Bruce began to feel like a Moon hand.

Somewhat later a boy's voice called "Heel and toe!" The troop dropped into a walk. The pathfinder stood on a rise ahead, holding his skis up. The troop halted and unlashed skis. Ahead was a wide basin filled with soft, powdery stuff.

Bruce turned to Sam, and for the first time looked back to the west. "*Jee* . . . miny *Crickets!*" he breathed.

Earth hung over the distant roof of Luna City, in half phase. It was round and green and beautiful, larger than the harvest Moon and unmeasurably more lovely in forest greens, desert browns and glare white of cloud.

Sam glanced at it. "Fifteen o'clock."

Bruce tried to read the time but was stumped by the fact that the sunrise line ran mostly across ocean. He questioned Sam. "Huh? See that bright dot on the dark side? That's Honolulu—figure from there."

Bruce mulled this over while binding his skis, then stood up and turned around, without tripping. "Hmmm—" said Sam, "you're used to skis."

"Got my badge."

"Well, this is different. Just shuffle along and try to keep your feet."

Bruce resolved to stay on his feet if it killed him. He let a handful of the soft stuff trickle through his glove. It was light and flaky, hardly packed at all. He wondered what had caused it,

Mr. Andrews sent Speedy out to blaze trail; Sam and Bruce joined the column. Bruce was hard put to keep up. The loose soil flew to left and right, settling so slowly in the weak gravity that it seemed to float in air—yet a ski pole, swung through such a cloud, cut a knife-sharp hole without swirling it.

The column swung wide to the left, then back again. Off to the right was a circular depression perhaps fifty yards across; Bruce could not see the bottom. He paused, intending to question Sam; the Scoutmaster's voice prodded him. "Bruce! Keep moving!"

Much later Speedy's voice called out, "Hard ground!" Shortly the column reached it and stopped to remove skis. Bruce switched off his radio and touched his helmet to Sam's.

"What was that back where the Skipper yelled at me?"

"That? That was a morning glory. They're poison!"

"A 'morning glory'?"

"Sort of a sink hole. If you get on the slope, you never get out. Crumbles out from under you and you wind up buried in the bottom. There you stay—until your air gives out. Lot of prospectors die that way. They go out alone and are likely to come back in the dark."

"How do you know what happens if they go out alone?"

"Suppose you saw tracks leading up to one and no tracks going away?"

"Oh!" Bruce felt silly.

The troop swung into a lope; slowly the hills drew closer and loomed high into the sky. Mr. Andrews called a halt. "Camp," he said. "Sam, spot the shelter west of that outcropping. Bruce, watch what Sam does."

The shelter was an airtight tent, framed by a half cylinder of woven heavy wire. The frame came in sections. The Scoutmaster's huge pack was the air bag.

The skeleton was erected over a ground frame, anchored at corners and over which was spread an asbestos pad. The curved roof and wall sections followed. Sam tested joints with a wrench, then ordered the air bag unrolled. The air lock, a steel drum, was locked into the frame and gasketed to the bag. Meanwhile, two Scouts were rigging a Sun shade.

Five boys crawled inside and stood up, arms stretched high. The others passed in all the duffel except skis and poles. Mr. Andrews was last in and closed the air lock. The metal frame blocked radio communication; Sam plugged a phone connection from the lock to his helmet. "Testing," he said.

Bruce could hear the answer, relayed through Sam's radio. "Ready to inflate."

"Okay." The bag surged up, filling the frame. Sam said, "You go on, Bruce. There's nothing left but to adjust the shade."

"I'd better watch."

"Okay." The shade was a flimsy Venetian blind, stretched over the shelter. Sam half-opened the slats. "It's cold inside," he commented, "from expanding gas. But it warms up fast." Presently, coached by phone, he closed them a bit. "Go inside," he urged Bruce. "It may be half an hour before I get the temperature steady."

"Maybe I should," admitted Bruce. "I feel dizzy."

Sam studied him. "Too hot?"

"Yeah, I guess so."

"You've held still in the Sun too long. Doesn't give the air a chance to circulate. Here." Sam opened Bruce's supply valve wider; "Go inside."

Gratefully, Bruce complied.

As he backed in, and straightened up, two boys grabbed him. They closed his valves, unlocked his helmet, and peeled off his suit. The suit traveled from hand to hand and was racked. Bruce looked around.

Daylamps were strung from air lock to a curtain at the far end that shut off the sanitary unit. Near this curtain suits and helmets were racked. Scouts were lounging on both sides of the long room. Near the entrance a Scout was on watch at the air conditioner, a blood-oxygen indicator clipped to his ear. Nearby, Mr. Andrews phoned temperature changes to Sam. In the middle of the room Chubby had set up his commissary. He waved. "Hi, Bruce! Siddown—chow in two shakes."

Two Scouts made room for Bruce and he sat. One of them said, "Y'ever been at Yale?" Bruce had not. "That's where I'm going," the Scout confided. "My brother's there now." Bruce began to feel at home.

When Sam came in Chubby served chow, beef stew, steaming and fragrant, packaged rolls, and bricks of peach ice cream. Bruce decided that Moon Scouts had it soft. After supper, the Bugler got out his harmonica and played. Bruce leaned back, feeling pleasantly drowsy.

"Hollifield!" Bruce snapped awake. "Let's try you on first aid."

For thirty minutes Bruce demonstrated air tourniquets and emergency suit patches, artificial respiration for a man in a space suit, what to do for Sun stroke, for anoxia, for fractures. "That'll do," the Scoutmaster concluded. "One thing: What do you do if a man cracks his helmet?"

Bruce was puzzled. "Why," he blurted, "you bury him."

"Check," the Scoutmaster agreed. "So be careful. Okay, sports—six hours of sleep. Sam, set the watch."

Sam assigned six boys, including himself. Bruce asked, "Shouldn't I take a watch?"

Mr. Andrews intervened. "No. And take yourself off, Sam. You'll take Bruce on his two-man hike tomorrow; you'll need your sleep."

"Okay, Skipper." He added to Bruce, "There's nothing to it. I'll show you." The Scout on duty watched several instruments, but, as with suits, the important one was the blood-oxygen reading. Stale air was passed through a calcium oxide bath, which precipitated carbon dioxide as calcium carbonate. The purified air continued through dry sodium hydroxide, removing water vapor.

"The kid on watch makes sure the oxygen replacement is okay," Sam went on. "If anything went wrong, he'd wake us and we'd scramble into suits."

Mr. Andrews shooed them to bed. By the time Bruce had taken his turn at the sanitary unit and found a place to lie down, the harmonica was sobbing: "*Day is done* . . . . . *Gone the Sun* . . ."

It seemed odd to hear *Taps* when the Sun was still overhead. They couldn't wait a week for sundown, of course. These colonials kept funny hours . . . bed at what amounted to early evening, up at one in the morning. He'd ask Sam. Sam wasn't a bad guy—a little bit know-it-all. Odd to sleep on a bare floor, too—not that it mattered with low gravity. He was still pondering it when his ears were assaulted by *Reveille,* played on the harmonica.

Breakfast was scrambled eggs, cooked on the spot. Camp was struck, and the troop was moving in less than an hour. They headed for Base Camp at a lope.

The way wound through passes, skirted craters. They had covered thirty miles and Bruce was getting hungry when the pathfinder called, "Heel and toe!" They converged on an air lock, set in a hillside.

Base Camp had not the slick finish of Luna City, being rough caverns sealed to airtightness, but each troop had its own well-equipped troop room. Air was renewed by hydroponic garden, like Luna City; there was a Sun power plant and accumulators to last through the long, cold nights.

Bruce hurried through lunch; he was eager to start his two-man hike. They outfitted as before, except that reserve air and water replaced packaged grub. Sam fitted a spring-fed clip of hiking rations into the collar of Bruce's suit.

The Scoutmaster inspected them at the lock. "Where to, Sam?"

"We'll head southeast. I'll blaze it."

"Hmm—rough country. Well, back by midnight, and stay out of caves."

"Yes, sir."

Outside Sam sighed, "Whew! I thought he was going to say not to climb."

"We're going to?"

"Sure. You can, can't you?"

"Got my Alpine badge."

"I'll do the hard part, anyhow. Let's go."

Sam led out of the hills and across a baked plain. He hit an eight-mile gait, increased it to a twelve-miler. Bruce swung along, enjoying it. "Swell of you to do this, Sam."

"Nuts. If I weren't here, I'd be helping to seal the gymnasium."

"Just the same, I need this hike for my Mooncraft badge."

Sam let several strides pass. "Look, Bruce—you don't really expect to make Lunar Eagle?"

"Why not? I've got my optional badges. There are only four required ones that are terribly different: camping, Mooncraft, pathfinding, and pioneering. I've studied like the dickens and now I'm getting experience."

"I don't doubt you've studied. But the Review Board are tough eggs. You've got to be a real Moon hand to get by."

"They won't pass a Scout from Earth?"

"Put it this way. The badges you need add up to one thing, Mooncraft. The examiners are old Moon hands; you won't get by with book answers. They'll know how long you've been here and they'll *know* you don't know enough."

Bruce thought about it. "It's not fair!"

Sam snorted. "Mooncraft isn't a game; it's the real thing. 'Did you stay alive?' If you make a mistake, you flunk—and they bury you."

Bruce had no answer.

Presently they came to hills; Sam stopped and called Base Camp. "Parsons and Hollifield, Troop One—please take a bearing."

Shortly Base replied, "One one eight. What's your mark?"

"Cairn with a note."

"Roger."

Sam piled up stones, then wrote date, time, and their names on paper torn from a pad in his pouch, and laid it on top. "Now we start up."

The way was rough and unpredictable; this canyon had never been a watercourse. Several times Sam stretched a line before he would let Bruce follow. At intervals he blazed the rock with his hammer. They came to an impasse, five hundred feet of rock, the first hundred of which was vertical and smooth.

Bruce stared. "We're going up that?"

"Sure. Watch your Uncle Samuel." A pillar thrust up above the vertical pitch. Sam clipped two lines together and began casting the bight up toward it. Twice he missed and the line floated down. At last it went over.

Sam drove a piton into the wall, off to one side, clipped a snap ring to it, and snapped on the line. He had Bruce join him in a straight pull on the free end to test the piton. Bruce then anchored to the snap ring with a rope strap; Sam started to climb.

Thirty feet up, he made fast to the line with his legs and drove another piton; to this he fastened a safety line. Twice more he did this. He reached the pillar and called, "Off belay!"

Bruce unlinked the line; it snaked up the cliff. Presently Sam shouted, "On belay!"

Bruce answered, "Testing," and tried unsuccessfully to jerk down the line Sam had lowered.

"Climb," ordered Sam.

"Climbing." One-sixth gravity, Bruce decided, was a mountaineer's heaven. He paused on the way up only to unsnap the safety line.

Bruce wanted to "leapfrog" up the remaining pitches, but Sam insisted on leading. Bruce was soon glad of it; he found three mighty differences between climbing on Earth and climbing here; the first was low gravity, but the others were disadvantages: balance climbing was awkward in a suit, and chimney climbing, or any involving knees and shoulders, was clumsy and carried danger of tearing the suit.

They came out on raw, wild upland surrounded by pinnacles, bright against black sky. "Where to?" asked Bruce.

Sam studied the stars, then pointed southeast. "The photomaps show open country that way."

"Suits me." They trudged away; the country was too rugged to lope. They had been traveling a long time, it seemed to Bruce, when they came out on a higher place from which Earth could be seen. "What time is it?" he asked.

"Almost seventeen," Sam answered, glancing up.

"We're supposed to be back by midnight."

"Well," admitted Sam, "I expected to reach open country before now."

"We're lost?"

"Certainly not! I've blazed it. But I've never been here before. I doubt if anyone has."

"Suppose we keep on for half an hour, then turn back?"

"Fair enough." They continued for at least that; Sam conceded that it was time to turn.

"Let's try that next rise," urged Bruce.

"Okay." Sam reached the top first. "Hey, Bruce—we made it!"

Bruce joined him. "Golly!" Two thousand feet below stretched a dead lunar plain. Mountains rimmed it except to the south. Five miles away two small craters formed a figure eight.

"I know where we are," Sam announced. "That pair shows up on the photos. We slide down here, circle south about twenty miles, and back to Base. A cinch—how's your air?"

Bruce's bottle showed fair pressure; Sam's was down, he having done more work. They changed both bottles and got ready. Sam drove a piton, snapped on a ring, fastened a line to his belt and passed it through the ring. The end of the line he passed between his legs, around a thigh and across his chest, over his shoulder and to his other hand, forming a rappel seat. He began to "walk" down the cliff, feeding slack as needed.

He reached a shoulder below Bruce. "Off rappel!" he called, and recovered his line by pulling it through the ring.

Bruce rigged a rappel seat and joined him. The pitches became steeper; thereafter Sam sent Bruce down first, while anchoring him above. They came to a last high sheer drop. Bruce peered over. "Looks like here we roost."

"Maybe." Sam bent all four lines together and measured it. Ten feet of line reached the rubble at the base.

Bruce said, "It'll reach, but we have to leave the lines behind us."

Sam scowled. "Glass lines cost money; they're from Earth."

"Beats staying here."

Sam searched the cliff face, then drove a piton. "I'll lower you. When you're halfway, drive two pitons and hang the strap from one. That'll give me a changeover."

"I'm against it," protested Bruce.

"If we lost our lines," Sam argued, "we'll never hear the last of it. Go ahead."

"I still don't like it."

"Who's in charge?"

Bruce shrugged, snapped on the line and started down.

Sam stopped him presently. "Halfway. Pick me a nest."

Bruce walked the face to the right, but found only smooth wall. He worked back and located a crack. "Here's a crack," he reported, "but just one. I shouldn't drive two pitons in one crack."

"Spread 'em apart," Sam directed. "It's good rock."

Reluctantly, Bruce complied. The spikes went in easily but he wished he could hear the firm ring that meant a piton was biting properly. Finished, he hung the strap. "Lower away!"

In a couple of minutes he was down and unsnapped the line. "Off belay!" He hurried down the loose rock at the base. When he reached the edge of it he called, "Sam! This plain is soft stuff."

"Okay," Sam acknowledged. "Stand clear." Bruce moved along the cliff about fifty feet and stopped to bind on skis. Then he shuffled out onto the plain, kick-turned, and looked back. Sam had reached the pitons. He hung, one foot in the strap, the bight in his elbow, and recovered his line. He passed his line through the second piton ring, settled in rappel, and hooked the strap from piton to piton as an anchor. He started down.

Halfway down the remaining two hundred feet he stopped. "What's the matter?" called Bruce.

"It's reached a shackle," said Sam, "and the pesky thing won't feed through the ring. I'll free it." He raised himself a foot, then suddenly let what he had gained slip through the ring above.

To Bruce's amazement Sam leaned out at an impossible angle. He heard Sam cry "Rock!" before he understood what had happened—the piton had failed.

Sam fell about four feet, then the other piton, connected by the strap, stopped him. He caught himself, feet spread. But the warning cry had not been pointless; Bruce saw a rock settling straight for Sam's helmet. Bruce repeated the shout.

Sam looked up, then jumped straight out from the cliff. The rock passed between him and the wall; Bruce could not tell if it had struck him. Sam swung in, his feet caught the cliff—and again he leaned out crazily. The second piton had let go.

Sam again shouted, "*Rock!*" even as he kicked himself away from the cliff.

Bruce watched him, turning slowly over and over and gathering momentum. It seemed to take Sam forever to fall.

Then he struck.

Bruce fouled his skis and had to pick himself up. He forced himself to be careful and glided toward the spot.

Sam's frantic shove had saved him from crashing his helmet into rock. He lay buried in the loose debris, one leg sticking up ridiculously. Bruce felt an hysterical desire to laugh.

Sam did not stir when Bruce tugged at him. Bruce's skis got in his way; finally he stood astraddle, hauled Sam out. The boy's eyes were closed, his features slack, but the suit still had pressure. "Sam," shouted Bruce, "can you hear me?"

Sam's blood-oxygen reading was dangerously in the red; Bruce opened his intake valve wider—but the reading failed to improve. He wanted to turn Sam face down, but he had no way of straightening Sam's helmeted head, nor would he then be able to watch the blood-oxygen indicator unless he took time to remove the belt. He decided to try artificial respiration with the patient face up. He kicked off skis and belt.

The pressure in the suit got in his way, nor could he fit his hands satisfactorily to Sam's ribs. But he kept at it—swing! and one, and two and up! and one, and two and swing!

The needle began to move. When it was well into the white Bruce paused.

It stayed in the white.

Sam's lips moved but no sound came. Bruce touched helmets. "What is it, Sam?"

Faintly he heard, "Look out! Rock!"

Bruce considered what to do next.

There was little he could do until he got Sam into a pressurized room. The idea, he decided, was to get help—fast!

Send up a smoke signal? Fire a gun three times? Snap out of it, Bruce! You're on the Moon now. He wished that someone would happen along in a desert car.

He would have to try radio. He wasn't hopeful, as they had heard nothing even from the cliff. Still, he must try—

He glanced at Sam's blood-oxygen reading, then climbed the rubble, extended his antenna and tried. "*M'aidez!*" he called. "Help! Does anybody hear me?" He tried again.

And again.

When he saw Sam move he hurried back. Sam was sitting up and feeling his left knee. Bruce touched helmets. "Sam, are you all right?"

"Huh? This leg won't work right."

"Is it broken?"

"How do I know? Turn on your radio."

"It *is* on. Yours is busted."

"Huh? How'd that happen?"

"When you fell."

"Fell?"

Bruce pointed. "Don't you remember?"

Sam stared at the cliff. "Uh, I don't know. Say, this thing hurts like mischief. Where's the rest of the troop?"

Bruce said slowly, "We're out by ourselves, Sam. Remember?"

Sam frowned. "I guess so. Bruce, we've got to get out of here! Help me get my skis on."

"Do you think you can ski with that knee?"

"I've got to." Bruce lifted him to his feet, then bound a ski to the injured leg while Sam balanced on the other. But when Sam tried shifting his weight he collapsed—and fainted.

Bruce gave him air and noted that the blood-oxygen reading was still okay. He untangled the ski, straightened out Sam's legs, and waited. When Sam's eyes fluttered he touched helmets. "Sam, can you understand me?"

"Yeah. Sure."

"You can't stay on your feet. I'll carry you."

"No."

"What do you mean, 'No'?"

"No good. Rig a toboggan." He closed his eyes.

Bruce laid Sam's skis side by side. Two steel rods were clipped to the tail of each ski; he saw how they were meant to be used. Slide a rod through four ring studs, two on each ski; snap a catch—*so!* Fit the other rods. Remove bindings—the skis made a passable narrow toboggan.

He removed Sam's pack, switched his bottles around in front and told him to hold them. "I'm going to move you. Easy, now!" The spacesuited form hung over the edges, but there was no help for it. He found he could thread a rope under the rods and lash his patient down. Sam's pack he tied on top.

He made a hitch by tying a line to the holes in the tips of the skis; there was a long piece left over. He said to Sam, "I'll tie this to my arm. If you want anything, just jerk."

"Okay."

"Here we go." Bruce put on his skis, brought the hitch up to his armpits and ducked his head through, forming a harness. He grasped his ski poles and set out to the south, parallel to the cliff.

The toboggan drag steadied him; he settled down to covering miles. Earth was shut off by the cliff; the Sun gave him no estimate of hour. There was nothing but blackness, stars, the blazing Sun, a burning desert underfoot, and the towering cliff—nothing but silence and the urgency to get back to base.

Something jerked his arm. It scared him before he accounted for it. He went back to the toboggan. "What is it, Sam?"

"I can't stand it. It's too hot." The boy's face was white and sweat-covered.

Bruce gave him a shot of air, then thought about it. There was an emergency shelter in Sam's pack, just a rolled-up awning with a collapsible frame. Fifteen minutes later he was ready to move. One awning support was tied upright to the sole of one of Sam's boots; the other Bruce had bent and wedged under Sam's shoulders. The contraption looked ready to fall apart but it held. "There! Are you okay?"

"I'm fine. Look, Bruce, I think my knee is all right now. Let me try it."

Bruce felt out the knee through the suit. It was twice the size of its mate; he could feel Sam wince. He touched helmets. "You're full of hop, chum. Relax." Bruce got back into harness.

Hours later, Bruce came across tracks. They swung in from northeast, turned and paralleled the hills. He stopped and told Sam.

"Say, Sam, how can I tell how old they are?"

"You can't. A track fifty years old looks as fresh as a new one."

"No point in following these?"

"No harm in it, provided they go in our direction."

"Roger." Bruce went back to towing. He called hopefully over the radio every few minutes and then listened. The tracks cheered him even though he knew how slim the chance was that they meant anything. The tracks swung out from the hills presently or, rather, the hills swung in, forming a bay. He took the shorter route as his predecessor had.

He should have seen what was coming. He knew that he should keep his eyes ahead, but the need to watch his instruments, the fact that he was leaning into harness, and the circumstance that he was following tracks combined to keep his head down. He had just glanced back at Sam when he felt his skis slipping out from under him.

Automatically he bent his knees and threw his skis into a "snowplow." He might have been able to stop had not the toboggan been scooting along behind. It plowed into him; boy, skis, and toboggan went down, tangled like jackstraws.

He struggled for footing, felt the sand slip under him. He had time to see that he had been caught—in daylight!—by that lunar equivalent of quicksand, a morning glory. Then the sifting dust closed over his helmet.

He felt himself slip, slide, fall, slide again, and come softly to rest.

Bruce tried to get his bearings. Part of his mind was busy with horror, shock, and bitter self blame for having failed Sam; another part seemed able to drive ahead with the business at hand. He did not seem hurt—and he was still breathing. He supposed that he was buried in a morning glory; he suspected that any movement would bury him deeper.

Nevertheless he had to locate Sam. He felt his way up to his neck, pushing the soft flakes aside. The toboggan hitch was still on him. He got both hands on it and heaved. It was frustrating work, like swimming in mud. Gradually he dragged the sled to him—or himself to the sled. Presently he felt his way down the load and located Sam's helmet. "*Sam!* Can you hear me?"

The reply was muffled. "Yeah, Bruce!"

"Are you okay?"

"Okay? Don't be silly! We're in a *morning glory!*"

"Yes, I know. Sam, I'm terribly sorry!"

"Well, don't cry about it. It can't be helped."

"I didn't mean to—"

"Stow it, can't you!" Sam's voice concealed panic with anger. "It doesn't matter. We're goners—don't you realize that?"

"Huh? No, we're not! Sam, I'll get you out—I swear I will."

Sam waited before replying. "Don't kid yourself, Bruce. Nobody ever gets out of a morning glory."

"Don't talk like that. We aren't dead yet."

"No, but we're going to be. I'm trying to get used to the idea." He paused. "Do me a favor, Bruce—get me loose from these confounded skis. I don't want to die tied down."

"Right away!" In total darkness, his hands in gloves, with only memory to guide him, and with the soft, flaky dust everywhere, unlashing the load was nearly impossible. He shifted position, then suddenly noticed something—his left arm was free of the dust.

He shifted and got his helmet free as well. The darkness persisted; he fumbled at his belt, managed to locate his flashlight.

He was lying partly out and mostly in a sloping mass of soft stuff. Close overhead was a rocky roof; many feet below the pile spilled over a floor of rock. Sideways the darkness swallowed up the beam.

He still clutched the toboggan; he hauled at it, trying to drag Sam out. Failing, he burrowed back in. "Hey, Sam! We're in a cave!"

"Huh?"

"Hang on. I'll get you out." Bruce cautiously thrashed around in an attempt to get his entire body outside the dust. It kept caving down on him. Worse, his skis anchored his feet. He kicked one loose, snaked his arm in, and dragged it out. It slid to the base of the pile. He repeated the process, then rolled and scrambled to the floor, still clinging to the hitch.

He set the light on the rock floor, and put the skis aside, then heaved mightily. Sam, toboggan, and load came sliding down, starting a small avalanche. Bruce touched helmets. "Look! We're getting somewhere!"

Sam did not answer. Bruce persisted, "Sam, did you hear me?"

"I heard you. Thanks for pulling me out. Now untie me, will you?"

"Hold the light." Bruce got busy. Shortly he was saying, "There you are. Now I'll stir around and find the way out."

"What makes you think there is a way out?"

"Huh? Don't talk like that. Who ever heard of a cave with no exit?"

Sam answered slowly, "*He* didn't find one."

"'He'?"

"Look." Sam shined the light past Bruce. On the rock a few feet away was a figure in an old-fashioned space suit.

Bruce took the light and cautiously approached the figure. The man was surely dead; his suit was limp. He lay at ease, hands folded across his middle, as if taking a nap. Bruce pointed the torch at the glass face plate. The face inside was lean and dark, skin clung to the bones; Bruce turned the light away.

He came back shortly to Sam. "He didn't make out so well," Bruce said soberly. "I found these papers in his pouch. We'll take them with us so we can let his folks know."

"You *are* an incurable optimist, aren't you? Well, all right." Sam took them. There were two letters, an oldstyle flat photograph of a little girl and a dog, and some other papers. One was a driver's license for the Commonwealth of Massachusetts, dated June 1995 and signed *Abner Green.*

Bruce stared. "1995! Gee whiz!"

"I wouldn't count on notifying his folks."

Bruce changed the subject. "He had one thing we can use. This." It was a coil of manila rope. "I'll hitch all the lines together, one end to your belt and one to mine. That'll give me five or six hundred feet. If you want me, just pull."

"Okay. Watch your step."

"I'll be careful. You'll be all right?"

"Sure. I've got *him* for company."

"Well . . . here goes."

One direction seemed as good as another. Bruce kept the line taut to keep from walking in a circle. The rock curved up presently and his flash showed that it curved back on itself, a dead end. He followed the wall to the left, picking his way, as the going was very rough. He found himself in a passage. It seemed to climb, but it narrowed. Three hundred feet and more out by the ropes, it narrowed so much that he was stopped.

Bruce switched off his light and waited for his eyes to adjust. He became aware of a curious sensation. It was panic.

He forced himself not to turn on the light until he was certain that no gleam lay ahead. Then thankfully he stumbled back into the main cavern.

Another series of chambers led steadily downward. He turned back at a black and bottomless hole.

The details varied but the answers did not: At the furthest reach of the lines, or at some impassable obstacle, he would wait in the dark—but no gleam of light ever showed. He went back to Sam after having covered, he estimated, about 180°.

Sam had crawled up to the heap of fallen dust. Bruce hurried to him. "Sam, are you all right?"

"Sure. I just moved to a feather bed. That rock is terribly cold. What did you find?"

"Well, nothing yet," he admitted. He sat down in the flaky pile and leaned toward Sam. "I'll start again in a moment."

"How's your air supply?" asked Sam.

"Uh, I'll have to crack my reserve bottle soon. How's yours?"

"Mine is throttled to the limit. You're doing all the work; I can save my reserve bottle for you—I think."

Bruce frowned. He wanted to protest, but the gesture wouldn't make sense. They would have to finish up all even; naturally he was using much more air than was Sam.

One thing was sure—time was running out. Finally he said, "Look, Sam—there's no end of those caves and passages. I couldn't search them all with all the air in Luna City."

"I was afraid so."

"But we *know* there's a way out right above us."

"You mean *in*."

"I mean *out*. See here—this morning glory thing is built like an hour glass; there's an open cone on top, and this pile of sand down below. The stuff trickled down through a hole in the roof and piled up until it choked the hole."

"Where does that get you?"

"Well, if we dug the stuff away we could clear the hole."

"It would keep sifting down."

"No, it wouldn't, it would reach a point where there wasn't enough dust close by to sift down any further—there would still be a hole."

Sam considered it. "Maybe. But when you tried to climb up it would collapse back on you. That's the bad part about a morning glory, Bruce; you can't get a foothold."

"The dickens I can't! If I can't climb a slope on skis without collapsing it, when I've got my wits about me and am really trying, why, you can have my reserve air bottle."

Sam chuckled. "Don't be hasty. I might hold you to it. Anyhow," he added, "I can't climb it."

"Once I get my feet on the level, I'll pull you out like a cork, even if you're buried. Time's awastin'." Bruce got busy.

Using a ski as a shovel he nibbled at the giant pile. Every so often it would collapse down on him. It did not discourage him; Bruce knew that many yards of the stuff would have to fall and be moved back before the hole would show.

Presently he moved Sam over to the freshly moved waste. From there Sam held the light; the work went faster. Bruce began to sweat. After a while he had to switch air bottles; he sucked on his water tube and ate a march ration before getting back to work.

He began to see the hole opening above him. A great pile collapsed on him; he backed out, looked up, then went to Sam. "Turn out the light!"

There was no doubt; a glimmer of light filtered down. Bruce found himself pounding Sam and shouting. He stopped and said, "Sam, old boy, did I ever say what patrol I'm from?"

"No. Why?"

"Badger Patrol. Watch me dig!" He tore into it. Shortly sunlight poured into the hole and reflected dimly around the cavern. Bruce shoveled until he could see a straight rise from the base of the pile clear to the edge of the morning glory high above them. He decided that the opening was wide enough to tackle.

He hitched himself to Sam with the full length of all the glass ropes and then made a bundle of Sam's pack save air and water bottles, tied a bowline on Sam's uninjured foot, using the manila line, and secured the bundle to the end of that line. He planned to drag Sam out first, then the equipment. Finished, he bound on skis.

Bruce touched helmets. "This is it, pal. Keep the line clear of the sand."

Sam grabbed his arm. "Wait a minute."

"What's the matter?"

"Bruce—if we don't make it, I just want to say that you're all right."

"Uh . . . oh, forget it. We'll make it." He started up.

A herringbone step suited the convex approach to the hole. As Bruce neared the opening he shifted to sidestep to fit the narrow passage and the concave shape of the morning glory above. He inched up, transferring his weight smoothly and gradually, and not remaining in one spot too long. At last his head, then his whole body, were in sunshine; he was starting up the morning glory itself.

He stopped, uncertain what to do. There was a ridge above him, where the flakes had broken loose when he had shoveled away their support. The break was much too steep to climb, obviously unstable. He paused only a moment as he could feel his skis sinking in; he went forward in half sidestep, intending to traverse past the unstable formation.

The tow line defeated him. When Bruce moved sideways, the line had to turn a corner at the neck of the hole. It brushed and then cut into the soft stuff. Bruce felt his skis slipping backwards; with cautious haste he started to climb, tried to ride the slipping mass and keep above it. He struggled as the flakes poured over his skis. Then he was fouled, he went down, it engulfed him.

Again he came to rest in soft, feathery, darkness. He lay quiet, nursing his defeat, before trying to get out. He hardly knew which way was up, much less which way was out. He was struggling experimentally when he felt a tug on his belt. Sam was trying to help him.

A few minutes later, with Sam's pull to guide him, Bruce was again on the floor of the cave. The only light came from the torch in Sam's hand; it was enough to show that the pile choking the hole was bigger than ever.

Sam motioned him over. "Too bad, Bruce," was all he said.

Bruce controlled his choking voice to say, "I'll get busy as soon as I catch my breath."

"Where's your left ski?"

"Huh? Oh! Must have pulled off. It'll show up when I start digging."

"Hmmm . . . how much air have you?"

"Uh?" Bruce looked at his belt. "About a third of a bottle."

"I'm breathing my socks. I've got to change."

"Right away!" Bruce started to make the switch; Sam pulled him down again.

"You take the fresh bottle, and give me your bottle."

"But—"

"No 'buts' about it," Sam cut him off. "You have to do all the work; you've *got* to take the full tank."

Silently Bruce obeyed. His mind was busy with arithmetic. The answer always came out the same; he knew with certainty that there was not enough air left to permit him again to perform the Herculean task of moving that mountain of dust.

He began to believe that they would never get out. The knowledge wearied him; he wanted to lie down beside the still form of Abner Green and, like him, not struggle at the end.

However he could not. He knew that, for Sam's sake, he would have to shovel away at that endless sea of sand, until he dropped from lack of oxygen. Listlessly he took off his remaining ski and walked toward his task.

Sam jerked on the rope.

Bruce went back. "What's got into you, kid?" Sam demanded.

"Nothing. Why?"

"It's got you whipped."

"I didn't say so."

"But you think so. I could see it. Now you listen! You convinced me that you could get us out—and, by Jiminy! you're going to! You're just cocky enough to be the first guy to whip a morning glory and you can do it. Get your chin up!"

Bruce hesitated. "Look, Sam, I won't quit on you, but you might as well know the truth: there isn't air enough to do it again."

"Figured that out when I saw the stuff start to crumble."

"You knew? Then if you know any prayers, better say them."

Sam shook his arm. "It's not time to pray; it's time to get busy."

"Okay." Bruce started to straighten up.

"That's not what I meant."

"Huh?"

"There's no point in digging. Once was worth trying; twice is wasting oxygen."

"Well, what do you want me to do?"

"You didn't try *all* the ways out, did you?"

"No." Bruce thought about it. "I'll try again, Sam. But there isn't air enough to try them all."

"You can search longer than you can shovel. But don't search haphazardly; search back toward the hills. Anywhere else will be just another morning glory; we need to come out *at the hills;* away from the sand."

"Uh . . . look, Sam, where *are* the hills? Down here you can't tell north from next week."

"Over that way," Sam pointed.

"Huh? How do you know?"

"You showed me. When you broke through I could tell where the Sun was from the angle of the light."

"But the Sun is overhead."

"Was when we started. Now it's fifteen, twenty degrees to the west. Now listen: these caves must have been big blow holes once, gas pockets. You search off in that direction and find us a blow hole that's not choked with sand."

"I'll do my darndest!"

"How far away were the hills when we got caught?"

Bruce tried to remember. "Half a mile, maybe."

"Check. You won't find what we want tied to me with five or six hundred feet of line. Take that pad of paper in my pouch. Blaze your way—and be darn sure you blaze enough!"

"I will!"

"Attaboy! Good luck."

Bruce stood up.

It was the same tedious, depressing business as before. Bruce stretched the line, then set out at the end of it, dropping bits of paper and counting his steps. Several times he was sure that he was under the hills, only to come to an impasse. Twice he skirted the heaps that marked other morning glorys. Each time he retraced his steps he gathered up his blazes, both to save paper and to keep from confusing himself.

Once, he saw a glimmer of light and his heart pounded—but it filtered down from a hole too difficult even for himself and utterly impossible for Sam.

His air got low; he paid no attention, other than to adjust his mix to keep it barely in the white. He went on searching.

A passage led to the left, then down; he began to doubt the wisdom of going further and stopped to check the darkness. At first his eyes saw nothing, then it seemed as if there might be a suggestion of light ahead. Eye fatigue? Possibly. He went another hundred feet and tried again. It was light!

Minutes later he shoved his shoulders up through a twisted hole and gazed out over the burning plain.

"Hi!" Sam greeted him. "I thought you had fallen down a hole."

"Darn near did. Sam, I found it!"

"Knew you would. Let's get going."

"Right. I'll dig out my other ski."

"Nope."

"Why not?"

"Look at your air gauge. We aren't going anywhere on skis."

"Huh? Yeah, I guess not." They abandoned their loads, except for air and water bottles. The dark trek was made piggyback, where the ceiling permitted. Some places Bruce half dragged his partner. Other places they threaded on hands and knees with Sam pulling his bad leg painfully behind him.

Bruce climbed out first, having slung Sam in a bowline before he did so. Sam gave little help in getting out; once they were above ground Bruce picked him up and set him against a rock. He then touched helmets. "There, fellow! We made it!"

Sam did not answer.

Bruce peered in; Sam's features were slack, eyes half closed. A check of his belt told why; the blood-oxygen indicator showed red.

Sam's intake valve was already wide open; Bruce moved fast, giving himself a quick shot of air, then transferring his bottle to Sam. He opened it wide.

He could see Sam's pointer crawl up even as his own dropped toward the red. Bruce had air in his suit for three or four minutes if he held still.

He did not hold still. He hooked his intake hose to the manifold of the single bottle now attached to Sam's suit and opened his valve. His own indicator stopped dropping toward the red. They were Siamese twins now, linked by one partly-exhausted bottle of utterly necessary gas. Bruce put an arm around Sam, settled Sam's head on his shoulder, helmet to helmet, and throttled down both valves until each was barely in the white. He gave Sam more margin than himself, then settled down to wait. The rock under them was in shadow, though the Sun still baked the plain. Bruce looked out, searching for anyone or anything, then extended his aerial. "*M'aidez!*" he called. "Help us! We're lost."

He could hear Sam muttering. "May day!" Sam echoed into his dead radio. "May day! We're lost."

Bruce cradled the delirious boy in his arm and repeated again, "*M'aidez!* Get a bearing on us." He paused, then echoed, "May day!

May day!"

After a while he readjusted the valves, then went back to repeating endlessly, "May day! Get a bearing on us."

He did not feel it when a hand clasped his shoulder. He was still muttering "May day!" when they dumped him into the air lock of the desert car.

Mr. Andrews visited him in the infirmary at Base Camp. "How are you, Bruce?"

"Me? I'm all right, sir. I wish they'd let me get up."

"My instructions. So I'll know where you are." The Scoutmaster smiled; Bruce blushed.

"How's Sam?" he asked.

"He'll get by. Cold burns and a knee that will bother him a while. That's all."

"Gee, I'm glad."

"The troop is leaving. I'm turning you over to Troop Three, Mr. Harkness. Sam will go back with the grub car."

"Uh, I think I could travel with the Troop, sir."

"Perhaps so, but I want you to stay with Troop Three. You need field experience."

"Uh—" Bruce hesitated, wondering how to say it. "Mr. Andrews?"

"Yes?"

"I might as well go back. I've learned something. You were right. A fellow can't get to be an old Moon hand in three weeks. Uh . . . I guess I was just conceited."

"Is that all?"

"Well—yes, sir."

"Very well, listen to me. I've talked with Sam and with Mr. Harkness. Mr. Harkness will put you through a course of sprouts; Sam and I will take over when you get back. You plan on being ready for the Court of Honor two weeks from Wednesday." The Scoutmaster added, "Well?"

Bruce gulped and found his voice. "Yes, sir!"

POOR DADDY

Mother is too busy for anything, except that she is always taking on more jobs. She can do them, too, and it never matters whether they’re something that Grandmother would call “ladylike.”

She practically built our new house—only it wasn’t new when we moved into it. For about three months, turpentine flavor would show up in the butterscotch pudding, or Daddy would complain that he didn’t mind not being able to use his electric razor while Mother was installing new wiring, but he *would* appreciate it if his other razor weren’t used to skin insulation.

Mother wouldn’t hear him; she’d be rebuilding the staircase, or something.

Eventually the house was finished, except for clearing out the garage so that the car could be kept inside, and covering the pipes in the new bathroom, and a few other things that Mother could do any day she had to wait for a pot roast to finish cooking. It left her with nothing to do, except teaching Sunday School and managing the Cornmunity Chest drive and seeing that Daddy changed his shirts and keeping up with her painting and the play she was writing.

Daddy suggested that she improve her mind, but Mother said nonsense, Daddy had all the mind the family needed. Daddy is fearfully learned about tribal customs and Yucatan culture and things like that. Besides, Mother pointed out that she had rerigged her bookrack so that it would go on the vacuum cleaner as well as over the sink, so she was already improving her mind. What she needed was exercise.

Daddy invited her to go fishing, but Mother said it wasn’t exercise the way he did it, practically urging the fish not to disturb him. Daddy said the fish got plenty of exercise and who was he to insist on all the benefits? Daddy talks that way because the freshmen laugh.

Anyhow, that’s why we took up figure skating.

Not Daddy—just Mother and Junior and me. Daddy said he had tried skating once and he had weak ankles, just go ahead and enjoy ourselves. He took out a family accident insurance policy and forgot the matter.

I liked figure skating, all but getting your pants wet if you take a tumble. I know why they call that other sort “dry” ice; the kind you skate on isn’t. Junior liked it because he could go slamming around, bumping into people and being a nuisance to his elders. But Mother took to it as if all her life had been preparation for this consummation.

She never was good at school figures; Mother’s style can’t be limited to a little patch of ice barely big enough for a figure eight. But dancing she loved— she was doing tangoes and waltzes and beginning to boss things when our club organized an ice carnival, while I was still struggling with the Mohawk in the fourteenstep. The fourteenstep is the first dance you learn; I was hopelessly outclassed by Mother, not a desirable thing, except that; as a result of my difficulties with the Mohawk, Cliff came into my life.

A Mohawk is not an Indian and neither is Cliff. A Mohawk is a transition from front to back while passing from one edge on one foot to a similar edge on the other foot. That doesn’t seem clear—anyhow you skate forward as fast as you can and suddenly turn and skate backward. All this while your partner has his feet crossed, and you are in a close embrace, and while turning a corner that you can't see. It would help to dislocate both knees. In fact, you can hardly avoid it. I explained it to Daddy and he said it didn't sound practical, except possibly in a wheelchair.

You may wonder why I persisted. Well, in the first place it was my battle with the Mohawk that caused Cliff to introduce himself and start teaching me. That was good. In the second place they say that love will cause a man to put up with a poor skating partner for ninety days— maybe six months, if it's true love. That was bad. The way I figured it I had a maximum of half a year in which to master that Mohawk—or put Cliff out of my life and devote myself to good works.

That Mohawk nearly stopped me, but Cliff was very patient. He said the trouble might be the fit of my boots, and got me some heel liners. I finally learned it after a fashion, and Cliff went on to teach me other things.

The Mohawk never bothered Mother. She was past it and learning the cut-off in the fox trot, which is even trickier, and zipping through seven or eight other dance patterns. Mother never actually danced well, but she could dance and she could hold up her partner in a pinch. Mother is little but tough. I am more a Junoesque type. She developed a bouncy style of her own. Our club professional gave up trying to smooth it out and let her learn new things as fast as she wanted to, which was just as well.

In March Daddy came to see the carnival and the dance that followed. He complimented Mother on the costumes, which she had made, of course. But the dancing afterward gave him pause. Mother is very popular on the ice—even Cliff would rather dance with her than with me. I suppose that it should have made Daddy proud to see how the mother of his progeny was sought after; instead he looked thoughtful. He remarked that the tango should be restricted to married couples, or at least considered tantamount to an engagement.

Mother said pish and tush.

Daddy dropped in at the rink and watched the dancing once or twice after that. When school closed he left on a long fishing trip and didn't urge Mother to go along, which worried me, but Mother said he was accepting the universe. Usually Daddy makes the universe accept him. It seemed odd. The importance of a stable family background for the adolescent is emphasized in all the textbooks, as well as in the more interesting works on psychology Daddy means to keep locked up; I decided I had better keep an eye on things.

Daddy sent back cards postmarked Green Mountain Falls, Colorado, and some fish packed in ice.

When he got back he showed an interest in skating and borrowed Mother's Primer of Figure Skating. One evening when Mother, Junior, and I returned from the rink, Daddy put down the book and announced, "Martha, I have concluded that figure skating is fundamentally simple."

Mother should have been wary. She said, "Yes, dear? That's nice," and sailed out to throw dinner together.

"Yes," he said, following her. "It is simple physics, primarily the conservation of angular momentum, plus laws relating to the acquirement of reflex patterns; Figure skating may be learned rapidly by analyzing each move, then being sure to do it correctly the first time. Anyone of adequate mentality should acquire the art in a short time."

"Hmm," said Mother. "I suppose you can apply these principles you've discovered?"

"Certainly," Daddy told her. "Skating is ordinarily taken up by the very young, whose habits of mental discipline are not formed. Or, conversely, by older people—but casually rather than systematically. I wish I had time to demonstrate it. However, the principles are clear from my analysis."

And that is why we all went to the rink the following Friday.

Mother started to pick out skates for Daddy. He waved her out of the skate shop. "I shall do this methodically," he said. "I'll see you all on the ice."

I've never seen Mother in such a dither. "Your father is such a child! Maureen, you help him when he steps on the ice—the mood he's in, he won't let me. Oh, dear! I wonder if I still know how to apply a traction splint?"

"Probably be his head, rather than his leg," I offered. It didn't console her.

I didn't get a chance to help, as he was met at the ice by Miss Swenson, our club professional. "I arranged by telephone for Miss Swenson's help, my dear," he said to Mother. With that he stepped down on his toe picks, just as it says in the book.

Miss Swenson flashed Mothera smile and said, "Don't worry, I'll take care of him."

Mother said, "Who said I was worried?" and skittered off. She looked mad.

Miss Swenson towed Daddy to the pen where the bunnies practice. Then she said sweetly to me, "Now, Maureen, go skate somewhere else. Just pretend your father isn't here at all." I can take a hint; I went back to my patch and practiced inside edges.

Mother joined me. "Is he all right?" she asked.

"Probably. Miss Swenson hardly ever maims them."

"I'll just skate down and see how they're making out."

"I wouldn't," I told her. "I got chased out. They don't want an audience."

Mother said, "They'll be too busy to notice me." She came back with her cheeks red and started doing loops like mad.

Presently the music started for dancing. Mother had ducked into the girls' room to restore her makeup and her confidence. The first dance was a fourteenstep.

Dad and Miss Swenson came out onto the dance floor. They actually lined up to start the dance with the others!

I closed both eyes. Dear heaven, I thought, don't let him do it. Oh, don't let him fall—they'll cut my poor Daddy to ribbons. The fourteenstep is awfully fast. If you fall down, it's just like being caught by traffic lights.

Finally I opened my eyes to see if I were going to be an orphan. Cliff skated up and said, "Skate this one, Puddin'?"

I said I might never skate again and tried to pick out Daddy. Finally I saw him, away down the ice. He was in the four-beat roll that carries you down the rink, and he was actually doing it—or sort of. I've seen circus bears that skated better, but he was still on his skates. I decided that Miss Swenson must be stronger than I'd thought.

There was stilt the corner to turn and it was coming at him. The ladies' Mohawk may forever remain my bugaboo, but the men's Mohawk is no slouch, and it comes right at the turn. I got ready to identify the body.

Then he was past it and Miss Swenson was faking to cover up the extra steps he took. He turned the corner without even missing the beat. I wanted to cheer but my throat was dry.

Mother showed up. "Where's your father, Maureen?" she demanded.

I pointed. They were swooping down the ice, and Daddy's roll was deeper this time.

It was the only time I've seen Mother start to faint. She managed to control it, but I had to grab her to keep her from sitting down suddenly on some very wet ice. The music stopped and Daddy skated up alone. "My dear," he said to Mother, "this next is a tango. Would you essay it with me?"

Mother grabbed him. "Charles!" she shrilled. "Get off this ice! You'll kill yourself—I don't know how that woman could take you out in that traffic!"

"Quiet, my dear," said Daddy. "I am unhurt. Will you tango with me, or shall I dance with my instructor?"

"You can't tango!"

"I have studied the pattern carefully. I expect to retain a semblance of the moves."

They tangoed. It wasn't good, but Daddy had not been woofing about memorizing the pattern. My own wasn't much better—I kept changing sides with Cliff at the wrong times, trying to watch.

We rode home in silence. I got Junior aside when we got home. "What did you think of Daddy's skating?" I asked.

"Huh? Dad's a terrible skater."

"Weren't you amazed that he could skate at all?"

"Why?" was all I could get out of him.

I didn't discuss it with Daddy until three days later, because it took that long to collect facts. I tackled him privately. "Daddy," I said, "something is worrying me."

"Well, Puddin'? Can I help?"

"Perhaps, since you are more experienced than I."

"Easy now! What are you leading up to?"

"Well, what would you think of a person who deceived someone?"

"It depends on the circumstances. For example, deception is justifiable around Christmas and before birthdays."

"Oh." I considered. "I don't know what category this belongs in."

"Well, spill it."

"Very well, then. It says in your logic text that when apparent facts lead to contradictions, each alleged fact should be tested. I have reason to believe that the sort of fish you sent home are not found in the lake at Green Mountain Falls."

"Who said they were? There are other places to fish."

"I suppose so. It occurred to me that both Green Mountain Falls and Broadmoor are suburbs of Colorado Springs."

"Go on."

"Broadmoor reminded me of the figure-skating school at the ice palace there each summer." -

"Yes?"

"One conjecture led to another. I remembered that Miss Swenson teaches at the rink over in Centerville mornings, and that you don't have any morning classes at present."

"Hmm. . . Did Miss Swenson show any interest in your conjectures?"

"Oh, Miss Swenson is incorruptible! But, Daddy, George at the skate shop is not so difficult. Cliff got him to recall that some skates were shipped to him from Colorado Springs recently. For five dollars he thinks he could remember whose they were."

"Tell Cliff not to waste his money. What is your object in this snooping, young lady? Not something your mother thought of?"

"Oh, no, Daddy! Mother is baffled."

"Then why—"

"At first it was just curiosity. Since then, however—"

"Yes?"

"After I had the facts, I still couldn't see the reason. Why the mystery? Come clean, Daddy."

He stopped to load his pipe. "Put yourself in my place, Puddin'. Suppose the girl of your dreams was being chased after by a bunch of young bucks who could cut didos on the ice. What would you do?"

"Why, uh—I'd learn to skate," I answered automatically. I was dazed. Imagine it! Romance—jealousy!—at Daddy's age!

"Yes, but not in public. It wouldn't do to go stumbling around with your mother hovering over me and explaining how I wasn't the athletic type and wasn't it brave of me? I had to impress her."

"Oh. I see your point, Daddy."

I suppose that should have settled it, but I had one more thing in mind. "Oh, Daddy—"

"Yes, Puddin'?"

"I'm glad you comprehend the crucial symbolic importance skating can have in relationships between the sexes, because then you will understand—" I stopped. I couldn't tell him anything about Cliff because Cliff doesn't know yet that he's going to marry me. Men are so complicated.

Daddy raised his brows. "Understand what, Puddin'? And where did you get all those big words? Not from me, I trust."

"No—I mean, yes." I hesitated; this was going to be touchy. "Well, to get to the point, Daddy, during my investigations I examined your skates. They're awfully nice. If I had Stanzione boots and Olympiad blades like yours, I might make marvelously fast progress myself. Of course, I'd keep your grisly secret," I added hastily.

"Blackmail!" Daddy said. "Puddin', men have been shot at sunrise for less."

"I suppose so, Daddy."

"You are almost too big to spank."

"I'm glad you think so, Daddy. It makes everything simpler."

"I said almost. However, you're getting older and have heavier expenses. Suppose I raise your allowance. Then, if you need skates, I'll advance the cash and deduct it."

"This is a private arrangement, Daddy?"

He shook his head. "Say anything you like. You will have to judge moral problems for yourself."

Daddy is such a lamb.

The Man Who Sold The Moon

Chapter One

"You've got to be a believer!"

George Strong snorted at his partner's declaration. "Delos, why don't you give up? You've been singing this tune for years. Maybe someday men will get to the Moon, though I doubt it. In any case, you and I will never live to see it. The loss of the power satellite washes the matter up for our generation."

D. D. Harriman grunted. "We won't see it if we sit on our fat behinds and don't do anything to make it happen. But we can make it happen."

"Question number one: how? Question number two: why?"

"'Why?' The man asks 'why.' George, isn't there anything in your soul but discounts, and dividends? Didn't you ever sit with a girl on a soft summer night and stare up at the Moon and wonder what was there?"

"Yeah, I did once. I caught a cold."

Harriman asked the Almighty why he had been delivered into the hands of the Philistines. He then turned back to his partner. "I could tell you why, the real 'why,' but you wouldn't understand me. You want to know why in terms of cash, don't you? You want to know how Harriman & Strong and Harriman Enterprises can show a profit, don't you?"

"Yes," admitted Strong, "and don't give me any guff about tourist trade and fabulous lunar jewels. I've had it."

"You ask me to show figures on a brand-new type of enterprise, knowing I can't. It's like asking the Wright brothers at Kitty Hawk to estimate how much money Curtiss-Wright Corporation would someday make out of building airplanes. I'll put it another way, You didn't want us to go into plastic houses, did you? If you had had your way we would still be back in Kansas City, subdividing cow pastures and showing rentals."

Strong shrugged.

"How much has New World Homes made to date?"

Strong looked absentminded while exercising the talent he brought to the partnership. "Uh . . . $172,946,004.62, after taxes, to the end of the last fiscal year. The running estimate to date is—"

"Never mind. What was our share in the take?"

"Well, uh, the partnership, exclusive of the piece you took personally and then sold to me later, has benefited from New World Homes during the same period by $13,010,437.20, ahead of personal taxes. Delos, this double taxation has got to stop. Penalizing thrift is a sure way to run this country straight into—"

"Forget it, forget it! How much have we made out of Skyblast Freight and Antipodes Transways?"

Strong told him.

"And yet I had to threaten you with bodily harm to get you to put up a dime to buy control of the injector patent. You said rockets were a passing fad."

"We were lucky," objected Strong. "You had no way of knowing that there would be a big uranium strike in Australia. Without it, the Skyways group would have left us in the red. For that matter New World Homes would have failed, too, if the roadtowns hadn't come along and given us a market out from under local building codes."

"Nuts on both points. Fast transportation will pay; it always has. As for New World, when ten million families need new houses and we can sell 'em cheap, they'll buy. They won't let building codes stop them, not permanently. We gambled on a certainty. Think back, George: what ventures have we lost money on and what ones have paid off? Everyone of my crack-brain ideas has made money, hasn't it? And the only times we've lost our ante was on conservative, blue-chip investments."

"But we've made money on some conservative deals, too," protested Strong.

"Not enough to pay for your yacht. Be fair about it, George; the Andes Development Company, the integrating pantograph patent, every one of my wildcat schemes I've had to drag you into—and every one of them paid."

"I've had to sweat blood to make them pay," Strong grumbled.

"That's why we are partners. I get a wildcat by the tail; you harness him and put him to work. Now we go to the Moon—and you'll make it pay."

"Speak for yourself. I'm not going to the Moon."

"I am."

"Hummph! Delos, granting that we have gotten rich by speculating on your hunches, it's a steelclad fact that if you keep on gambling you lose your shirt. There's an old saw about the pitcher that went once too often to the well."

"Damn it, George—I'm going to the Moon! If you won't back me up, let's liquidate and I'll do it alone."

Strong drummed on his desk top. "Now, Delos, nobody said anything about not backing you up."

"Fish or cut bait. Now is the opportunity and my mind's made up. I'm going to be the Man in the Moon."

"Well . . . let's get going. We'll be late to the meeting."

As they left their joint office, Strong, always penny conscious, was careful to switch off the light. Harriman had seen him do so a thousand times; this time he commented. "George, how about a light switch that turns off automatically when you leave a room?"

"Hmm—but suppose someone were left in the room?"

"Well. . . hitch it to stay on only when someone was in the room—key the switch to the human body's heat radiation, maybe."

"Too expensive and too complicated."

"Needn't be. I'll turn the idea over to Ferguson to fiddle with. It should be no larger than the present light switch and cheap enough so that the power saved in a year will pay for it."

"How would it work?" asked Strong.

"How should I know? I'm no engineer; that's for Ferguson and the other educated laddies."

Strong objected, "It's no good commercially. Switching off a light when you leave a room is a matter of temperament. I've got it; you haven't. If a man hasn't got it, you can't interest him in such a switch."

"You can if power continues to be rationed. There is a power shortage now; and there will be a bigger one."

"Just temporary. This meeting will straighten it out."

"George, there is nothing in this world so permanent as a temporary emergency. The switch will sell."

Strong took out a notebook and stylus. "I'll call Ferguson in about it tomorrow."

Harriman forgot the matter, never to think of it again. They had reached the roof; he waved to a taxi, then turned to Strong. "How much could we realize if we unloaded our holdings in Roadways and in Belt Transport Corporation—yes, and in New World Homes?"

"Huh? Have you gone crazy?"

"Probably. But I'm going to need all the cash you can shake loose for me. Roadways and Belt Transport are no good anyhow; we should have unloaded earlier."

"You *are* crazy! It's the one really conservative venture you've sponsored."

"But it wasn't conservative when I sponsored it. Believe me, George, roadtowns are on their way out. They are growing moribund, just as the railroads did. In a hundred years there won't be a one left on the continent. What's the formula for making money, George?"

"Buy low and sell high."

"That's only half of it. . . *your* half. We've got to guess which way things are moving, give them a boost, and see that we are cut in on the ground floor. Liquidate that stuff, George; I'll need money to operate." The taxi landed; they got in and took off.

The taxi delivered them to the roof of the Hemisphere Power Building they went to the power syndicate's board room, as far below ground as the landing platform was above—in those days, despite years of peace, tycoons habitually came to rest at spots relatively immune to atom bombs. The room did not seem like a bomb shelter; it appeared to be a chamber in a luxurious penthouse, for a "view window" back of the chairman's end of the table looked out high above the city, in convincing, live stereo, relayed from the roof.

The other directors were there before them. Dixon nodded as they came in, glanced at his watch finger and said, "Well, gentlemen, our bad boy is here, we may as well begin." He took the chairman's seat and rapped for order.

"The minutes of the last meeting are on your pads as usual. Signal when ready." Harriman glanced at the summary before him and at once flipped a switch on the table top; a small green light flashed on at his place. Most of the directors did the same.

"Who's holding up the procession?" inquired Harriman, looking around. "Oh—you, George. Get a move on."

"I like to check the figures," his partner answered testily, then flipped his own switch. A larger green light showed in front of Chainnan Dixon, who then pressed a button; a transparency, sticking an inch or two above the table top in front of him lit up with the word RECORDING.

"Operations report," said Dixon and touched another switch. A female voice came out from nowhere. Harriman followed the report from the next sheet of paper at his place. Thirteen Curie-type power piles were now in operation, up five from the last meeting. The Susquehanna and Charleston piles had taken over the load previously borrowed from Atlantic Roadcity and the roadways of that city were now up to normal speed. It was expected that the Chicago-Angeles road could be restored to speed during the next fortnight. Power would continue to be rationed but the crisis was over.

All very interesting but of no direct interest to Harriman. The power crisis that had been caused by the explosion of the power satellite was being satisfactorily met—very good, but Harriman's interest in it lay in the fact that the cause of interplanetary travel had thereby received a setback from which it might not recover.

When the Harper-Erickson isotopic artificial fuels had been developed three years before it had seemed that, in addition to solving the dilemma of an impossibly dangerous power source which was also utterly necessary to the economic life of the continent, an easy means had been found to achieve interplanetary travel.

The Arizona power pile had been installed in one of the largest of the Antipodes rockets, the rocket powered with isotopic fuel created in the power pile itself, and the whole thing was placed in an orbit around the Earth. A much smaller rocket had shuttled between satellite and Earth, carrying supplies to the staff of the power pile, bringing back synthetic radioactive fuel for the power-hungry technology of Earth.

As a director of the power syndicate Harriman had backed the power satellite—with a private ax to grind: he expected to power a Moon ship with fuel manufactured in the power satellite and thus to achieve the first trip to the Moon almost at once. He had not even attempted to stir the Department of Defense out of its sleep; he wanted no government subsidy—the job was a cinch; anybody could do it—and Harriman would do it. He had the ship; shortly he would have the fuel.

The ship had been a freighter of his own Antipodes line, her chem-fuel motors replaced, her wings removed. She still waited, ready for fuel—the recommissioned *Santa Maria*, nee *City of Brisbane*.

But the fuel was slow in coming. Fuel had to be eannarked for the shuttle rocket; the power needs of a rationed continent came next—and those needs grew faster than the power satellite could turn out fuel. Far from being ready to supply him for a "useless" Moon trip, the syndicate had seized on the safe but less efficient low temperature uranium-salts and heavy water, Curie-type power piles as a means of using uranium directly to meet the ever growing need for power, rather than build and launch more satellites.

Unfortunately the Curie piles did not provide the fierce star-interior conditions necessary to breeding the isotopic fuels needed for an atomic-powered rocket. Harriman had reluctantly come around to the notion that he would have to use political pressure to squeeze the necessary priority for the fuels he wanted for the *Santa Maria*.

Then the power satellite had blown up.

Harriman was stirred out of his brown study by Dixon's voice. "The operations report seems satisfactory, gentlemen. If there is no objection, it will be recorded as accepted. You will note that in the next ninety days we will be back up to the power level which existed before we were forced to close down the Arizona pile."

"But with no provision for future needs," pointed out Harriman. "There have been a lot of babies born while we have been sitting here."

"Is that an objection to accepting the report, D.D.?"

"No."

"Very well. Now the public relations report—let me call attention to the first item, gentlemen. The vice-president in charge recommends a schedule of annuities, benefits, scholarships and so forth for dependents of the staff of the power satellite and of the pilot of the *Charon*: see appendix 'C'."

A director across from Harriman—Phineas Morgan, chairman of the food trust, Cuisine, Incorporated—protested, "What is this, Ed? Too bad they were killed of course, but we paid them skyhigh wages and carried their insurance to boot. Why the charity?"

Harriman grunted. "Pay it—I so move. It's peanuts. 'Do not bind the mouths of the kine who tread the grain.'"

"I wouldn't call better than nine hundred thousand 'peanuts,'" protested Morgan.

"Just a minute, gentlemen—" It was the vice-president in charge of public relations, himself a director. "If you'll look at the breakdown, Mr. Morgan, you will see that eighty-five percent of the appropriation will be used to publicize the gifts."

Morgan squinted at the figures. "Oh—why didn't you say so? Well, I suppose the gifts can be considered unavoidable overhead, but it's a bad precedent."

"Without them we have nothing to publicize."

"Yes, but—"

Dixon rapped smartly. "Mr. Harriman has moved acceptance. Please signal your desires." The tally board glowed green; even Morgan, after hesitation, okayed the allotment. "We have a related item next," said Dixon. "A Mrs.—uh, Garfield, through her attorneys, alleges that we are responsible for the congenital crippled condition of her fourth child. The putative facts are that her child was being born just as the satellite exploded and that Mrs. Garfield was then on the meridian underneath the satellite. She wants the court to award her half a million."

Morgan looked at Harriman. "Delos, I suppose that you will say to settle out of court."

"Don't be silly. We fight it."

Dixon looked around, surprised. "Why, D.D.? It's my guess we could settle for ten or fifteen thousand—and that was what I was about to recommend. I'm surprised that the legal department referred it to publicity."

"It's obvious why; it's loaded with high explosive. But we should fight, regardless of bad publicity. It's not like the last case; Mrs. Garfield and her brat are not our people. And any dumb fool knows you can't mark a baby by radioactivity at birth; you have to get at the germ plasm of the previous generation at least. In the third place, if we let this get by, we'll be sued for every double-yolked egg that's laid from now on. This calls for an open allotment for defense and not one damned cent for compromise."

"It might be very expensive," observed Dixon.

"It'll be more expensive not to fight. If we have to, we should buy the judge."

The public relations chief whispered to Dixon, then announced, "I support Mr. Harriman's view. That's my department's recommendation."

It was approved. "The next item," Dixon went on, "is a whole sheaf of suits arising out of slowing down the roadcities to divert power during the crisis. They alleged loss of business, loss of time, loss of this and that, but they are all based on the same issue. The most touchy, perhaps, is a stockholder's suit which claims that Roadways and this company are so interlocked that the decision to divert the power was not done in the interests of the stockholders of Roadways. Delos, this is your pidgin; want to speak on it?"

"Forget it."

"Why?"

"Those are shotgun suits. This corporation is not responsible; I saw to it that Roadways volunteered to sell the power because I anticipated this. And the directorates don't interlock; not on paper, they don't. That's why dummies were born. Forget it—for every suit you've got there, Roadways has a dozen. We'll beat them."

"What makes you so sure?"

"Well—" Harriman lounged back and hung a knee over the arm of his chair. "—a good many years ago I was a Western Union messenger boy. While waiting around the office I read everything I could lay hands on, including the contract on the back of the telegram forms. Remember those? They used to come in big pads of yellow paper; by writing a message on the face of the form you accepted the contract in the fine print on the backT only most people didn't realize that. Do you know what that contract obhgated the company to do?"

"Send a telegram, I suppose."

"It didn't promise a durn thing. The company offered to *attempt* to deliver the message, by camel caravan or snail back, or some equally streamlined method, if convenient, but in event of failure, the company was not responsible. I read that fine print until I knew it by heart. It was the loveliest piece of prose I had ever seen. Since then all my contracts have been worded on the same principle. Anybody who sues Roadways will find that Roadways can't be sued on the element of time, because time is not of the essence. In the event of complete non-performance—which hasn't happened yet— Roadways is financially responsible only for freight charges or the price of the personal transportation tickets. So forget it."

Morgan sat up. "D.D., suppose I decided to run up to my country place tonight, by the roadway, and there was a failure of some sort so that I didn't get there until tomorrow? You mean to say Roadways is not liable?"

Harriman grinned. "Roadways is not liable even if you starve to death on the trip. Better use your copter." He turned back to Dixon. "I move that we stall these suits and let Roadways carry the ball for us."

"The regular agenda being completed," Dixon announced later, "time is allotted for our colleague, Mr. Harriman, to speak on a subject of his own choosing. He has not listed a subject in advance, but we will listen until it is your pleasure to adjourn."

Morgan looked sourly at Harriman. "I move we adjourn."

Harriman grinned. "For two cents I'd second that and let you die of curiosity." The motion failed for want of a second. Harriman stood up.

"Mr. Chairman, friends—" He then looked at Morgan. "—and associates. As you know, I am interested in space travel."

Dixon looked at him sharply. "Not that again, Delos! If I weren't in the chair, I'd move to adjourn myself."

"'That again'," agreed Harriman. "Now and forever. Hear me out. Three years ago, when we were crowded into moving the Arizona power pile out into space, it looked as if we had a bonus in the shape of interplanetary travel. Some of you here joined with me in forming Spaceways, Incorporated, for experimentation, exploration—and exploitation.

"Space was conquered; rockets that could establish orbits around the globe could be modified to get to the Moon—and from there, anywhere! It was just a matter of doing it. The problems remaining were financial—and political.

"In fact, the real engineering problems of space travel have been solved since World World II. Conquering space has long been a matter of money and politics. But it did seem that the Harper-Erickson process, with its concomitant of a round-the-globe rocket and a practical economical rocket fuel, had at last made it a very present thing, so close indeed that I did not object when the early allotments of fuel from the satellite were earmarked for industrial power."

He looked around. "I shouldn't have kept quiet. I should have squawked and brought pressure and made a hairy nuisance of myself until you allotted fuel to get rid of me. For now we have missed our best chance. The satellite is gone; the source of fuel is gone. Even the shuttle rocket is gone. We are back where we were in 1950. Therefore —"

He paused again. "Therefore—I propose that we build a space ship and send it to the Moon!"

Dixon broke the silence. "Delos, have you come unzipped? You just said that it was no longer possible. Now you say to build one."

"I didn't say it was impossible; I said we had missed our best chance. The time is overripe for space travel. This globe grows more crowded every day. In spite of technical advances the daily food intake on this planet is lower than it was thirty years ago—and we get

46 new babies every minute, 68,000 every day, 25,000,000 every year. Our race is about to burst forth to the planets; if we've got the initiative Cod promised an oyster we will help it along!

"Yes, we missed our best chance-but the engineering details can be solved. The real question is who's going to foot the bill? That is why I address you gentlemen, for right here in this room is the financial capital of this planet."

Morgan stood up. "Mr. Chairman, if all *company* business is finished, I ask to be excused."

Dixon nodded. Harriman said, "So long, Phineas. Don't let me keep you. Now, as I was saying, it's a money problem and here is where the money is. I move we finance a trip to the Moon."

The proposal produced no special excitement; these men knew Harriman. Presently Dixon said, "Is there a second to D.D.'s proposal?"

"Just a minute, Mr. Chairman—" It was Jack Entenza, president of Two-Continents Amusement Corporation. "I want to ask Delos some questions." He turned to Harriman. "D.D., you know I strung along when you set up Spaceways. It seemed like a cheap venture and possibly profitable in educational and scientific values—I never did fall for space liners plying between planets; that's fantastic. I don't mind playing along with your dreams to a moderate extent, but how do you propose to get to the Moon? As you say, you are fresh out of fuel."

Harriman was still grinning. "Don't kid me, Jack, I know why you came along. You weren't interested in science; you've never contributed a dime to science. You expected a monopoly on pix and television for your chain. Well, you'll get 'em, if you stick with me—otherwise I'll sign up 'Recreations, Unlimited'; they'll pay just to have you in the eye."

Entenza looked at him suspiciously. "What will it cost me?"

"Your other shirt, your eye teeth, and your wife's wedding ring—unless 'Recreations' will pay more."

"Damn you, Delos, you're crookeder than a dog's hind leg."

"From you, Jack, that's a compliment. We'll do business. Now as to how I'm going to get to the Moon, that's a silly question. There's not a man in here who can cope with anything more complicated in the way of machinery than a knife and fork. You can't tell a lefthanded monkey wrench from a reaction engine, yet you ask me for blue prints of a space ship.

"Well, I'll tell you how I'll get to the Moon. I'll hire the proper brain boys, give them everything they want, see to it that they have all the money they can use, sweet talk them into long hours—then stand back and watch them produce. I'll run it like the Manhattan Project—most of you remember the A-bomb job; shucks, some of you can remember the Mississippi Bubble. The chap that headed up the Manhattan Project didn't know a neutron from Uncle George—but he got results. They solved that trick *four ways*. That's why I'm not worried about fuel; we'll get a fuel. We'll get several fuels."

Dixon said, "Suppose it works? Seems to me you're asking us to bankrupt the company for an exploit with no real value, aside from pure science, and a one-shot entertainment exploitation. I'm not against you—I wouldn't mind putting in ten, fifteen thousand to support a worthy venture—but I can't see the thing as a business proposition."

Harriman leaned on his fingertips and stared down the long table. "Ten or fifteen thousand gum drops! Dan, I mean to get into you for a couple of megabucks *at least*—and before we're through you'll be hollering for more stock. This is the greatest real estate venture since the Pope carved up the New World. Don't ask me what we'll make a profit on; I can't itemize the assets—but I can lump them. The assets are a planet—a *whole planet*, Dan, that's never been touched. And more planets beyond it. If we can't figure out ways to swindle a few fast bucks out of a sweet set-up like that then you and I had better both go on relief. It's like having Manhattan Island offered to you for twenty-four dollars and a case of whiskey."

Dixon grunted. "You make it sound like the chance of a lifetime."

"Chance of a lifetime, nuts! This is' the greatest chance in all history. It's raining soup; grab yourself a bucket."

Next to Entenza sat Gaston P. Jones, director of TransAmerica and half a dozen other banks, one of the richest men in the room. He carefully removed two inches of cigar ash, then said dryly, "Mr. Harriman, I will sell you all of my interest in the Moon, present and future, for fifty cents."

Harriman looked delighted. "Sold!"

Entenza had been pulling at his lower lip and listening with a brooding expression on his face. Now he spoke up. "Just a minute, Mr. Jones—I'll give you a dollar for it."

"Dollar fifty," answered Harriman.

"Two dollars," Entenza answered slowly.

"Five!"

They edged each other up. At ten dollars Entenza let Harriman have it and sat back, still looking thoughtful. Harriman looked happily around. "Which one of you thieves is a lawyer?" he demanded. The remark was rhetorical; out of seventeen directors the normal percentage—eleven, to be exact—were lawyers. "Hey, Tony," he continued, "draw me up an instrument right *now* that will tie down this transaction so that it couldn't be broken before the Throne of God.

All of Mr. Jones' interests, rights, title, natural interest, future interests, interests held directly or through ownership of stock, presently held or to be acquired, and so forth and so forth. Put lots of Latin in it. The idea is that every interest in the Moon that Mr. Jones now has or may acquire is mine-for a ten spot, cash in hand paid." Harriman slapped a bill down on the table. "That right, Mr. Jones?"

Jones smiled briefly. "That's right, young fellow." He pocketed the bill. "I'll frame this for my grandchildren—to show them how easy it is to make money." Entenza's eyes darted from Jones to Harriman.

"Good!" said Harriman. "Gentlemen, Mr. Jones has set a market price for one human being's interest in our satellite. With around three billion persons on this globe that sets a price on the Moon of thirty billion dollars." He hauled out a wad of money. "Any more suckers? I'm buying every share that's offered, ten bucks a copy."

"I'll pay twenty!" Entenza rapped out.

Harriman looked at him sorrowfully. "Jack—don't do that! We're on the same team. Let's take the shares together, at ten."

Dixon pounded for order. "Gentlemen, please conduct such transactions after the meeting is adjourned. Is there a second to Mr. Harriman's motion?"

Gaston Jones said, "I owe it to Mr. Harriman to second his motion, without prejudice. Let's get on with a vote."

No one objected; the vote was taken. It went eleven to three against Harriman—Harriman, Strong, and Entenza for; all others against. Harriman popped up before anyone could move to adjourn and said, "I expected that. My real purpose is this: since the company is no longer interested in space travel, will it do me the courtesy of selling me what I may need of patents, processes, facilities, and so forth now held by the company but relating to space travel and not relating to the production of power on this planet? Our brief honeymoon with the power satellite built up a backlog; I want to use it. Nothing formal—just a vote that it is the policy of the company to assist me in any way not inconsistent with the primary interest of the company. How about it, gentlemen? It'll get me out of your hair."

Jones studied his cigar again. "I see no reason why we should not accommodate him, gentlemen . . . and I speak as the perfect disinterested party."

"I think we can do it, Delos," agreed Dixon, "only we won't sell you anything, we'll *lend* it to you. Then, if you happen to hit the jackpot, the company still retains an interest. Has anyone any objection?" he said to the room at large.

There was none; the matter was recorded as company policy and the meeting was adjourned. Harriman stopped to whisper with Entenza and, finally, to make an appointment. Gaston Jones stood near the door, speaking privately with Chairman Dixon. He beckoned to Strong, Harriman's partner. "George, may I ask a personal question?"

"I don't guarantee to answer. Go ahead."

"You've always struck me as a level-headed man. Tell me-why do you string along with Harriman? Why, the man's mad as a hatter."

Strong looked sheepish. "I ought to deny that, he's my friend . . . but I can't. But dawggone it! Every time Delos has a wild hunch, it turns out to be the real thing. I hate to string along—it makes me nervous—but I've learned to trust his hunches rather than another man's sworn financial report."

Jones cocked one brow. "The Midas touch, eh?"

"You could call it that."

"Well, remember what happened to King Midas—in the long run. Good day, gentlemen."

Harriman had left Entenza; Strong joined him. Dixon stood staring at them, his face very thoughtful.

Chapter Two

Harriman's home had been built at the time when everyone who could was decentralizing and going underground. Above ground there was a perfect little Cape Cod cottage—the clapboards of which concealed armor plate— and most delightful, skillfully landscaped grounds; below ground there was four or five times as much floorspace, immune to anything but a direct hit and possessing an independent air supply with reserves for one thousand hours. During the Crazy Years the conventional wall surrounding the grounds had been replaced by a wall which looked the same but which would stop anything short of a broaching tank—nor were the gates weak points; their gadgets were as personally loyal as a well-trained dog.

Despite its fortress-like character the house was comfortable. It was also very expensive to keep up.

Harriman did not mind the expense; Charlotte liked the house and it gave her something to do. When they were first married she had lived uncomplainingly in a cramped flat over a grocery store; if Charlotte now liked to play house in a castle, Harriman did not mind.

But he was again starting a shoestring venture; the few thousand per month of ready cash represented by the household expenses might, at some point in the game, mean the difference between success and the sheriff's bailiffs. That night at dinner, after the servants fetched the coffee, and port, he took up the matter.

"My dear, I've been wondering how you would like a few months in Florida."

His wife stared at him. "Florida? Delos, is your mind wandering? Florida is unbearable at this time of the year."

"Switzerland, then. Pick your own spot. Take a real vacation, as long as you like."

"Delos, you are up to something."

Harriman sighed. Being "up to something" was the unnameable and unforgivable crime for which any American male could be indicted, tried, convicted, and sentenced in one breath. He wondered how things had gotten rigged so that the male half of the race must always behave to suit feminine rules and feminine logic, like a snotty-nosed school boy in front of a stern teacher.

"In a way, perhaps. We've both agreed that this house is a bit of a white elephant. I was thinking of closing it, possibly even of disposing of the land— it's worth more now than when we bought it. Then, when we get around to it, we could build something more modern and a little less like a bombproof."

Mrs. Harriman was temporarily diverted. "Well, I *have* thought it might be nice to build another place, Delos—say a little chalet tucked away in the mountains, nothing ostentatious, not more than two servants, or three. But we won't close this place until it's built, Delos—after all, one must live somewhere."

"I was not thinking of building right away," he answered cautiously. "Why not? We're not getting any younger, Delos; if we are to enjoy the good things of life we had better not make delays. You needn't worry about it; I'll manage everything."

Harriman turned over in his mind the possibility of letting her build to keep her busy. If he earmarked the cash for her "little chalet," she would live in a hotel nearby wherever she decided to build it—and he could sell this monstrosity they were sitting in. With the nearest roadcity now less than ten miles away, the land should bring more than Charlotte's new house would cost and he would be rid of the monthly drain on his pocketbook.

"Perhaps you are right," he agreed. "But suppose you do build at once; you won't be living here; you'll be supervising every detail of the new place. I say we should unload this place; it's eating its head off in taxes, upkeep, and running expenses."

She shook her head. "Utterly out of the question, Delos. This is my home." He ground out an almost unsmoked cigar. "I'm sorry, Charlotte, but you can't have it both ways. If you build, you can't stay here. If you stay here, we'll close these belowground catacombs, fire about a dozen of the parasites I keep stumbling over, and live in the cottage on the surface. I'm cutting expenses."

"Discharge the servants? Delos, if you think that I will undertake to make a home for you without a proper staff, you can just—"

"Stop it." He stood up and threw his napkin down. "It doesn't take a squad of servants to make a home. When we were first married you had no servants—and you washed and ironed my shirts in the bargain. But we had a home then. This place is owned by that staff you speak of. Well, we're getting rid of them, all but the cook and a handy man."

She did not seem to hear. "Delos! sit down and behave yourself. Now what's all this about cutting expenses? Are you in some sort of trouble? Are you? Answer me!"

He sat down wearily and answered, "Does a man have to be in trouble to want to cut out unnecessary expenses?"

"In your case, yes. Now what is it? Don't try to evade me."

"Now see here, Charlotte, we agreed a long time ago that I would keep business matters in the office. As for the house, we simply don't need a house this size. It isn't as if we had a passel of kids to fill up—"

"*Oh*! Blaming me for *that* again!"

"Now see here, Charlotte," he wearily began again, "I never did blame you and I'm not blaming you now. All I ever did was suggest that we both see a doctor and find out what the trouble was we didn't have any kids. And for twenty years you've been making me pay for that one remark. But that's all over and done with now; I was simply making the point that two people don't fill up twentytwo rooms. I'll pay a reasonable price for a new house, if you want it, and give you an ample household allowance." He started to say how much, then decided not to. "Or you can close this place and live in the cottage above. It's just that we are going to quit squandering money—for a while."

She grabbed the last phrase. "'For a while.' What's going on, Delos? What are *you* going to squander money on?" When he did not answer she went on. "Very well, if you won't tell me, I'll call George. He will tell me."

"Don't do that, Charlotte. I'm warning you. I'll—"

"You'll what!" She studied his face. "I don't need to talk to George; I can tell by looking at you. You've got the same look on your face you had when you came home and told me that you had sunk all our money in those crazy rockets."

"Charlotte, that's not fair. Skyways paid off. It's made us a mint of money."

"That's beside the point. I know why you're acting so strangely; you've got that old trip-to-theMoon madness again. Well, I won't stand for it, do you hear? I'll stop you; I don't bave to put up with it. I'm going right down in the morning and see Mr. Kamens and find out what has to be done to make you behave yourself." The cords of her neck jerked as she spoke.

He waited, gathering his temper before going on. "Charlotte, you have no real cause for complaint. No matter what happens to me, your future is taken care of."

"Do you think I want to be a widow?"

He looked thoughtfully at her. "I wonder."

"Why— Why, you heartless *beast*." She stood up. "We'll say no more about it; do you mind?" She left without waiting for an answer.

His "man" was waiting for him when he got to his room. Jenkins got up hastily and started drawing Harriman's bath. "Beat it," Harriman grunted. "I can undress myself."

"You require nothing more tonight, sir?"

"Nothing. But don't go unless you feel like it. Sit down and pour yourself a drink. Ed, how long you been married?"

"Don't mind if I do." The servant helped himself. "Twentythree years, come May, sir."

"How's it been, if you don't mind me asking?"-

"Not bad. Of course there have been times—"

"I know what you mean. Ed, if you weren't working for me, what would you be doing?"

"Well, the wife and I have talked many times of opening a little restaurant, nothing pretentious, but good. A place where a gentleman could enjoy a quiet meal of good food."

"Stag, eh?"

"No, not entirely, sir—but there would be a parlor' for gentlemen only. Not even waitresses, I'd tend that room myself."

"Better look around for locations, Ed. You're practically in business."

Chapter Three

Strong entered their joint offices the next morning at a precise nine o'clock, as usual. He was startled to find Harriman there before him. For Harriman to fail to show up at all meant nothing; for him to beat the clerks in was significant.

Harriman was busy with a terrestrial globe and a book—the current Nautical Almanac, Strong observed. Harriman barely glanced up. "Morning, George. Say, who've we got a line to in Brazil?"

"Why?"

"I need some trained seals who speak Portuguese, that's why. And some who speak Spanish, too. Not to mention three or four dozen scattered around in this country. I've come across something very, very interesting. Look here. . . according to these tables the Moon only swings about twentyeight, just short of twenty-nine degrees north and south of the equator." He held a pencil against the globe and spun it. "Like that. That suggest anything?"

"No. Except that you're getting pencil marks on a sixty dollar globe."

"And you an old real estate operator! What does a man own when he buys a parcel of land?"

"That depends on the deed. Usually mineral rights and other subsurface rights are-"

"Never mind that. Suppose he buys the works, without splitting the rights: how far down does he own? How far up does he own?"

"Well, he owns a wedge down to the center of the Earth. That was settled in the slant-drilling and off-set oil lease cases. Theoretically he used to own the space above the land, too, out indefinitely, but that was modified by a series of cases after the commercial airlines came in —and a good thing, for us, too, or we would have to pay tolls every time one of our rockets took off for Australia."

"No, no, no, George! you didn't read those cases right. Right of passage was established—but *ownership* of the space above the land remained unchanged. And even right of passage was not absolute; you can build a thousand-foot tower on your own land right where airplanes, or rockets, or whatever, have been in the habit of passing and the ships will thereafter have to go above it, with no kick back on you. Remember how we had to lease the air south of Hughes Field to insure that our approach wasn't built up?"

Strong looked thoughtful. "Yes. I see your point. The ancient principle of land ownership remains undisturbed—down to the center of the Earth, up to infinity. But what of it? It's a purely theoretical matter. You're not planning to pay tolls to operate those spaceships you're always talking about, are you?" He grudged a smile at his own wit.

"Not on your tintype. Another matter entirely. George—*who owns the Moon?*"

Strong's jaw dropped, literally. "Delos, you're joking."

"I am not. I'll ask you again: if basic law says that a man owns the wedge of sky above his farm out to infinity, *who owns the Moon?* Take a look at this globe and tell me."

Strong looked. "But it can't mean anything, Delos. Earth laws wouldn't apply to the Moon."

"They apply here and that's where I am worrying about it. The Moon stays constantly over a slice of Earth bounded by latitude twenty-nine north and the same distance south; if one man owned all that belt of Earth—it's roughly the tropical zone-then he'd own the Moon, too, wouldn't he? By all the theories of real property ownership that our courts pay any attention to. And, by direct derivation, according to the sort of logic that lawyers like, the various owners of that belt of land have title-good vendable title—to the Moon somehow lodged collectively in them. The fact that the distribution of the title is a little vague wouldn't bother a lawyer; they grow fat on just such distributed titles every time a will is probated."

"It's fantastic!"

"George, when are you going to learn that 'fantastic' is a notion that doesn't bother a lawyer?"

"You're not planning to try to buy the entire tropical zone-that's what you would have to do."

"No," Harriman said slowly, "but it might not be a bad idea to buy right, title and interest in the Moon, as it may appear, from each of the sovereign countries in that belt. If I thought I could keep it quiet and not run the market up, I might try it. You can buy a thing awful cheap from a man if he thinks it's worthless and wants to sell before you regain your senses.

"But that's not the plan," he went on. "George, I want corporations — local corporations—in every one of those countries. I want the legislatures of each of those countries to grant franchises to its local corporation for lunar exploration, exploitation, et cetera, and the right to claim lunar soil on behalf of the country—with fee simple, naturally, being handed on a silver platter to the patriotic corporation that thought up the idea. And I want all this done quietly, so that the bribes won't go too high. We'll own the corporations, of course, which is why I need a flock of trained seals. There is going to be one hell of a fight one of these days over who owns the Moon; I want the deck stacked so that we win no matter how the cards are dealt."

"It will be ridiculously expensive, Delos. And you don't even know that you will ever get to the Moon, much less that it will be worth anything after you get there."

"We'll get there! It'll be more expensive not to establish these claims. Anyhow it need not be very expensive; the proper use of bribe money is a homoeopathic art—you use it as a catalyst. Back in the middle of the last century four men went from California to Washington with $40,000; it was all they had. A few weeks later they were broke-but Congress had awarded them a billion dollars' worth of railroad right of way. The trick is not to run up the market."

Strong shook his head. "Your title wouldn't be any good anyhow. The Moon doesn't stay in one place; it passes *over* owned land certainly—but so does a migrating goose."

"And nobody has title to a migrating bird. I get your point—but the Moon *always* stays over that one belt. If you move a boulder in your garden, do you lose title to it? Is it still real estate? Do the title laws still stand? This is like that group of real estate cases involving wandering islands in the Mississippi, George—the land moved as the river cut new channels, *but somebody always owned it.* In this case I plan to see to it that we are the 'somebody.'"

Strong puckered his brow. "I seem to recall that some of those island-andriparian cases were decided one way and some another."

"We'll pick the decisions that suit us. That's why lawyers' wives have mink coats. Come on, George; let's get busy."

"On what?"

"Raising the money."

"Oh." Strong looked relieved. "I thought you were planning to use our money."

"I am. But it won't be nearly enough. We'll use our money for the senior financing to get things moving; in the meantime we've got to work out ways to keep the money rolling in." He pressed a switch at his desk; the face of Saul Kamens, their legal chief of staff, sprang out at him. "Hey, Saul, can you slide in for a p0w-wow?"

"WThatever it is, just tell them 'no,'" answered the attorney. "I'll fix it."

"Good. Now come on in—they're moving Hell and I've got an option on the first ten loads."

Kamens showed up in his own good time. Some minutes later Harriman had explained his notion for claiming the Moon ahead of setting foot on it. "Besides those dummy corporations," he went on, "we need an agency that can receive contributions without having to admit any financial interest on the part of the contributor—like the National Geographic Society."

Kamens shook his head. "You can't buy the National Geographic Society."

"Damn it, who said we were going to? We'll set up our own."

"That's what I started to say."

"Good. As I see it, we need at least one tax-free, nonprofit corporation headed up by the right people-we'll hang on to voting control, of course. We'll probably need more than one; we'll set them up as we need them. And we've got to have at least one new ordinary corporation, *not* tax-free— but it won't show a profit until we are ready. The idea is to let the nonprofit corporations have all of the prestige and all of the publicity—and the other gets all of the profits, if and when. We swap assets around between corporations, always for perfectly valid reasons, so that the nonprofit corporations pay the expenses as we go along. Come to think about it, we had better have at least two ordinary corporations, so that we can let one of them go through bankruptcy if we find it necessary to shake out the water. That's the general sketch. Get busy and fix it up so that it's legal, will you?"

Kamens said, "You know, Delos, it would be a lot more honest if you did it at the point of a gun."

"A lawyer talks to me of honesty! Never mind, Saul; I'm not actually going to cheat anyone-"

"Humph!"

"—and I'm just going to make a trip to the Moon. That's what everybody will be paying for; that's what they'll get. Now fix it up so that it's legal, that's a good boy."

"I'm reminded of something the elder Vanderbilt's lawyer said to the old man under similar circumstances: 'It's beautiful the way it is; why spoil it by making it legal?' Okeh, brother gonoph, I'll rig your trap. Anything else?"

"Sure. Stick around, you might have some ideas. George, ask Montgomery to come in, will you?" Montgomery, Harriman's publicity chief, had two virtues in his employer's eyes: he was personally loyal to Harriman, and, secondly, he was quite capable of planning a campaign to convince the public that Lady Godiva wore a *Caresse*-brand girdle during her famous ride . . . or that Hercules attributed his strength to Crunchies for breakfast.

He arrived with a large portfolio under his arm. "Glad you sent for me, Chief. Get a load of this—" He spread the folder open on Harriman's desk and began displaying sketches and layouts. "Kinsky's work—is that boy hot!" Harriman closed the portfolio. "What outfit is it for?"

"Huh? New World Homes."

"I don't want to see it; we're dumping New World Homes. Wait a minute-don't start to bawl. Have the boys go through with it; I want the price kept up while we unload. But open your ears to another matter." He explained rapidly the new enterprise.

Presently Montgomery was nodding. "When do we start and how much do we spend?"

"Right away and spend what you need to. Don't get chicken about expenses; this is the biggest thing we've ever tackled." Strong flinched; Harriman went on, "Have insomnia over it tonight; see me tomorrow and we'll kick it around."

"Wait a see, Chief. How are you going to sew up all those franchises from the, uh—the Moon states, those countries the Moon passes over, while a big publicity campaign is going on about a trip to the Moon and how big a thing it is for everybody? Aren't you about to paint yourself into a corner?"

"Do I look stupid? We'll get the franchise before you hand out so much as a filler—*you'll* get 'em, you and Kamens. That's your first job."

"Hmmm. . . ." Montgomery chewed a thumb nail. "Well, all right—I can see some angles. How soon do we have to sew it up?"

"I give you six weeks. Otherwise just mail your resignation in, written on the skin off your back."

"I'll write it right now, if you'll help me by holding a mirror."

"Damn it, Monty, I know you can't do it in six weeks. But make it fast; we can't take a cent in to keep the thing going until you sew up those franchises. If you dillydally, we'll all starve-and we won't get to the Moon, either."

Strong said, "D.D., why fiddle with those trick claims from a bunch of moth-eaten tropical countries? If you are dead set on going to the Moon, let's call Ferguson in and get on with the matter."

"I like your direct approach, George," Harriman said, frowning. "Mmmm . . . back about 1845 or '46 an eager-beaver American army officer captured California. You know what the State Department did?"

"No."

"They made him hand it back. Seems he hadn't touched second base, or something. So they had to go to the trouble of capturing it all over again a few months later. Now I don't want that to happen to us. It's not enough just to set foot on the Moon and claim it; we've got to validate that claim in terrestrial courts—or we're in for a peck of trouble. Eh, Saul?"

Kamens nodded. "Remember what happened to Columbus."

"Exactly. We aren't going to let ourselves be rooked the way Columbus was."

Montgomery spat out some thumb nail. "But, Chief—you know damn well those banana-state claims won't be worth two cents after I do tie them up. Why not get a franchise right from the U.N. and settle the matter? I'd as lief tackle that as tackle two dozen cockeyed legislatures. In fact I've got an angle already—we work it through the Security Council and—"

"Keep working on that angle; we'll use it later. You don't appreciate the full mechanics of the scheme, Monty. Of course those claims are worth nothing—except nuisance value. But their nuisance value is all important. Listen: we get to the Moon, or appear about to. Every one of those countries puts up a squawk; we goose them into it through the dummy corporations they have enfranchised. Where do they squawk? To the U.N., of course. Now the big countries on this globe, the rich and important ones, are all in the northern temperate zone. They see what the claims are based on and they take a frenzied look at the globe. Sure enough, the Moon does not pass over a one of them. The biggest country of all—Russia-doesn't own a spadeful of dirt south of twenty-nine north. So they reject all the claims.

"Or do they?" Harriman went on. "The U.S. balks. *The Moon passes over Florida and the southern part of Texas.* Washington is in a tizzy. Should they back up the tropical countries and support the traditional theory of land title or should they throw their weight to the idea that the Moon belongs to everyone? Or should the United States try to claim the whole thing, seeing as how it was Americans who actually got there first?

"At this point we creep out from under cover. It seems that the Moon ship was owned and the expenses paid by a nonprofit corporation chartered by the U.N. itself—"

"Hold it," interrupted Strong. "I didn't know that the U.N. could create corporations?"

"You'll find it can," his partner answered. "How about it, Saul?" Kamens nodded. "Anyway," Harriman continued, "I've already got the corporation. I had it set up several years ago. It can do most anything of an educational or scientific nature-and brother, that covers a lot of ground! Back to the point—this corporation, the creature of the U.N., asks its parent to declare the lunar colony autonomous territory, under the protection of the U.N. We won't ask for outright membership at first because we want to keep it simple—"

"Simple, he calls it!" said Montgomery.

"Simple. This new colony will be a *de facto* sovereign state, holding title to the entire Moon, and—listen closely!—capable of buying, selling, passing laws, issuing title to land, setting up monopolies, collecting tariffs, *et cetera* without end. *And we own it.*"

"The reason we get all this is because the major states in the U.N. can't think up a claim that sounds as legal as the claim made by the tropical states, they can't agree among themselves as to how to split up the swag if they were to attempt brute force and the other major states aren't willing to see the United States claim the whole thing.

They'll take the easy way out of their dilemma by appearing to retain title in the U.N. itself. The real title, the title controlling all economic and legal matters, will revert to us. Now do you see my point, Monty?"

Montgomery grinned. "Damned if I know if it's necessary, Chief, but I love it. It's beautiful."

"Well, I don't think so," Strong grumbled. "Delos, I've seen you rig some complicated deals—some of them so devious that they turned even my stomach—but this one is the worst yet. I think you've been carried away by the pleasure you get out of cooking up involved deals in which somebody gets double-crossed."

Harriman puffed hard on his cigar before answering, "I don't give a damn, George. Call it chicanery, call it anything you want to. *I'm going to the Moon!* If I have to manipulate a million people to accomplish it, I'll do it."

"But it's not necessary to do it this way."

"Well, how would you do it?"

"Me? I'd set up a straightforward corporation. I'd get a resolution in Congress making my corporation the chosen instrument of the United States—"

"Bribery?"

"Not necessarily. Influence and pressure ought to be enough. Then I would set about raising the money and make the trip."

"And the United States would then own the Moon?"

"Naturally," Strong answered a little stiffly.

Harriman got up and began pacing. "You don't see it, George, you don't see it. The Moon was not meant to be owned by a single country, even the United States."

"It was meant to be owned by *you,* I suppose."

"Well, if I own it—for a short while—I won't misuse it and I'll take care that others don't. Damnation, nationalism should stop at the stratosphere. Can you see what would happen if the United States lays claim to the Moon? The other nations won't recognize the claim. It will become a permanent bone of contention in the Security Council—just when we were beginning to get straightened out to the point where a man could do business planning without having his elbow jogged by a war every few years. The other nations—quite rightfully—will be scared to death of the United States. They will be able to look up in the sky any night and see the main atom-bomb rocket base of the United States staring down the backs of their necks. Are they going to hold still for it? No, sirree—they are going to try to clip off a piece of the Moon for their own national use. The Moon is too big to hold, all at once. There will be other bases established there and presently there will be the worst war this planet has ever seen—and we'll be to blame.

"No, it's got to be an arrangement that everybody will hold still for—and that's why we've got to plan it, think of all the angles, and be devious about it until we are in a position to make it work.

"Anyhow, George, if we claim it in the name of the United States, do you know where we will be, as business men?"

"In the driver's seat," answered Strong.

"In a pig's eye! We'll be dealt right out of the game. The Department of National Defense will say, 'Thank you, Mr. Harriman. Thank you, Mr. Strong. We are taking over in the interests of national security; you can go home now.' And that's just what we would have to do—go home and wait for the next atom war.

"I'm not going to do it, George. I'm not going to let the brass hats muscle in. I'm going to set up a lunar colony and then nurse it along until it is big enough to stand on its own feet. I'm telling you—all of you!—this is the biggest thing for the human race since the discovery of fire. Handled right, it can mean a new and braver world. Handle it wrong and it's a one-way ticket to Armageddon. It's coming, it's coming soon, whether we touch it or not. But I plan to be the Man in the Moon myself—and give it my personal attention to see that it's handled right."

He paused. Strong said, "Through with your sermon, Delos?"

"No, I'm not," Harriman denied testily. "You don't see this thing the right way. Do you know what we may find up there?" He swung his arm in an arc toward the ceiling. "*People!*"

"On the *Moon*?" said Kamens.

"Why not on the Moon?" whispered Montgomery to Strong.

"No, not on the Moon—at least I'd be amazed if we dug down and found anybody under that airless shell. The Moon has had its day; I was speaking of the other planets—Mars and Venus and the satellites of Jupiter. Even maybe out at the stars themselves. Suppose we do find people? Think what it will mean to us. We've been alone, all alone, the only intelligent race in the only world we know. We haven't even been able to talk with dogs or apes. Any answers we got we had to think up by ourselves, like deserted orphans. But suppose we find *people*, intelligent people, who have done some thinking in their own way. *We wouldn't be alone any more!* We could look up at the stars and never be afraid again."

He finished, seeming a little tired and even a little ashamed of his outburst, like a man surprised in a private act. He stood facing them, searching their faces.

"Gee whiz, Chief," said Montgomery, "I can use that. How about it?"

"Think you can remember it?"

"Don't need to—I flipped on your 'silent steno."

"Well, damn your eyes!"

"We'll put it on video—in a play I think."

Harriman smiled almost boyishly. "I've never acted, but if you think it'll do any good, I'm game."

"Oh, no, not you, Chief," Montgomery answered in horrified tones. "You're not the type. I'll use Basil Wilkes-Booth, I think. With his organlike voice and that beautiful archangel face, he'll really send 'em."

Harriman glanced down at his paunch and said gruffly, "O.K.—back to business. Now about money. In the first place we can go after straight donations to one of the nonprofit corporations, just like endowments for colleges. Hit the upper brackets, where tax deductions really matter. How much do you think we can raise that way?"

"Very little," Strong opined. "That cow is about milked dry."

"It's never milked dry, as long as there are rich men around who would rather make gifts than pay taxes. How much will a man pay to have a crater on the Moon named after him?"

"I thought they all had names?" remarked the lawyer.

"Lots of them don't—and we have the whole back face that's not touched yet. We won't try to put down an estimate today; we'll just list it. Monty, I want an angle to squeeze dimes out of the school kids, too. Forty million school kids 'at a dime a head is $4,000,000.00—we can use that."

"Why stop at a dime?" asked Monty. "If you get a kid really interested he'll scrape together a dollar."

"Yes, but what do we offer him for it? Aside from the honor of taking part in a noble venture and so forth?"

"Mmmm. . . ." Montgomery used up more thumb nail. "Suppose we go after both the dimes and the dollars. For a dime he gets a card saying that he's a member of the Moonbeam club—"

"No, the 'Junior Spacemen'."

"O.K., the Moonbeams will be girls—and don't forget to rope the Boy Scouts and Girl Scouts into it, too. We give each kid a card; when he kicks in another dime, we punch it. When he's punched out a dollar, we give him a certificate, suitable for framing, with his name and some process engraving, and on the back a picture of the Moon."

"On the *front*," answered Harriman. "Do it in one print job; it's cheaper and it'll look better. We give him something else, too, a steelclad guarantee that his name will be on the rolls of the Junior Pioneers of the Moon, which same will be placed in a monument to be erected on the Moon at the landing site of the first Moon ship—in microfilm, of course; we have to watch weight."

"Fine!" agreed Montgomery. "Want to swap jobs, Chief? V/hen he gets up to ten dollars we give him a genuine, solid gold-plated shooting star pin and he's a senior Pioneer, with the right to vote or something or other. And his name goes *outside* of the monument—microengraved on a platinum strip."

Strong looked as if he had bitten a lemon. "What happens when he reaches a hundred dollars?" he asked.

"Why, then," Montgomery answered happily, "we give him another card and he can start over. Don't worry about it, Mr. Strong—if any kid goes that high, he'll have his reward. Probably we will take him on an inspection tour of the ship before it takes off and give him, absolutely free, a picture of himself standing in front of it, with the pilot's own signature signed across the bottom by some female clerk."

"Chiseling from kids. Bah!"

"Not at all," answered Montgomery in hurt tones. "Intangibles are the most honest merchandise anyone can sell. They are always worth whatever you are willing to pay for them and they never wear out. You can take them to your grave untarnished."

"Hmmmph!"

Harriman listened to this, smiling and saying nothing. Kamens cleared his throat. "If you two ghouls are through cannibalizing the youth of the land, I've another idea."

"Spill it."

"George, you collect stamps, don't you?"

"Yes."

"How much would a cover be worth which had been to the Moon and been cancelled there?"

"Huh? But you couldn't, you know."

"I think we could get our Moon ship declared a legal post office substation without too much trouble. What would it be worth?"

"Uh, that depends on how rare they are."

"There must be some optimum number which will fetch a maximum return. Can you estimate it?"

Strong got a faraway look in his eye, then took out an old-fashioned pencil and commenced to figure. Harriman went on, "Saul, my minor success in buying a share in the Moon from Jones went to my head. How about selling building lots on the Moon?"

"Let's keep this serious, Delos. You can't do that until you've landed there."

"I am serious. I know you are thinking of that ruling back in the 'forties that such land would have to be staked out and accurately described. I want to sell land on the Moon. You figure out a way to make it legal. I'll sell the whole Moon, if I can—surface rights, mineral rights, anything."

"Suppose they want to occupy it?"

"Fine. The more the merrier. I'd like to point out, too, that we'll be in a position to assess taxes on what we have sold. If they don't use it and won't pay taxes, it reverts to us. Now you figure out how to offer it, without going to jail. You may have to advertise it abroad, then plan to peddle it personally in this country, like Irish Sweepstakes tickets."

Kamens looked thoughtful. "We could incorporate the land company in Panama and advertise by video and radio from Mexico. Do you really think you can sell the stuff?"

"You can sell snowballs in Greenland," put in Montgomery. "It's a matter of promotion."

Harriman added, "Did you ever read about the Florida land boom, Saul? People bought lots they had never seen and sold them at tripled prices without ever having laid eyes on them. Sometimes a parcel would change hands a dozen times before anyone got around to finding out that the stuff was ten-foot deep in water. We can offer bargains better than that—an acre, a guaranteed dry acre with plenty of sunshine, for maybe ten dollars—or a thousand acres at a dollar an acre. Who's going to turn down a bargain like that? Particularly after the rumor gets around that the Moon is believed to be loaded with uranium?"

"Is it?"

"How should I know? When the boom sags a little we will announce the selected location of Luna City—and it will just happen to work out that the land around the site is still available for sale. Don't worry, Saul, if it's real estate, George and I can sell it. Why, down in the Ozarks, where the land stands on edge, we used to sell both sides of the same acre." Harriman looked thoughtful. "I think we'll reserve mineral rights—there just might actually be uranium there!"

Kamens chuckled. "Delos, you are a kid at heart. Just a great big, overgrown, lovable—juvenile delinquent."

Strong straightened up. "I make it half a million," he said.

"Half a million what?" asked Harriman.

"For the cancelled philatelic covers, of course. That's what we were talking about. Five thousand is my best estimate of the number that could be placed with serious collectors and with dealers. Even then we will have to discount them to a syndicate and hold back until the ship is built and the trip looks like a probability."

"Okay," agreed Harriman. "You handle it. I'll just note that we can tap you for an extra half million toward the end."

"Don't I get a commission?" asked Kamens. "I thought of it."

"You get a rising vote of thanks—and ten acres on the Moon. Now what other sources of revenue can we hit?"

"Don't you plan to sell stock?" asked Kamens.

"I was coming to that. Of course-but no preferred stock; we don't want to be forced through a reorganization. Participating common, nonvoting—"

"Sounds like another banana-state corporation to me."

"Naturally—but I want some of it on the New York Exchange, and you'll have to work that out with the Securities Exchange Commission somehow. Not too much of it—that's our show case and we'll have to keep it active and moving up."

"Wouldn't you rather I swam the Hellespont?"

"Don't be like that, Saul. It beats chasing ambulances, doesn't it?"

"I'm not sure."

"Well, that's what I want you—wups!" The screen on Harriman's desk had come to life. A girl said, "Mr. Harriman, Mr. Dixon is here. He has no appointment but he says that you want to see him."

"I thought I had that thing shut off," muttered Harriman, then pressed his key and said, "O.K., show him in."

"Very well, sir—oh, Mr. Harriman, Mr. Entenza came in just this second."

"Look who's talking," said Kamens.

Dixon came in with Entenza behind him. He sat down, looked around, started to speak, then checked himself. He looked around again, especially at Entenza.

"Go ahead, Dan," Harriman encouraged him. "'Tain't nobody here at all but just us chickens."

Dixon made up his mind. "I've decided to come in with you, D.D.," he announced. "As an act of faith I went to the trouble of getting this." He took a formal-looking instrument from his pocket and displayed it. It was a sale of lunar rights, from Phineas Morgan to Dixon, phrased in exactly the same fashion as that which Jones had granted to Harriman.

Entenza looked startled, then dipped into his own inner coat pocket. Out came three more sales contracts of the same sort, each from a director of the power syndicate. Harriman cocked an eyebrow at them. "Jack sees you and raises you two, Dan. You want to call?"

Dixon smiled ruefully. "I can just see him." He added two more to the pile, grinned and offered his hand to Entenza.

"Looks like a stand off." Harriman decided to say nothing just yet about seven telestated contracts now locked in his desk—after going to bed the night before he had been quite busy on the phone almost till midnight. "Jack, how much did you pay for those things?"

"Standish held out for a thousand; the others were cheap."

"Damn it, I warned you not to run the price up. Standish will gossip. How about you, Dan?"

"I got them at satisfactory prices."

"So you won't talk, eh? Never mind—gentlemen, how serious are you about this? How much money did you bring with you?"

Entenza looked to Dixon, who answered, "How much does it take?"

"How much can you raise?" demanded Harriman.

Dixon shrugged. "We're getting no place. Let's use figures. A hundred thousand."

Harriman sniffed. "I take it what you really want is to reserve a seat on the first regularly scheduled Moon ship. I'll sell it to you at that price."

"Let's quit sparring, Delos. How much?"

Harriman's face remained calm but he thought furiously. He was caught short, with too little information—he had not even talked figures with his chief engineer as yet. Confound it! Why had he left that phone hooked in? "Dan, as I warned you, it will cost you at least a million just to sit down in this game."

"So I thought. How much will it take to *stay* in the game?"

"All you've got."

"Don't be silly, Delos. I've got more than you have."

Harriman lit a cigar, his only sign of agitation. "Suppose you match us, dollar for dollar."

"For which I get two shares?"

"Okay, okay, you chuck in a buck whenever each of us does—share and share alike. But I run things."

"You run the operations," agreed Dixon. "Very well, I'll put up a million now and match you as necessary. You have no objection to me having my own auditor, of course."

"When have I ever cheated you, Dan?"

"Never and there is no need to start."

"Have it your own way—but be damned sure you send a man who can keep his mouth shut."

"He'll keep quiet. I keep his heart in a jar in my safe."

Harriman was thinking about the extent of Dixon's assets. "We just might let you buy in with a second share later, Dan. This operation will be expensive."

Dixon fitted his finger tips carefully together. "We'll meet that question when we come to it. I don't believe in letting an enterprise fold up for lack of capital."

"Good." Harriman turned to Entenza. "You heard what Dan had to say, Jack. Do you like the terms?"

Entenza's forehead was covered with sweat. "I can't raise a million that fast."

"That's all right, Jack. We don't need it this morning. Your note is good; you can take your time liquidating."

"But you said a million is just the beginning. I can't match you indefinitely; you've got to place a limit on it. I've got my family to consider."

"No annuities, Jack? No monies transferred in an irrevocable trust?"

"That's not the point. You'll be able to squeeze me-freeze me out."

Harriman waited for Dixon to say something. Dixon finally said, "We wouldn't squeeze you, Jack—as long as you could prove you had converted every asset you hold. We would let you stay in on a pro rata basis."

Harriman nodded. "That's right, Jack." He was thinking that any shrinkage in Entenza's share would give himself and Strong a clear voting majority.

Strong had been thinking of something of the same nature, for he spoke up suddenly, "I don't like this. Four equal partners—we can be deadlocked too easily."

Dixon shrugged. "I refuse to worry about it. I am in this because I am betting that Delos can manage to make it profitable."

"We'll get to the Moon, Dan!"

"I didn't say that. I am betting that you will show a profit whether we get to the Moon or not. Yesterday evening I spent looking over the public records of several of your companies; they were very interesting. I suggest we resolve any possible deadlock by giving the Director—that's you, Delos— the power to settle ties. Satisfactory, Entenza?"

"Oh, sure!"

Harriman was worried but tried not to show it. He did not trust Dixon, even bearing gifts. He stood up suddenly. "I've got to run, gentlemen. I leave you to Mr. Strong and Mr. Kamens. Come along, Monty." Kamens, he was sure, would not spill anything prematurely, even to nominal full partners. As for Strong—George, he knew, had not even let his left hand know how many fingers there were on his right.

He dismissed Montgomery outside the door of the partners' personal office and went across the hall. Andrew Ferguson, chief engineer of Harriman Enterprises, looked up as he came in. "Howdy, Boss. Say, Mr. Strong gave me an interesting idea for a light switch this morning. It did not seem practical at first but—"

"Skip it. Let one of the boys have it and forget it. You know the line we are on now."

"There have been rumors," Ferguson answered cautiously.

"Fire the man that brought you the rumor. No-send him on a special mission to Tibet and keep him there until we are through.

Well, let's get on with it. I want you to build a Moon ship as quickly as possible."

Ferguson threw one leg over the arm of his chair, took out a pen knife and began grooming his nails. "You say that like it was an order to build a privy."

"Why not? There have been theoretically adequate fuels since way back in '49. You get together the team to design it and the gang to build it; you build it—I pay the bills. What could be simpler?"

Ferguson stared at the ceiling. "'Adequate fuels—'" he repeated dreamily.

"So I said. The figures show that hydrogen and oxygen are enough to get a step rocket to the Moon and back—it's just a matter of proper design."

"'Proper design,' he says," Ferguson went on ifl the same gentle voice, then suddenly swung around, jabbed the knife into the scarred desk top and bellowed, "What do you know about proper design? Where do I get the steels? What do I use for a throat liner? How in the hell do I burn enough tons of your crazy mix per second to keep from wasting all my power breaking loose? How can I get a decent mass-ratio with a step rocket? Why in the hell didn't you let me build a proper ship when we had the fuel?"

Harriman waited for him to quiet down, then said, "What do we do about it, Andy?"

"Hmmm. . . . I was thinking about it as I lay abed last night—and my old lady is sore as hell at you; I had to finish the night on the couch. In the first place, Mr. Harriman, the proper way to tackle this is to get a research appropriation from the Department of National Defense. Then you—"

"Damn it, Andy, you stick to engineering and let me handle the political and financial end of it. I don't want your advice."

"Damn it, Delos, don't go off halfcocked. This *is* engineering I'm talking about. The government owns a whole mass of former art about rocketry—all classified. Without a government contract you can't even get a peek at it."

"It can't amount to very much. What can a government rocket do that a Skyways rocket can't do? You told me yourself that Federal rocketry no longer amounted to anything."

Ferguson looked supercilious. "I am afraid I can't explain it in lay terms. You will have to take it for granted that we need those government research reports. There's no sense in spending thousands of dollars in doing work that has already been done."

"Spend the thousands."

"Maybe millions."

"Spend the millions. Don't be afraid to spend money. Andy, I don't want this to be a military job." He considered elaborating to the engineer the involved politics back of his decision, thought better of it. "How bad do you actually need that government stuff? Can't you get the same results by hiring engineers who used to work for the government? Or even hire them away from the government right now?"

Ferguson pursed his lips. "If you insist on hampering me, how can you expect me to get results?"

"I am not hampering you. I am telling you that this is not a government project. If you won't attempt to cope with it on those terms, let me know now, so that I can find somebody who will."

Ferguson started playing mumblety-peg on his desk top. When he got to "noses"—and missed—he said quietly, "I mind a boy who used to work for the government at White Sands. He was a very smart lad indeed-design chief of section."

"You mean he might head up your team?"

"That was the notion."

"What's his name? Where is he? Who's he working for?"

"Well, as it happened, when the government closed down White Sands, it seemed a shame to me that a good boy should be out of a job, so I placed him with Skyways. He's maintenance chief engineer out on the Coast."

"Maintenance? What a hell of a job for a creative man! But you mean he's working for us now? Get him on the screen. No—call the coast and have them send him here in a special rocket; we'll all have lunch together."

"As it happens," Ferguson said quietly, "I got up last night and called him—that's what annoyed the Missus. He's waiting outside. Coster—Bob Coster."

A slow grin spread over Harriman's face. "Andy! You blackhearted old scoundrel, why did you pretend to balk?"

"I wasn't pretending. I like it here, Mr. Harriman. Just as long as you don't interfere, I'll do my job. Now my notion is this: we'll make young Coster chief engineer of the project and give him his head. I won't joggle his elbow; I'll just read the reports. Then you leave him alone, d'you hear me? Nothing makes a good technical man angrier than to have some incompetent nitwit with a check book telling him how to do his job."

"Suits. And I don't want a penny-pinching old fool slowing him down, either. Mind you don't interfere with him, either, or I'll jerk the rug out from under you. Do we understand each other?"

"I think we do."

"Then get him in here."

Apparently Ferguson's concept of a "lad" was about age thirty-five, for such Harriman judged Coster to be. He was tall, lean, and quietly eager. Harriman braced him immediately after shaking hands with, "Bob, can you build a rocket that will go to the Moon?"

Coster took it without blinking. "Do you have a source of X-fuel?" he countered, giving the rocket man's usual shorthand for the isotope fuel formerly produced by the power satellite.

Coster remained perfectly quiet for several seconds, then answered, "I can put an unmanned messenger rocket on the face of the Moon."

"Not good enough. I want it to go there, land, and come back. Whether it lands here under power or by atmosphere braking is unimportant."

It appeared that Coster never answered promptly; Harriman had the fancy that he could hear wheels turning over in the man's head. "That would be a very expensive job."

"Who asked you how much it would cost? Can you do it?"

"I could try."

"Try, hell. Do you think you can *do* it? Would you bet your shirt on it? Would you be willing to risk your neck in the attempt? If you don't believe in yourself, man, you'll always lose."

"How much will you risk, sir? I told you this would be expensive-and I doubt if you have any idea how expensive."

"And I told you not to worry about money. Spend what you need; it's my job to pay the bills. Can you do it?"

"I can do it. I'll let you know later how much it will cost and how long it will take."

"Good. Start getting your team together. Where are we going to do this, Andy?" he added, turning to Ferguson. "Australia?"

"No." It was Coster who answered. "It can't be Australia; I want a mountain catapult. That will save us one step-combination."

"How big a mountain?" asked Harriman. "Will Pikes Peak do?"

"It ought to be in the Andes," objected Ferguson. "The mountains are taller and closer to the equator. After all, we own facilities there—or the Andes Development Company does."

"Do as you like, Bob," Harriman told Coster. "I would prefer Pikes Peak, but it's up to you." He was thinking that there were tremendous business advantages to locating Earth's space port #1 inside the United States—and he could visualize the advertising advantage of having Moon ships blast off from the top of Pikes Peak, in plain view of everyone for hundreds of miles to the East.

"I'll let you know."

"Now about salary. Forget whatever it was we were paying you; how much do you want?"

Coster actually gestured, waving the subject away. "I'll work for coffee and cakes."

"Don't be silly."

"Let me finish. Coffee and cakes and one other thing: I get to make the trip.

Harriman blinked. "Well, I can understand that," he said slowly. "In the meantime I'll put you on a drawing account." He added, "Better calculate for a three-man ship, unless you are a pilot."

"I'm not."

"Three men, then. You see, I'm going along, too."

Chapter Four

"A good thing you decided to come in, Dan," Harriman was saying, "or you would find yourself out of a job. I'm going to put an awful crimp in the power company before I'm through with this."

Dixon buttered a roll. "Really? How?"

"We'll set up high-temperature piles, like the Arizona job, just like the one that blew up, around the corner on the far face of the Moon. We'll remote-control them; if one explodes it won't matter. And I'll breed more X-fuel in a week than the company turned out in three months. Nothing personal about it; it's just that I want a source of fuel for interplanetary liners. If we can't get good stuff here, we'll have to make it on the Moon."

"Interesting. But where do you propose to get the uranium for six piles? The last I heard the Atomic Energy Commission had the prospective supply earmarked twenty years ahead."

"Uranium? Don't be silly; we'll get it on the Moon."

"On the Moon? Is there uranium on the Moon?"

"Didn't you know? I thought that was why you decided to join up with me?"

"No, I didn't know," Dixon said deliberately. "What proof have you?"

"Me? I'm no scientist, but it's a well-understood fact. Spectroscopy, or something. Catch one of the professors. But don't go showing too much interest; we aren't ready to show our hand." Harriman stood up. "I've got to run, or I'll miss the shuttle for Rotterdam. Thanks for the lunch." He grabbed his hat and left.

Harriman stood up. "Suit yourself, Mynheer van der Velde. I'm giving you and your colleagues a chance to hedge your bets. Your geologists all agree that diamonds result from volcanic action. What do you think we will find *there*?" He dropped a large photograph of the Moon on the Hollander's desk.

The diamond merchant looked impassively at the pictured planet, pockmarked by a thousand giant craters. "If you get there, Mr. Harriman."

Harriman swept up the picture. "We'll get there. And we'll find diamonds—though I would be the first to admit that it may be twenty years or even forty before there is a big enough strike to matter. I've come to you because I believe that the worst villain in our social body is a man who introduces a major new economic factor without planning his innovation in such a way as to permit peaceful adjustment. I don't like panics. But all I can do is warn you. Good day."

"Sit down, Mr. Harriman. I'm always confused when a man explains how he is going to do *me* good. Suppose you tell me instead how this is going to do *you* good? Then we can discuss how to protect the world market against a sudden influx of diamonds from the Moon."

Harriman sat down.

Harriman liked the Low Countries. He was delighted to locate a dog-drawn milk cart whose young master wore real wooden shoes; he happily took pictures and tipped the child heavily, unaware that the set-up was arranged for tourists. He visited several other diamond merchants but without speaking of the Moon. Among other purchases he found a brooch for Charlotte— a peace offering.

Then he took a taxi to London, planted a story with the representatives of the diamond syndicate there, arranged with his London solicitors to be insured by Lloyd's of London through a dummy, *against* a successful Moon flight, and called his home office. He listened to numerous reports, especially those concerning Montgomery, and found that Montgomery was in New Delhi. He called him there, spoke with him at length, then hurried to the port just in time to catch his ship. He was in Colorado the next morning.

At Peterson Field, east of Colorado Springs, he had trouble getting through the gate, even though it was now his domain, under lease. Of course he could have called Coster and gotten it straightened out at once, but he wanted to look around before seeing Coster. Fortunately the head guard knew him by sight; he got in and wandered around for an hour or more, a tn-colored badge pinned to his coat to give him freedom.

The machine shop was moderately busy, so was the foundry . . . but most of the shops were almost deserted. Harriman left the shops, went into the main engineering building. The drafting room and the loft were fairly active, as was the computation section. But there were unoccupied desks in the structures group and a churchlike quiet in the metals group and in the adjoining metallurgical laboratory. He was about to cross over into the chemicals and materials annex when Coster suddenly showed up.

"Mr. Harriman! I just heard you were here."

"Spies everywhere," remarked Harriman. "I didn't want to disturb you."

"Not at all. Let's go up to my office."

Settled there a few moments later Harriman asked, "Well—how's it going?"

Coster frowned. "All right, I guess."

Harriman noted that the engineer's desk baskets were piled high with papers which spilled over onto the desk. Before Harriman could answer, Coster's desk phone lit up and a feminine voice said sweetly, "Mr. Coster— Mr. Morgenstern is calling."

"Tell him I'm busy."

After a short wait the girl answered in a troubled voice, "He says he's just got to speak to you, sir."

Coster looked annoyed. "Excuse me a moment, Mr. Harriman— O.K., put him on."

The girl was replaced by a man who said, "Oh there you are-what was the hold up? Look, Chief, we're in a jam about these trucks. Every one of them that we leased needs an overhaul and now it turns out that the White Fleet company won't do anything about it—they're sticking to the fine print in the contract. Now the way I see it, we'd do better to cancel the contract and do business with Peak City Transport. They have a scheme that looks good to me. They guarantee to—"

"Take care of it," snapped Coster. "You made the contract and you have authority to cancel. You know that."

"Yes, but Chief, I figured this would be something you would want to pass on personally. It involves policy and—"

"Take care of it! I don't give a damn what you do as long as we have transportation when we need it." He switched off.

"Who is that man?" inquired Harriman.

"Who? Oh, that's Morgenstern, Claude Morgenstem."

"Not his name—what does he do?"

"He's one of my assistants—buildings, grounds, and transportation."

"Fire him!"

Coster looked stubborn. Before he could answer a secretary came in and stood insistently at his elbow with a sheaf of papers. He frowned, initialed them, and sent her out.

"Oh, I don't mean that as an order," Harriman added, "but I do mean it as serious advice. I won't give orders in your backyard,—but will you listen to a few minutes of advice?"

"Naturally," Coster agreed stiffly.

"Mmm . . . this your first job as top boss?"

Coster hesitated, then admitted it.

"I hired you on Ferguson's belief that you were the engineer most likely to build a successful Moon ship. I've had no reason to change my mind. But top administration ain't engineering, and maybe I can show you a few tricks there, if you'll let me." He waited. "I'm not criticizing," he added. "Top bossing is like sex; until you've had it, you don't know about it." Harriman had the mental reservation that if the boy would not take advice, he would suddenly be out of a job, whether Ferguson liked it or not.

Coster drummed on his desk. "I don't know what's wrong and that's a fact. It seems as if I can't turn anything over to anybody and have it done properly. I feel as if I were swimming in quicksand."

"Done much engineering lately?"

"I try to." Coster waved at another desk in the corner. "I work there, late at night."

"That's no good. I hired you as an engineer. Bob, this setup is all wrong. The joint ought to be jumping—and it's not. Your office ought to be quiet as a grave. Instead your office is jumping and the plant looks like a graveyard."

Coster buried his face in his hands, then looked up. "I know it. I know what needs to be done-but every time I try to tackle a technical problem some bloody fool wants me to make a decision about trucks —or telephones—or some damn thing. I'm sorry, Mr. Harriman. I thought I could do it."

Harriman said very gently, "Don't let it throw you, Bob. You haven't had much sleep lately, have you? Tell you what—we'll put over a fast one on Ferguson. I'll take that desk you're at for a few days and build you a set-up to protect you against such things. I want that brain of yours thinking about reaction vectors and fuel efficiencies and design stresses, not about contracts for trucks." Harriman stepped to the door, looked around the outer office and spotted a man who might or might not be the office's chief clerk. "Hey, you! C'mere."

The man looked startled, got up, came to the door and said, "Yes?"

"I want that desk in the corner and all the stuff that's on it moved to an empty office on this floor, right away."

The clerk raised his eyebrows. "And who are you, if I may ask?"

"Damn it—"

"Do as he tells you, Weber," Coster put in.

"I want it done inside of twenty minutes," added Harriman. "Jump!" He turned back to Coster's other desk, punched the phone, and presently was speaking to the main offices of Skyways. "Jim, is your boy Jock Berkeley around? Put him on leave and send him to me, at Peterson Field, right away, special trip. I want the ship he comes in to raise ground ten minutes after we sign off. Send his gear after him." Harriman listened for a moment, then answered, "No, your organization won't fall apart if you lose Jock— or, if it does, maybe we've been paying the wrong man the top salary .

"Okay, okay, you're entitled to one swift kick at my tail the next time you catch up with me but send Jock. So long."

He supervised getting Coster and his other desk moved into another office, saw to it that the phone in the new office was disconnected, and, as an afterthought, had a couch moved in there, too. "We'll install a projector, and a drafting machine and bookcases and other junk like that tonight," he told Coster. "Just make a list of anything you need—to work on *engineering*. And call me if you want anything." He went back to the nominal chiefengineer's office and got happily to work trying to figure where the organization stood and what was wrong with it.

Some four hours later he took Berkeley in to meet Coster. The chief engineer was asleep at his desk, head cradled on his arms. Harriman started to back out, but Coster roused. "Oh! Sorry," he said, blushing, "I must have dozed off."

"That's why I brought you the couch," said Harriman. "It's more restful. Bob, meet Jock Berkeley. He's your new slave. You remain chief engineer and top, undisputed boss. Jock is Lord High Everything Else. From now on you've got absolutely nothing to worry about—except for the little detail of building a Moon ship."

They shook hands. "Just one thing I ask, Mr. Coster," Berkeley said seriously, "bypass me all you want to-you'll have to run the technical show—but for God's sake record it so I'll know what's going on. I'm going to have a switch placed on your desk that will operate a sealed recorder at my desk."

"Fine!" Coster was looking, Harriman thought, younger already.

"And if you want something that is not technical, don't do it yourself. Just flip a switch and whistle; it'll get done!" Berkeley glanced at Harriman. "The Boss says he wants to talk with you about the real job. I'll leave you and get busy." He left.

Harriman sat down; Coster followed suit and said, "Whew!"

"Feel better?"

"I like the looks of that fellow Berkeley."

"That's good; he's your twin brother from now on. Stop worrying; I've used him before. You'll think you're living in a well-run hospital. By the way, where do you live?"

"At a boarding house in the Springs."

"That's ridiculous. And you don't even have a place here to sleep?" Harriman reached over to Coster's desk, got through to Berkeley. "Jock—get a suite for Mr. Coster at the Broadmoor, under a phony name."

"Right."

"And have this stretch along here adjacent to his office fitted out as an apartment."

"Right. Tonight."

"Now, Bob, about the Moon ship. Where do we stand?"

They spent the next two hours contentedly running over the details of the problem, as Coster had laid them out. Admittedly very little work had been done since the field was leased but Coster had accomplished considerable theoretical work and computation before he had gotten swamped in administrative details. Harriman, though no engineer and certainly not a mathematician outside the primitive arithmetic of money, had for so long devoured everything he could find about space travel that he was able to follow most of what Coster showed him.

"I don't see anything here about your mountain catapult," he said presently.

Coster looked vexed. "Oh, that! Mr. Harriman, I spoke too quickly."

"Huh? How come? I've had Montgomery's boys drawing up beautiful pictures of what things will look like when we are running regular trips. I intend to make Colorado Springs the spaceport capital of the world. We hold the franchise of the old cog railroad now; what's the hitch?"

"Well, it's both time and money."

"Forget money. That's my pidgin."

"Time then. I still think an electric gun is the best way to get the initial acceleration for a chem-powered ship. Like this—" He began to sketch rapidly. "It enables you to omit the first step-rocket stage, which is bigger than all the others put together and is terribly inefficient, as it has such a poor mass-ratio. But what do you have to do to get it? You can't build a tower, not a tower a couple of miles high, strong enough to take the thrusts—not this year, anyway. So you have to use a mountain. Pikes Peak is as good as any; it's accessible, at least.

"But what do you have to do to use it? First, a tunnel in through the side, from Manitou to just under the peak, and big enough to take the loaded ship—"

"Lower it down from the top," suggested Harriman.

Coster answered, "I thought of that. Elevators two miles high for loaded space ships aren't exactly built out of string, in fact they aren't built out of any available materials. It's possible to gimmick the catapult itself so that the accelerating coils can be reversed and timed differently to do the job, but believe me, Mr. Harrima; it will throw you into other engineering problems quite as great . . . such as a giant railroad up to the top of the ship. And it still leaves you with the shaft of the catapult itself to be dug. It can't be as small as the ship, not like a gun barrel for a bullet. It's got to be considerably larger; you don't compress a column of air two miles high with impunity. Oh, a mountain catapult could be built, but it might take ten years—or longer."

"Then forget it. We'll build it for the future but not for this flight. No, wait—how about a *surface* catapult. We scoot up the side of the mountain and curve it up at the end?"

"Quite frankly, I think something like that is what will eventually be used. But, as of today, it just creates new problems. Even if we could devise an electric gun in which you could make that last curve—we can't, at present— the ship would have to be designed for terrific side stresses and all the additional weight would be parasitic so far as our main purpose is concerned, the design of a rocket ship."

"Well, Bob, what *is* your solution?"

Coster frowned. "Go back to what we know how to do—build a step rocket."

Chapter Five

"Monty—"

"Yeah, Chief?"

"Have you ever heard this song?" Harriman hummed, "*The Moon belongs to everyone; the best things in life are free—*," then sang it, badly off key.

"Can't say as I ever have."

"It was before your time. I want it dug out again. I want it revivçd, plugged until Hell wouldn't have it, and on everybody's lips."

"O.K." Montgomery took out his memorandum pad. "When do you want it to reach its top?"

Harriman considered. "In, say, about three months. Then I want the first phrase picked up and used in advertising slogans."

"A cinch."

"How are things in Florida, Monty?"

"I thought we were going to have to buy the whole damned legislature until we got the rumor spread around that Los Angeles had contracted to have a City-Limits-of-Los-Angeles sign planted on the Moon for publicity pix. Then they came around."

"Good." Harriman pondered. "You know, that's not a bad idea. How much do you think the Chamber of Commerce of Los Angeles would pay for such a picture?"

Montgomery made another note. "I'll look into it."

"I suppose you are about ready to crank up Texas, now that Florida is loaded?"

"Most any time now. We're spreading a few snide rumors first."

Headline from Dallas-Fort Worth *Banner*:

"THE MOON BELONGS TO TEXAS!!!"

"—and that's all for tonight, kiddies. Don't forget to send in those box tops, or reasonable facsimiles. Remember—first prize is a thousand-acre ranch on the Moon itself, free and clear; the second prize is a six-foot scale model of the actual Moon ship, and there are fifty, count them, fifty third prizes, each a saddle-trained Shetland pony. Your hundred word composition 'Why I want to go to the Moon' will be judged for sincerity and originality, not on literary merit. Send those boxtops to Uncle Taffy, Box 214, Juarez, Old Mexico."

Harriman was shown into the office of the president of the Moka-Coka Company ("Only a Moke is truly a coke"—"Drink the Cola drink with the Lift"). He paused at the door, some twenty feet from the president's desk and quickly pinned a two-inch wide button to his lapel.

Patterson Griggs looked up. "Well, this is really an honor, D.D. Do come in and—" The soft-drink executive stopped suddenly, his expression changed. "What are you doing wearing *that*?" he snapped. "Trying to annoy me?"

"That" was the two-inch disc; Harriman unpinned it and put it in his pocket. It was a celluloid advertising pin, in plain yellow; printed on it in black, almost covering it, was a simple

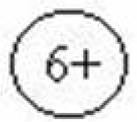

the trademark of Moka-Coka's only serious rival.

"No," answered Harriman, "though I don't blame you for being irritated. I see half the school kids in the country wearing these silly buttons. But I came to give you a friendly tip, not to annoy you."

"What do you mean?"

"When I paused at your door that pin on my lapel was just the size—to you, standing at your desk—as the full Moon looks when you are standing in your garden, looking up at it. You didn't have any trouble reading what was on the pin, did you? I know you didn't; you yelled at me before either one of us stirred."

"What about it?"

"How would you feel—and what would the effect be on your sales—if there was 'six-plus' written across the face of the Moon instead of just on a school kid's sweater?"

Griggs thought about it, then said, "D.D., don't make poor jokes. I've had a bad day."

"I'm not joking. As you have probably heard around the Street, I'm behind this Moon trip venture. Between ourselves, Pat, it's quite an expensive undertaking, even for me. A few days ago a man came to me—you'll pardon me if I don't mention names? You can figure it out. Anyhow, this man represented a client who wanted to buy the advertising concession for the Moon. He knew we weren't sure of success; but he said his client would take the risk.

"At first I couldn't figure out what he was talking about; he set me straight. Then I thought he was kidding. Then I was shocked. Look at this—" Harriman took out a large sheet of paper and spread it on Griggs' desk. "You see the equipment is set up anywhere near the center of the Moon, as we see it. Eighteen pyrotechnics rockets shoot out in eighteen directions, like the spokes of a wheel, but to carefully calculated distances. They hit and the bombs they carry go off, spreading finely divided carbon black for calculated distances. There's no air on the Moon, you know, Pat—a fine powder will throw just as easily as a javelin. Here's your result." He turned the paper over; on the back there was a picture of the Moon, printed lightly. Overlaying it, in black, heavy print was:

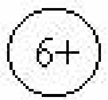

"So it is that outfit—those poisoners!"

"No, no, I didn't say so! But it illustrates the point; six-plus is only two symbols; it can be spread large enough to be read on the face of the Moon."

Griggs stared at the horrid advertisement. "I don't believe it will work!"

"A reliable pyrotechnics firm has guaranteed that it will—provided I can deliver their equipment to the spot. After all, Pat, it doesn't take much of a pyrotechnics rocket to go a long distance on the Moon. Why, you could throw a baseball a couple of miles yourself—low gravity, you know."

"People would never stand for it. It's sacrilege!"

Harriman looked sad. "I wish you were right. But they stand for skywriting—and video commercials."

Griggs chewed his lip. "Well, I don't see why you come to me with it," he exploded. "You know damn well the name of my product won't go on the face of the Moon. The letters would be too small to read."

Harriman nodded. "That's exactly why I came to you. Pat, this isn't just a business venture to me; it's my heart and soul. It just made me sick to think of somebody actually wanting to use the face of the Moon for advertising. As you say, it's sacrilege. But somehow, these jackals found out I was pressed for cash. They came to me when they knew I would have to listen.

"I put them off. I promised them an answer on Thursday. Then I went home and lay awake about it. After a while I thought of you."

"Me?"

"You. You and your company. After all, you've got a good product and you need legitimate advertising for it. It occurred to me that there are more ways to use the Moon in advertising than by defacing it.

Now just suppose that your company bought the same concession, but with the public-spirited promise of never letting it be used. Suppose you featured that fact in your ads? Suppose you ran pictures of a boy and girl, sitting out under the Moon, sharing a bottle of Moke? Suppose Moke was the only soft drink carried on the first trip to the Moon? But I don't have to tell you how to do it." He glanced at his watch finger. "I've got to run and I don't want to rush you. If you want to do business just leave word at my office by noon tomorrow and I'll have our man Montgomery get in touch with your advertising chief."

The head of the big newspaper chain kept him waiting the minimum time reserved for tycoons and cabinet members. Again Harriman stopped at the threshold of a large office and fixed a disc to his lapel.

"Howdy, Delos," the publisher said, "how's the traffic in green cheese today?" He then caught sight of the button and frowned. "If that is a joke, it is in poor taste."

Harriman pocketed the disc; it displayed not

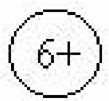

but the hammer-and-sickle.

"No," he said, "it's not a joke; it's a nightmare. Colonel, you and I are among the few people in this country who realize that communism is still a menace."

Sometime later they were talking as chummily as if the Colonel's chain had not obstructed the Moon venture since its inception. The publisher waved a cigar at his desk. "How did you come by those plans? Steal them?"

"They were copied," Harriman answered with narrow truth. "But they aren't important. The important thing is to get there first; we can't risk having an enemy rocket base on the Moon. For years I've had a recurrent nightmare of waking up and seeing headlines that the Russians had landed on the Moon and declared the Lunar Soviet—say thirteen men and two female scientists—and had petitioned for entrance into the U.S.S.R.—and the petition had, of course, been graciously granted by the Supreme Soviet. I used to wake up and tremble. I don't know that they would actually go through with painting a hammer and sickle on the face of the Moon, but it's consistent with their psychology. Look at those enormous posters they are always hanging up."

The publisher bit down hard on his cigar. "We'll see what we can work out. Is there any way you can speed up your takeoff?"

Chapter Six

"Mr. Harriman?"

"Yes?"

"That Mr. LeCroix is here again."

"Tell him I can't see him."

"Yes, sir—uh, Mr. Harriman, he did not mention it the other day but he says he is a rocket pilot."

"Send him around to Skyways. I don't hire pilots."

A man's face crowded into the screen, displacing Harriman's reception secretary. "Mr. Harriman—I'm Leslie LeCroix, relief pilot of the *Charon.*"

"I don't care if you are the Angel Gab— Did you say *Charon*?"

"I said *Charon*. And I've got to talk to you."

"Come in."

Harriman greeted his visitor, offered him tobacco, then looked him over with interest. The *Charon,* shuttle rocket to the lost power satellite, had been the nearest thing to a space ship the world had yet seen. Its pilot, lost in the same explosion that had destroyed the satellite and the *Charon* had been the first, in a way, of the coming breed of spacemen.

Harriman wondered how it had escaped his attention that the *Charon* had alternating pilots. He had known it, of course—but somehow he had forgotten to take the fact into account. He had written off the power satellite, its shuttle rocket and everything about it, ceased to think about them. He now looked at LeCroix with curiosity.

He saw a small, neat man with a thin, intelligent face, and the big, competent hands of a jockey. LeCroix returned his inspection without embarrassment. He seemed calm and utterly sure of himself.

"Well, Captain LeCroix?"

"You are building a Moon ship."

"Who says so?"

"A Moon ship is being built. The boys all say you are behind it."

"Yes?"

"I want to pilot it."

"Why should you?"

"I'm the best man for it."

Harriman paused to let out a cloud of tobacco smoke. "If you can prove that, the billet is yours."

"It's a deal." LeCroix stood up. "I'll leave my nameand address outside."

"Wait a minute. I said 'if.' Let's talk. I'm going along on this trip myself; I want to know more about you before I trust my neck to you."

They discussed Moon flight, interplanetary travel, rocketry, what they might find on the Moon. Gradually Harriman warmed up, as he found another spirit so like his own, so obsessed with the Wonderful Dream. Subconsciously he had already accepted LeCroix; the conversation began to assume that it would be a joint venture.

After a long time Harriman said, "This is fun, Les, but I've got to do a few chores yet today, or none of us will get to the Moon. You go on out to Peterson Field and get acquainted with Bob Coster—I'll call him. If the pair of you can manage to get along, we'll talk contract." He scribbled a chit and handed it to LeCroix. "Give this to Miss Perkins as you go out and she'll put you on the payroll."

"That can wait."

"Man's got to eat."

LeCroix accepted it but did not leave. "There's one thing I don't understand, Mr. Harriman."

"Huh?"

"Why are you planning on a chemically powered ship? Not that I object; I'll herd her. But why do it the hard way? I know you had the *City of Brisbane* refitted for X-fuel—"

Harriman stared at him. "Are you off your nut, Les? You're asking why pigs don't have wings—there isn't any X-fuel and there won't be any more until we make some ourselves—on the Moon."

"Who told you that?"

"What do you mean?"

"The way I heard it, the Atomic Energy Commission allocated X-fuel, under treaty, to several other countries—and some of them weren't prepared to make use of it. But they got it just the same. What happened to it?"

"Oh, *that*! Sure, Les, several of the little outfits in Central America and South America were cut in for a slice of pie for political reasons, even though they had no way to eat it. A good thing, too—we bought it back and used it to ease the immediate power shortage." Harriman frowned. "You're right, though. I should have grabbed some of the stuff then."

"Are you *sure* it's all gone?"

"Why, of course, I'm— No, I'm not. I'll look into it. G'bye, Les."

His contacts were able to account for every pound of X-fuel in short order—save for Costa Rica's allotment. That nation had declined to sell back its supply because its power plant, suitable for X-fuel, had been almost finished at the time of the disaster. Another inquiry disclosed that the power plant had never been finished.

Montgomery was even then in Managua; Nicaragua had had a change in administration and Montgomery was making certain that the special position of the local Moon corporation was protected. Harriman sent him a coded message to proceed to San José, locate X-fuel, buy it and ship it back—at any cost. He then went to see the chairman of the Atomic Energy Commission.

That official was apparently glad to see him and anxious to be affable. Harriman got around to explaining that he wanted a license to do experimental work in isotopes—X-fuel, to be precise.

"This should be brought up through the usual channels, Mr. Harriman."

"It will be. This is a preliminary inquiry. I want to know your reactions."

"After all, I am not the only commissioner . . . and we almost always follow the recommendations of our technical branch."

"Don't fence with me, Carl. You know dern well you control a working majority. Off the record, what do you say?"

"Well, D.D.—off the record—you can't get any X-fuel, so why get a license?"

"Let me worry about that."

"Mmmm . . we weren't required by law to follow every millicurie of X-fuel, since it isn't classed as potentially suitable for mass weapons. Just the same, we knew what happened to it. There's none available."

Harriman kept quiet.

"In the second place, you can have an X-fuel license, if you wish—for any purpose but rocket fuel."

"Why the restriction?"

"You are building a Moon ship, aren't you?"

"Me?"

"Don't *you* fence with me, D.D. It's my business to know things. You can't use X-fuel for rockets, even if you can find it—which you can't." The chairman went to a vault back of his desk and returned with a quarto volume, which he laid in front of Harriman. It was titled: *Theoretical Investigation into the Stability of Several Radioisotopic Fuels—With Notes on the* Charon-*Power-Satellite Disaster*. The cover had a serial number and was stamped: *SECRET*.

Harriman pushed it away. "I've got no business looking at that—

and I wouldn't understand it if I did."

The chairman grinned. "Very well, I'll tell you what's in it. I'm deliberately tying your hands, D.D., by trusting you with a defense secret—"

"I won't have it, I tell you!"

"Don't try to power a space ship with X-fuel, D.D. It's a lovely fuel — but it may go off like a firecracker anywhere out in space. That report tells why."

"Confound it, we ran the *Charon* for nearly three years!"

"You were lucky. It is the official—but utterly confidential—opinion of the government that the *Charon* set off the power satellite, rather than the satellite setting off the *Charon*. We had thought it was the other way around at first, and of course it could have been, but there was the disturbing matter of the radar records. It seemed as if the ship had gone up a split second before the satellite. So we made an intensive theoretical investigation. X-fuel is too dangerous for rockets."

"That's ridiculous! For every pound burned in the *Charon* there were at least a hundred pounds used in power plants on the surface. How come *they* didn't explode?"

"It's a matter of shielding. A rocket necessarily uses less shielding than a stationary plant, but the worst feature is that it operates out in space. The disaster is presumed to have been triggered by primary cosmic radiation. If you like, I'll call in one of the mathematical physicists to elucidate."

Harriman shook his head. "You know I don't speak the language." He considered. "I suppose that's all there is to it?"

"I'm afraid so. I'm really sorry." Harriman got up to leave. "Uh, one more thing, D.D.—you weren't thinking of approaching any of my subordinate colleagues, were you?"

"Of course not. Why should I?"

"I'm glad to hear it. You know, Mr. Harriman, some of our staff may not be the most brilliant scientists in the world—it's very hard to keep a first-class scientist happy in the conditions of government service. But there is one thing I am sure of; all of them are utterly incorruptible. Knowing that, I would take it as a personal affront if anyone tried to influence one of my people—a very personal affront."

"So?"

"Yes. By the way, I used to box light-heavyweight in college. I've kept it up."

"Hmmm . . . well, I never went to college. But I play a fair game of poker." Harriman suddenly grinned. "I won't tamper with your boys, Carl. It would be too much like offering a bribe to a starving man. Well, so long."

When Harriman got back to his office he called in one of his confidential clerks. "Take another coded message to Mr. Montgomery. Tell him to ship the stuff to Panama City, rather than to the States." He started to dictate another message to Coster, intending to tell him to stop work on the *Pioneer,* whose skeleton was already reaching skyward on the Colorado prairie, and shift to the *Santa Maria,* formerly the *City of Brisbane.*

He thought better of it. Takeoff would have to be outside the United States; with the Atomic Energy Commission acting stuffy, it would not do to try to move the *Santa Maria*: it would give the show away.

Nor could she be moved without refitting her for chem-powered flight. No, he would have another ship of the *Brisbane* class taken out of service and sent to Panama, and the power plant of the *Santa Maria* could be disassembled and shipped there, too. Coster could have the new ship ready in six weeks, maybe sooner . . . and he, Coster, and LeCroix would start for the Moon!

The devil with worries over primary cosmic rays! The *Charon* operated for three years, didn't she? They would make the trip, they would prove it could be done, then, if safer fuels were needed, there would be the incentive to dig them out. The important thing was to do it, make the trip. If Columbus had waited for decent ships, we'd all still be in Europe. A man had to take some chances or he never got anywhere.

Contentedly he started drafting the messages that would get the new scheme underway.

He was interçupted by a secretary. "Mr. Harriman, Mr. Montgomery wants to speak to you."

"Eh? Has he gotten my code already?"

"I don't know, sir."

"Well, put him on."

Montgomery had not received the second message. But he had news for Harriman:Costa Rica had sold all its X-fuel to the English Ministry of Power, soon after the disaster. There was not an ounce of it left, neither in Costa Rica, nor in England.

Harriman sat and moped for several minutes after Montgomery had cleared the screen. Then he called Coster. "Bob? Is LeCroix there?"

"Right here-we were about to go out to dinner together. Here he is, now."

"Howdy, Les. Les, that was a good brain storm of yours, but it didn't work. Somebody stole the baby."

"Eh? Oh, I get you. I'm sorry."

"Don't ever waste time being sorry. We'll go ahead as originally planned. We'll get there!"

"Sure we will."

Chapter Seven

From the June issue of *Popular Technics* magazine: "URANIUM PROSPECTING ON THE MOON—A Fact Article about a soon-to-come Major Industry."

From HOLIDAY: "*Honeymoon on the Moon*—A Discussion of the Miracle Resort that your children will enjoy, as told to our travel editor."

From the *American Sunday Magazine*: "DIAMONDS ON THE MOON?—A World Famous Scientist Shows Why Diamonds Must Be Common As Pebbles in the Lunar Craters."

"Of course, Clem, I don't know anything about electronics, but here is the way it was explained to me. You can hold the beam of a television broadcast down to a degree or so these days, can't you?"

"Yes—if you use a big enough reflector."

"You'll have plenty of elbow room. Now Earth covers a space two degrees wide, as seen from the Moon. Sure, it's quite a distance away, but you'd have no power losses and absolutely perfect and unchanging conditions for transmission. Once you made your set-up, it wouldn't be any more expensive than broadcasting from the top of a mountain here, and a derned sight less expensive than keeping copters in the air from coast to coast, the way you're having to do now."

"It's a fantastic scheme, Delos."

"What's fantastic about it? Getting to the Moon is my worry, not yours. Once we are there, there's going to be television back to Earth, you can bet your shirt on that. It's a natural set-up for line-of-sight transmission. If you aren't interested, I'll have to find someone who is."

"I didn't say I wasn't interested."

"Well, make up your mind. Here's another thing, Clem—I don't want to go sticking my nose into your business, but haven't you had a certain amount of trouble since you lost the use of the power satellite as a relay station?"

"You know the answer; don't needle me. Expenses have gone out of sight without any improvement in revenue."

"That wasn't quite what I meant. How about censorship?"

The television executive threw up his hands. "Don't say that word! How anybody expects a man to stay in business with every two-bit wowser in the country claiming a veto over wLhat we can say and can't say and what we can show and what we can't show—it's enough to make you throw up. The whole principle is wrong; it's like demanding that grown men live on skim milk because the baby can't eat steak. If I were able to lay my hands on those confounded, prurient-minded, slimy—"

"Easy! Easy!" Harriman interrupted. "Did it ever occur to you that there is absolutely no way to interfere with a telecast from the Moon —and that boards of censorship on Earth won't have jurisdiction in any case?"

"What? Say that again."

"LIFE goes to the Moon.' LIFETIME Inc. is proud to announce that arrangements have been completed to bring LIFE'S readers a personally conducted tour of the first trip to our satellite. In place of the usual weekly feature 'LIFE Goes to a Party' there will commence, immediately after the return of the first successful—"

"ASSURANCE FOR THE NEW AGE"

(An excerpt from an advertisement of the North Atlantic Mutual Insurance and Liability Company)

"—the same looking-to-thefuture that protected our policy-holders after the Chicago Fire, after the San Francisco Fire, after every disaster since the War of 1812, now reaches out to insure you from unexpected loss *even on the Moon*—"

"THE UNBOUNDED FRONTIERS OF TECHNOLOGY"

"When the Moon ship *Pioneer* climbs skyward on a ladder of flame, twenty-seven essential devices in her 'innards' will be powered by especiallyengineered DELTA batteries—"

"Mr. Harriman, could you come out to the field?"

"What's up, Bob?"

"Trouble," Coster answered briefly.

"What sort of trouble?"

Coster hesitated. "I'd rather not talk about it by screen. If you can't come, maybe Les and I had better come there."

"I'll be there this evening."

When Harriman got there he saw that LëCroix's impassive face concealed bitterness, Coster looked stubborn and defensive. He waited until the three were alone in Coster's workroom before he spoke. "Let's have it, boys."

LeCroix looked at Coster. The engineer chewed his lip and said, "Mr. Harriman, you know the stages this design has been through."

"More or less."

"We had to give up the catapult idea. Then we had this—" Coster rummaged on his desk, pulled out a perspective treatment of a four-step rocket, large but rather graceful."Theoretically it was a possibility; practically it cut things too fine. By the time the stress group boys and the auxiliary group and the control group got through adding things we were forced to come to this—" He hauled out another sketch; it was basically like the first, but squattier, almost pyramidal. "We added a fifth stage as a ring around the fourth stage. We even managed to save some weight by using most of the auxiliary and control equipment for the fourth stage to control the fifth stage. And it still had enough sectional density to punch through the atmosphere with no important drag, even if it was clumsy."

Harriman nodded. "You know, Bob, we're going to have to get away from the step rocket idea before we set up a schedule run to the Moon."

"I don't see how you can avoid it with chem-powered rockets."

"If you had a decent catapult you could put a single-stage chem-powered rocket into an orbit around the Earth, couldn't you?"

"Sure."

"That's what we'll do. Then it will refuel in that orbit."

"The old space-station set-up. I suppose that makes sense-in fact I know it does. Only the ship wouldn't refuel and continue on to the Moon. The economical thing would be to have special ships that never landed anywhere make the jump from there to another fueling station around the Moon. Then—"

LeCroix displayed a most unusual impatience. "AJ1 that doesn't mean anything now. Get on with the story, Bob."

"Right," agreed Harriman.

"Well, this model should have done it. And, damn it, it still should do it." Harriman looked puzzled. "But, Bob, that's the approved design, isn't it? That's what you've got two-thirds built right out there on the field."

"Yes." Coster looked stricken. "But it won't do it. It won't work."

"Why not?"

"Because I've had to add in too much dead weight, that's why. Mr. Harriman, you aren't an engineer; you've no idea how fast the performance falls off when you have to clutter up a ship with anything but fuel and power plant. Take the landing arrangements for the fifth-stage power ring. You use that stage for a minute and a half, then you throw it away. But you don't dare take a chance of it falling on Wichita or Kansas City. We have to include a parachute sequence. Even then we have to plan on tracking it by radar and cutting the shrouds by radio control when it's over empty countryside and not too high. That means more weight, besides the parachute. By the time we are through, we don't get a net addition of a mile a second out of that stage. It's not enough."

Harriman stirred in his chair. "Looks like we made a mistake in trying to launch it from the States. Suppose we took off from someplace unpopulated, say the Brazil coast, and let the booster stages fall in the Atlantic; how much would that save you?"

Coster looked off in the distance, then took out a slide rule. "Might work."

"How much of a chore will it be to move the ship, at this stage?"

"Well . . . it would have to be disassembled completely; nothing less would do. I can't give you a cost estimate off hand, but it would be expensive."

"How long would it take?"

"Hmm. . .shucks, Mr. Harriman, I can't answer off hand. Two years — eighteen months, with luck. We'd have to prepare a site. We'd have to build shops."

Harriman thought about it, although he knew the answer in his heart. His shoe string, big as it was, was stretched to the danger point. He couldn't keep up the promotion, on talk alone, for another two years; he had to have a successful flight and soon—or the whole jerry-built financial structure would burst. "No good, Bob."

"I was afraid of that. Well, I tried to add still a sixth stage." He held up another sketch. "You see that monstrosity? I reached the point of diminishing returns. The final effective velocity is actually less with this abortion than with the five-step job."

"Does that mean you are whipped, Bob? You can't build a Moon ship?"

"No, I—"

LeCroix said suddenly, "Clear out Kansas."

"Eh?" asked Harriman.

"Clear everybody out of Kansas and Eastern Colorado. Let the fifth and fourth sections fall anywhere in that area. The third section falls in the Atlantic; the second section goes into a permanent orbit—and the ship itself goes on to the Moon. You could do it if you didn't have to waste weight on the parachuting of the fifth and fourth sections. Ask Bob."

"So? How about it, Bob?"

"That's what I said before. It was the parasitic penalties that whipped us. The basic design is all right."

"Hmmm. . . somebody hand me an Atlas." Harriman looked up Kansas and Colorado, did some rough figuring. He stared off into space, looking surprisingly, for the moment, as Coster did when the engineer was thinking about his own work. Finally he said, "It won't work."

"Why not?"

"Money. I told you not to worry about money—for the ship. But it would cost upward of six or seven million dollars to evacuate that area even for a day. We'd have to settle nuisance suits out of hand; we couldn't wait. And there would be a few diehards who just couldn't move anyhow."

LeCroix said savagely, "If the crazy fools won't move, let them take their chances."

"I know how you feel, Les. But this project is too big to hide and too big to move. Unless we protect the bystanders we'll be shut down by court order and force. I can't buy all the judges in two states. Some of them wouldn't be for sale."

"It was a nice try, Les," consoled Coster.

"I thought it might be an answer for all of us," the pilot answered.

Harriman said, "You were starting to mention another solution, Bob?" Coster looked embarrassed. "You know the plans for the ship itself—a three-man job, space and supplies for three."

"Yes. What are you driving at?"

"It doesn't have to be three men. Split the first step into two parts, cut the ship down to the bare minimum for one man and jettison the remainder. That's the only way I see to make this basic design work." He got out another sketch. "See? One man and supplies for less than a week. No airlock— the pilot stays in his pressure suit. No galley. No bunks. The bare minimum to keep one man alive for a maximum of two hundred hours. It will work."

"It will work," repeated LeCroix, looking at Coster.

Harriman looked at the sketch with an odd, sick feeling at his stomach. Yes, no doubt it would work—and for the purposes of the promotion it did not matter whether one man or three went to the Moon and returned. Just to do it was enough; he was dead certain that one successful flight would cause money to roll in so that there would be capital to develop to the point of practical, passenger-carrying ships.

The Wright brothers had started with less.

"If that is what I have to put up with, I suppose I have to," he said slowly.

Coster looked relieved. "Fine! But there is one more hitch. You know the conditions under which I agreed to tackle this job—I was to go along. Now Les here waves a contract under my nose and says *he* has to be the pilot."

"It's not just that," LeCroix countered. "You're no pilot, Bob. You'll kill yourself and ruin the whole enterprise, just through bullheaded stubbornness."

"I'll learn to fly it. After all, I designed it. Look here, Mr. Harriman, I hate to let you in for a suit—Les says he will sue-but my contract antedates his. I intend to enforce it."

"Don't listen to him, Mr. Harriman. Let him do the suing. I'll fly that ship and bring her back. He'll wreck it."

"Either I go or I don't build the ship," Coster said flatly.

Harriman motioned both of them to keep quiet. "Easy, easy, both of you. You can both sue me if it gives you any pleasure. Bob, don't talk nonsense; at this stage I can hire other engineers to finish the job. You tell me it has to be just one man."

"That's right."

"You're looking at him."

They both stared.

"Shut your jaws," Harriman snapped. "What's funny about that? You both knew I meant to go. You don't think I went to all this trouble just to give you two a ride to the Moon, do you? *I intend to go*. What's wrong with me as a pilot? I'm in good health, my eyesight is all right, I'm still smart enough to learn what I have to learn. If I have to drive my own buggy, I'll do it. I won't step aside for anybody, not anybody, d'you hear me?"

Coster got his breath first. "Boss, you don't know what you are saying." Two hours later they were still wrangling. Most of the time Harriman had stubbornly sat still, refusing to answer their arguments. At last he went out of the room for a few minutes, on the usual pretext. When he came back in he said, "Bob, what do you weigh?"

"Me? A little over two hundred."

"Close to two twenty, I'd judge. Les, what do you weigh?"

"One twenty-six."

"Bob, design the ship for a net load of one hundred and twenty-six pounds."

"Huh? Now wait a minute, Mr. Harriman—"

"*Shut up!* If I can't learn to be a pilot in six weeks, neither can you."

"But I've got the mathematics and the basic knowledge to—"

"Shut up I said! Les has spent as long learning his profession as you have learning yours. Can he become an engineer in six weeks? Then what gave you the conceit to think that you can learn his job in that time? I'm not going to have you wrecking my ship to satisfy your swollen ego. Anyhow, you gave out the real key to it when you were discussing the design. The real limiting factor is the actual weight of the passenger or passengers, isn't it? Everything—*everything* works in proportion to that one mass. Right?"

"Yes, but—"

"Right or wrong?"

"Well . . . yes, that's right. I just wanted—"

"The smaller man can live on less water, he breathes less air, he occunies less space. Les goes." Harriman walked over and put a hand on Coster's shoulder. "Don't take it hard, son. It can't be any worse on you than it is on me. This trip has got to succeed—and that means you and I have got to give up the honor of being the first man on the Moon. But I promise you this: we'll go on the second trip, we'll go with Les as our private chauffeur. It will be the first of a lot of passenger trips. Look, Bob-you can be a big man in this game, if you'll play along now. How would you like to be chief engineer of the first lunar colony?"

Coster managed to grin. "It might not be so bad."

"You'd like it. Living on the Moon will be an engineering problem; you and I have talked about it. How'd you like to put your theories to work? Build the first city? Build the big observatory we'll found there? Look around and know that you were the man who had done it?"

Coster was definitely adjusting himself to it. "You make it sound good. Say, what will *you* be doing?"

"Me? Well, maybe I'll be the first mayor of Luna City." It was a new thought to him; he savored it. "The Honorable Delos David Harriman, Mayor of Luna City. Say, I like that! You know, I've never held any sort of public office; I've just owned things." He looked around. "Everything settled?"

"I guess so," Coster said slowly. Suddenly he stuck his hand out at LeCroix. "You fly her, Les; I'll build her."

LeCroix grabbed his hand. "It's a deal. And you and the Boss get busy and start making plans for the next job-big enough for all of us."

"Right!"

Harriman put his hand on top of theirs. "That's the way I like to hear you talk. We'll stick together and we'll found Luna City together."

"I think we ought to call it "Harriman," LeCroix said seriously.

"Nope, I've thought of it as Luna City ever since I was a kid; Luna City it's going to be. Maybe we'll put Harriman Square in the middle of it," he added.

"I'll mark it that way in the plans," agreed Coster.

Harriman left at once. Despite the solution he was terribly depressed and did not want his two colleagues to see it. It had been a Pyrrhic victory; he had saved the enterprise but he felt like an animal who has gnawed off his own leg to escape a trap.

Chapter Eight

Strong was alone in the offices of the partnership when he got a call from Dixon. "George, I was looking for D.D. Is he there?"

"No, he's back in Washington—something about clearances. I expect him back soon."

"Hmmm. . . . Entenza and I want to see him. We're coming over." They arrived shortly. Entenza was quite evidently very much worked up over something; Dixon looked sleekly impassive as usual. After greetings Dixon waited a moment, then said, "Jack, you had some business to transact, didn't you?"

Entenza jumped, then snatched a draft from his pocket.

"Oh, yes! George, I'm not going to have to pro-rate after all. Here's my payment to bring my share up to full payment to date."

Strong accepted it. "I know that Delos will be pleased." He tucked it in a drawer.

"Well," said Dixon sharply, "aren't you going to receipt for it?"

"If Jack wants a receipt. The cancelled draft will serve." However, Strong wrote out a receipt without further comment; Entenza accepted it.

They waited a while. Presently Dixon said, "George, you're in this pretty deep, aren't you?"

"Possibly."

"Want to hedge your bets?"

"How?"

"Well, candidly, I want to protect myself. Want to sell one half of one. percent of your share?"

Strong thought about it. In fact he was worried—worried sick. The presence of Dixon's auditor had forced them to keep on a cash basis—and only Strong knew how close to the line that had forced the partners. "Why do you want it?"

"Oh, I wouldn't use it to interfere with Delos's operations. He's our man; we're backing him. But I would feel a lot safer if I had the right to call a halt if he tried to commit us to something we couldn't pay for. You know Delos; he's an incurable optimist. We ought to have some sort of a brake on him."

Strong thought about it. The thing that hurt him was that he agreed with everything Dixon said; he had stood by and watched while Delos dissipated two fortunes, painfully built up through the years. D.D. no longer seemed to care. Why, only this morning he had refused even to look at a report on the H & S automatic household switch—after dumping it on Strong.

Dixon leaned forward. "Name a price, George. I'll be generous."

Strong squared his stooped shoulders. "I'll sell—"

"Good!"

"—if Delos okays it. Not otherwise."

Dixon muttered something. Enteuza snorted. The conversation might have gone acrimoniously further, had not Harriman walked in.

No one said anything about the proposal to Strong. Strong inquired about the trip; Harriman pressed a thumb and finger together. "All in the groove! But it gets more expensive to do business in Washington every day." He turned to the others. "How's tricks? Any special meaning to the assemblage? Are we in executive session?"

Dixon turned to Entenza. "Tell him, Jack."

Entenza faced Harriman. "What do you mean by selling television rights?"

Harriman cocked a brow. "And why not?"

"Because you promised them to me, that's why. That's the original agreement; I've got it in writing."

"Better take another look at the agreement, Jack. And don't go off halfcocked. You have the exploitation rights for radio, television, and other amusement and special feature ventures in connection with the first trip to the Moon. You've still got 'em. Including broadcasts from the ship, provided we are able to make any." He decided that this was not a good time to mention that weight considerations had already made the latter impossible; the *Pioneer* would carry no electronic equipment of any sort not needed in astrogation. "What I sold was the franchise to erect a television station on the Moon, later. By the way, it wasn't even an exclusive franchise, although Clem Haggerty thinks it is. If you want to buy one yourself, we can accommodate you."

"*Buy* it! Why you—"

"Wups! Or you can have it free, if you can get Dixon and George to agree that you are entitled to it. I won't be a tightwad. Anything else?"

Dixon cut in. "Just where do we stand now, Delos?"

"Gentlemen, you can take it for granted that the *Pioneer* will leave on schedule—next Wednesday. And now, if you will excuse me, I'm on my way to Peterson Field."

After he had left his three associates sat in silence for some time, Entenza muttering to himself, Dixon apparently thinking, and Strong just waiting. Presently Dixon said, "How about that fractional share,

George?"

"You didn't see fit to mention it to Delos."

"I see." Dixon carefully deposited an ash. "He's a strange man, isn't he?" Strong shifted around. "Yes."

"How long have you known him?"

"Let me see—he came to work for me in—"

"*He* worked for *you*?"

"For several months. Then we set up our first company." Strong thought back about it. "I suppose he had a power complex, even then."

"No," Dixon said carefully. "No, I wouldn't call it a power complex. It's more of a Messiah complex."

Entenza looked up. "He's a crooked son of a bitch, that's what he is!"

Strong looked at him mildly. "I'd rather you wouldn't talk about him that way. I'd really rather you wouldn't."

"Stow it, Jack," ordered Dixon. "You might force George to take a poke at you. One of the odd things about him," went on Dixon, "is that he seems to be able to inspire an almost feudal loyalty. Take yourself. I know you are cleaned out, George-yet you won't let me rescue you. That goes beyond logic; it's personal."

Strong nodded. "He's an odd man. Sometimes I think he's the last of the Robber Barons."

Dixon shook his head. "Not the last. The last of them opened up the American West. He's the first of the *new* Robber Barons—and you and I won't see the end of it. Do you ever read Carlyle?"

Strong nodded again. "I see what you mean, the 'Hero' theory, but I don't necessarily agree with it."

"There's something to it, though," Dixon answered. "Truthfully, I don't think Delos knows what he is doing. He's setting up a new imperialism.

There'll be the devil to pay before it's cleaned up." He stood up. "Maybe we should have waited. Maybe we should have balked him—*if* we could have. Well, it's done. We're on the merry-go-round and we can't get off. I hope we enjoy the ride.. Come on, Jack."

Chapter Nine

The Colorado prairie was growing dusky. The Sun was behind the peak and the broad white face of Luna, full and round, was rising in the east. In the middle of Peterson Field the *Pioneer* thrust toward the sky. A barbedwire fence, a thousand yards from its base in all directions, held back the crowds. Just inside the barrier guards patrolled restlessly. More guards circulated through the crowd. Inside the fence, close to it, trunks and trailers for camera, sound, and television equipment were parked and, at the far ends of cables, remote-control pickups were located both near and far from the ship on all sides. There were other trucks near the ship and a stir of organized activity.

Harriman waited in Coster's office; Coster himself was out on the field, and Dixon and Entenza had a room to themselves. LeCroix, still in a drugged sleep, was in the bedroom of Coster's on-the-job living quarters.

There was a stir and a challenge outside the door. Harriman opened it a crack. "If that's another reporter, tell him 'no.' Send him to Mr. Montgomery across the way. Captain LeCroix will grant no unauthorized interviews."

"Delos! Let me in."

"Oh—you, George. Come in. We've been hounded to death."

Strong came in and handed Harriman a large and heavy handbag. "Here it is."

"Here is what?"

"The cancelled covers for the philatelic syndicate. You forgot them. That's half a million dollars, Delos," he complained. "If I hadn't noticed them in your coat locker we'd have been in the soup."

Harriman composed his features. "George, you're a brick, that's what you are."

"Shall I put them in the ship myself?" Strong said anxiously.

"Huh? No, no. Les will handle them." He glanced at his watch. "We're about to waken him. I'll take charge of the covers." He took the bag and added, "Don't come in now. You'll have a chance to say goodbye on the field."

Harriman went next door, shut the door behind him, waited for the nurse to give the sleeping pilot a counteracting stimulant by injection, then chased her out. When he turned around the pilot was sitting up, rubbing his eyes. "How do you feel, Les?"

"Fine. So this is it."

"Yup. And we're all rooting for you, boy. Look, you've got to go out and face them in a couple of minutes. Everything is ready—but I've got a couple of things I've got to say to you."

"Yes?"

"See this bag?" Harriman rapidly explained what it was and what it signified.

LeCroix looked dismayed. "But I *can't* take it, Delos; It's all figured to the last ounce."

"Who said you were going to take it? Of course you can't; it must weigh sixty, seventy pounds. I just plain forgot it. Now here's what we do: for the time being I'll just hide it in here—" Harriman stuffed the bag far back into a clothes closet. "When you land, I'll be right on your tail. Then we pull a sleight-of-hand trick and you fetch it out of the ship."

LeCroix shook his head ruefully. "Delos, you beat me. Well, I'm in no mood to argue."

"I'm glad you're not; otherwise I'd go to jail for a measly half million dollars. We've already spent that money. Anyhow, it doesn't matter," he went on. "Nobody but you and me will know it—and the stamp collectors will get their money's worth." He looked at the younger man as if anxious for his approval.

"Okay, okay," LeCroix answered. "Why should I care what happens to a stamp collector—tonight? Let's get going."

"One more thing," said Harriman and took out a small cloth bag. "This you take with you—and the weight *has* been figured in. I saw to it. Now here is what you do with it." He gave detailed and very earnest instructions.

LeCroix was puzzled. "Do I hear you straight? I let it be found—then I tell the exact truth about what happened?"

"That's right."

"Okay." LeCroix zipped the little bag into a pocket of his coveralls. "Let's get out to the field. H-hour minus twenty-one minutes already."

Strong joined Harriman in the control blockhouse after LeCroix had gone up inside the ship. "Did they get aboard?" he demanded anxiously. "LeCroix wasn't carrying anything."

"Oh, sure," said Harriman. "I sent them ahead. Better take your place. The ready flare has already gone up."

Dixon, Entenza, the Governor of Colorado, the Vice-President of the United States, and a round dozen of V.I.P.'s were already seated at periscopes, mounted in slits, on a balcony above the control level. Strong and Harriman climbed a ladder and took the two remaining chairs.

Harriman began to sweat and realized he was trembling. Through his periscope out in front he could see the ship; from below he could hear Coster's voice, nervously checking departure station reports. Muted through a speaker by him was a running commentary of one of the newscasters reporting the show. Harriman himself was the—well, the admiral, he decided—of the operation, but there was nothing more he could do, but wait, watch, and try to pray.

A second flare arched up in the sky, burst into red and green. Five minutes.

The seconds oozed away. At minus two minutes Harriman realized that he could not stand to watch through a tiny slit; he had to be outside, take part in it himself—he had to. He climbed down, hurried to the exit of the blockhouse. Coster glanced around, looked startled, but did not try to stop him; Coster could not leave his post no matter what happened. Harriman elbowed the guard aside and went outdoors.

To the east the ship towered skyward, her slender pyramid sharp black against the full Moon. He waited.

And waited.

What had gone wrong? There had remained less than two minutes when he had come out; he was sure of that—yet there she stood, silent, dark, unmoving. There was not a sound, save the distant ululation of sirens warning the spectators behind the distant fence. Harriman felt his own heart stop, his breath dry up in his throat. Something had failed. Failure.

A single flare rocket burst from the top of the blockhouse; a flame licked at the base of the ship.

It spread, there was a pad of white fire around the base. Slowly, almost lumberingly, the *Pioneer* lifted, seemed to hover for a moment, balanced on a pillar of fire-then reached for the sky with acceleration so great that she was above him almost at once, overhead at the zenith, a dazzling circle of flame. So quickly was she above, rather than out in front, that it seemed as if she were arching back over him and must surely fall on him. Instinctively and futilely he threw a hand in front of his face.

The sound reached him.

Not as sound—it was a white noise, a roar in all frequencies, sonic, subsonic, supersonic, so incredibly loaded with energy that it struck him in the chest. He heard it with his teeth and with his bones as well as with his ears. He crouched his knees, bracing against it.

Following the sound at the snail's pace of a hurricane came the backwash of the splash. It ripped at his clothing, tore his breath from his lips. He stumbled blindly back, trying to reach the lee of the concrete building, was knocked down.

He picked himself up coughing and strangling and remembered to look at the sky. Straight overhead was a dwindling star. Then it was gone.

He went into the blockhouse.

The room was a babble of high-tension, purposeful confusion. Harriman's ears, still ringing, heard a speaker blare, "Spot One! Spot One to blockhouse! Step five loose on schedule—ship and step five showing separate blips—" and Coster's voice, high and angry, cutting in with, "Get Track One! Have they picked up step five yet? Are they tracking it?"

In the background the news commentator was still blowing his top. "A great day, folks, a great day! The mighty *Pioneer*, climbing like an angel of the Lord, flaming sword at hand, is even now on her glorious way to our sister planet. Most of you have seen her departure on your screens; I wish you could have seen it as I did, arching up into the evening sky, bearing her precious load of—"

"Shut that thing off!" ordered Coster, then to the visitors on the observation platform, "And pipe down up there! Quiet!"

The Vice-President of the United States jerked his head around, closed his mouth. He remembered to smile. The other V.I.P.'s shut up, then resumed again in muted whispers. A girl's voice cut through the silence, "Track One to Blockhouse—step five tracking high, plus two." There was a stir in the corner. There a large canvas hood shielded a heavy sheet of Plexiglass from direct light. The sheet was mounted vertically and was edge-lighted; it displayed a coordinate map of Colorado and Kansas in fine white lines; the cities and towns glowed red. Unevacuated farms were tiny warning dots of red light.

A man behind the transparent map touched it with a grease pencil; the reported location of step five shone out. In front of the map screen a youngish man sat quietly in a chair, a pear-shaped switch in his hand, his thumb lightly resting on the button. He was a bombardier, borrowed from the Air Forces; when he pressed the switch, a radio-controlled circuit in step five should cause the shrouds of step five's landing 'chute to be cut and let it plummet to Earth. He was working from radar reports alone with no fancy computing bombsight to think for him. He was working almost by instinct— or, rather, by the accumulated subconscious knowledge of his trade, integrating in his brain the meager data spread before him, deciding where the tons of step five would land if he were to press his switch at any particular instant. He seemed unworried.

"Spot One to Blockhouse!" came a man's voice again. "Step four free on schedule," and almost immediately following, a deeper voice echoed, "Track Two, tracking step four, instantaneous altitude nine-five-one miles, predicted vector."

No one paid any attention to Harriman.

Under the hood the observed trajectory of step five grew in shining dots of grease, near to, but not on, the dotted line of its predicted path. Reaching out from each location dot was drawn a line at right angles, the reported altitude for that location.

The quiet man watching the display suddenly pressed down hard on his switch. He then stood up, stretched, and said, "Anybody got a cigaret?" "Track Two!" he was answered. "Step four—first impact prediction—forty miles west of Charleston, South Carolina."

"Repeat!" yelled Coster.

The speaker blared out again without pause, "Correction, correction— forty miles east, repeat *east*."

Coster sighed. The sigh was cut short by a report. "Spot One to Blockhouse—step three free, minus five seconds," and a talker at Coster's control desk called out, "Mr. Coster, *Mister Coster*—Palomar Observatory wants to talk to you."

"Tell 'em to go—no, tell 'em to wait." Immediately another voice cut in with, "Track One, auxiliary range Fox—Step one about to strike near Dodge City, Kansas."

"*How near?*"

There was no answer. Presently the voice of Track One proper said, "Impact reported approximately fifteen miles southwest of Dodge City."

"Casualties?"

Spot One broke in before Track One could answer, "Step two free, step two free-the ship is now on its own."

"Mr. Coster—*please*, Mr. Coster—"

And a totally new voice: "Spot Two to Blockhouse-we are now tracking the ship. Stand by for reported distances and bearings. Stand by—"

"Track Two to Blockhouse-step four will definitely land in Atlantic, estimated point of impact oh-five-seven miles east of Charleston bearing ohnine-three. I will repeat—"

Coster looked around irritably. "Isn't there any drinking water anywhere in this dump?"

"Mr. Coster, please-Palomar says they've just got to talk to you."

Harriman eased over to the door and stepped out. He suddenly felt very much let down, utterly weary, and depressed.

The field looked strange without the ship. He had watched it grow; now suddenly it was gone. The Moon, still rising, seemed oblivious—

and space travel was as remote a dream as it had been in his boyhood.

There were several tiny figures prowling around, the flash apron where the ship had stood—souvenir hunters, he thought contemptuously. Someone came up to him in the gloom. "Mr. Harriman?"

"Eh?"

"Hopkins—with the A.P. How about a statement?"

"Uh? No, no comment. I'm bushed."

"Oh, now, just a word. How does it feel to have backed the first successful Moon flight—if it is successful."

"It will be successful." He thought a moment, then squared his tired shoulders and said, "Tell them that this is the beginning of the human race's greatest era. Tell them that every one of them will have a chance to follow in Captain LeCroix's footsteps, seek out new planets, wrest a home for themselves in new lands. Tell them that this means new frontiers, a shot in the arm for prosperity. It means—" He ran down. "That's all tonight. I'm whipped, son. Leave me alone, will you?"

Presently Côster came out, followed by the V.I.P.'s. Harriman went up to Coster. "Everything all right?"

"Sure. Why shouldn't it be? Track three followed him out to the limit of range-all in the groove." Coster added, "Step five killed a cow when it grounded."

"Forget it—we'll have steak for breakfast." Harriman then had to make conversation with the Governor and the Vice-President, had to escort them out to their ship. Dixon and Entenza left together, less formally; at last Coster and Harriman were alone save for subordinates too junior to constitute a strain and for guards to protect them from the crowds. "Where you headed, Bob?"

"Up to the Broadmoor and about a week's sleep. How about you?"

"if you don't mind, I'll doss down in your apartment."

"Help yourself. Sleepy pills in the bathroom."

"I won't need them." They had a drink together in Coster's quarters, talked aimlessly, then Coster ordered a copter cab and went to the hotel. Harriman went to bed, got up, read a day-old copy of the Denver Post filled with pictures of the *Pioneer*, finally gave up and took two of Coster's sleeping capsules.

Chapter Ten

Someone was shaking him. "Mr. Harriman! Wake up—Mr. Caster is on the screen."

"Huh? Wazza? Oh, all right." He got up and padded to the phone. Caster was :ooking tousie-headea and excited. "Hey, Boss—*he made it!*"

"Huh? What do you mean?"

"Palomar just called me. They saw the mark and now they've spotted the ship itself. He—"

"Wait a minute, Bob. Slow up. He *can't* be there yet. He just left last night."

Coster looked disconcerted. "What's the matter, Mr. Harriman? Don't you feel well? He left Wednesday."

Vaguely, Harriman began to be oriented. No, the takeoff had not been the night before—fuzzily he recalled a drive up into the mountains, a day spent dozing in the sun, some sort of a party at which he had drunk too much. What day was today? He didn't know. If LeCroix had landed on the Moon, then—never mind. "It's all right, Bob-I was half asleep. I guess I dreamed the takeoff all over again. Now tell me the news, slowly."

Coster started over. "LeCroix has landed, just west of Archimedes crater. They can see his ship, from Palomar. Say that was a great stunt you thought up, marking the spot with carbon black. Les must have covered two acres with it. They say it shines out like a billboard, through the Big Eye."

"Maybe we ought to run down and have a look. No—later," he amended. "We'll be busy."

"I don't see what more we can do, Mr. Harriman. We've got twelve of our best ballistic computers calculating possible routes for you now."

Harriman started to tell the man to put on another twelve, switched off the screen instead. He was still at Peterson Field, with one of Skyways' best stratoships waiting for him outside, waiting to take him to whatever point on the globe LeCroix might ground. LeCroix was in the upper stratosphere, had been there for more than twenty-four hours. The pilot was slowly, cautiously wearing out his terminal velocity, dissipating the incredible kinetic energy as shock wave and radiant heat.

They had tracked him by radar around the globe and around again —and again . . . yet there was no way of knowing just where and what sort of landing the pilot would choose to risk. Harriman listened to the running radar reports and cursed the fact that they had elected to save the weight of radio equipment.

The radar figures started coming closer together. The voice broke off and started again: "He's in his landing glide!"

"Tell the field to get ready!" shouted Harriman. He held his breath and waited. After endless seconds another voice cut in with, "The Moon ship is now landing. It will ground somewhere west of Chihuahua in Old Mexico."

Harriman started for the door at a run.

Coached by radio en route, Harriman's pilot spotted the *Pioneer* incredibly small against the desert sand. He put his own ship quite close to it, in a beautiful landing. Harriman was fumbling at the cabin door before the ship was fairly stopped.

LeCroix was sitting on the ground, resting his back against a skid of his ship and enjoying the shade of its stubby triangular wings. A paisano sheepherder stood facing him, open-mouthed. As Harriman trotted out and lumbered toward him LeCroix stood up, flipped a cigaret butt away and said, "Hi, Boss!"

"Les!" The older man threw his arms around the younger. "It's good to see you, boy."

"It's good to see *you*. Pedro here doesn't speak my language." LeCroix glanced around; there was no one else nearby but the pilot of Harriman's ship. "Where's the gang? Where's Bob?"

"I didn't wait. They'll surely be along in a few minutes—hey, there they come now!" It was another stratoship, plunging in to a landing. Harriman turned to his pilot. "Bill—go over and meet them."

"Huh? They'll come, never fear."

"Do as I say."

"You're the doctor." The pilot trudged through the sand, his back expressing disapproval. LeCroix looked puzzled. "Quick, Les—help me with this."

"This" was the five thousand cancelled envelopes which were supposed to have been to the Moon. They got them out of Harriman's stratoship and into the Moon ship, there to be stowed in an empty food locker, while their actions were still shielded from the later arrivals by the bulk of the strataship. "Whew!" said Harriman. "That was close. Half a million dollars. We need it, Les."

"Sure, but look, Mr. Harriman, the di—"

"Sssh! The others are coming. How about the other business? Ready with your act?"

"Yes. But I was trying to tell you—"

"Quiet!"

It was not their colleagues; it was a shipload of reporters, camera men, mike men, commentators, technicians. They swarmed over them.

Harriman waved to them jauntily. "Help yourselves, boys. Get a lot of pictures. Climb through the ship. Make yourselves at home. Look at anything you want to. But go easy on Captain LeCroix—he's tired."

Another ship had landed, this time with Caster, Dixon and Strong. Entenza showed up in his own chartered ship and began bossing the TV, pix, and radio men, in the course of which he almost had a fight with an unauthorized camera crew. A large copter transport grounded and spilled out nearly a platoon of khaki-clad Mexican troops. Fom somewhere—out of the sand apparently—several dozen native peasants showed up. Harriman broke away from reporters, held a quick and expensive discussion with the captain of the local troops and a degree of order was restored in time to save the *Pioneer* from being picked to pieces.

"Just let that be!" It was LeCroix's voice, from inside the *Pioneer*. Harriman waited and listened. "None of your business!" the pilot's voice went on, rising higher, "and put them back!"

Harriman pushed his way to the door of the ship. "What's the trouble, Les?"

Inside the cramped cabin, hardly large enough for a TV booth, three men stood, LeCroix and two reporters. All three men looked angry. "What's the trouble, Les?" Harriman repeated.

LeCroix was holding a small cloth bag which appeared to be empty. Scattered on the pilot's acceleration rest between him and the reporters were several small, dully brilliant stones. A reporter held one such stone up to the light.

"These guys were poking their noses into things that didn't concern them," LeCroix said angrily.

The reporter looked at the stone said, "You told us to look at what we liked, didn't you, Mr. Harriman?"

"Yes."

"Your pilot here—" He jerked a thumb at LeCroix. "—apparently didn't expect us to find these. He had them hidden in the pads of his chair."

"What of it?"

"They're diamonds."

"What makes you think so?"

"They're diamonds all right."

Harriman stopped and unwrapped a cigar. Presently he said, "Those diamonds were where you found them because I put them there."

A flashlight went off behind Harriman; a voice said, "Hold the rock up higher, Jeff."

The reporter called Jeff obliged, then said, "That seems an odd thing to do, Mr. Harriman."

"I was interested in the effect of outer space radiations on raw diamonds. On my orders Captain LeCroix placed that sack of diamonds in the ship."

Jeff whistled thoughtfully. "You know, Mr. Harriman, if you did not have that explanation, I'd think LeCroix had found the rocks on the Moon and was trying to hold out on you."

"Print that and you will be sued for libel. I have every confidence in Captain LeCroix. Now give me the diamonds."

Jeff's eyebrows went up. "But not confidence enough in him to let him keep them,.maybe?"

"Give me the stones. Then get out."

Harriman got LeCroix away from the reporters as quickly as possible and into Harriman's own ship. "That's all for now," he told the news and pictures people. "See us at Peterson Field."

Once the ship raised ground he turned to LeCroix. "You did a beautiful job, Les."

"That reporter named Jeff must be sort of confused."

"Eh? Oh, *that*. No, I mean the flight. You did it. You're head man on this planet."

LeCroix shrugged it off. "Bob built a good ship. It was a cinch. Now about those diamonds—"

"Forget the diamonds. You've done your part. We placed those rocks in the ship; now we tell everybody we did—truthful as can be. It's not our fault if they don't believe us."

"But Mr. Harriman—"

"What?"

LeCroix unzipped a pocket in his coveralls, hauled out a soiled handkerchief, knotted into a bag. He untied it—and spilled into Harriman's hands many more diamonds than had been displayed in the ship—larger, finer diamonds.

Harriman stared at them. He began to chuckle.

Presently he shoved them back at LeCroix. "Keep them."

"I figure they belong to all of us."

"Well, keep them for us, then. And keep your mouth shut about them. No, wait." He picked out two large stones. "I'll have rings made from these two, one for you, one for me. But keep your mouth shut, or they won't be worth anything, except as curiosities."

It was quite true, he thought. Long ago the diamond syndicate had realized that diamonds in plentiful supply were worth little more than glass, except for industrial uses. Earth had more than enough for that, more than enough for jewels. If Moon diamonds were literally "common as pebbles" then they were just that—pebbles.

Not worth the expense of bringing them to earth. But now take uranium. If that were plentiful— Harriman sat back and indulged in daydreaming. Presently LeCroix said softly, "You know, Boss, it's wonderful there."

"Eh? Where?"

"Why, on the Moon of course. I'm going back. I'm going back just as soon as I can. We've got to get busy on the new ship."

"Sure, sure! And this time we'll build one big enough for all of us. This time I go, too!"

"You bet."

"Les—" The older man spoke almost diffidently. "What does it look like when you look back and see the Earth?"

"Huh? It looks like— It looks—" LeCroix stopped. "Hell's bells, Boss, there isn't any way to tell you. It's wonderful, that's all. The sky is black and—well, wait until you see the pictures I took. Better .yet, wait and see it yourself."

Harriman nodded. "But it's hard to wait."

Chapter Eleven

"FIELDS OF DIAMONDS ON THE MOON!!!"

"BILLIONAIRE BACKER DENIES DIAMOND STORY

Says Jewels Taken Into Space for Science Reasons"

"MOON DIAMONDS: HOAX OR FACT?"

"—but consider this, friends of the invisible audience: why would anyone take diamonds to the moon? Every ounce of that ship and its cargo was calculated; diamonds would not be taken along without reason. Many scientific authorities have pronounced Mr. Harriman's professed reason an absurdity. It is easy to guess that diamonds might be taken along for the purpose of 'salting' the Moon, so to speak, with earthly jewels, with the intention of convincing us that diamonds exist on the Moon—but Mr. Harriman, his pilot Captain LeCroix, and everyone connected with the enterprise have sworn from the beginning that the diamonds *did not* come from the Moon. But it is an absolute certainty that the diamonds were in the space ship when it landed. Cut it how you will; this reporter is going to try to buy some lunar diamond mining stock—"

Strong was, as usual, already in the office when Harriman came in. Before the partners could speak, the screen called out, "Mr. Harriman, Rotterdam calling."

"Tell them to go plant a tulip."

"Mr. van der Velde is waiting, Mr. Harriman."

"Okay."

Harriman let the Hollander talk, then said, "Mr. van der Velde, the statements attributed to me are absolutely correct. I put those diamonds the reporters saw into the ship before it took off. They were mined right here on Earth. In fact I bought them when I came over to see you; I can prove it."

"But Mr. Harriman—"

"Suit yourself. There may be more diamonds on the Moon than you can run and jump over. I don't guarantee it. But I do guarantee that those diamonds the newspapers are talking about came from Earth."

"Mr. Harriman, why would you send diamonds to the Moon?

Perhaps you intended to fool us, no?"

"Have it your own way. But I've said all along that those diamonds came from Earth. Now see here: you took an option—an option on an option, so to speak. If you want to make the second payment on that option and keep it in force, the deadline is nine o'clock Thursday, New York time, as specified in the contract. Make up your mind."

He switched off and found his partner looking at him sourly. "What's eating you?"

"I wondered about those diamonds, too, Delos. So I've been looking through the weight schedule of the *Pioneer*."

"Didn't know you were interested in engineering."

"I can read figures."

"Well, you found it, didn't you? Schedule F-17-c, two ounces, allocated to me personally."

"I found it. It sticks out like a sore thumb. But I didn't find something else."

Harriman felt a 'cold chill in his stomach. "What?"

"I didn't find a schedule for the cancelled covers." Strong stared at him.

"It must be there. Let me see that weight schedule."

"It's not there, Delos. You know, I thought it was funny when you insisted on going to meet Captain LeCroix by yourself. What happened, Delos? Did you sneak them aboard?" He continued to stare while Harriman fidgeted. "We've put over some sharp business deals—but this will be the first time that anyone can say that the firm of Harriman and Strong has cheated."

"George—I would cheat, lie, steal, beg, bribe—do *anything* to accomplish what we have accomplished."

Harriman got up and paced the room. "We *had* to have that money, or the ship would never have taken off. We're cleaned out. You know that, don't you?"

Strong nodded. "But those covers should have gone to the Moon. That's what we contracted to do."

"I just forgot it. Then it was too late to figure the weight in. But it doesn't matter. I figured that if the trip was a failure, if LeCroix cracked up, nobody would know or care that the covers hadn't gone. And I knew if he made it, it wouldn't matter; we'd have plenty of money. And we will, George, we will!"

"We've got to pay the money back."

"Now? Give me time, George. Everybody concerned is happy the way it is. Wait until we recover our stake; then I'll buy every one of those covers back—out of my own pocket. That's a promise."

Strong continued to sit. Harriman stopped in front of him. "I ask you, George, is it worth while to wreck an enterprise of this size for a purely theoretical point?"

Strong sighed and said, "When the time comes, use the firm's money."

"That's the spirit! But I'll use my own, I promise you."

"No, the firm's money. If we're in it together, we're in it together."

"O.K., if that's the way you want it."

Harriman turned back to his desk. Neither of the two partners had anything to say for a long while. Presently Dixon and Entenza were announced.

"Well, Jack," said Harriman. "Feel better now?"

"No thanks to you. I had to fight for what I did put on the air—and some of it was pirated as it was. Delos, there should have been a television pick-up in the ship."

"Don't fret about it. As I told you, we couldn't spare the weight this time. But there will be the next trip, and the next. Your concession is going to be worth a pile of money."

Dixon cleared his throat. "That's what we came to see you about, Delos. What are your plans?"

"Plans? We go right ahead. Les and Coster and I make the next trip. We set up a permanent base. Maybe Coster stays behind. The third trip we send a real colony—nuclear engineers, miners, hydroponics experts, communications engineers. We'll found Luna City, first city on another planet."

Dixon looked thoughtful. "And when does this begin to pay off?"

"What do you mean by 'pay off'? Do you want your capital back, or do you want to begin to see some return on your investment? I can cut it either way."

Entenza was about to say that he wanted his investment back; Dixon cut in first, "Profits, naturally. The investment is already made."

"Fine!"

"But I don't see how you expect profits. Certainly, LeCroix made the trip and got back safely. There is honor for all of us. But where are the royalties?"

"Give the crop time to ripen, Dan. Do I look worried? What are our assets?" Harriman ticked them off on his fingers. "Royalties on pictures, television, radio—."

"Those things go to Jack."

"Take a look at the agreement. He has the concession, but he pays the firm—that's all of us—for them."

Dixon said, "Shut up, Jack!" before Entenza could speak, then added, "What else? That won't pull us out of the red."

"Endorsements galore. Monty's boys are working on that. Royalties from the greatest best seller yet—I've got a ghost writer and a stenographer following LeCroix around this very minute. A franchise for the first and only space line-"

"From whom?"

"We'll get it. Kamens and Montgomery are in Paris now, working on it. I'm joining them this afternoon. And we'll tie down that franchise with a franchise from *the other end*, just as soon as we can get a permanent colony there, no matter how small. It will be the autonomous state of Luna, under the protection of the United Nations —and no ship will land or take off in its territory without its permission. Besides that we'll have the right to franchise a dozen other companies for various purposes—and tax them, too—just as soon as we set up the Municipal Corporation of the City of Luna under the laws of the State of Luna. We'll sell everything but vacuum— we'll even sell vacuum, for experimental purposes. And don't forgct—we'll still have a big chunk of real estate, sovereign title in us—as a state-and not yet sold. The Moon is *big*."

"Your ideas are rather big, too, Delos," Dixon said dryly. "But what actually happens next?"

"First we get title confirmed by the U.N. The Security Council is now in secret session; the Assembly meets tonight. Things will be popping; that's why I've got to be there. When the United Nations decides—as it will!— that its own nonprofit corporation has the only real claim to the Moon, then I get busy. The poor little weak nonprofit corporation is going to grant a number of things to some real honest-to-god corporations with hair on their chests—in return for help in setting up a physics research lab, an astronomical observatory, a lunography institute and some other perfectly proper nonprofit enterprises. That's our interim pitch until we get a permanent colony with its own laws. Then we-"

Dixon gestured impatiently. "Never mind the legal shenanigans, Delos. I've known you long enough to know that you can figure out such angles. What do we actually have to do next?"

"Huh? We've got to build another ship, a bigger one. Not actually bigger, but effectively bigger. Coster has started the design of a surface catapult— it will reach from Manitou Springs to the top of Pikes Peak. With it we can put a ship in free orbit around the Earth. Then we'll use such a ship to fuel more ships—it amounts to a space station, like the power station. It adds up to a way to get there on chemical power without having to throw away nine-tenths of your ship to do it."

"Sounds expensive."

"It will be. But don't worry; we've got a couple of dozen piddling little things to keep the money coming in while we get set up on a commercial basis, then we sell stock. We-sold stock before; now we'll sell a thousand dollars' worth where we sold ten before."

"And you think that will carry you through until the enterprise as a whole is on a paying basis? Face it, Delos, the thing as a whole doesn't pay off until you have ships plying between here and the Moon on a paying basis, figured in freight and passenger charges. That means customers, with cash. What is there on the Moon to ship—and who pays for it?"

"Dan, don't you believe there will be? If not, why are you here?"

"I believe in it, Delos—or I believe in you. But what's your time schedule? What's your budget? What's your prospective commodity? And please don't mention diamonds; I think I understand that caper."

Harriman chewed his cigar for a few moments. "There's one valuable commodity we'll start shipping at once."

"What?"

"Knowledge."

Entenza snorted. Strong looked puzzled. Dixon nodded. "I'll buy that. Knowledge is always worth something—to the man who knows how to exploit it. And I'll agree that the Moon is a place to find new knowledge. I'll assume that you can make the next trip pay off. What's your budget and your time table for that?"

Harriman did not answer. Strong searched his face closely. To him Harriman's poker face was as revealing as large print—he decided that his partner had been crowded into a corner. He waited, nervous but ready to back Harriman's play. Dixon went on, "From the way you describe it, Delos, I judge that you don't have money enough for your next step—and you don't know where you will get it. I believe in you, Delos—and I told you at the start that I did not believe in letting a new business die of anemia. I'm ready to buy in with a fifth share."

Harriman stared. "Look," he said bluntly, "you own Jack's share now, don't you?"

"I wouldn't say that."

"You vote it. It sticks out all over."

Entenza said, "That's not true. I'm independent. I—"

"Jack, you're a damn liar," Harriman said dispassionately. "Dan, you've got fifty percent now. Under the present rules I decide deadlocks, which gives me control as long as George sticks by me. If we sell you another share, you vote three-fifths—and are boss. Is that the deal you are looking for?"

"Delos, as I told you, I have confidence in you."

"But you'd feel happier with the whip hand. Well, I won't do it. I'll let space travel—*real* space travel, with established runs—wait another twenty years before I'll turn loose. I'll let us all go broke and let us live on glory before I'll turn loose. You'll have to think up another scheme."

Dixon said nothing. Harriman got up and began to pace. He stopped in front of Dixon. "Dan, if you really understood what this is all about, I'd let you have control. But you don't. You see this is just another way to money and to power. I'm perfectly willing to let you vultures get rich—but I keep control. I'm going to see this thing developed, not milked. The human race is heading out to the stars—and this adventure is going to present new problems compared with which atomic power was a kid's toy. Unless the whole matter is handled carefully, it will be fouled up. *You'll* foul it up, Dan, if I let you have the deciding vote in it—because you don't understand it."

He caught his breath and went on, "Take safety for instance. Do you know *why* I let LeCroix take that ship out instead of taking it myself? Do you think I was afraid? No! I wanted it to come back—*safely*. I didn't want space travel getting another setback. Do you know why we have to have a monopoly, for a few years at least? Because every so-and-so and his brother is going to want to build a Moon ship, now that they know it can be done. Remember the first days of ocean flying? After Lindbergh did it, every so-called pilot who could lay hands on a crate took off for some over-water point. Some of them even took their kids along. And most of them landed in the drink. Airplanes get a reputation for being dangerous. A few years after that the airlines got so hungry for quick money in a highly competitive field that you couldn't pick up a paper without seeing headlines about another airliner crash.

"That's not going to happen to space travel! I'm not going to let it happen.

Space ships are too big and too expensive; if they get a reputation for being unsafe as well, we might as well have stayed in bed. I run things."

He stopped. Dixon waited and then said, "I said I believed in you, Delos. How much money do you need?"

"Eh? On what terms?"

"Your note."

"My note? Did you say *my note*?"

"I'd want security, of course."

Harriman swore. "I knew there was a hitch in it. Dan, you know everything I've got is tied up in this venture."

"You have insurance. You have quite a lot of insurance, I know."

"Yes, but that's all made out to my wife."

"I seem to have heard you say something about that sort of thing to Jack Entenza," Dixon said. "Come, now—if I know your tax-happy sort, you have at least one irrevocable trust, or paid-up annuities, or something, to keep Mrs. Harriman out of the poor house."

Harriman thought fiercely about it. "When's the call date on this note?"

"In the sweet bye and bye. I want a no-bankruptcy clause, of course."

"Why? Such a clause has no legal validity."

"It would be valid with *you*, wouldn't it?"

"Mmm . . . yes. Yes, it would."

"Then get out your policies and see how big a note you can write." Harriman looked at him, turned abruptly and went to his safe. He came back with quite a stack of long, stiff folders. They added them up together; it was an amazingly large sum—for those days. Dixon then consulted a memorandum taken from his pocket and said, "One seems to be missing— a rather large one. A North Atlantic Mutual policy, I think."

Harriman glared at him. "Am I going to have to fire every confidential clerk in my force?"

"No," Dixon said mildly, "I don't get my information from your staff. Harriman went back to the safe, got the policy and added it to the pile. Strong spoke up, "Do you want mine, Mr. Dixon?"

"No," answered Dixon, "that won't be necessary." He started stuffing the policies in his pocket. "I'll keep these, Delos, and attend to keeping up the premiums. I'll bill you of course. You can send the note and the changeof-beneficiary forms to my office. Here's your draft." He took out another slip of paper; it was the draft—already made out in the amount of the policies.

Harriman looked at it. "Sometimes," he said slowly, "I wonder who's kidding who?" He tossed the draft over to Strong. "O.K., George, take care of it. I'm off to Paris, boys. Wish me luck." He strode out as jauntily as a fox terrier.

Strong looked from the closed door to Dixon, then at the note. "I ought to tear this thing up!"

"Don't do it," advised Dixon. "You see, I really do believe in him." He added, "Ever read Carl Sandburg, George?"

"I'm not much of a reader."

"Try him some time. He tells a story about a man who started a rumor that they had struck oil in hell. Pretty soon everybody has left for hell, to get in on the boom. The man who started the rumor watches them all go, then scratches his head and says to himself that there just *might* be something in it, after all. So he left for hell, too."

Strong waited, finally said, "I don't get the point."

"The point is that I just want to be ready to protect myself if necessary, George—and so should you. Delos might begin believing his own rumors. Diamonds! Come, Jack."

Chapter Twelve

The ensuing months were as busy as the period before the flight of the Pioneer (now honorably retired to the Smithsonian Institution). One engineering staff and great gangs of men were working on the catapult, two more staffs were busy with two new ships; the *Mayflower*, and the *Colonial*; a third ship was on the drafting tables. Ferguson was chief engineer for all of this; Coster, still buffered by Jock Berkeley, was engineering consultant, working where and as he chose. Colorado Springs was a boom town; the Denver-Trinidad roadcity settlements spread out at the Springs until they surrounded Peterson Field.

Harriman was as busy as a cat with two tails. The constantly expanding exploitation and promotion took eight full days a week of his time, but, by working Kamens and Montgomery almost to ulcers and by doing without sleep himself, he created frequent opportunities to run out to Colorado and talk things over with Caster.

Luna City, it was decided, would be founded on the very next trip. The *Mayflower* was planned for a payload not only of seven passengers, but with air, water and food to carry four of them over to the next trip; they would live in an aluminum Quonset-type hut, sealed, pressurized, and buried under the loose soil of Luna until—and assuming—they were succored.

The choice of the four extra passengers gave rise to another contest, another publicity exploitation—and more sale of stock. Harriman insisted that they be two married couples, over the united objections of scientific organizations everywhere. He gave in only to the extent of agreeing that there was no objection to all four being scientists, providing they constituted two married couples. This gave rise to several hasty marriages—and some divorces, after the choices were announced.

The *Mayflower* was the maximum size that calculations showed would be capable of getting into a free orbit around the Earth from the boost of the catapult, plus the blast of her own engines. Before she took off, four other ships, quite as large, would precede her. But they were not space ships; they were mere tankers—nameless. The most finicky of ballistic calculations, the most precise of launchings, would place them in the same orbit at the same spot. There the *Mayflower* would rendezvous and accept their remaining fuel.

This was the trickiest part of the entire project. If the four tankers could be placed close enough together, LeCroix, using a tiny maneuvering reserve, could bring his new ship to them. If not—well, it gets very lonely out in Space.

Serious thought was given to placing pilots in the tankers and accepting as a penalty the use of enough fuel from one tanker to permit a getaway boat, a life boat with wings, to decelerate, reach the atmosphere and brake to a landing. Caster found a cheaper way.

A radar pilot, whose ancestor was the proximity fuse and whose immediate parents could be found in the homing devices of guided missiles, was given the task of bringing the tankers together. The first tanker would not be so equipped, but the second tanker through its robot would smell out the first and home on it with a pint-sized rocket engine, using the smallest of vectors to bring them together. The third would home on the first two and the fourth on the group.

LeCroix shouid have no trouble-if the scheme worked.

Chapter Thirteen

Strong wanted to show Harriman the sales reports on the H & S automatic household switch; Harriman brushed them aside.

Strong shoved them back under his nose. "You'd better start taking an interest in such things, Delos. *Somebody* around this office had better start seeing to it that some money comes in—some money that belongs to us, personally-or you'll be selling apples on a street corner."

Harriman leaned back and clasped his hands back of his head. "George, how can you talk that way on a day like this? Is there no poetry in your soul? Didn't you hear what I said when I came in? *The rendezvous worked.* Tankers one and two are as close together as Siamese twins. We'll be leaving within the week."

"That's as may be. Business has to go on."

"You keep it going; I've got a date. When did Dixon say he would be over?"

"He's due now."

"Good!" Harriman bit the end off a cigar and went on, "You know, George, I'm not sorry I didn't get to make the first trip. Now I've still got it to do. I'm as expectant as a bridegroom—and as happy." He started to hum.

Dixon came in without Entenza, a situation that had obtained since the day Dixon had dropped the pretence that he controlled only one share. He shook hands. "You heard the news, Dan?"

"George told me."

"This is it—or almost. A week from now, more or less, I'll be on the Moon. I can hardly believe it."

Dixon sat down silently. Harriman went on, "Aren't you even going to congratulate me? Man, this is a great dayl"

Dixon said, "D.D., why are you going?"

"Huh? Don't ask foolish questions. This is what I have been working toward."

"It's not a foolish question. I asked why you were going. The four colonists have an obvious reason, and each is a selected specialist observer as well. LeCroix is the pilot. Coster is the man who is designing the permanent colony. But why are *you* going? What's your function?"

"My function? Why, I'm the guy who runs things. Shucks, I'm going to run for mayor when I get there. Have a cigar, friend—the name's Harriman. Don't forget to vote." He grinned.

Dixon did not smile. "I did not know you planned on staying."

Harriman looked sheepish. "Well, that's still up in the air. If we get the shelter built in a hurry, we may save enough in the way of supplies to let me sort of lay over until the next trip. You wouldn't begrudge me that, would you?"

Dixon looked him in the eye. "Delos, I can't let you go at all."

Harriman was too startled to talk at first. At last he managed to say, "Don't joke, Dan. I'm going. You can't stop me. Nothing on Earth can stop me."

Dixon shook his head. "I can't permit it, Delos. I've got too much sunk in this. If you go and anything happens to you, I lose it all."

"That's silly. You and George would just carry on, that's all."

"Ask George."

Strong had nothing to say. He did not seem anxious to meet Harriman's eyes. Dixon went on, "Don't try to kid your way out of it, Delos. This venture is you and you are this venture. If you get killed, the whole thing folds up. I don't say space travel folds up; I think you've already given that a boost that will carry it along even with lesser men in your shoes. But as for this venture—our company—it will fold up. George and I will have to liquidate at about half a cent on the dollar. It would take sale of patent rights to get that much. The tangible assets aren't worth anything."

"Damn it, it's the intangibles we sell. You knew that all along."

"You are the intangible asset, Delos. You are the goose that lays the golden eggs. I want you to stick around until you've laid them. You must not risk your neck in space flight until you have this thing on a profit-making basis, so that any competent manager, such as George or myself, thereafter can keep it solvent. I mean it, Delos. I've got too much in it to see you risk it in a joy ride."

Harriman stood up and pressed his fingers down on the edge of his desk. He was breathing hard. "You can't stop me!" he said slowly and forcefully. "Not all the forces of heaven or hell can stop me."

Dixon answered quietly, "I'm sorry, Delos. But I can stop you and I will. I can tie up that ship out there."

"Try it! I own as many lawyers as you do—and better ones!"

"I think you will find that you are not as popular in American courts as you once were-not since the United States found out it didn't own the Moon after all."

"Try it, I tell you. I'll break you and I'll take your shares away from you, too."

"Easy, Delos! I've no doubt you have some scheme whereby you could milk the basic company right away from George and me if you decided to. But it won't be necessary. Nor will it be necessary to tie up the ship. I want the flight to take place as much as you do. But you won't be on it, because you will decide not to go."

"I will, eh? Do I look crazy from where you sit?"

"No, on the contrary."

"Then why won't I go?"

"Because of your note that I hold. I want to collect it."

"What? There's no due date."

"No. But I want to be sure to collect it."

"Why, you dumb fool, if I get killed you collect it sooner than ever."

"Do I? You are mistaken, Delos. If you are killed-on a flight to the Moon—I collect nothing. I know; I've checked with every one of the companies underwriting you. Most of them have escape clauses covering experimental vehicles that date back to early aviation. In any case all of them will cancel and fight it out in court if you set foot inside that ship."

"You put them up to this!"

"Calm down, Delos. You'll be bursting a blood vessel. Certainly I queried them, but I was legitimately looking after my own interests. I don't want to collect on that note-not now, not by your death. I want you to pay it back out of your own earnings, by staj'ing here and nursing this company through till it's stable."

Harriman chucked his cigar, almost unsmoked and badly chewed, at a waste basket. He missed. "I don't give a hoot if you lose on it. If you hadn't stirred them up, they'd have paid without a quiver."

"But it did dig up a weak point in your plans, Delos. If space travel is to be a success, insurance will have to reach out and cover the insured anywhere."

"Confound it, one of them does now—N. A. Mutual."

"I've seen their ad and I've looked over what they claim to offer. It's just window dressing, with the usual escape clause. No, insurance will have to be revamped, all sorts of insurance."

Harriman looked thoughtful. "I'll look into it. George, call Kamens. Maybe we'll have to float our own company."

"Never mind Kamens," objected Dixon. "The point is you can't go on this trip. You have too many details of that sort to watch and plan for and nurse along."

Harriman looked back at him. "You haven't gotten it through your head, Dan, that *I'm going*! Tie up the ship if you can. If you put sheriffs around it, I'll have goons there to toss them aside."

Dixon looked pained. "I hate to mention this point, Delos, but I am afraid you will be stopped even if I drop dead."

"How?"

"Your wife."

"What's she got to do with it?"

"She's ready to sue for separate maintenance right now—she's found out about this insurance thing. When she hears about this present plan, she'll force you into court and force an accounting of your assets."

"*You put her up to it!*"

Dixon hesitated. He knew that Entenza had spilled the beans to Mrs. Harriman—maliciously. Yet there seemed no point in adding to a personal feud. "She's bright enough to have done some investigating on her own account. I won't deny I've talked to her—but she sent for me."

"I'll fight both of you!" Harriman stomped to a window, stood looking out—it was a real window; he liked to look at the sky.

Dixon came over and put a hand on his shoulder, saying softly, "Don't take it this way, Delos. Nobody's trying to keep you from your dream. But you can't go just yet; you can't let us down. We've stuck with you this far; you owe it to us to stick with us until it's done."

Harriman did not answer; Dixon went on, "If you don't feel any loyalty toward me, how about George? He's stuck with you *against* me, when it hurt him, when he thought you were ruining him—and you surely were, unless you finish this job. How about George, Delos? Are you going to let him down, too?"

Harriman swung around, ignoring Dixon and facing Strong. "What about it, George? Do you think I should stay behind?"

Strong rubbed his hands and chewed his lip. Finally he looked up. "It's all right with me, Delos. You do what you think is best."

Harriman stood looking at him for a long moment, his face working as if he were going to cry. Then he said huskily, "Okay, you rats. Okay. I'll stay behind."

Chapter Fourteen

It was one of those glorious evenings so common in the Pikes Peak region, after a day in which the sky has been well scrubbed by thunderstorms. The track of the catapult crawled in a straight line up the face of the mountain, whole shoulders having been carved away to permit it. At the temporary space port, still raw from construction, Harriman, in company with visiting notables, was saying goodbye to the passengers and crew of the *Mayflower*.

The crowds came right up to the rail of the catapult. There was no need to keep them back from the ship; the jets would not blast until she was high over the peak. Only the ship itself was guarded, the ship and the gleaming rails.

Dixon and Strong, together for company and mutual support, hung back at the edge of the area roped off for passengers and officials. They watched Harriman jollying those about to leave: "Goodbye, Doctor. Keep an eye on him, Janet. Don't let him go looking for Moon Maidens." They saw him engage Coster in private conversation, then clap the younger man on the back.

"Keeps his chin up, doesn't he?" whispered Dixon.

"Maybe we should have let him go," answered Strong.

"Eh? Nonsense! We've got to have him. Anyway, his place in history is secure."

"He doesn't care about history," Strong answered seriously, "he just wants to go to the Moon."

"Well, confound it—he can go to the Moon . . . as soon as he gets his job done. After all, it's his job. He made it."

"I know."

Harriman turned around, saw them, started toward them. They shut up. "Don't duck," he said jovially. "It's all right. I'll go on the next trip. By then I plan to have it running itself. You'll see." He turned back toward the *Mayflowe*r. "Quite a sight, isn't she?"

The outer door was closed; ready lights winked along the track and from the control tower. A siren sounded.

Harriman moved a step or two closer.

"*There she goes!*"

It was a shout from the whole crowd. The great ship started slowly, softly up the track, gathered speed, and shot toward the distant peak. She was already tiny by the time she curved up the face and burst into the sky.

She hung there a split second, then a plume of light exploded from her tail. Her jets had fired.

Then she was a shining light in the sky, a ball of flame, then—nothing. She was gone, upward and outward, to her rendezvous with her tankers.

The crowd had pushed to the west end of the platform as the ship swarmed up the mountain. Harriman had stayed where he was, nor had Dixon and Strong followed the crowd. The three were alone, Harriman most alone for he did not seem aware that the others were near him. He was watching the sky.

Strong was watching him. Presently Strong barely whispered to Dixon, "Do you read the Bible?"

"Some."

"He looks as Moses must have looked, when he gazed out over the promised land."

Harriman dropped his eyes from the sky and saw them. "You guys still here?" he said. "Come on—there's work to be done."

Cliff and the Calories

According to Daddy, I'll eat anything standing still or even moving slowly. But Mother said nonsense, I simply have a high metabolic rate.

Daddy answered, "You haven't had it checked, so how do you know? Puddin', stand sideways and let me look at you."

Junior said, "She hasn't got a 'sideways,'" and let loose a perfectly horrible laugh that is supposed to sound like Woody Woodpecker and does, only worse. Of what use is the male of the species between the ages of two and sixteen? Later on, they are bearable, even indispensable—at least I would find it difficult to dispense with Cliff, although Junior may never be an asset.

That's how I went on a diet.

It started with Cliff—most things do. I am going to marry Cliff, only I haven't told him yet. I have never had any cause to doubt the sincerity of Cliff's devotion, but I have sometimes wondered what it was he found most attractive about me: my character, disposition, and true worth, or my so-to-speak physical attributes.

The bathroom scales were beginning to make me think it was the former. Perhaps that should have made me happy, but I have yet to find the girl who would swap a twenty-one-inch waist and a good silhouette for sterling merit. Not that I could hope to be a raving beauty, but a few wolf whistles never did any harm and are good for the morale.

I had just had a chance to test Cliff's point of view. A girl showed up at school who was exactly my size; we compared measurements. The point is, on Clarice it looked good—cursive and bountiful but good. Maureen, I told myself, here is a chance to get an honest opinion out of Cliff.

I saw to it that he got a good look at her at tennis practice. As we left I said craftily, "That new girl, Clarice—she has a lovely figure."

Cliff looked over his shoulder and replied. "Oh, sure—from her ankles down."

I had my answer and I didn't like it. Cliff didn't care for my type of figure; divorced from my personality it did not appeal to him. I should have felt a warm glow, knowing it for true love. I didn't; I felt terrible.

It was when I refused a second helping of potatoes that evening that the subject of my metabolism came up.

I went to the library next day and looked into this matter of diet. I hadn't known there were so many books about it. Finally I found one that made sense: *Eat and Grow Slender.* That struck me as an excellent idea.

I took it home to study. I got a few crackers and some cheese and ate them absentmindedly while I thumbed through the book. There was a plan for losing ten pounds in ten days; the menus looked pretty skimpy. There was another for losing ten pounds in a month. That's for me, I said; no need to be fanatic.

There was a chapter about calories. They make it so simple: one ice-cream cone, one hundred and fifty calories; three dates, eighty-four calories.

My eye lit on "soda crackers"; I knew they wouldn't count much and they didn't—only twenty-one calories apiece. Then I looked up "cheese."

Arithmetic stirred in my brain and I had a chilly feeling. I went into Daddy's study and used his postal scale to weigh the cheese that had not already become Maureen.

I did the arithmetic three times. Including two little bits of fudge I had eaten six hundred and seventy calories, *more than half of a day's allowance as given in the reducing diet!* And I had only meant to stay the pangs until dinnertime.

Maureen, I said, this time you've got to be a fanatic; it's the ten-day die-trying diet for you.

I planned to keep my affairs to myself, selecting the diet from what was placed before me, but such a course is impossible in a family that combines the worst aspects of a Senate investigation with the less brutal methods of a third degree. I got away with passing up the cream-of-tomato soup by being a little bit late, but when I refused the gravy, there was nothing to do but show them the book.

Mother said a growing girl needed her food. I pointed out that I had quit growing vertically and it was time I quit horizontally. Junior opened his mouth and I stuffed a roll into it. That gave Daddy a chance to say, "Let's put it up to Doc Andrews. If he gives her the green light, she can starve herself gaunt. She's a free agent."

So Daddy and I went to Doctor Andrews' office next day. Daddy had an appointment anyhow—he has terrible colds every spring. Doctor Andrews sent Daddy across the hall to Doctor Grieb who specializes in allergies and things, then he saw me.

I've known Doctor Andrews since my first squawk, so I told him everything, even about Cliff, and showed him the book. He thumbed through it, then he weighed me and listened to my heart and took my blood pressure. "Go ahead," he told me, "but make it the thirty-day diet. I don't want you fainting in the classroom."

I guess I had counted on him to save me from my will power. "How about exercise?" I said hopefully. "I'm pretty active. Won't I need to eat more to offset it?"

He roared. "Honey child," he said, "do you know how far you would have to hike to burn up one chocolate malt? *Eight miles!* It will help, but not much."

"How long do I keep this up?"—I asked faintly.

"Until you reach the weight you want—or until your character plays out."

I marched out with my jaw set. If a girl doesn't have a figure or character either, what has she got left?

Mother was home when we got there. Daddy picked her up and kissed her and said, "Now you've got two of us on diets!"

"Two?" said Mother.

"Look." Daddy peeled off his shirt. His arms were covered with little red pin pricks, some redder than others, arranged in neat rows. "I'm allergic," he announced proudly. "Those aren't real colds. I'm allergic to practically everything. That one"—he pointed to a red welt—"is bananas. That one is corn. That one is cow's milk protein. And there is pollen in honey. Wait." He hauled out a list: "Rhubarb, tapioca, asparagus, lima beans, coconut, mustard, cow's milk, apricot, beets, carrots, lamb, cottonseed oil, lettuce, oysters, chocolate—here, you read it; it's your problem."

"It's a good thing that I went to the campus today and signed up for an evening class in domestic dietetics. From now on this family is going to be fed scientifically," Mother said.

That should have been the worst of it, but it wasn't. Junior announced that he was training for hockey and he had to have a training-table diet—which to him meant beef, dripping with blood, whole-wheat toast, and practically nothing else. Last season he had discovered that, even with lead weights in his pockets, he didn't have what it took for a body check. Next season he planned to be something between Paul Bunyan and Gorgeous George. Hence the diet.

By now, Mother was on a diet, too, a scientific one, based on what she had learned during the two weeks she had actually attended classes. Mother pored over charts and we each had separate trays like a hospital, the time I broke my ankle playing second base for the West Side Junior Dodgers. Mother says a girl with my figure should not be a tomboy, but I said that a tomboy should not have my figure. Anyhow, I am no longer a tomboy since Cliff came into my life.

Somehow, Mother found things that weren't on Daddy's verboten list—stewed yak and pickled palm fronds and curried octopus and such. I asked if Daddy had been checked for those too? He said, "Tend to your knitting, Puddin'," and helped himself to more venison pasty. I tried not to watch.

Mother's own diet was as esoteric, but less attractive. She tried to tempt Junior and me with her seaweed soup or cracked wheat or raw rhubarb, but we stuck to our own diets. Eating is fun, but only if it's food.

Breakfast was easiest; Daddy breakfasted later than I did—he had no lectures earlier than ten o'clock that semester.

I would lie abed while our budding athlete wolfed down his Breakfast of Champions, then slide out at the last minute, slurp my glass of tomato juice (twentyeight calories), and be halfway to school before I woke up. By then it would be too late to be tempted.

I carried my pitiful little lunch. Cliff started packing his lunch, too, and we picnicked together. He never noticed what I ate or how much.

I didn't want Cliff to notice, not yet. I planned to make him faint with the way I would look in my new formal at graduation prom.

It did not work out. Cliff took two final exams early and left for California for the summer and I spent the night of the prom in my room, nibbling celery (four calories per stalk) and thinking about life.

We got ready for our summer trip immediately thereafter. Daddy voted for New Orleans.

Mother shook her head. "Impossibly hot. Besides, I don't want you tempted by those Creole restaurants."

"Just what I had in mind," Daddy answered. "Finest gourmet restaurants in the country. You can't keep us on diets while traveling;

it isn't practical. Antoine's, here I come!"

"No," said Mother.

"Yes," said Daddy.

So we went to California. I was ready to throw my weight (which was still too much) in with Daddy, when California was mentioned. I hadn't expected to see Cliff until fall. I put thoughts of *bouillabaisse* and Shrimp Norfolk out of mind; Cliff won, but it was nearer than I like to think.

The trip was hardly a case of merrie-merrie-be. Junior sulked because he wasn't allowed to take along his lifting weights, and Mother was loaded with charts and reference books and menus. Each time we stopped she would enter into long negotiations, involving a personal interview with the chef, while we got hungrier, and hungrier.

We were coming to Kingman, Arizona, when Mother announced that she didn't think we could find a restaurant to take care of our needs. "Why not?" demanded Daddy. "The people there must eat."

Mother shuffled her lists and suggested that we go on through to Las Vegas. Daddy said that if he had known this trip was going to be another Donner party, he would have studied up on how to cook human flesh.

While they discussed it we slid through Kingman and turned north toward Boulder Dam. Mother looked worriedly at the rugged hills and said, "Perhaps you had better turn back, Charles. It will be hours before we reach Las Vegas and there isn't a thing on the map."

Daddy gripped the wheel and looked grim. Daddy will not backtrack for less than a landslide, as Mother should have known.

I was beyond caring. I expected to leave my bones whitening by the road with a notice: *She tried and she died.*

We had dropped out of those hills and into the bleakest desert imaginable when Mother said, "You'll have to turn back, Charles. Look at your gasoline gauge."

Daddy set his jaw and speeded up. "Charles!" said Mother.

"Quiet!" Daddy answered. "I see a gas station ahead."

The sign read Santa Claus, Arizona. I blinked at it, thinking I was at last seeing a mirage. There was a gas station, all right, but that wasn't all.

You know what most desert gas stations look like—put together out of odds and ends. Here was a beautiful fairytale cottage with wavy candy stripes in the shingles. It had a broad brick chimney—*and Santa Claus was about to climb down the chimney!*

Maureen, I said, you've overdone this starvation business; now you are out of your head.

Between the station and the cottage were two incredible little dolls' houses. One was marked *Cinderella's House* and Mistress Mary Quite

Contrary was making the garden grow. The other one needed no sign; the Three Little Pigs, and Big Bad Wolf was stuck in its chimney.

"Kid stuff!" says Junior, and added, "Hey, Pop, do we eat here? Huh?"

"We just gas up," answered Daddy. "Find a pebble to chew on. Your mother has declared a hunger strike."

Mother did not answer and headed toward the cottage. We went inside, a bell bonged, and a sweet contralto voice boomed, "Come in! Dinner is ready!"

The inside was twice as big as the outside and was the prettiest dining room imaginable, fresh, new, and clean. Heavenly odors drifted out of the kitchen. The owner of the voice came out and smiled at us.

We knew who she was because her kitchen apron had "Mrs. Santa Claus" embroidered across it. She made me feel slender, but for her it was perfectly right. Can you imagine Mrs. Santa Claus being *skinny*?

"How many are there?" she asked.

"Four," said Mother, "but—" Mrs. Santa Claus disappeared into the kitchen.

Mother sat down at a table and picked up a menu. I did likewise and started to drool—here is why:

Minted Fruit Cup Rouge
Pot-au-feu à la Creole
Chicken Velvet Soup
Roast Veal with Fine Herbs
Ham Soufflé
Yankee Pot Roast
Lamb Hawaii
Potatoes Lyonnaise
Riced Potatoes
Sweet Potatoes Maryland
Glazed Onions
Asparagus Tips with Green Peas
Chicory Salad with
Roquefort Dressing
Artichoke Hearts with Avocado
Beets in Aspic
Cheese Straws
Miniature Cinnamon Rolls
Hot Biscuits
Sherry Almond Ice Cream
Rum Pie
Pêches Flambées Royales
Peppermint Cloud Cake

Devil's Food Cake
Angel Berry Pie
Coffee Tea Milk

(Our water is trucked fifteen miles; please help us save it.)

Thank you. Mrs. Santa Claus

It made me dizzy, so I looked out the window. We were still spang in the middle of the grimmest desert in the world.

I started counting the calories in that subversive document. I got up to three thousand and lost track, because fruit cups were placed in front of us. I barely tasted mine—and my stomach jumped and started nibbling at my windpipe.

Daddy came in, said, "Well!" and sat down, too. Junior followed.

Mother said, "Charles, there is hardly anything here you can touch. I think I had better—" She headed for the kitchen.

Daddy had started reading the menu. He said, "Wait, Martha! Sit down." Mother sat.

Presently he said, "Do I have plenty of clean handkerchiefs?"

Mother said, "Yes, of course. Why—"

"Good. I feel an attack coming on. I'll start with the *pot-au-feu* and —"

Mother said, "Charles!"

"Peace, woman! The human race has survived upwards of five million years eating anything that could be chewed and swallowed." Mrs. Santa Claus came back in and Daddy ordered lavishly, every word stabbing my heart. "Now," he finished, "if you will have that carried in by eight Nubian slaves—"

"We'll use a jeep," Mrs. Santa Claus promised and turned to Mother.

Mother was about to say something about chopped grass and vitamin soup but Daddy cut in with, "That was for both of us. The kids will order for themselves." Mother swallowed and said nothing.

Junior never bothers with menus. "I'll have a double cannibal sandwich," he announced.

Mrs. Santa Claus flinched. "What," she asked ominously, "is a cannibal sandwich?"

Junior explained. Mrs. Santa Claus looked at him as if she hoped he would crawl back into the woodwork. At last she said, "Mrs. Santa Claus always gives people what they want. But you'll have to eat it in the kitchen; other people will be coming in for dinner."

"Oke," agreed Junior.

"Now what would you like, honey?" she said to me.

"I'd like everything," I answered miserably, "but I'm on a reducing diet."

She clucked sympathetically. "Anything special you mustn't eat?"

"Nothing in particular—just food. I mustn't eat food."

She said, "You will have a hard time choosing a low-caloric meal here. I've never been able to work up interest in such cooking. I'll serve you the same as your parents; you can eat what you wish and as little as you wish."

"All right," I said weakly.

Honestly, I tried. I counted up to ten between bites, then I found I was counting faster so as to finish each course before the next one arrived.

Presently I knew I was a ruined woman and I didn't care. I was surrounded by a warm fog of calories. Once my conscience peeked over the edge of my plate and I promised to make up for it tomorrow. It went back to sleep.

Junior came out of the kitchen with his face covered by a wedge of pinkstriped cake. "Is that a cannibal sandwich?" I asked.

"Huh?" he answered. "You should see what she's got out there. She ought to run a training table."

A long time later Daddy said, "Let's hit the road. I hate to."

Mrs. Santa Claus said, "Stay here if you like. We can accommodate you."

So we stayed and it was lovely.

I woke up resolved to skip even my twentyeight calories of tomato juice, but I hadn't reckoned with Mrs. Santa Claus. There were no menus; tiny cups of coffee appeared as you sat down, then other things, deceptively, one at a time. Like this: grapefruit, milk, oatmeal and cream, sausage and eggs and toast and butter and jam, bananas and cream—then when you were sure that they had played themselves out, in came the fluffiest waffle in the world, more butter and strawberry jam and syrup, and then more coffee.

I ate all of it, my personality split hopelessly between despair and ecstasy. We rolled out of there feeling wonderful. "Breakfast," said Daddy, "should be compulsory, like education. I hypothesize that correlation could be found between the modern tendency to skimp breakfast and the increase in juvenile delinquency."

I said nothing. Men are my weakness; food my ruin—but I didn't care.

We lunched at Barstow, only I stayed in the car and tried to nap.

Cliff met us at our hotel and we excused ourselves because Cliff wanted to drive me out to see the university. When we reached the parking lot he said, "What has happened? You look as if you had lost your last friend—and you are positively emaciated."

"Oh, Cliff!" I said, and blubbered on his shoulder.

Presently he wiped my nose and started the car. As we drove I told him about it. He didn't say anything, but after a bit he made a left turn. "Is this the way to the campus?" I asked.

"Never you mind."

"Cliff, are you disgusted with me?"

Instead of answering me, he pulled up near a big public building and led me inside; it turned out to be the art museum. Still refusing to talk, he steered me into an exhibition of old masters. Cliff pointed at one of them. "That," he said, "is my notion of a beautiful woman."

I looked. It was *The Judgment of Paris* by Rubens. "And that—and that—" added Cliff. Every picture he pointed to was by Rubens, and I'll swear his models had never heard of dieting.

"What this country needs," said Cliff, "is more plump girls—and more guys like me who appreciate them."

I didn't say anything until we got outside; I was too busy rearranging my ideas. Something worried me, so I reminded him of the time I had asked his opinion of Clarice, the girl who is just my size and measurements. He managed to remember. "Oh, yes! Very beautiful girl, a knockout!"

"But, Cliff, you said—"

He grabbed my shoulders. "Listen, featherbrain, think I've got rocks in my head? Would I say anything that might make you jealous?"

"But I'm never jealous!"

"So *you* say! Now where shall we eat? Romanoff's? The Beachcomber? I'm loaded with dough."

Warm waves of happiness flowed over me. "Cliff?"

"Yeah, honey?"

"I've heard of a sundae called Moron's Delight. They take a great big glass and start with two bananas and six kinds of ice cream and—"

"That's passé. Have you ever had a Mount Everest?"

"Huh?"

"They start with a big platter and build up the peak with twenty-one flavors of ice cream, using four bananas, butterscotch syrup, and nuts to bind it. Then they cover it with chocolate syrup, sprinkle malted-milk powder and more nuts for rock, pour marshmallow syrup and whipped cream down from the top for snow, stick parsley around the lower slopes for trees, and set a little plastic skier on one of the snow banks. You get to keep him as a souvenir of the experience."

"Oh, my!" I said.

"Only one to a customer and I don't have to pay if you finish it."

I squared my shoulders. "Lead me to it!"

"I'm betting on you, Puddin'."

Cliff is such a wonderful man.

DESTINATION MOON

Today, with space full of ships, colonies on the inner planets, and Earth's Moon so close that pilots on the Luna run sleep home nights, it is hard to imagine when "flying to the Moon" was a figure of speech for the impossible, when men who thought it could be done were visionaries, crackpots.

It is hard to realize the opposition they faced, to understand why they persisted, what they thought—

Farquharson, History of Transportation, III: 414

I

The Mojave Desert was gray with first morning light, but at the construction site lights were still burning in the office of the technical director. The office was quiet, save for petulant burbling of a pot of coffee.

Three men were present—the director himself, Doctor Robert Corley, Lincoln-tall and lean, Rear Admiral "Red" Bowles, regular navy retired, and Jim Barnes, head of Barnes Aircraft, Barnes Tool Works, other enterprises.

All three needed shaves; Barnes badly needed a haircut as well. Barnes was seated at Corley's desk; Bowles sprawled on a couch, apparently asleep and looking like a fat, redheaded baby; Doctor Corley paced the room, following a well worn pattern.

He stopped, and stared out the window. A thousand yards away on the floor of the desert a great ship, pointed and sleek, thrust up into the sky, ready to punch out through Earth's thick atmosphere.

Wearily he turned away and picked up a letter from the desk; it read:

Reaction Associates, Inc.
Mojave, California.

Gentlemen:

Your request to test the engine of your atomic-powered rocket ship at the site of its construction is regretfully denied.

Although it is conceded that no real danger of atomic explosion exists, a belief in such danger does exist in the public mind. It is the policy of the Commission—Corley skipped down to the last paragraph:—*therefore,* *test is authorized at the Special Weapons Testing Center, South Pacific. Arrangements may be—*

He stopped and shoved the letter at Barnes. "If we've got to test at Eniwetok, we've got to find the money to do it."

Barnes' voice showed exasperation. "Doc, I've told you the syndicate won't put up another dime; there is no other money to be found."

"Confound it—we should have government money!"

Barnes grunted. "Tell that to Congress."

Without opening his eyes Bowles commented, "The United States is going to stall around and let Russia get to the Moon first—with hydrogen bombs. That's what you call 'policy.'"

Corley chewed his lip. "It's got to be *now.*"

"I know it." Barnes got up and went to the window. The rising sun caught a highlight on the polished skin of the great ship. "It's got to be now," he repeated softly.

He turned and said, "Doc, when is the next favorable time to leave?"

"When we planned on it—next month."

"No, I mean this month."

Corley glanced at the wall calendar, dug into a bookcase for a well-thumbed volume, did a quick estimate. "Tomorrow morning—around four o'clock."

"That's it, then. We blast off tomorrow morning."

Admiral Bowles sat up with a jerk. "Blast off in an untested ship? Jim, you're crazy!"

"Probably. But now is the time—*now*. If we wait even a month, we will be tangled in some new snafu. That ship is ready, except for testing the power plant. So we'll skip the test!"

"But we haven't even selected a crew."

Barnes grinned. "*We're the crew*!"

Neither Corley nor Bowles answered. Barnes went on, "Why not? The takeoff is automatic. Sure, we agreed that we should have young men, fast reflexes, and all that malarkey—and every damned one of us has been trying to figure out a reason why he should be included. You, Red, you sneaked off to Moffeatt Field and took a pilot's physical. Flunked it, too. Don't lie to me; I *know*. And you, Doc, you've been hinting that you ought to nurse the power plant yourself—you've been working on your wife, too."

"Eh?"

"She wanted me to say that the syndicate would object to your going. Don't worry; I didn't agree."

Corley looked at him levelly. “I’ve always intended to go. She knows that.”

“That’s my boy! Red?”

Bowles heaved himself to his feet. “Shucks, Jim, I didn’t bust that physical much—just overweight.”

“You’re in. I don’t want an eager young beaver as copilot anyhow.”

“‘Co—pilot?’”

“Want to rassle me for skipper? Red, I’ve meant to gun this crate myself ever since the day—Lordy, four years ago!—when you brought Doc to see me with a satchelful of blueprints.” He drew a breath and looked around exultantly.

Bowles said, “Let’s see. You for pilot; I’m co-; Doc is chief. That leaves nobody but the radarman. You can’t possibly train a man in the electronics of that ship by tomorrow morning.”

Barnes shrugged. “Hobson’s choice—it has to be Ward.” He named the chief electronics engineer of the project.

Bowles turned to Corley. “Does Ward hanker to go?” Corley looked thoughtful. “I’m sure he does. We haven’t discussed it.” He reached for the phone. “I’ll call his quarters.”

Barnes stuck a hand in the way. “Not so fast. Once the word got out, the Commission has twenty-four hours in which to stop us.”

Bowles glanced at his watch. “Twenty-one hours.”

“Long enough, anyhow.”

Corley frowned. “We can’t keep it secret. We’ve got to load that ship. I’ve got to reach Dr. Hastings and get our ballistic calculated.”

“One thing at a time.” Barnes paused, frowning.

“Here’s the plan: we’ll tell everybody that this is just a. dress rehearsal, but complete in all details, road blocks, rations, reporters, checkoff lists, the works. Doc, you get the power plant ready. Red, you’re in charge of loading. Me, I’m going into Mojave and phone Hastings. Then I’ll phone the University and arrange for the big computer.”

“Why drive twenty miles?” Corley protested. “Call from here.”

“Because these wires are probably tapped—and I don’t mean the F.B.I.! Aside from us three and Ward, Hastings is the one man who *must* know the truth— when he figures that ballistic, he’s got to know it matters.”

Barnes reached for his hat. “Doc, you can call Ward now—here I go.”

“Wait!” said Bowles. “Jim, you’re going off half cocked. You can at least find out from here where Hastings is. You may have to fly down to Palomar and get him.”

Barnes snapped his fingers. “I *am* half cocked, Red. I forgot the most important item—the reason why I can’t use my plane myself; I need it for the Resident Inspector." He referred to the project representative of the Atomic Energy Commission.

"Holmes? Why does *he* need your plane?"

"To get lost in. I'm going to persuade Ned Holmes to go to Washington and make one last plea for us to be allowed to test our engine here. He'll do it; turning us down wasn't his idea. Our boy Andy will fly him in my plane—and Andy will be forced down in the desert, forty miles from a phone. Very sad."

Corley grudged a smile. "Sounds like kidnapping."

Barnes looked innocent.

"Of course Holmes will put the Commission's seal on the power pile before he leaves."

"And we'll break it. Any more objections? If not, let's get Andy, Holmes, and Ward, in that order."

Admiral Bowles whistled. "Doc," he said, "that engine of yours had better work, or we will spend the rest of our lives in jail. Well, let's get busy."

II

The morning was well worn by the time Jim Barnes drove back to the construction site. The company guard at the pass gate waved him through; he stopped nevertheless. "Howdy, Joe."

"Morning, Mr. Barnes."

"I see the gate is open. Any orders from the front office?"

"About the gate? No. Somebody called and said today was dress rehearsal for the Big Boy." The guard hooked a thumb toward the ship, two miles away.

"That's right. Now listen; this dress rehearsal must be letter perfect. Keep that gate locked. Clear with me, or Admiral Bowles, or Doctor Corley himself before unlocking it."

"Gotcha, Mr. Barnes."

"Just remember that there are people who would do anything to keep that ship over there from leaving the ground—and they don't necessarily have foreign accents."

"Don't worry, Mr. Barnes."

But he did worry; corking up the gate still left fourteen miles of unguarded fence.

Oh, well—it was a risk that must be accepted. He drove on past the living quarters, through the circle of shops. The area swarmed with people, on foot, in trucks, in jeeps. Trucks were lined up at the entrance to the bull pen surrounding the ship itself. Barnes pulled up at the administration building.

In Corley's office he found Bowles, Corley himself— and Corley's wife. Corley looked harassed; Mrs. Corley was quite evidently angry. "Greetings, folks," he said. "Am I butting in?"

Corley looked up. "Come in, Jim."

Barnes bowed to Mrs. Corley. "How do you do, ma'am?"

She glared at him. "You! You're responsible for this!"

"Me, Mrs. Corley? For what?"

"You know very well 'what'! Oh you . . . you . . ." She caught her breath, then gave vent to one explosive word: "Men!" She slammed out of the room.

When the door had closed behind her, Barnes let his eyebrows seek their natural level. "I see she knows. You shouldn't have told her, not yet, Doc."

"Confound it, Jim. I didn't expect her to kick up a fuss."

Bowles faced around in his chair. "Don't be a fool, Jim. Doe's wife *had* to know—wives aren't hired hands."

"Sorry. The damage is done. Doc, have you put any check on phone calls?"

"Why, no."

"Do it. Wait, I'll do it." He stepped to the door. "Countess, call our switch board. Tell Gertie to switch all outgoing calls to you. You tell 'em firmly that outside lines are all in use, find out who it is, why they want to call, and whom—then tell the Director, Admiral Bowles, or me. Same for incoming calls."

He closed the door and turned back to Bowles.

"Your wife knows?"

"Of course."

"Trouble?"

"No. Navy wives get used to such things, Jim."

"I suppose so. Well, I got Hastings squared away. He says that he will be here with the tape not later than two in the morning. I've got a plane standing by for him."

Corley frowned. "That's cutting it fine. We ought to have more time to set up the autopilot."

"He says he can't promise it sooner. How about things here?"

"Loading is coming all right," answered Bowles, "provided the trucks with the oxygen aren't late."

"You should have flown it in."

"Quit uttering. The trucks are probably in Cajon Pass this minute."

"Okay, okay. Power plant, Doc?"

"I haven't broken Ned Holmes' seal on the atomic pile yet. The water tanks are filling, but they've just started."

He was interrupted by the telephone at his elbow. "Yes?"

His secretary's voice sounded in the room. "Your wife wants to call long distance, Doctor. I'm stalling her. Are you in?"

"Put her on," he said wearily. Mrs. Corley's words could not be heard, but her angry tones came through. Corley answered, "No, dear. . . That's right, dear. I'm sorry but that's how it is. . . no, I don't know when the lines will be free; we're holding them for calls placed to the east coast. . . no, you can't have the car; I'm using it. I—" He looked surprised and replaced the instrument. "She hung up on me."

"See what I mean?" said Barnes.

"Jim, you're a fool," Bowles answered.

"No, I'm a bachelor. Why? Because I can't stand the favorite sport of all women."

"Which is?"

"Trying to geld stallions. Let's get on with the job."

"Right," agreed Corley and flipped a key on his Teletalk. "Helen, call the electronics shop and tell Mr. Ward that I want to see him."

"Haven't you broken the news to him?" demanded Barnes.

"Ward? Of course."

"How did he take it?"

"Well enough. Ward is high strung. At first he insisted there wasn't time to get all the electronic gear ready."

"But he's in?"

"He's in." Corley stood up. "I've got to get back into the ship."

"Me, too," Bowles agreed.

Barnes followed them out. As they passed the desk of Corley's secretary she was saying, "One moment, puh*lease*—I'm ringing him." She looked up and pointed to Corley.

Corley hesitated. "Uh, uh," said Barnes, "if you let 'em tie you up on the phone, we'll never take off. I'm elected. Go on, you two. Get the buggy ready to go."

"Okay." Corley added to his secretary, "Got Mr. Ward yet?"

"Not in the electronics shop. I'm chasing him."

"I want him right away."

Barnes went back inside and spent an hour handling a logjam on the telephone. Personal calls he simply stalled on the excuse that the lines were needed for priority long distance calls. If a call was concerned with getting the ship ready to go, he handled it himself or monitored it. As best he could he kept the construction site an island, cut off from the world.

He straightened out a matter with the chief metallurgist, gave the accounting office an okay on some overtime of the week before, assured Associated Press that the "dress rehearsal" was worth full coverage, and gleefully extended an invitation to the Los Angeles Associated Civic Clubs to go through the ship—next week.

That done, he took Corley's dictaphone and began a memorandum to his business manager on how to close the project in case (a) the trip was successful, (b) the ship crashed. He planned to mark it to be transcribed the following day.

A call from Dr. Corley interrupted him. "Jim? I can't find Ward."

"Tried the men's washrooms?"

"No—but I will."

"He can't be far away. Anything wrong in his department?"

"No, but I need him."

"Well, maybe he's finished his tests and gone to his quarters to catch some sleep."

"There's no answer from his quarters."

"Phone could be off the hook. I'll send someone to dig him out."

"Do that."

While he was arranging this, Herbert Styles, public relations chief for the project, came in. The press agent slumped down in a chair and looked mournful.

"Howdy, Herb."

"Howdy. Say, Mr. Barnes, let's you and me go back to Barnes Aircraft and quit this crazy dump."

"What's biting you, Herb?"

"Well, maybe you can make some sense out of what's going on. They tell me to get everybody in here by three A.M.—A.P., U.P., INS, radio chains, television trucks, and stuff. Then you lock the joint up like a schoolhouse on Sunday. And all this for a practice drill, a dry run. Who's crazy? Me or you?"

Barnes had known Styles a long time. "It's not a drill, Herb."

"Of course not." Styles ground out a cigarette. "Now how do we play it?"

"Herb, I'm in a squeeze. We're going to take off—at three fifty-three tomorrow morning. If word gets out before then, they'll find some way to stop us."

"Who's 'they'? And why?"

"The Atomic Energy Commission for one—for jumping off with an untested power-pile ship."

Styles whistled. "Bucking the Commission, eh? Oh, brother! But why not test it?"

Barnes explained, concluding with, "—so we can't test it. I'm busted, Herb."

"Isn't everybody?"

"That isn't all… Call it a hunch, or anything you like. If we don't take off now, we never will—even if I had the dinero to test in the

South Pacific. We've had more than our share of bad luck on this project—and I don't believe in luck."

"Meaning?"

"There are people who want this enterprise to fail. Some are crackpots; some are jealous. Others—"

"Others," Styles finished for him, "don't like the United States getting space travel first any better than they liked us getting the atom bomb first."

"Check."

"So what do you want to guard against? A time bomb in the ship? Sabotage of the controls? Or the Federal marshal with a squad of soldiers to back him up?"

"I don't know!" Styles stared at nothing.

"Boss—"

"Yeh?"

"Item: pretty soon you've got to admit publicly that it's a real takeoff, for you've got to evacuate this valley. The sheriff and state police won't play games just for a drill."

"But—"

"Item: by now it is after office hours on the east coast. You're fairly safe from the Commission until morning. Item: any sabotage will be done on the spur of the moment, provided it isn't already built into the ship."

"Too late to worry about anything built into the ship."

"Just the same, if I were you, I would go over her with a toothpick. Any last minute stuff will be done with a wrench, behind a control panel or such—what they used to call 'target of opportunity."

"Hard to stop."

"Not too hard. There isn't anything that can be done to that ship down at its base, right? Well, if my neck depended on that heap, I wouldn't let anybody up inside it from now on, except those going along. Not *anybody*, not even if he carried a certificate of Simon-pure one-hundred-percentism from the D.A.R. I'd watch what went in and I'd stow things with my own little pattypaws."

Barnes chewed his lip. "You're right. Herb—you just bought yourself a job."

"Such as?"

"Take over here." He explained what he bad been doing. "As for the press, don't tip them off until you have to make arrangements for the road blocks and evacuation—maybe you can keep things wrapped up until around midnight. I'm going up into that ship and—"

The telephone jangled; he picked it up. "Yes?" It was Bowles.

"Jim—come to the electronics shop."

"Trouble?"

"Plenty. Ward has run out on us."

"Oh, oh! I'll be right over." He slammed the phone and said, "Take over, Herb!"

"Wilco!"

Outside, he jumped in his car and swung around the circle to the electronics shops. He found Bowles and Corley in Ward's office. With them was Emmanuel Traub, Ward's first assistant. "What happened?"

Corley answered, "Ward is in the hospital—acute appendicitis."

Bowles snorted. "Acute funk!"

"That's not fair! Ward wouldn't run out on me."

Barnes cut in. "It doesn't matter either way. The question is: what do we do now?"

Corley looked sick. "We can't take off."

"Stow that!" Barnes turned to Bowles. "Red, can you handle the electronics?"

"Hardly! I can turn the knobs on an ordinary two-way—but that ship is *all* electronics."

"I'm in the same fix—Doc, you could. Or couldn't you?"

"Uh, maybe—but I can't handle radar and power plant both."

"You could teach me to handle power plant and Red could pilot."

"*Huh*? I can't make a nucleonics technician out of you in something like a matter of hours."

Barnes seemed to feel the world pressing in on him. He shook off the feeling and turned to Traub. "Mannie, you installed a lot of the electronic gear, didn't you?"

"Me? I installed all of it; Mr. Ward didn't like to go up the Gantry crane. He is a nervous type guy."

Barnes looked at Corley. "Well?"

Corley fidgeted. "I don't know."

Bowles said suddenly, "Traub, where did you go to college?"

Traub looked hurt. "I got no fancy degree but I carry a civil service classification of senior electronics engineer—a P-5. I did three years in the Raytheon labs. I had my ham license since I was fifteen, and I was a master sergeant in the Signal Corps. If it makes with electrons, I savvy it."

Barnes said mildly, "The Admiral didn't mean any harm, Mannie. What do you weigh?"

Traub shifted his eyes from one to the other. "Mr. Barnes—this is no rehearsal? This is it?"

"This is it, Mannie. We take off—" He glanced at his watch. "—in thirteen hours."

Traub was breathing hard. "You gentlemen are asking me to go to the Moon with you? Tonight?"

Before Barnes could answer, Bowles put in:

"That's it, Mannie."

Traub swallowed hard. "Yes," he said.

"Yes?" Barnes echoed.

"I'll go."

Corley said hastily, "Traub, we don't want to rush you."

"Director, take a look at my job application. I put down 'Willing to travel."

III

The great ship was ringed with floodlights spaced inside the bull pen. It was still framed by the skeleton arch of the Gantry crane, but the temporary antiradiation shield which had surrounded its lower part down to the jets was gone; instead there were posted the trefoil signs used to warn of radioactivity—although the level of radiation had not yet become dangerously high.

But the power pile was unsealed and the ship was ready to go. Thirteen-fifteenths of its mass was water, ready to be flashed into incandescent steam by the atomic pile, to be thrown away at thirty thousand feet per second.

High up in the ship was the control room and adjacent airlock. Below the air lock the permanent antiradiation shield ran across the ship, separating the pressurized crew space from the tanks, the pumps, the pile itself, and auxiliary machinery. Above the control room, the nose of the craft was unpressurized cargo space.

At its base triangular airfoils spread out like oversize fins—fins they would be as the ship blasted away; glider wings they would become when the ship returned to Earth with her tanks empty.

Jim Barnes was at the foot of the Gantry crane, giving last-minute orders. A telephone had been strung out to the crane; it rang and he turned to answer it.

"Mr. Barnes?"

"Yes, Herb."

"Sheriff's office reports road blocks in place and everybody out of the valley—it cost plenty cumshaw to clear the Idle Hour Guest Rancho, by the way."

"No matter."

"Everybody out, that is, but Pete the Hermit. He won't git."

"The old boy with the whiskers in that shack north of the gate?"

"The same. We finally told him the score, but it didn't faze him. He says he ain't never seen no ship take off for the Moon and he ain't planning to miss it, not at his age."

Barnes chuckled. "Can't blame him. Well, let him sign the release our own people sign. Tell him if he won't sign, the show won't take place."

"And if he doesn't sign?"

"Herb, I take off even if some damn fool is standing under the jets. But don't tell him."

"I got you. Now how about the press?"

"Tell them now—but keep them off my neck. And even with releases they stay in the blockhouse."

"I'll have trouble with the newsreel and television people."

"Remote control or nothing. Herd 'em in, you go in last and lock the door behind you. They can string all the wires into the blockhouse they need, but nobody stays inside the area unsheltered."

"Mr. Barnes—do you really think the blast will be that dangerous?"

Barnes' reply was drowned out by the bull horn from the blockhouse: "Attention! The last bus is now loading at the north entrance to the shop circle!"

Presently Styles resumed:

"Another call—you better take it, boss. Trouble."

"Who is it?"

"Commanding general at Muroc."

"Put him on." In a moment he was saying, "Jim Barnes, General. How are you?"

"Oh—hello, Mr. Barnes. I hate to buck you, but your man seems unreasonable. Is it necessary to ask us to keep radar crews up all night for your practice drill?"

"Mmm . . . General, isn't your tracking radar always manned anyhow? I thought this country had a 'radar umbrella' over it."

The general answered stiffly, "That's not a proper question, Mr. Barnes."

"I suppose not. Big difference between passing a law and getting appropriations to carry it out, isn't there?" He thought a minute. "General, suppose I guarantee blips on your tracking screens?"

"What do you mean?"

Barnes said, "General, I've known you since open cockpits. You've used a lot of my planes."

"You make good planes, Mr. Barnes."

"Tonight I want some cooperation. This is it, Whitey."

"*Huh*?"

"We blast off tonight. As long as you know, you can call White Sands and make sure they track us, too. And Whitey—"

"Yes, Jim?"

"What with getting your crew organized and calling White Sands it will be another hour before you can call Washington, wouldn't you think?"

Silence persisted so long that Barnes thought he had been cut off, then the general answered, "It might take that long. Anything more you had better tell me?"

"No. . . that's enough. Except one thing; I'm going, Whitey. I'm piloting it."

"Oh. Good luck, Jim."

"Thanks, Whitey."

As Barnes turned away, he saw a plane circling the area, its lights blinking. The elevator creaked behind him; he looked up to see Corley, Bowles, and Traub descending. Corley shouted, "Is that Dr. Hastings?"

"I hope so."

The plane landed and a jeep drove up to it. A few minutes later the jeep swung into the bull pen and up to the crane; Doctor Hastings got out. Corley ran to meet him.

"Doctor Hastings! You have it?"

"Greetings, gentlemen. Yes, indeed." Hastings tapped a bulging pocket.

"Give it to me!"

"Suppose we go into the ship? I'd like to discuss it with you."

"Jump aboard." The two savants mounted the elevator and started up.

Admiral Bowles touched Barnes' sleeve. "Jim—a word with you."

"Shoot."

Bowles indicated Traub with his eyes; Barnes caught the meaning and they moved inside. "Jim," Bowles asked in a whisper, "what do you know about this man Traub?"

"Nothing that you don't. Why?"

"He's foreign born, isn't he? Germany? Poland?"

"Russia, for all I know. Does it matter?"

Bowles frowned. "There's been sabotage, Jim."

"The hell you say! What sort?"

"The earth-departure radar wouldn't function. Traub opened up the front, then called me over."

"What was it?"

"A pencil mark drawn between two leads. It—"

"I get you, a carbon short. Sabotage, all right. Well?"

"My point is, he found it too easily. How would he know right where to find it if he didn't do it himself?"

Barnes thought about it. “If Traub is trying to stop us, all he has to do is to refuse to go. We can’t go without him—and he knows it.”

“Suppose his object was not just to stop us, but to wreck the ship?”

“And kill himself in the bargain? Be logical, Red.”

“Some of those people are fanatics, Jim. Beyond logic.”

Barnes considered it. “Forget it, Red.”

“But—”

“I said, ‘Forget it!’ Get on back in that ship and prowl around. Imagine that you are a saboteur, try to think where you would hide a bomb—or what you would wreck.”

“Aye, aye, sir!”

“Good. Mannie!”

“Yes, Mr. Barnes.” Traub trotted up; Barnes told him to go up and continue checking. The phone at the foot of the crane rang; it was Styles again.

“Boss? Just got a call from the pass gate. The deputy there is hooked by car radio with the deputies at the road blocks—”

“Good. Nice organizing, Herb."

“Not good! The north road black reports a car with a bailiff; he has a federal court order to stop the takeoff. They let him through.”

Barnes swore softly. “Call, the pass gate. Tell the deputy there to stop him.”

“I did. He won’t. He says he can’t interfere with federal business.”

“That tears it!” Barnes stopped to think. “Tell him to make almighty sure that the man is what he says he is. Tell him that the court order is almost certainly phony-which it is. Tell him to hold the man while he gets in touch with the sheriff’s office and has the sheriff phone the judge who is supposed to have issued the described order.”

“I’ll try,” Styles answered, “but suppose the order is kosher, boss? Hadn’t I better just put the slug on him and dump him in a closet until the fireworks are over?”

Barnes weighed this. “No—you’d spend your life breaking rocks. Gain me all the minutes you can—then hightail it for the blockhouse. Is everybody clear?”

“Everybody but the car and driver for Mrs. Corley.”

“How about Admiral Bowles’ wife?”

“He sent her off earlier—the Admiral doesn’t like ships watched out of sight.”

“Bless his superstitious heart! Send Mrs. Corley’s car into the pen. I’m going to button up around here.”

“Roger!”

Barnes turned around to find Corley and Hastings descending. He waited, bursting with impatience. Corley spoke as they reached bottom. “Oh, Jim, I—”

"Never mind! Is everything okay up there?"

"Yes, but—"

"No time! Say goodbye to your wife, Doctor Hastings —goodbye, and thanks! Your plane's waiting."

"Jim," protested Corley, "what's the rush? It's—"

"No time!" A car swung in through the gate of the pen, came toward them. "There's your wife. Say goodbye

and get back here. Move!" Barnes turned away and went to the crane operator. "Barney!"

"Yeah?"

"We're going up now—*for the last time*. As soon as we are off the crane, back it away. —The safety stops are off the tracks?"

"Sure."

"Off entirely, or just moved back?"

"Off entirely. Don't worry; I won't run her off the rails."

"Yes, you will. Run the crane right off the end." "Huh? Mr. Barnes, if I dropped the wheels into the sand, it would take a week to get her back on."

"Check. That's exactly what I want. After you do it, don't stop to explain; just run for the blockhouse."

The operator looked baffled. "Okay—you said it."

Barnes came back to the elevator. Corley and his wife were standing near her car. She was crying.

Barnes shaded his eyes against the floodlights and tried to see the road to the pass gate. The foundry cut off his view. Suddenly headlights gleamed around that building, turned onto the shop circle and came toward the bull pen entrance. Barnes shouted, "Doc! Now! Hurry!"

Corley looked up, then hastily embraced his wife. Barnes shouted, "Come on! Come on!"

Corley waited to hand his wife into the car. Barnes climbed onto the elevator and, as Corley reached it, pulled him aboard. "Barney! UP!"

Cables creaked and groaned; the platform crawled upward. As Mrs. Corley's car approached the gate the other car started in. Both cars stopped, then the strange car bulled on through. It gunned in second toward the crane and slammed to a stop; a man swarmed out.

He ran to the elevator, the platform was thirty feet above his head. He waved and shouted. "Barnes! Come down here!"

Barnes shouted back, "Can't hear you! Too much racket!"

"Stop the elevator! I've got a court order!"

The driver of the car jumped out and ran toward the crane control station. Barnes watched, unable to stop whatever was to come.

Barney reached behind him and grabbed a wrench; the driver stopped short. “Good boy!” Barnes breathed.

The elevator reached the airlock door; Barnes nudged Corley. “In you go!” He followed Corley, turned and lifted the gangway off the lip of the door, shoved it clear with his foot. “Barney! Get going!”’

The crane operator glanced up and shifted his controls. The crane quivered, then very slowly crawled back from the ship, cleared it, and continued.

It backed still farther, lurched out of plumb, and trembled. Its drive motor squealed and stopped. Barney slid out of his saddle and loped away toward the gate.

IV

Time checks had been completed with Muroc, with White Sands and with their blockhouse. The control room was quiet save for the sighing of air-replenishing equipment, the low hum of radio circuits, and stray sounds of auxiliary machinery. The clocks at each station read 3:29—twenty-four minutes to H-hour.

The four were at their stations; two upper bunks were occupied by pilot and copilot; the lowers by power engineer and electronics engineer. Across the lap of each man arched a control console; his arms were supported so that his fingers were free to handle his switches without lifting any part of his body against the terrible weight to come. His head was supported so that he might see his instruments.

Traub lifted his head and peered out one of the two large quartz ports. “It’s clouding up. I can’t see the Moon.”

Barnes answered, “Out where we’re going there won’t be any clouds.”

“No clouds?”

“What do you expect, out in space?”

“Uh, I don’t know. I guess I got most of my ideas about space travel from -Buck Rogers. Electronics is my game.” “Twentythree minutes,” announced Bowles. “Skipper, what’s the name of this bucket?”

“Huh?”

“When you launch a ship you have to name her.”

“Eh, I suppose so. Doc, what do you say? She’s your baby.”

“Me? I’ve never thought about it.”

“How,” Bowles went on, “about calling her the *Luna*?”

Corley considered. “Suits me, if it suits the rest of you.”

“The space ship Luna,” agreed Barnes. “Sounds good.”

Traub chuckled nervously. “That makes us ‘the Lunatics.'"

“And why not?” agreed Barnes.

“Twenty minutes,” announced Bowles.

“Warm her up, Doc. Checkoff lists, everybody."

“She’s hot now,” Corley answered. “If I increase the fission rate, I’ll have to give her something to chew. Jim, I’ve been thinking. We could still test her.”

“Huh?”

“Set her for a half-g lift, and clear her throat once I’ve got her set for that.”

“What’s the point? She either works, or she blows up.”

“Okay,” Corley answered.

Traub gulped. “Could she blow up?”

“Don’t worry,” Cqrley reassured him. “The scale model ran an hour and twentythree minutes before it blew up.”

“Oh. Is that good?”

“Mannie,” Barnes ordered. “Switch on ‘Ground Pick-Up.’ We might as well watch.”

“Yes, sir.” Above them was a large TV screen. Traub could hook it in to a scanner in the tail, another in the nose, or—as now—pick up an ordinary video channel. The screen lighted up; they saw their own ship, lonely and tall in the floodlights.

An announcer’s voice came with the picture: “—this ship, the mightiest ever built, will soon plunge into outer space. Its flight was unannounced until tonight, its destination has not been revealed. Is this—”

The broadcast was interrupted by Herb Styles. “Mr. Barnes! Boss!”

Barnes leaned out and looked at Traub in the couch beneath. “Are you hooked in?”

"Just a sec—go ahead.”

“What is it, Herb?”

“Somebody tearing down the road, heading this way.”

“Who?”

“Don’t know. We can’t contact the north road block.”

“Call the pass gate. Head ‘em off.”

“It’s no longer manned. Hey—wait. North road block coming in.” After a pause, Styles yelled, “Truck loaded with men—they crushed through and ran over a deputy!”

“Keep your shirt on,” cautioned Barnes. “They can’t reach us. If they hang around down below, it’s their misfortune. I’m blasting on time.”

Bowles sat up. “Don’t be too sure, Jim.”

“Eh? What can they do to us now?”

"What would six sticks of dynamite against one of the tail jacks do to this ship? Let's take off—now!"

"Before calculated time? Red, don't be silly."

"Blast off and correct later!"

"Doc—could we do that?"

"Eh? *No*!"

Barnes stared at the TV picture. "Mannie—tell blockhouse to sound sirens!"

"Jim," protested Corley, "you can't take off now!"

"Are you still set up to test? Half g?"

"Yes, but—"

"Stand by!" His eyes were fixed on the pictured scene outside; headlights came around the foundry, sped toward the pen. The moaning of sirens drowned out Corley's answer.

The truck was almost at the gate. Barnes' forefinger stabbed the firing button.

A whine of great pumps was blanked out by a roar they could feel in their bones. The Luna shivered.

In the TV screen a flower of white light burst from the tail of the ship, billowed up, blanketing the headlights, the buildings, the lower half of the ship.

Barnes jerked his finger back. The noise died out; the cloud changed from incandescent to opaque. In the silence Styles' voice came over the speaker. "*Great— Day—in the Morning*!"

"Herb—can you hear me?"

"Yes. What happened?"

"Use the bull horn to warn them off. Tell 'em to scram; if they come closer I'll fry them."

"I think you have."

"Get busy." He watched the screen, his finger raised. The cloud lifted; he made out the truck.

"Nine minutes," Bowles announced, calmly.

Through the speaker Barnes could hear a voice on the bull horn, warning the attacking party back. A man jumped down from the truck, was followed by others.

Barnes' finger trembled.

They turned and ran.

Barnes sighed. "Doc, did the test suit you?"

"A mushy cutoff," Corley complained. "It should have been sharp."

"Do we blast, or don't we?"

Corley hesitated. "Well?" demanded Barnes.

"We blast."

Traub heaved a mournful sigh. Barnes snapped, "Power plant—shift to automatic! All hands—prepare for acceleration. Mannie, tell blockhouse, Muroc, and White Sands to stand by for count off at oh three five two."

"Oh three five two," Traub repeated, then went on, "Ship calling blockhouse, Muroc, White Sands."

"Power plant, report."

"Automatic, all green."

"Copilot?"

"Tracking on autopilot." Bowles added, "Eight minutes."

"Doc, is she hot as she'll take?"

"I'm carrying the fission rate as high as I dare," Corley answered, strain in his voice. "She's on the ragged edge."

"Keep her so. All hands, strap down."

Corley reared up. "Jim—I forgot to pass out the dropsick pills."

"Stay where you are! If we get seasick, we get seasick."

"One minute, coming up!" Bowles' voice was harsh.

"Take it, 'Mannie!"

"Blockhouse—Muroc—White Sands. Ready for count off!" Traub paused; the room was still.

"Sixty! Fifty-nine—fifty-eight—fifty-seven—"

Barnes gripped his arm rests, tried to slow down his heart. He watched the-seconds click off as Traub counted them. "Thirty-nine! Thirty-eight! Thirty-seven!" Traub's voice was shrill. "Thirtyone! *Half*!"

Barnes could hear sirens, rising and falling, out on the field. Above him in the TV screen, the *Luna* stood straight and proud, her head in darkness.

"Eleven"

"And ten"

"And nine!"

"And eight!"—Barnes licked his lips and swallowed.

"Five—four—three—two—

"Fire!"

The word was lost in sound, a roar that made the test blast seem as nothing. The Luna shrugged—and climbed for the sky.

V

If we are to understand those men, we must reorient. Crossing the Atlantic was high adventure—when Columbus did it. So with the early spacemen. The ships they rode in were incredibly makeshift.

They did not know what they were doing. Had they known, they would not have gone.

Farquharson, Ibid., III: 415

Barnes felt himself shoved back into the cushions. He gagged and fought to keep from swallowing his tongue. He felt paralyzed by body weight of more than half a ton; he strained to lift his chest. Worse than weight was noise, a mind-killing "white" sound from unbearable ultrasonics down to bass too low to be heard.

The sound Dopplered down the scale, rumbled off and left them. At five effective gravities they outraced their own din in six seconds, leaving an aching quiet broken only by noise of water coursing through pumps.

For a moment Barnes savored the silence. Then his eyes caught the TV screen above him; in it was a shrinking dot of fire. He realized that he was seeing himself, disappearing into the sky, and regretted that he had not watched the blast-away. "Mannie," he labored, to say, "switch on 'View After.'"

"I *can't*," Traub groaned thickly. "I can't move a muscle."

"Do it!"

Traub managed it; the screen blurred, then formed a picture. Bowies grunted, "Great Caesar's ghost!" Barnes stared. They were high above Los Angeles; the metropolitan area was map sharp, picked out in street lights and neon. It was shrinking visibly.

Rosy light flashed through the eastern port, followed at once by dazzling sunlight. Traub yelped, "*What happened?*"

Barnes himself had been startled but he strove to control his voice and answered, "Sunrise. We're up that high." He went on, "Doc—how's the power plant?"

"Readings normal," Corley replied in tongue-clogged tones. "How long to go?"

Barnes looked at his board. "More than three minutes."

Corley did not answer, three minutes seemed too long to bear. Presently Traub said, "Look at the sky!" Corley forced his head over and looked. Despite harsh sunlight the sky was black and spangled with stars.

At three minutes and fifty seconds the jets cut off. Like the first time, the cutoff was mushy, slow. The terrible weight left them gradually. But it left them completely. Rocket and crew were all in a free orbit "falling" upward toward the Moon. Relative to each other and to ship they had no weight.

Barnes felt that retching, frightening "falling elevator" feeling characteristic of no weight, but, expecting it, he steeled himself. "Power, plant," he snapped, "report!"

"Power plant okay," Corley replied weakly. "Notice the cutoff?"

"Later," decided Barnes. "Copilot, my track seems high."

"My display tracks on," wheezed Bowles, "—or a hair high."

"Mannie!"

No answer. Barnes repeated, "Mannie? Answer, man—are you all right?"

Traub's voice was weak. "I think I'm dying. This thing is falling—oh, God, *make it stop*!"

"Snap out of it!"

"Are we going to crash?"

"No, no! We're all right."

"All right,' the man says, Traub muttered, then added, "I don't care if we do."

Barnes called out, "Doc, get those pills. Mannie needs one bad." He stopped to control a retch. "I could use one myself."

"Me, too," agreed Bowles. "I haven't been this seasick since I was—" He caught himself, then went on. "—since I was a midshipman."

Corley loosened his straps and pulled himself out from his couch. Weightless, he floated free and turned slowly over, like a diver in slow motion. Traub turned his face away and groaned.

"Stop it, Mannie," ordered Barnes. "Try to raise White Sands. I want a series of time-altitude readings."

"I can't—I'm sick."

"Do it!"

Corley floated near a stanchion, grabbed it, and pulled himself to a cupboard. He located the pill bottle and hastily gulped a pill. He then moved to Traub's couch, pulling himself along. "Here, Traub—take this. You'll feel better."

"What is it?"

"Some stuff called Dramamine. It's for seasickness."

Traub put a pill in his mouth. "I can't swallow."

"Better try." Traub got it down, clamped his jaw to keep it down. Corley pulled himself to Barnes. "Need one, Jim?"

Barnes started to answer, turned his head away, and threw up in his handkerchief. Tears streaming from his eyes, he accepted the pill. Bowles called out, "Doc— hurry up!" His voice cut off; presently he added, "Too late."

"Sorry." Corley moved over to Bowles. "Criminy, you're a mess!"

"Gimme that pill and no comments."

Traub was saying in a steadier voice, "Spaceship *Luna*, calling White Sands. Come in White Sands."

At last an answer came back, "White Sands to Spaceship—go ahead."

"Give us a series of radar checks, time, distance, and bearing."

A new voice cut in, "White Sands to Spaceship—we have been tracking you, but the figures are not reasonable. What is your destination?"

Traub glanced at Barnes, then answered, "Luna, to White Sands—destination: Moon."

"Repeat? Repeat?"

"Our destination is the Moon!"

There was a silence. The same voice replied, "Destination: Moon—Good luck, Spaceship *Luna*!"

Bowles spoke up suddenly. "Hey! *Come look*!" He had unstrapped and was floating by the sunward port.

"Later," Barnes answered. "I need this tracking report first."

"Well, come look until they call back. This is once in a lifetime."

Corley joined Bowles. Barnes hesitated; he wanted very badly to see, but he was ashamed to leave Traub working. "Wait," he called out. "I'll turn ship and we can all see."

Mounted at the centerline of the ship was a flywheel. Barnes studied his orientation readings, then clutched the ship to the flywheel. Slowly the ship turned, without affecting its motion along its course. "How's that?"

"Wrong way!"

"Sorry." Barnes tried again; the stars marched past in the opposite direction; Earth swung into view. He caught sight of it and almost forgot to check the swing.

Power had cut off a trifle more than eight hundred miles up. The *Luna* had gone free at seven miles per second; in the last few minutes they had been steadily coasting upwards and were now three thousand miles above Southern California. Below—opposite them, from their viewpoint—was darkness. The seaboard cities stretched across the port like Christmas lights. East of them, sunrise cut across the Grand Canyon and shone on Lake Mead. Further east the prairies were in daylight, dun and green broken by blinding cloud. The plains dropped away into curved skyline.

So fast were they rising that the picture was moving, shrinking, and the globe drew into itself as a ball. Barnes watched from across the compartment. "Can you see all right, Mannie?" he asked.

"Yeah,", answered Traub. "Yeah," he repeated softly. "Say, that's *real,* isn't it?"

Barnes said, "Hey, Red, Doc—heads down. You're not transparent."

Traub looked at Barnes. "Go ahead, skipper."

"No, I'll stick with you."

"Don't be a chump. I'll look later."

"Well—" Barnes grinned suddenly. "Thanks, Mannie." He gave a shove and moved across to the port.

Mannie continued to stare. Later the radio claimed his attention. "White Sands, calling Spaceship—ready with radar report."

The first reports, plus a further series continued as long as White Sands and Muroc were able to track them, confirmed Barnes' suspicion. They were tracking "high," ahead of their predicted positions and at speeds greater than those called for by Hastings' finicky calculations. The difference was small; on the autopilot displays it was hardly the thickness of a line between the calculated path and the true path.

But the difference would increase.

"Escape speeds" for rockets are very critical Hastings had calculated the classical hundred-hour orbit and the *Luna* had been aimed to reach the place *where the Moon would be* four days later. But initial speed is critical. A difference of less than one percent in ship speed at cutoff can halve—or double—the transit time from Earth to Moon. The *Luna* was running very slightly ahead of schedule—but when it reached the orbit of the Moon, the Moon would not be there.

Doctor Corley tugged at his thinning hair. "Sure, the cutoff was mushy, but I was expecting it and I noted the mass readings. It's not enough to account for the boost. Here—take a look."

Corley was hunched at the log desk, a little shelf built into the space between the acceleration bunks. He was strapped to a stool fixed to the deck in front of it. Barnes floated at his shoulder; he took the calculation and scanned it. "I don't follow you," Barnes said presently; "your expended mass is considerably higher than Hastings calculated."

"You're looking at the wrong figure," Corley pointed out. "You forgot the mass of water you used up in that test. Subtract that from the total mass expended to get the effective figure for blast off—this figure here. Then you apply that—" Corley hesitated, his expression changed from annoyance to dismay. "Oh, my God!"

"Huh? What is it, Doc? Found the mistake?"

"Oh, how could I be so stupid!" Corley started frenzied figuring.

"What have you found?" Corley did not answer; Barnes grabbed his arm. "What's up?"

"Huh? Don't bother me."

"I'll bother you with a baseball bat. *What have you found*?"

"Eh? Look, Jim, what's the final speed of a rocket, ideal case?"

"What is this? A quiz show? Jet speed times the logarithm of the mass ratio. Pay me."

"And *you* changed the mass ratio! No wonder we're running 'high."

"Me?"

"We both did—my fault as much as yours. Listen; you spilled a mass of water in scaring off that truckload of thugs—but Hastings' figures were based on us lifting that particular mass *0*. The ship should have grossed almost exactly two hundred fifty tons at takeoff; she was shy what you had used—so we're going too fast."

"Huh? I wasted reaction mass, so we're going too fast? That doesn't make sense." Barnes hooked a foot into the legs of the stool to anchor himself, and did a rough run-through of the problem with slide rule and logarithm table. "Well, boil me in a bucket!" He added humbly, "Doc, I shouldn't have asked to be skipper. I don't know enough."

Corley's worried features softened. "Don't feel that way, Jim. Nobody knows enough—yet. God knows I've put in enough time on theory, but I went ahead and urged you to make the blunder."

"Doe, how important is this? The error is less than one percent. I'd guess that we would reach the Moon about an hour early."

"And roughly you'd be wrong. Initial speed is critical, Jim; you know that!"

"How critical? When do we reach the Moon?"

Corley looked glumly at the pitiful tools he had with him—a twenty-inch log-log slide rule, seven place tables, a Nautical Almanac, and an office-type calculator which bore the relation to a "giant brain" that a firecracker does to an A-bomb. "I don't know. I'll have to put it up to Hastings." He threw his pencil at the desk top; it bounced off and floated away. "The question is: do we get there at all?"

"Oh, it can't be that bad!"

"It is that bad."

From across the compartment Bowles called out, "Come and get it —or I throw it to the pigs!"

But food had to wait while Corley composed a message to Hastings. It was starkly simple: OFF TRAJECTORY. USE DATA WHITE SANDS MUROC AND COMPUTE CORRECTION VECTOR. PLEASE USE UTMOST HASTE—CORLEY.

After sending it Traub announced that he wasn't hungry and didn't guess he would eat.

Bowles left the "galley" (one lonely hot plate) and moved to Traub's couch. Traub had strapped himself into it to have stability while he handled his radio controls. "Snap out of it, man," Bowles advised. "Must eat, you know."

Traub looked gray. "Thanks, Admiral, but I couldn't."

"So you don't like my cooking? By the way, my friends call me 'Red.'"

"Thanks, uh—Red. No, I'm just not hungry."

Bowles brought his head closer and spoke in low tones. "Don't let it get you, Mannie. I've been in worse jams and come out alive. Quit worrying."

"I'm not worrying."

Bowles chuckled. "Don't be ashamed of it, son. We all get upset, first time under fire. Come eat."

"I can't eat. And I've *been* under fire."

"Really?"

"Yes, really! I've got two Purple Hearts to prove it. Admiral, leave me alone, please. My stomach is awful uneasy."

Bowles said, "I beg your pardon, Mannie." He added, "Maybe you need another seasick pill."

"Could be."

"I'll fetch one." Bowles did so, then returned again shortly with a transparent sack filled with milk—to be exact, a flexible plastic nursing cell, complete with nipple. "Sweet milk, Mannie. Maybe it'll comfort your stomach."

Traub looked at it curiously. "With this should go a diaper and a rattle," he announced. "Thanks, uh— Red."

"Not at all, Mannie. If that stays down, I'll fix you a sandwich." He turned in the air and rejoined the others.

VI

The Luna plunged on; Earth dropped away; radio signals grew weaker—and still no word from Hastings. Corley spent the time trying endlessly and tediously to anticipate the answer he expected from Hastings, using the tools be had. Traub stood guard at the radio. Barnes and Bowles spent a lengthy time staring out the ports—back at the shrinking, cloud-striped Earth, forward at the growing gibbous Moon and brilliant steady stars—until Bowles fell asleep in midsentence, a softly snoring free balloon.

Barnes nudged him gently toward his couch and there strapped him loosely, to keep him from cluttering up the cramped cabin. He eyed his own couch longingly, then turned to Traub instead.

"Out of there, Mannie," he ordered. "I'll relieve you while you catch some shuteye."

"Me? Oh, that's all right, Skipper. You get some sleep yourself and I'll take a rain check."

Barnes hesitated. "Sure you don't want to be relieved?"

"Not a bit. I feel—" He broke off and added, "Just a minute," and turned to his controls. He was on earphones now, rather than speaker. He settled them in place and said sharply, "Go ahead, Earth."

Presently Traub turned to Barnes: "Chicago Tribune— they want an exclusive story from you."

"No, I'm going to sleep."

Traub reported Barnes' answer, then turned back. "How about the Admiral or Doctor Corley?"

"The copilot is asleep and Doctor Corley is not to be disturbed."

"Mr. Barnes?" Traub's manner was diffident. "Do you mind if they get one from *me*?"

Barnes chuckled. "Not at all. But stick them plenty." As Barnes closed his eyes he could hear Traub dickering with some faceless negotiator. He wondered if Traub would ever get to spend the fee? What was a man like Traub doing up here anyhow, in a ship headed nowhere in a hell of a hurry?

For that matter, why was Jim Barnes here?

After his interview, Traub continued guarding the radio. Signals grew fainter and presently reduced to garble. The room was quiet, save for the soft murmur of the air replenisher.

After a long time the radio came suddenly to life—NAA, Washington, Traub soon learned, had rigged a reflector to beam directly at them. "Can you take code groups?" he was asked.

He assured them that he could. "Despatch for Rear Admiral Bowles," NAA rapped back at him. "Zero zero zero one: code groups follow—love, uncle, king, easy, roger—boy, able, dog, item, peter—" The groups continued for a longtime.

"Doctor Corley!"

Corley looked around vaguely, as if awakening in a strange place. "Eh? Yes, Mannie? I'm busy."

"Doctor Hastings calling."

"Oh, fine," Corley acknowledged. "Slide out of there and let me take it."

They changed places with effort, bothered by weightlessness. Traub felt a touch on his arm. "What is it, Mannie?"

He turned; Barnes and Bowles had waked up and loosed themselves. "Howdy, Skipper. It's Doctor Hastings."

"Good!"

"Uh, Admiral—got something for you." Traub hauled out the code dispatch.

Bowles stared at it. Barnes remarked, "Race results?"

Bowles did not answer. He shoved himself toward the forward bulkhead, as far away as possible. He then took a thin book from an inner pocket, and started studying the message with the aid of the book. Barnes looked surprised but said nothing.

Hastings' report was short but not sweet. They would reach the Moon's orbit where planned, but more than fifty hours too soon—and would miss the Moon by more than 90,000 miles!

Barnes whistled. “Hot pilot Barnes, they call me.”

Corley said, “It’s no joke.”

“I wasn’t laughing, Doc,” Barnes answered, “but there is no use crying. It will be tragic soon enough.”

Traub broke in. “Hey—what do you mean?”

“He means,” Bowles said bluntly, “that we are headed out and aren’t coming back.”

“On out? And out—out into outer space? Where the stars are?”

“That’s about it.”

“Not that,” Corley interrupted, “I’d estimate that we would reach our farthest point somewhere around the orbit of Mars.”

Traub sighed. “So it’s Mars, now? That’s not so bad, is it? I mean—they say people live on Mars, don’t they? All those canals and things? We can get another load of water and come back.”

“Don’t kid yourself, Mannie,” Bowles said. “Just be glad you’re a bachelor.”

“A bachelor? Who said I was?”

“Aren’t you?”

“Me? I’m a very domestic type guy. Four kids—and married--

fourteen years.”

Corley looked stricken. “Mannie, I didn’t know.”

“What’s that got to do with it? Insurance I’ve got, with a rocket experimentation rider. I knew this was no picnic.”

Barnes said, “Mannie, if I had known, I wouldn’t have asked you to go. I’m sorry.” He turned to Corley, “When do we run out of water—and air?”

Corley raised his voice. “Please! Everybody! I -didn’t say we weren’t going to get back. I said—”

“But you—”

“Shut up, Red! I said this orbit is no good. We’ve got to vector west, toward the Moon. And we’ve got to do it at—” He glanced at a clock. “Good grief! Seven minutes from now.”

Barnes jerked his head around. “Acceleration stations, everybody! Stand by to maneuver!”

VII

The most treacherous maneuver known to space flight is a jet landing on an airless planet. Even today, it commands the highest pay, the most skilled pilots—

Farquharson, Ibid., III: 418

For forty hours they fell toward the Moon. The maneuver had worked; one could see, even with naked eye, that they were closing with the Moon. The four took turns at the radio, ate and slept and talked and stared out at the glittering sky. Bowles and Traub discovered a common passion for chess and played off the "First Annual Interplanetary Championship"—so dubbed by the Admiral

—using pencil marks on paper. Traub won, four out of seven.

Some two hundred thousand miles out the *Luna* slid past the null point between Earth and Moon, and began to shape her final orbit. It became evident that the correction vector had somewhat overcompensated and that they were swinging toward the Moon's western limb—"western" as seen from Earth: the *Luna's* orbit would intersect her namesake somewhere on the never-yet-seen far side—or it was possible that the ship would skim the far side at high speed, come around sharply and head back toward Earth.

Two principal styles of landing were possible—Type A, in which a ship heads in vertically, braking on her jets to a landing in one maneuver, and Type B, in which a ship is first slowed to a circular orbit, then stopped dead, then backed to a landing when she drops from the point of rest.

"Type A, Jim—it's simplest."

Barnes shook his head. "No, Doc. Simple on paper only. Too risky." If they corrected course to head straight in (Type A), their speed at instant of braking would be a mile and a half a second and an error of one second would land them 8000 feet above—or below!—the surface.

Barnes went on, "How about a modified 'A'?" Modified Type A called for intentionally blasting too soon, then cutting the jets when the radar track showed that the ship hovered, allowing it to fall from rest, then blasting again as necessary, perhaps two or three times.

"Confound it, Jim, a modified 'A' is so damned wasteful."

"I'd like to get us down without wrecking us."

"And I would like us to get home, too. This ship was figured for a total change of twelve and a half miles per second. Our margin is paper thin."

"Just the same, I'd like to set the autopilot to kick her a couple of seconds early."

"We can't afford it and that's that."

"Land her yourself, then. I'm not Superman."

"Now, Jim—"

"Sorry." Barnes looked at the calculations. "But why Type A? Why not Type B?"

"But Jim, Type B is probably ruled out. It calls for decelerating at point of closest approach and, as things stand now, 'closest approach' may be contact."

"Crash, you mean. But don't be so damned conventional; you can vector into a circular orbit from any position."

"But that wastes reaction mass, too."

"Crashing from a sloppy Type A wastes more than reaction mass," Barnes retorted. "Get to work on a 'B'; I won't risk an 'A."

Corley looked stubborn. Barnes went on, "There's a bonus with Type B, Doc—two bonuses."

"Don't be silly. Done perfectly, it takes as much reaction mass as Type A; done sloppily, it takes more."

"I won't be sloppy. Here's your bonus: Type A lands us on this face, but Type B lets us swing around the Moon and *photograph the back side* before we land. How does that appeal to your scientific soul?"

Corley looked tempted. "I thought about that, but we've got too little margin. It takes a mile and a half of motion to get down to the Moon, the same to get up—three miles. For the trip back I have to save enough mass to slow from seven miles a second to five before we dip into the atmosphere. We used up seven to blast off—it all adds up to twelve. Look at the figures; what's left?"

Barnes did so and shrugged. "Looks like a slightly fat zero."

"A few seconds of margin at most. You could waste it on the transitions in a Type B landing."

"Now the second bonus, Doe," Barnes said slowly. "The Type B gives you a chance to change your mind after you get into a circular orbit; the straight-in job commits you beyond any help."

Corley looked shocked. "Jim, you mean go back to Earth *without landing*?"

Barnes lowered his voice. "Wait, Doc. I'd land on the Moon if I had enough in tanks to get down—and not worry about getting up again. I'm a bachelor. But there's Mannie Traub. No getting around it; we stampeded him. Now it turns out he has a slew of kids, waiting for poppa to come home. It makes a difference."

Corley pulled at his scalp lock. "He should have told us."

"If he had, we wouldn't have taken off."

"Confound it, things would have been all right if I hadn't suggested that you test the engine."

"Nonsense! If I hadn't scared those babies off with a blast, they probably would have wrecked the ship."

"You can't be sure."

"A man can't be sure of anything. How about Traub?"

"You're right—I, suppose. Okay, we leave it up to Traub."

From the other end of the compartment Traub looked around from his chess game with Bowles.

"Somebody call me?"

"Yes," Barnes agreed. "Both of you. We've got things to decide."

Barnes outlined the situation. "Now," he said, "Doc and I agree that, after we get into a circular orbit and have had time to add up what's left, Mannie should decide whether we land, or just swing around and blast for home."

Bowles looked amazed, but said nothing.

Traub looked flustered. "Me? It ain't my business to decide. I'm the electronics department."

"Because," Barnes stated, "you're the only one with kids."

"Yes, but— Look here—is there really a chance that, if we landed, we wouldn't be able to get back?"

"Possible," Barnes answered and Corley nodded.

"But don't you know?"

"Look, Mannie," Barnes countered, "we've got water in the tanks to land, take off, and return to Earth—but none for mistakes."

"Yes, but you won't make any mistakes, will you?"

"I can't promise. I've already made one and it's brought us to this situation."

Traub's features worked in agonized indecision. "But it's not my business to decide!"

Bowles spoke up suddenly. "You're right; it's not!" He went on, "Gentlemen, I didn't intend to speak, because it never crossed my mind that we might not land. But now the situation demands it. As you know, I received a coded message.

"The gist was this; our trip has caused grave international repercussions. The Security Council has been in constant session, with the U.S.S.R. demanding that the Moon be declared joint property of the United Nations—"

"As it should be," Corley interrupted.

"You don't see the point, Doctor. Their only purpose is to forestall us claiming the Moon—we, who actually are making the trip. To forestall us, you understand, so that the United States will not be able to found a base on the Moon without permission—permission that is certain to be vetoed."

"But," pointed out Corley, "it works both ways. We would veto Russia establishing a base on the Moon. Admiral, I've worked with you because it was a way to get on with my life's ambition, but, to be frank, using the Moon as a rocket launching base—*by anybody*—sticks in my craw."

Bowles turned red. "Doctor, this is not an attempt to insure the neutrality of the Moon; this is the same doubletalk they used to stop world control of atomics. The commissars simply want to tie us up in legalisms until they have time to get to the Moon. We'll wake up one morning to find Russia with a base on the Moon and us with none—and World War Three will be over before it starts."

"But—Admiral, you can't know that."

Bowles turned to Barnes. "Tell him, Jim."

Barnes gestured impatiently. "Come out of your ivory tower, Doc. Space travel is here now—we did it. There is bound to be a rocket base on the Moon. Sure, it ought to be a United Nations base, keeping the peace of the world. But the, United Nations has been helpless from scratch. The first base is going to belong to us—or to Russia. Which one-do you trust not to misuse the power? Us—or the Politburo?"

Corley covered his eyes, then looked at Bowles. "All right," he said dully. "It has to be—but I don't like it."

Traub broke the ensuing silence with "Uh, I don't see how this ties in with whether we land or not?"

Bowles turned to him. "Because of this: the rest of that message restored me to active duty and directed me to claim the Moon in the name of the United States—as quickly as possible. We would have what the diplomats call a *fait accompli*. But to claim the Moon *I have to land*!"

Traub stared. "Oh. I see."Bowles went on in a gentle voice, "Mannie, this goes beyond you and me, or even your kids. The surest way to make sure that your kids grow up in a peaceful, free world is to risk your neck right now. So we've got to land."

Traub hesitated; Bowles went on, "You see that, don't you? It's for your kids—and millions of other kids."

Barnes interrupted him. "Red—quit working on him!"

"Eh?"

"He'll make a free choice—after we've leveled off and looked the situation over."

"But, Jim, I thought we saw eye to eye. You told Doc—"

"Pipe down! You've stated your case, now quit trying to work him up into being a martyr."

Bowles turned bright red. "I must inform you, sir, that besides being returned to active duty I was given authority to commandeer this ship."

Barnes locked eyes with him. "You can take your authority and—do whatever you think proper with it. I'm skipper and will stay so as long as I'm alive." He looked around. "All hands—get ready for approach. Doe, go ahead with trial calculations, Type B. Mannie, warm up the pilot radar. Bowles!"

Finally Bowles answered, "Yes, sir."

"Rig the autocamera in the starboard port. We'll take a continuous strip as we pass around the far side."

"Aye aye, sir."

Traub leaned from his couch and peered out the starboard port. "It's just like the other side."

Barnes answered, "What did you expect? Skyscrapers? Copilot, how do you track?"

"Speed over ground—one point three seven. Altitude, fifty-one point two, closing slowly."

"Check. I project closest approach at not less than twenty-one—no contact. What do you get?"

"Closer to twenty, but no contact."

"Check. Take over orientation. I'll blast when altitude changes from steady to opening."

"Aye aye, sir!"

The *Luna* was swinging around the unknown far face of the Moon, but her crew was too busy to see much of the craggy, devil-torn landscape. She was nearing her closest approach, travelling almost horizontally. She was pointed tail first, ready to blast back from a top speed of a mile and a half a second to a circular orbit speed of a mile a second. At Barnes' order Bowles gave his attention to placing her axis precisely horizontal.

The television screen read "View Aft"; in its center was a cross mark lying over a picture of the mountainous horizon they were approaching. He jockeyed the ship against the reaction of the flywheel, then steadied her by gyros when one cross line held steady on the horizon.

Barnes set his controls on semiautomatic, ready both to fire and cut off with one punch of the firing button. Into his autopilot he fed the speed change he wished to achieve. Altitude dropped to forty miles, to thirty, to less than twenty-five. "Power plant," Barnes called out, "stand by for blasting!"

"Ready, Jim," Corley reported quietly.

"Electronics?"

"Everything sweet, Skipper."

Barnes watched ground speed with one eye, the radar altimeter with the other. . . twentythree, it said... twentytwo. . . twenty-one and a half.

Twenty-one point five . . . twenty-one - point four— point four again—and again. Point five! and crawling up. His finger stabbed at the firing button.

The blast was fourteen seconds only, then it cut off, but in the same mushy fashion which it had before. Barnes shook his head to clear it and looked at his board. Altitude twenty-one point five; ground speed, one plus a frog's whisker—they were in orbit as planned. He sighed happily. "That's all for now, troops. Leave everything hot but you can get out of your hammocks."

Bowles said, "Hadn't I better stay and watch the board?"

"Suit yourself—but they won't repeal the law of gravitation. Doc, let's see how much juice we have left." He glanced at a clock. "We've got an hour to make a decision. It will be almost half an hour before Earth is in sight again."

"I don't like the way she cuts off," Corley complained.

"Quit fretting. I used to have a car that sounded its horn every time I made a left turn."

Bowles got a container of coffee, then joined Traub at the starboard port. They peered around the automatic camera and watched the moonscape slide past. "Rugged terrain," Bowles remarked.

Traub agreed. "There's better stuff going to waste in California."

They continued to stare out. Presently Bowles turned in the air and slithered back to his acceleration couch.

"Traub!"

Mannie came to the desk. "Mannie," Barnes said, pointing at a lunar map, "we figure to land spang in the middle of the Earthside face—that dark spot, *Sinus Medii*. It's a plain."

"You figure to land, then?"

"It's up to you, Mannie. But you'll have to make up your mind. We'll be there in about—uh, forty minutes."

Traub looked troubled. "Look,chief, you shouldn't—"

He was interrupted by Bowles' voice. "Captain! We are closing, slowly."

"*Are you sure*?"

"Quite sure. Altitude nineteen point three—correction: point two. . . closing."

"*Acceleration stations*!"

Barnes was diving toward his couch as he shouted.

Traub and Corley followed him. As he strapped down

Barnes called out, "Copilot—get a contact prediction.

All hands, stand by for maneuvers." He studied his own board. He could not doubt it; they were in something less than a perfect circle.

He was trying to make a prediction from his display when Bowles reported, "I make it contact in nine minutes, Captain, plus or minus a minute."

Barnes concentrated. The radar track was jiggling as much as five or ten percent, because of mountains below them; the prediction line was a broad band. As near as he could tell, Bowles was right.

“What now, Captain?” Bowles went on. “Shall I swing her to blast forward?” A slight nudge would speed up the ship, in effect, lift her, permit her to *fall around* the Moon rather than curve down.

It would also waste reaction mass.

Nine minutes. . . nine hundred miles, about. He tried to figure how many minutes it would be until they raised Earth over the horizon, ahead.

Seven minutes, possibly—and Earth would be in sight. A landing at *Sinus Medii* was impossible but they still might land in sight of Earth without using more precious water to correct their orbit. “Mannie,” he snapped, “we land in seven minutes—or we never land. *Make up your mind*!”

Traub did not answer.

Barnes waited, while a minute coursed by. Finally he said in a weary voice, “Copilot—swing to blast forward. All hands, prepare for departure.”

Traub suddenly spoke up. “That’s what we came for, wasn’t it? To land on the Moon? Well, let’s land the damn thing!”

Barnes caught his breath. “Good boy! Copilot, cancel that last. Steady ship for deceleration. Sing out when you see Earth.”

“Aye aye, sir!”

“There’s Earth!”

Barnes glanced up, saw, Terra pictured in the TV screen, rising behind a wall of mountains. Bowles went on, “Better land, Jim. You’ll never get over those mountains.”

Barnes did not argue; their altitude was barely three miles now. He shouted, “Stand by. Red, start swinging as soon as I cut off.”

“Right!”

“Fire!” He stabbed the button. This maneuver was manual, intended only to stop their forward motion. He watched his ground-speed radar while the ship shivered—nine-tenths . . . seven . . . -five . . . four.;. three.. . two. . one . . . six-hundredths. He jerked his finger off just before it dropped to zero and prayed that a mushy cutoff would equal his anticipation.

He started to shout to Bowles, but the ship was already swinging. Earth and the horizon swung up in the TV screen and out of sight.

For a crawling ten seconds, while they fell straight down, the *Luna* crept into position for a tail-first landing. They were less than three miles up now. Barnes shifted scale from miles to feet and started his prediction.

Bowles beat him to an answer. “Contact in seventy-two seconds,

Skipper."

Barnes relaxed. "See the advantage of a Type 'B' landing, Doc," he remarked cheerfully. "No hurry—just like an elevator."

"Quit gabbing and get us down," Corley answered taut1y.

"Right," Barnes agreed. "Copilot, predict the blast altitude." His own hands were busy to the same end.

Bowles answered, "Jim, you going manual or automatic?"

"Don't know yet." Automatic firing was quicker, possibly more certain—but that mushy cutoff could bounce them like a ping-pong ball. He steadied crosshairs on his autopilot display and read the answer: "Blast at five two oh feet. What do you get, Red?"

"Check." Bowles added, "That's less than three seconds blast, Jim. Better make it automatic."

"Tend to your knitting."

"My mistake."

Nearly forty seconds passed and they had fallen to eleven thousand feet before he decided. "Power plant, set for manual landing. Copilot, cover me at five hundred feet."

"Jim, that's too late," Bowles protested.

"You will be covering me all of a tenth of a second—after I should fire."

Bowles subsided. Barnes grabbed a glance at the TV screen; the ground under them seemed level and there was no perceptible drift. He looked back at his board. "Correction—cover at five ten."

"Five ten—right."

The seconds clicked past; he had his finger poised over the button when Bowles shouted, "Jim—look at the screen!"

He looked up—the *Luna*, still carrying a trifle of drift, was now over a long crack, or rill—and they were about to land in it.

Barnes jabbed the button.

He let up at once; the Luna coughed to silence. The rill, canyon, or crevasse was still in sight but no longer centered. "Copilot—new prediction!"

"What happened?" Corley demanded.

"Quiet!"

"Prediction," Bowles chanted, "blast at—at three nine oh."

Barnes was adjusting verniers for his own prediction as Bowles reported. "Check," he answered. "Cover at three seven oh." He threw one glance at the TV screen. The crevasse was toward the edge of the screen; the ground below looked fairly smooth. Unquestionably the ship had a slight drift. All he could do was hope that the gyros would keep them from toppling. "*Brace for crash*!"

480—450—400— He jabbed the button.

The terrible pressure shoved his head back; be lost sight of the altimeter. He caught it again— 190—150—125— At “fifty” he snatched his finger away and prayed.

The jet cut off sloppily as always. A grinding jar slammed him more deeply into the cushions The ship lurched like an unsteady top—and stayed upright.

Barnes found that he had been holding his breath a long time.

VIII

Columbus found a pleasant climate rich land docile natives. Nowhere in our System did explorers find conditions friendly to men—and nowhere was this more brutally true than on our nearest neighbor.

-Farquharson, Ibid., III: 420

Barnes felt dazed, as if wakening from a confusing dream. Bowles’ voice recalled him to the present. “Jacks are down, skipper. Unclutch the gyros?”

He pulled himself together. “Check our footing first. I’ll—Say! *We’re on the Moon*!” Frantically he unstrapped.

“We sure are!” answered Bowles. “A fine landing, Jim. I was scared.”

“It was terrible, and you know it.”

“We’re alive, aren’t we? Never mind—*we made it.*”

Corley interrupted them. “Power plant secured.”

Barnes looked startled. “Oh, sure. Traub, your department okay?”

Mannie answered weakly, “I guess so. I think I fainted.”

“Nonsense!” Bowles reassured him. “Come on—let’s look.”

The four crowded at the portside port and stared out across an umber plain, baking under an unchecked sun, now not far from zenith. Miles away, jutting up into black, star-studded sky, were the peaks they had seen. In the middle distance was a single pock mark, a crater a mile or less across. Nothing else broke the flat desolation ... endless, lifeless waste, vacuum sharp and kiln dry.

Traub broke the silence with an awed whisper. “Gosh, what a place! How long do we stay, Mr. Barnes?”

“Not long, Mannie.” He tried to make his words carry conviction. “Doc,” he went on, “let’s check the mass ratio.”

“Okay, Jim.”

Bowles went to the starboard port; one glance through it and he sang out, “Hey—see this.”

They joined him. Below was the dark chasm in which they had almost landed. It ran close to the ship; one jack almost touched the edge. Barnes looked down into its awesome depths and felt no regret about expending mass to avoid it.

Bowles stared at it. “I repeat, Jim, a fine landing.”

“Too close for comfort.”

Bowles pushed his face to the quartz and tried to see farther to right and left. “I’m turned around,” he complained. “Which way is Earth?”

“Earth is east, of course,” Corley answered.

“Which way is east?”

“Man, you certainly are confused. East is out the other port.”

“But it *can’t* be. We looked out there first and Earth wasn’t in sight.” Bowles crossed back to the other port.

“See?”

Corley joined him. “That’s east,” he stated. “Look at the stars.”

Bowles looked. “But something is screwy. I saw Earth before we landed, in the screen. You saw it, didn’t you, Jim?”

“Yes, I saw it.”

“You; Doc?”

“I was too busy. How high was it?”

“Just rising. But I saw it.”

Corley looked at the sky, then at the mountains. “Sure, you did. And it’s there—back of those mountains.”

Barnes whistled tonelessly. “That’s it. I’ve landed us a few miles too short.”

Bowles looked whipped. “Out of line-of-sight,” he said dully. “I could claim it until hell freezes—and I can’t get the message back.”

Traub looked startled. “We’re cut off from Earth? But I saw it, too.”

“Sure, you did,” agreed Barnes, “you saw it while we had altitude. Now we’re down too low.”

“Oh.” Traub looked out. “But it isn’t serious, is it?

Earth is back of those mountains—but it’s in the east; it will rise after a bit. How fast does the Moon turn? Twentyeight days and something?”

Barnes turned to Corley. “You tell him, Doc.”

“Mannie—the Earth doesn’t rise or set.”

“Huh?”

“The Moon keeps the same face to the Earth all the time. From any one spot, the Earth doesn’t move; it just hangs.”

“Huh?” Traub raised his hands, stared at them; it could be seen that he was visualizing it, using his fists for Earth and Moon. “Oh—I get it.” He looked dismayed. “Say, that’s bad. That’s really bad.”

“Snap out of it, Mannie,” Barnes said quickly. “If we can’t contact Earth, we’ll just have to wait until we get back.” He said nothing about his own fears.

Bowles smashed a fist into a palm. “We’ve got to contact Earth! It doesn’t matter whether we get back; four casualties is cheap. But to get a message through now—*this* message, that a United States vessel has landed and taken possession—can mean the salvation of the United States.” He turned to Corley. “Doctor, we have enough power to lift us over those mountains, haven’t we?”

“Eh? Why, yes.”

“Then let’s do it—now.” He turned toward his couch. “Hold it, Red!” Bowles stopped; Barnes went on, “If we make one lift and drop, to near those mountains, you know what that does to our chances of getting back.”

“Of course! It’s not important; we owe it to our country.”

“Maybe so. Maybe not.” Barnes paused. “If it turns out that we don’t have enough juice left to break free of the Moon, I’ll concede your point.”

“Jim Barnes, we can’t consider ourselves against the safety of our country.”

“Speak for yourself, Red. Conceded that a claim to the Moon might help out the State Department this week— again it might not. It might stimulate Russia into going all out for space travel while the United States stumbles along as before, proud that we claimed it, but unwilling to spend real money to make it stick.”

“Jim, that’s sophistry.”

“So? That’s my decision. We’ll try everything else first. You don’t know you can’t get a message through. Why don’t you try?”

“When we’re not in line-of-sight? Don’t be silly.”

“Earth is not far down behind those mountains. Find a place that *is* line-of-sight.”

“Oh. Now you make sense.” Bowles looked out at the mountains. “I wonder how far away they are?”

“Tell you in a moment,” Traub offered. “Wait till I swing the soup bowl around.” He started for his couch.

“Never mind, Mannie!” put in Barnes. “No—go ahead. It won’t hurt to know. But I wasn’t talking about the mountains, Red. They are too far away. But if you scout around, you may find a spot from which the mountains are low enough to let you see Earth. Or you might find some hills—we can’t see all around from inside here. Mannie, is it possible to take out the radio and use it outside the ship?”

“Outside? Let me see— The transmitter is unpressurized; I guess I could jigger it. How about power?”

Bowles said, “Doc, how much cable can we dig up?” Barnes cut in, “Find your spot, then we’ll see what’s needed.”

“Right! Jim, I’ll go out at once. Mannie, come with me and we’ll find a spot.”

"Outside?" Traub said blankly.

"Sure. Don't you want to be the first man to set foot on the Moon?"

"Uh, I guess so." Traub peered out at the blazing unfriendly surface.

Corley got an odd look; Barnes noted it and said, "One moment, Red. Doc is entitled to the honor of being first. After all, the Corley engine made it possible."

"Oh, sure! Doc can be first down the ladder. Let's all go."

"I'll go later," Barnes decided. "I've got work to do."

"As you wish. Come on, Doc."

Corley looked shy. "Oh, I don't have to be first. We all did it, together."

"Don't be modest. Into our suits—let's go!" Thoughts of military policy seemed to have left Bowles' mind; he was for the moment boyishly eager for adventure. He was already undogging the hatch that led down into the airlock.

Barnes helped them dress. The suits were modifications of high-altitude pressure suits used by jet pilots—cumbersome, all-enclosing skins not unlike diving suits and topped off with "goldfish bowl" helmets. The helmets were silvered except for the face plates; a walkie-talkie radio, two oxygen bottles, and an instrument belt completed the main features of a suit. When they were dressed but not helmeted, Barnes said, "Stay in sight of the ship and each other. Red, when you shift from tank one to tank two, git for home and don't dawdle."

"Aye aye."

"I'm going now." He gasketed their helmets, leaving Corley to the last. To him he said softly, "Don't stay long. I need you."

Corley nodded. Barnes fastened the doctor's helmet, then climbed up into the control room and closed the hatch. Corley waited until Barnes was clear, then said, "Check radios. Check instruments."

"Okay, Doctor," Traub's voice sounded in his earphones.

"Okay here," added Bowles.

"Ready for decompression?" They assented; Corley touched a button near the door; there came a muted whine of impellers. Gradually his suit began to lift and swell. The feeling was not new; he had practiced in their own vacuum chamber back at Mojave. He wondered how Traub felt; the first experience with trusting a Rube Goldberg skin could be frightening. "How are you doing, Mannie?"

"All right."

"The first time seems odd, I know."

"But it's not the first time," Traub answered. "I checked these walkie-talkies in the chamber at the job."

“If you gentlemen are through chatting,” Bowles cut in, “you’ll note that the telltale reads ‘vacuum’.”

“Eh?” Corley turned and undogged the outer door.

He stood in the door, gazing north. The aching, sun-drenched plain stretched to a black horizon. On his right, knife sharp in the airless moonscape, was the wall of mountains they had grounded to avoid. He lifted his eyes and made out the Big Dipper, midnight clear above a dazzling, noonday desert.

Bowles touched his arm. “One side, Doc. I’ll rig the ladder.”

“Sorry.”

Bowles linked the ends of a rope ladder to hooks outside the door. Finished, he kicked the ladder out. “Go ahead, Doc.”

“Uh, thanks.” Corley felt for the first rung. It was a clumsy business in the pressure suit. Finally he knelt, grasped the threshold, got a toe in and started down.

It was awkward, rather than hard work. Suit and all, he weighed less than forty pounds. He found it easier to lower himself by his hands alone. He could not see below his chin, but the shape of the ship let him know his progress. Finally he was even with the jets. He lowered himself a bit more, felt for the ground—and kicked his toe into the lunar soil.

Then he was standing on it.

He stood there a moment, his heart pounding. He was trying to realize it, take it in, and found himself unable to do so. He had lived the moment too many thousands of times in too many years of dreams. It was still a dream. A foot brushed his shoulder; he stepped back to avoid being stepped on by Traub. Soon Bowles joined them. “So this is it,” the Admiral said inanely and turned slowly around. “Look, Mannie! Hills! Not far away.”

Corley saw that Bowles was looking under the jets to the south. The plain was broken there with a sharp eruption of rock. Corley touched Bowles’ arm. “Let’s get away from the ship. Here where the jets splashed is probably a bit radioactive.”

“Okay.” Bowles followed him; Traub brought up the rear.

IX

Columbus had one motive; Queen Isabella had another— Farquharson, Ibid., III: 421

On climbing back into the control room Barnes did not immediately get to work. Instead he sat down and thought. For the last—two days, was it? three days? four days, really—he had had no chance to collect his thoughts, drop his public mask and invite his soul.

He felt unutterably weary. He lifted his eyes to the mountains. There they stood, tall and forbidding, witnesses that he had accomplished his driving purpose.

To what end? To let Corley explore the dark outer reaches of science? To help Bowles insure the safety of western civilization—or perhaps hasten a new crisis?

Or to make orphans of four kids whose old man was "a very domestic type guy" but could be shamed into coming along?

No, he knew it had been because Jimmy Barnes had been small for his age, clumsy with his fists, no decent clothes—so he had to make more money, boss more men, build faster planes than anyone else. He, James A. Barnes, had reached the Moon because he had never been sure of himself.

He wondered about Mannie's kids and his stomach was a rock inside him.

He threw off the mood and went to the radio controls, keyed the walkie-talkie circuit and called out, "This is Jim Barnes, kiddies, coming to you by courtesy of 'SLUMP,' the Super soap. Come in, come in, wherever you are!"

"Jim!" Bowles' voice came back. "Come on out."

"Later," Barnes answered. "Where's Doc?"

"Right here," Corley answered. "I was just coming back."

"Good," said Barnes. "Red, I'll leave this switched on. Sing out now and then."

"Sure thing," Bowles agreed.

Barnes went to the desk and began toting up mass reserves. An orbit computation is complicated; calculating what it takes to pull free of a planet is simple; he had a rough answer in a few minutes.

He ran his hand through his hair. He still needed that haircut—and no barbers on this block. He wondered if it were true that a man's hair continued to grow after his death.

The hatch creaked and Corley climbed into the room. "Whew!" be said. "It's good to get out of that suit. That sun is really hot."

"Wasn't the gas expansion enough to keep you cool?"

"Not cool enough. Those suits are hard to get around in, too, Jim—they need a lot of engineering."

"They'll get it," Barnes answered absently, "but reengineering this ship is more urgent. Not the Corley engine, Doc; the controls. They aren't delicate enough;"

"I know," Corley admitted. "That poor cutoff—we'll have to design a prediction for it into the autopilot, and use a feedback loop."

Barnes nodded. “Yes, sure, *after* we get back—and if we get back.” He tossed his fingers at the scientist. “Hum that through.”

Corley glanced at it. “I know.”

“Red won’t find a spot in line-of-sight with home; those mountains are infernally high. But I wanted him out of the way—and Mannie. No use talking to Red, he’s going to get a posthumous Congressional Medal if it kills him—and us too.”

Corley nodded. “But I’m with him on trying to contact Earth; I need it worse than he does.”

“Hastings?”

“Yes. Jim, if we had enough margin, we could blast off and correct after radio contact. We haven’t; if we get off at all it will be close.”

“I know. I spent our ticket home, when I made that extra blast.”

“What good would it have done to have crashed? Forget it; I need Hastings. We need the best orbit possible.”

“Fat chance!”

“Maybe not. There’s libration, you know.”

Barnes looked startled. “Man, am I stupid!” He went on eagerly, “What’s the situation now? Is Earth swinging up, or down?”

The Moon’s spin is steady, but its orbit speed is not; it moves, fastest when it is closest to Earth. The amount is slight, but it causes the Moon to appear to wobble each month as if the Man-in-theMoon were shaking his head. This moves the Earth to-and-fro in the lunar sky some seven degrees.

Corley answered, “It’s rising—I think. As to whether it will rise enough—well, I’ll have to compute Earth’s position and then take some star sights.”

“Let’s get at it. Can I help?”

Before Corley could reply Bowles’ voice came over the speaker: “Hey! Jim!”

Barnes keyed the walkie-talkies. “Yes, Red?”

“We’re at the hills south of the ship. They might be high enough. I want to go behind them; there may be an easier place to climb.”

On the airless Moon, all radio requires line-of-sight— yet Barnes hated to refuse a reasonable request. “Okay— but don’t take any chances.”

“Aye aye, Skipper.” ‘Barnes turned to Corley. “We need the time anyhow.”

“Yes,” Corley agreed. “You know, Jim, this isn’t the way I imagined it. I don’t mean the Moon itself—just wait until we get some pressurized buildings here and some decent pressure suits. But what I mean is what we find ourselves doing. I expected to cram every minute with exploring and collecting specimens and gathering new data. Instead I'll beat my brains out simply trying to get us back."

"Well, maybe you'll have time later—too much time."

Corley grudged a smile. "Could be—"

He sketched out the relative positions of Earth and Moon, consulted tables. Presently he looked up. "We're in luck. Earth will rise nearly two and a half degrees before she swings back."

"Is that enough?"

"We'll see. Dig out the sextant, Jim." Barnes got it and Corley took it to the eastern port. He measured the elevations of three stars above the tops of the mountains. These he plotted on a chart and drew a line for the apparent horizon. Then he plotted Earth's position relative to those stars.

"Finicky business," he complained. "Better check me, Jim."

"I will. What do you get?"

"Well—if I haven't dropped a decimal point, Earth will be up for a few hours anyway three days from now."

Barnes grinned. "We'll get a ticker-tape parade yet, Doc."

"Maybe. Let's have another look at the ballistic situation first."

Barnes' face sobered.

Corley worked for an hour, taking Barnes' approximation and turning it into something slightly better. At last he stopped. "I don't know," he fretted. "Maybe Hastings can trim it a little."

"Doc," Barnes answered, "suppose we jettison everything we can? I hate to say it, but there's all that equipment you brought."

"What do you think I've been doing with these weight schedules? Theoretically the ship is stripped."

"Oh. And it's still bad?"

"It's still bad."

Bowles and Traub returned worn out and just short of sun stroke. The Admiral was unhappy; he had not been able to find any way to climb the hills: "I'll go back tomorrow," he said stoutly. "I mean after we've eaten and slept."

"Forget it," advised Barnes.

"What do you mean?"

"We are going to have line-of-sight from here."

"Eh? Repeat that."

"Libration," Barnes told him. "Doc has already calculated it."

Bowles' face showed delighted comprehension. Traub looked puzzled; Barnes explained it.

"So you see," Barnes went on, we'll have a chance to send a message in about seventy hours."

Bowles stood up, his fatigue forgotten. "That's all we need!" He pounded his palm exultantly.

"Slow down, Red," Barnes advised, "our chances of taking off look worse than ever."

"So?" Bowles shrugged. "It's not important."

"Oh, for Pete's sake! Drop the Nathan Hale act. Have the common decency to give a thought to Mannie and his four kids."

Bowles started to retort, stopped—then went on again with dignity. "Jim, I didn't mean to annoy you. But I meant what I said. It's not important to get back, as long as our message gets through. Our mistakes will make it easier for the next expedition. In a year the United States can have a dozen ships, better ships, on the Moon. Then no country would be so foolhardy as to attack us. That is important; we aren't."

He went on, "Every man dies; the group goes on. You spoke of Mannie's kids. You have no children, nor has Corley. Mannie has—so I know he understands what I mean better than you do." He turned to Traub. "Well, Mannie?"

Traub looked up, then dropped his eyes. "Red is right, Mr. Barnes," he answered in a low voice, "but I'd like to get home."

Barnes bit his lip. "Let's drop it," he said irritably. "Red, you might rustle up some supper."

For three days, Earth time, they labored. Bowles and Barnes stripped the ship—cameras, empty oxygen bottles, their extra clothing, the many scientific instruments Corley had hoped to use—Wilson cloud chamber, Geiger counter, a 12" Schmidt camera and clock, still cameras, the autocamera, ultra-and infra-spectrographs, other instruments. Corley stayed at his desk, computing, checking, computing again—getting the problem in the best possible shape to turn over to Hastings. Traub overhauled his radio and lined up his directional antenna to the exact orientation at which Earth would appear.

The hour finally crept up to them. Traub, was in his couch at the radio controls while the rest crowded at the eastern port. What they needed to say had been made one message:

A formal claim to the Moon, setting forth time and place of landing, a long and technical message to Hastings, and finally code groups supplied by Bowles. Traub would send it all out as one, many times if necessary.

"I see it!" It was Corley who claimed the distinction. Barnes stared at the spot. "Your imagination, Doc; a highlight on the peaks." The sun was behind them, "afternoon" by local time; the mountains were bright in the east.

Bowles put in, "No, Jim. There's something there." Barnes turned. "Start sending!"

Traub closed his key.

The message was repeated, with listening in between, time after time. An arc of Earth slowly, terribly slowly, crept above the horizon. No answer came back, but they did not despair, so little of Earth was as yet in sight. Finally Barnes turned to Corley. "What does that look like, Doc? The part we can see, I mean."

Corley peered at it. "Can't say. Too much cloud."

"It looks like ocean. If so, we won't get a jingle until it's higher."

Corley's face slowly became horror struck. "What's the matter?" demanded Barnes.

"Good grief! *I forgot to figure the attitude*."

"Huh?"

Corley did not answer. He jumped to the desk, grabbed the Nautical Almanac, started scribbling, stopped, and drew a diagram of the positions of Earth, Sun, and Moon. On the circle representing the Earth he drew a line for the Greenwich meridian.

Barnes leaned over him. "Why the panic?"

"That is ocean, the Pacific Ocean." Bowles joined them. "What about it?"

"Don't you see? Earth turns to the east; America is moving away—already out of sight." Corley hurriedly consulted his earlier calculations. "Earth reaches maximum elevation in about, uh, four hours and eight minutes. Then it drops back."

Traub pushed up an earphone. "Can't you guys shut up?" he protested. "I'm trying to listen."

Corley threw down his pencil. "It doesn't matter, Mannie. You aren't ever going to be in line-of-sight with NAA."

"Huh? What did you say?"

"The Earth is faced wrong. We're seeing the Pacific Ocean now, then we'll see Asia, Europe, and finally the Atlantic. By the time we should see the United States it will have dropped back of the mountains."

"You mean I'm just wasting time?"

"Keep sending, Mannie," Barnes said quietly, "and keep listening. You may pick up another station."

Bowles shook his head. "Not likely."

"Why not? Hawaii may still be in sight. The Pearl Harbor station is powerful."

"Provided they have rigged a beam on us, same as NAA."

"Well, keep trying, Mannie."

Traub slipped his earphone back in place. Bowles went on, "It's nothing to get excited about. We'll be picked up anywhere." He chuckled. "Soviet stations will be listening to us shortly. They will be broadcasting denials at the same time stations in Australia are telling the world the truth."

Corley looked up. "But I won't get to talk to Hastings!"

Bowles said very gently: "As I said, that isn't important in the long run."

Barnes said, "Stow it, Red. Don't get downhearted, Doc—there is a good chance that some other station will beam us. Keep trying, Mannie."

"Will you guys *please* shut up?"

He did keep trying over and over again; in the intervals he listened, not only to the beam frequency of NAA, but all over the dial.

More than eight hours later the last faint arc of Earth had vanished. No one had thought to eat and Traub had not left his post for any purpose.

They went on preparing to leave, but their hearts were not in it. Corley stayed at his desk, except for snatches of sleep, trying to make up by effort for the lack of fine tools. He set the departure ahead to, give him more time.

The aching, cloudless lunar day wore on and the sun sank to the west. They planned to risk it just at sundown. It was admitted by Corley—and by Barnes, who checked his figures—that the situation theoretically did not permit success. By the book, they would rise, curve around the Moon, and approach the border where the fields of Earth and Moon balance—but they would never reach it; they would fall back and crash.

It was also agreed, by everyone, that it was better to die trying than to wait for death. Bowles suggested that they wait a month until next sight of Earth, but arithmetic shut off that chance; they would not starve; they would not die of thirst—they would suffocate.

Bowles took it serenely; Traub lay in his bunk or moved like a zombie. Corley was a gray-faced automaton, buried in figures. Barnes became increasingly irritable.

As a sop to Corley, Bowles made desultory readings on the instruments Corley had not had time to use. Among the chores was developing the films taken on the flight across the back face. It had been agreed to keep them, they weighed ounces only, and it was desirable to develop them to prevent fogging by stray radioactivity. Barnes assigned Traub the task, to keep him busy.

Traub worked in the airlock, it being the only darkroom. Presently he came poking his head up through the hatch. "Mr. Barnes?"

"Yes, Mannie?" Barnes noted with satisfaction that Traub showed his first touch of animation since his ordeal.

"See what you make of this." Traub handed him a negative. Barnes spread it against a port. “See those little round things? What are they?”

“Craters, I guess.”

“No, these are craters. See the difference?”

Barnes tried to visualize what the negative would look like in positive. “What do you think?”

“Well, they look like hemispheres. Odd formation, huh?”

Barnes looked again. “Too damned odd,” he said slowly. “Mannie, let’s have a print.”

“There’s no print paper, is there?”

“You’re right; my error.”

Bowles joined them. “What’s the curiosity? Moon maidens?”

Barnes showed him. “What do you make of those things?”

Bowles looked, and looked again. Finally he asked, “Mannie, how can we enlarge this?”

It took an hour to jury-rig a magic lantern, using a pilfered camera lens. They all gathered in the airlock and Traub switched on his improvised projector.

Bowles said, “Focus it, for cripes’ sake.” Traub did so. The images of his “hemispheres” were reasonably distinct. They were six in number, arranged in a semicircle—and they were unnatural in appearance.

Barnes peered at them. “Red—you were a bit late when you claimed this planet.”

Bowles said, “Hmmm—” Finally he emphatically added, “Constructions.”

“Wait a minute,” protested Corley. “They look artificial, but some very odd formations are natural.”

“Look closer, Doc,” Barnes advised. “There is no reasonable doubt. The question: were we a year or so late in claiming the Moon? Or millions of years?”

“Eh?”

“Those are pressure domes. Who built them? Moon people, long before history? Visiting Martians? Or Russians?”

Traub said, “Mr. Barnes—why not *live* Moon people?”

“What? Take a walk outside.”

“I don’t see why not. As soon as I saw them I said, ‘That’s where those flying saucers came from a while back.”

“Mannie, there were no flying saucers. Don’t kid yourself.”

Traub said, doggedly, “I knew a man who—”

“—saw one with his own eyes,” Barnes finished. “Forget it. That’s our worry—there. They’re real. They show on film.”

“Forget Martians, too,” Bowles said gruffly, “and any long-dead Moon people.”

"I take it you go for Russians?" Barnes commented. "I simply know that those films must be in the hands of military intelligence as soon as possible."

"Military intelligence? Ah, yes, on Earth—a lovely thought."

"Don't be sarcastic. I mean it."

"So do I."

From willingness to die, his mission accomplished, Bowles became frantic to live, to get back. It made him bitter that he himself had insisted on landing—with all-important new evidence even then latent in the ship.

He sweated out a possible scheme to get the films back to Washington and seized a time when Traub was out of the ship to propose it to Barnes. "Jim—could you get this ship back by yourself?"

"What do you mean?"

"You checked the figures. One man might make it—if the ship were lightened by the other three."

Barnes looked angry. "Red, that's nonsense."

"Ask the others."

"*No*!" Barnes added, "Four men came; four go back— or nobody does."

"Well, I can lighten ship, at least. That's my privilege."

"Any more such talk and it'll be your privilege to be strapped down till takeoff!"

Bowles took Barnes' arm. "Those films have got to reach the Pentagon."

"Quit breathing in my face. We'll make it if we can. Have you anything left to jettison?"

"Jim, this ship gets back if I have to drag it."

"Drag it, then. Answer my question."

"I've got the clothes I stand in—I'll jettison them." Bowles looked around. "Jettison, he says. Jim Barnes, you call this ship stripped. Bye God, I'll show you! Where's that tool kit?"

"Traub just took it outside along with other stuff."

Bowles jumped to the microphone. "Mannie? Bring back the hacksaw; I need it!" He turned to Barnes. "I'll show you how to strip ship. What's that radio doing there? Useless as a third leg. Why do I need an autopilot display? Yours is enough. Doc—get up off that stool!"

Corley looked up from his closed world of figures. He had not even heard the row. "Eh? You called me?"

"Up off that stool—I'm going to unbolt it from the deck."

Corley looked puzzled. "Certainly, if you need it." He turned to

Barnes. “Jim, these are the final figures.”

Barnes was watching Bowles. “Hold the figures, Doc. We may make a few revisions.”

Under the drive of Bowles’ will they stripped ship again, fighting against their deadline. Rations—*all* rations— men do not starve quickly. Radios. Duplicate instruments. Engineering instruments not utterly essential to blasting. The hot plate. Cupboards and doors, light fixtures and insulation; everything that could be hacksawed away or ripped out bodily. The ladder from control room to airlock—that was kicked outlast, with three space suits and the rope ladder.

Bowles found no way to get rid of the fourth pressure suit; he had to wear it to stay alive while he pushed out the last items—but he found a way to minimize even that. He removed the instrument belt, the back pack, the air bottles, the insulating shoes, and stood there, gasping the air left in the suit, while the lock cycled from “vacuum” to “pressure” for the last time.

Three hands reached down and pulled him through the hatch. “Stations!” Barnes snapped. “Stand by to blast!”

They were waiting for the count off, when Traub reached up and touched Barnes’ arm. “Skipper?”

“Yes, Mannie?”

Traub looked to see if the other two were noticing; they were not. “Are we really going to make it?”

Barnes decided to be truthful. “Probably not.” He glanced at Bowles; the Admiral’s features were sunken; his false teeth had gone with the rest. Barnes grinned warmly. “But we’re sure going to give it a try!”

The monument where the proud Luna *once stood is pictured in every schoolroom. Many trips followed, some tragic, some not, before space transportation reached its present safe operation. The spaceways are paved with the bodies and glorious hopes of pioneers. With accomplishment of their dream some of the romance has gone out of space.*

-Farqüharson, *Ibid.*, Hi: 423

THE BULLETIN BOARD

Our campus is not a giant, factory-size job with a particle accelerator and a two-hundred-man football squad, but it’s chummy. The chummiest thing about it is the bulletin board in Old Main. You may find a stray glove fastened up with a thumbtack, or you can pick up a babysitting job if a married veteran doesn't beat you to it. Or you can buy a car cheap if you tow it from where it gave up. There are items like: "Will the person who removed a windbreaker from the Library please return same and receive a punch in the nose?"

But the main interest is the next four sections, "A-To-G," "H-To-L," "M-To-T," and "U-To-Z," for they are what we use in place of the U.S. Postal "Service" at enormous saving in postage. Everybody inspects his section before class in the morning. If there's nothing for you, at least you can see who does get mail and sometimes from whom. You'll look again at lunch time and before going home. A person with a busy social life will check the board six or seven times.

Mine isn't that busy but I frequently find a note from Cliff. He knows I like to, so he indulges me. It's fun to get mail on the board.

There was a girl I used to run across because we were both in "H-ro-L"—Gabrielle Lamont. I would say hello and she would say hello and there it stopped. Gabrielle was a sad one—not a total termite, but dampish. Her face had the usual features but she let them live their own lives, not even lipstick. She skinned her hair back and her clothes looked as if they had been bought in France. Not Paris—just France. There's a difference.

Which they probably were. Her father is in Modern Languages and he sent her three years to school in France. It did something. I don't think she ever had a date.

We both had eight o'clocks and she would check "H-To-L" every morning when I did and then go quietly away. There was never a note for her.

Until this one morning. . . Georgia Lammers, who is purely carnivorous, took a note off the board as Gabrielle came up. I heard this soft little voice say, "Excuse me. That's mine."

Georgia said, "Huh? Don't be silly!"

Gabrielle looked scared but she put out her hand. "Read the name, please. You've made a mistake."

Georgia snatched the note away. She is a junior and wouldn't bother to speak to me if Daddy weren't on the staff—but I'm not afraid of her. "Do it," I insisted. "Let's see the name."

Georgia stuck the envelope in my face and snapped, "Read it yourself, snoopy!"

"Gabrielle Lamont," I read out loud. "Hand it over, Georgia."

"What?" she yelped, and looked at it. Her cheeks got very red.

"Hand it over," I repeated.

"Well!" said Georgia. "Anybody can make a mistake!" She flung the note at Gabrielle and flounced off.

Gabrielle picked it up. "Thanks," she whispered.

"Usual Yellow Cab Service," I said. "A pleasure"— which it was.

Georgia Lammers is popular in a cheap, plunging-neckline way, but not with me. She acts as if she had invented sex.

Gabrielle started getting mail every day—some in envelopes, some just with a thumbtack shoved through folds. I wondered who it was; but every time I saw Gabrielle she was alone. I decided it must be someone her father did not like so they had to use notes to arrange secret dates. I told Cliff so, but he said I had an uncontrolled romantic imagination.

Gabrielle got eleven notes that week and I got only four, all from Cliff. I pointed this out and he said I did not appreciate my blessings and he was going to ration me to three a week. Men are exasperating.

I came up one morning as Gabrielle was taking down a note; this time Georgia Lammers was there. As Gabrielle left I said sweetly, “Nothing for you, Georgia? Too bad. Or was it Gabrielle’s turn to swipe your note?”

Georgia sniffed and went into the Registrar’s office, where she is a parttime clerk. I thought no more about it until after five, when I was waiting in Old Main for Daddy, intending to ride home with him.

There was nothing on “H-To-L” for me, or for Gabrielle, or Georgia. Nobody was around so I sat down on the Senior Bench and rested my feet.

I jumped when I heard someone behind me, but it was only Gabrielle. She’s a freshman, too, and anyhow she wouldn’t tell. But I didn’t sit down again—our senior committee thinks up fantastic punishments for ignoring their sacred privileges.

A good thing I didn’t—Georgia came out of the office then. But she did not notice me; she went straight-to “H-To-L” and unpinned a note. I thought: Maureen, your memory is slipping; there was nothing for her a minute ago.

Georgia turned and saw me. She flushed and said, “What are you staring at?”

“Sorry,” I said. “I didn’t think there was a note for you—I just looked at the board.”

She started to flare up, then she put on a catty smile. “Want to read it?”

“Heavens, no!”

“Go ahead!” She shoved it at me. “It’s very interesting.”

Puzzled, I took it. It was a blank sheet, nothing but creases and thumbtack holes. “Somebody is playing jokes on you,” I said.

“Not on me.”

I turned it over. The address read: “Miss Gabrielle Lamont.”

It finally soaked in that the address should have been “Georgia Lammers.” Or should have been for Georgia to touch it. I said, “This note isn’t yours. You have no right to it.”

"What note?"

"This note."

"I don't see any note. I see a blank sheet of paper."

"But— Look, you thought it was a note to Gabrielle. And you took it down anyway."

Her smile got nastier. "No, I knew it wasn't a note. That's the point."

"Huh?"

She explained and I wanted to scratch her. Poor little Gabrielle had been sending notes to herself, just to get mail when everybody else did —and Georgia had caught on. Both girls had campus jobs which kept them late; Georgia had seen Gabrielle come in late a week earlier, look around, and pin up a note. Being a sneak, she had ducked out to find out to whom Gabrielle was writing— only to find that it was addressed to Gabrielle herself.

Poor Gabby! No wonder I had never seen her with anyone. There wasn't anyone.

Georgia licked her lips. "Isn't it a scream? That snip trying to make us think she's popular? I should write a real note on this—let her know that her public isn't fooled."

"Don't you dare!"

"Oh, don't be dull!" She pinned it up, putting the tack back in the same holes. "I'll let the joke ride until I think of something good."

I grabbed her arm~ "Don't you touch her notes again or I'll—"

She shook me off. "You'll what? Tell her that you know her notes are phony? I can just see you!"

"I'll tell the Dean, that's what! I'll tell the Dean you've been opening Gabrielle's notes."

"Oh, yes? You looked at it, too."

"But you handed it to me!"

"Did I? My word against yours, sweetie pie."

"But—"

"And if you talk, the whole campus will know about Gabrielle's fake notes. Think it over." She marched off.

I was so quiet on the way home that Daddy said, "S'matter, Puddin'? Flunk a quiz?"

I assured him that my academic status was satisfactory.

"Then why the mourning?"

Before Daddy let me register he had warned me that the First Law of the Jungle for a professor's child was not to be a pipeline to the faculty. "But, Daddy, you're a professor."

"Student stuff, eh? Better sweat it out alone. Good luck."

I did not tell Mother either, because with Mother free speech is not just a theory. I did nothing but worry. Poor Gabrielle! She took her "note" down next morning, looking pleased—and I wanted to cry. Then I saw the smirk on Georgia Lammers' face and I felt like murder and mayhem. There was another "note" Friday and I wanted to shout to her not to touch it. I didn't dare. It was like a time bomb, watching Gabrielle's pitiful make believe and knowing that Georgia meant to wreck it as soon as she thought up something nasty enough.

I was in the Registrar's office Monday, not to see Georgia, though I couldn't avoid her, but because I am a freshman reporter for the Campus Crier. One of my chores is getting up the "Happy Birthday" column. I thumbed through the files, noting dates from the coming Friday through the following Thursday. Gabrielle's name turned up for Friday and I decided to send her a birthday card, via the bulletin board, so for once she would have real mail. Next I listed Bun Peterson's name; her birthday was the same as Gabrielle's. Bun is president of the Student Council and head cheerleader and honorary football captain; it seemed a shame she had to have Gabrielle's birthday as well. I decided to get Gabrielle a really nice card, with a hanky.

As I finished Georgia picked up my list and said, "Who's getting senile?"

I said, "You are," and took it back.

She said, "Don't get too big for your beanie, freshman." She went on, "Going to the party for Bun Peterson?"—then added, "Oh, I forgot—it's upper classmen only."

I looked her in the eye. "A double choc malt against a used candy bar you aren't either!"

She didn't answer and I swaggered out.

It was a busy week. Junior sprained his arm, Mother was away two days and I kept house, the cat had to be wormed, and I typed a term paper for Cliff. I didn't think about Gabrielle until late Friday when I stopped by the board on the chance that there might be a note from Cliff. There wasn't, but there was another of Gabnelle's notes, in an envelope with her name typed. I realized with a shock that I had forgotten her birthday card.

I was wondering whether to get one and let her find it Monday, when I heard a pssst! It was Georgia Lammers, motioning me to come to the office. Curiosity got me; I went. She pulled me inside; there was no one else in the outer office. "Keep back," she whispered. "If she sees anyone, she may not stop. She's due now—it's after five."

I shook her off. "Who?"

"Gabrielle, of course. Shut up!"

"Huh?" I said. "She's already been there. Her 'note' for Monday is up."

"A lot you know! Hush!" She crowded me into the corner, then peeked out.

"Quit shoving!" I said and looked out.

Gabrielle was pinning something up, her back to us. She saw the envelope with her name, took it down, and hurried away.

I turned to Georgia. "If you've monkeyed with one of her notes, I will go to the Dean."

"Go ahead—see how far it gets you."

"Did you touch that note?"

"Sure I did—I wrote it. What's wrong with that?" She had me; anybody can send anyone a note. "Well, what did you say?"

"What business is it of yours? Still," she went on, "I'll tell you. It's too good to keep." She dug a paper out of her purse. It was a typewritten rough draft, full of x-outs and inserts; it read:

Dear Gabrielle,

Today is Bun Peterson's birthday—and we are giving her the finest surprise party this school has ever seen. We would like to invite everybody, but we can't—and you have been picked as one of the girls to represent the freshman class. We are gathering in groups and will descend on her in a body. Your group will meet at seven o'clock in the Snack Shoppe. Put on your best bib and tucker—and don't breathe a word to anyone!

The Committee

"It's a shabby trick," I said, "to invite her to another girl's party on her own birthday. You knew it was her birthday."

"What of it?"

"It's mean—but just like you. How did you get them to invite her? You aren't on the committee—are you?"

She stared, then laughed. "She's not invited to anything."

"Huh? You mean there's no party? But there is."

"Oh, sure, there's a party for Bun Peterson. But that little snip won't be there. That's the joke."

It finally sank in. Gabrielle would go to the Snack Shoppe and wait—and wait—and wait—while the party she thought she had been invited to went on without her. "That strikes you as funny?" I said.

"That's just the beginning," this Lammers person answered. "About eight-thirty, when she is beginning to wonder 'What Happened?' a messenger will bring another note. It will be blank paper, just like those she sends to herself—then she'll know." She giggled and wet her lips. "The little fake will have her comeuppance."

I started after her and she ducked back of the counter. "You're not allowed back here!" she yelped.

I stopped. “You’ll have to come out some time. Then we’ll find Gabrielle and you will tell her the truth—all of it!”

“Tell her yourself!” she snapped. Two boys drifted in and the Registrar came out of the inner office and Georgia became briskly official. I left.

Cliff was waiting at “H-To-L”; I was never so glad to see him.

“Well,” Cliff said a bit later, “phone her. Tell her she’s been had and not to go to the Snack Shoppe.”

“But, Cliff, I can’t! That would be almost as cruel as the way Georgia planned it. Look—can’t you get somebody to take her to Bun’s party?”

Cliff wrinkled his forehead. “I don’t see how.”

“Cliff, you’ve got to!”

“Puddin’, today is Gabrielle’s birthday, too. Right?”

“Yes, yes—that’s what makes it so mean.”

“You don’t want to send her to Bun’s party. What we do is give her a surprise party of her own. Simple.”

I stared with open-mouthed adoration. “Cliff—you’re a genius.”

“No,” he said modestly, “just highly intelligent and with a heart of gold. Let’s get busy, chica.”

First I phoned Mother. She said, “Tonight, Maureen? I like to entertain your friends but—” I cut in with a quick up-to-date. Presently she said, “I’ll check the deep freeze. Sommers Market may still be open. How about turkey legs and creamed mushrooms on toast?”

“And ice cream,” I added. “Birthday parties need ice cream.”

“But the cake? I’m short on time.”

“Uh, we’ll get the cake.”

As I hung up Cliff came out of the other booth. “I got the Downbeat Campus Combo,” he announced.

“Oh, Cliff—an orchestra!”

“If you can call those refugees from a juke box that.”

“But how will we pay for it?”

“Don’t ask—it was a promotion. They bid on Bun’s party and got left, so they listened to reason. But I’m not doing well on guests, baby.”

“You called your house?”

“Yes. A lot of the boys have other plans.”

“You call again and tell those free loaders that they will never eat another Dagwood in my house if they are not there, on time, and each with a present. No excuses. This is total war.”

“Aye aye, sir!”

We went to Helen Hunt’s Tasty Pastry Shoppe. Mr. Helen Hunt was just closing but he let us in. No birthday cake. . . not a baker in the place until four the next morning—sorry. I spotted a threetier wedding cake. "Is that a prop?"

"Frankly, that's a disappointment. My wife and I each entered the same order."

"You're stuck with it?"

"Oh, we may get a wedding cake order unexpectedly."

"Eight dollars," I said.

He looked at the cake. "Ten dollars"—then added, "Cash."

I looked at Cliff. He looked at me. I opened my purse and he got out his wallet. We had six fifty-seven. Mr. Helen Hunt stared at the ceiling. Cliff sighed and unpinned his fraternity pin from my blouse, handed it over, and Mr. Helen Hunt dropped it into the cash register.

He took the little bride-and-groom off the cake, set candles around each tier, then fetched an icing gun. "What name?"

"Gabrielle," I replied. "No, make it 'Gabby'—G, A, double-B, Y."

I called Madame O'Toole from there. Madame bends hair for half the girls on the campus. She lives back of her beauty salon and agreed to be panting and ready at seven-fifteen. Fast driving let Cliff drop me at six-ten. Junior was stringing Christmas tree lights across the front porch and Daddy was moving furniture. Mother was swooshing like a restless tornado, a smudge of dirt on her cheek. I kissed Daddy but Mother wouldn't hold still.

I made three calls while the tub was filling, then dunked, put my face on, and inserted myself into my almost-strapless formal. Cliff honked at five minutes to seven; he looked swell in a tuxedo a little too small and the darling had two gardenia corsages, one for me and one for Gabrielle. We roared away toward the Snack Shoppe, hitting on all three.

We got there at seven-fifteen. I looked in and saw Gabrielle at a rear table, looking forlorn and nursing a half-empty coke. She was in a long dress which was not too bad but she, had tried to use makeup and did not know how. Her lipstick was smeared, crooked, and the wrong color, and she had done awful things with rouge and powder. Underneath she was scared green.

I walked in. "Hello, Gabby."

She tried to smile. "Oh—hello, Maureen."

"Ready to go? We're from the committee."

"Uh—I don't know. I don't feel well. I'd better go home."

"Nonsense! Come on—we'll be late." We got on each side and hustled her out to Cliff's open-air special.

"Where is the party?" Gabrielle asked nervously.

"Don't be nosy. It's a surprise." Which it was.

Cliff pulled up at Madame O'Toole's before she could ask more questions. Gabrielle looked puzzled but her will to resist was gone. Inside I said to Madame O'Toole, "You have seventeen minutes."

Madame looked her over like a pile of wet clay. "Two hours is what I need."

"Twenty minutes," I conceded. "Can you do it?" Over the phone I had told her that she had to create Cleopatra herself, starting from zip.

She pursed her lips and looked the kid over again. "We'll see. Come along, child."

Gabrielle looked dazed. "But Maureen—"

"Hush," I said firmly. "Do exactly what Madame tells you."

Madame led her away. While we waited Cliff called the Deke house and the senior dorm and stirred out five more men and two couples. It was thirty minutes before they reappeared—and I nearly fainted.

Madame was wasted here—She belonged at the court of Louis Quinze.

And so did Gabrielle.

At first I thought she was wearing no makeup. Then I saw that it had been put on so skillfully that you thought it had grown there. Her eyes were eight times as big as they had been and looked like pools of secret sorrow—you know, a woman who has lived. Her hair was still brushed straight back but Madame had done it over. What had been a bun was now a chignon—”bun” wasn’t the word. Her cheekbones were higher, too. And Madame had done something to the dress—it clung more and seemed more low-cut. Riding high on her shoulder was the corsage and her skin blended into the petals.

Instead of the beads she had been wearing there was a single strand of pearls resting where pearls love to rest. They must have been Madame’s very own. They looked real.

Cliff gasped so I poked him to remind him not to touch. Gabrielle smiled timidly. “Do I look all right?”

I said, “Sister, Conover would shoot Powers for your contract. Madame, you’re wonderful! Let’s go; kids. We’re late.”

You can’t talk when Cliff is driving, which was good. We got there at twenty past eight; our block was jammed and our house stood out in colored lights. Junior was on guard; he ducked inside.

Cliff took our coats I gave Gabrielle a shove and said, “Go on in.”

As she appeared in the living room the Downbeat boys bit it and they all sang:

“Happy birthday, dear Gabby!
“Happy birthday to you!”

And then I was almost sorry, for the poor baby covered her face and sobbed.

And so did I. Everybody began laughing and talking and shouting and the Downbeat Combo went into dance music, not good but solid, and I knew the party would do. Mother and I smuggled Gabby upstairs and I fixed my face and Mother shook Gabby and told her to stop crying. Gabby stopped and Mother did a perfect job fixing what damage had been done. I didn’t know Mother owned mascara but I am always finding out new things about Mother.

So we went back down. Cliff showed up with a strange man and said, “Mademoiselle Lamont, permettez-moi de vous presenter M’sieur Jean Allard,” which was more French than I knew he had.

Jean Allard was an exchange student that one of the boys had brought along. He was slender and dark and he fastened himself to Gabby—his English was spotty and here was a woman that spoke his language. . . that and Madame O’Toole’s handiwork. Be had competition; most of the stags seemed to want to get close to the new-model Gabby.

I sighed with relief and slipped out to the kitchen, being suddenly aware that I had missed dinner, a disaster for one of my metabolism. Daddy was there in an apron; he gave me a turkey leg. I ate that and a few other things that wouldn't fit on the plates.

Then I went back and danced with Cliff and some of the stags that had gotten crowded out around Gabby. When the orchestra took ten it turned out that Johnny Allard could play piano, and he and Gabby sang French songs—the kind that sound naughty, what with the eye-rolling, but probably aren't. Then we all sang Alouette which is more my speed.

Gabby was gaining a reputation as a woman of the world. I heard one ex—Boy Scout say, "You've really seen the Folies Bergère?"

Gabby looked puzzled and said, "Why not?"

He said, "Gee!" while his eyebrows crowded his scalp.

Finally we brought out the cake and everybody sang "Happy Birthday" again and Mother had to repair Gabby's face a second time. But by now Gabby could have washed her face and it wouldn't have mattered.

Professor Lamont arrived while we were killing the ice cream and cake—Daddy's doing. He and Jean Allard talked French, then I heard Jean ask him, in schoolbook English, for permission to call on his daughter. Doctor Lamont agreed in the same stilted fashion.

I blinked—Cliff never asked Daddy; he just started eating at our house, off and on.

Around midnight Doctor Lamont took his daughter home, loaded with swag. At the last minute I remembered to run upstairs and wrap up a new pair of nylons that would never fit Gabby but she could exchange them. So Gabby cried again and clung to me and got incoherent in two languages and I cried some, too. Finally everybody left and Cliff and Daddy and I tidied up the place, sort of. When I hit the bed, I died.

Cliff showed up next morning. We gloated over the party, at least I did. Presently he said, "What about Georgia?"

I said, "Huh?"

He said, "You can't leave it at this. It ought to be poisoned needles, or boiling lava, but the police are narrow-minded."

"Any ideas?"

He pulled out the bill for the cake. "I'd like to see her pay this."

"So would I! But how in the world?"

Cliff explained, then we composed the letter together, like this:

Dear Georgia,

Yesterday was Gabrielle Lamont's birthday—and we gave her the finest party this school has ever seen. Too bad you were hanging around the Snack Shoppe while the fun was going on. But we know you would like to give her a present anyway—you can still pay for the cake.

Put on your best bib and tucker and trot around to Helen Hunt's. It was a surprise party, so don't breathe a word to anyone! (Nor shall we.)

The Committee

P.S. On second thought it will be more fun if you don't pay for the cake!

It wasn't anonymous; the bill had our names on it and we pinned it to the letter. I bet Cliff two hamburgers that she wouldn't knuckle under. I was wrong. Half an hour after it was delivered Helen Hunt phoned to say that Cliff could have his pin back, the mortgage was lifted.

Monday morning I was at the board earlier than either Cliff or Gabby. Gabby's poor little "note" was still pinned up, where she had put it Friday. I wondered what she would do; start pretending all over again?

I spotted her coming up the steps, walking alone and lonely, same as always—and again I wondered if it had done any good. Then somebody shouted, "Hey, Gabby! Wait a minute." She stopped and two boys joined her.

I watched her and then Cliff growled at my back, "Why the sniffles? Got a cold?"

I said, "Oh, Cliff! Give me your hanky and don't ask silly questions."

The Year of the Jackpot

I

At first Potiphar Breen did not notice the girl who was undressing.

She was standing at a bus stop only ten feet away. He was indoors but that would not have kept him from noticing; he was seated in a drugstore booth adjacent to the bus stop; there was nothing between Potiphar and the young lady but plate glass and an occasional pedestrian.

Nevertheless he did not look up when she began to peel. Propped up in front of him was a Los Angeles *Times*; beside it, still unopened, were the *Herald-Express* and the *Daily News*. He was scanning the newspaper carefully but the headline stories got only a passing glance. He noted the maximum and minimum temperatures in Brownsville, Texas and entered them in a neat black notebook; he did the same with the closing prices of three blue chips and two dogs on the New York Exchange, as well as the total number of shares. He then began a rapid sifting of minor news stories, from time to time entering briefs of them in his little book; the items he recorded seemed randomly unrelated--among them a publicity release in which Miss National Cottage Cheese Week announced that she intended to marry and have twelve children by a man who could prove that he had been a lifelong vegetarian, a circumstantial but wildly unlikely flying saucer report, and a call for prayers for rain throughout Southern California.

Potiphar had just written down the names and addresses of three residents of Watts, California who had been miraculously healed at a tent meeting of the God-is-AII First Truth Brethren by the Reverend Dickie Bottomley, the eight-year-old evangelist, and was preparing to tackle the *Herald-Express*, when he glanced over his reading glasses and saw the amateur ecdysiast on the street comer outside. He stood up, placed his glasses in their case, folded the newspapers and put them carefully in his right coat pocket, counted out the exact amount of his check and added twenty-five cents. He then took his raincoat from a hook, placed it over his arm, and went outside.

By now the girl was practically down to the buff. It seemed to Potiphar Breen that she had quite a lot of buff. Nevertheless she had not pulled much of a house. The corner newsboy had stopped hawking his disasters and was grinning at her, and a mixed pair of transvestites who were apparently waiting for the bus had their eyes on her. None of the passers-by stopped. They glanced at her, then with the selfconscious indifference to the unusual of the true Southern Californian, they went on their various ways. The transvestites were frankly staring. The male member of the team wore a frilly feminine blouse but his skirt was a conservative Scottish kilt--his female companion wore a business suit and Homburg hat; she stared with lively interest.

As Breen approached the girl hung a scrap of nylon on the bus stop bench, then reached for her shoes. A police officer, looking hot and unhappy, crossed with the lights and came up to them. "Okay," he said in a tired voice, "that'll be all, lady. Get them duds back on and clear out of here."

The female transvestite took a cigar out of her mouth. "Just," she said, "what business is it of yours, officer?" The cop turned to her.

"Keep out of this!" He ran his eyes over her get up, that of her companion. "I ought to run both of you in, too."

The transvestite raised her eyebrows. "Arrest us for being clothed, arrest her for not being. I think I'm going to like this." She turned to the girl, who was standing still and saying nothing, as if she were puzzled by what was going on. "I'm a lawyer, dear." She pulled a card from her vest pocket. "If this uniformed Neanderthal persists in annoying you, I'll be delighted to handle him."

The man in the kilt said, "Grace! Please!"

She shook him off. "Quiet, Norman—this *is* our business." She went on to the policeman, "Well? Call the wagon. In the meantime my client will answer no questions."

The official looked unhappy enough to cry and his face was getting dangerously red. Breen quietly stepped forward and slipped his raincoat around the shoulders of the girl. She looked startled and spoke for the first time. "Uh—thanks." She pulled the coat about her, cape fashion.

The female attorney glanced at Breen then back to the cop. "Well, officer? Ready to arrest us?"

He shoved his face close to hers. "I ain't going to give you the satisfaction!" He sighed and added, "Thanks, Mr. Breen—you know this lady?"

"I'll take care of her. You can forget it, Kawonski."

"I sure hope so. If she's with you, I'll do just that. But get her out of here, Mr. Breen—please!"

The lawyer interrupted. "Just a moment—you're interfering with my client."

Kawonski said, "Shut up, you! You heard Mr. Breen—she's with him. Right, Mr. Breen?"

"Well yes. I'm a friend. I'll take care of her."

The transvestite said suspiciously, "I didn't hear *her* say that."

Her companion said, "Grace—please! There's our bus."

"And I didn't hear her say she was your client," the cop retorted. "You look like a—" His words were drowned out by the bus's brakes, "—and besides that, if you don't climb on that bus and get off my territory, I'll . . . I'll . . ."

"You'll what?"

"Grace! We'll miss our bus."

"Just a moment, Norman. Dear, is this man really a friend of yours? Are you with him?"

The girl looked uncertainly at Breen, then said in a low voice, "Uh, yes. That's right."

"Well . . ." The lawyer's companion pulled at her arm. She shoved her card into Breen's hand and got on the bus; it pulled away.

Breen pocketed the card. Kawonski wiped his forehead.

"Why did you do it, lady?" he said peevishly.

The girl looked puzzled. "I . . . I don't know."

"You hear that, Mr. Breen? That's what they all say. And if you pull 'em in, there's six more the next day. The Chief said—" He sighed. "The Chief said well, if I had arrested her like that female shyster wanted me to. I'd be out at a hundred and ninety-sixth and Ploughed Ground tomorrow morning, thinking about retirement. So get her out of here, will you?"

The girl said, "But—"

"No 'buts,' lady. Just be glad a real gentleman like Mr. Breen is willing to help you." He gathered up her clothes, handed them to her. When she reached for them she again exposed an uncustomary amount of skin; Kawonski hastily gave them to Breen instead, who crowded them into his coat pockets.

She let Breen lead her to where his car was parked, got in and tucked the raincoat around her so that she was rather more dressed than a girl usually is. She looked at him. She saw a medium-sized and undistinguished man who was slipping down the wrong side of thirty-five and looked older. His eyes had that mild and slightly naked look of the habitual spectacles wearer who is not at the moment with glasses; his hair was gray at the temples and thin on top. His herringbone suit, black shoes, white shirt, and neat tie smacked more of the East than of California.

He saw a face which he classified as "pretty" and "wholesome" rather than "beautiful" and "glamorous," It was topped by a healthy mop of light brown hair. He set her age at twenty-five, give or take eighteen months. He smiled gently, climbed in without speaking and started his car. He turned up Doheny Drive and east on Sunset. Near La Cienega he slowed down. "Feeling better?"

"Uh, I guess so. Mr.—'Breen'?"

"Call me Potiphar. What's your name? Don't tell me if you don't want to,"

"Me? I'm . . . I'm Meade Barstow."

"Thank you, Meade. Where do you want to go? Home?"

"I suppose so. I—Oh my no! I can't go home like *this*." She clutched the coat tightly to her.

"Parents?"

"No. My landlady. She'd be shocked to death."

"Where, then?"

She thought. "Maybe we could stop at a filling station and I could sneak into the ladies' room."

"Mmm. . . maybe. See here, Meade, my house is six blocks from here and has a garage entrance. You could get inside without being seen." He looked at her.

She stared back. "Potiphar you don't *look* like a wolf?"

"Oh, but I am! The worst sort." He whistled and gnashed his teeth. "See? But Wednesday is my day off from it." She looked at him and dimpled. "Oh, well! I'd rather wrestle with you than with Mrs. Megeath. Let's go."

He turned up into the hills. His bachelor diggings were one of the many little frame houses clinging like fungus to the brown slopes of the Santa Monica Mountains. The garage was notched into this hill; the house sat on it. He drove in, cut the ignition, and led her up a teetery inside stairway into the living room. "In there," he said, pointing. "Help yourself." He pulled her clothes out of his coat pockets and handed them to her.

She blushed and took them, disappeared into his bedroom. He heard her turn the key in the lock. He settled down in his easy chair, took out his notebook, and opened the *Herald-Express*.

He was finishing the *Daily News* and had added several notes to his collection when she came out. Her hair was neatly rolled; her face was restored; she had brushed most of the wrinkles out of her skirt. Her sweater was neither too tight nor deep cut, but it was pleasantly filled. She reminded him of well water and farm breakfasts.

He took his raincoat from her, hung it up, and said, "Sit down, Meade."

She said uncertainly, "I had better go."

"Go if you must—but I had hoped to talk with you."

"Well—" She sat down on the edge of his couch and looked around. The room was small but as neat as his necktie, clean as his collar. The fireplace was swept; the floor was bare and polished. Books crowded bookshelves in every possible space. One corner was filled by an elderly flattop desk; the papers on it were neatly in order. Near it, on its own stand, was a small electric calculator. To her right, French windows gave out on a tiny porch over the garage. Beyond it she could see the sprawling city; a few neon signs were already blinking.

She sat back a little. "This is a nice room—Potiphar. It looks like you."

"I take that as a compliment. Thank you." She did not answer; he went on, "Would you like a drink?"

"Oh, would I!" She shivered. "I guess I've got the jitters."

He got up. "Not surprising. What'll it be?"

She took Scotch and water, no ice; he was a Bourbon-and-ginger-ale man. She had soaked up half her highball in silence, then put it down, squared her shoulders and said, "Potiphar?"

"Yes, Meade?"

"Look—if you brought me here to make a pass, I wish you'd go ahead and make it. It won't do you a bit of good, but it makes me nervous to wait for it."

He said nothing and did not change his expression. She went on uneasily, "Not that I'd blame you for trying—under the circumstances. And I *am* grateful. But . . . well it's just that I don't—"

He came over and took both her hands. "My dear, I haven't the slightest thought of making a pass at you. Nor need you feel grateful. I butted in because I was interested in your case."

"My case? Are you a doctor? A psychiatrist?"

He shook his head. "I'm a mathematician. A statistician, to be precise."

"Hub? I don't get it." "Don't worry about it. But I would like to ask some questions. May I?"

"Uh, sure, sure! I owe you that much—and then some."

"You owe me nothing. Want your drink sweetened?"

She gulped it and handed him her glass, then followed him out into the kitchen. He did an exact job of measuring and gave it back. "Now tell me why you took your clothes off?"

She frowned. "I don't know. I *don't* know. I don't *know*. I guess I just went crazy." She added round-eyed, "But I don't feel crazy. Could I go off my rocker and not know it?" "You're not crazy . . . not more so than the rest of us," he amended. "Tell me, where did you see someone else do this?"

"Huh? But I never have."

"Where did you read about it?"

"But I haven't. Wait a minute—those people up in Canada. Dooka-somethings."

"Doukhobors. That's all? No bareskin swimming parties? No strip poker?"

She shook her head. "No. You may not believe it but I was the kind of a little girl who undressed under her nightie." She colored and added, "I still do--unless I remember to tell myself it's silly."

"I believe it. No news stories?"

"No. Yes, there was too! About two weeks ago, I think it was. Some girl in a theater, in the audience, I mean. But I thought it was just publicity. You know the stunts they pull here."

He shook his head. "It wasn't. February 3rd, the Grand Theater, Mrs. Alvin Copley. Charges dismissed."

"Huh? How did *you* know?"

"Excuse me." He went to his desk, dialed the City News Bureau. "Alf? This is Pot Breen. They still sitting on that story? . . . yes, yes, the Gypsy Rose file. Any new ones today?" He waited; Meade thought that she could make out swearing. "Take it easy, Alf—this hot weather can't last forever. Nine, eh? Well, add another—Santa Monica

Boulevard, late this afternoon. No arrest." He added, "Nope, nobody got her name—a middle-aged woman with a cast in one eye. I happened to see it . . . who, me? Why would I want to get mixed up? But it's rounding up into a very, very interesting picture." He put the phone down.

Meade said, "Cast in one eye, indeed!"

"Shall I call him back and give him your name?"

"Oh, no!"

"Very well. Now, Meade, we seemed to have located the point of contagion in your case--Mrs. Copley. What I'd like to know next is how you felt, what you were thinking about, when you did it?"

She was frowning intently. "Wait a minute, Potiphar--do I understand that *nine other* girls have pulled the stunt I pulled?"

"Oh, no—nine others *today*. You are—" He paused briefly. "—the three hundred and nineteenth case in Los Angeles county since the first of the year. I don't have figures on the rest of the country, but the suggestion to clamp down on the stories came from the eastern news services when the papers here put our first cases on the wire. That proves that it's a problem elsewhere, too."

"You mean that women all over the country are peeling off their clothes in public? Why, how shocking!"

He said nothing. She blushed again and insisted, "Well, it is shocking, even if it was me, this time."

"No, Meade. One case is shocking; over three hundred makes it scientifically interesting. That's why I want to know how it felt. Tell me about it."

"But—All right, I'll try. I told you I don't know why I did it; I still don't. I—"

"You remember it?"

"Oh, yes! I remember getting up off the bench and pulling up my sweater. I remember unzipping my skirt. I remember thinking I would have to hurry as I could see my bus stopped two blocks down the street. I remember how good it felt when I finally, uh—" She paused and looked puzzled. "But I still don't know why."

"What were you thinking about just before you stood up?"

"I don't remember."

"Visualize the street. What was passing by? Where were your hands? Were your legs crossed or uncrossed? Was there anybody near you? What were you thinking about?"

"Uh . . . nobody was on the bench with me. I had my hands in my lap. Those characters in the mixed-up clothes were standing near by, but I wasn't paying attention. I wasn't thinking much except that my feet hurt and I wanted to get home-and how unbearably hot and sultry it was. Then--" Her eyes became distant, "--suddenly I knew what I had to do and it was very urgent that I do it. So I stood up and I . . . and I--" Her voice became shrill.

"Take it easy!" he said. "Don't do it again."

"Huh? Why, Mr. Breen! I wouldn't do anything like that."

"Of course not. Then what?"

"Why, you put your raincoat around me and you know the rest." She faced him. "Say, Potiphar, what were you doing with a raincoat? It hasn't rained in weeks--this is the driest, hottest rainy season in years."

"In sixty-eight years, to be exact."

"Huh?"

"I carry a raincoat anyhow. Uh, just a notion of mine, but I feel that when it does rain, it's going to rain awfully hard." He added, "Forty days and forty nights, maybe."

She decided that he was being humorous and laughed.

He went on, "Can you remember how you got the idea?"

She swirled her glass and thought. "I simply don't know."

He nodded. "That's what I expected."

"I don't understand you--unless you think I'm crazy. Do you?"

"No. I think you had to do it and could not help it and don't know why and can't know why."

"But *you* know." She said it accusingly.

"Maybe. At least I have some figures. Ever take any interest in statistics, Meade?"

She shook her head. "Figures confuse me. Never mind statistics--*I want to know why I did what I did*!"

He looked at her very soberly. "I think we're lemmings, Meade."

She looked puzzled, then horrified. "You mean those little furry mouselike creatures? The ones that--"

"Yes. The ones that periodically make a death migration, until millions, hundreds of millions of them drown themselves in the sea. Ask a lemming why he does it. If you could get him to slow up his rush toward death, even money says he would rationalize his answer as well as any college graduate. But he does it because he has to--and so do we."

"That's a horrid idea, Potiphar."

"Maybe. Come here, Meade. I'll show you figures that confuse me, too." He went to his desk and opened a drawer, took out a packet of cards. "Here's one. Two weeks ago a man sues an entire state legislature for alienation of his wife's affection--and the judge lets the suit be tried. Or this one--a patent application for a device to lay the globe over on its side and warm up the arctic regions. Patent denied, but the inventor took in over three hundred thousand dollars in down payments on South Pole real estate before the postal authorities stepped in. Now he's fighting the case and it looks as if he might win. And here--prominent bishop proposes applied courses in the so-called facts of life in high schools." He put the card away hastily. "Here's a dilly: a bill introduced in the Alabama lower house to repeal the laws of atomic energy--not the present statutes, but the natural laws concerning nuclear physics; the wording makes that plain." He shrugged. "How silly can you get?"

"They're crazy."

"No, Meade. One such is crazy; a lot of them is a lemming death march. No, don't object--I've plotted them on a curve. The last time we had anything like this was the so-called Era of Wonderful Nonsense. But this one is much worse." He delved into a lower drawer, hauled out a graph. "The amplitude is more than twice as great and we haven't reached peak. What the peak will be I don't dare guess three separate rhythms, reinforcing."

She peered at the curves. "You mean that the laddy with the artic real estate deal is somewhere on this line?"

"He adds to it. And back here on the last crest are the flagpole sitters and the goldfish swallowers and the Ponzi hoax and the marathon dancers and the man who pushed a peanut up Pikes Peak with his nose. You're on the new crest—or you will be when I add you in."

She made a face. "I don't like it."

"Neither do 1. But it's as clear as a bank statement. This year the human race is letting down its hair, flipping its lip with a finger, and saying, *'Wubba, wubba, wubba.'*"

She shivered. "Do you suppose I could have another drink? Then I'll go."

"I have a better idea. I owe you a dinner for answering questions. Pick a place and we'll have a cocktail before."

She chewed her lip. "You don't owe me anything. And I don't feel up to facing a restaurant crowd. I might . . . I might—"

"No, you wouldn't," he said sharply. "It doesn't hit twice."

"You're sure? Anyhow, I don't want to face a crowd." She glanced at his kitchen door. "Have you anything to eat in there? I can cook."

"Urn, breakfast things. And there's a pound of ground round in the freezer compartment and some rolls. I sometimes make hamburgers when I don't want to go out."

She headed for the kitchen. "Drunk or sober, fully dressed or—or naked, I can cook. You'll see."

He did see. Open-faced sandwiches with the meat married to toasted buns and the flavor garnished rather than suppressed by scraped Bermuda onion and thin-sliced dill, a salad made from things she had scrounged out of his refrigerator, potatoes crisp but not vulcanized. They ate it on the tiny balcony, sopping it down with cold beer.

He sighed and wiped his mouth. "Yes, Meade, you can cook."

"'Some day I'll arrive with proper materials and pay you back. Then I'll prove it."

"You've already proved it. Nevertheless I accept. But I tell you three times, you owe me nothing."

"No? If you hadn't been a Boy Scout, I'd be in jail."

Breen shook his head. "The police have orders to keep it quiet at all costs—to keep it from growing. You saw that. And, my dear, you weren't a person to me at the time. I didn't even see your face; I—"

"You saw plenty else!"

"Truthfully, I didn't look. You were just a—a statistic."

She toyed with her knife and said slowly, "I'm not sure, but I think I've just been insulted. In all the twenty-five years that I've fought men off, more or less successfully, I've been called a lot of names—but a 'statistic'—why I ought to take your slide rule and beat you to death with it."

"My dear young lady—"

"I'm not a lady, that's for sure. But I'm *not* a statistic."

"My dear Meade, then. I wanted to tell you, before you did anything hasty, that in college I wrestled varsity middleweight."

She grinned and dimpled. "That's more the talk a girl likes to hear. I was beginning to be afraid you had been assembled in an adding machine factory. Potty, you're rather a dear."

"If that is a diminutive of my given name, I like it. But if it refers to my waist line, I resent it."

She reached across and patted his stomach. "I like your waist line; lean and hungry men are difficult. If I were cooking for you regularly, I'd really pad it."

"Is that a proposal?"

"Let it lie, let it lie—Potty, do you really think the whole country is losing its buttons?"

He sobered at once. "It's worse than that."

"Huh?"

"Come inside. I'll show you." They gathered up dishes and dumped them in the sink, Breen talking all the while. "As a kid I was fascinated by numbers. Numbers are pretty things and they combine in such interesting configurations. I took my degree in math, of course, and got a job as a junior actuary with Midwestern Mutual—the insurance outfit. That was fun—no way on earth to tell when a particular man is going to die, but an absolute certainty that so many men of a certain age group would die before a certain date. The curves were so lovely

—and they always worked out. Always. You didn't have to know *why*; you could predict with dead certainty and never know why. The equations worked; the curves were right.

"I was interested in astronomy too; it was the one science where individual figures worked out neatly, completely, and accurately, down to the last decimal point the instruments were good for. Compared with astronomy the other sciences were mere carpentry and kitchen chemistry.

"I found there were nooks and crannies in astronomy where individual numbers won't do, where you have to go over to statistics, and I became even more interested. I joined the Variable Star Association and I might have gone into astronomy professionally, instead of what I'm in now—business consultation—if I hadn't gotten interested in something else."

"'Business consultation'?" repeated Meade. "Income tax work?"

"Oh, no—that's too elementary. I'm the numbers boy for a firm of industrial engineers. I can tell a rancher exactly how many of his Hereford bull calves will be sterile. Or I tell a motion picture producer how much rain insurance to carry on location. Or maybe how big a company in a particular line must be to carry its own risk in industrial accidents. And I'm right, I'm always right."

"Wait a minute. Seems to me a big company would *have* to have insurance."

"Contrariwise. A really big corporation begins to resemble a statistical universe."

"Huh?"

"Never mind. I got interested in something else—cycles. Cycles are everything, Meade. And everywhere. The tides. The seasons. Wars. Love. Everybody knows that in the spring the young man's fancy lightly turns to what the girls never stopped thinking about, but did you know that it runs in an eighteen-year-plus cycle as well? And that a girl born at the wrong swing of the curve doesn't stand nearly as good a chance as her older or younger sister?"

"What? Is *that* why I'm a doddering old maid?"

"You're twenty-five?" He pondered. "Maybe—but your chances are picking up again; the curve is swinging up. Anyhow, remember you are just one statistic; the curve applies to the group. Some girls get married every year anyhow."

"Don't call me a statistic."

"Sorry. And marriages match up with acreage planted to wheat, with wheat cresting ahead. You could almost say that planting wheat makes people get married."

"Sounds silly."

"It *is* silly. The whole notion of cause-and-effect is probably superstition. But the same cycle shows a peak in house building right after a peak in marriages, every time."

"Now that makes sense."

"Does it? How many newlyweds do you know who can afford to build a house? You might as well blame it on wheat acreage. We don't know *why*; it just *is*."

"Sun spots, maybe?"

"You can correlate sun spots with stock prices, or Columbia River salmon, or women's skirts. And you are just as much justified in blaming short skirts for sun spots as you are in blaming sun spots for salmon. We don't know. But the curves go on just the same."

"But there has to be some *reason* behind it."

"Does there? That's mere assumption. A fact has no 'why.' There it stands, self demonstrating. Why did you take your clothes off today?"

She frowned. "That's not fair."

"Maybe not. But I want to show you why I'm worried."

He went into the bedroom, came out with a large roll of tracing paper. "We'll spread it on the floor. Here they are, all of them. The 54-year cycle—see the Civil War there? See how it matches in? The 18 & 1/3 year cycle, the 9-plus cycle, the 41-month shorty, the three rhythms of sunspots—everything, all combined in one grand chart. Mississippi River floods, fur catches in Canada, stock market prices, marriages, epidemics, freight-car loadings, bank clearings, locust plagues, divorces, tree growth, wars, rainfall, earth magnetism, building construction patents applied for, murders—you name it; I've got it there."

She stared at the bewildering array of wavy lines. "But, Potty, what does it mean?"

"It means that these things all happen, in regular rhythm, whether we like. it or not. It means that when skirts are due to go up, all the stylists in Paris can't make 'em go down. It means that when prices are going down, all the controls and supports and government planning can't make 'em go up." He pointed to a curve. "Take a look at the grocery ads. Then turn to the financial page and read how the Big Brains try to doubletalk their way out of it. It means that when an epidemic is due, it happens, despite all the public health efforts. It means we're lemmings."

She pulled her lip. "I don't like it. 1 am the master of my fate,' and so forth. I've got free will, Potty. I know I have—I can feel it."

"I imagine every little neutron in an atom bomb feels the same way. He can go *spung!* or he can sit still, just as he pleases. But statistical mechanics work out anyhow. And the bomb goes off—which is what I'm leading up to. See anything odd there, Meade?"

She studied the chart, trying not to let the curving lines confuse her. "They sort of bunch up over at the right end."

"You're dern tootin' they do! See that dotted vertical line? That's right now—and things are bad enough. But take a look at that solid vertical; that's about six months from now and that's when we get it. Look at the cycles—the long ones, the short ones, all of them. Every single last one of them reaches either a trough or a crest exactly on—or almost on—that line."

"That's bad?"

"What do you think? Three of the big ones troughed in 1929 and the depression almost ruined us . . . even with the big 54-year cycle supporting things. Now we've got the big one troughing—and the few crests are not things that help. I mean to say, tent caterpillars and influenza don't do us any good, Meade, if statistics mean anything, this tired old planet hasn't seen a jackpot like this since Eve went into the apple business. I'm scared."

She searched his face. "Potty—you're not simply having fun with me? You know I can't check up on you."

"I wish to heaven I were. No, Meade, I can't fool about numbers; I wouldn't know how. This is it. The Year of the Jackpot."

She was very silent as he drove her home. As they approached West Los Angeles, she said, "Potty?"

"Yes, Meade?"

"What do we *do* about it?"

"What do you do about a hurricane? You pull in your ears. What can you do about an atom bomb? You try to outguess it, not be there when it goes off. What else can you do?"

"Oh." She was silent for a few moments, then added, "Potty? Will you tell me which way to jump?"

"Hub? Oh, sure! If I can figure it out."

He took her to her door, turned to go. She said, "Potty!"

He faced her. "Yes, Meade?"

She grabbed his head, shook it—then kissed him fiercely on the mouth. "There—is that just a statistic?"

"Uh, no."

"It had better not be," she said dangerously. "Potty, I think I'm going to have to change your curve."

II

"RUSSIANS REJECT UN NOTE"

"MISSOURI FLOOD DAMAGE EXCEEDS 1951 RECORD"

"MISSISSIPPI MESSIAH DEFIES COURT"
"NUDIST CONVENTION STORMS BAILEY'S BEACH"
"BRITISH-IRAN TALKS STILL DEADLOCKED"
"FASTER-THAN-LIGHT WEAPON PROMISED"
"TYPHOON DOUBLING BACK ON MANILA"
"MARRIAGE SOLEMNIZED ON FLOOR OF HUDSON—*New York, 13 July, In a specially-constructed diving suit built for two, Merydith Smithe, cafe society headline girl, and Prince Augie Schleswieg of New York and the Riviera were united today by Bishop Dalton in a service televised with the aid of the Navy's ultra-new—"*

As the Year of the Jackpot progressed Breen took melancholy pleasure in adding to the data which proved that the curve was sagging as predicted. The undeclared World War continued its bloody, blundering way at half a dozen spots around a tortured globe. Breen did not chart it; the headlines were there for anyone to read. He concentrated on the odd facts in the other pages of the papers, facts which, taken singly, meant nothing, but taken together showed a disastrous trend.

He listed stock market prices, rainfall, wheat futures, but it was the "silly season" items which fascinated him. To be sure, some humans were always doing silly things—but at what point had prime damfoolishness become commonplace? When, for example, had the zombie-like professional models become accepted ideals of American womanhood? What were the gradations between National Cancer Week and National Athlete's Foot Week? On what day had the American people finally taken leave of horse sense?

Take transvestism—male-and-female dress customs were arbitrary, but they had seemed to be deeply rooted in the culture. When did the breakdown start? With Marlene Dietrich's tailored suits? By the late forties there was no "male" article of clothing that a woman could not wear in public—but when had men started to slip over the line? Should he count the psychological cripples who had made the word "drag" a byword in Greenwich Village and Hollywood long before this outbreak? Or were they "wild shots" not belonging on the curve? Did it start with some unknown normal man attending a masquerade and there discovering that skirts actually were more comfortable and practical than trousers? Or had it started with the resurgence of Scottish nationalism reflected in the wearing of kilts by many Scottish-Americans?

Ask a lemming to state his motives! The outcome was in front of him, a news story. Transvestism by draft-dodgers had at last resulted in a mass arrest in Chicago which was to have ended in a giant joint trial—only to have the deputy prosecutor show up in a pinafore and defy the judge to submit to an examination to determine the judge's true sex. The judge suffered a stroke and died and the trial was postponed—postponed forever in Breen's opinion; he doubted that this particular blue law would ever again be enforced.

Or the laws about indecent exposure, for that matter. The attempt to limit the Gypsy-Rose syndrome by ignoring it had taken the starch out of enforcement; now here was a report about the All Souls Community Church of Springfield: the pastor had reinstituted ceremonial nudity. Probably the first time this thousand years, Breen thought, aside from some screwball cults in Los Angeles. The reverend gentleman claimed that the ceremony was identical with the "dance of the high priestess" in the ancient temple of Kamak.

Could be—but Breen had private information that the "priestess" had been working the burlesque & nightclub circuit before her present engagement. In any case the holy leader was packing them in and had not been arrested. Two weeks later a hundred and nine churches in thirty-three states offered equivalent attractions. Breen entered them on his curves.

This queasy oddity seemed to him to have no relation to the startling rise in the dissident evangelical cults throughout the country. These churches were sincere, earnest and poor—but growing, ever since the War. Now they were multiplying like yeast. It seemed a statistical cinch that the United States was about to become godstruck again. He correlated it with Transcendentalism and the trek of the Latter Day Saints—hmm . . . yes, it fitted. And the curve was pushing toward a crest.

Billions in war bonds were now falling due; wartime marriages were reflected in the swollen peak of the Los Angeles school population. The Colorado River was at a record low and the towers in Lake Mead stood high out of the water. But the Angelenos committed slow suicide by watering lawns as usual. The Metropolitan Water District commissioners tried to stop it—it fell between the stools of the police powers of fifty "sovereign" cities. The taps remained open, trickling away the life blood of the desert paradise.

The four regular party conventions—Dixiecrats, Regular Republicans, the other Regular Republicans, and the Democrats—attracted scant attention, as the Know-Nothings had not yet met. The fact that the "American Rally," as the Know-Nothings preferred to be called, claimed not to be a party but an educational society did not detract from their strength. But what was their strength? Their beginnings had been so obscure that Breen had had to go back and dig into the December 1951 files—but he had been approached twice this very week to join them, right inside his own office, once by his boss, once by the janitor.

He hadn't been able to chart the Know-Nothings. They gave him chills in his spine. He kept column-inches on them, found that their publicity was shrinking while their numbers were obviously zooming.

Krakatau blew up on July i8th. It provided the first important transpacific TV-cast; its effect on sunsets, on solar constant, on mean temperature, and on rainfall would not be felt until later in the year. The San Andreas fault, its stresses unrelieved since the Long Beach disaster of 19331 continued to build up imbalance—an unhealed wound running the full length of the West Coast. Pelee and Etna erupted; Mauna Loa was still quiet.

Flying saucers seemed to be landing daily in every state. No one had exhibited one on the ground—or had the Department of Defense sat on them? Breen was unsatisfied with the off-the-record reports he had been able to get; the alcoholic content of some of them had been high. But the sea serpent on Ventura Beach was real; he had seen it. The troglodyte in Tennessee he was not in a position to verify.

Thirtyone domestic air crashes the last week in July. . .was it sabotage? Or was it a sagging curve on a chart? And that neo-polio epidemic that skipped from Seattle to New York? Time for a big epidemic? Breen's chart said it was. But how about B.W.? Could a chart *know* that a Slav biochemist would perfect an efficient virus-and-vector at the right time? Nonsense!

But the curves, if they meant anything at all, included "free will"; they averaged in all the individual "wills" of a statistical universe—and came out as a smooth function, Every morning three million "free wills" flowed toward the center of the New York megapolis; every evening they flowed out again—all by "free will," and on a smooth and predictable curve.

Ask a lemming! Ask *all* the lemmings, dead and alive—let them take a vote on it! Breen tossed his notebook aside and called Meade, "Is this my favorite statistic?"

"Potty! I was thinking about you."

"Naturally. This is your night off."

"Yes, but another reason, too. Potiphar, have you ever taken a look at the Great Pyramid?"

"I haven't even been to Niagara Falls. I'm looking for a rich woman, so I can travel."

"Yes, yes, I'll let you know when I get my first million, but—"

"That's the first time you've proposed to me this week."

"Shut up. Have you ever looked into the prophecies they found inside the pyramid?"

"Huh? Look, Meade, that's in the same class with astrology—strictly for squirrels. Grow up."

"Yes, of course. But Potty, I thought you were interested in anything odd. This is odd."

"Oh. Sorry. If it's 'silly season' stuff, let's see it."

"All right. Am I cooking for you tonight?"

"It's Wednesday, isn't it?"

"How soon?"

He glanced at his watch. "Pick you up in eleven minutes." He felt his whiskers. "No, twelve and a half."

"I'll be ready. Mrs. Megeath says that these regular dates mean that you are going to marry me."

"Pay no attention to her. She's just a statistic. And I'm a wild datum."

"Oh, well, I've got two hundred and forty-seven dollars toward that million. 'Bye!"

Meade's prize was the usual Rosicrucian come-on, elaborately printed, and including a photograph (retouched, he was sure) of the much disputed line on the corridor wall which was alleged to prophesy, by its various discontinuities, the entire future. This one had an unusual time scale but the major events were all marked on it—the fall of Rome, the Norman Invasion, the Discovery of America, Napoleon, the World Wars.

What made it interesting was that it suddenly stopped—now.

"What about it. Potty?"

"I guess the stonecutter got tired. Or got fired. Or they got a new head priest with new ideas." He tucked it into his desk. "Thanks. I'll think about how to list it." But he got it out again, applied dividers and a magnifying glass. "It says here," he announced, "that the end comes late in August—unless that's a fly speck."

"Morning or afternoon? I have to know how to dress."

"Shoes will be worn. All God's chilluns got shoes." He put it away.

She was quiet for a moment, then said, "Potty, isn't it about time to jump?"

"Huh? Girl, don't let *that* thing affect you! That's 'silly season' stuff."

"Yes. But take a look at *your* chart."

Nevertheless he took the next afternoon off, spent it in the reference room of the main library, confirmed his opinion of soothsayers. Nostradamus was pretentiously silly, Mother Shippey was worse. In any of them you could find what you looked for.

He did find one item in Nostradamus that he liked: "The Oriental shall come forth from his seat . . . he shall pass through the sky, through the waters and the snow, and he shall strike each one with his weapon."

That sounded like what the Department of Defense expected the commies to try to do to the Western Allies. But it was also a description of every invasion that had come out of the "heartland" in the memory of mankind. Nuts!

When he got home he found himself taking down his father's Bible and turning to Revelations. He could not find anything that he could understand but he got fascinated by the recurring use of precise numbers. Presently he thumbed through the Book at random; his eye lit on: "Boast not thyself of tomorrow; for thou knowest not what a day may bring forth." He put the Book away, feeling humbled but not cheered.

The rains started the next morning. The Master Plumbers elected Miss Star Morning "Miss Sanitary Engineering" on the same day that the morticians designated her as "The Body I would Like Best to Prepare," and her option was dropped by Fragrant Features. Congress voted $1.37 to compensate Thomas Jefferson Meeks for losses incurred while an emergency postman for the Christmas rush of 1936, approved the appointment of five lieutenant generals and one ambassador and adjourned in eight minutes. The fire extinguishers in a midwest orphanage turned out to be filled with air. The chancellor of the leading football institution sponsored a fund to send peace messages and vitamins to the Politburo. The stock market slumped nineteen points and the tickers ran two hours late. Wichita, Kansas, remained flooded while Phoenix, Arizona, cut off drinking water to areas outside city limits. And Potiphar Breen found that he had left his raincoat at Meade Barstow's rooming house.

He phoned her landlady, but Mrs. Megeath turned him over to Meade. "What are you doing home on a Friday?" he demanded.

"The theater manager laid me off. Now you'll have to marry me."

"You can't afford me. Meade—seriously, baby, what happened?"

"I was ready to leave the dump anyway. For the last six weeks the popcorn machine has been carrying the place. Today I sat through *I Was A TeenAge Beatnik* twice. Nothing to do."

"I'll be along."

"Eleven minutes?"

"It's raining. Twenty—with luck."

It was more nearly sixty. Santa Monica Boulevard was a navigable stream; Sunset Boulevard was a subway jam. When he tried to ford the streams leading to Mrs. Megeath's house, he found that changing tires with the wheel wedged against a storm drain presented problems.

"Potty! You look like a drowned rat."

"I'll live," But presently he found himself wrapped in a blanket robe belonging to the late Mr. Megeath and sipping hot cocoa while Mrs. Megeath dried his clothing in the kitchen.

"Meade . . . I'm 'at liberty,' too."

"Hub? You quit your job?"

"Not exactly. Old Man Wiley and I have been having differences of opinion about my answers for months—too much 'Jackpot factor' in the figures I give him to turn over to clients. Not that I call it that, but he has felt that I was unduly pessimistic."

"But you were right!"

"Since when has being right endeared a man to his boss? But that wasn't why he fired me; that was just the excuse. He wants a man willing to back up the Know-Nothing program with scientific doubletalk. And I wouldn't join." He went to the window. "It's raining harder."

"But they haven't got any program."

"I know that."

"Potty, you should have joined. It doesn't mean anything—I joined three months ago."

"The hell you did!"

She shrugged. "You pay your dollar and you turn up for two meetings and they leave you alone. It kept my job for another three months. What of it?"

"Uh, well—I'm sorry you did it; that's all. Forget it. Meade, the water is over the curbs out there."

"You had better stay here overnight."

"Mmm . . . I don't like to leave 'Entropy' parked out in this stuff all night. Meade?"

"Yes, Potty?"

"We're both out of jobs. How would you like to duck north into the Mojave and find a dry spot?"

"I'd love it. But look, Potty—is this a proposal, or just a proposition?"

"Don't pull that 'either-or' stuff on me. It's just a suggestion for a vacation. Do you want to take a chaperone?"

“No.”

"Then pack a bag."

"Right away. But look, Potiphar—pack a bag *how*? Are you trying to tell me it's *time to jump?*"

He faced her, then looked back at the window. "I don't know," he said slowly, "but this rain might go on quite a while. Don't take anything you don't have to have—but don't leave anything behind you can't get along without."

He repossessed his clothing from Mrs. Megeath while Meade was upstairs, She came down dressed in slacks and carrying two large bags; under one arm was a battered and rakish Teddy bear. "This is Winnie."

"Winnie the Pooh?"

"No, Winnie Churchill. When I feel bad he promises me 'blood, toil, tears, and sweat'; then I feel better. You said to bring anything I couldn't do without?" She looked at him anxiously.

"Right." He took the bags. Mrs. Megeath had seemed satisfied with his explanation that they were going to visit his (mythical) aunt in Bakersfield before looking for jobs; nevertheless she embarrassed him by kissing him good-by and telling him to "take care of my little girl."

Santa Monica Boulevard was blocked off from use. While stalled in traffic in Beverly Hills he fiddled with the car radio, getting squawks and crackling noises, then finally one station nearby: "—in effect," a harsh, high, staccato voice was saying, "the Kremlin has given us till sundown to get out of town. This is your New York Reporter, who thinks that in days like these every American must personally keep his powder dry. And now for a word from—" Breen switched it off and glanced at her face. "Don't worry," he said. "They've been talking that way for years,"

"You think they are bluffing?"

"I didn't say that. I said, 'don't worry.' "

But his own packing, with her help, was clearly on a "Survival Kit" basis—canned goods, all his warm clothing, a sporting rifle he had not fired in over two years, a first-aid kit and the contents of his medicine chest. He dumped the stuff from his desk into a carton, shoved it into the back seat along with cans and books and coats and covered the plunder with all the blankets in the house. They went back up the rickety stairs for a last check.

"Potty—where's your chart?"

"Rolled up on the back seat shelf. I guess that's all—hey, wait a minute!" He went to a shelf over his desk and began taking down small, sober-looking magazines. "I dern near left behind my file of *The Western Astronomer* and of the *Proceedings of the Variable Star Association.*"

"Why take them?"

"Huh? I must be nearly a year behind on both of them. Now maybe I'll have time to read."

"Hmm . . . Potty, watching you read professional journals is not my notion of a vacation."

"Quiet, woman! You took Winnie; I take these."

She shut up and helped him. He cast a longing eye at his electric calculator but decided it was too much like the White Knight's mouse trap. He could get by with his slide rule.

As the car splashed out into the street she said, "Potty, how are you fixed for cash?"

"Huh? Okay, I guess."

"I mean, leaving while the banks are closed and everything." She held up her purse. "Here's my bank. It isn't much, but we can use it."

He smiled and patted her knee. "Stout fellow! I'm sitting on my bank; I started turning everything to cash about the first of the year."

"Oh. I closed out my bank account right after we met."

"You did? You must have taken my maunderings seriously."

"I always take you seriously."

Mint Canyon was a five-mile-an-hour nightmare, with visibility limited to the tail lights of the truck ahead. When they stopped for coffee at Halfway, they confirmed what seemed evident: Cajon Pass was closed and long-haul traffic for Route 66 was being detoured through the secondary pass. At long, long last they reached the Victorville cut-off and lost some of the traffic—a good thing, as the windshield wiper on his side had quit working and they were driving by the committee system. Just short of Lancaster she said suddenly, "Potty, is this buggy equipped with a snorkel?"

"Nope."

"Then we had better stop. But I see a light off the road."

The light was an auto court. Meade settled the matter of economy versus convention by signing the book herself; they were placed in one cabin. He saw that it had twin beds and let the matter ride. Meade went to bed with her Teddy bear without even asking to be kissed goodnight. It was already gray, wet dawn.

They got up in the late afternoon and decided to stay over one more night, then push north toward Bakersfield. A high pressure area was alleged to be moving south, crowding the warm, wet mass that smothered Southern California. They wanted to get into it. Breen had the wiper repaired and bought two new tires to replace his ruined spare, added some camping items to his cargo, and bought for Meade a .32 automatic, a lady's social-purposes gun; he gave it to her somewhat sheepishly.

"What's this for?"

"Well, you're carrying quite a bit of cash."

"Oh. I thought maybe I was to use it to fight you off."

"Now, Meade—"

"Never mind. Thanks, Potty."

They had finished supper and were packing the car with their afternoon's purchases when the quake struck. Five inches of rain in twenty-four hours, more than three billion tons of mass suddenly loaded on a fault already overstrained, all cut loose in one subsonic, stomach-twisting rumble.

Meade sat down on the wet ground very suddenly; Breen stayed upright by dancing like a logroller. When the ground quieted down somewhat, thirty seconds later, he helped her up. "You all right?"

"My slacks are soaked." She added pettishly, "But, Potty, it never quakes in wet weather. *Never*."

"It did this time."

"But—"

"Keep quiet, can't you?" He opened the car door and switched on the radio, waited impatiently for it to warm up. Shortly he was searching the entire dial. "Not a confounded Los Angeles station on the air!"

"Maybe the shock busted one of your tubes?"

"Pipe down." He passed a squeal and dialed back to it: "—your Sunshine Station in Riverside, California. Keep tuned to this station for the latest developments. It is as of now impossible to tell the size of the disaster. The Colorado River aqueduct is broken; nothing is known of the extent of the damage nor how long it will take to repair it. So far as we know the Owens River Valley aqueduct may be intact, but all persons in the Los Angeles area are advised to conserve water. My personal advice is to stick your washtubs out into this rain; it can't last forever. If we had time, we'd play *Cool Water*, just to give you the idea. I now read from the standard disaster instructions, quote: 'Boil all water. Remain quietly in your homes and do not panic. Stay off the highways. Cooperate with the police and render—' Joe! Joe! Catch that phone! '—render aid where necessary. Do not use the telephone except for—' Flash! an unconfirmed report from Long Beach states that the Wilmington and San Pedro waterfront is under five feet of water. I re-peat, this is unconfirmed. Here's a message from the commanding general, March Field: 'official, all military personnel will report—' "

Breen switched it off. "Get in the car."

"Where are we going?"

"North."

"We've paid for the cabin. Should we—“

"Get in!"

He stopped in the town, managed to buy six five-gallon-tins and a jeep tank. He filled them with gasoline and packed them with blankets in the back seat, topping off the mess with a dozen cans of oil. Then they were rolling.

"What are we doing, Potiphar?"

"I want to get west on the valley highway."

"Any particular place west?"

"I think so. We’ll see. You work the radio, but keep an eye on the road, too. That gas back there makes me nervous."

Through the town of Mojave and northwest on 466 into the Tehachapi Mountains—Reception was poor in the pass but what Meade could pick up confirmed the first impression—worse than the quake of '06, worse than San Francisco, Managua, and Long Beach taken together.

When they got down out of the mountains it was clearing locally; a few stars appeared. Breen swung left off the highway and ducked south of Bakersfield by the county road, reached the Route 99 superhighway just south of Greenfield. It was, as he had feared, already jammed with refugees; he was forced to go along with the flow for a couple of miles before he could cut west at Greenfield toward Taft. They stopped on the western outskirts of the town and ate at an all-night truckers' joint.

They were about to climb back into the car when there was suddenly "sunrise" due south. The rosy light swelled almost instantaneously, filled the sky, and died; where it had been a red-and-purple pillar of cloud was mounting, mountingspreading to a mushroom top.

Breen stared at it, glanced at his watch, then said harshly, "Get in the car."

"Potty—that was . . . that was"

"That was—that used to be—Los Angeles. Get in the car!"

He simply drove for several minutes. Meade seemed to be in a state of shock, unable to speak. When the sound reached them he again glanced at his watch. "Six minutes and "nineteen seconds. That's about right."

"Potty—*we should have brought Mrs. Megeath*."

"How was I to know?" he said angrily. "Anyhow, you can't transplant an old tree. If she got it, she never knew it."

"Oh, I hope so!"

"Forget it; straighten out and fly right. We're going to have all we can do to take care of ourselves. Take the flashlight and check the map. I want to turn north at Taft and over toward the coast."

"Yes, Potiphar."

"And try the radio."

She quieted down and did as she was told. The radio gave nothing, not even the Riverside station; the whole broadcast range was covered by a curious static, like rain on a window. He slowed down as they approached Taft, let her spot the turn north onto the state road, and turned into it. Almost at once a figure jumped out into the road in front of them, waved his arms violently. Breen tromped on the brake.

The man came up on the left side of the car, rapped on the window; Breen ran the glass down. Then he stared stupidly at the gun in the man's left hand. "Out of the car," the stranger said sharply. "I've got to have it." He reached inside with his right hand, groped for the door lever.

Meade reached across Breen, stuck her little lady's gun in the man's face, pulled the trigger. Breen could feel the flash on his own face, never noticed the report. The man looked puzzled, with a neat, not-yet-bloody hole in his upper lip—then slowly sagged away from the car.

"Drive on!" Meade said in a high voice.

Breen caught his breath. "Good girl—"

"Drive on! *Get rolling*!"

They followed the state road through Los Padres National Forest, stopping once to fill the tank from their cans. They turned off onto a dirt road. Meade kept trying the radio, got San Francisco once but it was too jammed with static to read. Then she got Salt Lake City, faint but clear: "—since there are no reports of anything passing our radar screen the Kansas City bomb must be assumed to have been planted rather than delivered. This is a tentative theory but—" They passed into a deep cut and lost the rest.

When the squawk box again came to life it was a new voice: "Conelrad," said a crisp voice, "coming to you over the combined networks. The rumor that Los Angeles has been hit by an atom bomb is totally unfounded. It is true that the western metropolis has suffered a severe earthquake shock but that is all. Government officials and the Red Cross are on the spot to care for the victims, but—and I repeat—there has *been no atomic bombing*. So relax and stay in your homes. Such wild rumors can damage the United States quite as much as enemy's bombs. Stay off the highways and listen for—" Breen snapped it off.

"Somebody," he said bitterly, "has again decided that 'Mama knows best.' They won't tell us any bad news."

"Potiphar," Meade said sharply, "that *was* an atom bomb . . . wasn't it?"

"It was. And now we don't know whether it was just Los Angeles—and Kansas City—or all the big cities in the country. All we know is that they are lying to us."

"Maybe I can get another station?"

"The hell with it." He concentrated on driving. The road was very bad.

As it began to get light she said, "Potty—do you know where we're going? Are we just keeping out of cities?"

"I think I do. If I'm not lost." He stared around them.

"Nope, it's all right. See that hill up forward with the triple gendarmes on its profile?"

"Gendarmes?"

"Big rock pillars. That's a sure landmark. I'm looking for a private road now. It leads to a hunting lodge belonging to two of my friends—an old ranch house actually, but as a ranch it didn't pay."

"Oh. They won't mind us using it?"

He shrugged. "If they show up, we'll ask them. If they show up.

They lived in Los Angeles, Meade."

"Oh. Yes, I guess so."

The private road had once been a poor grade of wagon trail; now it was almost impassable. But they finally topped a hogback from which they could see almost to the Pacific, then dropped down into a sheltered bowl where the cabin was. "All out, girl. End of the line."

Meade sighed. "It looks heavenly."

"Think you can rustle breakfast while I unload? There's probably wood in the shed. Or can you manage a wood range?"

"Just try me."

Two hours later Breen was standing on the hogback, smoking a cigarette, and staring off down to the west. He wondered if that was a mushroom cloud up San Francisco way? Probably his imagination, he decided, in view of the distance. Certainly there was nothing to be seen to the south.

Meade came out of the cabin. "Potty!"

"Up here."

She joined him, took his hand, and smiled, then snitched his cigarette and took a deep drag. She expelled it and said, "I know it's sinful of me, but I feel more peaceful than I have in months and months."

"I know."

"Did you see the canned goods in that pantry? We could pull through a hard winter here."

"We might have to."

"I suppose. I wish we had a cow."

"What would you do with a cow?"

"I used to milk four cows before I caught the school bus, every morning. I can butcher a hog, too."

"I'll try to find one."

"You do and I'll manage to smoke it." She yawned. "I'm suddenly terribly sleepy."

"So am I. And small wonder."

"Let's go to bed."

"Uh, yes. Meade?"

"Yes, Potty?"

"We may be here quite a while. You know that, don't you?"

"Yes, Potty."

"In fact it might be smart to stay put until those curves all start turning up again. They will, you know."

"Yes. I had figured that out."

He hesitated, then went on, "Meade . . . will you marry me?"

"Yes." She moved up to him.

After a time he pushed her gently away and said, "My dear, my very dear, uh—we could drive down and find a minister in some little town?"

She looked at him steadily. "That wouldn't be very bright, would it? I mean, nobody knows we're here and that's the way we want it. And besides, your car might not make it back up that road."

"No, it wouldn't be very bright. But I want to do the right thing."

"It's all right. Potty. It's *all right.*"

"Well, then . . . kneel down here with me. Well say them together."

"Yes, Potiphar." She knelt and he took her hand. He closed his eyes and prayed wordlessly.

When he opened them he said, "What’s the matter?"

"Uh, the gravel hurts my knees."

"Well stand up, then."

"No. Look, Potty, why don't we just go in the house and say them there?"

"Hub? Hells bells, woman, we might forget to say them entirely. Now repeat after me: I, Potiphar, take thee, Meade—"

"Yes, Potiphar. I, Meade, take thee, Potiphar—"

III

"OFFICIAL: STATIONS WITHIN RANGE RELAY TWICE. EXECUTIVE BULLETIN NUMBER NINE—ROAD LAWS PREVIOUSLY PUBLISHED HAVE BEEN IGNORED IN MANY INSTANCES. PATBOLS ARE ORDERED TO SHOOT WITHOUT WARNING AND PROVOST MARSHALS ABE DIBECTED TO USE DEATH PENALTY FOR UNAUTHORIZED POSSESSION OF GASOLINE. B.W. AND RADIATION QUARANTINE REGULATIONS PREVIOUSLY ISSUED WILL BE RIGIDLY ENFORCED. LONG LIVE THE UNITED STATES! HARLEY J. NEAL, LIEUTENANT GENERAL, ACTING CHIEF OF GOVERNMENT. ALL STATIONS RELAY TWICE."

"THIS IS THE FREE RADIO AMERICA RELAY NETWOBK. PASS THIS ALONG, BOYS! GOVERNOR BRANDLEY WAS SWORN IN TODAY AS PRESIDENT BY ACTING CHIEF JUSTICE ROBERTS UNDER THE RULE-OF-SUCCESSION. THE PRESIDENT NAMED THOMAS DEWEY AS SECRETARY OF STATE AND PAUL DOUGLAS AS SECRETARY OF DEFENSE. HIS SECOND OFFICIAL ACT WAS TO STRIP THE RENEGADE NEAL OF RANK AND TO DIRECT HIS ARREST BY ANY CITIZEN OR OFFICIAL. MORE LATER. PASS THE WORD ALONG.

"HELLO, CQ, CQ, CQ. THIS IS W5KMR, FREEPORT, QRR, QRR! ANYBODY READ ME? ANYBODY? WE'RE DYING LIKE FLIES DOWN HERE. WHAT'S HAPPENED? STARTS WITH FEVER AND A BURNING THIRST BUT YOU CAN'T SWALLOW. WE NEED HELP. ANYBODY BEAD ME? HELLO, CQ 75, CQ 75 THIS IS W5 KILO METRO ROMEO CALLING QRR AND CQ 75. BY FOR SOMEBODY. ... ANYBODY!!!"

"THIS IS THE LORD'S TIME, SPONSORED BY SWAN'S ELIXIR, THE TONIC THAT MAKES WAITING FOR THE KINGDOM OF GOD WORTHWHILE. YOU ARE ABOUT TO HEAR A MESSAGE OF CHEER FROM JUDGE BROOMFIELD, ANOINTED VICAR OF THE KINGDOM ON EABTH. BUT FIRST A BULLETIN: SEND YOUR CONTRIBUTIONS TO 'MESSIAH,' CLINT, TEXAS. DON'T TRY TO MAIL THEM: SEND THEM BY A KINGDOM MESSENGER OR BY SOME PILGRIM JOURNEYING THIS WAY. AND NOW THE TABERNACLE CHOIR FOLLOWED BY THE VOICE OF THE VICAR ON EARTH—"

"—THE FIRST SYMPTOM IS LITTLE RED SPOTS IN THE ARMPITS. THEY ITCH. PUT 'EM TO BED AT ONCE AND KEEP 'EM COVERED UP WARM. THEN GO SCRUB YOUBSELF AND WEAR A MASK: WE DON'T KNOW YET HOW YOU CATCH IT. PASS IT ALONG, ED."

"—NO NEW LANDINGS REPORTED ANYWHERE ON THIS CONTINENT. THE PARATROOPERS WHO ESCAPED THE ORIGINAL SLAUGHTER ARE THOUGHT TO BE HIDING OUT IN THE POCONOS. SHOOT—BUT BE CAREFUL; IT MIGHT BE AUNT TESSIE. OFF AND CLEAR, UNTIL NOON TOMORROW—"

The curves were turning up again. There was no longer doubt in Breen's mind about that. It might not even be necessary to stay up here in the Sierra Madres through the winter—though he rather thought they would. He had picked their spot to keep them west of the fallout; it would be silly to be mowed down by the tail of a dying epidemic, or be shot by a nervous vigilante, when a few months' wait would take care of everything.

Besides, lie had chopped all that firewood. He looked at his calloused hands—he had done all that work and, by George, he was going to enjoy the benefits!

He was headed out to the hogback to wait for sunset and do an hour's reading; he glanced at his car as he passed it, thinking that he would like to try the radio. He suppressed the yen; two thirds of his reserve gasoline was gone already just from keeping the battery charged for the radio—and here it was only December. He really ought to cut it down to twice a week. But it meant a lot to catch the noon bulletin of Free America and then twiddle the dial a few minutes to see what else he could pick up.

But for the past three days Free America had not been on the air—solar static maybe, or perhaps just a power failure. But that rumor that President Brandley had been assassinated—while it hadn't come from the Free radio . . . and it hadn't been denied by them, either, which was a good sign. Still, it worried him.

And that other story that lost Atlantis had pushed up during the quake period and that the Azores were now a little continent—almost certainly a hangover of the "silly season" but it would be nice to hear a follow-up.

Rather sheepishly he let his feet carry him to the car. It wasn't fair to listen when Meade wasn't around. He warmed it up, slowly spun the dial, once around and back. Not a peep at full gain, nothing but a terrible amount of static. Served him right.

He climbed the hogback, sat down on the bench he had dragged up there—their "memorial bench," sacred to the memory of the time Meade had hurt her knees on the gravel—sat down and sighed. His lean belly was stuffed with venison and corn fritters; he lacked only tobacco to make him completely happy. The evening cloud colors were spectacularly beautiful and the weather was extremely balmy for December; both, he thought, caused by volcanic dust, with perhaps an assist from atom bombs.

Surprising how fast things went to pieces when they started to skid! And surprising how quickly they were going back together, judging by the signs. A curve reaches trough and then starts right back up. World War III was the shortest big war on record—forty cities gone, counting Moscow and the other slave cities as well as the American ones—and then *whoosh!* neither side fit to fight. Of course, the fact that both sides had thrown their ICBMs over the pole through the most freakish arctic weather since Peary invented the place had a lot to do with it, he supposed. It was amazing that any of the Russian paratroop transports had gotten through at all.

He sighed and pulled the November 1951 copy of the *Western Astronomer* out of his pocket. Where was he? Oh, yes, *Some Notes on the Stability of G-Type Stars with Especial Reference to Sol*, by A. G. M. Dynkowski, Lenin Institute, translated by Heinrich Ley, F. R. A. S. Good boy, Ski—sound mathematician. Very clever application of harmonic series and tightly reasoned. He started to thumb for his place when he noticed a footnote that he had missed. Dynkowski's own name carried down to it: "This monograph was denounced by *Pravda* as romantic reactionariism shortly after it was published. Professor Dynkowski has been unreported since and must be presumed to be liquidated," The poor geek! Well, he probably would have been atomized by now anyway, along with the goons who did him in. He wondered if they really had gotten all the Russki paratroopers? Well, he had killed his quota; if he hadn't gotten that doe within a quarter mile of the cabin and headed right back, Meade would have had a bad time. He had shot them in the back, the swine! and buried them beyond the woodpile—and then it had seemed a shame to skin and eat an innocent deer while those lice got decent burial. Aside from mathematics, just two things worth doing—kill a man and love a woman. He had done both; he was rich.

He settled down to some solid pleasure. Dynkowski was a treat. Of course, it was old stuff that a G-type star, such as the sun, was potentially unstable; a G-O star could explode, slide right off the Russell diagram, and end up as a white dwarf. But no one before Dynkowski had defined the exact conditions for such a catastrophe, nor had anyone else devised mathematical means of diagnosing the instability and describing its progress.

He looked up to rest his eyes from the fine print and saw that the sun was obscured by a thin low cloud—one of those unusual conditions where the filtering effect is just right to permit a man to view the sun clearly with the naked eye. Probably volcanic dust in the air, he decided, acting almost like smoked glass.

He looked again. Either he had spots before his eyes or that was one fancy big sun spot. He had heard of being able to see them with the naked eye, but it had never happened to him. He longed for a telescope.

He blinked. Yep, it was still there, upper right. A *big* spot—no wonder the car radio sounded like a Hitler speech. He turned back and continued on to the end of the article, being anxious to finish before the light failed. At first his mood was sheerest intellectual pleasure at the man's tight mathematical reasoning. A 3% imbalance in the solar constant—yes, that was standard stuff; the sun would nova with that much change. But Dynkowski went further; by means of a novel mathematical operator which he had dubbed "yokes" he bracketed the period in a star's history when this could happen and tied it down further with secondary, tertiary, and quaternary yokes, showing exactly the time of highest probability. Beautiful! Dynkowski even assigned dates to the extreme limit of his primary yoke, as a good statistician should.

But, as he went back and reviewed the equations, his mood changed from intellectual to personal. Dynkowski was not talking about just any G-O star; in the latter part he meant old Sol himself, Breen's personal sun, the big boy out there with the oversized freckle on his face.

That was one hell of a big freckle! It was a hole you could chuck Jupiter into and not make a splash. He could see it very clearly now.

Everybody talks about "when the stars grow old and the sun grows cold"—but it's an impersonal concept, like one's own death. Breen started thinking about it very personally. How long would it take, from the instant the imbalance was triggered until the expanding wave front engulfed earth? The mechanics couldn't be solved without a calculator even though they were implicit in the equations in front of him. Half an hour, for a horseback guess, from incitement until the earth went *phutt!*

It hit him with gentle melancholy. No more? Never again? Colorado on a cool morning . . . the Boston Post road with autumn wood smoke tanging the air . . . Bucks county bursting in the spring. The wet smells of the Fulton Fish Market—no, that was gone already. Coffee at the Morning Call. No more wild strawberries on a hillside in Jersey, hot and sweet as lips. Dawn in the South Pacific with the light airs cool velvet under your shirt and never a sound but the chuckling of the water against the sides of the old rust bucket—what was her name? That was a long time ago—the *S. S. Mary Brewster*.

No more moon if the earth was gone. Stars—but no one to look at them.

He looked back at the dates bracketing Dynkowski's probability yoke. "Thine Alabaster Cities gleam, undimmed by—“

He suddenly felt the need for Meade and stood up.

She was coming out to meet him. "Hello, Potty! Safe to come in now—I've finished the dishes."

"I should help."

"You do the man's work; I'll do the woman's work. That's fair." She shaded her eyes. "What a sunset! We ought to have volcanoes blowing their tops every year."

"Sit down and we'll watch it."

She sat beside him and he took her hand. "Notice the sun spot? You can see it with your naked eye."

She stared. "Is that a sun spot? It looks as if somebody had taken a bite out of it."

He squinted his eyes at it again. Damned if it didn't look bigger!

Meade shivered. "I'm chilly. Put your arm around me."

He did so with his free arm, continuing to hold hands with the other. It was bigger—the thing was growing.

What good is the race of man? Monkeys, he thought, monkeys with a spot of poetry in them, cluttering and wasting a second-string planet near a third-string star. But sometimes they finish in style.

She snuggled to him. "Keep me warm."

"It will be warmer soon. I mean I'll keep you warm."

"Dear Potty."

She looked up. "Potty—something funny is happening to the sunset."

"No darling—to the sun."

"I’m frightened."

"I'm here, dear."

He glanced down at the journal, still open beside him. He did not need to add up the two figures and divide by two to reach the answer. Instead he clutched fiercely at her hand, knowing with an unexpected and overpowering burst of sorrow that this was

The End

Project Nightmare

“Four’s your point. Roll ‘em!”

“Anybody want a side bet on double deuces?”

No one answered; the old soldier rattled dice in a glass, pitched them against the washroom wall. One turned up a deuce; the other spun. Somebody yelled, “It’s going to five! Come, Phoebe!”

It stopped—a two. The old soldier said, “I told you not to play with me. Anybody want cigarette money?”

“Pick it up, Pop. We don’t—oh, oh! *‘Tenshun!”*

In the door stood a civilian, a colonel, and a captain. The civilian said, “Give the money back, Two-Gun.”

“Okay, *Prof.”* The old soldier extracted two singles. “That much is mine.”

“Stop!” objected the captain. “I’ll impound that for evidence. Now, you men—”

The colonel stopped him. “Mick. Forget that you’re adjutant. Private Andrews, come along.” He went out; the others followed. They hurried through the enlisted men’s club, out into desert sunshine and across the quadrangle.

The civilian said, “Two-Gun, what the deuce!”

“Shucks, Prof, I was just practicing.”

“Why don’t you practice against Grandma Wilkins?”

The soldier snorted. “Do I look silly?”

The colonel put in, “You’re keeping a crowd of generals and V.I.P.s waiting. That isn’t bright.”

“Colonel Hammond, I was told to wait in the club.”

“But not in its washroom. Step it up!”

They went inside headquarters to a hail where guards checked their passes before letting them in. A civilian was speaking: “—and that's the story of the history-making experiments at Duke University. Doctor Reynolds is back; he will conduct the demonstrations."

The officers sat down In the rear, Dr. Reynolds went to the speaker's table. Private Andrews sat down with a group set apart from the high brass and distinguished civilians of the audience. A character who looked like a professional gambler—and was—sat next to two beautiful redheads, identical twins. A fourteen-year-old Negro boy slumped in the next chair; he seemed asleep. Beyond him a most wide-awake person, Mrs. Anna Wilkins, tatted and looked around. In the second row were college students and a drab middle-aged man.

The table held a chuck-a-luck cage, packs of cards, scratch pads, a Geiger counter, a lead carrying case. Reynolds leaned on it and said, "Extra-Sensory Perception, or E.S.P., is a tag for little-known phenomena—telepathy, clairvoyance, clairaudience, precognition, telekinesis. They exist; we can measure them; we know that some people are thus gifted. But we don't know how they work. The British, in India during World War One, found that secrets were being stolen by telepathy." Seeing doubt in their faces Reynolds added, "It is conceivable that a spy five hundred miles away is now 'listening in'—and picking your brains of top-secret data."

Doubt was more evident. A four-star Air Force general said, "One moment, Doctor—if true, what can we do to stop it?"

"Nothing."

"That's no answer. A lead-lined room?"

"We've tried that, General. No effect."

"Jamming with high frequencies? Or whatever 'brain waves' are?"

"Possibly, though I doubt it. If E.S.P. becomes militarily important you may have to operate with all facts known. Back to our program: These ladies and gentlemen are powerfully gifted in telekinesis, the ability to control matter at a distance. Tomorrow's experiment may not succeed, but we hope to convince the doubting Thomases"—he smiled at a man in the rear—"that it is worth trying."

The man he looked at stood up. "General Hanby!"

An Army major general looked around. "Yes, Doctor Withers?"

"I asked to be excused. My desk is loaded with urgent work—and these games have nothing to do with me."

The commanding general started to assert himself; the four-star visitor put a hand on his sleeve. "Doctor Withers, my desk in Washington is piled high, 'but I sin here because the President sent me. Will you please stay? I want a skeptical check on my judgment."

Withers sat down, still angry. Reynolds continued: 'We will start with E.S.P. rather than telekinesis—which is a bit different, anyhow." He turned to one of the redheads. "Jane, will you come here?"

The girl answered, "I'm Joan. Sure."

“All right—Joan. General LaMott, will you draw something on this scratch pad?”

The four-star flyer cocked an eyebrow. “Anything?”

“Not too complicated.”

“Right, Doctor.” He thought, then began a cartoon of a girl, grinned and added a pop-eyed wolf. Shortly he looked up. “Okay?”

Joan had kept busy with another pad; Reynolds took hers to the general. The sketches were alike—except that Joan bad added four stars to the wolf’s shoulders. The general looked at her; she looked demure. “I’m convinced,” he said drily. “What next?”

“That could be clairvoyance or telepathy,” Reynolds lectured. “We will now show direct telepathy.” He called the second twin to him, then said, “Doctor Withers, will you help us?”

Withers still looked surly. “With what?”

“The same thing—but Jane will watch over your shoulder while Joan tries to reproduce what you draw. Make it something harder.”

“Well…okay.” He took the pad, began sketching a radio circuit, while Jane watched. He signed it with a “Clem,” the radioman’s cartoon of the little fellow peering over a fence.

“That’s fine!” said Reynolds. “Finished, Joan?”

“Yes, Doctor.” He fetched her pad; the diagram was correct—but Joan had added to “Clem” a wink.

Reynolds interrupted awed comment with, “I will skip card, demonstrations and turn to telekinesis. Has anyone a pair of dice?” No one volunteered; he went on, “We have some supplied by your physics department. This chuck-a-luck cage is signed and sealed by them and so is this package.” He broke it open, spilled out a dozen dice. “Two-Gun, how about some naturals?”

“I’ll try, Prof.”

“General LaMott, please select a pair and put them In this cup.”

The general complied and handed the cup to Andrews. “What are you going to roll, soldier?”

“Would a sixtyfive suit the General?”

“If you can.”

“Would the General care to put up a five spot, to make it interesting?” He waited, wide-eyed and innocent.

LaMott grinned. “You’re faded, soldier.” He peeled out a five; Andrews covered it, rattled the cup and rolled. One die stopped on the bills—a five. The other bounced against a chair—a six.

“Let it ride, sir?’”

“I’m not a sucker twice. Show us some naturals.”

“As you say, sir.” Two-Gun picked up the money, then rolled 6-1, *5-2,* 4-3, and back again. He rolled several 6’s, then got snake eyes. He tried again, got acey-deucey. He faced the little old lady. “Ma’am,” he said, “if you want to roll, why don’t you get down here and do the work?”

“Why, Mr. Andrews!”

Reynolds said hastily, “You’ll get your turn, Mrs. Wilkins.”

“I don’t know what you gentlemen are talking about.” She resumed tatting.

Colonel Hammond sat down by the redheads. “You’re the January Twins—aren’t you?”

“Our public!” one answered delightedly.

“The name is ‘Brown,’” said the other.

“‘Brown,’” he agreed, “but how about a show for the boys?”

“Dr. Reynolds wouldn’t like it,” the first said dutifully. “I’ll handle him. We don’t get USO; security regulations are too strict. How about it, Joan?”

“I’m Jane. Okay, if you fix it with Prof.”

“Good girls!” He went back to where Grandma Wilkins was demonstrating selection—showers of sixes in the chuck-a-luck cage. She was still tatting. Dr. Withers watched glumly. Hammond said, ‘Well, Doc?”

“These things are disturbing,” Withers admitted, “but it’s on the molar level—nothing affecting the elementary particles.”

“How about those sketches?”

“I’m a physicist, not a psychologist. But the basic particles—electrons, neutrons, protons—can’t be affected except with apparatus designed in accordance with the laws of radioactivity. Dr. Reynolds was in earshot; at Withers’ remark he said, “Thank you, Mrs. Wilkins. Now, ladies and gentlemen, another experiment. Norman!”

The colored boy opened his eyes. “Yeah, Prof?”

“Up here. And the team from your physics laboratory, please. Has anyone a radium-dial watch?”

Staff technicians hooked the Geiger counter through an amplifier so that normal background radioactivity was heard as occasional clicks, then placed a radium-dial watch close to the counter tube; the clicks changed to hail-storm volume. “Lights out, please,” directed Reynolds.

The boy said, “Now, Prof?”

“Wait, Norman. Can everyone see the watch?” The silence was broken only by the rattle of the amplifier, counting radioactivity of the glowing figures. “Now, Norman!”

The shining figures quenched out; the noise, died to sparse clicks.

The same group was in a blockhouse miles out in the desert; more miles beyond was the bomb proving site; facing it was a periscope window set in concrete and glazed with solid feet of laminated filter glass. Dr. Reynolds was talking with Major General Hanby. A naval captain took reports via earphones and speaker horn; he turned to the C.O. “Planes on station, sir.”

“Thanks, Dick.”

The horn growled, “Station Charlie to Control; we fixed it.”

The navy man said to Hanby, “All stations ready, range clear.”

“Pick up the count.”

“All stations, stand by to resume count at minus seventeen minutes. Time station, pick up the count. This is a live nun. Repeat, this is a live run.”

Hanby said to Reynolds, “Distance makes no difference?”

“We could work from Salt Lake City once my colleagues knew the setup.” He glanced down. “My watch must have stopped.”

“Always feels that way. Remember the metronome on the first Bikini test? It nearly drove me nuts.”

“I can imagine. Um, General, some of my people are highstrung. Suppose I *ad lib?”*

Hanby smiled grimly. “We always have a pacifier for visitors. Doctor Withers, ready with your curtain raiser?”

The chief physicist was bending over a group of instruments; he looked tired. “Not today,” he answered in a flat voice. “Satterlee will make it.”

Satterlee came forward and grinned at the brass and V.I.P.’s and at Reynolds’ operators. “I’ve been saving a joke for an audience that can’t walk out. But first—” He picked up a polished metal sphere and looked at the ES.P. adepts. “You saw a ball like this on your tour this morning. That one was plutonium; it’s still out there waiting to go *bang!* in about . . . eleven minutes. This is merely steel—unless someone has made a mistake. That would be a joke—we’d laugh ourselves to bits!”

He got no laughs, went on: “But it doesn’t weigh enough; we’re safe. This dummy has been prepared so that Dr. Reynolds’ people will have an image to help them concentrate. It looks no more like an atom bomb than I look like Stalin, but it represents—if it were plutonium—what we atom tinkerers call a ‘subcritical mass.’ Since the spy trials everybody knows how an atom bomb works. Plutonium gives off neutrons at a constant rate. If the mass is small, most of them escape to the outside. But if it is large enough, or a critical mass, enough are absorbed by other nuclei to start a chain reaction. The trick is to assemble a critical mass quickly— then run for your life! This happens in microseconds; I can’t be specific without upsetting the security officer.

“Today we will find out if the mind can change the rate of neutron emission in plutonium. By theories sound enough to have destroyed two Japanese cities, the emission of any particular neutron is pure chance, but the total emission is as invariable as the stars in their courses. Otherwise it would be impossible to make atom bombs.

"By standard theory, theory that works, that subcritical mass out there is no more likely to explode than a pumpkin. Our test group will try to change that. They will concentrate, try to increase the probability of neutrons' escaping, and thus set off that sphere as an atom bomb."

"Doctor Satterlee?" asked a vice admiral with wings. "Do you think it can be done?"

"Absolutely not!" Satterlee turned to the adepts. "No offense intended, folks."

"Five minutes!" announced the navy captain.

Satterlee nodded to Reynolds. "Take over. And good luck." Mrs. Wilkins spoke up. "Just a moment, young man. These 'neuter' things. I —"

"Neutrons, madam."

"That's what I said. I don't quite understand. I suppose that sort of thing comes in high school, but I only finished eighth grade. I'm sorry."

Satterlee looked sorry, too, but, he tried. "—and each of these nuclei is potentially able to spit out one of these little neutrons. In that sphere out there"—he held up the dummy—"There are, say, five thousand billion trillion nuclei, each one—"

"My, that's quite a lot, isn't it?"

"Madam, it certainly is. Now—'"

"Two minutes!"

Reynolds interrupted. "Mrs.. Wilkins, don't worry. Concentrate on that metal ball out there and think about those neutrons, each one ready to come out. When I give the word, I want you all—you especially, Norman—to think about that ball, spitting sparks like a watch dial. Try for more sparks. Simply try. It you fail, no one will blame you. Don't get tense."

Mrs. Wilkins nodded. "I'll try." She put her tatting down and got a faraway look.

At once they were blinded by unbelievable radiance bursting through the massive filter. It beat on them, then died away.

The naval captain said, "What the hell!" Someone screamed, "It's gone, it's gone!"

The speaker brayed: "Fission at minus one minute thirty-seven seconds. Control, what went wrong. It looks like a hydrogen—"

The concussion wave hit and all sounds were smothered.

Lights went out, emergency lighting clicked on. The blockhouse heaved like a boat in a heavy sea. Their eyes were still dazzled, their ears assaulted by cannonading afternoise, and physicists were elbowing flag officers at the port, when an anguished soprano cut through the din. “Oh, *dear!*”

Reynolds snapped, “What’s the matter, Grandma? You all right?”

“Me? Oh, yes, yes—but I’m so sorry. I didn’t mean to do it.”

“Do what?”

“I was just feeling it out, thinking about all those little bitty neuters, ready to spit. But I didn’t mean to make it go off—not till you told us to.”

“Oh.” Reynolds turned to ‘the rest. “Anyone else jump the gun?”

No one admitted it. Mrs. Wilkins said timidly, “I’m sorry, Doctor. Have they got another one? I’ll be more careful.”

Reynolds and Withers were seated in the officers’ mess with coffee in front of them; the physicist paid no attention to his. His eyes glittered and his face twitched. “No limits! Calculations show over *ninety per cent* conversion of mass to energy. You know what that *means?* If we assume—no, never mind. Just say that we could make every bomb the size of a pea. No tamper. No control circuits. Nothing but...“ He paused. “Delivery would be fast, small jets—just a pilot, a weaponeer, and one of your ‘operators.’ No limit to the number of bombs. No nation on earth could—”

“Take it easy,” said Reynolds. “We’ve got only a few telekinesis operators. You wouldn’t risk them in a plane.”

“But—”

“You don’t need to. Show them the bombs, give them photos of the targets, hook them by radio to the weaponeer. That spreads them thin. And we’ll test for more sensitive people. My figures show about one in eighteen hundred.”

“‘Spread them thin,’” repeated Withers.’ “Mrs. Wilkins could handle dozens of bombs, one after another—couldn’t she?”

“I suppose so. We’ll test.”

“We will indeed!” ‘Withers noticed his coffee, gulped it. “Forgive me, Doctor; I’m punchy. I’ve had to revise too many opinions.”

“I know. I was a behaviorist.”

Captain Mikeler came in, looked around and came over. “The General wants you both,” he said softly. “Hurry.”

They were ushered into a guarded office.. Major General Hanby was with General LaMott and Vice Admiral Keithley; they looked grim. Hanby handed them message flimsies. Reynolds saw the stamp TOP SECRET and handed his back. “General, I’m not cleared for this,”

“Shut up and read it.”

Reynolds skipped the number groups:

"—(PARAPHRASED) RUSSIAN EMBASSY TODAY HANDED STATE ULTIMATUM: DEMANDS USA CONVERT TO 'PEOPLE'S REPUBLIC' UNDER POLITICAL COMMISSARS TO BE ASSIGNED BY USSR. MILITARY ASSURANCES DEMANDED. NOTE CLAIMS MAJOR US CITIES (LIST SEPARATE) ARE MINED WITH ATOMIC BOMBS WHICH THEY THREATEN TO SET OFF BY RADIO IF TERMS ARE NOT MET BY SIXTEEN HUNDRED FRIDAY EST."

Reynolds reread it—"SIXTEEN HUNDRED FRIDAY"—Two P.M. day after tomorrow, local time. Our cities booby-trapped with A-bombs? Could they do that? He realized that LaMott was speaking. "We must assume that the threat is real. Our free organization makes it an obvious line of attack."

The admiral said, "They may be bluffing."

The air general shook his head. "They know the President won't surrender. We can't assume that Ivan is stupid."

Reynolds wondered why he was being allowed to hear this. LaMott looked at him. "Admiral Keithley and I leave for Washington at once. I have delayed to ask you this: your people set off an atom bomb. *Can they keep bombs from going off?"*

Reynolds felt his time sense stretch as if he had all year to think about Grandma Wilkins, Norman, his other paranormals. "Yes," he answered.

LaMott stood up. "Your job, Hanby. Coming, Admiral?"

"Wait!" protested Reynolds. "Give me one bomb and Mrs. Wilkins—and I'll sit on it. But how many cities? Twenty? Thirty?"

"Thirty-eight."

"Thirty-eight bombs—or more. Where are they? What do they look like? How long will this go on? It's impossible."

"Of course—but do it anyhow. Or try. Hanby, tell them we're on our way, will you?"

"Certainly, General."

"Good-by, Doctor. Or so long, rather."

Reynolds suddenly realized that these two were going back to "sit" on one of the bombs, to continue their duties until it killed them. He said quickly, "We'll try. We'll certainly try."

Thirty-eight cities, forty-three hours and seventeen adepts. Others were listed in years of research, but they were scattered through forty-one states. In a dictatorship secret police would locate them at once, deliver them at supersonic speeds. But this was America.

"Find them! Get them here! *Fast!* Hanby assigned Colonel Hammond to turn Reynolds' wishes into orders and directed his security officer to delegate his duties, get on the phone and use his acquaintance with the F.B.I., and other security officers, and through them with local police, to cut red tape and *find those paranormals.* Find them, convince them, bring pressure, start them winging toward the proving ground. By sundown, twentythree had been found, eleven had been convinced or coerced, two had arrived. Hanby phoned Reynolds, caught him eating a sandwich standing up. “Hanby speaking. The Président just phoned.”

“The President?”

“LaMott got in to see him. He’s dubious, but he’s authorized an all-out try, short of slowing down conventional defense. One of his assistants left National Airport by jet plane half an hour ago to come here and help. Things will move faster.”

But it did not speed things up, as the Russian broadcast was even then being beamed, making the crisis public; the President went on the air thirty minutes later. Reynolds did not hear him; he was busy. Twenty people to save twenty cities—and a world. But how? He was sure that Mrs. Wilkins could smother any A-bomb she had seen; he hoped the others could. But a hidden bomb in a far-off city—find it mentally, think about it, quench it, not for the microsecond it took to set one off, but for the billions of microseconds it might take to uncover it—was it possible?

What would help? Certain drugs—caffeine, benzedrine. They must have quiet, too. He turned to Hammond. “I want a room and bath for each one.”

“You’ve got that.”

“No, we’re doubled up, with semi-private baths.”

Hammond shrugged. “Can do. It means booting out some brass.”

“Keep the kitchen manned. They must not sleep, but they’ll have to eat. Fresh coffee all the time and cokes and tea—anything they want. Can you put the room phones through a private switchboard?”

“Okay. What else?”

“I don’t know. We’ll talk to them.”

They all knew of the Russian broadcast, but not what was being planned; they met his words with uneasy silence. Reynolds turned to Andrews. “Well, Two-Gun?”

“Big bite to chew, Prof.”

“Yes. Can you chew it?”

“Have to, I reckon.”

“Norman?”

“Gee, Boss! How can I when I can’t see ‘em?”

“Mrs. Wilkins couldn’t see that bomb this morning. You can’t see radioactivity on a watch dial; it’s too small. You just see the dial and think about it. Well?”

The Negro lad scowled. “Think of a shiny ball in a city somewhere?”

“Yes. No, wait—Colonel Hammond, they need a visual image and it won’t be that. There are atom bombs here—they must *see* one.”

Hammond frowned. “An American bomb meant for dropping or firing won’t look like a Russian bomb rigged for placement and radio triggering.”

“What will they look like?”

“G-2 ought to know. I hope. We’ll get some sort of picture. A three-dimensional mock-up, too. I’d better find Withers and the General.” He left.

Mrs. Wilkins said briskly, “Doctor, I’ll watch Washington, D. C.”

“Yes, Mrs. Wilkins. You’re the only one who has been tested, even in reverse. So you guard Washington; it’s of prime importance.”

“No, no, that’s not why. It’s the city I can *see* best.”

Andrews said, “She’s got something, Prof. I pick Seattle.”

By midnight Reynolds had his charges, twenty-six by now, tucked away in the officers’ club. Hammond and he took turns at a switchboard rigged in the upper hall. The watch would not start until shortly before deadline. Fatigue reduced paranormal powers, sometimes to zero; Reynolds hoped that they were getting one last night of sleep.

A microphone had been installed in each room; a selector switch let them listen in. Reynolds disliked this but Hammond argued, “Sure, it’s an invasion of privacy. So is being blown up by an A-bomb.” He dialed the switch. “Hear that? Our boy Norman is sawing wood.” He moved it again. “Private ‘Two-Gun’ is stilt stirring. We can’t let them sleep, once it starts, so we have to spy on them.”

“I suppose so.”

Withers came upstairs. “Anything more you need?’

“I guess not,” answered Reynolds. “How about the bomb mock-up?”

“Before morning.”

“How authentic is it?”

“Hard to say. Their agents probably rigged firing circuits from radio parts bought right here; the circuits could vary a lot. But the business part—well, we’re using real plutonium.

“Good. We’ll show it to them after breakfast.”

Two-Gun’s door opened. “Howdy, Colonel. Prof—it’s there.”

“What is?’

“The bomb. Under Seattle. I can feel it.”

“Where is it?”

“It’s down—it *feels* down. And it feels wet, somehow. Would they put it in the Sound?"

Hammond jumped up. "In the harbor—and shower the city with radioactive water!" He was ringing as he spoke. "Get me General Hanby!"

"Morrison *here,"* a voice answered. "What is it, Hammond?"

"The Seattle bomb—have them dredge for it. It's in the Sound, or somewhere under water."

"Eh? How do you know?"

"One of Reynolds' magicians. Do it!" He cut off.

Andrews said worriedly, "Prof, I can't *see* it—I'm not a 'seeing-eye.' Why don't you get one? Say that little Mrs. Brentano?"

"Oh, my God! Clairvoyants.—we need them, too." Withers said, "Eh, Doctor? Do you think—"

"No, I don't, or I would have thought of it. How do they search for bombs? What instruments?"

"Instruments? A bomb in its shielding doesn't even affect a Geiger counter. You have to open things and look."

"How long will that take? Say for New York!"

"Hammond said, "Shut up! Reynolds, where are these clairvoyants?"

Reynolds chewed his lip. "They're scarce."

"Scarcer than us dice rollers," added Two-Gun. "But get that Brentano kid. She found keys I had lost digging a ditch. Buried three feet deep—and me searching my quarters."

"Yes, yes, Mrs. Brentano." Reynolds pulled out a notebook. Hammond reached for the switchboard. "Morrison? Stand by for more names—and even more urgent than the others."

More urgent but harder to find; the Panic was on. The President urged everyone to keep cool and stay home, whereupon thirty million people stampeded. The ticker in the P.I.O. office typed the story: "NEW YORK NY—TO CLEAR JAM CAUSED BY WRECKS IN OUTBOUND TUBE THE INBOUND TUBE OF HOLLAND TUNNEL HAS BEEN REVERSED. POLICE HAVE STOPPED TRYING TO PREVENT EVACUATION. BULLDOZERS WORKING TO REOPEN TRIBOROUGH BRIDGE, BLADES SHOVING WRECKED CARS AND HUMAN HAMBURGER. WEEHAWKEN FERRY DISASTER

CONFIRMED: NO PASSENGER LIST YET—FLASH—GEORGE WASHINGTON BRIDGE GAVE WAY AT 0353 EST, WHETHER FROM OVERLOAD OR SABOTAGE NOT KNOWN. MORE MORE MORE—FLASH—

It was repeated everywhere. The Denver-Colorado Springs highway had one hundred thirty-five deaths by midnight, then reports stopped. A DC-7 at Burbank ploughed into a mob which had broken through the barrier. The Baltimore-Washington highway was clogged both ways; Memorial Bridge was out of service. The five outlets from Los Angeles were solid with creeping cars. At four A.M. EST the President declared martial law; the order had no immediate effect.

By morning Reynolds had thirtyone adepts assigned to twenty-four cities. He had a stomach-churning ordeal before deciding to let them work only cities known to them. The gambler, Even-Money Karsch, had settled it: “Doc, I know when I’m hot, Minneapolis *has* to be mine.” Reynolds gave in, even though one of his students had just arrived from there; he put them both on it and prayed that at least one would be “hot.” Two clairvoyants arrived; one, a blind news-dealer from Chicago, was put to searching there; the other, a carnie mentalist, was given the list and told to find bombs wherever she could. Mrs. Brentano had remarried and moved; Norfolk was being combed for her.

At one fifteen P.M., fortyfive minutes before deadline, they were in their rooms, each with maps and aerial views of his city, each with photos of the mocked-up bomb. The club was clear of residents; the few normals needed to coddle the paranormals kept careful quiet. Roads nearby were blocked; air traffic was warned away. Everything was turned toward providing an atmosphere in which forty-two people could sit still and *think*.

At the switchboard were Hammond, Reynolds, and Gordon McClintock, the President’s assistant. Reynolds glanced up. “What time is it?”

“One thirty-seven,” rasped Hammond. “Twentythree minutes.”

“One thirty-eight,” disagreed McClintock. “Reynolds, how about Detroit? You *can’t* leave it unguarded.”

“Whom can I use? Each is guarding the city he knows best.”

“Those twin girls—I heard them mention Detroit.”

“They’ve played everywhere. But Pittsburgh is their home.”

“Switch one of them to Detroit.”

Reynolds thought of telling him to go to Detroit himself. “They work together. You want to get them upset and lose both cities?”

Instead of answering McClintock said, “And who’s watching Cleveland?”

“Norman Johnson. He lives there and he’s our second strongest operator.”

They were interrupted by voices downstairs. A man came up, carrying a bag, and spotted Reynolds. “Oh, hello, Doctor. What is this? I’m on top priority work—tank production— when the F.B.I. grabs me. You are responsible?”

“Yes. Come with me.” McClintock started to speak, but Reynolds led the man away. “Mr. Nelson, did you bring your family?”

"No, they're still in Detroit. Had I known—"

"Please! Listen carefully." He explained, pointed out a map of Detroit in the room to which they went, showed him pictures of the simulated bomb, "You understand?"

Nelson's jaw muscles were jumping. "It seems impossible."

"It *is* possible. You've got to think about that bomb—or bombs. Get in touch, squeeze them, keep them from going off. You'll have to stay awake."

Nelson breathed gustily. "I'll stay awake."

"That phone will get you anything you want. Good luck." He passed the room occupied by the blind clairvoyant; the door was open. "Harry, it's Prof. Getting anything?"

The man turned to the voice. "It's in the Loop. I could walk to it if I were there. A six-story building."

"That's the best you can do?"

"Tell them to try the attic. I get warm when I go up."

"Right away!" He rushed back, saw that Hanby had arrived. Swiftly he keyed the communications office. "Reynolds speaking. The Chicago bomb is in a six-story building in the Loop area, probably in the attic. No—that's all. G'by!"

Hanby started to speak; Reynolds shook his head and looked at his watch. Silently the General picked up the phone. "This is the commanding officer. Have any flash sent here." He put the phone down and stared at his watch.

For fifteen endless minutes they stood silent. The General broke it by taking the phone and saying, "Hanby. Anything?"

"No, General. Washington is on the wire."

"Eh? You say Washington?"

"Yes, sir. Here's the General, Mr. Secretary."

Hanby sighed. "Hanby speaking, Mr. Secretary. You're all right? Washington . . . is all right?"

They could hear the relayed voice. "Certainly certainly.

We're past the deadline. But I wanted to tell you: Radio Moscow is telling the world that our cities are in flames."

Hanby hesitated. "None of them are?"

"Certainly not. I've a talker hooked in to GHQ, which has an open line to every city listed. All safe. I don't know whether your freak people did any good but, one way or another, it was a false—" The line went dead.

Hanby's face went dead with it. He jiggled the phone. "I've been cut off!"

"Not here, General—at the other end. Just a moment."

They waited. Presently the operator said, "Sorry, sir. I can't get them to answer."

"Keep trying!"

It was slightly over a. minute—it merely seemed longer—when the operator said, "Here's your party, sir."

"That you, Hanby?" came the voice. "I suppose we'll have phone trouble just as we had last time. Now, about these ESP people: while we are grateful and all that, nevertheless I suggest that nothing be released to the papers. Might be misinterpreted."

"Oh. Is that an order, Mr. Secretary?"

"Oh, no, no! But have such things routed through my office."

"Yes, sir." He cradled the phone.

McClintock said, "You shouldn't have rung off, General. I'd like to know whether the Chief wants this business continued."

"Suppose we talk about it on the way back to my office." The General urged him away, turned and gave Reynolds a solemn wink.

Trays were placed outside the doors at six o'clock; most of them sent for coffee during the evening. Mrs. Wilkins ordered tea; she kept her door open and chatted with anyone who passed. Harry the newsboy was searching Milwaukee; no answer had been received from his tip about Chicago. Mrs. Ekstein, or "Princess Cathay" as she was billed, had reported a "feeling" about a house trailer in Denver and was now poring over a map of New Orleans. With the passing of the deadline panic abated; communications were improving. The American people were telling each other that they had known that those damned commies were bluffing.

Hammond and Reynolds sent for more coffee at three A.M.; Reynolds' hand trembled as he poured. Hammond said, "You haven't slept for two nights. Get over on that divan."

"Neither have you."

"I'll sleep when you wake up."

"I *can't* sleep. I'm worrying about what'll happen when *they* get sleepy." He gestured at the line of doors.

"So am I."

At seven A.M. Two-Gun came out. "Prof, they got it. The bomb. It's gone. Like closing your hand on nothing."

Hammond grabbed the phone. "Get me Seattle—the F.B.I. office."

While they waited, Two-Gun said, "What now, Prof?"

Reynolds tried to think. "Maybe you should rest."

"Not until this is over. Who's got Toledo? I know that burg."

"Uh...young Barnes."

Hammond was connected; he identified himself, asked the question. He put the phone down gently. "They *did* get it," he whispered. "It was in the lake."

"I told you it was wet," agreed Two-Gun. "Now, about Toledo—"

"Well . . . tell me when you've got it and we'll let Barnes rest."

McClintock rushed in at seven thirty-five, followed by Hanby. "Doctor Reynolds! Colonel Hammond!"

"Sh! Quiet! You'll disturb them."

McClintock said in a lower voice, "Yes, surely—I was excited. This is important. They located a bomb in Seattle and—"

"Yes. Private Andrews told us."

"Huh? How did *he* know?'

"Never mind," Hanby intervened. "The point is, they found the bomb already triggered. Now we *know* that your people are protecting the cities."

"Was there any doubt?'

"Well. . . yes."

"But there isn't now," McClintock added.' "I must take over." He bent over the board. "Communications? Put that White House line through here."

"Just what," Reynolds said slowly, "do you mean by 'take over'?"

"Eh? Why, take charge on behalf of the President. Make sure these people don't let down an instant!"

"But what do you propose to *do?"*

Hanby said hastily, "Nothing, Doctor. We'll just keep in touch with Washington from here."

They continued the vigil together; Reynolds spent the time hating McClintock's guts. He started to take coffee, then decided on another benzedrine tablet instead. He hoped his people were taking enough of it—and not too much. They all had it, except Grandma Wilkins, who wouldn't touch it. He wanted to check with them but knew that he could not—each bomb was bound only by a thread of thought; a split-split second of diversion might be enough.

The outside light flashed; Hanby took the call. "Congress has recessed," he announced, "and the President is handing the Soviet Union a counter ultimatum; locate and disarm any bombs or be bombed in return." The light flashed again; Hanby answered. His face lit up. "Two more found," he told them. "One in Chicago, right where your man said; the other in Camden."

"Camden? How?"

"They rounded up the known Communists, of course. This laddie was brought back there for questioning. He didn't like that; .he knew that he was being held less than a mile from the bomb. Who is on Camden?"

"Mr. Dimwiddy."

"The elderly man with the bunions?"

"That's right—retired postman. General, do we assume that there is only one bomb per city?"

McClintock answered, “Of course not! These people must—”

Hanby cut in, “Central Intelligence is assuming so, except for New York and Washington. If they had more bombs here, they would have added more cities.”

Reynolds left to take Dimwiddy off watch. McClintock, he fumed, did not realize that people were flesh and blood.

Dimwiddy was unsurprised. “A while ago the pressure let up, then —well, I’m afraid I dozed. I had a terrible feeling that I had let it go off, then I knew it hadn’t.”

Reynolds told him to rest, then be ready to help out elsewhere. They settled on Philadelphia; Dimwiddy had once lived there.

The watch continued. Mrs. Ekitein came up with three hits, but no answers came back; Reynolds still had to keep those cities covered. She then complained that her “sight” had gone; Reynolds went to her room and told her to nap, not wishing to consult McClintock.

Luncheon trays came and went. Reynolds continued worrying over how to arrange his operators to let them rest. Forty-three people and thirty-five, cities—if only he had two for every city! Maybe any of them could watch any city? No, he could not chance it.

Barnes woke up and took back Toledo; that left Two-Gun free. Should he let him take Cleveland? Norman had had no relief and Two-Gun had once been through it, on a train. The colored boy was amazing but rather hysterical, whereas Two-Gun-—well, Reynolds felt that Two-Gun would last, even through a week of no sleep.

No! He couldn’t trust Cleveland to a man who had merely passed through it. But with Dimwiddy on Philadelphia, when Mary Gifford woke he could put her on Houston and that would let Hank sleep before shifting him to Indianapolis and that would let him— A chess game, with all pawns queens and no mistakes allowed.

McClintock was twiddling the selector switch, listening in. Suddenly he snapped, “Someone is asleep!”

Reynolds checked the number.

“Of course, that’s the twins’ room; they take turns. You may hear snores in 21 and 30 and 8 and 19. It’s okay; they’re off watch.”

“Well, all right.” McCllntock seemed annoyed. Reynolds bent back to his list. Shortly McClintock snorted, “Who’s in room 12?”

“Uh? Wait—that’s Norman Johnson, Cleveland.”

“You mean he’s on watch?”

“Yes.” ‘Reynolds could hear the boy’s asthmatic breathing, felt relieved.

“He’s asleep!”

“‘No, he’s not.”

But McClintock was rushing down the corridor. Reynolds took after him; Hammond and Hanby followed. Reynolds caught up as McClintock burst into room 12. Norman was sprawled in a chair, eyes closed in his habitual attitude.

McClintock rushed up, slapped him. “Wake up!” Reynolds grabbed McClintock. “You bloody fool!” Norman opened his eyes, then burst into tears. “It’s *gone!”*

“Steady, Norman. It’s all right.”

“No, no! It’s gone—and my mammy’s gone with it!”

McClintock snapped, “Concentrate, boy! Get back on it!”

Reynolds turned on him. “Get out. Get out before I punch you.”

Hanby and Hammond were in the door; the General cut in with a hoarse whisper, “Pipe down, Doctor, bring the boy.”

Back at the board the outside light was flashing. Hanby took the call while Reynolds tried to quiet the boy. Hanby ‘listened gravely, then said, “He’s right. Cleveland just got it.”

McCllntock snapped, “He went to sleep. He ought to be shot.”

“Shut up,” said Hanby.

“But—”

Reynolds said, “any others, General?”

“Why would there be?”

“All this racket. It may have disturbed a dozen of them.”

“Oh, we’ll see.” He called Washington again. Presently he sighed. “No, just Cleveland. We were lucky.”

“General,” McClintock insisted, “he was asleep.”

Hanby looked at him. “Sir, you may be the President’s deputy but you yourself have no military authority. Off my post.”

“But I am directed by the President to—”

“Off my post, sir! Go back to Washington. *Or to Cleveland.* McClintock looked dumbfounded. Hanby added, “You’re worse than bad—you’re a fool.”

“The President will hear of this.”

“Blunder again and the President won’t live that long. Get out.”

By nightfall the situation was rapidly getting worse.

Twenty-seven cities were still threatened and Reynolds was losing operators faster than bombs were being found. Even-Money Karsch would not relieve when awakened. “See that?” he said, rolling dice. “Cold as a well-digger’s feet. I’m through.” After that Reynolds tested each one who was about to relieve, found that some were tired beyond the power of short sleep to restore them—they were “cold.”

By midnight there were eighteen operators for nineteen cities. The twins had fearfully split up; it had worked.

Mrs. Wilkins was holding both Washington and Baltimore; she had taken Baltimore when he had no one to relieve there.

But now he had no one for relief anywhere and three operators—

Nelson, Two-Gun and Grandma Wilkins—had had no rest. He was too fagged to worry; he simply knew that whenever one of them reached his limit, the United States would lose a city. The panic had resumed after the bombing of Cleveland; roads again were choked. The disorder made harder the search for bombs. But there was nothing he could do.

Mrs. Ekstein still complained about her sight but kept at it. Harry the newsboy had had no luck with Milwaukee, but there was no use shifting him; other cities were "dark" to him. During the night Mrs. Ekstein pointed to the bomb in Houston. It was, she said, in a box underground. A coffin? Yes, there was a headstone; she was unable to read the name.

Thus, many recent dead in Houston were disturbed. But it was nine Sunday morning before Reynolds went to tell Mary Gifford that she could rest—or relieve for Wilmington, if she felt up to it. He found her collapsed and lifted her onto the bed, wondering if she had known the Houston bomb was found.

Eleven cities now and eight people. Grandma Wilkins held four cities. No one else had been able to double up. Reynolds thought dully that it was a miracle that they had been able to last at all; it surpassed enormously the best test performance.

Hammond looked up as he returned. "Make any changes?"

"No. The Gifford kid is through. We'll lose half a dozen cities before this is over."

"Some of them must be damn near empty by now."

"I hope so. Any more bombs found?"

"Not yet. How do you feel, Doc?"

"Three weeks dead." Reynolds sat down wearily. He was wondering if he should wake some of those sleeping and test them again when he heard a noise below; he went to the stairwell. Up came an M.P. captain. "They said to bring her here." Reynolds looked at the woman with him. "Dorothy Brentano!"

"Dorothy Smith now."

He controlled his trembling and explained what was required. She nodded. "I figured that out on the plane. Got a pencil? Take this: St. Louis—a river warehouse with a sign reading 'Bartlett & Sons, Jobbers.' Look in the loft. And Houston—no, they got that one. Baltimore—it's in a ship at the docks, the S.S. *Gold Coast.* What other cities? I've wasted time feeling around where there was nothing to find."

Reynolds was already shouting for Washington to answer.

Grandma Wilkins was last to be relieved; Dorothy located one in the Potomac—and Mrs. Wilkins told her sharply to keep trying. There were four bombs in Washington, which Mrs. Wilkins had known all along. Dorothy found them in eleven minutes.

Three hours later Reynolds showed up in the club messroom, not having been able to sleep. Several of his people were eating and listening to the radio blast about our raid on Russia. He gave it a wide berth; they could blast Omsk and Tomsk and Minsk and Pinsk; today he didn't care. He was sipping milk and thinking that he would never drink coffee again when Captain Mikeler bent over his table.

"The General wants you. Hurry!"

"Why?"

"I said, 'Hurry!' Where's Grandma Wilkins—oh I see her. Who is Mrs. Dorothy Smith?"

Reynolds looked around. "She's with Mrs. Wilkins."

Mikeler rushed them to Hanby's office. Hanby merely said, "Sit over there. And you ladies, too. Stay in focus."

Reynolds found himself looking into a television screen at the President of the United States. He looked as weary as Reynolds felt, but he turned on his smile. "You are Doctor Reynolds?"

"Yes, Mr. President!"

"These ladies are Mrs. Wilkins and Mrs. Smith?"

"Yes, sir."

The President said quietly, "You three and your colleagues will be thanked by the Republic. And by me, for myself. But that must wait. Mrs. Smith, there are more bombs—in Russia. Could your strange gift find them there?"

"Why, I don't—I can try!"

"Mrs. Wilkins, could you set off those Russian bombs while they are still far away?"

Incredibly, she was still bright-eyed and chipper. "Why, Mr. President!"

"Can you?"

She got a faraway look. "Dorothy and I had better have a quiet room somewhere. And I'd like a pot of tea. A large pot."

Sky Lift

"All torch pilots! Report to the Commodore!" The call echoed through Earth Satellite Station.

Joe Appleby flipped off the shower to listen. "You don't mean me," he said happily, "I'm on leave—but I'd better shove before you change your mind."

He dressed and hurried along a passageway. He was in the outer ring of the Station; its slow revolution, a giant wheel in the sky, produced gravity-like force against his feet. As he reached his room the loudspeakers repeated, “All torch pilots, report to the Commodore,” then added, “Lieutenant Appleby, report to the Commodore.” Appleby uttered a rude monosyllable.

The Commodore’s office was crowded. All present wore the torch, except a *flight* surgeon and Commodore Berrio himself, who wore the jets of a rocketship pilot. Berrio glanced up and went on talking: “—the situation. If we are to save Proserpina Station, an emergency run must be made out to Pluto. Any questions?”

No one spoke. Appleby wanted to, but did not wish to remind Berrio that he had been late. “Very well,” Berrio went on. “Gentlemen, it’s a job for torch pilots. I must ask for volunteers.”

Good! thought Appleby. Let the eager lads volunteer and then adjourn. He decided that he might still catch the next shuttle to Earth. The Commodore continued, “Volunteers please remain. The rest are dismissed.”

Excellent, Appleby decided. Don’t rush for the door, me lad. Be dignified—sneak out between two taller men.

No one left. Joe Appleby felt swindled but lacked the nerve to start the exodus. The Commodore said soberly, “Thank you, gentlemen. Will you wait in the wardroom, please?” Muttering, Appleby left with the crowd. He wanted to go out to Pluto someday—sure!—but not now, not with Earthside leave papers in his pocket.

He held a torcher’s contempt for the vast distance itself. Older pilots thought of interplanetary trips with a rocket-man’s bias, in terms of years—trips that a torch ship with steady acceleration covered in days. By the orbits that a rocketship must use the round trip to Jupiter takes over five years; Saturn is twice as far, Uranus twice again, Neptune still farther. No rocketship ever attempted Pluto; a round trip would take more than ninety years. But torch ships had won a foothold even there: Proserpina Station—cryology laboratory, cosmic radiation station, parallax observatory, physics laboratory, all in one quintuple dome against the unspeakable cold.

Nearly four billion miles from Proserpina Station Appleby followed a classmate into the wardroom. “Hey, Jerry,” he said, “tell me what it is I seem to have volunteered for?”

Jerry Price looked around. “Oh, it’s late Joe Appleby. Okay, buy me a drink.”

A radiogram had come from Proserpina, Jerry told him, reporting an epidemic: “Larkin’s disease.” Appleby whistled. Larkin’s disease was a mutated virus, possibly of Martian origin; a victim’s red-cell count fell rapidly, soon he was dead. The only treatment was massive transfusions while the disease ran its course. “So, m’boy, somebody has to trot out to Pluto with a blood bank.”

Appleby frowned. “My pappy warned me. ‘Joe,’ he said, ‘keep your mouth shut and never volunteer.’”

Jerry grinned. “We didn’t exactly volunteer.”

“How long is the boost? Eighteen days or so? I’ve got social obligations Earthside.”

“Eighteen days at one-g—but this will be higher. They are running out of blood donors.”

“How high? A *g-and-a-half?”* Price shook his head. “I’d guess two gravities.”

“Two g’s!”

“What’s hard about that? Men have lived through a lot more.”

“Sure, for a short pullout—not for days on end. Two g’s strains your heart if you stand up.”

“Don’t moan, they won’t pick you—I’m more the hero type. While you’re on leave, think of me out in those lonely wastes, a grim-jawed angel of mercy. Buy me another drink.”

Appleby decided that Jerry was right; with only two pilots needed he stood a good chance of catching the next Earth shuttle. He got out his little black book and was picking phone numbers when a messenger arrived. “Lieutenant Appleby, sir?” Joe admitted it.

“The-Commodore’s-compliments-and-will-you-report-at-once-sir?”

“On my way.” Joe caught Jerry’s eye. “Who is what type?”

Jerry said, “Shall I take care of your social obligations?”

“Not likely!”

“I was afraid not. Good luck, boy.”

With Commodore Berrio was the flight surgeon and an older lieutenant. Berrio said, “Sit down, Appleby. You know Lieutenant Kleuger? He’s your skipper. You will be copilot.”

“Very good, sir.”

“Appleby, Mr. Kleuger is the most experienced torch pilot available. You were picked because medical records show you have exceptional tolerance for acceleration. This is a high-boost trip.’”

“How high, sir?”

Berrio hesitated. “Three and one-half gravities.” Three and a half g’s! That wasn’t a boost—that was a pullout. Joe heard the surgeon protest, “I’m sorry, sir, but three gravities is all I can approve.”

Berrio frowned. “Legally, it’s up to the captain. But three hundred lives depend on it.”

Kleuger said, “Doctor, let’s see that curve.” The surgeon slid a paper across the desk; Kleuger moved it so that Joe could see it. “Here’s the scoop, Appleby—”

A curve started high, dropped very slowly, made a sudden “knee” and dropped rapidly. The surgeon put his finger on the “knee.” “Here,” he said soberly, “is where the donors are suffering from loss of blood as much as the patients. After that it's hopeless, without a new source of blood."

"How did you get this curve?" Joe asked.

"It's the empirical equation of Larkin's disease applied to two hundred eighty-nine people."

Appleby noted vertical lines each marked with an acceleration and a time. Far to the right was one marked: "1 g— 18 days" That was the standard trip; it would arrive after the epidemic had burned out. Two gravities cut it to twelve days seventeen hours; even so, half the colony would be dead. Three g's was better but still bad. He could see why the Commodore wanted them to risk three-and-a-half kicks; that line touched the "knee," at nine days fifteen hours. That way they could save almost everybody, but, oh, brother!

The time advantage dropped off by inverse squares. Eighteen days required one gravity, so nine days took four, 'while four-and-a-half days required a fantastic sixteen gravities. But someone had drawn a line at "16 g—4.5 days." "Hey! This plot must be for a robot-torch—that's the ticket! Is there one available?"

Berrio said gently, "Yes. But what are its chances?"

Joe shut up. Even between the inner planets robots often went astray. In four-billion-odd miles the chance that one could hit close enough to be caught by radio control was slim. "We'll try," Berrio promised. "If it succeeds, I'll call you at once." He looked at Kleuger. "Captain, time is short. I must have your decision."

Kleuger turned to the surgeon. "Doctor, why not another half gravity? I recall a report on a chimpanzee who was centrifuged at high g for an amazingly long time."

"A chimpanzee is not a man."

Joe blurted out, "How much did this chimp stand, Surgeon?"

"Three and a quarter gravities for twenty-seven days."

"He *did?* What shape was he in when the test ended?"

"He wasn't," the doctor grunted.

Kleuger looked at the graph, glanced at Joe, then said to the Commodore, "The boost will be at three and one-half gravities, sir."

Berrio merely said, "Very well, sir. Hurry over to sick bay. You haven't much time."

Forty-seven minutes later they were being packed into the scout torchship *Salamander.* She was in orbit close by; Joe, Kleuger, and their handlers came by tube linking the hub of the Station to her airlock Joe was weak and dopy from a thorough washing-out plus a dozen treatments and injections. A good thing, he thought, that light-off would be automatic.

The ship was built for high boost; controls were over the pilots' tanks, where they could be fingered without lifting a hand. The flight surgeon and an assistant fitted Kleuger into one tank while two medical technicians arranged Joe in his. One of them asked, "Underwear smooth? No wrinkles?"

"I guess."

"I'll check." He did so, then arranged fittings necessary to a man who must remain in one position for days. "The nipple left of your mouth is water; the two on your right are glucose and bouillon."

"No solids?"

The surgeon turned in the air and answered, "You don't need any, you won't want any, and you mustn't have any. And be careful in swallowing."

"I've boosted before."

"Sure, sure. But be careful."

Each tank was like an oversized bathtub filled with a liquid denser than water. The top was covered by a rubbery sheet, gasketed at the edges; during boost each man would float with the sheet conforming to his body. The *Salamander* being still in free orbit, everything was weightless and the sheet now served to keep the fluid from floating out. The attendants centered Appleby against the sheet and fastened him with sticky tape, then placed his own acceleration collar, tailored to him, behind his head. The surgeon came over and inspected. "You okay?"

"Sure."

"Mind that swallowing." He added, "Okay, Captain. Permission to leave your ship, sir?"

"Certainly. Thank you, Surgeon."

"Good luck." He left with the technicians.

The room had no ports and needed none. The area in front of Joe's face was filled with screens, instruments, radar, and data displays; near his forehead was his eyepiece for the coelostat. A light blinked green as the passenger tube broke its anchors; Kleuger caught Joe's eye in a mirror mounted opposite them. "Report, Mister."

"Minus seven' minutes oh four. Tracking. Torch warm and idle. Green for light-off."

"Stand by while I check orientation." Kleuger's eyes disappeared into his coelostat eyepiece. Presently he said, "Check me, Joe."

"Aye aye, sir." Joe twisted a knob and his eyepiece swung down. He found three star images brought together perfectly in the cross hairs. "Couldn't be better, Skipper."

"Ask for clearance."

"Salamander to Control—clearance requested to Proserpina. Automatic light-off on tape. All green."

"Control to Salamander. You are cleared. Good luck!"

"Cleared, Skipper. Minus three. *Double oh!"* Joe thought morosely that he should be half way to Earth now. Why the hell did the military always get stuck with these succor-&-rescue jobs?

When the counter flashed the last thirty seconds he forgot his foregone leave. The lust to travel possessed him. To go, no matter where, anywhere go! He smiled as the torch lit off.

Then weight hit him.

At three and one-half gravities he weighed six hundred and thirty pounds. It felt as if a load of sand had landed on him, squeezing his chest, making him helpless, forcing his head against his collar. He strove to relax, to let the supporting liquid hold him together. It was all right to tighten up for a pullout, but for a long boost one must relax. He breathed shallowly and slowly; the air was pure oxygen, little lung action was needed. But he labored just to breathe. He could feel his heart struggling to pump blood grown heavy through squeezed vessels. This is awful! he admitted. I'm not sure I can take it. He had once had four g for nine minutes but he had forgotten how bad it was.

"Joe! *Joe!*"

He opened his eyes and tried to shake his head. "Yes, Skipper." He looked for Kleuger in the mirror; the pilot's face was sagging and drawn, pulled into the mirthless grin of high acceleration.

"Check orientation!"

Joe let his arms float as he worked controls with leaden fingers. "Dead on, Skipper."

"Very well. Call Luna."

Earth Station was blanketed by their torch but the Moon was on their bow. Appleby called Luna tracking center and received their data on the departure plus data relayed from Earth Station. He called figures and times to Kleuger, who fed them into the computer. Joe then found that he had forgotten, while working, his unbearable weight. It felt worse than ever. His neck ached and he suspected that there was a wrinkle under his left calf. He wiggled in the tank to smooth it, but it made it worse. "How's she look, Skipper?"

"Okay. You're relieved, Joe. I'll take first watch."

"Right, Skipper." He tried to rest—as if a man could when buried under sandbags. His bones ached and the wrinkle became a nagging nuisance. The pain in his neck got worse; apparently he had wrenched it at light-off. He turned his head, but there were just two positions—bad and worse. Closing his eyes, he attempted to sleep. Ten minutes later he was wider awake than ever, his mind on three things, the lump in his neck, the irritation under his leg, and the squeezing weight.

Look, bud, he told himself, this is a long boost. Take it easy, or adrenalin exhaustion will get you. As the book says, *"The ideal pilot is relaxed and unworried. Sanguine in temperament, he never borrows* *trouble."* Why, you chairwarming so-and-so! Were *you* at three and a half g's when you wrote that twaddle?

Cut it out, boy! He turned his mind to his favorite subject—girls, bless their hearts. Such self-hypnosis he had used to pass many a lonely million miles. Presently he realized wryly that his phantom harem had failed him. He could not conjure them up, so he banished them and spent his time being miserable.

He awoke in a sweat. His last dream had been a nightmare that he was headed out to Pluto at an impossibly high boost.

My God! So he was!

The pressure seemed worse. When he moved his head there was a stabbing pain down his side. He was panting and sweat was pouring off. It ran into his eyes; he tried to wipe them, found that his arm did not respond and that his fingertips were numb. He inched his arm across his body and dabbed at his eyes; it did not help.

He stared at the elapsed time dial of the integrating ancelerograph and tried to remember when he was due on watch. It took a while to understand that six and a half hours had passed since light-off. He then realized with a jerk that it was long past time to relieve the watch. Kleuger's face in the mirror was still split in the grin of high g; his eyes were closed. "Skipper!" Joe shouted. Kleuger did not stir. Joe felt for the alarm button, thought better of it. Let the poor goop sleep!

But somebody had to feed the hogs—better get the clouds out of his brain. The accelerometer showed three and a half exactly; the torch dials were all in operating range; the radiometer showed leakage less than ten percent of danger level.

The integrating accelerograph displayed elapsed time, velocity, and distance, in deadreckoning for empty space. Under these windows were three more which showed the same by the precomputed tape controlling the torch; by comparing, Joe could tell how results matched predictions. The torch had been lit off for less than seven hours, speed was nearly two million miles per hour and they were over six million miles out. A third display corrected these figures for the Sun's field, but Joe ignored this; near Earth's orbit the Sun pulls only one two-thousandth of a gravity—a gnat's whisker, allowed for in precomputation. Joe merely noted that tape and D.R. agreed; he wanted an outside check.

Both Earth and Moon now being blanketed by the same cone of disturbance, he. twisted knobs until their radar beacon beamed toward Mars and let it pulse the signal meaning "Where am I?" He did not wait for answer; Mars was eighteen minutes away by radio. He turned instead to the coelostat. The triple image had wandered slightly but the error was too small to correct.

He dictated what he had done into the log, whereupon he felt worse. His ribs hurt, each breath carried the stab of pleurisy. His hands and feet felt "pins-and-needles" from scanty circulation. He wiggled them, which produced crawling sensations and wearied him. So he held still and watched the speed soar. It increased seventy-seven miles per hour every second, more than a quarter million miles per hour every hour. For once he envied rocketship pilots; they took forever to get anywhere but they got there in comfort.

Without the torch, men would never have ventured much past Mars. E = Mc2, mass is energy, and a pound of sand equals fifteen billion horsepower-hours. An atomic rocketship uses but a fraction of one percent of that energy, whereas the new torchers used better than eighty percent. The conversion chamber of a torch was a tiny sun; particles expelled from it approached the speed of light.

Appleby was proud to be a torcher, but not at the moment. The crick had grown into a splitting headache, he wanted to bend his knees and could not, and he was nauseated from the load on his stomach. Kleuger seemed able to sleep through it, damn his eyes! How did they expect a man to *stand* this? Only eight hours and already he felt done in, bushed—how could he last nine days?

Later—time was beginning to be uncertain—some indefinite time later he heard his name called. "Joe! *Joe!"*

Couldn't a man die in peace? His eyes wandered around, found the mirror; he struggled to focus. "Joe! You've got to relieve me—I'm groggy."

"Aye aye, sir."

"Make a check, Joe. I'm too goofed up to do it."

"I already did, sir."

"Huh? When?"

Joe's eyes swam around to the elapsed-time dial. He closed one eye to read it. "Uh, about six hours ago."

"What? *What time is it?"*

Joe didn't answer. He wished peevishly that Kleuger would go away. Kleuger added soberly, "I must have blacked out, kid. What's the situation?" Presently he insisted, "Answer me, Mister."

"Huh? Oh, we're all right—down the groove. Skipper, is my left leg twisted? I can't see it."

"Eh? Oh, never mind your leg! What were the figures?"

"What figures?"

"'What figures?' Snap out of it, Mister! You're on duty."

A fine one to talk, Joe thought fretfully. If that's how he's going to act, I'll just close my eyes and ignore him.

Kleuger repeated, "The figures, Mister."

"Huh? Oh, play 'em off the log if you're so damned eager!" He expected a blast at that, but none came. When next he opened his eyes

Kleuger's eyes were closed. He couldn't recall whether the Skipper had played his figures back or not—nor whether he had logged them. He decided that it was time for another check but he was dreadfully thirsty; he needed a drink first. He drank carefully but still got a drop down his windpipe. A coughing spasm hurt him all over and left him so weak that he had to rest.

He pulled himself together and scanned the dials. Twelve hours and— No, wait a minute! One *day* and twelve hours—that *couldn't* be right. But their speed was over ten million miles per hour and their distance more than ninety million miles from Earth;, they were beyond the orbit of Mars. "Skipper! Hey! Lieutenant Kleuger!"

Kleuger's face was a grinning mask. In dull panic Joe tried to find their situation. The coelostat showed them balanced; either the ship had wobbled back, or Kleuger had corrected it. Or had he himself? He decided to run over the log and see. Fumbling among buttons he found the one to rewind the log.

Since he didn't remember to stop it the wire ran all the way back to light-off, then played back, zipping through silent stretches and slowing for speech. He listened to his record of the first check, then found that Phobos Station, Mars, had answered with a favorable report—to which a voice added, *"Where's the fire?"*

Yes, Kleuger had corrected balance hours earlier. The wire hurried through a blank spot, slowed again—Kleuger had dictated a letter to someone; it was unfinished and incoherent. Once Kleuger had stopped to shout, *"Joe! Joe!"* and Joe heard himself answer, *"Oh shut up!"* He had no memory of it.

There was something he should do but he was too tired to think and he hurt all over—except his legs, he couldn't feel them. He shut his eyes and tried not to think. When he opened them the elapsed time was turning three days; he closed them and leaked tears.

A bell rang endlessly; he became aware that it was the general alarm, but he felt no interest other than a need to stop it. It was hard to find the switch, his fingers were numb. But he managed it and was about to rest from the effort, when he heard Kleuger call him. "Joe!"

"Huh?"

"Joe—don't go back to sleep or I'll turn the alarm on again. You hear me?"

"Yeah—" So Kleuger had done that—why, damn him!

"Joe, I've got to talk to you. I can't stand any more."

"'Any more what?"

"High boost. I can't take any more—it's killing me."

"Oh, rats!" Turn on that loud bell, would he?

"I'm dying, Joe. I can't see—my eyes are shot. Joe, I've got to shut down the boost. I've got to."

"Well, what's stopping you?" Joe answered irritably.

"Don't you see, Joe? You've got to back me up. We tried-and we couldn't. We'll both log it. Then it'll be all right."

"Log what?"

"Eh? Dammit, Joe, pay attention. I can't talk much. You've got to say—to say that the strain became unendurable and you advised me to shut down. I'll confirm it and it will be all right." His labored whisper was barely audible.

Joe couldn't figure out what Kleuger meant. He couldn't remember why Kleuger had put them in high boost anyhow. *"Hurry,* Joe."

There he went, nagging him! Wake him up and then nag him—to hell with him. "Oh, go back to sleep!" He dozed off and was again jerked awake by the alarm. This time he knew where the switch was and flipped it quickly. Kleuger switched it on again, Joe turned it off. Kleuger quit trying and Joe passed out.

He came awake in free fall. He was still realizing the ecstasy of being weightless when he managed to reorient; he was in the *Salamander,* headed for Pluto. Had they reached the end of the run? No, the dial said four days and some hours. Had the tape broken? The autopilot gone haywire? He then recalled the last time he had been awake.

Kleuger had shut off the torch!

The stretched grin was gone from Kleuger's face, the features seemed slack and old. Joe called out, "Captain! Captain Kleuger!" Kleuger's eyes fluttered and lips moved but Joe heard nothing. He slithered out of the tank, moved in front of Kleuger, floated there. "Captain, can you hear me?"

The lips whispered, "I had to, boy. I saved us. Can you get us back, Joe?" His eyes opened but did not track.

"Captain, listen to me. I've got to light off again."

"Huh? No, Joe, no!"

"I've got to."

"No! That's an order, Mister."

Appleby stared, then with a judo chop caught the sick man on the jaw. Kleuger's head bobbed loosely. Joe pulled himself between the tanks, located a three-position switch, turned it from "Pilot & CoPilot" to "CoPilot Only"; Kleuger's controls were now dead. He glanced at Kleuger, saw that his head was not square in his collar, so he taped him properly into place, then got back in his tank. He settled his head and fumbled for the switch that would put the autopilot back on tape. There was some reason why they must finish this run—but for, the life of him he could not remember why. He squeezed the switch and, weight pinned him down.

He was awakened by a dizzy feeling added to the pressure. It went on for seconds, he retched futilely. When the motion stopped he peered at the dials. The *Salamander* had just completed the somersault from acceleration to deceleration. They had come half way, about, eighteen hundred million miles; their speed was over three million miles per hour and beginning to drop. Joe felt that he should report it to the skipper—he had no recollection of any trouble with him. "Skipper! Hey!" Kleuger did not move. Joe called again, then resorted to the alarm.

The clangor woke, not Kleuger, but Joe's memory. He shut it off, feeling soul sick. Topping his physical misery was shame and loss and panic as he recalled the shabby facts. He felt that he ought to log it but could not decide what to say. Beaten and ever lower in mind he gave up and tried to rest.

He woke later with something gnawing at his mind…something he should do for the Captain…something about a cargo robot—

That was it! If the robot-torch had reached Pluto, they could quit! Let's see—elapsed-time from light-off was over five days. Yes, if it ever got there, then— He ran the wire back, listened for a recorded message. It was there: *"Earth Station to Salamander—Extremely sorry to report that robot failed rendezvous. We are depending on you.—Berrio."*

Tears of weakness and disappointment sped down his cheeks, pulled along by three and one-half gravities.

It was on the eighth day that Joe realized that Kleuger was dead. It was not the stench—he was unable to tell that from his own ripe body odors. Nor was it that the Captain had not roused since flip-over; Joe's time sense was so fogged that he did not realize this. But he had dreamt that Kleuger was shouting for him to get up, to stand up —"Hurry up, Joe!" But the weight pressed him down.

So sharp was the dream that Joe tried to answer after he woke up. Then he looked for Kleuger in the mirror. Kleuger's face was much the same, but he knew with sick horror that the captain was dead. Nevertheless he tried to arouse him with the alarm. Presently he gave up; his fingers were purple and he could feel nothing below his waist; he wondered if be were dying and hoped that he was. He slipped into that lethargy which had become his normal state.

He did not become conscious when, after more than nine days, the autopilot quenched the torch. Awareness found him floating in midroom, having somehow squirmed out of his station. He felt deliciously lazy and quite hungry; the latter eventually brought him awake.

His surroundings put past events somewhat into place. He pulled himself to hii tank and examined the dials. Good grief!—it had been two hours since the ship had gone into free fall. The plan called for approach to be computed before the tape ran out, corrected on entering free fall, a new tape cut and fed in without delay, then let the autopilot make the approach. He had done nothing and wasted two hours.

He slid between tank and controls, discovering then that his legs were paralyzed. No matter—legs weren't needed in free fall, nor in the tank. His hands did not behave well, but he could use them. He was stunned when he found Kleuger's body, but steadied down and got to work. He had no idea where he was; Pluto might be millions of miles away, or almost in his lap—perhaps they had spotted him and were already sending approach data. He decided to check the wire.

He found their messages at once:

"Proserpina to Salamander—Thank God you are coming. Here are your elements at quench out—": followed by time reference, range-and-bearing figures, and doppler data.

And again: *"Here are later and better figures, Salamander—hurry!"*

And finally, only a few minutes 'before: *"Salamander, why the delay in light-off? Is your computer broken down? Shall we compute a ballistic for you?"*

The idea that anyone but a torcher could work a torch ballistic did not sink in. He tried to work fast, but his hands bothered him—he punched wrong numbers and had to correct them. It took him a half hour to realize that the trouble was not just his fingers. Ballistics, a subject as easy for him as checkers, was confused in his mind.

He could not work the ballistic.

"Salamander to Proserpino—Request ballistic for approach into parking orbit around Pluto."

The answer came so quickly that he knew that they had not waited for his okay. With ponderous care he cut the tape and fed it into the autopilot. It was then that he noticed the boost. . . four point oh three.

Four gravities for the approach— He had assumed that the approach would be a normal one—and so it might have been if he had not wasted three hours. But it wasn't fair! It was too much to expect. He cursed childishly as he settled himself, fitted the collar, and squeezed the button that turned control to the autopilot. He had a few minutes of waiting time; he spent it muttering peevishly. They could have figured him *a* better ballistic—hell, he should have figured it. They were always pushing him around. Good old Joe, anybody's punching bag! That so-and-so Kleuger over there, grinning like a fool and leaving the work for him—if Kleuger hadn't been so confounded eager— Acceleration hit him and he blacked out.

When the shuttle came up to meet him, they found one man dead, one nearly dead, and the cargo of whole blood.

The supply ship brought pilots for the *Salamander* and fetched

Appleby home. He stayed in sick bay until ordered to Luna for treatment; on being detached he reported to Berrio, escorted by the flight surgeon. The Commodore let him know brusquely that he had done a fine job, a damn' fine job! The interview ended and the surgeon helped Joe to stand; instead of leaving Joe said, "Uh, Commodore?"

"Yes, son?"

"Oh, there's one thing I don't understand, uh, what I don't understand is, uh, this: why do I have to go, uh, to the geriatrics clinic at Luna City? That's for old people, uh? That's what I've always understood—the way I understand it. Sir?"

The surgeon cut in, "I told you, Joe. They have the very best physiotherapy. We got special permission for you."

Joe looked perplexed. "Is that right, sir? I feel funny, going to an old folks', uh, hospital?"

"That's right, son."

Joe grinned sheepishly. "Okay, sir, uh, if you say so."

They started to leave. "Doctor—stay a moment. Messenger, help Mr. Appleby."

"Joe, can you make it?"

"Uh, sure! My legs are lots better—see?" He went out, leaning on the messenger.

Berrio said, "Doctor, tell me straight: will Joe get well?"

"No, sir."

"Will he get better?'

"Some, perhaps. Lunar gravity makes it easy to get the most out of what a man has left."

"But will his mind clear up?"

The doctor hesitated. "It's this way, sir. Heavy acceleration is a speeded-up aging process. Tissues break down, capillaries rupture, the heart does many times its proper work. And there is hypoxia, from failure to deliver enough oxygen to the brain."

The Commodore struck his desk an angry blow. The surgeon said gently, "Don't take it so hard, sir."

"Damn it, man—think of the way he was. Just a kid, all bounce and vinegar—now look at him! He's an old man-senile."

"Look at it this way," urged the surgeon, "you expended one man, but you saved two hundred and seventy."

"'Expended one man'? If you mean Kleuger, he gets a medal and his wife gets a pension. That's the best, any of us can expect. I wasn't thinking of Kleuger."

"Neither was I," answered the surgeon.

The Menace from Earth

My name is Holly Jones and I'm fifteen. I'm very intelligent but it doesn't show, because I look like an underdone angel. Insipid.

I was born right here in Luna City, which seems to surprise Earthside types. Actually, I'm third generation; my grandparents pioneered in Site One, where the Memorial is. I live with my parents in Artemis Apartments, the new co-op in Pressure Five, eight hundred feet down near City Hall. But I'm not there much; I'm too busy.

Mornings I attend Tech High and afternoons I study or go flying with Jeff Hardesty—he's my partner—or whenever a tourist ship is in I guide groundhogs. This day the *Gripsholm* grounded at noon so I went straight from school to American Express.

The first gaggle of tourists was trickling in from Quarantine but I didn't push forward as Mr. Dorcas, the manager, knows I'm the best. Guiding is just temporary (I'm really a spaceship designer), but if you're doing a job you ought to do it well.

Mr. Dorcas spotted me. "Holly! Here, please. Miss Brentwood, Holly Jones will be your guide."

"'Holly,'" she repeated. "What a quaint name. Are you really a guide, dear?"

I'm tolerant of groundhogs—some of my best friends are from Earth. As Daddy says, being born on Luna is luck, not judgment, and most people Earthside are stuck there. After all, Jesus and Gautama Buddha and Dr. Einstein were all groundhogs.

But they can be irritating. If high school kids weren't guides, whom could they hire? "My license says so," I said briskly and looked her over the way she was looking me over.

Her face was sort of familiar and I thought perhaps I had seen her picture in those society things you see in Earthside magazines—one of the rich playgirls we get too many of. She was almost loathsomely lovely. . . nylon skin, soft, wavy, silverblond hair, basic specs about 35-24-34 and enough this and that to make me feel like a matchstick drawing, a low intimate voice and everything necessary to make plainer females think about pacts with the Devil. But I did not feel apprehensive; she was a groundhog and groundhogs don't count.

"All city guides are girls," Mr. Dorcas explained. "Holly is very competent."

"Oh, I'm sure," she answered quickly and went into tourist routine number one: surprise that a guide was needed just to find her hotel, amazement at no taxicabs, same for no porters, and raised eyebrows at the prospect of two girls walking alone through "an underground city."

Mr. Dorcas was patient, ending with: "Miss Brentwood, Luna City is the only metropolis in the Solar System where a woman is really safe —no dark alleys, no deserted neighborhoods, no criminal element."

I didn't listen; I just held out my tariff card for Mr. Dorcas to stamp and picked up her bags. Guides shouldn't carry bags and most tourists are delighted to experience the fact that their thirty-pound allowance weighs only five pounds. But I wanted to get her moving.

We were in the tunnel outside and me with a foot on the slidebelt when she stopped. "I forgot! I want a city map."

"None available."

"Really?"

"There's only one. That's why you need a guide."

"But why don't they supply them? Or would that throw you guides out of work?"

See? "You think guiding is makework? Miss Brentwood, labor is so scarce they'd hire monkeys if they could."

"Then why not print maps?"

"Because Luna City isn't flat like—" I almost said, "—groundhog cities," but I caught myself.

"—like Earthside cities," I went on. "All you saw from space was the meteor shield. Underneath it spreads out and goes down for miles in a dozen pressure zones."

"Yes, I know, but why not a map for each level?"

Groundhogs always say, "Yes, I know, but—"

"I can show you the one city map. It's a stereo tank twenty feet high and even so all you see clearly are big things like the Hall of the Mountain King and hydroponics farms and the Bats' Cave."

"'The Bats' Cave,'" she repeated. "That's where they fly, isn't it?"

"Yes, that's where we fly."

"Oh, I want to see it!"

"OK. It first. . . or the city map?"

She decided to go to her hotel first. The regular route to the Zurich is to slide up the west through Gray's Tunnel past the Martian Embassy, get off at the Mormon Temple, and take a pressure lock down to Diana Boulevard. But I know all the shortcuts; we got off at Macy-Gimbel Upper to go down their personnel hoist. I thought she would enjoy it.

But when I told her to grab a hand grip as it dropped past her, she peered down the shaft and edged back. "You're joking."

I was about to take her back the regular way when a neighbor of ours came down the hoist. I said, "Hello, Mrs. Greenberg," and she called back, "Hi, Holly. How are your folks?"

Susie Greenberg is more than plump. She was hanging by one hand with young David tucked in her other arm and holding the *Daily*

Lunatic, reading as she dropped. Miss Brentwood stared, bit her lip, and said, "How do I do it?"

I said, "Oh, use both hands; I'll take the bags." I tied the handles together with my hanky and went first.

She was shaking when we got to the bottom. "Goodness, Holly, how do you stand it? Don't you get homesick?"

Tourist question number six . . . I said, "I've been to Earth," and let it drop. Two years ago Mother made me visit my aunt in Omaha and I was *miserable*—hot and cold and dirty and beset by creepy-crawlies. I weighed a ton and I ached and my aunt was always chivvying me to go outdoors and exercise when all I wanted was to crawl into a tub and be quietly wretched. And I had hay fever. Probably you've never heard of hay fever—you don't die but you wish you could.

I was supposed to go to a girls' boarding school but I phoned Daddy and told him I was desperate and he let me come home. What groundhogs can't understand is that they live in savagery. But groundhogs are groundhogs and loonies are loonies and never the twain shall meet.

Like all the best hotels the Zurich is in Pressure One on the west side so that it can have a view of Earth. I helped Miss Brentwood register with the roboclerk and found her room; it had its own port. She went straight to it, began staring at Earth and going *ooh*! and *ahh*!

I glanced past her and saw that it was a few minutes past thirteen; sunset sliced straight down the tip of India—early enough to snag another client. "Will that be all, Miss Brentwood?"

Instead of answering she said in an awed voice, "Holly, isn't that the most beautiful sight you ever saw?"

"It's nice," I agreed. The view on that side is monotonous except for Earth hanging in the sky—but Earth is what tourists always look at even though they've just left it. Still, Earth is pretty. The changing weather is interesting if you don't have to be in it. Did you ever endure a summer in Omaha?

"It's gorgeous," she whispered.

"Sure," I agreed. "Do you want to go somewhere? Or will you sign my card?"

"What? Excuse me, I was daydreaming. No, not right now—yes, I do! Holly, I want to go out *there*! I must! Is there time? How much longer will it be light?"

"Huh? It's two days to sunset."

She looked startled. "How quaint. Holly, can you get us space suits? I've got to go outside."

I didn't wince—I'm used to tourist talk. I suppose a pressure suit looked like a space suit to them. I simply said, "We girls aren't licensed outside. But I can phone a friend."

Jeff Hardesty is my partner in spaceship designing, so I throw business his way. Jeff is eighteen and already in Goddard Institute, but I'm pushing hard to catch up so that we can set up offices for our firm: "Jones & Hardesty, Spaceship Engineers." I'm very bright in mathematics, which is everything in space engineering, so I'll get my degree pretty fast. Meanwhile we design ships anyhow.

I didn't tell Miss Brentwood this, as tourists think that a girl my age can't possibly be a spaceship designer.

Jeff has arranged his class to let him guide on Tuesdays and Thursdays; he waits at West City Lock and studies between clients. I reached him on the lockmaster's phone. Jeff grinned and said, "Hi, Scale Model."

"Hi, Penalty Weight. Free to take a client?"

"Well, I was supposed to guide a family party, but they're late."

"Cancel them; Miss Brentwood . . . step into pickup, please. This is Mr. Hardesty."

Jeff's eyes widened and I felt uneasy. But it did not occur to me that Jeff could be attracted by a groundhog. . . even though it is conceded that men are robot slaves of their body chemistry in such matters. I knew she was exceptionally decorative, but it was unthinkable that Jeff could be captivated by any groundhog, no matter how well designed. They don't speak our language!

I am not romantic about Jeff; we are simply partners. But anything that affects Jones & Hardesty affects me.

When we joined him at West Lock he almost stepped on his tongue in a disgusting display of adolescent rut. I was ashamed of him and, for the first time, apprehensive. Why are males so childish?

Miss Brentwood didn't seem to mind his behavior. Jeff is a big hulk; suited up for outside he looks like a Frost Giant from *Das Rheingold*; she smiled up at him and thanked him for changing his schedule. He looked even sillier and told her it was a pleasure.

I keep my pressure suit at West Lock so that when I switch a client to Jeff he can invite me to come along for the walk. This time he hardly spoke to me after that platinum menace was in sight. But I helped her pick out a suit and took her into the dressing room and fitted it. Those rental suits take careful adjusting or they will pinch you in tender places once out in vacuum. . . besides there are things about them that one girl ought to explain to another.

When I came out with her, not wearing my own, Jeff didn't even ask why I hadn't suited up—he took her arm and started toward the lock. I had to butt in to get her to sign my tariff card.

The days that followed were the longest of my life. I saw Jeff only once . . . on the slidebelt in Diana Boulevard, going the other way. She was with him.

Though I saw him but once, I knew what was going on. He was cutting classes and three nights running he took her to the Earthview Room of the Duncan Hines. None of my business!—I hope she had more luck teaching him to dance than I had. Jeff is a free citizen and if he wanted to make an utter fool of himself neglecting school and losing sleep over an upholstered groundhog that was his business.

But he should not have neglected the firm's business!

Jones & Hardesty had a tremendous backlog, because we were designing Starship *Prometheus*. This project we had been slaving over for a year, flying not more than twice a week in order to devote time to it—and that's a sacrifice.

Of course you can't build a starship today, because of the power plant. But Daddy thinks that there will soon be a technological breakthrough and mass-conversion power plants will be built—which means starships. Daddy ought to know—he's Luna Chief Engineer for Space Lanes and Fermi Lecturer at Goddard Institute. So Jeff and I are designing a self-supporting interstellar ship on that assumption: quarters, auxiliaries, surgery, labs—everything.

Daddy thinks it's just practice but Mother knows better—Mother is a mathematical chemist for General Synthetics of Luna and is nearly as smart as I am. She realizes that Jones & Hardesty plans to be ready with a finished proposal while other designers are still floundering.

Which was why I was furious with Jeff for wasting time over this creature. We had been working every possible chance. Jeff would show up after dinner, we would finish our homework, then get down to real work, the *Prometheus*. . . checking each other's computations, fighting bitterly over details, and having a wonderful time. But the very day I introduced him to Ariel Brentwood, he failed to appear. I had finished my lessons and was wondering whether to start or wait for him—we were making a radical change in power plant shielding—when his mother phoned me. "Jeff asked me to call you, dear. He's having dinner with a tourist client and can't come over."

Mrs. Hardesty was watching me so I looked puzzled and said, "Jeff thought I was expecting him? He has his dates mixed." I don't think she believed me; she agreed too quickly.

All that week I was slowly convinced against my will that Jones & Hardesty was being liquidated. Jeff didn't break any more dates—how can you break a date that hasn't been made?—but we always went flying Thursday afternoons unless one of us was guiding. He didn't call. Oh, I know where he was; he took her iceskating in Fingal's Cave.

I stayed home and worked on the *Prometheus*, recalculating masses and moment arms for hydroponics and stores on the basis of the shielding change. But I made mistakes and twice I had to look up logarithms instead of remembering . . . I was so used to wrangling with Jeff over everything that I just couldn't function.

Presently I looked at the name place of the sheet I was revising. "Jones & Hardesty" it read, like all the rest. I said to myself, "Holly Jones, quit bluffing; this may be The End. You know that someday Jeff would fall for somebody."

"Of course. . . but not a *groundhog*."

"But he *did*. What kind of an engineer are you if you can't face facts? She's beautiful and rich—she'll get her father to give him a job Earthside. You hear me? *Earthside*! So you look for another partner. . . or go into business on your own."

I erased "Jones & Hardesty" and lettered "Jones & Company" and stared at it. Then I started to erase that, too—but it smeared; I had dripped a tear on it. Which was ridiculous!

The following Tuesday both Daddy and Mother were home for lunch which was unusual as Daddy lunches at the spaceport. Now Daddy can't even see you unless you're a spaceship but that day he picked to notice that I had dialed only a salad and hadn't finished it. "That plate is about eight hundred calories short," he said, peering at it. "You can't boost without fuel—aren't you well?"

"Quite well, thank you," I answered with dignity.

"Mmm . . . now that I think back, you've been moping for several days. Maybe you need a checkup." He looked at Mother.

"I do not either need a checkup!" I had *not* been moping—doesn't a woman have a right not to chatter?

But I hate to have doctors poking at me so I added, "It happens I'm eating lightly because I'm going flying this afternoon. But if you insist, I'll order pot roast and potatoes and sleep insead!"

"Easy, punkin'," he answered gently. "I didn't mean to intrude. Get yourself a snack when you're through . . . and say hello to Jeff for me."

I simply answered, "OK," and asked to be excused; I was humiliated by the assumption that I couldn't fly without Mr. Jefferson Hardesty but did not wish to discuss it.

Daddy called after me, "Don't be late for dinner," and Mother said, "Now, Jacob--" and to me, "Fly until you're tired, dear; you haven't been getting much exercise. I'll leave your dinner in the warmer. Anything you'd like?"

"No, whatever you dial for yourself." I just wasn't interested in food, which isn't like me. As I headed for Bats' Cave I wondered if I had caught something. But my cheeks didn't feel warm and my stomach wasn't upset even if I wasn't hungry.

Then I had a horrible thought. Could it be that I was jealous? *Me*?

It was unthinkable. I am not romantic; I am a career woman. Jeff had been my partner and pal, and under my guidance he could have become a great spaceship designer, but our relationship was straightforward . . . a mutual respect for each other's abilities, with never any of that lovey-dovey stuff. A career woman can't afford such things—why look at all the professional time Mother had lost over having me!

No, I couldn't be jealous; I was simply worried sick because my partner had become involved with a groundhog. Jeff isn't bright about women and, besides, he's never been to Earth and has illusions about it. If she lured him Earthside, Jones & Hardesty was finished.

And somehow, "Jones & Company" wasn't a substitute: the *Prometheus* might never be built.

I was at Bats' Cave when I reached this dismal conclusion. I didn't feel like flying but I went to the locker room and got my wings anyhow.

Most of the stuff written about Bats' Cave gives a wrong impression. It's the air storage tank for the city, just like all the colonies have—the place where the scavenger pumps, deep down, deliver the air until it's needed. We just happen to be lucky enough to have one big enough to fly in. But it never was built, or anything like that; it's just a big volcanic bubble, two miles across, and if it had broken through, way back when, it would have been a crater.

Tourists sometimes pity us loonies because we have no chance to swim. Well, I tried it in Omaha and got water up my nose and scared myself silly. Water is for drinking, not playing in; I'll take flying. I've heard groundhogs say, oh yes, they had "flown" many times. But that's not *flying*. I did what they talk about, between White Sands and Omaha. I felt awful and got sick. Those things aren't safe.

I left my shoes and skirt in the locker room and slipped my tail surfaces on my feet, then zipped into my wings and got someone to tighten the shoulder straps. My wings aren't readymade condors; they are Storer-Gulls, custom-made for my weight distribution and dimensions. I've cost Daddy a pretty penny in wings, outgrowing them so often, but these latest I bought myself with guide fees.

They're lovely—titanalloy struts as light and strong as bird bones, tension-compensated wrist-pinion and shoulder joints, natural action in the alula slots, and automatic flap action in stalling. The wing skeleton is dressed in styrene feather-foils with individual quilling of scapulars and primaries. They almost fly themselves.

I folded my wings and went into the lock. While it was cycling I opened my left wing and thumbed the alula control—I had noticed a tendency to sideslip the last time I was airborne. But the alula opened properly and I decided I must have been overcontrolling, easy to do with Storer-Gulls; they're extremely maneuverable. Then the door showed green and I folded the wing and hurried out, while glancing at the barometer. Seventeen pounds—two more than Earth sea-level and nearly twice what we use in the city; even an ostrich could fly in that. I perked up and felt sorry for all groundhogs, tied down by six times proper weight, who never, never, never could fly.

Not even I could, on Earth. My wing loading is less than a pound per square foot, as wings and all I weigh less than twenty pounds. Earthside that would be over a hundred pounds and I could flap forever and never get off the ground.

I felt so good that I forgot about Jeff and his weakness. I spread my wings, ran a few steps, warped for lift and grabbed air—lifted my feet and was airborne.

I sculled gently and let myself glide towards the air intake at the middle of the floor—the Baby's Ladder, we call it, because you can ride the updraft clear to the roof, half a mile above, and never move a wing. When I felt it I leaned right, spoiling with right primaries, corrected, and settled in a counterclockwise soaring glide and let it carry me toward the roof.

A couple of hundred feet up, I looked around. The cave was almost empty, not more than two hundred in the air and half that number perched or on the ground—room enough for didoes. So as soon as I was up five hundred feet I leaned out of the updraft and began to beat. Gliding is no effort but flying is as hard work as you care to make it. In gliding I support a mere ten pounds on each arm—shucks, on Earth you work harder than that lying in bed. The lift that keeps you in the air doesn't take any work; you get it free from the shape of your wings just as long as there is air pouring past them.

Even without an updraft all a level glide takes is gentle sculling with your finger tips to maintain air speed; a feeble old lady could do it. The lift comes from differential air pressures but you don't have to understand it; you just scull a little and the air supports you, as if you were lying in an utterly perfect bed. Sculling keeps you moving forward just like sculling a rowboat. . . or so I'm told; I've never been in a rowboat. I had a chance to in Nebraska but I'm not that foolhardy.

But when you're really flying, you scull with forearms as well as hands and add power with your shoulder muscles. Instead of only the outer quills of your primaries changing pitch (as in gliding), now your primaries and secondaries clear back to the joint warp sharply on each downbeat and recovery; they no longer lift, they force you forward—while your weight is carried by your scapulars, up under your armpits.

So you fly faster, or climb, or both, through controlling the angle of attack with your feet—with the tail surfaces you wear on your feet, I mean.

Oh dear, this sounds complicated and isn't—you just do it. You fly exactly as a bird flies. Baby birds can learn it and they aren't very bright. Anyhow, it's easy as breathing after you learn.. . and more fun than you can imagine!

I climbed to the roof with powerful beats, increasing my angle of attack and slotting my alulae for lift without burble—climbing at an angle that would stall most fliers. I'm little but it's all muscle and I've been flying since I was six. Once up there I glided and looked around. Down at the floor near the south wall tourists were trying glide wings—if you call those things "wings." Along the west wall the visitors' gallery was loaded with goggling tourists. I wondered if Jeff and his Circe character were there and decided to go down and find out.

So I went into a steep dive and swooped toward the gallery, leveled off and flew very fast along it. I didn't spot Jeff and his groundhoggess but I wasn't watching where I was going and overtook another flier, almost collided. I glimpsed him just in time to stall and drop under, and fell fifty feet before I got control. Neither of us was in danger as the gallery is two hundred feet up, but I looked silly and it was my own fault; I had violated a safety rule.

There aren't many rules but they are necessary; the first is that orange wings always have the right of way—they're beginners. This flier did not have orange wings but I was overtaking. The flier underneath—or being overtaken—or nearer to wall—or turning counterclockwise, in that order, has the right of way.

I felt foolish and wondered who had seen me, so I went all the way back up, made sure I had clear air, then stooped like a hawk toward the gallery, spilling wings, lifting tail, and letting myself fall like a rock.

I completed my stoop in front of the gallery, lowering and spreading my tail so hard I could feel leg muscles knot and grabbing air with both wings, alulae slotted. I pulled level in an extremely fast glide along the gallery. I could see their eyes pop and thought smugly, "There! That'll show 'em!"

When darn if somebody didn't stoop on me! The blast from a flier braking right over me almost knocked me out of control. I grabbed air and stopped a sideslip, used some shipyard words and looked around to see who had blitzed me. I knew the black-and-gold wing pattern—Mary Muhlenburg, my best girl friend. She swung toward me, pivoting on a wing tip. "Hi, Holly! Scared you, didn't I?"

"You did not! You better be careful; the flightmaster'll ground you for a month."

"Slim chance! He's down for coffee."

I flew away, still annoyed, and started to climb. Mary called after me, but I ignored her, thinking, "Mary my girl, I'm going to get over you and fly you right out of the air."

That was a foolish thought as Mary flies every day and has shoulders and pectoral muscles like Mrs. Hercules. By the time she caught up with me I had cooled off and we flew side by side, still climbing. "Perch?" she called out.

"Perch," I agreed. Mary has lovely gossip and I could use a breather. We turned toward our usual perch, a ceiling brace for flood lamps—it isn't supposed to be a perch but the flightmaster hardly ever comes up there.

Mary flew in ahead of me, braked and stalled dead to a perfect landing. I skidded a little but Mary stuck out a wing and steadied me. It isn't easy to come into a perch, especially when you have to approach level. Two years ago a boy who had just graduated from orange wings tried it . . . knocked off his left alula and primaries on a strut—went fluttering and spinning down two thousand feet and crashed. He could have saved himself—you can come in safely with a badly damaged wing if you spill air with the other and accept the steeper glide, then stall as you land. But this poor kid didn't know how; he broke his neck, dead as Icarus. I haven't used that perch since.

We folded our wings and Mary sidled over. "Jeff is looking for you," she said with a sly grin.

My insides jumped but I answered coolly, "So? I didn't know he was here."

"Sure. Down there," she added, pointing with her left wing. "Spot him?"

Jeff wears striped red and silver, but she was pointing at the tourist guide slope, a mile away. "No."

"He's there all right." She looked at me sidewise. "But I wouldn't look him up if I were you."

"Why not? Or for that matter, why should I?" Mary can be exasperating.

"Huh? You always run when he whistles. But he has that Earthside siren in tow again today; you might find it embarrasing?"

"Mary, whatever are you talking about?"

"Huh? Don't kid me, Holly Jones; you know what I mean."

"I'm sure I don't," I answered with cold dignity.

"Humph! Then you're the only person in Luna City who doesn't. Everybody knows you're crazy about Jeff; everybody knows she's cut you out. . . and that you are simply simmering with jealousy."

Mary is my dearest friend but someday I'm going to skin her for a rug. "Mary, that's preposterously ridiculous! How can you even think such a thing?"

"Look, darling, you don't have to pretend. I'm for you." She patted my shoulders with her secondaries.

So I pushed her over backwards. She fell a hundred feet, straightened out, circled and climbed, and came in beside me, still grinning. It gave me time to decide what to say.

"Mary Muhlenburg, in the first place I am not crazy about anyone, least of all Jeff Hardesty. He and I are simply friends. So it's utterly nonsensical to talk about me being 'jealous.' In the second place Miss Brentwood is a lady and doesn't go around 'cutting out' anyone, least of all me. In the third place she is simply a tourist Jeff is guiding—business, nothing more."

"Sure, sure," Mary agreed placidly. "I was wrong. Still--" She shrugged her wings and shut up.

"'Still' what? Mary, dont be mealymouthed."

"Mmm. . . I was wondering how you knew I was talking about Ariel Brentwood—since there isn't anything to it."

"Why, you mentioned her name."

"I did not."

I thought frantically. "Uh, maybe not. But it's perfectly simple. Miss Brentwood is a client I turned over to Jeff myself, so I assumed that she must be the tourist you meant."

"So? I don't recall even saying she was a tourist. But since she is just a tourist you two are splitting, why aren't you doing the inside guiding while Jeff sticks to outside work? I thought you guides had an agreement?"

"Huh? If he has been guiding her inside the city, I'm not aware of it--"

"You're the only one who isn't."

"--and I'm not interested; that's up to the grievance committee. But Jeff wouldn't take a fee for inside guiding in any case."

"Oh, sure!—not one he could *bank*. Well, Holly, seeing I was wrong, why don't you give him a hand with her? She wants to learn to glide."

Butting in on that pair was farthest from my mind. "If Mr. Hardesty wants my help, he will ask me. In the meantime I shall mind my own business . . . a practice I recommend to you!"

"Relax, shipmate," she answered, unruffled. "I was doing you a favor."

"Thank you, I don't need one."

"So I'll be on my way—got to practice for the gymkhana." She leaned forward and dropped off. But she didn't practice aerobatics; she dived straight for the tourist slope.

I watched her out of sight, then sneaked my left hand out the hand slit and got at my hanky—awkward when you are wearing wings but the floodlights had made my eyes water. I wiped them and blew my nose and put my hanky away and wiggled my hand back into place, then checked everything thumbs, toes, and fingers, preparatory to dropping off.

But I didn't. I just sat there, wings drooping, and thought. I had to admit that Mary was partly right; Jeff's head was turned completely. . . over a *groundhog*. So sooner or later he would go Earthside and Jones & Hardesty was finished.

Then I reminded myself that I had been planning to be a spaceship designer like Daddy long before Jeff and I teamed up. I wasn't dependent on anyone; I could stand alone, like Joan of Arc, or Lise Meitner.

I felt better. . . a cold, stern pride, like Lucifer in *Paradise Lost*.

I recognized the red and silver of Jeff's wings while he was far off and I thought about slipping quietly away. But Jeff can overtake me if he tries, so I decided, "Holly, don't be a fool! You've no reason to run. . . just be coolly polite."

He landed by me but didn't sidle up. "Hi, Decimal Point."

"Hi, Zero. Uh, stolen much lately?"

"Just the City Bank but they made me put it back." He frowned and added, "Holly, are you mad at me."

"Why, Jeff, whatever gave you such a silly notion?"

"Uh. . . something Mary the Mouth said."

"Her? Don't pay any attention to what she says. Half of it's always wrong and she doesn't mean the rest."

"Yeah, a short circuit between her ears. Then you aren't mad?"

"Of *course* not. Why should I be?"

"No reason I know of. I haven't been around to work on the ship for a few days.. . but I've been awfully busy."

"Think nothing of it. I've been terribly busy myself."

"Uh, that's fine. Look, Test Sample, do me a favor. Help me out with a friend—a client, that is—we'll she's a friend, too. She wants to learn to use glide wings."

I pretended to consider it. "Anyone I know?"

"Oh, yes. Fact is, you introduced us. Ariel Brentwood."

"'Brentwood?' Jeff, there are so many tourists. Let me think. Tall girl? Blonde? Extremely pretty?"

He grinned like a goof and I almost pushed him off. "That's Ariel!"

"I recall her . . . she expected me to carry her bags. But you don't need help, Jeff. She seemed very clever. Good sense of balance."

"Oh, yes, sure, all of that. Well, the fact is, I want you two to know each other. She's. . . well, she's just wonderful, Holly. A real person all the way through. You'll love her when you know her better. Uh... this seemed like a good chance."

I felt dizzy. "Why, that's very thoughtful, Jeff, but I doubt if she wants to know me better. I'm just a servant she hired—you know groundhogs."

"But she's not at all like the ordinary groundhog. And she does want to know you better—she *told* me so!"

After you told her to think so! I muttered. But I had talked myself into a corner. If I had not been hampered by polite upbringing I would have said, "On your way, vacuum skull! I'm not interested in your groundhog friends"—but what I did say was, "OK, Jeff," then gathered the fox to my bosom and dropped off into a glide.

So I taught Ariel Brentwood to "fly." Look, those so-called wings they let tourists wear have fifty square feet of lift surface, no controls except warp in the primaries, a builtin dihedral to make them stable as a table, and a few meaningless degrees of hinging to let the wearer think that he is "flying" by waving his arms. The tail is rigid, and canted so that if you stall (almost impossible) you land on your feet. All a tourist does is run a few yards, lift up his feet (he can't avoid it) and slide down a blanket of air. Then he can tell his grandchildren how he flew, really *flew*, "just like a bird."

An ape could learn to "fly" that much.

I put myself to the humiliation of strapping on a set of the silly things and had Ariel watch while I swung into the Baby's Ladder and let it carry me up a hundred feet to show her that you really and truly could "fly" with them. Then I thankfully got rid of them, strapped her into a larger set, and put on my beautiful Storer-Gulls. I had chased Jeff away (two instructors is too many), but when he saw her wing up, he swooped down and landed by us.

I looked up. "You again."

"Hello, Ariel. Hi, Blip. Say, you've got her shoulder straps too tight."

"Tut, tut," I said. "One coach at a time, remember? If you want to help, shuck those gaudy fins and put on some gliders then I'll use you to show how not to. Otherwise get above two hundred feet and stay there; we don't need any dining lounge pilots."

Jeff pouted like a brat but Ariel backed me up. "Do what teacher says, Jeff. That's a good boy."

He wouldn't put on gliders but he didn't stay clear, either. He circled around us, watching, and got bawled out by the flightmaster for cluttering the tourist area.

I admit Ariel was a good pupil. She didn't even get sore when I suggested that she was rather mature across the hips to balance well; she just said that she had noticed that I had the slimmest behind around there and she envied me. So I quit trying to get her goat, and found myself almost liking her as long as I kept my mind firmly on teaching. She tried hard and learned fast—good reflexes and (despite my dirty crack) good balance. I remarked on it and she admitted diffidently that she had had ballet training.

About midafternoon she said, "Could I possibly try real wings?"

"Huh? Gee, Ariel, I don't think so."

"Why not?"

There she had me. She had already done all that could be done with those atrocious gliders. If she was to learn more, she had to have real wings. "Ariel, it's dangerous. It's not what you've been doing, believe me. You might get hurt, even killed."

"Would you be held responsible?"

"No. You signed a release when you came in."

"Then I'd like to try it."

I bit my lip. If she had cracked up without my help, I wouldn't have shed a tear—but to let her do something too dangerous while she was my pupil. . . well, it smacked of David and Uriah. "Ariel, I can't stop you . . . but I should put my wings away and not have anything to do with it."

It was her turn to bite her lip. "If you feel that way, I can't ask you to coach me. But I still want to. Perhaps Jeff will help me."

"He probably will," I blurted out, "if he is as big a fool as I think he is!"

Her company face slipped but she didn't say anything because just then Jeff stalled in beside us. "What's the discussion?"

We both tried to tell him and confused him for he got the idea I had suggested it, and started bawling me out. Was I crazy? Was I trying to get Ariel hurt? Didn't I have any sense?

"*Shut up*!" I yelled, then added quietly but firmly, "Jefferson Hardesty, you wanted me to teach your girl friend, so I agreed. But don't butt in and don't think you can get away with talking to me like that. Now beat it! Take wing. Grab air!"

He swelled up and said slowly, "I absolutely forbid it."

Silence for five long counts. Then Ariel said quietly, "Come, Holly. Let's get me some wings."

"Right, Ariel."

But they don't rent real wings. Fliers have their own; they have to. However, there are secondhand ones for sale because kids outgrow them, or people shift to custom-made ones, or something. I found Mr. Schultz who keeps the key, and said that Ariel was thinking of buying but I wouldn't let her without a tryout. After picking over forty-odd pairs I found a set which Johnny Queveras had outgrown but which I knew were all right. Nevertheless I inspected them carefully. I could hardly reach the finger controls but they fitted Ariel.

While I was helping her into the tail surfaces I said, "Ariel? This is still a bad idea."

"I know. But we can't let men think they own us."

"I suppose not."

"They do own us, of course. But we shouldn't let them know it."

She was feeling out the tail controls. "The big toes spread them?"

"Yes. But don't do it. Just keep your feet together and toes pointed. Look, Ariel, you really aren't ready. Today all you will do is glide, just as you've been doing. Promise?"

She looked me in the eye. "I'll do exactly what you say. not even take wing unless you OK it."

"OK. Ready?"

"I'm ready."

"All right. Wups! I goofed. They aren't orange."

"Does it matter?"

"It sure does." There followed a weary argument because Mr. Schultz didn't want to spray them orange for a tryout. Ariel settled it by buying them, then we had to wait a bit while the solvent dried.

We went back to the tourist slope and I let her glide, cautioning her to hold both alulae open with her thumbs for more lift at slow speeds, while barely sculling with her fingers. She did fine, and stumbled in landing only once. Jeff stuck around, cutting figure eights above us, but we ignored him. Presently I taught her to turn in a wide, gentle bank—you can turn those awful glider things but it takes skill; they're only meant for straight glide.

Finally I landed by her and said, "Had enough?"

"I'll never have enough! But I'll unwing if you say."

"Tired?"

"No." She glanced over her wing at the Baby's Ladder; a dozen fliers were going up it, wings motionless, soaring lazily. "I wish I could do that just once. It must be heaven."

I chewed it over. "Actually, the higher you are, the safer you are."

"Then why not?"

"Mmm . . . safer *provided* you know what you're doing. Going up that draft is just gliding like you've been doing. You lie still and let it lift you half a mile high. Then you come down the same way, circling the wall in a gentle glide. But you're going to be tempted to do something you don't understand yet—flap your wings, or cut some caper."

She shook her head solemnly. "I won't do anything you haven't taught me."

I was still worried. "Look, it's only half a mile up but you cover five miles going there and more getting down. Half an hour at least. Will your arms take it?"

"I'm sure they will."

"Well. . . you can start down anytime; you don't have to go all the way. Flex your arms a little now and then, so they won't cramp. Just don't flap your wings."

"I won't."

"OK." I spread my wings. "Follow me."

I led her into the updraft, leaned gently right, then back left to start the counterclockwise climb, all the while sculling very slowly so that she could keep up. Once we were in the groove I called out, "Steady as you are!" and cut out suddenly, climbed and took station thirty feet over and behind her. "Ariel?"

"Yes, Holly?"

"I'll stay over you. Don't crane your neck; you don't have to watch me, I have to watch you. You're doing fine."

"I feel fine!"

"Wiggle a little. Don't stiffen up. It's a long way to the roof. You can scull harder if you want to."

"Aye aye, Cap'n!"

"Not tired?"

"Heavens, no! Girl, I'm living!" She giggled. "And mama said I'd never be an angel!"

I didn't answer because red-and-silver wings came charging at me, braked suddenly and settled into the circle between me and Ariel. Jeff's face was almost as red as his wings. "What the devil do you think you are doing?"

"Orange wings!" I yelled. "Keep clear!"

"Get down out of here! Both of you!"

"Get out from between me and my pupil. You know the rules."

"Ariel!" Jeff shouted. "Lean out of the circle and glide down. I'll stay with you."

"Jeff Hardesty," I said savagely, "I give you three seconds to get out from between us—then I'm going to report you for violation of Rule One. For the third time—Orange Wings!"

Jeff growled something, dipped his right wing and dropped out of formation. The idiot sideslipped within five feet of Ariel's wing tip. I should have reported him for that; all the room you can give a beginner is none too much.

I said, "OK, Ariel?"

"OK, Holly. I'm sorry Jeff is angry."

"He'll get over it. Tell me if you feel tired."

"I'm not. I want to go all the way up. How high are we?"

"Four hundred feet, maybe."

Jeff flew below us a while, then climbed and flew over us. . . probably for the same reason I did: to see better. It suited me to have two of us watching her as long as he didn't interfere; I was beginning to fret that Ariel might not realize that the way down was going to be as long and tiring as the way up. I was hoping she would cry uncle. I knew I could glide until forced down by starvation. But a beginner gets tense.

Jeff stayed generally over us, sweeping back and forth—he's too active to glide very long—while Ariel and I continued to soar, winding slowly up toward the roof. It finally occurred to me when we were about halfway up that I could cry uncle myself; I didn't have to wait for Ariel to weaken. So I called out, "Ariel? Tired now?"

"No."

"Well, I am. Could we go down, please?"

She didn't argue, she just said, "All right. What am I to do?"

"Lean right and get out of the circle." I intended to have her move out five or six hundred feet, get into the return down draft, and circle the cave down instead of up. I glanced up, looking for Jeff. I finally spotted him some distance away and much higher but coming toward us. I called out, "Jeff! See you on the ground." He might not have heard me but he would see if he didn't hear; I glanced back at Ariel.

I couldn't find her.

Then I saw her, a hundred feet below—flailing her wings and falling, out of control.

I didn't know how it happened. Maybe she leaned too far, went into a sideslip and started to struggle. But I didn't try to figure it out; I was simply filled with horror. I seemed to hang there frozen for an hour while I watched her.

But the fact appears to be that I screamed "Jeff!" and broke into a stoop.

But I didn't seem to fall, couldn't overtake her. I spilled my wings completely—but couldn't manage to fall; she was as far away as ever.

You do start slowly, of course; our low gravity is the only thing that makes human flying possible. Even a stone falls a scant three feet in the first second. But the first second seemed endless.

Then I knew I was falling. I could feel rushing air—but I still didn't seem to close on her. Her struggles must have slowed her somewhat, while I was in an intentional stoop, wings spilled and raised over my head, falling as fast as possible. I had a wild notion that if I could pull even with her, I could shout sense into her head, get her to dive, then straighten out in a glide. But I couldn't *reach* her.

This nightmare dragged on for hours.

Actually we didn't have room to fall for more than twenty seconds; that's all it takes to stoop a thousand feet. But twenty seconds can be horribly long . . . long enough to regret every foolish thing I had ever done or said, long enough to say a prayer for us both.. . and to say goodbye to Jeff in my heart. Long enough to see the floor rushing toward us and know that we were both going to crash if I didn't overtake her mighty quick.

I glanced up and Jeff was stooping right over us but a long way up. I looked down at once.. . and I was overtaking her... I was passing her —*I was under her*!

Then I was braking with everything I had, almost pulling my wings off. I grabbed air, held it, and started to beat without ever going to level flight. I beat once, twice, three times. . . and hit her from below, jarring us both.

Then the floor hit us.

I felt feeble and dreamily contented. I was on my back in a dim room. I think Mother was with me and I know Daddy was. My nose itched and I tried to scratch it, but my arms wouldn't work. I fell asleep again.

I woke up hungry and wide awake. I was in a hospital bed and my arms still wouldn't work, which wasn't surprising as they were both in casts. A nurse came in with a tray. "Hungry?" she asked.

"Starved," I admitted.

"We'll fix that." She started feeding me like a baby.

I dodged the third spoonful and demanded, "What happened to my arms?"

"Hush," she said and gagged me with a spoon.

But a nice doctor came in later and answered my question. "Nothing much. Three simple fractures. At your age you'll heal in no time. But we like your company so I'm holding you for observation of possible internal injury."

"I'm not hurt inside," I told him. "At least, I don't hurt."

"I told you it was just an excuse."

"Uh, Doctor?"

"Well?"

"Will I be able to fly again?" I waited, scared.

"Certainly. I've seen men hurt worse get up and go three rounds."

"Oh. Well, thanks. Doctor? What happened to the other girl? Is she. . . did she...?"

"Brentwood? She's here."

"She's right here," Ariel agreed from the door. "May I come in?"

My jaw dropped, then I said, "Yeah. Sure. Come in."

The doctor said, "Don't stay long," and left. I said, "Well, sit down."

"Thanks." She hopped instead of walked and I saw that one foot was bandaged. She got on the end of the bed.

"You hurt your foot."

She shrugged. "Nothing. A sprain and a torn ligament. Two cracked ribs. But I would have been dead. You know why I'm not?"

I didn't answer. She touched one of my casts. "That's why. You broke my fall and I landed on top of you. You saved my life and I broke both your arms."

"You don't have to thank me. I would have done it for anybody."

"I believe you and I wasn't thanking you. You can't thank a person for saving your life. I just wanted to make sure you knew that I knew it."

I didn't have an answer so I said, "Where's Jeff? Is he all right?"

"He'll be along soon. Jeff's not hurt . . . though I'm surprised he didn't break both ankles. He stalled in beside us so hard that he should have. But Holly . . . Holly my very dear . . . I slipped in so that you and I could talk about him before he got here."

I changed the subject quickly. Whatever they had given me made me feel dreamy and good, but not beyond being embarrassed. "Ariel, what happened? You were getting along fine—then suddenly you were in trouble."

She looked sheepish. "My own fault. You said we were going down, so I looked down. Really looked, I mean. Before that, all my thoughts had been about climbing to the roof; I hadn't thought about how far down the floor was. Then I looked down and got dizzy and panicky and went all to pieces." She shrugged. "You were right. I wasn't ready."

I thought about it and nodded. "I see. But don't worry—when my arms are well, I'll take you up again."

She touched my foot. "Dear Holly. But I won't be flying again; I'm going back where I belong."

"Earthside?"

"Yes. I'm taking the *Billy Mitchell* on Wednesday."

"Oh. I'm sorry."

She frowned slightly. "Are you? Holly, you don't like me, do you?"

I was startled silly. What can you say? Especially when it's true? "Well," I said slowly, "I don't dislike you. I just don't know you very well."

She nodded. "And I don't know you very well . . . even though I got to know you a lot better in a very few seconds. But Holly listen please and don't get angry. It's about Jeff. He hasn't treated you very well the last few days—while I've been here, I mean. But don't be angry with him. I'm leaving and everything will be the same."

That ripped it open and I couldn't ignore it, because if I did, she would assume all sorts of things that weren't so. So I had to explain. . . about me being a career woman.. . how, if I had seemed upset, it was simply distress at breaking up the firm of Jones & Hardesty before it even finished its first starship . how I was not in love with Jeff but simply valued him as a friend and associate. . . but if Jones & Hardesty couldn't carry on, then Jones & Company would. "So you see, Ariel, it isn't necessary for you to give up Jeff. If you feel you owe me something, just forget it. It isn't necessary."

She blinked and I saw with amazement that she was holding back tears. "Holly, Holly. . . you don't understand at all."

"I understand all right. I'm not a child."

"No, you're a grown woman. . . but you haven't found it out." She held up a finger. "One—Jeff doesn't love me."

"I don't believe it."

"Two. . . I don't love him."

"I don't believe that, either."

"Three . . . you say you don't love him—but we'll take that up when we come to it. Holly, am I beautiful?"

Changing the subject is a female trait but I'll never learn to do it that fast. "Huh?"

"I said, 'Am I beautiful?'"

"You know darn well you are!"

"Yes. I can sing a bit and dance, but I would get few parts if I were not, because I'm no better than a third-rate actress. So I have to be beautiful. How old am I?"

I managed not to boggle. "Huh? Older than Jeff thinks you are. Twenty-one, at least. Maybe twentytwo."

She sighed. "Holly, I'm old enough to be your mother."

"Huh? I don't believe that, either."

"I'm glad it doesn't show. But that's why, though Jeff is a dear, there never was a chance that I could fall in love with him. But how I feel about him doesn't matter; the important thing is that he loves you."

"What? That's the silliest thing you've said yet! Oh, he likes me—or did. But that's all." I gulped. "And it's all I want. Why, you should hear the way he talks to me."

"I have. But boys that age can't say what they mean; they get embarrassed."

"But--"

"Wait, Holly. I saw something you didn't because you were knocked cold. When you and I bumped, do you know what happened?"

"Uh, no."

"Jeff arrived like an avenging angel, a split second behind us. He was ripping his wings off as he hit, getting his arms free. He didn't even look at me. He just stepped across me and picked you up and cradled you in his arms, all the while bawling his eyes out."

"He did?"

"He did."

I mulled it over. Maybe the big lunk did kind of like me, after all.

Ariel went on, "So you see, Holly, even if you don't love him, you must be very gentle with him, because he loves you and you can hurt him terribly."

I tried to think. Romance was still something that a career woman should shun . . . but if Jeff really did feel that way—well. . . would it be compromising my ideals to marry him just to keep him happy? To keep the firm together? Eventually, that is?

But if I did, it wouldn't be Jones & Hardesty; it would be Hardesty & Hardesty.

Ariel was still talking: "--you might even fall in love with him. It does happen, hon, and if it did, you'd be sorry if you had chased him away. Some other girl would grab him; he's awfully nice."

"But," I shut up for I heard Jeff's step—I can always tell it. He stopped in the door and looked at us, frowning.

"Hi, Ariel."

"Hi, Jeff."

"Hi, Fraction." He looked me over. "My, but you're a mess."

"You aren't pretty yourself. I hear you have flat feet."

"Permanently. How do you brush your teeth with those things on your arms?"

"I don't."

Ariel slid off the bed, balanced on one foot. "Must run. See you later, kids."

"So long, Ariel."

"Goodbye, Ariel. Uh. . . thanks."

Jeff closed the door after she hopped away, came to the bed and said gruffly, "Hold still."

Then he put his arms around me and kissed me.

Well, I couldn't stop him, could I? With both arms broken? Besides, it was consonant with the new policy of the firm. I was startled speechless because Jeff never kisses me, except birthday kisses, which don't count. But I tried to kiss back and show that I appreciated it.

I don't know what the stuff was they had been giving me but my ears began to ring and I felt dizzy again.

Then he was leaning over me. "Runt," he said mournfully, "you sure give me a lot of grief."

"You're no bargain yourself, flathead," I answered with dignity.

"I suppose not." He looked me over sadly. "What are you crying for?"

I didn't know that I had been. Then I remembered why. "Oh, Jeff—I busted my pretty wings!"

"We'll get you more. Uh, brace yourself. I'm going to do it again."

"All right." He did.

I suppose Hardesty & Hardesty has more rhythm than Jones & Hardesty.

It really sounds better.

THE MAN WHO TRAVELED IN ELEPHANTS

Rain streamed across the bus's window. John Watts peered out at wooded hills, content despite the weather. As long as he was rolling, moving, traveling, the ache of loneliness was somewhat quenched. He could close his eyes and imagine that Martha was seated beside him.

They had always traveled together; they had honeymooned covering his sales territory. In time they had covered the entire country-Route 66, with the Indians' booths by the highway, Route 1, up through the District, the Pennsylvania Turnpike, zipping in and out through the mountain tunnels, himself hunched over the wheel and Martha beside him, handling the maps and figuring the mileage to their next stop.

He recalled one of Martha's friends saying, "But, dear, don't you get tired of it?"

He could hear Martha's bubbly laugh, "With fortyeight wide and wonderful states to see, grow tired? Besides, there is always something new-fairs and expositions and things."

"But when you've seen one fair you've seen them all."

"You think there is no difference between the Santa Barbara Fiesta and the Fort Worth Fat Stock Show? Anyhow," Martha had gone on, "Johnny and I are country cousins; we like to stare at the tall buildings and get freckles on the roofs of our mouths."

"Do be sensible, Martha." The woman had turned to him. "John, isn't it time that you two were settling down and making something out of your lives?"

Such people tired him. "It's for the 'possums," he had told her solemnly. "They like to travel."

"The opossums? What in the world is he talking about, Martha?"

Martha had shot him a private glance, then dead-panned, "Oh, I'm sorry! You see, Johnny raises baby 'possums in his umbilicus."

"I'm equipped for it," he had confirmed, patting his round stomach.

That had settled her hash! He had never been able to stand people who gave advice "for your own good."

Martha had read somewhere that a litter of newborn opossums would no more than fill a teaspoon and that as many as six in a litter were often orphans through lack of facilities in mother 'possum's pouch to take care of them all.

They had immediately formed the Society for the Rescue and Sustenance of the Other Six 'Possums, and Johnny himself had been unanimously selected-by Martha-as the site of Father Johnny's 'Possum Town.

They had had other imaginary pets, too. Martha and he had hoped for children; when none came, their family had filled out with invisible little animals: Mr. Jenkins, the little gray burro who advised them about motels, Chipmink the chattering chipmunk, who lived in the glove compartment, Mus Followalongus the traveling mouse, who never said anything but who would bite unexpectedly, especially around Martha's knees.

They were all gone now; they had gradually faded away for lack of Martha's gay, infectious spirit to keep them in health. Even Bindlestiff, who was not invisible, was no longer with him. Bindlestiff was a dog they had picked up beside the road, far out in the desert, given water and succor and received in return his large uncritical heart. Bindlestiff had traveled with them thereafter, until he, too, had been called away, shortly after Martha.

John Watts wondered about Bindlestiff. Did he roam free in the Dog Star, in a land lush with rabbits and uncovered garbage pails? More likely he was with Martha, sitting on her feet and getting in the way. Johnny hoped so.

He sighed and turned his attention to the passengers. A thin, very elderly woman leaned across the aisle and said, "Going to the fair, young man?"

He started. It was twenty years since anyone had called him "young man." "Unh? Yes, certainly." They were all going to the Fair: the bus was a special.

"You like going to fairs?"

"Very much." He knew that her inane remarks were formal gambits to start a conversation. He did not resent it; lonely old women have need of talk with strangers-and so did he. Besides, he liked perky old women. They seemed the very spirit of America to him, putting him in mind of church sociables and farm kitchens-and covered wagons.

"I like fairs, too," she went on. "I even used to exhibit-quince jelly and my Crossing-the-Jordan pattern."

"Blue ribbons, I'll bet."

"Some," she admitted, "but mostly I just liked to go to them. I'm Mrs. Alma Hill Evans. Mr. Evans was a great one for doings. Take the exposition when they opened the Panama Canal-but you wouldn't rememher that."

John Watts admitted that he had not been there.

"It wasn't the best of the lot, anyway. The Fair of '93, there was a fair for you: There'll never be one that'll even be a patch on that one."

"Until this one, perhaps?"

"This one? Pish and tush! Size isn't everything." The All-American Exposition would certainly be the biggest thing yet-and the best. If only Martha were along, it would seem like heaven. The old lady changed the subject. "You're a traveling man, aren't you?"

He hesitated, then answered, "Yes."

"I can always tell. What line are you in, young man?"

He hesitated longer, then said flatly, "I travel in elephants."

She looked at him sharply and he wanted to explain, but loyalty to Martha kept his mouth shut. Martha had insisted that they treat their calling seriously, never explaining, never apologizing. They had taken it up when he had planned to retire; they had been talking of getting an acre of ground and doing something useful with radishes or rabbits, or such. Then, during their final trip over his sales route, Martha had announced after a long silence. "John, you don't want to stop traveling."

"Eh? Don't I? You mean we should keep the territory?"

"No, that's done. But we won't settle down, either."

"What do you want to do? Just gypsy around?"

"Not exactly. I think we need some new line to travel in."

"Hardware? Shoes? Ladies' ready-to-wear?"

"No." She had stopped to think. "We ought to travel in something. It gives point to your movements. I think it ought to be something that doesn't turn over too fast, so that we could have a really large territory, say the whole United States."

"Battleships perhaps?"

"Battleships are out of date, but that's close." Then they had passed a barn with a tattered circus poster. "I've got it!" She had shouted. "Elephants! We'll travel in elephants."

"Elephants, eh? Rather hard to carry samples."

"We don't need to. Everybody knows what an elephant looks like. Isn't that right, Mr. Jenkins?" The invisible burro had agreed with Martha, as he always did; the matter was settled.

Martha had known just how to go about it. "First we make a survey. We'll have to comb the United States from corner to corner before we'll be ready to take orders."

For ten years they had conducted the survey. It was an excuse to visit every fair, zoo, exposition, stock show, circus, or punkin doings anywhere, for were they not all prospective customers? Even national parks and other natural wonders were included in the survey, for how was one to tell where a pressing need for an elephant might turn up? Martha had treated the matter with a straight face and had kept a dog-eared notebook: "La Brea Tar Pits, Los Angeles-surplus of elephants, obsolete type, in these parts about 25,000 years ago." "Philadelphia-sell at least six to the Union League." "Brookfield Zoo, Chicago-African elephants, rare." "Gallup, New Mexico-stone elephants east of town, very beautiful." "Riverside, California, Elephant Barbershop-brace owner to buy mascot." "Portland, Oregon-query Douglas Fir Association. Recite Road to Mandalay. Same for Southern Pine group. N.B. this calls for trip to Gulf Coast as soon as we finish with rodeo in Laramie."

Ten years and they had enjoyed every mile of it. The survey was still unfinished when Martha had been taken. John wondered if she had buttonholed Saint Peter about the elephant situation in the Holy City. He'd bet a nickel she had.

But he could not admit to a stranger that traveling in elephants was just his wife's excuse for traveling around the country they loved.

The old woman did not press the matter. "I knew a man once who sold mongooses," she said cheerfully. "Or is it 'mongeese'? He had been in the exterminator business and-what does that driver think he is doing?"

The big bus had been rolling along easily despite the driving rain. Now it was swerving, skidding. It lurched sickeningly-and crashed.

John Watts banged his head against the seat in front. He was picking himself up, dazed, not too sure where he was, when Mrs. Evans' thin, confident soprano oriented him. "Nothing to get excited about, folks. I've been expecting this-and you can see it didn't hurt a bit."

John Watts admitted that he himself was unhurt. He peered nearsightedly around, then fumbled on the sloping floor for his glasses. He found them, broken. He shrugged and put them aside; once they arrived he could dig a spare pair out of his bags.

"Now let's see what has happened," Mrs. Evans went on. "Come along, young man." He followed obediently.

The right wheel of the bus leaned drunkenly against the curb of the approach to a bridge. The driver was standing in the rain, dabbing at a cut on his cheek. "I couldn't help it," he was saying. "A dog ran across the road and I tried to avoid it."

"You might have killed us!" a woman complained.

"Don't cry till you're hurt," advised Mrs. Evans. "Now let's get back into the bus while the driver phones for someone to pick us up."

John Watts hung back to peer over the side of the canyon spanned by the bridge. The ground dropped away steeply; almost under him were large, mean-looking rocks. He shivered and got back into the bus.

The relief car came along very promptly, or else he must have dozed. The latter, he decided, for the rain had stopped and the sun was breaking through the clouds. The relief driver thrust his head in the door and shouted, "Come on, folks! Time's awastin'! Climb out and climb in." Hurrying, John stumbled as he got aboard. The new driver gave him a hand. "'Smatter, Pop? Get shaken up?"

"I'm all right, thanks."

"Sure you are. Never better."

He found a seat by Mrs. Evans, who smiled and said, "Isn't it a heavenly day?"

He agreed. It was a beautiful day, now that the storm had broken. Great fleecy clouds tumbling up into warm blue sky, a smell of clean wet pavement, drenched fields and green things growing-he lay back and savored it. While he was soaking it up a great double rainbow formed and blazed in the eastern sky. He looked at them and made two wishes, one for himself and one for Martha. The rainbows' colors seemed to be reflected in everything he saw. Even the other passengers seemed younger, happier, better dressed, now that the sun was out. He felt lighthearted, almost free from his aching loneliness.

They were there in jig time; the new driver more than made up the lost minutes. A great arch stretched across the road: THE ALL-AMERICAN CELEBRATION AND EXPOSITION OF ARTS and under it PEACE AND GOOD WILL TO ALL. They drove through and sighed to a stop.

Mrs. Evans hopped up. "Got a date-must run!" She trotted to the door, then called back, "See you on the midway, young man," and disappeared in the crowd.

John Watts got out last and turned to speak to the driver. "Oh, uh, about my baggage. I want to—"

The driver had started his engine again. "Don't worry about your baggage," he called out. "You'll be taken care of." The huge bus moved away.

"But—" John Watts stopped; the bus was gone. All very well-but what was he to do without his glasses?

But there were sounds of carnival behind him, that decided him. After all, he thought, tomorrow will do. If anything is too far away for me to see, I can always walk closer. He joined the queue at the gate and went in.

It was undeniably the greatest show ever assembled for the wonderment of mankind. It was twice as big as all outdoors, brighter than bright lights, newer than new, stupendous, magnificent, breathtaking, awe inspiring, supercolossal, incredible-and a lot of fun. Every community in America had sent its own best to this amazing show. The marvels of P. T. Barnum, of Ripley, and of all Tom Edison's godsons had been gathered in one spot. From up and down a broad continent the riches of a richly endowed land and the products of a clever and industrious people had been assembled, along with their folk festivals, their annual blowouts, their celebrations, and their treasured carnival customs. The result was as American as strawberry shortcake and as gaudy as a Christmas tree, and it all lay there before him, noisy and full of life and crowded with happy, holiday people.

Johnny Watts took a deep breath and plunged into it.

He started with the Fort Worth Southwestern Exposition and Fat Stock Show and spent an hour admiring gentle, whitefaced steers, as wide and square as flat-topped desks, scrubbed and curried, with their hair parted neatly from skull to base of spine, then day-old little black lambs on rubbery stalks of legs, too new to know themselves, fat ewes, their broad backs, paddled flatter and flatter by grave-eyed boys intent on blue ribbons. Next door he found the Pomona Fair with solid matronly Percherons and dainty Palominos from the Kellog Ranch.

And harness racing. Martha and he had always loved harness racing. He picked out a likely looking nag of the famous Dan Patch line, bet and won, then moved on, as there was so much more to see. Other country fairs were just beyond, apples from Yakima, the cherry festival from Beaumont and Banning, Georgia's peaches. Somewhere off beyond him a band was beating out, "Ioway, Ioway, that's where the tall corn grows!"

Directly in front of him was a pink cotton candy booth.

Martha had loved the stuff. Whether at Madison Square Garden or at Imperial County's fair grounds she had always headed first for the cotton candy booth. "The big size, honey?" he muttered to himself. He felt that if he were to look around he would see her nodding. "The large size, please," he said to the vendor.

The carnie was elderly, dressed in a frock coat and stiff shirt. He handled the pink gossamer with dignified grace. "Certainly, sir, there is no other size." He twirled the paper cornucopia and presented it. Johnny handed him a half dollar. The man flexed and opened his fingers; the coin disappeared. That appeared to end the matter.

"The candy is fifty cents?" Johnny asked diffidently.

"Not at all, sir." The old showman plucked the coin from Johnny's lapel and handed it back. "On the house-I see you are with it. After all, what is money?"

"Why, thank you, but, uh, I'm not really 'with it,' you know."

The old man shrugged. "If you wish to go incognito, who am I to dispute you? But your money is no good here."

"Uh, if you say so."

"You will see."

He felt something brush against his leg. It was a dog of the same breed, or lack of breed, as Bindlestiff had been. It looked amazingly like Bindlestiff. The dog looked up and waggled its whole body.

"Why, hello, old fellow!" He patted it-then his eyes blurred; it even felt like Bindlestiff. "Are you lost, boy? Well, so am I. Maybe we had better stick together, eh? Are you hungry?"

The dog licked his hand. He turned to the cotton candy man. "Where can I buy hot dogs?"

"Just across the way, sir."

He thanked him, whistled to the dog, and hurried across. "A half dozen hot dogs, please."

"Coming up! Just mustard, or everything on?"

"Oh, I'm sorry. I want them raw, they are for a dog."

"I getcha. Just a sec."

Presently he was handed six wienies, wrapped in paper. "How much are they?"

"Compliments of the house."

"I beg pardon?"

"Every dog has his day. This is his."

"Oh. Well, thank you." He became aware of increased noise and excitement behind him and looked around to see the first of the floats of the Priests of Pallas, from Kansas City, coming down the street. His friend the dog saw it, too, and began to bark.

"Quiet, old fellow." He started to unwrap the meat. Someone whistled across the way; the dog darted between the floats and was gone. Johnny tried to follow, but was told to wait until the parade had passed. Between floats he caught glimpses of the dog, leaping up on a lady across the way. What with the dazzling lights of the floats and his own lack of glasses he could not see her clearly, but it was plain that the dog knew her; he was greeting her with the all-out enthusiasm only a dog can achieve.

He held up the package and tried to shout to her; she waved back, but the band music and the noise of the crowd made it impossible to hear each other. He decided to enjoy the parade, then cross and find the pooch and its mistress as soon as the last float had passed.

It seemed to him the finest Priests of Pallas parade he had ever seen. Come to think about it, there hadn't been a Priests of Pallas parade in a good many years. Must have revived it just for this.

That was like Kansas City-a grand town. He didn't know of any he liked as well. Possibly Seattle. And New Orleans, of course.

And Duluth-Duluth was swell. And so was Memphis. He would like to own a bus someday that ran from Memphis to Saint Joe, from Natchez to Mobile, wherever the wide winds blow.

Mobile-there was a town.

The parade was past now, with a swarm of small boys tagging after it. He hurried across.

The lady was not there, neither she, nor the dog. He looked quite thoroughly. No dog. No lady with a dog.

He wandered off, his eyes alert for marvels, but his thoughts on the dog. It really had been a great deal like Bindlestiff...and he wanted to know the lady it belonged to-anyone who could love that sort of a dog must be a pretty good sort herself. Perhaps he could buy her ice cream, or persuade her to go the midway with him. Martha would approve he was sure. Martha would know he wasn't up to anything.

Anyhow, no one ever took a little fat man seriously.

But there was too much going on to worry about it. He found himself at St. Paul's Winter Carnival, marvelously constructed in summer weather through the combined efforts of York and American. For fifty years it had been held in January, yet here it was, rubbing shoulders with the Pendleton RoundUp, the Fresno Raisin Festival, and Colonial Week in Annapolis. He got in at the tail end of the ice show, but in time for one of his favorite acts, the Old Smoothies, out of retirement for the occasion and gliding as perfectly as ever to the strains of Shine On, Harvest Moon.

His eyes blurred again and it was not his lack of glasses.

Coming out he passed a large sign: SADIE HAWKINS DAY-STARTING POINT FOR BACHELORS. He was tempted to take part; perhaps the lady with the dog might be among the spinsters. But he was a little tired by now; just ahead there was an outdoor carnival of the pony-ride-and-ferris-wheel sort; a moment later he was on the merry-go-round and was climbing gratefully into one of those swan gondolas so favored by parents. He found a young man already seated there, reading a book.

"Oh, excuse me," said Johnny. "Do you mind?"

"Not at all," the young man answered and put his book down. "Perhaps you are the man I'm looking for."

"You are looking for someone?"

"Yes. You see, I'm a detective. I've always wanted to be one and now I am."

"Indeed?"

"Quite. Everyone rides the merry-go-round eventually, so it saves trouble to wait here. Of course, I hang around Hollywood and Vine, or Times Square, or Canal Street, but here I can sit and read."

"How can you read while watching for someone?"

"Ah, I know what is in the book—" He held it up; it was The Hunting of the Snark. "—so that leaves my eyes free for watching."

Johnny began to like this young man. "Are there boojums about?"

"No, for we haven't softly and silently vanished away. But would we notice it if we did? I must think it over. Are you a detective, too?"

"No, I-uh-I travel in elephants."

"A fine profession. But not much for you here. We have giraffes—" He raised his voice above the music of the calliope and let his eyes rove around the carousel. "—camels, two zebras, plenty of horses, but no elephants. Be sure to see the Big Parade; there will be elephants."

"Oh, I wouldn't miss it!"

"You musn't. It will be the most amazing parade in all time, so long that it will never pass a given point and every mile choked with wonders more stupendous than the last. You're sure you're not the man I'm looking for?"

"I don't think so. But see here-how would you go about finding a lady with a dog in this crowd?"

"Well, if she comes here, I'll let you know. Better go down on Canal Street. Yes, I think if I were a lady with a dog I'd be down on Canal Street. Women love to mask; it means they can unmask."

Johnny stood up. "How do I get to Canal Street?"

"Straight through Central City past the opera house, then turn right at the Rose Bowl. Be careful then, for you pass through the Nebraska section with Ak-Sar-Ben in full sway. Anything could happen. After that, Calaveras County-Mind the frogs!—then Canal Street."

"Thank you so much." He followed the directions, keeping an eye out for the lady with a dog. Nevertheless he stared with wonder at the things he saw as he threaded through the gay crowds. He did see a dog, but it was a seeing-eye dog-and that was a great wonder, too, for the live clear eyes of the dog's master could and did see anything that was going on around him, yet the man and the dog traveled together with the man letting the dog direct their way, as if no other way of travel were conceivable, or desired, by either one.

He found himself in Canal Street presently and the illusion was so complete that it was hard to believe that he had not been transported to New Orleans. Carnival was at height; it was Fat Tuesday here; the crowds were masked. He got a mask from a street vendor and went on.

The hunt seemed hopeless. The street was choked by merry-makers watching the parade of the Krewe of Venus. It was hard to breathe, much harder to move and search. He eased into Bourbon Street-the entire French Quarter had been reproduced-when he saw the dog.

He was sure it was the dog. It was wearing a clown suit and a little peaked hat, but it looked like his dog. He corrected himself; it looked like Bindlestiff.

And it accepted one of the frankfurters gratefully. "Where is she, old fellow?" The dog woofed once, then darted away into the crowd. He tried to follow, but could not; he required more clearance. But he was not downhearted; he had found the dog once, he would find him again. Besides, it had been at a masked ball that he had first met Martha, she a graceful Pierrette, he a fat Pierrot. They had watched the dawn come up after the ball and before the sun had set again they had agreed to marry.

He watched the crowd for Pierrettes, sure somehow that the dog's mistress would costume so.

Everything about this fair made him think even more about Martha, if that were possible. How she had traveled his territory with him, how it had been their habit to start out, anywhere, whenever a vacation came along. Chuck the Duncan Hines guide and some bags in the car and be off. Martha...sitting beside him with the open highway a broad ribbon before them...singing their road song America the Beautiful and keeping him on key: "—thine alabaster cities gleam, undimmed by human tears—"

Once she had said to him, while they were bowling along through-where was it? The Black Hills? The Ozarks? The Poconos? No matter. She had said, "Johnny, you'll never be President and I'll never be First Lady, but I'll bet we know more about the United States than any President ever has. Those busy, useful people never have time to see it, not really."

"It's a wonderful country, darling."

"It is, it is indeed. I could spend all eternity just traveling around in it-traveling in elephants, Johnny, with you."

He had reached over and patted her knee; he remembered how it felt.

The revelers in the mock French Quarter were thinning out; they had drifted away while he daydreamed. He stopped a red devil. "Where is everyone going?"

"To the parade, of course."

"The Big Parade?"

"Yes, it's forming now." The red devil moved on, he followed.

His own sleeve was plucked. "Did you find her?" It was Mrs. Evans, slightly disguised by a black domino and clinging to the arm of a tall and elderly Uncle Sam.

"Eh? Why, hello, Mrs. Evans! What do you mean?"

"Don't be silly. Did you find her?"

"How did you know I was looking for anyone?"

"Of course you were. Well, keep looking. We must go now." They trailed after the mob.

The Big Parade was already passing by the time he reached its route. It did not matter, there was endlessly more to come. The Holly, Colorado, Boosters were passing; they were followed by the prize Shiner drill team. Then came the Veiled Prophet of Khorassan and his Queen of Love and Beauty, up from their cave in the bottom of the Mississippi...the Anniversary Day Parade from Brooklyn, with the school children carrying little American flags...the Rose Parade from Pasadena, miles of flowered-covered floats...the Indian Powwow from Flagstaff, twentytwo nations represented and no buck in the march wearing less than a thousand dollars' worth of hand-wrought jewelry. After the indigenous Americans rode Buffalo Bill, goatee jutting out and hat in hand, locks flowing in the breeze. Then was the delegation from Hawaii with King Kamehamela himself playing Alii, Lord of Carnival, with royal abandon, while his subjects in dew-fresh leis pranced behind him, giving aloha to all.

There was no end. Square dancers from Ojai and from upstate New York, dames and gentlemen from Annapolis, the Cuero, Texas, Turkey Trot, all the Krewes and marching clubs of old New Orleans, double flambeaux blazing, nobles throwing favors to the crowd-the King of Zulus and his smooth brown court, singing: "Everybody who was anybody doubted it—"

And the Mummers came, "taking a suit up the street" to Oh Dem Golden Slippers. Here was something older than the country celebrating it, the shuffling jig of the masquers, a step that was young when mankind was young and first celebrating the birth of spring. First the fancy clubs, whose captains wore capes worth a king's ransom-or a mortgage on a row house-with fifty pages to bear them. Then the Liberty Clowns and the other comics and lastly the ghostly, sweet string bands whose strains bring tears.

Johnny thought back to '44 when he had first seen them march, old men and young boys, because the proper "shooters" were away to war. And of something that should not be on Broad Street in Philadelphia on the first day of January, men riding in the parade because, merciful Heaven forgive us, they could not walk.

He looked and saw that there were indeed automobiles in the line of march-wounded of the last war, and one G.A.R., hat square, hands folded over the head of his cane. Johnny held his breath and waited. When each automobile approached the judges' stand, it stopped short of it, and everyone got out. Somehow, with each other's help, they hobbled or crawled past the judging line, under their own power-and each club's pride was kept intact.

There followed another wonder-they did not get back into the automobiles, but marched up Broad Street.

Then it was Hollywood Boulevard, disguised as Santa Claus Lane, in a production more stupendous than movieland had ever attempted before. There were baby stars galore and presents and favors and candy for all the children and all the grownup children, too. When, at last, Santa Claus's own float arrived, it was almost too large to be seen, a veritable iceberg, almost the North Pole itself, with John Barrymore and Mickey Mouse riding one on each side of Saint Nicholas.

On the tail end of the great, icy float was a pathetic little figure. Johnny squinted and recognized Mr. Emmett Kelly, dean of all clowns, in his role as Weary Willie. Willie was not merry-oh, no, he was shivering. Johnny did not know whether to laugh or to cry. Mr. Kelly had always affected him that way.

And the elephants came.

Big elephants, little elephants, middlesized elephants, from pint-sized Wrinkles to mighty Jumbo...and with them the bull men, Chester Conklin, P. T. Barnum, Waffle Beery, Mowgli. "This," Johnny said to himself, "must be Mulberry Street."

There was a commotion on the other side of the column; one of the men was shooing something away. Then Johnny saw what it was-the dog. He whistled; the animal seemed confused, then it spotted him, scampered up, and jumped into Johnny's arms. "You stay with me," Johnny told him. "You might have gotten stepped on."

The dog licked his face. He had lost his clown suit, but the little peaked cap hung down under his neck. "What have you been up to?" asked Johnny. "And where is your mistress?"

The last of the elephants were approaching, three abreast, pulling a great carriage. A bugle sounded up front and the procession stopped. "Why are they stopping?" Johnny asked a neighbor.

"Wait a moment. You'll see."

The Grand Marshal of the march came trotting back down the line. He rode a black stallion and was himself brave in villain's boots, white pegged breeches, cutaway, and top hat. He glanced all around.

He stopped immediately in front of Johnny. Johnny held the dog more closely to him. The Grand Marshal dismounted and bowed.

Johnny looked around to see who was behind him. The Marshal removed his tall silk hat and caught Johnny's eye. "You, sir, are the Man Who Travels in Elephants?" It was more a statement than a question.

"Uh? Yes."

"Greetings, Rex! Serene Majesty, your Queen and your court await you." The man turned slightly, as if to lead the way.

Johnny gulped and gathered Bindlestiff under one arm. The Marshal led him to the elephant-drawn carriage. The dog slipped out of his arms and bounded up into the carriage and into the lap of the lady. She patted it and looked proudly, happily, down at Johnny Watts. "Hello, Johnny! Welcome home, darling!"

"Martha!" he sobbed-and Rex stumbled and climbed into his carriage to embrace his queen.

The sweet voice of a bugle sounded up ahead, the parade started up again, wending its endless way --

A TENDERFOOT IN SPACE

I

The little mongrel took position left and rear of his boy, waited. He could feel that Charlie was upset and he wanted to know why — but an order from Charlie could not be questioned.

The boy tried to see whether or not the policeman was noticing them. He felt lightheaded — neither he nor his dog had eaten that day. They had stopped in front of this supermarket, not to buy for the boy had no money left, but because of a "BOY WANTED" sign in the window.

It was then that he had noticed the reflection of the policeman in the glass.

The boy hesitated, trying to collect his cloudy thoughts. Should he go inside and ask for the job? Or should he saunter past the policeman? Pretend to be just out for a walk?

The boy decided to go on, get out of sight. He signalled the dog to stay close and turned away from the window. Nixie came along, tail high. He did not care where they went as long as he was with Charlie. Charlie had belonged to him as far back as he could remember; he could imagine no other condition. In fact Nixie would not have lived past his tenth day had not Charlie fallen in love with him; Nixie had been the least attractive of an unfortunate litter; his mother was

Champion Lady Diana of Ojai — his father was unknown.

But Nixie was not aware that a neighbor boy had begged his life from his first owners. His philosophy was simple: enough to eat, enough sleep, and the rest of his time spent playing with Charlie. This present outing had been Charlie's idea, but any outing was welcome. The shortage of food was a nuisance but Nixie automatically forgave Charlie such errors — after all, boys will be boys and a wise dog accepted the fact. The only thing that troubled him was that Charlie did not have the happy heart which was a proper part of all hikes.

As they moved past the man in the blue uniform, Nixie felt the man's interest in them, sniffed his odor, but could find no real unfriendliness in it. But Charlie was nervous, alert, so Nixie kept his own attention high.

The man in uniform said, "Just a moment, son — "

Charlie stopped, Nixie stopped. "You speaking to me, officer?"

"Yes. What's your dog's name?"

Nixie felt Charlie's sudden terror, got ready to attack. He had never yet had to bite anyone for his boy — but he was instantly ready. The hair between his shoulder blades stood up.

Charlie answered, "Uh...his name is 'Spot."

"So?" The stranger said sharply, "Nixie!"

Nixie had been keeping his eyes elsewhere, in order not to distract his ears, his nose, and the inner sense with which he touched people's feelings. But he was so startled at hearing this stranger call him by name that he turned his head and looked at him.

"His name is 'Spot,' is it?" the policeman said quietly. "And mine is Santa Claus. But you're Charlie Vaughn and you're going home." He spoke into his helmet phone: "Nelson, reporting a pickup on that Vaughn missing-persons flier. Send a car. I'm in front of the new supermarket."

Nixie had trouble sorting out Charlie's feelings; they were both sad and glad. The stranger's feelings were slightly happy but mostly nothing; Nixie decided to wait and see. He enjoyed the ride in the police car, as he always enjoyed rides, but Charlie did not, which spoiled it a little.

They were taken to the local Justice of the Peace. "You're Charles Vaughn?"

Nixie's boy felt unhappy and said nothing.

"Speak up, son," insisted the old man. "If you aren't, then you must have stolen that dog." He read from a paper " — accompanied by a small brown mongrel, male, well trained, responds to the name 'Nixie.' Well?"

Nixie's boy answered faintly, "I'm Charlie Vaughn."

"That's better. You'll stay here until your parents pick you up." The judge frowned. "I can't understand your running away. Your folks are emigrating to Venus, aren't they?"

"Yes, sir."

"You're the first boy I ever met who didn't want to make the Big Jump." He pointed to a pin on the boy's lapel. "And I thought Scouts were trustworthy. Not to mention obedient. What got into you, son? Are you scared of the Big Jump? 'A Scout is Brave.' That doesn't mean you don't have to be scared — everybody is at times. 'Brave' simply means you don't run even if you are scared."

"I'm not scared," Charlie said stubbornly. "I want to go to Venus."

"Then why run away when your family is about to leave?"

Nixie felt such a burst of warm happy-sadness from Charlie that he licked his hand. "Because Nixie can't go!"

"Oh." The judge looked at boy and dog. "I'm sorry, son. That problem is beyond my jurisdiction." He drummed his desk top. "Charlie...will you promise, Scout's honor, not to run away again until your parents show up?"

"Uh...yes, sir."

"Okay. Joe, take them to my place. Tell my wife she had better see how recently they've had anything to eat."

The trip home was long. Nixie enjoyed it, even though Charlie's father was happy-angry and his mother was happy-sad and Charlie himself was happy-sad-worried. When Nixie was home he checked quickly through each room, making sure that all was in order and that there were no new smells. Then he returned to Charlie.

The feelings had changed. Mr. Vaughn was angry, Mrs. Vaughn was sad, Charlie himself gave out such bitter stubbornness that Nixie went to him, jumped onto his lap, and tried to lick his face. Charlie settled Nixie beside him, started digging fingers into the loose skin back of Nixie's neck. Nixie quieted at once, satisfied that he and his boy could face together whatever it was — but it distressed him that the other two were not happy. Charlie belonged to him; they belonged to Charlie; things were better when they were happy, too.

Mr. Vaughn said, "Go to bed, young man, and sleep on it. I'll speak with you again tomorrow."

"Yes, sir. Good night, sir."

"Kiss your mother goodnight. One thing more — Do I need to lock doors to be sure you will be here in the morning?"

"No, sir."

Nixie got on the foot of the bed as usual, tromped out a space, laid his tail over his nose, and started to go to sleep. But his boy was not sleeping; his sadness was taking the distressing form of heaves and sobs. So Nixie got up, went to the other end of the bed and licked away tears — then let himself be pulled into Charlie's arms and tears applied directly to his neck. It was not comfortable and too hot, besides being taboo. But it was worth enduring as Charlie started to quiet down, presently went to sleep.

Nixie waited, gave him a lick on the face to check his sleeping, then moved to his end of the bed. Mrs. Vaughn said to Mr. Vaughn, "Charles, isn't there anything we can do for the boy?"

"Confound it, Nora. We're getting to Venus with too little money as it is. If anything goes wrong, we'll be dependent on charity."

"But we do have a little spare cash."

"Too little. Do you think I haven't considered it? Why, the fare for that worthless dog would be almost as much as it is for Charlie himself! Out of the question! So why nag me? Do you think I enjoy this decision?"

"No, dear." Mrs. Vaughn pondered. "How much does Nixie weigh? I...well, I think I could reduce ten more pounds if I really tried."

"What? Do you want to arrive on Venus a living skeleton? You've reduced all the doctor advises, and so have I."

"Well...I thought that if somehow, among us, we could squeeze out Nixie's weight — it's not as if he were a St. Bernard! — we could swap it against what we weighed for our tickets."

Mr. Vaughn shook his head unhappily. "They don't do it that way."

"You told me yourself that weight was everything. You even got rid of your chess set."

"We could afford thirty pounds of chess sets, or china, or cheese, where we can't afford thirty pounds of dog."

"I don't see why not."

"Let me explain. Surely, it's weight; it's always weight in a space ship. But it isn't just my hundred and sixty pounds, or your hundred and twenty, not Charlie's hundred and ten. We're not dead weight; we have to eat and drink and breathe air and have room to move — that last takes more weight because it takes more ship weight to hold a live person than it does for an equal weight in the cargo hold. For a human being there is a complicated formula — hull weight equal to twice the passenger's weight, plus the number of days in space times four pounds. It takes a hundred and forty-six days to get to Venus — so it means that the calculated weight for each of us amounts to six hundred and sixteen pounds before they even figure in our actual weights. But for a dog the rate is even higher — five pounds per day instead of four."

"That seems unfair. Surely a little dog can't eat as much as a man? Why, Nixie's food costs hardly anything."

Her husband snorted. "Nixie eats his own rations and half of what goes on Charlie's plate. However, it's not only the fact that a dog does eat more for his weight, but also they don't reprocess waste with a dog, not even for hydroponics."

"Why not? Oh, I know what you mean. But it seems silly."

"The passengers wouldn't like it. Never mind; the rule is: five pounds per day for dogs. Do you know what that makes Nixie's fare? Over three thousand dollars!"

"My goodness!"

"My ticket comes to thirty-eight hundred dollars and some, you get by for thirty-four hundred, and Charlie's fare is thirty-three hundred — yet that confounded mongrel dog, which we couldn't sell for his veterinary bills, would cost three thousand dollars. If we had that to spare — which we haven't — the humane thing would be to adopt some orphan, spend the money on him, and thereby give him a chance on an uncrowded planet...not waste it on a dog. Confound it! — a year from now Charlie will have forgotten this dog."

"I wonder."

"He will. When I was a kid, I had to give up dogs — more than once they died, or something. I got over it. Charlie has to make up his mind whether to give Nixie away...or have him put to sleep." He chewed his lip. "We'll get him a pup on Venus."

"It won't be Nixie."

"He can name it Nixie. He'll love it as much."

"But — Charles, how is it there are dogs on Venus if it's so dreadfully expensive to get them there?"

"Eh? I think the first exploring parties used them to scout. In any case they're always shipping animals to Venus; our own ship is taking a load of milch cows."

"That must be terribly expensive."

"Yes and no. They ship them in sleep-freeze of course, and a lot of them never revive. But they cut their losses by butchering the dead ones and selling the meat at fancy prices to the colonists. Then the ones that live have calves and eventually it pays off." He stood up. "Nora, let's go to bed. It's sad — but our boy is going to have to make a man's decision. Give the mutt away, or have him put to sleep."

"Yes, dear." She sighed. "I'm coming."

Nixie was in his usual place at breakfast — lying beside Charlie's chair, accepting tidbits without calling attention to himself. He had learned long ago the rules of the dining room: no barking, no whining, no begging for food, no paws on laps, else the pets of his pet would make difficulties. Nixie was satisfied. He had learned as a puppy to take the world as it was, cheerful over its good points, patient with its minor shortcomings. Shoes were not to be chewed, people were not to be jumped on, most strangers must be allowed to approach the house (subject, of course, to strict scrutiny and constant alertness) — a few simple rules and everyone was happy. Live and let live.

He was aware that his boy was not happy even this beautiful morning. But he had explored this feeling carefully, touching his boy's mind with gentle care by means of his canine sense for feelings, and had decided, from his superior maturity, that the mood would wear off. Boys were sometimes sad and a wise dog was resigned to it.

Mr. Vaughn finished his coffee, put his napkin aside. "Well, young man?"

Charlie did not answer. Nixie felt the sadness in Charlie change suddenly to a feeling more aggressive and much stronger but no better. He pricked up his ears and waited.

"Chuck," his father said, "last night I gave you a choice. Have you made up your mind?"

"Yes, Dad." Charlie's voice was very low.

"Eh? Then tell me."

Charlie looked at the tablecloth. "You and Mother go to Venus. Nixie and I are staying here."

Nixie could feel anger welling up in the man...felt him control it. "You're figuring on running away again?"

"No, sir," Charlie answered stubbornly. "You can sign me over to the state school."

"Charlie!" It was Charlie's mother who spoke. Nixie tried to sort out the rush of emotions impinging on him.

"Yes," his father said at last, "I could use your passage money to pay the state for your first three years or so, and agree to pay your support until you are eighteen. But I shan't."

"Huh? Why not, Dad?"

"Because, old-fashioned as it sounds, I am head of this family. I am responsible for it — and not just food, shelter, and clothing, but its total welfare. Until you are old enough to take care of yourself I mean to keep an eye on you. One of the prerogatives which go with my responsibility is deciding where the family shall live. I have a better job offered me on Venus than I could ever hope for here, so I'm going to Venus — and my family goes with me." He drummed on the table, hesitated. "I think your chances are better on a pioneer planet, too — but, when you are of age, if you think otherwise, I'll pay your fare back to Earth. But you go with us. Understand?"

Charlie nodded, his face glum.

"Very well. I'm amazed that you apparently care more for that dog than you do for your mother — and myself. But — "

"It isn't that, Dad. Nixie needs — "

"Quiet. I don't suppose you realize it, but I tried to figure this out — I'm not taking your dog away from you out of meanness. If I could afford it, I'd buy the hound a ticket. But something your mother said last night brought up a third possibility."

Charlie looked up suddenly, and so did Nixie; wondering why the surge of hope in his boy.

"I can't buy Nixie a ticket...but it's possible to ship him as freight."

"Huh? Why, sure, Dad! Oh, I know he'd have to be caged up — but I'd go down and feed him every day and pet him and tell him it was all right and — "

"Slow down! I don't mean that. All I can afford is to have him shipped the way animals are always shipped in space ships...in sleep-freeze."

Charlie's mouth hung open. He managed to say, "But that's — "

"That's dangerous. As near as I remember, it's about fifty-fifty whether he wakes up at the other end. But if you want to risk it — well, perhaps it's better than giving him away to strangers, and I'm sure you would prefer it to taking him down to the vet's and having him put to sleep."

Charlie did not answer. Nixie felt such a storm of conflicting emotions in Charlie that the dog violated dining room rules; he raised up and licked the boy's hand.

Charlie grabbed the dog's ear. "All right, Dad," he said gruffly. "We'll risk it — if that's the only way Nixie and I can still be partners."

Nixie did not enjoy the last few days before leaving; they held too many changes. Any proper dog likes excitement, but home is for peace and quiet. Things should be orderly there — food and water always in the same place, newspapers to fetch at certain hours, milkmen to supervise at regular times, furniture all in its proper place. But during that week all was change — nothing on time, nothing in order. Strange men came into the house (always a matter for suspicion), and he, Nixie, was not even allowed to protest, much less give them the what-for they had coming.

He was assured by Charlie and Mrs. Vaughn that it was "all right" and he had to accept it, even though it obviously was not all right. His knowledge of English was accurate for a few dozen words but there was no way to explain to him that almost everything owned by the Vaughn family was being sold, or thrown away...nor would it have reassured him. Some things in life were permanent; he had never doubted that the Vaughn home was first among these certainties

By the night before they left, the rooms were bare except for beds. Nixie trotted around the house, sniffing places where familiar objects had been, asking his nose to tell him that his eyes deceived him, whining at the results. Even more upsetting than physical change was emotional change, a heady and not entirely happy excitement which he could feel in all three of his people.

There was a better time that evening, as Nixie was allowed to go to Scout meeting. Nixie always went on hikes and had formerly attended all meetings. But he now attended only outdoor meetings since an incident the previous winter — Nixie felt that too much fuss had been made about it...just some spilled cocoa and a few broken cups and anyhow it had been that cat's fault.

But this meeting he was allowed to attend because it was Charlie's last Scout meeting on Earth. Nixie was not aware of that but he greatly enjoyed the privilege, especially as the meeting was followed by a party at which Nixie became comfortably stuffed with hot dogs and pop. Scoutmaster McIntosh presented Charlie with a letter of withdrawal, certifying his status and merit badges and asking his admission into any troop on Venus. Nixie joined happily in the applause, trying to outbark the clapping.

Then the Scoutmaster said, “Okay, Rip."

Rip was senior patrol leader. He got up and said, "Quiet, fellows. Hold it, you crazy savages! Charlie, I don't have to tell you that we're all sorry to see you go...but we hope you have a swell time on Venus and now and then send a postcard to Troop TwentyEight and tell us about it — we'll post 'em on the bulletin board. Anyhow, we wanted to get you a going-away present. But Mr. McIntosh pointed out that you were on a very strict weight allowance and practically anything would either cost you more to take with you than we had paid for it, or maybe you couldn't take it at all, which wouldn't be much of a present.

"But it finally occurred to us that we could do one thing. Nixie — "

Nixie's ears pricked. Charlie said softly, "Steady, boy."

"Nixie has been with us almost as long as you have. He's been around, poking his cold nose into things, longer than any of the tenderfeet, and longer even than some of the second class. So we decided he ought to have his own letter of withdrawal, so that the troop you join on Venus will know that Nixie is a Scout in good standing. Give it to him, Kenny."

The scribe passed over the letter. It was phrased like Charlie's letter, save that it named "Nixie Vaughn, Tenderfoot Scout" and diplomatically omitted the subject of merit badges. It was signed by the scribe, the scoutmaster, and the patrol leaders and countersigned by every member of the troop. Charlie showed it to Nixie, who sniffed it. Everybody applauded, so Nixie joined happily in applauding himself.

"One more thing," added Rip. "Now that Nixie is officially a Scout, he has to have his badge. So send him front and center."

Charlie did so. They had worked their way through the Dog Care merit badge together while Nixie was a pup, all feet and floppy ears; it had made Nixie a much more acceptable member of the Vaughn family. But the rudimentary dog training required for the merit badge had stirred Charlie's interest; they had gone on to Dog Obedience School together and Nixie had progressed from easy spoken commands to more difficult silent hand signals.

Charlie used them now. At his signal Nixie trotted forward, sat stiffly at attention, front paws neatly drooped in front of his chest, while Rip fastened the tenderfoot badge to his collar, then Nixie raised his right paw in salute and gave one short bark, all to hand signals.

The applause was loud and Nixie trembled with eagerness to join it. But Charlie signalled "hold & quiet," so Nixie remained silently poised in salute until the clapping died away. He returned to heel just as silently, though quivering with excitement. The purpose of the ceremony may not have been clear to him — if so, he was not the first tenderfoot Scout to be a little confused. But it was perfectly clear that he was the center of attention and was being approved of by his friends; it was a high point in his life.

But all in all there had been too much excitement for a dog in one week; the trip to White Sands, shut up in a travel case and away from Charlie, was the last straw. When Charlie came to claim him at the baggage room of White Sands Airport, his relief was so great that he had a puppyish accident, and was bitterly ashamed.

He quieted down on the drive from airport to spaceport, then was disquieted again when he was taken into a room which reminded him of his unpleasant trips to the veterinary — the smells, the white-coated figure, the bare table where a dog had to hold still and be hurt. He stopped dead.

"Come, Nixie!" Charlie said firmly. "None of that, boy. Up!"

Nixie gave a little sigh, advanced and jumped onto the examination table, stood docile but trembling.

"Have him lie down," the man in the white smock said. "I've got to get the needle into the large vein in his foreleg."

Nixie did so on Charlie's command, then lay tremblingly quiet while his left foreleg was shaved in a patch and sterilized. Charlie put a hand on Nixie's shoulder blades and soothed him while the veterinary surgeon probed for the vein. Nixie bared his teeth once but did not growl, even though the fear in the boy's mind was beating on him, making him just as afraid.

Suddenly the drug reached his brain and he slumped limp.

Charlie's fear surged to a peak but Nixie did not feel it. Nixie's tough little spirit had gone somewhere else, out of touch with his friend, out of space and time — wherever it is that the "I" within a man or a dog goes when the body wrapping it is unconscious.

Charlie said shrilly, "Is he all right?"

"Eh? Of course."

"Uh...I thought he had died."

"Want to listen to his heart beat?"

"Uh, no — if you say he's all right. Then he's going to be okay? He'll live through it?"

The doctor glanced at Charlie's father, back at the boy, let his eyes rest on Charlie's lapel. "Star Scout, eh?"

"Uh, yes, sir."

"Going on to Eagle?"

"Well...I'm going to try, sir."

"Good. Look, son. If I put your dog over on that shelf, in a couple of hours he'll be sleeping normally and by tomorrow he won't even know he was out. But if I take him back to the chill room and start him on the cycle — " He shrugged. "Well, I've put eighty head of cattle under today. If forty percent are revived, it's a good shipment. I do my best."

Charlie looked grey. The surgeon looked at Mr. Vaughn, back at the boy. "Son, I know a man who's looking for a dog for his kids. Say the word and you won't have to worry about whether this pooch's system will recover from a shock it was never intended to take."

Mr. Vaughn said, "Well, son?"

Charlie stood mute, in an agony of indecision. At last Mr. Vaughn said sharply, "Chuck, we've got just twenty minutes before we must check in with Emigration. Well? What's your answer?"

Charlie did not seem to hear. Timidly, he put out one hand, barely touched the still form with the staring, unseeing eyes. Then he snatched his hand back and squeaked, "No! We're going to Venus — both of us!" — turned and ran out of the room.

The veterinary spread his hands helplessly. "I tried."

"I know you did, Doctor," Mr. Vaughn answered gravely. "Thank you."

The Vaughns took the usual emigrant routing: winged shuttle rocket to the inner satellite station, ugly wingless ferry rocket to the outer station, transshipment there to the great globular cargo liner *Hesperus*. The jumps and changes took two days; they stayed in the deep space ship for twenty-one tedious weeks, falling in half-elliptical orbit from Earth down to Venus. The time was fixed, an inescapable consequence of the law of gravity and the sizes and shapes of the two planetary orbits.

At first Charlie was terribly excited. The terrific high gravity boost to break away from Earth's mighty grasp was as much of a shocker as he had hoped; six gravities is shocking, even to those used to it. When the shuttle rocket went into free fall a few minutes later, utter weightlessness was as distressing, confusing — and exciting — as he had hoped. It was so upsetting that he would have lost his lunch had he not been injected with antinausea drug.

Earth, seen from space, looked as it had looked in color-stereo pictures, but he found that the real thing is as vastly more satisfying as a hamburger is better than a picture of one. In the outer satellite station, someone pointed out to him the famous Captain Nordhoff, just back from Pluto. Charlie recognized those stern, lined features, familiar from TV and news pictures, and realized with odd surprise that the hero was a man, like everyone else. He decided to be a spaceman and famous explorer himself.

S.S. *Hesperus* was a disappointment. It "blasted" away from the outer station with a gentle shove, one-tenth gravity, instead of the soul-satisfying, bone-grinding, ear-shattering blast with which the shuttle had left Earth. Also, despite its enormous size, it was terribly crowded. After the Captain had his ship in orbit to intercept Venus five months later, he placed spin on his ship to give his passengers artificial weight—which took from Charlie the pleasant new feeling of weightlessness which he had come to enjoy.

He was bored silly in five days — and there were five months of it ahead. He shared a cramped room with his father and mother and slept in a hammock swung "nightly" (the ship used Greenwich time) between their bunks. Hammock in place, there was no room in the cubicle; even with it stowed, only one person could dress at a time. The only recreation space was the messrooms and they were always crowded. There was one view port in his part of the ship. At first it was popular, but after a few days even the kids didn't bother, for the view was always the same: stars, and more stars.

By order of the Captain, passengers could sign up for a "sightseeing tour." Charlie's chance came when they were two weeks out — a climb through accessible parts of the ship, a quick look into the power room, a longer look at the hydroponics gardens which provided fresh air and part of their food, and a ten-second glimpse through the door of the Holy of Holies, the control room, all accompanied by a lecture from a bored junior officer. It was over in two hours and Charlie was again limited to his own, very crowded part of the ship.

Up forward there were privileged passengers, who had staterooms as roomy as those of the officers and who enjoyed the luxury of the officers' lounge. Charlie did not find out that they were aboard for almost a month, but when he did, he was righteously indignant.

His father set him straight. "They paid for it."

"Huh? But we paid, too. Why should they get — "

"They paid for luxury. Those first-class passengers each paid about three times what your ticket cost, or mine. We got the emigrant rate — transportation and food and a place to sleep."

"I don't think it's fair."

Mr. Vaughn shrugged. "Why should we have something we haven't paid for?"

"Uh,...well, Dad, why should they be able to pay for luxuries we can't afford?"

"A good question. Philosophers ever since Aristotle have struggled with that one. Maybe you'll tell me, someday."

"Huh? What do you mean, Dad?"

"Don't say 'Huh.' Chuck, I'm taking you to a brand new planet. If you try, you can probably get rich. Then maybe you can tell me why a man with money can command luxuries that poor people can't."

"But we aren't poor!"

"No, we are not. But we aren't rich either. Maybe you've got the drive to get rich. One thing is sure: on Venus the opportunities are all around you. Never mind — how about a game before dinner?"

Charlie still resented being shut out of the nicest parts of the ship — he had never felt like a second-class anything (citizen, or passenger) before in his life; the feeling was not pleasant. He decided to get rich on Venus. He would make the biggest uranium strike in history; then he would ride first class between Venus and Earth whenever he felt like it — that would teach those stuckup snobs!

He then remembered he had already decided to be a famous spaceman. Well, he would do both. Someday he would own a space line...and one of the ships would be his private yacht. But by the time the *Hesperus* reached the halfway point he no longer thought about it.

The emigrants saw little of the ship's crew, but Charlie got acquainted with Slim, the emigrants' cook. Slim was called so for the reason that cooks usually are; he sampled his own wares all day long and was pear shaped.

Like all space ships, the *Hesperus* was undermanned except for astrogators and engineers — why hire a cook's helper when the space can be sold to a passenger? It was cheaper to pay high wages to a cook who could perform production-line miracles without a helper. And Slim could.

But he could use a helper. Charlie's merit badge in cooking plus a willingness to do as he was told made him Slim's favorite volunteer assistant. Charlie got from it something to do with his time, sandwiches and snacks whenever he wanted them, and lots of knowledgeable conversation. Slim had not been to college but his curiosity had never dried up; he had read everything worth reading in several ship's libraries and had kept his eyes open dirtside on every inhabited planet in the Solar System.

"Slim, what's it like on Venus?"

"Mmm...pretty much like the books say. Rainy. Hot. Not too bad at Borealis, where you'll land."

"Yes — but what's it *like*?"

"Why not wait and see? Give that stew a stir...and switch on the shortwaver. Did you know that they used to figure that Venus couldn't be lived on?"

"Huh? No, I didn't."

"s'truth. Back in the days when we didn't have space flight, scientists were certain that Venus didn't have either oxygen nor water. They figured it was a desert, with sand storms and no air you could breathe. Proved it, all by scientific logic."

"But how could they make such a mistake? I mean, obviously, with clouds all over it and — "

"The clouds didn't show water vapor, not through a spectroscope they didn't. Showed lots of carbon dioxide, though, and by the science of the last century they figured they had proved that Venus couldn't support life."

"Funny sort of science! I guess they were pretty ignorant in those days."

"Don't go running down our grandfathers. If it weren't for them, you and I would be squatting in a cave, scratching fleas. No, Bub, they were pretty sharp; they just didn't have all the facts. We've got more facts, but that doesn't make us smarter. Put them biscuits over here. The way I see it, it just goes to show that the only way to tell what's in a stew is to eat it...and even then you aren't always sure. Venus turned out to be a very nice place. For ducks. If there were any ducks there. Which there ain't."

"Do you like Venus?"

"I like any place I don't have to stay in too long. Okay, let's feed the hungry mob."

The food in the *Hesperus* was as good as the living accommodations were bad. This was partly Slim's genius, but was also the fact that food in a space ship costs by its weight; what it had cost Earthside matters little compared with the expense of lifting it off Earth. The choicest steaks cost the spaceline owners little more than the same weight of rice — and any steaks left over could be sold at high prices to colonists weary for a taste of Earth food. So the emigrants ate as well as the first class passengers, even though not with fine service and fancy surroundings. When Slim was ready he opened a shutter in the galley partition and Charlie dealt out the wonderful viands like chow in a Scout camp to passengers queued up with plates. Charlie enjoyed this chore. It made him feel like a member of the crew, a spaceman himself.

Charlie almost managed not to worry about Nixie, having told himself that there was nothing to worry about. They were a month past midpoint, with Venus only six weeks away before he discussed it with Slim. "Look, Slim, you know a lot about such things. Nixie'll make it all right...won't he?"

"Hand me that paddle; Mmm...don't know as I ever ran across a dog in space before. Cats now...cats belong in space. They're clean and neat and help to keep down mice and rats."

"I don't like cats."

"Ever lived with a cat? No, I see you haven't. How can you have the gall not to like something you don't know anything about? Wait till you've lived with a cat, then tell me what you think. Until then...well, who told you were entitled to an opinion?"

"Huh? Why, everybody is entitled to his own opinion!"

"Nonsense, Bub. Nobody is entitled to an opinion about something he is ignorant of. If the Captain told me how to bake a cake, I would politely suggest that he not stick his nose into my trade...contrariwise, I never tell him how to plot an orbit to Mars."

"Slim, you're changing the subject. How about Nixie? He's going to be all right...isn't he?"

"As I was saying, I don't have opinions about things I don't know. Happens I don't know dogs. Never had one as a kid; I was raised in a big city. Since then I've been in space. No dogs."

"Darn it, Slim! — you're being evasive: You know about sleep-freeze. I know you do."

Slim sighed. "Kid, you're going to die someday and so am I. And so is your pup. It's the one thing we can't avoid. Why, the ship's reactor could blow up and none of us would know what hit us till they started fitting us with haloes. So why fret about whether your dog comes out of sleep-freeze? Either he does and you've worried unnecessarily...or he doesn't and there's nothing you can do about it."

"So you don't think he will?"

"I didn't say that. I said it was foolish to worry."

But Charlie did worry; the talk with Slim brought it to the top of his mind, worried him more and more as the day got closer. The last month seemed longer to him than the four dreary months that had preceded it.

As for Nixie, time meant nothing to him. Suspended between life and death, he was not truly in the *Hesperus* at all; but somewhere else, outside of time. It was merely his shaggy little carcass that lay, stored like a ham, in the frozen hold of the ship.

Eventually the Captain slowed his ship, matched her with Venus and set her in a parking orbit alongside Venus's single satellite station. After transshipment and maddening delay the Vaughns were taken down in the winged shuttle *Cupid* into the clouds of Venus and landed at the north pole colony, Borealis.

For Charlie there was a still more maddening delay: cargo (which included Nixie) was unloaded after passengers and took many days because the mighty *Hesperus* held so much more than the little *Cupid.* He could not even go over to the freight sheds to inquire about Nixie as immigrants were held at the reception center for quarantine. Each one had received many shots during the five-month trip to innoculate them against the hazards of Venus; now they found that they must wait not only on most careful physical examination and observation to make sure that they were not bringing Earth diseases in with them but also to receive more shots not available aboard ship. Charlie spent the days with sore arms and gnawing anxiety.

So far he had had one glimpse outdoors — a permanently cloudy sky which never got dark and was never very bright. Borealis is at Venus's north pole and the axis of the planet is nearly erect; the unseen Sun circled the horizon, never rising nor setting by more than a few degrees. The colony lived in eternal twilight.

The lessened gravity, nine-tenths that of Earth, Charlie did not notice even though he knew he should. It had been five months since he had felt Earth gravity and the *Hesperus* had maintained only one-third gravity in that outer part, where spin was most felt. Consequently Charlie felt heavier than seemed right, rather than lighter — his feet had forgotten full weight.

Nor did he notice the heavy concentration (about 2%) of carbon dioxide in the air, on which Venus's mighty jungles depended. It had once been believed that so much carbon dioxide, breathed regularly, would kill a man, but long before space flight, around 1950, experiments had shown that even a higher concentration had no bad effects. Charlie simply didn't notice it.

All in all, he might have been waiting in a dreary, barracks-like building in some tropical port on Earth. He did not see much of his father, who was busy by telephone and by germproof conference cage, conferring with his new employers and arranging for quarters, nor did he see much of his mother; Mrs. Vaughn had found the long trip difficult and was spending most of her time lying down.

Nine days after their arrival Charlie was sitting in the recreation room of the reception center, disconsolately reading a book he had already read on Earth. His father came in. "Come along."

"Huh? What's up?"

"They're going to try to revive your dog. You want to be there, don't you? Or maybe you'd rather not? I can go...and come back and tell you what happened."

Charlie gulped. "I want to be there. Let's go."

The room was like the one back at White Sands where Nixie had been put to sleep, except that in place of the table there was a cage-like contraption with glass sides. A man was making adjustments on a complex apparatus which stood next to the glass box and was connected to it. He looked up. "Yes? We're busy."

"My name is Vaughn and this is my son Charlie. He's the owner of the dog."

The man frowned. "Didn't you get my message? I'm Doctor Zecker, by the way. You're too soon; we're just bringing the dog up to temperature."

Mr. Vaughn said, "Wait here, Charlie," crossed the room and spoke in a low voice to Zecker.

Zecker shook his head. "Better wait outside."

Mr. Vaughn again spoke quietly; Dr. Zecker answered, "You don't understand. I don't even have proper equipment — I've had to adapt the force breather we use for hospital monkeys. It was never meant for a dog."

They argued in whispers for a few moments. They were interrupted by an amplified voice from outside the room "Ready with ninety-seven-X, Doctor — that's the dog."

Zecker called back, "Bring it in!" — then went on to Mr. Vaughn, "All right — keep him out of the way. Though I still say he would be better off outside." He turned, paid them no further attention.

Two men, came in, carrying a large tray. Something quiet and not very large was heaped on it, covered by dull blue cloth. Charlie whispered, "Is that Nixie?"

"I think so," his father answered in a low voice. "Keep quiet and watch."

"Can't I see him?"

"Stay where you are and don't say a word — else the doctor will make you leave."

Once inside, the team moved quickly and without speaking, as if this were something rehearsed again and again, something that must be done with great speed and perfect precision. One of them opened the glass box; the other placed the tray inside, uncovered its burden. It was Nixie, limp and apparently dead. Charlie caught his breath.

One assistant moved the little body forward, fitted a collar around its neck, closed down a partition like a guillotine, jerked his hands out of the way as the other assistant slammed the glass door through which they had put the dog in, quickly sealed it. Now Nixie was shut tight in a — glass coffin, his head lying outside the end partition, his body inside. "Cycle!"

Even as he said it, the first assistant slapped a switch and fixed his eyes on the instrument board and Doctor Zecker thrust both arms into long rubber gloves passing through the glass, which allowed his hands to be inside with Nixie's body. With rapid, sure motions he picked up a hypodermic needle, already waiting inside, shoved it deep into the dog's side.

"Force breathing established."'

"No heart action, Doctor!"

The reports came one on top of the other, Zecker looked up at the dials, looked back at the dog and cursed. He grabbed another needle. This one he entered gently, depressed the plunger most carefully, with his eyes on the dials. "Fibrillation."

"I can see!" he answered snappishly, put down the hypo and began to massage the dog in time with the ebb and surge of the "iron lung."

And Nixie lifted his head and cried.

It was more than an hour before Dr. Zecker let Charlie take the dog away. During most of this time the cage was open and Nixie was breathing on his own, but with the apparatus still in place, ready to start again if his heart or lungs should falter in their newly relearned trick of keeping him alive. But during this waiting time Charlie was allowed — to stand beside him, touch him, sooth and pet him to keep him quiet.

At last the doctor picked up Nixie and put him in Charlie's arms. "Okay, take him. But keep him quiet; I don't want him running around for the next ten hours. But not too quiet, don't let him sleep."

"Why not, Doctor?" asked Mr. Vaughn.

"Because sometimes, when you think they've made it, they just lie down and quit — as if they had had a taste of death and found they liked it. This pooch has had a near squeak — we have only seven minutes to restore blood supply to the brain. Any longer than that...well, the brain is permanently damaged and you might as well put it out of its misery."

"You think you made it in time?"

"Do you think," Zecker answered angrily, "that I would let you take the dog if I hadn't?"

"Sorry."

"Just keep him quiet, but not too quiet. Keep him awake."

Charlie answered solemnly, "I will, Doctor Nixie's going to be all right — I know he is."

Charlie stayed awake all night long, talking to Nixie, petting him, keeping him quiet but not — asleep. Neither one of his parents tried to get him to go to bed.

II

Nixie liked Venus. It was filled with a thousand new smells, all worth investigating, countless new sounds, each of which had to be catalogued. As official guardian of the Vaughn family and of Charlie in particular, it was his duty and pleasure to examine each new phenomenon, decide whether or not it was safe for his people; he set about it happily.

It is doubtful that he realized that he had traveled other than that first lap in the traveling case to White Sands. He took up his new routine without noticing the five months clipped out of his life; he took charge of the apartment assigned to the Vaughn family, inspected it thoroughly, then nightly checked it to be sure that all was in order and safe before he tromped out his place on the foot of Charlie's bed and tucked his tail over his nose.

He was aware that this was a new place, but he was not homesick. The other home had been satisfactory and he had never dreamed of leaving it, but this new home was still better. Not only did it have Charlie — without whom no place could be home — not only did it have wonderful odors, but also he found the people more agreeable. In the past, many humans had been quite stuffy about flower beds and such trivia, but here he was almost never scolded or chased away; on the contrary people were anxious to speak to him, pet him, feed him. His popularity was based on arithmetic: Borealis had fifty-five thousand people but only eleven dogs; many colonists were homesick for man's traditional best friend. Nixie did not know this, but he had great capacity for enjoying the good things in life without worrying about why.

Mr. Vaughn found Venus satisfactory. His work for Synthetics of Venus, Ltd. was the sort of work he had done on Earth, save that he was now paid more and given more responsibility. The living quarters provided by the company were as comfortable as the house he had left back on Earth and he was unworried about the future of his family for the first time in years.

Mrs. Vaughn found Venus bearable but she was homesick much of the time.

Charlie, once he was over first the worry and then the delight of waking Nixie, found Venus interesting, less strange than he had expected, and from time to time he was homesick. But before long he was no longer homesick; Venus was home. He knew now what he wanted to be: a pioneer. When he was grown he would head south, deep into the unmapped jungle, carve out a plantation.

The jungle was the greatest single fact about Venus. The colony lived on the bountiful produce of the jungle. The land on which Borealis sat, buildings and spaceport, had been torn away from the hungry jungle only by flaming it dead, stabilizing the muck with gel-forming chemicals, and poisoning the land thus claimed — then flaming, cutting, or poisoning any hardy survivor that pushed its green nose up through the captured soil.

The Vaughn family lived in a large apartment building which sat on land newly captured. Facing their front door, a mere hundred feet away across scorched and poisoned soil, a great shaggy dark-green wall loomed higher than the buffer space between. But the mindless jungle never gave up. The vines, attracted by light — their lives were spent competing for light energy — felt their way into the open space, tried to fill it. They grew with incredible speed. One day after breakfast Mr. Vaughn tried to go out his own front door, found his way hampered. While they had slept a vine had grown across the hundred-foot belt, supporting itself by tendrils against the dead soil, and had started up the front of the building.

The police patrol of the city were armed with flame guns and spent most of their time cutting back such hardy intruders. While they had power to enforce the law, they rarely made an arrest. Borealis was a city almost free of crime; the humans were too busy fighting nature in the raw to require much attention from policemen.

But the jungle was friend as well as enemy. Its lusty life offered food for millions and billions of humans in place of the few thousands already on Venus. Under the jungle lay beds of peat, still farther down were thick coal seams representing millions of years of lush jungle growth, and pools of oil waiting to be tapped. Aerial survey by jet-copter in the volcanic regions promised uranium and thorium when man could cut his way through and get at it. The planet offered unlimited wealth. But it did not offer it to sissies.

Charlie quickly bumped his nose into one respect in which Venus was not for sissies. His father placed him in school, he was assigned to a grade taught by Mr. deSoto. The school room was not attractive — "grim" was the word Charlie used, but he was not surprised, as most buildings in Borealis were unattractive, being constructed either of spongy logs or of lignin panels made from jungle growth.

But the school itself was "grim." Charlie had been humiliated by being placed one grade lower than he had expected; now he found that the lessons were stiff and that Mr. deSoto did not have the talent, or perhaps the wish to make them fun. Resentfully, Charlie loafed.

After three weeks Mr. deSoto kept him in after school. "Charlie, what's wrong?"

"Huh? I mean, Sir?"

"You know what I mean. You've been in my class nearly a month. You haven't learned anything. Don't you want to?"

"What? Why, sure I do."

"'Surely' in that usage, not 'sure.' Very well, so you want to learn; why haven't you?"

Charlie stood silent. He wanted to tell Mr. deSoto what a swell place Horace Mann Junior High School had been, with its teams and its band and its student plays and its student council (this crazy school didn't even have a student council!), and its study projects picked by the kids themselves, and the Spring Outburst and Sneak Day...and — oh, shucks!

But Mr. deSoto was speaking. "Where did you last go to school, Charlie?"

Charlie stared. Didn't the teacher even bother to read his transcript? But he told him and added, "I was a year farther along there. I guess I'm bored, having to repeat."

"I think you are, too, but I don't agree that you are repeating. They had an eighteen-year law there, didn't they?"

"Sir?"

"You were required to attend school until you were eighteen Earth-years old?"

"Oh, that! Sure. I mean 'surely.' Everybody goes to school until he's eighteen. That's to 'discourage juvenile delinquency,'" he quoted.

"I wonder. Nobody ever flunked, I suppose."

"Sir?"

"Failed. Nobody ever got tossed out of school or left back for failing his studies?"

"Of course not, Mr. deSoto. You have to keep age groups together, or they don't develop socially as they should."

"Who told you that?"

"Why, everybody knows that. I've been hearing that ever since I was in kindergarten. That's what education is for — social development."

Mr. deSoto leaned back, rubbed his nose. Presently he said slowly; "Charlie, this isn't that kind of a school at all."

Charlie waited. He was annoyed at not being invited to sit down and was wondering what would happen if he sat down anyway.

"In the first place we don't have the eighteen-year rule. You can quit school today. You know how to read. Your handwriting is sloppy but it will do. You are quick in arithmetic. You can't spell worth a hoot, but that's your misfortune; the city fathers don't care whether you learn to spell or not. You've got all the education the City of Borealis feels obliged to give you. If you want to take a flame gun and start carving out your chunk of the jungle, nobody is standing in your way. I can write a note to the Board of Education, telling them that Charles Vaughn, Jr. has gone as far as he ever will. You needn't come back tomorrow."

Charlie gulped. He had never heard of anyone being dropped from school for anything less than a knife fight. It was unthinkable — what would his folks say?

"On the other hand," Mr. deSoto went on, "Venus needs educated citizens. We'll keep anybody as long as they keep learning. The city will even send you back to Earth for advanced training if you are worth it, because we need scientists and engineers...and more teachers. But this is a struggling new community and it doesn't have a penny to waste on kids who won't study. We do flunk them in this school. If you don't study, we'll lop you off so fast you'll think you've been trimmed with a flame gun. We're not running the sort of overgrown kindergarten you were in. It's up to you. Buckle down and learn...or get out. So go home and talk it over with your folks."

Charlie was stunned. "Uh...Mr. deSoto? Are you going to talk to my father?"

"What? Heavens, no! You are their responsibility, not mine. I don't care what you do. That's all. Go home."

Charlie went home, slowly. He did not talk it over with his parents. Instead he went back to school and studied. In a few weeks he discovered that even algebra could be interesting...and that old Frozen Face was an interesting teacher when Charlie had studied hard enough to know what the man was talking about.

Mr. deSoto never mentioned the matter again.

Getting back in the Scouts was more fun but even Scouting held surprises. Mr. Qu’an, Scoutmaster of Troop Four, welcomed him heartily. "Glad to have you, Chuck. It makes me feel good when a Scout among the new citizens comes forward and says be wants to pick up the Scouting trail again." He looked over the letter Charlie had brought with him. "A good record — Star Scout at your age. Keep at it and you'll be a Double Star...both Earth and Venus."

"You mean," Charlie said slowly, "that I'm not a Star Scout here?"

"Eh? Not at all." Mr. Qu'an touched the badge on Charlie's jacket. "You won that fairly and a Court of Honor has certified you. You'll always be a Star Scout, just as a pilot is entitled to wear his comet after he's too old to herd a space ship. But let's be practical. Ever been out in the jungle?"

"Not yet, sir. But I always was good at woodcraft~"

"Mmm...Ever camped in the Florida Everglades?"

"Well...no, sir."

"No matter. I simply wanted to point out that while the Everglades are jungle, they are an open desert compared with the jungle here. And the coral snakes and water moccasins in the Everglades are harmless little pets alongside some of the things here. Have you seen our dragonflies yet?"

"Well, a dead one, at school."

"That's the best way to see them. When you see a live one, better see it first...if it's a female and ready to lay eggs."

"Uh, I know about them. If you fight them off, they won't sting."

"Which is why you had better see them first."

"Mr. Qu'an? Are they really that *big*?"

"I've seen thirty-six-inch wing spreads. What I'm trying to say, Chuck, is that a lot of men have died learning the tricks of this jungle. If you are as smart as a Star Scout is supposed to be, you won't assume that you know what these poor fellows didn't. You'll wear that badge...but you'll class yourself in your mind as a tenderfoot all over again, and you won't be in a hurry about promoting yourself."

Charlie swallowed it. "Yes, sir. I'll try."

"Good. We use the buddy system — you take care of your buddy and he takes care of you. I'll team you with Hans Kuppenheimer. Hans is only a Second Class Scout, but don't let that fool you. He was born here and he lives in the bush, on his father's plantation. He's the best jungle rat in the troop."

Charlie said nothing, but resolved to become a real jungle rat himself, fast. Being under the wing of a Scout who was merely second class did not appeal to him.

But Hans turned out to be easy to get along with. He was quiet, shorter but stockier than Charlie, neither unfriendly nor chummy; he simply accepted the assignment to look after Charlie. But he startled Charlie by answering, when asked, that he was twentythree years old.

It left Charlie speechless long enough for him to realize that Hans, born here, meant Venus years, each only two hundred twenty-five Earth days. Charlie decided that Hans was about his own age, which seemed reasonable. Time had been a subject which had confused Charlie ever since his arrival. The Venus day was only seven minutes different from that of Earth — he had merely had to have his wristwatch adjusted. But the day itself had not meant what it used to mean, because day and night at the north pole of Venus looked alike, a soft twilight.

There were only eight months in the year, exactly four weeks in each month, and an occasional odd “Year Day" to even things off. Worse still, the time of year didn't mean anything; there were no seasons, just one endless hot, damp summer. It was always the same time of day, always the same time of year; only clock and calendar kept it from being the land that time forgot. Charlie never quite got used to it.

If Nixie found the timelessness of Venus strange he never mentioned it. On Earth he had slept at night simply because Charlie did so, and, as for seasons, he had never cared much for winter anyhow. He enjoyed getting back into the Scouts even more than Charlie had, because he was welcome at every meeting. Some of the Scouts born on Earth had once had dogs; now none of them had — and Nixie was at once mascot of the troop. He was petted almost to exhaustion the first time Charlie brought him to a meeting, until Mr. Qu'an pointed out that the dog had to have some peace...then squatted down and petted Nixie himself. "Nixie," he said musingly, "a nixie is a water sprite, isn't it?"

"Uh, I believe it does mean that," Charlie admitted, "but that isn't how he got his name."

"So?"

"Well, I was going to name him 'Champ,' but when he was a puppy I had to say 'Nix' to so many things he did that he got to thinking it was his name — and then it was."

"Mmm...more logical than most names. And even the classical meaning is appropriate in a wet place like this. What's this on his collar? I see...you've decorated him with your old tenderfoot badge."

"No, sir," Charlie corrected. "That's his badge."

"Eh?"

"Nixie is a Scout, too. The fellows in my troop back Earthside voted him into the troop. They gave him that. So Nixie is a Scout."

Mr. Qu'an raised his eyebrows and smiled. One of the boys said, "That's about the craziest yet. A dog can't be a Scout."

Charlie had doubts himself; nevertheless he was about to answer indignantly when the Scoutmaster cut smoothly in front of him. "What leads you to say that, Al!?"

"Huh? Well, gosh! It's not according to Scout regulations."

"It isn’t? I admit it is a new idea, but I can't recall what rule it breaks. Who brought a Handbook tonight?" The Scribe supplied one; Mr. Qu'an passed it over to Alf Rheinhardt. "Dig in, Alf. Find the rule."

Charlie diffidently produced Nixie's letter of transfer. He had brought it, but had not given it to the Scribe. Mr. Qu'an read it, nodded and said, "Looks okay." He passed the letter along to others and said, "Well, Al!?"

"In the first place, it says here that you have to be twelve years old to join — Earth years, that is, 'cause that's where the Handbook was printed. Is that dog that old? I doubt it."

Mr. Qu'an shook his head. "If I were sitting on a Court of Honor, I'd rule that the regulation did not apply. A dog grows up faster than a boy."

"Well, if you insist on joking — and Scouting is no joke to me —

that's the point: a dog can't be a Scout, because he's a dog."

"Scouting is no joke to me either, Alf — though I don't see any reason not to have fun as we go. But I wasn't joking. A candidate comes along with a letter of transfer, all regular and proper. Seems to me you should go mighty slow before you refuse to respect an official act of another troop. All you've said is that Nixie is a dog. Well, didn't I see somewhere — last month's Boys' Life, I think — that the Boy Scouts of Mars had asked one of the Martian chiefs to serve on their planetary Grand Council?"

"But that's not the same thing!"

"Nothing ever is. But if a Martian — who is certainly not a human being — can hold the highest office in Scouting, I can't see how Nixie is disqualified simply because he's a dog. Seems to me you'll have to show that he can't or won't do the things that a Tenderfoot Scout should do."

"Uh..." Alf grinned knowingly. "Let's hear him explain the Scout Oath."

Mr. Qu'an turned to Charlie. "Can Nixie speak English?"

"What? Why, no, sir — but he understands it pretty well."

The Scoutmaster turned back to Alf. "Then the 'handicapped' rule applies, — Alf — we never insist that a Scout do something he can't do. If you were crippled or blind, we would change the rules to fit you. Nixie can't talk words...so if you want to quiz him about the Scout Oath, you'll have to bark. That's fair, isn't it, boys?"

The shouts of approval didn't sit well with Alf. He answered sullenly, "Well, at least he has to follow the Scout Law — every Scout has to do that."

"Yes," agreed the Scoutmaster soberly. "The Scout Law is the essence of Scouting. If you don't obey it, you aren't a Scout, no matter how many merit badges you wear. Well, Charlie? Shall we examine Nixie in Scout Law?"

Charlie bit his lip. He was sorry that he hadn't taken that badge off Nixie's collar. It was mighty nice that the fellows back home had voted Nixie into the troop...but with this smart Aleck trying to make something of it — Why did there always have to be one in every troop who tried to take the fun out of life?

He answered reluctantly, "All right."

"Give me the Handbook. Is Nixie trustworthy?"

"Sure he is!"

"How?"

"Well...he doesn't get on furniture even if you're not watching him...and he won't touch food unless he's told to, and uh..."

"I think that's enough. Is he loyal?"

"He's loyal to *me*."

"Mmm...good enough. Helpful?"

"Uh, there isn't a whole lot he can do, I guess. He used to fetch newspapers in — but he can't do that here. He'll fetch anything you ask him to, if he understands what it is.

"Friendly' — well, obviously. 'Courteous' — we'll pass him on that, seeing what he has put up with tonight. Kind?"

"He'll let a baby try to pull his tail off, or step on his face, and never snap or growl. Uh, he did used to be kind of rough on cats, but I taught him better."

"Obedient?"

"Want to see?" Charlie put him through hand signal orders, ending with standing at attention and saluting. The applause made Nixie tremble but he held it until Charlie signalled "At ease."

"Take note of that, Alf," Mr. Qu'an said drily, "next time I have to speak to you twice. 'Cheerful' — we can skip that; I'm sure his grin isn't faked. 'Thrifty' — well, we can hardly expect him to have a savings account."

"He buries bones."

"Mmm, I suppose that's the canine equivalent. Brave?"

"I think he is. I've seen him tackle a dog three times his size — and chase it out of our yard, too, back home — back Earthside."

"Clean?"

"Smell him. He had a bath just yesterday. And he's perfectly housebroken."

"All that is left is 'Reverent' — and I don't intend to try to discuss that with him. I rule that Nixie is at least a reverent as the rapscallions I've heard cussing around here when they didn't think I was listening. How about it, boys? Does he pass?"

Nixie was voted into Troop Four in his tenderfoot status unanimously...Alfred Rheinhardt, Tenderfoot abstaining.

After the meeting the troop treasurer buttonholed Charlie. "You want to pay your dues now, Chuck?"

"Huh? Oh, yeah, sure — I brought some money."

"Good." The other Scout accepted payment. "Here's your receipt."

"Just mark it down in your book."

"Take it. No tickee, no washee. I'm nasty about it — that's why they made me treasurer. Now about Nixie? — You pay? Or do I speak to him?"

The other boy was not smiling and Charlie could not decide whether or not he was joking. He decided to play it just as soberly. "I settle for Nixie. You see, he doesn't have pockets." He dug down in his diminishing resources, managed to piece out enough to pay the small amount for Nixie. "Here."

"Thanks." The treasurer handed back a shilling. "Tenderfeet get by cheaper, under Troop by-laws. But every little bit helps. You know, when I took this job, the troop was in the hole. Now we got money in the bank."

"I believe it!" Charlie agreed. He was secretly delighted at the transaction. Nixie was no longer an honorary Scout, he was a *Scout* — he kept the Law and his dues were paid.

Nixie's eligibility to take part in all troop doings was not questioned until the first hike thereafter. Mr. Qu'an looked troubled when Charlie showed up with him. "You had better take Nixie home. We'll wait for you."

Charlie was upset. "But, Mr. Qu'an, I thought — Well, Nixie *always* goes on hikes."

"No doubt, back Earthside. Charlie, I'm not being arbitrary. I don't want your dog to get hurt."

"He won't get hurt! — He's real smart."

The Scoutmaster frowned. Hans Kuppenheimer spoke up. "I think Nixie could come along, Mr. Qu'an."

"Eh?" — The Scoutmaster looked at Hans thoughtfully. "You'll have your hands full with Chuck, since it's his first time out."

Hans had a habit of saying nothing when he had nothing to say; he did so now. Mr. Qu'an persisted, "You'd have to look out for them both, you know."

Hans still kept quiet. "Well," Mr. Qu'an said doubtfully, "Nixie is a member of the troop. If you can take care of him — and Charlie, too — I'll let him come."

"Yes, sir."

The Scoutmaster turned away. Charlie whispered, "Thanks, Hans. That was swell." Hans said nothing.

Hans had surprised Charlie by his first reaction to Nixie the night Nixie had been taken into the troop. While other boys were clustering around making much of Nixie, Hans had stayed a wary distance away. Charlie had felt offended. Since he was assigned with Hans as a buddy team, Charlie decided to do something about it.

After the meeting he sought out Hans. "Don't be in a hurry, Hans. I want you to get acquainted with Nixie."

The country boy still avoided the dog. "Does it bite?"

"Huh? *Nixie*? Of course not. Well, he would if you took a poke at me. Not otherwise."

"I thought so. And suppose I gave you a friendly slap on the back. He could kill a man, huh?"

Nixie had listened, tense and watchful. He could feel the fear in Hans' mind; he understood, without understanding why, that his boy was arguing with this other boy. Charlie did not seem in immediate danger, but Nixie stayed at yellow alert.

It showed. The savage carnivores who were Nixie's remote ancestors showed in his stance and his watchful eyes. The Venus-born jungle rat, drilled since babyhood to keep his eyes open for just such unknown dangers could see the carnivore — and failed to see the gentle household pet. He watched the dog carefully.

Charlie said, "Why, that's nonsense, Hans. Pat him. Rough him up a bit. Shake hands with him. Let him learn your smell." When Hans still did not move Charlie asked incredulously, "Don't you *like* dogs?"

"I don't know. I've never seen one before, up close." Charlie's jaw dropped. But Hans had spoken the simple truth. Some town boys in the troop, immigrants like Charlie, had once owned dogs Earthside. Others had friends among the handful of dogs in Borealis. But Hans alone, born on Venus and living outside town, knew so little of dogs that they were as strange to him as a tiger shark would have been.

When Charlie finally got this incredible fact firmly in his mind he persisted even more strongly in his effort to get his team buddy acquainted with his team partner. Before Hans went home that night he had touched the dog, patted him, even picked him up and held him. Nixie could feel the fear go away, to be replaced by a sudden warm feeling. So Nixie snuffled Hans and licked his chin.

Hans showed up the next day at Charlie's home. He wanted to see Nixie.

In the two weeks that followed before the hike, Nixie adopted Hans as another member of Charlie's family. Subject always to his first loyalty, he accepted the other boy, took orders from him, even worked to hand signals, which he had never done with anyone but Charlie. At first he did it to please Charlie, but in time he was doing so because it was right and proper in his doggy mind, as long as it was all right with Charlie.

The troop set out on the hike. Before they reached the jungle at the edge of town Hans said to Charlie, "Better have him heel."

"Why? He likes to run around and poke his nose into things. But he always stays in earshot. He'll come if he's called."

Hans scowled. "Suppose he can't? Maybe he goes into bush and doesn't come out. You want to lose him?"

This was a long speech for Hans. Charlie looked surprised, then called, "Nixie! Heel!"

The dog had been supervising the van; he turned and came at once to Charlie's left and rear. Hans relaxed, said, "Better," and placed himself so that the dog trotted between them.

When the jungle loomed up over them, pierced here by a road, Mr. Qu'an held up his arm and called out, "Halt! Check watches." He held up his wrist and waited; everybody else did the same.

Jock Quentin, an Explorer Scout equipped with two-way radio, spoke into his microphone, then said, "Stand by...oh nine eleven."

"Anybody fail to check?" continued Mr. Qu'an. "All you with polarizers, establish base line."

Hans took out an odd-looking pair of spectacles with double lenses which rotated and a sighting device which snapped out. "Try it."

"Okay." Charlie accepted them gingerly. He did not yet own a light-polarizing sighter. "Why are we going to establish base line if we're going to stay on marked roads?"

Hans did not answer and Charlie felt foolish, realizing that the time to learn how not to get lost was before you got lost. He put on the polarizers and tried to establish base line.

"Base line" was the prime meridian of Venus, the direction from Borealis of the Sun at noon. To find that direction it was necessary first to find the Sun itself (in a grey, thickly overcast sky), then, using a watch, figure where the Sun would be at noon.

That direction would be south — but all directions from Borealis were south; the city lay on the north pole of the planet. The mapmakers used Borealis as a zero point and the direction of the Sun at noon as a base line. With the aid of transceivers, radar beacons, and radio compass, they were gradually establishing a grid of reference points for the few hundred square mile around Borealis. A similar project was going on at South Pole City. But the millions of square miles between poles were unknown country, more mysterious and incredibly vaster than any jungle on Earth. There was a saying among the Scouts that streams at the equator were “hot enough to boil eggs," but nobody knew. As yet, no ship had landed near the equator and managed to come back.

The difficulty of telling directions on Venus is very great. The stars are always invisible. Neither magnetic compasses nor gyro compasses were of any use at the poles. Nor is there moss on the north sides of trees, nor any shadows to read — Venus is not only the land that time forgot; it is also the place of no directions.

So the colonists were forced to establish new directions. From Borealis toward the Sun at noon was prime meridian, called "base line," and any direction parallel to that was "base." Back the other way was "reverse"; the two intermediate directions were "Left demi" and "right demi." By counting clockwise from "base," any other direction could be named.

It was not a perfect system since it used square coordinates for a spherical surface. But it was better than nothing in a place where the old directions had turned slippery — where all directions away from the city were "south" and where east and west, instead of being straight lines, were circular.

At first, Charlie could not see why, if they were going to use four directions, they didn't call them "north," "south," "east" and "west," instead of ringing in these silly names, "base," "reverse," "right demi," and "left demi." It was not until he saw in school a map of the colony, with the old familiar directions, north, south, east, west, on it and a "base line" grid drawn on top of it that he realized that the problem was not that simple. To go east on that map you went counterclockwise on one of those little circles — but how could you tell what direction "east" was unless you knew where you were? And how could you tell how much to curve left in order to keep going east? When compasses were no good and the Sun might be in any direction, north, south, east, or west, depending on which side of the city you were on?

So he buckled down and learned the new system.

Charlie put on Hans' polarizing spectacles and looked around. He could see nothing. Light leaked around the guards of the spectacles and the glass in front of his eyes seemed opaque. He knew that he should be able to pick out the Sun, for he knew that the light from the sky, dispersed by the clouds of Venus, was polarized, made to wiggle up-and-down or sideways, instead of in all directions. He knew that these spectacles were supposed to blank out polarized light, let him see the Sun itself. But he could not see anything.

He turned slowly, blind behind the spectacles.

Hey, it was getting brighter! He swung his head back and forth, made sure he was not mistaken. "I got it!"

"False sun," Hans announced dispassionately.

"Huh?"

"You're a hundred and eighty degrees out of phase," Mr. Qu'an's voice announced. "You're looking at the reflection of the Sun. Never mind, other people have made that mistake. But it's not a mistake you can afford to make even once out in the bush...so keep trying."

Charlie kept on turning — darn it, these specs fit so tight that he couldn't even see his feet! There it was again! Was it false sun? Or the Sun itself? How far had he turned?

He turned until he was dizzy, seeing brightness, then darkness, several times — and realized that one brightness was brighter than that which it alternated. Finally he stopped. "I'm looking at the Sun," he announced firmly.

"Okay," Hans admitted. "Jigger with it. Fine it down."

Charlie found that he could fiddle with screw settings on the sides of the spectacles and thereby kill the brightness almost completely. He did so, while swinging his head back and forth like a radar, trying to spot the smallest gleam that he could. "That's the best I can do."

"Hold still," Hans ordered. "Uncover your right eye. Mark me."

Charlie did as ordered, found himself staring with one eye down the sighter in front of the spectacles. Hans was thirty feet away, holding his Scout staff upright. "Don't move!" Hans cautioned. "Coach me on."

"Uh...come right a couple of feet."

"Here?"

"I think so. Let me check." He covered his right eye again, but found that his eye, dazzled by brighter light, could no longer pick up the faint gleam he had marked. "That's the best I can do."

Hans stretched a string along the marked direction. "My turn. Note your time." He took the spectacles, quickly gave Charlie a direction, coached him into place. The two lines differed by about ten degrees.

"Figure your hour angle," Hans said and looked at his watch.

The time was nine-thirty ... and the Sun moved fifteen degrees each hour...two and a half hours to noon; that's thirty-seven and a half degrees and each minute on the face of his watch was six degrees, so — Charlie was getting confused. He looked up, saw that Hans had placed his watch on the ground and was laying out base line. Hans' watch had a twenty-four hour face; he simply pointed the hour hand at the Sun and the XII spot then pointed along base line.

No mental arithmetic, no monkeying around — "Gosh, I wish I had a watch like that!"

"Don't need it," Hans answered without looking up.

"But it makes it so simple. You just — "

"Your watch is okay. Make yourself a twenty-four hour dial out of cardboard."

"That would work? Yeah, it would! I wish I had one now.,'

Hans fumbled in his duffel bag. "Uh, I made you one." He handed it over without looking up — a cardboard clock face, laid out for twenty-four hours.

Charlie was almost speechless. "Gee! Nixie, look at that! Say, Hans, I don't know how to thank you."

“Don’t want you and Nixie getting lost," Hans answered gruffly.

Charlie took it, aimed nine-thirty along his line, marked noon and restretched the string to match. Base line, according to his sighting, differed by ten degrees from that of Hans. In the meantime, two patrol leaders had stretched a line at right angles to base line, along where the troop was spread out. One of them moved down the line, checking angles with a protractor. Mr. Qu'an followed, checked Charlie's layout himself. "About nine degrees off," he told Charlie. "Not bad for a first try."

Charlie felt crestfallen. He knew that he and Hans could not both be right but he had had a small hope that his answer was nearer the correct one. "Uh...which way am I wrong?"

"Left-demi. Look at Hans' — he's dead on...as usual." The Scoutmaster raised his voice. "All right, gang! Bush formation, route march. Flamers out, right and left. Rusty on point, Bill on drag –

shake it up!"

"Heel, Nixie."

The road cut straight through the jungle. The clearing had been flamed back wider than the road so that the jungle did not arch over it. The column kept — to the middle where the ground was packed by vehicles running to and from outlying plantations. The flamers on the flanks, both of them Explorer Scouts, walked close to the walls of green and occasionally used their flame guns to cut back some new encroachment of vine or tree or grass. Each time they did so, they kept moving and a scavenger gang moved out, tossed the debris back into the living forest, and quickly rejoined the column. It was everybody's business to keep the roads open; the colony depended on roads more than Ancient Rome had depended on theirs.

Presently it began to rain. No one paid attention; rain was as normal as ice in Greenland. Rain was welcome; it washed off everpresent sweat and gave an illusion of coolness.

Presently Point (Rusty Dunlop) stopped, sighted back at Drag, and shouted, "Right demi fifteen degrees!"

Drag answered, "Check!" Point continued around the slight bend in the road. They had left Borealis heading "south" of course, since no other direction was possible, but that particular south was base thirty-two degrees right demi, to which was now added fifteen degrees clockwise.

It was Point's duty to set trail, keep lookout ahead, and announce his estimate of every change in direction. It was Drag's business to have eyes in the back of his head (since even here the jungle was not without power to strike), keep count of his paces, and keep written record of all course changes and the number of paces between each dead reckoning navigation marked down in a waterproof notebook strapped to his wrist. He was picked for his reliability and the evenness of his strides.

A dozen other boys were doing the same things, imitating both Point and Drag, and recording everything, paces, times, and course changes, in preparation for Pathfinder merit badges. Each time the troop stopped, each would again establish base direction and record it. Later, after the hike, they would attempt to map where they had been, using only their notes.

It was just practice, since the road was surveyed and mapped, but practice that could determine later whether they lived, or died miserably in the jungle. Mr. Qu'an had no intention of taking the troop, including tenderfoot town boys not yet twenty Venus years old, into unexplored jungle. But older boys, seasoned explorer Scouts did go into trackless bush; some were already marking out land they would claim and try to conquer. On their ability to proceed by dead reckoning through bush and swamp and return to where they had started depended both their lives and their future livelihoods.

Mr. Qu'an dropped back, fell in beside Charlie. "Counting paces?"

"Yes, sir."

"Where's your notebook?"

"Uh, it was getting soggy in the rain, so I put it away. I'm keeping track in my head."

"That's a fine way to wind up at South Pole. Next time, bring a waterproof one."

Charlie didn't answer. He had wanted one, as he had wanted a polarizing sighter and many other things. But the Vaughn family was still scratching for a toehold; luxuries had to wait.

Mr. Qu'an looked at Charlie. "If convenient, that is," he went on gently. "Right now I don't want you to count paces anyhow."

"Sir?"

"You can't learn everything at once, and today you can't get lost. I want you to soak up junglecraft. Hans, you two move to the flank. Give Charlie a chance to see what we're passing through. Lecture him about it, and for goodness' sake try to say more than two words at a time!"

"Yes, sir."

"And — " The Scoutmaster got no further; he was hailed by the boss of the scavenger gang. "Mr. Qu'an! Squint's got a screwbug!"

The man said something bitter under his breath, started to run. The two boys followed. The scavengers had been moving a large branch, freshly flamed down. Now they were clustered around one boy, who was gripping his forearm. Mr. Qu'an burst into the group, grabbed the kid by that arm without saying a word, and examined it. He shifted his grip so that the skin was drawn tight at one spot, reached for his belt and drew a knife, dug the point into skin, and, as if he were cutting a bad spot out of an apple, excised a small chunk of flesh. Squint screwed up his face and tears came into his eyes, but he did not cry out.

The scavenger boss had his first-aid kit open. As the Scoutmaster handed his knife to a boy near him, the gang boss placed a shaker bottle in Mr. Qu'an's hand. The Scoutmaster squirted powder into the wound, accepted a pressure patch and plastered it over the cut.

Then he turned sternly to the gang boss. "Pete, why didn't you do it?"

"Squint wanted you."

"So? Squint, you know better. Next time, let the boy closest to you get it — or cut it out yourself. It could have gone in another half inch while I was getting to you. And next time be more careful where you put your hands!"

The column had halted. Point, looking back, saw Mr. Qu'an's wave, lifted his own arm and brought it down smartly. They moved on. Charlie said to Hans, "What's a screwbug?"

"Little thing, bright red. Cling underneath leaves."

"What do they do to you?"

"Burrow in. Abscess. Don't get 'em out, maybe lose an arm."

"Oh." Charlie added, "Could they get on Nixie?"

"Doubt it. 'Cept maybe his nose. Ought to check him over every chance we get. Other things, too."

They were on higher and drier ground now; the bush around them did not go up so high, was not quite as dense. Charlie peered into it, trying to sort out details, while Hans kept up what he probably felt was a lively discourse — usually one word at a time, such as: "Poison," "Physic," or "Eat those."

"Eat what?" Charlie asked, when Hans had made the last comment. He looked where Hans pointed, saw nothing looking like fruit, berries or nuts.

"That stuff. Sugar stick." Hans thrust cautiously into the brush with his staff, pushed aside a Venus nettle, and broke off a foot of brown twig. "Nixie! Get out of there! Heel!"

Charlie accepted half of it, bit cautiously when he saw Hans do so.

It chewed easily. Yes, it did have a sweetish taste, about like corn syrup. Not bad!

Hans spat out pulp. "Don't swallow the cud — give you trouble."

"I wouldn't've guessed you could eat this."

"Never go hungry in the bush."

"Hans? What do you do for water? If you haven't got any?"

"Huh? Water all around you."

"Yeah, but good water."

All water is good water...if you clean it." Hans' eyes darted around. "Find a filter ball. Chop off top and bottom. Run water through. I'll spot one, show you."

Hans found one shortly, a gross and poisonous looking fungus. But it was some distance off the clearing and when Hans started after it, he was told gruffly by the flamer on that flank to get back from the edge and stay there. Hans shrugged. "Later."

The procession stopped in the road clearing, lunched from duffel bags. Nixie was allowed to run free, with strict instructions to stay away from the trees. Nixie didn't mind. He sampled every lunch. After a rest they went on. Occasionally they all gave way to let some plantation family, mounted on high trucks with great, low-pressure bolster wheels, roll past on the way to a Saturday night in town. The main road led past narrow tunnels cut into the bush, side roads to plantations. Late in the afternoon they passed one such; Hans hooked a thumb at it. "Home."

"Yours?"

"Half a mile in."

A couple of miles farther the troop left the road and started across country. But this was high land, fairly dry and semi-open, no more difficult than most forest back Earthside. Hans merely saw to it that Nixie stayed close at heel and cautioned Charlie, "Mind where you step...and if anything drops on you, brush it off quick."

They broke out shortly into a clearing, made camp, and started supper. The clearing was manmade, having been flamed down, although a green carpet had formed underfoot. The first step in making camp was to establish four corners of a rectangle, using Scout staffs; then Jock Quentin, the troop's radioman, clamped mirrors to them. After much fiddling he had a system rigged by which a powerful flashlight beam bounced around the rectangle and back into a long tube which housed a photocell; the camp was now surrounded by an invisible fence. Whenever the beam was broken an alarm would sound.

While this was going on other Scouts were lashing staffs together, three to a unit, into long poles. Rags were sopped with a sickly-sweet fluid, fastened to the ends and the poles were erected, one at each corner of the rectangle. Charlie sniffed and made a face, "What's that stuff?"

"For dragonflies. They hate it."

"I don't blame 'em!"

"Haven't seen one lately. But if they were swarming, you'd rub it on your hide and be glad of the stink."

"Hans? Is it true that a dragonfly sting can paralyze a man?"

"No."

"Huh? But they say — "

"Takes three or four stings. One sting will just do for an arm or a leg — unless it gets you in the spine."

"Oh." Charlie couldn't see much improvement.

"I was stung once," Hans added.

"You *were*? But you're still alive."

"My paw fought it off and killed it. Couldn't use my left leg for a while."

"Boy! You must be lucky."

"Unlucky, I'd say. But not unlucky as it was. We ate it."

"You *ate* it?"

"Sure. Mighty tasty, they are."

Charlie felt queasy. "You eat insects?"

Hans thought about it. "You ever eat a lobster?"

"Sure. But that's different."

"It sure is. Seen pictures of lobsters. Disgusting."

This gourmets' discussion was broken up by the Scoutmaster. "Hans! How about scaring up some oil weed?"

"Okay." Hans headed far the bush. Charlie followed and Nixie trotted after. Hans stopped. "Make him stay behind. We can't gather weed and watch him, too."

"All right."

Nixie protested, since it was his duty to guard Charlie. But once he understood that Charlie meant it and would not be swayed, he trotted back, tail in air, and supervised campmaking.

The boys went on. Charlie asked, "This clearing...is it the regular Scout camp?"

Hans looked surprised. "I guess so. Paw and I aren't going to set a crop till we flame it a few more times."

"You mean it's *yours*? Why didn't you say so?"

"You never asked." Presently he added, "Some planters, they don't like Scouts tromping around, maybe hurting a crop."

Oil weed was a low plant, resembling bracken. They gathered it in silence, except once when Hans brushed something off Charlie's arm. "Want to watch that."

While they were loading with weed Hans made quite a long speech: "These dragonflies, they aren't much. You hear them coming. You can fight 'em off, even with your hands, because they can't sting till they light. They won't sting anyway, except when they're swarming — then it's just females, ready to lay eggs." He added thoughtfully, "They're stupid, they don't know the eggs won't hatch in a man."

"They won't?"

"No. Not that it does the man much good; he dies anyway. But they think they're stinging a big amphibian, thing called kteela."

"I've seen pictures of kteela."

"So? Wait till you see one. But don't let it scare you. Kteela can't hurt you and they're more scared than you are — they just look fearsome." He brushed at his arm. "It's little things you got to watch."

Oil weed burned with a clear steady flame; the boys had a hot dinner and hot tea. No precautions were taken against fire; of the many hazards on Venus, fire was not one. The problem was to get anything to burn, not to avoid forest fire.

After they had eaten, one boy was examined by Mr. Qu'an in first-aid and artificial respiration. Listening, Charlie found that there was much that he must learn and unlearn; conditions were different. Then Rusty Dunlop broke out a mouth organ and they sang.

Finally Mr. Qu'an yawned and said, "Sack in, Scouts. Hard day tomorrow. Pedro, first watch — then rotate down the list."

Charlie thought he would never get to sleep. The ground underneath his waterproof was not hard, but he was not used to sleeping with lighted sky in his eyes. Besides that, he was acutely aware of strange noises in the bush around them.

He was awakened by a shout. "Dragons! Heads up, gang! Watch yourself'!"

Without stopping to think, Charlie reached down, grabbed Nixie to his chest, then looked around. Several boys were pointing. Charlie looked and thought at first that he was seeing a helicopter.

Suddenly it came into perspective and he realized that it was an enormous insect...unbelievably huge, larger than had been seen on Earth since the Carboniferous period, a quarter of a billion years ago.

It was coming toward camp. Something about it — its wings? — made a whining buzz.

It approached the tall poles with the smelly rags, hesitated, turned away. Mr. Qu'an looked thoughtfully after it, glanced at Hans.

"They're not swarming," Hans stated positively. "Anyhow, that was a male."

"Mmm...No doubt you're right. Still — double guard the rest of the night, down the roster. Tenderfeet makeelearnee only." He lay down.

The troop started back the next morning — "Morning" by clock; Charlie, awakening stiff and sleepy to the same dull-bright, changeless sky, felt as if he had napped too long but not well during an afternoon. They headed back the way they had come. Once on the cleared road, Hans left Charlie and looked up the Scoutmaster. He was back shortly, grinning. "Stay over night with me? You and Nixie?"

"Gee! Is it okay? Your folks won't mind?"

"They like company. You can ride in with Paw in the morning."

"It 'ould be swell, Hans...but how about my folks? Uh, do you suppose Jock could raise 'em on the portable?"

"Everything's okay. Mr. Qu'an will phone 'em when the troop gets in...and you can call them soon as we get to my place. If they holler, I can still catch you up with the troop."

So it was settled. When they got to the little side road for the Kuppenheimer plantation Mr. Qu'an ordered them to head for the house and no monkey business. They solemnly agreed and left the troop.

The side road was a dark tunnel; Hans hurried them through it. A few hundred yards farther on they came out into cultivated fields and Hans slowed down. "That's the only bad stretch. You okay?"

"Sure."

"Let's check Nixie."

If anything had attached itself to Nixie, they could not find it and his wagging tail gave no sign of distress; they went on. Charlie looked around with interest. "What are you cropping?"

"Jungle bread on the right. Once it's established you don't have to worry about it, smothers anything else, mostly. Other side is mutated bananas. They take more care."

Shortly they came to the house, on a rise and with no growth around it — a typical Venus settler's house, long and low and built of spongy logs and native bamboo. Hans' mother greeted Charlie as if he were a neighbor boy, seen daily, and she petted Nixie. "He minds me of a hund I had in Hamburg." Then she set out banana cake and mugs of coffee that were mostly milk. Nixie had his cake on the floor.

There were several kids around, younger than Hans and looking like him. Charlie did not get them straight, as they talked even less than Hans did and hung back from Nixie — unlike their mother, they found him utterly strange. But presently, seeing how the monster behaved with Hans and with their mother, they timidly patted him. After that, Nixie was the center of attention while they continued shyly to ignore Charlie.

Hans bolted his cake, hurried out. He was back a few minutes later. "Maw, where's the flamer?"

"Paw is using it."

Hans looked blank. "Well...we don't have to have it. Come on, Chuck." He carried two hefty machetes, a blade in each hand; he handed one to Charlie.

"Okay." Charlie stood up. "Thanks, Mrs. Kuppenheimer — thanks a lot."

"Call me 'Maw."

"Hurry up, Charlie."

"Right. Say — how about that call to my folks?"

"I forgot! Maw, would you phone Mrs. Vaughn? Tell her Chuck is staying all night?"

"Yes, surely. What's your frequency, Charlie?"

"Uh, you have to call city exchange and ask them to relay."

"Jawohl. You boys run along."

They headed off through the fields. Nixie was allowed to run, which be did with glee, returning every thirty seconds or so to see that his charges had not fainted nor been kidnapped in his absence.

"Where are we going, Hans?"

Hans' eyes brightened. "To see the prettiest plantation land on Venus!"

"It's mighty pretty, no doubt about it."

"Not Paw's land. I mean my plantation."

"Yours?"

"Will be mine. Paw posted an option bond. When I'm old enough, I'll prove it." He hurried on.

Shortly Charlie realized that he was lost even though they were in a cultivated grove. "Hold it, Hans! Can I borrow your polarizer?"

"What for?"

"I want to establish base, that's what. I'm all mixed up.”

"Base is that direction," Hans answered, pointing with his machete. "My polarizer is at the house. We don't need it."

"I just thought I ought to keep straight."

"Look, Chuck, I can't get lost around here; I was born on this piece."

"But I wasn't."

"Keep your eyes open; you'll learn the landmarks. We're heading that way — " Hans pointed again. " — for that big tree." Charlie looked, saw several big trees. "We cut over a ridge. Pretty soon we come to my land. Okay?"

"I guess so."

"I won't let you get lost. Look, I'll show you the bush way to establish base — polarizers are for townies." He looked around, his quick eyes picking up and discarding details. "There's one."

"One what?"

"Compass bug. Right there. Don't scare him. Back, Nixie!"

Charlie looked, discovered a small, beetle-like creature with striped wing casings. Hans went on, "When they fly, they take right off toward the Sun. Every time. Then they level off and head home — they live in nests." Hans slapped the ground beside the little creature; it took off as if jet propelled. "So the Sun is that way. What time is it?"

"Ten thirty, about."

"So where is base?"

Charlie thought about it. "Must be about there."

"Isn't that the way I pointed? Now find another compass bug. Always one around, if you look."

Charlie found one — frightened it, watched it take off in the same direction as the first. "You know, Hans," he said slowly, "bees do something like that — fly by polarized light, I mean. That's the way they get back to their hives on cloudy days. I read about it."

"Bees? Those Earth bugs that make sugar?"

"Yes. But they aren't bugs."

"Okay," Hans answered indifferently. "I'll never see one. Let's get moving."

Presently they left cultivation, started into bush. Hans required Nixie to heel. Even though they were going uphill, the bush got thicker, became dense jungle. Hans led the way, occasionally chopping an obstacle.

He stopped. "Trash!" he said bitterly.

"Trouble?"

"This is why I wanted the flamer. This bit grows pretty solid."

"Can't we chop it?"

"Take all day with a bush knife; need heat on it. Going to have to poison this whole stretch 'fore I get a road through from Paw's place to mine."

"What do we do?"

"Go around, what else?" He headed left. Charlie could not see that Hans was following any track, decided he must know his way by the contour of the ground. About half an hour later Hans paused and whispered, "Keep quiet. Make Nixie keep quiet."

"What for?" Charlie whispered back.

"Good chance you'll see kteela, if we don't scare them." He went noiselessly ahead, with the other boy and the dog on his heels. He stopped. "There."

Charlie oozed forward, looked over Hans' shoulder — found that he was looking down at a stream. He heard a splash on his right, turned his head just in time to see spreading ripples. "Did you see him?" asked Hans in a normal voice.

“No.”

"Shucks, he was right there. A big one. Their houses are just downstream. They often fish along here. Have to keep your eyes open, Chuck." Hans looked thoughtful. "Kteela are people."

"Huh?"

"They're people. Paw thinks so. If we could just get acquainted with them, we could prove it. But they're timid. Come on — we cross here." Hans descended the bank, sat down on muddy sand by running water and started taking his shoes off. "Mind where you sit."

Charlie did the same. Barefooted and bare-legged, Hans picked up Nixie. "I'll lead. This stretch is shallow — keep moving and don't stumble."

The water was warm and the bottom felt mucky; Charlie was glad when they reached the far side. "Get the leeches off," Hans commanded as he put Nixie down. Charlie looked down at his legs, was amazed to find half a dozen purple blobs, large as hens' eggs, clinging to him. Hans cleaned his own legs, helped Charlie make sure that he was free of the parasites. "Run your fingers between your toes. Try to get the sand fleas off as you put on your boots, too — though they don't really matter."

"Anything else in that water?" Charlie asked, much subdued.

"Oh, glass fish can bite a chunk out of you...but they aren't poisonous. Kteela keep this stream cleaned up. Let's go."

They went up the far side, reached a stretch that was higher and fairly dry. Charlie thought that they were probably going upstream, he could not be sure.

Hans stopped suddenly. "Dragonfly. Hear it?"

Charlie listened, heard the high, motor-like hum he had heard the night before. "There it is," Hans said quickly. "Hang onto Nixie and be ready to beat it off. I'm going to attract its attention."

Charlie felt that attracting its attention was in a class with teasing a rattlesnake, but it was too late to object; Hans was waving his arms.

The fly hesitated, veered, headed straight for him. Charlie felt a moment of dreadful anticipation — then saw Hans take one swipe with his machete. The humming stopped; the thing fluttered to the ground.

Hans was grinning. The dragonfly jerked in reflex, but it was dead, the head neatly chopped off. "Didn't waste a bit," Hans said proudly.

"Huh?"

"That's lunch. Cut some of that oil weed behind you." Hans squatted down. In three quick slices he cut off the stinger and the wings; what was left was the size of a medium lobster. Using the chrome-sharp machete as delicately as a surgeon's knife, he split the underside of the exoskeleton, gently and neatly stripped out the gut. He started to throw it away, then paused and stared at it thoughtfully.

Charlie had been watching in queasy fascination. "Trouble?"

"Egg sac is full. They're going to swarm."

"That's bad, isn't it?"

"Some. They swarm every three, four years." Hans' hesitated. "We'd better skip seeing my land. Got to tell Paw, so they'll keep the kids in."

"Okay, let's get started."

"We'll eat lunch first. Ten minutes won't matter — they aren't really swarming yet, or this one wouldn't have been alone."

Charlie started to say that he wasn't interested in lunch — not this lunch — but Hans was already starting a fire.

What was left in the exoskeleton was clean milky white meat, lean flying muscle. Hans cut out chunks, toasted them over the fire, salted them from a pocket shaker. "Have some."

"Uh, I'm not hungry."

"You're crazy in the head, too. Here, Nixie." Nixie had been waiting politely but with his nose quivering. He snapped the tidbit out of the air, gulped it down, waited still more eagerly while Hans ate the next piece.

It did smell good...and it looked good, when he kept his mind off the source. Charlie's mouth began to water. Hans looked up. "Change your mind?"

"Uh...let me taste just a bite."

It reminded Charlie of crab meat. A few minutes later the exoskeleton was stripped too clean to interest even Nixie. Charlie stood up, burped gently, and said, "Ready?"

"Yeah. Uh, Chuck, one thing I do want to show you...and there's a way back above it maybe quicker than the way we came."

"What is it?"

"You'll see." Hans headed off in a new direction. Charlie wondered how Hans had picked it without the aid of a compass bug.

In a few minutes they were going downhill. Hans stopped. "Hear it?"

Charlie listened, seemed to pick out a soft roar under the everpresent multiple voice of the jungle. "It's not a dragonfly?"

"Of course not. You've got ears."

"What is it?" Hans did not reply, led on. Presently they broke into a clearing, or rather a room, for the jungle closed in overhead. It enclosed a delightful, surprising waterfall; the muted roar was its song.

"Isn't that swell?"

"It sure is," Charlie agreed. "I haven't seen anything so pretty in years."

"Sure, it's pretty. But that's not the point. My land is just above. I'll put a water wheel here and have my own power." Hans led his two friends down near it, began to talk excitedly about his plans. The noise of falling water was so great that he had to shout.

So neither one of them heard it. Charlie heard Nixie bark, turned his head and saw it at the last moment. "Hans! Dragon!"

Too late — the thing nailed Hans between his shoulder blades. It laid no eggs; Charlie killed it, crushed it with his hands. But Hans had already been stung.

Charlie wiped his trembling hands on his pants and looked down at his chum. Hans had collapsed even as Charlie had killed the thing; he lay crumpled on the ground. Charlie bent over him. "Hans! Hans, answer me!"

Hans' — eyelids fluttered. "Get Paw."

"Hans...can you stand up?"

"Sorry...Chuck" — then very feebly, "My fault." His eyes stayed open, but Charlie could get no more out of him. —

Even in his distress Charlie's training stayed with him. He could not find Hans' pulse, so he listened for his heart...was rewarded and greatly relieved by a steady, strong flub-a-dub!...flub-a-dub! Hans looked ghastly — but apparently it was true that they just paralyzed; they didn't kill.

But what to do?

Hans had said to get his father. Sure — but how? Could he find his way to the house? Even if he could, could he lead them back here? No, he wouldn't have to — surely Mr. Kuppenheimer would know where the waterfall was that Hans meant to harness. So what he had to do was simply get back. Now let's see; they had come down the bank there — and after they had crossed the stream — it must be this same stream; they hadn't gone over any watershed. Or had they?

Well, it had better be the same stream, else he was lost beyond hope. Back through the bush, then and across the stream — How was he going to cut back in and hit the stream at the place where it could be forded? The bush all looked pretty much alike.

Maybe he had better go downstream along the bank until he hit it. Then cross, and if he could find a compass bug, he could strike off in the general direction of the Kuppenheimers until he came to civilization. He remembered which way base was when they had first started out; that would orient him.

Or would it? They had gone first to that place that couldn't be passed without a flamer — but where had they gone then? How many turns? Which way were they heading when they reached the place where he had not quite seen a kteela?

Well, he would just have to try. At least he could get onto the same side of the stream as the plantation.

Nixie had been sniffing at Hans' still body. Now he began to whine steadily. "Shut up, you!" Charlie snapped. "I don't want any trouble out of you, too."

Nixie shut up.

Charlie decided that he couldn't leave Hans; he would have to take him with him. He kneeled down and started wrestling Hans' limp body into a fireman's carry, while wondering miserably whether or not Hans had told his mother where they were going? Or if it would do any good if he had, since they were not where Hans had originally intended to take them.

"Heel, Nixie."

An indefinitely long time later Charlie put Hans down on the ground in a fairly open place. It had taken only a few minutes of struggle to convince him that he could not carry Hans along the bank of the stream. A man might have been able to carve his way through with a machete — but while Charlie had two machetes he could not swing them and carry Hans as well. After giving that route up, he abandoned one machete by the waterfall, thinking that Hans could find it there some other day. He was tempted to abandon both, for the one on his belt was heavy and got in his way, but he decided that he might have to have it; they had done plenty of chopping in getting here.

So he set out again, this time trying to retrace their steps through the bush, hoping to spot the places they had chopped to help him find his way.

He never spotted such a sign; the living green maze swallowed all such puny marks.

After a long time he decided to go back to the familiar waterfall — he would stay there, nurse Hans, filter water for them all, and wait. Surely Mr. Kuppenheimer would eventually think of the waterfall!

So he turned back...and could not find the waterfall. Not even the stream.

He walked through something. He couldn't see it, there were branches in his face. Whatever it was it clung to his legs like red-hot wires; he stumbled and almost dropped Hans getting free of it. Then his leg did not stop paining him. The fiery burning dropped off a little but a numbness crept up his right leg.

He was glad indeed to put Hans on the ground at the first fairly open place he came to. He sat down and rubbed his leg, then checked Hans — still breathing, heart still beating...but out like a light.

Nixie sniffed Hans again, then looked up and whined inquiringly. "I can't help it," Charlie said to him. "He's a mess. I'm a mess. You're a mess, too."

Nixie barked.

"I will, I will...just as soon as I can move. Don't hurry me. How would you like to carry him for a while?"

Charlie continued to rub his leg. The pain was going away but the numbness was worse. At last he said to Nixie, "I guess we ought to try it, pal. Wait a second while I look for a compass bug — the way I figure it, we came mostly base, so I guess we ought to try to head reverse." He glanced at his wrist to see what time it was.

His watch had stopped.

But it couldn't stop — it was self-winding.

Nevertheless it had. Perhaps he had banged it in the bush, perhaps...no matter, it had stopped. He looked for Hans' watch, thinking that its twenty-four-hour face was easier to use as a compass dial anyhow.

But Hans was not wearing his watch, nor was it in any of his pockets. Whether he had left it at the house, along with his polarizer and duffel bag, or whether it had dropped off while Charlie was carrying him, did not matter. They had no watch between them and Charlie did not know what time it was, not even approximately. It seemed to him that he had been carrying Hans, fighting this dreary bush, for a week.

So a compass bug couldn't tell him anything.

He almost felt defeated at that moment. But he rallied, telling himself that if he went downhill he was bound to find that stream...then he would either find the ford or the waterfall, one or the other. He hauled himself around into position to lift Hans, favoring his right leg.

He need not have bothered; his right leg was not working.

The "pins and needles" in it were almost unbearable, as if he had sat much too long in a cramped position. But they would not go away as they always had in the past; nothing he could do would make that leg obey his orders. He lowered his head against Hans and bawled.

He became aware that Nixie was licking his face and whining. He stopped his useless blubbering and raised his head. "It's all right, fellow. Don't you worry."

But it wasn't all right. While Charlie was no jungle rat, he did know that search parties could comb the area for weeks — and not find them, could pass within feet of the spot and never see them. Possibly no human being had ever been where they were now; possibly no human would reach this spot in many years to come.

If he didn't use his head now, they would never get out. Nixie sat patiently, watching him, trusting him. "Nixie, this is up to you now, boy. You understand me?"

Nixie whined. "Go back to the house. Fetch! Fetch Maw. Fetch anybody. Right now! Go back to the house."

Nixie barked.

"Don't argue with me. You've got to do it. Go home! Go back and fetch somebody!"

Nixie looked — dubious, trotted a few steps in the direction in which they had come, stopped and looked around inquiringly. "That's right! Keep going! Go back to the house! Fetch somebody! Go!"

Nixie looked sharply at him, then trotted away in businesslike fashion.

Sometime later Charlie raised his head and shook it. Gosh! He must have gone to sleep...couldn't do that…what if another dragonfly came along...have to stay awake. Was Hans all right? Have to pick him up and get out of here...where was Nixie? "Nixie!"

No answer. That was the last straw. But he'd have to get moving anyhow — His leg wouldn't work...felt funny. "Nixie! *Nixie*!

Mrs. Kuppenheimer heard the scratching and whining at the door, wiped her hands on her apron and went to open it. When she saw what was there she threw her hands up. "Lieber Gott! What happened to you?" She knelt swiftly, picked up the little dog and put him on her clean table, bent over him, talking to him and picking leeches from him, wiping away blood. "Schrecklich!"

"What happened to him, Mama?"

"I don't know." She went on working. But Nixie jumped out of her arms, charged straight for the closed door, tried to crash his way out—unsuccessful, he leaped and clawed at it and howled.

Mrs. Kuppenheimer gathered him up and held his struggling body against her breast. "Gerta! Get Paw!"

"What's the matter with him, Mama?"

"Something dreadful has happened. *Run*!"

The Borealis council hall was filled with Scouts and older people. Hans and Charlie were seated in the front row, with Nixie on a chair between them. Hans had crutches across one knee; Charlie had a cane. Mr. Qu'an came down the aisle, saw them, and sat down as Charlie moved Nixie over to share his seat. The Scoutmaster said to Hans, "I thought you were off those things?" His glance touched the crutches.

"I am — but Maw made me bring them."

"I — " Mr. Qu'an stopped. An older man had just taken his place at a table in the front of the hall at which were seated half a dozen others.

"Quiet, please." The man waited a moment. "This Court of Honor is met in special session for awards. It is our first duty tonight — and proud pleasure — to award a lifesaving medal. Will Tenderfoot Scout Nixie Vaughn please come forward?"

"Now, Nixie!" Charlie whispered.

Nixie jumped off the chair, trotted forward, sat at attention and saluted, trembling.

All You Zombies

2217 Time Zone V (EST) 7 Nov. 1970 - NTC – 'Pop's Place':

I was polishing a brandy snifter when the Unmarried Mother came in. I noted the time—10:17 P. M. zone five, or eastern time, November 7th, 1970. Temporal agents always notice time and date; we must.

The Unmarried Mother was a man twenty-five years old, no taller than I am, childish features and a touchy temper. I didn't like his looks—I never had—but he was a lad I was here to recruit, he was my boy. I gave him my best barkeep's smile.

Maybe I'm too critical. He wasn't swish; his nickname came from what he always said when some nosy type asked him his line: “I’m an unmarried mother.” If he felt less than murderous he would add: “at four cents a word. I write confession stories.”

If he felt nasty, he would wait for somebody to make something of it. He had a lethal style of infighting, like a female cop—one reason I wanted him. Not the only one.

He had a load on, and his face showed that he despised people more than usual. Silently I poured a double shot of Old Underwear and left the bottle. He drank it, poured another.

I wiped the bar top. “How’s the ‘Unmarried Mother’ racket?”

His fingers tightened on the glass and he seemed about to throw it at me. I felt for the sap under the bar. In temporal manipulation you try to figure everything, but there are so many factors that you never take needless risks.

I saw him relax that tiny amount they teach you to watch for in the Bureau’s training school. “Sorry,” I said. “Just asking, ‘How’s business?’ Make it ‘How’s the weather?’”

He looked sour. “Business is okay. I write ‘em, they print ‘em, I eat.”

I poured myself one, leaned toward him. “Matter of fact,” I said, “you write a nice stick. I’ve sampled a few. You have an amazingly sure touch with the woman’s angle.”

It was a slip I had to risk; he never admitted what pen-names he used. But he was boiled enough to pick up only the last: “Woman’s angle!” he repeated with a snort. “Yeah, I know the woman’s angle. I should.”

“So?” I said doubtfully. “Sisters?”

“No. You wouldn’t believe me if I told you.”

“Now, now,” I answered mildly, “bartenders and psychiatrists learn that nothing is stranger than truth. Why, son, if you heard the stories I do—well, you’d make yourself rich. Incredible.”

“You don’t know what ‘incredible’ means!”

“So? Nothing astonishes me. I’ve always heard worse.”

He snorted again. “Want to bet the rest of the bottle?”

“I’ll bet a full bottle.” I placed one on the bar.

“Well,” I signaled my other bartender to handle the trade. We were at the far end, a single-stool space that I kept private by loading the bar top by it with jars of pickled eggs and other clutter. A few were at the other end watching the fights and somebody was playing the juke box-private as a bed where we were.

“Okay,” he began, “to start with, I’m a bastard.”

“No distinction around here,” I said.

“I mean it,” he snapped. “My parents weren’t married.”

“Still no distinction,” I insisted. “Neither were mine.”

"When—" He stopped, gave me the first warm look I ever saw on him. "You mean that?"

"I do. A one-hundred-percent bastard. In fact," I added, "no one in my family ever marries. All bastards."

"Don't try to top me—*you're* married." He pointed at my ring.

"Oh, that." I showed it to him. "It just looks like a wedding ring; I wear it to keep women off. It is an antique I bought in 1985 from a fellow operative—he had fetched it from pre-Christian Crete. The Worm Ouroboros... the World Snake that eats its own tail, forever without end. A symbol of the Great Paradox."

He barely glanced at it. "If you're really a bastard, you know how it feels. When I was a little girl—"

"Wups!" I said. "Did I hear you correctly?"

"Who's telling this story? When I was a little girl—Look, ever hear of Christine Jorgenson? Or Roberta Cowell?"

"Uh, sex-change cases? You're trying to tell me,"

"Don't interrupt or swelp me, I won't talk. I was a foundling, left at an orphanage in Cleveland in 1945 when I was a month old. When I was a little girl, I envied kids with parents. Then, when I learned about sex—and, believe me, Pop, you learn fast in an orphanage—"

"I know."

"—I made a solemn vow that any kid of mine would have both a pop and a mom. It kept me 'pure', quite a feat in that vicinity. I had to learn to fight to manage it. Then I got older and realized I stood darn little chance of getting married—for the same reason I hadn't been adopted." He scowled. "I was horsefaced and buck-toothed, flat-chested and straight-haired."

"You don't look any worse than I do."

"Who cares how a barkeep looks? Or a writer? But people wanting to adopt would pick a little blue-eyed golden-haired moron. Later on, the boys want bulging breasts, a cute face, and an oh-you-wonderful-male manner." He shrugged. "I couldn't compete. So I decided to join the W. E. N. C. H. E. S."

"Eh?"

"Women's Emergency National Corps, Hospitality & Entertainment Section, what they now call 'Space Angels'—Auxiliary Nursing Group, Extraterrestrial Legions."

I knew both terms, once I had them chronized. We use still a third name, it's that elite military service corps: Women's Hospitality Order Refortifying & Encouraging Spacemen. Vocabulary shift is the worst hurdle in timejumps—did you know that 'service station' once meant a dispensary for petroleum fractions? Once on an assignment in the Churchill Era, a woman said to me, "Meet me at the service station next door"—which is *not* what it sounds; a 'service station' (then) wouldn't have a bed in it.

He went on: "It was when they first admitted you can't send men into space for months and years and not relieve the tension. You remember how the wowsers screamed? That improved my chance, since volunteers were scarce. A gal had to be respectable, preferably virgin (they liked to train them from scratch), above average mentally, and stable emotionally. But most volunteers were old hookers, or neurotics who would crack up ten days off Earth. So I didn't need looks; if they accepted me, they would fix my buck teeth, put a wave in my hair, teach me to walk and dance and how to listen to a man pleasingly, and everything else—plus training for the prime duties. They would even use plastic surgery if it would help—nothing too good for our Boys."

"Best yet, they made sure you didn't get pregnant during your enlistment—and you were almost certain to marry at the end of your hitch. Same way today, A. N. G. E. L. S. marry spacers—they talk the language."

"When I was eighteen I was placed as a 'mother's helper'. This family simply wanted a cheap servant, but I didn't mind as I couldn't enlist till I was twenty-one. I did housework and went to night school —pretending to continue my high school typing and shorthand but going to a charm class instead, to better my chances for enlistment."

"Then I met this city slicker with his hundred-dollar bills." He scowled. "The no-good actually did have a wad of hundred-dollar bills. He showed me one night, told me to help myself."

"But I didn't. I liked him. He was the first man I ever met who was nice to me without trying to take my pants off. I quit night school to see him oftener. It was the happiest time of my life."

"Then one night in the park my pants did come off."

He stopped. I said, "And then?"

"And then *nothing*! I never saw him again. He walked me home and told me he loved me and kissed me goodnight and never came back." He looked grim. "If I could find him, I'd kill him!"

"Well," I sympathized, "I know how you feel. But killing him just for doing what comes naturally—hmm... Did you struggle?"

"Huh? What's that got to do with it?"

"Quite a bit. Maybe he deserves a couple of broken arms for running out on you, but..."

"He deserves worse than that! Wait till you hear. Somehow I kept anyone from suspecting and decided it was all for the best. I hadn't really loved him and probably would never love anybody, and I was more eager to join the W. E. N. C. H. E. S. than ever. I wasn't disqualified, they didn't insist on virgins. I cheered up. It wasn't until my skirts got tight that I realized."

“Pregnant?”

“He had me higher ‘n a kite! Those skinflints I lived with ignored it as long as I could work, then kicked me out, and the orphanage wouldn’t take me back. I landed in a charity ward surrounded by other big bellies and trotted bedpans until my time came.”

“One night I found myself on an operating table, with a nurse saying, ‘Relax. Now breathe deeply.’ I woke up in bed, numb from the chest down. My surgeon came in. ‘How do you feel?’ he says cheerfully.”

“Like a mummy.”

“Naturally. You’re wrapped like one and full of dope to keep you numb. You’ll get well—but a Cesarean isn’t a hangnail.”

“‘Cesarean’ I said. *‘Doc—did I lose the baby?’*”

“Oh, no. Your baby’s fine.”

“Oh. Boy or girl?”

“A healthy little girl. Five pounds, three ounces.”

“I relaxed. It’s something, to have made a baby. I told myself I would go somewhere and tack ‘Mrs.’ on my name and let the kid think her papa was dead—no orphanage for my kid!”

“But the surgeon was talking. ‘Tell me, uh—" He avoided my name. "—did you ever think your glandular setup was odd?’”

“I said, ‘Huh? Of course not. What are you driving at?’”

“He hesitated. ‘I’ll give you this in one dose, then a hypo to let you sleep off your jitters. You’ll have ‘em.’”

“‘Why?’ I demanded.”

“Ever hear of that Scottish physician who was female until she was thirty-five?—then had surgery and became legally and medically a man? Got married. All okay.”

“What’s that got to do with me?”

“That’s what I’m saying. You’re a man.”

“I tried to sit up. ‘*What?*’”

“‘Take it easy. When I opened you, I found a mess. I sent for the Chief of Surgery while I got the baby out, then we held a consultation with you on the table, and worked for hours to salvage what we could. You had two full sets of organs, both immature, but with the female set well enough developed for you to have a baby. They could never be any use to you again, so we took them out and rearranged things so that you can develop properly as a man.’ He put a hand on me. ‘Don’t worry. You’re young, your bones will readjust, we’ll watch your glandular balance and make a fine young man out of you.’”

“I started to cry. ‘What about my baby?’”

“Well, you can’t nurse her, you haven’t milk enough for a kitten. If I were you, I wouldn’t see her—put her up for adoption.”

“No!”

"He shrugged. 'The choice is yours; you're her mother—well, her parent. But don't worry now; we'll get you well first.'"

"Next day they let me see the kid and I saw her daily, trying to get used to her. I had never seen a brand new baby and had no idea how awful they look—my daughter looked like an orange monkey. My feelings changed to cold determination to do right by her. But four weeks later that didn't mean anything."

"Eh?"

"She was snatched."

"Snatched?"

The Unmarried Mother almost knocked over the bottle we had bet. "Kidnapped—stolen from the hospital nursery!" He breathed hard. "How's that for taking the last a man's got to live for?"

"A bad deal," I agreed. "Let's pour you another. No clues?"

"Nothing the police could trace. Somebody came to see her, claimed to be her uncle. While the nurse had her back turned, he walked out with her."

"Description?"

"Just a man, with a face—shaped face, like yours or mine." He frowned. "I think it was the baby's father. The nurse swore it was an older man but he probably used makeup. Who else would swipe my baby? Childless women pull such stunts—but whoever heard of a man doing it?"

"What happened to you then?"

"Eleven more months of that grim place and three operations. In four months I started to grow a beard; before I was out I was shaving regularly and no longer doubted that I was male." He grinned wryly. "I was staring down nurses necklines."

"Well," I said, "seems to me you came through okay. Here you are, a normal man, making good money, no real troubles. And the life of a female is not an easy one."

He glared at me. "A lot you know about it!"

"So?"

"Ever hear the expression 'a ruined woman'?"

"Mmm, years ago. Doesn't mean much today."

"I was as ruined as a woman can be; that bum really ruined me—I was no longer a woman and I didn't know *how* to be a man."

"Takes getting used to, I suppose."

"You have no idea. I don't mean learning how to dress, or not walking into the wrong rest room; I learned those in the hospital. But how could I *live*? What job could I get? Hell, I couldn't even drive a car. I didn't know a trade; I couldn't do manual labor—too much scar tissue, too tender."

"I hated him for having ruined me for the W. E. N. C. H. E. S., too, but I didn't know how much until I tried to join the Space Corps instead. One look at my belly and I was marked unfit for military service. The medical officer spent time on me just from curiosity; he had read about my case."

"So I changed my name and came to New York. I got by as a fry cook, then rented a typewriter and set myself up as a public stenographer—what a laugh! In four months I typed four letters and one manuscript. The manuscript was for *Real Life Tales* and a waste of paper, but the goof who wrote it sold it. Which gave me an idea; I bought a stack of confession magazines and studied them." He looked cynical. "Now you know how I get the authentic woman's angle on an unmarried-mother story, through the only version I haven't sold—the true one. Do I win the bottle?"

I pushed it toward him. I was upset myself, but there was work to do. I said, "Son, you still want to lay hands on that so-and-so?"

His eyes lighted up—a feral gleam.

"Hold it!" I said. "You wouldn't kill him?"

He chuckled nastily. "Try me."

"Take it easy. I know more about it than you think I do. I can help you. I know where he is."

He reached across the bar. "*Where is he?*"

I said softly, "Let go my shirt, sonny or you'll land in the alley and we'll tell the cops you fainted." I showed him the sap.

He let go. "Sorry. But where is he?" He looked at me. "And how do you know so much?"

"All in good time. There are records—hospital records, orphanage records, medical records. The matron of your orphanage was Mrs. Fetherage, right? She was followed by Mrs. Gruenstein, right? Your name, as a girl, was 'Jane', right? And you didn't tell me any of this—right?"

I had him baffled and a bit scared. "What's this? You trying to make trouble for me?"

"No indeed. I've your welfare at heart. I can put this character in your lap. You do to him as you see fit and I guarantee that you'll get away with it. But I don't think you'll kill him. You'd be nuts to and you aren't nuts. Not quite."

He brushed it aside. "Cut the noise. *Where is he*?"

I poured him a short one; he was drunk, but anger was offsetting it. "Not so fast. I do something for you—you do something for me."

"Uh ... what?"

"You don't like your work. What would you say to high pay, steady work, unlimited expense account, your own boss on the job, and lots of variety and adventure?"

He stared. "I'd say, 'Get those goddam reindeer off my roof!' Shove it, Pop—there's no such job."

"Okay, put it this way: I hand him to you, you settle with him, then try my job. If it's not all I claim—well, I can't hold you."

He was wavering; the last drink did it, "When d'yuh d'liver 'im?" he said thickly.

He shoved out his hand. "It's a deal!"

"If it's a deal—*right now*!"

I nodded to my assistant to watch both ends, noted the time, 2300, started to duck through the gate under the bar, when the juke box blared out: '*I'm My Own Grandpaw*!' The service man had orders to load it with Americana and classics because I couldn't stomach the 'music' of 1970, but I hadn't known that tape was in it. I called out, "Shut that off! Give the customer his money back." I added, "Storeroom, back in a moment," and headed there with my Unmarried Mother following.

It was down the passage across from the johns, a steel door to which no one but my day manager and myself had a key; inside was a door to an inner room to which only I had a key. We went there.

He looked blearily around at windowless walls. "Where is he?"

"Right away." I opened a case, the only thing in the room; it was a U. S. F. F. Coordinates Transformer Field Kit, series 1992, Mod. II—a beauty, no moving parts, weight twentythree kilos fully charged, and shaped to pass as a suitcase. I had adjusted it precisely earlier that day; all I had to do was to shake out the metal net which limits the transformation field. Which I did.

"What's that?" he demanded.

"Time machine," I said and tossed the net over us.

"Hey!" he yelled and stepped back.

There is a technique to this; the net has to be thrown so that the subject will instinctively step back *onto* the metal mesh, then you close the net with both of you inside completely—else you might leave shoe soles behind or a piece of foot, or scoop up a slice of floor. But that's all the skill it takes. Some agents con a subject into the net; I tell the truth and use that instant of utter astonishment to flip the switch. Which I did.

1030-V-3 April 1963—Cleveland, Ohio, Apex Bldg.

"Hey!" he repeated. "Take this damn thing off!"

"Sorry," I apologized and did so, stuffed the net into the case, closed it. "You said you wanted to find him."

"But you said that was a time machine!"

I pointed out a window. "Does that look like November? Or New York?" While he was gawking at new buds and spring weather, I reopened the case, took out a packet of hundred-dollar bills, checked that the numbers and signatures were compatible with 1963. The Temporal Bureau doesn't care how much you spend (it costs nothing) but they don't like unnecessary anachronisms. Too many mistakes, and a general courtmartial will exile you for a year in a nasty period, say 1974 with its strict rationing and forced labor. I never make such mistakes; the money was okay.

He turned around and said, "What happened?"

"He's here. Go outside and take him. Here's expense money." I shoved it at him and added, "Settle him, then I'll pick you up."

Hundred-dollar bills have a hypnotic effect on a person not used to them. He was thumbing them unbelievingly as I eased him into the hall, locked him out. The next jump was easy, a small shift in era.

1100-V-10 March 1964—Cleveland-Apex Bldg. There was a notice under the door saying that my lease expired next week; otherwise the room looked as it had a moment before. Outside, trees were bare and snow threatened. I hurried, stopping only for contemporary money and a coat, hat, and topcoat I had left there when I leased the room. I hired a car, went to the hospital. It took twenty minutes to bore the nursery attendant to the point where I could swipe the baby without being noticed. We went back to the Apex Building. This dial setting was more involved, as the building did not yet exist in 1945. But I had precalculated it.

0100-V-20 Sept. 1945—Cleveland-Skyview Motel. Field kit, baby, and I arrived in a motel outside town. Earlier I had registered as 'Gregory Johnson, Warren, Ohio,' so we arrived in a room with curtains closed, windows locked, and doors bolted, and the floor cleared to allow for waver as the machine hunts. You can get a nasty bruise from a chair where it shouldn't be—not the chair, of course, but backlash from the field.

No trouble. Jane was sleeping soundly; I carried her out, put her in a grocery box on the seat of a car I had provided earlier, drove to the orphanage, put her on the steps, drove two blocks to a 'service station' (the petroleum-products sort) and phoned the orphanage, drove back in time to see them taking the box inside, kept going and abandoned the car near the motel—walked to it and jumped forward to the Apex Building in 1963.

2200-V-24 April 1963—Cleveland-Apex Bldg. I had cut the time rather fine—temporal accuracy depends on span, except on return to zero. If I had it right, Jane was discovering, out in the park this balmy spring night, that she wasn't quite as nice a girl as she had thought. I grabbed a taxi to the home of those skinflints, had the hackie wait around a corner while I lurked in shadows.

Presently I spotted them down the street, arms around each other. He took her up on the porch and made a long job of kissing her goodnight—longer than I thought. Then she went in and he came down the walk, turned away. I slid into step and hooked an arm in his. “That’s all, son,” I announced quietly. “I’m back to pick you up.”

“*You*!” He gasped and caught his breath.

“Me. Now you know who *he* is—and after you think it over you’ll know who *you* are and if you think hard enough, you’ll figure out who the baby is and…who *I* am.”

He didn’t answer, he was badly shaken. It’s a shock to have it proved to you that you can’t resist seducing yourself. I took him to the Apex Building and we jumped again.

2300-VII-12 Aug. 1985—Sub Rockies Base. I woke the duty sergeant, showed my I. D., told the sergeant to bed my companion down with a happy pill and recruit him in the moming. The sergeant looked sour, but rank is rank, regardless of era; he did what I said, thinking, no doubt, that the next time we met he might be the colonel and I the sergeant. Which can happen in our corps. “What name?” he asked.

I wrote it out. He raised his eyebrows. “Like so, eh? *Hmm*—”

“You just do your job, Sergeant.” I turned to my companion.

“Son, your troubles are over. You’re about to start the best job a man ever held, and you’ll do well. I *know*.”

“That you will!” agreed the sergeant. “Look at me—born in 1917, still around, still young, still enjoying life.”

I went back to the jump room, set everything on preselected zero.

2301-V-7 Nov. 1970—NYC-‘Pop’s Place’. I came out of the storeroom carrying a fifth of Drambuie to account for the minute I had been gone. My assistant was arguing with the customer who had been playing ‘*I’m My Own Grand-Paw!’* I said, “Oh, let him play it, then unplug it.” I was very tired.

It’s rough, but somebody must do it, and it’s very hard to recruit anyone in the later years, since the Mistake of 1972. Can you think of a better source than to pick people all fouled up where they are and give them well-paid, interesting (even though dangerous) work in a necessary cause? Everybody knows now why the Fizzle War of 1963 fizzled. The bomb with New York’s number on it didn’t go off, a hundred other things didn’t go as planned—all arranged by the likes of me.

But not the Mistake of ‘72; that one is not our fault, and can’t be undone; there’s no paradox to resolve. A thing either is, or it isn’t, now and forever amen. But there won't be another like it; an order dated '1992' takes precedence any year.

I closed five minutes early, leaving a letter in the cash register telling my day manager that I was accepting his offer to buy me out, to see my lawyer as I was leaving on a long vacation. The Bureau might or might not pick up his payments, but they want things left tidy. I went to the room in the back of the storeroom and forward to 1993.

2200-VII-12 Jan 1993—Sub Rockies Annex-HQ Temporal DOL. I checked in with the duty officer and went to my quarters, intending to sleep for a week. I had fetched the bottle we bet (after all, I won it) and took a drink before I wrote my report. It tasted foul, and I wondered why I had ever liked Old Underwear. But it was better than nothing; I don't like to be cold sober, I think too much. But I don't really hit the bottle either; other people have snakes—I have people.

I dictated my report; forty recruitments all okayed by the Psych Bureau, counting my own, which I knew would be okayed. I was here, wasn't I? Then I taped a request for assignment to operations; I was sick of recruiting. I dropped both in the slot and headed for bed.

My eye fell on 'The By-Laws of Time' over my bed:

Never Do Yesterday What Should Be Done Tomorrow.
If at Last You Do Succeed, Never Try Again.
A Stitch in Time Saves Nine Billion.
A Paradox May Be Paradoctored.
It Is Earlier When You Think.
Ancestors Are Just People.
Even Jove Nods.

They didn't inspire me the way they had when I was a recruit; thirty subjective-years of timejumping wears you down. I undressed, and when I got down to the hide I looked at my belly. A Cesarean leaves a big scar, but I'm so hairy now that I don't notice it unless I look for it.

Then I glanced at the ring on my finger.

The Snake That Eats Its Own Tail, Forever and Ever. I *know* where I came from, but *where did all you zombies come from?*

I felt a headache coming on, but a headache powder is one thing I do not take. I did once and you all went away.

So I crawled into bed and whistled out the light.

You aren't really there at all. There isn't anybody but me, Jane, here alone in the dark.

I miss you dreadfully!

SEARCHLIGHT

"Will she hear you?"

"If she's on this face of the Moon. If she was able to get out of the ship. If her suit radio wasn't damaged. If she has it turned on. If she is alive. Since the ship is silent and no radar beacon has been spotted, it is unlikely that she or the pilot lived through it."

"She's got to be found! Stand by, Space Station. Tycho Base, acknowledge."

Reply lagged about three seconds, Washington to Moon and back. "Lunar Base, Commanding General."

"General, put every man on the Moon out searching for Betsy!"

Speed-of-light lag made the answer sound grudging. "Sir, do you know how big the Moon is?"

"No matter! Betsy Barnes is there somewhere—so every man is to search until she is found. If she's dead, your precious pilot would be better off dead, too!"

"Sir, the Moon is almost fifteen million square miles. If I used every man I have, each would have over a thousand square miles to search. I gave Betsy my best pilot. I won't listen to threats against him when he can't answer back. Not from anyone, sir! I'm sick of being told what to do by people who don't know Lunar conditions. My advice—my official advice sir is to let Meridian Station try. Maybe they can Work a miracle."

The answer rapped back, "Very well, General! I'll speak to you later. Meridian Station! Report your plans." Elizabeth Barnes, "Blind Betsy", child genius of the piano, had been making a USO tour of the Moon. She "wowed 'em" at Tycho Base, then lifted by jeep rocket for Farside Hardbase, to entertain our lonely missilemen behind the Moon. She should have been there in an hour. Her pilot was a safety pilot; such ships shuttled unpiloted between Tycho and Farside daily.

After liftoff her ship departed from its programming, was lost by Tycho's radars. It was ... somewhere.

Not in space, else it would be radioing for help and its radar beacon would be seen by other ships, space stations, surface bases. It had crashed—or made emergency landing—somewhere on the vastness of Luna.

"Meridian Space Station, Director speaking—" Lag was unnoticeable; radio bounce between Washington and the station only 22,300 miles up was only a quarter second. "We've patched Earthside stations to blanket the Moon with our call. Another broadcast blankets the far side from Station Newton at the three-body stable position. Ships from Tycho are orbiting the Moon's rim—that band around the edge which is in radio shadow from us and from the Newton. If we hear-"

"Yes, yes! How about radar search?"

"Sir, a rocket on the surface looks to radar like a million other features the same size. Our one chance is to get them to answer ... if they can. Ultrahigh-resolution radar might spot them in months—but suits worn in those little rockets carry only six hours air. We are praying they will hear and answer."

"When they answer, you'll slap a radio direction finder on them. Eh?"

"No, sir."

"In God's name, why not?"

"Sir, a direction finder is useless for this job. It would tell us only that the signal came from the Moon—which doesn't help."

"Doctor, you're saying that you might hear Betsy—and not know where she is?"

"We're as blind as she is. We hope that she will be able to lead us to her ... if she hears us."

"How?"

"With a Laser. An intense, very tight beam of light. She'll hear it—"

"Hear a beam of light?"

"Yes, sir. We are jury-rigging to scan like radar—that won't show anything. But we are modulating it to give a carrier wave in radio frequency, then modulating that into audio frequency—and controlling that by a piano. If she hears us, we'll tell her to listen while we scan the Moon and run the scale on the piano—"

"All this while a little girl is dying?"

"Mister President—*shut up*!"

"Who was *THAT*?"

"I'm Betsy's father. They've patched me from Omaha. Please, Mr. President, keep quiet and let them work. I want my daughter back."

The President answered tightly, "Yes, Mr. Barnes. Go ahead, Director. Order anything you need."

In Station Meridian the director wiped his face. "Getting anything?"

"No. Boss, can't something be done about that Rio station? It's sitting right on the frequency!"

"We'll drop a brick on them. Or a bomb. Joe, tell the President"

"I heard, Director. They'll be silenced!"

"Sh! Quiet! Betsy—do you hear me?" The operator looked intent, made an adjustment.

From a speaker came a girl's light, sweet voice: "—to hear somebody! Gee, I'm glad! Better come quick—the Major is hurt."

The Director jumped to the microphone. "Yes, Betsy, we'll hurry. You've got to help us. Do you know where you are?"

"Somewhere on the Moon, I guess. We bumped hard and I was going to kid him about it when the ship fell over. I got unstrapped and found Major Peters and he isn't moving. Not dead—I don't think so; his suits puffs out like mine and I hear something when I push my helmet against him. I just now managed to get the door open." She added, "This can't be Farside; it's supposed to be night there. I'm in sunshine, I'm sure. This suit is pretty hot."

"Betsy, you must stay outside. You've got to be where you can see us."

She chuckled. "That's a good one. I see with my ears."

"Yes. You'll see us, with your ears. Listen, Betsy. We're going to scan the Moon with a beam of light. You'll hear it as a piano note. We've got the Moon split into the eighty-eight piano notes. When you hear one, yell, 'Now!' Then tell us what note you heard. Can you do that?"

"Of course," she said confidently, "if the piano is in tune."

"It is. All right, we're starting–"

"Now!"

"What note, Betsy?"

"E flat, the first octave above middle C."

"This note, Betsy?"

"That's what I said."

The Director called out, "Where's that on the grid? In Mare Nubium? Tell the General!" He said to the microphone, "We're finding you, Betsy honey! Now we scan just that part you're on. We have to change the setup. Want to talk to your Daddy meanwhile?"

"Gosh! Could I?"

"Yes indeed!"

Twenty minutes later he cut in and heard: "—of course not, Daddy. Oh, a teensy bit scared when the ship fell. But people take care of me, always have."

"Betsy?"

"Yes, sir?"

"Be ready to tell us again."

"Now!' She added, "That's a bullfrog G, three octaves down."

"This note?"

"That's right."

"Get that on the grid and tell the General to get his ships up! That cuts it to a square ten miles on a side! Now, Betsy—we know almost where you are. We are going to focus still closer. Want to go inside and cool off?"

"I'm not too hot. Just sweaty."

Forty minutes later the General's voice rang out: 'They've spotted the ship! They see her waving!"

FREE MEN

"That makes three provisional presidents so far," the Leader said. "I wonder how many more there are?" He handed the flimsy sheet back to the runner, who placed it in his mouth and chewed it up like gum.

The third man shrugged. "No telling. What worries me—" A mockingbird interrupted. "Doity, doity, doity," he sang. "Terloo, terloo, terloo, purty-purty-purty-purty."

The clearing was suddenly empty.

"As I was saying," came the voice of the third man in a whisper in the Leader's ear, "it ain't how many worries me, but how you tell a de Gaulle from a Laval. See anything?"

"Convoy. Stopped below us." The Leader peered through bushes and down the side of a bluff. The high ground pushed out toward the river here, squeezing the river road between it and the water. The road stretched away to the left, where the valley widened out into farmland, and ran into the outskirts of Barclay ten miles away.

The convoy was directly below them, eight trucks preceded and followed by halftracks. The following halftrack was backing, vortex gun cast loose and ready for trouble. Its commander apparently wanted elbow room against a possible trap.

At the second truck helmeted figures gathered around its rear end, which was jacked up. As the Leader watched he saw one wheel removed.

"Trouble?"

"I think not. Just a breakdown. They'll be gone soon." He wondered what was in the trucks. Food, probably. His mouth watered. A few weeks ago an opportunity like this would have meant generous rations for all, but the conquerors had smartened up.

He put useless thoughts away. "It's not that that worries me, Dad," he added, returning to the subject. "We'll be able to tell quislings from loyal Americans. But how do you tell men from boys?"

"Thinking of Joe Benz?"

"Maybe. I'd give a lot to know how far we can trust Joe. But I could have been thinking of young Morrie."

"You can trust him."

"Certainly. At thirteen he doesn't drink—and he wouldn't crack if they burned his feet off. Same with Cathleen. It's not age or sex—but how can you tell? And you've *got* to be able to tell."

There was a flurry below. Guards had slipped down from the trucks and withdrawn from the road when the convoy had stopped, in accordance with an orderly plan for such emergencies. Now two of them returned to the convoy, hustling between them a figure not in uniform.

The mockingbird set up a frenetic whistling.

"It's the messenger," said the Leader. "The dumb fool! Why didn't he lie quiet? Tell Ted we've seen it."

Dad pursed his lips and whistled: "Keewah, keewah, keewah, terloo."

The other "mockingbird" answered, "Terloo," and shut up.

"We'll need a new post office now," said the Leader. "Take care of it, Dad."

"Okay."

"There's no real answer to the problem," the Leader said. "You can limit size of units, so that one person can't give away too many—but take a colony like ours. It needs to be a dozen or more to work. That means they all have to be dependable, or they all go down together. So each one has a loaded gun at the head of each other one."

Dad grinned, wryly. "Sounds like the United Nations before the Blow Off. Cheer up, Ed. Don't burn your bridges before you cross them."

"I won't. The convoy is ready to roll."

When the convoy had disappeared in the distance, Ed Morgan, the Leader, and his deputy Dad Carter stood up and stretched. The "mockingbird" had announced safety loudly and cheerfully. "Tell Ted to cover us into camp," Morgan ordered.

Dad wheepled and chirruped and received acknowledgment. They started back into the hills. Their route was roundabout and included check points from which they could study their back track and receive reports from Ted. Morgan was not worried about Ted being followed—he was confident that Ted could steal baby 'possums from mama's pouch. But the convoy breakdown might have been a trap—there was no way to tell that all of the soldiers had got back into the trucks. The messenger might have been followed; certainly he had been trapped too easily.

Morgan wondered how much the messenger would spill. He could not spill much about Morgan's own people, for the "post office" rendezvous was all that he knew about them.

The base of Morgan's group was neither better nor worse than average of the several thousand other camps of recalcitrant guerrillas throughout the area that once called itself the United States. The Twenty Minute War had not surprised everyone. The mushrooms which had blossomed over Washington, Detroit, and a score of other places had been shocking but expected—by some.

Morgan had made no grand preparations. He had simply conceived it as a good period in which to stay footloose and not too close to a target area. He had taken squatter's rights in an abandoned mine and had stocked it with tools, food, and other useful items. He had had the simple intention to survive; it was during the weeks after Final Sunday that he discovered that there was no way for a man with foresight to avoid becoming a leader.

Morgan and Dad Carter entered the mine by a new shaft and tunnel which appeared on no map, by a dry rock route which was intended to puzzle even a bloodhound. They crawled through the tunnel, were able to raise their heads when they reached the armory, and stepped out into the common room of the colony, the largest chamber, ten by thirty feet and as high as it was wide.

Their advent surprised no one, else they might not have lived to enter. A microphone concealed in the tunnel had conveyed their shibboleths before them. The room was unoccupied save for a young woman stirring something over a tiny, hooded fire and a girl who sat at a typewriter table mounted in front of a radio. She was wearing earphones and shoved one back and turned to face them as they came in.

"Howdy, Boss!"

"Hi, Margie. What's the good word?" Then to the other, "What's for lunch?"

"Bark soup and a notch in your belt."

"Cathleen, you depress me."

"Well . . . mushrooms fried in rabbit fat, but darn few of them."

"That's better."

"You better tell your boys to be more careful what they bring in. One more rabbit with tularemia and we won't have to worry about what to eat."

"Hard to avoid, Cathy. You must be sure you handle them the way Doc taught you." He turned to the girl. "Jerry in the upper tunnel?"

"Yes."

"Get him down here, will you?"

"Yes, sir." She pulled a sheet out of her typewriter and handed it to him, along with others, then left the room.

Morgan glanced over them. The enemy had abolished soap opera and singing commercials but he could not say that radio had been improved. There was an unnewsy sameness to the propaganda which now came over the air. He checked through while wishing for just one old-fashioned, uncensored newscast.

"Here's an item!" he said suddenly. "Get this, Dad—"

"Read it to me, Ed." Dad's spectacles had been broken on Final Sunday. He could bring down a deer, or a man, at a thousand yards—but he might never read again.

"'New Center, 28 April—It is with deep regret that Continental Coordinating Authority for World Unification, North American District, announces that the former city of St. Joseph, Missouri, has been subjected to sanitary measures. It is ordered that a memorial plaque setting forth the circumstances be erected on the former site of St. Joseph as soon as radioactivity permits. Despite repeated warnings the former inhabitants of this lamented city encouraged and succored marauding bands of outlaws skulking around the outskirts of their community. It is hoped that the sad fate of St. Joseph will encourage the native authorities of all North American communities to take all necessary steps to suppress treasonable intercourse with the few remaining lawless elements in our continental society.'"

Dad cocked a brow at Morgan. "How many does that make since they took over?"

"Let's see . . . Salinas . . . Colorado Springs . . . uh, six, including St. Joe."

"Son, there weren't more than sixty million Americans left after Final Sunday. If they keep up, we'll be kind of thinned out in a few years."

"I know." Morgan looked troubled. "We've got to work out ways to operate without calling attention to the towns. Too many hostages."

A short, dark man dressed in dirty dungarees entered from a side tunnel, followed by Margie. "You wanted me, boss?"

"Yes, Jerry. I want to get word to McCracken to come in for a meeting. Two hours from now, if he can get here."

"Boss, you're using radio too much. You'll get him shot and us, too."

"I thought that business of bouncing it off the cliff face was foolproof?"

"Well . . . a dodge I can work up, somebody else can figure out. Besides, I've got the chassis unshipped. I was working on it."

"How long to rig it?"

"Oh, half an hour—twenty minutes."

"Do it. This may be the last time we'll use radio, except as utter last resort."

"Okay, boss."

The meeting was in the common room. Morgan called it to order once all were present or accounted for. McCracken arrived just as he had decided to proceed without him. McCracken had a pass for the countryside, being a veterinarian, and held proxy for the colony's underground associates in Barclay.

"The Barclay Free Company, a provisional unit of the United States of America, is now in session," Morgan announced formally. "Does any member have any item to lay before the Company?"

He looked around; there was no response. "How about you?" he challenged Joe Benz. "I heard that you had some things you thought the Company ought to hear."

Benz started to speak, shook his head. "I'll wait."

"Don't wait too long," Morgan said mildly. "Well, I have two points to bring up for discussion—"

"Three," corrected Dr. McCracken. "I'm glad you sent for me." He stepped up to Morgan and handed him a large, much folded piece of paper. Morgan looked it over, refolded it, and put it in his pocket.

"It fits in," he said to McCracken. "What do the folks in town say?"

"They are waiting to hear from you. They'll back you up—so far, anyway."

"All right." Morgan turned back to the group. "First item—we got a message today, passed by hand and about three weeks old, setting up another provisional government. The courier was grabbed right under our noses. Maybe he was a stooge; maybe he was careless—that's neither here nor there at the moment. The message was that the Honorable Albert M. Brockman proclaimed himself provisional President of these United States, under derived authority, and appointed Brigadier General Dewey Fenton commander of armed forces including irregular militia—meaning us—and called on all citizens to unite to throw the Invader out. All formal and proper. So what do we do about it?"

"And who the devil is the Honorable Albert M. Brockman?" asked someone in the rear.

"I've been trying to remember. The message listed government jobs he's held, including some assistant secretary job—I suppose that's the 'derived authority' angle. But I can't place him."

"I recall him," Dr. McCracken said suddenly. "I met him when I was in the Bureau of Animal Husbandry. A career civil servant . . . and a stuffed shirt."

There was a gloomy silence. Ted spoke up. "Then why bother with him?"

The Leader shook his head. "It's not that simple, Ted. We can't assume that he's no good. Napoleon might have been a minor clerk under different circumstances. And the Honorable Mr. Brockman may be a revolutionary genius disguised as a bureaucrat. But that's not the point. We need nationwide unification more than anything. It doesn't matter right now who the titular leader is. The theory of derived authority may be shaky but it may be the only way to get everybody to accept one leadership. Little bands like ours can never win back the country. We've got to have unity—and that's why we can't ignore Brockman."

"The thing that burns me," McCracken said savagely, "is that it need never have happened at all! It could have been prevented."

"No use getting in a sweat about it," Morgan told him. "It's easy to see the government's mistakes now, but just the same I think there was an honest effort to prevent war right up to the last. It takes all nations to keep the peace, but it only takes one to start a war."

"No, no, no—I don't mean that, Captain," McCracken answered. "I don't mean the War could have been prevented. I suppose it could have been—once. But everybody knew that another war could happen, and everybody—*everybody,* I say, knew that if it came, it would start with the blasting of American cities. Every congressman, every senator knew that a war would destroy Washington and leave the country with no government, flopping around like a chicken with its head off. They *knew*—why didn't they *do* something!"

"What could they do? Washington couldn't be protected."

"Do? Why, they could have made plans for their own deaths! They could have slapped through a constitutional amendment calling for an alternate president and alternate congressmen and made it illegal for the alternates to be in target areas—or any scheme to provide for orderly succession in case of disaster. They could have set up secret and protected centers of government to use for storm cellars. They could have planned the same way a father takes out life insurance for his kids. Instead they went stumbling along, fat, dumb, and happy, and let themselves get killed, with no provision to carry out their sworn duties after they were dead. Theory of 'derived authority,' pfui! It's not just disastrous; it's ridiculous! We used to be the greatest country in the world—now look at us!"

"Take it easy, Doc," Morgan suggested. "Hindsight is easier than foresight."

"Hummm! *I* saw it coming. I quit my Washington job and took a country practice, five years ahead of time. Why couldn't a congressman be as bright as I am?"

"Hmmm . . . well—you're right. But we might just as well worry over the Dred Scott Decision. Let's get on with the problem. How about Brockman? Ideas?"

"What do you propose, boss?"

"I'd rather have it come from the floor."

"Oh, quit scraping your foot, boss," urged Ted. "We elected you to lead."

"Okay. I propose to send somebody to backtrack on the message and locate Brockman—smell him out and see what he's got. I'll consult with as many groups as we can reach in this state and across the river, and we'll try to manage unanimous action. I was thinking of sending Dad and Morrie."

Cathleen shook her head. "Even with faked registration cards and travel permits they'd be grabbed for the Reconstruction Battalions. I'll go."

"In a pig's eye," Morgan answered. "You'd be grabbed for something a danged sight worse. It's got to be a man."

"I am afraid Cathleen is right," McCracken commented. "They shipped twelve-year-old boys and old men who could hardly walk for the Detroit project. They don't care how soon the radiation gets them —it's a plan to thin us out."

"Are the cities still that bad?"

"From what I hear, yes. Detroit is still 'hot' and she was one of the first to get it."

"I'm going to go." The voice was high and thin, and rarely heard in conference.

"Now, Mother—" said Dad Carter.

"You keep out of this, Dad. The men and young women would be grabbed, but they won't bother with *me.* All I need is a paper saying I have a permit to rejoin my grandson, or something."

McCracken nodded. "I can supply that."

Morgan paused, then said suddenly, "Mrs. Carter will contact Brockman. It is so ordered. Next order of business," he went on briskly. "You've all seen the news about St. Joe—this is what they posted in Barclay last night." He hauled out and held up the paper McCracken had given him. It was a printed notice, placing the City of Barclay on probation, subject to the ability of "local authorities" to suppress "bands of roving criminals."

There was a stir, but no comment. Most of them had lived in Barclay; all had ties there.

"I guess you're waiting for me," McCracken began. "We held a meeting as soon as this was posted. We weren't all there—it's getting harder to cover up even the smallest gathering—but there was no disagreement. We're behind you but we want you to go a little easy. We suggest that you cut out pulling raids within, oh, say twenty miles of Barclay, and that you stop all killing unless absolutely necessary to avoid capture. It's the killings they get excited about—it was killing of the district director that touched off St. Joe."

Benz sniffed. "So we don't do anything. We just give up—and stay here in the hills and starve."

"Let me finish, Benz. We don't propose to let them scare us out and keep us enslaved forever. But casual raids don't do them any real harm. They're mostly for food for the Underground and for minor retaliations. We've got to conserve our strength and increase it and organize, until we can hit hard enough to make it stick. We won't let you starve. I can do more organizing among the farmers and some animals can be hidden out, unregistered. We can get you meat—some, anyhow. And we'll split our rations with you. They've got us on 1800 calories now, but we can share it. Something can be done through the black market, too. There are ways."

Benz made a contemptuous sound. Morgan looked at him.

"Speak up, Joe. What's on your mind?"

"I will. It's not a plan; it's a disorderly retreat. A year from now we'll be twice as hungry and no further along—and they'll be better dug in and stronger. Where does it get us?"

Morgan shook his head. "You've got it wrong. Even if we hadn't had it forced on us, we would have been moving into this stage anyhow. The Free Companies have got to quit drawing attention to themselves. Once the food problem is solved we've got to build up our strength and weapons. We've got to have organization and weapons—nationwide organization and guns, knives, and hand grenades. We've got to turn this mine into a factory. There are people down in Barclay who can use the stuff we can make here—but we can't risk letting Barclay be blasted in the meantime. Easy does it."

"Ed Morgan, you're kidding yourself and you know it."

"How?"

"'How?' Look, you sold me the idea of staying on the dodge and joining up—"

"You volunteered."

"Okay, I volunteered. It was all because you were so filled with fire and vinegar about how we would throw the enemy back into the ocean. You talked about France and Poland and how the Filipinos kept on fighting after they were occupied. You sold me a bill of goods. But there was something you didn't tell me—"

"Go on."

"There never was an Underground that freed its own country. All of them had to be pulled out of the soup by an invasion from outside. Nobody is going to pull *us* out."

There was silence after this remark. The statement had too much truth in it, but it was truth that no member of the Company could afford to think about. Young Morrie broke it. "Captain?"

"Yes, Morrie." Being a fighting man, Morrie was therefore a citizen and a voter.

"How can Joe be so sure he knows what he's talking about? History doesn't repeat. Anyhow, maybe we will get some help. England, maybe—or even the Russians."

Benz snorted. "Listen to the punk! Look, kid, England was smashed like we were, only worse—and Russia, too. Grow up; quit daydreaming."

The boy looked at him doggedly. "You don't know that. We only know what they chose to tell us. And there aren't enough of them to hold down the whole world, everybody, everywhere. We never managed to lick the Yaquis, or the Moros. And they can't lick us *unless we let them.* I've read some history too."

Benz shrugged. "Okay, okay. Now we can all sing 'My Country 'Tis of Thee' and recite the Scout oath. That ought to make Morrie happy —"

"Take it easy, Joe!"

"We have free speech here, don't we? What I want to know is: How long does this go on? I'm getting tired of competing with coyotes for the privilege of eating jackrabbits. You know I've fought with the best of them. I've gone on the raids. Well, haven't I? Haven't I? You can't call *me* yellow."

"You've been on some raids," Morgan conceded.

"All right. I'd go along indefinitely if I could see some sensible plan. That's why I ask, 'How long does this go on?' When do we move? Next spring? Next year?"

Morgan gestured impatiently. "How do I know? It may be next spring; it may be ten years. The Poles waited three hundred years."

"That tears it," Benz said slowly. "I was hoping you could offer some reasonable plan. Wait and arm ourselves—that's a pretty picture! Homemade hand grenades against atom bombs! Why don't you quit kidding yourselves? We're *licked!*" He hitched at his belt. "The rest of you can do as you please—I'm through."

Morgan shrugged. "If a man won't fight, I can't make him. You're assigned noncombatant duties. Turn in your gun. Report to Cathleen."

"You don't get me, Ed. I'm *through.*"

"You don't get *me,* Joe. You don't resign from an Underground."

"There's no risk, I'll leave quietly, and let myself be registered as a straggler. It doesn't mean anything to the rest of you. I'll keep my mouth shut—that goes without saying."

Morgan took a long breath, then answered, "Joe, I've learned by bitter experience not to trust statements set off by 'naturally,' 'of course,' or 'that goes without saying.'"

"Oh, so you don't trust me?"

"As Captain of this Company I can't afford to. Unless you can get the Company to recall me from office, my rulings stand. You're under arrest. Hand over your gun."

Benz glanced around, at blank, unfriendly faces. He reached for his waist. "With your left hand, Joe!"

Instead of complying, Benz drew suddenly, backed away. "Keep clear!" he said shrilly. "I don't want to hurt anybody—but keep clear!"

Morgan was unarmed. There might have been a knife or two in the assembly, but most of them had come directly from the dinner table. It was not their custom to be armed inside the mine.

Young Morrie was armed with a rifle, having come from lookout duty. He did not have room to bring it into play, but Morgan could see that he intended to try. So could Benz.

"Stop it, Morrie!" Morgan assumed obedience and turned instantly to the others. "Let him go. Nobody move. Get going, Joe."

"That's better." Benz backed down the main tunnel, toward the main entrance, weed and drift choked for years. Its unused condition was their principal camouflage, but it could be negotiated.

He backed away into the gloom, still covering them. The tunnel curved; shortly he was concealed by the bend.

Dad Carter went scurrying in the other direction as soon as Benz no longer covered them. He reappeared at once, carrying something. "Heads down!" he shouted, as he passed through them and took out after Benz.

"Dad!" shouted Morgan. But Carter was gone.

Seconds later a concussion tore at their ears and noses.

Morgan picked himself up and brushed at his clothes, saying in annoyed tones, "I never did like explosives in cramped quarters. Cleve—Art. Go check on it. Move!"

"Right, boss!" They were gone.

"The rest of you get ready to carry out withdrawal plan—full plan, with provisions and supplies. Jerry, don't disconnect either the receiver or the line-of-sight till I give the word. Margie will help you. Cathleen, get ready to serve anything that can't be carried. We'll have one big meal. 'The condemned ate hearty.'"

"Just a moment, Captain." McCracken touched his sleeve. "I had better get a message into Barclay."

"Soon as the boys report. You better get back into town."

"I wonder. Benz knows me. I think I'm here to stay."

"Hm . . . well, you know best. How about your family?"

McCracken shrugged. "They can't be worse off than they would be if I'm picked up. I'd like to have them warned and then arrangements made for them to rejoin me if possible."

"We'll do it. You'll have to give me a new contact."

"Planned for. This message will go through and my number-two man will step into my shoes. The name is Hobart—runs a feed store on Pelham Street."

Morgan nodded. "Should have known you had it worked out. Well, what we don't know—" He was interrupted by Cleve, reporting.

"He got away, Boss."

"Why didn't you go after him?"

"Half the roof came down when Dad chucked the grenade. Tunnel's choked with rock. Found a place where I could see but couldn't crawl through. He's not in the tunnel."

"How about Dad?"

"He's all right. Got clipped on the head with a splinter but not really hurt."

Morgan stopped two of the women hurrying past, intent on preparations for withdrawal. "Here—Jean, and you, Mrs. Bowen. Go take care of Dad Carter and tell Art to get back here fast. Shake a leg!"

When Art reported Morgan said, "You and Cleve go out and find Benz. Assume that he is heading for Barclay. Stop him and bring him in if you can. Otherwise kill him. Art is in charge. Get going." He turned to McCracken. "Now for a message." He fumbled in his pocket for paper, found the poster notice that McCracken had given him, tore off a piece, and started to write. He showed it to McCracken. "How's that?" he asked.

The message warned Hobart of Benz and asked him to try to head him off. It did not tell him that the Barclay Free Company was moving but did designate the "post office" through which next contact would be expected—the men's rest room of the bus station.

"Better cut out the post office," McCracken advised. "Hobart knows it and we may contact him half a dozen other ways. But I'd like to ask him to get my family out of sight. Just tell him that we are sorry to hear that Aunt Dinah is dead."

"Is that enough?"

"Yes."

"Okay." Morgan made the changes, then called, "Margie! Put this in code and tell Jerry to get it out fast. Tell him it's the strike-out edition. He can knock down his sets as soon as it's out."

"Okay, boss." Margie had no knowledge of cryptography. Instead she had command of jive talk, adolescent slang, and high school doubletalk which would be meaningless to any but another American bobby-soxer. At the other end a fifteen-year-old interpreted her butchered English by methods which impressed her foster parents as being telepathy—but it worked.

The fifteen-year-old could be trusted. Her entire family, save herself, had been in Los Angeles on Final Sunday.

Art and Cleve had no trouble picking up Benz's trail. His tracks were on the tailings spilling down from the main entrance to the mine. The earth and rock had been undisturbed since the last heavy rain; Benz's flight left clear traces.

But the trail was cold by more than twenty minutes; they had left the mine by the secret entrance a quarter of a mile from where Benz had made his exit.

Art picked it up where Benz had left the tailings and followed it through brush with the woodsmanship of the Eagle Scout he had been. From the careless signs he left behind Benz was evidently in a hurry and heading by the shortest route for the highway. The two followed him as fast as they could cover ground, discarding caution for speed.

They checked just before entering the highway. "See anything?" asked Cleve.

"No."

"Which way would he go?"

"The Old Man said to head him off from Barclay."

"Yeah, but suppose he headed south instead? He used to work in Wickamton. He might head that way."

"The Boss said to cover Barclay. Let's go."

They had to cache their guns; from here on it would be their wits and their knives. An armed American on a highway would be as conspicuous as a nudist at a garden party.

Their object now was speed; they must catch up with him, or get ahead of him and waylay him.

Nine miles and two and a half hours later—one hundred and fifty minutes of dog trot, with time lost lying in the roadside brush when convoys thundered past—they were in the outskirts of Barclay. Around a bend, out of sight, was the roadblock of the Invaders' check station. The point was a bottleneck; Benz must come this way if he were heading for Barclay.

"Is he ahead or behind us?" asked Cleve, peering out through bushes.

"Behind, unless he was picked up by a convoy—or sprouted wings. We'll give him an hour."

A horsedrawn hayrack lumbered up the road. Cleve studied it. Americans were permitted no power vehicles except under supervision, but this farmer and his load could go into town with only routine check at the road block. "Maybe we ought to hide in that and look for him in town."

"And get a bayonet in your ribs? Don't be silly."

"Okay. Don't blow your top." Cleve continued to watch the rig. "Hey," he said presently. "Get a load of that!"

"That" was a figure which dropped from the tail of the wagon as it started around the bend, rolled to the ditch on the far side, and slithered out of sight.

"That was Joe!"

"Are you sure?"

"Sure! Here we go."

"How?" Art objected. "Take it easy. Follow me." They faded back two hundred yards, to where they could cross the road on hands and knees through a drainage pipe. Then they worked up the other side to where Benz had disappeared in weeds.

They found the place where he had been; grass and weeds were still straightening up. The route he must have taken was evident—down toward the river bank, then upstream to the city. There were drops of blood. "Dad must have missed stopping him by a gnat's whisker," Cleve commented.

"Bad job he didn't."

"Another thing—he said he was going to give himself up. I don't think he is, or he would have stayed with the wagon and turned himself in at the check station. He's heading for some hideout. Who does he know in Barclay?"

"I don't know. We'd better get going."

"Wait a minute. If he touches off an alarm, they'll shoot him for us. If he gets by the 'eyes,' we've lost him and we'll have to pick him up inside. Either way, we don't gain anything by blundering ahead. We've got to go in by the chute."

Like all cities the Invader had consolidated, Barclay was girdled by electric-eye circuits. The enemy had trimmed the town to fit, dynamiting and burning where necessary to achieve unbroken sequence of automatic sentries. But the "chute"—an abandoned and forgotten aqueduct—passed under the alarms. Art knew how to use it; he had been in town twice since Final Sunday.

They worked back up the highway, crossed over, and took to the hills. Thirty minutes later they were on the streets of Barclay, reasonably safe as long as they were quick to step off the sidewalk for the occasional Invader.

The first "post office," a clothesline near their exit, told them nothing—the line was bare. They went to the bus station. Cleve studied the notices posted for inhabitants while Art went into the men's rest room. On the wall, defaced by scrawlings of every sort, mostly vulgar, he found what he sought: "Killroy was here." The misspelling of Kilroy was the clue—exactly eighteen inches below it and six to the right was an address: "1745 Spruce—ask for Mabel."

He read it as 2856 Pine—one block beyond Spruce. Art passed the address to Cleve, then they set out separately, hurrying to beat the curfew but proceeding with caution—at least one of them must get through. They met in the backyard of the translated address. Art knocked on the kitchen door. It was opened a crack by a middle-aged man who did not seem glad to see them. "Well?"

"We're looking for Mabel."

"Nobody here by that name."

"Sorry," said Art. "We must have made a mistake." He shivered. "Chilly out," he remarked. "The nights are getting longer."

"They'll get shorter by and by," the man answered.

"We've got to think so, anyhow," Art countered.

"Come in," the man said. "The patrol may see you." He opened the door and stepped aside. "My name's Hobart. What's your business?"

"We're looking for a man named Benz. He may have sneaked into town this afternoon and found someplace to—"

"Yes, yes," Hobart said impatiently. "He got in about an hour ago and he's holed up with a character named Moyland." As he spoke he removed a half loaf of bread from a cupboard, cut four slices, and added cold sausage, producing two sandwiches. He did not ask if they were hungry; he simply handed them to Art and Cleve.

"Thanks, pal. So he's holed up. Haven't you done anything about it? He has got to be shut up at once or he'll spill his guts."

"We've got a tap in on the telephone line. We had to wait for dark. You can't expect me to sacrifice good boys just to shut his mouth unless it's absolutely necessary."

"Well, it's dark now, and we'll be the boys you mentioned. You can call yours off."

"Okay." Hobart started pulling on shoes.

"No need for you to stick your neck out," Art told him. "Just tell us where this Moyland lives."

"And get your throat cut, too. I'll take you."

"What sort of a guy is this Moyland? Is he safe?"

"You can't prove it by me. He's a black market broker, but that doesn't prove anything. He's not part of the organization but we haven't anything against him."

Hobart took them over his back fence, across a dark side street, through a playground, where they lay for several minutes under bushes because of a false alarm, then through many more backyards, back alleys, and dark byways. The man seemed to have a nose for the enemy; there were no more alarms. At last he brought them through a cellar door into a private home. They went upstairs and through a room where a woman was nursing a baby. She looked up, but otherwise ignored them. They ended up in a dark attic. "Hi, Jim," Hobart called out softly. "What's new?"

The man addressed lay propped on his elbows, peering out into the night through opera glasses held to slots of a ventilating louvre. He rolled over and lowered the glasses, pushing one of a pair of earphones from his head as he did so. "Hello, Chief. Nothing much. Benz is getting drunk, it looks like."

"I'd like to know where Moyland gets it," Hobart said. "Has he telephoned?"

"Would I be doing nothing if he had? A couple of calls came in, but they didn't amount to anything, so I let him talk."

"How do you know they didn't amount to anything?"

Jim shrugged, turned back to the louvre. "Moyland just pulled down the shade," he announced.

Art turned to Hobart. "We can't wait. We're going in.

Benz arrived at Moyland's house in bad condition. The wound in his shoulder, caused by Carter's grenade, was bleeding. He had pushed a handkerchief up against it as a compress, but his activity started the blood again; he was shaking for fear his condition would attract attention before he could get under cover.

Moyland answered the door. "Is that you, Zack?" Benz demanded, shrinking back as he spoke.

"Yes. Who is it?"

"It's me—Joe Benz. Let me in, Zack—quick!"

Moyland seemed about to close the door, then suddenly opened it. "Get inside." When the door was bolted, he demanded, "Now—what's your trouble? Why come to me?"

"I had to go someplace, Zack. I had to get off the street. They'd pick me up."

Moyland studied him. "You're not registered. Why not?"

Benz did not answer. Moyland waited, then went on, "You know what I can get for harboring a fugitive. You're in the Underground—aren't you?"

"Oh, no, Zack! I wouldn't do that to you. I'm just a—a straggler. I gotta get registered, Zack."

"That's blood on your coat. How?"

"Uh . . . just an accident. Maybe you could let me have clean rags and some iodine."

Moyland stared at him, his bland face expressionless, then smiled. "You've got no troubles we can't fix. Sit down." He stepped to a cabinet and took out a bottle of bourbon, poured three fingers in a water glass, and handed it to Benz. "Work on that and I'll fix you up."

He returned with some torn toweling and a bottle. "Sit here with your back to the window, and open your shirt. Have another drink. You'll need it before I'm through."

Benz glanced nervously at the window. "Why don't you draw the shade?"

"It would attract attention. Honest people leave their shades up these days. Hold still. This is going to hurt."

Three drinks later Benz was feeling better. Moyland seemed willing to sit and drink with him and to soothe his nerves. "You did well to come in," Moyland told him. "There's no sense hiding like a scared rabbit. It's just butting your head against a stone wall. Stupid."

Benz nodded. "That's what I told them."

"Told who?"

"Hunh? Oh, nobody. Just some guys I was talking to. Tramps."

Moyland poured him another drink. "As a matter of fact you *were* in the Underground."

"Me? Don't be silly, Zack."

"Look, Joe, you don't have to kid me. I'm your friend. Even if you did tell me it wouldn't matter. In the first place, I wouldn't have any proof. In the second place, I'm sympathetic to the Underground—any American is. I just think they're wrongheaded and foolish. Otherwise I'd join 'em myself."

"They're foolish all right! You can say that again."

"So you *were* in it?"

"Huh? You're trying to trap me. I gave my word of honor—"

"Oh, relax!" Moyland said hastily. "Forget it. I didn't hear anything; I can't tell anything. Hear no evil, see no evil—that's me." He changed the subject.

The level of the bottle dropped while Moyland explained current events as he saw them. "It's a shame we had to take such a shellacking to learn our lesson but the fact of the matter is, we were standing in the way of the natural logic of progress. There was a time back in '45 when we could have pulled the same stunt ourselves, only we weren't bright enough to do it. World organization, world government. We stood in the way, so we got smeared. It had to come. A smart man can see that."

Benz was bleary but he did not find this comment easy to take. "Look, Zack—you don't mean you *like* what happened to us?"

"Like it? Of course not. But it was necessary. You don't have to like having a tooth pulled—but it has to be done. Anyhow," he went on, "it's not all bad. The big cities were economically unsound anyway. We should have blown them up ourselves. Slum clearance, you might call it."

Benz banged his empty glass down. "Maybe so—but they made slaves out of us!"

"Take it easy, Joe," Moyland said, filling his glass, "you're talking abstractions. The cop on the corner could push you around whenever he wanted to. Is that freedom? Does it matter whether the cop talks with an Irish accent or some other accent? No, chum, there's a lot of guff talked about freedom. No man is free. There is no such thing as freedom. There are only various privileges. Free speech—we're talking freely now, aren't we? After all, you don't want to get up on a platform and shoot off your face. Free press? When did *you* ever own a newspaper? Don't be a chump. Now that you've shown sense and come in, you are going to find that things aren't so very different. A little more orderly and no more fear of war, that's all. Girls make love just like they used to, the smart guys get along, and the suckers still get the short end of the deal."

Benz nodded. "You're right, Zack. I've been a fool."

"I'm glad you see it. Now take those wild men you were with. What freedom have they got? Freedom to starve, freedom to sleep on the cold ground, freedom to be hunted."

"That was it," Benz agreed. "Did you ever sleep in a mine, Zack? Cold. That ain't half of it. Damp, too."

"I can imagine," Moyland agreed. "The Capehart Lode always was wet."

"It wasn't the Capehart; it was the Harkn—" He caught himself and looked puzzled.

"The Harkness, eh? That's the headquarters?"

"I didn't say that! You're putting words in my mouth! You—"

"Calm yourself, Joe. Forget it." Moyland got up and drew down the shade. "You didn't say anything."

"Of course I didn't." Benz stared at his glass. "Say, Zack, where do I sleep? I don't feel good."

"You'll have a nice place to sleep any minute now."

"Huh? Well, show me. I gotta fold up."

"Any minute. You've got to check in first."

"Huh? Oh, I can't do that tonight, Zack. I'm in no shape."

"I'm afraid you'll have to. See me pull that shade down? They'll be along any moment."

Benz stood up, swaying a little. "You framed me!" he yelled, and lunged at his host.

Moyland sidestepped, put a hand on his shoulder and pushed him down into the chair. "Sit down, sucker," he said pleasantly. "You don't expect me to get Abombed just for you and your pals, do you?" Benz shook his head, then began to sob.

Hobart escorted them out of the house, saying to Art as they left, "If you get back, tell McCracken that Aunt Dinah is resting peacefully."

"Okay."

"Give us two minutes, then go in. Good luck."

Cleve took the outside; Art went in. The back door was locked, but the upper panel was glass. He broke it with the hilt of his knife, reached in and unbolted the door. He was inside when Moyland showed up to investigate the noise.

Art kicked him in the belly, then let him have the point in the neck as he went down. Art stopped just long enough to insure that Moyland would stay dead, then went looking for the room where Benz had been when the shade was drawn.

He found Benz in it. The man blinked his eyes and tried to focus them, as if he found it impossible to believe what he saw. "Art!" he got out at last. "Jeez, boy! Am I glad to see you! Let's get out of here—this place is 'hot.' "

Art advanced, knife out.

Benz looked amazed. "Hey, Art! Art! You're making a mistake. Art. You can't do this—" Art let him have the first one in the soft tissues under the breast bone, then cut his throat to be sure. After that he got out quickly.

Thirty-five minutes later he was emerging from the country end of the chute. His throat was burning from exertion and his left arm was useless—he could not tell whether it was broken or simply wounded.

Cleve lay dead in the alley behind Moyland's house, having done a good job of covering Art's rear.

It took Art all night and part of the next morning to get back near the mine. He had to go through the hills the entire way; the highway was, he judged, too warm at the moment.

He did not expect that the Company would still be there. He was reasonably sure that Morgan would have carried out the evacuation pending certain evidence that Benz's mouth had been shut. He hurried.

But he did not expect what he did find—a helicopter hovering over the neighborhood of the mine.

He stopped to consider the matter. If Morgan had got them out safely, he knew where to rejoin. If they were still inside, he had to figure out some way to help them. The futility of his position depressed him—one man, with a knife and a bad arm, against a helicopter.

Somewhere a bluejay screamed and cursed. Without much hope he chirped his own identification. The bluejay shut up and a mockingbird answered him—Ted.

Art signaled that he would wait where he was. He considered himself well hidden; he expected to have to signal again when Ted got closer, but he underestimated Ted's ability. A hand was laid on his shoulder.

He rolled over, knife out, and hurt his shoulder as he did so. "Ted! Man, do you look good to me!"

"Same here. Did you get him?"

"Benz? Yes, but maybe not in time. Where's the gang?"

"A quarter mile north of back door. We're pinned down. Where's Cleve?"

"Cleve's not coming back. What do you mean 'pinned down'?"

"That damned 'copter can see right down the draw we're in. Dad's got 'em under an overhang and they're safe enough for the moment, but we can't move."

"What do you mean 'Dad's got 'em'?" demanded Art. "Where's the Boss?"

"He ain't in such good shape, Art. Got a machine gun slug in the ribs. We had a dust-up. Cathleen's dead."

"The hell you say!"

"That's right. Margie and Maw Carter have got her baby. But that's one reason why we're pinned down—the Boss and the kid, I mean."

A mockingbird's call sounded far away. "There's Dad," Ted announced. "We got to get back."

"Can we?"

"Sure. Just keep behind me. I'll watch out that I don't get too far ahead."

Art followed Ted in, by a circuitous and, at one point, almost perpendicular route. He found the Company huddled under a shelf of rock which had been undercut by a stream, now dry. Against the wall Morgan was on his back, with Dad Carter and Dr. McCracken squatting beside him. Art went up and made his report.

Morgan nodded, his face gray with pain. His shirt had been cut away; bandaging was wrapped around his ribs, covering a thick pad. "You did well, Art. Too bad about Cleve. Ted, we're getting out of here and you're going first, because you're taking the kid."

"The baby? How—"

"Doc'll dope it so that it won't let out a peep. Then you strap it to your back, papoose fashion."

Ted thought about it. "No, to my front. There's some knee-and-shoulder work on the best way out."

"Okay. It's your job."

"How do *you* get out, boss?"

"Don't be silly."

"Look here, boss, if you think we're going to walk off and leave you, you've got another—"

"Shut up and scram!" The exertion hurt Morgan; he coughed and wiped his mouth.

"Yes, sir." Ted and Art backed away.

"Now, Ed—" said Carter.

"You shut up, too. You still sure you don't want to be Captain?"

"You know better than that, Ed. They took things from me while I was your deppity, but they wouldn't have me for Captain."

"That puts it up to you, Doc."

McCracken looked troubled. "They don't know me that well, Captain."

"They'll take you. People have an instinct for such things."

"Anyhow, if I am Captain, I won't agree to your plan of staying here by yourself. We'll stay till dark and carry you out."

"And get picked up by an infrared spotter, like sitting ducks? That's supposing they let you alone until sundown—that other 'copter will be back with more troops before long."

"I don't think they'd let me walk off on you."

"It's up to you to *make* them. Oh, I appreciate your kindly thoughts, Doc, but you'll think differently as soon as you're Captain. You'll know you have to cut your losses."

McCracken did not answer. Morgan turned his head to Carter. "Gather them around, Dad."

They crowded in, shoulder to shoulder. Morgan looked from one troubled face to another and smiled. "The Barclay Free Company, a provisional unit of the United States of America, is now in session," he announced, his voice suddenly firm. "I'm resigning the captaincy for reasons of physical disability. Any nominations?"

The silence was disturbed only by calls of birds, the sounds of insects.

Morgan caught Carter's eyes. Dad cleared his throat. "I nominate Doc McCracken."

"Any other nominations?" He waited, then continued, "All right, all in favor of Doc make it known by raising your right hand. Okay—opposed the same sign. Dr. McCracken is unanimously elected. It's all yours, Captain. Good luck to you."

McCracken stood up, stooping to avoid the rock overhead. "We're evacuating at once. Mrs. Carter, give the baby about another tablespoon of the syrup, then help Ted. He knows what to do. You'll follow Ted. Then Jerry. Margie, you are next. I'll assign the others presently. Once out of the canyon, spread out and go it alone. Rendezvous at dusk, same place as under Captain Morgan's withdrawal plan—the cave." He paused. Morgan caught his eye and motioned him over, "That's all until Ted and the baby are ready to leave. Now back away and give Captain Morgan a little air."

When they had withdrawn McCracken leaned over Morgan the better to hear his weak words. "Don't be too sure you've seen the last of me, Captain. I might join up in a few days."

"You might at that. I'm going to leave you bundled up warm and plenty of water within reach. I'll leave you some pills, too—that'll give you some comfort and ease. Only half a pill for you—they're intended for cows." He grinned at his patient.

"Half a pill it is. Why not let Dad handle the evacuation? He'll make you a good deputy—and I'd like to talk with you until you leave."

"Right." He called Carter over, instructed him, and turned back to Morgan.

"After you join up with Powell's outfit," whispered Morgan, "your first job is to get into touch with Brockman. Better get Mrs. Carter started right away, once you've talked it over with Powell."

"I will."

"That's the most important thing we've got to worry about, Doc. We've got to have unity, and one plan, from coast to coast. I look forward to a day when there will be an American assigned, by name, to each and every one of them. Then at a set time—zzzt!" He drew a thumb across his throat.

McCracken nodded. "Could be. It *will* be. How long do you think it will take us?"

"I don't know. I don't think about 'how long.' Two years, five years, ten years—maybe a century. That's not the point. The only question is whether or not there are any guts left in America." He glanced out where the fifth person to leave was awaiting a signal from Carter, who in turn was awaiting a signal from Art, hidden out where he could watch for the helicopter. "Those people will stick."

"I'm sure of that."

Presently Morgan added, "There's one thing this has taught me: You can't enslave a free man. Only person can do that to a man is himself. No, sir—you can't enslave a free man. The most you can do is kill him."

"That's a fact, Ed."

"It is. Got a cigarette, Doc?"

"It won't do you any good, Ed."

"It won't do me any harm, either—now, will it?"

"Well, not much." McCracken unregretfully gave him his last and watched him smoke it.

Later, Morgan said, "Dad's ready for you, Captain. So long."

"So long. Don't forget. Half a pill at a time. Drink all the water you want, but don't take your blankets off, no matter how hot you get."

"Half a pill it is. Good luck."

"I'll have Ted check on you tomorrow."

Morgan shook his head. "That's too soon. Not for a couple of days at least."

McCracken smiled. "I'll decide that, Ed. You just keep yourself wrapped up. Good luck." He withdrew to where Carter waited for him. "You go ahead, Dad. I'll bring up the rear. Signal Art to start."

Carter hesitated. "Tell me straight, Doc. What kind of shape is he in?"

McCracken studied Carter's face, then said in a low voice, "I give him about two hours."

"I'll stay behind with him."

"No, Dad, you'll carry out your orders." Seeing the distress in the old man's eyes, he added, "Don't you worry about Morgan. A free man can take care of himself. Now get moving."

"Yes, sir."

Notebooks of Lazarus Long

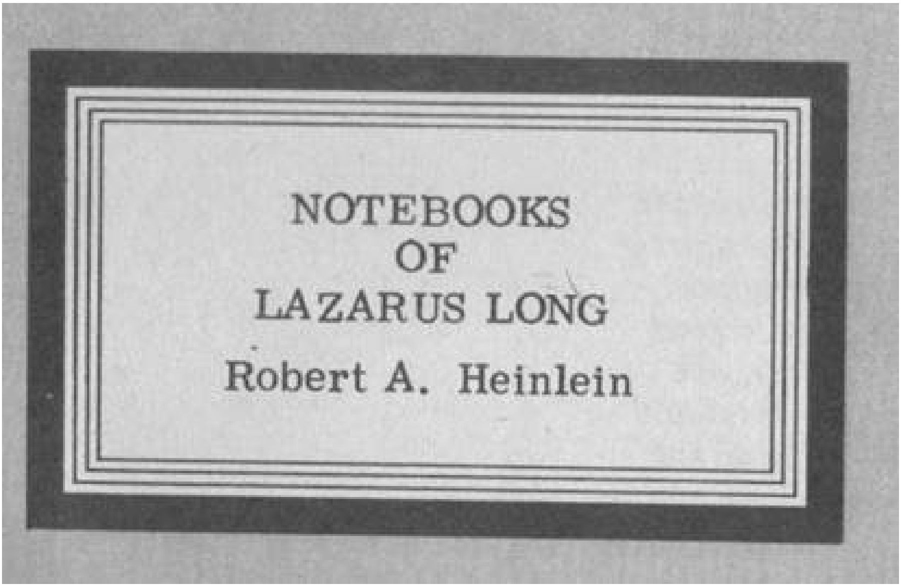

NOTEBOOKS
OF
LAZARUS LONG

Robert A. Heinlein

In the July 1941 issue of Astounding Science Fiction, Robert A. Heinlein's novel, "Methuselah's Children," introduced the virtually immortal Lazarus Long. The following excerpts from the Notebooks of Lazarus Long are part of Heinlein's new novel, "Time Enough for Love: The Lives of Lazarus Long." The Notebooks represent the wit and wisdom of a man who has lived for centuries—and enjoyed every minute of it!

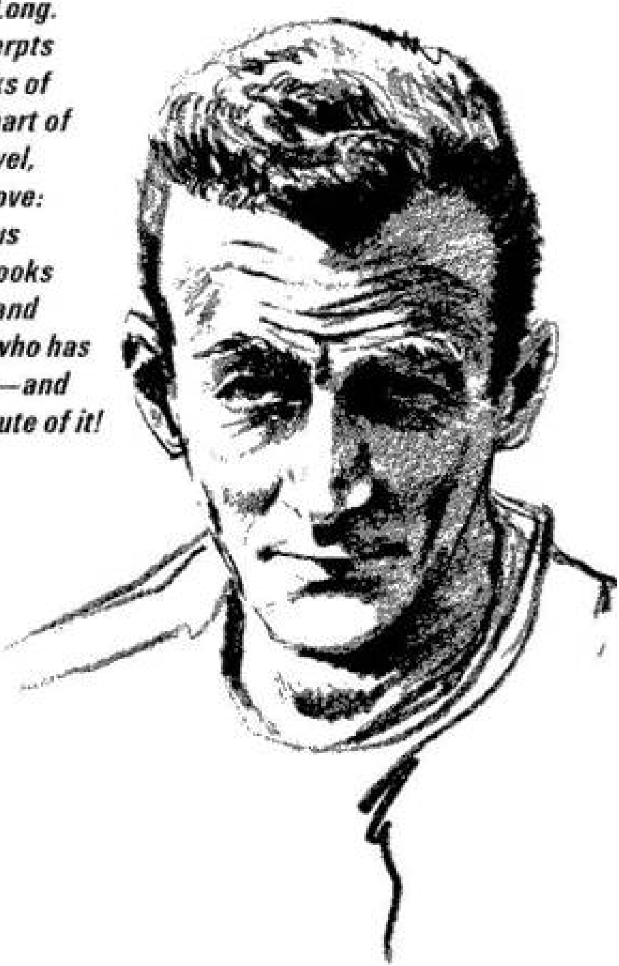

§ Always store beer in a dark place.

§ By the data to date, there is only one animal in the galaxy dangerous to man—man himself. So he must supply his own indispensable competition. He has no enemy to help him.

§ Men are more sentimental than women. It blurs their thinking.

§ Certainly the game is rigged. Don't let that stop you; if you don't bet, you can't win.

§ Any priest or shaman must be presumed guilty until proved innocent.

§ Always listen to the experts. They'll tell you what can't be done, and why. Then do it.

§ Get a shot off *fast*. This upsets him long enough to let you make your second shot perfect.

§ There is no conclusive evidence of life after death. But there is no evidence of any sort against it. Soon enough you will *know*. So why fret about it?

§ If it can't be expressed in figures, it is not science; it is opinion.

§ It has long been known that one horse can run faster than another—but *which one*? Differences are crucial.

§ A fake fortuneteller can be tolerated. But an authentic soothsayer should be shot on sight. Cassandra did not get half the kicking around she deserved.

§ Delusions are often functional. A mother's opinions about her children's beauty, intelligence, goodness, *et cetera* ad nauseam, keep her from drowning them at birth.

§ Most "scientists" are bottle washers and button sorters.

§ A "pacifist male" is a contradiction in terms. Most self-described "pacifists" are not pacific; they simply assume false colors. When the wind changes, they hoist the Jolly Roger.

§ Nursing does not diminish the beauty of a woman's breasts; it enhances their charm by making them look lived in and happy.

§ A generation that ignores history has no past—and no future.

§ A poet who reads his verse in public may have other nasty habits.

§ What a wonderful world it is that has girls in it!

§ Small change can often be found under seat cushions.

§ History does not record anywhere at any time a religion that has any rational basis. Religion is a crutch for people not strong enough to stand up to the unknown without help. But, like dandruff, most people do have a religion and spend time and money on it and seem to derive considerable pleasure from fiddling with it.

§ It's amazing how much "mature wisdom" resembles being too tired.

§ If you don't like yourself, you *can't* like other people.

§ Your enemy is never a villain in his own eyes. Keep this in mind; it may offer a way to make him your friend. If not, you can kill him without hate—and quickly.

§ A motion to adjourn is always in order.

§ No state has an inherent right to survive through conscript troops and, in the long run, no state ever has. Roman matrons used to say to their sons; "Come back with your shield, or on it." Later on, this custom declined. So did Rome.

§ Of all the strange "crimes" that human beings have legislated out of nothing, "blasphemy" is the most amazing—with "obscenity" and "indecent exposure" fighting it out for second and third place.

§ Cheops' Law: Nothing *ever* gets built on schedule or within budget.

§ It is better to copulate than never.

§ All societies are based on rules to protect pregnant women and young children. All else is surplusage, excrescence, adornment, luxury, or folly which can—and must—be dumped in emergency to preserve this prime function. As racial survival is the *only* universal morality, no other basic is possible. Attempts to formulate a "perfect society" on any foundation other than "Women and children first!" is not only witless, it is automatically genocidal. Nevertheless, starry-eyed idealists (all of them male) have tried endlessly—and no doubt will keep on trying.

§ All men are created unequal.

§ Money is a powerful aphrodisiac. But flowers work almost as well.

§ A brute kills for pleasure. A fool kills from hate.

§ There is only one way to console a widow. But remember the risk.

§ When the need arises—and it does—you must be able to shoot your own dog. Don't farm it out—that doesn't make it nicer, it makes it worse.

§ Everything in excess! To enjoy the flavor of life, take big bites. Moderation is for monks.

§ It may be better to be a live jackal than a dead lion, but it is better still to be a live lion. And usually easier.

§ One man's theology is another man's belly laugh.

§ Sex should be friendly. Otherwise stick to mechanical toys; it's more sanitary.

§ Men rarely (if ever) manage to dream up a god superior to themselves. Most gods have the manners and morals of a spoiled child.

§ Never appeal to a man's "better nature." He may not have one. Invoking his self-interest gives you more leverage.

§ Little girls, like butterflies, need no excuse.

§ You can have peace. Or you can have freedom. Don't ever count on having both at once.

§ Avoid making irrevocable decisions while tired or hungry. N.B.: Circumstances can force your hand. so think ahead!

§ Place your clothes and weapons where you can find them in the dark.

§ An elephant: A mouse built to government specifications.

§ Throughout history, poverty is the normal condition of man. Advances which permit this norm to be exceeded—here and there, now and then—are the work of an extremely small minority, frequently despised, often condemned, and almost always opposed by all right-thinking people. Whenever this tiny minority is kept from creating, or (as sometimes happens) is driven out of a society, the people slip back into abject poverty. This is known as "bad luck."

§ In a mature society, "civil servant" is semantically equal to "civil *master*."

§ When a place gets crowded enough to require ID's, social collapse is not far away. It is time to go elsewhere. The best thing about space travel is that it made it possible to go elsewhere.

§ A woman is not property, and husbands who think otherwise are living in a dream world.

§ The second best thing about space travel is that distances involved make war very difficult, usually impractical, and almost always unnecessary. This is probably a loss for most people, since war is our race's most popular diversion, one which gives purpose and color to dull and stupid lives. But it is a great boon to the intelligent man who fights only when he must—never for sport.

§ A zygote is a gamete's way of producing more gametes. This may be the purpose of the universe.

§ There are hidden contradictions in the minds of people who "love Nature" while deploring the "artificialities" with which "Man has spoiled 'Nature.'" The obvious contradiction lies in their choice of words, which imply that Man and his artifacts are *not* part of "Nature"—but beavers and their dams *are*. But the contradictions go deeper than the prima facie absurdity. In declaring his love for a beaver dam (erected by beavers for beaver's purposes) and his hatred for dams erected be men (for the purposes of men) the "Naturist" reveals his hatred for his own race—that is, his own self-hatred. In the case of "Naturists" such self-hatred is understandable; they are such a sorry lot. But hatred is too strong an emotion to feel toward them; pity and contempt are the most they rate. As for me, willy-nilly I am a man, not a beaver, and H. Sapiens is the only race I have or can have. Fortunately for me, I *like* being a part of a race made up of men and women—it strikes me as a fine arrangement and perfectly "natural."

Believe it or not there were "Naturists" who opposed the first flight to old Earth's Moon as being "unnatural" and a "despoiling of nature."

§ "No man is an island—" Much as we may feel and act as individuals, our race is a single organism, always growing and branching—which must be pruned, regularly to be healthy. This necessity need not be argued; anyone with eyes can see that any organism which grows without limits always dies in its own poisons. The only rational question is whether pruning is best done before or after birth. Being an incurable sentimentalist I favor the former of these methods—killing makes me queasy, even when its a case of "He's dead and I'm alive and that's the way I wanted it to be." But this may be a matter of taste. Some shamans think that it is better to be killed in a war, or to die in childbirth, or to starve in misery, than never to have lived at all. They may be right. But I don't have to like it—and I don't.

§ Democracy is based on the assumption that a million men are wiser than one man. How's that again? I missed something.

§ Autocracy is based on the assumption that one man is wiser than a million men. Let's play that over again, too. Who decides?

§ Any government will work if authority and responsibility are equal and coordinate. This does not insure "good" government; it simply insures that it will work. But such governments are rare—most people want to run things but want no part of the blame. This used to be called the "backseat driver syndrome."

§ What are the facts? Again and again and again—what are the *facts*? Shun wishful thinking, ignore divine revelation, forget what "the stars foretell," avoid opinion, care not what the neighbors think, never mind the unguessable "verdict of history"—what are the facts, and to how many decimal places? You pilot always into an unknown future; facts are your single clue. Get the facts!

§ Stupidity cannot be cured with money, or through education, or by legislation. Stupidity is not a sin, the victim can't help being stupid. But stupidity is the only universal capital crime; the sentence is death, there is no appeal, and execution is carried out automatically and without pity.

§ God is omnipotent, omniscient, and omnibenevolent—it says so right here on the label. If you have a mind capable of believing all three of these Divine attributes simultaneously, I have a wonderful bargain for you. No checks, please. Cash and in small bills.

§ Courage is the complement of fear. A man who is fearless cannot be courageous. (He is also a fool.)

§ The two highest achievements of the human mind are the twin concepts of "loyalty" and "duty." Whenever these twin concepts fall into disrepute—get out of there fast! you may possibly save yourself but it is too late to save that society. It is doomed.

§ People who go broke in a big way never miss any meals. It is the poor jerk who is shy a half slug who must tighten his belt.

§ The truth of a proposition has nothing to do with its credibility. And vice versa.

§ Anyone who cannot cope with mathematics is not fully human. At best he is a tolerable subhuman who has learned to wear shoes, bathe, and not make messes in the house.

§ Moving parts in rubbing contact require lubrication to avoid excessive wear. Honorifics and formal politeness provide lubrication where people rub together. Often the very young, the untraveled, the naive, the unsophisticated, deplore these formalities as "empty," "meaningless," or "dishonest," and scorn to use them. No matter how "pure" their motives, they thereby throw sand into machinery that does not work too well at best.

§ A human being should be able to change a diaper, plan an invasion, butcher a hog, conn a ship, design a building, write a sonnet, balance accounts, build a wall, set a bone, comfort the dying, take orders, giver orders, cooperate. act alone, solve equations, analyze a new problem, pitch manure, program a computer, cook a tasty meal, fight efficiently, die gallantly. Specialization is for insects.

§ The more you love, the more you *can* love—and the more intensely you love. Nor is there any limit on how *many* you can love. If a person had time enough, he could love all of that majority who are decent and just.

§ Masturbation is cheap, clean, convenient, and free of any possibility of wrongdoing—and you don't have to go home in the cold. But it's *lonely*.

§ Beware of altruism. It is based on self-deception, the root of all evil.

§ If tempted by something that feels "altruistic," examine your motives and root out the self-deception. Then if you still want to do it —wallow in it!

§ The most preposterous notion that H. Sapiens has ever dreamed up is that the Lord God of Creation, Shaper and Ruler of all the Universes, wants the saccharine adoration of His creatures, can be swayed by their prayers, and becomes petulant if He does not receive this flattery. Yet this absurd fantasy, without a shred of evidence to bolster it, pays the expenses of the oldest, largest, and least productive industry in all history.

§ The second most preposterous notion is that copulation is inherently sinful.

§ Writing is not necessarily something to be ashamed of—but do it in private and wash your hands afterwards.

§ A hundred dollars paced at seven percent interest compounded quarterly for two hundred years will increase to more than a hundred million dollars—by which time it will be worth nothing.

§ Dear, don't bore him with trivia nor burden him with your past mistakes. The happiest way to deal with a man is never to tell him anything that he does not need to know.

§ Darling, a true lady takes off her dignity with her clothes and does her whorish best. At other times you can be as modest and dignified as your persona requires.

§ Everybody lies about sex.

§ If men were the automatons that behaviorists claim they are, the behaviorist psychologists could not have invented the amazing nonsense called "behaviorist psychology." So they are wrong from scratch—as clever and as wrong as phlogiston chemists.

§ The shamans are forever yacking about their snake-oil "miracles." I prefer the Real McCoy—a pregnant woman.

§ If the universe has any purpose more important than topping a woman you love and making a baby with her hearty help, I've never heard of it.

§ Thou shalt remember the Eleventh Commandment and keep it Wholly.

§ A touchstone to determine the actual worth of an "intellectual"—find out how he feels about astrology.

§ Taxes are not levied for the benefit of the taxed.

§ There is no such thing as "social gambling." Either you are there to cut the other bloke's heart out and eat it—or you are a sucker. If you don't like this choice, don't gamble.

§ When the ship lifts, all bills are paid. No regrets.

§ The first time I was a drill instructor I was too inexperienced for the job—the things I taught those lads must have got some of them killed. War is too serious a matter to be taught by the inexperienced.

§ A competent and self-confident person is incapable of jealousy in anything. Jealousy is invariably a symptom of neurotic insecurity.

§ Money is the sincerest of all flattery. Women love to be flattered. So do men.

§ You live and learn. Or you don't live long.

§ Whenever women have insisted on absolute equality with men, they have invariably wound up with the dirty end of the stick. What they are and what they can do makes them superior to men, and their proper tactic is to demand special privileges, all the traffic will bear. They should never settle merely for equality. For women, "equality" is a disaster.

§ Peace is an extension of war by political means. Plenty of elbow room is pleasanter—and much safer.

§ One man's "magic" is another man's engineering. "Supernatural" is a null word.

§ The phrase "we (I)(you) simply must—" designates something that need not be done. "That goes without saying" is a red warning.

§ "Of course" means you had best check it yourself. These small-change cliches and others like them, when read correctly, are reliable channel markers.

§ Don't handicap your children by making their lives easy.

§ Rub her feet.

§ If you happen to be one of the fretful minority who can do creative work, never force an idea; you'll abort it if you do. Be patient and you'll give birth to it when the time is ripe. Learn to wait.

§ Never crowd youngsters about their private affairs—sex especially. When they are growing up, they are nerve ends all over, and resent (quite properly) any invasion of their privacy. Oh, sure, they'll make mistakes—but that's their business, not yours. (You made your own mistakes, did you not?)

§ Never underestimate the power of human stupidity.

§ Always tell her she is beautiful, especially if she's not.

§ If you are part of a society that votes, then do so. There may be no candidates and no measures you want to vote *for*... but there are certain to be ones you wish to vote AGAINST. In case of doubt, vote *against*. By this rule you will rarely go wrong. If this is too blind for your taste, consult some well-meaning fool (there is always one around) and ask his advice. then vote the other way. This enables you to be a good citizen (if such is your wish) without spending the enormous amount of time on it that truly intelligent exercise of franchise requires.

§ Sovereign ingredient for happy marriage: Pay cash or do without. Interest charges not only eat up a household budget; awareness of debt eats up domestic felicity.

§ Those who refuse to support and defend a state have no claim to protection by that state. Killing an anarchist or a pacifist should not be defined as "murder" in a legalistic sense. The offense against the state, if any, should be "using deadly weapons inside city limits," or "Creating a traffic hazard," or "Endangering bystanders," or other misdemeanor. However, the state may reasonably place a closed season on these exotic asocial animals whenever they are in danger of becoming extinct. An authentic buck pacifist has rarely been seen off Earth and it is doubtful that any have survived the troubles there...regrettable, as they had the biggest mouths and the smallest brains of any of the primates. The small-mouthed variety of anarchist has spread through the galaxy at the very wave front of the Diaspora; there is no need to protect them. But they often shoot back.

§ Another ingredient for a happy marriage: budget the luxuries *first*!

§ And still another: See to it that she has her own desk—then keep your hands off it!

§ And another: In a family argument, if it turns out you are right—apologize at once!

§ "God split himself into myriad parts that he might have friends." This may not be true but it sounds good—and is no sillier than any other theology.

§ To stay young requires unceasing cultivation of the ability to unlearn old falsehoods.

§ Does history record *any* case in which the majority was right?

§ When the fox gnaws—Smile!

§ A "critic" is a man who creates nothing and thereby feels qualified to judge the work of creative men. There is a logic in this: he is unbiased—he hates all creative people equally.

§ Money is truthful. If a man speaks of his honor, make him pay cash.

§ Never frighten a little man. He'll kill you.

§ Only a sadistic scoundrel—or a fool—tells the bald truth on social occasions.

§ This sad little lizard told me that he was a brontosaurus on his mother's side. I did not laugh; people who boast of ancestry often have little else to sustain them. Humoring them costs nothing and adds happiness in a world in which happiness is always in short supply.

§ In handling a stinging insect, move very slowly.

§ To be "matter of fact" about the world is to blunder into fantasy—and dull fantasy at that, as the real world is strange and wonderful.

§ The difference between science and the fuzzy subjects is that science requires reasoning, while those other subjects merely require scholarship.

§ Copulation is spiritual in essence—or it is merely friendly exercise. On second thought, strike out "merely"—even when it is just a happy pastime for two strangers. But copulation at its spiritual best is so much more than physical coupling that it is different in kind as well as degree. The saddest feature of homosexuality is not that it is "wrong" or "sinful" or even that it can't lead to progeny—but that it is more difficult to reach through it this spiritual union. Not impossible—but the cards are stacked against it. But—most sorrowfully—many people never achieve spiritual sharing even with the help of male-female advantage; they are condemned to wander through life alone.

§ Touch is the most fundamental sense. A baby experiences it, all over, before he is born and long before he learns to use sight, hearing, or taste, and no human ever ceases to need it. Keep your children short on pocket money—but long on hugs.

§ Secrecy is the beginning of tyranny.

§ The greatest productive force is human selfishness.

§ Be wary of strong drink. It can make you shoot at tax collectors—and miss.

§ The profession of shaman has many advantages. It offers high status with safe livelihood free of work in the dreary, sweaty sense. In most societies it offers legal privileges and immunities not granted to other men. But it is hard to see how a man who has been given a mandate from on High to spread tidings of joy to all mankind can be seriously interested in taking up a collection to pay his salary; it causes one to suspect that the shaman is on the moral level of any other conman. But it's lovely work if you can stomach it.

§ A whore should be judged by the same criteria as other professionals offering services for pay—such as dentists, lawyers, hairdressers, physicians, plumbers, et cetera. Is she professionally competent? Does she give good measure? Is she honest with her clients? It is possible that the percentage of honest and competent whores is higher than that of plumbers and much higher than that of lawyers. And *enormously* higher than that of professors.

§ Minimize your therbligs until it becomes automatic; this doubles your effective lifetime—and thereby gives time to enjoy butterflies and kittens and rainbows.

§ Have you noticed how much they look like orchids? Lovely!

§ Expertise in one field does not carry over into other fields. But experts often think so. The narrower their field of knowledge the more likely they are to think so.

§ Never try to outstubborn a cat.

§ Tilting at windmills hurts you more than the windmills.

§ Yield to temptation, it may not pass your way again.

§ Waking a person unnecessarily should not be considered a capital crime. For a first offense, that it.

§ "Go to HELL!" or other direct insult is all the answer a snoopy question rates.

§ The correct way to punctuate a sentence that starts: "Of course it is none of my business but—" is to place a period after the word "but." Don't use excessive force in supplying such a moron with a period. Cutting his throat is only a momentary pleasure and is bound to get you talked about.

§ A man does not insist on physical beauty in a woman who builds up his morale. After a while he realizes that she IS beautiful—he just hadn't noticed at first.

§ A skunk is better company than a person who prides himself on being "frank."

§ "All's fair in love and war"—what a contemptible lie!

§ Beware of the "Black Swan" fallacy. Deductive logic is tautological; there is no way to get a new truth out of it and it manipulates false statements as readily as true ones. If you fail to remember this, it can trip you—with perfect logic. The designers of the earliest computers called this the "Gigo Law," that is, "Garbage in, garbage out." Inductive logic is *much* more difficult—but can produce new truths.

§ A "practical joker" deserves applause for his wit according to its quality. Bastinado is about right. for exceptional wit one might grant keelhauling. But staking him out on an ant hill should be reserved for the very wittiest.

§ Natural laws have no pity.

§ On the planet Tranquille around KM849(G-O) lives a little animal known as a "knafn." It is herbivorous and has no natural enemies and is easily approached and may be petted—sort of a six-legged puppy with scales. Stroking it is very pleasant; it wiggles its pleasure and broadcasts euphoria in some band that humans can detect. Its worth the trip. Someday some bright boy will figure out how to record its broadcast, then some smart boy will see commercial angles—and not long after that it will be regulated and taxed. In the meantime I have faked the name and catalog number; it is several thousand lightyears off in another direction. Selfish of me—

§ Freedom begins when you tell Mrs. Grundy to go fly a kite.

§ Take care of the cojones and the frijoles will take care of themselves. Try to have getaway money—but don't be fanatic about it.

§ If "everybody knows" such-and-such, then it ain't so, by at least ten thousand to one.

§ Political rags—such as royalist, communist, democrat, populist, fascist, liberal, conservative, and so forth—are never basic criteria. The human race divides politically into those who want people to be controlled and those who have no such desire. The former are idealists acting from the highest motives, for the greatest good of the greatest number. The latter are surly curmudgeons, suspicious and lacking in altruism. But they are more comfortable neighbors than the other sort.

§ All cats are *not* grey after midnight. Endless variety—

§ Sin lies only in hurting other people unnecessarily. All other "sins" are invented nonsense. (Hurting yourself is not sinful—just stupid.)

§ Being generous is inborn; being altruistic is a learned perversity. No resemblance—

§ It is impossible for a man to love his wife wholeheartedly without loving all women somewhat. I suppose that the converse must be true of women.

§ You can go wrong by being too skeptical as readily as by being too trusting.

§ Formal courtesy between husband and wife is even more important than it is between strangers.

§ Anything free is worth what you pay for it.

§ Don't store garlic near other victuals.

§ Climate is what we expect, weather is what we get.

§ Pessimist by policy, optimist by temperament—it is possible to be both. How? By never taking an unnecessary chance and by minimizing risks you can't avoid. This permits you to play out the game happily, untroubled by the certainty of the outcome.

§ Do not confuse "duty" with what other people expect of you; they are utterly different. Duty is a debt you owe to yourself to fulfill obligations you have assumed voluntarily. Paying that debt can entail anything from years of patient work to instant willingness to die. Difficult it may be, but the reward is self-respect. But there is no reward at all for doing what other people expect of you, and to do so is not merely difficult, but impossible. It is easier to deal with a footpad than it is with the leech who wants "just a few minutes of your time, please—this won't take long." Time is your total capital, and the minutes of your life are painfully few. If you allow yourself to fall into the vice of agreeing to such requests, they quickly snowball to the point where these parasites will use up a hundred percent of your time—and squawk for more! So learn to say No—and to be rude about it when necessary. Otherwise you will not have time to carry out your duty, nor to do your own work, and certainly no time for love and happiness. The termites will nibble away your life and leave none of it for you. (This rule does not mean that you must not do a favor for a friend, or even a stranger. But let the choice be *yours*! Don't do it because it is "expected" of you.)

§ "I came, I saw, she conquered." (The original Latin seems to have been garbled.)

§ A committee is a life form with six or more legs and no brain.

§ Animals can be driven crazy by placing too many in too small a pen. Homo Sapiens is the only animal that voluntarily does this to himself.

§ Don't try to have the last word. You might get it.

Notes from Magdalen Moore

L*Z*R*S L*NG

Any instant idea is suspect—it is either superficial or a cliché.

A man should never let his wit trap him. The witty man often finds himself the victim of aphorism. He is unable to hold a true conversation, for he speaks only pithy quotable observations. Such a one has no friends. He has only students, or, heaven help him, *followers*.

You can always tell saints—they never tell *you* what they are.

Innocence is not ignorance. There is a difference, and if you plan to be a "sweet young thing," keep it in mind. Learn everything you can about sex, but do not ever speak your knowledge. Show it subtly, deceptively; that is, be able to blush at the most obscure references. This can be highly entertaining for everyone concerned, especially for the "sweet young thing".

Are they making love or fighting? Both?

Nothing tastes good when you have to eat alone.

Life is like a *crème de menthe* bottle—it looks much fuller when you invert it.

There Ain't No Such Thing As A Free Lunch. There are, however, cheap ones aplenty if you know where to look.

I am often grateful that I am free of the personal ignorance that many men have. I am sometimes resentful that many men know themselves better than I. This makes me even with humanity, in case you were keeping score.

Sex is a comforting aggravation.

No man is an island, but I have met many isthmuses, and even a few peninsulas.

Cookies are better comfort than religion—more immediate and understandable, and hardly likely to do any lasting harm.

Massage his scalp.

What is man but a mote of dust to the universe? Why, he *is* the universe! All we can ever know is ourselves.

Always carry a grapefruit.

A BATHROOM OF HER OWN

Ever step on a top step that wasn't there?

That's the way I felt when I saw my honorable opponent for the office of city councilman, third district.

Tom Griffith had telephoned at the close of filing, to let me know my opponents. "Alfred McNye," he said, "and Francis X. Nelson."

"McNye we can forget," I mused. "He files just for the advertising. It's a three-way race—me, this Nelson party, and the present encumbrance, Judge Jorgens. Maybe we'll settle it in the primaries." Our fair city has the system laughingly called "non-partisan"; a man can be elected in the primary by getting a clear majority.

"Jorgens didn't file, Jack. The old thief isn't running for reelection."

I let this sink in. "Tom, we might as well tear up those photostats. Do you suppose Tully's boys are conceding our district?"

"The machine *can't* concede the third district, not this year. It must be Nelson."

"I suppose so . . . it can't be McNye. What d'you know about him?"

"Nothing."

"Nor I. Well, we'll look him over tonight." The Civic League had called a "meet-the-candidates" meeting that night. I drove out to the trailer camp where I hang my hat—then a shower, a shave, put on my hurtin' shoes, and back to town. It gave me time to think.

It's not unusual for a machine to replace—temporarily—a man whose record smells too ripe with a citizen of no background to be sniped at. I could visualize Nelson—young, manly looking, probably a lawyer and certainly a veteran. He would be so politically naive that he would stand without hitching, or so ambitious that it would blind him to what he must do to keep the support of the machine. Either way the machine could use him.

I got there just in time to be introduced and take a seat on the platform. I couldn't spot Nelson but I did see Cliff Meyers, standing with some girl. Meyers is a handyman for Boss Tully—Nelson would be around close.

McNye accepted the call of the peepul in a few hundred well-worn words, then the chairman introduced Nelson. "—a veteran of this war and candidate for the same office."

The girl standing with Meyers walked up and took the stage.

They clapped and somebody in the balcony gave a wolf whistle. Instead of getting flustered, she smiled up and said, "Thank you!"

They clapped again, and whistled and stomped. She started talking. I'm not bright—I had trouble learning to wave bye-bye and never did master pattycake. I expected her to apologize for Nelson's absence and identify herself as his wife or sister or something. She was into her fourth paragraph before I realized that *she* was Nelson.

Francis X. Nelson—*Frances* X. Nelson. I wondered what I had done to deserve this. Female candidates are poison to run against at best; you don't dare use the ordinary rough-and-tumble, while she is free to use anything from a blacksnake whip to mickeys in your coffee.

Add to that ladylike good looks, obvious intelligence, platform poise—and a veteran. I couldn't have lived that wrong. I tried to catch Tom Griffith's eye to share my misery, but he was looking at *her* and the lunk was lapping it up.

Nelson—*Miss* Nelson—was going to town on housing. "You promised him that when he got out of that foxhole nothing would be too good for him. And what did he get? A shack in shanty-town, the sofa in his in-laws' parlor, a garage with no plumbing. If I am elected I shall make it my first concern—"

You couldn't argue against it. Like good roads, good weather, and the American Home, everybody is for veterans' housing.

When the meeting broke up, I snagged Tom and we rounded up the leaders of the Third District Association and adjourned to the home of one of the members. "Look, folks," I told them, "when we caucused and I agreed to run, our purpose was to take a bite out of the machine by kicking out Jorgens. Well, the situation has changed. It's not too late for me to forfeit the filing fee. How about it?"

Mrs. Holmes—Mrs. Bixby Holmes, as fine an old warhorse as ever swung a gavel—looked amazed. "What's gotten into you, Jack? Getting rid of Jorgens is only half of it. We have to put in men we can depend on. For this district, you're it."

I shook my head. "I didn't want to be the candidate; I wanted to manage. We should have had a veteran—"

"There's nothing wrong with your war record," put in Dick Blair.

"Maybe not, but it's useless politically. We needed a veteran." I had shuffled papers in the legal section of the Manhattan project—in civilian clothes. Dick Blair, a paratrooper and Purple Heart, had been my choice. But Dick had begged off, and who is to tell a combat veteran that he has got to make further sacrifice for the dear peepul?

"I abided by the will of the group, because Jorgens was not a veteran either. Now look at the damn thing—What makes you think I can beat her? She's got political sex-appeal."

"She's got more than political sex-appeal"—this from Tom.

When Dr. Potter spoke we listened; he's the old head in our group. "That's the wrong tack, Jack. It does not matter whether you win."

"I don't believe in lost causes, Doctor."

"I do. And so will you, someday. If Miss Nelson is Tully's choice to succeed Jorgens, then we must oppose her."

"She *is* with the machine, isn't she?" asked Mrs. Holmes.

"Sure she is," Tom told her. "Didn't you see that Cliff Meyers had her in tow? She's a stooge—the Stooge with the Light Brown Hair."

I insisted on a vote; they were all against me. "Okay," I agreed, "if you can take it, I can. This means a tougher campaign. We thought the dirt we had on Jorgens was enough; now we've got to dig."

"Don't fret, Jack," Mrs. Holmes soothed me. "We'll dig. I'll take charge of the precinct work."

"I thought your daughter in Denver was having a baby?"

"So she is. I'll stick."

I ducked out soon after, feeling much better, not because I thought I could win, but because of Mrs. Holmes and Dr. Potter and more like them. The team spirit you get in a campaign is pretty swell; I was feeling it again and recovering my pre-War zip.

Before the War our community was in good shape. We had kicked out the local machine, tightened up civil service, sent a police lieutenant to jail, and had put the bidding for contracts on an honest-to-goodness competitive basis—not by praying on Sunday, either, but by volunteer efforts of private citizens willing to get out and punch doorbells.

Then the War came along and everything came unstuck.

Naturally, the people who can be depended on for the in-and-out-of-season grind of volunteer politics are also the ones who took the

War the most seriously. From Pearl Harbor to Hiroshima they had no time for politics. It's a wonder the city hall wasn't stolen during the War—bolted to its foundations, I guess.

On my way home I stopped at a drive-in for a hamburger and some thought. Another car squeezed in close beside me. I glanced up, then blinked my eyes. "Well, I'll be—Miss Nelson! Who let you out alone?"

She jerked her head around, ready to bristle, then turned on the vote-getter. "You startled me. You're Mr. Ross, aren't you?"

"Your future councilman," I agreed. "You startled *me.* How's the politicking? Where's Cliff Meyers? Dump him down a sewer?"

She giggled. "Poor Mr. Meyers! I said goodnight to him at my door, then came over here. I was hungry."

"That's no way to win elections. Why didn't you invite him in and scramble some eggs?"

"Well, I just didn't want—I mean I wanted a chance to think. You won't tell on me?" She gave me the you-great-big-strong-man look.

"I'm the enemy—remember? But I won't. Shall I go away, too?"

"No, don't. Since you are going to be my councilman, I ought to get acquainted. Why are you so sure you will beat me, Mr. Ross?"

"Jack Ross—your friend and mine. Have a cigar. I'm not at all sure I can beat you. With your natural advantages and Tully's gang behind you I should 'a stood in bed."

Her eyes went narrow; the vote-getter smile was gone. "What do you mean?" she said slowly. "I'm an independent candidate."

It was my cue to crawl, but I passed. "You expect me to swallow that? With Cliff Meyers at your elbow—" The car hop interrupted us; we placed our orders and I resumed. She cut in.

"I *do* want to be alone," she snapped and started to close her window.

I reached out and placed a hand on the glass. "Just a moment. This is politics; you are judged by the company you keep. You show up at your first meeting and Cliff Meyers has you under his wing."

"What's wrong with that? Mr. Meyers is a perfect gentleman."

"And he's good to his mother. He's a man with no visible means of support, who does chores for Boss Tully. I thought what everybody thought, that the boss had sent him to chaperone a green candidate."

"It's not true!"

"No? You're caught in the jam cupboard. What's your story?"

She bit her lip. "I don't have to explain anything to you."

"No. But if you won't, the circumstances speak for themselves." She didn't answer. We sat there, ignoring each other, while we ate. When she switched on the ignition, I said, "I'm going to tail you home."

"It's not necessary, thank you."

"This town is a rough place since the War. A young woman should not be out alone at night. Even Cliff Meyers is better than nobody."

"That's why I let them— Do as you see fit!" I had to skim red lights, but I kept close behind her. I expected her to rush inside and slam the door, but she was waiting by the curb. "Thank you for seeing me home, Mr. Ross."

"Quite all right." I went up on her front porch with her and said goodnight.

"Mr. Ross—I shouldn't care what you think, but I'm not with Boss Tully. I'm independent." I waited. Presently she said, "You don't believe me." The big, beautiful eyes were shiny with tears.

"I didn't say so—but I'm waiting for you to explain."

"But what is there to explain?"

"Plenty." I sat down on the porch swing. "Come here, and tell papa. Why did you decide to run for office?"

"Well . . ." She sat down beside me; I caught a disturbing whiff of perfume. "It started because I couldn't find an apartment. No, it didn't—it was farther back, out in the South Pacific. I could stand the insects and the heat. Even the idiotic way the Army does things didn't fret me much. But we had to queue up to use the wash basins. There was even a time when baths were rationed. I hated it. I used to lie on my cot at night, awake in the heat, and dream about a bathroom of my own. A bathroom of my own! A deep tub of water and time to soak. Shampoos and manicures and big, fluffy towels! I wanted to lock myself in and live there. Then I got out of the Army—"

"Yes?"

She shrugged. "The only apartment I could find carried a bonus bigger than my discharge pay, and I couldn't afford it anyhow."

"What's wrong with your own home?"

"This? This is my aunt's home. Seven in the family and I make eight—one bathroom. I'm lucky to brush my teeth. And I share a three-quarters bed with my eight-year-old cousin."

"I see. But that doesn't tell why you are running for office."

"Yes, it does. Uncle Sam was here one night and I was boiling over about the housing shortage and what I would like to do to Congress. He said I ought to be in politics; I said I'd welcome the chance. He phoned the next day and asked how would I like to run for his seat? I said—"

"Uncle Sam—Sam Jorgens!"

"Yes. He's not my uncle, but I've known him since I was little. I was scared, but he said not to worry, he would help me out and advise me. So I did and that's all there is to it. You see now?"

I saw all right. The political acumen of an Easter bunny—except that the bunny rabbit was likely to lick the socks off me. "Okay," I told her, "but housing isn't the only issue. How about the gas company franchise, for example and the sewage disposal plant? And the tax rate? What airport deal do you favor? Do you think we ought to ease up on zoning and how about the freeways?"

"I'm going after housing. Those issues can wait."

I snorted. "They won't let you wait. While you're riding your hobbyhorse, the boys will steal the public blind—again."

"Hobbyhorse! Mister Smarty-Britches, getting a house is the most important thing in the world to the man who hasn't one. You wouldn't be so smug if you were in that fix."

"Keep your shirt on. Me, I'm sleeping in a leaky trailer. I'm strong for plenty of housing—but how do you propose to get it?"

"How? Don't be silly. I'll back the measures that push it."

"Such as? Do you think the city ought to get into the building business? Or should it be strictly private enterprise? Should we sell bonds and finance new homes? Limit it to veterans, or will you help me, too? Heads of families only, or are you going to cut yourself in on it? How about prefabrication? Can we do everything you want to do under a building code that was written in 1911?" I paused for breath. "Well?"

"You're being nasty, Jack."

"I sure am. But that's not half of it. I'll challenge you to debate on everything from dog licenses to patent paving materials. A nice, clean campaign and may the best man win—providing his name is Ross."

"I won't accept."

"You'll wish you had, before we're through. My boys and girls will be at all your meetings, asking embarrassing questions."

She looked at me. "Of all the dirty politics!"

"You're a candidate, kid; you're supposed to know the answers."

She looked upset. "I *told* Uncle Sam," she said, half to herself, "that I didn't know enough about such things, but he said—"

"Go on, Frances. What did he say?"

She shook her head. "I've told you too much already."

"I'll tell you. You were not to worry your pretty head, because he would be there to tell you how to vote. That was it, wasn't it?"

"Well, not in so many words. He said—"

"But it amounted to that. And he brought Meyers around and said Meyers would show you the ropes. You didn't want to cause trouble, so you did what Meyers told you to do. Right?"

"You've got the nastiest way of putting things."

"That's not all. You honestly think you are independent. But you do what Sam Jorgens tells you and Sam Jorgens—your sweet old Uncle Sam—won't change his socks without Boss Tully's permission."

"I don't believe it!"

"Check it. Ask some of the newspaper boys. Sniff around."

"I shall."

"Good. You'll learn about the birds and the bees." I stood up. "I've worn out my welcome. See you at the barricades, comrade."

I was halfway to the street when she called me back. "Jack!"

"Yes, Frances?" I went back up on the porch.

"I'm going to find out what connection, if any, Tully has with Uncle Sam, but, nevertheless and notwithstanding, I'm an independent. If I've been led around by the nose, I won't be for long."

"Good girl!"

"That's not all. I'm going to give you the fight of your life, whip the pants off you, and wipe that know-it-all look off your face!"

"Bravo! That's the spirit, kid. We'll have fun."

"Thanks. Well, goodnight."

"Just a second." I put an arm around her shoulders. She leaned away from me warily. "Tell me, darling: who writes your speeches?"

I got kicked in the shins, then the screen door was between us. "Goodnight, Mr. Ross!"

"One more thing—your middle name, it can't be 'Xavier.' What *does* the X stand for?"

"Xanthippe—want to make something of it?" The door slammed.

I was too busy the following month to worry about Frances Nelson. Ever been a candidate? It is like getting married and having your appendix out, while going over Niagara Falls in a barrel. One or more meetings every evening, breakfast clubs on Saturdays and Sundays, a Kiwanis, Rotary, or Lions, or Chamber of Commerce lunch to hit at noon, an occasional appearance in court, endless correspondence, phone calls, conferences, and, to top it off, as many hours of doorbell pushing as I could force into each day.

It was a grassroots campaign, the best sort, but strenuous. Mrs. Holmes, by scraping the barrel, rounded up volunteers to cover three-quarters of the precincts; the rest were my problem. I couldn't cover them all, but I could durn well try.

And every day there was the problem of money. Even with a volunteer, unpaid organization, politics costs money—printing, postage, hall rental, telephone bills, and there is gasoline and lunch money for people who can't carry their own expenses. A dollar here and a dollar there and soon you are three thousand bucks in the red.

It is hard to tell how a campaign is going; you tend to kid each other. We made a midstream spot check—phone calls, a reply postcard poll, and a doorbell sampling. And Tom and I and Mrs. Holmes got out and sniffed the air. All one day I bought gasoline here, a cola there, and a pack of cigarettes somewhere else, talking politics as I did so, and never offering my name. By the time I met Tom and Mrs. Holmes at her home I felt that I knew my chances.

We got our estimates together and looked them over. Mine read: "Ross 45%; Nelson 55%; McNye a trace." Tom's was: "fifty-fifty, against us." Mrs. Holmes had written, "A dull campaign, a light vote, and a trend against us." The computed results of the formal polls read; Ross 43%, Nelson 52%, McNye 5%—probable error plus-or-minus 9%.

I looked around. "Shall we cut our losses, or go on gallantly to defeat?"

"We aren't licked yet," Tom pointed out.

"No, but we're going to be. All we offer is the assumption that I'm better qualified than the little girl with the big eyes—a notion in which Joe Public is colossally uninterested. How about it, Mrs. Holmes? Can you make it up in the precincts?"

She faced me. "Jack, to be frank, it's all uphill. I'm working the old faithfuls too hard and I can't seem to stir out any new blood."

"We need excitement," Tom complained. "Let's throw some mud."

"At what?" I asked. "Want to accuse her of passing notes in school, or shall we say she sneaked out after taps when she was a WAC? She's got no record."

"Well, tackle her on housing. You've let her hog the best issue."

I shook my head. "If I knew the answers, I wouldn't be living in a trailer. I won't make phony promises. I've drawn up three bills, one to support the Federal Act, one to revise the building code, and one for a bond election for housing projects—that last one is a hot potato. None of them are much good. This housing shortage will be with us for years."

Tom said, "Jack, you shouldn't run for office. You don't have the fine, free optimism that makes a good public figure."

I grunted. "That's what I told you birds. I'm the manager type. A candidate who manages himself gets a split personality."

Mrs. Holmes knit her brows. "Jack—you know more about housing than she does. Let's hold a rally and debate it."

"Okay with me—I just work here. I once threatened to make her debate everything from streetcars to taxes. How about it, Tom?"

"Anything to make some noise."

I phoned at once. "Is this the Stooge with the Light Brown Hair?"

"That must be Jack Ross. Hello, Nasty. How's the baby-kissing?"

"Sticky. Remember I promised to debate the issues with you? How about 8 p.m. Wednesday the 15th?"

She said, "Hold the line—" I could hear a muffled rumble, then she said, "Jack? You tend to your campaign; I'll tend to mine."

"Better accept, kid. We'll challenge you publicly. Is Miss Nelson afraid to face the issues, quote and unquote."

"Goodbye, Jack."

"Uncle Sam won't let you, will he?" The phone clicked in my ear.

We went ahead anyway. I sold some war bonds and ordered a special edition of the Civic League News, with a Ross-for-Councilman front page, as a throw-away to announce the rally—prizes, entertainment, movies, and a supercolossal, gigantic debate between Ross in this corner and Nelson in that. We piled the bundles of papers in Mrs. Holmes' garage late Sunday night. Mrs. Holmes phoned about seven-thirty the next morning—"Jack," she yipped, "come over right away!"

"On my way. What's wrong?"

"Everything. Wait till you get here." When I did, she led me out to her garage; someone had broken in and had slit open our precious bundles—then had poured dirty motor oil on them.

Tom showed up while we were looking at the mess. "Pixies everywhere," he observed. "I'll call the Commercial Press."

"Don't bother," I said bitterly. "We can't pay for another run." But he went in anyhow. The kids who were to do the distributing started to show up; we paid them and sent them home. Tom came out. "Too late," he announced. "We would have to start from scratch—no time and too expensive."

I nodded and went in the house. I had a call to make myself. "Hello," I snapped, "is this Miss Nelson, the Independent Candidate?"

"This is Frances Nelson. Is this Jack Ross?"

"Yes. You were expecting me to call, I see."

"No, I knew your sweet voice. To what do I owe the honor?"

"I'd like to show you how well your boys have been campaigning."

"Just a moment— I've an appointment at ten; I can spare the time until then. What do you mean; how my boys have been campaigning?"

"You'll find out." I hung up.

I refused to talk until she had seen the sabotage. She stared. "It's a filthy, nasty trick, Jack—but why show it to me?"

"Who else?"

"But— Look, Jack, I don't know who did this, but it has nothing to do with me." She looked around at us. "You've got to believe me!" Suddenly she looked relieved. "I know! It wasn't me, so it must have been McNye."

Tom grunted. I said gently, "Look, darling, McNye is nobody. He's a seventeenth-rater who files to get his name in print. He wouldn't use sabotage because he's not out to win. It *has* to be you—wait!—not you personally, but the machine. This is what you get into when you accept the backing of wrong 'uns."

"But you're wrong! You're wrong! I'm not backed by the machine."

"So? Who runs your campaign? Who pays your bills?"

She shook her head. "A committee takes care of those things. My job is to show up at meetings and speak."

"Where did the committee come from? Did the stork bring it?"

"Don't be ridiculous. It's the Third District Home-Owners' League. They endorsed me and set up a campaign committee for me."

I'm no judge of character, but she was telling the truth, as she saw it. "Ever hear of a dummy organization, kid? Your only connection with this Home-Owners' League is Sam Jorgens . . . isn't it?"

"Why, no—that is— Yes, I suppose so."

"And I told you Jorgens was a tame dog for Boss Tully."

"Yes, but I checked on that, Jack. Uncle Sam explained the whole thing. Tully used to support him, but they broke because Uncle Sam wouldn't take the machine's orders. It's not his fault that the machine used to back him."

"And you believed him."

"No, I made him prove it. You said to check with the newspapers—Uncle Sam had me talk with the editor of the *Herald*." Tom snorted.

"He means," I told her, "that the *Herald* is part of the machine. I meant talk to reporters. Most of them are honest and all of them know the score. But I can't see how you could be so green. I know you've been away, but didn't you read the papers before the War?"

It developed that, what with school and the War, she hadn't been around town much since she was fifteen. Mrs. Holmes broke in, "Why, she's not eligible, Jack! She doesn't have the residence requirements."

I shook my head. "As a lawyer, I assure you she does. Those things don't break residence—particularly as she enlisted here. How about making us all some coffee, Mrs. Holmes?"

Mrs. Holmes bristled; I could see that she did not want to fraternize with the enemy, but I took her arm and led her into the house, whispering as I went. "Don't be hard on the kid, Molly. You and I made mistakes while we were learning the ropes. Remember Smythe?"

Smythe was as fine a stuffed shirt as ever took a bribe—we had given him our hearts' blood. Mrs. Holmes looked sheepish and relaxed. We chatted about the heat and presidential possibilities, then Frances said, "I'm conceding nothing, Jack—but I'm going to pay for those papers."

"Skip it," I said. "I'd rather bang Tully's heads together. But see here—you've got an hour yet; I want to show you something."

"Want me along, Jack?" Tom suggested, looking at Frances.

"If you like. Thanks for the coffee, Mrs. Holmes—I'll be back to clean up the mess." We drove to Dr. Potter's office and got the photostats we had on Jorgens out of his safe. We didn't say anything; I just arranged the exhibits in logical order. Frances didn't talk either, but her face got whiter and whiter. At last she said, "Will you take me home now, Mr. Ross?"

We bumped along for the next three weeks, chasing votes all day, licking stamps and stenciling auto-bumper signs late at night and never getting enough sleep. Presently we noticed a curious fact—McNye was coming up. First it was billboards and throw-aways, next was publicity—and then we began to get reports from the field of precinct work for McNye.

We couldn't have been more puzzled if the Republican Party had nominated Norman Thomas. We made another spot check. Mrs. Holmes and Dr. Potter and I went over the results. Ross and Nelson, neck and neck—a loss for Nelson; McNye a strong third and coming up fast. "What do you think, Mrs. Holmes?"

"The same you do. Tully has dumped Nelson and bought up McNye."

Potter agreed. "It'll be you and McNye in the runoff. Nelson is coasting on early support from the machine. She'll fizzle."

Tom had come in while we were talking. "I'm not sure," he said. "Tully needs a win in the primary, or, if that fails, a run-off between the girl and McNye. We've got an organization, she hasn't."

"Tully can't count on me running third. In fact, I'll beat out Frances for second place at the very worst."

Tom looked quizzical. "Seen tonight's *Herald,* Jack?"

"No. Have they discovered I'm a secret drinker?"

"Worse than that." He chucked us the paper. "CLAIM ROSS INELIGIBLE COUNCILMANIC RACE" it read; there was a 3-col cut of my trailer, with me in the door. The story pointed out that a city father must have lived two years in the city and six months in his district. The trailer camp was outside the city limits.

Dr. Potter looked worried. "Can they disqualify you, Jack?"

"They won't take it to court," I told him. "I'm legal as baseball. Residence isn't geographical location; it's a matter of intent—your home is where you intend to return when you're away. I'm registered at the flat I had before the War, but I turned it over to my partner when I went to Washington. My junk is still in it, but he's got a wife and twins. Hence the trailer, a temporary exigency of no legal effect."

"Hmmm . . . how about the political effect?"

"That's another matter."

"You betcha it is," agreed Tom. "How about it, Mrs. Holmes?"

She looked worried. "Tom is right. It's tailormade for a word-of-mouth campaign combined with unfavorable publicity. Why vote for a man who doesn't even live in your district?—that sort of thing."

I nodded. "Well, it's too late to back out, but, let's face it, folks—We've wasted our nickel."

For once they did not argue. Instead Potter said, "What sort of person is Miss Nelson? Could we possibly back her in the finals?"

"She's a good kid," I assured him. "She got taken in and hated to admit it, but she's better than McNye."

"I'll say she is," agreed Tom.

"She's a lady," stated Mrs. Holmes.

"But," I objected, "we can't elect her in the finals. We can't pin anything on McNye and she's too green to stand up to what the machine can do to her in a long campaign. Tully knows what he's doing."

"I'm afraid you're right," Potter agreed.

"Jack," said Tom, "I take it you think we're licked now."

"Ask Mrs. Holmes."

Mrs. Holmes said, "I hate to say so, and I'm not quitting, but it would take a miracle to put Jack on the final ballot."

"Okay," said Tom, "let's quit being boy scouts and have some fun the rest of the campaign. I don't like the way Boss Tully campaigns. We've played fair; what we've gotten in return is shenanigans."

"What do you want to do?"

He explained. Presently I nodded and said, "I'm all for it—and a wrinkle of my own. It'll be fun, and it just might work."

"Well, call her up then!"

I got Frances Nelson on the phone. "Jack Ross, Frances. Haven't seen you around much, sweetheart. How's the campaign?"

She sounded tired. "Oh, that— What campaign, Jack?"

"Did you withdraw? I haven't seen any announcement."

"It wasn't necessary. I had a showdown with Jorgens and after that my campaign just disappeared. The committee vanished away. Look, Jack, I'd like to see you—to apologize."

"Forget it, I want to see you, too. I'll pick you up."

We laid it on the line. "I'm dropping out of the race, Frances. We want to throw our organizational support to you—provided."

She stared. "But you can't, Jack. I'm going to vote for you."

"Huh? Never mind, you won't get a chance to." I showed her the *Herald* story. "It's a phony, but it licks me anyhow. I should have played up my homeless condition but, like a dope, I let them do it. It's too late now—when a candidate has to explain things he's back on his heels and ready for the knockout. I was a fifty-fifty squeeze at best; this tips the balance."

She was staring at the picture, bug-eyed, knuckles pressed to her mouth. "Jack— Oh, dear! I've gone and done it again."

"Done what?"

"Got you into this mess. I told Sam Jorgens all about our first talk, including how you had to camp out in a trailer. I—"

I brushed it aside. "No matter. They would have stumbled on it anyhow. See here—we're going to take you on. We might even elect you."

"But I don't want the job, Jack. I want you to have it."

"Too late, Frances. But we want to beat that spare tire, McNye. The machine is still using you, to beat me in the primary by splitting the non-machine vote; then they'll settle your hash. I've got a gimmick for that. But first—you call yourself an independent. Well, you aren't now."

"What do you mean? I won't be anything else."

"They gave women the vote! Look, darling, a candidate can be unbossed, but not independent. Independence is an adolescent notion. To merit support you have to commit yourself—and there goes your independence."

"But I— Oh, politics is a rotten business!"

"You make me tired! Politics is just as clean—or as dirty—as the people who practice it. The people who say it's dirty are too lazy to do their part in it." She dropped her face into her hands. I took her by the shoulders, and shook her. "Now you listen to me. I'm going over our program, point by point. If you agree with it and commit yourself, you're our candidate. Right?"

"Yes, Jack." It was just a whisper.

We ran through it. There was no trouble, it was sane and sensible, likely to appeal to anyone with no ax to grind. The points she did not understand we let lay over. She liked especially my housing bills and began to perk up and sound like a candidate.

"Okay," I said finally. "Here's the gimmick. I'll get my name off the ballot so that the race will be over in the primary. It's too late to do it myself, but they've played into my hands. It'll be a court order, for ineligibility through nonresidence."

Dr. Potter looked up sharply. "Come again, son? I thought you said your legal position was secure."

I grinned. "It is—if I fight. But I won't. Here's the gag—we bring a citizen's suit through a couple of dummies. The court orders me to show cause. I default. Court has no option but to order my name stricken from the ballot. One, two, three."

Tom cheered. I bowed. "Now Dr. Potter is your new campaign chairman. You go on as before, going where you are sent and speaking your piece. Oh, yes—I'm going to give you some homework on other issues than housing. As for Tom and me—we're the special effects department. Just forget us."

Three days later I was off the ballot. Tom handled it so that it looked like McNye and Tully. Mrs. Holmes had the delicate job of convincing our precinct workers that Frances was our new white hope. Dr. Potter and Dick Blair got Frances endorsed by the Civic League—the League would endorse a giant panda against a Tully man.

And Dick Blair worked up a veterans' division.

Leaving Tom and me free for fun and games.

First we got a glamor pic of Frances, one that made her look like Liberty Enlightening the World, with great sorrowful eyes and a noble forehead, and had it blown up for billboards—6-sheets; 24-sheets look like too much dough.

We got a "good" picture of McNye, too—good for us. Like this—you send two photographers to a meeting where your man is to speak. One hits him with a flash bulb; the second does also, right away, before the victim can recover from his reflex. Then you throw the first pic away. We got a picture which showed McNye as pop-eyed, open-mouthed, and idiotic—a Kallikak studying to be a Jukes. It was so good we had to tone it down. Then I went up state and got some printing done, very privately.

We waited until the last few days, then got busy. First we put snipe sheets on our own billboards, right across Frances' beautiful puss so that those eyes looked appealingly at you over the paster. "VOTE FOR McNYE" they read. Two nights later it was quarter cards, this time with his lovely picture: VOTE FOR McNYE—A WOMAN'S PLACE IS IN THE HOME. We stuck them up on private property, too.

Tom and I drove around the next day admiring our handiwork, "It's beautiful," Tom said dreamily. "Jack, do you suppose there is any way we could get the Communist Party to endorse McNye?"

"I don't see how," I admitted, "but if it doesn't cost too much I've still got a couple of war bonds."

He shook his head. "It can't work, but it's a lovely thought."

We saved our double whammy for the day before election. It was expensive—but wait. We hired some skid-row characters on Saturday, through connections Tom has, and specified that they must show up with two-day beards on Monday. We fed each one a sandwich loaded with garlic, gave him literature and instructions—ring the doorbell, blow his breath in the victim's face, and hand her a handbill, saying abruptly, "Here's how you vote, lady!" The handbill said, "VOTE FOR McNYE" and had his special picture. It had the rest of Tully's slate too, and some choice quotes of McNye's best double talk. Around the edge it said "100% American—100% American."

We pushed the stumblebums through an average of four precincts apiece, concentrating on the better neighborhoods.

That night there was an old-fashioned torchlight parade—Mrs. Holmes' show, and the wind-up of the proper campaign. It started off with an elephant and donkey (Heaven knows where she borrowed the elephant!) The elephant carried signs: I'M FOR FRANCES; the donkey, SO AM I. There was a kid's band, flambeaux carried by our weary volunteers, and a platoon of WAC and WAVE veterans marching ahead of the car that carried Frances. She looked scared and lovely.

Tom and I watched it, then got to work. No sleep that night—

More pasters. Windshield size this time, 3"x10", with glue on the printed side. I suppose half the cars in town have no garages, housing being what it is. We covered every block in the district before dawn, Tom driving and me on the right with a pail of water, a sponge, and stickers. He would pull alongside a car; I would slap a sticker on the windshield where it would stare the driver in the face—and have to be scraped off. They read: VOTE FOR McNYE—KEEP AMERICA PURE.

We figured it would help to remind people to vote.

I voted myself when the polls opened, then fell into bed.

I pulled myself together in time to get to the party at the headquarters—an empty building we had borrowed for the last month of the campaign. I hadn't given a thought to poll watchers or an honest count—that was Mrs. Holmes' baby—but I didn't want to miss the returns.

One election party is like another—the same friendly drunks, the same silent huddle around the radio, the same taut feeling. I helped myself to some beer and potato chips and joined the huddle.

"Anything yet," I asked Mrs. Holmes. "Where's Frances?"

"Not yet. I made her lie down."

"Better get her out here. The candidate has to be seen. When people work for a pat on the back, you've got to give 'em the pat."

But Frances showed up about then, and went through the candidate routine—friendly, gracious, thanking people, *etc.* I began to think about running her for Congress.

Tom showed up, bleary-eyed, as the first returns came in. All McNye. Frances heard them and her smile slipped. Dr. Potter went over to her and said, "It's not important—the machine's precincts are usually first to report." She plastered her smile back on.

McNye piled up a big lead. Then our efforts began to show—Nelson was pulling up. By 10:30 it was neck and neck. After a while it began to look as if we had elected a councilman.

Around midnight McNye got on the air and conceded.

So I'm a councilman's field secretary now. I sit outside the rail when the council meets; when I scratch my right ear, Councilman Nelson votes "yes"; if I scratch my left ear, she votes "no"—usually.

Marry her? *Me?* Tom married her. They're building a house, one bedroom and *two* bathrooms. When they can get the fixtures, that is.

ON THE SLOPES OF VESUVIUS

"Paddy, shake hands with the guy who built the atom bomb," Professor Warner said to the bartender. "He and Einstein rigged it up in their own kitchen one evening."

"With the help of about four hundred other guys," amended the stranger, raising his voice slightly to cut through the rumble of the subway.

"Don't quibble over details. Paddy, this is Doctor Mansfield. Jerry, meet Paddy— Say, Paddy, what *is* your last name?"

"Francis X. Hughes," answered the barkeep as he wiped his hand and stuck it out. "I'm pleased to meet any friend of Professor Warner."

"I'm pleased to meet you, Mr. Hughes."

"Call me Paddy, they all do. You really are one of the scientists who built the atom bomb?"

"I'm afraid so."

"May the Lord forgive you. Are you at N.Y.U., too?"

"No, I'm out at the new Brookhaven Laboratory."

"Oh, yes."

"You've been there?"

Hughes shook his head. "About the only place I go is home to Brooklyn. But I read the papers."

"Paddy's in a well-padded rut," explained Warner. "Paddy, what are you going to do when they blow up New York? It'll break up your routine."

He set their drinks before them and poured himself a short beer. "If that's all I've got to worry about I guess I'll die of old age and still in my rut, Professor."

Warner's face lost its cheerful expression for a moment; he stared at his drink as if it had suddenly become bitter. "I wish I had your optimism, Paddy, but I haven't. Sooner or later, we're in for it."

"You shouldn't joke about such things, Professor."

"I'm not joking."

"You can't be serious."

"I wish I weren't. Ask him. After all, he built the damned thing."

Hughes raised his brows at Mansfield who replied, "I'm forced to agree with Professor Warner. They will be able to do it—atom-bomb New York I mean. I *know* that; it's not a guess—it's a certainty. Being able to do it, I'm strongly of the opinion that they *will* do it."

"Who do you mean by 'they'?" demanded the bartender. "The Russians?"

"Not necessarily. It might be anybody who first worked up the power to smash us."

"Sure," said Warner. "Everybody wants to kick the fat boy. We're envied and hated. The only reason we haven't been smeared is that no one has had what it takes to do it—up to now, that is!"

"Just a minute, gentlemen—" put in Hughes. "I don't get it. You're talking about somebody—anybody—atom-bombing New York. How can they do it? Didn't we decide to hang on to the secret? Do you think some dirty spy has gotten away with it while we weren't watching?"

Mansfield looked at Warner, then back at Hughes and said gently, "I hate to disturb your peace of mind, Mr. Hughes—Paddy—but there is no secret. Any nation that is willing to go to the trouble and expense can build an atom bomb."

"And that's official," added Warner, "and it's a lead-pipe cinch that, power politics being what it is, a dozen different nations are working on the problem right now."

Hughes had been looking perturbed; his face cleared. "Oh, I see what you mean. In time, they can dig it out for themselves. In that case, gentlemen, let's have a round on the house and drink to their frustration. I can't be worrying about what might happen twenty years from now. We might none of us be spared that long what with taxicabs and the like."

Mansfield's brows shot up. "Why do you say twenty years, Paddy?"

"Eh? Oh, I seem to remember reading it in the papers. That general, wasn't it? The one who was in charge of the atom-bomb business."

Mansfield brushed the general aside. "Poppycock! That estimate is based on entirely unwarranted national conceit. The time will be much shorter."

"How much shorter?" demanded Hughes. Mansfield shrugged.

"What would you do, Paddy," Warner asked curiously, "if you thought some nation—let's say some nation that didn't like us—had already managed to manufacture atom bombs?"

The saloon cat came strolling along the top of the bar. Hughes stopped to feed it a slice of cheese before replying. "I do not have your learning, gentlemen, but Paddy Hughes is no fool. If someone is loose in the world with those devil's contraptions, New York is a doomed city. America is the champion and must be beaten before any new bully boy can hope to win—and New York is one of the spots he would shoot at first. Even Sad Sack—" He jerked a thumb at the cat. "—is bright enough to flee from a burning building."

"Well, what do you think you would do?"

"I don't 'think' what I'd do, I *know* what I'd do; I've done it before. When I was a young man and the Black-and-Tans were breathing down the back o' my neck, I climbed on a ship with never a thought of looking back—and any man who wanted them could have my pigs and welcome to them."

Warner chuckled. "You must have been quite the lad, Paddy. But I don't believe you would do it—not now. You're firmly rooted in your rut and you like it—like me and six million others in this town. That's why decentralization is a fantasy."

Hughes nodded. "It would be hard." That it would be hard he understood. Like leaving home it would be to quit Schreiber's Bar-Grill after all these years—Schreiber couldn't run it without him; he'd chase all the customers away. It would be hard to leave his friends in the parish, hard to leave his home—what with Molly's grave being just around the corner and all. And if the cities were to be blown up a man would have to go back to farming. He'd promised himself when he hit the new country that he'd never, never, never tackle the heartbreaking load of tilling the soil again. Well, perhaps there would be no landlords when the cities were gone. If a man must farm, at least he might be spared that. Still, it would be hard—and Molly's grave off somewhere in the rubble. "But I'd do it."

"You think you would."

"I wouldn't even go back to Brooklyn to pick up my other shirt. I've my week's pay envelope right here." He patted his vest. "I'd grab my hat and start walking." The bartender turned to Mansfield. "Tell me the truth, Doctor—if it's not twenty years, how long will it be?"

Mansfield took out an envelope and started figuring on the back of it. Warner started to speak, but Hughes cut him off. "Quiet while he's working it out!" he said sharply.

"Don't let him kid you, Paddy," Warner said wryly. "He's been lying awake nights working out this problem ever since Hiroshima."

Mansfield looked up. "That's true. But I keep hoping I'll come out with a different answer. I never do."

"Well, what *is* the answer?" Hughes insisted.

Mansfield hesitated. "Paddy, you understand that there are a lot of factors involved, not all of them too clear. Right? In the first place, it took us about four years. But we were lavish with money and lavish with men, more so maybe than any other nation could be, except possibly Russia. Figured on that alone it might take several times four years for another country to make a bomb. But that's not the whole picture; it's not even the important part. There was a report the War Department put out, the Smyth Report—you've heard of it?—which gives anyone who can read everything but the final answers. With that report, with competent people, uranium ore, and a good deal less money than it cost us, a nation ought to be able to develop a bomb in a good deal less time than it took us."

Hughes shook his head. "I don't expect you to explain, Doctor; I just want to know your answer. How long?"

"I was just explaining that the answer had to be indefinite. I make it not less than two and not more than four years."

The bartender whistled softly. "Two years. Two years to get away and start a new life."

"No, no, no! Mr. Hughes," Mansfield objected. "Not two years from now—two years from the time the first bomb was dropped."

Hughes' face showed a struggle to comprehend. "But, gentlemen," he protested, "it's been *more* than two years since the first bomb was dropped."

"That's right."

"Don't blow your top, Paddy," Warner cautioned him. "The bomb isn't everything. It might be ten years before anybody develops the sort of robot carrier that can go over the north pole or the ocean and seek out a particular city with an atom bomb. In the meantime we don't have too much to fear from an ordinary airplane attack."

Mansfield looked annoyed. "You started this, Dick. Why try to hand out soothing syrup now? With a country as wide open as this one you don't need anything as fancy as guided missiles to pull a Pearl Harbor on it. The bombs would be assembled secretly and set off by remote control. Why, there might be a tramp steamer lying out there in the East River right now—"

Warner let his shoulders slump. "You're right, of course."

Hughes threw down his bar towel. "You're telling me that New York is as likely to be blown up right now as at any other time."

Mansfield nodded. "That's the size of it," he said soberly.

Hughes looked from one to the other. The cat jumped down and commenced rubbing up against his ankle, purring. He pushed it away with his foot. "It's not true! I know it's not true!"

"Why not?"

"Because! If it was true would you be sitting here, drinking quietly? You've been having a bit of fun with me, pulling my leg. Oh, I can't pick the flaw in your argument, but you don't believe it yourselves."

"I wish I didn't believe it," said Mansfield.

"Oh, we believe it, Paddy," Warner told him. "To tell you the truth, I'm planning to get out. I've got letters out to half a dozen cow colleges; I'm just waiting until my contract expires. As for Doc Mansfield, he can't leave. This is where his lab is located."

Hughes considered this, then shook his head. "No, it won't wash. No man in his right mind will hang on to a job when it means sitting on the hot squat, waiting for the Warden to throw the switch. You're pulling my leg."

Mansfield acted as if Hughes had not spoken. "Anyhow," he said to Warner, "the political factors might delay the blowoff indefinitely."

Warner shook his head angrily. "Now who's handing out soothing syrup? The political factors speed up the event, not delay it. If a country intends to defeat us someday, it's imperative that she do it as quickly as possible, before we catch wind of her plans and strike first. Or before we work out a real counter weapon—if that's possible."

Mansfield looked tired, as if he had been tired for a long time. "Oh, you're right. I was just whistling to keep my courage up. But we won't develop a counter weapon, not a real one. The only possible defense against atomic explosion is not to be there when it goes off." He turned to the barman. "Let's have another round, Paddy."

"Make mine a Manhattan," added Warner.

"Just a minute. Professor Warner. Doctor Mansfield. You were not fooling with me? Every word you had to say is God's own truth?"

"As you're standing there, Paddy."

"And Doctor Mansfield—Professor Warner, do you trust Doctor Mansfield's figuring?"

"There's no man in the United States better qualified to make such an estimate. That's the truth, Paddy."

"Well, then—" Hughes turned toward where his employer sat nodding over the cash register on the restaurant side of the room and whistled loudly between his teeth. "Schreiber! Come take the bar." He started stripping off his apron.

"Hey!" said Warner, "where you going? I ordered a Manhattan."

"Mix it yourself," said Hughes. "I've quit." He reached for his hat with one hand, his coat with the other, and then he was out the door.

Forty seconds later he was on an uptown express; he got off at 34th Street and three minutes thereafter he was buying a ticket, west. It was ten minutes later that he felt the train start to roll under him, headed out of the city.

But it was less than an hour later when his misgivings set in. Had he been too hasty? Professor Warner was a fine man, to be sure, but given to his little jokes, now and again. Had he been taken in by a carefully contrived hoax? Had Warner said to his friend, we'll have some fun and scare the living daylights out of the old Irishman?

Nor had he made any arrangements for someone to feed Sad Sack. The cat had a weak stomach, he was certain, and no one else gave the matter any attention at all. And Molly's grave—Wednesday was his day to do his gardening there. Of course Father Nelson would see that it was watered, just for kindness' sake, but still—

When the train paused at Princeton Junction he slipped off and sought out a telephone. He had in mind what he meant to say if he was able to reach Professor Warner—a good chance, he thought, for considering the hour the gentlemen probably stayed on for a steak. Professor Warner, he would say, you've had your fun and a fine joke it was as I would be the first to say and to buy a drink on it, but tell me —man to man—was there anything to what you and your friend was telling me? That would settle it, he thought.

The call went through promptly and he heard Schreiber's irritated voice. "Hello," he said.

The line went dead. He jiggled the hook. The operator answered, "One moment, please—" then, "This is the Princeton operator. Is this the party with the call to New York?"

"Yes. I—"

"There has been a temporary interruption in service. Will you hang up and try again in a few minutes, please?"

"But I was just talking—"

"Will you hang up and try again in a few minutes, puh*lease?*"

He heard the shouting as he left the booth. As he got outdoors he could see the great, gloriously beautiful, gold and purple mushroom still mounting over where had been the City of New York.

My Object All Sublime

Those traffic violators were a stink to say the least; that was certain. But suddenly came the day when that expression was—no longer figurative—they stank literally!

The City Editor tells me to go to Seventh and spring.

“There’s a story there, he says.”Go down and check it.”

“What kind?”

“They say it smells.”

“Why shouldn’t it?” I told him. “Columbia Bank on one corner, Fidelity First National on the other, and the City Hall and the Daily Tide building just down the street.”

“Wise guy; he answers.”I mean it real smell—like yourself.”

Dobbs is all right—with him it’s stomach ulcers and matrimony. “What’s the sketch?” I asked, ignoring the crack.

Seems like it ain’t safe to drive a car through that intersection, he answered seriously. “You come out smelling like a telephone booth. Find out why.

I EASED down there and looked the situation over. Nothing I could put my finger on, but a general air of nervousness and uncertainty. Now and then I’d catch a whiff of something, some ancient rottenness. It put me in mind of the morgue, again it was more like a Chinese river boat When something happened that gave me a lead—

A truck came charging through as the lights were changing. He had time to stop, but didn’t—and just missed a feeble old gal in the crosswalk. There was a sharp “*fssss*”; the truck driver got a look of agonized surprise, and wipes at his eyes. As he passed me I smelled it.

No mistake this time—it stunk like a convention of pole kitties, with prizes for range and distance.

The truck wobbled along for a few yards, then double-parked on the car tracks. I came alongside. “What happened, Buddy?” I asked the driver, but he is too far gone with choking and gasping, I left, not wanting the perfume to soak into my clothes.

I went back to the corner, having an idea and wanting to check it. In the next thirty minutes seventeen drivers did things I didn’t like, bulling their way through left turns, jumping signals, ignoring pedestrians, and the like. And every one of them gets dosed with *eau de Cologne*. Usually with the sound of a hiss just before it happened.

I was beginning to plot a curve, as it were, when I leaned up against a postal storage box on the corner. “Oh, excuse me!” comes this polite voice in my ear.

“No harm done, chum,” I answered, and looked around. Nobody near me, nobody at all.

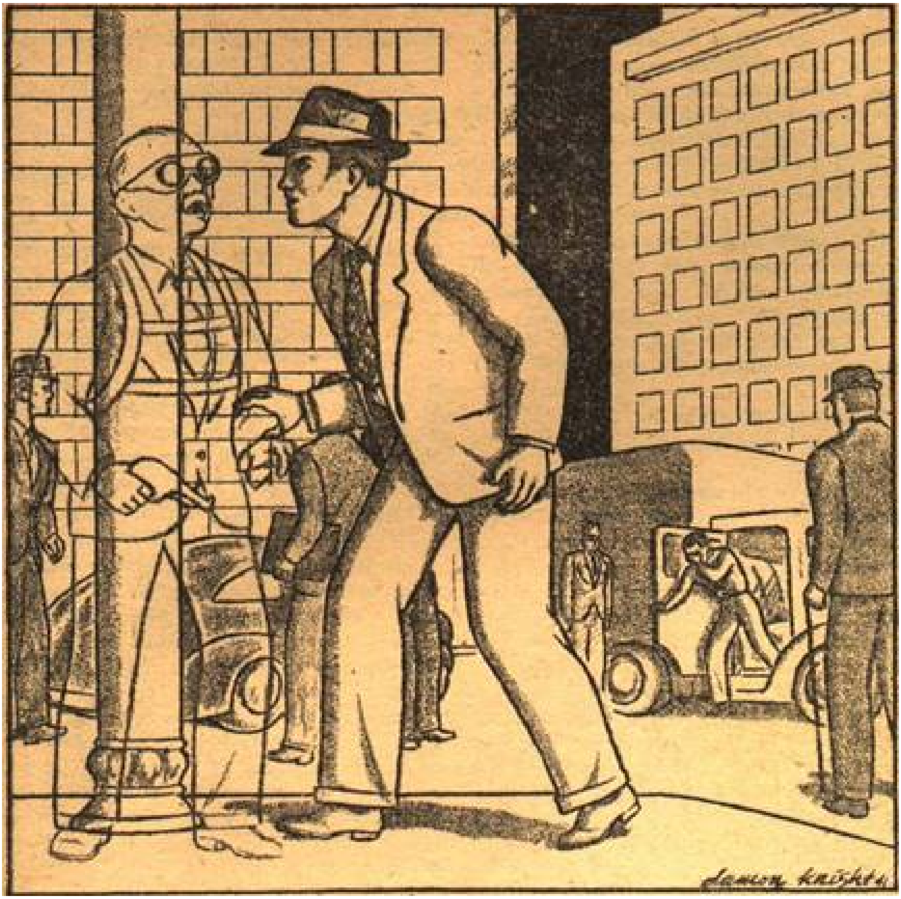

"Oh, excuse me", comes this polite voice in my ear.

The stuff a leg-man drinks has to be cheap, but I was sure I hadn't gotten any quite that green. I considered it, then moved my hand toward the box. I encountered something solid in the air about a foot over the box, and grabbed. There was a smothered gasp, then silence.

I waited, then said very soft, “Well, Cagliostro, it seems to be your move.” No answer. I clamped down on the chunk of breeze and twisted it. “Well?

“Oh, dear!” comes this same mild little voice. “You seem to have captured me. What shall I do?”

I thought. “We can't stand here playing statues. People would talk. There's a beer joint just around the comer. If I let you go , will you meet me there?”

“Oh, yes indeed,” I'm answered, “anything to get out of this predicament.”

“No tricks now,” I warned. “Fail to show up and I'll have them search for you with paint spray gun. That'll put a stop to your fun games.”

"Oh, no ! empty air assure me, and I let go.

I HAD killed a bottle of suds in the joint in question when this mousy little bird shows up. He glanced nervously around, came up to my booth and gulped at me.

"Are you," I asked incredulously, "Cagliostro?"

He gulped again and nodded.

"Well, I'll he a—skip it. Draw up a chair. Beer?"

He fidgeted. "Uh, might I have a little Bourbon whiskey?"

"You know best Pop." I fingered the waiter. "Joe, bring this gentleman some eight-year-old Kentucky." When Joe got back Casper Milquetoast took a tumbler, poured four fingers in it, and drank it, swallowing steadily. Then he sighed.

"I feel better," he announced. "My heart, you know."

"Yes, I know," I agreed. "I hated to upset you, but it's in the interest of science."

His face lit up. "You are a student of science, too?

"Mob psychology," I told him. "I'm a reporter for the *Graphic*."

He seemed upset at once, so I calmed him. "Take it easy. We'll make it off the record for the moment and talk about a story later." He relaxed a little and I continued, "Right now I'm curious on my own account. I figure you had something to do with that gymkhana around the corner Spring – not to mention finding you holed up in a slice of air. Come clean, professor."

"But I am not a professor," he protests in that same diffident voice, after tucking away another four fingers of corn. "I am a private research student in spectroscopy. My name is Cuthbert Higgins."

"Okay, Cuthbert. Mine's Carter. Call me Cleve. Let's get to it. What is it? Mirrors?"

"Not precisely. It may be hard to explain to a layman. Are you versed in advanced mathematics? The use of tensors, for example?"

"I was doing all right," I said, "up to improper fractions. Do they come after that?"

"I am, uh, afraid so."

"Okay," I told him. "I'll hang on where I can"

"Very well," he agreed, "you arc familiar with the gross phenomena associated with seeing. Light strikes an object, is reflected or refracted by it to the eye, where it is interpreted as sight. The only ordinary substance which reflects or refracts so little as to he invisible is air."

"Sure."

"For a number of reasons it is difficult to change the optical characteristics of the human body to the point where it would match air and be invisible. But there remain two possibilities: To bend the light rays around the body is one way. The other is psychological invisibility.

Huh ?" I demanded. "Come again. Do you mean hypnosis?"

"Not at all," he told me. "invisibility by suggestion is a common phenomenon ... a stock in trade of stage magicians. They suggest that an object in plain sight is not in plain sight, and surely enough, it is not."

I nodded. "I catch. Thurston used to do that in his levitation stunt. The frame that supports the gal is in plain sight, but the Audience never sees it. I never saw it until it was pointed out to me, then I couldn't we why in the hell I hadn't seen it."

HIGGINS nodded happily, "Exactly. The eye ignores what is actually there and the brain fills in the background. Lots of people have that quality. Good detectives, Pickpockets. I have it myself—that is what got me interested in the problem of invisibility."

"Slow up! I said. "Don't sit there and tell me that I didn't see you a while ago simply because you are inconspicuous. Dammit, I looked *through* you."

"Not quite," he corrected, "you looked *around* me."

"How?"

"By application of the laws of optics."

"Listen," I said, slightly irked, "I'm not quite as ignorant as I made out. I never heard of any optical laws that would fit."

"It *does,*" he conceded, "involve certain advances of my own. The principle is similar to total reflection. I throw a prolate ellipsoid field about my body. Light strikes the screen at any point, runs on the surface of the field for a hundred and eighty degrees, and departs at the antipodal point with its direction and intensity unchanged. In effect, it makes a detour around me."

"It sounds simple," I commented, "but I don't think I could build one."

"It is hard to make it clearer without recourse to higher mathematics," he apologized, "but perhaps I can give a somewhat analogous example with prisms and mirrors. When a ray of light strikes a surface, it may be reflected through twice the angle of incidence, or refracted through the angle of refraction, thusly—" and he started to sketch on the menu. "When an optical system is arranged in *this* fashion—" He sketched a sort of daisy chain of mirrors and prisms. "—a beam of light striking the system at any point 'A' and at any angle 'theta,' will be reflected and refracted around the system to point 'A Prime,'and exit at angle theta. So you see—"

"Skip it," I cut in. "I can see that it gallops half way around and heads out in the same direction; the rest is over my head. All right, that clears up half the mystery, but how about that reign of terror in the traffic?"

"Oh, *that."* He gives me a silly grin and hauls out a gat as long as my foot.

I DON'T like the look in his eye. "Put that thing down!" I yelled.

He does so reluctantly. "I don't see why you should make such a fuss, he protests. "It's not dangerous—not very. It's just a squirt gun."

"Huh?" I looked at it more closely "Pardon my I.Q., Cuthbert. I begin to see the sketch. What's it got in it?"

His face lit up. "Synthetic essence *mephitis*—skunk juice!"

"Mmm ... Cuthbert, is that nice?"

He grinned guiltily. "Perhaps not—but it's awfully good fun."

"Hmmm!"

"It was a byproduct of an attempt to find a synthetic base for perfume," he explained. "No real use, but I had made up quite a supply for experimental purposes—"

"And squirting it on traffic is your idea of a joke."

"Oh, no! For years I have been incensed—as who hasn't?—at the reckless drivers that infest our city. It would never have occurred to me that I might do anything about it myself, had I not heard a less inhibited victim refer to one of these loutish persons as 'stinking'—along with less repeatable things. It brought a whimsical thought to mind—would it not be a capital jest to make dangerous drivers smell physically the way they already smelled spiritually. At first the project seemed impractical; then I recalled the invisibility apparatus which had been gathering dust in my laboratory for ten years."

"What!" I demanded. "You mean to say you've had this gadget for years and have not used it?"

He gave me a big-eyed stare. "Why, certainly. Obviously there was no use for it. In the hands of an irresponsible person it could be the source of much wrong doing."

"But—Hell, you could turn it over to the government"

He shook his head.

"All right, then," I persisted. "You could use it yourself. Think of the things you could do. You could start out by cleaning up that mess down at the City Hall. Sit in on the crooked deals and expose them."

He shook his head again. "I am forced to regard your viewpoint as naive. Good government grows out of the people; it can not be handed to them."

"Oh, well," I shrugged. "You're probably right. Still, think of the fun you could have—" I was thinking about back stage at the Follies.

But he shook his head again. "Uses for amusement only would almost certainly involve some violation of the right of privacy."

I gave up. “Go on with your story, Cuthbert.”

“Having determined to try the jest, I made my preparations. They were simple. A water gun suggested itself as an applicator and a hot water bottle served as a source of supply. Earlier today I sought an outlying intersection and experimented. The results exceeded my fondest hopes—there are at least a dozen drivers who regret having jumped the light.

“Then I came down here where the hunting is better. I was just warming up when you apprehended me.”

I stood up. “Cuthbert Higgins,” I said, “you are a public benefactor. Long may you squirt!”

He was pleased as a kid. “Would you like to try it?”

“Would I! Half a sec while I phone in my story,”

His face fell. “Oh dear!” he moaned. “I had forgotten you were connected with the press.”

“‘Chained’ is the word, Cuthbert. But don’t give it a thought. I’ll cover you like a grave.”

Dobbs was difficult as usual, but I convinced him, gave my story to a rewrite man, along with the license numbers of the cars I had seen sprayed, and rang off.

CUTHBERT’S car was a couple of streets away. I wanted to drive, but be managed to convince me that he was sober, in spite of the $6.40 worth of liquor in him, by balancing a pencil by its point. Besides, I really wanted to try the invisibility gadget.

It fit like a knapsack between the shoulders, with a switch on the straps in front. I threw the switch.

It was as dark as the inside of a dog. “Get me out of here, Cuthbert!” I demanded.

He flipped the switch, and came the dawn. “Naturally you were in darkness,” he said. “Try these.”

“These” were a trick pair of spectacles. “Rectifiers.” he explained. “The shield bypasses visible light but not ultraviolet. With these you can see by ultraviolet.”

“I get it,” I announced, feeling smug. “‘Black light.’ I’ve read about it.”

“Not exactly,” he said, “but that will do. Try them.”

I did. They worked. No color, black and white like a movie peep show, but I could set with the shield up.

From then on it was “Tallyho!” and “Yoicks! Yoicks!” More fun than a Legion Convention. We penalized everything from cutting in and out to jaywalking. But a guy had to be doing some thing actually stupid and dangerous before we courtmartialed him.

All but one. We got a horn-tooter behind us at a signal change.

One of those lugs who wants the driver ahead to jump the lights so he can hurry on about his all-important business. You've met 'em.

Well, when this item pulled in behind us and started his serenade, I glanced at Cuthbert. "It's a moot point," he said, "but I think there is justification."

I slipped out of the car and sprayed him just as he was leaning out to cuss Cuthbert. So I sprayed the upholstery too, just to teach him not to use naughty words.

But the high point of the day was a motorcycle cop. He had a meek little citizen backed up to the curb and was bawling the bejasus out of him for a little technicality not actually dangerous—failing to signal a righthand turn on a clear street.

I gave the overgrown ape a liberal dose, not neglecting his pretty uniform and his shiny motorcycle.

THE *Graphic* played it big: "STENCH STALKS STREETS; POLICE PUZZLED" and "WAR WAGED ON DANGEROUS DRIVERS." The other papers copied in the later editions—all except the *Tide*. The *Tide* waited to the final, then let forth a blast that would curl your teeth, demanding immediate apprehension of "the lawless terror prowling the city streets." Poor old Cuthbert was made out to be something between Jack the Ripper and Dracula, with a dash of Nero.

When I looked over the list of victims in the *Graphic,* I understood. On it was Felix Harris, owner-publisher of the *Tide.*

Felix Harris arrived in this town riding the rods. He got a job on the *Tide,* married the boss's daughter, and has looked down on the common peepul ever since. He owns a pew in the right church, chairmans all the stuffed-shirt committees, and takes his cut on every racket in town. And he and his fatheaded son are notoriously bad drivers.

But Heaven help the cop silly enough to give one of them a ticket!

I COULD smell trouble, but saw no way for Cuthbert to be nabbed, if we were cautious. Dobbs kept me on the story; Cuthbert and I spent four colossal days, taking turns driving and squirting the stinkum.

Then I get a call from the jailhouse; Cuthbert is on ice.

They had gotten onto him through me—seems I had been tailed for three days. They had nothing against him but suspicion, but a dick had snooped around his house and had smelled him cooking up a fresh batch of the skunk juice. They nabbed him.

I ducked out to see a lawyer pal of mine. He thought it was a cinch for habeas corpus, but he was mistaken. There wasn't a judge in town who would issue a writ—we knew the squeeze was on. And Cuthbert was booked for everything from malicious mischief to criminal syndicalism. Maximum bail on each offence, total *seventy thousand dollars!*

The paper would go bail for a story, I knew—but not that much.

CUTHBERT was unperturbed, though I did my best to explain what a jam he was in. "I know I have a loyal friend in you," he said, talking soft so the turnkey would not hear. "Can you go to my home and get the invisibility apparatus?"

"What?" I almost shouted. Then I lowered my voice in a hurry. "Didn't they grab it?"

"I think not, else they would have questioned me about it."

It was there when I looked for it, right where we always hid it. I locked it into the trunk of my car and started back down town, thinking that I would have Cuthbert out of clink with its help in less time than it takes to buy a hat. When it suddenly occurs to me that I have no way to use it.

Here was the hitch: If I carried it down to the jail, they would never let me hand it to him. If I wore it in, invisible myself how would I get to his cell with if? Supposing I managed to take advantage of doors as they were opened to get into the cell blocks, and managed to find his cell—another unlikely point—how would I get out after slipping him the gear? I'd be left in the cell myself. I was already connected with the case; I had a dirty suspicion that they would throw away the key and pipe me fresh air and sunlight on alternate Wednesdays.

I pulled up to the curb.

A half hour later I had a headache and a plan, but it called for an accomplice. The plan, I mean. The headache I could manage alone.

There is a little actress, name o' Dorothy Bardou, with whom I've had many a swell tune. There isn't a mean streak in her—however, she would blow up the County Courthouse if it appealed to her imagination. I phoned her, found she was in, told her to stay that way, and drove over.

I brought her up to date and then broke my plan. "You see, Dotty," I told her, trying to make it both reasonable and intriguing, "all you do is wear the shield and follow me. I do all the explaining. When we get to his cell, you slip him the shield, and out he walks, a free man."

"Leaving Dorothy in the Bastille," she adds, coldly. "Had you thought of that, Cleve—or didn't it seem to matter?"

"Yes, darling," I said, "but that is the whole point in you doing it, instead of me. You aren't connected with the case, they've got no excuse to hold you, they don't dare sweat you, and the whole thing is a mystery. Think of the publicity."

She did not answer right away; I could see the idea had taken hold. I relaxed.

Presently she said, "I'd better dress my smartest for this. The nearer I come to looking Junior League, the better I can put over the part."

WE GOT her fur coat out of hock, which I charged to expense account, and I showed her how to use the gear. It all worked per plan, except that Dorothy sneezed in the elevator going up to the cell blocks and I had to cover with some fast pantomime.

Cuthbert was stuffy about it, but I convinced him that no other caper would work, and he gave in. I left them to work it out.

I had to get the details from Cuthbert later. "She is an intelligent and charming young lady," he opined, "as well as courageous."

"You're cookin' with gas, Cuthbert."

"Assuredly. We bad a most interesting conversation during the two hours we allowed for you to establish an alibi. At the end of that time, she took off the pack, permitted me to assume it, and gave vent to the most startling outcry it has ever has been my privilege to hear. The turnkey came most immediately. When he found my cubicle occupied by a beautiful young lady, his face was a study in conflicting emotions. He felt unequal to the situation and hurriedly fetched the jailer.

"Miss Bardou gave that worthy no time to think. She demanded to be released at once, and met his request for an explanation by demanding one of him. When the jailer, sweating copiously, opened the door for her, I slipped out in the confusion.

"She was not content to let well enough alone, but demanded to be taken to the Chief of Police at once. Having no choice in the matter of doors, I, perforce, followed along. There were gentlemen of the press there—"

"My work," I stuck in.

"Excellent. She distressed the Chief very much by propounding the theory that she had been drugged and kidnapped by his own men."

"Good girl! Did the boys get pictures ?"

"In quantity."

WE HID Cuthbert, for the time being, with an aunt of mine, since he obviously could not stay at his place nor mine. The *Tide* was still howling for his blood. I wrote an opus for the *Graphic* which suggested, in a nice way of course, that he had been done away with in jail, and that the Dotty incident had been framed up to cover it.

I told Cuthbert to keep indoors, and in particular not to play with his squirt gun, as it would queer my "foul play" story. This irked him.

He wanted especially to draw a bead on the judge of the traffic court, as I had inadvertently let him in on how the old fraud fixed tickets for the "right" people. Cuthbert's indignation you wouldn't believe. How a man could reach his age and still be that naive I don t see.

He sputtered about "equality before the law" and such matters. I had to calm him down and exact promises.

HE DIDN'T keep the promises very well. I have to piece this part of the yarn together as I did not see all of it. It seems he was taking a walk, in the shield of course which wasn't so bad, but carrying his squirt gun which was strictly against contract.

He has just crossed the intersection of two boulevards, when a big sedan, doing about sixty goes through against the signals. It just misses two cars going with the lights, and one of them climbs the curb and clashes into a store window.

This is too much for Cuthbert. He steps off the curb, takes careful aim, and gets the driver of the sedan right in the eye. Then he jumps back, for they almost run him down. He is tripped by the curbstone, and falls over a fireplug which dislodges the invisibility gear and it fall into the gutter, but he is much too busy to notice.

When he got to his feet he saw that the sedan had climbed the curb and skidded into a terrace a little further down. Filled with remorse, he went down to see if he could help. As he does, four men pile out of the car. One of them is wiping his eyes, two of them are carrying guns, and one is lugging a small child.

"I felt instinctively," Cuthbert tells me later, "that they were malefactors of some sort. So I shouted for them to put up their hands, meanwhile brandishing my water pistol."

I arrived on the scene right after this, in a police squad car. I had been at the station when the call came in and went along to cover it. For it's a kidnapping and a big one—old Felix Harris's grandson and probably the only person in the world he really cares about.

We find a curious scene. One of the kidnappers is down, shot in the leg by Cuthbert with one of their own gats, two of them are wiping their eyes and moaning, and one is very quiet. The kid is sitting on the grass, brying.

When Cuthbert sees us, he crumples up at the knees.

Cuthbert is not only a hero; the charges against him are quietly dropped. The secret of the shield is still safe, as the police car ran over it there in the gutter, and crushed it beyond recognition. The boys are puzzled as to how he can have spread so much skunk juice with the entire town looking for him, and question him not a little before they let him go, but he has an answer ready. "I'm naturally inconspicuous, “he told them . “Nobody ever notices me. You just didn’t see me.”

Which was true, as far as it went.

I groaned so much over the destruction of the shield that Cuthbert promised to build me a new one for my birthday. I’m looking forward to it. I’ve got some plans of my own.

Pied Piper

THE Prime Minister—and Field Marshal Yler! Doctor Groot's secretary was obviously excited.

Doctor Groot did not lift his eyes from the laboratory bench. With a gentle, steady grip he held a tiny furry animal while he shaved an area on its thigh.

"So? Have them wait."

"But Doctor, it's the—"

"Are they more important than this?" He reached for a hypodermic needle, loaded and waiting. His little specimen, a field mouse, did not resist the needle.

The secretary started to speak, bit her lip, and withdrew.

The statesman endured the wait somewhat better than the soldier. "I don't like this, Excellency," the field marshal grumbled. "Why should we be kept waiting while our host fiddles around among his stinks and bottles? Mind you, I'm not complaining on my own account; I learned to wait when I was a cadet; but you represent the state."

The Prime Minister twisted around in his chair to face Yler. "Patience, John. What does it matter if we are treated like job-seekers? We must have him to win the war, but does he need us? I doubt it from his viewpoint. Would you and I be here at all—if we were not already beaten."

The general turned a darker red. "With all due respect to you, sir, our armies are not yet beaten."

"True. True," the statesman conceded testily, "but they will be in the end. You told me so."

The soldier muttered to himself.

"What," asked his companion, "did you say?"

"I said I would rather go down in honorable defeat."

"Oh, that! Of course you would. All your training is to fight. My anxiety is to win. That is the difference between politicians and soldiers—we know when to give way in order to win. Resign yourself to it; we must have the services of Doctor Groot in order to win this war!"

The soldier's answer was cut short by the secretary appearing to announce that Doctor Groot could now see them. She led the way; the politician followed; the soldier brought up the rear, still fuming. As they entered Groot's study, the doctor was entering it also, from the laboratory door on the far side.

His visitors saw a vigorous elderly man, a little below middle height, stocky and a bit full about the equator. Live, merry eyes peered out of a face appropriate to an old bull ape. This was surmounted by a pink, hairless dome of startling size. He was dressed in dirty linen pajamas and a rubber apron.

"Sit down," he said, waving them to big leather armchairs and seating himself in one, after pushing several books and assorted oddments to the floor to clear the chair. "I'm sorry to have kept you waiting, but I was up to my eyes in some research that couldn't wait. But I found the answer to the problem."

The field marshal leaned forward eagerly. "You've found the weapon, Doctor?"

"The weapon? What weapon? I've found why field mice have herpies. Odd business—hysteric, just as in humans. I induced a neurosis; they responded by developing herpies. Quite interesting."

The soldier did not conceal his annoyance. "Field mice! Wasting time with such trifles! Man, don't you know there's a war?"

Groot lifted his shoulders a fraction of an inch. "Field mice; or field marshals, who shall say what is important? To me, all life is important, and interesting,"

The Prime Minister interrupted suavely, "No doubt you are right, Doctor, but Field Marshal Yler and I are faced with another problem of paramount importance to us. The sound of battle hardly reaches the quiet of your laboratory, but for us who are charged with the public responsibility of prosecuting the war, there is no escaping it. We have come to you because we are at our wit's end and need the help of your genius. Will you give us that help?"

Groot pushed out his lips. "How can I help? You have hundreds of able research men in your laboratories. Why do you think that one old man can help you win a war."

"I am no expert in these things," replied the politician, "but I know your reputation. Everywhere among our experts and technical men I hear the same thing: `If only Groot were here, he could do it.' . . . `Why isn't Doctor Groot called in on this?' They all seemed convinced that you can solve any problem you put your mind to."

"And what do you wish me to do?"

The Prime Minister turned to the soldier. "Tell him, John.”

RAPIDLY Yler sketched out the progress of the war; the statistics of men and materials involved, the factors of supply and distribution, the techniques employed in fighting, the types of weapons; the strategical principles.

"So you see that even though we started practically equal in manpower and technical equipment, because of the enemy's greater reserves of capital goods, the tide has swung against us. Under the law of decrements, each battle leaves us worse off than before; the ratio against us has increased."

Groot considered this, then answered.

"And the second differential is even worse, is it not so? The rate of increase of your losses climbs even more rapidly than the losses themselves. And it would seem from your figures that the third differential, the speed with which the rate is increasing spells disaster —you cannot even hold out until winter."

The field marshal admitted that such was true. "However," he added, "we have dug in and are holding the strategic situation practically static while we try to decide what to do about it. That is where you come in, Doctor; we need some radically new weapon or technique to change the ratio of losses to our favor, or the end is in sight. I can hold this situation together with very little change for six weeks or so. If you can go into your laboratory and produce some new and powerful weapon of offense in that length of time, you can save the country."

Groot looked at him quizzically. "So? What would you like? An incendiary ray from a portable projector, perhaps? Or how about a bomb that would not cease to explode, but would continue to destroy for days or weeks? Or perhaps you would like a means of disabling their aircraft in midair?"

The soldier nodded eagerly. "That's the idea, Doctor, any of those things. If you can do even one of them, you will be the greatest hero in the history of our country. But can you really give us such weapons?"

Groot nodded casually. "But certainly. Any of those things are obvious possibilities. You provide me with the money and help and I can deliver such weapons, or better ones, in fairly short order."

The politician intervened. "Anything you like, Doctor, anything at all. I shall direct the Secretary of the Exchequer to provide you with an unlimited drawing account. Any personnel you require will be ordered to report to you forthwith. Now suppose I leave you two to confer as to the most immediately important work to be done."

He arose and reached for his gloves and hat. "I may say, Doctor, that the reward will be commensurate with your service. Your country will not forget."

Groot motioned him back to his chair. "Don't be hasty, my friend. I did not say I would do these things. I said I could."

"Do you mean you might not—"

"In fact, I will not. I see no reason for helping you destroy our neighbor:"

The field marshal was on his feet at once.

"This is treason," he raged. "Excellency, permit me to arrest him at once. I'll make him produce—or kill him in the process!"

Groot's tones were soft, mild. "Do you really think a man my age fears death? And let me tell you, my friend, a man with your blood pressure should not get into rages—it is quite likely to bring on a thrombosis, and result in your demise."

The politician's years of practice in controlling his temper and concealing his feelings stood him in good stead. He placed a hand on the marshal's shoulder. "Sit down, John, and be quiet. You know as well as I that we can't make Dr. Groot work, if he refuses. To talk of revenge on him is silly." He turned to Groot. "Doctor, when your fellow countrymen are dying to accomplish a particular end, don't you think you owe them some explanation if you refuse to help them in any way you can?"

Groot had watched the little by-play with amusement. He replied courteously, "Certainly, Your Excellency. I will not assist in this mass killing because I see no reason why either side should win. The cultures are similar; the racial stocks are the same in about the same proportions. What difference will it make which side wins?"

"Don't you feel any obligation of patriotism, or loyalty?"

"Only," Groot shrugged, "to the race itself. Not to a particular gang."

"I don't suppose it would do any good to discuss with you the question of which side is morally justified?"

Groot shook his head. "None at all, I'm afraid."

"I thought not. We are realists, you and I—" He gathered up his gloves again. "I shall do what I can, Doctor, to protect you from the results of your decision, but political necessities may force my hand. You will understand."

"Stay." Groot stopped him again. "I refused to help you win this war. Suppose I undertook to keep you from losing?"

"But that is the same thing," exploded the field marshal.

The Prime Minister simply raised his brows.

Groot proceeded. "I will not help you to win. But if you wish it, I will show you how to stop this war with no victory on either side, provided—" He paused—" provided you agree now to my kind of peace."

He stopped and waited for the effect of his words. The Prime Minister nodded. "Go ahead. We will at least listen."

"If the war is finished with no victor and no vanquished, if the terms of the peace set up a new government which Welds the two countries into one nation, indistinguishable, free, and equal, I shall be satisfied. If you can assure me of that, I will help you—otherwise not."

The politician withdrew to the far end of the room, and stood staring out the window. He traced a triangle with his forefinger on his right cheek, and repeated it, endlessly; his brows furrowed in thought.

The old soldier got up and joined him and expostulated in whispers, "—utopian! . . . impractical! . . . different languages, different traditions . . :"

The politician left the soldier abruptly and faced the scientist. "I agree to your terms, Doctor: What do you, plan to do?"

"First you answer a question for me. Why are men willing to fight and die in a war?

"Why? For their country, for patriotic reasons. Oh, I suppose a few regard it as an adventure."

"No reason is necessary for the men themselves," put in the field marshal, "under compulsory service. They *have* to."

"But even under compulsory service," said Groot, "there must be good morale, a willingness to die fighting, else you would be faced with chronic mutiny. Not so?"

"Mmmm-well, yes. You're right."

"Doctor, why do you think men are willing to die in war?" inquired the Prime Minister.

Groot answered solemnly, "To be willing to die in war has nothing to do with personal self-preservation. To go to war is suicide—for the individual. Men are willing to be killed in war for one reason only—that their tribe may live after them. That is to say, they fight for their children. To a nation without children, war is meaningless, not worth fighting. That is a primary datum of mass psychology!"

"Go on."

"I propose that we kidnap their children!"

"It's an infamous scheme. I will not agree to it."

“It is humane.”

“It is contrary to international law.”

“Naturally. International law defines the legal ways to kill men. This proposes an illegal way to avoid killing them.”

"It violates every rule of civilized warfare!"

"Quiet, John! You'll do as you are told."

DEEP behind the enemy's lines in a moderate-sized city, life flowed quietly along. True, there were few men on the streets, and those few usually showed the marks of battle. The motor busses were driven by women; the clerks were women; even the street sweepers and rubbish collectors were women. On a hill at the outskirts of town, there stood a large boarding school, an orphanage for the children of the war dead. Here matriarchy was the natural thing.

It was recess time. The pleasant, gardened grounds swarmed and boiled with young life. Their high young voices were raised in shouts and calls that attend the age-old games of childhood; tag, ball games and the like.

In her private office, Madame Curan, superintendent, pored over her reports. The voices of the children outside reached her as a wordless, tuneless obligato, which she heard subconsciously and responded to by relaxing the tired wrinkles between her eyes.

She pushed a stack of papers to one side, and pressed a button. The outer office door opened almost at once, and she glanced up to find, not the stenographer she had rung for, but her second-in-command. The woman was plainly excited.

"Madame! Air raid!"

Madame Curare's finger was at once on another button. A siren mourned, and the shouts of the children were snuffed out.

"Are you sure?" she asked her assistant as they hurried out. "I don't understand it. They've never raided schoolhouses before."

Out on the grounds the children had formed into four queues and were being hurried down four covered ramps which led underground. The playground supervisors, young widows, most of them with a too bitter knowledge of war, were urging them on.

Madame Curan glanced up. Settling out of the sky was a huge helicopter of bombing type. It was attended by a dancing, swooping swarm of little fighting planes. Three little white clouds appeared suddenly among the planes; then a few seconds later the breeze brought three short dry coughs. The antiaircraft batteries had opened up.

Her assistant clutched at her arm.

“Where are our planes?”

"There they come.”

Three tiny specks, higher than the enemy, burst out of the glare of the sun from the southwest. They dropped their *V* formation, shifted into open column, and dived at full throttle, disregarding the convoying fighting planes in their eagerness to reach the big bomber. The bomber jerked away to the east, like a humming bird shifting to another blossom. But the column followed. It was plain that the lead pilot intended to suicide by diving into the bomber.

One of the fast little fighters of the convoy beat him to it. The two planes, defend and convoy, collided a short distance over the helicopter. They seemed to disintegrate noiselessly into disorganized rubbish.

The other two planes in the column ducked, one under, one over the floating rubbish. And passed harmlessly beyond the bomber. A few seconds later came the sound of the collision—the noise of a giant tearing a thousand yards of muslin.

The helicopter landed on the play ground.

From the control cabin on the port side forward, a small door opened, a light metal ladder swung down, and two men debarked. They approached the woman. The younger of two men addressed them.

“Madame Curan is it not? I am Lieutenant Bunes. Allow me to present Flight Commander Dansic. I will translate for him.”

“It is not necessary. I know your language. What is the meaning of this cowardly attack?”

The commander saluted smartly, and made a slight bow from the waist. “Please Madame. I am so happy that you speak our language our language. It will make everything so much simpler. I regret to inform you that you are my prisoner.”

“Obviously.”

He smiled as if she had been exceptionally witty. “Yes, of course. You and your assistants I am forced to require a certain service of you.”

“I shall not help you!”

“Please, Madame.” It will not be anything you do not wish to do. You will simply continue with your present duties of caring for children back to my country. You will be needed to care for them.”

“I will not! I shall tell them to resist. You cannot possibly control three thousand children.”

He shrugged his shoulders, “As you like, Madame. Did I not promise that you would not be required to do anything that you do not wish to do?”

While they were talking, a great door opened from the fat body of the aircraft, swung down like a drawbridge, and a dozen men trotted out at double time. They broke into two single file columns and deployed rapidly around the buildings until they completely surrounded the school at fifty-yard intervals. Each carried a large tripod and had a pack slung on his back.

Once at their posts, they set up the tripods, unslung the packs, clamped them hastily on the tripods, and stripped and stripped the covers from the packs. Then each one grasped the end of a reel of wire which was slung on his tripod, trotted away a counter-clockwise direction toward next adjacent tripod, paying out the wire as he ran. Each man clamped the end his wire to the tripod of his left-hand neighbor, and ran quickly back to his post.

A non-commissioned officer standing at the helicopter door bellowed, "Report!”

"One!" "Two!" "Three!" "Four!' "Five!" "Six!" "Seven!" "Eight!” "Nine!" "Ten!" "Eleven!" "Twelve!'

The non-commissioned officer brought his right hand down smartly.

Nothing much happened. The trees and buildings beyond the line of tripods shimmered slightly as if seen through a soap bubble film. But a motorcycle squad of civic guards came charging up the boulevard from the city a moment later, and crashed into this iridescent phantom. They piled up in a tangled, sickening heap.

Inside the helicopter a young technician sat before a complex control board, his bony, nervous hands busy with knurled levers, a triple bank of numbered keys, and numerous switches. His eyes followed the responses on the instrument panel back of the control board, noting the readings shown by quivering needles, watched the wandering of the little lighted "bugs" in the zero readers, saw the ready lights flash on.

A green light flashed near the top of the panel. He pulled a screen down in front of his face and threw a switch. A picture rapidly built up on the screen of another pale-faced nervous man. The picture spoke;

"Hi, Jan. Ready on your side?"

"Yeah. I'll give you a stand-by warning."

"I don't like this, Jan."

"Neither do I. I'll run any machine that they put in front of me, but I prefer to take 'em apart first and see what makes 'em tick."

"Right. How the hell do I know what goes on back of that board? I'm just punching keys in the dark. Besides, how do we know those kids won't be hurt? Nobody has ever seen this gadget in operation."

A shadow fell across the board. The technician looked up and saw the noncommissioned officer gesturing to him. He spoke again to the panel.

"Stand by! We're starting the music." He pressed three buttons in rapid succession.

The music reached the four standing on the grounds; Madame Curan, nervous and defiant; her assistant, frightened and looking for guidance; the commander and his aide, urbane and alert. It tinkled in their ears like a child's song. It sang to them of a child's cosmos, a child's heaven, wonderful, free from care.

Dansic smiled at Madame Curan. "Is it not silly to be at war when there is music like that in the world?"

In spite of herself she smiled back.

The music swelled and developed a throbbing almost below the audible range. Then a thin reedy piping was distinguishable. It wove in and out of the melody, embroidered it, and took it over. Come away, it said. *Come away with me.* It was piercing, but not painful—it seemed to vibrate in the very brain itself.

The children boiled up out of the underground ramps like so many puppies. They laughed and shouted and ran in circles. They rushed out of the ground and danced towards the helicopter. Up the incline they jostled, pushing and giggling.

The technician took a quick look over his shoulder, and barked, "Here they come!"

He threw a switch, and an empty frame beside the control board, six feet high, suddenly filled with opaque, velvet blackness.

The first of the children skipped up to the frame, jumped into it and disappeared.

Commander Dansic led Madame Curan into the helicopter as the last of the children were entering. She suppressed a scream when she saw what was happening to her charges, and turned furiously at the commander. But he silenced her with a wave of his hand.

"Regard, please."

Following the direction of his pointing finger, she saw, framed in the television panel, a screen similar to the one in which she stood, except that in the picture the children were popping out of a frame of blackness.

"Where are they? What have you done with them?"

"They are in my country—safe."

The last of the staff of the school was persuaded or coerced into passing through the blackness; the helicopter crew followed, two at a time. Finally the commander was left alone, save for the technician, with Madame Curan. He turned to her and bowed.

"And now, Madame, will you come with me and resume your duties to your wards?" He offered her the crook of his right elbow.

She bit her lip, then grasped the proffered arm. They marched steadily into the black.

The technician pulled off his earphones, made some last adjustments, and faced the framed darkness. He entered it with the air of a man about to take a cold shower.

Fifteen seconds later the packs on the circle of tripods blew up in a series of overlapping little pops. Ten seconds after, that the helicopter blossomed into a giant mushroom, with a dull *whooo-hooom* that shook the ground.

The two technicians need not have worried about the safety of the children. Back deep in the territory of their home country, Doctor Groot sprawled in a chair and watched the arrival of one consignment of children.

A small, warm smile lightened his ugly face, induced by the sound of the unearthly music perhaps, or possibly by the sight of so many happy children. The Prime Minister stood near him, too nervous to sit down.

Groot crooked a finger at an elderly gray-haired female in the white uniform of a chief nurse.

"Come here, Elda."

“Yes, Doctor."

"You must see to the music yourself. Reduce the volume now to the least that will keep them quiet, free from tears. Put them to sleep with it tonight. But no music—this sort of music—tomorrow, unless absolutely necessary. It is not good for them, to be happy as angels too long. They have still to be men and women."

"I understand, Doctor."

"See that they all understand." He turned to the Prime Minister, who pulled at his lip and looked distrait. "What is worrying you, my friend?"

"Well—Are you sure no harm can come to these children?"

"Do you not see?" Groot waved a hand at the frolicsome children, being herded in little groups to the quarters prepared for them.

"Yes—but suppose two of your receiving stations were tuned in the same fashion. What would happen to the children?"

Groot smiled. "You are confusing this with radio. My fault, perhaps. I called it mass-radio when speaking of it. But it is nothing of the sort. It is—how are you in mathematics?"

The Prime Minister made a grimace.

"Very well, then," continued Groot, "I cannot answer you properly. But I can tell you this: Those children were not broadcast like radio waves. They simply stepped through a door. It is as if I took that door—" He pointed to one in the end of the hall—"and twisted this building so that it fitted up against the door." He pointed to another on the other end of the hall. "I have tampered a little, oh, such a very little, with world lines, and pinned a piece of space to another piece of space with which it was not normally in contact." He pointed to the mass-radio receiver present with them in the room. "That is one end of my pin. You understand?"

"Well—not entirely."

Groot nodded. "I did not expect you to. I did not truly explain it. Without the language of tensor calculus it cannot be explained; I can only tell you an allegory."

An orderly trotted up and handed Groot a sheaf of reports. Groot glanced at them "Two more stations and we shall be ready for the shield. Have you wondered how that worked, too?"

The statesman admitted that he had.

"It is the same thing and yet different," said Groot. "This time we lock the door, very softly. The world lines are given a gentle twist and mass will not pass along them. But pshaw! Those are monkey tricks, mere gadgets, complex as they seem to the layman. But the music now that is another matter. There we tamper with the powers of heaven itself, which is why I am so careful with it."

The Prime Minister was surprised and said so. He had been impressed by the engineering miracles. The use of music he regarded as a harmless crotchet of Groot's.

"Oh, no," said Groot. "No. No indeed. Have you ever thought about music? Why is music? What is it? Can you define it?"

"Why-uh-music is certain rhythmical arrangements of sounds which produce emotional responses—"

Groot held up a hand. "Yes, but what arrangements? And what emotions? And why? Never mind. I have analyzed the matter. And now I hold the secret of Orpheus' lute, the magic of the Pied Piper."

He lowered his voice. “It is a serious matter, friend—a dangerous matter. These other toys will go to state, but this one secret I keep always to myself—and try to forget."

The orderly hurried up again, and handed him another report. Groot looked at it and passed it over to the Prime Minister.

"Time," he said. "They are all back. We will set the shield."

A few minutes later the lead wires of some thousands of tripods, spaced equally along four hundred and seventy miles of battle front, were joined. Telephonic reports were relayed to GHQ, two switches were thrown, and a shimmering intangible screen separated the opposing armies.

The war was *over-de facto*.

OFFICIAL PRIORITY MESSAGE
FROM: PRIME MINISTER
TO: CHANCELLOR
VIA: NEUTRAL LIAISON

EXCELLENCY, YOU ARE AWARE THAT HOSTILITIES HAVE CEASED BECAUSE OF OUR DEFENSIVE SCREEN. WE HOLD THREE HUNDRED FIFTY-SEVEN THOUSAND AND TWELVE OF YOUR CHILDREN AS HOSTAGES. PLEASE SEND OBSERVERS UNDER FLAG OF TRUCE TO ASSURE YOU OF THEIR WELL-BEING. WE ARE PREPARED TO MAINTAIN STATUS QUO INDEFINITELY. WE ARE READY TO TREAT WITH YOU FOR AN EQUITABLE PEACE WITHOUT VICTORY TO REPLACE PRESENT DE FACTO ARMISTSCE.

SIGNED AND SEALED BY THE
PRIME MINISTER

ON THE eleventh day of the peace conference, the chancellor asked for a recapitulation of the points agreed on. The chief clerk complied.

"First consideration: It is agreed that henceforth the two subscribing nations are one nation. Dependent considerations:" The clerk droned on. The two parliaments were to meet together, pending a census and a constitutional convention. The currencies were to be joined, and so forth, and so forth. It was provided that the war orphans in each territory were to be reared in the land of the former enemy; and that subsidies were to be provided to encourage marriages which would mingle the blood of the former two countries.

The armies were to be demobilized and a corps of technical experts were to be trained in the use of the new defensive weapons developed by Doctor Groot.

Doctor Groot himself lolled in a chair near the middle of the horseshoe of desks. When the clerk had concluded, the Prime Minister and the chancellor looked at Groot.

"Well," he said testily, when the pause had grown, "let's sign it and go home. The rest is routine."

"Had you considered," observed the chancellor, "that this new nation we have created must have a head; a chief executive?"

"What of it?"

"I cannot be it, nor can it be—" he bowed to the Prime Minister —"my honorable friend."

"Well! Pick one!"

"We have. There is only one man universally trusted here. He and no other will do, if this agreement is to be more than a scrap of paper. And that one is yourself, Doctor."

At this, the field marshal arose at his place at the head of his nation's table of military officials.

"Stop!" he shouted. "There is no need to go further with this fool's play. I shall not stand by while my country is dishonored and prostituted." He clapped his hands together. As if prearranged, two officers left the table, ran to the horseshoe and grasped Groot on each side.

"You are relieved of office, Mr. Prime Minister. I shall conduct the affairs of our country until the war is over. Safe conduct will be provided for the representatives of the enemy. Hostilities will be resumed at once. And that—" he pointed at Dr. Groot and bristled in rage—"that meddler must be removed—completely."

GROOT sat quietly, making no attempt to resist his captors. But under the table, his shoe pressed down on a button concealed in the rug. In another room some relays clicked.

And the music started.

Not children's music this time. No, rather the *Ride of the Valkyrie,* the *Marseillaise.* Not these exactly, but rather that quality of each, and of every martial song, that promises men Valhalla after battle.

The field marshal heard it and stopped in his tracks; his fine old head reared up, listening. The two officers grasping Groot heard it, and dropped his arms. One by one almost every one of the uniformed men stood up and quested for the sound. Here and there an occasional 4 rock-coated dignitary joined them. Almost immediately they formed a column of fours and swung away down the great hall, their heels pounding to two-four time.

At the end of the hall a tapestry swung aside and revealed . . . nothingness . . . nothingness, in a large frame.

The column marched into the blackness. When the last man had disappeared, Grout released the pressure from the button. The blackness vanished, leaving an empty frame, with the wall just beyond it. A murmur of expelled breath filled the room.

The Prime Minister turned to Grout and dabbed at his brow with a fine linen handkerchief. "Good God, man, where have you sent them?"

Grout shook his head. "I am sorry. I do not know."

"You don't know?"

"No. You see, I anticipated some trouble, but did not have time to fasten the other end of my `pin'."

The Prime Minister was horror stricken.

"Poor old John," he muttered.

Grout nodded soberly. "Yes. I am sorry I had to do it. Poor old John. He was such a good man—I liked him so very much."

NO BANDS PLAYING, NO FLAGS FLYING—

"The bravest man I ever saw in my life!" Jones said, being rather shrill about it.

We—Jones and Arkwright and I—were walking toward the parking lot at the close of visiting hours out at the veterans hospital. Wars come and wars go, but the wounded we have always with us—and damned little attention they get between wars. If you bother to look (few do), you can find some broken human remnants dating clear back to World War One in some of our wards.

So our post always sends out a visiting committee every Sunday, every holiday. I'm usually on it, have been for thirty years—if you can't pay a debt, you can at least try to meet the interest. And you do get so that you can stand it.

But Jones was a young fellow making his first visit. Quite upset, he was. Well, surely, I would have despised him if he hadn't been—this crop was fresh in from Southeast Asia. Jones had held it in, then burst out with that remark once we were outside.

"What do you mean by 'bravery'?" I asked him. (Not but what Jones had plenty to back up his opinion—this lad he was talking about was shy both legs and his eyesight, yet he was chin-up and merry.)

"Well, what do *you* mean by 'bravery'?" Jones demanded, then added, "sir." Respect for my white hair rather than my opinions, I think; there was an edge in his voice.

"Keep your shirt on, son," I answered. "What that lad back there has I'd call 'fortitude,' the ability to endure adversity without losing your morale. I'm not disparaging it; it may be a higher virtue than bravery—but I define 'bravery' as the capacity to *choose* to face danger when you are frightened by it."

"Why do you say 'choose'?"

"Because nine men out of ten meet the test when it's forced on them. But it takes something extra to face up to danger when it scares the crap out of you and there's an easy way to bug out." I glanced at my watch. "Give me three minutes and I'll tell you about the bravest man I've ever met."

I was a young fellow myself back between War One and War Two and had been in a hospital much like this one Arkwright and Jones and I had visited—picked up a spot on my lung in the Canal Zone and had been sent there for the cure. Mind you, this was years ago when lung therapy was primitive. No antibiotics, no specific drugs. The first thing they would try was a phrenectomy—cut the nerve that controls the diaphragm to immobilize the lung and let it get well. If that didn't work, they used artificial pneumothorax. If that failed, they did a "backdoor job"—chop out some ribs and fit you with a corset.

All these were just expedients to hold a lung still so it could get well. In artificial pneumothorax they shove a hollow needle between your ribs so that the end is between rib wall and lung wall, then pump the space in between full of air; this compresses the lung like a squeezed sponge.

But the air would be absorbed after a while and you had to get pumped up again. Every Friday morning those of us on pneumo would gather in the ward surgeon's office for the needle. It wasn't grim—lungers are funny people; they are almost always cheerful. This was an officers' ward and we treated it like a club. Instead of queuing up outside the surgeon's office we would swarm in, loll in his chair, sit on his desk, smoke his cigarettes, and swap lies while he took care of us. Four of us that morning and I was the first.

Taking the air needle isn't bad—just a slight prick as it goes in and you can even avoid that if you want to bother with skin anesthesia. It's over in a few minutes; you put your bathrobe back on and go back to bed. I hung around after I was through because the second patient, chap named Saunders, was telling a dirty story that was new to me.

He broke off in the middle of it to climb up on the table when I got off. Our number-one ward surgeon was on leave and his assistant was taking care of us—a young chap not long out of school. We all liked him and felt he had the makings of a great surgeon.

Getting pumped up is not dangerous in any reasonable sense of the word. You can break your neck falling off a step ladder, choke to death on a chicken bone. You can slip on a rainy day, knock yourself out, and drown in three inches of rain water. And there is just as unlikely a way to hit the jackpot in taking artificial pneumothorax. If the needle goes a little too far, penetrates the lung, and if an air bubble then happens to be forced into a blood vessel and manages to travel all the way back to the heart without being absorbed, it is possible though extremely unlikely to get a sort of vapor lock in the valves of your heart—air embolism, the doctors call it. Given all these improbable events, you can die.

We never heard the end of Saunders' dirty joke. He konked out on the table.

The young doc did everything possible for him and sent for help while he was doing it. They tried this and that, used all the tricks, but the upshot was that they brought in the meat basket and carted him off to the morgue.

Three of us were still standing there, not saying a word—me, reswallowing my breakfast and thanking my stars that I was through with it, an ex-field-clerk named Josephs who was next up, and Colonel Hostetter who was last in line. The surgeon turned and looked at us. He was sweating and looked bad—may have been the first patient he had ever lost; he was still a kid. Then he turned to Dr. Armand who had come in from the next ward. I don't know whether he was going to ask the older man to finish it for him or whether he was going to put it off for a day, but it was clear from his face that he did not intend to go ahead right then.

Whatever it was, he didn't get a chance to say it. Josephs stood up, threw off his bathrobe and climbed up on the table. He had just lighted a cigarette; he passed it to a hospital orderly and said, "Hold this for me, Jack, while Doctor"—he named our own surgeon—"pumps me up." With that he peels up his pajama coat.

You know the old business about sending a student pilot right back up after his first crack-up. That was the shape our young doctor was in—he had to get right back to it and prove to himself that it was just bad luck and not because he was a butcher. But he couldn't send himself back in; Josephs had to do it for him. Josephs could have ruined him professionally that moment, by backing out and giving him time to work up a real case of nerves—but instead Josephs forced his hand, made him do it.

Josephs died on the table.

The needle went in and everything seemed all right, then Josephs gave a little sigh and died. Dr. Armand was on hand this time and took charge, but it did no good. It was like seeing the same horror movie twice. The same four men arrived to move the body over to the morgue—probably the same basket.

Our doctor now looked like a corpse himself. Dr. Armand took over. "You two get back to bed," he said to Colonel Hostetter and me. "Colonel, come over to my ward this afternoon; I'll take care of your treatment."

But Hostetter shook his head. "No, thank you," he said crisply, "My ward surgeon takes care of my needs." He took off his robe. The young fellow didn't move. The Colonel went up to him and shook his arm. "Come, now Doctor—you'll make us both late for lunch." With that he climbed up on the table and exposed his ribs.

A few moments later he climbed off again, the job done, and our ward surgeon was looking human again, although still covered with sweat.

I stopped to catch my breath. Jones nodded soberly and said, "I see what you mean. To do what Colonel Hostetter did takes a kind of cold courage way beyond the courage needed to fight."

"He doesn't mean anything of the sort," Arkwright objected. "He wasn't talking about Hostetter; he meant the intern. The doctor had to steady down and do a job—not once but twice. Hostetter just had to hold still and let him do it."

I felt tired and old. "Just a moment," I said. "You're both wrong. Remember I defined 'bravery' as requiring that a man had to have a choice . . . and chooses to be brave in spite of his own fear. The ward surgeon had the decisions forced on him, so he is not in the running. Colonel Hostetter was an old man and blooded in battle—and he had Josephs' example to live up to. So he doesn't get first prize."

"But that's silly," Jones protested. "Josephs was brave, sure—but, if it was hard for Josephs to offer himself, it was four times as hard for Hostetter. It would begin to look like a jinx—like a man didn't stand a chance of coming off that table alive."

"Yes, yes!" I agreed. "I know, that's the way *I* felt at the time. But you didn't let me finish. I know for *certain* that it took more bravery to do what Josephs did.

"The autopsy didn't show an air embolism in Josephs, or anything else. Josephs died of fright."

SIXTH COLUMN

CHAPTER ONE

"What the hell goes on here?" Whitey Ardmore demanded.

They ignored his remark as they had ignored his arrival. The man at the television receiver said, "Shut up. We're listening," and turned up the volume. The announcer's voice blared out: "—Washington destroyed completely before the government could escape. With Manhattan in ruins, that leaves no—"

There was a click as the receiver was turned off. "That's that," said the man near it. "The United States is washed up." Then he added, "Anybody got a cigarette?"

Getting no answer, he pushed his way out of the small circle gathered around the receiver and felt through the pockets of a dozen figures collapsed by a table. It was not too easy, as rigor mortis had set in, but he finally located a half-empty pack, from which he removed a cigarette and lighted it.

"Somebody answer me!" commanded Ardmore. "What's happened here?"

The man with the cigarette looked him over for the first time. "Who are you?"

"Ardmore, major, intelligence. Who are you?"

"Calhoun, colonel in research."

"Very well, Colonel—I have an urgent message for your commanding officer. Will you please have someone tell him that I am here and see to it that I am taken to him?" He spoke with poorly controlled exasperation.

Calhoun shook his head. "Can't do it. He's dead." He seemed to derive some sort of twisted pleasure from the announcement.

"Huh?"

"That's right—dead. They're all dead, all the rest. You see before you, my dear Major, all that are left of the personnel of the Citadel—perhaps I should say of the emergency research laboratory, department of defense, this being in the nature of an official report." He smiled with half his face, while his eye took in the handful of living men in the room.

Ardmore took a moment to comprehend the statement, then inquired, "The PanAsians?"

"No. No, not the PanAsians. So far as I know, the enemy does not suspect the existence of the Citadel. No, we did it ourselves—an experiment that worked too well. Dr. Ledbetter was engaged in research in an attempt to discover a means of—"

"Never mind that, Colonel. Whom does command revert to? I've got to carry out my orders."

"Command? Military command? Good Lord, man, we haven't had time to think about that yet. Wait a moment."

His eye roved around the room, counting noses. "Hm-m-m—I'm senior to everyone here—and they are all here. I suppose that makes me commanding officer."

"No line officers present?"

"No. All special commissions. That leaves me it. Go ahead with your report."

Ardmore looked about at the faces of the half a dozen men in the room. They were following the conversation with apathetic interest. Ardmore worried to himself before replying over how to phrase the message. The situation had changed; perhaps he should not deliver it at all.

"I was ordered," he said, picking his words, "to inform your general that he was released from superior command. He was to operate independently and prosecute the war against the invader according to his own judgment. You see," he went on, "when I left Washington twelve hours ago we knew they had us. This concentration of brain power in the Citadel was about the only remaining possible military asset."

Calhoun nodded. "I see. A defunct government sends orders to a defunct laboratory. Zero plus zero equals zero. It's all very funny if one only knew when to laugh."

"Colonel!"

"Yes?"

"They are your orders now. What do you propose to do with them?"

"Do with them? What the hell is there to do? Six men against four hundred million. I suppose," he added "to make everything nice and tidy for the military mind I should write out a discharge from the United States army for everybody left and kiss 'em good-by. I don't know where that leaves me—hara-kiri, perhaps. Maybe you don't get it. This is all the United States there is left. And it's left because the PanAsians haven't found it."

Ardmore wet his lips. "Apparently I did not clearly convey the order. The order was to take charge, and prosecute the war!"

"With what?"

He measured Calhoun before answering. "It is not actually your responsibility. Under the changed situation, in accordance with the articles of war, as senior line officer present I am assuming command of this detachment of the United States army!"

It hung in the balance for twenty heartbeats. At last Calhoun stood up and attempted to square his stooped shoulders. "You are perfectly correct, sir. What are your orders?"

"What are your orders?" he asked himself. Think fast, Ardmore, you big Junk, you've shot off your face—now where are you? Calhoun was right when he asked "With what?" Yet he could not stand still and see the remnant of military organization fall to pieces.

You've got to tell 'em something, and it's got to be good; at least good enough to hold 'em until you think of something better. Stall, brother, stall! "I think we had best examine the new situation here, first. Colonel, will you oblige me by having the remaining personnel gather around—say around that big table? That will be convenient."

"Certainly, sir." The others, having heard the order, moved toward the table. "Graham! And you, what's your name? Thomas, isn't it? You two remove Captain MacAllister's body to some other place. Put him in the corridor for now."

The commotion of getting one of the ubiquitous corpses out of the way and getting the living settled around a table broke the air of unreality and brought things into focus. Ardmore felt more self-confidence when he turned again to Calhoun. "You had better introduce me to those here present. I want to know what they do and something about them, as well as their names."

It was a corporal's guard, a forlorn remnant. He had expected to find, hidden here safely and secretly away under an unmarked spot in the Rocky Mountains, the most magnificent aggregation of research brains ever gathered together for one purpose. Even in the face of complete military disaster to the regular forces of the United States, there remained a reasonable outside chance that two hundred-odd keen scientific brains, secreted in a hideaway whose very existence was unsuspected by the enemy and equipped with every modern facility for research, might conceivably perfect and operate some weapon that would eventually drive out the PanAsians.

For that purpose he had been sent to tell the commanding general that he was on his own, no longer responsible to higher authority. But what could half a dozen men do in any case?

For it was a scant half a dozen. There was Dr. Lowell Calhoun, mathematician, jerked out of university life by the exigencies of war and called a colonel. There was Dr. Randall Brooks, biologist and biochemist, with a special commission of major. Ardmore liked his looks; he was quiet and mild, but gave the impression of an untroubled strength of character superior to that of a more extroverted man—he would do, and his advice would be useful.

Ardmore mentally dubbed Robert Wilkie a "punk kid." He was young and looked younger, having an overgrown collie-dog clumsiness, and hair that would not stay in place. His field, it developed, was radiation, and the attendant branches of physics too esoteric for a layman to understand. Ardmore had not the slightest way of judging whether or not he was any good in his specialty. He might be a genius, but his appearance did not encourage the idea.

No other scientist remained. There were three enlisted men: Herman Scheer, technical sergeant. He had been a mechanic, a die maker, a tool maker. When the army picked him up he had been making precision instruments for the laboratories of the Edison Trust. His brown, square hands and lean fingers backed up his account of himself. His lined, set face and heavy jaw muscles made Ardmore judge him to be a good man to have at his back in a tight place. He would do.

There remained Edward Graham, private first-class, specialist rating officers' cook. Total war had turned him from his profession as an artist and interior decorator to his one other talent, cooking. Ardmore was unable to see how he could fit into the job, except, of course, that somebody had to cook.

The last man was Graham's helper, Jeff Thomas, private—background: none. "He wandered in here one day," explained Calhoun. "We had to enlist him and keep him here to protect the secret of the place."

Acquainting Ardmore with the individuals of his "command" had used up several minutes during which he had thought furiously with half his mind about what he should say next. He knew what he had to accomplish, some sort of a shot in the arm that would restore the morale of this badly demoralized group, some of the old hokum that men live by. He believed in hokum, being a publicity man by trade and an army man only by necessity. That brought to mind another worry—should he let them know that he was no more a professional than they, even though he happened to hold a line commission? No, that would not be very bright; they needed just now to regard him with the faith that the layman usually holds for the professional.

Thomas was the end of the list: Calhoun had stopped talking. Here's your chance, son, better not muff it!

Then he had it fortunately it would take only a short buildup. "It will be necessary for us to continue our task assignment independently for an indefinite period. I want to remind you that we derive our obligations not from our superior officers who were killed in Washington, but from the people of the United States, through their Constitution. That Constitution is neither captured nor destroyed—it cannot, for it is not a piece of paper, but the joint contract of the American people. Only the American people can release us from it."

Was he right? He was no lawyer, and he didn't know—but he did know that they needed to believe it. He turned to Calhoun. "Colonel Calhoun, will you now swear me in as commanding officer of this detachment of the United States army?" Then he added, as an apparent afterthought, "I think it would be well for us all to renew our oaths at the same time."

It was a chanted chorus that echoed through the nearly empty room. "'I do solemnly swear—to carry out the duties of my office—and to uphold and defend the Constitution of the United States—against all of its enemies, domestic and foreign!'

"So help me God."

"'So help me God!'"

Ardmore was surprised to discover that the show he had staged brought tears to his own cheeks. Then he noticed them in Calhoun's eyes. Maybe there was more to it than he had thought.

"Colonel Calhoun, you, of course, become director of research. You are second in command, but I will carry out the duties of executive officer myself in order to leave you free to pursue your scientific inquiries. Major Brooks and Captain Wilkie are assigned to you. Scheer!"

"Yes, sir!"

"You work for Colonel Calhoun. If he does not need all of your service, I will assign additional duties later. Graham!"

"Yes, sir."

"You will continue your present duties. You are also mess sergeant, mess officer, supply officer—in fact, you are the whole commissary department. Bring me a report later today estimating the number of rations available and the condition of perishables. Thomas works for you, but is subject to call by any member of the scientific staff any time they want him. That may delay meals, but it can't be helped."

"Yes, sir."

"You and I and Thomas will perform all duties among us that do not directly apply to research, and will assist the scientists in any way and at any time that they need us. That specifically includes myself. Colonel," he emphasized, turning to Calhoun, "if another pair of untrained hands is useful at any point, you are directed to call on me."

"Very well, Major."

"Graham, you and Thomas will have to clear out the bodies around the place before they get too high—say by tomorrow night. Put them in an unused room and hermetically seal it. Scheer will show you how." He glanced at his wrist. "Two o'clock. When did you have lunch?"

"There . . . uh . . . was none today."

"Very well. Graham, serve coffee and sandwiches here in twenty minutes."

"Very good, sir. Come along, Jeff."

"Coming."

As they left, Ardmore turned back to Calhoun. "In the meantime, Colonel, let's go to the laboratory where the catastrophe originated. I still want to find out what happened here!"

The other two scientists and Scheer hesitated; he picked them up with a nod, and the little party filed out.

"You say nothing in particular happened, no explosion, no gas—yet they died?" They were standing around Dr. Ledbetter's last set-up. The martyred scientist's body still lay where it had fallen, a helpless, disorganized heap. Ardmore took his eyes from it and tried to make out the meaning of the set-up apparatus. It looked simple, but called no familiar picture to mind.

"No, nothing but a little blue flame that persisted momentarily. Ledbetter had just closed this switch." Calhoun pointed to it without touching it. It was open now, a self-opening, springloaded type. "I felt suddenly dizzy. When my head cleared, I saw that Ledbetter had fallen and went to him, but there was nothing that I could do for him. He was dead—without a mark on him."

"It knocked me out," offered Wilkie. "I might not have made it if Scheer hadn't given me artificial respiration."

"You were here?" Ardmore asked.

"No, I was in the radiation laboratory over at the other end of the plant. It killed my chief."

Ardmore frowned and pulled a chair out from the wall. As he started to sit down there was a scurrying sound, a small gray shape flashed across the floor and out the open door. A rat, he thought, and dismissed the matter. But Dr. Brooks stared at it in amazement, and ran out the door himself, calling out behind him: "Wait a minute—right back!"

"I wonder what's gotten into him?" Ardmore inquired of no one in particular. The thought flashed through his mind that the strain of events had finally been too much for the mild little biologist.

They had less than a minute to wait in order to find out. Brooks returned as precipitately as he had left. The exertion caused him to pant and interfered with articulation. "Major Ardmore! Dr. Calhoun! Gentlemen!" He paused and caught his breath. "My white mice are alive!"

"Huh? What of it?"

"Don't you see? It's an important datum, perhaps a crucially important datum. None of the animals in the biological laboratory was hurt! Don't you see?"

"Yes, but—Oh! Perhaps I do—the rat was alive and your mice weren't killed, yet men were killed all around them."

"Of course! Of course!" Brooks beamed at Ardmore.

"Hm-m-m. An action that kills a couple of hundred men through rock walls and metal, with no fuss and no excitement, yet passes by mice and the like. I've never before heard of anything that would kill a man but not a mouse." He nodded toward the apparatus. "It looks as if we had big medicine in that little gadget, Calhoun."

"So it does," Calhoun agreed, "if we can learn to control it."

"Any doubt in your mind?"

"Well—we don't know why it killed, and we don't know why it spared six of us, and we don't know why it doesn't harm animals."

"So—Well, that seems to be the problem." He stared again at the simple-appearing enigma. "Doctor, I don't like to interfere with your work right from scratch, but I would rather you did not close that switch without notifying me in advance." His gaze dropped to Ledbetter's still figure and hurriedly shifted.

Over the coffee and sandwiches he pried further into the situation. "Then no one really knows what Ledbetter was up to?"

"You could put it that way," agreed Calhoun. "I helped him with the mathematical considerations, but he was a genius and somewhat impatient with lesser minds. If Einstein were alive, they might have talked as equals, but with the rest of us he discussed only the portions he wanted assistance on, or details he wished to turn over to assistants."

"Then you don't know what he was getting at?"

"Well, yes and no. Are you familiar with general field theory?"

"Criminy, no!"

"Well—that makes it rather hard to talk, Major Ardmore. Dr. Ledbetter was investigating the theoretically possible additional spectra—"

"Additional spectra?"

"Yes. You see, most of the progress in physics in the last century and a half has been in dealing with the electromagnetic spectrum, light, radio, X-ray—"

"Yes, yes, I know that, but how about these additional spectra?"

"That's what I am trying to tell you," answered Calhoun with a slight note of annoyance. "General field theory predicts the possibility of at least three more entire spectra. You see, there are three types of energy fields known to exist in space: electric, magnetic, and gravitic or gravitational. Light, X-rays, all such radiations, are part of the electromagnetic spectrum. Theory indicates the possibility of analogous spectra between magnetic and gravitic, between electric and gravitic, and finally, a three-phase type between electric-magnetio-gravitic fields. Each type would constitute a complete new spectrum, a total of three new fields of learning.

"If there are such, they would presumably have properties quite as remarkable as the electromagnetic spectrum and quite different. But we have no instruments with which to detect such spectra, nor do we even know that such spectra exist."

"You know," commented Ardmore, frowning a little, "I'm just a layman in these matters and don't wish to set my opinion up against yours, but this seems like a search for the little man who wasn't there. I had supposed that this laboratory was engaged in the single purpose of finding a military weapon to combat the vortex beams and A-bomb rockets of the PanAsians. I am a bit surprised to find the man whom you seem to regard as having been your ace researcher engaged in an attempt to discover things that he was not sure existed and whose properties were totally unknown. It doesn't seem reasonable."

Calhoun did not answer; he simply looked supercilious and smiled irritatingly. Ardmore felt put in the wrong and was conscious of a warm flush spreading up toward his face. "Yes, yes," he said hastily, "I know I'm wrong—whatever it was that Ledbetter found, it killed a couple of hundred men. Therefore it is a potential military weapon—but wasn't he just mugging around in the dark?"

"Not entirely," Calhoun replied, with a words-of-one-syllable air. "The very theoretical considerations that predict additional spectra allow of some reasonable probability as to the general nature of their properties. I know that Ledbetter had originally been engaged in a search for a means of setting up tractor and pressor beams—that would be in the magnetogravitic spectrum—but the last couple of weeks he appeared to be in a condition of intense excitement and radically changed the direction of his experimentation. He was close-mouthed; I got no more than a few hints from the transformations and developments which he had me perform for him. However—" Calhoun drew a bulky looseleaf notebook from an inner pocket "he kept complete notes of his experiments. We should be able to follow his work and perhaps infer his hypotheses."

Young Wilkie, who was seated beside Calhoun, bent toward him. "Where did you find these, doctor?" he asked excitedly.

"On a bench in his laboratory. If you had looked you would have seen them."

Wilkie ignored the thrust; he was already eating up the symbols set down in the opened book. "But that is a radiation formula—"

"Of course it is—d'you think I'm a fool?"

"But it's all wrong!"

"It may be from your standpoint; you may be sure that it was not to Dr. Ledbetter."

They branched off into argument that was totally meaningless to Ardmore; after some minutes he took advantage of a pause to say, "Gentlemen! Gentlemen! just a moment. I can see that I am simply keeping you from your work; I've learned all that I can just now. As I understand it, your immediate task is to catch up with Dr. Ledbetter and to discover what it is that his apparatus does—without killing yourselves in the process. Is that right?"

"I would say that is a fair statement," Calhoun agreed cautiously.

"Very well, then—carry on, and keep me advised at your convenience." He got up; the others followed his example. "Oh just one more thing."

"Yes?"

"I happened to think of something else. I don't know whether it is important or not, but it came to mind because of the importance that Dr. Brooks attached to the matter of the rats and mice." He ticked points off on his fingers.

"Many men were killed; Dr. Wilkie was knocked out and very nearly died; Dr. Calhoun experienced only a momentary discomfort; the rest of those who lived apparently didn't suffer any effects of any sort weren't aware that anything had happened except that their companions mysteriously died. Now, isn't that data of some sort?"

He awaited a reply anxiously, being subconsciously afraid that the scientists would consider his remarks silly, or obvious.

Calhoun started to reply, but Dr. Brooks cut in ahead of him. "Of course, it is! Now why didn't I think of that? Dear me, I must be confused today. That establishes a gradient, an ordered relationship in the effect of the unknown action." He stopped and thought, then went on almost at once. "I really must have your permission, Major, to examine the cadavers of our late colleagues, then by examining for differences between them and those alive, especially those hard hit by the unknown action—" He broke off short and eyed Wilkie speculatively.

"No, you don't!" protested Wilkie. "You won't make a guinea pig out of me. Not while I know it!" Ardmore was unable to tell whether the man's apprehension was real or facetious. He cut it short.

"The details will have to be up to you gentlemen. But remember—no chances to your lives without notifying me."

"You hear that, Brooksie?" Wilkie persisted.

Ardmore went to bed that night from sheer sense of duty, not because he felt ready to sleep. His immediate job was accomplished; he had picked up the pieces of the organization known as the Citadel and had thrown it together into some sort of a going concern—whether or not it was going any place he was too tired to judge, but at least it was going. He had given them a pattern to live by, and, by assuming leadership and responsibility, had enabled them to unload their basic worries on him and thereby acquire some measure of emotional security. That should keep them from going crazy in a world which had gone crazy.

What would it be like, this crazy new world—a world in which the superiority of western culture was not a casually accepted "Of course," a world in which the Stars and Stripes did not fly, along with the pigeons, over every public building?

Which brought to mind a new worry: if he was to maintain any pretense of military purpose, he would have to have some sort of a service of information.

He had been too busy in getting them all back to work to think about it, but he would have to think about it tomorrow, he told himself, then continued to worry about it.

An intelligence service was as important as a new secret weapon—more important; no matter how fantastic and powerful a weapon might be developed from Dr. Ledbetter's researches, it would be no help until they knew just where and how to use it against the enemy's weak points. A ridiculously inadequate military intelligence had been the prime characteristic of the United States as a power all through its history. The most powerful nation the globe had ever seen—but it had stumbled into wars like a blind giant. Take this present mess: the atom bombs of PanAsia weren't any more powerful than our own but we had been caught flatfooted and had never gotten to use a one.

We had had how many stockpiled? A thousand, he had heard. Ardmore didn't know, but certainly the PanAsians had known, just how many, just where they were. Military intelligence had won the war for them, not secret weapons. Not that the secret weapons of the PanAsians were anything to sneer at particularly when it was all too evident that they really were "secret." Our own so-called intelligence services had fallen down on the job.

O. K., Whitey Ardmore, it's all yours now! You can build any sort of an intelligence service your heart desires—using three nearsighted laboratory scientists, an elderly master sergeant, two kitchen privates, and the bright boy in person. So you are good at criticizing—"If you're so smart, why ain't you rich?"

He got up, wished passionately for just one dose of barbiturate to give him a night's sleep, drank a glass of hot water instead, and went back to bed.

Suppose they did dig up a really powerful and new weapon? That gadget of Ledbetter's certainly looked good, if they could learn to handle it but what then? One man couldn't run a battle cruiser—he couldn't even get it off the ground—and six men couldn't whip an empire, not even with seven-league boots and a death ray. What was that old crack of Archimedes? "If I had a lever long enough and a fulcrum on which to rest it, I could move the Earth." How about the fulcrum? No weapon was a weapon without an army to use it.

He dropped into a light sleep and dreamed that he was flopping around on the end of the longest lever conceivable, a useless lever, for it rested on nothing. Part of the time he was Archimedes, and part of the time Archimedes stood beside him, jeering and leering at him with a strongly Asiatic countenance.

CHAPTER TWO

Ardmore was too busy for the next couple of weeks to worry much about anything but the job at hand. The underlying postulate of their existence pattern—that they were, in fact, a military organization which must some day render an accounting to civil authority—required that he should comply with, or closely simulate compliance with, the regulations concerning paperwork, reports, records, pay accounts, inventories, and the like. In his heart he felt it to be waste motion, senseless, yet as a publicity man, he was enough of a jackleg psychologist to realize intuitively that man is a creature that lives by symbols. At the moment these symbols of government were all important.

So he dug into the regulation manual of the deceased paymaster and carefully closed out the accounts of the dead, noting in each case the amounts due each man's dependents "in lawful money of the United States," even while wondering despondently if that neat phrase would ever mean anything again. But he did it, and he assigned minor administrative jobs to each of the others in order that they might realize indirectly that the customs were being maintained.

It was too much clerical work for one man to keep up. He discovered that Jeff Thomas, the cook's helper, could use a typewriter with facility and had a fair head for figures. He impressed him into the job. It threw more work on Graham, who complained, but that was good for him, he thought—a dog needs fleas. He wanted every member of his command to go to bed tired every night.

Thomas served another purpose. Ardmore's highstrung disposition required someone to talk to. Thomas turned out to be intelligent and passively sympathetic, and he found himself speaking with more and more freedom to the man. It was not in character for the commanding officer to confide in a private, but he felt instinctively that Thomas would not abuse his trust—and he needed nervous release.

Calhoun brought up the matter which forced Ardmore to drop his preoccupation with routine and turn his attention to more difficult matters. Calhoun had called to ask permission to activate Ledbetter's apparatus, as modified to suit their current hypotheses, but he added another and embarrassing question.

"Major Ardmore, can you give me some idea as to how you intend to make use of the 'Ledbetter effect'?"

Ardmore did not know; he answered with another question. "Are you near enough to results to make that question urgent? If so, can you give me some idea of what you have discovered so far?"

"That will be difficult," Calhoun replied in an academic and faintly patronizing manner, "since I am constrained not to speak in the mathematical language which, of necessity, is the only way of expressing such things—"

"Now, Colonel, please," Ardmore broke in, irritated more than he would admit to himself and inhibited by the presence of Private Thomas, "you can kill a man with it or you can't and you can control whom you kill or you can't."

"That's an oversimplification," Calhoun argued. "However, we think that the new set-up will be directional in its effect. Dr. Brook's investigations caused him to hypothecate an asymmetrical relationship between the action and organic life it is applied to, such that an inherent characteristic of the life form determines the effect of the action as well as the inherent characteristics of the action itself. That is to say, the effect is a function of the total factors of the process, including the life form involved, as well as the original action—"

"Easy, easy, Colonel. What does that mean as a weapon?"

"It means that you could turn it on two men and decide which one it is to kill—with proper controls," Calhoun answered testily. "At least, we think so. Wilkie has volunteered to act as a control on it, with mice as the object."

Ardmore granted permission for the experiment to take place, subject to precautions and restrictions.

When Calhoun had gone, his mind returned at once to the problem of what he was going to do with the weapon—if any. And that required data that he did not have. Damn it! He had to have a service of information; he had to know what was going on outside.

The scientists were out, of course. And Scheer, for the scientific staff needed his skill. Graham? No, Graham was a good cook, but nervous and irritable, emotionally not stable, the very last man to pick for a piece of dangerous espionage. It left only himself. He was trained for such things; he would have to go.

"But you can't do that, sir," Thomas reminded him.

"Huh? What's that?" He had been unconsciously expressing his thoughts aloud, a habit he had gotten into when he was alone, or with Thomas only. The man's manner encouraged using him for a sounding board.

"You can't leave your command, sir. Not only is it against regulations, but, if you will let me express an opinion, everything you have done so far will fall to pieces."

"Why should it? I'll be back in a few days."

"Well, sir, maybe it would hold together for a few days—though I'm not sure of that. Who would be in charge in your absence?"

"Colonel Calhoun—of course."

"Of course." Thomas expressed by raised eyebrows and ready agreement an opinion which military courtesy did not permit him to say aloud. Ardmore knew that Thomas was right. Outside of his specialty, Calhoun was a bad-tempered, supercilious, conceited old fool, in Ardmore's opinion. Ardmore had had to intercede already to patch up trouble which Calhoun's arrogance had caused. Scheer worked for Calhoun only because Ardmore had talked with him, calmed him down, and worked on his strong sense of duty.

The situation reminded him of the time when he had worked as press agent for a famous and successful female evangelist. He had signed on as director of public relations, but he had spent two-thirds of his time straightening out the messes caused by the vicious temper of the holy harridan.

"But you have no way of being sure that you will be back in a few days," Thomas persisted. "This is a very dangerous assignment; if you get killed on it, there is no one here who can take over your job."

"Oh, now, that's not true, Thomas. No man is irreplaceable."

"This is no time for false modesty, sir. That may be true in general, but you know that it is not true in this case. There is a strictly limited number to draw from, and you are the only one from whom all of us will take direction. In particular, you are the only one from whom Dr. Calhoun will take direction. That is because you know how to handle him. None of the others would be able to, nor would he be able to handle them."

"That's a pretty strong statement, Thomas."

Thomas said nothing. At length Ardmore went on.

"All right, all right suppose you are right. I've got to have military information. How am I going to get it if I don't go myself?"

Thomas was a little slow in replying. Finally, he said quietly, "I could try it."

"You?" Ardmore looked him over and wondered why he had not considered Thomas. Perhaps because there was nothing about the man to suggest his potential ability to handle such a job—that, combined with the fact that he was a private, and one did not assign privates to jobs requiring dangerous independent action. Yet perhaps—

"Have you ever done any work of that sort?"

"No, but my experience may be specially adapted in a way to such work."

"Oh, yes! Scheer told me something about you. You were a tramp, weren't you, before the army caught up with you?"

"Not a tramp," Thomas corrected gently, "a hobo."

"Sorry—what's the distinction?"

"A tramp is a bum, a parasite, a man that won't work. A hobo is an itinerant laborer who prefers casual freedom to security. He works for his living, but he won't be tied down to one environment."

"Oh, I see. Hm-m-m—yes, and I begin to see why you might be especially well adapted to an intelligence job. I suppose it must require a good deal of adaptability and resourcefulness to stay alive as a hobo. But wait a minute, Thomas—I guess I've more or less taken you for granted; I need to know a great deal more about you, if you are to be entrusted with this job. You know, you don't act like a hobo."

"How does a hobo act?"

"Eh? Oh, well, skip it. But tell me something about your background. How did you happen to take up hoboing?"

Ardmore realized that he had, for the first time, pierced the man's natural reticence. Thomas fumbled for an answer, finally replying, "I suppose it was that I did not like being a lawyer."

"What?"

"Yes. You see, it was like this: I went from the law into social administration. In the course of my work I got an idea that I wanted to write a thesis on migratory labor and decided that in order to understand the subject I would have to experience the conditions under which such people lived."

"I see. And it was while you were doing your laboratory work, as it were, that the army snagged you."

"Oh, no," Thomas corrected him. "I've been on the road more than ten years. I never went back. You see, I found I liked being a hobo."

The details were rapidly arranged. Thomas wanted nothing in the way of equipment but the clothes he had been wearing when he had stumbled into the Citadel. Ardmore had suggested a bedding roll, but Thomas would have none of it. "It would not be in character," he explained. "I was never a bindlestiff. Bindlestiffs are dirty, and a self-respecting hobo doesn't associate with them. All I want is a good meal in my belly and a small amount of money on my person."

Ardmore's instructions to him were very general. "Almost anything you hear or see will be data for me," he told him. "Cover as much territory as you ran, and try to be back here within a week. If you are gone much longer than that, I will assume that you are dead or imprisoned, and will have to try some other plan.

"Keep your eyes open for some means by which we can establish a permanent service of information. I can't suggest what it is you are to look for in that connection, but keep it in mind. Now as to details: anything and everything about the PanAsians, how they are armed, how they police occupied territory, where they have set up headquarters, particularly their continental headquarters, and, if you can make any sort of estimate, how many of them there are and how they're distributed. That would keep you busy for a year, at least; just the same, be back in a week."

Ardmore showed Thomas how to operate one of the outer doors of the Citadel; two bars of "Yankee Doodle," breaking off short, and a door appeared in what seemed to be a wall of country rock—simple, and yet foreign to the Asiatic mind. Then he shook hands with him and wished him good luck.

Ardmore found that Thomas had still one mare surprise for him; when he shook hands, he did so with the grip of the Dekes, Ardmore's own fraternity! Ardmore stood staring at the closed portal, busy arranging his preconceptions.

When he turned around, Calhoun was behind him. He felt somewhat as if he had been caught stealing jam. "Oh, hello, Doctor," he said quickly.

"How do you do, Major," Calhoun replied with deliberation. "May I inquire as to what is going on?"

"Certainly. I've sent Lieutenant Thomas out to reconnoiter."

"Lieutenant?"

"Brevet lieutenant. I was forced to use him for work far beyond his rank; I found it expedient to assign him the rank and pay of his new duties."

Calhoun pursued that point no further, but answered with another, in the same faintly critical tone of voice. "I suppose you realize that it jeopardizes all of us to send anyone outside? I am a little surprised that you should act in such a matter without consulting with others."

"I am sorry you feel that way about it, Colonel," Ardmore replied, in a conscious attempt to conciliate the older man, "but I am required to make the final decision in any case, and it is of prime importance to our task that nothing be permitted to distract your attention from your all-important job of research. Have you completed your experiment?" he went on quickly.

"Yes."

"Well?"

"The results were positive. The mice died."

"How about Wilkie?"

"Oh, Wilkie was unhurt, naturally. That is in accordance with my predictions."

Jefferson Thomas. Bachelor of Arts magna cum laude, University of California, Bachelor of Law, Harvard Law School, professional hobo, private and cook's helper, and now a brevet lieutenant, intelligence, United States army, spent his first night outside shivering on pine needles where dark had overtaken him. Early the next morning he located a ranchhouse.

They fed him, but they were anxious for him to move along. "You never can tell when one of those heathens is going to come snooping around," apologized his host, "and I can't afford to be arrested for harboring refugees. I got the wife and kids to think about." But he followed Thomas out to the road, still talking, his natural garrulity prevailing over his caution. He seemed to take a grim pleasure in bewailing the catastrophe.

"God knows what I'm raising those kids up to. Some nights it seems like the only reasonable thing to do is to put them all out of their sorrow. But Jessie—that's my wife—says it's a scandal and a sin to talk that way, that the Lord will take care of things all in His own good time. Maybe so—but I know it's no favor to a child to raise it up to be bossed around and lorded over by those monkeys." He spat. "It's not American."

"What's this about penalties for harboring refugees?"

The rancher stared at him. "Where've you been, friend?"

"Up in the hills. I haven't laid eyes on one of the so-and-so's yet."

"You will. But then you haven't got a number, have you? You'd better get one. No, that won't do you any good; you'd just land in a labor camp if you tried to get one."

"Number?

"Registration number. Like this." He pulled a glassine-covered card out of his pocket and displayed it. It had attached to it a poor but recognizable picture of the rancher, his fingerprints, and pertinent data as to his occupation, marital status, address, etcetera. There was a long, hyphenated number running across the top. The rancher indicated it with a work-stained finger. "That first part is my number. It means I have permission from the emperor to stay alive and enjoy the air and sunshine," he added bitterly. "The second part is my serial classification. It tells where I live and what I do. If I want to cross the county line, I have to have that changed. If I want to go to any other town than the one I'm assigned to do my marketing in, I've got to get a day's special permit. Now I ask you—is that any way for a man to live?"

"Not for me," agreed Thomas. "Well, I guess I had better be on my way before I get you in trouble. Thanks for the breakfast."

"Don't mention it. It's a pleasure to do a favor for a fellow American these days."

He started off down the road at once, not wishing the kindly rancher to see how thoroughly he had been moved by the picture of his degradation. The implications of that registration card had shaken his free soul in a fashion that the simple, intellectual knowledge of the defeat of the United States had been unable to do.

He moved slowly for the first two or three days, avoiding the towns until he had gathered sufficient knowledge of the enforced new customs to be able to conduct himself without arousing suspicion. It was urgently desirable that he be able to enter at least one big city in order to snoop around, read the bulletin boards, and find a chance to talk with persons whose occupations permitted them to travel. From a standpoint of personal safety he was quite willing to chance it without an identification card but he remembered clearly a repeated injunction of Ardmore's "Your paramount duty is to return! Don't go making a hero of yourself. Don't take any chance you can avoid and come back!"

Cities would have to wait.

Thomas skirted around towns at night, avoiding patrols as he used to avoid railroad cops. The second night out he found the first of his objectives, a hobos' jungle. It was just where he had expected to find it, from his recollection of previous trips through the territory. Nevertheless, he almost missed it, for the inevitable fire was concealed by a jury-rigged oil-can stove, and shielded from chance observation.

He slipped into the circle and sat down without comment, as custom required, and waited for them to look him over.

Presently a voice said plaintively: "It's Gentleman Jeff. Cripes, Jeff, you gave me a turn. I thought you was a flatface. Whatcha been doin' with yourself, Jeff?"

"Oh, one thing and another. On the dodge."

"Who isn't these days?" the voice returned. "Everywhere you try, those slant-eyes—" He broke into a string of attributions concerning the progenitors and personal habits of the PanAsians about which he could not possibly have had positive knowledge.

"Stow it, Moe," another voice commanded. "Tell us the news, Jeff."

"Sorry," Thomas refused affably, "but I've been up in the hills, kinda keeping out of the army and doing a little fishing."

"You should have stayed there. Things are bad everywhere. Nobody dares give an unregistered man a day's work and it takes everything you've got just to keep out of the labor camps. It makes the big Red hunt look like a picnic."

"Tell me about the labor camps," Thomas suggested. "I might get hungry enough, to try one for a while." .

"You don't know. Nobody could get that hungry." The voice paused, as if the owner were turning the unpleasant subject over in his mind. "Did you know the Seattle Kid?"

"Seem to recall. Little squint-eyed guy, handy with his hands?"

"That's him. Well, he was in one, maybe a week, and got out. Couldn't tell us how; his mind was gone. I saw him the night he died. His body was a mass of sores, blood poisoning, I guess." He paused. then added reflectively: "The smell was pretty bad."

Thomas wanted to drop the subject but he needed to know more. "Who gets sent to these camps?"

"Any man that isn't already working at an approved job. Boys from fourteen on up. All that was left alive of the army after we folded up. Anybody that's caught without a registration card."

"That ain't the half of it," added Moe. "You should see what they do with unassigned women. Why, a woman was telling me just the other day—a nice old gel; gimme a handout. She was telling me about her niece used to be a schoolteacher, and the flatfaces don't want any American schools or teachers. When they registered her they—"

"Shut up, Moe. You talk too much."

It was disconnected, fragmentary, the more so as he was rarely able to ask direct questions concerning the things he really wanted to know. Nevertheless he gradually built up a picture of a people being systematically and thoroughly enslaved, a picture of a nation as helpless as a man completely paralyzed, its defenses destroyed, its communications entirely in the hands of the invaders.

Everywhere he found boiling resentment, a fierce willingness to fight against the tyranny, but it was undirected, uncoordinated, and, in any modern sense, unarmed. Sporadic rebellion was as futile as the scurrying of ants whose hill has been violated. PanAsians could be killed, yes, and there were men willing to shoot on sight, even in the face of the certainty of their own deaths. But their hands were bound by the greater certainty of brutal multiple retaliation against their own kind. As with the Jews in Germany before the final blackout in Europe, bravery was not enough, for one act of violence against the tyrants would be paid for by other men, women, and children at unspeakable compound interest.

Even more distressing than the miseries he saw and heard about were the reports of the planned elimination of the American culture as such. The schools were closed. No word might be printed in English. There was a suggestion of a time, one generation away, when English would be an illiterate language, used orally alone by helpless peons who would never be able to revolt for sheer lack of a means of communication on any wide scale.

It was impossible to form any rational estimate of the numbers of Asiatics now in the United States.

Transports, it was rumored, arrived daily on the West coast, bringing thousands of administrative civil servants, most of whom were veterans of the amalgamation of India. Whether or not they could be considered as augmenting the armed forces who had conquered and now policed the country it was difficult to say, but it was evident that they would replace the white minor officials who now assisted in civil administration at pistol point. When those white officials were "eliminated" it would be still more difficult to organize resistance.

Thomas found the means to enter the cities in one of the hobo jungles.

Finny—surname unknown—was not, properly speaking, a knight of the road, but one who had sought shelter among them and who paid his way by practicing his talent. He was an old anarchist comrade who had served his concept of freedom by engraving really quite excellent Federal Reserve notes without complying with the formality of obtaining permission from the treasury department. Some said that his name had been Phineas; others connected his moniker with his preference for manufacturing five-dollar bills—"big enough to be useful; not big enough to arouse suspicion."

He made a registration card for Thomas at the request of one of the 'bos. He talked while Thomas watched him work. "It's only the registration number that we really have to worry about, son. Practically none of the Asiatics you will run into can read English, so it really doesn't matter a lot we say about you. 'Mary had a little lamb—' would probably do. Same for the photograph. To them, all white men look alike." He picked up a handful of assorted photographs from his kit and peered at them nearsightedly through thick spectacles. "Here—pick out one of these that looks not unlike you and we will use it. Now for the number—"

The old man's hands were shaky, almost palsied, yet they steadied down to a deft sureness as he transferred India ink to cardboard in amazing simulation of machine printing. And this he did without proper equipment, without precision tools, under primitive conditions. Thomas understood why the old artist's masterpieces caused headaches for bank clerks. "There!" he announced. "I've given you a serial number which states that you were registered shortly after the change, and a classification number which permits you to travel. It also says that you are physically unfit for manual labor, and are permitted to peddle or beg. It's the same thing to their minds."

"Thanks, awfully," said Thomas. "Now. . . uh . . . what do I owe you for this?"

Finny's reaction made him feel as if he had uttered some indecency. "Don't mention payment, my son! Money is wrong—it's the means whereby man enslaves his brother."

"I beg your pardon, sir," Thomas apologized sincerely. "Nevertheless, I wish there were some way for me to do something for you."

"That is another matter. Help your brother when you can, and help will come to you when you need it."

Thomas found the old anarchist's philosophy confused, confusing, and impractical, but he spent considerable time drawing him out, as he seemed to know more about the PanAsians than anyone else he had met. Finny seemed unafraid of them and completely confident of his own ability to cope with them when necessary. Of all the persons Thomas had met since the change, Finny seemed the least disturbed by it—in fact, disturbed not at all, and completely lacking in any emotion of hate or bitterness. This was hard for him to understand at first in a person as obviously warmhearted as Finny, but he came to realize that, since the anarchist believed that all government was wrong and that all men were to him in fact brothers, the difference to him was one of degree only. Looking at the PanAsians through Finny's eyes there was nothing to hate; they were simply more misguided souls whose excesses were deplorable.

Thomas did not see it from such Olympian detachment. The PanAsians were murdering and oppressing a once-free people. A good PanAsian was a dead PanAsian, he told himself, until the last one was driven back across the Pacific. If Asia was overpopulated, let them limit their birth rate.

Nevertheless, Finny's detachment and freedom from animus enabled Thomas more nearly to appreciate the nature of the problem. "Don't make the mistake of thinking of the PanAsians as bad—they're not, but they are different. Behind their arrogance is a racial inferiority complex, a mass paranoia, that makes it necessary for them to prove to themselves by proving to us that a yellow man is just as good as a white man, and a damned sight better. Remember that, son, they want the outward signs of respect more than they want anything else in the world."

"But why should they have an inferiority complex about us? We've been completely out of touch with them for more than two generations—ever since the Nonintercourse Act."

"Do you think racial memory is that short-lived? The seeds of this are way back in the nineteenth century. Do you recall that two high Japanese officials had to commit honorable suicide to wipe out a slight that was done Commodore Perry when he opened up Japan? Now those two deaths are being paid for by the deaths of thousands of American officials."

"But the PanAsians aren't Japanese."

"No, and they are not Chinese. They are a mixed race, strong, proud, and prolific. From the American standpoint they have the vices of both and the virtues of neither. But from my standpoint they are simply human beings, who have been duped into the old fallacy of the State as a super-entity. 'Ich habe einen Kameraden.' Once you understand the nature of—" He went off into a long dissertation, a mixture of Rousseau, Rocker, Thoreau, and others. Thomas found it inspirational, but unconvincing.

But the discussion with Finny was of real use to Thomas in comprehending what they were up against. The Nonintercourse Act had kept the American people from knowing anything important about their enemy. Thomas wrinkled his brow, trying to recall what he knew about the history of it.

At the time it had been passed, the Act had been no more than a de jure recognition of a de facto condition. The sovietizing of Asia had excluded westerners, particularly Americans, from Asia more effectively than could any Act of Congress. The obscure reasons that had led the Congress of that period to think that the United States gained in dignity by passing a law confirming what the commissars had already done to us baffled Thomas; it smacked of Sergeant Dogberry's policy toward thieves. He supposed that it had simply seemed cheaper to wish Red Asia out of existence than to fight a war.

The policy behind the Act had certainly seemed to justify itself for better than half a century; there had been no war. The proponents of the measure had maintained that China was a big bite even for Soviet Russia to digest and that the United States need fear no war while the digesting was taking place. They had been correct as far as they went but as a result of the Nonintercourse Act we had our backs turned when China digested Russia . . . leaving America to face a system even stranger to western ways of thinking than had been the Soviet system it displaced.

On the strength of the forged registration card and Finny's coaching as to the etiquette of being a serf, Thomas ventured into a medium-sized city. The cleverness of Finny's work was put to test almost immediately.

He had stopped at a street corner to read a posted notice. It was a general order to all Americans to be present at a television receiver at eight each evening in order to note any instructions that their rulers might have for them. It was not news; the order had been in effect for some days and he had heard of it. He was about to turn away when he felt a sharp, stinging blow across his shoulder blades. He whirled around and found himself facing a PanAsian wearing the green uniform of a civil administrator and carrying a swagger cane.

"Keep out of the way, boy!" He spoke in English, but in a light, singing tone which lacked the customary American accentuation.

Thomas jumped into the gutter—"They like to look down, not up"—and clasped his hands together in the form required. He ducked his head and replied, "The master speaks; the servant obeys."

"That's better," acknowledged the Asiatic, apparently somewhat mollified. "Your ticket."

The man's accent was not bad, but Thomas did not comprehend immediately, possibly because the emotional impact of his experience in the role of slave was all out of proportion to what he had expected. To say that he raged inwardly is meaninglessly inadequate.

The swagger cane cut across his face. "Your ticket!"

Thomas produced his registration card. The time the Oriental spent in examining it gave Thomas an opportunity to pull himself together to some extent. At the moment he did not care greatly whether the card passed muster or not; if it came to trouble, he would take this one apart with his bare hands.

But it passed. The Asiatic grudgingly handed it back and strutted away, unaware that death had brushed his elbow.

It turned out that there was little to be picked up in town that he had not already acquired secondhand in the hobo jungles. He had a chance to estimate for himself the proportion of rulers to ruled, and saw for himself that the schools were closed and the newspapers had vanished. He noted with interest that church services were still held, although any other gathering together of white men in assembly was strictly forbidden.

But it was the dead, wooden faces of the people, the quiet children, that got under his skin and made him decide to sleep in the jungles rather than in town.

Thomas ran across an old friend at one of the hobo hideouts. Frank Roosevelt Mitsui was as American as Will Rogers, and much more American than that English aristocrat, George Washington. His grandfather had brought his grandmother, half Chinese and half wahini, from Honolulu to Los Angeles, where he opened a nursery and raised flowers, plants, and little yellow children, children that knew neither Chinese nor Japanese, nor cared.

Frank's father met his mother, Thelma Wang, part Chinese but mostly Caucasian, at the International Club at the University of Southern California. He took her to the Imperial Valley and installed her on a nice ranch with a nice mortgage. By the time Frank was raised, so was the mortgage.

Jet Thomas had cropped lettuce and honeydew melon for Frank Mitsui three seasons and knew him as a good boss. He had become almost intimate with his employer because of his liking for the swarm of brown kids that were Frank's most important crop. But the sight of a flat, yellow face in a hobo jungle made Thomas' hackles rise and almost interfered with his recognizing his old acquaintance.

It was an awkward meeting. Well as he knew Frank, Thomas was in no mood to trust an Oriental. It was Frank's eyes that convinced him; they held a tortured look that was even more intense than that found in the eyes of white men, a look that did not lessen even while he smiled and shook hands.

"Well, Frank," Jeff improvised inanely, "who'd expect to find you here? I should think you'd find it easy to get along with the new regime."

Frank Mitsui looked still more unhappy and seemed to be fumbling for words. One of the other hobos cut in. "Don't be a fool, Jeff. Don't you know what they've done to people like Frank?"

"No, I don't."

"Well, you're on the dodge. If they catch you, it's the labor camp. So is Frank. But if they catch him, it's curtains—right now. They'll shoot him on sight—"

"So? What did you do, Frank?"

Mitsui shook his head miserably.

"He didn't do anything," the other continued. "The empire has no use for American Asiatics. They're liquidating them."

It was quite simple. The Pacific coast Japanese, Chinese, and the like did not fit into the pattern of serfs and overlords—particularly the half-breeds. They were a danger to the stability of the pattern. With cold logic they were being hunted down and killed.

Thomas listened to Frank's story. "When I got home they were dead—all of them. My little Shirley, Junior, Jimmy, the baby—and Alice." He put his face in his hands and wept. Alice was his wife. Thomas remembered her as a brown, stocky woman in overalls and straw hat, who talked very little but smiled a lot.

"At first I thought I would kill myself," Mitsui went on when he had sufficient control of himself, "then I knew better. I hid in an irrigation ditch for two days, and then I got away over the mountains. Then some whites almost killed me before I could convince them I was on their side."

Thomas could understand how that would happen, and could think of nothing to say. Frank was damned two ways; there was no hope for him. "What do you intend to do now, Frank?"

He saw a sudden return of the will to live in the man's face. "That is why I will not let myself die! Ten for each one"—he counted them off on his brown fingers—"ten of those devils for each one of my babies—and twenty for Alice. Then maybe ten more for myself, and I can die."

"Hm-m-m. Any luck?"

"Thirteen, so far. It is slow, for I have to be very sure, so that they won't kill me before I finish."

Thomas pondered it in his mind, trying to fit this new knowledge into his own purpose. Such fixed determination should be useful, if directed. But it was some hours later before he approached Mitsui again.

"How would you," he asked gently, "like to raise your quota from ten to a thousand each—two thousand for Alice?"

CHAPTER THREE

The exterior alarms brought Ardmore to the portal long before Thomas whistled the tune that activated the door. Ardmore watched the door by televisor from the guard room, his thumb resting on a control, ready to burn out of existence any unexpected visitor. When he saw Thomas enter his thumb relaxed, but at the sight of his companion it tightened again. A PanAsiani He almost blasted them in sheer reflex before he checked himself. It was possible, barely possible, that Thomas had brought a prisoner to question..

"Major! Major Ardmore! It's Thomas."

"Stand where you are. Both of you."

"It's all right, Major. He's an American. I vouch for him."

"Maybe." The voice that reached Thomas over the announcing phone was still grimly suspicious. "Just the same—peel off all of your clothes, both of you." They did so, Thomas biting his lip in humiliation, Mitsui trembling in agitation. He did not understand it and he felt trapped. "Now turn around slowly and let me look you over," the voice commanded.

Having satisfied himself that they were unarmed, Ardmore told them to stand still and wait, then called Graham on the intercommunication circuit. "Graham!"

"Yes, sir."

"Report to me at once in the guard room."

"But, Major, I can't. Dinner will be—"

"Never mind dinner! Move!"

"Yes, sir!"

Ardmore pointed out the situation to him in the screen. "You go down there and handcuff both of them from behind. Secure the Asiatic first. Make him back up to you, and watch yourself. If he tries to jump you, I may have to wing you, too."

"I don't like this, Major," Graham protested. "Thomas is all right. He wouldn't be up to any hankypanky."

"Sure, man, I know he's all right, too. But he may be drugged and under control. This set-up could be a Trojan Horse gag. Now get down and do as you are told."

While Graham was gingerly carrying out his unwelcome assignment and making himself, in fact, eligible for a Congressional Medal which he would never receive, for his artist's imagination perceived too clearly the potential danger and forced him to call up courage for the task.

Ardmore phoned Brooks. "Doctor, can you drop what you are doing?"

"Why, perhaps I can. Yes, I may say so. What is it you wish?"

"Then come to my office. Thomas is back. I want to know whether or not he is under the influence of drugs."

"But I am not a medical man—"

"I know that, but you are the nearest thing we've got to one."

"Very well, sir."

Dr. Brooks examined Thomas' pupils, tried his knee jerks, and checked his pulse and respiration. "I should say that he was perfectly normal, though exhausted and laboring under excitement. Naturally, this is not a positive diagnosis. If I had more time—"

"It will do for now. Thomas, I trust you won't hold it against me if we leave you locked up until we have examined your Asiatic pal."

"Certainly not, Major," Thomas told him with a wry grin, "since you're going to, anyhow."

Frank Mitsui's flesh quivered and sweat dripped from his face when Brooks stuck the hypodermic into him, but he did not draw away. Presently he relaxed under the influence of the drug that releases inhibitions, and strips from the speech centers the protection of cortical censorship. His face became peaceful.

But it was not peaceful a few minutes later when they began to question him, nor was there peace in any of their faces. This was truth, too raw and too brutal for any man to stand. Deep lines carved themselves from nose to jaw in Ardmore's face as he listened to the little man's pitiful story. No matter what line they started him on, he always came back to the scene of his dead children, his broken household. Finally Ardmore put a stop to it.

"Give him the antidote, doc. I can't stand any more of this. I've found out all I need to know."

Ardmore shook hands with him solemnly after he had returned to full awareness. "We are glad to have you with us, Mr. Mitsui. And we'll put you to some work that will give you a chance to get some of your own back. Right now I want Dr. Brooks to give you a soporific that will let you get about sixteen hours' sleep; then we can think about swearing you in and what kind of work you can be most useful doing."

"I don't need any sleep, Mister . . . Major."

"Just the same, you are going to get some. And so is Thomas, as soon as he has reported. In fact—" He broke off and studied the apparently impassive face. "In fact, I want you to take a sleeping pill every night. Those are orders. You'll draw them from me and take them in my presence every night before you go to bed." There are certain bonus advantages to military absolutism. Ardmore could not tolerate the idea of the little yellow man lying awake and staring at the ceiling.

Brooks and Graham would quite plainly have liked to stay and hear Thomas' report, but Ardmore refused to notice the evident fact and dismissed them. He wished first to evaluate the data himself.

"Well, Lieutenant, I'm damn glad you're back."

"I'm glad to be back. Did you say 'lieutenant'? I assume that my rank reverts."

"Why should it? As a matter of fact, I am trying to figure out a plausible reason for commissioning Graham and Scheer. It would simplify things around here to eliminate social differences. But that is a side issue. Let's hear what you've done. I suppose you've come back with all our problems solved and tied up with string?"

"Not likely." Thomas grinned and relaxed.

"I didn't expect it. But seriously, between ourselves, I've got to pull something out of the hat, and it's got to be good. The scientific staff is beginning to crowd me, particularly Colonel Calhoun. There's no damn sense in their making miracles in the laboratory unless I can dope out some way to apply those miracles in strategy and tactics."

"Have they really gone so far?"

"You'd be surprised. They've taken that so-called 'Ledbetter effect' and shaken it the way a terrier shakes a rat. They can do anything with it but peel the potatoes and put out the cat."

"Really?"

"Really."

"What sort of things can they do?"

"Well—" Ardmore took a deep breath. "Honestly, I don't know where to begin. Wilkie has tried to keep me posted with simplified explanations, but, between ourselves, I didn't understand more than every other word. One way of putting it is to say that they've discovered atomic control—oh, I don't mean atom-splitting, or artificial radioactivity. Look—we speak of space, and time, and matter, don't we?"

"Yes. There's Einstein's spacetime concept, of course."

"Of course. Spacetime is standard stuff in high school these days. But these men really mean it. They really mean that space and time and mass and energy and radiation and gravity are all simply different ways of thinking about the same thing. And if you once catch on to how just one of them works, you have the key to all of them. According to Wilkie, physicists up to now, even after the A-bomb was developed, were just fooling around the edges of the subject; they had the beginnings of a unified field theory, but they didn't really believe it themselves; they usually acted as if these were all as different as the names for them.

"Apparently Ledbetter hit on the real meaning of radiation, and that has given Calhoun and Wilkie the key to everything else in physics. Is that clear?" he added with a grin.

"Not very," Thomas admitted. "Can you give me some idea of what they can do with it?"

"Well, to begin with, the original Ledbetter effect, the thing that killed most of the personnel here, Wilkie calls an accidental side issue. Brooks says that the basic radiation affected the colloidal dispersal of living tissue; those that were killed were coagulated by it. It might just as well have been set to release surface tension—in fact, they did that the other day, exploded a half of beefsteak like so much dynamite."

"Huh?"

"Don't ask me how; I'm just repeating the explanation given me. But the point is, they seem to have found out what makes matter tick. They can explode it—sometimes—and use it for a source of power. They can transmute it into any element they want. They seem to be confident that they know what to do to find out how gravity works, so that they will be able to handle gravity the way we now handle electricity."

"I thought gravity was not considered a force in the modern concepts."

"So it isn't but, then, 'force' isn't force, either, in unified field theory. Hell's bells, you've got me bogged down in

language difficulties. Wilkie says that mathematics is the only available language for these ideas."

"Well, I guess I'll just have to get along without understanding it. But, frankly, I don't see how they managed to come so far so fast. That changes just about everything we thought we knew. Honestly, how is it that it took a hundred fifty years to go from Newton to Edison, yet these boys can knock out results like that in a few weeks?"

"I don't know myself. The same point occurred to me, and I asked Calhoun about it. He informed me in that schoolmaster way of his that it was because those pioneers did not have the tensor calculus, vector analysis, and matrix algebra."

"Well, I wouldn't know," observed Thomas. "They don't teach that stuff in law school."

"Nor me," admitted Ardmore. "I tried looking over some of their work sheets. I can do simple algebra, and I've had some calculus, though I haven't used it for years, but I couldn't make sense out of this stuff. It looked like Sanskrit; most of the signs were different, and even the old ones didn't seem to mean the same things. Look—I thought that a times b always equaled b times a."

"Doesn't it?"

"Not when these boys get through kicking it around. But we are getting way off the subject. Bring me up to date."

"Yes, sir." Jeff Thomas talked steadily for a long time, trying very hard to paint a detailed picture of everything he had seen and heard and felt. Ardmore did not interrupt him except with questions intended to clarify points. There was a short silence when he had concluded. Finally Ardmore said:

"I think I must have had a subconscious belief that you would come back with some piece of information that would fall right into place and tell me what to do. But I don't see much hope in what you have told me. How to win back a country that is as completely paralyzed and as carefully guarded as you describe the United States to be is beyond me."

"Of course, I didn't see the whole country. About two hundred miles from here is as far as I got."

"Yes, but you got reports from the other hobos that covered the whole country, didn't you?"

"Yes."

"And it was all about the same. I think we can safely assume that what you heard, confirmed by what you saw, gives a fairly true picture. How recent do you suppose was the dope you got by the grapevine telegraph?"

"Well—maybe three or four days old news from the East coast—no more than that."

"That seems reasonable. News always travels by the fastest available route. It's certainly not very encouraging. And yet—" He paused and scowled in evident puzzlement. "And yet I have a feeling that you said something that was the key to the whole matter. I can't put my finger on it. I began to get an idea while you were talking, then some other point came up and diverted my mind, and I lost it."

"Maybe it would help if I started in again at the beginning," suggested Thomas.

"No need to. I'll play the recording back piece by piece sometime tomorrow, if I don't think of it in the meantime."

They were interrupted by peremptory knocking at the door. Ardmore called out, "Come in!" Colonel Calhoun entered.

"Major Ardmore, what's this about a PanAsiatic prisoner?"

"Not quite that, Colonel, but we do have an Asiatic here now. He's American-born."

Calhoun brushed aside the distinction. "Why wasn't I informed? I have notified you that I urgently require a man of Mongolian blood for test experimentation."

"Doctor, with the skeleton staff we have, it is difficult to comply with all the formalities of military etiquette. You were bound to learn of it in the ordinary course of events—in fact, it seems that you were informed in some fashion."

Calhoun snorted. "Through the casual gossip of subordinates!"

"I'm sorry, Colonel, but it couldn't be helped. Just at the moment I am trying to receive Thomas' reconnaissance report."

"Very well, sir." Calhoun was icily formal. "Will you be good enough to have the Asiatic report to me at once?"

"I can't do that. He is asleep, drugged, and there is no way to produce him for you before tomorrow. Besides, while I am quite sure that he will be entirely cooperative in any useful experimentation, he is an American citizen and a civilian under our protection—not a prisoner. We'll have to take it up with him."

Calhoun left as abruptly as he had come. "Jeff," mused Ardmore, glancing after him, "speaking strictly off the record—oh, strictly!—if there ever comes a time when we are no longer bound down by military necessity, I'm going to paste that old beezer right in the puss!"

"Why don't you clamp down on him?"

"I can't, and he knows it. He's invaluable, indispensable. We've absolutely got to have his brains for research, and you can't conscript brains just by handing out orders. Y'know, though, in spite of his brilliance, I sometimes think he's just a little bit cracked."

"Shouldn't be surprised. What does he want Frank Mitsui so bad for?"

"Well, that's somewhat involved. They've proved that the original Ledbetter effect depends on a characteristic of the life form involved—you might call it a natural frequency. It seems that everybody has his own wavelength, or wavelengths. The notion seemed like so much astrology to me, but Dr. Brooks says that it is not only the straight dope; it isn't even new. He showed me a paper by a chap named Fox, at the University of London, 'way back in 1945—Fox showed that each individual rabbit had hemoglobin with its own individual wavelength; it absorbed that wavelength in spectroscopic analysis, that one wavelength and no other. You could tell two rabbits apart with it, or you could tell a rabbit from a dog, simply by the spectra of their hemoglobins.

"This Dr. Fox tried to do the same thing with humans, but it didn't work—no distinguishable difference in wavelengths. But Calhoun and Wilkie have rigged a spectroscope for the spectrum Ledbetter was playing with, and it shows clearly separate wavelengths for each sample of human blood. Conversely, if they set up a tuned Ledbetter projector and start running down or up the scale, when they come to your individual, unique frequency, your red blood cells start absorbing energy, the hemoglobins protein breaks down and—Spung!—you're dead. I'm standing right beside you and I'm not even hurt; they haven't come to my frequency. Now Brooks has an idea that these frequencies come by groups according to races. He thinks they can tune it to discriminate by races, to knock over all the Asiatics in a group and not touch the white men, and vice versa."

Thomas shivered. "Whew! That would be a weapon."

"Yes, it would. It's just on paper so far, but they want to test it on Mitsui. As I gather what they intended to do, they don't intend to kill him, but it's bound to be dangerous as all hell to Mitsui."

"Frank won't mind chancing it," Thomas commented.

"No, I don't suppose he would." It seemed to Ardmore that it would probably be a favor to Mitsui to give him a clean, painless death in the laboratory. "Now about another matter. It seems to me we ought to be able to work up a sort of permanent secret service, using your hobo pals and their sources of information. Let's talk about it."

Ardmore gained a few days' respite in which to consider further the problem of military use of the weapons at his disposal while the research staff tested their theories concerning the interrelation between racial types and the improved Ledbetter effect. The respite did him no good. He had a powerful weapon, yes; in fact, many powerful weapons, for it seemed that the new principles they had tapped had fully as protean possibilities as electricity. It seemed extremely likely that if the United States defense forces had had, one year earlier, the tools now available in the Citadel, the United States would never have fallen.

But six men cannot whip an empire—not by brute force. The emperor could, if necessary, expend six million men to defeat six. The hordes of the empire could come at them barehanded and win, move over them as an avalanche moves, until they were buried under a mountain of dead flesh. Ardmore had to have an army to fight with his wonderful new weapons.

The question was: how to recruit and train such an army?

Certain it was that the PanAsians would not hold still while he went into the highways and byways and got his forces together. The thoroughness with which they had organized police surveillance of the entire population made it evident that they were acutely aware of the danger of revolution and would stamp out any such activity before it could possibly reach proportions dangerous to them.

There remained one clandestine group, the hobos.

He consulted with Thomas as to the possibility of organizing them for military purposes. Thomas shook his head at the idea.

"You can't understand the hobo temperament, Chief. There is not one in a hundred who could be depended on to observe the strict self-discipline necessary for such an enterprise. Suppose you were able to arm all of them with projectors—I don't say that is possible, but suppose you could—you still would not have an army; you would simply have an undisciplined rabble."

"Wouldn't they fight?"

"Oh, sure, they'd fight. They'd fight as individuals, and they would do quite a bit of slaughter until some flatface caught them off guard and winged them."

"I wonder if we can depend on them as sources of information."

"That's another matter. Most of the road kids won't have any idea that they are being used to obtain military information. I'll handpick not over a dozen to act as reporters to me, and I won't tell them anything they don't have to know."

Any way he looked at it, simple, straightforward military use of the new weapons was not expedient. Brutal frontal attack was for the commander who had men to expend. General U. S. Grant could afford to say, "I will fight it out on this line if it takes all summer," because he could lose three men to the enemy's one and still win. Those tactics were not for the commander who could not afford to lose any men. For him it must be deception, misdirection—feint and slash and run away—"and live to fight another day." The nursery rhyme finished itself in his mind. That was it. It had to be something totally unexpected, something that the PanAsians would not realize was warfare until they were overwhelmed by it.

It would have to be something like the "fifth columns" that destroyed the European democracies from within in the tragic days that led to the final blackout of European civilization. But this would not be a fifth column of traitors, bent on paralyzing a free country; but the antithesis of that, a sixth column of patriots whose privilege it would be to destroy the morale of invaders, make them afraid, unsure of themselves.

And misdirection was the key to it, the art of fooling!

Ardmore felt a little better when he had reached that conclusion. It was something he could understand, a job suited to an advertising man. He had been trying to crack it as a military problem, but he was not a field marshal and it had been silly of him to try to make a noise like one. His mind did not work that way. This was primarily a job in publicity, a matter of mob psychology. A former boss of his, under whom he had learned the racket, used to tell him, "I can sell dead cats to the board of health with a proper budget and a free hand."

Well, he had a free hand, all right, and the budget was no problem. Of course, he could not use the newspapers and the old channels of advertising, but there would be a way. The problem now was to figure out the weak points of the PanAsians and decide how Calhoun's little gadgets could be used to

play on those weak points until the PanAsians were sick of the whole deal and anxious to go home.

He did not have a plan as yet. When a man is at a loss for a course of action, he usually calls for a conference. Ardmore did.

He sketched out to them the situation up to date, including all that Thomas had learned and all that had come in by television through the conquerors' "educational" broadcasts. Then he discussed the powers that were made available to them by the research staff, and the various obvious ways in which they could be applied as military weapons, emphasizing the personnel necessary to use each type of weapon effectively. Having done so, he asked for suggestions.

"Do I understand, Major," Calhoun began, "that after rather pointedly telling us that you would make all military decisions you are now asking us to make up your mind for you?"

"Not at all, Colonel. I have still the responsibility for any decision, but this is a new sort of military situation. A suggestion from any source may prove valuable. I don't flatter myself that I have a monopoly on common sense, nor on originality. I would like for every one of us to tackle this problem and let the others criticize it."

"Do you yourself have any plan to offer us?"

"I am reserving my opinions until the rest of you have spoken."

"Very well, sir"—Dr. Calhoun straightened himself up—"since you have asked for it, I will tell you what I think should be done in this situation—what, in fact, is the only thing that can be done.

"You are aware of the tremendous power of the forces I have made available." Ardmore noticed Wilkie's mouth tighten at this allocation of credit, but neither of them interrupted. "In your resume, you underestimated them, if anything. We have a dozen fast scout cars housed here in the Citadel. By refitting them with power units of the Calhoun type they can be made faster than anything the enemy can put into the air. We will mount on them the heaviest projectors and attack. With overwhelmingly superior weapons it is only a matter of time until we will have the PanAsiatic empire beaten to its knees!"

Ardmore wondered how any man could be so blind. He did not himself wish to argue against Calhoun; he said, "Thank you, Colonel. I'll ask you to submit that plan written up in more detail. In the meantime does anyone wish to amplify or criticize the colonel's suggestion?" He waited hopefully, then added, "Come now, no plan is perfect. You must have some details to add, at least."

Graham took the, plunge. "How often do you expect to come down to eat?"

Calhoun cut in before Ardmore could call on him. "Well, I'm damned! I must say that I consider this no time for facetiousness."

"Wait a minute," protested Graham, "I didn't mean to be funny. I'm quite serious. That's my department. Those scout cars are not equipped to keep the air very long, and it seems to me that it will take quite a long time to reconquer the United States with a dozen scout cars, even if we located enough men to keep them in the air all the time. That means you have to come back to base to eat."

"Yes, and that means the base will have to be held against attack," Scheer put in suddenly.

"The base can be defended with other projectors." Calhoun's tone was scornful. "Major, I really must ask that the discussion be confined to sensible issues."

Ardmore rubbed his chin and said nothing.

Randall Brooks, who had been listening thoughtfully, pulled a piece of paper out of his pocket and began to sketch. "I think Scheer has something, Dr. Calhoun. If you will look here for a moment here, at this point, is your base. The PanAsians can encircle the base with ships at a distance greater than the range of the base projectors. The greater speed of your scout cars will be unimportant, for the enemy can well afford to use as many ships as necessary to insure our craft not getting past the blockade. It's sure that the scout cars will have the projectors with which to fight, but they can't fight a hundred ships at once, and the enemies' weapons are powerful, too—we mustn't forget that."

"You're right they're powerful!" added Wilkie. "We can't afford to have a known base. With their bombardment rockets they could stand back a thousand miles and blow this whole mountain out of the ground, if they knew we were under it."

Calhoun stood up. "I'm not going to remain here and listen to misgivings of pusillanimous fools. My plan assumed that men would execute it." He walked stiffly out of the room.

Ardmore ignored his departure and went hurriedly on, "The objections made to Colonel Calhoun's scheme seem to me to apply to every plan for open, direct combat at this time. I have considered several and rejected them for approximately those reasons, at least for reasons of logistics—that is to say, the problem of military supply. However, I may not have thought of some perfectly feasible solution. Does anyone have a direct warfare method to suggest, a method which will not risk personnel?"

No one answered. "Very well, bring it up later if you think of one. It seems to me that we must necessarily work by misdirection. If we can't fight the enemy directly at this time, we must fool 'em until we can."

"I see," agreed Dr. Brooks, "the bull wears himself out on the cape and never sees the sword."

"Exactly. Exactly. I only wish it were as easy as that. Now do any of you have any ideas as to how we can use what we've got without letting them know who we are, where we are, or how many we are? And now I'm going to take time out for a cigarette while you think about it."

Presently, he added, "You might bear in mind that we have two real advantages: the enemy apparently has not the slightest idea that we even exist, and our weapons are strange to them, even mysterious. Wilkie, didn't you compare the Ledbetter effect to magic?"

"I should hope to shout, Chief! It's safe to say that, aside from the instruments in our laboratories, there just isn't any way in existence to detect the forces we are working with now. You don't even know they're there. It's like trying to hear radio with your bare ears."

"That's what I mean. Mysterious. Like the Indians when they first met up with the white man's fire arms, they died and they didn't know why. Think about it. I'll shut up and let you."

Graham produced the first suggestion. "Major?"

"Yes?"

"Why couldn't we kidnap 'em?"

"How do you mean?"

"Well, your idea is to throw a scare into 'em, isn't it? How about a surprise raiding party, using the Ledbetter effect. We could go in one of the scout cars at night and pick out some really big shot, maybe the prince royal himself. We knock out everybody we come in contact with the projectors, and we walk right in and snatch him."

"Any opinions about that, gentlemen?" Ardmore said, reserving his own.

"It seems to have something to it," commented Brooks. "I would suggest that the projectors be set to render unconscious for a number of hours rather than to kill. It seems to me that the psychological effect would be heightened if they simply awoke and found their big man gone. One has no recollection of what has happened under such circumstances, as Wilkie and Mitsui can testify."

"Why stop at the prince royal?" Wilkie wanted to know. "We could set up four raiding parties, two to a car, and make maybe twelve raids in a single night. That way we could knock over enough of their number-one men to really cause some disorganization."

"That seems like a good idea," Ardmore agreed. "We may not be able to pull off these raids more than once. If we could do enough damage right at the top in one blow, we might both demoralize them and set off a general uprising. What's the matter, Mitsui?"

He had noticed the Oriental looking unhappy as the plan was developed. Mitsui spoke reluctantly, "It will not work, I am afraid."

"You mean we can't kidnap them that way? Do you know something we don't about their guard methods?"

"No, no. With a force that reaches through walls and knocks a man down before he knows you are there I believe you can capture them, all right: But the results will not be as you foresee them."

"Why not?"

"Because you will gain no advantage. They will not assume that you are holding their chief men as prisoners; they will assume that each one has committed suicide. The results will be horrible."

It was purely a psychological point, with room for difference of opinion. But the white men could not believe that the PanAsians would dare to retaliate if it were made unmistakably plain to them that their sacred leaders were not dead, but at the mercy of captors. Besides, it was a plan that offered immediate action, which they were spoiling for. Ardmore finally agreed to its adoption for want of something better, although he had a feeling of misgiving which he suppressed.

For the next few days all effort was bent toward preparing the scout cars for the projected task. Scheer performed Herculean mechanical jobs, working eighteen and twenty hours a day, with the others working joyfully under his supervision. Calhoun even came off his high horse and agreed to take part in the raid, although he did not help with the "menial" work. Thomas went out on a quick scouting trip and made certain of the location of twelve well-scattered PanAsian seats of government.

In the buoyancy of spirit which resulted from a plan of campaign, any plan of campaign, Ardmore failed to remember his own decision that what was required was a sixth column, an underground, or at least, unsuspected organization which would demoralize the enemy from within. This present plan was not such a one, but an essentially military plan. He began to think of himself as, if not Napoleon, at least as a modern Swamp Rat, or Sandino, striking through the night at the professional soldiers and fading away.

But Mitsui was right.

The television receiver was used regularly, with full recording, to pick up anything that the overlords had to broadcast to their slaves. It had become something of a custom to meet in the common room at eight in the evening to listen to the regular broadcast in which new orders were announced to the population. Ardmore encouraged it; the "hate session" it inspired was, he believed, good for morale.

Two nights before the projected raid they were gathered as usual. The ugly, broad face of the usual propaganda artist was quickly replaced by another and older PanAsian whom he introduced as the "heavenly custodian of peace and order." The older man came quickly to the point. The American servants of a provincial government had committed the hideous sin of rebelling against their wise rulers and had captured the sacred person of the governor and held him prisoner in his own palace. The soldiers of the heavenly emperor had brushed aside the insane profaners in the course of which the governor had most regrettably gone to his ancestors.

A period of mourning was announced, commencing at once, which would be inaugurated by permitting the people of the province to expiate the sins of their cousins. The television scene cut from the room from which he spoke.

It came to rest on great masses of humanity, men, women, children, huddled, jammed, behind barbed wire. The pick-up came down close enough to permit the personnel of the Citadel to see the blind misery on the faces of the crowd, the wept-out children, the mothers carrying babies, the helpless fathers.

They did not have to watch those faces long. The pick-up panned over the packed mob, acre on acre of helpless human animals, then returned to a steady closeup of one section.

They used the epileptigenic ray on them. Now they no longer resembled anything human. It was, instead, as if tens of thousands of monstrous chickens had had their necks wrung all at once and had been thrown into the same pen to jerk out their death spasms. Bodies bounded into the air in bonebreaking, spine-smashing fits. Mothers threw their infants from them, or crushed them in uncontrollable, viselike squeeze.

The scene cut back to the placid face of the Asiatic dignitary. He announced with what seemed to be regret in his voice that penance for sins was not sufficient, it was necessary also to be educational, in this case to the extent of one in every thousand.

Ardmore did a quick calculation in his head. A hundred fifty thousand people! It was unbelievable.

But it was soon believed. The pick-up cut again, this time to a residential street in an American city. It followed a squad of PanAsian soldiers into the living room of a family. They were gathered about a television receiver, plainly stunned by what they had just seen. The mother was huddling a young girl child to her shoulder, trying to quiet her hysteria. They seemed stupefied, rather than frightened, when the soldiers burst into their home. The father produced his card without argument; the squad leader compared it with a list, and the soldiers attended to him.

They had evidently been instructed to use a method of killing that was not pretty.

Ardmore shut off the receiver. "The raid is off," he announced. "Go to bed, all of you. And each of you take a sleeping pill tonight. That's an order!"

They left at once. No one said anything. After they were gone, Ardmore turned the receiver back on and watched it through to the end. Then he sat alone for a long time, trying to get his thoughts back into coherence. Those who order sleeping drafts won't take them.

CHAPTER FOUR

Ardmore kept very much to himself for the next two days, taking his meals in his quarters, and refusing anything but the briefest interviews. He saw his error plainly enough now; it was small solace to him that it had been another's mistake which had resulted in the massacres—he felt symbolically guilty.

But the problem remained with him. He knew now that he had been right when he had decided on a sixth column. A sixth column! Something which would conform in every superficial way to the pattern set up by the rulers, yet which would have in it the means of their eventual downfall. It might take years, but there must be no repetition of the ghastly mistake of direct action.

He knew intuitively that somewhere in Thomas' report was the idea he needed. He played it back again and again, but still he couldn't get it, even though he now knew it by heart. "They are systematically stamping out everything that is typically American in culture. The schools are gone, so are the newspapers. It is a capital offense to print anything in English. They have announced the early establishment of a system of translators for all business correspondence into their language; in the meantime all mail must be approved as necessary. All meetings are forbidden except religious meetings."

"I suppose that is a result of their experience in India. Keeps the slaves quiet." That was his own voice, sounding strange in reproduction.

"I suppose so, sir. Isn't it an historical fact that all successful empires have tolerated the local religions, no matter what else they suppressed?"

"I suppose so. Go ahead."

"The real strength of their system, I believe, is in their method of registration. They apparently were all set to put it into force, and pressed forward on that to the exclusion of other matters. It's turned the United States into one big prison camp in which it is almost impossible to move or communicate without permission from the jailers."

Words, words, and more words! He had played them over so many times that the significance was almost lost. Perhaps there was nothing in the report, after all—nothing but his imagination.

He responded to a knock at the door. It was Thomas. "They asked me to speak to you, sir," he said diffidently.

"What about?"

"Well—they are all gathered in the common room. They'd like to talk with you."

Another conference—and not of his choosing, this time. Well, he would have to go. "Tell them I will be in shortly."

"Yes, sir."

After Thomas had gone, he sat for a moment, then went to a drawer and took out his service side arm. He could smell mutiny in the very fact that someone had dared to call a general meeting without his permission. He buckled it on, then tried the slide and the change, and stood looking at it. Presently he unbuckled it and put it back into the drawer. It wouldn't help him in this mess.

He entered, sat down in his chair at the head of the table, and waited.

"Well?"

Brooks glanced around to see if anyone else wished to answer, cleared his throat, and said, "Uh—we wanted to ask you if you had any plan for us to follow."

"I do not have—as yet."

"Then we do have!" It was Calhoun.

"Yes, Colonel?"

"There is no sense in hanging around here with our hands tied. We have the strongest weapons the world has ever seen, but they need men to operate them."

"Well?"

"We are going to evacuate and go to South America! There we can find a government which will be interested in superior weapons."

"What good will that do the United States?"

"It's obvious. The empire undoubtedly intends to extend its sway over this entire hemisphere. We can interest them in a preventive war. Or perhaps we can raise up an army of refugees."

"No!"

"I am afraid you can't help yourself, Major." The tone held malicious satisfaction.

He turned to Thomas. "Are you with them on this?"

Thomas looked unhappy. "I had hoped that you would have a better plan, sir."

"And you, Dr. Brooks?"

"Well—it seems feasible. I feel much as Thomas does."

"Graham?"

The man gave him answer by silence. Wilkie looked up and then away again.

"Mitsui?"

"I'll go back outside, sir. I have things to finish."

"Scheer?"

Scheer's jaw muscles quivered. "I'll stick if you do, sir."

"Thanks." He turned to the rest. "I said, 'No!' and I mean it. If any of you leave here, it will be in direct violation of your oaths. That goes for you, Thomas! I'm not being arbitrary about this. The thing you propose to do is on all fours with the raid I canceled. So long as the people of the United States are hostages at the mercy of the PanAsians we can not take direct military action! It doesn't make any difference whether the attack comes from inside or outside, thousands, maybe millions, of innocent people will pay for it with their lives!"

He was very much wrought up, but not too much so to look around and see what effect his words were having. He had them back—or would have them in a few minutes. All but Calhoun. They were looking disturbed.

"Supposing you are right, sir"—it was Brooks speaking very gravely—"supposing you are right, is there anything we can do?"

"I explained that once before. We have to form what I called a 'sixth column,' lie low, study out their weak points, and work on them."

"I see. Perhaps you are right. Perhaps it is necessary. But it calls for a sort of patience more suited to gods than to men."

He almost had it then. What was it?

"So 'There'll be pie in the sky by and by,' " quoted Calhoun. "You should have been a preacher, Major Ardmore. We prefer action."

That was it! That was it!

"You're almost right," Ardmore answered. "Have you listened to Thomas' report?"

"I listened to the playback."

"Do you recall the one respect in which white men are still permitted to organize?"

"Why, no, I don't recall that there was one."

"None? Nowhere that they were permitted to assemble?"

"I know!" Thomas burst in. "Churches!"

Ardmore waited a moment for it to sink in, then he said very softly, "Has it ever occurred to any of you to think of the possibilities in founding a new religion?"

There was a short and startled silence. Calhoun broke it.

"The man's gone mad!"

"Take it easy, Colonel," Ardmore said mildly. "I don't blame you for thinking that I've gone crazy. It does sound crazy to talk about founding a new religion when what we want is military action against the PanAsians. But consider—what we need is an organization that can be trained and armed to fight. That and a communication system which will enable us to coordinate the whole activity. And we have to do the whole thing under the eyes of the PanAsians without arousing their suspicions. If we were a religious sect instead of a military organization, all that would be possible."

"It's preposterous! I'll have nothing to do with it."

"Please, Colonel. We need you badly. On that matter of a communication system now—Imagine temples in every city in the country hooking together with a communication system and the whole thing hooked in here at the Citadel."

Calhoun snorted. "Yes, and the Asiatics listening in to everything you say!"

"That's why we need you, Colonel. Couldn't you devise a system that they couldn't trap? Something like a radio, maybe, but operating in one of the additional spectra so that their instruments could not detect it? Or couldn't you?"

Calhoun snorted again but with a different intonation. "Why, certainly I could. The problem is elementary."

"That's exactly why we have to have you, Colonel—to solve problems that are elementary to a man of your genius," Ardmore felt slightly nauseated inside: this was worse than writing advertising copy, "but which are miracles for the rest of us. That's what a religion needs—miracles! You'll be called on to produce effects that will strain even your genius, things that the PanAsians cannot possibly understand, and will think supernatural." Seeing Calhoun still hesitate, he added, "You can do it, can't you?"

"Certainly, I can, my dear Major."

"Fine. How soon can you let me have a communication method which can't be compromised or detected?"

"Impossible to say, but it won't take long. I still don't see the sense to your scheme, Major, but I will turn my attention to the research you say you require." He got up and went out, a procession of one.

"Major?" Wilkie asked for attention.

"What? Oh, yes, Wilkie."

"I can design such a communication system for you."

"I don't doubt it a damn bit, but we are going to need all the talent we can stir up for this job. There will be plenty for you to do, too. Now as to the rest of the scheme, here's what I have in mind—just a rough idea, and I want you all to kick it around as much as possible until we get it as nearly foolproof as possible.

"We'll go through all the motions of setting up an evangelical religion, and try to get people to come to our services. Once we get 'em in where we can talk to 'em, we can pick out the ones that can be trusted and enlist them in the army. We'll make them deacons, or something, in the church. Our big angle will be charity—you come in on that, Wilkie with the transmutation process. You will turn out a lot of precious metal, gold mostly, so that we will have ready cash to work with. We feed the poor and the hungry—the PanAsians have provided us with plenty of those! and pretty soon we'll have 'em coming to us in droves.

"But that isn't the half of it. We really will go in for miracles in a big way. Not only to impress the white population—that's secondary—but to confuse our lords and masters. We'll do things they can't understand, make them uneasy, uncertain of themselves. Never anything against them, you understand. We'll be loyal subjects of the Empire in every possible way, but we'll be able to do things that they can't. That will upset them and make them nervous."

It was taking shape in his mind like a well-thought-out advertising campaign. "By the time we are ready to strike in force, we should have them demoralized, afraid of us, half hysterical."

They were beginning to be infected with some of his enthusiasm; but the scheme was conceived from a viewpoint more or less foreign to their habits of thought. "Maybe this will work, Chief," objected Thomas, "I don't say that it won't, but how do you propose to get it underway? Won't the Asiatic administrators smell a rat in the sudden appearance of a new religion?"

"Maybe so, but I don't think it likely. All Western religions look equally screwy to them. They know we have dozens of religions and they don't know anything about most of them. That's one respect in which the Era of Nonintercourse will be useful to us. They don't know much about our institutions since the Nonintercourse Act. This will just look like any one of half a dozen cockeyed cults of the sort that spring up overnight in Southern California."

"But about that springing-up business, Chief—How do we start out? We can't just walk out of the Citadel, buttonhole one of the yellow boys, and say, 'I'm John the Baptist.'"

"No, we can't. That's a point that has to be worked out. Has anybody any ideas?"

The silence that followed was thick with intense concentration. Finally Graham proposed, "Why not just set up in business, and wait to be noticed?"

"How do you mean?"

"Well, we've got enough people right here to operate on a small scale. If we had a temple somewhere, one of us could be the priest, and the others could be disciples or something. Then just wait to be noticed."

"H-m-m-m. You've got something there, Graham. But we'll open up on the biggest scale we can manage. We'll all be priests and altar attendants and so forth, and I'll send Thomas out to stir up a congregation for us among his pals. No, wait. Let 'em come in as pilgrims. We'll start this off with a whispering campaign among the hobos, send it over the grapevine. We'll have 'em say, 'The Disciple is coming!'"

"What does that mean?" Scheer inquired.

"Nothing, yet. But it will, when the time comes. Now look—Graham, you're an artist. You're going to have to get dinner with your left hand for a few days. Your right will be busy sketching out ideas for robes and altars and props in general—sacerdotal stuff. Guess the interior and exterior of the temple will be mostly up to you, too."

"Where will the temple be located?"

"Well, now, that's a question. It shouldn't be too far from here unless we abandon the Citadel entirely. That doesn't seem expedient; we need it for a base and a laboratory. But the temple can't be too close, for we can't afford to attract special attention to this mountainside." Ardmore drummed on the table. "It's a difficult matter."

"Why not," offered Dr. Brooks, "make this the temple?"

"Huh?"

"I don't mean this room, of course, but why not put the first temple right on top of the Citadel? It would be very convenient."

"So it would, doctor, but it would certainly draw a lot of unhealthy attention to—Wait a minute! I think I see what you mean." He turned to Wilkie. "Bob, how could you use the Ledbetter effect to conceal the existence of the Citadel, if the Mother Temple sat right on top of it? Could it be done?"

Wilkie looked more puzzled and collie-doggish than ever. "The Ledbetter effect wouldn't do it. Do you especially want to use the Ledbetter effect? Because if you don't it wouldn't be hard to rig a type-seven screen in the magnetogravitic spectrum so that electromagnetic type instruments would be completely blanked out. You see—"

"Of course I don't care what you use! I don't even know the names of the stuff you laboratory boys use—all I want is the results. O. K.—you take care of that. We'll completely design the temple here, get all the materials laid out and ready to assemble down below, then break through to the surface and run the thing up as fast as possible. Anyone have any idea how long that will take? I'm afraid my own experience doesn't run to building construction."

Wilkie and Scheer engaged in a whispered consultation. Presently Wilkie broke off and said, "Don't worry too much about that, Chief. It will be a power job."

"What sort?"

"You've got a memorandum on your desk about the stuff. The traction and pressure control we developed from the earlier Ledbetter experiments."

"Yes, Major," Scheer added, "you can forget it; I'll take care of the job. With tractors and pressors in an aggravitic field, it won't take any longer than assembling a cardboard model. Matter of fact, I'll practice on a cardboard model before we run up the main job."

"O.K., troops," Ardmore smilingly agreed, with the lightheartedness that comes from the prospect of plenty of hard work, "that's the way I like to hear you talk. The powwow is adjourned for now. Get going! Thomas, come with me."

"Just a second, Chief," Brooks added as he got up to follow him, "couldn't we—" They went out the door, still talking.

Despite Scheer's optimism the task of building a temple on the mountain top above the Citadel developed unexpected headaches. None of the little band had had any real experience with large construction jobs. Ardmore, Graham, and Thomas knew nothing at all of such things, although Thomas had done plenty of work with his hands, some of it carpentry. Calhoun was a mathematician and by temperament undisposed to trouble himself with such menial pursuits in any case. Brooks was willing enough but he was a biologist, not an engineer. Wilkie was a brilliant physicist and, along lines related to his specialty, a competent engineer; he could design a piece of new apparatus necessary to his work quite handily.

However, Wilkie had built no bridges, designed no dams, bossed no gangs of sweating men. Nevertheless the job devolved on him by Hobson's choice. Scheer was not competent to build a large building; he thought that he was, but he thought in terms of small things, tools, patterns, and other items that fitted into a machine shop. He could build a scale model of a large building, but he simply did not understand heavy construction.

It was up to Wilkie.

He showed up in Ardmore's office a few days later with a roll of drawings under his arm. "Uh, Chief?"

"Eh? Oh, come in, Bob. Sit down. What's eating on you? When do we start building the temple? See here—I've been thinking about other ways to conceal the fact that the Citadel will be under the temple. Do you suppose you could arrange the altar so that—"

"Excuse me, Chief."

"Eh?

"We can incorporate most any dodge you want into the design, but I've got to know something more about the design first."

"That's your problem—yours and Graham's."

"Yes, sir. But how big do you want it to be?"

"How big? Oh, I don't know, exactly. It has to be big." Ardmore made a sweeping motion with both hands that took in floor, walls, and ceiling. "It has to be impressive."

"How about thirty feet in the largest dimension?"

"Thirty feet? Why, that's ridiculous! You aren't building a soft-drinks stand; you're building the mother temple of a great religion—of course you aren't, but you've got to think of it that way. It's got to knock their eyes out. What's the trouble? Materials?"

Wilkie shook his head. "No, with Ledbetter-type transmutation materials are not a problem. We can use the mountain itself for materials."

"That's what I thought you intended to do. Carve out big chunks of granite and use your tractor and pressor beams to lay them up like giant bricks."

"Oh, no!"

"No? Why not?"

"Well, we could, but when we got through it wouldn't look like much—and I don't know how we would roof it over. What I intended to do was to use the Ledbetter effect not just for cutting or quarrying, but to make—transmute—the materials I want. You see, granite is principally oxides of silicon. That complicates things a little because both elements are fairly near the lower end of the periodic table. Unless we go to a lot of trouble and get rid of a lot of excess energy—a tremendous amount; darn near as much as the Memphis power pile develops—as I say, unless we arrange to bleed off all that power, and right now I don't see just how we could do it, then—"

"Get to the point, man!"

"I was getting to the point, sir," Wilkie answered in hurt tones. "Transmutations from the top or the bottom of the periodic scale toward the middle give off power; contrariwise, they absorb energy. Way back in the middle of the last century they found out how to do the first sort; that's what atom bombs are based on. But to handle transmutations for building materials, you don't want to give off energy like an atom bomb or a power pile. It would be embarrassing."

"I should think so!"

"So I'll use the second sort, the energy-absorbing sort. As a matter of fact I'll balance them. Take magnesium for instance. It lies between silicon and oxygen. The binding energies involved—"

"Wilkie!"

"Yes, Sir?"

"Just assume that I never got through third grade. Now can you make the materials you need, or can't you?"

"Oh, yes, sir, I can make them."

"Then how can I be of help to you?"

"Well, sir, it's the matter of putting the roof on and the size. You say a thirty-foot overall dimension is no good—"

"No good at all. Did you see the North American Exposition? Remember the General Atomics Exhibit?"

"I've seen pictures of it."

"I want something as gaudy and impressive as that, only bigger. Now why are you limited to thirty feet?"

"Well, sir, a panel six by thirty is the biggest I can squeeze out through the door, allowing for the turn in the passage."

"Take 'em up through the scout-car lift."

"I thought of that. It will take a panel thirteen feet wide, which is good, but the maximum length is then only twenty-seven feet. There's a corner to turn between the hangar and the lift."

"Hmm—Look, can you weld with that magic gimmick? I thought you could build the temple in sections, down below here, then assemble it above ground?"

"That was the idea. Yes, I suppose we could weld walls as big as you want. But look, major, how big a building do you want?"

"As big as you can manage."

"But how big do you want?"

Ardmore told him. Wilkie whistled. "I suppose it's possible to give you walls that big, but I don't see any way to roof it over."

"Seems to me I've seen buildings with that much clear span."

"Yes, of course. You give me the services of construction engineers and architects and heavy industry to build the trusses needed to take that span and I'll build you as big a temple as you want. But Scheer and I can't do it alone, even with pressors and tractors to do all the heavy work. I'm sorry, sir, but I don't see an answer."

Ardmore stood up and put a hand on Wilkie's arm. "You mean you don't see an answer yet. Don't get upset, Bob. I'll take whatever you build. But just remember—This is going to be our first public display. A lot depends on it. We can't expect to make much impression on our overlords with a hotdog stand. Make it as big as you can. I'd like something about as impressive as the Great Pyramid—but don't take that long to build it."

Wilkie looked worried. "I'll try, sir. I'll go back and think about it."

"Fine!"

When Wilkie had gone Ardmore turned to Thomas. "What do you think about it, Jeff? Am I asking too much?"

"I was just wondering," Thomas said slowly, "why you set so much store by this temple?"

"Well, in the first place it gives a perfect cover up for the Citadel. If we are going to do anything more than sit here and die of old age, the time will come when a lot of people will have to be going in and out of here. We can't keep the location secret under those circumstances so we will have to have a reason, a cover up. People are always going in and out of a church building—worship and so forth. I want to cover up the 'and so forth.'"

"I understand that. But a building with thirty-foot maximum dimensions can cover up a secret stairway quite as well as the sort of convention-hall job you are asking young Wilkie to throw up."

Ardmore squirmed. Damn it—couldn't anyone but himself see the value of advertising? "Look, Jeff, this whole deal depends on making the right impression at the start. If Columbus had come in asking for a dime, he would have been thrown out of the palace on his ear. As it was, he got the crown jewels. We've got to have an impressive front."

"I suppose so," Thomas answered without conviction.

Several days later Wilkie asked permission for Scheer and himself to go outside. Finding that they did not intend to go far, Ardmore gave permission, after impressing on them the need for extreme caution.

He encountered them some time later proceeding down the main passage toward the laboratories. They had an enormous granite boulder. Scheer was supporting it clear of walls and floor by means of tractors and pressors generated by a portable Ledbetter projector strapped as a pack on his shoulders. Wilkie had tied a line around the great chunk of rock and was leading it as if it were a cow. "Great Scott!" said Ardmore. "What y' got there?"

"Uh, a piece of mountain, sir."

"So I see. But why?"

Wilkie looked mysterious. "Major, could you spare some time later in the day? We might have something to show you."

"If you won't talk, you won't talk. Very well."

Wilkie phoned him later, much later, asked him to come and suggested that Thomas come, too. When they arrived in the designated shop room everyone was present except Calhoun. Wilkie greeted them and said, "With your permission, we'll start, Major."

"Don't be so formal. Aren't you going to wait for Colonel Calhoun?"

"I invited him, but he declined."

"Go ahead then."

"Yes, sir." Wilkie turned to the rest. "This piece of granite represents the mountain top above us. Go ahead, Scheer."

Wilkie took position at a Ledbetter projector. Scheer was already at one; it had been specially fitted with sights and some other gadgetry that Ardmore could not identify. Scheer pressed a couple of studs; a pencil beam of light sprang out.

Using it as if it were a saw he sliced the top off the boulder. Wilkie caught the separated portion with a tractor-pressor combination and moved it aside. He set his controls and it hung in air; where it had been the stone was flat and of mirror polish. "That's the temple's base," said Wilkie.

Scheer continued carving with his pencil beam, trucking his projector around as necessary. The flat top had now been squared off; the square was the summit of a four-sided truncated pyramid. That done, he started carving steps down one side of the figure. "That's enough, Scheer," Wilkie commanded. "Let's make a wall. Prepare the surface."

Scheer did something with his projector. No beam could be seen, but the flat upper surface turned black. "Carbon," announced Wilkie. "Industrial diamonds probably. That's our work bench. O. K., Scheer. " Wilkie moved the detached chunk back over the "bench"; Scheer carved off a piece; it turned molten, dripped down on the flat surface, spread to the edges and stopped. It now had a white metallic sheen. As it cooled Scheer nipped each corner, then, using one pressor as a vise to hold it firmly to the boulder and another as a moving wedge, he turned each corner up. It was now a shallow, open box, two feet square and an inch deep. Wilkie whisked it aside and hung it in air.

The process was repeated, but this time a single sheet rather than a box was formed. Wilkie put it out of the way and put the box back on the pedestal. "Let's stuff the turkey," announced Wilkie.

He transferred the chopped-off chunk back to a position over the open box. Scheer carved off a piece and lowered it into the box, then played a beam on it. It melted down and spread over the bottom. "Granite is practically glass," lectured Wilkie, "and what we want is foamed glass, so we use no transmutation in this step—except the least, little bit to make the gases to foam it. Let's have a shot of nitrogen, Scheer." The master sergeant nodded and irradiated the mess for a split second; it foamed up like boiling fudge, filling the shallow box to the rim, and froze.

Wilkie snagged the simple sheet out of the air and caused it to hover over the filled box, then to settle so that it lay, somewhat unevenly, as a cover. "Iron it down, Scheer."

The sheet glowed red and settled in place, pressed flat by an invisible hand. Scheer walked his projector around, welding the cover of the box to the box proper. When he had finished Wilkie set the filled box up on edge at one edge of the pedestal. Leaving the controls of his projector set to hold it there, he walked over to the far side of the room where a tarpaulin covered a pile of something on a bench.

"To save your time and for practice we made four others earlier," he explained and whipped off the tarpaulin. Disclosed were a stack of sandwich panels exactly like that one just created. He did not touch them; instead Scheer lifted them off by projector one at a time and built a cube, using the newly made panel as the first face and the pedestal as the bottom of the cube. Wilkie returned to his projector and held the structure rigid while Scheer welded each seam. "Scheer is much more accurate than I am," he explained. "I give him all the tough parts. O. K., Scheer—how about a door?"

"How big?" grunted the sergeant, speaking for the first time.

"Use your judgment. Eight inches high would be all right."

Scheer grunted again and carved a rectangular opening in the side facing the slope on which he had begun earlier to carve steps. When he finished Wilkie announced, "There's your temple, boss."

No human hand had touched the boulder nor anything made from it, from start to finish.

The applause sounded like considerably more than five people. Wilkie turned pink; Scheer worked his jaw muscles: They crowded around it. "Is it 'hot'?" inquired Brooks.

"No," answered Mitsui, "I touched it."

"I didn't mean that."

"No, it's not 'hot'," Wilkie reassured him, "not with the Ledbetter process. Stable isotopes, all of them."

Ardmore straightened up from a close inspection. "I take it you intend to do the whole thing outdoors?"

"Is that all right, Major? Of course we could work down below and assemble it up above, from small panels—but I'm sure that would take just as long as to work from scratch with big panels. And I'm not sure about assembling the roof from small units. Sandwich panels like these are the lightest, strongest, stiffest structure we can use. It was the problem of that big roof span you want that caused us to work out this system."

"Do it your way. I'm sure you know what you're doing."

"Of course," admitted Wilkie, "we can't finish it in this short a time. This is just the shell. I don't know how long it will take to dress it up."

"Dress it up?" inquired Graham. "When you've got a fine, great simple shape why belittle it with decoration? The cube is one of the purest and most beautiful shapes possible."

"I agree with Graham," Ardmore commented. "That's your temple, right there. Nothing makes a more effective display than great, unbroken masses. When you've got something simple and effective, don't louse it up."

Wilkie shrugged. "I wouldn't know. I thought you wanted something fancy."

"This is fancy. But see here, Bob, one thing puzzles me. Mind you, I'm not criticizing—I'd as soon think of criticizing the Days of Creation—but tell me this: why did you take a chance on going outside? Why didn't you just go into one of the unoccupied rooms, peel off the wall coating and use that magic knife to carve a chunk of granite right out of the heart of the mountain?"

Wilkie looked thunderstruck. "I never thought of that."

CHAPTER FIVE

A patrol helicopter cruised slowly south from Denver. The PanAsian lieutenant commanding it consulted a recently constructed aerial mosaic map and indicated to the pilot that he was to hover. Yes, there it was, a great cubical building rising from the shoulder of a mountain. It had been picked up by the cartographical survey of the Heavenly Emperor's new Western Realm and he had been sent to investigate.

The lieutenant regarded the job as a simple routine matter. Although the building did not appear in the records of the administrative district in which it was located there was nothing surprising in that. The newly conquered territory was enormous in extent, the aborigines, with their loose undisciplined ways—so characteristic of all the inferior races—kept no proper records of anything. It might be years before everything in this wild new country was properly indexed and cross-filed, particularly as this pale anemic people was almost childishly resistant to the benefits of civilization.

Yes, it would be a long job, perhaps longer than the Amalgamation of India. He sighed to himself. He had received a letter that morning from his principal wife informing him that his second wife had presented him with a manchild. Should he request that he be reclassified as a permanent colonist in order that his family might join him here, or should he pray for leave, long overdue?

Those were no thoughts for a man on the Heavenly Emperor's duty! He recited over to himself the Seven Principles of the Warrior Race and indicated to the pilot an alp in which to land.

The building was more impressive from the ground, a great square featureless mass, fully two hundred yards across in every dimension. The face toward him shone with a clear monochromatic emerald green, although it faced away from the afternoon sun. He could see a little of the wall to the right; it was golden.

His task group of one squad filed out of the helicopter after him and were followed by the mountain guide who had been impressed for this service. He spoke to the white man in English. "Have you seen this building before?"

"No, Master."

"Why not?"

"This part of the mountains is new to me."

The man was probably lying, but it was useless to punish him. He dropped the matter. "Lead on."

They trudged steadily up the slope toward the immense cube to where a broad flight of steps, wider still than the cube itself, led to its nearer face. The lieutenant hesitated momentarily before starting to mount them. He was aware of a general feeling of unease, a sense of mild disquietude, as if a voice were warning him of unnamed danger.

He set foot on the first step. A single deep clear note rolled across the canyon; the feeling of uneasiness swelled to an irrational dread. He could see that his men were infected with it. Resolutely he mounted the second step. Another and different tone echoed through the hills.

He marched steadily up the long flight, his men following reluctantly. A slow, ponderous and infinitely tragic largo kept time to his labored steps, labored because the treads were just too broad and the lifts just too high for comfort. The feeling of impending disaster, of inescapable doom, grew steadily greater as he approached the building.

Two doors of heroic size swung slowly open as the lieutenant ascended. In the archway thus created stood a human figure, a man, dressed in emerald robes that brushed the floor. White hair and flowing beard framed a face of benign dignity. He moved majestically forward from the doorway, reaching the top of the flight of steps just as the lieutenant attained it. The lieutenant noted with amazement that a halo flickered unsubstantially around the old man's head. But he had little time to consider it; the old man raised his right hand in benediction and spoke:

"Peace be unto you!"

And it was so! The feeling of dread, of irrational fright, dropped away from the PanAsian as if someone had turned a switch. In his relief he found himself regarding this member of an inferior race—so evidently a priest—with a warmth reserved for equals. He recalled the Admonitions for dealing with inferior religions.

"What is this place, Holy One?"

"You stand at the threshold of the Temple of Mota, Lord of Lords and Lord of All!"

"Mota-h-m-m-m." He could not recall such a god, but it did not matter. These sallow creatures had a thousand strange gods. Three things only do slaves require, food, work, and their gods, and of the three their gods must never be touched, else they grow troublesome. So said the Precepts for Ruling. "Who are you?"

"I am an humble priest, First Server of Shaam, Lord of Peace."

"Shaam? I thought you said Mota was your god?"

"We serve the Lord Mota in six of his thousand attributes. You serve him in your way. Even the Heavenly Emperor serves him in his. My duty is to the Lord of Peace."

This was perilously close to treason, the lieutenant thought, if not to blasphemy. Still, it may be that the gods have many names, and the native did not seem disposed to make trouble. "Very well, old Holy One, the Heavenly Emperor permits you to serve your god as you see him, but I must inspect for the Empire. Stand aside."

The old man did not move, but answered regretfully, "I am sorry, Master. It cannot be."

"It must be. Stand aside!"

"Please, Master, I beg of you! It is not possible for you to enter here. In these attributes Mota is Lord of the white men. You must go to your own temple; you cannot enter this one. It is death to any but his followers."

"You threaten me?"

"No, Master, no—we serve the Emperor, as our faith requires. But this thing the Lord Mota Himself forbids. I cannot save you if you offend."

"On the Heavenly Emperor's service—stand aside!" He strode steadily across the broad terrace toward the door, his squad clomping stolidly after him. The panic dread clutched at him as he marched and increased in intensity as he approached the great door. His heart seemed constricted, and a mad longing to flee clamored through him senselessly. Only the fatalistic courage of his training made him go on. Through the door he saw a vast empty hall and on the far side an altar, large in itself, but dwarfed by the mammoth proportions of the room. The inner walls shone, each with its own light, red, blue, green, golden. The ceiling was a perfect, flawless white, the floor an equally perfect black.

There was nothing to be afraid of here, he told himself, this illogical but horribly real dread was a sickness, unworthy of a warrior. He stepped across the threshold. A momentary dizziness, a flash of terrifying insecurity and he collapsed.

His squad, close at his heels, had no more warning.

Ardmore came trotting out of concealment. "Nice work, Jeff," he called out, "you should be on the stage!"

The old priest relaxed. "Thanks, Chief. What happens next?"

"We'll have time to figure that out." He turned toward the altar and shouted, "Scheer!"

"Yes, sir!"

"Turn off the fourteen-cycle note!" He added to Thomas, "Those damned subsonics give me the creeping horrors even when I know what's going on. I wonder what effect it had on our pal here?"

"He was cracking up, I believe. I never thought he'd make it to the doorway."

"I don't blame him. It made me want to howl like a dog, and I ordered it turned on. There's nothing like the fear of something you can't understand to break a man down. Well, we got a bear by the tail.

Now to figure out a way to turn loose—"

"How about him?" Thomas jerked his head toward the mountaineer, who still stood near the head of the great flight of steps.

"Oh, yes." Ardmore whistled at him and shouted, "Hey you—come here!"

The man hesitated, and Ardmore added, "Damn it—we're white men! Can't you see that?"

The man answered, "I see it, but I don't like it." Nevertheless he slowly approached.

Ardmore said, "This is a piece of razzle-dazzle for the benefit of our yellow brethren. Now that you're in it, you're in it! Are you game?"

The other members of the personnel of the Citadel had gathered around by this time. The mountain guide glanced around at their faces. "It doesn't look as if I had much choice."

"Maybe not, but we would rather have a volunteer than a prisoner."

The mountaineer shifted tobacco from left cheek to right, glanced around the immaculate pavement for a place to spit, decided not to, and answered. "What's the game?"

"It's a frameup on our Asiatic bosses. We plan to give them the run-around—with the help of God and the great Lord Mota."

The guide looked them over again, then suddenly stuck out his hand and said, "I'm in."

"Fine," agreed Ardmore, taking his hand. "What's your name?"

"Howe. Alexander Hamilton Howe. Friends call me Alec."

"O.K., Alec. Now what can you do? Can you cook?" he added.

"Some."

"Good." He turned away. "Graham, he's your man for now. I'll talk with him later. Now—Jeff, did it seem to you that one of those monkeys went down a little slowly?"

"Maybe. Why?"

"This one; wasn't it?" He touched one of the quiet, sprawled figures with his shoe.

"I think so."

"All right, I want to check up on him before we bring them to. If he's a Mongolian he should have keeled over quicker. Dr. Brooks, will you give this laddie's reflexes a workout? And don't be too gentle about it."

Brooks managed to produce some jerks in short order. Seeing this, Ardmore reached down and set his thumb firmly on the exposed nerve under the ear. The soldier came to his knees, writhing. "All right, bud—explain yourself." The soldier stared impassively. Ardmore studied his face for a moment, then made a quick gesture, which was protected from the gaze of the others by his body.

"Why didn't you say so?" asked the PanAsian soldier.

"I must say it's a good make-up job," commented Ardmore admiringly. "What's your name and rank?"

"Tattoo and plastic surgery," the other returned. "Name's Downer, captain, United States army."

"Mine's Ardmore. Major Ardmore."

"Glad to know you, Major." They shook hands. "Very glad, I should say. I've been hanging on for months, wondering who to report to and how."

"Well, we can certainly use you. It's a scratch organization. I've got to get busy now—we'll talk later." He turned away. "Places, gentlemen. Second act. Check each other's make-up. Wilkie, see to it that Howe and Downer are out of sight. We are going to bring our drowsy guests back to consciousness."

They started to comply. Downer touched Ardmore's sleeve.

"Just a moment, Major. I don't know your layout, but before we go any further, are you sure you don't want me to stay on my present assignment?"

"Eh? H-m-m-m—you've got something there. Are you willing to do it?"

"I'm willing to do it, if it's useful," Downer replied soberly.

"It would be useful. Thomas, come here." The three of them went into a short conference and arranged a way for Downer to report through the grapevine, and Ardmore told him as much about the set-up as he needed to know. "Well, good luck, old man," he concluded. "Get back down there and play dead, and we'll reanimate your messmates."

Thomas, Ardmore, and Calhoun attended the Asiatic lieutenant as his eyes flickered open. "Praise be!" intoned Thomas. "The Master lives!"

The lieutenant stared around him, shook his head, then reached for his sidearm. Ardmore, impressive in the red robes of Dis, Lord of Destruction, held up a hand. "Careful, Master, please! I have beseeched my Lord Dis to return you to us. Do not offend him again."

The Asiatic hesitated, then asked, "What happened?"

"The Lord Mota, acting through Dis, the Destroyer, took you for his own. We prayed and wept and beseeched Tamar, Lady of Mercy, to intercede for us." He swept an arm toward the open door. Wilkie, Graham, and Brooks, appropriately clad, were still busily genuflecting before the altar. "Graciously, our prayer was answered. Go in peace!"

Scheer, at the control board, picked this moment to increase the volume on the fourteen-cycle note. With nameless fear pressing his heart, confused, baffled, the lieutenant took the easy way out. He gathered his men about him and marched back down the broad flight of stairs, colossal organ music still following him in awful, inescapable accompaniment.

"Well, that's that," Ardmore commented as the little group disappeared in the distance. "First round to God's chilluns. Thomas, I want you to start into town at once."

"So?"

"In your robes and full paraphernalia. Seek out the district boss and register formal complaint that Lieutenant Stinkyface did wrongfully profane our sacred places to the great indignation of our gods, and pray for assurance that it will not happen again. You want to be on your high horse about the whole matter—righteous indignation, you know—but, oh, very respectful to temporal authority."

"I appreciate the confidence you place in me," Thomas said with sardonic grimness. Ardmore grinned at him.

"I know it's a tough assignment, fella, but a lot depends on it. If we can make use of their own customs and rules to establish a precedent right now which sets us up as a legitimate religion, entitled to all the usual immunities, we've got half the battle won."

"Suppose they ask for my identification card?"

"If you carry yourself with sufficient arrogance they will never get around to asking for it. Just think about the typical clubwoman and try to show that much bulge. I want 'em to get used to the idea that anyone with the staff and the robes and the halo carries his identification just in his appearance. It will save us trouble later."

"I'll try—but I'm not promising anything."

"I think you can do it. Anyhow, you are going out equipped with enough stuff to keep you safe. Keep your shield turned on whenever you are around any of 'em. Don't try to account for it in any way; just let 'em bounce off it, if they close in on you. It's a miracle—no need to explain."

"O. K."

The lieutenant's report was not satisfactory to his superiors. As for that, it was not satisfactory to himself. He felt an acute sense of loss of personal honor, of face, which the words of his immediate superior did nothing to lessen. "You, an officer in the army of the Heavenly Emperor, have permitted yourself to look small in the eyes of a subject race. What have you to say?"

"Your forgiveness, sire!"

"Not for me—it is a matter for you to settle with your ancestors."

"I hear, sire!" He caressed the short sword which hung at his side.

"Let there be no haste; I intend for you to tell your tale in person to the Imperial Hand."

The local Hand of the Emperor, military governor of that region which included Denver and the Citadel, was no more pleased than his junior. "What possessed you to enter their holy place? These people are childlike, excitable. Your action could be the regrettable cause of assassinations of many more valuable than yourself. We cannot be forever wasting slaves to teach them lessons."

"I am unworthy, sire."

"I do not dispute that. You may go." The lieutenant departed, to join, not his family, but his ancestors.

The Imperial Hand turned to his adjutant. "We will probably be petitioned by this cult. See that the petitioners are pacified and assured that their gods will not be disturbed. Note the characteristics of the sect and send out a general warning to deal gently with it." He sighed. "These savages and their false gods! I grow weary of them. Yet they are necessary; the priests and the gods of slaves always fight on the side of the Masters. It is a rule of nature."

"You have spoken, sire."

Ardmore was glad to see Thomas return to the Citadel. In spite of his confidence in Jeff's ability to handle himself in a tight place, in spite of the assurance that Calhoun had given him that the protective shield, properly handled, would protect the wearer from anything that the PanAsian could bring on it, he had been in a state of nerves ever since Thomas had set out to register a complaint with the Asiatic authorities. After all, the attitude of the PanAsians toward local religions might be one of bare toleration rather than special encouragement.

"Welcome home, old boy!" he shouted, pounding him on the back. "I'm glad to see your ugly face—tell me what happened?"

"Give me time to get out of this bloody bathrobe, and I'll tell you. Got a cigarette? That's a bad point about being a holy man; they don't smoke."

"Sure. Here. Had anything to eat?"

"Not recently."

Ardmore flipped the intercommunicator to Kitchen. "Alec, rustle up some groceries for Lieutenant Thomas. And tell the troops they can hear his story if they come around to my office."

"Ask him if he has any avocados."

Ardmore did so. "He says they're still in quick freeze, but he'll thaw one out. Now let's have your story. What did Little Red Riding Hood say to the wolf?"

"Well—you'll hardly believe it, Chief, but I didn't have any trouble at all. When I got into town, I marched right straight up to the first PanAsian policeman I found, stepped off the curb, and struck the old benediction pose—staff in my left hand, right hand pawing the air; none of this hands folded and head down stuff that white men are supposed to use. Then I said, 'Peace be unto you! Will the Master direct his servant to the seat of the Heavenly Emperor's government?'

"I don't think he understood much English. He seemed startled at my manner, and got hold of another flatface to help him. This one knew more English and I repeated my request. They palavered in that damned singsong tongue of theirs, then conducted me to the palace of the Emperor's Hand. We made quite a procession—one on each side and me walking fast so that I kept about even or a little in front of them."

"Good advertising," Ardmore approved.

"That's what I thought. Anyway, they got me there and I told my story to some underofficial. The results astounded me. I was whisked right straight up to the Hand himself."

"The hell you say!"

"Wait a minute—here's the pay-off: I'll admit I was scared, but I said to myself 'Jeff, old boy, if you start to crawl now, you'll never get out of here alive.' I knew a white man is expected to drop to his knees before an official of that rank. I didn't; I gave him the same standing benediction I had given his flunkies. And he let me get away with it! He looked me over and said, 'I thank you for your blessing, Holy One. You may approach.' He speaks excellent English, by the way.

"Well, I gave him a reasonably accurate version of what happened here—the official version, you understand—and he asked me a few questions."

"What sort of questions?"

"In the first place he wanted to know if my religion recognized the authority of the Emperor. I assured him that it did, that our followers were absolutely bound to obey temporal authority in all temporal matters, but that our creed commanded us to worship the true gods in our own fashion. Then I gave him a long theological spiel. I told him that all men worshipped God, but that God had a thousand attributes, each one a mystery. God in his wisdom had seen fit to appear to different races in different attributes because it was not seemly for servant and master to worship in the same fashion. Because of that, the six attributes of Mota, of Shaam, of Mens, of Tamar, of Barmac, and of Dis had been set aside for the white men, just as the Heavenly Emperor was an attribute reserved for the race of Master."

"How did he take it?"

"I gathered that he thought it was very sound doctrine—for slaves. He asked me what my church did besides holding services, and I told him that our principal desire is to minister to the poor and sick. He seemed pleased at that. I have an impression that our gracious overlords are finding relief a very serious problem."

"Relief? Do they give any relief?"

"Not exactly. But if you load prisoners into concentration camps you have to feed them something. The internal economy has largely broken down and they haven't got it straightened out yet. I think they would welcome a movement which would relieve them from worrying too much over how to feed the slaves."

"H-m-m-m. Anything else?"

"Nothing much. I assured him again that we, as spiritual leaders, were forbidden by our doctrines to have anything to do with politics, and he told me that we would not be molested in the future. Then he dismissed me. I repeated my benediction, turned my back on him, and stomped out."

"It seems to me," said Ardmore, "that you pretty thoroughly sold him a bill of goods."

"I wouldn't be too sure, Chief. That old scoundrel is shrewd and Machiavellian. I shouldn't call him a scoundrel, because he's not by his standards. He's a statesman. I've got to admit he impressed me. Look—these PanAsians can't be stupid; they've conquered and held half a world, hundreds of millions of people. If they tolerate local religions, it's because they have found it to be smart politics. We've got to keep them thinking so in our case, in the face of smart and experienced administrators."

"No doubt you're right. We certainly must be careful not to underestimate them."

"I hadn't quite finished. Another escort picked me up on the way out of the palace and stayed with me. I walked along, paying no attention to them. My route out of town took me through the central market. There were hundreds of whites there, lined up in queues, waiting for a chance to buy food on their ration cards. I got an idea and decided to find out just how far my immunity extended. I stopped and climbed up on a box and started to preach to them."

Ardmore whistled. "Cripes, Jeff, you shouldn't have taken a chance like that!"

"But, Major, we needed to know, and I was fairly certain that the worst that could happen would be that they would make me stop."

"Well . . . yes, I suppose so. Anyhow the job requires that we take chances and you have to use your own judgment. Boldness may be the safest policy. Sorry I spoke—what happened?"

"My escort seemed dumbfounded at first, and not certain what to do. I went right ahead, watching them out of the corner of my eye. Pretty soon they were joined by a chappie who seemed to be senior to them. They held a confab, and the senior cop went away. He came back in about five minutes, and just stood there, watching me. I gathered that he had phoned in and had received instructions to let me alone."

"How did the crowd take it?"

"I think they were most impressed by the apparent fact that a white man was breaking one of the rules of the overlords and getting away with it. I didn't try to tell them much. I took as my text, The Disciple is coming!' and embroidered it with a lot of glittering generalities. I told them to be good boys and girls and not to be afraid, for the Disciple was coming to feed the hungry and heal the sick and console the bereaved."

"H-m-m-m. Now that you've started making promises, we had better get set to deliver."

"I was coming to that. Chief, I think that we had better set up a branch church in Denver right away."

"We've hardly got the personnel yet to start branching out."

"Are you sure? I don't like to set my opinion up against yours, but I don't see how we can gain many recruits unless we go where the recruits are. They're all set for it now; you may be sure that every white man in Denver is talking about the old beezer in the halo—in a halo, mind you!—who preached in the market place and the Asiatics didn't dare stop him. We'll pack 'em in!"

"Well . . . maybe you're right—"

I think I am. Admitting that you can't spare the regular personnel from the Citadel, here's how we can work it; I'll go down to the city with Alec, locate a building that we can turn into a temple and start holding services. We can get along with the power units in the staffs at first, and Scheer can follow along and rebuild the interior of the temple and set up a proper unit in the altar. Once things are rolling I can turn the routine over to Alec. He'll be the local priest for Denver."

The others had drifted in one by one while Ardmore and Thomas were talking. Ardmore turned now to Alec Howe.

"How about it, Alec? Do you think you can make a noise like a priest, preach 'em sermons, organize charities, and that sort of thing?"

The mountain guide was slow to answer. "I think, Major, that I would rather stay on the job I have now."

"It won't be so hard," Ardmore reassured him. "Thomas or I can write your sermons for you. The rest of it would consist largely in keeping your mouth shut and your eyes open, and in shooing likely prospects up here to be enlisted."

"It's not the sermons, Major. I can preach a sermon—I used to be a lay preacher in my youth. It's just that I can't reconcile this false religion with my conscience. I know you are working toward a worthy purpose and I've agreed to serve, but I'd rather stay in the kitchen."

Ardmore considered his words before replying. "Alec," he said at length, in a grave voice, "I think I can appreciate your viewpoint. I wouldn't want to ask any man to do anything against his own conscience. As a matter of fact, we would not have adopted the cloak of a religion had we seen any other practical way to fight for the United States. Does your faith forbid you to fight for your country?"

"No, it does not."

"Most of your work as a priest of this church would be to help the helpless. Doesn't that fit into your creed?"

"Naturally it does. That is exactly why I cannot do it in the name of a false God."

"But is it a false God? Do you believe that God cares very much what name you call Him as long as the work you perform is acceptable to Him? Now mind you," he added hastily, "I don't say that this so-called temple we have erected here is necessarily a House of the Lord, but isn't the worship of God a matter of how you feel in your heart rather than the verbal forms and the ceremonials used?"

"That's true, Major, every word you've said is gospel—but I just don't feel right about it."

Ardmore could see that Calhoun had been listening to this discussion with poorly concealed impatience. He decided to terminate it. "Alec, I want you to go now and think this over by yourself. Come see me tomorrow. If you can't reconcile this work to your conscience, I'll give you an unprejudiced discharge as a conscientious objector. It won't even be necessary for you to serve in the kitchen."

"I wouldn't want to go that far, Major. It seems to me—"

"No, really. If one is wrong, so is the other. I don't want to be responsible for requiring a man to do anything that might be a sin against his faith. Now you get along and think about it."

Ardmore hustled him out without giving him a chance to talk further.

Calhoun could contain himself no longer. "Well, really, Major, I must say! Is it your policy to compromise with superstition in the face of military necessity?"

"No, Colonel, it is not—but that superstition, as you call it, is in this case a military fact. Howe's case is the first example of something we are going to have to deal with—the attitude of the orthodox religions to the one we have trumped up."

"Maybe," suggested Wilkie, "we should have imitated the more usual religions."

"Perhaps. Perhaps. I thought of that, but somehow I couldn't see it. I can't picture one of us standing up and pretending to be a minister, say, of one of the regular protestant churches. I'm not much of a churchgoer, but I didn't think I could stomach it. Maybe when it comes right down to it, I'm bothered by the same thing that bothers Howe. But we've got to deal with it. We've got to consider the attitude of the other churches. We mustn't tread on their toes in any way we can help."

"Maybe this would help," Thomas suggested. "It could be one of the tenets of our church that we included and tolerated, even encouraged, any other form of worship that a man might favor. Besides that, every church, especially these days, has more social work than it can afford. We'll give the others financial assistance with no strings attached."

"Both of those things will help," Ardmore decided, "but it will be ticklish business. Whenever possible, we'll enlist the regular ministers and priests themselves. You can bet that every American will be for us, if he understands what we are aiming toward. The problem will be to decide which ones can be trusted with the whole secret. Now about Denver, Jeff, do you want to start back right away, tomorrow, maybe?"

"How about Howe?"

"He'll come around, I think."

"Just a moment, Major." It was Dr. Brooks, who had been sitting quietly, as usual, while the others talked. " I think it would be a good idea if we waited a day or two, until Scheer can make certain changes in the power units of the staffs."

"What sort of changes?"

"You will remember that we established experimentally that the Ledbetter effect could be used as a sterilizing agent?"

"Yes, of course."

"That is why we felt safe in predicting that we would help the sick. As a matter of fact we underestimated the potentialities of the method. I infected myself with anthrax earlier this week—"

"Anthrax! For God's sake, Doctor, what in the world do you mean by taking a chance like that?"

Brooks turned his mild eyes on Ardmore. "But it was obviously necessary," he explained patiently. "The guinea pig tests were positive, it is true, but human experimentation was necessary to establish the method. As I was saying, I infected myself with anthrax and permitted the disease to establish itself, then exposed myself to the Ledbetter effect in all wave lengths except that band of frequencies fatal to warm-blooded vertebrates. The disease disappeared. In less than an hour the natural balance of anabolism over catabolism had cleared up the residue of pathological symptoms. I was well."

"I'll be a crosseyed intern! Do you think it will work on other diseases just as quickly?"

"I feel sure of it. Not only has such been the result with other diseases in the animal experimentation that I have conducted, but because of another unanticipated, though experimentally predictable, result. I've suffered from a rather severe cold in the head lately, as some of you may have noticed. The exposure not only cured the anthrax, it completely cleared up my cold. The cold virus involves a dozen or more known pathogenic organisms, and probably as many more unknown ones. The exposure killed them all, indiscriminately."

"I'm delighted to get this report, Doctor," Ardmore answered. "In the long run this one development may be of more importance to the human race than any military use we may make of it now. But how does it affect the matter of establishing the branch church in Denver?"

"Well, sir, perhaps it doesn't. But I took the liberty of having Scheer modify one of the portable power units in order that healing might be conveniently carried on by any one of our agents even though equipped only with the staff. I thought you might prefer to wait until Scheer could add the same modification to the staffs designed to be used by Thomas and Howe."

"I think you are right, if it does not take too long. May I see the modification?"

Scheer demonstrated the staff he had worked over. Superficially it looked no different from the others. A six-foot rod was surmounted by a capital in the form of an ornate cube about four inches through. The faces of the cube were colored to correspond with the sides of the great temple. The base of the cube and the staff itself were covered with intricate designs in golden scroll-work, formal arabesques, and delicate bas-relief—all of which effectively concealed the controls of the power unit and projector located in the cubical capital.

Scheer had not changed the superficial appearance of the staff; he had simply added an additional circuit internally to the power unit in the cube which constrained it to oscillate only outside the band of frequencies fatal to vertebrate life. This circuit controlled the action of the power unit and projector whenever a certain leaf in the decorative design of the staff was pressed.

Scheer and Graham had labored together to create the staff's designing and redesigning to achieve an integrated whole in which mechanical action would be concealed in artistic camouflage. They made a good team. As a matter of fact their talents were not too far apart; the artist is two-thirds artisan and the artisan has essentially the same creative urge as the artist.

"I would suggest," added Brooks, when the new control had been explained and demonstrated, "that this new effect be attributed to Tamar, Lady of Mercy, and that her light be turned on when it is used."

"That's right. That's the idea," Ardmore approved. "Never use the staff for any purpose without turning on the color light associated with the particular god whose help you are supposed to be invoking. That's an invariable rule. Let 'em break their hearts trying to figure out how a simple monochromatic light can perform miracles."

"Why bother with the rigamarole?" inquired Calhoun. "The PanAsians can't possibly detect the effects we use in any case."

"There is a double reason, Colonel. By giving them a false lead to follow we hope to insure that they will bend their scientific efforts in the wrong direction. We can't afford to underestimate their ability. But even more important is the psychological effect on nonscientific minds, both white and yellow. People think things are wonderful that look wonderful. The average American is completely unimpressed by scientific wonders; he expects them, takes them as a matter of course with an attitude of 'So what? That's what you guys are paid for.'

"But add a certain amount of flubdub and hokum and don't label it 'scientific' and he will be impressed. It's wonderful advertising."

"Well," said Calhoun, dismissing the matter, "no doubt you know best—you have evidently had a great deal of experience in fooling the public. I've never turned my attention to such matters; my concern is with pure science. If you no longer need me here, Major, I have work to do."

"Certainly, Colonel, certainly! Go right ahead, your work is of prime importance . . .

"Still," he added meditatively, when Calhoun had gone, "I don't see why mass psychology shouldn't be a scientific field. If some of the scientists had taken the trouble to formulate some of the things that salesmen and politicians know already, we might never have gotten into the mess we're in."

"I think I can answer that," Dr. Brooks said diffidently.

"Huh? Oh, yes, Doctor—what were you going to say?"

"Psychology is not a science because it is too difficult. The scientific mind is usually orderly, with a natural love for order. It resents and tends to ignore fields in which order is not readily apparent. It gravitates to fields in which order is easily found such as the physical sciences, and leaves the more complex fields to those who play by ear, as it were. Thus we have a rigorous science of thermodynamics but are not likely to have a science of psychodynamics for many years yet to come."

Wilkie swung around so that he faced Brooks. "Do you really believe that, Brooksie?"

"Certainly, my dear Bob."

Ardmore rapped on his desk, "It's an interesting subject, and I wish we could continue the discussion, but it looks like rain, and the crops still to get in. Now about this matter of founding a church in Denver—anybody got any ideas?"

CHAPTER SIX

Wilkie said, "I'm glad I don't have to tackle it. I wouldn't have the slightest idea where to start."

"Ah, but you may have to tackle it, Bob," Ardmore countered. "We may all have to tackle it. Damn it—if we only had a few hundred that we could depend on! But we haven't; there are only nine of us." He sat still for a moment, drumming the table. "Just nine."

"You'll never get Colonel Calhoun to make noises like a preacher," commented Brooks.

"Okay, then—eight. Jeff, how many cities and towns are there in the United States?"

"And you can't use Frank Mitsui," persisted Brooks. "For that matter, while I'm willing enough I don't see how you can use me. I haven't any more idea of how to go about setting up a fake church than I have about how to teach ballet dancing."

"Don't fret about it, Doctor, neither have I. We'll play by ear. Fortunately there aren't any rules. We can cook it up to suit ourselves."

"But how are you going to be convincing?"

"We don't have to be convincing—not in the sense of getting converts. Real converts might prove to be a nuisance. We just have to be convincing enough to look like a legitimate religion to our overlords. And that doesn't have to be very convincing. All religions look equally silly from the outside. Take the—" Ardmore caught a look on Scheer's face and said, "Sorry! I don't mean to tread on anybody's toes. But it's a fact just the same and one that we will make military use of. Take any religious mystery, any theological proposition: expressed in ordinary terms it will read like sheer nonsense to the outsider, from the ritualistic, symbolic eating of human flesh and blood practiced by all the Christian sects to the outright cannibalism practiced by some savages."

"Wait a minute, now!" he went on. "Don't throw anything at me. I'm not passing judgments on any religious beliefs or practices; I'm just pointing out that we are free to do anything at all, so long as we call it a religious practice and so long as we don't tread on the toes of the monkey men. But we have to decide what it is we are going to do and what it is we are going to say."

"It's not the doubletalk that worries me," said Thomas. "I just stuck to saying nothing in big words and it worked out all right. It's the matter of getting an actual toe hold in the cities. We just haven't got enough people to do it. Was that what you were thinking about when you asked me how many cities and towns there are in the country?"

"Mmm, yes. We can't act, we don't dare act, until we cover the

United States like a blanket. We'll have to make up our minds to a long war."

"Major, why do you want to cover every city and town?"

Ardmore looked interested. "Keep talking."

"Well," Thomas went on diffidently, "from what we've already learned the PanAsians don't maintain real military force in every hamlet. There are between sixty and seventy-five places that they have garrisoned. Most towns just have a sort of combination tax collector, mayor, and chief of police to see that the orders of the Hand are carried out. The local panjandrum isn't even a soldier, properly speaking, even though he goes armed and wears a uniform. He's sort of an M. P., a civil servant acting as a military governor. I think we can afford to ignore him; his power wouldn't last five minutes if he weren't backed up by the troops and weapons in the garrisoned cities."

Ardmore nodded. "I see your point. You feel that we should concentrate on the garrisoned towns and cities and ignore the rest. But look, Jeff, we mustn't underestimate the enemy. If the Great God Mota shows up nowhere but in the garrisoned spots it's going to look mighty funny to some intelligence officer among the PanAsians when he gets to fiddling with the statistics of the occupied country. I think we've got to show up elsewhere and. anywhere."

"And I respectfully suggest that we can't, sir. We haven't men enough to pull it off. We'll have trouble enough recruiting and training enough men to set up a temple in each of the garrisoned cities."

Ardmore chewed a thumbnail and looked frustrated. "You're probably right. Well, confound it, we won't get anywhere at all if we sit here worrying about the difficulties. I said we'd have to play by ear and that's what we'll do. The first job is to get a headquarters set up in Denver. Jeff, what are you going to need?"

Thomas frowned. "I don't know. Money, I suppose."

"No trouble about that," said Wilkie. "How much? I can make you half a ton of gold as easily as half a pound."

"I don't think I can carry more than about fifty pounds."

"I don't think he can spend bullion very easily," Ardmore commented. "It should be in coin."

"I can use bullion," Thomas insisted. "All I have to do is to take it to the Imperial bank. Panning gold is encouraged; our gracious masters charge one hell of a stiff seigniorage."

Ardmore shook his head. "You're missing the propaganda aspect. A priest in long robes and a flowing beard doesn't whip out a check book and a fountain pen; it's out of character. I don't want you to have a bank account anyhow; it will give the enemy detailed records of just what you are doing. I want you to pay for things with beautiful, shiny golden coins, stacks of them. It will make a tremendous impression.

Scheer, are you any good at counterfeiting?"

"I've never tried it, sir."

"No time like the present. Every man needs an alternative profession. Jeff, you didn't have any chance to pick up an Imperial gold coin, did you? We need a model."

"No, I didn't. But I suppose I could get one, if I sent word out among the hobos that I needed one."

"I hate to wait. But you've got to have money to tackle Denver."

"Does it have to be Imperial money?" asked Doctor Brooks.

"Eh?"

The biologist hauled a five dollar gold piece from his pocket. "Here's a lucky piece I've carried since I was a kid. I guess this is a lucky time to let it go."

"Hmm . . . How about it, Jeff? Can you pass American money?"

"Well, American paper money is no good, but gold coin—My guess is that those leeches probably won't object, so long as it's gold—at the bullion price, at least. I'm sure that Americans will take it."

"We don't care how much they discount it." Ardmore took the coin and chucked it to Scheer. "How long will it take you to make forty or fifty pounds of those?"

The master sergeant studied it. "Not long if I pour them rather than stamp them. You want them all just alike, sir?"

"Why not?"

"Well, sir, there's the matter of the date."

"Oh! I get you. Well, that's the only pattern we have; I guess we'll just have to hope that they either won't notice or won't care."

"If you can allow me just a little more time I think I could fix it, sir. I make about twenty or so with this as a pattern, then I'll do a little hand work and put a different date on each one. That will give me twenty different patterns instead of one."

"Scheer, you have the soul of an artist. Do it that way. While you are about it, you had better vary the scratches and wear marks on each."

"I had thought of that, sir."

Ardmore grinned. "This team is going to be a headache to His Imperial Nastiness yet. Well, how about it, Jeff? Any more points to settle before we adjourn the meeting?"

"Just one, boss. How do I get to Denver? Or how do we get there, assuming that Howe comes along?"

"I thought you would bring that up. It's a sticky question; we can't expect the Hand to provide you with a helicopter. How are your feet? Any broken arches? Corns and bunions?"

"I'll be switched if I want to walk. It's a long way."

"Don't blame you. And the devil of it is that it's a problem we're going to have with us from now on, if we are going to organize all over the country."

"I don't understand the difficulty," put in Brooks. "I thought citizens were still allowed to ride anything but aircraft?"

"Sure—with travel permits and endless red tape. Never mind," Ardmore continued, "the day will come when the costume of a priest of Mota will be all the travel permit we'll need. If we work this right, we'll be teacher's pet with all sorts of special privileges. In the meantime the trick is to get Jeff into Denver without attracting undue attention and without wearing out his feet. Say, Jeff, you never did tell me how you traveled. Somehow we missed that."

"I hitchhiked. Quite a chore, too. Most of the truckers are too scared of the security police to risk it."

"You did? You shouldn't have, Jeff: The priests of Mota do not hitchhike. It doesn't fit in with miracle working."

"Well, what do they do? Dawggone it, Major, if I had walked I would still be on the way—or more likely arrested by some flunky who hadn't gotten the news yet." Thomas' face showed irritation most unusual in him.

"Sorry. I shouldn't second-guess you. But we will have to figure out a better way."

"Why don't I just run him down in one of the scout cars?" asked Wilkie. "At night, of course."

"Night doesn't mean anything to radar, Bob. They would shoot you out of the sky."

"I don't think so. We have an almost unlimited amount of power at our disposal—sometimes it scares me when I try to think how much. I believe I can rig a radar beacon effect that will burn out any radar set that is turned on us."

"Giving notice to the enemy that there is still someone around capable of hankypanky with electronics? We mustn't tip our hand so soon, Bob."

Wilkie shut up, crestfallen. Ardmore thought it over. "And yet we've got to take chances. You rig your rig, Bob—then plan on hedgehopping all the way. We'll do it about three or four o'clock in the morning and there's a chance that you won't be noticed at all. Use your rig if you have to but if you do then everyone is to return to base. The incident must not be connected with the priests of Mota, even in the matter of timing. The same applies after Wilkie sets you down, Jeff. If by any chance you are surprised, use the Ledbetter effect to kill off all the enemy anywhere close to you—then go underground. Jungle up. Under no circumstances is any PanAsian to be permitted to suspect that the priests of Mota are anything but what they seem. Kill off your witnesses and escape."

"Right, boss."

The little scout car hovered over Lookout Mountain a few feet away from Buffalo Bill's grave. The door opened and a robed priest dropped to the ground, stumbling because of the heavy money belt slung from his shoulders and waist. A similar figure followed him and landed a bit more surefootedly. "You all right, Jeff"

"Sure."

Wilkie left the car on automatic long enough to lean out and say, "Good luck!"

"Thanks. But shut up and get going."

"Okay." The door closed and the car disappeared into the night.

It was growing light by the time Thomas and Howe reached the foot of the mountain and started into Denver. So far as they knew they had not been detected—although once they had crouched in bushes for several minutes, afraid to breathe, while a patrol passed. Jeff had kept his staff ready, a thumb resting lightly on a golden leaf in the decorations below the cube of Mota. But the patrol passed on, unaware of the curbed lightnings trained on them.

Once in the city and in daylight they made no further attempt to avoid attention. Few PanAsians were about so early; members of the slave race scurried along the streets, on their way to their labors, but the master race still slept. The Americans who saw them stared briefly but did not stop them nor speak to them; native Americans had already learned the first law of police states: mind your own business; don't be nosy!

Jeff deliberately sought out an encounter with a PanAsian policeman. He and Alec stepped down from the curb, switched on their shields and waited. No Americans were nearby; the presence of occupation police caused them to melt into walls. Jeff wet his lips and said "I'll do the talking, Alec."

"Suits me."

"Here he comes. Oh, my god, Alec, switch on your halo!"

"Huh?" Howe reached a finger up under his turban behind his right ear; the halo, shimmering iridescent light, sprang into being over his head. It was a mere ionization effect, a parlor trick of the additional spectra, less mysterious than natural aurora, but it looked good.

"That's better," Jeff acknowledged, from the side of his mouth. "What's the matter with your beard?"

"It keeps coming unstuck. I sweat."

"Don't let it come unstuck now! Here he comes—" Thomas struck the benediction pose; Howe followed suit. Jeff intoned, "Peace be unto you, Master!"

The Asiatic cop stopped. His knowledge of English was limited to halt, come along, and show your card; he depended on his club to keep the dogs in line. On the other hand he recognized the get up; it matched a picture on a notice newly posted in the barracks, this was one of the many silly things the slaves were allowed to do.

Still, a slave was a slave and must be kept in line. All slaves must bow; these slaves were not bowing. He cracked his club at the midriff of the nearer slave.

The nightstick bounced off before it reached the robed figure; the cop's fingers tingled as if he swung on something quite hard. "Peace be unto you!" Jeff rumbled again and watched him narrowly. The fellow was armed with a vortex pistol; Jeff was not afraid of it but it was no part of his plan to let the creature discover that he was immune to the Emperor's weapons. He was sorry that he had to use the shield against a blow from a stick and hoped that the PanAsian would not be able to believe the evidence of his own senses.

Certainly the man was startled. He looked at his stick, started to draw it back as if to swing again, then appeared to change his mind. He resorted to his meager supply of English. "Come along!"

Jeff raised his hand again. "Peace be unto you! It is not meet that the farjon should ripsnipe the cuskapads in the sight of the great lord Mota! Franchope!" He pointed to Howe.

The cop looked doubtful, then moved a few feet away to the street corner, glanced up and down and blew his whistle. Alec whispered, "What did you point to me for?"

"I don't know. It seemed like a good idea. Watch it!"

Another cop came trotting up; the pair approached Howe and Thomas. The new one seemed to be in authority over the first; they held a short discussion in meaningless singsong, then the later arrival came close, drawing his pistol as he did so. "You fellow boys, come along now quick!"

"Come, Alec." Thomas fell in with the policemen, switching off his shield as he did so. He hoped that Alec would notice that he had done so and conform; it seemed a good notion not to advertise the existence of the shields—not yet, at least.

The PanAsian conducted them to the nearest police station. Jeff walked briskly along, giving unctuous blessings to one and all. As they neared the station the senior cop sent the other trotting on ahead. When the party arrived they found the officer in charge waiting in the doorway, apparently curious to see these queer fish his men had hooked.

He was both curious and very much on his toes; the officer knew the circumstances under which the unfortunate lieutenant who had first turned up these strange holy men had gone to his ancestors. He was determined not to make a mistake which would cause him to lose face.

Jeff marched up to him, struck his pose and said, "Peace be unto you! Master, I have a complaint to make about your servants. They have stopped us from carrying out our holy work, work which is blessed by His Serene Highness himself, the Imperial Hand!"

The officer fingered his swagger stick, then spoke in his own language to his subordinates. He turned back to Jeff. "Who are you?"

"A priest of the great god Mota."

The PanAsian asked the same question of Alec; Jeff interceded. "Master," he said hastily, "he is a most holy man who has taken a vow of silence. If you force him to break it the sin will be on your head."

The officer hesitated. The bulletin concerning these crazy savages had been most pointed, but it had given no clear precedents for dealing with them. He hated to establish precedents; those who did so were sometimes promoted, more frequently they joined their ancestors. "He need not break his holy vow. But show me your cards, both of you."

Jeff looked amazed. "We are humble, nameless holy men, serving the great god Mota. What have we to do with such?"

"Hurry up!"

Jeff tried to look sad rather than nervous. He had rehearsed this speech in his mind; much depended on it getting across. "I am sorry for you, young Master. I will pray to Mota on your behalf. But now I must insist that you take me before the Hand of the Emperor—at once!"

"That's impossible."

"His Highness has seen me before; he will see me again. The Hand of the Emperor is always ready to see the servers of the great god Mota."

The officer looked at him, turned and went back into the station house. They waited.

"Do you suppose he'll actually have us taken before the prince?" Howe whispered.

"I hope not. I don't think so."

"Well, what will you do if he does?"

"Whatever I have to. Shut up—you're supposed to be under a vow of silence."

The officer came back after several minutes and said curtly, "You are free to go."

"To the Imperial Hand?" Jeff inquired maliciously.

"No, no! Just go. Get out of my district.,"

Jeff stepped back one pace and delivered a last benediction. The two "priests" turned away. From the corner of his eye Jeff saw the officer lift his swagger stick and cut savagely at the senior of the two policemen; he pretended not to see. He walked about a block before he spoke to Howe. "There! We should have no more trouble for a while."

"How do you figure? You sure got him sore at us."

"That's not the point. We can't afford to have him or any other cop thinking he can push us around like the others. By the time we have gone three blocks the word will be all over town that I'm back and to lay off. That's the way we've got to have it."

"Maybe so. I still think it's dangerous to have the cops on the alert for us."

"You don't understand," Jeff said impatiently. "There isn't any other safe way to do it. Cops are cops, no matter what is the color of their skin. They deal in fear and they understand fear. Once they understand we can't be touched, that it is very bad medicine to bother us, they'll be as polite to us as they are to their superiors. You'll see."

"I hope you're right."

"I'm right. Cops are cops. Pretty soon we'll have them on our payroll. Oh, oh! Watch it, Alec—here comes another one." A PanAsian policeman was dogtrotting up behind them. However, instead of overtaking them or calling to them to halt, he crossed over and kept abreast with them on the other side of the street. He ignored them determinedly.

"What's up, d'you think, Jeff?"

"We're being chaperoned. A good thing; Alec, the rest of the monkeys won't bother us now. We'll just get on with our job. You know this town pretty well, don't you? Where do you think we ought to locate the temple?"

"I guess that depends on what you are looking for."

"I don't know exactly." He stopped and wiped sweat from his face; the robes were hot and the money belt made it worse. "Now that I'm here, this whole deal seems silly. I guess I wasn't meant to be a secret agent. How about out in the west end, in the expensive neighborhood? We want to make a big impression.

"No, I don't think so, Jeff. There are just two kinds of people out in the rich neighborhoods now."

"Yes?"

"PanAsians and traitors—black market dealers and other sorts of collaborationists."

Thomas looked shocked. "I guess I've been out of circulation too long. Alec, until this very minute it never occurred to me that an American—any American—would go along with the invaders."

"Well, I wouldn't have believed it either, if I hadn't seen it. I guess some people will do anything, born pimps."

They settled on an empty warehouse downtown near the river in a populous, poor neighborhood. The area had long been rundown; now it was depressed. Three out of four shops were boarded up; trade had stagnated. The building was one of many empty warehouses; Thomas picked it because of its almost cubical shape, matching that of the mother temple and the cube on his staff, and the fact that it was detached from other buildings by an alley on one side and a vacant lot on the other.

The main door was broken. They peered in, entered and snooped around. The place was a mess but the plumbing was intact and the walls were sound. The ground floor was a single room with a twenty foot ceiling and few pillars; it would do for "worship."

"I think it will do," Jeff decided. A rat jumped out of a pile of rubbish heaped against one wall. Almost absentmindedly he trained his staff on it; the animal leaped high and dropped dead. "How do we go about buying it?"

"Americans can't own real estate. We'll have to find out what official holds the squeeze on it."

"That oughtn't to be hard." They went outside; their police chaperone waited across the street. He looked the other way.

The streets were fairly well filled by now, even in this neighborhood. Thomas reached out and snagged a passing boy—a child of not more than twelve but with the bitter, knowing eyes of a cynical man. "Peace be unto you, son. Who rents this building?"

"Hey, you let go of me!"

"I mean you no harm." He handed the boy one of Scheer's best five dollar gold pieces.

The boy looked at it, let his eyes slide past them to the Asiatic guard across the street. The PanAsian did not seem to be watching; the lad caused the coin to disappear. "Better see Konsky. He has all the angles on things like that."

"Who is Konsky?"

"Everybody knows Konsky. Say, grandpa, what's the idea of the funny clothes? The slanties'll make trouble for you."

"I am a priest of the great god Mota. The Lord Mota takes care of his own. Take us to this Konsky."

"Nothing doing. I don't want to tangle with the slanties." The boy tried to wriggle away; Jeff held his arm firmly and produced another coin. He did not hand it over.

"Fear not. The Lord Mota will protect you, too."

The youngster looked at it, glanced around, and said, "Okay. Come along."

He led them around a corner and to a walk-up office building located over a saloon. "He's up there if he's in." Jeff gave the boy the second coin and told him to come see him again, at the warehouse, as the Lord Mota had gifts for him. Alec questioned the wisdom of this as they climbed the stairs.

"The kid's all right," said Jeff. "Sure, the things that have happened to him have turned him into a guttersnipe. But he's on our side. He'll advertise us—and not to the PanAsians."

Konsky turned out to be a blandly suspicious man. It was soon evident that he "had connections," but he was slow to talk until he saw the red gold color of money. After that he was not in the least put off by the odd dress and odd manners of his clients (Thomas gave him the full treatment, with benedictions thrown in, aware that Konsky would discount it but for the purpose of staying in character). He made sure of the building Thomas meant, dickered over the rental and the bribe—he called it "charges for special services"—and left them.

Thomas and Howe were glad to be left alone. Being a "holy man" had disadvantages; they had had nothing to eat since leaving the Citadel. Jeff dug sandwiches out from under his robes; they munched them. Best of all, there was a washroom adjoining Konsky's office.

Three hours later they were in possession of a document, the English translation of which stated that the Heavenly Emperor was graciously pleased to grant to his faithful subjects etc., etc.—a lease paid up on the warehouse. In exchange for another unreasonable amount of money Konsky agreed to stir up enough labor to clean the place at once, that very day, and to provide certain repairs and materials. Jeff thanked him and with a straight face invited him to attend the first services to be held in the new temple.

They trudged back to the warehouse. Once out of Konsky's earshot Jeff said, "Y' know, Alec, we're going to make lots of use of that character—but when the day comes, well, I've got a little list and he's at the top of it. I mean to take care of him myself."

"Split him with me," was Howe's only comment.

The street urchin popped up from nowhere when they reached the warehouse. "Any more errands, grandpa?"

"Bless you, son. Yes, several." After another financial transaction the boy left to find cots and bedding for them. Jeff watched his departure and said, " I think I'll make an altar boy out of that kid. He can go places and do things that we can't—and the cops aren't so likely to stop a person that age."

"I don't think you should trust him."

"I won't. So far as he will ever know we are a couple of crackpots, firmly convinced that we are priests of the great god Mota. We can't afford to trust anybody, Alec, until we are sure of them. Come on let's kill all the rats in this place before the cleaners get here. Want me to check the setting on your staff?"

By nightfall the First Temple of Denver of the Lord Mota was a going concern, even though it still looked like a warehouse and had no congregation. The place reeked of disinfectant, the rubbish was gone, and the front door would lock. There were two beds of sorts and groceries enough to last two men a fortnight.

Their chaperone from the police force was still across the street.

The police guard stayed with them for four days. Twice squads of police came and searched through the place. Thomas let them; as yet there was nothing to hide. Their staffs were still their only source of power and the only Ledbetter communicator they had with them gave Howe a slightly hunch-backed appearance in the day time; he wore it while Thomas wore the money belt.

In the meantime, through Konsky they acquired a fast and powerful ground car—and permission to drive it, or have it driven, anywhere in the jurisdiction of the Hand. The "charge for special services" was quite high. The driver they hired for it was not acquired through Konsky, but indirectly through Peewee Jenkins, the boy who had helped them on the first day.

The watch was withdrawn from them around noon on the fourth day. That afternoon Jeff left Howe to hold the place and went back to the Citadel by car. He returned with Scheer, who looked vastly uncomfortable and out of character in priestly vestments and beard but who bore with him a cubical chest enameled in the six sacred colors of Mota. Once inside the warehouse with the door locked Scheer opened the chest with great care and in a particular fashion which prevented it from exploding and taking them and the building with it. He got very busy on the newly constructed "altar." He finished shortly after midnight; there was more work to do outside, with Thomas and Howe standing guard, ready to stun or kill if necessary to prevent the sergeant being interrupted.

The morning sun fell on a front wall of emerald green, the other walls were red and golden and deep sky blue. The temple of Mota was ready for converts—and for others.

Most important, none but a Caucasian could now pass through its door with impunity.

An hour before daylight Jeff posted himself at the door and waited nervously. The sudden transformation was sure to stir up another search squad; if necessary he must stop them, stun, or even kill—but no search could be permitted. He hoped to dissuade; the temple must be established as an enclave used only by the slave race. But a slight excess of zeal on the part of an underling could force him to violent means, and thereby destroy the hope of peaceful penetration.

Howe came up behind him and made him jump. "Uh? Oh! Alec! Don't do that. I'm nervous as a cat already."

"Sorry. Major Ardmore is on the circuit. He wants to know how you are making out."

"You'll have to talk to him. I can't leave the door."

"He wants to know when Scheer will be back, too."

"Tell him I'll send him back just as soon as I know it's safe to step outside this door and not a minute sooner."

"O. K. " Howe turned away. Jeff looked back at the street and felt the hair on his neck stand up. A PanAsian in uniform was staring curiously at the building. The foreigner stood for a moment, then went away at the dog trot they all affected when moving on duty.

"Mota, old boy," Jeff said to himself. "It's time to do your stuff."

Less than ten minutes later a squad arrived commanded by the same officer who had searched the building before. "Stand aside, Holy One."

"No, Master," Jeff said firmly, "the temple is now consecrated. None may enter but worshipers of the Lord Mota."

"We will not harm your temple, Holy One. Stand aside."

"Master, if you enter I cannot save you from the wrath of the Lord Mota. Nor can I save you from the wrath of the Imperial Hand." Before the officer had time to turn this over in his mind Jeff went quickly on, "The Lord Mota expected this visit from you and greets you. He bids me, his humble servant, to make you three gifts."

"Gifts?

"For yourself—" Jeff laid a heavy purse in his hand. "For your superior officer, may his name be blessed—" A second purse followed. "—and for your men." A third purse was added; the PanAsian was forced to use both hands.

He stood there for a moment. There could be no doubt in his mind, from the weight alone, as to what the purses contained. It was more gold than he had ever handled in his life. Shortly he turned, barked an order at his men, and strode away.

Howe came up again. "You made it, Jeff?"

"This round, at least." Thomas watched the squad move up the street. "Cops are all alike, the world over. Reminds me of a railroad dick I once knew."

"Do you think he'll share it out the way you suggested?"

"The men won't get any, that's sure. He may split with his boss, to keep him quiet. He'll probably find some way to hide the third lot of loot before he gets back to the station. What I'm wondering is: is he an honest politician?"

"Huh?"

"'An honest politician is one that stays bought.' Come on, let's get ready for customers."

They held their first services that evening. As church services they were nothing much, since Jeff was still feeling out the art. They conformed to the good old skid-road mission principle: sing a hymn and eat a meal. But the meal was good red meat and white bread—and the recipients had not eaten that well in many months.

CHAPTER SEVEN

"Hello? Hello? Jeff, are you there? Can you hear me?"

"Sure I can hear. you. Don't shout, Major."

"I wish these damn rigs were regular telephones. I like to see a man I'm talking to."

"If they were ordinary phones our Asiatic pals could listen in on us. Why don't you ask Bob and the colonel to whip up a vision circuit? I'll bet they could do it."

"Bob has already done so, Jeff, but Scheer is so busy machining parts for altar installations that I don't like to ask him to make it. Do you suppose you could recruit some assistants for Scheer? A machinist or two, maybe, and a radio technician? The manufacturing end of this enterprise is getting out of hand and Scheer is going to crack up from overwork. Every night I have to go around and order him to go to bed."

Thomas thought about it. "I have one man in mind. Used to be a watchmaker."

"A watchmaker! That's swell!"

"I don't know. He's a little bit balmy; his whole family was wiped out. A sad case, almost as sad as Frank Mitsui. Say, how. is Frank? Is he feeling any better?"

"Seems to be. Not down inside of course, but he seems happy enough at his work. He's taken over the kitchen and the clerical work you used to do for me, both."

"Give him my best."

"I will. Now about this watchmaker—you don't have to be as careful in recruiting personnel for the Citadel as you have to be in picking field workers, since once they are inside they can't get out."

"I know that, boss. I didn't use any special tests when I sent you Estelle Devens. Of course I wouldn't have sent her if she hadn't been about to be shipped out as a pleasure girl."

"You did all right. Estelle is a fine woman. She helps Frank in the kitchen, she helps Graham sew the robes, and Bob Wilkie is training her as a pararadio operator." Ardmore chuckled. "Sex is rearing its interesting head. I think Bob is sweet on her."

Thomas's voice was suddenly grave. "How about that, boss? Is it likely to louse things up?"

"I don't think so. Bob is a gentleman and Estelle is a nice girl if I ever saw one. If biology starts getting in the way of their work, I'll just up and marry them, in my capacity as high priest of the supercolossal god Mota."

"Bob won't go for that. He's a bit of a puritan, if you ask me."

"All right then, in my capacity as chief magistrate of this thriving little village. Don't be stuffy. Or send me up a real preacher."

"How about sending up more women, Major? I sent Estelle on impulse, more or less, but there are many more young women just as badly in need of help as she was."

There was a long wait before Ardmore replied, "Captain, that is a very difficult question. Most reluctantly I am forced to say that this is a military organization at war, not a personal rescue mission. Unless a female is being recruited for a military function to which she is adapted, you are not to recruit her, even to save her from the PanAsians' pleasure cities."

"Yes, sir. I will comply. I shouldn't have sent Estelle."

"What's done is done. She's working out all right. Don't hesitate to recruit suitable women. This is going to be a long war and I think we can maintain morale better with a mixed organization than with a strictly stag setup. Men without women go to pieces; they lose purpose. But try to make the next one an older woman, something between a mother superior and a chaperone. An elderly trained nurse would be the type. She could be lab assistant to Brooks and house mother to the babes, both."

"I'll see what I can find."

"And send up that watchmaker. We really need him."

"I'll give him a hypo test tonight."

"Is that necessary, Jeff? If the PanAsians killed his family you can be sure of his sentiments."

"That's his story. I'll feel a lot safer if I hear him tell it when he's doped. He might be a ringer you know."

"O.K., you're right, as usual. You run your show; I'll run mine. When are you going to be able to turn the temple over to Alec, Jeff? I need you here."

"Alec could take it now, just to run it. But as I understand it, my prime duty is to locate and recruit more 'priests,' ones capable of going out in the field and starting a new cell alone."

"That's true, but can't Alec do that? After all, the final tests will be given here. We agreed that never, under any circumstances, would the true nature of what we are doing be revealed to anyone except after we got him inside the Citadel and under our thumbs. If Alec makes a mistake in picking a man it won't be fatal."

Jeff turned over in his mind what he wanted to say. "Look, boss, it may seem simple from where you sit; it doesn't look simple from here. I—" He paused.

"What's the matter, Jeff? Got the jitters?"

"I guess so."

"Why? It seems to me the operation is proceeding according to plan."

"Well, yes—maybe. Major, you said this would be a long war."

"Yes?"

"Well, it can't be. If it's a long war, we'll lose it."

"But it's got to be. We don't dare move until we have enough trusted people to strike all over the country at once."

"Yes, yes, but that's got to be the shortest possible time. What would you say was the greatest danger that faces us?"

"Huh? Why the chance that someone might give us away, either accidentally or on purpose."

"I don't agree, sir—not at all. That's your opinion because you see it from the Citadel. From here I see an entirely different danger—and it worries me all the time."

"Well, what is it, Jeff? Give."

"The worst danger—and it hangs like a sword over our heads all the time—is that the PanAsian authorities may grow suspicious of us. They may decide that we can't be what we pretend to be—just another phony western religion, good to keep the slaves quiet. If they once get that idea before we are ready, we're finished."

"Don't let it get you nervy, Jeff: In a pinch, you've got enough stuff to fight your way back to base. They can't use an atom bomb on you in one of their own capitals—and Calhoun says that the new shield on the Citadel will stop even an atom bomb."

"I doubt it. But what good would it do us if it did? Suppose we could hole up there until we died of old age: if we don't dare stick our noses out we can't win back the country!"

"Mmm . . . no—but it might give us time to think of something else."

"Don't kid yourself, Major. If they catch on, we're licked—and the American people lose their last chance this generation, at least. There are still too few of us, no matter what weapons Calhoun and Wilkie can cook up."

"Suppose I concede your point: you knew all this when you went out. Why the panic? Battle fatigue?"

"You can call it that. But I want to discuss the dangers as I see them here in the field. If we really were a religious sect, with no military power, they'd leave us alone till hell froze. Right?"

"Check."

"Then the danger lies in the things we have to do to cover up the fact that we've got a lot of stuff we aren't supposed to have. Those dangers are all out here in the field. First—" Thomas ticked them off on his fingers, oblivious to the fact that his commanding officer could not see him. "—is the shield of the temple. We've got to have it; this place can't stand a search. But it would be almost as bad if we had to use it. If any senior PanAsian gets the notion to inspect in spite of our immunity, school is out for sure; I don't dare kill him and I don't dare let him come in. So far, by the grace of God, a lot of doubletalk, and the liberal use of bribes, I've been able to turn them away."

"They already know that we've got the temple shields, Jeff; they've known it from the first day we made contact here."

"Do they, now? I don't think so. Thinking back over my interview with the Hand I'm convinced that that officer who tried to force his way into the mother temple wasn't believed when he made his report. And you can bet your last cookie he is dead now; that's the way they work. The common soldiers that were there don't count. The second hazard is the personal shield that we 'priests' carry. I've used mine just once and I'm sorry I did. Fortunately he was just a common soldier, too. He wouldn't report it; he wouldn't be believed and he would lose face."

"But, Jeff, the 'priests' have got to wear shields; we can't let a staff fall into enemy hands—not to mention the fact that the monkeys might be able to drug an unshielded 'priest' before he could suicide."

"You're telling me! We've got to have them; we don't dare use them—and that calls for some fast doubletalk in a pinch. The next hazard is the halo; the halo was a mistake, boss."

"Why do you say that?"

"O. K., it impresses the superstitious. But the bigshot PanAsians are no more superstitious than you are. Take the Hand—I wore it in his presence. He wasn't impressed; it was my great good luck that he apparently regarded it as nothing important, just a gadget to impress my followers. But suppose he had really thought about it and decided to find out how I did it?"

"Maybe," said Ardmore, "we had better omit the halo effect in the next city we penetrate."

"Too late. Our official designation here is 'holy men who wear halos.' It's our trademark."

"So? Jeff, I think you've done a wonderfully good job of covering up."

"There is one more hazard. It's a slow one, a time bomb."

"Eh?"

"Money. We've got too much money. That's a suspicious circumstance."

"But you had to have money to operate."

"How well I know it. It has been the only thing that enabled us to get away with it so far. These people are even more corruptible than Americans, Chief; with us it is a frowned-upon dereliction; with them it's an essential part of their culture. A good thing, too—we now have the respected position of the goose that lays the golden eggs."

"But why do you call it a time bomb? Why is it a hazard at all?"

"Remember what happened to the goose in the story? Some day some smart laddie is going to wonder where the goose gets all that gold and take him apart to find out. In the meantime all the recipients of our cumshaw are closing their eyes to the suspicious circumstances and getting as much as they can while the getting is good. I'm betting that each one will keep his mouth shut about his take, as long as he can get away with it. I doubt if the Hand knows that we seem to have an unlimited supply of American gold coins. But some day he will find out; that's the time bomb element. Unless he can be bribed, too—in a polite way, of course—he will start some very embarrassing investigations. Somewhere up the line we'll run into an official more interested in knowing the facts than in sticking out his palm. Before that day rolls around we had better be set to move!"

"Hmm . . . I suppose so. Well, Jeff, do the best you can and get us some 'priest' recruits up here as fast as you can. If we had one hundred dependable men, as talented in handling people as you are, we could set 'D' Day a month from now. But it may take years and, as you say, events may trip us up before we can move."

"You can see why I have trouble finding 'priest' recruits? Loyalty isn't enough; a special aptitude for kidding the public is necessary. I learned it as a hobo. Alec really hasn't got it; he's too honest. However I may have one recruit now—a chap named Johnson."

"Yes? What about him?"

"He used to be a real estate salesman and he has a very convincing manner. The PanAsians put him out of business, of course, and he's anxious to avoid the labor camps. I've been feeling him out."

"Well, if you think he'll do, send him up. Perhaps I can look him over there."

"Huh?"

"I've been thinking while I listened. Jeff, I don't know enough about the field situation; I've got to come see for myself. If I am going to direct this show, I've got to understand it. I can't do it from a hole in the ground; I'm falling out of touch."

"I thought that was settled a long time ago, boss."

"What do you mean?"

"Are you going to leave Calhoun as acting C.O.?"

Ardmore remained silent for several moments, then said, "Damn you, Jeff."

"Well, are you?"

"Oh, very well! Let's drop the matter!"

"Don't get sore, boss. I've been trying to give you the whole picture; that's why I've talked so long."

"I'm glad you did. I want you to repeat it, in much more detail. I'll put Estelle on and have her make a recording of everything you've got to say. We'll work up an instruction manual for student 'priests' from your lecture."

"O. K., but let me call you back. I've got a service in ten minutes."

"Can't Alec even run a service?" '

"He does and he's O. K. He preaches a better sermon than I do. But it's my best recruiting time, Major; I study the crowd and talk to them individually afterwards."

"O. K., O. K. I'm switching off."

"Bye."

Services were crowded by now. Thomas did not fool himself that the creed of the great god Mota was the drawing card; even while the service proceeded, at the sides of the hall tables were being piled high with food, purchased with Scheer's fine gold. But Alec put on a good show. It seemed to Jeff, as he listened to him preach, that the old mountain man had somehow reconciled his strange new job with his conscience so thoroughly that he actually believed that he was preaching his own religion, in symbols of course and with odd ritual—but his voice carried conviction.

"If he keeps that up," Jeff told himself, "we'll have women fainting in the aisles. Maybe I should tell him to soft-pedal it."

But without untoward incident Alec reached the final hymn. The congregation sang with verve, then trooped toward the tables. Sacred music had at first been a problem until Jeff had hit on the dodge of putting new words to the commonest American patriotic music. It served a double purpose; anyone who listened closely could hear the old words, the true words, being sung by the bolder spirits present.

Jeff circulated around among his flock while they ate, patting the heads of children, pronouncing blessings—and listening. As he passed a man got up from his place and stopped him. It was Johnson, the former real estate salesman. "A word with you, Holy One?"

"What is it, my son?"

Johnson indicated that he wanted to speak privately; they drew away from the crowd over into the shadow of the altar. "Holy One, I don't dare go back to my room tonight."

"Why not, my son?"

"I still haven't been able to get my work card validated. Today was my last day of grace. If I go home it's the camps for me."

Jeff looked grave. "You know that the servers of Mota do not preach resistance to mundane authority."

"You wouldn't turn me out to be arrested?"

"We do not refuse sanctuary. Perhaps it is not as bad as you think it is, my son; perhaps if you stay here tonight, tomorrow you may find someone to hire you and validate your card."

"I can stay, then?"

"You may stay." Thomas decided that Johnson might as well stay from then on; if he measured up, he would be sent to the Citadel for final test. If not, Johnson could stay as an unenlightened helper around the temple—the temple needed more help every day, especially in the kitchen.

When the crowd had gone Jeff locked the door, then checked through the building personally to make sure that none but the resident help and those who had been granted overnight sanctuary were still inside. There were more than a dozen of these refugees; Jeff was studying some of them as prospective recruits.

Inspection completed and the place tidied up, Jeff shooed everyone but Alec upstairs to the second-floor dormitory rooms; he locked the door to the staircase after them. This was a nightly routine; the altar with its many marvelous gadgets was safe from snoopers, as it had a shield of its own, controlled by a switch in the basement—nonetheless Jeff did not want anyone attempting to get at it. The avowed reason for the nightly lock up was, of course, a piece of holy mumbo jumbo having to do with the "sacredness" of the lower floor.

Alec and Jeff went down into the basement, locking after them a heavy, steel-sheathed door. Their apartment was a large room, housing the power unit for the altar, the communicator back to the base, and the same two cots Peewee Jenkins had gotten for them on their first day in Denver. Alec undressed, went into the adjoining bath, and got ready for bed. Jeff peeled off his robes and turban, but not his beard; it was now homegrown. He put on overalls, stuck a cigar in his mouth, and called the base.

For the next three hours he dictated, over Alec's snores. Then he, too, went to bed.

Jeff woke up with a feeling of unease. The lights had not switched on; therefore it was not the morning alarm that had wakened him. He lay very still for a moment, then reached down beside him on the floor and recovered his staff.

Someone was in the room, other than Alec, still snoring on the other cot. He knew it, although at the moment he could hear no sound. Working by touch alone he carefully set his shield to cover both cots. He switched on the lights.

Johnson was standing in front of the communicator. Some sort of complicated goggles covered his eyes; in his hand was a blacklight projector.

"Stand where you are," Jeff said quietly.

The man whirled around, then shoved the goggles up on his forehead. He stood for a moment, blinking at the light.

Quite suddenly a vortex pistol appeared in his other hand. "Don't make any sudden moves, Pop," he snapped. "This is no toy."

"Alec!" Jeff called out. "Alec! Wake up."

Alec sat up, at once alert. He glanced around and dived for his staff. "I've got us both screened," Jeff said rapidly. "Now you grab him but don't kill him."

"Make a move and you get it," warned Johnson.

"Don't be foolish, my son," Jeff answered. "The great god Mota protects his own. Put down that gun.

Without wasting time on speech Alec was setting the controls on his staff. It took him some time; he had had only practice drills in the use of the tractor and pressor beams. Johnson watched him fumbling, looked uncertain, then fired at him point blank.

Nothing happened; Jeff's shield soaked up the energy.

Johnson looked amazed; he looked still more amazed and rubbed his hand a moment later when Alec snatched the gun from his hand with a tractor beam. "Now," said Jeff, "tell us, my son, why you saw fit to violate the mysteries of Mota?"

Johnson looked around at him, his eyes showing apprehension but still defiant. "Stow that Mota stuff. I wasn't kidded.."

"The Lord Mota is not mocked."

"Stow it, I tell you. How do you explain that stuff?" He hooked a thumb at the communicator.

"The Lord Mota need not explain. Sit down, my son, and make your peace with him."

"Sit down, my eye. I'm walking straight out of here. If you birds don't want this place swarming with slanties, you won't try to stop me. I wouldn't turn in a white man unless he made trouble for me."

"You are implying that you are a common thief?"

"Watch what you call me. You guys have been throwing gold around; anybody is bound to take an interest in it."

"Sit down."

"I'm leaving."

He turned away. Jeff said, "Nail him, Alec!—but don't hurt him."

The injunction slowed Alec down. Johnson was halfway up the stairs before Alec snatched his feet from under him. Johnson fell heavily, striking his head.

Unhurriedly Jeff got up and put on his robes. "Sit on him, Alec, with your staff. I'll reconnoiter." He went upstairs, was gone a few minutes, and returned. Johnson was stretched on Alec's cot, dormant. "Not much damage," Jeff reported. "The upper door's lock was merely picked. No one was awake; I relocked it. The lower door's lock will have to be replaced; he used something or other that melted it. That door really should have a shield; I must speak to Bob about that." He glanced at the figure. "Still out?"

"Not really. He was coming to; I gave him sodium pentothal."

"Good! I want to question him."

"So I figured."

"Anesthesia?"

"No, just a babble dose."

Thomas nipped one of Johnson's earlobes with a thumbnail and twisted viciously. The victim stirred. "Darn near anesthesia—must be the knock on his head. Johnson! Can you hear me?"

"Mmm, Yes."

Thomas questioned him patiently for many minutes. Finally Alec stopped him. "Jeff, do we have to listen to any more of this? It's like staring down into a cesspool."

"It makes me want to vomit, too, but we've got to get the dope." He went on. Who paid him? What did the PanAsians expect to find out? How did he report back? When was he due to report next? Who else was in the organization? What did the PanAsians think of the temple of Mota? Did his boss know that he was here tonight?

And finally: what had induced him to go against his own people?

The drug was wearing off now. Johnson was almost aware of his surroundings, but his censors were still down and he spoke with a savage disregard of what his hearers might think of him. "A man's got to look out for himself, doesn't he? If you're smart you can get along anywhere."

"I guess we just aren't smart, Alec," Thomas commented. He sat still for several minutes, then said, "I think he's told us everything he knows. I'm trying to decide just what to do with him."

"If I give him another shot he may talk some more."

Johnson said, "You can't make me talk!" He seemed unaware that he already had talked.

Thomas struck him across the face with the back of his hand. "Shut up, you. You'll talk whenever we give you the needle. Right now you'll keep quiet." He went on to Alec, "There is a bare chance that they might get more out of him if we shipped him back to base. But I don't think so and it would be difficult and dangerous. If we got caught with him or if he escaped, the jig would be up. I think we had best dispose of him here and now."

Johnson looked stunned and tried to sit up, but Alec's staff kept him pinned to the cot. "Hey! What are you talking about? That's murder!"

"Give him another shot, Alec. We can't have him raising Cain while we work."

Howe said nothing, but quickly made the injection. Johnson tried to squirm away from it, then struggled a little before he gave in to the drug. Howe straightened up. His face was almost as disturbed as

Johnson's had been. "Did you mean that the way it sounded, Jeff? If so, I didn't sign up for murder, either."

"It's not murder, Alec. We are executing a spy."

Howe chewed his lip. "It wouldn't bother me a bit, I guess, to kill a man in a fair fight. But to tie him down and butcher him, like he was a hog, turns my stomach."

"Executions are always like that, Alec. Ever see a man die in a gas chamber?"

"But it is murder, Jeff. We don't have the authority to execute him."

"I have the authority, Alec. I am a commanding officer, acting independently, in war time."

"But consarn it, Jeff, you didn't even give him a drumhead courtmartial."

"A trial is for the purpose of establishing guilt or innocence. Is he guilty?"

"Oh, he's guilty all right. But a man's entitled to a trial."

Jeff took a long breath. "Alec, I used to be a lawyer. The whole purpose of the complicated structure of western jurisprudence in criminal matters, as built up over the centuries, has been to keep the innocent from being convicted and punished through error. It sometimes lets the guilty go free in the process, but that's not the purpose. I don't have the personnel nor the time to form a military court and give this man a formal trial—but his guilt has been established with much more certainty than a court could possibly establish it and I don't propose to endanger my command and risk the ultimate outcome of the war by extending to him the protections that were devised to protect the innocent.

"If I could cut out his memory and turn him loose to report back that all he found was a screwy church and a lot of hungry people eating, I would do it, not to avoid the chore of killing him, but because it would confuse the enemy. I can't possibly turn him loose—"

"I didn't want you to do that, Jeff!"

"Shut up, soldier, and listen. If I turn him loose with the knowledge he has gained, the PanAsians will get it, the same way we made him talk, even if he tried to hold it back. We haven't the facilities to keep him here; it is dangerous to ship him back to base. I intend to execute him now." He paused.

Alec said diffidently, "Captain Thomas?"

"Yes?"

"Why don't you call up Major Ardmore and see what he thinks?"

"Because there is no reason to. If I have to ask him to make up my mind for me I'm no good on this job. I've just one thing more to add: you are too soft and mush-headed for this job. You apparently think that the United States can win this war without anyone getting hurt you don't even have the guts to watch a traitor die. I had hoped to turn this command over to you shortly; instead I am shipping you back to the Citadel tomorrow with a report to the commander-in-chief that you are utterly unfit to be trusted with work in the face of the enemy. In the meantime you will carry out orders. Help me lug that hulk into the bathroom."

Howe's mouth quivered, but he said nothing. The two carried the unconscious man into the adjoining room. Before the temple was "consecrated" Thomas had had a partition knocked out between the janitor's toilet and the space adjoining and in that space had had an old-fashioned bath tub installed. They dumped him in the tub.

Howe wet his lips. "Why in the tub?"

"Because it will be a bloody mess."

"You aren't going to use your staff?"

"No, it would take me an hour to disassemble it and take out the suppressor circuit for the white-man band of frequencies. And I'm not sure I could get it back together right. Give me that straight razor of yours and get out."

Howe got the razor and came back. He did not hand it over. "You ever butchered a hog?" he inquired.

"No."

"Then I know more about how to do it." Stooping, he lifted Johnson's chin. The man breathed heavily and grunted. Howe made one quick slash and the man's throat was cut. He dropped the head, stood up and stared at the spreading red stream. He spat in it, then stepped to the wash stand and cleaned his razor.

Jeff said, "I guess I spoke too hastily, Alec."

Alec did not look up. "No," he said slowly, "not a bit too hastily. I guess it takes some time to get used to the notion of war."

"Yeah, I guess so. Well, let's dispose of this thing."

Despite a very short night Jeff Thomas was up unusually early as he wanted to report to Ardmore before the morning service. Ardmore listened carefully to the account, then said, "I'll send Scheer down to install a shield on the basement door. Some such rig will be standard for ail temple installations from now on. How about Howe? Do you want to send him back?"

"No," Thomas decided, "I think he's over the hump now. He's squeamish by nature, but he's got plenty of moral courage. Damn it, boss, we've got to trust somebody."

"Are you willing to turn the temple over to him?"

"Well . . . yes, I am—now. Why?"

"Because I want you to move on to Salt Lake City practically at once. I lay awake most of the night thinking over what you told me yesterday. You stirred me up, Jeff; I had been getting fat and sloppy in my thinking. How many potential recruits have you got now?"

"Thirteen, now that Johnson is out of it. Not all of them candidates for 'priesthood,' of course."

"I want you to send them all here, at once."

"But, boss, I haven't examined them."

"I'm making a radical revision in procedure. We'll cut out examination under drugs except at the Citadel. You haven't the facilities to do it gracefully. I'm assigning Brooks to it; he will do all of it from now on and I will pass on the ones who get by his elimination. From now on the 'priests' will have the prime duty of locating likely candidates and sending them in to the mother temple."

Thomas thought about it. "How about characters like Johnson? We sure don't want his type penetrating into the Citadel."

"I've anticipated that—and that's why the examinations will be held here. A candidate will be doped before he goes to bed, but he won't know it. He will be given a hypo, roused, and examined during the night. If he passes, well and good. If he doesn't then he never will know he has been examined under drugs but he will be allowed to think that he has passed."

"That's the beauty of it. He will be accepted into the service of the great god Mota, sworn in as a lay brother—and then we will work the tail off him! He'll sleep in a bare cell, scrub floors, eat poor food and damn little of it, and spend hours each day on his knees at his devotions. He'll be regimented so thoroughly that he will never have a chance to suspect that there is anything under this mountain but country rock. When he's got his bellyful, he will be sorrowfully allowed to give up his vows, then he can trot back and tell his Masters anything he jolly well pleases."

Thomas looked pleased. "It sounds swell, Major. It sounds like fun—and it sounds as if it would work."

"I think it will and it will turn their agents to our advantage. After the war is over we'll round them up and shoot 'em—the actual spies, I mean, not the soft heads. But that's a sideshow; let's talk about the candidates that pass. I want recruits and I want them fast. I want several hundred right away. Out of that several hundred I want to get at least sixty satisfactory candidates for 'priesthood'; I want to train them simultaneously and send them all out into the field at once. You've thoroughly sold me on the dangers of waiting, Jeff; I want to penetrate every major PanAsian center at the same time. You've convinced me that this is our only chance to pull off this masquerade."

Thomas whistled. "You don't want much, do you, loss?"

"It can be done. Here is the new doctrine for recruiting. Turn on your recorder."

"It's on."

"Good. Send in only such candidates as have lost immediate members of their families as a result of the PanAsian invasion, or have other superficial, prima facia evidences that they are likely to be loyal under stress. Eliminate obviously unstable persons but leave any other psychological elimination to the staff at the Citadel. Send in candidates from the following categories only: for the 'priesthood'—salesmen, advertising men, publicity men, newspapermen, preachers, politicians, psychologists, carnival pitch men or talkers, personnel managers, psychiatrists, trial lawyers, theatrical managers; for work not in contact with the public nor the enemy—skilled metal workers of all sorts, electronics technicians, jewelers, watchmakers, skilled precision workers in any engineering art, cooks, stenographers, laboratory technicians, physicists, seamstresses. Any of the latter group may be female."

"No female priests?"

"What do you think?"

"I'm against it. These babies rate women as zero or even minus. I don't think a female 'priest' could possibly operate in contact with them."

"I feel the same way. Now, can Alec take over the recruiting under this doctrine?"

"Hmm . . . boss, I hate, to throw him on his own just yet."

"He wouldn't make a slip and give us away, would he?"

"No, but he might not get much in the way of results, either."

"Well, you'll just have to push him in, sink or swim. From here on we force the moves, Jeff. Turn the temple over to Alec and report here. You and Scheer will leave for Salt Lake City at once, publicly. Buy another car and use the driver you have now. Alec can recruit another driver. I want Scheer back here in fortyeight hours and I want your first recruits headed this way a couple of days thereafter. Two weeks from now I'll send someone out to relieve you, either Graham or Brooks—"

"Huh? Neither one of them has the temperament for it."

"They can pinch hit after you've broken the ground. We'll relieve the one I send as soon as possible with the proper type. You'll come back here and start a school for 'priests'—or, rather, continue it and improve it. I'm starting it now, with the people at hand. That's your job; I don't expect to send you into the field again, except possibly as a trouble shooter."

Thomas sighed. "I sure talked myself into a job, didn't I?"

"You did indeed. Get moving."

"Just a minute. Why Salt Lake City?"

"Because I think it's a good spot for recruiting. Those Mormons are shrewd, practical people and I don't think you'll find a traitor among them. If you work at it, I think you can convince their Elders that the great god Mota is a good thing to have around and no menace to their own faith. We haven't made half enough use of the legitimate churches; they should be the backbone of the movement. Take the Mormons—they run to lay missionaries; if you work it right you can recruit a number of them with such experience, courageous, used to organizing in hostile territory, good talkers, smart. Get it?"

"I get you. Well, I'll sure try."

"You can do it. As soon as possible we'll send someone to relieve Alec and let him try his hand alone in Cheyenne. It's not a big place; if he flops it won't matter too much. But I'm betting he can take Cheyenne. Now you go take Salt Lake City."

CHAPTER EIGHT

Denver, Cheyenne, Salt Lake City, Portland, Seattle, San Francisco. Kansas City, Chicago, Little Rock. New Orleans, Detroit, Jersey City. Riverside, Five Points, Butler, Hackettstown, Natick, Long Beach, Yuma, Fresno, Amarillo, Grants, Parktown, Bremerton, Coronado, Worcester, Wickenberg, Santa Ana, Vicksburg, LaSalle, Morganfield, Blaisville, Barstow, Wallkyll, Boise, Yakima, St. Augustine, Walla Walla, Abilene, Chattahoochee, Leeds, Laramie, Globe, South Norwalk, Corpus Christi.

"Peace be unto you! Peace, it's wonderful! Come, all you sick and heavy laden! Come! Bring your troubles to the temple of the Lord Mota. Enter the sanctuary where the Masters dare not follow. Hold up your heads as white men, for 'The Disciple is Coming!'

"Your baby daughter is dying from typhoid? Bring her in! Bring her in! Let the golden rays of Tamar make her well again. Your job is gone and you face the labor camps? Come in! Come in! Sleep on the benches and eat at the table that is never bare. There will be work aplenty for you to do; you can be a pilgrim and carry the word to others. You need only profit by instruction.

"Who pays for it all? Why, Lord love you, man, gold is the gift of Mota! Hurry! 'The Disciple is coming!'"

They poured in. At first they came through curiosity, because this new and startling and cockeyed religion was a welcome diversion from painful and monotonous facts of their slavelike existences. Ardmore's instinctive belief in flamboyant advertising justified itself in results; a more conventional, a more dignified cult would never have received the "house" that this one did.

Having come to be entertained, they came back for other reasons. Free food, and no questions asked—who minded singing a few innocuous hymns when they could stay for supper? Why, those priests could afford to buy luxuries that Americans rarely saw on their own tables, butter, oranges, good lean meat, paying for them at the Imperial storehouses with hard gold coin that brought smiles to the faces of the Asiatic bursars.

Besides that, the local priest was always good for a touch if a man was really hard up for the necessary. Why be fussy about creeds? Here was a church that did not ask a man to subscribe to its creeds; you could come and enjoy all the benefits and never be asked to give up your oldtime religion—or even be asked if you had a religion. Sure, the priests and their acolytes appeared to take their god-with-six-attributes pretty seriously, but what of it? That was their business. Haven't we always believed in religious freedom? Besides, you had to admit they did good work.

Take Tamar, Lady of Mercy, now—maybe there was something to it. If you've seen a child choking to death with diphtheria, and seen it put to sleep by the server of Shaam, then washed in the golden rays of Tamar, and then seen it walk out an hour later, perfectly sound and whole, you begin to wonder. With half the doctors dead, with the army and a lot of the rest sent to concentration camps, anyone who could cure disease had to be taken seriously. What if it did look like superstitious mumbo jumbo? Aren't we a practical people? It's results that count.

But cutting more deeply than the material advantages, were the psychological benefits. The temple of Mota was a place where a man could hold up his head and not be afraid, something he could not do even in his own home. "Haven't you heard? Why, they say that no flatface has ever set foot in one of their temples, even to inspect. They can't even get in by disguising themselves as white men; something knocks them out cold, right at the door. Personally, I think those apes are scared to death of Mota. I don't know what it is they've got, but you can breathe easy in the temple. Come along with me—you'll see!"

The Rev. Dr. David Wood called on his friend the equally reverend Father Doyle. The older man let him in himself. "Come in, David, come in," he greeted him. "You're a pleasant sight. It's been too many days since I've seen you." He brought him into his little study and sat him down and offered tobacco. Wood refused it in a preoccupied manner.

Their conversation drifted in a desultory way from one unimportant subject to another. Doyle could see that Wood had something on his mind, but the old priest was accustomed to being patient. When it became evident that the younger man could not, or would not, open the subject, he steered him to it. "You seem like a man with something preying on his mind, David. Should I ask what it is?"

David Wood took the plunge. "Father, what do you think of this outfit that call themselves the priests of Mota?"

"Think of it? What should I think of it?"

"Don't evade me, Francis. Doesn't it matter to you when a heathen heresy sets up in business right under your nose?"

"Well, now, it seems to me that you have raised some points for discussion there, David. just what is a heathen religion?"

Wood snorted. "You know what I mean! False gods! Robes, and bizarre temple, and—mummeries!"

Doyle smiled gently. "You were about to say 'papist mummeries,' were you not, David? No, I can't say that I am greatly concerned over odd paraphernalia. But as to the definition of the word 'heathen'—

from a strict standpoint of theology I am forced to consider any sect that does not admit authority of the Vicar on Earth—"

"Don't play with me, man! I'm in no mood for it."

"I am not playing with you, David. I was about to add that in spite of the strict logic of theology, God in His mercy and infinite wisdom will find some way to let even one like yourself into the Holy City. Now as for these priests of Mota, I have not searched their creed for flaws, but it seems to me that they are doing useful work; work that I have not been able to accomplish."

"That is exactly what worries me, Francis. There was a woman in my congregation who was suffering from an incurable cancer. I knew of cases like hers that had apparently been helped by . . . by those charlatans! What was I to do? I prayed and found no answer."

"What did you do?"

"In a moment of weakness I sent her to them."

"Well?"

"They cured her."

"Then I wouldn't worry about it too much. God has more vessels than you and me."

"Wait a moment. She came back to my church just once. Then she went away again. She entered the sanctuary, if you can call it that, that they have set up for women. She's gone, lost entirely to those idolaters! It has tortured me, Francis. What does it avail to heal her mortal body if it jeopardizes her soul?"

"Was she a good woman?"

"One of the best."

"Then I think God will look out for her soul, without your assistance, or mine. Besides, David," he continued, refilling his pipe, "those so-called priests. They are not above seeking your help, or mine, in spiritual matters. They don't perform weddings, you know. If you should wish to use their buildings, I am sure you would find it easy—"

"I can't imagine it!"

"Perhaps, perhaps, but I found a listening device concealed in my confessional—" The priest's mouth became momentarily a thin angry line. "Since then I've been borrowing a corner of the temple to listen to anything which might possibly be of interest to our Asiatic masters."

"Francis, you haven't!" Then, more moderately, "Does your bishop know of this?"

"Well, now, the bishop is a very busy man—"

"Really, Francis—"

"Now, now—I did write him a letter, explaining the situation as clearly as possible. One of these days I will find someone who is traveling in that direction and can carry it to him. I dislike to turn church business over to a public translator; it might be garbled."

"Then you haven't told him?"

"Didn't I just say that I had written him a letter? God has seen that letter; it won't harm the bishop to wait to read it."

It was nearly two months later that David Wood was sworn into the Secret Service of the United States Army. He was only mildly surprised when he found that his old friend, Father Doyle, was able to exchange recognition signals with him.

It grew and it grew. Organization—and communication—underneath each gaudy temple, shielded from any possible detection by orthodox science, operators stood watch and watch, heel and toe, at the pararadio equipment operating in one band of additional spectra—operators who never saw the light of day, who never saw anyone but the priest of their own temple; men marked as missing in the fields of the Asiatic warlords; men who accepted their arduous routine philosophically as the necessary exigency of war. Their morale was high, they were free men again, free and fighting, and they looked forward to the day when their efforts would free all men, from coast to coast.

Back in the Citadel women in headphones neatly typed everything that the pararadio operators had to report; typed it, classified it, condensed it, cross-indexed it. Twice a day the communication watch officer laid a brief of the preceding twelve hours on Major Ardmore's desk. Constantly throughout the day dispatches directed to Ardmore himself poured in from a dozen and a half dioceses and piled up on his desk. In addition to these myriad sheets of flimsy paper, each requiring his personal attention, reports piled up from the laboratories, for Calhoun now had enough assistants to fill every one of those ghost crowded rooms and he worked them sixteen hours a day.

The personnel office crowded more reports on him, temperament classifications, requests for authorization, notifications that this department or that required such and such additional personnel; would the recruiting service kindly locate them? Personnel there was a headache! How many men can keep a secret? There were three major divisions of personnel, inferiors in routine jobs such as the female secretaries and clerks who were kept completely insulated from any contact with the outside world; local temple personnel in contact with the public who were told only what they needed to know and were never told that they were serving in the army, and the "priests" themselves who of necessity had to be in the know.

These latter were sworn to secrecy, commissioned in the United States army, and allowed to know the real significance of the entire set-up. But even they were not trusted with the underlying secret, the scientific principles behind the miracles they performed. They were drilled in the use of the apparatus entrusted to them, drilled with care, with meticulous care, in order that they might handle their deadly symbols of office without error. But, save for the rare sorties of the original seven, no person having knowledge of the Ledbetter effect and its corollaries ever left the Citadel.

Candidates for priesthood were sent in as pilgrims from temples everywhere to the Mother Temple near Denver. There they sojourned in the monastery, located underground on a level between the temple building and the Citadel. There they were subjected to every test of temperament that could be devised. Those who failed were sent back to their local temples to serve as lay brothers, no wiser than when they had left home.

Those who passed, those who survived tests intended to make them angry, to make them loquacious, to strain their loyalty, to crack their nerve, were interviewed by Ardmore in his persona as High Priest of Mota, Lord of All. Over half of them he turned down for no reason at all, hunch alone, some vague uneasiness that. this was not the man.

In spite of these precautions he never once commissioned a new officer and sent him forth to preach without a deep misgiving that here perhaps was the weak link that would bring ruin to them all.

The strain was getting him. It was too much responsibility for one man, too many details, too many decisions. He found it increasingly difficult to concentrate on the matter at hand, hard to make even simple decisions. He became uncertain of himself and correspondingly irritable. His mood infected those in contact with him and spread throughout the organization.

Something had to be done.

Ardmore was sufficiently honest with himself to recognize, if not to diagnose, his own weakness. He called Thomas into his office, and unburdened his soul. Concluding, he asked, "What do you think I should do about it, Jeff? Has the job got too big for me? Should I try to pick out somebody else to take over?"

Thomas shook his head slowly. "I don't think you ought to do that, Chief. Nobody could work any harder than you do—there are just twenty-four hours in a day. Besides, whoever relieved you would have the same problems without your intimate knowledge of the background and your imaginative grasp of what we are trying to accomplish."

"Well, I've got to do something. We're about to move into the second phase of this show, when we start in systematically trying to break the nerve of the PanAsians. When that reaches a crisis, we've got to have the congregation of every temple ready to act as a military unit. That means more work, not less. And I'm not ready to handle it! Good grief, man you'd think that somebody somewhere would have worked out a science of executive organization so that a big organization could be handled without driving the man at the top crazy! For the past two hundred years the damned scientists have kept hauling gadget after gadget out of their laboratories, gadgets that simply demand big organizations to use them—but never a word about how to make those organizations run." He struck a match savagely. "It's not rational!"

"Wait a minute, Chief, wait a minute." Thomas wrinkled his brow in an intense effort to remember. "Maybe there has been such work done—I seem to recall something I read once, something about Napoleon being the last of the generals."

"Huh?"

"It's pertinent. This chap's idea was that Napoleon was the last of the great generals to exercise direct command, because the job got too big. A few years later the Germans invented the principle of staff command, and, according to this guy, generals were through: as generals. He thought that Napoleon wouldn't have stood a chance against an army headed by a general staff. Probably what you need is a staff:"

"For Pete's sake, I've got a staff! A dozen secretaries and twice that many messengers and clerks—I fall over 'em."

"I don't think it was that kind of a staff he was talking about. Napoleon must have had that kind of a staff."

"Well, what did he mean?"

"I don't know exactly, but apparently it was a standard notion in modern military organization. You're not a graduate of the War College?"

"You know damn well I'm not." It was true. Thomas had guessed from very early in their association that Ardmore was a layman, improvising as he went along, and Ardmore knew that he knew; yet each had kept his mouth closed.

"Well, it seems to me that a graduate of the War College might be able to give us some hints about organization."

"Fat chance. They either died in battle, or were liquidated after the collapse. If any escaped, they are lying very low and doing their best to conceal their identity—for which you can't blame them."

"No, you can't. Well, forget it—I guess it wasn't such a good idea after all."

"Don't be hasty. It was a good idea. Look—armies aren't the only big organizations. Take the big corporations, like Standard Oil and U. S. Steel and General Motors—they must have worked out the same principles."

"Maybe. Some of them, anyhow—although some of them burn their executives out pretty young. Generals have to be killed with an ax, it seems to me."

"Still, some of them must know something. Will you see if you can stir out a few?"

Fifteen minutes later a punched-card selector was rapidly rifling through the personnel files of every man and woman who had been reported on by the organization. It turned out that several men of business executive experience were actually then working in the Citadel in jobs of greater or lesser administrative importance. Those were called in, and dispatches were sent out summoning about a dozen more to "make a pilgrimage" to the Mother Temple.

The first trouble shooter turned out sour. He was a high-pressure man, who had run his own business much along the lines of personal supervision which Ardmore had been using up to then. His suggestions had to do with routing and forms and personal labor savers—rather than any basic change in principles. But in time several placid unhurried men were located who knew instinctively and through practice the principle of doctrinal administration.

One of them, formerly general manager of the communications trust, was actually a student and an admirer of modern military organizational methods. Ardmore made him Chief of Staff. With his help, Ardmore selected several others: the former personnel manager of Sears, Roebuck; a man who had been permanent undersecretary of the department of public works in one of the Eastern states; executive secretary of an insurance company. Others were added as the method was developed.

It worked. Ardmore had a little trouble getting used to it at first; he had been a one-man show all his life and it was disconcerting to find himself split up into several alter egos, each one speaking with his authority, and signing his name "by direction." But in time he realized that these men actually were able to apply his own policy to a situation and arrive at a decision that he might have made himself. Those who could not he got rid of, at the suggestion of his Chief of Staff: But it was strange to be having time enough to watch other men doing HIS work HIS way under the simple but powerful scientific principle of general staff command.

He was free at last to give his attention to perfecting that policy and to deal thoroughly with the occasional really new situation which his staff referred to him for solution and development of new policy. And he slept soundly, sure that one, or more, of his "other brains" was alert and dealing with the job. He knew now that, even if he should be killed, his extended brain would continue until the task was completed.

It would be a mistake to assume that the PanAsian authorities had watched the growth and spread of the new religion with entire satisfaction, but at the critical early stage of its development they simply had not realized that they were dealing with anything dangerous. The warning of the experience of the deceased lieutenant who first made contact with the cult of Mota went unheeded, the simple facts of his tale unbelieved.

Having once established their right to travel and operate, Ardmore and Thomas impressed on each missionary the importance of being tactful and humble and of establishing friendly relations with the local authorities. The gold of the priests was very welcome to the Asiatics, involved as they were in making a depressed and recalcitrant country pay dividends, and this caused them to be more lenient with the priests of Mota than they otherwise would have been. They felt, not unreasonably, that a slave who helps to make the books balance must be a good slave. The word went around at first to encourage the priests of Mota, as they were aiding in consolidating the country.

True, some of the PanAsian police and an occasional minor official had very disconcerting experiences in dealing with priests, but, since these incidents involved loss of face to the PanAsians concerned, they were strongly disposed not to speak of them.

It took some time for enough unquestioned data to accumulate to convince the higher authorities that the priests of Mota, all of them, had several annoying—yes, even intolerable characteristics. They could not be touched. One could not even get very close to one of them—it was as if they were surrounded by a frictionless pellucid wall of glass. Vortex pistols had no effect on them. They would submit passively to arrest but somehow they never stayed in jail. Worst of all, it had become certain that a temple of Mota could not, under any circumstances, be inspected by a PanAsian.

It was not to be tolerated.

CHAPTER NINE

It was not tolerated. The Prince Royal himself ordered the arrest of Ardmore.

It was not done as crudely as that. Word was sent to the Mother Temple that the Grandson of Heaven desired the High Priest of the Lord of Mota to attend him. The message reached Ardmore in his office in the Citadel, delivered to him by his Chief of Staff, Kendig, who for the first time in their relationship showed signs of agitation. "Chief," he burst out, "a battle cruiser has landed in front of the temple, and the commanding officer says he has orders to take you along!"

Ardmore put down the papers he had been studying. "Hmm-m-m," he said, "it looks like we're getting down to the slugging. A little bit earlier than I had counted on." He frowned.

"What are you going to do about it?"

"You know my methods. What do you think I'll do about it?"

"Well—I guess you'll probably go along with him, but it worries me. I wish you wouldn't."

"What else can I do? We aren't ready yet for an open breach; a refusal would be out of character. Orderly!"

"Yes, sir!"

"Send my striker in. Tell him full robes and paraphernalia. Then present my compliments to Captain Thomas and ask him to come here at once."

"Yes, sir." The orderly was already busy with the viewphone.

Ardmore talked with Kendig and Thomas as his striker robed him. "Jeff, here's the sack—you're holding it."

"Huh?"

"If anything happens so that I lose communication with headquarters, you are commanding officer. You'll find your appointment in, my desk, signed and sealed."

"But Chief."

"Don't 'But Chief' me. I made my decision on this a long time ago. Kendig knows about it; so does the rest of the staff. I'd have had you in the staff before this if I hadn't needed you as Chief of Intelligence." Ardmore glanced in a mirror and brushed at his curly blond beard. They had all grown beards, all those who appeared in public as priests. It tended to give the comparatively hairless Asiatics a feeling of womanly inferiority while at the same time arousing a vague unallocated repugnance. "You may have noticed that no one holding a line commission has ever been made senior to you. I had this eventuality in mind."

"How about Calhoun?"

"Oh, yes—Calhoun. Your commission as a line officer automatically makes you senior to him, of course. But I'm afraid that won't cut much ice in handling him. You just have to deal with him as best you can. You've got force majeure at your disposal, but go easy. But I don't have to tell you that."

A messenger, dressed as an acolyte, hurried in and saluted. "Sir, the temple officer of the watch says that the PanAsian Commander is getting very impatient."

"Good. I want him to be. Are the subsonics turned on?"

"Yes, sir, they make us all very nervous."

"You can stand it; you know what it is. Tell the watch officer to have the engineer on duty vary the volume erratically with occasional complete let-ups. I want those Asiatics to be fit to be tied by the time I get there."

"Yes, sir. Any word to the cruiser commander?"

"Not directly. Have the watch officer tell him that I am at my devotions and can't be disturbed."

"Very good, sir." The messenger trotted away. This was something like! He would hang around where he could see the face of that skunk when he heard that one!

"I'm glad we got these new headsets fitted out in time," Ardmore observed as his striker fitted his turban to his head.

The turbans had originally been intended simply to conceal the mechanism which produced the shining halo which floated above the heads of all priests of Mota. The turban and the halo together made a priest look about seven feet tall with consequent unfavorable effect on the psyche of the Asiatics. But Scheer had seen the possibility of concealing a short range transmitter and receiver under the turban as well; they were now standard equipment.

He settled the turban with his hands, made sure that the bone conduction receiver was firm against his mastoid, and spoke in natural low tones, apparently to no one, "Commanding officer—testing."

Apparently inside his head, a voice, muffled but distinct, answered him, "Communication watch officer—test check."

"Good," he approved. "Have direction finders crossed on me until further notice. Arrange your circuits to hook me in through the nearest temple to headquarters here. I may want Circuit A at any moment."

Circuit A was a general broadcast to every temple in the country. "Any news from Captain Downer?"

"One just this moment came in, sir; I've just sent it to your office," the inner voice informed him.

"So? Yes, I see." Ardmore stepped to his desk, flipped a switch which turned off a shining red transparency reading Priority, and tore a sheet of paper from the facsimile recorder.

"Tell the Chief," the message ran, "that something is about to bust. I can't find out what it is, but all the brass hats are looking very cocky. Watch everything and be careful." That was all, and that little possibly garbled in word of mouth relay.

Ardmore frowned and pursed his mouth, then signaled his orderly. "Send for Mr. Mitsui."

When Mitsui came in, Ardmore handed him the message. "I suppose you've heard that I am to be arrested?"

"It's all over the place," Mitsui acknowledged soberly, and handed the message back.

"Frank, if you were Prince Royal, what would you be trying to accomplish by arresting me?"

"Chief," protested Mitsui, distress in his eyes, "you act as if I were one of those . . . those murdering—"

"Sorry—but I still want your advice."

"Well—I guess I'd be intending to put you on ice, then clamp down on your church."

"Anything else?"

"I don't know. I don't guess I'd be doing it unless I was fairly sure that I had some way to get around your protections."

"No, I suppose so." He spoke again to the air. "Communication office, priority for Circuit A."

"Direct, or relay?"

"You send it out. I want every priest to return to his temple, if he is now out of it, and I want him to do it fast. Priority, urgent, acknowledge and report." He turned back to those with him.

"Now for a bite to eat, and I'll go. Our yellow friend upstairs ought to be about done to a turn by then. Anything else we should take up before I leave?"

Ardmore entered the main hall of the temple from the door in the rear of the altar. His approach to the great doors, now standing open, was a stately progress. He knew that the Asiatic commander could see him coming; he covered the two hundred yards with leisured dignity, attended by a throng of servers clad in robes of red, of green, of blue, and golden. His own vestments were immaculate white. His attendants fanned out as they neared the great archway; he marched out and up to the fuming Asiatic alone. "Your master wishes to see me?"

The PanAsian had difficulty in composing himself sufficiently to speak in English. Finally he managed to get out, "You were ordered to report to me. How dare you—"

Ardmore cut him short. "Does your master wish to see me?"

"Decidedly! Why didn't you—"

"Then you may escort me to him." He moved on past the officer and marched down the steps, giving the Asiatics the alternatives of running to catch up with him, or trailing after. The commander of the cruiser obeyed his first impulse to hurry, nearly fell on the broad steps, and concluded by bringing up ignominiously in the rear, his guard attending him.

Ardmore had been in the city chosen by the Prince Royal as his capital before, but not since the Asiatics had moved in. When they debarked on the municipal landing platform he looked about him with concealed eagerness to see what changes had been made. The skyways seemed to be running—probably because of the much higher percentage of Asiatic population here. Otherwise there was little apparent change. The dome of the State capitol was visible away to the right; he knew it to be the palace of the warlord. They had done something to its exterior; he could not put his finger on the change but it no longer looked like Western architecture.

He was too busy for the next few minutes to look at the city. His guard, now caught up with him and surrounding him, marched him to the escalator and down into the burrows of the city. They passed through many doors, each with its guard of soldiers. Each guard presented arms to Ardmore's captor as the party passed. Ardmore solemnly returned each salute with a gesture of benediction, acting as if the salute had been intended for him and him alone. His custodian was indignant but helpless; it soon developed into a race to see which could acknowledge a salute first. The commander won, but at the cost of saluting his startled juniors first.

Ardmore took advantage of a long unbroken passageway to check his communications. "Great Lord Mota," he said, "dost thou hear thy servant?" The commander glanced at him, but said nothing.

The muffled inner voice answered at once, "Got you, Chief. You are hooked in through the temple in the capitol." It was Thomas' voice.

"The Lord Mota speaks, the servant hears. Truly it is written that little pitchers have long ears."

"You mean the monkeys can overhear you?"

"Yea, verily, now and forever. The Lord Mota will understand igpay atinlay?"

"Sure, Chief—pig latin. Take it slow if you can."

"At-thay is oodgay. Ore-may aterlay." Satisfied, he desisted. Perhaps the PanAsians had a mike and a recorder on him even now. He hoped so, for he thought it would give them a useless headache. A man has to grow up in a language to be able to understand it scrambled.

The Prince Royal had been impelled by curiosity as much as by concern when he ordered the apprehension of the High Priest of Mota. It was true that affairs were not entirely to his liking, but he felt that his advisers were hysterical old women. When had a slave religion proved anything but an aid to the conqueror? Slaves needed a wailing wall; they went into their temples, prayed to their gods to deliver them from oppression, and came out to work in the fields and factories, relaxed and made harmless by the emotional catharsis of prayer.

"But," one of his advisers had pointed out, "it is always assumed that the gods do nothing to answer those prayers."

That was true; no one expected a god to climb down off his pedestal and actually perform. "What, if anything, has this god Mota done? Has anyone seen him?"

"No, Serene One, but—"

"Then what has he done?"

"It is difficult to say. It is impossible to enter their temples—"

"Did I not give orders not to disturb the slaves in their worship?" The Prince's tones were perilously sweet.

"True. Serene One, true," he was hastily assured, "nor have they been, but your secret police have been totally unable to enter in order to check up for you, no matter how cleverly they were disguised."

"So? Perhaps they were clumsy. What stopped them?"

The adviser shook his head. "That is the point, Serene One. None can remember what happened."

"What is that you say?—but that is ridiculous. Fetch me one to question."

The adviser spread his hands. "I regret, sire—"

"So? Of course, of course—peace be to their spirits." He smoothed an embroidered silken panel that streamed down his chest. While he thought, his eye was caught by ornately and amusingly carved chessmen set up on a table at his elbow. Idly he tried a pawn in a different square. No, that was not the solution; white to move and checkmate in four moves—that took five. He turned back. "It might be well to tax them."

"We have already tried—"

"Without my permission?" The Prince's voice was gentler than before. Sweat showed on the face of the other.

"If it were an error, Serene One, we wished the error to be ours."

"You think me capable of error?" The Prince was the author of the standard text on the administration of subject races, written while a young provincial governor in India. "Very well, we will pass it. You taxed them, heavily I presume—what then?"

"They paid it, sire."

"Triple it."

"I am sure they would pay it, for—"

"Make it tenfold. Set it so high they can not pay it."

"But Serene One, that is the point. The gold with which they pay is chemically pure. Our doctors of temporal wisdom tell us that this gold is made, transmuted. There is no limit to the tax they can pay. In fact," he went on hurriedly, "it is our opinion, subject always to the correction of superior wisdom"—he bowed quickly—"that this is not a religion at all, but scientific forces of an unknown sort!"

"You are suggesting that these barbarians have greater scientific attainments than the Chosen Race?"

"Please, sire, they have something, and that something is demoralizing your people. The incidence of honorable suicide has climbed to an alarming high, and there have been far too many petitions to return to the land of our fathers.

"No doubt you have found means to discourage such requests?"

"Yes, Serene One, but it has only resulted in a greater number of honorable suicides among those thrown in contact with the priests of Mota. I fear to say it, but such contact seems to weaken the spirit of your children."

"Hm-m-m. I think, yes, I think that I will see this High Priest of Mota."

"When will the Serene One see him?"

"That I will tell you. In the meantime, let it be said that my learned doctors, if they have not lived too many years and passed their usefulness, will be able to duplicate and counteract any science the barbarians may have."

"The Serene One has spoken."

The Prince Royal watched with great interest as Ardmore approached him. The man walked without fear. And, the Prince was forced to admit, the man had a certain dignity about him, for a barbarian. This would be interesting. What was that shining thing around his head?—an amusing conceit, that.

Ardmore stopped before him and pronounced a benediction, hand raised high. Then—"You asked that I visit you, Master."

"So I did." Was the man unaware that he should kneel?

Ardmore glanced around. "Will the Master cause his servants to fetch me a chair?"

Really, the man was delightful—regrettable that he must die. Or would it be possible to keep him around the palace for diversion? Of course, that would entail the deaths of all who had watched this scene and perhaps more such expedient deaths later, if his delicious vagaries continued. The Prince concluded that it was not the initial cost, but the upkeep.

He raised a hand. Two scandalized menials hastened up with a stool. Ardmore sat down. His eye rested on the chess table by the Prince. The Prince followed his glance and inquired, "Do you play the Battle Game?"

"A little, Master."

"How would you solve this problem?"

Ardmore got up and stood over the board. He studied it for a few moments, while the Oriental watched him. The courtiers were as silent as the pieces on the board—waiting.

"I would move this pawn—so," Ardmore announced at last.

"In such a fashion? That is a most unorthodox move."

"But necessary. From there it is mate in three moves—but, of course, the Master sees that.",

"Of course. Yes, of course. But I did not fetch you here for chess," he added, turning away. "We must speak of other matters. I learn with sorrow that there have been complaints about your followers."

"The Master's sorrow is my sorrow. May the servant ask in what manner his children have erred?"

But the Prince was again studying the chessboard. He raised a finger; a servant was kneeling beside him with writing board. He dipped a brush in ink and quickly executed a group of ideographs, sealing. the letter with his ring. The servant bowed himself away, while a messenger sped out with the dispatch.

"What was that? Oh, yes—it is reported that they lack in grace. Their manner is unseemly in dealing with the Chosen Ones."

"Will the Master help an humble priest by telling him which of his children have been guilty of lapses from propriety and in what respects that he may correct them?"

This request, the Prince admitted to himself, was awkward. In some manner this uncouth creature had managed to put him on the defensive. He was not used to being asked for details; it was improper. Furthermore there was no answer; the conduct of the priests of Mota had been impeccable, flawless, in every fashion that could be cited.

Yet his court stood there, waiting, to hear what answer he would make to this crude indecency. How went the ancient lines? " . . . Kung F'tze confounded by the question of a dolt!"

"It is not meet that the servant should question the master. At this moment you err in the fashion of your followers."

"Your pardon, Master. Though the slave may not question, is it not written that he may pray for mercy and help? We are simple servants, possessing not the wisdom of the Sun and of the Moon. Are you not our father and our mother? Will you not, from your heights, instruct us?"

The Prince refrained from biting his lip. How had this happened? By some twist of words this barbarian had put him in the wrong again. It was not safe to let the man open his mouth! Still—this must be met; when a slave cries for mercy, honor requires an answer.

"We consent to instruct you in one particular; learn the lesson well and other aspects of wisdom will come to you of themselves." He paused and considered his words. "The manner of address used by you and your lesser priests in greeting the Chosen Ones is not seemly. This afront corrupts the character of all who see it."

"Am I to believe that the Chosen Race disdains the blessing of the Lord Mota?"

He had twisted it—again! Sound policy required that the ruler assume that the gods of the slaves were authentic. "The blessing is not refused, but the form of greeting must be that of servant to master."

Ardmore was suddenly aware that he was being called with urgency. Ringing in his head was the voice of Thomas: "Chief! Chief! Can you hear me? There's a squad of police at every temple, demanding the surrender of the priests—we're getting reports in from all over the country!"

"The Lord Mota hears!" It was addressed to the Prince; would Jeff understand also?

Jeff again—"Was that to me, Chief?"

"See to it that his followers understand." The Prince had answered too quickly for Ardmore to devise another double meaning in which to speak to Thomas. But he knew something that the Prince did not know he knew. Now to use it.

"How can I instruct my priests when you are even now arresting them?" Ardmore's manner changed suddenly from humble to accusatory.

The face of the Prince was impassive, his eyes alone gave away his astonishment. Had the man guessed the nature of that dispatch? "You speak wildly."

"I do not! Even while you have been instructing me in the way that I must instruct my priests, your soldiers have been knocking at the gates of all the temples of Mota. Wait! I have a message to you from the Lord Mota: His priests do not fear worldly power. You have not succeeded in arresting them, nor would you, did not the Lord Mota bid them to surrender. In thirty minutes, after the priests have cleansed themselves spiritually and girded themselves for the ordeal, each will surrender himself at the threshold of his temple. Until then, woe to the soldier who attempts to violate the House of Mota!"

"'At's telling 'em Chief! 'At's telling 'em! You mean for each temple priest to hold off thirty more minutes, then surrender—is that right? And for them to be loaded for bear, power units, communicators, and all the latest gadgets. Acknowledge, if you can."

"In the groove, Jeff." He had to chance it four meaningless syllables to the Prince, but Jeff would understand.

"O. K., Chief. I don't know what you're up to, but we'll go along a thousand percent!"

The face of the Prince was a frozen mask. "Take him away."

For some minutes after Ardmore was gone the Serene One sat staring at the chessboard and pulling at his underlip.

They placed Ardmore in a room underground, a room with metal walls and massive locks on the door. Not content with that, he was hardly inside when he heard a soft hissing noise and saw a point at the edge of the door turn cherry red. Welding! They evidently intended to make sure that no possible human weakness of his guards could result in escape. He called the Citadel.

"Lord Mota, hear thy servant!"

"Yes, Chief."

"A wink is as good as a nod."

"Got you, Chief. You are still where you can be overheard. Slang it up. I'll get your drift!"

"The headman witch doctor hankers to chew the rag with the rest of the sky pilots."

"You want Circuit A?"

"Most bodaciously."

There was a brief pause, then Thomas answered. "O. K., Chief, you've got it. I'll stay cut in to interpret; it probably won't be necessary, since the boys have practiced this kind of double talk. Go ahead—you've got five minutes, if they are to surrender on time."

Any cipher can be broken, any code can be compromised. But the most exact academic knowledge of a language gives no clue to its slang, its colloquial allusions, its half statements, over statements, and inverted meanings. Ardmore felt logically certain that the PanAsians had planted a microphone in his cell. Very well, since they were bound to listen to his end of the conversation, let them be confused and baffled by it, uncertain whether he spoke in gibberish to his god, or had possibly lost his mind.

"Look, cherubs—mamma wants baby to go to the nice man. It's all hunkydory as long as baby-bunting carries his nice new rattle. Yea, verily, rattle is the watchword—you don't and they do. Deal this cold deck the way it's stacked and the chopstick laddies are stonkered and discombobulated. The stiff upper lip does it."

"Check me if I'm wrong, Chief. You want the priests to give themselves up, and to rattle the PanAsians by their apparent unconcern. You want them to carry it off the way you did, cool as a cucumber, and bold as brass. I also take it that you want them to hang on to their staffs, but not to use them unless you tell them to. Is that right?"

"Elementary, my dear Watson!"

"What happens after that?"

"No thirty."

"What's that? Oh, 'No thirty'—more to come on this story; you'll tell us later. All right, Chief—it's time!"

"Okey-dokey!"

Ardmore waited until he was reasonably certain that all the PanAsians not immediately concerned with guarding the prisoners would be asleep, or at least in their quarters. What he proposed to do would be effective fully only in the event that no one knew just what had happened. The chances were better at night.

He called Thomas by whistling a couple of bars of "Anchors Aweigh." He responded at once—he had not gone off duty, but had remained at the pararadio, giving the prisoners an occasional fight talk and playing records of martial music. "Yes, Chief?"

"The time has come to take a powder. Allee-allee out's in free!"

"Jailbreak?"

"In the manner of the proverbial Arab—the exact manner."

They had discussed this technique before; Thomas gave itemized instructions and then said, "Say when, Chief."

"When!"

He could almost see Thomas nod. "Right-oh! O. K., troops, get going!"

Ardmore stood up and stretched his cramped limbs. He walked over to one wall of his prison and stood so that the single light cast a shadow on the wall. That would be about right there! He set the controls of his staff for maximum range in the primary Ledbetter effect, checked to see that the frequency band covered the Mongolian race, and adjusted it to stun rather than kill. Then he turned on power.

A few moments later he turned it off, and again regarded his shadow on the wall. This required an entirely different setting, directional and with fine discrimination. He turned on the red ray of Dis to guide him in his work, completed his set-up, and again turned on power.

Quietly and without fuss, atoms of metal rearranged themselves and appeared as nitrogen, to mix harmlessly with the air. Where there had been a solid wall was now an opening the size and shape of a tall man dressed in priestly robes. He looked at it, and, as an after thought, he meticulously traced an ellipse over the head of the representation, an ellipse the size and shape of his halo. That done, he reset the controls of his staff to what he had used before, turned on power, and stepped through the opening. It was a close fit; he had to wriggle through sideways.

Outside it was necessary to step over the piled-up bodies of a dozen or more PanAsian soldiers. This was not the side of the welded-up entrance; he guessed that he would have found guards outside each and any of the four walls, probably floor and ceiling as well.

There were more doors to pass, more bodies to clamber over before he found himself outside. When he did, he was completely unoriented. "Jeff," he called, "where am I?"

"Just a second, Chief. You're—No, we can't get a fix on you, but you are on a line of bearing almost due south of the nearest temple. Are you still near the palace?"

"Just outside it."

"Then head north—it's about nine squares."

"Which way is north? I'm all turned around. No wait a minute—I just located the Big Dipper, I'm all right."

"Hurry, Chief."

"I will." He set out at a quick dogtrot, kept it up for a couple of hundred yards, then dropped into a fast walk. Damn it, he thought, a man gets out of condition with all this desk work.

Ardmore encountered several Asiatic police, but they were in no condition to notice him; he had kept the primary effect turned on. There were no whites about—the curfew was strict with the exception of a pair of startled street cleaners. It occurred to him that he should induce them to go with him to the temple, but he decided against it; they were in no more danger than a hundred fifty million others.

There was the temple!—its four walls glowing with the colors of attributes. He broke into a run and burst inside. The local priest was almost at his heels, arriving from the other direction.

He greeted the priest heartily, suddenly realizing the strain he had been under in finding how good it was to speak to a man of his own kind—a comrade. The two of them ducked around back of the altar and went down below to the control and communication room, where the pararadio operator and his opposite number were almost hysterically glad to see them. They offered him black coffee, which he accepted gratefully. Then he told the operator to cut out of Circuit A and establish direct two-way connection with headquarters with vision converted into the circuit.

Thomas appeared to be about to jump out of the screen. "Whitey!" he yelled. It was the first time since the Collapse that anyone had called Ardmore by his nickname. He was not even aware that Thomas knew it. But he felt warmed by the slip.

"Hi, Jeff," he called to the image, "good to see you. Any reports in yet?"

"Some. They are coming in all the time."

"Shift to relay through the diocese offices; Circuit A is too clumsy. I want a quick report."

It was forthcoming. Within less than twenty minutes the last diocese had reported in. Every priest was back in his own temple. "Good," he told Thomas. "Now I want the proprietor in each temple set for counteraction, and wake all those monkeys up. They ought to be able to use a directional concentration down the line each priest returned on, and reach clear back to the local jailhouse."

"O.K., if you say so, Chief. May I ask why you don't simply let 'em wake up when the effect wears off?'

"Because," he explained, "if they simply come to before anybody finds them the effect will be much more mysterious than if they are found apparently dead. The object of the whole caper was to break the morale of the Asiatics. This increases the effect."

"Right—as usual, Chief. The word is going out."

"Fine. When that's done, have them check the shielding of their temples, turn on the fourteen-cycle note, and go to bed—all that aren't on duty. I imagine we'll have a busy day tomorrow."

"Yes, sir. Aren't you coming back here, Chief?"

Ardmore shook his head. "It's an unnecessary risk. I can supervise just as effectively through television as I could if I were standing right beside you."

"Scheer is all set to fly over and pick you up. "He could set her down right on the temple roof."

"Tell him thanks, but to forget it. Now you turn it over to the staff duty officer and get some sleep."

"Just as you say, Chief."

He had a midnight lunch with the local priest and some conversation, then let the priest show him to a stateroom down underground.

CHAPTER TEN

Ardmore was awakened by the off duty pararadio operator shaking him vigorously. "Major Ardmore! Major! Wake up!"

"Unnh . . . . M-m-m-m . . . . Wassa matter?"

"Wake up—the Citadel is calling you—urgently!"

"What time is it?"

"About eight. Hurry, sir!"

He was reasonably wide awake by the time he reached the phone. Thomas was there, on the other end, and started to talk as soon as he saw Ardmore. "A new development, Chief—and a bad one. The PanAsian police are rounding up every member of our congregations—systematically."

"H-m-m-m—it was an obvious next move, I guess. How far along are they?"

"I don't know. I called you when the first report came in; they are coming in steadily now from all over the country."

"Well, I reckon we had better get busy." It was one thing for a priest, armed and protected, to risk arrest; these people were absolutely helpless.

"Chief—you remember what they did after the first uprising? This looks bad, Chief—I'm scared!"

Ardmore understood Thomas' fear; he felt it himself. But he did not permit his expression to show it.

"Take it easy, old son," he said in a gentle voice.

"Nothing has happened to our people yet and I don't think we'll let anything happen."

"But, Chief, what are you going to do about it? There aren't enough of us to stop them before they kill a lot of people."

"Not enough to do it directly, perhaps, but there is a way. You stick to collecting data and warn everybody not to go off halfcocked. I'll call you back in about fifteen minutes." He flipped the disconnect switch before Thomas could answer.

It required some thought. If he could equip each man with a staff, it would be simple. The shielding effect from a staff could theoretically protect a man against almost anything; except, perhaps, an A-bomb or the infiltration of poison gas. But the construction and repair department had been hard pushed to provide enough staffs to equip each new priest; one for each man was out of the question, since they lacked factory mass production. Anyhow, he needed them now—this morning.

A priest could extend his shield to include any given area or number of people, but in great extension the field became so tenuous that a well-thrown snowball would break through it. Nuts!

He realized suddenly that he was thinking of the problem in direct terms again, in spite of his conscious knowledge that such an approach was futile. What he wanted was psychological jiu-jitsu—some way to turn their own strength against them. Misdirection—that was the idea! Whatever it was they expected him to do, don't do it! Do something else.

But what else? When he thought he had found an answer to that question he called Thomas to the screen. "Jeff," he said at once, "give me Circuit A."

He spoke for some minutes to his priests, slowly and in detail, and emphasizing certain points. "Any questions?" he then asked, and spent several more minutes in dealing with such as they were relayed in from the diocese stations.

Ardmore and the local priest left the temple together. The priest attempted to persuade him to stay behind, but he brushed the objections aside. The priest was right; he knew in his heart that he should not take personal risks that could be avoided, but it was a luxury to be out from under Jeff Thomas' restraining influence.

"How do you plan to find out where they have taken our people?" asked the priest. He was a former real-estate operator named Ward, a man of considerable native intelligence. Ardmore liked him.

"Well, what would you do if I weren't along?"

"I don't know. I suppose I would walk into a police station and try to scare the information out of the flatface in charge."

"That's sound enough. Where is one?"

The central police station of the PanAsian police lay in the shadow of the palace, between eight and nine blocks to the south. They encountered many PanAsians en route, but were not interfered with. The Asiatics seemed dumbfounded to see two priests of Mota striding along in apparent unconcern. Even those garbed as police appeared uncertain what to do, as if their instructions had not covered the circumstance.

However, someone had phoned ahead; they were met on the steps by a nervous Asiatic officer who demanded of them, "Surrender! You are under arrest!"

They walked straight toward him. Ward lifted one, hand in blessing and intoned, "Peace! Take me to my people."

"Don't you understand my language?" snapped the PanAsian, his voice becoming shrill. "You are under arrest!" His hand crept nervously toward his holster.

"Your earthly weapons avail you not," said Ardmore calmly, "in dealing with the great Lord Mota. He commands you to lead me to my people. Be warned!" He continued to advance until his personal screen pushed against the man's body.

It—the disembodied pressure of the invisible screen—was more than the PanAsian could stand. He fell back a pace, jerked his sidearm clear and fired point-blank. The vortex ring struck harmlessly against the screen, was absorbed by it.

"Lord Mota is impatient," remarked Ardmore in a mild tone. "Lead his servant, before the Lord Mota sucks the soul from your body." He shifted to another effect, never before used in dealing with the PanAsians.

The principle involved was very simple; a cylindrical tractor-pressor stasis was projected, forming in effect a tube. Ardmore let it rest over the man's face, then applied a tractor beam down the tube. The unfortunate PanAsian gasped for air where there was no air and pawed at his face. When his nose began to bleed, Ardmore let up on him. "Where are my children?" he inquired again as softly as before.

The police officer, probably in sheer reflex, tried to run. Ardmore nailed him with a pressor beam against the door and again applied momentarily the suction tube, this time to the fellow's midriff. "Where are they?"

"In the park," the man gasped, and regurgitated violently.

They turned with leisured dignity, and headed back down the steps, sweeping those who had pressed too close casually out of the way with the pressor beam.

The park surrounded the erstwhile State capitol building. They found the congregation herded into a hastily erected bull pen which was surrounded by ranks of Asiatic soldiers. On a platform nearby, technicians were installing television pick-up. It was easy to infer that another public "lesson" was to be given the serfs. Ardmore saw no evidence of the rather bulky apparatus used to produce the epileptogenetic ray; either it had not been brought up, or some other method of execution was to be used—perhaps the soldiers present were an enormous firing squad.

Momentarily he was tempted to use the staff to knock out all the soldiers present, they were standing at ease with arms stacked, and it was conceivably possible that he might be able to do so before they could harm, not Ardmore, but the helpless members of the congregation. But he decided against it; he had been right when he gave his orders to his priests—this was a game of bluff; he could not combat all of the soldiers that the PanAsian authorities could bring to bear, yet he must get this crowd safely inside the temple.

The massed people in the bull pen recognized Ward, and perhaps the high priest as well, at least by reputation. He could see sudden hope wipe despair from their faces—they surged expectantly. But he passed on by them with the briefest of blessing, Ward in his train, and hope gave way to doubt and bewilderment as they saw him stride up to the PanAsian commander and offer him the same blessing.

"Peace!" cried Ardmore. "I come to help you."

The PanAsian barked an order in his own tongue. Two PanAsians ran up to Ardmore and attempted to seize him. They slithered off the screen, tried again, and then stood looking to their superior officer for instructions, like a dog bewildered by an impossible command.

Ardmore ignored them and continued his progress until he stood immediately in front of the commander. "I am told that my people have sinned," he announced. "The Lord Mota will deal with them."

Without waiting for an answer, he turned his back on the perplexed official and shouted, "In the name of Shaam, Lord of Peace!" and turned on the green ray from his staff.

He played it over the imprisoned congregation. Down they went, as if the ray were a strong gale striking a stand of wheat. In seconds' time, every man, woman and child lay limp on the ground, to all appearance dead. Ardmore turned back to the PanAsian officer and bowed low. "The servant asks this penance be accepted."

To say that the Oriental was disconcerted is to expose the inadequacy of language. He knew how to deal with opposition, but this wholehearted cooperation left him without a plan; it was not in the rules.

Ardmore left him no time to think of a plan. "The Lord Mota is not content," he informed him, "and directs that I give you and your men presents, presents of gold!"

With that he switched on a dazzling white light and played it over the stacked arms of the soldiers to his right. Ward followed his motions, giving his attention to the left flank. The stacked small arms glowed and scintillated under the ray. Wherever it touched, the metal shone with a new luster, rich and ruddy. Gold! Raw gold!

The PanAsian common soldier was paid no better than common soldiers usually are. Their lines shifted uneasily, like race horses at the barrier. A sergeant stepped up to the weapons, examined one and held it up. He called out something in his own tongue, his voice showing high excitement.

The soldiers broke ranks.

They shouted and swarmed and danced. They fought each other for possession of the useless, precious weapons. They paid no attention to their officers; nor were their officers free of the gold fever.

Ardmore looked at Ward and nodded. "Let 'em have it!" he commanded, and turned his knockout ray on the PanAsian commander.

The Asiatic toppled over without learning what had hit him, for his agonized attention was on his demoralized command. Ward had gone to work on the staff officers.

Ardmore gave the American prisoners the counteracting effect while Ward disintegrated a large gate in the bull pen. There developed the most unexpectedly difficult part of the task—to persuade three hundred-odd, dazed and disorganized people to listen and to move all in one direction. But two loud voices and a fixed determination accomplished it. It was necessary to clear a path through the struggling, wealth-mad Orientals with the aid of the tractor and pressor beams. This gave Ardmore an idea; he used the beams an his own followers much as a goose girl touches up a flock of geese with her switch.

They made the nine blocks to the temple in ten minutes, moving at a dogtrot that left many gasping and protesting. But they made it, made it without interruption by major force, although both Ward and Ardmore found it necessary to knock out an occasional PanAsian en route.

Ardmore wiped sweat from his face when he finally stumbled in the temple door, sweat that was not due entirely to precipitate progress. "Ward," he asked with a sigh, "have you got a drink in the place?"

Thomas was calling him again before he had had time to finish a cigarette. "Chief," he said, "we are beginning to get some reports in. I thought you would like to know."

"Go ahead."

"It looks successful—so far. Maybe twenty percent of the priests have reported so far through their bishops that they are back with their congregations."

"Any casualties?"

"Yes. We lost the entire congregation in Charleston, South Carolina. They were dead before the priest got there. He tore into the PanAsians with his staff at full power and killed maybe two or three times as many of the apes as they had killed of us before he beat his way to his temple and reported."

Ardmore shook his head at this. "Too bad. I'm sorry about his congregation, but I'm sorrier that he cut loose and killed a bunch of PanAsians. It tips my hand before I'm ready."

"But, Chief, you can't blame him—his wife was in that crowd!"

"I'm not blaming him. Anyhow, it's done—the gloves had to come off sooner or later; this just means that we will have to work a little faster. Any other trouble?"

"Not much. Several places they fought a sort of rear-guard action getting back to the temples and lost some people." Ardmore saw a messenger in the screen hand a sheaf of flimsies to Thomas. Thomas glanced at them and continued. "A bunch more reports, Chief. Want to hear 'em?"

"No. Give me a consolidated report when they are all in. Or when most of them are in, not later than an hour from now. I'm cutting off."

The consolidated report showed that over ninety-seven percent of the members of the cult of Mota had been safely gathered into the temples. Ardmore called a staff meeting and outlined his immediate plans. The meeting was, in effect, face to face, as Ardmore's place at the conference table was taken by the pick-up and the screen of the receiver. "We've had our hands forced," he told them. "As you know, we had not expected to start action of our own volition for another two weeks, perhaps three. But we have no choice now. As I see it, we have to act and act so fast that we will always have the jump on them."

He threw the situation open to general discussion; there was agreement that immediate action was necessary, but some disagreement as to methods. After listening to their several opinions Ardmore selected Disorganization Plan IV and told them to go ahead with preparations. "Remember," he cautioned, "once we start, it's too late to turn back. This thing moves fast and accelerates. How many basic weapons have been provided?"

The "basic weapon" was the simplest Ledbetter projector that had been designed. It looked very much like a pistol and was intended to be used in similar fashion. It projected a directional beam of the primary Ledbetter effect in the frequency band fatal in those of Mongolian blood and none other. It could be used by a layman after three minutes' instruction, since all that was required was to point it and press a trigger, but it was practically foolproof—the user literally could not harm a fly with it, much less a Caucasian man. But it was sudden death to Asiatics.

The problem of manufacturing and distributing quantities of weapons to be used in the deciding conflict had been difficult. The staffs used by the priests were out of the question; each was a precision instrument comparable to a fine Swiss watch. Scheer himself had laboriously fashioned by hand the most delicate parts of each staff, and, nevertheless, required the assistance of many other skilled metalsmiths and toolmakers to keep pace with the demand. It was all handwork; mass production was impossible until Americans once more controlled their own factories.

Furthermore, detailed instruction and arduous supervised practice were indispensable in order for a priest to become even moderately skillful in the use of the remarkable powers of his staff.

The basic weapon was the pragmatic answer. It was simple and rugged and contained no moving parts other than the activating switch, or trigger. Even so, it could not be manufactured in quantity at the Citadel, as there would have been no way to distribute the weapons to widely separated parts of the country without attracting unhealthy attention from the PanAsian authorities. Each priest carried to his own temple one sample of the basic weapon; it was then his responsibility to locate and enlist in his own community, workmen with the necessary skill in metalwork for producing the comparatively simple device.

In the secret places down underneath each temple, workmen had been busy for weeks at the task grinding, polishing, shaping, reproducing by hand row on row of the lethal little gadgets.

The supply staff officer gave Ardmore the information he had requested. "Very well," Ardmore acknowledged, "that's fewer weapons than we have members of our congregations, but it will have to do. There will be a lot of dead wood, anyway. This damned cult business has attracted every screwball and crackpot in the country—all the longhaired men and short-haired women. By the time we count them out we may have a few basic weapons left over. Which reminds me—if we do have any left over, there ought to be some women in every congregation who are young and strong and toughminded enough to be useful in a fight. We'll arm them. About the crackpots you'll find a note in the general indoctrination plan as to how each priest is to break the news to his flock that the whole thing is really a hoax for military purposes. I want to add to it. Nine people out of ten will be overjoyed to hear the truth and strongly cooperative. That tenth one may cause trouble, get hysterical, maybe try to do a bunk out of the temple. Caution each priest, for God's sake, to be careful; break the news to them in small numbers at a time, and be ready to turn the sleepy ray on anybody that looks like a source of trouble. Then lock 'em up until the fun is over—we haven't time to try to reorient the soft-minded.

"Now get on with it. The priests will need the rest of the day to indoctrinate their congregations and to get them organized into something resembling military lines. Thomas, I want the scout car assigned tonight to the job involving the Prince Royal to stop here first and pick me up. Have Wilkie and Scheer man it."

"Very well, sir. But I had planned to be in that car myself. Do you object to that slight change?"

"I do," Ardmore said dryly. "If you will look at Disorganization Plan IV you will see that it calls for the commanding officer to remain in the Citadel. Since I am already here, outside the Citadel, you will remain in my place."

"But, Chief—"

"We are not going to risk both of us, not at this stage of the game. Now pipe down."

"Yes, sir."

Ardmore was called back to the communicator later that morning. The face of the headquarters communication watch officer peered out of the screen at him. "Oh! Major Ardmore, Salt Lake City is trying to reach you with a priority routing."

"Put them on."

The face gave way to that of the priest at Salt Lake City.

"Chief," he began, "we've got a most extrordinary prisoner. I'm of the opinion you'd better question him yourself."

"I'm short of time. Why?"

"Well, he's a PanAsian, but claims he is a white man and that you will know him. The funny thing about it is that he got past our screen. I thought that was impossible."

"So it is. Let me see him."

It was Downer, as Ardmore had begun to suspect. Ardmore introduced him to the local priest and assured that official that his screens had not failed him. "Now, Captain, out with it."

"Sir, I decided to come in and report to you in detail because things are coming to a head."

"I know it. Give me all the details you can."

"I will, sir. I wonder if you have any idea how much damage you've done the enemy already?—their morale is cracking up like rotten ice in a thaw. They act all nervous, uncertain of themselves. What happened?"

Ardmore sketched out briefly the events of the past twenty-four hours, his own arrest, the arrest of the priests, the arrest of the entire cult of Mota, and the subsequent delivery. Downer nodded. "That explains it. I couldn't really tell what had happened; they never tell a common soldier anything—but I could see them going to pieces, and I thought you had better know."

"What happened?"

"Well—I guess I had better just tell you what I saw, and let you make your own inferences. The second battalion of the Dragon Regiment at Salt Lake City is under arrest. I heard a rumor that every officer in it had committed suicide. I suppose that is the outfit that let the local congregation escape, but I don't know."

"Probably. Go ahead."

"All I know is what I saw. They were marched in about the middle of the morning with their banners reversed and confined to their barracks, with a heavy guard around the buildings. But that's not all. It affects more than the one outfit under arrest. Chief, you know how an entire regiment will go to pieces if the colonel starts losing his grip?"

"I do. Is that the way they act?"

"Yes—at least the command stationed at Salt Lake City. I'm damned well certain that the big shot there is afraid of something he can't understand, and his fear has infected his troops, right down to the ordinary soldiers. Suicides, lots of 'em, even among the common soldiers. A man will get moody for about a day, then sit down facing toward the Pacific and rip out his guts.

"But here is the tip-off, the thing that proves that morale is bad all over the country. There has been a general order issued by the Prince Royal, in the name of the Heavenly Emperor, forbidding any more honorable suicides."

"What effect did that have?"

"Too soon to tell—it just came out today. But you don't appreciate what that means, Chief. You have to live among these people, as I have, to appreciate it. With the PanAsians, everything is face—everything. They care more for appearances than an American can possibly understand. To tell a man who has lost face that he can't balance the books and get square with his ancestors by committing suicide is to take the heart right out of him. It jeopardizes his most precious possession.

"You can count on it that the Prince Royal is scared, too, or he would never have resorted to any such measures. He must have lost an incredible number of his officers lately ever to have thought of such a thing."

"That is reassuring. Before this night is out, I think we will have damaged their morale at least as much more as we have already. So you think we've got them on the run?"

"I didn't say that, Major—don't ever think so. These damned yellow baboons"—he spoke quite earnestly, evidently forgetting his own exact physical resemblance to the Asiatics—"are just about four times as deadly and dangerous in their present frames of mine as they were when they were cock o' the walk. They are likely to run amuck with just a slight push and start slaughtering right and left—babies, women—indiscriminately!"

"H-m-m. Any recommendations?"

"Yes, Chief, I have. Hit 'em with everything you've got just as soon as possible, and before they start in on a general massacre. You've got 'em softened up now—sock it to 'em! before they have time to think about the general population. Otherwise you'll have a blood letting that will make the Collapse look like a tea party.

"That's the other reason I came in," he added. "I didn't want to find myself ordered out to butcher my own kind."

Downer's report left Ardmore plenty to worry about. He conceded that Downer was probably right in his judgment of the workings of the Oriental mind. The thing that Downer warned against—retaliation against the civilian population—always had been the key to the whole problem—that was why the religion of Mota had been founded; because they dare not strike directly for fear of systematic retaliation against the helpless. Now—if Downer was a judge—in attacking indirectly, Ardmore had rendered an hysterical retaliation almost as probable.

Should he call off Plan IV and attack today?

No—it simply was not practicable. The priests had to have a few hours at least in which to organize the men of their flocks into guerrilla warriors. That being the case, one might as well go ahead with Plan IV and soften up the war lords still further. Once it was under way, the PanAsians would be much too busy to plan massacres.

A small, neat scout car dropped from a great height and settled softly and noiselessly on the roof of the temple in the capital city of the Prince Royal. Ardmore stepped up to it as the wide door in its side opened and Wilkie climbed out. He saluted. "Howdy, Chief!"

"H'lo, Bob. Right on time, I see—just midnight. Think you were spotted?"

"I don't think so; at least, no one turned a spot on us. And we cruised high and fast; this gravitic control is great stuff." As they climbed in, Scheer gave his C.O. a brief nod accompanied by, "Evening, sir," with his hands still on the controls. As soon as the safety belts were buckled he shot the car vertically into the air.

"Orders, sir?"

"Roof of the palace—and be careful."

Without lights, at great speed, with no power source the enemy could detect, the little car plummeted to the roof designated. Wilkie started to open the door. Ardmore checked him. "Look around first."

An Asiatic cruiser, on routine patrol over the residance of the viceroyal, changed course and stabbed out with a searchlight. The radar-guided beam settled on the scout car.

"Can you hit him at this range?" inquired Ardmore, whispering unnecessarily.

"Easiest thing in the world, Chief." Cross hairs matched on the target; Wilkie depressed his thumb. Nothing seemed to happen, but the beam of the searchlight swept on past them.

"Are you sure you hit him?" Ardmore inquired doubtfully.

"Certain. That ship'll go ahead on automatic control till her fuel gives out. But it's a dead hand at the helm."

"O. K. , Scheer, you take Wilkie's place at the projector. Don't let fly unless you are spotted. If we aren't back in thirty minutes, return to the Citadel. Come on, Wilkie—now for a little hocus-pocus."

Scheer acknowledged the order, but it was evident from the way his powerful jaw muscles worked that he did not like it. Ardmore and

Wilkie, each attired in the full regalia of a priest, moved out across the roof in search of a way down. Ardmore kept his staff set and projecting in the wave band to which Mongolians were sensitive, but at a power-level anesthetic rather than lethal in its effect. The entire palace had been radiated with a cone of these frequencies before they had landed, using the much more powerful projector mounted in the scout car. Presumably every Asiatic in the building was unconscious—Ardmore was not taking unnecessary chances.

They found an access door to the roof, which saved them cutting a hole, and crept down a steep iron stairway intended only for janitors and repair men. Once inside, Ardmore had trouble orienting himself and feared that he would be forced to find a PanAsian, resuscitate him, and wring the location of the Prince's private chambers out of him by most ungentle methods. But luck favored them; he happened on the right floor and correctly inferred the portal of the Prince's apartment by the size and nature of the guard collapsed outside of it.

The door was not locked; the Prince depended on a military watch being kept rather than keys and bolts—he had never turned a key in his life. They found him lying in his bed, a book fallen from his limp fingers. A personal attendant lay crumpled in each of the four corners of the spacious room.

Wilkie eyed the Prince with interest. "So that's his nibs. What do we do now, Major?"

"You get on one side of the bed; I'll get on the other. I want him to be forced to divide his attention two ways. And stand up close so that he will have to look up at you. I'll talk all the business, but you throw in a remark or two every now and then to force him to split his attention."

"What sort of a remark?"

"Just priestly mumbo-jumbo. Impressive and no real meaning. Can you do it?"

"I think so—I used to sell magazine subscriptions."

"O. K. This guy is a tough nut really tough. I am going to try to get at him with the two basic congenital fears common to everybody; fear of constriction and fear of falling. I could handle it with my staff but it will be simpler if you do it with yours. Do you think you can follow my motions and catch what I want done?"

"Can you make it a little clearer than that?"

Ardmore explained in detail, then added, "All right let's get busy. Take your place." He turned on the four colored lights of his staff. Wilkie did likewise. Ardmore stepped across the room and switched out the lights of the room.

When the PanAsian Prince Royal, Grandson of the Heavenly One and ruler in his name of the Imperial Western Realm, came to his senses, he saw standing over him in the darkness two impressive figures. The taller was garbed in robes of shimmering, milky luminescence. His turban, too, glowed with a soft white fire—a halo.

The staff in his left hand streamed light from all four faces of its cubical capital—ruby, golden, emerald, and sapphire.

The second figure was like the first, save that his robes glowed ruddy like iron on an anvil. The face of each was partially illuminated by the rays from their wands.

The figure in shining white raised his right hand in a gesture not benign, but imperious. "We meet again, O unhappy Prince!"

The Prince had been trained truly and well; fear was not natural to him. He started to sit up, but an impalpable force shoved against his chest and thrust him back against the bed. He started to speak.

The air was sucked from his throat. "Be silent, child of iniquity! The Lord Mota speaks through me. You will listen in peace."

Wilkie judged it to be about time to divert the Asiatic's attention. He intoned, "Great is the Lord Mota!"

Ardmore continued, "Your hands are wet with the blood of innocence. There must be an end to it!"

"Just is the Lord Mota!"

"You have oppressed his people. You have left the land of your fathers, bringing with you fire and sword. You must return!"

"Patient is the Lord Mota!"

"But you have tried his patience," agreed Ardmore. "Now he is angry with you. I bring you warning; see that you heed it!"

"Merciful is the Lord Mota!"

"Go back to the place whence you came—go back at once, taking with you all your people—and return not again!" Ardmore thrust out a hand and closed it slowly. "Heed not this warning—the breath will be crushed from your body!" The pressure across the chest of the Oriental increased intolerably, his eyes bulged out, he gasped for air.

"Heed not this warning—you will be cast down from your high place!" The Prince felt himself suddenly become light; he was cast into the air, pressed hard against the high ceiling. Just as suddenly his support left him; he fell heavily back to the bed.

"So speaks my Lord Mota!"

"Wise is the man who heeds him!" Wilkie was running short of choruses.

Ardmore was ready to conclude. His eye swept around the room and noted something he had seen before—the Prince's ubiquitous chess table. It was set up by the head of the bed, as if the Prince amused himself with it on sleepless nights. Apparently the man set much store by the game. Ardmore added a postscript. "My Lord Mota is done—but heed the advice of an old man: men and women are not pieces in a game!" An invisible hand swept the costly, beautiful chessmen to the floor. In spite of his rough handling, the Prince had sufficient spirit left in him to glare.

"And now my Lord Shaam bids you sleep." The green light flared up to greater brilliance; the Prince went limp.

"Whew!" sighed Ardmore. "I'm glad that's over. Nice cooperation, Wilkie—I was never cut out to be an actor." He hoisted up one side of his robes and dug a package of cigarettes out of his pants pocket. "Better have one," he offered. "We've got a really dirty job ahead of us."

"Thanks," said Wilkie, accepting the offer. "Look, Chief—is it really necessary to kill everybody here? I don't relish it."

"Don't get chicken, son," admonished Ardmore with an edge in his voice. "This is war—and war is no joke. There is no such thing as humane war. This is a military fortress we are in; it is necessary to our plans that it be reduced completely. We couldn't do it from the air because the plan requires keeping the Prince alive."

"Why wouldn't it do just as well to leave them unconscious?"

"You argue too much. Part of the disorganization plan is to leave the Prince still alive and in command, but cut off from all his usual assistants. That will create a turmoil of inefficiency much greater than if we had simply killed him and let their command devolve to their number-two man. You know that. Get on with your job."

With the lethal ray from their staffs turned to maximum power, they swept the walls and floor and ceiling, carrying death to Asiatics for hundreds of feet—through rock and metal, plaster and wood. Wilkie did his job with white-lipped efficiency.

Five minutes later they were carving the stratosphere for home—the Citadel.

Eleven other scout cars were hurrying through the night. In Cincinnati, in Chicago, in Dallas, in major cities across the breadth of the continent they dove out of the darkness, silencing opposition where they found it, and landed little squads of intent and resolute men. In they went, past sleeping guards, and dragged out local senior officials of the PanAsians' provincial governors, military commanders, the men on horseback. They dumped each unconscious kidnapped Oriental on the roof of the local temple of Mota, there to be received and dragged down below by the arms of a robed and bearded priest.

Then to the next city to repeat it again, as long as the night lasted.

CHAPTER ELEVEN

Calhoun buttonholed Ardmore almost as soon as he was back in the Citadel. "Major Ardmore," he announced, clearing his throat, "I have waited up to discuss a matter of import with you."

This man, Ardmore thought, can pick the damnedest times for a conference. "Yes?"

"I believe you expect a rapid culmination of events?"

"Things are coming to a head, yes."

"I presume the issue will be decided very presently. I have not been able to get the details I want from your man Thomas—he is not very cooperative; I fail to see why you have thrust him up to the position of speaking for you in your absence—but that is beside the point," Calhoun conceded with a magnanimous gesture. "What I wanted to say is this: Have you given any thought to the form of government after we drive out the Asiatic invader?"

What the devil was the man getting at? "Not particularly—why should I? Of course, there will have to be a sort of provisional interim period, military government of sorts, while we locate all the old officials left alive and get them back on the job and arrange for a national election. But that ought not to be too hard—we'll have the local priests to work through."

Calhoun's eyebrows shot up. "Do you really mean to tell me, my dear man, that you are seriously contemplating returning to the outmoded inefficiencies of elections and all that sort of thing?"

Ardmore stared at him. "What else are you suggesting?"

"It seems obvious. We have here a unique opportunity to break with the stupidities of the past and substitute a truly scientific rule, headed by a man chosen for his intelligence and scientific training rather than for his skill in catering to the prejudices of the mob."

"Dictatorship, eh? And where would I find such a man?" Ardmore's voice was disarmingly, dangerously gentle.

Calhoun did not speak, but indicated by the slightest of smug self-deprecatory gestures that Ardmore would not have far to look to find the right man.

Ardmore chose not to notice Calhoun's implied willingness to serve. "Never mind," he said, and his voice was no longer gentle, but sharp. "Colonel Calhoun, I dislike to have to remind you of your duty—but understand this: you and I are military men. It is not the business of military men to monkey with politics. You and I hold our commissions by grace of a constitution, and our sole duty is to that constitution. If the people of the United States want to streamline their government, they will let us know!

"In the meantime, you have military duties, and so do I. Go ahead with yours."

Calhoun seemed about to burst into speech. Ardmore cut him short. "That is all. Carry out your orders, sir!"

Calhoun turned abruptly and left.

Ardmore called his Chief of Intelligence to him. "Thomas," he said, "I want a close, but discreet, check kept on Colonel Calhoun's movements."

"Yes, sir."

"The last of the scout cars are in, sir."

"Good. How does the tally stand now?" Ardmore asked.

"Just a moment, sir. It was running about six raids to a ship—with this last one that makes a total of . . . uh . . . nine and two makes eleven-seventy-one prisoners in sixty-eight raids. Some of them doubled up...

"Any casualties?"

"Only to the PanAsians—"

"Damn it, that's what I meant! No, I mean to our men, of course."

"None, Major. One man got a broken arm when he fell down a staircase in the dark."

"I guess we can stand that. We should get some reports on the local demonstrations—at least from the East coast cities—before long. Let me know."

"I will."

"Would you mind telling my orderly to step in as you leave? I want to send for some caffeine tablets, better have one yourself; this is going to be a big day."

"A good notion, Major." The communications aide went out.

In sixty-eight cities throughout the land, preparations were in progress for the demonstrations that constituted Phase 2 of Disorganization Plan IV. The priest of the temple in Oklahoma City had delegated part of his local task to two men, Patrick Minkowski, taxi driver, and John W. (Jack) Smyth, retail merchant. They were engaged in fitting leg irons to the ankles of the Voice of the Hand, PanAsian administrator of Oklahoma City. The limp, naked body of the Oriental lay on a long table in a workshop down under the temple.

"There," announced Minkowski, "that's the best job of riveting I can do without heating tools. It'll take him a while to get it off, anyway. Where's that stencil?"

"By your elbow. Captain Isaacs said he'd weld those joints with his staff after we finished; I wouldn't worry about them. Say, it seems odd to call the priest Captain Isaacs, doesn't it? Do you think we're really in the army—legally, I mean?"

"I wouldn't know about that—and as long as it gives me a chance to take a crack at those flatfaced apes, I don't care. I suppose we are, though—if you admit that Isaacs is an army officer, I guess he can take recruits. Look—do we put this stencil on his back or on his stomach?"

"I'd say to put it on both sides. It does seem funny, though, about this army business, I mean. One day you're going to church; the next you're told it's a military outfit, and they swear you in."

"Personally, I like it," commented Minkowski. "Sergeant Minkowski—it sounds good. They wouldn't take me before on account o' my heart. As for the church part, I never took any stock in this great God Mota business, anyhow; I came for the free food and the chance to breathe in peace." He removed the stencil from the back of the Asiatic; Smyth commenced filling in the traced design of an ideograph with quick-drying indelible paint. "I wonder what that heathen writing means?"

"Didn't you hear?" asked Smyth, and told him.

A delighted grin came over Minkowski's face. "Well, I'll be damned," he said. "If anybody called me that, it wouldn't do him no good to smile when he said it. You wouldn't kid me?"

"No, indeed. I was in the communications office when they were getting the design from the Mother Temple—I mean general headquarters. Here's another funny thing, too. I saw the chap in the screen who was passing out the design, and he was Asiatic as this monkey"—Smyth indicated the unconscious voice of the Hand—"but they called him Captain Downer and treated him like one of us. What do you make of that?"

"Couldn't say. He must be on our side, or else he wouldn't be loose in headquarters. What'll we do with the rest of the paint?"

Between them they found something to do with it, which Captain Isaacs noticed at once when he came in to see how they were progressing. He suppressed a smile. "I see you have elaborated on your instructions a bit," he commented, trying to keep his voice soberly official.

"It seemed a pity to waste the paint," Minkowski explained ingenuously. "Besides, he looked so naked the way he was."

"That's a matter of opinion. Personally, I would say that he looks nakeder now. We'll drop the point; hurry up and get his head shaved. I want to leave any time now."

Minkowski and Smyth waited at the door of the temple five minutes later, the Voice of the Hand rolled in a blanket on the floor between them. They saw a sleek duocycle station wagon come shooting up to the curb in front of the temple and brake to a sudden stop. Its bell sounded, and Captain Isaacs' face appeared in the window of the driver's compartment. Minkowski threw down the butt of a cigarette and grabbed the shoulders of the muffled figure at their feet; Smyth took the legs and they trotted clumsily and heavily out to the car.

"Dump him in the back," ordered Captain Isaacs.

That done, Minkowski took the wheel while Isaacs and Smyth crouched in the back with the subject of the pending demonstration.

"I want you to find a considerable gathering of PanAsians almost anywhere," directed the captain. "If there are Americans present, too, so much the better. Drive fast and pay no attention to anyone. I'll take care of any difficulties with my staff." He settled himself to watch the street over Minkowski's shoulder.

"Right, Captain! Say, this is a sweet little buggy," he added as the car shot forward. "How did you pick it up so fast?"

"I knocked out a few of our Oriental friends;" answered Isaacs briefly. "Watch that signal!"

"Got it!" The car dewed around and dodged under the nose of oncoming cross traffic. A PanAsian policeman was left futilely waving at them.

A few seconds later Minkowski demanded, "How about that spot up ahead, Captain?" and hooked his chin in the indicated direction. It was the square of the civic center.

"O. K. " He bent over the silent figure on the floor of the car, busy with his staff.

The Asiatic began to struggle. Smyth fell on him and pinned the blanket more firmly about the head and shoulders of their victim. "Pick your spot. When you stop, we'll be ready."

The car lurched to a stomach-twisting halt. Smyth slammed open the rear door; he and Isaacs grabbed corners of the blanket and rolled the now-conscious official into the street. "Take it away, pal."

The car jumped forward, leaving startled and scandalized Asiatics to deal with an utterly disgraceful situation as best they might. Twenty minutes later a brief but explicit account of their exploit was handed to Ardmore in his office at the Citadel. He glanced over it and passed it to Thomas. "Here's a crew with imagination, Jeff."

Thomas took the report and read it, then nodded agreement. "I hope they all do as well. Perhaps we should have given more detailed instructions."

"I don't think so. Detailed instructions are the death of initiative. This way we have them all striving to think up some particularly annoying way to get under the skins of our slant-eyed lords. I expect some very amusing and ingenious results."

By nine a.m., headquarters time, each one of the seventy-odd PanAsian major officials had been returned alive, but permanently, unbearably disgraced, to his racial brethren. In all cases, so far as the data at hand went, there had been no cause given to the Asiatics to associate their latest trouble directly with the cult of Mota. It was simply catastrophe, psychological catastrophe of the worst sort, which had struck in the night without warning and without trace.

"You have not set the time for Phase 3 as yet, Major," Thomas reminded Ardmore when all reports were in.

"I know it. I don't expect it to be more than two hours from now at the outside. We've got to give them a little time to appreciate what has happened to them. The force of demoralization will be many times as great when they have had time to compare notes around the country and realize that all of their top men have been publicly humiliated. That, combined with the fact that we crippled their continental headquarters almost to the limit, should produce as sweet a case of mass hysteria as one could wish: But we'll have to give it time to spread. Is Downer on deck?"

"He's standing by in the communications watch office."

"Tell them to cut in a relay circuit from him to my office. I want to listen to what he picks up here."

Thomas dialed with the interoffice communicator and spoke briefly. Very shortly Downer's pseudo-Asiatic countenance showed on the screen above Ardmore's desk. Ardmore spoke to him. Downer slipped an earphone off one ear and gave him an inquiring look.

"I said, 'Are you getting anything yet?'" repeated Ardmore.

"Some. They're in quite an uproar. What I've been able to translate is being canned." He flicked a thumb toward the microphone which hung in front of his face. A preoccupied, listening look came into his eyes, and he added, "San Francisco is trying to raise the palace—"

"Don't let me interrupt you," said Ardmore, and closed his own transmitter.

"—the Emperor's Hand there is reported dead. San Francisco wants some sort of authorization. Wait a minute; the comm office wants me to try another wavelength. There it comes—they're using the Prince Royal's signal, but it's in the provincial governor's frequency. I can't get what they're saying; it's either coded or in a dialect I don't know. Watch officer, try another wave band—I'm just wasting time on that one . . . . That's better." Downer's face became intent, then suddenly lit up. "Chief, get this: Somebody is saying that the Governor of the gulf province has lost his mind and asks permission to supersede him! Here's another—wants to know what's wrong with the palace circuits and how to reach the palace, wants to report an uprising—"

Ardmore cut back in. "Where?"

"Couldn't catch it. Every frequency is jammed with traffic, and about half of it is incoherent. They don't give each other time to clear —send right through another message."

There was a gentle knock at the outer door of Ardmore's office. It opened a few inches and Dr. Brooks' head appeared. "May I come in?"

"Oh—certainly, Doctor. Come in. We are listening to what Captain Downer can pick up from the radio."

"Too bad we haven't a dozen of him—translators, I mean."

"Yes, but there doesn't seem to be much to pick up but a general impression." They listened to what Downer could pick up for the better part of an hour, mostly disjointed or partial messages, but it was made increasingly evident that the sabotage of the palace organization, plus the terrific emotional impact of the disgrace of key administrators, had played hob with the normal, smooth functioning of the PanAsian government. Finally Downer said, "Here's a general order going out. Wait a minute—It orders a radio silence on all clear-speech messages; everything has to be coded."

Ardmore glanced at Thomas. "I guess that is about the right point, Jeff. Somebody with horse sense and poise is trying to whip them back into shape—probably our old pal, the Prince. Time to stymie him." He rang the communications office. "O.K., Steeves," he said to the face of the watch officer, "give them power!"

"Jam 'em?

"That's right. Warn all temples through Circuit A, and let them all do it at once."

"They are standing by now, sir. Execute?"

"Very well—execute!"

Wilkie had developed a simple little device whereby the tremendous power of the temple projectors could be rectified, if desired, to undifferentiated electromagnetic radiation in the radio frequencies—static. Now they cut loose like sunspots, electrical storms, and aurora, all hooked up together.

Downer was seen to snatch the headphones from his ears. "For the love o'—Why didn't somebody warn me?" He reapproached one receiver cautiously to an ear, and shook his head. "Dead. I'll bet we've burned out every receiver in the country."

"Maybe so," observed Ardmore to those in his office, "but we'll keep jamming them just the same. " At that moment, in all the United States, there remained no general communication system but the pararadio of the cult of Mota. The Asiatic rulers could not even fall back on wired telephony; the obsolete ground lines had long since been salvaged for their copper.

"How much longer, Chief?" asked Thomas.

"Not very long. We let 'em talk long enough for them to know something hellacious is happening all over the country. Now we've cut 'em off. That should produce a feeling of panic. I want to let that panic have time to ripen and spread to every PanAsian in the country. When

I figure they are ripe, we'll sock it to 'em!"

"How will you tell?"

"I can't. It will be on hunch, between ourselves. We'll let the little darlings run around in circles for a while, not over an hour, then give 'em the works."

Dr. Brooks nervously attempted to make conversation. "It certainly will be a relief to have this entire matter settled once and for always. It's been very trying at times—" His voice trailed off.

Ardmore turned on him. "Don't ever think we can settle things 'once and for always.'"

"But surely—if we defeat the PanAsians decisively—"

"That's where you are wrong about it." The nervous strain he was under showed in his brusque manner. "We got into this jam by thinking we could settle things once and for always. We met the Asiatic threat by the Nonintercourse Act and by big West Coast defenses—so they came at us over the north pole!

"We should have known better; there were plenty of lessons in history. The old French Republic tried to freeze events to one pattern with the Versailles Treaty. When that didn't work they built the Maginot Line and went to sleep behind it. What did it get them? Final blackout!

"Life is a dynamic process and can't be made static. '—and they all lived happily ever after' is fairytale stu—" He was interrupted by the jangling of a bell and the red flashing of the emergency transparency.

The face of the communications watch officer snapped into view on the reflectophone screen. "Major Ardmore!"

It was gone and replaced by the features of Frank Mitsui, contorted .with apprehension. "Major!" he burst out. "Colonel Calhoun—he's gone crazy!"

"Easy, man, easy! What's happened?"

"He gave me the slip—he's gone up the temple. He thinks he's the god Mota!"

CHAPTER TWELVE

Ardmore cut Frank off by switching to the communications watch officer. "Get me the control board in the great altar—move!"

He got it, but it was not the operator on watch that Ardmore saw. Instead it was Calhoun, bending over the console of controls. The operator was collapsed in his chair, head lolled to the right. Ardmore cut the connection at once and dived for the door.

Thomas and Brooks competed for second place, leaving the orderly a hopelessly outdistanced fourth. The three swept up the gravity chute to the temple level at maximum acceleration, and slammed out onto the temple floor. The altar lay before them, a hundred feet away.

"I assigned Frank to watch him," Thomas was trying to say when Calhoun stuck his head over the upper rail of the altar.

"Stand fast!"

They stood. Brooks whispered, "He's got the heavy projector trained on us. Careful, Major!"

"I know it," Ardmore acknowledged, letting the words slip out of one side of his mouth. He cleared his throat. "Colonel Calhoun!"

"I am the great Lord Mota. Careful how you speak to me!"

"Yes, certainly, Lord Mota. But tell thy servant something—isn't Colonel Calhoun one of your attributes?"

Calhoun considered this. "Sometimes," he finally answered, "sometimes I think that he is. Yes, he is."

"Then I wish to speak to Colonel Calhoun." Ardmore eased forward a few steps.

"Stand still!" Calhoun crouched rigid over the projector. "My lightnings are set for white men—take care!"

"Watch it, Chief," whispered Thomas, "he can blast the whole damn place with that thing."

"Don't I know it!" Ardmore answered voicelessly, and started to resume the verbal tightrope walk. But something had diverted Calhoun's attention. They saw him turn his head, then hastily swing the heavy projector around and depress its controls with both hands. He raised his head almost immediately, seemed to make some readjustment of the projector, and depressed the controls again. Almost simultaneously some heavy body struck him; he fell from sight behind the rail.

On the floor of the altar platform they found Calhoun struggling. But his arms were held, his legs pinioned by the limbs of a short stocky brown man—Frank Mitsui. Frank's eyes were lifeless china, his muscles rigid.

It took four men to force Calhoun into an improvised straitjacket and to carry him down to sick bay. "As I figure it," said Thomas, watching the work party remove their psychotic burden, "Dr. Calhoun had the projector set to kill white men. The first blast didn't harm Frank, and he had to stop to reset the controls. That saved us."

"Yes—but not Frank."

"Well—you know his story. That second blast must have hit him while he was actually in the air—full power. Did you feel his arms? Coagulated instantaneously—like a hard-boiled egg."

But they had no time to dwell on the end of little Mitsui's tragic life; more minutes had passed. Ardmore and company hurried back to his office, where he found Kendig, his Chief of Staff, calmly handling the traffic of dispatches. Ardmore demanded a quick verbal resume.

"One change, Major—they tried to A-bomb the temple in Nashville. A near miss, but it wrecked the city district south of it. Have you set the zero hour? Several dioceses have inquired."

"Not yet, but very soon. Unless you have some more data for me, I'll give them their final instructions right away on Circuit A."

"No, sir, you might as well go ahead."

When Circuit A was reported back as ready, Ardmore cleared his throat. He felt suddenly nervous. "Action in twenty minutes, gentlemen," he started in. "I want to review the main points of the plan.'

He ran over it; the twelve scout cars were assigned one each to the twelve largest cities, or, rather, what was almost the same list, the twelve heaviest concentrations of PanAsian military power. The attack of the scout cars would be the signal to attack on the ground in those areas.

The scout cars, with one exception, were poised even as he spoke, in the stratosphere over their objectives.

The heavy projectors mounted in the scout cars were to inflict as much quick damage as possible on military objectives on the ground, especially barracks and air fields. Priests, being nearly invulnerable, would supplement them on the ground, as would the projectors in the temples. The "troops" made up from the congregations would harry and hunt. "Tell them when in doubt to shoot, and shoot first. Don't wait to see the whites of their eyes. The basic weapons are good for thousands of activations without recharging, and they can't possibly hurt a white man with them. Shoot anything that moves!

"Also," he added, "tell them not to be alarmed at anything strange. If it looks impossible, one of our boys is responsible; we specialize in miracles!

"That's all—good hunting!"

His last precaution referred to a special task assignment for Wilkie, Graham, Scheer, and Downer. Wilkie had been working on some special effects, with Graham's artistic collaboration. The task in battle required a team of four, but was not a part of the regular plan. Wilkie himself did not know just how well it would work, but Ardmore had assigned a scout car to them and had given them their head in the matter.

His striker had been dressing him in his robes as he spoke. He settled his turban in place, checked his personal pararadio hook-up with the communications office, and turned to say good-by to Kendig and Thomas. He noticed a queer look in Thomas' eyes, and felt his neck turn red. "You want to go, don't you, Jeff?"

Thomas did not say anything. Ardmore added, "Sure—I'm a heel. I know that. But only one of us can go to this party, and it's going to be me!"

"You've got me wrong, Chief—I don't like killing."

"So? I don't know that I do, either. Just the same I'm going out and finish Frank Mitsui's bookkeeping for him." He shook hands with both of them.

Thomas gave the signal of execution before Ardmore reached the PanAsian capital city. His pilot set him down on the roof of the temple there after the fighting in the capital had commenced, then gunned his craft away to take up his own task assignment.

Ardmore looked around. It was quiet in the immediate neighborhood of the temple; the big projector in the temple would have seen to that. He had seen one PanAsian cruiser crash while they were landing, but the speedy little scout car assigned to that task he had not been able to notice. He went down inside the temple.

It seemed deserted. A man was standing near a duocycle car parked garagelike on the temple floor. He came up and announced, "Sergeant Bryan, sir. The priest—I mean Lieutenant Rogers—told me to wait for you."

"Very well, then—let's go." He climbed into the car. Bryan put his little fingers to his lips and whistled piercingly.

"Joel" he shouted. A man stuck his head over the top of the altar. "Going out, Joe." The head disappeared; the great doors of the temple opened. Bryan climbed in beside Ardmore and asked, "Where to?"

"Find me the heaviest fighting—or, rather, PanAsians, lots of them."

"It's the same thing." The car trundled down the wide temple steps, turned right and picked up speed.

The street ran into a little circular parkway set with bushes. There were four or five figures crouched behind those bushes, and one sprawled prone on the ground. As the car slowed, Ardmore heard the sharp ping! of a vortex rifle or pistol—he could not tell which—and one of the crouching figures jerked and fell.

"They're in that office building," yelled Bryan in his ear.

He set his staff to radiate a narrow, thin wedge and fanned the beam up and down the building. The pinging noise stopped. An Asiatic dashed out a door that he had not yet touched and fled up the street. Ardmore cut the beam and used another setting, aiming at the figure by means of a thin bright beam of light. The light touched the man; there was a dull, heavy boom and the man disappeared. In his place was a great oily cloud which swelled and dispersed.

"Jumping Judas! What was that?" Bryan demanded.

"Colloidal explosion. I released the surface tension of his body cells. We've been saving it for this day."

"But what made him explode?"

"The pressure in his cells. They can run as high as several hundred pounds. But let's go."

The next few blocks were deserted of all but bodies; however, Ardmore kept his projector turned on and swept the buildings they passed as systematically as the speed would allow. He took advantage of the lull to call headquarters. "Any reports yet, Jeff?"

"Nothing much yet, Chief. It's too soon."

They shot out into the open before Ardmore realized where Bryan was taking him. It was the State university campus on the edge of the city, now used as barracks by the imperial army. The athletic fields and golf course adjoining had been turned into an airport.

Here for the first time he realized clearly how pitifully few were the Americans whom he had armed to destroy the PanAsians. There appeared to be a skirmish line of sorts in position off to the right: he could see the toll they were taking of the Asiatics. But there were thousands of them, enough to engulf the Americans by sheer multitude. Damn it, why hadn't the scout car assigned reduced this place? Had it met with a mishap?

He decided that the crew of the scout car had been kept busy with aircraft, too busy to clean out the barracks. He thought now that he should have fought city by city, using all available scout cars as a unit, and trusting to the jamming of the radio to permit him to do it that way. Was it too late now to change? Yes—the gage was thrown, the battle was on all over the country. Now it must be fought.

He was already busy with his staff in an attempt to swing the issue. He cut into the lines of Asiatics with the primary effect set at full power, doing a satisfying amount of slaughter. Then he decided on a change in tactics—colloidal explosion. It was slower and clumsy, but the effect on morale should be advantageous.

He omitted the guide ray to make it more mysterious and sighted through a deep hole in the cube of the staff. There! One of the rats was smoke! He had them ranged now—two! Three! Four! Again and again—a dozen or more.

It was too much for the Orientals. They were brave and seasoned soldiers, but they could not fight what they did not understand. They broke and ran, back toward their barracks. Ardmore heard cheers from the scattered Americans, dominated by an authentic rebel yell. Figures rose up from cover and took out after the disorganized Asiatics.

Ardmore called headquarters again. "Circuit A1."

A few seconds' delay and he was answered, "You've got it."

"All officers, attention! Use the organic explosion as much as possible. It scares the hell out of 'em!" He repeated the message and released the circuit.

He directed Bryan to go closer to the buildings. Bryan bumped the car over a curb and complied, weaving in and out between trees. They were conscious of a terrific explosion; the car rose a few feet in the air and came lurching down on its side. Ardmore pulled himself together and attempted to get up. It was then that he realized that somehow he had held his staff clear.

The door above him was jammed. He burned his way clear with the staff and clambered out. He looked back in to Bryan. "Are you hurt?"

"Not much." Bryan shook himself. "Cracked my left collarbone, maybe."

"Here—grab my hand. Can you make it? I've got to hang on to my staff." Between them they got him out. "I'll have to leave you. Got your basic weapon?"

"Yes, sir."

"All right. Good luck." He glanced at the crater as he moved away. It was well, he thought, that he had had his shield turned on.

A few dozen Americans were moving cautiously among the buildings, shooting as they went. Twice Ardmore was fired on by men who had been told to shoot first. Good boys! Shoot anything that moves!

A PanAsian aircraft, flying low, cut slowly across the edge of the campus. It trailed a plume of heavy yellow fog. Gas! They were gassing their own troops in order to kill a handful of Americans. The bank of mist settled slowly toward the ground and rolled in his direction. He suddenly realized that this was serious, for him as well as for others. His shield was little protection against gas, for it was necessary to let air filter through it.

But he was attempting to get a line on the aircraft even as he decided that his own turn had come. The craft wavered and crashed before he could line up on it. So the scout car was on the job after all —good!

The gas came on. Could he run around the edge of it? No. Perhaps he could hold his breath and run through it, trusting to his shield for all other matters. Not likely.

Some unconscious recess of his brain gave him the answer—transmutation. A few seconds later, his staff set to radiate in a wide cone, he was blasting a hole in the deadly cloud. Back and forth he swept the cone, as if playing a stream of water with a hose, and the foggy particles changed to harmless, lifegiving oxygen.

"Jeff!"

"Yes, Chief?"

"Any trouble with gas?"

"Quite a bit. In—"

"Never mind. Broadcast this on Circuit A: Set staff to—" He went on to describe how to fight that most intangible weapon.

The scout car came screaming down out of heaven, hovered, and began cruising back and forth over the dormitory barracks. The campus became suddenly very silent. That was better; apparently the pilot had just had too much to do at one time. Ardmore felt suddenly alone, the fight had moved past him while he was dealing with the gas threat. He looked around for transportation to commandeer in order to scout around and check up on the fighting in the rest of the city. The trouble with this damn battle, he thought to himself, is that it hasn't any coherence; it's every place at once. No help for it; it was in the nature of the problem.

"Chief?" It was Thomas calling.

"Go ahead, Jeff."

"Wilkie is heading your way."

"Good. Has he had any luck?"

"Yes, but just wait till you see! I caught a glimpse of it in the screen, transmitted from Kansas City. That's all now."

"O.K." He looked around again for transportation. He wanted to be around some PanAsians, some live PanAsians, when Wilkie arrived. There was a monocycle standing at the curb, abandoned, about a block from the campus. He appropriated it.

There were PanAsians, he discovered, in plenty near the palace—and the battle was not going too well for the Americans. He added the effort of his staff and was very busy picking out individuals and exploding them when Wilkie arrived.

Enormous, incredible, a Gargantuan manlike figure of perfect black—more than a thousand feet high, it came striding across the buildings, its feet filling the streets. It was as if the Empire State Building had gone for a stroll—a giant, three-dimensional shadow of a priest of Mota, complete with robes and staff.

It had a voice.

It had a voice that rolled with thunder, audible and distinct for miles. "Americans, arise! The day is at hand! The Disciple has come! Rise up and smite your masters!"

Ardmore wondered how the men in the car, could stand the noise, wondered also if they were flying inside the projection, or somewhere above it.

The voice changed to the PanAsian tongue. Ardmore could not understand the words, but he knew the general line it would take. Downer was telling the war lords that vengeance was upon them, and that any who wished to save their yellow skins would be wise to flee at once. He was telling them that, but with a great deal more emphasis and attention to detail and with an acute knowledge of their psychological weaknesses.

The gross and horrifying pseudo-creature stopped in the park before the palace, and, leaning over, touched a massive finger to a fleeing Asiatic. The man disappeared. He straightened up and again addressed the world in PanAsian—but the square no longer contained PanAsians.

The fighting continued sporadically for hours, but it was no longer a battle; it was more in the nature of vermin extermination. Some of the Orientals surrendered; more died by their own hand; most died purposefully at the hands of their late serfs. A consolidated report from Thomas to Ardmore concerning the degree of progress in mopping up throughout the country was interrupted by the communications officer. "Urgent call from the priest in the capital city, sir."

"Put him on."

A second voice continued, "Major Ardmore?"

"Yes. Go ahead."

"We have captured the Prince Royal—"

"The hell you say!"

"Yes, sir. I request your permission to execute him."

"What was that, sir?"

"No! You heard me. I'll see him at your headquarters. Mind you don't let anything happen to him!"

Ardmore took time to shave off his beard and to change into uniform before he had the Prince Royal brought before him. When at last the PanAsian ruler stood before him he looked up and said without ceremony, "Any of your people I can save will be loaded up and shipped back where they came from."

"You are gracious."

"I suppose you know by now that you were tricked, hoaxed, by science that your culture can't match. You could have wiped us out any time, almost up to the last."

The Oriental remained impassive. Ardmore hoped fervently that the calm was superficial. He continued, "What I said about your people does not apply to you. I shall hold you as a common criminal."

The Prince's brows shot up. "For making war?"

"No—you might argue your way out of that. For the mass murder you ordered in the territory of the United States—your 'educational' lesson. You will be tried by a jury, like any other common criminal, and, I strongly suspect hanged by the neck until you are dead!

"That's all. Take him away."

"One moment, please."

"What is it?"

"You recall the chess problem you saw in my palace?"

"What of it?"

"Could you give me the four-move solution?"

"Oh, that." Ardmore laughed heartily. "You'll believe anything, won't you? I had no solution; I was simply bluffing."

It was clear for an instant that something at last had cracked the Prince's cold self-control.

He never came to trial. They found him the next morning, his head collapsed across the chessboard he had asked for.

BEYOND THIS HORIZON (revised version)

For Cal, Mickey and Both J's.

CHAPTER ONE

"All of them should have been very happy—"

THEIR problems were solved: the poor they no longer had with them; the sick, the lame, the halt, and the blind were historic memories; the ancient causes of war no longer obtained; they had more freedom than Man has ever enjoyed. All of them should have been happy—

Hamilton Felix let himself off at the thirteenth level of the Department of Finance, mounted a slideway to the left, and stepped off the strip at a door marked:

BUREAU OF ECONOMIC STATISTICS
Office of Analysis and Prediction
Director
PRIVATE

He punched the door with a code combination, and awaited face check. It came promptly; the door dilated, and a voice inside said, "Come in, Felix."

He stepped inside, glanced at his host and remarked, "You make ninety-eight."

"Ninety-eight what?"

"Ninety-eight sourpusses in the last twenty minutes. It's a game. I just made it up."

Monroe-Alpha Clifford looked baffled, an expression not uncommon in his dealings with his friend Felix. "But what is the point? Surely you counted the opposites, too?"

"Of course. Ninety-eight mugs who'd lost their last friends, seven who looked happy. But," he added, "to make it seven I had to count one dog."

Monroe-Alpha gave Hamilton a quick look in an effort to determine whether or not he was joking. But he could not be sure-he rarely could be sure. Hamilton's remarks often did not appear serious, frequently even seemed technically sense-free. Nor did they appear to follow the six principles of humor-Monroe-Alpha prided himself on his sense of humor, had been known to pontificate to his subordinates on the necessity of maintaining a sense of humor. But Hamilton's mind seemed to follow some weird illogic of its own, self consistent perhaps, but apparently unrelated to the existent world.

"But what is the purpose of your survey?" he asked.

"Does it need a purpose? I tell you, I just made it up."

"But your numbers are too few to be significant. You can't fair a curve with so little data. Besides, your conditions are uncontrolled.

Your results don't mean anything."

Hamilton rolled his eyes up. "Elder Brother, hear me," he said softly. "Living Spirit of Reason attend Thy servant. In Your greatest and most prosperous city I find vinegar phizzes to grins in a ratio of fourteen to one-and *he* says it's not significant!"

Monroe-Alpha looked annoyed. "Don't be irreverent, " he advised. "And the proper ratio is sixteen and a third to one; you should not have counted the dog."

"Oh, forget it!" his friend answered. "How goes the tail chasing?" He wandered around the room, picking things up and putting them down under Monroe-Alpha's watchful eye, and finally stopped in front of the huge integrating accumulator. "It's about time for your quarterly prediction, isn't it?"

"Not 'about time'—it *is* time. I had just completed the first inclusive run when you arrived. Want to see it?" He stepped to the machine, pressed a stud. A photostat popped out. Monroe Alpha undipped it and handed it to Hamilton without looking at it. He had no need to-the proper data had been fed into the computer; he knew with quiet certainty that the correct answer would come out. Tomorrow he would work the problem again, using a different procedure. If the two answers did not then agree within the limits of error of the machine, he would become interested in the figures themselves. But, of course, that would not happen. The figures would interest his superiors; the procedure alone was of interest to him.

Hamilton eyed the answer from a nonprofessional viewpoint. He appreciated, in part at least, the huge mass of detail which had gone into this simple answer. Up and down two continents human beings had gone about their lawful occasions-buying, selling, making, consuming, saving, spending, giving receiving. A group of men in Altoona, Pennsylvania, had issued unsecured aspirant stock to subsidize further research into a new method of recovering iron from low grade ores. The issue had been well received down in New Bolivar where there was a superabundance of credit because of the extreme success of the tropical garden cities along the Orinoco ("Buy a Slice of Paradise"). Perhaps that was the canny Dutch influence in the mixed culture of that region. It might have been the Latin influence which caused an unprecedented tourist travel away from the Orinoco during the same period-to Lake Louise, and Patagonia, and Sitka.

No matter. All of the complex of transactions appeared in the answer in Hamilton's hand. A child in Walla Walla broke its piggy bank (secretly, with one eye on the door), gathered up the slowly accumulated slugs and bought a perfectly delightful gadget, which not only *did* things, but made the appropriate noises as well. Some place down in the innards of the auto-clerk which handled the sale for the

Gadget Shoppe four holes were punched in a continuous roll of paper; the item appeared in the owner's cost accounting, and was reflected in the accounting of the endless chain of middle distributors, transporters, processors, original producers, service companies, doctors, lawyers, merchants, chiefs-world without end.

The child (a bad-tempered little blond brat, bound to prove a disappointment to his planners and developers) had a few slugs left over which he exchanged for a diet-negative confection ("Father Christmas' Psuedo-Sweets-Not a tummy ache in a tankful"); the sale was lumped with many others like it in the accounts of the Seattle Vending Machine Corporation.

The broken piggy bank and its concatenations appeared in the figures in Hamilton's hand, as a sliver of a fragment of a super-microscopic datum, invisible even in the fifth decimal place. Monroe-Alpha had not heard of this particular piggy bank when he set up the problem-nor would he, ever-but there are tens of thousands of piggy banks, a large but countable number of entrepreneurs, lucky, and unlucky, shrewd and stupid, millions of producers, millions of consumers, each with his draft book, each with printed symbols in his pouch, potent symbols-the stuff, the ready, the youknow-what, jack, kale, rocket juice, wampum, the shekels, the sugar, the dough.

All of these symbols, the kind that jingle and the kind that fold and, most certainly, the kind that are only abstractions from the signed promise of an honest man, all of these symbols, or more correctly, their reflected shadows, passed through the bottle neck formed by Monroe-Alpha's computer, and appeared there in terms of angular speeds, settings of three-dimensional cams, electronic flow, voltage biases, et complex cetera. The manifold constituted a dynamic abstracted structural picture of the economic flow of a hemisphere.

Hamilton examined the photostat. The reinvestment of accumulated capital called for an increase in the subsidy on retail transfers of consumption goods of three point one percent and an increase in monthly citizens' allowance of twelve credits-unless the Council of Policy decided on another means of distributing the social increment.

"'Day by day, in every way, I'm getting richer and richer, '" Hamilton said. "Say, Cliff, this money machine of yours is a wonderful little gadget. It's the goose that lays the golden egg."

"I understand your classical allusion, " Monroe-Alpha conceded, "but the accumulator is in no sense a production machine. It is merely an accounting machine, combined with an integrating predictor."

"I know that, " Hamilton answered absently. "Look, Cliff—what would happen if I took an ax and just beat the bejasus out of your little toy?"

"You would be examined for motive."

"Don't be obtuse. What about the economic system?"

"I suppose, " Monroe-Alpha told him, "that you want me to assume that no other machine was available for replacement. Any of the regional accumulators could—"

"Sure. Bust the hell out of all of them."

"Then we would have to use tedious methods of actuarial computation. A few weeks delay would result, with accumulated errors which would have to be smoothed out in the next prediction. No important result."

"Not that. What I want to know is this. If nobody computed the amount of new credit necessary to make the production-consumption cycle come out even-what would happen?"

"Your hypothetical question is too farfetched to be very meaningful," Monroe-Alpha stated, "but it would result in a series of panics and booms of the post-nineteenth century type. Carried to extreme, it could even result in warfare. But of course it would not be-the structural nature of finance is too deeply imbedded in our culture for pseudo-capitalism to return. Any child understands the fundamentals of production accounting before he leaves his primary development center."

"I didn't."

Monroe-Alpha smiled tolerantly. "I find that difficult to believe. You know the Law of Stable Money."

"'In a stable economy, debt-free new currency must be equated to the net reinvestment,'" Hamilton quoted.

"Correct enough. But that is Reiser's formulation. Reiser was sound enough, but he had a positive talent for stating simple things obscurely. There is a much simpler way to look at it. The processes of economic system are so multitudinous in detail and involve so many promises to be performed at later dates that it is a psychological impossibility for human beings to deal with the processes without the use of a symbol system. We call the system 'finance' and the symbols 'money. ' The symbolic structure should bear a one-to-one relationship to the physical structure of production and consumption. It's my business to keep track of the actual growth of the physical processes and recommend to the policy board changes in the symbol structure to match those in the physical structure."

"I'm damned if you've made it any simpler, " Hamilton complained. "Never mind-I didn't say I didn't understand it; I said I didn't understand it as a kid. But honestly-wouldn't it be simpler to set up a collective system and be done with it?"

Monroe-Alpha shook his head. "Finance structure is a general theory and applies equally to any type of state. A complete socialism would have as much need for structural appropriateness in its cost accounting as do free entrepreneurs. The degree of public ownership as compared with the degree of free enterprise is a cultural matter. For example, food is, of course, free, but—"

"Freeze it, pal. You've just reminded me of one of the two reasons I had for looking in on you. Busy for dinner tonight?"

"Not precisely. I've a tentative date with my orthowife for twenty-one hundred, but I'm free until then."

"Good. I've located a new pay-restaurant in Meridian Tower that will be a surprise to your gastro tract. Guaranteed to give you indigestion, or you have to fight the chef."

Monroe-Alpha looked dubious. He had had previous experience with Hamilton's gastronomic adventures. "Let's go to the refectory here. Why pay out hard cash for bad food when good food is included in your basic dividend?"

"Because one more balanced ration would unbalance me. Come on."

Monroe-Alpha shook his head. "I don't want to contend with the crowds. Honestly, I don't."

"You don't really like people, do you?"

"I don't dislike them-not individually."

"But you don't like 'em. Me, I like 'em. People are funnier than anybody. Bless their silly little hearts. They do the craziest things."

Monroe-Alpha looked morose. "I suppose you are the only sane one in the lot."

"Me? Shucks, no. I'm one long joke on myself. Remind me to tell you about it sometime. But look-the other thing I came to see you about. Notice my new sidearm?"

Monroe-Alpha glanced at Hamilton's holster. In fact, he had not noticed that his friend was bearing anything new in the way of weapons-had he arrived unarmed Monroe-Alpha would have noticed it, naturally, but he was not particularly observant about such matters, and could easily have spent two hours with a man and never noticed whether he was wearing a Stokes coagulator or a common needlebeam.

But, now that his attention was directed to the matter, he saw at once that Hamilton was armed with something novel...and deucedly odd and uncouth. "What is it?" he asked.

"Ah!" Hamilton drew the sidearm clear and handed it to his host. "Woops! Wait a moment. You don't know how to handle it-you'll blow your head off. " He pressed a stud on the side of the grip, and let a long flat container slide out into his palm. "There-I've pulled its teeth. Ever see anything like it?"

Monroe-Alpha examined the machine. "Why, yes, I believe so. It's a museum piece, isn't it? An explosive-type hand weapon?"

"Right and wrong. It's mill new, but it's a facsimile of one in the Smithsonian Institution collection. It's called a point fortyfive Colt automatic pistol."

"Point fortyfive what?"

"Inches."

"Inches...let me see, what is that in centimeters?"

"Huh? Let's see-three inches make a yard and a yard is about one meter. No, that can't be right. Never mind, it means the size of the slug it throws. Here...look at one." He slid one free of the clip. "Damn near as big as my thumb, isn't it?"

"Explodes on impact, I suppose."

"No. It just drills its way in."

"That doesn't sound very efficient."

"Brother, you'd be amazed. It'll blast a hole in a man big enough to throw a dog through."

Monroe-Alpha handed it back. "And in the meantime your opponent has ended your troubles with a beam that acts a thousand times as fast. Chemical processes are slow, Felix."

"Not that slow. The real loss of time is in the operator. Half the gunfighters running around loose chop into their target with the beam already hot. They haven't the skill to make a fast sight. You can stop 'em with this, if you've a fast wrist. I'll show you. Got something around here we can shoot at?"

"Mmm...this is hardly the place for target practice."

"Relax. I want something I can knock out of the way with the slug, while you try to burn it. How about this?" Hamilton picked up a large ornamental plastic paperweight from Monroe-Alpha's desk.

"Well...I guess so."

"Fine." Hamilton took it, removed a vase of flowers from a stand on the far side of the room, and set the target in its place. "We'll face it, standing about the same distance away. I'll watch for you to start to draw, as if we really meant action. Then I'll try to knock it off the stand before you can burn it."

Monroe-Alpha took his place with lively interest. He fancied himself as a gunman, although he realized that his friend was faster. This might be, he thought, the split second advantage he needed. "I'm ready."

"Okay."

Monroe-Alpha started his draw.

There followed a single CRACK! so violent that it could be felt through the skin and in the nostrils, as well as heard. Piled on top of it came the burbling Sring-aw-ow! as the bullet ricocheted around the room, and then a ringing silence.

"Hell and breakfast, " remarked Hamilton. "Sorry, Cliff-I never fired it indoors before." He stepped forward to where the target had been. "Let's see how we made out. "

The plastic was all over the room. It was difficult to find a shard large enough to show the outer polish. "It's going to be hard to tell whether you burned it, or not."

"I didn't."

"Huh?"

"That noise-it startled me. I never fired."

"Really? Say, that's great. I see I hadn't half realized the advantages of this gadget. It's a psychological weapon, Cliff."

"It's noisy."

"It's more than that. It's a terror weapon. You wouldn't even have to hit with your first shot. Your man would be so startled you'd have time to get him with the second shot. And that isn't all. Think...the braves around town are used to putting a man to sleep with a bolt that doesn't even muss his hair. This thing's bloody. You saw what happened to that piece of vitrolith. Think what a man's face will look like after it stops one of those slugs. Why a necrocosmetician would have to use a stereosculp to produce a reasonable facsimile for his friends to admire. Who wants to stand up to that kind of fire?"

"Maybe you're right. I still say it's noisy. Let's go to dinner."

"Good idea. Say-you've got a new nail tint. I like it."

Monroe-Alpha spread his fingers. "It is smart, isn't it? Mauve Iridescent it's called. Care to try some?"

"No, thank you. I'm too dark for it, I'm afraid. But it goes well with your skin."

They ate in the pay-restaurant Hamilton had discovered. Monroe-Alpha automatically asked for a private room when they entered; Hamilton, at the same moment, demanded a table in the ring. They compromised on a balcony booth, semi-private, from which Hamilton could amuse himself by staring down at the crowd in the ring.

Hamilton had ordered the meal earlier in the day, which was the point which had caused his friend to consent to venture out. It was served promptly. "What is it?" Monroe-Alpha demanded suspiciously.

"Bouillabaisse. It's halfway between a soup and a stew. More than a dozen kinds of fish, white wine, and the Great Egg alone knows how many sorts of herbs and spices. All natural foods."

"It must be terribly expensive."

"It's a creative art and it's a pleasure to pay for it. Don't worry about it. You know I can't help making money." "Yes, I know. I never could understand why you take so much interest in games. Of course, it pays well."

"You don't understand me. I'm not interested in games. Have you ever seen me waste a slug or a credit on one of my own gadgets-or any other? I haven't played a game since I was a boy. For me, it is already well established that one horse can run faster than mother, that the ball falls either on red or on black, and that three of a kind beats two pair. It's that I can't see the silly toys that people play with without thinking of one a little more complicated and mysterious. If I am bored with nothing better to do, I may sketch one and dispatch it to my agent. Presently in comes some more money." He shrugged.

"What are you interested in?" "People. Eat your soup."

Monroe-Alpha tasted the mess cautiously, looked surprised, and really went to work on it. Hamilton looked pleased, and undertook to catch up. "Felix—"

"Yes, Cliff."

"Why did you group me in the ninety-eight?"

"The ninety-eight? Oh, you mean the sourpuss survey. Shucks, pal, you rated it. If you are gay and merry-merry be-behind that death mask, you conceal it well."

"I've nothing to be unhappy about." "No, not to my knowledge. But you don't look happy." They ate in silence for a few minutes more. Monroe-Alpha spoke again. 'It's true, you know. I'm not."

"Not what?"

"Not happy."

"So? Mmmm...why not?"

"I don't know. If I did I could do something about it. My family psychiatrist doesn't seem to be able to find the reason."

"You're on the wrong frequency. A psychiatrist is the last man to see about a thing like that. They know everything about a man, except what he is and what makes him tick. Besides, did you ever see a worry-doctor that was sane himself? There aren't two in the country who can count their own fingers and get the same answer twice running."

"It's true that he hasn't been able to help me much."

"Of course not. Why? Because he will start with the assumption that there is something wrong with you. He can't find it, so he's stuck. It doesn't occur to him that there might be nothing wrong with you and that might be what was wrong."

The other man looked weary. "I don't understand you. But he does claim to be following a clue."

"What sort?"

"Well...I'm a deviant, you know."

"Yes, I know, " Hamilton answered shortly. He was reasonably familiar with his friend's genetic background, but disliked to hear him mention it. Some contrary strain in Hamilton rebelled against the idea that a man was necessarily and irrevocably the gene pattern handed to him by his genetic planners. Furthermore he was not convinced that Monroe-Alpha should be considered a deviant.

"Deviant" is a question-begging term. When the human zygote resulting from the combination of two carefully selected gametes is different from what the geneticists had predicted but not so different as to be classified with certainty as a mutation that zygote is termed a deviant. It is not, as is generally believed, a specific term for a recognized phenomenon, but a catch-all to cover a lack of complete knowledge.

Monroe-Alpha (this particular Monroe-Alpha-Clifford, 32-847-106 B62) had been an attempt to converge two lines of the original Monroe-Alpha to recapture and reinforce the mathematical genius of his famous ancestor. But mathematical genius is not one gene, nor does it appear to be anything as simple as a particular group of genes. Rather, it is thought to be a complex of genes arranged in a particular order.

Unfortunately this gene complex appears to be close-linked in the Monroe-Alpha line to a neurotic contrasurvival characteristic, exact nature undetermined and not assigned to any set of genes. That it is not necessarily so linked appears to be established, and the genetic technicians who had selected the particular gametes which were to produce Monroe-Alpha Clifford believed that they had eliminated the undesired strain.

Monroe-Alpha Clifford did not think so.

Hamilton fixed him with a finger. "The trouble with you, my fine foolish friend, is that you are bothering your head with things you don't understand. Your planners told you that they had done their level best to eliminate from you the thing which caused your great grandfather Whiffenpoof to raise garter snakes in his hat. There is a long chance that they failed, but why assume that they did?"

"My great grandfathers did nothing of the sort. A slight strain of anhedonism, a tendency to—"

"Then why act like they had to be walked on a leash? You make me tired. You've got a cleaner pedigree than ninetynine out of a hundred, and a chromosome chart that's as neat and orderly as a checker board. Yet you're yiping about it. How would you like to be a control natural? How would you like to have to wear lenses against your eyeballs? How would you like to be subject to a dozen filthy diseases? Or have your teeth fall out, and have to chew your meals with false choppers?"

"Of course, nobody would want to be a control natural, " Monroe-Alpha said reflectively, 'but the ones I've known seemed to be happy enough."

"All the more reason for you to snap out of your funk. What do you know of pain and sickness? You can't appreciate it any more than a fish appreciates water. You have three times the income you can spend, a respected position, and work of your own choosing. What more do you want out of life?"

"I don't know, Felix. I don't know, but I know I'm not getting it. Don't ride me about it."

"Sorry. Eat your dinner."

The fish stew contained several large crab legs; Hamilton ladled one into his guest's trencher. Monroe-Alpha stared at it uneasily. "Don't be so suspicious, " Hamilton advised. "Go ahead. Eat it."

"How?"

"Pick it up in your fingers, and crack the shell." Monroe-Alpha attempted to comply, somewhat clumsily, but the greasy, hard surface skidded between his fingers. He attempted to recover and knocked it over the edge of the balcony rail at his elbow.

He started to rise; Hamilton put a hand on his forearm. "My fault, " he said. "I will repair it." He stood up and looked down at the table directly beneath their booth.

He did not see the stray bit of seafood at once, but he had no difficulty in telling approximately where it had landed. Seated at the table was a party of eight. Two of them were elderly men who wore the brassards-of-peace. Four women alternated with the males around the table. One of them, quite young and pretty, was dabbing at something which seemed to have stained her gown. The wayward crab leg was floating in a crystal bell of purple liquid directly in front of her; cause and effect were easy to infer.

The two remaining men were both armed, both standing, and staring up at the balcony. The younger, a slender youth in bright scarlet promenade dress, resting his right hand on the grip of his sidearm, seemed about to speak. The older man turned coldly dangerous eyes from Hamilton to his youthful companion. "My privilege, Cyril, " he said quietly, "if you please."

The young brave was clearly annoyed and reluctant to comply; nevertheless he bowed stiffly and sat down. His elder returned the bow punctiliously and turned back to Hamilton. The lace of his cuff brushed his holster, but he had not touched his weapon-as yet.

Hamilton leaned over the balcony, both his hands spread and plainly visible on the rail. "Sir, my clumsiness has disturbed the pleasure of your meal and invaded your privacy. I am deeply sorry."

"I have your assurance that it was accidental, sir?" The man's eyes were still frosty, but he made no move to draw. But he did not sit down.

"You have indeed, sir, and with it my humble apology. Will you graciously permit me to make reparation?"

The other glanced down, not at the youth, but at the girl whose gown had been splashed. She shrugged. He answered Hamilton, "The thought is taken for the deed, sir."

"Sir, you leave me indebted."

"Not at all, sir."

They were exchanging bows and were about to resume their seats, when a shouted remark from the balcony booth directly opposite interrupted them. "Where's your brassard?"

They both looked toward the source of the disturbance; one of a party of men-armed citizens all apparently, for no brassards were to be seen-was leaning out of the booth and staring with deliberate rudeness. Hamilton spoke to the man at the table below. "My privilege, is it not, sir?"

"Your privilege. I wish you well." He sat down and turned his attention back to his guests.

"You spoke to me?" asked Hamilton of the man across the ring.

"I did. You were let off lightly. You should eat at home—if you have a home. Not in the presence of gentlefolk."

Monroe-Alpha touched Hamilton's arm. "He's drunk, " he whispered. "Take it easy."

"I know, " his friend answered in a barely audible aside, "but he gives me no choice."

"Perhaps his friends will take care of him."

"We'll see."

Indeed his friends were attempting to. One of them placed a restraining hand on his weapon arm, but he shook him off. He was playing to a gallery-the entire restaurant was quiet now, the diners ostentatiously paying no attention, a pose contrary to fact. "Answer me!" he demanded.

"I will, " Hamilton stated quietly. "You have been drinking and are not responsible. Your friends should disarm you and place a brassard on you. Else some short-tempered gentleman may fail to note that your manners were poured from a bottle."

There was a stir and a whispered consultation in the party behind the other man, as if some agreed with Hamilton's estimate of the situation. One of them spoke urgently to the belligerent one, but he ignored it.

"What's that about my manners, you misplanned mistake?"

"Your manners, " Hamilton stated, "are as thick as your tongue. You are a disgrace to the gun you wear."

The other man drew too fast, but he drew high, apparently with the intention of chopping down.

The terrific explosion of the Colt fortyfive brought every armed man in the place to his feet, sidearm clear, eyes wary, ready for action. But the action was all over. A woman laughed, shortly and shrilly. The sound broke the tension for everyone. Men relaxed, weapons went back to belts, seats were resumed with apologetic shrugs. The diners went back to their own affairs with the careful indifference to other people's business of the urbane sophisticate.

Hamilton's antagonist was half supported by the arms of his friends. He seemed utterly surprised and completely sobered. There was a hole in his chemise near his right shoulder from which a wet dark stain was spreading. One of the men holding him up waved to Hamilton with his free arm, palm out. Hamilton acknowledged the capitulation with the same gesture. Someone drew the curtains of the booth opposite.

Hamilton sank back into the cushions with a relieved sigh. "We lose more crabs that way, " he observed. "Have some more, Cliff?"

"Thanks, no, " Monroe-Alpha answered. "I'll stick to spoon foods. I hate interruptions at meals. He might have cooled you."

"And left you to pay the check. Such slug pinching ill becomes you, Cliff."

Monroe-Alpha looked annoyed. "You know it's not that. I have few enough friends not to wish to lose them in casual brawls. You should have taken a private room, as I requested." He touched a stud under the railing; the curtains waved across the arch, shutting them off from the public room.

Hamilton laughed. "A little excitement peps up the appetite."

In the booth opposite the man who had waved capitulation spoke savagely to the one who had been wounded. "You fool! You clumsy fool! You muffed it."

"I couldn't help it," the injured man protested. "After he waived privilege, there was nothing to do but play drunk and pretend I meant the other one." He dabbed futilely at his freely bleeding shoulder, "In the Name of the Egg, what did he burn me with?"

"No matter."

"Maybe not to you, but it is to me. I'll look him up."

"You will not. One mistake is too many."

"But I thought he was one of us. I thought it was part of the set-up."

"Hummph! Had it been, you would have been told."

After Monroe-Alpha left to keep his date, Hamilton found himself at loose ends. The night life of the capital offered plenty of opportunity for a man to divest himself of surplus credit, but it was not new to him. He tried, in a desultory fashion, to find professional entertainment, then gave up and let the city itself amuse him. The corridors were thronged as always, the lifts packed; the Great Square under the port surged with people. Where were they all going? What was the hurry? What did they expect to find when they got there?

The presence of some types held obvious explanations. The occasional man with a brassard was almost certainly out at this hour because his business required him to be. The same rule applied without exception to the few armed men who also wore brassards-proclaiming thereby their unique status as police monitors, armed but immune to attack.

But the others, the armed and richly costumed men and their almost as gaudy women-why did they stir about so? Why not remain quietly at home with their wenches? He realized, consciously and sardonically, that he himself was part of the throng, present because it amused him. He knew he had no reason to feel that his own sense of detached amusement was unique. Perhaps they all came to keep from being bored with themselves, to observe their mutual folly and to laugh.

He found himself, later, the last customer in a small bar. The collection of empty cups at his elbow was impressive. "Herbert, " he said at last, to the owner back of the bar, "why do you run this joint?"

Herbert paused in his tidying up. "To make money."

"That's a good answer, Herbert. Money and children—what other objectives are there? I've too much of one and none of the other. Set 'em up, Herbert. Let's drink to your kids."

Herbert set out two cups, but shook his head. "Make it something else. I've no kids."

"Sorry-none of my business. We'll drink to the kids I haven't got instead." Herbert poured the drinks, from separate bottles.

"What's that private stock of yours, Herbert? Let me try it."

"You wouldn't like it."

"Why not?"

"Well, to tell the truth, it's flavored water."

"You'd drink a toast in that? Why, Herbert!"

"You don't understand. My kidneys..."

Hamilton looked at him in sharp surprise. His host looked pleased. "You wouldn't guess, would you? Yes, I'm a natural. But it's my own hair I'm wearing. And my own teeth...mostly. Keep myself fit. Good a man as the next." He dumped the liquid from his own cup, and refilled it from the bottle he had used for Hamilton's drink. "Shucks! One won't hurt me." He raised his drink. "Long life!"

"And children, " Hamilton added mechanically.

They tossed them down. Herbert filled them up again. "Take children, " he began. "Any man wants to see his kids do better than he did. Now I've been married for twenty-five years to the same woman. My wife and I are both First Truthers and we don't hold with these modern arrangements. But children...we settled that a long time ago.

'Martha, ' I said to her, 'it don't matter what the brethren think. What's right is right. Our kids are going to have every advantage that other kids have. ' And after a while she came around to my way of thinking. So we went to the Eugenics Board—"

Hamilton tried to think of a way to stop his confidences.

"I must say that they were very kind and polite. First they told us to think it over. 'If you practice gene selection, ' they said, 'your children won't receive the control benefit. ' As if we didn't know that: Money wasn't the object. We wanted our kids to grow up fine and strong and smarter than we were. So we insisted and they made a chromosome chart on each of us.

"It was two, three weeks before they called us back. 'Well, Doc, ' I said, soon as we were inside, "what's the answer? What had we better select for?' 'Are you sure you want to do this?' he says. 'You're both good sound types and the state needs controls like you. I'm willing to recommend an increase in benefit, if you'll drop it. ' 'No, ' I said, 'I know my rights. Any citizen, even a control natural, can practice gene selection if he wants to. ' Then he let me have it, full charge."

"Well?"

"There wasn't anything to select for in either of us."

"Huh?"

"'S truth. Little things, maybe. We could have arranged to leave out my wife's hay fever, but that was about all. But as for planning a child that could compete on even terms with the general run of planned children, it just wasn't in the cards. The material wasn't there. They had made up an ideal chart of the best that could be combined from my genes and my wife's and it still wasn't good enough. It showed a maximum of a little over four percent over me and my wife in the general rating scale. 'Furthermore, ' he told us, 'you couldn't plan on that score. We might search your germ plasm throughout your entire fertile period and never come across two gametes that could be combined in this combination. ' 'How about mutations?' I asked him. He just shrugged it off. 'In the first place, ' he said, 'it's damned hard to pick out a mutation in the gene pattern of a gamete itself. You generally have to wait for the new characteristic to show up in the adult zygote, then try to locate the variation in the gene pattern. And you need at least thirty mutations, all at once, to get the child you want. It's not mathematically possible. '"

"So you gave up the idea of planned children?"

"So we gave up the idea of children period. Martha offered to be hostmother to any child I could get, but I said 'No, if it ain't for us, it ain't for us. '"

"Hmmm. I suppose so. Look-if you and your wife are both naturals, why do you bother to run this place? The citizen's allowances plus two control benefits add up to quite a tidy income. You don't look like a man with extravagant tastes."

"I'm not. To tell you the truth we tried it, after our disappointment. But it didn't work out. We got uneasy and fretful. Martha comes to me and says 'Herbert, please yourself, but I'm going to start my hairdressing studio again.' And I agreed with her. So here we are."

"Yes, so we are, " Hamilton concurred. "It's a queer world. Let's have another drink."

Herbert polished the bar before replying. "Mister, I wouldn't feel right about selling you another unless you checked that gun with me and let me loan you a brassard."

"So? Well, in that case I guess I've had enough. Good night."

"G'night."

CHAPTER TWO

"Rich Man, Poor Man, Beggar Man, Thief—"

HIS TELEPHONE started to yammer as soon as he was home. "Nuts to you," said Hamilton. "I'm going to get some sleep." The first three words were the code cut-off to which he had set the instrument; it stopped mournfully in the middle of its demand.

Hamilton swallowed eight hundred units of thiamin as a precautionary measure, set his bed for an ample five hours of sleep, threw his clothes in the general direction of the service valet, and settled down on the sheet. The water rose gently under the skin of the mattress until he floated, dry and warm and snug. The lullaby softened as his breathing became regular. When his respiration and heart action gave positive proof of deep sleep, the music faded out unobtrusively, shut off without so much as a click.

"It's like this," Monroe-Alpha was telling him,"we're faced with a surplusage of genes. Next quarter every citizen gets ninety-six chromosomes—"

"But I don't like it," Hamilton protested. Monroe-Alpha grinned gleefully.

"You have to like it," he proclaimed. "Figures don't lie. Everything comes out even. I'll show you." He stepped to his master accumulator and started it. The music swelled up, got louder. "See?" he said. "That proves it." The music got louder.

And louder.

Hamilton became aware that the water had drained out of his bed, and that he lay with nothing between him and the spongy bottom but the sheet and the waterproof skin. He reached up and toned down the reveille whereupon the insistent voice of his telephone cut through to him. "Better look at me, Boss. I got troubles. Better look at me Boss. I got troubles. Better look at me, Boss. I got troubles—"

"So have I. Thirty minutes!" The instrument shut off obediently. He punched for breakfast and stepped into the shower, eyed the dial, and decided against the luxury of a long workout. Besides, he wanted breakfast. Four minutes would do.

Warm soapy emulsion sprayed over his body, was scrubbed in by air blast, was replaced at the end of the first minute by water of the same temperature in needle jets. The temperature dropped, the needle jets persisted for a few seconds, then changed to a gentle full stream which left him cool and tingling. The combination was his own; he did not care what the physiotherapists thought of it.

The air blast dried him with a full minute to spare for massage. He rolled and stretched against the insistent yielding pressure of a thousand mechanical fingers and decided that it was worthwhile to get up, after all. The pseudo-dactyls retreated from him. He pushed his face for a moment into the capillotomer. Shave completed, the booth sprayed him with scent and dusted him off. He was beginning to feel himself again.

He tucked away a quarter litre of sweet-lemon juice and went to work seriously on the coffee before turning on the news roundup.

The news contained nothing fit to be recorded permanently. No news, he thought, makes a happy country but a dull breakfast. The machine called out the plugs for a dozen stories while the accompanying flash pictures zipped past without Hamilton's disturbing the setting When he did so, it was not because the story was important but because it concerned him. The announcer proclaimed "Diana's Playground Opened to the Public!"; the flash panned from a crescent moon down to the brutal mountain surface and below to a gaily lighted artificial dream of paradise. Hamilton slapped the tell-me-more.

"Leyburg, Luna. Diana's Playground, long touted by its promoters as the greatest amusement enterprise ever undertaken off earth or on, was invaded fry the first shipload of tourists at exactly twelve thirty-two, Earth Prime, These old eyes have seen many a pleasure city, but I was surprised! Biographers relate that Ley himself was fond of the gay spots-I'm going to keep one eye on his tomb while I'm here; he might show up—" Hamilton gave half an ear to the discourse, half an eye to the accompanying stories, most of his attention to half a kilo of steak, rare.

"—bewilderingly beautiful, weirdly sensuous low-gravity dancing.

"The gaming rooms are thronged; the management may have to open annexes. Particularly popular are the machines offered by Lady Luck, Incorporated-Hamilton's Hazards they are called by the trade. In fact—" The picture that went with the spiel did not show a throng in Hamilton's estimation; he could almost feel the trouble the pick-up man had gone to in order to shoot favorable angles.

"—round trip excursion tickets which entitle the holder to visit every place of amusement in the Playground, with three days hotel accommodations, strictly high-gravity, every room centrifuged."

He switched it off: and turned to the telephone. "Connection-one one one zero."

"Special service," a husky contralto answered him presently.

"Gimme the Moon, please."

"Certainly. To whom do you wish to speak, Mr.-- uh, Hamilton?"

"Hamilton is correct. I would like to talk to Blumenthal Peter. Try the manager's office at Diana's Playground."

There was a delay of several seconds before an image appeared on the screen. "Blumenthal speaking. That you, Felix? The image at this end is lousy. Ail streaked up with incidentals."

"Yeah, it's me. I called to ask about the play, Pete...what's the matter? Can't you hear me?"

The face of the image remained quiet for a long three seconds, then said suddenly, "Of course I can hear you. Don't forget the lag."

Hamilton looked sheepish. He had forgotten the lag-he always did. He found it difficult to remember, when staring right into a man's live features, that there would be a second and a half delay before that man-if on the Moon-could hear, another second and a half for his voice to travel back, three seconds lag in all. Three seconds lag seems inconsiderable but it is long enough to stride six paces, or fall forty-one metres.

He was glad there was no phone service to the minor planets; it would be maddening to wait ten minutes or so between sentences-easier to stat a letter. "Sorry," he said. "My mistake. How was the play? The crowds didn't look so good."

"Naturally the crowd was light. One shipload isn't Noah's Ark. But the play was okay. They had plenty of scrip and were anxious to spend. We reported to your agent."

"Sure. I'll get the report, but I wanted to know what gadgets were popular."

"Lost Comet went strong. And so did Eclipses."

"How about Claiming Race and Who's Your Baby?"

"Okay, but not too heavy. Astronomy is the angle for this dive. I told you that."

"Yes, I should have listened to you. Well, I'll figure out a revamp. You could change Claiming Race right now. Call it High Trajectory and rename the mobiles after some of the asteroids. Get it?"

"Right. We'll redecorate it in midnight blue and silver."

"That's right. I'll send a stat to confirm. That's all, I guess. I'm clearing."

"Wait a minute. I took a whirl at Lost Comet myself, Felix. That's a great game."

"How much did you drop?"

Blumenthal looked suspicious. "Why about eight hundred and fifty, if you must know. Why do you assume I lost? Isn't the game level?"

"Certainly it's level. But I designed that game myself, Pete. Don't forget that. It's strictly for suckers. You stay away from it."

"But look-I've figured out a way to beat it. I thought you ought to know."

"That's what you think. I know. There is no way to beat the game."

"Well-okay."

"Okay. Long life!"

"And kids."

As soon as the circuit was clear the phone resumed its ubiquitous demand. "Thirty minutes. Better look at me, Boss. I got troubles. Better —"

He removed a stat from the receiver; it shut up. "To Citizen Hamilton Felix 305-243 B47," it read, "Greetings. The District Moderator for Genetics presents his compliments and requests that Citizen Hamilton visit him at his office at ten hundred tomorrow." It was dated the previous evening and had an added notation requesting him to notify the moderator's office if it were not convenient to keep the appointment, refer to number such-and-so.

It lacked thirty minutes of ten hundred. He decided to comply with the request.

The Moderator's suite struck Hamilton as being rather less mechanized than most places of business, or perhaps more subtly so. It was staffed with humans where one expects auto-gadgets-the receptionist, for example. The staff was mostly female, some grave, some merry, but all were beautiful, very much alive, and obviously intelligent.

"The Moderator will see you now."

Hamilton stood up, chucked his cigaret into the nearest oubliette, and looked at her. "Do I disarm?"

"Not unless you wish. Come with me, please."

She ushered him as far as the door to the Moderator's private office, dilated it, and left him as he stepped through. "Good morning, sir!" a pleasant voice called out.

Hamilton found himself staring at the Moderator. "Good morning to you," he answered mechanically, then, "For the love o'—!" His right hand slid of its own volition toward his sidearm, hesitated, changed its mind, and stopped.

The Moderator was the gentleman whose dinner party had been disturbed by the incident of the wayward crab leg.

Hamilton recovered some of his poise. "Sir," he said stiffly, "this is not proper procedure. If you were not satisfied, you should have sent your next friend to wait on me."

The Moderator stared at. him, then laughed in a fashion that would have been rude in another man-but from him it was simply Jovian. "Believe me, sir, this is as much of a surprise to me as it is to you. I had no idea that the gentleman who exchanged courtesies with me yesterday evening was the one I wished to see this morning. As for the little contretemps in the restaurant-frankly, I would not have made an issue of the matter, unless you had forced me to the limit. I have not drawn my tickler in public for many years. But I am forgetting my manners-sit down, sir. Make yourself comfortable. Will you smoke?

May I pour you a drink?"

Hamilton settled himself. "If the Moderator pleases."

"My name is Mordan"—which Hamilton knew—"my friends call me Claude. And I would speak with you in friendship."

"You are most gentle-Claude."

"Not at all, Felix. Perhaps I have an ulterior motive. But tell me: what was that devil's toy you used on the cocky young brave? It amazed me."

Hamilton looked pleased and displayed his new weapon. Mordan looked it over. "Oh, yes," he said, "a simple heat engine burning a nitrate fuel. I think I have seen its pattern, have I not, on display at the Institution?"

Felix acknowledged the fact, a little crestfallen that Mordan was so little surprised at his toy. But Mordan made up for it by discussing in detail with, apparently, lively interest the characteristics and mechanism of the machine. "If I were a fighting man, I would like to have one like it," he concluded.

"I'll have one fashioned for you."

"No, no. You are kind, but I would have no use for it."

Hamilton chewed his lip. "I say...you'll pardon me...but isn't it indiscreet for a man who does no fighting to appear in public armed?"

Mordan smiled. "You misconstrue. Watch." He indicated the far wall. It was partly covered with a geometrical pattern, consisting of small circles, all the same size and set close together. Each circle had a small dot exactly in the center.

Mordan drew his weapon with easy swiftness, coming up, not down, on his target. His gun seemed simply to check itself at the top of its swing, before he returned it to his holster.

A light puff of smoke drifted up the face of the wall. There were three new circles, arranged in tangent trefoil. In the center of each was a small dot.

Hamilton said nothing. "Well?" inquired Mordan.

"I was thinking," Hamilton answered slowly, "that it is well for me that I was polite to you yesterday evening."

Mordan chuckled.

"Although we have never met," Mordan said, "you and the gene pattern you carry have naturally been of interest to me."

"I suppose so. I fall within the jurisdiction of your office."

"You misunderstand me. I cannot possibly take a personal interest in every one of the myriad "zygotes in this district. But it is my duty to conserve the best strains. I have been hoping for the past ten years that you would show up at the clinic, and ask for help in planning children."

Hamilton's face became completely expressionless. Mordan ignored it and went on. "Since you did not come in voluntarily for advice, I was forced to ask you to visit me. I want to ask you a question: Do you intend to have children any time soon?"

Hamilton stood up. "This subject is distasteful to me. May I have your leave, sir?"

Mordan came to him and placed a hand on his arm. "Please, Felix. No harm can be done by listening to me. Believe me, I do not wish to invade your private sphere-but I am no casual busybody. I am your moderator, representing the interests of all of your own kind. Yours among them."

Hamilton sat down without relaxing. "I will listen."

"Thank you. Felix, the responsibility of improving the race under the doctrines of our republic is not a simple one. We can advise but not coerce. The private life and free action of every individual must be scrupulously respected. We have no weapon but cool reason and the appeal to every man's wish that the next generation be better than the last. Even with cooperation there is little enough we can do-in most cases, the elimination of one or two bad characteristics, the preservation of the good ones present. But your case is different."

"How?"

"You know how. You represent the careful knitting together of favorable lines over four generations. Literally tens of thousands of gametes were examined and rejected before the thirty gametes were picked which constitute the linkage of your ancestral zygotes. It would be a shame to waste all that painstaking work."

"Why pick on me? I am not the only result of that selection. There must be at least a hundred citizens descended from my great gross grandparents. You don't want me-I'm a cull. I'm the plan that didn't pan out. I'm a disappointment."

"No," Mordan said softly, "no, Felix, you are not a cull. You are the star line."

"Huh?"

"I mean it. It is contrary to public policy to discuss these things, but rules were made to be broken. Step by step, back to the beginning of the experiment, your line has the highest general rating. You are the only zygote in the line which combines every one of the favorable mutations with which my predecessors started. Three other favorable mutations showed up after the original combinations; all of them are conserved in you."

Hamilton smiled wryly. "That must make me still more of a disappointment to you. I haven't done very much with the talents you attribute to me, have I?"

Mordan shook his head. "I have no criticism to make of your record."

"But you don't think much of it, do you? I've frittered away my time, done nothing more important than design silly games for idle people. Perhaps you geneticists are mistaken in what you call 'favorable characteristics.'"

"Possibly. I think not."

"What do you call a favorable characteristic?"

"A survival factor, considered in a broad sense. This inventiveness of yours, which you disparage, is a very strong survival factor. In you it lies almost latent, or applied to matters of no importance. You don't need it, because you find yourself in a social matrix in which you do not need to exert yourself to stay alive. But that quality of inventiveness can be of crucial importance to your descendants. It can mean the difference between life and death."

"But—"

"I mean it. Easy tunes for individuals are bad times for the race. Adversity is a strainer which refuses to pass the ill equipped. But we have no adversity nowadays. To keep the race as strong as it is and to make it stronger requires careful planning. The genetic technician eliminates in the laboratory the strains which formerly were eliminated by simple natural selection."

"But how do you know that the things you select for are survival factors? I've had my doubts about a lot of them."

"Ah! There's the rub. You know the history of the First Genetic War."

"I know the usual things about it, I suppose."

"It won't do any harm to recapitulate. The problem those early planners were up against is typical—"

The problems of the earliest experiments are typical of all planned genetics. Natural selection automatically preserves survival values in a race simply by killing off those strains poor in survival characteristics. But natural selection is slow, a statistical process. A weak strain may persist-for a time-under favorable conditions. A desirable mutation may be lost-for a time-because of exceptionally unfavorable conditions. Or it may be lost through the blind wastefulness of the reproductive method. Each individual animal represents exactly half of the characteristics potential in his parents.

The half which is thrown away may be more desirable than the half which is perpetuated. Sheer chance.

Natural selection is slow-it took eight hundred thousand generations to produce a new genus of horse. But artificial selection is fast, if we have the wisdom to know what to select for.

But we do not have the wisdom. It would take a superman to plan a superman. The race acquired the techniques of artificial selection without knowing what to select.

Perhaps it was a bad break for mankind that the basic techniques for gene selection were developed immediately after the last of the neo-nationalistic wars. It would be interesting to speculate whether or not the institution of modern finance structure after the downfall of the Madagascar System would have been sufficient to maintain peace if no genetic experiments had been undertaken. But pacifist reaction was at its highest point at this time; the technique of para-ectogenesis was seized on as a God-given opportunity to get rid of war by stamping it out of the human spirit.

After the Atomic War of 1970, the survivors instituted drastic genetic regulations intended for one purpose alone-to conserve the Parmalee-Hitchcock recessive of the ninth chromosome and to eliminate the dominant which usually masks it-to breed sheep rather than wolves.

It is wryly amusing that most of the "wolves" of the period-the Paramlee-Hitchcock island is recessive; there are few natural "sheep"—were caught by the hysteria and cooperated in the attempt to eliminate themselves. But some refused. The Northwest Colony eventually resulted.

That the Northwest Union should eventually fight the rest of the world was a biological necessity. The outcome was equally a necessity and the details are unimportant. The "wolves" ate the "sheep."

Not physically in the sense of complete extermination, but, genetically speaking, we are descended from "wolves," not "sheep."

"They tried to breed the fighting spirit out of men," Mordan went on, "without any conception of its biological usefulness. The rationalization involved the concept of Original Sin. Violence was 'bad'; nonviolence was 'good.'"

"But why," protested Hamilton, "do you assume that combativeness is a survival characteristic? Sure-I've got it; you've got it; we've all got it. But bravery is no use against nuclear weapons. What real use is it?"

Mordan smiled. "The fighters survived. That is the final test. Natural selection goes on always, regardless of conscious selection."

"Wait a minute," demanded Hamilton. "That doesn't check. According to that, we should have lost the Second Genetic War. Their 'mules' were certainly willing to fight."

"Yes, yes," Mordan agreed, "but I did not say that combativeness was the only survival characteristic. If it were, the Pekingese dog would rule the earth. The fighting instinct should be dominated by cool self-interest. Why didn't you shoot it out with me last night?"

"Because there was nothing worth fighting about."

"Exactly. The geneticists of the Great Khan made essentially the same mistake that was made three hundred years earlier; they thought they could monkey with the balance of human characteristics resulting from a billion years of natural selection and produce a race of supermen. They had a formula for it-efficient specialization. But they neglected the most obvious of human characteristics.

"Man is an unspecialized animal. His body, except for its enormous brain case, is primitive. He can't dig; he can't run very fast; he can't fly. But he can eat anything and he can stay alive where a goat would starve, a lizard would fry, a bird freeze. Instead of special adaptations he has general adaptability—"

The Empire of the Great Khans was a reversion to an obsolete form-totalitarianism. Only under absolutism could the genetic experiments which bred homo proteus have been performed, for they required a total indifference to the welfare of individuals.

Gene selection was simply an adjunct to the practices of the imperial geneticists. They made use also of artificial mutation, by radiation and through gene-selective dyes, and they practiced endocrine therapy and surgery on the immature zygote. They tailored human beings-if you could call them that-as casually as we construct buildings. At their height, just before the Second Genetic War, they bred over three thousand types including the hyperbrains (thirteen sorts), the almost brainless matrons, the clever and repulsively beautiful pseudo-feminine freemartins, and the neuter "mules."

We tend to identify the term mule with fighters, since we knew them best, but in fact, there was a type of mule for every sort of routine job in the Empire. The fighters were simply those specialized for fighting.

And what fighters! They needed no sleep. They had three times the strength of ordinary men. There is no way to compare their endurance since they simply kept on going, like well designed machines, until disabled. Each one carried fuel—"fuel" seems more appropriate than "food"—to last it for a couple of weeks, and could function beyond that time for at least another week.

Nor were they stupid. In their specialization their minds were keen. Even their officers were mules, and their grasp of strategy and tactics and the use of scientific weapons was masterly. Their only weakness lay in military psychology; they did not understand their opponents-but men did not understand them; it worked both ways.

The basic nature of their motivation has been termed a "substitute for sex sublimation," but the tag does not explain it, nor did we ever understand it. It is best described negatively by saying that captured mules became insane and suicided in not over ten days time, even though fed on captured rations. Before insanity set in they would ask for something called vepratoga in their tongue, but our semanticists could discover no process referent for the term.

They needed some spark that their masters could give them, and which we could not. Without it they died.

The mules fought us-yet the true men won. Won because they fought and continued to fight, as individuals and guerilla groups. The Empire had one vulnerable point, its coordinators, the Khan, his satraps and administrators. Biologically the Empire was a single organism and could be killed at the top, like a hive with a single queen bee. At the end, a few score assassinations accomplished a collapse which could not be achieved in battle.

No need to dwell on the terror that followed the collapse. Let it suffice that no representative of homo proteus is believed to be alive today. He joined the great dinosaurs and the sabre-toothed cats.

He lacked adaptability.

"The Genetic Wars were brutal lessons," Mordan added, "but they taught us not to tamper casually with human characteristics. If a characteristic is not already present in the germ plasm of the race we don't attempt to put it in. When natural mutations show up, we leave them on trial for a long time before we attempt to spread them around through the race. Most mutations are either worthless, or definitely harmful, in the long run. We eliminate obvious disadvantages, conserve obvious advantages; that is about all. I note that the backs of your hands are rather hairy, whereas mine are smooth. Does that suggest anything to you?"

"No."

"Nor to me. There appears to be no advantage, one way or the other, to the wide variations in hair patterns of the human race. Therefore we leave them alone. On the other hand-have you ever had a toothache?"

"Of course not."

"Of course not. But do you know why?" He waited, indicating that the question was not rhetorical.

"Well...it's a matter of selection. My ancestors had sound teeth."

"Not all of your ancestors. Theoretically it would have been enough for one of your ancestors to have naturally sound teeth, provided his dominant characteristics were conserved in each generation. But each gamete of that ancestor contains only half of his chromosomes; if he inherited his sound teeth from just one of his ancestors, the dominant will be present in only half of his gametes.

"We selected-our predecessors, I mean-for sound teeth. Today, it would be hard to find a citizen who does not have that dominant from both his parents. We no longer have to select for sound teeth. It's the same with color blindness, with cancer, with hemophilia, with a great many other heritable defects-we selected and eliminated them, without disturbing in any way the ordinary, normal, biologically commendable tendency for human beings to fall in love with other human beings and produce children. We simply enabled each couple to have the best children of which they were potentially capable by combining their gametes through selection instead of blind chance."

"You didn't do that in my case," Hamilton said bitterly. "I'm a breeding experiment."

"That's true. But yours is a special case, Felix. Yours is a star line. Every one of your last thirty ancestors entered voluntarily into the creation of your line, not because Cupid had been out with his bow and arrow, but because they had a vision of a race better than they were. Every cell in your body contains in its chromosomes the blueprint of a stronger, sounder, more adaptable, more resistant race. I'm asking you not to waste it."

Hamilton squirmed uncomfortably. "What do you expect me to do? Play Adam to a whole new race?"

"Not at all. I want you to perpetuate your line."

Hamilton leaned forward. "Gotcha!" he said. "You're trying to do what the Great Khans did. You're trying to separate out one line and make it different from the rest...as different as we are from the control naturals. It's no good. I won't have it. "

Mordan shook his head slowly. "Wrong on both counts. We intend to follow a process similar to that used to get sound teeth. Have you ever heard of Deaf Smith County?"

"No."

"Deaf Smith County, Texas, was a political subdivision of the old United States. Its natives had sound teeth, not by inheritance, but because of the soil. It gave them a diet rich in phosphates and fluorides. You can hardly appreciate the curse of dental caries in those days. Teeth actually rotted in the head, and were the cause of a large part of the continual sicknesses of the time. There were nearly a hundred thousand technicians in North America alone who did nothing but remove and repair diseased teeth-even at that, four fifths of the population had no such help. They simply suffered and died, with their rotten teeth poisoning their whole bodies."

"What has this to do with me?"

"It will have. The data from Deaf Smith County was seized on by the contemporary technicians-medicine men, they called them-as a solution for the problem. Duplicate the diet of the Deaf Smithians-no more caries. They were perfectly right and biologically quite wrong, for an advantage is no good to a race unless it can be inherited. The clue was there, but they used it the wrong way. What we looked for finally were men and women who had perfect teeth despite poor diet and lack of attention. In time it was proved that all such cases had a group of three genes, previously uncharted. Call it a favorable mutation. Or call the susceptibility to tooth decay an unfavorable mutation which didn't quite kill off the race.

"My predecessors conserved this particular gene group. You know how inheritance fans out; go back enough generations and all of us are descended from the whole population. But, genetically, our teeth are descended from one small group-because we selected to preserve that dominant. What we want to do with you; Felix, is to conserve the favorable variations present in you until the whole race has your advantages. You won't be the only ancestor of coming generations-oh, no!—but you will be, genetically, the ancestor of them all in the respects in which you are superior to the majority."

"You've picked the wrong man. I'm a failure."

"Don't tell me that, Felix. I know your chart. I know you better than you know yourself. You are a survivor type. I could set you down on an island peopled by howling savages and dangerous animals-in two weeks you would own the place."

Hamilton grudged a smile. "Maybe so. I'd like to try it."

"We don't need to try it. I know! You've got the physique and the mentality and the temperament. What's your sleep ration?"

"Around four hours."

"Fatigue index?"

"It runs around a hundred and twenty-five hours, maybe more."

"Reflex?"

Hamilton shrugged.. Mordan suddenly whipped his sidearm clear, aimed it at Hamilton. Hamilton had his own out and had Mordan covered at appreciably the same instant. He returned it at once. Mordan laughed and replaced his own. "I was in no danger," he declared. "I knew that you could draw, evaluate the situation, and decide not to fire, before a slower man would see that anything was going on."

"You took a long chance," Hamilton complained.

"Not at all. I know your chart. I counted not only on your motor reactions, but your intelligence. Felix, your intelligence rating entitles you to the term genius even in these days."

There followed a long silence. Mordan broke it. "Well?"

"You've said all you have to say?"

"For the moment."

"Very well, then, I'll speak my piece. You haven't said anything that convinces me. I wasn't aware that you planners took such an interest in my germ plasm, but you didn't tell me anything else that I did not already know. My answer is 'No'—"

"But—"

"My turn-Claude. I'll tell you why. Conceding that I am a superior survival type-I don't argue that; it's true. I'm smart and I'm able and I know it. Even so, I know of no reason why the human race should survive...other than the fact that their make-up insures that they will. But there's no sense to the whole bloody show. There's no point to being alive at all. I'm damned if I'll contribute to continuing the comedy."

He paused. Mordan waited, then said slowly, "Don't you enjoy life, Felix?"

"I certainly do," Hamilton answered emphatically. "I've got a twisted sense of humor, and everything amuses me."

"Then isn't life worth living for itself alone?"

"It is for me. I intend to live as long as I can and I expect to enjoy most of it. But do most people enjoy life? I doubt it. As near as I can tell from outward appearances it's about fourteen to one against it."

"Outward appearances may be deceiving. I am inclined to think that most people are happy."

"Prove it!"

Mordan smiled. "You've got me. We can measure most things about the make-up of a man, but we've never been able to measure that. However-don't you expect your own descendants to inherit your zest for living?"

"Is it inheritable?" Hamilton asked suspiciously.

"Well, truthfully, we don't know. I can't point to a particular spot on a particular chromosome and say, 'There lies happiness. ' It's more subtle than blue eyes versus brown eyes. But I want to delve into this more deeply. Felix, when did you begin to suspect that life was not worth living?" Hamilton stood up and paced nervously, feeling in himself such agitation as he had not felt since adolescence. He knew the answer to that question. He knew it well. But did he wish to bare it to this stranger?

No one speaks to a little child of chromosome charts. There was nothing to mark Hamilton Felix out from other infants in the first development center he could remember. He was a nobody, kindly and intelligently treated, but of importance to no one but himself. It had dawned on him slowly that his abilities were superior. A bright child is dominated in its early years by other, duller children, simply because they are older, larger, better informed. And there are always those remote omniscient creatures, the grown ups.

He was ten-or was it eleven?—when he began to realize that in competition he usually excelled. After that he tried to excel, to be conspicuously superior, cock-o'—the-walk. He began to feel the strongest of social motivations, the desire to be appreciated. He knew now what he wanted to be when he "grew up."

The other fellows talked about what they wanted to do. ("I'm going to be a rocket pilot when I grow up." "So am I." "I'm not. My father says a business man can hire all the rocket pilots he wants." "He couldn't hire me." "He could so.")

Let them talk. Young Felix knew what he wanted to do. He would be an encyclopedic synthesist. All the really great men were synthesists. The whole world was their oyster. Who stood a chance of being elected to the Board of Policy but a synthesis? What specialist was there who did not, in the long run, take his orders from a synthesist? They were the leaders, the men who knew everything, the philosopher-kings of whom the ancients had dreamed.

He kept his dream to himself. He appeared to be pulling out of his pre-adolescent narcissist period and to be undergoing the social integration of adolescence with no marked trouble. His developers were unaware that he was headed for an insuperable obstacle. Youths seldom plan to generalize their talents; it takes more subtle imagination than they usually possess to see romance in being a policy former.

Hamilton looked at Mordan. The man's face invited confidence. "You're a synthesist, aren't you? You aren't a geneticist."

"Naturally. I couldn't specialize in the actual techniques. That takes a lifetime."

"The best geneticist on your staff can't hope to sit where you are sitting."

"Of course not. They wouldn't wish to."

"Could I become your successor? Go ahead-answer me. You know my chart."

"No, you couldn't."

"Why not?"

"You know why. You have an excellent memory, more than adequate for any other purpose, but it's not an eidetic memory. A synthesist must have complete memory in order to be able to cover the ground he must cover."

"And without it," Hamilton added, "a man can never be recognized as a synthesist. He just isn't one, any more than a man can claim to be an engineer who can't solve fourth degree equations in his head. I wanted to be a synthesist and I wasn't equipped for it. When it was finally pounded into my head that I couldn't take first prize, I wasn't interested in second prize."

"Your son could be a synthesist."

Hamilton shook his head. "It doesn't matter any more. I still have the encyclopedic viewpoint, but I wouldn't want to trade places with you. You asked me when and how it was that I first came to the conclusion that life doesn't mean anything. I've told you how I first began to have my doubts, but the point is: I still have 'em."

"Wait," Mordan put in. "You still have not heard the whole story. It was planned that eidetic memory would be incorporated in your line either in your generation, or in your father's. Your children will have it, if you cooperate. There is still something lacking which needs to be added and will be added. I said you were a survival type. You are-except for one thing. You don't want children. From a biological standpoint that is as contrasurvival as a compulsion to suicide. You got that tendency from your dexter greatgrandfather. The tendency had to be accepted at the time as he Was dead before his germ plasm was used and we hadn't much supply in the bank to choose from. But it will be corrected at this linkage. Your children will be anxious to have children-I can assure you of that."

"What's that to me?" Hamilton demanded. "Oh, I don't doubt that you can do it. You can wind 'em up and make 'em run. You can probably eliminate my misgivings and produce a line that will go on happily breeding for the next ten million years. That still doesn't make it make sense. Survival! What for? Until you can give me some convincing explanation why the human race should go on at all, my answer is 'no.'" He stood up.

"Leaving?" asked Mordan.

"If you will excuse me."

"Aren't you interested in knowing something about the woman whom we believe is suitable for your line?"

"Not particularly."

"I choose to interpret that as permission," Mordan answered affably. "Look over there." He touched a control on his desk; Hamilton looked where he had been directed to. A section of the wall faded away and gave place to a stereo scene. It was as if they were looking out through an open window. Before them lay a garden swimming pool, its surface freshly agitated...by diving, apparently, for a head broke the surface of the water. The swimmer took three easy strokes toward the pick-up, and climbed out on the bank with effortless graceful strength. She rolled to her knees, stood up bare and lovely. She stretched and laughed, apparently from sheer animal spirits, and glided out of the picture. "Well?" asked Mordan.

"She's comely, but I've seen others."

"It's not necessary that you ever lay eyes on her," the Moderator added hastily. "She's your fifth cousin, by the way. The combination of your charts will be simple." He snapped off the scene, replaced it with a static picture. "Your chart is on the right; hers is on the left." Two additional diagrams then appeared, one under his, one under hers. "Those are the optimum haploid charts for your respective gametes. They combine so—" He touched another control; a fifth chart formed itself in the center of the square formed by the four others.

The charts were not pictures of chromosomes, but were made up of the shorthand used by genetic technicians to represent the extremely microscopic bits of living matter which are the arbiters of human make-up. Each chromosome was represented by a pattern which more nearly resembled a spectogram than any other familiar structure. But the language was a language of experts; to a layman the charts were meaningless.

Even Mordan could not read the charts unassisted. He depended on his technicians to explain them to him when necessary. Thereafter his unfailing memory enabled him to recall the significance of the details.

One thing alone was evident to the uninstructed eye: the two upper charts, Hamilton's and the girl's, contained twice as many chromosome patterns-forty-eight to be exactas the charts of the gametes underneath them. But the chart of the proposed offspring contained fortyeight representations of chromosomes-twenty-four from each of its parents.

Hamilton ran his eye over the charts with interest, an interest he carefully repressed. "Intriguing, I'm sure," he said indifferently. "Of course I don't understand it."

"I'd be glad to explain it to you."

"Don't bother. It's hardly worth while, is it?"

"I suppose not." Mordan cleared the controls; the pictures snapped off. "I must ask you to excuse me, Felix. Perhaps we can talk another day."

"Certainly, if you wish." He glanced at his host in surprise, but Mordan was as friendly and as smilingly urbane as ever. Hamilton found himself in the outer office a few moments later. They had exchanged goodbyes with all the appropriate intimate formality of name-friends; nevertheless Hamilton felt a vague dissatisfaction, a feeling of incompleteness, as if the interview had terminated before it was over. To be sure, he had said no, but he had not said it in all the detail he had wished to.

Mordan went back to his desk and switched the charts on again. He studied them, recalling all that he had been taught about them and dwelling with interest on the middle one.

A chime played the phrase announcing his chief technical assistant. "Come in, Martha," he invited without looking around.

"I'm in, Chief," she replied almost at once.

"Ah-so you are," he answered, turning to her.

"Got a cigaret?"

"Help yourself." She did so from the jeweled container on his desk, inhaled it into life, and settled down comfortably. She was older than he, iron grey, and looked as competent as she was. Her somber laboratory coveralls were in marked contrast to the dignified dandyism of his costume, but they fitted her character.

"Hamilton just left, didn't he?"

"Yes."

"When do we start?"

"Mmmm...How would the second Tuesday of next week do?"

She raised her brows. "As bad as that?"

"I'm afraid so. He said so. I kicked him out-gently-before he had time to rationalize himself into a position from which he would not care to back down later."

"Why did he refuse? Is he in love?"

"No."

"Then what's the catch?" She got up, went to the screen and stared at Hamilton's chart, as if she might detect the answer there.

"Mmmm...He posed me a question which I must answer correctly-else he will not cooperate."

"Huh? What was the question?"

"I'll ask you. Martha, what is the meaning of life?"

"What! Why, what a stupid question!"

"He did not ask it stupidly."

"It's a psychopathic question, unlimited, unanswerable, and, in all probability, sense free."

"I'm not so sure, Martha."

"But-well, I won't attempt to argue with you outside my own field. But it seems to me that 'meaning' is a purely anthropomorphic conception. Life simply is. It exists."

"He used the idea anthropomorphically. What does life mean to men, and why should he, Hamilton, assist in its continuance? Of course I couldn't answer him. He had me. And he proposed to play Sphinx and not let us proceed until I solve his riddle."

"Fiddlesticks!" She snapped the cigaret away savagely. "What does he think this clinic is-a place to play word games? A man should not be allowed to stand in the way of racial progress. He doesn't own the life in his body. It belongs to all of us-to the race. He's a fool."

"You know he's not, Martha." He pointed to the chart.

"No," she admitted, "he's not a fool. Nevertheless, he should be required to cooperate. It's not as if it would hurt him or inconvenience him in any way."

"Tut, tut, Martha. There's a little matter of constitutional law."

"I know. I know. I abide by it, but I don't have to worship it. Granted, it's a wise law, but this is a special case."

"They are all special cases."

She did not answer him but turned back to the charts. "My oh my," she said half to herself, "what a chart! What a beautiful chart, chief."

CHAPTER THREE

"This we covenant in the Name of Life Immortal

To THIS we pledge our lives and sacred honor:

"To destroy no fertile life,

"To hold as solemn secret that which may be divulged to us, directly, or indirectly through the techniques of our art, concerning the private matters of our clients,

"To practice our art only with the full and uninfluenced consent of our client zygotes,

"To hold ourselves, moreover, guardian in full trust for the future welfare of infant zygotes and to do only that which we soberly and earnestly believe to be in their best interests,

"To respect meticulously the laws and customs of the group social in which we practice,

"This we covenant in the Name of Life Immortal."

Extract from the Mendelian Oath Circa 2075 A. D. (Old Style)

Sweet peas, the evening primrose, the ugly little fruit fly Drosophila-back in the XIXth and XXth centuries the Monk Gregor Mendel and Doctor Morgan of the ancient University of Columbia used these humble tools to establish the basic laws of genetics. Simple laws, but subtle.

In the nucleus of every cell of every zygote, whether man or fruit fly, sweet pea or race horse, is a group of threadlike bodies-chromosomes. Along the threads are incredibly tiny somethings, on the order of ten times the size of the largest protein molecules. They are the genes, each one of which controls some aspect of the entire structure, man, animal, or plant, in which the cell is lodged. Every living cell contains within it the plan for the entire organism.

Each man's cells contain fortyeight chromosomes—twenty-four pairs. Half of them he derived from his mother, half from his father. In each one of a pair of chromosomes, there are genes, thousands of them, in one-to-one correspondence with the genes from the chromosomes of the other parent. Thus each parent "casts a vote" on each characteristic. But some "votes" carry more weight than others. Such "votes" are called dominant, the weaker, recessive. If one parent supplies the gene for brown eyes, while the other parent supplies the gene for blue eyes, the child will have brown eyes-brown is "dominant." If both parents supply the gene for brown eyes, the vote is unanimous, but the result is the same-for that generation. But it always requires "unanimous vote" to produce blue eyes.

Nevertheless, the gene for blue eyes may be passed on from generation to generation, unnoticed but unchanged. The potentialities of a race are passed on unchanged-except for mutation-from parent to child. They may be shuffled and dealt and shuffled again, producing an inconceivable number of unique individuals, but the genes are unchanged.

Chess men may be arranged on the board in many combinations, but the unit men do not vary. Fiftytwo playing cards may be dealt to produce an enormous number of different hands, but the cards are the original fiftytwo. One hand may be full of high cards; another may be worthless—pure chance.

But suppose you were permitted to make up the best hand of five cards possible out of the first ten cards dealt? The chance of getting the best possible hand has been increased two hundred and fiftytwo times! (Check it.)

Such is the method of racial improvement by gene selection.

A life-producing cell in the gonads of a male is ready to divide to form gametes. The fortyeight chromosomes intertwine frantically, each with its opposite number. So close is this conjugation that genes or groups of genes may even trade places with their opposites from the other chromosomes. Presently this dance ceases. Each member of a pair of chromosomes withdraws from its partner as far as possible, until there is a cluster of twenty-four chromosomes at each end of the cell. The cell splits, forming two new cells, each with only twenty-four chromosomes, each containing exactly half of the potentialities of the parent cell and parent zygote.

One of these cells contains a chromosome-the X-chromosome-which declares that any zygote formed with its help will be female.

The two cells divide again. But in this fission the chromosomes themselves divide, endwise, thereby conserving every gene and every one of the twenty-four chromosomes. The end product is four wigglers-male gametes, spermatozoa-half of whom can produce females; half, males. The male producers are exactly alike in their gene assortments and are exact complements of the female producers. This is the key point in the technique of gene selection.

The heads of the male producers average four microns in length; the heads of the female producers average five microns in length-another key point.

In the female gonad the evolution of the gamete, or ovum, is like that described for the male gametes, with two exceptions. After the reduction-division in which the number of chromosomes per cell is reduced from fortyeight to twenty-four the result is not two ova, but one ovum and one "polar body." The polar body is a pseudo egg, containing a chromosome pattern complementary to that of the true gamete, but it is sterile. It's a nobody that never will be anybody.

The ovum divides again, throwing off another polar body which has the same pattern as the ovum. The original polar body divides again, producing two more polar bodies of complementary pattern. Thus the polar bodies of pattern complementary to the ovum always exceed in number those of identical pattern. This is a key fact. All ova may become either male or female. Sex of the infant zygote is determined by the cell provided by the father; the mother has no part in it.

The above is a very rough picture. It is necessary to compress, to exaggerate, to omit detail, to use oversimplified analogy. For example, the terms "dominant" and "recessive" are relative terms; and characteristics are rarely determined by one gene alone. Furthermore, mutations-spontaneous changes in the genes themselves-occur with greater frequency than this account has emphasized. But, the picture is reasonably correct in its broad outlines.

How can these facts be used to produce the sort of man or woman one wishes to produce? Offhand, the question appears simple. An adult male produces hundreds of billions of gametes. Ova are produced on no such wholesale scale, but in quite adequate numbers. It would appear to be a simple matter to determine what combination you want and then wait for it to show up...or at least to wait for a combination near enough to be satisfactory.

But it is necessary to recognize the combination wanted when it shows up. And that can be done only by examining the gene patterns in the chromosomes.

Well? We can keep gametes alive outside the body...and genes, while infinitesimally small, are large enough to be recognized under our ultramicroscopes. Go ahead. Take a look. Is it the gamete we want, or is it one of its lesser brothers? If the latter, then reject it, and look again.

Wait a moment! Genes are such tiny things that to examine one is to disturb it. The radiations used to see a gamete closely enough to tell anything about its chromosomes will produce a storm of mutations. Sorry, what you were looking for isn't there any more. You've changed it-more probably killed it. So we fall back on the most subtle and powerful tool of research...inference. You will remember that a single male gonad cell produces two groups of gametes, complementary in their chromosome patterns. The female producers have the larger heads; the males are more agile. We can separate them. If, in a given small constellation of male gametes, enough members are examined to determine that they all stem from the same parent cell, then we may examine in minute detail the group producing the sex we do not want. From the chromosome-gene pattern of the group examined we can infer the complementary pattern of the group kept free of the perils of examination.

With female gametes the problem is similar. The ovum need not leave its natural environment in the body of the female. The polar bodies, worthless and non-viable in themselves, are examined. Their patterns are either identical with that of their sister cell, or complementary. Those that are complementary are more numerous than those identical. The pattern of the ovum may be inferred with exactness.

Half the cards are face up. Therefore we know the value of the cards face down. We can bet-or wait for a better hand. Romantic writers of the first days of genetics dreamed of many fantastic possibilities-test-tube babies, monsters formed by artificial mutation, fatherless babies, babies assembled piece by bit from a hundred different parents. All these horrors are possible, as the geneticists of the Great Khans proved, but we citizens of this Republic have rejected such tampering with our life stream. Infants born with the assistance of the neo-Ortega-Martin gene selection technique are normal babies, stemming from normal germ plasm, born of normal women, in the usual fashion.

They differ in one respect only from their racial predecessors: they are the best babies their parents can produce!

CHAPTER FOUR

Boy Meets Girl

MONROE-ALPHA called for his orthowife again the next evening. She looked up and smiled as he came into her apartment. "Two nights running," she said. "Clifford, you'll have me thinking you are courting me."

"I thought you wanted to go to this party," he said woodenly.

"I do, my dear. And I appreciate your taking me. Half a minute, while I gown." She got up and slipped out of the room with a slow-seeming, easy glide. Larsen Hazel had been a popular dancing star in her day, both record and beamcast. She had wisely decided to retire rather than fight it out with younger women. She was now just thirty, two years younger than her spouse.

"All ready," she announced after an interval hardly longer than her promise mentioned.

He should have commented on her costume; it deserved comment. Not only did it do things with respect to her laudable figure, but its color, a live Mermaid green, harmonized with her hair and with her sandals, her hair ornaments, and her costume clips. They all were of the same dull gold as the skintight metallic habit he had chosen.

He should at least have noticed that she had considered what he was wearing in selecting her own apparel. Instead he answered, "Fine. We'll be right on tune."

"It's a new gown, Clifford."

"It's very pretty," he answered agreeably. "Shall we go?"

"Yes, surely."

He said very little during the ride, but watched the traffic as if the little car were not capable of finding its way through the swarming traffic without his supervision. When the car finally growled to a stop at the top floor of an outlying residence warren he started to raise the shell, but she put a hand on his arm. "Let it be, for a moment, Clifford. Can we talk for a little before we get lost in a swarm of people?"

"Why surely. Is something the matter?"

"Nothing-and everything. Clifford, my dear-there's no need for us to go on as we have been going."

"Huh? What do you mean?"

"You know what I mean if you stop to think about it. I'm not necessary to you any more-am I?"

"Why, uh-Hazel, I don't know why you should say a thing like that. You've been swell. You're a swell girl, Hazel. Nobody could ask for anything more."

"Mmmm...that's as may be. I don't have any secret vices and I've never done you any harm that I know of. But that's not what I mean. You don't get any pleasure out of my company any more-any lift."

"Uh...that's not so. I couldn't ask for any better pal than you've been. We've never had an argu—"

She checked him with her hand. "You still don't understand me. It might be better if we did quarrel a little. I'd have a better idea of what goes on behind those big solemn eyes of yours. You don't dislike me. In fact, I think you like me as well as you like anybody. You even like to be with me, sometimes, if you're tired and I happen to fit your mood. But that isn't enough. And I'm fond enough of you to be concerned about you, darling. You need something more than I've been able to give you."

"I don't know how any woman could do any more than you've done for me."

"I do. I do, because I was once able to do it. Do you remember when we first registered? I gave you a lift then. You were happy. It made me happy, too. You were so pathetically pleased with me and with everything about me that sometimes I could cry, just to look at you."

"I haven't stopped being pleased with you."

"Not consciously. But I think I know what happened."

"What?"

"I was still dancing then. I was the great Hazel, premiere danseuse, I was everything you had never been. Glamour and bright lights and music. I remember how you used to call for me after a performance, looking so proud and so glad to see me. And I was so impressed by your intellect (I still am, dear) and I was so flattered that you paid attention to me."

"Why you could have had your pick of all the braves in the country."

"They didn't look at me the way you did. But that isn't the point. I'm not really glamorous and never was. I was just a working girl, doing the job she could do best. Now the lights are out and the music has stopped and I'm no longer any help to you."

"Don't say that, kid."

She placed a hand on his arm. "Be honest with yourself, Cliff. My feelings aren't hurt. I'm not a romantic person. ' My feelings have always been maternal, rather than anything else. You're my baby. You aren't happy and I want you to be happy."

He shrugged helplessly. "What is there to do about it? Even if everything you say is true, what is there to do?"

"I could make a guess. Somewhere there is a girl who is everything you thought I was. Someone who can do for you what I once did by just being herself."

"Hunnh! I don't know where I'd find her. There isn't any such person. No, kid, the trouble is with me, not with you. I'm a skeleton at the feast. I'm morose by nature. That's what."

"Hummph right back at you. You haven't found her because you haven't been looking for her. You've fallen into a rut, Cliff. Tuesdays and Fridays, dinner with Hazel. Mondays and Thursdays, work out at the gymnasium. Weekends, go to the country and soak up some natural vitamin D. You need to be shaken out of that. I'm going down tomorrow and register a consent."

"You wouldn't really!"

"I certainly shall. Then, if you find someone who pleases your fancy, you can confirm it without any delay."

"But Hazel, I don't want you to turn me loose."

"I'm not turning you loose. I'm just trying to encourage you to have a roving eye. You can come to see me whenever you like, even if you remarry. But no more of this Tuesday-and-Friday stuff. That's out. Try phoning me in the middle of the night, or duck out of your sacred office during working hours."

"Hazel, you don't really want me to go chasing after other women, do you?"

She took his chin in her hand. "Clifford, you are a big sweet dope. You know all there is to know about figures, but what you don't know about women would fill reels." She kissed him. "Relax. Mamma knows best."

"But—"

"The party waits."

He raised the shell of the car. They got out and went on in.

The town house of the Johnson-Smith Estaire occupied the entire top platform of the warren. It was a conspicuous example of conspicuous waste. The living quarters (that great pile of curiously assembled building materials could hardly be called a home) occupied perhaps a third of the space, the rest was given over to gardens, both open and covered. Her husband's ridiculously large income was derived from automatic furniture; it was her fancy to have her house display no apparent evidence of machine domination.

So it was that real live servants offered to take their wraps-they had none-and escorted them to the foot of the broad flight of stairs at the top of which the hostess was greeting her guests. She extended both arms as Clifford and Hazel approached. "My dear!" she bubbled to Hazel. "So gentle of you to come! And your brilliant husband." She turned to her guest of honor, standing at her side. "Doctor Thorgsen, these are two of my dearest friends. Larsen Hazel-such a clever little person, really. And Master Monroe-Alpha Clifford. He does things about money at the Department of Finance. Dreadfully intricate. I'm sure you would understand it-I don't."

Thorgsen managed to frown and smile simultaneously. "The Larsen Hazel? But you are-I recognize you. Will you be dancing for us tonight?"

"I no longer dance."

"What a pity! That is the first unfavorable change I've found on earth. I've been away ten years."

"You've been on Pluto. How fares it there, Doctor?"

"Chilly." He repeated his somewhat frightening mixed expression. Clifford caught his eye and bowed deeply. "I am honored, learned sir."

"Don't let it-I mean, not at all. Or something like that. Damn it sir, I'm not used to all this fancy politeness. Forgotten how to do it. We have a communal colony, you know. No weapons.

Monroe Alpha had noticed with surprise that Thorgsen was unarmed and brassarded, yet he carried himself with the easy arrogance of an armed citizen, sure of his position. "The life must be quite different," he offered.

"It is. It is. Nothing like this. Work, a little gossip, bed, and back to work again. You're in finance, eh? What sort of thing?"

"I compute the reinvestment problem."

"That? Now I know who you are. We heard of your refinement of the general solution-even out on Pluto. High computation that. Makes our little stereo-parallax puzzles look fiddlin'."

"I would hardly say so."

"I would. Perhaps we can find a chance to talk later. You could give me some advice."

"I would be honored."

Several latecomers were waiting in line. Hazel could see that their hostess was becoming impatient. They moved on. "Enjoy yourselves, my dears," she invited them. "There are, well, things—" She waved vaguely.

There were indeed "things." Two theaters were available, one of which was giving a continuous performance of all the latest and smartest stereo-reels, the other provided the current spot news for anyone who could not relax without knowing what was going on out of his sight. There were gaming rooms, of course, and dozens of little snuggeries where small groups, or couples could enjoy each other's company tete-a-tete. A currently popular deceiver circulated through the crowd, displaying his jests and deceptions and sophisticated legerdemain to any who cared to watch. Food and drink in lavish variety, quality, and quantity were available everywhere.

The sweeping tesselated ballroom floor was lightly filled. Pattern dancing would come later. The huge room faced, with no wall intervening, into one of the covered gardens, unlighted save for lights below the surface of numerous rocky little pools. The other side of the ballroom was limited by the transparent wall of the swimming bath, the surface of which was on the floor above. In addition to ornate decoration and moving colored lights on the water side of the crystal wall, the swimmers themselves, with the inescapable gracefulness of underwater movement, gave life and harmony to that side of the room.

Clifford and Hazel seated themselves at that wall and leaned against the glass. "Shall we dance?" he asked.

"No, not just yet." A girl, swimming on the other side of the wall, glided down toward them and blew bubbles against the glass. Hazel followed the girl's nose with her forefinger, tracing against the glass. The swimmer grinned, she smiled back. "I think I'd like a dip, if you don't mind."

"Not at all."

"Join me?"

"No, thanks."

After she had gone he wandered around aimlessly for a few minutes. The recreations at hand left him cold; he was searching halfheartedly for a niche in which he could be alone to nurse his own melancholy and, perhaps, a drink as well. But couples-not melancholy! —had had the same idea; the smaller hideaways were populated. He gave up and entered a medium-sized lounge, already occupied by a stag group of half a dozen or so. They were engaged in the ancient sport of liquidating world problems in liquid.

He hesitated at the door, elevated his brows in query, received casual gracious consent from one who caught his eye, came on in and found a seat. The hot-air session went on.

"Suppose they do release the field?" one of the men present was saying. "What will it amount to? What will it contain? Some artifacts possibly, perhaps some records of the period in which it was set up. But nothing more than that. The notion that life could be preserved in it, unchanged, in absolute stasis, for several centuries is preposterous."

"How do you know? It's certain that they thought they had found a way of suspending, uh, shall we say freezing entropy. The instructions with the field are perfectly plain."

Monroe-Alpha began to understand what they were talking about. It was the so-called Adirondack stasis field. It had been a three-day wonder when it was discovered, a generation earlier, in a remote part of the mountain from which it got its name. Not that the field itself was spectacular-it was simply an impenetrable area of total reflection, a cubical mirror. Perhaps not impenetrable, for no real effort had been made to penetrate it-because of the plaque of instructions found with it. The plaque stated quite simply that the field contained living specimens of the year 1926 (old style, of course) which could be released by the means given below-but there was nothing below.

Since the field had not been passed down in the custody of recognized institutions there was a strong tendency to regard the whole matter as a hoax. Nevertheless, attempts had been made to guess the secret of that blank plaque.

Monroe-Alpha had heard that it had at last been read, but he had not paid much attention. The newscasts were always full of wonders which amounted to little in the long run. He did not even recall how the inscription had been read-a reflected image, using polarized light, or something equally trivial.

"That isn't the matter of real interest," spoke up a third man. "Let us consider the purely intellectual problem of the hypothetical man who might thus be passed down to us, out of the Dark Ages." He was a slender, youngish man-in his late twenties, Clifford judged-and was dressed in a turquoise blue satin which brought out the pallor of his face. He spoke with slow intensity. "What would he think of this world in which he suddenly finds himself? What have we to offer him in exchange for that which he has left behind?"

"What have we to offer him! Everything! Look around you."

The young man answered with a superior smile. "Yes-look around you. Gadgets-but what need has he for gadgets? He comes from an earlier, braver world. A world of independence and dignity. Each man tilled his own plot of ground with his woman by his side. He raised his own children, straight and strong, and taught them to wrest their food from Mother Earth. He had no artificial lights, but he had no need for them. He was up with the dawn and busy with his serious, fundamental affairs. At sundown he was tired and welcomed the rest of night. If his body was sweaty and dusty with honest labor, he took a dip in his own brook. He needed no fancy swimming baths. He was based, rock solid, on primitive essentials."

"And you think he actually liked that better than modern comforts?"

"I certainly do. Those men were happy. They lived naturally, as the Great Egg intended they should."

Monroe-Alpha turned the idea over in his mind. There was something devilishly appealing about it. He felt, quite sincerely, that he cared nothing for gadgets. Not even for his master accumulator. It was not the machine he cared about but the mathematical principles involved. And since when did a mathematician need any tools but his own head? Pythagoras had done well enough with a stick and a stretch of sand. As for other matters, if he and Hazel were partners in the old, old, fight to win a living from the eternal soil, would they have drifted apart?

He closed his eyes and visualized himself back in the simple, golden days of 1926. He was dressed in homespun, woven by his wife's capable hands-or even in the skins of animals, cured on their cabin door. There would be children somewhere about-three, he thought. When the day's work was over, he would walk to the top of the hill with his oldest son, and show him the beauty of the sunset. When the stars came out he would explain to him the intricate wonders of astronomy. Wisdom would be passed down from father to son, as it had been.

There would be neighbors-strong, silent men, whose curt nod and hard handclasp meant more than the casual associations of modern "civilization."

There were others present who did not accept the thesis as readily as Monroe-Alpha. The argument was batted back and forth until it grew somewhat acrimonious. The young man who had started it-Gerald seemed to be his name-got up and asked the company to excuse him. He seemed slightly miffed at the reception his ideas had gotten.

Monroe-Alpha arose quickly and followed him out of the room. "Excuse me, gentle sir."

Gerald paused. "Yes?"

"Your ideas interest me. Will you grant me the boon of further conversation?"

"Gladly. You do me honor, sir."

"The benefit is mine. Shall we find a spot and sit?"

"With pleasure."

Hamilton Felix showed up at the party somewhat late. His credit account was such that he rated an invitation to any of Johnson-Smith Estaire's grand levees, although she did not like him-his remarks confused her; she half suspected the amused contempt he had for her.

Hamilton was troubled by no gentlemanly scruples which might have kept him from accepting hospitality under the circumstances. Estaire's parties swarmed with people in amusing combinations. Possessing no special talents of her own, she nevertheless had the knack of inducing brilliant and interesting persons to come to her functions. Hamilton liked that.

In any case there were always swarms of people present. People were always funny-the more, the merrier!

He ran across his friend Monroe-Alpha almost at once, walking in company with a young fellow dressed in a blue which did not suit his skin. He touched his shoulder. "Hi, Cliff."

"Oh-hello, Felix."

"Busy?"

"At the moment, yes. A little later?"

"Spare me a second. Do you see that bucko leaning against a pillar over there. Now-he's looking this way." "What about him?"

"I think I should recognize him, but I don't."

"I do. Unless I am misled by a close resemblance, he was in the party of the man you burned, night before last."

"Sooo! Now that's interesting."

"Try to stay out of trouble, Felix." "Don't worry. Thanks, Cliff."

"Not at all."

They moved on, left Hamilton watching the chap he had inquired about. The man evidently became aware that he was being watched, for he left his place and came directly to Hamilton. He paused a ceremonious three paces away and said, "I come in friendship, gentle sir."

"The House of Hospitality encloses none but friends, '" Hamilton quoted formally.

"You are kind, sir. My name is McFee Norbert."

"Thank you. I hight Hamilton Felix." "Yes, I know."

Hamilton suddenly changed his manner. "Ah! Did your friend know that when he chopped at me?"

McFee glanced quickly to the right and left, as if to see whether or not the remark had been overheard. It was obvious that he did not like the tack. "Softly, sir. Softly," he protested. "I tell you I come in friendship. That was a mistake, a regrettable mistake. His quarrel was with another."

"So? Then why did he challenge me?" "It was a mistake, I tell you. I am deeply sorry."

"See here," said Hamilton. "Is this procedure? If he made an honest error, why does he not come to me like a man? I'll receive him in peace." "He is not able to."

"Why? I did no more than wing him." "Nevertheless, he is not able to. I assure you he has been disciplined."

Hamilton looked at him sharply. "You say 'disciplined'—and he is not able to meet with me. Is he-perhaps-so 'disciplined' that he must tryst with a mortician instead?"

The other hesitated a moment. "May we speak privately-under the rose?"

"There is more here than shows above water. I don't like the rose, my friend Norbert." McFee shrugged. "I am sorry."

Hamilton considered the matter. After all, why not? The set-up looked amusing. He hooked an arm in McFee's. "Let it be under the rose, then. Where shall we talk?"

McFee filled the glass again. "You have admitted, Friend Felix, that you are not wholly in sympathy with the ridiculous genetic policy of our so-called culture. We knew that."

"How?"

"Does it matter? We have our ways. I know you are a man of courage and ability, ready for anything. Would you like to put your resources to work on a really worthwhile project?"

"I would need to know what the project is."

"Naturally. Let me say-no, perhaps it is just as well not to say anything. Why should I burden you with secrets?"

Hamilton refused the gambit. He just sat. McFee waited, then added, "Can I trust you, my friend?"

"If you can't, then what is my assurance worth?"

The intensity of McFee's deep-set eyes relaxed a little for the first time. He almost smiled. "You have me. Well...I fancy myself a good judge of men. I choose to trust you. Remember, this is still under the rose. Can you conceive of a program, scientifically planned to give us the utmost from the knowledge we have, which would not be inhibited by the silly rules under which our official geneticists work?"

"I can conceive of such a program, yes."

"Backed by toughminded men, men capable of thinking for themselves?"

Hamilton nodded. He still wondered what this brave was driving at, but he had decided to see the game through.

"There isn't much more I can say...here," McFee concluded. "You know where the Hall of the Wolf is?"

"Certainly."

"You are a member?"

Hamilton nodded. Everybody, or almost everybody, belonged to the Ancient Benevolent and Fraternal Order of the Wolf. He did not enter its portals once in six months, but it was convenient to have a place to rendezvous in a strange city. The order was about as exclusive as a rain storm.

"Good. Can you meet me there, later tonight?"

"I could."

"There is a room there where some of my friends sometimes gather. Don't bother to inquire at the desk-it's in the Hall of Romulus and Remus, directly opposite the escalator. Shall we say at two hundred?"

"Make it half past two."

"As you wish."

Monroe-Alpha Clifford saw her first during the grand promenade. He could not have told truthfully why she caught his eye. She was beautiful, no doubt, but beauty alone is, of course, no special mark of distinction among girls. They cannot help being beautiful, any more than can a Persian cat, or a luna moth, or a fine race horse.

What she did possess is less easy to tag. Perhaps it will do to say that, when Monroe-Alpha caught sight of her, he forgot about the delightful and intriguing conversation he had been having with Gerald, he forgot that he did not care much for dancing and had been roped into taking part in the promenade only through his inadvertent presence in the ballroom when the figure was announced, he forgot his own consuming melancholy.

He was not fully aware of all this. He was only aware that he had taken a second look and that he thereafter spent the entire dance trying to keep track of her. As a result of which he danced even worse than usual. He was forced to apologize to his temporary partners more than once for his awkwardness.

But he continued to be clumsy, for he was trying to work out in his head the problem of whether or not the figures of the dance would bring them together, make them partners for an interval. If he had been confronted with the question as an abstract problem-Given: the choreographic score of the dance. Required: will unit A and unit B ever come in contact?—had it been stated thus, he could have found the answer almost intuitively, had he considered it worthy of his talents.

To attempt to solve it after the dynamics had commenced, when he himself was one of the variables, was another matter. Had he been in the second couple? Or the ninth?

He had decided that the dance would not bring them together, and was trying to figure out some way to fudge-to change positions with another male dancer-when the dance did bring them together.

He felt her finger tips in his. Then her weight was cradled against his hand as he swung her by the waist. He was dancing lightly, beautifully, ecstatically. He was outdoing himself—he could feel it.

Fortunately, she landed on top.

Because of that he could not even help her to her feet. She scrambled up and attempted to help him. He started laboriously to frame his apology in the most abjectly formal terms he could manage when he realized that she was laughing.

"Forget it," she interrupted him. "It was fun. We'll practice that step on the quiet. It will be a sensation."

"Most gracious madame—" he began again.

"The dance—" she said. "We'll be lost!" She slipped away through the crowd, found her place.

Monroe-Alpha was too demoralized by the incident to attempt to find his proper place. He slunk away, too concerned with his own thalamic whirlwind to worry over the gaucherie he was commiting in leaving a figure dance before the finale.

He located her again, after the dance, but she was in the midst of a group of people, all strangers to him. A dextrous young gallant could have improvised a dozen dodges on the spot whereby the lady could have been approached. He had no such talent. He wished fervently that his friend Hamilton would show up-Hamilton would know what to do. Hamilton was resourceful in such matters. People never scared him.

She was laughing about something. Two or three of the braves around her laughed too. One of them glanced his way. Damn it-were they laughing at him?

Then she looked his way. Her eyes were warm and friendly. No, she was not laughing at him. He felt for an instant that he knew her, that he had known her for a long time, and that she was inviting him, as plain as speech, to come join her. There was nothing coquettish about her gaze. Nor was it tomboyish. It was easy, honest, and entirely feminine.

He might have screwed up his courage to approach her then, had not a hand been placed on his arm. "I've been looking everywhere for you, young fellow."

It was Doctor Thorgsen. Monroe-Alpha managed to stammer, "Uh...How do you fare, learned sir?"

"As usual. You aren't busy, are you? Can we have a gab?"

Monroe-Alpha glanced back at the girl. She was no longer looking at him, was instead giving rapt attention to something one of her companions was saying. Oh well, he thought, you can't expect a girl to regard being tumbled on a dance floor as the equivalent of a formal introduction. He would look up his hostess later and get her to introduce them. "I'm not busy," he acknowledged. "Where shall we go?"

"Let's find some place where we can distribute the strain equally on all parts," Thorgsen boomed. "I'll snag a pitcher of drinks. I see by this morning's news that your department announces another increase in the dividend, " he began.

"Yes," Monroe-Alpha said, a little mystified. There was nothing startling in an increase in the productivity of the culture. The reverse would have been news; an increase was routine.

"I suppose there is an undistributed surplus?"

"Of course. There always is." It was a truism that the principal routine activity of the Board of Policy was to find suitable means to distribute new currency made necessary by the ever-increasing productive capital investment. The simplest way was by the direct issue of debt-free credit-flat money-to the citizens directly, or indirectly in the form of a subsidized discount on retail sales. The indirect method permitted a noncoercive control against inflation of price symbols. The direct method raised wages by decreasing the incentive to work for wages. Both methods helped to insure that goods produced would be bought and consumed and thereby help to balance the books of every businessman in the hemisphere.

But man is a working animal. He likes to work. And his work is infernally productive. Even if he is bribed to stay out of the labor market and out of production by a fat monthly dividend, he is quite likely to spend his spare time working out some gadget which will displace labor and increase productivity.

Very few people have the imagination and the temperament to spend a lifetime in leisure. The itch to work overtakes them. It behooved the planners to find as many means as possible to distribute purchasing power through wages in spheres in which the work done would not add to the flood of consumption goods. But there is a reasonably, if not an actual, limit to the construction, for example, of nonproductive public works. Subsidizing scientific research is an obvious way to use up credit, but one, however, which only postpones the problem, for scientific research, no matter how "pure" and useless it may seem, has an annoying habit of paying for itself many times, in the long run, in the form of greatly increased productivity.

"The surplus," Thorgsen went on, "have they figured out what they intend to do with it?"

"Not entirely, I am reasonably sure," Monroe-Alpha told him. "I haven't given it much heed. I'm a computer, you know, not a planner."

"Yes, I know. But you're in closer touch with these planning chappies than I am. Now I've got a little project in my mind which I'd like the Policy Board to pay for. If you'll listen, I'll tell you about and, I hope, get your help in putting it over."

"Why don't you take it up with the Board directly?" Monroe-Alpha suggested. "I have no vote in the matter."

"No, but you know the ins-and-outs of the Board and I don't. Besides I think you can appreciate the beauty of the project. Offhand, it's pretty expensive and quite useless."

"That's no handicap."

"Huh? I thought a project had to be useful?"

"Not at all. It has to be worthwhile and that generally means that it has to be of benefit to the whole population. But it should not be useful in an economic sense."

"Hmmm...I'm afraid this one won't benefit anybody."

"That is not necessarily a drawback. 'Worthwhile' is an elastic term. But what is it?"

Thorgsen hesitated a moment before replying. "You've seen the ballistic planetarium at Buenos Aires?"

"No, I haven't. I know about it, of course."

"It's a beautiful thing! Think of it, man-a machine to calculate the position of any body in the solar system, at any time, past or future, and give results accurate to seven places."

"It's nice," Monroe-Alpha agreed. "The basic problem is elementary, of course. " It was-to him. To a man who dealt in the maddeningly erratic variables of socio-economic problems, in which an unpredictable whim of fashion could upset a carefully estimated prediction, a little problem involving a primary, nine planets, a couple of dozen satellites, and a few hundred major planetoids, all operating under a single invariable rule, was just that-elementary. It might be a little complex to set up, but it involved no real mental labor.

"Elementary!" Thorgsen seemed almost offended. "Oh, well, have it your own way. But what would you think of a machine to do the same thing for the entire physical universe?"

"Eh? I'd think it was fantastic."

"So it would be-now. But suppose we attempted to do it for this galactic island only."

"Still fantastic. The variables would be of the order of three times ten to the tenth, would they not?"

"Yes. But why not? If we had time enough-and money enough. Here is all I propose," he said earnestly. "Suppose we start with a few thousand masses on which we now have accurate vector values. We would assume straight-line motion for the original set up. With the stations we now have on Pluto, Neptune, and Titan, we could start checking at once. Later on, as the machine was revised, we could include some sort of empirical treatment of the edge effect-the limit of our field, I mean. The field would be approximately an oblate ellipsoid."

"Double oblation, wouldn't it be, including parallax shown by our own stellar drift?"

"Yes, yes. That would become important."

"I suppose you will include the Solar Phoenix devolution?"

"Huh?"

"Why, I should think that was obvious. You'll type the stars, won't you? The progression of the hydrogen-helium transformation in each body is certainly a key datum."

"Brother, you're way ahead of me. I was thinking only of a master ballistic solution."

"Why stop with that? When setting up a structural analogue why not make the symbolic mechanism as similar to the process as possible?"

"Sure, sure. You're right. I just wasn't that ambitious. I was willing to sell out for less. Tell me-d'you think the Board would go for it?"

"Why not? It's worthwhile, it's very expensive, it will run on for years, and it doesn't show any prospect of being economically productive. I would say it was tailormade for subsidy."

"It does me good to hear you say so."

They made a date for the following day.

As soon as he could gracefully do so, Monroe-Alpha excused himself from Thorgsen and went back to where he had last seen the girl. She was no longer there. He spent more than an hour looking for her, and was finally forced to the conclusion that she had left the party, or had hidden herself very cleverly. She was not in the swimming bath, or, if she were, she was capable of remaining under water longer than ten minutes. She was not in any of the accessible rooms-he had risked his life quite unconsciously, so thoroughly had he searched the dark corners.

He intended to tell Hazel of the incident on the way to her home, but he could not find the words. What was there to tell, really? He had seen an attractive girl, and had managed to trip her by his clumsiness. What was there in that? He did not even know her name. And it did not, somehow, seem like just the evening to speak to Hazel of other women. Good old Hazel!

She noticed his preoccupation, noticed that it differed in character from his earlier glumness. "Enjoy yourself, Clifford?"

"I think so. Yes."

"Meet any attractive girls?"

"Why, uh, yes. Several."

"That's nice."

"See here, Hazel-you don't intend to go through with this silly divorce business, do you?"

"I do."

One might think that he lay awake that night, filled with romantic thoughts of the nameless beauty. One would be wrong. He did think of her, but only for long enough to work out a suitable face-rehabilitating day dream, one in which he made killingly witty remarks anent his own awkwardness to which she responded with proper appreciation. It had not even been necessary to bulldoze any of the braves who surrounded her. They, too, had applauded his wit.

Nor did he think long of Hazel. If she saw fit to break the contract, it was her business. Not that there was any sense to it; it did not occur to him that anything could greatly change their relations. But he would stop this twice-a-week dine-and-visit. A woman appreciated a few surprises, he supposed.

All this was simply to clear the circuits for the serious getting-to-sleep thoughts. Thorgsen's proposal. A really pretty problem, that. A nice problem --

Hamilton Felix had a much busier night. So busy, that he had much on his mind at breakfast the next morning. Decisions to make, matters to evaluate. He did not even turn on the news, and, when the annunciator informed him that a visitor waited outside his door, he punched the "welcome" key absentmindedly, without stopping to consider whether he really wished to see anyone. Some woman, he had noticed, from the mug plate. His thoughts went no further.

She came in and perched herself on the arm of a chair, one leg swinging. "Well," she said, "good morning, Hamilton Felix!"

He looked at her in puzzlement. "Do we know each other?"

"Noooo," she said calmly, "but we will. I thought it was about time I looked you over."

"I know!" He stabbed the air with a forefinger. "You are the woman Mordan picked for me!"

"That's right. Of course."

"Why, damn your impudence! What the devil do you mean by invading my privacy like this?"

"Tut! Tut! Tut! Mamma spank. Is that any way to talk to the future mother of your children?"

"Mother of my fiddlesticks! If I needed anything to convince me that I want to have nothing to do with the scheme, you have given it to me. If I ever do have children, it won't be by you!"

She had on shorts and a boyish corselet. In defiance of usual custom for her sex she wore, belted to her side, a hand weapon, small but deadly. She stood up at his words, resting her hands on her hips. "What's wrong with me?" she said slowly.

"Hunh! What's wrong with you! What isn't wrong with you? I know your type. You're one of these 'independent' women, anxious to claim all the privileges of men but none of the responsibilities. I can just see you, swaggering around town with that damned little spit gun at your side, demanding all the rights of an armed citizen, picking fights in the serene knowledge that no brave will call your bluff. Arrgh! You make me sick."

She remained still, but her face was cold. "You are a shrewd judge of character, aren't you? Now you listen to me for a while. I haven't drawn this gun, except in practice, for years. I don't go around insisting on privileges and I am just as punctiliously polite as the next brave."

"Then why do you wear it?"

"Is there anything wrong with a woman preferring the dignity of an armed citizen? I don't like to be coddled and I don't like to be treated like a minor child. So I waive immunity and claim my right-I go armed. What's wrong with that?"

"Nothing-if that were really the case. Which it isn't. You give the lie to your own words by the fashion in which you broke in on me. A man couldn't get away with it."

"So! So? Let me remind you, you ill-mannered oaf, that you signalled 'welcome' and let me in. You did not have to. Once inside, before I could say yes, no, or maybe, you started to snarl at me."

"But—"

"Never mind! You think you have a grievance. I said I hadn't drawn this gun in years-that doesn't mean I'm not ready to! I'm going to give you a chance, my fine bucko boy, to work out that grievance. Belt on your gun."

"Don't be silly."

"Strap on your gun! Or, so help me, I'll take it away from you and hang it in the Square."

Instead of answering he moved toward her. She gripped her weapon, half drew it. "Stand back! Stand back, or I'll burn you."

He checked himself and looked at her face. "Great Egg!" he said delightedly. "I believe you would. I honestly believe you would."

"Of course I would."

"That," he admitted, "puts a different face on things, doesn't it?" He eased back a step, as if to parley. She relaxed a trifle, and removed her fist from the grip of the weapon.

He lunged forward, low, tackling her around the knees. They rolled on the floor, tussled briefly. When events slowed down a little, it could be seen that he had her right wrist grasped firmly, as firmly, indeed, as her right hand gripped her gun.

He banged her knuckles hard against the polished floor, grabbed the shank of the weapon with his other hand and broke it out of her grasp. Still grasping her wrist, he struggled to his knees and moved away from the spot, half dragging her behind him. He ignored the minor violences that were happening to his person in the process. When he was within reach he chucked her gun in the oubliette and turned his attention back to her.

Heedless of her struggles he picked her up and carried her to a large chair where he seated himself with her on his lap. He pinned her legs between his knees, forced her arms behind her back until he managed to get both her wrists in one of his fists. She bit him in the process.

With her thus effectively immobilized, he settled back, holding her away from him, and looked at her face. "Now we can talk," he said cheerily. He measured her face with his eye, and slapped her once, not too hard but with plenty of sting in it. "That's for biting. Don't do it again."

"Let me go."

"Be reasonable. If you look closely you will see that I am nearly forty kilos heavier than you are, and a lot taller. You are tough and strong-I've got to hand it to you-but I'm a hell of a sight stronger and tougher. What you want doesn't matter."

"What do you intend to do with me?"

"Talk to you. Yes, and I think I'll kiss you."

She answered this by giving a brief but entirely futile imitation of a small cyclone, with wildcat overtones. When it was over he said, "Put your face up."

She did not. He took a handful of hair and snapped her head back. "No biting," he warned, "or I'll beat holy hell out of you."

She did not bite him, but she did not help with the kiss either. "That," he observed conversationally, "was practically a waste of time. You 'independent' girls don't know anything about the art."

"What's wrong with the way I kiss?" she said darkly.

"Everything. I'd as lief kiss a twelve-year-old."

"I can kiss all right if I want to."

"I doubt it. I doubt if you've ever been kissed before. Men seldom make passes at girls that wear guns."

"That's not true."

"Caught you on the raw, didn't I? But it is true and you know it. See here-I'll give you a chance to prove that I'm wrong, and then we'll talk about letting you go."

"You're hurting my arm."

"Well—"

This kiss was longer than the first one, about eight times as long. Hamilton released her, drew his breath, and said nothing.

"Well?"

"Young lady," he said slowly, "I've misjudged you. Twice, I've misjudged you."

"Will you let me go now?"

"Let you go? That last deserves an encore."

"That's not fair."

"My lady," he said quite seriously, "'fair' is a purely abstract concept By the way, what is your name?"

"Longcourt Phyllis. You're changing the subject."

"How about the encore?"

"Oh, well!" He relaxed his hold on her completely. Nonetheless, it was as long and as breath-consuming as the last. At its conclusion she ran a hand through his hair, mussing it. "You heel," she said. "You dirty heel!"

"From you, Phyllis, that's a compliment. Have a drink?",

"I could use one."

He made a ceremony of selecting the liquor, fetching glasses, and pouring. He paused with his glass in the air. "Shall we pledge peace?"

She checked her own glass before it reached her mouth. "At this point? I think not. I want to catch you armed."

"Oh, come now. You fought valiantly and were licked with honor.

To be sure I slapped you, but you bit me. It's even."

"How about the kisses?"

He grinned. "That was an even exchange. Don't be stuffy. I don't want you hunting me down. Come on. Peace, and let bygones be bygones." He raised his glass a trifle.

He caught her eye and she smiled in spite of herself. "All right-peace."

"Have another drink?"

"No, thanks. I've got to go."

"What's the hurry?"

"I really must go. May I have my blazer now?"

He opened the oubliette, reached in, recovered it, and dusted it off. "It's mine, you know. I won it."

"You wouldn't keep it, would you?"

"That's what I mean," he said, "about you armed women just pretending to take a man's part. A man would never ask for his gun back. He would wear a brassard first."

"Are you going to keep it?"

"No, but I wish you wouldn't wear it."

"Why not?"

"Because I want to take you to dinner tonight. I'd feel a fool, escorting an armed woman."

She looked at him. "You're an odd one, Hamilton Felix. Slap a girl around, then ask her to dinner."

"You'll come?"

"Yes, I'll come." She unsnapped her gun belt and tossed it to him. "Tube them back to me. The address is on the name-plate."

"Twenty hundred?"

"Or a few minutes after."

"Do you know, Phyllis," he said as he dilated the door for her, "I have a feeling that you and I are going to have lots and lots of fun."

She gave him a slow, sidelong look. "You'll find out!"

CHAPTER FIVE

"I myself am but indifferent honest"

HAMILTON turned away from the door purposefully. There were things to be done, urgent things. He stepped to his phone and called Monroe-Alpha. "Cliff? In your office, I see. Stay there." He clicked off without offering explanation.

"Good morning, Felix," Monroe-Alpha said with his usual formality as he ushered him in. "You seemed perturbed. Anything wrong?"

"Not exactly. I want you to do me a favor. Say-what's gotten into you?"

"Me? What do you mean?"

"Yesterday you looked like a six-day corpse. Today you sparkle, you glow. There's a song on your lips and a hey, nonny, nonny. How come?"

"I didn't know that it showed in my face, but it is true that I am feeling somewhat elated."

"Why? Did the money machine declare another dividend?"

"Didn't you see the news this morning?"

"As a matter of fact, no. Why?"

"They opened the Adirondack Stasis!"

"Well?"

"It had a man in it, a live man."

Hamilton's eyebrows crawled up. "That's interesting, if true. But do you mean to tell me that the discovery of this human fossil is the cause of your childlike glee?"

"But don't you see it, Felix? Don't you feel the significance of it? He's an actual representative out of the golden days when the race was young-back when life was simple and good, before we messed up with a lot of meaningless complications. Think what he can tell us!"

"Maybe. What year is he from?"

"Uh...1926, on the old scale."

"1926...let's see...I'm no historian but I didn't know that that period was such glowing Utopia. I had a notion it was pretty primitive."

"That's just what I mean-simple and beautiful. I'm not a historian either, but I met a chap last night who told me a lot about it. He's made quite a study of it. " He launched into an enthusiastic description of Frisby Gerald's concept of life in the early XXth century.

Hamilton waited for him to run out of breath, then said, "I don't know. I wouldn't know, but it seems to me your gears don't mesh."

"Why?"

"Well, I don't think this present day is everything it might be, but I will say I think it is probably the best set-up the human race has ever managed. No, Cliff, this 'Back-to-theGood-Old-Days' stuff is the bunk. We get more for less, with less trouble, nowadays, than ever before in history."

"Well, of course, " Monroe-Alpha answered tartly, "if you have to have an automaton to rock you to sleep at night—"

"Save it. I can sleep on a pile of rock, if necessary, but I think it foolish to go out of your way to seek discomforts."

Monroe-Alpha did not answer. Hamilton saw that his words had rankled and added, "That was strictly a personal opinion. Maybe you're right. Let's forget it."

"What was the favor you wanted?"

"Oh, yes! Cliff, you know Mordan?"

"The district moderator?"

"The same. I want you to call him up and make a date for him to meet me-I mean, to meet you."

"Why should I want to see him?"

"You don't. I'll keep the date."

"Why all the fancy business?"

"Cliff, don't ask me questions. Do it for me."

Monroe-Alpha still hesitated. "You ask me to do this blind. Is it...everything it should be?"

"Cliff!"

Monroe-Alpha flushed. "Sorry, Felix. I know it's all right if you want it. How shall I get him to agree?"

"Make it insistent enough and he'll be there."

"Where, by the way?"

"At my-no, that won't do. Let me use your flat."

"Certainly. What time?"

"Noon."

Mordan came into the flat looking slightly puzzled. He looked still more puzzled and surprised when he saw Hamilton. "Felix! What brings you here?"

"To see you, uh, Claude."

"So? Where is our host?"

"He won't be here. Claude, I arranged this. I had to see you and I couldn't do it openly."

"Really? Why not?"

"Because, " Hamilton said, "there is a spy in your office."

Mordan simply waited.

"Before we go into that, " Hamilton went on, "I want to ask you one question: Did you sic Longcourt Phyllis on me?"

Mordan looked apprehensive. "Decidedly not. Have you seen her?"

"Decidedly yes. A sweet little hell cat you picked for me."

"Don't be too hasty in your judgment, Felix. I admit she is a bit startling, but she is absolutely sound. Her chart is admirable."

"Okay, okay. To tell the truth, I rather enjoyed the encounter. But I wanted to make sure you had not been trying to maneuver me."

"Not at all, Felix."

"Fine. I didn't get you up here just to ask you that. I said there was a spy in your office. I know that because our private conversation the other day leaked and leaked badly." He plunged into an account of his encounter with McFee Norbert, and his subsequent visit to the Hall of the Wolf. "They call themselves the 'Survivors Club,'" he went on. "Superficially it's a drinking club within the lodge. As a matter of fact, it's the front for a revolutionary clique."

"Go on."

"They picked me as likely material, and I played along with them, more out of curiosity, at first. Presently I found myself in too deep to back out." He paused.

"Yes?"

"I joined up. It seemed healthy to do so. I don't know for sure, but I suspect that I wouldn't have lived very long if I hadn't taken their oath. They are playing for keeps, Claude." He paused for a moment, then continued, "You know that little shooting scrape I got into the other night?"

"Yes, surely."

"I can't prove this, but it's the only explanation that makes sense. They weren't gunning for me; they were gunning for you. You are the one of the persons they have to rub out in order to put over their plans."

"What are their plans?"

"I don't know in detail...yet. But the sense of it is this: they've got no use at all for the present genetic policy. Nor for democratic freedom. They want to set up what they call a 'scientific' state, with the 'natural' leaders running things. They are the 'natural' leaders, self appointed. They have a great contempt for guys like you-synthesists-who help to maintain this present 'backward' state. When they are in control they intend to go all out for biological experimentation. They say that a culture should be an organic whole, with the parts specialized according to function. True men-supermen-sitting on top (that's themselves) and the rest of the population bred to fit requirements."

Mordan smiled slowly. "I seem to have seen all this before."

"Yeah, I know what you mean. The Empire of the Great Khans. They've got an answer for that one. The Khans were fools and did not know what they were up to. These boys know how. This is strictly 100% homegrown and any resemblance between it and the policies of the Khans is purely due to your lack of appreciation."

"So..." Mordan said nothing more for a long time. Hamilton became impatient.

"Well?"

"Felix, why do you tell me this?"

"Why? So you can do something about it!"

"But why should you want anything done about it? Wait a moment...please. You told me the other day that life is not worth living, as it is. If you go along with these people, you could make of life anything you want it to be. You could redesign the world to a pattern of your own choosing."

"Hm! I'd have some opposition. They have their own plans."

"You could change them. I know you, Felix. In any group, it's a foregone conclusion that you will dominate if you choose to. Not in the first ten minutes, but in the course of time. You must have known that. Why didn't you seize the opportunity?"

"What makes you think I could do anything of the sort?"

"Now, Felix!"

"All right! All right! Suppose I could. But I didn't. Call it patriotism. Call it anything you like."

"As a matter of fact it's because you approve of our culture as it is. Isn't that true?"

"Maybe. In a way. I never did say that I disliked the way things were being run. I just said that I couldn't see any sense to any manner of life, in any final absolute terms." Hamilton was feeling slightly bewildered. He had approached this interview feeling romantically heroic and expecting to be patted on the back for having unmasked the villains. But Mordan failed to get excited at the proper places, and insisted on discussing purely philosophical matters. It threw him off stride. "In any case, I don't want to see those conceited young punks running things. I can't see them building a Utopia."

"I see. Have you any more to tell me? Very well, then—" Mordan began to stir in the fashion of one about to leave.

"Hey, wait a minute!"

"Yes?"

"Look, I—The fact is, since I am already on the inside, I thought I might do a little amateur sleuthing. We could arrange some way for me to report to you, or to someone."

"Oh, so that's it. No, Felix, I could not approve that."

"Why not?"

"Too dangerous for you."

"I don't mind."

"I do. Your life is very valuable, from my professional point of view."

"That? Hell's delightI thought I made it clear that there is no chance, simply none at all, of me cooperating in the genetic program."

"You did. But so long as you are alive and fertile, I am bound to take into account the possibility that you might change your mind. I can't let you risk your life, therefore."

"Well! How are you going to stop me? You can't coerce me-I know the law."

"No...no, it's true that I can't prevent you from risking your valuable life, but I can remove the danger, and shall. The members of the Survivors Club will be picked up at once."

"But, but-look, Claude. If you do that today, you haven't a full case against them. The proper thing to do is to wait until we know all about them. Arresting this one group might mean that a hundred or a thousand others would simply take cover more thoroughly."

"I know that. It's the chance the government will have to take. But we won't risk your germ plasm."

Hamilton threw out his hands. "Damn it, Claude. This is blackmail. That's what it is-blackmail! It's sheer coercion."

"Not at all. I do not plan to do a thing...to you."

"But it is, just the same."

"Suppose we compromise."

"How?"

"Your life is your own. If you want to lose it, playing Fearless Frank, you may. My interest is in your potentialities as an ancestor. My professional interest, that is. Personally, I like you and prefer that you live a long and happy life. But that's beside the point. If you would deposit in the plasm bank a few million of your gametes, I would be willing not to interfere."

"But that's just what I was saying! You are trying to blackmail me into cooperating."

"Not so hasty. The life cells you leave with me would not be stirred into being without your consent. They would remain in escrow and you could break the escrow at will-unless you are killed in this adventure. In that case, I will use them to continue the genetic policy."

Hamilton sat down again. "Let's get this straight. You wouldn't touch them, if I don't get knocked over. No tricks?"

"No tricks."

"When it's over, I can withdraw them. Still no tricks?"

"Still no tricks."

"You wouldn't frame me into a position where I would be darned near certain to be killed, I suppose? No, you wouldn't do that. All right, I agree! I'll bet my ability to stay alive when the shooting starts against your chance to use my deposit."

When Mordan returned to his office, he sent for his chief technician. He caused her to leave the building with him, found a suitable bit of neutral ground where there was no chance of being overheard-a bench in a deserted corner of North roofpark-and told her of his talk with Hamilton.

"I suppose you told him that all this about the Survivors Club was no news to us."

"No, " Mordan said judiciously, "no, I can't say that I did. He didn't ask me."

"Mmmm...You know, chief, you are as crooked as a random incidence curve. A sophist."

"Why, Martha!" Nevertheless his eyes twinkled.

"Oh, I'm not criticizing. You've talked him into a position whereby we stand a much better chance of getting on with the work. Just the same, you did it by letting him think that we didn't already know all about this pipsqueak conspiracy."

"We don't know 'all about it,' Martha. He'll be useful. He has already dug up one significant fact. There is a leak in our own office."

"Um, yes. That's why you dragged me away from the clinic. Well, there'll be some changes made."

"Not too hastily. We'll assume that you can trust any of the women. This scheme, by its nature, is masculine. Women are not a part of it and their interests aren't considered. But be wary of the men on the staff. I think you had better handle the deposit of Hamilton's plasm yourself-today. Better keep an eye on the women, though."

"I shall. Honest, chief, don't you think you should have told him what he was getting into?"

"You forget that it's not my secret."

"No, I suppose not. Just the same, he's much too good stock to risk in such games. Why do you think they recruited him?"

"He thinks it's because he's a handy man with a gun and rich as well. But I think you have answered your own question-he's starline stock. He's good breeding material. The 'Survivors' aren't entirely fools."

"Oh ho! I hadn't thought of that. Well, I still say it's a damn shame to risk him in such business."

"Public custodians must not permit themselves the luxury of personal sentimentality, Martha. They have to take the long view."

"Hmmm...There is something a little terrifying about a man with too long a view."

CHAPTER SIX

"We don't speak the same lingo"

HAMILTON FELIX discovered that a conspirator can be a busy person, especially if he is also engaged in counter-conspiracy. He tried to present a convincing picture to McFee Norbert and his other associates in the Survivors Club of an enthusiastic neophyte, anxious in every way to promote the cause. Indoctrination classes, dull in themselves but required before advancement in the organization could be expected, took a good deal of time. He endured these patiently, trying his best to maintain actually the frame of mind of romantic acceptance during instruction, in order that his questions and reactions in general would arouse no suspicion.

In addition to lessons in the principles of the New Order new members were assigned tasks to perform. Since the organization was ruled with an absolute fromthe-top-down discipline, the reasons for the tasks were never explained nor were questions permitted. The assigned job might actually have significance to the conspiracy, or it might simply be a test, with every person concerned in the matter actually a brother clubmember. The recruit had no way of knowing.

Hamilton saw what happened to one candidate who neglected to take the instruction seriously.

He was tried in the presence of the chapter. Attendance on the part of junior members was compulsory. McFee Norbert acted as prosecutor and judge. The accused was not represented by spokesman, but was permitted to explain his actions.

He had been directed to deliver in person a specific message to a specific person. This he had done, but recognizing the man to whom he had been sent as one he had seen at the club, he had revealed himself. "You had not been told that this man was one in whom you could confide?" McFee persisted.

"No, but he—"

"Answer me."

"No, I had not been told that."

McFee turned to the company present and smiled thinly. "You will note, " he stated, "that the accused had no means whatsoever of knowing the exact status of the man he was to contact. He might have been a brother we suspected and wished to test; he might have been a government operative we had unmasked; the accused might have been misled by a chance resemblance. The accused had no way of knowing. Fortunately the other man was none of these things, but was a loyal brother of superior rank."

He turned back to the accused. "Brother Hornby Willem, stand up." The accused did so. He was unarmed.

"What is the first principle of our doctrines?"

"The Whole is greater than the parts."

"Correct. You will understand, then, why I find it necessary to dispense with you."

"But I didn't—" He got no further. McFee burned him down where he stood.

Hamilton was part of the task group which took the body and spirited it to a deserted corridor, then disposed it so that it would appear to have become deceased in an ordinary private duel, a matter of only statistical interest to police monitors. McFee commanded the group himself and earned Hamilton's reluctant admiration for the skill with which he handled the ticklish matter. Hamilton won McFee's approval by the intelligent alacrity which he showed in carrying out his orders.

"You are getting ahead fast, Hamilton," he said to him when they had returned to the clubroom. "You'll be up with me soon. By the way, what did you think of the object lesson?"

"I don't see what else you could have done, " Hamilton declared. "You can't make an omelet without breaking eggs."

"'You can't make an—' Say, that's a good one!" McFee laughed and dug him in the ribs. "Did you make it up, or hear it somewhere?"

Hamilton shrugged. He promised himself that he would cut off McFee's ears for that dig in the ribs-after all this was over.

He reported the matter in detail, through devious channels, to Mordan, including his own part as an accessory before and after the fact. Getting his reports to Mordan occupied a good portion of his time and thoughts. Neither of his secret lives could be permitted to show above water. His daily conduct had to conform, superficially, with his public persona; it was necessary to continue his social life as usual, see his agent when his affairs required it, be seen in public in his habitual manner. It is not necessary to enumerate the varied means by which he found safe channels of communication to Mordan in the midst of this pattern; the methods of intrigue have varied little through the millennia. One example will suffice; Mordan had provided him with a tube address to which (he maintained) messages might be safely sent. He dare not assume that it was safe to stat a letter over his own telephone, but he could and did assume that a public phone picked at random could be used for dictation recording. The spool containing his report would then be consigned at once to the anonymity of the postal system.

Longcourt Phyllis took up much of his free time. He freely admitted that the woman intrigued him; he did not admit even to himself that she represented anything more than diversion to him. Nevertheless he was quite likely to be found waiting for her at the end of her working day. For she was a working woman-four hours a day, seven days a week, forty weeks a year, as a practical psychopediatrician in the Wallingford Infant Development Center.

Her occupation disturbed him a little. Why anyone should voluntarily associate day after day with a mob of yelling sticky little brats was beyond him. She seemed normal otherwise-normal but stimulating.

He was too preoccupied to take much interest in the news of the world these days, which was why he did not follow the career of J. Darlington Smith, the "Man from the Past, " very closely. He was aware that Smith had been a news sensation for a few days, until crowded out by lunar field trials, and a report (erroneous) of intelligent life on Ganymede. The public soon filed him away with the duckbill platypus and the mummy of Rameses II-interesting relics of the past no doubt, but nothing to get excited about. It might have been different if his advent had been by means of the often discussed and theoretically impossible time travel, but it was nothing of the sort-simply an odd case of suspended animation. A sight-sound record from the same period was just as interesting-if one were interested.

Hamilton had seen him once, for a few minutes, in a newscast. He spoke with a barbarous accent and was dressed in his ancient costume, baggy pantaloons described by the interlocutor as "plus fours" and a shapeless knitted garment which covered his chest and arms. None of which prepared Hamilton for the reception of a stat relating to J. Darlington Smith.

"Greetings," it began, *etc. etc.* The gist of it was that the interlocutor appointed by the Institution as temporary guardian for Smith desired that Hamilton grant the favor of an hour of his no-doubt valuable time to Smith. No explanation.

In his bemused frame of mind his first impulse was to ignore it. Then he recalled that such an act would not have fitted his former, pre-intrigue, conduct. He would have seen the barbarian, from sheer curiosity.

Now was as good a time as any. He called the Institution, got hold of the interlocutor, and arranged for Smith to come to his apartment at once. As an afterthought he called Monroe-Alpha, he having remembered his friend's romantic interest in Smith. He explained what was about to take place. "I thought you might like to meet your primitive hero."

"My hero? What do you mean?"

"I thought you were telling me what a bucolic paradise he came from?"

"Oh, that! Slight mistake in dates. Smith is from 1926. It seems that gadgeting was beginning to spoil the culture, even then."

"Then you wouldn't be interested in seeing him?"

"Oh, I think I would. It was a transition period. He may have seen something of the old culture with his own eyes. I'll be over, but I may be a little late."

"Fine. Long life." He cleared without waiting for a reply. Smith showed up promptly, alone. He was dressed, rather badly, in modern clothes, but was unarmed.

"I'm John Darlington Smith, " he began.

Hamilton hesitated for a moment at the sight of the brassard, then decided to treat him as an equal. Discrimination, he felt, under the circumstances would be sheer unkindness. "I am honored that you visit me, sir."

"Not at all. Awfully good of you, and so forth."

"I had expected that there would be someone with you."

"Oh, you mean my nursemaid." He grinned boyishly. He was, Hamilton decided, perhaps ten years younger than Hamilton himself-discounting the years he had spent in stasis. "I'm beginning to manage the lingo all right, well enough to get around."

"I suppose so, " Hamilton agreed. "Both lingos are basically Anglic."

"It's not so difficult. I wish lingo were the only trouble I had."

Hamilton was a little at a loss as to how to handle him. It was utterly inurbane to display interest in a stranger's personal affairs, dangerous, if the stranger were an armed citizen. But this lad seemed to invite friendly interest. "What is troubling you, sir?"

"Well, lots of things, hard to define. Everything is different."

"Didn't you expect things to be different?"

"I didn't expect anything. I didn't expect to come to...to now."

"Eh? I understand that-never mind. Do you mean that you did not know that you were entering the 'stasis'?"

"I did and I didn't."

"What do you mean?"

"Well...Listen, do you think you could stand a long story? I've told this story about forty-eleven times, and I know it doesn't do any good to try to shorten it. They just don't understand."

"Go ahead."

"Well, I'd better go back a little. I graduated from Eastern U in the spring of '26 and—"

"You what?"

"Oh, dear! You see in those days the schools—"

"Sorry. Just tell it your own way. Anything I can't pick up I'll ask you about later."

"Maybe that would be better. I had a pretty good job offered to me, selling bonds-one of the best houses on the Street. I was pretty well known-All-American back two seasons." Hamilton restrained himself, and made about four mental notes.

"That's an athletic honor, " Smith explained hastily. "You'll understand. I don't want you to think I was a football bum, though. To be sure the fraternity helped me a little, but I worked for every cent I got. Worked summers, too. And I studied. My major was Efficiency Engineering. I had a pretty thorough education in business, finance, economics, salesmanship. It's true that I got my job because Grantland Rice picked me-I mean football helped a lot to make me well known-but I was prepared to be an asset to any firm that hired me. You see that, don't you?"

"Oh, most certainly!"

"It's important, because it has a bearing on what happened afterwards. I wasn't working on my second million but I was getting along. Things were slick enough. The night it happened I was celebrating a little-with reason. I had unloaded an allotment of South American Republics—"

"Eh?"

"Bonds. It seemed like a good time to throw a party. It was a Saturday night, so everybody started out with the dinner-dance at the country club. It was the usual thing. I looked over the flappers for a while, didn't see one I wanted to dance with, and wandered into the locker room, looking for a drink. The attendant used to sell it to people he could trust."

"Which reminds me, " said Hamilton, and returned a moment later with glasses and refreshment.

"Thanks. His gin was pure bathtub, but usually reliable. Maybe it wasn't, that night. Or maybe I should have eaten dinner. Anyhow, I found myself listening to an argument that was going on in one end of the room. One of these parlor bolsheviks was holding forth-maybe you still have the type? Attack anything, just so long as it was respectable and decent."

Hamilton smiled.

"You do, eh? He was one of 'em. Read nothing but the American Mercury and Jurgen and then knew it all. I'm not narrow-minded. I read those things, too, but I didn't have to believe 'em. I read the Literary Digest, too, and the Times, something they would never do. To get on, he was panning the Administration and predicting that the whole country was about to go to the bow-wows...go to pieces. He didn't like the Gold Standard, he didn't like Wall Street, he thought we ought to write off the War Debts.

"I could see that some of our better members were getting pretty sick of it, so I jumped in. "They hired the money, didn't they, ' I told

him.

"He grinned at me-sneered I should say. 'I suppose you voted for him.'

"'I certainly did, ' I answered, which was not strictly true; I hadn't gotten around to registering, such things coming in the middle of the football season. But I wasn't going to let him get away with sneering at Mr. Coolidge. 'I suppose you voted for Davis.'

"'Not likely, ' he says. 'I voted for Norman Thomas. '

"Well, that burned me up. 'See here, ' I said, 'the proper place for people like you is in Red Russia. You're probably an atheist, to boot. You have the advantage of living in the greater period in the history of the greatest country in history. We've got an Administration in Washington that understands business. We're back to normalcy and we're going to stay that way. We don't need you rocking the boat. We are levelled off on a plateau of permanent prosperity. Take it from me-Don't Sell America Short!'" I got quite a burst of applause.

"'You seem pretty sure of that,' he says, weakly.

"'I ought to be,' I told him. 'I'm in the Street. '

"'Then there is no point in me arguing,' he said, and just walked out.

"Somebody poured me another drink, and we got to talking. He was a pleasant, portly chap, looking like a banker or a broker. I didn't recognize him, but I believe in establishing contacts. 'Let me introduce myself, ' he said. 'My name is Thadeus Johnson.'

"I told him mine."

"'Well, Mr. Smith, ' he said, 'you seem to have confidence in the future of our country.'

"I told him I certainly did.

"'Confident enough to bet on it?'

"'At any odds you want to name, money, marbles, or chalk.'

"'Then I have a proposition that might interest you. '

"I pricked up my ears. 'What is it?' I said.

"'Could you take a little joyride with me?' he said. 'Between the saxophones and those Charleston-crazy kids, a man can't hear himself think.' I didn't mind-those things don't break up until 3 A. M.; I knew I could stand a spell of fresh air. He had a long, low wicked-looking Hispano-Suiza. Class.

"I must have dozed off. I woke up when we stopped at his place. He took me in and fixed me a drink and told me about the stasis-only he called it a 'level-entropy field. ' And he showed it to me. He did a lot of stunts with it, put a cat in it, left it in while we killed a drink. It was all right.

"'But that isn't the half of it, ' he said. 'Watch. ' He took the cat and threw it, right through where the field would be if it was turned on.

When the cat was right spang in the center of the area, he threw the switch. We waited again, a little longer this time. Then he released the switch. The cat came sailing out, just the way it was heading when we saw it last. It landed, spitting and swearing.

"'That was just to convince you, ' he said, 'that inside that field, time doesn't exist-no increase of entropy. The cat never knew the field was turned on. '

"Then he changed his tack. "Jack, " he says, 'what will the country be like in twenty-five years?'

"I thought about it. 'The same-only more so,' I decided.

"'Think A. T. & T. will still be a good investment?'

"'Certainly!'

"'Jack, ' he says softly, "would you enter that field for ten shares of A. T. & T. ?',

"'For how long?'

"'Twenty-five years, Jack.'

"Naturally, it takes a little time to decide a thing like that. Ten of A.T. & T. didn't tempt me; he added ten of U. S. Steel. And he laid 'em out on the table. I was as sure as I'm standing here that the stock would be worth a lot more in a quarter of a century, and a kid fresh out of college doesn't get blue chips to play with very easily. But a quarter of a century! It was like dying. When he added ten of National City, I said, 'Look Mr. Johnson, let me try it for five minutes. If it didn't kill the cat, I ought to be able to hold my breath that long.'

"He had been filling out the assignments in my name, just to tempt me. He said, 'Surely, Jack.' I stepped to the proper spot on the floor while I still had my courage up. I saw him reach for the switch.

"That's all I know."

Hamilton Felix sat up suddenly. "Huh? How's that?"

"That's all I know," repeated Smith. "I started to tell him to go ahead, when I realized he wasn't there any more. The room was filled with strangers, it was a different room. I was here. I was now."

"That," said Hamilton, "deserves another drink."

They drank it in silence.

"My real trouble is this," said Smith. "I don't understand this world at all. I'm a business man, I'd like to go into business here. (Mind you, I've got nothing against this world, this period. It seems okay, but I don't understand it.) I can't go into business. Damn it, nothing works the same. All they taught me in school, all I learned on the Street, seems utterly foreign to the way they do business now."

"I should think that business would be much the same in any age-fabrication, buying, selling."

"Yes and no. I'm a finance man-and, damn it, finance is cockeyed nowadays!"

"I admit that the details are a little involved," Hamilton answered, "but the basic principles are evident enough. Say-I've a friend coming over who is the chief mathematician for the department of finance. He'll straighten you out."

Smith shook his head decisively. "I've been experted to death. They don't speak my lingo."

"Well," said Hamilton, "I might tackle the problem myself."

"Would you? Please?"

Hamilton thought about it. It was one thing to kid sobersided Clifford about his "money-machine"; another matter entirely to explain the workings of finance economics to...to the hypothetical Man from Arcturus. "Suppose we start this way," he said. "It's basically a matter of costs and prices. A business man manufactures something. That costs him money-materials, wages, housing, and so forth. In order to stay in business he has to get his costs back in prices. Understand me?"

"That's obvious."

"Fine. He has put into circulation an amount of money exactly equal to his costs."

"Say that again."

"Eh? It's a simple identity. The money he has had to spend, put into circulation, is his costs."

"Oh...but how about his profit?"

"His profit is part of his cost. You don't expect him to work for nothing."

"But profits aren't costs. They're...they're profits."

Hamilton felt a little baffled. "Have it your own way. Costs-what you rail 'costs'—plus profit must equal price. Costs and profits are available as purchasing power to buy the product at a price exactly equal to them. That's how purchasing power comes into existence."

"But...but he doesn't buy from himself."

"He's a consumer, too. He uses his profits to pay for his own and other producers' products."

"But he owns his own products."

"Now you've got me mixed up. Forget about him buying his own products. Suppose he buys what he needs for himself from other business men. It comes out the same in the long run. Let's get on. Production puts into circulation the amount of money-exactly-needed to buy the product. But some of that money put into circulation is saved and invested in new production. There it is a cost charge against the new production, leaving a net shortage in necessary purchasing power. The government makes up that shortage by issuing new money."

"That's the point that bothers me," said Smith. "It's all right for the government to issue money, but it ought to be backed by something-gold, or government bonds."

"Why, in the Name of the Egg, should a symbol represent anything but the thing it is supposed to accomplish?"

"But you talk as if money was simply an abstract symbol."

"What else is it?"

Smith did not answer at once. They had reached an impasse of different concepts, totally different orientations. When he did speak it was to another point. "But the government simply gives away all this new money. That's rank charity. It's demoralizing. A man should work for what he gets. But forgetting that aspect for a moment, you can't run a government that way. A government is just like a business. It can't be all outgo and no income."

"Why can't it?' There's no parallel between a government and a business. They are for entirely different purposes."

"But it's not sound. It leads to bankruptcy. Read Adam Smith."

"I don't know this Adam Smith. Relative of yours?"

"No, he's a—Oh, Lord!"

"Crave pardon?"

"It's no use," Smith said. "We don't speak the same lingo."

"I am afraid that is the trouble, really. I think perhaps you should go to see a corrective semantician."

"Anyhow," Smith said, one drink later, "I didn't come here to ask you to explain finance to me. I came for another purpose."

"Yes?"

"Well, you see I had already decided that I couldn't go into finance. But I want to get to work, make some money. Everybody here is rich-except me."

"Rich?"

"They look rich to me. Everybody is expensively dressed. Everybody eats well-Hell! They give food away-it's preposterous."

"Why don't you live on the dividend? Why worry about money?"

"I could, of course, but, shucks, I'm a working man. There are business chances all around. It drives me nuts not to do something about them. But I can't-I don't know the ropes. Look-there is just one thing else besides finance that I know well. I thought you might be able to show me how to capitalize on it."

"What is it?"

"Football."

"Football?"

"Football. I'm told that you are the big man in games. Games 'tycoon' they called you." Hamilton conceded it wordlessly. "Now football is a game. There ought to be money in it, handled right."

"What sort of a game? Tell me about it."

Smith went into a long description of the sport. He drew diagrams of plays, describing tackling, blocking, forward passing. He described the crowds and spoke of gate receipts. "It sounds very colorful," Hamilton admitted. "How many men get killed in an engagement?"

"Killed? You don't hurt anybody-barring a broken collar bone, or so."

"We can change that. Wouldn't it be better if the men defending the ball handlers were armored? Otherwise we would have to replace them with every maneuver."

"No, you don't understand. It's-well..."

"I suppose I don't," Hamilton agreed, "I've never seen the game played. It's a little out of my line. My games are usually mechanicals-wagering machines."

"Then you aren't interested?"

Hamilton was not, very. But he looked at the youth's disappointed face and decided to stretch a point. "I'm interested, but it isn't my line. I'll put you in touch with my agent. I think he could work something out of it. I'll talk with him first."

"Say, that's white of you!"

"I take it that means approval. It's no trouble to me, really."

The annunciator warned of a visitor-Monroe-Alpha. Hamilton let him in, and warned him, sotto voce, to treat Smith as an armed equal. Some time was consumed in polite formalities, before Monroe-Alpha got around to his enthusiasm. "I understand that your background is urban industrial, sir."

"I was mostly a city boy, if that's what you, mean."

"Yes, that was the implication. I was hoping that you would be able to tell me something of the brave simple life that was just dying out in your period."

"What do you mean? Country life?"

Monroe-Alpha sketched a short glowing account of his notion of rustic paradise. Smith looked exceedingly puzzled. "Mr. Monroe," he said, "somebody has been feeding you a lot of cock-and-bull, or else I'm very much mistaken. I don't recognize anything familiar in the picture."

Monroe-Alpha's smile was just a little patronizing. "But you were an urban dweller. Naturally the life is unfamiliar to you."

"What you describe may be unfamiliar, but the circumstances aren't. I followed the harvest two summers, I've done a certain amount of camping, and I used to spend my summers and Christmases on a farm when I was a kid. If you think there is anything romantic, or desirable per se, in getting along without civilized comforts, well, you just ought to try tackling a two-holer on a frosty morning. Or try cooking a meal on a wood-burning range."

"Surely those things would simply stimulate a man. It's the primitive, basic struggle with nature."

"Did you ever have a mule step on your foot?"

"No, but—"

"Try it some time. Honest-I don't wish to seem impertinent, but you have your wires crossed. The simple life is all right for a few days vacation, but day in and day out it's just so much dirty backbreaking drudgery. Romantic? Hell, man, there's no time to be romantic about it, and damned little incentive."

Monroe-Alpha's smile was a little bit forced. "Perhaps we aren't talking about the same thing. After all, you came from a period when the natural life had already been sullied by overemphasis on machines. Your evaluations were already distorted."

Smith himself was beginning to get a little heated. "I hate to tell you, but you don't know what you're talking about. Country life in my day, miserable as it was, was tolerable in direct proportion to the extent to which it was backed by industrialization. They may not have had electric light and running water, but they had Sears Roebuck, and everything that implies."

"Had what?" asked Hamilton.

Smith took time out to explain mail-order shopping. "But what you're talking about means giving up all that-just the noble primitive, simple and self-sufficient. He's going to chop down a tree-who sold him the ax? He wants to shoot a deer-who made his gun? No, mister, I know what I'm talking about-I've studied economics." (That to Monroe-Alpha, thought Hamilton, with a repressed grin.) "There never was and there never could be a noble simple creature such as you described. He'd be an ignorant savage, with dirt on his skin and lice in his hair. He would work sixteen hours a day to stay alive at all. He'd sleep in a filthy hut on a dirt floor. And his point of view and his mental processes would be just two jumps above an animal."

Hamilton was relieved when the discussion was broken into by another chime from the annunciator. It was just as well-Cliff was getting a little white around the lips. He couldn't take it. But, damn it, he had it coming to him. He wondered how a man could be as brilliant as Monroe-Alpha undoubtedly was-about figures-and be such a fool about human affairs.

The plate showed McFee Norbert. Hamilton would have liked not to have admitted him, but it was not politic. The worm had the annoying habit of dropping in on his underlings, which Hamilton resented, but was helpless to do anything about-as yet.

McFee behaved well enough, for McFee. He was visibly impressed by Monroe-Alpha, whose name and position he knew, but tried not to show it. Toward Smith he was patronizingly supercilious. "So you're the man from out of the past? Well, well-how amusing! You did not time it very well."

"What do you mean?"

"Ah, that would be telling! But ten years from now might have been a better time-eh, Hamilton?" He laughed.

"Perhaps," Hamilton answered shortly, and tried to turn attention away from Smith. "You might talk to Monroe-Alpha about it. He thinks we could improve things." He regretted the remark at once, for McFee turned to Monroe-Alpha with immediate interest.

"Interested in social matters, sir?"

"Yes-in a way."

"So am I. Perhaps we can get together and talk."

"It would be a pleasure, I'm sure, Felix, I must leave you now."

"So must I," McFee said promptly. "May I drop you off?"

"Don't trouble."

Hamilton broke in. "Did you wish to see me, McFee?"

"Nothing important. I hope to see you at the Club tonight."

Hamilton understood the circumlocution. It was a direct order to reportat McFee's convenience. McFee turned back to Monroe-Alpha, adding, "No trouble at all. Right on my way."

Hamilton watched them leave together with vague discomfort.

CHAPTER SEVEN

"Burn him down at once—"

LONGCOURT PHYLLIS showed up for a moment in the waiting room of the development center and spoke to Hamilton. "Hello, Filthy."

"H'lo, Phil."

"Be with you in a moment. I've got to change." She was dressed in complete coveralls, with helmet. An inhaler dangled loose about her neck.

"Okay."

She returned promptly, dressed in more conventional and entirely feminine clothes. She was unarmed. He looked her over approvingly. "That's better," he said. "What was the masquerade?"

"Hmm? Oh, you mean the aseptic uniform. I'm on a new assignment-control naturals. You have to be terrifically careful in handling them. Poor little beggars!"

"Why?"

"You know why. They're subject to infections. We don't dare let them roll around in the dirt with the others. One little scratch, and anything can happen. We even have to sterilize their food."

"Why bother? Why not let the weak ones die out?"

She looked annoyed. "I could answer that conventionally by saying that the control naturals are an invaluable reference plane for genetics-but I won't. The real point is that they are human beings. They are just as precious to their parents as you were to yours, Filthy."

"Sorry. I didn't know my parents."

She looked suddenly regretful. "Oh-Felix, I forgot!"

"No matter. I never could see," he continued, "why you want to bury yourself in that cage of monkeys. It must be deadly."

"Huh uh. Babies are fun. And they're not much trouble. Feed 'em occasionally, help them when they need it, and love them a lot. That's all there is to it."

"I've always favored the bunghole theory myself."

"The what?"

"You take the child at an early age and place it in a barrel. You feed it through the bunghole. At the age of seventeen, you drive in the bung."

She grinned at him. "Filthy, for a nice man you have a nasty sense of humor. Seriously, your method leaves out the most essential part of a child's rearing-the petting he gets from his nurses."

"I don't seem to recall much of it. I thought the basic idea was to take care of its physical needs and otherwise leave it strictly alone."

"You're way out of date. They used to have a notion of that sort, but it was silly-contra-biological." It occurred to her that Hamilton's faulty orientation might have its origin in the injudicious application of that outmoded, unfounded theory. The natural urges of mothers had prevented it ever being applied thoroughly in most cases, but his case was different. He had been what was, to her, the most tragic thing on earth-a baby that never left the development center. When she found one of these exceptions among her own charges she lavished on it extra affection and a little over. But she said nothing of this to him.

"Why," she continued, "do you think animals lick their young?"

"To cleanse them, I suppose."

"Nonsense! You can't expect an animal to appreciate cleanliness. It's a caress, an expression of instinctive affection. So-called instincts are instructive, Felix. They point to survival values."

He shrugged. "We're here."

They entered the restaurant-a pay-restaurant-he had chosen, and went to a private room reserved for them. They started the meal in silence. His usual sardonic humor was dampened by the thing in the back of his mind. This business of the Survivors Club-he had entered into it lightheartedly, but now it was developing ominous overtones which worried him. He wished that Mordan-the government, rather—would act.

He had not gotten ahead as fast in the organization as he had hoped. They were anxious to use him, willing to accept, to demand, his money, but he still had not obtained a clear picture of the whole network. He still did not know who was senior to McFee Norbert, nor did he know the numbers of the whole organization.

Meantime, daily the tightrope became more difficult to walk.

He had been permitted to see one thing which tended to show that the organization was older and larger than he had guessed. McFee Norbert had escorted him personally, as one of the final lessons in his education in the New Order, to a place in the country, location carefully concealed from Hamilton, where he was permitted to see the results of clandestine experiments in genetics.

Beastly little horrors!

He had viewed, through one-way glass, "human" children whose embryonic gills had been retained and stimulated. They were at home in air or water, but required a humid atmosphere at all times. "Useful on Venus, don't you think?" McFee had commented.

"We assumed too readily," he continued, "that the other planets in this system were not useful. Naturally the leaders will live here, most of the time, but with special adaptation, quite useful supporting types could remain permanently on any of the planets. Remind me to show you the antiradiation and low-gravity types."

"I'd be interested," Hamilton stated truthfully but incompletely. "By the way, where do we get our breeding stock?"

"That's an impertinent and irrelevant question, Hamilton, but I'll answer you. You are a leader type-you'll need to know eventually. The male plasm we supply ourselves. The females were captured among the barbarians-usually."

"Doesn't that mean rather inferior stock?"

"Yes, surely. These are simple experiments. None of them will be retained. After the Change, it will be another story. We'll have superior stock to start with-you, for example."

"Yes, of course." He did not care to pursue that line. "No one has ever told me just what our plans are for the barbarians."

"No need for juniors to discuss it. We'll save some of them for experimentation. In time, the rest will be liquidated."

A neat but sweeping plan, Hamilton had thought. The scattered tribes of Eurasia and Africa, fighting their way back up to civilization after the disasters of the Second War, consigned without their consent or knowledge to the oblivion of the laboratory or death. He decided to cut off McFee's ears a bit at a time.

"This is possibly the most stimulating exhibit," McFee had continued, moving on. Hamilton had looked where he was directed. The exhibit appeared to be a hydrocephalic idiot, but Hamilton had never seen one. His eyes saw an obviously sick child with a head much too big for it. "A tetroid type," McFee stated. "Ninety-six chromosomes. We once thought that was the secret of the hyperbrain, but we were mistaken. The staff geneticists are now on the right track."

"Why don't you kill it?"

"We will, presently. There is still something to be learned from it."

There were other things-things that Hamilton preferred not to think about. He felt now that, if he managed to get through that test without displaying his true feelings, he had been damned lucky!

The proposed extermination of the barbarians reminded him of another matter. Most curiously, the strange advent of John Darlington Smith had had an indirect effect on the plans of the Survivors Club. The compelling logic of the plans for the New Order called automatically for the deaths of the inefficient and sickly control naturals, as well as the deaths of synthesists, recalcitrant geneticists, counterrevolutionaries in general.

The plans for the latter aroused no opposition to speak of, but many of the club members had a sentimental fondness for control naturals. They regarded them with the kindly paternal contempt that members of a ruling class frequently feel for subject "inferior" races. Just what to do about this psychological problem had delayed the zero hour of the Change.

The Adirondack stasis gave a means. McFee had announced the tactical change the evening of the very day that Smith had called on Hamilton. Control naturals were to be placed in stasis for an indefinite period. It was an entirely humane procedure; the prisoners would be unhurt by their stay and would emerge in the distant future. McFee had asked Hamilton what he thought of the scheme, after the meeting.

"It should be popular," Hamilton had admitted. "But what happens after they are let out?"

McFee had looked surprised, then laughed. "We are practical men, you and I," he had said in a low voice.

"You mean..."

"Surely. But keep your mouth shut." Phyllis decided that it was time to interrupt his morose preoccupation. "What's eating you, Filthy?" she inquired. "You haven't said two words since we sat down."

He returned to his surroundings with a start. "Nothing important," he lied-wishing that he could unburden himself to her. "You haven't been chatty yourself. Anything on your mind?"

"Yes," she admitted, "I've just selected the name for our son."

"Great jumping balls of fire! Aren't you being just a little premature? You know damned well we aren't ever going to have children."

"That remains to be seen."

"Hummph! What name have you picked for this hypothetical offspring?"

"Theobald—'Bold for the People,'" she answered dreamily --

"'Bold for the—' better make it Jabez."

"Jabez? What does it mean?"

"'He will bring sorrow.'"

"'He will bring sorrow!' Filthy, you're filthy!"

"I know it. Why don't you forget all this business, give that noisy nursery a miss, and team up with me?"

"Say that slowly."

"I'm suggesting matrimony."

She appeared to consider it. "Just what do you have in mind?"

"You write the ticket. Ortho-spouse, registered companion, legal mate-any contract you want."

"To what," she said slowly, "am I to attribute this sudden change of mind?"

"It isn't sudden. I've been thinking about it ever since...ever since you tried to shoot me."

"Something's wrong here. Two minutes ago you were declaring that Theobald was impossibly hypothetical."

"Wait a minute," he said hastily. "I didn't say a word about children. That's another subject. I was talking about us."

"So? Well, understand this, Master Hamilton. When I get married, it will not be to a man who regards it as sort of a super-recreation." She turned her attention back to her dinner.

A thick silence followed for several minutes. He broke it.

"Sore at me?"

"No. Filthy, you're such a rat."

"Yeah, I know that, top. Finished?"

"Yes. Coming home with me?"

"I'd like to, but I can't tonight."

After he left her he went straight to the Hall of the Wolf. A full roundup had been ordered for that evening, no reason given but no excuses accepted. It happened also to be his first meeting since he had been promoted to the minor dignity of section leader.

The door of the clubroom stood open. A few members assembled inside were being moderately noisy and convivial, in accordance with doctrine. It was even possible that a stranger, or two, was present. Such presence was desired when nothing was going on. Later, they would be gently dismissed.

Hamilton wandered in, said hello to a couple of people, drew himself a stein of beer, and settled down to watch a dart game taking place in one end of the lounge.

Some time later, McFee bustled in, checked over the company by sight, picked up two section leaders by eye, and signalled them with a jerk of his head to get rid of the one remaining outsider. The stranger had been well lubricated; he was reluctant to leave, but presented no real problem. When he was gone and the doorway had relaxed, he said, "To business, brothers." To Hamilton he added, "You attend conference tonight, you know."

Hamilton started to acknowledge the order, when he felt a touch on his shoulder and a voice behind him. "Felix. Oh, Felix!"

He turned around, half recognizing the voice. Nevertheless, it was only his animal quickness which enabled him to cover up in time. It was Monroe-Alpha.

"I knew you were one of us," his friend said happily. "I have been wondering when—"

"Get to your section room," McFee said sternly.

"Yes, sir! See you later, Felix."

"Sure thing, Cliff," Hamilton responded heartily. He followed McFee into the council room, glad of the brief chance to get his raging thoughts in order. Cliff! Great Egg-Cliff! What in the Name of Life was he doing in this nest of vermin? Why hadn't he seen him? He knew why, of course-a member of one section was extremely unlikely to meet a member of another. Different instruction nights and so on. He cursed the whole system. But why Cliff? Cliff was the gentlest, kindest man who ever packed a gun. Why would he fall for this rot?

He considered the idea that Monroe-Alpha might be an agent provocateur, like himself-and amazed to find him there. Or perhaps not amazed-he might know Hamilton's status even though Hamilton did not know his. No, that did not make sense. Cliff didn't have the talent for the deception required. His emotions showed on his sleeve. He was as pellucid as air. He couldn't act worth a damn.

McFee was speaking. "Leaders, I have been ordered to transmit to you great news!" He paused. "The Change is upon us."

They stirred, alert, attentive. Hamilton sat up. Hell's delight! he thought, the ship about to raise and I have to be saddled with that holy fool Cliff. "Bournby!"

"Yes, sir."

"You and your section-prime communications. Here's your spool. Memorize it at once. You'll cooperate with the chief of propaganda." "Right."

"Steinwitz, your section is assigned to Power Center. Take your spool. Harrickson!"

"Yes, sir."

It went on and on, Hamilton listened with half his mind, face impassive, while he tried to think himself out of his predicament. Mordan had to be warned-that was primary!—at the earliest possible moment at which he could break clear. After that, if there was some way to save the fool from his folly, he would try it. "Hamilton!" "Yes, sir."

"Special assignment. You will—"

"Just a moment, Chief. Something has come to my attention that constitutes a danger to the movement."

"Yes?" McFee's manner was impatient and frosty. "Junior member Monroe-Alpha. I want him assigned to me."

"Impossible. Attend your orders."

"I am not being undisciplined," Hamilton stated evenly. "I happen to know this man better than any of you. He is erratic and inclined to be hysterical. He's a deviant type, but personally devoted to me. I want him where I can keep an eye on him."

McFee tapped the table impatiently. "Utterly impossible. Your zeal exceeds your sense of subordination. Don't repeat the error. Furthermore, if what you say is true, he is better off where he is-you couldn't use him. Mosely-you're his section leader. Watch him. If necessary, burn him down."

"Yes, sir."

"Now, Hamilton—" Hamilton realized with sinking heart that his attempt to find a way out for Monroe-Alpha had simply placed his friend in greater jeopardy. He was snapped to attention by McFee's succeeding words. "At the time of action, you will get yourself admitted to the Moderator for Genetics-Mordan. Burn him down at once, being particularly careful not to give him a chance to draw."

"I know his speed," Hamilton said dryly.

McFee relaxed a trifle. "You need no help on the assignment, as you are one man who can get in to see him easily-as you and I know."

"That's correct."

"So it's just as well that you haven't been assigned a section. I imagine you'll enjoy this assignment; you have a personal interest, I think." He favored Hamilton with a sly smile.

Very, very small pieces, thought Hamilton. But he managed an appropriately grim smile and answered, "There's something in what you say."

"Ah, yes! That's all, gentlemen. No one is to leave until I give the word-then by ones and twos. To your sections!"

"When do we start?" someone ventured.

"Read your spools."

Hamilton stopped McFee on the way to the lounge. "I have no spool. When is the zero time?"

"Oh, yes. As a matter of fact, it hasn't been assigned yet. Be ready from now on. Stay where you can be reached."

"Here?"

"No. At your apartment."

"I'll leave, then."

"No, don't. Leave when the rest do. Come have a drink with me and help me relax. What was that song about the Rocket Pilot's Children? It tickled me."

Hamilton spent the next hour helping The Great Man relax.

Monroe-Alpha's section was dismissed shortly before McFee released them. Hamilton used his new seniority to see to it that he and his friend were among the first groups to filter out. Once outside Monroe-Alpha, tense and excited by the prospect of action, started to babble. "Shut up," Hamilton snapped.

"Why, Felix!"

"Do as you're told," he said savagely. "To your apartment."

Monroe-Alpha continued in sulky silence, which was just as well. Hamilton wanted no talk with him until he had him alone. In the meantime he had his eye open for a telephone. The distance was short-a few flights and a short slide-away. They passed two booths. The first was occupied, the second showed a glowing transparency: OUT OF SERVICE. He swore to himself and continued.

They passed a monitor, but he despaired of getting his message across to a routine-indoctrinated mind. They hurried on to Monroe-Alpha's home. Once inside and the door sealed behind them, Hamilton stepped quickly to his friend's side and relieved him of his weapon before Monroe-Alpha had time to realize what he was up to.

Monroe-Alpha stepped back in surprise. "What did you do that for, Felix?" he cried. "What's up? Don't you trust me?"

Hamilton looked him up and down. "You fool," he said bitterly. "You utter, stupid, hysterical fool!"

CHAPTER EIGHT

"Thou, beside me, in the wilderness"

"FELIX! What do you mean? What's come over you?" His expression was so completely surprised, so utterly innocent of wrongdoing, that Hamilton was momentarily disconcerted. Was it possible that Monroe-Alpha, like himself, was in it as an agent of the government and knew that Hamilton was one also?

"Wait a minute," he said grimly. "What's your status here? Are you loyal to the Survivors Club, or are you in it as a spy?"

"A spy? Did you think I was a spy? Was that why you grabbed my gun?"

"No," Hamilton answered savagely, "I was afraid you weren't a spy."

"But—"

"Get this. I am a spy. I'm in this thing to bust it up. And, damn it, if I were a good one, I'd blow your head off and get on with my work. You bloody fool, you've gummed the whole thing up!"

"But...but Felix, I knew you were in it. That was one of the things that persuaded me. I knew you wouldn't—"

"Well, I'm not! Where does that put you? Where do you stand? Are you with me, or against me?"

Monroe-Alpha looked from Hamilton's face to the gun in his fist, then back to his face. "Go ahead and shoot," he said.

"Don't be a fool!"

"Go ahead. I may be a fool-I'm not a traitor."

"Not a traitor-you! You've already sold out the rest of us."

Monroe-Alpha shook his head. "I was born into this culture. I had no choice and I owe it no loyalty. Now I've had a vision of a worthwhile society. I won't sacrifice it to save my own skin."

Hamilton swore. "'God deliver us from an idealist.' Would you let that gang of rats run the country?"

The telephone said softly but insistently, "Someone's calling. Someone's calling. Someone's—" They ignored it.

"They aren't rats. They propose a truly scientific society and I'm for it. Maybe the change will be a little harsh but that can't be helped. It's for the best—"

"Shut up. I haven't time to argue ideologies with you." He stepped toward Monroe-Alpha, who drew back a little, watching him.

Hamilton suddenly, without taking his eyes off Monroe-Alpha's face, kicked him in the groin. "Someone's calling. Someone's calling." Hamilton bolstered his gun-fast-bent over the disabled man and punched him in the pit of the stomach, not with-his fist but with stiffened fingers. It was nicely calculated to paralyse the diaphragm-and did. He dragged Monroe-Alpha to a point under the telephone, placed a knee in the small of his back, and seized his throat with the left hand.

"One move is all you'll get," he warned. With his right hand he cut in the phone. His face was close to the pick-up; nothing else would be transmitted.

McFee Norbert's face appeared in the frame. "Hamilton!" he said. "What in the hell are you doing there?"

"I went home with Monroe-Alpha."

"That's direct disobedience. You'll answer for it-later. Where's Monroe-Alpha?"

Hamilton gave a brief, false, but plausible, explanation.

"A fine time to have to do that," McFee commented. "Give him these orders: he is relieved from duty. Tell him to get far away and stay away for fortyeight hours. I've decided to take no chances with him."

"Right," said Hamilton.

"And you-do you realize how near you came to missing your orders? You should be in action ten minutes before the section group moves in. Get going."

"Now?"

"Now."

Hamilton cleared the circuit. Monroe-Alpha had started to struggle the second the phone came to life. Hamilton had ground his knee into his spine and clamped down hard on his throat, but it was a situation which could mot be maintained indefinitely.

He eased up on Monroe-Alpha a little. "You heard those orders?"

"Yes," Monroe-Alpha acknowledged hoarsely.

"You are going to carry them out. Where's your runabout?"

No answer. Hamilton dug in viciously. "Answer me. On the roof?"

"Yes."

Hamilton did not bother to answer. He took his heavy automatic from its holster and struck Monroe-Alpha behind his right ear. The man's head jerked once, then sagged limply. Hamilton turned to the phone and signalled Mordan's personal number. He waited apprehensively while distant machinery hunted, fearful that the report would come back, "NOWHERE AVAILABLE." He was relieved when the instrument reported instead, "Signalling."

After an interminable time-all of three or four seconds—Mordan's face lighted up the frame. "Oh-hello, Felix."

"Claude-the time's come! This is it."

"Yes, I know. That's why I'm here." The background behind him showed his office.

"You-knew?"

"Yes, Felix."

"But...Never mind. I'm coming over."

"Yes, certainly." He cut off.

Hamilton reflected grimly that one more surprise would be just enough to cause him to start picking shadows off the wall. But he had no time to worry about it. He rushed into his friend's bedchamber, found what he wanted immediately-small pink capsules, Monroe-Alpha's habitual relief from the peril of sleepless worry. He returned then and examined Monroe-Alpha briefly. He was still out cold.

He picked him up in his arms, went out into the corridor, and sought the lift. He passed one startled citizen on the way. Hamilton looked at him, said, "Sssh-you'll waken him. Open the lift for me, will you please?"

The citizen looked dubious, shrugged, and did as he was requested.

He found Monroe-Alpha's little skycar without trouble, removed the key from his friend's pocket, and opened it. He dumped his burden inside, set the pilot for the roof of the Clinic, and depressed the impeller bar. He had done all he could for the moment; in overcity traffic automatic operation was faster than manual. It would be five minutes, or more, before he reached Mordan, but, even at that, he had saved at least ten minutes over what it would have taken by tube and slideway.

It consoled him somewhat for the time he had wasted on Monroe-Alpha.

The man was beginning to stir. Hamilton took a cup from the cooler, filled it with water, dissolved three of the capsules in it, and went to his side. He slapped him.

Monroe-Alpha sat up. "Whassa matter?" he said. "Stop it. What's happened?"

"Drink this." Hamilton put the cup to his lips.

"What happened? My head hurts."

"It ought to-you had quite a fall. Drink it. You'll feel better."

Monroe-Alpha complied docilely. When he had finished, Hamilton watched him narrowly, wondering if he would have to slug him again before the hypnotic took hold. But Monroe-Alpha said nothing more, seemed still dazed, and shortly was sleeping soundly.

The car grounded gently.

Hamilton raised the panel of the communicator, shoved his foot inside, and pushed. There was a satisfying sound of breaking crystal and snapping wires. He set the pilot on due South, without destination, opened the door, and stepped out. He turned, reached inside, sought the impeller bar-but hesitated without depressing it. He stepped back inside and removed the selector key from the pilot. He stepped out again, depressed the impeller-and ducked. As the door slammed shut, the little runabout angled straight up, seeking cruising altitude.

He did not wait for it to go out of sight, but turned and started below.

Monroe-Alpha awoke with a dry mouth, an excruciatingly throbbing head, a nauseous feeling at his midriff, and a sense of impending disaster. He became aware of things in that order.

He knew that he was in the air, in a skycar, and alone, but how had he gotten there, why he was there, escaped him. He had had some dreadful nightmares-they seemed to have some bearing on it. There was something he should be doing.

This was the Day, the Day of the Change! That was it!

But why was he here? He should be with his section. No. No, McFee had said --

What was it he had said? And where was Hamilton? Hamilton was a spy! Hamilton was about to betray them all!

He must inform McFee at once. Where was he? No matter-call him!

It was then that he found the wrecked communicator. And the bright sunlight outside told him it was too late, too late. Whatever had come of Hamilton's treachery had already happened. Too late.

The pieces were beginning to fall into place. He recalled the ugly interview with Hamilton, the message from McFee, the fight. Apparently he had been knocked out. There was nothing left to do but to go back, turn himself in to his leader, and confess his failure.

No. McFee had given him orders to stay out, to stay away for two days. He must obey. The Whole is greater than the parts.

But those orders did not apply-McFee had not known about Hamilton.

He knew now. That was certain. Therefore, the orders did apply. What was it McFee had said? "I've decided to take no chances on him."

They didn't trust him. Even McFee knew him for what he was-a thumb-fingered idiot who could be depended on to do the wrong thing at the wrong time.

He never had been any good. All he was fit for was to do fiddling things with numbers. He knew it. Everybody knew it. Hazel knew it. If he met a girl he liked, the best he could do was to knock her off her feet. Hamilton knew it. Hamilton hadn't even bothered to kill him-he wasn't worth killing. They hadn't really wanted him in the Survivors Club-not in a pinch. They just wanted him available to set up the accounting for the New Order. McFee had spoken to him about that, asked him if he could do it. Naturally, he could. That's all he was-a clerk.

Well, if they wanted him for that, he'd do it. He wasn't proud. All he asked was to serve. It would be a fairly simple matter to set up foolproof accounting for a collective-type state. It would not take him long; after that, his usefulness ended, he would be justified in taking the long sleep.

He got up, having found some comfort in complete self-abnegation. He rinsed out his mouth, drank more than a litre of water, and felt a little better. He rummaged in the larder, opened a seal of tomato juice, drank it, and felt almost human, in a deeply melancholy way.

He then investigated his location. The car was hovering; it had reached the extreme limit of its automatic radius. The ground was concealed by clouds, though it was bright sunlight where he was. The pilot showed him the latitude and longitude; a reference to the charts placed him somewhere over the Sierra Nevada Mountains-almost precisely over the Park of the Giant Redwoods, he noticed.

He derived a flicker of interest from that. The Survivors Club, in their public, social guise, claimed the Generalsherman Tree as president emeritus. It was a nice jest, he thought-the unkillable, perfectly adapted Oldest Living Thing on Earth. The sabotaged pilot put wrinkles between his eyes. He could fly it manually, but he could not enter the traffic of the Capital until it was repaired. He would have to seek some small town --

- No, McFee had said to go away and stay away-and McFee meant what he said. If he went to any town, he would be mixed up in the fighting.

He did not admit to himself that he no longer had any stomach for it-that Hamilton's words had left him with unadmitted doubts.

Still, it must be repaired. There might be a repair station at the Park-must be, in fact, in view of the tourist traffic. And surely the Change would not cause any fighting there. He cut in the fog eyes and felt his way down. When he grounded a single figure approached. "You can't stay," the man said, when he was in earshot. "The Park's closed."

"I've got to have a repair," said Monroe-Alpha. "Why is the Park closed?"

"Can't say. Some trouble down below. The rangers were called on special duty hours ago, and we sent the tourists out. There's nobody here but me."

"Can you repair?"

"Could...maybe. What's the trouble?" Monroe-Alpha showed him. "Can you fix it?"

"Not the talkie box. Might scare up some parts for the pilot. What happened? Looks like you smashed it yourself."

"I didn't." He opened a locker, located his car gun, and stuck it in his holster. The caretaker was brassarded; he shut up at once. "I think I'll take a walk while you fix it."

"Yes sir. It won't take long."

Monroe-Alpha took out his credit folder, tore out a twenty credit note, and handed it to the man. "Here. Leave it in the hangar." He wanted to be alone, to talk to no one at all, least of all this inquisitive stranger. He turned and walked away. He had seen very little of the Big Trees in landing; he had kept his eyes glued to the fog eyes and had been quite busy with the problem of landing. Nor had he ever been in the Park before. True, he had seen pictures-who has not?—but pictures are not the trees. He started out, more intent on his inner turmoil than on the giants around him. But the place got him.

There was no sun, no sky. The trees lost themselves in a ceiling of mist, a remote distance overhead. There was no sound. His own footsteps lost themselves in a carpet of evergreen needles. There was no limiting horizon; endless succession only of stately columns, slim green columns of sugar pine, a mere meter in thickness, massive red-brown columns of the great ones themselves. They receded from him on all sides, the eye could see nothing but trees-trees, the mist overhead, and the carpet of their debris, touched in spots by stubborn patches of old snow.

An occasional drop of purely local rain fell, dripping from the branches far above.

There was no time there. This had been, was and would be. Time was not. There was no need for time here; the trees negated it, ignored it. Seasons they might recognize, lightly, as one notes and dismisses a passing minute. He had a feeling that he moved too frantically for them to notice, that he was too small for them to see.

He stopped, and approached one of the elders, cautiously, as befits a junior in dealing with age. He touched its coat, timidly at first, then with palm-flat pressure, as he gained confidence. It was not cool, as bark is, but warm and live in spite of the moisture that clung to it. He drew from the tree, through its warm shaggy pelt, a mood of tranquil strength. He felt sure, on a level of being just below that of word-shaped thoughts, that the tree was serene and sure of itself, and, in some earth-slow somber fashion, happy.

He was no longer capable of worrying over the remote problems of his own ant hill. His scales had changed, and the frenetic struggles of that world had faded both in time and distance until he no longer discerned their details.

He came upon the Old One unexpectedly. He had been moving through the forest, feeling it rather than thinking about it. If there were signs warning him of what lay ahead he had not seen them. But he needed no signs to tell him what he saw. The other giants had been huge and old; this one dwarfed them as they dwarfed the sugar pines.

Four thousand years it had stood there, maintaining, surviving, building its giant thews of living wood. Egypt and Babylon were young with it-it was still young. David had sung and died. Great Caesar stained the Senate floor with his ambitious blood. Mohamet fled. Colon Christopher importuned a queen, and the white men found the tree, still standing, still green. They named him for a man known only through that fact-Generalsherman. The Generalsherman Tree.

It had no need of names. It was itself, the eldest citizen, quiet, untroubled, alive and unworried.

He did not stay near it long. It helped him, but its presence was overpowering to him, as it has been to every man who has ever seen it. He went back through the woods, finding the company of those lesser immortals almost jovial by contrast. When he got back near the underground hangar in front of which he had left his runabout, he skirted around it, not wishing to see anyone as yet. He continued on.

Presently he found his way blocked by a solid grey mass of granite which labored on up out of sight in the mist. A series of flights of steps, cleverly shaped to blend into the natural rock, wound up through its folds. There was a small sign at the foot of these stairs: MORO ROCK. He recognized it, both from pictures and a brief glimpse he had had of it through the fog in landing. It was a great grey solid mass of stone, peak-high and mountain-wide, a fit place for a Sabbat.

He started to climb. Presently the trees were gone. There was nothing but himself, the grey mist, and the grey rock. His feeling for up-and-down grew shaky, he had to watch his feet and the steps to hang on to it.

Once he shouted. The sound was lost and nothing came back.

The way led along a knife edge, on the left a sheer flat slide of rock, on the right bottomless empty grey nothingness. The wind cut cold across it. Then the path climbed the face of the rock again.

He began to hurry; he had reached a decision. He could not hope to emulate the serene, eternal certainty of the old tree-he was not built for it. Nor was he built, he felt sure, for the life he knew. No need to go back to it, no need to face it out with Hamilton nor McFee, whichever won their deadly game. Here was a good place, a place to die with clean dignity.

There was a clear drop of a thousand meters down the face of the rock.

He reached the top at last and paused, a little breathless from his final exertion. He was ready and the place was ready-when he saw that he was not alone. There was another figure, prone, resting on elbows, looking out at the emptiness.

He turned, and was about to leave. His resolution was shaken by another's presence. He felt nakedly embarrassed.

Then he turned and looked at him. Her gaze was friendly and unsurprised. He recognized her-without surprise, and was surprised that he had not been. He saw that she recognized him.

"Oh, hello," he said stupidly.

"Come sit down," she answered.

He accepted silently, and squatted beside her. She said nothing more at the time, but remained resting on one elbow, watching him-not narrowly, but with easy quietness. He liked it. She gave out warmth, as the redwoods did.

Presently she spoke. "I intended to speak to you after the dance. You were unhappy."

"Yes. Yes, that is true."

"You are not unhappy now."

"No," he found himself saying and realized with a small shock that it was true. "No, I am happy now."

They were silent again. She seemed to have no need for small speech, nor for restless movement. He felt calmed by her manner himself, but his own calm was not as deep. "What were you doing here?" he asked.

"Nothing. Waiting for you, perhaps." The answer was not logical, but it pleased him.

Presently the wind became more chill and the fog a deeper grey. They started down. The way seemed shorter this time. He made a show of helping her, and she accepted it, although she was more surefooted than he and they both knew it. Then they were on the floor of the forest and there was no further excuse to touch her hand or arm.

They encountered a group of mule deer-a five-point-buck who glanced at them and returned to the serious business of eating, his dignity undisturbed; two does who accepted them with the calm assurance of innocence long protected; and three fawns. The does were passively friendly, but enjoyed being scratched, especially behind their ears.

The fawns were skittishly curious. They crowded around, stepping on their feet and nuzzling their clothes, then would skitter away in sudden alarm at an unexpected movement, their great soft ears flopping foolishly.

The girl offered them leaves plucked from a shrub, and laughed when her fingers were nibbled. Monroe-Alpha tried it and smiled broadly-the nibbling tickled. He would have liked to have wiped his fingers, but noticed that she did not, and refrained.

He felt a compulsion to unburden himself to her, as they walked along, and tried to, stumbling. He stopped long before he had made himself clear, and looked at her, half expecting to see disgusted disapproval in her eyes. There was none. "I don't know what it is you have done," she said, "but you haven't been bad. Foolish, perhaps, but not bad." She stopped, looked a little puzzled, and added reflectively, "I've never met any bad people."

He tried to describe some of the ideals of the Survivors Club. He spoke of the plans for dealing with the control naturals as being the easiest and clearest to explain. No inhumanity, a bare minimum of necessary coercion, a free choice between a simple sterilizing operation and a trip to the future-all this in the greater interest of the race. He spoke of these things as something that might be done if the people were wise enough to accept it.

She shook her head. "I don't think I would care for it," she said gently, but with clear finality. He dropped the subject.

He was surprised when it became dark. "I suppose we should hurry on to the lodge," he said.

"The lodge is closed." That was true, he remembered. The Park was closed; they were not supposed to be there. He started to ask her if she had a skycar there, or had she come up through the tunnel, but checked himself. Either way, she would be leaving him. He did not want that; he himself was not pressed for time-his fortyeight hours would not be up until the morrow. "I saw some cabins as I came this way," he suggested.

They found them, nestling half hidden in a hollow. They were unfurnished and, quite evidently out of service, but strong and weather-tight. He rummaged around in the cupboards and found a little glow-heater with more than enough charge showing on its dial for their needs. Water there was, but no food. It did not matter.

There were not even cushion beds available, but the floor was warm and clean. She lay down, seemed to nestle out a bed in the floor as an animal might, said, "Good night," and closed her eyes. He believed that she went to sleep at once.

He expected to find it hard to get to sleep, but he fell asleep before he had time to worry about it.

When he awoke it was with a sense of wellbeing such as he had not enjoyed in many days-months. He did not attempt to analyze it at once, but simply savored it, wallowed in it, stretching luxuriously while his soul fitted itself, catlike, back into its leasehold.

Then he caught sight of her face, across the cabin floor, and knew why he felt cheerful. She was still asleep, her head cradled on the curve of her arm. Bright sun flooded in through the window and illuminated her face. It was, he decided, not necessarily a beautiful face, although he could find no fault with it. Its charm lay more in a childlike quality, a look of fresh wonder, as if she greeted each new experience as truly new and wholly delightful-so different, he thought, from the jaundiced melancholy he had suffered from.

Had suffered from. For he realized that her enthusiasm was infectious, that he had caught it, and that he owed his present warm elation to her presence.

He decided not to wake her. He had much to think of, anyhow, before he was ready to talk with another. He saw now that his troubles of yesterday had been sheer funk. McFee was a careful commander; if McFee saw fit to leave him off the firing line, he should not complain or question. The Whole was greater than the parts. McFee's decision was probably inspired by Felix, anyhow-from the best of intentions.

Good old Felix! Misguided, but a good sort anyhow. He would have to see if he couldn't intercede for Hamilton, in the reconstruction. They could not afford to hold grudges-the New Order had no place for small personal emotions. Logic and science.

There would be much to be done and he could still be useful. The next phase started today-rounding up control naturals, giving them their choice of two humane alternatives. Questioning public officials of every sort and determining whether or not they were temperamentally suited to continue to serve under the New Order. Oh, there was much to be done-he wondered why he had felt yesterday that there was no place for him.

Had he been as skilled in psychologies as he was in mathematics he might possibly have recognized his own pattern for what it was-religious enthusiasm, the desire to be a part of a greater whole and to surrender one's own little worries to the keeping of an overbeing. He had been told, no doubt, in his early instruction, that revolutionary political movements and crusading religions were the same type-form process, differing only in verbal tags and creeds, but he had never experienced either one before. In consequence, he failed to recognize what had happened to him. Religious frenzy? What nonsense-he believed himself to be an extremely hardheaded agnostic.

She opened her eyes, saw him and smiled, without moving. "Good morning," she said.

"Good morning, good morning," he agreed. "I neglected to ask your name yesterday."

"My name is Marion," she answered. "What is yours?"

"I am Monroe-Alpha Clifford."

"'Monroe-Alpha,'" she mused. "That's a good line, Clifford. I suppose you—" She got no further with her remark; her expression was suddenly surprised; she made two gasping quick intakes of breath, buried her face in her hands, and sneezed convulsively.

Monroe-Alpha sat up abruptly, at once alert and no longer happy.

She? Impossible!

But he faced the first test of his new-found resolution firmly. It was going to be damned unpleasant, he realized, but he had to do it. The Whole is greater than the parts.

He even derived unadmitted melancholy satisfaction from the realization that he could do his duty, no matter how painful. "You sneezed," he said accusingly.

"It was nothing," she said hastily. "Dust-dust and the sunshine."

"Your voice is thick. Your nose is stopped up. Tell me the truth. You're a 'natural'—aren't you?"

"You don't understand," she protested. "I'm a-oh, dear!" She sneezed twice in rapid succession, then left her head bowed.

Monroe-Alpha bit his lip. "I hate this as much as you do," he said, "but I'm bound to assume that you are a control natural until you prove the contrary."

"Why?"

"I tried to explain to you yesterday. I've got to take you in to the Provisional Committee-what I was talking about is already an established fact."

She did not answer him. She just looked. It made him still more uncomfortable. "Come now," he said. "No need to be tragic about it. You won't have to enter the stasis. A simple, painless operation that leaves you unchanged-no disturbance of your endocrine balance at all. Besides, there may be no need for it. Let me see your tattoo."

Still she did not answer. He drew his gun and levelled it at her. "Don't trifle with me. I mean it." He lowered his sights and pinged the floor just in front of her. She flinched back from the burnt wood and the little puff of smoke. "If you force me, I'll burn you. I'm not joking. Let me see your tattoo."

When still she made no move, he got up, went to her, grabbed her roughly by the arm, dragging her to her feet. "Let's see your tattoo."

She hesitated, then shrugged her shoulders. "All right...but you'll be sorry." She lifted her left arm. As he lowered his head to read the figures tattooed near the arm pit she brought her hand down sharply near the wrist joint of his right hand. At the same instant her right fist made a painful surprise in the pit of his stomach.

He dropped his gun.

He dived after the gun before it had clattered to a stop and was up after her. But she was already gone. The cabin door stood open, framing a picture of sugar pines and redwoods, but no human figure. A bluejay cursed and made a flicker of blue; nothing else moved.

Monroe-Alpha leaped to the door and looked both ways, covering the same arc with his weapon, but the Giant Forest had swallowed her. She was somewhere close at hand, of course; her flight had disturbed the jay. But where? Behind which of fifty trees? Had there been snow on the ground he would have known, but the snow had vanished, except for bedraggled hollows, and the pine needles carpet of an evergreen forest left no tracks perceptible to his untrained eye-nor was it cluttered with undergrowth to impede and disclose her flight.

He cast around uncertainly like a puzzled hound. He caught a movement from the corner of his eye, turned, saw a flash of white, and fired instantly.

He had hit-that was sure. His target had fallen behind a baby pine which blocked his view, thrashed once, and was quiet. He went toward the little tree with reluctant steps, intending to finish her off mercifully, if, by chance, his first bolt had merely mutilated her.

It was not she, but a mule deer fawn. His charge had burnt away half the rump and penetrated far up into the vitals. The movement he had seen and heard could have been no more than dying reflex. Its eyes were wide open, deer soft, and seemed to him to be filled with gentle reproach. He turned away at once, feeling a little sick. It was the first nonhuman animal he had ever killed.

He spent only a few minutes more searching for her. His sense of duty he quieted by telling himself that she stood no chance of getting away here in a mountain forest anyhow, infected, as he knew her to be, with a respiratory ailment. She would have to give up and turn herself in.

Monroe-Alpha did not return to the cabin. He had left nothing there, and he assumed that the little glow-heater which had kept them warm through the night was equipped with automatic cut-off. If not, no matter-it did not occur to him to weigh his personal convenience against the waste involved. He went at once to the parking lot underground where he found his runabout, climbed in, and started its impeller. There was an immediate automatic response from the Park's traffic signal system, evidenced by glowing letters on the runabout's annunciator: NO CRUISING OVER GIANT FOREST-ANGLE THREE THOUSAND AND SCRAMBLE. He obeyed without realizing it; his mind was not on the conning of the little car.

His mind was not on anything in particular. The lethargy, the bitter melancholy, which had enervated him before the beginning of the Readjustment, descended on him with renewed force. For what good? To what purpose was this blind senseless struggle to stay alive, to breed, to fight? He drove the little capsule as fast as its impeller would shove it straight for the face of Mount Whitney, with an unreasoned half-conscious intention of making an ending there and then.

But the runabout was not built to crash. With the increase in speed the copilot extended the range of its feelers; the klystrons informed the tracker; solenoids chattered briefly and the car angled over the peak.

CHAPTER NINE

"When we die, do we die all over?"

AS HE turned his back on the lifting runabout into which he had shanghaied Monroe-Alpha, Hamilton dismissed his friend from his mind-much to do and damned little time. Hurry!

He was surprised and not pleased to find that the door giving down into the building from the roof responded at once to the code used by the Clinic staff-a combination Mordan had given him. Nor were there guards beyond that door. Why, the place might as well be wide open! He burst into Mordan's office with the fact on his mind. "This place is as unprotected as a church," he snapped. "What's the idea?" He looked around. In addition to Mordan the room contained Bainbridge Martha, his chief of technical staff, and Longcourt Phyllis. His surprise at her presence was reinforced by annoyance at seeing she was armed.

"Good evening, Felix," Mordan answered mildly. "Why should it be protected?"

"Good grief! Aren't you going to resist attack?"

"But," Mordan pointed out, "there is no reason to expect attack. This is not a strategic point. No doubt they plan to take the Clinic over later but the fighting will be elsewhere."

"That's what you think. I know better."

"Yes?"

"I was assigned to come here to kill you. A section follows me to seize the Clinic."

Mordan made no comment. He sat still, face impassive. Hamilton started to speak; Mordan checked him with a raised hand and said, "There are only three other men in the building. None of them are gunmen. How much time have we?"

"Ten minutes-or less."

"I'll inform the central peace station. They may be able to divert a few reserve monitors. Martha, send the staff home." He turned to the telephone.

The lighting flickered sharply, was replaced at once by a lesser illumination. The emergency lighting had cut in. No one needed to be told that Power Central was out. Mordan continued to the phone-it was dead.

"The building cannot be held by two guns," he observed, as if thinking aloud. "Nor is it necessary. But there is just one point necessary to protect-the plasm bank. Our friends are not completely stupid. But it is still bad strategy. They forget that a trapped animal will gnaw off a leg. Come, Felix. We must attempt it."

The significance of the attack on the Clinic raced through Hamilton's mind. The plasm bank. The one here in the Capital's clinic was repository of the plasm of genius for the past two centuries. If the rebels captured it, even if they did not win, they would have a unique and irreplaceable hostage. At the worst they could exchange it for their lives.

"What do you mean, 'two guns'?" demanded Longcourt Phyllis. "What about this?" She slapped her belt.

"I daren't risk you." Mordan answered. "You know why."

Their eyes locked for a moment. She answered with two words. "Fleming Marjorie."

"Hmm...I see your point. Very well."

"What is she doing here, anyhow?" demanded Hamilton. "And who is Fleming Marjorie?"

"She came here to talk with me-about you. Fleming Marjorie is another fifth cousin of yours. Quite a good chart. Come!" He started away briskly.

Hamilton hurried after him, thinking furiously. The significance of Mordan's last remarks broke on him with a slightly delayed action. When he understood he was considerably annoyed, but there was no time to talk about it. He avoided looking at Phyllis.

Bainbridge Martha joined them as they were leaving the room. "One of the girls is passing the word," she informed Mordan.

"Good," he answered without pausing.

The plasm bank stood by itself in the middle of a large room, a room three stories high and broad in proportion. The bank itself was arranged in library-like tiers. A platform divided it halfway up, from which technicians could reach the cells in the upper level.

Mordan went directly to the flight of stairs in the center of the mass and climbed to the platform. "Phyllis and I will cover the two front doors," he directed. "Felix, you will cover the rear door."

"What about me?" asked his chief of staff.

"You, Martha? You're not a gunman."

"There's another gun," she declared pointing at Hamilton's belt. Hamilton glanced down, puzzled. She was right. He had stuffed the gun he had taken from Monroe-Alpha under his belt. He handed it to her.

"Do you know how to use it?" asked Mordan.

"It will burn where I point it, won't it?" "Yes."

"That's all I want to know."

"Very well. Phyllis, you and Martha cover the back door. Felix and I will take a front door apiece."

The balcony platform was surrounded by a railing waist high and not quite one solid piece, for it was pierced here and there with small openings-part of an ornamental design. The plan was quite simple-crouch behind the railing, spy out the doors through the openings and use them as loopholes through which to fire.

They waited.

Hamilton got out a cigaret, stuck it in his mouth and inhaled it into burning, without taking his eyes off the lefthand door. He offered the case to Mordan, who pushed it away.

"Claude, there's one thing I can't figure out..."

"So?"

"Why in the world didn't the government bust this up before it had gone so far? I gather that I wasn't the only stoolie in the set-up. Why didn't you smear it?"

"I am not the government," Mordan answered carefully, "nor am I on the Board of Policy. I might venture an opinion."

"Let's have it."

"The only certain way to get all of the conspirators was to wait until they showed themselves. Nor will it be necessary to try them-an unsatisfactory process at best. This way they will be exterminated to the last man."

Hamilton thought about it. "It does not seem to me that the policy makers are justified in risking the whole state by delaying."

"Policy makers take a long view of things. Biologically it is better to make sure that the purge is clean. But the issue was never in doubt, Felix."

"How can you be sure? We're in a sweet spot now, as a result of waiting."

"You and I are in jeopardy, to be sure. But the society will live. It may take a little time for the monitors to recruit enough militia to subdue them in any key points they may have seized, but the outcome is certain."

"Damnation," complained Hamilton. "It shouldn't be necessary to wait to stir up volunteers among the citizens. The police force should be large enough."

"No," said Mordan. "No, I don't think so. The police of a state should never be stronger or better armed than the citizenry. An armed citizenry, willing to fight, is the foundation of civil freedom. That's a personal evaluation, of course."

"But suppose they don't? Suppose these rats win? It's the Policy Board's fault."

Mordan shrugged. "If the rebellion is successful, notwithstanding an armed citizenry, then it has justified itself biologically. By the way, be a little slow in shooting, if the first man comes through your door."

"Why?"

"Your weapon is noisy. If he is alone, we'll gain a short delay."

They waited. Hamilton was beginning to think that his timepiece had stopped, until he realized that his first cigaret was still burning. He glanced quickly back to his door, and said, "Psst!" to Mordan, and shifted his watching to the other door.

The man entered cautiously, weapon high. Mordan led him with his gunsight until he was well inside and had stepped out of direct line of sight of the door. Then he let him have it, neatly, in the head. Felix glanced at him, and noticed that it was a man he had had a drink with earlier in the evening.

The next two came in a pair. Mordan motioned for him not to shoot. He was not able to wait so long this time; they saw the body as soon as they were in the doorway. Hamilton noted with admiration that he was unable to tell which one had been shot first. They seemed to drop simultaneously.

"You need not honor my fire the next time," Mordan remarked. "The element of surprise will be lacking." Over his shoulder he called, "First blood, ladies. Anything doing there?"

"Not yet."

"Here they come!" Ba-bang! Bang! Hamilton had fired three times, winged three men. One of them stirred, attempted to raise himself and return the fire. He let him have one more bullet, which quieted him. "Thank you," said Mordan.

"For what?"

"That was my file secretary. But I would rather have killed him myself."

Hamilton cocked an eyebrow at him. "I think you once told me that a public official should try to keep his personal feeling out of his work?"

"That's true...but there is no rule saying I can't enjoy my work. I wish he had come in my door. I liked him."

Hamilton noted that Mordan had accounted for four more, silently, while Hamilton was so noisily stopping the rush at his own door. That made five at his door, one in between, and four at Mordan's. "If they keep this up, they'll have a barricade of living flesh," he commented.

"Formerly living," Mordan corrected. "Haven't you been at that same loophole a bit too long?"

"I stand corrected on both counts." He shifted to another spot, then called back, "How is it coming, girls?"

"Martha got one," Phyllis sang out.

"Good for her! What's the matter with you?"

"I'm doing all right."

"Fine. Burn 'em so they don't wiggle."

"They don't," she stated briefly.

There were no more rushes. A portion of a head would peek out cautiously, its owner would blast once quickly without proper aim, the man would duck back. They returned the fire, but with little expectation of hitting anything. The targets never appeared twice in the same spot, and for split seconds only. They crept back and forth along the balcony, trying to enfilade the rooms beyond, but their antagonists had become cagy.

"Claude...I just thought of something funny."

"So?"

"Suppose I get killed in this. You get your own way in our argument, don't you?"

"Yes. What's the joke?"

"But if I get knocked over, you'll probably be dead too. You told me my deposit was listed only in your mind. You win and you lose."

"Not exactly. I said it was not on file. But it's identified in my will-my professional executor will carry out the plan."

"Oh, ho. So I'm a papa anyhow." He fired once at a shape that suddenly appeared in his door. There was a yelp of anguish, and the shape drew back. "Lousy," he deplored. "I must be losing my eyesight." He banked a slug off the floor in front of his door, letting it thereby ricochet loosely in the room beyond. He did the same through Mordan's door. "That's to teach 'em to keep their heads down. Look, Claude-if you had your choice, which would you prefer: for both of us to be knocked over and thereby insure your own way about my hypothetical offspring, or for both of us to get through it and be back where we started?"

Mordan considered the question. "I think I would rather try to argue around to my viewpoint. I'm afraid there isn't much of the martyr spirit in me."

"That's what I thought."

Somewhat later Mordan said, "Felix, I think they have taken to drawing our fire. I don't think that was a face I shot at last time."

"I believe you're right. I couldn't have missed a couple of times lately."

"How many shots have you left?"

Hamilton did not need to count; he knew-and it had been worrying him. He had had four clips when he left for the Hall of the Wolf-three in his belt, one in his gun, twentyeight shots in all. The last clip was in his gun; he had fired two shots from it. He held up one hand, fingers spread. "How about you?"

"About the same. I could use half charge for this sparring." He thought a moment. "Cover both doors." He crawled rapidly away through the stacks to where the two women kept guard on the rear door.

Martha heard him and turned. "Look at this, chief," she insisted, holding out her left hand. He looked-the first two joints of the forefinger were burned away and the tip of the thumb-cleanly cauterized. "Isn't that a mess?" she complained. "I'll never be able to operate again. No manipulation."

"Your assistants can operate. It's your brain that counts."

"A lot you know about it. They're clumsy-every blessed one of them. It's a miracle they can dress themselves."

"I'm sorry. How many charges have you left?"

The picture was no better here. Phyllis's lady's weapon had been only a twenty-gun to start with. Both Mordan's and Monroe-Alpha's were fifty-guns, but the gun expropriated from Monroe-Alpha had started the evening even more depleted than Mordan's. Phyllis had withdrawn Martha from anything more than standby when she had been wounded, planning to use the gun herself when her own was exhausted.

Mordan cautioned them to be still more economical with their shooting and returned to his post. "Anything happened?" he asked.

"No. What's the situation?"

Mordan told him.

Hamilton whistled tunelessly, his eye on his target. "Claude?"

"Yes, Felix."

"Do you think we are going to get out of this?"

"No, Felix."

"Hmmm...Well, it's been a nice party." A little later he added, "Damn it-I don't want to die. Not just yet...Claude, I've thought of another joke."

"Let's have it."

"What's the one thing that could give life point to it-real point?"

"That," Mordan pointed out, "is the question I've been trying to answer for you all along."

"No, no. The question itself."

"You state it," Mordan parried cautiously.

"I will. The one thing that could give us some real basis for our living is to know for sure whether or not anything happens after we die. When we die, do we die all over-or don't we?"

"Hmm...granting your point, what's the joke?"

"The joke is on me. Or rather on my kid. In a few minutes I'll probably know the answer. But he won't. He's sitting back there right now-in a way-sleeping in one of those freezers. And there is no way on earth for me to let him know the answer. But he's the one that will need to know. Isn't that funny?"

"Hmm...If that's your idea of a joke, Felix, I suggest that you stick to parlor tricks."

Hamilton shrugged jauntily. "I'm considered quite a wit-in some circles," he bragged. "Sometimes I wow myself."

"Here they come!" It was an organized rush this time, spreading fanwise from both doors. They were both very busy for perhaps two seconds, then it was over. "Any get through?"

"Two, I think," Mordan answered. "You cover the stairs. I'll stay here." It was not personal caution, but tactics. Mordan's eye and hand were fast, but Hamilton was the younger, abler man.

He watched the stairs on his belly, most of his body shielded by the stacks. He was lucky on the first shot-his man stuck his head up facing the other way. Hamilton sent him down with a hole in the back of his skull and his forehead blown away. He then shifted quickly to the far side of the stair well. But his gun was empty.

The second man came up fast. Hamilton slugged him with the empty weapon and grappled, trying to get inside his range. The man almost fought free, dragging them both part way into the staircase, but Hamilton jerked back on his head, hard. There was a crunch of bone; he went limp.

Hamilton reported back to Mordan.

"Good. Where's your gun?" Hamilton shrugged and spread his palms. "There ought to be two at the foot of the stairs," he suggested.

"You wouldn't last long enough to stoop over for them. You stay up here. Go back and get Martha's."

"Yes, sir."

He crawled back, explained what he wanted, and told Martha to hide in the stacks. She protested. "Chief's orders," he lied. Then to Phyllis, "How are you doing, kid?"

"All right."

"Keep your chin up and your head down." He glanced at the meters on both guns. They had the same charge. He bolstered Monroe-Alpha's gun, shot a quick look at the door Phyllis was covering, then grabbed her chin, turned her face around, and kissed her quickly.

"That's for keeps," he said, and turned away at once.

Mordan reported no activity. "But there will be," he added. "We don't dare waste shots on casual targets and they will soon realize it."

It seemed an interminable wait. They grimly forbore accepting the targets they were offered. "I think," said Mordan at last, "that we had better expend one charge on the next thing that appears. It might cause a worthwhile delay."

"You don't have any silly notion that we are going to get out of this now, do you? I've begun to suspect that the monitors don't even know this point was attacked."

"You may be right. But we'll keep on."

"Oh, of course."

They had a target soon-plain enough to be sure that it was a man, and not a decoy. Mordan stung him. He fell in sight, but shots were scarce-he was allowed to crawl painfully back.

Hamilton looked up for a moment. "See here, Claude-it would be worthwhile, you know-to know what happens after the lights go out. Why hadn't anyone tackled it seriously?"

"Religions do. Philosophies do."

"That isn't what I mean. It ought to be tackled the same as any other—" He stopped. "Do you smell anything?"

Mordan sniffed. "I'm not sure. What does it smell like?"

"Sweetish. It—" He felt suddenly dizzy, a strange sensation for him. He saw two of Mordan. "Gas. They've got us. So long, pal." He tried to crawl to the passageway down which Phyllis was on duty, but he achieved only a couple of clumsy, crawling steps, fell on his face, and lay still.

CHAPTER TEN

"—the only game in town"

IT WAS pleasant to be dead. Pleasant and peaceful, not monotonous. But a little bit lonely. He missed those others—serene Mordan, the dauntless gallantry of Phyllis, Cliff and his frozen face. And there was that funny little man, pathetic little man who ran the Milky Way Bar-what had he named him? He could see his face, but what had he named him? Herbie, Herbert, something like that-names didn't taste the same when words were gone. Why had he named him Herbert?

Never mind. The next time he would not choose to be a mathematician. Dull, tasteless stuff, mathematics-quite likely to give the game away before it was played out. No fun in the game if you knew the outcome. He had designed a game like that once, and called it Futility-no matter how you played, you had to win. No, that wasn't himself, that was a player called Hamilton. Himself wasn't Hamilton-not this game. He was a geneticist-that was a good one!—a game within a game. Change the rules as you go along. Move the players around. Play tricks on yourself.

"Don't you peek and close your eyes, And I'll give you something to make a s'prise!"

That was the essence of the game-surprise. You locked up your memory, and promised not to look, then played through the part you had picked with just the rules assigned to that player. Sometimes the surprises were pretty ghastly, though-he didn't like having his fingers burned off.

No! He hadn't played that position at all. That piece was an automatic, some of the pieces had to be. Himself had burned off that piece's lingers, though it seemed real at the time.

It was always like this on first waking up. It was always a little hard to remember which position Himself had played, forgetting that he had played all of the parts. Well, that was the game; it was the only game in town, and there was nothing else to do. Could he help it if the game was crooked? Even if he had made it up and played all the parts. But he would think up another game the next time. Next time...

His eyes didn't work right. They were open but he couldn't see anything. A hell of a way to run things-some mistake.

"Hey! What's going on here?"

It was his own voice. He sat up, the cloth fell from his eyes. Everything was too bright; his eyes smarted.

"What's the trouble, Felix?" He turned in the direction of the voice and strove to focus his aching eyes. It was Mordan, lying a few feet away from him. There was something he wanted to ask Mordan, but it escaped him.

"Oh. Claude. I don't feel right. How long have we been dead?"

"We aren't dead. You're just a bit sick. You'll get over it."

"Sick? Is that what it is?"

"Yes. I was sick once, about thirty years ago. It was much like this."

"Oh—" There was still something he wanted to ask Mordan, but he couldn't for the life of him recall what it was. It was important, too, and Claude would know. Claude knew everything-he made the rules.

That was silly. Still, Claude would know.

"Do you want to know what happened?" Mordan asked.

Maybe that was it. "They gassed us, didn't they? I don't remember anything after that." That wasn't quite right—there was something else. He couldn't recall.

"We were gassed, but it was done by our own monitors. Through the conditioning system. We were lucky. No one knew we were under siege inside, but they could not be sure that all of the staff were out of the building-else they would have used a lethal gas."

His head was clearing now. He remembered the fight in detail. "So? How many were left? How many did we fail to get?"

"I don't know exactly, and it's probably too late to find out. They are probably all dead."

"Dead? Why? They didn't burn them after they were down, did they?"

"No...But this gas we took is lethal without an immediate antidote-and I'm afraid that the therapists were a little bit overworked. Our own people came first."

Hamilton grinned. "You old hypocrite. Say! How about Phyllis?"

"She's all right, and so is Martha. I ascertained that when I woke up. By the way, do you know that you snore?"

"Do I really?"

"Outrageously. I listened to your music for more than an hour. You must have had a heavier dose of gas than I had. Perhaps you struggled."

"Maybe. I wouldn't know. Say, where are we?" He swung his legs out of bed, and attempted to stand. It was a foolish attempt; he just missed falling on his face.

"Lie down," ordered Mordan. "You won't be fit for several hours yet."

"I guess you're right," Hamilton admitted, sinking back on the cushion. "Say, that's a funny feeling. I thought I was going to fly."

"We're next door to the Carstairs Infirmary, in a temporary annex," Mordan continued. "Naturally, things are a bit crowded today."

"Is the party all over? Did we win?"

"Of course we won. I told you the issue was never in doubt."

"I know, but I've never understood your confidence." Mordan considered how to reply to this. "Perhaps," he said, "it would be simplest to state that they never did have what it takes. The leaders were, in most cases, genetically poor types, with conceit far exceeding their abilities. I doubt if any one of them had sufficient imagination to conceive logically the complexities of running a society, even the cut-to-measure society they dreamed of."

"They talked as if they did."

Mordan nodded. "No doubt. It's a common failing, and it's been with the race as long as it has had social organization. A little businessman thinks his tiny business is as complex and difficult as the whole government. By inversion, he conceives himself as competent to plan the government as the chief executive. Going further back in history, I've no doubt that many a peasant thought the job of the king was a simple one and that he could do it better if he only had a chance. What it boils down to is lack of imagination and overwhelming conceit."

"I would never have thought them lacking in imagination."

"There is a difference between constructive imagination and wild, uncontrolled daydreams. One is psychopathic-megalomania-unable to distinguish between fact and fancy. The other is hardheaded. In any case, the fact remains that they did not have a single competent scientist, nor a synthesist of any sort, in their whole organization. I venture to predict that, when we get around to reviewing their records, we will find that the rebels were almost all-all, perhaps-men who had never been outstandingly successful at anything. Their only prominence was among themselves."

Hamilton thought this over to himself. He had noticed something of the sort. They had seemed like thwarted men. He had not recognized a face among them as being anyone in particular outside the Survivors Club. But inside the club they were swollen with self-importance, planning this, deciding that, talking about what they would do when they "took over." Pipsqueaks, the lot of 'em.

But dangerous pipsqueaks, no matter what Mordan said. You were just as dead, burned by a childish man, as you would be if another killed you. "Felix, are you still awake?"

"Yes."

"Do you recall the conversations we were having during the fight?"

"Why, um-yes-yes, I think I do."

"You were about to say something when the gas hit us." Hamilton was slow in replying. He recalled what had been on his mind but it was difficult to fit it into adequate words. "It's like this, Claude. It seems to me that scientists tackle every problem but the important ones. What a man wants to know is 'Why?'—all that science tells him is 'What.'"

"'Why' isn't the business of science. Scientists observe, describe, hypothecate, and predict. 'What' and 'How' are their whole field; 'Why' doesn't enter into it."

"Why shouldn't 'Why' enter into it? I don't want to know how far it is from here to the Sun; I want to know why the Sun is there-and why I am standing here looking at it. I ask what life is for, and they show me a way to make better bread."

"Food is important. Try going without it."

"Food isn't important after you've solved that problem."

"Were you ever hungry?"

"Once-when I was studying basic socio-economics. But It was just instructional. I never expect to be hungry again—and neither does anybody else. That's a solved problem and it answers nothing. I want to know What next? Where to? Why?"

"I had been thinking about these matters," Mordan said slowly, "while you were sleeping. The problems of philosophy seem to be unlimited, and it is not too healthy to dwell on unlimited questions. But last night you seemed to feel that the key problem, for you, was the old, old question as to whether a man was anything more than his hundred years here on earth? Do you still feel that way?"

"Yes...I think I do. If there was anything, anything more at all, after this crazy mix-up we call living, I could feel that there might be some point to the whole frantic business, even if I did not know and could not know the full answer while I was alive."

"And suppose there was not? Suppose that when a man's body disintegrates, he himself disappears absolutely. I'm bound to say I find it a probable hypothesis."

"Well—It wouldn't be cheerful knowledge, but it would be better than not knowing. You could plan your life rationally, at least. A man might even be able to get a certain amount of satisfaction in planning things better for the future, after he's gone. A vicarious pleasure in the anticipation."

"I assure you he can," Mordan stated, from his own inner knowledge. "But, I take it, either way, you would feel that the question you posed to me in our first interview was fairly answered."
"Mmm, yes."

"Whereupon you would be willing to cooperate in the genetics program planned for you?"

"Yes, if."

"I don't propose to give you an answer here and now," Mordan answered equably. "Would you be willing to cooperate if you knew that a serious attempt was being made to answer your question?"

"Easy there! Wait a minute. You-win-and-I-lose. I ought to be entitled to look at the answer. Suppose you do assign someone to look into the matter and he comes back with a negative report-after I've fulfilled my part of the bargain?"

"It would be necessary for you to place credence in me. Such a research might not be completed in years, or in our lifetimes. But suppose I declare to you that such a research were to be attempted, seriously, hard headedly, all out, and no trouble spared, would you then consent to cooperate?"

Hamilton covered his face with his hands. There were myriad factors revolving in his brain-some of which he was not fully aware of, none of which he wished to talk about. "If you did-if you did-I think perhaps—"

"Here, here," a voice boomed in the room. "What's going on in here? Mustn't excite yourselves yet."

"Hello, Joseph," Mordan greeted the newcomer.

"Morning, Claude. Feel better?"

"Much."

"You still need sleep. Put yourself to sleep."

"Very well." Mordan closed his eyes.

The man called Joseph stepped up to Felix, felt his wrist, peeled back his eyelid, and examined the eye. "You'll do."

"I want to get up."

"Not yet. I want you to sleep for a few hours first. Look at me. You feel sleepy. You—"

Felix tore his gaze away from the man's eyes, and said, "Claude!"

"He's asleep. You can't possibly wake him."

"Oh. See here, you're a therapist, aren't you?"

"Certainly."

"Is there anything that can be done to cure snoring?"

The man chuckled. "All I can suggest is that you sleep through it. Which is what I want you to do now. You are sleepy. You are falling asleep. Sleep..."

When they let him go he tried to look up Phyllis, It was difficult to find her, to begin with, since the meager hospital accommodations of the city were overcrowded and she had been ministered to, as he had been, in temporary quarters. When he did find her, they wouldn't let him in-she was sleeping, they said. Nor were they inclined to give him any information as to her condition; he could show no claim on such knowledge and it was clearly in the private sphere.

He made such a nuisance of himself that he was finally told that she was entirely well, save for a slight indisposition pursuant to gas poisoning. He had to be contented with that.

He might have gotten himself into serious trouble had he been dealing with a man, but his argument was with a grimly inflexible matron, who was about twice as tough as he was.

He had the faculty of dismissing from mind that which could not be helped. Phyllis was not on his mind once he had turned away. He started for his apartment automatically, then recalled, for the first time in a good many hours, Monroe-Alpha.

The fool, the silly fool! He wondered what had happened to him. He was reluctant to inquire since to do so might give away his connection with the conspiracy. It seemed likely that he had already found some means to do that himself.

It did not occur to him then, or at any other time, to "do the honorable thing" by reporting Monroe-Alpha. His morals were strictly pragmatic, and conformed to accepted code as closely as they did only through a shrewd and imaginative self-interest.

He called Monroe-Alpha's office-no, he was not there. He called his apartment. No answer. Temporarily blocked, he decided to go to his friend's apartment on the assumption that he might show up there first.

He got no response at the door. He knew the combination but ordinarily would not think of using it. This seemed to him an extraordinary occasion.

Monroe-Alpha was sitting in his lounging room. He looked up when Hamilton entered, but did not rise and said nothing. Hamilton walked over and planted himself in front of him. "So you're back."

"Yes."

"How long have you been back?"

"I don't know. Hours."

"You have? I signalled your phone."

"Oh, was that you?"

"Certainly it was. Why didn't you answer?"

Monroe-Alpha said nothing, looked at him dully, and looked away. "Snap out of it, man," Hamilton snapped, by now exasperated. "Come to life. The putsch failed. You know that, don't you?"

"Yes." Then he added, "I'm ready."

"Ready for what?"

"You've come to arrest me, haven't you?"

"Me? Great Egg! I'm no monitor."

"It's all right. I don't mind."

"Look here, Cliff," Hamilton said seriously. "What's gotten into you? Are you still filled up with the guff McFee dished out? Are you determined to be a martyr? You've been a fool-there's no need to be a damned fool. I've reported that you were an agent of mine." (In this he anticipated a decision he had made at the moment; he would carry it out later-if necessary.) "You're all in the clear. Well, speak up. You didn't get in on the fighting, did you?"

"No."

"I didn't think you would, after the hypno pills I stuffed down you. One more and you would have listened to the birdies. What's the trouble, then? Are you still fanatical about this damned Survivors Club tommyrot?"

"No. That was a mistake. I was crazy."

"I'll say you were crazy! But see here-you don't rate it, but you're getting away with it, cold. You don't have to worry. Just slide back in where you were and no one's the wiser."

"It's no good, Felix. Nothing's any good. Thanks, just the same." He smiled briefly and wanly.

"Well, for the love o'—I've a good mind to paste you right in the puss, just to get a rise out of you." Monroe-Alpha did not answer. His face he had let sink down into his hands; he showed in no way that he had even heard. Hamilton shook his shoulder.

"What's the matter? Did something else happen? Something I don't know about."

"Yes." It was barely a whisper.

"Do you want to tell me about it?"

"It doesn't matter." But he did start to tell of it; once started he went on steadily, in a low voice and without raising his head. He seemed to be talking only to himself, as if he were repeating over something he wished to learn by heart.

Hamilton listened uneasily, wondering whether or not he should stop him. He had never heard a man bare his secret thoughts as Monroe-Alpha was doing. It seemed indecent.

But he went on and on, until the whole pitiful, silly picture was mercilessly sharp. "And so I came back here," he concluded. He said nothing further, nor did he look up.

Hamilton looked amazed. "Is that all?"

"Yes."

"You're sure you haven't left anything out?"

"No, of course not."

"Then what, in the Name of the Egg, are you doing here?"

"Nothing. There wasn't anyplace else to go."

"Cliff, you'll be the death of me, yet. Get going. Get started. Get up off that fat thing you're sitting on and get a move on."

"Huh? Where?"

"After her, you bubble-brained idiot! Go find her."

Monroe-Alpha shook his head wearily. "You must not have listened. I tell you I tried to burn her."

Hamilton took a deep breath, let it out, then said, "Listen to me. I don't know much about women, and sometimes it seems like I didn't know anything about them. But I'm sure of this-she won't let a little thing like you taking a pot shot at her stand in the way if you ever had any chance with her at all. She'll forgive you."

"You don't really mean that, do you?" Monroe-Alpha's face was still tragic, but he clutched at the hope.

"Certainly I do. Women will forgive anything." With a flash of insight he added, "Otherwise the race would have died out long ago."

CHAPTER ELEVEN

"—then a man is something more than his genes!"

"I CANNOT say," remarked the Honorable Member from Great Lakes Central, "that I place high evaluation on Brother Mordan's argument that this project be taken up to get young Hamilton's consent to propagate. It is true that I am not entirely familiar with the details of the genetic sequence involved—"

"You should be," Mordan cut in somewhat acidly, "I supplied full transcript two days ago."

"I beg your pardon, brother. In those fortyeight hours I have held hearings steadily. The Mississippi Valley matter, you know. It's rather urgent."

"I'm sorry," Mordan apologized. "It's easy for a layman to forget the demands on a Planner's time."

"Never mind. No need for finicky courtesy among ourselves. I scanned the brief and the first sixty pages while we were assembling; that, with such previous knowledge of the case as I had, gives me a rough idea of your problem. But tell me, am I correct in thinking that Hamilton holds nothing exclusively in his chart? You have alternative choices?"

"Yes."

"You expected to finish with his descendent generation—how many generations would be required, using alternative choices?"

"Three additional generations."

"That is what I thought, and that is my reason for disagreeing with your argument. The genetic purpose of the sequence is, I think, of greater importance to the race, but a delay of a hundred years, more or less, is not important-not sufficiently important to justify an undertaking as major as a full effort to investigate the question of survival after death."

"I take it," put in the Speaker for the Day, "that you wish to be recorded as opposing Brother Mordan's proposal?"

"No, Hubert, no. You anticipate me-incorrectly. I am supporting his proposition. Notwithstanding the fact that I consider his reasons, though good, to be insufficient, I evaluate the proposal as worthwhile in itself. I think we should support it fully."

The Member from the Antilles looked up from the book he was reading (not rudeness; everyone present knew that he had parallel mental processes and no one expected him to waste half the use of his time out of politeness) and said, "I think George should amplify his reason."

"I will. We policy men are like a pilot who is attempting to do a careful job of conning his ship without having any idea of his destination. Hamilton has put his finger on the weak point in our whole culture-he should be a planner himself. Every decision that we make, although it is based on data, is shaped by our personal philosophies. The data is examined in the light of these philosophies. How many of you have an opinion about survival-after-death? I ask for a show of hands. Come now, be honest with yourselves." Somewhat hesitantly they put their hands up-men and women alike, every one of them. "Now," the Great Lakes member continued, "the hands of those who are sure that their opinions are correct."

All of the hands went down, save that of the Member from Patagonia. "Bravo!" Rembert of the Lakes called out. "I should have guessed that you would be sure."

She took the cigar out of her mouth, said rather sharply, "Any fool knows that one," and went back to her needlework. She was over a hundred years old, and the only control natural in the Board. Her district had confirmed her tenure regularly for more than fifty years. Her eyesight was thought to be failing, but she had all of her own yellow teeth. Her wrinkled, mahogany features showed more evidence of Indian blood than Caucasian. They all claimed to be a little afraid of her.

"Garvala," Rembert said to her, "perhaps you can cut the matter short by giving us the answer?"

"I can't tell you the answer-and you wouldn't believe me if I did." She was silent for a moment, then added, "Let the boy do as he pleases. He will anyway."

"Do you support or oppose Mordan's proposition?"

"Support. Not that you're likely to go at it right." There was a short silence. Every member in the chamber was hastily trying to recall when, if ever, Carvala had been proven to be on the wrong side of a questionin the long run.

"It would seem obvious to me," Rembert continued, "that the only rational personal philosophy based on a conviction that we die dead, never to rise again, is a philosophy of complete hedonism. Such a hedonist might seek his pleasure in life in very subtle, indirect, and sublimated fashions; nevertheless pleasure must be his only rational purpose-no matter how lofty his conduct may appear to be. On the other hand, the possibility of something more to life than the short span we see opens up an unlimited possibility of evaluations other than hedonistic. It seems to me a fit subject to investigate."

"Granting your point," commented the woman representing the Northwest Union, "is it our business to do so? Our functions and our authority are limited; we are forbidden by constitution to meddle in spiritual matters. How about it, Johann?"

The member addressed was the only priest persona among them, he being the Most Reverend Mediator to some millions of his coreligionists south of the Rio Grande. His political prominence was the more exceptional in that the great majority of his constituents were not of his faith. "I do not see, Geraldine," he replied, "that the constitutional restriction applies. What Brother Mordan proposes is a coldly scientific investigation. Its consequences may have spiritual implications, if there are positive results, but an unbiased investigation is no violation of religious freedom."

"Johann is right," said Rembert. "There is no subject inappropriate for scientific research. Johann, we've let you fellows have a monopoly of such matters for too long. The most serious questions in the world have been left to faith or speculation. It is time for scientists to cope with them, or admit that science is no more than pebble counting."

"Go ahead. I shall be interested in seeing what you can make of them-in laboratories."

Hoskins Geraldine looked at him. "I wonder, Johann, what your attitude will be if this research should turn up facts which controvert some one of your articles of faith?"

"That," he answered imperturbably, "is a matter for me to settle with myself. It need not affect this board."

"I think," observed the Speaker for the Day, "that we might now seek a preliminary expression of opinion. Some support the proposal-are any opposed?" There was no response. "Are any undecided?" There was still no response, but one member stirred slightly. "You wished to speak, Richard?"

"Not yet. I support the proposal, but I will speak to it later."

"Very well. It appears to be unanimous...It is so ordered. I will co-opt an instigator later. Now, Richard?"

The member-at-large for transient citizens indicated that he was ready. "The research does not cover enough territory."

"Yes?"

"When proposed as a means of persuading Hamilton Felix to accede to the wishes of the State geneticists, it was sufficient. But we are now undertaking it for itself. Is that not true?"

The Speaker glanced around the room, picking up nods from all but ancient Carvala-she seemed uninterested in the whole matter. "Yes, that is true."

"Then we should undertake not just one of the problems of philosophy, but all of them. The same reasons apply."

"We are under no necessity of being consistent, you know."

"Yes, I know, am I not trammeled by the meshes of verbal logic. I am interested. I am stimulated by the vista. I want us to extend the research."

"Very well. I am interested, too. I think we might well spend the next several days discussing it. I will postpone co-opting the instigator until we determine just how far we will go."

Mordan had been intending to ask to be excused, his mission accomplished, but at this new twist, fire and earthquake, garnished with pretty girls, could not have tempted him to leave. As a citizen, he was entitled to listen if he chose; as a distinguished synthesist himself, no one would think of objecting to his physical presence in the circle of discussion.

The member for transients went on. "We should enumerate and investigate all of the problems of philosophy, especially the problems of metaphysics and epistemology."

"I had thought," the Speaker said mildly, "that epistemology had been pretty well settled."

"Certainly, certainly-in the limited sense of agreeing on the semantic nature of symbolic communication. Speech and other communication symbols necessarily refer back to agreed-upon, pointed-to referent physical facts, no matter how high the level of abstraction, for communication to take place. Beyond that we cannot communicate. That's why Brother Johann and I can't argue about religion. He carries his around inside of him and can't point to what he means-as I carry mine. We can't even be sure that we disagree. Our notions about religion may be identical, but we can't talk about it meaningfully-so we keep quiet."

Johann smiled with untroubled good nature, but said nothing. Carvala looked up from her fancywork and said sharply, "Is this a development center lecture?"

"Sorry, Carvala. We agree on the method of symbol communication-the symbol is not the referent, the map is not the territory, the speech-sound is not the physical process. We go further and admit that the symbol never abstracts all of the details of the process it refers to. And we concede that symbols can be used to manipulate symbols...dangerously but usefully. And we agree that symbols should be structurally as similar as possible to the referents for communication purposes. To that extent epistemology is settled; but the key problem of epistemology-how we know what we know and what that knowledge means, we have settled by agreeing to ignore-like Johann and myself in re theology."

"Do you seriously propose that we investigate it?"

"I do. It's a key problem in the general problem of the personality. There is a strong interconnection between it and the object of Mordan's proposal. Consider-if a man 'lives' after his body is dead or before that body was conceived, then a man is something more than his genes and his subsequent environment. The doctrine of no-personal-responsibility for personal acts has become popular through the contrary assumption. I won't go into the implications-they must be evident to all of you-in ethics, in politics, in every field. But note the parallel between map-territory and gene-chart-and-man. These basic problems are all interrelated and the solution to any of them might be the key to all the others."

"You did not mention the possibility of direct communication without symbols."

"I implied it. That is one of the things we agreed to forget when we accepted the semantic negative statements as the final word on epistemology. But it ought to be looked into again. There is something to telepathy, even if we can't measure it and manipulate it. Any man who has ever been happily married knows that, even if he's afraid to talk about it. Infants and animals and primitives have some use of it. Maybe we've been too smart. But the question ought to be reopened."

"Speaking of philosophical questions in general," put in the member from New Bolivar, "we have already agreed to subsidize one. Doctor Thorgsen's project-the ballistic stellarium-eidouraniun, I should call it. The origin and destination of the universe is certainly a classic problem of metaphysics."

"You are right," said the Speaker. "If we follow Richard's proposal, Doctor Thorgsen's project should be included."

"I suggest we did not allot Doctor Thorgsen enough credit."

"The subsidy could be increased, but he has not spent much of it. He seems to have little talent for spending money."

"Perhaps he needs abler assistants. There is Hargrave Caleb, and, of course, Monroe-Alpha Clifford. Monroe-Alpha is wasted in the department of finance."

"Thorgsen knows Monroe-Alpha. Perhaps Monroe-Alpha doesn't want to work on it."

"Nonsense! Any man likes a job that stretches his muscles."

"Then perhaps Thorgsen hesitated to ask him to help. Thorgsen is an essentially modest man, as is Monroe-Alpha."

"That seems more likely."

"In any case," the Speaker finished, "such details are for the instigator to consider, not the whole board. Are you ready for opinion? The question is Brother Richard's proposal in the broadest sense-I suggest that we postpone elaboration of the details of projects and methods until tomorrow and other morrows. In the meantime-does any member oppose?"

There was no opposition; there was full consent.

"So be it," said the Speaker. He smiled. "It seems we are about to attempt to walk where Socrates stumbled."

"Crawl, not 'walk,'" Johann corrected. "We have limited ourselves to the experimental methods of science."

"True, true. Well, 'he who crawls cannot stumble.' Now to other matters-we still have a state to govern!"

CHAPTER TWELVE

'Whither thou goest—"

"HOW WOULD you like," Felix asked Phyllis, "to have a half interest in a gladiator?"

"What in the world are you talking about?"

"This undertaking of Smith Darlington's feetball. We are going to incorporate each employee's contract and sell it. Our agent thinks it will be a good investment, and, truthfully, I think he's right."

"Feetball," repeated Phyllis meditatively. "You did say something about it, but I never understood it."

"It's a silly business, at best. Twentytwo men get out on a large open place and battle with their bare hands."

"Why?"

"The excuse is to move a little plastic spheroid from one end of the place to the other."

"What difference does it make which end it's on?"

"None, really-but it's as reasonable as any other game."

"I don't get it," Phyllis decided. "Why should anyone fight unless he wants to kill someone?"

"You have to see it to understand it. It's exciting. I even found myself shouting."

"You!'"

"Uh huh. Me. Old calm-as-a-cat Felix. It's going to take hold, I tell you. It's going to be popular. We'll sell permissions to view it physically and then all sorts of lesser rights-direct pick-up, recording, and so forth. Smith has a lot of ideas about identifying various combinations with cities and organizations and attaching color symbols to them and songs and things. He's full of ideas-an amazing young man, for a barbarian."

"He must be."

"Better let me buy you a piece of it. It's a pure spec proposition and you can get in cheap-now. It'll make you rich."

"What use have I for any more money?"

"I don't know. You might spend it on me."

"That's pretty silly. You're bloated with credit now."

"Well, that brings me around to another subject. When we're married you can really put your mind on helping me spend it."

"Are you on that subject again?"

"Why not? Times have changed. There is no obstacle anymore. I've come around to Mordan's way of thinking."

"So Mordan told me."

"He did? Egg's Name-everything goes on behind my back! Never mind. When do we stat the contract?"

"What makes you think we are going to?"

"Huh? Wait a minute-I thought that all that stood between us was a difference of opinion about children?"

"You thought too much. What I said was that I would never marry a man who didn't want children."

"But I understood you to say—" He got up and moved nervously around the room. "Say, Phil-don't you like me?"

"You're nice enough-in your own horrid way."

"Then what's the trouble?"

She did not answer.

Presently he said, "I don't know whether it makes any difference since you feel that way about it, but I love you-you know that, don't you?"

"Come here." He came near to where she was sitting. She took him by the ears and pulled his head down.

"Filthy, you big dope-you should have said that ten minutes ago." She kissed him.

Sometime later she said dreamily, "Filthy—"

"Yes, darling?"

"After we have Theobald we'll have a little girl and then another little boy, and then maybe another little girl."

"Urn—"

She sat up. "What's the matter? Aren't you pleased at the prospect?" She looked at him closely.

"Sure, sure."

"Then why are you looking so glum?"

"I was thinking about Cliff. The poor lunk.

"Hasn't he found any trace of her yet?"

"Nary a trace."

"Oh, dear!" She put her arms around him and held him.

No sign of her in the Giant Forest, though he had cut the air back to the place. No woman had registered there with the given name of Marion. No one could he find who could identify her by his description. No ship had checked in there registered to such a person. Nor did the owners of the ships that had been there know such a person-several of them knew Marions, but not the Marion-although three of them had responded to the description closely enough to send him charging across country, with wildly beating heart, on errands which cruelly disappointed him.

There remained Johnson-Smith Estaire, at whose town house he had first seen her. He had consulted her at once, after his initial failure to find Marion still at the Park. No, she didn't recall such a person. "After all, my dear Master Monroe-Alpha, the place was simply mobbed."

Did she keep a guest list? Yes, of course; what land of a hostess did he think she was? Could he see it? She sent for her social secretary.

There was no Marion on the list.

He went back again. Could she have been mistaken? No, there was no mistake. But people sometimes brought others along to such a party as that-had he thought of that? In that case she would have no record of it. Did she recall any such? No, she couldn't-it was too much to ask. Would it be too much to ask to copy the guest list? Not at all-anything to oblige.

But first he must listen to her. "It's becoming simply impossible to get servants at any reasonable wage." Couldn't he do something about it. "Dear Master Monroe-Alpha." In what way? He was the man who handled the dividend, wasn't he? That was the trouble-with the dividend so high they simply would not enter service unless you simply bribed them, my dear.

He tried to explain to her that he had no control over the dividend, that he was simply the mathematical go-between for the facts of economics and the Board of Policy. He could see that she did not believe him.

He decided not to tell her, since he wanted a favor from her, that he himself would not choose to work as a personal servant for another unless driven to it by hunger. He tried to suggest that she make use of the excellent automaton furniture manufactured by her husband, supplemented by the help of the service companies. But she would have none of it. "So common, my dear. I tell you nothing replaces a well-trained servant. I should think people of that class would take pride in such a profession. I'm sure I would if I were called to such a station in life."

Impatiently, but with aching care, he plodded through the list. Some of the addresses were outside the Capital, some as far away as South America-Johnson-Smith Estaire was a fashionable hostess. Those he could not question himself, not fast enough to satisfy the lump of misery inside him. He must needs hire agents to track them down. He did so; it took all the credit he had-personal service comes high!—he borrowed against his salary to make up the deficit. Two of the guests had died in the meantime. He set more agents to work, investigating tactfully their backgrounds and acquaintances, trying, trying to locate a woman named Marion. He dare not even leave these two deceased to the last, for fear the trail might grow cold.

The others, those living in the Capital, he investigated himself. No, we took no one with us to that party-certainly no one named Marion. Estaire's party?—let me see, she gives so many. Oh, that one-no, I'm sorry. Now let me think-do you mean Selby Marion? No, Selby Marion is a little tiny woman with bright red hair. Sorry, my dear fellow-care for a drink. No? What's the hurry?

Yes, surely. My cousin, Faircoat Marion. There's a stereo of her over there, on the organ. Not the one you're looking for? Well, signal me and tell me how you made out. Always glad to do a favor for a friend of Estaire's. Fine woman, Estaire-always lots of fun at her place.

We did take someone to that party-who was it, dear? Oh, yes, Reynolds Hans. He had some strange girl with him. No, I can't remember her name-do you, dear?—Me, I just call them all Lollipops, if they're under thirty. But here's Reynolds' address; you might ask him.

Master Reynolds did not consider it an intrusion, no. Yes, he recalled the occasion-jolly brawl. Yes, he had escorted his cousin from Sanfrisco. Why, yes, her name was Marion—Hartnett Marion. How had he known her name?

Say, that's interesting-done something like that himself once. Thought he'd lost track of the girl, only she turned up the following week at another party. Married, though, and in love with her husband-fortunately.

No, he didn't mean that Marion was married, but this other girl-kid named Francine. Did he have a picture of his cousin? Well, now, let me see, he didn't think so. Wait now, he might have a flat pic, taken when they were kids, in a scrapbook somewhere. Where would that be? He was going to clean out this flat some day and throw away a lot of this junk-never could find anything when he wanted it. Here it is-that's Marion, in the "front row, second from the left. Was that the girl?

It was she! It was she!

How fast can a skyracer be pushed? How many corners can a man cut without being patrolled? Go...go...go!

He paused for a moment and tried to still his racing heart, before signalling at the door. The scanner investigated him and the door dilated.

He found her alone. He stopped when he saw her, unable to move, unable to speak, face white.

"Come in," she said.

"You...you'll receive me?"

"Of course. I've been waiting."

He searched her eyes. They were warm and tender still, albeit troubled. "I don't understand. I tried to burn you."

"You didn't mean to. You didn't want to."

"I—But...Oh, Marion, Marion!" He stumbled forward toward her, and half fell. His head was in her lap. He shook with the racking sobs of one who has not learned how to cry.

She patted his shoulder. "My dear. My dear."

He looked up at last and found that her face was wet, even though he had heard no sound of tears. "I love you," he said. He said it tragically, as if it were an irreparable harm.

"I know. I love you."

Much later, she said to him, "Come with me."

He followed her on out into another room, where she busied herself at her wardrobe. "What are you doing?"

"I've a few things to take care of first."

"First?"

"This time I'm coming with you."

On the way back he used the phrase "after we're married."

"You intend to marry me?"

"Of course. If you'll have me!"

"You would marry a control natural?"

"Why not?" He met the issue bravely, even casually.

Why not? Well, Roman citizens, proud of their patrician Latin blood, could have told him. The white aristocracy of the Old South could have, in their little day, explained to him in detail why not. "Aryan" race-myth apologists could have defined the reasons. Of course, in each case the persons giving the reasons would have had a different "race" in mind when explaining the obscene horror he contemplated committing, but their reasons would have been the same. Even Johnson-Smith Estaire could have explained to him "Why not"—and she would most certainly cut him off her list for stooping to such an alliance. After all, kings and emperors have lost their thrones for lesser miscegenations.

"That's all I wanted to know," she said. "Come here, Clifford."

He came, a little mystified. She raised her left arm; he read the little figures tattooed there. The registration number was-no matter. But the classification letter was neither the "B" of a basic type, such as he bore, nor the "C" of a control natural. It was X-experimental.

She told him about it a little later. Her hyper-dexter great-grandparents had both been control naturals. "Of course it shows a little," she said. "I do catch colds, if I don't take my pills. And sometimes I forget. I'm a sloppy person, Clifford." A child of these two, her dexter grandfather, had been identified, rather late in life, as a mutation, probably favorable-almost certainly favorable. His mutation was no gross matter, easily recognized, but was subtle and subliminal. It had to do with emotional stability. Perhaps it would be easiest to say that he was more civilized than any man can be expected to be. Naturally, an attempt was made to conserve the mutation. She was one of the conservators.

CHAPTER THIRTEEN

"No more privacy than a guppy in an aquarium"

PHYLLIS squealed at him as he got home. "Felix!"

He chucked aside the file case he had been carrying and kissed her. "What's the trouble, Flutterbrain?"

"This. Look. Read it." "It" was a stat of a handwritten message. He read aloud: "'Espartero Carvala presents her compliments to Madame Longcourt Phyllis and prays permission to call on the morrow at half after sixteen hundred.' Hummm...You're shooting high, darling."

"But whatever am I to do?"

"Do? Why, you put out your hand, say 'How do you fare?' and then serve her something-tea, I suppose, though they say she drinks like a fish."

"Filthy!"

"What's the matter?"

"Don't joke with me. What am I to do? I can't entertain her. She's a Policy Maker-I wouldn't know what to say to her."

"Suppose she is on the Policy Board. She's human, ain't she? Our home is all right, isn't it? Go down and buy yourself a new gown-then you'll feel fit for anything."

Instead of brightening up, she began to cry. He took her in his arms, and said, "There, there! What's the trouble? Did I say something wrong?"

She stopped and dabbed at her eyes. "No. Just nerves, I guess. I'm all right."

"You startled me. You never did anything like that before."

"No. But I never had a baby before, either."

"Yeah, that's right. Well, cry, if it makes you feel better. But don't let this old fossil get under your skin, kid. You don't have to receive her, you know. I'll call her and tell her you can't."

She seemed quite recovered from her unease. "No, don't do that. I'd really like to see her. I'm curious and I'm flattered."

They had discussed with each other the question as to whether Madame Espartero Carvala had intended to call on both of them, or Phyllis only. Felix was reluctant to be present if his presence was not expected; he was equally reluctant to fail to show proper urbanity by not being present to receive a distinguished visitor. As he pointed out to Phyllis, it was his home as well as hers. He telephoned Mordan, since he knew that Mordan was much closer to such mighty and remote people than himself. Mordan gave him no help. "She's a rule unto herself, Felix. She's quite capable of breaking every custom of polite conduct, if she chooses."

"Any idea why she's coming?"

"Not the slightest. Sorry." Mordan himself wondered, but was honest enough to admit that his guesses were unsound-no data; he simply did not understand the old girl, and knew it.

Madame Espartero Carvala settled the matter herself. She came stumping in, supporting herself with a heavy cane. Clutched in her left hand was a lighted cigar. Hamilton approached her, bowed, "Madame —" he began.

She peered at him. "You're Hamilton Felix. Where's your wife?"

"If Madame will come with me." He attempted to offer her bis arm for support.

"I can manage," she said rather ungraciously. Nevertheless she clamped the cigar in her teeth and took his arm. He was amazed to find how little she weighed, judging by the pressure on his arm-but the grip of her fingers was firm. Once in the lounging room, in the presence of Phyllis, she said, "Come here, child. Let me look at you."

Hamilton stood by foolishly, not knowing whether to seat himself or leave. The old lady turned, noticing that he was still there and said, "You were very gracious to escort me in to your wife. I thank you." The formal politeness of the words were oddly at variance with her first, brittle remarks, but they were not delivered in warm tones. Felix realised that he had been clearly and unmistakably dismissed. He got out.

He went to his retiring room, selected a scrollscript, fitted it into the reader, and prepared to kill time until Carvala should leave. But he found himself unable to fix his attention on the story he selected. He found that he had used the rewind button three times and still had no notion of how the story started.

Damn! He thought-I might as well have gone to the office.

For he had an office-now. The thought made him smile a little. He was the man who was never going to be tied down, who had split his profits with a man-of-affairs rather than be troubled with business worries. Yet here he was, married, an expectant father, actually living at the same address as his wife, and-possessing an office! True, the office had nothing to do with his business affairs.

He found himself actually engaged in the Great Research which Mordan had promised. Carruthers Alfred, former member of the Board of Policy until he had retired to pursue his studies, had been co-opted as instigator for the enlarged project. He in turn had co-opted Hamilton, who had protested, that he was no synthesist, nor scientist. Nevertheless Carruthers wanted him. "You have an erratic and unorthodox imagination," he had said. "This job calls for imagination, the more heterodox the better. You needn't do routine research, if you don't want to-plenty of patient technicians for that."

Felix suspected that Mordan had had something to do with his selection, but did not press him about it. Mordan, Hamilton knew, had an overrated opinion of his ability. He esteemed himself as a second-rater, a competent and high-powered man, but a second-rater nonetheless. That chart that Mordan talked about-you could not compress a man into a diagram and hang him on a wall. He was not that chart. And didn't he know more about himself, from sitting on the inside, than any genetic technician could learn by peering down the double barrel of a 'scope?

But he had to admit he was glad that he had been invited into the project-it interested him. He had realized quite early that the enlarged project had not been taken up just to circumvent his balkiness-the transcript of authorization had shown him that. But he did not feel cheated-Mordan had delivered everything that he had promised, and Felix had become interested in the project for its own sake-both projects. Both the great public project of the Great Research and the private matter of himself, Phyllis, and their child to come.

He wondered what the little tyke would be like.

Mordan seemed confident that he knew. He had shown them the diploid chromosome chart resulting from their carefully chosen gametes, expounding on how the characteristics of the two parents would be combined in the child. Felix was not so sure; in spite of his own reasonably thorough knowledge of genetic theory and technique he was not convinced that all of a human being's multifold complexity could be wrapped up in a little blob of protoplasm smaller than a pin point. It was not reasonable. There had to be more to a man than that.

Mordan had seemed to find it highly desirable that he and Phyllis possessed so many Mendelian characteristics in common. It not only, he pointed out, made the task of selection of gametes much simpler and shorter, but also insured reinforcement of those characteristics, genetically. Paired genes would be similar, instead of opposed.

On the other hand, Hamilton found that Mordan favored the alliance of Monroe-Alpha and Hartnett Marion, although they were as dissimilar as two persons could be. Hamilton pointed out the inconsistency in reasoning. Mordan had been unperturbed. "Each genetic case is a discrete individual. No rule in genetics is invariable. They complement each other."

It was certainly obvious that Marion had made Cliff happy, happier than Felix had ever seen him.

The big dope.

He had long been of the opinion that what Cliff needed was a keeper, to lead him around on a string, fetch him indoors when it rained, and tickle him when he pouted. (Not that the opinion subtracted from his very real devotion to his friend.)

Marion seemed to qualify on all counts. She hardly let him out of her sight. She worked with him, under the euphemistic title of "special secretary."

"'Special secretary'?" Hamilton said, when Monroe-Alpha told him about it. "What does she do? Is she a mathematician?"

"Not at all. She doesn't know a thing about mathematics-but she thinks I'm wonderful!" He grinned boyishly-Hamilton was startled to see how it changed his face. "Who am I to contradict her?"

"Cliff, if you keep that up, you'll have a sense of humor yet."

"She thinks I have one now."

"Perhaps you have. I knew a man who raised warthogs once. He said they made the flowers more beautiful."

"Why did he think that?" Monroe-Alpha was puzzled and interested.

"Never mind. Just what is it that Marion does?"

"Oh, a lot of little things. Keeps track of things I forget, brings me a cup of tea in the afternoon. Mostly she's just here when I want her. When a concept won't come straight and my head feels tired, I look up and there's Molly, just sitting there, looking at me. Maybe she's been reading, but when I look up I don't have to say anything-she's looking back at me. I tell you it helps, I never get tired anymore." He smiled again.

Hamilton realized with sudden insight that there never had been anything wrong with Monroe-Alpha except that the poor boob had never been happy. He had no defenses against the world-until now. Marion had enough for both of them.

He had wanted to ask Cliff what Hazel thought of the new arrangements, but hesitated to do so. despite their close friendship. Monroe-Alpha brought it up himself. "You know, Felix, I was a little worried about Hazel."

"So?"

"Yes. I know she had said she wanted to enter a divorce, but I hadn't quite believed her."

"Why not?" Felix had inquired blandly.

Monroe-Alpha had colored. "Now, Felix, you're just trying to get me mixed up. Anyhow, she seemed positively relieved when I told her about Marion and me. She wants to take up dancing again."

Felix thought with regret that it was a mistake for a retired artist to attempt a comeback. But Cliff's next words made him realize he had been hasty. "It was Thorgsen's idea—"

"Thorgsen? Your boss?"

"Yes. He had been telling her about the outstations, particularly the ones on Pluto, of course, but he mentioned Mars and the rest, I suppose. They don't get much recreation, other than canned shows and reading." Hamilton knew what he meant, although he had never thought much about it. With the exception of the tourist cities on Luna there was nothing to attract human beings to the other planets, save for exploration and research. The devoted few who put up with the unearthly hardships necessarily lived a monklike existence. Luna was a special case, naturally; being practically in Earth's front yard and an easy jump, it was as popular for romantic holidays as Southpole had once been.

"She got the idea, or Thorgsen suggested it to her, of getting together a diversified travelling troupe to play a circuit of all the outposts."

"It doesn't sound commercial."

"It doesn't have to be. Thorgsen took the matter up for subsidy. He argued that, if research and exploration were necessary, then morale of the personnel involved was a government matter, in spite of the longstanding policy against government participation in the entertainment business, luxury business, or fine arts."

Hamilton whistled. "Nice going! Why, that principle was almost as rock solid as civil rights."

"Yes, but it was a matter of constitution. And the Planners are no fools. They don't necessarily follow precedent. Look at this job we're on."

"Yes, surely. Matter of fact, that was what I dropped in to see you about. I wanted to see how you were getting along." At the time of this conversation Hamilton was feeling his way into the whole picture of the Great Research. Carruthers had given him no fixed instructions, but had told him to spend a few weeks sizing up the problem.

The phase of the research occupying Monroe-Alpha's attention-Thorgsen's project, the Grand Eidouraniun-was much further advanced than any other aspect of the whole project, since it had been conceived originally as a separate matter before the Great Research, which included it, had been thought of. Monroe-Alpha had come into it rather late, but Hamilton had assumed that his friend would be the dominant figure in it. This, Monroe-Alpha maintained, was not true.

"Hargrave is much more fitted for this sort of work than I am. I take my directions from him-myself, and about sixty others."

"How come? I thought you were tops in the numbers racket."

"I have my specialty and Hargrave knows how to make the best use of it. You apparently have no idea of how diversified and specialized mathematics is, Felix. I remember a congress I attended last year-more than a thousand present, but there weren't more than a dozen men there I could really talk to, or understand."

"Hmmm...What does Thorgsen do?"

"Well, naturally, he isn't much use in design-he's an astrophysicist, or, more properly, a cosmic metrician. But he keeps in touch and his suggestions are always practical."

"I see. Well-got everything you want?"

"Yes," admitted Monroe-Alpha, "unless you should happen to have concealed, somewhere about your person, a hyper-sphere, a hypersurface, and some four-dimensional liquid, suitable for fine lubrication."

"Thanks. You can hand me back my leg now. I see I've been wrong again-you are acquiring a sense of humor."

"I am quite serious about it," Cliff answered without cracking a smile, "even though I haven't the slightest idea where I could find such nor how I could manipulate it if I did."

"For why? Give."

"I would like to set up a four-dimensional integrator to integrate from the solid surface of a four-dimensional cam. It would greatly shorten our work if we could do such a thing. The irony of it is that I can describe the thing I want to build, in mathematical symbology, quite nicely. It would do work, which we now have to do with ordinary ball-and-plane integrators and ordinary three-dimensional cams, in one operation whereas the system we use calls for an endless series of operations. It's a little maddening-the theory is so neat and the results are so unsatisfactory."

"I grieve for you," Hamilton had answered, "but you had better take it up with Hargrave."

He had left soon after that. It was evident that those human calculating machines needed nothing from him, and that they knew what they were doing. The project was important-damned important, he thought it was-to investigate what the Universe had been and what it would become. But it was certainly a long-distance matter and he himself would never live to see the end of it. Cliff had told him with a perfectly straight face that they hoped to check their preliminary calculations in a matter of three or three-and-a-half centuries. After that they could hope to build a really worthwhile machine which might tell them things they did not already know.

So he dismissed the matter. He admired the sort of intellectual detachment which would permit men to work on such a scale, but it was not his horse.

The Great Research in its opening phases seemed to fall into half a dozen major projects, some of which interested him more than others because they gave some hope of producing results during his lifetime. Some, however, were almost as colossal as the building of the Grand Eidouraniun. The distribution of life through the physical universe, for example, and the possibility that other, nonhuman intelligences existed somewhere. If there were such, then it was possible, with an extremely high degree of mathematical probability, that some of them, at least, were more advanced than men. In which case they might give Man a "leg up" in his philosophical education. They might have discovered "Why" as well as "How."

It had been pointed out that it might be extremely dangerous, psychologically, for human beings to encounter such superior creatures. There had been the tragic case of the Australian Aborigines in not too remote historical times-demoralized and finally exterminated by their own sense of inferiority in the presence of the colonizing Anglish.

The investigators serenely accepted the danger; they were not so constituted as to be able to do otherwise.

Hamilton was not sure it was a danger. To some it might be, but he himself could not conceive of a man such as Mordan, for example, losing his morale under any circumstances. In any case it was a long-distance project. First they must reach the stars, which required inventing and building a starship. That would take a bit of doing. The great ships which plied the lonely reaches between the planets were simply not fast enough. Some new drive must be found, if the trips were not to take generations for each leg.

That they would find life elsewhere in the universe he was quite sure, although a millennia of exploration might intervene. After all, he considered, the universe was roomy! It had taken Europeans four centuries to spread throughout the two continents of the "New World"—what about a galaxy! But Life they would find. It was not only an inner conviction; it was just short of scientific fact, for it was a tight inference of only one stage from established fact. Arrhenius the Great had set forth the brilliant speculation, sometime around the beginning of the XXth century, that life-potent spores might be carried from planet to planet, from star to star, pushed along by light pressure. The optimum size for motes to be carried along by light pressure happens to be on the same order as the sizes of bacilli. And bacilli spores are practically unkillable-heat, cold, radiation, time-they sleep through it until lodged in a favorable environment. Arrhenius calculated that spores could drift to Alpha Centauri in around nine thousand years-a mere cosmic blink of the eye.

If Arrhenius were right, then the universe was populated, not just the earth. It mattered not whether life had originated first on earth, first elsewhere, or in many different neighborhoods, once started it had to spread. Millions of years before spaceships it had spread-if Arrhenius were right. For spores alone, lodging and multiplying, would infect an entire planet with whatever forms of life were suited to that planet. Protoplasm is protean; any simple protoplasm can become any complex form of life under mutation and selection.

Arrhenius had been spectacularly vindicated, in part, in the early days of interplanetary exploration. Life had been found on all the planets, save Mercury and Pluto; even on Pluto there were signs of feeble, primitive life in the past. Furthermore, protoplasm seemed to be much the same wherever found-incredibly varied but presumably related. It was disappointing not to have found recognizable intelligence in the solar system-it would have been nice to have had neighbors! (The poor degenerate starveling descendants of the once-mighty Builders of Mars can hardly be described as intelligent

-except in charity. A half-witted dog could cheat them at cards.)

But the most startling and satisfying vindication of Arrhenius lay in the fact that spores had been trapped out in space itself, in the supposedly-sterile raw vacuum of space!

Hamilton admitted that he did not expect the search for other living intelligences to bear fruit during his tenure on Terra, unless they got a hump on themselves in dreaming up that starship and then hit the jackpot on the first or second try. And again it was not his forte-he might cook up a few gadgets for them as auxiliary mechanicals in making the ship more livable, but for the key problem, motive power, he was about twenty years too late in specializing. No, keep in touch, kibitz a little, and report to Carruthers-that was all he could do.

But there were still several other research possibilities already underway, things that had to do with human beings, with men, in their more esoteric and little-studied aspects. Things that nobody knew anything about anyhow and which he could, therefore, tackle on an equal footing with others, catch-as-catch-can, and no holds barred. Where does a man go after he's dead? And, conversely, where does he come from? He made a mental note of that latter-it suddenly occurred to him that most of the attention had been given to the first half of the paired question. What is telepathy and how do you make it tick? How is it that a man can live another life in his dreams? There were dozens more, all questions science had refused to tackle because they were too slippery-had in fact walked away from like a disgruntled cat. All of them related to some troublesome characteristic of the human personality-whatever that was-and any of them might lead to an answer as to purpose-meaning.

He felt toward these questions the free and easy attitude of the man who was asked if he could pilot a rocket: "I don't know-I've never tried." Well, he would try. And he would help Carruthers see to it that many others tried, strongly, consistently, following out every approach that could be thought of, and keeping meticulous, full, scientific records. They would track down the Ego, trap it, and put a band on its leg.

What was an ego? He didn't know, but he knew he was one. By which he did not mean his body, nor, by damn, his genes. He could localize it-on the centerline, forward of his ears, back of his eyes, and about four centimetres down from the top of the skull-no, more like six. That was where he himself lived-when he was home-he would bet on it, to the nearest centimetre. He knew closer than that, but he couldn't get in and measure it. Of course, he wasn't home all the time.

Hamilton could not figure out just why Carruthers wanted him, but then, he had not been present at an exchange between Mordan and Carruthers. "How is my Problem Child getting along?" Mordan had inquired.

"Quite well, Claude. Quite well indeed."

"What are you using him for?"

"Well..." Carruthers pursed his lips. "I'm using him as a philosopher, only he does not know it."

Mordan chuckled. "Better not let him know. I. think he might be offended to be called a philosopher."

"I shan't. Really, he's quite useful to me. You know how impossible most specialists are, and how pedantic most of our brother synthesists."

"Tut, tut. Such heresy."

"Isn't it, though? But Felix is useful to me. He has an active, uninhibited mind. His mind prowls."

"I told you he was a star line."

"Yes, you did. Every now and then you genetics laddies come out with the right answer."

"May your bed spring a leak," Mordan answered. "We can't always be wrong. The Great Egg must love human beings, he made a lot of them."

"Same argument applies to oysters, only more so."

"That's different," said Mordan. "I'm the one who loves oysters. Have you had dinner?" Felix sat up with a start. The house phone at his elbow was chiming. He flipped the come-along tab and heard Phyllis's voice. "Felix, my dear, will you come in and say goodbye to Madame Espartero?" "Coming, dear."

He returned to the lounge, feeling vaguely unsettled. He had forgotten the presence of the ancient Planner. "Madame, will you graciously permit—" "Come here, lad!" she said sharply. "I want to see you in the light." He came forward and stood before her, feeling somewhat as he always had as a child when the development center therapists checked over his growth and physical development. Damnation, he thought, she looks at me as if I were a horse and she a buyer.

She stood up suddenly and grasped her stick. "You'll do," she stated, as if the knowledge somehow annoyed her. She extracted a fresh cigar from somewhere about her person, turned to Phyllis, and said, "Goodbye, child. And thank you." Whereupon she started for the door.

Felix had to hurry to catch up with her and let her out. Felix returned to Phyllis, and said savagely, "A man that'ud do that 'ud be challenged." "Why, Felix!"

"I detest," he stated, "these damned emphatic old women. I have never seen why politeness should be the obligation of the young and rudeness the privilege of age."

"Why, Felix, she's not like that at all. I think she's a dear."

"She doesn't act like it."

"Oh, she doesn't mean anything by that. I think she's just always in a hurry."

"Why should she be?"

"Wouldn't you be-at her age?"

He hadn't thought of it from that point of view. "Maybe you're right. Sands of time, and so forth. What did the two of you talk about?"

"Oh-lots of things. When I expected the baby and what we were going to name him and what plans we had for him and things."

"I'll bet she did most of the talking." "No, I did. Occasionally she put in a question."

"Do you know, Phyllis," he said soberly, "one of the things I like least about the whole business of you and me and him is the quivering interest that outsiders take in it. No more privacy than a guppy in an aquarium."

"I know what you mean, but I didn't feel that way with her. We talked women talk. It was nice."

"Hrummph!"

"Anyway, she didn't talk much about Theobald. I told her we intended to have a little sister for Theobald presently. She was very much interested. She wanted to know when, and what plans we had for her, and what we intended to name her. I hadn't thought about that. What do you think would be a nice name, Felix?"

"Egg knows-seems to me that's rushing matters a little. I hope you told her that it would be a long, long tune."

"I did, but she seemed a little disappointed. But I want to be myself for a while, after Theobald comes. How do you like the name 'Justina'?"

"Seems all right," he answered. "What about it?"

"She suggested it."

"She did? Whose baby does she think it's going to be?"

CHAPTER FOURTEEN

"—and beat him when he sneezes'"

"Now, Felix, don't get yourself excited."

"But dammit, Claude, she's been in there a long time!"

"Not very long. First babies are often a little slow arriving."

"But-Claude, you biologist johnnies should have worked out something better than this. Women shouldn't have to go through with this."

"Such as?"

"How should I know? Ectogenesis, maybe."

"We could practice ectogenesis," Mordan answered imperturbably, "if we wished. It has been done. But it would be a mistake."

"Egg's sake-why?"

"Contrasurvival in nature. The race would be dependent on complex mechanical assistance to reproduce. The time might come when it wasn't available. Survivor types are types that survive in difficult times as well as easy times. An ectogenetic race couldn't cope with really hard, primitive conditions. But ectogenesis isn't new-it's been in use for millions of years."

"No, I suppose it-Huh? How long did you say?"

"Millions of years. What is egg-laying but ectogenesis? It's not efficient; it risks the infant zygotes too hazardously. The great auk and the dodo might still be alive today, if they had not been ectogenetic. No, Felix, we mammals have a better method."

"That's all right for you to say," Felix replied glumly. "It's not your wife that's concerned."

Mordan forebore to answer this. He went on, making conversation. "The same applies to any technique which makes life easier at the expense of hardiness. Ever hear of a bottle-baby, Felix? No, you would not have-it's an obsolete term. But it has to do with why the barbarians nearly died out after the Second Genetic War. They weren't all killed, you know-there are always survivors, no matter how fierce the war. But they were mostly bottle-babies, and the infant-generation thinned out to almost nothing. Not enough bottles and not enough cows. Their mothers could not feed them."

Hamilton raised a hand irritably. Mordan's serene detachment-for such he assumed it to be-from the events at hand annoyed him.

"The deuce with that stuff. Got another cigaret?"

"You have one in your hand," Mordan pointed out.

"Eh? So I have!" Quite unconsciously he snuffed it out, and took another one from his own pouch. Mordan smiled and said nothing.

"What time is it?"

"Fifteen-forty."

"Is that all? It must be later."

"Wouldn't you be less jumpy if you were inside?"

"Phyllis won't let me. You know how she is, Claude-a whim of steel." He smiled, but there was no gayety in it.

"You are both rather dynamic and positive."

"Oh, we get along. She lets me have my own way, and later I find out I've done just what she wanted me to do."

Mordan had no difficulty in repressing his smile. He was beginning to wonder at the delay himself. He told himself that his interest was detached, impersonal, scientific. But he had to go on telling himself.

The door dilated; an attendant showed herself. "You may come in now," she announced with brisk cheeriness.

Mordan was closer to the door; he started to go in first. Hamilton made a long arm, grabbed him by the shoulder. "Hey! What goes on here? Who's the father in this deal, anyhow?" He pushed himself into the lead. "You wait your turn."

She looked a little pale. "Hello, Felix."

"Hello, Phil." He bent over her. "You all right?"

"Of course I'm all right-this is what I'm for." She looked at him. "And get that silly smirk off your face. After all, you didn't invent fatherhood."

"You're sure you're all right?"

"I'm fine. But I must look a fright."

"You look beautiful."

A voice at his ear said, "Don't you want to see your son?"

"Eh? Oh-sure!" He turned and looked. Mordan straightened up and stood out of the way. The attendant held the baby up, half inviting him to hold it, but he kept his arms down and looked it over gingerly. It seemed to have the usual number of arms and legs, he thought, but that bright orange color-well, he didn't know. Maybe it was normal.

"Don't you approve of him?" Phyllis asked sharply.

"Huh? Sure, sure. It's a beautiful baby. He looks like you."

"Babies," said Phyllis, "don't look like anyone, except other babies."

"Why, Master Hamilton," put in the attendant, "how you are sweating! Don't you feel well?" Transferring the baby with casual efficiency to her left arm, she picked up a pad and wiped his forehead. "Take it easy. Seventy years in this one location and we've never lost a father."

Hamilton started to tell her that the gag was ancient when the establishment was new, but he restrained himself. He felt a little inhibited, a rare thing for him. "We'll take the child out for a while," the attendant went on. "Don't stay too long."

Mordan excused himself cheerily and left.

"Felix," she said thoughtfully, "I've been thinking about something."

"So?"

"We've got to move."

"Why? I thought you liked our place."

"I do. But I want a place in the country."

He looked suddenly apprehensive. "Now, darling, you know I'm not the bucolic type."

"You don't have to move if you don't want to. But Theobald and I are going to. I want him to be able to get himself dirty and have a dog and things like that."

"But why be so drastic? All development centers run to the air, sunshine, and the good 'earth motif.'

"I don't want him spending all his time in development centers. They're necessary, but they're no substitute for family life."

"I was raised in development centers."

"Take a look at yourself in the mirror."

The child grew in no particularly spectacular fashion. He crawled at a reasonable age, tried to stand, burned his fingers a few times, tried to swallow the usual quota of unswallowable objects.

Mordan seemed satisfied. So did Phyllis. Felix had no criteria.

At nine months Theobald attempted a few words, then shut up for a long time. At fourteen months he began speaking in sentences, short and of his own structure, but sentences. The subjects of his conversation, or, rather, his statements, were consistently egocentric. Normal again-no one expects an infant to write essays on the beauties of altruism.

"That," remarked Hamilton to Mordan one day, hooking a thumb toward where Theobald sat naked in the grass, trying to remove the ears from an uncooperative and slightly indignant puppy, "is your superchild, is he not?"

"Mm, yes."

"When does he start doing his miracles?"

"He won't do miracles. He is not unique in any one respect; he is simply the best we can conceive in every respect. He is uniformly normal, in the best sense of the word-optimum, rather."

"Hmm. Well, I'm glad he doesn't have tentacles growing out of his ears, or a bulging forehead, or something like that. Come here, son."

Theobald ignored him. He could be deaf when he chose; he seemed to find it particularly difficult to hear the word "No." Hamilton got up, went over and picked him up. He had no useful purpose in mind; he just wanted to cuddle the child for a while for his own amusement. Theobald resisted being separated from the pup for a moment, then accepted the change. He could soak up a great deal of petting-when it suited him. If it really did not suit him he could be extremely uncooperative.

Even to the extent of biting. He and his father had put in a difficult and instructive half hour in his fifteenth month settling the matter, beyond cautioning Felix to be careful not to damage the brat Phyllis had let them have it out. Theobald did not bite anymore, but Felix had a permanent, small, ragged scar on his left thumb.

Hamilton was almost inordinately fond of the child, although he was belligerently offhand in his manner. It hurt him that the child did not really seem to care anything about him and would as readily accept petting and endearments from "Uncle Claude"—or a total stranger-if he happened to be in the mood to accept anything of the sort.

On Mordan's advice and by Phyllis's decision (Felix was not offered a vote in the matter-she was quite capable of reminding him that she, and not he, was a psycho-pediatrician) Theobald was not taught to read any earlier than the usual age of thirty months, although experimental testing showed that he could comprehend the basic idea of abstracted symbols a little earlier than that. She used the standard extensionalized technique of getting a child to comprehend symbolic grouping-by-abstracted-characteristics while emphasizing individual differences. Theobald was rather bored with the matter and appeared to make no progress-at all for the first three weeks. Then he seemed suddenly to get the idea that there might be something in it for him-apparently by recognising his own name on a stat which Felix had transmitted from his office, for shortly thereafter he took the lead in his own instruction and displayed the concentrated interest he was capable of.

Nine weeks after the instruction began it was finished. Reading was an acquired art: further instruction would merely have gotten in his way. Phyllis let him be and restricted her efforts in the matter to seeing to it that only such reading matter was left in his reach as she wished him to attempt. Otherwise he would have read anything he could lay hands on; as it was she had to steal scrolls from him when she wanted him to exercise or eat.

Felix worried about the child's obsession with printed matter. Phyllis told him not to. "It will wear off. We've suddenly extended his psycho field; he's got to explore it for a while."

"It didn't with me. I still read when I should be doing something else. It's a vice."

He read stumblingly and with much subvocalization and was, of course, forced to call for help frequently when he ran on to symbols new to him and not sufficiently defined by context. A home is not as well equipped for extensional instruction as a development center. In a center no words appear in a primer which are not represented by examples which can be pointed to, or, if the words are action symbols, the actions are such that they can be performed there and then.

But Theobald was through with primers before he should have been and their home, although comfortably large, would have needed to be of museum size to accommodate samples in groups of every referent he inquired about. Phyllis's resourcefulness and histrionic ability were stretched to the limit, but she stuck to the cardinal principle of semantic pedagogy: never define a new symbol in terms of symbols already known if it is possible to point to a referent instead.

The child's eidetic memory first became evident in connection with reading. He read rapidly if badly and remembered what he read. Not for him was the childish custom of cherishing and rereading favorite books. A once-read scroll was to him an empty sack; he wanted another.

"What does 'infatuated' mean, Mama?" He made this inquiry in the presence of his father and Mordan.

"Hmmm," she began guardedly, "tell me what words you found it sitting with."

"'It is not that I am merely infatuated with you, as that old goat Mordan seems to think—' I don't understand that either. Is Uncle Claude a goat? He doesn't look like one."

"What," said Felix, "has that child been reading now?" Mordan said nothing, but he cocked a brow at Felix.

"I think I recognize it," Phyllis said in an aside to Felix. Then, turning back to the child, she added, "Where did you find it? Tell Phyllis."

No answer.

"Was it in Phyllis's desk?" She knew that it had been; there was secreted in there a bundle of stats, mementos of the days before she and Felix had worked out then" differences. She had the habit of rereading them privately and secretly. "Tell Phyllis."

"Yes."

"That's out of bounds, you know."

"You didn't see me," he stated triumphantly.

"No, that is true." She thought rapidly. She wished to encourage his truthfulness, but to place a deterrent on disobedience. To be sure, disobedience was more often a virtue than a sin, but-Oh, well! She tabled the matter.

Felix muttered, "That child seems to have no moral sense whatsoever."

"Have you?" she asked him, and turned back to Theobald.

"There was lots more, Mama. Want to hear it?"

"Not just now. Let's answer your two questions first."

"But Phyllis," Felix interrupted.

"Wait, Felix. I've got to answer his questions."

"Suppose you and I step out into the garden for a smoke," Mordan suggested. "Phyllis is going to be fairly busy for a while."

Quite busy. "Infatuated" was, in itself, quite a hurdle, but how to explain to a child in his forty-second month the allegorical use of symbols? She was not entirely successful; Theobald referred to Mordan indiscriminately thereafter as "Uncle Claude" or "Old Goat."

Eidetic memory is a Mendelian recessive. Both Phyllis and Felix had the gene group for it from one ancestor; Theobald had it from both his parents, by selection. The potentiality, masked as recessive in each of his parents, was therefore effective in him. Both "recessive" and "dominant" are relative terms; dominants do not cancel recessives like symbols in an equation. Both Phyllis and Felix had excellent, unusual memories. Theobald's memory was well-nigh perfect.

Recessive Mendelian characteristics are usually undesirable ones. The reason is simple-dominant characteristics get picked over by natural selection every generation. Natural selection-the dying out of the poorly equipped-goes on day in and day out, inexorable and automatic. It is as tireless, as inescapable, as entropy. A really bad dominant will weed itself out of the race in a few generations. The worst dominants appear only as original mutations, since they either kill their bearers, or preclude reproduction. Embryo cancer is such a one-complete sterility is another. But a recessive may be passed on from generation to generation, masked and not subjected to natural selection. In time a generation may arrive in which a child receives the recessive from both parents-up it pops, strong as ever. That is why the earlier geneticists found it so hard to eliminate such recessives as hemophilia and deaf-mutism; it was impossible, until the genes in question were charted by extremely difficult indirect and inferential means, to tell whether or not an adult, himself in perfect health, was actually "clean." He might pass on something grisly to his children. Nobody knew.

Felix demanded of Mordan why, in view of the bad reputation of recessives, eidetic memory should happen to be recessive rather than dominant.

"I'll answer that twice," said Mordan. "In the first place the specialists still arguing as to why some things are recessives, and others dominants. In the second place, why call eidetic, memory a desirable trait?"

"But-for Egg's sake! You selected for it for Baldy!"

"To be sure we did-for Theobald. 'Desirable' is a relative term. Desirable for whom? Complete memory is an asset only if you have the mind to handle it; otherwise it's a curse. One used to find such cases occasionally, before your time and mine-poor simple souls who were bogged down in the complexities of their own experience; they knew every tree but could not find the forest. Besides that, forgetting is an anodyne and a blessing to most people. They don't need to remember much and they don't. It's different with Theobald."

They had been talking in Mordan's office. He took from his desk a file of memoranda, arranged systematically on perhaps a thousand small punched cards. "See this? I haven't looked it over yet-it's data the technicians supply me with. Its arrangement is quite as significant as its content-more so, perhaps." He took the file and dumped the cards out onto the floor. "The data are still all there, but what use is it now?" He pressed a stud on his desk; his new file secretary entered. "Albert, will you please have these fed into the sorter again? I'm afraid I've randomed them."

Albert looked surprised, but said, "Sure, chief," and took the pied cards away.

"Theobald has the brain power, to speak loosely, to arrange his data, to be able to find it when he wants it, and to use it. He will be able to see how what he knows is related to its various parts, and to abstract from the mass significantly related details. Eidetic memory is a desirable trait in him."

No doubt-but sometimes it did not seem so to Hamilton. As the child grew older he developed an annoying habit of correcting his elders about minutiae, in which he was always maddeningly accurate. "No, Mother, it was not last Wednesday; it was last Thursday. I remember because that was the day that Daddy took me walking up past the reservoir and we saw a pretty lady dressed in a green jumpsuit and Daddy smiled at her and she stopped and asked me what my name was and I told her my name was Theobald and that Daddy's name was Felix and that I was four years and one month old. And Daddy laughed and she laughed and then Daddy said—"

"That will do," said Felix. "You've made your point. It was Thursday. But it is not necessary to correct people on little things like that."

"But when they're wrong I have to tell them!"

Felix let it ride, but he reflected that Theobald might need to be inordinately fast with a gun when he was older.

Felix had developed a fondness for country life, little as he had wanted to undertake it. Had it not been for his continuous work on the Great Research he might have taken up horticulture seriously. There was something deeply satisfying, he found, in making a garden do what he wanted it to do.

He would have spent all his holidays fussing with his plants, if Phyllis had concurred. But her holidays were less frequent than his, since she had resumed putting in one shift a day at the nearest primary development center as soon as Theobald was old enough to need the knocking around he would get from other children. When she did have a holiday she liked to go somewhere-a flying picnic, usually.

They had to live near the Capital, because of Felix's work, but the Pacific was only a little over five hundred kilometres west of them. It was convenient to pack a lunch, get to the beach in time for a swim and a nice, long, lazy bake, then eat.

Felix wanted to see the boy's reaction the first time he saw the ocean. "Well, son, this is it. What do you think of it?"

Theobald scowled out at the breakers. "It's all right," he grudged.

"What's the matter?"

"The water looks sick. And the sun ought to be off that way, not there. And where's the big trees?"

"What big trees?"

"The high slim ones, with big bushes at the top."

"Hmmm...what's wrong with the water?"

"It ain't blue."

Hamilton walked back to where Phyllis lay on the sand. "Can you tell me," he said slowly, "whether or not Baldy has ever seen stereos of royal palms-on a beach, a tropical beach?"

"Not that I know of. Why?"

"Think back. Did you use such a picture to extensionalize for him?"

"No, I'm sure of that."

"You know what he's read-has he seen any flat-picture like that."

She checked back through her excellent and well-arranged memory. "No, I would have remembered it. I would never have put such a picture in his way without explaining it to him."

The incident occurred before Theobald had been entered at the development center; what he had seen, he had seen at home. Of course it was possible that he had seen it in a news or story cast in the receiver at home, but he could not start the machine himself and neither of them recalled such a scene. Nevertheless, it was damned funny.

"What did you start to say, dear?"

Hamilton gave a slight start. "Nothing, nothing at all."

"What kind of 'nothing'?"

He shook his head. "Too fantastic. My mind was wandering."

He went back to the boy and attempted to pump him for details in an effort to ferret out the mystery. But Theobald was not talking. In fact, he was not even listening. He said so.

On a similar occasion but much later an event occurred which was quite as disturbing, but a little more productive. Felix and the boy had been splashing in the surf, until they were quite tired. At least Felix was, which made a majority with only one dissent. They lay down on the sand and let the sun dry them. Presently the salt drying on the skin made them itch, as it has a habit of doing.

Felix scratched Theobald between the shoulder blades—that awkward spot-and reflected to himself how catlike the child was in many ways, even to the sybaritic way in which he accepted this small sensuous pleasure. Just now it suited him to be petted; a moment later he might be as haughty and distant as a Persian torn. Or he might decide to cuddle.

Then Felix lay on his stomach, Theobald straddled his back and returned the favor. Felix was beginning to feel rather catlike himself-it felt so good!—when he began to be aware of a curious and almost inexplicable phenomenon.

When one human monkey does another the great service of scratching him, delightful as it is, it never quite hits the spot. With infuriating obtuseness, despite the most careful coaching, the scratcher will scratch just above, just below, all around the right spot, but never, never, never quite on it, until, in sheer frustration, the scratchee will nearly dislocate his shoulder going after it for himself.

Felix was giving Theobald no instructions; in fact, he was nearly falling asleep under the warm relaxing ecstasy of his son's ministrations, when he suddenly snapped to attention.

Theobald was scratching where Felix itched.

The exact spot. An area of sensation had only to show up for him to pounce on it and scratch it out of existence.

This was another matter that had to be taken up with Phyllis. He got up and explained to her what had happened, attempting the meanwhile to keep it from the child's attention by suggesting that he go for a run down the beach—"But don't go in more than ankle deep."

"Just try him," he added, when he had told her of it. "He can do it. He really can."

"I'd like to," she said. "But I can't. I'm sorry to say that I am still fresh and clean and free from vulgar distresses."

"Phyllis—"

"Yes, Felix?"

"What kind of a person can scratch where another person itches?"

"An angel."

"No, seriously."

"You tell me."

"You know as well as I do. That kid's a telepath!"

They both looked down the beach at a small, skinny, busy silhouette. "I know how the hen felt that hatched the ducks," said Phyllis softly. She got quickly to her feet. "I'm going in and get some salt on me, and let it dry. I've got to find out about this."

CHAPTER FIFTEEN

"Probably a blind alley—"

HAMILTON FELIX took his son into the city the next day. There were men attached to the Great Research who knew much more about such things than either he or Phyllis; he wished them to examine the boy. He took Theobald to his office, supplied him with a scroll and a reader, a dodge that would tie him to one spot almost as effectively as if he were chained down, and called Jacobstein Ray by telephone. Jacobstein was in charge of a team investigating telepathy and related phenomena.

He explained to Jake that he was unable to leave his own office at the moment. Could Jake drop over, or was he tied up? Jake could and would; he arrived a few minutes later. The two men stepped into an adjoining room, out of earshot of the child. Felix explained what had taken place on the beach and suggested that Jake look into it.

Jake was willing and interested. "But don't expect too much from it," he cautioned. "We've demonstrated telepathy in young children time and again, under circumstances which made it a statistical certainty that they were receiving information by no known physical means. But there was never any control in the business, the child was never able to explain what was going on, and the ability faded away to nothing as the child grew up and became more coherent. It seems to shrivel away just like the thymus gland."

Hamilton looked alert. "Thymus gland? Any correlation?"

"Why, no. I just used that as a figure of speech."

"Mightn't there be?"

"It seems most unlikely."

"Everything about this business seems most unlikely. How about putting a crew on it? A good biostatician and one of your operators?"

"I will if you wish."

"Good. I'll stat an open voucher to your office. It's probably a blind alley, but you never know!"

Let us add that it was a blind alley. Nothing ever came of it, but a slight addition to the enormous mass of negative information constituting the main body of scientific knowledge.

Felix and Jake went back into the room where Theobald sat reading. They seated themselves first, in order to be on the same level as the child, and Felix performed the introduction with proper attention to the enormous and vulnerable dignity of a child. He then said:

"Look, sport, Dad wants you to go with Jake and help him with some things for an hour or so. How about it?"

"Why?"

That was a tough one. With less-than-adult minds it had been found to be optimum procedure to keep them from knowing the purpose of the experimentation. "Jake wants to find out some things about the way your mind works. He'll talk with you about it. Well...will you help him?"

Theobald thought about it.

"It will be a favor to Dad." Phyllis could have warned him against that approach. Theobald had been rather slow in reaching the degree of social integration necessary to appreciate the cool pleasure of conferring benefits on others.

"Will you do me a favor?" he countered.

"What do you want?"

"A flop-eared buck." The boy had been raising rabbits, with some adult assistance; but his grandiose plans, if unchecked, would have resulted in their entire home being given over to fat, furry rodents. Nevertheless, Hamilton was somewhat relieved to find the favor desired was no larger.

"Sure thing, sport. You could have had one anyhow."

Theobald made no answer, but stood up, signifying his willingness to get on with it.

After they had gone Hamilton considered the matter for a moment. A new buck rabbit was all right; he did not mind that as much as he would have minded a new doe. But something had to be done fairly soon, or else his garden would have to be abandoned.

Theobald seemed to be working out, with the busy and wholehearted collaboration of his rabbits, an interesting but entirely erroneous neo-Mendelian concept of inherited characteristics. Why, he wanted to know, did white bunnies sometimes have brown babies? Felix pointed out that a brown buck had figured in the matter, but soon bogged down, and turned the matter over to Mordan-accepting as inevitable the loss of face involved. Theobald, he knew, was quite capable now of being interested in the get of a flop-eared buck.

The boy had formulated an interesting, but decidedly specialized, arithmetic to keep his records of rabbits, based on the proposition that one plus one equals at least five. Hamilton had discovered it by finding symbols in the boy's rabbit note book with which he was unfamiliar. Theobald boredly interpreted them for him.

Hamilton showed the records to Monroe-Alpha the next time Monroe-Alpha and Marion showed up at his home. He had regarded it as an amusing and insignificant joke, but Clifford took it with his usual dead seriousness. "Isn't it about time you started him on arithmetic?"

"Why, I don't think so. He is a little young for it-he's hardly well into mathematical analysis." Theobald had been led into mathematical symbology by the conventional route of generalized geometry, analysis, and the calculi. Naturally, he had not been confronted with the tedious, inane, and specialized mnemonics of practical arithmetic-he was hardly more than a baby.

"I don't think he is too young for it. I had devised a substitute for positional notation when I was about his age. I imagine he can take it, if you don't ask him to memorize operation tables." Monroe-Alpha was unaware that the child had an eidetic memory and Hamilton passed the matter by. He had no intention of telling Monroe-Alpha anything about Theobald's genetic background. While custom did not actually forbid such discussion, good taste, he felt, did. Let the boy alone, let him keep his private life private. He and Phyllis knew, the geneticists involved had to know, the Planners had had to know since this was a star line. Even that he regretted, for it had brought such intrusions as the visit of that old hag Carvala.

Theobald himself would know nothing, or very little, of his ancestral background until he was a grown man. He might not inquire into it, or have it brought to his attention, until he reached something around the age Felix had been when Mordan called Felix's attention to his own racial significance.

It was better so. The pattern of a man's inherited characteristics was racially important and inescapable anyhow, but too much knowledge of it, too much thinking about it, could be suffocating to the individual. Look at Cliff-damned near went off the beam entirely just from thinking about his great-grandparents. Well, Marion had fixed that.

No, it was not good to talk too much about such things. He himself had talked too much a short time before, and had been sorry ever since. He had been telling Mordan his own point of view about Phyllis having any more children-after the baby girl to come, of course. Phyllis and he had not yet come to agreement about it; Mordan had backed up Phyllis. "I would like for you two to have at least four children, preferably six. More would be better but we probably would not have time enough to select properly for that many."

Hamilton almost exploded. "It seems to me that you make plans awfully easy-for other people. I haven't noticed you doing your bit. You are pretty much of a star line yourself—how come? Is this a one-way proposition?"

Mordan had kept his serenity. "I have not refrained. My plasm is on deposit, and available if wanted. Every moderator in the country saw my chart, in the usual course of routine."

"The fact remains that you haven't done much personally about children."

"No. No, that is true. Martha and I have so many, many children in our district, and so many yet to come, that we hardly have time to concentrate on one."

From the peculiar phraseology Hamilton gained a sudden bit of insight. "Say, you and Martha are married-aren't you?"

"Yes. For twentythree years."

"Well, then...but, why—"

"We can't," Mordan said flatly, with just a shade less than his usual calm. "She's a mutation...sterile."

Hamilton's ears still burned to think that his big mouth had maneuvered his friend into making such a naked disclosure. He had never guessed the relationship; Martha never called Claude anything but "chief"; they used no words of endearment, nor let it creep otherwise into their manner. Still, it explained a lot of things-the rapport-like cooperation between the technician and the synthesist, the fact that Mordan had shifted to genetics after starting a brilliant career in social administration, his intense and fatherly interest in his charges.

He realized with a slight shock that Claude and Martha were as much parents of Theobald as were Phyllis and himself-foster parents, godparents. Mediator parents might be the right term. They were mediator parents to hundreds of thousands, he didn't know how many.

But this wasn't getting his work done-and he would have to go home early today, because of Theobald. He turned to his desk. A memorandum caught his eye-from himself to himself. Hmmm...he would have to get after that. Better talk to Carruthers. He swung around toward the phone.

"Chief?"

"Yes, Felix."

"I was talking with Doctor Thorgsen the other day, and I got an idea-may not be much in it."

"Give." Way out on far Pluto, the weather is cold. The temperature rarely rises above eighteen degrees centigrade absolute even on the side toward the sun. And that refers to high noon in the open sunlight. Much of the machinery of the observatories is exposed to this intense cold. Machinery that will work on Terra will not work on Pluto, and vice versa. The laws of physics seem to be invariable but the characteristics of materials change with changes in temperature—consider ice and water, a mild example.

Lubricating oil is a dry powder at such temperatures. Steel isn't steel. The exploring scientists had to devise new technologies before Pluto could be conquered.

Not only for mobiles but for stabiles as well-such as electrical equipment. Electrical equipment depends on, among other factors, the resistance characteristics of conductors; extreme cold greatly lowers the electrical resistance of metals. At thirteen degrees centigrade absolute lead becomes a superconductor with no resistance whatsoever. An electric current induced in such lead seems to go on forever, without damping.

There are many other such peculiarities. Hamilton did not go into them-it was a sure thing that a brilliant synthesist such as his chief had all the gross facts about such matters. The main fact was this: Pluto was a natural laboratory for low temperature research, not only for the benefit of the observatories but for every other purpose.

One of the classic difficulties of science has to do with the fact that a research man can always think of things he wants to measure before instruments for the purpose have been devised. Genetics remained practically at a standstill for a century before ultramicroscopy reached the point where genes could really be seen. But the peculiar qualities of superconductors and near superconductors gave physicists an opportunity, using such chilled metals in new instruments, to build gadgets which would detect phenomena more subtle than ever before detected.

Thorgsen and his colleagues had stellar bolometers so accurate and so sensitive as to make the readings of earlier instruments look like a casual horseback guess. He claimed to be able to measure the heat from a flushed cheek at ten parsecs. The colony on Pluto even had an electromagnetic radiation receiver which would-sometimes-enable them to receive messages from Terra, if the Great Egg smiled and everyone kept their fingers crossed.

But telepathy, if it was anything physical at all-whatever "physical" may mean!—should be detectable by some sort of a gadget. That the gadget would need to be extremely sensitive seemed a foregone conclusion; therefore, Pluto seemed a likely place to develop one.

There was even some hope to go on. An instrument-Hamilton did not remember what it had been-had been perfected there, had worked satisfactorily, and then had performed very erratically indeed-when the two who had perfected it attempted to demonstrate it in the presence of a crowd of colleagues. It seemed sensitive to living people.

To living people. Equivalent masses, of blood temperature and similar radiating surfaces, did not upset it. But it grew querulous in the presence of human beings. It was dubbed a "Life Detector"; the director of the colony saw possibilities in it and instigated further research.

Hamilton's point to Carruthers was this: might not the so-called life detector be something that was sensitive to whatever it was they called telepathy? Carruthers thought it possible. Would it not then be advisable to instigate research along that line on Terra? Decidedly. Or would it be better to send a team out to Pluto, where low temperature research was so much more handy? Go ahead on both lines, of course.

Hamilton pointed out that it would be a year and a half until the next regular ship to Pluto. "Never mind that," Carruthers said. "Plan to send a special. The Board will stand for it."

Hamilton cleared the phone, turned it to recording, and spoke for several minutes, giving instructions to two of his bright young assistants. He referred to his next point of agenda.

In digging back into the literature of the race it had been noted that the borderline subjects of the human spirit with which he was now dealing had once occupied much more of the attention of the race than now was the case. Spiritism, apparitions, reports of the dead appearing in dreams with messages which checked out, "Ghosties, and Ghoulies, and things that go Flop in the Dark" had once obsessed the attention of many. Much of the mass of pseudo-data seemed to be psychopathic. But not all of it. This chap Flammarion, for example, a professional astronomer (or was he an astrologer?—there used to be such, he knew, before space flight was developed)—anyhow, a man with his head screwed on tight, a man with a basic appreciation for the scientific method even in those dark ages. Flammarion had collected an enormous amount of data, which, if even one per cent of it was true, proved survival of the ego after the physical death beyond any reasonable doubt.

It gave him a lift just to read about it.

Hamilton knew that the loose stories of bygone days did not constitute evidence of the first order, but some of it, after examination by psychiatric semanticians, could be used as evidence of the second order. In any case, the experience of the past might give many a valuable clue for further research. The hardest part of this aspect of the Great Research was to know where to start looking.

There were a couple of old books, for example, by a man named Doon, or Dunn, or something of the sort-the changes in speech symbols made the name uncertain-who had tediously collected records of forerunner dreams for more than a quarter of a century. But he had died, no one had followed up his work, and it had been forgotten. Never mind-Dunn's patience would be vindicated; over ten thousand careful men, in addition to their other activities, made a practice of recording their dreams immediately on wakening, before speaking to anyone or even getting out of bed. If dreams ever opened a window to the future, the matter would be settled, conclusively.

Hamilton himself tried to keep such records. Unfortunately, he rarely dreamed. No matter-others did, and he was in touch with them.

The old books Hamilton wished to have perused were mostly obscure and few translations had ever been made; idiom presented a hazard. There were scholars of comparative lingo, of course, but even for them the job was difficult. Fortunately, there was immediately at hand a man who could read Anglish of the year 1926 and for at least the century preceding that date-a particularly rich century for such research, as the scientific method was beginning to be appreciated by some but the interest in such matters was still high-Smith John Darlington-or J. Darlington Smith, as he preferred to be called. Hamilton had co-opted him. Smith did not want to do it. He was very busy with his feetball industry-he had three associations of ten battle groups each, and a fourth forming. His business was booming; he was in a fair way to becoming as rich as he wanted to be, and he disliked to spare the time.

But he would do it-if the man who gave him his start in business insisted. Felix insisted.

Felix telephoned him next. "Hello, Jack,"

"Howdy, Felix."

"Do you have any more for me?"

"I've a stock of spools shoulder high."

"Good. Tube them over, will you?"

"Sure. Say, Felix, this stuff is awful, most of it."

"I don't doubt it. But think how much ore must be refined to produce a gram of native radium. Well, I'll clear now."

"Wait a minute, Felix. I got into a jam last night. I wonder if you could give me some advice."

"Certainly. Give." It appeared that Smith, who, in spite of his financial success, was a brassarded man and technically a control natural, had inadvertently given offense to an armed citizen by refusing to give way automatically in a public place. The citizen had lectured Smith on etiquette. Smith had never fully adjusted himself to the customs of a different culture; he had done a most urbane thing-he had struck the citizen with his closed fist, knocking him down and bloodying his nose. Naturally, there was the deuce to pay, and all big bills.

The citizen's next friend had called the following morning and presented Smith with a formal challenge. Smith must either accept and shoot it out, apologize acceptably, or be evicted from the city bodily by the citizen and his friends, with monitors looking on to see that the customs were maintained.

"What ought I to do?"

"I would advise you to apologize." Hamilton saw no way out of it; to advise him to fight was to suggest suicide. Hamilton had no scruples about suicide, but he judged correctly that Smith preferred to live.

"But I can't do that-what do you think I am, a nigger?"

"I don't understand what you mean. What has your color to do with it?"

"Oh, never mind. But I can't apologize, Felix. I was ahead of him in line. Honest I was."

"But you were brassarded."

"But...Look, Felix, I want to shoot it out with him. Will you act for me?"

"I will if you request it. He'll kill you, you know."

"Maybe not. I might happen to beat him to the draw."

"Not in a set duel you won't. The guns are cross-connected. Your gun won't burn until the referee flashes the signal."

"I'm fairly fast."

"You're outclassed. You don't play feetball yourself you know. And you know why."

Smith knew. He had planned to play, as well as manage and coach, when the enterprise was started. A few encounters with the men he had hired soon convinced him that an athlete of his own period was below average in this present period. In particular his reflexes were late. He bit his lip and said nothing.

"You sit tight," said Felix, "and don't go out of your apartment. I'll do a little calling and see what can be worked out."

The next friend was polite but regretful. Awfully sorry not to oblige Master Hamilton but he was acting under instructions. Could Master Hamilton speak with his principal? Now, really, that was hardly procedure. But he admitted that the circumstances were unusual-give him a few minutes, then he would phone back.

Hamilton received permission to speak to the principal; called him. No, the challenge could not be lifted-and the conversation was strictly under the rose. Procedure, you know. He was willing to accept a formal apology; he did not really wish to kill the man.

Hamilton explained that Smith would not accept the humiliation-could not, because of his psychological background. He was a barbarian and simply could not see things from a gentleman's point of view. Hamilton identified Smith as the Man from the Past.

The principal nodded. "I know that now. Had I known that before, I would have ignored his rudeness-treated him as a child. But I didn't know. And now, in view of what he did-well, my dear sir, I can hardly ignore it, can I?"

Hamilton conceded that he was entitled to satisfaction, but suggested it would make him publicly unpopular to kill Smith. "He is rather a public darling, you know. I am inclined to think that many will regard it as murder to force him to fight."

The citizen had thought of that. Rather a dilemma, wasn't it?

"How would you like to combat him physically-punish him the way he damaged you, only more so?"

"Really, my dear sir!"

"Just an idea," said Hamilton. "You might think about it. May we have three days grace?"

"More, if you like. I told you I was not anxious to push it to a duel. I simply want to curb his manners. One might run into him anywhere."

Hamilton let it go, and called Mordan, a common thing when he was puzzled. "What do you think I ought to do, Claude?"

"Well, there is no real reason why you should not let him go ahead and get himself killed. Individually, it's his life; socially, he's no loss."

"You forget that I am using him as a translator. Besides, I rather like him. He is pathetically gallant in the face of a world he does not understand."

"Mmm...well, in that case, we'll try to find a solution."

"Do you know, Claude," Felix said seriously, "I am beginning to have my doubts about this whole custom. Maybe I'm getting old, but, while it's lots of fun for a bachelor to go swaggering around town, it looks a little different to me now. I've even thought of assuming the brassard."

"Oh, no, Felix, you mustn't do that!"

"Why not? A lot of people do."

"It's not for you. The brassard is an admission of defeat, an acknowledgement of inferiority."

"What of it? I'd still be myself. I don't care what people think."

"You're mistaken, son. To believe that you can live free of your cultural matrix is one of the easiest fallacies and has some of the worst consequences. You are part of your group whether you like it or not, and you are bound by its customs."

"But they're only customs!"

"Don't belittle customs. It is easier to change Mendelian characteristics than it is to change customs. If you try to ignore them, they bind you when you least expect it."

"But dammit! How can there be any progress if we don't break customs?"

"Don't break them-avoid them. Take them into your considerations, examine how they work, and make them serve you. You don't need to disarm yourself to stay out of fights. If you did you would get into fights-I know you!—the way Smith did. An armed man need not fight. I haven't drawn my gun for more years than I can remember."

"Come to think about it, I haven't pulled mine in four years or more."

"That's the idea. But don't assume that the custom of going armed is useless. Customs always have a reason behind them, sometimes good, sometimes bad. This is a good one."

"Why do you say that? I used to think so, but I have my doubts now."

"Well, in the first place an armed society is a polite society. Manners are good when one may have to back up his acts with his life. For me, politeness is a sine qua non of civilization. That's a personal evaluation only. But gunfighting has a strong biological use. We do not have enough things to kill off the weak and the stupid these days. But to stay alive as an armed citizen a man has to be either quick with his wits or with his hands, preferably both. It's a good thing.

"Of course," he continued, "our combativeness has to do with our ancestry and our history." Hamilton nodded; he knew that Mordan referred to the Second Genetic War. "But we have preserved that inheritance intentionally. The Planners would not stop the wearing of arms if they could."

"Maybe so," Felix answered slowly, "but it does seem like there ought to be a better way to do it. This way is pretty sloppy. Sometimes the bystanders get burned."

"The alert ones don't," Mordan pointed out. "But don't expect human institutions to be efficient. They never have been; it is a mistake to think that they can be made so-in this millennium or the next."

"Why not?"

"Because we are sloppy, individually-and therefore collectively. Look at a cageful of monkeys, at your next opportunity. Watch how they do things and listen to them chatter. You'll find it instructive. You'll understand humans better."

Felix grinned. "I think I see what you mean. But what am I to do about Smith?"

"If he gets out of this, I think he had better wear a gun after this. Perhaps you can impress on him then that his life will depend on the softness of his words. But for the presentI know this chap he challenged. Suppose you suggest me as referee."

"Are you going to let them fight?"

"In my own way. I think I can arrange for them to fight barehanded." Mordan had delved back into his encyclopedic memory and had come put with a fact that Hamilton would not fully appreciate. Smith had come from a decadent period in which handfighting had become stylized as fist fighting, No doubt he was adept in it. It was necessary for one not to use the gun with which he was adept; it was equitable that the other not use fists, were he adept in their use. So Mordan wished to referee that he might define the rules.

It is not necessary to give overmuch attention to that rather unimportant and uncolorful little man, J. Darlington Smith. Hamilton was forced to withdraw as next friend, since Carruthers needed him at the time, and did not therefore see the encounter. He learned of it first by discovering that Smith was immobilized in an infirmary, suffering from some rather unusual wounds. But he did not quite lose the sight of his left eye and his other damages were mostly gone in a couple of weeks.

All of which happened some days later than the conversation with Mordan.

Hamilton turned back to his work. There were various little matters to attend to. One team of researchers in particular belonged to him alone. He had noticed when he was a boy that a physical object, especially a metallic one, brought near to his forehead above the bridge of the nose seemed to produce some sort of a response inside the head, not connected, apparently, with the physiological senses. He had not thought of it for many years, until the Great Research had caused him to think of such things. Was it real, or was it imagination? It was a mere tightening of the nerves, an uneasy feeling, but distinct and different from any other sensation. Did other people have it? What caused it? Did it mean anything?

He mentioned it to Carruthers who had said, "Well, don't stand there speculating about it. Put a crew to work on it." He had. They had already discovered that the feeling was not uncommon but rarely talked about. It was such a little thing and hard to define. Subjects had been found who had it in a more marked degree than most-Hamilton ceased being a subject for experimentation himself.

He called the crew leader. "Anything new, George?"

"Yes and no. We have found a chap who can distinguish between different metals nearly eighty per cent of the time, and between wood and metal every time. But we are still no nearer finding out what makes it tick."

"Need anything?"

"No."

"Call me if you need me. Helpful Felix the Cheerful Cherub."

"Okay."

It must not be supposed that Hamilton Felix was very important to the Great Research. He was not the only idea man that Carruthers had, not by several offices. It is probable that the Great Research would have gone on in much the same fashion, even during his lifetime, even if he had not been co-opted. But it would not have gone in quite the same way.

But it is hard to evaluate the relative importance of individuals.

Who was the more important?—the First Tyrant of Madagascar, or the nameless peasant who assassinated him? Felix's work had some effect. So did that of each of the eight-thousand-odd other individuals who took part at one time or another in the Great Research.

Jacobstein Ray called back before he could turn his mind to other matters. "Felix? You can come over and take your young hopeful away, if you will."

"Fine. What sort of results?"

"Maddening. He started out with seven correct answers in a row, then he blew up completely. Results no better than random-until he stopped answering at all."

"Oh, he did, did he?" remarked Hamilton, thinking of a certain flop-eared buck.

"Yes indeed. Went limp on us. I'd as leave try to stuff a snake down a hole."

"Well, we'll try another day. Meanwhile I'll attend to him."

"I'd enjoy helping you," Jake said wistfully.

Theobald was just sitting, doing less than nothing, when Felix came in. "Hello, sport. Ready to go home?"

"Yes."

Felix waited until they were in the family car and the pilot set on home before bracing him. "Ray tells me you didn't help him very well."

Theobald twisted a string around his finger. He concentrated on it.

"Well, how about it? Did you, or didn't you?"

"He wanted me to play some stupid games," the child stated. "No sense to them."

"So you quit?"

"Yeah."

"I thought you told me you would help?"

"I didn't say I would."

Felix thought back. The child was probably right-he could not remember. But he had had a feeling of contract, the "meeting of minds."

"Seems to me there was mention of a flop-eared rabbit."

"But," Theobald pointed out, "you said I could have it anyhow. You told me so!"

The rest of the trip home was mostly silence.

CHAPTER SIXTEEN

The Quick and the Dead

MADAME ESPARTERO CARVALA called again, unexpectedly and with no ceremony. She simply called by telephone and announced that she was coming to see them. She had informed Phyllis on the previous occasion that she expected to come back and see the baby. But more than four years had passed with no word from her; Phyllis had given up expecting her. After all, one does not thrust oneself on a member of the cosmically remote Board of Policy!

They had seen references to her in the news: Madame Espartero re-confirmed without opposition. Madame Espartero offers her resignation. The Grand Old Lady of the Board in failing health. Madame Espartero's alternate selected by special election. Carvala rallies in her fight for life. Planners honor sixtieth year of service of the Oldest Member. Stereo stories and news bits-she had become an institution.

Felix had thought when he saw her last that she looked older than any human being could. He realized when he saw her this time that he had been mistaken. She was still more incredibly frail and shrunken and she seemed to move with great effort. She compressed her lips tightly with each movement.

But her eye was still bright, her voice was still firm. She dominated her surroundings.

Phyllis came forward. "We are delighted. I never expected to see you again."

"I told you I was coming back to see the boy."

"Yes, I remember, but it has been a long time and you did not come."

"No sense in looking a child over until he has shaped up and can speak for himself! Where is he? Fetch him in."

"Felix, will you find him?"

"Certainly, my dear." Felix departed, wondering how it was that he, a grown man and in full possession of his powers, could permit a little old woman, ripe for cremation, to get him so on edge. It was childish of him!

Theobald did not want to leave his rabbits. "I'm busy."

Felix considered the plan of returning to the lounge and announcing that Theobald would receive Madame Espartero, if at all, at the rabbit run. But he decided that he could not do such a thing to Phyllis. "Look, son, there is a lady in there who wants to see you."

No answer.

"Make up your mind," Felix announced cheerfully. "Will you walk or do you prefer to be dragged? It makes no difference to me."

Theobald looked slowly up his father's sheer two meters and, without further comment, started for the house.

"Madame Espartero, this is Theobald."

"So I see. Come to me, Theobald." Theobald stood fast.

"Go to her, Theobald." Phyllis spoke briskly; the boy complied at once. Felix wondered why it was that the child obeyed his mother so much more readily than his father. Damn it, he was good to the child and just with him. There must have been a thousand times when he had refrained from losing his temper with him.

Madame Carvala spoke to him in a low voice, too low for either Felix or Phyllis to catch. He glowered and tried to look away, but she insisted, caught his eye, and held it. She spoke again, and he answered, in the same low tones. They talked together for some minutes, quite earnestly. Finally she straightened up in her chair and said in a louder tone, "Thank you, Theobald. You may go now."

He fled out of the house. Felix looked longingly after him, but decided he had to stay. He selected a chair as far across the room as manners permitted, and waited.

Carvala selected another cigar, puffed until she was the center of a cloud of blue smoke, and turned her attention exclusively to Phyllis. "He's a sound child," she announced. "Sound. He'll do well."

"I'm happy that you think so."

"I don't think so, I know so." They talked for a while longer about the boy, small talk. Felix had a feeling that the old woman was improvising until she was ready with whatever was on her mind.

"When do you expect to have his sister?"

"I am ready any time," replied Phyllis. "I have been for months. They are selecting for her now."

"What are they selecting for? Anything different from the boy?"

"Not in any major respect-except one. Of course there will be plenty of variation from what Theobald is, because in so many, many of the alternatives no attempt will be made to make a choice."

"What is the one major respect you spoke of?"

Phyllis told her of it. Since the coming child was to be a girl, its chromosome pattern would contain two X-chromosomes, one from each of its parents. Now philoprogenitiveness is, of course, a sex-linked characteristic. Hamilton, be it remembered, lacked it to a moderate degree. Theobald derived his one X-chromosome from his mother; Mordan confidently expected that he would be normal in his desire to have children of his own when he became old enough for such things to matter to him.

But his projected little sister would inherit from both her parents in this respect. She might be rather cool to the matter of having children. However, if she did have, then her offspring need not be handicapped by any lack in this highly desirable survival trait; since she would pass on to her heirs but one of her two X-chromosomes, by selection, she could transmit only that of her mother. Hamilton's undesirable trait would be eliminated forever.

Carvala listened carefully to this explanation-or rather to that small portion of it Phyllis had found it necessary to relate-and nodded cheerfully. "Put your mind at rest, child. It won't matter a bit." She offered no elaboration of her words.

She talked of other matters for a while, then said suddenly, "Any time now, I take it?"

"Yes," Phyllis agreed.

Carvala stood up and took her departure as suddenly as she came. "I hope we will have the honor of your presence again, Madame," Felix said carefully.

She stopped, turned, and looked at him. She took her cigar from her mouth and grinned. "Oh, I'll be back! You can count on that."

Felix stood scowling at the door through which she had left. Phyllis sighed happily. "She makes me feel good, Felix."

"She doesn't me. She looks like a corpse."

"Now, Filthy!"

Felix went outside and looked up his son. "Hi, sport."

"H'lo."

"What did she have to say to you?"

Theobald muttered something in which Felix caught only the term "cuss boss!"

"Take it easy, son. What did she want?"

"She wanted me to promise her something."

"And did you?"

"No."

"What was it?"

But Theobald wasn't listening again.

After a late and pleasant supper in the cool of the garden Felix turned on the news, rather idly. He listened lackadaisically for a while, then suddenly called out, "Phyllis!"

"What is it?"

"Come here! Right away!"

She ran in; he indicated the spieling, flickering box:

"—dame Espartero Carvala. She appears to have died instantly. It is assumed that she stumbled near the top of the escalator, for she seemed to have fallen, or rolled, the entire flight. She will long be remembered, not only for her lengthy tenure on the Board, but for her pioneer work in—" Phyllis had switched it off. Felix saw that she had tears in her eyes, and refrained from the remark he had intended to make about her cockiness in saying that she would be sure to be back.

Hamilton did not think it advisable to take Theobald back to Jacobstein Ray again; he felt that an antipathy had already grown up. But there were others engaged in telepathy research; he selected a crew and introduced Theobald to them. But he had formed a theory about the former failure; the methods used then had been the simple methods considered appropriate for young children. This time they told Theobald what they were attempting to do and started him out with tests intended for adults.

He could do it. It was as simple as that. There had been other cases equally clear cut, and the research leader cautioned Felix not to expect too much, as telepathically sensitive children tended to fade out in the talent-which Felix knew. But he could do it. Theobald, at least within the limits of the conditions, could read minds.

So Felix called Mordan again, told him again of what was on his mind. Did Mordan think that Theobald was a mutation?

"Mutation? No, I have no data to go on."

"Why not?"

"'Mutation' is a technical term. It refers only to a new characteristic which can be inherited by Mendelian rules. I don't know what this is. Suppose you find out for me first what telepathy is-then I'll tell you whether or not Theobald can pass it on-say, about thirty years from now!"

Well, that could wait. It sufficed that Theobald was telepathic-at least for the present. The projected telepath gadget, which had derived from the Plutonian "Life Detector," was beginning to show promise. It had been duplicated in the auxiliary cold laboratory beneath the outskirts of Buenos Aires and had performed in the same fashion as on Pluto. It had been greatly refined, once the researchers knew the direction in which they were driving, but it had presented grave difficulties.

One of the difficulties had been straightened out in a somewhat odd fashion. The machine, while responsive to sentient beings (it would not respond to plants, nor to animal life of low form), did little else-it was not a true telepath. There was a cat, of doubtful origin, which had made itself the lab mascot-moved in and taken possession. While the gadget was sensitized the operator had stepped back without looking and stepped on pussy's tail. Pussy did not like it and said so.

But the technician acting as receiver had liked it even less; he had snatched off the headset, yelping. It had screamed at him, he alleged.

Further experimentation made it evident that the machine was especially sensitive to the thalamic storm aroused by any sudden violent emotion. Mere cool cerebration had much less effect on it. However, banging a man on the thumb did not count. The man expected it, and delayed his reaction, routing it through the "cooler" of the forebrain. The emotion had to be strong and authentic.

Many tails were stepped on thereafter; many cats sacrificed their temporary peace of mind to the cause of science.

Theobald developed a strange antipathy for his mother's company during the period when she was expecting the arrival of his sister. It upset Phyllis; Felix tried to reason him out of it. "See here, sport," he said, "hasn't mama been good to you?"

"Yeah. Sure."

"Then what's the trouble? Why don't you like her?"

"I like her all right...but I don't like her." He pointed and his meaning was unmistakable. Felix held a hurried whispered consultation with his wife. "How about it, Phil? I thought we hadn't let him in on the news yet?"

"I haven't"

"I didn't-that's sure. Do you suppose Claude-no, Claude wouldn't spill it. Hmmm...well, there's only one other way he could have found out...he found out for himself." He looked at his son with a deeply wrinkled brow; it might not be too convenient, he was thinking, to have a telepathic member of the household. Well, it might wear off-it frequently did.

"We'll have to play it as it lies. Theobald."

"Wha'cha want?"

"Is it your little sister whom you don't like?"

The boy scowled and indicated assent.

("It's probably nothing but natural jealousy. After all, he's been the big show around here all his life.") He turned again to his son. "Look here, sport-you don't think that little sister will make any difference in how mama and daddy feel about you, do you?"

"No. I guess not."

"A little sister will be a lot of fun for you. You'll be bigger than she will be, and you'll know a lot more, and you'll be able to show her things. You'll be the important one."

No answer.

"Don't you want a baby sister?"

"Not that one."

"Why not?"

He turned completely away. They heard him mutter, "Old cuss boss!" Then he added distinctly, "and her cigars stink."

The threesome was adjourned. Phyllis and Felix waited until the boy was asleep, and, presumably, with his telepathic ability out of gear. "It seems pretty evident," he told her, "that he has identified Carvala in his mind with Justina."

She agreed. "At least I'm relieved to know that it isn't me he has a down on. Just the same, it's serious. I think we had better call in a psychiatrist."

Felix agreed. "But I'm going to talk to Claude about it, too."

Claude refused to be upset by it. "After all," he said, "it's perfectly natural that blood relatives should dislike each other. That's a prime datum of psychology. If you can't condition him to put up with her, then you'll have to rear them apart. A nuisance, but that's all."

"But how about this fixation of his?"

"I'm not a psychiatrist. I wouldn't worry too much about it. Children frequently get some funny notions. If you ignore them, they generally get over them."

So the psychiatrist thought, too. But he was totally unable to shake Theobald's conviction in the matter. He had made his point, he stuck to it, and he refused to argue.

It was a matter of prime significance, aside from Theobald's fantastic delusion, that a telepathic person had been able to locate a person whom he had never seen and whose existence he had no reason to suspect. It was a fair-sized brick in the Great Research. Dutifully, Hamilton reported the affair to Carruthers.

Carruthers was intensely interested. He asked questions about it, took the matter home with him, and nursed it. The next day he called Felix to explain a plan he had conceived. "Mind you," he said, "I'm not urging you to do this. I'm not even asking you. It's your wife, and your baby, and your boy. But I think it's a unique opportunity to advance the Research."

Felix thought about it. "I'll let you know tomorrow."

"How would you like," he said to Phyllis, when they were alone that night, "to go to Buenos Aires to have Justina?"

"Buenos Aires? Why there?"

"Because there is the only telepath machine on Earth. And it can't be moved out of the cold laboratory."

CHAPTER SEVENTEEN

Da Capo

"I'VE GOT it again." The receiver for the telepath made the announcement grimly. The gadget was still cantankerous; during the past few days it had worked beautifully part of the time-about twenty minutes in all!—and had refused to come to life the rest of the time. It seemed to have soaked up some of the contrariness of the subtle life-force it tapped. "What are you getting?"

"Feels like a dream. Water, long stretches of water. Shore line in the back with mountain peaks." A recorder at his elbow took down everything he said, with the exact times. "Are you sure it's the baby?"

"Sure as I was yesterday. Everybody is different over it. They taste different. I don't know how else to express it. Hold on! Something else...a city, a damn big city, bigger than Buenos Aires."

"Theobald," said Mordan Claude gently, "can you still hear her?" Mordan had been brought because Felix conceded that Claude had a handier way with the child than Felix. The child could not hear the telepath receiver where they had spotted him, although Claude could cut in through an earphone. Phyllis, of course, was in another room, busy with her fundamental affairs...it made no difference to the gadget, nor to Theobald. Felix had a roving assignment, privileged to make a nervous nuisance out of himself to anyone.

The boy leaned back against Mordan's thigh. "She's not over the ocean any more," he said. "She's gone to Capital City."

"Are you sure it's Capital City?"

"Sure." His voice was scornful. "I've been there, ain't I? And there's the tower."

Beyond the partition someone was asking, "A modern city?"

"Yes. Might be the Capital. It's got a pylon like it."

"Any other details?"

"Don't ask me so many questions-it breaks into the revery...she's moving again. We're in a room...Lot of people, all adults. They're talking."

"What now, son?" Claude was saying. "Aw, she's gone to that party again."

Two observers, standing clear of the activity were whispering. "I don't like it," the short one said. "It's ghastly." "But it's happening."

"But don't you realize what this means, Malcolm? Where can an unborn child get such concepts?"

"Telepathically from its mother, perhaps. The brother is certainly a telepath."

"No, no, no! Not unless all our ideas of cerebration are mistaken. Conceptions are limited to experiences, or things similar to experiences. An unborn child has experienced nothing but warmth and darkness. It couldn't have such conceptions."

"Ummm."

"Well-answer me!"

"You've got me-I can't."

Someone was saying to the receiver, "Can you make out any of the people present?"

He raised his headset. "Quit bothering me! You drive it out with my own thoughts when you do that. No, I can't. It's like dream images...I think it is a dream. I can't feel anything unless she thinks about it."

A little later. "Something's happening...the dream's gone. Uneasy...it's very unpleasant...she's resisting it...it's...it's...Oh, Great-it's awful...it hurts! I can't stand it!" He tore off his headset, and stood up, white and shaking. At the same instant Theobald screamed.

It was a matter of minutes only when a woman came out the door of Phyllis' room and motioned to Hamilton.

"You can come in now," she said cheerfully.

Felix got up from where he was kneeling with Theobald. "Stay with Uncle Claude, Sport," he said, and went in to his wife.

CHAPTER EIGHTEEN

"Beyond This Horizon—"

IT WAS nice to be able to come to the beach again. It was swell that Phyllis felt up to such little expeditions. It was pleasant to lie in the sun with his family and soak up comfort.

Things had not turned out the way he had planned, but things rarely did. Certainly he would never have believed all this a few years back...Phyllis and Baldy, and now Justina. Once he had asked Claude to tell him the meaning of life-now he did not care. Life was good, whatever it was. And the prime question had been answered for him. Let the psychologicians argue it all they pleased-there was some kind of life after this one-where a man might find out the full answer.

For the main question: "Do we get another chance?" had been answered by the back door. There was something more to the ego of a newborn child than its gene pattern. Justina had answered that, whether she knew it or not. She had brought memory patterns with her; she had lived before. He was convinced of that. Therefore, it was a dead-sure cinch that the ego went somewhere after the body disintegrated. Where, he would worry about when the time came.

It did seem extremely likely that Justina did not know what she had proved (and of course there was no way of asking her). Her telepathic patterns after she was born were meaningless, confused, as one would expect of a baby. Shock amnesia the psychologicians had decided to call it. Being born must be something like being awakened out of a sound sleep by a dash of cold water in the face. That would shock anybody.

He had not made up his mind yet whether he wanted to continue active in the Great Research, or not. He might just be lazy and raise dahlia bulbs and kids. He didn't know. Most of it was pretty long distance stuff, and he personally was satisfied. Take that work Cliff was on-centuries and then some. Cliff had compared the job with that of trying to figure out the entire plot of a long stereostory from just one flash frame.

But they would finish it-some day. Theobald wouldn't see it, but he would see more of it than Felix, and his son would see still more. His sons would roam the stars-no limit.

It was nice that Theobald seemed to have gotten over that ridiculous fixation identifying Justina with Old Carvala. True, he did not seem actually fond of the baby, but that was expecting a lot. He seemed more puzzled by her, and interested. There he was, leaning over the baby's basket. He really did seem --

"Theobald!"

The boy stood up straight quickly.

"What were you doing?"

"Nothing." Maybe-but it looked as if he had pinched her.

"Well, I think you had better find another place to do it. The baby needs to sleep now."

The boy shot a quick glance at the infant and turned away. He walked slowly down toward the water.

Felix settled back, after glancing at Phyllis. Yes, she was still asleep. It was a good world, he assured himself again, filled with interesting things. Of which the most interesting were children. He glanced at Theobald. The boy was a lot of fun now, and would be more interesting as he grew up-if he could refrain from wringing his cussed little neck in the meantime!

Rocket Ship Galileo

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Chapter 1 "LET THE ROCKET ROAR"

"EVERYBODY ALL SET?" Young Ross Jenkins glanced nervously at his two chums. "How about your camera, Art? You sure you got the lens cover off this time?"

The three boys were huddled against a thick concrete wall, higher than their heads and about ten feet long. It separated them from a steel stand, anchored to the ground, to which was bolted a black metal shape, a pointed projectile, venomous in appearance and an ugly rocket. There were fittings on each side to which stub wings might be attached, but the fittings were empty; the creature was chained down for scientific examination.

"How about it, Art?" Ross repeated. The boy addressed straightened up to his full five feet three and faced him.

"Look," Art Mueller answered, "of course I took the cover off, it's on my checkoff list. You worry about your rocket, last time it didn't fire at all and I wasted twenty feet of film."

"But you forgot it once, okay, how about your lights?"

For answer Art switched on his spot lights; the beams shot straight up, bounced against highly polished stainless-steel mirrors and brilliantly illuminated the model rocket and the framework which would keep it from taking off during the test.

A third boy, Maurice Abrams, peered at the scene through a periscope which allowed them to look over the reinforced concrete wall which shielded them from the rocket test stand.

"Pretty as a picture," he announced, excitement in his voice. "Ross, do you really think this fuel mix is what we're looking for?"

Ross shrugged, "I don't know. The lab tests looked good, we'll soon know. All right, places everybody! Checkoff lists, Art?"

"Complete."

"Morrie?"

"Complete."

"And mine's complete. Stand by! I'm going to start the clock. Here goes!" He started checking off the seconds until the rocket was fired. "Minus ten. . minus nine… minus eight… minus seven… minus six… minus five… minus four…"

Art wet his lips and started his camera.

"Minus three! Minus two! Minus one! Contact!"

"Let it roar!" Morrie yelled, his voice already drowned by the earsplitting noise of the escaping rocket gas.

A great plume of black smoke surged out the orifice of the thundering rocket when it was first fired, billowed against an earth ramp set twenty feet behind the rocket test stand and filled the little clearing with choking fumes. Ross shook his head in dissatisfaction at this and made an adjustment in the controls under his hand. The smoke cleared away; through the periscope in front of him he could see the rocket exhaust on the other side of the concrete barricade. The flame had cleared of the wasteful smoke and was almost transparent, save for occasional sparks. He could actually see trees and ground through the jet of flame. The images shimmered and shook but the exhaust gases were smoke-free.

"What does the dynamometer read?" he shouted to Morrie without taking his eyes away from the periscope. Morrie studied the instrument, rigged to the test stand itself, by means of a pair of opera glasses and his own periscope. "I can't read it!" he shouted. "Yes, I can — wait a minute. Fiftytwo — no, make it a hundred and fiftytwo; it's second time around. Hunderfiftytwo, fif'three, four. Ross, you've done it! You've done it! That's more than twice as much thrust as the best we've ever had."

Art looked up from where he was nursing his motion-picture camera. It was a commercial 8-millimeter job, modified by him to permit the use of more film so that every second of a test could be recorded. The modification worked, but was cantankerous and had to be nursed along. "How much more time?," he demanded.

"Seventeen seconds," Ross yelled at him. "Stand by, I'm going to give her the works." He twisted his throttle-monitor valve to the right, wide open. The rocket responded by raising its voice from a deepthroated roar to a higher pitch with an angry overtone almost out of the audible range. It spoke with snarling menace.

Ross looked up to see Morrie back away from his periscope and climb on a box, opera glasses in hand.

"Morrie-get your head down!" The boy did not hear him against the scream of the jet, intent as he was on getting a better view of the rocket. Ross jumped away from the controls and dived at him, tackling him around the waist and dragging him down behind the safety of the barricade. They hit the ground together rather heavily and struggled there. It was not a real fight; Ross was angry, though not fighting mad, while Morrie was merely surprised.

"What's the idea ?," he protested, when he caught his breath.

"You crazy idiot!," Ross grunted in his ear. "What were you trying to do? Get your head blown off?"

"But I wasn't-" But Ross was already clambering to his feet and returning to his place at the controls; Morrie's explanation, if any, was lost in the roar of the rocket.

"What goes on ?" Art yelled. He had not left his place by his beloved camera, not only from a sense of duty but at least partly from indecision as to which side of the battle he should join. Ross heard his shout and turned to speak. "This goon," he yelled bitterly, jerking a thumb at Morrie, "tried to-"

Ross's version of the incident was lost; the snarling voice of the rocket suddenly changed pitch, then lost itself in a boneshaking explosion. At the same time there was a dazzling flash which would have blinded the boys had they not been protected by the barricade, but which nevertheless picked out every detail of the clearing in the trees with brilliance that numbed the eyes.

They were still blinking at the memory of the ghastly light when billowing clouds of smoke welled up from beyond the barricade, surrounded them, and made them cough.

"Well," Ross said bitterly and looked directly at Morrie, "that's the last of the Starstrack V."

"Look, Ross," Morrie protested, his voice sounding shrill in the strange new stillness, "I didn't do it. I was only trying to- "

"I didn't say you did," Ross cut him short. "I know you didn't do it. I had already made my last adjustment. She was on her own and she couldn't take it. Forget it. But keep your head down after this-you darn near lost it. That's what the barricade is for."

"But I wasn't going to stick my head up. I was just going to try-"

"Both of you forget it," Art butted in. "So we blew up another one. So what? We'll build another one. Whatever happened, I got it right here in the can." He patted his camera. "Let's take a look at the wreck." He started to head around the end of the barricade.

"Wait a minute," Ross commanded. He took a careful look through his periscope, then announced: "Seems okay. Both fuel chambers are split. There can't be any real danger now. Don't burn yourselves. Come on."

They followed him around to the test stand.

The rocket itself was a complete wreck but the test stand was undamaged; it was built to take such punishment. Art turned his attention to the dynamometer which measured the thrust generated by the rocket. "I'll have to recalibrate this," he announced. "The loop isn't hurt, but the dial and the rack-and-pinion are shot."

The other two boys did not answer him; they were busy with the rocket itself. The combustion chamber was split wide open and it was evident that pieces were missing.

"How about it, Ross?" Morrie inquired. "Do you figure it was the metering pump going haywire, or was the soup just too hot for it?"

"Hard to tell," Ross mused absently. "I don't think it was the pump. The pump might jam and refuse to deliver fuel at all, but I don't see how it could deliver too much fuel unless it reared back and passed a miracle."

"Then it must have been the combustion chamber. The throat is all right. It isn't even pitted much," he added as he peered at it in the gathering twilight.

"Maybe. Well, let's throw a tarp over it and look it over tomorrow morning. Can't see anything now. Come on, Art."

"Okay. Just a sec while I get my camera." He detached his camera from its bracket and placed it in its carrying case, then helped the other two drag canvas tarpaulins over all the test gear-one for the test stand, one for the barricade with its controls, instruments, and periscopes. Then the three turned away and headed out of the clearing.

The clearing was surrounded by a barbed wire fence, placed there at the insistence of Ross's parents, to whom the land belonged, in order to keep creatures, both four-legged and two-legged, from wandering into the line of fire while the boys were experimenting. The gate in this fence was directly behind the barricade and about fifty feet from it.

They had had no occasion to glance in the direction of the gate since the beginning of the test run-indeed, their attentions had been so heavily on the rocket that anything less than an earthquake would hardly have disturbed them.

Ross and Morrie were a little in front with Art close at their heels, so close that, when they stopped suddenly, he stumbled over them and almost dropped his camera. "Hey, watch where you're going, can't you ?" he protested. "Pick up your big feet!"

They did not answer but stood still, staring ahead and at the ground. "What gives?," he went on. "Why the trance? Why do-oh!" He had seen it too.

"It" was the body of a large man, crumpled on the ground, half in and half out the gate. There was a bloody wound on his head and blood on the ground. They all rushed forward together, but it was Morrie who shoved them back and kept them from touching the prone figure. "Take it easy!," he ordered.

"Don't touch him. Remember your first aid. That's a head wound. If you touch him, you may kill him."

"But we've got to find out if he's alive," Ross objected.

"I'll find out. Here-give me those." He reached out and appropriated the data sheets of the rocket test run from where they stuck out of Ross's pocket. These he rolled into a tube about an inch in diameter, then cautiously placed it against the back of the still figure, on the left side over the heart. Placing his ear to the other end of the improvised stethoscope he listened. Ross and Art waited breathlessly. Presently his tense face relaxed into a grin. "His motor is turning over," he announced. "Good and strong. At least we didn't kill him."

"We?"

"Who do you think? How do you think he got this way? Take a look around and you'll probably find the piece of the rocket that konked him." He straightened up. "But never mind that now. Ross, you shag up to your house and call an ambulance. Make it fast! Art and I will wait here with… with, uh, him. He may come to and we'll have to keep him quiet."

"Okay." Ross was gone as he spoke. Art was staring at the unconscious man. Morrie touched him on the arm. "Sit down, kid. No use getting in a sweat. We'll have trouble enough later. Even if this guy isn't hurt much I suppose you realize this about winds up the activities the Galileo Marching-and-Chowder Society, at least the rocketry-and-loud-noises branch of it."

Art looked unhappy. "I suppose so."

"`Suppose' nothing. It's certain. Ross's father took a very dim view of the matter the time we blew all the windows out of his basement — not that I blame him. Now we hand him this. Loss of the use of the land is the least we can expect. We'll be lucky not to have handed him a suit for damages too. Art agreed miserably. "I guess it's back to stamp collecting for us," he assented, but his mind was elsewhere. Law suit. The use of the land did not matter. To be sure the use of the Old Ross Place on the edge of town had been swell for all three of them, what with him and his mother living in back of the store, and Morrie's folks living in a flat, but-law suit! Maybe Ross's parents could afford it; but the little store just about kept Art and his mother going, even with the afterschool jobs he had had ever since junior high — a law suit would take the store away from them.

His first feeling of frightened sympathy for the wounded man was beginning to be replaced by a feeling of injustice done him. What was the guy doing there anyhow? It wasn't just.

"Let me have a look at this guy," he said.

"Don't touch him," Morrie warned.

"I won't. Got your pocket flash?" It was becoming quite dark in the clearing.

"Sure. Here… catch." Art took the little flashlight and tried to examine the face of their victim-hard to do, as he was almost face down and the side of his face that was visible was smeared with blood.

Presently Art said in an odd tone of voice, "Morrie-would it hurt anything to wipe some of this blood away?"

"You're dern tootin' it would! You let him be till the doctor comes."

"All right, all right. Anyhow I don't need to — I'm sure anyhow. Morrie, I know who he is."

"You do? Who?"

"He's my uncle."

"Your uncle!"

"Yes, my uncle. You know-the one I've told you about. He's my Uncle Don. Doctor Donald Cargraves, my `Atomic Bomb' uncle."

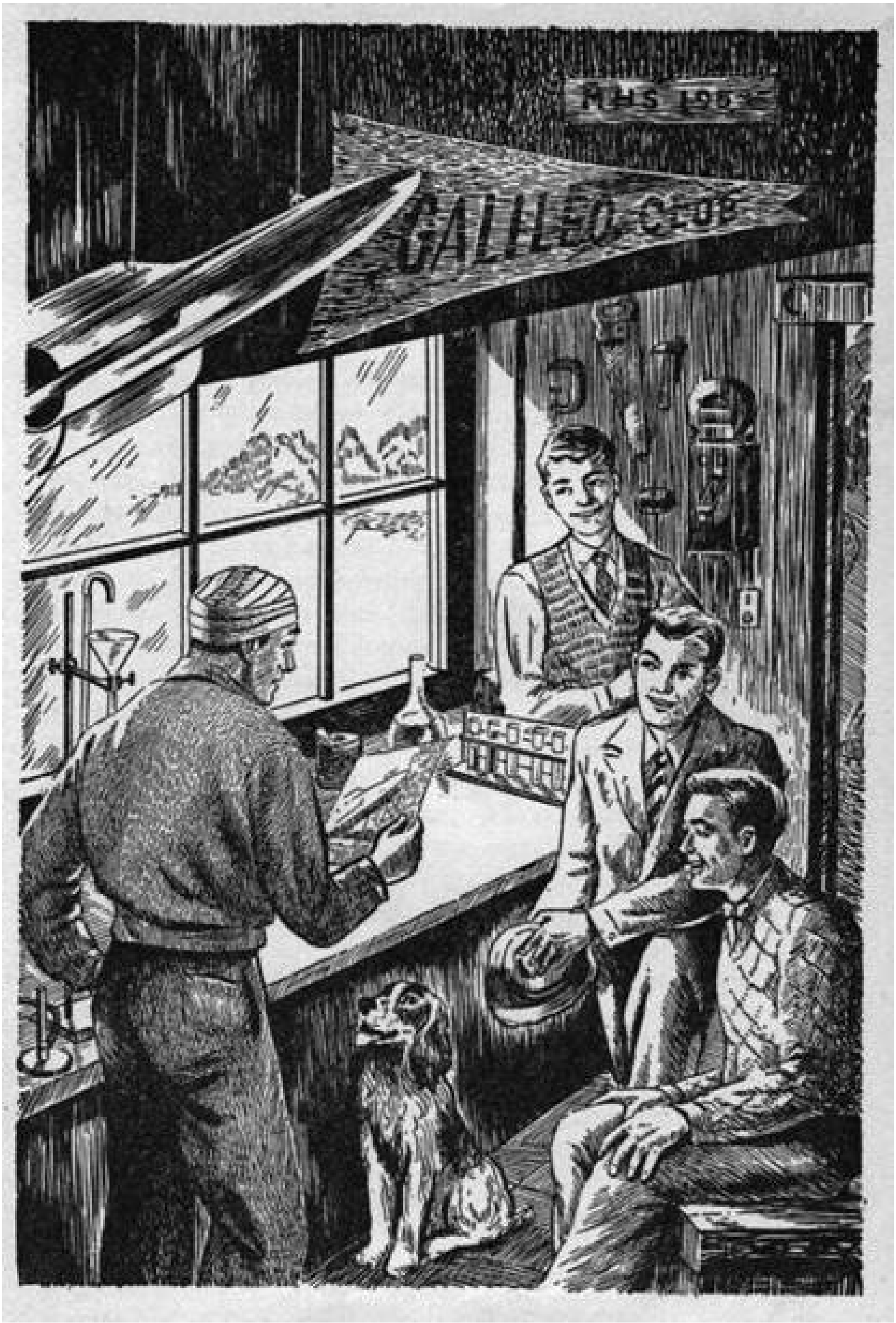
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GALILEO CLUB

Chapter 2 A MAN-SIZED CHALLENGE

"AT LEAST I'M PRETTY SURE it's my uncle," Art went on. "I could tell for certain if I could see his whole face."

"Don't you know whether or not he's your uncle? After all, a member of your own family-"

"Nope. I haven't seen him since he came through here to see Mother, just after the war. That's been a long time. I was just a kid then. But it looks like him."

"But he doesn't look old enough," Morrie said judiciously. "I should think-Here comes the ambulance!"

It was indeed, with Ross riding with the driver to show him the road and the driver cussing the fact that the road existed mostly in Ross's imagination. They were all too busy for a few minutes, worrying over the stranger as a patient, to be much concerned with his identity as an individual. "Doesn't look too bad," the interne who rode with the ambulance announced. "Nasty scalp wound. Maybe concussion, maybe not. Now over with him-easy! -while I hold his head." When turned face up and lifted into the stretcher, the patient's eyes flickered; he moaned and seemed to try to say something. The doctor leaned over him.

Art caught Morrie's eye and pressed a thumb and forefinger together. There was no longer any doubt as to the man's identity, now that Art had seen his face.

Ross started to climb back in the ambulance but the interne waved him away. "But all of you boys show up at the hospital. We'll have to make out an accident report on this."

As soon as the ambulance lumbered away Art told Ross about his discovery. Ross looked startled. "Your uncle, eh? Your own uncle. What was he doing here?"

"I don't know. I didn't know he was in town."

"Say, look-I hope he's not hurt bad, especially seeing as how he's your uncle — but is this the uncle, the one you were telling us about who has been mentioned for the Nobel Prize?"

"That's what I've been trying to tell you. He's my Uncle Donald Cargraves."

"Doctor Donald Cargraves!," Ross whistled. "Jeepers! When we start slugging people we certainly go after big game, don't we?"

"It's no laughing matter. Suppose he dies? What'll I tell my mother?"

"I wasn't laughing. Let's get over to the hospital and find out how bad he's hurt before you tell her anything. No use in worrying her unnecessarily." Ross sighed, "I guess we might as well break the news to my folks. Then I'll drive us over to the hospital."

"Didn't you tell them when you telephoned?," Morrie asked. "No. They were out in the garden, so I just phoned and then leaned out to the curb to wait for the ambulance. They may have seen it come in the drive but I didn't wait to find out."

"I'll bet you didn't."

Ross's father was waiting for them at the house. He answered their greetings, then said, "Ross-"

"Yes, sir?"

"I heard an explosion down toward your private stamping ground. Then I saw an ambulance drive in and drive away. What happened?"

"Well, Dad, it was like this: We were making a full-power captive run on the new rocket and-" He sketched out the events.

Mr. Jenkins nodded and said, "I see. Come along, boys." He started toward the converted stable which housed the family car. "Ross, run tell your mother where we are going. Tell her I said not to worry." He went on, leaning on his cane a bit as he walked. Mr. Jenkins was a retired electrical engineer, even-tempered and taciturn.

Art could not remember his own father; Morrie's father was still living but a very different personality. Mr. Abrams ruled a large and noisy, children-cluttered household by combining a loud voice with lavish affection.

When Ross returned, puffing, his father waved away his offer to drive. "No, thank you. I want us to get there."

The trip was made in silence. Mr. Jenkins left them in the foyer of the hospital with an injunction to wait.

"What do you think he will do?" Morrie asked nervously.

"I don't know. Dad'll be fair about it."

"That's what I'm afraid of," Morrie admitted. "Right now I don't want justice; I want charity."

"I hope Uncle Don is all right," Art put in.

"Huh? Oh, yes, indeed! Sorry, Art, I'm afraid we've kind of forgotten your feelings. The principal thing is for him to get well, of course."

"To tell the truth, before I knew it was Uncle Don, I was more worried over the chance that I might have gotten Mother into a law suit than I was over what we might have done to a stranger."

"Forget it," Ross advised. "A person can't help worrying over his own troubles. Dad says the test is in what you do, not in what you think. We all did what we could for him."

"Which was mostly not to touch him before the doctor came," Morrie pointed out.

"Which was what he needed."

"Yes," agreed Art, "but I don't check you, Ross, on it not mattering what you think as long as you act all right. It seems to me that wrong ideas can be just as bad as wrong ways to do things."

"Easy, now. If a guy does something brave when he's scared to death is he braver than the guy who does the same thing but isn't scared?"

"He's less… no, he's more… You've got me all mixed up. It's not the same thing."

"Not quite, maybe. Skip it."

They sat in silence for a long time. Then Morrie said, "Anyhow, I hope he's all right."

Mr. Jenkins came out with news. "Well, boys, this is your lucky day. Skull uninjured according to the X-ray. The patient woke when they sewed up his scalp. I talked with him and he has decided not to scalp any of you in return." He smiled.

"May I see him?" asked Art.

"Not tonight. They've given him a hypo and he is asleep. I telephoned your mother, Art."

"You did? Thank you, sir."

"She's expecting you. I'll drop you by."

Art's interview with his mother was not too difficult; Mr. Jenkins had laid a good foundation. In fact, Mrs. Mueller was incapable of believing that Art could be "bad." But she did worry about him and Mr. Jenkins had soothed her, not only about Art but also as to the welfare of her brother. Morrie had still less trouble with Mr. Abrams. After being assured that the innocent bystander was not badly hurt, he had shrugged. "So what? So we have lawyers in the family for such things. At fifty cents a week it'll take you about five hundred years to pay it off. Go to bed."

"Yes, Poppa."

The boys gathered at the rocket testing grounds the next morning, after being assured by a telephone call to the hospital that Doctor Cargraves had spent a good night. They planned to call on him that afternoon; at the moment they wanted to hold a post-mortem on the ill-starred Starstruck V.

The first job was to gather up the pieces, try to reassemble them, and then try to figure out what had happened. Art's film of the event would be necessary to complete the story, but it was not yet ready.

They were well along with the reassembling when they heard a whistle and a shout from the direction of the gate. "Hello there! Anybody home?"

"Coming!" Ross answered. They skirted the barricade to where they could see the gate. A tall, husky figure waited there — a man so young, strong, and dynamic in appearance that the bandage around his head seemed out of place, and still more so in contrast with his friendly grin.

"Uncle Don!" Art yelled as he ran up to meet him.

"Hi," said the newcomer. "You're Art. Well, you've grown a lot but you haven't changed much." He shook hands.

"What are you doing out of bed? You're sick."

"Not me," his uncle asserted. "I've got a release from the hospital to prove it. But introduce me — are these the rest of the assassins?"

"Oh-excuse me. Uncle Don, this is Maurice Abrams and this is Ross Jenkins… Doctor Cargraves."

"How do you do, sir?"

"Glad to know you, Doctor."

"Glad to know you, too." Cargraves started through the gate, then hesitated. "Sure this place isn't booby-trapped?"

Ross looked worried. "Say, Doctor-we're all sorry as can be. I still can't see how it happened. This gate is covered by the barricade."

"Ricochet shot probably. Forget it. I'm not hurt. A little skin and a little blood-that's all. If I had turned back at your first warning sign, it wouldn't have happened."

"How did you happen to be coming here?"

"A fair question. I hadn't been invited, had I?"

"Oh, I didn't mean that."

"But I owe you an explanation. When I breezed into town yesterday, I already knew of the Galileo Club; Art's mother had mentioned it in letters. When my sister told me where Art was and what he was up to, I decided to slide over in hope of getting here in time to watch your test run. Your hired girl told me how to find my way out here."

"You mean you hurried out here just to see this stuff we play around with?"

"Sure. Why not? I'm interested in rockets."

"Yes, but-we really haven't got anything to show you. These are just little models."

"A new model," Doctor Cargraves answered seriously, "of anything can be important, no matter who makes it nor how small it is. I wanted to see how you work. May I?"

"Oh, certainly, sir-we'd be honored." Ross showed their guest around, with Morrie helping out and Art chipping in. Art was pink-faced and happy — this was his uncle, one of the world's great, a pioneer of the Atomic Age. They inspected the test stand and the control panel. Cargraves looked properly impressed and tut-tutted over the loss of Starstruck V.

As a matter of fact he was impressed. It is common enough in the United States for boys to build and take apart almost anything mechanical, from alarm clocks to hiked-up jaloppies. It is not so common for them to understand the sort of controlled and recorded experimentation on which science is based.

Their equipment was crude and their facilities limited, but the approach was correct and the scientist recognized it.

The stainless steel mirrors used to bounce the spotlight beams over the barricade puzzled Doctor Cargravcs. "Why take so much trouble to protect light bulbs ?" he asked. "Bulbs are cheaper than stainless steel."

"We were able to get the mirror steel free," Ross explained. "The spotlight bulbs take cash money."

The scientist chuckled. "That reason appeals to me. Well, you fellows have certainly thrown together quite a set-up. I wish I had seen your rocket before it blew up."

"Of course the stuff we build," Ross said diffidently, "can't compare with a commercial unmanned rocket, say like a mailcarrier. But we would like to dope out something good enough to go after the junior prizes."

"Ever competed?"

"Not yet. Our physics class in high school entered one last year in the novice classification. It wasn't much — just a powder job, but that's what got us started, though we've all been crazy about rockets ever since I can remember."

"You've got some fancy control equipment. Where do you do your machine-shop work? Or do you have it done?"

"Oh, no. We do it in the highschool shop. If the shop instructor okays you, you can work after school on your own."

"It must be quite a high school," the physicist commented. "The one I went to didn't have a machine shop."

"I guess it is a pretty progressive school," Ross agreed. "It's a mechanical-arts-and-science high school and it has more courses in math and science and shop work than most. It's nice to be able to use the shops. That's where we built our telescope."

"Astronomers too, eh?"

"Well-Morrie is the astronomer of the three of us."

"Is that so?," Cargraves inquired, turning to Morrie.

Morrie shrugged. "Oh, not exactly. We all have our hobbies. Ross goes in for chemistry and rocket fuels. Art is a radio ham and a camera nut. You can study astronomy sitting down."

"I see," the physicist replied gravely. "A matter of efficient self-protection. I knew about Art's hobbies. By the way, Art, I owe you an apology; yesterday afternoon I took a look in your basement. But don't worry-I didn't touch anything."

"Oh, I'm not worried about your touching stuff, Uncle Don," Art protested, turning pinker, "but the place must have looked a mess."

"It didn't look like a drawing room but it did look like a working laboratory. I see you keep notebooks — no, I didn't touch them, either!"

"We all keep notebooks," Morrie volunteered. "That's the influence of Ross's old man."

"Dad told me he did not care," Ross explained, "how much I messed around as long as I kept it above the tinker-toy level. He used to make me submit notes to him on everything I tried and he would grade them on clearness and completeness. After a while I got the idea and he quit."

"Does he help you with your projects?"

"Not a bit. He says they're our babies and we'll have to nurse them."

They prepared to adjourn to their clubhouse, an outbuilding left over from the days when the Old Ross Place was worked as a farm. They gathered up the forlorn pieces of Starstruck V, while Ross checked each item. "I guess that's all," he announced and started to pick up the remains.

"Wait a minute," Morrie suggested. "We never did search for the piece that clipped Doctor Cargraves."

"That's right," the scientist agreed. "I have a personal interest in that item, blunt instrument, missile, shrapnel, or whatever. I want to know how close I came to playing a harp."

Ross looked puzzled. "Come here, Art," he said in a low voice.

"I am here. What do you want?"

"Tell me what piece is still missing-"

"What difference does it make?" But he bent over the box containing the broken rocket and checked the items. Presently he too looked puzzled.

"Ross-"

"Yeah?"

"There isn't anything missing."

"That's what I thought. But there has to be."

"Wouldn't it be more to the point," suggested Cargraves, "to look around near where I was hit?"

"I suppose so."

They all searched, they found nothing. Presently they organized a system which covered the ground with such thoroughness that anything larger than a medium-small ant should have come to light. They found a penny and a broken Indian arrowhead, but nothing resembling a piece of the exploded rocket.

"This is getting us nowhere," the doctor admitted. "Just where was I when you found me?"

"Right in the gateway," Morrie told him. "You were collapsed on your face and-"

"Just a minute. On my face?"

"Yes. You were-"

"But how did I get knocked on my face? I was facing toward your testing ground when the lights went out. I'm sure of that. I should have fallen backwards."

"Well… I'm sure you didn't, sir. Maybe it was a ricochet, as you said."

"Hmm… maybe." The doctor looked around. There was nothing near the gate which would make a ricochet probable. He looked at the spot where he had lain and spoke to himself.

"What did you say, doctor?"

"Uh? Oh, nothing, nothing at all. Forget it. It was just a silly idea I had. It couldn't be." He straightened up as if dismissing the whole thing.

"Let's not waste any more time on my vanishing `blunt instrument.' It was just curiosity. Let's get on back."

The clubhouse was a one-story frame building about twenty feet square. One wall was filled with Ross's chemistry workbench with the usual clutter of test-tube racks, bunsen burners, awkward-looking, pretzel-like arrangements of glass tubing, and a double sink which looked as if it had been salvaged from a junk dealer. A homemade hood with a hinged glass front occupied one end of the bench. Parallel to the adjacent wall, in a little glass case, a precision balance' of a good make but of very early vintage stood mounted on its own concrete pillar.

"We ought to have airconditioning," Ross told the doctor, "to do really good work."

"You haven't done so badly," Cargraves commented. The boys had covered the rough walls with ply board; the cracks had been filled and the interior painted with washable enamel. The floor they had covered with linoleum, salvaged like the sink, but serviceable. The windows and door were tight. The place was clean.

"Humidity changes could play hob with some of your experiments, however," he went on. "Do you plan to put in airconditioning sometime?"

"I doubt it. I guess the Galileo Club is about to fold up."

"What? Oh, that seems a shame."

"It is and it isn't. This fall we all expect to go away to Tech."

"I see. But aren't there any other members?"

"There used to be, but they've moved, gone away to school, gone in the army. I suppose we could have gotten new members but we didn't try. Well .. we work together well and… you know how it is."

Cargraves nodded. He felt that he knew more explicitly than did the boy. These three were doing serious work; most of their schoolmates, even though mechanically minded, would be more interested in needling a stripped-down car up to a hundred miles an hour than in keeping careful notes.

"Well, you are certainly comfortable here. It's a shame you can't take it with you." A low, wide, padded seat stretched from wall to wall opposite the chemistry layout. The other two boys were sprawled on it, listening. Behind them, bookshelves had been built into the wall. Jules Verne crowded against Mark's Handbook of Mechanical Engineering. Cargraves noted other old friends: H.G. Wells' Seven Famous Novels, The Handbook of Chemistry and Physics, and Smyth's Atomic Energy for Military Purposes. Jammed in with them, side by side with Ley's Rockets and Eddington's Nature of the Physical World, were dozens of puip magazines of the sort with robot men or space ships on their covers.

He pulled down a dog-eared copy of Haggard's When the Earth Trembled and settled his long body between the boys. He was beginning to feel at home. These boys he knew; he had only to gaze back through the corridors of his mind to recognize himself.

Ross said, "If you'll excuse me, I want to run up to the house." Cargraves grunted, "Sure thing," with his nose still in the book. Ross came back to announce, "My mother would like all of you to stay for lunch."

Morrie grinned, Art looked troubled. "My mother thinks I eat too many meals over here as it is," he protested feebly, his eyes on his uncle. Cargraves took him by the arm. "I'll go your bail on this one, Art," he assured him; then to Ross, "Please tell your mother that we are very happy to accept."

At lunch the adults talked, the boys listened. The scientist, his turban bandage looking stranger than ever, hit it off well with his elders. Any one would hit it off well with Mrs. Jenkins, who could have been friendly and gracious at a cannibal feast, but the boys were not used to seeing Mr. Jenkins in a chatty mood.

The boys were surprised to find out how much Mr. Jenkins knew about atomics. They had the usual low opinion of the mental processes of adults; Mr. Jenkins they respected but had subconsciously considered him the anachronism which most of his generation in fact was, a generation as a whole incapable of realizing that the world had changed completely a few years before, at Alamogordo, New Mexico, on July 16, 1945. Yet Mr. Jenkins seemed to know who Doctor Cargraves was and seemed to know that he had been retained until recently by North American Atomics. The boys listened carefully to find out what Doctor Cargraves planned to do next, but Mr. Jenkins did not ask and Cargraves did not volunteer the information.

After lunch the three and their guest went back to the clubhouse. Cargraves spent most of the afternoon spread over the bunk, telling stories of the early days at Oak Ridge when the prospect of drowning in the inescapable, adhesive mud was more dismaying than the everpresent danger of radioactive poisoning, and the story, old but ever new and eternally exciting, of the black, rainy morning in the New Mexico desert when a great purple-and-golden mushroom had climbed to the stratosphere, proclaiming that man had at last unloosed the power of the suns.

Then he shut up, claiming that he wanted to re-read the old H. Rider Haggard novel he had found. Ross and Morrie got busy at the bench; Art took a magazine. His eyes kept returning to his fabulous uncle. He noticed that the man did not seem to be turning the pages very often.

Quite a while later Doctor Cargraves put down his book. "What do you fellows know about atomics ?"

The boys exchanged glances before Morrie ventured to answer. "Not much I guess. Highschool physics can't touch it, really, and you can't mess with it in a home laboratory."

"That's right. But you are interested?"

"Oh, my, yes! We've read what we could — Pollard and Davidson, and Gamov's new book. But we don't have the math for atomics."

"How much math do you have?"

"Through differential equations."

"Huh?" Cargraves looked amazed. "Wait a minute. You guys are still in high school?"

"Just graduated."

"What kind of high school teaches differential equations? Or am I an old fuddy-duddy?"

Morrie seemed almost defensive in his explanation. "It's a new approach. You have to pass a test, then they give you algebra through quadratics, plane and spherical trigonometry, plane and solid geometry, and plane and solid analytical geometry all in one course, stirred in together. When you finish that course-and you take it as slow or as fast as you like -you go on."

Cargraves shook his head. "There've been some changes made while I was busy with the neutrons. Okay, Quiz Kids, at that rate you'll be ready for quantum theory and wave mechanics before long. But I wonder how they go about cramming you this way? Do you savvy the postulational notion in math?"

"Why, I think so."

"Tell me."

Morrie took a deep breath. "No mathematics has any reality of its own, not even common arithmetic. All mathematics is purely an invention of the mind, with no connection with the world around us, except that we find some mathematics convenient in describing things."

"Go on. You're doing fine!"

"Even then it isn't real-or isn't `true' -the way the ancients thought of it. Any system of mathematics is derived from purely arbitrary assumptions, called `postulates', the sort of thing the ancients called `axioms.'"

"Your jets are driving, kid! How about the operational notion in scientific theory? No… Art-you tell me."

Art looked embarrassed; Morrie looked pleased but relieved. "Well, uh… the operational idea is, uh, it's building up your theory in terms of the operations you perform, like measuring, or timing, so that you don't go reading into the experiments things that aren't there."

Cargraves nodded. "That's good enough — it shows you know what you're talking about." He kept quiet for a long time, then he added, "You fellows really interested in rockets?"

Ross answered this time, "Why, er, yes, we are. Rockets among other things. We would certainly like to have a go at those junior prizes."

"That's all?"

"Well, no, not exactly. I guess we all think, well, maybe some day…" His voice trailed off.

"I think I see." Cargraves sat up. "But why bother with the competition? After all, as you pointed out, model rockets can't touch the full-sized commercial jobs. The prizes are offered just to keep up interest in rocketry — it's like the model airplane meets they used to have when I was a kid. But you guys can do better than that — why don't you go in for the senior prizes?"

Three sets of eyes were fixed on him. "What do you mean ?" Cargraves shrugged. "Why don't you go to the moon with me?"

Chapter 3 CUTRATE COLUMBUS

THE SILENCE THAT FILLED THE clubhouse had a solid quality, as if one could slice it and make sandwiches. Ross recovered his voice first. "You don't mean it," he said in a hushed tone.

"But I do," Doctor Cargraves answered evenly. "I mean it quite seriously. I propose to try to make a trip to the moon. I'd like to have you fellows with me. Art," he added, "close your mouth. You'll make a draft."

Art gulped, did as he was told, then promptly opened it again. "But look," he said, his words racing, "Uncle Don, if you take us — I mean, how could we-or if we did, what would we use for — how do you propose-"

"Easy, easy!" Cargraves protested. "All of you keep quiet and I'll tell you what I have in mind. Then you can think it over and tell me whether or not you want to go for it."

Morrie slapped the bench beside him. "I don't care," he said, "I don't care if you're going to try to fly there on your own broom — I'm in. I'm going along."

"So am I," Ross added quickly, moistening his lips.

Art looked wildly at the other two. "But I didn't mean that I wasn't — I was just asking — Oh, shucks! Me, too! You know that."

The young scientist gave the impression of bowing without getting up.

"Gentlemen, I appreciate the confidence you place in me. But you are not committed to anything just yet."

"But-"

"So kindly pipe down," he went on, "and I'll lay out my cards, face up. Then we'll talk. Have you guys ever taken an oath ?"

"Oh, sure — Scout Oath, anyhow."

"I was a witness in court once."

"Fine. I want you all to promise, on your honor, not to spill anything I tell you without my specific permission, whether we do business or not. It is understood that you are not bound thereby to remain silent if you are morally obligated to speak up — you are free to tell on me if there are moral or legal reasons why you should. Otherwise, you keep mum — on your honor. How about it?"

"Yes, sir!"

"Right!"

"Check."

"Okay," agreed Cargraves, settling back on his spine. "That was mostly a matter of form, to impress you with the necessity of keeping your lips buttoned. You'll understand why, later. Now here is the idea: All my life I've wanted to see the day when men would conquer space and explore the planets — and I wanted to take part in it. I don't have to tell you how that feels." He waved a hand at the book shelves. "Those books show me you understand it; you've got the madness yourselves. Besides that, what I saw out on your rocket grounds, what I see here, what I saw yesterday when I sneaked a look in Art's lab, shows me that you aren't satisfied just to dream about it and read about it — you want to do something. Right?"

"Right!" It was a chorus.

Cargraves nodded. "I felt the same way. I took my first degree in mechanical engineering with the notion that rockets were mechanical engineering and that I would need the training. I worked as an engineer after graduation until I had saved up enough to go back to school. I took my doctor's degree in atomic physics, because I had a hunch-oh, I wasn't the only one! -I had a hunch that atomic power was needed for practical space ships. Then came the war and the Manhattan Project. When the Atomic Age opened up a lot of people predicted that space flight was just around the corner. But it didn't work out that way-nobody knew how to harness the atom to a rocket. Do you know why?"

Somewhat hesitantly Ross spoke up. "Yes, I think I do."

"Go ahead."

"Well, for a rocket you need mass times velocity, quite a bit of mass in what the jet throws out and plenty of velocity. But in an atomic reaction there isn't very much mass and the energy comes out in radiations in all directions instead of 2 nice, lined-up jet. Just the same-"

"`Just the same' what?"

"Well, there ought to be a way to harness all that power. Darn it — with so much power from so little weight, there ought to be some way."

"Just what I've always thought," Cargraves said with a grin. "We've built atomic plants that turn out more power than Boulder Dam. We've made atomic bombs that make the two used in the war seem like firecrackers. Power to burn, power to throw away. Yet we haven't been able to hook it to a rocket. Of course there are other problems. An atomic power plant takes a lot of shielding to protect the operators — you know that. And that means weight. Weight is everything in a rocket. If you add another hundred pounds in dead load, you have to pay for it in fuel. Suppose your shield weighed only a ton — how much fuel would that cost you, Ross?"

Ross scratched his head. "I don't know what kind of fuel you mean nor what kind of a rocket you are talking about — what you want it to do."

"Fair enough," the scientist admitted. "I asked you an impossible question. Suppose we make it a chemical fuel and a moon rocket and assume a mass-ratio of twenfy to one. Then for a shield weighing a ton we have to carry twenty tons of fuel."

Art sat up suddenly. "Wait a minute, Uncle Don."

"Yes?"

"If you use a chemical fuel, like alcohol and liquid oxygen say, then you won't need a radiation shield."

"You got me, kid. But that was just for illustration. If you had a decent way to use atomic power, you might be able to hold your mass-ratio down to, let's say, one-to-one. Then a one-ton shield would only require one ton of fuel to carry it. That suit you better?"

Art wriggled in excitement. "I'll say it does. That means a real space ship. We could go anywhere in it!"

"But we're still on earth," his uncle pointed out dryly. "I said `if.' Don't burn out your jets before you take off. And there is still a third hurdle: atomic power plants are fussy to control — hard to turn on, hard to turn off. But we can let that one alone till we come to it. I still think we'll get to the moon."

He paused. They waited expectantly.

"I think I've got a way to apply atomic power to rockets." Nobody stood up. Nobody cheered. No one made a speech starting, "On this historic occasion-" Instead they held their breaths, waiting for him to go on.

"Oh, I'm not going into details now. You'll find out all about it, if we work together."

"We will!"

"Sure thing!"

"I hope so. I tried to interest the company I was with in the scheme, but they wouldn't hold still."

"Gee whillickers! Why not?"

"Corporations are in business to make money; they owe that to their stockholders. Do you see any obvious way to make money out of a flight to the moon?"

"Shucks." Art tossed it off. "They ought to be willing to risk going broke to back a thing like this."

"Nope. You're off the beam, kid. Remember they are handling other people's money. Have you any idea how much it would cost to do the research and engineering development, using the ordinary commercial methods, for anything as big as a trip to the moon?"

"No," Art admitted. "A good many thousands, I suppose."

Morrie spoke up. "More like a hundred thousand."

"That's closer. The technical director of our company made up a tentative budget of a million and a quarter."

"Whew!"

"Oh, he was just showing that it was not commercially practical. He wanted to adapt my idea to power plants for ships and trains. So I handed in my resignation."

"Good for you!"

Morrie looked thoughtful. "I guess I see," he said slowly, "why you swore us to secrecy. They own your idea."

Cargraves shook his head emphatically, "No, not at all. You certainly would be entitled to squawk if I tried to get you into a scheme to jump somebody else's patent rights — even if they held them by a yellowdog, brain-picking contract." Cargraves spoke with vehemence. "My contract wasn't that sort. The company owns the idea for the purposes for which the research was carried out — power. And I own anything else I see in it. We parted on good terms. I don't blame them. When the Queen staked Columbus, nobody dreamed that he would come back with the Empire State Building in his pocket."

"Hey," said Ross, "these senior prizes — they aren't big enough. That's why nobody has made a real bid for the top ones. The prize wouldn't pay the expenses, not for the kind of budget you mentioned. It's a sort of a swindle, isn't it?"

"Not a swindle, but that's about the size of it," Cargraves conceded. "With the top prize only $250,000 it won't tempt General Electric, or du Pont, or North American Atomic, or any other big research corporation. They can't afford it, unless some other profit can be seen. As a matter of fact, a lot of the prize money comes from those corporations." He sat up again. "But we can compete for it!"

"How?"

"I don't give a darn about the prize money. I just want to go!"

"Me too!" Ross made the statement; Art chimed in.

"My sentiments exactly. As to how, that's where you come in. I can't spend a million dollars, but I think there is a way to tackle this on a shoestring. We need a ship. We need the fuel. We need a lot of engineering and mechanical work. We need overhead expenses and supplies for the trip. I've got a ship."

"You have? Now? A space ship?" Art was wide-eyed.

"I've got an option to buy an Atlantic freighter-rocket at scrap prices. I can swing that. It's a good rocket, but they are replacing the manned freighters with the more economical robot-controlled jobs. It's a V-17 and it isn't fit to convert to passenger service, so we get it as scrap. But if I buy it, it leaves me almost broke. Under the UN trusteeship for atomics, a senior member of the Global Association of Atomic Scientists — that's me!" he stuck in, grinning, "can get fissionable material for experimental purposes, if the directors of the

Association approve. I can swing that. I've picked thorium, rather than uranium-235, or plutonium-never mind why. But the project itself had me stumped, just too expensive. I was about ready to try to promote it by endorsements and lecture contracts and all the other claptrap it sometimes takes to put over scientific work -when I met you fellows."

He got up and faced them. "I don't need much to convert that old V-17 into a space ship. But I do need skilled hands and brains and the imagination to know what is needed and why. You'd be my mechanics and junior engineers and machine-shop workers and instrument men and presently my crew. You'll do hard, dirty work for long hours and cook your own meals in the bargain. You'll get nothing but coffee-and-cakes and a chance to break your necks. The ship may never leave the ground. If it does, chances are you'll never live to tell about it. It won't be one big adventure. I'll work you till you're sick of me and probably nothing will come of it. But that's the proposition. Think it over and let me know."

There was the nerve-tingling pause which precedes an earthquake. Then the boys were on their feet, shouting all at once. It was difficult to make out words, but the motion had been passed by acclamation; the Galileo Club intended to go to the moon.

When the buzzing had died down, Cargraves noticed that Ross's face was suddenly grave. "What's the matter, Ross? Cold feet already ?"

"No," Ross shook his head. "I'm afraid it's too good to be true."

"Could be, could be. I think I know what's worrying you. Your parents?"

"Uh, huh. I doubt if our folks will ever let us do it."

Chapter 4 THE BLOOD OF PIONEERS

CARGRAVES LOOKED AT THEIR woebegone faces. He knew what they were faced with; a boy can't just step up to his father and say, "By the way, old man, count me out on those plans we made for me to go to college. I've got a date to meet Santa Claus at the North Pole." It was the real reason he had hesitated before speaking of his plans. Finally he said, "I'm afraid it's up to each of you. Your promise to me does not apply to your parents, but ask them to respect your confidence. I don't want our plans to get into the news."

"But look, Doctor Cargraves," Morrie put in, "why be so secret about it? It might make our folks feel that it was just a wild-eyed kid's dream. Why can't you just go to them and explain where we would fit into it?"

"No," Cargraves answered, "they are your parents. When and if they want to see me, I'll go to them and try to give satisfactory answers. But you will have to convince them that you mean business. As to secrecy, the reasons are these: there is only one aspect of my idea that can be patented and, under the rules of the UN Atomics Convention, it can be licensed by any one who wants to use it. The company is obtaining the patent, but not as a rocket device. The idea that I can apply it to a cheap, shoestring venture into space travel is mine and I don't want any one else to beat me to it with more money and stronger backing. Just before we are ready to leave we will call in the reporters — probably to run a story about how we busted our necks on the takeoff."

"But I see your point," he went on. "We don't want this to look like a mad-scientist-and-secret-laboratory set-up. Well, I'll try to convince them."

Doctor Cargraves made an exception in the case of Art's mother, because she was his own sister. He cautioned Art to retire to his basement laboratory as soon as dinner was over and then, after helping with the dishes, spoke to her. She listened quietly while he explained. "Well, what do you think of it?

She sat very still, her eyes everywhere but on his face, her hands busy twisting and untwisting her handkerchief. "Don, you can't do this to me." He waited for her to go on.

"I can't let him go, Don. He's all I've got. With Hans gone…"

"I know that," the doctor answered gently. "But Hans has been gone since Art was a baby. You can't limit the boy on that account."

"Do you think that makes it any easier?" She was close to tears.

"No, I don't. But it is on Hans' account that you must not keep his son in cotton batting. Hans had courage to burn. If he had been willing to knuckle under to the Nazis he would have stayed at Kaiser Wilhelm Institute. But Hans was a scientist. He wouldn't trim his notion of truth to fit political gangsters. He-"

"And it killed him!"

"I know, I know. But remember, Grace, it was only the fact that you were an American girl that enabled you to pull enough strings to get him out of the concentration camp."

"I don't see what that's got to do with it. Oh, you should have seen him when they let him out!" She was crying now.

"I did see him when you brought him to this country," he said gently, "and that was bad enough. But the fact that you are American has a lot to do with it. We have a tradition of freedom, personal freedom, scientific freedom. That freedom isn't kept alive by caution and unwillingness to take risks. If Hans were alive he would be going with me — you know that, Sis. You owe it to his son not to keep him caged. You can't keep him tied to your apron strings forever, anyhow. A few more years and you will have to let him follow his own bent."

Her head was bowed. She did not answer. He patted her shoulder. "You think it over, Sis. I'll try to bring him back in one piece." When Art came upstairs, much later, his mother was still sitting, waiting for him. "Arthur?"

"Yes, Mother."

"You want to go to the moon?"

"Yes, Mother."

She took a deep breath, then replied steadily. "You be a good boy on the moon, Arthur. You do what your uncle tells you to."

"I will, Mother."

Morrie managed to separate his father from the rest of the swarming brood shortly after dinner. "Poppa, I want to talk to you man to man."

"And how else ?"

"Well, this is different. I know you wanted me to come into the business, but you agreed to help me go to Tech."

His father nodded. "The business will get along. Scientists we are proud to have in the family. Your Uncle Bernard is a fine surgeon. Do we ask him to help with the business ?"

"Yes, Poppa, but that's just it-I don't want to go to Tech."

"So? Another school?"

"No, I don't want to go to school." He explained Doctor Cargraves' scheme, blurting it out as fast as possible in an attempt to give his father the whole picture before he set his mind. Finished, he waited.

His father rocked back and forth. "So it's the moon now, is it? And maybe next week the sun. A man should settle down if he expects to accomplish anything, Maurice."

"But, Poppa, this is what I want to accomplish!"

"When do you expect to start?"

"You mean you'll let me? I can?"

"Not so fast, Maurice. I did not say yes; I did not say no. It has been quite a while since you stood up before the congregation and made your speech, `Today I am a man-' That meant you were a man, Maurice, right that moment. It's not for me to let you; it's for me to advise you. I advise you not to. I think it's foolishness."

Morrie stood silent, stubborn but respectful.

"Wait a week, then come back and tell me what you are going to do. There's a pretty good chance that you will break your neck on this scheme, isn't there?"

"Well… yes, I suppose so."

"A week isn't too long to make up your mind to kill yourself. In the meantime, don't talk to Momma about this."

"Oh, I won't!"

"If you decide to go ahead anyway, I'll break the news to her. Momma isn't going to like this, Maurice."

Doctor Donald Cargraves received a telephone call the next morning which requested him, if convenient, to come to the Jenkins' home. He did so, feeling, unreasonably he thought, as if he were being called in on the carpet. He found Mr. and Mrs. Jenkins in the drawing room; Ross was not in sight. Mr. Jenkins shook hands with him and offered him a chair.

"Cigarette, Doctor? Cigar?"

"Neither, thank you."

"If you smoke a pipe," Mrs. Jenkins added, "please do so." Cargraves thanked her and gratefully stoked up his old stinker.

"Ross tells me a strange story," Mr. Jenkins started in. "If he were not pretty reliable I'd think his imagination was working overtime. Perhaps you can explain it."

"I'll try, sir."

"Thanks. Is it true, Doctor, that you intend to try to make a trip to the moon."

"Quite true."

"Well! Is it also true that you have invited Ross and his chums to go with you in this fantastic adventure?"

"Yes, it is." Doctor Cargraves found that he was biting hard on the stem of his pipe.

Mr. Jenkins stared at him. "I'm amazed. Even if it were something safe and sane, your choice of boys as partners strikes me as outlandish." Cargraves explained why he believed the boys could be competent junior partners in the enterprise. "In any case," he concluded, "being young is not necessarily a handicap. The great majority of the scientists in the Manhattan Project were very young men."

"But not boys, Doctor."

"Perhaps not. Still, Sir Isaac Newton was a boy when he invented the calculus. Professor Einstein himself was only twenty-six when he published his first paper on relativity — and the work had been done when he was still younger. In mechanics and in the physical sciences, calendar age has nothing to do with the case; it's solely a matter of training and ability."

"Even if what you say is true, Doctor, training takes time and these boys have not had time for the training you need for such a job. It takes years to make an engineer, still more years to make a toolmaker or an instrument man. Tarnation, I'm an engineer myself. I know what I'm talking about."

"Ordinarily I would agree with you. But these boys have what I need. Have you looked at their work?"

"Some of it."

"How good is it?"

"It's good work — within the limits of what they know."

"But what they know is just what I need for this job. They are rocket fans now. They've learned in their hobbies the specialties I need." Mr. Jenkins considered this, then shook his head. "I suppose there is something in what you say. But the scheme is fantastic. I don't say that space flight is fantastic; I expect that the engineering problems involved will some day be solved. But space flight is not a backyard enterprise. When it comes it will be done by the air forces, or as a project of one of the big corporations, not by half-grown boys."

Cargraves shook his head. "The government won't do it. It would be laughed off the floor of Congress. As for corporations, I have reason to be almost certain they won't do it, either."

Mr. Jenkins looked at him quizzically. "Then it seems to me that we're not likely to see space flight in our lifetimes."

"I wouldn't say so," the scientist countered. "The United States isn't the only country on the globe. It wouldn't surprise me to hear some morning that the Russians had done it. They've got the technical ability and they seem to be willing to spend money on science. They might do it."

"Well, what if they do?"

Cargraves took a deep breath. "I have nothing against the Russians; if they beat me to the moon, I'll take off my hat to them. But I prefer our system to theirs; it would be a sour day for us if it turned out that they could do something as big and as wonderful as this when we weren't even prepared to tackle it, under our set-up. Anyhow," he continued, "I have enough pride in my own land to want it to be us, rather than some other country."

Mr. Jenkins nodded and changed his tack. "Even if these three boys have the special skills you need, I still don't see why you picked boys. Frankly, that's why the scheme looks rattlebrained to me. You should have experienced engineers and mechanics and your crew should be qualified rocket pilots."

Doctor Cargraves laid the whole thing before them, and explained how he hoped to carry out his plans on a slim budget. When he had finished Mr. Jenkins said, "Then as a matter of fact you braced these three boys because you were hard up for cash?"

"If you care to put it that way."

"I didn't put it that way; you did. Candidly, I don't altogether approve of your actions. I don't think you meant any harm, but you didn't stop to think. I don't thank you for getting Ross and his friends stirred up over a matter unsuited to their ages without consulting their parents first." Donald Cargraves felt his mouth grow tense but said nothing; he felt that he could not explain that he had lain awake much of the night over misgivings of just that sort.

"However," Mr. Jenkins went on, "I understand your disappointment and sympathize with your enthusiasm." He smiled briefly. "I'll make you a deal. I'll hire three mechanics-you pick them - and one junior engineer or physicist, to help you in converting your ship. When the time comes, I'll arrange for a crew. Hiring will not be needed there, in my opinion — we will be able to pick from a long list of volunteers. Wait a minute," he said, as Cargraves started to speak, "you'll be under no obligation to me. We will make it a business proposition of a speculative sort. We'll draw up a contract under which, if you make it, you assign to me a proper percentage of the prize money and of the profits from exclusive news stories, books, lectures, and so forth. Does that look like a way out?"

Cargraves took a deep breath. "Mr. Jenkins," he said slowly, "if I had had that proposition last week, I would have jumped at it. But I can't take it."

"Why not?"

"I can't let the boys down. I'm already committed."

"Would it make a difference if I told you there was absolutely no chance of Ross being allowed to go?"

"No. I will have to go looking for just such a backer as yourself, but it can't be you. It would smack too much of allowing myself to be bought off-No offense intended, Mr. Jenkins! -to welch on the proposition I made Ross."

Mr. Jenkins nodded. "I was afraid you would feel that way. I respect your attitude, Doctor. Let me call Ross in and tell him the outcome." He started for the door.

"Just a moment, Mr. Jenkins-"

"Yes?"

"I want to tell you that I respect your attitude, too. As I told you, the project is dangerous, quite dangerous. I think it is a proper danger but I don't deny your right to forbid your son to risk his neck with me."

"I am afraid you don't understand me, Doctor Cargraves. It's dangerous, certainly, and naturally that worries me and Mrs. Jenkins, but that is not my objection. I would not try to keep Ross out of danger. I let him take flying lessons; I even had something to do with getting two surplus army trainers for the high school. I haven't tried to keep him from playing around with explosives. That's not the reason."

"May I asked what it is ?"

"Of course. Ross is scheduled to start in at the Technical Institute this fall. I think it's more important for him to get a sound basic education than for him to be first man on the moon." He turned away again.

"Wait a minute! If it's his education you are worried about, would you consider me a competent teacher ?"

"Eh? Well… yes."

"I will undertake to tutor the boys in technical and engineering subjects. I will see to it that they do not fall behind."

Mr. Jenkins hesitated momentarily. "No, Doctor, the matter is settled. An engineer without a degree has two strikes against him to start with. Ross is going to get his degree." He stepped quickly to the door and called out,

"Ross!"

"Coming, Dad." The center of the argument ran downstairs and into the room. He looked around, first at Cargraves, then anxiously at his father, and finally at his mother, who looked up from her knitting and smiled at him but did not speak. "What's the verdict?" he inquired.

His father put it bluntly. "Ross, you start in school in the fall. I cannot okay this scheme."

Ross's jaw muscles twitched but he did not answer directly. Instead he said to Cargraves, "How about Art and Morrie?"

"Art's going. Morrie phoned me and said his father didn't think much of it but would not forbid it."

"Does that make any difference, Dad?"

"I'm afraid not. I don't like to oppose you, son, but when it comes right down to cases, I am responsible for you until you are twenty-one. You've got to get your degree."

"But… but… look, Dad. A degree isn't everything. If the trip is successful, I'll be so famous that I won't need a tag on my name to get a job. And if I don't come back, I won't need a degree!"

Mr. Jenkins shook his head. "Ross, my mind is made up." Cargraves could see that Ross was fighting to keep the tears back. Somehow it made him seem older, not younger. When he spoke again his voice was unsteady. "Dad?"

"Yes, Ross?"

"If I can't go, may I at least go along to help with the rebuilding job? They'll need help."

Cargraves looked at him with new interest. He had some comprehension of what the proposal would cost the boy in heartache and frustration. Mr. Jenkins looked surprised but answered quickly. "You may do that up till the time school opens."

"Suppose they aren't through by then? I wouldn't want to walk out on them."

"Very well. If necessary you can start school the second semester. That is my last concession." He turned to Doctor Cargraves. "I shall count on you for some tutoring." Then to his son, "But that is the end of the matter, Ross. When you are twenty-one you can risk your neck in a space ship if you like. Frankly, I expect that there will still be plenty of chance for you to attempt the first flight to the moon if you are determined to try it." He stood up.

"Albert."

"Eh? Yes, Martha?," he turned deferentially to his wife.

She laid her knitting in her lap and spoke emphatically. "Let him go, Albert!"

"Eh? What do you mean, my dear?"

"I mean, let the boy go to the moon, if he can. I know what I said, and you've put up a good argument for me. But I've listened and learned. Doctor Cargraves is right; I was wrong. We can't expect to keep them in the nest."

"Oh, I know what I said," she went on, "but a mother is bound to cry a little. Just the same, this country was not built by people who were afraid to go. Ross's great-great-grandfather crossed the mountains in a Conestoga wagon and homesteaded this place. He was nineteen, his bride was seventeen. It's a matter of family record that their parents opposed the move." She stirred suddenly and one of her knitting needles broke.

"I would hate to think that I had let the blood run thin." She got up and went quickly from the room.

Mr. Jenkins' shoulders sagged. "You have my permission, Ross," he said presently. "Doctor, I wish you good luck. And now, if you will excuse me.

He followed his wife.

Chapter 5 GROWING PAINS

"HOW MUCH FARTHER?" The noise of the stripped-down car combined with desert wind caused Art to shout. "Look at the map," Ross said, his hands busy at the wheel in trying to avoid a jack rabbit. "It's fifty-three miles from Route 66 to the turnoff, then seven miles on the turnoff."

"We left Highway 66 about thirty-nine, forty miles back," Art replied. "We oughtto be in sight of the turnoff before long." He squinted out across bare, colorful New Mexico countryside. "Did you ever see so much wide-open, useless country? Cactus and coyotes — what's it good for?"

"I like it," Ross answered. "Hang on to your hat." There was a flat, straight stretch ahead, miles along; Ross peeled off and made the little car dig… seventy… eighty… ninety… ninety-five. The needle quivered up toward three figures."

"Hey, Ross?"

"Yeah?"

"This rig ain't young any more. Why crack us up?"

"Sissy," said Ross, but he eased up on the gas.

"Not at all," Art protested. "If we kill ourselves trying to get to the moon, fine — we're heroes. But if we bust our fool necks before we start, we'll just look silly."

"Okay, okay — is that the turnoff?"

A dirt road swung off to the right and took out over the desert. They followed it about a quarter of a mile, then pulled up at a steel gate barring the road. A strong fence, topped by barbed wire, stretched out in both directions. There was a sign on the gate:

DANGER

Unexploded Shells

Enter this area at your own risk. Disturb nothing - report all suspicious objects to the District Forester.

"This is it," Ross stated. "Got the keys?" The area beyond was an abandoned training ground of the war, part of more than 8,000,000 acres in the United States which had been rendered useless until decontaminated by the hazardous efforts of army engineer specialists. This desert area was not worth the expense and risk of decontamination, but it was ideal for Cargraves; it assured plenty of room and no innocent bystanders — and it was rent free, loaned to the Association of Atomic Scientists, on Cargraves' behalf.

Art chucked Ross some keys. Ross tried them, then said, "You've given me the wrong keys."

"I don't think so. Nope," he continued, "those are the keys Doc sent."

"What do we do?"

"Bust the lock, maybe."

"Not this lock. Do we climb it?"

"With the rig under one arm? Be your age."

A car crawled toward them, its speed lost in the vastness of the desert. It stopped near them and a man in a military Stetson stuck his head out. "Hey, there!"

Art muttered, "Hey, yourself," then said, "Good morning."

"What are you trying to do?"

"Get inside."

"Don't you see the sign? Wait a minute — either one of you named Jenkins?"

"He's Ross Jenkins. I'm Art Mueller."

"Pleased to know you. I'm the ranger hereabouts. Name o' Buchanan. I'll let you in, but I don't rightly know as I should."

"Why not?" Ross's tone was edgy. He felt that they were being sized up as youngsters.

"Well… we had a little accident in there the other day. That's why the lock was changed."

"Accident?"

"Man got in somehow — no break in the fence. He tangled with a land mine about a quarter of a mile this side of your cabin."

"Did it… kill him?"

"Deader `n a door nail. I spotted it by the buzzards. See here — I'll let you in; I've got a copy of your permit. But don't go exploring. You stay in the marked area around the cabin, and stay on the road that follows the power line."

Ross nodded. "We'll be careful."

"Mind you are. What are you young fellows going to do in there, anyway? Raise jackrabbits?"

"That's right. Giant jackrabbits, eight feet tall."

"So? Well, keep `em inside the marked area, or you'll have jackrabbit hamburger."

"We'll be careful," Ross repeated. "Any idea who the man was that had the accident? Or what he was doing here?"

"None, on both counts. The buzzards didn't leave enough to identify. Doesn't make sense. There was nothing to steal in there; it was before your stuff came."

"Oh, it's here!"

"Yep. You'll find the crates stacked out in the open. He wasn't a desert man," the Ranger went on. "You could tell by his shoes. Must `a' come by car, but there was no car around. Doesn't make sense."

"No, it doesn't seem to," Ross agreed, "but he's dead, so that ends it."

"Correct. Here are your keys. Oh, yes-" He put his hand back in his pocket. "Almost forgot. Telegram for you."

"For us? Oh, thanks!"

"Better put up a mail box out at the highway," Buchanan suggested. "This reached you by happenstance."

"We'll do that," Ross agreed absently, as he tore open the envelope.

"So long." Buchanan kicked his motor into life.

"So long, and thanks again."

"For Heaven's sake, what does it say?," Art demanded.

"Read it:"

PASSED FINAL TESTS TODAY. LEAVING SATURDAY. PLEASE PROVIDE BRASS BAND, DANCING GIRLS, AND TWO FATTED CALVES — ONE RARE, ONE MEDIUM. (signed) DOC AND MORRIE.

Ross grinned. "Imagine that! Old Morrie a rocket pilot! I'll bet his hat doesn't fit him now."

"I'll bet it doesn't. Darn! We all should have taken the course."

"Relax, relax. Don't be small about it — we'd have wasted half the summer." Ross dismissed the matter.

Art himself did not understand his own jealousy. Deep inside, it was jealousy of the fact that Morrie had been able to go to Spaatz Field in the company of Art's idolized uncle, rather than the purpose of the trip. All the boys had had dual-control airplane instruction; Morrie had gone on and gotten a private license. Under the rules-out of date, in Art's opinion -an airplane pilot could take a shortened course for rocket pilot. Doctor Cargraves held a slightly dusty aircraft license some fifteen years old. He had been planning to qualify for rocket operation; when he found that Morrie was eligible it was natural to include him.

This had left Ross and Art to carry out numerous chores for the enterprise, then to make their own way to New Mexico to open up the camp.

The warning to follow the power line had been necessary; the boys found the desert inside pockmarked by high explosive and crisscrossed with tracks, one as good as another, carved years before by truck and tank and mobile carrier. The cabin itself they found to be inside a one-strand corral a quarter of a mile wide and over a mile long. Several hundred yards beyond the corral and stretching away for miles toward the horizon was an expanse which looked like a green, rippling lake — the glassy crater of the atom bomb test of 1951, the UN's Doomsday Bomb.

Neither the cabin nor the piled-up freight could hold their attention until they had looked at it. Ross drove the car to the far side of the enclosure and they stared.

Art gave a low respectful whistle. "How would you like to have been under that?" Ross inquired in a hushed voice.

"Not any place in the same county — or the next county. How would you like to be in a city when one of those things goes off?"

Ross shook his head. "I want to zig when it zags. Art, they better never have to drop another one, except in practice. If they ever start lobbing those things around, it `ud be the end of civilization."

"They won't," Art assured him. "What d'you think the UN police is for? Wars are out. Everybody knows that."

"You know it and I know it. But I wonder if everybody knows it ?"

"It'll be just too bad if they don't."

"Yeah — too bad for us."

Art climbed out of the car. "I wonder if we can get down to it?

"Well, don't try. We'll find out later."

"There can't be any duds in the crater or anywhere in the area — not after that."

"Don't forget our friend that the buzzards ate. Duds that weren't exposed to the direct blast might not go off. This bomb was set off about five miles up."

"Huh? I thought-"

"You were thinking about the test down in Chihuahua. That was a ground job. Come on. We got work to do." He trod on the starter.

The cabin was pre-fab, moved in after the atom bomb test to house the radioactivity observers. It had not been used since and looked it.

"Whew! What a mess," Art remarked. "We should have brought a tent."

"It'll be all right when we get it fixed up. Did you see kerosene in that stuff outside?"

"Two drums of it."

"Okay. I'll see if I can make this stove work. I could use some lunch." The cabin was suitable, although dirty. It haddrilled well; the water was good, although it had a strange taste. There were six rough bunks needing only bedding rolls. The kitchen was the end of the room, the dining room a large pine table, but there were shelves, hooks on the walls, windows, a tight roof overhead. The stove worked well, even though it was smelly; Ross produced scrambled eggs, coffee, bread and butter, German-fried potatoes, and a bakery apple pie with only minor burns and mishaps.

It took all day to clean the cabin, unload the car, and uncrate what they needed at once. By the time they finished supper, prepared this time by Art, they were glad to crawl into their sacks. Ross was snoring gently before Art closed his eyes. Between Ross's snores and the mournful howls of distant coyotes Art was considering putting plugs in his ears, when the morning sun woke him up.

"Get up, Ross!"

"Huh? What? Wassamatter?"

"Show a leg. We're burning daylight."

"I'm tired," Ross answered as he snuggled back into the bedding. "I think I'll have breakfast in bed."

"You and your six brothers. Up you come — today we pour the foundation for the shop."

"That's right." Ross crawled regretfully out of bed. "Wonderful weather — I think I'll take a sun bath."

"I think you'll get breakfast, while I mark out the job."

"Okay, Simon Legree."

The machine shop was a sheet metal and stringer affair, to be assembled. They mixed the cement with the sandy soil of the desert, which gave them a concrete good enough for a temporary building. It was necessary to uncrate the power tools and measure them before the fastening bolts could be imbedded in the concrete. Ross watched as Art placed the last bolt. "You sure we got `em all?"

"Sure. Grinder, mill, lathe-" He ticked them off. "Drill press, both saws-"

They had the basic tools needed for almost any work. Then they placed bolts for the structure itself, matching the holes in the metal sills to the bolts as they set them in the wet concrete. By nightfall they had sections of the building laid out, each opposite its place, ready for assembly. "Do you think the power line will carry the load?" Art said anxiously, as they knocked off.

Ross shrugged. "We won't be running all the tools at once. Quit worrying, or we'll never get to the moon. We've got to wash dishes before we can get supper."

By Saturday the tools had been hooked up and tested, and Art had rewound one of the motors. The small mountain of gear had been stowed and the cabin was clean and reasonably orderly. They discovered in unpacking cases that several had been broken open, but nothing seemed to have been hurt. Ross was inclined to dismiss the matter, but Art was worried. His precious radio and electronic equipment had been gotten at.

"Quit fretting," Ross advised him. "Tell Doc about it when he comes. The stuff was insured."

"It was insured in transit," Art pointed out. "By the way, when do you think they will get here?"

"I can't say," Ross answered. "If they come by train, it might be Tuesday or later. If they fly to Albuquerque and take the bus, it might be tomorrow — what was that?" He glanced up.

"Where?" asked Art.

"There. Over there, to your left. Rocket."

"So it is! It must be a military job; we're off the commercial routes. Hey, he's turned on his nose jets!"

"He's going to land. He's going to land here!"

"You don't suppose?"

"I don't know. I thought — there he comes! It can't-" His words were smothered when the thunderous, express-train roar reached them, as the rocket decelerated. Before the braking jets had been applied, it was traveling ahead of its own din, and had been, for them, as silent as thought. The pilot put it down smoothly not more than five hundred yards from them, with a last blast of the nose and belly jets which killed it neatly.

They began to run.

As they panted up to the sleek, gray sides of the craft, the door forward of the stub wings opened and a tall figure jumped down, followed at once by a smaller man.

"Doc! Morrie!"

"Hi, sports!" Cargraves yelled. "Well, we made it. Is lunch ready?"

Morrie was holding himself straight, almost popping with repressed emotion.

"I made the landing," he announced.

"You did?" Art seemed incredulous.

"Sure. Why not? I got my license. Want to see it?"

"`Hot Pilot Abrams,' it says here," Ross alleged, as they examined the document. "But why didn't you put some glide on it? You practically set her down on her jets."

"Oh, I was practicing for the moon landing."

"You were, huh? Well, Doc makes the moon landing or I guarantee I don't go."

Cargraves interrupted the kidding. "Take it easy. Neither one of us will try an airless landing."

Morrie looked startled. Ross said, "Then who-"

"Art will make the moon landing."

Art gulped and said, "Who? Me?"

"In a way. It will have to be a radar landing; we can't risk a crack-up on anything as hard as an all jet landing when there is no way to walk home. Art will have to modify the circuits to let the robot-pilot do it. But Morrie will be the standby," he went on, seeing the look on Morrie's face. "Morrie's reaction time is better than mine. I'm getting old. Now how about lunch? I want to change clothes and get to work."

Morrie was dressed in a pilot's coverall, but Cargraves was wearing his best business suit. Art looked him over. "How come the zoot suit, Uncle? You don't look like you expected to come by rocket. For that matter, I thought the ship was going to be ferried out?"

"Change in plans. I came straight from Washington to the field and Morrie took off as soon as I arrived. The ship was ready, so we brought it out ourselves, and saved about five hundred bucks in ferry pilot charges."

"Everything on the beam in Washington?" Ross asked anxiously.

"Yes, with the help of the association's legal department. Got some papers for each of you to sign. Let's not stand here beating our gums. Ross, you and I start on the shield right away. After we eat."

"Good enough."

Ross and the doctor spent three days on the hard, dirty task of tearing out the fuel system to the tail jets. The nose and belly jets, used only in maneuvering and landing, were left unchanged. These operated on aniline and nitric fuel; Cargraves wanted them left as they were, to get around one disadvantage of atomic propulsion-the relative difficulty in turning the power off and on when needed.

As they worked, they brought each other up to date. Ross told him about the man who had tangled with a dud land mine. Cargraves paid little attention until Ross told him about the crates that had been opened. Cargraves laid down his tools and wiped sweat from his face. "I want the details on that," he stated.

"What's the matter, Doc? Nothing was hurt."

"You figure the dead man had been breaking into the stuff?"

"Well, I thought so until I remembered that the Ranger had said flatly that this bozo was already buzzard meat before our stuff arrived."

Cargraves looked worried and stood up. "Where to, Doc?"

"You go ahead with the job," the scientist answered absently. "I've got to see Art."

Ross started to speak, thought better of it, and went back to work.

"Art," Cargraves started in, "what are you and Morrie doing now?"

"Why, we're going over his astrogation instruments. I'm tracing out the circuits on the acceleration integrator. The gyro on it seems to be off center, by the way."

"It has to be. Take a look in the operation manual. But never mind that. Could you rig an electric-eye circuit around this place?"

"I could if I had the gear."

"Never mind what you might do `if' — what can you do with the stuff you've got?"

"Wait a minute, Uncle Don," the younger partner protested. "Tell me what you want to do — I'll tell you if I can wangle it."

"Sorry. I want a prowler circuit around the ship and cabin. Can you do it?"

Art scratched his ear. "Let me see. I'd need photoelectric cells and an ultraviolet light. The rest I can piece together. I've got two light meters in my photo kit; I could rig them for the cells, but I don't know about UV light. If we had a sun lamp, I could filter it. How about an arc? I could jimmy up an arc."

Cargraves shook his head. "Too uncertain. You'd have to stay up all night nursing it. What else can you do?"

"Mmmm… Well, we could use thermocouples maybe. Then I could use an ordinary floodlight and filter it down to infrared."

"How long would it take? Whatever you do, it's got to be finished by dark, even if it's only charging the top wire of the fence."

"Then I'd better do just that," Art agreed, "if that — Say!"

"Say what?"

"Instead of giving the fence a real charge and depending on shocking anybody that touches it, I'll just push a volt or two through it and hook it back in through an audio circuit with plenty of gain. I can rig it so that if anybody touches the fence it will howl like a dog. How's that?"

"That's better. I want an alarm right now. Get hold of Morrie and both of you work on it." Cargraves went back to his work, but his mind was not on it. The misgivings which he had felt at the time of the mystery of the missing `blunt instrument' were returning. Now more mysteres — his orderly mind disliked mysteries.

He started to leave the rocket about an hour later to see how Art was making out. His route led him through the hold into the pilot compartment. There he found Morrie. His eyebrows went up. "Hi, sport," he said. "I thought you were helping Art."

Morrie looked sheepish. "Oh, that!" he said. "Well, he did say something about it. But I was busy." He indicated the computer, its cover off.

"Did he tell you I wanted you to help him?"

"Well, yes — but he didn't need my help. He can do that sort of work just as well alone."

Cargraves sat down. "Morrie," he said slowly, "I think we had better have a talk. Have you stopped to think who is going to be secondin-command of this expedition?"

Morrie did not answer. Cargraves went on. "It has to be you, of course. You're the other pilot. If anything happens to me the other two will have to obey you. You realize that?"

"Art won't like that." Morrie's voice was a mutter.

"Not as things stand now. Art's got his nose out of joint. You can't blame him — he was disappointed that he didn't get to take pilot training, too."

"But that wasn't my fault."

"No, but you've got to fix it. You've got to behave so that, if the time comes, they'll want to take your orders. This trip is no picnic.

There will be times when our lives may depend on instant obedience. I put it to you bluntly, Morrie — if I had had a choice I would have picked Ross for my second-incommand — he's less flighty than you are. But you're it, and you've got to live up to it. Otherwise we don't take off."

"Oh, we've got to take off! We can't give up now!"

"We'll make it. The trouble is, Morrie," he went on, "American boys are brought up loose and easy. That's fine. I like it that way. But there comes a time when loose and easy isn't enough, when you have to be willing to obey, and do it wholeheartedly and without argument. See what I'm driving at?"

"You mean you want me to get on back to the shop and help Art."

"Correct." He swung the boy around and faced him toward the door, slapped him on the back and said, "Now git!"

Morrie "got." He paused at the door and flung back over his shoulder,

"Don't worry about me, Doc. I can straighten out and fly right."

"Roger!" Cargraves decided to have a talk with Art later.

Chapter 6 DANGER IN THE DESERT

THE SPACE SUITS WERE delivered the next day, causing another break in the work, to Cargraves' annoyance. However, the boys were so excited over this evidence that they were actually preparing to walk on the face of the moon that he decided to let them get used to the suits.

The suits were modified pressurized stratosphere suits, as developed for the air forces. They looked like diving suits, but were less clumsy. The helmets were "goldfish bowls" of Plexiglas, laminated with soft polyvinyl-butyral plastic to make them nearly shatter-proof. There were no heating arrangements. Contrary to popular belief, vacuum of outer space has no temperature; it is neither hot nor cold. Man standing on the airless moon would gain or lose heat only by radiation, or by direct contact with the surface of the moon. As the moon was believed to vary from extreme subzero to temperatures hotter than boiling water, Cargraves had ordered thick soles of asbestos for the shoes of the suits and similar pads for the seats of the pants of each suit, so that they could sit down occasionally without burning or freezing. Overgloves of the same material completed the insulation against contact. The suits were so well insulated, as well as airtight, that body heat more than replaced losses through radiation. Cargraves would have preferred thermostatic control, but such refinements could be left to the pioneers and colonists who would follow after. Each suit had a connection for an oxygen bottle much larger and heavier than the jump bottle of an aviator, a bottle much too heavy to carry on earth but not too heavy for the surface of the moon, where weight is only one-sixth that found on earth.

The early stratosphere suits tended to starfish and become rigid, which made the simplest movements an effort. In trying on his own suit, Cargraves was pleased to find that these suits were easy to move around in, even when he had Ross blow him up until the suit was carrying a pressure of three atmospheres, or about fortyfive pounds to the square inch. The constant-volume feature, alleged for the de-Camp joints, appeared to be a reality.

Cargraves let them experiment, while seeing to it that as many field tests as possible were made to supplement the manufacturer's laboratory tests. Then the suits were turned over to Art for installation of walky-talky equipment.

The following day the doctor turned all the boys to work on the conversion of the drive mechanism. He was expecting delivery of the atomic fission element thorium; the antiradiation shield had to be ready. This shield was constructed of lead, steel, and organic plastic, in an arrangement which his calculations indicated would be most effective in screening the alpha, beta, and gamma radiations and the slippery neutrons, from the forward part of the rocket.

Of these radiations, the gamma are the most penetrating and are much like X-rays. Alpha particles are identical with the nuclei of helium atoms; beta particles are simply electrons moving at extremely high speeds. Neutrons are the electrically uncharged particles which make up much of the mass of most atomic nuclei and are the particles which set off or trigger the mighty explosions of atomic bombs.

All of these radiations are dangerous to health and life.

The thorium drive unit was to be shielded only on the forward side, as radiations escaping to outer space could be ignored. Morrie had landed the rocket with one side facing the cabin, inside the corral. It was now necessary to jack the rocket around until the tubes pointed away from the cabin, so that radiations, after the thorium was in place, would go harmlessly out across the crater of the Doomsday Bomb and, also, so that the rocket would be in position for a captive test run with the exhaust directed away from the cabin.

The jacking-around process was done with hydraulic jacks, muscle, and sweat, in sharp contrast to the easy-appearing, powered manipulation of rockets by dolly and cradle and mobile sling, so familiar a sight on any rocket field. It took all of them until late afternoon. When it was over Cargraves declared a holiday and took them on a long-promised trip into the Doomsday Crater.

This bomb site has been pictured and described so much and the boys were so used to seeing it in the distance that the thrill of being in it was limited. Nevertheless the desolation, the utter deadness, of those miles and miles of frozen, glassy waste made their flesh creep. Cargraves marched ahead, carrying a Geiger radiation counter, of the sort used to prospect for uranium in Canada during the war. This was largely to impress the boys with the necessity for unsleeping watchfulness in dealing with radioactive elements. He did not really expect to hear the warning rattle of danger in the ear phones; the test had been made so long before that the grim lake was almost certainly as harmless as the dead streets of Hiroshima.

But it put them in the mood for the lecture he had in mind. "Now, listen, sports," he started in when they got back, "day after tomorrow the thorium arrives. From then on the holiday is over. This stuff is poison. You've got to remember that all the time."

"Sure," agreed Morrie. "We all know that."

"You know it at the tops of your minds. I want you to know it every minute, way down in your guts. We'll stake out the unshielded area between the ship and the fence. If your hat blows into that stretch, let it stay there, let it rot — but don't go after it."

Ross looked perturbed. "Wait a second, Doc. Would it really hurt anything to expose yourself for just a few seconds?"

"Probably not," Cargraves agreed, "provided that were all the dosage you ever got. But we will all get some dosage all the time, even through the shield. Radioactivity accumulates its poisonous effect. Any exposure you can possibly avoid, you must avoid. It makes your chances better when you get a dose of it accidentally. Art!"

"Uh? Yes, sir!"

"From now on you are the medical officer. You must see to it that everybody wears his X-ray film all the time-and I mean all the time - and his electroscope. I want you to change the films and develop them and check the electroscopes according to the dose in the manual. Complete charts on everything, and report to me each Friday morning — oftener if you find anything outside the limits. Got me?"

"Got you, Doc."

"Besides that, you arrange for blood counts once a week for everybody, over in town."

"I think I could learn to do a blood count myself," Art offered.

"You let the regular medic do it. You've got enough to worry about to keep all the electronic equipment purring along properly. One more thing." He looked around him, waiting to get their full attention. "If any one shows the possibility of overdosage of radiation, by film or by blood count or whatever, I will have to send him home for treatment. It won't be a case of `just one more chance.' You are dealing with hard facts herd — not me, but natural laws. If you make a mistake, out you go and we'll have to find somebody to take your place."

They all nodded solemnly. Art said, "Doc?"

"Suppose it's your film that shows the overdosage?"

"Me? Not likely! If it does you can kick me all the way to the gate — I'm afraid of that stuff!

"Just the same," he went on more seriously, "you run the same checks on me as on everybody else. Now let's have supper. I want you and Morrie to do the KP tonight, so that Ross can start his study period right after supper. Ross, you and I are getting up at five, so let's hit the sack early."

"Okay. What's cookin'?"

"Trip into Albuquerque — shopping." He was reluctant to explain. The place had no firearms. They had seemed a useless expense — many a man has spent years in the desert without shooting off anything but his mouth, he had reasoned. As for the dreamed of trip, what could one shoot on the moon? But signs of prowlers, even in this fenced and forbidding area, had him nervous. Art's watchdog fence was tested each night and Art slept with the low power-hum of the hot circuit in his ears; thus far there had been no new alarm. Still he was nervous.

Cargraves was awakened about three A.M. to find Art shaking his shoulder and light pouring in his eyes. "Doc! Doc! Wake up!"

"Huh? Wassamatter?"

"I got a squawk over the loudspeaker."

Cargraves was out of bed at once. They bent over the speaker. "I don't hear anything."

"I've got the volume low, but you'd hear it. There it is again — get it?" There had been an unmistakable squawk from the box. "Shall I wake the others?"

"Mmmm… no. Not now. Why did you turn on the light?"

"I guess I wanted it," Art admitted.

"I see." Cargraves hauled on trousers and fumbled with his shoes. "I want you to turn out the lights for ten seconds. I'm going out that window. If I'm not back in twenty minutes, or if you hear anything that sounds bad, wake the boys and come get me. But stay together. Don't separate for any reason." He slipped a torch in his pocket. "Okay."

"You ought not to go by yourself."

"Now, Art. I thought we had settled such matters."

"Yes, but — oh, well !" Art posted himself at the switch.

Cargraves was out the window and had catfooted it around behind the machine shop before the light came on again. He lurked in the shadow and let his eyes get used to the darkness.

It was a moonless night, clear and desert sharp. Orion blazed in the eastern sky. Cargraves soon was able to pick out the sage bushes, the fence posts, the gloomy bulk of the ship a hundred yards away.

The padlock on the machine shop was undisturbed and the shop's windows were locked. Doing his best to take advantage of the scanty cover, he worked his way down to the ship.

The door was ajar. He could not remember whether he or Ross had been last man out. Even if it had been Ross, it was not like Ross to fail to lock the door.

He found that he was reluctant to enter the craft. He wished that he had not put off buying guns; a fortyfive in his hand would have comforted him. He swung the door open and scrambled in fast, ducking quickly away from the door, where his silhouette would make a target. He crouched in the darkness, listening and trying to slow his pounding heart. When he was sure he could hear nothing, he took the flashlight, held it at arm's length away from him and switched it on.

The piloting compartment was empty. Somewhat relieved, he sneaked back through the hold, empty also, and into the drive compartment. Empty. Nothing seemed disturbed.

He left the ship cautiously, this time making sure that the door was locked. He made a wide sweep around the cabin and machine shop and tried to assure himself that no one was inside the corral. But in the starlight, fifty men might have hidden in the sage, simply by crouching down and holding still.

He returned to the cabin, whistling to Art as he approached. "About time you got back," Art complained. "I was just about to roust out the others and come and get you. Find anything?"

"No. Anything more out of the squawk box?"

"Not a peep."

"Could it have been a coyote brushing against the wire?"

"How would a coyote get through the outer fence ?" Art wanted to know.

"Dig under it. There are coyotes in here. We've heard them."

"You can't tell how far a coyote is from you by its howl."

"Listen to the old desert rat! Well, leave the light on, but go back to bed. I'll be awake. I've got to be up in another hour in any case. Crawl in the sack." Cargraves settled down to a pipe and some thought.

Cargraves was too busy on the trip to Albuquerque to worry about the preceding night. Ross's style of herding his hot rod left little time to think about anything but the shortness of life and the difficulty of hanging on to his hat. But Ross poured them into the city with plenty of time for shopping.

Cargraves selected two Garand rifles, Army surplus stock at a cheap price, and added a police thirty-eight special, on a fortyfive frame. His mouth watered at a fancy sporting rifle with telescopic sights, but money was getting short; a few more emergency purchases or any great delay in starting would bankrupt the firm.

He ordered a supply of army-style Crations and Krations for the trip. Ross remarked privately, while the clerk wrote up the order, "In most stories about space travel, they just eat pills of concentrated food. Do you think it will ever come to that?"

"Not with my money," the physicist answered. "You guys can eat pills if you want to. I want food I can get my teeth in."

"Check," said Ross.

They stopped at a nursery where Cargraves ordered three dozen young rhubarb plants. He planned to use a balanced oxygen-carbon-dioxide air-refreshing system during the stay on the moon, if possible, and the plants were to supply the plantlife half of the cycle. Enough liquid oxygen would be carted along for breathing throughout the round trip, but a "balanced aquarium" arrangement for renewing their air supply would enable them to stay on the moon as long as their food lasted.

The chemical fertilizers needed for hydroponic farming of the rhubarb were ordered also. This done, they grabbed a chocolate malt and a hamburger apiece and hightailed it for the camp.

Morrie and Art swarmed out of the machine shop as they arrived. "Hi, Doc!

Hi, Ross! What's the good word?"

Ross showed them the guns. Art was eager to try them and Cargraves okayed it. Morrie hung back and said, "By the way, Doc, the CAB inspector was here today."

"The what?"

"The Civil Aeronautics inspector. He had a letter from you."

"From me? What did it say?"

"Why, it requested them to send an inspector to go over the rebuilt parts of the rocket and approve it for flight. I told him it wasn't ready."

"What else did you say? Did you tell him it was atomic-powered?"

"No, but he seemed to know it. He knew that we planned a space flight, too. What's the pitch, Doc? I thought you were going to keep it quiet a while longer?"

"So did I," Cargraves said bitterly. "What did you tell him?"

"Nothing — so help me. I decided you ought to handle it, so I played stupid. I tipped Art and he did the same. Did we do wrong?" he went on anxiously. "I know he was CAB, but it seemed to me he ought to talk to you. Do you suppose we offended him?"

"I hope you gave him apoplexy," Cargraves said savagely. "He was no CAB inspector, Morrie. He was a phony."

"Huh? Why… But he had your letter."

"Faked. I'll bet he's been holed up somewhere outside the gate, waiting for me to be away. Did you leave him alone at any time?"

"No. Wait a minute — only once, for about five minutes. We were down at the ship and he sent me back for a flashlight. I'm sorry." The boy looked miserable.

"Forget it. It was the natural, polite thing to do. You didn't know he was phony. I wonder how he got through the gate? Did he come in a car?"

"Yes. I… Was the gate locked?"

"Yes, but he might have bulldozed the forester into letting him in." They had been moving down toward the ship as they talked. Cargraves made a quick examination of the ship, but found nothing amiss. It seemed likely that the intruder had not found what he was looking for, probably because the drive was not yet installed.

He still worried about the matter of the locked gate. "I'm going to run down to the gate," he announced, heading for the car. "Tell the boys."

"I'll drive you." None of the boys approved the way Cargraves drove a car; it was one respect in which they did not look up to him.

Privately, they considered his style stuffy.

"Okay. Snap it up."

Morrie ran down toward where the other two were wasting ammunition on innocent tin cans and bellowed at them. Seconds later he had the engine revved up and was ready to gun the rig when Cargraves slid into the seat beside him.

The padlock was intact, but one link of the bullchain had been hacksawed away and replaced with wire. "So that's that," Cargraves dismissed the matter.

"Hadn't we better put on a new chain?" inquired Morrie.

"Why bother? He's still got the hacksaw."

The trip back was gloomy. Cargraves was worried. Morrie felt responsible for not having unmasked and made prisoner the impostor. In retrospect he could think of a dozen dramatic ways to have done it. Cargraves told him to keep his lip buttoned until after supper. When the dishes were out of the way, he brought the others up to date on the ominous happenings. Art and Ross took it with grave faces but without apparent excitement. "So that's how it is," Ross said. "Seems like somebody doesn't like us."

"Why that dirty so-and-so," Art said softly. "I thought he was too smooth.

I'd like to have him on the other end of one of those Garands."

"Maybe you will," Cargraves answered him soberly. "I might as well admit, fellows, that I've been worried..."

"Shucks, we knew that when you ordered that watchdog hook-up."

"I suppose so. I can't figure out why anybody would do this. Simple curiosity I can understand, once the fact leaked out-as it seems to have done -that we are after space flight. But whoever it is has more than curiosity eating him, considering the lengths he is willing to go to."

"I'll bet he wants to steal your space drive, Uncle Don."

"That would make a swell adventure yarn, Art; but it doesn't make sense. If he knows I've got a rocket drive, all he has to do is apply for a license to the commission and use it."

"Maybe he thinks you are holding out some secrets on the commission?"

"If he thinks so, he can post a bond for the costs and demand an examination. He wouldn't have to fake letters, or bust open gates. If he proves it on me, I go to jail."

"The point is," Morrie asserted, "not why he's snooping but what we can do to stop him. I think we ought to stand watches at night." He glanced at the two rifles.

"No," Cargraves disagreed. "Art's squawk circuit is better than a guard. You can't see enough at night. I found that out."

"Say," put in Art. "Look — I could take the pilot radar and mount it on the roof of the cabin. With it set to scan for a landing it'll pick up anything in the neighborhood."

"No," Cargraves answered, "I wouldn't want to risk jimmying up the equipment. It's more important to have it just right for the moon landing than it is to use it for prowlers."

"Oh, I won't hurt it!"

"I still think," insisted Morrie, "that getting a shot at him is the best medicine."

"So much the better," Art pointed out. "I'll spot him in the scope. You wear phones with about a thousand feet of cord and I'll coach you right up to him, in the dark. Then you got `im."

"Sounds good," Morrie agreed.

"Take it easy," Cargraves cautioned. "You fellows may think this is the Wild West but you will find that a judge will take a very sour attitude if you plug a man engaged in simple trespassing. You boys've read too many comic books."

"I never touch the things," Art denied fiercely. "Anyhow. Not often," he amended.

"If we can't shoot, then why did you buy the guns?" Ross wanted to know.

"Fair enough. You can shoot — but you have to be certain it's self-defense; I'll take those guns back to the shop before I'll have a bunch of wild men running around with blood in their eyes and an itch in their trigger fingers. The other use for the guns is to throw a scare into any more prowlers. You can shoot, but shoot where he isn't — unless he shoots first."

"Okay."

"Suits."

"I hope he shoots first!"

"Any other ideas?"

"Just one," Art answered. "Suppose our pal cut our power line. We've got everything on it — light, radio, even the squawk box. He could cut the line after we went to sleep and loot the whole place without us knowing it."

Cargraves nodded. "I should have thought of that." He considered it. "You and I will string a temporary line right now from the ship's batteries to your squawk box. Tomorrow we'll hook up an emergency lighting circuit." He stood up. "Come on, Art. And you guys get busy. Study hour."

"Study hour?" Ross protested. "Tonight? We can't keep our minds on books — not tonight."

"You can make a stab at it," the doctor said firmly. "Guys have been known to write books while waiting to be hanged."

The night passed quietly. Ross and Doc were down at the ship early the next morning, leaving Art and Morrie to work out an emergency lighting circuit from the battery of the car. Doc planned to have everything ready for the thorium when it arrived. He and Ross climbed into the rocket and got cheerfully to work. Cargraves started laying out tools, while Ross, whistling merrily off key, squeezed himself around the edge of the shield. Cargraves looked up just in time to see a bright, bright flash, then to be hit in the face by a thunderous pressure which threw him back against the side of the ship.

Chapter 7 "WE'LL GO IF WE HAVE TO WALK"

ART WAS SHAKING HIS SHOULDER. "Doc!" he was pleading. "Doc! Wake up-are you hurt bad ?"

"Ross..." Cargraves said vaguely. "It's not Ross; it's Art."

"But Ross — how's Ross? Did it, did it kill him?"

"I don't know. Morrie's with him."

"Go find out."

"But you're-"

"Go find out, I said!" Whereupon he passed out again.

When he came to a second time, Art was bending over him. "Uncle," he said, "the thorium has come. What do we do?"

Thorium. Thorium? His head ached, the word seemed to have no meaning.

"Uh, I'll be out in a... what about Ross? Is he dead?"

"No, he's not dead."

"How bad is he hurt?"

"It seems to be his eyes, mostly. He isn't cut up any, but he can't see. What'll I tell them about the thorium, Uncle?"

"Oh, hang the thorium! Tell them to take it back."

"What?"

He tried to get up, but he was too dizzy, too weak. He let his head fall back and tried to collect his spinning thoughts.

"Don't be a dope, Art," he muttered peevishly. "We don't need thorium. The trip is off, the whole thing was a mistake. Send it back — it's poison." His eyes were swimming; he closed them. "Ross..." he said.

He was again brought back to awareness by the touch of hands on his body. Morrie and Art were gently but firmly going over him. "Take it easy, Doc," Morrie warned him.

"How's Ross?"

"Well..." Morrie wrinkled his brow. "Ross seems all right, except for his eyes. He says he's all right."

"But he's blind?"

"Well, he can't see."

"We've got to get him to a hospital." Cargraves sat up and tried to stand up. "Ow!" He sat down suddenly.

"It's his foot," said Art.

"Let's have a look at it. Hold still, Doc." They took his left shoe off gently and peeled back the sock. Morrie felt it over. "What do you think, Art?"

Art examined it. "It's either a sprain or a break. We'll have to have an X-ray."

"Where's Ross?" Cargraves persisted. "We've got to get him to a hospital."

"Sure, sure," Morrie agreed. "We've got to get you to one, too. We moved Ross up to the cabin."

"I want to see him."

"Comin' up! Have a seet, while I get the car."

With Art's help Cargraves managed to get up on his good foot and hobble to the door. Getting down from the ship's door was painful, but he made it, and fell thankfully into the seat of the car.

"Who's there?" Ross called out, as they came in with Cargraves leaning on the two boys.

"All of us," Art told him.

Cargraves saw that Ross was lying in his bunk with his eyes covered with a handkerchief. Cargraves hobbled over to him. "How is it, kid?" he said huskily.

"Oh, it's you, Doc. I'll get by. It'll take more than that to do me in. How are you?"

"I'm all right. How about your eyes?"

"Well," Ross admitted, "to tell the truth, they don't work too well. All I see is purple and green lights." He kept his voice steady, almost cheerful, but the pulse in his neck was throbbing visibly. Cargraves started to remove the bandage. Morrie stopped him.

"Let the bandage alone, Doc," he said firmly. "There's nothing to see. Wait till we get him to a hospital."

"But... Okay, okay. Let's get on with it."

"We were just waiting for you. Art will drive you."

"What are you going to do?"

"I," said Morrie, "am going to climb up on the roof of this shack with a load of sandwiches and a gun. I'll still be there when you get back."

"But-" Cargraves shrugged and let the matter pass.

Morrie scrambled down when they got back and helped Cargraves hobble into the cabin. Ross was led in by Art; his eyes were bandaged professionally and a pair of dark glasses stuck out of his shirt pocket. "What's the score?" Morrie demanded of all of them, but his eyes were fastened on Ross.

"It's too early to tell," Cargraves said heavily, as he eased into a chair.

"No apparent damage, but the optic nerve seems paralyzed."

Morrie clucked and said nothing. Ross groped at a chair and sat down.

"Relax," he advised Morrie. "I'll be all right. The flash produced a shock in the eyes. The doctor told me all about it. Sometimes a case like this goes on for three months or so, then it's all right."

Cargraves bit his lip. The doctor had told him more than he had told Ross; sometimes it was not all right; sometimes it was permanent.

"How about you, Doc?"

"Sprain, and a wrenched back. They strapped me up."

"Nothing else?"

"No. Anti-tetanus shots for both of us, but that was just to be on the safe side."

"Well," Morrie announced cheerfully, "it looks to me as if the firm would be back in production in short order."

"No," Cargraves denied. "No, it won't be. I've been trying to tell these goons something ever since we left the hospital, but they wouldn't listen. We're through. The firm is busted."

None of the boys said anything. He went on, raising his voice. "There won't be any trip to the moon. Can't you see that?"

Morrie looked at him impassively. "You said, `The firm is busted.' You mean you're out of money?"

"Well, not quite, but that's a factor. What I meant-"

"I've got some E-bonds," Ross announced, turning his bandaged head.

"That's not the point," Cargraves answered, with great gentleness. "I appreciate the offer; don't think I don't. And don't think I want to give up. But I've had my eyes opened. It was foolish, foolish from the start, sheer folly. But I let my desires outweigh my judgment. I had no business getting you kids into this. Your father was right, Ross. Now I've got to do what I can to make amends."

Ross shook his head. Morrie glanced at Art and said, "How about it, medical officer?"

Art looked embarrassed, started to speak, and changed his mind. Instead he went to the medicine cabinet, and took out a fever thermometer. He came back to Cargraves. "Open your mouth, Uncle."

Cargraves started to speak. Art popped the tube in his mouth. "Don't talk while I'm taking your temperature," he warned, and glanced at his wrist watch.

"Why, what the-"

"Keep your mouth closed!"

Cargraves subsided, fuming. Nobody said anything until Art reached again for the thermometer. "What does it say ?" Morrie demanded.

"A tenth over a hundred."

"Let me see that," Cargraves demanded. Art held it away from him. The doctor stood up, absentmindedly putting his weight on his injured foot. He then sat down quite suddenly. Art shook down the thermometer, cleaned it and put it away.

"It's like this," Morrie said firmly. "You aren't boss; I'm boss."

"Huh? What in the world has got into you, Morrie?"

Morrie said, "How about it, Art?"

Art looked embarrassed but said stubbornly, "That's how it is, Uncle."

"Ross?"

"I'm not sure of the pitch," Ross said slowly, "but I see what they are driving at. I'm stringing along with Art and Morrie."

Cargraves' head was beginning to ache again. "I think you've all gone crazy. But it doesn't make any difference; we're washed up anyhow."

"No," Morrie said, "we're not crazy, and it remains to be seen whether or not we're washed up. The point is: you are on the sick list. That puts me in charge; you set it up that way yourself. You can't give any orders or make any decisions for us until you are off the sick list."

"But-" He stopped and then laughed, his first laugh in hours. "This is nuts. You're hijacking me, with a technicality. You can't put me on the sick list for a little over a degree of temperature."

"You weren't put on the sick list for that; you are being kept on the sick list for it. Art put you on the sick list while you were unconscious. You stay there until he takes you off — you made him medical officer."

"Yes, but-Look here, Art -you put me on the sick list earlier? This isn't just a gag you thought up to get around me?"

"No, Uncle," Art assured him, "when I told Morrie that you said not to accept the thorium, he tried to check with you. But you were out like a light. We didn't know what to do, until Morrie pointed out that I was medical officer and that I had to decide whether or not you were in shape to carry out your job. So-"

"But you don't have... Anyway, all this is beside the point. I sent the thorium back; there isn't going to be any trip; there isn't any medical officer; there isn't any secondin-command. The organization is done with."

"But that's what I've been trying to tell you, Uncle. We didn't send the thorium back."

"Huh?"

"I've signed for it," Morrie explained, "as your agent."

Cargraves rubbed his forehead. "You kids — you beat me! However, it doesn't make any difference. I have made up my mind that the whole idea was a mistake. I am not going to the moon and that puts the kibosh on it. Wait a minute, Morrie! I'm not disputing that you are in charge, temporarily — but I can talk, can't I?"

"Sure. You can talk. But nothing gets settled until your temperature is down and you've had a night's sleep."

"Okay. But you'll see that things settle themselves. You have to have me to build the space drive. Right?"

"Mmmm… yes."

"No maybes about it. You kids are learning a lot about atomics, fast. But you don't know enough. I haven't even told you, yet, how the drive is supposed to work."

"We could get a license on your patent, even without your permission," Ross put in. "We're going to the moon."

"Maybe you could — if you could get another nuclear physicist to throw in with you. But it wouldn't be this enterprise. Listen to me, kids. Never mind any touch of fever I've got. I'm right in the head for the first time since I got banged on the head at your rocket test. And I want to explain some things. We've got to bust up, but I don't want you sore at me."

"What do you mean: `since you got banged in the head' ?"

Cargraves spoke very soberly. "I knew at that time, after we looked over the grounds, that that `accident' was no accident. Somebody put a slug on me, probably with a blackjack. I couldn't see why then and I still don't see why. I should have seen the light when we started having prowlers. But I couldn't believe that it was really serious. Yesterday I knew it was. Nobody impersonates a federal inspector unless he's playing for high stakes and willing to do almost anything. It had me worried sick. But I still didn't see why anybody would want anything we've got and I certainly didn't think they would try to kill us."

"You think they meant to kill us?" asked Ross.

"Obviously. The phony inspector booby-trapped us. He planted some sort of a bomb."

"Maybe he meant to wreck the ship rather than to kill us."

"What for?"

"Well," said Art, "maybe they're after the senior prizes."

"Wrecking our ship won't win him any prize money."

"No, but it could keep us from beating him."

"Maybe. It's farfetched but it's as good an answer as any. But the reason doesn't matter. Somebody is out to get us and he's willing to go to any lengths. This desert is a lonely place. If I could afford a squadron of guards around the place we might bull it through. But I can't. And I can't let you kids get shot or bombed. It's not fair to you, nor to your parents."

Art looked stubborn and unhappy.

Morrie's face was an impassive mask. Finally he said, "If that's all you've got to say, Doc, I suggest we eat and adjourn until tomorrow."

"All right."

"Not just yet." Ross had stood up. He groped for the back of his chair and tried to orient himself. "Where are you, Doc?"

"I'm here — to your left."

"All right. Now I've got some things to say. I'm going to the moon. I'm going to the moon, somehow, whether you want to go or not. I'm going to the moon even if I never get back the use of my eyes. I'm going to the moon even if Morrie or Art has to lead me around. You can do as you please."

"But I'm surprised at you, Doc," he went on. "You're afraid to take the responsibility for us, aren't you? That's the size of it?"

"Yes, Ross, that's the size of it."

"Yet you were willing to take the responsibility of leading us on a trip to the moon. That's more dangerous than anything that could happen here, isn't it? Isn't it?"

Cargraves bit his lip. "It's different."

"I'll tell you how it's different. If we get killed trying to make the jump, Einety-nine chances out of a hundred we all get killed together. You don't have to go back and explain anything to our parents. That's how it's different!"

"Now, Ross!"

"Don't `Now, Ross' me. Want the deuce, Doc?" he went on bitterly. "Suppose it had happened on the moon; would you be twittering around, your morale all shot? Doc, I'm surprised at you. If you are going to have an attack of nerves every time the going gets a little tough, I vote for Morrie for permanent captain."

"That's about enough, Ross," Morrie put in quietly.

"Okay. I was through, anyway." Ross sat down.

There was an uncomfortable silence. Morrie broke it by saying, "Art, let's you and me throw together some food. Study hour will be late as it is." Cargraves looked surjrised. Morrie saw his expression and continued, "Sure. Why not? Art and I can take turns reading aloud."

Cargraves pretended to be asleep that night long before he was. Thus he was able to note that Morrie and Art stood alternate watches all night, armed and ready. He refrained from offering any advice.

The boys both went to bed at sunrise. Cargraves got painfully but quietly out of bed and dressed. Leaning on a stick he hobbled down to the ship. He wanted to inspect the damage done by the bomb, but he noticed first the case containing the thorium, bulking large because of its antiradiation shipping shield. He saw with relief that the seal of the atomics commission was intact. Then he hunched himself inside the ship and made his way slowly to the drive compartment.

The damage was remarkably light. A little welding, he thought, some swaging, and some work at the forge would fix it. Puzzled, he cautiously investigated further.

He found six small putty-like pieces of a plastic material concealed under the back part of the shield. Although there were no primers and no wiring attached to these innocentappearing little objects he needed no blueprint to tell him what they were. It was evident that the saboteur had not had time to wire more than one of his deadly little toys in the few minutes he had been alone. His intentions had certainly been to wreck the drive compartment — and kill whoever was unlucky enough to set off the trap.

With great care, sweating as he did so, he removed the chunks of explosive, then searched carefully for more. Satisfied, he slipped them into his shirt pocket and went outside. The scramble, hampered by his game leg, out of the door of the rocket, made him shaky; he felt like a human bomb. Then he limped to the corral fence and threw them as far as he could out into the already contaminated fields. He took the precaution of removing them all from his person before throwing the first one, as he wanted to be ready to fall flat. But there was no explosion; apparently the stuff was relatively insensitive to shock. Finished, he turned away, content to let sun and rain disintegrate the stuff.

He found Ross outside the cabin, turning his bandaged face to the morning sun. "That you, Doc?" the young man called out.

"Yes. Good morning, Ross."

"Good morning, Doc." Ross moved toward the scientist, feeling the ground with his feet. "Say, doc — I said some harsh things last night. I'm sorry. I was upset, I guess."

"Forget it. We were all upset." He found the boy's groping hand and pressed it. "How are your eyes?"

Ross's face brightened. "Coming along fine. I slipped a peek under the bandage when I got up. I can see-"

"Good!"

"I can see, but everything's fuzzy and I see double, or maybe triple. But the light hurt my eyes so I put the bandage back."

"It sounds as if you were going to be all right," Cargraves ventured. "But take it easy."

"Oh, I will. Say, Doc..."

"Yes, Ross ?"

"Nnnn... Oh, nothing. Never mind."

"I think I know, Ross. I've changed my mind. I changed my mind last night before I got to sleep. We're going through with it."

"Good!"

"Maybe it's good, maybe it's bad. I don't know. But if that's the way you fellows feel about it, I'm with you. We'll go if we have to walk."

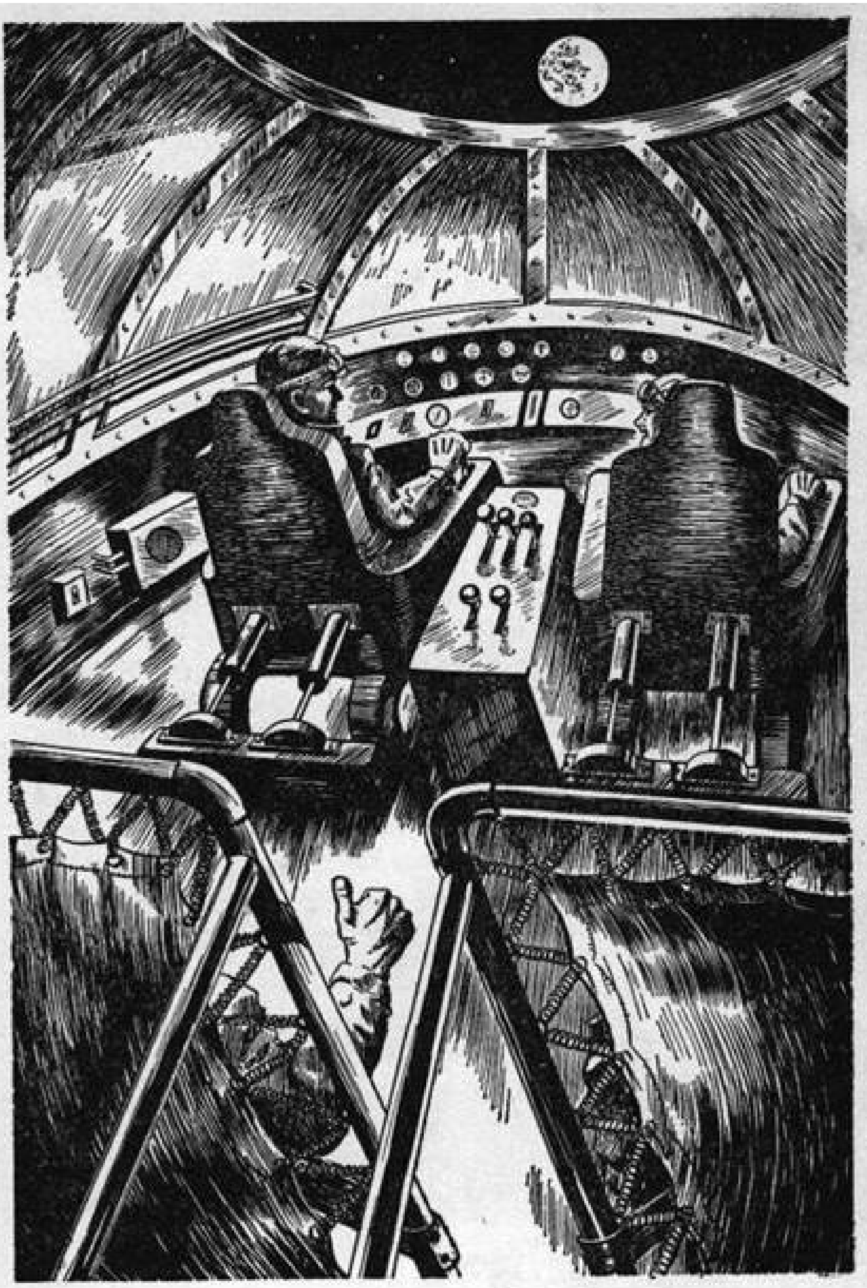

Chapter 8 SKYWARD!

"THAT SOUNDS MORE LIKE you, Doc!"

"Thanks. Are the others up yet?"

"Not yet. They didn't get much sleep."

"I know. Let's let them sleep. We'll sit out in the car. Take my arm."

When they had settled themselves Ross asked, "Doc, how much longer will it take to get ready?"

"Not long. Why?"

"Well, I think the key to our problems lies in how fast we can get away. If these attempts to stop us keep up, one of them is going to work. I wish we would leave today."

"We can't do that," Cargraves answered, "but it shouldn't be long. First I've got to install the drive, but it's really just a matter of fitting the parts together. I had almost everything prepared before I ever laid eyes on you guys."

"I wish my blinkers weren't on the fritz."

"It's one job I'll have to do myself. Not that I am trying to keep you out of it, Ross," he added hastily, seeing the boy's expression. "I've never explained it because I thought it would be easier when we had all the gear in front of us."

"Well, how does it work?"

"You remember Heron's turbine in elementary physics? Little boiler on the bottom and a whirligig like a lawn sprinkler on top? You heat the boiler, steam comes up through the whirligig, and makes it whirl around. Well, my drive works like that. Instead of fire, I use a thorium atomic power pile; instead of water, I use zinc. We boil the zinc, vaporize it, get zinc `steam.' We let the `steam' exhaust through the jet. That's the works."

Ross whistled. "Simple — and neat. But will it work?"

"I know it'll work. I was trying for a zinc `steam' power plant when I hit on it. I got the hard, hot jet I wanted, but I couldn't get a turbine to stand up under it. Broke all the blades. Then I realized I had a rocket drive."

"It's slick, Doc! But say — why don't you use lead? You'd get more mass with less bulk."

"A good point. Concentrated mass means a smaller rocket motor, smaller tanks, smaller ship, less dead weight all around. But mass isn't our main trouble; what we've got to have is a high-velocity jet. I used zinc because it has a lower boiling point than lead. I want to superheat the vapor so as to get a good, fast jet, but I can't go above the stable limit of the moderator I'm using."

"Carbon?"

"Yes, carbon-graphite. We use carbon to moderate the neutron flow and cadmium inserts to control the rate of operation. The radiations get soaked up in a bath of liquid zinc. The zinc boils and the zinc `steam' goes whizzing out the jet as merry as can be."

"I see. But why don't you use mercury instead of zinc? It's heavier than lead and has a lower boiling point than either one of them."

"I'd like to, but it's too expensive. This is strictly a cut-rate show." Doc broke off as Morrie stuck his head out the cabin door.

"Hi, there! Come to breakfast, or we'll throw it out!"

"Don't do that!" Cargraves slipped a leg over the side of the car-the wrong leg-touched the ground and said, "Ouch!"

"Wait a minute, and lean on me," Ross suggested.

They crept back, helping each other. "Aside from the pile," Cargraves went on, "there isn't much left. The thorium is already imbecided in the graphite according to my calculations. That leaves just two major jobs: the air lock and a test-stand run."

The rocket, although it had operated on the trans-Atlantic run above the atmosphere, had no air lock, since it's designers had never intended it to be opened up save on the ground. If they were to walk the face of the moon, an air lock, a small compartment with two doors, was necessary. Cargraves planned to weld a steel box around the inside of the present door frame, with a second airtight door, opening inward.

"I can weld the lock," Ross offered, "while you rig the pile. That is, if my eyes clear up in time."

"Even if they do, I don't think it would be smart to stare at a welding arc. Can't the others weld?"

"Well, yes, but just between us chickens, I run a smoother seam."

"We'll see..."

At breakfast Cargraves told the other two of his decision to go ahead. Art turned pink and got his words twisted. Morrie said gravely, "I thought your temperature would go down over night. What are the plans?"

"Just the same, only more so. How's your department?"

"Shucks, I could leave this afternoon. The gyros are purring like kittens; I've calculated Hohmann orbits and S-trajectories till I'm sick of `em; the computer and me are like that." He held out two fingers.

"Fine. You concentrate on getting the supplies in, then. How about you, Art?"

"Who, me? Why, I've got everything lined up, I guess. Both radars are right on the beam. I've got a couple wrinkles I'd like to try with the FM circuit."

"Is it all right the way it is?"

"Good enough, I guess."

"Then don't monkey with the radios. I can keep you busy."

"Oh, sure."

"How about the radar screen Art was going to rig?" Morrie inquired.

"Eh? Oh, you mean the one for our friend the prowler. Hm…" Cargraves studied the matter. "Ross thinks and I agree that the best way to beat the prowler is to get out of here as fast as we can. I don't want that radar out of the ship. It would waste time and always with the chance of busting a piece of equipment we can't afford to replace and can't get along without."

Morrie nodded. "Suits. I still think that a man with a gun in his hands is worth more than a gadget anyhow. See here — there are four of us. That's two hours a' night. Let's stand guard."

Cargraves agreed to this. Various plans were offered to supplement the human guard and the charged fence, but all were voted down as too time-consuming, too expensive or impractical. It was decided to let the matter stand, except that lights would be left burning at night, including a string to be rigged around the ship. All of these lines were to be wired to cut over automatically to the ship's batteries.

Cargraves sat down to lunch on Wednesday of the following week with a feeling of satisfaction. The thorium power pile was in place, behind the repaired shield. This in itself was good; he disliked the finicky, ever-dangerous work of handling the radioactive element, even though he used body shields and fished at it with tongs.

But the pile was built; the air lock had been welded in place and tested for airtightness; almost all the supplies were aboard. Acceleration hammocks had been built for Art and Ross (Cargraves and Morrie would ride out the surges of power in the two pilot seats). The power pile had been operated at a low level; all was well, he felt, and the lights on the board were green.

The phony inspector had not showed up again, nor were the night watches disturbed. Best of all, Ross's eyesight had continued to improve; the eye specialist had pronounced him a cure on Monday, subject to wearing dark glasses for a couple of weeks.

Cargraves' sprain still made him limp, but he had discarded his stick. Nothing bothered him. He tackled Aggregate a la Galileo (hash to ordinary mortals) with enthusiasm, while thinking about a paper he would write for the Physical Review. Some Verified Experimental Factors in Space Flight seemed like a good title — by Doctor Donald Morris Cargraves, B.S., Sc.D., LL.D., Nobel Prize, Nat. Acad., Fr. Acad., *etc.* The honors were not yet his — he was merely trying them on for size.

The car ground to a stop outside and Art came in with the mail.

"Santa Claus is here!" he greeted them. "One from your folks, Ross, and one from that synthetic blonde you're sweet on."

"I'm not sweet on her and she's a natural blonde," Ross answered emphatically.

"Have it your own way — you'll find out. Three for you, Morrie — all business. The rest are yours, Doc," he finished, holding back the one from his mother. "Hash again," he added.

"It's to soften you up for what you're going to eat on the moon," said the cook. "Say, Doc-"

"Yes, Morrie?"

"The canned rations are at the express office in town, it says here. I'll pick `em up this afternoon. The other two are bills. That finishes my checkoff list."

"Good," he answered absently, as he tore open a letter. "You can help Ross and me on the test stand. That's the only big job left." He unfolded the letter and read it.

Then he reread it. Presently Ross noticed that he had stopped eating and said, "What's the matter, Doc?"

"Well, nothing much, but it's awkward. The Denver outfit can't supply the dynamometers for the test stand run." He tossed the letter to Ross.

"How bad off does that leave us?" asked Morrie.

"I don't know, yet. I'll go with you into town. Let's make it right after lunch; I have to call the East Coast and I don't want to get boxed in by the time difference."

"Can do."

Ross handed the letter back. "Aren't there plenty of other places to buy them?"

"Hardly `plenty.' Half-a-million-pound dynamometers aren't stock items. We'll try Baldwin Locomotives."

"Why don't we make them?" asked Art. "We made our own for the Starstruck series.'"

Cargraves shook his head. "High as my opinion is of you lugs as good, all-around jackleg mechanics and pretzel benders, some jobs require special equipment. But speaking of the Starstruck series," he went on, intentionally changing the subject, "do you guys realize we've never named the ship? How does Starstruck VI appeal to you ?"

Art liked it. Morrie objected that it should be Moonstruck. But Ross had another idea. "Starstruck was a good enough name for our model rockets, but we want something with a little more — oh, I don't know; dignity, I guess-for the moon ship."

"The Pioneer?"

"Corny."

"The Thor — for the way she's powered."

"Good, but not enough."

"Let's call it Einstein."

"I see why you want to name it for Doctor Einstein," Cargraves put in, "but maybe I've got another name that will symbolize the same thing to you. How about the Galileo?"

There was no dissension; the members of the Galileo Club again were unanimous. The man who had first seen and described the mountains of the moon, the man whose very name had come to stand for steadfast insistence on scientific freedom and the freely inquiring mind — his name was music to them.

Cargraves wondered whether or not their own names would be remembered after more than three centuries. With luck, with lots of luck — Columbus had not been forgotten. If the luck ran out, well, a rocket crash was a fast clean death.

The luck appeared to be running out, and with nothing as gallant and spectacular as a doomed and flaming rocket. Cargraves sweated in a phone booth until after five o'clock, East Coast time, and then another hour until it was past five in Chicago as well before he admitted that dynamometers of the size he needed were not to be had on short notice.

He blamed himself for having slipped up, while neglecting to credit himself with having planned to obtain the instruments from the Denver firm for reasons of economy; he had expected to get them secondhand. But blaming himself comforted him.

Morrie noted his long face as he climbed into the heavily loaded little car. "No soap, eh?"

"No soap. Let's get back to camp."

They sped along the desert road in worried silence for several minutes. Finally Morrie spoke up. "How about this, Doc? Make a captive run on the ground with the same yoke and frame you planned to use, but without dynamometers."

"What good would that do? I have to know what the thrust is."

"I'm getthig to that. We put a man inside. He watches the accelerometer — the pendulum accelerometer of course; not the distance-integrating one. It reads in g's. Figure the number of gravities against the gross weight of the ship at the time and you come out with your thrust in pounds."

Cargraves hesitated. The boy's mistake was so obvious and yet so easy to make that he wished to point it out without hurting his pride. "It's a clever plan, except that I would want to use remote control — there's always the chance that a new type of atomic-fission power plant will blow up. But that's not the hitch; if the ship is anchored to the ground, it won't be accelerating no matter how much thrust is developed."

"Oh!" said Morrie. "Hmm. I sure laid an egg on that one, Doc."

"Natural mistake."

After another five miles Morrie spoke again. "I've got it, Doc. The Galileo has to be free to move to show thrust on the accelerometer. Right? Okay, I'll test-fly it. Hold it, hold it," he went on quickly, "I know exactly what you are going to say: you won't let any one take a risk if you can help it. The ship might blow up, or it might crash. Okay, so it might. But it's my job. I'm not essential to the trip; you are. You have to have Ross as flight engineer; you have to have Art for the radar and radio; you don't have to have a second pilot. I'm elected."

Cargraves tried to make his voice sound offhand. "Morrie, your analysis does your heart credit, but not your head. Even if what you said is true, the last part doesn't quite add up. I may be essential, if the trip is made. But if the test flight goes wrong, if the power pile blows, or if the ship won't handle and crashes, then there won't be any trip and I'm not essential."

Morrie grinned. "You're sharp as a tack, Doc."

"Tried to frame me, eh? Well, I may be old and feeble but I'm not senile. Howsoever, you've given me the answer.

"We skip the captive run and test-fly it. I test-fly it." Morrie whistled, "When?"

"Just as soon as we get back."

Morrie pushed the accelerator down to the floor boards; Cargraves wished that he had kept quiet until they reached the camp.

Forty minutes later he was handing out his final instructions. "Drive outside the reservation and find some place at least ten miles away where you can see the camp and where you can huddle down behind a road cut or something. If you see a Hiroshima mushroom, don't try to come back. Drive on into town and report to the authorities." He handed Ross a briefcase. "In case I stub my toe, give this stuff to your father. He'll know what to do with it. Now get going. I'll give you twenty minutes. My watch says seven minutes past five."

"Just a minute, Doc."

"What is it, Morrie?" His tones showed nervous irritability. "I've polled the boys and they agree with me. The Galileo is expendable but you aren't. They want you left around to try it again."

"That's enough on that subject, Morrie."

"Well, I'll match you for it."

"You're on thin ice, Morrie!"

"Yes, sir." He climbed in the car. The other two squeezed in beside him.

"So long!"

"Good luck!"

He waved back at them as they drove away, then turned toward the open door of the Galileo. He was feeling suddenly very lonely.

The boys found such a spot and crouched down behind a bank, like soldiers in a trench. Morrie had a small telescope; Art and Ross were armed with the same opera glasses they had used in their model rocket tests. "He's closed the door," announced Morrie.

"What time is it?"

"I've got five twenty-five."

"Any time now. Keep your eyes peeled." The rocket was tiny even through the opera glasses; Morrie's view was slightly better. Suddenly he yelled, "That's it! Geronimo!"

The tail jet, bright silver even in the sun light, had flared out. The ship did not move. "There go his nose jets!" Red and angry, the aniline-and-nitric reached out in front. The Galileo, being equipped with nose and belly maneuvering jets, could take off without a launching platform or catapult. He brought his belly jets into play now; the bow of the Galileo reared up, but the opposing nose and tail jets kept her nailed to one spot.

"He's off!" The red plumes from the nose were suddenly cut and the ship shot away from the ground. It was over their heads almost before they could catch their breaths. Then it was beyond them and shooting toward the horizon. As it passed over the mountains, out of sight, the three exhaled simultaneously. "Gosh!" said Art, very softly.

Ross started to run.

"Hey, where y' going?"

"Back to the camp! We want to be there before he is!"

"Oh!" They tore after him.

Ross set a new high in herding the rig back to the camp site, but his speed did not match their urgency. Nor were they ahead of time. The Galileo came pouring back over the horizon and was already braking on her nose jets when the car slammed to a stop.

She came in at a steep dive, with the drive jet already dead. The nose jets splashed the ground on the very spot where she had taken off. He kicked her up with the belly jets and she pancaked in place. Morrie shook his head. "What a landing!" he said reverently.

Cargraves fell out of the door into a small mob. The boys yelled and pounded him on the back.

"How did she behave? How did she handle?"

"Right on the button! The control of the drive jet is laggy, but we expected that. Once she's hot she doesn't want to cool off. You have to get rid of your head of `steafli.'(<— SeaGull/Zopharnal - Is this right?) I was half way to Oklahoma City before I could slow down enough to turn and come back."

"Boy, oh boy! What a ship!"

"When do we start?"

Cargraves' face sobered. "Does staying up all night to pack suit you?"

"Does it! Just try us!"

"It's a deal. Art, get in the ship and get going with the radio. Get the Associated Press station at Salt Lake. Get the United Press. Call up the radio news services. Tell them to get some television pickups out here. The lid is off now. Make them realize there is a story here."

"On my way!" He scrambled up into the ship, then paused in the door. "Say — what if they don't believe me?"

"Make them believe you. Tell them to call Doctor Larksbee at the commission for confirmation. Tell them that if they miss they'll be scooped on the biggest story since the war. And say — call up Mr. Buchanan on the forestry frequency. He's kept his mouth shut for us; he ought to be in on it."

By midnight the job was practically complete and Cargraves insisted that they take turns lying down, two at a time, not to sleep, but just to keep from starting the trip completely tired out. The fuel tanks for the belly and nose jets were topped off and the specially installed reserve tanks were filled. The tons of zinc which served the main drive were already aboard as well as an equal weight of powdered reserve. The food was aboard; the carefully rationed water was aboard. (Water was no problem; the airconditioner would scavenge the vapor of their own exhalations.) The liquid oxygen tanks were full. Cargraves himself had carried aboard the two Garands, excusing it to himself on the pretext that they might land in some wild spot on the return trip… that, despite the fact they had ripped the bindings from their few books in order to save space and weight.

He was tired. Only the carefully prepared lists enabled him to be sure that the ship was in all respects ready — or would be soon.

The boys were tired, confused, and excited. Morrie had worked the problem of their departure trajectory three times and then had gotten nerves over it, although it had checked to the last decimal each time. He was gnawed by fear that he had made some silly and fatal mistake and was not satisfied until Cargraves had gotten the same answer, starting with a clear board.

Mr. Buchanan, the Ranger, showed up about one o'clock, "Is this the Central New Mexico Insane Asylum?" he inquired pleasantly.

Cargraves admitted it. "I've wondered what you folks were up to," the Ranger went on. "Of course I saw your ship, but your message surely surprised me. I hope you don't mind me thinking you're crazy; I wish you luck just the same."

"Thanks." Cargraves showed him the ship, and explained their plans. The moon was full and an hour past its greatest elevation. They planned to take off shortly after daybreak, as it was sinking in the west. This would lose them the earth's spin, but, after the trial run, Cargraves did not care; he had power to throw away. Waiting twelve hours to save a difference of about 1600 miles per hour was more than his nerves could stand.

He had landed the rocket faced west; it would save jacking her around as well.

Buchanan looked the layout over and asked where the jets would splash. Cargraves showed him. Whereupon Buchanan asked, "Have you arranged for any guards?"

In truth, Cargraves had forgotten it. "Never mind," said Buchanan, "I'll call Captain Taylor and get some state police over."

"Never mind calling; we'll radio. Art!"

The press started showing up at four; by the time the state police arrived, Cargraves knew that he had been saved real grief. The place was crowded. Escorts were necessary from the outer gate to the corral to make sure that no one drove on the danger-studded mock-battle fields. Once in the corral it took the firm hand of the state police to keep them there — and to keep them from swarming over the ship.

At five they ate their last breakfast in the camp, with a guard at the door to give them some peace. Cargraves refused to be interviewed; he had prepared a typed handout and given copies to Buchanan to distribute. But the boys were buttonholed whenever his back was turned. Finally Captain Taylor assigned a bodyguard to each.

They marched in a hollow square of guards to the ship. Flash guns dazzled their eyes and television scanners followed their movements. It seemed impossible that this was the same lonely spot where, only hours before, they had worried about silent prowlers in the dark.

Cargraves had the boys climb in, then turned to Buchanan and Captain Taylor. "Ten minutes, gentlemen. Are you sure you can keep everybody clear? Once I get in the seat I can't see the ground near me."

"Don't worry, Captain Cargraves," Taylor assured him. "Ten minutes it is."

Buchanan stuck out his hand. "Good luck, Doctor. Bring me back some green cheese." `

A man came puffing up, dodged past a guard, and thrust a folded paper in Cargraves' hand.

"Here, what's this?" demanded Taylor. "Get back where you belong."

The man shrugged. "It's a court order."

"Eh? What sort?"

"Temporary injunction against flying this ship. Order to appear and show cause why a permanent injunction should not be issued to restrain him from willfully endangering the lives of minors."

Cargraves stared. It felt to him as if the world were collapsing around him. Ross and Art appeared at the door behind him. "Doc, what's up?"

"Hey, there! You boys-come down out of there," yelled the stranger, and then said to Captain Taylor, "I've got another paper directing me to take them in charge on behalf of the court."

"Get back in the ship," Cargraves ordered firmly, and opened the paper. It seemed in order. State of New Mexico and so forth. The stranger began to expostulate. Taylor took him by the arm.

"Take it easy," he said.

"Thanks," said Cargraves. "Mr. Buchanan, can I have a word with you? Captain, will you hang on to this character?"

"Now, I don't want any beef," protested the stranger. "I'm just carrying out my duty."

"I wonder," Cargraves said thoughtfully. He led Buchanan around the nose of the craft and showed him the paper.

"It seems to be in order," Buchanan admitted.

"Maybe. This says it's the order of a state court. This is federal territory, isn't it? As a matter of fact, Captain Taylor and his men are here only by your invitation and consent. Isn't that right?"

"Hmmm... yes. That's so." Buchanan suddenly jammed the paper in his pocket. "I'll fix his clock!"

"Just a minute." Cargraves told him rapidly about the phony inspector, and the prowlers, matters which he had kept to himself, save for a letter to the Washington CAB office. "This guy may be a phony, or a stooge of a phony. Don't let him get away until you check with the court that supposedly issued this order."

"I won't!"

They went back, and Buchanan called Taylor aside. Cargraves took the stranger by the arm, not gently. The man protested. "How would you like a poke in the eye?" Cargraves inquired.

Cargraves was six inches taller, and solid. The man shut up. Taylor and Buchanan came back in a moment or two. The state policeman said, "You are due to take off in three minutes, Captain. I had better be sure the crowd is clear." He turned and called out, "Hey! Sergeant Swanson!"

"Yes, sir!'

"Take charge of this guy." It was the stranger, not Cargraves, whom he indicated.

Cargraves climbed in the ship. As he turned to close the door a cheer, ragged at first but growing to a solid roar, hit him. He clamped the door and locked it, then turned. "Places, men."

Art and Ross trotted to their hammocks, directly behind the pilots' seats. These hammocks were vertical, more like stretchers braced upright than garden hammocks. They snapped safety belts across their knees and chests.

Morrie was already in his chair, legs braced, safety belts buckled, head back against the shock pad. Cargraves slipped into the seat beside him, favoring his bad foot as he did so. "All set, Morrie." His eyes glanced over the instrument board, particularly noticing the temperature of the zinc and the telltale for position of the cadmium damping plates.

"All set, Captain. Give her the gun when you are ready."

He buckled himself in and glanced out the quartz glass screen ahead of him. The field was clear as far as he could see. Staring straight at him, round and beautiful, was their destination. Under his right hand, mounted on the arm rest, was a large knurled knob. He grasped it. "Art?"

"Ready sir."

"Ross?"

"Ready, Captain."

"Copilot?"

"Ready, Captain. Time, six-oh-one."

He twisted the knob slowly to the right. Back behind him, actuated by remote control, cadmium shields slowly withdrew from between lattices of graphite and thorium; uncountable millions of neutrons found it easier to seek atoms of thorium to destroy. The tortured nuclei, giving up the ghost, spent their energy in boiling the molten zinc.

The ship began to tremble.

With his left hand he cut in the nose rockets, balancing them against the increasing surge from the rear. He slapped in the belly jets; the ship reared. He let the nose jets die.

The Galileo leaped forward, pressing them back into their pads.

They were headed skyward, out and far.

Chapter 9 INTO THE LONELY DEPTHS

TO ROSS AND ART THE WORLD seemed to rotate dizzily through ninety degrees. They had been standing up, strapped to their upright hammocks, and staring straight forward past Cargraves and Morrie out through the conning port at the moon and the western horizon.

When the rocket took off it was as if they had been suddenly forced backwards, flat on their backs and pushed heavily into the cushions and springs. Which, in a way, was exactly what had happened to them. It was the powerful thrust of the jet which had forced them back against the springs and held them there. The force of the drive made the direction they were traveling "up."

But the moon still stared back at them, dead ahead through the port; "up" was also "west." From where they lay, flat on their backs, Cargraves and Morrie were above them and were kept from falling on them by the heavy steel thrust members which supported the piloting chairs.

The moon shimmered and boiled under the compression waves of air. The scream of the frantic molecules of air against the skin of the craft was louder and even more nerve-racking than steady thunder of the jet below them. The horizon dropped steadily away from the disk of the moon as they shot west and gained altitude. The sky, early morning gray as they took off, turned noonday blue as their flat climb took them higher and higher into the sunlight.

The sky started to turn purple and the stars came out. The scream of the air was less troublesome. Cargraves cut in his gyros and let Joe the Robot correct his initial course; the moon swung gently to the right about half its width and steadied. "Everybody all right ?," he called out, his attention free of the controls for a moment.

"Swell!" Art called back.

"Somebody's sitting on my chest," Ross added.

"What's that?"

"I say, somebody's sitting on my chest!" Ross shouted.

"Well, wait a bit. His brother will be along in a minute."

"What did you say?"

"Never mind!" Cargraves shouted. "It wasn't important. Copilot!"

"Yes, Captain!"

"I'm going into full automatic. Get ready to check our course."

"Aye, aye, sir." Morrie clamped his octant near his face and shifted his head a little so that he could see the scope of the belly radar easily. He dug his head into the pads and braced his arms and hands; he knew what was coming. "Astrogator ready!"

The sky was black now and the stars were sharp. The image of the moon had ceased to shake and the unearthly scream of the air had died away, leaving only the tireless thunder of the jet. They were above the atmosphere, high above — free.

Cargraves yelled, "Hang on to your hats, boys! Here we go! He turned full control over to Joe the Robot pilot. That mindless, mechanical-and-electronic worthy figuratively shook his nonexistent head and decided he did not like the course. The image of the moon swung "down" and toward the bow, in terms of the ordinary directions in the ship, until the rocket was headed in a direction nearly forty degrees further east than was the image of the moon.

Having turned the ship to head for the point where the moon would be when the Galileo met it, rather than headed for where it now was, Joe turned his attention to the jet. Thee cadmium plates were withdrawn a little farther; the rocket really bit in and began to dig.

Ross found that there was indeed a whole family on his chest. Breathing was hard work and his eyes seemed foggy.

If Joe had had feelings he need have felt no pride in what he had just done, for his decisions had all been made for him before the ship left the ground. Morrie had selected, with Cargraves' approval, one of several three-dimensional cams and had installed it in Joe's innards. The cam "told" Joe what sort of a course to follow to the moon, what course to head first, how fast to gun the rocket and how long to keep it up. Joe could not see the moon-Joe had never heard of the moon - but his electronic senses could perceive how the ship was headed in relation to the steady, unswerving spin of the gyros and then head the ship in the direction called for by the cam in his tummy.

The cam itself had been designed by a remote cousin of Joe's, the gteat "Eniac" computer at the University of Pennsylvania. By means of the small astrogation computer in the ship either Morrie or Cargraves could work out any necessary problem and control the Galileo by hand, but Joe, with the aid of his cousin, could do the same thing better, faster, more accurately and with unsleeping care — provided the human pilot knew what to ask of him and how to ask it.

Joe had not been invented by Cargraves; thousands of scientists, engineers, and mathematicians had contributed to his existence. His grandfathers had guided the Nazi V-2 rockets in the horror-haunted last days of World War II. His fathers had been developed for the deadly, ocean-spanning guidedmissiles of the UN world police force. His brothers and sisters were found in every rocket ship, private and commercial, passenger-carrying or unmanned, that cleft the skies of earth.

Trans-Atlantic hop or trip to the moon, it was all one to Joe. He did what his cam told him to do. He did not care, he did not even know.

Cargrave called out, "How you making out down there?"

"All right, I guess," Ross answered, his voice laboring painfully.

"I feel sick," Art admitted with a groan.

"Breathe through your mouth. Take deep breaths."

"I can't."

"Well, hang on. It won't be long."

In fact it was only fifty-five seconds at full drive until Joe, still advised by his cam, decided that they had had enough of full drive. The cadmium plates slid farther back into the power pile, thwarting the neutrons; the roar of the rocket drive lessened.

The ship did not slow down; it simply ceased to accelerate so rapidly. It maintained all the speed it had gained and the frictionless vacuum of space did nothing to slow its headlong plunge. But the acceleration was reduced to one earth-surface gravity, one g, enough to overcome the powerful tug of the earth's mighty weight and thereby permit the ship to speed ahead unchecked — a little less than one g, in fact, as the grasp of the earth was already loosening and would continue to drop off to the changeover, more than 200,000 miles out in space, where the attraction of the moon and that of the earth are equal.

For the four in the ship the reduction in the force of the jet had returned them to a trifle less than normal weight, under an artificial gravity produced by the drive of the jet.

This false "gravity" had nothing to do with the pull of the earth; the attraction of the earth can be felt only when one is anchored to it and supported by it, its oceans, or it's air.

The attraction of the earth exists out in space but the human body has no senses which can perceive it. If a man were to fall from a tremendous height, say fifty thousand miles, it would not seem to him that he was falling but rather that the earth was rushing up to meet him.

After the tremendous initial drive had eased off, Cargraves called out again to Art. "Feeling any better, kid?"

"I'm all right now," Art replied.

"Fine. Want to come up here where you can see better?"

"Sure!" responded both Art and Ross, with one voice.

"Okay. Watch your step."

"We will." The two unstrapped themselves and climbed up to the control station by means of hand and toe holds welded to the sides of the ship. Once there they squatted on the supporting beams for the pilots' chairs, one on each side. They looked out.

The moon had not been visible to them from their hammock positions after the change in course. From their new positions they could see it, near the "lower" edge of the conning port. It was full, silver white and so dazzling bright that it hurt their eyes, although not sufficiently nearer to produce any apparent increase in size. The stars around it in the coalblack sky were hard bright diamonds, untwinkling.

"Look at that," breathed Ross. "Look at old Tycho shining out like a searchlight. Boy!"

"I wish we could see the earth," said Art. "This bucket ought to have more than one view port."

"What do you expect for a dollar-six-bits ?" asked Ross. "Chimes? The Galileo was a freighter."

"I can show it to you in the scope," Morrie offered, and switched on the piloting radar in the belly. The screen lit up after a few seconds but the picture was disappointing. Art could read it well enough-it was his baby -but esthetically it was unsatisfying. It was no more than a circular plot reading in bearing and distance; the earth was simply a vague mass of light on that edge of the circle which represented the astern direction.

"That's not what I want," Art objected. "I want to see it. I want to see it shape up like a globe and see the continents and the oceans."

"You'll have to wait until tomorrow, then, when we cut the drive and swing ship. Then you can see the earth and the sun, too."

"Okay. How fast are we going? Never mind — I see," he went on, peering at the instrument board. "3,300 miles per hour."

"You're looking at it wrong," Ross corrected him. "It says 14,400 miles per hour."

"You're crazy."

"Like fun. Your eyes have gone bad."

"Easy, boys, easy," Cargraves counseled. "You are looking at different instruments. What kind of speed do you want?"

"I want to know how fast we're going," Art persisted.

"Now, Art, I'm surprised at you. After all you've had every one of these instruments apart. Think what you're saying."

Art stared at the instrument board again, then looked sheepish. "Sure, I forgot. Let's see now — we've gained 14,000 and some, close to 15,000 now, miles per hour in free fall — but we're not falling."

"We're always falling," Morrie put in, smug for the moment in his status as a pilot. "You fall all the time from the second you take off, but you drive to beat the fall."

"Yes, yes, I know," Art cut him off. "I was just mixed up for a moment. Thirty-three hundred is the speed I want — 3310 flow."

'Speed' in space is a curiously slippery term, as it is relative to whatever point you select as 'fixed' — but the points in space are never fixed. The speed Art settled for was the speed of the Galileo along a line from the earth to their meeting place with the moon. This speed was arrived at deep inside Joe the Robot by combining by automatic vector addition three very complicated figures: first was the accumulated acceleration put on the ship by its jet drive, second the motions imposed on the ship by its closeness to the earth — its 'free fall' speed of which Art had spoken. And lastly, there was the spin of the earth itself, considered both in amount and direction for the time of day of the takeoff and the latitude of the camp site in New Mexico. The last was subtracted, rather than added, insofar as the terms of ordinary arithmetic apply to this sort of figuring.

The problem could be made vastly more complicated. The Galileo was riding with the earth and the moon in their yearly journey around the sun at a speed of about 19 miles per second or approximately 70,000 miles per hour as seen from outer space. In addition, the earthmoon line was sweeping around the earth once each month as it followed the moon — but Joe the Robot had compensated for that when he set them on a course to where the moon would be rather than where it was.

There were also the complicated motions of the sun and its planets with reference to the giddily whirling 'fixed' stars, speeds which could be nearly anything you wanted, depending on which types of stars you selected for your reference points, but all of which speeds are measured in many miles per second.

But Joe cared nothing for these matters. His cam and his many circuits told him how to get them from the earth to the moon; he knew how to do that and Doctor Einstein's notions of relativity worried him not. The mass of machinery and wiring which made up his being did not have worry built into it. It was, however, capable of combining the data that came to it to show that the Galileo was now moving somewhat more than 3300 miles per hour along an imaginary line which joined earth to the point where the moon would be when they arrived.

Morrie could check this figure by radar observations for distance, plus a little arithmetic. If the positions as observed did not match what Joe computed them to be, Morrie could feed Joe the corrections and Joe would accept them and work them into his future calculations as placidly and as automatically as a well-behaved stomach changes starch into sugar.

"Thirty-three hundred miles per hour," said Art. "That's not so much. The V-2 rockets in the war made more than that. Let's open her up wide and see what she'll do. How about it, Doc?"

"Sure," agreed Ross, "we've got a clear road and plenty of room. Let's bust some space."

Cargraves sighed. "See here," he answered, "I did not try to keep you darned young speed demons from risking your necks in that pile of bailing wire you call an automobile, even when I jeopardized my own life by keeping quiet. But I'm going to run this rocket my way. I'm in no hurry."

"Okay, okay, just a suggestion," Ross assured him. He was quiet for a moment, then added, "But there's one thing that bothers me…"

"What?"

"Well, if I've read it once, I've read it a thousand times, that you have to go seven miles per second to get away from the earth. Yet here we are going only 3300 miles per hour."

"We're moving, aren't we?"

"Yeah, but-"

"As a matter of fact we are going to build up a lot more speed before we start to coast. We'll make the first part of the trip much faster than the last part. But suppose we just held our present speed — how long would it take to get to the moon?"

Ross did a little fast mental arithmetic concerning the distance of the moon from the earth, rounding the figure off to 240,000 miles. "About three days."

"What's wrong with that? Never mind," Cargraves went on. "I'm not trying to be a smart-Aleck. The misconception is one of the oldest in the book, and it keeps showing up again, every time some nontechnical man decides to do a feature story on the future of space travel. It comes from mixing up shooting with rocketry. If you wanted to fire a shot at the moon, the way Jules Verne proposed, it would have to go seven miles per second when it left the gun or it would fall back. But with a rocket you could make the crossing at a slow walk if you had enough power and enough fuel to keep on driving just hard enough to keep from falling back. Of course it would raise Cain with your mass-ratio. But we're doing something of that sort right now. We've got tower to spare; I don't see why we should knock ourselves out with higher acceleration than we have to just to get there a little sooner. The moon will wait. It's waited a long time.

"Anyhow," he added, "no matter what you say and no matter how many physics textbooks are written and studied, people still keep mixing up gunnery and rocketry. It reminds me of that other old chestnut — about how a rocket can't work out in empty space, because it wouldn't have anything to push on."

"Go ahead and laugh!" Cargraves continued, seeing their expressions, "It strikes you as funny as a The-World-Is-Flat theory. But I heard an aeronautical engineer, as late as 1943, say just that."

"No! Not really!"

"I certainly did. He was a man with twenty-five years of professional experience and he had worked for both Wright Field and the Navy. But he said that in it. Next year the Nazis were bombing London with V-2s. Yet according to him it couldn't be done!"

"I'd think any man who had ever felt the kick of a shotgun would understand how a rocket works," Ross commented.

"It doesn't work out that way. Mostly it has no effect on his brain cells; it just gives him a sore shoulder." He started to lift himself out of his semi-reclining position in his pilot's chair. "Come on. Let's eat. Wow! My foot's gone to sleep. I want to stock up and then get some sleep. Breakfast wasn't much good for me — too many people staring down our necks."

"Sleep?" said Art. "Did you say `sleep'? I can't sleep; I'm too excited. I don't suppose I'll sleep the whole trip."

"Suit yourself. Me, I'm going to soak up shuteye just as soon as we've eaten. There's nothing to see now, and won't be until we go into free fall. You've had better views of the moon through a telescope."

"It's not the same thing," Art pointed out.

"No, it's not," Cargraves conceded. "Just the same, I intend to reach the moon rested up instead of worn out. Morrie, where did you stow the can openers?"

"I-" Morrie stopped and a look of utter consternation came over his face. "I think I left them behind. I put them down on the sink shelf and then some female reporter started asking me some fool question and-"

"Yeah, I saw," Ross interrupted him. "You were practically rolling over and playing dead for her. It was cute."

Cargraves whistled tunelessly. "I hope that we find out that we haven't left behind anything really indispensable. Never mind the can openers, Morrie. The way I feel I could open a can with my bare teeth."

"Oh, you won't have to do that, Doc," Morrie said eagerly. "I've got a knife with a gadget for-" He was feeling in his pocket as he talked. His expression changed abruptly and he withdrew his hand. "Here are the can openers, Doc."

Ross looked at him innocently. "Did you get her address, Morrie?"

Supper, or late breakfast, as the case may be, was a simple meal, eaten from ration cans. Thereafter Cargraves got out his bedding roll and spread it on the bulkhead-now a deck -which separated the pilot compartment from the hold. Morrie decided to sleep in his copilot's chair. It, with its arm rests, head support, and foot rest, was not unlike an extremely well-padded barber's chair for the purpose, one which had been opened to a semi-reclining position. Cargraves let him try it, cautioning him only to lock his controls before going to sleep.

About an hour later Morrie climbed down and spread his roll beside Cargraves. Art and Ross slept on their acceleration hammocks, which were very well adapted to the purpose, as long as the occupant was not strapped down.

Despite the muted roar of the jet, despite the excitement of being in space, they all were asleep in a few minutes. They were dead tired and needed it.

During the 'night' Joe the Robot slowly reduced the drive of the jet as the pull of the earth grew less.

Art was first to awaken. He had trouble finding himself for a moment or two and almost fell from his hammock on to the two sleepers below before he recollected his surroundings. When he did it brought him wide awake with a start. Space! He was out in space! — Headed for the moon!

Moving with unnecessary quiet, since he could hardly have been heard above the noise of the jet in any case and since both Ross and Cargraves were giving very fair imitations of rocket motors themselves, he climbed out of the hammock and monkey-footed up to the pilots' seats. He dropped into Morrie's chair, feeling curiously but pleasantly light under the much reduced acceleration.

The moon, now visibly larger and almost painfully beautiful, hung in the same position in the sky, such that he had to let his gaze drop as he lay in the chair in order to return its stare. This bothered him for a moment — how were they ever to reach the moon if the moon did not draw toward the point where they were aiming?

It would not have bothered Morrie, trained as he was in a pilot's knowledge of collision bearings, interception courses, and the like. But, since it appeared to run contrary to common sense, Art worried about it until he managed to visualize the situation somewhat thus: if a car is speeding for a railroad crossing and a train is approaching from the left, so that their combined speeds will bring about a wreck, then the bearing of the locomotive from the automobile will not change, right up to the moment of the collision.

It was a simple matter of similar triangles, easy to see with a diagram but hard to keep straight in the head. The moon was speeding to their meeting place at about 2000 miles an hour, yet she would never change direction; she would simply grow and grow and grow until she filled the whole sky.

He let his eyes rove over her face, naming the lovely names in his mind, Mare Tranquilitatis, Oceanus Procellarum, the lunar Apennines, LaGrange, Ptolemous, Mare Imbrium, Catharina. Beautiful words, they rolled on the tongue.

He was not too sure of the capitals of all the fifty-one United States and even naming the United Nations might throw him, but the geography-or was it lunography? -of the moon was as familiar to him as the streets of his home town.

This face of the moon, anyway — he wondered what the other face was like, the face the earth has never seen.

The dazzle of the moon was beginning to hurt his eyes; he looked up and rested them on the deep, black velvet of space, blacker by contrast with the sprinkle of stars.

There were few of the really bright stars in the region toward which the Galileo was heading. Aldebaran blazed forth, high and aft, across the port from the moon. The righthand frame of the port slashed through the Milky Way and a small portion of that incredible river of stars was thereby left visible to him. He picked out the modest lights of Aries, and near mighty Aldebaran hung the ghostly, fairy Pleiades, but dead ahead, straight up, were only faint stars and a black and lonely waste.

He lay back, staring into this remote and solitary depth, vast and remote beyond human comprehension, until he was fascinated by it, drawn into it. He seemed to have left the warmth and safety of the ship and to be plunging deep into the silent blackness ahead.

He blinked his eyes and shivered, and for the first time felt himself wishing that he had never left the safe and customary and friendly scenes of home. He wanted his basement lab, his mother's little shop, and the humdrum talk of ordinary people, people who stayed home and did not worry about the outer universe.

Still, the black depths fascinated him. He fingered the drive control under his right hand. He had only to unlock it, twist it all the way to the right, and they would plunge ahead, nailed down by unthinkable acceleration, and speed on past the moon, too early for their date in space with her. On past the moon, away from the sun and the earth behind them, on an on and out and out, until the thorium burned itself cold or until the zinc had boiled away, but not to stop even then, but to continue forever into the weary years and the bottomless depths.

He blinked his eyes and then closed them tight, and gripped both arms of the chair.

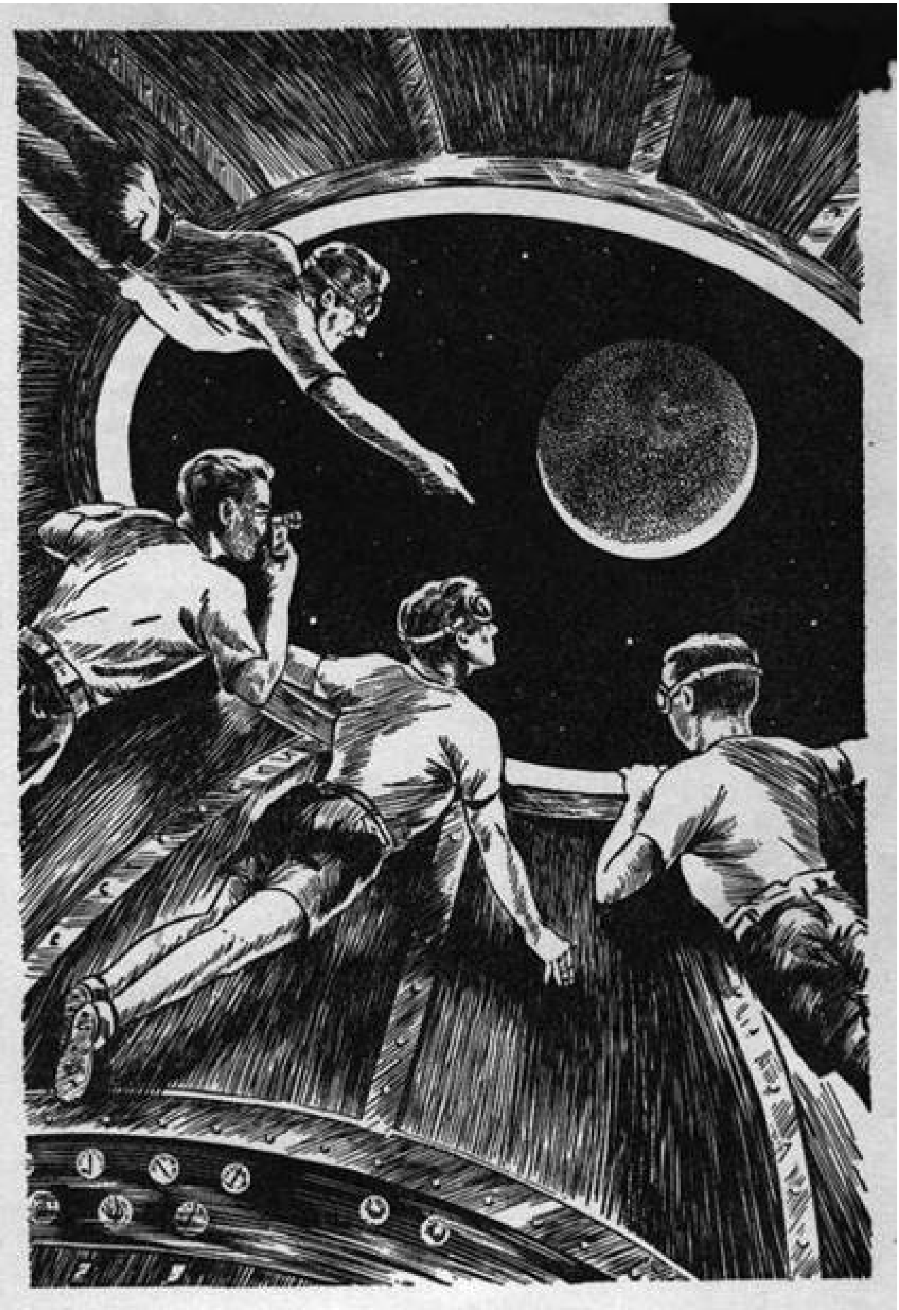

Chapter 10 THE METHOD OF SCIENCE

"ARE YOU ASLEEP?" THE VOICE in his ear made Art jump; he had still had his eyes closed — it startled him. But it was only Doc, climbing up behind him.

"Oh! Good morning, Doc. Gee, I'm glad to see you. This place was beginning to give me the jim-jams."

"Good morning to you, if it is morning. I suppose it is morning, somewhere." He glanced at his watch. "I'm not surprised that you got the willies, up here by yourself. How would you like to make this trip by yourself?"

"Not me."

"Not me, either. The moon will be just about as lonely but it will feel better to have some solid ground underfoot. But I don't suppose this trip will be really popular until the moon has some nice, noisy night clubs and a bowling alley or two." He settled himself down in his chair.

"That's not very likely, is it?"

"Why not? The moon is bound to be a tourists' stop some day — and have you ever noticed how, when tourists get somewhere new, the first thing they do is to look up the same kind of entertainments they could find just as easily at home?"

Art nodded wisely, while tucking the notion away in his mind. His own experience with tourists and travel was slight — until now! "Say, Uncle, do you suppose I could get a decent picture of the moon through the port?"

Cargraves squinted up at it. "Might. But why waste film? They get better pictures of it from the earth. Wait until we go into a free orbit and swing ship. Then you can get some really unique pics — the earth from space. Or wait until we swing around the moon."

"That's what I really want! Pictures of the other side of the moon."

"That's what I thought." Cargraves paused a moment and then added, "But how do you know you can get any?"

"But — Oh, I see'. what you mean. It'll be dark on that side."

"That's not exactly what I meant, although that figures in, too, since the moon will be only about three days past `new moon' — `new moon,' that is, for the other side. We'll try to time it to get all the pics you want on the trip back. But that isn't what I mean: how do you know there is any back side to the moon? You've never seen it. Neither has any one else, for that matter."

"But-there has to -I mean, you can see…"

"Did I hear you say there wasn't any other side to the moon, Doc?"

It was Ross, whose head had suddenly appeared beside Cargraves'.

"Good morning, Ross. No, I did not say, there was no other side to the moon. I had asked Art to tell me what leads him to think there is one."

Ross smiled. "Don't let him pull your leg, Art. He's just trying to rib you."

Cargraves grinned wickedly. "Okay, Aristotle, you picked it. Suppose you try to prove to me that there is a far side to the moon."

"It stands to reason."

"What sort of reason? Have you ever been there? Ever seen it?"

"No, but-"

"Ever met anybody who's ever seen it? Ever read any accounts by anybody who claimed to have seen it?"

"No, I haven't, but I'm sure there is one."

"Why?"

"Because I can see the front of it."

"What does that prove? Isn't your experience, up to now, limited to things you've seen on earth? For that matter I can name a thing you've seen on earth that hasn't any back side."

"Huh? What sort of a thing? What are you guys talking about?" It was Morrie this time, climbing up on the other side.

Art said, "Hi, Morrie. Want your seat?"

"No, thanks. I'll just squat here for the time being." He settled himself, feet dangling. "What's the argument?"

"Doc," Ross answered, "is trying to prove there isn't any other side to the moon."

"No, no, no," Cargraves hastily denied. "And repeat `no.' I was trying to get you to prove your assertion that there was one. I was saying that there was a phenomenon even on earth which hasn't any back side, to nail down Ross's argument from experience with other matters — even allowing that earth experience necessarily applies to the moon, which I don't."

"Whoops! Slow up! Take the last one first. Don't natural laws apply anywhere in the universe?"

"Pure assumption, unproved."

"But astronomers make predictions, eclipses and such, based on that assumption — and they work out."

"You've got it backwards. The Chinese were predicting eclipses long before the theory of the invariability of natural law was popular. Anyhow, at the best, we notice certain limited similarities between events in the sky and events on earth. Which has nothing to do with the question of a back side of the moon which we've never seen and may not be there."

"But we've seen a lot of it," Morrie pointed out.

"I get you," Cargraves agreed. "Between librations and such — the eccentricity of the moon's orbit and its tilt, we get to peek a little way around the edges from time to time and see about 60 per cent of its surface — if the surface is globular. But I'm talking about that missing 40 per cent that we've never seen."

"Oh," said Ross, "you mean the side we can't see might just be sliced off, like an apple with a piece out of it. Well, you may be right, but I'll bet you six chocolate malts, payable when we get back, that you're all wet."

"Nope," Cargrave answered, "this is a scientific discussion and betting is inappropriate. Besides, I might lose. But I did not mean anything of the slice-out-of-an-apple sort. I meant just what I said: no back side at all. The possibility that when we swing around the moon to look at the other side, we won't find anything at all, nothing, just empty space-that when we try to look at the moon from behind it, there won't be any moon to be seen — not from that position. I'm not asserting that that is what we will find; I'm asking you to prove that we will find anything."

"Wait a minute," Morrie put in, as Art glanced wildly at the moon as if to assure himself that it was still there — it was! "You mentioned something of that sort on earth — a thing with no back. What was it? I'm from Missouri."

"A rainbow. You can see it from just one side, the side that faces the sun. The other side does not exist."

"But you can't get behind it."

"Then try it with a garden spray some sunny day. Walk around it. When you get behind it, it ain't there."

"Yes, but Doc," Ross objected, "you're just quibbling. The cases aren't parallel. A rainbow is just light waves; the moon is something substantial."

"That's what I'm trying to get you to prove, and you haven't proved it yet. How do you know the moon is substantial? All you have ever seen of it is just light waves, as with the rainbow."

Ross thought about this. "Okay, I guess I see what you're getting at. But we do know that the moon is substantial; they bounced radar off it, as far back as `46."

"Just light waves again, Ross. Infrared light, or ultra-shortwave radio, but the same spectrum. Come again."

"Yes, but they bounced."

"You are drawing an analogy from earth conditions again. I repeat, we know nothing of moon conditions except through the insubstantial waves of the electromagnetic spectrum."

"How about tides?"

"Tides exist, certainly. We have seen them, wet our feet in them.

But that proves nothing about the moon. The theory that the moon causes the tides is a sheer convenience, pure theory. We change theories as often as we change our underwear. Next year it may be simpler to assume that the tides cause the moon. Got any other ideas?"

Ross took a deep breath. "You're trying to beat me down with words. All right, so I haven't seen the other side of the moon. So I've never felt the moon, or taken a bite out of it. By the way, you can hang on to the theory that the moon is made of green cheese with that line of argument."

"Not quite," said Cargraves. "There is some data on that, for what it's worth. An astronomer fellow made a spectrograph of green cheese and compared it with a spetcrograph of the moon. No resemblance."

Art chortled. "He didn't, really?"

"Fact. You can look it up."

Ross shrugged. "That's no better than the radar data," he said correctly. "But to get on with my proof. Granted that there is a front side to the moon, whatever it's nature, just as long as it isn't so insubstantial that it won't even reflect radar, then there has to be some sort of a back, flat, round, square, or wiggly. That's a matter of certain mathematical deduction."

Morrie snorted.

Cargraves limited himself to a slight smile. "Now, Ross. Think it over. What is the content of mathematics?"

"The content of mathe-" He collapsed suddenly. "Oh."

"I guess I finally get it. Mathematics doesn't have any content. If we found there wasn't any other side, then we would just have to invent a new mathematics."

"That's the idea. Fact of the matter is, we won't know that there is another side to the moon until we get there. I was just trying to show you," he went on, "just how insubstantial a `common sense' idea can be when you pin it down. Neither `common sense' nor `logic' can prove anything. Proof comes from experiment, or to put it another way, from experience, and from nothing else. Short lecture on the scientific method — you can count it as thirty minutes on today's study time. Anybody else want breakfast but me? Or has the low weight made you queasy?" He started to climb out of his chair.

Ross was very thoughtful while they made preparations for breakfast. This was to be a proper meal, prepared from their limited supply of non-canned foods. The Galileo had been fitted with a galley of sorts, principally a hot plate and a small refrigerator. Dishes and knives, forks, and spoons could be washed, sparingly, with the water which accumulated in the dump of the airconditioner, and then sterilized on the hot plate. The ship had everything necessary to life, even a cramped but indispensable washroom. But every auxiliary article, such as dishes, was made of zinc-reserve mass for the hungry jet.

They sat, or rather squatted, down to a meal of real milk, cereal, boiled eggs, rolls, jam, and coffee. Cargraves sighed contentedly when it had been tucked away. "We won't get many like that," he commented, as he filled his pipe. "Space travel isn't all it's cracked up to be, not yet."

"Mind the pipe, Skipper!" Morrie warned.

Cargraves looked startled. "I forgot," he admitted guiltily. He stared longingly at the pipe. "Say, Ross," he inquired, "do you think the airconditioner would clean it out fast enough?"

"Go ahead. Try it," Ross urged him. "One pipeful won't kill us. But say, Doc-"

"Yes?"

"Well, uh, look — don't you really believe there is another side to the moon?"

"Huh? Still on that, eh? Of course I do."

"But it's just my opinion. I believe it because all my assumptions, beliefs, prejudices, theories, superstitions, and so forth, tend that way. It's part of the pattern of fictions I live by, but that doesn't prove it's right. So if it turns out to be wrong I hope I am sufficiently emotionally braced not to blow my top."

"Which brings us right back to study time," he went on. "You've all got thirty minutes credit, which gives you an hour and a half to go. Better get busy."

Art looked dumfounded. "I thought you were kidding Uncle. You don't mean to run such a schedule on the moon, do you?"

"Unless circumstances prevent. Now is a good time to work up a little reserve, for that matter, while there is nothing to see and no work to do."

Art continued to look astonished, then his race cleared. "I in afraid we can't, Uncle. The books are all packed down so far that we can't get at them till we land."

"So? Well, we won't let that stop us. A school," he quoted, "is a log with a pupil on one end and a teacher on the other. We'll have lectures and quizzes — starting with a review quiz. Gather round, victims."

They did so, sitting cross-legged in a circle on the hold bulkhead. Cargraves produced a pencil and a reasonably clean piece of paper from his always bulging pockets. "You first, Art. Sketch and describe a cyclotron. Basic review — let's see how much you've forgotten."

Art commenced outlining painfully the essential parts of a cyclotron. He sketched two hollow half-cylinders, with their open sides facing each other, close together. "These are made of copper," he stated, "and each one is an electrode for a very high frequency, high voltage power source. It's actually a sort of shortwave radio transmitter — I'll leave it out of the sketch. Then you have an enormously powerful electromagnet with its field running through the opening between the dees, the half-cylinders, and vertical to them. The whole thing is inside a big vacuum chamber. You get a source of ions-"

"What sort of ions?"

"Well, maybe you put a little hydrogen in the vacuum chamber and kick it up with a hot filament at the center point of the two dees. Then you get hydrogen nuclei-protons."

"Go ahead."

"The protons have a positive charge, of course. The alternating current would keep them kicking back and forth between the two electrodes — the dees. But the magnetic field, since the protons are charged particles, tends to make them whirl around in circles. Between the two of them, the protons go whirling around in a spiral, gaining speed each revolution until they finally fly out a little thin, metal window in the vacuum chamber, going to beat the band."

"But why bother?"

"Well, if you aim this stream of highspeed protons at some material, say a piece of metal, things begin to happen. It can knock electrons off the atoms, or it can even get inside and stir up the nuclei and cause transmutations or make the target radioactive — things like that."

"Good enough," Cargraves agreed, and went on to ask him several more questions to bring out details. "Just one thing," he said afterwards. "You know the answers, but just between ourselves, that sketch smells a bit. It's sloppy."

"I never did have any artistic talent," Art said defensively. "I'd rather take a photograph any day."

"You've taken too many photographs, maybe. As for artistic talent, I haven't any either, but I learned to sketch. Look, Art-the rest of you guys get this, too -if you can't sketch, you can't see. If you really see what you're looking at, you can put it down on paper, accurately. If you really remember what you have looked at, you can sketch it accurately from memory."

"But the lines don't go where I intend them to."

"A pencil will go where you push it. It hasn't any life of its own. The answer is practice and more practice and thinking about what you are looking at. All of you lugs want to be scientists. Well, the ability to sketch accurately is as necessary to a scientist as his slipstick. More necessary, you can get along without a slide rule. Okay, Art. You're next, Ross. Gimme a quick tell on the protoactinium radioactive series."

Ross took a deep breath. "There are three families of radioactive isotopes: the uranium family, the thorium family, and the protoactinium family. The last one starts with isotope U-235 and-" They kept at it for considerably longer than an hour and a half, for Cargraves had the intention of letting them be as free as possible later, while still keeping to the letter and spirit of his contract with Ross's father.

At last he said, "I think we had better eat again. The drive will cut out before long. It's been cutting down all the time — notice how light you feel?"

"How about a Kration?" inquired Morrie, in his second capacity as commissary steward.

"No, I don't think so," Cargraves answered slowly. "I think maybe we had better limit this meal to some amino acids and some gelatine." He raised his eyebrows.

"Umm — I see," Morrie agreed, glancing at the other two. "Maybe you are right." Morrie and Cargraves, being pilots, had experienced free fall in school. The stomachs of Ross and Art were still to be tried.

"What's the idea?" Art demanded.

Ross looked disgusted. "Oh, he thinks we'll toss our cookies. Why, we hardly weigh anything now. What do you take us for, Doc? Babies?"

"No," said Cargraves, "but I still think you might get dropsick. I did. I think predigested foods are a good idea."

"Oh, shucks. My stomach is strong. I've never been air sick."

"Ever been seasick?"

"I've never been to sea."

"Well, suit yourself," Cargraves told him. "But one thing I insist on. Wear a sack over your face. I don't want what you lose in the airconditioner." He turned away and started preparing some gelatine for himself by simply pouring the powder into water, stirring, and drinking.

Ross made a face but he did not dig out a Kration. Instead he switched on the hot plate, preparatory to heating milk for amino-acid concentrates.

A little later Joe the Robot awoke from his nap and switched off the jet completely.

They did not bounce up to the ceiling. The rocket did not spin wildly. None of the comic-strip things happened to them. They simply gradually ceased to weigh anything as the thrust died away. Almost as much they noticed the deafening new silence. Cargraves had previously made a personal inspection of the entire ship to be sure that everything was tied, clamped, or stored firmly so that the ship would not become cluttered `up with loosely floating bric-a-brac.

Cargraves lifted himself away from his seat with one hand, turned in the air like a swimmer, and floated gently down, rather across-up and down had ceased to exist -to where Ross and Art floated, loosely attached to their hammocks by a single belt as an added precaution. Cargraves checked his progress with one hand and steadied himself by grasping Art's hammock. "How's everybody?"

"All right, I guess," Art answered, gulping. "It feels like a falling elevator." He was slightly green.

"You, Ross?"

"I'll get by," Ross declared, and suddenly gagged. His color was gray rather than green.

Space sickness is not a joke, as every cadet rocket pilot knows. It is something like seasickness, like the terrible, wild retching that results from heavy pitching of a ship at sea— except that the sensation of everything dropping out from under one does not stop!

But the longest free-flight portions of a commercial rocket flight from point to point on earth last only a few minutes, with the balance of the trip on thrust or in glide, whereas the course Cargraves had decided on called for many hours of free fall. He could have chosen, with the power at his disposal, to make the whole trip on the jet, but that would have prevented them from turning ship, which he proposed to do now, until the time came to invert and drive the jet toward the moon to break their fall.

Only by turning the ship would they be able to see the earth from space; Cargraves wanted to do so before the earth was too far away.

"Just stay where you are for a while," he cautioned them.. "I'm about to turn ship."

"I want to see it," Ross said stoutly. "I've been looking forward to it." He unbuckled his safety belt, then suddenly he was retching again. Saliva overflowed and drooled out curiously, not down his chin but in large droplets that seemed undecided where to go.

"Use your handkerchief," Cargraves advised him, feeling none too well himself. "Then come along if you feel like it." He turned to Art.

Art was already using his handkerchief.

Cargraves turned away and floated back to the pilot's chair. He was aware that there was nothing that he could do for them, and his own stomach was doing flipflops and slow, banked turns. He wanted to strap his safety belt across it. Back in his seat, he noticed that Morrie was doubled up and holding his stomach, but he said nothing and gave his attention to turning the ship. Morrie would be all right.

Swinging the ship around was a very simple matter. Located at the center of gravity of the ship was a small, heavy, metal wheel. He had controls on the panel in front of him whereby he could turn this wheel to any axis, as it was mounted freely on gymbals, and then lock the gymbals. An electric motor enabled him to spin it rapidly in either direction and to stop it afterwards.

This wheel by itself could turn the ship when it was in free fall and then hold it in the new position. (It must be clearly understood that this turning had no effect at all on the course or speed of the Galileo, but simply on its attitude, the direction it faced, just as a fancy diver may turn and twist in falling from a great height, without thereby disturbing his fall.)

The little wheel was able to turn the huge vessel by a very simple law of physics, but in an application not often seen on the earth. The principle was the conservation of momentum, in this case angular momentum or spin. Ice skaters understand the application of this law; some of their fanciest tricks depend on it.

As the little wheel spun rapidly in one direction the big ship spun slowly in the other direction. When the wheel stopped, the ship stopped and just as abruptly.

"Dark glasses, boys!" Cargraves called out belatedly as the ship started to nose over and the stars wheeled past the port. In spite of their wretched nausea they managed to find their goggles, carried on their persons for this event, and get them on.

They needed them very soon. The moon slid away out of sight. The sun and the earth came in to view. The earth was a great shining crescent like a moon, two days past new. At this distance-one-fourth the way to the moon -it appeared sixteen times as wide as the moon does from the earth and many times more magnificent. The horns of the crescent were blue-white from the polar ice caps. Along its length showed the greenish blue of sea and the deep greens and sandy browns of ocean and forest and field… for the line of light and dark ran through the heart of Asia and down into the Indian Ocean. This they could plainly see, as easily as if it had been a globe standing across a school room from them. The Indian Ocean was partly obscured by a great cloud bank, stormy to those underneath it perhaps, but blazing white as the polar caps to those who watched from space.

In the arms of the crescent was the nightside of earth, lighted dimly but plainly by the almost full moon behind them. But-and this is never seen on the moon when the new moon holds the old moon in her arms -the faintly lighted dark face was picked out here and there with little jewels of light, the cities of earth, warm and friendly and beckoning!

Halfway from equator to northern horn were three bright ones, not far apart — London, and Paris, and reborn Berlin. Across the dark Atlantic, at the very edge of the disk, was one especially bright and rosy light, the lights of Broadway and all of Greater New York.

All three of the boys were seeing New York for the first time, not to mention most of the rest of the great globe.

But, although it was their home, although they were it from a glorious vantage point new to mankind, their attention was torn away from the earth almost at once. There was a still more breathtaking object in the sky — the sun.

Its apparent width was only one-sixteenth that of the mighty crescent earth, but it brooked no competition. It hung below the earth-below when referred to the attitude of the Galileo, not in the sense of "up" or "down" -and about four times the width of the earth away. It was neither larger nor smaller than it appears from the earth and not appreciably brighter than it is on a clear, dry desert noon. But the sky was black around it in the airless space; its royal corona shone out; its prominences could be seen; its great infernal storms showed on its face.

"Don't look too directly at it," Cargraves warned, "even when you have the polarizer turned to maximum interference." He referred to the double lenses the boys wore, polaroid glass with thick outer lens that were rotatable.

"I gotta have a picture of this!" Art declared, and turned and swam away. He had forgotten that he was space sick.

He was back shortly with his Contax and was busy fitting his longest lens into it. The camera was quite old, being one of the few things his mother had managed to bring out of Germany, and was his proudest possession. The lens in place, he started to take his Weston from its case. Cargraves stopped him.

"Why burn out your light meter?" he cautioned.

Art stopped suddenly. "Yes, I guess I would," he admitted. "But how am I going to get a picture?"

"Maybe you won't. Better use your slowest film, your strongest filter, your smallest stop, and your shortest exposure. Then pray."

Seeing that the boy looked disappointed, he went on, "I wouldn't worry too much about pictures of the sun. We can be sure that to the astronomers who will follow us after we've blazed the trail. But you ought to be able to get a swell picture of the earth. Waste a little film on the sun first, then we will try it. I'll shade your lens from the sunlight with my hand."

Art did so, then prepared to photograph the earth. "I can't get a decent light reading on it, either," he complained. "Too much interference from the sun."

"Well, you know how much light it is getting — the works. Why not assume it's about like desert sunlight, then shoot a few both above and below what that calls for?"

When Art had finished Cargraves said, "Mind the sunburn, boys." He touched the plastic inner layer of the quartz port. "This stuff is supposed to filter out the worst of it — but take it easy."

"Shucks, we're tanned." And so they were; New Mexico sun had left its mark.

"I know, but that's the brightest sunshine you ever saw. Take it easy."

"How much chance is there," asked Morrie, "that this pure stuff is dangerous? I mean aside from bad sunburn."

"You read the same papers I did. We're getting more cosmic radiation, too. Maybe it'll knock us down dead. Maybe it'll cause your children to have long green tendrils. That's one of the chances we take."

"Well, Columbus took a chance."

"And look how far he got!," put in Art.

"Yeah, thrown in the hoosegow for his trouble."

"Be that as it may," said Cargraves, "I'm going to turn the ship again so that the sun doesn't shine in so directly. This tub is getting too hot." It was no trouble to keep the Galileo warm enough, but how to get rid of unwanted heat was another matter. Her polished sides reflected most of the heat that struck them, but sunshine pouring directly in the view port produced a most uncomfortable greenhouse effect. Refrigeration, in the ordinary sense, was no answer; the ship was a closed system and could lose heat only by radiation to outer space. At the moment she was absorbing radiant heat from the sun much faster than she was radiating it.

"I want to take some more pictures," Art protested.

"I'll keep the earth in sight," Cargraves promised, and set the controls of the spinning wheel to suit his purpose. Then he floated back to the view port and joined the others, who were swimming in front of it like goldfish in a bowl.

Ross touched the transparent wall with a finger tip; the light contact pushed him back from the port. "Doc, what do you think would happen if a meteor hit this port?"

"I don't like to think about it. However, I wouldn't worry too much about it. Ley has calculated that the chance of being hit by a meteor on a trip out to the moon and back is about one in a half a million. I figure I was in much graver danger every time I climbed into that alleged automobile you guys drive.

"That's a good car."

"I'll admit it performs well." He turned away with a motion much like that of a sprint swimmer turning on the side of a pool. "Art, when you are through snapping that Brownie, I've got something better for you to do. How about trying to raise earth?"

"Just one more of — Huh? What did you say?"

"How about heating up your tubes and seeing if there is anybody on the air-or lack-of-air, as the case may be?"

No attempt had been made to use the radios since blasting off. Not only did the jet interfere seriously, but also the antenna were completely retracted, even spike antenna, during the passage through the atmosphere. But now that the jet was silent an attempt at communication seemed in order.

True, the piloting radar had kept them in touch by radio, in a manner of speaking, during the early part of the journey, but they were now beyond the range of the type of equipment used for piloting. It bore little resemblance to the giant radars used to bounce signals against the moon. The quartz windows through which it operated would have been quite inadequate for the large antenna used to fling power from the earth to the moon.

Art got busy at once, while stating that he thought the chances of picking up anything were slim. "It would have to be beamed tight as a, as a, well — tight. And why would anybody be beaming stuff out this way?"

"At us, of course," Ross offered.

"They can't find us. Radar won't pick up anything as small as this ship at this distance — too little mirror cross section." Art spoke authoritatively. "Not the radars they've got so far. Maybe some day, if — hey!"

"What have you got?"

"Keep quiet!" Art stared ahead with that look of painful, unseeing concentration found only under a pair of earphones. He twiddled his dials carefully, then fumbled for pencil and paper. Writing, he found, was difficult without gravity to steady himself and his hand. But he scribbled.

"Get a load of this," he whispered a few minutes later. He read:

RADIO PARIS CALLING ROCKET SHIP GALILEO
RADIO PARIS CALLING ROCKET SHIP GALILEO
RADIO PARIS CALLING ROCKET SHIP GALILEO
DOCTOR DONALD CARGRAVES ARTHUR MUELLER
MAURICE ABRAMS ROSS JENKINS GREETINGS YOUR
FLIGHT FOLLOWED UNTIL OH ONE ONE THREE
GREENWICH TIME SEPTEMBER TWENTYFIFTH
CONTACT LOST WILL CONTINUE TO CALL YOU ON
THIS BEAM AND FREQUENCY FOLLOWING PROBABLE
TRAJECTORY GOOD LUCK TO YOU RADIO
PARIS CALLING ROCKET SHIP GALILEO RADIO
PARIS-

"And then they repeat. It's a recording." His voice was shaky.

"Gosh!" Ross had no other comment.

"Well, boys, it looks like we're celebrities." Cargraves tried to make his words sound casual. Then he found that he was holding a piece of his pipe in each hand; he had broken it in two without knowing it. Shrugging, he let the pieces float away from him.

"But how did they find us?" persisted Art.

"The message shows it," Morrie pointed out. "See that time? That's the time we went into free fall. They followed the jet."

"How? By telescope?"

"More likely," Cargraves put in, "by anti-rocket radiation tracer."

"Huh? But the UN patrol are the only ones with that sort of gear."

Cargraves permitted himself a grin. "And why shouldn't the UN be interested in us? See here, kid — can you squirt anything back at them?"

"I'll sure try!"

Chapter 11 ONE ATOM WAR TOO MANY

ART GOT BUSY AT HIS TASK, but nothing came back which would tell him whether or not his attempts had been successful. The recording continued to come in whenever he listened for it, between attempts to send, for the next three and a half hours. Then it faded out — they were off the beam.

Nevertheless, it was the longest direct communication of record in human history.

The Galileo continued her climb up from the earth, toward that invisible boundary where the earth ceased to claim title and the lesser mass of the moon took charge. Up and up, out and farther out, rising in free flight, slowing from the still effective tug of the earth but still carried on by the speed she had attained under the drive of the jet, until at last the Galileo slipped quietly over the border and was in the moon's back yard. From there on she accelerated slowly as she fell toward the silvery satellite.

They ate and slept and ate again. They stared at the receding earth. And they slept again.

While they slept, Joe the Robot stirred, consulted his cam, decided that he had had enough of this weightlessness, and started the jet. But first he straightened out the ship so that the jet faced toward the moon, breaking their fall, while the port stared back at earth.

The noise of the jet woke them up. Cargraves had had them strap themselves down in anticipation of weight. They unstrapped and climbed up to the control station. "Where's the moon?" demanded Art.

"Under us, of course," Morrie informed him.

"Better try for it with radar, Morrie," Cargraves directed.

"Cheek!" Morrie switched on the juice, waited for it to warm, then adjusted it. The moon showed as a large vague mass on one side of the scope. "About fifteen thousand miles," he declared. "We'd better do some checking, Skipper."

They were busy for more than an hour, taking sights, taking readings, and computing. The bearing and distance of the moon, in relation to the ship, were available by radar. Direct star sights out the port established the direction of drive of the ship. Successive radar readings established the course and speed of the ship for comparison with the courses and speeds as given by the automatic instruments showing on the board. All these factors had to be taken into consideration in computing a check on the management of Joe the Robot.

Minor errors were found and the corrections were fed to the automatic pilot. Joe accepted the changes in his orders without comment.

While Morrie and Cargraves did this, Art and Ross were preparing the best meal they could throw together. It was a relief to have weight under their feet and it was a decided relief to their stomachs. Those organs had become adjusted to free fall, but hardly reconciled. Back on firm footing they hollered for solid food.

The meal was over and Cargraves was thinking sadly of his ruined pipe, when the control alarm sounded. Joe the Robot had completed his orders, his cam had run out, he called for relief.

They all scrambled up to the control station. The moon, blindingly white and incredibly huge was shouldering its way into one side of the port. They were so close to it now that their progress was visible, if one looked closely, by sighting across the frame of the port at some fixed object, a crater or a mountain range.

"Whee!" Art yelled.

"Kinda knocks your eyes out, doesn't it?" Ross said, gazing in open wonder.

"It does," agreed Cargraves. "But we've got work to do. Get back and strap yourselves down and stand by for maneuvering."

While he complied, he strapped himself into his chair and then flipped a switch which ordered Joe to go to sleep; he was in direct, manual command of the rocket. With Morrie to coach him by instrument, he put the ship through a jockeying series of changes, gentle on the whole and involving only minor changes in course at any one time, but all intended to bring the ship from the flat conoid trajectory it had been following into a circular orbit around the moon.

"How'm I doin'?" he demanded, a long time later.

"Right in the groove," Morrie assured him, after a short delay.

"Sure enough of it for me to go automatic and swing ship?"

"Let me track her a few more minutes." Presently Morrie assured him as requested. They had already gone into free flight just before Cargraves asked for a check. He now called out to Art and Ross that they could unstrap. He then started the ship to swinging so that the port faced toward the moon and switched on a combination which told Joe that he must get back to work; it was now his business to watch the altitude by radar and to see to it that altitude and speed remained constant.

Art was up at the port, with his camera, by the time he and Morrie had unstrapped.

"Goshawmighty," exclaimed Art, "this is something!" He unlimbered his equipment and began snapping frantically, until Ross pointed out that his lens cover was still on. Then he steadied down.

Ross floated face down and stared out at the desolation. They were speeding silently along, only two hundred miles above the ground, and they were approaching the sunrise line of light and darkness. The shadows were long on the barren wastes below them, the mountain peaks and the great gaping craters more horrendous on that account. "It's scary," Ross decided. "I'm not sure I like it."

"Want off at the next corner?" Cargraves inquired.

"No, but I'm not dead certain I'm glad I came."

Morrie grasped his arm, to steady himself apparently, but quite as much for the comfort of solid human companionship. "You know what I think, Ross," he began, as he stared out at the endless miles of craters. "I think I know how it got that way. Those aren't volcanic craters, that's certain — and it wasn't done by meteors. They did it themselves!"

"Huh? Who?"

"The moon people. They did it. They wrecked themselves. They ruined themselves. They had one atomic war too many."

"Huh? What the-" Ross stared, then looked back at the surface as if to read the grim mystery there. Art stopped taking pictures.

"How about it, Doc?"

Cargraves wrinkled his brow. "Could be," he admitted. "None of the other theories for natural causes hold water for one reason or another. It would account for the relatively smooth parts we call `seas.' They really were seas; that's why they weren't hit very hard."

"And that's why they aren't seas any more," Morrie went on. "They blew their atmosphere off and the seas boiled away at Tycho. That's where they set off the biggest ammunition dump on the planet. It cracked the whole planet. I'll bet somebody worked out a counter-weapon that worked too well. It set off every atom bomb on the moon all at once and it ruined them! I'm sure of it."

"Well," said Cargraves, "I'm not sure of it, but I admit the theory is attractive. Perhaps we'll find out when we land. That notion of setting off all the bombs at once-there are strong theoretical objections to that. Nobody has any idea how to do it."

"Nobody knew how to make an atom bomb a few years ago," Morrie pointed out.

"That's true." Cargraves wanted to change the subject; it was unpleasantly close to horrors that had haunted his dreams since the beginning of World War II. "Ross, how do you feel about the other side of the moon now?"

"We'll know pretty soon," Ross chuckled. "Say — this is the Other Side!"

And so it was. They had leveled off in their circular orbit near the left limb of the moon as seen from the earth and were coasting over the mysterious other face. Ross scanned it closely. "Looks about the same."

"Did you expect anything different?"

"No, I guess not. But I had hoped." Even as he spoke they crossed the sunrise line and the ground below them was dark, not invisible, for it was still illuminated by faint starlight — starlight only, for the earthshine never reached this face. The suncapped peaks receded rapidly in the distance. At the rate they were traveling, a speed of nearly 4000 miles per hour necessary to maintain them in a low-level circular orbit, the complete circuit of the planet would take a little over an hour and a half.

"No more pictures, I guess," Art said sadly. "I wish it was a different time of the month."

"Yes," agreed Ross, still peering out, "it's a dirty shame to be this close and not see anything."

"Don't be impatient," Cargraves told him; "When we start back in eight or nine days, we swing around again and you can stare and take pictures till you're crosseyed."

"Why only eight or nine days? We've got more food than that."

"Two reasons. The first is, if we take off at new moon we won't have to stare into the sun on the way back. The second is, I'm homesick and I haven't even landed yet." He grinned. In utter seriousness he felt that it was not wise to stretch their luck by sticking around too long.

The trip across the lighted and familiar face of the moon was delightful, but so short that it was like window shopping in a speeding car. The craters and the "seas" were old familiar friends, yet strange and new. It reminded them of the always strange experience of seeing a famous television star on a personal appearance tour-recognition with an odd feeling of unreality.

Art shifted over to the motion-picture camera once used to record the progress of the Starstruck series, and got a complete sequence from Mare Fecunditatis to the crater Kepler, at which point Cargraves ordered him emphatically to stop at once and strap himself down.

They were coming into their landing trajectory. Cargraves and Morrie had selected a flat, unnamed area beyond Oceanus Procellarum for the landing because it was just on the border between the earth side and the unknown side, and thereby fitted two plans: to attempt to establish radio contact with earth, for which direct line-of-sight would be necessary, and to permit them to explore at least a portion of the unknown side.

Joe the Robot was called again and told to consult a second cam concealed in his dark insides, a cam which provided for the necessary braking drive and the final ticklish contact on maneuvering jets and radar. Cargraves carefully leveled the ship at the exact altitude and speed Joe would need for the approach and flipped over to automatic when Morrie signaled that they were at the exact, precalculated distance necessary for the landing.

Joe took over. He flipped the ship over, using the maneuvering rockets, then started backing in to a landing, using the jet in the tail to kill their still tremendous speed. The moon was below them now and Cargraves could see nothing but the stars, the stars and the crescent of the earth — a quarter of a million miles away and no help to him now.

He wondered if he would ever set foot on it again.

Morrie was studying the approach in the radar scope. "Checking out to nine zeros, Captain," he announced proudly and with considerable exaggeration. "It's in the bag."

The ground came up rapidly in the scope. When they were close and no longer, for the moment, dropping at all, Joe cut the main jet and flipped them over.

When he had collected, himself from the wild gyration of the somersault, Cargraves saw the nose jets reach out and splash in front of them and realized that the belly jets were in play, too, as the surge of power pushed the seat of the chair up against him. He felt almost as if he could land it himself, it seemed so much like his first wild landing on the New Mexico desert.

Then for one frantic second he saw the smooth, flat ground ahead of the splash of the plowing nose jets give way to a desolation of rocky ridges, sharp crevasses, loose and dangerous cosmic rubble… soil from which, if they landed without crashing, they could not hope to take off.

The sunlight had fooled them. With the sun behind them the badlands had cast no shadows they could see; the flat plain had appeared to stretch to the mountains ahead. These were no mountains, but they were quite sufficient to wreck the Galileo.

The horrible second it took him to size up the situation was followed by frantic action. With one hand he cut the automatic pilot; with the other he twisted violently on the knob controlling the tail jet. He slapped the belly jets on full.

Her nose lifted.

She hung there, ready to fall, kept steady on her jets only by her gyros. Then slowly, slowly, slowly the mighty tail jet reached out — so slowly that he knew at that moment that the logy response of the atoumatic pilot would never serve him for what he had to do next, which was to land her himself.

The Galileo pulled away from the surface of the moon.

"That was close," Morrie said mildly.

Cargrave swiped the sweat from his eyes and shivered.

He knew what was called for now, in all reason. He knew that he should turn the ship away from the moon, head her in the general direction of the earth and work out a return path, a path to a planet with an atmosphere to help a pilot put down his savage ship. He knew right then that he was not the stuff of heroes, that he was getting old and knew it.

But he hated to tell Morrie.

"Going to put her down on manual?" the boy inquired.

"Huh?"

"That's the only way we'll get her down on a strange field. I can see that now you've got to be able to see your spot at the last half minute — nose jet,and no radar."

"I can't do it, Morrie."

The younger man said nothing. He simply sat and stared ahead without expression.

"I'm going to head her back to earth, Morrie."

The boy gave absolutely no sign of having heard him. There was neither approval nor disapproval on his face, nor any faint suggestion.

Cargraves thought of the scene when Ross, blind and bandaged, had told him oft. Of Art, quelling his space sickness to get his pictures. He thought, too, of the hot and tiring days when he and Morrie had qualified for piloting together.

The boy said nothing, neither did he look at him.

These kids, these damn kids! How had he gotten up here, with a rocket under his hand and a cargo of minors to be responsible for? He was a laboratory scientist, not a superman. If it had been Ross, if Ross were a pilot — even where he now was, he shivered at the recollection of Ross's hairraising driving. Art was about as bad. Morrie was worse.

He knew he would never be a hot pilot — not by twenty years. These kids, with their casual ignorance, with their hot rod rigs, it was for them; piloting was their kind of a job. They were too young and too ignorant to care and their reflexes were not hobbled by second thoughts. He remembered Ross's words: "I'll go to the moon if I have to walk!"

"Land her, Morrie."

"Aye, aye, sir!"

The boy never looked, at him. He flipped her up on her tail, then let her drop slowly by easing off on the tail jet. Purely by the seat of his pants, by some inner calculation-for Cargraves could see nothing through the port but stars, and neither could the boy -he flipped her over again, cutting the tail jet as he did so.

The ground was close to them and coming up fast.

He kicked her once with the belly jets, placing them thereby over a smooth stretch of land, and started taking her down with quick blasts of the nose jets, while sneaking a look between blasts.

When he had her down so close that Cargraves was sure that he was going to land her on her nose, crushing in the port and killing them, he gave her one more blast which made her rise a trifle, kicked her level and brought her down on the belly jets, almost horizontal, and so close to the ground that Cargraves could see it ahead of them, out the port.

Glancing casually out the port, Morrie gave one last squirt with the belly jets and let her settle. They grated heavily and were stopped. The Galileo sat on the face of the moon.

"Landed, sir. Time: Oh-eight-threefour."

Cargraves drew in a breath. "A beautiful, beautiful landing, Morrie."

"Thanks, Captain."

Chapter 12 THE BARE BONES

ROSS AND ART WERE ALREADY out of their straps and talking loudly about getting out the space suits when Cargraves climbed shakily out of his chair — and then nearly fell. The lowered gravitation, one-sixth earth-normal, fooled him. He was used to weightlessness by now, and to the chest-binding pressure of high acceleration; the pseudo-normal weight of a one-g drive was no trouble, and maneuvering while strapped down was no worse than stunting in an airplane.

This was different and required a little getting used to, he decided. It reminded him a little of walking on rubber, or the curiously light-footed feeling one got after removing snow shoes or heavy boots.

Morrie remained at his post for a few moments longer to complete and sign his log. He hesitated over the space in the log sheet marked 'position'. They had taught him in school to enter here the latitude and longitude of the port of arrival — but what were the latitude and longitude of this spot?

The moon had its north and south poles just as definitely as the earth, which gave any spot a definite latitude, nor was longitude uncertain once a zero meridian was selected. That had been done; Tycho was to be the Greenwich of the moon.

But his navigation tables were tables for the earth.

The problem could be solved; he knew that. By spherical trigonometry the solutions of celestial triangles on which all navigation was based could be converted to the special conditions of Luna, but it would require tedious calculation, not at all like the precalculated short cuts used by all pilots in the age of aircraft and rocket. He would have to go back to the Marc St. Hilaire method, obsolete for twenty years, after converting laboriously each piece of data from earth reference terms to moon reference terms.

Well, he could do it later, he decided, and get Cargraves to check him. The face of the moon called him.

He joined the little group huddled around the port. In front of them stretched a dun and lifeless floor, breaking into jagged hills a few miles beyond them. It was hot, glaring hot, under the oblique rays of the sun, and utterly still. The earth was not in sight; they had dropped over the rim into the unknown side in the last minutes of the impromptu landing.

Instead of the brassy sky one might expect over such a scene of blistering desert desolation, a black dome of night, studded brilliantly with stars, hung over it. At least, thought Morrie, his mind returning to his problem in navigation, it would be hard to get lost here. A man could set a course by the stars with no trouble.

"When are we going out?" demanded Art.

"Keep your shirt on," Ross told him and turned to Cargraves. "Say, Doc, that was sure a slick landing. Tell me-was that first approach just a look around on manual, or did you feed that into the automatic pilot, too?"

"Neither one, exactly." He hesitated. It had been evident from their first remarks that neither Ross nor Art had been aware of the danger, nor of his own agonizing indecision. Was it necessary to worry them with it now? He was aware that, if he did not speak, Morrie would never mention it.

That decided him. The man-man was the word, he now knew, not "boy" -was entitled to public credit. "Morrie made that landing," he informed them. "We had to cut out the robot and Morrie put her down."

Ross whistled.

Art said, "Huh? What did you say? Don't tell me that radar cut out — I checked it six ways."

"Your gadgets all stood up," Cargraves assured him, "but there are some things a man can do that a gadget can't. This was one of them." He elaborated what had happened.

Ross looked Morrie up and down until Morrie blushed. "Hot Pilot I said, and Hot Pilot it is," Ross told him. "But I'm glad I didn't know." He walked aft, whistling Danse Macabre, off key again, and began to fiddle with his space suit.

"When do we go outside?," Art persisted.

"Practically at once, I suppose."

"Whoopee!"

"Don't get in a hurry. You might be the man with the short straw and have to stay with the ship."

"But… Look, Uncle, why does anybody have to stay with the ship? Nobody's going to steal it."

Cargraves hesitated. With automatic caution, he had intended always to keep at least one man in the ship, as a safety measure. On second thought there seemed no reason for it. A man inside the ship could do nothing for a man outside the ship without first donning a pressure suit and coming outside. "We'll compromise," he said. "Morrie and I — no, you and I." He realized that he could not risk both pilots at once.

"You and I will go first. If it's okay, the others can follow us. All right, troops," he said, turning. "Into your space suits!"

They helped each other into them, after first applying white sunburn ointment liberally over the skin outside their goggles. It gave them an appropriate out-of-this-world appearance. Then Cargraves had them cheek their suits at twice normal pressure while he personally inspected their oxygen-bottle back packs. All the while they were checking their walky-talkies; ordinary conversation could be heard, but only faintly, through the helmets as long as they were in the air of the ship; the radios were louder.

"Okay, sports," he said at last. "Art and I will go into the lock together, then proceed around to the front, where you can see us. When I give you the high sign, come on out. One last word: stay together. Don't get more than ten yards or so away from me. And remember this. When you get out there, every last one of you is going to want to see how high you can jump; I've heard you talking about it. Well, you can probably jump twenty-five or thirty feet high if you try. But don't do it.

"Why not?" Ross's voice was strange, through the radio.

"Because if you land on your head and crack your helmet open, we'll bury you right where you fall! Come on, Morrie. No, sorry — I mean `Art'."

They crowded into the tiny lock, almost filling it. The motor which drove the impeller to scavenge the air from the lock whirred briefly, so little was the space left unoccupied by their bodies, then sighed and stopped. The scavenger valve clicked into place and Cargraves unclamped the outer door.

He found that he floated, rather than jumped, to the ground. Art came after him, landing on his hands and knees and springing lightly up.

"Okay, kid?"

"Swell!"

They moved around to the front, boots scuffing silently in the loose soil. He looked at it and picked up a handful to see if it looked like stuff that had been hit by radioactive blast. He was thinking of Morrie's theory. They were on the floor of a crater; that was evident, for the wall of hills extended all around them. Was it an atomic bomb crater?

He could not tell. The moon soil did have the boiled and bubbly look of atom-scorched earth, but that might have been volcanic action, or, even, the tremendous heat of the impact of a giant meteor. Well, the problem could wait.

Art stopped suddenly. "Say! Uncle, I've got to go back."

"What's the matter?"

"I forgot my camera!"

Cargraves chuckled. "Make it next time. Your subject won't move." Art's excitement had set a new high, he decided; there was a small school of thought which believed he bathed with his camera.

Speaking of baths, Cargraves mused, I could stand one. Space travel had its drawbacks. He was beginning to dislike his own smell, particularly when it was confined in a space suit!

Ross and Morrie were waiting for them, not patiently, at the port. Their radio voices, blanked until now by the ship's sides, came clearly through the quartz. "How about it, Doc?," Ross sang out, pressing his nose to the port.

"Seems all right," they heard him say.

"Then here we come!"

"Wait a few minutes yet. I want to be sure."

"Well — okay." Ross showed his impatience, but discipline was no longer a problem. Art made faces at them, then essayed a little dance, staying close to the ground but letting each step carry him a few feet into the air — or, rather, vacuum. He floated slowly and with some grace. It was like a dance in slow motion, or a ballet under water.

When he started rising a little higher and clicking his boot heels together as he sailed, Cargraves motioned for him to stop. "Put down your flaps, chum," he cautioned, "and land. You aren't Nijinsky."

"Who's Nijinsky?"

"Never mind. Just stay planted. Keep at least one foot on the ground. Okay, Morrie," he called out, "come on out. You and Ross."

The port was suddenly deserted.

When Morrie set foot on the moon and looked around him at the flat and unchanging plain and at the broken crags beyond he felt a sudden overwhelming emotion of tragedy and of foreboding welling up inside him. "It's the bare bones," he muttered, half to himself, "the bare bones of a dead world."

"Huh?" said Ross. "Are you coming, Morrie?"

"Right behind you."

Cargraves and Art had joined them. "Where to?" asked Ross, as the captain came up.

"Well, I don't want to get too far from the ship this first time," Cargraves declared. "This place might have some dirty tricks up its sleeve that we hadn't figured on. How much pressure you guys carrying?"

"Ship pressure."

"You can cut it down to about half that without the lower pressure bothering you. It's oxygen, you know."

"Let's walk over to those hills," Morrie suggested. He pointed astern where the rim of the crater was less than half a mile from the ship. It was the sunward side and the shadows stretched from the rim to within a hundred yards or so of the ship.

"Well, part way, anyhow. That shade might feel good. I'm beginning to sweat."

"I think," said Morrie, "if I remember correctly, we ought to be able to see earth from the top of the rim. I caught a flash of it, just as we inverted. We aren't very far over on the back side."

"Just where are we?"

"I'll have to take some sights before I can report," Morrie admitted. "Some place west of Ocean us Procellarum and near the equator."

"I know that."

"Well, if you're in a hurry, Skipper, you had better call up the Automobile Club."

"I'm in no hurry. Injun not lost — wigwam lost. But I hope the earth is visible from there. It would be a good spot, in that case, to set up Art's antenna, not too far from the ship. Frankly, I'm opposed to moving the ship until we head back, even if we miss a chance to try to contact earth."

They were in the shadows now, to Cargraves' relief. Contrary to popular fancy, the shadows were not black, despite the lack of air-dispersed sunlight. The dazzle of the floor behind them and the glare of the hills beyond all contrived to throw quite a lot of reflected light into the shadows.

When they had proceeded some distance farther toward the hills, Cargraves realized that he was not keeping his party together too well. He had paused to examine a place, discovered by Ross, where the base rock pushed up through the waste of the desert floor, and was trying in the dim light to make out its nature, when he noticed that Morrie was not with them.

He restrained his vexation; it was entirely possible that Morrie, who was in the lead, had not seen them stop. But he looked around anxiously.

Morrie was about a hundred yards ahead, where the first folds of the hills broke through. "Morrie!"

The figure stood up, but no answer came over the radio. He noticed then that Morrie was veering, weaving around. "Morrie! Come back here! Are you all right?"

"All right? Sure, I'm all right." He giggled.

"Well, come back here."

"Can't come back. I'm busy — I've found it!" Morrie took a careless step, bounded high in the air, came down, and staggered.

"Morrie! Stand still." Cargraves was hurrying toward him.

But he did not stand still. He began bounding around, leaping higher and higher. "I've found it!" he shrieked. "I've found it!" He gave one last bound and while he floated lazily down, he shouted, "I've found… the bare bones-" His voice trailed off. He lit feet first, bounced through a complete forward flip and collapsed.

Cargraves was beside him almost as he fell, having himself approached in great flying leaps.

First the helmet — no, it was not cracked. But the boy's eyes stared out sightlessly. His head lolled, his face was gray.

Cargraves gathered him up in his arms and began to run toward the Galileo. He knew the signs though he had seen it only in the low-pressure chamber used for pilot training — anoxia! Something had gone wrong; Morrie was starved for oxygen. He might die before he could be helped, or, still worse, he might live with his brain permanently damaged, his fine clear intellect gone.

It had happened before that way, more than once during the brave and dangerous days when man was conquering high-altitude flying.

The double burden did not slow him down. The two together, with their space suits, weighed less than seventy pounds. It was just enough to give him stability.

He squeezed them into the lock, holding Morrie close to his chest and waited in agonizing impatience as the air hissed through the valve. All his strength would not suffice to force that door open until the pressure equalized.

Then he was in and had laid him on the deck. Morrie was still out. He tried to remove the suit with trembling, glove-hampered fingers, then hastily got out of his own suit and unclamped Morrie's helmet. No sign of life showed as the fresh air hit the patient.

Cussing bitterly he tried to give the boy oxygen directly from his suit but found that the valve on Morrie's suit, for some reason, refused to respond. He turned then to his own suit, disconnected the oxygen line and fed the raw oxygen directly to the boy's face while pushing rhythmically on his chest.

Morrie's eyes flickered and he gasped.

"What happened? Is he all right?" The other two had come through the lock while he worked.

"Maybe he is going to be all right. I don't know."

In fact he came around quickly, sat up and blinked his eyes. "Whassa matter?" he wanted to know.

"Lie down," Cargraves urged and put a hand on his shoulder.

"All right… hey! I'm inside."

Cargraves explained to him what had happened. Morrie blinked. "Now that's funny. I was all right, except that I was feeling exceptionally fine-"

"That's a symptom."

"Yes, I remember. But it didn't occur to me then. I had just picked up a piece of metal with a hole in it, when-"

"A what? You mean worked metal? Metal that some one made-"

"Yes, that's why I was so ex-" He stopped and looked puzzled. "But it couldn't have been."

"Possible. This planet might have been inhabited… or visited.

"Oh, I don't mean that." Morrie shrugged it off, as if it were of no importance. "I was looking at it, realizing what it meant, when a little baldheaded short guy came up and . . but it couldn't have been."

"No," agreed Cargraves, after a short pause, "it couldn't have been. I am afraid you were beginning to have anoxia dreams by then. But how about this piece of metal?"

Morrie shook his head. "I don't know," he admitted "I remember holding it and looking at it, just as clearly as I remember anything, ever. But I remember the little guy just as well. He was standing there and there were others behind him and I knew that they were the moon people. There were buildings and trees." He stopped. "I guess that settles it."

Cargraves nodded, and turned his attention to Morrie's oxygen pack. The valve worked properly now. There was no way to tell what had been wrong, whether it had frosted inside when Morrie walked on into the deeper shadows, whether a bit of elusive dirt had clogged it, or whether Morrie himself had shut it down too far when he had reduced pressure at Cargraves' suggestion and thereby slowly suffocated himself. But it must not happen again. He turned to Art.

"See here, Art. I want to rig these gimmicks so that you can't shut them off below a certain limit. Mmmm . . no, that isn't enough. We need a warning signal too — something to warn the wearer if his supply stops. See what you can dream up."

Art got the troubled look on his face that was habitual with him whenever his gadget-conscious mind was working at his top capacity. "I've got some peanut bulbs among the instrument spares," he mused. "Maybe I could mount one on the neck ring and jimmy it up so that when the flow stopped it would-" Cargraves stopped listening; he knew that it was only a matter of time until some unlikely but perfectly practical new circuit would be born.

Chapter 13 SOMEBODY IS NUTS!

THE TOP OF THE RING OF HILLS showed them the earth, as Morrie had thought. Cargraves, Art, and Ross did the exploring, leaving Morrie back to recuperate and to work on his celestial navigation problem. Cargraves made a point of going along because he did not want the two passengers to play mountain goat on the steep crags — a great temptation under the low gravity conditions.

Also, he wanted to search over the spot where Morrie had had his mishap. Little bald men, no; a piece of metal with a hole in it — possible. If it existed it might be the first clue to the greatest discovery since man crawled up out of the darkness and became aware of himself.

But no luck — the spot was easy to find; footprints were new to this loose soil! But search as they might, they found nothing. Their failure was not quite certain, since the gloom of the crater's rim still hung over the spot. In a few days it would be daylight here; he planned to search again.

But it seemed possible that Morrie might have flung it away in his anoxia delirium, if it ever existed. It might have carried two hundred yards before it fell, and then buried itself in the loose soil.

The hill top was more rewarding. Cargraves told Art that they would go ahead with the attempt to try to beam a message back to earth… and then had to restrain him from running back to the ship to get started. Instead they searched for a place to install the "Dog House".

The Dog House was a small pre-fab building, now resting in sections fitting snugly to the curving walls of the Galileo. It had been Ross's idea and was one of the projects he and Art had worked on during the summer while Cargraves and Morrie were training. It was listed as a sheetmetal garage, with a curved roof, not unlike a Quonset hut, but it had the special virtue that each panel could be taken through the door of the Galileo.

It was not their notion simply to set it up on the face of the moon; such an arrangement would have been alternately too hot and then too cold. Instead it was to be the frame for a sort of tailormade cave.

They found a place near the crest, between two pinnacles of rock with a fairly level floor between and of about the right size. The top of one of the crags was easily accessible and had a clear view of earth for line-of-sight, beamed transmission. There being no atmosphere, Art did not have to worry about horizon effects; the waves would go where he headed them. Having settled on the location, they returned for tools and supplies.

Cargraves and Ross did most of the building of the Dog House. It would not have been fair to Art to require him to help; he was already suffering agonies of indecision through a desire to spend all his time taking pictures and an equally strong desire to get his set assembled with which he hoped to raise earth. Morrie, at Cargraves' request, stayed on light duty for a few days, cooking, working on his navigation, and refraining from the strain of spacesuit work.

The low gravitational pull made light work of moving the building sections, other materials, and tools to the spot. Each could carry over five hundred pounds, earth-weight, of the total each trip, except on the steeper portions of the trail where sheer bulk and clumsiness required them to split the loads.

First they shoveled the sandy soil about in the space between the two rocks until the ground was level enough to receive the metal floor, then they assembled the little building in place. The work went fast; wrenches alone were needed for this and the metal seemed light as cardboard. When that was done, they installed the "door," a steel drum, barrel-sized, with an airtight gasketed head on each end.

Once the door was in place they proceeded to shovel many earth-tons of lunar soil down on top of the roof, until the space between the rock walls was filled, some three feet higher than the roof of the structure. When they were finished, nothing showed of the Dog House but the igloo-style door, sticking out between the rocky spires. The loose soil of Luna, itself a poor conductor of heat, and the vacuum spaces in it, would be their insulation.

But it was not yet airtight. They installed portable, temporary lights, then dragged in sealed canisters and flat bales. From the canisters came sticky, tacky sheets of a rubbery plastic. This they hung like wallpaper, working as rapidly as possible in order to finish before the volatiles boiled out of the plastic. They covered ceiling, walls and floor, then from the bales they removed aluminum foil, shiny as mirrors, and slapped it on top of the plastic, all except the floor, which was covered with heavier duraluminum sheets.

It was ready for a pressure test. There were a few leaks to patch and they were ready to move in. The whole job had taken less than two 'days'.

The Dog House was to be Art's radio shack, but that was not all. It was to be also a storeroom for everything they could possibly spare from the ship, everything not necessary to the brief trip back. The cargo space would then be made available for specimens to take back to earth, even if the specimens were no more than country rock, lunar style.

But to Cargraves and to the three it was more than a storeroom, more than a radio shack. They were moving their personal gear into it, installing the hydroponic tank for the rhubarb plants to make the atmosphere self-refreshing, fitting it out as completely as possible for permanent residence.

To them it was a symbol of man's colonization of this planet, his intention to remain permanently, to fit it to his needs, and wrest a living from it.

Even though circumstances required them to leave it behind them in a few days, they were declaring it to be their new home, they were hanging up their hats.

They celebrated the completion of it with a ceremony which Cargraves had deliberately delayed until the Dog House was complete. Standing in a semicircle in front of the little door, they were addressed by Cargraves:

"As commander of this expedition, duly authorized by a commission of the United Nations and proceeding in a vessel of United States registry, I take possession of this planet as a colony, on behalf of the United Nations of earth in accordance with the laws thereof and the laws of the United States. Run `em up, Ross!"

On a short and slender staff the banner of the United Nations and the flag of the United States whipped to the top. No breeze disturbed them in that airless waste — but Ross had taken the forethought to stiffen the upper edges of each with wire; they showed their colors.

Cargraves found himself gulping as he watched the flag and banner hoisted. Privately he thought of this little hole in the ground as the first building of Luna City. He imagined that in a year or so there would be dozens of such cave dwellings, larger and better equipped, clustered around this spot. In them would live prospectors, scientists, and tough construction workers. Workers who would be busy building the permanent Luna City down under the floor of the crater, while other workers installed a great rocket port up on the surface.

Nearby would be the beginnings of the Cargraves Physical Laboratory, the Galileo Lunar Observatory.

He found that tears were trickling down his cheeks; he tried futilely to wipe them away through his helmet. He caught Ross's eye and was embarrassed. "Well, sports," he said with forced heartiness, "let's get to work. Funny," he added, looking at Ross, "what effect a few little symbols can have on a man."

Ross looked from Cargraves to the bits of gay bunting. "I don't know," he said slowly. "A man isn't a collection of chemical reactions; he is a collection of ideas."

Cargraves stared. His "boys" were growing up!

"When do we start exploring?" Morrie wanted to know. "Any reason why we shouldn't get going, now that the Dog House is finished ?"

"Before long, I think," Cargraves answered uncomfortably. He had been stalling Morrie's impatience for the last couple of days; Morrie was definitely disappointed that the rocket ship was not to be used, as originally planned, for point to point exploration. He felt confident that he could repeat his remarkable performance in making the first landing.

Cargraves, on the other hand, was convinced that a series of such landings would eventually result in a crash, leaving them marooned to starve or suffocate even if they were not killed in the crash. Consequently he had not budged from his decision to limit exploradon to trips on foot, trips which could not be more than a few hours in duration.

"Let's see how Art is getting on," he suggested. "I don't want to leave him behind — he'll want to take pictures. On the other hand, he needs to get on with his radio work. Maybe we can rally around and furnish him with some extra hands."

"Okay." They crawled through the air lock and entered the Dog House. Art and Ross had already gone inside.

"Art," Cargraves inquired when he had taken off his clumsy suit, "how long will it be until you are ready to try out your Earth sender?"

"Well, I don't know, Uncle. I never did think we could get through with the equipment we've got. If we had been able to carry the stuff I wanted-"

"You mean if we had been able to afford it," put in Ross. "Well… anyhow, I've got another idea. This place is an electronics man's dream — all that vacuum! I'm going to try to gimmick up some really big power tubes — only they won't be tubes. I can just mount the elements out in the open without having to bother with glass. It's the easiest way to do experimental tube design anybody ever heard of."

"But even so," Morrie pointed out, "that could go on indefinitely. Doc, you've got us scheduled to leave in less than ten earth-days. Feel like stretching the stay?" he added hopefully.

"No, I don't," Cargraves stated. "Hmmm… Art, let's skip the transmitter problem for a moment. After all, there isn't any law that says we've got to establish radio contact with the earth. But how long would it take to get ready to receive from the earth?"

"Oh, that!" said Art. "They have to do all the hard work for that. Now that I've got everything up here I can finish that hook-up in a couple of hours."

"Fine! We'll whip up some lunch."

It was nearer three hours when Art announced he was ready to try. "Here goes," he said. "Stand by."

They crowded around. "What do you expect to get?" Ross asked eagerly.

Art shrugged. "Maybe nothing. NAA, or Berlin Sender, if they are beamed on us. I guess Radio Paris is the best bet, if they are still trying for us." He adjusted his controls with the vacant stare that always came over him.

They all kept very quiet. If it worked, it would be a big moment in history, and they all knew it.

He looked suddenly startled.

"Got something?"

He did not answer for a moment. Then he pushed a phone off one ear and said bitterly, "One of you guys left the power on your walky-talky."

Cargraves checked the suits himself. "No, Art, they are all dead."

Art looked around the little room. "But… but . . there's nothing else it could be. Somebody is nuts!"

"What's the matter?"

"What's the matter? I'm getting a power hum from somewhere and it's from somewhere around here… close!"

Chapter 14 NO CHANCE AT ALL!

"ARE YOU sure?," CARGRAVES demanded.

"Of course I'm sure!"

"It's probably Radio Paris," Ross suggested. "You don't know how far away it is."

Art looked indignant. "Suppose you sit down here and try your luck, Mr. de Forrest. It was close. It couldn't have been an earth station."

"Feed back?"

"Don't be silly!" He tried fiddling with his dials a bit more. "It's gone now."

"Just a minute," said Cargraves. "We've got to be sure about this. Art, can you get any sort of a transmitter rigged?"

"Not very easy, but yes, I can, too. The homing set is all set to go." The homing set was a low-power transmitter intended simply for communication between the Dog House and any member of the party outside in a suit.

"Gimme half a second to hook it up." It took more than half a second but shortly he was leaning toward the microphone, shouting, "Hello! Hello! Is there anybody there! Hello!"

"He must have been dreaming," Morrie said quietly to Cargraves. "There couldn't be anybody out there."

"Shut up," Art said over his shoulder and went back to calling, "Hello! Hello, hello."

His expression suddenly went blank, then he said sharply, "Speak English! Repeat!"

"What was it?" demanded Cargraves, Ross, and Art.

"Quiet… please!" Then, to the mike, "Yes, I hear you.

"Who is this? What? Say that again?… This is the Space Ship Galileo, Arthur Mueller transmitting. Hold on a minute."

Art flipped a switch on the front of the panel. "Now go ahead. Repeat who you are."

A heavy, bass voice came out of the transmitter: "This is Lunar Expedition Number One," the voice said. "Will you be pleased to wait one minute while I summon our leader?"

"Wait a minute," yelled Art. "Don't go away!" But the speaker did not answer.

Ross started whistling to himself. "Stop that whistling," Art demanded.

"Sorry," Ross paused, then added, "I suppose you know what this means?"

"Huh? I don't know what anything means!"

"It means that we are too late for the senior prizes. Somebody has beaten us to it."

"Huh? How do you figure that?"

"Well, it's not certain, but it's likely."

"I'll bet we landed first."

"We'll see. Listen!" It was the speaker again, this time a different voice, lighter in timbre, with a trace of Oxford accent. "Are you there? This is Captain James Brown of the First Lunar Expedition. Is this the Rocket Ship Galileo?"

Cargraves leaned over to the mike. "Rocket Ship Galileo, Captain Cargraves speaking. Where are you?"

"Some distance away, old chap. But don't worry. We are locating you. Keep sending, please."

"Let us know where we are in reference to you."

"Do not worry about that. We will come to you. Just remain where you are and keep sending."

"What is your lunar latitude and longitude?"

The voice seemed to hesitate, then went on, "We have you located now. We can exchange details later. Good-by."

Thereafter Art shouted "hello" until he was hoarse, but there was no answer. "Better stay on the air, Art," Cargraves decided. "Ross and I will go back to the ship. That's what they will see. I don't know, though. They might not show up for a week." He mused. "This presents a lot of new problems."

"Somebody ought to go to the ship," Morrie pointed out, "without waiting. They may be just coming in for a landing. They may show up any time."

"I don't think it was ship transmission," said Art, then turned back to his microphone.

Nevertheless it was decided that Cargraves and Ross would go back to the ship. They donned their suits and crawled through the air lock, and had no more than started down the steep and rocky slope when Ross saw the rocket.

He did not hear it, naturally, but he had glanced back to see if Cargraves was behind him. "Look!" he called into his helmet mike, and pointed.

The ship approached them from the west, flying low and rather slowly. The pilot was riding her on her jet, for the blast shot more downward than to the stern. "We had better hurry!," Ross shouted, and went bounding ahead.

But the rocket did not come in for a landing. It nosed down, forward jets driving hard against the fall, directly toward the Galileo. At an altitude of not more than five hundred feet the pilot kicked her around, belly first, and drove away on his tail jet.

Where the Galileo lay, there was a flash, an utterly silent explosion, and a cloud of dust which cleared rapidly away in the vacuum. The sound reached them through their feet, after a long time — it seemed to them.

The Galileo lay on her side, a great gaping hole in her plates. The wound stretched from shattered view port to midships.

Cargraves stood perfectly still, staring at the unbelievable. Ross found his voice first. "They gave us no chance," he said, shaking both fists at the sky. "No chance at all!"

Chapter 15 WHAT POSSIBLE REASON?

HE TURNED AND STUMBLED back up the slope to where Cargraves still stood forlorn and motionless. "Did you see that, Doc?" he demanded. "Did you see that? The dirty rats bombed us — they bombed us. Why? Why, Doc? Why would they do such a thing?"

Tears were streaming down his face. Cargraves patted him clumsily. "I don't know," he said slowly. "I don't know," he repeated, still trying to readjust himself to the shock.

"Oh, I want to kill somebody!"

"So do I." Cargraves turned away suddenly. "Maybe we will. Come on — we've got to tell the others." He started up the slope.

But Art and Morrie were already crawling out of the lock when they reached it. "What happened?" Morrie demanded. "We felt a quake."

Cargraves did not answer directly. "Art, did you turn off your transmitter?"

"Yes, but what happened?"

"Don't turn it on again. It will lead them to us here." He waved a hand out at the floor of the crater. "Look!"

It took a minute or two for what they saw to sink in. Then Art turned helplessly to Cargraves. "But, Uncle," he pleaded, "what happened? Why did the ship blow up?"

"They blitzed us," Cargraves said savagely. "They bombed us out. If we had been aboard they would have killed us. That's what they meant to do."

"But why?"

"No possible reason. They didn't want us here." He refrained from saying what he felt to be true: that their unknown enemy had failed only temporarily in his intent to kill. A quick death by high explosive would probably be a blessing compared with what he felt was in store for them marooned… on a dead and airless planet.

How long would they last? A month? Two months? Better by far if the bomb had hit them.

Morrie turned suddenly back toward the lock. "What are you doing, Morrie?"

"Going to get the guns!"

"Guns are no good to us."

But Morrie had not heard him. His antenna was already shielded by the metal drum.

Ross said, "I'm not sure that guns are no good, Doc."

"Huh? How do you figure?"

"Well, what are they going to do next? Won't they want to see what they've done? They didn't even see the bomb hit; they were jetting away."

"If they land we'll hijack their ship!"

Art came up closer. "Huh? Hey, Ross, that's tellin' `em! We'll get them! We'll show them! Murderers!" His words tumbled over one another, squeaking and squawking in their radios.

"We'll try!" Cargraves decided suddenly. "We'll try. If they land we won't go down without a fight. We can't be any worse off than we are." He was suddenly unworried; the prospect of a gun fight, something new to his experience, did not upset him further. It cheered him. "Where do you think we ought to hide, Ross? In the Galileo?"

"If we have to — There they come!" The rocket had suddenly appeared over the far rim.

"Where's Morrie?"

"Here." He came up from behind them, burdened with the two rifles and the revolver. "Here, Ross, you take… hey!" He had caught sight of the strangers' rocket. "We've got to hurry," he said.

But the rocket did not land. It came down low, dipping below the level of the crater's rim, then scooted on its tail across near the wreckage of the Galileo, up, out, and away.

"And we didn't even get a crack at them," Morrie said bitterly.

"Not yet," Ross answered, "but I think they'll be back. This was a second bombing run, sure as anything, in case they missed the first time. They'll still come back to see what they've done. How about it, Doc?"

"I think they will," Cargraves decided. "They will want to look over our ship and to kill us off if they missed any of us. But we don't go to the Galileo."

"Why not?"

"We haven't time. They will probably turn as fast as they can check themselves, come back and land. We might be caught out in the open."

"That's a chance we'll have to take."

It was decided for them. The rocket appeared again from the direction it had gone. This time it was plainly a landing trajectory. "Come on!" shouted Cargraves, and went careening madly down the slope.

The rocket landed about halfway between the Galileo and the shadows, now close to the foot of the hills, for the sun had climbed four 'days' higher in the sky. The ship was noticeably smaller than the Galileo even at that distance.

Cargraves did not notice such details. His immediate intent was to reach the door of the craft before it opened, to be ready to grapple with them as they came out.

But his good sense came to his aid before he was out in the sunlight. He realized he had no gun. Morrie had kept one, Ross had the other, and Art was waving the revolver around. He paused just short of the dazzling, sunlighted area. "Hold it," he ordered. "I don't think they have seen us. I don't think they will — yet."

"What are your plans?" Morrie demanded.

"Wait for them to get out, then rush the ship — after they get well away from it. Wait for my signal."

"Can't they hear us?"

"Maybe. If they are on this frequency, we're goners. Switch off your talkies, everybody." He did so himself; the sudden silence was chilling.

The rocket was almost tail towards them. He now saw three suit-clad figures pile out from a door that swung out from the side. The first looked around briefly, but he appeared not to see them. Since it was almost certain that he was wearing sun goggles, it was doubtful if he could see much inside the shadows.

He motioned to the other two and moved toward the Galileo, using a long, loping gallop that the Galileo's crew had learned was the proper way to walk on the moon. That alone was enough to tell Cargraves that these men, their enemies, were not grounding on the moon for the first time.

Cargraves let them get all the way to the Galileo, and, in fact, to disappear behind it, before he got up from where he had been crouching. "Come on!" he yelled into a dead microphone, and slammed ahead in great leaps that took him fifty feet at a stride.

The outer door of the lock stood open. He swarmed into it and closed it after him. It clamped by means of a wheel mounted in its center; the operation was obvious. That done he looked around. The tiny lock was dimly illuminated by a pane of glass set in the inner door. In this feeble light he looked and felt for what he needed next — the spill valve for air.

He found it and heard the air hissing into the compartment. He leaned his weight against the inner door and waited.

Suddenly it gave way; he was in the rocket and blinking his eyes.

There was a man still seated in the pilot's chair. He turned his head, and appeared to say something. Cargraves could not hear it through his helmet and was not interested. Taking all advantage of the low gravity he dived at the man and grappled him about the head and shoulders.

The man was too surprised to put up much of a fight — not that it would have mattered; Cargraves felt ready to fight anything up to and including tigers.

He found himself banging the man's head against the soft padding of the acceleration chair. That, he realized, was no good. He drew back a gauntleted fist and buried it in the pit of the man's stomach.

The man grunted and seemed to lose interest. Cargraves threw a short jab straight to the unguarded chin. No further treatment was needed. Cargraves pushed him down to the floor, noticing without interest that the belt of his victim carried a holster with what appeared to be a heavy-caliber Mauser, and then stood on him. He looked out the conning port.

There was a figure collapsed on the ground near the broken bow of the Galileo, whether friend or foe it was impossible to say. But another was standing over him and concerning him there was no doubt. It was not alone the unfamiliar cut of his space suit, it was the pistol in his hand. He was firing in the direction of the rocket in which Cargraves stood.

He saw the blaze of a shot, but no answering report. Another shot followed it — and this one almost deafened him; it struck the ship containing him, making it ring like a giant bell.

He was in a dilemma. He wanted very urgently to join the fight; the weapon on the person of his disabled opponent offered a way. Yet he could not leave his prisoner inside the ship while he went out, nor did he, even in the heat of fighting, have any stomach for killing an unconscious man.

He had already decided, in the space of a breath, to slug his man heavily and get outside, when the fast drama beyond the port left him no time. The spacesuited stranger at the bow of the Galileo was suddenly without a helmet. Around his neck was only a jagged collar.

He dropped his pistol and clutched at his face. He stood there for a moment, as if puzzled by his predicament, took two hesitant steps forward, and sank gently to the ground.

He thrashed around a bit but did not get up. He was still convulsing when a third man appeared around the end of the ship. He did not last long. He appeared confused, unable to comprehend the turn of events, which was quite likely, in view of the ghostly stillness of the gun fight. It was entirely possible that he never knew what hit him, nor why. He was still reaching for his iron when he was struck twice, first in the chest and the second shot lower down.

He bowed forward, until his helmet touched the ground, then collapsed.

Cargraves heard a noise behind him. Snatching the gun he had taken to the ready, and turning, he watched the door of the air lock open.

It was Art, wild-eyed and red. "Any more in here?" the boy called out to him, while swinging his revolver in a wide arc. His voice reached Cargraves faintly, muffled by their two helmets.

"No. Turn on your radio," he shouted back, then realized his own was still off. Switching it on, he repeated his statement.

"Mine is on," Art replied. "I turned it on while the lock filled. How are they doing outside?"

"All right, it looks like. Here, you guard this guy." He pointed down at his feet. "I'm going outside."

But it was unnecessary. The lock opened again and both Ross and Morrie bulged out of it. Cargraves wondered absently how the two had managed to squeeze into that coffin-like space.

"Need any help?" demanded Morrie.

"No. It doesn't look like you guys did, either."

"We ambushed `em," Ross said jubilantly. "Hid in the shadow of the ship and picked `em off as they showed up. All but the second one. He darn near got us before we got him. Do you know," he went on conversationally, as if he had spent a lifetime shooting it out, "it's almost impossible to sight a gun when you're wearing one of these fish bowls over your head?"

"Hmm… You made out all right."

"Pure luck. Morrie was shooting from the hip."

"I was not," Morrie denied. "I aimed and squeezed off every shot."

Cargraves cautioned them to keep an eye on the prisoner, as he wanted to take a look around outside. "Why," demanded Art, "bother to guard him? Shoot him and chuck him out, I say."

"Cool down," Cargraves told him. "Shooting prisoners isn't civilized."

Art snorted. "Is he civilized?"

"Shut up, Art. Morrie — take charge." He shut himself in the air lock.

The examination took little time. Two of the strangers had received wounds which would have been fatal in any case, it seemed to him, but their suits were deflated in any event. The third, whose helmet had been struck, was equally beyond help. His eyes bulged sightlessly at the velvet sky. Blood from his nose still foamed. He was gone — drowned in vacuum.

He went back to the little ship, without even a glance at the dismal pile of junk that had been the sleekly beautiful Galileo.

Back in the ship, he threw himself in one of the acceleration chairs and sighed. "Not so bad," he said. "We've got a ship."

"That's what you think," Art said darkly. "Take a look at that instrument board."

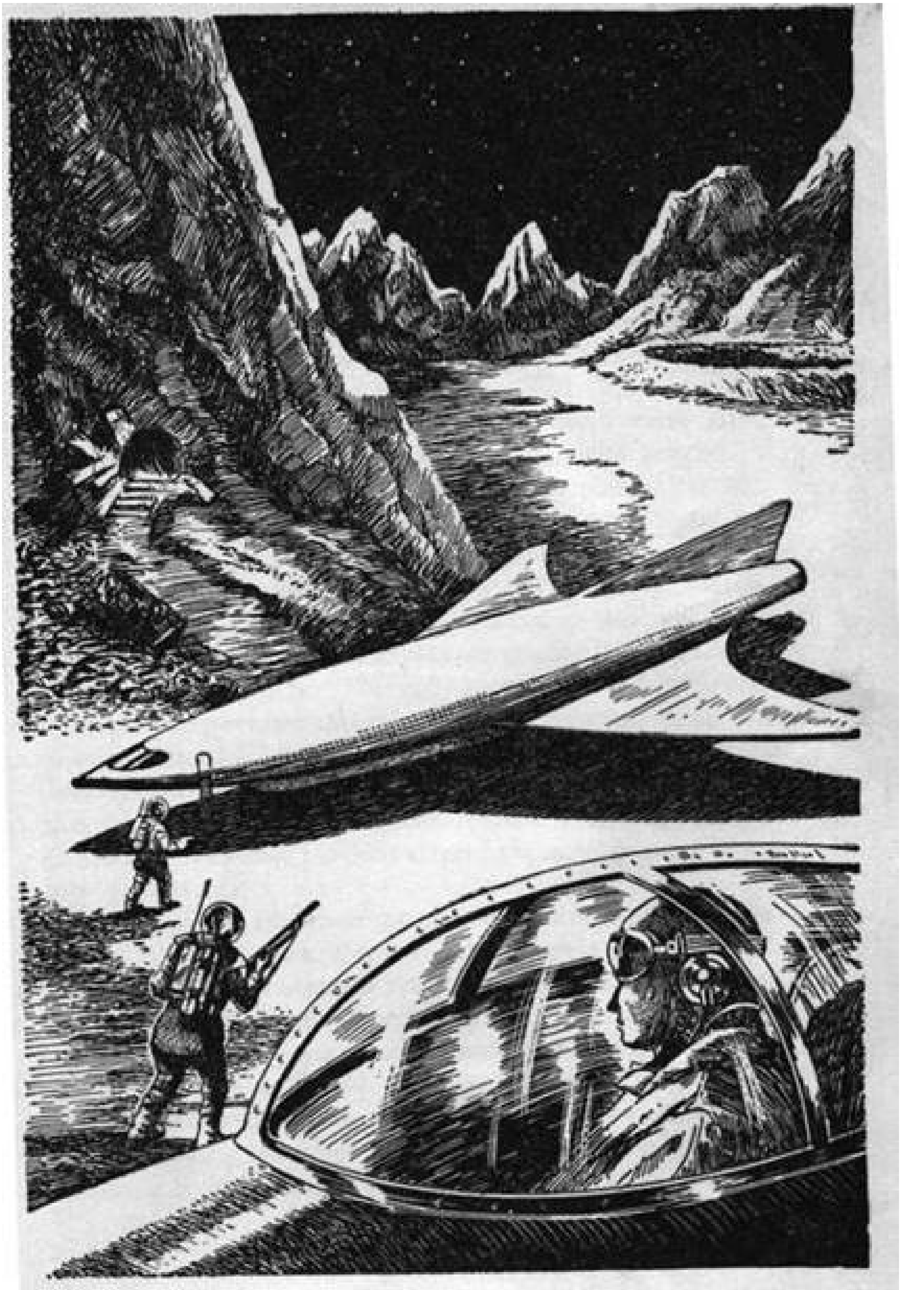

Chapter 16 THE SECRET BEHIND THE MOON

"WHAT?" SAID CARGRAVES and looked where he was pointing.

"This is no space ship," Art said bitterly. "This thing is a jeep. Look at that." He indicated two gauges. One was marked SAUERSTOFF, the other ALKOHOL. "Oxygen and alcohol. This thing is just a kiddy wagon."

"Maybe those are just for the maneuvering jets," Cargraves answered, not very hopefully.

"Not a chance, Doc," Ross put in. "I've already given her the once-over, with Art translating the Jerry talk for me. Besides, did you notice that this boat hasn't any wings of any sort? It's purely a station wagon for the moon. Look, we've got company."

The prisoner had opened his eyes and was trying to sit up. Cargraves grabbed him by a shoulder, yanked him to his feet, and shoved him into the chair he had just vacated. "Now, you," he snapped. "Talk!"

The man looked dazed and did not answer. "Better try German on him, Uncle," Art suggested. "The labels are all in German."

Cargraves reached far back into his technical education and shifted painfully to German. "What is your name?"

"My name is Friedrich Lenz, sergeant-technician of the second class. To whom am I speaking?"

"Answer the questions you are asked. Why did you bomb our ship?"

"In line of duty. I was ordered."

"That is not a reason. Why did you bomb a peaceful ship?" The man simply looked sullen. "Very well," Cargraves went on, still speaking in German. "Get the air lock open, Art. We'll throw this trash out on the face of the moon."

The self-styled sergeant-technician suddenly began talking very rapidly. Cargraves wrinkled his forehead. "Art," he said, returning to English, "you'll have to help me out. He's slinging it too fast for me."

"And translate!" protested Ross. "What does he say?"

"I'll try," Art agreed, then shifted to German. "Answer the question over again. Speak slowly."

"Ia-" the man agreed, addressing his words to Cargraves.

"Herr Kapitan!," Art thundered at him.

"Ja, Herr Kapitan," the man complied respectfully, "I was trying to explain to you-" He went on at length.

Art translated when he paused. "He says that he is part of the crew of this rocket. He says that it was commanded by Lieutenant — I didn't catch the name; it's one of the guys we shot — and that they were ordered by their leader to seek out and bomb a ship at this location. He says that it was not a — uh, a wanton attack because it was an act of war."

"War?" demanded Ross. "What in thunder does he mean, `war'? There's no war. It was sheer attempted murder."

Art spoke with the prisoner again.

"He says that there is a war, that there always has been a war. He says that there will always be war until the National Socialist Reich is victorious." He listened for a moment. "He says that the Reich will live a thousand years."

Morrie used some words that Cargraves had never heard him use before. "Ask him how he figures that one."

"Never mind," put in Cargraves. "I'm beginning to get the picture." He addressed the Nazi directly. "How many are there in your party, how long has it been on the moon, and where is your base?"

Presently Art said, "He claims he doesn't have to answer questions of that sort, under international law."

"Hummph! You might tell him that the laws of warfare went out when war was abolished. But never mind — tell him that, if he wants to claim prisoner-of-war privileges, we'll give him his freedom, right now!" He jerked a thumb at the air lock.

He had spoken in English, but the prisoner understood the gesture. After that he supplied details readily.

He and his comrades had been on the moon for nearly three months. They had an underground base about thirteen miles west of the crater in which the shattered Galileo lay. There was one rocket at the base, much larger than the Galileo, and it, too, was atom-powered. He regarded himself as a member of the army of the Nazi Reich. He did not know why the order had been given to blast the Galileo, but he supposed that it was an act of military security to protect their plans.

"What plans?"

He became stubborn again. Cargraves actually opened the inner door of the lock, not knowing himself how far he was prepared to go to force information out of the man, when the Nazi cracked.

The plans were simple — the conquest of the entire earth. The Nazis were few in number, but they represented some of the top military, scientific, and technical brains from Hitler's crumbled empire. They had escaped from Germany, established a remote mountain base, and there had been working ever since for the redemption of the Reich. The sergeant appeared not to know where the base was; Cargraves questioned him closely. Africa? South America? An island? But all that he could get out of him was that it was a long submarine trip from Germany.

But it was the objective, der Tag, which left them too stunned to worry about their own danger. The Nazis had atom bombs, but, as long as they were still holed up in their secret base on earth, they dared not act, for the UN had them, too, and in much greater quantity.

But when they achieved space flight, they had an answer. They would sit safely out of reach on the moon and destroy the cities of earth one after another by guided missiles launched from the moon, until the completely helpless nations of earth surrendered and pleaded for mercy.

The announcement of the final plan brought another flash of arrogance back into their prisoner. "And you cannot stop it," he concluded. "You may kill me, but you cannot stop it! Heil dem Führer!"

"Mind if I spit in his eye, Doc?" Morrie said conversationally.

"Don't waste it," Cargraves counseled. "Let's see if we can think ourselves out of this mess. Any suggestions?" He hauled the prisoner out of the chair and made him lie face down on the deck. Then he sat down on him. "Go right ahead," he urged. "I don't think he understands two words of English. How about it, Ross?"

"Well," Ross answered, "it's more than just saving our necks now. We've got to stop them. But the notion of tackling fifty men with two rifles and two pistols sounds like a job for Tarzan or Superman. Frankly, I don't know how to start."

"Maybe we can start by scouting them out. Thirteen miles isn't much. Not on the moon."

"Look," said Art, "in a day or two I might have a transmitter rigged that would raise earth. What we need is reinforcements."

"How are they going to get here?" Ross wanted to know. "We had the only space ship — except for the Nazis."

"Yes, but listen — Doc's plans are still available. You left full notes with Ross's father — didn't you, Doc? They can get busy and rebuild some more and come up here and blast those skunks out."

"That might be best," Cargraves answered. "We can't afford to miss, that's sure. They could raid the earth base of the Nazis first thing and then probably bust this up in a few weeks, knowing that our ship did work and having our plans."

Morrie shook his head. "It's all wrong. We've got to get at them right now. No delay at all, just the way they smashed us. Suppose it takes the UN six weeks to get there. Six weeks might be too long. Three weeks might be too long. A week might be too long. An atom war could be all over in a day."

"Well, let's ask our pal if he knows when they expect to strike, then," Ross offered.

Morrie shook his head and stopped Art from doing so. "Useless. We'll never get a chance to build a transmitter. They'll be swarming over this crater like reporters around a murder trial. Look — they'll be here any minute. Don't you think they'll miss this rocket?"

"Oh, my gosh!" It was Art. Ross added, "What time is it, Doc?"

To their complete amazement it was only forty minutes from the time the Galileo had been bombed. It had seemed like a full day.

It cheered them up a little but not much. The prisoner had admitted that the rocket they were in was the only utility, short-jump job. And the Nazi space ship-the Wotan, he termed it -would hardly be used for search. Perhaps they had a few relatively free hours.

"But I still don't see it," Cargraves admitted. "Two guns and two pistols — four of us. The odds are too long — and we can't afford to lose. I know you sports aren't afraid to die, but we've got to win."

"Why," inquired Ross, "does it have to be rifles?"

"What else?"

"This crate bombed us. I'll bet it carries more than one bomb."

Cargraves looked startled, then turning to the prisoner, spoke rapidly in German. The prisoner gave a short reply. Cargraves nodded and said, "Morrie, do you think you could fly this clunker?"

"I could sure make a stab at it."

"Okay. You are it. We'll make Joe Masterrace here take it off, with a gun in his ribs, and you'll have to feel her out. You won't get but one chance and no practice. Now let's take a look at the bomb controls."

The bomb controls were simple. There was no bombsight, as such. The pilot drove the ship on a straight diving course and kicked it out just before his blast upwards. There was a gadget to expel the bomb free of the ship; it continued on the ship's previous trajectory. Having doped it out, they checked with the Nazi pilot who gave them the same answers they had read in the mechanism.

There were two pilot seats and two passenger seats, directly behind the pilot seats. Morrie took one pilot seat; the Nazi the other. Ross sat behind Morrie, while Cargraves sat with Art in his lap, one belt around both. This squeezed Art up close to the back of the Nazi's chair, which was good, for Art reached around and held a gun in the Nazi's side.

"All set, Morrie?"

"All set. I make one pass to get my bearings and locate the mouth of their hideaway. Then I come back and give `em the works."

"Right. Try not to hit their rocket ship, if you can. it would be nice to go home. Blast off! Achtung! Aufstieg!"

The avengers raised ground.

"How is it going?" Cargraves shouted a few moments later. "Okay!" Morrie answered, raising his voice to cut through the roar. "I could fly her down a chimney. There's the hill ahead, I think — there!"

The silvery shape of the Wotan near the hill they were shooting towards put a stop to any doubts. It appeared to be a natural upthrust of rock, quite different from the craters, and lay by itself a few miles out in one of the 'seas'.

They were past it and Morrie was turning, blasting heavily to kill his momentum, and pressing them hard into their seats. Art fought to steady the revolver without firing it.

Morrie was headed back on his bombing run, coming in high for his dive. Cargraves wondered if Morrie had actually seen the air lock of the underground base; he himself had had no glimpse of it.

There was no time left to wonder. Morrie was diving; they were crushed against the pads as he fought a moment later to recover from the dive, kicking her up and blasting. They hung for a second and Cargraves thought that Morrie had played it too fine in his anxiety to get in a perfect shot; he braced himself for the crash.

Then they were up. When he had altitude, Morric kicked her over again, letting his jet die. They dropped, view port down, with the ground staring at them.

They could see the splash of dust and sand still rising. Suddenly there was a whoosh from the middle of it, a mighty blast of air, bits of debris, and more sand. It cleared at once in the vacuum of that plain, and they saw the open wound, a black hole leading downward.

He had blown out the air lock with a bull's-eye.

Morrie put her down to Cargraves' plan, behind the Wotan and well away from the hole. "Okay, Doc!"

"Good. Now let's run over the plan — I don't want any slipup. Ross comes with me. You and Art stay with the jeep. We will look over the Wotan first, then scout out the base. If we are gone longer than thirty minutes, you must assume that we are dead or captured. No matter what happens, under no circumstances whatever are you to leave this rocket. If any one comes toward you, blast off. Don't even let us come near you unless we are by ourselves. Blast off. You've got one more bomb — you know what to do with it."

Morrie nodded. "Bomb the Wotan. I hate to do that." He stared wistfully at the big ship, their one chain to the earth.

"But you've got to. You and Art have got to run for it, then, and get back to the Dog House and hole up. It'll be your business, Art, to manage somehow or other to throw together a set that can get a message back to earth. That's your only business, both of you. Under no circumstances are you to come back here looking for Ross and me. If you stay holed up, they may not find you for weeks — and that will give you your chance, the earth's chance. Agreed?"

Morrie hesitated. "Suppose we get a message through to earth.

How about it then?"

Cargraves thought for a moment, then replied, "We can't stand here jawing — there's work to be done. If you get a message through with a reply that makes quite clear that they believe you and are getting busy, then you are on your own. But I advise you not to take any long chances. If we aren't back here in thirty minutes, you probably can't help us." He paused for a moment and decided to add one more thing — the boy's personal loyalty had made him doubtful about one point. "You know, don't you, that when it comes to dropping that bomb, if you do, you must drop it where it has to go, even if Ross and I are standing on your target?"

"I suppose so."

"Those are orders, Morrie."

"I understand them."

"Morrie!"

"Aye aye, Captain!"

"Very well, sir — that's better. Art, Morrie is in charge. Come on, Ross."

Nothing moved on the rocket field. The dust of the bombing, with no air to hold it up, had dissipated completely. The broken air lock showed dark and still across the field; near them the sleek and mighty Wotan crouched silent and untended.

Cargraves made a circuit of the craft, pistol ready in his gloved fist, while Ross tailed him, armed with one of the Garands. Ross kept well back, according to plan.

Like the Galileo, the Wotan had but one door, on the port side just aft the conning compartment. He motioned Ross to stay back, then climbed a little metal ladder or staircase and tried the latch. To his surprise the ship was not locked — then he wondered why he was surprised. Locks were for cities.

While the pressure in the air chamber equalized, he unsnapped from his belt a flashlight he had confiscated from the Nazi jeep rocket and prepared to face whatever lay beyond the door. When the door sighed open, he dropped low and to one side, then shot his light around the compartment. Nothing… nobody.

The ship was empty of men from stem to stern. It was almost too much luck. Even if it had been a rest period, or even if there had been no work to do in the ship, he had expected at least a guard on watch.

However a guard on watch would mean one less pair of hands for work… and this was the moon, where every pair of hands counted for a hundred or a thousand on earth. Men were at a premium here; it was more likely, he concluded, that their watch was a radar, automatic and unsleeping.

Probably with a broad-band radio alarm as well, he thought, remembering how promptly their own call had been answered the very first time they had ever sent anything over the rim of their crater.

He went through a passenger compartment equipped with dozens of acceleration bunks, through a hold, and farther aft. He was looking for the power plant.

He did not find it. Instead he found a welded steel bulkhead with no door of any sort. Puzzled, he went back to the control station. What he found there puzzled him still more. The acceleration chairs were conventional enough; some of the navigational instruments were common types and all of them not too difficult to figure out; but the controls simply did not make sense.

Although this bewildered him, one point was very clear. The Nazis had not performed the nearly impossible task of building a giant space ship in a secret hideout, any more than he and the boys had built the Galileo singlehanded. In each case it had been a job of conversion plus the installation of minor equipment.

For the Wotan was one of the finest, newest, biggest ships ever to come out of Detroit!

The time was getting away from him. He had used up seven minutes in his prowl through the ship. He hurried out and rejoined Ross. "Empty," he reported, saving the details for later; "let's try their rat hole." He started loping across the plain.

They had to pick their way carefully through the rubble at the mouth of the hole. Since the bomb had not been an atom bomb but simply ordinary high explosive, they were in no danger of contamination, but they were in danger of slipping, sliding, falling, into the darkness.

Presently the rubble gave way to an excellent flight of stairs leading deep into the moon. Ross flashed his torch around.

The walls, steps, and ceiling were covered with some tough lacquer, sprayed on to seal the place. The material was transparent, or nearly so, and they could see that it covered carefully fitted stonework.

"Went to a lot of trouble, didn't they?" Ross remarked.

"Keep quiet!" answered Cargraves.

More than two hundred feet down the steep passageway ended, and they came to another door, not an air lock, but intended apparently as an airtight safety door. It had not kept the owners safe; the blast followed by a sudden letting up of normal pressure had been too much for it. It was jammed in place but so bulged and distorted that there was room for them to squeeze through.

There was some light in the room beyond. The blast had broken most of the old-fashioned bulbs the Nazis had used, but here and there a light shone out, letting them see that they were in a large hail. Cargraves went cautiously ahead.

A room lay to the right from the hall, through an ordinary non-air-tight door, now hanging by one hinge. In it they found the reason why the field had been deserted when they had attacked.

The room was a barrack room; the Nazis had died in their bunks. 'Night' and 'day' were arbitrary terms on the moon, in so far as the working times and eating times and sleeping times of men are concerned. The Nazis were on another schedule; they had had the bad luck to be sleeping when Morrie's bomb had robbed them of their air.

Cargraves stayed just long enough in the room to assure himself that all were dead. He did not let Ross come in at all. There was some blood, but not much, being mostly bleeding from mouths and bulging eyes. It was not this that caused his squeamish consideration; it was the expressions which were frozen on their dead faces.

He got out before he got sick.

Ross had found something. "Look here!" he demanded. Cargraves looked. A portion of the wall had torn away under the sudden drop in pressure and had leaned crazily into the room. It was a metal panel, instead of the rock masonry which made up the rest of the walls. Ross had pulled and pried at it to see what lay behind, and was now playing his light into the darkness behind it.

It was another corridor, lined with carefully dressed and fitted stones. But here the stone had not been covered with the sealing lacquer.

"I wonder why they sealed it off after they built it?" Ross wanted to know. "Do you suppose they have stuff stored down there? Their A-bombs maybe?"

Cargraves studied the patiently fitted stones stretching away into the unfathomed darkness. After a long time he answered softly, "Ross, you haven't discovered a Nazi storeroom. You have discovered the homes of the people of the moon."

Chapter 17 UNTIL WE ROT

FOR ONCE ROSS WAS ALMOST as speech-bound as Art. When he was able to make his words behave he demanded, "Are you sure? Are you sure, Doc?"

Cargraves nodded. "As sure as I can be at this time. I wondered why the Nazis had built such a deep and extensive a base and why they had chosen to use fitted stone masonry. It would be hard to do, working in a space suit. But I assigned it to their reputation for doing things the hard way, what they call `efficiency.' I should have known better." He peered down the mysterious, gloomy corridor. "Certainly this was not built in the last few months."

"How long ago, do you think?"

"How long? How long is a million years? How long is ten million years? I don't know — I have trouble imagining a thousand years. Maybe we'll never know."

Ross wanted to explore. Cargraves shook his head. "We can't go chasing rabbits. This is wonderful, the biggest thing in ages. But it will wait. Right now," he said, glancing at his watch, "we've got eleven minutes to finish the job and get back up to the surface — or things will start happening up there!"

He covered the rest of the layout at a fast trot, with Ross guarding his rear from the central hall. He found the radio 'shack', with a man dead in his phones, and noted that the equipment did not appear to have suffered much damage when the whirlwind of escaping air had slammed out of the place. Farther on, an arsenal contained bombs for the jeep, and rifles, but no men.

He found the storeroom for the guided missiles, more than two hundred of them, although the cradles were only half used up. The sight of them should have inspired terror, knowing as he did that each represented a potentially dead and blasted city, but he had no time for it. He rushed on.

There was a smaller room, well furnished, which seemed to be sort of a wardroom or common room for the officers. It was there that he found a Nazi who was not as the others.

He was sprawled face down and dressed in a space suit. Although he did not move Cargraves approached him very cautiously.

The man was either dead or unconscious. However, he did not have the grimace of death on his face and his suit was still under pressure. Wondering what to do, Cargraves knelt over him. There was a pistol in his belt; Cargraves took it and stuck it in his own.

He could feel no heart beat through the heavy suit and his own gauntlet, nor could he listen for it, while wearing a helmet himself.

His watch showed five minutes of the agreed time left; whatever he did must be done fast. He grappled the limp form by the belt and dragged it along.

"What have you got there?" Ross demanded.

"Souvenir. Let's get going. No time." He saved his breath for the climb. The sixty-pound weight that he and his burden made, taken together, flew up the stairs six at a time. At the top his watch still showed two minutes to go. "Leg it out to the jeep," he commanded Ross. "I can't take this item there, or Morrie may decide it's a trap. Meet me in the Wotan. Get going!" Heaving his light burden over one shoulder, he set out for the big ship at a gallop.

Once inside he put his load down and took the man out of his space suit. The body was warm but seemed dead. However, he found he could detect a faint heartbeat. He was starting an artificial respiration when the boys piled out of the lock.

"Hi," he said, "who wants to relieve me here? I don't know much about it."

"Why bother?" asked Morrie.

Cargraves paused momentarily and looked at him quizzically. "Well, aside from the customary reasons you have been brought up to believe in, he might be more use to us alive than dead."

Morrie shrugged. "Okay. I'll take over." He dropped to his knees, took Cargraves' place, and started working.

"Did you bring them up to date?," Cargraves asked Ross.

"I gave them a quick sketch. Told them the place seemed to be ours and I told them what we found — the ruins."

"Not very ruined," Cargraves remarked.

"Look, Uncle," demanded Art. "Can I go down there? I've got to get some pictures."

"Pictures can wait," Cargraves pointed out. "Right now we've got to find out how this ship works. As soon as we get the hang of it, we head back. That comes first."

"Well, sure," Art conceded, "but… after all — I mean. No pictures at all?"

"Well… Let's put it this way. It may take Ross and Morrie and me, not to mention yourself, quite some time to figure out how they handle this craft. There might be twenty minutes when we could spare you. In the meantime, table the motion. Come on, Ross. By the way, what did you do with the prisoner?"

"Oh, him," Morrie answered, "we tied him up and left him."

"Huh? Suppose he gets loose? He might steal the rocket."

"He won't get loose. I tied him myself and I took a personal interest in it. Anyhow he won't try to get away — no space suit, no food. That baby knows his chance of living to a ripe old age depends on us and he doesn't want to spoil it."

"That's right, Uncle," Art agreed. "You should have heard what he promised me."

"Good enough, I guess," Cargraves conceded. "Come on, Ross." Morrie went on with his job, with Art to spell him.

Cargraves returned, with Ross, to the central compartment a few minutes later. "Isn't that pile of meat showing signs of life yet?," he asked.

"No. Shall I stop?"

"I'll relieve you. Sometimes they come to after an hour or more. Two of you go over to the jeep with an additional space suit and bring back Sergeant What's-his-name. Ross and I are as much in the dark as ever," he explained. "The sergeant bloke is a pilot. We'll sweat it out of him."

He had no more than gotten firmly to work when the man under him groaned. Morrie turned back at the lock. "Go ahead," Cargraves confirthed. "Ross and I can handle this guy."

The Nazi stirred and moaned. Cargraves turned him over. The man's eyelids flickered, showing bright blue eyes. He stared up at Cargraves. "How do you do?" he said in a voice like a stage Englishman. "May I get up from here?"

Cargraves backed away and let him up. He did not help him.

The man looked around. Ross stood silently, covering him with a Garand. "That isn't necessary, really," the Nazi protested. Ross glanced at Cargraves but continued to cover the prisoner. The man turned to Cargraves. "Whom have I the honor of addressing?" he asked. "Is it Captain Cargraves of the Galileo?"

"That's right. Who are you?"

"I am Helmut von Hartwick, Lieutenant Colonel, Elite Guard." He pronounced lieutenant "leftenant."

"Okay, Helmut, suppose you start explaining yourself. Just what is the big idea?"

The self-styled colonel laughed. "Really, old man, there isn't much to explain, is there? You seem to have eluded us somehow and placed me at a disadvantage. I can see that."

"You had better see that, but that is not what I mean, and that is not enough." Cargraves hesitated. The Nazi had him somewhat baffled; he did not act at all like a man who has just come out of a daze. Perhaps he had been playing possum — if so, for how long?

Well, it did not matter, he decided. The Nazi was still his prisoner. "Why did you order my ship bombed?"

"Me? My dear chap, why do you think I ordered it?"

"Because you sound just like the phony English accent we heard over our radio. You called yourself `Captain James Brown.' I don't suppose there is more than one fake Englishman in this crowd of gangsters."

Von Hartwick raise his eyebrows. "`Gangsters' is a harsh term, old boy. Hardly good manners. But you are correct on one point; I was the only one of my colleagues who had enjoyed the questionable advantage of attending a good English school. I'll ask you not to call my accent `phony.' But, even if I did borrow the name `Captain James Brown,' that does not prove that I ordered your ship bombed. That was done under the standing orders of our Leader — a necessary exigency of war. I was not personally responsible."

"I think you are a liar on both counts. I don't think you ever attended an English school; you probably picked up that fake accent from Lord Haw-Haw, or from listening to the talkies. And your Leader did not order us bombed, because he did not know we were there. You ordered it, just as soon as you could trace a bearing on us, as soon as you found out we were here."

The Nazi spread his. hands, palms down, and looked pained. "Really, you Americans are so ready to jump to conclusions. Do you truly think that I could fuel a rocket, call its crew, and equip it for bombing, all in ten minutes? My only function was to report your location."

"You expected us, then?"

"Naturally. If a stupid radarman had not lost you when you swung into your landing orbit, we would have greeted you much sooner. Surely you don't think that we would have established a military base without preparing to defend it? We plan, we plan for everything. That is why we will win."

Cargraves permitted himself a thin smile. "You don't seem to have planned for this."

The Nazi tossed it off. "In war there are setbacks. One expects them."

"Do you call it `war' to bomb an unarmed, civilian craft without even a warning?"

Hartwick looked pained. "Please, my dear fellow! It ill befits you to split hairs. You seemed to have bombed us without warning. I myself would not be alive this minute had I not had the good fortune to be just removing my suit when you struck. I assure you I had no warning. As for your claim to being a civilian, unarmed craft, I think it very strange that the Galileo was able to blast our base if you carried nothing more deadly than a fly swatter. You Americans amaze me. You are always so ready to condemn others for the very things you do yourselves."

Cargraves was at a loss for words at the blind illogic of the speech.

Ross looked disgusted; he seemed about to say something. Cargraves shook his head at him.

"That speech," he announced, "had more lies, half-truths, and twisted statements per square inch than anything you've said yet. But I'll put you straight on one point: the Galileo didn't bomb your base; she's wrecked. But your men were careless. We seized your rocket and turned your own bombs on you-"

"Idioten!"

"They were stupid, weren't they? The Master Race usually is stupid when it comes to a showdown. But you claimed we bombed you without warning. That is not true; you had all the warning you were entitled to and more. You struck the first blow. It's merely your own cocksureness that led you to think we couldn't or wouldn't strike back."

Von Hartwick started to speak. "Shut up!" Cargraves said sharply. "I'm tired of your nonsense. Tell me how you happen to have this American ship. Make it good."

"Oh, that! We bought it."

"Don't be silly."

"I am not being silly. Naturally we did not walk in and place an order for one military space ship, wrapped and delivered. The transaction passed through several hands and eventually our friends delivered to us what we needed."

Cargraves thought rapidly. It was possible; something of the sort had to be true. He remembered vaguely an order for twelve such ships as the Wotan had originally been designed to be, remembered it because the newspapers had hailed the order as a proof of postwar recovery, expansion, and prosperity.

He wondered if all twelve of those rockets were actually operating on the run for which they had supposedly been purchased.

"That is the trouble with you stupid Americans," von Hartwick went on. "You assume that every one shares your silly belief in such rotten things as democracy. But it is not true. We have friends everywhere. Even in Washington, in London, yes, even in Moscow. Our friends are everywhere. That is another reason why we will win."

"Even in New Mexico, maybe?"

Von Hartwick laughed. "That was a droll comedy, my friend. I enjoyed the daily reports. It would not have suited us to frighten you too much, until it began to appear that you might be successful. You were very lucky, my friend, that you took off as soon as you did."

"Don't call me `my friend'," Cargraves said testily. "I'm sick of it."

"Very well, my dear Captain." Cargraves let the remark pass. He was getting worried by the extended absence of Art and Morrie. Was it possible that some other of the Nazis were still around, alive and capable of making trouble?

He was beginning to think about tying up the prisoner here present and going to look for them when the lock sighed open. Morrie and Art stepped out, prodding the other prisoner before them. "He didn't want to come, Uncle," Art informed him. "We had to convince him a little." He chuckled. "I don't think he trusts us."

"Okay. Get your suits off."

The other prisoner seemed completely dumfounded by the sight of von Hartwick. Hastily he unclamped his helmet, threw it back, and said in German, "Herr Oberst — it was not my fault. I was-"

"Silence!" shouted the Nazi officer, also in German. "Have you told these pig-dogs anything about the operation of this ship?"

"Nein, nein, Herr Oberst — I swear it!"

"Then play stupid or I'll cut your heart out!"

Cargraves listened to this interesting little exchange with an expressionless face, but it was too much for Art. "Uncle," he demanded, "did you hear that? Did you hear what he said he'd do?"

Von Hartwick looked from nephew to uncle. "So you understand German?" he said quietly. "I was afraid that you might." Ross had let the muzzle of his gun wander away from von Hartwick when the boys came in with their prisoner. Cargraves had long since shoved the pistol he had appropriated into his belt.

Von Hartwick glanced from one to another. Morrie and Art were both armed, one with a Garand, the other with revolver, but they had them trained on the Nazi pilot. Von Hartwick lunged suddenly at Cargraves and snatched the pistol from his belt.

Without appearing to stop to take aim he fired once. Then Cargraves was at him, clawing at his hands.

Von Hartwick brought the pistol down on his head, club fashion, and moved in to grapple him about the waist.

The Nazi pilot clasped his hands to his chest, gave a single bubbly moan, and sank to the floor. No one paid him any attention. After a split second of startled inaction, the three boys were milling around, trying to get in a shot at von Hartwick without hitting Cargraves. Cargraves himself had jerked and gone limp when the barrel of the pistol struck his head. Von Hartwick held the doctor's thirty pounds of moon-weight up with one arm. He shouted, "Silence!"

His order would have had no effect had not the boys seen something else: Von Hartwick was holding the pistol to Cargraves' head. "Careful, gentlemen," he said, speaking very rapidly. "I have no wish to harm your leader and will not do so unless you force me. I am sorry I was forced to strike him; I was forced to do so when he attacked me."

"Watch out!" commanded Morrie. "Art! Ross! Don't try to shoot."

"That is sensible," von Hartwick commended him. "I have no wish to try to shoot it out with you. My only purpose was to dispose of him." He indicated the body of the Nazi pilot.

Morrie glanced at it. "Why?"

"He was a soft and foolish pig. I could not afford to risk his courage. He would have told you what you want to know." He paused, and then said suddenly, "And now — I am your prisoner again!" The pistol sailed out of his hand and clanged against the floor.

"Get Doc out of my way," Ross snapped. "I can't get a shot in."

"No!" Morrie thundered. "Art, pick up the pistol. Ross, you take care of Doc."

"What are you talking about?" Ross objected. "He's a killer. I'll finish him off."

"No!"

"Why not?"

"Well — Doc wouldn't like it. That's reason enough. Don't shoot. That's an order, Ross. You take care of Doc. Art, you tie up the mug. Make it good."

"It'll be good!" promised Art.

The Nazi did not resist and Morrie found himself able to give some attention to what Ross was doing. "How bad is it?" he inquired, bending over Cargraves.

"Not too bad, I think. I'll know better when I get some of this blood wiped away."

"You will find dressings and such things," von Hartwick put in casually, as if he were not in the stages of being tied up, "in a kit under the instrument board in the control room."

"Go look for them, Ross," Morrie directed. "I'll keep guard. Not," he said to von Hartwick, "that it will do you any good if he dies. If he does, out you go, outside, without a suit. Shooting's too good for you."

"He won't die. I hit him very carefully."

"You had better hope he doesn't. You won't outlive him more than a couple of minute."

Von Hartwick shrugged. "It is hardly possible to threaten me. We are all dead men. You realize that, don't you?"

Morrie looked at him speculatively. "Finished with him, Art? Sure he's tied up tight?"

"He'll choke himself to death if he tries to wiggle out of that one."

"Good. Now you," he went on to von Hartwick, "you may be a dead man. I wouldn't know. But we're not. We are going to fly this ship back to earth. You start behaving yourself and we might take you with us."

Von Hartwick laughed. "Sorry to disillusion you, dear boy, but none of us is going back to earth. That is why I had to dispose of that precious pilot of mine."

Morrie turned away, suddenly aware that no one had bothered to find out how badly the sergeant-pilot was wounded. He was soon certain; the man was dead, shot through the heart. "I can't see that it matters," he told von Hartwick.. "We've still got you. You'll talk, or I'll cut your ears off and feed them to you."

"What a distressing thought," he was answered, "but it. won't help you. You see, I am unable to tell you anything; I am not a pilot."

Art stared at him. "He's kidding you, Morrie."

"No," von Hartwick denied. "I am not. Try cutting my ears off and you will see. No, my poor boys, we are all going to stay here a long time, until we rot, in fact. Heil dem Führer!"

"Don't touch him, Art," Morrie warned. "Doc wouldn't like it."

Chapter 18 TOO LITTLE TIME

CARGRAVES WAS WIDE ENOUGH awake to swear by the time Ross swabbed germicide on the cut in his hair line. "Hold still, Doc I-"

"I am holding still. Take it easy."

They brought him up to date as they bandaged him. "The stinker thinks he's put one over on us," Ross finished. "He thinks we can't run this boat without somebody to show us."

"He may be perfectly right," Cargraves admitted. "So far it's got us stumped. We'll see. Throw him in the hold, and we'll have another look. Morrie, you did right not to let him be shot."

"I didn't think you would want him killed until you had squeezed him dry."

Cargraves gave him an odd smile. "That wasn't your only reason, was it?

"Well — shucks !" Morrie seemed almost embarrassed. "I didn't want to just shoot him down after he dropped the gun. That's a Nazi trick."

Cargraves nodded approvingly. "That's right. That's one of the reasons they think we are soft. But we'll have a little surprise for him." He got up, went over, and stirred von Hartwick with his toe. "Listen to me, you. If possible, I am going to take you back to earth to stand trial... If not, we'll try you here."

Von Hartwick lifted his eyebrows. "For making war on you? How delightfully American!"

"No, not for making war. There isn't any war, and there hasn't been any war. The Third Reich disappeared forever in the spring of 1945 and today there is peace between Germany and the United States, no matter how many pipsqueak gangsters may still be hiding out. No, you phony superman, you are going to be tried for the murder of your accomplice — that poor dupe lying over there." He turned away. "Chuck him in the hold, boys. Come on, Ross."

Three hours later Cargraves was quite willing to admit that von Hartwick was correct when he said that the operation of the Wotan could not be figured out by a stranger. There were strange controls on the arms of the piloting seats which certainly had to be the flight controls, but no matter what they twisted, turned or moved, nothing happened. And the drive itself was sealed away behind a bulkhead which, from the sound it gave off when pounded, was inches thick.

Cargraves doubted whether he could cut through even with a steel-cutting flame. He was very reluctant to attempt to do so in any case; an effort to solve the mysteries of the ship by such surgery might, as likely as not, result in disabling the ship beyond any hope of repairing it.

There should be an operation manual somewhere. They all searched for it. They opened anything that would open, crawled under anything that could be crawled under, lifted everything that would move. There was no control manual in the ship.

The search disclosed something else. There was no food in the ship. This latter point was becoming important.

"That's enough, sports," he announced when he was certain that further search would be useless. "We'll try their barracks next. We'll find it. Not to mention food. You come with me, Morrie, and pick out some groceries."

"Me too!" Art shouted. "I'll get some pictures. The moon people! Oh, boy!"

Cargraves wished regretfully that he were still young enough for it to be impossible to stay worried. "Well, all right," he agreed, "but where is your camera?"

Art's face fell. "It's in the Dog House," he admitted.

"I guess the pictures will have to wait. But come along; there is more electronic equipment down there than you can run and jump over. Maybe raising earth by radio will turn out to be easy."

"Why don't we all go?" Ross wanted to know. "I found the ruins, but I haven't had a chance to look at them."

"Sorry, Ross; but you've got to stay behind and stand guard over Stinky. He might know more about this ship than he admits. I would hate to come up that staircase and find the ship missing. Stand guard over him. Tell him that if he moves a muscle you'll slug him. And mean it."

"Okay. I hope he does move. How long will you be gone?"

"If we can't find it in two hours we'll come back."

Cargraves searched the officers' room first, as it seemed the most likely place. He did not find it, but he did find that some of the Nazis appeared to have some peculiar and unpleasant tastes in books and pictures. The barrack room he took next. It was as depressing a place as it had been earlier, but he was prepared for it. Art he had assigned to the radio and radar room and Morrie to the other spaces; there seemed to be no reason for any one but himself to have to touch the bloating corpses.

He drew a blank in the barrack room. Coming out, he heard Art's voice in his phones. "Hey, Uncle, look what I've found!"

"What is it?," he said, and Morrie's voice cut in at once.

"Found the manual, Art?"

"No, but look!" They converged in the central hail. 'It' was a Graflex camera, complete with flash gun. "There is a complete darkroom off the radio room. I found it there. How about it, Uncle? Pictures?"

"Well, all right. Morrie, you go along — it may be your only chance to see the ruins. Thirty minutes. Don't go very far, don't bust your necks, don't take any chances, and be back on time, or I'll be after you with a Flit gun." He watched them go regretfully, more than a little tempted to play hookey himself. If he had not been consumed with the urgency of his present responsibilities — But he was. He forced himself to resume the dreary search.

It was all to no good. If there was an instruction manual in existence he had to admit that he did not know how to find it. But he was still searching when the boys returned.

He glanced at his watch. "Forty minutes," he said. "That's more prompt than I thought you would be; I expected to have to go look for you. What did you find? Get any good pictures?"

"Pictures? Did we get pictures! Wait till you see!"

"I never saw anything like it, Doc," Morrie stated impressively. "The place is a city. It goes down and down. Great big arched halls, hundreds of feet across, corridors running every which way, rooms, balconies — I can't begin to describe it."

"Then don't try. Write up full notes on what you saw as soon as we get back."

"Doc, this thing's tremendous!"

"I realize it. But it's so big I'm not even going to try to comprehend it, not yet. We've got our work cut out for us just to get out of here alive. Art, what did you find in the radio room? Anything you can use to raise earth?"

"Well, Uncle, that's hard to say, but the stuff doesn't look promising."

"Are you sure? We know that they were in communication — at least according to our nasty-nice boy friend."

Art shook his head. "I thought you said they received from earth. I found their equipment for that but I couldn't test it out because I couldn't get the earphones inside my suit. But I don't see how they could send to earth."

"Why not? They need two-way transmission."

"Maybe they need it but they can't afford to use it. Look, Uncle, they can beam towards the moon from their base on earth — that's all right; nobody gets it but them. But if the Nazis on this end try to beam back, they can't select some exact spot on earth. At that distance the beam would fan out until it covered too much territory — it would be like a broadcast."

"Oh!" said Cargraves, "I begin to see. Chalk up one for yourself, Art; I should have thought of that. No matter what sort of a code they used, if people started picking up radio from the direction of the moon, the cat would be out of the bag."

"That's what I thought, anyhow."

"I think you're dead right. I'm disappointed; I was beginning to pin my hopes on getting a message across." He shrugged. "Well, one thing at a time. Morrie, have you picked out the supplies you want to take up?"

"All lined up." They followed him into the kitchen space and found he had stacked three piles of tin cans in quantities to make three good-sized loads. As they were filling their arms Morrie said. "How many men were there here, Doc?"

"I counted forty-seven bodies not counting the one von Hartwick shot. Why?"

"Well, I noticed something funny. I've sort of acquired an eye for estimating rations since I've been running the mess. There isn't food enough here to keep that many men running two weeks. Does that mean what I think it means?"

"Hunnh… Look, Morrie, I think you've hit on something important. That's why von Hartwick is so cocky. It isn't just whistling in the dark. He actually expects to be rescued."

"What do you mean, Uncle?" Art wanted to know.

"He is expecting a supply ship, almost any time."

Art whistled. "He thinks we'll be caught by surprise!"

"And we would have been. But we won't be now." He put down his load of groceries. "Come along."

"Where?"

"I just remembered something." In digging through the officers' quarters he had come across many documents, books, manuals, records, and papers of many sorts. He had scanned them very briefly, making certain only that no one of them contained anything which would give a clue to the operation of the Wotan.

One of them was the day book or journal of the task-force commander. Among other things it had given the location of the Nazi base on earth; Cargraves had marked it as something he wanted to study later. Now he decided to do it at once.

It was long. It covered a period of nearly three months with Teutonic thoroughness. He read rapidly, with Art reading over his shoulder. Morrie stood around impatiently and finally pointed out that the time was approaching when they had promised Ross to return.

"Go ahead," Cargraves said absently. "Take a load of food. Get a meal started." He read on.

There was a roster of the party. He found von Hartwick listed as executive officer. He noted that as an indication that the Nazi was lying when he claimed not to understand the piloting of the Wotan. Not proof, but a strong indication. But falsehood was all that he expected of the creature.

He was beginning to find what he was looking for. Supply trips had been made each month. If the schedule was maintained-and the state of supplies certainly indicated it -the next ship should be along in six or seven days.

But the most important fact he was not sure of until he had finished the journal: there was more than one big rocket in their possession; the Wotan was not about to leave to get supplies; she would not leave, if the schedule had been followed, until the supply ship landed. Then she would be taken back empty and the other ship would be unloaded. By such an arrangement the party on the moon was never left without a means of escape — or, at least, that was the reason he read into the account.

There were just two and only two Nazi moon rockets — the Wotan and the Thor. The Thor was due in a week, as nearly as he could make out, which meant that she would leave her home base in about five days. The transit times for each trip had been logged in; forty-six hours plus for the earthmoon jump was the way the record read.

Fast time! he thought.

If the Thor ever took off, it might be too late for good intentions, too late for warnings. The Nazis were certainly aware that the techniques of space flight were now an open secret; there was reference after reference to the Galileo including a last entry noting that she had been located. They would certainly strike at the earliest possible moment.

He could see in his mind's eye the row upon row of A-bomb guidedmissiles in a near-by cavern. He could see them striking the defenseless cities of earth.

No time to rig a powerful transmitter. No time for anything but drastic measures.

Not time enough, he was afraid!

Chapter 19 SQUEEZE PLAY

"SOUP'S ON!" MORRIE GREETED him as he came hurrying into the Wotan. Cargraves started shucking off his suit as he answered.

"No time for that — no, gimme a couple of those sandwiches."

Morrie complied.

Ross inquired, "What's the rush?"

"Got to see the prisoner." He turned away, then stopped. "No — wait. Come here, guys." He motioned them into a football huddle. "I'm going to try something." He whispered urgently for a few minutes. "Now play up. I'll leave the door open."

He went into the hold and prodded von Hartwick with his boot. "Wake up, you." He took a bite of sandwich.

"I am awake." Von Hartwick turned his head with some difficulty as he was trussed up with his ankles pulled up toward his wrists, which were tied behind him. "Ah, food," he said cheerfully. "I was wondering when you would remember the amenities in dealing with prisoners."

"It's not for you," Cargraves informed him. "The other sandwich is for me. You won't need one."

Von Hartwick looked interest but not frightened. "So?"

"Nope," said Cargraves, wiping his mouth with his sleeve, "you won't. I had intended to take you to earth for trial, but I find I won't have time for that. I'll try you myself — now."

Von Hartwick shrugged under his bonds. "You are able to do as you like. I've no doubt you intend to kill me, but don't dignify it with the name of a trial. Call it a lynching. Be honest with yourself. In the first place my conduct has been entirely correct. True, I was forced to shoot one of my own men, but it was a necessary emergency military measure-"

"Murder," put in Cargraves.

"-in defense of the security of the Reich," von Hartwick went on unhurriedly, "and no concern of yours in any case. It was in my own ship, entirely out of jurisdiction of any silly laws of the corrupt democracies. As for the bombing of your ship, I have explained to you-"

"Shut up," Cargraves said. "You'll get a chance to say a few words later. Court's in session. Just to get it straight in your head, this entire planet is subject to the laws of the United Nations. We took formal possession and have established a permanent base. Therefore-"

"Too late, Judge Lynch. The New Reich claimed this planet three months ago."

"I told you to keep quiet. You're in contempt of court. One more peep and we'll think up a way to keep you quiet. Therefore, as the master of a vessel registered under the laws of the United Nations it is my duty to see that those laws are obeyed. Your so-called claim doesn't hold water. There isn't any New Reich, so it can't claim anything. You and your fellow thugs aren't a nation; you are merely gangsters. We aren't bound to recognize any fictions you have thought up and we don't. Morrie! Bring me another sandwich."

"Coming up, Captain!"

"Now as master of the Galileo," Cargraves went on, "I have to act for the government when I'm off by myself, as I am now. Since I haven't time to take you back to earth for trial, I'm trying you now. Two charges: murder in the first degree and piracy."

"Piracy? My dear fellow!"

"Piracy. You attacked a vessel of UN register. On your own admission you took part in it, whether you gave the orders or not. All members of a pirate crew are equally guilty, and it's a capital offense. Murder in the first degree is another one. Thanks for the sandwich, Morrie. Where did you find fresh bread?"

"It was canned."

"Clever, these Nazis. There was some doubt in my mind as to whether to charge you with first or second degree. But you had to grab the gun away from me first, before you could shoot your pal. That's premeditation. So you're charged — piracy and first-degree murder. How do you plead? Guilty or not guilty?"

Von Hartwick hesitated a bit before replying. "Since I do not admit the jurisdiction of this so-called court, I refuse to enter a plea. Even if I concede-which I don't -that you honestly believe this to be United Nations territory, you still are not a court."

"A ship's master has very broad powers in an emergency. Look it up some time. Get a ouija board and look it up."

Von Hartwick raised his eyebrows. "From the nature of that supposedly humorous remark I can see that I am convicted before the trial starts."

Cargraves chewed reflectively. "In a manner of speaking, yes," he conceded. "I'd like to give you a jury, but we don't really need one. You see, there aren't any facts to be established because there aren't any facts in doubt. We were all there. The only question is: What do those facts constitute under the law? This is your chance to speak your piece if you intend to."

"Why should I bother? You mongrel nations prate of justice and equality under law. But you don't practice it. You stand there with your hands dripping with the blood of my comrades, whom you killed in cold blood, without giving them a chance — yet you speak to me of piracy and murder!"

"We discussed that once before," Cargraves answered carefully. "There is a world of difference, under the laws of free men, between an unprovoked attack and striking back in your own defense. If a footpad assaults you in a dark alley, you don't have to get a court order to fight back. Next. Got any more phony excuses?"

The Nazi was silent. "Go ahead," Cargraves persisted. "You could still plead not guilty by reason of insanity and you might even convince me. I always have thought a man with a MasterRace complex was crazy as a hoot owl. You might convince me that you were crazy in a legal sense as well."

For the first time, von Hartwick's air of aloof superiority seemed to crack. His face got red and he appeared about to explode. Finally he regained a measure of control and said, "Let's have no more of this farce. Do whatever it is you intend to do and quit playing with me."

"I assure you that I am not playing. Have you anything more to say in your own defense?"

"I find you guilty on both charges. Have you anything to say before sentence is passed?"

The accused did not deign to answer.

"Very well. I sentence you to death."

Art took a quick, gasping breath and backed out of the doorway where he had been huddled, wide-eyed, with Ross and Morrie. There was no other sound.

"Have you anything to say before the sentence is executed?"

Von Hartwick turned his face away. "I am not sorry. At least I will have a quick and merciful death. The best you four swine can hope for is a slow and lingering death."

"Oh," said Cargraves, "I intended to explain to you about that. We aren't going to die."

"You think not?" There was undisguised triumph in von Hartwick's voice.

"I'm sure of it. You see, the Thor arrives in six or seven days-"

"What? How did you find that out?" The Nazi seemed stunned for a moment, then muttered, "Not that it matters to the four of you — but I see why you decided to kill me. You were afraid I would escape you."

"Not at all," returned Cargraves. "You don't understand. If it were practical to do so, I would take you back to earth to let you appeal your case before a higher court. Not for your sake-you're guilty as sin! -but for my own. However, I do not find it possible. We will be very busy until the Thor gets here and I have no means of making sure that you are securely imprisoned except by standing guard over you every minute. I can't do that; we haven't time enough. But I don't intend to let you escape punishment. I don't have a cell to put you in. I had intended to drain the fuel from your little rocket and put you in there, without a suit. That way, you would have been safe to leave alone while we worked. But, now that the Thor is coming, we will need the little rocket."

Von Hartwick smiled grimly. "Think you can run away, eh? That ship will never take you home. Or haven't you found that out yet?"

"You still don't understand. Keep quiet and let me explain. We are going to take several of the bombs such as you used on the Galileo and blow up the room containing your guided missiles. It's a shame, for I see it's one of the rooms built by the original inhabitants. Then we are going to blow up the Wotan."

"The Wotan? Why?" Von Hartwick was suddenly very alert.

"To make sure it never flies back to earth. We can't operate it; I must make sure that no one else does. For then we intend to blow up the Thor."

"The Thor? You can't blow up the Thor!"

"Oh, yes, we can — the same way you blew up the Galileo. But I can't chance the possibility of survivors grabbing the Wotan — so she must go first. And that has a strong bearing on why you must die at once. After we blast the Wotan we are going back to our own base-you didn't know about that, did you ? -but it is only one room. No place for prisoners. I had intended, as I said, to keep you in the jeep rocket, but the need to blast the Thor changes that. We'll have to keep a pilot in it all times, until the Thor lands. And that leaves no place for you. Sorry," he finished, and smiled.

"Anything wrong with it?" he added.

Von Hartwick was beginning to show the strain. "You may succeed-"

"Oh, we will!"

"But if you do, you are still dead men. A quick death for me, but a long and slow and lingering death for you. If you blast the Thor, you lose your own last chance. Think of it," he went on, "starving or suffocating or dying with cold. I'll make a pact with you. Turn me loose now and I'll give you my parole. When the Thor arrives, I'll intercede with the captain on your behalf. I'll-"

Cargraves cut him off with a gesture. "The word of a Nazi! You wouldn't intercede for your own grandmother! You haven't gotten it through your thick head yet that we hold all the aces. After we kill you and take care of your friends, we shall sit tidy and cozy and warm, with plenty of food and air, until we are picked up. We won't even be lonesome; we were just finishing our earth sender when you picked up one of our local signals. We'll-"

"You lie!" shouted von Hartwick. "No one will pick you up. Yours was the only ship. I know, I know. We had full reports."

"Was the only ship." Cargraves smiled sweetly. "But under a quaint old democratic law which you wouldn't understand, the plans and drawings and notes for my ship were being studied eagerly the minute we took off. We'll be able to take our pick of ships before long. I hate to disappoint you but we are going to live. I am afraid I must disappoint you on another score. Your death will not be as clean and pleasant as you had hoped."

"What do you mean?"

"I mean I am not going to get this ship all bloodied up again by shooting you. I'm going to-"

"Wait. A dying man is entitled to a last request. Leave me in the Wotan. Let me die with my ship!"

Cargraves laughed full in his face. "Lovely, von Nitwit. Perfectly lovely. And have you take off in her. Not likely!"

"I am no pilot — believe me!"

"Oh, I do believe. I would not think of doubting a dying man's last words. But I won't risk a mistake. Ross!"

"Yes, sir!"

"Take this thing and throw it out on the face of the moon."

"Deelighted!"

"And that's all." Cargraves had been squatting down; he got up and brushed the crumbs from his hands. "I shan't even have you untied so that you can die in a comfortable position. You are too handy at grabbing guns. You'll just have to flop around as you are. It probably won't take long," he went on conversationally. "They say it's about like drowning. In seven or eight minutes you won't know a thing. Unless your heart ruptures through your lungs and finishes you a little sooner."

"Swine!"

"Captain Swine, to you."

Ross was busily zipping his suit into place. "Okay, Doc?"

"Go ahead. No, on second thought," he added, "I'll do this job myself. I might be criticized for letting a boy touch it. My suit, Morrie."

He whistled as they helped him dress. He was still whistling as he picked up von Hartwick like a satchel, by the line which bound his ankles to his wrists, and walked briskly to the lock. He chucked his bundle in ahead of him, stepped in, waved to the boys, said, "Back soon!" and clamped the door.

As the air started whistling out von Hartwick began to gasp. Cargraves smiled at him, and said, "Drafty, isn't it?" He shouted to make himself heard through the helmet.

Von Hartwick's mouth worked.

"Did you say something?"

The Nazi opened his mouth again, gasped, choked, and sprayed foam out on his chest. "You'll have to talk louder," Cargraves shouted. "I can't hear you." The air whistled away.

"I'm a pilot!"

"What?"

"I'm a pilot! I'll teach you-"

Cargraves reached up and closed the exhaust valve. "I can't hear with all that racket. What were you saying?"

"I'm a pilot!" gasped von Hartwick.

"Yes? Well, what about it?"

"Air. Give me air-"

"Shucks," said Cargraves. "You've got plenty of air. I can still hear you talking. Must be four or five pounds in here."

"Give me air. I'll tell you how it works."

"You'll tell me first," Cargraves stated. He reached for the exhaust valve again.

"Wait! There is a little plug, in the back of the instrument-" He paused and gasped heavily. "The instrument panel. Starboard side. It's a safety switch. You wouldn't notice it; it looks just like a mounting stud. You push it in." He stopped to wheeze again.

"I think you'd better come show me," Cargraves said judicially. "If you aren't lying again, you've given me an out to take you back to earth for your appeal. Not that you deserve it."

He reached over and yanked on the spill valve; the air rushed back into the lock.

Ten minutes later Cargraves was seated in the lefthand pilot's chair, with his safety belt in place. Von Hartwick was in the righthand chair. Cargraves held a pistol in his left hand and cradled it over the crook of his right arm, so that it would remain pointed at von Hartwick, even under drive. He called out, "Morrie! Everybody ready?"

"Ready, Captain," came faintly from the rear of the ship. The boys had been forced to use the acceleration bunks in the passenger compartment. They resented it, especially Morrie, but there was no help for it. The control room could carry just two people under acceleration.

"Okay! Here we go!" He turned again to von Hartwick. "Twist her tail, Swine — Colonel Swine, I mean."

Von Hartwick glared at him. "I don't believe," he said slowly, "that you ever intended to go through with it."

Cargraves grinned and rubbed the chair arm. "Want to go back and see?" he inquired.

Von Hartwick swiveled his head around to the front. "Achtung!" he shouted. "Prepare for acceleration! Ready?" Without waiting for a reply he blasted off.

The ship had power to spare with the light load; Cargraves had him hold it at two g's for five minutes and then go free. By that time, having accelerated at nearly 64 feet per second for each second of the five minutes, even with due allowance for loss of one-sixth g to the pull of the moon at the start, they were making approximately 12,000 miles per hour.

They would have breezed past earth in twenty hours had it not been necessary to slow down in order to land. Cargraves planned to do it in a little less than twenty-four hours.

Once in free fall, the boys came forward and Cargraves required of von Hartwick a detailed lecture on the operation of the craft. When he was satisfied, he said, "Okay. Ross, you and Art take the prisoner aft and lash him to one of the bunks. Then strap yourselves down. Morrie and I are going to practice."

Von Hartwick started to protest. Cargraves cut him short. "Stow it! You haven't been granted any pardon; we've simply been picking your brains. You are a common criminal, going back to appeal your case."

They felt out the ship for the next several hours, with time out only to eat. The result of the practice on the course and speed were null; careful check was kept by instrument to see that a drive in one direction was offset by the same amount of drive in the opposite direction. Then they slept.

They needed sleep. By the time they got it they had been awake and active at an unrelenting pace for one full earth-day.

When they woke Cargraves called Art. "Think you could raise earth on this Nazi gear, kid?"

"I'll try. What do you want me to say and who do you want to talk to?"

Cargraves considered. Earth shone gibbous, more than half full, ahead. The Nazi base was not in line-of-sight. That suited him. "Better make it Melbourne, Australia," he decided, "and tell them this-" Art nodded. A few minutes later, having gotten the hang of the strange set, he was saying endlessly: "Space Ship City of Detroit calling UN police patrol, Melbourne; Space Ship City of Detroit calling UN police patrol, Melbourne-"

He had been doing this for twenty-five minutes when a querulous voice answered: "Pax, Melbourne; Pax, Melbourne — calling Space Ship City of Detroit. Come in, City of Detroit."

Art pushed up one phone and looked helpless. "You better talk to `em, Uncle."

"Go ahead. You tell them what I told you. It's your show."

Art shut up and did so.

Morrie let her down carefully and eased her over into a tight circular orbit just outside the atmosphere. Their speed was still nearly five miles per second; they circled the globe in ninety minutes. From that orbit he killed her speed slowly and dipped down cautiously until the stub wings of the City of Detroit, Wotan, began to bite the tenuous stratosphere in a blood-chilling thin scream.

Out into space again they went and then back in, each time deeper and each time slower. On the second of the braking orbits they heard the broadcast report of the UN patrol raid on the Nazi nest and of the capture of the Thor. On the next lap two chains bid competitively for an exclusive broadcast from space. On the third there was dickering for television rights at the field. On the fourth they received official instructions to attempt to land at the District-of-Columbia Rocket Port.

"Want me to take her down?" Morrie yelled above the scream of the skin friction.

"Go right ahead," Cargraves assured him. "I'm an old I want a chauffeur."

Morrie nodded and began his approach. They were somewhere over Kansas.

The ground of the rocket port felt strange and solid under the ship. Eleven days-only eleven days? -away from the earth's massive pull had given them new habits. Cargraves found that he staggered a little in trying to walk. He opened the inner door of the lock and waited for the boys to get beside him. Latching the outer door and broke the inner door open, he stepped to the seal.

As he swung it open, the face, an endless mass of guns flickered like heat "Oh, my gosh!" he said. 'Want to take the bows?' a solid wall of sound beat him in of eager eyes looked up at him. Flash lightning. He turned back to Ross. "This is awful! Say — don't you guys want to take the bows?"

Space Cadet

For William Ivar Bacchus

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I TERRA BASE

"To MATTHEW BROOKS DODSON," the paper in his hand read, "greetings:

Having successfully completed the field elimination tests for appointment to the position of cadet in the Interplanetary Patrol you are authorized to report to the Commandant, Terra Base, Santa Barbara Field, Colorado, North American Union, Terra, on or before One July 2075, for further examination.

"You are cautioned to remember that the majority of candidates taking these final tests usually fail and you should provide—"

Matt folded the paper and stuck it back in his belt pouch. He did not care to think about the chance of failure. The passenger across from him, a boy about his own age, caught his eye. "That paper looks familiar, you a candidate too?"

"That's right."

"Well, shake! M' name's Jarman—I'm from Texas."

"Glad to know you, Tex. I'm Matt Dodson, from Des Moines."

"Howdy, Matt. We ought to be about there—" The car sighed softly and slowed; their chairs rocked to meet the rapid deceleration. The car stopped and their chairs swung back to normal position. "We *are* there," Jarman finished.

The telescreen at the end of the car, busy a moment before with a blonde beauty demonstrating Sorkin's Super-Stellar Soap, now read: TERRA BASE STATION. The two boys grabbed their bags, and hurried out. A moment later, they were on the escalator, mounting to the surface.

Facing the station a half mile away in the cool, thin air stood Hayworth Hall, Earth headquarters of the fabulous Patrol. Matt stared at it, trying to realize that he was at last seeing it.

Jarman nudged him. "Come on."

"Huh? Oh—sure." A pair of slidewalks stretched from the station to the hall; they stepped onto the one running toward the building. The slidewalk was crowded; more boys streamed out of the station behind them. Matt noticed two boys with swarthy, thin features who were wearing high, tight turbans, although dressed otherwise much like himself. Further down the walk he glimpsed a tall, handsome youth whose impassive face was shiny black.

The Texas boy hooked his thumbs in his belt and looked around. "Granny, kill another chicken!" he said. "There's company for dinner. Speaking of that," he went on, "I hope they don't wait lunch too long. I'm hungry."

Matt dug a candy bar out of his pouch, split it and gave half to Jarman, who accepted it gratefully. "You're a pal, Matt, I've been living on my own fat ever since breakfast— and that's risky. Say, your telephone is sounding."

"Oh!" Matt fumbled in his pouch and got out his phone. "Hello?"

"That you, son?" came his father's voice.

"Yes, Dad."

"Did you get there all right?"

"Sure, I'm about to report in."

"How's your leg?"

"Leg's all right, Dad." His answer was not frank; his right leg, fresh from a corrective operation for a short Achilles' tendon, was aching as he spoke.

"That's good. Now see here, Matt—if it should work out that you aren't selected, don't let it get you down. You call me at once and—"

"Sure, sure, Dad," Matt broke in. "I'll have to sign off—I'm in a crowd. Good-by. Thanks for calling."

"Good-by, son. Good luck."

Tex Jarman looked at him understandingly. "Your folks always worry, don't they? I fooled mine—packed my phone in my bag." The slidewalk swung in a wide curve preparatory to heading back; they stepped off with the crowd, in front of Hayworth Hall. Tex paused to read the inscription over the great doorway. "*Quis custodi*— What does it say, Matt?"

"*Quis custodiet ipsos custodes*. That's Latin for: Who will watch the guardians?"

"You read Latin, Matt?"

"No, I just remember that bit from a book about the Patrol."

The rotunda of Hayworth Hall was enormous and seemed even larger, for, despite brilliant lighting at the floor level, the domed ceiling gave back no reflection at all; it was midnight black—black and studded with stars. Familiar stars—blazing Orion faced the tossing head of Taurus; the homely shape of the Dipper balanced on its battered handle at north-northeast horizon; just south of overhead the Seven Sisters shone.

The illusion of being outdoors at night was most persuasive. The lighted walls and floor at the level at which people walked and talked and hurried seemed no more than a little band of light, a circle of warmth and comfort, against the awful depth of space, like prairie schooners drawn up for the night under a sharp desert sky.

The boys caught their breaths, as did everyone who saw it for the first time. But they could not stop to wonder as something else demanded their attention. The floor of the rotunda was sunk many feet below the level at which they entered; they stood on a balcony which extended around the great room to enclose a huge, shallow, circular pit. In this pit a battered spaceship lurched on a bed of rock and sand as if it had crash-landed from the mimic sky above.

"It's the *Kilroy*—" Tex said, almost as if he doubted it.

"It *must* be," Matt agreed in a whisper.

They moved to the balcony railing and read a plaque posted there:

USSF Rocket Ship *Kilroy Was Here*

FIRST INTERPLANETARY SHIP

From Terra to Mars and return—Lieut. Colonel Robert deFries Sims, Commanding; Captain Saul S. Abrams; Master Sergeant Malcolm MacGregor. None survived the return landing. Rest in Peace.

They crowded next to two other boys and stared at the *Kilroy*. Tex nudged Matt. "See the gash in the dirt, where she skidded? Say, do you suppose they just built right over her, where she lay.

One of the other two—a big-boned six-footer with tawny hair—answered, "No, the Kilroy landed in North Africa."

"Then they must have fixed it to look like where she crashed. You a candidate too?"

"That's right."

I'm Bill Jarman—from Texas. And this is Matt Dodson."

"I'm Oscar Jensen—and this is Pierre Armand."

"Howdy, Oscar. Glad to know you, Pierre."

"Call me Pete," Armand acknowledged. Matt noticed that he spoke Basic English with an accent, but Matt was unable to place it. Oscar's speech was strange, too—a suggestion of a lisp. He turned back to the ship.

"Imagine having the guts to go out into space in a cracker box like that," he said. "It scares me to think about it"

"Me, too," agreed Oscar Jensen.

"It's a dirty shame," Pierre said, softly.

"What is, Pete?" Jarman demanded.

"That their luck didn't hold. You can see it was an almost perfect landing—they didn't just crash in, or there would have been nothing left but a hole in the ground."

"Yeah, I guess you're right. Say, there's a stairway down over on the far side—see it, Matt? Do you suppose we could look through her?"

"Maybe," Matt told him, "but I think we had better put it off. We've got to report in, you know."

"We had all better check in," agreed Jensen. "Coming, Pete?"

Armand reached for his bag. Oscar Jensen pushed him aside and picked it up with his own. "That's not necessary!" Armand protested, but Oscar ignored him.

Jarman looked at Pierre. "You sick, Pete?" he asked. "I noticed you looked kind of peaked. What's the trouble?"

"If you are," put in Matt, "ask for a delay."

Armand looked embarrassed. "He's not sick and he'll pass the exams," Jensen said firmly. "Forget it."

"Sho', sho'," Tex agreed. They followed the crowd and found a notice which told all candidates to report to room 3108, third corridor. They located corridor three, stepped on the slideway, and put down their baggage.

"Say, Matt," said Tex, "tell me—who was Kilroy?"

"Let me see," Matt answered. "He was somebody in the Second Global War, an admiral, I think. Yeah, Admiral 'Bull' Kilroy, that sounds right."

"Funny they'd name it after an admiral."

"He was a flying admiral."

"You're a savvy cuss," Tex said admiringly. "I think I'll stick close to you during the tests."

Matt brushed it off. "Just a fact I happened to pick up."

In room 3108 a decorative young lady waved aside their credentials but demanded their thumb prints. She fed these into a machine at her elbow. The machine quickly spit out instruction sheets headed by the name, serial number, thumb print, and photograph of each candidate, together with temporary messing and rooming assignments.

The girl handed out the sheets and told them to wait next door. She abruptly turned away.

"I wish she hadn't been so brisk," complained Tex, as they went out. "I wanted to get her telephone code. Say," he went on, studying his sheet, "there's no time left on here for a siesta."

"Did you expect it?" asked Matt.

"Nope—but I can hope, can't I?"

The room next door was filled with benches but the benches were filled with boys. Jarman stopped at a bench which was crowded by three large cases, an ornate portable refresher kit, and a banjo case. A pink-faced youth sat next to this. "Your stuff?" Tex asked him.

The young man grudgingly admitted it. "You won't mind if we move it and sit down," Tex went on. He started putting the items on the floor. The owner looked sulky but said nothing.

There was room for three. Tex insisted that the others sit down, then sat down on his bag and leaned against Mart's knees, with his legs stretched out. His footwear, thus displayed, were seen to be fine western boots, high-heeled and fancy.

A candidate across from them stared at the boots, then spoke to the boy next to him. "Pipe the cowboy!"

Tex snorted and started to get up. Matt put a hand on his shoulder, shoving him back. "It's not worth it, Tex. We've got a busy day ahead."

Oscar nodded agreement. "Take it easy, fellow."

Tex subsided. "Well—all right. Just the same," he added, "my Uncle Bodie would stuff a man's feet in his mouth for less than that." He glared at the boy across from him.

Pierre Armand leaned over and spoke to Tex. "Excuse me—but are those really shoes for riding on horses?"

"Huh? What do you think they are? Skis?"

"Oh, I'm sorry! But you see, I've never seen a horse."

"What?"

"I have," announced Oscar, "in the zoo, that is."

"In a zoo?" repeated Tex.

"In the zoo at New Auckland."

"Oh—" said Tex. "I get it. You're a Venus colonial." Matt then recalled where he had heard Oscar's vaguely familiar lisp before—in the speech of a visiting lecturer. Tex turned to Pierre. "Pete, are you from Venus, too?"

"No, I'm—" Pete's voice was drowned out.

"Attention, please! Quiet!" The speaker was dressed in the severely plain, oyster—white uniform of a space cadet. "All of you," he went on, speaking into a hand amplifier, "who have odd serial numbers come with me. Bring your baggage. Even numbers wait where you are."

"Odd numbers?" said Tex. "That's me!" He jumped up.

Matt looked at his instructions. "Me, too!"

The cadet came down the aisle in front of them. Matt and Tex waited for him to pass. The cadet did not hold himself erectly; he crouched the merest trifle, knees relaxed and springy, hands ready to grasp. His feet glided softly over the floor. The effect was catlike, easy grace; Matt felt that if the room were suddenly to turn topsy—turvy the cadet would land on his feet on the ceiling—which was perfectly true.

Matt wanted very much to look like him.

As the cadet was passing, the boy with the plentiful baggage plucked at his sleeve. "Hey, mister!"

The cadet turned suddenly and crouched, then checked himself as quickly. "Yes?"

"I've got an odd number, but I can't carry all this stuff. Who can I get to help me?"

"You can't." The cadet prodded the pile with his toe. "All of this is yours?"

"Yes. What do I do? I can't leave it here. Somebody'd steal it."

"I can't see why anyone would." The cadet eyed the pile with distaste. "Lug it back to the station and ship it home. Or throw it away."

The youngster looked blank. "You'll have to, eventually," the cadet went on. "When you make the lift to the school ship, twenty pounds is your total allowance."

"But— Well, suppose I do, who's to help me get it to the station?"

"That's your problem. If you want to be in the Patrol, you'll have to learn to cope with problems."

"But—"

"Shut up." The cadet turned away. Matt and Tex trailed along.

Five minutes later Matt, naked as an egg, was stuffing his bag and clothes into a sack marked with his serial number. As ordered, he filed through a door, clutching his orders and a remnant of dignity. He found himself in a gang refresher which showered him, scrubbed him, rinsed him, and blew him dry again, assembly—line style. His instruction sheet was waterproof; he shook from it a few clinging drops.

For two hours he was prodded, poked, thumped, photographed, weighed, X-rayed, injected, sampled, and examined until he was bewildered. He saw Tex once, in another queue. Tex waved, slapped his own bare ribs, and shivered. Matt started to speak but his own line started up.

The medicos examined his repaired leg, making him exercise it, inquired the date of the operation, and asked if it hurt him. He found himself admitting that it did. More pictures were taken; more tests were made. Presently he was told, "That's all. Get back into line."

"Is it all right, sir?" Matt blurted out.

"Probably. You'll be given some exercises. Get along."

After a long time he came into a room in which several boys were dressing. His path took him across a weighing platform; his body interrupted electric—eye beams. Relays closed, an automatic sequence took place based on his weight, height, and body dimensions. Presently a package slid down a chute and plunked down in front of

him.

It contained an undergarment, a blue coverall, a pair of soft boots, all in his size.

The blue uniform he viewed as a makeshift, since he was anxious to swap it for the equally plain, but oyster white, uniform of a cadet. The shoes delighted him. He zipped them on, relishing their softness and glovelike fit. It seemed as if he could stand on a coin and call it, heads or tails. "Cat feet"—his first space boots! He took a few steps, trying to walk like the cadet he had seen earlier.

"Dodson!"

"Coming." He hurried out and shortly found himself thrust into a room with an older man in civilian clothes.

"Sit down. I'm Joseph Kelly." He took Mart's instruction sheet. "Matthew Dodson . .. nice to know you, Matt."

"How do you do, Mr. Kelly."

"Not too badly. Why do you want to join the Patrol, Matt?"

"Why, uh, because—" Matt hesitated. "Well, to tell the truth, sir, I'm so confused right now that I'm darned if I know!"

Kelly chuckled. "That's the best answer I've heard today. Do you have any brothers or sisters, Matt?" The talk wandered along, with Kelly encouraging Matt to talk. The questions were quite personal, but Matt was sophisticated enough to realize that "Mr. Kelly" was probably a psychiatrist; he stammered once or twice but he tried to answer honestly.

"Can you tell me now why you want to be in the Patrol?"

Matt thought about it "I've wanted, to go out into space ever since I can remember."

"Travel around, see strange planets and strange people— that's understandable, Matt. But why not the merchant service? The Academy is a long, hard grind, and it's three to one you won't finish, even if you are sworn in as a cadet— and not more than a quarter of the candidates will pass muster. But you could enter the merchant school—I could have you transferred today—and with your qualifications you'd be a cinch to win your pilot's ticket before you are twenty. How about it?"

Matt looked stubborn.

"Why not, Matt? Why insist on trying to be an officer of the Patrol? They'll turn you inside out and break your heart and no one will thank you for your greatest efforts. They'll make you over into a man your own mother wouldn't recognize—and you won't be any happier for it. Believe me, fellow—I know."

Matt did not say anything.

"You still want to try it, knowing chances are against you?"

"Yes. Yes, I think I do."

"Why, Matt?"

Matt still hesitated. Finally he answered in a low voice. "Well, people look up to an officer in the Patrol."

Mr. Kelly looked at him. "That's enough reason for now, Matt. You'll find others—or quit." A clock on the wall suddenly spoke up:

"Thirteen o'clock! Thirteen o'clock!" Then it added thoughtfully, "I'm hungry."

"Mercy me!" said Kelly. "So am I. Let's go to lunch, Matt."

II ELIMINATION PROCESS

MATT'S INSTRUCTIONS told him to mess at table 147, East Refectory. A map on the back of the sheet showed where East Refectory was; unfortunately he did not know where Matt was—he had gotten turned around in the course of the morning's rat race. He ran into no one at first but august personages in the midnight black of officers of the Patrol and he could not bring himself to stop one of them.

Eventually he got oriented by working back to the rotunda and starting over, but it made him about ten minutes late. He walked down an endless line of tables, searching for number 147 and feeling very conspicuous. He was quite pink by the time he located it.

There was a cadet at the head of the table; the others wore the coveralls of candidates. The cadet looked up and said, "Sit down, mister—over there on the right. Why are you late?"

Matt gulped. "I got lost, sir."

Someone tittered. The cadet sent a cold glance down the table. "You. You with the silly horse laugh—what's your name?"

"Uh, Schultz, sir."

"Mister Schultz, there is nothing funny about an honest answer. Have you never been lost?"

"Why— Well, uh, once or twice, maybe."

"Hm ... I shall be interested in seeing your work in astrogation, if you get that far." The cadet turned back to Matt. "Aren't you hungry? What's your name?"

"Yes, sir. Matthew Dodson, sir." Matt looked hurriedly at the controls in front of him, decided against soup, and punched the "entree," "dessert," and "milk" buttons. The cadet was still watching him as the table served him.

"I am Cadet Sabbatello. Don't you like soup, Mr. Dodson?"

"Yes, sir, but I was in a hurry."

"There's no hurry. Soup is good for you." Cadet Sabbatello stretched an arm and punched Mart's "soup" button. "Besides, it gives the chef a chance to clean up the galley." The cadet turned away, to Mart's relief. He ate heartily. The soup was excellent, but the rest of the meal seemed dull compared with what he had been used to at home.

He kept his ears open. One remark of the cadet stuck in his memory. "Mr. van Zook, in the Patrol we never ask a man where he is from. It is all right for Mr. Romolus to volunteer that he comes from Manila; it is incorrect for you to ask him."

The afternoon was jammed with tests; intelligence, muscular control, reflex, reaction time, sensory response. Others required him to do two or more things at once. Some seemed downright silly. Matt did the best he could.

He found himself at one point entering a room containing nothing but a large, fixed chair. A loudspeaker addressed him: "Strap yourself into the chair. The grips on the arms of the chair control a spot of light on the wall. When the lights go out, you will see a lighted circle. Center your spot of light in the circle and keep it centered."

Matt strapped himself down. A bright spot of light appeared on the wall in front of him. He found that the control in his right hand moved the spot up and down, while the one in his left hand moved it from side to side. "Easy!" Matt told himself. "I wish they would start."

The lights in the room went out; the lighted target circle bobbed slowly up and down. He found it not too difficult to bring his spot of light into the circle and match the bobbing motion.

Then his chair turned upside down.

When he recovered from his surprise at finding himself hanging head down in the dark, he saw that the spot of light had drifted away from the circle. Frantically he brought them together, swung past and had to correct.

The chair swung one way, the circle another, and a loud explosion took place at his left ear. The chair bucked and teetered; a jolt of electricity convulsed his hands and he lost the circle entirely.

Matt began to get sore. He forced his spot back to the circle and nailed it. "Gotcha!" Smoke poured through the room, making him cough, watering his eyes, and veiling the target. He squinted and hung on grimly, intent only on hanging onto that pesky circle of light—through more explosions, screaming painful noise, flashing lights, wind in his eyes, and endless, crazy, motions of his chair.

Suddenly the room lights flared up, and the mechanical voice said: "Test completed. Carry out your next assignment."

Once he was given a handful of beans and a small bottle, and was told to sit down and place the bottle at a mark on the floor and locate in his mind the exact position of the bottle. Then he was to close his eyes and drop the beans one at a time into the bottle—if possible.

He could tell from the sound that he was not making many hits, but he was mortified to find, when he opened his eyes, that only one bean rested in the bottle.

He hid the bottom of his bottle in his fist and queued up at the examiner's desk. Several of those lined up had a goodly number of beans in their bottles, although he noted two with no beans at all. Presently he handed his bottle to the examiner. "Dodson, Matthew, sir. One bean."

The examiner noted it without comment. Matt blurted out, "Excuse me, sir—but what's to keep a person from cheating by peeking?"

The examiner smiled. "Nothing at all. Go on to your next test."

Matt left, grumbling. It did not occur to him that he might not know what was being tested.

Late in the day he was ushered into a cubbyhole containing a chair, a gadget mounted on a desk, pencil and paper, and framed directions.

"If any score from a previous test," Matt read, "appears in the window marked SCORE, return the starting lever to the position marked NEUTRAL to clear the board for your test."

Matt found the window labeled "SCORE"; it had a score showing in it—"37." Well, he thought, that gives me a mark to shoot at. He decided not to clear the board until he had read the instructions.

"After the test starts," he read, "a score of "1" will result each time you press the lefthand button except as otherwise provided here below. Press the lefthand button whenever the red light appears provided the green light is not lighted as well except that no button should be pressed when the righthand gate is open unless all lights are out. If the right—hand gate is open and the lefthand gate is closed, no score will result from pressing any button, but the lefthand button must nevertheless be pressed under these circumstances if all other conditions permit a button to be pressed before any score may be made in succeeding phases of the test. To put out the green light, press the righthand button. If the lefthand gate is not closed, no button may be pressed. If the lefthand gate is closed while the red light is lighted, do not press the lefthand button if the green light is out unless the righthand gate is open. To start the test move the starting lever from neutral all the way to the right. The test runs for two minutes from the time you move the starting lever to the right. Study these instructions, then select your own time for commencing the test. You are not permitted to ask questions of the examiner, so be sure that you understand the instructions. Make as high a score as possible."

"Whew!" said Matt.

Still, the test looked simple—one lever, two pushbuttons, two colored lights, two little gates. Once he mastered the instructions, it would be as easy as flying a kite, and a durn sight simpler than flying a copter!—Matt had had his copter license since he was twelve. He got to work.

First, he told himself, there seems to be just two ways to make a score, one with the red light on and one with both lights out and one gate open.

Now for the other instructions— Let's see, if the lefthand gate is not closed—no, if the lefthand gate is closed—he stopped and read them over again.

Some minutes later he had sixteen possible positions of gates and conditions of lights listed. He checked them against the instructions, seeking scoring combinations. When he was through he stared at the result, then checked everything over again.

After rechecking he stared at the paper, whistled tunelessly, and scratched his head. Then he picked up the paper, left the booth, and went to the examiner.

That official looked up. "No questions, please."

"I don't have a question," Matt said. "I want to report something. There's something wrong with that test. Maybe the wrong instructions sheet was put in there. In any case, there is no possible way to make a score under the instructions that are in there."

"Oh, come, now!" the examiner answered. "Are you sure of that?"

Matt hesitated, then answered firmly, "I'm sure of it, Want to see my proof?"

"No. Your name is Dodson?" The examiner glanced at a timer, then wrote on a chart. "That's all."

"But— Don't I get a chance to make a score?"

"No questions, please! I've recorded your score. Get along —it's dinner time."

There were a large number of vacant places at dinner. Cadet Sabbatello looked down the long table. "I see there have been some casualties," he remarked. "Congratulations, gentlemen, for having survived thus far."

"Sir—does that mean we've passed all the tests we took today?" one of the candidates asked.

"Or at least won a retest. You haven't flunked." Matt sighed with relief. "Don't get your hopes up. There will be still fewer of you here tomorrow."

"Does it get worse?" the candidate went on.

Sabbatello grinned wickedly. "Much worse. I advise you all to eat little at breakfast. However," he went on, "I have good news, too. It is rumored that the Commandant himself is coming down to Terra to honor you with his presence when you are sworn in—if you are sworn in."

Most of those present looked blank. The cadet glanced around. "Come, come, gentlemen!" he said sharply. "Surely not all of you are that ignorant. You!" He addressed Matt. "Mister, uh—Dodson. You seem to have some glimmering of what I am talking about. Why should you feel honored at the presence of the Commandant?"

Matt gulped. "Do you mean the Commandant of the Academy, sir?"

"Naturally. What do you know about him?"

"Well, sir, he's Commodore Arkwright." Matt stopped, as if the name were explanation.

"And what distinguishes Commodore Arkwright?"

"Uh, he's blind, sir."

"Not blind, Mr. Dodson, not blind! It simply happens that he had his eyes burned out. How did he lose his eyesight?" The cadet stopped him. "No—don't tell them. Let them find out for themselves."

The cadet resumed eating and Matt did likewise, while thinking about Commodore Arkwright. He himself had been too young to pay attention to the news, but his father had read an account of the event to him—a spectacular, single—handed rescue of a private yacht in distress, inside the orbit of Mercury. He had forgotten just how the Patrol officer had exposed his eyes to the Sun—something to do with transferring the yacht's personnel—but he could still hear his father reading the end of the report: "—these actions are deemed to be in accordance with the tradition of the Patrol."

He wondered if any action of his would ever receive that superlative distinction. Unlikely, he decided; "duty satisfactorily performed" was about the best an ordinary man could hope for.

Matt ran into Tex Jarman as he left the mess hall. Tex pounded him on the back. "Glad to see you, kid. Where are you rooming?"

"I haven't had time to look up my room yet."

"Let's see your sheet." Jarman took it. "We're in the same corridor—swell. Let's go up."

They found the room and walked in. Sprawled on the lower of two bunks, reading and smoking a cigarette, was another candidate. He looked up.

"Enter, comrades," he said, "Don't bother to knock."

"We didn't," said Tex.

"So I see." The boy sat up. Matt recognized the boy who had made the crack about Tex's boots. He decided to say nothing—perhaps they would not recognize each other. The lad continued, "Looking for someone?"

"No," Matt answered, "this is the room I'm assigned to."

"My roommate, eh? Welcome to the palace. Don't trip over the dancing girls. I put your stuff on your bed."

The sack containing Matt's bag and civilian clothes rested on the upper bunk. He dragged it down.

"What do you mean, his bed?" demanded Tex. "You ought to match for the lower bunk."

Matt's roommate shrugged. "First come, first served."

Tex clouded up. "Forget it, Tex," Matt told him. "I prefer the upper. By the way," he went on, to the other boy, "I'm Matt Dodson."

"Girard Burke, at your service."

The room was adequate but austere. Matt slept in a hydraulic bed at home, but he had used mattress beds in summer camp. The adjoining refresher was severely functional but very modern—Matt noted with pleasure that the shower was installed with robot massage. There was no shave mask, but shaving was not yet much of a chore.

In his wardrobe he found a package, marked with his serial number, containing two sets of clothing and a second pair of space boots. He stowed them and his other belongings; then turned to Tex. "Well, what'll we do now?"

"Let's look around the joint."

"Fine. Maybe we can go through the Kilroy."

Burke chucked his cigarette toward the oubliette. "Wait a sec. I'll go with you." He disappeared into the 'fresher.

Tex said in a low voice. "Tell him to go fly a kite, Matt."

"It'ud be a pleasure. But I'd rather get along with him, Tex."

"Well, maybe they'll eliminate him tomorrow."

"Or me." Matt smiled wryly.

"Or me. Shucks, no, Matt—we'll get by. Have you thought about a permanent roomie? Want to team up?"

"It's a deal." They shook hands.

"I'm glad that's settled," Tex went on. "My cellmate is a nice little guy, but he's got a blood brother, or some such, he wants to room with. Came to see him before dinner. They chattered away in Hindustani, I guess it was. Made me nervous. Then they shifted to Basic out of politeness, and that made me more nervous."

"You don't look like the nervous type."

"Oh, all us Jarmans are high strung. Take my Uncle Bodie. Got so excited at the county fair he jumped between the shafts of a sulky and won two heats before they could catch him and throw him."

"Is that so?"

"My solemn word. Didn't pay off, though. They disqualified him because he wasn't a two—year—old."

Burke joined them and they sauntered down to the rotunda. Several hundred other candidates had had the same idea but the administration had anticipated the rush. A cadet stationed at the stairway into the pit was permitting visitors in parties of ten only, each party supervised by a cadet. Burke eyed the queue. "Simple arithmetic tells me there's no point in waiting."

Matt hesitated. Tex said, "Come on, Matt. Some will get tired and drop out."

Burke shrugged, said, "So long, suckers," and wandered away.

Matt said doubtfully, "I think he's right, Tex."

"Sure—but I got rid of him, didn't I?"

The entire rotunda was a museum and memorial hall of the Patrol. The boys found display after display arranged around the walls—the original log of the first ship to visit Mars, a photo of the take—off of the disastrous first Venus expedition, a model of the German rockets used in the Second Global War, a hand—sketched map of the far side of the Moon, found in the wrecked *Kilroy*.

They came to an alcove the back wall of which was filled by a stereo picture of an outdoor scene. They entered and found themselves gazing, in convincing illusion, out across a hot and dazzling lunar plain, with black sky, stars, and Mother Terra herself in the background.

In the foreground, life size, was a young man dressed in an old—fashioned pressure suit. His features could be seen clearly through his helmet, big mouth, merry eyes, and ; thick sandy hair cut in the style of the previous century.

Under the picture was a line of lettering: *Lieutenant Ezra Dahlquist, Who Helped Create the Tradition of the Patrol—1969—1996.*

Matt whispered, "There ought to be a notice posted somewhere to tell us what he did."

"I don't see any," Tex whispered back. "Why are you whispering?"

"I'm not—yes, I guess I was. After all, he can't hear us, can he? Oh —there's a vocal!"

"Well, punch it."

Matt pressed the button; the alcove filled with the first bars of Beethoven's Fifth. The music gave way to a voice: "The Patrol was originally made up of officers sent to it by each of the nations then in the Western Federation. Some were trustworthy, some were not. In 1996 came a day shameful and glorious in the history of the Patrol, an attempted *coup d'etat*, the so—called Revolt of the Colonels. A cabal of high—ranking officers, acting from Moon Base, tried to seize power over the entire world. The plot would have been successful had not Lieutenant Dahlquist disabled every atom—bomb rocket at Moon Base by removing the fissionable material from each and wrecking the triggering mechanisms. In so doing he received so much radiation that he died of his burns." The voice stopped and was followed by the Valhalla theme from *Götterdämmerung*.

Tex let out a long sigh; Matt realized that he had been holding his own breath. He let it go, then took another; it seemed to relieve the ache in his chest.

They heard a chuckle behind them. Girard Burke was leaning against the frame of the alcove. "They go to a lot of trouble to sell it around here," he remarked. "Better watch it, me lads, or you will find yourselves buying it."

"What do you mean by that? Sell what?"

Burke gestured toward the picture. "That. And the plug that goes with it. If you care for that sort of thing, there are three more, one at each cardinal point of the compass."

Matt stared at him. "What's the matter with you, Burke? Don't you want to be in the Patrol?"

Burke laughed. "Sure I do. But I'm a practical man; I don't have to bamboozled into it by a lot of emotional propaganda." He pointed to the picture of Ezra Dahlquist. "Take him. They don't tell you he disobeyed orders of his superior officer—if things had fallen the other way, he'd be called a traitor. Besides that, they don't mention that it was sheer clumsiness that got him burned. Do you expect me to think he was a superman?"

Matt turned red. "No, I wouldn't expect it." He took a step forward. "But, since you are a practical man, how would you like a nice, practical punch in the snoot?"

Burke was no larger than Matt and a shade shorter, but he leaned forward, balanced on the balls of his feet, and said softly, "I'd love it. You and who else?"

Tex stepped forward. "I'm the 'who else.' "

"Stay out of this, Tex!" Matt snapped.

"I will not! I don't believe in wasting fair fighting on my social inferiors."

"Stay out, I tell you!"

"Nope, I want a piece of this. You slug him and I'll kick him in the stomach as he goes down."

Burke looked at Jarman, and relaxed, as if he knew that the fighting moment was past. "Tut, tut, gentlemen! You're squabbling among yourselves." He turned away. "Goodnight, Dodson. Don't wake me coming in."

Tex was still fuming. "We should have let him have it. He'll make your life miserable until you slap him down. My Uncle Bodie says the way to deal with that sort of pimple is to belt him around until he apologizes."

"And get kicked out of the Patrol before we're in it? I let him get me mad, so that puts him one up. Come on— let's see what else there is to see."

But Call—to—Quarters sounded before they worked around to the next of the four alcoves. Matt said good night to Tex at his door and went inside. Burke was asleep or shamming. Matt peeled off his clothes, shinnied up into his bunk, looked for the light switch, spotted it, and ordered it to switch off.

The unfriendly presence under him made him restless, but he was almost asleep when he recalled that he had not called his father back. The thought awakened him. Presently he became aware of a vague ache somewhere inside him. Was he coming down with something?

Could it be that he was homesick? At his age? The longer he considered it the more likely it seemed, much as he hated to admit it. He was still pondering it when he fell asleep.

III OVER THE BUMPS

THE NEXT MORNING Burke ignored the trouble they had had; he made no mention of it. He was even moderately cooperative about sharing the 'fresher. But Matt was glad to hear the call to breakfast.

Table 147 was not where it should be. Puzzled, Matt moved down the line until he found a table marked "147—149," with Cadet Sabbatello in charge. He found a place and sat down, to find himself sitting next to Pierre Armand. "Well! Pete!" he greeted him. "How are things going?"

"Glad to see you, Matt. Well enough, I guess." His tone seemed doubtful.

Matt looked him over. Pete seemed—"dragged through a knothole" was the phrase Matt settled on. He was about to ask what was wrong when Cadet Sabbatello rapped on the table. "Apparently," said the cadet, "some of you gentlemen have forgotten my advice last night, to eat sparingly this morning. You are about to go over the bumps today —and ground—hogs have been known to lose their breakfasts as well as their dignity."

Matt looked startled. He had intended to order his usual lavish breakfast; he settled for milk toast and tea. He noticed that Pete had ignored the cadet's advice; he was working on a steak, potatoes, and fried eggs—whatever ailed Pete, Matt decided, it had not affected his appetite.

Cadet Sabbatello had also noticed it. He leaned toward Pete. "Mister, uh—"

"Armand, sir," Pete answered between bites.

"Mr. Armand, either you have the digestion of a Martian sandworm, or you thought I was joking. Don't you expect to be dropsick?"

"No, sir."

"No?"

"You see, sir, I was born on Ganymede."

"Oh! I beg your pardon. Have another steak. How are you doing?"

"Pretty well, on the whole, sir."

"Don't be afraid to ask for dispensations. You'll find that everyone around here understands your situation."

"Thank you, sir."

"I mean it. Don't play 'iron man.' There's no sense in it."

After breakfast, Matt fell in step with Armand. "Say, Pete, I see why Oscar carried your bag yesterday. Excuse me for being a stupe."

Pete looked self—conscious. "Not at all. Oscar has been looking out for me—I met him on the trip down from Terra Station."

Matt nodded. "I see." He had no expert knowledge of interplanetary schedules, but he realized that Oscar, coming from Venus, and Pete, coming from one of Jupiter's moons, would—have to change ships at the artificial satellite of Earth called Terra Station, before taking the shuttle rocket down.

It accounted for the two boys being well acquainted despite cosmically different backgrounds. "How do you feel?" he went on.

Pete hesitated. "As a matter of fact, I feel as if I were wading in quicksand up to my neck. Every move is an effort."

"Gee, that's too bad! Just what is the surface gravity on Ganymede? About one—third 'g' isn't it?"

"Thirty—two per cent. Or from my point of view, everything here weighs three times as much as it ought to. Including me."

Matt nodded. "As if two other guys were riding on you, one on your shoulders, and one on your back."

"That's about it. The worst of it is, my feet hurt all the time. I'll get over it—"

"Sure you will!

"—since. I'm of Earth ancestry and potentially just as strong as my grandfather was. Back home, I'd been working out in the centrifuge the last couple of earth—years. I'm a lot stronger than I used to be. There's Oscar." Matt greeted Oscar, then hurried to his room to phone his father in private.

A copter transport hopped Matt and some fifty other candidates to the site of the variable acceleration test—in cadet slang, the "Bumps." It was west of the base, in the mountains, in order to have a sheer cliff for free fall. They landed on a loading platform at the edge of this cliff and joined a throng of other candidates. It was a crisp Colorado morning. They were near the timberline; gaunt evergreens, twisted by the winds, surrounded the clearing.

From a building just beyond the platform two steel skeletons ran vertically down the face of the two—thousand—foot cliff. They looked like open frames for elevators, which one of them was. The other was a guide for the testing car during the drop down the cliff.

Matt crowded up to the rail and leaned over. The lower ends of the skeleton frameworks disappeared, a dizzy distance below, in the roof of a building notched into the sloping floor of the canyon. He was telling himself that

he hoped the engineer who had designed the thing knew what he was doing when he felt a dig in the ribs. It was Tex. "Some roller coaster, eh, Matt?"

"Hi, Tex. That's an understatement if I ever heard one."

The candidate on Matt's left spoke up. "Do you mean to say we ride down that thing?"

"No less," Tex answered. "Then they gather the pieces up in a basket and haul 'em up the other one."

"How fast does it go?"

"You'll see in a mom— Hey! *Thar she blows!*"

A silvery, windowless car appeared inside one guide frame, at its top. It poised for a split second, then dropped. It dropped and dropped and dropped, gathering speed, until it disappeared with what seemed incredible velocity— actually about two hundred and fifty miles per hour—into the building below. Matt braced himself for the crash. None came, and he caught his breath.

Seconds later the car reappeared at the foot of the other framework. It seemed to crawl; actually it was accelerating rapidly during the first half of the climb. It passed from view into the building at the top of the cliff.

"Squad nine!" a loudspeaker bawled behind them.

Tex let out a sigh "Here I go, Matt," he said. "Tell mother my last words were of her. You can have my stamp collection." He shook hands and walked away.

The candidate who had spoken before gulped; Matt saw that he was quite pale. Suddenly he took off in the same direction but did not line up with the squad; instead he went up to the cadet mustering the squad and spoke to him, briefly and urgently. The cadet shrugged and motioned him away from the group.

Matt found himself feeling sympathetic rather than contemptuous.

His own test group was mustered next. He and his fellows were conducted into the upper building, where a cadet explained the test: "This test examines your tolerance for high acceleration, for free fall or weightlessness, and for violent changes in acceleration. You start with centrifugal force of three gravities, then all weight is removed from you as the car goes over the cliff. At the bottom the car enters a spiraling track which reduces its speed at deceleration of three gravities. When the car comes to rest, it enters the ascending tower; you make the climb at two gravities, dropping to one gravity, and momentarily to no weight, as the car reaches the top. Then the cycle is repeated, at higher accelerations, until each of you has reacted. Any questions?"

Matt asked, "How long is the free fall, sir?"

"About eleven seconds. We would increase it, but to double it would take four times as high a cliff. However, you will find this one high enough." He smiled grimly.

A timid voice asked, "Sir, what do you mean by 'react'?"

"Any of several things—hemorrhage, loss of consciousness."

"It's dangerous?"

The cadet shrugged. "What isn't? There has never been any mechanical failures. Your pulse, respiration, blood pressure, and other data are telemetered to the control room. We'll try not to let you die under test."

Presently he led them out of the room, down a passage and through a door into the test car. It had pendulum seats, not unlike any high—speed vehicle, but semi—reclining and heavily padded. They strapped down and medical technicians wired them for telemetering their responses. The cadet inspected, stepped out and returned with an officer, who repeated the inspection. The cadet then distributed "sick kits"—cloth bags of double thickness to be tied and taped to the mouth, so that a person might retch without inundating his companions. This done, he asked, "Are you all ready?" Getting no response, he went out and closed the door.

Matt wished that he had stopped him before it was too late.

For a long moment nothing happened. Then the car seemed to incline; actually, the seats inclined as the car started to move and picked up speed.

The seats swung back to the at—rest position but Matt felt himself getting steadily heavier and knew thereby that they were being centrifuged. He pressed against the pads, arms leaden, legs too heavy to move.

The feeling of extra weight left him, he felt his normal weight again, when suddenly that, too, was taken from him. He surged against the safety belts.

His stomach seemed to drop out of him. He gulped and swallowed; his breakfast stayed down. Somebody yelled, "We're falling!" It seemed to Matt the most unnecessary statement he had ever heard.

He set his jaw and braced himself for the bump. It did not come—and still his stomach seemed trying to squirm its way out of his body. Eleven seconds? Why, he had been falling more than eleven seconds already. What had gone wrong?

And still they fell, endlessly.

And fell.

Then he was forced back against the pads. The pressure increased smoothly until he was as heavy as he had been just before the drop. His abused stomach tried to retch but the pressure was too much for it.

The pressure eased off to normal weight. A short while later the car seemed to bounce and momentarily he was weightless, while his insides grabbed frantically for anchorage. The feeling of no weight lasted only an instant; he sagged into the cushions.

The door was flung open; the cadet strode in, followed by two medical technicians. Someone yelled, "Let me out of here! Let me out of here!" The cadet paid no attention but went to the seat in front of Matt. He unstrapped the occupant and the two medical assistants carried him out. His head lolled loosely as they did so. The cadet then went to the candidate who was kicking up the fuss, unstrapped him, and stepped back. The boy got up, staggered, and shuffled out.

"Anyone need a fresh sick kit?" There were muffled responses. Working swiftly, the cadet helped those who needed it. Matt felt weakly triumphant that his own kit was still clean.

"Stand by for five gravities," commanded the cadet. He made them answer to their names, one by one. While he was doing so another boy started clawing at his straps. Still calling the roll, the cadet helped him free and let him leave. He followed the lad out the door and shut it.

Matt felt himself tensing unbearably. He was relieved when the pressure took hold—but only momentarily, for he found that five gravities were much worse than three. His chest seemed paralyzed, he fought for air.

The giant pressure lifted—they were over the edge again, falling. His mistreated stomach revenged itself at once; he was sorry that he had eaten any breakfast at all.

They were still falling. The lights went out—and someone screamed. Falling and still retching, Matt was sure that the blackness meant some sort of accident; this time they would crash—but it did not seem to matter.

He was well into the black whirlpool of force that marked the deceleration at the bottom before he realized that he had come through without being killed. The thought brought no particular emotion; breathing at five gravities fully occupied him. The ride up the cliff, at double weight dropping off to normal weight, seemed like a vacation—except that his stomach protested when they bounced to a stop.

The lights came on and the cadet re—entered the room. His gaze stopped at the boy on Matt's right. The lad was bleeding at his nose and ears. The candidate waved him away feebly. "I can take it," he protested. "Go on with the test."

"Maybe you can," the cadet answered, "but you are through for today." He added, "Don't feel bad about it. It's not necessarily a down check."

He inspected the others, then called in the officer. The two held a whispered consultation over one boy, who was then half led, half carried from the test chamber. "Fresh sick kits?" asked the cadet.

"Here," Matt answered feebly. The change was made, while Matt vowed to himself never to touch milk toast again.

"Seven gravities," announced the cadet. "Speak up, or stand by." He called the roll again. Matt was ready to give up, but he heard himself answer "ready" and the cadet was gone before he could make up his mind. There were only six of them left now.

It seemed to him that the lights were going out again, gradually, as the weight of his body built up to nearly a thousand pounds. But the lights "came on" again as the car dropped over the cliff; he realized dully that he had blacked out.

He had intended to count seconds on this fall to escape the feeling of endless time, but he was too dazed. Even the disquiet in his middle section seemed remote. Falling — falling —

Again the giant squeezed his chest, drained the blood from his brain, and shut the light from his eyes. The part that was Matt squeezed out entirely. ...

"How do you feel?" He opened his eyes, saw a double image, and realized dimly that the cadet was leaning over him. He tried to answer. The cadet passed from view; he felt someone grasping him; he was being lifted and carried.

Someone wiped his face with a wet, cold towel. He sat up and found himself facing a nurse.

"You're all right now," she said cheerfully. "Keep this until your nose stops bleeding." She handed him the towel. "Want to get up?"

"Yes, I think so."

"Take my arm. We'll go out into the air."

Out on the loading platform Matt sat in the sunshine, dabbling at his nose and regaining his strength. He could hear sounds of excitement from the rail behind each time the car dropped. He sat there, soaking in the sun and wondering whether or not he really wanted to be a spaceman.

"Hey, Matt." It was Tex, looking pale and not too sure of himself. There was a blood stain down the front of his coverall.

"Hello, Tex. I see you've had it."

"Yeah."

"How many g's?"

"Seven."

"Same here. What do you think of it?"

"Well—" Tex seemed at a loss. "I wish my Uncle Bodie could have tried it. He wouldn't talk so much about the time he rassled the grizzly."

There were many vacant seats at lunch. Matt thought about those who had gone—did they mind being "bumped out," or were they relieved?

He was hungry but ate little, for he knew what was ahead that afternoon—rocket indoctrination. He had looked forward to this part of the schedule most eagerly. Space flight! Just a test jump, but the real thing nevertheless. He had been telling himself that, even if he failed, it would be worth it to get this first flight.

Now he was not sure; the "bumps" had changed his viewpoint. He had a new, grim respect for acceleration and he no longer thought drop—sickness funny; instead he was wondering whether or not he would ever get adjusted to free fall. Some never did, he knew.

His test group was due in Santa Barbara Field at fourteen—thirty. He had a long hour to kill with nothing to do but fret. Finally it was time to go underground, muster, and slidewalk out to the field.

The cadet in charge led them up to the surface into a concrete trench about four feet deep. Matt blinked at the sunlight. His depression was gone; he was anxious to start. On each side and about two hundred yards away were training rockets, lined up like giant birthday candles, poised on their fins with sharp snouts thrusting against the sky.

"If anything goes wrong," the cadet said, "throw yourself flat in the trench. Don't let that get your goat—I'm required to warn you.

"The jump lasts nine minutes, with the first minute and a half under power. You'll feel three gravities, but the acceleration is only two gravities, because you are still close to the Earth.

"After ninety seconds you'll be travelling a little faster than a mile a second and you will coast on up for the next three minutes for another hundred miles to an altitude of about one hundred fifty miles. You fall back toward the earth another three minutes, brake your fall with the jet and ground at the end of the ninth minute.

"A wingless landing on an atmosphere planet with gravity as strong as that of Earth is rather tricky. The landing will be radar—robot controlled, but a human pilot will stand by and check the approach against the flight plan. He can take over if necessary. Any questions?"

Someone asked, "Are these atomic—powered ships?"

The cadet snorted. "These jeeps? These are chemically powered, as you can see from the design. Monatomic hydrogen. They are much like the first big rockets ever built, except that they have variable thrust, so that the pilot and the passengers won't be squashed into strawberry jam as the mass—ratio drops off."

A green signal flare arched up from the control tower. "Keep your eyes on the second rocket from the end, on the north," advised the cadet.

There was a splash of orange flame, sun bright, at the base of the ship. *"There she goes!"*

The ship lifted majestically, and poised for an instant, motionless as a hovering helicopter. The noise reached Matt, seemed to press against his chest. It was the roar of an impossibly huge blowtorch. A searchlight in the tower blinked, and the ship mounted, up and up, higher and faster, its speed increasing with such smoothness that it was hard to realize how fast it was going—except that the roar was gone. Matt found himself staring straight at the zenith, watching a dwindling artificial sun, almost as dazzling as Sol himself.

Then it was gone. Matt closed his mouth and started to look away,vwhen his attention was seized by the ice trail left as the rocket sliced its way through the outer atmosphere. White and strange, it writhed like a snake with a broken back. Under the driving force of the many—hundred—miles—an—hour winds of that far altitude it twisted visibly as he watched.

"That's all!" the cadet shouted. "We can't wait for the landing."

They went underground, down a corridor, and entered an elevator. It went up right out of the ground and into the air, supported by a hydraulic piston. It mounted close by the side of a rocket ship; Matt was amazed to see how large it was close up.

The elevator stopped and its door let down drawbridge fashion into the open hatch in the rocket's side. They trooped across; the cadet raised the bridge and went down again.

They were in a conical room. Above them the pilot lay in his acceleration rest. Beside them, feet in and head out, were acceleration couches for passengers. "Get in the bunks!" shouted the pilot. "Strap down."

Ten boys jostled one another to reach the couches. One hesitated. "Uh, oh, Mister!" he called out.

"Yes? Get in your couch."

"I've changed my mind. I'm not going."

The pilot used language decidedly not officerlike and turned to his control board. 'Tower! Remove passenger from number nineteen." He listened, then said, "Too late to change the flight plan. Send up mass." He shouted to the waiting boy, "What do you weigh?"

"Uh, a hundred thirty—two pounds, sir."

"One hundred and thirty—two pounds and make it fast!" He turned back to the youngster. "You better get off this base fast, for if I have to skip my take—off I'll wring your neck."

The elevator climbed into place presently and three cadets poured across. Two were carrying sandbags, one had five lead weights. They strapped the sandbags to the vacant couch, and clamped the weights to its sides. "One thirty—two mass," announced one of the cadets.

"Get going," snapped the pilot and turned back to the board.

"Don't blow your tubes, Harry," advised the cadet addressed. Matt was amazed, then decided the pilot must be a cadet, too. The three left, taking with them the boy; the hatch door shut with a *whish*.

"Stand by to raise!" the pilot called out, then looked down to check his passengers. "Passengers secure, nineteen," he called to the tower. "Is that confounded elevator clear?"

There was silence as the seconds trickled away.

The ship shivered. A low roar, muffled almost below audibility, throbbed in Mart's head. For a moment he felt slightly heavy, the feeling passed, then he was pressed strongly against the pads.

Matt was delighted to find that three gravities were not bad, flat on his back as he was. The minute and a half under power stretched out; there was nothing to hear but the muted blast of the reactor, nothing to see but the sky through the pilot's port above.

But the sky was growing darker. Already it was purple; as he watched it turned black. Fascinated, he watched the stars come out.

"Stand by for free fall!" the pilot called out, using an amplifier. "You'll find sick kits under each pillow. If you need 'em, put 'em on. I don't want to have to scrape it off the port."

Matt fumbled with heavy fingers under his head, found the kit. The sound of the jet died away, and with it the thrust that had kept them pinned down. The pilot swung out of his rest and floated, facing them. "Now look, sports —we've got six minutes. You can unstrap, two at a time and come up for a look—see. But get this: Hang on tight. Any man who starts floating free, or skylarking, gets a down check." He pointed to a boy. "You—and the next guy."

The "next guy" was Matt. His stomach was complaining and he felt so wretched that he did not really want the privilege offered—but his face was at stake; he clamped his jaws, swallowed the saliva pouring into his mouth, and unstrapped.

Free, he clung to one strap, floating loosely, and tried to get his bearings. It was curiously upsetting to have no up—and—down; it made everything swim—he had trouble focusing his eyes. "Hurry up there!" he heard the pilot shout, "or you'll miss your turn."

"Coming, sir."

"Hang on—I'm going to turn the ship." The pilot un—clutched his gyros and cut in his processing flywheels. The ship turned end over end. By the time Matt worked his way to the control station, moving like a cautious and elderly monkey, the rocket was pointed toward Earth.

Matt stared out at the surface, nearly a hundred miles below and still receding. The greens and browns seemed dark by contrast with the white dazzle of clouds. Off to the left and right he could see the inky sky, stabbed with stars. "That's the Base, just below," the pilot was saying. "Look sharp and you can make out Hayworth Hall, maybe, by its shadow."

It did not seem "just below" to Matt; it seemed "out"— or no direction at all. It was disquieting. "Over there—see? —is the crater where Denver used to be. Now look south—that brown stretch is Texas; you can see the Gulf beyond it."

"Sir," asked Matt, "can we see Des Moines from here?"

"Hard to pick out. Over that way—let your eye slide down the Kaw River till it strikes the Missouri, then up river. That dark patch—that's Omaha and Council Bluffs. Des Moines is between there and the horizon." Matt strained his eyes, trying to pick out his home. He could not be sure— but he did see that he was staring over the bulge of the Earth at a curved horizon; he was seeing the Earth as round. "That's all," ordered the pilot. "Back to your bunks. Next pair!"

He was glad to strap a belt across his middle. The remaining four minutes or so stretched endlessly; he resigned himself to never getting over space sickness. Finally the pilot chased the last pair back, swung ship jet toward Earth, and shouted, "Stand by for thrust—we're about to ride 'er down on her tail!"

Blessed weight pressed down on him and his stomach stopped complaining. The ninety seconds of deceleration seemed longer; it made him jumpy to know that the Earth was rushing up at them and not be able to see it. But at last there came a slight bump and his weight dropped suddenly to normal. "Grounded," announced the pilot, "and all in one piece. You can unstrap, sports."

Presently a truck arrived, swung a telescoping ladder up to the hatch, and "they climbed down. On the way back they passed a great unwieldy tractor, crawling out to retrieve the rocket. Someone stuck his head out of the tractor. "Hey! Harry—why didn't you land it in Kansas?"

Their pilot waved at the speaker. "Be grateful I didn't!"

Matt was free until mess; he decided to return to the observation trench; he still wanted to see a ship land on its jet. He had seen winged landings of commercial stratosphere rockets, but never a jet landing.

Matt had just found a vacant spot in the trench when a shout went up—a ship was coming in. It was a ball of flame, growing in the sky, and then a pillar of flame, streaking down in front of him. The streamer of fire brushed the ground, poised like a ballet dancer, and died out. The ship was down.

He turned to a candidate near him. "How long till the next one?"

"They've come in about every five minutes. Stick around."

Presently a green flare went up from the control tower and he looked around, trying to spot the ship about to take off, when another shout caused him to turn back. There again was a ball of fire in the sky, growing.

Unbelievably, it went out. He stood there, stupefied— to hear a cry of "Down! Down, everybody! Flat on your faces!" Before he could shake off his stupor, someone tackled him and threw him.

He was rocked by a sharp shock, on top of it came the roar of an explosion. Something snatched at his breath.

He sat up and looked around. A cadet near him was peering cautiously over the parapet. "Allah the Merciful," he heard him say softly.

"What happened?"

"Crashed in. Dead, all dead." The cadet seemed to see him for the first time. "Get back to your quarters," he said sharply.

"But how did it happen?"

"Never mind—this is no time for sightseeing." The cadet moved down the line, clearing out spectators.

IV FIRST MUSTER

MATT'S ROOM WAS EMPTY, which was a relief. He did not want to see Burke, nor anyone. He sat down and thought about it.

Eleven people—just like that. All happy and excited and then—*crrump!*—not enough left to cremate. Suddenly he himself was back up in the sky— He broke off the thought, trembling.

At the end of an hour he had made up his mind that the Patrol was not for him. He had thought of it, he realized, through a kid's bright illusions—*Captain Jenks of the Space Patrol, The Young Rocketeers*, stuff like that. Well, those books were all right—for kids—but he wasn't hero material, he had to admit.

Anyhow, his stomach would never get used to free fall. Right now it tightened up when he thought about it.

By the time Burke returned he was calm and, if not happy, at least he was not unhappy, for his mind was at rest.

Burke came in whistling. He stopped when he saw Matt. "Well, junior, still here? I thought the bumps would send you home."

"No."

"Didn't you get dropsick?"

"Yes." Matt waited and tried to control his temper. "Didn't you?"

Burke chuckled. "Not likely. I'm no groundhog, junior.

"Call me 'Matt.'"

"Okay, Matthew. I was going out into space before I could walk. My old man builds 'em, you know."

"I didn't know."

"Sure. 'Reactors, Limited'—he's chairman of the board. Say, did you see the fireworks out at the field?"

"You mean the ship that crashed?"

"What else? Quite a show, wasn't it?"

Matt could feel himself coming to a slow boil. "Do you mean to stand there and tell me," he said quietly, "that you regard the deaths of eleven human beings as 'quite a show'?"

Burke stared at him. Then he laughed. "I'm sorry, old fellow. I apologize. But it actually didn't occur to me that you didn't know."

"Didn't know what?"

"But you weren't supposed to know, of course. Relax, son—no one was killed. You were framed."

"Huh? What are you talking about?"

Burke sat down and laughed until he had tears. Matt grabbed him by the shoulder. "Cut that out and talk."

The other candidate stopped and looked up. "Honest, I rather like you, Dodson—you're such a perfect country cousin. How do you feel about Santa Claus and the Stork?"

"Talk!"

"Haven't you caught on to what they've been doing to you ever since you checked in?"

"Doing what?"

"War of nerves, man. Haven't you noticed some tests were too easy —too easy to cheat in, that is? When you went over the bumps, didn't you notice that they let you take a good look at the drop before you made it? When they could just as easily have kept you inside where it wouldn't worry you?"

Matt thought about it. It was an enticing notion—he could see how some of the things he had not understood would fit in to such a theory. "Go on."

"Oh, it's a good gag—it cleans out the weak sisters and it cleans out the stupes, too—the guys so dumb that they can't resist an invitation to cheat, never dreaming that it might be booby—trapped. It's efficient —a Patrol officer has to be smart and fast on his feet and cool—headed. It keeps from wasting money on second—raters."

"You just called me dumb and yet I got by."

"Of course you did, junior, because your heart is pure." He laughed again. "And I got by. But you'll never make a Patrolman, Matt. They've got other ways to get rid of the good, dumb boys. You'll see."

"Okay, so I'm dumb. But don't call me junior again. What's this got to do with the ship that crashed?"

"Why, it's simple. They want to eliminate all the dead—wood before swearing us in. There are candidates with cast—iron stomachs who don't get upset by the bumps, or anything. So they send up a ship under robot control—no pilot, no passengers and crash it, just to scare off those who can be scared. It's a darn sight cheaper than training just one cadet, if he doesn't pay off in the long run."

"How do you know? Have you got inside information on it?"

"In a way, yes. It's a logical necessity—those ships can't crash, unless you crash 'em on purpose. I know—my old man makes them."

"Well—maybe you're right." Matt dropped the matter, unsatisfied but lacking basis for further argument. It did convince him of one thing, however—spacesickness or not, come what may, he resolved to hang on as long as Girard Burke did, and at least twenty—four hours longer!

His table at dinner that night was numbered "147, 149, 151 & 153." There was room enough to seat the survivors.

Cadet Sabbatello looked them over pleasantly. "Congratulations, gentlemen, on having lasted it out. Since you will be sworn in tonight, when next we meet it will be in a different status." He grinned. "So relax and enjoy your last meal of freedom."

In spite of no effective breakfast and little lunch, Matt found himself unable to eat much. Girard Burke's interpretation of the tests and what they meant troubled him. He still intended to take the oath, but he had an uneasy feeling that he was about to take it without knowing what it signified—what the Patrol really was.

When the meal broke up, on sudden impulse he followed the cadet in charge of the table out. "Excuse me—Mr. Sabbatello, could I speak to you privately, sir?"

"Eh? I suppose so—come along." He led Matt to his own room; it was exactly like Matt's. "Now what is it?"

"Uh—Mr. Sabbatello, that crash today: was anybody hurt?"

"Hurt? It killed eleven people. Don't you call that hurt'?"

"Are you sure? Is it possible that it was a drone and nobody was inside?"

"It's possible, but it's not the case. I wish it were—the pilot was a friend of mine."

"Oh—I'm sorry. But I had to know, for sure. You see, it's very important to me."

"'Why?"

Matt sketched out Burke's version of what had happened, without giving Burke's name. As he talked, Sabbatello showed more and more annoyance. "I see," he said, when Matt was done. "It is true that some of the tests are psychological rather than overt. But this matter of the crash —who fed you that nonsense?"

Matt did not say anything.

"Never mind. You can protect your informant—it won't matter in the least in the long run. But about the crash—" He considered. "I'd give my word of honor to you—in fact I do—but if you accept the hypothesis your friend holds, then you won't pay any attention to my sworn word." He thought a moment. "Are you a Catholic?"

"Uh, nossir." Matt was startled.

"It doesn't matter. Do you know who Saint Barbara is?"

"Not exactly, sir. The field—"

"Yes, the field. She was a third—century martyr. The point is that she is the patron saint of all who deal with high explosives, rocket men among others." He paused.

"If you go over to the chapel, you will find that a mass is scheduled during which Saint Barbara will be asked to intercede for the souls of the men who were lost this afternoon. I think you realize that no priest would lend his office to any such chicanery as your friend suggests?"

Matt nodded solemnly. "I see your point, sir. I don't need to go to the chapel—I've found out what I needed to know."

"Fine. You had better hightail it and get ready. It would be embarrassing to be late to your own swearing in."

First Muster was scheduled for twenty—one o'clock in the auditorium. Matt was one of the first to arrive, scrubbed and neat and wearing a fresh coverall. A cadet took his name and told him to wait inside. The floor of the hall had been cleared of seats. Above the stage at the far end were the three closed circles of the Federation—Freedom, Peace, and Law, so intertwined that, if any one were removed, the other two would fall apart. Under them was the Patrol's own sign, a star blazing in the night.

Tex was one of the last to show up. He was greeting Matt, breathlessly, when a cadet, speaking from the rostrum, called out, "Attention!

"Gather on the left side of the hall," he went on. The candidates milled and shuffled into a compact group. "Remain where you are until muster. When your name is called, answer 'Here!', then walk across to the other side. You will find white guide lines on the deck there. Toe the lines to form ranks."

Another cadet came down from the rostrum and moved toward the mass of boys. He stopped, picked a slip of paper from four such slips he held, and fixed Tex with his eye. "You, mister," he said. "Take this."

Jarman took it, but looked puzzled. "What for?"

"As well as answering to your own name, when you hear this name, speak up. Step out in front and sing out, 'I answer for him!'"

Tex looked at the slip. Matt saw that it read: "John Martin."

"But why?" demanded Tex.

The cadet looked at him. "You really don't know?"

"Nary a notion."

"Hmmph! Well, since the name doesn't ring a bell, just take it that he is a classmate of yours who can't be here tonight, in person. So you answer for him to make the muster complete. Get it?"

"Yes, sir. Can do."

The cadet moved on down the line. Tex turned to Matt. "What gives, d'you s'pose?"

"It beats me."

"Me, too. Well, we'll probably find out."

The cadet on the rostrum moved to stage .left. "Silence!" he commanded. "The Commandant!"

From the rear entered two men dressed in the midnight black. The younger of them walked so that his sleeve brushed the elbow of his senior. They moved to the center of the platform; the younger man stopped. The elder halted immediately, whereupon the aide withdrew. The Commandant of the Academy stood facing the new class.

Or, rather, facing down the center of the hall. He stood still for a long moment; someone coughed and shuffled, at which he turned toward the group and faced them thereafter. "Good evening, gentlemen."

Seeing him, Matt was reminded strongly of Cadet Sabbatello's protest: "Not *blind*, Mr. Dodson!" Commodore Arkwright's eyes looked strange—the sockets were deep set and the eyelids drooped like a man in thought. Yet, as that sightless gaze rested on him, it seemed to Matt that the Commandant could not only see him but could peer inside his head.

"I welcome you to our fellowship. You come from many lands, some from other planets. You are of various colors and creeds. Yet you must and shall become a band of brothers.

"Some of you are homesick. You need not be. From this day on every part of this family of planets is your home, each place equally. Each living, thinking creature in this system is your neighbor—and your responsibility.

"You are about to take an oath, by your own choice, as a member of the Patrol of this our System. In time, you expect to become an officer of that Patrol. It is necessary that you understand the burden you assume. You expect to spend long hours studying your new profession, acquiring the skills of the spaceman and the arts of the professional soldier. These skills and arts you must have, but they will not make you an officer of the Patrol."

He paused, then went on, "An officer in command of a ship of the Patrol, away from base, is the last of the absolute monarchs, for there is none but himself to restrain him. Many places where he must go no other authority reaches. He himself must embody law, and the rule of reason, justice and mercy.

"More than that, to the members of the Patrol singly and together is entrusted such awful force as may compel or destroy, all other force we know of—and with this trust is laid on them the charge to keep the peace of the System and to protect the liberties of its peoples. They are soldiers of freedom.

"It is not enough that you be skillful, clever, brave— The trustees of this awful power must each possess a meticulous sense of honor, self—discipline beyond all ambition, conceit, or avarice, respect for the liberties and dignity of all creatures, and an unyielding will to do justice and give mercy. He must be a true and gentle knight."

He stopped and there was no sound at all in the huge room. Then he said, "Let those who are prepared to take the oath be mustered."

The cadet who had been acting as adjutant stepped forward briskly. "Adams!"

"Uh—here, sir!" A candidate trotted across the room.

"Akbar."

"Here!"

"Alvarado—"

"Anderson, Peter—"

"Anderson, John—"

"Angelico—"

Then, presently, it was, "Dana—Delacroix—DeWitt—Diaz — Dobbs," and "Dodson!"

"Here!" shouted Matt. His voice squeaked but no one laughed. He hurried over to the other side, found a place and waited, panting. The muster went on:

"Eddy—Eisenhower—Ericsson—" Boys trickled across the room until few were left. "Sforza, Stanley, Suliman," and then, finally: "Zahm!" The last candidate joined his fellows.

But the cadet did not stop. "Dahlquist!" he called out.

There was no answer.

"Dahlquist!" he repeated. "Ezra Dahlquist!"

Matt felt cold prickles around his scalp. He recognized the name now—but Dahlquist would not be here, not Ezra Dahlquist. Matt was sure of that, for he remembered an alcove in the rotunda, a young man in a picture, and the hot, bright sand of the Moon.

There was a stir in the rank behind him. A candidate pushed his way through and stepped forward. "I answer for Ezra Dahlquist!"

"Martin!"

This time there was no hesitation. He heard Tex's voice, his tone shrill: "I answer for him."

"Rivera."

A strong baritone: "Answering for Rivera!"

"Wheeler!"

"I answer for Wheeler."

The cadet turned toward the Commandant and saluted:

"All present, sir. Class of 2075, First Muster complete."

The man in black returned the salute. "Very well, sir. We will proceed with the oath." He stepped forward to the very edge of the platform, the cadet at his elbow. "Raise your right hands."

The Commandant raised his own hand. "Repeat after me: Of my own free will, without reservation—"

" 'Of my own free will, without reservation—' "

"I swear to uphold the peace of the Solar System—"

In chorus they followed him.

"—to protect the lawful liberties of its inhabitants—

"—to defend the constitution of the Solar Federation—

"—to carry out the duties of the position to which I am now appointed—

"—and to obey the lawful orders of my superior officers,

"To these ends I subordinate all other loyalties and renounce utterly any that may conflict with them.

"This I solemnly affirm in the Name I hold most sacred."

"So help me, God," concluded the Commandant. Matt repeated his words, but the response around him took a dozen different forms, in nearly as many languages.

The Commandant turned his head to the cadet by his side. "Dismiss them, sir."

"Aye aye, sir." The cadet raised his voice. "On being dismissed, face to the right and file out. Maintain your formation until clear of the door. Dismissed!"

At the cue of his command, music swelled out and filled the hall; the newly created cadets marched away to the strains of the Patrol's own air, *The Long Watch*. It persisted until the last of them were gone, then faded out.

The Commandant waited until the youngster cadets had left, then faced around. His aide joined him at once, whereupon the acting cadet adjutant moved quickly from his side. Commodore Arkwright turned toward the departing cadet. "Mr. Barnes."

"Yes, sir?"

"Are you ready to be commissioned?"

"Er— I don't think so, sir. Not quite."

"So? Well, come see me soon."

"Yes, sir. Thank you."

The Commodore turned away and headed rapidly for the stage exit, with his aide's sleeve brushing his. "Well, John," asked the senior, "What did you think of them?"

"A fine bunch of boys, sir."

"That was my impression. All youth and eagerness and young expectation. But how many of them will we have to eliminate? It's a sorry thing, John, to take a boy and change him so that he is no longer a civilian, then kick him out. It's the cruelest duty we have to perform."

"I don't see a way to avoid it."

"There is no way. If we had some magic touchstone— Tell the field that I want to raise ship in thirty minutes."

"Aye aye, sir."

V INTO SPACE

The PATROL ACADEMY may lack ivy—covered buildings and tree—shaded walks; it does not lack room. There are cadets in every reach of the Federation, from ships circling Venus, or mapping the scorched earth of Mercury, to ships patrolling the Jovian moons.

Even on years—long exploration flights to the frozen fringes of the Solar System cadets go along—and are brevetted as officers when their captains think them ready, without waiting to return.

The public thinks of the Academy as the school ship P.R.S. *James Randolph*, but every cadet mess in every ship of the Patrol is part of the Academy. A youngster cadet is ordered to the *Randolph* as soon as he is sworn in and he remains attached to that ship until he is ready to go to a regular Patrol vessel as a passed cadet. His schooling continues; in time he is ordered back to where he started, Hayworth Hall, to receive his final polish.

An oldster, attached to Hayworth Hall, will not necessarily be there. He may be at the radiation laboratories of Oxford University, or studying interplanetary law at the Sorbonne, or he may even be as far away as Venus, at the Institute for System Studies. Whatever his route —and no two cadets pursue exactly the same course of training—the Academy is still in charge of him, until, and *if*, he is commissioned.

How long it takes depends on the cadet. Brilliant young Hartstone, who died on the first expedition to Pluto, was brevetted less than a year after he reported to Hayworth Hall as a groundhog candidate. But it is not unusual to find oldsters at Terra Base who have been cadets for five years or more.

Cadet Matthew Dodson admired himself in the mirror of the 'fresher. The oyster—white uniform he had found waiting when he returned from First Muster the evening before, and with it a small book of regulations embossed with his name and clipped to a new assignment schedule. The schedule had started out: "1.. Your first duty as a cadet is to read the regulation book herewith, at once. Hereafter you are responsible for the contents."

He had read it before taps, until his mind was a jumble of undigested rules: "A cadet is an officer in a limited sense—" "—behave with decorum and sobriety appropriate to the occasion—" "—in accordance with local custom rather than Patrol custom unless in conflict with an invariant law of the Federation or regulation of the Patrol." "—but the responsibility of determining the legality of the order rests on the person ordered as well as on the person giving the order." "—circumstances not covered by law or regulation must be decided by the individual in the light of the living tradition of the Patrol." "Cadets will at all times be smooth—shaven and will not wear their hair longer than two inches."

He felt that he understood the last mentioned.

He got up before reveille the next morning and dived into the 'fresher, shaved hastily and rather unnecessarily and got into uniform.

It fit him well enough, but to his eye the fit was perfect, the styling superb. As a matter of fact, the uniform lacked style, decoration, trim, insignia, or flattering cut.

But Matt thought he looked wonderful.

Burke pounded on the 'fresher door. "Have you died in there?" He stuck his head in. "Oh—all right, so you look sweet. Now how about getting out?"

"Coming." Matt stalled around the room for a few minutes, then overcome by impatience, tucked his regulation book in his tunic (regulation #383), and went to the refectory. He walked in feeling selfconscious, proud, and about seven feet tall. He sat down at his table, one of the first to arrive. Cadets trickled in; Cadet Sabbatello was one of the last.

The oldster looked grimly down the table. "Attention," he snapped. "All of you—stand up."

Matt jumped to his feet with the rest. Sabbatello sat down. "From now on, gentlemen, make it a rule to wait until your seniors are seated. Be seated." The oldster studied the studs in front of him, punched his order, and looked up. The youngsters had resumed eating. He rapped the table sharply. "Quiet, please. Gentlemen, you have many readjustments to make. The sooner you make them, the happier you will be. Mr. Dodson—stop dunking your toast; you are dripping it on your uniform. Which brings me," he went on, "to the subject of table manners—"

Matt returned to his quarters considerably subdued.

He stopped by Tex's room and found him thumbing through the book of regulations. "Hello, Matt. Say, tell me something—is there anything in this bible that says Mr. Dynkowski has the right to tell me not to blow on my coffee?"

"I see you've had it, too. What happened?"

Jarman's friendly face wrinkled. "Well, I'd begun to think of Ski as an all—right guy, helpful and considerate. But this morning at breakfast he starts out by asking me how I manage to carry around all that penalty-weight." Tex glanced at his waist line; Matt noted with surprise that Tex looked quite chubby in cadet uniform.

"All us Jarmans are portly," Tex went on defensively. "He should see my Uncle Bodie. Then he—"

"Skip it," said Matt. "I know the rest of it—now."

"Well, I guess I shouldn't have lost my temper."

"Probably not." Matt looked through the book. "Maybe this will help. It says here that, in case of doubt, you may insist that the officer giving the order put it in writing and stamp his thumb print, or use other means to provide a permanent record."

"Does it, really?" Tex grabbed the book. "That's for me!— 'cause I sure am in doubt. Boy! Just wait and see his face when I pull this one."

"I'd like to," agreed Matt. "Which way do you take the lift, Tex?"

The Patrol Rocket Ship Simon Bolivar, transport, was at Santa Barbara Field, having discharged a battalion of Space Marines, but P.R.S. Bolivar could take but about half the new class. The rest were to take the public shuttle rocket from Pike's Peak, launching catapult to Terra Space Station, there to be transferred to the *Randolph.*

"Transport," Tex answered. "How about you?"

"Me, too. I'd like to see Terra Station, but I'm glad we're going in a Patrol ship. What are you taking with you?"

Tex hauled out his luggage and hefted it. "It's a problem. I've got about fifty pounds here. Do you suppose if I rolled it up real small I could get it down to twenty pounds?"

"An interesting theory," Matt said. "Let's have a look at it—you've got to eliminate thirty pounds of penalty-weight."

Jarman spread his stuff out on the floor. "Well," Matt said at once, "you don't need all those photographs." He pointed to a dozen large stereos, each weighing a pound or more.

Tex looked horrified. "Leave my harem behind?" He picked up one. "There is the sweetest redhead in the entire Rio Grande Valley." He picked up another. "And Smitty—I couldn't get along without Smitty. She thinks I'm wonderful."

"Wouldn't she still think so if you left her pic behind?"

"Oh, of course. But it wouldn't be gallant." He considered. "I'll compromise—I'll leave behind my club."

"Your club?" Matt asked, failing to see anything of that description.

"The one I use to beat off the little darlings when they get too persistent."

"Oh. Maybe someday you'll teach me your secret. Yes, leave your club behind; there aren't any girls in the *Randolph*."

"Is that good?" demanded Tex.

"I refuse to commit myself." Matt studied the pile. "You know what I'd suggest? Keep that harmonica—I like harmonica music. Have those photos copied in micro. Feed the rest to the cat."

"That's easy for you to say."

"I've got the same problem." He went to his room. The class had the day free, for the purpose of getting ready to leave Earth. Matt spread his possessions out to look them over. His civilian clothes he would ship home, of course, and his telephone as well, since it was limited by its short range to the neighborhood of an earth—side relay office.

He made a note to telephone home before he packed the instrument. Might as well make one other call, too, he decided; even though he was resolved not to waste time on girls in his new life, it would be polite to phone and say good—by. He did so.

He put the instrument down a few minutes later, baffled to find that he had apparently promised to write regularly.

He called home, spoke with his parents and kid brother, —and then put the telephone with things to be shipped. He was scratching his head over what remained when Burke came in. He grinned. "Trying to swallow your penalty—weight?"

"I'll figure it out."

"You don't have to leave that junk behind, you know."

"Huh?"

"Ship it up to Terra Station, rent a locker, and store it. Then, when you go on liberty to the Station, you can bring back what you want. Sneak it aboard, if it's that sort of thing." Matt made no comment; Burke went on, "What's the matter, Galahad? Shocked at the notion of running contraband?"

"No. But I don't have a locker at Terra Station."

"Well, if you're too cheap to rent one, you can ship the stuff to mine. You scratch me and I'll scratch you."

"No, thanks." He thought about expressing some things to the Terra Station post office, then discarded the idea— the rates were too high. He went on sorting. He would keep his camera, but his micro kit would have to go, and his chessmen. Presently he had cut the list to what he hoped was twenty pounds; he took the stuff away to weigh it.

Reveille and breakfast were an hour early the next day. Shortly after breakfast the call-to-muster ran through Hayworth Hall, to be followed by heart-quickening strains of "Raise Ship!" Matt slung his jump bag over his shoulder and hurried down to the lower corridors. He pushed his way through a throng of excited youngster cadets and found his assigned area.

Muster was by squads and Matt was a temporary squad leader, as his name came first, alphabetically, in his squad. He had been, given a list; he reached into his pouch and had an agonizing moment of thinking he had left it up in his room before his fingers closed on it.

"Dodsworth!"

"Here."

"Dunstan,"

"Here."

He was still working through Frankel, Freund, and Funston when the oldster mustering the entire corridor shouted for him to report. He hurried to a conclusion, faced around, and saluted. "Squad nineteen—all present!"

Someone tittered and Matt realized suddenly that he had used the scout salute, rather than the relaxed, open-palmed gesture of the Patrol. His cheeks burned.

A brassy amplified voice called out, "All deck parties report." In turn, the oldster in Mart's corridor called out, "Third deck party, all present." When all reports were in there was a momentary silence, long enough for Matt to have a spine—tingling anticipation of what was to come. Would they? But they were doing so; the voice over the speaker called out: "Dahlquist?"

Another voice—heard only through the speaker—replied, "I answer for him."

It went on, until the Four were mustered, whereupon the first voice stated, "All present, sir."

"Man the ship."

They mounted a slidewalk, to step off in a large underground room, far out under Santa Barbara Field. There were eight large elevators arranged in a wide circle around the room. Matt and his squad were crowded into one of them and mounted to the surface. Up it went, much higher than had been necessary to enter the test-flight rocket, up and up, close by the huge bulk of the *Bolivar*.

It stopped and they trotted across the drawbridge into the ship. Inside the airlock stood a space-marines sergeant, gaudy and splendid who kept repeating, "Seventh deck! Down the hatch to your own deck—step lively!" He pointed to the hatch, down which disappeared a narrow, vertical steel ladder.

Matt hitched his jump bag out of his way and lowered himself into the hatch, moving fast to avoid getting his fingers stepped on by the cadet who followed him. He lost track of the decks, but there was a sergeant master-at-arms on each. He got off when he heard, "Third deck!"

He was in a wide, low cylindrical compartment, the deck of which was covered with plastic-foam padding. It ,was marked off in sections, each about seven feet by three and fitted with safety belts.

Matt found an unoccupied section, sat down, and waited. Presently cadets stopped dribbling in, the room was crowded. The master-at-arms called out, "Down, everybody—one to a section." He then counted them by noting that all sections were filled.

A loudspeaker warned, "All hands, prepare for acceleration!" The sergeant told them to strap down and remained standing until all had done so. He then lay down, grasped two handholds, and reported the third deck ready.

"All hands, stand by to raise!" called out the speaker.

There was a long and breathless wait.

"Up ship!" shouted the speaker.

Matt felt himself pressed into the padding.

Terra Space Station and the school ship *Randolph* lie in a circular orbit 22,300 miles above the surface of the Earth, where they circle the Earth in exactly twenty-four hours, the natural period of a body at that distance.

Since the Earth's rotation exactly matches their period, they face always one side of the Earth—the ninetieth western meridian, to be exact. Their orbit lies in the ecliptic, the plane of the Earth's orbit around the Sun, rather than in the plane of the Earth's equator. This results in them swinging north and south each day as seen from the earth. When it is noon in the Middle West, Terra Station and the *Randolph* lie over the Gulf of Mexico; at midnight they lie over the South Pacific.

The state of Colorado moves eastward about 830 miles per hour. Terra Station and the *Randolph* also move eastward nearly 7000 miles per hour—1.93 miles per second, to be finicky. The pilot of the Bolivar had to arrive at the *Randolph* precisely matched in course and speed. To do this he must break his ship away from our heavy planet, throw her into an elliptical orbit just tangent to the circular orbit of the *Randolph* and with that tangency so exactly placed that, when he matched speeds, the two ships would lie relatively motionless although plunging ahead at two miles per second. This last maneuver was no easy matter like jockeying a copter over a landing platform, as the two speeds, unadjusted, would differ by 3000 miles an hour.

Getting the *Bolivar* from Colorado to the *Randolph,* and all other problems of journeying between the planets, are subject to precise and elegant mathematical solution under four laws formulated by the saintly, absent—minded Sir Isaac Newton nearly four centuries earlier than this flight of the Bolivar—the three Laws of Motion and the Law of Gravitation. These laws are simple; their application in space to get from where you are to where you want to be, at the correct time with the correct course and speed, is a nightmare of complicated, fussy computation.

The "weight" pressing Matt into the padding was four gravities—Matt weighed nearly six hundred pounds. He lay there, breathing with difficulty, while the ship punched its way through the thick soup of air and out into free space. The heavy weight bound down the cadets while the Bolivar attained a speed of some six miles per second and climbed to an altitude of 900 miles.

At the end of five minutes and a few odd seconds the drive stopped.

Matt raised his head, while the sudden silence rang in his ears. The master-at-arms detected Matt's movement and others. He shouted, "Stay where you are—don't move."

Matt relaxed. They were in free fall, weightless, even though the *Bolivar* was speeding away from the Earth at more than 20,000 miles an hour. Each body—ship, planet, meteor, atom—in space falls continually. It moves also with whatever other motion it has inherited from its past experience.

Matt was acutely aware of his weightlessness, for his stomach told him about it, complainingly. To be on the safe side, he removed a sick kit from his jump bag, but he did not put it on. He was feeling queasy; it was not as bad as it had been on his test flight, not half as bad as the "bumps." He hoped to get by without losing his breakfast.

The loudspeaker sang out, "End of acceleration. Four hours of free fall." The master—at—arms sat up. "You can unstrap now," he said.

In a matter of seconds the compartment took on the look of a particularly crowded aquarium. One hundred boys were floating, swimming, squirming in every attitude and position between the deck and the overhead. These two barriers no longer seemed like floor and ceiling since up—and—down was gone; they were simply walls which rotated slowly and erratically for each observer as his own body turned past them.

"Hey, you guys!" yelled the sergeant. "Grab on to something and listen to me." Matt looked around, found himself near the overhead, spotted a handhold, and grasped it. "It's time you kids learned some traffic rules for free flight. You got to learn to zig when the other guy zags. If you happen to meet the Captain and you zig when you should 'a' zagged and bump him, he ain't going to like it. See?"

He stuck out a scarred thumb. "Rule one: all groundhogs —that's you and don't try to tell me anything different—are required to hold on with at least one hand at all times. That applies until you pass your free-fall acrobatics test. Rule two.— give way to officers and don't make them have to shout 'Gangway!' Besides that, give way to anybody on duty, or busy, or with his hands full.

"If you're moving aft, pass inboard of the man you meet, and contrariwise if you're moving forward. If you're moving clockwise, figuring 'clockwise' from the bow end of the ship,

you pass the man you meet outboard and let him pass inboard—contrariwise for counterclockwise. No matter what direction you're going, if you overtake a man you pass inboard of him. Is that all clear?"

Matt thought it was, though he doubted if he could remember it. But a remaining possibility occurred to him. "Sergeant," he asked innocently, "suppose you're moving directly in or out from the center of the ship—what do you do?"

The sergeant looked disgusted, which gave his face an odd appearance to Matt, as their two faces were upside down with respect to each other. "You get what usually happens to jaywalkers—okay, so you're moving across the traffic: just stay out of everybody's way. It's your lookout. Any more questions?"

No one answered; he went on: "All right, go out and look around the ship—but try to behave yourselves and not bump into anybody so you'll be a credit to deck three."

The third deck had no ports of any sort, but the Bolivar was a long-jump transport; she possessed recreation rooms and viewports. Matt started forward, seeking a place from which to get a glimpse of the Earth.

He remembered to pass outboard as he pulled himself along, but apparently some passengers had not been indoctrinated. Each hatchway was a traffic jam of youngsters, each trying to leave his own deck to sightsee in some other deck, any deck.

The sixth deck, he found, was a recreation room. It contained the ship's library—locked—and games equipment, also locked. But it did have six large viewports.

The recreation deck had carried a full load of passengers. Now, in free fall, cadets from all other decks gradually found their way to the recreation deck, just as Matt had, seeking a view of outside; at the same time the original roster of that deck showed no tendency to want to leave their favored billet.

It was crowded.

Crowded as a basket full of kittens—Matt removed someone's space boot from his left eye and tried to worm his way toward one of the ports. Judicious work with his knees and elbows and a total disregard of the rules of the road got him to the second or third layer near one port. He placed a hand on a shoulder in front of him. The cadet twisted around. "Hey! Who do you think you're shoving? Oh—hello, Matt."

"Hi, Tex. How's it going?"

"All right. Say, you should have been here a few minutes ago. We passed one of the television relay stations, close by. Boy, oh, boy, are we traveling!"

"We did, huh? What did it look like?"

"Couldn't see much of it, must have been ten miles away, maybe. But, with the time we're making it was just there she comes and there she goes."

"Can you see the Earth?" Matt squirmed toward the port.

"Natch." Tex gave way and let Matt slide into his place. The frame of the port cut across the eastern Atlantic. Matt could see an arc extending almost from the North Pole to the Equator.

It was high noon over the Atlantic. Beyond it, bright in the afternoon sunlight, he could make out the British Isles, Spain, and the brassy Sahara. The browns and greens of land were in sharp contrast to the deep purple of the ocean. In still greater contrast stood the white dazzle of cloud. As his eye approached the distant, rounded horizon the details softened, giving a strong effect of stereo, of depth, of three—dimensional globularness—the world indeed was round!

Round and green and beautiful! He discovered presently that he had been holding his breath. His nausea was quite gone.

Someone tugged at his leg. "Don't stay there all day. Do you want to hog it?"

Regretfully Matt gave way to another cadet. He turned and shoved himself away from the port and in so doing became disoriented. He could not find Tex in the helter-skelter mass of floating bodies.

He felt a grip on his right ankle. "Let's get out of here, Matt."

"Right." They worked their way to the hatch and moved to the next deck. Being without ports it was not heavily populated. They propelled themselves toward the center of the room, away from the traffic, and steadied themselves on handholds. "Well," said Matt, "so this is it—space, I mean. How do you like it?"

"Makes me feel like a goldfish. And I'm getting crosseyed trying to figure out which side is up. How's your gizzard? Been dropsick?"

"No." Matt swallowed cautiously. "Let's not talk about it. Where were you last night, Tex? I looked for you a couple of times, but your roomate said he hadn't seen you since dinner."

"Oh, that—" Tex looked pained. "I was in Mr. Dynkowski's room. Say, Matt, that was a bum steer you gave me."

"Huh? What steer?"

"You know—when you advised me to ask Mr. Dynkowski to put an order in writing if I was in doubt about it. Man, oh man, did you get me.in a jam!" .

"Wait a minute—I didn't advise you to do that; I just pointed out that the regs let you do it if you wanted to."

"Just the same, you were egging me on."

"The deuce I was! My interest was purely theoretical. You were a free agent."

"Oh, well—skip it. Skip it."

"What happened?"

"Well, last night at dinner I ordered pie for dessert. I picked it up, just like I always have ever since I got too big for Ma to slap my hands for it, and started shoveling it in my face, happy as a pup in a pansy bed. Ski ordered me to cease and desist—told me to use my fork."

"Yeah? Go on."

"I said to put it in writing, please, sir, polite as a preacher."

"It stopped him?"

"Like fun it did! He said, Very well, Mr. Jarman, cool as could be, took out his notebook, wrote it out, stamped his thumb print on it, tore out the page and handed it to me."

"So you used your fork. Or didn't you?"

"I sure did. But that's only the beginning. Immediately he wrote out another order and handed it to me. He told me to read it aloud. Which I did."

"What did it say?"

"Wait a minute ... I've got it here somewhere." Tex poked around in his pouch. "Here—read it."

Matt read, " 'Cadet Jarman—immediately after this meal you will report to the officer-of-thewatch, taking with you the first written order I gave you. Explain to him the events leading up to the first order and get an opinion from him as to the legality of orders of this type—S. Dynkowski, psd. cdt.'"

Matt whistled. "Oh, oh. ... What did you do?"

"I finished my pie, the way he told me to, though I didn't want it very much by then. Ski was nice about it. He grinned at me and said, 'No hard feelings, Mr. Jarman. All according to protocol and all that sort of thing.' Then he wanted to know where in the world I had gotten the idea."

Matt felt his neck grow warm. "You told him it was my idea?"

"Do I look stupid? I just told him somebody had pointed out regulation number nine-oh-seven to me."

Matt relaxed. "Thanks, Tex. I'll remember that."

"Forget it. But he sent you a message."

"Me?"

"It was just one word: 'Don't,'"

"Don't what?"

"Just 'Don't.' He added that amateur space lawyers frequently talked themselves out of the Patrol."

"Oh." Matt tucked this away and started trying to digest it. "What happened afterwards? When you saw the duty officer?"

"I reported to the duty office and the cadet on watch sent me on in. I saluted and announced my name, like a good little boy, and showed him the two orders." Tex paused and stared into the distance.

"Yes? Go on, man—don't stop like that"

"Then he most scientifcially ate my ears off. My Uncle Bodie couldn't have done a better job." Tex paused again, as if the memory were too painfully sharp. "Then he quieted down a little bit and explained to me in words of one syllable that reg nine-oh-seven was for emergencies only and that youngster cadets were under the orders of oldster cadets at all times and in all matters, unless the regulations specifically say otherwise."

"He did? Say, that covers an awful lot of ground. Why, that means a senior cadet can order us to do almost anything. You mean it's covered by law that an oldster can tell me how to part my hair?"

"Just precisely that—you happened to pick the very words Lieutenant von Ritter used. An oldster can't tell you to violate a regulation—he can't tell you to take a poke at the captain and he can't order you to hold still while he takes a poke at you. But that's about all that limits him. Mr. von Ritter says that it's left up to the good judgment and discretion of the senior, and table manners were very definitely Mr. Dynowski's business and not to forget it! Then he told me to report back to Ski."

"Did he crow over you?"

"Not a bit." Tex's brow wrinkled. "That's the funny part about it. Ski treated the whole affair just as if he had been giving me a lesson in geometry. He said that now that I was assured that his orders were according to regulation he wanted me to know why he had told me how to eat my pie. He even said he could see that I would regard it as improper interference with my private life. I said I guessed I didn't have any private life any more. He said no, I had one all right, but it would feel pretty microscopic for a while.

"Then he explained the matter. A patrol officer is supposed to be able to move in all society—if your hostess eats with her knife, then you eat with your knife."

"Everybody knows that."

"Okay. He pointed out that candidates come from everywhere. Some of them even come from families and societies where it's good manners for everybody to eat out of one dish, with their fingers". . .

some of the Moslem boys. But there is an overall way to behave that is acceptable anywhere among the top crust."

"Nuts," said Matt. "I've seen the Governor of Iowa with a hot dog in one hand and a piece of pie in the other."

"I'll bet it wasn't at a state dinner," Tex countered. "No, Matt, it made sense the way he told it. He said pie wasn't important, but it was part of a larger pattern—for instance that you must never mention death on Mars or to a Martian."

"Is that a fact?"

"I guess so. He said that in time I would learn how to 'eat pie with a fork' as he put it, under any possible circumstances on any planet. He let it go at that."

"I should think he would. I take it he lectured you all evening?"

"Oh, my, no. Ten minutes, maybe."

"Then where were you? You still hadn't come back to your room, just before taps."

"Oh, I was still in Ski's room, but I was busy."

"Doing what? Stroking his brow?"

"No." Tex looked mildly embarrassed. "I was writing— 'I will always eat my pie with my fork,' two thousand times."

Tex and Matt attempted to explore the ship and did in fact visit every deck that was open to them. But the power-room door was locked and a space-marine guard kept them from entering the passageway leading to the pilot room. They tried to get another view from the ports in the recreation room but found that a degree of order had been instituted; the master-at-arms of that deck was requiring each cadet that entered to state that he had not yet had a chance to look out before the cadet was allowed to tarry.

As for the other passenger decks, they found that when they had seen one, they had seen all. Shipboard refreshers interested them for a while, as the curious and clever modifications necessary to make a refresher function properly in space were new to both of them. But four hours is too long to spend inspecting showers and fixtures; after a while they found another fairly quiet spot to loaf and experienced for the first time the outstanding characteristic of all space travel—its monotony.

Much later the ship's speaker blared, "Prepare for acceleration. Ten minute warning."

Strapped down again, each in his place, the boys felt short blasts of power at rather long intervals, then a very considerable wait, after which there was the softest and gentlest of bumps. "That's the drag line," remarked the sergeant in Matt's compartment. "They'll warp us in. It won't be long now."

Ten minutes later the speaker announced, "By decks, in succession

—discharge passengers."

"Unstrap," said the sergeant. He left his midships position and posted himself at the hatch ladder. Transferring passengers was a lengthy process, as the two ships were linked by only one air lock each. Matt's party waited while four decks forward of them were emptied, then they pulled themselves along the ladder to the seventh deck. There a passenger port was open but beyond it, instead of empty space, was the inside of a corrugated tube, six feet in diameter. A line ran down the center of it and was made fast to a padeye in the ship. Along this line swarmed a steady stream of cadets, monkey fashion.

In his turn, Matt grabbed the line and pulled himself along. Fifty feet beyond the air lock, the tube suddenly opened out into another compartment, and Matt found himself inside his new home, the P.R.S. *Randolph.*

VI 'READING, AND 'RITING, AND 'RITHMETIC —"

THE P.R.S. *Randolph* had been a powerful and modern cruiser of her day. Her length was 900 feet, her diameter 200, making her of moderate size, but her mass, as a school ship, was only 60,000 tons, more or less.

She was kept ten miles astern of Terra Station in their common orbit. Left to the influence of their mutual gravitations, she would have pursued a most leisurely orbit around the ten-times-more-massive Terra Station, but, for the safety of traffic at Terra Station, it was better to keep in a fixed position.

This was easy to accomplish. The mass of Earth is six billion trillion tons; the mass of Terra Station is one hundred-million-billionth of that, a mere 600,000 tons. At ten miles the "weight" of the *Randolph* with respect to Terra Station was roughly one thirtieth of an ounce, about the weight on Earth of enough butter for one half slice of bread.

On entering the *Randolph* Matt found himself in a large, well—lighted compartment of odd shape, somewhat like a wedge of cake. Clumps of youngster cadets were being herded out exits by other cadets who wore black armbands. One such cadet headed toward him, moving through the air with the easy grace of a pollywog. "Squad nineteen—where's the squad leader of squad nineteen?"

Matt held out his arm. "Here, sir! I'm squad leader of nineteen."

The upperclassman checked himself with one hand on the guide line to which Matt still clung. "I relieve you, sir. But stick close to me and help me round up these yahoos. I suppose you know them by sight?"

"Uh, I think so, sir."

"You should—you've had time." Matt was chagrined to find, in the next few moments that the new squad leader—Cadet Lopez—knew the squad muster roll by heart, whereas Matt had to refer to his copy to assist him in locating the members. He was not really aware of the implications of order and efficient preparation; it did impress him as "style." With Matt to spot and Lopez to dive, hawklike, all the way across the compartment if necessary, to round up stragglers, squad nineteen was soon assembled near one exit, where they clung like a colony of bats.

"Follow me," Lopez told them, "and hang on. No free maneuvers. Dodson—bring up the rear."

"Aye aye, sir."

They snaked their way through endless passages, by guide line across compartment after compartment, through hatches, around corners. Matt was quite lost. Presently the man just head of him stopped. Matt closed in and found the squad gathered just inside another compartment. "Soup's on," announced Lopez. "This is your messroom. Lunch in a few minutes."

Behind Lopez, secured firmly to the far wall, were mess tables and benches. The table tops faced Matt—under him, over him, or across from him—what you will. It seemed an impractical arrangement. "I'm not very hungry," one youngster said faintly.

"You ought to be," Lopez answered reasonably. "It's been five hours or more since you had breakfast. We're on the same time schedule here as Hayworth Hall, zone plus eight, Terra. Why aren't you hungry?"

"Uh, I don't know, sir. I'm just not."

Lopez grinned and suddenly looked as young as his charges. "I was just pulling your leg, kiddo. The chief engineer will have some spin on us in no time, as soon as we break loose from the *Bolivar*. Then you can sit down on your soft, round fanny and console your tender stomach in peace. You'll have an appetite. In the meantime, take it easy."

Two more squads filtered in. While they waited Matt said to Lopez, "How fast will the ship spin, sir?"

"We'll build up to one gravity at the outer skin. Takes about two hours to do it, but we'll eat as soon as we're heavy enough for you groundhogs to swallow your soup without choking."

"But how fast is that, sir?"

"Can you do simple arithmetic?"

"Why, yes, sir."

"Then do it. The *Randolph* is two hundred feet through and we spin on her main axis. The square of the rim speed divided by her radius—what's the rpm?"

Matt got a faraway look on his face. Lopez said, "Come, now, Mr. Dodson—pretend you're heading for the surface and about to crash. *What's the answer?*"

"Uh—I'm afraid I can't do it in my head, sir."

Lopez looked around. "All right—who's got the answer?" No one spoke up. Lopez shook his head mournfully. "And you laddies expect to learn to astrogate! Better by far you should have gone to cow colleges. Never mind—it works out to about five and four-tenths revolutions per minute. That gives one full gravity for the benefit of the women and children. Then it's cut down day by day, until a month from now we're in free fall again. That gives you time to get used to it—or else."

Someone said, "Gee, it must take a lot of power."

Lopez answered, "Are you kidding? It's done by electric-braking the main axis flywheels. The shaft has field coils wound on it; you cut it in as a generator and let the reaction between the wheel and the ship put a spin on the ship. You store the juice. Then when you want to take the spin off, you use the juice to drive it as a motor and you are back where you started, free for nothing, except for minor losses. Savvy?"

"Er, I guess so, sir."

"Look it up in the ship's library, sketch the hook—up, and show it to me after supper." The junior cadet said nothing; Lopez snapped. "What's the matter, Mister? Didn't you hear me?"

"Yes, sir—aye aye, sir."

"That's better."

Very slowly they drifted against a side wall, bumped against it, and started sliding slowly toward the outboard wall, the one to which the mess tables were fastened. By the time they reached it there was enough spin on the ship to enable them to stand up and the mess tables now assumed their proper relationship, upright on the floor, while the hatch through which they had lately floated was a hole in the ceiling above.

Matt found that there was no sensation of dizziness; the effect was purely one of increasing weight. He still felt light, but he weighed enough to sit down at a mess table and stay in contact with his seat; minute by minute, imperceptibly, he grew heavier.

He looked over his place at the table, seeking controls that would permit him to order his meal. There were clips and locking holes which he guessed were intended for use in free flight, but nothing else. He looked up as Lopez banged on the table.

"And now, gentlemen, this is not a resort hotel. Count off, around the table." He waited until the youngsters had done so, then said, "Remember your order. Numbers one and two will rustle up the calories today, and all of you in rotation thereafter."

"Where, sir?"

"Use your eyes. Over there."

"Over there" was a door which concealed a delivery conveyor. Cadets from other tables were gathering around it. The two cadets designated as waiters went over and returned shortly with a large metal rack containing twenty rations, each packed in its service platter and still steaming hot. Clipped to each were knife, fork, and spoons—and sipping tubes.

Matt found that the solid foods were covered by lids that snapped back over the food unless clipped up out of the way, while the liquids were in covered containers fitted with valves through which sipping tubes might be slipped. He had never before seen table utensils adapted for free-fall conditions in space. They delighted him, even though Earthside equipment would have served as long as the ship was under spin.

Lunch was hot roast beef sandwiches with potatoes, green salad, lime sherbert, and tea. Lopez kept up a steady fire of questions throughout the meal, but Matt did not come into his range. Twenty minutes later the metal tray in front of Matt was polished almost as well as the sterilizer would achieve. He sat back, feeling that the Patrol was a good outfit and the *Randolph* a fine place to be.

Before turning his charges loose Lopez gave them each their schedule of assignments. Mart's room number was A-5197. All living quarters were on A-deck which was the insulated outer skin of the ship. Lopez gave them a brief, condescending lecture on the system of numbering the spaces in the ship and dismissed them. His manner gave no hint that he himself had been lost for one full day shortly after his own arrival a year earlier.

Matt got lost, of course.

He attempted to take a short cut straight through the ship on the advice of a passing marine and got completely twisted when he found himself at the no-weight center of the *Randolph*. When he had worked his way back down levels of increasing weight until he found himself at one gravity and could go no further he stopped the first cadet with a black arm band whom he could find and threw himself on his mercy. A few minutes later he was led to corridor five and found his own room.

Tex was already there. "Hello, Matt," he greeted him. "What do you think of our little cabin in the sky?"

Matt put down his jump bag. "Looks all right, but the first time I have to leave it I'm going to unroll a ball of string. Is there a viewport?"

"Not likely! What did you expect? A balcony?"

"I don't know. I sort of hoped that we'd be able to look out and see Earth." He started poking around, opening doors. "Where's the 'fresher?"

"Better start unrolling your ball of string. It's way down the passage."

"Oh. Kind of primitive. Well, I guess we can stand it." He went on exploring. There was a common room about fifteen feet square. It had doors, two on each side, leading into smaller cubicles. "Say, Tex," he announced when he had opened them all, "this place is fitted up for four people."

"Go to the head of the class."

"I wonder who we'll draw."

"So do I." Tex took out his assignment sheet. "It says here that we can reshuffle roommates until supper time tomorrow. Got any ideas, Matt?"

"No, I can't say I really know anybody but you. It doesn't matter as long as they don't snore—and as long as it isn't Burke."

They were interrupted by a rap on the door. Tex called out, "Come in!" and Oscar Jensen stuck his blond head inside.

"Busy?"

"Not at all."

"I've got a problem. Pete and I found ourselves assigned to one of these four-way rooms and the two roommates we landed with want us to make room for two other fellows. Are you guys tied down as yet?"

Tex looked at Matt, who nodded. Tex turned back to Oscar. "You can kiss me, Oscar—we're practically married."

An hour later the four had settled down to domesticity. Pete was in high spirits. "The *Randolph* is just what the doctor ordered," he announced. "I'm going to like it here. Any time my legs start to ache all I have to do is go up to G—deck and it's just like being back home —I weigh my proper weight again."

"Yep," agreed Tex, "if the joint were co—educational it would be perfect."

Oscar shook his head. "Not for me. I'm a woman-hater."

Tex clucked sorrowfully. "You poor, poor boy. Now take my Uncle Bodie—he thought he was a woman-hater, too. . . ."

Matt never found out how Uncle Bodie got over his disability. An announcer, mounted in the common room, summoned him to report to compartment B-121. He got there, after a few wrong turns, and found another youngster cadet just coming out. "What's it for?" he asked.

"Go on in," the other told him. "Orientation."

Matt went in and found an officer seated at a desk. "Cadet Dodson, sir, reporting as ordered."

The officer looked up and smiled. "Sit down, Dodson, Lieutenant Wong is my name. I'm your coach."

"My coach, sir?"

"Your tutor, your supervisor, anything you care to call it. It's my business to see that you and a dozen more like you study what you need to study. Think of me as standing behind you with a black snake whip." He grinned.

Matt grinned back. He began to like Mr. Wong.

Wong picked up a sheaf of papers. "I've got your record here—let's lay out a course of study. I see you type, use a slide rule and differential calculator, and can take shorthand—those are all good. Do you know any outer languages? By the way, don't bother to talk Basic; I speak North American English fairly well. How long have you spoken Basic?"

"Er, I don't know any outer languages, sir. I had Basic in high school, but I don't really think in it. I have to watch what I'm saying."

"I'll put you down for Venerian, Martian, and Venus trade talk. Your voicewriter—you've looked over the equipment in your room?"

"Just glanced at it, sir. I saw there was a study desk and a projector."

"You'll find a spool of instructions in the upper righthand drawer of the desk. Play them over when you go back. The voicewriter built into your desk is a good model. It can hear and transcribe not only the Basic vocabulary, but the Patrol's special vocabulary of technical words. If you will stick to its vocabulary, you can even write love letters on it—" Dodson glanced sharply at Lieutenant Wong, but Wong's face was impassive; Matt decided not to laugh.

"—so it's worth your while to perfect your knowledge of Basic even for social purposes. However, if you speak a word the machine can't find on its list, it will just 'beep' complainingly until you come to its rescue. Now about math—I see you have a condition in tensor calculus."

"Yes, sir," Matt admitted. "My high school didn't offer it."

Wong shook his head sadly. "I sometimes think that modern education is deliberately designed to handicap a boy. If cadets arrived here having already been taught the sort of things the young human animal can learn, and should learn, there would be fewer casualties in the Patrol. Never mind—we'll start you on tensors at once. You can't study nuclear engineering until you've learned the language of it. Your school was the usual sort, Dodson? Classroom recitations, daily assignments, and so forth?"

"More or less. We were split into three groups."

"Which group were you in?"

"I was in the fast one, sir, in most subjects."

"That's some help, but not much. You're in for a shock, son. We don't have classrooms and fixed courses. Except for laboratory work and group drills, you study alone. It's pleasant to sit in a class daydreaming while the teacher questions somebody else, but we haven't got time for that. There is too much ground to cover. Take the outer languages alone—have you ever studied under hypnosis?"

"Why, no, sir."

"We'll start you on it at once. When you leave here, go to the Psycho Instruction Department and ask for a first hypno in Beginning Venerian. What's the matter?"

"Well. . . . Sir, is it absolutely necessary to study under hypnosis?"

"Definitely. Everything that can possibly be studied under hypno you will have to learn that way in order to leave time for the really important subjects."

Matt nodded. "I see. Like astrogation."

"No, no, no! Not astrogation. A ten-year-old child could learn to pilot a spaceship if he had the talent for mathematics. That is kindergarten stuff, Dodson. The arts of space and warfare are the least part of your education. I know, from your tests, that you can soak up the math and physical sciences and technologies. Much more important is the world around you, the planets and their inhabitants—extraterrestrial biology, history, cultures, psychology, law and institutions, treaties and conventions, planetary ecologies, system ecology, interplanetary economics, applications of extraterritorialism, comparative religious customs, law of space, to mention a few."

Matt was looking bug-eyed. "My gosh! How long does it take to learn all those things?"

"You'll still be studying the day you retire. But even those subjects are not your education; they are simply raw materials. Your real job is to learn how to think—and that means you must study several other subjects: epistemology, scientific methodology, semantics, structures of languages, patterns of ethics and morals, varieties of logics, motivational psychology, and so on. This school is based on the idea that a man who can think correctly will automatically behave morally—or what we call 'morally.' What is moral behavior for a Patrolman, Matt? You are called Matt, aren't you? By your friends?"

"Yes, sir. Moral behavior for a Patrolman ,. ."

"Yes, yes. Go on."

"Well, I guess it means to do your duty, live up to your oath, that sort of thing."

"Why should you?"

Matt kept quiet and looked stubborn.

"Why should you, when it may get you some messy way of dying?

Never mind. Our prime purpose here is to see to it that you learn how your own mind works. If the result is a man who fits into the purposes of the Patrol because his own mind, when he knows how to use it, works that way—then fine! He is commissioned. If not, then we have to let him go."

Matt remained silent until Wong finally said, "What's eating on you, kid? Spill it."

"Well—look here, sir. I'm perfectly willing to work hard to get my commission. But you make it sound like something beyond my control. First I have to study a lot of things I've never heard of. Then, when it's all over, somebody decides my mind doesn't work right. It seems to me that what this job calls for is a superman."

"Like me." Wong chuckled and flexed his arms. "Maybe so, Matt, but there aren't any supermen, so we'll have to do the best we can with young squirts like you. Come, now, let's make up the list of spools you'll need."

It was a long list. Matt was surprised and pleased to find that some story spools had been included. He pointed to an item that puzzled him—An Introduction to Lunar Archeology. "I don't see why I should study that—the Patrol doesn't deal with Selenites; they've been dead for millions of years."

"Keeps your mind loosened up. I might just as well have stuck in modern French music. A Patrol officer shouldn't limit his horizons to just the things he is sure to need. I'm marking the items I want you to study first, then you beat it around to the library and draw out those spools, then over to Psycho for your first hypno. In about a week, when you've absorbed this first group, come back and see me."

"You mean you expect me to study all the spools I'm taking out today in *one week*?" Matt looked at the list in amazement.

"That's right. In your off hours, that is—you'll be busy with drills and lab a lot. Come back next week and we'll boost the dose. Now get going."

"But— Aye aye, sir!"

Matt located the Psycho Instruction Department and was presently ushered into a small room by a bored hypno technician wearing the uniform of the staff services of the Space Marines. "Stretch out in that chair," he was told. "Rest your head back. This is your first treatment?" Matt admitted that it was.

"You'll like it. Some guys come in here just for the rest— they already know more than they ought to. What course was it you said you wanted?"

"Beginning Venerian."

The technician spoke briefly to a pick—up located on his desk. "Funny thing—about a month ago an oldster was in here for a brush up in electronics. The library thought I said 'colonies' and now he's loaded up with a lot of medical knowledge he'll never use. Lemme have your left arm." The technician irradiated a patch on his forearm and injected the drug. "Now just lay back and follow the bouncing light. Take it easy . . . relax . . . relax . . . and . . . close . . . your ... eyes ... and ... relax ... you're ... getting—"

Someone was standing in front of him, holding a hypodermic pressure injector "That's all. You've had the antidote."

"Huh?" said Matt. "Wazzat?"

"Sit still a couple of minutes and then you can go."

"Didn't it take?"

"Didn't what take? I don't know what you were being exposed to; I just came on duty."

Matt went back to his room feeling rather depressed. He had been a little afraid of hypnosis, but to find that he apparently did not react to the method was worse yet. He wondered whether or not he could ever keep up with his studies if he were forced to study everything, outer languages as well, by conventional methods.

Nothing to do but to go back and see Lieutenant Wong about it tomorrow, he decided.

Oscar was alone in the suite and was busy trying to place a hook in the wall of a common room. A framed picture was leaning against the chair on which he stood. "Hello, Oscar."

"Howdy, Matt." Oscar turned his head as he spoke; the drill he was using slipped and he skinned a knuckle. He started to curse in strange, lisping speech. "*May maledictions pursue this nameless thing to the uttermost depths of world slime!*"

Matt clucked disapprovingly. "*Curb thy voice, thou impious fish.*"

Oscar looked up in amazement. "Matt—I didn't know you knew any Venerian."

Matt's mouth sagged open. He closed it, then opened it to speak "Well, I'll be a— neither did I."

VII TO MAKE A SPACEMAN

THE SERGEANT CROUCHED in the air, his feet drawn up. "At the count of one," he was saying, "take the ready position, with your feet about six inches from the steel. At the count of two, place your feet firmly against the steel and push off." He shoved against the steel wall and shot into the air, still talking, "Hold the count of four, turn on the count of five—" His body drew up into a ball and turned over a half turn, "—check your rotation—" His body extended again, "—and make contact on the count of seven—" His toes touched the far wall, "—letting your legs collapse softly so that your momentum will be soaked up without rebound." He collapsed loosely, like an empty sack, and remained floating near the spot where he had landed.

The room was a cylinder fifty feet in diameter in the center of the ship. The entire room was mounted in rollers and was turned steadily in the direction opposite to the spin of the ship and with the same angular speed: thus it had no net spin. It could be entered only from the end, at the center of rotation.

It was a little island of "free fall"—the free-fall gymnasium. A dozen youngster cadets clung to a grab line running fore—and—aft along the wall of the gym and watched the sergeant. Matt was one of the group.

"And now, gentlemen, let's try it again. By the numbers—One! Two! Three!" by the count of five, at which time they all should have turned in the air, neatly and together, all semblance of order was gone. There were collisions, one cadet had even failed to get away from the grab line, and two cadets, refugees from a midair skirmish, were floating aimlessly toward the far end of the room. Their faces had the bewildered look of a dog trying to get traction on smooth ice as they threshed their arms and legs in an effort to stay their progress.

"No! No! No!" said the sergeant and covered his face with his hands. "I can't bear to look. Gentlemen—please! A little coordination. Don't throw yourself at the far wall like an Airedale heading into a fight. A steady, firm shove— like this."

He took off sideways, using the traction given him by his space boots, and intercepted the two deserters, gathering one in each arm and letting his momentum carry the three bodies slowly toward the far end of the grab line, "Grab on," he told them, "and back to your places. Now, gentlemen—once more. Places! By the numbers—normal push off, with arrested contact—one!"

A few moments later he was assuring them that he would much rather teach a cat to swim.

Matt did not mind. He had managed to reach the far wall and stay there. Without grace, proper timing, nor at the spot he had aimed for, but he had managed it, after a dozen failures. For the moment he classed himself as a spaceman.

When the class was dismissed he hurried to his room and into his own cubicle, selected a spool on Martian history, inserted it in his projector, and began to study. He had been tempted to remain in the free-fall gymnasium to practice; he wanted very badly to pass the "space legs" test—free-fall acrobatics—as those who had passed it and qualified in the use of basic space suits as well were allowed one liberty a month at Terra Station.

But he had had an extra interview with Lieutenant Wong a few days before. It had been brief, biting, and had been concerned with the efficient use of his time.

Matt did not want another such—nor the five demerits that went with it. He settled his head in the neck rest of his study chair and concentrated on the recorded words of the lecturer while scenes in color-stereo passed in front of him, portraying in chill beauty the rich past of the ancient planet.

The projector was much like the study box he had used at home, except that it was more gadgeted, it could project in three dimensions, and was hooked in with the voicewriter. Matt found this a great time-saver. He could stop the lecture, dictate a summary, then cause the projector to throw his printed notes on the screen.

Stereo-projection was a time-saver for manual subjects as well. "You are now entering the control room of a type A-6 utility rocket," the unseen lecturer would say, "and will practice an airless landing on Luna"—while the camera moved through the door of the rocket's pilot room and panned down to a position corresponding to the pilot's head. From there on a pictured flight could be made very realistic.

Or it might be a spool on space suits. "This is a four-hour suit," the voice would say, "type M, and may be worn anywhere outside the orbit of Venus. It has a low-capacity rocket unit capable of producing a total change of speed in a 300 lb. mass of fifty foot-seconds. The builtin radio has a suit-to-suit range of fifty miles. Internal heating and cooling is—" By the time Matt's turn came for spacesuit drill he knew as much about it as could be learned without practice.

His turn came when he passed the basic free-fall test. He was not finished with free-fall drill-—there remained group precision drill, hand-to-hand combat, use of personal weapons, and other refinements —but he was judged able to handle himself well enough. He was free, too, to go out for free-fall sports, wrestling, bank tennis, jai alai, and several others —up to now he had been eligible only for the chess club. He picked space polo, a game combining water polo and assault with intent to maim, and joined the local league, in the lowest or "bloodynose" group.

He missed his first chance at spacesuit drill because a battered nose had turned him into a mouth breather—the respirator for a type-M suit calls for inhaling through the nose and exhaling through the mouth. But he was ready and anxious the following week. The instructor ordered his group to "Suit up!" without preliminary, as it was assumed that they had studied the instruction spool.

The last of the ship's spin had been removed some days before. Matt curled himself into a ball, floating free, and spread open the front of his suit. It was an unhandy process; he found shortly that he was trying to get both legs down one leg of the suit. He backed out and tried again. This time the big fishbowl flopped forward into the opening.

Most of the section were already in their suits. The instructor swam over to Matt and looked at him sharply. "You've passed your free-fall basic?"

"Yes," Matt answered miserably.

"It's hard to believe. You handle yourself like a turtle on its back. Here." The instructor helped Matt to tuck in, much as if he were dressing a baby in a snow suit. Matt blushed.

The instructor ran through the checkoff list—tank pressure, suit pressure, rocket fuel charge, suit oxygen, blood oxygen (measured by a photoelectric gadget clipped to the earlobe) and finally each suit's walky—talky unit. Then he herded them into the airlock.

Matt felt his suit swell up as the pressure died away in the lock. It was becoming slightly harder to move his arms and legs. "Hook up your static lines," called out the instructor. Matt uncoiled his from his belt and waited. Reports came in: "Number one hooked." "Number two hooked."

"Number three hooked," Matt sang out into the mike in his helmet as he snapped his line to the belt of cadet number four. When they were all linked like mountain climbers the instructor hooked himself to the chain and opened the outer door of the lock. They looked out into the star-flecked void.

"Click on," directed the instructor, and placed his boots gently against the side of the lock. Matt did likewise and felt the magnetic soles of his boots click against the steel. "Follow me and stay closed up." Their teacher walked along the wall to the open door and performed an awkward little squatting spread-eagle step. One boot was still inside the door, flat to the wall, with the toe pointing inboard; with the other he reached around the corner, bent his knees, and felt for the outer surface of the ship. He withdrew the foot still in the lock and straightened his body—with which he almost disappeared, for he now stuck straight out from the ship, his feet flat to her side.

Following in order, Matt went out through the door. The ninety degree turn to get outside the lock and "standing" on the outer skin of the ship he found to be tricky; he was forced to use his hands to steady himself on the door frame. But he got outside and "standing up." There was no true up—and—down; they were still weightless, but the steel side was a floor "under" them; they stuck to it as a fly sticks to a ceiling.

Matt took a couple of trial steps. It was like walking in mud; his feet would cling stickily to the ship, then pull away suddenly. It took getting used to.

They had gone out on the dark side of the ship. Sun, Moon and Earth lay behind its bulk, underfoot. Not even Terra Station could be seen.

"We'll take a walk," announced the instructor, his voice hollow in their helmets. "Stick together." He started around the curving side of the ship. A cadet near the end of the chain tried to break both magnetized boots free from the ship at the same time. He accomplished it, by jumping—and then had no way to get back. He moved out until his static line tugged at the two boys on each side of him.

One of them, caught with one foot free of the ship in walking, was broken loose also, though he reached wildly for the steel and missed. The cadet next to him, last in line, came loose in turn.

No more separated, as the successive tugs on the line had used up the energy of the first cadet's not-so-violent jump. But three cadets now dangled on the line, floating and twisting grotesquely.

The instructor caught the movement out of the corner of his eye, and squatted down. He found what he sought, a steel ring recessed in the ship's side, and snapped his static line to it. When he was certain that the entire party was not going to be dragged loose, he ordered, "Number nine—haul them in, gently—very gently. Don't pull yourself loose doing it."

A few moments later the vagrants were back and sticking to the ship. "Now," said the instructor, "who was responsible for that piece of groundhog stupidity?"

No one answered. "Speak up," he said sharply. "It wasn't an accident; it's impossible to get both feet off unless you hop. Speak up, confound it, or I'll haul every last one of you up in front of the Commandant."

At the mention of that awful word a small, meek voice answered, "I did it, sergeant."

"Hold out your hand, so I'll know who's talking. I'm not a mind reader."

"Vargas—number ten." The cadet held out his arm.

"Okay. Back to the airlock, everybody. Stick together." When they were there, the instructor said, "Inside, Mr. Vargas. Unhook your line, snap to the lock and wait for us. You'll take this drill over—about a month from now."

"But sergeant—"

"Don't give me any lip, or swelp me, I'll report you" for AWOL—jumping ship."

Silently the cadet did as ordered. The instructor leaned inside to see that Vargas actually anchored himself, then straightened out.

"Come, gentlemen—we'll start again—and no monkeyshines. This is a drill, not a tea party."

Presently Matt said, "Sergeant Hanako—"

"Yes? Who is it?"

"Dodson. Number three. Suppose we had all pulled loose?"

"We'd 'ave had to work our way back on our rocket units."

Matt thought about it. "Suppose we didn't have reaction, units?"

"Nothing much—under these circumstances. The officer of the watch knows we're outside; the radio watch is guarding our frequency. They would just have tracked us by radar until they could man a scooter and come get us. Just the same—listen, all of you—just because they've got you wrapped in cotton batting is no reason to behave like a bunch of school girls. I don't know of any nastier, or lonelier, way to die than all by yourself in a space suit, with your oxygen running out." He paused. "I saw one once, after they found him and fetched him back."

They were rounding the side of the ship, and the bulging sphere of the Earth had been rising over their metal horizon.

Suddenly the Sun burst into view.

"Mind the glare!" Sergeant Hanako called out. Hastily Matt set his visor for maximum interference and adjusted it to shade his face and eyes. He did not attempt to look at the Sun; he had dazzled his eyes often enough from the viewports of the ship's recreation rooms, trying to blank out the disc of the Sun exactly, with a coin, so that he might see the prominences and the ghostly aurora. It was an unsatisfactory business; the usual result was a headache and spots before his eyes.

But he never grew tired of looking at Earth. She hung before him, great and fat and beautiful, and seeming more real than when seen through a port. She swelled across Aquarius, so huge that had she been in Orion she would have concealed the giant hunter from Betelgeuse to Rigel.

Facing them was the Gulf of Mexico. Above it sprawled North America wearing the polar cap like a chef's hat. The pole was still bright under the failing light of late northern summer. The sunrise line had cleared North America except for the tip of Alaska; only the central Pacific was dark.

Someone said, "What's that bright dot in the Pacific, over near the edge? Honolulu?"

Honolulu did not interest Matt; he searched, as usual, for Des Moines—but the Mississippi Valley was cloudy; he could not 'find it. Sometimes he could pick it out with his naked eyes, when the day was clear in Iowa. When it was night in North America he could always tell which jewel of light was home—or thought he could.

They were facing Earth so that the north pole seemed "up" to them.

Far off to the right, almost a ship's width from the Earth, nearly occulting Regulus in Leo, was the Sun, and about half way between the Sun and Earth, in Virgo, was a crescent Moon. Like the Sun, the Moon appeared no larger than she did from Earth surface. The gleaming metal sides of Terra Station, in the sky between Sun and Moon and ninety degrees from Earth, outshone the Moon. The Station, a mere ten miles away, appeared half a dozen times as wide as the Moon.

That's enough rubbernecking," announced Hanako. "Let's move around." They walked forward, looking the ship over and getting the feel of her size, until the sergeant stopped them. "Any further and we'd be slapping our feet over the Commandant's head. He might be asleep." They sauntered aft and Hanako let them work around the edge of the stern until they looked across the openings of her mighty tubes. He called them back promptly. "Even though she ain't blasted in years, this area is a little bit hot—and you're not shielded from the pile abaft frame ninety-three anyhow. Forward, now!"

By hot he did not mean warm to the touch, but radioactive.

He led them amidships, unhooked himself from the cadet next to him and hooked the lad's line to the ship. "Number twelve—hook to steel," he added.

"The trick to jetting yourself in space,"—he went on, 'lies in balancing your body on the jet—the thrust has to pass through your center of gravity. If you miss and don't correct it quickly, you start to spin, waste your fuel, and have the devil's own time stopping your spin.

"It's no harder than balancing a walking stick on your finger—but the first time you try it, it seems hard.

"Rig out your sight." He touched a stud at his belt; a light metal gadget snapped up in front of his helmet so that a small metal ring was about a yard in front of his face. "Pick out a bright star, or a target of any sort, lined up in the direction you want to go. Then take the ready position— no, no! Not yet—I'll take it."

He squatted down, lifted himself on his hands, and very cautiously broke his boots loose from the side, then steadied himself on a cadet within reach. He turned and stretched out, so that he floated with his back to the ship, arms and legs extended. His rocket jet stuck straight back at the ship from the small of his back; his sight stuck out from his helmet in the opposite direction.

He went on, "Have the firing switch ready in your right hand. Now, have you fellows ever seen a pair of adagio dancers? You know what I mean—a man wears a piece of leopard skin and a girl wearing less than that and they go leaping around the stage, with him catching her?"

Several voices answered yes. Hanako continued, "Then you know what I'm talking about. There's one stunt they always do—the girl jumps and the man pushes her up and balances her overhead on one hand. He has his hand at the small of her back and she lays there, artistic—like.

"That's exactly the way you got to ride a jet. The push comes at the small of your back and you balance on it. Only you have to do the balancing—if the push doesn't pass exactly through your center of gravity, you'll start to turn. You can see yourself starting to turn by watching through your sight.

"You have to correct it before it gets away from you. You do this by shifting your center of gravity. Drag in the arm or leg on the side toward which you've started to turn. The trick is—"

"Just a second, Sarge," someone cut in, "you said that just backwards. You mean; haul in the arm or leg on the *other* side, don't you?"

"Who's talking?"

"Lathrop, number six. Sorry."

"I meant what I said, Mr. Lathrop."

"But—"

"Go ahead, do it your way. The rest of the class will do it my way. Let's not waste time. Any questions? Okay, stand clear of my jet."

The half circle backed away until stopped by the anchored static lines. A bright orange flame burst from the sergeant's back and he moved straight out or "up," slowly at first, then with increasing speed. His microphone was open; Matt could hear, by radio only, the muted rush of his jet—and could hear the sergeant counting seconds: "And . . . *one!* . . . and . . . *two!* . . . and . . . *three!*" With the count of ten, the jet and the counting stopped.

Their instructor was fifty feet "above" them and moving away, back toward them. He continued to lecture. "No matter how perfectly you've balanced you'll end up with a small amount of spin. When you want to change direction, double up in a ball—" He did so. "—to spin faster—and snap out of it when you've turned as far as you want." He suddenly flattened out and was facing them. "Cut in your jet and balance on it to straighten out on your new course—before you drift past the direction you want."

He did not cut in his jet, but continued to talk, while moving away from them and slowly turning. "There is always some way to squirm around on your axis of rotation so that you can face the way you need to face for a split second at least. For example, if I wanted to head toward the Station—" Terra Station was almost a right angle away from his course; he went through contortions appropriate to a monkey dying in convulsions and again snapped out in starfish spread, facing the Station—but turning slow cartwheels now, his axis of rotation unchanged.

"But I don't want to go to the Station; I want to come back to the ship." The monkey died again; when the convulsions ceased, the sergeant was facing them. He cut in his jet and again counted ten seconds. He hung in space, motionless with respect to the ship and his class and about a quarter mile away. "I'm coming in on a jet landing, to save

time." The jet blasted for twenty seconds and died; he moved toward them rapidly.

When he was still a couple of hundred feet away, he flipped over and blasted away from the ship for ten seconds. The sum of his maneuvers was to leave him fifty feet away and approaching at ten feet per second. He curled up in a ball again and came out of it feet toward the ship.

Five seconds later his boots clicked to steel and he let himself collapse without rebound. "But that is not the way you'll do it," he went on. "My tanks hold more juice than yours do—you've got fifty seconds of power, with each second good for a change of speed on one foot—second—that's for three hundred pounds of mass; some of you skinny guys will go a little faster.

"Here's your flight plan: ten seconds out, counted. Turn as quick as you can and blast fifteen seconds back. That means you'll click on with five foot—seconds. Even your crippled grandmother ought to be able to do that without bouncing off. Lathrop! Unhook—you're first."

As the cadet came up, Hanako anchored himself to the ship with two short lines and took from his belt a very long line. He snapped one end to a hook in the front of the cadet's belt and the other to his own suit. The student looked at it with distaste. "Is the sky hook necessary?"

Sergeant Hanako stared at him. "Sorry, Commodore—regulations. And shut up. Take the ready position."

Silently the cadet crouched, then he was moving away, a fiery brush growing out of his back. He moved fairly straight at first, then started to turn.

He pulled in a leg—and turned completely over.

"Lathrop—cut off your jet!" snapped Hanako. The flame died out, but the figure in the suit continued to turn and to recede. Hanako paid out his safety line. "Got a big fish here, boys," he said cheerfully. "What do you think he'll weigh?" He tugged on the line, which caused Lathrop to spin the other way, as the line had wound itself around him. When the line was free he hauled the cadet in.

Lathrop clicked on. "You were right, sergeant. I want to try it again —your way."

"Sorry. The book says a hundred per cent reserve fuel for this drill; you'd have to recharge." Hanako hesitated. "Sign up for tomorrow morning—I'll take you as an extra."

"Oh—thanks, Sarge!"

"Don't mention it. Number one!"

The next cadet moved out smoothly, but returned on an angle and had to be snubbed with the safety line before he could click on. The next cadet had trouble orienting himself at all. He receded, his back to the —ship, and seemed to be about to continue in the direction of Draco till the end of time. Hanako tugged gently on the safety line while letting it run through his gloves and turned him around toward the ship. "Ten seconds on the jet, while I keep a strain on the line," he ordered. The safety line kept the cadet straightened out until he got back. "Number three!" called out Hanako.

Matt stepped forward with a feeling of tight excitement. The instructor hooked the safety line and said, "Any questions? Go ahead when ready."

"Okay." Matt crouched, broke his boots free, and stretched out. He steadied himself against the sergeant's knee. In front of him lay the northern constellations. He picked out the Pole Star as a target, then loosened the safety catch of the firing switch in his glove.

"And . . . *one!*" He felt a soft, steady pressure across his saddle, a shove of not quite ten pounds. Polaris seemed to vibrate to the blasting of the tiny jet. Then the star swung to the left, beyond the ring of the sight.

He pulled in his right arm and right leg. The star swung faster, checked and started back. Cautiously he extended his right—side limbs again—and almost forgot to cut the jet on the count of ten.

He could not see the ship. Earth swam in the velvety darkness off to the right. The silence and aloneness were more intense, more complete, than he had ever experienced.

"Time to turn," said Hanako in his ear.

"Oh—" said Matt, and grabbed his knees.

The heavens wheeled around him. He saw the ship swinging into sight, too late. He checked by starfishing, but it

had moved on past. "Take it easy," advised the sergeant. "Don't curl up quite so tight, and catch it on the next time around. There's no hurry."

He drew himself in again, but not so much. The ship came around again, though twice as far away as it had been before. This time he checked before it swung past. The figures crawling on her side were about three hundred feet away and still backing away from him. He got someone's helmet centered in his sight, pressed the switch and began to count.

For a few worried seconds he thought that something had gone wrong. The figures on the ship did not seem— to be getting nearer and now they were swinging slowly past him. He was tempted to blast again—but Hanako's orders had been specific; he decided not to.

The ship swung out of sight; he doubled up in a ball to bring it around more quickly. When it showed up it was distinctly nearer and he felt relieved. Actually the two bodies, ship and man, had been closing at five feet per second—but five feet per second is a slow walk.

A little more than a minute after cutting his jet, he jackknifed to bring his boots in front of him and clicked on, about ten feet from the instructor.

Hanako came over and placed his helmet against Mart's so he could speak to him privately, with the radio shut off. "A good job, kid, the way you kept your nerve when you swung past. Okay—I'll post you for advanced training."

Matt remembered to cut out his walky—talky. "Gee, thanks!"

"You did it, not me." Hanako cut back in the voice circuit. "Okay, there—number four."

Matt wanted to chase back to his room, find Tex, and do some boasting. But there were seven more to go. Some did well, some had to be fished out of difficulty.

The last man outdid himself. He failed to cut off his power in spite of Hanako's shouts for him to do so. He moved away from the ship in a wide curve and commenced to spin, while the sergeant whipped at the safety line to try to stop the spin and head him back. At the end of a long fifty seconds his power gave out; he was nearly a thousand feet away and still receding rapidly.

The sergeant played him like a fisherman fighting a barracuda, then brought him in very, very slowly, for there was no way to check whatever speed the tension on the line placed on him.

When at last he was in, clicked down, and anchored by static line, Hanako sighed. "Whew!" he said. "I thought I was going to have to go get him." He went to the cadet and touched helmets, radio off.

The cadet did not shut off his instrument. "I don't know," they heard him reply. "The switch didn't go bad—I just couldn't seem to move a muscle. I could hear you shouting but I couldn't move."

Matt went back to the airlock with the group, feeling considerably sobered. He suspected that there would be a vacant place at supper. It was the Commandant's policy to get a cadet who was to be dropped away from the ship without delay. Matt did not question the practice, but it jarred him when he saw it happening—it brought the cold breath of disaster on his own neck.

But he cheered up as soon as he was dismissed. Once he was out of his suit and had inspected it and stowed it as the rules required, he zipped to his room, bouncing his turns in a fashion not approved for in—ship progress.

He banged on the door of Tex's cubicle. "Hey, Texl Wake up! I've got news for you."

No answer—he opened the door, but Tex was not there. Nor, as it happened, were Pete nor Oscar. Disconsolately he went into his own sanctum and picked out a study spool.

Nearly two hours later Tex came bouncing in as Matt was getting ready for lunch and shouted, "Hey! Matt! Mitt me, big boy—shake hands with a spaceman!"

"Huh?"

"I just passed "basic space suit'—sergeant said it was the best first test he had ever seen."

"He did? Oh—"

"He sure did. Oh boy—Terra Station, here I come!"

VIII TERRA STATION

"LIBERTY PARTY—man the scooter!"

Matt zipped up the front of his space suit and hurriedly ran through the routine check. Oscar and Tex urged him along, as the liberty party was already filing through the door of the lock. The cadet officer-of-thewatch checked Matt in and sealed the door of the lock behind him.

The lock was a long corridor, sealed at each end, leading to a hangar pocket in the side of the *Randolph* in which the scooter rockets were stowed. The pressure died away and the far end of the lock opened; Matt pulled himself along, last in line, and found the scooter loaded. He could not find a place; the passenger racks were filled with space—suited cadets, busy strapping down.

The cadet pilot beckoned to him. Matt picked his way forward and touched helmets. "Mister," said the oldster, "can you read instruments?"

Guessing that he referred only to the simple instrument panel of a scooter, Matt answered, "Yes, sir."

"Then get in the copilot's chair. What's your mass?"

"Two eighty-seven, sir," Matt answered, giving the combined mass, in pounds, of himself and his suit with all its equipment. Matt strapped down, then looked around, trying to locate Tex and Oscar. He was feeling very important, even though a scooter requires a copilot about as much as a hog needs a spare tail.

The oldster entered Mart's mass on his center-of-gravity and moment-of-inertia chart, stared at it thoughtfully and said to Matt, "Tell Gee-three to swap places with Bee-two."

Matt switched on his walky-talky and gave the order. There was a scramble while a heavyset youngster changed seats with a smaller cadet. The pilot gave a high sign to the cadet manning the hangar pocket; the scooter and its launching cradle swung out of the pocket, pushed by powerdriven lazy tongs.

A scooter is a passenger rocket reduced to its simplest terms and has been described as a hat rack with an outboard motor. It operates only in empty space and does not have to be streamlined.

The rocket motor is unenclosed. Around it is a tier of light metal supports, the passenger rack. There is no "ship" in the sense of a hull, airtight compartments, *etc.* The passengers just belt themselves to the rack and let the rocket motor scoot them along.

When the scooter was clear of the ship the cadet in the hangar pocket turned the launching cradle, by power, until the scooter pointed at Terra Station. The pilot slapped the keys in front of him; the scooter took off.

The cadet pilot watched his radarscope. When the distance to the Station was closing at eighty-eight feet per second he cut his jet. "Latch on to the Station," he told Matt.

Matt plugged in and called the station. "Scooter number three, *Randolph*—scheduled trip. Arriving nine minutes, plus or minus," Matt sent, and congratulated himself on having studied the spool on small-craft procedures.

"Roger," a feminine voice answered, then added, "Use out-orbit contact platform Bee-for-Busy."

"Bee-for-Busy," acknowledged Matt. "Traffic?"

"None out-orbit. *Winged Victory* in-orbit, warping in."

Matt reported to his pilot. "No traffic," repeated the oldster. "Mister, I'm going to catch forty winks. Wake me when we've closed to a mile and a half."

"Aye aye, sir."

"Think you could bring her in?"

Matt gulped. "I'll try, sir."

"Figure it out while I'm asleep." The cadet promptly closed his eyes, floating as comfortably in free fall as if he had been in his own cubicle. Matt concentrated on the instrument dials.

Seven minutes later he shook the oldster, who opened his eyes and said, "What's your flight plan, Mister?"

"Well, uh—if we keep going as is, we'll just slide past on the out-orbit side. I don't think I'd change it at all. When we close to four thousand feet I'd blast until our relative speed is down to about ten foot-seconds, then forget the radar and brake by eye as we pass along the side."

"You've been studying too hard."

"Is that wrong?" Matt asked anxiously.

"Nope. Go ahead. Do it." The oldster bent over the tracking 'scope to assure himself that the scooter would miss the Station. Matt watched the closing range, while excitement built up inside him. Once he glanced ahead at the shining cylindrical bulk of the Station, but looked back quickly. A few seconds later he punched his firing key and a plume of flame shot out in front of them.

A scooter has jets at both ends, served by the same interconnected tanks, fuel pumps and piping. Scooters are conned "by the seat of your pants" rather than by complex mathematics. As such they are invaluable in letting student pilots get the feel of rocket ships.

As the distance decreased Matt felt for the first time the old nightmare of rocket pilots: is the calculated maneuver enough to avoid a crash? He felt this, even though he knew his course would slide him past the corner of the mammoth structure. It was a relief to release the firing key.

The oldster said, "Can you spot Bee-for-Busy when you see it?"

Matt shook his head. "No, sir. This is my first trip to Terra Station."

"It is? And I let you pilot! Well, there it is, ahead—third platform down. Better start braking."

"Aye aye, sir." The scooter was passing along the side of the Station and about a hundred yards out, at the speed of a brisk walk. Matt let Bee-for-Busy approach for a few moments more, then gave a short, experimental blast. It did not seem to slow them much; he gave a somewhat longer blast.

A few minutes later he had the scooter almost dead in space and practically abreast their contact point. He looked inquiringly at the pilot. "I've seen worse," the oldster grunted. "Tell them to bring us in."

"*Randolph* number three—ready for contact," Matt reported, via radio.

"We see you," the girl's voice answered. "Stand by for a line."

A line, shot by a gun, came sailing out in perfectly flat trajectory and passed through a metal loop sticking out from the scooter. "I relieve you, sir," the pilot told Matt. "Shinny out there and make that line fast."

A few minutes later the scooter was secured to platform Bee-for-Busy and the cadets were filing into the platform's airlock. Matt located Oscar and Tex in the suiting room and they undressed together. "What did you think of that contact?" Matt said to them, with studied casualness.

"All right, I guess," answered Tex. "What about it?"

"I made it."

Oscar raised his eyebrows. "You did? Nice going, kid."

Tex looked amazed. "The pilot let you jockey it? On your first trip?"

"Well, why not? You think I'm kidding?"

"No, I'm just impressed. May I touch you? How about an autograph?"

"Oh, come off it!"

They were, of course, in the free-fall part of the Station. As soon as they had stowed their suits, they hurried to the centrifuged belt frequented by the traveling public. Oscar knew his way around somewhat, having changed ships at the Station when he was a candidate, and led them to the door at the axis of rotation—the only possible place to pass from the free-fall zone to the weight zone.

From the axis they went down several levels, past offices and private quarters to the first of the public levels. It was, in effect, a wide, brightly lighted street, with a high ceiling and with slideways down the middle. Shops and restaurants lined it. The slideways curved up and away in the distance, for the corridor curved completely around the Station. "This," Oscar told them, "is Paradise Walk."

"I see why," agreed Tex, and gave a low whistle. The others followed his gaze. A tall, willowy blonde, dressed in some blue wisps of nothing much, was looking in the display window of a jewelry shop.

"Take it easy, Tex," advised Oscar. "She's taller than you are."

"I like them tall," Tex answered. "Watch me."

He sauntered over to the young woman. Matt and Oscar could not hear his opening remark, but it did not offend her, for she laughed. Then she looked him up and down with cool amusement and spoke. Her voice carried quite clearly. "I am married and at least ten years older than you are. I never pick up cadets."

Tex appeared to tuck his tail between his legs and slunk back toward his friends. He started to say, fiercely, "Well, you can't rule a guy out for try—," when the woman called out:

"Wait a moment! All three of you." She came up to them and looked from Matt to Oscar, "You are youngsters, aren't you?"

"Youngster cadets, yes, ma'am," answered Oscar.

She fumbled in her jewelled pouch. "If you want to have some fun and meet some younger girls, you might try this address." She handed Oscar a card.

He looked startled and said, "Thank you, ma'am."

"Not at all." She moved away and managed to lose herself in the crowd at once.

"What does it say?" demanded Matt.

Oscar looked at it, then held it out. "Read it."

Terra Station First Baptist Church
Ralph Smiley, D.D., Pastor
SOCIAL HALL
#2437, Level "C"

Tex grinned. "Well, you can't say I scored a clean miss."

There ensued an argument. Matt and Tex wanted to go at once to the social hall; Oscar insisted that he was hungry and wanted some civilized food. The longer they argued the more reasonable seemed Oscar's case. Finally Tex switched sides and Matt gave in to the majority.

He regretted it a few minutes later, when he saw the prices on the menu. The restaurant they selected was a tourist trap, a fancy dining room with an adjoining bar. It had human waiters instead of automatic tables and items were priced accordingly.

Tex saw the expression on his face. "Relax, Matt," he told him. "This is on me—Pop sent me a check."

"Oh, I wouldn't want to do that."

"Want to fight?"

Matt grinned. "Okay, thanks."

Oscar said, "How hard shall we punish you, Tex? Tea and toast?"

"Anything you want. Let's really celebrate. Which reminds me—I think we ought to have a drink."

"Huh?" said Oscar. "And have an M.P. catch us? No, thank you."

Matt started to protest but Tex stood up. "Just leave this to Father Jarman. It's high time you two poor, underprivileged outlanders tasted a real old Southern mint julep." He started for the bar. Oscar shrugged.

Tex scouted out the bar before entering. There were no cadets, of course; more important there were no officers and no marine M.P.'s. The hour was early and the bar almost deserted. He went up to the bartender. "Can you make a mint julep?" he asked.

The bartender looked up and answered, "Beat it. I'm not supposed to serve you liquor. This is off limits to cadets."

"I didn't ask you if this was off limits—I asked you if you could make a mint julep." Tex slid a bill across the counter. "Three mint juleps, in fact."

The barman eyed the bill. Finally he caused it to disappear. "Go on back into the dining room."

"Right!" said Tex.

A few minutes later a waiter placed a complete tea service in front of them, but the teapot did not contain tea. Tex poured out the drink, splitting it carefully three ways, in tea cups. "Here's to you, chums—drink up."

Matt took a sip. "It tastes like medicine," he announced.

"Like medicine?" Tex protested. "This noble potion? I'll meet you at dawn, suh—coffee and pistols for two."

"I still say it tastes like medicine. What do you think of it, Oscar?"

"It's not bad."

Matt pushed his aside. "Aren't you going to drink it?" asked Tex.

"No. Thanks, Tex, really—but I think it would make me sick. I guess I'm a sissy."

"Well, we won't waste it." He picked up Mart's cup and poured some into his own. "Split it with me, Oscar?"

"No. You go ahead."

"Okay, if you say so." He poured the rest into his cup.

When the food they ordered was served, Tex was no longer interested. While Matt and Oscar were busily chewing he kept urging them to sing. "Come on, Oscar! You can learn it."

"I can't sing."

"Sure you can. I've heard you sing, with the Hog Alley band. Ill sing the verse, we'll all clap, then hit the chorus together: 'Deep in ... the heart of ... Texas!' Like that."

"Shut up," said Oscar, "or you'll be deep in the heart of trouble."

"Kill—joy! Come on, Matt."

"I can't sing with my mouth full."

"Look," said Oscar to Matt, in a tense, low voice. "Do you see what I see?"

Matt looked and saw Lieutenant Wong entering the far end of the dining room. He went to a table, sat down, looked around, spotted the table of cadets, nodded, and started studying a menu. "Oh, mother!" Matt breathed softly.

"Then we'll sing 'Ioway,' " announced Tex. "I'm broadminded."

"We won't sing anything. For the love of Mike, Tex— shut up! An officer just came into the joint."

"Where?" demanded Tex. "Invite him over. I don't hold any grudges. They're good boys, all of 'em, the stinkers. Matt shot a quick glance at Lieutenant Wong and was dismayed to see the officer crooking a finger at him, beckoning. He got up and walked stiffly toward the officer.

"Dodson—"

"Yes, sir."

"Go back and tell Jarman to quiet down before I have to come over there and ask him what his name is."

"Uh—aye aye, sir!"

When he got back to the table, Tex was already quiet and appeared sobered but very much puzzled. Oscar's usually pleasant face was dark with anger. "What's the verdict?"

Matt reported. "I see. Wong's all right. Well, we got to get him out of here." Oscar flagged the waiter, then opened Tex's pouch and paid the bill.

He stood up. "Let's go. Pull yourself together, Tex, or I'll break your neck."

"Where to?" asked Matt.

"Into the 'fresher."

Fortunately it turned out that they had that room to themselves. Oscar marched Tex to a—washbasin and told him to stick his finger down his throat. "Why?" objected Tex.

"Because if you don't, I'll do it for you. Look, Matt—can you take care of him? Ill be back in a few minutes."

It was nearly twenty minutes before Oscar returned, bearing a carton of hot, black coffee and a tube of pills. He forced the coffee and half a dozen of the pills on the patient. "What are the pills?" Matt wanted to know.—

"Thiamin chloride."

"You seem to know your way around?"

"Well . . ." Oscar wrinkled his brow. "Venus isn't like Earth, you know. Still sort of wild and woolly. You see a lot of things go on. Drink the rest of the coffee, Tex."

"Yessir."

"The front of his uniform is all messed up," said Matt.

"So I see. I guess we should have undressed him."

"What'll we do? If he goes back like that, there will be questions asked—bad ones."

"Let me think." Presently he said to Tex, "Go in there—" Oscar indicated one of a row of 'fresher booths, "—and take off your uniform. Hand it out and lock yourself in. We'll be back after a while." Tex seemed to feel that he was being consigned to the salt mines, but there was no real opposition left in him. He went. Shortly thereafter Matt and Oscar left, Oscar with a tightly rolled bundle of a cadet uniform under one arm.

They took the slideway half around the Station, through crowds of gorgeously dressed and hurrying people, past rich and beckoning shops. Matt enjoyed it thoroughly.

"They say," said Oscar, "that this is what the big cities used to be like, back before the Disorders."

"It certainly doesn't look like Des Moines."

"Nor like Venus." Oscar found what he was looking for, an automatic laundry service, in a passageway off the waiting room of the emigrant zone. After a considerable wait the uniform came back to them, clean, pressed, and neatly packaged. It being Terra Station, the cost was sky high. Matt looked at what remained of his funds.

"Might as well be broke," he said and invested the remainder in a pound of chocolate—coated cherries. They hurried back. Tex looked so woe—begone and so glad to see them that Matt had a sudden burst of generosity and handed the box to Tex. "Present to you, you poor, miserable, worthless critter."

Tex seemed touched by the gesture—it was no more than a gesture, since candy and such are, by ancient right, community property among roommates.

"Hurry up and get dressed, Tex. The scooter shoves off in just thirty-two minutes." Twenty-five minutes later, suited up, they were filing into the airlock, Tex with the chocolates under his arm.

The trip back was without incident, except for one thing: Matt had not thought to specify a pressure container for the candy. Before Tex could strap down the box had bulged.

By the time they reached the *Randolph* the front and left side of his space suit was covered with a bubbly, sticky mess compounded of cherry juice, sugar syrup, and brown stains of chocolate as the semi—liquid confection boiled and expanded in the vacuum. He would have thrown the package away had not the oldster, strapped next to him in the rack, reminded him of the severe penalties for jettisoning anything in a traffic lane.

The cadet in charge of the hangar pocket in the *Randolph* looked Tex over in disgust. "Why didn't you pack it inside your suit?"

"Uh, I just didn't think of it, sir."

"Hummph! Next time you will, no doubt. Go on inside and place yourself on the report for 'gross untidiness in uniform.' And clean up that suit."

"Aye aye, sir."

Pete was in their suite when they got back. He came out of his cubicle. "Have fun? Gee, I wish I hadn't had the duty."

"You didn't miss much," said Oscar.

Tex looked from one to the other. "Gee, fellows, I'm sorry I ruined your liberty."

"Forget it," said Oscar. "Terra Station will still be there next month."

"That's right," agreed Matt, "but see here, Tex—tell us the truth. That was the first drink you ever had—wasn't it?"

Tex looked shamefaced. "Yes . . . my folks are all temperance—except my Uncle Bodie."

"Never mind your Uncle Bodie. If I catch you taking another, I'll beat you to death with the bottle."

"Aw, shucks, Matt!"

Oscar looked at Matt quizzically. "Easy on that holier-than-thou stuff, kid. Maybe it could happen to you."

"Maybe it could. Maybe some day I'll get you to chaperone me and find out what happens. But not in public."

"It's a date."

"Say," demanded Pete, "what goes on here? What's it all about?"

IX LONG HAUL

LIFE IN THE *Randolph* had a curious aspect of timelessness —or, rather, datelessness. There was no weather, there were no seasons. The very divisions into "night" and "day" were arbitrary and were continually being upset by night watches and by laboratory periods at any hour, in order to make maximum use of limited facilities. Meals were served every six hours around the clock and the meal at one in the "morning" was almost as well attended as breakfast at seven hundred.

Matt got used to sleeping when he could find time—and the "days" tumbled past. It seemed to him that there was never time enough for all that he was expected to do. Mathematics and the mathematical subjects, astrogation and atomic physics in particular, began to be a bugaboo; he was finding himself being rushed into practical applications of mathematics before he was solidly grounded.

He had fancied himself, before becoming a cadet, as rather bright in mathematics, and so he was—by ordinary standards. He had not anticipated what it would be like to be part of a group of which every member was unusually talented in the language of science. He signed up for personal coaching in mathematics and studied harder than ever. The additional effort kept him from failing, but that was all. It is not possible to work all the time without cracking up, but the environment would have kept Matt from overworking even if he had been so disposed. Corridor number five of "A" deck, where Matt and his roommates lived, was known as "Hog Alley" and had acquired a ripe reputation for carefree conduct even before Tex Jarman added his talents.

The current "Mayor of Hog Alley" was an oldster named Bill Arensa. He was a brilliant scholar and seemed able to absorb the most difficult study spool in a single playing, but he had been in the *Randolph* an unusually long time—a matter of accumulated demerits.

One evening after supper, soon after arrival, Matt and Tex were attempting to produce a little harmony. Matt was armed with a comb and a piece of tissue paper; Tex had his harmonica. A bellow from across the hallway stopped them. "Open up in there! You youngsters—come busting out!"

Tex and Matt appeared as ordered. The Mayor looked them over.

"No blood," he remarked. "I'd swear I heard someone being killed. Go back and get your noisemakers."

Arensa ushered them into his own room, which was crowded. He waved a hand around at the occupants. "Meet the Hog Alley People's Forum—Senator Mushmouth, Senator Filibuster, Senator Hidebound, Doctor Dogoodly, and the Marquis de Sade. Gentlemen, meet Commissioner Wretched and Professor Farflung." The oldster went into his study cubicle.

"What's your name, Mister?" said one of the cadets, addressing Tex.

"Jarman, sir."

"And yours?"

"We've got no time for those details," announced Arensa, returning bearing a guitar. "That number you gentlemen were working on—let's try it again. Brace yourself for the down beat. . . and a one, and a two!"

Thus was born the Hog Alley band. It grew to seven pieces and started working on a repertoire to be presented at a ship's entertainment. Matt dropped out when he became eligible for the space polo league, as he could not spare time for both—his meager, talent was no loss to the band.

Nevertheless he remained in the orbit of the oldster. Arensa adopted all four of them, required them to report to his room from time to time, and supervised their lives. However, he never placed them on the report. By comparing notes with other youngster cadets on this point, Matt discovered that he and his friends were well off. They attended numerous sessions of the "Forum," first by direction, later from choice. The staple recreation in the *Randolph*, as it is in all boarding schools, was the bull session. The talk ranged through every possible subject and was kept spiced by Arensa's original and usually radical ideas.

However, no matter what was discussed, the subject usually worked around to girls and then broke up with the un-startling conclusion: "There's no sense in talking about it—there aren't any girls in the *Randolph*. Let's turn in."

Almost as entertaining was the required seminar in "Doubt." The course had been instituted by the present commandant and resulted from his own observation that every military organization—with the Patrol no exception—suffered from an inherent vice. A military hierarchy automatically places a premium on conservative behavior and dull conformance with precedent; it tends to penalize original and imaginative thinking. Commodore Arkwright realized that these tendencies are inherent and inescapable; he hoped to offset them a bit by setting up a course that could not be passed without original thinking.

The method was the discussion group, made up of youngsters, oldsters, and officers. The seminar leader would chuck out some proposition that attacked a value usually regarded as axiomatic. From there on anything could be said.

It took Matt a while to get the hang of it. At his first session the leader offered: "Resolved: that the Patrol is a detriment and should be abolished." Matt could hardly believe his ears.

In rapid succession he heard it suggested that the past hundred years of Patrol—enforced peace had damaged the race, that the storm of mutations that followed atomic warfare were necessarily of net benefit under the inexorable laws of evolution, that neither the human race nor any of the other races of the system could expect to survive permanently in the universe if they deliberately forsook war, and that, in any case, the Patrol was made up of a bunch of self-righteous fatheads who mistook their own trained-in prejudices for the laws of nature.

Matt contributed nothing to the first discussion he attended.

The following week he heard both mother love and love of mother questioned. He wanted to reply, but, for the life of him, could think of no other answer than "Because!" Thereafter came attacks on monotheism as a desirable religious form, the usefulness of the scientific method, and the rule of the majority, in reaching decisions. He discovered that it was permissible to express opinions that were orthodox as well as ones that were unorthodox and began to join the debate by defending some of his own pet ideas.

At once he found his own unconscious assumptions that lay behind his opinions subjected to savage attack and found himself again reduced to a stubborn and unvoiced "Because!"

He began to catch on to the method and found that he could ask an innocent question that would undermine someone else's line of argument. From then on he had a good time.

He particularly enjoyed it after Girard Burke was assigned to his seminar. Matt would lie in wait until Girard would express some definite opinion, then jump him—always with a question; never with a statement. For some reason not clear to Matt, Burke's opinions were always orthodox; to attack them Matt was forced to do some original thinking.

But he asked Burke about it after class one day. "See here, Burke—I thought you were the bird with a new slant on everything?"

"Well, maybe I am. What about it?"

"You don't sound like it in 'Doubt.' "

Burke looked wise. "You don't catch me sticking my neck out."

"What do you mean?"

"Do you think our dear superiors are really interested in your bright ideas? Won't you ever learn to recognize a booby trap, son?"

Matt thought about it. "I think you're crazy." Nevertheless he chewed it over.

The days rolled past. The pace was so hard that there was little time to be bored. Matt shared the herd credo of all cadets that the *Randolph* was a madhouse, unfit for human habitation, sky junk, etc., etc.—but in fact he had no opinion of his own about the school ship; he was too busy. At first he had had some acute twinges of homesickness; thereafter it seemed to recede. There was nothing but the treadmill of study, drill, more study, laboratory, sleep, eat, and study again.

He was returning from the communications office, coming off watch late one night, when he heard sounds from Pete's cubicle. At first he thought Pete must be running his projector, studying late. He was about to bang on his door and suggest going up to the galley to wheedle a cup of cocoa when he became convinced that the sound was not a projector.

Cautiously he opened the door a crack. The sound was sobbing. He closed the door noiselessly and knocked on it. After a short silence Pete said, "Come in."

Matt went in. "Got anything to eat?"

"Some cookies in my desk."

Matt got them out. "You look sick, Pete. Anything wrong?"

"No. Nothing."

"Don't give me the space drift. Out with it."

Pete hesitated. "It's nothing. Nothing anybody can do anything about."

"Maybe so, maybe not. Tell me."

"There's nothing you can do. I'm *homesick*, that's all!"

"Oh—" Matt had a sudden vision of the rolling hills and broad farms of Iowa. He suppressed it. 'That's bad, kid. I know how you feel."

"No, you don't. Why, you're practically at home—you can just step to a port and *see* it."

"That's no help."

"And it hasn't been so terribly long since you've been home. Me—it took me two years just to make the trip to Terra; there's no way of telling when I'll ever see home again." Pete's eyes got a faraway look; his voice became almost lyrical. "You don't know what it's like, Matt. You've never seen it. You know what they say: 'Every civilized man has two planets, his own and Ganymede.' "

"Huh?"

Pete did not even hear him. "Jupiter hanging overhead, filling half the sky—" He stopped. "It's beautiful, Matt. There's no place like it."

Matt found himself thinking about Des Moines in a late summer evening . . . with fireflies winking and the cicadas singing in the trees, and the air so thick and heavy you could cup it in your hand. Suddenly he hated the steel shell around him, with its eternal free—fall and its filtered air and its artifical lights. "Why did we ever sign up, Pete?"

"I don't know. I don't know!"

"Are you going to resign?"

"I can't. My father had to put up a bond to cover my passage both ways—if I leave voluntarily he's stuck for it."

Tex came in, yawning and scratching. "What's the matter with you guys? Can't you sleep? Don't you want anybody else to sleep?"

"Sorry, Tex."

Jarman looked them over. "You both look like your pet dog had died. What's the trouble?"

Matt bit his lip. "Nothing much. I'm homesick, that's all."

Pete spoke up at once. "That's not quite straight. I was the one that was pulling the baby act—Matt was trying to cheer me up."

Tex looked puzzled. "I don't get it. What difference does it make where you are so long as you aren't in Texas?"

"Oh, Tex, for heaven's sake!" Matt exploded.

"What's the matter? Did I say something wrong?" Tex looked from Matt to Pete. "Pete, you certainly are a mighty far piece away from your folks, I've got to admit. Tell you what—comes time we get some leave, you come home with me. I'll let you count the legs on a horse."

Pete grinned feebly. "And meet your Uncle Bodie?"

"Sho', sho'! Uncle Bodie'll tell you about the time he rode the twister, bareback. Is it a deal?"

"If you'll come to visit at my home someday. You, too, Matt."

"It's a deal." They shook hands all around.

The effects of the nostalgic binge with Pete might have worn off if another incident had not happened soon after. Matt went across the passage to Arensa's room, intending to ask the oldster for some help in a tricky problem in astroga—tion. He found the oldster packing. "Come in, Senator," said Arensa. "Don't clutter up the doorway. What's on your mind, son?"

"Uh, nothing, I guess. You got your ship, sir?" Arensa had been passed for outer duty the month before; he was now technically a "passed cadet" as well as an "oldster."

"No." He picked up a sheaf of papers, glanced at them, and tore them across. "But I'm leaving."

"Oh."

"No need to be delicate about it—I wasn't fired. I've resigned."

"Oh."

"Don't stare at me and say 'oh'! What's so odd about resigning?"

"Nothing. Nothing at all."

"You were wondering why, weren't you? Well, I'll tell you. I've had it, that's why. I've had it and I'm sick of it. Because, sonny, I have no wish to be a superman. My halo is too tight and I'm chucking it. Can you—understand that?"

"Oh, I wasn't criticizing!"

"No, but you were thinking it. You stick with it, Senator. You're just the sort of serious-minded young squirt they want and need. But not for me—I'm not going to be an archangel, charging around the sky and brandishing a flaming sword. Did you ever stop to think what it would feel like to atom-bomb a city? Have you ever really thought about it?"

"Why, I don't know. It hasn't been necessary for the Patrol actually to use a bomb since they got it rolling right. I don't suppose it ever will be."

"But that's what you signed up for, just the same. It's your reason for being, my boy." He stopped and picked up his guitar. "Forget it. Now what can I do with this? I'll sell it to you cheap, Earthside price."

"I couldn't even pay Earthside prices right now."

"Take it as a gift." Arensa chucked it at him. "The Hog Alley band ought to have a gitter and I can get another. In thirty minutes I shall be in Terra Station, Senator, and six hours later I shall be back with the ground crawlers, the little people who don't know how to play God—and wouldn't want to!"

Matt couldn't think of anything to say.

It seemed odd thereafter not to have Arensa's bellowing voice across the passageway, but Matt did not have time to think about it. Matt's drill section in piloting was ordered to the Moon for airless-landing.

The section had progressed from scooters to drill in an A-6 utility rocket rigged for instruction. The cargo space of this ship—P.R.S. *Shakysides* to the cadets; drill craft #106 on the rolls of the *Randolph*—had been fitted as a dozen duplicate control rooms, similar in every visible detail to the real control rooms, to the last switch, dial, scope and key. The instruments in the duplicate rooms showed the same data as their twins in the master room but when a cadet touched a control in one of the instruction rooms, it had no effect on the ship; instead the operation was recorded on tape.

The pilot's operations were recorded, too, so that each student pilot could compare what he did with what he should have done, after having practiced under conditions identical with those experienced by the actual pilot.

The section had completed all it could learn from practice contacts at the *Randolph* and at Terra Station. They needed the hazard of a planet. The two-day trip to Moon Base was made in the Shakysides herself, under conditions only a little worse than those encountered by an emigrant.

Matt and his companions saw nothing of the Lunar colonies. There was no liberty; they lived for two weeks in pressurized underground barracks at the Base and went up to the field each day for landing drill, first in the dummy control rooms of the *Shakysides*, then in dual-controlled A-6 rockets for actual piloting.

Matt soloed at the end of the first week. He had the "feel" for piloting; given a precalculated flight plan he could make his craft respond. It was as natural to him as mathematical astrogation was difficult.

Soloing left him with time on his hands. He explored the Base and took a spacesuited walk on the burned and airless Lunar plain. The student pilots were quartered in a corner of the marine barracks. Matt killed time by watching the space marines and chinning with the non—coms.

He liked the spit-and-polish style with which the space marines did "things, the strutting self-confidence with which they handled themselves. There is no more resplendent sight in the solar system than an old space-marine sergeant in full dress, covered with stripes, hash marks, and ribbons, the silver at his temples matching the blazing sunburst on his chest. Matt began to feel dowdy in the one plain, insignia-less uniform he had brought in his jump bag.

He enjoyed their frequent ceremonials. At first it startled him to hear a unit mustered without the ghostly repetition of the names of the Four—"Dahlquist! Martin! Rivera! Wheeler!"—but the marines had traditional rites of their own and more of them.

Faithful to his intention of swotting astrogation as hard as possible, Matt had brought some typical problems along. Reluctantly he tackled them one day. "Given: Departure from the orbit of Deimos, Mars, not earlier than 1200 Greenwich, 15 May 2087; chemical fuel, exhaust velocity 10,000 meters per second; destination, suprastratospheric orbit around Venus. Required: Most economical orbit to destination and quickest orbit, mass-ratios and times of departure and arrival for each. Prepare flight plan and designate check points, with precalculation for each point, using stars of 2nd magnitude or brighter. Questions: Is it possible to save time or fuel by tacking on the Terra-Luna pair? What known meteor drifts will be encountered and what evasive plans, if any, should be made? All answers must conform to space regulations as well as to ballistic principles."

The problem could not be solved in any reasonable length of time without machine calculation. However, Matt could set it up and then, with luck, sweettalk the officer in charge of the Base's computation room into letting him use a ballistic integrator. He got to work.

The sweet voice of a bugle reached him, first call for changing the guard. He ignored it.

He was sweating over his preliminary standard approximation when the bugle again interrupted him with call-to-muster. It completely disrupted his chain of reasoning. Confounded problem!—why would they assign such a silly problem anyhow? The Patrol didn't fiddle around with chemical fuels and most economical orbits—that was merchant service stuff.

Two minutes later he was watching guard mount, down in the main HQ under the barracks. When the band sounded off with "Till the Suns are cold and the heavens dark—" Matt found himself choking up.

He stopped by the guard office, reluctant to get back to the fussy complexities of mathematics. The new sergeant of the guard was an acquaintance, Master Sergeant Macleod. "Come in, young fellow, and rest yourself. Did you see the guard mount?"

"Thanks. Yes, I did. It's pretty wonderful to see."

"Know what you mean. Been doing it twenty years and I get more of a bang out of it than I did when I was a recruit. How's tricks? They keeping you busy?"

Matt grinned sheepishly. "I'm playing hooky. I should be studying astrogation, but I get so darned sick of it."

"Don't blame you a bit. Figures make my head ache."

Matt found himself telling the older man his troubles. Sergeant Macleod eyed him with sympathetic interest. "See here, Mr. Dodson—you don't like that longhaired stuff. Why don't you chuck it?"

"Huh?"

"You like the space marines, don't you?"

"Why, yes."

"Why not switch over and join a man's outfit? You're a likely lad and educated—in a year I'd be saluting you. Ever thought about it?"

"Why, no, I can't say that I have."

"Then do so. You don't belong with the Professors—you didn't know that was what we call the Patrol, did you?— the 'Professors.' "

"I'd heard it."

"You had? Well, we work for the Professors, but we aren't of them. We're . . . well, you've seen. Think it over."

Matt did think it over, so much so that he took the Mars-to-Venus problem back with him, still unsolved.

It was no easier to solve for the delay, nor were other and more complicated problems made any simpler by virtue of the idea, buzzing in the back of his mind, that he need not belabor himself with higher mathematics in order to be a spaceman. He began to see himself decked out in the gaudy, cock-pheasant colors of the space marines.

At last he took it up with Lieutenant Wong. "You want to transfer to the marines?"

"Yes. I think so."

"Why?"

Matt explained his increasing feeling of frustration in dealing with both atomic physics and astrogation.

Wong nodded. "I thought so. But we knew that you would have tough sledding since you came here insufficently prepared. I don't like the sloppy work you've been doing since you came back from Luna."

"I've done the best I could, sir."

"No, you haven't. But you can master these two subjects and I will see to it that you do."

Matt explained, almost inaudibly, that he was not sure he wanted to. Wong, for the first time, looked vexed.

"Still on that? If you turn in a request for transfer, I won't okay it and I can tell you ahead of time that the Commandant will turn it down."

Matt's jaw muscles twitched. "That's your privilege, sir."

"Damn it, Dodson, it's not my privilege; it's my duty. You would never make a marine and I say so because I know you, your record, and your capabilities. You have a good chance of making a Patrol officer."

Matt looked startled. "Why couldn't I become a marine?"

"Because it's too easy for you—so easy that you would fail."

"Huh?"

"Don't say "huh." The spread in I.Q. between leader and follower should not be more than thirty points. You are considerably more than thirty points ahead of those old sergeants—don't get me wrong; they are fine men. But your mind doesn't work like theirs." Wong went on, "Have you ever wondered why the Patrol consists of nothing but officers—and student officers, cadets?"

"Mmm, no, sir."

"Naturally you wouldn't. We never wonder at what we grow up with. Strictly speaking, the Patrol is not a military organization at all."

"Sir?"

"I know, I know—you are trained to use weapons, you are under orders, you wear a uniform. But your purpose is not to fight, but to prevent fighting, by every possible means. The Patrol is not a fighting organization; it is the repository of weapons too dangerous to entrust to military men.

"With the development last century of mass—destruction weapons, warfare became all offense and no defense, speaking broadly. A nation could launch a horrific attack but it could not even protect its own rocket bases. Then space travel came along.

"The spaceship is the perfect answer in a military sense to the atom bomb, and to germ warfare and weather warfare. It can deliver an attack that can't be stopped—and it is utterly impossible to attack that spaceship from the surface of a planet."

Matt nodded. "The gravity gauge."

"Yes, the gravity gauge. Men on the surface of a planet are as helpless against men in spaceships as a man would be trying to conduct a rock-throwing fight from the bottom of a well. The man at the top of the well has gravity working for him.

"We might have ended up with the tightest, most nearly unbreakable tyranny the world has ever seen. But the human race got a couple of lucky breaks and it didn't work out that way. It's the business of the Patrol to see that it stays lucky.

"But the Patrol can't drop an atom bomb simply because some pipsqueak Hitler has made a power grab and might some day, when he has time enough, build spaceships and mass-destruction weapons. The power is too great, too awkward—it's like trying to keep order in a nursery with a loaded gun instead of a switch.

"The space marines are the Patrol's switch. They are the finest—"

"Excuse me, sir—"

"Yes?"

"I know how the marines work. They do the active policing in the System—but that's why I want to transfer. They're a more active outfit. They are—"

"—more daring, more adventurous, more colorful, more glamorous —and they don't have to study things that Matthew Dodson is tired of studying. Now shut up and listen; there is a lot you don't know about the set-up, or you wouldn't be trying to transfer."

Matt shut up.

"People tend to fall into three psychological types, all differently motivated. There is the type, motivated by economjc factors, money . . . and there is the type motivated by 'face,' or pride. This type is a spender, fighter, boaster, lover, sportsman, gambler; he has a will to power and an itch for glory. And there is the professional type, which claims to follow a code of ethics rather than simply seeking money or glory—priests and ministers, teachers, scientists, medical men, some artists and writers. The idea is that such a man believes that he is devoting his life to some purpose more important than his individual self. You follow me?"

"I... think so."

"Mind you this is terrifically over—simplified. And don't try to apply these rules to non—terrestrials; they won't fit. The Martian is another sort of a cat, and so is the Venerian."

Wong continued, "Now we get to the point: The Patrol is meant to be made up exclusively of the professional type. In the space marines, every single man jack, from the generals to the privates, is or should be the sort who lives by pride and glory."

"Oh..."

Wong waited for it to sink in. "You can see it in the very uniforms; the Patrol wears the plainest of uniforms, the marines wear the gaudiest possible. In the Patrol all the emphasis is on the oath, the responsibility to humanity. In the space marines the emphasis is on pride in their corps and its glorious history, loyalty to comrades, the ancient virtues of the soldier. I am not disparaging the marine when I say that he does not care a tinker's damn for the political institutions of the Solar System; he cares only for his organization.

"But it's not your style, Matt. I know more about you than you do yourself, because I have studied the results of your psychological tests. You will never make a marine."

Wong paused so long that Matt said diffidently, "Is that all, sir?"

"Almost. You've got to learn astrogation. If deepsea diving were the key to the Patrol's responsibility, it would be that that you would have to learn. But the key happens to be space travel. So—I'll lay out a course of sprouts for you. For a few weeks you'll do nothing but astrogate. Does that appeal to you?"

"No, sir."

"I didn't think it would. But when I get through with you, you'll be able to find your way around the System blindfolded. Now let me see —"

The next few weeks were deadly monotony but Matt made progress. He had plenty of time to think—when he was not bending over a calculator. Oscar and Tex went to the Moon together; Pete was on night shift in the power room. Matt kept sullenly and stubbornly at work—and brooded. He promised himself to stick it out until Wong let up on him. After that—well, he would have a leave coming up one of these days. If he decided to chuck it, why, lots of cadets never came back from their first leave.

In the meantime his work began to get the grudging approval of Lietuenant Wong.

At last Wong let up on him and he went back to a normal routine. He was settling into it when he found himself posted for an extra duty. Pursuant thereto, he reported one morning to the officer of the watch, received a briefing, memorized a list of names, and was issued a black armband. Then he went to the main airlock and waited.

Presently a group of scared and greenish boys began erupting from the lock. When his turn came, he moved forward and called out, "Squad seven! Where is the squad leader of squad seven?"

He got his charges rounded up at last and told the acting squad leader to follow along in the rear, then led them slowly and carefully down to "A" deck. He was glad to find when he got there that none of them had gotten lost. "This is your messroom," he told them. "We'll have lunch before long."

Something about the expression of one of them amused him. "What's the matter, Mister?" he asked the boy. "Aren't you hungry?"

"Uh, no, sir."

"Well, cheer up—you will be."

X QUIS CUSTODIET IPSOS CUSTODES?

INTERPLANETARY PATROL Cadet Matthew Dodson sat in the waiting room of Pikes Peak Catapult Station and watched the clock. He had an hour to wait before boarding the New Moon for Terra Station; meanwhile he was expecting his roommates.

It had been a good leave, he supposed; he had done everything he had planned to do—except joining the others at the Jarman ranch at the end; his mother had kicked up such a fuss at the idea.

Still, it had been a good leave. His space-burned face, lean and beginning to be lined, looked slightly puzzled. He had confided to no one his tentative intention of resigning while on leave. Now he was trying to remember just when and why it had ceased to be his intention. He had been sent on temporary duty to the P.R.S *Nobel,* as assistant to the astrogator during a routine patrol of circum-Terra bomb-rockets. Matt had joined his ship at Moon Base and, at the conclusion of the patrol when the *Nobel* had grounded at Terra Base for overhaul, was detached with permission to take leave before reporting back to the *Randolph.* He had gone straight home.

The entire family met him at the station and copted him home. His mother had cried a little and his father had shaken hands very vigorously. It seemed to Matt that his kid brother had grown almost incredibly. It was good to see them, good to be back in the old family bus. Matt would have piloted the copter himself had not Billie, his brother, gone straight to the controls.

The house had been redecorated throughout. His mother obviously expected favorable comment and Matt had given it—but he hadn't really liked the change. It had not been what he had pictured. Besides that, the rooms seemed smaller. He decided that it must be the effect of redecorating; the house couldn't have shrunk!

His own room was filled with Bill's things, although Bill had been temporarily evicted to his old room, now turned into a hobby room for his mother. The new arrangements were sensible, reasonable—and annoying.

In thinking it over Matt knew that the changes at home had had nothing to do with his decision. Certainly not! Nor his father's remarks about posture, even though they had stuck in his craw—

He and his father had been alone in the living room, just before dinner, and Matt had been pacing up and down, giving an animated and, he believed, interesting account of the first time he had soloed. His father had taken advantage of a pause to say, "Stand up, son."

Matt stopped. "Sir?"

"You are all crouched over and seem to be limping. Does your leg still bother you?"

"No, my leg is fine."

"Then straighten up and "square your shoulders. Look proud. Don't they pay any attention to your posture at school?"

"What's wrong with the way I was walking?"

Bill had appeared in the door just as the subject had come up. "I'll show you, Mattie," he had interrupted, and proceeded to slouch across the room in a grotesque exaggeration of a spaceman's relaxed and boneless glide. The boy made it look like the amble of a chimpanzee.

"You walk like that."

"The devil I do!"

"The devil you don't."

"Bill!" said his father. "Go wash up and get ready for dinner. And don't talk that way. Go on, now!" When the younger son had left his father turned again to Matt and said, "I thought I was speaking privately, Matt. Honestly, it's not as bad as Bill makes out; it's only about half that bad."

"But— Look, Dad, I walk just like everybody else—among spacemen, I mean. It comes of getting used to free-fall. You carry yourself sort of pulled in, for days on end, ready to bounce a foot off a bulkhead, or grab with your hands. When you're back under weight, after days and weeks of that, you walk the way I do. 'Cat feet' we call it."

"I suppose it would have that effect," his father had answered reasonably, "but wouldn't it be a good idea to practice walking a little every day, just to keep in form?"

"In free-fall? But—" Matt had stopped, suddenly aware that there was no way to bridge the gap.

"Never mind. Let's go in to dinner."

There had been the usual round of family dinners with aunts and uncles. Everyone asked him to tell about school, about what it felt like to go out into space. But, somehow, they had not actually seemed very interested. Take Aunt Dora.

Great-aunt Dora was the current family matriarch. She had been a very active woman, busy with church and social work. Now she was bedfast and had been for three years. Matt called on her because his family obviously expected it. "She often complains to me that you don't write to her, Matt, and—"

"But, Mother, I don't have time to write to everyone!"

"Yes, yes. But she's proud of you, Matt. She'll want to ask you a thousand questions about everything. Be sure to wear your uniform—she'll expect it."

Aunt Dora had not asked a thousand questions; she had asked just one—why had he waited so long to come to see her? Thereafter Matt found himself being informed, in detail, on the shortcomings of the new pastor, the marriage chances of several female relatives and connections, and the states of health of several older women, many of them unknown to him, including details of operations and postoperative developments.

He was a bit dizzy when he escaped, pleading a previous date.

Yes, maybe that was it—it might have been the visit to Aunt Dora that convinced him that he was not ready to resign and remain in Des Moines. It could not have been Marianne.

Marianne was the girl who had made him promise to write regularly—and, in fact, he had, more regularly than had she. But he had let her know that he was coming home and she had organized a picnic to welcome him back. It had been jolly. Matt had renewed old acquaintances and had enjoyed a certain amount of hero worship from the girls present. There had been a young man there, three or four years older than Matt, who seemed unattached. Gradually it dawned on Matt that Marianne treated the newcomer as her property.

It had not worried him. Marianne was the sort of girl who never would get clearly fixed in her mind the distinction between a planet and a star. He had not noticed this before, but it and similar matters had come up on the one date he had had alone with her.

And she had referred to his uniform as "cute."

He began to understand, from Marianne, why most Patrol officers do not marry until their mid—thirties, after retirement.

The clock in Pikes Peak Station showed thirty minutes until up-ship. Matt began to worry that Tex's casual way might have caused the other three to miss connections, when he spotted them in the crowd. He grabbed his jump bag and went toward them.

They had their backs toward him and had not seen him as yet. He sneaked up behind Tex and said in a hoarse voice, "Mister—report to the Commandant's office."

Tex jumped into the air and turned completely around. "Matt! You horsethief, don't scare me like that!"

"Your guilty conscience. Hi, Pete. Hello, Oscar."

"How's the boy, Matt? Good leave?"

"Swell."

"Here, too." They shook hands all around.

"Let's get aboard."

"Suits." They weighed in, had their passes stamped, and were allowed to proceed on up to where the *New Moon* stood upright and ready in the catapult cradle, her mighty wings outstretched. A stewardess showed them to their seats.

At the ten-minute warning Matt announced, "I'm going up for some makeelearnee. Anybody with me?"

"I'm going to sleep," denied Tex.

"Me, too," added Pete. "Nobody ever sleeps in Texas. I'm dead."

Oscar decided to come along. They climbed up to the control room and spoke to the captain. "Cadets Dodson and Jensen, sir—request permission to observe."

"I suppose so," the captain grunted. "Strap down." The pilot room of any licensed ship was open to all members of the Patrol, but the skippers on the Terra—to—Station run were understandably bored with the practice.

Oscar took the inspector's chair; Matt had to use deck pads and straps. His position gave him an excellent view of the copilot and mate, waiting at the airplane-type controls. If the rocket motor failed to fire, after catapulting,

it would be the mate's business to fight the ship into level flight and bring her down to a deadstick landing on the Colorado prairie.

The captain manned the rocket-type controls. He spoke to the catapult control room, then sounded the siren. Shortly thereafter the ship mounted up the face of the mountain, at a bone-clamping six gravities. The acceleration lasted only ten seconds; then the ship was flung straight up at the sky, leaving the catapult at 1300 miles per hour.

They were in free-fall and climbing. The captain appeared to be taking his time about cutting in the jet; for a moment Matt held to the excited hope that an emergency landing was going to be necessary. But the jet roared on time.

When they had settled in their orbit and the jet was again silent, Matt and Oscar thanked the captain and went back to their proper seats. Tex and Pete were both asleep; Oscar followed suit at once. Matt decided that he must have missed quite a bit in letting himself be talked out of finishing his leave in Texas.

His thoughts went back—to the problem he had been considering. Certainly he had not decided to stick simply because his own leave had been fairly quiet; he had never thought of home as being a night club, or a fair ground.

One night at dinner his father had asked him to describe just what it was that the *Nobel* did in circum-Terra patrol. He had tried to oblige. "After we lift from Moon Base we head for Terra on an elliptical orbit. As we approach the Earth we brake gradually and throw her into a tight circular orbit from pole to pole—"

"Why pole to pole? Why not around the equator?"

"Because, you see, the atom—bomb rockets are in pole-to-pole orbits. That's the only way they can cover the whole globe. If they were circling around the equator—"

"I understand that," his father had interrupted, "but your purpose, as I understand it, is to inspect the bomb rockets. If you—your ship—circled around the equator, you could just wait for the bomb rockets to come past."

You may understand it," his mother had said to his father, "but I don't."

Matt looked from one to the other, wondering which one to answer—and how. "One at a time . . . please," he protested. "Dad, we can't just intercept the bombs; we have to sneak up on them, match orbits until you are right alongside it and making exactly the same course and speed. Then you bring the bomb inside and ship and inspect it."

"And of what does that inspection consist?"

"Just a sec, Dad. Mother, look here for a moment." Matt took an orange from the table's centerpiece. "The rocket bombs go round and round, like this, from pole-to-pole, every two hours. In the meantime the Earth is turning on its axis, once every twenty—four hours." Matt turned the orange slowly in his left hand while moving a finger of his right hand rapidly around it from top to bottom to simulate a pole-to-pole bomb. "That means that if a bomb passes over Des Moines on this trip, it will just about pass over the Pacific Coast on its next trip. In twenty-four hours it covers the globe."

"Goodness! Matthew, I wish you wouldn't talk about an atom bomb being over Des Moines, even in fun."

"In fun?" Matt had been puzzled. "As a matter of fact ... let me think; we're about forty—two north and ninety—four west—" He glanced at his watch finger and studied for a few moments. "Jay-three ought to be along in about seven minutes—yes, it will be almost exactly overhead by the time you finish your coffee." Long weeks in the *Nobel*, plotting, calculating,, and staring in radarscopes had gotten Matt so that he knew the orbits of circum-Terra prowler rockets a bit better than a farmer's wife knows her own chickens; Jay-three was an individual to him, one with fixed habits.

His mother was looking horrified. She spoke directly to her husband as if she expected him to do something about it. "John. ... I don't like this. I don't like it, do you hear me? What if it should fall?"

"Nonsense, Catherine—it can't fall."

Mart's younger brother chortled. "Mom doesn't even know what holds the Moon up!"

Matt turned to his brother. "Who pushed your button squirt? Do you know what holds the Moon up?"

"Sure—gravity."

"Not exactly. Suppose you give me a quick tell, with diagrams."

The boy tried; his effort was hardly successful. Matt shut him off. "You know somewhat less about astronomy than the ancient Egyptians. Don't make fun of your elders. Now, look, Mother—don't get upset. Jay-three can't fall on us. It's in a free orbit that does not intersect the Earth—like smarty—pants here says, it can't fall down any more than the Moon can fall. Anyhow, if the Patrol was to bomb Des Moines tonight, at this time, it wouldn't use Jay-three for the very reason that it is overhead. To bomb a city you start with a rocket heading for your target and a couple of thousand miles away, because you have to signal its robot to start the jet and seek the target. You have to slow it down and bend it down. So it wouldn't be Jay-three; it would be—" He thought again. "—Eye-two, or maybe Ache-one." He smiled wryly. "I got bawled out over Eye-two."

"Why?" demanded his brother.

"Matt, I don't think you have picked the right tack to quiet your mother's fears," his father said dryly. "I suggest we not talk about bombing cities."

"But I didn't— Sorry, Father."

"Catherine, there really is nothing to get worked up over —you might just as well be afraid of the local policeman. Matt, you were going to tell me about inspection. Why do the rockets have to be inspected?"

"I want to know why Mattie got bawled out!"

Matt cocked an eyebrow at his brother. "I might as well start by telling him, Dad—it has to do with inspection. Okay, Bill—I made a poor dive when we started to pick it up and had to come back on my suit jet and try again."

"What do you mean, Matthew?"

"He means—"

"Pipe down, Billie. Dad, you send a man out in a suit to insert the trigger guard and attach a line to the rocket so you can bring her inboard of the ship and work on her. I was the man. I made a bad push-off and missed the rocket entirely. She was about a hundred yards away and I guess I misjudged the distance. I turned over and found I was floating on past her. I had to jet back and try again."

His mother still seemed confused, but did not like what she heard. "Matthew! That sounds dangerous to me."

"Safe as houses, Mother. You *can't* fall, any more than the rocket can, or the ship. But it's embarrassing. Anyhow, I finally got a line on her and rode her back into the ship."

"You mean you were *riding* an atom bomb?"

"Shucks, Mother, it's safe—the tamper around the fission material stops most of the radioactivity. Anyhow, the exposure is short."

"But suppose it went off?"

"It can't go off. To go off it has to either crash into the ground with a speed great enough to slap the subcritical masses together as fast as its trigger-gun could do it, or you have to fire the trigger-gun by radio. Besides that, I had inserted the trigger guard—that's nothing more nor less than a little crowbar, but when it's in place not even a miracle could set it off, because you can't bring the subcritical masses together."

"Maybe we had better drop this subject, Matt. It seems to make your mother nervous."

"But, Dad, she asked me."

"I know. But you still haven't told me what you inspect for."

"Well, in the first place, you inspect the bomb itself, but there's never anything wrong with the bomb. Anyhow, I haven't had the course for bomb-officer yet—he has to be a nucleonics engineer. You inspect the rocket motor, especially the fuel tanks. Sometimes you have to replace a little that has escaped through relief valves. But mostly you give her a ballistic check and check her control circuits."

"Ballistic check?"

"Of course, theoretically you ought to be able to predict where a prowler bomb would be every instant for the next thousand years. But it doesn't work out that way. Little things, the effect of the tidal bulges and the fact that the Earth is not a perfect uniform sphere and such, cause them to gradually wander a little away from the predicted orbits. After you find one and service it—they're never very far from where they ought to be—you correct the orbit by putting the whole ship in just precisely the proper trajectory and then put the rocket outside the ship again. Then you go after the next one."

"Clear enough. And these corrections have to be made often enough that a ship is kept busy just inspecting them?"

"Well, no, Dad, we inspect oftener than we really have to—but it keeps the ship and the crew busy. Keeps it from getting monotonous. Anyhow, frequent inspections keep you on the safe side."

"Sounds like a waste of taxpayers' money to inspect too often."

"But you don't understand—we're not there to inspect; we're there to *patrol*. The inspection ship is the ship that would deliver an attack in case anybody started acting up. We have to stay on patrol until the next ship relieves us, so we might as well inspect. Granted that you can bomb a city from Moon Base, you can do a better, more accurate job, with less chance of hitting the wrong people, from close by."

His mother was looking very upset. His father raised his eyebrows and said, "We've wandered back to the subject of bombing, Matt."

"I was simply answering your questions, sir."

"I'm afraid I asked the wrong question. Your mother is not able to take the answers impersonally. Catherine, there isn't the slightest chance of the North American Union being bombed. Tell her that, Matt—I think she'll believe you."

Matt had remained silent. His father had insisted, "Go ahead, Matt. Catherine, after all, it's our Patrol. For all practical purposes the other nations don't count. A majority

of the Patrol officers are from North America, That's true, Matt, isn't it?"

"I've never thought about it I guess so."

"Very well. Now, Catherine, you can't imagine Matt bombing Des Moines, now can you? And that is what it amounts to. Tell, her, Matt."

"But— Dad, you don't know what you are saying!"

"What? What's that, young man!"

"I—" Matt had looked around him, then had gotten up very suddenly and left the room.

His father came into his room some time later. "Matt?"

"Yes, sir?"

"Look, Matt, I let the conversation get out of hand tonight. I'm sorry and I don't blame you for getting upset. Your mother, you know. I try to protect her. Women get worked up so easily."

"It's all right, Dad. I'm sorry I walked out"

"No matter. Let's forget it. There's just one thing I feel we ought to get straight on. I know that you feel loyal to the Patrol and its ideals and it's good that you should, but—well, you are a little young still to see the political realities involved, but you must know that the Patrol could not bomb the North American Union."

"It would in a show down!"

"But there won't be any show down. Even if there were, you couldn't bomb your own people and neither could your shipmates."

Matt thought about it, fiercely. He remembered Commander Rivera—one of the Four, of the proud Tradition—how Rivera, sent down to reason with the official in his own capital, his very native city, had kept the trust. Suspecting that he might be held as hostage, he had left orders to go ahead with the attack unless he returned in person to cancel the orders. Rivera, whose body was decaying radioactive dust but whose name was mustered whenever a unit of the Patrol called the roll.

His father was still talking. "Of course, the Patrol has to patrol this continent just as it patrols all through the System. It would look bad, otherwise this is no reason to frighten women with an impossibility."

"I'd rather not talk about it, Dad."

Matt glanced at his watch and figured how long it would be until the *New Moon* reached Terra Station. He wished he could sleep, like the others. He was sure now what it was that had changed his mind about resigning and remaining in Des Moines. It was not a desire to emulate Rivera. No, it was an accumulation of things—all of them adding up to just one idea, that little Mattie didn't live there any more!

For the first few weeks after leave, Matt was too busy to fret. He had to get back into the treadmill, with more studying to do and less time to do it in. He was on the watch list for cadet officer of the watch now, and had more laboratory periods in electronics and nucleonics as well. Besides this he shared with other oldsters the responsibility for bringing up the youngster cadets. Before; leave his evenings had usually been free for study, now he coached youngsters in astrogation three nights a week.

He was beginning to think that he would have to give up space polo, when he found himself elected captain of the Hog Alley team. Then he was busier than ever. He hardly thought about abstract problems until his next session; with Lieutenant Wong.

"Good afternoon," his coach greeted him. "How's your class in astrogation?"

"Oh, that— It seems funny to be teaching it instead of flunking it."

"That's why you're stuck with it—you still remember what it was that used to stump you and why. How about atomics?"

"Well ... I suppose I'll get by, but I'll never be an Einstein."

"I'd be amazed if you were. How are you getting along otherwise?" Wong waited.

"All right, I. guess. Do you know, Mr. Wong—when I went on leave I didn't intend to come back."

"I rather thought so. That space-marines notion was just your way of dodging around, trying to avoid your real problem."

"Oh. Say, Mr. Wong—tell me straight. Are you a regular Patrol officer, or a psychiatrist?"

Wong almost grinned. "I'm a regular Patrol officer, Matt, but I've had the special training required for this job."

"Uh, I see. What was it I was running away from?"

"I don't know. You tell me."

"I don't know where to start."

"Tell me about your leave, then. We've got all afternoon."

"Yes, sir." Matt meandered along, telling as much as he could remember. "So you see," he concluded, "it was a lot of little things. I was home—but I was a stranger. We didn't talk the same language."

Wong chuckled. "I'm not laughing at you," he apologized. "It isn't funny. We all go through it—the discovery that there's no way to go back. It's part of growing up— but with spacemen it's an especially acute and savage process."

Matt nodded. "I'd already gotten that through my thick head. Whatever happens I won't go back—not to stay. I might go into the merchant service, but I'll stay in space."

"You're not likely to flunk out at this stage, Matt."

"Maybe not, but I don't know yet that the Patrol is the place for me. That's what bothers me."

"Well... can you tell me about it?"

Matt tried. He related the conversation with his fattier and his mother that had gotten them all upset. "It's this: if it comes to a show down, I'm expected to bomb my own home town. I'm not sure it's in me to do it. Maybe I don't belong here."

"Not likely to come up, Matt. Your father was right there."

"That's not the point. If a Patrol officer is loyal to his oath only when, it's no skin off his own nose, then the whole system breaks down."

Wong waited before replying. "If the prospect of bombing your own town, your own family, didn't worry you, I'd have you out of this ship within the hour—you'd be an utterly dangerous man. The Patrol doesn't expect a man to have godlike perfection. Since men are imperfect, the Patrol works on the principle of calculated risk. The chance of a threat to the System coming from your home town in your lifetime is slight; the chance that you might be called on to carry out the attack is equally slight—you might be away on Mars. Taking the two chances together you have something close to zero.

"But if you did hit the jackpot, your commanding officer would probably lock you up in your room rather than take a chance on you."

Matt still looked troubled. "Not satisfied?" Wong went on. "Matt, you are suffering from a disease of youth—you expect moral problems to have nice, neat, black-and-white answers. Suppose you relax and let me worry about whether or not you have what it takes. Oh, some day you'll be caught in a squeeze and no one around to tell you the right answer. But I have to decide whether or not you can get the right answer when the problem comes along— and I don't, even know what your problem will be! How would you like to be in my boots?"

Matt grinned sheepishly. "I wouldn't like it."

XI AES TRIPLEX

OSCAR, MATT, AND TEX were gathered in their common room just before lunch when Pete bounced in. Literally so—he caromed off the door frame and zipped into the room, shouting, "Hey, fellows!"

Oscar grabbed his arms as he rebounded from the inner wall. "Cut your jet and ground—what's the excitement?"

Peter turned in the air and faced them. "The new 'Passed' list is posted!"

"Who's on it?"

"Don't know—just heard about it. Come on!"

They streamed after him. Tex came abreast of Matt and said, "I don't know why I should be getting in a sweat—I won't be on it."

"Pessimist!" They turned out of Hog Alley, went inboard three decks, and forward. There was a clot of cadets gathered around the bulletin board outside the watch office. They crowded in.

Pete spotted his own name at once. "Look!" The paragraph read: "Armand, Pierre—temporary duty P.R.S. *Charles' Wain*, rpt. Terr.St, dtch. Leda, Gnymd, d.&a.o."

"Look!" he repeated. "*I'm going home*—'delay and await orders.'"

Oscar patted his shoulder. "Congratulations, Pete—that's swell. Now if you will kindly get your carcass out of the way—"

Matt spoke up. "I'm on it!"

"What ship?" asked Tex.

"The *Aes Triplex*."

Oscar turned at this. "*What* ship?"

"*Aes Triplex*."

"Matt—that's *my* ship. We're shipmates, boy!"

Tex turned disconsolately away. "Just as I said—no 'Jarman.' I'll be here five years, ten years, fifteen years—old and grizzled. Promise to write on my birthday."

"Gee, Tex, I'm sorry!" Matt tried to swallow his own elation.

"Tex, did you look on the other half of the list?" Pete wanted to know.

"What other half? Huh?"

Pete pointed. Tex dove back into the swarm; presently he reappeared. "What do you know? They passed me!"

"Probably didn't want to expose another class of youngsters to you. What ship?"

"P.R.S. *Oak Ridge*. Say, you and Oscar got the same ship?"

"Yep—the *Aes Triplex*."

"Rank discrimination, that's what it is. Well, come on, we'll be late to lunch."

They ran into Girard Burke in the passageway. Tex stopped him. "No use bothering to look, Stinky. Your name's not on the list."

"What list? Oh, you mean the 'Passed' list. Don't bother me, children—you're talking to a free man."

"So they finally bounced you?"

"Like fun! Resignation accepted, effective today. I'm going in business with my father."

"Going to build sky junk, eh? I don't envy you."

"No, we're starting an export line, with our own ships. The next time you see me, just remember to address me as 'Captain.' " He moved away.

"I'll 'captain' him," Tex muttered. "I'll bet he resigned by request."

"Maybe not," conceded Matt. "Girard is a smooth character. Well, we've seen the last of him."

"And a good thing, too."

Tex was missing after lunch. He showed up after nearly two hours. "I worked it. Shake hands with your new shipmate."

"Huh? No fooling!"

"Fact. First I located Dvorak and convinced him that he would rather have a ship in the circum-Terra patrol than the *Aes Triplex*—so he could see his girl oftener. Then I went to see the Commandant and pointed out to him that you guys were used to having the benefit of my advice and would be lost without it. That's all there was to it. The Commandant saw the wisdom of my words and approved the swap with Dvorak."

"Not for that reason, I'll bet," Matt answered. "Probably he wanted me to continue to look out for you."

Tex took on an odd look. "Do you know, Matt, you aren't so far wrong."

"Really? I was just kidding."

"What he did say was that he thought Cadet Jensen would be a good influence on me. What do you think of that, Oscar?"

Oscar snorted. "If I've reached the place where I'm a good influence on anybody, it's time I cultivated some new vices."

"I'd be glad to help."

"I don't want you, I want your Uncle Bodie—there's a man of the world."

Three weeks later, at Moon Base, Oscar and Matt were settling into their stateroom in the *Aes Triplex*. Matt was not feeling his best; the previous evening at Tycho Colony had been late and noisy. They had taken the last possible shuttle to Moon Base.

The ship's phone in their room sounded; Matt answered it to get the squeal out of his ears. "Yes? Cadet Dodson speaking—"

"Officer of the watch. Is Jensen there too?"

"Yes, sir."

"Both of you report to the Captain."

"Aye aye, sir." Matt turned a troubled face to Oscar. "What'll I do, Oz? The rest of my uniforms are over at the base tailor shop—and this one I've got on looks as if I had slept in it."

"You did. Wear one of mine."

"Thanks, but it would fit me like socks on a rooster. Do you suppose I have time to run over and pick up my clean ones?"

"Hardly!"

Matt rubbed the stubble on his chin. "I ought to shave, anyhow."

"Look," said Oscar, "if I'm any judge of skippers, you'll do better to show up naked as an oyster and with a beard down to here, than to keep him waiting. Let's get going."

The door opened and Tex stuck his head in. "Say—did you guys get a call to report to the Old Man?"

"Yes—Tex, can you lend me a clean uniform?"

Tex could. Matt crossed the passageway to Tex's tiny room and changed. He belted in tightly at the waist, distributed the wrinkles in back, and hoped for the best. The three headed for the cabin.

"I'm glad I don't have to report by myself," Tex announced. "I'm nervous."

"Relax," Oscar advised. "Captain McAndrews is supposed to be a very human sort of a guy."

"Hadn't, you heard? McAndrews is detached—busted his ankle. At the last minute the Department ordered Captain Yancey to command the expedition."

"Yancey!" Oscar let out a low whistle. "Oh, my sore feet!"

"What's the matter, Oscar?" Matt demanded. "You know him?"

"My father knew him. Father had the fresh-foods contract for the port at New Auckland when Yancey—Lieutenant Yancey, then—was portmaster." They stopped outside the commanding officer's cabin.

"That ought to give you an inside track."

"Not likely! They didn't get along."

"I wonder if I did right," Tex mused darkly, "when I wangled the swap from the *Oak Ridge*?"

"Too late to fret. Well, I guess we might—" Oscar stopped! speaking, for the door in front of them suddenly opened! and they found themselves facing the commanding officer. He was tall, wide-shouldered, and flat-hipped, and so handsome that he looked like a television star playing a Patrol officer.

"Well?" he snapped. "Don't stand chatting outside my; door. Come in!"

They filed in silently. Captain Yancey sat down, facing them, and looked them over, one after the other. "What's the trouble, gentlemen?" he said presently. "Are you all struck dumb?"

Tex found his voice. "Cadet Jarman, sir, reporting to the Captain." Yancey's eyes flicked over to Matt.

Matt wet his lips. "Cadet Dodson, sir."

"Cadet Jensen, sir, reporting as ordered." The office looked at Oscar sharply, then spoke to him in Venerian.

"*Do these ears detect some echo of the speech of the Fair Planet*."

"*It is true, thou old and wise one*."

"Never could stand that silly talk," Yancey commented, relapsing into Basic. "I won't ask you where you are from, but—is your father in the provisions racket?"

"My father is a food wholesaler, sir."

"I thought so." The Captain continued to look at him for a moment, then turned to Matt. "Now, Mister, what is the idea of the masquerade? You look like a refugee from an emigrant ship."

Matt tried to explain; Yancey cut him short. "I'm not interested in excuses. I keep a taut ship. Remember that."

"Aye aye, sir."

The Captain settled back and struck a cigarette. "Now, gentlemen, you are no doubt wondering as to why I sent for you. I must admit to a slight curiosity as to the sort of product the old school is turning out. In my day, it was a real course of sprouts and no nonsense about it. But now I understand that the psychologists have taken over and the old rules are all changed."

He leaned forward and fixed Matt with his eyes. "They aren't changed here, gentlemen. In my ship, the old rules still obtain."

No one answered. Yancey waited, then went on, "The regulations state that you shall pay a social call on your commanding officer within twenty-four hours after reporting to a new ship or station. Please consider that the social call has commenced. Sit down, gentlemen. Mr. Dodson, you will find coffee over there on your left. Will you please favor me by pouring it?"

Forty minutes later they left, feeling quite confused. Yancey had demonstrated that he could put them most charmingly at their ease and had displayed a dry, warm wit and a gift for telling anecdotes. Matt decided that he liked him.

But just as they left Yancey glanced at his clock and laid, "I'll see you later, Mr. Dodson—in fifteen minutes."

Once they were outside Tex demanded, "What's he want to see you for, Matt?"

"Can't you guess?" answered Oscar. "Look, Matt, I'll tear over to the tailor shop for you—you can't do that and shave, too, not in fifteen minutes."

"You're a lifesaver, Oz!"

P.R.S. *Aes Triplex* blasted from Moon Base thirteen hours later in a trajectory intended to produce an elliptical orbit with its far end in the asteroid belt. Her orders were to search for the missing P.R.S. *Pathfinder*. The *Pathfinder* had been engaged in radar-charting a sector of the asteroid belt for the Uranographic Office of the Patrol. Her mission had taken her beyond the range of ship-type radio; nevertheless she should have reported in by radio nearly six months earlier, at which time she should have been approaching conjunction with Mars. But Deimos Station, around Mars, had been unable to raise the *Pathfinder*; she was presumed lost.

The possible locations of the *Pathfinder* were a moving zone in space, defined by using geometry, ballistics, the characteristics of the ship, her mission, and her last reported location, course, and speed. This zone was divided into four sectors and the *Aes Triplex* was to search one sector while three other Patrol vessels covered the other sectors. The joint task was designated "Operation Samaritan" but each ship was independent as they necessarily would be too far apart to be commanded as a task force.

While searching, the rescue vessels would continue the *Pathfinder*'s mission of charting the space drift that clutters the asteroid belt.

In addition to the commanding officer and the three cadets, the company of the *Aes Triplex* included Commander Hartley Miller, executive officer and astrogator, Lieutenant Novak, Chief Engineer, Lieutenant Thurlow, Bomb Officer, Lieutenant Brunn, Communications Officer, Sublieutenants Peters, Gomez, and Cleary, assistant engineer and communications watch officers respectively, and Dr. Pickering, ship's surgeon, along to care for survivors—if my were found.

The ship contained no marines, unless one chooses to count Dr. Pickering, who was technically a staff corps member of the marines rather than a member of the Patrol. Every task in the ship would be performed by the officers or cadets. Time was when the lowliest subaltern in an infantry regiment had his personal servant, but servants are too expensive a luxury in terms of fuel and space and food to lift through millions of miles of space. Besides that, some few manual tasks are a welcome relief from boredom in the endless monotony of space; even the undesirable chore of cleaning the refresher was taken in turn by the entire ship's company, in accordance with custom, except for the Captain, the Executive Officer, and the Surgeon.

Captain Yancey assigned Lieutenant Thurlow as training officer who in turn set up the jobs of assistant astrogator, junior communication watch officer, junior assistant engineer, and assistant bomb officer and arranged a schedule of rotation among these—quite unnecessary—positions. It was also Mr. Thurlow's job to see to it that Matt, Oscar, and Tex made intensive use of the one study projector available to the cadets.

The Executive Officer assigned other tasks not directly concerned with formal training. Matt was appointed the ship's "farmer." As the hydroponics tanks supply both fresh air and green vegetables to a ship he was responsible for the ship's airconditioning and shared with Lieutenant Brunn the tasks of the ship's mess.

Theoretically every ration taken aboard a Patrol vessel is precooked and ready for eating as soon as it is taken out of freeze and subjected to the number of seconds, plainly marked on the package, of high-frequency heating required. Actually many Patrol officers fancy themselves chefs. Mr. Brunn was one and his results justified his conceit—the *Aes Triplex* set a good table.

Matt found that Mr. Brunn expected more of the "farm" than that the green plants should scavenge carbon dioxide from the air and replace it with oxygen; the mess officer

wanted tiny green scallions, fragrant fresh mint, cherry tomatoes, Brussels sprouts, new potatoes. Matt began to wonder whether it wouldn't have been simpler to have stayed in Iowa and grown tall corn.

When he started in as airconditioning officer Matt was not even sure how to take a carbon—dioxide count, but shortly he was testing his growing solutions and adding capsules of salts with the confidence and speed of a veteran, thanks to Brunn and to spool #62A8134 from the ship's files—"Simplified Hydroponics for Spaceships, with Growth Charts and Additives Formulae." He began to enjoy tending his "farm."

Until human beings give up the habit of eating, spaceships on long cruises must carry about seven hundred pounds of food per man per year. The green plants grown in a ship's airconditioner enable the stores officer to get around this limitation to some extent, as the growing plants will cycle the same raw materials—air, carbon dioxide, and water—over and over again with only the addition of quite small quantities of such salts as potassium nitrate, iron sulphate, and calcium phosphate.

The balanced economy of a spaceship is much like that of a planet; energy is used to make the cycles work but the same raw materials are used over and over again. Since beefsteak and many other foods can't be grown conveniently aboard ship some foods have to be carried and the ship tends to collect garbage, waste paper, and other trash.

Theoretically this could be processed back into the cycles of balanced biological economy, but in practice this is too complicated.

However, all mass in an atomic powered ship can be used, if desired, as reaction mass, mass for the rocket jet. The radioactive materials in the power pile of an atom-powered ship are not themselves used up to any great extent; instead they heat other materials to extreme temperatures and expel them out the rocket tube at very high speeds, as a sort of "steam" jet.

Even though turnip greens and such can be used in the jet, the primary purpose of the "farm" is to take the carbon dioxide out of the air. For this purpose each man in the ship must be balanced by about ten square feet of green plant leaf. Lieutenant Brunn, with his steady demands for variety in fresh foods, usually caused Matt to have too much growing at one time; the air in the ship would get too fresh and the plants would start to fail for lack of carbon dioxide to feed on. Matt had to watch his CO2 count and sometimes build it up by burning waste paper or plant cuttings.

Brunn kept a file of seeds in his room; Matt went there one "day" (ship's time) to draw out Persian melon seeds and set a crop. Brunn told him to help himself. Matt rummaged away, then said, "For the love of Pete! Look at this, Mr. Brunn."

"Huh?" The officer looked at the package Matt held. The outside was marked, "Seeds, melon, Persian—jumbo fancy, stock #12—Q4728—a"; the envelope inside read "Seed, pansies, giant variegated."

Brunn shook his head. "Let that be a lesson, Dodson— never trust a stock clerk—or you'll wind up half way to Pluto with a gross of brass spittoons when you ordered blank spacecharts."

"What'll I substitute? Cantaloupe?"

"Let's grow some watermelon—the Old Man likes watermelon."

Matt left with watermelon seeds, but he took along the truant pansy seeds.

Eight weeks later he devised a vase of sorts by covering a bowl from the galley with the same sponge-cellulose sheet which was used to restrain the solutions used in his farming, thereby to keep said solutions from floating around the "farm" compartment during free fall. He filled his vase with water, arranged his latest crop therein, and clipped the whole to the mess table as a centerpiece.

Captain Yancey smiled broadly when he appeared for dinner and saw the gay display of pansies. "Well, gentlemen," he applauded, "this is most delightful. All the comforts of home!" He looked along the table at Matt. "I suppose we have you to thank for this, Mr. Dodson?"

"Yes, sir." Matt's ears turned pink.

"A lovely idea. Gentlemen, I move that we divest Mr. Dodson of the plebeian title of 'farmer' and designate him 'horticulturalist extraordinary.' Do I hear a second?" There were nine "ayes" and a loud "no" from Commander Miller. A second ballot, proposed by the Chief Engineer, required the Executive Officer to finish his meal in the galley.

Lieutenant Brunn explained the mishap that resulted in the flower garden. Captain Yancey frowned. "You've checked the rest of your supply of seeds, of course, Mr. Brunn?"

"Uh, no, sir."

"Then do so." Lieutenant Brunn immediately started to leave the table, "—after dinner," added the Captain. Brunn resumed his place.

"That puts me in mind of something that happened to me when I was 'farmer' in the old Percival Lowell—the one before the present one," Yancey went on. "We had touched at Venus South Pole and had managed somehow to get a virus infection, a sort of rust, into the 'farm'—don't look so superior, Mr. Jensen; someday you'll come a cropper with a planet that is new to you!"

"Me, sir? I wasn't looking superior."

"No? Smiling at the pansies, no doubt?"

"Yes, sir."

"Hmmph! As I was saying, we got this rust infection and about ten days out I didn't have any more farm than an Eskimo. I cleaned the place out, sterilized, and reseeded. ? Same story. The infection was all through the ship and I couldn't chase it down. We finished that trip on preserved foods and short rations and I wasn't allowed to eat at the table the rest of the trip." He smiled to himself, then' shouted at the galley door, "How you getting along in there, Red?"

The Executive Officer appeared in the doorway, a spoon in one hand, covered dish in the other. "Fine," he answered in a muffled voice, "I just ate your dessert, Captain."

Lieutenant Brunn shouted, "Hey! Commander! Stop! Don't! Those berries are for breakfast."

"Too late." Commander Miller wiped his mouth.

"Captain?"

"Yes, Dodson?"

"What did you do about airconditioning?"

"Well. Mister, what would you have done?"

Matt studied it. "Well, sir, I would have jury—rigged something to take the Cee—Oh—Two out of the air."

"Precisely. I exhausted the air from an empty compartment, suited up, and drilled a couple of holes to the outside. Then I did a piping job to carry foul air out of the dark side of the ship in a fractional still arrangement—freeze out the water first, then freeze out the carbon dioxide. Pesky thing was always freezing up solid and forcing me to tinker with it. But it worked well enough to get us home." Yancey backed away from the table. "Hartley, if you're through making a pig of yourself, let's run over that meteor-layout. I've got an idea."

The ship was approaching the orbit of Mars and soon would be in the comparatively hazardous zone of the asteroids and their company of space drift. Matt was rotated, in turn, to assistant astrogator, but continued as ship's farmer. Tex looked him up one day in the hydroponics compartment. "Hey! Hayseed—"

"Hey yourself, Tex."

"Got the south forty plowed yet? Looks like rain." Tex pretended to study the blinking lights used to stimulate plant growth, then looked away. "Never mind—I'm here on business. The Old Man wants to see you."

"Well, for heaven's sake, why didn't you say so, instead of banging your choppers?" Matt stopped what he was doing and hurriedly started climbing into his uniform. Because of the heat and the humidity in the "farm" Matt habitually worked there bare naked, both for comfort and to save his clothes.

"Well, I did tell you, didn't I?"

The Captain was in his cabin. "Cadet Dodson, sir."

"So I see." Yancey held up a sheet of paper. "Dodson, I've just written a letter to the Department, to be transmitted as soon as we are in radio contact, recommending that fresh flowers be grown in all ships, as a means of stimulating morale. You are credited therein as the originator of the idea."

"Er . .. thank you, sir."

"Not at all. Anything that relieves the tedium, the boredom, the barrenness of life in deep space is in the interest of the Patrol. We have enough people going space-happy as it is. Flowers are considered good for psychotics on Earth; perhaps they will help to keep spacemen from going wacky. Enough of that—I've a question to ask you."

"Yes, sir?"

"I want to know why in the devil you were spending your time growing pansies when you are behind in your study schedule?"

Matt did not have anything to say.

"I've been looking over the reports Mr. Thurlow sends me and I find that both Mr. Jensen and Mr. Jarman are covering more ground than you are. In the past few weeks they have pulled 'way ahead of you. It's a fine thing to have hobbies but your duty is to study."

"Yes, sir."

"I've marked your performance unsatisfactory for this quarter; you have the next quarter in which to make up the deficiency. By the way, have you made up your mind about your next move?"

Matt did a doubletake, then realized that the Captain had changed the subject to chess; he and Matt were fighting it out for first place in the ship's tournament. "Uh, yes, sir—I've decided to take your pawn."

"I thought so." Yancey reached behind him; Matt heard the pieces click into their sockets as the Captain made the move on his own board. "Wait till you see what's going to happen to your queen!"

The speeds of the asteroids, flying boulders, rocks, sand, and space drift that infest the area between Mars and Jupiter vary from about fifteen miles per second near Mars to about eight miles per second near Jupiter. The orbits of this flying junkyard are erratically inclined to the plane of the ecliptic an average of about nine degrees and some of the orbits are quite eccentric as well.

All this means that a ship on a circular orbit, headed "east," or with the traffic, may expect the possibility of side—swiping collisions at relative speeds averaging two miles per second, with crashes remotely possible at double that speed.

Two miles per second is only about twice the muzzle velocity of a good sporting rifle. With respect to small stuff, sand and gravel, the *Aes Triplex* was built to take it. Before the ship reached the danger zone, an allhands chore in space suits took place; armor-plate segments, as thick as the skin of the ship, were bolted over the ship's quartz ports, leaving only the eyes of the astrogational instruments and the radar antennae exposed.

To guard against larger stuff Captain Yancey set up a meteor-watch much tighter than is usual in most parts of space. Eight radars scanned all space through a global 360°. The only condition necessary for collision is that the other object hold a steady bearing—no fancy calculation is involved. The only action necessary then to avoid collision is to change your own speed, any direction, any amount. This is perhaps the only case where theory of piloting is simple.

Commander Miller put the cadets and the sublieutenants on a continuous heel-and-toe watch, scanning the meteor-guard 'scopes. Even if the human being failed to note a steady bearing the radars would "see" it, for they were so rigged that, if a "blip" burned in at one spot on the screen, thereby showing a steady bearing, an alarm would sound— and the watch officer would cut in the jet, fast!

However, even the asteroid belt is very empty space indeed; the chances were strongly against collision with anything larger than a grain of sand. The only difference in the *Aes Triplex*, aside from the increased work for the junior officers, was a ship's order directing all hands to strap down when sleeping, instead of floating loosely and comfortably about, so that the sleeper would not break his neck in case of sudden acceleration.

P.R.S. *Aes Triplex* was equipped with two jeeps, nestled in hangar pockets—quite ordinary short-range, chemically-powered rockets except that they were equipped with search radar as powerful as the ship's. When they reached their search area a pilot and copilot were assigned to each jeep —and a second crew also, as each rocket was to remain away from the ship a week at a time, then swap crews and go out again.

Lieutenants Brunn, Thurlow, and Novak, and Sublieutenant Peters were designated pilots. A cadet was assigned to each senior lieutenant and Sublieutenant Gomez was teamed with Sublieutenant Peters. Matt drew Lieutenant Thurlow.

Dr. Pickering took over the mess. That left Sublieutenant Cleary as "George," the man who does everything—an impossibility, since meteor-guard and search watches would have to be kept up. Consequently the two jeep crews not actually in space had to help out even during their week of rest.

Each Monday the ship placed the jeep rockets on station so that the three vessels would sweep the largest possible volume of space, with their search fields barely overlapping. The placement was made by the mother ship, so that the jeep would be left with full tanks in the unhappy event that she was not picked up—and thereby have enough fuel to shape an orbit toward the inner planets, if need be.

XII P.R.S. PATHFINDER

MATT TOOK ALONG a supply of study spools on his first week of search intending to play them on the jeep's tiny, earphones-type viewer. He did not get much chance; four hours out of eight he had to keep his eyes glued to the search scopes. During the four hours off watch he had to sleep, eat, attend to chores, and study, if possible.

Besides that, Lieutenant Thurlow liked to talk.

The bomb officer was expecting Earthside duty in postgraduate study at the end of the cruise. "And then I'll have to make up my mind, Matt. Do I stay in and make physics a parttime specialty, or resign and go in for research?"

"It depends on what you want to do."

"Trite but true. I think I want to be a scientist, full time—but after a few years the Patrol becomes a father and a mother to you. I don't know. That pile of rock is creeping up on us—I can see it through the port now."

"It is, eh?" Matt moved forward until he, too, could see the undersized boulder that Thurlow had been watching by radar. It was of irregular shape, a pattern of sunlight and sharp, dark shadow.

"Mister Thurlow," said Matt, "look—about the middle. Doesn't that look like striation to you?"

"Could be. Some specimens have been picked up that were definitely sedimentary rock. That was the first proof that the asteroids used to be a planet, you know."

"I thought that Goodman's integrations were the first proof?"

"Nope, you're switched around. Goodman wasn't 'able to run his checks until the big ballistic computer at Terra Station was built."

"I knew that—I just had it backwards, I guess." The theory that the asteroids had once been a planet, between Mars and Jupiter, was denied for many years because their orbits showed no interrelation, i.e., if a planet had blown to bits the orbits should intersect at the point of the explosion. Professor Goodman, using the giant, strain—free computer, had shown that the lack of relationship was caused by the perturbations through the ages of the other planets acting on the asteroids.

He had assigned a date to the disaster, nearly half a billion years ago, and had calculated as well that most of the ruined planet had escaped from the System entirely. The debris around them represented about one per cent of the lost planet.

Lieutenant Thurlow measured the angular width of the fragment, noted its distance by radar, and recorded the result as gross size. The rock, large as it was, was too small to merit investigation of its orbit; it was simply included in the space-drift survey. Smaller objects were merely listed while collisions with minute particles were counted by an electronic circuit hooked to the hull of the jeep.

"The thing that bothers me," went on Thurlow, "about getting out is this— Matt, have you noticed the difference between people in the Patrol and people not in the Patrol?"

"Haven't I, though!"

"What is the difference?"

"The difference? Uh, why, we're spacemen and they're not. I guess it's a matter of how big your world is."

"Partly. But don't get carried away by mere size. A hundred million miles of empty space isn't significant—if it's empty. No, Matt, the split goes deeper. We've given the human race a hundred years of peace, and now there is no one left who remembers war. They've come to accept peace and comfort as the normal way of life. But it isn't. The human animal has millions of years of danger and starving and death behind him; the past century is just a flicker of an eyelash in his history. But only the Patrol seems aware of it."

"Would you abolish the Patrol?"

"Oh, my, no, Matt! But I wish there were some way to make people realize by how thin a barrier the jungle has been shut out. And another thing, too—" Thurlow grinned sheepishly. "—I wish they had some understanding of what we are. The taxpayer's hired man, that's what they think of us."

Matt nodded. "They think we're some sort of traffic cop. There is a man back home who sells used copters—asked me why Patrolmen should be pensioned when they retire. He said that he hadn't been able to sit back and take it easy at thirty-five and he didn't see why he should have to support somebody else who did." Matt looked puzzled. "At the same time he sort of glamorized the Patrol—wants his son to be a cadet. I don't understand it."

"That's it. To them we are a kind of expensive, useless prize pet—their property. They don't understand that we're not for hire. The sort of guardian you can hire is worth about as much as the sort of wife you can buy."

The following week Matt found time to look up what the ship's library afforded on the subject of the exploded planet. There was not much—dry statistics on sizes of asteroids, fragments, and particles, distributional and orbital data, Goodman's calculations summarized. Nothing at all about what he wanted to know—how it happened!—nothing but some finespun theories.

He took it up with Thurlow the next time they were out on Patrol. The lieutenant shrugged. "What do you expect, Matt?"

"I don't know, but more than I found."

"Our time scale is all wrong for us to learn much. Suppose you pick out one of the spools you've been studying— here, this one." The officer held out one marked "Social structures of the Martian aborigines." "Now suppose you examine a couple of frames in the middle. Can you reconstruct the thousands and thousands of frames that come before it, just by logic?"

"Naturally not."

"That's the situation. If the race manages to keep from blowing its top for a few million years, maybe we'll begin to find out some things. So far, we don't even know what questions to ask,"

Matt was dissatisfied, but had no answer ready. Thurlow knit his brows. "Maybe we aren't built to ask the right questions. You know the Martian 'double-world' idea—"

"Certainly, but I don't understand it."

"Who does? Let's forget the usual assumption that a Martian is talking in religious symbols when he says that we live just on 'one side' while he lives on"both sides.' Suppose that what he means is as real as butter and eggs, that he really does live in two worlds at the same time and that we are in the one he regards as unimportant. If you accept that, then it accounts for the Martian being unwilling to waste time talking with us, or trying to explain things to us. He isn't being stuffy, he's being reasonable. Would you waste time trying to explain rainbows to an earthworm?"

"The cases aren't parallel."

"Maybe they are to a Martian. An earthworm can't even see, much less have a color sense. If you accept the 'double world' as real, then to a Martian we just don't have the proper senses to be able to ask the right questions. Why bother with us?"

The radio squealed for attention. Thurlow glanced toward it and said, "Someone calling, Matt. See who it is and tell 'em we don't want any."

"Okay." Matt flipped the switch and answered, "Jeep One, *Triplex*—go ahead."

"*Triplex* calling," came Sublieutenant Cleary's familiar voice. "Stand by to be picked up."

"Huh? Cut the comedy—we're only three days out."

"Stand by to be picked up—official. Jeep Two has found the *Pathfinder*."

"The deuce you say! Did you hear that, Mr. Thurlow? Did you hear that?"

It was true; Peters and Gomez, in the other jeep, had discovered the missing ship, almost by accident. The *Pathfinder* was found anchored to a smallish asteroid about a mile in greatest dimension. Since it was a listed body, 1987—CD, the crew of the jeep had paid little attention to it, until its rotation brought the *Pathfinder* into view.

With fine consideration Captain Yancey had elected to pick up Thurlow and Dodson before rendezvousing with the second jeep. Once they were inside, the *Aes Triplex* moved toward 1987—CD and matched orbits. Sublieutenant Peters had elected to expend some of his get—away fuel and had matched orbits also.

Matt fidgeted while the second jeep was brought into the ship. He could see nothing, since the ports were covered, and for the moment had no assigned duties. With maddening deliberation Captain Yancey secured his ship to the *Pathfinder*, sending a line over by Sublieutenant Gomez. The rest of the ship's company was crowded into the control room. Tex and Matt took the opportunity to question Sublieutenant Peters.

"Couldn't tell much," he informed them. "Off hand, she looks undamaged, but the door of the lock was standing open."

"Any chance anyone is alive inside?" asked Tex.

"Possible. Hardly likely."

Captain Yancey looked around. "Pipe down," he ordered. "This is a control room, not a sewing circle." When he had finished he ordered Peters and Gomez to come with him; the three suited up and left the ship.

They were gone about an hour. When they returned the Captain called them all into the mess room. "I am sorry to tell you, gentlemen, that none of our comrades is alive."

He went on heavily, "There is not much doubt as to what happened. The outer armored door of the lock was open and undamaged. The inner door had been punched through by a missile about the size of my fist, producing explosive decompression in the connecting compartments. Apparently they had had the enormous bad luck to have a meteor enter the ship through the door just as it was opened."

"Wait a minute, Skipper," objected Miller. "Was every airtight door in the ship wide open? One rock shouldn't have done the trick."

"We couldn't get into the after part of the ship; it still holds pressure. But we could reconstruct what happened, because we could count the bodies—seven of them, the entire ship's company. They were all near the lock and not in spacesuits, except for one man in the lock—his suit was pierced by a fragment apparently. The others seem to have been gathered at the lock, waiting for him to come in." Yancey looked grave. "Red, I think we are going to have to put in a recommended technical order over this— something to require personnel to spread out while suit operations are going on, so that an accident to the lock won't affect the entire ship's company."

Miller frowned. "I suppose so, Captain. Might be awkward to comply with, sometimes, in a small ship."

"It's awkward to lose your breath, too. Now about the investigation—you'll be the president, Red, and Novak and Brunn will be your other two members. The rest of us will remain in the ship until the board has completed its work. When they have finished and have removed from the *Pathfinder* anything needed as evidence I will allow sufficient time for each of you to satisfy his curiosity."

"How about the surgeon, Captain? I want him for an expert witness."

"Okay, Red. Dr. Pickering, you go with the board."

The cadets crowded into the stateroom shared by Matt and Oscar. "Can you beat it?" said Tex. "Of all the cheap tricks! We have to sit in here, a week or ten days, maybe, while a board measures how big a hole there is in the door."

"Forget it, Tex," advised Oscar. "I figure the Old Man didn't want you carving your initials in things, or maybe snagging the busted door for a souvenir, before they found out what the score was."

"Oh, nuts!"

"Quit crabbing. He promised you that you could snoop around and take pictures and satisfy your ghoulish appetites as soon as the board is finished. In the meantime, enjoy the luxury of eight hours of sleep for a change. No watches, none of any sort."

"Say, that's right!" agreed Matt. "I hadn't thought about it, but there's no point in watching for rocks when you're tied down and can't duck."

"As the crew of the *Pathfinder* know only too well."

Last Muster was held for the *Pathfinder* on the following day. The bodies themselves had been sealed into a compartment of the dead ship; muster took place in the wardroom of the *Aes Triplex*. It was rather lengthy, as it was necessary to read the services of three different faiths before the Captain concluded with the Patrol's own all-inclusive farewell: "Now we shape our orbit home—"

It so happened that there were just enough persons present to answer the roll. The *Aes Triplex*'s company was a captain and eleven others. For the *Pathfinder* there were exactly eleven—six patrol officers, one civilian planetologist, and the Four who are present at every muster. Captain Yancey called off the *Pathfinder*'s roll and the others answered, one after the other, from Commander Miller down to Tex—while The Long Watch, muted down to a requiem, played softly over the ship's speaker system.

Matt found his throat almost too dry to answer. Tex's chubby cheeks ran with tears and he made no effort to wipe them.

Lieutenant Brunn was a source of information for the first couple of days of the investigation. He described the *Pathfinder* as in good shape, except for the damaged door. On the third day he suddenly shut up. "The Captain doesn't want the board's findings discussed until he has had time to study them."

Matt passed the word on to the others. "What's cooking?" demanded Tex. "What can there possibly be to be secret about?"

"How should I know?"

"I've got a theory," said Oscar.

"Huh? What? Spill it."

"The Captain wants to prove a man can't die of curiosity. He figures that you are a perfect test case."

"Oh, go soak your head."

Captain Yancey called them all together again the following day. "Gentlemen, I appreciate your patience. I have not wanted to discuss what was found in the *Pathfinder* until I had time to decide what should be done about it. It comes to this: the planetologist with the *Pathfinder*, Professor Thorwald, came to the unmistakable conclusion that the disrupted planet was inhabited."

The room started to buzz. "Quiet, please! There are samples of fossil-bearing rock in the *Pathfinder*, but there are other exhibits as well, which Professor Thorwald concluded —Dr. Pickering and Commander Miller and I concur—concluded to be artifacts, items worked by intelligent hands.

"That fact alone would be enough ,to send a dozen ships scurrying into the asteroid belt," he went on. "It is probably the most important discovery in System-study since they opened the diggings in Luna. But Professor Thorwald formed another conclusion even more startling. With the aid of the ship's bomb officer, using the rate-of-radioactive-decay method, he formed a tentative hypothesis that the planet—he calls it Planet Lucifer—was disrupted by artificial nuclear explosion. In other words, they did it themselves."

The silence was broken only by the soft sighing of the room's ventilators. Then Thurlow exploded, "But Captain, that's impossible!"

Captain Yancey looked at him. "Do you know all the answers, young man? I'm sure I don't."

"I'm sorry, sir."

"In this case I wouldn't even venture to have an opinion. I'm not competent. However, gentlemen, if it be true, as Professor Thorwald certainly thought it was, then I hardly need point out to you that we have more reason than ever to be proud of our Patrol—and our responsibility is even heavier than we had thought.

"Now to business—I am very reluctant to leave the *Pathfinder* where she is. Aside from sentimental reasons she is a ship of the Patrol and she is worth a good many millions. I think we can repair her and take her back."

XIII LONG WAY HOME

MATT TOOK PART in the rebuilding of the inner door of the *Pathfinder*'s airlock and the checks for airtightness, all under the careful eye of the chief engineer. There was little other damage inside the ship. The rock, or meteor, that had punched the gaping hole in the inner door had expended most of its force in so doing; an inner bulkhead had to be patched and a few dents smoothed. The outer, armored door was quite untouched; it was clear that the invader, by bad chance, had come in while the outer door was standing open.

The plants in the airconditioner had died for lack of attention and carbon dioxide. Matt took over the job while the others helped in the almost endless chores of checking every circuit, every instrument, every gadget necessary to the ship's functioning. It was a job which should have been done at a repair base and could not have been accomplished if there had actually been much wrong.

Oscar and Matt squeezed an hour out of sleep to explore 1987-CD, a job that mixed mountain climbing with suitjet work. The asteroid had a gravitational field, of course, but even a mass the size of a small mountain is negligible compared with that of a planet. They simply could not feel it; muscles used to opposing the tenacious pull of robust Terra made nothing of the frail pull of 1987—CD. ' At last the *Pathfinder* was cast loose and her drive tested by a scratch crew consisting of Captain Yancey at the controls and Lieutenant Novak in the power room. The *Aes Triplex* lay off a few miles, waited until she blasted her jet for a few seconds, then joined her. The two ships tied together and Captain Yancey and the chief engineer came back into the *Aes Triplex*.

"She's all yours, Hartley," he announced. "Test her yourself, then take over when you are ready."

"If she suits you she suits me. With your permission, sir, I'll transfer my crew now."

"So? Very well, Captain—take command and carry out your orders. Log it, Mister," Captain Yancey added, over his shoulder to the officer of the watch.

Thirty minutes later the split crew passed out through the airlock of the *Aes Triplex* and into the airlock of the other. P.R.S. *Pathfinder* was back in commission.

Remaining with the *Aes Triplex* was Captain Yancey, Lieutenant Thurlow, now executive officer and astrogator, Sublieutenant Peters, now chief engineer, Cadet Jensen, chief communications officer, and Cadets Jarman and Dodson, watch officers, all departments—and Dr. Picketing, ship's surgeon.

Commander Miller, captain of the *Pathfinder*, had one less officer than Captain Yancey, but all of his officers were experienced; Captain Yancey had elected to burden himself with the cadets. He would have assumed command of the derelict himself and taken his chances with her, except for one point—the law did not permit it. He could place a master aboard her and put her back in commission, but there was no one present with authority to relieve him of his own ship—he was prisoner of his own unique status, commanding officer operating alone.

In her original flight plan it had been intended that the *Pathfinder* should make port at Deimos, Mars, when Mars overtook her and was in a favorable position. The delay caused by the disaster made the planned orbit quite out of the question; Mars would not be at the rendezvous. Furthermore Captain Yancey wanted to get the astounding evidence contained in the *Pathfinder* to Terra Base as quickly as possible; there was little point in sending it to the outpost on Mars' outer satellite.

Accordingly reaction mass was pumped from the *Aes Triplex* to the smaller ship until her tanks were full and a fast, fairly direct, though uneconomical, orbit to Earth was plotted for her. The *Aes Triplex*, using an economical "Hohmann"-type, much longer orbit, would mosey in past the orbit of Mars, past the orbit of Earth (Earth would not be anywhere close at the time), in still further, swinging around the Sun and out again, catching up with Earth nearly a year later than the *Pathfinder*. She had mass to accomplish this, even after replenishing the *Pathfinder*, but she was limited to time—wasting, but fuel—saving, orbits more usual to merchant vessels than to ships of the Patrol.

[* Hohmann, Dr. Walter—*The Attainability of the Celestial Bodies*, Munich, 1925. This pioneer work in astrogation, written long before the flight of the *Kilroy Was Here*, remains the foundation work in its field. All subsequent work is refinement of basic principles set forth by Hohmann.]

Matt, in one of his multiple roles as assistant astrogator, noticed a peculiarity of the orbit and called it to Oscar's attention. "Say, Oz, come and look at this—when we get to perihelion point, the other side of the Sun, we almost clip a cloud off your home town. See?"

Oscar looked over the charted positions. "Well, darn if we don't! What's the nearest approach?"

"Less than a hundred thousand miles. We'll tack on her a bit—the Old Man is a heller for efficient orbits, I find. Want to jump ship?"

"We'd be going a trifle fast for that," Oscar commented dryly.

"Oh, where's the old pioneer spirit? You could swipe one of the jeeps and be gone before you're missed."

"Gosh, I'd like to. It would be nice to have some leave." Oscar shook his head sadly and stared at the chart.

"I know what's eating on you—since you've been made the head of a department you've acquired a sense of responsibility. How does it feel to be one of the mighty?"

Tex had come into the chartroom while they were talking. He chipped in with, "Yeah, come on, Oz—tell your public."

Oscar's fair skin turned pink. "Quit riding me, you guys. It's not my fault."

"Okay, you can get up now. Seriously," Matt went on, "this is quite a break for all of us—acting ship's officers on what was supposed to be a training tour. You know what I think?"

"Do you think?" inquired Tex.

"Shut up. If we keep our noses clean and get any chance to show some stuff, it might mean brevet commissions for all of us."

"Captain Yancey give me a brevet?" said Tex. "A fat chance!"

"Well, Oscar almost certainly. After all, he is chief comm officer."

"I tell you that doesn't mean a thing," protested Oscar. "Sure, I've got the tag—with nobody to communicate with. We're out of range, except for the *Pathfinder*, and she's pulling away fast."

"We won't always be out of range."

"It won't make any difference. Can you see the Old Man letting me—or any of us—do anything without staring down the backs of our necks? Anyhow, I don't want a brevet. Suppose we got back and it wasn't confirmed? Embarrassing!"

"I'd jump at the chance," announced Tex. "It may be the only way I'll ever get one."

"Drop the orphan-child act,— Tex. Suppose your Uncle Bodie heard you talking like that."

In fact, the atmosphere in the ship was very different, even though the Captain, or Lieutenant Thurlow, or both, supervised them very carefully. Captain Yancey took to calling them by their first names at mess and dropped the use of "cadet" entirely. He sometimes referred to the "ship's officers," using the term so that it plainly included the three cadets. But there was no suggestion of brevet rank made.

Out of the asteroid belt, out of radio range, and in interminable free fall, the ship's duties were light. The cadets had plenty of time to study, enough time for card games and bull sessions. Matt caught up with his assignments and reached the point where he was digging into the ship's library for advanced work, for the courses outlined for them when they left the *Randolph* had been intended for a short cruise.

The Captain set up a seminar series, partly to pass his own time and partly as a supplement to their education. It was supposed to illustrate various problems faced by a Patrol officer as a spaceman, or in his more serious role as a diplomatic representative. Yancey lectured well; the cadets found, too, that he could be drawn into reminiscence. It was both enjoyable and instructive and helped! to pass the weary weeks.

At long, long last they were within radio range of Venus—and there was mail for all of them, messages that had been chasing them half around the Solar System. An official dispatch from the Department congratulated the Commanding Officer on the recovery of the *Pathfinder* and commended the ship's company—this was entered, in due course, in the record of each. A private message from Hartley Miller told Captain Yancey that the trip home had been okay and that the longhairs were tearing same over the contents of the ship. Yancey read this aloud to them.

In addition to letters from home, Matt received a wedding announcement from Marianne. He wondered if she had married the young man he had met at the picnic, but he could not be sure of the name—the whole thing seemed very remote. There was a letter, too, to all three cadets date—marked "Leda, Ganymede" from Pete, of the having-a-wonderful-time-wish-you-were-here sort. "Lucky stiff!" said

Tex.

" 'Touring the world'—phooey!"

Other messages poured in—ships' movements, technical orders, personnel changes, the accumulated minutiae of a large military organization—and a detailed resume of the news of four planets from the time they had lost contact to the present.

Oscar found that Captain Yancey did not breathe on his neck in his duties as communications chief—but by then it did not surprise him. Oscar simply was the comm chief and had almost forgotten that he had ever been anything else.

He felt, however, that he was really confirmed in his office the day a message came in top cipher, the first not in "clear." He was forced to ask the Captain for the top-cipher machine, kept in the Captain's safe. It was turned over to him without comment.

Oscar was bug-eyed when he took the translated message to Yancey. It read: TRIPLEX—CAN YOU INVESTIGATE TROUBLE EQUATORIAL REGION VENUS—OPERATIONS.

Yancey glanced at it. "Tell the Executive Officer I want to see him, please. And don't discuss this."

"Aye aye, sir."

Thurlow came in somewhat mystified. "What's up, Captain?" Yancey handed him the flimsy. The lieutenant read it and whistled.

"Can you see any way to comply?"

"You know how much reaction potential we have, Captain. We could manage a circular orbit. We can't land."

"That's the way I see it. I suppose we'll have to refuse—dammit, I'd rather take a whipping than send in a negate. Why did they pick on us? There must be half a dozen other ships better located."

"I don't think so, Captain. I think we are the only available ship. Have you studied the movements file?"

"Not especially. Why?"

"Well, the Thomas Paine should be the ship—but she's grounded at New Aukland for emergency repairs."

"I see. There ought to be a standing circum—Venus patrol — there'll have to be, some day." Yancey scratched his chin and looked unhappy.

"How about this, Captain—"

"Yes?"

"If we change course right now we could do it cheaply. Then we could bring her in for atmospheric braking with no further expenditure. Then ease her down with the jet."

"Hmmm—how much margin?"

Lieutenant Thurlow got a far—away look in his eyes, while he approximated a fourth—order solution in his head. Captain Yancey joined him in the trance, his lips moving soundlessly.

"Practically none, Captain. After you've steadied in circum, you'd have to dive in and accept atmospheric terminal speed, or close to it, before you blasted."

Yancey shook his head. "Into *Venus?* I'd as soon fly a broom on Walpurgis night. No, Mr. Thurlow, we'll just have to call them up and confess."

"Just a minute, Captain—they know we don't have marines."

"Of course."

"Then they don't expect us to deliver police action. What we can do is to send a jeep down."

"I've been wondering when you would work around to that. All right, Mr. Thurlow—it's yours. I hand it over reluctantly, but I can't seem to help it. Never had a mission of your own, have you?"

"No, sir."

"You're getting one young. Well, I'll ask Operations for the details while you're preparing the course change."

"Fine, sir! Does the Captain care to designate the cadet to go with me, or shall I pick him?"

"You're not going with just one, Lieutenant—you'll take all three. I want you to leave the jeep manned at all times and I want you to have an armed man at your elbow. The equatorial region of Venus—there is no telling what you'll run into."

"But that leaves you with no one but Peters, sir—not counting the surgeon, of course."

"Mr. Peters and I will make out all right. Peters plays a very good hand of cribbage."

Details from Operations were slight. The M.R.S. *Gary* had radioed for help claiming to be imperiled by a native uprising. She had given her position, then radio contact had been lost.

Yancey elected to use atmospheric braking in any case to save his reaction mass for future use—otherwise the *Aes Triplex* might have circled Venus until she could be succored. The ship's company spent a crowded, tiring fifty-six hours shut up in the control room while the ship dipped to the clouds of Venus and out again, a bit deeper and bit slower on each round trip. The ship grew painfully hot and the time spent in free space on each lap was hardly enough to let her radiate what she picked up. Most of the ship was intolerably hot, for the control room and the "farm" were refrigerated at the expense of the other spaces. In space, there is no way to get rid of unwanted heat, permanently, except by radiation—and the kinetic energy difference between the original orbit and the circum-Venus orbit the Captain wanted had to be absorbed as heat, a piece at a time, then radiated into space.

But at the end of that time three hot, tired, but very excited, young men, with one a little older, were ready to climb into jeep no. 2.

Matt suddenly remembered something. "Oh, Doctor—Doctor Pickering!" The surgeon had spent a medically uneventful voyage writing a monograph entitled "Some Notes on Comparative Pathologies of the Inhabited Planets" and was now at loose ends. He had relieved Matt as "farmer."

"Yes, Matt?"

"Those new tomato plants—they have to be cross-pollenated three days from now. You'll do it for me? You won't forget?"

"Can do!"

Captain Yancey guffawed. "Get your feet out of the furrows, Dodson. Forget the farm—we'll look out for it. Now, gentlemen—" He looked around and caught their eyes. "Try to stay alive. I doubt very much if this mission warrants expending four Patrol officers."

As they filed in Tex dug Matt in the ribs. "Did you hear that, kid—'four Patrol officers.' "

"Yeah, but look what else he said."

Thurlow tucked his orders in his pouch. They were simple: proceed to latitude north two degrees seven, longitude two hundred twelve degrees zero; locate the *Gary* and investigate reported native uprising. Keep the peace.

The lieutenant settled himself and looked around at his crew. "Hold your hats, boys. Here we go!"

XIV "THE NATIVES ARE FRIENDLY ..."

WITH THURLOW at the controls and Matt in the copilot's seat the jeep started down. It started with an orbital speed of better than four miles per second, the speed of the *Aes Triplex* in her tight circular orbit around the equator of Venus. The lieutenant's purpose was to kill this speed exactly over his destination, then balance the jeep down on its tail. A jet landing was necessary, as the jeep had no wings.

He needed to do this precisely, with the least use of fuel. He was helped somewhat by riding "with the current" from west to east; the 940-mile-per-hour rotational speed of Venus at her equator was profit rather than loss. However, exact placement was another matter. A departure time was selected so that the entire descending curve would be on the day side of the planet in order to use the Sun as a reckoning point for placement in longitude; placement in latitude would have to depend on dead reckoning by careful choice of course.

The Sun is the only possible celestial body to use in air navigation at Venus, and even Sol is lost to the naked eye as soon as one is inside the planetwide blanket of cloud. Matt "shot the Sun" by keeping one eye glued on the eyepiece of an infrared adapter which had been fitted to the ship's octant, and was enabled thereby to coach his skipper from a prepared flight plan. It had not been considerred practical to cut a cam for the automatic robot; too little was known about the atmospheric conditions to be expected.

When Matt informed his pilot that they were about thirty miles up, by radar, and approaching the proper longitude, is given by the infrared image of the Sun, Thurlow brought the jeep down toward their target, ever lower and slower, and finally braked her with the jet to let her drop in a parabola distorted by air resistance.

They were enveloped in the everpresent Venerian clouds. The pilot's port was utterly useless to them. Matt now started watching the surface under them, using an infrared-sensitive "cloud piercer."

Thurlow watched his radar altimeter, checking it against the height-time plan for grounding.

"If we are going to dodge around any, it's got to be now," he said quietly to Matt. "What do you see?"

"Looks fairly smooth. Can't tell much."

Thurlow sneaked a look. "It's not water, anyway—and it's not forest. I guess we'll chance it."

Down they dropped, with Matt watching the ghostly infrared-produced picture narrowly at the end, ready to tell Thurlow to give her full power if it were a meadow.

Thurlow eased off his jet—and cut it. There was a bump as if they had fallen a couple of feet. They were down, landed on Venus.

"Whew!" said the pilot and wiped sweat from his forehead. "I don't want to have to try that every day."

"Nice landing, Skipper!" called out Oscar.

"Yea bo!" agreed Tex.

"Thanks, fellows. Well, let's get the stilts down." He punched a stud on the control board. Like most rockets built for jet landings, the jeep was fitted with three stabilizing jacks which came telescoping out of the craft's sides and slanting downward. Hydraulic pressure forced them down until they touched something solid enough to hold them, whereupon the thrusting force was automatically cut off and they locked in place, propping the rocket on three sides, tripod fashion, and holding it erect.

Thurlow waited until three little green lights appeared under the stud controlling the stilts, then unclutched the jeep's stabilizing gyros. The jeep held steady, he unstrapped. "All right, men. Let's take a look. Matt and Tex, stay inside. Oscar, if you don't mind my mentioning it, since it's your home town, you should do the honors."

"Right!" Oscar unstrapped and hurried to the lock. There was no need to check the air, since Venus is man-inhabited, and all of them, as members of the Patrol, had been immunized to the virulent Venerian fungi.

Thurlow crowded close behind him. Matt unstrapped and came down to sit by Tex in the passenger rest Oscar had left. The space around the lock was too limited in the little craft to make it worthwhile to do anything but wait.

Oscar stared out into the mist. "Well, how does it feel to be home?" asked Thurlow.

"Swell! What a beautiful, beautiful day!"

Thurlow smiled at Oscar's back and said, "Let's get the ladder down and see where we are." The access door was more than fifty feet above the jeep's fins, with no convenient loading elevator.

"Okay." Oscar turned and squeezed past Thurlow. The jeep settled suddenly on the side away from the door, seemed to catch itself, then started to fall over with increasing speed.

"The gyros!" yelled Thurlow. "Matt, clutch the gyros!" He tried to scramble past Oscar; they fouled each other, then the two fell sprawling backwards as the jeep toppled over.

At the pilot's yell Matt tried to comply—but he had been sprawled out, relaxing. He grabbed the sides of the rest, trying to force himself up and back to the control station, but the rest tilted backwards; he found himself "skinning the cat" out of it, and then was resting on the side of the craft, which was now horizontal.

Oscar and Thurlow were the first things he saw as he untangled himself. They were piled up on the inner wall of the ship, with Oscar mostly on top. Oscar started to get up—and stopped. "Eeeyowp!"

"You hurt, Oz?"

"My arm."

"What's the trouble?" This was Tex, who appeared from behind Matt, apparently untouched by the tumble.

Oscar helped himself up with his right arm, then tenderly felt his left forearm. "I don't know. A sprain—or a break, maybe. Eeee—ah! It's a break."

"Are you sure?" Matt stepped forward. "Let me see it."

"What's the matter with the skipper?" asked Tex.

"Huh?" said Matt and Oscar together. Thurlow had not moved. Tex went to him and knelt over him.

"Looks like he's knocked out cold."

"Throw some water over him."

"No, don't do that Do—" The craft settled again. Oscar looked startled and said, "I think we had better get out of here."

"Huh? We can't," protested Matt. "We've got to bring Mr. Thurlow to."

Oscar did not answer him but started climbing up toward the open lock, now ten feet over their heads, swearing in Venerian as he struggled painfully and awkwardly, using one hand, from strut to brace. " 'S'matter with old Oz?" asked Tex. "Acts like he's blown his top."

"Let him go. We've got to take care of the skipper." They knelt over Thurlow and gave him a quick, gentle' examination. He seemed unhurt, but remained unconscious.; "Maybe he's just had the breath knocked out of him," suggested Matt. "His heart beat is strong and steady."

"Look at this, Matt." It was a lump on the back of the; lieutenant's head. Matt felt it gently.

"Didn't bash in his skull. He's just had a wallop on his noggin. He'll be all right—I think."

"I wish Doc Pickering was here."

"Yeah, and if fish had feet, they'd be mice. Quit worrying, Tex. Stop messing with him and give him a chance to come out of it naturally."

Oscar stuck his head down into the open door. "Hey, you guys! Come up out of there—and fast!"

"What for?" asked Matt. "Anyhow, we can't—we got to stay with the boss, and he's still out cold."

"Then carry him!"

"How? Piggyback?"

"Any way—but *do it!* The ship is sinking!"

Tex opened his mouth, closed it again, and dived toward a small locker. Matt yelled. "Tex—get a line!"

"What do you think I'm doing? Iceskating?" Tex reappeared with a coil of thin, strong line used in warping the little craft in to her mother ship. "Easy now—lift him as I slip it under his chest."

"We ought to make a proper sling. We might hurt him."

"No time for that!" urged Oscar from above them. "Hurry!"

Matt swarmed up to the door with the end of the line while Tex was still fastening the loop under the armpits of the unconscious man. A quick look around was enougfl to confirm Oscar's prediction; the jeep lay on her side with her fins barely touching solid ground. The nose was lower than the tail and sinking in thin, yellow mud. The mud stretched away into the mist, like a flat field, its surface carpeted with a greenish—yellow fungus except for a small space adjacent to the ship where the ship, in failing, had splashed a gap in the surface.

Matt had no time to take the scene in; the mud was almost up to the door. "Ready down there?"

"Ready. Ill be right up."

"Stay where you are and steady him. I think I can handle him." Thurlow weighed one hundred forty pounds, Earthside; his Venus weight was about one hundred and seventeen. Matt straddled the door and took a strain on the line.

"I can give you one hand, Matt," Oscar said anxiously.

"Just stay out of my way." With Matt pulling and Tex pushing and steadying from below, they got the limp lieutenant over the lip of the door and laid out on the rocket.

The craft lurched again as a tail fin slid off the bank. "Let's get going, troops," Matt urged. "Oz, can you get up on that bank by yourself?"

"Sure."

"Then do so. We'll leave the line on the skipper and chuck the end to you and you can hang onto it with your good hand. That way, if he goes in the mud, we can haul him out."

"Quit talking and get busy." Oscar trotted the length of the craft, taking the end of the line with him. He made it to the bank by stepping from a tail fin.

Matt and Tex had no trouble carrying Thurlow as far as the fins, but the last few feet, from fins to bank, were awkward. They had to work close to the jet tube, still sizzling hot, and balance themselves in a trough formed by a fin and the converging side of the ship. They finally made it by letting Oscar take most of the lieutenant's weight by hauling from the bank with his one good arm.

When they had gotten Thurlow laid out on the turf Matt jumped back aboard the jeep. Oscar shouted at him. "Hey, Matt—where do you think you're going?"

"Back inside."

"Don't do it. Come back here." Matt hesitated, Oscar added, "That's an order, Matt."

Matt answered, "I'll only be a minute. We've got no weapons and no survival kits. I'll duck in and toss them out."

"Don't try it." Matt stood still a moment, balanced between Oscar's unquestioned seniority and the novelty of taking direct orders from his roommate. "Look at the door, Matt," Oscar added. "You'd be trapped."

Matt looked. The far end of the door was already in the mud and a steady stream was slopping into the ship, like molasses. As he looked the jeep rolled about a quarter turn, seeking a new stability. Matt made it to the bank in one flying leap.

He looked back and saw that the door was out of sight; a big bubble formed and *plopped!*—and then another. "Thanks, Oz!"

They stood and watched as the tail slid away from the bank. A cloud of steam came up and joined the mist as the jet tube hit the wetness; then the tail lifted and the jeep was almost vertical, upside down, for a few moments, with only her after end showing above the slime.

She sank slowly. Presently there was nothing but bubbles in the mud and a ragged break in the false lawn to show where it had been.

Mart's chin was trembling. "I should have stayed at the controls. I could have caught her on her gyros."

"Nonsense," said Oscar. "He didn't tell you to stay put."

"I should have known better."

"Quit beating yourself with it. The procedures say it's the pilot's business. If there was any doubt in his mind he should have left her stabilized on gyro until he inspected. Right now we got to take care of him, so cut out the post-mortem."

"Okay." Matt knelt down and tried Thurlow's pulse. It was still steady. "Nothing we can do for him at the moment but let him rest. Let's see your arm."

"Okay, but take it easy. Ouch!"

"Sorry. I'm afraid I'll have to hurt you; I've never actually set a bone before."

"I have," said Tex, "out on the range. Here you go, Oz old boy—lie down on your back. And relax—it's going to hurt."

"Okay. Only I thought that down in Texas you just shot "em." Oscar managed to smile.

"Just for broken legs. Broken arms we usually save. Matt, you whip up a couple of splints. Got a knife?"

"Yep."

"Good thing—I don't have. Better take your blouse off first, Oscar." With help Jensen complied; Tex placed a foot in Oscar's left armpit, grasped his left hand in both of his, and gave a steady tug.

Oscar yelped. "I think that did it," said Tex. "Matt, hurry up with those splints."

"Coming." Matt had found a clump of grass, twelve to fifteen feet tall and superficially similar to Earthside bamboo. He cut about a dozen lengths as thick as his little finger and around fifteen inches long, brought them,back and gave them to Tex. "Will these do?"

"I guess so. Here goes your blouse, Oscar." Tex attempted to tear strips from the garment, then gave up. "Golly, that stuff is tough. Gimme your knife, Matt."

Ten minutes later Oscar was adequately splinted and bandaged, with what remained of his blouse rigged as a sling. Tex took off his own blouse and sat down on it, for the turf was damp and the day was hot and muggy as only Venus can be. "That's done," he said, "and the skipper hasn't blinked an eye. That leaves you holding the sack, Oz—when do we have lunch?"

"A fine question, that." Oscar wrinkled his brows. "First, let's see what we've got to work with. Turn out your pouches."

Matt had his knife. Oscar's pouch contained nothing of significance. Tex contributed his harmonica. Oscar looked worried. "Fellows, do you suppose I'm justified in looking through Mr. Thurlow's pouch?"

"I think you ought to," said Tex. "I've never seen anybody stay out so long."

"I agree," added Matt. "I think we had better admit he s got a concussion and assume that he's going to be out of the running for a while. Go ahead, Oscar."

Thurlow's pouch contained some personal items that they skipped over quickly, the orders to the expedition, and a second knife—which had set in its handle a small, ornamental, magnetic compass. "Golly, I'm glad to find that item. I've been wondering how we would ever find our way back to this spot without natives to guide us."

"Who wants to?" asked Tex. "It doesn't seem to have any attractions for me."

"The jeep is here."

"And the *Triplex* is somewhere over your head. One is about as close as the other—to a pedestrian, meaning me."

"Look, Tex—somehow we've got to get that firecracker out of the mud and put her back into commission. Otherwise we stay here for life."

"Huh? I'd been depending on you, the old Venerian hand, to lead us back to civilization."

"You don't know what you're saying. Maybe you can walk five or six thousand miles through swamps, and sink holes, and cane brake; I can't. Just remember that there isn't a permanent settlement, not even a plantation, more than five hundred miles from either one of the poles. You know Venus isn't really explored—I know about as much about this neck of the woods as you know about Tibet."

"I wonder what in the world the *Gary* was doing here?" Matt commented.

"Search me."

"Say!" said Tex. "Maybe we can get home in the *Gary*."

"Maybe we can, but we haven't even found the *Gary* yet. Consequently if we find we can't, just as soon as we carry out these orders—" Oscar held up the paper he had taken from Thurlow's pouch, "—we've got to find some way to haul the jeep out of the sinkhole."

"With our own, little pink pattypaws?" inquired Tex. "And what's that about our orders? We don't seem to be in very good shape to go around quelling riots, putting down insurrection, and generally throwing our weight about. We haven't even got a bean shooter, much less a bean. Come to think about it, if I had a bean, I'd eat it."

"Oscar's right," agreed Matt, "We're here; we've got a mission to perform; we've got to carry it out. That's what Mr. Thurlow would say. After that comes trying to figure out a way to get back."

Tex stood up. "I should have gone into the cattle business. Okay, Oscar—what next?"

"The first thing is for you and Matt to build a litter to carry the boss. We've got to find open water and I don't want to split up the party."

The same clump of cane grass that furnished splints provided material for a litter frame. Using both knives Matt and Tex cut two seven—foot lengths as thick as their upper arms. The stuff was light and, in that thickness, satisfactorily stiff. They slipped the poles through the sleeves of their blouses, then notched in cross pieces near each end. There was a wide gap in the middle which they wound about with the line salvaged from the jeep.

The result was a sloppy piece of work, but serviceable. Thurlow was still unconscious. His breathing was shallow but his pulse was still steady. They lifted him onto the stretcher and set out, with Oscar in the lead, compass in hand.

For about an hour they tramped through swampy land, splashing through mud, getting welts from the undergrowth, and pursued by clouds of insects. At last Matt called out, "Oz! We've just got to have some rest."

Jensen turned around. "Okay—this is the end of the line, anyhow. Open water."

They crowded forward and joined him. Beyond the cane brake, perfectly flat and calm under the fog, was a pond or lake. Its size was uncertain as the far shore was lost in the mist.

They tramped out a spot to put the litter down, then Oscar bent over the water and slapped it—*Slap!—Slap!—Slap, slap, slap—Slap, slap!*

"What do we do now?"

"We wait—and pray. Thank goodness the natives are usually friendly."

"Do you think they can help us?"

"If they want to help I'll lay you even money that they can snake the jeep out of that muck and polish it clean in three days."

"You really think so? I knew the Venerians were friendly but a job like that—"

"Don't underrate the Little People. They don't look like us but don't let that throw you."

Matt squatted down and started fanning the insects away from the unconscious officer. Presently Oscar slapped the water again, in the same pattern.

"Looks like nobody's home, Oz."

"I hope you're wrong, Tex. Most of Venus is supposed to be inhabited, but this might be a tabu spot."

A triangular head, large as a collie's, broke water about ten feet from them. Tex jumped. The Venerian regarded him with shiny, curious eyes. Oscar stood up. *"Greetings, thou whose mother was my mothers friend."*

The Venerian turned her attention to Oscar. *"May thy mother rest happily."* She surface-dived and disappeared almost without a ripple.

"That's a relief," said Oscar. "Of course they say this planet has only one language but this is the first time I've put it to a test."

"Why did it leave?"

"Gone back to report, probably. And don't say 'it,' Matt say 'she.'"

"It's a difference that could only matter to another Venerian."

"Well, it's a bad habit, anyway." Oscar squatted down and waited.

After a time made longer by insects, heat, and sultriness the water was broken in a dozen places at once. One of the amphibians climbed gracefully up on the bank and stood up. She came about to Matt's shoulder. Oscar repeated the formal greeting. She looked him over. *"My mother tells me that she knows thee not."*

"Doubtless being busy with important thoughts she has forgotten."

"Perhaps. Let us go to my mother and let her smell thee."

"Thou art gracious. Canst thou carry my sibling?" Oscar pointed to Thurlow. *"Being ill, 'she' cannot close 'her' mouth to the waters."*

The Venerian agreed. She called one of her followers to her side and Oscar joined the consultation, illustrating how Thurlow's mouth must be covered and his nose pinched *together "—lest the waters return 'her to 'her' mother's mother's mother."* The second native argued but agreed.

Tex was getting more and more round-eyed. "See here, Matt," he said urgently in Basic, "surely you're not figuring on going under water?"

"Unless you want to stay here until the insects eat you up, you've got to. Just take it easy, let them tow you, and try to keep your lungs full. When they dive you may have to stay under several minutes."

"I don't like it either," said Matt.

"Shucks, I visited my first Venerian home when I was nine. They know you can't swim the way they do. At least the ones around the colonies know it," he admitted doubtfully.

"Maybe you had better impress them with it."

"I'll try."

The leader cut him short with assurances. She gave a sharp command and six of her party placed themselves by the cadets, two to each man. Three others took over Thurlow, lifting him and sliding him into the water. One of them was the one who had been instructed.

Oscar called out, "Take it easy, fellows!" Matt felt little hands urging him into the lake. He took a deep breath and stepped off into the water.

The water closed over his head. It was blood warm and fresh. He opened his eyes, saw the surface, then his head broke water again. The little hands grasped his sides and propelled him along, swimming strongly. He told himself to relax and stop fighting it. After a while it even began to seem pleasant, once he was sure that the little creatures did not intend to pull him under. But he remembered Oscar's advice and tried to watch out for a dive. Luckily, he saw the trio of which Tex was the middle go under; he gulped air just in time.

They went down and down, until his eardrums hurt, then forward. By the time they started up the pains in his chest were almost unbearable. He was fighting a reflex to open his mouth and breathe anything, even water, when they broke surface again.

There were three more of the lung-searing passages under water; when they broke water for the last time Matt saw that they were no longer outdoors.

The cave—if it was a cave—was about a hundred feet long and less than half as wide. In the center of it was the water entrance through which they had come. It was lighted from above, rather dimly, from some sort of glowing, orange clusters.

Most of this he noticed after he pulled himself up on the bank. His first impression was a crowd of Venerians surrounding the pool. They were obviously curious about their guests and chattered among themselves. Matt picked up a few words of it and heard a reference to "—slime spawn—" which annoyed him.

The three with Thurlow broke water. Matt pulled away from his custodians and helped drag him onto dry land. He was frantic for a moment when he could not find the lieutenant's pulse; then he located it. It was fast and fluttery.

Thurlow opened his eyes and looked at him. "Matt—the gyros..." !

"It's all right, Lieutenant. Just take it easy."

Oscar was standing over him. "How is he Matt?"

"Coming out of it, it looks like."

"Maybe the immersion did him good."

"It didn't do me any good," asserted Tex. "I swallowed about a gallon of water on that last one. Those little frogs are careless."

"They're more like seals," said Matt

"They're neither one," Oscar cut in sharply. They're people. Now," he went on, "to try to set up some friendly relations." He turned around, looking for the leader of the group.

The crowd separated, leaving an aisle to the pool. An amphibian, walking alone, but followed by three others, came slowly down this aisle toward them. Oscar faced her. *"Greetings, most worthy mother of many."*

She looked him slowly up and down, then spoke, but not to him. *"As I thought. Take them away."*

Oscar started to protest, but it did him no good. Four of the little people closed in around him. Tex yelled at him. "How about it, Oz? Let 'em have it?"

"No!" Oscar called back. "Don't resist."

Three minutes later they were herded into a small room that was almost completely dark, the gloom being broken only by a single sphere of the orange light. After depositing Thurlow on the floor the little people went away, closing the door after them by drawing across it a curtain. Tex looked around him, trying to adjust his eyes to the dim light, and said, "About as cozy as a grave. Oz, you should have let us put up a scrap. I'll bet we could have licked the whole caboodle of 'em."

"Don't be silly, Tex. Suppose we had managed it—a possibility which I doubt, but suppose we had: how would you like to try to swim your way out of here?"

"I wouldn't try it. We'd dig a tunnel up to the surface— we've got two knives."

"Maybe you would; I wouldn't attempt it. The Little People generally built their cities underneath lakes."

"I hadn't thought of that angle—say, that's bad." Tex studied the ceiling as if wondering when it would give way. "Look, Oz, I don't, think we're under the lake, or the walls of this dungeon would be damp."

"Huh uh, they're good at this sort of thing."

"Well—okay, so they've got us. I'm not beefing, Oz—your intentions were good—but it sure looks like we should 'a' taken our chances in the jungle."

"For Pete's sake, Text—haven't I got enough to worry about without you second-guessing me? If you're not beefing, then stop beefing."

There was a short silence, then Tex said, "Excuse me, Oscar. My big mouth."

"Sorry. I shouldn't have lost my temper. My arm hurts."

"Oh. How's it doing? Didn't I set it right?"

"I think you did a good job on it, but it aches. And it's beginning to itch, under the wrappings—makes me edgy. What are you doing, Matt?"

After checking on Thurlow's condition—unchanged—Matt had gone to the door and was investigating the closure. The curtain he found to be a thick, firm fabric of some sort, fastened around the edges. He was trying his knife on it when Oscar spoke to him.

"Nothing," he answered. "This stuff won't cut."

"Then quit trying to and relax. We don't want to get out of here—not yet, anyway."

" 'Speak for yourself, John.' Why don't we?"

"That's what I've been trying to tell Tex. I won't say this is a pleasure resort but we are about eight hundred per cent better off than we were a couple of hours ago, in every way."

"How?"

"Have you got any idea of what it means to spend a night in the jungle here, with nothing at all to shut it out? When it gets dark and the slime worms come up and start nibbling at your toes? Maybe we could live through a night of it, or even two nights, by being active and very, very lucky—but how about him?" Oscar gestured at Thurlow's still form. "That's why I made it our first business to find natives. We're safe, even if we are locked up."

Matt shivered. The slime worms have no teeth; instead they excrete an acid that dissolves what they wish to sample. They average about seven feet long. "You've sold me."

Tex said, "I wish my Uncle Bodie was here."

"So do I—he'd keep you shut up. I'm not anxious to get out of here until we've had something to eat and some sleep. Then maybe the boss will be back on his feet and will know what to do next."

"What makes you think they'll feed us?"

"I don't know that they will, but I think they will. If they are anything like the same breed of cat as the natives around the polar colonies, they'll feed us. To keep another creature shut up without feeding it is a degree of orneriness they just wouldn't think of." Oscar groped for words. "You have to know them to understand what I mean, but the Little People don't have the cussedness in them that humans have."

Matt nodded. "I know that they are described as being a gentle, unwarlike race. I can't imagine becoming really fond of them, but the spools I studied showed them as friendly."

"That's just race prejudice. A Venerian is easier to like than a man."

"Oz, that's not fair," Tex protested. "Matt hasn't got any race prejudice and neither have I. Take Lieutenant Peters—did it make any difference to us that he's as black as the ace of spades?"

"That's not the same thing—a Venerian is really different. I guess you have to be brought up with them, like I have, to take them for granted. But everything about them is different—for instance, like the fact that you never lay eyes on anything but females."

"Say, how about that, Oz? Are there really male Venerians, or is it just a superstition?"

"Sure there are—the Little People are unquestionably bisexual. But I doubt if we'll ever get a picture of one or a chance to examine one. The guys who claim to have seen one are mostly liars," he added, "because their stories never add up."

"Why do you suppose they are so touchy about it?"

"Why won't a Hindu eat beef? There doesn't have to be any reason for it. I go for the standard theory; the males are little and helpless and have to be protected."

"I'm glad I'm not a Venerian," Matt commented.

"Might not be such a bad life," Tex asserted. "Me—I could use a little coddling right now."

"Don't go taking me for an authority on Venerians," warned Oscar. "I was born here, but I wasn't born here." He patted the floor. "I know the polar region natives, the sort around my own home town—and that's just about the only sort anybody knows."

"You think that makes such a difference?" Matt wanted to know.

"I think we're lucky to be able to talk with them at all—even if the accent does drive me wild. As for other differences—look, if the only humans you had ever met were Eskimos, how far would that get you in dealing with the mayor of a Mexican town? The local customs would all be different."

"Then maybe they won't feed us, after all," Tex said mournfully.

But they were fed, and shortly. The curtain was thrust back, something was deposited on the floor, and the door was closed again.

There was a platter of some lumpish substance, color and texture indeterminate in the dim light, and an object about the size and shape of an ostrich egg. Oscar took the platter and sniffed at it, then took a small piece and tasted it. "It's all right," he announced. "Go ahead and eat."

"What is it?" inquired Tex.

"It's . . . well, never mind. Eat it. It won't hurt you and it will keep you alive."

"But what is it? I want to know what I'm eating."

"Permit me to point out that you eat this or go hungry. I don't care which. If I told you, your local prejudices would get in your way. Just pretend it's garbage and learn to love it."

"Aw, quit horsing around, Oz."

But Oscar refused to be drawn into any further discussion. He ate rapidly until he had finished his share, glanced at Thurlow and said reluctantly, "I suppose we ought to leave some for him."

Matt tried the stuff. "What's it like?" asked Tex.

"Not bad. Reminds me of mashed soybeans. Salty—it makes me thirsty."

"Help yourself," suggested Oscar.

"Huh? Where? How?"

"The drinking bladder, of course." Oscar handed him the "ostrich egg." It was soft to Mart's touch, despite its appearance. He held it, looking puzzled.

"Don't know how to use it? Here—" Oscar took it, looked at the ends, and selected one, which he placed to his lips.

"There!" he said, wiping his lips. "Try it. Don't squeeze too hard, or you'll get it all over you." Matt tried it and got a drink of water. It was a bit like using a nursing bottle.

"It's a sort of a fish's gizzard," explained Oscar, "and spongy inside. Oh, don't look squeamish, Tex! It's sterile."

Tex tried it gingerly, then gave in and tackled the food. After a while they all sat back, feeling considerably better. "Not bad," admitted Tex, "but do you know what I'd like? A stack of steaming hotcakes, tender and golden brown—"

"Oh, shut up!" said Matt.

"—with melted butter and just swimming in maple syrup. Okay, I'll shut up." He unzipped his pouch and took out his harmonica.. "Well, what d'yuh know! Still dry." He tried a couple of notes, then broke into a brilliant execution of *The CrossEyed Pilot*.

"Hey, stop that," said Oscar. "This is a sort of a sick room, you know."

Tex turned a troubled glance, at the patient. "You think he can hear it?"

Thurlow turned and muttered in his sleep. Matt bent over him. "*J'ai soif*," the lieutenant mumbled, then repeated distinctly, "*J'ai soif*."

"What did he say?"

"I don't know."

"It sounded like French to me. Either of you guys savvy French?"

"Not me."

"Nor me," Matt concurred. "Why would he talk French?

I always thought he was North American; he spoke Basic like one."

"Maybe he was French—Canadian." Tex knelt beside him and felt his forehead. "He seems sort of feverish. Maybe we should give him some water."

"Okay." Oscar took the bladder and put it to Thuflow's lips; he squeezed gently so that a little welled out. The injured man worked his lips and then began to suck on it, without appearing to wake up. Presently he let it fall from his mouth. "There," said Oscar, "maybe he'll feel better now."

"Are we going to save that for him?" asked Tex, eyeing the remainder of the food.

"Go ahead and eat it, if you want it. It turns rancid few hours after it's . . . well, it turns rancid."

"I don't believe I want any more," Tex decided.

They had been sleeping an undetermined length of time when a noise awakened them—a voice, unquestionably human. "Hey!" it demanded, *"where art thou taking me? I insist that thou take me to see thy mother!"*

The noise was right at their door. *"Quell thy tongue!"* answered a native accent; the curtain was shoved aside and someone was pushed into the room before the door was again closed.

"Hello there!" called out Oscar.

The figure spun around. "Men ..." he said, as if he could not believe it. "Men!" He began to sob.

"Hello, Stinky," said Tex. "What are you doing here?"

It was Girard Burke.

There was considerable confusion for the next several moments. Burke alternated between tears and uncontrollable shaking. Matt, who had awakened last, had trouble sorting out what was going on from the fantasy he had been dreaming, and everybody talked at once, all asking questions and none of them answering.

"Quiet!" commanded Oscar. "Let's get this straight. Burke, as I understand it, you were in the *Gary*?"

"I'm skipper of the *Gary*."

"Huh? Well, I'll be switched. Come to think of it, we knew the captain of the *Gary* was named Burke, but it never occurred to anybody that it could be Stinky Burke. Who would be crazy enough to trust you with a crate, Stinky?"

"It's my own ship—or, anyhow, my father's. And I'll thank you to call me Captain Burke, not 'Stinky.' "

"Okay, Captain Stinky."

"But how did he get here?" Matt wanted to know, still trying to catch up.

"He's just explained that," said Tex. "He's the guy that yelled for help. But what beats me is that it should happen to be us—it's like dealing out a bridge hand and getting thirteen spades."

"Oh, I don't know," objected Oscar. "It's a coincidence, but not a very startling one. He's a spaceman, he hollers for help, and naturally the Patrol responds. It happened to be us. It's about as likely, or as unlikely, as running across your piano teacher on the downtown streets of your home town."

"I don't have a piano teacher," objected Tex.

"Skip it. Neither do I. Now I think—"

"Wait a minute," broke in Burke, "do I gather that you were sent here, in answer to my message?"

"Certainly."

"Well, thank heaven for that—even if you guys were stupid enough to stumble right into it. Now tell me—how many are there in the expedition and how are they equipped? This is going to be a tough nut to crack."

"Huh? What are you talking about, Stinky? This is the expedition, right in front of you."

"What? This is no time to joke. I sent for a regiment of marines, equipped for amphibious operations."

"Maybe you did, but this is what you got—total. Lieutenant Thurlow is in command, but he got a crack on the skull so I'm temporarily filling in for him. You can talk to me—what's the situation?"

Burke seemed dazed by the knowledge. He stared without speaking. Oscar went on, "Snap out of it, Stinky. Give us the data, so we can work out an operation plan."

"Huh? Oh, it's no use. It's utterly hopeless." "What's so hopeless? The natives seem friendly, on the whole. Tell us what the difficulty was, so we can work it out with them."

"Friendly!" Burke gave a bitter laugh. "They killed all of my men. They're going to kill me. And they'll kill you."

XV PIE WITH A FORK

"OKAY," agreed Oscar. "Now that that's settled, I still want to know the score. Suppose you pull yourself together, —Burke, and tell us what happened?"

The merchant rocketship *Gary*, built by "Reactors Ltd." and transferred to the family corporation "System Enterprises," was a winged rocket especially fitted for point-to-point operations on Venus. The elder Mr. Burke had placed his son in command, backing him up with an experienced crew; the purpose of the trip was to investigate a tip concerning ores of the transuranic elements.

The tip had been good; the ores were present in abundance. Young Burke had then undertaken to negotiate exploitation rights with the local Venerian authorities in order to hold the valuable claim against other exploiters who were sure to follow.

He had not been able to interest the local "mother of many" in his wishes; the swamp he wanted, she gave Burke to understand, was tabu. However, he was able to intrigue her into visiting the *Gary*. Once aboard the ship he again tried to get her to change her mind. When she turned him down again he had refused to allow her to leave the rocket ship.

"You mean you kidnapped her," said Matt.

"Nothing of the sort. She came aboard of her own free will. I just didn't get up and open the door for her and went on arguing."

"Oh, yeah?" commented Oscar. "How long did this go on?"

"Not very long."

"Exactly how long? You might as well tell me; I'll find out from the natives."

"Oh, well! Overnight—what's so criminal about that?"

"I don't know just how criminal it is here. On Mars, as I learned in school and as I'm sure you did too, the punishment would be to stake you out on the desert, unprotected, for exactly the same length of time."

"Hell's hells—I didn't hurt her. I'm not that silly. I wanted her cooperation."

"So you twisted her arm to get it. You held her prisoner, in effect kidnapped her by enticement and held her for ransom. Okay—you kept her overnight. What happened when you let her go?"

"That's what I'm trying to tell you. I never got a chance to turn her loose. I was going to, of course, but—"

"Sez you!"

"Don't get sarcastic. The next morning they attacked the ship. There must have been thousands of the beasts."

"So you turned her loose?"

"I was afraid to. I figured as long as we held her nothing much could happen to us. But I was wrong—they poured something on the door that ate it right away and they were in the ship before we could stop them. They killed my crew, just overran them—but we must have gotten at least twice as many of them, the brutes!"

"How come you're still breathing?"

"I locked myself in the comm room and sent out the call for help that got you here. They didn't find me there until they went through the ship, compartment by compartment. I must have passed out from the fumes when they melted their way in—anyhow I woke up while they were bringing me here."

"I see." Oscar sat a while and thought, his knees pulled up under his chin. "This is your first time on Venus, Stinky?"

"Well, yes."

"I thought so. It's apparent that you didn't know just how stubborn and difficult the Little People can be if you start pushing them around."

Burke looked wry. "I know now. That's why I distinctly called for a regiment of marines. I can't imagine what the Department was thinking about, to send three cadets and a watch officer. Of all the brass-hatted stupidity! My old man will raise plenty of Cain about it when I get back."

Tex gave a snort of disgust. "Did you think the Patrol was invented to keep a jughead like you from having to pay for his fun?"

"Why, you—"

"Quiet, Burke. And never mind the side remarks, Tex. This is an investigation, not a debate. You know the Patrol never sends marines until they've tried negotiation, Burke."

"Sure, that's why I specified marines. I wanted them to cut the red tape and get some action."

"You were kidding yourself. And there's no point in talking about what you'll do when you get back. We don't know yet that we can get back."

"That's true." Burke chewed his lip and thought about it. "Look here, Jensen, you and I were never very chummy in school, but that's unimportant now; we're in the same boat and we've got to stick together. I've got a proposition. You know these frogs better than I do —"

"People, not 'frogs.'"

"Okay, you know the natives. If you can manage to square this and get me out of here, I can cut you in on—"

"Careful there, Burke!"

"Don't get on your high horse. Just hear me out, will you? Just listen. Do I have free speech or don't I?"

"Let him talk, Oz," advised Tex. "I like to watch his tonsils."

Oscar held his tongue, Burke went on, "I wasn't going to suggest anything that would smirch your alabaster character. After all, you're here to get me out of this; it's my business if I want to offer a reward. Now this swamp we staked out is loaded with the stuff—transuranics, all the way from element 97 through 104. I don't have to tell you what that means—101 and 103 for jet-lining alloys; 100 for cancer therapy —not to mention the catalyzing uses. Why, there's millions in catalysts alone. I'm no hog; I'll cut you all in ... say for ten per cent apiece."

"Is that all you have to say?"

"Not quite. If you can work it so that they'll let us go and leave us alone while we jury-rig some repairs on the *Gary* so that we can get away with a load this trip, I'll make it twenty per cent. You'll like the *Gary*; she's the sweetest job in the System. But if that won't work and you can get me back in your ship it's still worth ten per cent."

"Are you through?"

"Yes."

"I can answer for all of us. If I didn't consider the source, I'd be insulted."

"Fifteen per cent. There's no need to get shirty; after all, it's absolutely free just for doing what you were ordered down here to do anyhow."

"Oz," said Matt, "do we have to listen to this tripe?"

"Not any more of it," decided Jensen. "He's had his say. Burke, I'll keep this factual and leave my personal opinions out of it. You can't hire the Patrol, you know that. In—"

"I wasn't offering to hire you, I was just trying to do you a favor, show my appreciation."

"I've got the floor. In the second place, we haven't got a ship, not at present."

"Huh? What's that?" Burke seemed startled. . Oscar gave him a quick resume of the fate of the jeep. Burke looked both amazed and terribly, bitterly disappointed. "Well, of all the gang of stupes! Just forget that offer; you haven't got anything to sell."

"I've already forgotten it and you had better be glad I have. Let me point out that we wouldn't have been making a jet-landing in a jungle if you hadn't made an ass of yourself and then called for help. However, we hope to recover the jeep if I can manage to smooth out the trouble you've caused—and that's no small job."

"Well, of course if you can square things and get your ship back, the offer stands."

"Stop talking about that clumsy piece of bribery! We can't possibly promise you anything, even if we wanted to. We've got our mission to carry out."

"Okay—your mission is to get me out of here. It comes to the same thing; I was just being generous."

"Our mission isn't anything of the sort. Our prime mission is what the prime mission of the Patrol always is: to keep the peace. Our orders read to investigate a reported native uprising—there isn't any—and keep the peace.' There's not a word about springing Girard Burke from the local jail and giving him a free ride home."

"But—"

"I'm not through. You know how the Patrol works as well as I do. It acts in remote places and a Patrol officer has to use his own judgment, being guided by the Tradition—"

"Well, if it's precedent you're looking for, you've got to—"

"Shut up! Precedent is merely the assumption that somebody else, in the past with less information, nevertheless knows better than the man on the spot. If you had gotten any use out of the time you spent as a cadet, you'd know that the Tradition is something very different. To follow a tradition means to do things in the same grand style as your predecessors; it does not mean to do the same things."

"Okay, okay—you can skip the lecture."

"I need some information from you. Had the Little People here ever seen a man before you came along?"

"Uh . . . why, they knew about men, a little anyhow. Of course there was Stevens."

"Who was Stevens?"

"Mineralogist, working for my old man. He did the quickie survey that caused us to bring the *Gary* in. Oh, there was his pilot, too."

"And those are the only men these natives have encountered, aside from the crew of the *Gary*?"

"So far as I know, yes."

"Have they ever heard of the Patrol?"

"I doubt it—yes, they have, too. At least the boss mother seemed to know the native word for it."

"Hmm . . . that rather surprises me. So far as I know the Patrol has never had any occasion to land this near the equator—and if it had I think Captain Yancey would have briefed us about it."

Burke shrugged. Oscar went on, "It affects what we're to do. You've stirred up a mess, Burke. With the discovery of valuable minerals here, there will be more men coming along. The way you've started things off there could be more and more trouble, until there was nothing but guerrilla warfare between the natives and the men, everywhere you looked. It might even spread to the poles. It's the Patrol's business to stamp out such things before they get started and that's what I construe our mission here to be. I've got to apologize and smooth it over and do my darnedest to correct a first bad impression. Can you give me any more information, anything at all, that might help me when I try it?"

"I don't think so. But go ahead—soft-soap the old girl any way you can. You can even pretend to take me away from here under arrest if it will do any good. Say, that might be a good idea! I'll be agreeable to it just as long as I get out."

Oscar shook his head. "I might take you out under arrest, if she wants it that way. But as far as I can see you are a perfectly legal prisoner here for a crime under the local customs."

"What in the world are you talking about?"

"I might point oat that what you've admitted doing is a crime anywhere. You can be tried for it on Terra if she wants it that way. But it really doesn't matter to me, one way or the other. It's no business of the Patrol."

"But you can't leave me here!"

Oscar shrugged. "That's the way I see it. Lieutenant Thurlow might snap out of it at any time, then you could take it up with him. As long as I'm in charge I'm not going to jeopardize the Patrol's mission to try to help you get away with murder—and I do mean murder!"

"But—" Burke looked wildly around him. "Tex! Matt! Are you going to let him side up with those frog-people against a *man?*"

Matt gave him a stony-eyed stare. Tex said, "Button your lip, Stinky."

Oscar added, "Yes, do. —And go to sleep. My arm hurts and I don't want to be bothered any more with you tonight."

The room quieted down at once, even though none of them got to sleep quickly. Matt lay awake a long time, worrying out their predicament, wondering whether or not Oscar could convince the frog mother—he thought of her as such—of the innocence of their intentions, and repeatedly blaming himself for the disaster to the jeep. Presently! he fell into an exhausted sleep.

He was awakened by a moaning sound. It brought him wide awake at once and to the lieutenant's side. He found Tex already awake with him. "What is it?" he asked. "Is he worse?"

"He keeps trying to say something," Tex answered.

Thurlow's eyes came open and he looked up at Matt. *"Maman,"* he said querulously. *"Maman—pourquoi fait-il nuit ainsi?"*

Oscar joined them. "What's he saying?"

"Sounds like he's calling for his momma," said Tex. "The rest is just gibberish."

"Where did that bladder get to? We could give him a drink." It was found and again the patient drank, then seemed to drop at once to sleep.

"You guys go back to sleep," said Oscar. "I want to snag a word with the guard that brings us our next meal and try to get to see the big mother. He's got to have some medical attention, somehow."

"I'll take the watch, Oz," Matt offered.

"No, I can't sleep very well anyhow. This darn thing itches." He held up his damaged arm.

"Well—all right."

Matt was still awake when the curtain opened. Oscar had been sitting cross-legged at the door, waiting; as the native shoved inside a platter of food, he thrust his arm into the opening.

"Remove thy arm," said the native emphatically.

"Attend thou me," insisted Oscar. *"I must have speech with thy mother."*

"Remove thy arm."

"Thou wilt carry my message?"

"Remove thy arm!"

Oscar did so and the curtain was hurriedly secured. Matt said, "Doesn't look as if they intended to powwow with us, does it, Oz?"

"Keep your shirt on," Oscar answered. "Breakfast. Wake up the others."

It was the same dull fodder as before. "Split it five ways, Tex," Oscar directed. "The lieutenant may snap out of it and be hungry."

Burke looked at it and sniffed. "I'm sick of that stuff. I don't want any."

"Okay, split it four ways." Tex nodded and did so.

They ate; presently Matt sat back, burped reflectively, and said, "You know, while I could use some orange juice and coffee, that stuffs not bad."

"Did I ever tell you," asked Tex, "about the time my Uncle Bodie got incarcerated in the jail at Juarez?—by mistake, of course."

"Of course," agreed Oscar. "What happened?"

"Well, they fed him nothing but Mexican jumping beans. He—"

"Didn't they upset him?"

"Not a bit. He ate as many as he could and a week later he jumped over a twelve foot wall and bounced home."

"Having met your Uncle Bodie, I can well believe it. What do you suppose he would do under these circumstances?"

"Obvious. He'd make love to the old girl and inside of three days he'd be head man around here."

"I think I'll have some breakfast after all." announced Burke.

"You'll leave that chow for the lieutenant," Oscar said firmly. "You had your chance."

"You've got no authority over me."

"There are two reasons why you are wrong."

"So? What are they?"

"Matt and Tex."

Tex stood up. "Shall I clip him, boss?"

"Not yet."

"Oh, shucks!"

"Anyhow," objected Matt. "I get first crack—I'm senior to you, Tex."

"Pulling rank on me, eh? Why you unspeakable rat!"

"Mister Rat, if you please, Yep, in this instance I claim rank."

"But this is a social occasion."

"Shut up, you guys," instructed Oscar. "Neither of you is to clip him unless he gets to sniffing around that food dish."

There was a noise at the door, the curtain was pushed back and a native announced, *"My mother will see thee. Come."*

"Myself alone, or me and my sisters?"

"All of you. Come."

However, when Burke attempted to pass through the door two of the little creatures pushed him back inside. They continued, to restrain him while four others picked up Lieutenant Thurlow and carried him outside. The numerous party set out down the passageway.

"I wish they would light these rabbit nests," Tex complained, after stumbling.

"It's light enough to their eyes," Oscar answered.

"Natch," agreed Tex, "but a fat lot of good that does me. My eyes don't see infrared."

"Then pick up your big feet."

They were taken to another large room, not the entrance hall, for it contained no pool of water. An amphibian, the same who had viewed them and ordered them taken away on their arrival, sat on a raised platform at the far end of the room. Only Oscar recognized her as such; to the others she looked like the rest.

Oscar quickened his pace and drew ahead of his escort *"Greetings, thou old and wise mother of many."*

She sat up and looked at him steadily. The room was very quiet. On every side the little folk waited, looking first from the earthlings to their chief executive, then back again. Matt felt that somehow the nature of her answer would show them their fate.

"Greetings." She had chucked the ball back to Oscar by refusing to assign him any title at all, good or bad. *"Thou sought speech with me. Thou may speak."*

"What manner of city is thine? Have I, perhaps, journeyed so far that manners are no longer observed?" The Venerian word meant much more than "manners"; it referred to the entire obligatory code of custom by which the older and stronger looked out for the weaker and younger.

The entire audience stirred. Matt wondered if Oscar had overplayed his hand. The expression of the leader changed but Matt had no way of reading it. *"My city and my daughters live ever by custom —"* She used a more inclusive term, embracing tabus and other required acts, as well as the law of assistance, *"—and I have never before heard it suggested that we fail in performance."*

"I hear thee, gracious mother of many, but thy words confuse me. We come, my 'sisters' and I, seeking shelter and help for ourselves and our 'mother' who is gravely ill. I myself am injured and am unable to protect my younger 'sisters.' What have we received in thy house? Thou hast deprived us of our freedom; our 'mother' lies unattended and failing. Indeed we have not even been granted the common decency of personal rooms in which to eat."

A noise rose from the spectators which Matt correctly interpreted as the equivalent of a shocked gasp. Oscar had deliberately used the offensive word *"eat,"* instead of talking around it. Matt was sure now that Oscar had lost his judgment.

If so, Oscar went on to confirm it. *"Are we fish, that such should be done to us? Or are the customs such among thy daughters?"*

"We follow the customs," she said shortly, and even Matt and Tex could interpret the anger in her voice. *"It was my understanding that thy breed had no decencies. It will be corrected."* She spoke sharply in an aside to one of her staff; the little creature trotted away. *"As to thy*

freedom, what I had done was lawful for it was to protect my daughters."

"To protect thy daughters? From what? From my ailing 'mother'? Or from my injured arm?"

"Thy sister who knows no customs has forfeited thy freedom."

"I hear thy words, wise mother, but I understand them not."

The amphibian seemed nonplused. She inquired specifically about Burke, naming him by his terrestrial tag, calling it "Captain-Burke," as one word. Oscar assured her that ; Burke was no "daughter" of Oscar's "mother," nor of Oscar's "mother's mother."

The matriarch considered this. *"If we return you to the upper waters will you leave us?"*

"What of my 'mother'?" asked Oscar. *"Wouldst thou, cast 'her' forth thus ailing, to die and to be destroyed by the creatures of the slime?"* On this occasion he carefully avoided the Venerian expression for "to be eaten."

The mother-of-many had Thurlow carried up to the dais on which she sat. Several of the little folk gathered around him and examined him, speaking to each other in high, lisping whispers. Presently the matriarch herself joined the consultation, then spoke again. *"Thy mother sleeps."*

"It is a sickly sleep. 'Her' head was injured by a blow." Oscar joined the group and showed them the lump on the back of Thurlow's head. They compared it with Oscar's own head, running gentle, inquisitive little hands through his blond hair. There was more lisping chatter; Matt found himself unable to follow even what he could hear; most of the words were strange.

"My learned sisters tell me that they dare not take thy mother's head apart for fear that they could not get it back together," announced the mother-of-many.

"Well, that's a relief!" Tex said out of the corner of his mouth.

"Old Oz wouldn't let them anyhow," Matt whispered.

The leader gave instructions and four of her "daughters" picked up the unconscious officer and started carrying him out of the room. Tex called out, "Hey, Oz—do you think that's safe?"

"It's all right," Oscar called back, then explained to the matriarch, "My 'sister' feared for the safety of our 'mother.' "

The creature made a gesture that reminded Matt suddenly of his great-aunt Dora—she positively sniffed. *"Tell her that her nose need not twitch!"*

"She says not to get in an uproar, Tex."

"I heard her. Okay, you're the boss," Tex answered, and then muttered, "My nose, indeed!"

When Thurlow had been removed the leader turned toward them again. *"May thy dreams be of daughters."*

"May thy dreams be as pleasant, gracious mother."

"We will speak again." She gathered herself up to a lordly four feet and left the chamber. When she was gone the group of escorts conducted the cadets out of the council hall but by a different passageway than that from which they had come. The group stopped presently at another doorway. The guide in charge wished them farewell with the same formula as the matriarch. A curtain was drawn but it was not fastened, a point that Matt immediately checked. He turned to Oscar.

"I've got to hand it to you, Oz. Anytime you get tired of the Patrol and don't want to run for prime minister of the System, I can book you for a swell job, selling snow to Eskimos. For you it would be a cinch."

"Mart's not just fanning the air," agreed Tex. "Oscar, you were wonderful. Uncle Bodie couldn't have handled the old gal any slicker."

"That's high praise, Tex. I'll admit to being relieved. If the Little People weren't so downright decent it wouldn't have worked."

The living room of their apartment—there were two rooms —was about the size of the room they had been in, but was more comfortable. There was a softly padded, wide couch running around the wall. In the center of the room was a pool of water, black under the dim light. "Oz, do you suppose that bathtub connects with the outside?" Tex wanted to know.

"They almost always do."

Matt became interested. "Maybe we could swim out."

"Go ahead and try it. Don't get lost in the dark and remember not to swim under water more than half the distance you can hold your breath." Oscar smiled cynically.

"I see your point."

"Anyhow, we want to stay until we've gotten over the last hurdle."

Tex wandered on into the second room. "Hey, Oz—come look at this."

Matt and Oscar joined him. There were rows of little closets down each side, ten in all, each with its own curtain. "Oh, yes, our eating booths."

"That reminds me," said Matt. "I thought you had wrecked everything, Oz, when you started talking about eating. But you pulled out of it beautifully."

"I didn't pull out of it; I did it on purpose."

"Why?"

"It was a squeeze play. I had to shock them with the idea that they were indecent, or looked that way to us. It established us as 'people,' from their point of view. After that it was easy." Oscar went on. "Now that we are accepted as people, we've got to be awfully careful not to undo it. I don't like to eat in one of these dark little cubbyholes any better than you do, but we don't dare take a chance of being seen eating—you don't dare even fail to draw the curtain, as one of them might come popping in. Remember, eating is the only sort of privacy they observe."

"I get you," agreed Tex. "Pie with a fork."

"Huh?"

"Never mind—it's a painful memory. But Matt and I won't slip."

XVI P.R.S. *ASTARTE*

OSCAB WAS SUMMONED again the next day into the presence of the city's chief magistrate and started laying the foundation, in a leisurely, indirect fashion, for formal diplomatic relations in the future. He began by getting her story of the trouble with the *Gary* and its skipper. It was much as Burke had admitted it to be, although from a different viewpoint.

Oscar had inquired casually as to why the swamp Burke wanted was tabu. He was worried that he might be invading religious matters but he felt that he needed to know—it was a dead certainty that others would be along, in due course, to attempt to exploit the transuranic ores; if the Patrol was to prevent further breaches of the peace the matter must be investigated.

The matriarch answered without hesitation; the swamp was tabu because the ore muds were poisonous.

Oscar felt the relief of a man who has just been told that it will not be necessary to lose a leg, after all. The ores were understandably poisonous; it was a matter that the Patrol could undoubtedly negotiate—conditional or practical tabus had been overcome many times with natives. He tabled the matter, as something to be taken up at a later time by the appropriate experts.

In a later interview he sounded her out on the. subject of the Patrol. She had heard of it, in a fashion, apparently—she used the native word given by the polar-region natives to all colonial government, a word meaning "guardians of the customs" or "keepers of the law."

The native meaning was quite useful to Oscar, for he found it impossible to get over to her the idea that the Patrol was intended to prevent war—"war" was a concept she had never heard of!

But her conservative mind was naturally prejudiced in favor of any organization tagged as "guardians of the customs." Oscar approached it from that viewpoint. He explained to her that more of his own kind would be arriving; therefore the "great mother of many" of his own people had sent them as messengers to propose that a "mother" from Oscar's people be sent to aid her in avoiding friction.

She was receptive to the idea as it fitted her own experience and concepts. The groups of natives near the polar colonies were in the habit of handling their foreign affairs by exchanging "mothers"—actually judges—who ruled on matters arising out of differences in custom; Oscar had presented the matter in the same terms.

He had thus laid the groundwork for a consulate, extraterritorial courts, and an Earthman police force; the mission, as he saw it, was complete—provided he could get back to base and report before other prospectors, mining engineers, and boomers of all sorts started showing up.

Only then had he spoken to her of getting back—to have her suggest that he remain permanently as "mother" for his people. (The root word translated as "mother" is used for every position of authority in the Venerian speech; the modifiers and the context give the word its current meaning—)

The proposal left Oscar temporarily speechless. "I didn't know what to say next," he confessed later. "From her point of view she was honoring me. If I turned it down, it might offend her and crab the whole deal."

"Well, how did you talk your way out of it?" Tex wanted to know. "Or did you?"

"I think so. I explained as diplomatically as possible that I was too young for the honor and that I was acting as 'mother' only because Thurlow was laid up and that, in any case, my 'great mother of many had other work which I was obliged, by custom, to carry out."

"I guess that held her."

"I think she just filed it away as a point to negotiate. The Little People are great negotiators; you'll have to come to New Auckland some time and listen to the proceedings of a mixed court."

"Keep to the point," suggested Matt

"That is to the point—they don't fight; they just argue until somebody gives in. Anyhow, I told her that we had to get Thurlow back where he could get surgical attention. She understood that all right and expressed regret for the steenth time that her own little girls couldn't do the trick. But she had a suggestion for curing the boss."

"Yes?" demanded Matt. "What was it?" Matt had appointed himself Thurlow's caretaker, working with the amphibian healers who now had him as a professional responsibility. He had taught them to take his pulse and to watch his respiration; now there was always one of the gentle creatures squatting on the end of Thurlow's couch, watching him with grave eyes. They seemed genuinely distressed at not being able to help him; the lieutenant had remained in a semi-coma, coming out of it enough occasionally that it had been possible to feed him and give him water, but never saying anything that the cadets could understand. Matt found that the little nurses were quite unsqueamish about feeding a helpless person; they accepted offensive necessities with the same gallantry as a human nurse.

But Thurlow, while he did not die, did not get any better.

"The old girl's suggestion was sort of radical, but logical. She suggested that her healers take Burke's head apart first, to see how it was made. Then they could operate on the boss and fix him."

"What?" said Matt.

Tex was having trouble controlling himself. He laughed so hard he strangled, then got hiccoughs and had to be pounded on the back. "Oh, boy!" he finally exploded, tears streaming down his cheeks, "this is wonderful. I can't wait to see Stinky's face. You haven't told him, have you?"

"No."

"Then let me. Dibs on the job."

"I don't think we ought to tell him," objected Oscar. "Why kick him when he's down?"

"Oh, don't be so noble! It won't hurt any to let him know that his social rating is 'guinea pig.' "

"She really hates him, doesn't she?" Matt commented.

"Why shouldn't she?" Tex answered. "A dozen or more of her people dead—do you expect her to regard it as a schoolboy prank?"

"You've both got her wrong," Oscar objected. "She doesn't hate him."

"Huh?"

"Could you hate a dog? Or a cat—"

"Sure could," said Tex. "There was an old tomcat we had once—"

"Pipe down and let me finish. Conceding your, point, you can hate a cat only by placing it on your own social level. She doesn't regard Burke as ... well, as people at all, because he doesn't follow the customs. We're 'people' to her, because we do, even though we look like him. But Burke in her mind is just a dangerous animal, like a wolf or a shark, to be penned up or destroyed—but not hated or punished.

"Anyhow," he went on, "I told her it wouldn't do, because we had an esoteric and unexplainable but unbreakable religious tabu that interfered—that blocked her off from pressing the point. But I told her we'd like to use Burke's ship to get the lieutenant back. She gave it to me. We go out tomorrow to look at it."

"Well, for crying out loud—why didn't you say so, instead of giving all this buildup?"

They had made much the same underwater trip as on entering the city, to be followed by a longish swim and a short trip overland. The city mother herself honored them with her company.

The *Gary* was everything Burke had claimed for her, modern, atomic-powered, expensively outfitted and beautiful, with sharp wings as graceful as a swallow's.

She was also a hopeless wreck.

Her hull was intact except the ruined door, which appeared to have been subjected to great heat, or an incredible corrosive, or both. Matt wondered how it had been done and noted it as still another indication that the Venerians were not the frog-seal-beaver creatures his Earth—side prejudices had led him to think.

The inside of the ship had looked fairly well, too, until they started checking over the controls. In searching the ship the amphibians, to whom even a common door latch was a puzzle, had simply burned their way through impediments—including the access hatch to the ship's autopilot and gyro compartment. The circuits of the ship's nervous system were a mass of fused and melted junk.

Nevertheless they spent three hours convincing themselves that it would take the resources of a dockyard to make the ship fly again. They gave up reluctantly at last and started back, their spirits drooping.

Oscar had at once taken up with the city mother the project of recovering the jeep. He had not mentioned it before as the *Gary* seemed the better bet. Language difficulties would have hampered him considerably—their hostesses had no word for "vehicle," much less a word for "rocket ship"—but the *Gary* gave him something to point to wherewith to explain.

When she understood what he was driving at she gave orders which caused the party to swim to the point where the cadets had first been picked up. The cadets made sure of the spot by locating the abandoned litter and from there Oscar had led them back to the sinkhole that was the grave of the jeep. There he acted out what had happened, showing her the scar in the bank where the jeep had balanced and pacing off on the bank the dimensions of the ship.

The mother-of-many discussed the problem with her immediate staff while the cadets waited, ignored rather than excluded. Then she abruptly gave the order to leave; it was getting on in the late afternoon and even the Venerians do not voluntarily remain out in the jungle overnight.

That had ended the matter for several days. Oscar's attempts to find out what, if anything, was being done about the jeep were brushed off as one might snub a persistent brat. It left them with nothing to do. Tex played his harmonica until threatened with a ducking in the room's center pool. Oscar sat around, nursing his arm and brooding. Matt spent much of his time watching over Thurlow and became well acquainted with the nurses who never left him, especially one bright-eyed cheerful little thing who called herself Th'wing."

Th'wing changed his viewpoint about Venerians. At first he regarded her much as he might a good and faithful, and unusually intelligent dog. By degrees he began to think of her as a friend, an interesting companion—and as "people." He had tried to tell her about himself and his own kind and his own world. She had listened with alert interest, but without ever taking her eyes off Thurlow.

Matt was forced willy-nilly into the concepts of astronomy—and came up against a complete block. To Th'wing there was the world of water and swamp and occasional dry land; above that was the endless cloud. She knew the Sun, for her eyes, perceptive to infrared, could see it, even though Matt could not, but she thought of it as a disc , of light and warmth, not as a star.

As for other stars, none of her people had ever seen them and the idea did not exist. The notion of another planet was not ridiculous; it was simply incomprehensible— Matt got nowhere.

He told Oscar about it. "Well, what did you expect?" Oscar had wanted to know. "All the natives are like that. They're polite but they think you are talking about your religion."

"The natives around the colonies, too?"

"Same deal."

"But they've seen rocket ships, some of 'em, anyhow. Where do they think we come from? They must know we haven't been here always."

"Sure they know that—but the ones at South Pole think we came orignally from North Pole and the ones around North Pole are sure we came from South Pole—and it's no use trying to tell them anything different."

The difficulty was not onesided. Th'wing was continually using words and concepts which Matt could not understand and which could not be straightened out even with Oscar's help. He began to get hazily the idea that Th'wing was the sophisticated one and that he, Matt, was the ignorant outlander. "Sometimes I think," he told Tex, "that Th'wing thinks that I am an idiot studying hard to become a moron—but flunking the course."

"Well, don't let it throw you, kid. You'll be a moron, yet, if you just keep trying."

On the morning fifteen Venus days after their arrival the mother of the city sent for them and had them taken to the site of the jeep. They stood on the same bank where they had climbed ashore from the sinking ship, but the scene had changed. A great hole stretched out at their feet; in it the jeep lay, three—quarters exposed. A swarm of

Venerians crawled over it and around it like workmen in a dockyard.

The amphibians had begun by adding something to the thin yellow mud of the sinkhole. Oscar had tried to get the formula for the additive, but even his command of the language was useless—the words were strange. Whatever it was, the effect was to turn the almost-liquid mud into a thick gel which became more and more stiff the longer it was exposed to air. The little folk had carved it away from the top as fast as it consolidated;, the jeep was now surrounded by the sheer walls of a caisson—like pit. A ramp led up on the shoreward side and a stream of the apparently tireless little creatures trotted up it, bearing more jelled blocks of mud.

The cadets had climbed down into the pit to watch, talking in high spirits about the prospects of putting the jeep back into commission and jetting out again, until the Venerian in charge of the work had urged them emphatically to go up out of the pit and stay out of the way. They joined the city mother and waited.

"Ask her how she expects to get it up out of there, Oz," Tex suggested. Oscar did so.

"Tell thy impatient daughter to chase her fish and I will chase mine."

"No need for her to be rude about it," Tex complained.

"What did she say?" inquired the mother-of-many.

" 'She' thanks thee for the lesson," Oscar prevaricated. The Little People worked rapidly. It was evident that the ship would be entirely free before the day was far advanced—and clean as well; the outside shone now and a steady procession of them had been pouring in and out of the door of the ship, bearing cakes of jellied mud. In the last hour the routine had changed; the little workers came out bearing distended bladders. The cleanup squad was at work.

Oscar watched them approvingly. "I told you they would lick it clean."

Matt looked thoughtful. "I'm worried, Oz, about the possibility that they will mess with something on the control board and get into trouble."

"Why? The leads are all sealed away. They can't hurt anything. You locked the board when you left it, didn't you?"

"Yes, of course."

"Anyhow, they can't fire the jet when she's in that attitude even if you hadn't."

"That's true. Still, I'm worried."

"Well, let's take a look, then. I want to talk to the foreman in any case. I've got an idea."

"What idea?" asked Tex.

"Maybe they can get her upright in the pit. It seems to me we could take off from there and never have to drag her out. Might save several days." They went down the ramp and located the Venerian in charge, then Matt and Tex went inside the ship while Oscar stayed to talk over his idea.

It was hard to believe that the pilot room had lately; been choked with filthy, yellow mud. A few amphibians were still working in the after end of the room; elsewhere the compartment was clean.

Matt climbed to the pilot's seat and started inspecting. He noticed first that the sponge—rubber eyeguards for the infrared viewer were missing. This was not important, but he wondered what had happened to them—did the little folk have the vice of souvenir snitching? He filed away the suspicion, and attempted a dry run on the controls, without firing the jet.

Nothing operated—nothing at all.

He looked the board over more carefully. To a casual inspection it was clean, bright, in perfect order, but he now perceived many little pits and specks. He dug at one with a finger nail, something came away. He worked at it a bit more and produced a tiny hole into the interior of the control board. It gave him a sick feeling at the pit of his stomach. "Say, Tex—come here a minute. I've got something."

"You think you've got something," Tex answered in muffled tones. "Wait till you've seen this."

He found Tex with a wrench in his hand and a cover plate off the gyro compartment. "After what happened to the *Gary* I decided to check this first. Did you ever see such a mess?"

The mud had gotten in. The gyros, although shut down, were of course still spinning when the ship had gone into the sinkhole and normally would have coasted for days; they should still have been spinning when Tex removed the cover. Instead they had ground to a stop against the mud—burned to a stop.

"We had better call Oscar," Matt said dully.

With Oscar's help they surveyed the mess. Every instrument, every piece of electronic equipment had been invaded. Non—metallic materials were missing completely; thin metal sheets such as instrument cases were riddled with pinholes. "I can't understand what did it," Oscar protested, almost in tears.

Matt asked the Venerian in charge of the work. She did not understand him at first; he pointed out the pinholes, whereupon she took a lump of the jelled mud and mashed it flat. With a slender finger she carefully separated out what seemed to be a piece of white string, a couple inches long. "This is the source of thy troubles."

"Know what it is, Oz?"

"Some sort of worm. I don't recognize it. But I wouldn t expect to; the polar regions are nothing like this, thank goodness." "

"I suppose we might as well call off the working party.

"Let's don't jump the gun. There might be some way to salvage the mess. We've got to."

"Not a chance. The gyros alone are enough. You can't raise ship in a wingless job without gyros. It's impossible."

"Maybe we could clean them up and get them to working."

"Maybe you could—I can't. The mud got to the bearings, Oz."

Jensen agreed regretfully. The gyros, the finest precision equipment in a ship, were no better than their bearings. Even an instrument maker in a properly equipped shop would have thrown up his hands at gyros abused as these had been.

"We've at least got to salvage some electronic equipment and jury-rig some sort .of a sending set. We've got to get a. message through."

"You've seen it. What do you think?"

"Well—we'll pick out the stuff that seems in the best shape and take it back with us. They'll help us with the stuff."

"What sort of shape will it be in after an hour or so in the water? No, Oz, the thing to do is to lock up the door, once the last of the filth is out and come back and work here."

"Okay, we'll do that." Oscar called to Tex, who was still snooping around. He arrived swearing.

"What now, Tex?" Oscar asked wearily.

"I thought maybe we could at least take some civilized food back with us, but those confounded worms bored into the cans. Every ration in the ship is spoiled."

"Is that all?"

" 'Is that all? Is that all! the man says! What do you want? Flood, pestilence, and earthquakes?"

But it was not all—further inspection showed another thing which would have dismayed them had they not already been as low in spirit as they could get. The jeep's jet ran on liquid hydrogen and liquid oxygen. The fuel tanks, insulated and protected from direct radiation, could retain fuel for long periods, but the warm mud had reached them and heated them; the expanding gases had bled out through relief valves. The jeep was out of fuel.

Oscar looked this situation over stonily. "I wish the *Gary* had been chemically powered," he finally commented.

"What of it?" Matt answered. "We couldn't raise ship if we had all the juice this side of Jupiter."

The mother-of-many had to be shown before she was convinced that there was anything wrong with the ship. Even then, she seemed only half convinced and somehow vexed with the cadets for being unsatisfied with the gift of their ship back. Oscar spent much of the return journey trying to repair his political fences with her.

Oscar ate no dinner that night. Even Tex only picked at his food and did not touch his harmonica afterwards. Matt spent the evening silently sitting out a watch in Thurlow's room.

The mother-of-many sent for all three of them the next morning. After formal exchange of greetings she commenced, "Little mother, is it true that thy *Gary* is indeed dead, like the other *Gary*?"

"It is true, gracious mother."

"Is it true that without a *Gary* thou canst not find thy way back to thine own people?"

"It is true, wise mother of many; the jungle would destroy us."

She stopped and gestured to one of her court. The "daughter" trotted to her with a bundle half as big as the bearer. The city mother took it and invited, or commanded, the cadets to join her on the dais. She commenced unwrapping. The object inside seemed to have more bandages than a mummy. At long last she had it uncovered and held out to them. "Is this thine?"

It was a large book. On the cover, in large ornate letters, was:

LOG of the *Astarte*

Tex looked at it and said, "Great leaping balls of fire! It can't be."

Matt stared and whispered, "It must be. The lost first expedition. They didn't fail—they got here."

Oscar stared and said nothing at all until the city mother repeated her question impatiently. "Is this thine?"

"Huh? What? Oh, sure! Wise and gracious mother, this thing belonged to my 'mother's mother's mother.' We are her 'daughters'"

"Then it is thine."

Oscar took it from, her and gingerly opened the brittle pages. They stared at the original entry for "raise ship"—but most especially at the year entry in the date column—"1971."

"Holy Moses!" breathed Tex. "Look at that—just look at it. More than a hundred years ago."

They thumbed through it. There was page after page of one line entries of "free fall, position according to plan" which they skipped over rapidly, except for one: "Christmas day. Carols were sung after the mid-day meal."

It was the entries after grounding they were after. They were forced to skim them as the mother-of-many was beginning to show impatience: "—climate no worse than the most extreme terrestrial tropics in the rainy season, the dominant life form seems to be a large amphibian. This planet is definitely possible of colonization."

"—the amphibians have considerable intelligence and seem to talk with each other. They are friendly and an attempt is being made to bridge the semantic gap."

"—Hargraves has contracted an infection, apparently fungoid, which is unpleasantly reminiscent of leprosy. The surgeon is treating it experimentally."

"—after the funeral muster Hargraves' room was sterilized at 400°."

The handwriting changed shortly thereafter. The city mother was growing so obviously discontented that they glanced only at the last two entries: "—Johnson continues to fail, but the natives are very helpful—"

"—my left hand is now useless. I have made up my mind to decommission the ship and take my chances in the hands of the natives. I shall take this log with me and add to it, if possible."

The handwriting was firm and clear; it was their own eyes that blurred it.

The mother-of-many immediately ordered up the party used to ferry the humans in and out of the city. She was not disposed to stop to talk and, once the journey began, there was no opportunity to until they reached dry land.

"Look here, Oz," Tex started in, as soon as he had shaken off the water, "do you really think she's taking us to the *Astarte*?"

"Could be. Probably is."

"Do you think there is a chance that we will find the ship intact?" asked Matt.

"Not a chance. Not a chance in this world. On one point alone, she couldn't possibly have any fuel left in her tanks. You saw what happened to the jeep. What do you think a century has done to the Astarte?" He paused and looked thoughtful. "Anyhow, I'm not going to get my hopes up, not again. I couldn't stand it, three times. That's too many."

"I guess you're right," agreed Matt. "It won't do to get excited. She's probably a mound of rust under a covering of vines."

"Who said anything about not getting excited?" Oscar answered. "I'm so excited I can hardly talk. But don't think of the Astarte as a possible way to get back; think of her historically."

"Yow think of it that way," said Tex. "I'm a believer and a hoper. I want to get out of this dump."

"Oh, you'll get out! They'll come find us some day—and then they'll finish the mission we flubbed."

"Look," answered Tex, "couldn't we go off duty and not think about the mission just for the next quarter of a mile? These insects are something fierce—you think about Oscar and I'll think about Mother Jarman's favorite son. I wish I was back in the good old *Triplex*."

"You were the guy that was always beefing that the *Triplex* was a madhouse."

"So I was wrong. I can be big about it."

They came to one of the rare rises in the level of the ground, all of ten feet above water level. The natives started to whisper and lisp excitedly among themselves. Matt caught the Venerian word for "tabu." "Did you get that, Oz?" he said in Basic. "Tabu."

"Yes. I don't think she told them where she was taking, them."

The column stopped and spread out; the three cadets moved forward, pushing rank growth aside and stepped in a clearing.

In front of them, her rakish wings festooned in vines and her entire hull sheathed in some translucent substance, was the Patrol Rocket Ship *Astarte*.

XVII HOTCAKES FOR BREAKFAST

THE CITY MOTHER was standing near the door of the *Astarte,* underneath the starboard wing. Two of her people were working at the door, using bladders to squirt some liquid around the edges. The translucent layer over the hull melted away wherever the liquid touched it. They grasped a free edge of the skin stuff and began to peel it away. "Look at that," said Tex. "Do you see what they've done? The ship is *Venusized.*"

His use of the term was loose; an item that has been "planetized" is one that has been rendered stable against certain typical conditions of the planet concerned, as defined by tests of the Bureau of Standards—for example, an item listed in the colonial edition of the Sears & Montgomery catalog as "Venusized" is thereby warranted to resist the excessive humidity, the exotic fungi, and certain of the planet's pests. The Astarte was merely encased in a sheath.

"Looks like it," agreed Oscar, his voice carefully restrained. "Sort of a spray-gun job."

"Five gets you ten it never saw a spray gun. The Venerians did it" Tex slapped at an insect. "You know what this means, Oz?"

"I'm way ahead of you. Don't get your hopes up. And don't try to get mine up, either. A hundred years is a long time."

"Oz, you don't get any fun out of life."

The little workers were having difficulties. The top of the door was much higher than they could reach; they were now trying to form two-high pyramids, but, having no shoulders to speak of, they were hardly built for the job. Matt said to Oscar, "Couldn't we give them a hand with that?"

"I'll see." Oscar went forward and suggested that the cadets take over the job of squirting on the solvent. The mother person looked at him.

"Canst thou grow a new hand, if needed?"

Oscar admitted that he could not.

"Then do not tamper with that which thou dost not understand."

Using their own methods the natives soon had the door cleared. It was latched but not locked; the door refused to open for a moment, then gave suddenly. They scrambled up into the airlock.

"Wait a minute," Matt whispered. "Hadn't we better go easy? We don't know that the infection that got them is necessarily dead."

"Don't be silly," Tex whispered back. If your immunizations hadn't worked, you'd have been a sick chicken long ago."

"Tex is right, Matt. And .there's no need to whisper. Ghosts can't hear."

"How do you know?" objected Tex. "Are you a doctor of ghostology?"

"I don't believe in ghosts."

"I do. Once my Uncle Bodie stayed overnight—"

"Let's get on inside," Matt insisted.

The passageway beyond the inner door was dark, save for the light that filtered in through the lock. The air had a strange odor, not precisely foul but lifeless—old.

The control room beyond was dimly but adequately lighted; the light from outside filtered softly through the sheathing that still covered the quartz pilot's port. The room was very cramped. The cadets were used to roomy modern ships; the *Astarte's* wings gave her a false impression of great size. Inside she was smaller than the jeep.

Tex began humming something about "—stout—hearted men—," then broke off suddenly. "Look at the darned thing!" he said. "Just look at it. To think they actually made an interplanetary jump in it. Look at that control board. Why, she's as primitive as a rowboat. And yet they took the chance. Puts you in mind of Columbus and the *Santa Maria*"

"Or the Viking ships," suggested Matt.

"There were men in those days," agreed Oscar, not very originally but with great sincerity.

"You can say that louder," commented Tex. "There's no getting around it, fellows; we were born too late for the age of adventure. Why, they weren't even heading for a listed port; they just blasted off into the dark and trusted to luck that they could get back."

"They didn't get back," Oscar said softly.

"Let's talk about something else," Matt requested. "I'm covered with goose pimples as it is."

"Okay," Oscar concurred, "I'd better get back and see what her royal nibs is doing anyway." He left, to return almost at once, accompanied by the city mother. "She was just waiting to be invited," he called out ahead of them, in Basic, "and huffy at being forgotten. Help me butter her up."

The native official turned out to be helpful; except for the control room the other spaces were dark, even to her. She stepped to the door, made known her wants, and returned with one of the glowing orange spheres they used for lighting. It was a poor excuse for a flashlight, but about as effective as a candle.

Everywhere the ship was orderly and clean, save for a faint film of dust. "Say what you like, Oscar," commented Matt, "I'm beginning to get my hopes up. I don't believe there is anything wrong with her. It looks as if the crew had just gone out for a walk. We may be able to put her in commission."

"I'm ready to throw in with Oscar," Tex objected. "I've lost my enthusiasm—I'd rather go over Niagara Falls in a barrel."

"*They* flew her," Matt pointed out.

"Sure they did—and my hat's off to them. But it takes heroes to fly a box as primitive as this and I'm not the hero type."

The mother-of-many lost interest presently and went outside. Tex borrowed the orange sphere and continued to look around while Matt and Oscar gave the control room a careful going over. Tex found a locker containing small, sealed packages marked "Personal effects of Roland Hargraves," "Personal effects of Rupert H. Schreiber," and other names. He put them back carefully.

Oscar shouted for him presently. "I think we had better get going. Her nibs hinted that when she left."

"Come see what I've found. Food!"

Matt and Oscar came to the door of the galley storeroom. "Do you suppose any of it is any good?" asked Matt.

"Why not? It's all canned. Jigger for me and we'll find out." Tex operated with a can opener. "Phewey!" he said presently. "Anybody want to sample some embalmed corned beef hash? Throw it outside, Matt, before it stinks up the place."

"It already has."

"But look at this!" Tex held up a can marked: *Old Plantation Hotcake Flour*. "This won't be spoiled—hotcakes for breakfast, troops. I can hardly wait."

"What good are flapjacks without syrup?"

"All the comforts of home—half a dozen cans of it." He produced one marked: *Genuine Vermont Maple Syrup, unadulterated.*

Tex wanted to take some back with them. Oscar vetoed it, on both practical and diplomatic grounds. Tex suggested that they remain in the ship, not go back. "Presently, Tex, presently," Oscar agreed. "You forgot about Lieutenant Thurlow."

"So I did. Close my big mouth."

"Speaking of Mr. Thurlow," put in Matt, "you've given me an idea. He won't touch much of that native hash, even when he seems to come pretty far out of it. How about that sugar syrup? I could feed it to him from a drinking bladder."

"It can't hurt him and it might help," decided Oscar. "We'll take half the syrup back with us." Tex picked the cans up, Matt tucked a can opener in his pouch, and they went outside.

Matt was pleased to find Th'wing on watch in Thurlow's room when they got back; she would be easier to deal with than the other nurses. He explained to her what he had in mind, in polite circumlocutions. She accepted a can Matt had opened and tasted, beforehand, and turned her back apologetically while she tasted it.

She spat it out. *"Art thou sure that this will not harm thy ailing mother?"*

Matt understood her hesitation, since Venerian diet runs to starch and protein, not to sugar. —He assured her that Thurlow would be helped thereby. They transferred the contents to a bladder.

The cadets talked over what they should do about the Astarte after dinner that night. Matt insisted that she could be made to fly; Tex remained of the opinion that they would be silly to attempt it. "She might get high enough to crash—no higher."

Oscar listened, then said, "Matt, did you check the tanks?" Matt admitted that he had. "Then you know there isn't any fuel."

"Then why are you arguing?" Tex interrupted. "The matter is settled."

"No, it's not, announced Oscar. "We'll try to fly her."

"Huh!"

"She can't fly and we'll try anyhow," Oscar went on.

"But why?"

"Okay—here's why. If we just sit here long enough, the Patrol will come along and find us, won't they?"

"Probably," agreed Matt.

"Absolute certainty. That's the way the Patrol works. They won't let us down. Look at the search for the *Pathfinder* —four ships, month after month. If their mishap hadn't killed them, the Patrol would have brought them back alive. We're still alive and we are somewhere near our original destination. They'll find us—the delay simply means they aren't sure we are lost yet; we haven't been out of touch so very long. Anyhow, we knew there wasn't a ship ready at either North Pole or South Pole to attempt an equatorial search, or we wouldn't have gotten the mission in the first place, so it may take a while before they can come for us. But they'll come."

"Then why not wait?" insisted Tex.

"Two reasons. The first is the boss—we've got to get him to a proper hospital before he just fades away and dies."

"And kill him in the take off."

"Maybe. That wouldn't faze him, is my guess. The second reason is —*we* are the Patrol."

"Huh? Come again."

"It's agreed that the Patrol wouldn't give up looking for us. Okay, if that's the sort of an outfit the Patrol is and we are part of the Patrol, then when they find us, they'll find us doing our level best to pull out unassisted, not sitting on our fat fannies waiting for a lift."

"I get you," said Tex. "I was afraid your busy little brain would figure that out, given time. Very well—mark me down as a reluctant hero. I think I'll turn in; this hero business is going to be sweaty and wearing."

It was indeed sweaty. The Venerians continued to be helpful but the actual work of attempting to outfit a ship for space had to be done entirely by the humans. With the permission of the city mother Oscar, transferred their headquarters to the Astarte. Thurlow was not moved, but arrangements were made for one cadet to be ferried each day back to the city, to report on Thurlow and to bring food back. There were few supplies left in the Astarte which were still edible.

However the pancake mix turned out to be usable. Tex had gadgeted together an oil burner of sorts—they had no electrical power as yet—and had charged the contraption with a fish oil obtained from the natives. Over this he baked his hotcakes. They were noticeably inferior to any that any of the three had ever tasted, for the flour had aged and changed flavor. They showed little tendency to rise.

But they were hotcakes and they were drowned in maple syrup. It was a ceremony, at the beginning of each working day, held on the sly behind a locked door, lest one of their puritanical friends be offended.

They embarked on a systematic campaign to vandalize each of the other ships for anything at all that might prove useful in outfitting the Astarte. In this, too, they were dependent on the natives; Matt or Tex could pick out what was wanted, but it took the little folk to move anything several miles through swamp and water and unmarked jungle.

They talked of the flight as if they really expected to make it. "You give me radar," Matt told Oscar, "any sort of approach radar, so that I've got a chance to land, and I'll set her down somewhere at South Pole. You can forget about the astrogational junk; it'll be dead reckoning."

They had settled on New Auckland, South Pole, as their nominal destination. North Pole would have been equally reasonable, but Oscar was a southern colonial, which decided it.

Oscar had promised the radar, not knowing quite how he could manage it. The *Gary* was the only hope; her communications room had been wrecked but Oscar had hopes of salvaging her belly radar. He set about doing it, while swearing at the impossibility of doing delicate work with one arm in a sling.

Little from the jeep was worth salvaging and none of it was entirely intact. Oscar had tried at first to use the radar equipment of the Astarte, but had given up—a century of difference in technology baffled him. Not only were the electronic circuits of the Astarte vastly more complicated and equally less efficient than the gear he had been brought up. with but the nomenclature was different—the markings, for example, on a simple resistor were Greek to him.

As for radio circuits the only sending installation actually fit to operate was a suit walky-talky from the *Gary*.

Nevertheless there came a morning when they had done what they could do. Tex was dealing out hotcakes. "It looks to me," he said, "as if we were ready to go, if we had some 'go' juice."

"How do you figure that," asked Matt. "The control board isn't even hooked to the jet."

"What of it? I'm going to have to throttle by hand anyhow. I'm going to take that big piece of tubing we pulled out of the *Gary* and string it from you back to me, at the jet throttle. You can shout down it and if I like it I'll do it."

"And if you don't like it?"

"Then I'll do something else. Easy on that syrup, Oz; it's the very last."

Oscar stopped himself, syrup can in midair. "Oh, I'm sorry, Tex. Here—let me slop some from my plate onto yours."

"Don't bother. It was just a reflex remark. To tell the truth, I'm sick of hotcakes. We've had them every day now for more than two weeks, with nothing to break the monotony but hash a la native."

"I'm sick of them, too, but it didn't seem polite to say so, with you doing the cooking." Oscar pushed back his plate. "I don't mind the syrup running out"

"But it hasn't—" Matt stopped.

"Something bite you, Matt?"

"No, I—nothing." He continued to look thoughtful.

"Close your mouth, then. Say, Oz, if we had some 'go' juice for the *Tart*, what would you pick?"

"Monatomic hydrogen."

"Why pick the one thing she can't burn? I'd settle for alcohol and oxygen."

"As long as you haven't got it, why not wish for the best?"

"Because we agreed to play this game for keeps. Now we've got to go through the motions of trying to make some fuel, from now till they find us. That's why I say alcohol and oxygen. I'll whomp up some sort of a still and start cooking alky while you and Matt figure out how to produce liquid oxygen with just your bare hands and a ship's equipment."

"How long do you figure it will take you to distill several tons of alcohol with what you can rig up?"

"That's the beauty of it. I'll still be working away at it, like a good little boy, busy as a moonshiner, when they come to rescue us. Say, did I ever tell you about Uncle Bodie and the moonshiners? It seems —"

"Look here," interrupted Matt, "how would you go about cooking up some maple syrup—here?"

"Huh? Why fret about it? We're sick of hotcakes."

"So am I, but I want to know how you can make maple syrup right here. Or, rather, how the natives can do it?"

"Are you nuts, or is this a riddle?"

"Neither one. I just remembered something I had overlooked. You said there wasn't any more maple syrup, and I was about to say that there was still plenty in Thurlow's room." Two days before, it had been Mart's turn to go into the city. As usual he had visited Thurlow's sickroom. His friend Th'wing had been on watch and had left him alone with the lieutenant for twenty minutes or so.

During the interval the patient had roused and Matt had wished to offer him a drink; there were several drinking bladders at hand.

The first one Matt picked up turned out to be charged with maple syrup, and so did the next and the next—the entire row, in fact. Then he found the one he wanted, lying on the couch. "I didn't think anything about it at the time— I was busy with the lieutenant. But this is what bothers me: He's been taking quite a lot of the syrup; you might say he's been living on nothing else. I opened the first can when we first took it to him, and I opened both the other cans myself, as needed—Th'wing couldn't cope with the can opener. So I know that the syrup was almost gone.

"Where did the rest of the syrup come from?"

"Why, I suppose the natives made it," answered Oscar. "It wouldn't be too hard to get sugar from some of the plants around here. There's a sort of grass somewhat like sugar cane, up near the Poles; they could find something of the sort."

"But, Oz, this was *maple* syrup!"

"Huh? It couldn't be. Your taster has gone haywire."

"It was maple, I tell you."

"Well, what if it was—mind you, I don't concede that you can get the true maple flavor this side of Vermont, but what difference does it make?"

"I think we've been overlooking a bet. You were talking about distilling alcohol; I'll bet the natives can supply alcohol in any quantities."

"Oh." Oscar thought about it. "You're probably right. They are clever about things like that—that gunk they use to jell mud and those solvents they cleaned the *Tart* with. Kitchen chemists."

"Maybe they aren't kitchen chemists. Maybe they are the real thing."

"Huh?" said Tex. "What do you mean, Matt?"

"Just what I said. We want 'go' juice for the *Tart*—maybe if we just had sense enough to ask the mother-of-many for it, we'd get it."

Oscar shook his head. "I wish you were right, Matt. Nobody has more respect for the Little People than I have, but there isn't a rocket fuel we can use that doesn't involve one or more liquefied gases. We might even make them understand what we needed but they wouldn't have the facilities for it."

"Why are you so sure?"

"Well, shucks, Matt, liquid oxygen—even liquid air—calls for high pressures and plenty of power, and high-pressure containers for the intermediate stages. The Little People make little use of power, they hardly use metal."

"They don't use power, eh? How about those orange lights?"

"Well, yes, but that can't involve much power."

"Can you make one? Do you know how they work?"

"No, but—"

"What I'm trying to get at is that there may be more ways of doing engineering than the big, muscley, noisy ways we've worked out. You've said yourself that we don't really know the natives, not even around the poles. Let's'at least ask!"

"I think he's got something there, Oz," said Tex. "Let's ask."

Oscar was looking very thoughtful. "I've realized for some time that our friends here were more civilized than the ones around the colonies, but I couldn't quite put my finger on it."

"What is civilization?"

"Never mind the philosophy—let's get going." Oscar unlocked the ship's outer door and spoke to a figure, waiting in what was to her bright sunlight and busy looking at the pictures in a 1971 *Saturday Evening Post*. "Hey, girlie! *Wouldst thou graciously conduct us to the home of thy mother?"*

It was maple syrup. Both Tex and Oscar agreed. Th'wing explained quite readily that, when the supply ran low, they had made more, using the original terrestrial stuff as a sample.

Oscar went to see the city mother, taking with him a bottle of grain alcohol salvaged from the medical supplies of the *Gary*. Matt and Tex had to sweat it out, for it had been agreed that Oscar did best with her nibs when not accompanied. He returned after more than two hours, looking stunned.

"What gives, Oz? What did you find out?" Matt demanded.

"It's bad news," said Tex. "I can tell from your face."

"No, it's not bad news."

"Then spill it, man, spill it—you mean they can do it?"

Oscar swore softly in Venerian. "They can do anything!"

"Back off and try again," advised Tex. "They can't play a harmonica. I know; I let one try. Now tell us."

"I started in by showing her the ethyl alcohol and tried to explain that we still had a problem and asked her if her people could make the stuff. She seemed to think it was a silly question—just sniffed it and said they could. Then I positively strained myself trying to act out liquid oxygen, first telling her that there were two different things in air, one inert and one active. The —best I could do was to use their words for 'living' and 'dead.' I told her I wanted the living part to be like water. She cut me off and sent for one of her people. They talked back and forth for several minutes and I swear I could understand only every second or third word and could not even get the gist of it. It was a part of their language totally new to me. Then the other old girl leaves the room.

"We waited. She asked me if we would be leaving soon if we got what we wanted. I said, yes if— Then she asked me to do her the favor of taking Burke along; she was apologetic about it but firm. I said we would."

"I'm glad of that," said Matt. "I despise Stinky's insides, but it sticks in my craw to leave him to die here. He ought to have a trial."

"Keep quiet, Matt," said Tex. "Who cares about Stinky? Go on, Oscar."

"After quite a wait, the other old girl came back, with a bladder—just an ordinary bladder by the appearance, but darker than a drinking bladder. Her nibs hands it to me and asks me if this is what I wanted. I said sorry but I did not want water. She squeezed a few drops out on my hand." Oscar held out his hand. "See that? It burned me."

"It actually was liquid oxygen?"

"That or liquid air. I didn't have any way to test, think it was oxygen. But get this—the bladder wasn't even cold. And it didn't fume until she squeezed out the drop The other gal was carrying it around as casually as you carry a hot-water bottle."

Oscar stared off into space a moment. "It beats me," he said. "The only thing I can think of is catalyst chemistry—they must have catalyst chemistry down to the point where they can do things without fuss that we do with heat and pressure."

"Why try to figure it out?" asked Tex. "You'll probably get the wrong answer. Just let it go that they've forgotten more about chemistry than we'll ever learn. And we get the 'go' juice."

For two days a steady procession of little folk had formed a double line from the water's edge to the Astarte, bearing full bladders toward the ship and returning with empty ones. Thurlow was already abroad, still attended by his patient little nurses. Burke was brought to the ship under escort and turned loose. The cadets let him alone, which seemed to disconcert him. He looked the ship over—it was the first he had heard of it—and finally sought out Jensen.

"If you think I'm going to ride in that flying coffin you're greatly mistaken."

"Suit yourself."

"Well, what are you going to do about it?"

"Nothing. You can stay in the jungle, or try to persuade the city mother to take you back."

Burke considered it. "I think I'll stay with the frogs. If you get through, you can tell them where I am and have them come get me."

"I'll tell them where you are all right and all the rest of it, too."

"You needn't think you can scare me." Burke went away.

He returned shortly. "I've changed my mind. I'm coming with you."

"You mean they wouldn't have you."

"Well—yes."

"Very well," answered Cadet Jensen, "the local authorities having declined jurisdiction, I arrest you under the colonial code titled 'Relations with Aborigines,' charges and specifications to be made known to you at your arraignment and not necessarily limited to the code cited. You are warned that anything you say may be used in evidence against you."

"You can't do this!"

"Mattl Tex! Take him in and strap him down."

"With pleasure!" They strapped him to an acceleration rest mounted in the galley, where, they had agreed, he would be the least nuisance. Done, they reported it to Jensen,"

"See here, Oz," Matt added, "do you think you can make any charges stick against him?"

"I rather doubt it, unless they allow our hearsay under a "best evidence' rule. Of course he ought to be strung up higher than the Milky Way, but the best I expect is to get his license revoked and his passport lifted. The Patrol will believe our story and that's enough for those items."

Less than an hour later Thurlow's nurses left the ship and the cadets said goodby to the mother-of-many, a flowery, long-winded business in which Oscar let himself be trapped into promising to return some day. But at last he closed the outer door and Tex clamped it. "Are you sure they understand how to keep clear of our blast?" asked Matt.

"I paced off the safety line with her myself and heard her give the orders. Quit worrying and get to your station."

"Aye aye, sir."

Matt and Oscar went forward, Oscar with the ancient log tucked in his sling. Tex took station at the hand throttles. Oscar sat down in the copilot's chair and opened the log to the page of the last entry. He took a stub of pencil that he had found in the galley, wet it in his mouth, entered the date, and wrote in a large hand:

He paused and said to Matt, "I still think we ought to shift the command."

"Stow it," said Matt. "If Commodore Arkwright can command the

Randolph with his lights gone, you can command the Tart with a busted wing."

"Okay, if that's the way you want it." He continued to write,

O. Jensen, acting captain
M. Dodson, pilot and astrogator
W. Jarman, chief engineer
Lt. R. Thiwlow, passenger (sick list)
G. Burke, passenger, civilian (prisoner)

"Muster the crew, Mister."

"Aye aye, sir. Call your name, too, Oz?"

"Sure, its a short list as it is."

"How about Stinky?"

"Of course not! I've got him billed as cargo."

Matt took a deep breath and, speaking close to the speaking tube so that Tex could hear, called out: "Lieutenant Thurlow!"

Oscar replied, "I answer for him." He glanced back at the lieutenant, strapped in the inspector's rest where they could keep an eye on him. Thurlow opened his eyes with the puzzled, questioning look he always showed on the rare occasions when he seemed to be aware of anything.

"Jensen!"

"Here."

"Jarman!"

"Here!" Tex called back, his voice muffled and hollow through the tube.

Matt said, "Dodson present," then wet his lips and hesitated.

"Dahlquist!"

Oscar was about to reply when Thurlow's voice came from behind them: "I answer for him."

"Martin!" Matt went on mechanically, too startled to stop.

"I answer for him," said Oscar, his eyes on Thurlow.

"Rivera!"

"I answer for him," came Tex's voice.

"Wheeler!"

"Wheeler's here too," Tex answered again.

"They're all here, Matt. We're ready."

"Complement complete, Captain;"

"Very well, sir."

"How is he, Oz?"

"He's closed his eyes again. Raise ship when ready."

"Aye aye, sir. According to plan—*raise ship*!" He grasped the wing controls and waited. The *Astarte* reared on her belly jets, drove up and forward and into the mists of Venus.

XVIII IN THE COMMANDANT'S OFFICE

PASSED CADETS Dodson and Jarman, freshly detached from the P.R.S. *Pegasus*, at Terra Station out from New Auckland, climbed out of the *Randolph*'s scooter and into the *Randolph* herself. Cadet Jensen was not with them; Oscar, on dispatch authorization from the Academy, had been granted six months for leave at home, with the understanding that he would be ordered to temporary duty in the course of it, to accompany the first consul to the equatorial regions to his station and assist in establishing liaison. Matt and Tex showed their orders to the officer of the watch and left with him the inevitable copies. He gave them their rooming assignments—in Hog Alley, in a room with a different number but otherwise like the one they had had. "Seems like we never left it," remarked Tex, as he unpacked his jump bag.

"Except it seems funny not to have Oz and Pete around."

"Yeah, I keep expecting Oz to stick his head in and ask if we'd like to team up with him and Pete."

The room phone sounded, Tex answered.

"Cadet Jarman?"

"Speaking."

"The Commandant's compliments—you are to report to his office at once."

"Aye aye, sir." He switched off and continued to Matt. "They don't waste much time, do they?" He looked thoughtful and added, "You know what I think?"

"Maybe I can guess."

"Well, this quick service looks promising. And we did do quite a job, Matt. There's no getting around to it."

"I guess so. Bringing in the *Astarte*, a hundred and eight years overdue, was something—even if we had dragged it in on wheels it still would be something. I won't start calling you 'Lieutenant' just yet, but—he might commission us."

"Keep your fingers crossed. How do I look?"

"You aren't pretty, but you look nineteen times better than you did when we grounded at South Pole. Better get moving."

"Right." Tex left and Matt waited nervously. Presently the call he expected came in, telling him, too, to report to the Commandant.

He found that Tex was still inside. Rather than fidget under the eyes of others in the Commandant's outer office, he chose to wait in the passageway. After a while, Tex came out. Matt went up to him eagerly. "How about it?"

Tex gave him an odd look. "Just go on in."

"You can't talk?"

"We'll talk later. Go on in."

"Cadet Dodson!" someone called from the outer office.

"On deck," he called back. A couple of moments later he was in the presence of the Commandant.

"Cadet Dodson, reporting as ordered, sir."

The Commandant turned his face toward him and Matt felt again the eerie feeling that Commodore Arkwright could see him better than could an ordinary, sighted man. "Oh, yes, Mr. Dodson. At ease." The elder Patrolman reached unerringly for a clip on his desk. "I've been looking over your record. You've made up your deficiency in astrogation and supplemented it with a limited amount of practical work. Captain Yancey seems to approve of you, on the whole, but notes that you are sometimes absentminded, with a tendency to become preoccupied with one duty to the expense of others. I don't find that very serious—in a young man."

"Thank you, sir."

"It was not a compliment, just an observation. Now tell me, what would you do if—" Fortyfive minutes later Matt caught his breath sufficiently to realize that he had been subjected to a very searching examination. He had come into the Commandant's office feeling nine feet tall, four feet wide, and completely covered with hair. The feeling had passed.

The Commandant paused for a moment as if thinking, then went on, "When will you be ready to be commissioned, Mr. Dodson?"

Matt strangled a bit, then managed to answer, "I don't know, sir. Three or four years, perhaps."

"I think a year should suffice, if you apply yourself. I'm sending you down to Hayworth Hall. You can catch the shuttle from the Station this afternoon.

"The usual delay for leave, of course," he added.

"That's fine, sir!"

"Enjoy yourself. I have an item here for you—" The blind man hesitated a split second, then reached for another clip, "—a copy of a letter from Lieutenant Thurlow's mother. Another copy has been placed in your record."

"Uh, how is the lieutenant, sir?"

"Completely recovered, they tell me. One more thing before you go —"

"Yes, sir."

"Let me have some notes on what troubles you ran into in recommissioning the *Astarte*, emphasizing what you had to learn as you went along—especially any mistakes you made."

"Uh, aye aye, sir."

"Your notes will be considered in revising the manual on obsolete equipment. No hurry about it—do it when you come back from leave."

Matt left the Commandant's presence feeling only a fraction the size he had when he had gone in, yet he felt curiously elated rather than depressed. He hurried to the room he shared with Tex and found him waiting. Tex looked him over. "I see you've had it."

"Check."

"Hayworth Hall?"

"That's it." Matt looked puzzled. "I don't understand it. I went in there honestly convinced that I was going to be commissioned. But I feel wonderful. Why is that?"

"Don't look at me. I feel the same way, and yet I can't remember that he had a kind word to say. The whole business on Venus he just tossed off."

Matt said, "That's it!"

"What's what?"

" 'He just tossed it off.' That's why we feel good. He didn't make anything of it because he didn't expect anything less—*because we are Patrolmen*!"

"Huh? Yes, that's it—that's exactly it! Like he was thirty—second degree and we were first degree, but members of the same lodge." Tex started to whistle.

"I feel better," said Matt. "I felt good before, but now I feel better, now that I understand why. Say—one other thing."

"What?"

"You didn't tell him about the fight I had with Burke in New Auckland, did you?"

"Of course not." Tex was indignant.

"That's funny. I didn't tell anybody but you, and I could have sworn that no one saw it. I planned it that way."

"He knew about it?"

"He sure did."

"Was he sore?"

"No. He said he realized that Burke was out on bond and that I was on leave and he had no wish to invade my private life—but he wanted to give me a word of advice."

"Yeah? What was it?"

"Never lead with my left."

Tex looked amazed, then thoughtful. "I think he was telling you not to lead with your chin, too."

"Probably." Matt started repacking his jump bag. "When's the next scooter for the Station?"

"About thirty minutes. Say, Matt, you've got leave of course?"

"Check."

"How about picking up my invitation to spend a few weeks on the Jarman spread? I want you to meet my folks —and Uncle Bodie."

"Uncle Bodie, by all means. But Tex?"

"Yeah?"

"Hotcakes for breakfast?"

"No hotcakes."

"It's a deal"

"Shake."

Red Planet

For Tish

1
Willis

The thin air of Mars was chill but not really cold. It was not yet winter in southern latitudes and the daytime temperature was usually above freezing.

The queer creature standing outside the door of a domeshaped building was generally manlike in appearance, but no human being ever had a head like that. A thing like a coxcomb jutted out above the skull, the eye lenses were wide and staring, and the front of the face stuck out in a snout. The unearthly appearance was increased by a pattern of black and yellow tiger stripes covering the entire head.

The creature was armed with a pistol-type hand weapon slung at its belt and was carrying, crooked in its right arm, a ball, larger than a basketball, smaller than a medicine ball. It moved the ball to its left arm, opened the outer door of the building and stepped inside.

Inside was a very small anteroom and an inner door. As soon as the outer door was closed the air pressure in the anteroom began to rise, accompanied by a soft sighing sound. A loudspeaker over the inner door shouted in a booming bass, ‘Well? Who is it? Speak up! Speak up!’

The visitor placed the ball carefully on the floor, then with both hands grasped its ugly face and pushed and lifted it to the top of its head. Underneath was disclosed the face of an Earthhuman boy. ‘It's Jim Marlowe, Doc,’ he answered.

'Well, come in. Come in! Don't stand out there chewing your nails.’

'Coming.’ When the air pressure in the anteroom had equalized with the pressure in the rest of the house the inner door opened automatically. Jim said, ‘Come along, Willis,’ and went on in.

The ball developed three spaced bumps on its lower side and followed after him, in a gait which combined spinning, walking, and rolling. More correctly, it careened, like a barrel being manhandled along a dock. They went down a passage and entered a large room that occupied half the floorspace of the circular house plan. Doctor MacRae looked up but did not get up. ‘Howdy, Jim. Skin yourself. Coffee on the bench. Howdy, Willis,’ he added and turned back to his work. He was dressing the hand of a boy about Jim's age.

'Thanks, Doc. Oh—hello, Francis. What are you doing here?’

'Hi, Jim. I killed a waterseeker, then I cut my thumb on one of its spines.’

'Quit squirming!’ commanded the doctor.

'That stuff stings,’ protested Francis.

'I meant it to.’

'How in the world did you do that?’ persisted Jim. ‘You ought to know better than to touch one of those things. Just burn ‘em down and burn ‘em up.’ He zipped open the front of his outdoor costume, peeled it off his arms and legs and hung it on a rack near the door. The rack held Francis's suit, the headpiece of which was painted in bright colours like an Indian brave's war paint, and the doctor's suit, the mask of which was plain. Jim was now stylishly and appropriately dressed for indoors on Mars—in bright red shorts.

'I did burn it,’ explained Francis, ‘but it moved when I touched it. I wanted to get the tail to make a necklace.’

'Then you didn't burn it right. Probably left it full of live eggs. Who're you making a necklace for?’

'None of your business. And I did so burn the egg sac. What do you take me for? A tourist?’

'Sometimes I wonder. You know those things don't die until sundown.’

'Don't talk nonsense, Jim,’ the doctor advised. ‘Now, Frank, I'm going to give you an antitoxin shot. ‘Twon't do you any good but it'll make your mother happy. Long about tomorrow your thumb will swell up like a poisoned pup; bring it back and I'll lance it.’

'Am I going to lose my thumb?’ the boy asked. ‘No. But you'll do your scratching with your left hand for a few days. Now, Jim, what brings you here? Tummy ache?’

'No, Doc. It's Willis.’

'Willis, eh? He looks pert enough to me.’ The doctor stared down at the creature. Willis was at his feet, having come up to watch the dressing of Frank's thumb. To do so he had protruded three eye stalks from the top of his spherical mass. The stalks stuck up like thumbs, in an equal-sided triangle, and from each popped a disturbingly human eye. The little fellow turned around slowly on his tripod of bumps, or pseudopeds, and gave each of his eyes a chance to examine the doctor.

'Get me up a cup of Java, Jim,' commanded the doctor, then leaned over and made a cradle of his hands. 'Here, Willis, upsidaisy!' Willis gave a little bounce and landed in the doctor's hands, withdrawing all protuberances as he did so. The doctor lifted him to the examining table; Willis promptly stuck out legs and eyes again. They stared at each other.

The doctor saw a ball covered with thick, close-cropped fur, like sheared sheepskin, and featureless at the moment save for supports and eye stalks. The Mars creature saw an elderly male Earthman almost completely covered with wiry grey-and-white hair. The middle portion of this strange, unMartian creature was concealed in snow-white shorts and shirt. Willis enjoyed looking at him.

'How do you feel, Willis?' inquired the doctor. 'Feel good? Feel bad?'

A dimple showed at the very crown of the ball between the stalks, dilated to an opening. 'Willis fine!' he said. His voice was remarkably like Jim's.

'Fine, eh?' Without looking around the doctor added, 'Jim! Wash those cups again. And this time, sterilize them. Want everybody around here to come down with the pip?'

'Okay, Doc,' Jim acknowledged, and added to Francis, 'You want some coffee, too?'

'Sure. Weak, with plenty of cow.'

'Don't be fussy.' Jim dipped into the laboratory sink and managed to snag another cup. The sink was filled with dirty dishes. Nearby a large flask of coffee simmered over a Bunsen burner. Jim washed three cups carefully, put them through the sterilizer, then filled them.

Doctor MacRae accepted a cup and said, 'Jim, this citizen says he's okay. What's the trouble?'

'I know he says he's all right, Doc, but he's not. Can't you examine him and find out?'

'Examine him? How, boy? I can't even take his temperature because I don't know what his temperature ought to be. I know as much about his body chemistry as a pig knows about pattycake. Want me to cut him open and see what makes him tick?'

Willis promptly withdrew all projections and became as featureless as a billiard ball. 'Now you've scared him,' Jim said accusingly.

'Sorry.' The doctor reached out and commenced scratching and tickling the furry ball. 'Good Willis, nice Willis. Nobody's going to hurt Willis. Come on, boy, come out of your hole.'

Willis barely dilated the sphincter over his speaking diaphragm. 'Not hurt Willis?' he said anxiously in Jim's voice.

'Not hurt Willis. Promise.'

'Not cut Willis?’

'Not cut Willis. Not a bit.’

The eyes poked out slowly. Somehow he managed an expression of watchful caution, though he had nothing resembling a face. ‘That's better,’ said the doctor. ‘Let's get to the point, Jim. What makes you think there's something wrong with this fellow, when he and I can't see it?’

'Well, Doc, it's the way he behaves. He's all right indoors, but outdoors—He used to follow me everywhere, bouncing around the landscape, poking his nose into everything.’

'He hasn't got a nose,’ Francis commented.

'Go to the head of the class. But now, when I take him out, he just goes into a ball and I can't get a thing out of him. If he's not sick, why does he act that way?’

'I begin to get a glimmering,’ Doctor MacRae answered. ‘How long have you been teamed up with this balloon?’

Jim thought back over the twenty-four months of the Martian year. ‘Since along toward the end of Zeus, nearly November.’

'And now here it is the last of March, almost Ceres, and the summer gone. That suggest anything to your mind?’

'Uh, no.’

'You expect him to go hopping around through the snow? We migrate when it gets cold; he lives here.’

Jim's mouth dropped open. ‘You mean he's trying to hibernate?’

'What else? Willis's ancestors have had a good many millions of years to get used to the seasons around here; you can't expect him to ignore them.’

Jim looked worried. ‘I had planned to take him with me to Syrtis Minor.’

'Syrtis Minor? Oh, yes, you go away to school this year, don't you? You, too, Frank.’

'You bet!’

'I can't get used to the way you kids grow up. I came to Mars so that the years would be twice as long, but it doesn't seem to make any difference—they spin faster.’

'Say, Doc, how old are you?’ inquired Francis.

'Never mind. Which one of you is going to study medicine and come back to help me with my practice?’

Neither one answered. ‘Speak up, speak up!’ urged the doctor. ‘What are you going to study?’

Jim said, ‘Well, I don't know. I'm interested in areography*, but I like biology, too. Maybe I'll be a planetary economist, like my old man.’

'That's a big subject. Ought to keep you busy a long time. You,

Frank?’

Francis looked slightly embarrassed. ‘Well, uh—shucks, I still think I'd like to be a rocket pilot.’

'I thought you had outgrown that.’

'Why not?’ Francis answered. ‘I might make it.’

'On your own head be it. Speaking of such things, you younkers go to school before the colony migrates, don't you?’ Since Earthhumans do not hibernate, it was necessary that the colony migrate twice each Martian year. The southern summer was spent at Charax, only thirty degrees from the southern pole; the colony was now about to move to Copais in Utopia, almost as far to the north, there to remain half a Martian year, or almost a full Earth year.

There were year-around establishments near the equator—New Shanghai, Marsport, Syrtis Minor, others—but they were not truly colonies, being manned mainly by employees of the Mars Company. By contract and by charter the Company was required to provide advanced terrestrial education on Mars for colonists; it suited the Company to provide it only at Syrtis Minor.

'We go next Wednesday,’ said Jim, ‘on the mail scooter.’

'So soon?’

'Yes, and that's what worries me about Willis. What ought I to do, Doc?’

Willis heard his name and looked inquiringly at Jim. He repeated, in exact imitation of Jim, ‘What ought I to do, Doc?’

'Shut up, Willis —’

'Shut up, Willis.’ Willis imitated the doctor just as perfectly.

'Probably the kindest thing would be to take him out, find him a hole, and stuff him in it. You can renew your acquaintance when he's through hibernating.’

'But, Doc, that means I'll lose him! He'll be out long before I'm home from school. Why, he'll probably wake up even before the colony comes back.’

'Probably.’ MacRae thought about it. ‘It won't hurt him to be on his own again. It's not a natural life he leads with you, Jim. He's an individual, you know; he's not property.’

'Of course he's not! He's my friend.’

'I can't see,’ put in Francis, ‘why Jim sets such store by him. Sure, he talks a lot, but most of it is just parrot stuff. He's a moron, if you ask me.’

'Nobody asked you. Willis is fond of me, aren't you, Willis? Here, come to papa.’ Jim spread his arms; the little Martian creature hopped into them and settled in his lap, a warm, furry mass, faintly pulsating. Jim stroked him.

'Why don't you ask one of the Martians?’ suggested MacRae.

'I tried to, but I couldn't find one that was in a mood to pay any attention.'

'You mean you weren't willing to wait long enough. A Martian will notice you if you're patient. Well, why don't you ask *him*? He can speak for himself.'

'What should I say?'

'I'll try it. Willis!' Willis turned two eyes on the doctor; MacRae went on, 'Want to go outdoors and find a place to sleep?'

'Willis not sleepy.'

'Get sleepy outdoors. Nice and cold, find hole in ground. Curl up and take good long sleep. How about it?'

'No!' The doctor had to look sharply to see that it was not Jim who had answered; when Willis spoke for himself he always used Jim's voice. Willis's sound diaphragm had no special quality of its own, any more than has the diaphragm of a radio loudspeaker. It was much like a loudspeaker's diaphragm, save that it was part of a living animal.

'That seems definite, but we'll try it from another angle. Willis, do you want to stay with Jim?'

'Willis stay with Jim.' Willis added meditatively, 'Warm!'

'There's the key to your charm, Jim,' the doctor said dryly. 'He likes your blood temperature. But *ipse dixit*—keep him with you. I don't think it will hurt him. He may live fifty years instead of a hundred, but he'll have twice as much fun.'

'Do they normally live to be a hundred?' asked Jim.

'Who knows? We haven't been around this planet long enough to know such things. Now come on, get out. I've got work to do.' The doctor eyed his bed thoughtfully. It had not been made in a week; he decided to let it wait until wash day.

'What does *ipse dixit* mean, Doc?' asked Francis.

'It means, He sure said a mouthful.'

'Doc,' suggested Jim, 'why don't you have dinner with us tonight. I'll call mother. You, too, Frank.'

'Not me,' Frank said. 'I'd better not. My mother says I eat too many meals with you folks.'

'My mother, if she were here, would undoubtedly say the same thing,' admitted the doctor. 'Call your mother, Jim.'

Jim went to the phone, turned out two colonial housewives gossiping about babies, and finally reached his home on an alternate frequency. When his mother's face appeared on the screen he explained his wish. 'Delighted to have the doctor with us,' she said. 'Tell him to hurry along, Jimmy.'

'Right away, Mom!' Jim switched off and reached for his outdoor suit.

'Don't put it on,' advised MacRae. 'It's too chilly out. We'll go through the tunnels.'

'It's twice as far,' objected Jim.

'We'll leave it up to Willis. Willis, how do you vote?'

'Warm,' said Willis smugly.

Areography: equivalent to 'geography' for Earth. From 'Ares,' Greek for Mars.

2

South Colony, Mars

South colony was arranged like a wheel. The administration building was the hub; tunnels ran out in all directions and buildings were placed over them. A rim tunnel had been started to join the spokes at the edge of the wheel; thus far a fortyfive degree arc had been completed.

Save for three Moon huts erected when the colony was founded and since abandoned, all the buildings were shaped alike. Each was a hemispherical bubble of silicone plastic, processed from the soil of Mars and blown on the spot. Each was a double bubble, in fact; first one large bubble would be blown, say thirty or forty feet across; when it had hardened, the new building would be entered through the tunnel and an inner bubble, slightly smaller than the first, would be blown. The outer bubble 'polymerized'—that is to say, cured and hardened, under the rays of the sun; a battery of ultraviolet and heat lamps cured the inner. The walls were separated by a foot of dead air space, which provided insulation against the bitter subzero nights of Mars.

When a new building had hardened, a door would be cut to the outside and a pressure lock installed; the colonials maintained about two-thirds Earth-normal pressure indoors for comfort and the pressure on Mars is never as much as half of that. A visitor from Earth, not conditioned to the planet, will die without a respirator. Among the colonists only Tibetans and Bolivian Indians will venture outdoors without respirators and even they will wear the snug elastic Mars suits to avoid skin hemorrhages.

Buildings had not even view windows, any more than a modern building in New York has. The surrounding desert, while beautiful, is monotonous. South Colony was in an area granted by the Martians, just north of the ancient city of Charax—there is no need to give the Martian name since an Earthman can't pronounce it—and between the legs of the double canal Strymon. Again we follow colonial custom in using the name assigned by the immortal Dr Percival Lowell.

Francis accompanied Jim and Doctor MacRae as far as the junction of the tunnels under city hall, then turned down his own tunnel. A few minutes later the doctor and Jim—and Willis—ascended into the Marlowe home. Jim's mother met them; Doctor MacRae bowed. ‘Madame, I am again imposing on your good nature.’

'Fiddlesticks, Doctor. You are always welcome at our table.’

'I would that I had the character to wish that you were not so superlative a cook, that you might know the certain truth: it is yourself, my dear, that brings me here.’

Jim's mother blushed. She changed the subject. ‘Jim, hang up your pistol. Don't leave it on the sofa where Oliver can get it.’

Jim's baby brother, hearing his name, immediately made a dash for the pistol. Jim and his sister Phyllis both saw this, both yelled, ‘Ollie!’—and were immediately mimicked by Willis, who performed the difficult trick, possible only to an atonal diaphragm, of duplicating both voices simultaneously.

Phyllis was nearer; she grabbed the gun and slapped the child's hands. Oliver began to cry, reinforced by Willis. ‘Children!’ said Mrs Marlowe, just as Mr Marlowe appeared in the door.

'What's all the ruckus?’ he inquired mildly.

Doctor MacRae picked up Oliver, turned him upside down, and sat him on his shoulders. Oliver forgot that he was crying. Mrs Marlowe turned to her husband. ‘Nothing, darling. I'm glad you're home. Children, go wash for dinner, all of you.’

The second generation trooped out. ‘What was the trouble?’ Mr Marlowe repeated.

A few moments later Mr Marlowe joined Jim in his son's room. ‘Jim?’

'Yes, Dad.’

'What's this about your leaving your gun where the baby could reach it?’

Jim flushed. ‘It wasn't charged, Dad.’

'If all the people who had been killed with unloaded guns were laid end to end it would make quite a line up. You are proud of being a licensed gun wearer, aren't you?’

'Uh, yes, sir.’

'And I'm proud to have you be one. It means you are a responsible, trusted adult. But when I sponsored you before the Council and stood up with you when you took your oath, I guaranteed that you would obey the regulations and follow the code, wholeheartedly and all the time—not just most of the time. Understand me?’

'Yes, sir. I think I do.’

'Good. Let's go in to dinner.’

Doctor MacRae dominated the dinner table talk, as he always did, with a soft rumble of salty comments and outrageous observations. Presently he turned to Mr Marlowe and said, ‘You said something earlier about another twenty years and we could throw away our respirators; tell me: is there news about the Project?'

The colony had dozens of projects, all intended to make Mars more livable for human beings, but *the* Project always meant the atmosphere, or oxygen, project. The pioneers of the Harvard-Carnegie expedition reported Mars suitable for colonization except for the all-important fact that the air was so thin that a normal man would suffocate. However they reported also that many, many billions of tons of oxygen were locked in the Martian desert sands, the red iron oxides that give Mars its ruddy color. The Project proposed to free this oxygen for humans to breathe.

'Didn't you hear the Deimos newscast this afternoon?' Mr Marlowe answered.

'Never listen to newscasts. Saves wear and tear on the nervous system.'

'No doubt. But this was good news. The pilot plant in Libya is in operation, successful operation. The first day's run restored nearly four million tons mass of oxygen to the air—and no breakdowns.'

Mrs Marlowe looked startled. 'Four million tons? That seems a tremendous lot.'

Her husband grinned. 'Any idea how long it would take that one plant at that rate to do the job, that is, increase the oxygen pressure by five mass-pounds per square inch?'

'Of course I haven't. But not very long I should think.'

'Let me see —' His lips moved soundlessly. 'Uh, around two hundred thousand years—Mars years, of course.'

'James, you're teasing me!'

'No, I'm not. Don't let big figures frighten you, my dear; of course we won't depend on one plant; they'll be scattered every fifty miles or so through the desert, a thousand mega-horsepower each. There's no limit to the power available, thank goodness; if we don't clean up the job in our lifetimes, at least the kids will certainly see the end of it.'

Mrs Marlowe looked dreamy. 'That would be nice, to walk outside with your bare face in the breeze. I remember when I was a little girl, we had an orchard with a stream running through it —' She stopped.

'Sorry we came to Mars, Jane?' her husband asked softly.

'Oh, no! This is my home.'

'Good. What are you looking sour about, Doctor?'

'Eh? Oh, nothing, nothing! I was just thinking about the end result. Mind you, this is fine work, all of it—hard work, good work, that a man can get his teeth into. But we get it done and what for? So that another two billion, three billion sheep can fiddle around with nonsense, spend their time scratching themselves and *baa*ing. We should have left Mars to the Martians. Tell me, sir, do you know what television was used for when it first came out?’

'No. How would I?’

'Well, I didn't see it myself of course, but my father told me about it. It seems —’

'Your *father?* How old was he? When was he born?’

'My grandfather then. Or it may have been my great grandfather. That's beside the point. They installed the first television sets in cocktail bars—amusement places—and used them to watch wrestling matches.’

'What's a wrestling match?’ demanded Phyllis.

'An obsolete form of folk dancing,’ explained her father. ‘Never mind. Granting your point, Doctor, I see no harm —’

'What's folk dancing?’ persisted Phyllis.

'You tell her, Jane. She's got me stumped.’

Jim looked smug. ‘It's when folks dance, silly.’

'That's near enough,’ agreed his mother.

Doctor MacRae stared. ‘These kids are missing something. I think I'll organize a square dancing club. I used to be a pretty good caller, once upon a time.’

Phyllis turned to her brother. ‘Now I suppose you'll tell me that square dancing is when a square dances.’

Mr Marlowe raised his eyebrows. ‘I think the children have all finished, my dear. Couldn't they be excused?’

'Yes, surely. You may leave, my dears. Say Excuse me, please, Ollie.’ The baby repeated it, with Willis in mirror chorus.

Jim hastily wiped his mouth, grabbed Willis, and headed for his own room. He liked to hear the doctor talk but he had to admit that the old boy could babble the most fantastic nonsense when other grownups were around. Nor did the discussion of the oxygen project interest Jim; he saw nothing strange nor uncomfortable about wearing his mask. He would feel undressed going outdoors without it.

From Jim's point of view Mars was all right the way it was, no need to try to make it more like Earth. Earth was no great shakes anyway. His own personal recollection of Earth was limited to vague memories from early childhood of the emigrants’ conditioning station on the high Bolivian plateau—cold, shortness of breath, and great weariness.

His sister trailed after him. He stopped just inside his door and said, ‘What do you want, shorty?’

'Well.... Lookie, Jimmy, seeing as I'm going to have to take care of Willis after you've gone away to school, maybe it would be a good idea for you to sort of explain it to him, so he would do what I tell him without any trouble.’

Jim stared. ‘Whatever gave you the notion I was going to leave him behind?'

She stared back. 'But you are! You'll *have* to. You can't take him to school. You ask mother.'

'Mother hasn't anything to do with it. She doesn't care what I take to school.'

'Well, you oughtn't to take him, even if she doesn't object. I think you're mean.'

'You always think I'm mean if I don't cater to your every wish!'

'Not to me—to Willis. This is Willis's home; he's used to it. He'll be homesick away at school.'

'He'll have me!'

'Not most of the time, he won't. You'll be in class. Willis wouldn't have anything to do but sit and mope. You ought to leave him here with me—with us—where he'd be happy.'

Jim straightened himself up. 'I'm going to find out about this, right away.' He walked back into the living compartment and waited aggressively to be noticed. Shortly his father turned toward him.

'Yes? What is it, Jim? Something eating you?'

'Uh, well—look, Dad, is there any doubt about Willis going with me when I go away to school?'

His father looked surprised. 'It had never occurred to me that you would consider taking him.'

'Huh? Why not?'

'Well, school is hardly the place for him.'

'Why?'

'Well, you wouldn't be able to take care of him properly. You'll be awfully busy.'

'Willis doesn't take much care. Just feed him every month or so and give him a drink about once a week and he doesn't ask for anything else. Why can't I take him, Dad?'

Mr Marlowe looked baffled; he turned to his wife. She started in, 'Now, Jimmy darling, we don't want you to —'

Jim interrupted, 'Mother, every time you want to talk me out of something you start out, Jimmy darling!'

Her mouth twitched but she kept from smiling. 'Sorry, Jim. Perhaps I do. What I was trying to say was this: we want you to get off to a good start at school. I don't believe that having Willis on your hands will help any.'

Jim was stumped for the moment, but was not ready to give up. 'Look, Mother. Look, Dad. You both saw the pamphlet the school sent me, telling me what to do and what to bring and when to show up and so forth. If either one of you can find anything anywhere in those instructions that says I can't take Willis with me, I'll shut up like a Martian. Is that fair?'

Mrs Marlowe looked inquiringly at her husband. He looked back at her with the same appeal for help in his expression. He was acutely aware that Doctor MacRae was watching both of them, not saying a word but wearing an expression of sardonic amusement.

Mr Marlowe shrugged. ‘Take Willis along, Jim. But he's your problem.’

Jim's face broke out in a grin. ‘Thanks, Dad!’ He left the room quickly in order not to give his parents time to change their minds.

Mr Marlowe banged his pipe on an ashtray and glowered at Doctor MacRae. ‘Well, what are you grinning at, you ancient ape? You think I'm too indulgent, don't you?’

'Oh, no, not at all! I think you did perfectly right.’

'You think that pet of Jim's won't cause him trouble at school?’

'On the contrary. I have some familiarity with Willis's peculiar social habits.’

'Then why do you say I did right?’

'Why shouldn't the boy have trouble? Trouble is the normal condition for the human race. We were raised on it. We thrive on it.’

'Sometimes, Doctor, I think that you are, as Jim would put it, crazy as a spin bug.’

'Probably. But since I am the only medical man around, I am not likely to be committed for it. Mrs Marlowe, could you favor an old man with another cup of your delicious coffee?’

'Certainly, Doctor.’ She poured for him, then went on. ‘James, I am not sorry you decided to let Jim take Willis. It will be a relief.’

'Why, dear? Jim was correct when he said that the little beggar isn't much trouble.’

'Well, he isn't really. But—I just wish he weren't so truthful.’

'So? I thought he was the perfect witness in settling the children's squabbles?’

'Oh, he is. He'll play back anything he hears as accurately as a transcriber. That's the trouble.’ She looked upset, then chuckled. ‘You know Mrs Pottle?’

'Of course.’

The doctor added, ‘How can one avoid it? I, unhappy man, am in charge of her nerves.’

Mrs Marlowe asked, ‘Is she actually sick, Doctor?’

'She eats too much and doesn't work enough. Further communication is forbidden by professional ethics.’

'I didn't know you had any.’

'Young lady, show respect for my white hairs. What about this Pottle female?’

'Well, Luba Konski had lunch with me last week and we got to talking about Mrs Pottle. Honest, James, I didn't say much and I did not know that Willis was under the table.’

'He was?’ Mr Marlowe covered his eyes. ‘Do go on.’

'Well, you both remember that the Konskis housed the Pottles at North Colony until a house was built for them. Sarah Pottle has been Luba's pet hate ever since, and Tuesday Luba was giving me some juicy details on Sarah's habits at home. Two days later Sarah Pottle stopped by to give me advice on how to bring up children. Something she said triggered Willis—I knew he was in the room but I didn't think anything of it—and Willis put on just the wrong record and I couldn't shut him up. I finally carried him out of the room. Mrs Pottle left without saying goodbye and I haven't heard from her since.’

'That's no loss.’ her husband commented.

'True, but it got Luba in Dutch. No one could miss Luba's accent and Willis does it better than she does herself. I don't think Luba minds, though—and you should have heard Willis's playback of Luba's description of how Sarah Pottle looks in the morning—and what she does about it.’

'You should hear,’ answered MacRae, ‘Mrs Pottle's opinions on the servant problem.’

'I have. She thinks it's a scandal that the Company doesn't import servants for us.’

The doctor nodded. ‘With collars riveted around their necks.’

'That woman! I can't see why she ever became a colonist.’

'Didn't you know?’ her husband said. ‘They came out here expecting to get rich in a hurry.’

'Hummph!’

Doctor MacRae got a faraway look. ‘Mrs Marlowe, speaking as her physician, it might help me to hear what Willis has to say about Mrs Pottle. Do you suppose he would recite for us?’

'Doctor, you're an old fraud, with a taste for gossip.’

'Granted. I like also eavesdropping.’

'You're shameless.’

'Again granted. My nerves are relaxed. I haven't felt ashamed in years.’

'Willis may just give a thrilling account of the children's chitchat for the past two weeks.’

'Perhaps if you coaxed him?’

Mrs Marlowe suddenly dimpled. ‘It won't hurt to try.’ She left the room to fetch Jim's globular friend.

3

Gekko

Wednesday morning dawned clear and cold, as mornings have a habit of doing on Mars. The Suttons and the Marlowes, minus Oliver, were gathered at the Colony's cargo dock on the west leg of Strymon canal, ready to see the boys off.

The temperature was rising and the dawn wind was blowing firmly, but it was still at least thirty below. Strymon canal was a steel-blue, hard sheet of ice and would not melt today in this latitude. Resting on it beside the dock was the mail scooter from Syrtis Minor, its boat body supported by razor-edged runners. The driver was still loading it with cargo dragged from the warehouse on the dock.

The tiger stripes on Jim's mask, the war paint on Frank's, and a rainbow motif on Phyllis's made the young people easy to identify. The adults could be told apart only by size, shape, and manner; there were two extras, Doctor MacRae and Father Cleary. The priest was talking in low, earnest tones to Frank.

He turned presently and spoke to Jim. ‘Your own pastor asked me to say goodbye to you, son. Unfortunately the poor man is laid up with a touch of Mars throat. He would have come anyhow had I not hidden his mask.’ The Protestant chaplain, as well as the priest, was a bachelor; the two shared a house.

'Is he very sick?’ asked Jim.

'Not that sick. But take his blessing—and mine too.’ He offered his hand.

Jim dropped his travel bag, shifted his ice skates and Willis over to his left arm and shook hands. There followed an awkward silence. Finally Jim said, ‘Why don't you all go inside before you freeze to death?’

'Yeah,’ agreed Francis. ‘That's a good idea.’

'I think the driver is about ready now,’ Mr Marlowe countered. ‘Well, son, take care of yourself. We'll see you at migration.’ He shook hands solemnly.

'So long, Dad.’

Mrs Marlowe put her arms around him, pressed her mask against his and said, ‘Oh, my little boy—you're too young to go away from home!’

'Oh, Mother, please!’ But he hugged her. Then Phyllis had to be hugged. The driver called out: ‘'Board!’

''Bye everybody!’ Jim turned away, felt his elbow caught.

It was the doctor. ‘Take care of yourself, Jim. And don't take any gruff off of anybody.’

'Thanks, Doc.’ Jim turned and presented his school authorization to the driver while the doctor bade Francis goodbye.

The driver looked it over. ‘Both deadheads, eh? Well, seeing as how there aren't any pay passengers this morning you can ride in the observatory.’ He tore off his copy; Jim climbed inside and went up to the prized observation seats behind and above the driver's compartment. Frank joined him.

The craft trembled as the driver jacked the runners loose from the ice, then with a roar from the turbine and a soft, easy surge the car got under way. The banks flowed past them and melted into featureless walls as the speed picked up. The ice was mirror smooth; they soon reached cruising speed of better than two hundred fifty miles per hour. Presently the driver removed his mask; Jim and Frank, seeing him, did likewise. The car was pressurized now by an air ram faced into their own wind of motion; it was much warmer, too, from the air's compression.

'Isn't this swell?’ said Francis.

'Yes. Look at Earth.’

Their mother planet was riding high above the Sun in the north eastern sky. It blazed green against a deep purple background. Close to it, but easy to separate with the naked eye, was a lesser, pure white star—Luna, Earth's moon. Due north of them, in the direction they were going, Deimos, Mars’ outer moon, hung no more than twenty degrees above the horizon. Almost lost in the rays of the sun, it was a tiny pale disc, hardly more than a dim star and much outshone by Earth.

Phobos, the inner moon, was not in sight. At the latitude of Charax it never rose more than eight degrees or so above the northern horizon and that for an hour or less, twice a day. In the daytime it was lost in the blue of the horizon and no one would be so foolhardy as to watch for it in the bitter night. Jim did not remember ever having seen it except during migration between colonies.

Francis looked from Earth to Deimos. ‘Ask the driver to turn on the radio,’ he suggested. ‘Deimos is up.’

'Who cares about the broadcast?’ Jim answered. ‘I want to watch.’ The banks were not so high now; from the observation dome he could see over them into the fields beyond. Although it was late in the season the irrigated belt near the canal was still green and getting greener as he watched, as the plants came out of the ground to seek the morning sunlight.

He could make out, miles away, an occasional ruddy sand dune of the open desert. He could not see the green belt of the east leg of their canal; it was over the horizon.

Without urging, the driver switched on his radio; music filled the car and blotted out the monotonous low roar of the turbo-jet. It was terrestrial music, by Sibelius, a classical composer of another century. Mars colony had not yet found time to develop its own arts and still borrowed its culture. But neither Jim nor Frank knew who the composer was, nor cared. The banks of the canal had closed in again;

there was nothing to see but the straight ribbon of ice; they settled back and daydreamed.

Willis stirred for the first time since he had struck the outer cold. He extended his eye stalks, looked inquiringly around, then commenced to beat time with them.

Presently the music stopped and a voice said: ‘This is station D-M-S, the Mars Company, Deimos, *circum* Mars. We bring you now by relay from Syrtis Minor a program in the public interest. Doctor Graves Armbruster will speak on Ecological Considerations involved in Experimental Artificial Symbiotics as related to —’

The driver promptly switched the radio off.

'I would like to have heard that,’ objected Jim. ‘It sounded interesting.’

'Oh, you're just showing off,’ Frank answered. ‘You don't even know what those words mean.’

'The dickens I don't. It means —’

'Shut up and take a nap.’ Taking his own advice Frank lay back and closed his eyes. However he got no chance to sleep. Willis had apparently been chewing over, in whatever it was he used for a mind, the programme he had just heard. He opened up and started to play it back, woodwinds and all.

The driver looked back and up, looked startled. He said something but Willis drowned him out. Willis bulled on through to the end, even to the broken-off announcement. The driver finally made himself heard. ‘Hey, you guys! What you got up there? A portable recorder?’

'No, a bouncer.’

'A what?’

Jim held Willis up so that the driver could see him. ‘A bouncer. His name is Willis.’ The driver stared.

'You mean *that* thing is a recorder?’

'No, he's a bouncer. As I said, his name is Willis.’

'This I got to see,’ announced the driver. He did something at his control board, then turned around and stuck his head and shoulders up into the observation dome.

Frank said, ‘Hey! You'll wreck us.’

'Relax,’ advised the driver. ‘I put her on echo-automatic. High banks for the next couple o’ hundred miles. Now what is this gismo? When you brought it aboard I thought it was a volley ball.’

'No, it's Willis. Say hello to the man, Willis.’

'Hello, man,’ Willis answered agreeably.

The driver scratched his head. ‘This beats anything I ever saw in Keokuk. Sort of a parrot, eh?’

'He's a bouncer. He's got a scientific name, but it just means Martian roundhead. Never seen one before?’

'No. You know, bud, this is the screwiest planet in the whole system.'

'If you don't like it here,' asked Jim, 'why don't you go back where you came from?'

'Don't go popping off, youngster. How much will you take for the gismo? I got an idea I could use him.'

'Sell Willis? Are you crazy?'

'Sometimes I think so. Oh, well, it was just an idea.' The driver went back to his station, stopping once to look back and stare at Willis.

The boys dug sandwiches out of their travel bags and munched them. After that Frank's notion about a nap seemed a good idea. They slept until wakened by the car slowing down. Jim sat up, blinked and called down, 'What's up?'

'Coming into Cynia Station,' the driver answered. 'Lay over until sundown.'

'Won't the ice hold?'

'Maybe it will. Maybe it won't. The temperature's up and I'm not going to chance it.' The car slid softly to a stop, then started again and crawled slowly up a low ramp, stopped again. 'All out!' the driver called. 'Be back by sundown—or get left.' He climbed out; the boys followed.

Cynia Station was three miles west of the ancient city of Cynia, where west Strymon joins the canal Oeroe. It was merely a lunchroom, a bunkhouse, and a row of pre-fab warehouses. To the east the feathery towers of Cynia gleamed in the sky, seemed almost to float, too beautifully unreal to be solid.

The driver went into the little inn. Jim wanted to walk over and explore the city; Frank favoured stopping in the restaurant first. Frank won out. They went inside and cautiously invested part of their meagre capital in coffee and some indifferent soup.

The driver looked up from his dinner presently and said, 'Hey, George! Ever see anything like that?' He pointed to Willis.

George was the waiter. He was also the cashier, the hotel keeper, the station agent, and the Company representative. He glanced at Willis. 'Yep.'

'You did, huh? Where? Do you suppose I could find one?'

'Doubt it. You see 'em sometimes, hanging around the Martians. Not many of 'em.' He turned back to his reading—a *New York Times*, more than two years old.

The boys finished, paid their bills, and prepared to go outside. The cook-waiter-station-agent said, 'Hold on. Where are you kids going?'

'Syrtis Minor.'

'Not that. Where are you going right now? Why don't you wait in the dormitory? Take a nap if you like.’

'We thought we would kind of explore around outside,’ explained Jim.

'Okay. But stay away from the city.’

'Why?’

'Because the Company doesn't allow it, that's why. Not without permission. So stay clear of it.’

'How do we get permission?’ Jim persisted.

'You can't. Cynia hasn't been opened up to exploitation yet.’ He went back to his reading.

Jim was about to continue the matter but Frank tugged at his sleeve. They went outside together. Jim said, ‘I don't think he has any business telling us we can't go to Cynia.’

'What's the difference? He thinks he has.’

'What'll we do now?’

'Go to Cynia, of course. Only we won't consult his nibs.’

'Suppose he catches us?’

'How can he? He won't stir off that stool he's warming. Come on.’

'Okay.’ They set out to the east. The going was not too easy; there was no road of any sort and all the plant growth bordering the canal was spread out to its greatest extent to catch the rays of the midday sun. But Mars’ low gravity makes walking easy work even over rough ground. They came shortly to the bank of Oeroe and followed it to the right, toward the city.

The way was easy along the smooth stone of the bank. The air was warm and balmy even though the surface of the canal was still partly frozen. The sun was high; they were the better part of a thousand miles closer to the equator than they had been at daybreak.

'Warm,’ said Willis. ‘Willis want down.’

'Okay,’ Jim agreed, ‘but don't fall in.’

'Willis not fall in.’ Jim put him down and the little creature went skipping and rolling along the bank, with occasional excursions into the thick vegetation, like a puppy exploring a new pasture.

They had gone perhaps a mile and the towers of the city were higher in the sky when they encountered a Martian. He was a small specimen of his sort, being not over twelve feet tall. He was standing quite still, all three of his legs down, apparently lost in contemplation of the whichness of what. The eye facing them stared unblinkingly.

Jim and Frank were, of course, used to Martians and recognized that this one was busy in his ‘other world'; they stopped talking and continued on past him, being careful not to brush against his legs.

Not so Willis. He went darting around the Martian's peds, rubbing against them, then stopped and let out a couple of mournful croaks.

The Martian stirred, looked around him, and suddenly bent and scooped Willis up.

'Hey!’ yelled Jim. ‘Put him down!’

No answer.

Jim turned hastily to Frank. ‘You talk to him, Frank. I'll never be able to make him understand me. Please!’ Of the Martian dominant language Jim understood little and spoke less. Frank was somewhat better, but only by comparison. Those who speak Martian complain that it hurts their throats.

'What'll I say?’

'Tell him to put Willis down!’

'Relax. Martians never hurt anybody.’

'Well, tell him to put Willis down, then.’

'I'll try.’ Frank screwed up his mouth and got to work. His accent, bad at best, was made worse by the respirator and by nervousness. Nevertheless he clucked and croaked his way through a phrase that seemed to mean what Jim wanted. Nothing happened.

He tried again, using a different idiom; still nothing happened. ‘It's no good, Jim,’ he admitted. ‘Either he doesn't understand me or he doesn't want to bother to listen.’

Jim shouted, ‘Willis! Hey, Willis! Are you all right?’

'Willis fine!’

'Jump down! I'll catch you.’

'Willis fine.’

The Martian wobbled his head, seemed to locate Jim for the first time. He cradled Willis in one arm; his other two arms came snaking suddenly down and enclosed Jim, one palm flap cradling him where he sat down, the other slapping him across the belly.

He felt himself lifted and held and then he was staring into a large liquid Martian eye which stared back at him. The Martian ‘man’ rocked his head back and forth and let each of his eyes have a good look.

It was the closest Jim had ever been to a Martian; he did not care for it. Jim tried to wiggle away, but the fragile appearing Martian was stronger than he was.

Suddenly the Martian's voice boomed out from the top of his head. Jim could not understand what was being said although he spotted the question symbol at the beginning of the phrase. But the Martian's voice had a strange effect on him. Croaking and uncouth though it was, it was filled with such warmth and sympathy and friendliness that the native no longer frightened him. Instead he seemed like an old and trusted friend.

The Martian repeated the question.

'What did he say, Frank?’

'I didn't get it. He's friendly but I can't understand him.’

The Martian spoke again; Frank listened. ‘He's inviting you to go with him, I think.’

Jim hesitated a split second. ‘Tell him okay.’

'Jim, are you crazy?’

'It's all right. He means well. I'm sure of it.’

'Well—all right.’ Frank croaked the phrase of assent.

The native gathered up one leg and strode rapidly away toward the city. Frank trotted after. He tried his best to keep up, but the pace was too much for him. He paused, gasping, then shouted, ‘Wait for me,’ his voice muffled by his mask.

Jim tried to phrase a demand to stop, gave up, then got an inspiration. ‘Say, Willis—Willis boy. Tell him to wait for Frank.’

'Wait for Frank?’ Willis said doubtfully.

'Yes. Wait for Frank.’

'Okay.’ Willis hooted at his new friend; the Martian paused and dropped his third leg. Frank came puffing up.

The Martian removed one arm from Jim and scooped up Frank with it. ‘Hey!’ Frank protested. ‘Cut it out.’

'Take it easy,’ advised Jim.

'But I don't want to be carried.’

Frank's reply was disturbed by the Martian starting up again. Thus burdened, he shifted to a three-legged gait in which at least two legs were always on the ground. It was bumpy but surprisingly fast.

'Where do you suppose he is taking us?’ asked Jim.

'To the city I guess.’ Frank added, ‘We don't want to miss the scooter.’

'We've got hours yet. Quit worrying.’

The Martian said nothing more but continued slogging toward Cynia. Willis was evidently as happy as a bee in a flower shop. Jim settled down to enjoying the ride. Now that he was being carried with his head a good ten feet above ground his view was much improved; he could see over the tops of the plants growing by the canal and beyond them to the iridescent towers of Cynia. The towers were not like those of Charax; no two Martian cities looked alike. It was as if each were a unique work of art, each expressing the thoughts of a different artist.

Jim wondered why the towers had been built, what they were good for, how old they were.

The canal crops spread out around them, a dark green sea in which the Martian waded waist deep. The broad leaves were spread flat to the sun's rays, reaching greedily for lifegiving radiant energy. They curled aside as the native's body brushed them, to spread again as he passed.

The towers grew much closer; suddenly the Martian stopped and set the two boys down. He continued to carry Willis. Ahead of them, almost concealed by overhanging greenery, a ramp slanted down into the ground and entered a tunnel arch. Jim looked at it and said, ‘Frank, what do you think?’

'Gee, I don't know.’ The boys had been inside the cities of Charax and Copais, but only in the abandoned parts and at ground level. They were not allowed time to fret over their decision; their guide started down the slope at a good clip.

Jim ran after him, shouting, ‘Hey, Willis!’

The Martian stopped and exchanged a couple of remarks with Willis; the bouncer called out, ‘Jim wait.’

'Tell him to put you down.’

'Willis fine. Jim wait.’ The Martian started up again at a pace that Jim could not possibly match. Jim went disconsolately back to the start of the ramp and sat down on the ledge thereof.

'What are you going to do?’ demanded Frank.

'Wait, I suppose. What else can I do? What are you going to do?’

'Oh, I'll stick. But I'm not going to miss the scooter.’

'Well, neither am I. We couldn't stay here after sundown anyhow.’

The precipitous drop in temperature at sunset on Mars is almost all the weather there is, but it means death by freezing for an Earth human unless he is specially clothed and continuously exercising.

They sat and waited and watched spin bugs skitter past. One stopped by Jim's knee, a little tripod of a creature, less than an inch high; it appeared to study him. He touched it; it flung out its limbs and whirled away. The boys were not even alert, since a waterseeker will not come close to a Martian settlement; they simply waited.

Perhaps a half hour later the Martian—or, at least, *a* Martian of the same size—came back. He did not have Willis with him. Jim's face fell. But the Martian said, ‘Come with me,’ in his own tongue, prefacing the remark with the question symbol.

'Do we or don't we?’ asked Frank.

'We do. Tell him so.’ Frank complied. The three started down. The Martian laid a great hand flap on the shoulders of each boy and herded him along. Shortly he stopped and picked them up. This time they made no objection.

The tunnel seemed to remain in full daylight even after they had penetrated several hundred yards underground. The light came from everywhere but especially from the ceiling. The tunnel was large by human standards but no more than comfortably roomy for Martians. They passed several other natives; if another was moving their host always boomed a greeting, but if he was frozen in the characteristic trancelike immobility no sound was made.

Once their guide stepped over a ball about three feet in diameter.

Jim could not make out what it was at first, then he did a doubletake and was still more puzzled. He twisted his neck and looked back at it. It *couldn't be*—but it was!

He was gazing at something few humans ever see, and no human ever wants to see: a Martian folded and rolled into a ball, his hand flaps covering everything but his curved back. Martians—modern, civilized Martians—do not hibernate, but at some time remote eons in the past their ancestors must have done so, for they are still articulated so that they can assume the proper, heat-conserving, moisture-conserving globular shape, if they wish.

They hardly ever so wish.

For a Martian to roll up is the moral equivalent of an Earthly duel to the death and is resorted to only when that Martian is offended so completely that nothing less will suffice. It means: I cast you out, I leave your world, I deny your existence.

The first pioneers on Mars did not understand this, and, through ignorance of Martian values, offended more than once. This delayed human colonization of Mars by many years; it took the most skilled diplomats and semanticians of Earth to repair the unwitting harm. Jim stared unbelievingly at the withdrawn Martian and wondered what could possibly have caused him to do that to an entire city. He remembered a grisly tale told him by Doctor MacRae concerning the second expedition to Mars. ‘So this dumb fool,’ the doctor had said, ‘a medical lieutenant he was, though I hate to admit it—this idiot grabs hold of the beggar's flaps and tries to unroll him. Then it happened.’

'What happened?’ Jim had demanded.

'He disappeared.’

'The Martian?’

'No, the medical officer.’

'Huh? How did he disappear?’

'Don't ask me; I didn't see it. The witnesses—four of ‘em, with sworn statements—say there he was and then there he wasn't. As if he had met a boojum.’

'What's a boojum?’ Jim had wanted to know.

'You modern kids don't get any education, do you? The boojum is in a book; I'll dig up a copy for you.’

'But how did he disappear?’

'Don't ask me. Call it mass hypnosis if it makes you feel any better. It makes me feel better, but not much. All I can say is that seven-eighths of an iceberg never shows.’ Jim had never seen an iceberg, so the allusion was wasted on him—but he felt decidedly not better when he saw the rolled up Martian.

'Did you see that?’ demanded Frank.

'I wish I hadn't,’ said Jim. ‘I wonder what happened?’

'Maybe he ran for mayor and lost.'

'It's nothing to joke about. Maybe he—*Sssh!'* Jim broke off. He caught sight of another Martian, immobile, but not rolled up; politeness called for silence.

The Martian carrying them made a sudden turn to the left and entered a hall; he put them down. The room was very large to them; to Martians it was probably suitable for a cozy social gathering. There were many of the frames they use as a human uses a chair and these were arranged in a circle. The room itself was circular and domed; it had the appearance of being outdoors for the domed ceiling simulated Martian sky, pale blue at the horizon, increasing to warmer blue, then to purple, and reaching purple-black with stars piercing through at the highest point of the ceiling.

A miniature sun, quite convincing, hung west of the meridian. By some trick of perspective the pictured horizons were apparently distant. On the north wall Oeroe seemed to flow past.

Frank's comment was, 'Gee whiz!'; Jim did not manage that much.

Their host had placed them by two resting frames. The boys did not attempt to use them; stepladders would have been more comfortable and convenient. The Martian looked first at them, then at the frames, with great sorrowful eyes. He left the room.

He came back very shortly, followed by two others; all three were carrying loads of colourful fabrics. They dumped them down in a pile in the middle of the room. The first Martian picked up Jim and Frank and deposited them gently on the heap.

'I think he means, Draw up a chair,' commented Jim.

The fabrics were not woven but were a continuous sheet, like cobweb, and almost as soft, though much stronger. They were in all hues of all colours from pastel blue to deep, rich red. The boys sprawled on them and waited.

Their host relaxed himself on one of the resting frames; the two others did the same. No one said anything. The two boys were decidedly not tourists; they knew better than to try to hurry a Martian. After a bit Jim got an idea; to test it he cautiously raised his mask. Frank snapped, 'Say! What 'cha trying to do? Choke to death?'

Jim left his mask up. 'It's all right. The pressure is up.'

'It *can't* be. We didn't come through a pressure lock.'

'Have it your own way.' Jim left his mask up. Seeing that he did not turn blue, gasp, nor become slack-featured, Frank ventured to try it himself. He found himself able to breathe without trouble. To be sure, the pressure was not as great as he was used to at home and it would have seemed positively stratospheric to an Earthling, but it was enough for a man at rest.

Several other Martians drifted in and unhurriedly composed themselves on frames. After a while Frank said, ‘Do you know what's going on, Jim?’

'Uh—maybe.’

'No maybes about it. It's a growing-together.’

'Growing together’ is an imperfect translation of a Martian idiom which names their most usual social event—in bald terms, just sitting around and saying nothing. In similar terms, violin music has been described as dragging a horse's tail across the dried gut of a cat. ‘I guess you're right,’ agreed Jim. ‘We had better button our lips.’

'Sure.’

For a long time nothing was said. Jim's thoughts drifted away, to school and what he would do there, to his family, to things in the past. He came back presently to personal self-awareness and realized that he was happier than he had been in a long time, with no particular reason that he could place. It was a quiet happiness; he felt no desire to laugh nor even to smile, but he was perfectly relaxed and content.

He was acutely aware of the presence of the Martians, of each individual Martian, and was becoming even more aware of them with each drifting minute. He had never noticed before how beautiful they were. ‘Ugly as a native’ was a common phrase with the colonials; Jim recalled with surprise that he had even used it himself, and wondered why he ever had done so.

He was aware, too, of Frank beside him and thought about how much he liked him. Staunch—that was the word for Frank, a good man to have at your back. He wondered why he had never told Frank that he liked him.

Mildly he missed Willis, but he was not worried about him. This sort of a party was not Willis's dish; Willis liked things noisy, boisterous, and unrefined. Jim put aside the thought of Willis, lay back, and soaked in the joy of living. He noted with delight that the unknown artist who had designed this room had arranged for the miniature sun to move across the ceiling just as the true Sun moved across the sky. He watched it travel to the west and presently begin to drop toward the pictured horizon.

There came a gentle booming behind him—he could not catch the words—and another Martian answered. One of them unfolded himself from his resting stand and ambled out of the room. Frank sat up and said, ‘I must have been dreaming.’

'Did you go to sleep?’ asked Jim. ‘I didn't.

'The heck you didn't. You snored like Doc MacRae.’

'Why, I wasn't even asleep.’

'Says you!’

The Martian who had left the room returned. Jim was sure it was the same one; they no longer looked alike to him. He was carrying a drinking vase. Frank's eyes bulged out. ‘Do you suppose they are going to serve us *water?'*

'Looks like,’ Jim answered in an awed voice.

Frank shook his head. ‘We might as well keep this to ourselves; nobody'll ever believe us.’

'You're right.’

The ceremony began. The Martian with the vase announced his own name, barely touched the stem of the vase and passed it on. The next Martian gave his name and also simulated drinking. Around the circle it came. The Martian who had brought them in, Jim learned, was named ‘Gekko'; it seemed a pretty name to Jim and fitting. At last the vase came around to Jim; a Martian handed it to him with the wish, ‘May you never suffer thirst.’ The words were quite clear to him.

There was an answering chorus around him: ‘May you drink deep whenever you wish!’

Jim took the vase and reflected that Doc said that the Martians didn't have anything that was catching for humans. ‘Jim Marlowe!’ he announced, placed the stem in his mouth and took a sip.

As he handed it back he dug into his imperfect knowledge of the dominant language, concentrated on his accent and managed to say, ‘May water ever be pure and plentiful for you.’ There was an approving murmur that warmed him. The Martian handed the vase to Frank.

With the ceremony over the party broke up in noisy, almost human chatter. Jim was trying vainly to follow what was being said to him by a Martian nearly three times his height when Frank said, ‘Jim! You see that sun? We're going to miss the scooter!’

'Huh? That's not the real Sun; that's a toy.’

'No, but it matches the real Sun. My watch says the same thing.’

'Oh, for Pete's sake! Where's Willis? Gekko—where's Gekko?’

Gekko, on hearing his name, came over; he clucked inquiringly at Jim. Jim tried very hard to explain their trouble, tripped over syntax, used the wrong directive symbols, lost his accent entirely. Frank shoved him aside and took over. Presently Frank said, ‘They'll get us there before sunset, but Willis stays here.’

'Huh? They can't do that!’

'That's what the man says.’

Jim thought. ‘Tell them to bring Willis here and ask *him.'*

Gekko was willing to do that. Willis was carried in, placed upon the floor. He waddled up to Jim and said, ‘Hi, Jim boy! Hi, Frank boy!’

'Willis,’ said Jim earnestly, ‘Jim is going away. Willis come with Jim?’

Willis seemed puzzled. ‘Stay here. Jim stay here. Willis stay here. Good.’

'Willis,’ Jim said frantically, ‘Jim has *got* to go away. Willis come with Jim?’

'Jim go?’

'Jim go.’

Willis almost seemed to shrug. ‘Willis go with Jim,’ he said sadly.

'Tell Gekko.’ Willis did so. The Martian seemed surprised, but there was no further argument. He gathered up both boys and the bouncer and started for the door. Another larger Martian—tagged ‘G'kuro’ Jim recalled—relieved Gekko of Frank and tailed along behind. As they climbed the tunnel Jim found suddenly that he needed his mask; Frank put his on, too.

The withdrawn Martian was still cluttering the passageway; both their porters stepped over him without comment.

The sun was very low when they got to the surface. Although a Martian cannot be hastened, his normal pace makes very good time; the long-legged pair made nothing of the three miles back to Cynia Station. The sun had just reached the horizon and the air was already bitter when the boys and Willis were dumped on the dock. The two Martians left at once, hurrying back to the warmth of their city.

'Goodbye, Gekko!’ Jim shouted. ‘Goodbye, G'kuro!’

The driver and the station master were standing on the dock; it was evident that the driver was ready to start and had been missing his passengers. ‘What in the world?’ said the station master.

'We're ready to go,’ said Jim.

'So I see,’ said the driver. He stared at the retreating figures. He blinked and turned to the agent. ‘We should have left that stuff alone, George. I'm seeing things.’ He added to the boys, ‘Well, get aboard.’

They did so and climbed up to the dome. The car clumped down off the ramp to the surface of the ice, turned left onto Oeroe canal and picked up speed. The Sun dropped behind the horizon; the landscape was briefly illuminated by the short Martian sunset. On each bank the boys could see the plants withdrawing for the night. In a few minutes the ground, so lush with vegetation a half hour before, was bare as the true desert.

The stars were out, sharp and dazzling. Soft curtains of aurora hung over the skyline. In the west a tiny steady light rose and fought its way upwards against the motion of the stars. ‘There's Phobos,’ said Frank. ‘Look!’

'I see it,’ Jim answered. ‘It's cold. Let's turn in.’

'Okay. I'm hungry.’

'I've got some sandwiches left.’ They munched one each, then went down into the lower compartment and crawled into bunks. In time the car passed the city Hesperidum and turned west-northwest onto the canal Erymanthus, but Jim was unaware of it; Jim was dreaming that Willis and he were singing a duet for the benefit of amazed Martians.

'All out! End of the line!' The driver was prodding them.

'Huh?'

'Up you come, shipmate. This is it—Syrtis Minor.'

4

Lowell Academy

Dear Mother and Dad,

The reason I didn't phone you when we got in Wednesday night was that we didn't get in until Thursday morning. When I tried to phone on Thursday the operator told me that Deimos had set for South Colony and then I knew it would be about three days until I could relay a call through Deimos and a letter would get there sooner and save you four and a half credits on a collect phone call. Now I realize that I didn't get this letter off to you right away and maybe you're not going to get it until after I would have been able to make a phone call if I had made it but what you probably don't realize is how busy they keep you at school and how many demands there are on a fellow's time and anyhow you probably heard from Frank's mother that we had gotten here all right and anyway you look at it I still saved you four and one half credits by not making that phone call.

I can just hear Phyllis saying that I am just hinting that the half-and-four I saved should be turned over to me but I am not doing anything of the sort because I wouldn't do anything like that and besides I've still got some of the money left that you gave me before I left as well as part of my birthday money and with careful management I will not need any more until you all come through here at Migration even though everything costs more here than it does at home. Frank says it's because they always jack up the prices for the tourist trade but there aren't any tourists around now and won't be until the *Albert Einstein* gets in next week. Anyway if you simply split the difference with me you would still be a clear two and a quarter credits ahead.

The reason we didn't get here Wednesday night was because the driver decided the ice might not hold so we laid over at Cynia Station and Frank and I just fooled around and killed time until sunset.

Frank and I have been allowed to room together and we've got a dandy room. It was meant for just one boy and only has one study desk but we're mostly taking the same subjects and lots of times we can use the projector together. I am talking this letter into the study desk recorder because tonight is Frank's night to help out in the kitchen and all I've got left to study is a little bit of history and I'm saving that to do it with Frank when he comes back. Professor Steuben says that he does not know what they are going to do if they keep getting more students here with no more room, hang them on hooks maybe but he is just joking. He jokes a lot and everybody likes him and will be sorry when he leaves on the *Albert Einstein* and the new headmaster takes over.

Well that's all for now because Frank just got back and we had better get to work because tomorrow we have a quiz on system history.

Your loving son,
James Madison Marlowe, Jr.

PS. Frank just told me that he didn't write his folks either and he wonders if you would mind phoning his mother and telling her that he is all right and would she please send his camera right away, he forgot it.

PPS. Willis sends his love. I just asked him.

PPPS. Tell Phyllis that the girls here are dyeing their hair in stripes. I think it looks silly.

JIM

If Professor Otto Steuben, MA, LLD, had not retired, Jim's life at Lowell Academy would have been different. But retire he did and went back to San Fernando Valley for a well-earned rest. The entire school went to Marsport to see him off. He shook hands all around and wept a little and commended them to the care of Marquis Howe, recently arrived from Earth and now taking over.

When Jim and Frank got back from the space port they found the first arrivals gathered around the bulletin board. They crowded in and read the item that was drawing the crowd:

SPECIAL NOTICE

All students are required to keep themselves and their quarters neat and orderly at all times. The supervision of these matters by student monitors has not proved satisfactory. Therefore formal inspections by the Headmaster will be held each week. The first such inspection will be at ten hundred, Saturday, the 7th of Ceres.

(signed)

M. Howe, Headmaster

'Well, for crying out loud!' Frank burst out. 'What d'you think of that, Jim?'

Jim stared at it darkly. 'I think that today is the sixth of Ceres.'

'Yeah, but what's the idea? He must think that this is a school of correction.' Frank turned to an older student, who had, until now, been monitor of their corridor. 'Anderson, what do you think about it?'

'I really don't know. I thought we were doing all right the way we were.’

'What do you intend to do about it?’

'Me?’ The young man thought a while before replying. ‘I've got just one more semester to my degree, then I'm out of here. I think I'll just sit tight, keep my mouth shut, and sweat it out.’

'Huh? That's easy enough for you to say but I've got twelve semesters staring me in the face. What am I? A criminal?’

'That's your problem, fellow.’ The older student left.

One of the boys in the crowd seemed undisturbed by the notice. He was Herbert Beecher, son of the Company's Resident Agent General and a newcomer both to Mars and to the school. One of the other boys noticed his smirk. ‘What are you looking smug about, tourist?’ he demanded. ‘Did you know about this ahead of time?’

'Certainly I did.’

'I'll bet you thought it up.’

'No, but my old man says you guys have been getting away with it for a long time. My old man says that Stoobie was too soft to put any discipline into this school. My old man says that —’

'Nobody cares what your old man says. Beat it!’

'You better not talk about my old man that way. I'll —’

'Beat it I said!’

Young Beecher eyed his antagonist—a redheaded lad named Kelly—and decided that he meant it. He faded out of sight.

'He can afford to grin,’ Kelly said bitterly, ‘he lives in his old man's quarters. This thing only gets at those of us who have to live in the school. It's rank discrimination, that's what it is!’ About a third of boys were day students, mostly sons of Company employees who were stationed at Syrtis Minor. Another third were migratory colonials and the balance were the children of terrestrials at the outlying stations, especially those employed on the atmosphere project. Most of these last were Bolivians and Tibetans, plus a few Eskimos. Kelly turned to one of them. ‘How about it, Chen? Are we going to put up with this?’

The Asiatic's broad face showed no expression. ‘It is not worth getting excited about.’ He started to turn away.

'Huh? You mean you won't stand up for your rights?’

'These things pass.’

Jim and Frank went back to their room but continued to discuss it. ‘Frank,’ asked Jim, ‘what's behind this? Do you suppose they're pulling the same stunt over in the girl's school?’

'I could call up Dolores Montez and find out.’

'Mmm ... don't bother. I don't suppose it matters. The question is: what are we going to do about it?’

'What can we do about it?’

'I don't know. I wish I could ask Dad about this. He always told me to stand up for my rights—but maybe he would say that this is just something I should expect. I don't know.’

'Look,’ suggested Frank, ‘why don't we ask our fathers?’

'You mean call ‘em up tonight. Is there relay tonight?’

'No, don't call ‘em up; that costs too much. We'll wait till our folks come through here at Migration; that's not so very long now. If we're going to make a fuss, we've got to have our folks here to back us up, or we won't get any place with it. Meantime, we sit tight and do what he asks us. It may not amount to anything.’

'Now you're talking sense.’ Jim stood up. ‘I suppose we might as well try to get this dump tidied up.’

'Okay. Say, Jim, I just thought of something. Isn't the chairman of the Company named Howe?’

'John W. Howe,’ agreed Jim. ‘What about it?’

'Well, the head is named Howe, too.’

'Oh.’ Jim shook his head. ‘Doesn't mean anything. Howe is a very common name.’

'I'll bet it does mean something. Doc MacRae says you have to be somebody's cousin to get any of the juicy company appointments. Doc says that the company set-up is just one big happy family, and that the idea that it is a nonprofit corporation is the biggest joke since women were invented.’

'Hmm ... Well, I wouldn't know. Where shall I put this junk?’

Slips were distributed at breakfast the next morning giving what was described as ‘Official Arrangement of Rooms for Inspection'; the job the boys had done the night before had to be done over. Since Headmaster Howe's instructions failed to consider the possibility that two boys might be living in a one-boy room the rearranging was not easy; they were not ready by ten o'clock. However it was nearly two hours later that the Headmaster got around to their cubicle.

He poked his head inside, seemed about to leave, then came inside. He pointed to their outdoor suits, hanging on hooks by the clothes locker. ‘Why haven't you removed those barbaric decorations from your masks?’

The boys looked startled; Howe went on, ‘Haven't you looked at the bulletin board this morning?’

'Er—no, sir.’

'Do so. You are responsible for anything posted on the bulletin board.’ He shouted toward the door. ‘Orderly!’

One of the older students appeared in the doorway. ‘Yes, sir.’

'Weekend privileges suspended for these two pending satisfaction of inspection requirements. Five demerits each.’ Howe looked around. ‘This room is unbelievably cluttered and untidy. Why didn't you follow the prescribed diagram?’

Jim stuttered, tongue-tied by the evident unfairness of the question. Finally he got out, ‘This is supposed to be a single room. We did the best we could.’

'Don't resort to excuses. If you don't have room to store things neatly, get rid of the excess baggage.’ For the first time his eye lit on Willis, who, at the sight of strangers, had retreated to a corner and hauled in all out-rigging. Howe pointed at him. ‘Athletic equipment must be stored on tops of lockers or left in the gymnasium. It must not be thrown in corners.’

Jim started to answer; Frank kicked him in a shin. Howe went on lecturing as he moved toward the door. ‘I realize that you young people have been brought up away from civilization and have not had the benefits of polite society, but I shall do my best to remedy that. I intend that this school shall, above all other things, turn out civilized young gentlemen.’ He paused at the door and added, ‘When you have cleaned up those masks, report to my office.’

When Howe was out of earshot Jim said, ‘What did you kick me for?’

'You dumb idiot, he thought Willis was a ball.’

'I know; I was just about to set him right.’

Frank looked disgusted. ‘Don't you know enough to let well enough alone? You want to keep Willis, don't you? He would have whipped up some rule making him contraband.’

'Oh, he couldn't do that!’

'The heck he couldn't! I'm beginning to see that Stoobie kept our pal Howe from exercising his full talents. Say, what did he mean: demerits?’

'I don't know, but it doesn't sound good.’ Jim took down his respirator mask, looked at the gay tiger stripes. ‘You know, Frank, I don't think I want to become a civilized young gentleman.’

'You and me both!’

They decided to take a quick look at the bulletin board before they got into any more trouble rather than fix the masks at once. They went to the entrance foyer and did so. On the board was pinned:

NOTICE TO STUDENTS

1. The practice of painting respirator masks with so-called identification patterns will cease. Masks will be plain and each student will letter his name neatly in letters one inch high across the chest and across the shoulders of his outdoors suit.

2. Students are required to wear shirts and shoes or slippers at all times and places except in their own rooms.

3. Pets will no longer be permitted. In some cases, where the animals are of interest as scientific specimens, arrangements may be made to feed and care for same in the biology laboratory.

4. Food must not be kept in dormitory rooms. Students receiving food packages from parents will store them with the commissary matron and reasonable amounts may be withdrawn immediately after meals, except Saturday morning breakfast. Special permission may be obtained for ‘sweets parties’ during recreation hours on occasions such as birthdays, *etc.*

5. Students denied weekend privileges for disciplinary reasons may read, study, compose letters, play musical instruments or listen to music. They are not permitted to play cards, visit in other students’ rooms, nor leave the school area for any reason.

6. Students wishing to place telephone calls will submit a written request on the approved form and will obtain a key to the communications booth at the main office.

7. The student council is dissolved. Student government will be resumed only if and when the behaviour of the student body justifies it.

(signed) M. Howe, Headmaster

Jim whistled. Frank said, ‘Would you look at that, Jim? Dissolving the Student Council—imagine that! Do you suppose we have to get permission to scratch? What does he take us for?’

'Search me. Frank, I haven't *got* a shirt.’

'Well, I can lend you a sweat shirt until you can buy some. But take a look at paragraph three—you'd better get busy.’

'Huh? What about it?’ Jim reread it.

'You'd better go butter up the bio teacher, so you can make some arrangements for Willis.’

'What?’ Jim simply had not connected the injunction concerning pets with Willis; he did not think of Willis as a pet. ‘Oh, I can't do that, Frank. He'd be terribly unhappy.’

'Then you had better ship him home and let your folks care for him.’

Jim looked balky. ‘I won't do it. I won't!’

'Then what are you going to do?’

'I don't know.’ He thought about it. ‘I won't do anything about it. I'll just keep him under cover. Howe doesn't even know I've got him.’

'Well ... you might get away with it, so long as nobody snitches on you.’

'I don't think any of the fellows would do that.’

They went back to their room and attempted to remove the decorations from their masks. They were not very successful; the paint had bitten into the plastic and they succeeded only in smearing the colours around. Presently a student named Smythe stuck his head in the door. ‘Clean up your masks for you?’

'Huh? It can't be done; the colours have soaked in.’

'You're the umpteenth to find that out. But, from the goodness of my heart and a willingness to be of public service, I will paint your mask over to match the original shade—at a quarter credit per mask.'

'I thought there was a catch in it,' Jim answered.

'Do you want it, or don't you? Hurry up, my public is waiting.'

'Smitty, you would sell tickets to your grandmother's funeral.' Jim produced a quarter credit.

'That's an idea. How much do you think I could charge?'

The other boy produced a can of lacquer and a brush, rapidly painted out Jim's proud design, using a pigment that was a fair match for the olive-drab original shade. 'There. It'll dry in a couple of minutes. How about you, Sutton?'

'Okay, bloodsucker,' Frank agreed.

'Is that any way to talk about your benefactor? I've got a heavy date over on the girls' side and here I am spending my precious Saturday helping you out.' Smythe made equally rapid work of Frank's mask.

'Spending your time raising money for your date, you mean,' amended Jim. 'Smitty, what do you think of these trick rules the new Head has thought up? Should we knuckle under, or make a squawk?'

'Squawk? What for?' Smythe gathered up his tools. 'There's a brand-new business opportunity in each one, if you only had the wit to see it. When in doubt, come see Smythe—special services at all hours.' He paused at the door. 'Don't mention that deal about tickets to my grandmother's funeral; she'd want a cut on it before she kicks off. Granny is a very shrewd gal with a credit.'

'Frank,' remarked Jim when Smythe was gone, 'there is something about that guy I don't like.'

Frank shrugged. 'He fixed us up. Let's check in and get off the punishment list.'

'Right. He reminds me of something Doc used to say. Every law that was ever written opened up a new way to graft.'

'That's not necessarily so. Come on.'

They found a long line waiting outside the Headmaster's office. They were finally ushered in in groups of ten. Howe gave their masks a brief glance each, then started in to lecture. 'I hope that this will be a lesson to you young gentlemen not only in neatness, but in alertness. Had you noticed what was posted on the bulletin boards you would have been, each of you, prepared for inspection. As for the dereliction itself, I want you to understand that this lesson far transcends the matter of the childish and savage designs you have been using on your face coverings, offensive as they were.'

He paused and made sure of their attention. 'There is actually no reason why colonial manners should be rude and vulgar and, as head of this institution, I intend to see to it that whatever defects there may have been in your home backgrounds are repaired. The first purpose, perhaps the only purpose, of education is the building of character—and character can be built only through discipline. I flatter myself that I am exceptionally well prepared to undertake this task; before coming here I had twelve years' experience as a master at the Rocky Mountains Military Academy, an exceptionally fine school, a school that produced *men*'

He paused again, either to catch his breath or let his words soak in. Jim had come in prepared to let a reprimand roll off his back, but the schoolmaster's supercilious attitude and most especially his suggestion that a colonial home was an inferior sort of environment had gradually gotten his dander up. He spoke up. 'Mr Howe?'

'Eh? Yes? What is it?'

'This is not the Rocky Mountains; it's Mars. And this isn't a military academy.'

There was a brief moment when it seemed as if Mr Howe's surprise and anger might lead him to some violence, or even to apoplexy. After a bit he contained himself and said through tight lips. 'What is your name?'

'Marlowe, sir. James Marlowe.'

'It would be a far, far better thing for you, Marlowe, if it were a military academy.' He turned to the others. 'The rest of you may go. Weekend privileges are restored. Marlowe, remain behind.'

When the others had left Howe said, 'Marlowe, there is nothing in this world more offensive than a smart-aleck boy, an ungrateful upstart who doesn't know his place. You are enjoying a fine education through the graciousness of the Company. It ill behooves you to make cheap wisecracks at persons appointed by the Company to supervise your training and welfare. Do you realize that?'

Jim said nothing. Howe said sharply, 'Come! Speak up, lad—admit your fault and make your apology. Be a man!'

Jim still said nothing. Howe drummed on the desk top; finally he said, 'Very well, go to your room and think it over. You have the weekend to think about it.'

When Jim got back to his room Frank looked him over and shook his head admiringly. 'Boy, oh boy!' he said, 'ain't you the reckless one.'

'Well, he needed to be told.'

'He sure did. But what are your plans now? Are you going to cut your throat, or just enter a monastery? Old Howie will be gunning for you every minute from here on out. Matter of fact, it won't be any too safe to be your roommate.'

'Confound it, Frank, if that's the way you feel, you're welcome to find another roommate!’

'Easy, easy! I won't run out on you. I'm with you to the end.’ Smiling, the boy fell dead. ‘I'm glad you told him off. I wouldn't have had the courage to do it myself.’

Jim threw himself across his bunk. ‘I don't think I can stand this place. I'm not used to being pushed around and sneered at, just for nothing. And now I'm going to get it double. What can I do?’

'Derned if I know.’

'This was a nice place under old Stoobie. I thought I was going to like it just fine.’

'Stoobie was all right. But what *can* you do, Jim, except shut up, take it, and hope he will forget it?’

'Look, nobody else likes it either. Maybe if we stood together we could make him slow up.’

'Not likely. You were the only one who had the guts to speak up. Shucks, *I* didn't even back you up—and I agree with you a hundred per cent.’

'Well, suppose we all sent letters to our parents?’

Frank shook his head. ‘You couldn't get them all to—and some pipsqueak would snitch. Then you would be in the soup, for inciting to riot or some such nonsense. Anyhow,’ he went on, ‘just what could you say in a letter that you could put your finger on and prove that Mr Howe was doing something he had no right to? I know what my old man would say.’

'What would he say?’

'Many's the time he's told me stories about the school he went to back Earthside and what a rough place it was. I think he's a little proud of it. If I tell him that Howie won't let us keep cookies in our room, he'll just laugh at me. He'd say —’

'Dawggone it, Frank, it's not the rule about food in our rooms; it's the whole picture.’

'Sure, sure. *I* know it. But try to tell my old man. All we can tell is little things like that It'll have to get a lot worse before you could get our parents to do anything.’

Frank's views were confirmed as the day wore on. As the news spread student after student dropped in on them, some to pump Jim's hand for having bearded the Headmaster, some merely curious to see the odd character who had had the temerity to buck vested authority. But one two-pronged fact became apparent: no one liked the new school head and all resented some or all of his new ‘disciplinary’ measures, but no one was anxious to join up in what was assumed to be a foregone lost cause.

On Sunday Frank went out into Syrtis Minor—the terrestrial settlement, not the nearby Martian city. Jim, under what amounted to room arrest, stayed in their room, pretended to study and talked to Willis. Frank came back at supper time and announced, ‘I brought you a present.’ He chucked Jim a tiny package.

'You're a pal! What is it?’

'Open it and see.’

It was a new tango recording, made in Rio and direct from Earth via the *Albert Einstein,* titled *¿Quién Es La Señorita?* Jim was inordinately fond of Latin music; Frank had remembered it.

'Oh, boy!’ Jim went to the study desk, threaded the tape into the speaker, and got ready to enjoy it. Frank stopped him.

'There's the supper bell. Better wait.’

Reluctantly Jim complied, but he came back and played it several times during the evening until Frank insisted that they study. He played it once more just before lights-out.

The dormitory corridor had been dark and quiet for perhaps fifteen minutes when *¿Quién Es La Señorita?* started up again. Frank sat up with a start. ‘What the dickens? Jim—don't play that now!’

'I'm not,’ protested Jim. ‘It must be Willis. It has to be Willis.’

'Well, shut him up. Choke him. Put a pillow over his head.’

Jim switched on the light. ‘Willis boy—hey, Willis! Shut up that racket!’ Willis probably did not even hear him. He was standing in the middle of the floor, beating time with his eye stalks, and barrelling on down the groove. His rendition was excellent, complete with marimbas and vocal chorus.

Jim picked him up. ‘Willis! Shut up, fellow.’

Willis kept on beating it out.

The door burst open and framed Headmaster Howe. ‘Just as I thought,’ he said triumphantly, ‘no consideration for other people's rights and comforts. Shut off that speaker. And consider yourself restricted to your room for the next month.’

Willis kept on playing; Jim tried to hide him with his body. ‘Didn't you hear my order?’ demanded Howe. ‘I said to shut off that music.’ He strode over to the study desk and twisted the speaker switch. Since it was already shut off full, all he accomplished was breaking a finger nail. He suppressed an unschoolmasterly expression and stuck the finger in his mouth. Willis worked into the third chorus.

Howe turned around. ‘How do you have this thing wired?’ he snapped. Getting no answer, he stepped up to Jim and said, ‘What are you hiding?’ He shoved Jim aside, looked at Willis with evident disbelief and distaste. ‘What is *that?'*

'Uh, that's Willis,’ Jim answered miserably, raising his voice to be heard.

Howe was not entirely stupid; it gradually penetrated that the music he had been hearing came out of the curious-looking, fuzzy sphere in front of him.

'And what is Willis, may I ask?'

'Well, he's a ... a bouncer. A sort of a Martian.' Willis picked this moment to finish the selection, breathe a liquid contralto *buenas noches,* and shut up—for the moment.

'A bouncer? I've never heard of one.'

'Well, not very many have seen one, even among the colonists. They're scarce.'

'Not scarce enough. Sort of a Martian parrot, I assume.'

'Oh, no!'

'What do you mean, Oh, no?'

'He's not a bit like a parrot. He talks, he thinks—he's my friend!'

Howe was over his surprise and recalling the purpose of his visit. 'All that is beside the point. You saw my order about pets?'

'Yes, but Willis is not a pet.'

'What is he, then?'

'Well, he *can't* be a pet. Pets are animals; they're property. Willis isn't property; he's—well, he's just Willis.'

Willis picked this time to continue with the next thing he had heard after the last playing of the tango. 'Boy, when I hear that music,' he remarked in Jim's voice, 'I don't even remember that old no-good Howe.'

'I can't forget him,' Willis went on in Frank's voice. 'I wish I had had the nerve to tell him off the same time you did, Jim. You know what? I think Howe is nuts, I mean really nuts. I'll bet he was a coward when he was a kid and it's twisted him inside.'

Howe turned white. Frank's armchair psychoanalyzing had hit dead centre. He raised his hand as if to strike, then dropped it again, uncertain what to strike. Willis hastily withdrew all protuberances and became a smooth ball.

'I say it's a pet,' he said savagely, when he regained his voice. He scooped Willis up and headed for the door.

Jim stared after him. 'Say! Mr Howe—you can't take Willis!'

The Headmaster turned. 'Oh, I can't, can't I? You get back to bed. See me in my office in the morning.'

'If you hurt Willis, I'll ... I'll —'

'You'll what?' he paused. 'Your precious pet won't be hurt. Now you get back in that bed before I thrash you.' He turned again and left without stopping to see whether or not his order had been carried out.

Jim stood staring at the closed door, tears streaming down his cheeks, sobs of rage and frustration shaking him. Frank came over and put a hand on him. 'Jim. Jim, don't take on so. You heard him promise not to hurt Willis. Get back into bed and settle it in the morning. At the very worst you'll have to send Willis home.'

Jim shook off the hand.

Frank went on, ‘Don't let him get your goat, fellow; if he gets you angry, you'll do something silly and then he's got you.’

'I'm already angry.’

'I know you are and I don't blame you. But you've got to get over it and use your head. He was laying for you—you saw that. No matter what he does or says you've got to keep cool and outsmart him—or he gets you in wrong.’

'I suppose you're right.’

'I know I'm right. That's what Doc would say. Now come to bed.’

Neither one of them got much sleep that night. Toward morning Jim had a nightmare that Howe was a withdrawn Martian whom he was trying to unroll—against his better judgement.

There was a brand-new notice on the bulletin board at breakfast time. It read:

IMPORTANT NOTICE

Hereafter all personal weapons will be kept in the armoury at all times. The office of student armourer is abolished; weapons will be issued by the Headmaster and only when the student concerned is leaving the limits of the school and the adjoining settlement. The practice of wearing sidearms in areas where there is no actual danger from Martian *fauna* will cease.

(signed) M. Howe, Headmaster

Jim and Frank read it together. ‘I don't get it,’ said Jim. ‘Why should he want to take over such a headache? Especially since most of us are licensed?’ All the students usually kept their guns in the armoury, but the student armourer had kept check only on the weapons of those students still trying to win their licences.

Frank studied it. ‘Do you know what I think?’

'No what?’

'I think he's afraid of you personally.’

'Me? Why?’

'Because of what happened last night. There was murder in your eye and he saw it. I think he wants to pull your teeth. I don't think he gives a hoot about the rest of us hanging on to our guns.’

'You really think so? Hmm ... maybe it's a good thing our guns don't happen to be in the armoury at the moment.’

'The question is: what are you going to do about it?’

Jim thought about it. ‘I'm not going to give up my gun. Dad wouldn't want me to. I'm sure of that. Anyhow, I'm licensed and I don't have to. I'm a qualified marksman, I've passed the psycho tests, and I've taken the oath; I'm as much entitled to wear a gun as he is.’

'Okay, I'm with you on it. But we had better think up a wrinkle before you have to go see him this morning.’

The wrinkle showed up at breakfast—the student named Smythe. Frank spoke to Jim about it in a low voice; together they accosted the student after breakfast and brought him to their room. ‘Look, Smitty,’ began Jim, ‘you're a man with lots of angles, aren't you?’

'Mmm ... could be. What's up?’

'You saw that notice this morning?’

'Sure. Who didn't? Everybody is grousing about it.’

'Are you going to turn in your gun?’

'My gun has been in the armoury all along. What do I need a gun for around here? I've got a brain.’

'In that case you won't be called in about your gun. Now just supposing that you were handed two packages to take care of. You won't open them and you won't know what's in them. Do you think you could find a safe, a *really* safe place to keep them and still be able to give them back on short notice?’

'I don't suppose you want me to tell anybody about these, uh, packages?’

'Nope. Nobody.’

'Hmm ... this sort of service comes high.’

'How high?’

'Well, now, I couldn't afford to do it for less than two credits a week.’

'That's too much,’ Frank put in sharply.

'Well—you're friends of mine. I'll make you a flat rate of eight credits for the rest of the year.’

'Too much.’

'Six credits then, and I won't go lower. You've got to pay for the risk.’

'It's a deal,’ Jim said before Frank could bargain further.

Smythe left with a bundle before Jim reported to the Headmaster's office.

5

Little Pitchers Have Big Ears

Headmaster Howe kept Jim waiting thirty minutes before admitting him. When he was finally let in, Jim saw that Howe seemed to be quite pleased with himself. He glanced up. ‘Yes? You asked to see me?’

'You told me to see you, sir.’

'I did? Let me see now, what is your name?’

He darn well knows my name, Jim said savagely to himself; *he's trying to get my goat.* He recalled Frank's solemn warning not to lose his temper. ‘James Marlowe, sir,’ he answered evenly.

'Oh, yes. Now, Marlowe, you wanted to see me about something?'

'You told me to see you. About Willis.'

'Willis? Oh yes, the Martian roundhead.' Howe smiled with his lips. 'An interesting scientific specimen.'

Howe added nothing more. The silence kept up so long that Jim began to realize that the Headmaster intended to force him to make any moves. Jim had already resigned himself to the idea that it would be impossible to keep Willis at the school any longer. He said, 'I've come to get him. I'm going to take him out in town and arrange to send him home.'

Howe smiled more broadly. 'Oh, you are? And pray tell me how you are going to do that when you are restricted to the school for the next thirty days?'

Frank was still warning him; Jim could almost hear him. He answered, 'All right, sir, I'll get somebody to do it for me—today. Now, please, can I have Willis?'

Howe leaned back and crossed his fingers over his stomach. 'You bring up a most interesting point, Marlowe. You said last night that this creature is not a pet.'

Jim was puzzled. 'Yes?'

'You were quite emphatic about it. You said that he wasn't your property, but your friend. That's right, isn't it?'

Jim hesitated. He could feel that a trap was being built for him, but he was not sure what sort. 'What if I did?'

'Did you say that, or didn't you? Answer me!'

'Well—yes.'

Howe leaned forward. 'In that case, what are you doing in here demanding that I turn this creature over to you? You have no claim on him.'

'But—but —' Jim stopped, at a loss for words. He had been tricked with words, slippery words; he did not know how to answer them. 'You can't do that!' he blurted out. 'You don't own him, either! You have no right to keep him locked up.'

Howe carefully fitted his finger tips together. 'That is a matter still to be determined. Although you have waived all claim to him, it may be that the creature is property nevertheless—in which case he was found on the school grounds and I may take title to him on behalf of the school, as a scientific specimen.'

'But—You can't do that; that's not fair! If he belongs to anybody, he belongs to me! You've got no right to —'

'Silence!' Jim shut up; Howe went on more quietly, 'Don't tell me what I can or cannot do. You forget that I am in *loco parentis* to you. Any rights that you may have are vested in me, just as if I were your own father. As to the disposition of this creature, I am looking into it;

I expect to see the Agent General this afternoon. In due course you will be informed of the outcome.’

The Latin phrase confused Jim, as it was intended to; but he did catch one point in Howe's statement and snatched at it ‘I'm going to tell my father about this. You can't get away with it.’

'Threats, eh?’ Howe smiled sourly. ‘Don't bother to ask for the key to the communications booth; I don't propose to have students phoning their parents every time I tell them to wipe their noses. Send your father a letter—but let me hear it before you send it.’ He stood up. ‘That is all. You may go.’

Frank was waiting. ‘I don't see any blood,’ he announced, looking Jim over. ‘How did it go?’

'Oh, that so-and-so!’

'Bad, eh?’

'Frank, he won't let me have Willis.’

'He's going to make you send him home? But you expected that.’

'No, not that. He won't let me have him at all. He used a lot of doubletalk but all it meant was that he had him and meant to keep him.’ Jim seemed about to break down and blubber. ‘Poor little Willis—you know how timid he is. Frank, what'll I do?’

'I don't get it,’ Frank answered slowly. ‘He can't keep Willis, not for keeps. Willis belongs to you.’

'I told you he used a lot of doubletalk—but that's what he means to do just the same. How am I going to get him back? Frank, I've just got to get him back.’

Frank did not answer; Jim looked around disconsolately and noticed the room for the first time. ‘What happened here?’ he asked. ‘The place looks like you had tried to wreck it.’

'Oh, that. I started to tell you. While you were gone, a couple of Howie's stooges searched the place.’

'Huh?’

'Trying to find our guns. I just played dumb.’

'They did, did they?’ Jim appeared to make up his mind. ‘I've got to find Smythe.’ He headed for the door.

'Hey wait—what d'you want to find Smitty for?’

Jim looked back and his face was very old. ‘I'm going to get my gun and go back there and get Willis.’

'Jim! You're nuts!’

Jim did not answer but continued toward the door.

Frank stuck out a foot, tripped him and landed on his back as he went down. He grabbed Jim's right arm and twisted it behind his back. ‘Now you just rest there,’ he told Jim, ‘until you quiet down.’

'Let me up.’

'You got some sense in your head?’

No answer. ‘Okay,’ Frank went on, ‘I can sit here just as long as you want to. Let me know when you've quieted down.’ Jim started to struggle; Frank twisted his arm until he yelped and relaxed.

'That's better,’ said Frank. ‘Now listen to me: you're a nice guy, Jim, but you go off half cocked. Suppose you do get your gun and suppose you manage to scare old Howie into coughing up Willis. How long are you going to keep him? You know how long? Just long enough for him to call in some Company police. Then they lock you up and take Willis away from you again. And you'll never see Willis again, not to mention the trouble and grief you'll cause your folks.’

There followed a considerable silence. Finally Jim said, ‘Okay, let me up.’

'You've given up the idea of waving your gun around?’

'Sure.’

'On your honor? Licensed gun-wearer's oath and all that sort of thing?’

'Yes, I promise.’

Frank let him up and brushed him off. Jim rubbed his arm and said, ‘You needn't have twisted it so hard.’

'You're a fine one to complain; you ought to thank me. Now grab your notebook; we're going to be late to chemistry lab.’

'I'm not going.’

'Don't be silly, Jim. No use to pile up a bunch of cuts and maybe flunk just because you're sore at the Head.’

'That's not the idea. I'm quitting, Frank. I won't stay in this school.’

'What? Don't be hasty, Jim. I know how you feel, but it's here or nowhere. Your folks can't afford to send you back to Earth for school.’

'Then it's nowhere. I won't stay here. I'm going to hang around just long enough to find some way to get my hands on Willis, then I'm going home.’

'Well ...’ Frank stopped to scratch his head. ‘It's your problem. But see here—you might as well come on to chem lab. It won't hurt you any and you don't intend to leave this minute anyhow.’

'No.’

Frank looked worried. ‘Will you promise me to stay right here and not do anything rash till I get back?’

'Why should you worry?’

'Promise me, Jim, or I cut lab, too.’

'Oh, all right, all right! Go ahead.’

'Right!’ Frank dashed away.

When Frank got back he found Jim sprawled on his bunk. ‘Asleep?’

'No.’

'Figured out what you are going to do?’

'No.’

'Anything you want?'

'No.'

'Your conversation is brilliant,' Frank commented and sat down at the study desk.

'Sorry.' Nothing was heard from Howe the rest of that day. Frank managed to persuade Jim to attend classes the next day by pointing out that he did not want to invite attention to himself while he was waiting for an opportunity to grab Willis.

Tuesday also passed without word from Howe. Tuesday night, perhaps two hours after lights-out, Frank suddenly woke up. Someone was stirring in the room. 'Jim!' he called out softly.

Dead silence. Keeping quiet himself Frank reached out and switched on the light. Jim was standing near the door. 'Jim,' complained Frank, 'why didn't you answer me? You trying to scare me to death?'

'Sorry.'

'What's up? What are you doing out of bed?'

'Never mind. You go on back to sleep.'

Frank climbed out of bed. 'Oh, no! Not while you've got that wild look in your eye. Now tell papa.'

Jim waved him away. 'I don't want to mix you up in this. Go on back to bed.'

'Think you're big enough to make me? Now cut out the foolishness and give. What are your plans?'

Reluctantly Jim explained. It seemed likely to him that Headmaster Howe had Willis locked up somewhere in his office. Jim planned to break in and attempt a rescue. 'Now you go back to bed,' he finished. 'If they question you, you don't know anything; you slept all night.'

'Let you tackle it alone? Not likely! Anyhow you need somebody to jigger for you.' Frank started fumbling around in their locker.

'I don't want any help. What are you looking for?'

'Laboratory gloves,' answered Frank. 'You're going to get help whether you want it or not, you thumb-fingered idiot. I don't want you caught.'

'What do you want gloves for?'

'Ever hear of fingerprints?'

'Sure, but he'll know who did it—and I don't care; I'll be gone.'

'Sure, he'll know, but he may not be able to prove it. Here, put these on.' Jim accepted the gloves and with them he tacitly accepted Frank's help in the adventure.

Burglary is not common on Mars and locks are unusual items. As for night watchmen, manpower is not transported through millions of miles of space simply to be used to watch the silent corridors of a boys' school. The principal hazard that Jim and Frank faced in getting to the school's offices was the chance of running into some restless student going to the washroom after hours.

They moved as silently as possibly and scouted each stretch of corridor before entering it. In a few minutes they were at the outer door of the offices without—they hoped—having been seen. Jim tried the door; it was locked. 'Why do they bother to lock this?' he whispered.

'On account of guys like you and me,' Frank told him. 'Go back to the corner and keep your eye peeled.' He attacked the latch with his knife.

'Okay.' Jim went to the passageway intersection and kept lookout. Five minutes later Frank hissed at him; he went back. 'What's the matter?'

'Nothing's the matter. Come on.' Frank had the outer door open.

They tiptoed through the outer office, past recording desks and high stacked spool files to an inner door marked: Marquis Howe—HEADMASTER—*Private.*

The lettering on the door was new—and so was the lock. The lock was no mere gesture, capable of being picked or sprung with a knife; it was a combination type, of titanium steel, and would have looked more at home on a safe.

'Think you can open it?' Jim asked anxiously.

Frank whistled softly. 'Don't be silly. The party is over, Jim. Let's see if we can get back to bed without getting caught.'

'Maybe we can get the door off its hinges.'

'It swings the wrong way. I'd rather try to cut a hole through the partition.' He moved aside, knelt down, and tried the point of his knife on the wall.

Jim looked things over. There was an airconditioning duct running from the corridor through the room they were in and to the wall of the headmaster's office. The hole for the duct was almost as wide as his shoulders; if he could unscrew the holding flanges and let the duct sag out of the way—

No, he could not even get up to it; there was nothing to use as a ladder. The file cabinets were fastened to the floor, he found.

There was a small grille set in the bottom of the door, to permit the exhaust air to escape from the inner office. It could not be removed, nor would the hole left be large enough to be of use, but he lay down and tried to peer through it. He could see nothing; the room beyond was dark.

He cupped his hands over it and called out, 'Willis! Oh, Willis! Willis boy —'

Frank came over and said urgently, 'Cut that out. Are you trying to get us caught?’

'Sh!’ Jim put his ear to the grille.

They both heard a muffled reply: ‘Jim boy! Jim!’

Jim replied, ‘Willis! Come here, Willis!’ and listened. ‘He's in there,’ he said to Frank. ‘Shut up in something.’

'Obviously,’ agreed Frank. ‘Now will you quiet down before somebody comes?’

'We've got to get him out. How are you making out with the wall?’

'No good. There's heavy wire mesh set in the plastic.’

'Well, we've got to get him out. What do we do?’

'We don't do a darn thing,’ asserted Frank. ‘We're stymied. We go back to bed.’

'You can go back to bed if you want to. I'm going to stay here and get him out.’

'The trouble with you, Jim, is that you don't know when you are licked. Come on!’

'No. Sh!’ He added, ‘Hear anything?’

Frank listened. ‘I hear something. What is it?’

It was a scraping noise from inside the inner office. ‘It's Willis, trying to get out,’ Jim stated.

'Well, he can't. Let's go.’

'No.’ Jim continued to listen at the grille. Frank waited impatiently, his spirit of adventure by now more than satisfied. He was stretched between a reluctance to run out on Jim and an anxiety to get back to his room before they were caught. The scraping noise continued.

After a while it stopped. There was a soft *plop!* as if something soft but moderately heavy had fallen a foot or so, then there was a slight scurrying sound, almost beyond hearing.

'Jim? Jim boy?’

'Willis!’ yelped Jim. The bouncer's voice had come to him from just beyond the grille.

'Jim boy take Willis home.’

'Yes, yes! Stay there, Willis; Jim has to find a way to get Willis out.’

'Willis get out.’ The bouncer stated it positively.

'Frank,’ Jim said urgently ‘if we could just find something to use as a crowbar, I could bust that grille out of its frame. I think maybe Willis could squeeze through.’

'We've got nothing like that. We've got nothing but our knives.’

'Think, fellow, think! Is there anything in our room, anything at all?’

'Not that I know of.’ The scraping noise had resumed; Frank added, ‘What's Willis up to?’

'I guess he's trying to get the door open. We've got to find some way to open it for him. Look, I'll boost you up on my shoulders and you try to take the collar off that air duct.’

Frank looked the situation over. ‘No good. Even if we get the duct down, there'll be a grille set in the other side of the wall.’

'How do you know?’

'There always is.’

Jim shut up. Frank was certainly correct and he knew it. The scraping sound had continued, still continued. Frank dropped on one knee and put his head close to the grille. He listened.

'Take it easy,’ he advised Jim after a moment. ‘I think maybe Willis is making out all right by himself.’

'What do you mean?’

'That's a cutting sound if I ever heard one.’

'Huh? Willis can't cut through a door. Many's the time I've locked him up, back home.’

'Maybe. Maybe not. Maybe he just didn't want to get out bad enough.’ The scraping sound was more distinct now.

A few minutes later a fine circular line began to show around the grille, then the portion of the door enclosed by the line fell toward them. For an instant Willis could be seen through the hole. Sticking out from his tubby body was a clawed pseudolimb eight inches long and an inch thick. ‘What's that?’ demanded Frank.

'Darned if I know. He never did anything like *that* before.’

The strange limb withdrew, disappeared inside his body, and the fur closed over the spot, leaving no sign that it had ever existed. Willis proceeded to change his shape, until he was more nearly watermelon-shaped than globular. He oozed through the hole. ‘Willis out,’ he announced proudly.

Jim snatched him up and cradled him in his arms. ‘Willis! Willis, old fellow.’

The bouncer cuddled in his arms. ‘Jim boy lost,’ he said accusingly. ‘Jim went away.’

'Yes, but not ever again, Willis stay with Jim.’

'Willis stay. Good.’

Jim rubbed his cheek against the little fellow's fur. Frank cleared his throat. ‘It might be a good idea to pop back into our hole.’

'Sure.’ The trip back to their room was made quickly and, so far as they could detect, without arousing attention. Jim dumped Willis on his bed and looked around. ‘I wonder just what I should try to take? I'll have to get hold of Smitty and get my gun.’

'Hold on,’ said Frank. ‘Don't get ahead of yourself. You don't really have to go, you know.’

'Huh?’

'I didn't hurt the outer lock; we never touched Howe's private lock. All there is to show for Willis's escape is a hole that we obviously couldn't get through—and another one like it, probably, in Howe's desk. He can't prove a thing. You can arrange to ship Willis back and we can just sit tight.’

Jim shook his head. ‘I'm leaving. Willis is just part of it. I wouldn't stay in a school run by Howe if you paid me to.’

'Why be hasty, Jim?’

'I'm not being hasty. I don't blame you for staying; in another year you can take the rocket pilot candidate exams and get out. But if you should happen to bust the exams, I'll bet you don't stick here until graduation.’

'No, I probably won't. Have you figured out how you are going to get away without Howe stopping you? You don't dare leave until daylight; it is too cold until then.’

'I'll wait until daylight and just walk out.’

'The idea,’ Frank said dryly, ‘is to get away. What you want to do is to pull a sneak. I think we had better find a way to keep you under cover until that can be arranged. The chances ought to be good after noon.’

Jim was about to ask Frank why he thought the chances would be good after noon when Willis repeated the last three words. First he repeated them in Frank's voice, then he said them again in rich, fruity accents of an older man. ‘Good afternoon!’ he intoned.

'Shut up, Willis.’

Willis said it again, ‘Good afternoon, Mark. Sit down, my boy. Always happy to see you.’

'I've heard that voice,’ said Frank, puzzlement in his tones.

'Thank you, General. How do you do, sir?’ Willis went on, now in the precise, rather precious tones of Headmaster Howe.

'I know,’ said Frank. ‘I've heard it on broadcast; it's Beecher, the Resident Agent General.’

'Sh —’ said Jim, ‘I want to listen.’ Willis continued, again in the fruity voice:

'Not bad, not too bad for an old man.’

'Nonsense, General, you're not old.’—Howe's voice again.

'Kind of you to say so, my boy,’ Willis went on. ‘What have you in the bag? Contraband?’

Willis repeated Howe's sycophantic laugh. ‘Hardly. Just a scientific specimen—a rather interesting curiosity I confiscated from one of the students.’

There was a short pause, then the fruity voice said, ‘Bless my boots! Mark, wherever did you find this creature?’

'I just told you, sir,’ came Howe's voice. ‘I was forced to take it away from one of the students.’

'Yes, yes—but do you have any idea of *what* you've got?’

'Certainly, sir; I looked it up. *Areocephalopsittacus Bron* —'

'Spare me the learned words, Mark. It's a roundhead, a Martian roundhead. That's not the point. You say you got this from a student; do you think you could buy it from him?' the fruity voice continued eagerly.

Howe's voice answered slowly, 'I hardly think so, sir. I am fairly sure he wouldn't want to sell.' He hesitated, then went on, 'Is it important?'

'Important? That depends on what you mean by important ,' answered the voice of the Resident Agent General. 'Would you say that sixty thousand credits was important? Or even seventy thousand? For that is what I am sure the London zoo will pay for him, over and above the cost of getting him there.'

'Really?'

'Really. I have a standing order from a broker in London at fifty thousand credits; I've never been able to get him one. I'm sure the price can be boosted.'

'Indeed?' Howe agreed cautiously. 'That would be a fine thing for the Company, wouldn't it?'

There was a brief silence, then a hearty laugh. 'Mark, my boy, you slay me. Now see here—you are hired to run the school, aren't you?'

'Yes.'

'And I'm hired to look out for the interests of the Company, right? We put in a good day's work and earn our pay; that leaves eighteen hours a day that belongs to each of us, personally. Are you hired to find strange specimens?'

'No.'

'Neither am I. Do you understand me?'

'I think I do.'

'I'm sure you do. After all, I know your uncle quite well; I'm sure he wouldn't have sent his nephew out here without explaining the facts of life to him. He understands them very well himself, I can assure you. The fact is, my boy, that there are unlimited opportunities in a place such as this for a smart man, if he will just keep his eyes and ears open. Not graft, you understand.' Willis paused.

Jim started to say something; Frank said, 'Shut up! We don't want to miss any of this.'

The Resident's voice continued, 'Not graft at all. Legitimate business opportunities that are the natural concomitants of our office. Now about this student: what will it take to convince him he should sell? I wouldn't offer him too much or he will become suspicious. We mustn't have that.'

Howe was slow in replying. 'I am almost certain he won't sell, General, but there is another way, possibly.'

'Yes? I don't understand you.'

The boys heard Howe explain his particular theory of ownership with respect to Willis. They could not see Beecher dig Howe in the ribs but they could hear his choked laughter. 'Oh, that is rich! Mark, you slay me, you really do. Your talents are wasted as a school teacher; you should be a resident.'

'Well,' Howe's voice replied, 'I hardly expect to teach school all my life.'

'You won't, you won't. We'll find an agency for you. After all, the school will be smaller and of less importance after the non-migration policy goes into effect.'

('What's he talking about?' whispered Frank—'Quiet!' Jim answered.)

'Is there any news about that?' Howe wanted to know.

'I expect to hear from your uncle momentarily. You might stop in again this evening, my boy; I may have news.'

The remainder of the conversation was of no special interest, but Willis ploughed on with it nevertheless. The boys listened until Howe had made his farewell, after which Willis shut up.

Jim was frothing. 'Put Willis in a zoo! Why, the very idea! I hope he does catch me leaving; I'd welcome an excuse to take a shot at him!'

'Easy, fellow! I wonder,' Frank went on, 'what that business was about a non-migration policy?'

'I thought he said immigration.'

'I'm sure it was non-migration. What time is it?'

'About three.'

'We've got three hours, more or less. Jim, let's see what else we can coax out of Willis. I've got a hunch it may be important.'

'Okay.' Jim picked the fuzz ball up and said, 'Willis old fellow, what else do you know? Tell Jim everything you've heard—everything.'

Willis was happy to oblige. He reeled off bits of dialogue for the next hour, most of it concerned with unimportant routine of the school. At last the boys were rewarded by hearing again the unctuous tones of Gaines Beecher:

'Mark, my boy —'

'Oh—come in, General. Sit down. Happy to see you.'

'I just stopped by to say that I have gotten a dispatch from your dear uncle. He added a postscript sending his regards to you.'

'That's nice. Thank you, sir.'

'Not at all. Close that door, will you?' Willis put in sound effects of a door being closed. 'Now we can talk. The dispatch, of course, concerned the non-migration policy.'

'Yes?’

'I am happy to say that the board came round to your uncle's point of view. South Colony will stay where it is; this next ship load and the one following it will go to North Colony, where the new immigrants will have nearly twelve months of summer in which to prepare for the northern winter. What are you chuckling about?’

'Nothing important, sir. One of the students, a great lout named Kelly, was telling me today what his father was going to do to me when he came through here at migration. I am looking forward to seeing his face when he learns that his father will not show up.’

'You are not to tell him anything of the sort,’ the Resident's voice said sharply.

'Eh?’

'I want all this handled with the least possible friction. No one must know until the last possible moment. There are hotheads among the colonials who will oppose this policy, even though it has already been proved that, with reasonable precautions, the dangers of a Martian winter are negligible. My plan is to postpone migration two weeks on some excuse, then postpone it again. By the time I announce the change it will be too late to do anything but comply.’

'Ingenious!’

'Thank you. It's really the only way to handle colonials, my boy. You haven't been here long enough to know them the way I do. They are a neurotic lot, most of them failures back on Earth, and they will drive you wild with their demands if you are not firm with them. They don't seem to understand that all that they are and all that they have they owe directly to the Company. Take this new policy: if you let the colonists have their own way, they would continue to follow the sun, like so many rich playboys—and at the Company's expense.’

Willis shifted to Howe's voice. ‘I quite agree. If their children are any guide, they are a rebellious and unruly lot.’

'Really shiftless,’ agreed the other voice. ‘You must be firm with them. I must be going. Oh, about that, uh, specimen: you have it in a safe place?’

'Yes indeed, sir. Locked in this cabinet.’

'Hmm ... it might be better to bring it to my quarters.’

'Hardly necessary,’ Howe's voice denied. ‘Notice the lock on that door? It will be safe.’

There were goodbyes said and Willis shut up.

Frank muttered savagely to himself.

6

Flight

Jim shook him by the shoulder. ‘Snap out of it and help me. I'm going to be late.’

Frank said softly, ‘I wonder how he would like to tackle a winter at Charax? Maybe *he'd* like to stay inside for eleven or twelve months at a time—or go outside when it's a hundred below.’

'Sure, sure,’ agreed Jim. ‘But give me a hand.’

Frank turned suddenly and took down Jim's outdoors suit. He flung it at him, then took down his own and started climbing rapidly into it. Jim stared. ‘Hey—what are you doing?’

'I'm going with you.’

'Huh?’

'Think I'm going to sit here and do lessons when somebody is planning to trick my mother into being forced to last out a high-latitude winter? My own mother? Mom's got a bad heart; it would kill her.’ He turned and started digging things out of the locker. ‘Let's get moving.’

Jim hesitated, then said, ‘Sure, Frank, but how about your plans? If you quit school now you'll never be a rocket pilot.’

'So what? This is more important.’

'I can warn everybody of what's up just as well as two of us can.’

'The matter is settled, I tell you.’

'Okay. Just wanted to be sure you knew your own mind. Let's go.’ Jim climbed into his own suit, zipped it up, tightened straps, and then started picking over his belongings. He was forced to throw away a large part, as he wanted Willis to travel in his bag.

He picked up Willis. ‘Look, fellow,’ he said, ‘we're going home. I want you to ride inside here, where it's nice and warm.’

'Willis go for ride?’

'Willis go for ride. But I want you to stay inside and not say one word until I take you out. Understand?’

'Willis not talk?’

'Willis not talk at all, not till Jim takes him out.’

'Okay, Jim boy.’ Willis thought about it and added, ‘Willis play music?’

'No! Not a sound, not a word. No music. Willis close up and stay closed up.’

'Okay, Jim boy,’ Willis answered in aggrieved tones and promptly made a smooth ball of himself. Jim dropped him into the bag and zipped it.

'Come on,’ said Frank. ‘Let's find Smitty, get our guns, and get going.’

'The Sun won't be up for nearly an hour.’

'We'll have to risk it. Say, how much money have you got?’

'Not much. Why?’

'Our fare home, dope.'

'Oh —' Jim had been so preoccupied with other matters that he had not thought about the price of a ticket. The trip to the school had been free, of course, but they had no travel authorization for this trip; cash would be required.

They pooled resources—not enough for one ticket, much less than enough for two. 'What'll we do?' asked Jim.

'We'll get it out of Smitty.'

'How?'

'We'll get it. Let's go.'

'Don't forget your ice skates.'

Smythe roomed alone, a tribute to his winning personality. When they shook him, he wakened quickly and said, 'Very well, officer, I'll go quietly.'

'Smitty,' said Jim, 'we want our—we want those packages.'

'I'm closed for the night. Come back in the morning.'

'We got to have them now.'

Smythe got out of bed. 'There's an extra charge for night service, of course.' He stood on his bunk, removed the grille from his air intake, reached far inside, and hauled out the wrapped guns.

Jim and Frank tore off the wrappings and belted their guns on. Smythe watched them with raised eyebrows. Frank added, 'we've got to have some money.' He named the amount.

'Why come to me?'

'Because I know you've got it.'

'So? And what do I get in return? A sweet smile?'

'No.' Frank got out his slide rule, a beautiful circular instrument with twenty-one scales. 'How much for that?'

'Mmm—six credits.'

'Don't be silly! It cost my father twenty-five.'

'Eight, then. I won't be able to get more than ten for it.'

'Take it as security for fifteen.'

'Ten, cash. I don't run a pawn shop.' Jim's slide rule went for a smaller amount, then both their watches, followed by lesser items at lower prices.

At last they had nothing left to sell but their skates, and both boys refused the suggestion although they were still twelve credits short of what they needed. 'You've just got to trust us for the rest, Smitty,' Frank told him.

Smythe studied the ceiling. 'Well, seeing what good customers you've been, I might add that I also collect autographs.'

'Huh?'

'I'll have both of yours, on one IOU, at six per cent—per month.'

'Take it,' said Jim.

Finished, they started to leave. Smythe said, ‘My crystal ball tells me that you gentlemen are about to fade away. How?’

'Just walk out,’ Jim told him.

'Hmm ... it does not seem to have come to your attention that the front door is now locked at nights. Our friend and mentor, Mr Howe, unlocks it himself when he arrives in the morning.’

'You're kidding!’

'Go see for yourself.’

Frank tugged Jim's arm. ‘Come on. We'll bust it down if we have to.’

'Why do things the hard way?’ inquired Smythe. ‘Go out through the kitchen.’

'You mean the back door's not locked?’ demanded Frank.

'Oh, it's locked all right.’

'Then quit making silly suggestions.’

'I should be offended at that,’ Smythe answered, ‘but I consider the source. While the back door is locked, it did not occur to brother Howe to install a lock on the garbage dump.’

'The *garbage* dump,’ exploded Jim.

'Take it or leave it. It's your only way to sneak out.’

'We'll take it,’ decided Frank. ‘Come on, Jim.’

'Hold on,’ put in Smythe. ‘One of you can operate the dump for the other, but who's going to do it for the second man? He's stuck.’

'Oh, I see.’ Frank looked at him. ‘You are.’

'And what am I offered?’

'Confound you, Smitty, how would you like a lump on the head? You've already taken us for everything but our eye teeth.’

Smythe shrugged. ‘Did I refuse? After all, I told you about it. Very well, I'll chalk it up to overhead—good will, full measure, advertising. Besides, I don't like to see my clients fall afoul the law.’

They went quickly to the school's large kitchen. Smythe's cautious progress through the corridors showed long familiarity with casual disregard of rules. Once there, Smythe said, ‘All right, who goes first?’

Jim eyed the dump with distaste. It was a metal cylinder, barrel-size, laid on its side in the wall. It could be rotated on its main axis by means of a lever set in the wall; a large opening in it permitted refuse to be placed in it from inside the building, then removed from the outside, without disturbing the pressurization of the building—the simplest sort of a pressure lock. The interior showed ample signs of the use for which it was intended. ‘I'll go first,’ he volunteered and settled his mask over his face.

'Wait a second,’ said Frank. He had been eyeing the stocks of canned foods racked around the room. Now he dumped spare clothing from his bag and started replacing it with cans.

'Hurry up,' Smythe insisted. 'I want to get back to bed before the morning bell rings.'

'Yes, why bother?' protested Jim. 'We'll be home in a few hours.'

'Just a hunch. Okay, I'm ready.'

Jim climbed into the dump, drawing up his knees and clutching his bag to his chest. The cylinder rotated around him; he felt a sudden drop in pressure and a bitter cold draft. Then he was picking himself up from the pavement of the alley behind the school.

The cylinder creaked back to the loading position; in a moment Frank landed beside him. Jim helped him up. 'Boy, are you a mess!' he said, brushing at a bit of mashed potato that clung to his chum's suit.

'So are you, but there's no time to worry about it. Gee, but it's cold!'

'It'll be warmer soon. Let's go.' The pink glow of the coming Sun was already lighting the eastern sky, even though the air was still midnight cold. They hurried down the alley to the street in back of the school and along it to the right. This portion of the city was entirely terrestrial and could have been a city in Alaska or Norway, but beyond them, etched against the lightening sky, were the ancient towers of Syrtis Minor, denying the Earthlike appearance of the street.

They came, as they had planned, to a tributary canal and sat down to put on their skates. They were racers, with 22-inch razor-like blades, intended for speed alone. Jim finished first and lowered himself to the ice. 'Better hurry,' he said. 'I almost froze my behind.'

'You're telling me!'

'This ice is almost too hard to take an edge.'

Frank joined him; they picked up their bags and set out. A few hundred yards away the little waterway gave into the Grand Canal of the city; they turned into it and made speed for the scooter station. Despite the exercise they were tingling with cold by the time they got to it.

They went through the pressure door and inside. A single clerk was on duty there. He looked up and Frank went to him. 'Is there a scooter to South Colony today?'

'In about twenty minutes,' said the clerk. 'You want to ship those bags?'

'No, we want tickets.' Frank handed over their joint funds.

Silently the clerk attended to the transaction. Jim heaved a sigh of relief; scooters to the colony did not run every day. The chance that they might have to keep out of sight for a day or more and then try to get away without encountering Howe had been eating at him.

They took seats in the back of the station and waited. Presently Jim said, 'Frank, is Deimos up?'

'I didn't notice. Why?'

'Maybe I can get a call through to home.'

'No money.'

'I'll put it through collect.' He went to the booth opposite the clerk's desk; the clerk looked up but said nothing. Inside, he signalled the operator. Subconsciously he had been worrying about getting word to his father ever since Willis had spilled the secret of the so-called non-migration policy.

The screen lighted up and a pleasant-appearing young woman—with the fashionable striped hair—appeared therein. 'I'd like to call South Colony,' he said.

'No relay until later this morning,' she informed him. 'Would you like to record a delayed message?'

He was stopped; delayed messages were not accepted on a collect basis. 'No, thank you, I'll try later,' he fibbed and switched off.

The clerk was tapping on the booth's door. 'The driver is ready for you,' he told Jim. Jim hurriedly settled his mask in place and followed Frank out through the pressure door. The driver was just closing the baggage compartment of the scooter. He took their tickets and the two boys got aboard. Again they were the only passengers; they claimed the observation seats.

Ten minutes later, tired of staring almost into a rising Sun, Jim announced, 'I'm sleepy. I think I'll go down.'

'I think I'll ask the driver to turn on the radio,' said Frank.

'Oh, the heck with that. We've both had a hard night. Come on.'

'Well—all right.' They went into the lower compartment, found bunks, and crawled in. In a few minutes they both were snoring.

The scooter, leaving Syrtis Minor at sunrise, kept ahead of the daily thaw and did not have to lay over at Hesperidum. It continued south and reached Cynia about noon. So far advanced was the season that there was no worry about the ice holding from Cynia south to Charax; Strymon canal would not thaw again until the following spring.

The driver was pleased to have kept his schedule. When Deimos rose toward the end of the morning's run he relaxed and switched on his radio. What he heard caused him to make a quick check of his passengers. They were still asleep; he decided not to do anything about it until he reached Cynia Station.

On reaching there he hurried inside. Jim and Frank were awakened by the scooter stopping but did not get out. Presently the driver came back and said, 'Meal stop. Everybody out.'

Frank answered, 'We're not hungry.'

The driver looked disconcerted. 'Better come in anyhow,' he insisted. 'It gets pretty cold in the car when she's standing still.'

'We don't mind.' Frank was thinking that he would dig a can of something out of his bag as soon as the driver had left; from suppertime the night before until noon today seemed a long time to his stomach.

'What's the trouble?' the driver continued. 'Broke?' Something in their expressions caused him to continue, 'I'll stake you to a sandwich each.'

Frank refused but Jim interceded. 'Don't be silly, Frank. Thank you, sir. We accept.'

George, the agent and factotum of Cynia station, looked at them speculatively and served them sandwiches without comment. The driver bolted his food and was quickly through. When he got up, the boys did so, too. 'Just take it easy,' he advised them. 'I've got twenty, thirty minutes' work, loading and checking.'

'Can't we help you?' asked Jim,

'Nope. You'd just be in the way. I'll call you when I'm ready!'

'Well—thanks for the sandwich.'

'Don't mention it.' He went out.

Less than ten minutes later there came faintly to their ears the sound of a scooter starting up. Frank looked startled and rushed to the traffic-checking window. The car was already disappearing to the south. Frank turned to the agent. 'Hey, he didn't wait for us!'

'Nope.'

'But he said he'd call us.'

'Yep.' The agent resumed reading.

'But—but *why,'* insisted Frank. 'He told us to wait.'

The agent put down his newspaper. 'It's like this,' he said 'Clem is a peaceable man and he told me that he wasn't a cop. He said he would have no part in trying to arrest two strapping, able-bodied boys, both wearing guns.'

'What!'

'That's what I said. And don't go fiddling around with those heaters. You'll notice I ain't wearing my gun; you can take the station apart for all of me.'

Jim had joined Frank at the counter. 'What's this all about?' he asked.

'You tell me. All I know is, there's a call out to pick you up. You're charged with burglary, theft, truancy, destruction of company property—pretty near everything. Seems like you are a couple of desperate characters—though you don't look the part.'

'I see,' said Frank slowly. 'Well, what are you going to do about it?'

'Nothing. Nothing at all. Long about tomorrow morning a special scooter will arrive and I presume there will be force enough aboard her to subdue a couple of outlaws. In the meantime do as you please. Go outside. Wander around. When you get chilly, come back inside.'

He went back to his reading.

'I see. Come along, Jim.' They retreated to the far corner of the room for a war conference. The agent's attitude was easily understood. Cynia station was almost literally a thousand miles from anywhere; the station itself was the only human habitation against the deadly cold of night.

Jim was almost in tears. 'I'm sorry, Frank. If I hadn't been so darned anxious to eat, this wouldn't have happened.'

'Don't be so tragic about it,' Frank advised him. 'Can you imagine us shooting it out with a couple of innocent bystanders and hijacking the scooter? I can't.'

'Uh—no. I guess you're right.'

'Certainly I am. What we've got to decide is what to do next.'

'I know one thing; I'm not going to let them drag me back to school.'

'Neither am I. What's more important, we've got to get word to our folks about the deal that's being cooked up against them.'

'Say, look—maybe we can phone now!'

'Do you think he —' Frank nodded toward the agent. '— would let us?'

'Maybe. Maybe not. We've still got our guns—and I can be pushed just so far.' Jim got up and went to the agent. 'Any objection to us using the phone?'

The agent did not even glance up. 'Not a bit. Help yourself.'

Jim went into the booth. There was no local exchange; the instrument was simply a radio link to the relay station on the outer moon. A transparency announced that Deimos was above the horizon; seeing this, Jim punched the call button and asked for linkage to South Colony.

There was an unusually long delay, then a sweetly impersonal voice announced, 'Due to circumstances beyond our control calls are not being accepted from Cynia station to South Colony.'

Jim started to ask if Deimos were visible at South Colony, since he knew that line-of-sight was essential to radio transmission on Mars—indeed, it was the only sort of radio transmission he was familiar with—but the relay station had switched off and made no answer when he again punched the call button. He left the booth and told Frank about it.

'Sounds like Howe has fixed us,' Frank commented. 'I don't believe there is a breakdown. Unless —'

'Unless what?'

'Unless there is more to it than that. Beecher may be rigging things to interfere with messages getting through until he's put over his scheme.'

'Frank, we've got to get word to our folks. See here, I bet we could hole up with the Martians over at Cynia. After all, they offered us water and —'

'Suppose we could. Where does that get us?'

'Let me finish. We can mail a letter from here, giving our folks all the details and telling them where we are hiding. Then we could wait for them to come and get us.'

Frank shook his head. 'If we mail a letter from here, old frozen face over there is bound to know it. Then, when the cops show up and we are gone, he turns it over to them. Instead of our folks getting it, it goes back to Howe and Beecher.'

'You really think so? Nobody has any right to touch private mail.'

'Don't be a little innocent. Howe didn't have any right to order us to give up our guns—but he did. No, Jim, we've got to carry this message ourselves.'

On the wall opposite them was a map of the area served by Cynia station. Frank had been studying it idly while they talked. Suddenly he said, 'Jim, what's that new station south of Cynia?'

'Huh? Where do you mean?'

'There.' Frank pointed. Inked on the original map was a station on west Strymon, south of them.

'That?' said Jim. 'That must be one of the shelters for the Project.' The grand plan for restoring oxygen to Mars called for setting up, the following spring, a string of processing plants in the desert between Cynia and Charax. Some of the shelters had already been completed in anticipation of the success of atmosphere plant number one in Libya.

'It can't be much over a hundred miles away.'

'A hundred and ten, maybe,' Jim commented, looking at the scale.

Frank got a faraway look in his eyes. 'I think I can skate that far before dark. Are you game?'

'What? Are you crazy? We'd still be better than seven hundred miles from home.'

'We can skate better than two hundred miles a day,' answered Frank. 'Aren't there more shelters?'

'The map doesn't show any.' Jim thought. 'I *know* they've finished more than one; I've heard Dad talking about it.'

'If we had to, we could skate all night and sleep in the day time. That way we wouldn't freeze.'

'Hmm ... I think you're kidding yourself. I saw a man once who was caught out at night. He was stiff as a board. All right, when do we start?'

'Right now.'

They picked up their bags and headed for the door. The agent looked up, and said, 'Going somewhere?'

'For a walk.'

'Might as well leave your bags. You'll be back.'

They did not answer but went on out the door. Five minutes later they were skating south on west Strymon.

'Hey, Jim!'

'What?'

'Let's stop for a minute. I want to sling my bag.'

'Just what I was thinking.' Their travel bags unbalanced them and prevented proper arm motion and any real speed. But skating was a common form of locomotion; the bags had straps which permitted them to be slung as haversacks. Jim opened his before he put it on; Willis extended his eye stalks and looked at him reproachfully. 'Jim boy gone long time.'

'Sorry, old fellow.'

'Willis not talk.'

'Willis can talk all he wants to now. Look, if I leave the bag open a little bit so that you can see, will you manage not to fall out?'

'Willis want out.'

'Can't do that; I'm going to take you for a fine ride. You won't fall out?'

'Willis not fall out.'

'Okay.' He slung his bag and they set out again.

They picked up speed. With fast ice, little air resistance, and the low Martian gravity the speed of a skater on Mars is limited by his skill in stroking. Both of the boys were able. Willis let out a 'Whee!' and they settled down to putting miles behind them.

The desert plateau between Cynia and Charax is higher than the dead sea bottom between Cynia and the equator. This drop is used to move the waters of the southern polar cap across the desert to the great green belt near the equator. In midwinter the southern ice cap reaches to Charax; the double canal of Strymon, which starts at Charax, is one of the principal discharge points for the polar cap when it melts in the spring.

The boys were starting at the lower end of the canal's drop; the walls of the canal reached high above their heads. Furthermore the water level—or ice level—was low because the season was late autumn; the water level would be much higher during spring flood. There was nothing to see but the banks of the canal converging ahead of them, the blue sky beyond, and the purple-black sky overhead. The Sun was behind them and a bit west of meridian; it was moving north toward northern summer solstice. Seasons do not lag on Mars as much as they do on Earth; there are no oceans to hold the heat and the only 'flywheel' of the climate is the freezing and melting of the polar caps.

With nothing to see the boys concentrated on skating, heads down and shoulders swinging.

After many miles of monotonous speed Jim grew careless; the toe of his right runner caught on some minor obstruction in the ice. He went down. His suit saved him from ice burns and he knew how to fall safely, but Willis popped out of his bag like a cork from a bottle.

The bouncer, true to instinct, hauled in all excrescences at once. He hit as a ball and rolled; he travelled over the ice for several hundred yards. Frank threw himself into a hockey stop as soon as he saw Jim tumble. He stopped in a shower of ice particles and went back to help Jim up. ‘You all right?’

'Sure. Where's Willis?’

They skated on and recovered the bouncer who was now standing on his tiny legs and waited for them. ‘Whoopee!’ yelled Willis as they came up. ‘Do it again!’

'Not if I can help it,’ Jim assured him and stuffed him back in the bag. ‘Say, Frank, how long have we been travelling?’

'Not over three hours,’ Frank decided, after a glance at the Sun.

'I wish I had my watch,’ complained Jim. ‘We don't want to overrun the shelter.’

'Oh, we won't come to it for another couple of hours, at least.’

'But what's to keep us from passing right by it? We can't see over these banks.’

'Want to turn around and go back?’

'No.’

'Then quit worrying.’

Jim shut up but continued to worry. Perhaps that was why he noticed the only indication of the shelter when they came to it, for Frank skated on past it. It was merely a ramp down the bank. There were such ramps every few miles, as ancient as the canals themselves, but this one had set above it an overhanging beam, as if to support a hoist. Jim spotted it as terrestrial workmanship.

He stopped. Frank skated on ahead, noticed presently that Jim was not following him and came back. ‘What's up?’ he called out.

'I think this is it.’

'Hmm ... could be.’ They removed their skates and climbed the ramp. At the top, set back a short distance from the bank, was one of the bubble-shaped buildings which are the sign anywhere on Mars of the alien from Earth. Beyond it a foundation had been started for the reducing plant. Jim heaved a big sigh. Frank nodded and said, ‘Just about where we expected to find it.’

'And none too soon,’ added Jim. The Sun was close to the western horizon and dropping closer as they watched.

There was, of course, no one in the shelter; no further work would be done at this latitude until the following spring. The shelter was unpressurized; they simply unlatched the outer door, walked through the inner door without delay. Frank groped for the light switch, found it, and lighted up the place—the lighting circuit was powered by the building's atomic fuel power pack and did not require the presence of men,

It was a simple shelter, lined with bunks except for the space occupied by the kitchen unit. Frank looked around happily. ‘Looks like we've found a home from home, Jim.’

'Yep.’ Jim looked around, located the shelter's thermostat, and cut it in. Shortly the room became warmer and with it there was a soft sighing sound as the building's pressure regulator, hooked in with the thermostat, started the building's supercharger. In a few minutes the boys were able to remove their masks and finally their outdoor suits as well.

Jim poked around the kitchen unit, opening cupboards and peering into shelves. ‘Find anything?’ asked Frank.

'Nary a thing. Seems like they could have left at least a can of beans.’

'Now maybe you're glad I raided the kitchen before we left. Supper in five minutes.’

'Okay, so you've got a real talent for crime,’ acknowledged Jim. ‘I salute you.’ He tried the water tap. ‘Plenty of water in the tanks,’ he announced.

'Good!’ Frank answered. ‘That saves me having to go down and chip ice. I need to fill my mask. I was dry the last few miles.’ The high coxcomb structure on a Mars mask is not only a little supercharger with its power pack, needed to pressurize the mask; it is also a small water reservoir. A nipple in the mask permits the wearer to take a drink outdoors, but this is a secondary function. The prime need for water in a Mars mask is to wet a wick through which the air is forced before it reaches the wearer's nose.

'You were? Don't you know better than to drink yourself dry?’

'I forgot to fill it before we left.’

'Tourist!’

'Well, we left in kind of a hurry, you know.’

'How long were you dry?’

'I don't know exactly,’ Frank evaded.

'How's your throat?’

'All right. A little dry, maybe.’

'Let me see it,’ Jim persisted, coming closer.

Frank pushed him away. ‘I tell you it's all right. Let's eat.’

'Well—okay.’

They dined off canned corned beef hash and went promptly to bed. Willis snuggled up against Jim's stomach and imitated his snores.

Breakfast was more of the same, since there was some hash left and Frank insisted that they not waste anything. Willis had no breakfast since he had eaten only two weeks before, but he absorbed nearly a quart of water. As they were about to leave Jim held up a flashlight. ‘Look what I found.’

'Well, put it back and let's go.’

'I think I'll keep it,’ Jim answered, stuffing it in his bag. ‘We might have a use for it.’

'We won't and it's not yours.’

'For criminy's sake, I'm not swiping it; I'm just borrowing it. This is an emergency.’

Frank shrugged. ‘Okay, let's get moving.’ A few minutes later they were on the ice and again headed south. It was a beautiful day, as Martian days almost always are; when the Sun was high enough to fill the slot of the canal it was almost balmy, despite the late season. Frank spotted the telltale hoisting beam of a Project shelter around midday and they were able to lunch inside, which saved them the tedious, messy, and unsatisfactory chore of trying to eat through the mouth valve of a respirator mask. The shelter was a twin of the first but no foundation for the plant had as yet been built near it.

As they were preparing to leave the shelter Jim said, ‘You look sort of flushed, Frank. Got a fever?’

'That's just the bloom of health,’ Frank insisted. ‘I'm fine.’ Nevertheless he coughed as he put on his mask. ‘Mars throat,’ Jim thought but said nothing as there was nothing that he could do for Frank.

Mars throat is not a disease in itself; it is simply an extremely dry condition of the nose and throat which arises from direct exposure to Martian air. The humidity on Mars is usually effectively zero; a throat dehydrated by it is wide open to whatever disease organisms there may be present in the human throat at the time. The result is usually a virulent sore throat.

The afternoon passed without incident. As the Sun began to drop toward the skyline it seemed possible that home was not much more than five hundred miles away. Jim had watched Frank closely all afternoon. His chum seemed to be skating as strongly as ever; perhaps, he decided, the cough was just a false alarm. He skated up alongside Frank. ‘I guess we had better start watching for a shelter.’

'Suits me.’

Soon they passed another of the ramps built by long-dead Martians, but there was no hoisting beam above it nor any other sign of terrestrial activity. The banks, though somewhat lower now, were still too high to see over. Jim stepped up the stroke a bit; they hurried on.

They came to another ramp, but again there was nothing to suggest that a shelter might be above it. Jim stopped. ‘I vote we take a look up on the bank,’ he said. ‘We *know* they build the shelters by the ramps and they may have taken the hoist down for some reason.’

'It would just be wasting valuable time,’ Frank protested. ‘If we hurry, we can get to another ramp before dark.’

'Well, if you say so —’ Jim shoved off and picked up speed.

The next ramp was the same story; Jim stopped again. ‘Let's take a look,’ he pleaded. ‘We can't possibly reach the next one before sundown.’

'Okay.’ Frank stooped over and tugged at his skates.

They hurried up the bank and reached the top. The slanting rays of the Sun showed nothing but the vegetation bordering the canal.

Jim felt ready to bawl through sheer weariness and disappointment. ‘Well, what do we do now?’ he said.

'We go back down,’ Frank answered, ‘and keep going until we find it.’

'I don't think we could spot one of those hoist beams in the dark.’

'Then we keep going,’ Frank said grimly, ‘until we fall flat on our faces.’

'More likely we'll freeze.’

'Well, if you want my opinion,’ Frank replied, ‘I think we're washed up. I, for one, can't keep going all night, even if we don't freeze.’

'You don't feel good?’

'That's putting it mildly. Come on.’

'All right.’

Willis had climbed out of the bag and up on Jim's shoulder, in order to see better. Now he bounced to the ground and rolled away. Jim snatched at him and missed. ‘Hey! Willis! Come back here!’

Willis did not answer. Jim started after him. His progress was difficult. Ordinarily he would have gone under the canal plants, but, late in the day as it was, most of them had lowered almost to knee height preparatory to withdrawing into the ground for the night. Some of the less hardy plants were already out of sight, leaving bare patches of ground.

The vegetation did not seem to slow up Willis but Jim found it troublesome; he could not catch the little scamp. Frank shouted, ‘'Ware waterseekers! Watch where you put your feet!’ Thus warned, Jim proceeded more carefully—and still more slowly. He stopped. ‘Willis! Oh, Willis! Come back! Come back, doggone it, or we'll go away and leave you.’ It was a completely empty threat.

Frank came crashing up and joined him. ‘We can't hang around up here, Jim.’

'I know it. Wouldn't you know that he would pull a stunt like this just at the wrong time?’

'He's a pest, that's what he is. Come on.’

Willis's voice—or, rather, Jim's voice as used by Willis—reached them from a distance. ‘Jim boy! Jim! Come here!’

Jim struggled through the shrinking vegetation with Frank after him. They found the bouncer resting at the edge of an enormous plant, a desert cabbage quite fifty yards across. The desert cabbage is not often found near the canals; it is a weed and not tolerated in the green sea bottoms of the lower latitudes, though it may be found in the deserts miles from any surface water.

The western half of this specimen was still spread out in a semicircular fan, flat to the ground, but the eastern half was tilted up almost vertically, its flat leaves still reaching greedily for the Sun's rays to fuel the photosynthesis by which plants live. A hardy plant, it would not curl up until the Sun was gone completely, and it would not withdraw into the ground at all. Instead it would curl into a tight ball, thus protecting itself from the cold and incidentally simulating, on giant scale, the Earth plant for which it was named.

Willis sat by the edge of the half that was flat to the ground. Jim reached for him.

Willis bounced up on the edge of the desert cabbage and rolled toward the heart of the plant. Jim stopped and said, ‘Oh, Willis, darn your eyes, come back here. Please come back.’

'Don't go after him,’ warned Frank. ‘That thing might close up on you. The Sun is almost down.’

'I won't. Willis! Come back!’

Willis called back, ‘Come here, Jim boy.’

'You come *here.'*

'Jim boy come here. Frank come here. Cold there. Warm here.’

'Frank, what'll I do?’

Willis called again. ‘Come, Jim boy. Warm! Stay warm all night.’

Jim stared. ‘You know what, Frank? I think he means to let it close up on him. And he wants us to join him.’

'Sounds that way.’

'Come, Jim! Come, Frank!’ Willis insisted. ‘Hurry!’

'Maybe he knows what he's doing,’ Frank added. ‘Like Doc says, he's got instincts for Mars and we haven't.’

'But we can't go inside a cabbage. It would crush us.’

'I wonder.’

'Anyhow, we'd suffocate.’

'Probably.’ Frank suddenly added, ‘Do as you like, Jim. I can't skate any further.’ He set foot on a broad leaf—which flinched under the contact—and strode steadily toward the bouncer. Jim watched for a moment and then ran after them.

Willis greeted them ecstatically. ‘Good boy, Frank! Good boy, Jim! Stay nice and warm all night.’

The Sun was slipping behind a distant dune; the sunset wind whipped coldly at them. The far edges of the plant lifted and began to curl toward them. ‘We still could get out if we jumped, Frank,’ Jim said nervously.

'I'm staying.’ Nevertheless Frank eyed the approaching leaves apprehensively.

'We'll smother.’

'Maybe. That's better than freezing.’

The inner leaves were beginning to curl faster than the outer leaves. Such a leaf, four feet wide at its widest and at least ten feet long, raised up back of Jim and curved in until it touched his shoulder. Nervously he struck at it. The leaf snatched itself away, then slowly resumed its steady progress toward him. ‘Frank,’ Jim said shrilly, ‘they'll smother us!’

Frank looked apprehensively at the broad leaves, now curling up all around them. ‘Jim,’ he said, ‘sit down. Spread your legs wide. Then take my hands and make an arch.’

'What for?’

'So that we'll take up as much space as possible. Hurry!’

Jim hurried. With elbows and knees and hands the two managed to occupy a roughly spherical space about five feet across and a little less than that high. The leaves closed down on them, seemed to feel them out, then settled firmly against them, but not, however, with sufficient pressure to crush them. Soon the last open space was covered and they were in total darkness. ‘Frank,’ Jim demanded, ‘we can move now, can't we?’

'No! Give the outside leaves a chance to settle into place.’

Jim kept still for quite a long while. He knew that considerable time had passed for he spent the time counting up to one thousand. He was just starting on his second thousand when Willis stirred in the space between his legs. ‘Jim boy, Frank boy—nice and warm, huh?’

'Yeah, Willis,’ he agreed. ‘Say, how about it, Frank?’

'I think we can relax now.’ Frank lowered his arms; the inner leaf forming the ceiling immediately above him at once curled down and brushed him in the dark. He slapped at it instinctively; it retreated.

Jim said, ‘It's getting stuffy already.’

'Don't worry about it. Take it easy. Breathe shallowly. Don't talk and don't move and you'll use up less oxygen.’

'What difference does it make whether we suffocate in ten minutes or an hour? This was a crazy thing to do, Frank; any way you figure it we can't last till morning.’

'Why can't we? I read in a book that back in India men have let themselves be buried alive for days and even weeks and were still alive when they were dug up. Fakirs, they called them.'

'Fakers is right! I don't believe it.'

'I read it in a book, I tell you.'

'I suppose you think that anything that's printed in a book is true?'

Frank hesitated before replying, 'It had better be true because it's the only chance we've got. Now will you shut up? If you keep yapping, you'll use up what air there is and kill us both off and it'll be your fault.'

Jim shut up. All that he could hear was Frank's breathing. He reached down and touched Willis; the bouncer had withdrawn all his stalks. He was a smooth ball, apparently asleep. Presently Frank's breathing changed to rasping snores.

Jim tried to sleep but could not. The utter darkness and the increasing deadness of the air pressed down on him like a great weight. He wished again for his watch, lost to Smythe's business talent; if he only knew what time it was, how long it was until sunrise, he felt that he could stand it.

He became convinced that the night had passed—or had almost passed. He began to expect the dawn and with it the unrolling of the giant plant. When he had been expecting it 'any minute now' for a time he estimated at two hours, at least, be became panicky. He knew how late in the season it was; he knew also that desert cabbages hibernated by the simple method of remaining closed through the winter. Apparently Frank and he had had the enormous bad luck to take shelter in a cabbage on the very night on which it started its hibernation.

Twelve long months from now, more than three hundred days in the future, the plant would open to the spring Sun and release them—dead. He was sure of it.

He remembered the flashlight he had picked up in the first Project shelter. The thought of it stimulated him, took his mind off his fears for the moment. He leaned forward, twisted around and tried to get at his bag, still strapped to his shoulders.

The leaves above him closed in; he struck at them and they shrank away. He was able to reach the torch, drag it out, and turn it on. Its rays brightly illuminated the cramped space. Frank stopped snoring, blinked, and said, 'What's the matter?'

'I just remembered this. Good thing I brought it, huh?'

'Better put it out and go to sleep.'

'It doesn't use up any oxygen. I feel better with it on.'

'Maybe you do, but as long as you stay awake you use up more oxygen.'

'I suppose so.' Jim suddenly recalled what had been terrifying him before he got out the light. ‘It doesn't make any difference.’ He explained to Frank his conviction that they were trapped forever in the plant.

'Nonsense!’ said Frank.

'Nonsense yourself! Why didn't it open up at dawn?’

'Because,’ Frank said, ‘we haven't been in here more than an hour.’

'What?’

'Not more than an hour. Now shut up and let me sleep. Better put out that light.’ Frank settled his head again on his knees.

Jim shut up but did not turn out the light. It comforted him. Besides, the inner leaves which had shown an annoying tendency to close in on the tops of their heads now had retreated and flattened themselves firmly against the dense wall formed by the outer layers of leaves. Under the mindless reflex which controlled the movements of the plant they were doing their best to present maximum surface to the rays from the flashlight.

Jim did not analyse the matter; his knowledge of photosynthesis and of heliotropism was sketchy. He was simply aware that the place seemed roomier in the light and that he was having less trouble with the clinging leaves. He settled the torch against Willis, who had not stirred, and tried to relax.

It actually seemed less stuffy with the light on. He had the impression that the pressure was up a little. He considered trying to take off his mask but decided against it. Presently, without knowing it, he drifted off to sleep.

He dreamed and then dreamt that he was dreaming. Hiding in the desert cabbage had been only a fantastic, impossible dream; school and Headmaster Howe had merely been nightmares; he was home, asleep in his bed, with Willis cuddled against him. Tomorrow Frank and he would start for Syrtis Minor to enter school.

It had simply been a nightmare, caused by the suggestion that Willis be taken away from him. They were planning to take Willis away from him! They couldn't do that; he wouldn't let them!

Again his dream shifted; again he defied Headmaster Howe; again he rescued Willis and fled—and again they were locked away in the heart of a desert plant.

He knew with bitter certainty that it would always end like this. This was the reality, to be trapped and smothering in the core of a hibernating giant weed—to die there.

He choked and muttered, tried to wake up, then slipped into a less intolerable dream.

7

Pursued

Tiny Phobos, inner moon of Mars, came out of eclipse and, at breakneck speed, flew west to east into the face of the rising Sun. The leisurely spin of its ruddy primary, twenty-four and a half hours for each rotation, presently brought the rays of that Sun to east Strymon, then across the band of desert between the twin canals and to the banks of west Strymon. The rays struck a great ball perched near the eastern bank of that canal, a desert cabbage closed against the cold.

The plant stirred and unfolded. The sunward half of the plant opened flat to the ground; the other half fanned itself open like a spread peacock's tail to catch the almost horizontal rays. In so doing it spilled something out of its heart and onto the flat portion—two human bodies, twisted and stiff, clad garishly in elastic suits and grotesque helmets.

A tiny ball spilled out with them, rolled a few yards over the thick green leaves, and stopped. It extended eye stalks and little bumps of legs and waddled back to the sprawled bodies. It nuzzled up against one.

It hesitated, nuzzled again, then settled back and let out a thin wailing in which was compounded inconsolable grief and an utter sense of loss.

Jim opened one bloodshot eye. ‘Cut out that infernal racket,’ he said crossly.

Willis shrieked, ‘Jim boy!’ and jumped upon his stomach, where he continued to bounce up and down in an ecstasy of greeting.

Jim brushed him off, then gathered him up in one arm. ‘Calm down. Behave yourself. Ouch!’

'What's the matter, Jim boy?’

'My arm's stiff. Ooo—ouch!’ Further efforts had shown Jim that his legs were stiff as well. Also his back. And his neck.

'What's the matter with you?’ demanded Frank.

'Stiff as board. I'd do better to skate on my hands today. Say —’

'Say what?’

'Maybe we don't skate. I wonder if the spring floods have started?’

'Huh? What are you gibbering about?’ Frank sat up, slowly and carefully.

'Why, the spring floods, of course. Somehow we lasted through the winter, though I don't know how. Now we —’

'Don't be any sillier than you have to be. Look where the Sun is rising.’

Jim looked. Martian colonials are more acutely aware of the apparent movements of the Sun than any Earthbound men, except, possibly, the Eskimos. All he said was, ‘Oh ... ,’ then added, ‘I guess it was a dream.’

'Either that or you are even nuttier than usual. Let's get going.' Frank struggled to his feet with a groan.

'How do you feel?'

'Like my own grandfather.'

'I mean, how's your throat?' Jim persisted.

'Oh, it's all right.' Frank promptly contradicted himself by a fit of coughing. By great effort he controlled it shortly; coughing while wearing a respirator is a bad idea. Sneezing is worse.

'Want some breakfast?'

'I'm not hungry now,' Frank answered. 'Let's find a shelter first, so we can eat in comfort.'

'Okay.' Jim stuffed Willis back into the bag; discovered by experiment that he could stand and walk. Noticing the flashlight, he tucked it in with Willis and followed Frank toward the bank. The canal vegetation was beginning to show; even as they walked the footing grew more tangled. The green plants, still stiff with night cold, could not draw away quickly as they brushed through them.

They reached the bank. 'The ramp must be about a hundred yards off to the right,' Frank decided. 'Yep—I see it. Come on.'

Jim grabbed his arm and drew him back. ''Smatter?' demanded Frank.

'Look on up the canal, north.'

'Huh? O!' A scooter was proceeding toward them. Instead of the two hundred fifty miles per hour or more that such craft usually make, this one was throttled down to a minimum. Two men were seated on top of it, out in the open.

Frank drew back hastily. 'Good boy, Jim,' he approved. 'I was just about to walk right into them. I guess we had better let them get well ahead.'

'Willis good boy, too,' Willis put in smugly.

'Let them get ahead, my foot!' Jim answered. 'Can't you see what they're doing?'

'Huh?'

'They're following our tracks!'

Frank looked startled but did not answer. He peered cautiously out. 'Look out!' Jim snapped. 'He's got binoculars.' Frank ducked back. But he had seen enough; the scooter had stopped at approximately the spot where they had stopped the night before. One of the men on top was gesturing through the observation dome at the driver and pointing to the ramp.

Canal ice was, of course, never cleaned of skate marks; the surface was renewed from time to time by midday thaws until the dead freeze of winter set in. However, it was unlikely that anyone but the two boys had skated over this stretch of ice, so far from any settlement, any time in months. The ice held scooter tracks, to be sure, but, like all skaters, Jim and Frank had avoided them in favour of untouched ice.

Now their unmistakable spoor lay for any to read from Cynia station to the ramp near them.

'If we head back into the bushes,' Jim whispered. 'We can hide until they go away. They'll never find us in this stuff.'

'Suppose they don't go away. Do you want to spend another night in the cabbage?'

'They're bound to go away eventually.'

'Sure but not soon enough. They know we went up the ramp; they'll stay and they'll search, longer than we can hold out. They can afford to; they've got a base.'

'Well, what do we do?'

'We head south along the bank, on foot, at least as far as the next ramp.'

'Let's get going, then. They'll be up the ramp in no time.'

With Frank in the lead they dogtrotted to the south. The plants along the bank were high enough now to permit them to go under; Frank held a course about thirty feet in from the bank. The gloom under the spreading leaves and the stems of the plants themselves protected them from any distant observation.

Jim kept an eye out for snake worms and waterseekers and cautioned Willis to do likewise. They made fair time. After a few minutes Frank stopped, motioned for silence, and they both listened. All that Jim could hear was Frank's rasping breath; if they were being pursued, the pursuers were not close.

They were at least two miles south of the ramp when Frank stopped very suddenly. Jim bumped into him and the two almost tumbled into the thing that had caused Frank to stop—another canal. This one ran east and west and was a much narrower branch of the main canal. There were several such between Cynia and Charax. Some of them joined the east and west legs of Strymon canal; some merely carried water to local depressions in the desert plateau.

Jim stared down into the deep and narrow gash. 'For the love of Mike! We nearly took a header.'

Frank did not answer. He sank down to his knees, then sat and held his head. Suddenly he was overcome by a spasm of coughing. When it was over, his shoulders still shook, as if he were racked by dry sobs.

Jim put a hand on his arm. 'You're pretty sick, aren't you, fellow?'

Frank did not answer. Willis said, 'Poor Frank boy,' and tut-tutted.

Jim stared again at the canal, his forehead wrinkled. Presently Frank raised his head and said, 'I'm all right. It just got me for a moment—running into the canal and all and realizing it had us stopped. I was so tired.’

Jim said, ‘Look here, Frank, I've got a new plan. I'm going to follow this ditch off to the east until I find some way to get down to it. You're going to go back and give yourself up —’

'No!'

'Wait till I finish! This makes sense. You're too sick to keep going. If you stay out here, you're going to die. You might as well admit it. Somebody's got to get the word to our folks—me. You go back, surrender, and then give them a song and dance about how I went that way—any way but this. If you make it good, you can stall them and keep them chasing their tails for a full day and give me that much head start. In the mean time you lie around in the scooter, warm and safe, and tonight you're in bed in the infirmary at school. There—doesn't that make sense?’

'No.’

'Why not? You're just being stubborn.’

'No,’ repeated Frank, ‘it's no good. In the first place I won't turn myself over to them. I'd rather die out here —’

'Nuts!’

'Nuts yourself. In the second place, a day's start will do you no good. Once they are sure you aren't where I say you are, they'll just go back to combing the canal, by scooter. They'll pick you up tomorrow.’

'But—well, what is the answer then?’

'I don't know, but it's not that.’ He was seized again by coughing.

Neither one of them said anything for several minutes. At last Jim said, ‘What kind of a scooter was that?’

'The usual cargo sort, a Hudson Six Hundred I think. Why?’

'Could it turn around on that ice down there?’

Frank looked down into the small canal. Its sides sloped in toward the bottom; the water level was so low that the ice surface was barely twenty feet across. ‘Not a chance,’ he answered.

'Then they won't try to search this branch by scooter—at least not in *that* scooter.’

'I'm way ahead of you,’ put in Frank. ‘You figure we'll cross to east Strymon and go home that way. But how do you know this cut runs all the way through? You remember the map that well?’

'No, I don't. But there is a good chance it does. If it doesn't, it will run most of the way across and we'll just have to hoof it the rest of the way.’

'After we get to the east leg it will still be five hundred miles or so to Charax. This leg has shelters on it, even if we did miss the one last night.’

'We've got just as good a chance of finding project shelters on east leg as on west leg,’ Jim answered. ‘The Project starts next spring on both sides. I know—Dad's talked about it enough. Anyhow, we can't use this leg any further; they're searching it—so why beat your choppers about it? The real question is: can you skate? If you can't, I still say you ought to surrender.’

Frank stood up. ‘I'll skate,’ he said grimly. ‘Come on.’

They went boldly along the stone embankment, convinced that their pursuers were still searching the neighbourhood of the ramp. They were three or four miles further east when they came to a ramp leading down to the ice. ‘Shall we chance it?’ asked Jim.

'Sure. Even if they send a man in on skates I doubt if he would come this far with no tracks to lead him on. I'm tired of walking.’ They went down, put on their skates, and started. Most of the kinks from their uncomfortable night had been smoothed out by walking; it felt good to be on the ice again. Jim let Frank set the pace; despite his illness he stroked right into it and pushed the miles behind them.

They had come perhaps forty miles when the banks began to be noticeably lower. Jim, seeing this, got a sick feeling that the little canal was not cross-connecting from west to east leg, but merely a feeder to a low spot in the desert. He kept his suspicion to himself. At the end of the next hour it was no longer necessary to spare his chum; the truth was evident to them both. The banks were now so low that they could see over them and the ice ahead no longer disappeared into the blue sky but dead-ended in some fashion.

They came to the dead end presently, a frozen swamp. The banks were gone; the rough ice spread out in all directions and was bordered in the distance by green plants. Here and there, canal grass, caught by the freeze, stuck up in dead tufts through the ice.

They continued east, skating where they could and picking their way around bits of higher ground. At last Frank said, ‘All out! End of the line!’ and sat down to take off his skates.

'I'm sorry, Frank.’

'About what? We'll leg it the rest of the way. It can't be so many miles.’

They set out through the surrounding greenery, walking just fast enough to let the plants draw out their way. The vegetation that surrounded the marsh was lower than the canal plants, hardly shoulder high, and showed smaller leaves. After a couple of miles of this they found themselves out on the sand dunes.

The shifting, red, iron-oxide sands made hard walking and the dunes, to be climbed or skirted, made it worse. Jim usually elected to climb them even if Frank went around; he was looking for a dark green line against the horizon that would mark east Strymon. It continued to disappoint him.

Willis insisted on getting down. First he gave himself a dust bath in the clean sand; thereafter he kept somewhat ahead of Jim, exploring this way and that and startling the spin bugs. Jim had just topped a dune and was staring down the other side when he heard an agonized squeak from Willis. He looked around.

Frank was just coming around the end of the dune and Willis was with him, that is to say, Willis had skittered on ahead. Now the bouncer was standing dead still. Frank apparently had noticed nothing; he was dragging along in a listless fashion, his head down.

Charging straight at them was a waterseeker.

It was a long shot, even for a match marksman. The scene took on a curious unreality to Jim. It seemed as if Frank were frozen in his tracks and as if the waterseeker itself were strolling slowly towards his victims. Jim himself seemed to have all the time in the world to draw, take a steady, careful bead, and let go his first charge.

It burned the creature, but it kept coming.

Jim sighted on it again, held the stud down. His beam, held steadily on the centreline of the varmint, sliced it in two as if it had run into a buzz saw. It kept coming until its two halves were no longer joined, until they fell two ways, twitching. The great scimitar claw on the left stopped within inches of Willis.

Jim ran down the dune. Frank, no longer a statue, actually had stopped. He was standing, blinking at what had been a moment before the incarnation of sudden and bloody death. He looked around as Jim came up. ‘Thanks,’ he said.

Jim did not answer but kicked at a trembling leg of the beast. ‘The filthy thing,’ he said intensely. ‘Gosh, how I hate them. I wish I could burn every one on Mars, all at once.’ He walked on up along the body, located the egg sac, and carefully blasted every bit of it.

Willis had not moved. He was sobbing quietly. Jim came back, picked him up, and popped him into the travel bag. ‘Let's stick together from here on,’ he said. ‘If you don't feel like climbing, I'll go around.’

'Okay.’

'Frank!’

'Uh? Yes, what is it, Jim?’ Frank's voice was listless.

'What do you see ahead?’

'Ahead?’ Frank tried manfully to make his eyes focus, to chase the fuzz from them. ‘Uh, it's the canal, the green belt I mean. I guess we made it.’

'And what else? Don't you see a tower?’

'What? Where? Oh, there—Yes, I guess I do. It's a tower all right.’

'Well, for heaven's sake, don't you know what that means? Martians!’

'Yeah, I suppose so.'

'Well, show some enthusiasm!'

'Why should I?'

'They'll take us in, man! Martians are good people; you'll have a warm place to rest, before we go on.'

Frank looked a bit more interested, but said nothing. They might even know Gekko, 'Jim went on. This is a real break.'

'Maybe so.'

It took another hour of foot-slogging before the little Martian town was reached. It was so small that it boasted only one tower, but to Jim it was even more beautiful than Syrtis Major. They followed its wall and presently found a gate.

They had not been inside more than a few minutes when Jim's hopes, so high, were almost as low as they could be. Even before he saw the weed-choked central garden, the empty walks and silent courts had told him the bad truth: the little town was deserted.

Mars must once have held a larger native population than it does today. Ghost cities are not unknown and even the greater centres of population, such as Charax, Syrtis Major and Minor, and Hesperidum, have areas which are no longer used and through which tourists from Earth may sometimes be conducted. This little town, apparently never of great importance, might have been abandoned before Noah laid the keel of his ship.

Jim paused in the plaza, unwilling to speak. Frank stopped and sat down on a metal slab, its burnished face bright with characters that an Earthly scholar would have given an arm to read. 'Well,' said Jim, 'rest a bit, then I guess we had better find a way to get down on to the canal.'

Frank answered dully, 'Not for me. I've come as far as I can.'

'Don't talk that way.'

'I'm telling you, Jim, that's how it is.'

Jim puzzled at it. 'I tell you what—I'll search around. These places are always honeycombed underneath. I'll find a place for us to hole up over night.'

'Just as you like.'

'You just stay here.' He started to leave, then suddenly became aware that Willis was not with him. He then recalled that the bouncer had jumped down when they entered the city. 'Willis—where's Willis?'

'How would I know?'

'I've got to find him. Oh, Willis! Hey, Willis! Come, boy!' His voice echoed around the dead square.

'Hi, Jim!'

It was Willis, rightly enough, his voice reaching Jim from some distance. Presently he came into sight. But he was not alone; he was being carried by a Martian.

The Martian came near them, dropped his third leg, and leaned down. His voice boomed gently at Jim. ‘What's he saying, Frank?’

'Huh? Oh, I don't know. Tell him to go away.’

The Martian spoke again. Jim abandoned the attempt to use Frank as a translator and concentrated on trying to understand. He spotted the question symbol, in the inverted position; the remark was an invitation or a suggestion of some sort. Following it was the operator of motion coupled with some radical that meant nothing to Jim.

He answered it with the question symbol alone, hoping that the native would repeat himself. Willis answered instead. ‘Come along, Jim boy—fine place!’

Why not? he said to himself and answered, ‘Okay, Willis.’ To the Martian he replied with the symbol of general assent, racking his throat to produce the unEarthly triple guttural required. The Martian repeated it, inverted, then picked up the leg closest to them and walked rapidly away without turning around. He had gone about twenty-five yards when he seemed to notice that he was not being followed. He backed up just as rapidly and used the general inquiry symbol in the sense of ‘What's wrong?’

'Willis,’ Jim said urgently, ‘I want him to carry Frank.’

'Carry Frank boy?’

'Yes, the way Gekko carried him.’

'Gekko not here. This K'boomch.’

'His name is K'boomk?’

'Sure—K'boomch,’ Willis agreed, correcting Jim's pronunciation.

'Well, I want K'boomch to carry Frank like Gekko carried him.’

Willis and the Martian mooed and croaked at each other for a moment, then Willis said, ‘K'boomch wants to know does Jim boy know Gekko.’

'Tell him we are friends, water friends.’

'Willis already tell him.’

'How about Frank?’ But it appeared that Willis had already told his new acquaintance about that, too, for K'boomch enclosed Frank in two palm flaps and lifted him up. Frank opened his eyes, then closed them. He seemed indifferent to what happened to him.

Jim trotted after the Martian, stopping only to grab up Frank's skates from where he had abandoned them on the metal slab. The Martian led him into a huge building that seemed even larger inside than out, so richly illuminated in glowing lights were the walls. The Martian did not tarry but went directly into an archway in the far wall; it was a ramp tunnel entrance, leading down.

The Martians appear never to have invented stair steps, or more likely never needed them. The low surface gravity of Mars, only 38%

of that of Earth, permits the use of ramps which would be disastrously steep on Earth. The Martian led Jim down a long sequence of these rapid descents.

Presently Jim discovered, as he had once before under Cynia city, that the air pressure had increased. He raised his mask with a feeling of great relief; he had not had it off for more than twenty four hours. The change in pressure had come abruptly; he knew from this that it had not resulted from descent alone, nor had they come deep enough to make any great difference in pressure.

Jim wondered how the trick was accomplished. He decided that it had pressure locks beat all hollow.

They left the ramps and entered a large domed chamber, evenly lighted from the ceiling itself. Its walls were a continuous series of archways. K'boomch stopped and spoke again to Jim, another inquiry in which he used the name Gekko.

Jim reached into his memory and carefully phrased a simple declaration: ‘Gekko and I have shared water. We are friends.’

The Martian seemed satisfied; he led the way into one of the side rooms and placed Frank gently on the floor. The door closed behind them, sliding silently into place. It was a smallish room, for Martians, and contained several resting frames. K'boomch arranged his ungainly figure on one of them.

Suddenly Jim felt heavy and sat down rather unexpectedly on the floor. The feeling persisted and with it a slight giddiness; he stayed seated. ‘Are you all right, Frank?’ he asked.

Frank muttered something. His breathing seemed laboured and rough. Jim took off Frank's mask and touched his face; it was hot.

There was nothing that he could do for Frank at the moment. The heavy feeling continued. The Martian did not seem disposed to talk and Jim did not feel up to attempting a conversation in the dominant tongue in any case. Willis had withdrawn into a ball. Jim lay down beside Frank, closed his eyes, and tried not to think.

He felt a moment of lightness, almost of vertigo, then felt heavy again and wondered what he was coming down with. He lay still for a few more minutes, to be disturbed presently by the native bending over him and speaking. He sat up and discovered that he felt fine again. K'boomch scooped up Frank and they left the room.

The great domed chamber outside looked the same, except that it now held a crowd of Martians, thirty or more of them. When K'boomch and his two burdens, followed by Jim, came out the archway one of them separated himself from the group and stepped forward. He was rather short as Martians go. ‘Jim-Marlowe,’ he stated, with the vocative symbol.

'Gekko!’ yelled Jim, echoed by Willis.

Gekko bent over him. ‘My friend,’ he boomed softly in his own tongue. ‘My little, crippled friend.’ He raised Jim up and carried him away, the other Martians retreating to make way.

Gekko moved rapidly through a series of tunnels. Jim, looking back, could see that K'boomch and the rest of his party were close behind, so he let matters drift. Gekko turned presently into a medium-sized chamber and put Jim down. Frank was deposited by him. Frank blinked his eyes and said, ‘Where are we?’

Jim looked around. The room held several resting frames, set in a circle. The ceiling was domed and simulated the sky. On one wall a canal flowed past, in convincing miniature. Elsewhere on the curved wall was the silhouette of a Martian city, feathery towers floating in the air. Jim knew those towers, knew of what city they were the signature; Jim knew this room.

It was the very room in which he had ‘grown together’ with Gekko and his friends.

'Oh, my gosh, Frank—we're back in Cynia.’

'Huh?’ Frank sat up suddenly, glared around him—then lay back down and shut his eyes tightly.

Jim did not know whether to laugh or to cry. All that effort! All their striving to escape and to get home, Frank's gallant refusal to give up in the face of sickness and body weariness, the night in the desert cabbage—and here they were not three miles from Cynia station.

8

The Other World

Jim set up housekeeping—or hospital-keeping—in the smallest room that Gekko could find for him. There had been a ‘growing together’ immediately after their arrival. On its conclusion Jim had found, as before, that his command of the dominant tongue was improved. He had made Gekko understand that Frank was sick and needed quiet.

Gekko offered to take over Frank's care, but Jim refused. Martian therapy might cure Frank—or it might kill him. He asked instead for a plentiful supply of drinking water—his right, now that he was a ‘water friend', almost a tribal brother—and he asked for the colourful Martian silks that had been used by the boys in place of resting frames. From these silks Jim made a soft bed for Frank and a nest nearby for himself and Willis. He bedded Frank down, roused him enough to get him to drink deeply of water, and then waited for his friend to get well.

The room was quite comfortably warm; Jim took off his outdoors suit, stretched, and scratched. On second thought he peeled off Frank's elastic suit as well and covered him with a layer of flame-coloured cloth. After that he dug into Frank's travel bag and looked over the food supply. Up to now he had been too busy and too tired to worry about his stomach; now the very sight of the labels made him drool. He picked out a can of synthetic orange juice, vitamin fortified, and a can of simulated chicken fillet. The latter had started life in a yeast tank at North Colony, but Jim was used to yeast proteins and the flavour was every bit as tempting as white breast of chicken. Whistling, he got out his knife and got busy.

Willis had wandered off somewhere but he did not miss him. Subconsciously he was not disposed to worry about Willis while they were both in a native city; the place was filled with an atmosphere of peace and security. In fact Jim hardly thought about his patient until he had finished and wiped his mouth.

Frank was still sleeping but his breathing was noisy and his face still flushed. The air in the room, though warm and of satisfactory pressure, was Mars dry. Jim got a handkerchief from his bag, wet it, and put it over Frank's face, From time to time he moistened it again. Later he got another handkerchief, doused it, and tied it around his own face.

Gekko came in with Willis tagging along. ‘Jim-Marlowe,’ he stated and settled himself. ‘Gekko,’ Jim answered and went on with moistening Frank's face cloth. The Martian remained so quiet for so long that Jim decided that he must have retreated into his ‘other world’ but, when Jim looked at him, Gekko's eyes showed lively, alert interest.

After a long wait he asked Jim what he was doing and why.

Jim tried to explain that his kind must breathe water as well as air but his Martian vocabulary, despite the ‘growing together', was not up to the strain it placed on it. He gave up and there was another long silence. Eventually the Martian left, Willis with him.

Presently Jim noticed that the face cloths, both his and Frank's, were not drying out rapidly. Shortly they were hardly drying at all. He took off his, as it made him uncomfortable, and decided that it must be uncomfortable for Frank as well; he stopped using them entirely.

Gekko returned. After only ten minutes of silence he spoke, showing thereby almost frantic haste for his kind. He wanted to know if the water that flies with the air was now sufficient? Jim assured him that it was and thanked him. After twenty minutes or so of silence Gekko again left. Jim decided to go to bed. It had been a long, hard day and the previous night could hardly be called a night of rest. He looked around for some way to switch off the light but could find none. Giving up, he lay down, pulled a polychrome sheet up to his chin, and went to sleep.

'Hey, Jim—wake up.'

Blearily Jim opened his eyes, and closed them. 'Go away.'

'Come on. Snap out of it. I've been awake the past two hours, while you snored. I want to know some things.'

'What do you want to know? Say—how do you feel?'

'Me?' said Frank. 'I feel fine. Why shouldn't I? Where are we?'

Jim looked him over. Frank's colour was certainly better and his voice sounded normal, the hoarseness all gone. 'You were plenty sick yesterday,' he informed him. 'I think you were out of your head.'

Frank wrinkled his forehead. 'Maybe I was. I've sure had the darnedest dreams. There was a crazy one about a desert cabbage —'

'That was no dream.'

'What?'

'I said that was no dream, the desert cabbage—nor any of the rest of it. Do you know where we are?'

'That's what I was asking you.'

'We're in Cynia, that's where we are. We —'

'In *Cynia?'*

Jim tried to give Frank a coherent account of the preceding two days. He was somewhat hampered by the item of their sudden translation from far up the canal back to Cynia, because he did not understand it clearly himself. 'I figure it's a sort of a subway paralleling the canal. You know—a subway, like you read about.'

'Martians don't do that sort of engineering.'

'Martians built the canals.'

'Yes, but that was a long, long time ago.'

'Maybe they built the subway a long time ago. What do you know about it?'

'Well—nothing, I guess. Never mind. I'm hungry. Anything left to eat?'

'Sure.' Jim got up and looked around. Willis was still missing.

'I'd like to find Gekko and ask him where Willis is,' he fretted.

'Nuts,' said Frank. 'Let's eat breakfast.'

'Well ... all right.'

Once the meal was over, Frank opened the larger question. 'Okay, so we are in Cynia. We've still got to get home and fast. The question is: how do we go about it? Now as I see it, if these Martians could bring us back here so fast, they can turn around and put us back where they found us and then we can head home up the east leg of Strymon. How does that strike you?'

'It sounds all right, I guess,' Jim answered, 'but —'

'Then the first thing to do is to find Gekko and try to arrange it, without fiddling around.'

'The first thing to do,' Jim contradicted, 'is to find Willis.'

'Why? Hasn't he caused enough trouble? Leave him; he's happy here.’

'Frank, you take entirely the wrong attitude toward Willis. Didn't he get us out of a jam? If it hadn't been for Willis, you'd be coughing your lungs out in the desert.’

'If it hadn't been for Willis, we wouldn't have been in that jam in the first place.’

'Now that's not fair. The truth is —’

'Skip it, skip it. Okay, go find Willis.’

Jim left Frank to clean up the litter of breakfast and set out. Although he was never able thereafter to give a fully coherent account of just what happened to him on this errand, certain gross facts are clear. He started by looking for Gekko, asking for him of the first Martian he met in the corridors by the barbarous expedient of voicing the general inquiry followed by Gekko's name.

Jim was not and probably never would be a competent linguist, but his attempt worked. The first Martian he encountered took him to another, as an Earthly citizen might lead a foreigner to a policeman. This Martian took him to Gekko.

Jim had no great trouble in explaining to Gekko that he wanted Willis returned to him. Gekko listened, then explained gently that what Jim wanted was impossible.

Jim started over again, sure that his own poor command of the language had caused misunderstanding. Gekko let him finish, then made it quite clear that he understood correctly what it was that Jim wanted, but that Jim could not have it—could not have Willis. No. Gekko was sorrowful to have to refuse his friend with whom he had shared the pure water of life, but this thing could not be.

Under the direct influence of Gekko's powerful personality Jim understood most of what was said and guessed the rest. Gekko's refusal was unmistakable. It is not important that Jim did not have his gun with him; Gekko could not inspire the hatred in him that Howe did. For one thing Gekko's warm sympathy poured over him in flood; nevertheless Jim was thunderstruck, indignant, and quite unable to accept the verdict. He stared up at the Martian for a long moment. Then he walked away abruptly, not choosing his direction and shouting for Willis as he did so. ‘Willis! Oh, Willis! Here, Willis boy—come to Jim!’

The Martian started after him, each stride three of Jim's. Jim ran, still shouting. He turned a corner, came face to face with three natives and darted between their legs and beyond. Gekko got into a traffic jam with them which required timewasting exercise of Martian protocol to straighten out. Jim got considerably ahead.

He stuck his head into every archway he came to and shouted. One such led into a chamber occupied by Martians frozen in that trancelike state they call visiting the ‘other world'. Jim would no more have disturbed a Martian in a trance, ordinarily, than an American western frontier child would have teased a grizzly—but he was in no shape to care or notice; he shouted in there, too, thereby causing an unheard-of and unthinkable disturbance. The least response was violent trembling; one poor creature was so disturbed that he lifted abruptly all of his legs and fell to the floor.

Jim did not notice; he was already gone, shouting into the next chamber.

Gekko caught up with him and scooped him up with two great hand flaps. ‘Jim-Marlowe!’ he said. ‘Jim-Marlowe, my friend —’

Jim sobbed and beat on the Martian's hard thorax with both his fists. Gekko endured it for a moment, then wrapped a third palm flap around Jim's arms, securing him. Jim looked wildly up at him. ‘Willis,’ he said in his own language, ‘I want Willis. You've got no right!’

Gekko cradled him and answered softly, ‘I have no power. This is beyond me. We must go to the other world.’ He moved away. Jim made no answer, tired by his own outburst. Gekko took a ramp downward, then another and another. Down and down he went, much deeper than Jim had ever been before, deeper perhaps than any terrestrial had ever been. On the upper levels they passed other Martians; farther down there were none.

At last Gekko halted in a small chamber far underground. It was exceptional in that it was totally without decoration; its plain, pearl-gray walls seemed almost unMartian. Gekko laid Jim on the floor here and said, ‘This is a gate to the other world,’

Jim picked himself up. ‘Huh?’ he said. ‘What do you mean?’ and then carefully rephrased the question in the dominant tongue. He need not have bothered; Gekko did not hear him.

Jim craned his neck and looked up. Gekko stood utterly motionless, all legs firmly planted. His eyes were open but lifeless. Gekko had crossed over into the ‘other world'.

'For the love of Mike,’ Jim fretted, ‘he sure picks a sweet time to pull a stunt like that.’ He wondered what he ought to do, try to find his way to the upper levels alone or wait for Gekko. Natives were reputed to be able to hold a trance for weeks at a time, but Doc MacRae had pooh-poohed such stories.

He decided to wait for a while at least and sat down on the floor, hands clasped around his knees. He felt considerably calmed down and in no special hurry, as if Gekko's boundless calm had flowed over into him while the native had carried him.

After a while, an indefinitely long while, the room grew darker. Jim was not disturbed; he was vastly content, feeling again the untroubled happiness that he had known in his two experiences of ‘growing together'.

A tiny light appeared at great distance in the darkness and grew. But it did not illuminate the small pearl-grey room; it built up an outdoor scene instead. It was as if a stereo-movie projector were being used to project New Hollywood's best work, in full, natural colour. That it was not an importation from Earth Jim knew, for the scene, while utterly realistic, had no slick commercial finish, no plot.

He seemed to be seeing a grove of canal plants from a viewpoint about a foot off the ground. The viewpoint shifted steadily and erratically as if the camera were being trucked on a very low dolly here and there through the stalks of the canal plants. The viewpoint would shift quickly for a few feet, stop, then change direction and move again, but it never got very far off the ground. Sometimes it would wheel in a full circle, a panorama of three hundred and sixty degrees.

It was during one of these full rotations that he caught sight of a waterseeker.

It would not have been strange if he had not recognized it as such, for it was enormously magnified. As it charged in, it filled the entire screen. But it was impossible not to recognize those curving scimitar claws, the grisly horror of the gaping sucker orifice, those pounding legs—and most particularly the stomach-clutching revulsion the thing inspired. Jim could almost smell it.

The viewpoint from which he saw it did not change; it was frozen to one spot while the foul horror rushed directly at him in the final death charge. At the last possible instant, when the thing filled the screen, something happened. The face—or where the face should have been—disappeared, went to pieces, and the creature collapsed in a blasted ruin.

The picture was wiped out completely for a few moments, replaced by whirling coloured turmoil. Then a light, sweet voice said, ‘Well, aren't you the cute little fellow!’ The picture built up again as if a curtain had been lifted and Jim stared at another face almost as grotesque as the faceless horror it replaced.

Although this face occupied the whole screen and was weirdly distorted, Jim had no trouble in placing it as a colonial's respirator mask. What startled him almost out of the personal unawareness with which he was accepting this shadow show was that he recognized the mask. It was decorated with the very tiger stripes that Smythe had painted out for a quarter credit; it was his own, as it used to be.

He heard his own voice say, ‘You're too little to be wandering around by yourself; another one of those vermin might really get you. I think I'll take you home.’

The scene went swinging through the canal growth at a greater height, hobbling up and down to the boy's steps. Presently the point of view came out into open country and showed in the distance the star-shaped lay-out and bubble domes of South Colony.

Jim adjusted to the idea of watching himself, hearing himself, and accepted the notion of seeing things from Willis's viewpoint. The record was quite unedited; it pushed forward in a straight line, complete recollection of everything Willis had seen and heard from the time Jim had first taken him under his protection. Willis's visual recollections were not entirely accurate; they seemed to be affected by his understanding of what he saw and how used to it he was. Jim—the ‘Jim’ in the shadow show—at first seemed to have three legs; it was some time before the imaginary excrescence vanished. Other actors, Jim's mother, old Doc MacRae, Frank, developed from formless shapes to full though somewhat distorted representations.

On the other hand, every sound was heard with great clarity and complete accuracy. As Jim listened and watched he found that he was savouring sounds of every sort and most especially voices with a new and rich delight.

Most especially he enjoyed seeing himself as Willis saw him. With affection and warm humour he saw himself stripped of dignity but clothed in a lively regard; he was loved but not respected. He, Jim himself, was a great bumbling servant, helpful but maddeningly unreliable in his attentions, like a poorly trained dog. As for other human beings, they were curious creatures, harmless on the whole, but unpredictable traffic hazards. This bouncer-eye view of people amused Jim mightily.

Day by day and week by week the account unfolded, even to the periods of dark and quiet when Willis chose to sleep or was shut up. It carried on to Syrtis Minor and into a bad time when Jim was missing. Howe appeared as a despised voice and a pair of legs; Beecher was a faceless nonentity. It continued, step by step, and somehow Jim was neither tired nor bored. He was simply in the continuity and could no more escape from it than could Willis—nor did it occur to him to try. At last it wound up in the Martian city of Cynia and ended in a period of dark and quiet.

Jim stretched his cramped legs; the light was returning. He looked around but Gekko was still deep in his trance. He looked back and found that a door had opened in what had appeared to be blank wall. He looked through and into a room beyond, decorated as Martian rooms so frequently are in careful imitation of an outdoor scene—lush countryside more like the sea bottoms south of Cynia than like the desert.

A Martian was in the room. Jim was never able afterwards to visualize him completely for his face and particularly his eyes compelled attention. An Earthling has no good way to estimate the age of a Martian, yet Jim had the unmistakable impression that this Martian was very old—older than his father, older even than Doc MacRae.

'Jim Marlowe,' the native said in clear tones. 'Welcome, Jim Marlowe, friend of my people and friend of mine. I give you water.' He spoke in Basic English, in an accent vaguely familiar.

Jim had never heard a Martian speak an Earthly tongue before, but he knew that some of them did speak Basic. It was a relief to be able to answer in his own speech. 'I drink with you. May you ever enjoy pure and plentiful water.'

'I thank you, Jim Marlowe.' No actual water was used and none was needed. There followed a polite period of quiet, during which Jim thought about the Martian's accent. It was oddly familiar; it put him in mind of his father's voice, again it sounded like Doc MacRae.

'You are troubled, Jim Marlowe. Your unhappiness is ours. How may I help you?'

'I don't want anything,' Jim answered, 'except to go home and take Willis with me. They took Willis away. They shouldn't have done that.'

The silence that followed was even longer than before. At last the Martian answered, 'When one stands on the ground, one may not see over the horizon—yet Phobos sees all horizons.' He hesitated a moment before the word 'Phobos'. As if in afterthought he added, 'Jim Marlowe, I have but lately learned your tongue. Forgive me if I stumble.'

'Oh, you speak it beautifully!' Jim said quite sincerely.

'The words I know; the pictures are not clear. Tell me, Jim Marlowe, what is the london-zoo?'

Jim had to ask him to repeat it before it was clear that the Martian asked about the London Zoo. Jim tried to explain, but broke off before he had finished elaborating the idea. The Martian radiated such cold, implacable anger that Jim was frightened.

After a time the Martian's mood changed abruptly and Jim was again bathed in a warm glow of friendliness that poured out of his host like rays from the Sun and was as real as sunshine to Jim. 'Jim Marlowe, twice you have saved the little one whom you call Willis from —' He used first a Martian term not known to Jim, then changed it to 'waterseekers'. 'Have you killed many such?'

'Uh, quite a few, I guess,' Jim answered, then added, 'I kill 'em whenever I see 'em. They're getting too smart to hang around the colonies much.'

The Martian appeared to be thinking this over, but when he got around to answering he had again changed the subject. 'Jim Marlowe, twice, perhaps three times, you have saved the little one; once, perhaps twice, our little one has saved you. Each time you have grown closer together. Day by day you have grown together until neither one of you is complete without the other. Do not leave here, Jim Marlowe. Stay. You are welcome in my house, a son and a friend.'

Jim shook his head. 'I have to go home. In fact I have to go home right away. It's a mighty kind offer and I want to thank you but —' He explained as clearly as he could the threat to the welfare of the colony and the urgent need for him to carry the message. 'If you please, sir, we—my friend and I—would like to be taken back where K'boomch found us. Only I want Willis back before we go.'

'You wish to go back to the city where you were found? You do not wish to go home?'

Jim explained that Frank and he would go home from there. 'Now, sir, why don't you ask Willis whether or not he wants to stay or to go home with me?'

The old Martian sighed exactly as Jim's father had been known to sigh after a fruitless family discussion. 'There is a law of life and a law of death and both are the law of change. Even the hardest rock is worn away by the wind. You understand my son and friend, that even if the one you call Willis returns with you, there will come a time when the little one *must* leave you?'

'Uh, yes, I guess so. You mean Willis can come home with me?'

'We will speak to the one you call Willis.'

The old one spoke to Gekko, who stirred and muttered in his sleep. Then the three of them wound back up the ramps, with Gekko carrying Jim and the old one following a little behind.

They stopped in a chamber about half way up to the surface. The room was dark when they reached it but it became illuminated as soon as the party entered. Jim saw that the place was lined, floor to ceiling, with little niches and each niche contained a bouncer, as similar, each to the other, as identical twins.

The little fellows raised their eye stalks when the light came on and peered interestedly around. From somewhere in the room came a shout of 'Hi, Jim boy!'

Jim looked around but could not pick out the bouncer that had spoken. Before he could do anything about it the phrase had echoed round the room. 'Hi, Jim boy! Hi, Jim boy! Hi, Jim boy!' each time in Jim's own voice, as borrowed by Willis.

Jim turned to Gekko in bewilderment. 'Which one is Willis?' he demanded, forgetting to speak in the dominant tongue.

The chorus started up again, 'Which one is Willis? Which one is Willis? Which—Which—Which one is Willis?'

Jim stepped out into the middle of the room. 'Willis!' he commanded, ‘come to Jim.’

Off to his right a bouncer popped out from a middle tier, landed on the floor, and waddled up to him. ‘Pick up Willis,’ it demanded. Gratefully, Jim did so.

'Where Jim boy been?’ Willis wanted to know.

Jim scratched the bouncer. ‘You wouldn't understand if I told you. Look, Willis—Jim is about to go home. Does Willis want to go home with him?’

'Jim go?’ Willis said doubtfully, as if the unrelenting echoing chorus had made it hard for him to understand.

'Jim go home, right away. Is Willis coming or is Willis going to stay here?’

'Jim go; Willis go,’ bouncer announced, stating it as a law of nature.

'Okay, tell Gekko that.’

'Why?’ Willis asked suspiciously.

'Tell Gekko that, or you'll get left behind. Go on, tell him.’

'Okay.’ Willis addressed Gekko in a series of clucks and croaks. Neither the old Martian nor Gekko made any comment; Gekko picked up the two smaller creatures and the procession continued on up toward the surface. Gekko put them down outside the room assigned to Frank and Jim. Jim carried Willis inside.

Frank looked up as they came in. He was sprawled on the silks and, arranged beside him on the floor, was a meal, as yet untouched. ‘Well, I see you found him,’ he commented. ‘It sure took you long enough.’

Jim was suddenly overcome with remorse. He had been gone goodness knows how long. Days? Weeks? That moving-picture thing had covered months, in detail. ‘Gee, Frank, I'm sorry,’ he apologized. ‘Were you worried about me?’

'Worried? What for? I just didn't know whether or not to wait lunch on you. You must have been gone at least three hours.’

Three hours? Jim started to object that it had been more like three weeks, then thought better of it. He recalled that he had not eaten while away, nor did he feel anything more than normally hungry.

'Uh—Yeah, sure. Sorry. Look, do you mind waiting lunch a bit longer?’

'Why? I'm starved.’

'Because we're leaving, that's why. Gekko and another native are waiting to take us back to that town where K'boomch found us.’

'Well—Okay!’ Frank stuffed his mouth full and started to pull on his outdoor suit.

Jim imitated him, both as to eating and dressing. ‘We can finish lunch in the subway dingus,’ he said, mumbling with his mouth full.

‘Don't forget to fill your mask reservoir.’

'Don't worry. I won't pull that stunt twice.’ Frank filled his tank and Jim's, took a big drink of water, and offered the rest to Jim. Moments later they slung their skates over their shoulders and were ready to leave. The party filed through ramps and corridors to the ‘subway station’ hall and stopped at one of the archways.

The old Martian went inside, but, somewhat to Jim's surprise, Gekko bade them goodbye. They parted with ritualistic exchange of courtesies appropriate to water friends, then Frank and Jim, with Willis, went inside and the door closed behind them.

The car started up at once. Frank said, ‘Wups! what is this?’ and sat down suddenly. The old Martian, secure on the resting frame, said nothing. Jim laughed.

'Don't you remember the last ride?’

'Not very well. Say, I feel heavy.’

'So do I. That's part of the ride. Now how about a bite to eat? It may be a long time before we get another decent meal.’

Frank got out the remainder of their lunch. When they had finished Frank thought about it and opened another can. Before they had had a chance to eat its contents—cold baked beans and surrogate pork—his stomach suddenly did a flipflop. ‘Hey!’ he yelped. ‘What's happened?’

'Nothing. It was like that last time.’

'I thought we had plowed into something.’

'No, it's all right, I tell you. Hand me over some of those beans.’ They ate the beans and waited; after a time the feeling of extra weight left them and Jim knew that they had arrived.

The door of the car compartment opened and they stepped out into a circular hall exactly like the one they had left. Frank looked around in disappointment. ‘Say, Jim—we haven't gone any place. There's some mistake.’

'No, there's not.’ He turned, intending to speak to the old Martian, but the archway door behind them was already closed. ‘Oh, that's too bad,’ he said.

'What's too bad? That they gave us a run-around?’

'They didn't give us a run-around; it's just that this room looks like the one back in Cynia. You'll see when we get up to the surface. No, I was saying too bad because I let —’ Jim hesitated, realizing that he had never gotten the old Martian's name. ‘— because I let the old fellow, not Gekko, the other one, get away without saying goodbye.’

'Who?’

'You know, the other one. The one that rode with us.’

'What do you mean, the other one? I didn't see anybody but Gekko. And nobody rode with us; we were in there by ourselves.’

'Huh? You must be blind.'

'You must be nuts.'

'Frank Sutton, do you mean to stand there and tell me you didn't see the Martian that rode with us?'

'You heard me the first time.'

Jim took a deep breath. ‘Well, all I've got to say is: if you hadn't had your face buried in your food the whole time and had looked around you occasionally, you'd see more. How in —'

'Forget it, forget it,' Frank interrupted, ‘before you get me sore. There were six Martians, if you like it that way. Let's get on up and outside and see what the score is. We're wasting time.'

'Well, all right.' They started up the ramps. Jim was very silent; the incident bothered him more than it did Frank.

Part way up they were forced to adjust their masks. Ten minutes or so thereafter they reached a room into which the sunlight came flooding; they hurried through it and outdoors.

A moment later it was Frank's turn to be puzzled and uncertain. ‘Jim, I know I was lightheaded at the time but wasn't, uh—wasn't that town we started from just a one-tower burg?'

'It was.'

'This one isn't.'

'No, it isn't.'

'We're lost.'

'That's right.'

9
Politics

They were in a large enclosed courtyard, such as characterizes many Martian buildings. They could make out the tops of the towers of the city, or some of them, but their view was much restricted.

'What do you think we ought to do?' asked Frank.

'Mmm ... try to find a native and see if we can find out where we've landed. I wish I hadn't let the old fellow get away from us,' Jim added. 'He spoke Basic.'

'You still harping on that?' said Frank. 'Anyway I don't think our chances are good; this place looks utterly deserted. You know what I think? I think they've just dumped us.'

'I think they've just dumped us,' agreed Willis.

'Shut up. They wouldn't do that,' Jim went on to Frank in worried tones. He moved around and stared over the roof of the building. 'Say, Frank —'

'Yes?'

'You see those three little towers, just alike? You can just make out their tips.'

'Well? What about them?'

'I think I've seen them before.'

'Say, I think I have, too!'

They began to run. Five minutes later they were standing on the city wall and there was no longer any doubt about it; they were in the deserted part of Charax. Below them and about three miles away were the bubble domes of South Colony.

Forty minutes of brisk walking, varied with dogtrotting, got them home.

They split up and went directly to their respective homes. 'See you later!' Jim called to Frank and hurried away to his father's house. It seemed to take forever for the pressure lock to let him through. Before the pressure had equalized he could hear his mother, echoed by his sister, inquiring via the announcing speaker as to who was at the door, please?—he decided not to answer but to surprise them.

Then he was inside, facing Phyllis whose face was frozen in amazement—only to throw herself around his neck while shouting, 'Mother! Mother! Mother! It's Jim! It's Jim!' and Willis was bouncing around the floor and chorusing ‘It's Jim! It's Jim!’ and his mother was crowding Phyl aside and hugging him and getting his face wet with her tears and Jim himself wasn't feeling any too steady.

He managed to push them away presently. His mother stood back a little and said, ‘Just let me look at you, darling. Oh, my poor baby! Are you all right?’ She was ready to weep again.

'Sure, I'm all right,’ Jim protested. ‘Why shouldn't I be? Say, is Dad home?’

Mrs Marlowe looked suddenly apprehensive. ‘No, Jim, he's at work.’

'I've got to see him right away. Say, Mom, what are you looking funny about?’

'Why, because—Uh, nothing. I'll call your father right away.’ She went to the phone and called the ecological laboratory. He could hear her guarded tones: ‘Mr Marlowe? Dear, this is Jane. Could you come home right away?’ and his father's reply, ‘It wouldn't be convenient. What's up? You sound strange.’

His mother glanced over her shoulder at Jim. ‘Are you alone? Can I be overheard?’ His father answered, ‘What's the matter? Tell me.’ His mother replied, almost in a whisper, ‘He's home.’

There was a short silence. His father answered, ‘I'll be there right away.’

In the meantime Phyllis was grilling Jim. ‘Say, Jimmy, what in the world have you been doing?’

Jim started to answer, thought better of it. ‘Kid, you wouldn't believe me if I told you.’

'I don't doubt that. But what *have* you been doing? You've sure got folks in a stew.’

'Never mind. Say, what day is it?’

'Saturday.’

'Saturday the what?’

'Saturday the fourteenth of Ceres, of course.’

Jim was startled. Four days? Only four days since he had left Syrtis Minor? Then as he reviewed it in his mind, he accepted it. Granting Frank's assertion that the time he had spent down under Cynia was only three hours or so, the rest added up. ‘Gee! I guess I'm in time then.’

'What do you mean, in time?’

'Huh? Oh, you wouldn't understand it. Wait a few years.’

'Smarty!’

Mrs Marlowe came away from the phone. ‘Your father will be right home, Jim.’

'So I heard. Good.’

She looked at him. ‘Are you hungry? Is there anything you would like?’

'Sure, fatted calf and champagne. I'm not really hungry, but I could stand something. How about some cocoa? I've been living on cold stuff out of cans for days.’

'Cocoa there shall be.’

'Better eat what you can now,’ put in Phyllis. ‘Maybe you won't get what you want to eat when —’

'Phyllis!’

'But, Mother, I was just going to say that —’

'Phyllis—keep quiet or leave the room.’

Jim's sister subsided with muttering. Shortly the cocoa was ready and while Jim was drinking it his father came in. His father shook hands with him soberly as if he were a grown man. ‘It's good to see you home, Son.’

'It feels mighty good to be home, Dad.’ Jim gulped the rest of the cocoa. ‘But look, Dad, I've got a lot to tell you and there isn't any time to waste. Where's Willis?’ He looked around. ‘Anybody see where he went?’

'Never mind Willis. I want to know —’

'But Willis is essential to this, Dad. Oh, Willis! Come here!’ Willis came waddling out of the passageway; Jim picked him up.

'All right; you've got Willis,’ Mr Marlowe said. ‘Now pay attention. What is this mess you are in, Son?’

Jim frowned. ‘It's a little hard to know where to start.’

'There's a warrant out for you and Frank!’ blurted out Phyllis.

Mr Marlowe said, ‘Jane, will you please try to keep your daughter quiet?’

'Phyllis, you heard what I said before!’

'Aw, Mother, everybody knows it!’

'Possibly Jim did not know it.’

Jim said, ‘Oh, I guess I did. They had cops chasing us all the way home.’

'Frank came with you?’ asked his father.

'Oh, sure! But we gave ‘em the slip. Those Company cops are stupid.’

Mr Marlowe frowned. ‘See here, Jim—I'm going to call up the Resident and tell him you are here. But I'm not going to let you surrender until something a lot more definite is shown to me than I have seen so far, and certainly not until we've had your side of the matter. When you do surrender, Dad will go along with you and stick by you.’

Jim sat up straight. ‘Surrender? What are you talking about, Dad?’

His father suddenly looked very old and tired. ‘Marlowes don't run away from the law, Son. You know I'll stick by you no matter what you've done. But you've got to face up to it.'

Jim looked at his father defiantly. 'Dad, if you think Frank and I have beaten our way across better than two thousand miles of Mars just to give up when we get here—well, you've just got another think coming. And anybody that tries to arrest me is going to find it a hard job.' Phyllis was listening round-eyed; his mother was quietly dripping tears.

His father said, 'Son, you can't take that attitude.'

Jim said, 'Can't I? Well, I do. Why don't you find out what the score is before you talk about giving me up?' His voice was a bit shrill.

His father bit his lip. His mother said, 'Please, James—why don't you wait and hear what he has to say?'

'Of course I want to hear what he has to say,' Mr Marlowe answered irritably. 'Didn't I say that? But I can't let my own son sit there and declare himself an outlaw.'

'Please, James!'

'Speak your piece, Son.'

Jim looked around. 'I don't know as I'm so anxious to, now,' he said bitterly. 'This is a fine homecoming. You'd think I was a criminal or something.'

'I'm sorry, Jim,' his father said slowly. 'Let's keep first things first. Tell us what happened.'

'Well ... all right. But wait a minute—Phyllis said there was a warrant out for me. For what?'

'Well ... truancy—but that's not important. Actions to the prejudice of good order and discipline at the school and I myself don't know what they mean by that. It doesn't worry me. But the real charges are burglary and theft—and another one they tacked on a day later, escaping arrest.'

'Escaping arrest? That's silly! They never caught us.'

'So? How about the others?'

'Theft is silly, too. I didn't steal anything from *him*—Howe, I mean, Headmaster Howe—he stole Willis from *me*. And then he laughed at me when I tried to get him back! I'll theft him!'

'Go on with your story.'

'The burglary business has got something to it. I busted in to his office, or tried to. But he can't prove anything. I'd like to see him show how I could crawl through a ten-inch round hole. And we didn't leave any fingerprints.' He added, 'Anyhow, I had a right to. He had Willis locked up inside. Say, Dad, can't we swear out a warrant against Howe for stealing Willis? Why should he have it all his own way?'

'Wait a minute, now. You've got me confused. If you have a cause for action against the headmaster, I'll certainly back you up in it. But I want to get things straight. What hole? Did you cut a hole in the headmaster's door?’

'No, Willis did.’

'Willis! How can he cut anything?’

'Darned if I know. He just grew an arm with a sort of a claw on the end and cut his way out. I called to him and out he came.’

Mr Marlowe rubbed his forehead. ‘This gets more confusing all the time. How did you boys get here?’

'By subway. You see —’

'By subway!’

Jim looked thwarted. His mother put in, ‘James dear, I think perhaps he could tell his story better if we just let him tell it straight through, without interrupting.’

'I think you are right,’ Mr Marlowe agreed. ‘I'll reserve my questions. Phyllis, get me a pad and pencil.’

Thus facilitated, Jim started over and told a reasonably consecutive and complete story, from Howe's announcement of military-school inspections to their translation via Martian ‘subway’ from Cynia to Charax. When Jim had done, Mr Marlowe pulled his chin. ‘Jim, if you didn't have a lifetime reputation for stubborn honesty, I'd think you were romancing. As it is, I have to believe it, but it is the most fantastic thing I ever heard.’

'You still think I ought to surrender?’

'Eh? No, no—this puts it in a different light. You leave it up to Dad. I'll call the Resident and —’

'Just a second, Dad.’

'Eh?’

'I didn't tell you all of it.’

'What? You must, Son, if I am to —’

'I didn't want to get my story fouled up with another issue entirely. I'll tell you, but I want to know something. Isn't the colony supposed to be on its way by now?’

'It was supposed to have been,’ agreed his father. ‘Migration would have started yesterday by the original schedule. But there has been a two weeks’ postponement.’

'That's not a postponement, Dad; that's a frame up. The Company isn't going to allow the colony to migrate this year. They mean to make us stay here all through the winter.’

'What? Why, that's ridiculous, Son; a polar winter is no place for terrestrials. But you are mistaken, it's just a postponement; the Company is revamping the power system at North Colony and is taking advantage of an unusually late winter to finish it before we get there.’

'I'm telling you, Dad, that's just a stall. The plan is to keep the colony here until it's too late and force you to stay here through the winter. I can prove it.'

'How?'

'Where's Willis?' The bouncer had wandered off again, checking up on his domain.

'Never mind Willis. You've made an unbelievable charge. What makes you think such a thing? Speak up, Son.'

'But I've got to have Willis to prove it. Here, boy! Come to Jim.' Jim gave a rapid summary of what he had learned through Willis's phonographic hearing, following which he tried to get Willis to perform.

Willis was glad to perform. He ran over almost all of the boys' conversation of the past few days, repeated a great amount of Martian speech that was incomprehensible out of context, and sang *¿Quién es la Señorita?* But he could not, or would not, recall Beecher's conversation.

Jim was still coaxing him when the phone sounded. Mr Marlowe said, 'Phyllis, answer that.'

She trotted back in a moment. 'It's for you, Daddy.'

Jim shut Willis up; they could hear both ends of the conversation. 'Marlowe? This is the Resident Agent. I hear that boy of yours has turned up.'

Jim's father glanced over his shoulder, hesitated. 'Yes. He's here.'

'Well, keep him there. I'm sending a man over to pick him up.'

Mr Marlowe hesitated again. 'That's not necessary, Mr Kruger. I'm not through talking with him. He won't go away.'

'Come, come, Marlowe—you can't interfere with orderly legal processes. I'm executing that warrant at once.'

'You are? You just think you are.' Mr Marlowe started to add something, thought better of it, and switched off. The phone sounded again almost at once. 'If that's the Resident,' he said, 'I won't speak to him. If I do, I'll say something I'll regret.'

But it was not; it was Frank's father. 'Marlowe? Jamie, this is Pat Sutton.' The conversation showed that each father had gotten about to the same point with his son.

'We were just about to try to get something out of Jim's bouncer,' Mr Marlowe added. 'It seems he overheard a pretty damning conversation.'

'Yes, I know,' agreed Mr Sutton. 'I want to hear it, too. Hold it till we get there.'

'Fine. Oh, by the way—friend Kruger is out to arrest the kids right away. Watch out.'

'How well I know it; he just called me. And I put a flea in his ear. 'Bye now!'

Mr Marlowe switched off, then went to the front door and locked it. He did the same to the door to the tunnels. He was none too soon; the signal showing that someone had entered the pressure lock came on shortly. ‘Who is it?’ called out Jim's father.

'Company business!’

'What sort of Company business and who is it?’

'This is the Resident's proctor. I've come for James Marlowe, Junior.’

'You might as well go away again. You won't get him.’ There was a whispered exchange outside the door, then the lock was rattled.

'Open up that door,’ came another voice. ‘We have a warrant.’

'Go away. I'm switching off the speaker.’ Mr Marlow did so.

The pressure lock indicator showed presently that the visitors had left, but shortly it indicated occupancy again. Mr Marlowe switched the speaker back on. ‘If you've come back, you might as well leave,’ he said.

'What sort of a welcome is this, Jamie my boy?’ came Mr Sutton's voice.

'Oh, Pat! Are you alone?’

'Only my boy Francis and that's all.’

They were let in. ‘Did you see anything of proctors?’ Mr Marlowe inquired.

'Yep, I ran into ‘em.’

'Pop told them that if they touched me he'd make them sorry,’ Frank said proudly, ‘and he would, too.’

Jim caught his father's eye. Mr Marlowe looked away. Mr Sutton went on, ‘Now what's this about Jim's pet having evidence for us? Let's crank him up and hear him talk.’

'We've been trying to,’ Jim said. ‘I'll try again. Here, Willis —’ Jim took him in his lap. ‘Now, look, Willis, do you remember Headmaster Howe?’

Willis promptly became a featureless ball.

'That's not the way to do it,’ objected Frank. ‘You remember what set him off before. Hey, Willis.’ Willis extended his eyes. ‘Listen to me, chum. Good afternoon. Good afternoon, Mark,’ Frank continued in a fair imitation of the Agent General's rich, affected tones.’ Sit down, my boy.’

'Always happy to see you,’ Willis continued in exact imitation of Beecher's voice. He went on from there, reciting perfectly the two conversations he had overheard between the headmaster and the Resident Agent General, and including the meaningless interlude between them.

When he had finished and seemed disposed to continue with all that had followed up to the present moment, Jim shut him off.

'Well,’ said Jim's father, ‘what do you think of it, Pat?’

'I think it's terrible,' put in Jim's mother.

Mr Sutton screwed up his face. 'Tomorrow I am taking myself down to Syrtis Minor and there I shall take the place apart with my two hands.'

'An admirable sentiment,' agreed Mr Marlowe, 'but this is a matter for the whole colony. I think our first step should be to call a town meeting and let everyone know what we are up against.'

'Humph! No doubt you are right but you'll be taking all the fun out of it.'

Mr Marlowe smiled. 'I imagine there will be excitement enough to suit you before this is over. Kruger isn't going to like it—and neither is the Honourable Mr Gaines Beecher.'

Mr Sutton wanted Dr MacRae to examine Frank's throat and Jim's father decided, over Jim's protest, that it would be a good idea to have him examine Jim as well. The two men escorted the boys to the Doctor's house. There Mr Marlowe instructed them, 'Stay here until we get back, kids. I don't want Kruger's proctors picking you up.'

'I'd like to see them try!'

'Me, too.'

'I don't want them to try; I want to settle the matter first. We're going over to the Resident's office and offer to pay for the food you kids appropriated and, Jim, I'll offer to pay for the damage Willis did to Headmaster Howe's precious door. Then —'

'But, Dad, we oughtn't to pay for that. Howe shouldn't have locked him up.'

'I agree with the kid,' said Mr Sutton. 'The food, now, that's another matter. The boys took it; we pay for it.'

'You're both right,' agreed Mr Marlowe, 'but it's worth it to knock the props out of these ridiculous charges. Then I'm going to swear out a warrant against Howe for attempting to steal, or enslave, Willis. What would you say it was, Pat? Steal, or enslave?'

'Call it steal; you'll not be raising side issues, then.'

'All right. Then I shall insist that he consult the planet office before taking any action. I think that will stop his clock for the time being.'

'Dad,' put in Jim, 'you aren't going to tell the Resident that we've found out about the migration frameup, are you? He would just turn around and call Beecher.'

'Not just yet, though he's bound to know at the town meeting. He won't be able to call Beecher then; Deimos sets in two hours.' Mr Marlowe glanced at his watch. 'See you later, boys. We've got things to do.'

Doctor MacRae looked up as they came in. 'Maggie, bar the door!' he called out. 'We've got two dangerous criminals.'

'Howdy, Doc.'

'Come in and rest yourselves. Tell me all about it.'

It was fully an hour later that MacRae said, 'Well, Frank, I suppose I had better look you over. Then I'll have a look at you, Jim.'

'There's nothing wrong with me, Doc.'

'Start some more coffee while I take care of Frank.' The room was well stocked with the latest diagnostic equipment, but MacRae did not bother with it. He tilted Frank's head back, told him to say *aaaah!,* thumped his chest, and listened to his heart. 'You'll live, he decided. 'Any kid who can hitchhike from Syrtis to Charax will live a long time.'

'Hitchhike?' asked Frank.

'Beat your way. It's an expression that was used way back when. Your turn, Jim.' He took even less time to dispose of Jim. Then the three friends settled back to visit.

'I want to know more about this night you spent in the cabbage head,' Doc announced. 'Willis can understand, since any Martian creature can tuck his tail in and live indefinitely without air. But by rights you two should have smothered. The plant closed up entirely?'

'Oh, yes,' Jim assured him, then related the event in more detail. When he got to the point about the flashlight MacRae stopped him.

'That's it, that's it. You didn't mention that before. The flashlight saved your lives, son.'

'Huh? How?'

'Photosynthesis. You shine light on green leaf and it can no more help taking in carbon dioxide and giving off oxygen than you can help breathing.' The doctor stared at the ceiling, his lips moving while he figured. 'Must have been pretty stuffy, just the same; you were short on green leaf surface. What kind of a torch was it?'

'A G.E. Midnight Sun. It *was* stuffy, terribly.'

'A Midnight Sun has enough candle power to do the trick. Hereafter I'll carry one if I'm going further than twenty feet from my front stoop. It's a good dodge.'

'Something that still puzzles me,' said Jim, 'is how I could see a movie that covered every bit of the time I've had Willis, minute by minute, without missing anything, and have it turn out to be only three or four hours.'

'That,' Doc said slowly, 'is not nearly so mysterious as the other matter, the matter of why you were shown this.'

'Huh?'

'I've wondered about that, too,' put in Frank. 'After all, Willis is a pretty insignificant creature—take it easy, Jim! What was the point in running over his biography for Jim? What do you think, Doc?'

'The only hypothesis I've got on that point is so wildly fantastic that I'll keep it to myself, thank you. But on the point of time, Jim—

can you think of any way to photograph a person's memories?’

'Uh, no.’

'I'll go further and state flatly that it is impossible. Yet you described *seeing* what Willis *remembered.* That suggest anything to you?’

'No,’ admitted Jim, ‘it's got me stumped. But I did see it.’

'Sure, you did—because seeing takes place in the brain and not in the eye. I can close my eyes and see the Great Pyramid shimmering in the desert heat. I can see the donkeys and hear the porters yelling at the tourists. See ‘em? Shucks, I can smell ‘em—but it's just memory. Now back to what I was saying, Jim. When only one hypothesis covers the facts, you've got to accept it. You saw what the old Martian wanted you to see. Call it hypnosis.’

'But—But —’ Jim was wildly indignant; it felt like an attack on his very inner being. ‘But I did see it, I tell you. I was there.’

'I'll string along with Doc,’ Frank told him. ‘You were still seeing things on the trip back.’

'The old boy did so make the trip back with us; if you had kept your eyes open, you would have seen him.’

'Easy there,’ cautioned Doc, ‘if you lugs want to fight, go outside. Has it occurred to you that both of you might be right?’

'What? How could we be?’ objected Frank.

'I don't like to put words to it, but I can tell you this: I've lived long enough to know that man does not live by bread alone and that the cadaver I perform an autopsy on is not the man himself. The most wildly impossible philosophy of all is materialism. We'll leave it at that.’

Frank was about to object again when the lock signalled visitors; the boys’ parents were back. ‘Come in, come in, gentlemen,’ the doctor roared. ‘You're just in time. We were having a go at solipsism. Pull up a pulpit and take part. Coffee?’

'Solipsism, is it?’ said Mr Sutton. ‘Francis, pay no mind to the old heathen. You listen to what Father Cleary tells you.’

'He'll pay no mind to me anyhow,’ MacRae answered. ‘That's the healthy thing about kids. How did you make out with the Lord High Executioner?’

Mr Marlowe chuckled. ‘Kruger was fit to be tied.’

The called meeting of the colonists took place that evening in the town hall, central building of the star-shaped group. Mr Marlowe and Mr Sutton, having sponsored the meeting, arrived early. They found the meeting-room doors closed and Kruger's two proctors posted outside. Mr Marlowe ignored the fact that they had been attempting to arrest Frank and Jim only a few hours ago; he offered them a civil good evening and said, ‘Let's get the place opened up. People will be arriving any minute now.’

The proctors did not move. The senior of them, a man named Dumont, announced, ‘There'll be no meeting tonight.’

'What? Why not?’

'Mr Kruger's orders.’

'Did he say why?’

'No.’

'This meeting,’ Mr Marlowe told him, ‘has been properly called and will be held. Stand aside.’

'Now, Mr Marlowe, don't make things tough for yourself. I've got my orders and —’

Mr Sutton crowded forward. ‘Let me handle him, Jamie.’ He hitched at his belt. Behind the men, Frank glanced at Jim with a grin and hitched at *his* belt. All four of them were armed, as were the proctors; the two fathers had decided not to depend on Kruger's self-restraint while waiting for instructions from Syrtis Minor about the warrant.

Dumont looked nervously at Sutton. The colony had no real police force; these two were clerks in the Company's office and proctors only by Kruger's deputization. ‘You people have got no call to be running around armed to the teeth, inside the colony,’ he complained.

'Oh, so that's it?’ Mr Sutton said sweetly. ‘Well this job calls for no gun. Here, Francis—hold my heater.’ With empty holster he advanced on them. ‘Now would you like to be tossed out gently or would you prefer to bounce?’

For years before coming to Mars Mr Sutton had used something other than his engineering degree to dominate tough construction gangs. He was not much bigger than Dumont but immeasurably tougher. Dumont backed into his cohort and stepped on his toes. ‘Now see here, Mr Sutton, you've no—Hey! Mr Kruger!’

They all looked around. The Resident was approaching. He took in the scene and said briskly, ‘What's this? Sutton, are you interfering with my men?’

'Not a bit of it,’ denied Mr Sutton. ‘They were interfering with me. Tell them to stand aside.’

Kruger shook his head. ‘The meeting is cancelled.’

Mr Marlowe stepped forward. ‘By whom?’

'*I* cancelled it.’

'By what authority? I have the approval of all councillors and will, if necessary, get you the names of twenty colonists.’ Twenty colonists could call a meeting without permission from the council, under the colony's rules.

'That's beside the point. The rule reads that meetings are to consider matters of public interest; it cannot be construed as of public interest to agitate about criminal indictments in advance of trial—and I won't let you take advantage of the rules to do so. After all, I have the final word. I do not intend to surrender to mob rule and agitation.'

A crowd was forming, colonists come to the meeting. Marlowe said, 'Are you through?'

'Yes, except to say that these others and you yourself should return to your quarters.'

'They will do as they please—and so will I. Mr Kruger, I am amazed to hear you say that a civil-rights case is not of public interest. Our neighbours here have boys who are still under the care, if you call it that, of Headmaster Howe; they are interested in how their sons are treated. However, that is not the purpose of the meeting. I give you my word that neither Mr Sutton nor I intend to ask the colony to take any action about the charges against our sons. Will you accept that and withdraw your proctors?'

'What is the purpose, then?'

'It's a matter of urgent interest to every member of the colony. I'll discuss it inside.'

'Hummph!'

By this time several councillors were in the crowd. One of them, Mr Juan Montez, stepped forward. 'Just a minute. Mr Marlowe, when you called me about this meeting, I had no notion that the Resident objected.'

'The Resident has no option in the matter.'

'Well, that's never come up before. He does have a veto over actions of meetings. Why don't you tell us what the meeting is for?'

'Don't give in, Jamie!' It was Doctor MacRae; he shouldered forward. 'What kind of nincompoop are you, Montez? I'm sorry I voted for you. We meet when it suits us, not when Kruger says we may. How about it, folks?'

There was a murmur of approval. Mr Marlowe said, 'I wasn't going to tell him, Doc. I want everybody here and the doors closed when I talk.'

Montez went into a huddle with other councillors. Out of it came Hendrix, the chairman. 'Mr Marlowe, just to keep things regular, will you tell the council why you want this meeting?'

Jim's father shook his head. 'You okayed the meeting. Otherwise I would have collected twenty signatures and forced a meeting. Can't you stand up to Kruger?'

'We don't need them, Jamie,' MacRae assured him. He turned to the crowd, now growing fast. 'Who wants a meeting? Who wants to hear what Marlowe has to tell us?'

'I do!' came a shout.

'Who's that? Oh—Kelly. All right, Kelly and I make two. Are there eighteen more here who don't have to ask Kruger for permission to sneeze? Speak up.'

There was another shout and another. 'That's three—and four.' Seconds later MacRae called off the twentieth; he turned to the Resident. 'Get your stooges out of that doorway, Kruger.'

Kruger sputtered. Hendrix whispered with him, then motioned the two proctors away. They were only too happy to treat this as a relayed order from Kruger; the crowd poured into the hall.

Kruger took a seat in the rear; ordinarily he sat on the platform.

Jim's father found that none of the councillors cared to preside; he stepped to the platform himself. 'Let's elect a chairman,' he announced.

'You run it, Jamie.' It was Doc MacRae.

'Let's have order, please. Do I hear a nomination?'

'Mr Chairman —'

'Yes, Mr Konski?'

'I nominate you.'

'Very well. Now let's have some others.' But there were none; he kept the gavel by unanimous consent.

Mr Marlowe told them that news had come to him which vitally affected the colony. He then gave the bald facts about how Willis had come into Howe's hands. Kruger stood up. 'Marlowe!'

'Address the chair, please.'

'Mr Chairman,' Kruger acceded sourly, 'you said this meeting was not to stir up sympathy for your son. You are simply trying to keep him from having to take his medicine. You —'

Mr Marlowe pounded his gavel. 'You're out of order. Sit down.'

'I won't sit down. You had the barefaced gall to —'

'Mr Kelly, I appoint you sergeant-at-arms. Keep order. Pick your own deputies.'

Kruger sat down. Mr Marlowe went on, 'This meeting has nothing to do with the charges against my son and Pat Sutton's boy, but the news I have came through them. You've all seen Martian roundheads —bouncers, the kids call them, and you know their amazing ability to repeat sounds. Probably most of you have heard my son's pet perform. It happened that this particular roundhead was within hearing when some things were discussed that we all need to know about. Jim— bring your pet here.'

Jim, feeling selfconscious, mounted the platform and sat Willis on the speaker's table. Willis looked around and promptly battened down all hatches. 'Jim,' his father whispered urgently, 'snap him out of it.'

'I'll try,' agreed Jim. 'Come on, boy. Nobody's going to hurt Willis. Come out; Jim wants to talk to you.'

His father said to the audience, 'These creatures are timid. Please be very quiet.' Then, 'How about it, Jim?'

'I'm trying.'

'Confound it, we should have made a recording.'

Willis chose this minute to come out of hiding. 'Look, Willis boy,' Jim went on, 'Jim wants you to talk. Everybody is waiting for Willis to talk. Come on, now. Good afternoon. Good afternoon, Mark.'

Willis picked it up. 'Sit down, my boy. Always happy to see you.' He went on, reeling off the words of Howe and Beecher.

Somebody recognized Beecher's voice; there was a muffled exclamation as he passed his knowledge on. Mr Marlowe made frantic shushing signs.

Presently, as Beecher was expounding by proxy his theory of 'legitimate graft', Kruger got up. Kelly placed hands on his shoulders and pushed him down. Kruger started to protest; Kelly placed a hand over Kruger's mouth. He then smiled; it was something he had been wanting to do ever since Kruger had first been assigned to the colony.

The audience got restless between the two significant conversations; Mr Marlowe promised by pantomime that the best was yet to come. He need not have worried; Willis, once wound up, was as hard to stop as an after-dinner speaker.

There was amazed silence when he had finished, then a murmur that became a growl. It changed to uproar as everyone tried to talk at once. Marlowe pounded for order and Willis closed up. Presently Andrews, a young technician, got the floor.

'Mr Chairman ... we know how important this is, if it's true—but how reliable is that beastie?'

'Eh? I don't think it's possible for one of them to repeat other than *verbatim.* Is there a psychological expert present who might give us an opinion? How about you, Dr Ibañez?'

'I agree, Mr Marlowe. A roundhead can originate speech on its mental level, but a speech such as we just heard is something it has listened to. It repeats parrot-fashion exactly what it has heard. I doubt if such a recording, if I may call it that, may be modified after it has been impressed on the animal's nervous system; it's an involuntary reflex—complicated and beautiful, but reflex nevertheless.'

'Does that satisfy you, Andy?'

'Uh, no. Everybody knows that a bouncer is just a superparrot and not smart enough to lie. But is that the Resident General's voice? It sounds like it, but I've only heard him over the radio.'

Someone called out, 'It's Beecher. I had to listen to his drivel often enough, when I was stationed at Syrtis.'

Andrews shook his head. 'Sure, it sounds like him, but we've got to *know*. It could be a clever actor.'

Kruger had been quiet, in a condition resembling shock. The revelation had come as a surprise to him, too, as Beecher had not dared trust anyone on the spot. But Kruger's conscience was not easy; there were telltale signs in his own despatch file that Willis's report was correct; migration required a number of routine orders from the planet office. He was uncomfortably aware that none of the proper groundwork had been laid if, as was the official claim, migration were to take place in less than two weeks.

But Andrews' comment gave him a straw to clutch. Standing, he said, 'I'm glad somebody has sense enough not to be swindled. How long did it take you to teach him that, Marlowe?'

Kelly said, 'Shall I gag him, chief?'

'No. This has to be met. I suppose it's a matter of whether or not you believe my boy and his chum. Do any of you wish to question them?'

A long, lean, lanky individual unfolded himself from a rear seat. 'I can settle it.'

'Eh? Very well, Mr Toland, you have the floor.'

'Got to get some apparatus. Take a few minutes.' Toland was an electronics engineer and sound technician.

'Oh—I think I see what you mean. You'll need a comparison model of Beecher's voice, won't you?'

'Sure. But I've got all I need. Every time Beecher made a speech, Kruger wanted it recorded.'

Volunteers were found to help Toland, then Marlowe suggested that it was time for a stretch. At once Mrs Pottle stood up. 'Mr Marlowe!'

'Yes, Mrs Pottle. Quiet, everybody.'

'I for one will not remain here one minute longer and listen to this nonsense! The idea of making such charges against dear Mr Beecher! To say nothing of what you let that awful man Kelly do to Mr Kruger! And as for that beast —' She pointed to Willis. 'It is utterly unreliable, as I know full well.' She paused to snort, then said, 'Come, dear,' to Mr Pottle, and started to flounce out.

'Stop her, Kelly!' Mr Marlowe went on quietly, 'I had hoped that no one would try to leave until we reached a decision. If the colony decides to act it may be to our advantage to keep it as a surprise. Will the meeting authorize me to take steps to see that no scooter leaves the colony until you have made up your minds about the issue?'

There was just one 'no', from Mrs Pottle. 'Conscript some help, Mr Kelly,' Marlowe ordered, 'and carry out the will of the meeting.'

'Right, chief!'

'You can go now, Mrs Pottle. Not you, Mr Kruger.' Mr Pottle hesitated in bewilderment, then trotted after his wife.

Toland returned and set up his apparatus on the platform. With

Jim's help, Willis was persuaded to perform again, this time into a recorder. Shortly Toland held up his hand. ‘That's enough. Let me find some matching words.’ He selected ‘colony', ‘company', ‘afternoon', and ‘Martian’ because they were easy to find in each recording, Willis's and an identified radio speech of the Resident General. Each he checked with care, throwing complex standing waves on the bright screen of an oscilloscope, waves that earmarked the peculiar timbre of an individual's voice as certainly as a fingerprint would identify his body.

At last he stood up. ‘It's Beecher's voice,’ he said flatly.

Jim's father again had to pound for order. When he had got it, he said, ‘Very well—what is your pleasure?’

Someone shouted, ‘Let's lynch Beecher.’ The chairman suggested that they stick to practical objectives.

Someone else called out, ‘What's Kruger got to say about it?’

Marlowe turned to Kruger. ‘Mr Resident Agent, you speak for the Company. What about it?’

Kruger wet his lips. ‘If one assumes that that beast is actually reporting statements of the Agent-General —’

'Quit stalling!’

'Toland proved it!’

Kruger's eyes darted around; he was faced with a decision impossible for a man of his temperament. ‘Well, it's really no business of mine,’ he said angrily. ‘I'm about to be transferred.’

MacRae got up. ‘Mr Kruger, you are custodian of our welfare. You mean to say you won't stand up for our rights?’

'Well, now, Doctor, I work for the Company. If this is its policy—and I'm not admitting it—you can't expect me to go against it.’

'I work for the Company, too,’ the Doctor growled, ‘but I didn't sell myself to it, body and soul.’ His eyes swept the crowd. ‘How about it, folks? Shall we throw him out on his ear?’

Marlowe had to bang for order. ‘Sit down, Doctor. We haven't time to waste on trivia.’

'Mr Chairman —’

'Yes, Mrs Palmer?’

'What do you think we ought to do?’

'I would rather that suggestions came from the floor.’

'Oh, nonsense—you've known about it longer than we have; you must have an opinion. Speak up.’

Marlowe saw that her wish was popular. ‘Very well, I speak for myself and Mr Sutton. By contract we are entitled to migrate and the Company is obligated to let us. I say go ahead and do so, at once.’

'I so move!’

'I second!’

'Question!'—'Question!'

'Is there debate?' asked Marlowe.

'Just a moment, Mr Chairman —' The speaker was one Humphrey Gibbs, a small precise individual. '— we are acting hastily and, if I may say so, not in proper procedure. We have not exhausted our possible reliefs. We should communicate with Mr Beecher. It may be that there are good reasons for this change of policy —'

'How are *you* going to like a hundred below?'

'Mr Chairman, I really must insist on order.'

'Let him have his say,' Marlowe ordered.

'As I was saying, there may be good reasons, but the Company board back on Earth is perhaps not fully aware of conditions here. If Mr Beecher is unable to grant us relief, then we should communicate with the board, reason with them. But we should not take the law into our own hands. If worst comes to worst, we have a contract; if forced to do so, we can always sue.' He sat down.

MacRae got up again. 'Anybody mind if I talk? I don't want to hog the proceedings.' Silence gave approval; he went on, 'So this pantywaist wants to sue! With the temperature outside a hundred and thirty below by the time he has exhausted his means—and us!—and with the rime frost a foot deep on the ground he wants it put on some judge's calendar, back on Earth, and hire a lawyer!

'If you want a contract enforced, you have to enforce it yourself. You know what lies behind this; it showed up last season when the Company cut down on the household allowance and started charging excess baggage. I warned you then—but the board was a hundred million miles away and you paid rather than fight. The Company hates the expense of moving us, but more important they are very anxious to move more immigrants in here faster than we can take them; they think they see a cheap way out by keeping both North Colony and South Colony filled up all the time, instead of building more buildings. As Sister Gibbs put it, they don't realize the conditions here and they don't know that we can't do effective work in the winter.

The question is not whether or not we can last out a polar winter; the Eskimo caretakers do that every season. It isn't just a matter of contract; it's a matter of whether we are going to be free men, or are we going to let our decisions be made for us on another planet, by men who have never set foot on Mars!

'Just a minute—let me finish! We are the advance guard. When the atmosphere project is finished, millions of others will follow. Are they going to be ruled by a board of absentee owners on Terra? Is Mars to remain a colony of Earth? Now is the time to settle it!'

There was dead silence, then scattered applause. Marlowe said, 'Is there more debate?’

Mr Sutton got up. ‘Doc has something there. It was never in my blood to love absentee landlords.’

Kelly called out, ‘Right you are, Pat!’

Jim's father said, ‘I rule that subject out of order. The question before the house is to migrate, at once, and nothing else. Are you ready for the question?’

They were—and it was carried unanimously. If any refrained from voting, at least they did not vote against. That matter settled, by another ballot they set up an emergency committee, the chairman to hold power subject to review by the committee, and the committee's decisions to be subject to review by the colony.

James Marlowe, Senior, was elected chairman. Dr MacRae's name was proposed but he refused to let it be considered. Mr Marlowe got even with him by sticking him on the committee.

South Colony held at the time five hundred and nine persons, from the youngest baby to old Doc MacRae. There were eleven scooters on hand; enough but barely enough to move everyone at one time, provided they were stacked almost like freight and each person was limited to a few pounds only of hand baggage. A routine migration was usually made in three or more sections, with extra scooters provided from Syrtis Minor.

Jim's father decided to move everyone at once and hoped that events would permit sending back for personal possessions. The squawks were many, but he stood by his guns, the committee ratified and no one tried to call a town meeting. He set dawn Monday as the zero hour.

Kruger was allowed to keep his office; Marlowe preferred to run the show from his own. But Kelly, who remained a sort of *de facto* chief of police, was instructed to keep a constant watch over him. Kelly called Marlowe Sunday afternoon. ‘Hey, chief, what do you know? A couple of Company cops just arrived by scooter to take your boy and the Sutton kid back to Syrtis.’

Marlowe considered it. Kruger must have phoned Beecher the moment he heard that the boys were home, he decided. ‘Where are they now?’

'Right here, in Kruger's office. *We* arrested *them.*'

'Bring them over. I'd like to question them.’

'Right.’

They showed up shortly, two very disgruntled men, disarmed and escorted by Kelly and an assistant. ‘That's fine, Mr Kelly. No, no need to stay—I'm armed.’

When Kelly and his deputy had left, one of the Company men said, ‘You can't get away with this, you know.’

'You're not hurt,' Marlowe said reasonably, 'and you'll get your guns back presently. I just want to ask you some questions.' But all he had gotten out of them, several minutes later, was a series of begrudged negative answers. The intracolony phone sounded again; Kelly's face appeared on the screen. 'Chief? You wouldn't believe it —'

'Wouldn't believe what?'

'That old fox Kruger has skipped in the scooter those two birds came in on. I didn't even know he could drive.'

Marlowe's calm face concealed his feelings. After a short time he answered, 'Departure time is stepped up to sundown, today. Drop everything and get the word around.' He consulted a chart. 'That's two hours and ten minutes from now.'

The squawks were louder even than before; nevertheless as the Sun touched the horizon, the first scooter got underway. The rest followed at thirty second intervals. As the Sun disappeared the last one shoved off and the colony was headed north on its seasonal migration.

10

'We're Boxed In!'

Four of the scooters were older types and slower, less than two hundred miles per hour top speed. They were placed in the van as pacesetters. Around midnight one of them developed engine trouble; the column had to slow down. About 3 am it quit completely; it was necessary to stop and distribute its passengers among the other scooters—a cold and risky business.

MacRae and Marlowe climbed back into the headquarters car, last in the column. The doctor glanced at his watch. 'Planning to stop in Hesperidum now, Skipper?' he asked as the scooter started up. They had passed Cynia station without stopping; Hesperidum lay a short distance ahead, with Syrtis Minor some seven hundred miles beyond it.

Marlowe frowned. 'I don't want to. If we lay over at Hesperidum, that means waiting until sundown for ice and a full day's loss of time. With Kruger ahead of us that gives Beecher a whole day in which to figure out a way to stop us. If I were sure the ice would hold after sunrise long enough for us to get there —' He stopped and chewed his lip.

Back at South Colony it was early winter and the canal ice would remain hard until spring, but here they were already close to the equator; the canals froze every night and thawed every day under the extreme daily changes in temperature permitted by Mars' thin blanket of air. North of the equator, where they were headed, the spring floods from the melting northern polar cap had already started; ice formed in the flooding canal currents at night, but it was floe ice, riding with the current, and night clouds helped to save the day time heat.

'Suppose you do go on through, what's your plan, Skipper?' MacRae persisted.

'Go straight to the boat basin, ramp the scooters, and load whatever boats are there. As soon as the ice is rotten enough for the boats to break through it, start them north. I'd like to have a hundred and fifty or so of us out of Syrtis Minor and headed north before Beecher recovers from his surprise. I haven't any real plan except to keep forcing events so that *he* doesn't have time to plan, either. I want to hand him a set of accomplished facts.'

MacRae nodded. 'Audacity, that's the ticket. Go ahead with it.'

'I want to, but I'm afraid of the ice. If a scooter breaks through there'll be people killed—and my fault.'

'Your drivers are smart enough to spread out in echelon once the Sun is up. Jamie, I found out a long time ago that you have to take some chances in this life. Otherwise you are just a vegetable, headed for the soup pot.' He paused and peered out past the driver. 'I see a light ahead that ought to be Hesperidum. Make up your mind, Jamie.'

Marlowe did not answer. After a time the light was behind them.

When the Sun came up Marlowe had his driver cut out of column and take the lead. It was near nine when they passed Syrtis Minor scooter station, without stopping. They ploughed on past the space port and turned right into the boat basin that marked the terminus of the main canal from the north. Marlowe's driver drove onto the ramp while still lowering his crawling gear, with no respect for his runners. The lead car crawled along the ramp and parked; the others closed in behind it.

Out of the headquarters car climbed Marlowe, Kelly, and MacRae, followed by Jim, carrying Willis. Other scooter doors opened and people started getting out. 'Tell them to get back into their cars, Kelly,' Mr Marlowe snapped. Hearing this, Jim placed himself behind his father and tried to avoid attracting attention.

Marlowe stared angrily at the basin. There was not a boat in it. Across the basin one small launch was drawn up on skids, its engine dismounted. Finally Marlowe turned to MacRae. 'Well, Doc, I'm up a tree; how do I get down?'

'You are no worse off than if you had stopped at Hesperidum.'

'And no better.'

A man came out of one of the row of warehouses ringing the basin and approached them. 'What's all this?' he inquired, staring at the parked scooters. 'A circus?'

'It's the seasonal migration.'

'Wondered when you folks were coming through. Hadn't heard anything about it.'

'Where are all the boats?'

'Still spread out here and there, at the Project camps mostly, I suppose. Not my responsibility. Better call the traffic office.'

Marlowe frowned again. 'At least you can tell me where the temporary quarters are.' To take care of the relays of colonists a warehouse was always set aside at each migration and fitted up as a barracks; the one Company hostelry, Hotel Marsopolis, had only twenty beds.

The man looked puzzled. 'Now that you mention it, I don't know of any such preparations being made. Looks like the schedule was kind of fouled up, doesn't it?'

Marlowe swore, realizing his question had been foolish. Beecher, of course, had made no preparations for a migration he did not intend to permit. 'Is there a phone around here?'

'Inside, in my office—I'm the warehouse storekeeper. Help yourself.'

'Thanks,' said Marlowe and started off, MacRae followed him.

'What's your plan, son?'

'I'm going to call Beecher.'

'Do you think that's wise?'

'Confound it, I've got to get those people out of those cars. There are young babies in there—and women.'

'They're safe.'

'Look, Doc, Beecher has got to do *something* about it, now that we're here.'

MacRae shrugged. 'You're the cook.'

Marlowe argued his way past several secretaries and finally got Beecher on the screen. The Agent General looked out at him without recognition. 'Yes? Speak up, my good man, what is this urgent business?'

'My name is Marlowe. I'm executive chairman of the colonists from South Colony. I want to know —'

'Oh, yes! The famous Mr Marlowe. We saw your tattered army coming through.' Beecher turned away and said something in an aside. Kruger's voice answered him.

'Well, now that we are here, what are you going to do about us?'

'Do? Isn't that obvious. As soon as the ice forms tonight you can all turn around and go back where you came from. All except you—you stay here for trial. And your son, if I recall correctly.'

Marlowe held his temper. 'That isn't what I mean. I want living space, with cooking and toilet accommodations, for five hundred people.'

Beecher waved the problem away. ‘Let them stay where they are. A day won't hurt them. Teach them a lesson.’

Marlowe started to answer, thought better of it and switched oft. ‘You were right, Doc. There was no point in talking with him.’

'Well—no harm done, either.’

They went outside, there to find that Kelly had strung a line of his deputies around the scooters. ‘After you went inside, Boss, I got uneasy, so I stationed some of the boys around.’

'You're a better general than I am,’ Marlowe told him. ‘Any trouble?’

'One of Beecher's cops showed up, but he went away again.’

'Why didn't you grab him?’ asked MacRae.

'Well, I wanted to,’ Kelly answered, ‘but he kept going when I yelled at him. I couldn't stop him without shooting, so I let him go.’

'Should have winged him,’ said MacRae.

'Should I have?’ Kelly said to Marlowe. ‘I was tempted to, but I didn't know where we stood. Is this a shooting war, or is it just a row with the Company?’

'You did right,’ Marlowe assured him. ‘There will be no shooting unless Beecher starts it.’ MacRae snorted. Marlowe turned to him. ‘You disagree?’

'Jamie, you put me in mind of a case I ran into in the American West. A respected citizen shot a professional gun-thrower in the back. When asked why he didn't give the other chap a chance to draw, the survivor said, Well, he's dead and I'm alive and that's how I wanted it to be. Jamie, if you use sportsmanship on a known scamp, you put yourself at a terrible disadvantage.’

'Doctor, this is no time to swap stories. I've got to get these people safely housed and at once.’

'That's my point,’ persisted MacRae. ‘Finding housing isn't the first thing to do.’

'What is it, then?’

'Set up a task force of your best shots and send them over to grab Beecher and the Company offices. I volunteer to lead it.’

Marlowe gestured angrily. ‘Out of the question. At present we are a group of citizens going about our lawful occasions. One move like that and we're outlaws.’

MacRae shook his head. ‘You don't see the logic of the actions you've already taken. You know that water runs down hill, but you think it'll never reach the bottom. In Beecher's books you are an outlaw now. All of us.’

'Nonsense, we're just enforcing our contract. If Beecher behaves, we'll behave.’

'I'm telling you, son—the way to grasp a nettle is firmly.’

'Doctor MacRae, if you are so sure how this matter should be conducted, why did you refuse to accept leadership?’

MacRae turned red. ‘I beg your pardon, sir. What are your orders?’

'You know Syrtis better than I do. Where is a building we can commandeer as a barracks?’

Jim decided that this was a good time to come out of hiding. ‘Dad,’ he said, coming around in front of him, ‘I know where we are and the school is —’

'Jim, I've no time to chat. Get in the car.’

'But, Dad, it's only about ten minutes walk!’

'I think he's got something,’ put in the doctor. ‘The school will have real beds for the kids, and a kitchen.’

'Hmmm ... very well. Possibly we should use both schools and put the women and small children in the girls’ school.’

'Jamie,’ advised the doctor, ‘at the risk of getting my ears batted down again, I say no. Don't divide your forces.’

'I didn't really want to. Kelly!’

'Yes, sir.’

'Get them all out and put a deputy in charge of each car party to keep them together. We're moving out.’

'Right.’

There is very little foot traffic in the streets of the Earth settlement at Syrtis Minor; pedestrians prefer to go by tunnel. The few they did meet seemed startled but no one bothered them.

The pressure lock at the school's front door could hold about twenty people at a time. As the outer door opened after the second load, Howe stepped out. Even with his mask on it could be seen that he was angry. ‘What is the meaning of this?’ he demanded.

Willis took one look at him and closed up. Jim got behind his father. Marlowe stepped forward. ‘We're sorry but we've got to use the school as an emergency shelter.’

'You can't do that. Who are you, anyway?’

'My name is Marlowe. I'm in charge of the migration.’

'But —’ Howe turned suddenly, pushed his way through the crowd and went inside.

Nearly thirty minutes later Marlowe, MacRae, and Kelly went inside with the last party. Marlowe directed Kelly to station guards on the inside at each door. MacRae considered suggesting a string of armed guards around the outside of the building, but he held his tongue.

Mr Sutton was waiting for Marlowe in the entrance hall. ‘A news flash from Mrs Palmer, Chief—she says to tell you that chow will be ready in about twenty minutes.’

'Good! I could use a bite myself.’

'And the school's regular cook is sulking in the dining room. She wants to talk to you.'

'You deal with her. Where is Howe?'

'Derned if I know. He went through here like a destroying angel.'

A man pressed forward—the entrance hall was jammed, not only with colonists but with students. Reunions were going on all around, between parents and sons. Kelly was pounding a smaller replica of himself on the back, and was himself being pounded. The babble was deafening. The man who had forced his way forward put his mouth to Marlowe's ear and said, 'Mr Howe is in his office. He's locked himself in; I've just come from trying to see him.'

'Let him stay,' decided Marlowe. 'Who are you?'

'Jan van der Linden, instructor here in natural sciences. Who, may I ask, are you?'

'Name's Marlowe. I'm in charge of this mad house. Look here, could you round up the boys who live outside the school? We are going to have to stay here for a day or two at least. You might as well send the town boys home—and the teachers, too.'

The teacher looked doubtful. 'Mr Howe won't like me doing it without his say-so.'

'I'm going to do it in any case but you can speed things up. I take full responsibility.'

Jim saw his mother through the crowd and did not wait to hear the outcome. She was leaning against the wall, holding Oliver and looking very tired. Phyllis was standing close to her. Jim wormed his way through the crowd. 'Mother!'

She looked up. 'What is it Jimmy?'

'You come with me.'

'Oh, Jimmy—I'm too tired to move.'

'Come on! I know a place where you can lie down.' A few minutes later he had the three in the room abandoned by Frank and himself. His mother sank down on his bunk. 'Jimmy, you're an angel.'

'You take it easy. Phyl can bring you something to eat. I'm going back and see what's going on.' He started to leave, then hesitated. 'Phyl—would you take care of Willis for me?'

'Why? I want to see what's doing, too.'

'You're a girl; you'd better stay out from under foot.'

'Well, I like that! I guess I've got just as much business —'

'Stop it, children. Jimmy, we'll take care of Willis. Tell your father where we are.'

Jim delivered the message, then found himself late in the chow line. By the time he had gone through for seconds, and eaten same, he discovered that most of the colonists were gathered in the school auditorium. He went in, spotted Frank and Doctor MacRae and squeezed over to them.

His father was pounding for order, using the butt of his gun as a gavel. ‘Mr Linthicum has the floor.’

The speaker was a man about thirty with an annoyingly aggressive manner. ‘I say Doctor MacRae is right; we shouldn't fool around. We've got to have boats to get to Copais. Right? Beecher won't give ‘em to us. Right? But all the actual force Beecher has is a squad of cops. Right? Even if he deputizes every man in Syrtis he only has maybe a hundred and fifty guns. Right? We've got twice that many. Besides which Beecher won't be able to get all the local employees to fight us. So what do we do? We go over and grab him by the neck and force him to do right by us. Right?’ He sat down triumphantly.

MacRae muttered, ‘Heaven defend me from my friends.’

Several tried to speak; Marlowe picked one out. ‘Mr Gibbs has the floor.’

'Mr Chairman ... neighbours ... I have rarely heard a more rash and provocative speech. You persuaded us, Mr Marlowe, to embark on this reckless adventure, a project of which I never approved —’

'You came along!’ someone shouted.

'Order!’ called Marlowe. ‘Get to the point, Mr Gibbs.’

'— but in which I acceded rather than oppose the will of the majority. Now the hasty and ill-tempered would make matters worse with outright violence. But now that we are here, at the seat of government, the obvious thing to do is to petition for redress of grievances.’

'If you mean by that to ask Beecher for transportation to Copais, Mr Gibbs, I've already done so.’

Gibbs smiled thinly. ‘Forgive me, Mr Marlowe, if I say that the personality of the petitioner sometimes affects the outcome of the petition? I understand we have here, Mr Howe, the Headmaster of this school and a person of influence with the Resident Agent General. Would it not be wise to seek his help in approaching the Resident?’

Mr Sutton shouted, ‘He's the last man on Mars I'd let speak for me!’

'Address the chair, Pat,’ Marlowe cautioned. ‘I feel the same way, but I won't oppose it if that's what the crowd wants. But,’ he continued, to the audience, ‘is Howe still here? I haven't seen him.’

Kelly stood up. ‘Oh, he's here; he's holed up in his office. I've talked to him through the ventilator, I've promised him a honey of a beating if he will only come out and stand up to me like a man.’

Mr Gibbs looked scandalized. ‘Well, really!’

'It's a personal matter involving my boy,’ explained Kelly.

Marlowe banged the table. ‘I imagine Mr Kelly will waive his privilege if you folks want Howe to speak for you. Do I hear a motion?’ Gibbs proposed it; in the end only he and the Pottles voted for it.

After the vote Jim said, ‘Dad?’

'Address the chair, son. What is it?’

'Er, Mr Chairman—I got an idea. I was wondering, since we haven't got any boats, maybe we could get to Copais the way Frank and I got back to Charax—that is, if the Martians would help us.’ He added, ‘If folks wanted us to, I guess Frank and I could go back and find Gekko and see what could be done about it.’

There was a moment of silence, then murmurs of ‘What's he talking about?’ Although almost all of the colonists had heard the two boys’ story, it was the simple fact that it had not been believed, or had been ignored or discounted. The report ran counter to experience and most of the colonists were as bogged down in ‘common sense’ as their relatives back on Earth.

Mr Marlowe frowned. ‘We don't know that the natives have these conveyances between here and Copais —’

'I'll bet they have!’

’—and we don't know that they would let us ride in them even if they have.’

'But, Dad, Frank and I —’

'A point of order, Mr Chairman!’ It was Gibbs again. ‘Under what rules do you permit children to speak in the councils of adults?’

Mr Marlowe looked embarrassed; Doctor MacRae spoke up. ‘Another point of order, Mr Chairman. Since when does this cream puff —’ He motioned at Gibbs.

'Order, Doctor.’

'Correction. I mean this fine upstanding male citizen, Mr Gibbs, get the notion that Frank and Jim and the other gun-toting men their age ain't citizens? I might add that I was a man grown when this Gibbs party was still drooling on his bib —’

'Order!’

'Sorry. I mean even before he had reached that stage. Now this is a frontier society and any man old enough to fight is a man and must be treated as such—and any girl old enough to cook and tend babies is adult, too. Whether you folks know it or not, you are headed into a period when you'll have to fight for your rights. The youngsters will do the fighting; it behooves you to treat them accordingly. Twenty-five may be the right age for citizenship in a moribund, age-ridden society back on Earth, but we aren't bound to follow customs that aren't appropriate to our needs here.’

Mr Marlowe banged his gun. ‘I declare this subject out of order. Jim, see me later. Has anyone any action to propose that can be carried out at this time? Do we negotiate, or do we resort to force?’

Mr Konski said, ‘I favour taking what we have to have, if necessary, but it may not be necessary. Wouldn't it be well for you, Mr Marlowe, to phone Mr Beecher again? You could point out that we have force enough to do as we see fit; perhaps he will see reason. I so move.'

The motion was carried; Mr Marlowe suggested that some one else speak for them, but was turned down. He left the rostrum and went out to the communications booth. It was necessary to break the lock Howe had placed on it.

Beecher seemed pleased with himself. 'Ah, yes—my good friend, Marlowe. You've called to give yourself up?'

Marlowe explained civilly to Beecher the purpose of his call.

'Boats to Copais?' Beecher laughed. 'Scooters will be ready at nightfall to take the colonists back to South Colony. All who are ready to go at that time will escape the consequences of their hasty actions. Not you, of course.'

'Let me point out to you that we are considerably larger in numbers than the largest force you can drum up here in Syrtis Minor. We intend to carry out the contract. If you crowd us into using force to get our rights, force we will use.'

Beecher sneered through the TV screen. 'Threats do not move me, Marlowe. Surrender. Come out one at a time and unarmed, hands up.'

'Is that your last word?'

'One more thing. You are holding Mr Howe a prisoner. Let him go at once, or I shall see to it that you are prosecuted for kidnapping.'

'Howe? He's not a prisoner; he's free to leave at any time.'

Beecher elaborated. Marlowe answered, 'That's a private matter between Kelly and Howe. You can call Howe in his office and tell him so.'

'You must give him safe conduct,' Beecher insisted.

Marlowe shook his head. 'I'm not going to interfere in a private quarrel. Howe is safe where he is; why should I bother? Beecher, I am offering you one more chance to provide boats peacefully.'

Beecher stared at him and switched off.

Kelly said, 'Maybe you should have thrown me to the wolves, Chief.'

Marlowe scratched his chin. 'I don't think so. I can't hold a hostage—but this building is safer with Howe in it. So far as I know there isn't a bomb nor any other heavy weapon in Syrtis—but I would like to know what makes Beecher so confident.'

'He's bluffing.'

'I wonder.' Marlowe went back and reported the conversation to all the colonists.

Mrs Pottle stood up. 'Well, *we* are accepting Mr Beecher's gracious offer at once! As for holding poor Mr Howe a prisoner—why, the very idea! I hope that you are properly punished, and that ungentlemanly Mr Kelly as well. Come, dear!' Again she made a grand exit, with Mr Pottle trotting after.

Marlowe said, 'Any more who want to surrender?'

Gibbs looked around uncertainly and followed them. No one spoke until he had left, then Toland said, 'I move that we organize for action.'

'Second!'—'Second the motion!'

No one wanted to debate it; it was carried. Toland then proposed that Marlowe be elected captain, with power to appoint officers. It, too, was carried.

At this point Gibbs came stumbling back, his face white, his hands trembling. 'They're dead! They're dead!' he cried.

Marlowe found it impossible to restore order. Instead he crowded into the circle around Gibbs and demanded, 'Who's dead? What happened?'

'The Pottles. I was almost killed myself.' He quieted down enough to tell his story; the three had assumed their masks and got out through the lock. Mrs Pottle, without bothering to look around, had stomped out into the street, her husband a close shadow. As soon as they had stepped clear of the archway they had both been blasted. Their bodies lay in the street in front of the school. 'It's your fault,' Gibbs finished shrilly, looking at Marlowe. 'You got us into this.'

'Just a moment,' said Marlowe, 'did they do the things Beecher demanded? Hands up, one at a time, and so forth? Was Pottle wearing his gun?'

Gibbs shook his head and turned away. 'That's not the point,' MacRae said bitterly. 'While we've been debating, Beecher has boxed us in.'

11

Besieged

It was maddeningly true, as investigation soon proved. The front and back exits were covered by gunmen—Beecher's police, supposedly—who were able to blast anyone emerging from the building without themselves being under fire. The airlock nature of the doors made a rush suicidal.

The school was at a distance from the settlement's dwellings; it was not connected by tunnel. Nor had it any windows. The colony listed hundreds of licensed gun wearers—and yet a handful of gun fighters outside could keep them holed up.

Under the influence of Doc MacRae's bellowing voice the assembly got back to work. 'Before I go ahead,' Marlowe announced, 'does anyone else want to surrender? I'm fairly sure that the Pottles were shot because they blundered out without notice. If you shout and wave something white, I think your surrender will be accepted.’

He waited. Presently a man got up with his wife, and then another. A few more trickled out. They left in dead silence.

When they were gone Captain Marlowe went on with organizing. Mrs Palmer he confirmed as head of commissary, Doc he designated as executive officer, Kelly he appointed officer of the watch, responsible for interior guard. Sutton and Toland were given the job of devising some sort of portable screen to block the enfilading fire that had dropped Mr and Mrs Pottle. Jim followed all this with excited interest until, after the appointment of platoon leaders, it became evident that his father did not intend to use boys as combatants. The students from the school were organized into two platoons, designated as reserve, and dismissed.

Jim hung around, trying to get a word with his father. At last he managed to catch his eye. ‘Dad —’

'Don't bother us now, Jim.’

'But, Dad, you *told* me to see you about getting the Martians to help us get to Copais.’

'The Martians? Oh —’ Mr Marlowe thought about it, then said, ‘Forget it, Jim. Until we can break out of here, neither that scheme, nor any other, will work. Go see how your mother is doing.’

Thus brushed off, Jim turned disconsolately away. As he was leaving Frank fell in step with him. ‘Do you know, Jim, sometimes you aren't as full of guff as you are other times.’

Jim eyed him suspiciously. ‘If that's a compliment—thanks.’

'Not a compliment, Jim, merely justice. Seldom as I approve of your weary notions, this time I admit that you had a bright idea.’

'Quit making a speech and get to the point.’

'Very well. Point: when you suggested getting the Martians to help us you were firing on all jets.’

'Huh? Well, thanks, but I don't see it myself. As Dad pointed out, there's nothing we can do about it until we find some way to break out of here. Then I suppose we won't need their help.’

'You're supposing too fast. Let's, as Doc would say, analyse the situation. In the first place, your father got us boxed in here —’

'You lay off my father!’

'I wasn't picking on your father. Your father is a swell guy. But by behaving like a gentleman he got us cornered and we can't get out. I'm not blaming him, but that's the situation. So what are they going to do about it? Your old man tells my old man and that drip Toland to work out a shield, some sort of armour, that will let us get out the door and into the open where we can fight. Do you think they'll have any luck?’

'Well, I hadn't thought about it.'

'I have. They are going to get exactly no place. Dad is a good engineer. You give him equipment and materials and he'll build you anything. But what's he got to work with? He's got the school workshop and you know what a sad mess that is. The Company never spent any money on equipping it; it's about right for making bookends. Materials? What are they going to make a shield out of? Dining room table tops? A heater would cut through a table top like soft cheese.'

'Oh, there must be something around they can use.'

'You name it.'

'Well, what do you want us to do?' Jim said in exasperation. 'Surrender?'

'Certainly not. The old folks are stuck in a rut. Here's where we show finesse—using your idea.'

'Quit calling it my idea. I haven't got any idea.'

'Okay, I'll take all the credit. We get word to Gekko that we need help. He's our water friend; he'll see to it.'

'How can Gekko help us? Martians don't fight.'

'That's right, but, as it says in geometry, what's the corollary? Human beings never fight Martians, *never.* Beecher can't risk offending the Martians. Everybody knows what a terrible time the Company had persuading the Martians that it was all right to let us settle here in the first place. Now suppose that about twenty or thirty Martians—or even one—came stomping up to the front door of this place: what do Beecher's cops do?'

'Huh?'

'They cease fire, that's what—and we come swarming out. That's what Gekko can do for us. He can fix it so that Beecher is forced to call off his gun toters. He'll *have* to.'

Jim thought about it. There was certainly merit in it. Every human who set foot on Mars had it thoroughly drummed into him that the natives must not be interfered with, provoked, nor their customs violated—nor, above all things, hurt. The strange and distressing history of the first generation of contact with the Martians had resulted in this being the first law of the settlements on Mars. Jim could not imagine Beecher violating this rule—nor could he imagine the Company police doing so. In normal times the principal duty of the police was the enforcement of this rule, particularly with respect to tourists from Earth, who were never allowed to come in contact with natives.

'There is just one thing wrong, Frank. Supposing Gekko and his friends were willing, how are we going to let him know that we need help? We can't just call him on the phone.'

'No, we can't—but that is where you come in. *You* can send him a message.'

'How?'

'Willis.'

'You're crazy!'

'Am I? Suppose you go out that front door—*fsst*! You are done for. But suppose Willis goes out? Who's going to shoot a bouncer?'

'I don't like it. Willis might get hurt.'

'If we just sit tight and do nothing, you'll wish he was dead. Beecher will sell him to the London Zoo.'

Jim considered this, then answered, 'Anyhow, your scheme is full of holes. Even if he gets outside safely, Willis couldn't find Gekko and couldn't be depended on to deliver a message. He'd be just as likely to sing or recite some of Doc's bum jokes. I've got a better idea.'

'Convince me.'

'I'll bet that Beecher's plug-uglies didn't think to keep watch on the garbage dump. I'll deliver the message to Gekko myself.'

Frank thought it over. 'No good. Even if they aren't watching the dump, they can see you from where they are watching the back door. They'd nail you before you could scramble to your feet.'

'I'll wait till dark.'

'Mmmm ... could work. Only I'll do it. I'm faster on my feet than you are.'

'Look who's talking!'

'All right! We'll *both* do it—an hour apart.' Frank went on, 'But that doesn't cut Willis out of it. He'll try it, too. One of us might get through. Now wait a minute—you underrate your little pal. We'll teach him just what he's to say. Then you tell him to go over into the native city, stop the first Martian he meets and recite his piece. The Martian does the rest because we'll put it all into the message. The only question is whether or not Willis is bright enough to do as you tell him. I've got grave doubts about that.'

Jim bristled. 'You're always trying to make out that Willis is stupid. He's not; you just don't understand him.'

'Okay, then he can find his way over to the city and deliver the message. Or can't he?'

'Well—I don't like it.'

'Which do you prefer, to take a small risk with Willis or to have your mother and your baby brother have to spend the winter at South Colony?'

Jim chewed his lip. 'All right—we'll try it. Let's get Willis.'

'Don't get in a rush. Neither you nor I know the native language well enough to whip up just what we want to say. But Doc does. He'll help us.'

'He's the only one of the grown ups I'd trust with this anyhow. Come on.'

They found MacRae, but were not able to speak with him at once. He was in the communications booth, bellowing at the screen. They could hear his half of the conversation. 'I want to talk to Doctor Rawlings. Well, get him—don't sit there chewing your pencil! Tell him it's Doctor MacRae.... Ah, good day, Doctor! ... No, I just got here ... How's business, Doctor? Still cremating your mistakes? ... Well, don't we all? ... Sorry, I can't; I'm locked up.... Locked up, I said ...—L ... O ... C ... K ... E ... D up, like a disorderly drunk.... No reason, none at all. It's that simian moron, Beecher.... Yes, hadn't you heard? The entire colony, penned up in the schoolhouse ... shoots us down if we so much as stick our noses out.... No, I'm not joking. You know Skinny Pottle—he and his wife were killed not two hours ago. Come see for yourself and find out what kind of a madman you have ruling you here ...' The screen suddenly went blank. MacRae swore and fiddled with the controls.

Presently, by experiment, he realized the instrument had been cut off completely. He came out, shrugging. 'Well, they finally caught on to me,' he remarked to the room in general, 'but I talked to three key men.'

'What were you doing, Doc?' asked Jim.

'Starting some fifth column activity behind Beecher's lines. There are good people everywhere, son, but you have to spell it out for them.'

'Oh. Look, Doc, could you spare us some time?'

'What for? Your father has a number of things for me to do, Jim.'

'This is important.' They got MacRae aside and explained to him their plans.

MacRae looked thoughtful. 'It just might work. That notion of making use of Martian immunity is brilliant, Frank; you should go into politics. However, about the other stunt—the garbage can paratrooper act—if you ask your father, he'll veto it.'

'Can't you ask him? He'll listen to you.'

'I said *If* you ask your father.'

'Oh. I get you.'

'About the other matter—chase up the little beastie and meet me in classroom "C"; I'm using it as an office.'

Jim and Frank left to do so. Jim found his mother and Oliver asleep, his sister and Willis gone. He had started to leave when his mother woke up. 'Jimmy?'

'I didn't mean to wake you, Mother. Where's Phyl? I want to find Willis.'

'Your sister is in the kitchen, I think, helping out. Isn't Willis here?

He was here on the bed with baby and me.'

Jim looked again, but found no sign of Willis. 'I'll go ask Phyl. Maybe she came back and got him.'

'He can't have wandered far. I'm sorry, Jim.'

'I'll find him.'

He went to the kitchen, found his sister. 'How would I know?' she protested. 'He was with mother when I left. Don't go looking at me.'

Jim joined Frank. 'Darn it, they've let him wander off. We'll just have to search.'

One hour and hundreds of inquiries later they were convinced that, if the bouncer was in the school, he had found a very special hiding place. Jim was so annoyed that he had forgotten completely the essential danger that they were all in. 'That's what comes of trusting women,' he said bitterly. 'Frank, what'll I do now?'

'Search me.'

They were in the far end of the building from their former room. They started back toward it on the chance that Willis might have come back. As they were passing through the entrance hall, Jim stopped suddenly. 'I heard him!'

They both listened. 'Open up!' came a replica of Jim's voice. 'Let Willis in!' The voice came through the door's announcing speaker.

Jim darted for the pressure lock, was stopped by the guard. 'Hey,' he protested, 'open the lock. That's Willis.'

'More likely it's a trap. Stand back.'

'Let him in. That's Willis, I tell you.' The guard ignored him, but threw the switch that caused the lock to cycle. He cleared everybody out of range, then watched the door from one side, gun drawn.

The inner door opened and Willis waddled through.

Willis was bland about the whole thing. 'Jim go away. Everybody go away. Willis go for walk.'

'How did you get outdoors?'

'Went out.'

'But how?' Willis apparently could see nothing difficult about that; he did not amplify.

'Maybe he went out when the Pottles did?' suggested Frank.

'Maybe. Well, I guess it doesn't matter.'

'Go see people,' Willis offered. He named off a string of native names, then added, 'Fine time. Water friends. Give Willis good water, big drink.' He made lip-smacking noises in imitation of Jim, although he had no lips himself.

'You had a drink just a week ago,' Jim said accusingly.

'Willis good boy!' Willis countered.

'Wait a minute,' said Frank. 'He was with *Martians.'*

'Huh? I don't care if he was with Cleopatra; he shouldn't run away.'

'But don't you see? He can get to the natives; he already has. All we've got to do is to be sure he carries a message for them to pass on to Gekko.'

The point, relayed to MacRae, increased his interest. The three composed a message in English for MacRae to translate. 'Greetings,' it began, 'this is a message from Jim Marlowe, water friend of Gekko of the city of —' Here they inserted the unspellable and most unpronounceable Martian name of Cynia. 'Whoever you may be, friend of my friend, you are implored to send this word at once to Gekko. I am in great trouble and I need your help.' The message went on to tell the nature of the trouble, who was responsible, and what they hoped would be done about it. Telegraphic simplicity was not attempted, since Willis's nervous system could hold a thousand words as easily as ten.

MacRae translated it, then drilled Jim in reading it, after which they attempted to impress on Willis what he was to do. Willis was willing, but his consistently slaphappy, featherbrained approach to any problem exasperated them almost to hysteria. At last it seemed likely that he might carry out his assignment; at least (a) when asked what he was to do he would answer, 'go see friends,' and (b) when asked what he would tell them he would (usually) answer by reciting the message.

'It might work,' decided MacRae. 'We know the Martians have means of rapid communication, even though we've never known what sort. If our plump friend doesn't forget what he is doing and why he is making the trip...'

Jim took him to the front door. On MacRae's authorization the guard let them through. Jim checked Willis again while the lock was cycling; the bouncer appeared to be sure of his instructions, although his answers showed his usual mental leapfrog.

Jim hung back in the doorway, out of the line of fire, while Willis rolled off the stoop. The Pottles still lay where they had fallen; Willis looked at them, then took a zig-zag course down the street and disappeared from Jim's view, cut off as he was by the door frame. Jim wished then that he had had the foresight to bring along a mirror to use as a periscope. Finally he screwed up his courage, lay down, and peeked around the edge of the door at the bottommost part.

Willis was well down the street and nothing had happened to him. Far down the street some sort of a cover had been set up. Jim stuck his head out an inch farther, trying to see what it was, when the corner of the door frame above him gave off a puff of smoke and he felt the electric tingle of a near miss. He jerked his head back and reentered the lock.

He had an all-gone feeling at the pit of his stomach and a conviction that he would never see Willis again.

12

'Don't Shoot!'

The day passed wearily for Jim and Frank. There was nothing they could do about their own plan until after dark. In the meantime discussions were taking place among colonial leaders, but they were held behind closed doors and the boys were not invited.

Supper was welcome diversion, both because they were hungry and because it meant that the kitchen would presently be deserted and the way left open to the garbage dump. Or so they thought. They found that, in practice, the womenfolk running the kitchen first took a leisurely time to clean up, then seemed disposed to sit around all night, drinking coffee and talking.

The boys found excuses to come into the kitchen, excuses which began to arouse Mrs Palmer's suspicions. Finally Jim followed another boy in, wondering what he would say this time, when he heard the other boy say, ‘Mrs Palmer, Captain Marlowe wants to know if it would be too much trouble to keep a night watch for coffee and sandwiches for the men on guard.’

'Why, no,’ Jim heard her say, ‘we'll be glad to. Henrietta, will you find some volunteers? I'll take the first stint.’

Jim backed out and went to where Frank awaited him. ‘What's the chances?’ asked Frank. ‘Does it look like they're going to break up any time soon?’

Jim told him what the chances were—or, rather, were not. Frank swore, using a couple of words that Jim had not heard before. ‘What'll we do, Jim?’

'I don't know. Maybe when it's down to just one of them, she'll go out occasionally.’

'Maybe we could get her out with some song and dance.’

'Maybe we could tell her that she's wanted in the headquarters room. That ought to do it.’

They were still discussing it when the lights went out.

The place was suddenly as dark as the inside of a rock. Worse than that, there was a disturbing silence. Jim had just realized that the complete emptiness of sound resulted from the ending of the noise of circulating air, from the stopping of the supercharger on the roof, when a woman began to scream.

She was joined by another, in a higher key. Then there were voices everywhere in the darkness, questioning, complaining, soothing.

Down the hall a light sprang out and Jim heard his father's voice. ‘Quiet, everybody. It's just a power failure. Be patient.’

The light moved toward them, suddenly hit them. ‘You boys get to bed.’ Jim's father moved on. In the other direction they could hear Doc's bellow, ordering people to shut up and calm down.

Jim's father came back. This time he was saying, ‘Into your suits, everybody. Have your respirators on your head. We hope to correct this in a few minutes, but we don't want anybody hurt. Don't get excited; this building will hold pressure for half an hour at least. Plenty of time to get ready for thin air, even if it takes a while to correct the trouble.’

Other lights sprang up; shortly the passageways throughout the building, if not the rooms, were adequately lighted. The corridors were crowded with dim shapes, struggling into their outdoors suits. Jim and Frank, planning as they were to attempt to go outside, had long been in their suits, armed, and with respirators at the ready. ‘Maybe this is a good time,’ suggested Frank.

'No,’ Jim answered. ‘They're still in the kitchen. I can see a light.’

MacRae came down the corridor; Jim stopped him. ‘Doc, how long do you think it will be until they get the lights on?’

MacRae said, ‘Are you kidding?’

'What do you mean, Doc?’

'This is one of Beecher's stunts. He's pulled the switch on us, at the power house.’

'Are you sure?’

'There's no failure—we've checked it. I'm surprised Beecher didn't do it hours ago. But don't you birds go blabbing, Jim; your Pop has his hands full keeping the nervous nellies from blowing their tops.’ He moved on.

In spite of Captain Marlowe's reassuring words the true state of things was soon common knowledge. The pressure dropped slowly, so slowly that it was necessary to warn everyone to adjust his respirator, lest oxygen starvation sneak up on the unwary. After that it was hardly possible to maintain the fiction that the power loss was temporary, to be corrected any minute now. The temperature in the building fell slowly; there was no danger of them freezing in the closed and insulated building—but the night chill penetrated.

Marlowe set up headquarters in the entrance hall in a circle of light cast by a single torch. Jim and Frank loitered there, discreetly back in the shadows, unwilling to miss what might be going on and quite unwilling to go to bed as ordered ... as Frank pointed out to Jim, the only beds they had were occupied, by Mrs Marlowe, Phyllis, and Oliver. Neither of them had given up the idea of attempting the garbage chute route, but they knew in their hearts that the place was too stirred up to give them the privacy they would require.

Joseph Hartley, one of the colony's hydroponists, came up to

Marlowe. His wife was behind him, carrying their baby daughter in a pressurized crib, its supercharger sticking up above the clear plastic shell of it like a chimney. ‘Mr Marlowe—I mean Captain Marlowe —’

'Yes?’

'You've got to do something. Our kid can't stand this. She's coming down with croup and we can't get at her to help her.’

MacRae crowded forward. ‘You should have brought her to me, Joe.’ He looked the baby over, through the plastic, then announced, ‘The kid seems to be doing all right.’

'She's sick, I tell you.’

'Hmm—I can't make much of an examination when I can't get at her. Can't take her temperature, but she doesn't seem to be in any real danger.’

'You're just trying to soothe me down,’ Hartley said angrily. ‘You can't tell anything about it when she is in a sealed crib.’

'Sorry, son,’ the doctor answered.

'A lot of good it does to be sorry! Somebody's got to *do* something. This can't —’ His wife plucked at his sleeve; he turned away and they went into a huddle. Shortly he turned back. ‘Captain Marlowe!’

'Yes, Mr Hartley.’

'The rest of you can do as you like. I've had enough. I've got my wife and baby to think about.’

'The decision is yours,’ Marlowe said stiffly and turned away in abrupt dismissal.

'But —’ said Hartley and stopped, aware that Marlowe was no longer paying any attention to him. He looked uncertain, like a man who wants someone to argue him out of his resolution. His wife touched his arm; he turned then and they went together to the front entrance.

Marlowe said to MacRae, ‘What do they expect of me? Miracles?’

MacRae answered, ‘Exactly, boy. Most people never grow up. They expect papa to get ‘em the pretty Moon.’ The doctor went on, ‘Just the same, Joe accidentally told the truth. We've got to do something.’

'I don't see what we can do until Sutton and Toland get some results.’

'You can't wait any longer for them, son. We've got to crush out of here anyway. Theoretically a man can live for days in a respirator. Practically, it won't work and that is what Beecher is counting on. You can't keep several hundred people crouching here in the dark and the cold, wearing masks to stay alive, not indefinitely. You're going to have a panic on your hands.’

Marlowe looked weary, even through his mask. ‘We can't tunnel out. We can't get out at all, except through the doors. And they've got those doors zeroed. It's suicide.’

'It's got to be done, son. I'll lead the rush.'

Marlowe sighed. 'No, I will.'

'You've got a wife and kids. I've got nobody and I've been living on borrowed time so long I've lost track.'

'It's my privilege. That settles it.'

'We'll see.'

'I said that settles it, sir!'

The argument was left unfinished; the inner door to the pressure lock opened again and Mrs Hartley stumbled inside. She was clutching the tiny crib and sobbing wildly.

It was the case of the Pottles and Gibbs all over again. When MacRae was able to make something out of her sobs, it appeared that they had been very cautious, had waited, had shouted their intention to surrender, and had displayed a light. There had been no answer, so they had shouted again, then Hartley had stepped off the threshold with his hands up and his wife shining the light on him.

He had been struck down as soon as he stepped out the door.

MacRae turned her over to the women, then went out to reconnoitre. He came back in almost at once. 'Somebody get me a chair,' he demanded, and looked around. 'You, Jim—skedaddle.'

'What's up?' asked Marlowe.

'Let you know in a moment. I suspect something.'

'Be careful.'

'That's why I want the chair.'

Jim came back with one; the doctor went through the pressure lock again. He came back in about five minutes later. 'It's a booby trap,' he stated.

'What do you mean?'

'Beecher didn't try to keep men outdoors all night—at least I don't think so. It's automatic. They've put an electric-eye grid across the door. When you break it, a bolt comes across, right where you'd be if you walked through it.' He displayed half a dozen deep burns through the chair.

Marlowe examined them. 'But that's not the important point,' MacRae went on. 'It's automatic but it's inflexible. It hits about two feet above the step and about four feet. A man could crawl through it—if his nerves were steady.'

Marlowe straightened up. 'Show me.'

They came back, with the chair still more burned, in a few minutes. 'Kelly,' Marlowe said briskly, 'I want twenty volunteers to make a sortie. Pass the word around.'

There were at least two hundred volunteers; the problem was to weed them down. Both Frank and Jim tried to get in on it; Jim's father refused to take any but grown, unmarried men—except himself.

MacRae he refused.

The doctor pulled Jim back and whispered to him. ‘Hold your horses. In a few minutes I'll be boss.’

The raiding party started into the lock. Marlowe turned to MacRae. ‘We'll head for the power plant. if we are gone more than two hours, you are on your own.’ He went into the lock and closed the door.

As soon as the door was closed, MacRae said, ‘Okay, twenty more volunteers.’

Kelly said, ‘Aren't you going to wait two hours?’

'You tend to your knitting! When I'm out of here, you're in charge.’ He turned and nodded to Jim and Frank. ‘You two come along.’ MacRae had his party in short order, had apparently selected them in his mind before Marlowe left. They filed into the lock.

Once the outer door was open MacRae flashed his torch into the street. The Pottles and the unfortunate Joseph Hartley lay where they had fallen, but no other bodies littered the street. MacRae turned around and said, ‘Gimme that chair. I'll demonstrate the gimmick.’ He stuck it out into the door. Instantly two bolts cut across the doorway, parallel to the ground. After they were gone and the eye was still dazzled by their brilliance, two soft violet paths of ionization marked where they had been and then gradually dispersed.

'You will note,’ said the doctor, as if he were lecturing medical students, ‘that it does not matter where the chair is inserted.’ He again shoved the chair into the opening, moved it up and down. The bolts repeated at splitsecond intervals, but always at the same places, about knee high and chest high.

'I think it is best,’ continued the doctor, ‘to maintain the attack. Then you can see where you are. First man!’

Jim gulped and stepped forward—or was shoved, he was not sure which. He eyed the deadly fence, stooped over, and with awkward and infinite care stepped through. He went on out into the street. ‘Get moving!’ the doctor ordered. ‘Spread out.’

Jim ran up the street, feeling very much alone but terribly excited. He paused short of the end of the building and cautiously looked around the corner. Nothing either way—he stopped and waited in the darkness, ready to blast anything that moved.

Ahead of him and to the left he could see the curious structure which had almost cost him the top of his head many hours before. It was clear now that the bolts were coming from it.

Someone came up behind him. He whirled and heard a voice yelp, ‘Don't shoot! It's me—Frank.’

'How about the others?’

'They're coming—I think.’

A light flashed at the building ahead, beyond the shield from which the bolts came. Frank said, ‘I think somebody came out there.’

'Can you see him? Do you think we ought to shoot?’

'I don't know.’

Someone else was pounding up the street behind them. Up ahead, from near the spot where Frank had thought he had seen a man a heater flashed out in the darkness; the beam passed them.

Jim's gun answered by pure reflex; he nailed the spot from which the flash had come. ‘You got him,’ said Frank. ‘Good boy!’

'I did?’ said Jim. ‘How about the guy behind me?’ He found that he was trembling.

'Here he is now.’

'Who shot at me?’ the newcomer said. ‘Where are they?’

'Nowhere at the moment,’ Frank answered. ‘Jim nailed him.’ Frank tried to peer into the mask; the night was too dark. ‘Who is it?’

'Smitty.’

Both Frank and Jim gave exclamations of surprise—it was Smythe, the practical man. ‘Don't look at me like that,’ Smythe said defensively. ‘I came along at the last minute—to protect my investment. You guys owe me money.’

'I think Jim just paid it off,’ suggested Frank.

'Not on your life! That's another matter entirely.’

'Later, later,’ said Frank. Others were coming up. Presently MacRae came puffing up and roared, ‘I told you bird brains to spread out!’ He caught his breath and said, ‘We tackle the Company main offices. Dogtrot—and don't bunch together.’

'Doc,’ said Jim, ‘there are some in that building up ahead.’

'Some what?’

'Somebody that shoots at us, that's what.’

'Oh. Hold it, everybody.’ MacRae gave them hoarse instructions, then said, ‘Got it, everybody?’

'Doc,’ asked Frank, ‘how about the gun over there? Why don't we wreck it first?’

'I must be getting old,’ said MacRae. ‘Anybody here enough of a technician to sneak up on it and pull its teeth?’

A faceless figure in the darkness volunteered. ‘Go ahead,’ Doc told him. ‘We'll cover you from here.’ The colonial trotted ahead, swung around behind the shield covering the stationary automatic blaster, and stopped. He worked away for several minutes, then there was a white flash, intensely bright. He trotted back. ‘Shorted it out. Bet I blew every overload breaker in the power house.’

'Sure you fixed it?’

'You couldn't dot an “i” with it now.’

'Okay. You —’ MacRae grabbed one of his squad by the arm. ‘—tear back and tell Kelly. You —’ He indicated the chap who had wrecked the gun. '— go around in back and see what you can do with the set up back there. You two guys cover him. The rest of you follow me—the building ahead, according to plan.'

Jim's assignment called for sneaking along the face of the building and taking a covering position about twenty feet short of the doorway. His way led him over the ground where the man had been at whom he had shot. There was no body on the pavement; he wondered if he had missed. It was too dark to look for blood.

MacRae gave his covering troops time to reach their stations, then made a frontal assault with six to back him up, among them Frank. The doctor himself walked up to the building entrance, tried the outer door. It opened. Motioning the assault group to join him, he went in. The outer door of the building's lock closed on them.

Jim huddled against the icy wall, eyes wide, ready to shoot. It seemed a cold eternity that he waited; he began to fancy that he could see some traces of dawn in the east. At last he saw silhouettes ahead, raised his gun, then identified one as Doc's portly figure.

MacRae had the situation in hand. There were four disarmed prisoners; one was being half carried by two others. 'Take 'em back to the school,' Doc ordered one of his group. 'Shoot the first one of them who makes a funny move. And tell whoever is in charge back there now to lock 'em up. Come on, men. We've got our real job ahead.'

There came a shout behind them; MacRae turned. Kelly's voice called, 'Doc! *Wait for us!'* He came running up and demanded, 'What are the plans?' Behind him, men were pouring out of the school and up the street.

MacRae took a few minutes to recast things on the basis of more guns. One of the platoon leaders, a civil engineer named Alvarez, was left in charge at the school with orders to maintain a guard outside the building and to patrol the neighbourhood with scouts. Kelly was assigned the task of capturing the communications building which lay between the settlement and the space port. It was an important key to control of the whole situation, since it housed not only the local telephone exchange but also the radio link to Deimos and thence to all other outposts on Mars—and also the radar beacons and other aids for incoming ships from Earth.

MacRae reserved for himself the job of taking the planet office—the main offices on Mars of the Company, Beecher's own headquarters. The Resident Agent General's personal apartment was part of the same building; the doctor expected to come to grips with Beecher himself.

MacRae sent a squad of men to reinforce Marlowe at the power house, then called out, 'Let's go, before we all freeze to death. Chop, chop!' He led the way at a ponderous trot.

Jim located Frank in the group and joined him. ‘What took you guys so long in that building?’ he asked. ‘Was there a fight?’

'Took so long?’ said Frank. ‘We weren't inside two minutes.’

'But you must have —’

'Cut out that chatter back there!’ called out Doc. Jim shut up and pondered it.

MacRae had them cross the main canal on ice, avoiding the arching bridge as a possible trap. They crossed in pairs, those behind covering those crossing; in turn they who had crossed spread out and covered those yet to come. The crossing held a nightmarish, slow-motion quality; while on the ice a man was a perfect target—yet it was impossible to hurry. Jim longed for his skates.

On the far side the doctor gathered them together in the shadow of a warehouse. ‘We'll swing around to the east and avoid the dwellings,’ he told them in a hoarse whisper. ‘From here on, *quiet!*—for your life. We won't split up because I don't want you shooting each other in the dark.’ He set forth a plan to surround the building and cover all exits, while MacRae himself and about half their numbers tried to force an entrance at the main door.

'When you get around in back and make contact,’ MacRae warned the two who were to lead the flanking and covering moves, ‘you may have one deuce of a time telling friend from foe. Be careful. The word is Mars; the answer is Freedom.’

Jim was in the assault party. Doc stationed six of them in fan shape around the door, at an easy twenty-five yards range, and had them take cover where available. Three of them were on the open ramp in front of the door; he had them lie down and steady their guns. ‘In case of doubt—shoot,’ he instructed them. ‘Come on, the rest of you.’

Jim was included in the last order. MacRae walked up to the outer door and tried it; it was locked. He pressed the signal switch and waited.

Nothing happened. MacRae pressed the switch again and called out mildly to the speaker grille, ‘Let me in. I have an important message for the Resident.’

Still nothing happened. MacRae changed his tone to pretended exasperation. ‘Hurry up, please! I'm freezing to death out here.’

The door remained dark and silent. MacRae changed his manner to belligerence. ‘Okay, Beecher, open up! We've got the place surrounded and we're ready to blast in the door. You have thirty seconds till we set off the charge.’

The seconds ticked away. Doc muttered to Jim, ‘I wish it were the truth,’ then raised his voice and said, ‘Time's up, Beecher. This is it.’

The door hissed as the compressed air in the lock began to escape to the outside; the lock was starting to cycle. MacRae motioned them back a little; they waited, not breathing, all guns drawn and aimed at the point where the door would begin to open.

Then it was open and a single figure stood in it, the lock's light shining behind him. ‘Don't shoot!’ said a firm, pleasant voice. ‘It's all right. It's all over.’

MacRae peered at the figure. ‘Why, Doctor Rawlings!’ he said. ‘Bless your ugly face.’

13
'It's An Ultimatum'

Rawlings himself had spent half the night locked up, along with half a dozen other prominent citizens who had attempted to reason with Beecher. As the story got around, especially the matter of the deaths of the Pottles, Beecher found himself with no support at all, save from his own clique of sycophants and toadies and the professional, largely disinterested support of the Company's police.

Even Kruger cracked up under the strain, tried to get Beecher to reverse himself—and was stuffed in with the others, which by then included the chief engineer of the power plant. But it was Doctor Rawlings who talked the guard placed over them into risking his job and letting them go—the doctor was treating the guard's wife.

'I don't think Beecher would ever stand trial, even if we had him back on Earth,’ MacRae remarked about the matter to Rawlings and Marlowe. ‘What do you think, Doctor?’ The three were seated in the outer offices of the planet office building. Marlowe had come there after getting word at the power house from MacRae and had gotten busy at once, writing despatches to the Project camps and the other outlying activities, including North Colony itself, trying to round up boats. He had then tried, red-eyed and uncertain from lack of sleep, to compose a suitable report to Earth, until MacRae had interrupted him and insisted that he get some rest first.

'Paranoia?’ said Rawlings.

'A clear case.’

'My opinion, too. I've seen suggestive indications of it, but the case was not fully developed until his will was crossed. He must be hospitalized—and restrained.’ Doctor Rawlings glanced over his shoulder at a closed door. Behind it was Beecher.

Rawlings turned back. ‘What do you think of Howe, Doctor?’

MacRae grunted. ‘Haven't seen enough of him to have an opinion. What do you plan to do with him, Jim?’ he added, turning to Marlowe.

Marlowe frowned. ‘Nothing. The only charges we can make stick aren't worth the trouble. We'll simply ship him back.’

MacRae nodded. ‘That's the ticket. Hanging's too good for him; kick him out.’

'What worries me more,’ Marlowe went on, ‘is whom to get to replace him. The school has to be running again before we leave for Copais. Why don't you volunteer to fill in, Doc? Temporarily, of course.’

MacRae stared. ‘Me? Heaven forbid!’

'Well, I've got to have somebody to ride herd on those youngsters, somebody who can do it without using a straitjacket. They all like you.’

'No—repeat—emphatically—no!’

'There is a young fellow already with the school,’ volunteered Rawlings, ‘whom Professor Steuben was grooming for the job when the Company sent Howe instead. Chap named van der Linden. Seems a good, sensible sort. My boy likes him.’

Marlowe looked interested. ‘I ran into him. He was helpful. Of course I don't have any real authority to appoint him.’

MacRae snorted. ‘Jamie, you'll be the death of me!’

Marlowe put down his coffee cup and wiped his mouth. ‘All that is as may be. I think I'll stretch out on one of these desks for a couple of hours. Doc, will you see that someone wakes me?’

'Certainly,’ agreed MacRae, having no intention of allowing the man to be disturbed until he was fully rested. ‘Don't worry.’

Jim and the others were back at the school where they were to remain until boats could be gotten to take them to Copais. Mrs Palmer was bustling around with her assistants, getting a mammoth breakfast for weary men and boys. Jim himself was dead tired and hungry but much too excited to think about sleeping, even though dawn had broken outside.

He had just received a cup of coffee and was blowing on it when Smythe showed up. ‘Say, I understand you really did kill that cop that took a pot shot at me.’

'No,’ Jim denied, ‘he's in the infirmary now, just wounded. I've seen him.’

Smythe looked troubled. ‘Oh, shucks,’ he said finally, ‘it won't happen more than once in a lifetime. Here's your IOU.’

Jim stared at him. ‘Smitty, you're sick.’

'Probably. Better take it.’

Jim reached back into his subconscious memory and quoted his father. ‘No, thanks, Marlowes pay their debts.’

Smythe looked at him, then said, ‘Oh, the heck with you, you ungracious twerp!’ He tore the IOU into small pieces and stalked away.

Jim looked wonderingly after him. ‘Now what was he sore about?’

He decided to look up Frank and tell him about it.

He found Frank but had no time to tell him about it; a shout came through the crowd: ‘Marlowe! Jim Marlowe!’

'Captain Marlowe's at the planet office,’ someone answered.

'Not him, the kid,’ the first voice replied. ‘Jimmy Marlowe! You're wanted up front, right away.’

'Coming,’ yelled Jim. ‘What for?’ He pushed his way toward the entrance, Frank behind him.

The man who had paged him let him get close before he answered, ‘You won't believe it—I don't myself. Martians.’

Jim and Frank hurried outside. Gathered in front of the school door were more than a dozen Martians. Gekko was there, and G'kuro, but not K'boomch. Nor could Jim make out the old one whom he thought of as ‘head man’ of Gekko's tribe. Gekko spotted them and said in his own speech, ‘Greetings, Jim-Marlowe, greetings, Frank-Sutton, friends sealed with water.’

Another voice called out from one of Gekko's palm flaps, ‘Hi, Jim boy!’ Willis had come home with the bacon, a little late perhaps, but successfully.

Another voice boomed mellowly. Gekko listened, then said, ‘Where is he who stole our little one?’

Jim, uncertain of the dominant tongue, at best, was not sure that he had understood. ‘Huh?’

'He wants to know where Howe is,’ said Frank and answered in fluent, fairly accurate Martian. Howe was still where he had taken refuge, still afraid to face Kelly, despite repeated invitations.

Gekko indicated that he would come into the building. Amazed, but cooperative, the boys led him in. Gekko was forced to fold himself into a shape resembling a hat rack to get into the lock but he managed it; the lock was large. Inside, the sensation caused by his appearance was like that which might have resulted from introducing an elephant into a church. People gave way before him.

The door to the outer office was even more of a squeeze than the air lock, but Gekko made it, with Jim and Frank trailing him. Gekko handed Willis to Jim, then gently explored the handle of the door to Howe's office with a hand flap. Suddenly he pulled and the door came away, not only the lock broken but the door wrenched completely off its hinges. He squatted down further, completely filling the door frame.

The boys looked at each other; Willis closed up. They heard Howe saying ‘What's the meaning of this? Who are —’

Then Gekko stood up as well as he could in a room intended for humans and started for the outer door. The boys hesitated; Frank said, ‘Let's see what he did to him.’ He stepped to the wrecked door and looked in. ‘I don't see him. Hey, Jim—he's not in here at all.’

Nor was he.

They hurried after Gekko and reached him at the air lock. No one stopped Gekko; no one stopped them. The repeated indoctrination concerning Martians swept a path before them. Outside Gekko turned to them. ‘Where is the other one, who would do harm to the little one?’

Frank explained that Beecher was some distance away and not available. ‘You will show us,’ announced Gekko and picked them both up. Another Martian relieved him of Frank.

Jim felt himself cradled in the soft palm flaps, even as Willis was still cradled in Jim's arms. Willis extended his eyes, looked around and remarked, ‘Fine ride, huh?’ Jim was not sure.

The Martians ambled through town at an easy eight miles an hour, over the bridge, and to the planet offices. The pressure lock there was higher and larger than that at the school; the entire party went inside. The ceiling of the building's foyer was quite high enough for even the tallest Martian. Once they were inside Gekko set Jim down, as did the Martian carrying Frank.

There had been the same scurrying surprise as at the school. MacRae came out and looked the situation over without excitement. ‘What's all this jamboree?’ he asked.

'They want to talk to Beecher,’ Frank explained.

MacRae raised his eyebrows, then spoke in clear Martian. One of them answered him; they conversed back and forth. ‘Okay, I'll get him,’ agreed MacRae, then repeated it in Martian. He went into the offices. He returned in a few minutes, pushing Beecher in front of him, and followed by Rawlings and Marlowe. ‘Some people to see you,’ MacRae said and gave Beecher a shove that carried him out onto the floor of the foyer.

'This is the one?’ inquired the Martian spokesman.

'This is verily the one.’

Beecher looked up at them. ‘What do you want me for?’ he said in Basic. The Martians moved so that they were on all sides of him. ‘Now you get away from me!’ he said. They moved in slowly, tightening the circle. Beecher attempted to break out of it; a great hand flap was placed in his way.

They closed in further. Beecher darted this way and that, then he was concealed completely from the spectators by a screen of palm flaps. ‘Let me out!’ he was heard to shout. ‘I didn't do anything. You've got no right to —’ His voice stopped in a scream.

The circle relaxed and broke up. There was no one inside it, not even a spot of blood on the floor.

The Martians headed for the door. Gekko stopped and said to Jim, ‘Would you return with us, my friend?’

'No—oh, no,’ said Jim. ‘I have to stay here,’ then remembered to translate.

'And the little one?’

'Willis stays with me. That's right, isn't it, Willis?’

'Sure, Jim boy.’

'Then tell Gekko so.’ Willis complied. Gekko said farewell sadly to the boys and to Willis and went on out the lock.

MacRae and Rawlings were in whispered, worried conference at the spot where Beecher had last been seen; Captain Marlowe was looking sleepy and confused and listening to them. Frank said, ‘Let's get out of here, Jim.’

'Right.’

The Martians were still outside. Gekko saw them as they came out, spoke to one of his kind, then said, ‘Where is the learned one who speaks our speech? We would talk with him.’

'I guess they want Doc,’ said Frank.

'Is that what he meant?’

'I think so. We'll call him.’ They went back inside and dug MacRae out of a cluster of excited humans. ‘Doc,’ said Frank, ‘they want to talk with you—the Martians.’

'Eh?’ said MacRae. ‘Why me?’

'I don't know.’

The doctor turned to Marlowe. ‘How about it, Skipper? Do you want to sit in on this?’

Mr Marlowe rubbed his forehead. ‘No, I'm too confused to try to handle the language. You take it.’

'Okay.’ MacRae went for his suit and mask, let the boys help dress him, and then did not deny them when they tagged along. However, once outside, they held back and watched from a distance.

MacRae walked down to the group standing on the ramp and addressed them. Voices boomed back at him. He entered the group and the boys could see him talking, answering, gesticulating with his hands. The conference continued quite a long time.

Finally MacRae dropped his arms to his sides and looked tired. Martian voices boomed in what was plainly farewell, then the whole party set out at a rapid, leisurely pace for the bridge and their own city. MacRae plodded back up the ramp.

In the lock Jim demanded, ‘What was it all about, Doc?’

'Eh? Hold your peace, son.’

Inside MacRae took Marlowe's arm and led him toward the office they had preempted. ‘You, too, Rawlings. The rest of you get about your business.’ Nevertheless the boys tagged along and MacRae let them come in. ‘You might as well hear it; you're in it up to your ears.

Mind that door, Jim. Don't let anyone open it.’

'Now what is it?’ asked Jim's father. ‘What are you looking so grim about?’

'They want us to leave.’

'Leave?’

'Get off Mars, go away, go back to Earth.’

'What? Why do they suggest that?’

'It's not a suggestion; it's an order, an ultimatum. They aren't even anxious to give us time enough to get ships here from Earth. They want us to leave, every man jack, woman, and child; they want us to leave right away—and they aren't fooling!’

14
Willis

Four days later doctor MacRae stumbled into the same office. Marlowe still looked tired, but this time it was MacRae who looked exhausted. ‘Get these other people out of here, Skipper.’

Marlowe dismissed them and closed the door. ‘Well?’

'You got my message?’

'Yes.’

'Is the Proclamation of Autonomy written? Did the folks go for it?’

'Yes, it's written—we cribbed a good deal from the American Declaration of Independence I'm afraid, but we wrote one.’

'I'm not interested in the rhetoric of the thing! How about it?’

'It's ratified. Easily enough here. We had quite a few startled queries from the Project camps, but it was accepted. I guess we owe Beecher a vote of thanks on that; he made independence seem like a fine idea.’

'We owe Beecher nothing! He nearly got us all killed.’

'Just how do you mean that?’

'I'll tell you—but I want to know about the Declaration. I had to make some promises. It's gone off?’

'Radioed to Chicago last night. Too soon to expect an answer. But let me ask the questions: were you successful?’

'Yes.’ MacRae rubbed his eyes wearily. ‘We can stay. It was a great fight, Maw, but I won. They'll let us stay.’

Marlowe got up and started to set up a wire recorder. ‘Do you want to talk it into the record and save having to go over it again?’

MacRae waved it away. ‘No. Whatever formal report I make will have to be very carefully edited. I'll try to tell you about it first.’ He paused and looked thoughtful. ‘Jamie, how long has it been since men first landed on Mars? More than fifty Earth years, isn't it? I believe I have learned more about Martians in the past few hours than was learned in all that time. And yet I don't know anything about them. We kept trying to think of them as human, trying to force them into our moulds. But they aren't human; they aren't anything like us at all.'

He added, 'They had interplanetary flight millions of years back ... had it and gave it up.'

'What?' said Marlowe.

'It doesn't matter. It's not important. It's just one of the things I happened to find out while I was talking with the old one, the same old one with whom Jim talked. By the way, Jim was seeing things; he's not a Martian at all.'

'Wait a minute—what is he, then?'

'Oh, I guess he's a native of Mars all right, but he isn't what you and I mean by a Martian. At least he didn't look like one to me.'

'What did he look like? Describe him.'

MacRae looked puzzled. 'Uh, I *can't.* Maybe Jim and I each saw what he wanted us to see. Never mind. Willis has to go back to the Martians and rather soon.'

'I'm sorry,' Marlowe answered. 'Jim won't like that, but it's not a high price to pay if it pleases them.'

'You don't understand, you don't understand at all. Willis is the key to the whole thing.'

'Certainly he's been mixed up in it,' agreed Marlowe, 'but why the key?'

MacRae rubbed his temples. 'It's very complicated and I don't know where to start. Willis *is* important. Look, Jamie, you'll go down in history as the father of your country, no doubt, but, between ourselves, Jim should be credited for being the saviour of it. It was directly due to Jim and Willis—Willis's love for Jim and Jim's staunch befriending of him—that the colonists are alive today instead of pushing up daisies. The ultimatum to get off this globe represented a concession made to Jim; they had intended to exterminate us.'

Marlowe's mouth dropped open. 'But that's impossible! Martians wouldn't do anything like that!'

'Could and would,' MacRae stated flatly. 'They've been having doubts about us for a long time. Beecher's notion of shipping Willis off to a zoo pushed them over the edge—but Jim's relationship to Willis pulled them back again. They compromised.'

'I can't believe that they would,' protested Marlowe, 'nor can I see how they could.'

'Where's Beecher?' MacRae said bluntly.

'Mmm ... yes.'

'So don't talk about what they can or can't do. We don't know anything about them ... not anything.'

'I can't argue with you. But can you clear up some of this mystery about Jim and Willis? Why do they care? After all, Willis is just a bouncer.'

'I don't think I can clear it up,' MacRae admitted, 'but I can sure lace it around with some theories. Do you know Willis's Martian name? Do you know what it means?'

'I didn't know he had one —'

'It reads: In whom the hopes of a world are joined. That suggest anything to you?'

'Gracious, no!'

'I may have translated it badly. Maybe it means Young Hopeful, or merely Hope. Maybe Martians go in for poetical meanings, like we do. Take my name, Donald. Means World Ruler. My parents sure muffed that one. Or maybe Martians enjoy giving bouncers fancy names. I once knew a Pekinese called, believe it or not, Grand Champion Manchu Prince of Belvedere.' MacRae looked suddenly startled. 'Do you know, I just remembered that dog's family-and-fireside name was Willis!'

'You don't say!'

'I do say.' The doctor scratched the stubble on his chin and reflected that he should shave one of these weeks. 'But it's not even a coincidence. I suggested the name Willis to Jim in the first place; I was probably thinking of the Peke. Engaging little devil, with a pop-eyed way of looking at you just like Willis—our Willis. Which is to say that neither one of Willis's names necessarily means anything.'

He sat so long without saying anything that Marlowe said, 'You aren't clearing up the mystery very fast. You think that Willis's real name does mean something, don't you?—else you wouldn't have brought it up.'

MacRae sat up with a jerk. 'I do. I do indeed. I think Willis's name is meant literally. Now wait a minute—don't throw anything. I won't get violent. What do you think Willis is?'

'Me?' said Marlowe. 'I think he's an example of exotic Martian *fauna,* semi-intelligent and adapted to his environment.'

'Big words,' complained the doctor. '*I* think he is what a Martian is before he grows up.'

Marlowe looked pained. 'There is no similarity of structure. They're as different as chalk and cheese.'

'Granted. What's the similarity between a caterpillar and a butterfly?'

Marlowe opened his mouth and closed it. 'I don't blame you,' MacRae went on, 'we never think of such metamorphosis in connection with higher types, whatever a higher type is. But I think that is what Willis is and it appears to be why Willis has to go back to his people soon. He's in the nymph stage; he's about to go into a pupal stage—some sort of a long hibernation. When he comes out he'll be a Martian.’

Marlowe chewed his lip. ‘There's nothing unreasonable about it—just startling.’

'Everything about Mars is startling. But if my theory is correct—and mind you, I'm not saying it is—then it might explain *why* Willis is such an important personage. Eh?’

Marlowe said wearily, ‘You ask me to assimilate too much at once.’

'Emulate the Red Queen. I'm not through. I think the Martians have still another stage, the stage of the old one to whom I talked—and I think it's the strangest one of all. Jamie, can you imagine a people having close and everyday relations with Heaven—*their* heaven—as close and matter of fact as the relations between, say, the United States and Canada?’

'Doc, I'll imagine anything you tell me to.’

'We speak of the Martian other world; what does it mean to you?’

'Nothing. Some sort of a trance, such as the East Indians indulge in.’

'I ask you because I talked, so they told me, to someone in the other world—the old one I mean. Jamie, I think I negotiated our new colonizing treaty with a *ghost.'*

'Now just keep your seat,’ MacRae went on. ‘I'll tell you why. I was getting nowhere with him so I changed the subject. We were talking Basic, by the way; he had picked Jim's brains. He knew every word that Jim might know and none that Jim couldn't be expected to know. I asked him to assume, for the sake of argument, that we were to be allowed to stay—in which case, would the Martians let us use their subway system to get to Copais? I rode one of those subways to the conference. Very clever—the acceleration is always *down,* as if the room were mounted on gymbals. The old one had trouble understanding what I wanted. Then he showed me a globe of Mars—very natural, except that it had no canals. Gekko was with me, just as he was with Jim. The old one and Gekko had a discussion, the gist of which was *what year was I at?* Then the globe changed before my eyes, bit by bit. I saw the canals crawl across the face of Mars. *I saw them being built,* Jamie.

'Now I ask you,’ he concluded, ‘what kind of a being is it that has trouble remembering which millennium he is in? Do you mind if I tag him a ghost?’

'I don't mind anything,’ Marlowe assured him. ‘Maybe we're all ghosts.’

'I've given you one theory, Jamie; here is another: bouncers and Martians and Old Ones are entirely separate races. Bouncers are third class citizens, Martians are second class citizens, and the real owners we never see, because they live down underneath. They don't care what we do with the surface as long as we behave ourselves. We can use the park, we can even walk on the grass, but we mustn't frighten the birds. Or maybe the old one was just hypnosis that Gekko used on me, maybe it's bouncers and Martians only. You name it.’

'I can't,’ said Marlowe. ‘I'm satisfied that you managed to negotiate an agreement that permits us to stay on Mars. I suppose it will be years before we understand the Martians.’

'You are putting it mildly, Jamie. The white man was still studying the American Indian, trying to find out what makes him tick, five hundred years after Columbus—and the Indian and the European are both *men,* like as two peas. These are *Martians.* We'll never understand them; we aren't even headed in the same direction.’

MacRae stood up. ‘I want to get a bath and some sleep ... after I see Jim.’

'Just a minute. Doc, do you think we'll have any real trouble making this autonomy declaration stick?’

'It's got to stick. Relations with the Martians are eight times as delicate as we thought they were; absentee ownership isn't practical. Imagine trying to settle issues like this one by taking a vote back on Earth among board members that have never even *seen* a Martian.’

'That's not what I mean. How much opposition will we run into?’

MacRae scratched his chin again. ‘Men have had to fight for their liberties before, Jamie. I don't know. It's up to us to convince the folks back on Earth that autonomy is necessary. With the food and population problem back on Earth being what it is, they'll do anything necessary—once they realize what we're up against—to keep the peace and continue migration. They don't want anything to hold up the Project.’

'I hope you're right.’

'In the long run I have to be right. We've got the Martians pitching on our team. Well, I'm on my way to break the news to Jim.’

'He's not going to like it,’ said Jim's father.

'He'll get over it. Probably he'll find another bouncer and teach him English and call him Willis, too. Then he'll grow up and not make pets of bouncers. It won't matter.’ He looked thoughtful, and added, ‘But what becomes of Willis? I wish I knew.’

Farmer in the Sky

1. Earth

Our troop had been up in the High Sierras that day and we were late getting back. We had taken off from the camp field on time but Traffic Control swung us 'way east to avoid some weather. I didn't like it; Dad usually won't eat if I'm not home.

Besides that, I had had a new boy shoved off on me as copilot; my usual copilot and assistant patrol leader was sick, so our Scoutmaster, Mr. Kinski, gave me this twerp. Mr. Kinski rode in the other copter with the Cougar Patrol.

"Why don't you put on some speed?" the twerp wanted to know.

"Ever hear of traffic regulations?" I asked him.

The copter was on slave-automatic, controlled from the ground, and was cruising slowly, down a freight lane they had stuck us in.

The twerp laughed. "You can always have an emergency. Here—I'll show you." He switched on the mike. "Dog Fox Eight Three, calling traffic—"

I switched it off, then switched on again when Traffic answered and told them that we had called by mistake. The twerp looked disgusted. "Mother's good little boy!" he said in sticky sweet tones.

That was just the wrong thing to say to me. "Go aft," I told him, "and tell Slats Keifer to come up here."

"Why? He's not a pilot."

"Neither are you, for my money. But he weighs what you do and I want to keep the crate trimmed."

He settled back in his seat. "Old Man Kinski assigned me as copilot; here I stay."

I counted to ten and let it ride. The pilot compartment of a ship in the air is no place for a fight. We had nothing more to say to each other until I put her down on North Diego Platform and cut the tip jets.

I was last one out, of course. Mr, Kinski was waiting there for us but I didn't see him; all I saw was the twerp. I grabbed him by the shoulder. "Want to repeat that crack now?" I asked him.

Mr. Kinski popped up out of nowhere, stepped between us and said, "Bill! Bill! What's the meaning of this?"

"I—" I started to say that I was going to slap the twerp loose from his teeth, but I thought better of it

Mr. Kinski turned to the twerp. "What happened, Jones?"

"I didn't do anything! Ask anybody."

I was about to say that he could tell that to the Pilots' Board. Insubordination in the air is a serious matter. But that "Ask anybody" stopped me. Nobody else had seen or heard anything.

Mr. Kinski looked at each of us, then said, "Muster your patrol and dismiss them, Bill." So I did and went on home.

All in all, I was tired and jumpy by the time I got home. I had listened to the news on the way home; it wasn't good. The ration had been cut another ten calories—which made me still hungrier and reminded me that I hadn't been home to get Dad's supper. The newscaster went on to say that the Spaceship *Mayflower* had finally been commissioned and that the rolls were now opened for emigrants. Pretty lucky for them, I thought. No short rations. No twerps like Jones.

And a brand new planet.

George—my father, that is—was sitting in the apartment, looking over some papers. "Howdy, George," I said to him, "eaten yet?"

"Hello, Bill. No."

"I'll have supper ready right away." I went into the pantry and could see that he hadn't eaten lunch, either. I decided to fix him a plus meal.

I grabbed two Syntho-Steaks out of the freezer and slapped them in quickthaw, added a big Idaho baked potato for Dad and a smaller one for me, then dug out a package of salad and let it warm naturally.

By the time I had poured boiling water over two soup cubes and over coffee powder the steaks were ready for the broiler. I transferred them, letting it cycle at medium rare, and stepped up the gain on the quickthaw so that the spuds would be ready when the steaks were—then back to the freezer for a couple of icekreem cake slices for dessert.

The spuds were ready. I took a quick look at my ration accounts, decided we could afford it, and set out a couple of pats of butterine for them. The broiler was ringing; I removed the steaks, set everything out, and switched on the candles, just as Anne would have done.

"Come and get it!" I yelled and turned back to enter the calorie and point score on each item from the wrappers, then shoved the wrappers in the incinerator. That way you never get your accounts fouled up.

Dad sat down as I finished. Elapsed time from scratch, two minutes and twenty seconds—there's nothing hard about cooking; I don't see why women make such a fuss about it. No system, probably.

Dad sniffed the steaks and grinned. "Oh boy! Bill, you'll bankrupt us."

"You let me worry," I said. I'n still plus for this quarter." Then I frowned. "But I won't be, next quarter, unless they quit cutting the ration."

Dad stopped with a piece of steak on its way to his mouth. "Again?"

"Again. Look, George, I don't get it. This was a good crop year and they started operating the Montana yeast plant besides."

"You follow all the commissary news, don't you, Bill?"

"Naturally."

"Did you notice the results of the Chinese census as well? Try it on your slide rule."

I knew what he meant—and the steak suddenly tasted like old rubber. What's the use in being careful if somebody on the other side of the globe is going to spoil your try? "Those darned Chinese ought to quit raising babies and start raising food!"

"Share and share alike, Bill."

"But—" I shut up. George was right, he usually is, but somehow it didn't seem fair. "Did you hear about the *Mayflower*?" I asked to change the subject.

"What about the *Mayflower*?" Dad's voice was suddenly cautious, which surprised me. Since Anne died —Anne was my mother—George and I have been about as close as two people can be.

"Why, she was commissioned, that's all. They've started picking emigrants."

"So?" There was that cautious tone again. "What did you do today?"

"Nothing much. We hiked about five miles north of camp and Mr. Kinski put some of the kids through tests. I saw a mountain lion."

"Really? I thought they were all gone."

"Well, I thought I saw one."

"Then you probably did. What else?"

I hesitated, then told him about this twerp Jones. "He's not even a member of our troop. How does he get that way, interfering with my piloting?"

"You did right, Bill. Sounds as if this twerp Jones, as you call him, was too young to be trusted with a pilot's license."

"Matter of fact, he's a year older than I am."

"In my day you had to be sixteen before you could even go up for your license."

"Times change, George."

"So they do. So they do."

Dad suddenly looked sad and I knew he was thinking about Anne. I hastily said, "Old enough or not, how does an insect like Jones get by the temperament-stability test?"

"Psycho tests aren't perfect, Bill. Neither are people." Dad sat back and lit his pipe. "Want me to clean up tonight?"

"No, thanks." He always asked; I always turned him down. Dad is absentminded; he lets ration points get into the incinerator. When I salvage, I really salvage. "Feel like a game of cribbage?"

"I'll beat the pants off you."

"You and who else?" I salvaged the garbage, burned the dishes, followed him into the living room. He was getting out the board and cards.

His mind wasn't really on the game. I was around the corner and ready to peg out before he was really under way. Finally he put down his cards and looked square at me. "Son—"

"Huh? I mean, 'Yes, George?'"

"I've decided to emigrate in the *Mayflower*."

I knocked over the cribbage board. I picked it up, eased my throttle, and tried to fly right. "That's swell! When do we leave?"

Dad puffed furiously on his pipe. "That's the point, Bill. You're not going."

I couldn't say anything. Dad had never done anything like this to me before. I sat there, working my mouth like a fish. Finally I managed, "Dad, you're joking."

"No, I'm not, Son."

"But why? Answer me that one question: why?"

"Now see here, Son—"

"Call me 'Bill'."

"Okay, Bill. It's one thing for me to decide to take my chances with colonial life but I've got no right to get you off to a bad start. You've got to finish your education. There are no decent schools on Ganymede. You get your education, then when you're grown, if you want to emigrate, that's your business."

"That's the reason? That's the only reason? To go to school?"

"Yes. You stay here and take your degree. I'd like to see you take your doctor's degree as well. Then, if you want to, you can join me. You won't have missed your chance; applicants with close relatives there have priority."

"No!"

Dad looked stubborn.

So did I, I guess. "George, I'm telling you, if you leave me behind, it won't do any good. I won't go to school. I can pass the exams for third class citizenship right now. Then I can get a work permit and—"

He cut me short. "You won't need a work permit. I'm leaving you well provided for, Bill. You'll—"

" 'Well provided for'! Do you think I'd touch a credit of yours if you go away and leave me? I'll live on my student's allowance until I pass the exams and get my work card."

"Bring your voice down, Sonl" He went on, "You're proud of being a Scout, aren't you?"

"Well--yes."

"I seem to remember that Scouts are supposed to be obedient. And courteous, too."

That one was pretty hot over the plate. I had to think about it. "George——"

"Yes, Bill?"

"If I was rude, I'm sorry. But the Scout Law wasn't thought up to make it easy to push a Scout around. As long as I'm living in your home I'll do what you say. But if you walk out on me, you don't have any more claim on me. Isn't that fair?"

"Be reasonable, Son. I'm doing it for your own good."

"Don't change the subject, George. Is that fair or isn't it? If you go hundreds of millions of miles away, how can you expect to run my life after you're gone? I'll be on my own."

"I'll still be your father."

"Fathers and sons should stick together. As I recall, the fathers that came over in the original *Mayflower* brought their kids with them."

"This is different."

"How?"

"It's further, incredibly further—and dangerous."

"So was that move dangerous—half the Plymouth Rock colony died the first winter; everybody knows that. And distance doesn't mean anything; what matters is how long it takes. If I had had to walk back this afternoon, I'd still be hiking next month. It took the Pilgrims sixty-three days to cross the Atlantic or so they taught me in school, but this afternoon the caster said that the *Mayflower* will reach Ganymede in sixty days. That makes Ganymede closer than London was to Plymouth Rock."

Dad stood up and knocked out his pipe. "I'm not going to argue, Son."

"And I'm not, either." I took a deep breath. I shouldn't have said the next thing I did say, but I was mad. I'd never been treated this way before and I guess I wanted to hurt back. "But I can tell you this: you're not the only one who is sick of short rations. If you think I'm going to stay here while you're eating high on the hog out in the colonies, then you had better think about it again. I thought we were partners."

That last was the meanest part of it and I should have been ashamed. That was what he had said to me the day after Anne died, and that was the way it had always been.

The minute I said it I knew why George had to emigrate and I knew it didn't have anything to do with ration points. But I didn't know how to unsay it.

Dad stared. Then he said slowly, "You think that's how it is? That I want to go away so I can quit skipping lunch to save ration points?"

"What else?" I answered. I was stuck in a groove; I didn't know what to say.

"Hmm... well, if you believe that, Bill, there is nothing I can say. I think I'll turn in."

I went to my room, feeling all mixed up inside. I wanted Mother around so bad I could taste it and I knew that George felt the same way. She would never have let us reach the point where we were actually shouting at each other—at least I had shouted. Besides that, the partnership was busted up, it would never be the same.

I felt better after a shower and a long massage. I knew that the partnership couldn't really be busted up. In the long run, when George saw that I had to go, he wouldn't let college stand in the way. I was sure of that—well, pretty sure at least.

I began to think about Ganymede.

Ganymede!

Why, I had never even been out to the Moon!

There was a boy in my class who had been born on the Moon. His parents were still there; he had been sent home for schooling. He gave himself airs as a deepspace man. But Luna was less than a quarter of a million miles away; you could practically throw rocks at it. It wasn't self-supporting; Moon Colony had the same rations as Earth. It was really part of Earth. But Ganymede!

Let's see—Jupiter was half a billion miles away, more or less, depending on the time of year. What was the tiny distance to the Moon compared with a jump like that?

Suddenly I couldn't remember whether Ganymede was Jupiter's third moon or fourth. And I just had to know. There was a book out in the living room that would tell and more besides—Ellsworth Smith's A Tour of Earth's Colonies. I went out to get it.

Dad hadn't gone to bed. He was sitting up, reading. I said, "Oh—hello," and went to look for the book. He nodded and went on reading.

The book wasn't where it should have been. I looked around and Dad said, "What are you looking for, Bill?"

Then I saw that he was reading it. I said, "Oh, nothing. I didn't know you were using it."

"This?" He held it up.

"It doesn't matter. I'll find something else."

"Take it. I'm through with it."

"Well ... All right-thanks." I took it and turned away.

"Just a minute, Bill."

I waited. "I've come to a decision, Bill. I'm not going."

"Huh?"

"You were right about us being partners. My place is here."

"Yes, but— Look, George, I'm sorry I said what I did about rations. I know that's not the reason. The reason is—well, you've got to go." I wanted to tell him I knew the reason was Anne, but if I said Anne's name out loud I was afraid I'd bawl.

"You mean that you are willing to stay behind—and go to school?"

"Uh—" I wasn't quite ready to say that; I was dead set on going myself. "I didn't quite mean that. I meant that I know why you want to go, why you've got to go."

"Hmm…" He lit his pipe, making a long business of it. "I see. Or maybe I don't" Then he added, "Let's put it this way, Bill. The partnership stands. Either we both go, or we both stay—unless you decide of your own volition that you will stay to get your degree and join me out there later. Is that fair?"

"Huh? Oh, yes!"

"So let's talk about it later."

I said goodnight and ducked into my room quick. William, my boy, I told myself, it's practically in the bag—if you can just keep from getting soft-hearted and agreeing to a split up. I crawled into bed and opened the book.

Ganymede was Jupiter-III; I should have remembered that. It was bigger than Mercury, much bigger than the Moon, a respectable planet, even if it was a moon. The surface gravity was one third of Earth-normal; I would weigh about fortyfive pounds there. First contacted in 1985—which I knew—and its atmosphere project started in 1998 and had been running ever since.

There was a stereo in the book of Jupiter as seen from Ganymede —round as an apple, ruddy orange, and squashed on both poles. And big as all outdoors. Beautiful. I fell asleep staring at it.

Dad and I didn't get a chance to talk for the next three days as my geography class spent that time in Antarctica. I came back with a frostbitten nose and some swell pix of penguins—and some revised ideas. I had had time to think.

Dad had fouled up the account book as usual but he had remembered to save the wrappers and it didn't take me long to straighten things out. After dinner I let him beat me two games, then said, "Look, George——"

"Yes?"

"You know what we were talking about?"

"Well, yes."

"It's this way. I'm under age; I can't go if you won't let me. Seems to me you ought to, but if you don't, I won't quit school. In any case, you ought to go—you need to go—you know why. I'm asking you to think it over and take me along, but I'm not going to be a baby about it."

Dad almost looked embarrassed. "That's quite a speech, Son. You mean you're willing to let me go, you stay here and go to school, and not make a fuss about it?"

"Well, not 'willing'-but I'd put up with it."

"Thanks." Dad fumbled in his pouch and pulled out a flat photo. "Take a look at this."

"What is it?"

"Your file copy of your application for emigration. I submitted it two days ago."

2. The Green-Eyed Monster

I wasn't much good in school for the next few days. Dad cautioned me not to get worked up over it; they hadn't approved our applications as yet. "You know, Bill, ten times as many people apply as can possibly go."

"But most of them want to go to Venus or Mars. Ganymede is too far away; that scares the sissies out."

"I wasn't talking about applications for all the colonies; I meant applications for Ganymede, specifically for this first trip of the *Mayflower*."

"Even so, you can't scare me. Only about one in ten can qualify. That's the way it's always been."

Dad agreed. He said that this was the first time in history that some effort was being made to select the best stock for colonization instead of using colonies as dumping grounds for misfits and criminals and failures. Then he added, "But look, Bill, what gives you the notion that you and I can necessarily qualify? Neither one of us is a superman,"

That rocked me back on my heels. The idea that we might not be good enough hadn't occurred to me. "George, they couldn't turn us down!"

"They could and they might."

"But how? They need engineers out there and you're tops. Me—I'm not a genius but I do all right in school. We're both healthy and we don't have any bad mutations; we aren't color blind or bleeders or anything like that."

"No bad mutations that we know of," Dad answered. "However, I agree that we seem to have done a fair job in picking our grandparents. I wasn't thinking of anything as obvious as that."

"Well, what, then? What could they possibly get us on?"

He fiddled with his pipe the way he always does when he doesn't want to answer right away. "Bill, when I pick a steel alloy for a job, it's not enough to say, 'Well, it's a nice shiny piece of metal; let's use it.' No, I take into account a list of tests as long as your arm that tells me all about that alloy, what it's good for and just what I can expect it to do in the particular circumstances I intend to use it. Now if you had to pick people for a tough job of colonizing, what would you look for?"

"Uh ... I don't know."

"Neither do I. I'm not a social psychometrician. But to say that they want healthy people with fair educations is like saying that I want steel rather than wood for a job. It doesn't tell what sort of steel. Or it might not be steel that was needed; it might be titanium alloy. So don't get your hopes too high."

"But—well, look, what can we do about it?"

"Nothing. If we don't get picked, then tell yourself that you are a darn good grade of steel and that it's no fault of yours that they wanted magnesium."

It was all very well to look at it that way, but it worried me. I didn't let it show at school, though. I had already let everybody know that we had put in for Ganymede; if we missed—well, it would be sort of embarrassing.

My best friend, Duck Miller, was all excited about it and was determined to go, too.

"But how can you?" I asked. "Do your folks want to go?"

"I already looked into that," Duck answered. "All I have to have is a grown person as a sponsor, a guardian. Now if you can tease your old man into signing for me, it's in the bag."

"But what will your father say?"

"He won't care. He's always telling me that when he was my age he was earning his own living. He says a boy should be self reliant. Now how about it? Will you speak to your old man about it—tonight?"

I said I would and I did. Dad didn't say anything for a moment, then he asked: "You really want Duck with you?"

"Sure I do. He's my best friend."

"What does his father say?"

"He hasn't asked him yet," and then I explained how Mr. Miller felt about it

"So?" said Dad. "Then let's wait and see what Mr. Miller says."

"Well—look, George, does that mean that you'll sign for Duck if his father says it's okay?"

"I meant what I said, Bill. Let's wait. The problem may solve itself."

I said, "Oh well, maybe Mr. and Mrs. Miller will decide to put in for it, too, after Duck gets them stirred up."

Dad just cocked an eyebrow at me. "Mr. Miller has, shall we say, numerous business interests here. I think it would be easier to jack up one corner of Boulder Dam than to get him to give them up."

"You're giving up your business."

"Not my business, my professional practice. But I'm not giving up my profession; I'm taking it with me."

I saw Duck at school the next day and asked him what his father had said.

"Forget it," he told me. "The deal is off."

"Huh?"

"My old man says that nobody but an utter idiot would even think of going out to Ganymede. He says that Earth is the only planet in the system fit to live on and that if the government wasn't loaded up with a bunch of starry-eyed dreamers we would quit pouring money down a rat hole trying to turn a bunch of bare rocks in the sky into green pastures. He says the whole enterprise is doomed."

"You didn't think so yesterday."

"That was before I got the straight dope. You know what? My old man is going to take me into partnership. Just as soon as I'm through college he's going to start breaking me into the management end. He says he didn't tell me before because he wanted me to learn self reliance and initiative, but he thought it was time I knew about it. What do you think of that?"

"Why, that's pretty nice, I suppose. But what's this about the 'enterprise being doomed'?"

" 'Nice', he calls it! Well, my old man says that it is an absolute impossibility to keep a permanent colony on Ganymede. It's a perilous toehold, artificially maintained—those were his exact words—and someday the gadgets will bust and the whole colony will be wiped out, every man jack, and then we will quit trying to go against nature."

We didn't talk any more then as we had to go to class. I told Dad about it that night. "What do you think, George?"

"Well, there is something in what he says——"

"Huh?"

"Don't jump the gun. If everything went sour on Ganymede at once and we didn't have the means to fix it, it would revert to the state we found it in. But that's not the whole answer. People have a funny habit of taking as 'natural' whatever they are used to—but there hasn't been any 'natural' environment, the way they mean it, since men climbed down out of trees. Bill, how many people are there in California?"

"Fifty-five, sixty million."

"Did you know that the first four colonies here starved to death? 'S truthl How is it that fifty-odd million can live here and not starve?

Barring short rations, of course."

He answered it himself. "We've got four atomic power plants along the coast just to turn sea water into fresh water. We use every drop of the Colorado River and every foot of snow that falls on the Sierras. And we use a million other gadgets. If those gadgets went bad—say a really big earthquake knocked out all four atomic plants—the country would go back to desert. I doubt if we could evacuate that many people before most of them died from thirst. Yet I don't think Mr. Miller is lying awake nights worrying about it. He regards Southern California as a good 'natural' environment.

"Depend on it, Bill. Wherever Man has mass and energy to work with and enough savvy to know how to manipulate them, he can create any environment he needs."

I didn't see much of Duck after that. About then we got our preliminary notices to take tests for eligibility for the Ganymede colony and that had us pretty busy. Besides, Duck seemed different—or maybe it was me. I had the trip on my mind and he didn't want to talk about it. Or if he did, he'd make some crack that rubbed me the wrong way.

Dad wouldn't let me quit school while it was still uncertain as to whether or not we would qualify, but I was out a lot, taking tests. There was the usual physical examination, of course, with some added wrinkles. A g test, for example—I could take up to eight gravities before I blacked out, the test showed. And a test for low-pressure tolerance and hemorrhaging—they didn't want people who ran to red noses and varicose veins. There were lots more.

But we passed them. Then came the psycho tests which were a lot worse because you never knew what was expected of you and half the time you didn't even know you were being tested. It started off with hypno-analysis, which really puts a fellow at a disadvantage. How do you know what you've blabbed while they've got you asleep?

Once I sat around endlessly waiting for a psychiatrist to get around to seeing me. There were a couple of clerks there; when I came in one of them dug my medical and psycho record out of file and laid it on a desk. Then the other one, a redheaded guy with a permanent sneer, said, "Okay, Shorty, sit down on that bench and wait."

After quite a while the redhead picked up my folder and started to read it. Presently he snickered and turned to the other clerk and said, "Hey, Ned—get a load of this!"

The other one read what he was pointing to and seemed to think it was funny, too. I could see they were watching me and I pretended not to pay any attention.

The second clerk went back to his desk, but presently the redhead went over to him, carrying my folder, and read aloud to him, but in such a low voice that I couldn't catch many of the words. What I did catch made me squirm.

When he had finished the redhead looked right at me and laughed. I stood up and said, "What's so funny?"

He said, "None of your business, Shorty. Sit down."

I walked over and said, "Let me see that."

The second clerk stuffed it into a drawer of his desk. The redhead said, "Mamma's boy wants to see it, Ned. Why don't you give it to him?"

"He doesn't really want to see it," the other one said.

"No, I guess not." The redhead laughed again and added, "And to think he wants to be a big bold colonist."

The other one looked at me while chewing a thumbnail and said, "I don't think that's so funny. They could take him along to cook."

This seemed to convulse the redhead. "Ill bet he looks cute in an apron."

A year earlier I would have poked him, even though he outweighed me and outreached me. That "Mamma's boy" remark made me forget all about wanting to go to Ganymede; I just wanted to wipe the silly smirk off his face.

But I didn't do anything. I don't know why; maybe it was from riding herd on that wild bunch of galoots, the Yucca Patrol—Mr. Kinski says that anybody who can't keep order without using his fists can't be a patrol leader under him.

Anyhow I just walked around the end of the desk and tried to open the drawer. It was locked. I looked at them; they were both grinning, but I wasn't. "I had an appointment for thirteen o'clock," I said. "Since the doctor isn't here, you can tell him I'll phone for another appointment." And I turned on my heel and left

I went home and told George about it. He just said he hoped I hadn't hurt my chances.

I never did get another appointment. You know what? They weren't clerks at all; they were psychometricians and there was a camera and a mike on me the whole time.

Finally George and I got notices saying that we were qualified and had been posted for the *Mayflower*, "subject to compliance with all requirements."

That night I didn't worry about ration points; I really set us out a feast.

There was a booklet of the requirements mentioned. "Satisfy all debts"—that didn't worry me; aside from a half credit I owed Slats Keifer I didn't have any. "Post an appearance bond"—George would take care of that "Conclude any action before any court of superior jurisdiction"—I had never been in court except the Court of Honor.

There were a flock of other things, but George would handle them.

I found some fine print that worried me. "George," I said, "It says here that emigration is limited to families with children."

He looked up. "Well, aren't we such a family? If you don't mind being classified as a child."

"Oh. I suppose so. I thought it meant a married couple and kids."

"Don't give it a thought."

Privately I wondered if Dad knew what he was talking about.

We were busy with innoculations and blood typing and immunizations and I hardly got to school at all. When I wasn't being stuck or being bled, I was sick with the last thing they had done to me. Finally we had to have our whole medical history tattooed on us —identity number, Rh factor, blood type, coag time, diseases you had had, natural immunities and inoculations. The girls and the women usually had it done in invisible ink that showed up only under infrared light, or else they put it on the soles of their feet.

They asked me where I wanted it, the soles of my feet? I said no, I don't want to be crippled up; I had too much to do. We compromised on putting it where I sit down and then I ate standing up for a couple of days. It seemed a good place, private anyhow. But I had to use a mirror to see it.

Time was getting short; we were supposed to be at Mojave Space Port on 26 June, just two weeks away. It was high time I was picking out what to take. The allowance was fifty-seven and six-tenths pounds per person and had not been announced until all our body weights had been taken.

The booklet had said, "Close your terrestrial affairs as if you were dying." That's easy to say. But when you die, you can't take it with you, while here we could— fifty-seven-odd pounds of it.

The question was: what fifty-seven pounds?

My silkworms I turned over to the school biology lab and the same for the snakes. Duck wanted my aquarium but I wouldn't let him; twice he's had fish and twice he's let them die. I split them between two fellows in the troop who already had fish. The birds I gave to Mrs. Fishbein on our deck. I didn't have a cat or a dog; George says ninety floors up is no place to keep junior citizens—that's what he calls them.

I was cleaning up the mess when George came in. "Well," he says, "first time I've been able to come into your room without a gas mask."

I skipped it; George talks like that. "I still don't know what to do," I said, pointing at the heap on my bed.

"Microfilmed everything you can?"

"Yes, everything but this picture." It was a cabinet stereo of Anne, weighing about a pound and nine ounces.

"Keep that, of course. Face it, Bill, you've got to travel light. We're pioneers."

"I don't know what to throw out."

I guess I looked glum for he said, "Quit feeling sorry for yourself. Me, I've got to give up this—and that's tough, believe me." He held out his pipe.

"Why?" I asked. "A pipe doesn't weigh much."

"Because they aren't raising tobacco on Ganymede and they aren't importing any."

"Oh. Look, George, I could just about make it if it weren't for my accordion. But it licks me."

"Hmm… Have you considered listing it as a cultural item?"

"Huh?"

"Read the fine print. Approved cultural items are not covered by the personal weight schedule. They are charged to the colony."

It had never occurred to me that I might have anything that would qualify. "They wouldn't let me get away with it, George!"

"Can't rule you out for trying. Don't be a defeatist."

So two days later I was up before the cultural and scientific board, trying to prove that I was an asset. I knocked out Turkey in the Straw, Nehru's Opus 81, and the introduction to Morgenstern's Dawn of the 22nd Century, as arranged for squeeze boxes. I gave them The Green Hills of Earth for an encore.

They asked me if I liked to play for other people and told me politely that I would be informed as to the decision of the board… and about a week later I got a letter directing me to turn my accordion over to the Supply Office, Hayward Field. I was in, I was a "cultural asset"!

Four days before blastoff Dad came home early-he had been closing his office—and asked me if we could have something special for dinner; we were having guests. I said I supposed so; my accounts showed that we would have rations to turn back.

He seemed embarrassed. "Son—"

"Huh? Yes, George?"

"You know that item in the rules about families?"

"Uh, yes."

"Well, you were right about it, but I was holding out on you and now I've got to confess. I'm getting married tomorrow."

There was a sort of roaring in my ears. Dad couldn't have surprised me more if he had slapped me.

I couldn't say anything. I just stood there, looking at him. Finally I managed to get out, "But, George, you can't do that!"

"Why not, Son?"

"How about Anne?"

"Anne is dead."

"But— But—" I couldn't say anything more; I ducked into my room and locked myself in. I lay on the bed, trying to think.

Presently I heard Dad trying the latch. Then he tapped on the door and said, "Bill?"

I didn't answer. After a while he went away. I lay there a while longer. I guess I bawled, but I wasn't bawling over the trouble with Dad. It seemed the way it did the day Anne died, when I couldn't get it through my head that I wouldn't ever see her again. Wouldn't ever see her smile at me again and hear her say, "Stand tall, Billy."

And I would stand tall and she would look proud and pat my arm.

How could George do it? How could he bring some other woman into Anne's home?

I got up and had a look at myself in the mirror and then went in and set my 'fresher for a needle shower and a hard massage. I felt better afterwards, except that I still had a sick feeling in my stomach. The 'fresher blew me off and dusted me and sighed to a stop. Through the sound it seemed to me I could hear Anne speaking to me, but that must have been in my head.

She was saying, "Stand tall, Son." I got dressed again and went out.

Dad was messing around with dinner and I do mean messing. He had burned his thumb on the shortwave, don't ask me how. I had to throw out what he had been fiddling with, all except the salad. I picked out more stuff and started them cycling. Neither of us said anything.

I set the table for three and Dad finally spoke. "Better set it for four, Bill. Molly has a daughter, you know."

I dropped a fork. "Molly? You mean Mrs. Kenyon?"

"Yes. Didn't I tell you? No, you didn't give me a chance to."

I knew her all right. She was Dad's draftsman. I knew her daughter, too—a twelve-year-old brat. Somehow, it being Mrs. Kenyon made it worse, indecent. Why, she had even come to Anne's Farewell and had had the nerve to cry.

I knew now why she had always been so chummy with me whenever I was down at Dad's office. She had had her eye on George.

I didn't say anything. What was there to say?

I said "How do you do?" politely when they came in, then went out and pretended to fiddle with dinner. Dinner was sort of odd. Dad and Mrs. Kenyon talked and I answered when spoken to. I didn't listen. I was still trying to figure out how he could do it. The brat spoke to me a couple of times but I soon put her in her place.

After dinner Dad said how about all of us going to a show? I begged off, saying that I still had sorting to do. They went.

I thought and thought about it. Any way I looked at it, it seemed like a bad deal.

At first I decided that I wouldn't go to Ganymede after all, not if they were going. Dad would forfeit my bond, but I would work hard and pay it back—I wasn't going to owe them anything!

Then I finally figured out why Dad was doing it and I felt some better, but not much. It was too high a price.

Dad got home late, by himself, and tapped on my door. It wasn't locked and he came in. "Well, Son?" he said.

"'Well' what?"

"Bill, I know that this business comes as a surprise to you, but you'll get over it."

I laughed, though I didn't feel funny. Get over it! Maybe he could forget Anne, but I never would.

"In the meantime," he went on, "I want you to behave yourself. I suppose you know you were as rude as you could be without actually spitting in their faces?"

"Me rude?"I objected. "Didn't I fix dinner for them? Wasn't I polite?"

"You were as polite as a judge passing sentence. And as friendly. You needed a swift kick to make you remember your manners."

I guess I looked stubborn. George went on, "That's done; let's forget it. See here, Bill—in time you are going to see that this was a good idea. All I ask you to do is to behave yourself in the meantime. I don't ask you to fall on their necks; I do insist that you be your own normal, reasonably polite and friendly self. Will you try?"

"Uh, I suppose so." Then I went on with, "See here, Dad, why did you have to spring it on me as a surprise?"

He looked embarrassed. "That was a mistake. I suppose I did it because I knew you would raise Cain about it and I wanted to put it off."

"But I would have understood if you had only told me. I know why you want to marry her—"

"Eh?"

"I should have known when you mentioned that business about rules. You have to get married so that we can go to Ganymede——"

"What?"

I was startled. I said, "Huh? That's right, isn't it? You told me so yourself. You said—"

"I said nothing of the sort!" Dad stopped, took a deep breath, then went on slowly, "Bill, I suppose you possibly could have gathered that impression—though I am not flattered that you could have entertained it. Now I'll spell out the true situation: Molly and I are not getting married in order to emigrate. We are emigrating because we are getting married. You may be too young to understand it, but I love Molly and Molly loves me. If I wanted to stay here, she'd stay. Since I want to go, she wants to go. She's wise enough to understand that I need to make a complete break with my old background. Do you follow me?"

I said I guessed so.

"I'll say goodnight, then."

I answered, "Goodnight." He turned away, but I added, "George—" He stopped.

I blurted out. "You don't love Anne any more, do you?"

Dad turned white. He started back in and then stopped. "Bill," he said slowly, "it has been some years since I've laid a hand on you—but this is the first time I ever wanted to give you a thrashing."

I thought he was going to do it. I waited and I had made up my mind that if he touched me he was going to get die surprise of his life. But he didn't come any nearer; he just closed the door between us.

After awhile I took another shower that I didn't need and went to bed. I must have lain there an hour or more, thinking that Dad had wanted to hit me and wishing that Anne were around to tell me what to do. Finally I switched on the dancing lights and stared at them until they knocked me out.

Neither one of us said anything until breakfast was over and neither of us ate much, either. Finally Dad said, "Bill, I want to beg your pardon for what I said last night. You hadn't done or said anything to justify raising a hand to you and I had no business thinking it or saying it."

I said, "Oh, that's all right." I thought about it and added, "I guess I shouldn't have said what I did."

"It was all right to say it What makes me sad is that you could have thought it. Bill, I've never stopped loving Anne and I'll never love her any less."

"But you said—" I stopped and finished, "I just don't get it."

"I guess there is no reason to expect you to." George stood up. "Bill, the ceremony is at fifteen o'clock. Will you be dressed and ready about an hour before that time?"

I hesitated and said, "I won't be able to, George. I've got a pretty full day."

His face didn't have any expression at all and neither did his voice. He said, "I see," and left the room. A bit later he left the apartment. A while later I. tried to call him at his office, but the autosecretary ground out the old stall about "Would you like to record a message?" I didn't. I figured that George would be home some time before fifteen hundred and I got dressed in my best. I even used some of Dad's beard cream.

He didn't show up. I tried the office again, and again, got the "Would-you-like-to-recorda-message?" routine. Then I braced myself and looked up the code on Mrs. Kenyon.

He wasn't there. Nobody was there.

The time crawled past and there was nothing I could do about it. After a while it was fifteen o'clock and I knew that my father was off somewhere getting married but I didn't know where. About fifteen-thirty I went out and went to a show.

When I got back the red light was shining on the phone. I dialed playback and it was Dad: "Bill I tried to reach you but you weren't in and I can't wait. Molly and I are leaving on a short trip. If you need to reach me, call Follow Up Service, Limited, in Chicago—we'll be somewhere in Canada. We'll be back Thursday night. Goodbye." That was the end of the recording.

Thursday night—blastoff was Friday morning.

3. Space Ship *Bifrost*

Dad called me from Mrs. Kenyon's—I mean from Molly's—apartment Thursday night. We were both polite but uneasy. I said yes, I was all ready and I hoped they had had a nice time. He said they had and would I come over and we would all leave from there in the morning.

I said I hadn't known what his plans were, so I had bought a ticket to Mojave port and had reserved a room at Hotel Lancaster. What did he want me to do?

He thought about it and said, "It looks like you can take care of yourself, Bill."

"Of course I can."

"All right. We'll see you at the port. Want to speak to Molly?"

"Uh, no, just tell her hello for me."

"Thanks, I will." He switched off.

I went to my room and got my kit—fifty-seven and fifty-nine hundredths pounds; I couldn't have added a clipped frog's hair. My room was bare, except for my Scout uniform. I couldn't afford to take it, but I hadn't thrown it away yet.

I picked it up, intending to take it to the incinerator, then stopped. At the physical exam I had been listed at one hundred thirtyone and two tenths pounds mass in the clothes I would wear for blast off.

But I hadn't eaten much the last few days.

I stepped into the 'fresher and onto the scales—one hundred twenty-nine and eight tenths. I picked up the uniform and stepped back on the scales—one hundred thirty-two and five tenths.

William, I said, you get no dinner, you get no breakfast, and you drink no water tomorrow morning. I bundled up my uniform and took it along.

The apartment was stripped. As a surprise for the next tenant I left in the freezer the stuff I had meant to eat for supper, then switched all the gadgets to zero except the freezer, and locked the door behind me. It felt funny; Anne and George and I had lived there as far back as I could remember.

I went down to subsurface, across town, and caught the In-Coast tube for Mojave. Twenty minutes later I was at Hotel Lancaster in the Mojave Desert.

I soon found out that the "room" I had reserved was a cot in the billiard room. I trotted down to find out what had happened.

I showed the room clerk the 'stat that said I had a room coming to me. He looked at it and said, "Young man, have you ever tried to bed down six thousand people at once?"

I said no, I hadn't.

"Then be glad you've got a cot. The room you reserved is occupied by a family with nine children."

I went.

The hotel was a madhouse. I couldn't have gotten anything to eat even if I hadn't promised myself not to eat; you couldn't get within twenty yards of the dining room. There were children underfoot everywhere and squalling brats galore. There were emigrant families squatting in the ball room. I looked them over and wondered how they had picked them; out of a grab bag?

Finally I went to bed. I was hungry and got hungrier. I began to wonder why I was going to all this trouble to hang on to a Scout uniform I obviously wasn't going to use.

If I had had my ration book I would have gotten up and stood in line at the dining room—but Dad and I had turned ours in. I still had some money and thought about trying to find a free-dealers; they say you can find them around a hotel. But Dad says that "free-dealer" is a fake word; they are black marketeers and no gentleman will buy from them.

Besides that I didn't have the slightest idea of how to go about finding one.

I got up and got a drink and went back to bed and went through the relaxing routine. Finally I got to sleep and dreamed about strawberry shortcake with real cream, the kind that comes from cows.

I woke up hungry but I suddenly remembered that this was it!—my last day on Earth. Then I was too excited to be hungry. I got up, put on my Scout uniform and my ship suit over it.

I thought we would go right on board. I was wrong.

First we had to assemble under awnings spread out in front of the hotel near the embarking tubes. It wasn't air conditioned outside, of course, but it was early and the desert wasn't really hot yet. I found the letter "L" and sat down under it, sitting on my baggage. Dad and his new family weren't around yet; I began to wonder if I was going to Ganymede by myself. I didn't much care.

Out past the gates about five miles away, you could see the ships standing on the field, the *Daedalus* and the *Icarus,* pulled off the EarthMoon run for this one trip, and the old *Bifrost* that had been the shuttle rocket to Supra-New-York space station as far back as I could remember.

The *Daedalus* and the *Icarus* were bigger but I hoped I would get the *Bifrost*; she was the first ship I ever saw blast off.

A family put their baggage down by mine. The mother looked out across the field and said, "Joseph, which one is the *Mayflower*?"

Her husband tried to explain to her, but she still was puzzled. I nearly burst, trying to keep from laughing. Here she was, all set to go to Ganymede and yet she was so dumb she didn't even know that the ship she was going in had been built out in space and couldn't land anywhere.

The place was getting crowded with emigrants and relatives coming to see them off, but I still didn't see anything of Dad. I heard my name called and turned around and there was Duck Miller. "Gee, Bill," he said, "I thought I'd missed you."

"Hi, Duck. No, I'm still here."

"I tried to call you last night but your phone answered 'service discontinued,' so I hooked school and came up."

"Aw, you shouldn't have done that."

"But I wanted to bring you this." He handed me a package, a whole pound of chocolates. I didn't know what to say.

I thanked him and then said, "Duck, I appreciate it, I really do. But I'll have to give them back to you."

"Huh? Why?"

"Weight Mass, I mean. I can't get by with another ounce."

"You can carry it."

"That won't help. It counts just the same."

He thought about it and said, "Then let's open it."

I said, "Fine," and did so and offered him a piece. I looked at them myself and my stomach was practically sitting up and begging. I don't know when I've been so hungry.

I gave in and ate one. I figured I would sweat it off anyhow; it was getting hot and I had my Scout uniform on under my ship suit—and that's no way to dress for the Mojave Desert in June! Then I was thirstier than ever, of course; one thing leads to another.

I went over to a drinking fountain and took a very small drink. When I came back I closed the candy box and handed it back to Duck and told him to pass it around at next Scout meeting and tell the fellows I wished they were going along. He said he would and added, "You know, Bill, I wish I was going. I really do."

I said I wished he was, too, but when did he change his mind? He looked embarrassed but about then Mr. Kinski showed up and then Dad showed up, with Molly and the brat—Peggy—and Molly's sister, Mrs. van Metre. Everybody shook hands all around and Mrs. van Metre started to cry and the brat wanted to know what made my clothes so bunchy and what was I sweating about?

George was eyeing me, but about then our names were called and we started moving through the gate.

George and Molly and Peggy were weighed through and then it was my turn. My baggage was right on the nose, of course, and then I stepped on the scales. They read one hundred and thirtyone and one tenth pounds—I could have eaten another chocolate.

"Check!" said the weightmaster, then he looked up and said, "What in the world have you got on, son?"

The left sleeve of my uniform had started to unroll and was sticking out below the half sleeve of my ship suit. The merit badges were shining out like signal lights.

I didn't say anything. He started feeling the lumps the uniform sleeves made. "Boy," he said, "you're dressed like an arctic explorer; no wonder you're sweating. Didn't you know you weren't supposed to wear anything but the gear you were listed in?"

Dad came back and asked what the trouble was? I just stood there with my ears burning. The assistant weightmaster got into the huddle and they argued what should be done. The weightmaster phoned somebody and finally he said, "He's inside his weight limit; if he wants to call that monkey suit part of his skin, we'll allow it. Next customer, please!"

I trailed along, feeling foolish. We went down inside and climbed on the slide strip, it was cool down there, thank goodness. A few minutes later we got off at the loading room down under the rocket ship. Sure enough, it was the *Bifrost*, as I found out when the loading elevator poked above ground and stopped at the passenger port. We filed in.

They had it all organized. Our baggage had been taken from us in the loading room; each passenger had a place assigned by his weight. That split us up again; I was on the deck immediately under the control room. I found my place, couch 14-D, then went to a view port where I could see the *Daedalus* and the *Icarus*.

A brisk little stewardess, about knee high to a grasshopper, checked my name off a list and offered me an injection against dropsickness. I said no, thanks.

She said, "You've been out before?"

I admitted I hadn't; she said, "Better take it."

I said I was a licensed air pilot; I wouldn't get sick I didn't tell her that my license was just for copters. She shrugged and turned away. A loudspeaker said, "The *Daedalus* is cleared for blasting." I moved up to get a good view.

The *Daedalus* was about a quarter of a mile away and stood up higher than we did. She had fine lines and was a mighty pretty sight, gleaming in the morning sunshine. Beyond her and to the right, clear out at the edge of the field, a light shone green at the traffic control blockhouse.

She canted slowly over to the south, just a few degrees.

Fire burst out of her base, orange, and then blinding white. It splashed down into the ground baffles and curled back up through the ground vents. She lifted.

She hung there for a breath and you could see the hills shimmer through her jet. And she was gone.

Just like that—she was gone. She went up out of there like a scared bird, just a pencil of white fire in the sky, and was gone while we could still hear and feel the thunder of her jets inside the compartment.

My ears were ringing. I heard someone behind me say, "But I haven't had breakfast. The Captain will just have to wait. Tell him, Joseph."

It was the woman who hadn't known that the *Mayflower* was a space-to-space ship. Her husband tried to hush her up, but he didn't have any luck. She called over the stewardess. I heard her answer, "But, madam, you can't speak to the Captain now. He's preparing for blastoff."

Apparently that didn't make any difference. The stewardess finally got her quiet by solemnly promising that she could have breakfast after blastoff. I bent my ears at that and I decided to put in a bid for breakfast, too.

The *Icarus* took off twenty minutes later and then the speaker said, "All hands! Acceleration stations–prepare to blast off." I went back to my couch and the stewardess made sure that we were all strapped down. She cautioned us not to unstrap until she said we could. She went down to the deck below.

I felt my ears pop and there was a soft sighing in the ship. I swallowed and kept swallowing. I knew what they were doing: blowing the natural air out and replacing it with the standard helium-oxygen mix at half sea-level pressure. But the woman—the same one—didn't like it. She said, "Joseph, my head aches. Joseph, I can't breathe. Do something!"

Then she clawed at her straps and sat up. Her husband sat up, too, and forced her back down.

The *Bifrost* tilted over a little and the speaker said, "Minus three minutes!"

After a long time it said, "Minus two minutes!"

And then "Minus one minutel" and another voice took up the count:

"Fifty-nine! Fifty-eight! Fifty-seven!"

My heart started to pound so hard I could hardly hear it. But it went on: "-thirty-five! Thirty-four! Thirty-three! Thirty-two! Thirtyone! Half! Twenty-nine! Twentyeight!"

And it got to be: "Ten!"

And "Nine!"

"Eight!

"Seven!

"And six!

"And five!

"And four!

"And three!

"And two—"

I never did hear them say "one" or "fire" or whatever they said. About then something fell on me and I thought I was licked. Once, exploring a cave with the fellows, a bank collapsed on me and I had to be dug out. It was like that—but nobody dug me out.

My chest hurt My ribs seemed about to break. I couldn't lift a finger. I gulped and couldn't get my breath.

I wasn't scared, not really, because I knew we would take off with a high g, but I was awfully uncomfortable. I managed to turn my head a little and saw that the sky was already purple. While I watched, it turned black and the stars came out, millions of stars. And yet the Sun was still streaming in through the port

The roar of the jets was unbelievable but the noise started to die out almost at once and soon you couldn't hear it at all. They say the old ships used to be noisy even after you passed the speed of sound; the *Bifrost* was not. It got as quiet as the inside of a bag of feathers.

There was nothing to do but lie there, stare out at that black sky, try to breathe, and try not to think about the weight sitting on you.

And then, so suddenly that it made your stomach turn flipflops, you didn't weigh anything at all.

4. Captain DeLongPre

Let me tell you that the first time you fall is no fun. Sure, you get over it. If you didn't you would starve. Old space hands even get so they like it—weightlessness, I mean. They say that two hours of weightless sleep is equal to a full night on Earth. I got used to it, but I never got to like it.

The *Bifrost* had blasted for a little more than three minutes. It seemed lots longer because of the high acceleration; we had blasted at nearly six g. Then she was in free orbit for better than three hours and we fell the whole time, until the Captain started to maneuver to match orbits with the *Mayflower*.

In other words we fell straight up for more than twenty thousand miles.

Put that way, it sounds silly. Everybody knows that things don't fall up; they fall down.

Everybody knew the world was flat, too.

We fell up.

Like everybody, I had had the elements of space ballistics in grammar school physics, and goodness knows there have been enough stories about how you float around in a spaceship when it's in a free orbit. But, take it from me, you don't really believe it until you've tried it.

Take Mrs. Tarbutton—the woman who wanted breakfast. I suppose she went to school like everybody else. But she kept insisting that the Captain had to do something about it. What he could do I don't know; find her a small asteroid, maybe.

Not that I didn't sympathize with her—or with myself, I guess. Ever been in an earthquake? You know how everything you ever depended on suddenly goes back on you and terra firma isn't firma any longer? It's like that, only much worse. This is no place to review grammar school physics but when a spaceship is in a free trajectory, straight up or any direction, the ship and everything in it moves along together and you fall, endlessly—and your stomach darn near falls out of you.

That was the first thing I noticed. I was strapped down so that I didn't float away, but I felt weak and shaky and dizzy and as if I had been kicked in the stomach. Then my mouth filled with saliva and I gulped and I was awfully sorry I had eaten that chocolate.

But it didn't come up, not quite.

The only thing that saved me was no breakfast. Some of the others were not so lucky. I tried not to look at them. I had intended to unstrap as soon as we went free and go to a port so I could look at Earth, but I lost interest in that project entirely. I stayed strapped down, and concentrated on being miserable.

The stewardess came floating out the hatch from the next deck, shoved herself along with a toe, checked herself with a hand at the center stanchion, and hovered in the air in a swan dive, looking us over. It was very pretty to watch if I'd been in shape to appreciate it.

"Is everybody comfy?" she said cheerfully.

It was a silly remark but I suppose nurses get that way. Somebody groaned and a baby on the other side of the compartment started to cry. The stewardess moved over to Mrs. Tarbutton and said, "You may have breakfast now. What would you like? Scrambled eggs?"

I clamped my jaw and turned my head away, wishing she would shut up. Then I looked back. She had paid for that silly remark—and she had to clean it up.

When she was through with Mrs. Tarbutton I said, "Uh-oh, Miss—"

"Andrews."

"Miss Andrews, could I change my mind about that dropsick injection?"

"Righto, chum," she agreed, smiling, and whipped out an injector from a little kit she had at her belt. She gave me the shot. It burned and for a moment I thought I was going to lose the chocolate after all. But then things quieted down and I was almost happy in a miserable sort of way.

She left me and gave shots to some others who had kidded themselves the same way I had. Mrs. Tarbutton she gave another sort of shot to knock her out entirely. One or two of the hardier souls unstrapped themselves and went to the ports; I decided I was well enough to try it.

It's not as easy as it looks, this swimming around in free fall. I undid the safety belts and sat up; that's all I meant to do. Then I was scrambling in the air, out of control, trying frantically to grasp at anything.

I turned over in the air and cracked the back of my head against the underside of the control room deck and saw stars, not the ones out the ports—some of my own. Then the deck with the couches on it was approaching me slowly.

I managed to grab a safety belt and came to anchor. The couch it belonged to was occupied by a little plump man. I said, "Excuse me."

He said, "Don't mention it," and turned his face away, looking as if he hated me. I couldn't stay there and I couldn't even get back to my own couch without grabbing handholds on other couches that were occupied, too, so I pushed off again, very gently this time, and managed to grab hold when I bumped against the other deck.

It had handholds and grab lines all over it. I didn't let go again, but pulled myself along, monkey fashion, to one of the ports.

And there I got my first view of Earth from space.

I don't know what I expected, but it wasn't what I expected. There it was, looking just like it does in the geography books, or maybe more the way it does in the station announcements of Super-New-York TV station. And yet it was different. I guess I would say it was like the difference between being told about a good hard kick in the rear and actually being kicked.

Not a transcription. Alive.

For one thing it wasn't prettily centered in a television screen; it was shouldering into one side of the frame of the port, and the aft end of the ship cut a big chunk out of the Pacific Ocean. And it was moving, shrinking. While I hung there it shrunk to about half the size it was when I first got there and got rounder and rounder. Columbus was right.

From where I was it was turned sideways; the end of Siberia, then North America, and finally the north half of South America ran across from left to right. There were clouds over Canada and the eastern part of the rest of North America; they were the whitest white I ever saw—whiter than the north pole cap. Right opposite us was the reflection of the Sun on the ocean; it hurt my eyes. The rest of the ocean was almost purple where there weren't clouds.

It was so beautiful my throat ached and I wanted to reach out and touch it.

And back of it were stars, even brighter and bigger and more of them than the way they look from Little America.

Pretty soon there were more people crowding around, trying to see, and kids shoving and their mothers saying, "Now, now, darling!" and making silly remarks themselves. I gave up. I pulled myself back to my couch and put one belt around me so I wouldn't float away and thought about it. It makes you proud to know that you come from a big, fancy planet like that. I got to thinking that I hadn't seen all of it, not by a long sight, in spite of all the geography trips I had made and going to one Scout roundup in Switzerland and the time George and Anne and I went to Siam.

And now I wasn't going to see any more of it. It made me feel pretty solemn.

I looked up; there was a boy standing in front of me. He said, "What's the trouble, William, my boy? Dropsick?"

It was that twerp Jones. You could have knocked me out with a feather. If I had known he was going to emigrate, I would have thought twice about it.

I asked him where in the world he had come from.

"The same place you did, naturally. I asked you a question."

I informed him that I was not dropsick and asked him whatever gave him that silly notion. He reached out and grabbed my arm and turned it so that the red spot the injection had made showed. He laughed and I jerked my arm away.

He laughed again and showed me his arm; it had a red spot on it, too. "Happens to the best of us," he said. "Don't be shy about it."

Then he said, "Come on. Let's look around the joint before they make us strap down again."

I went along. He wasn't what I would pick for a buddy but he was a familiar face. We worked our way over to the hatch to the next deck. I started to go through but Jones stopped me. "Let's go into the control room," he suggested.

"Huh? Oh, they wouldn't let us!"

"Is it a crime to try? Come on." We went back the other way and through a short passage. It ended in a door that was marked: CONTROL ROOM-STAY OUT! Somebody had written under it: This means you!!! and somebody else had added: Who? Me?

Jones tried it; it was locked. There was a button beside it; he pushed it.

It opened and we found ourselves staring into the face of a man with two stripes on his collar. Behind him was an older man with four stripes on his; he called out, "Who is it, Sam? Tell 'em we're not in the market."

The first man said, "What do you kids want?"

Jones said, "Please, sir, we're interested in astrogation. Could we have permission to visit the control room?"

I could see he was going to chuck us out and I had started to turn away when the older man called out, "Oh, shucks, Sam, bring 'em in!"

The younger fellow shrugged and said, "As you say, Skipper."

We went in and the Captain said, "Grab on to something; don't float around. And don't touch anything, or I'll cut your ears off. Now who are you?"

We told him; he said, "Glad to know you, Hank–same to you, Bill. Welcome aboard." Then he reached out and touched the sleeve of my uniform—it had come loose again. "Son, your underwear is showing."

I blushed and told him how I happened to be wearing it. He laughed and said, "So you swindled us into lifting it anyway. That's rich—eh, Sam? Have a cup of coffee."

They were eating sandwiches and drinking coffee— not from cups, of course, but from little plastic bags like they use for babies. The bags even had nipples on them. I said no, thanks. While the shot Miss Andrews gave me had made me feel better, it hadn't made me feel that much better. Hank Jones turned it down, too.

The control room didn't have a port in it of any sort. There was a big television screen forward on the bulkhead leading to the nose, but it wasn't turned on. I wondered what Mrs. Tarbutton would think if she knew that the Captain couldn't see where we were going and didn't seem to care.

I asked him about the ports. He said ports were strictly for tourists. "What would you do with a port if you had one?" he asked. "Stick your head out the window and look for road signs? We can see anything we need to see. Sam, heat up the video and show the kids."

"Aye aye, Skipper." The other chap swam over to his couch and started turning switches. He left his sandwich hanging in the air while he did so.

I looked around. The control room was circular and the end we came in was bigger than the other end; it was practically up in the nose of the ship and the sides sloped in. There were two couches, one for the pilot and one for the copilot, flat against the wall that separated the control room from the passenger compartments. Most of the space between the couches was taken up by the computer.

The couches were fancier than the ones the passengers had; they were shaped to the body and they lifted the knees and the head and back, like a hospital bed, and there were arm rests to support their hands over the ship's controls. An instrument board arched over each couch at the middle, where the man in the couch could see the dials and stuff even when his head was pushed back into the cushions by high g.

The TV screen lighted up and we could see Earth; it filled most of the screen. "That's 'View Aft'," the copilot said, "from a TV camera in the tail. We've got 'em pointing in all directions. Now we'll try 'View Forward'." He did, but it didn't amount to anything, just a few tiny little dots that might have been stars. Hank said you could see more stars out a port.

"You don't use it to look at stars," he answered. "When you need to take a star sight, you use the coelostats. Like this." He lay back on the couch and reached behind his head, pulling an eye piece arrangement over his face until the rubber guard fitted over one eye without lifting his head off the couch. "Coelostat" is just a trick name for a telescope with a periscope built into it. He didn't offer to let us look through it, so I looked back at the instrument board. It had a couple of radar presentations, much like you'll find in any atmosphere ship, even in a copter, and a lot of other instruments, most of which I didn't understand, though some of them were pretty obvious, like approach rate and throat temperature and mass ratio and ejection speed and such.

"Watch this," said the copilot. He did something at his controls; one of the tiny blips on the TV screen lit up very brightly, blinked a few times, then died away. "That was Supra-New-York; I triggered her radar beacon. You are not seeing it by television; it's radar brought on to the same screen." He fiddled with the controls again and another light blinked, two longs and a short. "That's where they're building the Star Rover."

"Where's the *Mayflower*?" Hank asked.

"Want to see where you're going, eh?" He touched his controls again; another light came on, way off to one side, flashing in groups of three.

I said it didn't look much like we were going there. The Captain spoke up. "We're taking the long way round, past the fair grounds. That's enough, Sam. Lock your board."

We all went back where the Captain was still eating. "You an Eagle Scout?" he asked me. I said yes and Hank said he was too.

"How old were you when you made it?" he wanted to know. I said I had been thirteen, so Hank said twelve, whereupon the Captain claimed he had made it at eleven. Personally I didn't believe either one of them.

The Captain said so now we were going out to Ganymede; he envied both of us. The copilot said what was there to envy about that?

The Captain said, "Sam, you've got no romance in your soul. You'll live and die running a ferry boat."

"Maybe so," the copilot answered, "but I sleep home a lot of nights."

The Captain said pilots should not marry. "Take me," he said, "I always wanted to be a deepspace man. I was all set for it, too, when I was captured by pirates and missed my chance. By the time I had the chance again, I was married."

"You and your pirates," said the copilot.

I kept my face straight. Adults always think anybody younger will swallow anything; I try not to disillusion them.

"Well, all that's as may be," said the Captain. "You two young gentlemen run along now. Mr. Mayes and I have got to fake up a few figures, or we'll be landing this bucket in South Brooklyn."

So we thanked him and left.

I found Dad and Molly and the Brat in the deck aft of my own. Dad said, "Where have you been, Bill? I've been looking all over the ship for you."

I told them, "Up in the control room with the Captain."

Dad looked surprised and the Brat made a face at me and said, "Smarty, you have not. Nobody can go up there."

I think girls should be raised in the bottom of a deep, dark sack until they are old enough to know better. Then when it came time, you could either let them out or close the sack and throw them away, whichever was the best idea.

Molly said, "Hush, Peggy."

I said, "You can just ask Hank. He was with me. We—" I looked around but Hank was gone. So I told them what had happened, all but the part about pirates.

When I finished the Brat said, "I want to go into the control room, too."

Dad said he didn't think it could be arranged. The Brat said, "Why not? Bill went."

Molly said hush again. "Bill is a boy and older than you are." The Brat said it wasn't fair.

I guess she had something there—but things hardly ever are. Dad went on, "You should feel flattered, Bill, being entertained by the famous Captain DeLongPre."

"Huh?"

"Maybe you are too young to remember it. He let himself be sealed into one of the robot freighters used to jump thorium ore from the lunar mines—and busted up a ring of hijackers, a gang the newscasters called the 'Ore Pirates.'"

I didn't say anything.

I wanted to see the *Mayflower* from space, but they made us strap down before I could locate it. I got a pretty good view of Supra-New-York though; the *Mayflower* was in the 24-hour orbit the space station rides in and we were closing almost directly on it when the word came to strap down.

Captain DeLongPre was quite some pilot. He didn't fiddle around with jockeying his ship into the new groove; he gave one long blast on the jet, the right time, the right amount, and the right direction. As it says in the physics book, "every one-plane correction-of-orbit problem which can be solved at all, can be solved with a single application of acceleration"—provided the pilot is good enough.

He was good enough. When we went weightless again, I looked over my shoulder out a port and there was the *Mayflower*, with the Sun gleaming on her, large as life and not very far away. There was the softest sort of a correction bump and the loudspeaker sang out, "Contact completed. You may unstrap."

I did and went to the port from which we could see the *Mayflower*. It was easy to see why she could never land; she had no airfoils of any sort, not even fins, and she was the wrong shape—almost spherical except that one side came out to a conical point.

She looked much too small—then I realized that a little bulge that was sticking out past her edge at one point was actually the bow of the *Icarus*, unloading on the far side. Then suddenly she was enormous and the little flies on her were men in space suits.

One of them shot something at us and a line came snaking across. Before the knob on the end of it quite reached us there was a bright purple brush discharge from the end of it and every hair on my head stood straight up and my skin prickled. A couple of the women in the compartment squealed and I heard Miss Andrews soothing them down and telling them that it was just the electrical potential adjusting between the two ships. If she had told them it was a bolt of lightning she would have been just as correct, but I don't suppose that would have soothed them.

I wasn't scared; any kid who had fooled around with radio or any sort of electronics would have expected it.

The knob on the line clunked against the side of the ship and after a bit the little line was followed by a heavier line and then they warped us together, slowly. The *Mayflower* came up until she filled the port.

After a bit my ears popped and the loudspeaker said, "All hands—prepare to disembark."

Miss Andrews made us wait quite a while, then it was our deck's turn and we pulled ourselves along to the deck we had come in by. Mrs. Tarbutton didn't come along; she and her husband were having some sort of a discussion with Miss Andrews.

We went right straight out of our ship, through a jointed steel drum about ten feet long, and into the *Mayflower*.

5. Captain Harkness

Do you know the worst thing about spaceships? They smell bad.

Even the *Mayflower* smelled bad and she was brand new. She smelled of oil and welding and solvents and dirty, sweaty smells of all the workmen who had lived in her so long. Then we came, three shiploads of us, most of us pretty whiff with that bad odor people get when they're scared or very nervous. My stomach still wasn't happy and it almost got me.

The worst of it is that there can't be very good 'freshers in a ship; a bath is a luxury. After the ship got organized we were issued tickets for two baths a week, but how far does that go, especially when a bath means two gallons of water to sponge yourself off with?

If you felt you just had to have a bath, you could ask around and maybe buy a ticket from somebody who was willing to skip one. There was one boy in my bunk room who sold his tickets for four weeks running until we all got sick of it and gave him an unscheduled bath with a very stiff brush. But I'm getting ahead of myself.

And you couldn't burn your clothes either; you had to wash them.

When we first got into the *Mayflower* it took them maybe half an hour to get us all sorted out and into our acceleration couches. The people from the *Daedalus* and the *Icarus* were supposed to be stowed away by the time we got there, but they weren't and the passageways were traffic jams. A traffic jam when everybody is floating, and you don't know which end is up, is about eight times as confusing as an ordinary one.

There weren't any stewardesses to get us straight, either; there were emigrants instead, with signs on their chests reading SHIP'S AIDE–but a lot of them needed aid themselves; they were just as lost as anybody else. It was like amateur theatricals where the ushers don't know how to find the reserved seats.

By the time I was in the bunk room I was assigned to and strapped down there were bells ringing all over the place and loudspeakers shouting: "Prepare for acceleration! Ten minutes!"

Then we waited.

It seemed more like half an hour. Presently the count-off started. I said to myself, William, if the blastoff from Earth was rugged, this is going to knock the teeth right out of your head. I knew what we were going to build up to—better than ninety-three miles per second. That's a third of a million miles an hour! Frankly I was scared.

The seconds ticked away; there was a soft push that forced me down against the cushions—and that was all. I just lay there; the ceiling was the ceiling again and the floor was under me, but I didn't feel extra heavy, I felt fine.

I decided that was just the first step; the next one would be a dilly.

Up overhead in the bunk room was a display screen; it lighted up and I was looking into the face of a man with four collar stripes; he was younger than Captain DeLongPre. He smiled and said, "This is your Captain speaking, friends—Captain Harkness. The ship will remain at one gravity for a little more than four hours.I think it is time to serve lunch, don't you?"

He grinned again and I realized that my stomach wasn't bothering me at all—except that I was terribly hungry. I guess he knew that all of us ground hogs would be starving to death as soon as we were back to normal weight. He went on:

"We'll try to serve you just as quickly as possible. It is all right for you to unstrap now, sit up, and relax, but I must ask you to be very careful about one thing:

"This ship is precisely balanced so that the thrust of our drive passes exactly through our center of gravity. If that were not so, we would tend to spin instead of moving in a straight line—and we might fetch up in the heart of the Sun instead of at Ganymede.

"None of us wants to become an impromptu barbecue, so I will ask each of you not to move unnecessarily from the neighborhood of your couch. The ship has an automatic compensator for a limited amount of movement, but we must not overload it—so get permission from your ship's aide before moving as much as six inches from your present positions."

He grinned again and it was suddenly a most unpleasant grin. "Any one violating this rule will be strapped down by force—and the Captain will assign punishment to fit the crime after we are no longer under drive."

There wasn't any ship's aide in our compartment; all we could do was wait. I got acquainted with the boys in the bunkroom, some older, some younger. There was a big, sandy-haired boy about seventeen, by the name of Edwards—"Noisy" Edwards. He got tired of waiting.

I didn't blame him; it seemed like hours went past and still nothing to eat. I thought we had been forgotten.

Edwards had been hanging around the door, peering out. Finally he said, "This is ridiculous! We can't sit here all day. I'm for finding out what's the hold up. Who's with me?"

One of the fellows objected, "The Captain said to sit tight."

"What if he did? And what can he do if we don't? We aren't part of the crew."

I pointed out that the Captain had authority over the whole ship, but he brushed me off. "Tommyrot! We got a right to know what's going on—and a right to be fed. Who's coming along?"

Another boy said, "You're looking for trouble, Noisy."

Edwards stopped; I think he was worried by the remark but he couldn't back down. Finally he said, "Look, we're supposed to have a ship's aide and we haven't got one. You guys elect me ship's aide and I'll go bring back chow. How's that?"

Nobody objected out loud. Noisy said, "Okay, here I go."

He couldn't have been gone more than a few seconds when a ship's aide showed up carrying a big box of packaged rations. He dealt them out and had one left over. Then he counted the bunks. "Weren't there twenty boys in here?" he asked.

We looked at each other but nobody said anything. He pulled out a list and called our names. Edwards didn't answer, of course, and he left, taking Noisy's ration with him.

Then Noisy showed up and saw us eating and wanted to know where his lunch was. We told him; he said, "For the love of Mike! Why didn't you guys save it for me? A fine bunch you turned out to be." And he left again.

He came back shortly, looking mad. A ship's aide followed him and strapped him down.

We had about reached the teeth-picking stage when the screen on the ceiling lit up again and there was the Moon. It looked as if we were headed right toward it and coming up fast. I began to wonder if

Captain Harkness had dropped a decimal point.

I lay back on my couch and watched it grow. After a while it looked worse. When it had grown until it filled the screen and more and it seemed as if we couldn't possibly miss, I saw that the mountains were moving past on the screen from right to left. I breathed a sigh of relief; maybe the Old Man knew what he was doing after all.

A voice came over the speaker: "We are now passing the Moon and tacking slightly in so doing. Our relative speed at point of closest approach is more than fifty miles per second, producing a somewhat spectacular effect."

I'll say it was spectacular! We zipped across the face of the Moon in about half a minute, then it faded behind us. I suppose they simply kept a TV camera trained on it, but it looked as if we had dived in, turned sharply, and raced out again. Only you don't make sharp turns at that speed.

About two hours later they stopped gunning her. I had fallen asleep and I dreamed I was making a parachute jump and the chute failed to open. I woke up with a yell, weightless, with my stomach dropping out of me again. It took me a moment to figure out where I was.

The loudspeaker said: "End of acceleration. Spin will be placed on the ship at once."

But it did not happen all at once; it happened very slowly. We drifted toward one wall and slid down it toward the outer wall of the ship. That made what had been the outer wall the floor; we stood on it — and the side with the bunks on it was now a wall and the side with the TV screen on it, which had been the ceiling, was now the opposite wall. Gradually we got heavier.

Noisy was still strapped to his couch; the ship's aide had moved the buckles so that he could not reach them himself. Now he was up against the wall, hanging on the straps like a papoose. He began to yell for us to help him down.

He was not in any danger and he could not have been too uncomfortable, for we weren't up to a full gravity, not by a whole lot. It turned out later that the Captain had brought the spin up to one-third g and held it there, because Ganymede has one-third g. So there wasn't any urgent need to turn Noisy loose.

Nor was there any rush to do so. We were still discussing it and some of the fellows were making comical remarks which Noisy did not appreciate when the same ship's aide came in, unstrapped Noisy, and told all of us to follow him.

That's how I happened to attend Captain's mast.

"Captain's mast" is a sort of court, like when in ancient times the lord of the countryside would sit and dispense the high and middle justice. We followed the aide, whose name was Dr. Archibald, to Captain Harkness's cabin. There were a lot of other people waiting there in the passage outside the cabin. Presently Captain Harkness came out and Noisy was the first case.

We were all witnesses but the Captain didn't question but a few of us; I wasn't questioned. Dr. Archibald told about finding Noisy wandering around the ship while we were under acceleration and the Captain asked Noisy if he had heard the order to stay at his bunk?

Noisy beat around the bush a good deal and tried to spread the blame on all of us, but when the Captain pinned him down he had to admit that he had heard the order.

Captain Harkness said, "Son, you are an undisciplined lunk. I don't know what sort of trouble you'll run into as a colonist, but so far as my ship is concerned, you've had it."

He mused for a moment, than added, "You say you did this because you were hungry?"

Noisy said yes, he hadn't had anything since breakfast and he still hadn't had his lunch.

"Ten days bread and water," said the Captain. "Next case."

Noisy looked as if he couldn't believe his ears.

The next case was the same thing, but a woman-one of those large, impressive ones who run things. She had had a row with her ship's aide and had stomped off to tell the Captain about it personally—while we were under acceleration.

Captain Harkness soon cut through the fog. "Madam," he said, with icy dignity, "by your bullheaded stupidity you have endangered the lives of all of us. Do you have anything to say for yourself?"

She started a tirade about how "rude" the aide had been to her and how she never heard of anything so preposterous in her life as this kangaroo court, and so forth, and so forth. The Captain cut her short.

"Have you ever washed dishes?" he asked.

"Why, no!"

"Well, you are going to wash dishes—for the next four hundred million miles."

6. E = MC^2

I looked up dad after they let us go. It was like finding a needle in a haystack but I kept asking and presently I found him. Molly and he had a room to themselves. Peggy was there and I thought she was rooming with them, which annoyed me some, until I saw that there were only two couches and realized that Peggy must be in a dormitory. It turned out that all the kids over eight were in dormitories.

Dad was busy unclamping their couches and moving them to what was the floor, now that the ship was spinning. He stopped when I came in and we sat around and talked. I told him about Captain's mast. He nodded. "We saw it in the screen. I didn't notice your shining face, however."

I said I hadn't been called on.

"Why not?" Peggy wanted to know.

"How should I know?" I thought about mast for a bit and said, "Say, George, the skipper of a ship in space is just about the last of the absolute monarchs, isn't he?"

Dad considered it and said, "Mmm… no, he's a constitutional monarch. But he's a monarch all right."

"You mean we have to bow down to him and say 'Your Majesty?" Peggy wanted to know.

Molly said, "I don't think that would be advisable, Peg."

"Why not? I think it would be fun."

Molly smiled. "Well, let me know how you make out. I suspect that he will just turn you over his knee and paddle you."

"Oh, he wouldn't dare! I'd scream."

I wasn't so sure. I remembered those four hundred million miles of dirty dishes. I decided that, if the Captain said "Frog," I'd hop.

If Captain Harkness was a monarch, he didn't seem anxious to rule; the first thing he had us do was to hold an election and set up a ship's council. After that we hardly laid eyes on him.

Everybody over eighteen could vote. The rest of us got to vote, too; we were told to setup a junior council—not that it was ever good for anything.

But the senior council, the real council, ran the ship from then on. It even acted as a court and the Captain never handed out punishments again. Dad told me that the Captain reviewed everything that the council did, that he had to, to make it legal—but I never heard of him overruling their decisions.

And you know what the first thing was that that council did—after setting up meal hours and simple things like that? They decided we had to go to school!

The junior council promptly held a meeting and passed a resolution against it, but it didn't mean anything. We had school, just the same.

Peggy was on the junior council. I asked her why she didn't resign if she wasn't going to do anything. I was just teasing—as a matter of fact she put up quite a battle for us.

School wasn't so bad, though. There is very little to do in space and when you've seen one star you've seen 'em all. And the first thing we had in school was a tour of the ship, which was all right.

We went in groups of twenty and it took all day–"day" by ship's time, I mean. The *Mayflower* was shaped like a ball with a cone on one side—top shaped. The point of the cone was her jet—although Chief Engineer Ortega, who showed us around, called it her "torch."

If you count the torch end as her stern, then the round end, her bow, was where the control room was located; around it were the Captain's cabin and the staterooms of the officers. The torch and the whole power plant space were cut off from the rest of the ship by a radiation shield that ran right through the ship. From the shield forward to the control room was a big cargo space. It was a cylinder more than a hundred feet in diameter and was split up into holds. We were carrying all sorts of things out to the colony —earth moving machinery, concentrated soil cultures, instruments, I don't know what all.

Wrapped around this central cylinder were the decks for living, "A" deck just inside the skin of the ship, "B" deck under it, and "C" deck just inside that, with "D" deck's ceiling being the outer wall of the cargo space. "D" deck was the mess rooms and galley and recreation rooms and sick bay and such; the three outer decks were bunk rooms and staterooms. "A" deck had steps in it every ten or fifteen feet because it was fitted into the outer curve of the ship; this made the ceilings in it of various heights. The furthest forward and furthest aft on "A" deck were only about six feet between floor and ceiling and some of the smaller kids lived in them, while at the greatest width of the ship the ceilings in "A" deck must have been twelve or thirteen feet high.

From inside the ship it was hard to see how it all fitted together. Not only was it all chopped up, but the artificial gravity we had from spinning the ship made directions confusing—anywhere you stood on a deck it seemed level, but it curved sharply up behind you and in front of you. But you never came to the curved part; if you walked forward it was still level. If you walked far enough you looped the loop and came back to where you started, having walked clear around the ship.

I never would have figured it out if Mr. Ortega hadn't drawn a sketch for us.

Mr. Ortega told us that the ship was spinning three and six-tenths revolutions per minute or two hundred and sixteen complete turns an hour, which was enough to give "B" deck a centrifugal force of one-third g. "B" deck was seventy-five feet out from the axis of the *Mayflower*; "A" deck where I lived was further out and you weighed maybe a tenth more there, while "C" deck caught about a tenth less.

"D" deck was quite a lot less and you could make yourself dizzy if you stood up suddenly in the mess room.

The control room was right on the axis; you could float in it even when the ship was spinning—or so they told me; I never was allowed inside.

Spinning the ship had another odd effect: all around us was "down." I mean to say that the only place you could put a view port was in the floor plates of "A" deck and that's where they were, four of them—big ones, each in its own compartment.

Mr. Ortega took us into one of these view galleries. The view port was a big round quartz plate in the floor, with a guard rail around it.

The first ones into the room went up to the guard rail and then backed away from it quick and two of the girls squealed. I pushed forward and got to the rail and looked down , . . and I was staring straight into the very bottom of the universe, a million trillion miles away and all of it down.

I didn't shy away—George says I'm more acrobat than acrophobe—but I did sort of grip the railing. Nobody wants to fall that far. The quartz was surface-treated so that it didn't give off reflections and it looked as if there were nothing at all between you and Kingdom Come.

The stars were reeling across the hole from the ship spinning, which made it worse. The Big Dipper came swinging in from the left, passed almost under me, and slid away to the right—and a few seconds later it was back again. I said, "This is where I came in," and gave up my place so that someone else could have a look, but nobody seemed anxious to.

Then we went through the hydroponics plant, but there wasn't anything fancy about that—just enough plants growing to replace the oxygen we used up breathing. Eel grass, it was mostly, but there was a vegetable garden as well. I wondered how they had gotten it going before they had the passengers aboard? Mr. Ortega pointed to a CO_2 fitting in the wall. "We had to subsidize them, of course."

I guess I should have known it; it was simple arithmetic.

The Chief led us back into one of the mess rooms, we sat down, and he told us about the power plant.

He said that there had been three stages in the development of space ships: first was the chemical fuel rocket ship that wasn't very different from the big German war rockets used in the Second World War, except that they were step rockets. "You kids are too young to have seen such rockets," he said, "but they were the biggest space ships ever built. They had to be big because they were terribly inefficient. As you all know, the first rocket to reach the Moon was a four-stage rocket. Its final stage was almost as long as the *Mayflower*—

yet its pay load was less than a ton.

"It is characteristic of space ship development that the ships have gotten smaller instead of bigger. The next development was the atom-powered rocket. It was a great improvement; steps were no longer necessary. That meant that a ship like the *Daedalus* could take off from Earth without even a catapult, much less step rockets, and cruise to the Moon or even to Mars. But such ships still had the shortcomings of rockets; they depended on an atomic power plant to heat up reaction mass and push it out a jet, just as their predecessors depended on chemical fuel for the same purpose.

"The latest development is the mass-conversion ship, such as the *Mayflower*, and it may be the final development—a mass-conversion ship is theoretically capable of approaching the speed of light. Take this trip: we accelerated at one gravity for about four hours and twenty minutes which brought us up to more than ninety miles a second. If we had held that drive for a trifle less than a year, we would approach the speed of light.

"A mass-conversion ship has plenty of power to do just that. At one hundred per cent efficiency, it would use up about one per cent of her mass as energy and another one per cent as reaction mass. That's what the Star Rover is going to do when it is finished."

One of the younger kids was waving his hand. "Mister Chief Engineer?"

"Yes, son?"

"Suppose it goes on a few weeks longer and passes the speed of light?"

Mr. Ortega shook his head. "It can't."

"Why not, sir?"

"Eh, how far have you gone in mathematics, sonny?"

"Just through grammer school calculus," the kid answered.

'Tm afraid there is no use in trying to explain it, then. Just take it from me that the big brains are sure it can't be done."

I had worried about that very point more than once. Why can't you go faster than light? I know all that old doubletalk about how the Einstein equations show that a speed faster than light is a meaningless quantity, like the weight of a song or the color of a sound, because it involves the square root of minus one—but all of that is just theory and if the course we had in history of science means anything at all, it means that scientists change their theories about as often as a snake changes his skin. I stuck up my hand.

"Okay," he says. "You with the cowlick. Speak up."

"Mr. Ortega, admitting that you can't pass the speed of light, what would happen if the Star Rover got up close to the speed of light—and then the Captain suddenly stepped the drive up to about six g and held it there?"

"Why, it would— No, let's put it this way—" He broke off and grinned; it made him look real young. "See here, kid, don't ask me questions like that. I'm an engineer with hairy ears, not a mathematical physicist." He looked thoughtful and added, "Truthfully, I don't know what would happen, but I would sure give a pretty to find out. Maybe we would find out what the square root of minus one looks like— from the inside."

He went on briskly, "Let's go on about the *Mayflower*. You probably know that when the original Star Rover failed to come back, the *Mayflower* was designed to be the Star Rover II, but the design was obsolete before they ever started putting her together. So they shifted the name over to the new intersteller ship, the Star Rover III, renamed this one the *Mayflower* and grabbed her for the colonial service.

"You kids should consider how lucky you are. Up to now, emigrants to Ganymede have had to spend two years and nine months in space, just to get there. You're making it in two months."

"Couldn't we go faster?" somebody wanted to know.

"We could," he told us. "But we don't need to and it runs up the astrogation and control difficulties. In these new ships the power plant has gotten 'way ahead of the instrumentation. Be patient; your grandchildren will make the trip in a week, blasting at one g all the way. There'll be so many ships they'll have to have traffic cops and maybe we can come close to shipping out as many people as there are extras bom each year.

"Enough about that," he went on. "Who here can tell me what 'E equals M C squared' means?"

I could have answered but I had already spoken up once and it doesn't do to get a reputation for apple polishing. Finally one of the older kids said, "It means that mass can be converted into energy."

"Right!" Mr. Ortega agreed. "The first real demonstration of that was the atom bomb they set off 'way back in 1945 at Alamogordo, New Mexico. That was a special case; they still didn't know how to control it; all they could do was to make one whale of a big bang. Then came the uranium power plants, but that still didn't amount to much because it was a very special case and only a microscopic percentage of the mass was converted into energy. It wasn't until Kilgore's energy transformation equations—don't worry about them; you'll study them when you are older if you are interested—it wasn't until Kilgore showed how it could be done that we had any idea of how to do what Dr. Einstein's energy-mass equation said, clear back in 1905.

"And we still didn't know how to control it. If we were going to turn mass into energy, we needed more mass with which to surround the reaction, a very special sort of mass that would not turn into energy when we didn't want it to and would hold the reaction where we wanted it. Ordinary metal wouldn't do; one might as well use soft butter.

"But the Kilgore equations showed how to do that, too, when they were read correctly. Now has anyone here any notion of how much energy you get when you convert a chunk of mass into raw energy?"

Nobody knew. "It's all in that one equation," he said, "good old Doc Einstein's 'E equals M C squared.' It comes out that one gram of mass gives nine times ten to the twentieth power ergs." He wrote it down for us: 1 gm. = 9 x 10^{20} ergs.

"Doesn't look like much, does it?" he said. "Now try it this way:" He wrote down

900,000,000,000,000,000,000 ergs.

"Read it off. Nine hundred thousand million billion ergs. It still doesn't mean much, does it? Figures like that are impossible to comprehend. The nuclear physicists keep a barrel of zeroes around handy the way a carpenter does a keg of nails.

"I’ll try once more," he went on. "A pound of mass, any old mass, say a pound of feathers, when converted into energy equals fifteen billion horsepower-hours. Does that give anyone a notion of why the *Mayflower* was assembled out in an orbit and will never ever land anywhere?"

"Too hot," somebody said.

"'Too hot' is an understatement. If the Mayftower had blasted off from Mojave space port the whole Los Angeles Borough of the City of Southern California would have been reduced to a puddle of lava and people would have been killed by radiation and heat from Bay City to Baja California. And that will give you an idea of why the shielding runs right through the ship between here and the power plant, with no way at all to get at the torch."

We had the misfortune to have Noisy Edwards along, simply because he was from the same bunk room. Now he spoke up and said, "Suppose you have to make a repair?"

"There is nothing to go wrong," explained Mr. Ortega. "The power plant has no moving parts of any sort"

Noisy wasn't satisfied. "But suppose something did go wrong, how would you fix it if you can't get at it?"

Noisy has an irritating manner at best; Mr. Ortega sounded a little impatient when he answered. "Believe me, son, even if you could get at it, you wouldn't want to. No indeed!"

"Humph!" said Noisy. "All I've got to say is, if there isn't any way to make a repair when a repair is needed, what's the use in sending engineer officers along?"

You could have heard a pin drop. Mr. Ortega turned red, but all he said was, "Why, to answer foolish questions from youngsters like yourself, I suppose." He turned to the rest of us. "Any more questions?"

Naturally nobody wanted to ask any then. He added, "I think that's enough for one session. School's out."

I told Dad about it later. He looked grim and said, "I'm afraid Chief Engineer Ortega didn't tell you the whole truth."

"Huh?"

"In the first place there is plenty for him to do in taking care of the auxiliary machinery on this side of the shield. But it is possible to get at the torch, if necessary."

"Huh? How?"

"There are certain adjustments which could conceivably have to be made in extreme emergency. In which case it would be Mr. Ortega's proud privilege to climb into a space suit, go outside and back aft, and make them."

"You mean——"

"I mean that the assistant chief engineer would succeed to the position of chief a few minutes later. Chief engineers are very carefully chosen, Bill, and not just for their technical knowledge."

It made me feel chilly inside; I didn't like to think about it.

7. Scouting in Space

Making a trip in a space ship is about the dullest way to spend time in the world, once the excitement wears off. There's no scenery, nothing to do, and no room to do it in. There were nearly six thousand of us crowded into the *Mayflower* and that doesn't leave room to swing a cat.

Take "B" deck—there were two thousand passengers sleeping in it. It was 150 feet across—fore and aft, mat is—and not quite 500 feet around, cylinder fashion. That gives about forty square feet per passenger, on the average, but a lot was soaked up in stairs, passageways, walls, and such. It worked out that each one had about room enough for his bunk and about that much left over to stand on when he wasn't sleeping.

You can't give a rodeo in that kind of space; you can't even get up a game of ring-around-the-rosy.

"A" deck was larger and "C" deck was smaller, being nearer the axis, but they averaged out the same. The council set up a staggered system to get the best use out of the galley and the mess rooms and to keep us from falling over each other in the 'freshers. "A" deck was on

Greenwich time; "B" deck was left on zone plus-eight time, or Pacific West Coast time; and "C" deck drew zone minus-eight time, Philippine time.

That would have put us on different days, of course, but the day was always figured officially on Greenwich time; the dodge was just to ease the pressure on eating facilities.

That was really all we had to worry about. You would wake up early, not tired but bored, and wait for breakfast Once breakfast was over, the idea was to kill time until lunch. All afternoon you could look forward to the terrific excitement of having dinner.

I have to admit that making us go to school was a good plan; it meant that two and a half hours every morning and every afternoon was taken care of. Some of the grown ups complained that the mess rooms and all the spare space was always crowded with classes, but what did they expect us to do? Go hang on sky hooks? We used up less space in class than if we had been under foot.

Still, it was a mighty odd sort of school. There were some study machines in the cargo but we couldn't get at them and there wouldn't have been enough to go around. Each class consisted of about two dozen kids and some adult who knew something about something. (You'd be surprised how many adults don't know anything about anything!) The grown up would talk about what he knew best and the kids would listen, then we would ask questions and he would ask questions. No real examinations, no experiments, no demonstrations, no stereos.

Dad says this is the best kind of a school, that a university consists of a log with a teacher on one end and a pupil on the other. But Dad is a sort of romantic.

Things got so dull that it was hardly worth while to keep up my diary, even if I had been able to get microfilm, which I wasn't.

Dad and I played an occasional game of cribbage in the evening—somehow Dad had managed to squeeze the board and a pack of cards into his weight allowance. Then he got too busy with technical planning he was doing for the council and didn't have time. Molly suggested that I teach her to play, so I did.

After that I taught Peggy to play and she pegged a pretty sharp game, for a girl. It worried me a little that I wasn't being loyal to Anne in getting chummy with Peg and her mother, but I decided that Anne would want me to do just what I did. Anne was always friendly with everybody.

It still left me with time on my hands. What with only one-third gravity and no exercise I couldn't sleep more than six hours a night. The lights were out eight hours but they didn't make us go to bed, not after the trouble they had with it the first week. I used to fool around the corridors after lights out, usually with Hank Jones, until we both would get sleepy. We talked a lot. Hank turned out not to be such a bad guy as long as you kept him trimmed down to size.

I still had my Scout suit with me and kept it folded up in my bunk. Hank came in one morning while I was making up my bunk and noticed it. "See here, William," he said, "why do you hang on to that? Let the dead past bury its dead."

"I don't know," I admitted. "Maybe there will be Scouting on Ganymede."

"Not that I ever heard of."

"Why not? There is Scouting on the Moon."

"Proves nothing," he answered.

But it got us to talking about it and Hank got a brilliant idea. Why not start up Scouting right now, in the *Mayflower*?

We called a meeting. Peggy spread the word around for us, through the junior council, and we set it for fifteen-thirty that same afternoon, right after school. Fifteen-thirty Greenwich, or "A" deck time, that is. That made it seven-thirty in the morning for the "B" deck boys and a half hour before midnight for the fellows on "C" deck. It was the best we could do. "B" deck could hurry through breakfast and get to the meeting if they wanted to and we figured that those who were really interested from "C" would stay up for the meeting.

I played my accordion while they were drifting in because Hank's father said that you needed music to warm up a meeting before it got down to work. The call had read "all Scouts and former Scouts;" by fifteen-forty we had them packed in and spilling into the corridors, even though we had the use of the biggest mess room. Hank called them to order and I put away my accordion and acted as Scribe pro tem, having borrowed a wire recorder from the Communications Officer for the purpose.

Hank made a little speech. I figure him for politics when he grows up. He said that all of us had enjoyed the benefits, the comradeship, and the honorable traditions of Scouting on Earth and it seemed a shame to lose them. He said that the Scouting tradition was the tradition of the explorer and pioneer and there could be no more fitting place and time for it than in the settlement of a new planet In fact the spirit of Daniel Boone demanded that we continue as Scouts.

I didn't know he had it in him. It sounded good.

He stopped and slipped me the wink. I got up and said that I wanted to propose a resolution. Then I read it—it had been a lot longer but we cut it down. It read: "Be it resolved—we the undersigned, Scouts and former Scouts of many jurisdictions and now passengers in the good ship *Mayflower*, having as our purpose to continue the Scouting tradition and to extend the Scouting trail out to the stars, do organize ourselves as the Boy Scouts of Ganymede in accordance with the principles and purpose of Scouting and in so doing do reaffirm the Scout Law."

Maybe it was flowery but it sounded impressive; nobody laughed. Hank said, "You have heard the resolution; what is your pleasure? Do I hear a second?"

He surely did; there were seconds all over the place. Then he asked for debate.

Somebody objected that we couldn't call ourselves the Boy Scouts of Ganymede because we weren't on Ganymede yet. He got a chilly reception and shut up. Then somebody else pointed out that Ganymede wasn't a star, which made that part about "Carrying the Scouting trail out to the stars" nonsense.

Hank told him that was poetic license and anyhow going out to Ganymede was a step in the right direction and that there would be more steps; what about the Star Rover III? That shut him up.

The worst objection was from "Millimetre" Muntz, a weary little squirt too big for his britches. He said, "Mr. Chairman, this is an outlaw meeting. You haven't any authority to set up a new Scouting jurisdiction. As a member in good standing of Troop -Ninety-Six, New Jersey, I object to the whole proceeding."

Hank asked him just what authority he thought Troop Ninety-Six, New Jersey, had out around the orbit of Mars? Somebody yelled, "Throw him out!"

Hank banged on the mess table. "It isn't necessary to throw him out —but, since Brother Millimetre thinks this is not a proper meeting, then it isn't proper for him to take part in it. He is excused and the chair will recognize him no further. Are you ready to vote?"

It was passed unanimously and then Hank was elected organizational chairman. He appointed a flock of committees, for organization and for plans and programs and for credentials and tests and for liaison, and such. That last was to dig out the men in the ship who had been troop masters and commissioners and things and get a Court of Honor set up. There were maybe a dozen of the men passengers at the meeting, listening. One of them, a Dr. Archibald who was an aide on "A" deck, spoke up.

"Mr. Chairman, I was a Scoutmaster in Nebraska. I'd like to volunteer my services to this new organization."

Hank looked him straight in the eye. "Thank you, sir. Your application will be considered."

Dr. Archibald looked startled, but Hank went smoothly on, "We want and need and will appreciate the help of all you older Scouts. The liaison committee is instructed to get the names of any who are willing to serve."

It was decided that we would have to have three troops, one for each deck, since it wasn't convenient to try to meet all at the same time. Hank asked all the Explorer Scouts to stand up. There were too many of them, so he asked those who were Eagles to remain standing. There were about a dozen of us.

Hank separated us Eagles by decks and told us to get busy and organize our troops and to start by picking an acting senior patrol leader. "A" deck had only three Eagles, me, Hank, and a kid from another bunk room whom I hadn't met before, Douglas MacArthur Okajima. Doug and Hank combined on me and I found myself tagged with the job.

Hank and I had planned to finish the meeting with setting up exercises, but there just wasn't room, so I got out my accordion again and we sang The Scouting Trail and followed it with The Green Hills of Earth. Then we took the oath together again:

"Upon my honor I will do my best to do my duty to God and my planet, and to keep myself physically fit, mentally alert, and morally straight."

After that the meeting busted up.

For a while we held meetings every day. Between troop meetings and committee meetings and Explorer meetings and patrol leader meetings we didn't have time to get bored. At first the troops were just "A" troop, "B" troop, and "C" troop, after the decks, but we wanted names to give them some personality. Anyhow I wanted a name for my troop; we were about to start a membership drive and I wanted something with more oomph to it than "'A'" deck troop."

Somebody suggested "The Space Rats" but that was voted down, and somebody else suggested "The *Mayflower*s"; they didn't bother to vote on that; they simply sat on him.

After that we turned down "The Pilgrims," "Deep Space Troop," "Star Rovers," and "Sky High." A kid named John Edward Forbes-Smith got up. "Look," he said, "we're divided into three troops on the basis of the time zones we use, aren't we? "B" deck has California time; "C" deck has Philippine time; and we have Greenwich or English time. Why don't we pick names that will show that fact? We could call ourselves the Saint George Troop."

Bud Kelly said it was a good idea as far as it went but make it Saint Patrick instead of Saint George; after all, Dublin was on Greenwich time, too, and Saint Patrick was a more important saint.

Forbes-Smith said, "Since when?"

Bud said, "Since always, you limey—" So we sat on both of them, too, and it was decided not to use saints. But Johnny Edwards had a good idea, just the same; we settled on the Baden-Powell Troop, Boy Scouts of Ganymede, which tied in with the English time zone and didn't offend anybody.

The idea took hold; "C" deck picked Aguinaldo as a name and "B" deck called themselves the Junipero Serra Troop. When I heard that last I was kind of sorry our deck didn't have California time so that we could have used it. But I got over it; after all "Baden-Powell" is a mighty proud name, too.

For that matter they were all good names—scouts and explorers and brave men, all three of them. Two of them never had a chance to be Scouts in the narrow, organized meaning, but they were all Scouts in the wider sense—like Daniel Boone.

Dad says there is a lot in a name.

As soon as they heard about what we were doing the girls set up Girl Scouting, too, and Peggy was a member of the Florence Nightingale Troop. I suppose there was no harm in it, but why do girls copy what the boys do? We were too busy to worry about them, though; we had to revamp Scouting activities to fit new conditions.

We decided to confirm whatever ranks and badges a boy had held in his former organization—permanent rankings, I mean, not offices. Having been a patrol leader or a scribe didn't mean anything, but if you were an Eagle on Earth, you stayed one in the B.S.G.; if you were a Cub, then you were still a Cub. If a boy didn't have records—and about half of them didn't— we took his Scout oath statement as official.

That was simple; working over the tests and the badges was complicated. After all you can't expect a boy to pass beekeeping when you haven't any bees.

(It turned out that there were several swarms of bees sleep-frozen in the cargo, but we didn't have the use of them.)

But we could set up a merit badge in hydroponics and give tests right there in the ship. And Mr. Ortega set up a test for us in spaceship engineering and Captain Harkness did the same for ballistics and astrogation. By the end of the trip we had enough new tests to let a boy go up for Eagle Scout, once we had a Court of Honor.

That came last. For some reason I couldn't figure Hank had kept putting off the final report of the liaison committee, the committee which had as its job getting Scout Masters and Commissioners and such. I asked him about it, but he just looked mysterious and said that I would see.

I did see, eventually. At last we had a joint meeting of all three troops to install Scout Masters and dedicate the Court of Honor and such. And from then on the adults ran things and we went back to being patrol leaders at the most. Oh well—it was fun while it lasted.

8. Trouble

When we were fifty-three days out and about a week to go to reach Ganymede, Captain Harkness used the flywheel to precess the ship so that we could see where we were going—so that the passengers could see, that is; it didn't make any difference to his astrogation.

You see, the axis of the *Mayflower* had been pointed pretty much toward Jupiter and the torch had been pointed back at the Sun. Since the view ports were spaced every ninety degrees around the sides, while we had been able to see most of the sky, we hadn't been able to see ahead to Jupiter nor behind to the Sun. Now he tilted the ship over ninety degrees and we were rolling, so to speak, along our line of flight. That way, you could see Jupiter and the Sun both, from any view port, though not both at the same time.

Jupiter was already a tiny, ruddy-orange disc. Some of the boys claimed they could make out the moons. Frankly, I couldn't, not for the first three days after the Captain precessed the ship. But it was mighty fine to be able to see Jupiter.

We hadn't seen Mars on the way out, because Mars happened to be on the far side of the Sun, three hundred million miles away. We hadn't seen anything but the same old stars you can see from Earth. We didn't even see any asteroids.

There was a reason for that. When we took off from the orbit of Supra-New-York, Captain Harkness had not aimed the *Mayflower* straight for where Jupiter was going to be when we got there; instead he had lifted her north of the ecliptic high enough to give the asteroid belt a wide berth. Now anybody knows that meteors are no real hazard in space. Unless a pilot does deliberately foolish things like driving his ship through the head of a comet it is almost impossible to get yourself hit by a meteor. They are too far between.

On the other hand the asteroid belt has more than its fair share of sky junk. The older power-pile ships used to drive straight through the belt, taking their chances, and none of them was ever hit to amount to anything. But Captain Harkness, having literally all the power in the world, preferred to go around and play it safe. By avoiding the belt there wasn't a chance in a blue moon that the *Mayflower* would be hit.

Well, it must have been a blue moon. We were hit.

It was just after reveille, "A" deck time, and I was standing by my bunk, making it up. I had my Scout uniform in my hands and was about to fold it up and put it under my pillow. I still didn't wear it. None of the others had uniforms to wear to Scout meetings so I didn't wear mine. But I still kept it tucked away in my bunk.

Suddenly I heard the goldarnest noise I ever heard in my life. It sounded like a rifle going off right by my ear, it sounded like a steel door being slammed, and it sounded like a giant tearing yards and yards of cloth, all at once.

Then I couldn't hear anything but a ringing in my ears and I was dazed. I shook my head and looked down and I was staring at a raw hole in the ship, almost between my feet and nearly as big as my fist.

There was scorched insulation around it and in the middle of the hole I could see blackness—then a star whipped past and I realized that I was staring right out into space.

There was a hissing noise.

I don't remember thinking at all. I just wadded up my uniform, squatted down, and stuffed it in the hole. For a moment it seemed as if the suction would pull it on through the hole, then it jammed and stuck and didn't go any further. But we were still losing air. I think that was the point at which I first realized that we were losing air and that we might be suffocated in vacuum.

There was somebody yelling and screaming behind me that he was killed and alarm bells were going off all over the place. You couldn't hear yourself think. The airtight door to our bunk room slid across automatically and settled into its gaskets and we were locked in.

That scared me to death.

I know it has to be done. I know that it is better to seal off one compartment and kill the people who are in it than to let a whole ship die—but, you see, I was in that compartment, personally. I guess I'm just not the hero type.

I could feel the pressure sucking away at the plug my uniform made. With one part of my mind I was recalling that it had been advertised as "tropical weave, self ventilating" and wishing that it had been a solid plastic rain coat instead. I was afraid to stuff it in any harder, for fear it would go all the way through and leave us sitting there, chewing vacuum. I would have passed up desserts for the next ten years for just one rubber patch, the size of my hand.

The screaming had stopped; now it started up again. It was Noisy Edwards, beating on the airtight door and yelling, "Let me out of here! Get me out of here!"

On top of that I could hear Captain Harkness's voice coming through the bull horn. He was saying,

"H-twelve! Report! H-twelve! Can you hear me?"

On top of that everybody was talking at once.

I yelled: "Quiet!" at the top of my voice—and for a second or so there was quiet.

Peewee Brunn, one of my Cubs, was standing in front of me, looking big-eyed. "What happened, Billy?" he said.

I said, "Grab me a pillow off one of the bunks. Jump!"

He gulped and did it. I said, "Peel off the cover, quick!"

He did, making quite a mess of it, and handed it to me—but I didn't have a hand free. I said, "Put it down on top of my hands."

It was the ordinary sort of pillow, soft foam rubber. I snatched one hand out and then the other, and then I was kneeling on it and pressing down with the heels of my hands. It dimpled a little in the middle and I was scared we were going to have a blowout right through the pillow. But it held. Noisy was screaming again and Captain Harkness was still asking for somebody, anybody, in compartment H-12 to tell him what was going on. I yelled "Quiet!" again, and added, "Somebody slug Noisy and shut him up."

That was a popular idea. About three of them jumped to it. Noisy got clipped in the side of the neck, then somebody poked him in the pit of his stomach and they swarmed over him. "Now everybody keep quiet," I said, "and keep on keeping quiet. If Noisy lets out a peep, slug him again," I gasped and tried to take a deep breath and said, "H-twelve, reporting!"

The Captain's voice answered, "What is the situation there?"

"There is a hole in the ship, Captain, but we got it corked up."

"How? And how big a hole?"

I told him and that is about all there was to it. They took a while to get to us because—I found this out afterward—they isolated that stretch of corridor first, with the airtight doors, and that meant they had to get everybody out of the rooms on each side of us and across the passageway. But presently two men in space suits opened the door and chased all the kids out, all but me. Then they came back. One of them was Mr. Ortega. "You can get up now, kid," he said, his voice sounding strange and far away through his helmet. The other man squatted down and took over holding the pillow in place.

Mr. Ortega had a big metal patch under one arm. It had sticky padding on one side. I wanted to stay and watch him put it on but he chased me out and closed the door. The corridor outside was empty but I banged on the airtight door and they let me through to where the rest were waiting. They wanted to know what was happening but I didn't have any news for them because I had been chased out.

After a while we started feeling light and Captain Harkness announced that spin would be off the ship for a short time. Mr. Ortega and the other man came back and went on up to the control room. Spin was off entirely soon after that and I got very sick. Captain Harkness kept the ship's speaker circuits cut in on his conversations with the men who had gone outside to repair the hole, but I didn't listen. I defy anybody to be interested in anything when he is drop sick

Then spin came back on and everything was all right and we were allowed to go back into our bunkroom. It looked just the same except that there was a plate welded over the place where the meteorite had come in.

Breakfast was two hours late and we didn't have school that morning.

That was how I happened to go up to Captain's mast for the second time. George was there and Molly and Peggy and Dr. Archibald, the Scoutmaster of our deck, and all the fellows from my bunk room and all the ship's officers. The rest of the ship was cut in by visiplate. I wanted to wear my uniform but it was a mess—torn and covered with sticky stuff. I finally cut off the merit badges and put it in the ship's incinerator.

The First Officer shouted, "Captain's Mast for punishments and rewards!" Everybody sort of straightened up and Captain Harkness walked out and faced us. Dad shoved me forward.

The Captain looked at me. "William Lermer?" he said.

I said, "Yessir."

He said, "I will read from yesterday's log: 'On twenty-one August at ohseven-oh-four system standard, while cruising in free fall according to plan, the ship was broached by a small meteorite. Safety interlocks worked satisfactorily and the punctured volume, compartment H-twelve, was isolated with no serious drop in pressure elsewhere in the ship.

" 'Compartment H-twelve is a bunk room and was occupied at the time of the emergency by twenty passengers. One of the passengers, William J. Lermer, contrived a makeshift patch with materials at hand and succeeded in holding sufficient pressure for breathing until a repair party could take over.

" 'His quick thinking and immediate action unquestionably saved the lives of all persons in compartment H-twelve.' "

The Captain looked up from the log and went on, "A certified copy of this entry, along with depositions of witnesses, will be sent to Interplanetary Red Cross with recommendation for appropriate action. Another copy will be furnished you. I have no way to reward you except to say that you have my heartfelt gratitude. I know that I speak not only for the officers but for all the passengers and most especially for the parents of your bunk mates."

He paused and waggled a finger for me to come closer. He went on in a low voice, to me alone, "That really was a slick piece of work. You were on your toes. You have a right to feel proud."

I said I guessed I had been lucky.

He said, "Maybe. But that sort of luck comes to the man who is prepared for it."

He waited a moment, then said, "Lermer, have you ever thought of putting in for space training?"

I said I suppose I had but I hadn't thought about it very seriously. He said, "Well, Lermer, if you ever do decide to, let me know. You can reach me care of the Pilots' Association, Luna City."

With that, mast was over and we went away, George and I together and Molly and Peggy following along. I heard Peggy saying, "That's my brother."

Molly said, "Hush, Peggy. And don't point."

Peggy said, "Why not? He is my brother—well, isn't he?"

Molly said, "Yes, but there's no need to embarrass him."

But I wasn't embarrassed.

Mr. Ortega looked me up later and handed me a little, black, twisted piece of metal, about as big as a button. "That's all there was left of it," he said, "but I thought you would like to have it—pay you for messing up your Scout suit, so to speak."

I thanked him and said I didn't mind losing the uniform; after all, it had saved my neck, too. I looked at the meteorite. "Mr. Ortega, is there any way to tell where this came from?"

"Not really," he told me, "though you can get the scientific johnnies to cut it up and then express an opinion—if you don't mind them destroying it."

I said no, I'd rather .keep it—and I have; I've still got it as a pocket piece. He went on, "It's either a bit of a comet or a piece of the Ruined Planet. We can't tell which because where we were there shouldn't have been either one."

"Only there was," I said.

"As you say, there was."

"Uh, Mr. Ortega, why don't they put enough armor on a ship to stop a little bitty thing like this?" I remembered what the skin of the ship looked like where it had been busted; it seemed awful thin.

"Well, now, in the first place, this meteor is a real giant, as meteors go. In the second place—do you know anything about cosmic rays, Bill?"

"Uh, not much, I guess."

"You undoubtedly know that the human body is transparent to primary cosmic radiation and isn't harmed by it. That is what we encounter out here in space. But metal is not completely transparent to it and when it passes through metal it kicks up all sorts of fuss—secondary and tertiary and quaternary cosmic radiation. The stuff cascades and it is not harmless, not by a darn sight. It can cause mutations and do you and your descendants a lot of harm. It adds up to this: a man is safest in space when he has just enough ship around him to keep the air in and ultraviolet out."

Noisy didn't have much to say around the compartment for the next couple of days and I thought maybe he had learned his lesson. I was wrong. I ran into him in one of the lower passageways when there was nobody else around. I started to go around him but he stepped in my way. "I want to talk to you," he said.

"Okay," I answered. "What's on your mind?" "You think you're pretty smart, don't you?" I didn't like the way he said it, nor what he said. I said, "I don't think I'm smart; I am smart." He made me tired.

"Pretty cocky, aren't you? You think I ought to be kissing your hand and telling you how grateful I am for saving my life, don't you?"

I said, "Oh, yeah? If that's what is worrying you, you can just skip it; I didn't do it for you."

"I know that," he answered," and I'm not grateful, see?"

"That's fine with me," I told him. "I wouldn't want a guy like you being grateful to me."

He was breathing hard. "I've had just about enough of you," he said slowly. And the next thing I knew I had a mouthful of knuckles and I was down.

I got up cautiously, trying to surprise him. But it was no good; he knocked me down again. I tried to kick him while I was down, but he danced out of my way.

The third time he hit me I stayed down. When I quit seeing stars he was gone—and I hadn't managed to lay a finger on him. I never was any good in a fight; I'm still talking when I ought to be slugging.

I went to a scuttlebutt and bathed my face. Hank ran across me there and asked me what in the world I had been doing. I told him I had run into a door. I told Dad the same thing.

Noisy didn't bother me any more and we never had anything to say to each other again. I lay awake a long time that night, trying to figure it out. I didn't get it. The chap who thought up that malarkey about "my strength is as the strength of ten because my heart is pure" certainly had never met Noisy Edwards. For my taste Noisy was a no good so-and-so and I wished I had been able to use his face to stuff the hole the meteor made. I thought about a number of ways to fix him, but none of them was any good. As Dad says, sometimes there just isn't any cure for a situation.

9. The Moons of Jupiter

Nothing much happened until it was time to make our approach to Jupiter, except that a four-year-old kid turned up missing. The kid's parents searched all around and they passed the word from the control room for everybody to keep an eye open but they still couldn't find him.

So we had a chance to try out the Scouts' emergency organization. The ship's officers couldn't search the ship, since there was just the Captain and two watch officers and Mr. Ortega and his assistant chief. Captain Harkness supplied plans to each of the Scoutmasters and we went through that ship like a kid searching his clothes for a half credit. We turned the kid up, all right, in about twenty minutes. Seems the little devil had snuck into the hydroponics room while it was being serviced and had got himself locked in.

While he was in there he had got thirsty and had tried to drink the solutions they raise the plants in–had drunk some, in fact. The result was just about what you would expect. It didn't do him any real harm but, boy, was that place a mess!

I was talking to Dad about it that night over a game. Peggy had a Girl Scout meeting and Molly was off somewhere; we were alone for once. The baby's mother had raised particular Ned, just as if there had really been something wrong—I mean, what can happen in a space ship? The kid couldn't fall overboard.

Dad said her reaction was perfectly natural.

I said, "See, here, George, does it seem to you that some of the emigrants don't have what it takes to be colonists?"

"Mmmm .. . possibly."

I was thinking of Noisy but the ones I mentioned were Mrs. Tarbutton, who gave up and didn't even come along, and that female —Mrs. Grigsby—who got in trouble and had to wash dishes. And another fellow named Saunders who was continually in trouble with the council for trying to live his own life, wild and free, no matter what it did to the rest of us. "George, how did those characters get past the psycho tests?"

George stopped to peg fifteen-four, then said, "Bill, haven't you ever heard of political influence?"

All I said was, "Huh?"

"It's a shocking thought I know, but you are old enough to get used to the world as it is, instead of the way it ought to be. Take a hypothetical case: I don't suppose that a niece of a state councilor would be very likely to fail the psycho tests. Oh, she might fail the first tests, but a review board might find differently–if the councilor really wanted her to pass."

I chewed this over a while. It did not sound like George; he isn't the cynical type. Me, I'm cynical, but George is usually naive. "In that case, George, there is no use in having psycho tests at all, not if people like that can sneak past."

"Contrariwise. The tests are usually honest. As for those who sneak past, it doesn't matter. Old Mother Nature will take care of them in the long run. Survivors survive." He finished dealing and said, "Wait till you see what I'm going to do to you this hand. You haven't a chance."

He always says that. I said, "Anybody who would use public office like that ought to be impeached!"

George said mildly, "Yep. But don't bum out your jets, son; we've got human beings, not angels, to work with."

On the twenty-fourth of August Captain Harkness took spin off and started bringing us in. We decelerated for better than four hours and then went into free fall about six hundred thousand miles out from Jupiter and on the opposite side from where Ganymede was then. Weightlessness still wasn't any fun but this time we were ready and everyone got shots for it who wanted them. I took mine and no nonsense.

Theoretically the *Mayflower* could have made it in one compound maneuver, ending up at the end of deceleration in a tight circular orbit around Ganymede. Practically it was much better to sneak in easy and avoid any more trouble with meteorites—with the "false rings," that is.

Of course Jupiter doesn't have rings like Saturn, but it does have quite a lot of sky junk traveling around in the same plane as its moons. If there were enough of it, it would show up like Saturn's rings. There isn't that much, but there is enough to make a pilot walk on eggs coming in. This slow approach gave us a fine front seat for a tour of Jupiter and its satellites.

Most of this stuff we were trying to avoid is in the same plane as Jupiter's equator, just the way Saturn's rings are—so Captain Harkness brought us in over the top of Jupiter, right across Jupiter's north pole. That way, we never did get in the danger zone until we had curved down on the other side to reach Ganymede—and by then we were going fairly slow.

But we weren't going slow when we passed over Jupiter's north pole, no indeedy! We were making better than thirty miles a second and we were close in, about thirty thousand miles. It was quite a sight.

Jupiter is ninety thousand miles thick; thirty thousand miles is close—too close for comfort.

I got one good look at it for about two minutes from one of the view ports, then had to give up my place to somebody who hadn't had a turn yet and go back to the bunk room and watch through the vision screen. It was an odd sight; you always think of Jupiter with equatorial bands running parallel across it. But now we were looking at it end on and the bands were circles. It looked like a giant archery target, painted in orange and brick red and brown— except that half of it was chewed away. We saw it in half moon, of course.

There was a dark spot right at the pole. They said that was a zone of permanent clear weather and calm and that you could see clear down to the surface there. I looked but I couldn't see anything; it just looked dark.

As we came over the top, Io—that's satellite number one— suddenly came out of eclipse. Io is about as big as the Moon and was about as far away from us at the time as the Moon is from the Earth, so it looked about Moon size. There was just black sky and then there was a dark, blood red disc and in less than five minutes it was brilliant orange, about the color of Jupiter itself. It simply popped up, like magic.

I looked for Barnard's satellite while we were close in, but missed it. It's the little one that is less than one diameter from the surface of Jupiter—so close that it whirls around Jupiter in twelve hours. I was interested in it because I knew that the Jovian observatory was on it and also the base for Project Jove.

I probably didn't miss anything; Barnard's satellite is only about a hundred and fifty miles in diameter. They say a man can come pretty close to jumping right off it. I asked George about it and he said, no, the escape speed was about five hundred feet per second and who had been filling me up with nonsense?

I looked it up later; he was right. Dad is an absolute mine of useless information. He says a fact should be loved for itself alone.

Callisto was behind us; we had passed her on the way in, but not very close. Europa was off to the right of our course nearly ninety degrees; we saw her in half moon. She was more than four hundred thousand miles away and was not as pretty a sight as the Moon is from Earth.

Ganymede was straight ahead, almost, and growing all the time—and here was a funny thing; Callisto was silvery, like the Moon, but not as bright; Io and Europa were bright orange, as bright as Jupiter itself. Ganymede was downright dull!

I asked George about it; he came through, as usual "Ganymede used to be about as bright as Io and Europa," he told me. "It's the greenhouse effect—the heat trap. Otherwise we wouldn't be able to live on it."

I knew about that, of course; the greenhouse effect is the most important part of the atmosphere project When the 1985 expedition landed Ganymede had a surface temperature a couple of hundred degrees below zero—that's cold enough to freeze the milk of human kindness! "But look, George," I objected, "sure, I know about the heat trap, but why is it so dark? It looks like the inside of a sack."

"Light is heat; heat is light," he answered. "What's the difference? It's not dark on the ground; it goes in and doesn't come out—and a good thing, too."

I shut up. It was something new to me and I didn't understand it, so I decided to wait and not pound my teeth about it.

Captain Harkness slowed her down again as we came up to Ganymede and we got in one good meal while she was under drive. I never did get so I could eat at free fall, even with injections. He leveled her off in a tight circular orbit about a thousand miles up from Ganymede. We had arrived—just as soon as we could get somebody to come and get us.

It was on the trip down to Ganymede's surface that I began to suspect that being a colonist wasn't as glamorous and romantic as it had seemed back on Earth. Instead of three ships to carry us all at once, there was just one ship, the Jitterbug, and she would have fitted into one of the *Bifrost*'s compartments. She could carry only ninety of us at a time and that meant a lot of trips.

I was lucky; I had to wait only three days in free fall. But I lost ten pounds.

While I waited, I worked, helping to stow the freight that the Jitterbug brought up each trip. At last it came our turn and we piled into the Jitterbug. She was terrible; she had shelves rather than decks—they weren't four feet apart. The air was stale and she hadn't been half way cleaned up since the last trip. There weren't individual acceleration couches; there were just pads covering the deck space and we covered the pads, shoulder to shoulder—and foot in your eye, for that matter.

The skipper was a loudmouthed old female they called "Captain Hattie" and she kept bawling us out and telling us to hurry. She didn't even wait to make sure that we were all strapped down.

Fortunately it didn't take very long. She drove away so hard that for the first time except in tests I blacked out, then we dropped for about twenty minutes; she gunned her again, and we landed with a terrible bump. And Captain Hattie was shouting, "Out you come, you ground hogsl This is it."

The Jitterbug carried oxygen, rather than the helium-oxygen mix of the *Mayflower*. We had come down at ten pounds pressure; now Captain Hattie spilled the pressure and let it adjust to Ganymede normal, three pounds. Sure, three pounds of oxygen is enough to live on; that's all Earth has—the other twelve pounds are nitrogen. But a sudden drop in pressure like that is enough to make you gasp anyhow. You aren't suffocating but you feel as if you were.

We were miserable by the time we got out and Peggy had a nose bleed. There weren't any elevators; we had to climb down a rope ladder. And it was cold!

It was snowing; the wind was howling around us and shaking the ladder—the smallest kids they had to lower with a line. There was about eight inches of snow on the ground except where the splash of the Jitterbugs jet had melted it. I could hardly see, the wind was whipping the snow into my face so, but a man grabbed me by the shoulder, swung me around, and shouted, "Keep moving! Keep moving! Over that way."

I headed the way he pointed. There was another man at the edge of the blast clearing, singing the same song, and there was a path through the snow, trampled to slush. I could see some other people disappearing in the snow ahead and I took out after them, dogtrotting to keep warm.

It must have been half a mile to the shelter and cold all the way. We weren't dressed for it. I was chilled through and my feet were soaking wet by the time we got inside.

The shelter was a big hangarlike building and it was not much warmer, the door was open so much, but it was out of the weather and it felt good to be inside. It was jammed with people, some of them in ship suits and some of them Ganymedeans—you couldn't miss the colonial men; they were bearded and some of them wore their hair long as well. I decided that was one style I was not going to copy; I'd be smooth shaven, like George.

I went scouting around, trying to find George & Co. I finally did. He had found a bale of something for Molly to sit on and she was holding Peggy on her lap. Peg's nose had stopped bleeding. I was glad to see, but there were dried tears and blood and dirt on her face. She was a sight.

George was looking gloomy, the way he did the first few days without his pipe. I came up and said, "Hi, folks!"

George looked around and smiled and said, "Well, Bill, fancy meeting you here! How is it going?"

"Now that you ask me," I answered, "it looks like a shambles."

He looked gloomy again and said, "Oh, I suppose they will get things straightened out presently."

We didn't get a chance to discuss it. A colonist with snow on his boots and hair on his face stopped near us, put his little fingers to his lips, and whistled. "Pipe down!" he shouted. "I want twelve able-bodied men and boys for the baggage party." He looked around and started pointing. "You—and you—and you—"

George was the ninth "You"; I was the tenth.

Molly started to protest. I think George might have balked if she had not. Instead he said, "No, Molly, I guess it has to be done. Come on, Bill."

So we went back out into the cold.

There was a tractor truck outside and we were loaded in it standing up, then we lumbered back to the rocket site. Dad saw to it that I was sent up into the Jitterbug to get me out of the weather and I was treated to another dose of Captain Hattie's tongue; we couldn't work fast enough to suit her. But we got our baggage lowered finally; it was in the truck by the time I was down out of the ship. The trip back was cold, too.

Molly and Peggy were not where we had left them. The big room was almost empty and we were told to go on into another building through a connecting door. George was upset, I could see, from finding Molly gone.

In the next building there were big signs with arrows: MEN & BOYS-TO THE RIGHT and WOMEN & GIRLS-TO THE LEFT. George promptly turned to the left. He got about ten yards and was stopped by a stem-faced woman dressed like a colonial, in a coverall. "Back the other way," she said firmly. "This is the way to the ladies' dormitory."

"Yes, I know," agreed Dad, "but I want to find my wife."

"You can look for her at supper."

"I want to see her now."

"I haven't any facilities for seeking out any one person at this time. You'll have to wait."

"But—" There were several women crowding past us and going on inside. Dad spotted one from our deck in the *Mayflower*. "Mrs. Archibald!"

She turned around. "Oh—Mr. Lermer. How do you do?"

"Mrs. Archibald," Dad said intently, "could you find Molly and let her know that I'm waiting here?"

"Why, I'd be glad to try, Mr. Lermer."

"Thanks, Mrs. Archibald, a thousand thanks!"

"Not at all." She went away and we waited, ignoring the stern-faced guard. Presently Molly showed up without Peggy. You would have thought Dad hadn't seen her for a month.

"I didn't know what to do, dear," she said. "They said we had to come and it seemed better to get Peggy settled down. I knew you would find us."

"Where is Peggy now?"

"I put her to bed."

We went back to the main hall. There was a desk there with a man behind it; over his head was a sign: IMMIGRATION SERVICE-INFORMATION. There was quite a line up at it; we took our place in the queue.

"How is Peggy?" Dad asked.

"I'm afraid she is catching a cold."

"I hope-" Dad said. "Ah, I HOPE-Atchoo!"

"And so are you," Molly said accusingly.

"I don't catch cold," Dad said, wiping his eyes. "That was just a reflex."

"Hmm—" said Molly.

The line up took us past a low balcony. Two boys, my age or older, were leaning on the rail and looking us over. They were colonials and one was trying to grow a beard, but it was pretty crummy.

One turned to the other and said, "Rafe, will you look at what they are sending us these days?"

The other said, "It's sad."

The first one pointed a thumb at me and went on, "Take that one, now—the artistic type, no doubt."

The second one stared at me thoughtfully. "Is it alive?" he asked.

"Does it matter?" the first one answered.

I turned my back on them, whereupon they both laughed. I hate self-panickers.

10. The Promised Land

Mr. Saunders was ahead of us in line. He was crabbing about the weather. He said it was an outrage to expose people the way we had been. He had been with us on the working party, but he had not worked much.

The man at the desk shrugged. "The Colonial Commission set your arrival date; we had nothing to say about it. You can't expect us to postpone winter to suit your convenience."

"Somebody's going to hear about this!"

"By all means." The man at the desk handed him a form, "Next, please!" He looked at Dad and said, "What may I do for you, citizen?"

Dad explained quietly that he wanted to have his family with him. The man shook his head. "Sorry. Next case, please."

Dad didn't give up his place. "You can't separate a man and wife. We aren't slaves, nor criminals, nor animals. The Immigration Service surely has some responsibilities toward us."

The man looked bored. "This is the largest shipload we've ever had to handle. We've made the best arrangements we could. This is a frontier town, not the Astor."

"All I'm asking for is a minimum family space, as described in the Commission's literature about Ganymede."

"Citizen, those descriptions are written back on Earth. Be patient and you will be taken care of."

"Tomorrow?”

"No, not tomorrow. A few days—or a few weeks."

Dad exploded. "Weeks, indeed! Confound it, I'll build an igloo out on the field before I'll put up with this."

"That's your privilege." The man handed Dad a sheet of paper. "If you wish to lodge a complaint, write it out on this."

Dad took it and I glanced at it. It was a printed form—and it was addressed to the Colonial Commission back on Earth! The man went on, "Turn it in to me any time this phase and it will be ultramicrofilmed in time to go back with the mail in the *Mayflower*."

Dad looked at it, snorted, crumpled it up, and stomped away.

Molly followed him and said, "George! Georgel Don't be upset. We'll live through it."

Dad grinned sheepishly. "Sure we will, honey. It's the beauty of the system that gets me. Refer all complaints to the head office—half a billion miles away!"

The next day George's reflexes were making his nose run. Peggy was worse and Molly was worried about her and Dad was desperate. He went off somewhere to raise a stink about the way things were being handled.

Frankly, I didn't have it too bad. Sleeping in a dormitory is no hardship to me; I could sleep through the crack of doom. And the food was everything they had promised.

Listen to this: For breakfast we had corn cakes with syrup and real butter, little sausages, real ham, strawberries with cream so thick I didn't know what it was, tea, all the milk you could drink, tomato juice, honeydew melon, eggs—as many eggs as you wanted.

There was an open sugar bowl, too, but the salt shaker had a little sign on it; DON'T WASTE THE SALT.

There wasn't any coffee, which I wouldn't have noticed if George had not asked for it. There were other things missing, too, although I certainly didn't notice it at the time. No tree fruits, for example—no apples, no pears, no oranges. But who cares when you can get strawberries and watermelon and pineapples and such? There were no tree nuts, too, but there were peanuts to burn.

Anything made out of wheat flour was a luxury, but you don't miss it at first.

Lunch was choice of corn chowder or jellied consomme, cheese souffle, fried chicken, corned beef and cabbage, hominy grits with syrup, egg plant au gratin, little pearl onions scalloped with cucumbers, baked stuffed tomatoes, sweet potato surprise, German-fried Irish potatoes, tossed endive, coleslaw with sour cream, pineapple and cottage cheese with lettuce. Then there was peppermint ice cream, angel berry pie, frozen egg nog, raspberry ice, and three kinds of pudding—but I didn't do too well on the desserts. I had tried to try everything, taking a little of this and a dab of that, and by the time desserts came along I was short on space. I guess I ate too much.

The cooking wasn't fancy, about like Scout camp, but the food was so good you couldn't ruin it. The service reminded me of camp, too—queueing up for servings, no table cloths, no napkins. And the dishes had to be washed; you couldn't throw them away or burn them—they were imported from Earth and worth their weight in uranium.

The first day they took the first fifty kids in the chow line and the last fifty lads to leave the mess hall and made them wash dishes. The next day they changed pace on us and took the middle group. I got stuck both times.

The first supper was mushroom soup, baked ham, roast turkey, hot corn bread with butter, jellied cold meats, creamed asparagus, mashed potatoes and giblet gravy, spinach with hard boiled egg and grated cheese, corn pudding, creamed peas and carrots, smothered lettuce and three kinds of salad. Then there was frozen custard and raisin pudding with hard sauce and Malaga and Thompson grapes and more strawberries with powdered sugar.

Besides that you could drop around to the kitchen and get a snack any time you felt like it.

I didn't go outside much the first three days. It snowed and although we were in Sun phase when we got there it was so murky that you couldn't see the Sun, much less Jupiter. Besides, we were in eclipse part of the time. It was as cold as Billy-be-switched and we still didn't have any cold weather clothes.

I was sent along with the commissary tractor once to get supplies over in town. Not that I saw much of the town—and not that Leda is much of a town, anyhow, to a person who has lived in Diego Borough—but I did see the hydroponics farms. There were three of them, big multiple sheds, named for what they grew in them, "Oahu," "Imperial Valley," and "Iowa." Nothing special about them, just the usual sort of soiless gardening. I didn't hang around because the flicker lighting they use to force the plants makes my eyes burn.

But I was interested in the tropical plants they grew in "Oahu"—I had never seen a lot of them before. I noticed that most of the plants were marked "M-G" while a few were tagged "N. T." I asked one of the gardeners; he said that "M-G" meant "mutation-Ganymede" and the other meant "normal terrestrial."

I found out later that almost everything grown on Ganymede was a special mutation adapted to Ganymede conditions.

Beyond there was another of the big multiple sheds named "Texas"; it had real cows in it and was very interesting. Did you know a cow moves its lower jaw from side to side? And no matter what you've heard, there is not one teat that is especially for cream.

I hated to leave, but "Texas" shed smelled too much like a space ship. It was only a short dash through the snow to the Exchange where all of Leda's retail buying and selling takes place—big and little shops all under one roof.

I looked around, thinking I might take a present back to Peggy, seeing that she was sick. I got the shock of my life. The prices!

If I had had to buy in the Exchange the measly fifty-eight pounds of stuff they had let me bring with me, it would have cost—I'm telling the truth!—several thousand credits. Everything that was imported from Earth cost that kind of money. A tube of beard cream was two hundred and eighty credits.

There were items for sale made on Ganymede, hand work mostly, and they were expensive, too, though not nearly as expensive as the stuff brought up from Earth.

I crept out of that place in a hurry. As nearly as I could figure the only thing cheap on Ganymede was food.

The driver of the commissary tractor wanted to know where I had been when there was loading to do? "I should have left you behind to walk back," he groused. I didn't have a good answer so I didn't say anything.

They shut off winter soon after that. The heat trap was turned on full force, the skies cleared and it was lovely. The first view I got of the Ganymede sky was a little after dawn next Sun phase. The heat trap made the sky a pale green but Jupiter shone right through it, ruddy orange, and big. Big and beautiful—I've never gotten tired of looking at Jupiter!

A harvest moon looks big, doesn't it? Well, Jupiter from Ganymede is sixteen or seventeen times as wide as the Moon looks and it covers better than two hundred and fifty times as much sky. It hangs there in the sky, never rising, never setting, and you wonder what holds it up.

I saw it first in half-moon phase and I didn't see how it could be any more beautiful than it was. But the Sun crept across the sky and a day later Jupiter was a crescent and better than ever. At the middle of Sun phase we went into eclipse, of course, and Jupiter was a great red, glowing ring in the sky, brightest where the Sun had just passed behind it.

But the best of all is during dark phase.

Maybe I ought to explain how the phases work; I know I didn't understand it until I came to Ganymede. Ganymede is such a small planet and so close to its primary that it is tide-locked, just the way the Moon is; it keeps one face always toward Jupiter and therefore Jupiter does not move in the sky. The sun moves, the other Jovian moons move, the stars move—but not good old Jove; it just hangs there.

Ganymede takes just over an Earth week to revolve around Jupiter, so we have three and a half days of sunlight and then three and a half days of darkness. By Ganymede time the period of rotation is exactly one week; twenty-four Ganymede hours is one seventh of the period. This arrangement makes a Ganymede minute about a standard second longer than an Earth minute, but who cares? Except scientists, of course, and they have clocks that keep both sorts of time.

So here is the way a week goes on Ganymede: the Sun rises at Sunday midnight every week; when you get up Monday morning it's a little above the eastern horizon and Jupiter is in half-moon phase. The

Sun keeps climbing higher and about suppertime on Tuesday it slides behind Jupiter and Ganymede is in eclipse; eclipse can last an hour or so up to a maximum of about three hours and a half. The stars come out and Jupiter shows that beautiful red ring effect because of its thick atmosphere. Then it's light again by bedtime Tuesday.

At noon on Thursday the Sun goes down and we start the dark phase; that's best of all. Jupiter's colors really show and the other moons are easier to see. They can be almost anywhere and in almost any combination.

Jupiter and its satellites is sort of a miniature solar system; from Ganymede you have a front seat for the show. There is always something new in the sky. Besides the eleven "historical" satellites ranging in size from Ganymede down to Jay-ten or Nicholson-Alpha, which is a ball of rock and ice only fifteen miles thick, there are maybe a dozen more a few miles or less in diameter but big enough to be called moons and heaven knows how many smaller than that. Sometimes these little ones come close enough to Ganymede to show discs; they mostly have very eccentric orbits. Any time there will be several that are conspicuous lights in the sky, like the planets are from Earth.

Io, and Europa, and Callisto are always discs. When Europa passes between Jupiter and Ganymede it is as big in the sky as the Moon is from Earth. It actually is as big as the Moon and at that time it is only about a quarter of a million miles away.

Then it swings around to the far side and is very much smaller— more than a million miles away and less than a quarter as wide. Io goes through the same sorts of changes, but it never gets as big.

When Io and Europa pass between Ganymede and Jupiter you can see them move with your naked eye, chasing their shadows or running ahead of them, depending on the phase. Io and Europa, being inside Ganymede's orbit, never get very far away from Jupiter, Io sticks within a couple of diameters of the big boy; Europa can get about sixty degrees away from it. Callisto is further out than Ganymede and goes all around the sky.

It's a show you never get tired of. Earth's sky is dull.

By six o'clock Saturday morning Jupiter would be in full phase and it was worthwhile to get up to see it. Not only was it the most gorgeous thing I had ever seen, but there was always the reverse eclipse, too, and you could see Ganymede's shadow, a little round black dot, crawling across old Jupiter's face. It gave you an idea of just how colossally big Jupiter was— there was the shadow of your whole planet on it and it wasn't anything more than a big freckle.

Jupiter is ninety thousand miles across the equator, eighty-four thousand from pole to pole. Ganymede is only a little better than three thousand.

For the next couple of days after full phase Jupiter would wane and at Sunday midnight it would be in half phase again, the Sun would rise and a new light phase would start. One thing I expected but didn't find was dim sunlight. Jupiter is a long way out; it gets only one twenty-seventh the sunlight that Earth does. I expected that we would always be in a sort of twilight.

It didn't work out that way. It seemed to me that the sunlight was just as bright as on Earth.

George says that this is an optical illusion and that it has to do with the way the human eye works, because the iris of the eye simply shuts out light it doesn't need. Bright desert sunlight back on Earth is maybe ten thousand foot-candles; the same thing on Ganymede is only four hundred foot-candles. But really good bright artificial light is only twenty-five foot candles and a "well-lighted" room is seldom that bright.

If you've got only a two-gallon bucket does it make any difference whether you fill it from the ocean or from a small pond? Sunlight on Ganymede was still more than the eye could accept, so it looked just as bright as sunlight on Earth.

I did notice, however, that it was almost impossible to get a sunburn.

11. "Share Croppers"

George got us a place to live when we had been there about a week, which was a lot better than most of the other immigrants did, but it didn't suit him and it didn't suit Molly and it didn't really suit me.

The trouble was he had to take a job as a staff engineer with the colonial government to get quarters for us—and that meant he would be too tied down to prove a piece of land for homestead. But it did carry private family quarters with it, if you could call two rooms twelve feet square a home.

It was like this: the colony was made up of homesteaders and townies. The townies worked for the government and lived in government-owned buildings —except for a very few who were in private trade. The townies included the Colonial Commission representative, Captain Hattie the pilot, the hydroponics engineers, the hospital staff, the engineers who ran the power plant and the heat trap, the staff of the local office of Project Jove, and everybody else who worked at anything but land farming. But most of the colonials were homesteaders and that's what George had meant us to be. Like most everybody, we had come out there on the promise of free land and a chance to raise our own food.

There was free land, all right, a whole planet of it. Putting up a house and proving a farm was another matter.

Here is the way it was supposed to work: A colonist comes out from Earth with his family and lands at Leda. The Colonial Commission gives him an apartment in town on arrival, helps him pick out a piece of land to improve and helps him get a house up on it. The Commission will feed him and his family for one Earth year—that is, two Ganymede years—while he gets a couple of acres under cultivation. Then he has ten G-years in which to pay back the Commission by processing at least twenty acres for the Commission—and he is allowed to process as much land for himself as for the Commission during the time he is paying what he owes. At the end of five Earth years he owns a tidy little farm, free and clear. After that, he can spread out and acquire more land, get into trade, anything he likes. He has his toehold and has paid off his debt.

The Colonial Commission had a big expensive investment in having started the atmosphere project and made the planet fit to live on in the first place. The land processed by the colonists was its return on the investment; the day would come when the Colonial Commission would own thousands of acres of prime farmland on Ganymede which it could then sell Earthside to later settlers ... if you wanted to emigrate from Earth you would have to pay for the privilege and pay high. People like us would not be able to afford it.

By that time, although Ganymede would be closed to free immigration, Callisto would have an atmosphere and pioneers could move in there and do it all over again. It was what the bankers call "Self-liquidating," with the original investment coming from Earth.

But here is the way it actually did work out: when we landed there were only about thirty thousand people on Ganymede and they were geared to accept about five hundred immigrants an Earth year, which was about all the old-type ships could bring out. Remember, those power-pile ships took over five years for the round trip; it took a fleet of them to bring in that many a year.

Then the Star Rover II was renamed the *Mayflower* and turned over to the Colonial Commission, whereupon six thousand people were dumped on them all at once. We were about as welcome as unexpected overnight guests when there is sickness in the family.

The colonists had known, for a full Earth year, that we were coming, but they had not been able to protest. While Earth Sender can punch a message through to Ganymede anytime except when the Sun is spang in the way, at that time the best radio the colony could boast had to relay via Mars to reach Earth—and then only when Mars was at its closest approach to Jupiter— which it wasn't.

I've got to admit that they did what they could for us. There was plenty to eat and they had managed to fix up places for us to sleep. The Immigrants' Receiving Station had formerly been split up into family apartments; they had torn out the partitions and used the partitions to build bunks for the big dormitories we were stacked in. They had moved their town hall and made it over into a mess hall and kitchen for us. We were in out of the weather and well fed, even if we were about as crowded as we had been in the *Mayflower*.

You may ask why, with a year to get ready, they had not built new buildings for us? Well, we asked the same thing, only we weren't asking, we were demanding, and we were sore about it!

They hadn't built new buildings because they could not. Before the Earthmen moved in, Ganymede was bare rock and ice. Sure, everybody knows that—but does everybody know what that means? I'm sure I didn't.

No lumber. No sheet metal. No insulation. No wires, No glass. No pipe. The settlers in North America built log cabins—no logs.

The big hydroponics sheds, the Receiving Station and a few other public buildings had been built with materials lifted a half a billion miles from Earth. The rest of Leda and every homesteader's farm house had been built the hard way, from country rock. They had done their best for us, with what they had.

Only we didn't appreciate it.

Of course we should not have complained. After all, as George pointed out, the first California settlers starved, nobody knows what happened to the Roanoke Colony, and the first two expeditions to Venus died to the last man. We were safe.

Anyhow, even if we had to put up with barracks for a while, there was all that free land, waiting for us.

On close inspection, it looked as if it would have to wait quite a while. That was why George had given in and taken a staff engineering job. The closest land to town open to homesteading was nine miles away. To find enough land for six thousand people meant that most of them would have to go about eighteen to twenty miles away.

"What's twenty miles? A few minutes by tube, an up-and-down hop for a copter—brother, have you ever walked twenty miles? And then walked back again?

It wasn't impossible to settle six thousand people that far from town; it was just difficult—and slow. The pioneer explorer used to set out with his gun and an axe; the settler followed by hitching his oxen to a wagonload of furniture and farm tools. Twenty miles meant nothing to them.

They weren't on Ganymede.

The colony had two tractor trucks; another had come in the *Mayflower*. That's all the transportation there was on the whole planet —not just to settle six thousand people but for the daily needs of thirty thousand people who were there ahead of us.

They explained it all to us at a big meeting of heads of families. I wasn't supposed to be there but it was held outdoors and there was nothing to stop me. The chief ecologist and the chief engineer of the planet were there and the chairman of the colony council presided. Here was the proposition:

What Ganymede really needed was not more farmers, but manufacturing. They needed prospectors and mines and mills and machine shops. They needed all the things you can make out of metal and which they simply could not afford to import from Earth. That's what they wanted us to work on and they would feed any of us who accepted, not just for a year, but indefinitely.

As for any who insisted on homesteading—well, the land was there; help ourselves. There wasn't enough processing machinery to go around, so it might be two or three years before any particular immigrant got a chance to process his first acre of ground.

Somebody stood up near the front of the crowd and yelled, "We've been swindled!"

It took Mr. Tolley, the chairman, quite a while to calm them down. When they let him talk again, he said, "Maybe you have been swindled, maybe you haven't. That's a matter of opinion. I'm quite willing to concede that conditions here are not the way they were represented to you when you left Earth. In fact—"

Somebody yelled. "That's mighty nice of you!" only the tone was sarcastic.

Mr. Tolley looked vexed. "You folks can either keep order, or I'll adjourn this meeting."

They shut up again and he went on. Most of the present homesteaders had processed more land than they could cultivate. They could use hired hands to raise more crops. There was a job waiting for every man, a job that would keep him busy and teach him Ganymede farming—and feed his wife and family-while he was waiting his turn to homestead.

You could feel a chill rolling over the crowd when the meaning of Mr. Tolley's words sunk in. They felt the way Jacob did when he had labored seven years and then was told he would have to labor another seven years to get the girl he really wanted. I felt it myself, even though George had already decided on the staff job.

A man spoke up. "Mr. Chairman!"

"Yes? Your name, please."

"Name of Saunders. I don't know how the rest of them feel, but I'm a farmer. Always have been. But I said 'farmer,' not sharecropper. I didn't come here to hire out to no boss. You can take your job and do what you see fit with it. I stand on my rights!"

There was scattered applause and the crowd began to perk up. Mr. Tolley looked at him and said, "That's your privilege, Mr. Saunders."

"Huh? Well, I'm glad you feel that way, Mr. Chairman. Now let's cut out the nonsense. I want to know two things: what piece of land am I going to get and when do I lay hands on some machinery to start putting it into condition?"

Mr. Tolley said, "You can consult the land office about your first question. As to the second, you heard the chief engineer say that he estimates the average wait for processing machinery will be around twenty-one months."

"That's too long."

"So it is, Mr. Saunders."

"Well, what do you propose to do about it?" Mr. Tolley shrugged and spread his hands. "I'm not a magician. We've asked the Colonial Commission by urgent message going back on the *Mayflower* not to send us any more colonists on the next trip, but to send us machinery. If they agree, there may be some relief from the situation by next winter. But you have seen—all of you have already seen—that the Colonial Commission makes decisions without consulting us. The first trip of the *Mayflower* should have been all cargo; you folks should have waited."

Saunders thought about it. "Next winter, eh? That's five months away. I guess I can wait—I'm a reasonable man. But no sharecropping; that's outl"

"I didn't say you could start homesteading in five months, Mr. Saunders. It may be twenty-one months or longer."

"No, indeedy!"

"Suit yourself. But you are confronted with a fact, not a theory. If you do have to wait and you won't work for another farmer, how do you propose to feed yourself and your family in the mean time?"

Mr. Saunders looked around and grinned, "Why, in that case, Mr. Chairman, I guess the government will just have to feed us until the government can come through on its end of the deal. I know my rights."

Mr. Tolley looked at him as if he had just bitten into an apple and found Saunders inside. "We won't let your children starve," he said slowly, "but as for you, you can go chew rocks. If you won't work, you won't eat."

Saunders tried to bluster. "You can't get away with it! I'll sue the government and I'll sue you as the responsible government official You can't—"

"Shut up!" Mr. Tolley went on more quietly, speaking to all of us. "We might as well get this point straight. You people have been enticed into coming out here by rosy promises and you are understandably disappointed. But your contract is with the Colonial Commission back on Earth. But you have no contract with the common council of Ganymede, of which I am chairman, and the citizens of Ganymede owe you nothing. We are trying to take care of you out of common decency.

"If you don't like what we offer you, don't start throwing your weight around with me; I won't stand for it. Take it up with the representative of the Immigration Service. That's what he is here for. Meeting's adjourned!"

But the immigration representative wasn't there; he had stayed away from the meeting.

12. Bees and Zeroes

We had been swindled all right. It was equally clear that there was no help for it. Some of the immigrants did see the Colonial Commission representative, but they got no comfort out of him. He had resigned, he said, fed up with trying to carry out impossible instructions five hundred million miles from the home office. He was going home as soon as his relief arrived.

That set them off again; if he could go home so could they. The *Mayflower* was still in orbit over us, taking on cargo. A lot of people demanded to go back in her.

Captain Harkness said no, he had no authority to let them deadhead half way across the system. So they landed back on the Commission representative, squawking louder than ever.

Mr. Tolley and the council finally settled it. Ganymede wanted no soreheads, no weak sisters. If the Commission refused to ship back those who claimed they were gypped and didn't want to stay, then the next shipload wouldn't even be allowed to land. The representative gave in and wrote Captain Harkness out a warrant for their passage.

We held a family powwow over the matter, in Peggy's room in the hospital—it had to be there because the doctors were keeping her in a room pressurized to Earth normal

Did we stay, or did we go back? Dad was stuck in a rut. Back Earthside he at least had been working for himself; here he was just an employee. If he quit bis job and elected to homestead, it meant working two or three G-years as a field hand before we could expect to start homesteading.

But the real rub was Peggy. In spite of having passed her physical examination Earthside she hadn't adjusted to Ganymede's low pressure. "We might as well face it," George said to Molly. "We've got to get Peg back to the conditions she's used to."

Molly looked at him; his face was as long as my arm. "George, you don't want to go back, do you?"

"That's not the point, Molly. The welfare of the kids comes first." He turned to me and added, "You're not bound by this, Bill. You are big enough to make up your own mind. If you want to stay, I am sure it can be arranged."

I didn't answer right away. I had come into the family get-together pretty disgusted myself, not only because of the run-around we had gotten, but also because of a run-in I had had with a couple of the Colonial kids. But you know what it was that swung me around? That pressurized room. I had gotten used to low pressure and I liked it. Peggy's room, pressurized to Earth normal, felt like swimming in warm soup. I could hardly breath. "I don't think I want to go back," I said.

Peggy had been sitting up in bed, following the talk with big eyes, like a little lemur. Now she said, "I don't want to go back, eitherl"

Molly patted her hand and did not answer her, "George," she said, "I've given this a lot of thought You don't want to go back, I know. Neither does Bill But we don't all have to go back. We can—"

"That's out, Molly," Dad answered firmly. "I didn't marry you to split up. If you have to go back, I go back."

"I didn't mean that. Peggy can go back with the O'Farrells and my sister will meet her and take care of her at the other end. She wanted me to leave Peggy with her when she found I was determined to go. It will work out all right." She didn't look at Peggy as she said it.

"But, Molly!" Dad said.

"No George," she answered, "I've thought this all out. My first duty is to you. It's not as if Peggy wouldn't be well taken care of; Phoebe will be a mother to her and—"

By now Peggy had caught her breath. "I don't want to go live with Aunt Phoebe!" she yelled and started to bawl.

George said, "It won't work, Molly."

Molly said, "George, not five minutes ago you were talking about leaving Bill behind, on his own."

"But Bill is practically a man!"

"He's not too old to be lonesome. And I'm not talking about leaving Peggy alone; Phoebe will give her loving care. No, George, if the womenfolk ran home at the first sign of trouble there never would be any pioneers. Peggy has to go back, but I stay."

Peggy stopped her blubbering long enough to say, "I won't go back! I'm a pioneer, too—ain't I, Bill?"

I said, "Sure kid, sure!" and went over and patted her hand. She grabbed onto mine.

I don't know what made me say what I did then. Goodness knows the brat had never been anything but a headache, with her endless questions and her insistence that she be allowed to do anything I did. But I heard myself saying, "Don't worry, Peggy. If you go. back, I'll go with you."

Dad looked at me sharply, then turned to Peggy. "Bill spoke hastily, Baby. You mustn't hold him to that."

Peggy said, "You did so mean it, didn't you, Bill?"

I was regretting it already. But I said, "Sure, Peggy."

Peggy turned back to Dad. "See? But it doesn't matter; we're not going back, not any of us. Please Daddy —I'll get well, I promise you I will. I'm getting better every day."

Sure, she was—in a pressurized room. I sat there, sweating, and wishing I had kept my big mouth shut. Molly said, "It defeats me, George. What do you think?"

"Mmmm—"

"Well?"

"Uh, I was thinking we could pressurize one room in our quarters. I could rig some sort of an impeller in the machine shop."

Peggy was suddenly all over her tears. "You mean I can get out of the hospital?"

"That's the idea, Sugar, if Daddy can work it."

Molly looked dubious. "That's no answer to our problems, George."

"Maybe not." Dad stood up and squared his shoulders. "But I have decided one thing; we all go, or we'll all stay. The Lermers stand together. That's settled."

Homesteading wasn't the only thing we had been mistaken about. There was Scouting on Ganymede even if the news hadn't gotten back to Earth. There hadn't been any meetings of the *Mayflower* troops after we landed; everybody had been just too busy to think about it. Organized Scouting is fun, but sometimes there just isn't time for it.

There hadn't been any meetings of the Leda Troop, either. They used to meet in their town hall; now we had their town hall as a mess hall, leaving them out in the cold. I guess that didn't tend to make them fee! chummy towards us.

I ran into this boy over in the Exchange. Just as he was passing me I noticed a little embroidered patch on his chest. It was a homemade job and not very good, but I spotted it. "Hey!" I said.

He stopped. " 'Hey' yourself! Were you yelling at me?"

"Uh, yes. You're a Scout, aren't you?"

"Certainly."

"So am I. My name's Bill Lermer. Shake." I slipped him the Scout grip.

He returned it. "Mine's Sergei Roskov." He looked me over. "You're one of the Johnny-Come-Latelies, aren't you?"

"I came over in the *Mayflower*" I admitted.

"That's what I meant. No offense— I was born Earthside, myself. So you used to be a Scout, back home. That's good. Come around to meeting and we'll sign you up again."

"I'm still a Scout," I objected.

"Huh? Oh, I get you—'Once a Scout, always a Scout.' Well, come around and we'll make it official."

That was a very good time for me to keep my lip zipped. But not me—oh, no! When comes the Tromp of Doom, I'll still be talking instead of listening. I said, "It's as official as it can be. I'm senior patrol leader, Baden-Powell Troop."

"Huh? You're kind of far away from your troop, aren't you?"

So I told him all about it. He listened until I was through, then said quietly, "And you laddie bucks had the nerve to call yourselves the 'Boy Scouts of Ganymede.' Anything else you would like to grab? You already have our meeting hall; maybe you'd like to sleep in our beds?"

"What do you mean?"

"Nothing." He seemed to be thinking it over. "Just a friendly warning, Bill——"

"Huh?"

"There is only one senior patrol leader around here–and you're looking right at him. Don't make any mistake about it. But come on around to meeting anyhow," he added. "You'll be welcome. We're always glad to sign up a new tenderfoot."

I went back to the Receiving Station and looked up Hank Jones and told him all about it. He looked at me admiringly. "William, old son," he said, "I've got to hand it to you. It takes real talent to louse things up that thoroughly. It's not easy."

"You think I've messed things up?"

"I hope not. Well, let's look up Doc Archibald and see what can be done."

Our troop master was holding clinic; we waited until the patients were out of the way, then went in. He said, "Are you two sick, or just looking for a ticket to gold brick?"

"Doc," I said, "we were wrong. There are so Scouts on Ganymede."

"So I know," he answered.

I said, "Huh?"

"Mr. Ginsberg and Mr. Bruhn and I have been negotiating with the senior Scout officials here to determine just how our troops will be taken into the parent organization. It's a bit complicated as there are actually more *Mayflower* Scouts than there are in the local troop. But they have jurisdiction, of course."

I said, "Oh."

"Well have a joint meeting in a few days, after we get the rules ironed out."

I thought it over and decided I had better tell him what had happened, so I did.

He listened, not saying anything. Finally I said, "Hank seems to think I've messed things up. What do you think, Doc?"

"Mmmm—" he said. "Well, I hope he's wrong. But I think I may say you haven't helped the situation any."

I didn't know what to say. "Don't look so tragic about it," he urged. "You'll get well. Now run along and forget it. It may not make any difference."

But it did make a difference. Doc and the others had been pitching for our troops to be recognized as properly constituted troops, with all ratings acknowledged. But after Sergei spread the word around, the regular Ganymede Scouts all squawked that we were nothing but a bunch of tenderfeet, no matter what we had been back on Earth. The place for us to start was the bottom; if we were any good, we could prove it— by tests.

It was compromised; George says things like that are always compromised. Ratings were confirmed on probation, with one G-year to make up any tests that were different. Our troops were kept intact But there was one major change:

All patrol leaders had to be from the original Ganymede Scouts; they were transferred from the Leda troop. I had to admit the justice of it. How could I be a patrol leader on Ganymede when I was still so green that I didn't know northwest from next week? But it didn't set well with the other fellows who had been patrol leaders when the word got around that I was responsible for the flies in the soup.

Hank talked it over with me. "Billy my boy," he told me, "I suppose you realize that you are about as popular as ants at a picnic?"

"Who cares?" I objected.

"You care. Now is the time for all good men to perform an auto da fé"

"What in great blazing moons is an auto da fé?"

"In this case it means for you to transfer to the Leda Troop."

"Have you gone crazy? You know what those guys think of us, especially me. I'd be lucky to get away with my life."

"Which just goes to show how little you know about human nature. Sure, it would be a little rough for a while, but it's the quickest way to gain back some respect."

"Hank, you really are nuts. In that troop I really would be a tenderfoot—and how!"

"That's just the point," Hank went on quietly, "We're all tenderfeet—only here in our own troop it doesn't show. If we stay here, we'll keep on being tenderfeet for a long time. But if we transfer, we'll be with a bunch who really know their way around—and some of it will rub off on us."

"Did you say 'we'?"

"I said 'we'."

"I catch on. You want to transfer, so you worked tip this gag about how I ought to do so, so you would have company. A fine chum you are!"

He just grinned, completely unembarrassed. "Good old Bill! Hit him in the head eight or nine times and he can latch on to any idea. It won't be so bad, Bill. In precisely four months and nine days we won't be tenderfeet; we'll be old timers."

"Why the exact date?"

"Because that is the due date of the *Mayflower* on her next trip—as soon as they arrive they'll be the Johnny-Come-Latelies."

"Oh!"

Anyhow, we did it—and it was rough at first, especially on me… like the night they insisted that I tell them how to be a hero. Some twerp had gotten hold of the meteorite story. But the hazing wasn't too bad and Sergei put a stop to it whenever he caught them at it. After a while they got tired of it.

Sergei was so confounded noble about the whole thing that I wanted to kick him.

The only two merit badges to amount to anything that stood in the way of my getting off probation and back up to my old rating of Eagle Scout were agronomy and planetary ecology, Ganymede style. They were both tough subjects but well worth studying. On Ganymede you had to know them to stay alive, so I dug in.

Ecology is the most involved subject I ever tackled. I told George so and he said possibly politics was worse—and on second thought maybe politics was just one aspect of ecology. The dictionary says ecology is "the science of the interrelations of living organisms and their environment." That doesn't get you much, does it? It's like defining a hurricane as a movement of air.

The trouble with ecology is that you never know where to start because everything affects everything else. An unseasonal freeze in Texas can affect the price of breakfast in Alaska and that can affect the salmon catch and that can affect something else. Or take the old history book case: the English colonies took England's young bachelors and that meant old maids at home and old maids keep cats and the cats catch field mice and the field mice destroy the bumble bee nests and bumble bees are necessary to clover and cattle eat clover and cattle furnish the roast beef of old England to feed the soldiers to protect the colonies that the bachelors emigrated to, which caused the old maids.

Not very scientific, is it? I mean you have too many variables and you can't put figures to them. George says that if you can't take a measurement and write it down in figures you don't know enough about a thing to call what you are doing with it "science" and, as for him, hell stick to straight engineering, thank you.

But there were some clear cut things about applied ecology on Ganymede which you could get your teeth into. Insects, for instance—on Ganymede, under no circumstances do you step on an insect. There were no insects on Ganymede when men first landed there. Any insects there now are there because the bionomics board planned it that way and the chief ecologist okayed the invasion. He wants that insect to stay right where it is, doing whatever it is that insects do; he wants it to wax and grow fat and raise lots of little insects.

Of course a Scout doesn't go out of his way to step on anything but black widow spiders and the like, anyhow—but it really brings it up to the top of your mind to know that stepping on an insect carries with it a stiff fine if you are caught, as well as a very pointed lecture telling you that the colony can get along very nicely without you but the insects are necessary.

Or take earthworms. I know they are worth their weight in uranium because I was buying them before I was through. A farmer can't get along without earthworms.

Introducing insects to a planet isn't as easy as it sounds. Noah had less trouble with his animals, two by two, because when the waters went away he still had a planet that was suited to his load. Ganymede isn't Earth. Take bees—we brought bees in the *Mayflower* but we didn't turn them loose; they were all in the shed called "Oahu" and likely to stay there for a smart spell. Bees need clover, or a reasonable facsimile. Clover would grow on Ganymede but our real use for clover was to fix nitrogen in the soil and thereby refresh a worn out field. We weren't planting clover yet because there wasn't any nitrogen in the air to fix—or not much.

But I am ahead of my story. This takes us into the engineering side of ecology. Ganymede was bare rock and ice before we came along, cold as could be, and no atmosphere to speak of—just traces of ammonia and methane. So the first thing to do was to give it an atmosphere men could breathe.

The material was there—ice. Apply enough power, bust up the water molecule into hydrogen and oxygen. The hydrogen goes up—naturally—and the oxygen sits on the surface where you can breathe it. That went on for more than fifty years.

Any idea how much power it takes to give a planet the size of Ganymede three pressure-pounds of oxygen all over its surface?

Three pressure-pounds per square inch means nine mass pounds, because Ganymede has only one third the surface gravitation of Earth. That means you have to start with nine pounds of ice for every square inch of Ganymede—and that ice is cold to start with, better than two hundred degrees below zero Fahrenheit

First you warm it to die freezing point, then you melt it, then you dissociate the water molecule into oxygen and hydrogen—not in the ordinary laboratory way by electrolysis, but by extreme heat in a mass converter. The result is three pressure pounds of oxygen and hydrogen mix for that square inch. It's not an explosive mixture, because the hydrogen, being light, sits on top and the boundary layer is too near to being a vacuum to maintain burning.

But to carry out this breakdown takes power and plenty of it—65,000 Btus for each square inch of surface, or for each nine pounds of ice, whichever way you like it. That adds up; Ganymede may be a small planet but it has 135,000,000,000,000,000 square inches of surface. Multiply that by 65,000 Btus for each square inch, then convert British thermal units to ergs and you get:

92,500,000,000,000,000,000,000,000,000,000 ergs.

Ninety-two-and-a-half million billon quadrillion ergs! That figure is such a beauty that I wrote it down in my diary and showed it to George.

He wasn't impressed. George said that all figures were the same size and nobody but a dimwit is impressed by strings of zeroes. He made me work out what the figure meant in terms of mass-energy, by the good old $E = MC^2$ formula, since mass-energy converters were used to give Ganymede its atmosphere.

By Einstein's law, one gram mass equals $9x10^{20}$ ergs, so that fancy long figure works out to be $1.03x10^{11}$ grams of energy, or 113,200 tons. It was ice, mostly, that they converted into energy, some of the same ice that was being turned into atmosphere—though probably some country rock crept in along with the ice. A mass converter will eat anything.

Let's say it was all ice; that amounts to a cube of ice a hundred and sixty feet on an edge. That was a number I felt I could understand.

I showed my answer to George and he still was not impressed. He said I ought to be able to understand one figure just as easily as the other, that both meant the same thing, and both figures were the same size.

Don't get the idea that Ganymede's atmosphere was made from a cube of ice 160 feet on a side; that was just the mass which had to be converted to energy to turn the trick. The mass of ice which was changed to oxygen and hydrogen would, if converted back into ice, cover the entire planet more than twenty feet deep —like the ice cap that used to cover Greenland.

George says all that proves is that there was a lot of ice on Ganymede to start with and that if we hadn't had mass converters we could never have colonized it. Sometimes I think engineers get so matter of fact that they miss a lot of the juice in life.

With three pressure-pounds of oxygen on Ganymede and the heat trap in place and the place warmed up so that blood wouldn't freeze in your veins colonists could move in and move around without wearing space suits and without living in pressure chambers. The atmosphere project didn't stop, however. In the first place, since Ganymede has a low escape speed, only 1.8 miles per second compared with Earth's 7 m/s, the new atmosphere would gradually bleed off to outer space, especially the hydrogen, and would be lost— in a million years or so. In the second place, nitrogen was needed.

We don't need nitrogen to breathe and ordinarily we don't think much about it. But it takes nitrogen to make protein—muscle. Most plants take it out of the ground; some plants, like clover and alfalfa and beans, take it out of the air as well and put it back into the ground. Ganymede's soil was rich in nitrogen; the original scanty atmosphere was partly ammonia—but the day would come when we would have to put the nitrogen back in that we were taking out. So the atmosphere project was now turned to making nitrogen.

This wasn't as simple as breaking up water; it called for converting stable isotope oxygen-16 into stable isotope nitrogen-14, an energy consuming reaction probably impossible in nature—or so the book said—and long considered theoretically impossible. I hadn't had any nucleonics beyond high school physics, so I skipped the equations. The real point was, it could be done, in the proper sort of a mass-energy converter, and Ganymede would have nitrogen in her atmosphere by the time her fields were exhausted and had to be replenished.

Carbon dioxide was no problem; there was dry ice as well as water ice on Ganymede and it had evaporated into the atmosphere long before the first homesteader staked out a claim.

Not that you can start farming with oxygen, carbon dioxide, and a stretch of land. That land was dead. Dead as Christopher Columbus. Bare rock, sterile, no life of any sort—and there never had been any life in it. It's a far piece from dead rock to rich, warm, black soil crawling with bacteria and earthworms, the sort of soil you have to have to make a crop.

It was the job of the homesteaders to make the soil.

See how involved it gets? Clover, bees, nitrogen, escape speed, power, plant-animal balance, gas laws, compound interest laws, meteorology—a mathematical ecologist has to think of everything and think of it ahead of time. Ecology is explosive; what seems like a minor and harmless invasion can change the whole balance. Everybody has heard of the English sparrow. There was the Australian jack rabbit, too, that darn near ate a continent out of house and home. And the Caribbean mongoose that killed the chickens it was supposed to protect. And the African snail that almost ruined the Pacific west coast before they found a parasite to kill it.

You take a harmless, useful insect, plant, or animal to Ganymede and neglect to bring along its natural enemies and after a couple of seasons you'll wish you had imported bubonic plague instead.

But that was the chief ecologist's worry; a farmer's job was engineering agronomy—making the soil and then growing things in it.

That meant taking whatever you came to—granite boulders melted out of the ice, frozen lava flows, pumice, sand, ancient hardrock—and busting it up into little pieces, grinding the top layers to sand, pulverizing the top few inches to flour, and finally infecting the topmost part with a bit of Mother Earth herself–then nursing what you had to keep it alive and make it spread. It wasn't easy.

But it was interesting. I forgot all about my original notion of boning up on the subject just to pass a merit badge test. I asked around and found out where I could see the various stages going on and went out and had a look for myself. I spent most of one light phase just looking.

When I got back to town I found that George had been looking for me. "Where in blazes have you been?" he wanted to know.

"Oh, just out and around," I told him, "seeing how the 'steaders do things."

He wanted to know where I had slept and how I had managed to eat? "Bill, it's all very well to study for your merit badges but that's no reason to turn into a tramp," he objected. "I guess I have neglected you lately—I'm sorry." He stopped and thought for a moment, then went on, "I think you had better enter school here. It's true they haven't much for you, but it would be better than running around at loose ends."

"George?"

"Yes, that's probably the best-huh?"

"Have you completely given up the idea of homesteading?"

Dad looked worried. "That's a hard question, Bill. I still want us to, but with Peggy sick—it's difficult to say. But our name is still in the hat. I'll have to make up my mind before the drawing."

"Dad, I'll prove it."

"Eh?"

"You keep your job and take care of Peggy and Molly. I'll make us a farm."

13. Johnny Appleseed

The drawing of our division took place three weeks later; the next day George and I walked out to see what we had gotten. It was west of town out through Kneiper's Ridge, new country to me; I had done my exploring east of town, over toward the power plant, where most of the proved land was located.

We passed a number of farms and some of them looked good, several acres in cultivation, green and lush, and many more acres already chewed level. It put me in mind of Illinois, but there was something missing. I finally figured out what it was—no trees.

Even without trees it was beautiful country. On the right, north of us, were the foothills of the Big Rock Candy Mountains. Snow-covered peaks thrust up beyond them, twenty or thirty miles away. On the left, curving in from the south and closer than it came to Leda, was Laguna Serenidad. We were a couple of hundred feet higher than the lake. It was a clear day and I tried to see the far shore, but I couldn't be sure.

It was a mighty cheerful scene. Dad felt it, too. He strode along, whistling "Beulah Land" off key. I get my musical talent from Anne.

He broke off and said, "Bill, I envy you."

I said, "We'll all be together yet, George. I'm the advance guard." I thought a bit and said, "George, do you know what the first thing I raise is going to be–after I get some food crops in?"

"What?"

"I'm going to import some seed and raise you some tobacco."

"Oh, no, Son!"

"Why not?" I knew he was touched by it, because he called me 'Son'. "I could do it, as well as not."

"It's a kind thought, but we'll have to stick to the main chance. By the time we can afford that, I will have forgotten how to light a pipe. Honest, I don't miss it."

We slogged along a bit further, not saying anything but feeling close together and good. Presently the road played out. Dad stopped and took his sketch map out of his pouch. "This must be about it."

The sketch showed where the road stopped, with just a dotted line to show where it would be, some day. Our farm was outlined on it, with the nearest comer about half a mile further along where the road ought to be and wasn't. By the map, the edge of our property—or what would be ours if we proved it—ran along the north side of the road about a quarter of a mile and from there back toward the foothills. It was marked "Plot 117-H-2" and had the chief engineer's stamp on it.

Dad was staring at where the road ended. There was a lava flow right across it, high as my head and rough as a hard winter in Maine. "Bill," he said, "How good an Indian are you?"

"Fair, I guess."

"We'll have to try to pace it off and hold a straight line due west."

But it was almost impossible to do it. We struggled and slipped on the lava and made detours. Lava looks soft and it isn't. Dad slipped and skinned his shin and I discovered that I had lost track of how many paces we had come. But presently we were across the flow and in a boulder field. It was loose rubble, from pieces the size of a house down to stuff no bigger than your fist—stuff dropped by the ice when it melted and formed Laguna Serenidad.

George says that Ganymede must have had a boisterous youth, covered with steam and volcanoes.

The boulder field was somewhat easier going but it was even harder to hold a straight line. After a bit Dad stopped. "Bill," he said, "do you know where we are?"

"No," I admitted, "but we aren't really lost. If we head back east we are bound to come to proved ground."

"Perhaps we had better."

"Wait a minute." There was a particularly big boulder ahead of us. I picked a way and managed to scramble to the top with nothing worse than a cut on my hand. I stood up. "I can see the road," I told Dad. "We're north of where we ought to be. And I think maybe we've come too far." I marked a spot with my eye and came down.

We worked south the amount I thought was right and then headed east again. After a bit I said, "I guess we missed it, George. I'm not much of an InHe said, "So? What's this?" He was a little ahead of me and had stopped.

It was a cairn with a flat rock on top. Painted on it was: "117-H-2, SE corner."

We had been on our farm for the past half hour; the big boulder I had climbed up on was on it.

We sat down on a fairly flat rock and looked around. Neither of us said anything for a while; we were both thinking the same thing: if this was a farm, I was my own great uncle.

After a bit Dad muttered something. I said, "What did you say?"

"Golgotha," he said out loud. "Golgotha, the place of skulls." He was staring straight ahead.

I looked where he was looking; there was a boulder sitting on top of another and the way the sun caught it, it did look like a skull. It leered at us.

It was so darn quiet you could hear your hair grow. The place was depressing me. I would have given anything to hear something or see something move. Anything—just a lizard darting out from behind a rock, and I could have kissed it.

But there were no lizards here and never had been.

Presently Dad said, "Bill, are you sure you want to tackle this?"

"Sure I'm sure."

"You don't have to, you know. If you want to go back to Earth and go to M.I.T., I could arrange it for the next trip."

Maybe he was thinking that if I went back, I could take Peggy with, me and she would be willing to go. Maybe I should have said something about it. But didn't; I said, "Are you going back?"

"No."

"Neither am I." At the moment is was mostly stubbornness. I had to admit that our "farm" wasn't flowing with milk and honey; in fact it looked grim. Nobody but a crazy hermit would want to settle down in such a spot.

"Think it over, Bill."

"I've thought it over."

We sat there a while longer, not saying anything, just thinking long thoughts. Suddenly we were almost startled out of our boots by somebody yodelling at us. A moment before I had been wishing to hear just anything, but when it came it was like unexpectedly encountering a clammy hand in the dark.

We both jumped and Dad said, "What in the—?" I looked around. There was a large man coming toward us. In spite of his size he skipped through the rocks like a mountain goat, almost floating in the low gravity. As he got closer I knew I had seen him before; he was on the Court of Honor, a Mr. Schultz.

Dad waved to him and pretty soon he reached us. He stood half a head taller than Dad and would have made the pair of us, he was so big. His chest was as thick as my shoulders were broad and his belly was thicker than that. He had bushy, curly red hair and his beard spread out over his chest like a tangle of copper springs. "Greetings, citizens," he boomed at us, "my name is Johann Schultz."

Dad introduced us and he shook hands and I almost lost mine in his. He fixed his eyes on me and said, "I've seen you before, Bill."

I said I guessed he had, at Scout meetings. He nodded and added, "A patrol leader, no?"

I admitted that I used to be. He said, "And soon again," as if the matter were all settled. He turned to Dad. "One of the kinder saw you going past on the road, so Mama sent me to find you and bring you back to the house for tea and some of her good coffee cake."

Dad said that was very kind but that we didn't want to impose. Mr. Schultz didn't seem to hear him. Dad explained what we were there for and showed him the map and pointed out the cairn. Mr. Schultz nodded four or five times and said, "So we are to be neighbors. Good, good!" He added to Dad "My neighbors call me John, or sometimes 'Johnny'." Dad said his name was George and from then on they were old friends.

Mr. Schultz stood by the cairn and sighted off to the west and then north to the mountains. Then he scrambled up on a big boulder where he could see better and looked again. We went up after him.

He pointed to a rise west of us. "You put your house so, not too far from the road, but not on it. And first you work this piece in here and next season you work back further toward the hills." He looked at me and added. "No?"

I said I guessed so. He said, "It is good land, Bill. You will make a fine farm." He reached down and picked up a piece of rock and rubbed it between his fingers. "Good land," he repeated.

He laid it down carefully, straightened up, and said, "Mama will be waiting for us."

Mama was waiting for us, all right, and her idea of a piece of coffee cake was roughly what they used to welcome back the Prodigal Son. But before we got into the house we had to stop and admire the Tree.

It was a real tree, an apple tree, growing in a fine bluegrass lawn out in front of his house. Furthermore it was bearing fruit on two of its limbs. I stopped and stared at it.

"A beauty, eh, Bill?" Mr. Schultz said, and I agreed. "Yes," he went on, "it's the most beautiful tree on Ganymede—you know why? Because it's the only tree on Ganymede." He laughed uproariously and dug me in the ribs as if he had said something funny. My ribs were sore for a week.

He explained to Dad all the things he had had to do to persuade it to grow and how deep down he had had to go to prepare for it and how he had had to channel out to drain it. Dad asked why it was bearing only on one side. "Next year we pollenate the other side," he answered, "and then we have Stark's Delicious. And Rome Beauties. This year, Rhode Island Greenings and Winesaps." He reached up and picked one. "A Winesap for you, Bill."

I said thanks and bit into it. I don't know when I've tasted anything so good.

We went inside and met Mama Schultz and four or five other Schultzes of assorted sizes, from a baby crawling around in the sand on the floor up to a girl as old as I was and nearly as big. Her name was Gretchen and her hair was red like her father's, only it was straight and she wore it in long braids. The boys were mostly blond, including the ones I met later.

The house was mainly a big living room, with a big table down the middle of it. It was a solid slab of rock, maybe four feet wide and twelve or thirteen feet long, supported by three rock pillars. A good thing it was rock, the way Mama Schultz loaded it down.

There were rock slab benches down the long sides and two real chairs, one at each end, made out of oil drums and padded with stuffed leather cushions.

Mama Schultz wiped her face and hands on her apron and shook hands and insisted that Dad sit down in her chair; she wouldn't be sitting down much, she explained. Then she turned back to her cooking while Gretchen poured tea for us.

The end of the room was the kitchen and was centered around a big stone fireplace. It had all the earmarks of being a practical fireplace—and it was, as I found out later, though of course nothing had ever been burned in it. It was really just a ventilation hole. But Papa Schultz had wanted a fireplace so he had a fireplace. Mama Schultz's oven was set in the side of it.

It was faced with what appeared to be Dutch tile, though I couldn't believe it. I mean, who is going to import anything as useless as Ornamental tile all the way from Earth? Papa Schultz saw me looking at them and said, "My little girl Kathy paints good, huh?" One of the medium-sized girls blushed and giggled and left the room.

I had the apple down to a very skinny core and was wondering what to do with it in that spotless room when Papa Schultz stuck out his hand. "Give it to me, Bill."

I did. He took out his knife and very gently separated out the seeds. One of the kids left the room and fetched him a tiny paper envelope in which he placed the seeds and then sealed it. He handed it to me. "There, Bill," he said. "I have only one apple tree, but you have eight!"

I was sort of surprised, but I thanked him. He went on, "That place just this side of where you will build your house—if you will fill that gully from the bottom, layer by layer, building your soil as you go, with only a very little 'pay dirt' you will have a place that will support a whole row of trees. When your seedlings are big, we’ll bud from my tree."

I put them very carefully in my pouch.

Some of the boys drifted in and washed up and soon we were all sitting around the table and digging into fried chicken and mashed potatoes and tomato preserves and things. Mama Schultz sat beside me and kept pressing food on me and insisting that I wasn't eating enough to keep body and soul together which wasn't true.

Afterwards I got acquainted with the kids while George and Papa Schultz talked. Four of the boys I knew; they were Scouts. The fifth boy, Johann Junior —they called him "Yo"—was older than I, almost twenty, and worked in town for the chief engineer. The others were Hugo and Peter, both Cubs, then Sam, and then Vic, who was an Explorer Scout, same as I was. The girls were the baby, Kathy and Anna, who seemed to be twins but weren't, and Gretchen. They all talked at once.

Presently Dad called me over. "Bill, you know we don't rate a chance at a rock crusher for several months."

"Yes," I said, somewhat mystified.

"What are your plans in the meantime?"

"Uh, well, I don't know exactly. Study up on what I'll have to do."

"Mmrn… Mr. Schultz has very kindly offered to take you on as a farm hand in the meantime. What do you think of the idea?"

14. Land of My Own

Papa Schultz needed a field hand about as much as I need four ears, but that didn't keep me from moving in. In that family everybody worked but the baby and you could count on it that she would be washing dishes as soon as she was up off the floor. Everybody worked all the time and seemed to enjoy it. When the kids weren't working they were doing lessons and the boys were punished when they weren't up on their lessons by being required to stay in from the fields.

Mama would listen to them recite while she cooked. Sometimes she listened to lessons in things I'm pretty sure she never had studied herself, but Papa Schultz checked up on them, too, so it didn't matter.

Me, I learned about pigs. And cows. And chickens. And how you breed pay dirt to make more pay dirt. "Pay dirt" is the stuff that is actually imported from Earth, concentrated soil cultures with the bacteria and so forth in it you have to have to get a field alive.

There was an awful lot to learn. Take cows, now–half the people you meet can't tell their left hands from their right so who would think that a cow would care about such things? But they do, as I found out when I tried to milk one from the left.

Everything was stoop labor around the place, as primitive as a Chinese farm. The standard means of transportation was a wheelbarrow.

I learned not to sneer at a wheelbarrow after I priced one at the

Exchange.

The total lack of power machinery wasn't through lack of power; the antenna on the farm house roof could pick up as much power as necessary—but there wasn't any machinery. The only power machinery in the colony belonged to the whole colony and was the sort of thing the colony absolutely couldn't get along without, like rock chewers and the equipment for the heat trap and the power plant itself.

George explained it this way: every load that was sent up from Earth was a compromise between people and cargo. The colonists were always yapping for more machinery and fewer immigrants; the Colonial Commission always insisted on sending as many people as possible and holding the imports down to a minimum.

"The Commission is right, of course," he went on. "If we have people, we'll get machinery—we'll make it ourselves. By the time you have a family of your own, Bill, immigrants will arrive here barehanded, no cargo at all, and we'll be able to outfit a man with everything from plastic dishes for his cupboard to power cultivators for his fields."

I said, "If they wait until I have a family, they'll have a long wait. I figure a bachelor travels faster and further."

Dad just grinned, as if he knew something I didn't know and wouldn't tell. I had walked into town to have dinner with him and Molly and the kid. I hadn't seen much of them since I went to work for Papa Schultz. Molly was teaching school, Peggy couldn't come out to the farm, of course, and Dad was very busy and very excited over a strike of aluminum oxides twenty miles east of town. He was in the project up to his ears and talking about having sheet aluminum on sale in another G-year.

As a matter or fact, cultivating a farm by stoop labor wasn't too bad, not on Ganymede. Low gravity was a big help; you didn't wear yourself out just dragging your own carcass around. I grossed a hundred and forty-two mass pounds, what with the way Mama Schultz stuffed me; that meant I weighed less than fifty pounds, field boots and all A wheelbarrow was similarly light when loaded.

But the real advantage that made the work easy was something you might not guess.

No weeds.

No weeds at all; we had very carefully not imported any. Once the land was built, making a crop was darn near a case of poking a seed into the ground and then stepping back quick before the stalk shot up and hit you in the eye.

Not that we didn't work. There is plenty of work around a farm even with no weeds to worry about. And a light wheelbarrow load simply meant that we piled three times as much on. But we had fun, too; I never met a family that laughed so much.

I brought my squeeze box out from town and used to play it after supper. We would all sing, with Papa Schultz booming away on his own and leaving it up to the rest of us to find the key he was singing in. We had fun.

It turned out that Gretchen was an awful tease when she got over being shy. But I could always get her goat by pretending that her head was on fire and either warming my hands over her hair or threatening to pour water on her before she burned the place down.

The day finally came when it was my turn to have the colony's crushers work on my land and I was almost sorry to see it arrive; I had had such a nice time at the Schultz's. But by then I could caponize a rooster or plant a row of corn; I still had a lot to learn, but there wasn't any good reason why I shouldn't start making my own farm.

Dad and I had had to prepare our farm for the crusher by dynamiting the biggest boulders. A crusher will choke on anything much bigger than a barrel but it will handle up to that size very nicely. Dynamite is cheap, thank goodness, and we used plenty of it. The raw material is nitroglycerine which we didn't have to import from Earth, the glycerine being refined from animal fats and the nitric acid being a synthetic byproduct of the atmosphere project.

Dad spent two weekends with me, making medium-sized ones out of big ones, then decided it was safe to trust me to set powder by myself and I finished the job. There was a little stream of melted snow water coming down from the hills at the far side of our property; we blew out a new bed for it to lead it close to the place where the house would go. We left it dry for the time being, with a natural rock dam to blow up later. One fair-sized hill we moved entirely and blew it into a gully on the lake side of the land. Big charges that took and I almost got fitted for a halo through underestimating how far some of the stuff would throw.

It was easy work and lots of fun. I had a vibro-drill, borrowed from the engineer's office; you could sink a charge hole with it twenty feet into rock as easily as you could sink a hot knife into butter. Then drop in the powder, fill the rest of the hole with rock dust, light the fuse, and run like the dickens!

But the most fun was blowing up that rock that looked like a grinning skull. I fixed it properly, it and its leer!

We had a visitor while we were dynamiting the land. Dad and I had just knocked off for lunch one day when Saunders, "The One-Man Lobby"—that's George's name for him—showed up. We invited him to share what we had; he had brought nothing but his appetite.

He complained about this and that. Dad tried to change the subject by asking him how he was getting along with his blasting. Saunders said it was slow work. Dad said, "You have the crusher the day after us, don't you?"

Saunders admitted it and said he wanted to borrow some powder; he was running short of time. Dad let him have it, though it meant another trip out from town, after work, for him the next day. Saunders went on, "I've been looking this situation over, Mr. Lermer. We're tackling it all wrong."

George said, "So?"

Saunders said, "Yes, indeedy! Now in the first place this blasting ought not to be done by the homesteader; it should be done by trained crews, sent out by the government. It's really part of the contract anyway; we're supposed to receive processed land."

Dad said mildly that, while that might be a nice idea, he didn't know where they would find enough trained crews to do the work for fifteen hundred new farms.

"Let the government hire them!" Mr. Saunders answered. "Bring them in from Earth for that purpose. Now, see here, Mr. Lermer, you are in the chief engineer's office. You ought to put in a word for the rest of us."

George picked up the vibro and got ready to set a charge. Presently he answered, "I'm afraid you've come to the wrong party. I'm in an entirely different department."

I guess Mr. Saunders saw he was off on the wrong tack for he went on, "In the second place, I have been looking into the matter of the soil, or what they call 'soil'—again they are off on the wrong foot." He kicked a rock. "This stuff isn't good for anything. You can't grow anything in stuff like that."

"Naturally not," agreed Dad. "You have to make soil first."

"That's just what I'm getting at," Saunders went on. "You have to have soil—good, black, rich soil. So they tell us to breed it, a square foot at a time. Plough garbage into it, raise earthworms—I don't know how many tomfool stunts."

"Do you know of a better way?"

"You bet you I do! That's just what I'm getting at. Here we are, piddling along, doing things the way a bunch of bureaucrats who never made a crop tell us to, all for a few inches of second-rate soil—when there are millions of cubic feet of the richest sort of black soil going begging."

Dad looked up sharply. "Where?"

"In the Mississippi Delta, that's where! Black soil goes down there for hundreds of feet."

We both looked at him, but he was quite serious about it. "Now here's what you've got to have—Level the ground off, yes. But after that spread real Earth soil over the rock to a depth of at least two feet; then it will be worth while to farm. As it is, we are just wasting our time."

Dad waited a bit before answering, "Have you figured out what this would cost?"

Mr. Saunders brushed that aside. "That's not the point; the point is, that's what we've got to have. The government wants us to settle here, doesn't it? Well, then, if we all stick together and insist on it, we'll get it." He jerked his chin triumphantly.

George started to say something, then stopped. He patted rock dust in on top of his charge, then straightened up and wiped the sweat off his beard. "Listen, citizen," he said, "can't you see that we are busy? I'm about to light this fuse; I suggest that you back away out of danger."

"Huh?" said Saunders. "How big a charge is it? How far?"

If he had kept his eyes open, he would have seen how big a charge it was and known how far to give back. Dad said, "Oh, say a mile and a half—or even two miles. And keep backing."

Saunders looked at him, snorted disgustedly, and stalked away. We backed out of range and let her blow.

While we were setting the next charge I could see George's lips moving. After a while he said, "Figuring gumbo mud conservatively at a hundred pounds per cubic foot it would take one full load of the *Mayflower* to give Mr. Saunders alone the kind of a farm he would like to have handed to him. At that rate it would take just an even thousand G-years—five hundred Earth years—for the *Mayflower* to truck in topsoil for farms for our entire party."

"You forgot the Covered Wagon," I said brightly.

George grinned. "Oh, yes! When the Covered Wagon is commissioned and in service we could cut it down to two hundred and fifty years—provided no new immigrants came in and there was a ban on having babies!" He frowned and added, "Bill, why is it that some apparently-grown men never learn to do simple arithmetic?" I didn't know the answer, so he said, "Come on, Bill, let's get on with our blasting. I'm afraid we'll just have to piddle along in our inefficient way, even if it doesn't suit our friend Saunders."

The morning the crusher was scheduled to show up I was waiting for it at the end of the road. It came breezing down the road at twenty miles an hour, filling it from side to side. When it came to the wall of lava, it stopped. I waved to the operator; he waved back, then the machine grunted a couple of times, inched forward, and took a bite out of the lava.

Lava didn't bother it; it treated it like peanut brittle. A vibro-cutter built into its under carriage would slice under the flow like a housewife separating biscuit from a pan, the big steel spade on the front of the thing would pry under and crack the bite off, and the conveyor would carry the chunk up into the jaws.

The driver had a choice of dropping the chewed up material under the rear rollers or throwing it off to the side. Just now he was throwing it away, leaving the clean slice made by the vibro-cutter as a road bed —a good road, a little dusty but a few rains would fix that.

It was terrifically noisy but the driver didn't seem to mind. He seemed to enjoy it; there was a good breeze taking the dust away from him and he had his anti-silicosis mask pushed up on his forehead, showing the grin on his face.

By noon he was down to our place and had turned in. We had a bite to eat together, then he started in levelling a farm for me—five acres, the rest would have to wait. At that I was lucky for I was to get land to work months ahead of the original schedule. The second trip of the *Mayflower* had brought in three more crushers and very few immigrants, just enough to replace those who had given up and gone back out of our party, that being the compromise the town council had worked out with the Colonial Commission.

The racket was still worse when the crusher bit into hard rock, instead of lava, but it was music to me and I didn't get tired of watching. Every bite was a piece of land to me. At suppertime the second-shift driver showed up with Dad. We watched together for a while, then Dad went back to town. I stayed. About midnight I went over into a stretch that was not to be processed now, found a big rock to keep the Sun out of my eyes and lay down for a quick nap.

Then the relief driver was shaking me and saying, "Wake up, kid—you got a farm."

I stood up and rubbed my eyes and looked around. Five acres, with just enough contour for drainage and a low hummock in the middle where the house would sit. I had a farm.

The next logical thing to do would have been to get the house up, but, under the schedule, I rated the use of a cud-chewer for the following week. A cud-chewer is a baby rock crusher. It uses a power pack instead of an antenna, it is almost fool proof and anybody can run one, and it finishes up what the crusher starts. It is small and low-powered compared with a crusher. The colony had about forty of them.

The crusher left loose rubble several feet deep in pieces as big as my fist. The cud-chewer had a fork spade on the front of it, several sizes of spade forks, in fact. The coarse fork went down into the loose rocks about eighteen inches and picked up the big ones. These drifted back into the hopper as the machine moved forward and were busted into stuff about the size of walnuts.

When you had been over the ground once with the coarse fork, you unshipped it and put on the medium fork and reset the chewing rollers. This time you went down only ten inches and the result was gravel. Then you did it again for medium-fine and then fine and when you were done the upper six inches or so was rock flour, fine as the best loam—still dead, but ready to be bred into life.

Round and round and round, moving forward an inch at a time. To get real use out of your time allotment the cud-chewer had to be moving twenty-four hours a day until they took it away from you. I stayed at it all through the first day, eating my lunch in the saddle. Dad spelled me after supper and Hank came out from town and we alternated through the nightlight phase it was, actually, it being Monday night.

Papa Schultz found me asleep with my head on the controls late next afternoon and sent me back to his house to get some real sleep. Thereafter one of the Schultzes always showed up when I had been at it alone for four or five hours. Without the Schultzes I don't know how Dad and I would have gotten through the dark phase of that week.

But they did help and by the time I had to pass the cud-chewer along I had nearly three and a half acres ready to be seeded with pay dirt.

Winter was coming on and I had my heart set on getting my house up and living in it during the winter month, but to do so I really had to hump. I had to get some sort of a holding crop in or the spring thaw would wash my top soil away. The short Ganymede year is a good idea and I'm glad they run it that way; Earth's winters are longer than necessary. But it keeps you on the jump.

Papa Schultz advised grass; the mutated grass would grow in sterile soil much like growing things in hydroponic solutions. The mat of rootlets would hold my soil even if the winter killed it and the roots would furnish something through which the infection could spread from the "pay dirt."

Pay dirt is fundamentally just good black soil from Earth, crawling with bacteria and fungi and microscopic worms—everything you need but the big fishing worms; you have to add those. However, it wouldn't do simply to ship Earth dirt to Ganymede by the car load. In any shovelful of loam there are hundreds of things, plant and animal, you need for growing soil—but there are hundreds of other things you don't want. Tetanus germs. Plant disease viruses. Cut worms. Spores. Weed seeds. Most of them are too small to be seen with the naked eye and some of them can't even be filtered out

So to make pay dirt the laboratory people back on Earth would make pure cultures of everything they wanted to keep in the way of bacteria, raise the little worms under laboratory conditions, do the same for fungi and everything else they wanted to save—and take the soil itself and kill it deader than Luna, irradiate it, bake it, test it for utter sterility. Then they would take what they had saved in the way of life forms and put it back into the dead soil That was "pay dirt," the original pay dirt. Once on Ganymede the original stuff would be cut six ways, encouraged to grow, then cut again. A hundred weight of pay dirt supplied to a ‘steader might contain a pound of Terra's own soil.

Every possible effort was made to "limit the invasion," as the ecologists say, to what was wanted. One thing that I may not have mentioned about the trip out was the fact that our clothes and our baggage were sterilized during the trip and that we ourselves were required to take a special scrub before we put our clothes back on. It was the only good bath I got the whole two months, but it left me smelling like a hospital.

The colony's tractor trucks delivered the pay dirt I was entitled to in order to seed my farm; I left the Schultz place early that morning to meet them. There is difference of opinion as to the best way to plant pay dirt; some 'steaders spread it all over and take a chance on it dying; some build up little pockets six or eight feet apart, checker board style… safe but slow. I was studying the matter, my mind not made up, when I saw something moving down the road.

It was a line of men, pushing wheelbarrows, six of them. They got closer and I could see that it was all the male Schultzes. I went out to meet them.

Every one of those wheelbarrows was loaded with garbage and all for me!

Papa Schultz had been saving it as a surprise for me. I didn't know what to say. Finally I blurted out, "Gee, Papa Schultz, I don't know when I'll be able to pay you back!"

He looked fierce and said, "Who is speaking of paying back when we have compost running out of our ears yet?" Then he had the boys dump their loads down on top of my pay dirt, took a fork and began mixing it as gently as Mama Schultz folding in beaten egg white.

He took charge and I didn't have to worry about the best way to use it. In his opinion—and you can't bet that I didn't buck itl—what we had was good for about an acre and his method was to spread it through the soil. But he did not select one compact acre; he laid out strips, seven of them, a couple of hundred yards long each and stretching across my chewed soil thirty-five or forty feet apart. Each of us took a wheelbarrow—their six and my one—and distributed the mix along each line.

When that was done and cairns had been set to show where the strips ran, we raked the stuff into the rock dust five or six feet on each side of each line. Around noon Mama and Gretchen showed up, loaded down, and we stopped and had a picnic.

After lunch Yo had to go back to town but he had almost finished his strip. Papa had finished his and proceeded to help Hugo and Peter who were too small to swing a good rake. I dug in and finished mine soon enough to be able to finish what Yo had left. Dad showed up at the end of the day, expecting to help me all evening—it was light phase and you could work as late as you could stand up under it— but there was nothing left to do. And he didn't know how to thank them either.

I like to think that we would have gotten the farm made anyhow, without the Schultzes, and maybe we would have—but I'm sure not sure. Pioneers need good neighbors.

The following week I spent working artificial nitrates from the colony's power pile into the spaces between the strips—not as good as pay dirt from Earth, but not as expensive, either.

Then I tackled sowing the grass, by hand, just like in the Bible, and then raking it gently in. That old pest Saunders showed up. He still did so every now and then, but never when Dad was around. I guess he was lonely. His family was still in town and he was camping out in a ten-foot rock shed he had built. He wasn't really making a farm, not properly; I couldn't figure out what he was up to. It didn't make sense.

I said, "Howdy," and went on with my work.

He watched me, looking sour, and finally said, "You still bent on breaking your heart on this stuff, aren't you, youngster?"

I told him I hadn't noticed any wear and tear on my pump, and anyhow, wasn't he making a farm, too?

He snorted. "Not likely!"

"Then what are you doing?"

"Buying my ticket, that's what."

"Huh?"

"The only thing you can sell around this place is improved land. I'm beating them at their own game, that's what. I'll get that land in shape to unload it on some other sucker and then me and mine are heading straight back for that ever-lovin' Earth. And that's just what you'll be doing if you aren't an utter fool. You'll never make a farm here. It can't be done."

I was getting very tired of him but I'm short on the sort of point-blank guts it takes to be flatly rude. "Oh, I don't know," I said. "Look at Mr. Schultz—he's got a good farm."

Saunders snorted again. "You mean 'Johnny Appleseed?"

"I mean Mr. Johann Schultz."

"Sure, sure—Johnny Appleseed. That's what everybody calls him in town. He's nuts. You know what he did? He gave me a handful of apple seeds and acted like he had handed me the riches of Solomon."

I stopped raking. "Well, hadn't he?"

Saunders spat on the ground between us. "He's a clown."

I lifted up the head of the rake. I said, "Mr. Saunders, you are standing on my land, my property. I'll give you just two shakes to get off it and never set foot on it again!"

He backed away and said, "Hey! You stop that! Watch what you are doing with that rake!"

I said, "Git!"

He got.

The house was a problem. Ganymede has little quakes all the time. It has to do with "isostasy" which doesn't mean a thing but "equal-pressure" when you get right down to it, but it's the science of how the mountains balance the seas and the gravitation of a planet all comes out even.

It has to do with tidal strains, too, which is odd, since Ganymede doesn't have any tides; the Sun is too far away to matter and Ganymede always keeps the same face toward Jupiter. Oh, you can detect a little tide on Laguna Serenidad when Europa is closest to Ganymede and even a trifle from Callisto and lo, but what I mean is it doesn't have tides—not like the Pacific Ocean.

What it does have is a frozen tidal strain. The way Mr. Hooker, the chief meteorologist, explains it is that Ganymede was closer to Jupiter when it cooled off and lost its rotation, so that there is a tidal bulge in the planet itself—sort of a fossil tidal bulge. The Moon has one, you know.

Then we came along and melted off the ice cap and gave Ganymede an atmosphere. That rearranged the pressures everywhere and the isostatic balance is readjusting. Result: little quakes all the time.

I'm a California boy; I wanted a quakeproof house. Schultzes had a quakeproof house and it seemed like a good idea, even though there had never been a quake heavy enough to knock a man down, much less knock a house down. On the other hand most of the colonists didn't bother; it is hard to make a rock house really quakeproof.

Worse than that, it's expensive. The basic list of equipment that a 'steader is promised in his emigration contract reads all right, a hoe, a spade, a shovel, a wheelbarrow, a hand cultivator, a bucket, and so forth down the list—but when you start to farming you find that is only the beginning and you've got to go to the Exchange and buy a lot of other stuff. I was already in debt a proved acre and a half, nearly, before the house ever went up.

As usual we compromised. One room had to be quake proof because it had to be air tight—Peggy's room. She was getting better all the time, but she still couldn't take low pressure for any length of time. If the family was going to move out to the farm, her bedroom had to be sealed, it had to have an air lock on it, and we had to have an impeller. All that runs into money.

Before I was through I had to pledge two more acres. Dad tried to sign for it but they told him bluntly that while a 'steader's credit was good, his wasn't. That settled the matter. We planned on one reinforced room and hoped to build on to it later. In the mean time the house would be a living room, ten by twelve, where I would sleep, a separate bedroom too small to swing a cat for George and Molly, and Peggy's room. All but Peggy's room would be dry wall rock with a patent roof.

Pretty small, eh? Well, what's wrong with that? Abe Lincoln started with less.

I started in cutting the stone as soon as the seed was in. A vibro-saw is like a vibro-drill, except that it cuts a hair line instead of drilling a hole. When the power is on you have to be durned careful not to get your fingers or anything into the field, but it makes easy work of stone cutting. By the contract you got the use of one for fortyeight hours free and another fortyeight hours, if you wanted it, at a reduced rate. I got my work lined up and managed to squeeze it into the two free days. I didn't want to run up any more debt, because there was another thing I was hankering for, come not later than the second spring away—flicker flood lights. Papa Schultz had them for his fields and they just about doubled his crops. Earth plants aren't used to three and half days of darkness, but, if you can tickle them during the dark phase with flicker lights, the old photosynthesis really gets in and humps itself.

But that would have to wait.

The patrol got the house up—the patrol I was in, I mean, the Auslanders. It was a surprise to me and yet it wasn't, because everybody has a house raising; you can't do it alone. I had already taken part in six myself—not just bigheartedness, don't get me wrong. I had to learn how it was done.

But the patrol showed up before I had even passed the word around that I was ready to hold a house raising. They came swinging down our road; Sergei marched them up to where the house was to be, halted them, and said to me, "Bill, are your Scout dues paid up?" He sounded fierce. I said, "You know they are."

"Then you can help. But don't get in our way." Suddenly he grinned and I knew I had been framed. He turned to the patrol and shouted, "House raising drill! Fall out and fall to."

Suddenly it looked like one of those TV comedies where everything has been speeded up. I never saw anybody work the way they did. Let me tell you it doesn't take Scout uniforms to make Scouts. None of us ever had uniforms; we couldn't afford special clothes just for Scouting.

Besides the Auslanders there was Vic Schultz and Hank Jones, both from the Hard Rock patrol and Doug Okajima, who wasn't even of our troop but still with the Baden-Powell. It did my heart good. I hadn't seen much of the fellows lately; during light phase I always worked too late to get in to meetings; during dark phase a cold nine miles into town after supper is something to think twice about.

I felt sheepish to realize that while I might have forgotten them, they hadn't forgotten me, and I resolved to get to meetings, no matter how tired I was. And take the tests for those two merit badges, too—the very first chance I got.

That reminded me of another item of unfinished business, too—Noisy Edwards. But you can't take a day off just to hunt somebody up and poke him in the snoot, not when you are making a farm. Besides it wouldn't hurt anything for me to put on another ten pounds; I didn't want it to be a repetition of the last time.

Dad snowed up almost immediately with two men from his office and he took charge of bracing and sealing Peggy's room. The fact that he showed up at all let me know that he was in on it—which he admitted. It had been Sergei's idea and that was why Dad had put me off when I said it was about time to invite the neighbors in.

I got Dad aside. "Look, George," I said, "how in nation are we going to feed 'em?"

"Don't worry about it," he said.

"But I do worry about it!" Everybody knows it's the obligation of the 'steader whose house is being raised to provide the victuals and I had been taken by surprise.

"I said not to," he repeated. And presently I knew why; Molly showed up with Mama Schultz, Gretchen, Sergei's sister Marushka, and two girls who were friends of Peggy—and what they were carrying they couldn't have carried on Earth. It was a number one picnic and Sergei had trouble getting them back to work after lunch.

Theoretically, Molly had done the cooking over at the Schultz's but I know Mama Schultz—anyhow, let's face it, Molly wasn't much of a cook.

Molly had a note for me from Peggy. It read: "Dearest Billy, Please come into town tonight and tell me all about it. Pretty please!" I told Molly I would.

By eighteen o'clock that afternoon the roof was on and we had a house. The door wasn't hung; it was still down at the 'Change. And the power unit wasn't in and might not be for a week. But we had a house that would keep off the rain, and a pint-sized cow barn as well, even if I didn't own a cow.

15. Why Did We Come?

According to my diary we moved into the house on the first day of spring.

Gretchen came over and helped me get ready for them. I suggested that we ask Marushka as well, since there would be lots of work to do. Gretchen said, "Suit yourself!" and seemed annoyed, so I didn't. Women are funny. Anyhow Gretchen is a right good worker.

I had been sleeping in the house ever since the raising and even before the technicians from the engineer's office had come and installed the antenna on the roof and rigged the lights and heat—but that was done before winter was started and I passed a comfortable month, fixing up the inside of the place and getting in a crop of ice for the summer. I stored the ice, several tons of it, in the gully at the side of the house, where I meant to plant apple trees just as soon as I could get fixed for it. The ice would keep there until I could build a proper cold cellar.

The first few months after the folks moved out are the happiest I can remember. We were together again and it was good. Dad still spent most of each dark phase in town, working on a part time basis, but that was quite as much because he was interested in the manufacturing project as it was to help pay off our debts. During light phase we worked almost around the clock, side by side or at least within earshot.

Molly seemed to like being a housewife. I taught her how to cook and she caught on real fast. Ganymede cooking is an art. Most things have to be cooked under pressure, even baked things, for water boils at just a little over a hundred and forty degrees. You can stir boiling water with your finger if you don't leave it in too long. Then Molly started learning from Mama Schultz but I didn't mind that; Mama Schultz was an artist. Molly got to be a really good cook.

Peg had to live in her room, of course, but we had hopes that she would be out soon. We had the pressure down to eight pounds, half oxygen and half nitrogen, and we usually all ate in her room. I still hated the thick stuff but it was worth while putting up with it so that the family could eat together. After a while I got so that I could change pressure without even an earache.

Peggy could come outside, too. We had brought her from town in a bubble stretcher—another thing bought on credit!—and Dad had fitted it with the gas apparatus from an old space suit he had salvaged from the Project Jove people. Peggy could get into the stretcher and shut herself in and we could bleed off the pressure in her room and take her outside where she could get some sunshine and look at the mountains and the lake and watch Dad and me work in the fields. The clear plastic of the bubble did not stop ultraviolet and it was good for her.

She was a skinny little runt and it was no trouble to move her around, even in the stretcher. Light phase, she spent a lot of time outdoors.

We had started with a broody hen and fifteen fertile eggs, and a pair of rabbits. Pretty soon we had meat of our own. We always let Peggy think that the fryers we ate came from the Schultzes and I don't think she ever caught on. At first I used to go to the Schultz farm every day for fresh milk for Peggy, but I got a chance, midsummer, to get a fresh two-year-old cow on tick at a reasonable price. Peggy named her Mabel and was much irked that she couldn't get at her to pet her.

We were on the move all the time. I still hadn't managed to take my merit badge tests and I hadn't done much better about getting in to Scout meetings. There was just too much to do. Building a pond, for example—Laguna Serenidad was being infected with plankton and algae but there weren't fish in it yet and it would be a long time, even after the fish were stocked, before fishing would be allowed. So we did fishpond gardening, Chinese style, after I got the pond built.

And there were always crops to work on. My cover grass had taken hold all right and shortly after we moved in the soil seemed ready to take angle worms. Dad was about to send a sample into town for analysis when Papa Schultz stopped by. Hearing what we were about he took up a handful of the worked soil, crumbled it, smelled it, tasted it, and told me to go ahead and plant my worms. I did and they did all right; we encountered them from time to time in working the fields thereafter.

You could see the stripes on the fields which had been planted with pay dirt by the way the grass came up. You could see that the infection was spreading, too, but not much. I had a lot of hard work ahead before the stripes would meet and blend together and then we could think about renting a cud-chewer and finishing off the other acre and a half, using our own field loam and our own compost heap to infect the new soil. After that we could see about crushing some more acres, but that was a long way away.

We put in carrots and lettuce and beets and cabbage and brussels sprouts and potatoes and broccoli. We planted corn between the rows. I would like to have put in an acre of wheat but it didn't make sense when we had so little land. There was one special little patch close to the house where we put in tomatoes and Hubbard squash and some peas and beans. Those were "bee" plants and Molly would come out and pollenate them by hand, a very tedious business. We hoped to have a hive of bees some day and the entomologists on the bionomics staff were practically busting their hearts trying to breed a strain of bees which would prosper out doors. You see, among other things, while our gravity was only a third Earth-normal, our air pressure was only a little better than a fifth Earth-normal and the bees resented it; it made flying hard work for them. Or maybe bees are just naturally conservative.

I guess I was happy, or too tired and too busy to be unhappy, right up to the following winter.

At first winter seemed like a good rest. Aside from getting the ice crop in and taking care of the cow and the rabbits and the chickens there wasn't too much to do. I was tired out and cranky and didn't know it; Molly, I think, was just quietly, patiently exhausted. She wasn't used to farm life and she wasn't handy at it, the way Mama Schultz was.

Besides that, she wanted inside plumbing and it just wasn't in the cards for her to have it any time soon. I carried water for her, of course, usually having to crack ice in the stream to get it, but that didn't cover everything, not with snow on the ground. Not that she complained.

Dad didn't complain, either, but there were deep lines forming from his nose down to his mouth which his beard didn't cover entirely. But it was mostly Peggy.

When we first moved her out to the farm she perked up a lot. We gradually reduced the pressure in her room and she kept insisting that she was fine and teasing for a chance to go out without the bubble stretcher. We even tried it once, on Dr. Archibald's advice, and she didn't have a nose bleed but she was willing to get back in after about ten minutes.

The fact was she wasn't adjusting. It wasn't just the pressure; something else was wrong. She didn't belong here and she wouldn't grow here. Have you ever had a plant that refused to be happy where you planted it? It was like that.

She belonged back on Earth.

I suppose we weren't bad off, but there is a whale of a difference between being a rich farmer, like Papa Schultz, with heaps of cow manure in your barn yard and hams hanging in your cold cellar and every modern convenience you could want, even running water in your house, and being poor farmers, like us, scratching for a toe hold in new soil and in debt to the Commission. It told on us and that winter we had time to brood about it.

We were all gathered in Peggy's room after lunch one Thursday.

Dark phase had just started and Dad was due to go back into town; we always gave him a send off. Molly was darning and Peg and George were playing cribbage. I got out my squeeze box and started knocking out some tunes. I guess we all felt cheerful enough for a while. I don't know how I happened to drift into it, but after a bit I found I was playing The Green Hills of Earth. I hadn't played it in a long time.

I brayed through that fortissimo part about "Out ride the sons of Terra; Far drives the thundering jet—" and was thinking to myself that jets didn't thunder any more. I was still thinking about it when I went on into the last chorus, the one you play very softly: "We pray for one last landing on the globe that gave us birth—"

I looked up and there were tears running down Molly's cheeks.

I could have kicked myself. I put my accordion down with a squawk, not even finishing, and got up. Dad said, "What's the matter, Bill?"

,I muttered something about having to go take a look at Mabel.

I went out into the living room and put on my heavy clothes and actually did go outside, though I didn't go near the barn. It had been snowing and it was already almost pitch dark, though the Sun hadn't been down more than a couple of hours. The snow had stopped but there were clouds overhead and you couldn't see Jupiter.

The clouds had broken due west and let the sunset glow come through a bit. After my eyes adjusted, by that tiny amount of light I could see around me—the mountains, snow to their bases, disappearing in the clouds, the lake, just a sheet of snow-covered ice, and the boulders beyond our fields, making weird shapes in the snow. It was a scene to match the way I felt; it looked like the place where you might be sent for having lived a long and sinful life.

I tried to figure out what I was doing in such a place.

The clouds in the west shifted a little and I saw a single bright green star, low down toward the horizon, just above where the Sun had set.

It was Earth.

I don't know how long I stood there. Presently somebody put a hand on my shoulder and I jumped. It was Dad, all bundled up for a nine-mile tramp through the dark and the snow.

"What's the matter, Son?" he said.

I started to speak, but I was all choked up and couldn't. Finally I managed to say, "Dad, why did we come here?"

"Mmmm… you wanted to come. Remember?"

"I know," I admitted.

"Still, the real reason, the basic reason, for coming here was to keep your grandchildren from starving. Earth is overcrowded, Bill."

I looked back at Earth again. Finally I said, "Dad, I've made a discovery. There's more to life than three square meals a day. Sure, we can make crops here— this land would grow hair on a billiard ball. But I don't think you had better plan on any grandchildren here; it would be no favor to them. I know when I've made a mistake."

"You're wrong, Bill, Your kids will like this place, just the way Eskimos like where they live."

"I doubt it like the mischief."

"Remember, the ancestors of Eskimos weren't Eskimos; they were immigrants, too. If you send your kids back to Earth, for school, say, they'll be homesick for Ganymede. They'll hate Earth. They'll weigh too much, they won't like the air, they won't like the climate, they won't like the people."

"Hmm—look, George, do you like it here? Are you glad we came?"

Dad was silent for a long time. At last he said, "I'm worried about Peggy, Bill."

"Yeah, I know. But how about yourself—and Molly?"

"I'm not worried about Molly. Women have their ups and downs. You'll learn to expect that." He shook himself and said, "I'm late. You go on inside and have Molly fix you a cup of tea. Then take a look at the rabbits. I think the doe is about to drop again; we don't want to lose the young 'uns." He hunched his shoulders and set off down toward the road. I watched him out of sight and then went back inside.

16. Line Up

Then suddenly it was spring and everything was all right.

Even winter seemed like a good idea when it was gone. We had to have winter; the freezing and thawing was necessary to develop the ground, not to mention the fact that many crops won't come to fruit without cold weather. Anyway, anybody can live through four weeks of bad weather.

Dad laid off his job when spring came and we pitched in together and got our fields planted. I rented a power barrow and worked across my strips to spread the living soil. Then there was the backbreaking job of preparing the gully for the apple trees. I had started the seeds soon after Papa Schultz had given them to me, forcing them indoors, first at the Schultz's, then at our place. Six of them had germinated and now they were nearly two feet tall.

I wanted to try them outdoors. Maybe I would have to take them in again next winter, but it was worth a try.

Dad was interested in the venture, too, not just for fruit trees, but for lumber. Wood seems like an obsolete material, but try getting along without it.

I think George had visions of the Big Rock Candy Mountains covered with tall straight pines… someday, someday.

So we went deep and built it to drain and built it wide and used a lot of our winter compost and some of our precious topsoil. There was room enough for twenty trees when we got through, where we planted our six little babies. Papa Schultz came over and pronounced a benediction over them.

Then he went inside to say hello to Peggy, almost filling her little room. George used to say that when Papa inhaled the pressure in the room dropped.

A bit later Papa and Dad were talking in the living room; Dad stopped me as I was passing through. "Bill," he asked, "how would you like to have a window about here?" He indicated a blank wall.

I stared. "Huh? How would we keep the place warm?"

"I mean a real window, with glass."

"Oh." I thought about it. I had never lived in a place with windows in my life; we had always been apartment dwellers. I had seen windows, of course, in country houses back Earthside, but there wasn't a window on Ganymede and it hadn't occurred to me that there ever would be.

"Papa Schultz plans to put one in his house. I thought it might be nice to sit inside and look out over the lake, light phase evenings," Dad went on.

"To make a home you need windows and fireplaces," Papa said placidly. "Now that we glass make, I mean to have a view."

Dad nodded. "For three hundred years the race had glazed windows. Then they shut themselves up in little airconditioned boxes and stared at silly television pictures instead. One might as well be on Luna."

It was a startling idea, but it seemed like a good one. I knew they were making glass in town. George says that glassmaking is one of the oldest manufacturing arts, if not the oldest, and certainly one of the simplest. But I had thought about it for bottles and dishes, not for window glass. They already had glass buckets on sale at the 'Change, for about a tenth the cost of the imported article.

A view window—it was a nice idea. We could put one on the south and see the lake and another on the north and see the mountains. Why, I could even put in a skylight and lie on my bunk and see old Jupiter.

Stow it, William, I said to myself; you'll be building a whole house out of glass next. After Papa Schultz left I spoke to George about it. "Look," I said, "about this view window idea. It's a good notion, especially for Peggy's room, but the question is: can we afford it?"

"I think we can," he answered.

"I mean can we afford it without your going back to work in town? You've been working yourself to death —and there's no need to. The farm can support us now."

He nodded. "I had been meaning to speak about that. I've about decided to give up the town work, Bill—except for a class I'll teach on Saturdays."

"Do you have to do that?"

"Happens that I like to teach engineering, Bill And don't worry about the price of the glass; well get it free—a spot of cumshaw coining to your old man for designing the glass works. "The kine who tread the grain,'" he quoted. "Now you and I had better get busy; there is a rain scheduled for fifteen o'clock.'

It was maybe three weeks later that the moons lined up. This is an event that almost never happens, Ganymede, Callisto, Io, and Europa, all perfectly lined up and all on the same side of Jupiter. They come close to lining up every seven hundred and two days, but they don't quite make it ordinarily. You see, their periods are all different, from less than two days for Io to more than two weeks for Callisto and the fractions don't work out evenly. Besides that they have different eccentricities to their orbits and their orbits aren't exactly in the same plane.

As you can see, a real line up hardly ever happens.

Besides that, this line up was a line up with the Sun, too; it would occur at Jupiter full phase. Mr. Hooker, the chief meteorologist, announced that it had been calculated that such a perfect line up would not occur again for more than two hundred thousand years. You can bet we were all waiting to see it. The Project Jove scientists were excited about it, too, and special arrangements had been made to observe it.

Having it occur at Jupiter full phase meant not only that a sixth heavenly body—the Sun—would be in the line up, but that we would be able to see it. The shadows of Ganymede and Callisto would be centered on Jupiter just as Io and Europa reached mid transit.

Full phase is at six o'clock Saturday morning; we all got up about four-thirty and were outside by five. George and I carried Peggy out in her bubble stretcher. We were just in time.

It was a fine, clear summer night, light as could be, with old Jupiter blazing overhead like a balloon on fire. Io had just barely kissed the eastern edge of Jupiter—"first contact" they call it. Europa was already a bit inside the eastern edge and I had to look sharp to see it. When a moon is not in full phase it is no trouble to pick it out while it's making its transit, but at full phase it tends to blend into the background. However, both Ioand Europa are just a hair brighter than Jupiter. Besides that, they break up the pattern of Jupiter's bands and that lets you see them, too.

Well inside, but still in the eastern half—say about half way to Jupiter's center point—were the shadows of Ganymede and Callisto. I could not have told them apart, if I hadn't known that the one further east had to be Ganymede's. They were just little round black dots; three thousand miles or so isn't anything when it's plastered against Jupiter's eighty-nine thousand mile width.

Io looked a bit bigger than the shadows; Europa looked more than half again as big, about the way the Moon looks from Earth.

We felt a slight quake but it wasn't even enough to make us nervous; we were used to quakes. Besides that, about then Io"kissed" Europa. From then on, throughout the rest of the show, Io gradually slid underneath, or behind, Europa.

They crawled across the face of Jupiter; the moons fairly fast, the shadows in a slow creep. When we had been outside a little less than half an hour the two shadows kissed and started to merge. Io had slid halfway under Europa and looked like a big tumor on its side. They were almost halfway to center and the shadows were even closer.

Just before six o'clock Europa—you could no longer see Io; Europa covered it—as I was saying, Europa kissed the shadow, which by now was round, just one shadow.

Four or five minutes later the shadow had crawled up on top of Europa; they were all lined up—and I knew I was seeing the most extraordinary sight I would ever see in my life, Sun, Jupiter, and the four biggest moons all perfectly lined up.

I let out a deep breath: I don't know how long I had been holding it. "Gee whiz!" was all I could think of to say.

"I agree in general with your sentiments, Bill," Dad answered. "Molly, hadn't we better get Peggy inside? I'm afraid she is getting cold."

"Yes," agreed Molly. "I know I am, for one."

"I'm going down to the lake now," I said. The biggest tide of record was expected, of course. While the lake was too small to show much tide, I had made a mark the day before and I hoped to be able to measure it.

"Don't get lost in the dark," Dad called out. I didn't answer him. A silly remark doesn't require an answer.

I had gotten past the road and maybe a quarter of a mile beyond when it hit.

It knocked me flat on my face, the heaviest shake I had ever felt in my life. I've felt heavy quakes in California; they weren't a patch on this one. I lay face down for a long moment, digging into the rock with my finger nails and trying to get it to hold still.

The seasick roll kept up and kept up and kept up, and with it the noise—a deep bass rumble, deeper than thunder and more terrifying.

A rock rolled up against me and nipped my side. I got to my feet and managed to stay there. The ground was still swaying and the rumble kept on. I headed for the house, running—like dancing over shifting ice. I fell down twice and got up again.

The front end of the house was all caved in. The roof slanted down at a crazy angle. "George!" I yelled. "Molly! Where are you?"

George heard me and straightened up. He was on the other side of the house and now I saw him over the collapsed roof. He didn't say anything. I rushed around to where he stood. "Are you all right?" I demanded.

"Help me get Molly out—" he gasped.

I found out later that George had gone inside with Molly and Peggy, had helped get Peg out of the stretcher and back into her room, and then had gone outside, leaving Molly to get breakfast. The quake had hit while he was returning from the barn. But we didn't have time then to talk it over; we dug—moving slabs with our bare hands that had taken four Scouts, working together, to lay. George kept crying, "Molly! Molly! Where are you?"

She was lying on the floor beside the stone work bench that was penned in by the roof. We heaved it off her; George scrambled over the rubble and reached her. "Molly! Molly darling!"

She opened her eyes. "George!"

"Are you all right?"

"What happened?"

"Quake. Are you all right? Are you hurt?"

She sat up, made a face as if something hurt her, and said, "I think I— George! Where s Peggy? Get Peggy!"

Peggy's room was still upright; the reinforcements had held while the rest of the house had gone down around it. George insisted on moving Molly out into the open first, then we tackled the slabs that kept us from getting at the air lock to Peggy's room.

The outer door of the air lock was burst out of its gaskets and stood open, the wrong way. It was black inside the lock; Jupiter light didn't reach inside. I couldn't see what I was doing but when I pushed on the inner door it wouldn't give. "Can't budge it," I told Dad. "Get a light."

"Probably still held by air pressure. Call out to Peggy to get in the stretcher and we'll bleed it."

"I need a light," I repeated.

"I haven't got a light."

"Didn't you have one with you?" I had had one; we always carried torches, outdoors in dark phase, but I had dropped mine when the quake hit. I didn't know where it was.

Dad thought about it, then climbed over the slabs. He was back in a moment. "I found it between here and the barn. I must have dropped it." He shined it on the inner door and we looked over the situation.

"It looks bad," Dad said softly. "Explosive decompression." There was a gap you could poke your fingers through between the top of the door and the frame; the door wasn't pressure held, it was jammed.

Dad called out, "Peggy! Oh, Peggy, darling—can you hear me?"

No answer. "Take the light, Bill—and stand aside." He reared back and then hit the door hard with his shoulder. It gave a bit but didn't open. He hit it again and it flew open, spilling him on his hands and knees. He scrambled up as I shined the light in past him.

Peggy lay half in and half out of bed, as if she had been trying to get up when she passed out. Her head hung down and a trickle of blood was dripping from her mouth on to the floor.

Molly had come in right behind us; she and Dad got Peggy into the stretcher and Dad brought the pressure up. She was alive; she gasped and choked and sprayed blood over us while we were trying to help her. Then she cried. She seemed to quiet down and go to sleep —or maybe fainted again—after we got her into the bubble.

Molly was crying but not making any fuss about it. Dad straightened up, wiped his face and said, "Grab on, Bill. We've got to get her into town."

I said, "Yes," and picked up one end. With Molly holding the light and us carrying, we picked our way over the heap of rock that used to be our house and got out into the open. We put the stretcher down for a moment and I looked around.

I glanced up at Jupiter; the shadows were still on his face and Io and Europa had not yet reached the western edge. The whole thing had taken less than an hour. But that wasn't what held my attention; the sky looked funny.

The stars were too bright and there were too many of them. "George," I said, "what's happened to the sky?"

"No time now——" he started to say. Then he stopped and said very slowly, "Great Scott!"

"What?" asked Molly. "What's the matter?"

"Back to the house, all of you! We've got to dig out all the clothes we can get at. And blankets!"

"What? Why?"

"The heat trap! The heat trap is gone—the quake must have gotten the power house."

So we dug again, until we found what we had to have. It didn't take long; we knew where things had to be. It was just a case of getting the rocks off. The blankets were for the stretcher; Dad wrapped them around like a cocoon and tied them in place. "Okay, Bill," he said. "Quick march, nowl"

It was then that I heard Mabel bawl. I stopped and looked at Dad. He stopped too, with an agony of indecision on his face. "Oh, damn!" he said, the first time I had ever heard him really swear. "We can't just leave her to freeze; she's a member of the family. Come, Bill."

We put the stretcher down again and ran to the bam. It was a junk heap but we could tell by Mabel's complaints where she was. We dragged the roof off her and she got to her feet. She didn't seem to be hurt but I guess she had been knocked silly. She looked at us indignantly.

We had a time of it getting her over the slabs, with Dad pulling and me pushing. Dad handed the halter to Molly. "How about the chickens?" I asked, "And the rabbits?" Some of them had been crushed; the rest were loose around the place. I felt one—a rabbit —scurry between my feet

"No time!" snapped Dad. "We can't take them; all we could do for them would be to cut their throats. Come!"

We headed for the road.

Molly led the way, leading and dragging Mabel and carrying the light. We needed the light. The night, too bright and too clear a few minutes before, was now suddenly overcast. Shortly we couldn't see Jupiter at all, and then you couldn't count your fingers in front of your face.

The road was wet underfoot, not rain, but sudden dew; it was getting steadily colder.

Then it did rain, steadily and coldly. Presently it changed to wet snow. Molly dropped back. "George," she wanted to know, "have we come as far as the turn off to the Schultz's?"

"That's no good," he answered. "We've got to get the baby into the hospital."

That isn't what I meant. Oughtn't I to warn them?"

They'll be all right. Their house is sound."

"But the cold?"

"Oh." He saw what she meant and so did I, when I thought about it. With the heat trap gone and the power house gone, every house in the colony was going to be like an ice box. What good is a power receiver on your roof with no power to receive? It was going to get colder and colder and colder ....

And then it would get colder again. And colder....

"Keep moving," Dad said suddenly. "We'll figure it out when we get there."

But we didn't figure it out, because we never found the turn off.

The snow was driving into our faces by then and we must have walked on past it. It was a dry snow now, little sharp needles that burned when they hit.

Without saying anything about it, I had started counting paces when we left the walls of lava that marked the place where the new road led to our place and out to the new farms beyond. As near as I could make it we had come about five miles when Molly stopped.

"What's the matter?" yelled Dad.

"Dear," she said, "I can't find the road. I think I've lost it."

I kicked the snow away underfoot. It was made ground, all right—soft. Dad took the torch and looked at his watch. "We must have come about six miles," he announced.

"Five," I corrected him. "Or five and a half at the outside," I told him I had been counting.

He considered it. "We've come just about to that stretch where the road is flush with the field," he said. "It can't be more than a half mile or a mile to the cut through Kneiper's Ridge. After that we can't lose it. Bill, take the light and cast off to the right for a hundred paces, then back to the left. If that doesn't do it, well go further. And for heaven's sakes retrace your steps—it's the only way you'll find us in this storm."

I took the light and set out. To the right was no good, though I went a hundred and fifty paces instead of a hundred, I got back to them, and reported, and started out again. Dad just grunted; he was busy with something about the stretcher.

On the twenty-third step to the left I found the road —by stepping down about a foot, falling flat on my face, and nearly losing the light. I picked myself up and went back.

"Good!" said Dad. "Slip your neck through this."

"This" was a sort of yoke he had devised by retying the blankets around the stretcher so as to get some free line. With my neck through it I could carry the weight on my shoulders and just steady my end with my hands. Not that it was heavy, but our hands were getting stiff with cold. "Good enough!" I said, "But, look, George—let Molly take your end."

"Nonsense!"

"It isn't nonsense. Molly can do it—can't you, Molly? And you know this road better than we do; you've tramped it enough times in the dark."

"Bill is right, dear," Molly said at once. "Here—take Mabel."

Dad gave in, took the light and the halter. Mabel didn't want to go any further; she wanted to sit down, I guess. Dad kicked her in the rear and jerked on her neck. Her feelings were hurt; she wasn't used to that sort of treatment—particularly not from Dad. But there was no time to humor her; it was getting colder.

We went on. I don't know how Dad kept to the road but he did. We had been at it another hour, I suppose, and had left Kneiper's slot well behind, when Molly stumbled, then her knees just seemed to cave in and she knelt down in the snow.

I stopped and sat down, too; I needed the rest. I just wanted to stay there and let it snow.

Dad came back and put his arms around her and comforted her and told her to lead Mabel now; she couldn't get lost on this stretch. She insisted that she could still carry. Dad ignored her, just lifted the yoke business off her shoulders. Then he came back and peeled a bit of blanket off the bubble and shined the torch inside. He put it back into place. Molly said, "How is she?'

Dad said, "She's still breathing. She opened her eyes when the light hit them. Let's go." He got the yoke on and Molly took the light and the halter.

Molly couldn't have seen what I saw; the plastic of the bubble was frosted over on the inside. Dad hadn't seen Peggy breathe; he hadn't seen anything.

I thought about it for a long while and wondered how you would classify that sort of a lie. Dad wasn't a liar, that was certain—and yet it seemed to me that such a lie, right then, was better than the truth. It was complicated.

Pretty soon I forgot it; I was too busy putting one foot in front of the other and counting the steps. I couldn't feel my feet any longer.

Dad stopped and I bumped into the end of the stretcher. "Listen!" he said.

I listened and heard a dull rumble. "Quake?"

"No. Keep quiet." Then he added, "It's down the road. Off the road, everybody! Off to the right."

The rumble got louder and presently I made out a light through the snow, back the way we had come. Dad saw it, too, and stepped out on the road and started waving our torch.

The rumble stopped almost on top of him; it was a rock crusher and it was loaded down with people, people clinging to it all over and even riding the spade. The driver yelled, "Climb on! And hurry!"

Then he saw the cow and added, "No live stock."

"We've got a stretcher with my little girl in it," Dad shouted back to him. "We need help."

There was a short commotion, while the driver ordered a couple of men down to help us. In the mix up Dad disappeared. One moment Molly was holding Mabel's halter, then Dad was gone and so was the cow.

We got the stretcher up onto the spade and some of the men braced it with their backs. I was wondering what to do about Dad and thinking maybe I ought to jump off and look for him, when he appeared out of the darkness and scrambled up beside me. "Where's Molly?" he asked.

"Up on top. But where is Mabel? What did you do with her?"

"Mabel is all right." He folded his knife and put it in his pocket. I didn't ask any more questions.

17. Disaster

We passed several more people after that, but the driver wouldn't stop. We were fairly close into town and he insisted that they could make it on their own. His emergency power pack was running low, he said; he had come all the way from the bend in the lake, ten miles beyond our place.

Besides, I don't know where he would have put them. We were about three deep and Dad had to keep warning people not to lean on the bubble of the stretcher.

Then the power pack did quit and the driver shouted, "Everybody off! Get on in on your own." But by now we were actually in town, the outskirts, and it would have been no trouble if it hadn't been blowing a blizzard. The driver insisted on helping Dad with the stretcher. He was a good Joe and turned out to be—when I saw him in the light—the same man who had crushed our acreage.

At long, long last we were inside the hospital and Peggy was turned over to the hospital people and put in a pressurized room. More than that, she was alive. In bad shape, but alive.

Molly stayed with her. I would like to have stayed, too—it was fairly warm in the hospital; it had its own emergency power pack. But they wouldn't let me.

Dad told Molly that he was reporting to the chief engineer for duty. I was told to go to the Immigration Receiving Station. I did so and it was just like the day we landed, only worse—and colder. I found myself right back in the very room which was the first I had ever been in on Ganymede.

The place was packed and getting more packed every minute as more refugees kept pouring in from the surrounding country. It was cold, though not so bitterly cold as outside. The lights were off, of course; light and heat all came from the power plant for everything. Hand lights had been set up here and there and you could sort of grope your way around. There were the usual complaints, too, though maybe not as bad as you hear from immigrants. I paid no attention to any of them; I was happy in a dead beat sort of way just to be inside and fairly warm and feel the blood start to go back into my feet.

We stayed there for thirty-seven hours. It was twenty-four hours before we got anything to eat.

Here was the way it went: the metal buildings, such as the Receiving Station, stood up. Very few of the stone buildings had, which we knew by then from the reports of all of us. The Power Station was out, and with it, the heat trap. They wouldn't tell us anything about it except to say that it was being fixed.

In the mean time we were packed in tight as they could put us, keeping the place warm mainly by the heat from our bodies, sheep style. There were, they say, several power packs being used to heat the place, too, one being turned on every time the temperature in the room dropped below freezing. If so, I never got close to one and I don't think it ever did get up to freezing where I was.

I would sit down and grab my knees and fall into a dopey sleep. Then a nightmare would wake me up and I'd get up and pound myself and walk around. After a while I'd sit down on the floor and freeze my fanny again.

I seem to remember encountering Noisy Edwards in the crowd and waving my finger under his nose and telling him I had an appointment to knock his block off. I seem to remember him staring back at me as if he couldn't place me. But I don't know; I may have dreamed it. I thought I ran across Hank, too, and had a long talk with him, but Hank told me afterwards that he never laid eyes on me the whole time.

After a long time—it seemed a week but the records show it was eight o'clock Sunday morning—they passed us out some lukewarm soup. It was wonderful. After that I wanted to leave the building to go to the hospital. I wanted to find Molly and see how Peggy was doing.

They wouldn't let me. It was seventy below outside and still dropping.

About twentytwo o'clock the lights came on and the worst was over.

We had a decent meal soon after that, sandwiches and soup, and when the Sun came up at midnight they announced that anybody could go outside who cared to risk it. I waited until noon Monday. By then it was up to twenty below and I made a dash for it to the hospital.

Peggy was doing as well as could be expected. Molly had stayed with her and had spent the time in bed with her, huddling up to her to keep her warm. While the hospital had emergency heat, it didn't have the capacity to cope with any such disaster as had struck us; it was darn near as cold as the Receiving Station. But Peggy had come through it, sleeping most of the time. She even perked up enough to smile and say hello.

Molly's left arm was in a sling and splinted. I asked how that happened—and then I felt foolish. It had happened in the quake itself but I hadn't known it and George still didn t know about it; none of the engineers were back.

It didn't seem possible that she could have done what she did, until I recalled that she carried the stretcher only after Dad had rigged the rope yokes. Molly is all right.

They chased me out and I hightailed it back to the Receiving Station and ran into Sergei almost at once. He hailed me and I went over to him. He had a pencil and a list and a number of the older fellows were gathered around him. "What's up?" I said.

"Just the guy I'm looking for," he said. "I had you down for dead. Disaster party—are you in?"

I was in, all right. The parties were made up of older Scouts, sixteen and up, and the younger men, We were sent out on the town's tractors, one to each road, and we worked in teams of two. I spotted Hank Jones as we were loading and they let us make up a team.

It was grim work. For equipment we had shovels and lists—lists of who lived on which farm. Sometimes a name would have a notation "known to be alive," but more often not. A team would be dropped off with the lists for three or four farms and the tractor would go on, to pick them up on the return trip.

Our job was to settle the doubt about those other names and—theoretically—to rescue anyone still alive.

We didn't find anyone alive.

The lucky ones had been killed in the quake; the unlucky ones had waited too long and didn't make it into town. Some we found on the road; they had tried to make it but had started too late. The worst of all were those whose houses hadn't fallen and had tried to stick it out. Hank and I found one couple just sitting, arms around each other. They were hard as rock.

When we found one, we would try to identify it on the list, then cover it up with snow, several feet deep, so it would keep for a while after it started to thaw.

When we settled with the people at a farm, we rummaged around and found all the livestock we could and carried or dragged their carcasses down to the road, to be toted into town on the tractor and slapped into deep freeze. It seemed a dirty job to do, robbing the dead, but, as Hank pointed out, we would all be getting a little hungry by and by.

Hank bothered me a little; he was merry about the whole thing. I guess it was better to laugh about it, in the long run, and after a while he had me doing it. It was just too big to soak up all at once and you didn't dare let it get you.

But I should have caught on when we came to his own place. "We can skip it," he said, and checked off the list.

"Hadn't we better check for livestock?" I said.

"Nope. We're running short of time. Let's move on to the Millers' place."

"Did they get out?"

"I don't know. I didn't see any of them in town."

The Millers hadn't gotten out; we barely had time to take care of them before the tractor picked us up. It was a week later that I found out that both of Hank's parents had been killed in the quake. He had taken time to drag them out and put them into their ice cellar before he had headed for town.

Like myself, Hank had been outside when it hit, still looking at the line up. The fact that the big shock had occurred right after the line up had kept a lot of people from being killed in their beds—but they say that the line up caused the quake, triggered it, that is, with tidal strains, so I guess it sort of evens up. Of course, the line up didn't actually make the quake; it had been building up to it ever since the beginning of the atmosphere project. Gravity's books have got to balance.

The colony had had thirty-seven thousand people when the quake hit. The census when we finished it showed less than thirteen thousand. Besides that we had lost every crop, all or almost all the livestock. As Hank said, we'd all be a little hungry by and by.

They dumped us back at the Receiving Station and a second group of parties got ready to leave. I looked for a quiet spot to try to get some sleep.

I was just dozing off, it seemed to me, when somebody shook me. It was Dad. "Are you all right, Bill?"

I rubbed my eyes. "I'm okay. Have you seen Molly and Peggy?"

"Just left them. I'm off duty for a few hours. Bill, have you seen anything of the Schultzes?"

I sat up, wide awake. "No. Have you?"

"No."

I told him what I had been doing and he nodded. "Go back to sleep, Bill. I'll see if there has been a report on them."

I didn't go to sleep. He was back after a bit to say that he hadn't been able to find out anything one way or another. "I'm worried, Bill."

"So am I."

"I'm going out and check up."

"Let's go."

Dad shook his head. "No need for us both. You get some sleep." I went along, just the same.

We were lucky. A disaster party was just heading down our road and we hitched a ride. Our own farm and the Schultz's place were among those to be covered on this trip; Dad told the driver that we would check both places and report when we got back to town. That was all right with him.

They dropped us at the turn off and we trudged up toward the Schultz's house. I began to get the horrors as we went. It's one thing to pile snow over comparative strangers; it's another thing entirely to expect to find Mama Schultz or Gretchen with their faces blue and stiff.

I didn't visualize Papa as dead; people like Papa Schultz don't die–they just go on forever. Or it feels like that.

But I still wasn't prepared for what we did find.

We had just come around a little hummock that conceals their house from the road. George stopped and said, "Well, the house is still standing. His quakeproofing held."

I looked at it, then I stared—and then I yelled. "Hey, George! The Tree is gone!"

The house was there, but the apple tree—"the most beautiful tree on Ganymede"—was missing. Just gone. I began to run.

We were almost to the house when the door opened. There stood Papa Schultz.

They were all safe, every one of them. What remained of the tree was ashes in the fireplace. Papa had cut it down as soon as the power went off and the temperature started to drop—and then had fed it, little by little, into the flames.

Papa, telling us about it, gestured at the blackened firebox. "Johann's folly, they called it. I guess they will not think old Appleseed Johnny quite so foolish now, eh?" He roared and slapped Dad on the shoulders.

"But your tree," I said stupidly.

"I will plant another, many others." He stopped and was suddenly serious. "But your trees, William, your brave little baby trees—they are dead, not?"

I said I hadn't seen them yet. He nodded solemnly. "They are dead of the cold. Hugo!"

"Yes, Papa."

"Fetch me an apple." Hugo did so and Papa presented it to me. "You will plant again." I nodded and stuck it in my pocket.

They were glad to hear that we were all right, though Mama clucked over Molly's broken arm. Yo had fought his way over to our place during the first part of the storm, found that we were gone and returned, two frost bitten ears for his efforts. He was in town now to look for us.

But they were all right, every one of them. Even their livestock they had saved—cows, pigs, chickens, people, all huddled together throughout the cold and kept from freezing by the fire from their tree.

The animals were back in the barn, now that power was on again, but the place still showed that they had been there—and smelled of it, too. I think Mama was more upset by the shambles of her immaculate living room than she was by the magnitude of the disaster. I don't think she realized that most of her neighbors were dead. It hadn't hit her yet.

Dad turned down Papa Schultz's offer to come with us to look over our farm. Then Papa said he would see us on the tractor truck, as he intended to go into town and find out what he could do. We had mugs of Mama's strong tea and some corn bread and left.

I was thinking about the Schultzes and how good it was to find them alive, as we trudged over to our place. I told Dad that it was a miracle.

He shook his head. "Not a miracle. They are survivor types."

"What type is a survivor type?" I asked.

He took a long time to answer that one. Finally he said, "Survivors survive. I guess that is the only way to tell the survivor type for certain."

I said. "We're survivor types, too, in that case."

"Could be," he admitted. "At least we've come through this one."

When I had left, the house was down. In the mean time I had seen dozens of houses down, yet it was a shock to me when we topped the rise and I saw that it really was down. I suppose I expected that after a while I would wake up safe and warm in bed and everything would be all right.

The fields were there, that was all that you could say for it. I scraped the snow off a stretch I knew was beginning to crop. The plants were dead of course and the ground was hard. I was fairly sure that even the earth worms were dead; they had had nothing to warn them to burrow below the frost line.

My little saplings were dead, of course.

We found two of the rabbits, huddled together and stiff, under a drift against what was left of the barn. We didn't find any of the chickens except one, the first old hen we ever had. She had been setting and her nest wasn't crushed and had been covered by a piece of the fallen roof of the barn. She was still on it, hadn't moved and the eggs under her were frozen. I think that was what got me.

I was just a chap who used to have a farm.

Dad had been poking around the house. He came back to the barn and spoke to me. "Well, Bill?"

I stood up. "George, I've had it."

"Then let's go back to town. The truck will be along shortly."

"I mean I've really had it!"

"Yes, I know."

I took a look in Peggy's room first, but Dad's salvage had been thorough. My accordion was in there, however, with snow from the broken door drifted over the case. I brushed it off and picked it up. "Leave it," Dad said. "It's safe here and you've no place to put it."

"I don't expect to be back," I said.

"Very well."

We made a bundle of what Dad had gotten together, added the accordion, the two rabbits and the hen, and carried it all down to the road. The tractor showed up presently, we got aboard and Dad chucked the rabbits and chicken on the pile of such that they had salvaged. Papa Schultz was waiting at his turnoff.

Dad and I tried to spot Mabel by the road on the trip back, but we didn't find her. Probably she had been picked up by an earlier trip, seeing that she was close to town. I was just as well pleased. All right, she had to be salvaged—but I didn't want the job. I'm not a cannibal.

I managed to get some sleep and a bite to eat and was sent out on another disaster party. The colony began to settle down into some sort of routine. Those whose houses had stood up moved back into them and the rest of us were taken care of in the Receiving Station, much as we had been when our party landed. Food was short, of course, and Ganymede had rationing for the first time since the first colonials really got started.

Not that we were going to starve. In the first place there weren't too many of us to feed and there had been quite a lot of food on hand. The real pinch would come later. It was decided to set winter back by three months, that is, start all over again with spring—which messed up the calendar from then on. But it would give us a new crop as quickly as possible to make up for the one that we had lost.

Dad stayed on duty with the engineer's office. Plans called for setting up two more power plants, spaced around the equator, and each of them capable of holding the heat trap alone. The disaster wasn't going to be allowed to happen again. Of course the installations would have to come from Earth, but we had been lucky on one score; Mars was in a position to relay for us. The report had gone into Earth at once and, instead of another load of immigrants, we were to get what we needed on the next trip.

Not that I cared. I had stayed in town, too, although the Schultzes had invited me to stay with them. I was earning my keep helping to rebuild and quakeproof the houses of the survivors. It had been agreed that we would all go back, George, Molly, Peggy, and me, on the first trip, if we could get space. It had been unanimous except that Peggy hadn't been consulted; it just had to be.

We weren't the only ones who were going back. The Colonial Commission had put up a squawk of course, but under the circumstances they had to give in. After it had been made official and the lists were opened Dad and I went over to the Commission agent's office to put in our applications. We were about the last to apply; Dad had been out of town on duty and I had waited until he got back.

The office was closed with a "Back in a half hour" sign stuck on the door. We waited. There were bulletin boards outside the office; on them were posted the names of those who had applied for repatriation. I started reading them to kill time and so did Dad.

I found Saunders' name there and pointed it out to George. He grunted and said, "No loss." Noisy Edwards' name was there, too; maybe I had seen him in the Receiving Station, although I hadn't seen him since. It occurred to me that I could probably corner him in the ship and pay him back his lumps, but I wasn't really interested in the project. I read on down.

I expected to find Hank Jones' name there, but I couldn't find it. I started reading the list carefully, paying attention to every name I recognized. I began to see a pattern.

Presently the agent got back and opened the door. Dad touched my arm. "Come on, Bill."

I said, "Wait a minute, George. You read all the names?"

"Yes, I did."

"I've been thinking. You know, George, I don't like being classed with these lugs."

He chewed his lip. "I know exactly what you mean."

I took the plunge. "You can do as you like, George, but I'm not going home, if I ever do, until I've licked this joint."

Dad looked as unhappy as he could look. He was silent for a long time, then he said, "I've got to take Peggy back, Bill. She won't go unless Molly and I go along. And she's got to go."

"Yes, I know."

"You understand how it is, Bill?"

"Yes, Dad, I understand." He went on in to make out his application, whistling a little tune he used to whistle just after Anne died. I don't think he knew he was whistling it.

I waited for him and after a bit we went away together.

I moved back out to the farm the next day. Not to the Schultzes—to the farm. I slept in Peggy's room and got busy fixing the place up and getting ready to plant my emergency allowance of seed.

Then, about two weeks before they were to leave in the Covered Wagon, Peggy died, and there wasn't any reason for any of us to go back to Earth.

Yo Schultz had been in town and Dad sent word back by him. Yo came over and woke me up and told me about it. I thanked him.

He wanted to know if I wanted to come back to the house with him. I said, no, thanks, that I would rather be alone. He made me promise to come over the next day and went away.

I lay back down on Peggy's bed.

She was dead and there was nothing more I could do about it She was dead and it was all my fault… if I hadn't encouraged her, they would have been able to get her to go back before it was too late. She would be back Earthside, going to school and growing up healthy and happy—right back in California, not here in this damned place where she couldn't live, where human beings were never meant to live.

I bit the pillow and blubbered. I said, "Oh, Anne, Anne! Take care of her, Anne—She's so little; she won't know what to do."

And then I stopped bawling and listened, half way expecting Anne to answer me and tell me she would,

But I couldn't hear anything, not at first… and what I did hear was only, "Stand tall, Billy," . .. very faint and far away, "Stand tall, son."

After a while I got up and washed my face and started hoofing it back into town.

18. Pioneer Party

We all lived in Peggy's room until Dad and I had the seeds in, then we built on to it, quake proof this time and with a big view window facing the lake and another facing the mountains. We knocked a window in Peggy's room, too; it made it seem like a different place.

We built on still another room presently, as it seemed as if we might be needing it. All the rooms had windows and the living room had a fireplace.

Dad and I were terribly busy the second season after the quake. Enough seed could be had by then and we farmed the empty farm across the road from us. Then some newcomers, the Ellises, moved in and paid us for the crop. It was just what they call a "book transaction," but it reduced our debt with the Commission.

Two G-years after the line up you would never have known that anything had happened. There wasn't a wrecked building in the community, there were better than fortyfive thousand people, and the town was booming. New people were coming in so fast that you could even sell some produce to the Commission in lieu of land.

We weren't doing so badly, ourselves. We had a hive of bees. We had Mabel II, and Margie and Mamie, and I was sending the spare milk into town by the city transport truck that passed down our road once a day. I had broken Marge and Mamie to the yoke and used them for ploughing as well—we had crushed five more acres—and we were even talking about getting a horse.

Some people had horses already, the Schultzes for instance. The council had wrangled about it before okaying the "invasion," with conservatives holding out for tractors. But we weren't equipped to manufacture tractors yet and the policy was to make the planet self-sufficient—the hay burners won out. Horses can manufacture more horses and that is one trick that tractors have never learned.

Furthermore, though I would have turned my nose up at the idea when I was a ground hog back in Diego Borough, horse steak is very tasty.

It turned out we did need the extra room. Twins— both boys. New babies don't look as if they were worth keeping, but they get over it—slowly. I bought a crib as a present for them, made right here on Ganymede, out of glass fabric stuck together with synthetic resin. It was getting possible to buy quite a number of home products.

I told Molly I would initiate the brats into the Cubs when they were old enough. I was getting in to meetings oftener now, for I had a patrol again—the Daniel Boone patrol, mostly new kids. I still hadn't taken my own tests but you can't do everything at once. Once I was scheduled to take them and a litter of pigs picked that day to arrive. But I planned to take them; I wanted to be an Eagle Scout again, even if I was getting a little old to worry about badges in themselves.

It may sound as if the survivors didn't give a hoot about those who had died in the disaster. But that isn't the truth. It was just that you work from day to day and that keeps your mind busy. In any case, we weren't the first colony to be two-thirds wiped out— and we wouldn't be the last. You can grieve only so much; after that it's self pity. So George says.

George still wanted me to go back to Earth to finish my education and I had been toying with the idea myself. I was beginning to realize that there were a few things I hadn't learned. The idea was attractive; it would not be like going back right after the quake, tail between my legs. I'd be a property owner, paying my own way. The fare was considerable—five acres—and would about clean me out, my half, and put a load on George and Molly. But they were both for it.

Besides, Dad owned blocked assets back Earthside which would pay my way through school. They were no use to him otherwise; the only thing the Commission will accept as pay for imports is proved land. There was even a possibility, if the council won a suit pending back Earthside, that his blocked assets could be used for my fare as well and not cost us a square foot of improved soil. All in all, it was nothing to turn down idly.

We were talking about me leaving on the New Ark when another matter came up—the planetary survey.

Ganymede had to have settlements other than Leda; that was evident even when we landed. The Commission planned to set up two more ports-of-entry near the two new power stations and let the place grow from three centers. The present colonists were to build the new towns—receiving stations, hydroponics sheds, infirmaries, and so forth—and be paid for it in imports. Immigration would be stepped up accordingly, something that the Commission was very anxious to do, now that they had the ships to dump them in on us in quantity.

The old Jitterbug was about to take pioneer parties out to select sites and make plans—and both Hank and Sergei were going.

I wanted to go so bad I could taste it In the whole time I had been here I had never gotten fifty miles from Leda. Suppose somebody asked me what it was like on Ganymede when I got back on Earth? Truthfully, I wouldn't be able to tell them; I hadn't been any place.

I had had a chance, once, to make a trip to Barnard's Moon, as a temporary employee of Project Jove—and that hadn't worked out either. The twins. I stayed back and took care of the farm.

I talked it over with Dad.

"I hate to see you delay it any longer," he said seriously. I pointed out that it would be only two months.

"Hmmm—" he said. "Have you taken your merit badge tests yet?"

He knew I hadn't; I changed the subject by pointing out that Sergei and Hank were going.

"But they are both older than you are," he answered.

"Not by very much!"

"But I think they are each over the age limit they were looking for—and you are just under."

"Look, George," I protested, "rules were made to be broken. I've heard you say that There must be some spot I can fill—cook, maybe."

And that's just the job I got—cook.

I always have been a pretty fair cook—not in Mama Schultz's class, but good. The party had nothing to complain about on that score.

Captain Hattie put us down at a selected spot nine degrees north of the equator and longitude 113 west—that is to say, just out of sight of Jupiter on the far side and about thirtyone hundred miles from Leda. Mr. Hooker says that the average temperature of Ganymede will rise about nine degrees over the next century as more and more of the ancient ice melts—at which time Leda will be semitropical and the planet will be habitable half way to the poles. In the meantime colonies would be planted only at or near the equator.

I was sorry we had Captain Hattie as pilot; she is such an insufferable old scold. She thinks rocket pilots are a special race apart

—supermen. At least she acts like it. Recently the Commission had forced her to take a relief pilot; there was just too much for one pilot to do. They had tried to force a check pilot on her, too—an indirect way to lead up to retiring her, but she was too tough for them. She threatened to take the Jitterbug up and crash it ... and they didn't dare call her bluff. At that time they were absolutely dependent on the Jitterbug.

Originally the Jitterbug's only purpose was for supply and passengers between Leda and the Project Jove station on Barnard's Moon—but that was back in the days when ships from Earth actually landed at Leda. Then the *Mayflower* came along and the Jitterbug was pressed into service as a shuttle. There was talk of another shuttle rocket but we didn't have it yet, which is why Captain Hattie had them where it hurt. The Commission had visions of a loaded ship circling Ganymede, just going round and round and round again, with no way to get down, like a kitten stuck up in a tree.

I'll say this for Hattie; she could handle her ship. I think she had nerve ends out in the skin of it. In clear weather she could even make a glide landing, in spite of our thin air. But I think she preferred to shake up her passengers with a jet landing.

She put us down, the Jitterbug took on more water mass, and away it bounced. She had three more parties to land. All in all the Jitterbug was servicing eight other pioneer parties. It would be back to pick us up in about three weeks.

The leader of our party was Paul du Maurier, who was the new assistant Scoutmaster of the Auslander troop and the chap who had gotten me taken on as cookie. He was younger than some of those working for him; furthermore, he shaved, which made him stand out like a white leghorn in a hog pen and made him look even younger. That is, he did shave, but he started letting his beard grow on this trip. "Better trim that grass," I advised him.

He said, "Don't you like my beard, Doctor Slop?" —that was a nickname he had awarded me for "Omnibus stew," my own invention. He didn't mean any harm by it.

I said, "Well, it covers your face, which is some help—but you might be mistaken for one of us colonial roughnecks. That wouldn't do for one of you high-toned Commission boys."

He smiled mysteriously and said, "Maybe that's what I want."

I said, "Maybe. But they'll lock you up in a zoo if you wear it back to Earth." He was due to go back for Earthside duty by the same trip I expected to make, via the Covered Wagon, two weeks after the end of the survey.

He smiled again and said, "Ah, yes, so they would," and changed the subject. Paul was one of the most thoroughly good guys I have ever met and smart as a whip as well. He was a graduate of South Africa University with P. G. on top of that at the System Institute on Venus—an ecologist, specializing in planetary engineering.

He handled that gang of rugged individualists without raising his voice. There is something about a real leader that makes it unnecessary for him to get tough.

But back to the survey—I didn't see much of it as I was up to my elbows in pots and pans, but I knew what was going on. The valley we were in had been picked from photographs taken from the Jitterbug; it was now up to Paul to decide whether or not it was ideally suited to easy colonization. It had the advantage of being in direct line-of-sight with power station number two, but that was not essential. Line-of-sight power relays could be placed anywhere on the mountains (no name, as yet) just south of us. Most of the new villages would have to have power relayed anyhow. Aside from a safety factor for the heat trap there was no point in setting up extra power stations when the whole planet couldn't use the potential of one mass-conversion plant.

So they got busy—an engineering team working on drainage and probable annual water resources, topographers getting a contour, a chemistry-agronomy team checking on what the various rock formations would make as soil, and a community architect laying out a town and farm and rocket port plot. There were several other specialists, too, like the mineralogist, Mr. Villa, who was doodlebugging the place for ores.

Paul was the "general specialist" who balanced all the data in his mind, fiddled with his slip stick, stared off into the sky, and came up with the over all answer. The over all answer for that valley was "nix"—and we moved on to the next one on the list, packing the stuff on our backs.

That was one of the few chances I got to look around. You see, we had landed at sunrise—about five o'clock Wednesday morning sunrise was, in that longitude—and the object was to get as much done as possible during each light phase. Jupiter light is all right for working in your own fields, but no good for surveying strange territory—and here we didn't even have Jupiter light—just Callisto, every other dark phase, every twelve-and-half days, to be exact. Consequently we worked straight through light phase, on pep pills.

Now a man who is on the pills will eat more than twice as much as a man who is sleeping regularly. You know, the Eskimos have a saying, "Food is sleep." I had to produce hot meals every four hours, around the clock. I had no time for sightseeing.

We got to camp number two, pitched our tents, I served a scratch meal, and Paul passed out sleeping pills. By then the Sun was down and we really died for about twenty hours. We were comfortable enough —spun glass pads under us and resin sealed glass canvas over us.

I fed them again, Paul passed out more sleepy pills, and back we went to sleep. Paul woke me Monday afternoon. This time I fixed them a light breakfast, then really spread myself to turn them out a feast. Everybody was well rested by now, and not disposed to want to go right back to bed. So I stuffed them.

After that we sat around for a few hours and talked. I got out my squeeze box—brought along by popular demand, that is to say, Paul suggested it—and gave 'em a few tunes. Then we talked some more.

They got to arguing about where life started and somebody brought up the old theory that the Sun had once been much brighter —Jock Montague, it was, the chemist. "Mark my words," he said, "When we get around to exploring Pluto, you'll find that life was there before us. Life is persistent, like mass-energy."

"Nuts," answered Mr. Villa, very politely. "Pluto isn't even a proper planet; it used to be a satellite of Neptune."

"Well, Neptune, then," Jock persisted. "Life is all through the universe. Mark my words—when the Jove Project straightens out the bugs and gets going, they'll even find life on the surface of Jupiter."

"On Jupiter?" Mr. Villa exploded. "Please, Jock! Methane and ammonia and cold as a motherin-law's kiss. Don't joke with us. Why, there's not even light down under on the surface of Jupiter; it's pitch dark."

"I said it and I'll say it again," Montague answered. "Life is persistent. Wherever there is mass and energy with conditions that permit the formation of large and stable molecules, there you will find life. Look at Mars. Look at Venus. Look at Earth—the most dangerous planet of the lot. Look at the Ruined Planet."

I said, "What do you think about it, Paul?"

The boss smiled gently. "I don't. I haven't enough data."

"There!" said Mr. Villa. "There speaks a wise man. Tell me, Jock, how did you get to be an authority on this subject?"

"I have the advantage," Jock answered grandly, "of not knowing too much about the subject. Facts are always a handicap in philosophical debate."

That ended that phase of it, for Mr. Seymour, the boss agronomist, said, "I'm not so much worried about where life came from as where it is going—here."

"How?" I wanted to know. "In what way?"

"What are we going to make of this planet? We can make it anything we want. Mars and Venus—they had native cultures. We dare not change them much and we'll never populate them very heavily. These Jovian moons are another matter; it's up to us. They say man is endlessly adaptable. I say on the contrary that man doesn't adapt himself as much as he adapts his environment. Certainly we are doing so here. But how?"

"I thought that was pretty well worked out," I said. "We set up these new centers, more people come in and we spread out, same as at Leda."

"Ah, but where does it stop? We have three ships making regular trips now. Shortly there will be a ship in every three weeks, then it will be every week, then every day. Unless we are almighty careful there will be food rationing here, same as on Earth. Bill, do you know how fast the population is increasing, back Earthside?"

I admitted that I didn't

"More than one hundred thousand more persons each day than there were the day before. Figure that up."

I did. "That would be, uh, maybe fifteen, twenty shiploads a day. Still, I imagine they could build ships to carry them."

"Yes, but where would we put them? Each day, more than twice as many people landing as there are now on this whole globe. And not just on Monday, but on Tuesday, and Wednesday, and Thursday—and the week and the month and the year after that, just to keep Earth's population stable. I tell you, it won't work. The day will come when we will have to stop immigration entirely." He looked around aggressively, like a man who expects to be contradicted.

He wasn't disappointed. Somebody said, "Oh, Seymour, come off it! Do you think you own this place just because you got here first? You snuck in while the rules were lax."

"You can't argue with mathematics," Seymour insisted. "Ganymede has got to be made self-sufficient as soon as possible—and then we've got to slam the door!"

Paul was shaking his head. "It won't be necessary."

"Huh?" said Seymour. "Why not? Answer me that. You represent the Commission: what fancy answer has the Commission got?"

"None," Paul told him. "And your figures are right but your conclusions are wrong. Oh, Ganymede has to be made self-sufficient, true enough, but your bogeyman about a dozen or more shiploads of immigrants a day you can forget."

"Why, if I may be so bold?"

Paul looked around the tent and grinned apologetically. "Can you stand a short dissertation on population dynamics? I'm afraid I don't have Jock's advantage; this is a subject I am supposed to know something about."

Somebody said, "Stand back. Give him air."

"Okay," Paul went on, "you brought it on yourselves. A lot of people have had the idea that colonization is carried on with the end purpose of relieving the pressure of people and hunger back on Earth. Nothing could be further from the truth."

I said. "Huh?"

"Bear with me. Not only is it physically impossible for a little planet to absorb the increase of a big planet, as Seymour pointed out, but there is another reason why well never get any such flood of people as a hundred thousand people a day—a psychological reason. There are never as many people willing to emigrate (even if you didn't pick them over) as there are new people born. Most people simply will not leave home. Most of them won't even leave their native villages, much less go to a far planet."

Mr. Villa nodded. "I go along with you on that The willing emigrant is an odd breed of cat. He's scarce."

"Right," Paul agreed. "But let's suppose for a moment that a hundred thousand people were willing to emigrate every day and Ganymede and the other colonies could take them. Would that relieve the situation back home—I mean "back Earthside'? The answer is, 'No, it wouldn't'."

He appeared to have finished. I finally said, "Excuse my blank look, Paul, but why wouldn't it?"

"Studied any bionomics, Bill?"

"Some."

"Mathematical population bionomics?"

"Well–no."

"But you do know that in the greatest wars the Earth ever had there were always more people after the war than before, no matter how many were killed. Life is not merely persistent, as Jock puts it; life is explosive. The basic theorem of population mathematics to which there has never been found an exception is that population increases always, not merely up to extent of the food supply, but beyond it, to the minimum diet that will sustain life—the ragged edge of starvation. In other words, if we bled off a hundred thousand people a day, the Earth's population would then grow until the increase was around two hundred thousand a day, or the bionomical maximum for Earth's new ecological dynamic."

Nobody said anything for a moment; there wasn't anything to say. Presently Sergei spoke up with, "You paint a grim picture, boss. What's the answer?"

Paul said, "There isn't any!"

Sergei said, "I didn't mean it that way. I mean, what is the outcome?"

When Paul did answer it was just one word, one monosyllable, spoken so softly that it would not have been heard if there had not been dead silence. What he said was:

"War."

There was a shuffle and a stir; it was an unthinkable idea. Seymour said, "Come now, Mr. du Maurier—I may be a pessimist, but I'm not that much of one. Wars are no longer possible."

Paul said, "So?"

Seymour answered almost belligerently, "Are you trying to suggest that the Space Patrol would let us down? Because that is the only way a war could happen."

Paul shook his head. "The Patrol won't let us down. But they won't be able to stop it. A police force is all right for stopping individual disturbances; it's fine for nipping things in the bud. But when the disturbances are planet wide, no police force is big enough, or strong enough, or wise enough. They'll try—they'll try bravely. They won't succeed."

"You really believe that?"

"It's my considered opinion. And not only my opinion, but the opinion of the Commission. Oh, I don't mean the political board; I mean the career scientists."

"Then what in tarnation is the Commission up to?"

"Building colonies. We think that is worthwhile in itself. The colonies need not be affected by the War. In fact, I don't think they will be, not much. It will be like America was up to the end of the nineteenth century; European troubles passed her by. I rather expect that the War, when it comes, will be of such size and duration that interplanetary travel will cease to be for a considerable period. That is why I said this planet has got to be self-sufficient. It takes a high technical culture to maintain interplanetary travel and Earth may not have it—after a bit."

I think Paul's ideas were a surprise to everyone present; I know they were to me. Seymour jabbed a finger at him, "If you believe this, then why are you going back to Earth? Tell me that."

Again Paul spoke softly. "I'm not. I'm going to stay here and become a 'steader."

Suddenly I knew why he was letting his beard grow.

Seymour answered, "Then you expect it soon." It was not a question; it was a statement.

"Having gone this far," Paul said hesitantly, "I'll give you a direct answer. War is not less than forty Earth years away, not more than seventy."

You could feel a sigh of relief all around the place. Seymour continued to speak for us, "Forty to seventy, you say. But that's no reason to homestead; you probably wouldn't live to see it. Not but what you'd make a good neighbor."

"I see this War," Paul insisted. "I know it's coming. Should I leave it up to my hypothetical children and grandchildren to outguess it? No. Here I rest. If I marry, I'll marry here. I'm not raising any kids to be radioactive dust."

It must have been about here that Hank stuck his head in the tent, for I don't remember anyone answering Paul. Hank had been outside on business of his own; now he opened the flap and called out, "Hey gents! Europa is up!"

We all trooped out to see. We went partly through embarrassment, I think; Paul had been too nakedly honest. But we probably would have gone anyhow. Sure, we saw Europa every day of our lives at home, but not the way we were seeing it now.

Since Europa goes around Jupiter inside Ganymede's orbit, it never gets very far away from Jupiter, if you call 39 degrees "not very far." Since we were 113 west longitude, Jupiter was 23 degrees below our eastern horizon—which meant that Europa, when it was furthest west of Jupiter, would be a maximum of 16 degrees above the true horizon.

Excuse the arithmetic. Since we had a row of high hills practically sitting on us to the east, what all this means is that, once a week, Europa would rise above the hills, just peeking over, hang there for about a day—then turn around and set in the east, right where it had risen. Up and down like an elevator.

If you've never been off Earth, don't tell me it's impossible. That's how it is—Jupiter and its moons do some funny things.

It was the first time it had happened this trip, so we watched it—a little silver boat, riding the hills like waves, with its horns turned up. There was argument about whether or not it was still rising, or starting to set again, and much comparing of watches. Some claimed to be able to detect motion but they weren't agreed on which way. After a while I got cold and went back in.

But I was glad of the interruption. I had a feeling that Paul had said considerably more than he had intended to and more than he would be happy to recall, come light phase. I blamed it on the sleeping pills. Sleeping pills are all right when necessary, but they tend to make you babble and tell your right name–treacherous things.

19. The Other People

By the end of the second light phase it was clear–to Paul, anyhow—that this second valley would do. It wasn't the perfect valley and maybe there was a better one just over the ridge—but life is too short. Paul assigned it a score of 92% by some complicated system thought up by the Commission, which was seven points higher than passing.

The perfect valley could wait for the colonials to find it ... which they would, some day.

We named the valley Happy Valley, Just for luck, and named the mountains south of it the Pauline Peaks, over Paul's protests. He said it wasn't official anyway; we said we would see to it that it was made so—and the boss topographer, Abie Finkelstein, marked it so on the map and we all intialed it

We spent the third light phase rounding up the details. We could have gone back then, if there had been any way to get back. There wasn't, so we had to dope through another dark phase. Some of them preferred to go back on a more normal schedule instead; there was a round-the-clock poker game, which I stayed out of, having nothing I could afford to lose and no talent for filling straights. There were more dark phase bull sessions but they never got as grave as the first one and nobody ever again asked Paul what he thought about the future prospects of things.

By the end of the third dark phase I was getting more than a little tired of seeing nothing but the inside of our portable range. I asked Paul for some time off.

Hank had been helping me since the start of the third dark phase. He had been working as a topographical assistant; flash contour pictures were on the program at the start of that dark phase. He was supposed to get an open-lens shot across the valley from an elevation on the south just as a sunburst flash was let off from an elevation to the west.

Hank had a camera of his own, just acquired, and he was shutter happy, always pointing it at things. This time he had tried to get a picture of his own as well as the official picture. He had goofed off, missed the official picture entirely, and to top it off had failed to protect his eyes when the sunburst went off. Which put him on the sick list and I got him as kitchen police.

He was all right shortly, but Finkelstein didn't want him back. So I asked for relief for both of us, so we could take a hike together and do a little exploring. Paul let us go.

There had been high excitement at the end of the second light phase when lichen had been discovered near the west end of the valley. For a while it looked as if native life had been found on Ganymede. It was a false alarm—careful examination showed that it was not only an Earth type, but a type authorized by the bionomics board.

But it did show one thing—life was spreading, taking hold, at a point thirtyone hundred miles from the original invasion. There was much argument as to whether the spores had been air borne, or had been brought in on the clothing of the crew who had set up the power plant. It didn't matter, really.

But Hank and I decided to explore off that way and see if we could find more of it. Besides it was away from the way we had come from camp number one. We didn't tell Paul we were going after lichen because we were afraid he would veto it; the stuff had been found quite some distance from camp. He had warned us not to go too far and to be back by six o'clock Thursday morning, in time to break camp and head back to our landing point, where the Jitterbug was to meet us.

I agreed as I didn't mean to go far in any case. I didn't much care whether we found lichen or not; I wasn't feeling well. But I kept that fact to myself; I wasn't going to be done out of my one and only chance to see some of the country.

We didn't find any more lichen. We did find the crystals.

We were trudging along, me as happy as a kid let out of school despite an ache in my side and Hank taking useless photographs of odd rocks and lava flows. Hank had been saying that he thought he would sell out his place and homestead here in Happy Valley. He said, "You know, Bill, they are going to need a few real Ganymede farmers here to give the greenhorns the straight dope. And who knows more about Ganymede-style farming than I do?"

"Almost everybody," I assured him.

He ignored it. "This place has really got it," he went on, gazing around at a stretch of country that looked like Armageddon after a hard battle. "Much better than around Leda."

I admitted that it had possibilities. "But I don't think it's for me," I went on. "I don't think I'd care to settle anywhere where you can't see Jupiter."

"Nonsense!" he answered. "Did you come here to stare at the sights or to make a farm?"

"That's a moot point," I admitted. "Sometimes I think one thing, sometimes the other. Sometimes I don't have the foggiest idea."

He wasn't listening. "See that slot up there?"

"Sure. What about it?"

"If we crossed that little glacier, we could get up to it."

"Why?"

"I think it leads into another valley—which might be even better. Nobody has been up there. I know—I was in the topo gang."

"I've been trying to help you forget that," I told him. "But why look at all? There must be a hundred thousand valleys on Ganymede that nobody has looked at. Are you in the real estate business?" It didn't appeal to me. There is something that gets you about virgin soil on Ganymede; I wanted to stay in sight of camp. It was quiet as a library —quieter. On Earth there is always some sound, even in the desert.

After a while the stillness and the bare rocks and the ice and the craters get on my nerves.

"Come on! Don't be a sissyl" he answered, and started climbing.

The slot did not lead to another valley; it led into a sort of corridor in the hills. One wall was curiously flat, as if it had been built that way on purpose. We went along it a way, and I was ready to turn back and had stopped to call to Hank, who had climbed the loose rock on the other side to get a picture. As I turned, my eye caught some color and I moved up to see what it was. It was the crystals.

I stared at them and they seemed to stare back. I called, "Hey! Hank! Come here on the bounce!"

"What's up?"

"Come here! Here's something worth taking a picture of."

He scrambled down and joined me. After a bit he let out his breath and whispered, "Well, I'll be fried on Friday!"

Hank got busy with his camera. I never saw such crystals, not even stalactites in caves. They were six-sided, except a few that were three-sided and some that were twelve-sided. They came anywhere from little squatty fellows no bigger than a button mushroom up to tall, slender stalks, knee high. Later on and further up we found some chest high.

They were not simple prisms; they branched and budded. But the thing that got you was the colors.

They were all colors and they changed color as you looked at them. We finally decided that they didn't have any color at all; it was just refraction of light. At least Hank thought so.

He shot a full cartridge of pictures then said, "Come on. Let's see where they come from."

I didn't want to. I was shaky from the climb and my right side was giving me fits every step I took. I guess I was dizzy, too; when I looked at the crystals they seemed to writhe around and I would have to blink my eyes to steady them.

But Hank had already started so I followed. The crystals seemed to keep to what would have been the water bed of the canyon, had it been spring. They seemed to need water. We came to a place where there was a drift of ice across the floor of the corridor —ancient ice, with a thin layer of last winter's snow on top of it. The crystals had carved a passage right through it, a natural bridge of ice, and had cleared a space of several feet on each side of where they were growing, as well.

Hank lost his footing as we scrambled through and snatched at one of the crystals. It broke off with a sharp, clear note, like a silver bell.

Hank straightened up and stood looking at his hand. There were parallel cuts across his palm and fingers. He stared at them stupidly.

"That'll teach you," I said, and then got out a first-lid kit and bandaged it for him. When I had finished I said, "Now let's go back."

"Shucks," he said. "What's a few little cuts? Come

I said, "Look, Hank, I want to go back. I don't feel good."

"What's the matter?"

"Stomach ache."

"You eat too much; that's your trouble. The exercise will do you good."

"No, Hank. I've got to go back."

He stared up the ravine and looked fretful. Finally he said, "Bill, I think I see where the crystals come from, not very far up. You wait here and let me take a look. Then I'll come back and well head for camp. I won't be gone long; honest I won't."

"Okay," I agreed. He started up; shortly I followed him. I had had it pounded into my head as a Cub not to get separated in a strange country.

After a bit I heard him shout. I looked up and saw him standing, facing a great dark hole in the cliff. I called out, "What's the matter?"

He answered:

"GREAT JUMPING HOLY SMOKE!!!"–like that.

"What's the matter?" I repeated irritably and hurried along until I was standing beside him.

The crystals continued up the place where we were. They came right to the cave mouth, but did not go in; they formed a solid dense thicket across the threshold. Lying across the floor of the ravine, as if it had been tumbled there by an upheaval like the big quake, was a flat rock, a monolith, Stonehenge size. You could see where it had broken off the cliff, uncovering the hole. The plane of cleavage was as sharp and smooth as anything done by the ancient Egyptians.

But that wasn't what we were looking at; we were looking into the hole.

It was dark inside, but diffused light, reflected off the canyon floor and the far wall, filtered inside. My eyes began to adjust and I could see what Hank was staring at, what he had exploded about.

There were things in there and they weren't natural

I couldn't have told you what sort of things because they were like nothing I had ever seen before in my life, or seen pictures of—or heard of. How can you describe what you've never seen before and have no words for? Shucks, you can't even see a thing properly the first time you see it; your eye doesn't take in the pattern.

But I could see this: they weren't rocks, they weren't plants, they weren't animals. They were made things, man made—well, maybe not "man" made, but not things that just happen, either.

I wanted very badly to get up close to them and see what they were. For the moment, I forgot I was sick.

So did Hank. As usual he said, "Come onl Let's go!"

But I said, "How?"

"Why, we just—" He stopped and took another look. "Well, let's see, we go around— No. Hmm . . . Bill, we will have to bust up some of those crystals and go right through the middle. There's no other way to get in."

I said, "Isn't one chopped up hand enough for you?"

"I'll bust 'em with a rock. It seems a shame; they are so pretty, but that's what I'll have to do."

"I don't think you can bust those big ones. Besides that, I'll give you two to one that they are sharp enough to cut through your boots."

"I'll chance it." He found a chunk of rock and made an experiment; I was right on both counts. Hank stopped and looked the situation over, whistling softly. "Bill—"

"Yeah?"

"See that little ledge over the opening?"

"What about it?"

"It comes out to the left further than the crystals do. I'm going to pile rock up high enough for us to reach it, then we can go along it and drop down right in front of the cave mouth. The crystals don't come that close."

I looked it over and decided it would work. "But how do we get back?"

"We can pile up some of that stuff we can see inside and shinny up again. At the very worst I can boost you up on my shoulders and then you can reach down your belt to me, or something."

If I had my wits about me, maybe I would have protested. But we tried it and it worked—worked right up to the point where I was hanging by my fingers from the ledge over the cave mouth.

I felt a stabbing pain in my side and let go.

I came to with Hank shaking me. "Let me alone!" I growled.

"You knocked yourself out," he said. "I didn't know you were so clumsy." I didn't answer. I just gathered my knees up to my stomach and closed my eyes.

Hank shook me again. "Don't you want to see what's in here?"

I kicked at him. "I don't want to see the Queen of Sheba! Can't you see I'm sick?" I closed my eyes again.

I must have passed out. When I woke up, Hank was sitting Turk fashion in front of me, with my torch in his hand. "You've been asleep a long time, fellow," he said gently. "Feel any better?"

"Not much."

'Try to pull yourself together and come along with me. You've got to see this, Bill. You won't believe it. This is the greatest discovery since—well, since— Never mind; Columbus was a piker. We're famous, Bill."

"You may be famous," I said. "I'm sick."

"Where does it hurt?"

"All over. My stomach is hard as a rock—a rock with a toothache."

"Bill," he said seriously, "have you ever had your appendix out?"

"No."

"Hmmm… maybe you should have had it out."

"Well, this is a fine time to tell me!"

"Take it easy."

"Take it easy, my foot!" I got up on one elbow, my head swimming. "Hank, listen to me. You've got to get back to camp and tell them. Have them send a tractor for me."

"Look, Bill," he said gently, "you know there isn't anything like a tractor at camp."

I tried to struggle with the problem but it was too much for me. My brain was fuzzy. "Well, have them bring a stretcher, at least," I said peevishly and lay down again.

Some time later I felt him fumbling around with my clothes. I tried to push him away, then I felt something very cold on me. I took a wild swing at him; it didn't connect.

"Steady," he said. "I have found some ice. Don't squirm around or you'll knock off the pack."

"I don't want it."

"You've got to have it. You keep that ice pack in place until we get out of here and you may live to be hanged, yet."

I was too feeble to resist. I lay back down and closed my eyes again. When I opened my eyes again, I was amazed to feel better. Instead of feeling ready to die, I merely felt awful. Hank wasn't around; I called to him. When he didn't answer at once I felt panicky.

Then he came trotting up, waving the torch. "I thought you had gone," I said.

"No. To tell the truth, I can't get out of here. I can't get back up to the ledge and I can't get over the crystals. I tried it." He held up one boot; it was in shreds and there was blood on it.

"Hurt yourself?"

"I'll live."

"I wonder," I answered. "Nobody knows we are here—and you say we can't get out. Looks like we starve. Not that I give a hoot."

'Speaking of that," he said. "I saved you some of our lunch. I'm afraid I didn't leave much; you were asleep a long, long time."

"Don't mention food!" I retched and grabbed at my side.

"Sorry. But look—I didn't say we couldn't get out"

"But you did."

"No, I said I couldn't get out."

"What's the difference?"

"Uh, never mind. But I think we'll get out. It was what you said about getting a tractor——"

"Tractor? Are you out of your head?"

"Skip it," Bill answered. "There is a sort of tractor thing back there—or more like a scaffolding, maybe."

"Make up your mind."

"Call it a wagon. I think I can get it out, at least across the crystals. We could use it as a bridge."

"Well, roll it out."

"It doesn't roll. It, uh-well, it walks."

I tried to get up. "This I got to see."

"Just move over out of the way of the door."

I managed to get to my feet, with Hank helping me. "I'm coming along."

"Want the ice pack changed?"

"Later, maybe." Hank took me back and showed me. I don't know how to describe the walker wagon–maybe you've seen pictures since. If a centipede were a dinosaur and made of metal to boot, it would be a walker wagon. The body of it was a sort of trough and it was supported by thirty-eight legs, nineteen on a side.

"That," I said, "is the craziest contraption I ever laid eyes on. You'll never shove it out the door."

"Wait until you see," he advised. "And if you think this is crazy, you should see the other things in here."

"Such as?"

"Bill, you know what I think this place is? I think it's a hangar for a space ship."

"Huh? Don't be silly; space ships don't have hangars."

"This one has."

"You mean you saw a space ship in here?"

"Well, I don't know. It's not like any I ever saw before, but if it's not a space ship, I don't know what it is good for."

I wanted to go see, but Hank objected. "Another time, Bill; we've got to get back to camp. We're late as it is."

I didn't put up any fight. My side was paining me again, from the walk. "Okay, what happens next?"

"Like this." He led me around to the end of the contraption; the trough came nearly down to the floor in back. Hank helped me get inside, told me to lie down, and went up to the other end. 'The guy that built this," he said, "must have been a hump-backed midget with four arms. Hang on."

"Do you know what you're doing?" I asked.

"I moved it about six feet before; then I lost my nerve. Abracadabra! Hold onto your hat!" He poked a finger deep into a hole.

The thing began to move, silently, gently, without any fuss. When we came out into the sunshine, Hank pulled his finger out of the hole. I sat up. The thing was two thirds out of the cave and the front end was beyond the crystals.

I sighed. "You made it, Hank, Let's get going. If I had some more ice on my side I think I could walk."

"Wait a second," he said. "I want to try something. There are holes here I haven't stuck a finger in yet."

"Leave well enough alone."

Instead of answering he tried another hole. The machine backed up suddenly. "Woopsl" he said, jerked his finger out, and jabbed it back where it had been before. He left it there until he regained what we had lost.

He tried other holes more cautiously. At last he found one which caused the machine to rear up its front end slightly and swing it to the left, like a caterpillar. "Now we are in business," he said happily. "I can steer it." We started down the canyon.

Hank was not entirely correct in thinking he could guide it. It was more like guiding a horse than a machine—or perhaps more like guiding one of those new groundmobiles with the semiautomatic steering. The walker wagon came to the little natural bridge of ice through which the crystals passed and stopped of itself. Hank tried to get it to go through the opening, which was large enough; it would have none of it. The front end cast around like a dog sniffing, then eased gradually up hill and around the ice.

It stayed level; apparently it could adjust its legs, like the fabulous hillside snee.

When Hank came to the ice flow we had crossed on the way up to the notch, he stopped it and gave me a fresh ice pack. Apparently it did not object to ice in itself, but simply refused to go through holes, for when we started up again, it crossed the little glacier, slowly and cautiously, but steadily.

We headed on toward camp. "This," Hank announced happily, "is the greatest cross-country, rough-terrain vehicle ever built. I wish I knew what makes it go. If I had the patent on this thing, I'd be rich."

"It's yours; you found it."

"It doesn't really belong to me."

"Hank," I answered, "you don't really think the owner is going to come back looking for it, do you?"

He got a very odd look. "No, I don't, Bill. Say, Bill, uh, how long ago do you think this thing was put in there?"

"I wouldn't even want to guess."

There was only one tent at the camp site. As we came up to it, somebody came out and waited for us. It was Sergei.

"Where have you guys been?" he asked. "And where in Kingdom Come did you steal that?

"And what is it?" he added.

We did our best to bring him up to date, and presently he did the same for us. They had searched for us as long as they could, then Paul had been forced to move back to camp number one to keep the date with the Jitterbug. He had left Sergei behind to fetch us when we showed up. "He left a note for you," Sergei added, digging it out

It read:

"Dear Pen Pals,

"I am sorry to go off and leave you crazy galoots but you know the schedule as well as I do. I would stay behind myself to herd you home, but your pal Sergei insists that it is his privilege. Every time I try to reason with him he crawls further back into his hole, bares his teeth, and growls.

"As soon as you get this, get your chubby little legs to moving in the direction of camp number one. Run, do not walk. We'll hold the Jitterbug, but you know how dear old Aunt Hattie feels about keeping her schedule. She isn't going to like it if you are late.

"When I see you, I intend to beat your ears down around your shoulders.

"Good luck,

"P. du M.

"P.S. to Doctor Slop: I took care of your accordion."

When we had finished reading it Sergei said, "I want to hear more about what you found—about eight times more. But not now; we've got to tear over to camp number one. Hank, you think Bill can't walk it?"

I answered for myself, an emphatic "no." The excitement was wearing off and I was feeling worse again.

"Hmm—Hank, do you think that mobile junk yard will carry us over there?"

"I think it will carry us any place." Hank patted it.

"How fast? The Jitterbug has already grounded."

"Are you sure?" asked Hank.

"I saw its trail in the sky at least three hours ago."

"Let's get going!"

I don't remember much about the trip. They stopped once in the pass, and packed me with ice again. The next thing I knew I was awakened by hearing Sergei shout, "There's the Jitterbug! I can see it."

"Jitterbug, here we come," answered Hank. I sat up and looked, too.

We were coming down the slope, not five miles from it, when flame burst from its tail and it climbed for the sky.

Hank groaned. I lay back down and closed my eyes.

I woke up again when the contraption stopped. Paul was there, hands on his hips, staring at us. "About time you birds got home," he announced. "But where did you find that?"

"Paul," Hank said urgently, "Bill is very sick."

"Oh, oh!" Paul swung up and into the walker and made no more questions then. A moment later he had my belly bared and was shoving a thumb into that spot between the belly button and the hip bone. "Does that hurt?" he asked.

I was too weak to slug him. He gave me a pill.

I took no further part in events for a while, but what had happened was this: Captain Hattie had waited, at Paul's urgent insistence, for a couple of hours, and then had announced that she had to blast. She had a schedule to keep with the Covered Wagon and she had no intention, she said, of keeping eight thousand people waiting for the benefit of two. Hank and I could play Indian if we liked; we couldn't play hob with her schedule.

There was nothing Paul could do, so he sent the rest back and waited for us.

But I didn't hear this at the time. I was vaguely aware that we were in the walker wagon, travelling, and I woke up twice when I was repacked with ice, but the whole episode is foggy. They travelled east, with Hank driving and Paul navigating—by the seat of his pants. Some long dreamy time later they reached a pioneer camp surveying a site over a hundred miles away—and from there Paul radioed for help.

Whereupon the Jitterbug came and got us. I remember the landing back at Leda—that is, I remember somebody saying, "Hurry, there! We've got a boy with a burst appendix."

20. Home

There was considerable excitement over what we had found—and there still is—but I didn't see any of it. I was busy playing games with the Pearly Gates. I guess I have Dr. Archibald to thank for still being here. And Hank. And Sergei. And Paul. And Captain Hattie. And some nameless party, who lived somewhere, a long time ago, whose shape and race I still don't know, but who designed the perfect machine for traveling overland through rough country.

I thanked everybody but him. They all came to see me in the hospital, even Captain Hattie, who growled at me, then leaned over and kissed me on the cheek as she left. I was so surprised I almost bit her.

The Schultzes came, of course, and Mama cried over me and Papa gave me an apple and Gretchen could hardly talk, which isn't like her. And Molly brought the twins down to see me and vice versa.

The Leda daily Planet interviewed me. They wanted to know whether or not we thought the things we found were made by men?

Now that is a hard question to answer and smarter people than myself have worked on it since.

What is a man?

The things Hank and I—and the Project Jove scientists who went later—found in that cave couldn't have been made by men—not men like us. The walker wagon was the simplest thing they found. Most of the things they still haven't found out the use for. Nor have they figured out what the creatures looked like—no pictures.

That seems surprising, but the scientists concluded they didn't have eyes—not eyes like ours, anyhow. So they didn't use pictures.

The very notion of a "picture" seems pretty esoteric when you think it over. The Venetians don't use pictures, nor the Martians. Maybe we are the only race in the universe that thought up that way of recording things.

So they weren't "men"—not like us.

But they were men in the real sense of the word, even though I don't doubt that I would run screaming away if I met one in a dark alley. The important thing, as Mr. Seymour would say, they had—they controlled their environment. They weren't animals, pushed around and forced to accept what nature handed them; they took nature and bent it to their will.

I guess they were men.

The crystals were one of the oddest things about it and I didn't have any opinions on that. Somehow, those crystals were connected with that cave—or space ship hangar, or whatever it was. Yet they couldn't or wouldn't go inside the cave.

Here was another point that the follow-up party from Project Jove recorded: that big unwieldly walker wagon came all the way down that narrow canyon-yet it did not step on a single crystal. Hank must be a pretty good driver. He says he's not that good.

Don't ask me. I don't understand everything that goes on in the universe. It's a big place.

I had lots of time to think before they let me out of the hospital—and lots to think about. I thought about my coming trip to Earth, to go back to school I had missed the Covered Wagon, of course, but that didn't mean anything; I could take the *Mayflower* three weeks later. But did I want to go? It was a close thing to decide.

One thing I was sure of: I was going to take those merit badge tests as soon as I was out of bed. I had put it off too long. A close brush with the hereafter reminds you that you don't have forever to get things done.

But going back to school? That was another matter. For one thing, as Dad told me, the council had lost its suit with the Commission; Dad couldn't use his Earthside assets.

And there was the matter that Paul had talked about the night he had to let his hair down—the coming war.

Did Paul know what he was talking about? If so, was I letting it scare me out? I honestly didn't think so; Paul had said that it was not less than forty years away. I wouldn't be Earthside more than four or five years—and, besides, how could you get scared of anything that far in the future?

I had been through the Quake and the reconstruction; I didn't really think I'd ever be scared of anything again.

I had a private suspicion that, supposing there was a war, I'd go join up; I wouldn't be running away from it. Silly, maybe.

No, I wasn't afraid of the War, but it was on my mind. Why? I finally doped it out. When Paul called I asked him about it. "See here, Paul—this war you were talking about: when Ganymede reaches the state that Earth has gotten into, does that mean war here, too? Not now—a few centuries from now."

He smiled rather sadly. "By then we may know enough to keep from getting into that shape. At least we can hope."

He got a faraway look and added, "A new colony is always a new hope."

I liked that way of putting it. "A new hope—" Once I heard somebody call a new baby that.

I still didn't have the answer about going back when Dad called on me one Sunday night. I put it up to him about the cost of the fare. "I know the land is technically mine, George—but it's too much of a drain on you two."

"Contrariwise," said George, "well get by and that's what savings are for. Molly is for it. We will be sending the twins back for school, you know."

"Even so, I don't feel right about it. And what real use is there in it, George? I don't need a fancy education. I've been thinking about Callisto: there's a brand new planet not touched yet with great opportunities for a man in on the ground floor. I could get a job with the atmosphere expedition—Paul would put in a word for me—and grow up with the project. I might be chief engineer of the whole planet some day."

"Not unless you learn more about thermodynamics than you do now, you won't be!"

"Huh?"

"Engineers don't just 'grow up'; they study. They go to school."

"Don't I study? Ain't I attending two of your classes right now? I can get to be an engineer here; I don't have to drag back half a billion miles for it."

"Fiddlesticks! It takes discipline to study. You haven't even taken your merit badge tests. You've let your Eagle Scoutship lapse."

I wanted to explain that taking tests and studying for tests were two different things—that I had studied. But I couldn't seem to phrase it right.

George stood up. "See here, Son, I'm going to put it to you straight. Never mind about being chief engineer of a planet; these days even a farmer needs the best education he can get. Without it he's just a country bumpkin, a stumbling peasant, poking seeds into the ground and hoping a miracle will make them grow. I want you to go back to Earth and get the best that Earth has to offer. I want you to have a degree with prestige behind it—M.I.T., Harvard, the Sorbonne. Some place noted for scholarship. Take the time to do that and then do anything you want to do. Believe me, it will pay."

I thought about it and answered, "I guess you are right, George."

Dad stood up. "Well, make up your mind. I'll have to hurry now for the bus, or I'll be hoofing it back to the farm. See you tomorrow."

"Good night, George."

I lay awake and thought about it. After a while, Mrs. Dinsmore, the wing nurse, came in, turned out my light, and said goodnight. But I didn't go to sleep.

Dad was right, I knew. I didn't want to be an ignoramus. Furthermore, I had seen the advantage held by men with fancy degrees—first crack at the jobs, fast promotion. Okay, I'd get me one of those sheepskins, then come back and—well, go to Callisto, maybe, or perhaps prove a new parcel of land. I'd go and I'd come back.

Nevertheless I couldn't get to sleep. After a while I glanced at my new watch and saw that it was nearly midnight—dawn in a few minutes. I decided that I wanted to see it It might be the last time I'd be up and around at midnight Sunday for a long, long time.

I scouted the corridor; Old Lady Dinsmore wasn't in sight. I ducked outside.

The Sun was just barely below the horizon; north of me I could see its first rays touching the topmost antenna of the power station, miles away on Pride Peak. It was very still and very beautiful. Overhead old Jupiter was in half phase, bulging and orange and grand. To the west of it Io was just coming out of shadow; it passed from black to cherry red to orange as I watched.

I wondered how I would feel to be back on Earth? How would it feel to weigh three times as much as I did now? I didn't feel heavy; I felt just right.

How would it feel to swim in that thick dirty soup they use for air?

How would it feel to have nobody but ground hogs to talk to? How could I talk to a girl who wasn't a colonial, who had never been off Earth higher than a copter hop? Sissies. Take Gretchen, now—there was a girl who could kill a chicken and have it in the pot while an Earthside girl would still be squealing.

The top of the Sun broke above the horizon and caught the snow on the peaks of the Big Rock Candy Mountains, tinting it rosy against a pale green sky. I began to be able to see the country around me. It was a new, hard, clean place—not like California with its fifty, sixty million people falling over each other. It was my kind' of a place—it was my place.

The deuce with Caltech and Cambridge and those fancy schools! I'd show Dad it didn't take ivied halls to get an education. Yes, and I'd pass those tests and be an Eagle again, first thing.

Hadn't Andrew Johnson, that American President, learned to read while he was working? Even after he was married? Give us time; we'd have as good scientists and scholars here as anywhere.

The long slow dawn went on and the light caught Kneiper's cut west of me, outlining it. I was reminded of the night we had struggled through it in the storm. As Hank put it, there was one good thing about colonial life—it sorted out the men from the boys.

"I have lived and worked with men." The phrase rang through my head. Rhysling? Kipling, maybe. I had lived and worked with men!

The Sun was beginning to reach the roof tops. It spread across Laguna Serenidad, turning it from black to purple to blue. This was my planet, this was my home and I knew that I would never leave it

Mrs. Dinsmore came bustling out to the door and spotted me. "Why, the very idea!" she scolded. "You get back where you belong!"

I smiled at her. "I am where I belong. And I'm going to stay!"

The Puppet Masters

I

Were they truly intelligent? By themselves, that is? I don't know and I don't know how we can ever find out. I'm not a lab man; I'm an operator.

With the Soviets it seems certain that they did not invent anything.

They simply took the communist power-for-power's-sake and extended it without any "rotten liberal sentimentality" as the commissars put it. On the other hand, with animals they were a good deal more than animal.

(It seems strange no longer to see dogs around. When we finally come to grips with them, there will be a few million dogs to avenge. And cats. For me, one particular cat.)

If they were *not* truly intelligent, I hope I never live to see us tangle with anything at all like them, which is intelligent. I know who will lose. Me. You. The so-called human race.

For me it started much too early on July 12, '07, with my phone shrilling in a frequency guaranteed to peel off the skull. I felt around my person, trying to find the thing to shut it off, then recalled that I had left it in my jacket across the room. "All right," I growled. "I hear you. Shut off that damned noise."

"Emergency," a voice said in my ear. "Report in person."

I told him what to do with his emergency. "I'm on a seventy-two hour pass."

"Report to the Old Man," the voice persisted, "at once."

That was different. "Moving," I acknowledged and sat up with a jerk that hurt my eyeballs. I found myself facing a blonde. She was sitting up, too, and staring at me round-eyed.

"Who are you talking to?" she demanded.

I stared back, recalling with difficulty that I had seen her before. "Me? Talking?" I stalled while trying to think up a good lie, then, as I came wider-awake, realized that it did not have to be a very good lie as she could not possibly have heard the other half of the conversation. The sort of phone my section uses is not standard; the audio relay was buried surgically under the skin back of my left ear—bone conduction. "Sorry, babe," I went on. "Had a nightmare. I often talk in my sleep."

"Sure you're all right?"

"I'm fine, now that I'm awake," I assured her, staggering a bit as I stood up. "You go back to sleep."

"Well, uh—" She was breathing regularly almost at once. I went into the bath, injected a quarter grain of "Gyro" in my arm, then let the vibro shake me apart for three minutes while the drug put me back together. I stepped out a new man, or at least a good mock-up of one, and got my jacket. The blonde was snoring gently.

I let my subconscious race back along its track and realized with regret that I did not owe her a damned thing, so I left her. There was nothing in the apartment to give me away, nor even to tell her who I was.

I entered our section offices through a washroom booth in

MacArthur Station. You won't find our offices in the phone lists. In fact, it does not exist. Probably I don't exist either. All is illusion. Another route is through a little hole-in-the-wall shop with a sign reading RARE STAMPS & COINS. Don't try that route either—they'll try to sell you a Tu'penny Black.

Don't try any route. I told you we didn't exist, didn't I?

There is one thing no head of a country can know and that is: how good is his intelligence system? He finds out only by having it fail him. Hence our section. Suspenders *and* belt. United Nations had never heard of us, nor had Central Intelligence—I think. I heard once that we were blanketed into an appropriation for the Department of Food Resources, but I would not know; I was paid in cash.

All I really knew about was the training I had received and the jobs the Old Man sent me on. Interesting jobs, some of them—if you don't care where you sleep, what you eat, nor how long you live. I've totaled three years behind the Curtain; I can drink vodka without blinking and spit Russian like a cat—as well as Cantonese, Kurdish, and some other bad-tasting tongues. I'm prepared to say that they've got nothing behind the Curtain that Paducah, Kentucky doesn't have bigger and better. Still, it's a living.

If I had had any sense, I'd have quit and taken a working job.

The only trouble with that would be that I wouldn't have been working for the Old Man any longer. That made the difference.

Not that he was a soft boss. He was quite capable of saying, "Boys, we need to fertilize this oak tree. Just jump in that hole at its base and I'll cover you up."

We'd have done it. Any of us would.

And the Old Man would bury us alive, too, if he thought that there was as much as a 53 percent probability that it was the Tree of Liberty he was nourishing.

He got up and limped toward me as I came in. I wondered again why he did not have that leg done over. Pride in how he had gotten the limp was my guess, not that I would ever know. A person in the Old Man's position must enjoy his pride in secret; his profession does not allow for public approbation.

His face split in a wicked smile. With his big hairless skull and his strong Roman nose he looked like a cross between Satan and Punch of Punch-and-Judy. "Welcome, Sam," he said. "Sorry to get you out of bed."

The deuce he was sorry! "I was on leave," I answered shortly. He was the Old Man, but leave is leave—and damned seldom!

"Ah, but you still are. We're going on a vacation."

I didn't trust his "vacations" so I did not rise to the bait. "So my name is 'Sam'," I answered. "What's my last name?"

"Cavanaugh. And I'm your Uncle Charlie—Charles M. Cavanaugh, retired. Meet your sister Mary."

I had noticed that there was another person in the room, but had filed my one glance for future reference. When the Old Man is present he gets full attention as long as he wants it. Now I looked over my "sister" more carefully and then looked her over again. It was worth it.

I could see why he had set us up as brother and sister if we were to do a job together; it would give him a trouble-free pattern. An indoctrinated agent can't break his assumed character any more than a professional actor can intentionally muff his lines. So this one I must treat as my sister—a dirty trick if I ever met one!

A long, lean body, but unquestionably and pleasingly mammalian. Good legs. Broad shoulders for a woman. Flaming, wavy red hair and the real redheaded saurian bony structure to her skull. Her face was handsome rather than beautiful; her teeth were sharp and clean. She looked me over as if I were a side of beef.

I was not yet in character; I wanted to drop one wing and run in circles. It must have showed, for the Old Man said gently, "Tut tut, Sammy—there's no incest in the Cavanaugh family. You were both carefully brought up, by my favorite sister-in-law. Your sister dotes on you and you are extremely fond of your sister, but in a healthy, clean-cut, sickeningly chivalrous, All-American-Boy sort of way."

"As bad as that?" I asked, still looking at my "sister".

"Worse."

"Oh, well—howdy, Sis. Glad to know you."

She stuck out a hand. It was firm and seemed as strong as mine. "Hi, Bud." Her voice was deep contralto, which was all I needed. Damn the Old Man!

"I might add," the Old Man went on in the same gentle tones, "that you are so devoted to your sister that you would gladly die to protect her. I dislike to tell you so, Sammy, but your sister is a little more valuable, for the present at least, to the organization than you are."

"Got it," I acknowledged. "Thanks for the polite qualification."

"Now, Sammy—"

"She's my favorite sister; I protect her from dogs and strange men. I don't have to be slapped with an ax. Okay, when do we start?"

"Better stop over in Cosmetics; I think they have a new face for you."

"Make it a whole new head. See you. 'By, Sis."

They did not quite do that, but they did fit my personal phone under the overhang of my skull in back and then cemented hair over it. They dyed my hair to the same shade as that of my newly acquired sister, bleached my skin, and did things to my cheekbones and chin. The mirror showed me to be as good an authentic redhead as Sis. I looked at my hair and tried to recall what its natural shade had been, way back when. Then I wondered if Sis were what she seemed to be along those lines. I rather hoped so. Those teeth, now—Stow it, Sammy! She's your sister.

I put on the kit they gave me and somebody handed me a jump bag, already packed. The Old Man had evidently been in Cosmetics, too; his skull was now covered by crisp curls of a shade just between pink and white. They had done something to his face, for the life of me I could not tell just what—but we were all three clearly related by blood and were all of that curious subrace, the redheads.

"Come, Sammy," he said. "Time is short. I'll brief you in the car." We went up by a route I had not known about and ended up on the Northside launching platform, high above New Brooklyn and overlooking Manhattan Crater.

I drove while the Old Man talked. Once we were out of local control he told me to set it automatic on Des Moines, Iowa. I then joined Mary and "Uncle Charlie" in the lounge. He gave us our personal histories briefly and filled in details to bring us up to date. "So here we are," he concluded, "a merry little family party—tourists. And if we should happen to run into unusual events, that is how we will behave, as nosy and irresponsible tourists might."

"But what is the problem?" I asked. "Or do we play this one entirely by ear?"

"Mmmm . . . possibly."

"Okay. But when you're dead, it's nice to know why you're dead, I always say. Eh, Mary?"

"Mary" did not answer. She had that quality, rare in babes and commendable, of not talking when she had nothing to say. The Old Man looked me over, his manner not that of a man who can't make up his mind, but rather as if he were judging me as I was at that moment and feeding the newly acquired data into the machine between his ears.

Presently he said, "Sam, you've heard of 'flying saucers'."

"Huh? Can't say that I have."

"You've studied history. Come, now!"

"You mean *those*? The flying-saucer craze, 'way back before the Disorders? I thought you meant something recent and real; those were mass hallucinations."

"Were they?"

"Well, weren't they? I haven't studied much statistical abnormal psychology, but I seem to remember an equation. That whole period was psychopathic; a man with all his gaskets tight would have been locked up."

"But this present day is sane, eh?"

"Oh, I wouldn't go so far as to say that." I pawed back through the unused drawers of my mind and found the answer I wanted. "I remember that equation now—Digby's evaluating integral for second and higher order data. It gave a 93.7 percent certainty that the flying-saucer myth, after elimination of explained cases, was hallucination. I remember it because it was the first case of its type in the history of science in which the instances had been systematically collected and evaluated. Some sort of a government project, God knows why."

The Old Man looked benignly avuncular. "Brace yourself, Sammy. We are going to inspect a flying saucer today. Maybe we'll even saw off a piece for a souvenir, like true tourists."

II

"*Seen* a newscast lately?" the Old Man went on.

I shook my head. Silly question—I'd been on leave.

"Try it sometime," he suggested. "Lots of interesting things on the 'casts. Never mind. Seventeen hours—" he glanced at his finger watch and added, "—and twentythree minutes ago an unidentified spaceship landed near Grinnell, Iowa. Type, unknown. Approximately disc-shaped and about one hundred fifty feet across. Origin, unknown, but—"

"Didn't they track a trajectory on it?" I interrupted.

"They did not," he answered, spacing his words. "Here is a photo of it taken after landing by Space Station Beta."

I looked it over and passed it to Mary. It was as unsatisfactory as a telephoto taken from five thousand miles out usually is. Trees looking like moss . . . a cloud shadow that loused up the best part of the pic . . . and a gray circle that might have been a disc-shaped space ship and could just as well have been an oil tank or a water reservoir. I wondered how many times we had bombed hydroponics plants in Siberia, mistaking them for atomic installations.

Mary handed the pic back. I said, "Looks like a tent for a camp meeting to me. What else do we know?"

"Nothing."

"Nothing! After *seventeen hours*? We ought to have agents pouring out of their ears!"

"Ah, yes. We did have. Two within reach and four that were sent in. They failed to report back. I dislike losing agents, Sammy, especially with no results."

Up to then I had not stopped to wonder about the Old Man himself being risked on a job—it had not looked like risk. But I had a sudden cold realization that the situation must be so serious that the Old Man had chosen to bet his own brain against the loss of the organization—for he *was* the Section. Nobody who knew him doubted his guts, but they did not doubt his horse sense, either. He knew his own value; he would not risk himself unless he believed coldly that it would take his own skill to swing it and that the job *had* to be done.

I felt suddenly chilly. Ordinarily an agent has a duty to save his own neck—in order to complete his mission and report back. On this job it was the Old Man who must come back—and after him, Mary. I stood number three and was as expendable as a paper clip. I didn't like it.

"One agent made a partial report," the Old Man went on. "He went in as a casual bystander and reported by phone that it must be a space ship although he could not determine its motive power. We got the same thing from the newscasts. He then reported that the ship was opening and that he was going to try to get closer, past the police lines. The last thing he said was, 'Here they come. They are little creatures, about—' Then he shut off."

"Little men?"

"He said, 'creatures'."

"Peripheral reports?"

"Plenty of them. The Des Moines stereocasting station reported the landing and sent mobile units in for spot cast. The pictures they sent out were all fairly long shots, taken from the air. They showed nothing but a disc-shaped object. Then, for about two hours, no pictures and no news, followed later by close ups and a new news slant."

The Old Man shut up. I said, "Well?"

"The whole thing was a hoax. The 'space ship' was a sheet metal and plastic fraud, built by two farm boys in some woods near their home. The fake reports originated with an announcer with more sense of humor than good judgment and who had put the boys up to it to make a story. He has been fired and the latest 'invasion from outer space' turns out to be a joke."

I squirmed. "So it's a hoax—but we lose six men. We're going to look for them?"

"No, for we would not find them. We are going to try to find out why triangulation of this photograph—" He held up the teleshot taken from the space station. "—doesn't quite jibe with the news reports—and why Des Moines stereo station shut up for a while."

Mary spoke up for the first time. "I'd like to talk with those farm boys."

I roaded the car about five miles this side of Grinnell and we started looking for the McLain farm—the news reports had named Vincent and George McLain as the culprits. It wasn't hard to find. At a fork in the road was a big sign, professional in appearance: THIS WAY TO THE SPACESHIP. Shortly the road was parked both sides with duos and groundcars and triphibs. A couple of hastily built stands dispensed cold drinks and souvenirs at the turnoff into the McLain place. A state cop was directing traffic.

"Pull up," directed the Old Man. "Might as well see the fun, eh?"

"Right, Uncle Charlie," I agreed.

The Old Man bounced out with only a trace of limp, swinging his cane. I handed Mary out and she snuggled up to me, grasping my arm. She looked up at me, managing to look both stupid and demure. "My, but you're strong. Buddy."

I wanted to slap her, but gave a selfconscious smirk instead. That poor-little-me routine—from an agent, from one of the Old Man's agents. A smile from a tiger.

"Uncle Charlie" buzzed around, bothering state police, buttonholing people to give them unasked-for opinions, stopping to buy cigars at one of the stands, and in general giving a picture of a well-to-do, senile old fool, out for a holiday. He turned back to us and waved his cigar at a state sergeant. "The inspector says the whole thing is a fraud, my dears—a prank thought up by some boys. Shall we go?"

Mary looked disappointed. "No space ship?"

"There's a space ship, if you want to call it that," the cop answered. "Just follow the suckers, and you'll find it. It's 'sergeant', not 'inspector'."

"Uncle Charlie" pressed a cigar on him and we set out, across a pasture and into some woods. It cost a dollar to get through the gate and many of the potential suckers turned back. The path through the woods was rather deserted. I moved carefully, wishing for eyes in the back of my head instead of a phone. According to the book six agents had gone down this path and none had come back. I didn't want it to be nine.

Uncle Charlie and Sis walked ahead, Mary chattering like a fool and somehow managing to be both shorter and younger than she had been on the trip out. We came to a clearing and there was the "space ship".

It was the proper size, more than a hundred feet across, but it was whipped together out of light-gauge metal and sheet plastic, sprayed with aluminum. It was roughly the shape of two giant pie plates, face to face. Aside from that, it looked like nothing in particular. Nevertheless Mary squealed. "Oh, how exciting!"

A youngster, eighteen or nineteen, with a permanent sunburn and a pimply face, stuck his head out of a sort of hatch in the top of the monstrosity. "Care to see inside?" he called out. He added that it would be fifty cents a piece more and Uncle Charlie shelled out.

Mary hesitated at the hatch. Pimple face was joined by what appeared to be his twin and they started to hand her down in. She drew back and I moved in fast, intending to do any handling myself. My reasons were 99 percent professional; I could feel danger all through the place. "It's dark in there," she quavered.

"It's perfectly safe," the second young man said. "We've been taking sightseers through all day. I'm Vinc McLain, one of the owners. Come on, lady."

Uncle Charlie peered down the hatch, like a cautious mother hen. "Might be snakes in there," he decided. "Mary, I don't think you had better go in."

"Nothing to fear," the first McLain said insistently. "It's safe as houses."

"Just keep the money, gentlemen." Uncle Charlie glanced at his finger. "We're late as it is. Let's go, my dears."

I followed them back up the path, my hackles up the whole way.

We got back to the car and I pulled out into the road. Once we were rolling, the Old Man said sharply, "Well? What did you see?"

I countered with, "Any doubt about that first report? The one that broke off?"

"None."

"That thing over in the woods wouldn't have fooled an agent, even in the dark. This wasn't the ship he saw."

"Of course not. What else?"

"How much would you say that fake cost? That was new sheet metal, fresh paint, and from what I saw of the inside through the hatch, probably a thousand feet, more or less, of lumber to brace it."

"Go on."

"Well, the McLain house hadn't been painted in years, not even the barn. The place had 'mortgage' spelled out all over it. If the boys were in on the gag, they didn't foot the bill."

"Obviously. You, Mary?"

"Uncle Charlie, did you notice the way they treated me?"

"Who?" I said sharply.

"Both the state sergeant and the two boys. When I use the sweet-little-bundle-of-sex routine, something should happen. Nothing did."

"They were all attentive," I objected.

"You don't understand. You can't understand—but I *know*. I always know. Something was wrong with them. They were dead inside. Harem guards, if you know what I mean."

"Hypnosis?" asked the Old Man.

"Possibly. Or drugs perhaps." She frowned and looked puzzled.

"Hmm—" he answered. "Sammy, take the next turn to the left.

We're investigating a point about two miles south of here."

"The triangulated location by the pic?"

"What else?"

But we didn't get there. First it was a bridge out and I didn't have room enough to make the car hop it, quite aside from the small matter of traffic regulations for a duo on the ground. We circled to the south and came in again, the only remaining route. We were stopped by a highway cop and a detour sign. A brush fire, he told us; go any farther and we would probably be impressed into firefighting. He didn't know but what he ought to send me up to the firelines anyhow.

Mary waved her lashes and other things at him and he relented. She pointed out that neither she nor Uncle Charlie could drive, a double lie.

After we pulled away I asked her, "How about that one?"

"What about him?"

"Harem guard?"

"Oh, my, no! A most attractive man."

Her answer annoyed me.

The Old Man vetoed taking to the air and making a pass over the triangulated spot. He said it was useless. We headed for Des Moines. Instead of parking at the toll gates we paid to take the car into the city proper, and ended up at the main studios of Des Moines stereo. "Uncle Charlie" blustered his way into the office of the general manager, us in tow. He told several lies—or perhaps Charles M. Cavanaugh was actually a big wheel with the Federal Communications Authority. How was I to know?

Once inside and the door shut he continued the Big Brass act. "Now, sir, what is all this nonsense about a spaceship hoax? Speak plainly, sir; I warn you your license may depend on it."

The manager was a little round-shouldered man, but he did not seem cowed, merely annoyed. "We've made a full explanation over the channels," he said. "We were victimized by one of our own people. The man has been discharged."

"Hardly adequate, sir."

The little man—Barnes, his name was—shrugged. "What do you expect? Shall we string him up by his thumbs?"

Uncle Charlie pointed his cigar at him. "I warn you, sir, that I am not to be trifled with. I have been making an investigation of my own and I am not convinced that two farm louts and a junior announcer could have pulled off this preposterous business. There was money in it, sir. Yes, sir—money. And where would I expect to find money? Here at the top. Now tell me, sir, just what did you—"

Mary had seated herself close by Barnes's desk. She had done something to her costume, which exposed more skin, and her pose put me in mind of Goya's *Disrobed Lady*. She made a thumbs-down signal to the Old Man.

Barnes should not have caught it; his attention appeared to be turned to the Old Man. But he did. He turned toward Mary and his face went dead. He reached for his desk.

"Sam! Kill him!" the Old Man rapped.

I burned his legs off and his trunk fell to the floor. It was a poor shot; I had intended to burn his belly.

I stepped quickly to him and kicked his gun away from his still-groping fingers. I was about to give him the *coup de grace*—a man burned that way is dead, but it takes him a while to die—when the Old Man snapped, "Don't touch him! Mary, stand back!"

We did so. The Old Man sidled toward the body, like a cat cautiously investigating the unknown. Barnes gave a long bubbling sigh and was quiet—shock death; a gun burn doesn't bleed much, not that much. The Old Man looked him over and poked him gently with his cane.

"Boss," I said, "about time to git, isn't it?"

Without looking around he answered, "We're as safe here as anywhere. Safer, probably. This building may be swarming with them."

"Swarming with what?"

"How would I know? Swarming with whatever *he* was." He pointed to Barnes's body. "That's what I've got to find out."

Mary gave a choked sob, the first honest feminine thing I had known her to do, and gasped, "He's still breathing. Look!"

The body lay facedown; the back of the jacket heaved as if the chest were rising. The Old Man looked at it and poked at it with his cane. "Sam. Come here."

I came. "Strip it," he went on. "Use your gloves. And be careful."

"Booby trap?"

"Shut up. Use care."

I don't know what he expected me to find, but he must have had a hunch that was close to truth. I think the bottom part of the Old Man's brain has a builtin integrator which arrives at a logical necessity from minimum facts the way a museum johnny reconstructs an extinct animal from a single bone.

I took him at his word. First pulling on gloves—agent's gloves; I could have stirred boiling acid with my gloved hand, yet I could feel a coin in the dark and call heads or tails—once gloved, I started to turn him over to undress him.

The back was still heaving; I did not like the look of it—unnatural. I placed a palm between the shoulder blades.

A man's back is bone and muscle. This was jelly soft and undulating. I snatched my hand away.

Without a word Mary handed me a fancy pair of scissors from Barnes's desk. I took them and cut the jacket away. Presently I folded it back and we all looked. Underneath the jacket the body was dressed in a light singlet, almost transparent. Between this shirt and the skin, from the neck halfway down the back, was something which was not flesh. A couple of inches thick, it gave the corpse a round-shouldered, or slightly humped, appearance.

It pulsed like a jellyfish.

As we watched, it slid slowly off the back, away from us. I reached out to peel up the singlet, to let us at it; my hand was knocked away by the Old Man's cane. "Make up your mind," I said and rubbed my knuckles.

He did not answer but tucked the end of his cane under the bottom of the shirt and worried it up the trunk. The thing was uncovered.

Grayish, faintly translucent, and shot through with darker structure, shapeless—it reminded me of a giant clot of frogs' eggs. It was clearly alive, for it pulsed and quivered and moved by flowing. As we watched it flowed down into the space between Barnes's arm and chest, filled it and stayed there, unable to go farther.

"The poor devil," the Old Man said softly.

"Huh? *That*?"

"No. Barnes. Remind me to see to it that he gets the Purple Heart, when this is over. If it ever is over." The Old Man straightened up and stumped around the room, as if he had forgotten completely the gray horror nestling in the crook of Barnes's arm.

I drew back a bit and continued to stare at it, my gun ready. It could not move fast; it obviously could not fly; but I did not know what it could do and I was not taking chances. Mary moved closer to me and pressed her shoulder against mine, as if for human comfort. I put my free arm around her.

On a side table there was an untidy stack of cans, the sort used for stereo tapes. The Old Man took a double program can, spilled the reels on the floor, and came back with it. "This will do, I think." He placed the can on the floor, near the thing, and began chivvying it with his cane, trying to irritate it into crawling into the can.

Instead it oozed back until it was almost entirely under the body. I grabbed the free arm and heaved what was left of Barnes away from the spot; the thing clung momentarily, then flopped to the floor. After that, under dear old Uncle Charlie's directions, Mary and I used our guns set at lowest power to force it, by burning the floor close to it, into the can. We got it in, a close fit, and I slapped the cover on.

The Old Man tucked the can under his arm. "On our way, my dears."

On the way out he paused in the partly open door to call out a parting to Barnes, then, after closing the door, stopped at the desk of Barnes's secretary. "I'll be seeing Mr. Barnes again tomorrow," he told her. "No, no appointment. I'll phone first."

Out we went, slow march, the Old Man with the can full of thing under his arm and me with my ears cocked for alarums. Mary played the silly little moron, with a running monologue. The Old Man even paused in the lobby, bought a cigar, and inquired directions, with bumbling, self-important good nature.

Once in the car he gave me directions, then cautioned me against driving fast. The directions led us into a garage. The Old Man sent for the manager and said to him, "Mr. Malone wants this car—immediately." It was a signal I had had occasion to use myself, only then it had been "Mr. Sheffield" who was in a hurry. I knew that the duo would cease to exist in about twenty minutes, save as anonymous spare parts in the service bins.

The manager looked us over, then answered quietly, "Through that door over there." He sent the two mechanics in the room away on errands and we ducked through the door.

We ended up presently in the apartment of an elderly couple; there we became brunets and the Old Man got his bald head back. I acquired a moustache which did nothing for my looks, but I was surprised to find that Mary looked as well dark as she had as a redhead. The "Cavanaugh" combination was dropped; Mary got a chic nurse's costume and I was togged out as a chauffeur while the Old Man became our elderly, invalid employer, complete with shawl and temper tantrums.

A car was waiting for us when we were ready. The trip back was no trouble; we could have remained the carrot-topped Cavanaughs. I kept the screen turned on to Des Moines, but, if the cops had turned up the late Mr. Barnes, the newsboys hadn't heard about it.

We went straight down to the Old Man's office—straight as one can go, that is—and there we opened the can. The Old Man sent for Dr. Graves, the head of the Section's bio lab, and the job was done with handling equipment.

We need not have bothered. What we needed were gas masks, not handling equipment. A stink of decaying organic matter, like the stench from a gangrenous wound, filled the room and forced us to slap the cover back on and speed up the blowers. Graves wrinkled his nose. "What in the world was that?" he demanded. "Puts me in mind of a dead baby."

The Old Man was swearing softly. "You are to find out," he said. "Use handling equipment. Work it in suits, in a germ-free compartment, and *don't* assume that it is dead."

"If that is alive, I'm Queen Anne."

"Maybe you are, but don't take chances. Here is all the help I can give. It's a parasite; it's capable of attaching itself to a host, such as a man, and controlling the host. It is almost certainly extraterrestrial in origin and metabolism."

The lab boss sniffed. "Extraterrestrial parasite on a terrestrial host? Ridiculous! The body chemistries would be incompatible."

The Old Man grunted. "Damn your theories. When we captured it, it was living on a man. If that means it has to be a terrestrial organism, show me where it fits into the scheme of things and where to look for its mates. And quit jumping to conclusions; I want facts."

The biologist stiffened. "You'll get them!"

"Get going. Wait—don't use more of it than necessary for your investigations; I need the major portion as evidence. And don't persist in the silly assumption that the thing is dead; that perfume may be a protective weapon. That thing, if alive, is fantastically dangerous. If it gets on one of your laboratory men, I'll almost certainly have to kill him."

The lab director said nothing more, but he left without some of his cockiness.

The Old Man settled back in his chair, sighed, and closed his eyes. He seemed to have gone to sleep; Mary and I kept quiet. After five minutes or so he opened his eyes, looked at me, and said, "How many mustard plasters the size of that thing Doc just carted out of here can arrive in a space ship as big as that fraud we looked at?"

"Was there a space ship?" I asked. "The evidence seems slim."

"Slim but utterly incontrovertible. There was a ship. There still is a ship."

"We should have examined the site."

"That site would have been our last sight. The other six boys weren't fools. Answer my question."

"I can't. How big the ship was doesn't tell me anything about its payload, when I don't know its propulsion method, the jump it made, or what supply load the passengers require. It's a case of how long is a piece of rope? If you want a horseback guess, I'd say several hundred, maybe several thousand."

"Mmm . . . yes. So there are several hundred, maybe several thousand zombies in the State of Iowa tonight. Or harem guards, as Mary puts it." He thought for a moment. "But how am I to get past them to the harem? We can't go around shooting every round-shouldered man in Iowa; it would cause talk." He smiled feebly.

"I'll put you another question with no answer," I said. "If one space ship lands in Iowa yesterday, how many will land in North Dakota tomorrow? Or in Brazil?"

"Yes, there's that." He looked still more troubled. "I'll answer it by telling you how long is your piece of rope."

"Huh?"

"Long enough to choke you to death. You kids go wash up and enjoy yourselves; you may not have another chance. Don't leave the offices."

I went back to Cosmetics, got my own skin color back and in general resumed my normal appearance, had a soak and a massage, and then went to the staff lounge in search of a drink and some company. I looked around, not knowing whether I was looking for a blonde, brunette, or redhead, but feeling fairly sure that I could spot the right chassis.

It was a redhead. Mary was in a booth, sucking on a drink and looking much as she had looked when she was introduced to me as my sister. "Hi, Sis," I said, sliding in beside her.

She smiled and answered, "Hello, Bud. Drag up a rock," while moving to make room for me.

I dialed for bourbon and water which I needed for medicinal purposes and then said, "Is this your *real* appearance?"

She shook her head. "Not at all. Zebra stripes and two heads. What's yours?"

"My mother smothered me with a pillow the first time she saw me, so I never got a chance to find out."

She again looked me over with that side-of-beef scrutiny, then said, "I can understand her actions, but I am probably more hardened than she was. You'll do, Bud."

"Thanks." I went on, "Let's drop this 'Bud-and-Sis' routine; I find it gives me inhibitions."

"Hmm . . . I think you need inhibitions."

"Me? Not at all. Never any violence with me; I'm more the 'Barkis-is-willing' type." I might have added that, if I laid a hand on her and she happened not to like it. I'd bet that I would draw back a bloody stump. The Old Man's kids are never sissies.

She smiled. "So? Well, note it down that Miss Barkis is *not* willing, at least not this evening." She put down her glass. "Drink up and let's reorder."

We did so and continued to sit there, feeling warm and good, and, for the moment, not worried. There aren't many hours like that, especially in our profession; it makes one savor them.

One of the nicest things about Mary was that she did not turn on the sex, except for professional purposes. I think she knew—I'm *sure* she knew—what a load of it she possessed. But she was too much of a gentleman to use it socially. She kept it turned down low, just enough to keep us both warm and comfortable.

While we sat there, not saying much, I got to thinking how well she would look on the other side of a fireplace. My job being what it was, I had never thought seriously about getting married—and after all, a babe is just a babe; why get excited? But Mary was an agent herself; talking to her would not be like shouting off Echo Mountain. I realized that I had been lonely for one hell of a long time.

"Mary—"

"Yes?"

"Are you married?"

"Eh? Why do you ask? As a matter of fact I'm not—now. But what business—I mean, why does it matter?"

"Well, it might," I persisted.

She shook her head.

"I'm serious," I went on. "Look me over. I've got both hands and both feet. I'm fairly young, and I don't track mud in the house. You could do worse."

She laughed, but her laugh was kindly. "And you could work up better lines than that. I am sure they must have been extemporaneous."

"They were."

"And I won't hold them against you. In fact, I'll forget them. Listen, wolf, your technique is down; just because a woman tells you that she is not going to sleep with you tonight is no reason to lose your head and offer her a contract. Some women would be just mean enough to hold you to it."

"I meant it," I said peevishly.

"So? What salary do you offer?"

"Damn your pretty eyes. If you want that type of contract, I'll go along; you can keep your pay and I'll allot half of mine to you . . . unless you want to retire."

She shook her head. "I didn't mean it; I'd never insist on a settlement contract, not with a man I was willing to marry in the first place—"

"I didn't think you would."

"I was just trying to make you see that you yourself were not serious." She looked me over soberly. "But perhaps you are," she added in a warm, soft voice.

"I am."

She shook her head again. "Agents should not marry. You know that."

"Agents shouldn't marry anyone but agents."

She started to answer, but stopped suddenly. My own phone was talking in my ear, the Old Man's voice, and I knew she was hearing the same thing. "Come into my office," he said.

We both got up without saying anything. Mary stopped me at the door, put a hand on my arm, and looked up into my eyes. "*That* is why it is silly to talk about marriage. We've got this job to finish. All the time we've been talking, you've been thinking about the job and so have I."

"I have not."

"Don't play with me! Consider this, Sam—suppose you were married and you woke up to find one of those things on your wife's shoulders, possessing her." There was horror in her eyes as she went on, "Suppose I woke up and found one of them on *your* shoulders."

"I'll chance it. And I won't let one get to you."

She touched my cheek. "I don't believe you would."

We went on into the Old Man's office.

He looked up just long enough to say, "Come along. We're leaving."

"Where to?" I answered. "Or shouldn't I ask?"

"White House. See the President. Shut up."

I shut.

III

At the beginning of a forest fire or an epidemic there is a short time when a minimum of correct action will contain and destroy. The B. W. boys express it in exponential equations, but you don't need math to understand it; it depends on early diagnosis and prompt action before the thing gets out of hand. What the President needed to do the Old Man had already figured out—declare a national emergency, fence off the Des Moines area, and shoot anybody who tried to slip out, be it a cocker spaniel or grandma with her cookie jar. Then let them out one at a time, stripping them and searching them for parasites. Meantime, use the radar screen, the rocket boys, and the space stations to spot and smash any new landings.

Warn all the other nations including those behind the Curtain, ask for their help—but don't be fussy about international law, for this was a fight for racial survival against an outside invader. For the moment it did not matter where they came from—Mars, Venus, the Jovian satellites, or outside the system entirely. Repel the invasion.

The Old Man had cracked the case, analyzed it, and come up with the right answer in a little more than twenty-four hours. His unique gift was the ability to reason logically with unfamiliar, hard-to-believe facts as easily as with the commonplace. Not much, eh? I have *never* met anyone else who could do it wholeheartedly. Most minds stall dead when faced with facts which conflict with basic beliefs; "I-just-can't-believe-it" is all one word to highbrows and dimwits alike.

But not to the Old Man—and he had the ear of the President.

The Secret Service guards gave us the works, politely. An X-ray went *beep*! and I surrendered my heater. Mary turned out to be a walking arsenal; the machine gave four beeps and a hiccough, although you would have sworn she couldn't hide a tax receipt under what she was wearing. The Old Man surrendered his cane without waiting to be asked; I got the notion he did not want it to be X-rayed.

Our audio capsules gave them trouble. They showed up both by X-ray and by metal detector, but the guards weren't equipped for surgical operations. There was a hurried conference with a presidential secretary and the head guard ruled that anything embedded in the flesh need not be classed as a potential weapon.

They printed us, photographed our retinas, and ushered us into a waiting room. The Old Man was whisked out and in to see the President alone.

"I wonder why we were brought along?" I asked Mary. "The Old Man knows everything we know."

She did not answer, so I spent the time reviewing in my mind the loopholes in the security methods used to guard the President. They do such things much better behind the Curtain; an assassin with any talent could have beaten our safeguards with ease. I got to feeling indignant about it.

After a while we were ushered in. I found I had stage fright so badly I was stumbling over my feet. The Old Man introduced us and I stammered. Mary just bowed.

The President said he was glad to see us and turned on that smile, the way you see it in the stereocasts—and he made us feel that he *was* glad to see us. I felt all warm inside and no longer embarrassed.

And no longer worried. The President, with the Old Man's help, would take action and the dirty horror we had seen would be cleaned up.

The Old Man directed me to report all that I had done and seen and heard on this assignment. I made it brief but complete. I tried to catch his eye when it came to the part about killing Barnes, but he wasn't having any—so I left out the Old Man's order to shoot and made it clear that I had shot to protect another agent—Mary—when I saw Barnes reach for his gun. The Old Man interrupted me. "Make your report complete."

So I filled in the Old Man's order to shoot. The President threw the Old Man a glance at the correction, the only expression he showed. I went on about the parasite thing, went on, in fact, up to that present moment, as nobody told me to stop.

Then it was Mary's turn. She fumbled in trying to explain to the

President why she expected to get some sort of response out of normal men—and had not gotten it out of the McLain boys, the state sergeant, and Barnes. The President helped her . . . by smiling warmly, managing to bow without getting up, and saying, "My dear young lady, I quite believe it."

Mary blushed, then went on. The President listened gravely while she finished. He asked a couple of questions, then sat still for several minutes.

Presently he looked up and spoke to the Old Man. "Andrew," he said, "your section has been invaluable. On at least two occasions your reports have tipped the balance in crucial occasions in history."

The Old Man snorted. "So it's 'no', is it?"

"I did not say so."

"You were about to."

The President shrugged. "I was going to suggest that your young people withdraw, but now it does not matter. Andrew, you are a genius, but even geniuses make mistakes. They overwork themselves and lose their judgment. I'm not a genius but I learned to relax about forty years ago. How long has it been since you had a vacation?"

"Damn your vacations! See here, Tom, I anticipated this; that's why I brought witnesses. They are neither drugged nor instructed. Call in your psych crew; try to shake their stories."

The President shook his head. "You wouldn't have brought witnesses who could be cracked. I'm sure you are cleverer about such things than anyone whom I could bring in to test them. Take this young man—he was willing to risk a murder charge to protect you. You inspire loyalty, Andrew. As for the young lady, really, Andrew, I can't start what amounts to war on a woman's intuition."

Mary took a step forward. "Mr. President," she said very earnestly, "I do know. I know every time. I can't tell you how I know—*but those were not normal male men.*"

He hesitated, then answered, "I do not dispute you. But you have not considered an obvious explanation—that they actually were, ah, 'harem guards'. Pardon me, Miss. There are always such unfortunates in the population. By the laws of chance you ran across four in one day."

Mary shut up. The Old Man did not. "God damn it, Tom—" I shuddered; you don't talk to the President that way. "—I knew you when you were an investigating senator and I was a key man in your investigations. You know I wouldn't bring you this fairy tale if there were any way to explain it away. Facts can't be ignored; they've got to be destroyed, or faced up to. How about that space ship? What was in it? Why couldn't I even reach the spot where it landed?" He hauled out the photograph taken by Space Station Beta and shoved it under the

President's nose.

The President seemed unperturbed. "Ah, yes, facts. Andrew, both you and I have a passion for facts. But I have several sources of information other than your section. Take this photo—you made quite a point of it when you phoned. I've checked the matter. The metes and bounds of the McLain farm as recorded in the local county courthouse check precisely with the triangulated latitude and longitude of this object on this photograph." The President looked up. "Once I absentmindedly turned off a block too soon and got lost in my own neighborhood. You weren't even in your own neighborhood, Andrew."

"Tom—"

"Yes, Andrew?"

"You did not trot out there and check those courthouse maps yourself?"

"Of course not."

"Thank God for that—or you would be carrying three pounds of pulsing tapioca between your shoulder blades this minute—and God save the United States! You can be sure of this: the courthouse clerk and whatever agent was sent to see him, both are hag-ridden by filthy parasites this very moment." The Old Man stared at the ceiling. "Yes, and the Des Moines chief of police, newspaper editors around there, dispatchers, cops, all sorts of key people. Tom, I don't know what we are up against, but *they* know what *we* are, and they are pinching off the nerve cells of our social organism before true messages can get back—or they cover up the true reports with false ones, just as they did with Barnes. Mr. President, you must order an immediate, drastic quarantine of the whole area. There is no other hope!"

"Barnes," the President repeated softly, as if he had heard nothing else. "Andrew, I had hoped to spare you this, but—" He broke off and flipped a key at his desk. "Get me stereo station WDES, Des Moines, the manager's office."

Shortly a screen lighted on his desk; he touched another switch and a solid display in the wall lighted up. We were looking into the room we had been in only a few hours before.

Looking into it past the shoulders of a man who filled most of the screen—Barnes.

Or his twin. When I kill a man, I expect him to stay dead. I was shaken but I still believed in myself—and my heater.

The man in the display said, "You asked for me, Mr. President?" He sounded as if he were dazzled by the honor.

"Yes, thank you. Mr. Barnes, do you recognize any of these people?"

He looked surprised. "I'm afraid not. Should I?"

The Old Man interrupted. "Tell him to call in his office force."

The President looked quizzical but did just that. "Barnes" looked puzzled but complied. They trooped in, girls mostly, and I recognized the secretary who sat outside the manager's door. One of them squealed, "Ooh—it's the *President*," and they all fell to buzzing.

None of them identified us—not surprising with the Old Man and me, but Mary's appearance was just as it had been in that same office, and I will bet that Mary's looks would be burned into the mind of any woman who had ever seen her.

But I noticed one thing about *them*—every single one of them was round-shouldered.

The President eased us out. He put a hand on the Old Man's shoulder. "Seriously, Andrew, take that vacation." He flashed the famous smile. "The Republic won't fall—I'll worry it through till you get back."

Ten minutes later we were standing in the wind on the Rock Creek platform. The Old Man seemed shrunken and, for the first time, old. "What now, boss?"

"Eh? For you two, nothing. You are both on leave until recalled."

"I'd like to take another look at Barnes's office."

"Don't go near the place. Stay out of Iowa. That's an order."

"Mmm—what are you going to do, if I may ask?"

"You heard the President, didn't you? I am going down to Florida and lie in the sun and wait for the world to go to hell. If you have any sense, you'll do the same. There's damned little time."

He squared his shoulders and stumped away. I turned to speak to Mary, but she was gone. His advice seemed awfully good, and it had suddenly occurred to me that waiting for the end of the world might not be too bad, with her help.

I looked around quickly but could not spot her. I trotted off and overtook the Old Man. "Excuse me, Boss. Where did Mary go?"

"Huh? On leave no doubt. Don't bother me."

I considered trying to relay to her through the Section circuit, when I remembered that I did not know her right name, nor her code, nor her I. D. number. I thought of trying to bull it through by describing her, but that was foolishness. Only Cosmetics Records knows the original appearance of an agent—and they won't talk. All I knew about her was that she had twice appeared as a redhead, at least once by choice—and that, for my taste, she was "why men fight". Try punching that into a phone!

Instead I found a room for the night. After I found it I wondered why I had not left the Capital and gone back to my own apartment. Then I wondered if the blonde were still in it. Then I wondered who the blonde was, anyway? Then I went to sleep.

IV

I woke up at dusk. The room I was in had a real window—the Section pays well and I could afford little luxuries. I looked out over the Capital as it came to life for the night. The river swept away in a wide bend past the Memorial; it was summer and they were adding fluorescine to the water above the District so the river stood out in curving sweeps of glowing rose and amber and emerald and shining fire. Little pleasure boats cut through the colors, each filled, I had no doubt, with couples up to no good and enjoying it.

On the land, here and there among the older buildings, the bubble domes were lighting up, giving the city a glowing fairyland look. Off to the east, where the Bomb had landed, there were no old buildings at all and the area was an Easter basket of color—giant Easter eggs, lighted from within.

I've seen the Capital at night oftener than most, because of my business, and, while I like the place, I had not thought much about it. But tonight I had that "Last Ride Together" feeling. It was so beautiful it hurt but it was not its beauty that choked me up; it was knowing that down under those warm lights were people, alive and individual people, going about their lawful occasions, making love or having spats, whichever suited them . . . doing whatever they damn well pleased, each under his own vine and his own fig tree with nobody to make him afraid, as it says.

I thought about all those gentle, kindly people (with only an occasional heel) and I thought about them each with a gray slug clinging to the back of his neck, twitching his legs and arms, making his voice say what the slug wished, going where the slug wanted to go.

Hell's bells—life under the commissars couldn't be that bad. I know—I've been behind the Curtain.

I made myself a solemn promise: if the parasites won. I'd arrange to be dead before I would let one of those things ride me the way one had ridden Barnes. For an agent it would be simple; just bite my nails—or, if your hands happen to be off, there are a couple of other ways. The Old Man planned for all professional necessities.

But the Old Man had not planned such arrangements for such a purpose and I knew it. It was the Old Man's business—and mine—to keep those people down there safe, not to run out on them when the going got rough.

I turned away from the window. There was not a confounded thing

I could do about it now; I decided that what I needed was company. The room contained the usual catalog of "escort bureaus" and "model agencies" that you'll find in almost any big hotel except maybe the Martha Washington. I thumbed through it, looking the girls over, then slammed it shut. I didn't want a whoopee girl; I wanted one particular girl—one who would as soon shoot as shake hands and would bite in the clinches. And I did not know where she had gone.

I always carry a tube of "tempus fugit" pills; most agents do, as one never knows when giving your reflexes a jolt will get you through a tight spot. Despite the scare propaganda, tempos pills are not habit-forming, not the way the original hashish is.

Nevertheless a purist would say I was addicted to them, for I had the habit of taking them occasionally to make a twenty-four hour leave seem like a week. I admit that I enjoyed the mild euphoria which the pills induced as a side effect. Primarily, though, they just stretch out your subjective time by a factor of ten or more—chop time into finer bits so that you live longer for the same amount of clock and calendar.

What's wrong with that? Sure, I know the horrible example story of the man who died of old age in a calendar month through taking the pills steadily, but I took them only once in a while.

Maybe he had the right idea. He lived a long and happy life—you can be sure it was happy—and died happy at the end. What matter that the sun rose only thirty times? Who is keeping score and what are the rules anyhow?

I sat there, staring at my tube of pills and thinking that I had enough to keep me hopped up and contented for what would be, to me, at least two "years". If I wanted to, I could crawl in my hole and pull it in after me.

I took out two pills and got a glass of water. Then I put them carefully back in the tube, put on my gun and phone, left the hotel and headed for the Library of Congress.

On the way I stopped in a bar for a quick one and looked at a newscast. There was no news from Iowa, but when is there any news from Iowa?

At the Library I went to the general catalog, put on blinkers, and started scanning for references. "Flying Saucers" led to "Flying Discs", then to "Project Saucer", then "Lights in the Sky", "Fireballs", "Cosmic Diffusion Theory of Life Origins", and two dozen blind alleys and screwball branches of literature. I needed some sort of a Geiger counter to tell me what was pay dirt and what was not, especially as what I wanted was almost certain to carry a semantic-content code key classing it somewhere between Aesop's fables and the Lost Continent myths.

Nevertheless, in an hour I had a double handful of selector cards. I handed them to the vestal virgin at the desk and waited while she fed them into the hopper. Presently she said, "Most of the films you want are in use. The rest will be delivered to study room 9-A. Take the south escalator, puhlease."

Room 9-A had one occupant—who looked up as I came in and said, "Well! The wolf in person—how did you manage to pick me up again? I could swear I gave you a clean miss."

I said, "Hello, Mary."

"Hello," she answered, "and now, good-by. Miss Barkis still ain't willin' and I've got work to do."

I got annoyed. "Listen, you conceited little twerp, odd as it may seem to you, I did not come here looking for your no-doubt beautiful white body. I occasionally do some work myself and that is why I'm here. If you will put up with my unwelcome presence until my spools arrive, I'll get the hell out and find another study room—a stag one."

Instead of flaring back, she immediately softened, thereby proving that she was more of a gentleman than I was. "I'm sorry, Sam. A woman hears the same thing so many thousand times that she gets to thinking that no other topic is possible. Sit down."

"No," I answered, "thanks, but I'll take my spools to an unoccupied room. I really do want to work."

"Stay here," she insisted. "Read that notice on the wall. If you remove spools from the room to which they are delivered, you will not only cause the sorter to blow a dozen tubes, but you'll give the chief reference librarian a nervous breakdown."

"I'll bring them back when I'm through with them."

She took my arm and warm tingles went up it. "Please, Sam. I'm sorry."

I sat down and grinned at her. "Nothing could persuade me to leave. I did not expect to find you here, but now that I have, I don't intend to let you out of sight until I know your phone code, your home address, and the true color of your hair."

"Wolf," she said softly, wrinkling her nose. "You'll never know any of them." She made a great business of fitting her head back into her study machine while ignoring me. But I could see that she was not displeased.

The delivery tube went *thunk*! and my spools spilled into the basket. I gathered them up and stacked them on the table by the other machine. One of them rolled over against the ones Mary had stacked up and knocked them down. Mary looked up.

I picked up what I thought was my spool and glanced at the end—the wrong end, as all it held was the serial number and that little pattern of dots which the selector reads. I turned it over, read the label, and placed it in my pile.

"Hey!" said Mary. "That's mine."

"In a pig's eye," I said politely.

"But it is—I read the label when it was faced toward me. It's the one I want next."

Sooner or later, I can see the obvious. Mary wouldn't be there to study the history of footgear through the Middle Ages. I picked up three or four more of hers and read the labels. "So that's why nothing I wanted was in," I said. "But you didn't do a thorough job; I found some that you missed." I handed her my selection.

Mary looked them over, then pushed all the spools into a single pile. "Shall we split them fifty-fifty, or both of us see them all?"

"Fifty-fifty to weed out the junk, then we'll both go over the remainder," I decided. "Let's get busy."

Even after having seen the parasite on poor Barnes's back, even after being solemnly assured by the Old Man that a "flying saucer" had in fact landed, I was not prepared for the monumental pile of evidence to be found buried in a public library. A pest on Digby and his evaluating formula! Digby was a floccinaucinihilipilificator at heart—which is an eight-dollar word meaning a joker who does not believe in anything he can't bite.

The evidence was unmistakable; Earth had been visited by ships from outer space not once but many times.

The reports long antedated our own achievement of space travel; some of them ran back into the seventeenth century—earlier than that, but it was impossible to judge the quality of reports dating back to a time when "science" meant an appeal to Aristotle. The first systematic data came from the United States itself in the 1940's and '50's. The next flurry was in the 1980's, mostly from Russo-Siberia. These reports were difficult to judge as there was no direct evidence from our own intelligence agents and anything that came from behind the Curtain was usually phony, ipso facto.

I noticed something and started taking down dates. Strange objects in the sky appeared to hit a cycle with crests at thirty-year intervals, about. I made a note about it; a statistical analyst might make something of it—or more likely, if I fed it to the Old Man, he would see something in that crystal ball he uses for a brain.

"Flying saucers" were tied in with "mysterious disappearances" not only through being in the same category as sea serpents, bloody rain, and such like wild data, but also because in at least three well-documented instances pilots had chased "saucers" and never come back, or down, anywhere, i.e., officially classed as crashed in wild country and not recovered—an "easy out" or "happy hurdle" type of explanation.

I got another wild hunch and tried to see whether or not there was a thirty-year cycle in mysterious disappearances, and, if so, did it phase-match the objects in-the-sky cycle? There seemed to be but I could not be sure—too much data and not enough fluctuation; there are too many people disappearing every year for other reasons, from amnesia to mothers-in-law.

But vital records have been kept for a long time and not all were lost in the bombings. I noted it down to farm out for professional analysis.

The fact that groups of reports seemed to be geographically and even politically concentrated I did not try very hard to understand. I tabled it, after trying one hunch hypothesis on for size; put yourself in the invaders' place; if you were scouting a strange planet, would you study all of it equally, or would you pick out areas that looked interesting by whatever standards you had and then concentrate?

It was just a guess and I was ready to chuck it before breakfast, if necessary.

Mary and I did not exchange three words all night. Eventually we got up and stretched, then I lent Mary change to pay the machine for the spools of notes she had taken (*why* don't women carry change?) and got my wires out of hock, too. "Well, what's the verdict?" I asked.

"I feel like a sparrow who has built a nice nest and discovers that it is in a rain spout."

I recited the old jingle. "And we'll do the same thing—refuse to learn and build again in the spout."

"Oh, no! Sam, we've got to do something, fast. The President has to be convinced. It makes a full pattern; this time they are moving in to stay."

"Could be. In fact I think they are."

"Well, what do we *do*?"

"Honey chile, you are about to learn that in the Country of the Blind the one-eyed man is in for a hell of a rough ride."

"Don't be cynical. There isn't time."

"No. There isn't. Gather up your gear and let's get out of here."

Dawn was on us as we left and the big library was almost deserted. I said, "Tell you what—let's find a barrel of beer, take it to my hotel room, bust in the head, and talk this thing over."

She shook her head. "Not to your hotel room."

"Damn it, this is business."

"Let's go to my apartment. It's only a couple of hundred miles away; I'll fix you breakfast when we get there."

I recalled my basic purpose in life in time to remember to leer. "That's the best offer I've had all night. But seriously—why not the hotel? We'd get breakfast there and save a half hour's travel."

"You don't want to come to my apartment? I won't bite you."

"I was hoping you would—so I could bite back. No, I was just wondering why the sudden switch?"

"Well—perhaps I wanted to show you the bear traps I have arranged tastefully around my bed. Or perhaps I just wanted to prove to you I could cook." She dimpled for a moment.

I flagged a taxi and we went to her apartment.

When we got inside she left me standing, while she made a careful search of the place, then she came back and said, "Turn around. I want to feel your back."

"Why do—"

"Turn around!"

I shut up and did so. She gave it a good knuckling, all over, then said, "Now you can feel mine."

"With pleasure!" Nevertheless I did a proper job, for I saw what she was driving at. There was nothing under her clothes but girl—girl and assorted items of lethal hardware.

She turned around and let a deep sigh. "That's why I didn't want to go to your hotel room. Now we're safe. Now I *know* we are safe for the first time since I saw that *thing* on the station manager's back. This apartment is tight; I turn off the air and leave it sealed like a vault every time I leave it."

"Say—how about the air conditioning? Could one get in through the ducts?"

"Possibly—but I didn't turn on the conditioner system; I cracked one of the air-raid reserve bottles instead. Never mind; what would you like to eat?"

I wanted to suggest Mary herself, served up on lettuce and toast, but I thought better of it. "Any chance of about two pounds of steak, just warmed through?"

We split a five-pound steak between us and I swear I ate the short half. While we chomped, we watched the newscast. Still no news from Iowa.

V

I did not get to see the bear traps; she locked her bedroom door. I know; I tried it. Three hours later she woke me and we had a second breakfast. Presently we struck cigarettes and I reached over and switched off the newscast. It was devoted principally to a display of the states' entries for "Miss America." Ordinarily I would have watched with interest but since none of the babes was round-shouldered and their contest costumes could not possibly have concealed humps bigger than mosquito bites, it seemed to lack importance that day.

I said, "Well?"

Mary said, "We've got to arrange the facts we have dug up and rub the President's nose in them. Action has to be on a national scale—global, really."

"How?"

"We've got to see him again."

I repeated, "How?"

She had no answer for that one.

I said, "We've got only one route—via official channels. Through the Old Man."

I put in the call, using both our codes so that Mary could hear, too. Presently I heard, "Chief Deputy Oldfield, speaking for the Old Man. He's not available. Shoot."

"It's got to be the Old Man."

There was a pause, then, "I don't have either one of you down as on assignment. Is this official or unofficial?"

"Uh, I guess you'd call it unofficial."

"Well, I won't put you through to the Old Man for anything unofficial. And anything official I am handling. Make up your mind."

I thanked him and switched off before I used any bad language. Then I coded again. The Old Man has a special code, in addition to regular channels, which is guaranteed to cause him to rise up out of his coffin—but God help the agent who uses it unnecessarily. I hadn't used it in five years.

He answered with a burst of profanity.

"Boss," I said, "on the Iowa matter—"

He broke off short. "Yes?"

"Mary and I spent all night digging former data out of the files. We want to talk it over with you."

The profanity resumed. Presently he told me to brief it and turn it in for analysis and added that he intended to have my ears fried for a sandwich.

"Boss!" I said sharply.

"Eh?"

"If you can run out on the job, so can we. Both Mary and I are resigning from the Section right now—and that's official!"

Mary's eyebrows went up but she said nothing. There was a silence so long that I thought he had cut me off, then he said, in a tired, whipped voice, "Palmglade Hotel, North Miami Beach. I'll be the third sunburn from the end."

"Right away." I sent for a taxi and we went up on the roof. I had the hackie swing out over the ocean to avoid the Carolina speed trap;

we made good time.

The Old Man was sunburned all right. He lay there, looking sullen and letting sand dribble through his fingers, while we reported. I had brought along a little buzz box so that he could get it directly off the wire.

He looked up sharply when we came to the point about thirty-year cycles, but he allowed it to ride until he came to my later query about possible similar cycles in disappearances, whereupon he stopped me and called the Section. "Get me Analysis. Hello—Peter? This is the boss. I want a curve on unexplained disappearances, quantitative, starting with 1800. Huh? People, of course—did you think I meant latch keys? Smooth out known factors and discount steady load—what I want to see is humps and valleys. When? I want it two hours ago; what are you waiting for?"

After he switched off he struggled to his feet, let me hand him his cane and said, "Well, back to the jute mill. We've no facilities here."

"To the White House?" Mary asked eagerly.

"Eh? Be your age. You two have picked up nothing that would change the President's mind."

"Oh. Then what?"

"I don't know. Keep quiet, unless you have a bright idea."

The Old Man had a car at hand, of course, and I drove us back. After I turned it over to block control I said, "Boss, I've got a caper that might convince the President, if you can get him to hold still."

He grunted. "Like this," I went on, "send two agents in, me and one other. The other agent carries a portable scanning rig and keeps it trained on me the whole time. You get the President to *watch* what happens."

"Suppose nothing happens?"

"I plan to make it happen. First, I am going where the space ship landed, bull my way on through. We'll get closeup pix of the real ship, piped right into the White House. After that I plan to go back to Barnes's office and investigate those round shoulders. I'll tear shirts off right in front of the camera. There won't be any finesse to the job; I'll just bust things wide open with a sledge hammer."

"You realize you would have the same chance as a mouse at a cat convention."

"I'm not so sure. As I see it, these things haven't any superhuman powers. I'll bet they are strictly limited to whatever the human being they are riding can do—maybe less. I don't plan on being a martyr. In any case I'll get you pix, good ones."

"Hmm—"

"It might work," Mary put in. "I'll be the other agent, I can—"

The Old Man and I said, "No," together—and then I flushed; it was not my prerogative to say so. Mary went on, "I was going to say that I am the logical one because of the, uh, talent I have for spotting a man with a parasite on him."

"No," the Old Man repeated, "It won't be necessary. Where he's going they'll all have riders—assumed so until proved otherwise. Besides, I am saving you for something."

She should have shut up, but for once did not. "For what? This is important."

Instead of snapping at her the Old Man said quietly, "So is the other job. I'm planning to make you a presidential bodyguard, as soon as I can get it through his head that this is serious."

"Oh." She thought about it and answered, "uh, boss—"

"Eh?"

"I'm not certain I could spot a woman who was possessed. I'm not, uh, equipped for it."

"So we take his women secretaries away from him. Ask me a hard one. And Mary—you'll be watching him, too. He's a man, you know."

She turned that over in her mind. "And suppose I find that one has gotten to him, in spite of everything?"

"You take necessary action, the Vice President succeeds to the chair, and you get shot for treason. Simple. Now about this mission. We'll send Jarvis with the scanner and I think I'll include Davidson as an extra hatchet man. While Jarvis keeps the pick-up on you, Davidson can keep his eyes on Jarvis—and you can try to keep one eye on him. Ring-around the-rosy."

"You think it will work, then?"

"No—but any plan of action is better than no plan. Maybe it will stir up something."

While we headed for Iowa—Jarvis, Davidson, and I—the Old Man went back to Washington. He took Mary along. She cornered me as we were about to leave, grabbed me by the ears, kissed me firmly and said, "Sam—try to come back."

I got all tingly and felt like a fifteen-year-old. Second childhood, I guess.

Davidson roaded the car beyond the place where I had found a bridge out. I was navigating, using a large-scale ordnance map on which had been pinpointed the exact landing site of the real space ship. The bridge, which was still out, gave a close-by and precise reference point. We turned off the road two tenths of a mile due east of the site and jeeped through the scrub to the spot. Nobody tried to stop us.

Almost to the spot, I should say. We ran into freshly burned-over ground and decided to walk. The site as shown by the space station photograph was included in the brush fire area—and there was no "flying saucer". It would have taken a better detective than I will ever be to show that one had ever landed there. The fire had destroyed the traces, if any.

Jarvis scanned everything, anyhow, but I knew that the slugs had won another round. As we came out we ran into an elderly farmer; following doctrine we kept a wary distance, although he looked harmless.

"Quite a fire," I remarked, sidling away.

"Sure was," he said dolefully. "Killed two of my best milk cows, the poor dumb brutes. You fellows reporters?"

"Yes," I agreed, "but we've been sent out on a wild-goose chase." I wished Mary were along. Probably this character was naturally round-shouldered. On the other hand, assuming that the Old Man was right about the space ship—and he *had* to be right—then this all-too-innocent bumpkin must know about it and was covering it up. Ergo, he was hag-ridden.

I decided that I had to do it. The chances of capturing a live parasite and getting its picture on the channels back to the White House were better here than they would be in a crowd. I threw a glance at my teammates; they were both alert and Jarvis was scanning.

As the farmer turned to go I tripped him. He went face down and I was on his back like a monkey, clawing at his shirt. Jarvis moved in and got a close up; Davidson moved over to cover point. I had his back bare before he got his wind.

And it was *bare*. It was as clean as mine, no parasite, no sign of one. Nor any place on his body, which I made sure of before I let him up.

I helped him up and brushed him off; his clothes were filthy with ashes and so were mine. "I'm terribly sorry," I said. "I've made a bad mistake."

He was trembling with anger. "You young—" He couldn't seem to find a word bad enough for me. He looked at all of us and his mouth quivered. "I'll have the law on you. If I were twenty years younger I'd lick all three of you."

"Believe me, old timer, it was a mistake."

"Mistake!" His face broke and I thought he was going to cry. "I come back from Omaha and find my place burned, half my stock gone, and my son-in-law no place around. I come out to find out why strangers are snooping around my land and I like to get torn to pieces. Mistake! What's the world coming to?"

I thought I could answer that last one, but I did not try to. I did try to pay him for the indignity but he slapped my money to the ground. We tucked in our tails and got out.

When we were back in the car and rolling again, Davidson said to me, "Are you and the Old Man sure you know what you are up to?"

"I can make a mistake," I said savagely, "but have you ever known the Old Man to?"

"Mmm. . . no. Can't say as I have. Where next?"

"Straight in to WDES main station. This one won't be a mistake."

"Anyhow," Jarvis commented. "I got good pick-up throughout."

I did not answer.

At the toll gates into Des Moines the gatekeeper hesitated when I offered the fee. He glanced at a notebook and then at our plates. "Sheriff has a call out for this car," he said. "Pull over to the right." He left the barrier down.

"Right it is," I agreed, backed up about thirty feet and gunned her for all she was worth. The Section's cars are beefed up and hopped up, too—a good thing, for the barrier was stout. I did not slow down on the far side.

"This," said Davidson dreamily, "is interesting. Do you still know what you are doing?"

"Cut the chatter," I snapped. "I may be crazy but I am still agent-in-charge. Get this, both of you: we aren't likely to get out of this. *But we are going to get those pix*."

"As you say, chief."

I was running ahead of any pursuit. I slammed to a stop in front of the station and we poured out. None of "Uncle Charlie's" indirect methods—we swarmed into the first elevator that was open and punched for the top floor—Barnes's floor. When we got there I left the door of the car open, hoping to use it later.

As we came into the outer office the receptionist tried to stop us but we pushed on by. The girls looked up, startled. I went straight to Barnes's inner door and tried to open it; it was locked. I turned to his secretary. "Where's Barnes?"

"Who is calling, please?" She said, polite as a fish.

I looked down at the fit of the sweater across her shoulders. Humped. By God, I said to myself, this one *has* to be. She was here when I killed Barnes.

I bent over and pulled up her sweater.

I was right. I had to be right. For the second time I stared at the raw flesh of one of the parasites.

I wanted to throw up, but I was too busy. She struggled and clawed and tried to bite. I judo-cut the side of her neck, almost getting my hand in the filthy mess, and she went limp. I gave her three fingers in the pit of her stomach for good measure, then swung her around. "Jarvis," I yelled, "get a close up."

The idiot was fiddling with his gear, bending over it, his big hind end between me and the pick up. He straightened up. "School's out," he said. "Blew a tube."

"Replace it—*hurry*!"

A stenographer stood up on the other side of the room and fired, not at me, not at Jarvis, but at the scanner. Hit it, too—and both Davidson and I burned her down. As if it had been a signal about six of them jumped Davidson. They did not seem to have guns; they just swarmed over him.

I still hung onto the secretary and shot from where I was. I caught a movement out of the corner of my eye and turned to find Barnes—"Barnes" number two—standing in his doorway. I shot him through the chest to be sure to get the slug I knew was on his back. I turned back to the slaughter.

Davidson was up again. A girl crawled toward him; she seemed wounded. He shot her full in the face and she stopped. His next bolt was just past my ear. I looked around and said, "Thanks! Now let's get out of here. Jarvis—come on!"

The elevator was still open and we rushed in, me still burdened with Barnes's secretary. I slammed the door closed and started it. Davidson was trembling and Jarvis was dead white. "Buck up," I said, "you weren't shooting people, you were shooting *things*. Like this." I held the girl's body up and looked down at her back myself.

Then I almost collapsed. My specimen, the one I had grabbed with its host to take back alive, was gone. Slipped to the floor, probably, and oozed away during the ruckus. "Jarvis," I said, "did you get *anything* up there?" He shook his head and said nothing. Neither did I. Neither did Davidson.

The girl's back was covered with a red rash, like a million pinpricks, in the area where the thing had ridden her. I pulled her sweater down and settled her on the floor against the wall of the car. She was still unconscious and likely to stay that way. When we reached street level we left her in the car. Apparently nobody noticed, for there was no hue-and-cry as we went through the lobby to the street.

Our car was still standing there and a policeman had his foot on it while making out a ticket. He handed it to me as we got in. "You know you can't park in this area, Mac," he said reprovingly.

I said, "Sorry," and signed his copy as it seemed the safest and quickest thing to do. Then I gunned the car away from the curb, got as clear as I could of traffic—and blasted her off, right from a city street. I wondered whether or not he added that to the ticket. When I had her up to altitude I remembered to switch the license plates and identification code. The Old Man thinks of everything.

But he did not think much of me when we got back. I tried to report on the way in but he cut me short and ordered us into the Section offices. Mary was there with him. That was all I needed to know; if despite my flop the Old Man had convinced the President she would have stayed.

He let me tell what had happened with only an occasional grunt. "How much did you see?" I asked when I had finished.

"Transmission cut off when you hit the toll barrier," he informed me. "I can't say that the President was impressed by what he saw."

"I suppose not."

"In fact he told me to fire you."

I stiffened. I had been ready to offer my resignation, but this took me by surprise. "I am perfectly will—" I started out.

"Pipe down!" the Old Man snapped. "I told him that he could fire me, but that he could not fire my subordinates. You are a thumb-fingered dolt," he went on more quietly, "but you can't be spared, not now."

"Thanks."

Mary had been wandering restlessly around the room. I had tried to catch her eye, but she was not having any. Now she stopped back of Jarvis's chair—and gave the Old Man the same sign she had given about Barnes.

I hit Jarvis in the side of the head with my heater and he sagged out of his chair.

"Stand back, Davidson!" the Old Man rapped. His own gun was out and pointed at Davidson's chest. "Mary, how about him?"

"He's all right."

"And him."

"Sam's clean."

The Old Man's eyes moved from one of us to the other and I have never felt closer to death. "Both of you peel off your shirts," he said sourly.

We did—and Mary was right on both counts. I had begun to wonder whether or not I would know it if I *did* have a parasite on me. "Now him," the Old Man ordered. "Gloves, both of you."

We stretched Jarvis out on his face and very carefully cut his clothing away. We had our live specimen.

VI

I felt myself ready to retch. The thought of that *thing* travelling right behind me in a closed car all the way from Iowa was almost more than my stomach could stand. I'm not squeamish—I hid once for four days in the sewers of Moscow—but you don't know what the sight of one can do to you unless you yourself have seen one while knowing what it was.

I swallowed hard and said, "Let's see what we can do to work it off. Maybe we can still save Jarvis." I did not really think so; I had a deep-down hunch that anyone who had been ridden by one of those things was spoiled, permanently. I guess I had a superstitious notion that they "ate souls" whatever that means.

The Old Man waved us back. "Forget about Jarvis!"

"But—"

"Stow it! If he can be saved, a bit longer won't matter. In any case—" He shut up and so did I. I knew what he meant; the principle which declared that the individual was all important now called for canceling Jarvis out as a factor, i.e., we were expendable; the people of the United States were not.

Pardon the speech. I liked Jarvis.

The Old Man, gun drawn and wary, continued to watch the unconscious agent and the thing on his back. He said to Mary, "Get the President on the screen. Special code zero zero zero seven."

Mary went to his desk and did so. I heard her talking into the muffler, but my own attention was on the parasite. It made no move to leave its host, but pulsed slowly while iridescent ripples spread across it.

Presently Mary reported, "I can't get him, sir. One of his assistants is on the screen."

"Which one?"

"Mr. McDonough."

The Old Man winced and so did I. McDonough was an intelligent, likeable man who hadn't changed his mind on anything since he was housebroken. The President used him as a buffer.

The Old Man bellowed, not bothering with the muffler.

No, the President was not available. No, he could not be reached with a message. No, Mr. McDonough was not exceeding his authority; the President had been explicit and the Old Man was not on the list of exceptions—if there was such a list, which Mr. McDonough did not concede. Yes, he would be happy to make an appointment; he would squeeze the Old Man in somehow and that was a promise. How would next Friday do? Today? Quite out of the question. Tomorrow? Equally impossible.

The Old Man switched off and I thought he was going to have a stroke. But after a moment he took two deep breaths, his features relaxed, and he slumped back to us, saying, "Dave, slip down the hall and ask Doc Graves to step in. The rest of you keep your distance and your eyes peeled."

The head of the biological lab came in shortly, wiping his hands as he came. "Doc," said the Old Man, "there is one that isn't dead."

Graves looked at Jarvis, then more closely at Jarvis's back. "Interesting," he said. "Unique, possibly." He dropped to one knee.

"Stand back!"

Graves looked up. "But I must have an opportunity—" he said reasonably.

"You and my halfwit aunt! Listen—I want you to study it, yes, but that purpose has low priority. First, you've got to keep it alive. Second, you've got to keep it from escaping. Third, you've got to protect yourself."

Graves smiled. "I'm not afraid of it. I—"

"Be afraid of it! That's an order."

"I was about to say that I think I must rig up an incubator to care for it after we remove it from the host. The dead specimen you gave me did not afford much opportunity for studying its chemistry, but it is evident that these things need oxygen. You smothered the other one. Don't misunderstand me, not free oxygen, but oxygen from its host. Perhaps a large dog would suffice."

"No," snapped the Old Man. "Leave it right where it is."

"Eh?" Graves looked surprised. "Is this man a volunteer?"

The Old Man did not answer. Graves went on, "Human laboratory subjects must be volunteers. Professional ethics, you know."

These scientific laddies never do get broken to harness; I think they keep their bags packed. The Old Man calmed himself and said quietly, "Doctor Graves, every agent in this Section is a volunteer for whatever I find necessary. That is what they sign up for. Please carry out my orders. Get a stretcher in here and take Jarvis out. Use care."

The Old Man dismissed us after they had carted Jarvis away, and Davidson and Mary and I went to the lounge for a drink or four. We needed them. Davidson had the shakes. When the first drink failed to fix him I said, "Look, Dave, I feel as bad about those girls as you do—but it could not be helped. Get that through your head; *it could not be helped*."

"How bad was it?" asked Mary.

"Pretty bad. I don't know how many we killed, maybe six, maybe a dozen. There was no time to be careful. We weren't shooting people, not intentionally; we were shooting parasites." I turned to Davidson. "Don't you see that?"

He seemed to take a brace. "That's just it. They weren't human." He went on, "I think I could shoot my own brother, if the job required it. But these things aren't human. You shoot and they keep coming toward you. They don't—" He broke off.

All I felt was pity. After a bit he got up to go to the dispensary to get a shot for what ailed him. Mary and I talked a while longer, trying to figure out answers and getting nowhere. Then she announced that she was sleepy and headed for the women's dormitory. The Old Man had ordered all hands to sleep in that night, so, after a nightcap, I went to the boys' wing and crawled in a sack.

I did not get to sleep at once. I could hear the rumble of the city above us and I kept imagining it in the state Des Moines was already in.

The air-raid alarm woke me. I stumbled into my clothes as the blowers sighed off, then the intercom bawled in the Old Man's voice, "Antigas and antiradiation procedures! Seal everything—all hands gather in the conference hall. Move!"

Being a field agent I was a supernumerary with no local duties. I shuffled down the tunnel from the living quarters to the Offices. The Old Man was in the big hall, looking grim. I wanted to ask him what was up, but there was a mixed dozen of clerks, agents, stenos, and such there before me and I decided not to. After a bit the Old Man sent me out to get the door tally from the guard on watch. The Old Man called the roll himself and presently it was clear that every living person listed on the door tally was now inside the hall, from old Miss Haines, the Old Man's private secretary, down to the steward of the staff lounge—except the door guard on watch and Jarvis. The tally had to be right; we keep track of who goes in and out a good bit more carefully than a bank keeps track of money.

I was sent out again for the door guard. It took a call back to the Old Man to persuade him it was all right for him to leave his post; he then threw the bolt switch and followed me. When we got back Jarvis was there, being attended by Graves and one of his lab men. He was on his feet and wrapped in a hospital robe, conscious apparently, but he seemed dopey.

When I saw him I began to have some notion of what it was all about. The Old Man did not leave us in doubt. He was facing the assembled staff and keeping his distance; now he drew his gun. "One of the invading parasites is loose among us," he said. "To some of you that means something—too much. To the rest of you I will have to explain, as the safety of all of us—and of our whole race—depends this moment on complete cooperation and utter obedience." He went on to explain briefly but with ugly exactness what a parasite was, what the situation was. "In other words," he concluded, "the parasite is almost certainly here in this room. One of us looks human but is actually an automaton, moving at the will of our deadliest and most dangerous enemy."

There was a murmur from the staff. People stole glances at each other. Some tried to draw away. A moment before we had been a team, picked for temperament compatibility; we were now a mob, each suspicious of the other. I felt it myself and found myself edging away from the man closest to me—Ronald the lounge steward, it was; I had known him for years.

Graves cleared his throat. "Chief," he started in, "I want you to understand that I took every reasonable—"

"Stow it. I don't want excuses. Bring Jarvis out in front. Take his robe off."

Graves shut up and he and his assistant complied. Jarvis did not seem to mind; he seemed only partly aware of his surroundings. There was a nasty blue welt across his left cheekbone and temple, but that was not the cause; I did not hit him that hard. Graves must have drugged him.

"Turn him around," the Old Man ordered. Jarvis let himself be turned; there was the mark of the slug, a red rash on the shoulders and neck. "You can all see," the Old Man went on, "where the thing rode him." There had been some whispers and one embarrassed giggle when Jarvis had been stripped; now there was a dead hush.

"Now," said the Old Man, "we are going *to get that slug*! Furthermore, we are going to capture it alive. That warning is for you eager boys with itchy trigger fingers. You have all seen where a parasite rides on a man. I'm warning you; if the parasite gets burned, I'll burn the man who did it. If you have to shoot the host to catch it, shoot low. Come here!" He pointed his gun at me.

I started toward him; he halted me halfway between the crowd and himself. "Graves! Take Jarvis out of the way. Sit him down behind me. No, leave his robe off," Jarvis was led across the room, still docile, and Graves and his helper rejoined the group. The Old Man turned his attention back to me. "Take out your gun. Drop it on the floor."

The Old Man's gun was pointed at my belly button; I was very careful how I drew mine. I slid it some six feet away from me. "Take off your clothes—all of them."

I am no shrinking violet, but that is an awkward order to carry out. The Old Man's gun overcame my inhibitions.

It did not help any to have some of the younger girls giggling at me as I got down to the buff. One of them said, not too *sotto voce*, "Not bad!" and another replied, "Knobby, I'd say."

I blushed like a bride.

After he looked me over the Old Man told me to pick up my gun and stand beside him. "Back me up," he ordered, "and keep an eye on the door. You! Dotty Something-or-other—you're next."

Dotty was a girl from the clerical pool. She had no gun, of course, and she had evidently been in bed when the alarm sounded; she was dressed in a floor length negligee. She stepped forward, stopped, but did nothing more.

The Old Man waved his gun at her. "Come on—get 'em off! Don't take all night."

"You really mean it?" she said incredulously.

"*Move*!"

She started—almost jumped. "Well!" she said, "no need to take a person's head off." She bit her lower lip and then slowly unfastened the clasp at her waist. "I ought to get a bonus for this," she said defiantly, then threw the robe from her all in one motion.

Whereupon she ruined her buildup by posing for an instant—not long, but you couldn't miss it. I concede that she had something to display, although I was in no mood to appreciate it.

"Over against the wall," the Old Man said savagely. "Renfrew!"

I don't know whether the Old Man alternated men and women on purpose or not, but it was a good idea, as it kept resistance to a minimum. Oh, shucks, I do know—the Old Man never did anything by accident. After my ordeal the men were businesslike though some were obviously embarrassed. As to the women, some giggled and some blushed, but none of them objected too much. I would have found it interesting if the circumstances had been different. As it was, we were all bound to learn things about each other that we had not known. For instance there was a girl whom we used to call "Chesty"—never mind. In twenty minutes or so there were more square yards of gooseflesh exposed than I had ever seen before and the pile of guns on the floor looked like an arsenal.

When Mary's turn came, she set a good example by taking off her clothes quickly and in a completely unprovocative manner—the Old Man should have called her first, instead of that Dotty baggage. Bare, Mary made nothing of it, and wore her skin with quiet dignity. But what I saw did nothing to cool down my feelings about her.

Mary had added considerably to the pile of hardware. I decided she just plain liked guns. Me, I've never found use for more than one.

Finally we were all mother naked and quite evidently free of parasites, except the Old Man himself and his secretary, Miss Haines. I think he was a bit in awe of Miss Haines; she was older than he and inclined to boss him. It dawned on me whom it had to be—if the Old Man were right. He could have been wrong; for all we knew the parasite might be on a ceiling girder, waiting to drop on someone's neck.

The Old Man looked distressed and poked about in the pile of clothing with his cane. He knew that there was nothing in it—or perhaps be was really making sure. Finally he looked up at his secretary. "Miss Haines—if you please. You are next."

I thought to myself. Brother, this time you are going to have to use force.

She did not move. She stood there, facing him down, a statue of offended virginity. I could see that he was about to take action, so I moved closer to him and said, out of the corner of my mouth, "Boss—how about yourself? Take 'em off."

He jerked his head around and looked startled. "I mean it," I said. "It's you or she. It might be either. Get out of those duds."

The Old Man can relax to the inevitable. He said, "Have her stripped. And I'm next." He began fumbling at his zippers, looking grim.

I told Mary to take a couple of the women and peel Miss Haines. When I turned back the Old Man had his trousers at half mast—and Miss Haines chose to make a break for it.

The Old Man was between me and her and I couldn't get in a clean shot—and every other agent in the place was disarmed! Again, I don't think it was accident; the Old Man did not trust them not to shoot when the parasite was discovered. He wanted that slug, alive.

She was out the door and running down the passage by the time I could get organized. I could have winged her in the passageway but I was inhibited by two things—first, I could not shift gears emotionally that fast. I mean to say she was to me still old Lady Haines, the spinster secretary to the boss, the one who bawled me out for poor grammar in my reports. In the second place, if she was carrying a parasite I did not want to risk burning it, not after what we had been told. I am not the world's best shot, anyhow.

She ducked into a room; I came up to it and again I hesitated—sheer habit; it was the ladies' room.

But only a moment. I slammed the door open and looked around, gun ready.

Something hit me back of my right ear. It seemed to me that I took a long leisurely time in getting to the floor.

I can give no clear account of the next few moments. In the first place I was out cold, for a time at least. I remember a struggle and some shouts: "Look out!" "Damn her—she's bitten me!" "Watch your hands! Watch your hands!" Then somebody said more quietly, "Bind her hands and feet, now—careful." Somebody said, "How about him?" and someone else answered, "Later. He's not really hurt."

I was still practically out as they left, but I began to feel a flood of life stirring back into me. I sat up, feeling extreme urgency about something. I got up, staggering a little, and went to the door. I hesitated there, looked out cautiously; nobody was in sight. I stepped out and trotted down the corridor, away from the direction of the conference hall.

I slowed down momentarily at the outer door, then realized with a shock that I was naked and tore on down the hallway toward the men's wing. There I grabbed the first clothes I could find and pulled them on. I found a pair of shoes much too small for me, but it did not seem to matter.

I ran back toward the exit, fumbled, and found the switch; the door opened.

I thought I had made a clean escape, but somebody shouted, "Sam!" just as I was going out. I did not wait, but plunged on out. At once I had my choice of six doors and then three more beyond the one I picked. The warren we called the "Offices", being arranged to permit any number of people to come and go without being noticed, was served by a spaghetti-like mess of tunnels. I came up finally inside a subway fruit and bookstall, nodded to the proprietor—who seemed unsurprised—and swung the counter gate up and mingled with the crowd. It was not a route I had used before.

I caught the upriver jet express and got off at the first station. I crossed over to the downriver side, waited around the change window until a man came up who displayed quite a bit of money as he bought his counter. I got on the same train he did and got off when he did. At the first dark spot I rabbit-punched him. Now I had money and was ready to operate. I did not know quite why I had to have money, but I knew that I needed it for what I was about to do.

VII

Language grows, so they say, to describe experience of the race using it. Experience first—language second. How can I tell how I felt?

I saw things around me with a curious double vision, as if I stared at them through rippling water—yet I felt no surprise and no curiosity about this. I moved like a sleepwalker, unaware of what I was about to do—but I was wide-awake, fully aware of who I was, where I was, what my job at the Section had been. There was no amnesia; my full memories were available to me at any moment. And, although I did not know what I was about to do, I was always aware of what I was doing and sure that each act was the necessary, purposeful act at that moment.

They say that posthypnotic commands work something like that. I don't know; I am a poor hypnotic subject.

I felt no particular emotion most of the time, except the mild contentment that comes from being at work which needs to be done. That was up on the conscious level—and, I repeat, I was fully awake. Someplace, more levels down than I understand about, I was excruciatingly unhappy, terrified, and filled with guilt—but that was down, 'way down, locked, suppressed; I was hardly aware of it and in no practical way affected by it.

I knew that I had been seen to leave. That shout of "Sam!" had been intended for me; only two persons knew me by that name and the Old Man would have used my right name. So Mary had seen me leave—it was a good thing, I thought, that she had let me find out where her private apartment was. It would be necessary presently to boobytrap it against her next use of it. In the meantime I must get on with work and keep from being picked up.

I was in a warehouse district, moving through it cautiously, all my agent's training at work to avoid being conspicuous. Shortly I found what seemed to be a satisfactory building; there was a sign: LOFT FOR LEASE—SEE RENTAL AGENT ON GROUND FLOOR. I scouted it thoroughly, noted the address, then doubled back to the nearest Western Union booth two squares behind me. There I sat down at a vacant machine and sent the following message: EXPEDITE TWO CASES TINY TOTS TALKY TALES SAME DISCOUNT CONSIGNED TO JOEL FREEMAN and added the address of the empty loft. I sent it to Roscoe and Dillard, Jobbers and Manufacturers Agents, Des Moines, Iowa.

As I left the booth the sight of one of the Kwikfede chain of all-night restaurants reminded me that I was very hungry, but the reflex cut off at once and I thought no more about it. I returned to the warehouse building, found a dark corner in the rear, and settled quietly back to wait for dawn and business hours.

I must have slept; I have a dim recollection of ever repeating, claustrophobic nightmares.

From daylight until nine o'clock I hung around a hiring hall, studying the notices; it was the one place in the neighborhood where a man of no occupation would not attract attention. At nine o'clock I met the rental agent as he unlocked his office, and leased the loft, paying him a fat squeeze on the side for immediate possession while the paperwork went through on the deal. I went up to the loft, unlocked it, and waited.

About ten-thirty my crates were delivered. I let the teamsters leave; three were too many for me and I was not yet ready in any case. After they were gone, I opened one crate, took out one cell, warmed it, and got it ready. Then I went downstairs, found the rental agent again, and said, "Mr. Greenberg, could you come up for a moment? I want to see about making some changes in the lighting."

He fussed, but agreed to do so. When we entered the loft I closed the door behind us and led him over to the open crate. "Here," I said, "if you will just lean over there, you will see what I mean. If I could just—"

I got him around the neck with a grip that cut off his wind, ripped his jacket and shirt up, and, with my free hand, transferred a master from the cell to his bare back, then held him tight for a moment until his struggles stopped. Then I let him up, tucked his shirt back in and dusted him off. When he had recovered his breath, I said, "What news from Des Moines?"

"What do you want to know?" he asked. "How long have you been out?"

I started to explain, but he interrupted me with, "Let's have a direct conference and not waste time." I skinned up my shirt; he did the same; and we sat down on the edge of the unopened case, back to back, so that our masters could be in contact. My own mind was merely blank and I have no idea how long the conference went on. I watched a fly droning around a dusty cobweb, seeing it but not thinking about it.

The building superintendent was our next recruit. He was a large Swede and it took both of us to hold him. After that Mr. Greenberg called up the owner of the building and insisted that he simply had to come down and see some horrendous mishap that had occurred to the structure—just what, I don't know; I was busy with the super, opening and warming several more cells.

The owner of the building was a real prize and we all felt quiet satisfaction, including, of course, he himself. He belonged to the Constitution Club, the membership list of which read like the index of *Who's Who in Finance, Government, and Industry*. Better still, the club boasted the most famous chef in town; it was an even chance that any given member would be lunching there if he were in the city.

It was pushing noon; we had no time to lose. The super went out to buy suitable clothes and a satchel for me and sent the owner's chauffeur up to be recruited as he did so. At twelve-thirty we left, the owner and I, in his own car; the satchel contained twelve masters, still in their cells but ready.

The owner signed: *J. Hardwick Potter & Guest*. One of the flunkies tried to take my bag but I insisted that I needed it to change my shirt before lunch. We fiddled around in the washroom until we had it to ourselves, save for the attendant—whereupon we recruited him and sent him out with a message to the resident manager that a guest had taken ill in the washroom.

After we took care of the manager he obtained a white coat for me and I became another washroom attendant. I had only ten masters left but I knew that the cases would be picked up from the warehouse loft and delivered to the club shortly. The regular attendant and I used up the rest of those I had been able to bring before the lunch hour rush was over. One guest surprised us while we were busy and I had to kill him, as there was no time to save him for recruiting. We stuffed him into the mop closet.

There was a lull after that, as the cases had not yet arrived. Hunger reflex nearly doubled me over, then it dropped off sharply but still persisted; I told the manager, who had me served one of the best lunches I have ever eaten, in his office. The cases arrived just as I was finishing.

During the drowsy period that every gentlemen's club has in the midafternoon we secured the place. By four o'clock everyone present in the building—members, staff, and guests—were with us; from then on we simply processed them in the lobby as the doorman passed them in. Later in the day the manager phoned Des Moines for four more cases.

Our big prize came that evening—a guest, the Assistant Secretary of the Treasury. We saw a real victory in that; the Treasury Department is charged with the safety of the President.

VIII

The jubilation caused by the capture of a high key official was felt by me only as absentminded satisfaction, then I thought no more about it. We—the human recruits, I mean—hardly thought at all; we knew what we were to do each instant, but we knew it only at the moment of action, as a "high school" horse gets his orders, responds to them instantly, and is ready for the next signal from his rider.

High school horse and rider is a good comparison, as far as it goes—but it goes not nearly far enough. The horseman has partly at his disposal the intelligence of the horse; the masters had at their disposal not only our full intelligences, but also tapped directly our memory and experiences. We communicated for them between masters, too; sometimes we knew what we were talking about; sometimes we did not—such spoken words went through the servant, but the servant had no part in more important, direct, master-to-master conferences. During these we sat quietly and waited until our riders were through conferring, then rearranged our clothing to cover them up and did whatever was necessary. There was such a conference on a grand scale after the Assistant Secretary of the Treasury was recruited; I know no more of it than you do, although I sat in on it.

I had no more to do with words spoken by me for my master than had the audio relay buried behind my ear to do with words it sounded—the relay was silent all this time, incidentally; my phone proper I had left behind me. I, like it, was a communication instrument, nothing more. Some days after I was recruited I gave the club manager new instructions about how to order shipments of masters' carrying cells. I was fleetingly aware, as I did so, that three more ships had landed, but I was not aware of their locations; my overt knowledge was limited to a single address in New Orleans.

I thought nothing about it; I went on with my work. After the day spent at the club, I was a new "special assistant to Mr. Potter" and spent the days in his office—and the nights, too. Actually, the relationship may have reversed; I frequently gave oral instructions to Potter. Or perhaps I understand the social organization of the parasites as little now as I did then; the relationship may have been more flexible, more anarchistic, and vastly more subtle than I have the experience to imagine.

I knew—and my master certainly knew—that it was well for me to stay out of sight. Through me, my master knew as much of the organization we called the "Section" as I did; it knew that I was one human known to the Old Man to have been recruited—and my master knew, I am sure, that the Old Man would not cease to search for me, to recapture me or kill me.

It seems odd that it did not choose to change bodies and to kill mine; we had vastly more potential recruits available than we had masters. I do not think it could have felt anything parallel to human squeamishness; masters newly delivered from their transit cells frequently damaged their initial hosts; we always destroyed the damaged host and found a new one for the master.

Contrariwise, my master, by the time he chose me, had controlled not less than three human hosts—Jarvis, Miss Haines, and one of the girls in Barnes's office, probably the secretary—and in the course of it had no doubt acquired both sophistication and skill in the control of human hosts. It could have "changed horses" with ease.

On the other hand, would a skilled cowhand have destroyed a well-trained workhorse in favor of an untried, strange mount? That may have been why I was hidden and saved—or perhaps I don't know what I am talking about; what does a bee know about Beethoven?

After a time the city was "secured" and my master started taking me out on the streets. I do not mean to say that every inhabitant of the city wore a hump—no, not by more than 99 percent; the humans were very numerous and the masters still very few—but the key positions in the city were all held by our own recruits, from the cop on the comer to the mayor and the chief of police, not forgetting ward bosses, church ministers, board members, and any and all who were concerned with public communications and news. The vast majority continued with their usual affairs, not only undisturbed by the masquerade but unaware that anything had happened.

Unless, of course, one of them happened to be in the way of some purpose of a master—in which case he was disposed of to shut his mouth. This used up potential hosts but there was no need to be economical.

One of the disadvantages we worked under in serving our masters—or perhaps I should say one of the disadvantages our masters worked under—was the difficulty of long-distance communication. It was limited to what human hosts could say in human speech over ordinary communication channels, and was further limited, unless the channel was secured throughout, to conventionalized code messages such as the one I had sent ordering the first two shipments of masters. Oh, no doubt the masters could communicate ship-to-ship and probably ship-to-home-base, but there was no ship nearby; this city had been stormed as a prize-of-opportunity, as a direct result of my raid on Des Moines in my previous life.

Such communication through servants was almost certainly not adequate to the purposes of the masters; they seemed to need frequent direct body-to-body conference to coordinate their actions. I am no expert in exotic psychologies; some of those who are maintain that the parasites are not discrete individuals, but cells of a larger organism, in which case—but why go on? They seemed to need direct-contact conferences.

I was sent to New Orleans for such a conference.

I did not know I was going. I went out on the street as usual one morning, then went to the uptown launching platform and ordered a cab. Cabs were scarce; I thought about moving over to the other side and catching the public shuttle but the thought was immediately suppressed. After a considerable wait my cab was lifted to the loading ramp and I started to get in—I say "started to" as an old gentleman hustled up and climbed into it ahead of me.

I received an order to dispose of him, which order was immediately countermanded by one telling me to go slow and be careful, as if even the masters were not always sure of themselves. I said, "Excuse me, sir, but this cab is taken."

"Quite," the elderly man replied. "I've taken it." He was a picture of self-importance, from briefcase to dictatorial manner. He could easily have been a member of the Constitution Club, but he was not one of our own, as my master knew and told me.

"You will have to find another," I said reasonably. "Let's see your queue ticket." I had taken my ticket from the rack as soon as I reached the platform; the cab carried the launching number shown by my ticket.

I had him, but he did not stir. "Where are you going?" he demanded.

"New Orleans," I answered and learned for the first time my destination.

"Then you can drop me off in Memphis."

I shook my head. "It's out of my way."

"All of fifteen minutes!" He seemed to have difficulty controlling his temper, as if he were not often crossed. "You, sir, must know the rules about sharing cabs in these days of shortages. You cannot preempt a public vehicle unreasonably." He turned from me. "Driver! Explain to this person the rules."

The driver stopped picking his teeth just long enough to say, "It's nothing to me. I pick 'em up, I take 'em, I drop 'em. Settle it between yourselves or I'll ask the dispatcher for another fare."

I hesitated, not yet having been instructed. Then I found myself chucking my bag in and climbing inside. "New Orleans," I said, "with stop at Memphis." The driver shrugged and signaled the control tower. The other passenger snorted and paid me no further attention.

Once in the air he opened his briefcase and spread papers across his knees. I watched him with disinterest. Presently I found myself shifting my position to let me get at my gun easily. The elderly man shot out a hand and grabbed my wrist. "Not so fast, son," he said, and his features broke into the Satanic grin of the Old Man himself.

My reflexes are fast, but I was at the disadvantage of having everything routed from me to my master, passed on by it, and action routed back to me. How much delay is that? A millisecond? I don't know. As I was drawing, I felt the bell of a gun against my ribs. "Take it easy."

With his other hand he thrust something against my side; I felt a prick, and then through me spread the warm tingle of a jolt of "morpheus" taking hold. I've been knocked out by that drug twice before and I've given it more times than that; I knew what it was.

I made one more attempt to pull my gun free and sank forward.

I was vaguely aware of voices—voices which had been going on for some time before I got around to sorting them out as meaning. Someone was handling me roughly and someone was saying, "Watch out for that ape!" Another voice replied, "It's all right; his tendons are cut," to which the first voice retorted, "He's still got *teeth*, hasn't he?"

Yes, I thought fretfully, and if you get close enough I'll bite you with them, too. The remark about cut tendons seemed to be true; none of my limbs would move, but that did not worry me as much as being called an ape and not being able to resent it. It was a shame, I thought, to call a man names when he can't protect himself.

I wept a little and then fell into a stupor.

"Feeling better, son?"

The Old Man was leaning over the end of my bed, staring at me thoughtfully. His chest was bare and covered with grizzled hair; he showed a slight paunch.

"Unh," I said, "pretty good, I guess." I started to sit up and found I could not move.

The Old Man came around to the side of the bed. "We can take those restraints off now," he said, fiddling with clasps. "Didn't want you hurting yourself. There!"

I sat up, rubbing myself. I was quite stiff. "Now," said the Old Man, "how much do you remember? Report."

"Remember?"

"You were with them—remember? They caught you. Do you remember anything after the parasite got to you?"

I felt a sudden wild fear and clutched at the sides of the bed. "Boss! Boss—they know where this place is! *I told them.*"

"No, they don't," he answered quietly, "because these aren't the Section offices you remember. Once I was convinced that you had made a clean getaway, I had the old offices evacuated. They don't know about this hangout—I think. So you remember?"

"Of course I remember. I got out of here—I mean out of the old offices and went up—" My thoughts raced ahead of my words; I had a sudden full image of holding a live, moist master in my bare hand, ready to place it on the back of the rental agent.

I threw up on the sheet. The Old Man took a corner of it, wiped my mouth, and said gently, "Go ahead."

I swallowed and said, "Boss—they're all over the place! They've got the city."

"I know. Same as Des Moines. And Minneapolis, and St. Paul, and New Orleans, and Kansas City. Maybe more. I don't know—I can't be every place." He looked sour and added, "It's like fighting with your feet in a sack. We're losing, fast." He scowled and added, "We can't even clamp down on the cities we know about. It's very—"

"Good grief! Why not?"

"You should know. Because 'older and wiser heads' than mine are still to be convinced that there is a war on. Because when they take over a city, everything goes on as before."

I stared at him. "Never mind," he said gently. "You are the first break we've had. You're the first victim to be recaptured alive—and now we find you remember what happened to you. That's important. And your parasite is the first live one we've managed to capture and keep alive. We'll have a chance to—"

He broke off. My face must have been a mask of terror; the notion that my master was still alive—and might get to me again—was more than I could stand.

The Old Man took my arm and shook it. "Take it easy, son," he said mildly. "You are still pretty sick and pretty weak."

"*Where is it*?"

"Eh? The parasite? Don't worry about it. You can see it, if you wish; it's living off your opposite number, a red orangutan, name of Napoleon. It's safe."

"*Kill it*!"

"Hardly—we need it alive, for study."

I must have gone to pieces, for he slapped me a couple of times. "Take a brace," he said. "I hate to bother you when you are sick, but it's got to be done. We've got to get everything you remember down on wire. So level off and fly right."

I pulled myself together and started making a careful, detailed report of all that I could remember. I described renting the loft and recruiting my first victim, then how we moved on from there to the Constitution Club. The Old Man nodded. "Logical. You were a good agent, even for *them.* "

"You don't understand," I objected. "*I* didn't do any thinking. I knew what was going on, but that was all. It was as if, uh, as if—" I paused, stuck for words.

"Never mind. Get on with it."

"After we recruited the club manager the rest was easy. We took them as they came in and—"

"Names?"

"Oh, certainly. Myself, Greenberg—M. C. Greenberg, Thor Hansen, J. Hardwick Potter, his chauffeur Jim Wakeley, a little guy called 'Jake' who was washroom attendant at the club but I believe he had to be disposed of later—his master would not let him take time out for necessities. Then there was the manager; I never did get his name." I paused, letting my mind run back over that busy afternoon and evening in the club, trying to make sure of each recruit. "Oh my God!"

"What is it?"

"The Secretary—The Assistant Secretary of the *Treasury*."

"You mean you got *him*?"

"Yes. The first day. What day was that? How long has it been? God, chief, the Treasury Department *protect the President*!"

But I was not talking to anyone; there was just a hole in the air where the Old Man had been.

I lay back exhausted. I started sobbing softly into my pillow. After a while I went to sleep.

IX

I woke up with my mouth foul, my head buzzing, and a vague sense of impending disaster. Nevertheless I felt fine, by comparison. A cheerful voice said, "Feeling better?"

A small brunet creature was bending over me. She was as cute a little bug as I have ever seen and I was well enough to appreciate the fact, however faintly. She was dressed in a very odd costume, what there was of it—skintight white shorts, a wisp of practically transparent stuff that restrained her breasts, but not much, and a sort of metal carapace that covered the back of her neck, her shoulders, and went on down her spine.

"Better," I admitted, then made a wry face.

"Mouth taste unpleasant?"

"Like a Balkan cabinet meeting."

"Here." She gave me some stuff in a glass; it was spicy and burned a little, and it washed away the bad taste at once. "No," she went on, "don't swallow it. Spit it out like a little man and I'll get you some water." I obeyed.

"I'm Doris Marsden," she went on, "your day nurse."

"Glad to know you, Doris," I answered and stared at her with increasing appreciation. "Say—why the get up? Not that I don't like it, but you look like a refugee from a comic book."

She looked down at herself and giggled. "I feel like a chorus girl. But you'll get used to it—I did."

"I'm already used to it. I like it fine. But why?"

"The Old Man's orders."

I started to ask why again, then I knew why, and I started feeling worse again. I shut up. Doris went on, "Now for some supper." She got a tray and sat down on my bed.

"I don't believe I want anything to eat."

"Open up," she said firmly, "or I'll rub it in your hair. There! That's a good boy."

Between gulps, taken in self-defense, I managed to get out, "I feel pretty good. Give me one jolt of 'gyro' and I'll be back on my feet."

"No stimulants for you," she said flatly, still shoveling it in. "Special diet and lots of rest, with maybe a sleepy pill later. That's what the man says."

"What's wrong with me?"

"Extreme exhaustion, starvation, and the first case of scurvy I ever saw in all my born days. As well as scabies and lice—but we got those whipped. There, now you know—and if you tell the doctor I told you, I'll call you a liar to your face. Turn over on your tummy."

I did so and she started changing dressings. I appeared to be spotted with sores; the stuff she used stung a bit, then felt cool. I thought about what she had told me and tried to remember just how I had lived under my master.

"Stop trembling," she said. "Are you having a bad one?"

"I'm all right," I told her. I did manage to stop shaking and to think it over calmly. As near as I could remember I had not eaten during that period oftener than every second or third day. Bathing? Let me see—why, I hadn't bathed at all! I had shaved every day and put on a clean shirt; that was a necessary part of the masquerade and the master knew it.

On the other hand, so far as I could remember, I had never taken off my shoes from the time I had stolen them until the Old Man had recaptured me—and they had been too tight to start with. "What sort of shape are my feet in?" I asked.

"Don't be nosy," Doris advised me. "Now turn over on your back."

I like nurses; they are calm and earthy and very tolerant. Miss Briggs, my night nurse, was not the mouthwatering job that Doris was; she had a face like a jaundiced horse—but she had a fine figure for a woman her age, hard and well cared for. She wore the same sort of musical-comedy rig that Doris sported, but she wore it with a no-nonsense air and walked like a grenadier guard. Doris, bless her heart, jiggled pleasantly as she walked.

Miss Briggs refused to give me a second sleeping pill when I woke up in the night and had the horrors, but she did play poker with me and skinned me out of half a month's pay. I tried to find out from her about the President matter, for I figured the Old Man had either won or lost by that time. But she wasn't talking. She would not admit that she knew anything about parasites, flying saucers, or what not—and she herself sitting there dressed in a costume that could have only one purpose!

I asked her what the public news was, then? She maintained that she had been too busy lately to look at a 'cast. So I asked to have a stereo box moved into my room, so I could catch a newscast. She said I would have to ask the doctor about that; I was on the 'quiet' list. I asked when in the deuce I was going to see this so-called doctor? She said she didn't know; the doctor had been very busy lately. I asked how many other patients there were in the infirmary anyway? She said she really didn't remember. About then her call bell sounded and she left, presumably to see another patient.

I fixed her. While she was gone, I cold-decked the next deal, so that she got a pat hand—then I wouldn't bet against her.

I got to sleep later on and was awakened by Miss Briggs slapping me in the face with a cold, wet washcloth. She got me ready for breakfast, then Doris relieved her and brought it to me. This time I fed myself and while I was chomping I tackled her for news—with the same perfect score I had made with Miss Briggs. Nurses run a hospital as if it were a nursery for backward children.

Davidson came around to see me after breakfast. "Heard you were here," he said. He was wearing shorts and nothing else, except that his left arm was covered by a dressing.

"More than I've heard," I complained. "What happened to you?"

"Bee stung me."

I dropped that subject; if he didn't want to tell how he had gotten burned, that was his business. I went on, "The Old Man was in here yesterday, getting my report, when he left very suddenly. Seen him since?"

"Yep."

"Well?" I answered.

"Well, how about *you*? Are you straightened out? Have the psych boys cleared you for classified matters, or not?"

"Is there any doubt about it?"

"You're darn tootin' there's doubt. Poor old Jarvis never did pull out of it."

"Huh?" I hadn't thought about Jarvis. "How is he now?"

"He isn't. Never did get right in his head. Dropped into a coma and died the next day—the day after you left. I mean the day after you were captured. No apparent reason—just died." Davidson looked me over. "You must be tough."

I did not feel tough. I felt tears of weakness welling up again and I blinked them back. Davidson pretended not to see and went on conversationally, "You should have seen the ruckus after you gave us the slip. The Old Man took out after you wearing nothing but a gun and a look of grim determination. He would have caught you, too, my money says—but the civil police picked him up and we had to get him out of hock." Davidson grinned.

I grinned feebly myself. There was something both gallant and silly about the Old Man charging out to save the world singlehanded dressed in his birthday suit. "Sorry I missed it. But what else has happened—lately?"

Davidson looked me over carefully, then said, "Wait a minute." He stepped out of the room and was gone a short time. When he came back, he said, "The Old Man says it's all right. What do you want to know?"

"Everything! What happened yesterday?"

"I was in on that one," he answered, "That's how I got this." He waved his damaged wing at me, "I was lucky," he added, "three agents were killed. Quite a fracas."

"But how did it come out? How about the President? Was he—"

Doris hustled into the room. "Oh, there you are!" she said to

Davidson. "I told you to stay in bed. You're due in prosthetics at Mercy Hospital right now. The ambulance has been waiting for ten minutes."

He stood up, grinned at her, and pinched her cheek with his good hand. "The party can't start until I get there."

"Well, hurry!"

"Coming." He started out the door with her.

I called out, "Hey! How about the *President*?"

Davidson paused and looked back over his shoulder. "Oh, him? He's all right—not a scratch on him." He went on.

Doris came back a few minutes later, fuming. "Patients!" she said, like a swear word. "Do you know why they call them 'patients'? Because it's patience you have to have to put up with them. I should have had at least twenty minutes for his injection to take hold; as it was I gave it to him when he got into the ambulance."

"Injection for what?"

"Didn't he tell you?"

"No."

"Well . . . no reason not to tell you. Amputation and graft, lower left arm."

"Oh." Well, I thought, I won't hear the end of the story from Davidson; grafting on a new limb is a shock. They usually keep the patient hopped up for at least ten days. I wondered about the Old Man: had he come out of it alive? Of course he had, I reminded myself; Davidson checked with him before he talked.

But that didn't mean he hadn't been wounded. I tackled Doris again. "How about the Old Man? Is he on the sick list? Or would it be a violation of your sacred run-around rules to tell me?"

"You talk too much," she answered. "It's time for your morning nourishment and your nap." She produced a glass of milky slop, magician fashion.

"Speak up, wench, or I'll spit it back in your face."

"The Old Man? You mean the Chief of Section?"

"Who else?"

"*He's* not on the sick list, at least not here." She shivered and made a face. "I wouldn't want *him* as a patient."

I was inclined to agree with her.

X

For two or three more days I was kept wrapped in swaddling clothing and treated like a child. I did not care; it was the first real rest I had had in years. Probably they were slipping me sedatives; I noticed that I was always ready to sleep each time after they fed me. The sores got much better and presently I was encouraged—"required" I should say—by Doris to take light exercise around the room.

The Old Man called on me. "Well," he said, "still malingering, I see."

I flushed. "Damn your black, flabby heart," I told him. "Get me a pair of pants and I'll show you who is malingering."

"Slow down, slow down." He took my chart from the foot of my bed and looked it over. "Nurse," he said, "get this man a pair of shorts. I'm restoring him to duty."

Doris faced up to him like a banty hen. "Now see here," she said, "you may be the big boss, but you can't give orders here. The doctor will—"

"Stow it!" he said, "and get those drawers. When the doctor comes in, send him to me."

"But—"

He picked her up, swung her around, paddled her behind, and said, "Git!"

She went out, squawking and sputtering, and came back shortly, not with clothes for me, but with the doctor. The Old Man looked around and said mildly, "Doc, I sent for pants, not for you."

The medico said stiffly, "I'll thank you not to interfere with my patients."

"He's not your patient. I need him, so I am restoring him to duty."

"Yes? Sir, if you do not like the way I run my department, you may have my resignation at once."

The Old Man is stubborn but not bullheaded. He answered, "I beg your pardon, sir. Sometimes I become too preoccupied with other problems to remember to follow correct procedure. Will you do me the favor of examining this patient? I need him; if he can possibly be restored to duty, it would help me to have his services at once."

The doctor's jaw muscles were jumping, but all he said was, "Certainly, sir!" He went through a show of studying my chart, then had me sit on the bed while he tested my reflexes. Personally, I thought they were mushy. He peeled back my eyelids, flashed a light in my eye, and said, "He needs more recuperation time—but you may have him. Nurse—fetch clothing for this man."

Clothing consisted of shorts and shoes; I had been better dressed in a hospital gown. But everybody else was dressed the same way, and it was downright comforting to see all those bare shoulders with no masters clinging to them. I told the Old Man so. "Best defense we've got," he growled, "even if it does make the joint look like a ruddy summer colony. If we don't win this set-to before winter weather, we're licked."

The Old Man stopped at a door with a freshly lettered sign: BIOLOGICAL LABORATORY—STAY OUT! He dilated the door.

I hung back. "Where are we going?"

"Going to take a look at your twin brother, the ape with your parasite."

"That's what I thought. Not for me—no point in it. No, thanks!" I could feel myself begin to tremble.

The Old Man paused. "Now, look, son," he said patiently, "you've got to get over your panic. The best way is to face up to it. I know it's hard—I've spent a good many hours in here myself, just staring at the thing, getting used to it."

"You don't know—you *can't* know!" I had the shakes so badly now that I had to steady myself by the doorframe.

He looked at me. "I suppose it's different," he said slowly, "when you've actually had it. Jarvis—" He broke off.

"You're darn right it's different! You're not going to get *me* in *there*!"

"No, I guess not. Well, the doctor was right. Go on back, son, and turn yourself in at the infirmary." His tones were regretful rather than angry. He turned and started into the laboratory.

He had gotten three or four steps away before I called out, "Boss!"

He stopped and turned, his face expressionless. "Wait," I added, "I'm coming."

"You don't have to."

"I know. I'll do it. It—It just takes . . . a while—to get your nerve back."

He did not answer but, as I came alongside him, he grasped my upper arm, warmly and affectionately, and continued to hold it as we walked, as if I were a girl. We went on in, through another locked door and into a room that was conditioned warm and moist. The ape was there, caged.

He sat facing us, his torso supported and restrained by a strap-metal framework. His arms and legs hung limply, as if he had no control over them—which he did not have, as I learned.

As we came in he looked up and at us. For an instant his eyes were malevolent and intelligent; then the fire died out and they were merely the eyes of a dumb brute, a brute in pain.

"Around to the side," the Old Man said softly. I would have hung back but he still had me by the arm. We moved around; the ape followed us with his eyes, but his body was held by the frame. From the new position I could see—it.

My master. The thing that had ridden my back for an endless time, spoken with my mouth—thought with my brain. My master.

"Steady," the Old Man said softly. "Steady. You'll get used to it." He shook my arm. "Look away for a bit. It helps."

I did so and it did help. Not much, but some. I took a couple of deep breaths, then held it and managed to slow my heart down a little. I made myself stare at it.

It is not the appearance of a parasite which arouses horror. True, they are disgustingly ugly, but not more so than slime in a pond—not as much so as maggots in garbage.

Nor was the horror entirely from knowing what they could do—for I felt the horror the first time I saw one, before I really knew what one was. I tried to tell the Old Man about it, letting the talk steady me. He nodded, his eyes still on the parasite. "It's the same with everybody," he said. "Unreasoned fear, like a bird with a snake. Probably its prime weapon." He let his own eyes drift away, as if too long a sight of it were too much even for his rawhide nerves.

I stuck with him, trying to get used to it and gulping at my breakfast but not losing it. I kept telling myself that I was safe from it, that it couldn't harm *me*.

I looked away again and found the Old Man's eyes on me. "How about it?" he said. "Getting hardened to it?"

I looked back at it. "A little." I went on savagely, "All I want to do is to kill it! I want to kill all of them—I could spend my whole life killing them and killing them." I began to shake again.

The Old Man continued to study me. "Here," he said, and handed me his gun.

It startled me. I was unarmed myself, having come straight from bed. I took it but looked back at him questioningly. "Huh? What for?"

"You want to kill it, don't you? If you feel that you have to—go ahead. Kill it. Right now."

"Huh? But—Look here, boss, you told me you needed this one for study."

"I do. But if you need to kill it, if you feel that you have to kill it, do so. I figure this particular one is your baby; you're entitled to it. If you need to kill it, to make you a whole man again, go ahead."

" 'To make me a whole man again—' " The thought rang through my head. The Old Man knew, better than I knew, what was wrong with me, what medicine it would take to cure me. I was no longer trembling; I stood there, the gun cradled in my hand, ready to spit and kill. My master . . .

If I killed *this* one I would be a free man again—but I would never be free as long as *it* lived. Surely, I wanted to kill them, every one of them, search them out, burn them, kill them—but this one above all.

My master . . . still my master unless I killed it. I had a dark and certain thought that if I were alone with it, I would be able to do nothing, that I would freeze and wait while it crawled up me and settled again between my shoulder blades, searched out my spinal column, took possession of my brain and my very inner self.

But now I could kill it!

No longer frightened but fiercely exultant I raised the gun, ready to squeeze the trigger.

The Old Man watched me.

I lowered the gun a little and said uncertainly, "Boss, suppose I do kill it. You've got others?"

"No."

"But you need it."

"Yes."

"Well, but—For the love o' God, why did you give me the gun?"

"You know why. This one is yours; you've got first claim. If you have to kill it, go ahead. If you can pass it up, then the Section will use it."

I had to kill it. Even if we killed all the others, while this one was still alive I would still crouch and tremble in the dark. As for the others, for study—why, we could capture a dozen any time at the Constitution Club. With this one dead I'd lead the raid myself. Breathing rapidly, I raised the gun again.

Then I turned and chucked the gun to the Old Man; he plucked it out of the air and put it away. "What happened?" he asked. "You were all set."

"Uh? I don't know. When it got right down to it, it was enough to know that I could."

"I figured that it would be."

I felt warm and relaxed, as if I had just killed a man or had a woman—as if I had just killed *it*. I was able to turn my back on it and face the Old Man. I was not even angry with him for what he had done; instead I felt warm toward him, even affectionate. "I know you did, damn you. How does it feel to be a puppet master?"

He did not take the jibe as a joke. Instead he answered soberly, "Not me. The most I ever do is to lead a man on the path he wants to follow. *There* is the puppet master." He hooked a thumb at the parasite.

I looked around at it. "Yes," I agreed softly, " 'the puppet master'. You think you know what you mean by that—but you don't. And boss . . . I hope you never do."

"I hope so, too," he answered seriously.

I could look now without trembling. I even started to put my hands in my pockets, but the shorts had no pockets. Still staring at it, I went on, "Boss, when you are through with it, if there is anything left, then I'll kill it."

"That's a promise."

We were interrupted by a man bustling into the cage room. He was dressed in shorts and a lab coat; it made him look silly. I did not recognize him—it was not Graves; I never saw Graves again; I imagine the Old Man ate him for lunch.

"Chief," he said, trotting up, "I did not know you were in here. I—"

"Well, I am," the Old Man cut in. "What are you doing wearing a coat?" The Old Man's gun was out and pointed at the man's chest.

The man stared at the gun as if it were a bad joke. "Why, I was working, of course. There is always a chance of splattering one's self. Some of our solutions are rather—"

"Take it off!"

"Eh?"

The Old Man waggled his gun at him. To me he said, "Get ready to take him."

The man took his coat off. He stood there holding it and biting his lip. His back and shoulders were bare, nor was there the telltale rash. "Take that damned coat and burn it," the Old Man told him. "Then get back to your work."

The man hurried away, his face red, then hesitated, glanced at me, and said to the Old Man, "Chief, are you ready for that, uh, procedure?"

"Shortly. I'll let you know."

The man opened his mouth, closed it, and left. The Old Man wearily put his gun away. "Post an order," he muttered. "Read it aloud. Make everybody sign for it—tattoo it on their narrow little chests—and some smart Aleck thinks it doesn't apply to him. Scientists!" He said the last word in the way in which Doris had said, "Patients!"

I turned back to looking at my former master. It still revolted me, but there was a gusty feeling of danger, too, that was not totally unpleasant—like standing on a very high place. "Boss," I asked, "what are you going to do with this thing?"

He looked at me, rather than at the slug. "I plan to interview it."

"To what? But how can you— What I want to say is: the ape, I mean—"

"No, the ape can't talk. That's the hitch. We'll have to have a volunteer—a human volunteer."

When his words sank in and I began to visualize what he meant by them the horror struck me again almost full force. "You can't mean that. You wouldn't do that—not to anybody."

"I could and I'm going to. What needs to be done will be done."

"You won't get any volunteers!"

"I've already got one."

"You have? Who?"

"But I don't want to use the volunteer I've got. I'm still looking for the right man."

I was disgusted and showed it. "You ought not to be looking for anyone, volunteer or not. And if you've got one, I'll bet you won't find another; there can't be two people that far out of their minds."

"Possibly," he agreed. "But I still don't want the one I've got. The interview is a necessity, son; we are fighting a war with a total lack of military intelligence. We don't know anything, really, about our enemy. We can't negotiate with him, we don't know where he comes from, nor what makes him tick. We've got to find out; our racial existence depends on it. The only—the *only* way to talk to these critters is through a human volunteer. So it will be done. But I'm still looking for a volunteer."

"Well, don't look at me!"

"I *am* looking at you."

My answer had been half wisecrack; his answer turned it dead serious and startled me speechless. I finally managed to splutter, "You're crazy! I should have killed it when I had your gun—and I would have if I had known what you wanted it for. But as for me volunteering to let you put that thing—No! I've had it."

He ploughed on through as if he had not heard me. "It can't be just any volunteer; it has to be a man who can take it. Jarvis wasn't stable enough, nor tough enough in some fashion to stand up under it. We know you are."

"Me? You don't know anything of the sort. All you know is that I lived through it once. I . . . I couldn't *stand* it again."

"Well, maybe it will kill you," he answered calmly, "but it is less likely to kill you than someone else. You are proved and salted; you ought to be able to do it standing on your head. With anyone else I run more risk of losing an agent."

"Since when did you worry about risking an agent?" I said bitterly.

"Since always, believe me. I am giving you one more chance, son: are you going to do this, knowing that it has to be done and that you stand the best chance of anybody—and can be of most use to us, because you *are* used to it—or are you going to let some other agent risk his reason and probably his life in your place?"

I started to try to explain how I felt, that I was not afraid to die, no more than is normal, but that I could not stand the thought of dying while possessed by a parasite. Somehow I felt that to die so would be to die already consigned to an endless and unbearable hell. Even worse was the prospect of *not* dying once the slug touched me. But I could not say it; there were still no words to describe what the race had not experienced.

I shrugged. "You can have my appointment back. There is a limit to what one man can be expected to go through and I've reached it. I won't do it."

He turned to the intercom phone on the wall. "Laboratory," he called out, "we'll start the experiment right now. Hurry it up!"

The answering voice I recognized as that of the man who had walked in on us. "Which subject?" he asked. "It affects the measurements."

"The original volunteer."

"That's the smaller rig?" the voice asked doubtfully.

"Right. Get it in here."

I started for the door. The Old Man snapped, "Where do you think you are going?"

"Out," I snapped back. "I'm having no part of this."

He grabbed me and spun me around as if he had been the bigger and younger. "No, you don't. You know more about these things than the rest of us; your advice could be of help."

"Let go of me."

"You'll stay and watch!" he said savagely, "strapped down or free to move, as you choose. I've made allowance for your illness but I've had enough of your nonsense."

I was too weary to buck him; I felt nervously exhausted, tired in my bones. "You're the boss."

The lab people wheeled in a metal framework, a sort of chair, more like a Sing Sing special than anything else. There were metal clamps for ankles and knees, more of the same on the chair arms for the wrists and elbows. There was a corselet effect to restrain the waist and the lower part of the chest, but the back was cut away so that the shoulders of the person unfortunate enough to sit in it would be free.

They brought it over and placed it beside the ape's cage, then removed the back panel of the cage and the panel on the side nearest the "chair" rig.

The ape watched the procedure with intent, aware eyes, but his limbs still dangled helplessly. Nevertheless, I became still more disturbed at the cage being thus opened. Only the Old Man's threat of placing me under restraint kept me from leaving.

The technicians stood back and waited, apparently ready for the job. The outer door opened and several people came in; among them was Mary.

I was caught off balance by her sudden appearance; I had been wanting to see her and had tried several times to get word to her through the nurses—but they either honestly could not identify her or had received instructions. Now I saw her first under these circumstances. I cursed the Old Man to myself, knowing it was useless to object. It was no sort of a show to bring a woman to, even if the woman was an agent. There ought to be some sort of decent limits somewhere.

Mary saw me, looked surprised, and nodded. I let it go with a nod myself; it was no time for small talk. She was looking good, as always, though very sober. She was dressed in the same sort of costume as the nurses had worn, shorts and a skimpy halter, but she did not have on the ludicrous metal helmet and back plate.

The others in the party were men. They wore shorts, like the Old Man and myself. They were loaded with recording and stereo equipment as well as other apparatus.

"Ready?" inquired the lab chief.

"Get going," answered the Old Man.

Mary walked straight to the metal chair and sat down in it. Two of the technicians knelt at her feet and started busying themselves with the clamps. Mary reached behind her, unfastened her halter and let it fall, leaving her back bare.

I looked at this in a frozen daze, as if caught in a nightmare. Then I had grabbed the Old Man by the shoulders and had literally thrown him aside and I was standing by the chair, kicking the technicians out of the way. "Mary!" I screamed, "get up out of there!"

Now the Old Man had his gun on me and was motioning me back with it. "Away from her," he ordered. "You three—grab him and tie him up."

I looked at the gun, then I looked down at Mary. She said nothing and did not move; in fact her feet were already bound. She simply looked at me with compassionate eyes. "Get up from there, Mary," I said dully, "I want to sit down."

They removed the chair Mary had sat in and brought in another, larger one. I could not have used hers; both of them were tailored to size. When they finished clamping me in place I might as well have been cast into concrete. Once secured, my back began to itch unbearably, although nothing, as yet, had touched it.

Mary was no longer in the room; whether she had left or had been ordered out by the Old Man I do not know and it did not seem to matter. The Old Man stepped up to me after I had been prepared, laid a hand on my arm, and said quietly, "Thanks, son."

I did not bother to answer.

I did not see them handle the parasite as it took place behind my back. There was a rig which I had seen them bring in which appeared to be modified from the remote-handling gear used on radioactives; no doubt they used that. I was not interested enough to look, even if I had been able to turn my head far enough, which I couldn't.

Once the ape barked and screamed and someone shouted, "Watch it!"

There was a dead silence as if everyone was holding his breath—then something moist touched the back of my neck and I fainted.

I came out of it with the same tingling energy I had experienced once before. I knew I was in a tight spot, but I was warily determined to think my way out of it. I was not afraid; I was contemptuous of those around me and sure that in the long run I could outwit them.

The Old Man said sharply, "Can you hear me?"

I answered, "Of course I can. Quit shouting."

"Do you remember what we are here for?"

I said, "Naturally I remember. You want to ask some questions. What are you waiting for?"

"*What are you*?"

"Now that's a silly question. Take a look at me. I'm six feet one, more muscle than brain, and I weigh—"

"Not you. You know to whom I am talking—*you*."

"Guessing games?"

The Old Man waited a bit before replying, "It will do you no good to pretend that I don't know what you are—"

"Ah, but you don't."

"Or, rather, that I don't know that you are a parasite talking through the body of a man. You know that I have been studying you all the time you have been living on the body of that ape. I know things about you which give me an advantage over you. One—" He started ticking them off.

"You can be killed.

"Two, you can be hurt. You don't like electric shock and you can't stand the amount of heat even a man can stand.

"Three, you are helpless without your host. I could have you removed from this man and you would die.

"Four, you have no powers except those you borrow from your host—and your host is helpless. Try your bonds; then be sensible. You must cooperate—or die."

I listened with half an ear; I had already been trying my bonds, neither hoping nor fearing, but finding them, as I expected, impossible to escape. This did not worry me; I had neither worries nor fears. I was oddly contented to be back with my master, to be free of troubles and tensions. My business was to serve and the future would take care of itself.

In the meantime I must be alert, ready to serve him.

One ankle strap seemed less tight than the other; possibly I might drag my foot through it. I checked on the arm clamps; perhaps if I relaxed my muscles completely—

But I made no effort to escape. An instruction came at once—or, I made a decision, for the words mean the same; I tell you there was no conflict between my master and me; we were one—instruction or decision, I knew it was not time to risk an escape. I ran my eyes around the room, trying to figure who was armed and who was not. It was my guess that only the Old Man was armed; that bettered the chances.

Somewhere, deep down, was that dull ache of guilt and despair never experienced by any but the servants of the masters—but I was much too busy with the problem at hand to be troubled by it.

"Well?" the Old Man went on. "Do you answer my questions, or do I punish you?"

"What questions?" I asked. "Up to now, you've been talking nonsense."

The Old Man turned to one of the technicians. "Give me the tickler."

I felt no apprehension although I did not understand what it was he had asked for. I was still busy checking my bonds. If I could tempt him into placing his gun within my reach—assuming that I could get one arm free—then I might be able to—

He reached past my shoulders with a rod. I felt a shocking, unbearable pain. The room blacked out as if a switch had been thrown and for an undying instant I was jolted and twisted by hurt. I was split apart by it; for the moment I was masterless.

The pain left, leaving only its searing memory behind. Before I could speak, or even think coherently for myself, the splitting away had ended and I was again safe in the arms of my master. But for the first and only time in my service to him I was not myself free of worry; some of his own wild fear and pain was passed on to me, the servant.

I looked down and saw a line of red welling out of my left wrist; in my struggles I had cut myself on the clamp. It did not matter; I would tear off hands and feet and escape from there on bloody stumps, if escape for my master were possible that way.

"Well," asked the Old Man, "how did you like the taste of that?"

The panic that possessed me washed away; I was again filled with an unworried sense of well being, albeit wary and watchful. My wrists and ankles, which had begun to pain me, stopped hurting. "Why did you do that?" I asked. "Certainly, you can hurt me—but why?"

"Answer my questions."

"Ask them."

"*What are you*?"

The answer did not come at once. The Old Man reached for the rod; I heard myself saying, "We are the people."

"The people? What people?"

"The only people. We have studied you and we know your ways.

We—" I stopped suddenly.

"Keep talking," the Old Man said grimly, and gestured with the rod.

"We come," I went on, "to bring you—"

"To bring us what?"

I wanted to talk; the rod was terrifyingly close. But there was some difficulty with words. "To bring you peace," I blurted out.

The Old Man snorted.

" 'Peace'," I went on, "and contentment—and the joy of—of surrender." I hesitated again; "surrender" was not the right word. I struggled with it the way one struggles with a poorly grasped foreign language. "The joy," I repeated, "—the joy of . . . *nirvana*." That was it; the word fitted. I felt like a dog being patted for fetching a stick; I wriggled with pleasure.

"Let me get this," the Old Man said thoughtfully. "You are promising the human race that, if we will just surrender to your kind, you will take care of us and make us happy. Right?"

"Exactly!"

The Old Man studied me for a long moment, looking, not at my face, but past my shoulders. He spat upon the floor. "You know," he said slowly, "me and my kind, we have often been offered that bargain, though maybe not on such a grand scale. It never worked out worth a damn."

I leaned forward as much as the rig would allow. "Try it yourself," I suggested. "It can be done quickly—and then you will *know*."

He stared at me, this time in my face. "Maybe I should," he said thoughtfully. "Maybe I owe it to—somebody, to try it. And maybe I will, someday. But right now," he went on briskly, "you have more questions to answer. Answer them quick and proper and stay healthy. Be slow about it and I'll step up the current." He brandished the rod.

I shrank back, feeling dismay and defeat. For a moment I had thought he was going to accept the offer and I had been planning the possibilities of escape that could develop. "Now," he went on, "where do you come from?"

No answer . . . I felt no urge to answer.

The rod came closer. "Far away!" I burst out.

"That's not news. Tell me where? Where's your home base, your own planet?"

I had no answer. The Old Man waited a moment, then said, "I see I'll have to touch up your memory." I watched dully, thinking nothing at all. He was interrupted by one of the bystanders. "Eh?" said the Old Man.

"There may be a semantic difficulty," the other repeated. "Different astronomical concepts."

"Why should there be?" asked the Old Man. "That slug is using borrowed language throughout. He knows what his host knows; we've proved that." Nevertheless he turned back and started a different tack. "See here—you savvy the solar system; is your planet inside it or outside it?"

I hesitated, then answered, "All planets are ours."

The Old Man pulled at his lip. "I wonder," he mused, "just what you mean by that?" He went on, "Never mind; you can claim the whole damned universe; I want to know where your nest is? Where is your home base? Where do your ships come from?"

I could not have told him and did not; I sat silent.

Before I could anticipate it he reached behind me with the rod; I felt one smashing blow of pain, then it was gone. "Now, talk, damn you! What planet? Mars? Venus? Jupiter? Saturn? Uranus? Neptune? Pluto? Kalki?" As he ticked them off, I saw them—and I have never been as far off Earth as the space stations. When he came to the right one, I knew—and the thought was instantly snatched from me.

"Speak up," he went on, "or feel the whip."

I heard myself saying, "None of them. Our home is much farther away. You could never find it."

He looked past my shoulders and then into my eyes. "I think you are lying. I think you need some juice to keep you honest."

"No, no!"

"No harm to try." Slowly he thrust the rod past me, behind me. I knew the answer again and was about to give it, when something grabbed my throat. Then the pain started.

It did not stop. I was being torn apart; I tried to talk, to tell, anything to stop the pain—but the hand still clutched my throat and I could not.

Through a clearing blur of pain I saw the Old Man's face, shimmering and floating. "Had enough?" he asked. "Ready to talk?" I started to answer, but I choked and gagged. I saw him reach out again with the rod.

I burst into pieces and died.

They were leaning over me. Someone said, "He's coming around. Watch him; he might be violent."

The Old Man's face was over mine, his expression worried. "Are you all right, son?" he asked anxiously. I turned my face away.

"One side, please," another voice said. "Let me give him the injection."

"Will his heart stand it?"

"Certainly—or I wouldn't give it to him." The speaker knelt by me, took my arm, and gave me a shot. He stood up, looked at his hands, then wiped them on his shorts; they left bloody streaks.

I felt strength flowing back into me. "Gyro", I thought absently, or something like it. Whatever it was, it was pulling me back together. Shortly I sat up, unassisted.

I was still in the cage room, directly in front of that damnable chair. The cage, I noticed without interest, was closed again. I started to get to my feet; the Old Man stepped forward and gave me a hand. I shook him off. "Don't touch me!"

"Sorry," he answered, then snapped, "Jones! You and Ito—get the litter. Take him back to the infirmary. Doc, you go along."

"Certainly." The man who had given me the shot stepped forward and started to take my arm. I drew away from him.

"Keep your hands off me!"

He stopped. "Get away from me—all of you. Just leave me alone." The doctor looked at the Old Man, who shrugged, then motioned them all back. Alone, I went to the door, through it, and on out through the outer door into the passageway.

I paused there, looked at my wrists and ankles and decided that I might as well go back to the infirmary. Doris would take care of me, I was sure, and then maybe I could sleep. I felt as if I had gone fifteen rounds and lost every one of them.

"Sam, Sam!"

I looked up; I knew that voice. Mary hurried up and was standing before me, looking at me with great sorrowful eyes. "I've been waiting," she said. "Oh, Sam! What have they done to you?" Her voice was so choked that I could hardly understand her.

"You should know," I answered, and found I had strength enough left to slap her.

"Bitch," I added.

The room I had had was still empty, but I did not find Doris. I was aware that I had been followed, probably by the doctor, but I wanted no part of him nor any of them just then; I closed the door. Then I lay face down on the bed and tried to stop thinking or feeling anything.

Presently I heard a gasp, and opened one eye; there was Doris. "What in the world?" she exclaimed and came over to me. I felt her gentle hands on me. "Why, you poor, poor baby!" Then she added, "Just stay there, don't try to move. I'll get the doctor."

"No!"

"But you've got to have the doctor."

"No. I won't see him. You help me."

She did not answer. Presently I heard her go out. She came back shortly—I think it was shortly—and started to bathe my wounds. The doctor was not with her.

She was not more than half my size but she lifted me and turned me when she needed to as if I had been the baby she had called me. I was not surprised by it; I knew she could take care of me.

I wanted to scream when she touched my back. But she dressed it quickly and said, "Over easy, now."

"I'll stay face down."

"No," she denied, "I want you to drink something, that's a good boy."

I turned over, with her doing most of the work, and drank what she gave me. After a bit I went to sleep.

I seem to remember being awakened later, seeing the Old Man and cursing him out. The doctor was there too—or it could just as well have been a dream.

Miss Briggs woke me up and Doris brought me breakfast; it was as if I had never been off the sick list. Doris wanted to feed me but I was well able to do it myself. Actually I was not in too bad shape. I was stiff and sore and felt as if I had gone over Niagara Falls in a barrel; there were dressings on both arms and both legs where I had cut myself on the clamps, but no bones were broken. Where I was sick was in my soul.

Don't misunderstand me. The Old Man could send me into a dangerous spot—and had done so, more than once—and I would not hold it against him. That I had signed up for. But I had not signed up for what he had done to me. He knew what made me tick and he had deliberately used it to force me into something I would never have agreed to, had I not been jockeyed into it. Then after he had gotten me where he wanted me, he had used me unmercifully.

Oh, I've slapped men around to make them talk. Sometimes you have to. But this was different. Believe me.

It was the Old Man that really hurt. Mary? After all, what was she? Just another babe. True, I was disgusted with her to the bottom of my soul for letting the Old Man talk her into being used as bait. It was all right for her to use her femaleness as an agent; the Section had to have female operatives; they could do things men could not do. There have always been female spies and the young and pretty ones had always used the same tools.

But she should not have agreed to use them against another agent, inside her own Section—at least, she should not have used them against *me*.

Not very logical, is it? It was logical to me. Mary shouldn't have done it.

I was through, I was finished. They could go ahead with Operation Parasite without me; I'd had it. I owned a cabin up in the Adirondacks; I had enough stuff there in deep freeze to carry me for years—well, a year, anyhow. I had plenty of tempus pills and could get more; I would go up there and use them—and the world could save itself, or go to hell, without me.

If anyone came within a hundred yards of me, he would either show a bare back or be burned down.

XI

I had to tell somebody about it and Doris was the goat. It may have been classified information but I did not give a hoot. It turned out that Doris knew all about Operation Parasite; there was no reason to try to keep any part of it secret. The trouble was to make it not a secret—but I am ahead of myself.

Doris was indignant—shucks, she was sore as a boiled owl. She had dressed what they had done to me. Of course, as a nurse, she had dressed a lot worse, but this had been done *by our own people*. I blurted out how I felt about Mary's part in it. "You know that old slaughterhouse trick," I asked her, "where they train one animal to lead the others in? That's what they got Mary to do to me."

She had not heard of it, but she understood me. "Do I understand you that you had wanted to *marry* this girl?"

"Correct. Stupid, ain't I?"

"All men are, about women—but that's not the point. It does not make any difference whether she wanted to marry you or not; her knowing that you wanted to marry her makes what she did about eight thousand times worse. She *knew* what she could do to you. It wasn't fair." She stopped massaging me, her eyes snapping. "I've never met your redhead, not yet—but if I ever do, I'll scratch her face!"

I smiled at her. "You're a good kid, Doris. I believe you would play fair with a man."

"Oh, I'm no angel, and I've pulled some fast ones in my time. But if I did anything halfway like that. I'd have to break every mirror I own. Turn a bit, and I'll get the other leg."

Mary showed up. The first I knew about it was hearing Doris say angrily, "You can't come in."

Mary's voice answered, "I'm going in. Try to stop me."

Doris squealed, "Stay where you are—or I'll pull that hennaed hair out by the roots!"

There was a short silence, sounds of a scuffle—and the *smack*! of someone getting slapped, hard. I yelled out, "Hey! What goes on?"

They appeared in the doorway together. Doris was breathing hard and her hair was mussed. Mary managed to look dignified and composed, but there was a bright red patch on her left cheek the size and shape of Doris's hand. She looked at me and ignored the nurse.

Doris caught her breath and said, "You get out of here. He doesn't want to see you."

Mary said, "I'll hear that from him."

I looked at them both, then said, "Oh, what the hell—Doris, she's here; I'll talk to her. I've got some things to tell her, in any case. Thanks for trying."

Doris waited a moment, then said, "You're a fool!" and flounced out.

Mary came over to the bed. "Sam," she said. "Sam."

"My name isn't 'Sam'."

"I've never known your right name."

I hesitated. It was no time to explain to her that my parents had been silly enough to burden me with 'Elihu'. I answered, "What of it? 'Sam' will do."

"Sam," she repeated. "Oh Sam, my dear."

"I am not your 'dear'."

She inclined her head. "Yes, I know that. I don't know why. Sam, I came here to find out why you hate me. Perhaps I can't change it, but I must know why."

I made some sound of disgust. "After what you did, you don't know why? Mary, you may be a cold fish, but you aren't stupid. I know; I've worked with you."

She shook her head. "Just backwards, Sam. I'm not cold, but I'm frequently stupid. Look at me, please—I know what they did to you. I know that you let it be done to save me from the same thing. I know that and I'm deeply grateful. But I don't know why you hate me. You did not have to do it, I did not ask you to do it, and I did not want you to do it."

I didn't answer; presently she said, "You don't believe me?"

I reared up on one elbow. "I believe you. I believe you have yourself convinced that that is how it was. Now I'll tell *you* how it was."

"Do, please."

"You sat down in that trick chair knowing that I would never let you go through with it. You *knew* that, whether that devious female mind of yours admitted it to itself or not. The Old Man could not have forced me into that chair, not with a gun, not even with drugs. But *you* could. You did. You were the one who forced me to go through with something which I would rather have been dead than touched . . . a thing that now leaves me dirty and spoiled. You did it."

She had grown steadily whiter as I talked, until her face was almost green against her hair. She caught her breath and said, "You believe that, Sam?"

"What else?"

"Sam, that is not the way it was. I did not know you were going to be in there. I was terribly startled. But there was nothing to do but go through with it; I had promised."

"'Promised'," I repeated. "That covers everything, a schoolgirl promise."

"Hardly a schoolgirl promise."

"No matter. And it doesn't matter whether you are telling the truth or not about knowing that I would be in there—you aren't, of course, but it doesn't matter. The point is: *you* were there and *I* was there—and you could figure what would happen if you did what you did do."

"Oh." She waited a bit, then went on, "That's the way it looks to you and I can't dispute the facts."

"Hardly."

She stood very still for a long time. I let her. Finally she said, "Sam—once you said something to me about wanting to marry me."

"I remember something of the sort. That was another day."

"I didn't expect you to renew the offer. But there was something else, a sort of corollary. Sam, no matter what you think of me, I want to tell you that I am deeply grateful for what you did for me. Uh, Miss Barkis is willing, Sam—you understand me?"

This time I grinned at her. "A female to the very end! Honest so help me, the workings of the female mind continue to delight and astound me. You always think you can cancel out the score and start over with that one trump play." I continued to grin at her while she turned red. "It won't work. Not this time. I won't inconvenience you by taking up your no-doubt generous offer."

She continued to blush but she came back at me in a steady, level voice, "I let myself in for that. Nevertheless, it's true. That—or anything else I can ever do for you."

My elbow was going to sleep; I sank back and lay down. "Sure, you can do something for me."

Her face lit up. "What?"

"Go away and quit bothering me. I'm tired." I turned my face away. I did not hear her leave, but I heard Doris come back in. She was bristling like a fox terrier; they must have passed in the hall. She faced me, fists on her hips, looking cute and adorable and very indignant. "She got around you, didn't she?"

"I don't think so."

"Don't lie to me. You went soft on her. I know—men always do. The idiots! A woman like that, all she has to do is shake her fanny at a man and he rolls over and plays dead."

"Well, I didn't. I gave her what for."

"You're sure you did?"

"I did—and sent her packing."

Doris looked doubtful. "I hope you did. Maybe you did—she wasn't looking too pert as she came out." She dismissed the matter. "How do you feel?"

"Pretty good"—it was a lie, net.

"Want some massage?"

"No, just come here and sit on the bed and talk to me. Want a cigarette?"

"Well—as long as the doctor doesn't catch me." She perched up on the bed; I struck cigarettes for both of us and stuck hers in her mouth. She took a deep drag, swelling out her chest and pushing her arrogant breasts against her halter almost to the breaking point. I thought again what a sweet dish she was; she was just what I needed to take my mind off Mary.

We talked for a while. Doris gave her views on women—it appeared she disapproved of them on principle, although she was not in the least apologetic about being one herself—on the contrary! "Take women patients," she said. "One of the reasons I took this job was because we don't get a woman patient once in a coon's age. A man patient appreciates what is done for him. A woman just expects it and hollers for more."

"Would you be that sort of patient?" I asked, just to tease her.

"I hope not. I'm healthy, thank the Lord." She crushed out her cigarette and jumped off the bed, bouncing a little. "Got to get out of here. Scream if you want anything."

"Doris—"

"Yes?"

"You got any leave coming up?"

"I plan to take two weeks shortly. Why?"

"I was thinking. I'm going on leave—at least. I've got a shack in the Adirondacks. How about it? We could have a nice time and forget this madhouse."

She dimpled. "You know, that's mighty white of you, podnuh." She came over and kissed me full on the mouth, the first time she had done so. "And if I weren't an old married lady, with a pair of twins in the bargain, I might take you up."

"Oh."

"Sorry. But thanks for the compliment. You've made my day."

She started for the door. I called out, "Doris, wait a minute." When she stopped I added, "I didn't know. Look, why don't you take me up on it anyhow? The cabin, I mean—take your old man and the kids up there and give 'em a good time. I'll give you the combo and the transponder code."

"You mean that?"

"Of course I do."

"Well—I'll talk to you later. Thanks." She came back and kissed me again and it made me wish she had not been married, or, at least, not working at it. Then she left.

The doctor came in a bit later. While he was fiddling with the futile things doctors do, I said, "That nurse. Miss Marsden—is she married?"

"What business is it of yours?"

"I just wanted to know."

"You keep your hands off my nurses—or I'll fit you with mittens. Now stick out your tongue."

The Old Man put his head in late that afternoon. My immediate response was pleasure; the Old Man's personality is hard to shake off. Then I remembered and went cold.

"I want to talk to you," he started in.

"I don't want to talk to you. Get out."

He ignored my remarks and came in, dragging his bad leg. "Mind if I sit down?"

"You seem to be doing so."

He ignored that, too. He wrinkled his face and scowled. "You know, son, you are one of my best boys, but sometimes you are a little hasty."

"Don't let that worry you," I answered, "as soon as the doctor lets me out of here. I'm through." I had not really decided up until then, but it seemed as necessary as syrup with buckwheat cakes. I no longer trusted the Old Man; the rest was obvious.

He was not hearing anything that he did not choose to hear. "You're too hasty. You jump to conclusions. Now take this girl Mary—"

"Mary who?"

"You know who I mean; you know her as 'Mary Cavanaugh'."

"*You* take her."

"You jumped all over her without knowing the score. You've got her all upset. Matter of fact, you may have ruined a good agent for me."

"Hmmph! I'm in tears about it."

"Listen, you young snot, you didn't have any call to be rough on her. You don't know the facts."

I did not answer; explanations are a poor defense.

"Oh, I know that you think you do," he went on. "You think she let herself be used as bait to get you to take part in that job we did. Well, you've got it slightly wrong. She was being used as bait, but *I* was using *her*. I planned it that way."

"I know you did."

"Then why blame her?"

"Because, although you planned it, you couldn't have carried it out without her active cooperation. It's mighty big of you, you no-good, heartless bastard, to take all the blame—but you can't."

He did not hear my profanity, either. He went on, "You understand everything about it but the key point, which is—*the girl didn't know*."

"Hell's bells, she was *there*."

"So she was. Son, did you ever know me to lie to you?"

"No," I admitted, "but I don't think you would hesitate."

He looked pained but answered, "Maybe I deserve that. I'd lie to one of my own people if the country's safety depended on it. I haven't found it necessary up till now because I've been choosy about who works for me. But this time the country's welfare doesn't depend on it and I'm not lying and you'll just have to test it for yourself, any way you can figure out, and make up your mind whether or not I'm lying. That girl didn't know. She didn't know you were going to be in that room. She didn't know why you were in there. She didn't know that there was any question about who was going to sit in that chair. She didn't have the faintest suspicion that I didn't mean for her to go through with it, or that I had already decided that you were the only party who would suit me, even if I had to have you tied down and forced—which I would have done, if I hadn't had a double whammy up my sleeve to trick you into volunteering. Hell's bells yourself, son; she didn't even know you were off the sick list."

I wanted to believe it, so I did my damnedest not to believe it. If it were a lie, it would be just the shape of lie he would tell. As to whether he would bother to lie—well, getting two prime agents back into the groove might be something he would class, just now, as involving the country's safety. The Old Man had a complex mind.

"Look at me!" he added. I snapped out of my brown study and looked up. "There is something else I want you to know and I want to rub your nose in it. First off, let me say that everybody—including me—appreciates what you did, regardless of your motives. I'm putting in a letter about it and no doubt there will be a medal in due time. That stands, whether you stay with the Section or not. And if you go, I'll help you with any transfer or such you may want."

He paused for breath, then went on. "But don't go giving yourself airs as a little tin hero—"

"I won't!"

"—because that medal is going to the wrong person. Mary ought to get it.

"Now hush up; I'm not through. You had to be forced into it, like building a fire under a mule. No criticism; you had been through plenty. But Mary was a real, honest-to-God, Simon-pure volunteer. When she sat down in that chair, she didn't know what was going to happen to her. She didn't expect any last minute reprieve and she had every reason to believe that, if she got up alive, her reason would be gone, which is worse. But she did it—because she is a hero, which you miss by a couple of points."

He went on without waiting for me to reply; "Listen, son—most women are damn fools and children. But they've got more range than we've got. The brave ones are braver, the good ones are better—and the vile ones are viler, for that matter. What I'm trying to tell you is: this one is more of a man than you are and you've done her a serious wrong."

I was so churned up inside that I could not judge for the life of me whether he was telling the truth, or manipulating me again. I said, "Maybe so. Maybe I lashed out at the wrong person. But if what you say is true—"

"It is."

"—it doesn't make what you did any sweeter; it makes it worse."

He took it without flinching. "Son, I'm sorry if I've lost your respect. But I'd do it again under the same circumstances. I can't be choosy about such things any more than can a commander in battle. Less, because I fight with different weapons. I've always been able to shoot my own dog. Maybe that's good; maybe that's bad—but that is what my job takes. If you are ever in my shoes, you'll have to do it, too."

"I'm not likely to be."

"Why don't you take leave, rest up, and think about it?"

"I'll take leave—terminal leave."

"Very well." He started to leave; I said, "Wait—"

"Yes?"

"You made me one promise and I'm holding you to it. About that parasite—you said I could kill it, personally. Are you through with it?"

"Yes, I'm through with it, but—"

I started to get out of bed. "No 'buts'. Give me your gun; I'm going to kill it *now*."

"But you can't. It's already dead."

"What! You *promised* me."

"I know I did. But it died while we were trying to force you—to force *it*—to talk."

I sat down and started to shake with laughter. I got started and could not stop. I was not enjoying it; I could not help it.

The Old Man grasped my shoulders and shook me. "Snap out of it! You'll get yourself sick. I'm sorry about it, but there's nothing to laugh at. It could not be helped."

"Ah, but there is," I answered, still sobbing and chuckling. "It's the funniest thing that ever happened to me. All that—and all for nothing. You dirtied yourself and you loused up me and Mary—and all for no use."

"Huh? Whatever gave you that idea?"

"Eh? I *know*—I know everything that went on. And you didn't even get small change out of it—out of us, I should say. You didn't learn anything you didn't know before."

"The hell we didn't!"

"And the hell you did."

"It was a bigger success than you'd ever guess, son. True, we didn't squeeze anything out of it directly, before it died—but we got something out of you."

"Me?"

"Last night. We put you through it last night. You were doped, psyched, brain-waved, analyzed, wrung out, and hung out to dry. The parasite spilled things to you and they were still there for the hypno-analysts to pick up after you were free of it."

"What?"

"Where they live. We know where they come from and can fight back—Titan, sixth satellite of Saturn."

When he said it, I felt a sudden gagging constriction of my throat—and I knew that he was right.

"You certainly fought before we could get it out of you," he went on reminiscently. "We had to hold you down to keep you from hurting yourself—more."

Instead of leaving he threw his game leg over the edge of the bed and struck a cigarette. He seemed anxious to be friendly. As for me, I did not want to fight with him further; my head was spinning and I had things to get straight. Titan—that was a long way out. Mars was the farthest men had ever been, unless the Seagraves Expedition, the one that never came back, got out to the Jovian moons.

Still, we could get there, if there were a reason for it. We would burn out their nest!

Finally he got up to go. He had limped almost to the door when I stopped him again. "Dad—"

I had not called him that in years. He turned and his face held a surprised and defenseless expression. "Yes, son?"

"Why did you and mother name me 'Elihu'?"

"Eh? Why, it seemed the thing to do at the time. It was your maternal grandfather's name."

"Oh. Not enough reason. I'd say."

"Perhaps not." He turned again and again I stopped him.

"Dad—what sort of a person was my mother?"

"Your mother? I don't exactly know how to tell you. Well—she was a great deal like Mary. Yes, sir, a great deal like her." He turned and stumped out without giving me any further chance to talk.

I turned my face to the wall. After a while I steadied down.

XII

This is a personal account of my angle of view on events known to everybody. I'm not writing history. For one thing, I don't have the broad viewpoint.

Maybe I should have been sweating about the fate of the world when I was actually stewing about my own affairs. Maybe. But I never heard of a man with a blighty wound caring too much about how the battle turned out.

Anyhow, there did not seem much to worry about. I knew that the President had been saved under circumstances which would open up anybody's eyes, even a politician's, and that was, as I saw it, the last real hurdle. The slugs—the titans, that is—were dependent on secrecy; once out in the open they could not possibly hold out against the massed strength of the United States. They had no powers except those they borrowed from their slaves, as I knew better than anybody.

Now we could clean up their beachhead here; then we could go after them where they lived. But planning interplanetary expeditions was hardly my job. I knew as much about that subject as I knew about Egyptian art.

When the doctor released me I went looking for Mary. I still had nothing but the Old Man's word for it, but I had more than a suspicion that I had made a big hairy thing of myself. I did not expect her to be glad to see me, but I had to speak my piece.

You would think that a tall, handsome redhead would be as easy to find as flat ground in Kansas. She would have been had she been a member of the in staff, but she was a field agent. Field agents come and go and the resident personnel are encouraged to mind their own business. Doris had not seen her again—so she said—and was annoyed that I should want to find her.

The personnel office gave me the bland brush off. I was not inquiring officially, I did not know the agent's name, and just who did I think I was, anyway? They referred me to Operations, meaning the Old Man. That did not suit me.

I had no more luck and met with even more suspicion when I tried the door tally; I began to feel like a spy in my own section.

I went to the bio lab, could not find its chief, and talked to an assistant. He did not know anything about a girl in connection with Project Interview; the subject had been a man—he knew; he had seen the stereo. I told him to take a close look at me. He did and said, "Oh, were you that guy? Pal, you sure took a beating." He went back to scratching himself and shuffling reports.

I left without saying thank you and went to the Old Man's office. There seemed to be no choice.

There was a new face at Miss Haines's desk. I never saw Miss Haines again after the night I got taken. Nor did I ask what had become of her; I did not want to know. The new secretary passed in my I.D. code and, for a wonder, the Old Man was in and would see me.

"What do you want?" he said grumpily.

I said, "Thought you might have some work for me," which was not at all what I intended to say.

"Matter of fact, I was just fixing to send for you. You've loafed long enough." He barked something at his desk phone, stood up and said, "Come!"

I felt suddenly at peace, and followed him. "Cosmetics?" I asked.

"Your own ugly face will do. We're headed for Washington." Nevertheless we did stop in Cosmetics, but only for street clothes. I drew a gun—my own had gone where the woodbine twineth—and had my phone checked.

The door guard made us bare our backs before he would let us approach and check out. Then we tucked our shirts in and went on up, coming out in the lower levels of New Philadelphia, the first I had known as to the location of the Section's new base. "I take it this burg is clean?" I said to the Old Man.

"If you do, you are rusty in the head," he answered. "Keep your eyes peeled."

There was no opportunity for more questions. The presence of so many fully clothed humans bothered me; I found myself drawing away from people and watching for round shoulders. Getting into a crowded elevator to go up to the launching platform seemed downright reckless. When we were in our car and the controls set, I said so. "What in the devil do the authorities in that dump think they are doing? I could swear that at least one cop we passed was wearing a hump."

"Possibly. Even probably."

"Well, for crying in church! What goes on? I thought you had this job taped and that we were fighting back on all fronts."

"We're trying to. What would you suggest we do about it?"

"Why, it's obvious—even if it were freezing cold, we ought not to see a back covered up anywhere, not until we know they are all dead."

"That's right."

"Well, then—Look, the President knows the score, doesn't he? I understand that—"

"He knows it."

"What's he waiting for? For the whole country to be taken over? He should declare martial law and get action. You told him, a long time ago."

"So I did." The Old Man stared down at the countryside. "Son, are you under the impression that the President runs the country?"

"Of course not. But he is the only man who can act."

"Mmmm—They sometimes call Premier Tsvetkov 'the Prisoner of the Kremlin'. True or not, the President is the prisoner of Congress."

"You mean Congress *hasn't acted*?"

"I have spent my time the past several days—ever since we stopped the attempt on the President—trying to help the President convince them. Ever been worked over by a congressional committee, son?"

I tried to figure it out. Here we sat, as stupid as dodoes walking up a gangplank to be slugged—yes, and *homo sapiens* would be as extinct as the dodo if we did not move. Presently the Old Man said, "It's time you learned the political facts of life. Congresses have refused to act in the face of dangers more obvious than this one. This one isn't obvious, not until a man has had it in his lap, the way we have. The evidence is slim and hard to believe."

"But how about the Assistant Secretary of the Treasury? They can't ignore that."

"Can't they? The Assistant Secretary had one snatched off his back, right in the East Wing, and we killed two of his Secret Service guards. And now the honorable gent is in Walter Reed with a nervous breakdown and can't recall what happened. The Treasury Department gave out that an attempt to assassinate the President had been foiled—true, but not the way they meant it."

"And the President held still for that?"

"His advisers told him to wait until he can get congressional support. His majority is uncertain at best—and there are stalwart statesmen in both houses who want his head on a platter. Party politics is a rough game."

"Good Lord, partisanship doesn't figure in a case like this!"

The Old Man cocked an eyebrow. "You think not, eh?"

I finally managed to ask him the question I had come into his office to ask: where was Mary?

"Odd question from you," he grunted. I let it ride; he went on, "Where she should be. Guarding the President."

We went first to a room where a joint special committee was going over evidence. It was a closed session but the Old Man had passes. When we got there they were running stereos; we slipped into seats and watched.

The films were of my anthropoid friend. Napoleon—the ape himself, shots of him with the titan on his back, then closeups of the titan. It made me sick to see it. One parasite looks like another; but I knew which one this was and I was deeply glad it was dead.

The ape gave way to me myself. I saw myself being clamped into the chair. I hate to admit how I looked; real funk is not pretty. A voice off screen told what was going on.

I saw them lift the titan off the ape and onto my own bare back. Then I fainted in the picture—and almost fainted again. I won't describe it and it upsets me to tell about it. I saw myself writhing under the shocks given the titan—and I writhed again. At one point I tore my right hand free of the clamps, something I had not known, but which explained why my wrist was still not healed.

And I saw the thing *die*. That was worth sitting through the rest.

The film ended and the chairman said, "Well, gentlemen?"

"Mr. Chairman!"

"The gentleman from Indiana is recognized."

"Speaking without prejudice to the issue, I must say that I have seen better trick photography from Hollywood." They tittered and someone called out, "Hear! Hear!" I knew the ball game was gone.

The head of our bio lab testified, then I found myself called to the stand. I gave my name, address, and occupation, then perfunctorily was asked a number of questions, about my experiences under the titans. The questions were read from a sheet and the chairman obviously was not familiar with them.

The thing that got me was that they did not *want* to hear. Two of them were reading newspapers.

There were only two questions from the floor. One senator said to me, "Mr. Nivens—your name *is* Nivens?"

I agreed that it was. "Mr. Nivens," he went on, "you say that you are an investigator?"

"Yes."

"F.B.I., no doubt?"

"No, my chief reports directly to the President."

The senator smiled. "*Just* as I thought. Now Mr. Nivens, you say you are an investigator—but as a matter of fact you are an actor, are you not?" He seemed to be consulting notes.

I tried to tell too much truth. I wanted to say that I had once acted one season of summer stock but that I was, nevertheless, a real, live, sure-enough investigator. I got no chance. "That will *do,* Mr. Nivens. Thank you."

The other question was put to me by an elderly senator whose name I should have known. He wanted to know my views on using tax money to arm other countries—and he used the question to express his own views. My views on that subject are cloudy but it did not matter, as I did not get to express them. The next thing I knew the clerk was saying, "Stand down, Mr. Nivens."

I sat tight. "Look here," I said, "all of you. It's evident that you don't believe me and think this is a put-up job. Well, for the love of heaven, bring in a lie detector! Or use the sleep test. This hearing is a joke."

The chairman banged his gavel. "Stand down, Mr. Nivens."

I stood.

The Old Man had told me that the purpose of the meeting was to report out a joint resolution declaring total emergency and vesting war powers in the President. The chairman asked if they were ready to consider the resolution. One of the newspaper readers looked up long enough to say, "Mr. Chairman, I call for clearing the committee room."

So we were ejected. I said to the Old Man, "It looks bad to this boy."

"Forget it," he said. "The President knew this gambit had failed when he heard the names of the committee."

"Where does that leave us? Do we wait for the slugs to take over Congress, too?"

"The President goes right ahead with a message to Congress and a request for full powers."

"Will he get them?"

The Old Man screwed up his face. "Frankly, I don't think he stands a chance."

The joint session was secret, of course, but we were present—direct orders of the President, probably. The Old Man and I were on that little balcony business back of the Speaker's rostrum. They opened it with full rigamarole and then went through the ceremony of appointing two members from each house to notify the President.

I suppose he was right outside for he came in at once, escorted by the delegation. His guards were with him—but they were all our men.

Mary was with him, too. Somebody set up a folding chair for her, right by the President. She fiddled with a notebook and handed papers to him, pretending to be a secretary. But the disguise ended there; she had it turned on full blast and looked like Cleopatra on a warm night—and as out of place as a bed in church. I could feel them stir; she got as much attention as the President did.

Even the President noticed it. You could see that he wished that he had left her at home, but it was too late to do anything about it without greater embarrassment.

You can bet I noticed her. I caught her eye—and she gave me a long, slow, sweet smile. I grinned like a collie pup until the Old Man dug me in the ribs. Then I settled back and tried to behave but I was happy.

The President made a reasoned explanation of the situation, why we knew it to be so and what had to be done. It was as straightforward and rational as an engineering report, and about as moving. He simply stated facts. He put aside his notes at the end. "This is such a strange and terrible emergency, so totally beyond any previous experience, that I must ask very broad powers to cope with it. In some areas, martial law must be declared. Grave invasions of civil guarantees will be necessary, for a time. The right of free movement must be abridged. The right to be secure from arbitrary search and seizure must give way to the right of safety for everyone. Because any citizen, no matter how respected or how loyal, may be the unwilling servant of these secret enemies, all citizens must face some loss of civil rights and personal dignities until this plague is killed.

"With utmost reluctance, I ask that you authorize these necessary steps." With that he sat down.

You can feel a crowd. They were made uneasy, but he did not carry them. The president of the Senate took the gavel and looked at the Senate majority leader; it had been programmed for him to propose the emergency resolution.

Something slipped. I don't know whether the floor leader shook his head or signaled, but he did not take the floor. Meanwhile the delay was getting awkward and there were cries of, "Mister President!" and "Order!"

The Senate president passed over several others and gave the floor to a member of his own party. I recognized the man—Senator Gottlieb, a wheelhorse who would vote for his own lynching if it were on his party's program. He started out by yielding to none in his respect for the Constitution, the Bill of Rights, and, probably, the Grand Canyon. He pointed modestly to his own long and faithful service and spoke well of America's place in history.

I thought he was beating the drum while the boys worked out a new shift—when I suddenly realized that his words were adding up to meaning: he was proposing to suspend the order of business and get on with the impeachment and trial of the President of the United States!

I think I tumbled to it as quickly as anyone; the senator had his proposal so decked out in ritualistic verbiage that it was a wonder that anyone noticed what he was actually saying. I looked at the Old Man.

The Old Man was looking at Mary.

She was looking back at him with an expression of extreme urgency.

The Old Man snatched a pad out of his pocket, scrawled something, wadded it up, and threw it down to Mary. She caught it, opened it, and read it—and passed it to the President.

He was sitting, relaxed and easy—as if one of his oldest friends were not at that moment tearing his name to shreds and, with it, the safety of the Republic. He put on his old-fashioned specs and read the note. He then glanced unhurriedly around at the Old Man and lifted his eyebrows. The Old Man nodded.

The President nudged the Senate president, who, at the President's gesture, bent over him. The President and he exchanged whispers.

Gottlieb was still rumbling along about his deep sorrow, but that there came times when old friendship must give way to a higher duty and therefore— The Senate president banged his gavel. "If the senator please!"

Gottlieb looked startled and said, "I do not yield."

"The senator is not asked to yield. At the request of the President of the United States, because of the importance of what you are saying, the senator is asked to come to the rostrum to speak."

Gottlieb looked puzzled but there was nothing else he could do. He walked slowly toward the front of the house.

Mary's chair blocked the little stairway up to the rostrum. Instead of getting quietly out of the way, she bumbled around, turning and picking up the chair, so that she got even more in the way. Gottlieb stopped and she brushed against him. He caught her arm, as much to steady himself as her. She spoke to him and he to her, but no one else could hear the words. Finally they got around each other and he went on to the front of the rostrum.

The Old Man was quivering like a dog in point. Mary looked up at him and nodded. The Old Man said, "Take him!"

I was over that rail in a flying leap, as if I had been wound up like a crossbow. I landed on Gottlieb's shoulders.

I heard the Old Man shout, "Gloves, son! Gloves!" I did not stop for them. I split the senator's jacket with my bare hands and I could see the slug pulsing under his shirt. I tore the shirt away and anybody could see it.

Six stereo cameras could not have recorded what happened in the next few seconds. I slugged Gottlieb back of the ear to stop his thrashing. Mary was sitting on his legs. The President was standing over me and pointing, while shouting, "There! There! Now you can *all* see." The Senate president was standing stupefied, waggling his gavel.

The Congress was just a mob, men yelling and women screaming. Above me the Old Man was shouting orders to the presidential guards as if he were standing on a bridge.

We had this in our favor; doors were locked and there were no armed and disciplined men present except the Old Man's own boys. Sergeants-at-arms, surely—but what are they? One elderly Congressman pulled a hogleg out of his coat that must have been a museum piece, but that was a mere incident.

Between the guns of the guards and the pounding of the gavel something like order was restored. The President started to talk. He told them that an amazing accident had given them a chance to see the true nature of the enemy and he suggested that they file past and see for themselves one of the titans from Saturn's largest moon. Without waiting for their consent, he pointed to the front row and told them to come up.

They came.

I squatted back out of the way and wondered what was accidental about it. With the Old Man you can never tell. Had he *known* that Congress was infested? I rubbed a bruised knee and wondered.

Mary stayed on the platform. About twenty had filed by and a female Congressman had gotten hysterics when I saw Mary signal the Old Man again. This time I was a hair ahead of his order.

I might have had quite a fight if two of the boys had not been close by; this one was young and tough, an ex-marine. We laid him beside Gottlieb, and again the Old Man and the President and the Senate president, shouting their lungs out, restored order.

Then it was "inspection and search" whether they liked it or not. I patted the women on the back as they came by and caught one. I thought I had caught another, but it was an embarrassing mistake; she was so blubber fat that I guessed wrong.

Mary spotted two more, then there was a long stretch, three hundred or more, with no jackpots. It was soon evident that some were hanging back.

Don't let anyone tell you that Congressmen are stupid. It takes brains to get elected and it takes a practical psychologist to stay elected. Eight men with guns were not enough—eleven, counting the

Old Man, Mary, and me. Most of the slugs would have gotten away if the Whip of the House had not organized help.

With their assistance, we caught thirteen, ten alive. Only one of the hosts was badly wounded.

But the Congress of the United States has not been such a shambles since Jefferson Davis announced his momentous decision. No, not even after the Bombing.

XIII

So the President got the authority he needed and the Old Man was his *de facto* chief of staff; at last we could move fast and effectively. Oh, yes? Did you ever try to hurry a project through a bureaucracy?

"Directives" have to be "implemented"; "agencies" have to be "coordinated"—and everything has to go to the files.

The Old Man had a simple enough campaign in mind. It could not be the straightforward quarantine he had proposed when the infection was limited to the Des Moines area; before we could fight back, we had to locate them. But government agents couldn't search two hundred million people; the people had to do it themselves.

Schedule Bare Back was to be the first phase of the implementation of Operation Parasite—which makes *me* talk like a bureaucrat. Never mind—the idea was that everybody, *everybody* was to peel to the waist and stay peeled, until all titans were spotted and killed. Oh, women could have halter strings across their backs, but a parasite could not hide under a bra string.

We whipped up a visual presentation to go with the stereocast speech the President would make to the nation. Fast work had saved seven of the parasites we had flushed in the sacred halls of Congress and now they were alive on animal hosts. We could show them and we could show the less grisly parts of the film taken of me. The President himself would appear in the 'cast in shorts, and models would demonstrate what the Well Undressed Citizen Would Wear This Season, including the metal head-and-spine armor which was intended to protect a person even if a parasite got to him in his sleep.

We got it ready in one black-coffee night and the President's writers had his lines ready for him. The smash finish was to show Congress in session, discussing the emergency, and every man, woman, and page boy showing a bare back to the camera.

With twentyeight minutes left until stereocast time the President got a call from up the street. I was present; the Old Man had been with the President all night, and had kept me around for chores. Mary was there, of course; the President was her special charge. We were all in shorts; Schedule Bare Back had already started in the White House. The only ones who looked comfortable in the get-up were Mary, who can wear anything, the colored doorman, who carried himself like a Zulu king, and the President himself, whose innate dignity could not be touched.

When the call came in the President did not bother to cut us out of his end of the conversation. "Speaking," he said. Presently he added, "You feel certain? Very well, John, what do you advise . . . . I see. No, I don't think that would work. . . . I had better come up the street. Tell them to be ready." He pushed back the phone, his face still serene, and turned to an assistant. "Tell them to hold up the broadcast." He turned to the Old Man. "Come, Andrew, we must go to the Capitol."

He sent for his valet and retired into a dressing room adjoining his office; when he came out, he was formally dressed for a state occasion. He offered no explanation, the Old Man raised an eyebrow but said nothing and I did not dare say anything. The rest of us stayed in our gooseflesh specials and so we went to the Capitol.

It was a joint session, the second in less than twenty-four hours. We trooped in—and I got that no-pants-in-church nightmare feeling, for the Congressmen and senators were dressed as usual. Then I saw that the page boys were in shorts without shirts and felt somewhat better.

I still don't understand it. It seems that some people would rather be dead than lose dignity, with senators high on the list. Congressmen, too—a Congressman is a man who wants to be a senator. They had given the President all the authority he asked for; Schedule Bare Back itself had been discussed and approved—but they did not see where it applied to them. After all, they had been searched and cleaned out; Congress was the only group in the country known to be free of titans.

Maybe some saw the holes in the argument, but not one wanted to be first in a public striptease. Face and dignity are indispensable to an office holder. They sat tight, fully dressed.

When the President took the rostrum, he simply looked at them until he got dead silence. Then slowly, calmly, he started taking off clothes.

He stopped when he was bare to the waist. He had had me worried for a moment; I think he had others worried. He then turned slowly around, lifting his arms. At last he spoke.

"I did that," he said, "so that you might see for yourself that your Chief Executive is not a prisoner of the enemy." He paused.

"But how about *you*?" That last word was flung at them.

The President punched a finger at the junior Whip. "Mark Cummings—how about *you*? Are you a loyal citizen or are you a zombie spy? Get up! Get your shirt off!"

"Mister President—" It was Charity Evans, from the State of Maine, looking like a pretty schoolteacher. She stood and I saw that, while she was fully dressed, she was in evening dress. Her gown reached to the floor, but was cut as deep as could be above. She turned like a mannequin; in back the dress ended at the base of her spine; in front it came up in two well-filled scallops. "Is this satisfactory, Mr. President?"

"Quite satisfactory, madam."

Cummings was on his feet and fumbling at his jacket; his face was scarlet. Someone stood up in the middle of the hall.

It was Senator Gottlieb. He looked as if he should have been in bed; his cheeks were gray and sunken; his lips showed cyanosis. But he held himself erect and, with incredible dignity, followed the President's example. His old-fashioned underwear was a one-piece job; he wriggled his arms out and let it dangle over his galluses. Then he, too, turned all the way around; on his back, scarlet against his fish-white flesh, was the mark of the parasite.

He spoke. "Last night I stood here and said things I would rather have been flayed alive than utter. But last night I was not my own master. Today I am. Can you not see that Rome is burning?" Suddenly he had a gun in his hand. "Up on your feet, you wardheelers, you courthouse loafers! Two minutes to get your duds off and show a bare back—then I shoot!"

Men close to him sprang up and tried to grab his arm, but he swung the gun around like a flyswatter, smashing one of them in the face. I had my own out, ready to back his play, but it was not necessary. They could see that he was as dangerous as an old bull and they backed away.

It hung in balance, then they started shucking clothes like Doukhobors. One man bolted for a door; he was tripped. No, he was not wearing a parasite.

But we did catch three. After that, the show went on the channels, ten minutes late, and Congress started the first of its "bare back" sessions.

XIV

"LOCK YOUR DOORS!"

"CLOSE THE DAMPERS ON YOUR FIREPLACES!"

"NEVER ENTER A DARK PLACE!"

"BE WARY OF CROWDS!"

"A MAN WEARING A COAT IS AN ENEMY—SHOOT!"

We should have had every titan in the country spotted and killed in a week. I don't know what more we could have done. In addition to a steady barrage of propaganda the country was being quartered and sectioned from the air, searching for flying saucers on the ground. Our radar screen was on full alert for unidentified blips. Military units, from airborne troops to guided-rocket stations, were ready to smear any that landed.

Then nothing happened. There was no work for them to do. The thing fizzled like a damp firecracker.

In the uncontaminated areas people took off their shirts, willingly or reluctantly, looked around them and found no parasites. They watched their newscasts and wondered and waited for the government to tell them that the danger was over. But nothing happened and both laymen and local officials began to doubt the necessity of running around the streets in sunbathing costumes. We had shouted "Wolf!" and no wolf came.

The contaminated areas? The reports from the contaminated areas were *not materially different from the reports from other areas*.

Our stereocast and the follow-ups did not reach those areas. Back in the days of radio it could not have happened; the Washington station where the 'cast originated could have blanketed the country. But stereo-video rides wavelengths so short that horizon-to-horizon relay is necessary and local channels must be squirted out of local stations; it's the price we pay for plenty of channels and high resolution pictures.

In the infected areas *the slugs* controlled the local stations; the people never heard the warning.

But in Washington we had every reason to believe that they *had* heard the warning. Reports came back from—well, Iowa, for example, just like those from California. The governor of Iowa was one of the first to send a message to the President, promising full cooperation. The Iowa state police were already cruising the roads, he reported, stopping everybody and requiring them to strip to the waist. Air travel above Iowa was stopped for the duration of the emergency, just as the President had urged.

There was even a relayed stereo of the governor addressing his constituents, bare to the waist. He faced the camera and I wanted to tell him to turn around. But presently they cut to another camera and we had a close up of a bare back, while the governor's voice went cheerfully on, urging all citizens to work with the police.

If any place in the Union was a pest house of slugs, Iowa should have been it. Had they evacuated Iowa and concentrated on heavier centers of population?

We were gathered in a conference room off the President's office. The President had kept the Old Man with him, I tagged along, and Mary was still on watch. Secretary of Security Martinez was there as well as the Supreme Chief of Staff, Air Marshal Rexton. There were others from the President's "fishing cabinet", but they weren't important.

The President watched the 'cast from Iowa and turned to the Old Man. "Well, Andrew? I thought Iowa was a place we would have to fence off."

The Old Man grunted.

Marshal Rexton said, "As I figure it—mind you, I have not had much time to evaluate this situation—they have gone underground. We may have to comb every inch of every suspicious area."

The Old Man grunted again. "Combing Iowa, corn shock by corn shock, does not appeal to me."

"How else would you tackle it, sir?"

"Figure your enemy! He *can't* go underground. He can't live without a host."

"Very well—assuming that is true, how many parasites would you say are in Iowa?"

"Damn it, how should I know? They didn't take me into their confidence."

"Suppose we make a top estimate. If—"

The Old Man interrupted him. "You've got no basis for an estimate. Can't you folks see that the titans have won another round?"

"Eh?"

"You just heard the governor; they let us look at his back—or somebody's back. Did you notice that he didn't turn around in front of the camera?"

"But he did," someone said. "I saw him."

"I certainly had the impression that I saw him turn," said the President slowly. "You are suggesting that Governor Packer is himself possessed?"

"Correct. You saw what you were meant to see. There was a camera cut just before he was fully turned; people hardly ever notice them; they are used to them. Depend on it. Mister President, every message out of Iowa is faked."

The President looked thoughtful. Secretary Martinez shook his head emphatically and said, "Impossible. Granted that the governor's message could have been faked—a clever character actor could have faked it. Remember the inaugural address in the crisis of '96, when the President Elect was laid up with pneumonia? Granted that one such 'cast could be faked, we've had our choice of dozens of 'casts from Iowa. How about that street scene in Des Moines? Don't tell me you can fake hundreds of people dashing around stripped to their waists—or do your parasites practice mass hypnotic control?"

"They can't that I know of," conceded the Old Man. "If they can, we might as well throw in the towel and admit that the human race has been superseded. But what made you think that that 'cast came from Iowa?"

"Eh? Why, damn it, sir, it came over the Iowa channel."

"Proving what? Did you read any street signs? It looked like any typical street in a downtown retail district. Never mind what city the announcer *told* you it was; what city was it?"

The Secretary let his mouth hang open. I've got fairly close to the "camera eye" that detectives are supposed to have; I let that picture run through my mind—and I not only could not tell what city, I could not even place the part of the country. It could have been Memphis, Seattle, or Boston—or none of them. Allowing for special cases like Canal Street in New Orleans, or Denver's Civic Center, the downtown districts in American cities are as standardized as barber shops.

"Never mind," the Old Man went on. "I couldn't tell and I was looking for landmarks. The explanation is simple; the Des Moines station picked up a Schedule Bare Back street scene from some city not contaminated and rechanneled it under their own commentary. They chopped out anything that would localize it . . . and we swallowed it. Gentlemen, this enemy knows us, inside and out. This campaign has been planned in great detail and they are ready to outwit us in almost any move we can make."

"Aren't you being an alarmist, Andrew?" said the President. "There is another possibility, that the titans have moved somewhere else."

"They are still in Iowa," the Old Man said flatly, "but you won't prove it with that thing." He gestured at the stereo tank.

Secretary Martinez squirmed. "This is ridiculous!" he exclaimed. "You are saying that we can't get a correct report out of Iowa, as if it were occupied territory."

"That is what it is."

"But I stopped off in Des Moines two days ago, coming back from Alaska. Everything was normal. Mind you, I grant the existence of your parasites, though I haven't seen one. But let's find them where they are and root them out, instead of dreaming up fantasies."

The Old Man looked tired and I felt tired. I wondered how many ordinary people were taking it seriously, if this was what we ran into at the top.

Finally the Old Man replied, "Control the communications of a country and you control the country; that's elementary. You had better take fast steps, Mister Secretary, or you won't have any communications left."

"But I was merely—"

"*You* root 'em out!" the Old Man said rudely. "I've told you they are in Iowa—and in New Orleans, and a dozen other spots. My job is finished. You are Secretary of Security; you root 'em out." He stood up and said, "Mister President, I've had a long pull for a man my age; when I lose sleep I lose my temper. Could I be excused?"

"Certainly, Andrew." He had not lost his temper and I think the President knew it. He doesn't lose his temper; he makes other people lose theirs.

Before the Old Man could say goodnight. Secretary Martinez interrupted. "Wait a moment! You've made some flatfooted statements. Let's check up on them." He turned to the Chief of Staff. "Rexton!"

"Uh, yes, sir."

"That new post near Des Moines, Fort something-or-other, named after what's-his-name?"

"Fort Patton."

"That's it, that's it. Well, let's not dally; get them on the command circuit—"

"With visual," put in the Old Man.

"With visual, of course, and we'll show this—I mean we'll get the true situation in Iowa."

The Air Marshal handed a by-your-leave-sir to the President, went to the stereo tank and patched in with Security General Headquarters. He asked for the officer of the watch at Fort Patton, Iowa.

Shortly thereafter the stereo tank showed the inside of a military communications center. Filling the foreground was a young officer. His rank and corps showed on his cap, but his chest was bare. Martinez turned triumphantly to the Old Man. "You see?"

"I see."

"Now to make certain. Lieutenant!"

"Yes, sir!" The young fellow looked awestruck and kept glancing from one famous face to another. Reception and bi-angle were in synch; the eyes of the image looked where they seemed to look, as if he were actually sitting in the receiver tank.

"Stand up and turn around," Martinez continued.

"Uh? Why, certainly, sir." He seemed puzzled, but he did so—and it took him almost out of scan. We could see his bare back, up to about the short ribs—no higher.

"Confound it!" shouted Martinez. "*Sit down* and turn around."

"Yessir!" The youth seemed flustered. He leaned over the desk and added, "Just a moment while I widen the view angle, sir."

The picture suddenly melted and rippling rainbows chased across the tank. The young officer's voice was still coming over the audio channel. "There—is that better, sir?"

"Damn it, we can't see a thing!"

"You can't? Just a moment, sir."

We could hear him breathing heavily. Suddenly the tank came to life and I thought for a moment that we were back at Fort Patton. But it was a major on the screen this time and the place looked larger. "Supreme Headquarters," the image announced, "Communications officer of the watch. Major Donovan."

"Major," Martinez said in controlled tones, "I was hooked in with Fort Patton. What happened?"

"Yes, sir; I was monitoring it. We've had a slight technical difficulty on that channel. We'll put your call through again in a moment."

"Well, hurry!"

"Yes, sir." The tank rippled and went empty.

The Old Man stood up again. "Call me when you've cleared up that 'slight technical difficulty'. Meantime, I'm going to bed."

XV

If I have given the impression that Secretary Martinez was stupid, I am sorry. Everyone had trouble at first believing what the slugs could do. You have to see one—then you believe in the pit of your stomach.

There were no flies on Air Marshal Rexton, either. The two must have worked all night, after convincing themselves by more calls to known danger spots that "technical interruptions" do not occur so conveniently. They called the Old Man about four a.m. and he called me, using our special phones. Those flesh-embedded receptors should not be used as alarm clocks; it's too rough a way to wake a man.

They were in the same conference room, Martinez, Rexton, a couple of his high brass, and the Old Man. The President came in, wearing a bathrobe and followed by Mary, just as I arrived. Martinez started to speak but the Old Man cut in. "Let's see your back, Tom!"

The President looked surprised and Mary signaled that everything was okay, but the Old Man chose not to see her. "I mean it," he persisted.

The President said quietly, "Perfectly correct, Andrew," and slipped his robe off his shoulders. His back was clean. "If I don't set an example, how can I expect others to cooperate?"

The Old Man started to help him back into the robe, but the President shrugged him off and hung it over a chair. "I'll just have to acquire new habits. Difficult, at my age. Well, gentlemen?"

I thought myself that bare skin would take getting used to; we made an odd group. Martinez was lean and tanned, carved smooth from mahogany. I'd judge he was part Indian. Rexton had a burned-in, high-altitude tan on his face, but from his collar line down he was as white as the President. On his chest was a black cross of hair, armpit to armpit and chin to belly, while the President and the Old Man were covered front and back with grizzled, wiry fur. The Old Man's mat was so thick that mice could have nested in it.

Mary looked like a publicity pic—low angle shot to bring out the legs and careful posing, that sort. Me—well. I'm the spiritual type.

Martinez and Rexton had been shoving push pins into a map, red for bad, green for good, and a few amber ones. Reports were still coming and Rexton's assistants kept adding new pins.

Iowa looked like measles; New Orleans and the Teche country were as bad. So was Kansas City. The upper end of the Missouri-Mississippi system, from Minneapolis and St. Paul down to St. Louis, was clearly enemy territory. There were fewer red pins from there down to New Orleans—but there were no green ones.

There was another hot spot around El Paso and two on the East Coast.

The President looked it over calmly. "We shall need the help of Canada and Mexico," he said. "Any reports?"

"None that mean anything, sir."

"Canada and Mexico," the Old Man said seriously, "will be just a start. You are going to need the whole world with you on this job."

Rexton said, "We will, eh? How about Russia?"

Nobody had an answer to that one; nobody ever has. Too big to occupy and too big to ignore—World War III had not settled the Russian problem and no war ever would. The parasites might feel right at home behind the Curtain.

The President said, "We'll deal with that when we come to it." He drew a finger across the map. "Any trouble getting messages through to the Coast?"

"Apparently not, sir," Rexton told him. "They don't seem to interfere with straight-through relay. But all military communications I have shifted to one-link relay through the space stations." He glanced at his watch finger. "Space Station Gamma, at the moment."

"Hmmm—" said the President. "Andrew, could these things storm a space station?"

"How would I know?" the Old Man answered testily. "I don't know whether their ships are built for it or not. More probably they would do it by infiltration, through the supply rockets."

There was discussion as to whether or not the space stations could already have been taken over; Schedule Bare Back did not apply to the stations. Although we had built them and paid for them, since they were technically United Nations territory, the President had to wait until the United Nations acted on the entire matter.

"Don't worry about it," Rexton said suddenly.

"Why not?" the President asked.

"I am probably the only one here who has done duty in a space station. Gentlemen, the costume we are now wearing is customary in a station. A man fully dressed would stand out like an overcoat on the beach. But we'll see." He gave orders to one of his assistants.

The President resumed studying the map. "So far as we know," he said, pointing to Grinnell, Iowa, "all this derives from a single landing, here."

The Old Man answered, "Yes—so far as we know."

I said, "Oh, no!"

They all looked at me and I was embarrassed. "Go ahead," said the President.

"There were at least three more landings—I know there were—before I was rescued."

The Old Man looked dumbfounded. "Are you sure, son? We thought we had wrung you dry."

"Of course I'm sure."

"Why didn't you mention it?"

"I never thought of it before." I tried to explain how it feels to be possessed, how you know what is going on, but everything seems dreamy, equally important and equally unimportant. I grew quite upset. I am not the jittery type, but being ridden by a master does something to you.

The Old Man put his hand on me and said, "Steady down, son." The President said something soothing and gave me a reassuring smile. That stereocast personality of his is not put on; he's really got it.

Rexton said, "The important point is: where did they land? We might still capture one."

"I doubt it," the Old Man answered. "They did a coverup on the first one in a matter of hours. If it was the first one," he added thoughtfully.

I went to the map and tried to think. Sweating, I pointed to New Orleans. "I'm pretty sure one was about here." I stared at the map. "I don't know where the others landed. But I know they did."

"How about here?" Rexton asked, pointing to the East Coast.

"I don't know. I don't know."

The Old Man pointed to the other East Coast danger spot. "We know this one is a secondary infection." He was kind enough not to say that I had been the means of infecting it.

"Can't you remember anything else?" Martinez said testily. "Think, man!"

"I just don't know. We never knew what they were up to, not really." I thought until my skull ached, then pointed to Kansas City. "I sent several messages here, but I don't know whether they were shipment orders, or not."

Rexton looked at the map; around Kansas City was almost as pin-studded as Iowa. "We'll assume a landing near Kansas City, too. The technical boys can do a problem on it. It may be subject to logistic analysis; we might derive the other landing."

"Or landings," added the Old Man.

"Eh? 'Or landings'. Certainly. But we need more reports." He turned back to the map and stared at it thoughtfully.

XVI

Hindsight is confoundedly futile. At the moment the first saucer landed the menace could have been stamped out by one determined man and a bomb. At the time "The Cavanaughs"—Mary, the Old Man, and I—reconnoitered around Grinnell and in Des Moines, we three alone might have killed every slug had we been ruthless and, more important, known where they all were.

Had Schedule Bare Back been ordered during the fortnight after the first landing it alone might have turned the trick. But by the next day it was clear that Schedule Bare Back had failed as an offensive measure. As a defense it was useful; the uncontaminated areas could be kept so, as long as the slugs could not conceal themselves. It had even had mild success in offense; areas contaminated but not "secured" by the parasites were cleaned up at once . . . Washington itself, for example, and New Philadelphia. New Brooklyn, too—there I had been able to give specific advice. The entire East Coast turned from red to green.

But as the area down the middle of the country filled in on the map, it filled in red, and stayed so. The infected areas stood out in ruby light now, for the simple wall map studded with push pins had been replaced by a huge electronic military map, ten miles to the inch, covering one wall of the conference room. It was a repeater map, the master being located down in the sublevels of the New Pentagon.

The country was split in two, as if a giant had washed red pigment down the Central Valley. Two zigzag amber paths bordered the great band held by the slugs; these were overlap, the only areas of real activity, places where line-of-sight reception was possible from both stations held by the enemy and from stations still in the hands of free men. One such started near Minneapolis, swung west of Chicago and east of St. Louis, then meandered through Tennessee and Alabama to the Gulf. The other cut a wide path through the Great Plains and came out near Corpus Christi. El Paso was the center of a ruby area as yet unconnected with the main body.

I looked at the map and wondered what was going on in those border strips. I had the room to myself; the Cabinet was meeting and the President had taken the Old Man with him. Rexton and his brass had left earlier. I stayed there because I had not been told where to go and I hesitated to wander around in the White House. So I stayed and fretted and watched amber lights blink red and, much less frequently, red lights blink amber or green.

I wondered how an overnight visitor with no status managed to get breakfast? I had been up since four and my total nourishment so far had been one cup of coffee, served by the President's valet. Even more urgently I wanted to find a washroom. I knew where the President's washroom was, but I did not have the nerve to use it, feeling vaguely that to do so would be somewhere between high treason and disorderly conduct.

There was not a guard in sight. Probably the room was being scanned from a board somewhere; I suppose every room in the White House has an "eye & ear" in it; but there was no one physically in view.

At last I got desperate enough to start trying doors. The first two were locked; the third was what I was looking for. It was not marked "Sacred to the Chief" nor did it appear to be booby-trapped, so I used it.

When I came back into the conference room, Mary was there.

I looked at her stupidly for a moment. "I thought you were with the President?"

She smiled. "I was, but I got chased out. The Old Man took over for me."

I said, "Say, Mary, I've been wanting to talk with you and this is the first chance I've had. I guess I—Well, anyway, I shouldn't have, I mean, according to the Old Man—" I stopped, my carefully rehearsed speech in ruins. "Anyhow, I shouldn't have said what I did," I concluded miserably.

She put a hand on my arm. "Sam. Sam, my very dear, do not be troubled. What you said and what you did was fair enough from what you knew. The important thing, *to me*, is what you did *for me*. The rest does not matter—except that I am happy again to know that you don't despise me."

"Well, but—Damn it, don't be so noble! I can't stand it!"

She gave me a merry, lively smile, not at all like the gentle one with which she had greeted me. "Sam, I think you *like* your women to be a little bit bitchy. I warn you, I can be so." She went on, "You are still worried about that slap, too, I think. All right, I'll pay it back." She reached up and patted me gently on the cheek, once. "There, it's paid back and you can forget it."

Her expression suddenly changed, she swung on me—and I thought the top of my head was coming off. "And that," she said in a tense, hoarse whisper, "pays you back the one I got from your girlfriend!"

My ears were ringing and my eyes did not want to focus. If I had not seen her bare palm, I would have sworn that she had used at least a two-by-four.

She looked at me, wary and defiant, not the least apologetic—angry, rather, if dilated nostrils meant anything. I raised a hand and she tensed—but I just wanted to touch my stinging cheek. It was very sore. "She's not my girlfriend," I said lamely.

We eyed each other and simultaneously burst out laughing. She put both her hands on my shoulders and let her head collapse on my right one, still laughing. "Sam," she managed to say, "I'm so sorry. I shouldn't have done it—not to you, Sam. At least I shouldn't have slapped you so hard."

"The devil you're sorry," I growled, "but you shouldn't have put English on it. You damn near took the hide off."

"Poor Sam!" She reached up and touched it; it hurt. "She's really not your girlfriend?"

"No, worse luck. But not from lack of my trying."

"I'm sure it wasn't. Who is your girlfriend, Sam?" The words seem coquettish; she did not make them so.

"You are, you vixen!"

"Yes," she said comfortably, "I am—if you'll have me. I told you that before. And I meant it. Bought and paid for."

She was waiting to be kissed; I pushed her away. "Confound it, woman, I don't want you 'bought and paid for'."

It did not faze her. "I put it badly. Paid for—but not bought. I'm here because I want to be here. Now will you kiss me, please?"

So help me, up to that moment she had not turned on the sex, not really. When she saw that the answer was yes, she did so and it was like summer sun coming out from a cloud. That is inadequate but it will have to do.

She had kissed me once before; this time she *kissed* me. The French are smart; they have two words for it . . . this was the other one. I felt myself sinking into a warm golden haze and I did not ever want to come up.

Finally I had to break and gasped. "I think I'll sit down for a minute."

She said, "Thank you, Sam," and let me.

"Mary," I said presently, "Mary, my dear, there is something you possibly could do for me."

"Yes?" she said eagerly.

"Tell me how in the name of Ned a person gets anything to eat around here? I'm starved. No breakfast."

She looked startled; I suppose she had expected something else. But she answered, "Why, certainly!"

I don't know where she went nor how she did it. She may have butted into the White House pantry and helped herself. But she returned in a few minutes with a tray of sandwiches and two bottles of beer. Corned beef and rye put the roses back in my cheeks. I was cleaning up my third when I said, "Mary, how long do you figure that meeting will last?"

"Let me see," she answered, "fourteen people, including the Old Man. I give it a minimum of two hours. Why?"

"In that case," I said, swallowing the last bite, "we have time to duck out of here, find a registry office, get married, and get back before the Old Man misses us."

She did not answer and she did not look at me. Instead she stared at the bubbles in her beer. "Well?" I insisted.

She raised her eyes. "I'll do it if you say so. I'm not welshing. But I'm not going to start out by lying to you. I would rather we didn't."

"You don't want to marry me?"

"Sam, I don't think you are ready to get married."

"Speak for yourself!"

"Don't be angry, my dear. I'm not holding out—honest. You can have me with or without a contract, anywhere, anywhen, anyway. But you don't know me yet. Get acquainted with me; you might change your mind."

"I'm not in the habit of changing my mind." She glanced up without answering, then looked away sadly. I felt my face get hot. "That was a very special circumstance," I protested. "It could not happen to us again in a hundred years. That wasn't really me talking; it was—"

She stopped me. "I know, Sam. And now you want to prove to me that it didn't really happen or at least that you are sure of your own mind now. But you don't have to prove anything. I won't run out on you and I don't mistrust you. Take me away on a weekend; better yet, move into my apartment. If you find that I wear well, there's always time to make me what great grandmother called an 'honest woman', heaven knows why."

I must have looked sullen; I felt so. She put a hand on mine and said seriously, "Take a look at the map, Sam."

I turned my head and looked. Red as ever, or more so—it seemed to me that the danger zone around El Paso had increased. She went on, "Let's get this mess cleaned up first, dear. Then, if you still want to, ask me again. In the meantime, you can have the privileges without the responsibilities."

What could be fairer than that? The only trouble was that it was not the way I wanted it. Why will a man who has been avoiding marriage like the plague suddenly decide that nothing less will suit him? I had seen it happen a hundred times and never understood it; now I was doing it myself.

Mary had to go back on duty as soon as the meeting was over. The Old Man collared me and took me for a walk. Yes, a walk, though we went only as far as the Baruch Memorial Bench. There he sat down, fiddled with his pipe, and stared into space. The day was as muggy as only Washington can get, but the park was almost deserted. People were not yet used to Schedule Bare Back.

He said, "Schedule Counter Blast starts at midnight."

I said nothing; questioning him was useless.

Presently he added, "We swoop down on every relay station, broadcast station, newspaper office, and Western Union office in 'Zone Red'."

"Sounds good," I answered. "How many men does it take?"

He did not answer; instead he said, "I don't like it. I don't like it a little bit."

"Huh?"

"See here, bub—the President went on the channels and told everybody to peel off their shirts. We find that the message did not get through into infected territory. What's the next logical development?"

I shrugged. "Schedule Counter Blast, I suppose."

"That hasn't happened yet. Think—it has been more than twenty-four hours: what should have happened and hasn't?"

"Should I know?"

"You should, if you are ever going to amount to anything on your own. Here—" He handed me a combo key. "Scoot out to Kansas City and take a looksee. Stay away from comm stations, cops, and—shucks, you know their attack points better than I do. Stay away from *them*. Take a look at anything else. And don't get caught." He looked at his finger and added, "Be back here a half hour before midnight, or sooner. Get going."

"A lot of time you allow me to case a whole city," I complained. "It will take nearly three hours just to drive to Kansas City."

"More than three hours," he answered. "Don't attract attention by picking up a ticket."

"You know dam well I'm a careful driver."

"Move."

So I moved, stopping by the White House to pick up my kit. I wasted ten minutes convincing a new guard that I really had been there overnight and actually had possessions to pick up.

The combo was to the car we had come down in; I picked it up at Rock Creek Park platform. Traffic was light and I commented on it to the dispatcher as I handed in the combo. "Freight and commercial carriers are grounded," he answered. "The emergency—you got a military clearance?"

I knew I could get one by phoning the Old Man, but bothering him about minutiae does not endear one to him. I said, "Check the number."

He shrugged and slipped the combo in his machine. My hunch had been right; his eyebrows shot up and he handed it back. "How you rate!" he commented. "You must be the President's fair-haired boy."

He did not ask for my destination and I did not offer it. His machine probably broke into "Hail, Columbia!" when the Old Man's number hit it.

Once launched, I set the controls for Kansas City at legal max and tried to think. The transponder beeped as radar beams hit it each time I slid from one control block into the next, but no faces appeared on the screen. Apparently the Old Man's combo was good for the route, emergency or not.

I began to wonder what would happen when I slipped over into the red areas—and then realized what he had been driving at when he talked about "the next logical development". Would the control net pass me on through into areas we knew darn well were infested by titans?

One tends to think of communications as meaning the line-of-sight channels and nothing else. But "communications" means all traffic of every sort, even dear old Aunt Mamie, headed for California with her head stuffed with gossip. The slugs had seized the channels and the President's proclamation had not gotten through, or so we assumed—but news can't be stopped that easily; such measures merely slow it down. Behind the Soviet Curtain Aunt Sonya does not go on long trips; it ain't healthy. Ergo, if the slugs expected to retain control where they were, seizing the channels would be just their first step.

It stood to reason that they were not numerous enough to interfere with *all* traffic, but what would they do?

I reached only the unhelpful conclusion that they would do something and that I, being a part of "communications" by definition, had better be prepared for evasive action if I wanted to save my pretty pink skin.

In the meantime the Mississippi River and Zone Red were sliding closer by the minute. I wondered what would happen the first time my recognition signal was picked up by a station controlled by masters. I tried to think like a titan—impossible, I found, even though I had been a slave to one. The idea revolted me.

Well, then, what would a security commissar do if an unfriendly craft flew past the Curtain? Have it shot down, of course. No, that was not the answer; I was probably safe in the air.

But I had better not let them spot me landing. Elementary.

"Elementary" in the face of a traffic control net which was described proudly as the No-Sparrow-Shall-Fall plan. They boasted that a butterfly could not make a forced landing anywhere in the United States without alerting the search & rescue system. Not quite true—but I was no butterfly.

What I wanted was to land short of the infested area and go in on the ground. On foot I will make a stab at penetrating any security screen, mechanical, electronic, manned, or mixed. But how can you use misdirection in a car making westing a full degree every seven minutes? Or hang a stupid, innocent look on the nose of a duo?

If I went in on foot the Old Man would get his report come next Michaelmas; he wanted it before midnight.

Once, in a rare mellow mood, the Old Man told me that he did not bother his agents with detailed instructions—give a man a mission; let him sink or swim. I suggested that his method must use up a lot of agents.

"Some," he had admitted, "but not as many as the other way. I believe in the individual and I try to pick individuals who are survivor types."

"And how in the hell," I had asked him, "do you know when you've got a 'survivor type'."

He had grinned at me wickedly. "A survivor type is an agent who comes back. Then I know."

I had to reach a decision in the next few minutes. Elihu, I said to myself, you are about to find out which type you are—and damn his icy heart!

My course would take me in toward St. Louis, swing me in the city loop around St. Louis, and on to Kansas City. But St. Louis was in Zone Red. The military-situation map had showed Chicago as still green; as I remembered it the amber line had zigzagged west somewhere above Hannibal, Missouri—and I wanted very badly to cross the Mississippi while still in Zone Green. A car crossing that mile-wide river would make a radar blip as sharp as a desert star.

I signaled block control for permission to descend to local-traffic level, then did so without waiting, resuming manual control and cutting my speed. I headed north.

Short of the Springfield loop I headed west again, staying low.

When I reached the river I crossed slowly, close to the water, with my transponder shut down. Sure, you can't shut off your radar recognition signal in the air, not in a standard rig—but the Section's cars were not standard. The Old Man was not above using gangster tricks.

I had hopes, if local traffic were being monitored while I crossed, that my blip would be mistaken for a boat on the river. I did not know certainly whether the next block station across the river was Zone Red or Zone Green, but, if my memory was correct, it should be green.

I was about to cut in the transponder again on the assumption that it would be safer, or at least less conspicuous, to get back into the traffic system when I noticed the shoreline opening up ahead of me. The map did not show a tributary there; I judged it to be an inlet, or possibly a new channel cut in the spring floods and not yet mapped. I dropped almost to water level and headed into it. The stream was narrow, meandering, and almost overhung by trees and I had no more business taking a sky car into it than a bee has of flying down a trombone—but it afforded perfect radar "shadow"; I could get lost in it.

In a few minutes I *was* lost, not only from any monitoring technician, but lost myself, right off the map. The channel switched and turned and cut back and I was so busy bucking the car by hand, trying to keep from crashing that I lost all track of navigation. I swore and wished that the car were a triphib so that I could land on water.

The trees suddenly broke on the left bank; I saw a stretch of level land, kicked her over and squatted her in with a deceleration that nearly cut me in two against my safety belt. But I was down and no longer trying to play catfish in a muddy stream.

I wondered what to do. There seemed to be nobody around; I judged that I was on the back end of someone's farm. No doubt there was a highway close by. I had better find it and stay on the ground.

But I knew that was silly even as I thought it. Three hours from Washington to Kansas City by air—I had completed almost all the trip and now I was how far away from Kansas City? By land, about *three hours*. At that rate, all I needed to make the trip complete was to park the car ten or twelve miles outside Kansas City and walk; then I would *still* have three hours to go.

I felt like the frog who jumped halfway to the end of the log with each hop, but never got there. I *must* get back into the air.

But I did not dare do so until I knew positively whether traffic here was being controlled by free men, or by slugs.

It suddenly occurred to me that I had not turned on the stereo since leaving Washington. I am not much for stereo; between the commercials and the junk they sandwich between them I sometimes wonder about "progress". But a newscast may have uses.

I could not find a newscast. I got (a) a lecture by Myrtle Doolightly, Ph.D., on *Why Husbands Grow Bored,* sponsored by the Uth-a-gen Hormone Company—I decided that she probably had plenty of experience in her subject; (b) a trio of girl hepsters singing *If You Mean What I think You Mean, What are We Waiting For?* (c) an episode in *Lucretia Learns About Life*.

Dear Doctor Myrtle was fully dressed and could have hidden half a dozen titans around her frame. The trio were dressed about the way one would expect them to be, but they did not turn their backs to the camera. Lucretia appeared to alternate having her clothes torn off with taking them off willingly, but the camera always cut or the lights always went out just before I could check on whether or not her back was bare—of slugs, that is.

And none of it meant anything. Those programs could have been taped weeks or months before the President announced Schedule Bare Back. I was still switching channels, trying to find a newscast—or any live program—when I found myself staring into the professionally unctuous smile of an announcer. He was fully dressed.

Shortly I realized it was one of those silly giveaway shows. He was saying: "—and some lucky little woman sitting by her screen right this minute is about to receive, absolutely free, a General Atomics Six-in-One Automatic Home Butler. Who will it be? You? You? Or lucky *you*? He turned away from scan; I could see his shoulders. They were covered by shirt and jacket and distinctly rounded, almost humped. I was inside Zone Red.

When I switched off I realized that I was being watched—by a male urchin about nine years old. He was wearing nothing but shorts, but the brown of his shoulders showed that such was his custom. I threw back the windscreen. "Hey, bub, where's the highway?"

He continued to stare before replying, "Road to Macon's up there yonder. Say, mister, that's a Cadillac Zipper, ain't it?"

"Sure thing. Where yonder?"

"Give me a ride, huh, will you?"

"Haven't got time. Where's the road?"

He sized me up before answering, "Take me along and I'll show you."

I gave in. While he climbed in and looked around, I opened my kit, got out shirt, trousers, and jacket, and put them on. I said conversationally, "Maybe I shouldn't put on this shirt. Do people around here wear shirts?"

He scowled. "I've got shirts!"

"I didn't say you didn't; I just asked if people around here wore shirts."

"Of course they do. Where do you think you are, mister; Arkansas?"

I gave up and asked again about the road. He said, "Can I punch the button when we take off, huh?"

I explained that we were going to stay on the ground. He was frankly annoyed but condescended to point out a direction. I drove cautiously as the car was heavy for unpaved countryside. Presently he told me to turn. Quite a bit later I stopped the car and said, "Are you going to show me where that road is, or am I going to wallop your backsides?"

He opened the door and slid out. "Hey!" I yelled.

He looked back. "Over that way," he admitted. I turned the car, not really expecting to find a highway, but finding one, nevertheless, only fifty yards away. The brat had caused me to drive around three sides of a large square.

If you could call it a highway—there was not an ounce of rubber in the paving. Still, it was a road; I followed it to the west. All in all, I had wasted more than an hour.

Macon, Missouri seemed normal—much too normal to be reassuring, as Schedule Bare Back obviously had not been heard of here. There were a number of bare backs, but it was a hot day. There were more backs that were covered and any of them might have concealed a slug. I gave serious thought to checking this town, rather than Kansas City, then beating back the way I had come, while I could. Pushing further into country which I knew to be controlled by the masters made me as nervous as a preacher at a stag party; I wanted to run.

But the Old Man had said "Kansas City"; he would take a dim view of a substitute. Finally I drove the belt around Macon and pulled into a landing flat on the far side. There I queued up for local traffic launching and headed for Kansas City in a mess of farmers' copters and suchlike local craft. I would have to hold local speeds all across the state, but that was safer than getting into the hot pattern with my transponder identifying my car to every block control station.

The field was automatically serviced, no attendants, not even at the fuelling line. It seemed probable that I had managed to enter the Missouri traffic pattern without arousing suspicion. True, there was a block control station back in Illinois which might be wondering where I had gone, but that did not matter.

XVII

Kansas City is an old-fashioned city; it was not hurt in the bombings; except on the East Side where Independence used to be.

Consequently, it was never rebuilt. From the southeast you can drive almost downtown, as far as Swope Park, without having to choose between parking or paying toll to enter the city proper.

One can fly in and make another choice: land in the landing flats north of the Missouri River and take the tunnels into the city, or land on the downtown platforms south of Memorial Hill.

I decided against both of these; I wanted the car near me but I did not want to have to pick it up through a checking system. If it came to a pinch, I could not shoot my way out while offering my combo to a parking attendant. I did not like tunnels in a pinch, either—nor launching platform elevators. A man can be trapped in such.

Frankly I did not want to go into the city at all.

I roaded the car on Route 40 and drove into the Meyer Boulevard toll gate. The line waiting to pay toll for the doubtful privilege of driving on a city street was quite long; I began to feel hemmed in as soon as another car filled in behind me and wished mightily that I had decided to park and go in by the public passenger ways. But the gatekeeper took my toll without glancing at me. I glanced at him, all right, but could not tell whether or not he was being ridden.

I drove through the gate with a sigh of relief—only to be stopped just beyond the gate. A barrier dropped in front of me and I just managed to stop the car, whereupon a cop stuck his head in the side I had open. "Safety check," he said. "Climb out."

I protested that my car had just been inspected. "No doubt," he agreed, "but the city is having a safety drive. Here's your car check. Pick it up just beyond the barrier. Now get out and go in that door." He pointed to a low building a few steps from the curb.

"What for?"

"Eyesight and reflexes," he explained. "Come on. You're holding up the line."

In my mind's eye, I saw the map, with Kansas City glowing red. That the city was "secured" I was sure; therefore this mild-mannered policeman was almost surely hag-ridden. I did not need to look at his shoulders.

But, short of shooting him and making an emergency takeoff from that spot, there was nothing I could do but comply. With a normal, everyday cop I would have tried the bribe direct, slipping him money as he handed me my car check. But titans don't use money.

Or do they?

I got out, grumbling, and walked slowly toward the building. The door near me was marked "IN"; there was one at the far end marked "OUT"; a man came out from it as I approached. I wanted very badly to ask him what he had found.

It was a temporary building with an oldstyle unpowered door. I pushed it open with a toe and glanced both sides and up before I entered. It seemed safe. Inside was an empty anteroom with open door beyond.

Someone inside called out, "Come in." Still as cautious as the setup permitted, I went in.

There were two men, both in white coats, one with a doctor's speculum strapped to his head. He looked up and said briskly, "This won't take a minute. Step over here." He closed the door I had entered; I heard the latch click.

It was a sweeter setup than we had worked out for the Constitution Club; had I had time I would have admired it. Spread out on a long table were transit cells for masters, already opened and warmed. The second man had one ready—for me, I knew—and was holding it tilted toward him, so that I could not see the slug inside. The transit cells would not arouse alarm in the minds of victims; medical men always have things at hand which are odd to the layman.

As for the rest, I was being invited to place my eyes against the goggles of a quite ordinary visual acuity tester. The "doctor" would keep me there, blindfolded without knowing it and reading test figures, while his "assistant" fitted me with a master. No violence, no slips, no protests.

It was not even necessary, as I had learned during my own "service", to bare the victim's back. Just touch the master to the bare neck, then let the new recruit himself adjust his clothing to cover his master before he left.

"Right over here," the "doctor" repeated. "Place your eyes against the eyepieces."

Moving very quickly I went to the bench on which was mounted the acuity tester and started to comply. Then I turned suddenly around.

The assistant had moved in closer: the cell was ready in his hands. As I turned he tilted it away from me. "Doctor," I said, "I wear contact lenses. Should I take them off?"

"No, no," he snapped. "Let's not waste time."

"But, Doctor," I protested, "I want you to see how they fit. Now I've had a little trouble with this left one—" I lifted both hands and pulled back the upper and lower lids of my left eye. "See?"

He said angrily, "This is not a clinic. Now, if you please—" They were both within reach; lowering my arms in a mighty bear hug I got them both—and grabbed with clutched fingers at the spot between each set of shoulder blades. With each hand I struck something soft and mushy under the coats and felt revulsion shake me at the touch.

Once I saw a cat struck by a ground car; the poor thing leapt straight up about four feet with its back arched the wrong way and all limbs flying. These two unlucky men did the same sort of thing; they contorted in every muscle in a grand spasm as if every motor cell in each body had been stimulated at once.

Which is perhaps just what happened when I clutched and crushed their masters.

I could not hold them; they jerked out of my arms and flopped to the floor. But there was no need to hold them; after that first boneshaking convulsion they went limp, unconscious, possibly dead.

Someone was knocking at the door. I called out, "Just a moment. The doctor is busy." The knocking stopped. I made sure that the door was fastened, then went back, bent over the "doctor" and pulled up his coat to see what I had done to his master.

The thing was a ruptured, slimy mess, already beginning to stink. So was the one on the other man—which facts pleased me heartily as I was determined to burn the slugs if they were not already dead and I was not sure that I could do so without killing the hosts as well. I left the men, to live or die—or be seized again by titans, as might be. I had no way to help them.

The masters waiting in their cells were another matter. With a fan beam and a max charge I burned them all in seconds only. There were two large crates against the wall. I did not know that they contained masters but I had no reason to believe otherwise; I beamed them through and through until the wood charred.

The knocking at the door resumed. I looked around hastily for somewhere to hide the two men. There was nowhere at all, so I decided to execute the classic military maneuver. As I was about to go out the exit, I felt that something was missing. I hesitated and looked around again.

The room was almost bare; there seemed to be nothing suited to my purpose. I could use clothing from the "doctor" or his helper, but I did not want to touch them. Then I noticed the dust cover for the acuity tester lying on the bench. I loosened my shirt, snatched up the dust cover, wadded it up, and stuffed it under my shirt between my shoulder blades. With my shirt collar fastened and my jacket zipped tightly it made a bulge of the proper size.

Then I went out, "—a stranger and afraid, into a world I never made."

As a matter of fact I was feeling pretty cocky.

Another cop took my car check. He glanced sharply at me, then motioned me to climb in. I did so and he said, "Go to police headquarters, under the City Hall."

" 'Police headquarters, the City Hall'," I repeated and gunned her ahead. I started in that direction and turned onto Nichols Freeway. I came to a stretch where traffic thinned out and punched the button to shift license plates, hoping that no one would notice. It seemed possible that there was already a call out for the plates I had been showing at the toll gate. I wished that I had been able to change the car's colors and body lines as well.

Before the freeway reached Magee Traffic Way, I turned into a down ramp and stuck thereafter to residential side streets. It was eighteen hundred, zone six time, and I was due in Washington in four and one-half hours.

XVIII

The city did not look right. I tried to discount my own keyed-up state and to see what was actually there—not what I expected to see nor what I was expected to see. Superficially there was nothing wrong, but it did not have the right flavor, as if it were a clumsily directed play. I kept trying to put my finger on it; it kept slipping away.

Kansas City has many wide neighborhoods made up of family units a century old or more. Time seems to have passed them by; kids roll on lawns and householders sit in the cool of the evening on their front porches, just as their great-grandparents did. If there are bomb shelters around, they do not show. The queer, old, bulky houses, fitted together piece by piece by guildsmen long since dead, have homely charm. Seeing them, one wonders how Kansas City got its gamy reputation; those old neighborhoods feel like an enclave of security, impregnable, untouchable.

I cruised through, dodging dogs and rubber balls and toddlers who chased after each, and tried to get the feel of the place. It was the slack of the day, time for the first drink, for watering lawns, and for neighborly chatting.

And so it seemed. Ahead of me I saw a woman bending over a flower bed. She was wearing a sun suit and her back was bare as mine—more so, for I had that wad of cloth stuffed under my jacket. But clearly she was not wearing a master, nor were the two young kids with her. So what could be wrong?

It was a hot day, hotter even than Washington had been; I began to look for bare shoulders, sun-suited women and men in shorts and sandals. Kansas City, despite its reputation, is in the Bible Belt and feels its puritanical influence. People there do not strip to the weather with the cheerful unanimity of Laguna Beach or Coral Gables. An adult fully covered up is never conspicuous, even on the hottest day.

So I found people dressed both ways—but the proportions were wrong. Sure, there were plenty of kids dressed for the weather, but in several miles of driving I saw the bare backs of only five adult women and two adult men.

I should have seen more like five hundred. It was a *hot* day.

Cipher it out. While some jackets undoubtedly did *not* cover masters, by simple proportion *well over ninety percent of the population must be possessed.*

This city was not "secured" the way we had secured New Brooklyn; this city was *saturated.* The masters did not simply hold key points and key officials; the masters *were* the city.

I felt a panicky urge to blast off right from the street and streak out of Zone Red at emergency maximum. They knew that I had escaped the toll gate trap; they would be looking for me. I might be the only free man driving a car in the entire city—and they were all around me!

I fought it down. An agent who gets the wind up is no use to himself or his boss and is not likely to get out of a tight spot. But I had not fully recovered from what it had done to me to be possessed; it was hard to be calm.

I counted ten, delayed my reactions, and tried to figure the situation. It seemed that I must be wrong; there could not possibly be enough masters available to permit them to saturate a city with a million population. I remembered my own experiences hardly two weeks earlier; I recalled how we picked our recruits and made each new host count. Of course that had been a secondary invasion in which we had depended on shipments, whereas Kansas City almost certainly had had a flying saucer land nearby.

Still it did not make sense; it would have taken, I felt sure, not one saucer but a dozen or more, to carry enough masters to saturate Kansas City. If there had been that many surely the space stations would have spotted them, radar-tracked their landing orbits.

Or could it be that they had no trajectories to track? That they simply appeared instead of swooping down like a rocket? Maybe they used that hypothetical old favorite, the "spacetime warp"? I did not know what a spacetime warp was and I doubted if anyone knew, but it would do to tag a type of landing which could not be spotted by radar. We did not know what the masters were capable of in the way of engineering and it was not safe to judge their limitations by our own.

But the data I had led to a conclusion which contradicted common logic; therefore I must check before I reported back. One thing seemed sure: if I assumed that the masters had in fact almost saturated this city, then it was evident that they were still keeping up the masquerade. For the time being they were permitting the city to look like a city of free human beings. Perhaps I was not as conspicuous as I feared.

While I was thinking I had moseyed along another mile or so, going nowhere. Once I found myself heading into the retail district around the Plaza; I swung away; where there are crowds, there are cops. But I skimmed the edge of the district and in so doing passed a public swimming pool. I observed it and filed what I had seen. My mind works by delays and priorities; an item having a low priority is held until the circuits are cleared and ready for it.

To put it bluntly, I am subject to doubletakes.

I was several blocks away before I reviewed the swimming pool datum; it had not been much: the gates were locked and it carried a sign—"CLOSED FOR THE SEASON".

A swimming pool closed down during the hottest part of the summer? What did it mean? Nothing at all; swimming pools have gone out of business before and will again. On the other hand it was contrary to the logic of economics to close such an enterprise during the season of greatest profit except through utter necessity. The odds against it were long.

But a swimming pool was the one place where the masquerade could not possibly be maintained. From the viewpoint of humans a closed pool was less conspicuous than a pool unpatronized in hot weather. And I knew that the masters noted and followed the human point of view in their maneuvers—shucks, I had been there!

Item: a trap at the city's toll gates; item: too few sun suits; item: a closed swimming pool.

Conclusion: the slugs were incredibly more numerous than had been dreamed by anyone—including myself who had been possessed by them.

Corollary: Schedule Counter Blast was based on a mistaken estimate of the enemy and would work as well as hunting rhinoceri with a slingshot.

Counter argument: what I thought I saw was physically impossible. I could hear Secretary Martinez's restrained sarcasm tearing my report to shreds. My guesses referred only to Kansas City and were insufficiently grounded even there. Thank you kindly for your interest but what you need is a long rest and freedom from nervous strain. Now, gentlemen—

Pfui!

I had to have something strong enough for the Old Man to convince the President over the reasonable objections of his official advisers—and I had to have it right away. Even with a total disregard of traffic laws I could not clip much off two and a half hours running time back to Washington.

What could I dig up that would be convincing? Go farther downtown, mingle with crowds, and then tell Martinez that I was sure that almost every man I passed was possessed? How could I prove it? For that matter, how could I myself be certain; I did not have Mary's special talent. As long as the titans kept up the farce of "business as usual" the telltales would be subtle, a superabundance of round shoulders, a paucity of bare ones.

True, there was the toll gate trap. I had some notion now of how the city had been saturated, granting a large enough supply of slugs. I felt sure that I would encounter another such trap on the way out and that there would be others like it on launching platforms and at every other entrance and exit to the city proper. Every person leaving would be a new agent for the masters; every person entering would be a new slave.

This I felt sure of without being inclined to test it by visiting a launching platform. I had once set up such a trap in the Constitution Club; no one who entered it had escaped.

I had noticed a vendo-printer for the *Kansas City Star* on the last corner I had passed. Now I swung around the block and came back to it, pulled up, and got out. I shoved a dime in the slot and waited for my paper to be printed. It seemed to take unusually long, but that was my own nervousness, I felt that every passer-by was staring at me.

The *Star's* format had its usual dull respectability-no excitement, no mention of an emergency, no reference to Schedule Bare Back. The lead news story was headed PHONE SERVICE DISRUPTED BY SUNSPOT STORM, with a subhead *City Semi-Isolated by Solar Static*. There was a 3-col, semi-stereo, trukolor of the sun, its face disfigured by cosmic acne. The pic carried a Palomar date line, as did one of the substories.

The picture was a good fake—or perhaps they pulled a real one out of the paper's library. It added up to a convincing and unexciting explanation of why Mamie Schultz, herself free of parasites, could not get her call through to Grandma in Pittsburgh.

The rest of the paper looked normal. I tucked it under my arm to study later and turned back to my car . . . just as a police car glided silently up and cramped in across the nose of it. A cop got out.

A police car seems to condense a crowd out of air. A moment before the corner was deserted—else I would never have stopped. Now there were people all around and the cop was coming toward me. My hand crept closer to my gun; I would have dropped him had I not been sure that most, if not all, of those around me were equally dangerous.

He stopped in front of me. "Let me see your license," he said pleasantly.

"Certainly, officer," I agreed, "It's clipped to the instrument board of my car." I stepped past him, letting it be assumed that he would follow me. I could feel him hesitate, then take the bait. I led him around to the far side, between my car and his. This let me see that he did not have a mate in his car, a most welcome variation from human practice. More important, it placed my car between me and the too-innocent bystanders.

"Right there," I said, pointing inside, "it's fastened down." Again he hesitated, then looked—just long enough for me to use the new technique I had developed through necessity. My left hand slapped down on his shoulders and I clutched with all my strength.

It was the "struck cat" all over again. His body seemed to explode so violent was the spasm. I was in the car and gunning it almost before he hit the pavement.

And none too soon. The masquerade broke as suddenly as it had in Barnes's outer office; the crowd closed in. One young woman clung by her nails to the smooth outside of the car for fifty feet or more before she fell off. By then I was making speed and still accelerating. I cut in and out of oncoming traffic, ready to take to the air but lacking space.

A cross street showed up on the left; I slammed into it. It was a mistake; trees arched over it and I could not take off. The next turn was even worse; I cursed the city planners who had made Kansas City so parklike.

Of necessity I slowed down. Now I was cruising at a conservative city speed, still watching for a street which would carry me to some boulevard wide enough for an illegal takeoff. My thoughts began to catch up with me and I realized that there was no sign of pursuit. My own too-intimate knowledge of the masters came to my aid. Except for "direct conference" a titan lives in and through his host; he sees what the host sees; receives and passes on information through whatever organs and by whatever means are available to the host.

I knew that. So I knew that it was unlikely that any of the slugs at the corner had been looking for that particular car other than the one inhabiting the body of a policeman—and I had settled with it!

Now, of course, the other parasites present would be on the lockout for me, too—but they had only the bodily abilities and facilities of their hosts. I decided that I need treat them with no more respect, or only a little more respect, than I would give to any casual crowd of witnesses, i.e., ignore them; change neighborhoods and forget it.

For I had nearly thirty minutes of grace left and I had decided what it was I needed as proof; a prisoner, a man who had been possessed and could tell what had happened to the city. I had to rescue a host.

I had to capture a man who was possessed, capture him without hurting him, kill or remove his rider, and kidnap him back to

Washington. I had not time to pick a victim, to make plans; I must act *now*. Even as I decided, I saw a man walking in the block ahead. He was carrying a briefcase and stepping along like a man who sees home and supper ahead. I pulled alongside him and said, "Hey!"

He stopped. "Eh?"

I said, "I've just come from City Hall. No time to explain—slide in here and we'll have a direct conference."

He answered, "City Hall? What are you talking about?"

I said, "Change in plans. Don't waste time. Get in!"

He backed away. I jumped out of the car and grabbed at his hunched shoulders.

Nothing happened—nothing, save that my hand struck bony human flesh, and the man began to yell.

I jumped back into the car and got out of there fast. When I was blocks away I slowed and thought it over. Could it be that I was wrong, that my nerves were so overwrought that I saw signs of titans where there were none?

No! For the moment I had the Old Man's indomitable will to face facts, to see them as they were. The toll gate, the sun suits, the swimming pool, the cop at the vendo-printer . . . those facts I *knew*—and this last fact simply meant that I had hit the double-zero, rolled boxcars, picked the one man in ten, or whatever the odds were, who was not yet recruited. I speeded up, looking for a new victim.

He was a middle-aged man watering his lawn, a figure so bucolic and out-of-this-century that I was half a mind to pass him by. But I had no time left—and he wore a heavy sweater which bulged suspiciously. Had I seen his wife on the veranda I would have gone past, for she was dressed in bra and skirt and so could not have been possessed.

He looked up inquiringly as I stopped. "I've just come from City Hall," I repeated. "You and I need a direct conference right away. Get in."

He said quietly, "Come in the house for it. That car is too public."

I wanted to refuse but he had already turned and was heading for the house. As I came up by him he whispered, "Careful. The woman is not of us."

"Your wife?"

"Yes."

We stopped on the porch and he said, "My dear, this is Mr. O'Keefe. We have some business to discuss. We'll be in the study."

She smiled and answered, "Certainly, my love. Good evening, Mr. O'Keefe. Sultry, isn't it?"

I agreed that it was and she went back to her knitting. We went on inside and the man ushered me into his study. Since we were both keeping the masquerade I went in first, as befitted a visitor being escorted. I did not like turning my back on him.

For that reason I was half expecting it. He hit me near the base of the neck. But I rolled with it and went down almost unhurt. I continued to roll and fetched up on my back.

In training school they used to slap us with sandbags for trying to get up, once down. I recall my *savate* instructor saying in a flat Belgian accent, "Brave men get up again—and die. Be a coward—fight from the floor."

So I was on my back and threatening him with my heels as soon as I hit. He danced back out of range. Apparently he did not have a gun and I could get at mine. But there was an open fireplace in the room, a real one, complete with poker, shovel, and tongs. He circled toward it.

There was a small table just out of my reach. I half rolled, half lunged, grabbed a leg and threw it. It caught him in the face as he was grabbing the poker. Then I was on him.

His master was dying in my fingers and he himself was convulsing under its last, terrible command when I became aware of nerve-shattering screams. His wife was standing in the doorway. I bounced up and let her have one, right about her double chin. She went down in mid scream and I returned to her husband.

A limp man is amazingly hard to lift; it took me longer to get him up and across my shoulders than it had to silence him. He was heavy. Fortunately I am a big husky, all hands and feet; I managed a lumbering dog trot toward the car. I doubt if the noise of our fight disturbed anyone but my victim's wife, but her screams must have aroused half that end of town. There were people popping out of doors on both sides of the street. So far, none of them was near, but I was glad to see that I had left the car door open. I hurried toward it.

Then I was sorry; a brat who looked like the twin of the one who had given me trouble earlier was inside fiddling with the controls. Cursing, I dumped my prisoner in the lounge circle and grabbed at the kid. The boy shrank back and struggled, but I tore him loose and threw him out—straight into the arms of the first of my pursuers.

That saved me. He was still untangling himself as I slammed into the driver's seat and shot forward without bothering with door or safety belt. As I took the first corner the door swung shut and I almost went out of my seat; I then held a straight course long enough to fasten the belt. I cut sharp on another corner, nearly ran down a ground car coming out, and went on.

I found the wide boulevard I needed—the Paseo, I think—and jabbed the takeoff key. Possibly I caused several wrecks; I had no time to worry about it. Without waiting to reach altitude I wrestled her to course east and continued to climb as I made easting. I kept her on manual across Missouri and expended every launching unit in her racks to give her more speed. That reckless and illegal action may have saved my neck; somewhere over Columbia, just as I fired the last one, I felt the car shake to concussion. Someone had launched an interceptor, a devil-chaser would be my guess—and the pesky thing had fused where I had just been.

There were no more shots, which was good, as I would have been a duck on water from then on. My starboard impeller began to run hot immediately thereafter, possibly from the near miss or perhaps simply from abuse. I let it heat, praying that it would not fly apart, for another ten minutes. Then, with the Mississippi behind me and the indicator way up into "danger" I cut it out and let the car limp along on the port unit. Three hundred was the best she would do—but I was out of Zone Red and back among free men.

Up until then I had not had time to give my passenger more than a glance. He lay where I had slung him, sprawled on the floor pads, unconscious or dead. Now that I was back among men and no longer had the power for illegal speeds there was no reason not to go automatic. I flipped on the transponder, signaled a request for block assignment, and put the controls on automatic without waiting for permission. A block control technician might curse me out and even note my signal for a citation, but they would fit me into the system somehow. I swung around into the lounge and looked my man over.

He was breathing but still out. There was a welt on his face where I had clipped him with the table, but no bones seemed broken and I doubted that he would be unconscious from that cause. I slapped his face and dug my thumbnails into his ear lobes but I could not rouse him.

The dead slug was beginning to stink but I had no way to dispose of it. I let him be and went back to the control seat.

The chronometer read twenty-one thirty-seven Washington time—and I still had better than six hundred miles to go. At my best speed on one power plant, allowing nothing for landing, for tearing over to the White House and finding the Old Man, I would reach Washington a few minutes after midnight. So I had already failed to carry out the letter of my orders and the Old Man was sure as the devil going to make me stay in after school for it.

I took a chance and tried to start the starboard impeller. No dice—it was probably frozen solid and needing a major overhaul. Perhaps just as well, as anything that goes that fast can be explosively dangerous if it gets out of balance—so I desisted and tried to raise the Old Man by phone.

The phone would not work. Perhaps I had jiggered it in one of the spots of exercise I had been forced to take that day but I had never had one fail me before. Printed circuits, transistors, and the whole works being embedded in plastic made those units almost as shock resistant as a proximity fuse. I put it back in my pocket, feeling that this was one of those days when it was just not worthwhile to get out of bed. I turned to the car's communicator and punched the emergency tab.

"Control," I called out. "Control! This is an emergency!"

The screen lighted up and I was looking at a young man. He was, I saw with relief, bare-skinned so far as he appeared in the screen. "Control answering—Block Fox Eleven. What are you doing in the air? I've been trying to raise you ever since you entered my block."

"Never mind!" I snapped. "Patch me into the nearest military circuit. This is crash priority!"

He looked uncertain, but the screen flickered and went blank. Shortly another picture built up showing a military message center—and that did my heart good, as every person in sight was stripped to the waist. The foreground was occupied by a young watch officer; I could have kissed him. Instead I said, "Military emergency—patch me through to the Pentagon and there to the White House."

"Who are you?"

"No time, no time! I'm a civil agent and you wouldn't recognize my I.D. if you saw it. Hurry!"

I might have talked him into it but he was shouldered out of scan by an older man, a wing commander by his cap insignia. "Land at once!" was all that he said.

"Look, skipper," I said. "This is a military emergency; you've got to put me through. I—"

"*This* is a military emergency," he interrupted, "and all civil craft have been grounded for the past three hours. Land at once."

"But I've got to—"

"Land or be shot down. We are tracking you; I am about to launch an interceptor to burst a half mile ahead of you. Hold your course, or make any maneuver but landing, and the next one will burst on."

"Will you *listen*, please? I'll land, but I've got to get—" He switched off, leaving me with my jaw pumping air.

The first burst seemed considerably short of a half mile ahead of me; I landed.

I cracked up in doing it, but without hurting myself or my passenger. I did not have long to wait. They had me flare-lighted and were swooping down on me before I had satisfied myself that the boat wouldn't move. They took me in and I met the wing commander personally. He even put my message through after his psych squad got through giving me the antidote for the sleep test. By then it was one-thirteen, zone five—and Schedule Counter Blast had been underway for exactly that hour and thirteen minutes.

The Old Man listened to a summary, grunted, then told me to shut up and see him in the morning.

XIX

If the Old Man and I had gone to the National Zoological Gardens instead of sitting around in the park, it would not have been necessary for me to go to Kansas City. The ten titans we had captured at the joint session of Congress, plus two the next day, had been entrusted to the director of the zoo to be placed on the shoulders of unlucky anthropoids—chimps and orangutans, mostly. No gorillas.

The director had had the apes locked up in the zoo's veterinary hospital. Two chimpanzees, Abelard and Heloise, were caged together; they had always been mates and there seemed to be no reason to separate them. Maybe that sums up our psychological difficulty in dealing with the titans; even the men who transplanted the slugs to the apes still thought of the result as apes, rather than as titans.

The treatment cage next to that of the two chimps was occupied by a family of tuberculous gibbons. They were not used as hosts, since they were sick, and there was no communication between cages. They were shut one from another by sliding, gasketed panels and each cage had its own airconditioning. I've been in worse hospitals; I remember one in the Ukraine—

Anyhow, the next morning the panel had been slid back and the gibbons and the chimps were all in together. Abelard, or possibly Heloise, had found some way to pick the lock. The lock was supposed to be monkey proof, but it was not ape-*cum*-titan proof. Don't blame the designer of the lock.

Two chimps plus two titans plus five gibbons—the next morning there were seven apes ridden by *seven* titans.

This was discovered two hours before I left for Kansas City, but the Old Man had not been notified. Had he been, he would have *known* that Kansas City was saturated. I might have figured it out for myself. Had the Old Man known about the gibbons, Schedule Counter Blast would not have taken place.

Schedule Counter Blast was the worst wet firecracker in military history. The evolution was beautifully worked out and the drops were made simultaneously just at midnight, zone five, on over ninety-six hundred communication points—newspaper offices, block controls, relay stations, and so forth. The raiding squad were the cream of our sky-borne forces, mostly veteran noncoms, and with them, technicians to put each communication point back into service.

Whereupon the President's speech and the visual display would go out from each local station; Schedule Bare Back would take effect all through the infected territory; and the war would be over, save for minor mopping up.

Ever see a bird hurt itself by flying into a glass window? The bird is not stupid; he simply did not have all the data.

By twenty-five minutes after midnight reports started coming in that such-and-such points were secured. A little later there were calls for help from other points. By one in the morning most of the reserves had been committed but the operation was clearly going well—so well, indeed, that unit commanders were landing and were reporting from the ground.

That was the last anybody ever heard of them.

Zone Red swallowed up the task force as if it had never existed—over eleven thousand military craft, more than a hundred and sixty thousand fighting men and technicians, seventy-one group commanders and—why go on? The United States had received its worst military setback since Black Sunday. Not in numbers, for there was not a city bombed, but in selected quality.

Let me make it clear that I am not criticizing Martinez, Rexton, the General Staff, or those poor devils who made the drop. The program was properly planned, it was based on what appeared to be a true picture, and the situation called for fast action with the best we had. If Rexton had sent any but his best boys he would have earned a court martial; the Republic was at stake and he had the sense to realize it.

But he did not know about the seven apes.

It was nearly daylight, so I understand, before Martinez and Rexton got it through their heads that the messages they had gotten back about successes were actually faked, fakes sent by their own men—*our* own men—but hag-ridden, possessed, and brought into the masquerade. After my report, more than an hour too late to stop the raids, the Old Man had tried to get them not to send in any more men, but they were flushed with success and anxious to make a clean sweep.

The Old Man asked the President to insist on visual checks of what was happening, but the operation was being controlled by relay through Space Station Alpha and there just aren't enough channels to parallel audio with video through a space station. Rexton had said, "They know what they are up against; quit worrying. As fast as we get local stations back in our hands, our boys will patch back into the ground relay net and you will have all the visual evidence you want."

The Old Man had pointed out that by then it would be too late.

Rexton had burst out, "Confound it, man!—I can't stop soldiers in action to have them take pictures of bare backs. Do you want a thousand men to let themselves be killed just to quiet your jitters?"

The President had backed him up.

By early morning they had their visual evidence. Stereo stations in the Central Valley were giving out with the same old pap; *Rise and Shine with Mary Sunshine, Breakfast with the Browns*, and such junk. There was not a station with the President's stereocast, not one that even conceded that anything had happened. The military dispatches tapered off and stopped around four o'clock and Rexton's frantic calls were not answered. Task Force Redemption of Schedule Counter Blast ceased to exist—*spurlos versenkt.*

I got this not from the Old Man but from Mary. Being the President's little shadow who went in and out with him, she had a box seat. I did not get to see the Old Man until nearly eleven the next morning. He let me report without comment, and without bawling me out, which was worse.

He was about to dismiss me when I put in, "How about my prisoner? Didn't he confirm my conclusions?"

"Oh, him? Still unconscious, by the last report. They don't expect him to live. The psychotechnicians can't get anything out of him."

"I'd like to see him."

"You stick to things you understand."

"Well—have you got something for me to do?"

"Not at the moment. I think you had better—No, do this: trot down to the National Zoo. You'll see some things that may put a different light on what you picked up in Kansas City."

"Huh?"

"Look up Doctor Horace, he's the Assistant Director. Tell him I sent you."

So I went down to see the animals. I tried to find Mary, but she was tied up.

Horace was a nice little guy who looked like one of his own baboons; he turned me over to a Doctor Vargas who was a specialist in exotic biologies—the same Vargas who was on the Second Venus Expedition. He told me what had happened and I looked at the gibbons, meantime rearranging my prejudices.

"I saw the President's broadcast," he said conversationally, "weren't you the man who—I mean, weren't you the—"

"Yes, I was 'the man who'," I agreed shortly.

"Then you can tell us a great deal about these phenomena. Your opportunities have been unique."

"Perhaps I should be able to," I admitted slowly, "but I can't."

"Do you mean that no cases of fission reproduction took place while you were, uh, their prisoner?"

"That's right." I thought about it and went on, "At least, I think that's right."

"Don't you know? I was given to understand that, uh, victims have full memory of their experiences?"

"Well, they do and they don't." I tried to explain the odd detached frame of mind of a servant of the masters.

"I suppose it could happen while you sleep."

"Maybe. Besides sleep, there is another time, or rather times, which are difficult to remember. During conference."

"Conference?"

So I explained. His eyes lit up, "Oh, you mean 'conjugation'."

"No, I mean 'conference'."

"We mean the same thing. Don't you see? Conjugation and fission—they reproduce at will, whenever the food supply, that is to say the supply of hosts, permits. Probably one contact for each fission; then, when the opportunity exists, fission—two fully adult daughter parasites in a matter of hours . . . or less, possibly."

I thought it over. If that were true—and looking at the gibbons, I could not doubt it—then why had we depended on shipments at the Constitution Club? Or had we? In fact I did not know; I did what my master wanted done and saw only what came under my eyes. But why had we not saturated New Brooklyn as Kansas City had been saturated. Lack of time?

It was clear how Kansas City had been saturated. With plenty of "livestock" at hand and a space ship loaded with transit cells to draw from, the titans had reproduced to match the human population.

I am no biologist, exotic or otherwise, but I can do simple arithmetic. Assume a thousand slugs in that space ship, the one we believed to have landed near Kansas City; suppose that they could reproduce when given the opportunity every twenty-four hours.

First day, one thousand slugs.

Second day, two thousand.

Third day, four thousand.

At the end of the first week, the eighth day, that is—*a hundred and twentyeight thousand* slugs.

After two weeks, *more than sixteen million slugs*.

But we did not know that they were limited to spawning once a day; on the contrary the gibbons proved they weren't. Nor did we know that a flying saucer could lift only a thousand transit cells; it might be ten thousand—or more—or less. Assume ten thousand as breeding stock with fission every twelve hours. In two weeks the answer comes out—

MORE THAN TWO AND A HALF TRILLION!!!!

The figure did not mean anything; it was cosmic. There aren't anything like that many people on the whole globe, not even if you counted in apes.

We were going to be knee deep in slugs—and that before long. I felt worse than I had in Kansas City.

Dr. Vargas introduced me to a Doctor McIlvaine of the Smithsonian Institution; McIlvaine was a comparative psychologist, the author, so Vargas told me, of *Mars, Venus, and Earth: A Study in Motivating Purposes*. Vargas seemed to expect me to be impressed but I was not as I had not read it. Anyhow, how can anyone study the motives of Martians when they were all dead before we swung down out of trees?

They started swapping trade talk not intelligible to an outsider; I continued to watch the gibbons. Presently McIlvaine asked me, "Mr. Nivens, how long does a conference last?"

"Conjugation," Vargas corrected him.

"Conference," McIlvaine repeated. "Keep your mind on the more important aspect."

"But, Doctor," Vargas insisted, "there are parallels in terrestrial biology. In primitive reproduction, conjugation is the means of gene exchange whereby mutation is spread through the body of the—"

"You are being anthropocentric. Doctor. You do not know that this life form has genes."

Vargas turned red. "I presume you will allow me gene equivalents?" he said stiffly.

"Why should I? I repeat, sir, that you are reasoning by analogy where there is no reason to judge that analogy exists. There is one and only one characteristic common to all life forms and that is the drive to survive."

"And to reproduce," insisted Vargas.

"Suppose the organism is immortal and has no need to reproduce?"

"But—" Vargas shrugged. "Your question is not germane; we know that they reproduce." He gestured at the apes.

"And I am suggesting," McIlvaine came back, "that this is not reproduction, but a single organism availing itself of more space, as a man might add a wing to his house. No, really. Doctor, I do not wish to be offensive, but it is possible to get so immersed in the idea of the zygote-gamete cycle that one forgets that there may be other patterns."

Vargas started out, "But throughout the entire system—"

McIlvaine cut him short. "Anthropocentric, terrocentric, solocentric—it is still a provincial approach. These creatures may be from outside the solar system entirely."

I said, "Oh, no!" I had had a sudden flash picture of the planet Titan and with it a choking sensation.

Neither one paid any attention to me. McIlvaine continued, "If you must have analogy, take the amoeba—an earlier, more basic, and much more successful life form than ours. The motivational psychology of the amoeba—"

I switched off my ears; I suppose free speech gives a man the right to talk about the 'psychology' of an amoeba, but I don't have to listen. They never did get back to asking me how long a conference takes, not that I could have told them. A conference is, well—*timeless*.

They did do some direct experimentation which raised my opinion of them a little. Vargas ordered brought in a baboon who was wearing a slug and had him introduced into the cage with the gibbons and the chimps. Up to then the gibbons had been acting like gibbons, grooming each other and such, except that they seemed rather quiet—and kept a sharp eye on our movements. As soon as the newcomer was dumped in they gathered in a ring facing outwards and went into direct conference, slug to slug. McIlvaine jabbed his finger excitedly at them. "You see? You see? Conference is *not* for reproduction, but for exchange of memory. The organism, temporarily divided, has now re-identified itself."

I could have told him the same thing without the double talk; a master who has been out of touch always gets into direct conference as soon as possible.

"Hypothesis!" Vargas snorted. "Pure hypothesis—they have no opportunity to reproduce just now. George!" He ordered the boss of the handling crew to bring in another ape.

"Little Abe?" asked the crew boss.

"No, I want one which is not supporting a parasite. Let me see—make it Old Red."

The crew boss glanced at the gibbons, looked away at once, and said, "Gripes, Doc, I'd rather you didn't pick on Old Red."

"This won't hurt him."

"Why can't I bring in Satan? He's a mean bastard anyway."

"All right, all right! But hurry it up; you are keeping Dr. McIlvaine waiting."

So they brought in Satan, a coal black chimp. He may have been aggressive elsewhere; he was not so here. They dumped him inside, he took one look around, shrank back against the door, and began to whine. It was like watching an execution; I could not stand to look but I couldn't look away. I had had my nerves under control—a man can get used to anything; there are people who make their livings by pumping out cesspools—but the ape's hysteria was contagious. I wanted to run.

At first the hag-ridden apes did nothing; they simply stared at him like a jury. It went on that way for a long while. Satan's whines changed to low, sobbing moans and he covered his face with his hands. Presently Vargas said, "Doctor! Look!"

"Where?"

"Lucy—the old female. There." He pointed.

It was the matriarch of the family of consumptive gibbons. Her back was toward us; I could see that the slug thereon had humped itself together. An iridescent line ran down the center of it.

It began to split as an egg splits. In a few minutes only, the division was complete. One new slug centered itself over her spine; the other flowed down her back. She was squatting, buttocks almost to the floor; it slithered off and plopped gently on the concrete.

It crept slowly toward Satan. The ape must have peeked through his fingers, for he screamed hoarsely—and swarmed up into the top of the cage.

So help me, they sent a squad to arrest him. Four of the biggest—two gibbons, a chimp, and a baboon. They tore him loose and hauled him down and held him face down on the floor.

The slug slithered closer.

It was a good two feet away when it grew a pseudopod—slowly, at first—a slimy stalk that weaved around like a cobra. Then it lashed out and struck the ape on the foot. The others promptly let go of him but Satan did not move.

The titan seemed to pull itself in by the extension it had formed and attached itself to Satan's foot. From there it crawled up; when it reached the base of his spine the ape stirred. Before it was settled at the top of his back Satan sat up. He shook himself and joined the others, stopping only to look us over.

Vargas and McIlvaine started talking excitedly, apparently quite unmoved otherwise. I wanted to smash something—for me, for Satan, for the whole simian race.

Vargas was insisting that nothing had been proved, while McIlvaine maintained that we were seeing something new to our concepts; an intelligent creature which was, by the fashion in which it was organized, immortal and continuous in its personal identity—or its group identity; the argument grew confused. In any case McIlvaine was theorizing that such a creature would have continuous memory of all its experiences, not just from the moment of fission, but back to its racial beginning. He described the slug as a four dimensional worm in spacetime, intertwined with itself as a single organism, and the talk grew so esoteric as to be silly.

As for me, I did not know and did not care. All very interesting, no doubt, but the only way I cared about slugs was to kill them. I wanted to kill them, early and often and as many as possible.

About that uninterrupted "racial memory" idea: wouldn't it be rather cumbersome to be able to recall exactly what you did the second Wednesday in March a million years ago?

XX

For a wonder, when I got back the Old Man was available and wanted to talk. The President had left to address a secret session of the United Nations and the Old Man had not been included in the party. I wondered if he had fallen out of official favor, but I did not say so.

He had me report fully on what I had seen at the zoo and questioned me closely; he had not been down there himself. I added my opinion of Vargas and McIlvaine. "A couple of boy scouts," I complained, "comparing stamp collections. They don't realize it's serious."

The Old Man took time out before answering. "Don't sell those boys short, son," he advised me. "They are more likely to come up with the answer than are you and I."

"Humph!" I said, or something stronger. "They are more likely to let those slugs escape. Remember Graves?"

"I do remember Graves. You don't understand scientific detachment."

"I hope I never do!"

"You won't. But it's the ignition system of the world; without it, we're sunk. Matter of fact, they did let one escape."

"Huh?"

"Didn't they tell you about the elephant?"

"What elephant? They damn near didn't tell me anything; they got interested in each other and ignored me."

"Sure that's not what's biting you? About the elephant: an ape with a rider got out, somehow. Its body was found trampled to death in the elephant house. And one of the elephants was gone."

"You mean there is an elephant loose *with a slug on him*?" I had a horrid vision of what that could mean—something like a tank with a cybernetic brain.

"Her," the Old Man corrected me, "it was a cow elephant. I didn't say so, anyhow. They found her over in Maryland, quietly pulling up cabbages. No parasite."

"Where did the slug get to?" Involuntarily I glanced around. The Old Man chuckled.

"Don't worry; I don't have it in here. But a duo was stolen in the adjoining village. I'd say the slug is somewhere west of the Mississippi by now."

"Anybody missing?"

He shrugged again. "How can you tell, in a free country? At least, the titan can't hide on a human host anywhere short of Zone Red."

That seemed true; Schedule Bare Back appeared to be operating one hundred percent. That made me think of something else, something I had seen at the zoo and had not reasoned through. Whatever it was, it eluded me. The Old Man went on, "It's taken drastic action to make the bare-shoulders order stick, though. The President has had a flood of protests on moral grounds, not to mention the National Association of Men's Haberdashers."

"Huh?"

"You would think we were trying to sell their daughters down to Rio, the way some of them carry on. There was a delegation in, called themselves The Mothers of the Republic, or some such nonsense."

"The President's time is being wasted like *that*, at a time like *this*?"

"McDonough handled them. But he roped me in on it, damn his eyes." The Old Man looked pained. "We told them that they could not see the President unless they stripped absolutely naked. That stopped 'em."

The thought that had been bothering me came to the surface. "Say, boss, you might have to."

"'Have to what?"

"Make people strip naked."

He chewed his lip and looked worried. "What are you driving at?"

"Do we know, as a certainty, that a slug can attach itself to its host only near the base of the brain?"

"You should know, better than I do."

"I thought I did, but now I'm not sure. That's the way we always did it, when I was, uh, with them." I recounted again, in more detail, what I had seen when Vargas had had poor old Satan exposed to a slug. "That ape moved as soon as the thing reached the base of his spine, clear down at his tail bone. Maybe they prefer to ride up near the brain—I'm sure they do. But maybe they don't have to. Maybe they could ride down inside a man's pants and just put out an extension to the end of his spinal cord."

"Hmm . . . you'll remember, son, that the first time I had a crowd searched for one I made everybody peel clear down to the buff. That was not accidental; I wanted to be sure."

"I think you were justified. See here; they might be able to conceal themselves anywhere on the body, if they have to. Inside a pair of shorts, for example. Of course you couldn't hide anything under some shorts—" I was thinking of the skintight things that Mary wore. "—but take those droopy drawers you've got on. One could hide in them and it would just make you look a bit satchel fannied—a bit more, I should say."

"Want me to take 'em off?"

"I can do better than that; I'll give you the Kansas City Clutch." My words were joking but I was not; I grabbed at the bunchiness of his pants and made sure he was clean. If he had not been, he would have contorted and gone unconscious had I clutched a parasite. He submitted to it with good grace, then gave me the same treatment.

"But we can't," he complained as he sat down, "go around slapping women on the rump. It won't do."

"You may have to," I pointed out, "or make everybody strip."

"We'll run some experiments."

"How?" I asked.

"You know that head-and-spine armor deal? It's not worth much, except to give a feeling of security to anybody who bothers to wear one. I'll tell Doctor Horace to take an ape, fit an armor to him so that a slug can't reach anything but his legs, say—and see what happens. Or use some other method to limit the area of attack, and vary the areas, too. We'll find out."

"Uh, yes. But don't have him use an ape, boss."

"Why not?"

"Well—they're too human."

"Damn it, bub, you can't make an omelet—"

"—without breaking eggs. Okay, okay, but I don't have to like it. Anyhow, we'll find out."

I could see that he did not like what he was thinking. "I hope it turns out that you are wrong. Yes, sir, I surely do. It has been hard enough to get their shirts off; I'd hate like the very deuce to try to get 'em to take off their drawers as well." He looked worried.

"Well, maybe it won't be necessary."

"I hope not."

"By the way, we're moving back to the old nest."

"How about the New Philadelphia hideout?" I asked.

"We'll keep both. This war may go on a long time."

"Speaking of such, what have you got for me now?"

"Well, now, as I said, this is likely to prove a long war. Why don't you take some leave? Indefinite—I'll call you back when I need you."

"You always have," I pointed out. "Is Mary going on leave?"

"What's that got to do with it?"

"I asked you a straight question. Boss."

"Mary is on duty, with the President."

"Why? She's done her job, and nobly. You aren't depending on her being able to smell out a slug, not if I know you. You don't need her as a guard; she's too good an agent to waste on such work."

"See here—when did you get so big that you are telling me how to use other agents? Answer that and make it good."

"Oh, skip it, skip it," I told him, my temper very much out of hand. "Let it lay that if Mary isn't taking leave, I don't want leave—and none of your business why."

"That's a nice girl."

"Did I say she wasn't? Keep your nose out of my affairs. In the meantime, give me a job to do."

"I say you need to take leave."

"So you can make damn sure that I don't have any free time when Mary has? What is this? A YWCA?

"I say you need leave because you are worn out."

"Hunh!"

"You are a fair-to-good agent when you are in shape. Right now you aren't; you've been through too much. No, shut up and listen: I send you out on a simple assignment. Penetrate an occupied city, look it over and see everything there is to see and report back by a certain time. What do you do? You are so jittery that you hang around in the suburbs and are afraid to go downtown. You don't keep your eyes open and you damn near get caught three times. Then when you do head back, you get so nervy that you burn out your ship and fail to get back in time to be of any use. Your nerve is shot and your judgment with it. Take leave—sick leave, in fact."

I stood there with my ears burning. He did not directly blame me for the failure of Schedule Counter Blast but he might as well have. I felt that it was unfair—and yet I knew that there was truth in it. My nerves used to be like rock, and now my hands trembled when I tried to strike a cigarette.

Nevertheless he let me have an assignment—the first and only time I have ever won an argument with him.

A hell of an assignment—I spent the next several days lecturing to brass, answering fool questions about what titans eat for lunch, explaining how to tackle a man who was possessed. I was billed as an "expert" but half the time my pupils seemed sure that they knew more about slugs than I did.

Why do people cherish their preconceptions? Riddle me that.

XXI

Operation Parasite seemed to come to a dead stop during this period. The titans continued to hold Zone Red, but they could not break out without being spotted. And we did not try to break in for the good reason that every slug held one of our own people as hostage. It was a situation which might go on for a long time.

The United Nations were no help. The President wanted a simple act of cooperation—Schedule Bare Back on a global scale. They hemmed and hawed and sent the matter to committee for investigation. The plain truth was they did not believe us; that was always the enemy's great advantage—only the burned believed in the fire.

Some nations were safe from the slugs through their own customs. A Finn who did not strip down and climb into a steam bath, in company, every day or so would have been conspicuous. The Japanese, too, were casual about undressing. The South Seas were relatively safe, as were large parts of Africa. France had gone enthusiastically nudist, on weekends at least, right after World War III—a slug would have a tough time hiding in France.

But in countries where the body-modesty taboo meant something a slug could stay hidden until his host began to stink. The United States itself, Canada—England, most particularly England. "Aren't you getting excited over nothing, old chap? Take off my weskit? Now, really!"

They flew three slugs (with apes) to London; I understand that the King wanted to set an example as the President had, but the Prime Minister, egged on by the Archbishop of Canterbury, would not let him. The Archbishop had not even bothered to look; moral behavior was more important than mundane peril. Nothing about this appeared in the news and the story may not be true, but English skin was not exposed to the cold stares of neighbors.

The Cominform propaganda system began to blast us as soon as they had worked out a new line. The whole thing was an "American Imperialist fantasy" intended to "enslave the workers"; the "mad dogs of capitalism" were at it again.

I wondered why the titans had not attacked Russia first; Stalinism seemed tailormade for them. On second thought, I wondered if they had. On third thought I wondered what difference it would make; the people behind the Curtain had had their minds enslaved and parasites riding them for three generations. There might not be two kopeks difference between a commissar with a slug and a commissar without a slug.

There would be one change: their intermittent purges would take a different form; a "deviationist" would be "liquidated" by plastering a titan on his neck. It wouldn't be necessary to send him to the gas chamber.

Except when the Old Man picked me to work with him I was not close to the center of things; I saw the war with the titans as a man sees hurricanes—his small piece only. I did not see the Old Man soon and I got my assignments from Oldfield, his deputy. Consequently I did not know of it when Mary was relieved from special duty with the President. I ran into her in the lounge of the Section offices. "Mary!" I yelped and fell over my feet getting to her.

She gave me that long, slow, sweet smile and moved over to make room for me. "Hello, darling!" she whispered. She did not ask me what I had been doing, nor scold me that I had not been in touch with her, nor even comment on how long it had been. Mary always let the water over the dam take care of itself.

Not me—I babbled. "This is wonderful! I thought you were still tucking the President into his beddy-bye. How long have you been here? Do you have to go back right away? Say, can I dial you a drink—no, you've got one." I started to dial for an old-fashioned and discovered that Mary had already done so; it popped out almost into my hand. "Huh? How'd this get here?"

"I ordered it when you came in the door."

"You did? Mary, did I tell you that you are wonderful?"

"No."

"Very well, then, I will: You're wonderful."

"Thank you."

I went on, "This calls for a celebration! How long are you free? Say, couldn't you possibly get some leave? They can't expect you to be on duty twenty-four hours a day, week after week, with no time off. I think I'll go right straight to the Old Man and tell him just what—"

"I'm on leave, Sam."

"—just what I think of that sort of—Huh?"

"I'm on leave now."

"You *are*? For how long?"

"Subject to call. All leaves read that way now."

"But—How long have you been on leave?"

"Since yesterday. I've been sitting here, waiting for you to show up."

"Yesterday!" And I had spent yesterday giving more kindergarten lectures to brass hats who did not want them. "Oh, for the love of—" I stood up. "Stay right where you are. Don't move. I'll be right back."

I rushed over to the operations office. I got in to see the chief deputy by insisting that I had a very urgent matter that he had to attend to. Oldfield looked up when I came in and said in a surly tone, "What do *you* want?"

"Look, chief, that series of bedtime stories I'm scheduled to tell: better cancel them."

"Why?"

"I'm a sick man; I've been due for sick leave for a long time. Now I've just got to take it."

"You're sick in the head, if you ask me."

"That's right; I'm sick in the head. Sometimes I hear voices. People have been following me around. I keep dreaming I'm back with the titans." That last point was regrettably true.

"But since when has this being crazy been any handicap in this section?" He leaned back and waited for me to argue the point.

"Look—do I get leave or don't I?"

He fumbled through papers on his desk, found one and tore it up. "Okay. Keep your phone handy; you're subject to recall. Get out."

I got. Mary looked up when I came in and gave me the soft warm treatment again. I said, "Grab your things; we're leaving."

She did not ask where; she simply stood up. I snatched my drink, gulped half of it and spilled the rest. We went up and were out on the pedestrian level of the city before either one of us said anything. Then I asked, "Now—where do you want to get married?"

"Sam, we discussed that before."

"Sure we did and now we are going to do it. Where?"

"Sam, Sam my very dear—I will do what you say. But I am bound to tell you that I am still opposed to it."

"Why?"

"Sam, let's go straight to my apartment. I'd like to cook dinner for you."

"Okay, you can cook dinner—but not in your apartment. And we get married first."

"Please, Sam!"

I heard somebody say, "Keep pitching, kid. She's weakening." I looked around and found that we were playing to a good-sized gallery.

I swept an arm wide, almost clipping the youngster who had given me the advice and shouted irritably, "Haven't you people got anything else to do? Go get drunk!"

Somebody else said, "I'd say he ought to take her offer; he won't get a better one."

I grabbed Mary by the arm and hurried her away from there. I did not say another word until I had gotten her into a cab and closed off the driver's compartment from the lounge. "All right," I said gruffly, "why not get married? Let's have your reasons."

"Why get married, Sam? I'm yours; you don't need a contract."

"Why? Because I love you; that's one reason, damn it!"

She did not answer for quite a while; I thought I had offended her.

When she did I could hardly hear her. "You hadn't mentioned that before, Sam."

"Hadn't I? Oh, I must have. I'm sure I have."

"No, I'm sure, quite sure, that you haven't. Why didn't you?"

"Unh, I don't know. Just an oversight, I guess. I'm not right sure what the word 'love' means."

"Neither am I," she said softly, "but I love to hear you say it. Say it again, please."

"Huh? Okay. I love you. I love you, Mary."

"Oh, Sam!"

She snuggled in against my shoulder and began to tremble. I shook her a little. "How about *you*?"

"Me? Oh, I love you, Sam. I do love you. I've loved you ever since—"

"Ever since when?"

I thought she was going to say that she had loved me ever since I took her place in Project Interview; what she said was, "I've loved you ever since you slapped me."

Is that logic?

The driver was cruising slowly east along the Connecticut coast; I had told him just to drive around. I had to wake him up before I could get him to land us in Westport. We went straight to the City Hall.

I stepped up to a counter in the Bureau of Sanctions and Licenses and said to a clerk there, "Is this where we get married?"

"That's up to you," he answered. "Hunting licenses on the left, dog licenses on the right, this desk is the happy medium—I hope." He leered at me.

I don't like smart boys and the gag was ancient. "Very well," I said stiffly, "will you oblige by issuing us a license?"

"Sure thing. Everybody ought to get married at least once; that's what I keep telling my old lady." He got out a large printed form. "Let's have your serial numbers."

We gave them to him. He slid the form into a typer and recorded them. "Now—are either of you married in any other state?" We said that we weren't; he went on, "You're sure, now? If you are and don't tell me, so I can put a rider on this showing the other contracts, this contract ain't valid."

We told him again that we weren't married anywhere. He shrugged and went on, "Term, renewable, or lifetime? If it's over ten years, the fee is the same as for lifetime; if it's under six months, you don't need this; you get the short form from that vendo machine over there by the wall."

I looked at Mary; she said in a very small voice, "Lifetime."

The clerk looked surprised. "Lady, are you sure you know what you're doing? The renewable contract, with the automatic option clause, is just as permanent and you don't have to go through the courts if you change your mind."

I said, "You heard the lady! Put it down."

"Okay, okay—either party, mutual consent, or binding?"

"Binding," I answered and Mary nodded.

"Binding it is," he agreed, stroking the typer. "Now we come to the meat of the matter: who pays and how much? And is it salary or endowment?"

I said, "Salary"; I didn't own enough to set up a fund.

At the same time and in a firm voice Mary said, "Neither."

The clerk said, "Huh?"

"Neither one," Mary repeated. "This is not a financial contract."

The clerk stopped completely, looked at me, and then looked at Mary. "Now, look, lady," he said reasonably, "don't be foolish. You heard the gentleman say that he was willing to do the right thing."

"No."

"Hadn't you better talk it over with your lawyer before you go ahead with this? There's a public communicator out in the hall."

"No!"

"Well—I'm darned if I see what you need a license for."

"Neither do I," Mary told him.

"You mean you don't want this?"

"*No*! Put it down the way I told you to. 'No salary'."

The clerk looked helpless but bent over the typer again. "I guess that's all we need," he said finally. "You've kept it simple, I'll say that for you. 'Do-you both-solemnly-swear-that-the-above-facts-are-true-to-the-best-of-your-knowledge-and-belief-that-you-aren'tentering-into-this-agreement-uninfluenced-by-drugs-orother-illegal-inducements-and-that-there-exists-no-other-covenants-nor-other-legal-impediments-to-the-execution-and-registration-of-the-above-contract?' "

We both said that we did and we were and it was and there weren't. He pulled the form out of the typer. "Let's have your thumb prints . . . okay; that'll be ten dollars, including the federal tax." I paid him and he shoved the form into the copier and threw the switch. "Copies will be mailed to each of you," he announced, "at your serial-number addresses. Now—what type of ceremony are you looking for? Maybe I can be of help."

"We don't want a religious ceremony," Mary told him and I agreed.

He nodded. "Then I've got just what you're looking for. Old Doctor Chamleigh. He's completely nonsectarian, best stereo accompaniment in town, all four walls and full orchestra. He gives you the whole works, fertility rites and everything, but dignified. And he tops it off with a fatherly straight-from-the-shoulder word of advice. Makes you feel *married*."

"No." This time I said it.

"Oh, come, now!" the clerk said to me. "Think of the little lady. If she sticks by what she just swore to—and I'm not saying she won't—she'll never have another chance. Every girl is entitled to a formal wedding. Honest—I don't get much of a commission out of it."

I said, "See here, you can marry us, can't you? Go ahead. Get it over with!"

He looked surprised and said, "Didn't you know? In this state you marry yourself. You've *been* married, ever since you thumbprinted the license."

I said, "Oh—" Mary didn't say anything. We left.

I hired a duo at the landing flat north of town; the heap was ten years old and smelled of it but it had full-automatic and that was all that really mattered. I looped around the city, cut across Manhattan Crater, and set the controls. We didn't talk much; there didn't seem to be much to say just yet. I was happy but terribly nervous—and then Mary put her arms around me and after a bit I wasn't nervous any longer but happier than ever. After a long time that seemed short I heard the *BEEEEP*! *beep-beep BEEEEP*! of the beacon at my shack in the mountains, whereupon I unwound myself, took over manual, and landed. Mary said sleepily, "Where are we?"

"At my cabin in the mountains," I told her.

"I didn't know you had a cabin in the mountains. I thought you were headed for my apartment."

"What, and risk those bear traps? Anyhow, it's not mine; it's ours."

She kissed me again and I loused up the landing. She slid out ahead of me while I was securing the board, then I followed and found her staring at my shack. "Sweetheart, it's beautiful!"

"You can't beat the Adirondacks," I agreed. There was a slight haze with the sun low in the west, giving that wonderful, depth upon depth, stereo look that you never get anywhere else. "I picked this place for the view."

She glanced at it and said, "Yes, yes—but I didn't mean that. I meant your—*our* cabin. Let's go inside, right now."

"Suits," I agreed, "but it's really just a simple shack." Which it was—not even an indoor pool. I had kept it that way on purpose; when I came up here I didn't want to feel that I had brought the city with me. The shell was conventional steel-and-fiberglass construction but I had had it veneered in duroslabs which could not be told from real logs unless you took a knife to them. The inside was just as simple—a big living room with a real, wood-burning fireplace, deep plain-colored rugs, and plenty of low chairs. The services were all in a Kompacto special, the shell of which was buried under the foundation—airconditioner, power pack, cleansing system, sound equipment, plumbing, radiation alarm, servos—everything but the deep-freeze and the other kitchen equipment, out of sight and out of mind. Even the stereo screens were covered up and would not be noticed unless in use. It was about as near as a man could get to a real log cabin and still have inside plumbing.

"*I* think it's just lovely," Mary said seriously. "I wouldn't want to have an ostentatious place."

"You and me both." I worked the combo and the front door dilated; Mary was inside at once. "Hey! Come back here!" I yelled.

She did so. "What's the matter, Sam? Did I do something wrong?"

"You sure did." I dragged her back to me, then swung her up in my arms and carried her across the threshold. I kissed her as I put her down. "There. Now you are in your own house, properly."

The lights had come on as we entered the house. She looked around her, then turned and threw her arms around my neck. "Oh, darling, darling! I can't see—my eyes are all blurry."

Mine were blurry, too, so we took time out for mutual treatment. Then she started wandering around, touching things. "Sam, if I had planned it all myself, it would have been just this way."

"It hasn't but one bathroom," I apologized. "We'll have to rough it a bit."

"I don't mind. In fact I'm glad; now I know you didn't bring any of those women of yours up here."

"What women?"

"You know darn well what women. If you had been planning this as a nest, you would have included a woman's bathroom."

"You know too much."

She did not answer but wandered on out into the kitchen. I heard her squeal. "What's the matter?" I asked, following her out.

"I never expected to find a real kitchen in a bachelor's lodge."

"I'm not a bad cook myself. I wanted a kitchen so I bought one."

"I'm so glad. Now I *will* cook you dinner."

"It's your kitchen; suit yourself. But don't you want to wash up? You can have first crack at the shower if you want it. And tomorrow we'll get a catalog and you can pick out a bathroom of your own. We'll have it flown in."

"No hurry," she said. "You take the first shower. I want to start dinner."

So I did. I guess she did not have any trouble figuring out the controls and filing system in the kitchen, for about fifteen minutes later while I was whistling away in the shower, letting the hot water soak in, I heard a tap on the shower door. I looked through the translucent panel and saw Mary silhouetted there.

"May I come in?" she called out.

"Sure, sure!" I said, "Plenty of room." I opened the door and looked at her. She looked good. For a moment she stood there, letting me look but with a sweet shyness on her face that I had never seen before.

I put on an expression of utter surprise and said, "Honey! What's the matter? Are you sick?"

She looked startled out of her wits and said, "Me? What do you mean?"

"There's not a gun on you anywhere."

She giggled and came at me. "Idiot!" she squealed and started to tickle me. I got her left arm in a bonebreaker but she countered with one of the nastiest judo tricks that ever came out of Japan. Fortunately I knew the answer to it and then we were both on the bottom of the shower and she was yelling, "Let me up! You're getting my hair all wet."

"Does it matter?" I asked, not moving. I liked it there.

"I guess not," she answered softly and kissed me. So I let her up and we rubbed each other's bruises and giggled. It was quite the nicest shower I have ever had.

Mary and I slipped into domesticity as if we had been married for twenty years. Oh, not that our honeymoon was humdrum, far from it, nor that there weren't a thousand things we still had to learn about each other—the point was that we already seemed to know the necessary things about each other that made us married. Especially Mary.

I don't remember those days too clearly, yet I remember every second of them. I went around feeling gay and a bit confused. My Uncle Egbert used to achieve much the same effect with a jug of corn liquor, but we did not even take tempus pills, not then. I was happy; I had forgotten what it was like to be happy, had not known that I was not happy. Interested, I used to be—yes. Diverted, entertained, amused—but not happy.

We did not turn on a stereo, we did not read a book—except that Mary read aloud some Oz books that I had. Priceless items, they were, left to me by my greatgrandfather; she had never seen any. But that did not take us back into the world; it took us farther out.

The second day we did go down to the village; I wanted to show Mary off. Down there they think I am a writer and I encourage the notion, so I stopped to buy a couple of tubes and a condenser for my typer and a roll of copy tape, though I certainly had no intention of doing any writing, not this trip. I got to talking with the storekeeper about the slugs and Schedule Bare Back—sticking to my public *persona* of course. There had been a local false alarm and a native in the next town had been shot by a triggerhappy constable for absentmindedly showing up in public in a shirt. The storekeeper was indignant. I suggested that it was his own fault; these were war conditions.

He shook his head. "The way I see it we would have had no trouble at all if we had tended to our own business. The Lord never intended men to go out into space. We should junk the space stations and stay home; then we would be all right."

I pointed out that the slugs came here in their own ships; we did not go after them—and got a warning signal from Mary not to talk too much.

The storekeeper placed both hands on the counter and leaned toward me. "We had no trouble *before* space travel; you'll grant that?"

I conceded the point. "Well?" he said triumphantly.

I shut up. How can you argue?

We did not go into town after that and saw no one and spoke to no one. On the way home (we were on foot) we passed close to the shack of John the Goat, our local hermit. Some say that John used to keep goats; I know he smelled like one. He did what little caretaking I required and we respected each other, that is, we saw each other only when strictly necessary and then as briefly as possible. But, seeing him, I waved.

He waved back. He was dressed as usual, stocking cap, an old army blouse, shorts, and sandals. I thought of warning him that a man had been shot nearby for not complying with the bare-to-the-waist order, but decided against it. John was the perfect anarchist; advice would have made him only more stubborn. Instead I cupped my hands and shouted, "Send up the Pirate!" He waved again and we went on without coming within two hundred feet of him, which was about right unless he was downwind.

"Who's the Pirate, darling?" Mary asked.

"You'll see."

Which she did; as soon as we got back the Pirate came in, for I had his little door keyed to his own *meow* so that he could let himself in and out—the Pirate being a large and rakish tom cat, half red Persian and half travelling salesman. He came in strutting, told me what he thought of people who stayed away so long, then headbumped my ankle in forgiveness. I reached down and roughed him up, then he inspected Mary.

I was watching Mary. She had dropped to her knees and was making the sounds used by people who understand cat protocol, but the Pirate was looking her over suspiciously. Suddenly he jumped into her arms and commenced to buzz like a faulty fuel meter, while bumping her under the chin.

I sighed loudly. "That's a relief," I announced. "For a moment I didn't think I was going to be allowed to keep you."

Mary looked up and smiled. "You need not have worried; I get along with cats. I'm two-thirds cat myself."

"What's the other third?"

She made a face at me. "You'll find out." She was scratching the Pirate under the chin; he was stretching his neck and accepting it, with an expression of indecent and lascivious pleasure. I noticed that her hair just matched his fur.

"Old John takes care of him while I'm away," I explained, "but the Pirate belongs to me—or vice versa."

"I figured that out," Mary answered, "and now I belong to the Pirate, too; don't I, Pirate?"

The cat did not answer but continued his shameless lallygagging—but it was clear that she was right. Truthfully I was relieved; aelurophobes cannot understand why cats matter to aelurophiles, but if Mary had turned out not to be one of the lodge it would have fretted me.

From then on the cat was with us—or with Mary—almost all the time, except when I shut him out of our bedroom. That I would not stand for, though both Mary and the Pirate thought it small of me. We even took him with us when we went down the canyon for target practice. I suggested to Mary that it was safer to leave him behind but she said, "See to it that *you* don't shoot him. I won't."

I shut up, somewhat stung. I am a good shot and remain so by unrelenting practice at every opportunity—even on my honeymoon. No, that's not quite straight; I would have skipped practice on that occasion had it not turned out that Mary really liked to shoot. Mary is not just a good trained shot; she is the real thing, an Annie Oakley. She tried to teach me, but it can't be taught, not that sort of shooting.

I asked why she carried more than one gun. "You might need more than one," she told me. "Here—take my gun away from me."

I went through the motions of a standing, face-to-face disarm, bare hands against gun. She avoided it easily and said sharply, "What are you doing? Disarming me, or asking me to dance? Make it good."

So I made it good. I'll never be a match-medal shot but I stood at the top of my class in barroom. If she had not given in to it, I would have broken her wrist.

I had her gun. Then I realized that a second gun was pressing against my belly button. It was a lady's social gun, but perfectly capable of making two dozen widows without recharging. I looked down, saw that the safety was off, and knew that my beautiful bride had only to tense one muscle to burn a hole through me. Not a wide one, but sufficient.

"Where in the deuce did you find that?" I asked—and well I might, for neither one of us had bothered to dress when we came out. The area was very deserted and often it did not seem worthwhile to take the trouble; it was my land.

So I was much surprised as I would have sworn that the only gun Mary had with her was the one she had carried in her sweet little hand.

"It was high up on my neck, under my hair," she said demurely. "See?" I looked. I knew a phone could be hidden there but I had not thought of it for a gun—though of course I don't use a lady-size weapon and I don't wear my hair in long flame-colored curls.

Then I looked again, for she had a third gun shoved against my ribs. "Where did that one come from?" I asked.

She giggled. "Sheer misdirection; it's been in plain sight all the time." She would not tell me anything further and I never did figure it out. She should have clanked when she walked—but she did not. Oh my, no!

I found I could teach her a few things about hand-to-hand, which salved my pride. Bare hands are more useful than guns anyhow; they will save your life oftener. Not that Mary was not good at it herself; she packed sudden death in each hand and eternal sleep in her feet. However, she had the habit, whenever she lost a fall, of going limp and kissing me. Once, instead of kissing her back, I shook her and told her she was not taking it seriously. Instead of cutting out the nonsense, she continued to remain limp, let her voice go an octave lower, and said, "Don't you realize, my darling, that these are not my weapons?"

I knew that she did not mean that guns *were* her weapons; she meant something older and more primitive. True, she could fight like a bad-tempered Kodiak bear and I respected her for it, but she was no Amazon. An Amazon doesn't look that way with her head on a pillow. Mary's true strength lay in her other talents.

Which reminds me; from her I learned how it was that I was rescued from the slugs. Mary herself had prowled the city for days, not finding me, but reporting accurately the progress with which the city was being "secured". Had she not been able to spot a possessed man, we might have lost many agents fruitlessly—and I might never have gotten free from my master. As a result of the data she brought in, the Old Man drew back and concentrated on the entrances and exits to the city. And I was rescued, though they weren't waiting for me in particular . . . at least I don't suppose they were.

Or maybe they were. Something Mary said led me to think that the Old Man and she had worked watch on and watch off, heel-and-toe, covering the city's main launching platform, once it was evident that there was a focal point active in the city. But that could not have been correct—the Old Man would not have neglected his job to search for one agent. I must have misunderstood her.

I never got a chance to pursue the subject; Mary did not like digging into the past. I asked her once why the Old Man had relieved her as a presidential guard. She said, "I stopped being useful at it," and would not elaborate. She knew that I eventually would learn the reason: that the slugs had found out about sex, thus rendering her no longer useful as a touchstone for possessed males. But I did not know it then; she found the subject repulsive and refused to talk about it. Mary spent less time borrowing trouble than anyone I ever knew.

So little that I almost forgot, during that holiday from the world, what it was we were up against.

Although she would not talk about herself, she let me talk about myself. As I grew still more relaxed and still happier I tried to explain what had been eating me all my life. I told her about resigning from the service and the knocking around I had done before I swallowed my pride and went to work for the Old Man. "I'm a peaceable guy," I told her, "but what's the matter with me? The Old Man is the only one I've ever been able to subordinate myself to—and I still fight with him. Why, Mary? Is there something wrong with me?"

I had my head in her lap; she picked it up and kissed me. "Heavens, boy, don't you know? There's nothing really wrong with you; it's what has been done to you."

"But I've always been that way—until now."

"I know, ever since you were a child. No mother and an arrogantly brilliant father—you've been slapped around so much that you have no confidence in yourself."

Her answer surprised me so much that I reared up. Me? No *confidence* in myself? "Huh?" I said. "How can you say that? I'm the cockiest rooster in the yard."

"Yes. Or you used to be. Things will be better now." And there's where it stood for she took advantage of my change in position to stand up and say, "Let's go look at the sunset."

"Sunset?" I answered. "Can't be—we just finished breakfast." But she was right and I was wrong, a common occurrence.

The mix-up about the time of day jerked me back to reality. "Mary, how long have we been up here? What's the date?"

"Does it matter?"

"You're dam right it matters. It's been more than a week. I'm sure. One of these days our phones will start screaming and then it's back to the treadmill."

"In the meantime what difference does it make?"

She was right but I still wanted to know what day it was. I could have found out by switching on a stereo screen, but I would probably have bumped into a newscast—and I did not want that; I was still pretending that Mary and I were away in a different world, a *safe* world, where titans did not exist. "Mary," I said fretfully, "how many tempus pills have you?"

"None."

"Well—I've got enough for both of us. Let's stretch it out, make it last a long time. Suppose we have just twenty-four more hours; we could fine it down into a month, subjective time."

"No."

"Why not? Let's *carpe* that old *diem* before it gets away from us."

She put a hand on my arm and looked up into my eyes. "No, darling, it's not for me. I must live each moment as it comes and not let it be spoiled by worrying about the moment ahead." I suppose I looked stubborn for she went on, "If you want to take them, I won't mind, but please don't ask me to."

"Confound it. I'm not going on a joy ride alone." She did not answer, which is the damnedest way of winning an argument I know of.

Not that we argued. If I tried to start one—which I did, more than once—Mary would give in and somehow it would work out that I was mistaken. I did try several times to find out more about her; it seemed to me that I ought to know something about the woman I was married to. To one question she looked thoughtful and answered presently, "I sometimes wonder whether I ever did have a childhood—or was it something I dreamed last night?"

I asked her point blank what her name was. "Mary," she said tranquilly.

"Mary really is your name, then?" I had long since told her my right name, but we had agreed to go on using "Sam".

"Certainly it's my name, dear. I've been 'Mary' since you first called me that."

"Oh. All right, your name is Mary. You are my beloved Mary. But what was your name before?"

Her eyes held an odd, hurt look, but she answered steadily, "I was once known as 'Allucquere'."

"'Allucquere'," I repeated, savoring it. "Allucquere. What a strange and beautiful name. Allucquere. It has a rolling majesty about it. My darling Allucquere."

"My name is Mary, now." And that was that. Somewhere, somewhen, I was becoming convinced, Mary had been hurt, badly hurt. But it seemed unlikely that I was ever going to know about it. She had been married before, I was fairly certain; perhaps that was it.

Presently I ceased to worry about it. She was what she was, now and forever, and I was content to bask in the warm light of her presence. "Age cannot wither her nor custom stale her infinite variety."

I went on calling her "Mary" since she obviously preferred it and that was how I thought of her anyhow, but the name that she had once had kept running through my mind. Allucquere . . . Allucquere . . . I rolled it around my tongue and wondered how it was spelled.

Then suddenly I knew how it was spelled. My pesky packrat memory had turned up the right tab and now was pawing away at the shelves in the back of my mind where I keep the useless junk that I don't think about for years on end and am helpless to get rid of. There had been a community, a colony that used an artificial language, even to given names—

The Whitmanites, that was it—the anarchist-pacifist cult that got kicked out of Canada, then failed to make a go of it in Little America. There was a book, written by their prophet. *The Entropy of Joy*—I had not read it but I had skimmed it once; it was full of pseudomathematical formulas for achieving happiness.

Everybody is for "happiness", just as they are against "sin", but the cult's practices kept getting them in hot water. They had a curious and yet very ancient solution to their sexual problems, a solution which appeared to suit them but which produced explosive results when the Whitmanite culture touched any other pattern of behavior. Even Little America had not been far enough away for them; I had heard somewhere that the remnants had emigrated to Venus—in which case they must all be dead by now.

I put it out of my mind. If Mary were a Whitmanite, or had been reared that way, that was her business. I certainly was not going to let the cult's philosophy cause us a crisis now or ever; marriage is not ownership and wives are not property.

If that were all there was to what Mary did not want me to know about her, then I simply would not know it. I had not been looking for virginity wrapped in a sealed package; I had been looking for *Mary*.

XXII

The next time I mentioned tempos pills, she did not argue but suggested that we hold it down to a minimum dose. It was a fair compromise—and we could always take more.

I prepared it as injections so that it would take hold faster. Ordinarily I watch a clock after I've taken tempus; when the second hand stops I know that I'm loaded. But my shack has no clocks and neither of us was wearing ringwatches. It was just sunrise and we had been awake all night, cuddled upon a big low half-moon couch in front of the fireplace.

We continued to lie there for a long time, feeling good and dreamy, and I was half considering the idea that the drug had not worked. Then I realized that the sun had stopped rising. I watched a bird fluttering past the view window. If I stared at him long enough, I could see his wings move.

I looked back from it to my wife, admired the long sweep of her limbs and the sudden, rising curves. The Pirate was curled up on her stomach, a cubical cat, with his paws tucked in as a muff. Both of them seemed asleep. "How about some breakfast?" I said, "I'm starved."

"You fix it," she answered. "If I move, I'll disturb Pirate."

"You promised to love, honor, and fix me breakfast," I replied and tickled the soles of her feet. She gasped and drew up her legs; the cat squawked and landed on the floor.

"Oh dear!" she said, sitting up. "You made me move too fast and now I've offended him."

"Never mind the cat, woman; you're married to me." But I knew that I had made a mistake. In the presence of others, people not under the drug, one should move with great care. I simply hadn't thought about the cat; no doubt he thought we were behaving like drunken jumping jacks. I intentionally slowed down and tried to woo him.

No use—he was streaking toward his door. I could have stopped him, for to me his movement was a molasses crawl, but had I done so I would simply have frightened him more. I let him go and went to the kitchen.

Do you know, Mary was right; tempus fugit drug is no good for honeymoons. The ecstatic happiness that I had felt before was masked by the euphoria of the drug, though I did not feel the loss at the time because the drug's euphoria is compelling. But the loss was real; I had substituted for the true magic a chemical fake.

And there are some precious things which cannot or should not be hurried. Mary was right, as usual. Nevertheless it was a good day—or month, however you care to look at it. But I wished that I had stuck to the real thing.

Late that evening we came out of it. I felt the slight irritability which marks the loosening hold of the drug, found my ringwatch and timed my reflexes. When they were back to normal I timed Mary's, whereupon she informed me that she had been out of it for twenty minutes or so—pretty accurate matching of dosage to have been based on body weights alone.

"Do you want to go under again?" she asked me.

I pulled her to me and kissed her. "No; frankly, I'm glad to be back."

"I'm so glad."

I had the usual ravenous appetite that one has afterward no matter how many times one eats while under; I mentioned it. "In a minute," she said. "I want to call Pirate. He has not been in all day."

I had not missed him during the day—or "month"—just past; the euphoria is like that. "Don't worry about it," I told her. "He often stays out all day."

"He has not before."

"He has with me," I answered.

"I think I offended him—I know I did."

"Then he is probably down at Old John's. That is his usual way of punishing me when he does not like the service. He'll be all right."

"But it's late at night—I'm afraid a coyote might get him."

"Don't be silly; there are no coyotes this far east."

"A fox, then—or something. Do you mind, darling? I'll just step out and call him." She headed for the door.

"Put on something, then," I ordered. "It will be nippy out there."

She hesitated, then went back to the bedroom and got a negligee I had bought for her the day we had gone down to the village. She went out; I put more wood on the fire and went into the kitchen.

She must have left the door dilated for, while I was trying to make up my mind between convenience of a "Soup-to-Nuts" and the pleasure of planning a meal from separate units, I heard her saying, "Bad, bad cat! You worried mama," in that cooing voice suitable for babies and felines.

I called out, "Fetch him in and close the door—and mind the penguins!" She did not answer and I did not hear the door relax, so I went back into the living room.

She was just coming in and did not have the cat with her. I started to speak and then caught sight of her eyes. They were staring, filled with unspeakable horror. I said, "Mary!" and started toward her.

She seemed to see me and turned back toward the door; her movements were jerky, spasmodic. As she turned I saw her shoulders.

Under the negligee was a hump.

I don't know how long I stood there. Probably a split second but it is burned into me as endless. I jumped toward her and grabbed her by the arms. She looked at me and her eyes were no longer wells of horror but merely dead.

She gave me the knee.

I squeezed and managed to avoid the worst of it. Look—I know you don't tackle a dangerous opponent by grabbing his upper arms, but this was my *wife*. I couldn't come at Mary with a feint-shift-and-kill.

But the slug had no compunctions about me. Mary—or *it*—was giving me everything she had and I had all I could do to keep from killing her. I had to keep her from killing me—and I had to kill the slug—and I had to keep the slug from getting at me or I would not be able to save her.

I let go with one hand and jabbed at her chin. The blow should have knocked her out but it did not even slow her down. I grabbed again, with both arms and legs, trying to encase her in a bear hug to immobilize her without injuring her. We went down together, Mary on top. I shoved the top of my head into her face to stop her biting me.

I held her so, curbing her strong body by sheer bulk of muscle. Then I tried to paralyze her with nerve pressure, but she knew what I was up to, knew the key spots as well as I did—and I was lucky that I was not myself paralyzed.

There was one thing left that I could do: clutch the slug itself—but I knew the shattering effect that had on the host. It might not kill her; again it might. It was sure to hurt her horribly. I wanted to make her unconscious, then remove the slug gently before I killed it . . . drive it off with heat or force it to turn loose with mild shocks.

Drive it off with heat—

But I was given no time to develop the idea; she got her teeth in my ear. I shifted my right arm and grabbed at the slug. Nothing happened. Instead of sinking my fingers into a slimy mess I found that this slug had a horny, leathery covering; it was as if I had clutched a football. Mary jerked when I touched it and took away part of my ear, but there was no bonecrushing spasm; the slug was still alive and in control of her.

I tried to get my fingers under it, to pry it loose; it clung like a suction cup. My fingers would not go under.

In the meantime I was suffering damages in other places. I rolled over and got to my knees, still hugging her. I had to let her legs free and that was bad, but I bent her across a knee and then struggled to my feet. I dragged and carried her to the fireplace.

She knew what I was doing and almost got away from me; it was like trying to wrestle a mountain lion. But I got her there, grabbed her by her mop of hair and slowly forced her shoulders over the fire.

I meant—I swear that I meant only to singe it, force it to drop off to escape that heat. But she struggled so hard that I slipped, banging my own head against the arch of the opening and dropping her shoulders against the coals.

She screamed and bounded out of the fire, carrying me with her. I struggled to my feet, still dazed by the wallop I had taken in the head, and saw her collapsed on the floor. Her hair, her beautiful hair, was burning.

So was her negligee. I slapped at them both with my hands. The slug was no longer on her. Still crushing the flames with my hands I glanced around and saw it lying on the floor in front of the fireplace—and the Pirate was sniffing at it.

"Get away from there!" I yelled. "Pirate! Stop that!" The cat looked up inquiringly, as if this were some new and interesting game. I went on doing what I had to do, making absolutely certain that the fire was out, both hair and clothing. When I was sure, I left her; there was not even time to make certain that she was still alive. There was something more urgent to do.

What I wanted was the fireplace shovel; I did not dare risk touching the thing with my hands. I turned to get the shovel.

But the slug was no longer on the floor; it had gotten Pirate. The cat was standing rigid, feet wide apart, and the slug was settling into place.

Perhaps it would have been better had I been a few seconds later; perhaps the slug, mounted on the cat, would have escaped outdoors. I would not have pursued it into the dark. I don't think I would have. But I dived at Pirate and got him by his hind legs just as he made his first controlled movement.

Handling a frenzied, full-grown cat with bare hands is reckless at best; controlling one which is already controlled by a titan is impossible. Hands and arms being slashed by claws and teeth at every step, I hurried again to the fireplace.

This time I made sure. Despite Pirate's wails and struggles I forced the slug against the coals and held it there, cat fur and my hands alike burning, until the slug dropped off directly into the flames. Then I took Pirate out and laid him on the floor. He was no longer struggling. I did for him what I had done for Mary, made sure that he was no longer burning anywhere and went back to Mary.

She was still unconscious. I squatted down beside her and sobbed.

An hour later I had done what I could for Mary. Her hair was almost gone from the left side of her head and there were burns on her shoulders and neck. But her pulse was strong, her respiration steady though fast and light, and I did not judge that she would lose much body fluid. I dressed her burns—I keep a rather full stock out there in the country—and gave her an injection to make her sleep. Then I had time for Pirate.

He was still on the floor where I had left him and he did not look good. He had gotten it much worse than Mary and probably flame in his lungs as well. I thought he was dead, but he lifted his head when I touched him. "I'm sorry, old fellow," I whispered. I think I heard him mew.

I did for him what I had done for Mary, except that I was afraid to give him a soporific. After that I went into the bathroom and looked myself over.

The ear had stopped bleeding and I decided to ignore it, for the time being. Someday, when I had time, it would need to be rebuilt. My hands were what bothered me. I stuck them under hot water and yelped, then dried them in the air blast and that hurt, too. I could not figure out how I could dress them, and, besides, I needed to use them.

Finally I dumped about an ounce of the jelly for burns into each of a pair of plastic gloves and put them on. The stuff included a local anesthetic; I could get by. Then I went to the stereophone and called the village medical man. I explained to him carefully and correctly what had happened and what I had done about it and asked him to come at once.

"At *night*?" he said. "You must be joking."

I said that I decidedly was not joking.

He answered, "Don't ask the impossible, man. Yours makes the fourth alarm in this county; nobody goes out at night. You've done everything that can be done tonight; I'll stop in and see your wife first thing in the morning."

I told him to go straight to the devil first thing in the morning and switched off.

Pirate died a little after midnight. I buried him at once so that Mary would not see him. Digging hurt my hands but he did not take a very big hole. I said goodbye to him and came back in. Mary was resting quietly; I brought a chair to the bed and watched over her. Probably I dozed from time to time; I can't be sure.

XXIII

About dawn Mary began to struggle and moan. I stepped to the bed and put a hand on her. "There, baby, there—It's all right. Sam's here."

Her eyes opened and for a moment held the same horror they had held when she was first possessed. Then she saw me and relaxed. "Sam! Oh, darling, I've had the most terrible dream."

"It's all right," I repeated.

"Why are you wearing gloves?" She became aware of her own dressings; she looked dismayed and said, "It wasn't a dream!"

"No, dearest, it wasn't a dream. But it's all right; I killed it."

"You killed it? You're sure it's dead?"

"Quite sure." The house still reeked with the stench of its dying.

"Oh. Come here, Sam. Hold me tight."

"I'll hurt your shoulders."

"Hold me!" So I did, while trying to be careful of her burns, although she seemed indifferent to them. Presently her trembling slowed down and stopped almost completely. "Forgive me, darling—I'm being weak and womanish."

"You should have seen the shape I was in when they got me back."

"I did see. Now tell me what happened; I must know. The last I remember you were trying to force me into the fireplace."

"Look. Mary, I couldn't help it; I had to—I couldn't get it off!"

She shook my shoulders and now it was she comforting me. "I know, darling, I know—and thank you for doing it! Thank you from the bottom of my heart. Again I owe you everything."

We both cried a bit and presently I blew my nose and went on, "You did not answer when I called you, so I went into the living room and there you were."

"I remember—oh darling, I tried so hard!"

I stared at her. "I know you did—you tried to leave. But how did you? Once a slug gets you, that's it. There's no way to fight it."

"Well, I lost—but I tried." There was no answer to the mystery. Somehow, Mary had forced her will against that of a parasite—and that can't be done. I *know*. True, she had succumbed, but I knew then that I was married to a human who was tougher and stronger than I was, despite her lovely curves and her complete femininity.

I had a sneaking hunch that had Mary not been able to resist the slug by some amount, however slight, I would have lost the struggle, handicapped as I was by what I could not do.

"I should have used a light, Sam," she went on, "but it never occurred to me to be afraid *here*." I nodded; this was the safe place, like crawling into bed or into sheltering arms. "Pirate came to me at once. I didn't see the thing until I had reached down and touched him. Then it was too late." She sat up, supporting herself on one arm. "Where is he, Sam? Is he all right? Call him in."

So I had to tell her about Pirate. She listened without expression, nodded and never referred to him again. I changed the subject by saying, "Now that you are awake I had better fix you some breakfast."

"*Don't go*!" I stopped. "Don't go out of my sight at all," she went on, "Not for any reason. I'll get up in a moment and get breakfast."

"The hell you will. You'll stay right in that bed, like a good little girl."

"Come here and take off those gloves. I want to see your hands." I did not take them off—could not bear to think about it; the anesthesia had worn off. She nodded and said grimly, "Just as I thought. You were burned worse than I was."

So she got breakfast. Furthermore she ate—I wanted nothing but a pot of coffee. I did insist that she drink a lot, too; large area burns are no joke. Presently she pushed aside her plate, looked at me and said, "Darling, I'm not sorry it happened. Now I know. Now we've both been there." I nodded humbly, knowing what she meant. Sharing happiness is not enough. She stood up and said, "Now we must go."

"Yes," I agreed, "now we must go. I want to get you to a doctor as soon as possible."

"I did not mean that."

"I know you didn't." There was no need to discuss it further; we both knew that the music had stopped and that now was time to go back to work. The heap we had arrived in was still sitting on my landing flat, piling up rental charges. It took about three minutes to burn the dishes, switch off everything but the permanent circuits, and get ready. I could not find my shoes but Mary remembered where I had left them.

Mary drove, because of my hands. Once in the air she turned to me and said, "Let's go straight to the Section offices. We'll get treatment there and find out what has been going on—or are your hands hurting too badly?"

"Suits," I agreed. My hands were hurting but they would not be any worse for another hour of waiting. I wanted to learn the situation as soon as possible—and I wanted to get back to work. I asked Mary to switch on the squawk screen; I was as anxious to catch a newscast now as I had been anxious to avoid them before. But the car's communication equipment was as junky as the rest of it; we could not even pick up audio. Fortunately the remote-control circuits were still okay, or Mary would have had to buck it through traffic by hand.

A thought had been fretting me for some time; I mentioned it to Mary. "A slug would not mount a cat just for the hell of it, would it?"

"I suppose not."

"But *why*? It doesn't make sense. But it *has* to make sense; everything they do makes sense, grisly sense, from their viewpoint."

"But it did make sense. They caught a human that way."

"Yes, I know. But how could they plan it? Surely there aren't enough of them that they can afford to place themselves on cats on the off chance that the cat might catch a human. Or are there enough?" I remembered the speed with which a slug on an ape's back had turned itself into two, I remembered Kansas City, saturated, and shivered.

"Why ask me, darling? I don't have an analytical brain." Which was true, in a way; there is nothing wrong with Mary's brain but she jumps logic and arrives at her answers by instinct. Me, I have to worry it out by logic.

"Drop the modest little girl act and try this on for size: the first question is, 'Where did the slug come from?' It didn't walk; it had to get to the Pirate on the back of another host. What host? I'd say it was Old John—John the Goat. I doubt if Pirate would have let any other human get close to him."

"Old John?" Mary closed her eyes, then opened them. "I can't get any feeling about it. I was never close to him."

"It does not matter; by elimination I think it must be true. Old John wore a coat when everyone else was complying with the Bare Back order . . . getting away with it because he shuns people. Ergo, he was hag-ridden before Schedule Bare Back. But that does not get me any further. Why would a slug single out a hermit way up in the mountains?"

"To capture you."

"Me?"

"To *recapture* you."

It made some sense. Possibly any host that ever escaped them was a marked man; in that case the dozen-odd Congressmen and any others we had rescued—including Mary—were in special danger. I'd mark that down to report for analysis. No, not Mary—the only slug that knew she had been possessed was dead.

On the other hand they might want me in particular. What was special about me? I was a secret agent. More important, the slug that had ridden me must have known what I knew about the Old Man and known that I had access to him. That would be reason enough to try to get me back. I held an emotional certainty that the Old Man was their principal antagonist; the slug must have known that I thought so; he had full use of my mind.

That slug had even met the Old Man, talked with him. Wait a minute—that slug was dead. And my theory came tumbling down.

And built up again at once. "Mary," I asked, "have you used your apartment since the morning you and I had breakfast there?"

"No. Why?"

"Don't. Don't go back there for any purpose. I recall thinking, while I was with *them*, that I would have to boobytrap it."

"Well, you didn't, did you? Or did you?"

"No, I did not. But it may have been booby-trapped since then. There may be the equivalent of Old John waiting, spider fashion, for you—or me—to return there." I explained to her McIlvaine's theory about the slugs, the "group memory" idea. "I thought at the time he was spinning the dream stuff scientists are so fond of. But now I don't know; it's the only hypothesis I can think of that covers everything . . . unless we assume that the titans are so stupid that they would as soon try to catch fish in a bathtub as in a brook. Which they aren't."

"Just a moment, dear—by Dr. McIlvaine's theory each slug is really every other slug; is that it? In other words that *thing* that caught me last night was just as much the one that rode you when you were with them as was the one that actually did ride you—Oh, dear, I'm getting confused. I mean—"

"That's the general idea. Apart, they are individuals; in direct conference they merge their memories and Tweedledum becomes exactly like Tweedledee. Then, if that is true, this one last night remembers everything it learned from me provided it had direct conference with the slug that rode me, or any other slug that had had, or a slug that had been linked through any number of slugs by direct conference to the slug that had ridden me, after the time it did—which you can bet it did, from what I know of their habits. It would have—the first one, I mean . . . wait a minute; this is getting involved. Take three slugs; Joe, Moe, and uh, Herbert. Herbert is the one last night; Moe is the one which—"

"Why give them names if they are not individuals?" Mary wanted to know.

"Just to keep them— No reason; let it lie that if McIlvaine is right there are hundreds of thousands, maybe millions, of slugs who know exactly who you and I are, by name and by sight and everything, know where your apartment is, where my apartment is, and where our cabin is. They've got us on a list."

"But—" She frowned. "That's a horrid thought, Sam. How would they know when to find us at the cabin? You didn't tell anybody we were going and I did not even know. Would they simply stake it out and wait? Yes, I suppose they would."

"They must have. We don't know that waiting matters to a slug; time may mean something entirely different to them."

"Like Venerians," she suggested. I nodded; a Venerian is likely as not to "marry" his own great-great-granddaughter—and be younger than his descendants. It depends on how they estivate, of course.

"In any case," I went on, "I've got to report this, including our guesses as to what is behind it, for the boys in the analytical group to play with."

I was about to go on to say that, if we were right, the Old Man would have to be especially careful, as it was he and not Mary and myself that they were after. But my phone sounded for the first time since my leave had started. I answered and the Old Man's voice cut in ahead of the talker's: "Report in person."

"We're on our way," I acknowledged. "About thirty minutes."

"Make it sooner. You use Kay Five; tell Mary to come in by Ell One. Move." He switched off before I could ask him how he had known that Mary was with me.

"Did you get it?" I asked Mary.

"Yes, I was in the circuit."

"Sounds as if the party was about to start."

It was not until we had landed that I began to realize how drastically the situation had changed. We were complying with Schedule Bare Back; we had not heard of Schedule Sun Tan. Two cops stopped us as we got out. "Stay where you are!" one of them ordered. "Don't make any sudden moves."

You would not have known they were cops, except for the manner and the drawn guns. They were dressed in gun belts, shoes, and skimpy breech clouts—little more than straps. A second glance showed their shields clipped to their belts. "Now," the same one went on, "Off with those pants, buddy."

I did not move quickly enough to suit him. He barked, "Make it snappy! There have been two shot trying to escape already today; you may be the third." "Do it, Sam," Mary said quietly. I did it. My shorts were a one-piece garment, with the underwear part built in; without them, I stood dressed in my shoes and a pair of gloves, feeling like a fool—but I had managed to keep both my phone and my gun covered up as I took off my shorts.

The cop made me turn around. His mate said, "He's clean. Now the other one." I started to put my shorts back on and the first cop stopped me.

"Hey! You looking for trouble? Leave 'em off."

I said reasonably, "You've searched me. I don't want to get picked up for indecent exposure."

He looked surprised, then guffawed and turned to his mate. "You hear that. Ski? He's afraid he'll be arrested for indecent exposure."

The second one said patiently, "Listen, yokel, you got to cooperate, see? You know the rules. You can wear a fur coat for all of me—but you won't get picked up for indecent exposure; you'll get picked up DOA. The Vigilantes are a lot quicker to shoot than we are." He turned to Mary. "Now, lady, if you please."

Without argument Mary started to remove her shorts. The second cop said kindly, "That isn't necessary lady, not the way those things are built. Just turn around slowly."

"Thank you," Mary said and complied. The policeman's point was well taken; Mary's briefies appeared to have been sprayed on, and her halter also quite evidently contained nothing but Mary.

"How about those bandages?" the first one commented. "Her clothes sure can't cover anything." I thought, brother, how wrong you are; I'll bet she's packing at least two guns this minute, besides the one in her purse—and I'll bet one of them is ready to heat up quicker than yours! But what I said was,

"She's been badly burned. Can't you see that?" He looked doubtfully at the sloppy job I had done on the dressings; I had worked on the principle that, if a little is good, more is better, and the dressing across her shoulders where she had been burned the worst undoubtedly could have concealed a slug, if that had been the purpose. "Mmmm . . ." he said, "*If* she was burned."

"Of course she was burned!" I felt my judgment slipping away; I was the perfect heavy husband, unreasonable where my wife was concerned. I knew it—and I liked it that way. "Damn it, look at her hair! Would she ruin a head of hair like that just to fool you?"

The first cop said darkly, "One of *them* would."

The more patient one said, "Carl is right. I'm sorry, lady; we'll have to disturb those bandages."

I said excitedly, "You can't do that! We're on our way to a doctor. You'll just—"

Mary said, "Help me, Sam. I can't take them off myself."

I shut up and started to peel up one corner of the big dressing, my hands trembling with rage. Presently the older, more kindly one whistled and said, "I'm satisfied. How about you, Carl?"

"Me, too. Ski. Gripes, girlie, it looks like somebody tried to barbecue you. What happened?"

"Tell them, Sam."

So I did. The older cop finally commented, "I'd say you got off easy—no offense, madam. So it's cats, now, eh? Dogs I knew about. Horses, yes. But cats—you wouldn't think the ordinary cats could carry one." His face clouded. "We got a cat and now we'll have to get rid of it. My kids won't like that."

"I'm sorry," Mary told him and sounded as if she meant it.

"It's a bad time for everybody. Okay, folks, you can go—"

"Wait a minute," the first one said. "Ski, if she goes through the streets with that thing on her back somebody is likely to burn her."

The older one scratched his chin. "That's true," he said to Mary. "I'd say you couldn't stand to have that dressing off. We'll just have to dig up a prowl car for you."

Which they did—one was just landing and they hailed it. I had to pay the charges on the rented wreck, then I went along, as far as Mary's entrance. It was in a hotel, through a private elevator; I got in with her to avoid explanations, then went back up after she had gotten out at a level lower than the obvious controls of the car provided for. I was tempted to go on in with her, but the Old Man had ordered me to come in by Kay Five, so Kay Five it was.

I was tempted, too, to put my shorts back on. In the prowl car and during a quick march through a side door of the hotel, with police around us to keep Mary from being shot, I had not minded so much—but it took nerve to step out of the elevator and face the world without pants.

I need not have worried. The short distance I had to go was enough to show me that a fundamental custom had gone with last year's frost. Most men were wearing straps—codpieces, really—as the cops had been, but I was not the only man in New Brooklyn stark naked to his shoes. One in particular I remember; he was leaning against a street roof stanchion and searching with cold eyes every passer-by. He was wearing nothing but slippers and a brassard lettered with "VIG"—and he was carrying an Owens mob gun under his arm.

I saw three more like him before I reached Kay Five; I was glad that I was carrying my shorts.

Some women were naked, some were not—but those who were not might as well have been—string brassieres, translucent plastic trunks, nothing that could possibly hide a slug.

Most of the women, I decided, would have looked better in clothes, preferably togas. If this was what the preachers had been worrying about all these years, then they had been barking up the wrong tree; it was nothing to arouse the happy old beast in men. The total effect was depressing. That was my first impression—but before I got to my destination even that had worn off. Ugly bodies weren't any more noticeable than ugly taxicabs; the eye discounted them automatically. And so it appeared to be with everybody else, too; those on the streets seemed to have acquired utter indifference. Maybe Schedule Bare Back got them ready for it.

One thing I did not notice consciously until much later: after the first block I was unaware of my own nakedness. I noticed other people long after I had forgotten my own bare skin. Somehow, some way, the American community had been all wrong about the modesty taboo and had been wrong for centuries.

When tackled firmly, it was as empty as the ghost that turns out to be a flapping window drape. It did not mean a thing, either pro or con, moral or immoral. Skin was skin and what of it?

I was let in to see the Old Man at once. He looked up and growled, "You're late."

I answered, "Where's Mary?"

"In the infirmary, getting treated and dictating her report. Let's see your hands."

"I'll show them to the doctor, thanks," I replied, making no move to take off the gloves. "What's up?"

"If you would ever bother to listen to a newscast," he grumbled, "you would know what was up."

XXIV

I'm glad I had not looked at a newscast; our honeymoon would never have gotten to first base. While Mary and I had each been telling the other how wonderful the other one was the war had almost been lost—and I was not sure about that "almost". My suspicion that the slugs could, if necessary, hide themselves on any part of the body and still control hosts had proved to be right—but I had guessed that from my own experience on the streets. It had been proved by experiments at the National Zoo before Mary and I had holed up on the mountain, although I had not seen the report. I suppose the Old Man knew it; certainly the President knew it and the other top VIPs.

So Schedule Sun Tan replaced Schedule Bare Back and everybody skinned down to the buff.

Like hell they did! The matter was still "Top Secret" and the subject of cabinet debates at the time of the Scranton Riot. Don't ask me why it was top secret, or even restricted; our government has gotten the habit of classifying anything as secret which the all-wise statesmen and bureaucrats decide we are not big enough boys and girls to know, a Mother-Knows-Best-Dear policy. I've read that there used to be a time when a taxpayer could demand the facts on anything and get them. I don't know; it sounds Utopian.

The Scranton Riot should have convinced anybody that the slugs were loose in Zone Green despite Schedule Bare Back, but even that did not bring on Schedule Sun Tan. The fake air-raid alarm on the east coast took place, as I figure it, the third day of our honeymoon; there had not been any special excitement in the village when we visited it the day before that and certainly no vigilante activity. After the false air-raid alarm it took a while to figure out what had happened, even though it was obvious that lighting could not fail by accident in so many different shelters.

It gives me the leaping horrors to think about it even now—all those people crouching in the darkness, waiting for the all-clear, while zombies moved among them, slapping slugs on them. Apparently in some air raid bunkers the recruitment was one hundred percent. They did not have a chance.

So there were more riots the next day and we were well into the Terror, though we did not know it. Technically, the start of vigilantism came the first time a desperate citizen pulled a gun on a cop—Maurice T. Kaufman of Albany and the cop was Sergeant Malcolm MacDonald. Kaufman was dead a half second later and MacDonald followed him in a few minutes, torn to pieces by the mob, along with his titan master. But the Vigilantes did not really get going until the air-raid wardens put organization into the movement.

The wardens, being mostly aboveground at the time the coup in the bunkers took place, largely escaped—but they felt responsible. Not that all Vigilantes were wardens, nor all wardens Vigilantes—but a stark naked, armed man on the street was as likely to be wearing a warden's armband as the "VIG" brassard. Either way, you could count on him shooting at any unexplained excrescence on a human body—shoot and investigate afterward.

While my hands were being treated and dressed I was brought up to date concerning the period (it turned out to be two weeks) that Mary and I had spent at the cabin. By the Old Man's orders the doctor gave me a short shot of tempus before he worked on me and I spent the time—subjective, about three days; objective, less than an hour—studying stereo tapes through an overspeed scanner. This gadget has never been released to the public, though I have heard that it is bootlegged at some of the colleges around examination week. You adjust the speed to match your subjective time rate, or a little faster, and use an audio frequency step-down to let you hear what is being said. It is hard on the eyes and usually results in a splitting headache—but it is a big help in my profession.

It was hard to believe that so much could have happened in so short a time. Take dogs. A Vigilante would kill a dog on sight, even though it was not wearing a slug—because it was even money that it would be wearing one before next sunrise, that it would attack a man and that the titan would change riders in the dark.

A hell of a world where you could not trust dogs!

Apparently cats were hardly ever used because of their smaller size. Poor old Pirate was an exceptional case.

In Zone Green dogs were almost never seen now, at least by day. They filtered out of Zone Red at night, traveled in the dark and hid out in the daytime. They kept showing up, even on the coasts. It made one think of the werewolf legends. I made a mental note to apologize to the village doctor who had refused to come to see Mary at night—after I pasted him one.

I scanned dozens of tapes which had been monitored from Zone Red; they fell into three time groups: the masquerade period, when the slugs had been continuing the "normal" broadcasts; a short period of counter-propaganda during which the slugs had tried to convince citizens in Zone Green that the government had gone crazy—it had not worked as we had not relayed their casts, just as they had not relayed the President's proclamation—and, finally, the current period in which pretense had been dropped, the masquerade abandoned.

According to Dr. McIlvaine the titans have no true culture of their own; they are parasitic even in that and merely adapt the culture they find to their own needs. Maybe he assumes too much, but that is what they did in Zone Red. The slugs would have to maintain the basic economic activity of their victims since the slugs themselves would starve if the hosts starved. To be sure, they continued that economy with variations that we would not use—that business of processing damaged and excess people in fertilizer plants, for example—but in general farmers stayed farmers, mechanics went on being mechanics, and bankers were still bankers. That last seems silly, but the experts claim that any "division-of-labor" economy requires an accounting system, a "money" system.

I know myself that they use money behind the Curtain, so he may be right—but I never heard of "bankers" or "money" among ants or termites. However, there may be lots of things I've never heard of.

It is not so obvious why they continued human recreations. Is the desire to be amused a universal need? Or did they learn it from us? The "experts" on each side of the argument are equally emphatic—and I don't know. What they picked from human ideas of fun to keep and "improve on" does not speak well for the human race although some of their variations may have merit—that stunt that they pulled in Mexico, for example, of giving the bull an even break with the matador.

But most of it just makes one sick at the stomach and I won't elaborate. I am one of the few who saw even transcriptions on such things, except for foolhardy folk who still held out in Zone Amber; I saw them professionally. The government monitored all stereocasts from Zone Red but the transcriptions were suppressed under the old Comstock "Indecency" Law—another example of "Mother-Knows-Best", though perhaps Mother did know best in this case. I hope that Mary, in her briefing, did not have to look at such things, but Mary would never say so if she had.

Or perhaps "Mother" did *not* "Know Best"; if anything more could have added to the determination of men still free to destroy this foul thing it would have been the "entertainment" stereocast from stations inside Zone Red. I recall a boxing match cast from the Will Rogers Memorial Auditorium at Fort Worth—or perhaps you would call it a wrestling match. In any case there was a ring and a referee and two contestants pitted against each other. There were even fouls, i.e., doing anything which might damage the opponent's manager—I mean "master", the opponent's slug.

Nothing else was a foul—nothing! It was a man versus a woman, both of them big and husky. She gouged out one of his eyes in the first clinch, but he broke her left wrist which kept the match on even enough terms to continue. It ended only when one of them had been so weakened by loss of blood that the puppet master could no longer make the slave dance. The woman lost—and died, I am sure, for her left breast was almost torn away and she had bled so much that only immediate surgery and massive transfusions could have saved her. Which she did not get; the slugs were transferred to new hosts at the end of the match and the inert contenders were dragged out.

But the male slave had remained active a little longer than the female, slashed and damaged though he was, and he finished the match with a final act of triumph over her which I soon learned was customary. It seemed to be a signal to turn it into an "audience participation show", an orgy which would make a witches' Sabbat seem like a sewing circle.

Oh, the slugs had discovered sex, all right!

There was one more thing which I saw in this and other tapes, a thing so outrageous, so damnably disgusting that I hesitate even to mention it, though I feel I must—there were men and women here and there among the slaves, humans (if you could call them that) without slugs . . . trusties . . . renegades—

I hate slugs but I would turn from killing a slug to kill one such. Our ancestors believed that there were men who would willingly sign compacts with the Devil; our ancestors were partly right: there are men who *would*, given the chance.

Some people refuse to believe that any human being turned renegade; those who disbelieve did not see the suppressed transcriptions. There was no chance for mistake; as everyone knows, once the masquerade was no longer useful to the slugs, the wearing of clothes was dropped in Zone Red even more thoroughly than it was under Schedule Sun Tan in Zone Green; one could see. In the Fort Worth horror which I have faintly sketched above the referee was a renegade; he was much in the camera and I was able to be absolutely sure. I knew him by sight, a well-known amateur sportsman, a "gentleman" referee. I shan't mention his name, not to protect him but to protect myself; later on I killed him.

We were losing ground everywhere; that I knew before they finished treating my hands. Ours was a holding action only; our methods were effective only in stopping the spread of the infection and not fully effective in that. To fight them directly we would have to fight our own people, bomb our own cities, with no certainty of killing the humps. What we needed was a selective weapon, one that would kill slugs but not men, or something that would disable humans or render unconscious without killing and thereby permit us to rescue our compatriots. No such weapon was available, though the scientists were all busy on the problem, from the comedy team of McIlvaine & Vargas down to the lowliest bottle-washer in the Bureau of Standards. A "sleep" gas would have been perfect, but it is lucky that no such gas was known before the invasion, or the slugs could have used it against us; it would have cut both ways. It must be remembered that the slugs then had as much, or more, of the military potential of the United States at their disposal as had the free men.

Stalemate—with time on the side of the enemy. There were the fools who wanted to H-bomb the cities of the Mississippi Valley right out of existence, like curing a lip cancer by cutting off the head, but they were offset by their twins who had not seen slugs, did not believe in slugs, and felt that the whole matter was a violation of states' rights and Schedule Sun Tan a tyrannical Washington plot. These second sort were fewer each day, not because they changed their minds but because the Vigilantes were awfully eager.

Then there was the *tertium quid*, the flexible mind, the "reasonable" man who hardly had a mind to change—he favored negotiation; he thought we could "do business" with the titans. One such committee, a delegation from the caucus of the opposition party in Congress, actually attempted negotiation. Bypassing the State Department they got in touch via a linkage rigged across Zone Amber with the Governor of Missouri, and were assured of safe conduct and diplomatic immunity—"guarantees" from a titan, but they accepted them; they went to St. Louis—and never came back. They sent messages back; I saw one such, a good rousing speech adding up to, "Come on in; the water is fine!"

Do steers sign treaties with meat packers?

North America was still the only known center of infection. The only action by the United Nations, other than placing the space stations at our disposal, was to remove temporarily to Geneva. No aggression by any other nation was involved and it was even argued that the slugs—if they existed—were technically an epidemic disease rather than a potential source of war and therefore of no interest to the Security Council. It was voted, with twentythree nations abstaining, to define it as "civil disorder" and to urge each member nation to give such aid as it saw fit to the legitimate governments of the United States, Mexico, and Canada.

What each might have "seen fit" was academic; we did not know what to ask for.

It remained a creeping war, a silent war, with battles lost before we knew they were joined. After the debacle of Schedule Counter Blast, conventional weapons were hardly used, except in police action in Zone Amber—which was now a double no-man's-land on each side of Zone Red, from the trackless Canadian forests to the Mexican deserts. It was almost deserted in the daytime of any life larger than birds and mice, save for our own patrols. At night our scouts drew back and the dogs came through—and other things, perhaps.

At the time Mary and I arrived back only one atom bomb had been used in the entire war and that against a flying saucer that landed near San Francisco just south of Burlingame. Its destruction was according to doctrine, but the doctrine was now under criticism; the saucer should have been captured for study, so it was argued, if we were to learn enough about our foe to fight successfully. I found my sympathies with those who wanted to shoot first and study later.

By the time the dose of tempus was beginning to wear off I had a picture of the United States in a shape that I had not imagined even when I was in saturated Kansas City—a country undergoing a Terror. Friend might shoot friend, or wife denounce husband. Rumor of a titan could drum up a mob on any street, with Old Judge Lynch baying in their van. To rap on a door at night was to invite a blast through the door rather than a friendly response. Honest folk stayed home; at night the dogs were out—and others.

The fact that most of the rumored discoveries of slugs were baseless made the rumors no less dangerous. It was not exhibitionism which caused many people to prefer outright nudity to the tight and scanty clothing permitted under Schedule Sun Tan; even the skimpiest clothing invited a doubtful second look, a suspicion that might be decided too abruptly. The head-and-spine armor was never worn now; the slugs had faked it and used it almost at once. And there had been the case of a girl in Seattle; she had been dressed in sandals and a big purse, nothing else—but a Vigilante who apparently had developed a nose for the enemy followed her and noticed that she never, under any circumstances, moved the purse from her right hand, even when she opened it to make change.

She lived, for he burned her arm off at the wrist, and I suppose that she had a new one grafted on; the supply of such spare parts was almost a glut. The slug was alive, too, when the Vigilante opened the purse—but not for long.

When I came across this in the briefing I realized with a shudder that I had not been too safe even in *carrying* my shorts through the streets; any slug-sized burden was open to suspicion.

The drug had worn off by the time I scanned this incident and I was back in contact with my surroundings. I mentioned the matter to the nurse. "Mustn't worry," she told me. "It does no good. Now flex the fingers of your right hand, please."

I flexed them, while she helped the doctor spray on surrogate skin. I noticed that she was taking no chances; she wore no bra at all and her so-to-speak shorts were actually more of a Gstring. The doctor was dressed about the same. "Wear gloves for rough work," the doctor cautioned, "and come back next week."

I thanked them and went to the operations office. I looked for Mary first, but found that she was busy in Cosmetics.

XXV

Hands all right?" the Old Man asked when they let me in.

"They'll do. False skin for a week. They do a graft job on my ear tomorrow."

He looked vexed. "I forgot your ear. There's no time for a graft to heal; Cosmetics will have to fake one for you."

"The ear doesn't matter," I told him, "but why bother to fake it? Impersonation job?"

"Not exactly. Now that you've been briefed, what do you think of the situation?"

I wondered what answer he was fishing for. "Not good," I conceded. "Everybody watching everybody else. Might as well be behind the Curtain. Shucks," I admitted, going overboard, "this is worse. You can usually bribe a communist, but what bribe can you offer a slug?"

"Hmm—" he commented. "That's an interesting thought. What would constitute a bribe inducement to a titan?"

"Look, that was a rhetorical question. I—"

"And my restatement of it was not rhetorical; we'll farm it out for theoretical investigation."

"Grabbing at straws these days, aren't you?"

"Precisely. Now about the rest of your comment; would you say that it was easier to penetrate and maintain surveillance in the Soviet Union or in Zone Red. Which would you rather tackle?"

I eyed him suspiciously. "There's a catch in this. You don't let a man pick his assignment."

"I asked you for a professional opinion."

"Mmmm . . . I don't have enough data. Tell me; are there slugs behind the Curtain?"

"That," he answered, "is just what I would like to find out."

I realized suddenly that Mary had been right; agents should not marry. If this job were ever finished, I wanted to hire out to count sheep for a rich insomniac or, something equally soft. "This time of year," I said, "I think I'd want to enter through Canton. Unless you were figuring on a drop?"

"What makes you think I want you to go into the USSR?" he asked. "We might find out what we want to know quicker and easier in Zone Red."

"Huh?"

"Certainly. If there is infection anywhere but in this continent, the titans in Zone Red must know about it. Why go half around the globe to find out?"

I put aside the plans I had been forming to be a Hindu merchant, travelling with his wife, and thought about what he was saying. Could be . . . could be. "How in the devil can Zone Red be penetrated now?" I asked. "Do I wear a plastic imitation slug on my shoulder blades? They'd catch me the first time I was called on for direct conference. Or before."

"Don't be a defeatist. Four agents have gone in already."

"And come back?"

"Well, no, not exactly. That's the rub."

"And you want me to be the fifth? Have you decided that I've cluttered up the payroll long enough?"

"I think the others used the wrong tactics—"

"Obviously!"

"The trick is to convince them that you are a renegade. Got any ideas?"

The idea was overwhelming, so much so that I did not answer at once. Finally I burst out, "Why not start me easy? Can't I impersonate a Panama pimp for a while? Or practice being an ax murderer? I have to get into the mood for this."

"Easy," he said. "It may not be practical—"

"*Hmmph*!"

"But you might bring it off. You've had more experience with their ways than any agent I've got. You must be rested up, aside from that little singe you got on your fingers. Or maybe we should drop you near Moscow and let you take a direct look. Think it over. Don't get into a fret about it for maybe another day."

"Thanks. Thank you too much." I changed the subject. "What have you got planned for Mary?"

"Why don't you stick to your own business?"

"I'm married to her."

"Yes."

"Well, for the love of Pete! Is that all you've got to say? Don't you even want to wish me luck?"

"It strikes me," he said slowly, "that you have had all the luck one man could ask for. You have my blessing, for whatever it's worth."

"Oh. Well, thanks." I am slow in some ways, but I plead the excuse that I had had much on my mind—up to that moment it had not occurred to me that the Old Man might have had something directly to do with Mary's leave and mine falling together so conveniently. I said, "Look here. Dad—"

"*Huh*?" It was the second time I had called him that in a month; it seemed to put him on the defensive.

"You meant for Mary and me to marry all along. You planned it that way."

"Eh? Don't be ridiculous. I believe in free will, son—and free choices."

"Provided the choice suits you."

"See here, we discussed this once before—"

"I know we did. Never mind; I'm hardly in a position to be angry about it. It's just that I feel like a prize stallion being led into the pen. Why did you do it? It wasn't sentiment about 'young love' and such twaddle; I know you better than that."

"I did not do anything, I tell you. As for approving of it—well, the race must go on, so they tell me. If it doesn't, everything else we do is pointless—even this war."

"Like that, eh? You would send two agents on leave in the middle of a battle—to catch yourself a grandson?" I did a rapid summing up and added, "I'll bet you used a slide rule."

He colored. "I don't know what you are talking about. You both were entitled to leave; the rest was accidental."

"Hmm! Accidents don't happen; not around you. Never mind; I'm a willing victim. Now about the job; give me a bit longer to size up the possibilities, if you really mean to let me pick my own method. Meantime, I'll see Cosmetics about a rubber ear."

I did not see a man about an ear, not then, for, as I was heading into Cosmetics, I met Mary coming out. I had not intended to let myself be surprised into endearments around the Section, but I was caught off guard. "Darling! They fixed you!"

She turned slowly around and let me look. "Good job, isn't it?"

It *was* a good job. I could not tell that her hair had ever been burned. Besides that, they had done a make-up job on her shoulders over the temporary skin that was quite convincing, but I had expected that. It was the hair that fooled me. I touched it gently and examined the hair line on the left side. "They must have taken it all off and started fresh."

"No, they simply matched it."

"Now you've got your favorite gun cache back."

"Like this?" she said, dimpling. She adjusted her curls with her left hand—then suddenly she had a gun in each hand. And again I did not know where the second one had come from.

"That's papa's good girl! If you ever have to, you can make a living as a nightclub magician. But seriously—don't let a Vigilante catch you doing that trick; he might get jumpy."

"One won't catch me," she assured me solemnly. I wondered about the verb. We went to the staff lounge and found a quiet place to talk. We did not order drinks; we did not seem to need such. We talked over the situation and found that each had been briefed. I did not tell Mary about my proposed assignment, and, if she had one, she did not mention it; we were back with the Section and indoctrinated habits are hard to break.

"Mary," I said suddenly, "are you pregnant?"

"It's too early to tell, dear," she answered, searching my eyes. "Do you want me to be?"

"Yes."

"Then I'll try very hard to be."

XXVI

We finally decided to attempt to penetrate the Curtain rather than Zone Red. The evaluation group had advised that there was no chance of impersonating a renegade; their advice would not have stopped the Old Man, but it agreed with his opinion and mine. The question hinged on, "How does a man get to be a renegade? Why do the titans trust him?"

The question answers itself; a slug knows its host's mind. Verbal guarantees would mean nothing to a titan—but if the titan, through once possessing a man's mind, *knows* that he is a natural renegade, a man who can be had, then it may suit the slug's purposes to let him be renegade rather than host. But first the slug had to plumb the vileness in the man's mind and be sure of its quality.

We did not know this as fact but as logical necessity. Human logic—but it had to be slug logic, too, since it fitted what the slugs could and could not do. As for me, it was not possible even under deep hypnotic instruction to pass myself off to a slug in possession of my mind as a candidate for renegade. So the psycho lads decided—and to which I said "Amen!"; it saved me from telling the Old Man that I would not volunteer to let myself be caught by a slug and it saved him from rigging some damned logical necessity which would force me into "volunteering".

It may seem illogical that titans would "free" a host even though they knew that the host was the sort who could be owned. But the advantages to them show up through analogy: the commissars will not willingly let any of their slave-citizens escape; nevertheless they send out thousands of fifth columnists into the territory of free men. Once outside, these agents can choose freedom and many do, but most of them don't—as we all know too well. They prefer slavery.

In the renegades the slugs had a supply of "trustworthy" fifth columnists—"trustworthy" is not the right word but the English language has no word for this form of vileness. That Zone Green was being penetrated by renegades was certain—but it is hard to tell a fifth columnist from a custard head; it always has been. The ratio of damn fools to villains is high.

So I got ready to go. I took under light hypnosis a refresher in the languages I would need with emphasis on shibboleth phrases of the latest meanderings of the Party Line. I was provided with a personality and coached in a trade which would permit me to travel, repairman for irrigating pumps—and given much money. If it suited me, my trade would let me hint that a pump had been sabotaged. Coercion, intimidation, blackmail, and bribery are especially useful behind the Curtain; the people have lived under a terror so long that they have no defenses; their puppet strings are always at hand.

I was to be dropped, rather than let to crawl under the Curtain. If I failed to report back, other agents would follow. Probably other agents would anyhow—or already had gone. I was not told; what an agent does not know he cannot divulge, even under drugs.

The reporting equipment was a new model and a joy to have. Ultramicrowave stuff with the directional cavity no bigger than a teacup and the rest, power pack and all, hardly larger than a loaf of bread, with the whole thing so well shielded that it would not make a Geiger counter even nervous. Strictly horizon range—I was to aim it at whatever space station was above the horizon. It had to be aimed closely, which required me to seal into my mind the orbital tables of all three space stations and a navigational grid of the territory I was to operate in. The handicap was really its prime advantage; the highly directional quality of the sender meant that it would not be detected save by wild accident.

I had to drop through their screen but it would be under a blanket of anti-radar "window" to give their search technicians fits. They would know that something was being dropped, but they would not know what, nor where, nor when, for mine would not be the only blanket, nor the only night of such tactics.

Once I had made up my mind whether the USSR was or was not slug infested I was to dictate a report to whatever space station was in sight—the line-of-sight, that is; I can't pick out a space station by eye and I doubt those who say they can. Report made, I was free to walk, ride, crawl, sneak and/or bribe my way out if I could.

The only trouble was that I never had a chance to use these preparations; the Pass Christian saucer landed.

The Pass Christian saucer was only the third to be seen after landing. Of the first two, the Grinnell saucer had been concealed by the slugs—or perhaps it took off again—and the Burlingame saucer was a radioactive memory. But the Pass Christian saucer was tracked and was seen on the ground almost at once.

It was tracked by Space Station Alpha—and recorded as an extremely large meteorite believed to have landed in or near the Gulf of Mexico. Which fact was not connected with the Pass Christian saucer until later but which, when it was, told us why we had failed to spot other landings by radar screen . . . the saucers came in too fast.

The saucers could be "seen" by radar—the primitive radar of sixty-odd years ago had picked them up many times, especially when cruising at atmospheric speeds while scouting this planet. But our modern radar had been "improved" to the point where saucers could not be seen; our instruments were too specialized. Electronic instruments follow an almost organic growth toward greater and greater selectivity. All our radar involves discriminator circuits and like gimmicks to enable each type to "see" what it is supposed to see and not bother with what it should ignore. Traffic block control sees atmospheric traffic only; the defense screen and fire control radars see what *they* are supposed to see—the fine screen "sees" a range from atmospheric speeds up to orbiting missiles at five miles a second; the coarse screen overlaps the fine screen, starting down at the lowest wingless-missile speed and carrying on up into the highest spaceship speeds relative to Earth and somewhat higher—about ten miles per second.

There are other selectivities—weather radar, harbor radar, and so forth. The point is *none* of them sees objects at speeds over ten miles per second . . . with the single exception of meteor-count radars in the space stations, which are not military but a research concession granted by the U.N. to the Association for the Advancement of Science.

Consequently the "giant meteor" was recorded as such and was not associated with flying saucers until later.

But the Pass Christian saucer was seen to land. The submersible cruiser U.N.S. *Robert Fulton* on routine patrol of Zone Red out of Mobile was ten miles off Gulfport with only her receptors showing when the saucer decelerated and landed. The spaceship popped up on the screens of the cruiser as it dropped from outer-space speed (around fifty-three miles per second by the space station record) to a speed the cruiser's radars would accept.

It came out of nothing, slowed to zero, and disappeared from the screen—but the operator had a fix on the last blip, less than twenty miles away on the Mississippi coast. The cruiser's skipper was puzzled. The radar track surely could not be a ship, since ships don't decelerate at fifty gravities. It did not occur to him that g's might not matter to a slug. He swung his ship over and took a look.

His first dispatch read: SPACESHIP LANDED BEACH WEST OF PASS CHRISTIAN MISSISSIPPI. His second was: LANDING FORCE BEACHING TO CAPTURE.

If I had not been in the Section offices I suppose I would have been left out of the party. As it was my phone shrilled so, that I bumped my head on the study machine I was using and swore. The Old Man said, "Come at once. Move!"

It was the same party we had started with so many weeks—or was it years?—before, the Old Man, Mary, and myself. We were in the air and heading south at emergency maximum, paying no attention to block controls and with our transponder sending out the police warning, before the Old Man told us why.

When he did tell us, I said, "Why the family group? You need a full-scale air task force."

"It will be there," he answered grimly. Then he grinned, his old wicked grin, an expression I had not seen since it started. "What do you care?" he jibed. "The 'Cavanaughs' are riding again. Eh, Mary?"

I snorted. "If you want that sister-and-brother routine, you had better get another boy."

"Just the part where you protect her from dogs and strange men," he answered soberly. "And I do mean dogs and I do mean strange men, very strange men. This may be the payoff, son."

I started to ask him more but he went into the operator's compartment, closed the panel, and got busy at the communicator. I turned to Mary. She snuggled up with a little sigh and said, "Howdy, Bud."

I grabbed her. "Don't give me that 'Bud' stuff or somebody's going to get a paddling."

XXVII

We were almost shot down by our own boys, then we picked up an escort of two Black Angels who throttled back and managed to stay with us. They turned us over to the command ship from which Air Marshal Rexton was watching the action. The command ship matched speeds with us and took us inboard with an anchor loop—I had never had that done before; it's disconcerting.

Rexton wanted to spank us and send us home, since we were technically civilians—but spanking the Old Man is a chore. They finally unloaded us and I squatted our car down on the seawall roadway which borders the Gulf along there—scared out of my wits, I should add, for we were buffeted by A.A. on the way down. There was fighting going on above and all around us, but there was a curious calm near the saucer itself.

The outlander ship loomed up almost over us, not fifty yards away.

It was as convincing and as ominous as the plastic-board fake in Iowa had been phony. It was a discus in shape and of great size; it was tilled slightly toward us, for it had grounded partly on one of the magnificent high-stilted old mansions which line that coast. The house had collapsed but the saucer was partly supported by the wreckage and by the six-foot-thick trunk of a tree that had shaded the house.

The ship's canted attitude let us see that the upper surface and what was surely its airlock—a metal hemisphere, a dozen feet across, at the main axis of the ship, where the hub would have been had it been a wheel. This hemisphere was lifted straight out or up from the body of the ship some six or eight feet. I could not see what held it out from the hull but I assumed that there must be a central shaft or piston; it came out like a poppet valve.

It was easy to see why the masters of the saucer had not closed up again and taken off from there; the airlock was fouled, held open by a "mud turtle", one of those little amphibious tanks which are at home on the bottom of a harbor or crawling up onto a beach—part of the landing force of the *Fulton.*

Let me set down now what I learned later; the tank was commanded by Ensign Gilbert Calhoun of Knoxville; with him was Powerman 2/c Florence Berzowski and a gunner named Booker T. W. Johnson. They were all dead, of course, before we got there.

The car, as soon as I roaded it, was surrounded by a landing force squad commanded by a pink-cheeked lad who seemed anxious to shoot somebody or anybody. He was less anxious when he got a look at Mary but he still refused to let us approach the saucer until he had checked with his tactical commander—who in turn consulted the skipper of the *Fulton.* We got an answer back in a short time, considering that the demand must have been referred to Rexton and probably clear back to Washington.

While waiting I watched the battle and, from what I saw, was well pleased to have no part of it. Somebody was going to get hurt—a good many had already. There was a male body, stark naked, just behind the car—a boy not more than fourteen. He was still clutching a rocket launcher and across his shoulders was the mark of the beast, though the slug was nowhere around. I wondered whether the slug had crawled away and was dying, or whether, perhaps, it had managed to transfer to the person who had bayoneted the boy.

Mary had walked west on the highway with the downy young naval officer while I was examining the corpse. The notion of a slug, possibly still alive, being around caused me to hurry to her. "Get back into the car," I said.

She continued to look west along the road. "I thought I might get in a shot or two," she answered, her eyes bright.

"She's safe here," the youngster assured me. "We're holding them, well down the road."

I ignored him. "Listen, you bloodthirsty little hellion," I snapped, "get back in that car before I break every bone in your body!"

"Yes, Sam." She turned and did so.

I looked back at the young salt. "What are you staring at?" I demanded, feeling edgy and needing someone to take it out on. The place smelled of slugs and the wait was making me nervous.

"Nothing much," he said, looking me over. "In my part of the country we don't speak to ladies that way."

"Then why in the hell don't you go back where you come from?" I answered and stalked away. The Old Man was missing, too; I did not like it.

An ambulance, coming back from the west, ground to a halt beside me. "Has the road to Pascagoula been opened?" the driver called out.

The Pascagoula River, thirty miles or so east of where the saucer had landed, was roughly "Zone Amber" for that area; the town of that name was east of the river's mouth and, nominally at least, in Zone Green—while sixty or seventy miles west of us on the same road was New Orleans, the heaviest concentration of titans south of St. Louis. Our opposition came from New Orleans while our nearest base was in Mobile.

"I haven't heard," I told the driver.

He chewed a knuckle. "Well . . . I made it through once; maybe I'll make it back all right." His turbines whined and he was away. I continued to look for the Old Man.

Although the ground fighting had moved away from the site, the air fighting was all around and above us. I was watching the vapor trails and trying to figure out who was what and how they could tell, when a big transport streaked into the area, put on the brakes with a burst of rato units, and spilled a platoon of sky boys. Again I wondered; it was too far away to tell whether they wore slugs or not. At least it came in from the east, but that did not necessarily prove anything.

I spotted the Old Man, talking with the commander of the landing force. I went up and interrupted. "We ought to get out of here, boss. This place is due to be atom-bombed about ten minutes ago."

The commander answered me. "Relax," he said blandly, "the concentration does not merit Abombing, not even a pony bomb."

I was just about to ask him sharply how he knew that the slugs would figure it that way, when the Old Man interrupted. "He's right, son." He took me by the arm and walked me back toward the car. "He's perfectly right, but for the wrong reasons."

"Huh?"

"Why haven't *we* bombed the cities *they* hold? They won't bomb this area, not while that ship is intact. They don't want to damage it; they want it back. Now go on back to Mary. Dogs and strange men—remember?"

I shut up, unconvinced. I expected us all to be clicks in a Geiger counter any second. Slugs, fighting as individuals, fought with gamecock recklessness—perhaps because they were really not individuals. Why should they be any more cautious about one of their own ships? They might be more anxious to keep it out of our hands than to save it.

We had just reached the car and spoken to Mary when the still-damp little snottie came trotting up. He halted, caught his breath, and saluted the Old Man. "The commander says that you are to have anything you want, sir—anything at all!"

From his manner I gathered that the answering dispatch had probably been spelled out in asterisks, accompanied by ruffles and flourishes. "Thank you, sir," the Old Man said mildly. "We merely want to inspect the captured ship."

"Yes, sir. Come with me, sir." He came with us instead, having difficulty making up his mind whether to escort the Old Man or Mary. Mary won. I came along behind, keeping my mind on watching out and ignoring the presence of the youngster. The country on that coast, unless gardened constantly, is practically jungle; the saucer lapped over into a brake of that sort and the Old Man took a shortcut through it. The kid said to him. "Watch out, sir. Mind where you step."

I said, "Slugs?"

He shook his head. "Coral snakes."

At that point a poisonous snake would have seemed as pleasant as a honey bee, but I must have been paying some attention to his warning for I was looking down when the next thing happened.

I first heard a shout. Then so help me, a Bengal tiger was charging us.

Probably Mary got in the first shot. I know that mine was not behind that of the young officer; it might even have been ahead. I'm sure it was—fairly sure, anyhow. It was the Old Man who shot last.

Among the four of us we cut that beast so many ways that it would never be worth anything as a rug. And yet the slug on it was untouched; I fried it with my second bolt. The young fellow looked at it without surprise. "Well," he said, "I thought we had cleaned up that load."

"Huh? What do you mean?"

"One of the first transport tanks they sent out. Regular Noah's Ark. We were shooting everything from gorillas to polar bears. Say, did you ever have a water buffalo come at you?"

"No and I don't want to."

"Not near as bad as the dogs, really. If you ask me, those things don't have much sense." He looked at the slug, quite unmoved, while I was ready as usual to throw up.

We got up out of there fast and onto the titan ship—which did not make me less nervous, but more. Not that there was anything frightening in the ship itself, not in its appearance.

But its appearance wasn't *right*. While it was obviously artificial, one knew without being told that it was not made by men. Why? I don't know. The surface of it was dull mirror, not a mark on it—not any sort of a mark; there was no way to tell how it had been put together. It was as smooth as a Jo block.

I could not tell of what it was made. Metal? Of course, it *had* to be metal. But was it? You would expect it to be either bitterly cold—or possibly intensely hot from its landing. I touched it and it was not anything at all, neither cold nor hot. Don't tell me it just happened to be exactly ninety-eight and six-tenths. I noticed another thing presently; a ship that size, landing at high speed, should have blasted a couple of acres. There was no blast area at all; the brake around it was green and rank.

We went up to the parasol business, the air lock, if that is what it was. The edge was jammed down tight on the little mud turtle; the armor of the tank was crushed in, as one might crush a pasteboard box with the hand. Those mud turtles are built to launch five hundred feet deep in water; they are *strong*.

Well, I suppose this one was strong. The parasol arrangement had damaged it, but the air lock had not closed. On the other hand the metal, or whatever the spaceship's door was made of, was unmarked by the exchange.

The Old Man turned to me. "Wait here with Mary."

"You're not going in there by yourself?"

"Yes. There may be very little time."

The kid spoke up. "I'm to stay with you, sir. That's what the commander said."

"Very well, sir," the Old Man agreed. "Come along." He peered over the edge, then knelt and lowered himself by his hands. The kid followed him. I felt burned up—but had no desire to argue the arrangements.

They disappeared into the hole. Mary turned to me and said, "Sam—I don't like this. I'm afraid."

She startled me. I was afraid myself—but I had not expected her to be. "I'll take care of you."

"Do we have to stay? He did not say so, quite."

I considered it. "If you want to go back to the car I'll take you back."

"Well . . . no, Sam, I guess we have to stay. Come closer to me." She was trembling.

I don't know how long it was before they stuck their heads over the rim. The youngster climbed out and the Old Man told him to stand guard. "Come on," he said to us, "it's safe—I think."

"The hell it is," I told him, but I went because Mary was already starting. The Old Man helped her down.

"Mind your head," he said. "Low bridge all the way."

It is a platitude that unhuman races produce unhuman works, but very few humans have ever been inside a Venerian labyrinth and still fewer have seen the Martian ruins—and I was not one of the few. I don't know what I expected. Superficially the inside of the saucer was not, I suppose, too startling, but it was strange. It had been thought out by unhuman brains, ones which did not depend on human ideas in fabricating, brains which had never heard of the right angle and the straight line or which regarded them as unnecessary or undesirable. We found ourselves in a very small oblate chamber and from there we crawled through a tube about four feet thick, a tube which seemed to wind down into the ship and which glowed from all its surface with a reddish light.

The tube held an odd and somewhat distressing odor, as if of marsh gas, and mixed with it faintly was the reek of dead slugs. That and the reddish glow and the total lack of heat response from the wall of the tube as my palms pressed against it gave me the unpleasant fancy that I was crawling through the gut of some unearthly behemoth rather than exploring a strange machine.

The tube branched like an artery and there we came across our first Titanian androgyne. He—let me call it "he"—was sprawled on his back, like a child sleeping, his head pillowed on his slug. There was a suggestion of a smile on the little rosebud mouth; at first I did not realize that he was dead.

At first sight the similarities between the Titanian people and ourselves are more noticeable than the differences; we impress what we expect to see on what we do see, as a wind-sculptured rock may look like a human head or a dancing bear. Take the pretty little "mouth" for example; how was I to know that it was an organ for breathing solely?

Conceded that they are not human and that, despite the casual similarities of four limbs and a head-like protuberance, we are less like them than is a bullfrog like a bullpup; nevertheless the general effect is pleasing, not frightening, and faintly human. "Elfin" I should say—the elves of Saturn's moons. Had we met them before the slugs we call titans possessed them I think we could have gotten along with them. Judged by their ability to build the saucers they were our equals—if they did build them. (Certainly the slugs did not build them; slugs are not builders but thieves, cosmic cuckoos.)

But I am letting my own later thoughts get in the way. When I saw the little fellow I managed to draw my gun. The Old Man, anticipating my reaction, turned and said, "Take it easy. It's dead—they are all dead, smothered in oxygen when the tank ruined their air seal."

I still had my gun out. "I want to burn the slug," I insisted. "It may still be alive." It was not covered by the horny shell we had lately come to expect but was naked, moist and ugly.

He shrugged. "Suit yourself. It can't possibly hurt you."

"Why not?"

"Wrong chemistry. That slug can't live on an oxygen breather." He crawled across the little body, giving me no chance to shoot had I decided to. Mary, always so quick with a gun, had not drawn but had shrunk against my side and was breathing in sharp little sobbing gasps. The Old Man stopped and said patiently, "Coming, Mary?"

She choked and then gasped, "Let's go back! Let's get out of here!"

I said, "She's right. This is no job for three people; this is something for a research team and proper equipment."

He paid no attention to me. "It has to be done, Mary. You know that. And you have to be the one to do it."

"Why does she have to do it?" I demanded angrily.

Again he ignored me. "Well, Mary?"

From somewhere inside herself she called on reserves. Her breathing became normal, her features relaxed, and she crawled across the slug-ridden elfin body with the serenity of a queen going to the gallows. I lumbered after them, still hampered by my gun and trying not to touch the body.

We came at last to a large chamber. It may have been the control room, for there were many of the dead little elfin creatures in it, though I saw nothing resembling (to my eye) instruments or machinery. Its inner surface was cavitated and picked out with lights much brighter than the reddish illumination and the chamber space was festooned with processes as meaningless to me as the convolutions of a brain. I was troubled again with the thought—completely wrong, I know now—that the ship itself was a living organism.

The Old Man paid no attention but crawled on through and into another ruddy-glowing tube. We followed its contortions to a place where it widened out to ten feet or more with a "ceiling" overhead almost tall enough to let us stand erect. But that was not what caught our eyes; the walls were no longer opaque.

On each side of us, beyond transparent membranes, were thousands on thousands of slugs, swimming, floating, writhing in some fluid which sustained them. Each tank had an inner diffuse light of its own and I could see back into the palpitating mass—and I wanted to scream.

I still had my gun out. The Old Man reached back and placed his hand over the bell of it. "Don't yield to temptation," he warned me. "You don't want to let *that* loose in *here*. Those are for *us*."

Mary looked at them with a face too calm. Thinking back, I doubt that she was fully conscious in the ordinary sense. I looked at her, glanced back at the walls of that ghoulish aquarium, and said urgently, "Let's get out of here if we can—then just bomb it out of existence."

"No," he said quietly, "there is more. Come." The tube narrowed in again, then enlarged and we were again in a somewhat smaller chamber like that of the slugs. Again there were transparent walls and again there were things floating beyond them.

I had to look twice before I could fully make out and believe what I saw.

Floating just beyond the wall, face down, was the body of a man—a human, Earthborn man—about forty to fifty years old. He was grizzled and almost bald. His arms were curved across his chest and his knees were drawn up, as if he were sleeping safe in bed—or in the womb.

I watched him, thinking terrible thoughts. He was not alone; there were more beyond him, male and female, young and old—but he was the only one I could see properly and he got my attention. I was sure that he was dead; it did not occur to me to think otherwise—then I saw his mouth working—and then I wished he were dead.

Mary was wandering around in that chamber as if she were drunk—no, not drunk but preoccupied and dazed. She went from one transparent wall to the other, peering intently into the crowded, half-seen depths. The Old Man looked only at her. "Well, Mary?" he said softly.

"I can't find them!" she said piteously in a voice like a little girl's. She ran back to the other side.

The Old Man grasped her arm and stopped her. "You're not looking for them in the right place," he said firmly. "Go back where they are. Remember?"

She stopped and her voice was a wail. "*I can't remember*!"

"You must remember . . . now. This is what you can do for them. You must return to where they are and look for them."

Her eyes closed and tears started leaking from them. She gasped and choked. I pushed myself between them and said, "Stop this! What are you doing to her?"

He grabbed me with his free hand and pushed me away. "No, son," he whispered fiercely. "Keep out of this—you *must* keep out."

"But—"

"No!" He let go of Mary and led me away to the entrance. "Stay there. And, as you love your wife, as you hate the titans, do not interfere. I shan't hurt her—that's a promise."

"What are you going to do?" But he had turned away. I stayed, unwilling to let it go on, afraid to tamper with what I did not understand.

Mary had sunk down to the floor and now squatted on it like a child, her face covered with her hands. The Old Man went back to her, knelt down and touched her arm. "Go back," I heard him say. "Go back to where it started."

I could barely hear her answer, "No . . . no."

"How old were you? You seemed to be about seven or eight when you were found. It was before that?"

"Yes—yes, it was before that." She sobbed and collapsed completely to the floor. "Mama! Mama!"

"What is your mama saying?" he asked gently.

"She doesn't say anything. She's looking at me so queerly. There's something on her back. I'm afraid, I'm afraid!"

I got up and hurried toward them, crouching to keep from hitting the low ceiling. Without taking his eyes off Mary the Old Man motioned me back. I stopped, hesitated. "Go back," he ordered. "Way back."

The words were directed at me and I obeyed them—but so did Mary. "There was a ship," she muttered, "a big shiny ship—" He said something to her; if she answered I could not hear it. I stayed back this time and made no attempt to interfere. I could see that he was doing her no physical hurt and, despite my vastly disturbed emotions, I realized that something important was going on, something big enough to absorb the Old Man's full attention in the very teeth of the enemy.

He continued to talk to her, soothingly but insistently. Mary quieted down, seemed to sink almost into a lethargy, but I could hear that she answered him. After a while she was talking in the monotonous logorrhea of emotional release. Only occasionally did the Old Man prompt her.

I heard something crawling along the passage behind me. I turned and drew my gun, with a wild feeling that we were trapped. I almost shot him before I realized that it was the ubiquitous young officer we had left outside. "Come on out!" he said urgently. He pushed on past me out into the chamber and repeated the demand to the Old Man.

The Old Man looked exasperated beyond endurance. "Shut up and don't bother me," he said.

"You've *got* to, sir," the youngster insisted. "The commander says that you must come out at once. We're falling back; the commander says he may have to use demolition at any moment. If we are still inside—*blooie*! That's it."

"Very well," the Old Man agreed in unhurried tones. "We're coming. You go out and tell your commander that he must hold off until we get out; I have vitally important information. Son, help me with Mary."

"Aye, aye, sir!" the youngster acknowledged. "But hurry!" He scrambled away. I picked up Mary and carried her to where the chamber narrowed into a tube; she seemed almost unconscious. I put her down.

"We'll have to drag her," the Old Man said. "She may not come out of this soon. Here—let me get her up on your back, you can crawl with her."

I paid no attention but shook her. "Mary," I shouted, "Mary! Can you hear me?"

Her eyes opened. "Yes, Sam?"

"Darling—we've got to get out of here, *fast*! Can you crawl?"

"Yes, Sam." She closed her eyes again. I shook her again. "Mary!"

"Yes, darling? What is it? I'm so tired."

"Listen, Mary—you've got to crawl out of here. If you don't the slugs will get us—do you understand?"

"All right, darling." Her eyes stayed open this time but were vacant. I got her headed up the tube and came along after her. Whenever she faltered or slowed I slapped at her. I lifted and dragged her through the chamber of the slugs and again through the control room, if that is what it was. When we came to the place where the tube was partly blocked by the dead elfin creature she stopped; I wormed my way past her and moved it, stuffing it into the branching tube. There was no doubt, this time, that its slug was dead; I gagged at the job. Again I had to slap her into cooperation.

After an endless nightmare of leaden-limbed striving we reached the outer door and the young officer was there to help us lift her out, him pulling and the Old Man and me lifting and pushing. I gave the Old Man a leg up, jumped out myself, and took her away from the youngster. It was quite dark.

We went back the long way past the crushed house, avoiding the jungle like brake, and thence down to the beach road. Our car was no longer there; it did not matter for we found ourselves hurried into a "mud turtle" tank—none too soon, for the fighting was almost on top of us. The tank commander buttoned up and the craft lumbered off the stepped-back seawall and into the water. Fifteen minutes later we were inside the *Fulton*.

And an hour later we disembarked at the Mobile base. The Old Man and I had bad coffee and sandwiches in the wardroom of the *Fulton*, some of the Wave officers had taken Mary and cared for her in the women's quarters. She joined us as we left and seemed entirely normal. I said, "Mary, are you all right?"

She smiled at me. "Of course, darling. Why shouldn't I be?"

A small command ship and an escort took us out of there. I had supposed that we were headed back to the Section offices, or more likely to Washington. I had not asked; the Old Man was in no mood to talk and I was satisfied simply to hold Mary's hand and feel relieved.

The pilot put us into a mountainside hangar in one of those egg-on-a-plate maneuvers that no civilian craft can accomplish—in the sky at high speed, then in a cave and stationary. Like that. "Where are we?" I asked.

The Old Man did not answer but got out; Mary and I followed. The hangar was small, just parking space for about a dozen craft, an arresting platform, and a single launching rack; it contained only two other ships besides ours. Guards met us and directed us on back to a door set in the living rock; we went through and found ourselves in an anteroom. An unseen metallic voice told us to strip off what little we wore. I did not mind being naked but I hated to part with my gun and phone.

We went on inside and were met by a young fellow whose total clothing was an armband showing three chevrons and crossed retorts. He turned us over to a girl who was wearing even less, as her armband had only two chevrons. Both of them noticed Mary, each with typical gender response. I think the corporal was glad to pass us on to the captain who received us.

"We got your message," the captain said. "Dr. Steelton is waiting."

"Thank you, ma'am," the Old Man answered. "The sooner, the better. Where?"

"Just a moment," she said, went to Mary and felt through her hair. "We have to be sure, you know," she said apologetically. If she was aware of the falseness of much of Mary's hair, she did not mention it and Mary did not flinch. "All right," she decided, "let's go." Her own hair was cut mannishly short, in crisp gray waves.

"Right," agreed the Old Man. "No, son, this is as far as you go."

"Why?" I asked.

"Because you dam near loused up the first try," he explained briefly. "Now pipe down."

The captain said, "The officers' mess is straight down the first passageway to the left. Why don't you wait there?"

So I did. On the way I passed a door decorated primly in large red skull-and-crossbones and stenciled with: WARNING—LIVE PARASITES BEYOND THIS DOOR; in smaller letters it added *Qualified Personnel Only—Use Procedure "A"*.

I gave the door a wide berth.

The officers' mess was the usual clubroom and there were three or four men and two women lounging in it. No one seemed interested in my presence, so I found an unoccupied chair, sat down, and wondered just who you had to be to get a drink around this joint. After a time I was joined by a large male extrovert wearing a colonel's insignia on a chain around his neck; with it was a Saint Christopher's medal and an I.D. dog tag. "Newcomer?" he asked.

I admitted it. "Civilian expert?" he went on.

"I don't know about 'expert'," I replied. "I'm a field operative."

"Name? Sorry to be officious," he apologized, "but I'm alleged to be the security officer around here. My name's Kelly."

I told him mine. He nodded. "Matter of fact I saw your party coming in. Mine was the voice of conscience, coming out of the wall. Now, Mr. Nivens, how about a drink? From the brief we had on you, you could use one."

I stood up. "Whom do I have to kill to get it?"

"—though as far as I can see," Kelly went on sometime later, "this place needs a security officer the way a horse needs roller skates. We should publish our results as fast as we get them. This isn't like fighting a human enemy."

I commented that he did not sound like the ordinary brass hat. He laughed and did not take offense. "Believe me, son, not all brass hats are as they are pictured—they just seem to be."

I remarked that Air Marshal Rexton struck me as a pretty sharp citizen.

"You know him?" the colonel asked.

"I don't know him exactly, but my work on this job has thrown me in his company a good bit—I last saw him earlier today."

"Hmm—" said the colonel. "I've never met the gentleman. You move in more rarefied strata than I do, sir."

I explained that it was mere happenstance, but from then on he showed me more respect. Presently he was telling me about the work the laboratory did. "By now we know more about those foul creatures than does Old Nick himself. But do we know how to kill them without killing their hosts? We do not.

"Of course," he went on, "if we could lure them one at a time into a small room and douse them with anesthetics, we could save the hosts—but that is like the old saw about how to catch a bird: naturally it's no trouble if you can sneak up close enough to put salt on its tail. I'm not a scientist myself—just the son of a cop and a cop myself under a different tag—but I've talked to the scientists here and I know what we need. This is a biological war and it will be won by biological warfare. What we need is a bug, one that will bite the slug and not the host. Doesn't sound too hard, does it? It is. We know a hundred things that will kill the slug—smallpox, typhus, syphilis, encephalitis lethargica, Obermeyer's virus, plague, yellow fever, and so on. But they kill the host, too."

"Couldn't they use something that everyone is immune to?" I asked. "Take typhoid—everybody has typhoid shots. And almost everybody is vaccinated for smallpox."

"No good—if the host is immune, the parasite doesn't get exposed to it. Now that the slugs have developed this outer cuticle the parasite's environment is the host. No, we need something the host will catch and that will kill the slug, but won't give the host more than a mild fever or a splitting headache."

I started to answer with some no-doubt brilliant thought when I saw the Old Man standing in the doorway. I excused myself and went to him. "What was Kelly grilling you about?" he asked.

"He wasn't grilling me," I answered.

"That's what you think. Don't you know what Kelly that is?"

"Should I?"

"You should. Or perhaps you shouldn't; he never lets his picture be taken. That's B. J. Kelly, the greatest scientific criminologist of our generation."

"*That* Kelly! But he's not in the army."

"Reserve, probably. But you can guess how important this laboratory is. Come on."

"Where's Mary?"

"You can't see her now. She's recuperating."

"Is she—hurt?"

"I promised you she would not be hurt. Steelton is the best in his line. But we had to go down deep, against a great deal of resistance. That's always rough on the subject."

I thought about it. "Did you get what you were after?"

"Yes and no. We got a great deal, but we aren't through."

"What were you after?"

We had been walking along one of the endless underground passageways of which the place was made. Now he turned us into a small, empty office and we sat down. The Old Man touched the communicator on the desk and said, "Private conference."

"Yes, sir," a voice answered. "We will not record." A green light came on in the ceiling.

"Not that I believe them," the Old Man complained, "but it may keep anyone but Kelly from playing it back. Now, son, about what you want to know; I'm not sure you are entitled to it. You are married to the girl, but that does not mean that you own her soul—and this stuff comes from down so deep that she did not know she had it herself."

I said nothing; there was nothing to say. He went on presently in worried tones, "Still—it might be better to tell you enough so that you will understand. Otherwise you would be bothering her to find out. That I don't want to happen, I don't ever want that to happen. You might throw her into a bad wingding. I doubt if she'll remember anything herself—Steelton is a very gentle operator—but you could stir up things."

I took a deep breath. "You'll have to judge. I can't."

"Yes, I suppose so. Well, I'll tell you a bit and answer your questions—some of them—in exchange for a solemn promise never to bother your wife with it. You don't have the skill."

"Very well, sir. I promise."

"Well—there was a group of people, a cult you might call them, that got into disrepute."

"I know—the Whitmanites."

"Eh? How did you know? From Mary? No, she couldn't have; she didn't know herself."

"No, not from Mary. I just figured it out."

He looked at me with odd respect. "Maybe I've been underestimating you, son. As you say, the Whitmanites. Mary was one of them, as a kid in Antarctica."

"Wait a minute!" I said. "They left Antarctica in—" The wheels buzzed in my mind and the number came up. "—in 1974."

"Surely. What about it?"

"But that would make Mary around forty years old. She can't be."

"Do you care?"

"Huh? Why, no—but she can't be."

"She is and she isn't. Just listen. Chronologically her age is about forty. Biologically she is in her middle twenties. Subjectively she is even younger, because she doesn't remember anything, not to know it, earlier than about 1990."

"What do you mean? That she doesn't remember I can understand—she never *wants* to remember. But what do you mean by the rest?"

"Just what I said. She is no older than she is because—you know that room where she started to remember? She spent ten years and probably more floating in suspended animation in just such a tank as that."

XXVIII

Time was when I was immune to emotional shocks. But as I get older, I don't get tougher; I get softer. Being in love has a lot to do with it, too. The thought of Mary, my beloved Mary, swimming in that artificial womb, neither dead nor alive but preserved like a pickled grasshopper, was too much for me.

I heard the Old Man saying, "Take it easy, son. She's all right."

I said, "Go ahead."

Mary's overt history was simple, although mystifying. She had been found in the swamps near Kaiserville at the North Pole of Venus—a little girl who could give no account of herself and who knew only her name—Allucquere. Nobody spotted the significance of the name and a child of her (apparent) age could not be associated with the Whitmanites debacle in any case; the 1980 supply ship had not been able to find any survivor of their "New Zion" colony. Its plantations had returned to the swamp; the dwellings were ruptured shells, hidden in rank growth. More than ten years of time and more than two hundred miles of jungle separated the little waif of Kaiserville from the Godstruck colonists of New Zion.

At that time, an unaccounted-for Earth child on Venus was little short of incredible. Like finding the cat locked in the icebox, it called for explanation. But there was no one around with the intellectual curiosity to push the matter. Kaiserville still does not have a sweet reputation; in those days it was made up of miners, doxies, company representatives of the Two Planets Corporation—and nothing else. I don't suppose that shoveling radioactive mud in the swamps leaves much energy for wonder.

Apparently she grew up using poker chips for toys and calling every woman in crib row "mother" or "auntie". In turn they shortened her name to "Lucky". The Old Man did not go into detail about who paid her way back to Earth and why, and he avoided my questions. The real question was where she had been from the time New Zion was eaten up by the Venerian jungle and just what had happened to the colony.

The only record of those things was buried in Mary's mind, locked tight with terror and despair.

Sometime before 1980—about the same time as the flying saucer reports from Russo-Siberia, or a year or so earlier—the titans had discovered the New Zion colony. If you place it one Saturn year earlier than the invasion of Earth, the times fit fairly well. It does not seem likely that the titans were looking for Earthmen on Venus; more probably they were scouting Venus as they had long scouted Earth. Or they may have known just where to look; we know that they kidnapped Earthmen at intervals over the course of two or more centuries; they may have captured someone on Earth whose brain could tell them where to find the New Zion colony. Mary's dark memories could contain no clue to that.

Mary saw the colony captured, saw her parents turned into zombies who no longer cared for her. Apparently she herself was not possessed, or she may have been possessed and turned loose, the titans finding a weak and ignorant young girl an unsuitable slave. In any case, for what was to her baby mind an endlessly long time, she hung around the slave colony, unwanted, uncared for, but unmolested, scavenging like a mouse for her living. On Venus the slugs were moving in to stay; their principal slaves were Venerians and the New Zion colonists were only incidental. It is sure that Mary saw her parents being placed in suspended animation—for later use in the invasion of Earth? Probable, but not certain.

In due course she herself was grabbed and placed in the tanks. Inside a titan ship? At a titan base on Venus itself? More probably the latter, as when she awoke, she was still on Venus. There are many such gaps. Were the slugs that rode the Venerians identical with the slugs which rode the colonists? Possible—since both Earth and Venus have oxy-carbon economy. The slugs seem to be endlessly protean but they surely have to adapt themselves to the biochemistry of their hosts. Had Venus an oxy-silicon economy like Mars, or a fluorine economy, the same parasite type could not possibly have fed on both.

But the gist of the matter lay in the situation as it was when Mary was removed from the artificial incubator. The titan invasion of Venus had failed, or was failing. Almost certainly she was possessed as soon as they removed her from the tank—but Mary had outlived the slug that possessed her.

Why had the slugs died? Why had the invasion of Venus failed? It was for clues to these that the Old Man and Dr. Steelton had gone fishing in Mary's brain.

I said, "Is that all?"

He answered, "Isn't that enough?"

"It raises as many questions as it answers," I complained.

"Of course there is more," he told me, "a great deal more. But you aren't a Venerian expert of any sort, nor a psychologist, so you won't be called on to evaluate it. I've told you what I have so that you will know why we have to work on Mary and so that you won't question her about it. Be good to her, boy; she's had more than her share of grief."

I ignored the advice; I can get along or not get along with my own wife without help, thank you. "What I can't figure out," I answered, "is why you ever had Mary linked up with flying saucers in the first place? I can see now that you took her along on that first trip to Iowa on purpose. You were right, granted—but why? And don't give me any malarkey."

The Old Man himself looked puzzled. "Son, do you ever have hunches?"

"Lord, yes!"

"What is a 'hunch'?"

"Eh? It's a belief that something is so, or isn't so, without evidence. Or a premonition that something is going to happen—or a compulsion to do something."

"Sloppy definitions. I'd call a hunch the result of automatic reasoning below the conscious level on data you did not know you possessed."

"Sounds like the black cat in the coal cellar at midnight. You didn't have any data, not then. Don't tell me that your unconscious mind works on data you are going to get, next week. I won't believe it."

"Ah, but I did have data."

"Huh?"

"What's the last thing that happens to a candidate before he is certified as an agent in our section?"

"The personal interview with you."

"No, no!"

"Oh—the trance analysis." I had forgotten hypno-analysis for the simple reason that the subject never remembers it; he's off somewhere else, wherever it is you go when you're asleep. "You mean you had this data on Mary then. It wasn't a hunch at all."

"No again. I had some, a very little of it—Mary's defenses are strong. And I had forgotten what little I knew, in my conscious memory. But I knew that Mary was the agent for this job. Later on I played back her hypno interview; then I *knew* that there must be more. We tried for it—and did not get it. But I knew that there had to be more."

I thought it over. "You must have been pretty cocky certain that it was worth digging out; you sure put her over the bumps to get it."

"I had to. I'm sorry."

"Okay, okay." I waited a moment, then said, "Look—what was there in *my* hypno record?"

"That's not a proper question."

"Nuts."

"And I couldn't tell you if I would. I have never listened to your analysis, son."

"Huh?"

"I had my deputy play it, then asked him if there were anything in it which I should know. He said there wasn't so I never played it."

"So? Well—thanks."

He merely grunted, but I felt warmer toward him than I had in a long time. Dad and I have always managed to embarrass each other.

XXIX

The slugs had died from something they contracted on Venus. That much we knew, or thought we knew. We weren't likely to get another chance in a hurry to collect direct information as a dispatch came in while the Old Man and I were still talking, telling us that Rexton had finally ordered the Pass Christian saucer bombed to keep it from falling back in the hands of the titans. I think that the Old Man had hoped to get at those human beings whom we knew to be inanimate prisoners in that ship, find some way to breathe life into them, and question them.

Well, that chance was gone—what they could dig out of Mary had better be the answer. Assuming that some infection peculiar to Venus was fatal to slugs but not fatal to humans—at least Mary had lived through it—then the thing to do was to test them all and determine which one. Just dandy!—it was like examining every grain of sand on a wide beach to locate the one with square edges!

The problem was somewhat simplified by there being no need to check the Venus diseases known to be fatal to Earthmen. Perhaps it had been one of such, but, if so, no matter; we could as well use smallpox. But the list of diseases native to Venus which kill Earthmen is surprisingly short and the list of those which are not fatal but merely nastily annoying is very long—from the standpoint of a Venerian bug we must be too strange a diet to suit his taste. If a Venerian bug has a viewpoint, which I doubt, McIlvaine's silly ideas notwithstanding.

The problem was made harder by the fact that the types of diseases native to Venus which were represented by living cultures on Earth were strictly limited in number, i.e., the grain of sand we sought might not be on this beach. To be sure, such an omission could be repaired—in a century or so of exploration and research on a strange planet.

In the meantime there was beginning to be a breath of frost in the air; Schedule Sun Tan could not go on forever.

They had to go back where they hoped the answer was—into Mary's brain. I did not like it, but I could not stop it. She did not appear to know why she was being asked to submit, over and over again, to hypnotics—or perhaps she would not tell. She seemed serene, but the strain showed—circles under her eyes, things like that.

Finally I went to the Old Man and told him that it had to stop. "You know better than that, son," he said mildly.

"The hell I do! If you haven't gotten what you want from her by now, you'll never get it."

"Have you any idea of how long it takes to search *all* the memories in a person's mind, even if you limit yourself to a particular period? It takes exactly as long as the period itself. What we need—if it's there at all—may be subtle."

"If it's there at all,'" I repeated. "You don't know that it is. See here—if Mary miscarries as a result of this, I'll break your neck personally."

"And if we don't succeed," he answered gently, "you will wish to heaven that she had. Or do you want to raise up kids to be hosts to titans?"

I chewed my lip. "Why didn't you send me to the USSR as you planned to, instead of keeping me around?"

"Oh, that—In the first place I want you here, with Mary, keeping her morale up—instead of acting like a spoiled brat! In the second place, it isn't necessary, or I would have sent you."

"Huh? What happened? Did some other agent report in?"

He stood up and started to leave. "If you would ever learn to show a grownup interest in the news of the world, you would know."

I said, "Huh?" again, but he did not answer; he left.

I hurried out of there and brought myself up to date. My one-track mind has never been able to interest itself in the daily news; for my taste this dinning into the ears and eyes of trivia somewhere over the horizon is the bane of so-called civilization and the death of serious thinking. But I do miss things.

This time I had managed to miss the first news of the Asiatic plague. I had had my back turned on the biggest—no, the second biggest—news story of the century, the only continent-wide epidemic of the Black Death since the seventeenth century.

I could not understand it. Communists are crazy, granted—but I had been behind the Curtain enough to know that their public health measures were as good as ours and even better in some ways, for they were carried out "by the numbers" and no nonsense tolerated. And a country has to be, quite literally, lousy to permit the spread of plagues—rats, lice, and fleas, the historical vectors. In such respects the commissars had even managed to clean up China to the point, at least, that bubonic plague and typhus were sporadically endemic rather than epidemic.

Now both plagues were spreading like gossip across the whole Sino-Russo-Siberian axis, to the point where the soviet government system had broken down and pleas were being sent via the space stations for U.N. help. What had happened?

Out of my own mind I put the pieces together; I looked up the Old Man again. "Boss—there *were* slugs behind the Curtain."

"Yes."

"You knew? Well, for cripes sake—we'd better do something fast, or the whole Mississippi Valley will be in the shape that Asia is in. Just one rat, one little rat—" I was thinking back to my own time among the slugs, something I avoided doing when possible. The titans did not bother about human sanitation. My own master had not caused me to bathe, not once. I doubted if there had been a bath taken between the Canadian border and New Orleans since the slugs dropped the masquerade as unnecessary. Lice—Fleas—

The Old Man sighed. "Maybe that's the best solution. Maybe it's the only one."

"You might as well bomb them, if that's the best we have to offer. It would be a cleaner way to die."

"So it would. But you know that we won't. As long as there is a chance of cleaning out the vermin without burning down the barn, we'll keep on trying."

I mulled it over at great length. We were in still another race against time. Fundamentally the slugs must be too stupid to keep slaves; perhaps that was why they moved from planet to planet—they spoiled what they touched. After a while their hosts would die out and then they needed new hosts.

Theory, just theory—I brushed it aside. One thing was sure: what had happened behind the Curtain would happen in Zone Red unless we found a way to kill off the slugs, and that mighty soon! Thinking about it, I made up my mind to do something I had considered before—force myself into the mind-searching sessions being conducted on Mary. If there were something in her hidden memories which could be used to kill slugs, possibly I might see it where others had failed. In any case I was going in, whether Steelton and the Old Man liked it or not. I was tired of being treated like a cross between a prince consort and an unwelcome child.

XXX

Since our arrival Mary and I had been living in a cubicle about the size of a bass drum. It had been intended for one junior officer; the laboratory had not been planned for married couples. We were as crowded as a plate of smorgasbord but we did not care.

I woke up first the next morning and made my usual quick check to be sure that a slug had not gotten to her. While I was doing so, she opened her eyes and smiled drowsily. "Go back to sleep," I said. "You've got another thirty minutes."

But she did not go back to sleep. After a while I said, "Mary, do you know the incubation period for bubonic plague?"

She answered, "Should I know? One of your eyes is slightly darker than the other."

I shook her. "Pay attention, wench. I was in the lab library last night, doing some rough figuring. As I get it, the slugs must have moved in on our commie pals at least three months before they invaded us."

"Yes, of course."

"You knew? Why didn't you say so?"

"Nobody asked me. Besides, it's obvious."

"Oh, for heaven's sake! Let's get up; we'll be late for breakfast."

Before we left the cubicle I said, "Parlor games at the usual time this morning?"

"Yes."

"Mary, you never talk about what they ask you."

She looked surprised. "But I never know."

"That's what I gathered. Deep trance with a 'forgetter' order, eh?"

"I suppose so."

"Hmm . . . well, there will be some changes made. Today I am going in with you."

All she said was, "Yes, dear."

They were gathered as usual in Dr. Steelton's office, the Old Man, Steelton himself, a Colonel Gibsy who was chief of staff, a lieutenant colonel whom I knew only by sight, and an odd lot of sergeant-technicians, j.o.'s, and flunkies. In the army it seems to take an eight-man working party to help a brass hat blow his nose; that is one reason why I left the service.

The Old Man's eyebrows shot up when he saw me but he said nothing. A sergeant who seemed to be doorman tried to stop me. "Good morning, Mrs. Nivens," he said to Mary; then to me he added, "I don't seem to have you on the list."

"I'm putting myself on the list," I announced to the entire room and pushed on past him.

Colonel Gibsy glared at me and turned to the Old Man with one of those "Hrrumph-hrrumph-what's-all-this?" noises. The Old Man did not answer but his eyebrows went still higher. The rest looked frozen faced and tried to pretend they weren't there—except one WAC sergeant who could not keep from grinning.

The Old Man got up, said to Gibsy, "Just a moment. Colonel." and limped over to me. In a voice that reached me alone, he said, "Son, you promised me."

"And I withdraw it. You had no business exacting a promise from a man about his wife. You were talking out of turn."

"You've no business here, son. You are not skilled in these matters. For Mary's sake, get out."

Up to that moment it had not occurred to me to question the Old Man's right to stay—but I found myself announcing my decision as I made it. "You are the one with no business here—*you* are not an analyst. So get out."

The Old Man glanced at Mary and so did I. Nothing showed in her face; she might have been waiting for me to make change. The Old Man said slowly, "You been eating raw meat, son?"

I answered, "It's my wife who is being experimented on; from here on I make the rules—or there won't be any experiments."

Colonel Gibsy butted in with, "Young man, are you out of your mind?"

I said, "What's your status here?" I glanced at his hands and added, "That's a V.M.I, ring, isn't it? Have you any other qualifications? Are you an M.D.? Or a psychologist?"

He drew himself up and tried to look dignified—pretty difficult dressed in your skin, unless your dignity is built in, the way Mary's is. "You seem to forget that this is a military reservation."

"And you seem to forget that my wife and I aren't military personnel!" I added, "Come on, Mary. We're leaving."

"Yes, Sam."

I added to the Old Man, "I'll tell the offices where to send our mail." I started for the door with Mary following me.

The Old Man said, "Just a moment, as a favor to me." I stopped and he went on to Gibsy, "Colonel, will you step outside with me? I'd like a word in private."

Colonel Gibsy gave me a general-court-martial look but he went. We all waited. Mary sat down but I did not. The juniors continued to be poker-faced, the lieutenant colonel looked perturbed, and the little sergeant seemed about to burst. Steelton was the only one who appeared unconcerned. He took papers out of his "incoming" basket and commenced quietly to work on them.

It was ten or fifteen minutes later that a sergeant came in. "Dr. Steelton, the Commanding Officer says to go ahead."

"Very well. Sergeant," he acknowledged, then looked at me, and said, "Let's go into the operating room."

I said, "Not so fast. Who are the rest of these supernumeraries? How about them?" I indicated the lieutenant colonel.

"Eh? He's Dr. Hazelhurst—two years on Venus."

"Okay, he stays." I caught the eye of the sergeant with the grin and said, "What's your job here, sister?"

"Me? Oh, I'm sort of a chaperone."

"I'm taking over the chaperone business. Now, Doctor, suppose you sort out the spare wheels from the people you actually need for your work."

"Certainly, sir." It turned out that he wanted no one but Colonel Hazelhurst. I gathered an impression that he was glad to get rid of the gallery. We went on inside—Mary, myself, and the two specialists.

The operating room contained a psychiatrist's couch surrounded by a semicircle of chairs. The double snout of a tri-dim camera poked unobtrusively out of the overhead; I suppose the mike was hidden in the couch. Mary went to the couch and sat down; Dr. Steelton got out an injector. "We'll try to pick up where we left off, Mrs. Nivens."

I said, "Just a moment. You have records of the earlier attempts?"

"Of course."

"Let's play them over first. I want to come up to date."

He hesitated, then answered, "If you wish. Mrs. Nivens, I suggest that you wait in my office. No, it will take quite a long time; suppose I send for you later?"

It was probably just the contrary mood that I was in; bucking the Old Man had gotten me hiked up with adrenaline. "Let's find out first if she *wants* to leave."

Steelton looked surprised. "You don't know what you are suggesting. These records would be emotionally disturbing to your wife, even harmful."

Hazelhurst put in, "Very questionable therapy, young man."

I said, "This isn't therapy and you know it. If therapy had been your object you would have used eidetic recall technique instead of drugs."

Steelton looked worried. "There was not time for that. We had to use rough methods for quick results. I'm not sure that I can authorize the subject to see the records."

Hazelhurst put in, "I agree with you. Doctor."

I exploded. "Damn it, nobody asked you to authorize anything and you haven't got any authority in the matter. Those records were snitched right out of my wife's head and they belong to *her*. I'm sick of you people trying to play God. I don't like it in a slug and I don't like it any better in a human being. She'll make up her own mind whether or not she wants to see them and whether or not I or anybody else will see them. Now *ask her*!"

Steelton said, "Mrs. Nivens, do you wish to see your records?"

Mary answered, "Yes, Doctor, I'd like very much to see them."

He seemed surprised. "Uh, to be sure. Do you wish to see them by yourself?" He glanced at me.

"My husband and I will see them. You and Dr. Hazelhurst are welcome to remain, if you wish."

Which they did. Presently a whole stack of tape spools were brought in, each labeled with attributed dates and ages. It would have taken us hours to go through them all, so I discarded those which concerned Mary's life after about 1991. I could not see how they could affect the problem and Mary could see them later if she wished.

We started out with her very early life. Each record started with the subject—Mary, that is—choking and groaning and struggling the way people always do when they are being forced back on a memory track which they would rather not follow, then would come the reconstruction, both in Mary's voice and in other voices. What surprised me most was Mary's face—in the tank, I mean. We had the magnification stepped up so that the stereo image of her face was practically in our laps and one could follow every change of expression.

First her face became that of a little girl—oh, her features were the same grownup features but I knew that I was seeing my darling as she must have been when she was very small. It made me hope that we would have a little girl ourselves.

Then her expression would change to match when other actors out of her memory took over. It was like watching an incredibly able monologist playing many parts.

Mary took it with apparent serenity but her hand stole into mine. When we came to the terrible part when her parents changed, became not her parents but slaves of slugs, she clamped down on my fingers so hard that it would have crushed a hand less hamlike than my own. But she controlled herself.

I skipped over the spools marked "period of suspended animation". I was surprised to find that there were a great many of them; I would have thought that there was nothing to dig out of the memory of a person in such a condition. Be that as it may, I could not see how she could have learned anything during that period which would tell us how the slugs had died, so I left them out and proceeded to the group concerned with the time from her resuscitation to the group concerned with her rescue from the swamps.

One thing was certain from her expressions in the imaged record: she had been possessed by a slug as soon as she was revived. The dead quality of her face was that of a slug not bothering to keep up a masquerade; the stereocasts from Zone Red were full of that expression. The barren qualities of her memories from that period confirmed it.

Then, rather suddenly, she was no longer hag-ridden but was again a little girl, a very sick and frightened little girl. There was a delirious quality to her remembered thoughts, but, at the last, a new voice came out loud and clear; "Well, skin me alive come Sunday! Look, Pete—it's a little girl!"

Another voice answered, "Alive?" and the first voice answered, "I don't know."

The rest of that tape carried on into Kaiserville, her recovery, and many new voices and memories; presently it ended.

"I suggest," Dr. Steelton said as he took the tape out of the projector, "that we play another one of the same period. They are all slightly different and this period is the key to the whole matter."

"Why, Doctor?" Mary wanted to know.

"Eh? Of course you need not see them if you don't want to—but this period is the one which we are actually investigating. From your memories we must build up a picture of what happened to the parasites on Venus, why they died. In particular, if we could tell just what killed the titan which, uh, possessed you before you were found—what killed it and left you alive—we might well have the weapon we need."

"But don't you *know*?" Mary asked wonderingly.

"Eh? Not yet, not yet—but we'll get it. The human memory is an amazingly complete record, even though unhandy to use."

"But I can tell you now—I thought you knew. It was 'nineday fever'."

"*What*?" Hazelhurst was out of his chair as if prodded.

"But of course. Couldn't you tell from my face? It was utterly characteristic—the mask, I mean. I saw it several times; I used to nurse it back ho—back in Kaiserville, because I had had it once and was immune to it."

Steelton said, "How about it Doctor? Have you ever seen a case of it?"

"Seen a case? No, I can't say that I have; by the time of the second expedition they had the vaccine for it. I'm thoroughly acquainted with its clinical characteristics, of course."

"But can't you tell from this record?"

"Well," Hazelhurst answered carefully, "I would say that what we have seen is consistent with it—but not conclusive, not conclusive."

"What's not conclusive?" Mary said sharply. "I told you it was 'nineday fever'."

"We must be sure," Steelton said apologetically.

"How sure can you get? There is no question about it. I was told that I had had nineday fever, that I had been sick with it when Pete and Frisco found me. I nursed other cases later and I never caught it again. I remember what their faces looked like when they were ready to die—just like my own face in the record. Anyone who has ever seen a case never forgets it and could not possibly mistake it for anything else. What more do you want? Fiery letters in the sky?" I have never seen Mary so close to losing her temper—except once. I said to myself: look out, gentlemen, better duck!

Steelton said, "I think you have proved your point, dear lady—but tell me: you were believed to have no memory of this period and my own experience with you leads me to think so. Now you speak as if you had direct, conscious memory—yes?"

Mary looked puzzled. "I remember it now—I remember it quite clearly. I haven't thought about it in many years."

"I think I understand." He turned to Hazelhurst. "Well, Doctor? Do we have a culture of it in the laboratory? Have your boys done any work on it?"

Hazelhurst seemed stunned. "Work on it? Of course not! It's utterly out of the question—nineday fever! We might as well use polio—or typhus. I'd rather treat a hangnail with an ax!"

I touched Mary's arm and said, "Let's go, darling. I think we have done all the damage we can." As we left I saw that she was trembling and that her eyes were full of tears. I took her into the messroom for systemic treatment—distilled.

Later on I bedded Mary down for a nap and sat with her until I was sure she was asleep. Then I looked up my father; he was in the office they had assigned to him. The green privacy light was already on. "Howdy," I said.

He looked at me speculatively. "Well, Elihu, I hear that you hit the jackpot."

"I prefer to be called 'Sam'," I answered.

"Very well, Sam. Success is its own excuse; nevertheless the jackpot appears to be disappointingly small. The situation seems to be almost as hopeless as before. Nineday fever—no wonder the colony died out and the slugs as well. I don't see how we can use it. We can't expect everyone to have Mary's indomitable will to live."

I understood him; the fever carried a 98-percent plus death rate among unprotected Earthmen. With those who had taken the shots the rate was an effective zero—but that did not figure. We needed a bug that would just make a man sick—but would kill his slug. "I can't see that it makes much difference," I pointed out. "It's odds-on that you will have typhus—or plague—or both—throughout the Mississippi Valley in the next six weeks."

"Or the slugs may have learned a lesson from the setback they took in Asia and will start taking drastic sanitary measures," he answered. I had not thought of that; the idea startled me so that I almost missed the next thing he said, which was: "No, Sam, you'll have to devise a better plan than that."

"*I'll* have to? I just work here."

"You did once—but now you've taken charge. I don't mind; I was ready to retire anyhow."

"Huh? What the devil are you talking about? I'm not in charge of anything—and don't want to be. You are head of the Section."

He shook his head. "A boss is the man who does the bossing. Titles and insignia usually come after the fact, not before. Tell me—do you think Oldfield could take over my job?"

I considered it and shook my head; Dad's chief deputy was the executive officer type, a "carry-outer", not a "think-upper". "I've known that you would take over, some day," he went on. "Now you've done it—by bucking my judgment on an important matter, forcing your own on me, and by being justified in the outcome."

"Oh, rats! I got bullheaded and forced one issue. It never occurred to you big brains that you were failing to consult the one real Venus expert you had on tap—Mary, I mean. But I didn't expect to find out anything; I had a lucky break."

He shook his head. "I don't believe in luck, Sam. Luck is a tag given by the mediocre to account for the accomplishments of genius."

I placed my hands on the desk and leaned toward him. "Okay, so I'm a genius—just the same you are not going to get me to hold the sack. When this is over Mary and I are going up in the mountains and raise kittens and kids. We don't intend to spend our time bossing screwball agents."

He smiled gently as though he could see farther into the future than I could. I went on, "I don't *want* your job—understand me?"

"That is what the Devil said to the Deity after he displaced him—but he found he could not help himself. Don't take it so hard, Sam. I'll keep the title for the present and give you all the help I can. In the meantime, what are your orders, sir?"

XXXI

The worst of it was, he meant it. I tried to correct matters by going limp on him, but it did not work. A top-level conference was called late that afternoon; I was notified but I stayed away. Shortly a very polite little WAC came to tell me that the commanding officer was waiting and would I please come at once?

So I went—and tried to stay out of the discussion. But my father has a way of conducting any meeting he is in, even if he is not in the chair, by looking expectantly at the one he wants to hear from. It's a subtle trick, as the group does not know that it is being led.

But *I* knew. With every eye in the room on you, it is easier to voice an opinion than to keep quiet. Particularly as I found that I had opinions.

The meeting was largely given over to moaning and groaning about the utter impossibility of using nineday fever against the slugs. Admitted that it would kill slugs—it would even kill Venerians who can be chopped in two and still survive. But it was sure death to any human—or almost any human; I was married to one who *had* survived—death to the enormous majority. Seven to ten days after exposure, then curtains.

"Yes, Mr. Nivens?" It was the commanding general, addressing me. I hadn't said anything but Dad's eyes were on me, waiting.

"I think there has been a lot of despair voiced at this session," I said, "and a lot of opinions given that were based on assumptions. The assumptions may not be correct."

"Yes?"

I did not have an instance in mind; I had been shooting from the hip. I continued to do so. "Well . . . for example—I hear constant reference to nineday fever as if the 'nineday' part were an absolute fact. It's not."

The boss brass shrugged impatiently. "It's a convenient tag—it averages nine days."

"Yes—but how do you know it lasts nine days—*for a slug*?"

By the murmur with which it was received I knew that I had hit the jackpot again.

A few minutes later I was being invited to explain why I thought the fever might run a different time in slugs and, if so, why it mattered. I began to feel like the after-dinner speaker who wishes he had not gotten up in the first place. But I bulled on ahead. "As to the first point," I said, "according to the record I saw this morning in the only case we know about the slug did die in less than nine days—quite a lot less. Those of you who have seen the records on my wife—and I gather that entirely too many of you have—are aware that her parasite left her, presumably dropped off and died, long before the eighth-day crisis. One datum does not fair a curve, but if it is true and experiments show it to be, then the problem is very different. A man infected with the fever might be rid of his slug in—oh, call it four days. That gives you five days to catch him and cure him."

The general whistled. "That's a pretty heroic solution, Mr. Nivens. How do you propose to cure him? For that matter, how do you propose to catch him? I mean to say, suppose we do plant an epidemic of nineday fever in Zone Red, it would take some incredibly fast footwork—in the face of stubborn resistance, remember—to locate and treat more than fifty million people before they died of the fever."

It was a hot potato, so I slung it right back. I wondered as I did so how many "experts" made their names by passing the buck. "As to the second question, that is a logistical and tactical problem—*your* problem, not mine. As to the first, there is your expert." I pointed to Dr. Hazelhurst. "Ask him."

Hazelhurst huffed and puffed and I knew how he felt. Insufficient former art . . . more research needed . . . experiments would be required . . . he seemed to recall that some work had been done toward an antitoxin treatment but the vaccine for immunizing had proven so successful that he was not sure the antitoxin had ever been perfected. Anyway, everyone who went to Venus nowadays was immunized before leaving. He concluded lamely by saying that the study of the exotic diseases of Venus was necessarily still in its infancy.

The general interrupted him as he was finishing. "This antitoxin business—how soon can you find out about it?"

Hazelhurst said he would get after it at once, there was a man at the Sorbonne he wanted to phone.

"Do so," his commanding officer said. "You are excused."

Hazelhurst came buzzing at our door before breakfast the next morning. I was annoyed but tried not to show it when I stepped out into the passage to see him. "Sorry to wake you," he said, "but you were right about that antitoxin matter."

"Huh?"

"They are sending me some from Paris; it should arrive any minute now. I do hope it's still potent."

"And if it isn't?"

"Well, we have the means to make it. We'll have to make it, of course, if this wild scheme is used—millions of units of it."

"Thanks for telling me," I said. "I know the general will be pleased." I started to turn away; he stopped me.

"Uh, Mr. Nivens—"

"Yes?"

"About the matter of vectors—"

"Vectors?" At the moment all the word meant to me was little arrows pointing in various directions.

"Disease vectors. We can't use rats or mice or anything like that. Do you happen to know how the fever is transmitted on Venus? By a little flying rotifer, the Venerian equivalent of an insect—but we don't have such here and that is the *only* way it can be carried."

"Do you mean to say you couldn't give it to me if you tried? Even with a jugful of live culture?"

"Oh, yes—I could inject you with it. But I can't picture a million paratroopers dropping into Zone Red and asking the parasite-ridden population to hold still while they gave them injections." He spread his hands helplessly.

Something started turning slowly over in my brain . . . a million men, in a single drop. "Why ask me?" I said. "It seems to be a medical problem."

"Uh, yes, it is of course. I just thought—Well, you seemed to have a ready grasp—" He paused.

"Thanks." My mind was struggling with two problems at once and beginning to have traffic problems. How many people were there in Zone Red? "Let me get this straight: suppose you had the fever and I didn't; I could not catch it from you?" The drop could not be medical men; there weren't that many.

"Not very easily. If I took a live smear from my throat and placed it in your throat, you might contract it. If I opened a vein of mine and made a trace transfusion to your veins, you would be sure to be infected with it."

"Direct contact, eh?" How many people could one paratrooper service? Ten? Twenty? Thirty? Or more? "If that is what it takes, you don't have any problem."

"Eh?"

"What's the first thing one slug does when he runs across another slug he hasn't seen lately?"

"*Conjugation*!"

" 'Direct conference', I've always called it—but then I use the sloppy old slug language for it. Do you think that would pass on the disease?"

"Think so? I'm sure of it! We have demonstrated, right here in this laboratory, that there is actual exchange of living protein during conjugation. They could not possibly escape direct transmission; we can infect the whole colony as if it were one body. Now why didn't I think of that?"

His words roused out a horrid memory, something about, "Would that my subjects had but one neck—" But I refrained from quoting it. "Don't go off half cocked," I said. "Better try it first. But I suspect that it will work."

"It will, it will!" He started to go, then stopped. "Oh, Mr. Nivens, would you mind very much—I know it's a great deal to ask—"

"What is? Speak up; I'm getting hungry." Actually I was anxious to work out the rest of the other problem.

"Well, would you consider permitting me to announce this method of vectoring in my report this morning? I'll give you full credit, but the general expects so much and this is just what I need to make my report complete." He looked so anxious that I almost laughed.

"Not at all," I said. "It's your department."

"That's decent of you. I'll try to return the favor." He turned away feeling happy and I turned back feeling the same way. I was beginning to like being a "genius".

I waited before reopening the door to our cubicle until I had straightened out in my mind all the main features of the big drop. Then I went in. Mary opened her eyes when I came in and gave me that long heavenly smile. I reached down and smoothed her hair. "Howdy, flame top, did you know that your husband is a genius?"

"Yes."

"You did? You never said so."

"You never asked me."

Hazelhurst gave credit all right; he referred to it as the "Nivens vector". I suppose it was natural that I should be asked to comment, though Dad looked my way first.

"I agree with Dr. Hazelhurst," I started out, "subject to experimental confirmation as outlined. However, he has properly left open for discussion certain aspects which are tactical rather than medical. While it is true that the entire body of titans might be infected from one contact, important considerations of timing—crucial, I should say—" I had worked out my whole opening speech, even to the hesitations, while eating breakfast. Mary does not chatter at breakfast, thank goodness!

"—require vectoring from many focal points. If we are to save a nominal hundred percent of the population of Zone Red, it is necessary that all the parasites be infected at as nearly the same time as possible in order that rescue squads may enter Zone Red *after* the slugs are no longer dangerous and *before* any host has passed the point where antitoxin can save him. The problem is susceptible to mathematical analysis—" Sam boy, I said to myself, you old phony, you could not solve it with an electronic integrator and twenty years of sweat. "—and should be turned over to your analytical section. However, let me sketch out the factors. Call the number of vector origins 'X'; call the number of rescue workers who much be dropped 'Y'. There will be an indefinitely large number of simultaneous solutions, with the optimum solution depending on logistic factors. Speaking in advance of rigorous mathematical treatment—" I had done my very damndest with a slipstick, but I did not mention that. "—and basing my opinions on my own unfortunately-too-intimate knowledge of their habits, I would estimate that—"

They let me go right ahead. You could have heard a pin drop, if anybody in that bare-skinned crew had had a pin. The general interrupted me once when I placed a rather low estimate on "X"; "Mr. Nivens. I think we can assure you of any number of volunteers for vectoring."

I shook my head. "You can't accept volunteers, General."

"I think I see your objection. The disease would have to be given time to establish itself in the volunteer and the timing might be dangerously close for his safety. But I think we could get around that—a gelatin capsule with the antitoxin embedded in tissue, or something of the sort. I'm sure the staff could work it out."

I thought they could, too, but I did not say that my real objection was a deep-rooted aversion to any additional human soul having to be possessed by a slug. "You *must not* use human volunteers, sir. The slug will know everything that his host knows—and he simply will not go into direct conference; he'll warn the others by word of mouth instead." I did not know that I was right but it sounded plausible. "No, sir, we will use animals—apes, dogs, anything large enough to carry a slug but incapable of human speech, and in sufficient quantities to infect the whole group before any slug knows that it is sick."

I went on to give a fast sketch of the final drop, Schedule Mercy, as I visualized it. "We can assume that the first drop—Schedule Fever—can start as soon as we are sure that we will have enough units of antitoxin for the second drop. In less than a week thereafter there should be no slug left alive on this continent."

They did not applaud, but it felt that way. The general adjourned the meeting and hurried away to call Air Marshal Rexton, then sent his aide back to invite me to lunch. I sent word that I would be pleased provided the invitation included my wife, otherwise I would be unable to accept.

Dad waited for me outside the conference room. "Well, how did I do?" I asked him, more anxiously than I tried to sound.

He shook his head. "Sam, you wowed 'em. You have the makings of a politician. No, I think I'll sign you up for twenty-six weeks of stereo instead."

I tried not to show how much I was pleased. I had gotten through the whole performance without once stammering; I felt like a new man.

XXXII

That ape Satan which had wrung my heart so back at the National Zoo turned out to be as mean as he was billed, once he was free of his slug. Dad had volunteered to be the test case for the Nivens-Hazelhurst theories, but I put my foot down and Satan drew the short straw.

Dad made an issue out of it; he had some silly idea that it was up to him to be possessed by a slug, at least once. I told him that we had no time to waste on his sinful pride. He grew huffy but I made it stick.

It was neither filial affection nor its neoFreudian antithesis that caused me to balk him; I was afraid of the combination of Dad-cum-slug. I did not want him on *their* side even temporarily and under laboratory conditions. Not with his shifty, tricky mind! I did not know how he would manage to escape nor what he would do to wreck our plans, but I was morally certain he would, once possessed.

People who have never experienced possession, even those who have seen it, cannot appreciate that the host is utterly *against* us—with all his abilities intact. We could not risk having Dad against us—and I swung enough weight to overrule him.

So we used anthropoid apes for the experiments. We had on hand not only apes from the National Zoological Gardens but simian citizens from half a dozen zoos and a couple of circuses. I did not select Satan for the job; I would have let the poor beast be. The look of patient suffering on his face made one forget the slug on his back.

Satan was injected with nineday fever on Wednesday the 13th. By Friday the fever had established; another chimp-cum-slug was introduced into his cage; the two slugs immediately went into direct conference, after which the second ape was removed.

On Sunday the 17th Satan's master shriveled up and fell off—dead. Satan was immediately injected with the antitoxin. Late Monday the other slug died and its host was dosed.

By Wednesday Satan was well though a bit thin and the second ape, Lord Fauntleroy, was on the road to recovery. I gave Satan a banana to celebrate and he took off the first joint of my left index finger and me with no time for a repair job. It was no accident either;

that ape was nasty.

But a minor injury could not depress my spirits. After I had it dressed I looked for Mary, as I wanted to crow; I failed to find her and ended up in the messroom, wanting someone with whom to share a toast.

The place was empty; everyone in the labs—except me—was working harder than ever, mounting Schedule Fever and Schedule Mercy. By order of the President all possible preparations were taking place in this one lab in the Smoky Mountains. The apes for vectoring, some two hundred of them, were here, and both the culture and the antitoxin were being "cooked" here; the horses needed for serum were stalled in what had been an underground handball court.

The million-plus men necessary for the Schedule Mercy drop could not be here, but they would know nothing about it until alerted a few hours before the drop, at which time each would be issued a hand gun and two bandoleers of individual dose antitoxin injectors. Those who had never parachuted before would not be given a chance to practice; they would each be pushed, if necessary, by some sergeant with a large foot. Everything possible was being done to keep the secret close; the only way I could see that we could lose (now that we knew that our theories worked) would be for the titans to find out our plans, through a renegade or by whatever means. Too many good plans have failed because some fool told his wife about it in bed.

If we failed to keep this secret, our ape disease vectors would never get into direct conference; they would be shot on sight wherever they appeared in the titan nation. But I relaxed over my first drink, happy and reasonably sure that the secret could not leak. Traffic with the laboratory was "incoming only" until after Drop Day and Colonel Kelly censored or monitored all communication outward—Kelly was no fool.

As for a leak from outside, the chances were slight. The general, Dad, Colonel Gibsy, and myself had gone to the White House the week before, there to see the President and Marshal Rexton. I had already convinced Dad that the way to keep this secret was not to share it with anybody; he put on a histrionic exhibition of belligerence and exasperation that got him what we wanted; in the end even Secretary Martinez was bypassed. If the President and Rexton could keep from talking in their sleep for another week, I did not see how we could miss.

A week would be none too soon; Zone Red was spreading. The counterattack they had launched at Pass Christian had not stopped there. The slugs had pushed on and now held the Gulf coast past Pensacola and there were signs that more was to come. Perhaps the slugs were growing tired of our resistance and might decide to waste human raw material by Abombing the cities we still held. If so, we would find it hard to stop; a radar screen can alert your defenses, but it won't stop a determined attack.

But I refused to worry about that. One more week—

Colonel Kelly came in, looked around the otherwise empty room, came over and sat down beside me. "How about a drink?" I suggested. "I feel like celebrating."

He examined the hairy paunch bulging out in front of him and said, "I suppose one more beer wouldn't put me in any worse shape."

"Have two beers. Have four—a dozen." I dialed for him, and told him about the success of the experiments with the apes.

He nodded. "Yes, I had heard. Sounds good."

" 'Good', the man says! Colonel, we are on the one yard line and goal to go. A week from now the game will be won."

"So?"

"Oh, come now!" I answered, irritated by his manner. "In a short time you'll be able to put your clothes back on and lead a normal life. Or don't you think our plans will work?"

"Yes, I think they will work."

"Then why the crepe-hanging?"

Instead of answering directly he said, "Mr. Nivens, you don't think that a man with my pot belly enjoys running around without his clothes, do you?"

"I suppose not. As for myself, I'm beginning to find it pleasant. I may hate to have to give it up—saves time and it's comfortable."

"You need not worry about having to give it up. This is a permanent change."

"Huh? I don't get you. You said our plans would work and now you talk as if Schedule Sun Tan would go on forever."

"In a modified way, it will."

I said, "Pardon me? I'm stupid today."

He dialed for another beer. "Mr. Nivens, I never expected to live to see a military reservation turned into a ruddy nudist camp. Having seen it happen, I never expect to see us change back—because we *can't*. Pandora's box has a one-way lid. All the king's horses and all the king's men—"

"Conceded," I answered. "Things never go back quite to what they were before. Just the same, you are exaggerating. The day after the President rescinds Schedule Sun Tan the suspended blue laws will go into effect and a man without pants will be liable to arrest."

"I hope not."

"Huh? Make up your mind."

"It's made up for me. Mr. Nivens, as long as there exists a possibility that a slug is alive the polite man must be willing to bare his entire body on request—or risk getting shot. Not just this week and next week but twenty years from now, or a hundred. No, no!" he said, seeing that I was about to interrupt, "I am not disparaging your fine plans—but pardon me if I say that you have been too busy with their details to notice that they are strictly local and temporary. For example—have you made any plans for combing the Amazonian jungles, tree by tree?"

He went on apologetically, "Just a rhetorical inquiry. This globe has nearly sixty million square miles of dry land; we can't begin to search it and clean out the slugs. Shucks, man, we haven't made a dent in the rats and we've been at that a long time. Titans are trickier and more prolific than rats."

"Are you trying to tell me it's hopeless?" I demanded.

"Hopeless? Not at all. Have another drink. I'm trying to say that we are going to have to learn to live with this horror, the way we had to learn to *live* with the atom bomb."

I went away feeling dashed and not at all cocky. I wanted to find Mary. Some days, it occurred to me, the "genius" business wasn't worth the trouble.

XXXIII

We were gathered in the same conference room in the White House; it put me in mind of the night after the President's message many weeks before. Dad was there; so were Mary and Rexton and Martinez. None of the "fishing cabinet" was present but their places were filled by our own lab general, by Dr. Hazelhurst, and by Colonel Gibsy. Martinez was busy trying to restore his face after having been told that he had been shunted out of the biggest show of his own department.

Nobody paid him any attention. Our eyes were on the big map still mounted across one wall; it had been four and a half days since the vector drop of Schedule Fever but the Mississippi Valley still glowed in ruby lights.

I was getting jittery, although the drop had been an apparent success and we had lost only three craft. According to the equations every slug within reach of direct conference should have been infected three days ago, with an estimated twentythree percent overlap. The operation had been computed to contact about eighty percent of the slugs in the first twelve hours alone, mostly in the large cities.

Soon, slugs should start dying a dam sight faster than flies ever did—*if* we were right.

I forced myself to sit still and wondered whether those ruby lights covered a few million very sick slugs—or merely two hundred dead apes. Had somebody skipped a decimal point? Or blabbed? Or had there been an error in our reasoning so colossal that we could not see it?

Suddenly a light blinked green, right in the middle of the board; everybody sat up. Right on top of it a voice began to come out of the stereo gear though no picture built up. "This is Station Dixie, Little Rock," a very tired southern voice said. "We need help very badly. Anyone who is listening, please be good enough to pass on this message: Little Rock, Arkansas, is in the grip of a terrible epidemic. Notify the Red Cross. We have been in the hands of—" The voice trailed off, whether from weakness or transmission failure I could not be sure.

I remembered to breathe. Mary patted my hand and I sat back, relaxing consciously. It was joy too great to be pleasure. I saw now that the green light had not been Little Rock, but farther west in Oklahoma. Two more lights blinked green, one in Nebraska and one north of the Canadian line. Another voice came over, a twangy New England voice; I wondered how he had gotten into Zone Red.

"A little like election night, eh, chief?" Martinez said heartily.

"A little," the President agreed, "but we do not usually get returns from Old Mexico." He pointed to the board; a pair of green lights were showing in Chihuahua.

"By George, you're right. Well, I guess 'State' will have some international incidents to straighten out when this is over, eh?"

The President did not answer and he shut up, to my relief. The President seemed to be talking to himself; he noticed me watching him, smiled, and spoke out loud:

" ' 'Tis said that fleas have little fleas,
Upon their backs to bite 'em,
And little fleas have lesser fleas,
And so, ad infinitum.' "

I smiled to be polite though I thought the notion was gruesome, under the circumstances. The President looked away and said, "Would anyone like supper? I find that I am hungry, for the first time in days."

By late the next afternoon the board was more green than red. Rexton had caused to be set up two annunciators keyed into the command center in the New Pentagon; one showed percentage of completion of the complicated score deemed necessary before the big drop; the other showed the projected time of drop. The figures on it changed from time to time, sometimes up, sometimes down. For the past two hours they had been holding fairly steady around 17.43, east coast time.

Finally Rexton stood up. "I'm going to freeze it at seventeen fortyfive," he announced. "Mr. President, if you will excuse me?"

"Certainly, sir."

Rexton turned to Dad and myself. "If you two Don Quixote's are still determined to go, now is the time."

I stood up. "Mary, you wait for me."

She asked, "Where?" It had already been settled—and not peacefully!—that she was not to go.

The President interrupted. "I suggest that Mrs. Nivens stay here. After all, she is a member of the family."

With the invitation he gave us his best smile and I said, "Thank you, sir." Colonel Gibsy got a very odd look.

Two hours later we were coming in on our target and the jump door was open. Dad and I were last in line, after the kids who would do the real work. My hands were sweaty and I stunk with the old curtain going-up stink. I was scared as hell—I never like to jump.

XXXIV

Gun in my left hand, antitoxin injector ready in my right, I went from door to door in my assigned block. It was an older section of Jefferson City, slums almost; it consisted of apartment houses built fifty years ago. I had given two dozen injections and had three dozen to go before it would be time for me to rendezvous at the State House. I was getting sick of it.

I knew why I had come—it was not just curiosity; I wanted to see them *die*! I wanted to watch them die, see them dead, with a weary hate that passed all other needs. But now I had seen them dead and I wanted no more of it; I wanted to go home, take a bath, and forget it.

It was not hard work, just monotonous and nauseating. So far I had not seen one live slug, though I had seen many dead ones. I had burned one skulking dog that appeared to have a hump; I was not sure as the light had been bad. We had hit shortly before sundown and now it was almost full dark.

The worst of it was the smells. Whoever compared the odor of unwashed, lousy, diseased humans with that of sheep was no friend to decent sheep.

I finished checking the rooms of the apartment building I was in, shouted to make sure, and went out into the street. It was almost deserted; with the whole population sick with the fever we found few on the streets. The lone exception was a man who came weaving toward me, eyes vacant. I yelled, "Hey!"

He stopped. I said, "You are sick, but I've got what you need to get well. Hold out your arm."

He struck at me feebly. I hit him carefully with my gun and he went face down. Across his back was the red rash of the slug; I avoided that area, picked a reasonably clean and healthy patch over his kidney and stuck in the injector, bending it to break the point after it was in. The units were gas-loaded; nothing more was needed. I did not even withdraw it, but left him.

The first floor of the next house held seven people, most of them so far gone that I did not bother to speak but simply gave them their shots and hurried on. I had no trouble. The second floor was like the first.

The top floor had three empty apartments, at one of which I had to burn out the lock to enter. The fourth flat was occupied, in a manner of speaking. There was a dead woman on the floor of the kitchen, her head bashed in. Her slug was still on her shoulders, but merely resting there, for it was dead, too, and beginning to reek. I left them quickly and looked around.

In the bathroom, sitting in an old-fashioned bathtub, was a middle-aged man. His head slumped on his chest and his wrist veins were open. I thought he was dead but he looked up as I bent over him. "You're too late," he said dully. "I killed my wife."

—or too soon, I thought. From the appearance of the bottom of the tub and by his gray face, five minutes later would have been better. I looked at him, wondering whether or not to waste an injection.

He spoke again. "My little girl—"

"You have a daughter?" I said loudly. "Where is she?"

His eyes flickered but he did not speak. His head slumped forward again. I shouted at him, then felt his jaw line and dug my thumb into his neck, but could find no pulse. As a favor to him I burned him carefully through the base of the brain before I left.

The child was in bed in one of the rooms, a girl of eight or so who would have been pretty had she been well. She roused and cried and called me Daddy. "Yes, yes," I said soothingly, "Daddy's going to take care of you." I gave her the injection in her leg; I don't think she noticed it.

I turned to go but she called out again. "I'm thirsty. Want a drink of water." So I had to go back into that bathroom again.

As I was giving it to her my phone shrilled and I spilled some of it. "Son! Can you hear me?"

I reached for my belt and switched on my phone. "Yes. What's up?"

"I'm in that little park just north of you. Can you come? I'm in trouble."

"Coming!" I put down the glass and started to leave—then caught by indecision, I turned back. I could not leave my new friend to wake up in that charnel house, a parent dead in each room. I gathered her up in my arms and stumbled down to the second floor. There I entered the first door I came to and laid her on a sofa. There were people in the flat, probably too sick to bother with her, but it was all I could do.

"Hurry, son!"

"On my way!" I dashed out of there and wasted no more breath talking to him, but made speed. Dad's assignment was directly north of mine, paralleling it and fronting on one of those pint-sized downtown parks. When I got around the block I did not see him at first and ran on past him.

"Here, son, over here—at the car!" This time I could hear him both through the phone and my bare ear. I swung around and spotted the car, a big Cadillac duo much like the Section often used. There was someone inside but it was too dark for me to see whether or not it was the Old Man. I approached cautiously until I heard him say, "Thank God! I thought you would never come," and knew that it was he.

I had to duck to get in through the door. It was then that he clipped me.

I came to, to find my hands tied and my ankles as well. I was in the second driver's seat of the car and the Old Man was in the other, at the controls. The wheel on my side was latched up out of the way. The sudden realization that the car was in the air brought me fully awake.

He turned and said cheerfully, "Feeling better?" I could see his slug, riding high on his shoulders.

"Some better," I admitted.

"Sorry I had to hit you," he went on, "but there was no other way."

"I suppose not."

"I'll have to leave you tied up for the present; you know that. Later on we can make better arrangements." He grinned, his old wicked grin. Most amazingly his own personality came through with every word the slug said.

I did not ask what "better arrangements" were possible; I did not need nor want to know. I concentrated on checking my bonds; I need not have bothered—the Old Man had given them his personal attention.

"Where are we going?" I asked.

"South." He fiddled with the controls. "'Way south. Just give me a moment to lay this heap in the groove and I will explain what's in store for us." He was busy for a few seconds, then said, "There—that will hold her until she levels off at thirty thousand."

The mention of that much altitude caused me to take a quick look at the control board. The duo did not merely look like one of the

Section's cars; it actually *was* one of our souped-up jobs. "Where did you get this car?" I asked.

"The Section had it cached in Jefferson City. I looked, and, sure enough, nobody had found it. Fortunate, wasn't it?"

There could be a second opinion on that point, I thought, but I did not argue. I was still checking the possibilities—and finding them somewhere between slim and hopeless. My own gun was gone, as I could tell by the pressure. He was probably carrying his on the side away from me; it was not in sight.

"But that was not the best of it," he went on; "I had the good luck to be captured by what was almost certainly the only healthy master in the whole of Jefferson City—not that I believe in luck. So we win after all." He chuckled. "It's like playing both sides of a very difficult chess game."

"You did not tell me where we are going?" I persisted. I did not know that it would help, but I was getting nowhere fast and talking was the only action open to me.

He considered. "Out of the United States, certainly. My master may be the only one free of nineday fever in the whole continent and I don't dare take a chance. I think the Yucatan peninsula would suit us—that's where I've got her pointed. We can hole up there and increase our numbers and work on south. When we do come back—and we will!—we won't make the same mistakes."

I said, "Dad, can't you take these ties off me? I'm losing circulation. You know you can trust me."

"Presently, presently—all in good time. Wait until we go full automatic." The car was still climbing; souped up or not, thirty thousand was a long pull for a car that had started out as a family model.

I said, "You seem to forget that I was with the masters a long time. I know the score—and I give you my word of honor."

He grinned. "Don't teach grandma how to steal sheep. If I let you loose now, you'll kill me or I'll have to kill you. And I want you alive. We're going places, son—you and me. We're fast and we're smart and we are just what the doctor ordered."

I did not have an answer. He went on, "Just the same—about you knowing the score: why didn't you tell me the score, son? Why did you hold out on me?"

"Huh?"

"You didn't tell me how it felt. Son, I had no idea that a man could feel such a sense of peace and contentment and wellbeing. This is the happiest I've been in years, the happiest since—" he suddenly looked puzzled, and then went on, "since your mother died. But never mind that; this is better. You should have told me."

Disgust suddenly poured over me and I forgot the cautious game I was playing. "Maybe I didn't see it that way. And neither would you, you crazy old fool, if you didn't have a filthy slug riding you, talking through your mouth, thinking with your brain!"

"Take it easy, son," he said gently—and so help me, his voice *did* soothe me. "You'll know better in a little while. Believe me, this is what we were intended for, this is our destiny. Mankind has been divided, warring with himself. The masters will make him whole again."

I thought to myself that there were probably custard heads just screwy enough to fall for such a line—surrender their souls willingly for a promise of security and peace. But I did not say so; I was clamping my jaws to keep from throwing up.

"But you need not wait much longer," he said suddenly, glancing at the board. "I'll nail her down in the groove." He adjusted his deadreckoner bug, checked his board, and set his controls. "That's a relief. Next stop: Yucatan. Now to work." He got out of his chair and knelt beside me in the crowded space. "Got to be safe," he said, as he strapped the safety belt across my middle.

I brought my knees up in his face.

He reared up and looked at me without anger. "Naughty, naughty. I could resent that—but the masters don't go in for resentment. Now be good." He went ahead, checking my wrists and feet. His nose was bleeding but he did not bother to wipe it. "You'll do," he said. "Now be patient; it won't be long."

He went back to the other control seat, sat down and leaned forward, elbows on knees. It brought his master directly into my view.

Nothing happened for some minutes, nor could I think of anything to do other than strain at my bonds. By his appearance, the Old Man was asleep, but I placed no trust in that.

A line formed straight down the middle of the horny brown covering of the slug.

As I watched it, it widened. Presently I could see the clotted opalescent horror underneath. The space between the two halves of the shell widened—and I realized that the slug was fissioning, sucking life and matter out of the body of my father to make two of itself.

I realized, too, with rigid terror, that I had no more than five minutes of individual life left to me. My new master was being born and soon would be ready to mount me.

Had it been humanly possible for flesh and bone to break the ties on me I would have broken them. I did not succeed. The Old Man paid no attention to my struggles. I doubt if he were conscious; the slugs must surely give up some measure of control while they are occupied with splitting. It must be that they simply immobilize the slave. As may be—the Old Man did not move.

By the time I had given up, worn out and sure that I could not break loose, I could see the ciliated silvery line down the center of the slug proper which means that fission is about to be complete. It was that which changed my line of reasoning, if there were reason left in my churning skull.

My hands were tied behind me, my ankles were tied, and I was belted tight across the middle to the chair. But my legs, even though fastened together, were free from my waist down; the seat had no knee belts.

I slumped down in the chair to get even more reach and swung my legs up high. I brought them down smashingly across the board—and set off every launching unit in her racks at once.

That adds up to a lot of g's—how many, I don't know, for I don't know how full her racks were. But there were plenty. We were both slammed back against the seats. Dad much harder than I was, since I was strapped down. He was thrown against the back of his seat, with his slug, open and helpless, crushed between the two masses.

It splashed.

And Dad himself was caught in that terrible, total reflex, that spasm of every muscle that I had seen three times before. He bounced forward against the wheel, face contorted, fingers writhing.

The car dived.

I sat there and watched it dive, if you call it sitting when you are held in place only by the belt. If Dad's body had not hopelessly fouled the controls I might have been able to do something about it—gotten her headed up again perhaps—with my bound feet. As it was, I tried but with no success at all. The controls were probably jammed as well as fouled.

The altimeter was clicking away busily. We had dropped to eleven thousand feet before I found time to glance at it. Then it was nine . . . seven . . . six—and we entered our last mile.

At fifteen hundred the radar interlock with the altimeter cut in and the nose units fired one at a time. The belt buffeted me across the stomach each time and I finally did throw up. I was thinking that I was saved, that now the ship would level off—though I should have known better. Dad being jammed up against the wheel as he was.

I was still thinking so as we crashed.

I came to by becoming slowly aware of a gently rocking motion. I was annoyed by it, I wanted it to stop; even a slight motion seemed to cause me more pain than I could bear. I managed to get one eye open—the other would not open at all—and looked dully around for the source of my annoyance.

Above me was the floor of the car, but I stared at it for a long time before I placed it as such. By the time I figured out what it was I was somewhat aware of where I was and what had happened. I remembered the dive and the crash—and realized that we must have crashed not into the ground but into some body of water—the Gulf of Mexico—but I did not really care.

With a sudden burst of grief I mourned my father.

The broken belt of my seat was flapping uselessly just above me. My hands were still tied and so were my ankles, and one arm at least seemed to be broken. One eye was stuck shut and it hurt me to breathe; I quit taking stock of my injuries. Dad was no longer plastered against the wheel and that puzzled me. With painful effort I rolled my head over to see the rest of the car with my one good eye. He was lying not far from me, three feet or so, from my head to his. He was bloody and cold and I was sure that he was dead. I think it took me about a half hour to cross that three feet.

I lay face to face with him, almost cheek to cheek. So far as I could tell there was no trace of life, nor, from the odd and twisted way in which he lay, did it seem possible.

"Dad," I said hoarsely. Then I screamed it. "*Dad*!"

His eyes flickered but did not open. "Hello, son," he whispered. "Thanks, boy, thanks—" His voice died out.

I wanted to shake him but all I could do was shout. "Dad! Wake up—are you all right?"

He spoke again, as if every word were a painful task. "Your mother—said to tell you . . . she was—proud of you." His voice died out again and his breathing was labored in that ominous dry-stick sound.

"Dad," I sobbed, "don't die—I can't get along without you."

His eyes opened wide. "Yes, you can, son." He paused and labored, then added, "I'm hurt, boy." His eyes closed again.

I could not get any more out of him, though I shouted and screamed. Presently I lay my face against his and let my tears mix with the dirt and blood.

XXXV

And now to clean up Titan!

Each of us who are going is writing one of these reports, for we know that we may not come back. If not, this is our legacy to free human beings—all that we learned and all that we know of how the titan parasites operate and what must be guarded against. For Kelly was right; there is no getting Humpty-Dumpty back together. In spite of the almost complete success of Schedule Mercy there is no way to be sure that the slugs are all gone. No longer ago than last week it was reported that a bear was shot, up Yukon way, wearing a hump.

The race will have to be always on guard; most especially it will have to be on guard about twenty-five years from now if we don't come back—but the flying saucers do. We don't know why the titan monsters follow the twenty-nine year cycle of Saturn's "year", but they do. The human race has many cycles which match the Earth year; the reasons may be equally simple for the titans. We hope that they are active only at one period of their "year"; if they are. Operation Vengeance may have easy pickings. Not that we are counting on it. I am going out, heaven help us, as an "applied psychologist (exotic)", but I am also a combat trooper, as is every one of us, from chaplain to cook. This is for keeps and we intend to show those slugs that they made the mistake of tangling with the toughest, meanest, deadliest, most unrelenting—and ablest—form of life in this section of space, a critter that can be killed but can't be tamed.

(I have a private hope that we will find some way to save the little elf creatures, the androgynes. We weren't able to save any of those in the saucer we found near Kansas City when the fighting was over, but that doesn't prove anything. I think we could get along with the elves. They are probably the real natives of Titan, anyhow; certainly they aren't related to the slugs.)

Whether we make it, or not, the human race has got to keep up its well-earned reputation for ferocity. If the slugs taught us anything, it was that the price of freedom is the willingness to do sudden battle, anywhere, any time, and with utter recklessness. If we did not learn that, well—"Dinosaurs, move over! We are ready to become extinct."

For who knows what dirty tricks may be lurking around this universe? The slugs may be simple and open and friendly compared with, let us say, the natives of the planets of Sirius. If this is just the opener, we had better learn from it for the main event. We thought space was empty and that we were automatically the lords of creation—even after we "conquered" space we thought so; Mars was already dead and Venus had not really gotten started. Well, if Man wants to be top dog—or even a respected neighbor—he'll have to fight for it. Beat the plowshares back into swords; the other was a maiden aunt's fancy.

Every one of us who is going has been possessed at least once. Only those who have been hag-ridden can know how tricky the slugs are, how constantly one must be on guard—or how deeply one must hate. The trip, they tell me, will take about twelve years, which will give Mary and me time to finish our honeymoon. Oh, yes, Mary is going; most of us are married couples and the single men are balanced by an equal number of single women. Twelve years isn't a trip; it's a way of living.

When I told Mary that we were going to Saturn her single comment was, "Yes, dear."

We'll have time for two or three kids, too. As Dad says, "The race must go on, even if it doesn't know where."

This report is loose-jointed in spots, and I can see that some must be cut and some must be censored before it is transcribed. But I have put everything into it, as I saw it and as I felt it, for war with another race is psychological war, not war of gadgets, and what I thought and what I felt may be more important than what I did.

I am finishing this report in Space Station Beta, from which we will transship to our vessel U.N.S. *Avenger*. I will not have time to make corrections; this will have to go as is, for the historians to have fun with. We said good-by to Dad last night at Pikes Peak Port and left our little girl with him. She did not understand and that was hard. But it was better so—and Mary and I will look into the matter of having another, at once.

When I said good-by Dad corrected me. "So long, you mean. You'll be back and I intend to hang on, getting crankier and meaner every year, until you do." I said I hoped so. He nodded. "You'll make it. You're too tough and mean to die. I've got a lot of confidence in you and the likes of you, son."

We are about to transship. I feel exhilarated. Puppet masters—the free men are coming to kill you!

Death and Destruction!

Between Planets

I

NEW MEXICO

"EASY, boy, easy."

Don Harvey reined in the fat little cow pony. Ordinarily Lazy lived up to his name; today he seemed to want to go places. Don hardly blamed him. It was such a day as comes only to New Mexico, with sky scrubbed clean by a passing shower, the ground already dry but with a piece of rainbow still hanging in the distance. The sky was too blue, the buttes too rosy, and the far reaches too sharp to be quite convincing. Incredible peace hung over the land and with it a breathless expectancy of something wonderful about to happen.

"We've got all day," he cautioned Lazy, "so don't get yourself in a lather. That's a stiff climb ahead." Don was riding alone because he had decked out Lazy in a magnificent Mexican saddle his parents had ordered sent to him for his birthday. It was a beautiful thing, as gaudy with silver as an Indian buck, but it was as out of place at the ranch school he attended as formal clothes at a branding — a point which his parents had not realized. Don was proud of it, but the other boys rode plain stock saddles; they kidded him unmercifully and had turned "Donald James Harvey" into "Don Jaime" when he first appeared with it.

Lazy suddenly shied. Don glanced around, spotted the cause, whipped out his gun, and fired. He then dismounted, throwing the reins forward so that Lazy would stand, and examined his work. In the shadow of a rock a fair-sized snake, seven rattles on its tail, was still twitching. Its head lay by it, burned off. Don decided not to save the rattles; had he pinpointed the head he would have taken it in to show his marksmanship. As it was, he had been forced to slice sidewise with the beam before he got it. If he brought in a snake killed in such a clumsy fashion someone would be sure to ask him why he hadn't used a garden hose.

He let it lie and remounted while talking to Lazy. "Just a no-good old sidewinder," he said reassuringly. "More scared of you than you were of it."

He clucked and they started off. A few hundred yards further on Lazy shied again, not from a snake this time but from an unexpected noise. Don pulled him in and spoke severely. "You bird-brained butterball! When are you going to learn not to jump when the telephone rings?"

Lazy twitched his shoulder muscles and snorted. Don reached for the pommel, removed the phone, and answered.

"Mobile 6-J-233309, Don Harvey speaking."

"Mr. Reeves, Don," came back the voice of the headmaster of Ranchito Alegre. "Where are you?"

"Headed up Peddler's Grave Mesa, sir."

"Get home as quickly as you can."

"Uh, what's up, sir?"

"Radiogram from your parents. I'll send the copter out for you if the cook is back with someone to bring your horse in."

Don hesitated. He didn't want just anybody to ride Lazy, like as not getting him overheated and failing to cool him off. On the other hand a radio from his folks could not help but be important. His parents were on Mars and his mother wrote regularly, every ship—but radiograms, other than Christmas and birthday greetings, were almost unheard of.

"I'll hurry, sir."

"Right!" Mr. Reeves switched off. Don turned Lazy and headed back down the trail. Lazy seemed disappointed and looked back accusingly.

As it turned out, they were only a half-mile from the school when the ranch copter spotted them. Don waved it off and took Lazy on in himself. Despite his curiosity he delayed to wipe down the pony and water it before he went in. Mr. Reeves was waiting in his office and motioned for him to come in. He handed Don the message.

It read: DEAR SON, PASSAGE RESERVED FOR YOU VALKYRIE CIRCUM-TERRA TWELVE APRIL LOVE MOTHER AND DAD.

Don blinked at it, having trouble taking in the simple facts. "But that's right away"

"Yes. You weren't expecting it?"

Don thought it over. He had halfway expected to go home—if one could call it going home when he had never set foot on Mars—at the end of the school year. If they had arranged his passage for the Vanderdecken three months from now . . . "Uh, not exactly. I can't figure out why they would send for me before the end of the term."

Mr. Reeves fitted his fingertips carefully together. "I'd say that it was obvious."

Don looked startled. "You mean? Mr. Reeves, you don't really think there is going to be trouble, do you?"

The headmaster answered gravely, "Don, I'm not a prophet. But it is my guess that your parents are sufficiently worried that they want you out of a potential war zone as quickly as possible."

He was still having trouble readjusting. Wars were something you studied, not something that actually happened. Of course his class in contemporary history had kept track of the current crisis in colonial affairs, but, even so, it had seemed something far away, even for one as widely traveled as himself—a matter for diplomats and politicians, not something real.

"Look, Mr. Reeves, they may be jumpy but I'm not. I'd like to send a radio telling them that I'll be along on the next ship, as soon as school is out."

Mr. Reeves shook his head. "No. I can't let you go against your parents' explicit instructions. In the second place, ah—" The headmaster seemed to have difficulty in choosing his words. "—that is to say, Donald, in the event of war, you might find your position here, shall we call it, uncomfortable?"

A bleak wind seemed to have found its way into the office. Don felt lonely and older than he should feel. "Why?" he asked gruffly.

Mr. Reeves studied his fingernails. "Are you quite sure where your loyalties lie?" he said slowly.

Don forced himself to think about it. His father had been born on Earth; his mother was a second-generation Venus colonial. But neither planet was truly their home; they had met and married on Luna and had pursued their researches in planetology in many sectors of the solar system. Don himself had been born out in space and his birth certificate, issued by the Federation, had left the question of his nationality open. He could claim dual citizenship by parental derivation. He did not think of himself as a Venus colonial; it had been so long since his family had last visited Venus that the place had grown unreal in his mind. On the other hand he had been eleven years old before he had ever rested his eyes on the lovely hills of Earth.

"I'm a citizen of the System," he said harshly.

"Mmmm—" said the headmaster. "That's a fine phrase and perhaps someday it will mean something. In the meantime, speaking as a friend, I agree with your parents. Mars is likely to be neutral territory; you'll be safe there. Again, speaking as your friend—things may get a little rough here for anyone whose loyalty is not perfectly clear."

"Nobody has any business questioning my loyalty; under the law, I count as native born!"

The man did not answer. Don burst out, "The whole thing is silly! If the Federation wasn't trying to bleed Venus white there wouldn't be any war talk."

Reeves stood up. "That will be all, Don. I'm not going to argue politics with you."

"It's true! Read Chamberlain's *Theory of Colonial Expansion*!"

Reeves seemed startled. "Where did you lay hands on that book? Not in the school library."

Don did not answer. His father had sent it to him but had cautioned him not to let it be seen; it was one of the suppressed books—on Earth, at least. Reeves went on, "Don, have you been dealing with a booklegger?"

Don remained silent. "Answer me!"

Presently Reeves took a deep breath and said, "Never mind. Go up to your room and pack. The copter will take you to Albuquerque at one o'clock."

"Yes, sir." He had started to leave when the headmaster called him back.

"Just a moment. In the heat of our, uh, discussion I almost forgot that there was a second message for you."

"Oh?" Don accepted the slip; it said: DEAR SON, BE SURE TO SAY GOODBYE TO UNCLE DUDLEY BEFORE YOU LEAVE — MOTHER.

This second message surprised him in some ways even more than the first; he had trouble realizing that his mother must mean Dr.

Dudley Jefferson—a friend of his parents but no relation, and a person of no importance in his own life. But Reeves seemed not to see anything odd in the message, so he stuck it in his Levis and left the room.

Long as he had been earthbound he approached packing with a true spaceman's spirit. He knew that his passage would entitle him to only fifty pounds of free lift; he started discarding right and left. Shortly he had two piles, a very small one on his own bed—indispensable clothing, a few capsules of microfilm, his slide rule, a stylus, and a vreetha, a flutelike Martian instrument which he had not played in a long time as his schoolmates had objected. On his roommate's bed was a much larger pile of discards.

He picked up the vreetha, tried a couple of runs, and put it on the larger pile. Taking a Martian product to Mars was coal to Newcastle. His roommate, Jack Moreau, came in as he did so. "What in time goes on? House cleaning?"

"Leaving."

Jack dug a finger into his ear. "I must be getting deaf. I could have sworn you said you were leaving."

"I am." Don stopped and explained, showing Jack the message from his parents.

Jack looked distressed. "I don't like this. Of course I knew this was our last year, but I didn't figure on you jumping the gun. I probably won't sleep without your snores to soothe me. What's the rush?"

"I don't know. I really don't. The Head says that my folks have war jitters and want to drag their little darling to safety. But that's silly, don't you think? I mean, people are too civilized to go to war today."

Jack did not answer. Don waited, then said sharply, "You agree, don't you? There won't be any war."

Jack answered slowly, "Could be. Or maybe not."

"Oh, come off it!"

His roommate answered, "Want me to help you pack?"

"There isn't anything to pack."

"How about all that stuff?"

"That's yours, if you want it. Pick it over, then call in the others and let them take what they like."

"Huh? Gee, Don, I don't want your stuff. I'll pack it and ship it after you."

"Ever ship anything 'tween planets? It's not worth it."

"Then sell it. Tell you what, we'll hold an auction right after supper."

Don shook his head. "No time. I'm leaving at one o'clock."

"What? You're really blitzing me, kid. I don't like this."

"Can't be helped." He turned back to his sorting.

Several of his friends drifted in to say goodbye. Don himself had not spread the news and he did not suppose that the headmaster would have talked, yet somehow the grapevine had spread the word. He invited them to help themselves to the plunder, subject to Jack's prior claim.

Presently he noticed that none of them asked why he was leaving. It bothered him more than if they had talked about it. He wanted to tell someone, anyone, that it was ridiculous to doubt his loyalty—and anyhow there wasn't going to be a war.

Rupe Salter, a boy from another wing, stuck his head in, looked over the preparations. "Running out, eh? I heard you were and thought I'd check up."

"I'm leaving, if that's what you mean."

"That's what I said. See here, 'Don Jaime,' how about that circus saddle of yours? I'll take it off your hands if the price is right."

"It's not for sale."

"Huh? No horses where you're going. Make me a price."

"It belongs to Jack here."

"And it's still not for sale," Moreau answered promptly.

"Like that, eh? Suit yourself." Salter went on blandly, "Another thing—you willed that nag of yours yet?"

The boys' mounts, with few exceptions, were owned by the school, but it was a cherished and longstanding privilege of a boy graduating to "will" his temporary ownership to a boy of his choice. Don looked up sharply; until that moment he had not thought about Lazy. He realized with sudden grief that he could not take the little fat clown with him—nor had he made any arrangements for his welfare. "The matter is settled," he answered, added to himself: as far as you are concerned.

"Who gets him? I could make it worth your while. He's not much of a horse, but I want to get rid of the goat I've had to put up with."

"It's settled."

"Be sensible. I can see the Head and get him anyhow. Willing a horse is a graduating privilege and you're ducking out ahead of time."

"Get out."

Salter grinned. "Touchy, aren't you? Just like all fogeaters, too touchy to know what's good for you. Well, you're going to be taught a lesson some day soon."

Don, already on edge, was too angry to trust himself to speak. "Fogeater," used to describe a man from cloudwrapped Venus, was merely ragging, no worse than "Limey" or "Yank"—unless the tone of voice and context made it, as now, a deliberate insult. The others looked at him, half expecting action.

Jack got up hastily from the bed and went toward Salter. "Get going, Salty. We're too busy to monkey around with you." Salter looked at Don, then back at Jack, shrugged and said, "I'm too busy to hang around here . . . but not too busy, if you have anything in mind."

The noon bell pealed from the mess hall; it broke the tension. Several boys started for the door; Salter moved out with them. Don hung back. Jack said, "Come on beans!"

"Jack?"

"Yeah?"

"How about you taking over Lazy?"

"Gee, Don? I'd like to accommodate you—but what would I do with Lady Maude?"

"Uh, I guess so. What'll I do?"

"Let me see—" Jack's face brightened. "You know that kid Squinty Morris? The new kid from Manitoba? He hasn't got a permanent yet; he's been taking his rotation with the goats. He'd treat Lazy right; I know, I let him try Maudie once. He's got gentle hands."

Don looked relieved. "Will you fix it for me? And see Mr. Reeves?"

"Huh? You can see him at lunch; come on."

"I'm not going to lunch. I'm not hungry. And I don't much want to talk to the Head about it."

"Why not?"

"Well, I don't know. When he called me in this morning he didn't seem exactly . . . friendly."

"What did he say?"

"It wasn't his words; it was his manner. Maybe I am touchy—but I sort of thought he was glad to see me go."

Don expected Jack to object, convince him that he was wrong. Instead he was silent for a moment, then said quietly, "Don't take it too hard, Don. The Head is probably edgy too. You know he's got his orders?"

"Huh? What orders?"

"You knew he was a reserve officer, didn't you? He put in for orders and got 'em, effective at end of term. Mrs. Reeves is taking over the school for the duration."

Don, already overstrained, felt his head whirling. For the duration? How could anyone say that when there wasn't any such thing?

"'Sfact," Jack went on. "I got it straight from cookie." He paused, then went on, "See here, old son—we're pals, aren't we?"

"Huh? Sure, sure!"

"Then give it to me straight: are you actually going to Mars? Or are you heading for Venus to sign up?"

"Whatever gave you that notion?"

"Skip it, then. Believe me; it wouldn't make any difference between us. My old man says that when it's time to be counted, the important thing is to be man enough to stand up." He looked at Don's face, then went on, "What you do about it is up to you. You know I've got a birthday coming up next month?"

"Huh? Yes, so you have."

"Come then, I'm going to sign up for pilot training. That's why I wanted to know what you planned to do."

"Oh."

"But it doesn't make any difference—not between us. Anyhow, you're going to Mars."

"Yes. Yes, that's right."

"Good!" Jack glanced at his watch. "I've got to run—or they'll throw my chow to the pigs. Sure you're not coming?"

"Sure."

"See you." He dashed out.

Don stood for a moment, rearranging his ideas. Old Jack must be taking this seriously—giving up Yale for pilot training. But he was wrong—he had to be wrong.

Presently he went out to the corral.

Lazy answered his call, then started searching his pockets for sugar. "Sorry, old fellow," he said sadly, "not even a carrot. I forgot." He stood with his face to the horse's cheek and scratched the beast's ears. He talked to it in low tones, explaining as carefully as if Lazy could understand all the difficult words.

"So that's how it is," he concluded. "I've got to go away and they won't let me take you with me." He thought back to the day their association had begun. Lazy had been hardly more than a colt, but Don had been frightened of him. He seemed huge, dangerous, and probably carnivorous. He had never seen a horse before coming to Earth; Lazy was the first he had ever seen close up.

Suddenly he choked, could talk no further. He flung his arms around the horse's neck and leaked tears.

Lazy nickered softly, knowing that something was wrong, and tried to nuzzle him. Don raised his head. "Goodbye, boy. Take care of yourself." He turned abruptly and ran toward the dormitories.

II

"MENE, MENE, TEKEL, UPHARSIN"

THE SCHOOL copter dumped him down at the Albuquerque field. He had to hurry to catch his rocket, as traffic control had required them to swing wide around Sandia Weapons Center. When he weighed in he ran into another new security wrinkle. "Got a camera in that stuff, son?" the weighmaster had inquired as he passed over his bags.

"No. Why?"

"Because we'll fog your film when we fluoroscope, that's why." Apparently X-ray failed to show any bombs hidden in his underwear; his bags were handed back and he went aboard the winged-rocket Santa Fe Trail, shuttling between the Southwest and New Chicago. Inside, he fastened his safety belts, snuggled down into the cushions, and waited.

At first the noise of the blastoff bothered him more than the pressure. But the noise doppplered away as they passed the speed of sound while the acceleration grew worse; he blacked out.

He came to as the ship went into free flight, arching in a high parabola over the plains. At once he felt great relief no longer to have unbearable weight racking his rib cage, straining his heart, turning his muscles to water—but, before he could enjoy the blessed relief, he was aware of a new sensation; his stomach was trying to crawl up his gullet.

At first he was alarmed, being unable to account for the unexpected and unbearably unpleasant sensation. Then he had a sudden wild suspicion could it? Oh, no! It couldn't be . . . not space sickness, not to him. Why, he had been born in free fall; space nausea was for Earth crawlers, groundhogs!

But the suspicion grew to certainty; years of easy living on a planet had worn out his immunity. With secret embarrassment he conceded that he certainly was acting like a groundhog. It had not occurred to him to ask for an antinausea shot before blastoff, though he had walked past the counter plainly marked with a red cross.

Shortly his secret embarrassment became public; he had barely time to get at the plastic container provided for the purpose. Thereafter he felt better, although weak, and listened halfheartedly to the canned description coming out of the loudspeaker of the country over which they were falling. Presently, near Kansas City, the sky turned from black back to purple again, the air foils took hold, and the passengers again felt weight as the rocket continued glider fashion on a long, screaming approach to New Chicago. Don folded his couch into a chair and sat up.

Twenty minutes later, as the field came up to meet them, rocket units in the nose were triggered by radar and the Santa F6 Trail braked to a landing. The entire trip had taken less time than the copter jaunt from the school to Alburquerque — something less than an hour for the same route eastward that the covered wagons had made westward in eighty days, with luck. The local rocket landed on a field just outside the city, next door to the enormous field, still slightly radioactive, which was both the main spaceport of the planet and the former site of Old Chicago.

Don hung back and let a Navajo family disembark ahead of him, then followed the squaw out. A movable slideway had crawled out to the ship; he stepped on it and let it carry him into the station. Once inside he was confused by the bustling size of the place, level after level, above and below ground. Gary Station served not merely the Santa Fe Trail, the Route 66, and other local rockets shuttling to the Southwest; it served a dozen other local lines, as well as ocean hoppers, freight tubes, and space ships operating between Earth and Circum-Terra Station—and thence to Luna, Venus, Mars, and the Jovian moons; it was the spinal cord of a more-than-worldwide empire.

Tuned as he was to the wide and empty New Mexico desert and, before that, to the wider wastes of space, Don felt oppressed and irritated by the noisy swarming mass. He felt the loss of dignity that comes from men behaving like ants, even though his feeling was not thought out in words. Still, it had to be faced—he spotted the triple globes of Interplanet Lines and followed glowing arrows to its reservation office.

An uninterested clerk assured him that the office had no record of his reservation in the Valkyrie. Patiently Don explained that the reservation had been made from Mars and displayed the radiogram from his parents. Annoyed into activity the clerk finally consented to phone Circum-Terra; the satellite station confirmed the reservation. The clerk signed off and turned back to Don. "Okay, you can pay for it here."

Don had a sinking feeling. "I thought it was already paid for?" He had on him his father's letter-of-credit but it was not enough to cover passage to Mars.

"Huh? They didn't say anything about it being prepaid."

At Don's insistence the clerk again phoned the space station. Yes, the passage was prepaid since it had been placed from the other end; didn't the clerk know his tariff book? Thwarted on all sides, the clerk grudgingly issued Don a ticket to couch 64, Rocket Ship Glory Road, lifting from Earth for Circum-Terra at 9:03:57 the following morning.

"Got your security clearance?"

"Huh? What's that?"

The clerk appeared to gloat at what was a legitimate opportunity to decline to do business after all. He withdrew the ticket. "Don't you bother to follow the news? Give me your ID."

Reluctantly Don passed over his identity card; the clerk stuck it in a stat machine and handed it back. "Now your thumb prints."

Don impressed them and said, "Is that all? Can I have my ticket?"

"'Is that all?' he says. Be here about an hour early tomorrow morning. You can pick up your ticket then—provided the I.B.I. says you can."

The clerk turned away. Don, feeling forlorn, did likewise. He did not know quite what to do next. He had told Headmaster Reeves that he would stay overnight at the Hilton Caravansary, that being the hotel his family had stopped at 18 years earlier and the only one he knew by name. On the other hand he had to attempt to locate Dr. Jefferson "Uncle Dudley"—since his mother had made such a point of it. It was still early afternoon; he decided to check his bags and start looking.

Bags disposed of, he found an empty communication booth and looked up the doctor's code, punched it into the machine. The doctor's phone regretted politely that Dr. Jefferson was not at home and requested him to leave a message. He was dictating it when a warm voice interrupted: "I'm at home to you, Donald. Where are you, lad?" The view screen cut in and he found himself looking at the somewhat familiar features of Dr. Dudley Jefferson.

"Oh I'm at the station, Doctor—Gary Station. I just got in."

"Then grab a cab and come here at once."

"Uh, I don't want to put you to any trouble, Doctor. I called because mother said to say goodbye to you." Privately he had hoped that Dr. Jefferson would be too busy to waste time on him. Much as he disapproved of cities he did not want to spend his last night on Earth exchanging politeness with a family friend; he wanted to stir around and find out just what the modern Babylon did have to offer in the way of diversion. His letter-of-credit was burning a hole in his pocket; he wanted to bleed it a bit.

"No trouble. See you in a few minutes. Meanwhile I'll pick out a fatted calf and butcher it. By the way, did you receive a package from me?" The doctor looked suddenly intent.

"A package? No."

Dr. Jefferson muttered something about the mail service. Don said, "Maybe it will catch up with me. Was it important?"

"Uh, never mind; we'll speak of it later. You left a forwarding address?"

"Yes, sir—the Caravansary."

"Well whip up the horses and see how quickly you can get here. Open sky."

"And safe grounding, sir." They both switched off. Don left the booth and looked around for a cab stand. The station seemed more jammed than ever, with uniforms much in evidence, not only those of pilots and other ship personnel but military uniforms of many corps—and always the ubiquitous security police. Don fought his way through the crowd, down a ramp, along a slidewalk tunnel, and finally found what he wanted. There was a queue waiting for cabs; he joined it.

Beside the queue was sprawled the big, ungainly saurian form of a Venerian "dragon." When Don progressed in line until he was beside it, he politely whistled a greeting.

The dragon swiveled one fluttering eyestalk in his direction. Strapped to the "chest" of the creature, between its forelegs and immediately below and in reach of its handling tendrils, was a small box, a voder. The tendrils writhed over the keys and the Venerian answered him, via mechanical voder speech, rather than by whistling in his own language. "Greetings to you also, young sir. It is pleasant indeed, among strangers, to hear the sounds one heard in the egg." Don noted with delight that the outlander had a distinctly Cockney accent in the use of his machine.

He whistled his thanks and a hope that the dragon might die pleasantly.

The Venerian thanked him, again with the voder, and added, "Charming as is your accent, will you do me the favor of using your own speech that I may practice it?"

Don suspected that his modulation was so atrocious that the Venerian could hardly understand it; he lapsed at once into human words. "My name is Don Harvey," he replied and whistled once more—but just to give his own Venerian name, "Mist on the Waters"; it had been selected by his mother and he saw nothing funny about it.

Nor did the dragon. He whistled for the first time, naming himself, and added via voder, "I am called 'Sir Isaac Newton.' " Don understood that the Venerian, in so tagging himself, was following the common dragon custom of borrowing as a name of convenience the name of some earthhuman admired by the borrower.

Don wanted to ask "Sir Isaac Newton" if by chance he knew Don's mother's family, but the queue was moving up and the dragon was lying still; he was forced to move along to keep from losing his place in line. The Venerian followed him with one oscillating eye and whistled that he hoped that Don, too, might die pleasantly.

There was an interruption in the flow of autocabs to the stand; a manoperated flatbed truck drew up and let down a ramp. The dragon reared up on six sturdy legs and climbed aboard. Don whistled a farewell—and became suddenly and unpleasantly aware that a security policeman was giving him undivided attention. He was glad to crawl into his autocab and close the cover.

He dialed the address and settled back. The little car lurched forward, climbed a ramp, threaded through a freight tunnel, and mounted an elevator. At first Don tried to keep track of where it was taking him but the tortured convolutions of the ant hill called "New Chicago" would have made a topologist dyspeptic; he gave up. The robot cab seemed to know where it was going and, no doubt, the master machine from which it received its signals knew. Don spent the rest of the trip fretting over the fact that his ticket had not yet been turned over to him, over the unwelcome attention of the security policeman, and, finally, about the package from Dr. Jefferson. The last did not worry him; it simply annoyed him to have mail go astray. He hoped that Mr. Reeves would realize that any mail not forwarded by this afternoon would have to follow him all the way to Mars.

Then he thought about "Sir Isaac." It was nice to run across somebody from home.

Dr. Jefferson's apartment turned out to be far underground in an expensive quarter of the city. Don almost failed to arrive; the cab had paused at the apartment door but when he tried to get out the door would not open. This reminded him that he must first pay the fare shown in the meter—only to discover that he had pulled the bumpkin trick of engaging a robot vehicle without having coins on him to feed the meter. He was sure that the little car, clever as it was, would not even deign to sniff at his letter-of-credit. He was expecting disconsolately to be carted by the machine off to the nearest police station when he was rescued by the appearance of Dr. Jefferson.

The doctor gave him coins to pay the shot and ushered him in. "Think nothing of it, my boy; it happens to me about once a week. The local desk sergeant keeps a drawer full of hard money just to buy me out of hock from our mechanical masters. I pay him off once a quarter, cumshaw additional. Sit down. Sherry?"

"Er, no, thank you, sir."

"Coffee, then. Cream and sugar at your elbow. What do you hear from your parents?"

"Why, the usual things. Both well and working hard and all that." Don looked around him as he spoke. The room was large, comfortable, even luxurious, although books spilling lavishly and untidily over shelves and tables and even chairs masked its true richness. What appeared to be a real fire burned in one corner. Through an open door he could see several more rooms. He made a high, and grossly inadequate, mental estimate of the cost of such an establishment in New Chicago.

Facing them was a view window which should have looked into the bowels of the city; instead it reflected a mountain stream and fir trees. A trout broke water as he watched.

"I'm sure they are working hard," his host answered. "They always do. Your father is attempting to seek out, in one short lifetime, secrets that have been piling up for millions of years. Impossible—but he makes a good stab at it. Son, do you realize that when your father started his career we hadn't even dreamed that the first system empire ever existed?" He added thoughtfully, "If it was the first." He went on, "Now we have felt out the ruins on the floor of two oceans and tied them in with records from four other planets. Of course your father didn't do it all, or even most of it—but his work has been indispensable. Your father is a great man, Donald — and so is your mother. When I speak of either one I really mean the team. Help yourself to sandwiches."

Don said, "Thank you," and did so, thereby avoiding a direct answer. He was warmly pleased to hear his parents praised but it did not seem to be quite the thing to agree heartily.

But the doctor was capable of carrying on the conversation unassisted. "Of course we may never know all the answers. How was the noblest planet of them all, the home of empire, broken and dispersed into space junk? Your father spent four years in the Asteroid Belt—you were along, weren't you? — and never found a firm answer to that. Was it a paired planet, like Earth-Luna, and broken up by tidal strains? Or was it blown up?"

"Blown up?" Don protested. "But that's theoretically impossible—isn't it?"

Dr. Jefferson brushed it aside. "Everything is theoretically impossible, until it's done. One could write a history of science in reverse by assembling the solemn pronouncements of highest authority about what could not be done and could never happen. Studied any mathematical philosophy, Don? Familiar with infinite universe sheafs and open-ended postulate systems?"

"Uh, I'm afraid not, sir."

"Simple idea and very tempting. The notion that everything is possible and I mean everything—and everything has happened. Everything. One universe in which you accepted that wine and got drunk as a skunk. Another in which the fifth planet never broke up. Another in which atomic power and nuclear weapons are as impossible as our ancestors thought they were. That last one might have its points, for sissies at least. Like me."

He stood up. "Don't eat too many sandwiches. I'm going to take you out to a restaurant where there will be food, among other things . . . and such food as Zeus promised the gods and failed to deliver."

"I don't want to take up too much of your time, sir." Don was still hoping to get out on the town by himself. He had a dismaying vision of dinner in some stuffy rich man's club, followed by an evening of highfalutin talk. And it was his last night on Earth.

"Time? What is time? Each hour ahead is as fresh as was the one we just used. You registered at the Caravansary?"

"No, sir, I just checked my bags at the station."

"Good. You'll stay here tonight; we'll send for your luggage later."

Dr. Jefferson's manner changed slightly. "But your mail was to be sent to the hotel?"

"That's right."

Don was surprised to see that Dr. Jefferson looked distinctly worried. "Well, we'll check into that later. That package I sent to you—would it be forwarded promptly?"

"I really don't know, sir. Ordinarily the mail comes in twice a day. If it came in after I left, it would ordinarily wait over until morning. But if the headmaster thought about it, he might have it sent into town special so that I would get it before up-ship tomorrow morning."

"Mean to say there isn't a tube into the school?"

"No, sir, the cook brings in the morning mail when he shops and the afternoon mail is chuted in by the Roswell copter bus."

"A desert island! Well . . . we'll check around midnight. If it hasn't arrived then—never mind." Nevertheless he seemed perturbed and hardly spoke during their ride to dinner.

The restaurant was misnamed The Back Room and there was no sign out to indicate its location; it was simply one of many doors in a side tunnel. Nevertheless many people seemed to know where it was and to be anxious to get in, only to be thwarted by a stern-faced dignitary guarding a velvet rope. This ambassador recognized Dr. Jefferson and sent for the maitre d'hotel. The doctor made a gesture understood by headwaiters throughout history, the rope was dropped, and they were conducted in royal progress to a ringside table. Don was bug-eyed at the size of the bribe. Thus he was ready with the proper facial expression when he caught sight of their waitress.

His reaction to her was simple; she was, it seemed to him, the most beautiful sight he had ever seen, both in person and in costume. Dr. Jefferson caught his expression and chuckled. "Don't use up your enthusiasm, son. The ones we have paid to see will be out there." He waved at the floor. "Cocktail first?"

Don said that he didn't believe so, thank you.

"Suit yourself. You are man high and a single taste of the fleshpots wouldn't do you any permanent harm. But suppose you let me order dinner for us?" Don agreed. While Dr. Jefferson was consulting with the captive princess over the menu, Don looked around. The room simulated outdoors in the late evening; stars were just appearing overhead. A high brick wall ran around the room, hiding the nonexistent middle distance and patching in the floor to the false sky. Apple trees hung over the wall and stirred in the breeze. An old-fashioned well with a well sweep stood beyond the tables on the far side of the room; Don saw another "captive princess" go to it, operate the sweep, and remove a silver pail containing a wrapped bottle.

At the ringside opposite them a table had been removed to make room for a large transparent plastic capsule on wheels. Don had never seen one but he recognized its function; it was a Martian's "perambulator," a portable airconditioning unit to provide the rare, cold air necessary to a Martian aborigine. The occupant could be seen dimly, his frail body supported by a metal articulated servo framework to assist him in coping with the robust gravity of the third planet. His pseudo wings drooped sadly and he did not move. Don felt sorry for him.

As a youngster he had met Martians on Luna, but Luna's feeble field was less than that of Mars; it did not turn them into cripples, paralyzed by a gravity field too painful for their evolutionary pattern. It was both difficult and dangerous for a Martian to risk coming to Earth; Don wondered what had induced this one. A diplomatic mission, perhaps?

Dr. Jefferson dismissed the waitress, looked up and noticed him staring at the Martian. Don said, "I was just wondering why he would come here. Not to eat, surely."

"Probably wants to watch the animals feeding. That's part of my own reason, Don. Take a good look around you; you'll never see the like again."

"No, I guess not—not on Mars."

"That's not what I mean. Sodom and Gomorrah, lad — rotten at the core and skidding toward the pit. '—these our actors, as I foretold you . . . are melted into air—' and so forth. Perhaps even 'the great globe itself.' I tally too much. Enjoy it; it won't last long."

Don looked puzzled. "Dr. Jefferson, do you like living here?"

"Me? I'm as decadent as the city I infest; it's my natural element. But that doesn't keep me from telling a hawk from a handsaw."

The orchestra, which had been playing softly from nowhere in particular, stopped suddenly and the sound system announced "News flash!" At the same time the darkening sky overhead turned black and lighted letters started marching across it. The voice over the sound system read aloud the words streaming across the ceiling: BERMUDA: OFFICIAL: THE DEPARTMENT OF COLONIAL AFFAIRS HAS JUST ANNOUNCED THAT THE PROVISIONAL COMMITTEE OF THE VENUS COLONIES HAS REJECTED OUR NOTE. A SOURCE CLOSE TO THE FEDERATION CHAIRMAN SAYS THAT THIS IS AN EXPECTED DEVELOPMENT AND NO CAUSE FOR ALARM.

The lights went up and the music resumed. Dr. Jefferson's lips were stretched back in a mirthless grip. "How appropriate!" he commented. "How timely! The handwriting on the wall."

Don started to blurt out a comment, but was distracted by the start of the show. The stage floor by them had sunk out of sight, unnoticed, during the news flash. Now from the pit thus created came a drifting, floating cloud lighted from within with purple and flame and rose. The cloud melted away and Don could see that the stage was back in place and peopled with dancers. There was a mountain in the stage background.

Dr. Jefferson had been right; the ones worth staring at were on the stage, not serving the tables. Don's attention was so taken that he did not notice that food had been placed in front of him. His host touched his elbow. "Eat something, before you faint."

"Huh? Oh, yes, sir!" He did so, busily and with good appetite but with his eyes on the entertainers. There was one man in the cast, portraying Tannhauser, but Don did not know and did not care whom he represented; he noticed him only when he got in the way. Similarly, he had finished two thirds of what was placed before him without noticing what he was eating.

Dr. Jefferson said, "Like it?"

Don did a double take and realized that the doctor was speaking of food, not of the dancers. "Oh, yes! It's awfully good." He examined his plate. "But what is it?"

"Don't you recognize it? Baked baby gregarian."

It took a couple of seconds for Don to place in his mind just what a gregarian was. As a small child he had seen hundreds of the little satyr-like bipeds—faunas gregariaus veneris Smythii—but he did not at first associate the common commercial name with the friendly, silly creatures he and his playmates, along with all other Venus colonials, had always called "moveovers" because of their chronic habit of crowding up against one, shouldering, nuzzling, sitting on one's feet, and in other ways displaying their insatiable appetite for physical affection.

Eat a baby moveover? He felt like a cannibal and for the second time in one day started to behave like a groundhog in space. He gulped and controlled himself but could not touch another bite.

He looked back at the stage. Venusberg disappeared, giving way to a tired-eyed man who kept up a rapid fire of jokes while juggling flaming torches. Don was not amused; he let his gaze wander around the room. Three tables away a man met his eyes, then looked casually away. Don thought about it, then looked the man over carefully and decided that he recognized him. "Dr. Jefferson?"

"Yes, Don?"

"Do you happen to know a Venus dragon who calls himself 'Sir Isaac Newton'?" Don added the whistled version of the Venerian's true name.

"Don't!" the older man said sharply.

"Don't what?"

"Don't advertise your background unnecessarily, not at this time.

Why do you ask about this, uh, 'Sir Isaac Newton'?" He kept his voice low with his lips barely moving.

Donald told him about the casual meeting at Gary Station. "When I got through I was dead sure that a security cop was watching me. And now that same man is sitting over there, only now he's not in uniform."

"Are you sure?"

"I think I'm sure."

"Mmm . . . you might be mistaken. Or he might simply be here in his off hours—though a security policeman should not be, not on his pay. See here, pay no further attention to him and don't speak of him again. And don't speak of that dragon, nor of anything else Venetian. Just appear to be having a good time. But pay careful attention to anything I say."

Don tried to carry out the instructions, but it was hard to keep his mind on gaiety. Even when the dancers reappeared he felt himself wanting to turn and stare at the man who had dampened the party. The plate of baked gregarian was removed and Dr. Jefferson ordered something for him called a "Mount Etna." It was actually shaped like a volcano and a plume of steam came out of the tip. He dipped a spoon into it, found that it was fire and ice, assaulting his palate with conflicting sensations. He wondered how anyone could eat it. Out of politeness he cautiously tried another bite. Presently he found that he had eaten all of it and was sorry there was not more.

At the break in the stage acts Don tried to ask Dr. Jefferson what he really thought about the war scare. The doctor firmly turned the talk around to his parents' work and branched out to the past and future of the System. "Don't fret yourself about the present, son. Troubles, merely troubles—necessary preliminaries to the consolidation of the System. In five hundred years the historians will hardly notice it. There will be the Second Empire—six planets by then."

"Six? You don't honestly think well ever be able to do anything with Jupiter and Saturn? Oh—you mean the Jovian moons."

"No, I mean six primary planets. We'll move Pluto and Neptune in close by the fire and we'll drag Mercury back and let it cool off."

The idea of moving planets startled Don. It sounded wildly impossible, but he let it rest, since his host was a man who maintained that everything and anything was possible. "The race needs a lot of room," Dr. Jefferson went on. "After all, Mars and Venus have their own intelligent races; we can't crowd them much more without genocide—and it's not dead certain which way the genocide would work, even with the Martians. But the reconstruction of this system is just engineering — nothing to what else we'll do. Half a millennium from now there will be more Earthhumans outside this system than in it; we'll be swarming around every G-type star in this neighborhood. Do you know what I would do if I were your age, Don? I'd get me a berth in the Pathfinder."

Don nodded. "I'd like that." The Pathfinder, star ship intended for a one-way trip, had been building on, and near, Luna since before he was born. Soon she would go. All or nearly all of Don's generation had at least dreamed about leaving with her.

"Of course," added his host, "you would have to have a bride." He pointed to the stage which was again filling. "Take that blonde down there. She's a likely looking lassie—healthy at least."

Don smiled and felt worldly. "She might not hanker after pioneering. She looks happy as she is."

"Can't tell till you ask her. Here." Dr. Jefferson summoned the maitre d'hotel; money changed hands. Presently the blonde came to their table but did not sit down. She was a tom-tom singer and she proceeded to boom into Don's ears, with the help of the orchestra, sentiments that would have embarrassed him even if expressed privately. He ceased to feel worldly, felt quite warm in the face instead and confirmed his resolution not to take this female to the stars. Nevertheless he enjoyed it.

The stage was just clearing when the lights blinked once and the sound system again brayed forth: "Space raid warning! Space raid warning!" All lights went out.

III

HUNTED

For an infinitely long moment there was utter blackness and silence without even the muted whir of the blowers. Then a tiny light appeared in the middle of the stage, illuminating the features of the starring comic. He drawled in an intentionally ridiculous nasal voice, "The next sound you hear will be . . . The Tromp of Doom!" He giggled and went on briskly, "Just sit quiet, folks, and hang on to your money—some of the help are relatives of the management. This is just a drill. Anyhow, we have a hundred feet of concrete overhead—and a darn sight thicker mortgage. Now, to get you into the mood for the next act which is mine, the next round of drinks is on the house." He leaned forward and called out, "Gertie! Drag up that stuff we couldn't unload New Year's Eve."

Don felt the tension ease around the room and he himself relaxed. He was doubly startled when a hand closed around his wrist. "Quiet!"

whispered Dr. Jefferson into his ear.

Don let himself be led away in the darkness. The doctor apparently knew, or remembered, the layout; they got out of the room without bumping into tables and with only one unimportant brush with someone in the dark. They seemed to be going down a long hall, black as the inside of coal, then turned a corner and stopped.

"But you can't go out sir," Don heard a voice say. Dr. Jefferson spoke quietly, his words too low to catch. Something rustled; they moved forward again, through a doorway, and turned left.

They proceeded along this tunnel. Don felt sure that it was the public tunnel just outside the restaurant though it seemed to have turned ninety degrees in the dark. Dr. Jefferson still dragged him along by the wrist without speaking. They turned again and went down steps.

There were other people about, though not many. Once someone grabbed Don in the dark; he struck out wildly, smashed his fist into something flabby and heard a muffled grunt. The doctor merely pulled him along the faster.

The doctor stopped at last, seemed to be feeling around in the dark. There came a feminine squeal out of the blackness. The doctor drew back hastily and moved on a few feet, stopped again. "Here," he said at last. "Climb in." He pulled Don forward and placed his hand on something; Don felt around and decided that it was a parked autocab, its top open. He climbed in and Dr. Jefferson got in behind, closing the top after him. "Now we can talk," he said calmly. "Someone beat us to that first one. But we can't go anywhere until the power comes on again."

Don was suddenly aware that he was shaking with excitement. When he could trust himself to speak he said, "Doctor—is this actually an attack?"

"I doubt it mightily," the man answered. "It's almost certainly a drill—I hope. But it gave us just the opportunity that I had been looking for to get away quietly."

Don chewed this over. Jefferson went on, "What are you fretting about? The check? I have an account there."

It had not occurred to Don that they were walking out on the check. He said so and added, "You mean that security policeman I thought I recognized?"

"Unfortunately."

"But— I think I must have made a mistake. Oh, it looked like the same man, all right, but I don't see how it would have been humanly possible for him to have followed me even if he popped into the next cab. I distinctly remember that at least once my cab was the only cab on an elevator. That tears it. If it was the same cop, it was an accident;

he wasn't looking for me."

"Perhaps he was looking for me."

"Huh?"

"Never mind. As to following you—Don, do you know how these autocabs work?"

"Well—in general."

"If that security cop wanted to tail you, he would not get into the next cab. He would call in and report the number of your cab. That number would be monitored in the control-net board at once. Unless you reached your destination before the monitoring started, they would read the code of your destination right out of the machine. Whereupon another security officer would be watching for your arrival. It carries on from there. When I rang for an auto cab my circuit would already be monitored, and the cab that answered the ring likewise. Consequently the first cop was already seated at a table in The Back Room before we arrived. That was their one slip, using a man you had seen but we can forgive that as they are overworked at present.

"But why would they want me? Even if they think I'm uh, disloyal, I'm not that important."

Dr. Jefferson hesitated, then said, "Don, I don't know how long we will be able to talk. We can talk freely for the moment because they are just as limited by the power shutdown as we are. But once the power comes on we can no larger talk and I have a good deal to say. We can't talk, even here, after the power comes on."

"Why not?"

"The public isn't supposed to know, but each of these cabs has a microphone in it. The control frequency for the cab itself can carry speech modulation without interfering with the operation of the vehicle. So we are not safe once power is restored. Yes, I know; it's a shameful set up. I didn't dare talk in the restaurant, even with the orchestra playing. They could have had a shotgun mike trained on us.

"Now, listen carefully. We must locate that package I mailed to you — we must. I want you to deliver it to your father . . . or rather, what's in it. Point number two: you must catch that shuttle rocket tomorrow morning, even if the heavens fall. Point number three: you won't stay with me tonight, after all. I'm sorry but I think it is best so. Number four: when the power comes on, we will ride around for a while, talking of nothing in particular and never mentioning names. Presently I will see to it that we end up near a public common booth and you will call the Caravansary. If the package is there, you will leave me, go back to the Station, get your bags, then go to the hotel, register and pick up your mail. Tomorrow morning you will get your ship and leave. Don't call me. Do you understand all that?"

"Uh, I think so, sir." Don waited, then blurted out, "But why? Maybe I'm talking out of turn, but it seems to me I ought to know why we are doing this."

"What do you want to know?"

"Well . . . what's in the package?"

"You will see. You can open it, examine it, and decide for yourself. If you decide not to deliver it, that's your privilege. As for the rest—what are your political convictions, Don?"

"Why, that's rather hard to say, sir."

"Mmmm—mine weren't too clear at your age either. Let's put it this way: would you be willing to string along with your parents for the time being? Until you form your own?"

"Why, of course!"

"Did it seem a bit odd to you that your mother insisted that you look me up? Don't be shy—I know that a young fellow arriving in the big town doesn't look up semi-strangers through choice. Now—she must have considered it important for you to see me. Eh?"

"I guess she must have."

"Will you let it stand at that? What you don't know, you can't tell—and can't get you into trouble."

Don thought it over. The doctor's words seemed to make sense, yet it went mightily against the grain to be asked to do something mysterious without knowing all the whys and wherefore. On the other hand, had he simply received the package, he undoubtedly would have delivered it to his father without thinking much about it.

He was about to ask further questions when the lights came on and the little car started to purr. Dr. Jefferson said, "Here we go!" leaned over the board and quickly dialed a destination. The autocab moved forward. Don started to speak but the doctor shook his head.

The car threaded its way through several tunnels, down a ramp and stopped in a large underground square. Dr. Jefferson paid it off and led Don through the square and to a passenger elevator. The square was jammed and one could sense the crowd's frenetic mood resulting from the space raid alarm. They had to shove their way through a mass of people gathered around a public telescreen in the center of the square. Don was glad to get on the elevator, even though it too was packed.

Dr. Jefferson's immediate destination was another cab stand in a square several levels higher. They got into a cab and moved away; this one they rode for several minutes, then changed cabs again. Don was completely confused and could not have told whether they were north, south, high, low, east, or west. The doctor glanced at his watch as they left the last autocab and said, "We've killed enough time. Here." He indicated a communication booth near them.

Don went in and phoned the Carvansary. Was there any mail being held for him? No, there was not. He explained that he was not registered at the hotel; the clerk looked again. No, sorry sir.

Don came out and told Dr. Jefferson. The doctor chewed his lip. "Son, I've made a bad error in judgment." He glanced around; there was no one near them. "And I've wasted time."

"Can I help, sir?"

"Eh? Yes, I think you can—I'm sure you can." He paused to think. "We'll go back to my apartment. We must. But we won't stay there. We'll find some other hotel—not the Caravansary—and I'm afraid we must work all night. Are you up to it?"

"Oh, certainly!"

"I've some 'borrowed-time' pills; they'll help. See here Don, whatever happens, you are to catch that ship tomorrow. Understand?"

Don agreed. He intended to catch the ship in any case and could not conceive of a reason for missing it. Privately he was beginning to wonder if Dr. Jefferson were quite right in his head.

"Good. We'll walk; it's not far."

A half-mile of tunnels and a descent by elevator got them there. As they turned into the tunnel in which the doctor's apartment was located, he glanced up and down it; it was empty. They crossed rapidly and the doctor let them in. Two strange men were seated in the living room.

Dr. Jefferson glanced at them, said, "Good evening, gentlemen," and turned back to his guest. "Good night, Don. It's been very pleasant seeing you and be sure to remember me to your parents." He grasped Don's hand and firmly urged him out the door.

The two men stood up. One of them said, "It took you a long time to get home, Doctor."

"I'd forgotten the appointment, gentlemen. Now, goodbye, Don—I don't want you to be late."

The last remark was accompanied by increased pressure on Don's hand. He answered, "Uh, good night, Doctor. And thanks."

He turned to leave, but the man who had spoken moved quickly between him and the door. "Just a moment, please."

Dr. Jefferson answered, "Really, gentlemen, there is no reason to delay this boy. Let him go along so that we may get down to our business."

The man did not answer directly but called out, "Elkins! King!" Two more men appeared from a back room of the apartment. The man who seemed to be in charge said to them, "Take the youngster back to the bedroom. Close the door."

"Come along, buddy."

Don, who had been keeping his mouth shut and trying to sort out the confusing new developments, got angry. He had more than a suspicion that these men were security police even though they were not in uniform, but he had been brought up to believe that honest citizens had nothing to fear. "Wait a minute!" he protested. "I'm not going any place. What's the idea?"

The man who had told him to come along moved closer and took his arm. Don shook it off. The leader stopped any further action by his men with a very slight gesture. "Don Harvey—"

"Huh? Yes?"

"I could give you a number of answers to that. One of them is this—" He displayed a badge in the palm of his hand. "But that might be faked. Or, if I cared to take time, I could satisfy you with stamped pieces of paper, all proper and legalistic and signed with important names." Don noticed that his voice was gentle and cultured.

"But it happens that I am tired and in a hurry and don't want to be bothered playing word games with young punks. So let it stand that there are four of us all armed. So will you go quietly, or would you rather be slapped around a bit and dragged?"

Don was about to answer with school-game bravado; Dr. Jefferson cut in. "Do as they ask you, Donald!"

He closed his mouth and followed the subordinate on back. The man led him into the bedroom and closed the door. "Sit down," he said pleasantly. Don did not move. His guard came up, placed a palm against his chest and pushed. Don sat down.

The man touched a button at the bed's control panel, causing it to lift to the reading position, then lay down. He appeared to go to sleep, but every time Don looked at him the man's eyes met his. Don strained his ears, trying to hear what was going on in the front room, but he need not have bothered; the room, being a sleeping room, was fully soundproof.

So he sat there and fidgeted, trying to make sense out of preposterous things that had happened to him. He recalled almost with unbelief that it had been only this morning that Lazy and he had started out to climb Peddler's Grave. He wondered what Lazy was doing now and whether the greedy little rascal missed him.

Probably not, he admitted mournfully.

He slid a glance at the guard, while wondering whether or not, if he gathered himself together, drawing his feet as far under him as he could—"

The guard shook his head. "Don't do it," he advised.

"Don't to what?"

"Don't try to jump me. You might hurry me and then you might get hurt bad." The man appeared to go back to sleep.

Don slumped into apathy. Even if he did manage to jump this one, slug him maybe, there were three more out front. And suppose he got away from them? A strange city, where they had everything organized, everything under control — where would he run to?

Once he had come across the stable cat playing with a mouse. He had watched for a moment, fascinated even though his sympathies were with the mouse, before he had stepped forward and put the poor beastie out of its misery. The cat had never once let the mouse scamper further than pounce range. Now he was the mouse.

"Up you come!"

Don jumped to his feet, startled and having trouble placing himself. "I wish I had your easy conscience," the guard said admiringly. "It's a real gift to be able to catch forty winks any time. Come on; the boss wants you."

Don preceded him back into the living room; there was no one there but the mate of the man who had guarded him. Don turned and said, "Where is Dr. Jefferson?"

"Never mind," his guard replied. "The lieutenant hates to be kept waiting." He started on out the door.

Don hung back. The second guard casually took him by the arm; he felt a stabbing pain clear to his shoulder and went along.

Outside they had a manually-operated car larger than the robot cabs. The second guard slipped into the driver's seat; the other urged Don into the passenger compartment. There he sat down and started to turn—and found that he could not. He was unable even to raise his hands. Any attempt to move, to do anything other than sit and breathe, felt like struggling against the weight of too many blankets. "Take it easy," the guard advised. "You can pull a ligament fighting that field. And it does not do any good."

Don had to prove to himself that the man was right. Whatever the invisible bonds were, the harder he strained against them the tighter they bound him. On the other hand when he relaxed and rested he could not even feel them. "Where are you taking me?" he demanded.

"Don't you know? The city I.B.I. office, of course."

"What for? I haven't done anything!"

"In that case, you won't have to stay long."

The car pulled up inside a large garaging room; the three got out and waited in front of a door; Don had a feeling that they were being looked over. Shortly the door opened; they went inside.

The place had the odor of bureaucracy. They went down a long corridor past endless offices filled with clerks, desks, transtypers, filing machines, whirring card sorters. A lift bounced them to another level; they went on through more corridors and stopped at an office door. "Inside," said the first guard. Don went in; the door slid shut behind him with the guards outside.

"Sit down, Don." It was the leader of the group of four, now in the uniform of security officer and seated at a horseshoe desk.

Don said, "Where is Dr. Jefferson? What did you do with him?"

"Sit down, I said." Don did not move; the lieutenant went on, "Why make it hard for yourself? You know where you are; you know that I could have you restrained in any way that suited me—some of them quite unpleasant. Will you sit down, please, and save us both trouble?"

Don sat down and immediately said, "I want to see a lawyer."

The lieutenant shook his head slowly, looking like a tired and gentle school teacher. "Young fellow, you've been reading too many romantic novels. Now if you had studied the dynamics of history instead, you would realize that the logic of legalism alternates with the logic of force in a pattern dependent on the characteristics of the culture. Each culture evokes its own basic logic. You follow me?"

Don hesitated; the other went on, "No matter. The point is, your request for a lawyer comes about two hundred years too late to be meaningful. The verbalisms lag behind the facts. Nevertheless, you shall have a lawyer or a lollipop, whichever you prefer, after I am through questioning you. If I were you, I'd take the lollipop. More nourishing.

"I won't talk without a lawyer," Don answered firmly.

"No? I'm sorry. Don, in setting up your interview I budgeted eleven minutes for nonsense. You have used up four already — no, five. When the eleven minutes are gone and you find yourself spitting out teeth, remember that I bore you no malice. Now about this matter of whether or not you will talk; there are several ways of making a man talk and each method has its fans who swear by it. Drugs, for example — nitrous oxide, scopolamine, sodium pentothal, not to mention some of the new, more subtle, and relatively non-toxic developments. Even alcohols have been used with great success by intelligence operatives. I don't like drugs; they affect the intellect and clutter up an interview with data of no use to me. You'd be amazed at the amount of rubbish that can collect in the human brain, Don, if you had had to listen to it —as I have.

"And there is hypnosis and its many variations. There is also the artificial stimulation of an unbearable need, as with morphine addiction. Finally there is old-fashioned force—pain. Why, I know an artist — I believe he is in the building now — who can successfully question the most recalcitrant case, in minimum time and using only his bare hands. Then, of course, under that category, is the extremely ancient switch in which the force, or pain, is not applied to the person being examined but to a second person whom he cannot bear to see hurt, such as a wife, or son, or daughter. Offhand, that method would seem difficult to use on you, as your only close relatives are not on this planet." The security officer glanced at his watch and added, "Only thirty seconds of nonsense still available, Don. Shall we start?"

"Huh? Wait a minute! You used up the time; I've hardly said a word."

"I haven't time to be fair. Sorry. However," he went on, "the apparent objection to the last method does not apply in your case. During the short time you were unconscious at Dr. Jefferson's apartment we were able to determine that there actually was available a person who meets the requirements. You will talk freely rather than let this person be hurt."

"Huh?"

"A stock pony named 'Lazy.' "

The suggestion caught him completely off guard; he was stunned by it. The man went quickly on, "If you insist, we will adjourn for three hours or so and I will have your horse shipped here. It might be interesting, as I don't believe the method has ever been used with a horse before. I understand that their ears are rather sensitive. On the other hand I feel bound to tell you that, if we go to the trouble of bringing him here, we won't send him back but will simply send him to the stockyards to be butchered. Horses are an anachronism in New Chicago, don't you think?"

Don's head was whirling too much to make a proper answer, or even to follow all of the horrid implications of the comments. Finally he burst out, "You can't! You wouldn't!"

"Time's up, Don."

Don took a deep breath, collapsed. "Go ahead," he said dully. "Ask your questions."

The lieutenant took a film spool from his desk, fed it into a projector which faced back toward him. "Your name, please."

"Donald James Harvey."

"And your Venerian name?"

Don whistled "Mist on the Waters."

"Where were you born?"

"In the Outward Bound, in trajectory between Luna and Ganymede." The questions went on and on. Don's inquisitor appeared to have all the answers already displayed in front of him; once or twice he had Don elaborate or corrected him on some minor point. After reviewing his entire past life he required Don to give a detailed account of the events starting with his receiving the message from his parents to take passage on the Valkyrie for Mars.

The only thing Don left out was Dr. Jefferson's remarks about the package. He waited nervously, expecting to be hauled up short about it. But if the security policeman knew of the package, he gave no sign of it. "Dr. Jefferson seemed to think that this so-called security operative was following you? Or him?"

"I don't know. I don't think he knew."

" 'The wicked flee when no man pursueth,' " the lieutenant quoted. "Tell me exactly what you did after you left The Back Room."

"Was that man following me?" Don asked. "So help me, I had never laid eyes on that dragon before; I was just passing the time of day, being polite."

"I'm sure you were. But I'll ask the questions. Go ahead."

"Well, we changed cabs twice—or maybe three times. I don't know just where we went; I don't know the city and was all turned around. But eventually we came back to Dr. Jefferson's apartment." He omitted mention of the call to the Caravansary; again, if his questioner was aware of the omission, he gave no sign of it.

The lieutenant said, "Well, that seems to bring us up to date." He switched off the projector and sat staring at nothing for some minutes. "Son, there is no doubt in my mind but what you are potentially disloyal."

"Why do you say that?"

"Never mind the guff. There's nothing in your background to make you loyal. But that is nothing to get excited about; a person in my position has to be practical. You are planning to leave for Mars tomorrow morning?"

"I sure am."

"Good. I don't see how you could have been up to much mischief at your age, isolated as you were out on that ranch. But you fell into bad company. Don't miss that ship; if you are still here tomorrow I might have to revise my opinions."

The lieutenant stood up and so did Don. "I'll certainly catch it!" Don agreed, then stopped. "Unless—"

"Unless what?" the lieutenant said sharply.

"Well, they held up my ticket for security clearance," Don blurted out.

"They did, eh? A routine matter; I'll take care of it. You can leave now. Open sky!"

Don did not make the conventional answer. The man said, "Don't be sulky. It would have been simpler to have beaten the living daylights out of you, then questioned you. But I didn't; I have a son about your age myself. And I never intended to hurt your horse—happens I like horses; I'm a country boy originally. No hard feelings?"

"Uh, I guess not."

The lieutenant put out his hand; Don found himself accepting it — he even found himself liking the man. He decided to chance one more question. "Could I say goodbye to Dr. Jefferson?"

The man's expression changed. "I'm afraid not."

"Why not? You'd be watching me, wouldn't you?"

The officer hesitated. "There's no reason why you shouldn't know. Dr. Jefferson was a man in very poor health. He got excited, suffered an attack and died of heart failure, earlier tonight."

Don simply stared. "Brace up!" the man said sharply. "It happens to all of us." He pressed a button on his desk a guard came in and was told to take Don out. He was led out by another route but he was too bemused to notice it. Dr. Jefferson dead? It did not seem possible. A man so alive, so obviously in love with life. He was dumped out into a major public tunnel while still thinking about it.

Suddenly he recalled a phrase he had heard in class from his biology teacher, " 'In the end, all forms of death can be classed as heart failure.' " Don held up his right hand, stared at it. He would wash it as quickly as he could.

IV

THE GLORY ROAD

He still had things to do; he could not stand there all night. First, he supposed that he had better go back to the station and pick up his bags. He fumbled in his pouch for his claim check while he worried about just how he would get there; he still did not have hard money with which to pay off an autocab.

He failed to find the claim check. Presently he removed everything from the pouch. Everything else was there; his letter of credit; his identification card, the messages from his parents, a flat photo of Lazy, his birth certificate, odds and ends—but no claim check. He remembered putting it there.

He thought of going back into the I.B.I. warren; he was quite sure now that it must have been taken from him while he slept. Darn funny, him falling asleep like that, at such a time. Had they drugged him? He decided against going back.

Not only did he not know the name of the officer who had questioned him, nor any other way of identifying him, but more importantly he would not have done back into that place for all the baggage in Gary Station. Let it go, let it go — he'd pick up more socks and shorts before blast off!

He decided instead to go to the Caravansary. First he had to find out where it was; he walked slowly along, looking for someone who did not seem too busy nor too important to ask. He found him in the person of a lottery ticket vendor at the next intersection.

The vendor looked him over. "You don't want to go to that place, Mac. I can fix you up with something really good." He winked.

Don insisted that he knew what he wanted. The man shrugged. "Okay, chump. Straight ahead until you come to a square with an electric fountain in it, then take the slidewalk south. Ask anybody where to get off. What month were you born?"

"July."

"July! Boy, are you lucky—I've just got one ticket left with your horoscope combination. Here." Don had no intention at all of buying it and he thought of telling the grifter that he considered horoscopes as silly as spectacles on a cow—but he found that he had purchased it with his last coin. He pocketed the ticket, feeling foolish. The vendor said, "About half a mile on the slidewalk. Brush the hay out of your hair before you go in."

Don found the slidewalk without difficulty and discovered that it was a pay-as-you-enter express. The machine not being interested in lottery tickets he walked the catwalk alongside it to the hotel. He had no trouble finding it; its brilliantly lighted entrance spread for a hundred yards along the tunnel.

No one seemed to help him as he came in. He went to the reservation desk and asked for a room. The clerk looked him over doubtfully. "Did someone take care of your baggage, sir?"

Don explained that he had none. "Well . . . that will be twentytwo fifty, in advance. Sign here, please."

Don signed and stamped his thumb print, then got out his father's letter of credit. "Can I get this cashed?"

"How much is it?" The clerk took it, then said, "Certainly, sir. Let me have your ID, please." Don passed it over. The clerk took it and the fresh thumb print, placed both in a comparison machine. The machine beeped agreement; the clerk handed back the card. "You are you, all right." He counted out the money, deducting the room charge. "Will your baggage be along, sir?" His manner indicated that Don's social status had jumped.

"Uh, no, but there might be some mail for me." Don explained that he was going out on the Glory Road in the morning.

"I'll query the mail room."

The answer was no; Don looked disappointed. The clerk said, "I'll have the mail room flag your name. If anything arrives before upship, you'll be sure to get it—even if we have to send a messenger to the field."

"Thanks a lot."

"Not at all. Front!" As he let himself be led away, Don suddenly realized that he was groggy. The big foyer clock told him that it was already tomorrow, had been for hours in fact — he was paying seven-fifty an hour, about, for the privilege of a bed, but the way he felt he would have paid more than that simply to crawl into a hole.

He did not go immediately to bed. The Caravansary was a luxury hotel; even its "cheap" rooms had the minimums of civilized living. He adjusted the bath for a cycling hot sitz, threw off his clothes, and let the foaming water soothe him. After a bit he changed the pattern and floated in tepid stillness.

He came to with a start and got out. Ten minutes later, dried, powdered, and tingling with massage, he stepped back into the bedroom feeling almost restored. The ranch school had been intentionally monastic, oldstyle beds and mere showers; that bath was worth the price of the room.

The delivery chute's annunciator shone green; he opened it and found three items. The first was a largish package sealed in plastic and marked "CARAVANSARY COURTESY KIT"; it contained a comb and toothbrush, a sleeping pill, a headache powder, a story film for the bed's ceiling projector, a New Chicago News, and a breakfast menu. The second item was a card from his roommate; the third item was a small package, a common mailing tube. The card read: Dear Don, A package came for you on the P.M. I got the Head to let me run it into Alb-Q-Q. Squinty is taking over Lazy. Must sign off; I've got to land this heap. All the best, Jack.

Good old Jack, he said to himself, and picked up the mailing tube. He looked at the return address and realized with something of a shock that this must be the package over which Dr. Jefferson had been so much concerned, the package which apparently had led to his death. He stared at it and wondered if it could be true that a citizen could he dragged out of his own home, then so maltreated that he died.

Was the man he had had dinner with only hours ago really dead? Or had the security cop lied to him for some reason of his own?

Part of it was certainly true; he had seen them waiting to arrest the doctor—why, he himself had been arrested and threatened and questioned, and had had his baggage virtually stolen from him, for nothing! He hadn't been doing a thing, not a confounded thing, just going about his lawful business.

Suddenly he was shaking with anger. He had let himself be pushed around; he made a solemn vow never to let it happen again. He could see now that there were half a dozen places where he should have been stubborn. If he had fought right at the outset, Dr. Jefferson might be alive — if he actually were dead, he amended.

But he had let himself be bulldozed by the odds against him. He promised himself never again to pay any attention to the odds, but only to the issues.

He controlled his trembling and opened the package.

A moment later he was looking baffled. The tube contained nothing but a man's ring, a cheap plastic affair such as one might find on any souvenir counter. An old English capital "H" framed with a circle had been pressed into the face of it and the grooves filled with white enamel. It was flashy but commonplace and of no value at all to any but the childish and vulgar in taste.

Don turned it over and over, then put it aside and sorted through its wrappings. There was nothing else, not even a message, just plain white paper used to pack the ring. Don thought it over.

The ring obviously was not the cause of the excitement; it seemed to him that there were just two possibilities: first, that the security police had switched packages — if they had, there was probably nothing he could do about it — and second, if the ring were unimportant but it was the right package, then the rest of the contents of the package must be important even though it looked like nothing but blank paper.

The idea that he might be carrying a message in invisible ink excited him and he started thinking of ways to bring out the message. Heat? Chemical reagents? Radiation? Even as he considered it he realized regretfully that, supposing there were such a message, it was not his place to try to make it legible; he was simply to deliver it to his father.

He decided, too, that it was more likely that this was a dummy package sent along by the police. He had no way of telling what they might have forced out of Dr. Jefferson. Which reminded him that there was still one thing he could do to check up, futile as it probably would be; he stepped to the phone and asked for Dr. Jefferson's residence. True, the doctor had told him not to phone—but the circumstances had changed.

He had to wait a bit, then the screen lighted up—and he found himself staring into the face of the security police lieutenant who had grilled him. The police officer stared back. "Oh, me!" he said in a tired voice, "so you didn't believe me? Go back to bed; you have to be up in an hour or so."

Don switched off without saying anything.

So Dr. Jefferson was either dead or still in the hands of the police. Very well; he would assume that the paper came from the doctor — and he would deliver that paper in spite of all the slimily polite stormtroopers New Chicago could muster! The dodge the doctor had apparently used to fake the purpose of the paper caused him to wonder what he could do to cover up its importance. Presently he got his stylus from his pouch, smoothed out the paper, and started a letter. The paper looked enough like writing paper to make a letter on it seem reasonable—it might be writing paper in truth. He started in "Dear Mother and Dad, I got your radiogram this morning and was I excited!" He continued, simply covering space in a sprawling hand and finishing, when he was about to run out of paper, by mentioning an intention to add to the letter and have the whole thing sent off as soon as his ship was in radio range of Mars. He then folded it, tucked it into his wallet, and put the whole into his pouch.

He looked at the clock as he finished. Good heavens! He should be up in an hour; it was hardly worthwhile going to bed. But his eyes were trying to close even as he thought it; he saw that the alarm dial of the bed was graduated from "Gentle Reminder" to "Earthquake"; he picked the extreme setting and crawled in.

He was being bounced around, a blinding light was flashing in his eyes, and a siren was running up and down the scale. Don gradually became aware of himself, scrambled out of bed. Mollified, the bed ceased its uproar.

He decided against breakfast in his room for fear that he might go back to sleep, choosing instead to stumble into his clothes and seek out the hotel's coffee shop. Four cups of coffee and a solid meal later, checked out and armed with hard money for an autocab, he headed for Gary Station. At the reservation office of Interplanet Lines he asked for his ticket. A strange clerk hunted around, then said, "I don't see it. It's not with the security clearances."

This, Don thought, is the last straw. "Look around. It's bound to be there"

"But it's— Wait a moment!" The clerk picked up a slip. "Donald James Harvey? You're to pick up your ticket in room 4012, on the mezzanine."

"Why?"

"Search me; I just work here. That's what it says."

Mystified and annoyed, Don sought out the room named. The door was plain except for a notice "Walk In"; he did and found himself again facing the security lieutenant of the night before.

The officer looked up from a desk. "Get that sour look off your puss, Don," he snapped. "I haven't had much sleep either."

"What do you want of me?"

"Take off your clothes."

"Why?"

"Because we are going to search you. You didn't really think I'd let you take off without it, did you?"

Don planted his feet. "I've had just about enough pushing around," he said slowly. "If you want my clothes off you'll have to do it."

The police officer scowled. "I could give you a couple of convincing answers to that, but I am fresh out of patience. Kelly, Arteem. Strip him."

Three minutes later Don had an incipient black eye and was nursing a damaged arm. He decided that it was not broken, after all. The lieutenant and his assistants had disappeared into a rear room with his clothing and pouch. It occurred to him that the door behind him did not seem to be locked, but he dropped the idea; making a dash for ii through Gary Station in his skin did not appear to make sense.

Despite the inevitable defeat his morale was better than it had been in hours.

The lieutenant returned presently and shoved his clothes at him. "Here you are. And here's your ticket. You may want to put on clean clothes; your bags are back of the desk."

Don accepted them silently, ignored the suggestion about a change in order to save time. While he was dressing the lieutenant said suddenly, "When did you pick up that ring?"

"Forwarded to me from school."

"Let me see it."

Don took it off and flung it at him. "Keep it, you thief!"

The lieutenant caught it and said mildly, "Now, Don, it's nothing personal." He looked the ring over carefully, then said, "Catch!" Don caught it and put it back on, picked up his bags and started to leave. "Open sky," said the lieutenant.

Don ignored him.

" 'Open sky,' I said!"

Don turned again, looked him in the eye and said, "Some day I hope to meet you socially." He went on out. They had spotted the paper after all; he had noticed that it was missing when he got back his clothes and pouch.

This time he took the precaution of getting an antinausea shot before upship. After he had stood in line for that he had barely time to be weighed in before the warning signal. As he was about to get into the elevator he saw what he believed to be a familiar figure lumbering onto the cargo lift nearby—"Sir Isaac Newton." At least it looked like his passing acquaintance of the day before, though he had to admit that the difference in appearance between one dragon and another was sometimes a bit subtle for the human eye.

He refrained from whistling a greeting; the events of the past few hours had rendered him less naive and more cautious. He thought about those events as the elevator mounted up the ship's side. It was unbelievably only twenty-four hours, less in fact, since he had gotten that radio message. It seemed like a month and he himself felt aged ten years.

Bitterly he reflected that they had outwitted him after all. Whatever message lay concealed in that wrapping paper was now gone for good. Or bad.

Couch 64 in the Glory Road was one of a scant half dozen on the third deck; the compartment was almost empty and there were marks on the deck where other couches had been unbolted. Don found his place and strapped his bags to the rack at its foot. While he was doing so he heard a rich Cockney voice behind him; he turned and whistled a greeting.

"Sir Isaac Newton" was being cautiously introduced into the compartment from the cargo hold below with the help of about six spaceport hands. He whistled back a courteous answer while continuing to supervise the engineering feat via voder. "Easy, friends, easy does it! Now if two of you will be so kind as to place my left midship foot on the ladder, bearing in mind that I cannot see it — Wups! Mind your fingers. There, I think I can make it now. Is there anything breakable in the way of my tail?"

The boss stevedore answered, "All clear, chief. Upsy-daisy!"

"If you mean what I think you mean," answered the Venerian, "then, 'On your mark; get set—GO!' " There was a crunching metallic sound, a tinkle of breaking glass, and the huge saurian scrambled up out of the hatch. Once there he turned cautiously around and settled himself in the space left vacant for him. The spaceport hands followed him and secured him to the deck with steel straps. He waggled an eye at the straw boss. "You, I take it, are the chieftain of this band?"

"I'm in charge."

The Venerian's tendrils quitted the keys of the voder, sought out a pouch by it, and removed a sheaf of paper money. He laid it on the deck and returned to the keys. "Then, sir, will you favor me by accepting this evidence of my gratitude for a difficult service well performed and distribute it among your assistants equitably and according to your customs, whatever they may be?"

The human scooped it up and shoved it into his pouch. "Sure thing, chief. Thanks."

"The honor is mine." The laborers left and the dragon turned his attention to Don, but, before they could exchange any words, the last of the compartment's human freight came down from the deck above.

It was a family party; the female head thereof took one look inside and screamed.

She swarmed back up the ladder, causing a traffic jam with her descendants and spouse as she did so. The dragon swiveled two eyes in her direction while waving the others at Don. "Dear me!" he keyed. "Do you think it would help if I were to assure the lady that I have no anthropophagic tendencies?"

Don felt acutely embarrassed; he wished for some way to disown the woman as a blood sister and member of his race. "She's just a stupid fool," he answered. "Please don't pay any attention to her."

"I fear me that a merely negative approach will not suffice."

Don whistled an untranslatable dragon sound of contempt and continued with "May her life be long and tedious."

"Tut, tut," the dragon tapped back. "Unreasoned anguish is nonetheless real. 'To understand all is to forgive all'—one of your philosophers."

Don did not recognize the quotation and it seemed pretty extreme to him, in any case. He was sure that there were things he would never forgive no matter how well he understood them—some recent events, in fact. He was about to say so when both their attentions were arrested by sounds pouring down the open hatchway. Two and perhaps more male voices were engaged in an argument with a shrill female voice rising over them and sometimes drowning them out. It appeared (a) that she wanted to speak to the captain (b) that she had been carefully brought up and had never had to put up with such things (c) that those hideous monsters should never be allowed to come to Earth; they should be exterminated (d) that if Adolf were half a man he wouldn't just stand there and let his own wife be treated so (e) she intended to write to the company and that her family was not without influence and (f) that she demanded to speak to the captain.

Don wanted to say something to cover it up but he was fascinated by it. Presently the sounds moved away and died out; a ship's officer came down the hatch and looked around. "Are you comfortable?" he said to "Sir Isaac Newton."

"Quite, thank you."

He turned to Don. "Get your bags, young man, and come with me. The captain has decided to give his nibs here a compartment to himself."

"Why?" asked Don. "My ticket says couch sixty-four and I like it here."

The ship's officer scratched his chin and looked at him, then turned to the Venerian. "Is it all right with you?"

"Most certainly. I shall be honored by the young gentleman's company."

He turned back to Don. "Well . . . all right. I'd probably have to hang you on a hook if I moved you anyway." He glanced at his watch and swore. "If I don't get a move on, we'll miss takeoff and have to lay over a day." He was up and out of the compartment as he spoke.

The final warning sounded over the announcing system; a hoarse voice followed it with, "All hands! Strap down! Stand by for lift!" The order was followed by a transcription of the brassy strains of Le Compte's, Raise Ship! Don's pulse quickened; excitement mounted in him. He felt ecstatically happy, eager to be back in space again, back where he belonged. The bad, confusing things of the past day washed out of his mind; even the ranch and Lazy grew dim.

So timed was the transcribed music that the rocket-blast effect of the final chorus merged into the real blast of the ship's tubes; the Glory Road stirred and lifted . . . then threw herself away into the open sky.

V

CIRCUM TERRA

The weight of acceleration was no worse than it had been the day before in the Santa Fe Trail but the drive persisted for more than five minutes, minutes that seemed like an endless hour. After they passed the speed of sound the compartment was relatively quiet. Don made a great effort and managed to turn his head a little. "Sir Isaac Newton's" great bulk was flattened to the deck, making Don think unpleasantly of a lizard crushed into a road. His eyestalks drooped like limp asparagus. He looked dead.

Don strained for breath and called out, "Are you all right?"

The Venerian did not stir. His voder instrument was covered by the sagging folds of his neck; it seemed unlikely that his tendrils could have managed the delicate touch required for its keys even had it been free. Nor did he reply in his own whistling speech.

Don wanted to go to him, but he was as immobilized by the blast weight as is the bottommost player in a football pile up. He forced his head back where it belonged a so that he might breathe less painfully and waited.

When the blast died away his stomach gave one protesting flipflop, then quieted down; either the antinausea shot had worked or he had his space balance again—or both. Without waiting for permission from the control room he quickly unstrapped and hurried to the Venerian. He steadied himself in the air, holding with one hand to the steel bands restraining his companion.

The dragon was no longer crushed to the deck plates; only the steel hoops kept him from floating around the compartment. Behind him his giant tail waved loosely, brushing the ship's plates and knocking off paint chips.

The eyestalks were still limp and each eye filmed over. The dragon stirred only in the meaningless motion of string in water; there was nothing to show that he was alive. Don clenched a fist and pounded on the creature's flat skull. "Can you hear me? Are you all right?"

All he got out of it was a bruised hand; Sir Isaac made no response. Don hung for a moment, wondering what to do. That his acquaintance was in a bad way he felt sure, but his training in first aid did not extend to Venerian pseudosaurians. He dug back into his childhood memories, trying to think of something.

The same ship's officer who had rearranged the berthing appeared at the forward or "upper" hatch, floating head "down." "All okay this deck?" he inquired perfunctorily and started to back out.

"No!" Don shouted. "Case of blast shock."

"Huh?" The officer swam on into the compartment and looked at the other passenger. He swore unimaginatively and looked worried. "This is beyond me; I never carried one before. How the deuce do you give artificial respiration to a thing as big as that?"

"You don't," Don told him. "His lungs are completely enclosed in his armor box."

"He looks dead. I think he's stopped breathing."

A memory floated to the top in Don's mind; he snatched it. "Got a cigarette?"

"Huh? Don't bother me! Anyhow the smoking lamp is out."

"You don't understand," Don persisted. "If you've got one, light it. You can blow smoke at his nostril plate and see whether or not he's breathing."

"Oh. Well, maybe it's a good idea." The spaceman got out a cigarette and struck it.

"But be careful," Don went on. "They can't stand nicotine. One big puff and then put it out."

"Maybe it's not such a good idea," the ship's officer objected. "Say, you sound like a Venus colonial?"

Don hesitated, then answered, "I'm a Federation citizen." It seemed like a poor time to discuss politics. He moved over to the dragon's chin, braced his feet against the deck plates and shoved, thus exposing the Venerian's nostril plate, which was located under the creature's head in the folds of his neck. Don could not have managed it, save that they were in free fall, making the bulky mass weightless.

The man blew smoke at the exposed opening. It eddied forward, then some of it curled inside; the dragon was still alive.

Still very much alive. Every eyestalk sprang to rigid attention; he lifted his chin, carrying Don with it, then he sneezed. The blast struck Don where he floated loosely and turned him over and over. He threshed in the air for a moment before catching a handhold on the hatch ladder.

The ship's officer was rubbing one wrist. "The beggar clipped me," he complained. "I won't try that again soon. Well, I guess he'll be all right."

Sir Isaac whistled mournfully; Don answered him. The spaceman looked at him. "You savvy that stuff?"

"Some."

"Well, tell him to use his squawk box. I don't!"

Don said, "Sir Isaac—use your voder." The Venerian tried to comply. His tentacles hunted around, found the keys of the artificial voice box, and touched them. No sounds came out. The dragon turned an eye at Don and whistled a series of phrases.

"He regrets to say that its spirit has departed," Don interpreted.

The ship's officer sighed. "I wonder why I ever left the grocery business? Well, if we can get it unlatched from him, I'll see if 'Sparks' can fix it."

"Let me," said Don and squirmed into the space between the dragon's head and the deck plates. The voder case, he found, was secured to four rings riveted to the Venerian's skin plates. He could not seem to find the combination; the dragon's tendrils fluttered over his hands, moved them gently out of the way, unfastened the box, and handed it to him. He wiggled out and gave it to the man. "Looks like he kind of slept on it," he commented.

"A mess," the other agreed. "Well, tell him I'll have them fix it if possible and that I'm glad he wasn't hurt."

"Tell him yourself; he understands English."

"Eh? Oh, of course, of course." He faced the Venerian who immediately set up a long shrilling. "What's he say?"

Don listened. "He says he appreciates your good wishes but that he is sorry to have to disagree; he is unwell. He says that he urgently requires" Don stopped and looked puzzled, then whistled the Venerian equivalent of "Say that again, please?"

Sir Isaac answered him; Don went on, "He says he's just got to have some sugar syrup."

"Huh?"

"That's what he says."

"I'll be — How much?"

There was another exchange of whistles; Don answered, —Uh, he says he needs at least a quarter of a—there isn't any word for it; it's an amount about equal to half a barrel, I'd say."

"You mean he wants half a barrel of waffle juice?"

"No, no, a quarter of that—an eighth of a barrel. What would that come to in gallons?"

"I wouldn't attempt it without a slipstick; I'm confused. I don't even know that we have any on board." Sir Isaac set up more frantic whistling. "But if we don't, I'll have the cook whip up some. Tell him to hold everything and take it easy." He scowled at the dragon, then left quite suddenly.

Don attached himself to one of the steel straps and asked, "How are you feeling now?"

The dragon replied apologetically to the effect that he needed to return to the egg for the moment. Don shut up and waited.

The captain himself showed up to attend the sick passenger. The ship, being in free trajectory for the satellite space station, would not require his presence in the control room until well past noon, New Chicago time; he was free to move around the ship. He arrived in company with the ship's doctor and followed by a man herding a metal tank.

The two conferred over the dragon, at first ignoring Don's presence. However neither of them knew the piping speech of the dragon tribe; they were forced to turn to Don. Through him Sir Isaac again insisted that he required sugar solution, as a stimulant. The captain looked worried. "I've read somewhere that sugar gets them drunk the same as alcohol does us."

Don again translated for the Venerian; what he had asked for was simply a medicinal dose.

The captain turned to the medical officer. "How about it, surgeon?"

The doctor stared at the bulkhead. "Captain, this is as far outside my duties as tap dancing."

"Confound it, man, I asked for your official opinion!"

The medical officer faced him. "Very well, sir—I would say that if this passenger should die, you having refused him something he had asked for, it would look very, very bad indeed."

The captain bit his lip. "As you say, sir. But I'll be switched if I want several tons of intoxicated dragon banging around in my ship. Administer the dose."

"Me, sir?"

"You, sir."

The ship being in free fall it was quite impossible to pour out the syrup and let the Venerian lick it up, nor was he physically equipped to use the "baby bottle" drinking bladder used by humans when weightless. But that had been anticipated; the tank containing the syrup was a type used in the galley to handle soup or coffee in free fall. It had a hand pump and an attachable hose.

It was decided, Sir Isaac concurring, to place the end of the hose well down the dragon's throat. But nobody seemed to want the job. Granted that Draco Veneris Wilsonii is a civilized race, to stick one's head and shoulders between those rows of teeth seemed to be inviting a breach in foreign relations.

Don volunteered for the job and was sorry when they took him up on it. He trusted Sir Isaac but recalled times when Lazy had stepped on his foot quite unintentionally. He hoped that the dragon had no unfortunate involuntary reflexes; apologies are no use to a corpse.

While he kept the end of the hose firmly in place he held his breath and was glad that he had taken that antinausea injection. Sir Isaac did not have halitosis, as dragons go, but dragons go rather far in that direction. The job done, he was happy to back out.

Sir Isaac thanked them all, via Don, and assured them that he would now recover rapidly. He seemed to fall asleep in the midst of whistling. The ship's doctor peeled one eyestalk and shined a hand torch at it. "The stuff has hit him, I think. We'll let him be and hope for the best."

They all left. Don looked his friend over, decided that there was no point in sitting up with him, and followed them. The compartment had no view port; he wanted at least one good look at Earth while they were still close by. He found what he sought three decks forward.

They were still only fifteen thousand miles out; Don had to crowd in close to the view port to see all of Earth at one time. It was, he had to admit, a mighty pretty planet; he was a little bit sorry to be leaving it. Hanging there against velvet black and pinpoint stars, drenched in sunlight so bright it hurt your eyes, it almost took your breath away.

The sunrise line had swung far into the Pacific past Hawaii, and North America was spread out to his gaze. Storm blanketed the Pacific Northwest, but the Midwest was fairly clear and the Southwest was sharp. He could make out where New Chicago was with ease; he could see the' Grand Can on and from it he could almost figure out where the range had to be. He was sure that with a small telescope he could have spotted it.

He gave up his place at last. He was soaking in the pleasant melancholy of mild homesickness and the comments of some of the other passengers were beginning to annoy him, not the cheerful inanities of tourists but the know-it-all remarks of self-appointed old timers, making their second trip out. He headed back to his own compartment.

He was startled to hear his name called. He turned and the ship's officer he bad met before floated up to him. He had with him Sir Isaac's voder. "You seem to be chummy with that overeducated crocodile you're bunking with; how about taking this to him?"

"Why, certainly."

"The radio officer says it needs an overhaul but at least it's working again." Don accepted it and went aft. The dragon seemed to be sleeping, then one eye waved at him and Sir Isaac whistled a salutation.

"I've got your voice box," Don told him. "Want me to fasten it on for you?"

Sir Isaac politely refused. Don handed the instrument to the fidgeting tendrils and the dragon arranged it to suit him. He then ran over the keys as a check, producing sounds like frightened ducks. Satisfied, he began to speak in English: "I am enriched by the debt you have placed upon me."

"It was nothing," Don answered. "I ran into the mate a couple of decks forward and be asked me to fetch it along."

"I do not refer to this artificial voice, but to your ready help when I was in distress and peril. Without your quick wit, your willingness to share mud with an untested stranger, and in passing your knowledge of the true speech, I might have lost my chance to attain the happy death."

"Shucks," Don answered, feeling somewhat pink, "it was a pleasure." He noticed that the dragon's speech was slow and somewhat slurred, as if his tentacles lacked their customary dexterity. Besides that, Sir Isaac's talk was more a pedantic than ever and much more Cockney-flavored—the voder was mixing aspirates with abandon and turning the theta sound into "f"; Don felt sure that the Earthman who had taught him to speak must have been born in earshot of Bow Bells.

He noticed as well that his friend could not seem to make up his mind which eye he wanted to use on him. He kept waggling one after another at Don, as if seeking one which would let him focus better. Don wondered if Sir Isaac had overestimated the proper size of a medicinal dose.

"Permit me," the Venerian went on, still with ponderous dignity, "to judge the worth of the service you have done me." He changed the subject. "This word 'shucks'—I do not recognize the use you made of it. Husks of plants?"

Don struggled to explain how little and how much "shucks" could mean. The dragon thought it over and tapped out an answer. "I believe that I gain a portion of understanding. The semantic content of this word is emotional and variable, rather than orderly and descriptive. Its referent is the state of one's spirits?"

"That's it," Don said happily. "It means just what you want it to mean. It's the way you say it."

"Shucks," the dragon said experimentally. "Shucks. I seem to be getting the feel of it. A delightful word. Shucks." He went on, "The delicate nuances of speech must be learned from the living users thereof. Perhaps I may return the favor by helping you in some small wise with your already great mastery of the speech of my people? Shucks."

This confirmed Don's suspicion that his own whistling had become so villainous that it might do for popcorn vending but not for regular communication. "I certainly would appreciate a chance to brush up," he answered. "I haven't had a chance to speak 'true speech' for years—not since I was a kid. I was taught by a historian who was working with my father on the (whistled) ruins. Perhaps you know him? His name was 'Professor Charles Darwin.' " Don added the whistled or true version of the Venerian scholar's name.

"You ask me if I know (whistled)? He is my brother; his grandmother, nine times removed, and my grandmother, seven times removed, were the same egg. Shucks!" He added, "A learned person, for one so young."

Don was a bit taken aback to hear "Professor Darwin" described as "young"; as a child he had classed him and the ruins as being about the same age. He now had to remind himself that Sir Isaac might see it differently. "Say that's nice!" he answered. "I wonder if you knew my parents? Dr. Jonas Harvey and Dr. Cynthia Harvey?"

The dragon turned all eyes on him. "You are their egg? I have not had the honor of meeting them but all civilized persons know of them and their work. I am no longer surprised at your own excellence. Shucks!"

Don felt both embarrassment and pleasure. Not knowing what to say he suggested that Sir Isaac coach him for a while in "true speech," a suggestion to which the dragon readily assented. They were still so engaged when the warning signal sounded and a voice from the control room sang, out, "Strap down for acceleration! Prepare to match trajectories!"

Don placed his hands against his friend's armored sides and shoved himself back to his couch. He paused there and said, "Are you going to be all right?"

The dragon made a sound which Don construed as a hiccup cup, and tapped out, "I feel sure of it. This time I am fortified."

"I hope so. Say, you don't want to bung up your voder again. Want me to take care of it?"

"If you will, please."

Don went back and got it, then fastened it to his bags. He had barely time to fasten his safety belts when the first surge of acceleration hit them. It was not so bad, this time, neither as many gravities as the blastoff from Earth nor of as long duration, for they were not breaking free of Earth's crushing grip but merely adjusting trajectories—modifying the outer end of the Glory Roads elliptical path to make it agree perfectly with the circular orbit of Circum-Terra, the crossroads station in space which was their destination.

The captain gave them one long powerful shove, waited, then blasted twice more for short intervals, without, Don noted, finding it necessary to invert and blast back. He nodded approval. Good piloting! — the captain knew his vectors. The bullhorn sang out, "Contact! Unstrap at will. Prepare to disembark."

Don returned the voder to Sir Isaac, then lost track of him, for the dragon again had to be taken aft to be transferred through the cargo hatch. Don whistled goodbye and went forward, towing his bags behind him, to go out through the passenger tube.

Circum-Terra was a great, confused mass in the sky. It had been built, rebuilt, added to, and modified over the course of years for a dozen different purposes—weather observation station, astronomical observatory, meteor count station, television relay, guided missile control station, high vacuum, strain-free physics laboratory, strain-free germ-free biological experiment station, and many other uses.

But most importantly it was a freight and passenger transfer station in space, the place where short-range winged rockets from Earth met the space liners that plied between the planets. For this purpose it had fueling tanks, machine shops, repair cages that could receive the largest liners and the smallest rockets and a spinning, pressurized drum — "Goddard Hotel"—which provided artificial gravity and Earth atmosphere for passengers and for the permanent staff of Circum-Terra.

Goddard Hotel stuck out from the side of Circum-Terra like a cartwheel from a pile of junk. The hub on which it turned ran through its center and protruded out into space. It was to this hub that a ship would couple its passenger tube when discharging or loading humans. That done, the ship would then be warped over to a cargo port in the non-spinning major body of the station. When the Glory Road made contact, there were three other ships in at Circum-Terra: the Valkyrie in which Don Harvey had passage for Mars, the Nautilus, just in from Venus and in which Sir Isaac expected to return home, and the Spring Tide, the Luna shuttle which alternated with its sister the Near Tide.

The two liners and the moon ship were already tied up to the main body of the station; the Glory Road warped in at the hub of the hotel and immediately began to discharge passengers. Don waited his turn and then pulled himself along by handholds, dragging his bags behind him, and soon found himself inside the hotel, but still in weightless free fall in the cylindrical hub of the Goddard.

A man in overalls directed Don and the dozen passengers he was with to a point halfway along the hub where a large lift blocked further progress. Its circular door stood open and turned very slowly around, moving with the spinning hotel proper. "Get in," he ordered. "Mind you get your feet pointed toward the floor."

Don got in with the others and found that the inside of the car was cubical. One wall was marked in big letters: FLOOR. Don found a handhold and steadied himself so that his feet would be on the floor when weight was applied. The man got in and started the car out toward the rim.

There was no feeling of weight at first, at least not toward the "floor." Don experienced a dizzy sensation as increasing spin sloshed the liquid about in his inner ear. He knew that he had ridden this elevator before, when he was eleven and heading for Earth and school, but he had forgotten its unpleasant aspects.

Soon the elevator stopped; the floor became the floor in earnest, though with considerably less than one gravity, and the upsetting sensation ceased. The operator opened the door and shouted, "Everybody out!"

Don walked into a large inner compartment, carrying his bags. It was already crowded with more than half of the ship's passengers. Don looked around for his dragon friend, then remembered that the ship would have to be moved around to a cargo port before the Venerian could disembark. He put his bags on the floor and sat down on them.

The crowd, for some reason, seemed unquiet. Don heard one woman say, "This is preposterous! We've been here at least half an hour and no one appears to know that we're here."

A man answered, "Be patient, Martha."

" 'Patient' he says! Only one door out of the place and it locked—suppose there were a fire?"

"Well, where would you run to, dear? Nothing outside but some mighty thin vacuum."

She squealed. "Oh! We should have gone to Bermuda as I wanted to."

"As you wanted to?"

"Don't be petty!"

Another elevator load discharged and then another; the ship was empty. After many minutes more of grumbling, during which even Don began to wonder at the service, the only door other than the elevator door opened. Instead of a hotelman anxious to please his guests, in came three men in uniform. The two flank men were carrying mob guns cradled at their hips; the third man had only a hand pistol, still holstered. He stepped forward, planted his feet and set his fists on his hips. "Attention! Quiet, everybody."

He got it; his voice had the ring of command, which is obeyed without thinking. He went on, "I am Assault Sergeant McMasters of the High Guard, Venus Republic. My commanding officer has directed me to advise you of the present situation."

There was an additional short moment of silence, then a rising mutter of surprise, alarm, disbelief, and indignation. "Pipe down!" the sergeant shouted. "Take it easy. Nobody's going to get hurt—if you behave." He went on, "The Republic has taken over this station and everybody is being cleared out. You groundhogs will be shipped back to Earth at once. Those of you who are headed home to Venus will go home — provided you pass our loyalty check. Now, let's get sorted out."

A fussy, plump man pushed his way forward. "Do you realize, sir, what you are saying? 'Venus Republic,' indeed. This is piracy!"

"Get back in line, fatty."

"You can't do this. I wish to speak to your commanding officer."

"Fatty," the sergeant said slowly, "back up before you get a boot in your belly." The man looked dumbfounded, then scuttled back into the crowd.

The sergeant continued, "Those of you going to Venus form a queue here at the door. Have your ID's and birth certificates ready."

The passengers, up to that time a friendly group of fellow travelers, split into hostile camps. Someone shouted, "Long live the Republic!", which was followed by the beefy sound of a fist striking flesh. One of the guards hurried into the crowd and stopped the impending riot. The sergeant drew his sidearm and said in a bored voice, "No politics, please. Let's get on with the job."

Somehow a line was formed. The second in line was the man who had cheered the new nation. His nose was dripping blood but his eyes were shining. As he offered his papers to the sergeant he said, "This is a great day! I've waited all my life for it."

"Who hasn't?" the sergeant answered. "Okay—on through the door for processing. Next!"

Don was busy trying to quiet down and arrange his whirling thoughts. He was forced at last to admit that this was it, this was war, the war that he had told himself was impossible. No cities had been bombed, not yet, but this was the Fort Sumter of a new war; he was smart enough to see that. He did not have to be threatened with a boot in the belly to see what was in front of his face.

He realized with nervous shock that he had just barely gotten away in time. The Valkyrie might be the last ship to Mars in a long, long time. With the transfer station in the hands of the rebels it might be the last one for years.

The sergeant had not said anything about passengers for Mars as yet; Don told himself that the sergeant's first effort must naturally be to sort out the citizens of the two belligerents. He decided that the thing to do was to keep his mouth shut and wait.

There was an interruption in the queue. Don heard the sergeant say, "You're in the wrong pew, bud. You go back to Earth."

The man he was speaking to answered, "No, no! Take a look at my papers; I'm emigrating to Venus."

"You're a little bit late to be emigrating. The situation has changed."

"Why? Sure, I know it has changed. I declare for Venus."

The sergeant scratched his head. "This one isn't in the book. Atkinson! Pass this man on through; we'll let the lieutenant figure it out."

When he had completed the group that wanted to go to Venus the sergeant went to a speech-only wall phone. "Jim? Mac speaking, from the nursery. They got that dragon out yet? No? Well, let me know when the Road is back at the chute; I want to load." He turned back to the crowd. "All right, you groundhogs—there'll be a delay so I'm going to move you into another room until we're ready to send you hack to Earth."

"Just a moment, Sergeant!" called out a male passenger.

"Yeah? What do you want?"

"Where do passengers for Luna wait?"

"Huh? Service discontinued. You're going hack to Earth."

"Now, Sergeant, let's be reasonable. I haven't the slightest interest in politics; it does not matter to me who administers this station. But I have business on the Moon. It is essential that I get to the Moon. A delay would cost millions!"

The sergeant stared at him. "Now isn't that just too bad! You know, brother, I've never had as much as a thousand at one time in my life; the thought of losing millions scares me." His manner suddenly changed. "You stupid jerk, have you ever thought what a bomb would do to the roof of Tycho City? Now line up, all of you, double file."

Don listened to this with disquiet. Still, the sergeant had not said anything about Mars. He got into line, but at the very end. When the tail of the line reached the door he stopped. "Get a move on, kid," said the sergeant.

"I'm not going back to Earth," Don told him.

"Huh?"

"I'm headed for Mars in the Valkyrie."

"Oh, I see. You mean you were, now you're headed back to Earth in the Glory Road."

Don said stubbornly, "Look, mister, I've got to get to Mars. My parents are there; they are expecting me."

The sergeant shook his head. "Kid I feel sorry for you. I really do.

The Valkyrie isn't going to Mars."

"What?"

"She's being recommissioned as a cruiser of the High Guard. She's going to Venus. So I guess you had better go back to Earth. I'm sorry you won't be able to join your folks, but war is like that."

Don breathed slowly and forced himself to count up to ten. "I'm not going back to Earth. I'll wait right here until a ship does go to Mars."

The sergeant sighed. "If you do, you'll have to chin yourself on a star while you wait."

"Huh? What do you mean?"

"Because," he said slowly, "a few minutes after we blast off there will be nothing in this neighborhood but a nice, pretty radioactive cloud. Want to play a leading role in a Geiger counter?"

VI

THE SIGN IN THE SKY

Don could not answer. His simian ancestors, beset with perils every moment of life, might have taken it calmly; Don's soft life had not prepared him for such repeated blows. The sergeant went on, "So it had better be the Glory Road for you kid. That's what your parents would want. Go back and find yourself a nice spot in the country; the cities are likely to be unhealthy for a while."

Don snapped out of it. "I'm not going back to Earth! I don't belong there; I'm not a native of Earth."

"Eh? What is your citizenship? Not that it matters; anybody who isn't a citizen of Venus goes back in the Glory Road."

"I'm a Federation citizen," Don answered, "but I can claim Venus citizenship."

"The Federation," the sergeant answered, "has had a slump in its stock lately. But what's this about Venus citizenship? Stop the doubletalk and let's see your papers."

Don passed them over. Sergeant McMasters looked first at his birth certificate, then stared at it. "Born in free fall! I'll be a crosseyed pilot — say, there aren't many like you, are there?"

"I guess not."

"But just what does that make you?"

"Read on down. My mother was born on Venus. I'm Venus native born, by derivation."

"But your pop was born on Earth."

"I'm native born there, too."

"Huh? That's silly."

"That's the law."

"There are going to be some new laws. I don't know just where you fit. See here — where do you want to go? Venus or Earth?"

"I'm going to Mars," Don answered simply.

The sergeant looked at him and handed back the papers. "It beats me. And I can't get any sense out of you. I'm going to refer it on up. Come along."

He led Don down a passageway and into a small compartment which had been set up as an orderly room. Two other soldiers were there; one was using a typer, the other was just sitting. The sergeant stuck his head in and spoke to the one who was loafing. "Hey, Mike—keep an eye on this character. See that he doesn't steal the station." He turned back to Don. "Give me those papers again, kid." He took them and went away.

The soldier addressed as Mike stared at Don, then paid no further attention to him. Don put his bags down and sat on them.

After several minutes Sergeant McMasters returned but ignored Don. "Who's got the cards?" he inquired.

"I have."

"Not your readers, Mike. Where are the honest cards?" The third soldier closed the typer, reached in a drawer and pulled out a deck of cards. The three sat down at the desk and McMasters started to shuffle. He turned to Don. "Care for a friendly game, kid?"

"Uh, I guess not."

"You'll never learn any cheaper." The soldiers played cards for half an hour or so while Don kept quiet and thought. He forced himself to believe that the sergeant knew what he was talking about; he could not go to Mars in the Valkyrie because the Valkyrie was not going to Mars. He could not wait for a later ship because the station — this very room he was sitting in — was about to be blown up.

What did that leave? Earth? No! He had no relatives on Earth, none close enough to turn to. With Dr. Jefferson dead or missing be had no older friends. Perhaps he could crawl back to the ranch, tail between his legs.

No! He had outgrown that skin and shed it. The ranch school was no longer for him.

Down inside was another and stronger reason: the security police in New Chicago had made of him an alien; he would not go back because Earth was no longer his.

Hobson's choice, he told himself; it's got to be Venus. I can find people there whom I used to know—or know Dad and Mother. I'll scrounge around and find some way to get from there to Mars; that's best. His mind made up, he was almost content.

The office phone called out: "Sergeant McMasters!" The sergeant laid down his hand and went to it, pulling the privacy shield into place. Presently he switched off and turned to Don. "Well, kid, the Old Man has settled your status; you're a 'displaced person.'"

"Huh?"

"The bottom fell out for you when Venus became an independent republic. You have no citizenship anywhere. So the Old Man says to ship you back where you come from . . . back to Earth."

Don stood up and squared his shoulders. "I won't go."

"You won't, eh?" McMasters said mildly. "Well, just sit hack down and be comfortable. When the time comes, we'll drag you." He started to deal the cards again.

Don did not sit down. "See here, I've changed my mind. If I can't get to Mars right away, then I'll go to Venus."

McMasters stopped and turned around. "When Commodore Higgins settles a point, it's settled. Mike, take this prima donna across and shove him in with the other groundhogs."

"But. . ."

Mike stood up. "Come on, you."

Don found himself shoved into a room packed with injured feelings. The Earthlings had no guards and no colonials in with them; they were giving vent freely to their opinions about events. "Outrage! We should blast every one of their settlements, level them to the ground!" "—I think we should send a committee to this commanding officer of theirs and say to him firmly—" "I told you we shouldn't have come!" "Negotiate? That's a sign of weakness." "Don't you realize that the war is already over? Man, this place isn't just a traffic depot; it's the main guidedmissile control station. They can bomb every last city on Earth from here, like ducks on a pond!"

Don noticed the last remark, played it over in his mind, let it sink in. He was not used to thinking in terms of military tactics; up to this moment the significance of a raid on Circum-Terra had been lost on him. He had thought of it in purely personal terms, his own convenience.

Would they actually go that far? Bomb the Federation cities right off the map? Sure, the colonials had plenty to be sore about, but— of course, it had happened like that, once in the past, but that was history; people were more civilized now. Weren't they?

"Harvey! Donald Harvey!"

Everyone turned at the call. A Venus Guardsman was standing in the compartment door, shouting his name. Don answered, "Here."

"Come along."

Don picked up his bags and followed him out into the passageway, waited while the soldier relocked the door. "Where are you taking me?"

"The C. O. wants to see you." He glanced at Don's baggage. "No need to drag that stuff."

"Uh, I guess I'd better keep it with me."

"Suit yourself. But don't take it into the C. O.'s office." He took Don down two decks where the "gravity" was appreciably greater and stopped at a door guarded by a sentry. "Here's the guy the Old Man sent for—Harvey."

"Go right on in."

Don did so. The room was large and ornate; it had been the office of the hotel manager. Now it was occupied by a man in uniform, a man still young though his hair was shot with grey. He looked up as Don came in; Don thought he looked alert but tired. "Donald Harvey?"

"Yes, sir." Don got out his papers.

The commanding officer brushed them aside. "I've seen them. Harvey, you are a headache to me. I disposed of your case once."

Don did not answer; the other went on, "Now it appears that I must reopen it. Do you know a Venerian named—" He whistled it.

"Slightly," Don answered. "We shared a compartment in the Glory Road."

"Hmm. . . . I wonder if you planned it that way?"

"What? How could I?"

"It could have been arranged and it would not be the first time that a young person has been used as a spy."

Don turned red. "You think I am a spy, sir?"

"No, it is just one of the possibilities I must consider. No military commander enjoys political pressure being used on him, Harvey, but they all have to yield to it. I've yielded. You aren't going back to Earth; you are going to Venus." He stood up. "But let me warn you; if you are a ringer who has been planted on me, all the dragons on Venus won't save your skin." He turned to a ship's phone, punched its keys, and waited; presently he said, "Tell him his friend is here and that I've taken care of the matter." He turned back to Don. "Take it."

Shortly Don heard a warm Cockney voice, "Don, my dear boy, are you there?"

"Yes, Sir Isaac."

The dragon shrilled relief. "When I inquired about you, I found some preposterous intention of shipping you back to that dreadful place we just quitted. I told them that a mistake had been made. I'm afraid I had to be quite firm about it. Shucks!"

"It's all fixed up now, Sir Isaac. Thanks."

"Not at all; I am still in your debt. Come to visit me when it is possible. You will, won't you?"

"Oh, sure!"

"Thank you and cheerio! Shucks."

Don turned away from the phone to find the task force commander studying him quizzically. "Do you know who your friend is?"

"Who he is?" Don whistled the Venerian name, then added, "He calls himself 'Sir Isaac Newton.'"

"That's all you know?"

"I guess so."

"Mmm—" He paused, then went on, "You might as well know what influenced me. 'Sir Isaac,' as you call him, traces his ancestry directly back to the Original Egg, placed in the mud of Venus on the day of Creation. So that's why I'm stuck with you. Orderly!"

Don let himself be led away without saying a word. Few if any Earthlings have been converted to the dominant religion of Venus; it is not a proselytizing faith. But none laugh at it; all take it seriously. A terrestrial on Venus may not believe in the Divine Egg and all that that implies; he finds it more profitable—and much safer—to speak of it with respect.

Sir Isaac a Child of the Egg! Don felt the sheepish awe that is likely to strike even the most hard-boiled democrat when he first comes in contact with established royalty. Why, he had been talking to him, just as if he were any old dragon—say one that sold vegetables in the city market.

Shortly he began to think of it in more practical ways. If anyone could wangle a way for him to get to Mars, Sir Isaac was probably just the bird who could do it. He turned it over in his mind—he'd get home yet!

But Don did not get to see his Venerian friend at once. He was herded into the Nautilus along with Venus-bound passengers from the Glory Road and a handful of technicians from Circum-Terra whose loyalties lay with Venus rather than with Earth. By the time he discovered that Sir Isaac had been transshipped to the Valkyrie it was too late to do anything about it.

The flag of the task force commander, High Commodore Higgins, was shifted from Circum-Terra back to the Nautilus, and Higgins moved at once to carry out the rest of the coup. The storming of Circum-Terra had been managed almost without bloodshed; it had depended on timing and surprise. Now the rest of the operation must be completed before any dislocation in ship schedules would be noticed on Earth.

The Nautilus and the Valkyrie had already been prepared for their long jumps; the Spring Tide's crew was removed to be sent to Earth and a crew supplied from the task force; she herself was fueled and provisioned for deep space. Although designed for the short jump to Luna, she was quite capable of making the trip to Venus. Space travel is not a matter of distance but of gravity potential levels; the jump from Circum-Terra to Venus required less expenditure of energy than did the terrible business of fighting up though Earth's field from New Chicago to Circum-Terra.

The Spring Tide shoved off in a leisurely, economical parabola; she would make the trip to Venus in free fall all the way. The Valkyrie blasted away to shape a fast, almost flat, hyperboloid orbit; she would arrive as soon or sooner than the Nautilus. The Nautilus was last to leave, for High Commodore Higgins had one more thing to do before destroying the station—a television broadcast on a globe-wide network.

All global broadcasts originated in, or were relayed through, the communications center of Circum-Terra. Since the Nautilus had touched in at Circum-Terra, a cosmic Trojan horse, the regular broadcasts had been allowed to continue uninterrupted. The commodore's C-6 staff officer (propaganda and nerve warfare) picked as the time for the commodore's announcement to Earth of the coup the time ordinarily given over to "Steve Brodie Says:" the most widely heard global news commentator. Mr. Brodie immediately followed the immensely popular "Kallikak Family" serial drama, an added advantage audience-wise.

The Glory Road had been allowed at last to blast off for Earth with her load of refugees but with her radios wrecked. The Nautilus lay off in space, a hundred miles outside, hanging in a parking orbit, waiting. Inside the space station, now utterly devoid of life, the television center continued its functions unattended. The commodore's speech had already been canned; its tape was threaded into the programmer and it would start as soon as the throb show was over.

Don watched it from a recreation lounge of the liner along with a hundred-odd other civilians. All eyes were on a big television tank set in the end of the compartment. A monitoring beam, jury-rigged for the purpose, brought the cast from Circum-Terra to the Nautilus and the radio watch in the ship was passing it on throughout the ship so that the passengers and crew might see and hear it.

As the day's serial episode closed, Celeste Kallikak had been arrested for suspected husband murder, Buddy Kallikak was still in the hospital and not expected to live, Father Kallikak was still missing, and Maw Kallikak was herself suspected of cheating on ration stamps—but she was facing it all bravely, serene in her knowledge that only the good die young. After the usual commercial plug ("The Only Soap with Guaranteed Vitamin Content for greater Vitacity!!!") the tank faded into Steve Brodie's trademark, a rocket trail condensing into his features while a voice boomed, "Steve Brodie, with tomorrow's news TODAY!"

It cut suddenly, the tank went empty and a voice said, "We interrupt this broadcast to bring you a special news flash." The tank filled again, this time with the features of Commodore Higgins.

His face lacked the synthetic smile obligatory for all who speak in public telecast; his manner and voice were grim. "I am High Commodore Higgins, commanding Task Force Emancipation of the High Guard, Venus Republic. The High Guard has seized Earth's satellite station Circum-Terra. We now have all of Earth's cities utterly at our mercy."

He paused to let it sink in. Don thought it over and did not like the thought. Everybody knew that Circum-Terra carried enough A-bomb rockets to smear any force or combination of forces that could be raised to oppose the Federation. The exact number of rocket bombs carried was a military secret, variously estimated between two hundred and a thousand. A rumor had spread through the civilians in the Nautilus that the High Guard had found seven hundred and thirty-two bombs ready to go, with component parts for many more, plus enough deuterium and tritium to make up about a dozen H bombs.

Whether the rumor was true or not, Circum-Terra certainly held enough bombs to turn the Terran Federation into a radioactive abattoir. No doubt with so much under ground many inhabitants of cities would survive, but any city, once bombed, would have to be abandoned; the military effect would be the same. And many would die. How many? Forty millions? Fifty millions? Don did not know.

The commodore went on, "Mercifully we stay our hand. Earth's cities will not be bombed. The free citizens of Venus Republic have no wish to slaughter their cousins still on Terra. Our only purpose is to establish our own independence, to manage our own affairs, to throw off the crushing yoke of absentee ownership and of taxation without representation, which has bled us poor.

"In so doing, in so taking our stand as free men, we call on all oppressed and impoverished nations everywhere to follow our lead, accept our help. Look up into the sky! Swimming there above you is the very station from which I now address you. The fat and stupid rulers of the Federation have made of Circum-Terra an overseer's whip. The threat of this military base in the sky has protected their empire from the just wrath of their victims for more than five score years.

"We now crush it."

"In a matter of minutes this scandal in the clean skies, this pistol pointed at the heads of men everywhere on your planet, will cease to exist. Step out of doors, watch the sky. Watch a new sun blaze briefly and know that its light is the light of Liberty inviting all Earth to free itself.

"Subject peoples of Earth, we free men of the free Republic of

Venus salute you with that sign!"

The commodore continued to sit and gaze steadily into the eyes of each of his colossal audience while the heartlifting beat of Morning Star of Hope followed his words. Don did not recognize the anthem of the new nation; he could not help but feel its surging promise.

Suddenly the tank went dead and at the same instant there was a flash of light so intense that it leaked through the shuttered ports and tormented the optic nerve. Don was still shaking his head from it when over the ship's announcing system came the call: "Safe to unshutter!"

A petty officer stationed at the compartment's view port was already cranking the metal shield out of the way; Don crowded in and looked.

A second sun blazed white and swelled visibly as he watched. What on Earth would have been—so many terrible times had been—a climbing mushroom cloud was here in open space a perfect geometrical sphere, growing unbelievably. It swelled still larger, dropping from limelight white to silvery violet, became blotched with purple, red and flame. And still it grew, until it blanked out Earth beyond it.

At the time it was transformed into a radioactive cosmic cloud Circum-Terra had been passing over, or opposite, the North Atlantic; the swollen incandescent cloud was visible to most of the habitable portions of the globe, a burning symbol in the sky.

VII

DETOUR

Immediately after the destruction of Circum-Terra the ship's warning signal howled and loudspeakers bellowed, ordering all hands to acceleration stations. The Nautilus blasted away, shaping her orbit for the weary trip to Venus. When she was up to speed and spin had been placed on her to permit sure footing the control room secured from blast stations. Don unstrapped and hurried to the radio room. Twice he had to argue to get past sentries.

He found the door open; everyone inside seemed busy and paid him no attention. He hesitated, then stepped inside. A long hand reached out and grabbed him by the scruff. "Hey! Where the deuce do you think you're going?"

Don answered humbly, "I just want to send a message."

"You do, eh? What do you think of that, Charlie?" His captor appealed to a soldier who was bending over a rig.

The second soldier pushed one earphone up. "Looks like a sabatoor. Probably an A-bomb in each pocket."

An officer wandered out of an inner room. "What goes on here?"

"Sneaked in, sir. Says he wants to send a message."

The officer looked Don up and down. "Sorry. No can do. Radio silence. No traffic outgoing."

"But," Don answered desperately, "I've just got to." Quickly he explained his predicament. "I've got to let them know where I am, sir."

The officer shook his head. "We couldn't raise Mars even if we were not in radio silence."

"No, sir, but you could beam Luna, for relay to Mars."

"Yes, I suppose we could — but we won't. See here, young fellow, I'm sorry about your troubles but there is no possibility, simply none at all, that the commanding officer will permit silence to he broken for any reason, even one much more important than yours. The safety of the ship comes first."

Don thought about it. "I suppose so," he agreed forlornly.

"However, I wouldn't worry too much. Your parents will find out where you are."

"Huh? I don't see how. They think I'm headed for Mars."

"No, they don't—or won't shortly. There is no secret now about what has happened; the whole system knows it. They can find out that you got as far as Circum-Terra; they can find out that the Glory Road did not fetch you back. By elimination, you must be on your way to Venus. I imagine that they are querying Interplanet about you right now."

The officer turned away and said, "Wilkins, paint a sign for the door saying, 'Radio Silence—No Messages Accepted.' We don't want every civilian in the ship barging in here trying to send greetings to Aunt Hattie."

Don bunked in a third-class compartment with three dozen men and a few boys. Some passengers who had paid for better accommodations complained. Don himself had had first-class passage booked for the Valkyrie and Mars, but he was glad that he had not been silly enough to object when he saw the disgruntled returning with their tails between their legs. First-class accommodations, up forward, were occupied by the High Guard.

His couch was comfortable enough and a space voyage, dull under any circumstances, is less dull in the noise and gossip of a bunkroom than it is in the quiet of a first-class stateroom. During the first week out the senior surgeon announced that any who wished could avail themselves of coldsleep. Within a day or two the bunkroom was half deserted, the missing passengers having been drugged and chilled and stowed in sleep tanks aft, there to dream away the long weeks ahead.

Don did not take coldsleep. He listened to a bunkroom discussion, full of half facts, as to whether or not coldsleep counted against a man's lifetime. "Look at it this way," one passenger pontificated. "You've got so long to live—right? It's built into your genes; barring accidents, you live just that long. But when they put you in the freezer, your body slows down. Your clock stops, so to speak. That time doesn't count against you. If you had eighty years coming to you, now you've got eighty years plus three months, or whatever. So I'm taking it."

"You couldn't be wronger," he was answered. "More wrong, I mean. What you've done is chop three months right out of your life. Not for me!"

"You're crazy. I'm taking it."

"Suit yourself. And another thing—" The passenger who opposed it leaned forward and spoke confidentially, so that only the entire bunkroom could hear. "They say that the boys with the bars up front question you while you are going under. You know why? Because the Commodore thinks that spies slipped aboard at Circum-Terra."

Don did not care which one was right. He was too much alive to relish deliberately "dying" for a time simply to save the boredom of a long trip. But the last comment startled him. Spies? Was it possible that the I.B.I. had agents right under the noses of the High Guard? Yet the I.B.I. was supposed to be able to slip in anywhere. He looked around at his fellow passengers, wondering which one might be traveling under a false identity.

He put it out of his mind—at least the I.B.I. was no longer interested in him.

Had Don not known that he was in the Nautilus headed for Venus he might well have imagined himself in the Valkyrie headed for Mars. The ships were of the same class and one piece of empty space looks like another. The Sun grew daily a little larger rather than smaller—but one does not look directly at the Sun, not even from Mars. The ship's routine followed the same Greenwich day kept by any liner in space; breakfast came sharp on the bell; the ship's position was announced each "noon"; the lights were dimmed at "night."

Even the presence of soldiers in the ship was not conspicuous. They kept to their own quarters forward and civilians were not allowed there except on business. The ship was forty-two days out before Don again had any reason to go forward—to get a cut finger dressed in sick bay. On his way aft he felt a hand on his shoulder and turned.

He recognized Sergeant McMasters. The sergeant was wearing the star of a master-at-arms, a ship's policeman. "What are you doing," he demanded, "skulking around here?"

Don held up his damaged digit. "I wasn't skulking; I was getting this attended to."

McMasters looked at it. "Mashed your finger, eh? Well, you're in the wrong passageway. This leads to the bomb room, not to passengers' quarters. Say, I've seen you before, haven't I?"

"Sure."

"I remember. You're the lad who thought he was going to Mars."

"I'm still going to Mars."

"So? You seem to favor the long way around—by about a hundred million miles. Speaking of the long way around, you haven't explained why I find you headed toward the bomb room."

Don felt himself getting red. "I don't know where the bomb-room is. If I'm in the wrong passage, show me the right one."

"Come with me." The sergeant led him down two decks where the spin of the ship made them slightly heavier and conducted Don into an office. "Sit down. The duty officer will be along."

Don remained standing. "I don't want to see the duty officer. I want to go back to my bunkroom."

"Sit down, I said. I remember your case. Maybe you were just turned around but could be you took the wrong turn on purpose."

Don swallowed his annoyance and sat. "No offense," said McMasters. "How about a slug of solvent?" He went to a coffee warmer and poured two cups.

Don hesitated, then accepted one. It was the Venerian bean, black and bitter and very strong. Don found himself beginning to like McMasters. The sergeant sipped his, grimaced, then said, "You must be born lucky. You ought to be a corpse by now."

"Huh?"

"You were scheduled to go back in the Glory Road, weren't you? Well?"

"I don't track you."

"Didn't the news filter aft? The Glory didn't make it."

"Huh? Crashed?"

"Hardly! The Federation groundhogs got jumpy and blasted her out of the sky. Couldn't raise her and figured she was booby-trapped, I guess. Anyhow they blasted her."

"Oh."

"Which is why I say you were born lucky, seeing as how you were supposed to go back in her."

"But I wasn't. I'm headed for Mars."

McMasters stared at him, then laughed. "Boy, have you got a one-track mind! You're as bad as a 'moveover.' "

"Maybe so, but I'm still going to Mars."

The sergeant put down his cup. "Why don't you wise up? This war is going to last maybe ten or fifteen years. Chances are there won't be a scheduled ship to Mars in that whole time."

"Well . . . I'll make it, somehow. But why do you figure it will last so long?"

McMasters stopped to light up. "Studied any history?"

"Some."

"Remember how the American colonies got loose from England? They piddled along for eight years, fighting just now and then—yet England was so strong that she should have been able to lick the colonies any weekend. Why didn't she?"

Don did not know. "Well," McMasters answered, "you may not be a student of history, but Commodore Higgins is. He planned this strike. Ask him about any rebellion that ever happened; he'll tell you why it succeeded, or why it failed. England didn't lick the colonies because she was up to her ears in bigger wars elsewhere. The American rebellion was just a 'police action'—not important. But she couldn't give proper attention to it; after a while it got to be just too expensive and too much trouble, so England gave up and recognized their independence."

"You figure this the same way?"

"Yes—because Commodore Higgins gave it a shove in the right direction. Figured on form, the Venus Republic can't win against the Federation. Mind you, I'm just as patriotic as the next—but I can face facts. Venus hasn't a fraction of the population of the Federation, nor one per cent of its wealth. Venus can't win—unless the Federation is too busy to fight. Which it is, or will be soon."

Don thought about it. "I guess I'm stupid."

"Didn't you grasp the significance of blowing up Circum-Terra? In one raid the Commodore had Earth absolutely helpless. He could have bombed any or all of Terra's cities. But what good would that have done? It would simply have gotten the whole globe sore at us. As it is, we've got two-thirds of the peoples of Earth cheering for us. Not only cheering but feeling frisky and ready to rebel themselves, now that Circum-Terra isn't sitting up there in the sky, ready to launch bombs at the first sign of unrest. It will take the Federation years to pacify the associate nations—if ever. Oh, the Commodore is a sly one!" McMasters glanced up. "'Tenshun!" he called out and got to his feet.

A lieutenant of the High Guard was in the doorway. He said, "That was a very interesting lecture, professor, but you should save it for the classroom."

"Not 'professor,' Lieutenant," McMasters said earnestly. " 'Sergeant,' if you please."

"Very well, Sergeant—but don't revert to type." He turned to Don. "Who is this and why is he loafing here?"

"Waiting for you, sir." McMasters explained the circumstances.

"I see," answered the duty officer. He said to Don, "Do you waive your right not to testify against yourself?"

Don looked puzzled. "He means," explained McMasters, "do we try the gimmick on you, or would you rather finish the trip in the brig?"

"The gimmick?"

"Lie detector."

"Oh. Go ahead. I've got nothing to hide."

"Wish I could say as much. Sit down over here." McMasters opened a cupboard, fitted electrodes to Don's head and a bladder gauge to his forearm. "Now," he said, "tell me the real reason why you were skulking around the bomb room!"

Don stuck to his story. McMasters asked more questions while the lieutenant watched a "wiggle" scope back of Don's head. Presently he said, "That's all, Sergeant. Chase him back where he belongs."

"Right, sir. Come along." They left the room together. Once out of earshot McMasters continued: "As I was saying when we were so crudely interrupted, that is why you can expect a long war. The 'status' will stay 'quo' while the Federation is busy at home with insurrections and civil disorder. From time to time they'll send a boy to do a man's job; we'll give the boy lumps and send him home. After a few years of that the Federation will decide that we are costing more than we are worth and will recognize us as a free nation. In the meantime there will be no ships running to Mars. Too bad!"

"I'll get there," Don insisted.

"You'll have to walk."

They reached "G" deck. Don looked around and said, "I know my way from here. I must have gone down a deck too many."

"Two decks," McMasters corrected, "but I'll go with you until you are back where you belong. There is one way you might get to Mars—probably the only way."

"Huh? How? Tell me how?"

"Figure it out. There won't be any passenger runs, not till the war is over, but it is a dead cinch that both the Federation and the Republic will send task forces to Mars eventually, each trying to preempt the facilities there for the home team. If I were you, I'd enlist in the High Guard. Not the Middle Guard, not the Ground Forces—but the High Guard."

Don thought about it. "But I wouldn't stand much chance of getting to go along would I?"

"Know anything about barracks politics? Get yourself a job as a clerk. If you've any skill at kissing the proper foot, a clerk's job will keep you around Main Base. You'll be close to the rumor factory and you'll know when they finally get around to sending a ship to Mars.

Kiss the proper foot again and put yourself on the roster. That's the only way you are likely to get to Mars. Here's your door. Mind you don't get lost up forward again."

Don turned McMasters' words over in his mind for the next several days. He had clung stubbornly to the idea that, when he got to Venus, he would find some way to wrangle passage to Mars. McMasters forced him to regroup his thoughts. It was all very well to talk about getting in some ship headed for Mars—somehow, legally or illegally, paid passenger, crew member, or stowaway. But suppose there were no ships heading for Mars? A lost dog might beat his way back to his master—but a man could not travel a single mile in empty space without a ship. A total impossibility.

But that notion of joining the High Guard? It seemed a drastic solution even if it would work and—little as Don knew about the workings of military organization—he held a dark suspicion that the sergeant had oversimplified things. Using the High Guard to get to Mars might prove as unsatisfactory as trying to hitchhike on a Kansas twister.

On the other hand he was at the age at which the idea of military service was glamorous in itself. Had his feelings about Venus been just a touch stronger he could easily have persuaded himself that it was his duty to throw in with the colonists and sign up, whether it got him to Mars or not.

Enlisting held another attraction: it would give pattern to his life. He was beginning to feel the basic, gnawing tragedy of the wartime displaced person, the loss of roots. Man needs freedom, but few men are so strong as to be happy with complete freedom. A man needs to be part of a group, with accepted and respected relationships. Some men join foreign legions for adventure; still more swear on a bit of paper in order to acquire a framework of duties and obligations, customs and taboos, a time to work and a time to loaf, a comrade to dispute with and a sergeant to hate—in short, to belong.

Don was as "displaced" as any wanderer in history; he had not even a planet of his own. He was not conscious of his spiritual need—but he took to staring at the soldiers of the High Guard when he ran across them, imagining what it would be like to wear that uniform.

The Nautilus did not land, nor did she tie up to a space station. Instead her speed was reduced as she approached the planet so that she fell into a 2-hour, pole-to-pole parking orbit only a few hundred miles outside the silvery cloud blanket. The Venus colonies were too young, too poor, to afford the luxury of a great orbiting station in space, but a fast pole-to-pole parking orbit caused a ship to pass over every part of the spinning globe, an "orange slice" at each pass—like winding string on a ball.

A shuttle ship up from the surface could leave any spot on Venus, rendezvous with the ship in orbit, then land on its port of departure or on any other point having expended a theoretical minimum of fuel. As soon as the Nautilus had parked such shuttles began to swarm up to her. They were more airplane than spaceship, for, although each was sealed and pressurized to operate outside the atmosphere while making contact with orbiting spaceships, each was winged and was powered with ramjet atmosphere engines as well as with rocket jets. Like frogs, they were adapted to two media.

A shuttle would be launched by catapult from the surface, her ramjets would take hold and she would climb on her wings, reaching in the thin, cold heights of the upper stratosphere speeds in excess of three thousand miles an hour. There, as her ramjets failed for want of air, her rocket jets would take over and kick her forward to orbiting speed of around twelve thousand miles an hour and permit her to match in with a spaceship.

A nice maneuver! It required both precise mathematical calculation of times, orbits, fuel expenditure, and upper air weather and piloting virtuosity beyond mathematical calculation—but it saved pennies. Once the shuttle was loaded at the spaceship it was necessary only to nudge it with its rockets against the orbital direction whereupon the shuttle would drop into a lower orbit which would eventually intersect the atmosphere and let the pilot take a free ride back to the surface, glider fashion, killing his terrible speed by dipping ever lower into the thickening air. Here again the pilot must be an artist, for he must both kill his momentum and conserve it so that it would take him where he wanted to go. A shuttle, which landed out in the bush, a thousand miles from a port, would never make another trip, even if pilot and passengers walked away from the landing.

Don went down in the Cyrus Buchanan, a trim little craft of hardly three hundred feet wingspread. From a port Don watched her being warped in to match air locks and noticed that the triple globes of Interplanet Lines had been hastily and inadequately painted out on her nose and over had been stenciled: MIDDLE GUARD—VENUS REPUBLIC. This defaced insignia brought the rebellion home to him almost more than had the bombing of Circum-Terra. Interplanet was strong as government—some said it was the government. Now hardy rebels had dared to expropriate ships of the great transport trust, paint out the proud triple globes.

Don felt the winds of history blowing coldly around his ears. McMasters was right; he now believed that no ship would run from here to Mars.

When his turn came he pulled himself along through the air locks and into the Cyrus Buchanan. The craft's steward was still in the uniform of Interplanet but the company's insignia had been removed and chevrons had been sewed to his sleeves. With this change had come a change in manner; he handled the passengers efficiently but without the paid deference of the semi-servant.

The trip down was long, tedious, and hot, as an atmosphere-braking series always is. More than an hour after touch off the airfoils first took hold; shortly Don and the other passengers felt almost full weight pressing them into the cushions, then the pilot lifted her as he decided his ship was growing too hot, let her ride out and upward in free fall. Over and over again this happened, like a stone skipping on water, a nauseating cosmic roller coaster, vastly uncomfortable.

Don did not mind. He was a spaceman again; his stomach was indifferent to surges of acceleration or even the absence thereof. At first he was excited at being back in the clouds of Venus; presently he was bored. At long, long last he was awakened by a change in motion; the craft was whistling down in its final glide, the pilot stabbing ahead with radar for his landing. Then the Cyrus Buchanan touched, bounced, and quivered to the rushing water under her hull. She slowed and stopped. After a considerable wait she was towed to her berth. The steward stood up and shouted, "New London! Republic of Venus! Have your papers ready."

VIII

"FOXES HAVE HOLES AND BIRDS OF THE AIR HAVE NESTS"

Don's immediate purpose was to ask his way to the I. T. & T. office, there to file a radiogram to his parents, but he was unable to leave at once; the passengers had to have their papers inspected and they themselves were subjected to physical examinations and questioning. Don found himself, hours later, still sitting outside the security office, waiting to be questioned. His irregular status had sent him to the end of the line.

In addition to being hungry, tired, and bored, his arms itched—they were covered from shoulders to wrists with needle pricks caused by extensive testing for immunities to the many weird diseases and fungus-like infections of the second planet. Having once lived there he retained immunity to the peculiar perils of Venus—a good thing, he mused, else he would have had to waste weeks in quarantine while being inoculated. He was rubbing his arms and wondering whether or not he should kick up a fuss when the door opened and his name was called.

He went inside. An officer of the Middle Guard sat at a desk, looking at Don's papers. "Donald Harvey?"

"Yes, sir."

"Frankly, your case puzzles me. We've had no trouble identifying you; your prints check with those recorded when you were here before. But you aren't a citizen."

"Sure I am! My mother was born here."

"Mmmm—" The official drummed on his desktop. "I'm not a lawyer. I get your point, but, after all, when your mother was born, there wasn't any such nation as Venus Republic: Looks to me as if you were a test case, with precedent still to be established."

"Then where does that leave me?" Don said slowly.

"I don't know. I'm not sure you have any legal right to stay here at all."

"But I don't want to stay here! I'm just passing through."

"Eh?

"I'm on my way to Mars."

"Oh, that! I've seen your papers—too bad. Now let's talk sense, shall we?"

"I'm going to Mars," Don repeated stubbornly.

"Sure, sure! And I'm going to heaven when I die. In the meantime you are a resident of Venus whether we like it or not. No doubt the courts will decide, eventually, whether you are a citizen as well. Mr. Harvey, I've decided to turn you loose."

"Huh?" Don was startled; it had not occurred to him that his liberty could be in question.

"Yes. You don't seem like a threat to the safety of Venus Republic and I don't fancy holding you in quarantine indefinitely. Just keep your nose clean and phone in your address after you find a place to stay. Here are your papers."

Don thanked him, picked up his bags and left quickly. Once outside, he stopped to give his arms a good scratching.

At the dock in front of the building an amphibious launch was tied up; its coxswain was lounging at the helm.

Don said, "Excuse me, but I want to send a radio. Could you tell me where to go?"

"Sure. I. T. & T. Building, Buchanan Street, Main Island. Just down in the Nautilus?"

"That's right. How do I get there?"

"Jump in. I'll be making another trip in about five minutes. Any more passengers to come?"

"I don't think so."

"You don't sound like a fogeater." The coxswain looked him over.

"Raised on the stuff," Don assured him, "but I've been away at school for several years."

"Just slid in under the wire, didn't you?"

"Yeah, I guess so."

"Lucky for you. No place like home, I guess." The coxswain looked happily around at the murky sky and the dark waters.

Shortly he started his engine and cast off lines. The little vessel slopped its way through narrow channels, around islands and bars barely above water. A few minutes later Don disembarked at the foot of Buchanan Street, main thoroughfare of New London, capital of the planet.

There were several people loafing around the landing dock; they looked him over. Two of them were runners for rooming houses; he shook them off and started up Buchanan Street. The street was crowded with people but was narrow, meandering, and very muddy. Two lighted signs, one on each side of the street, shone through the permanent fog. One read: ENLIST NOW!!! YOUR NATION NEEDS YOU; the other exhorted in larger letters: Drink COCACOLA — New London Bottling Works.

The I. T. & T. Building turned out to be several hundred yards down the street, almost at the far side of Main Island, but it was easy to find as it was the largest building on the island. Don climbed over the coaming at the entrance and found himself in the local office of Interplanetary Telephone and Televideo Corporation. A young lady was seated behind a counter desk. "I'd like to send a radiogram," he said to her.

"That's what we're here for." She handed him a pad and stylus.

"Thanks." Don composed a message with much wrinkling of forehead, trying to make it both reassuring and informative in the fewest words. Presently he handed it in.

The girl raised her brows when she saw the address but made no comment. She counted the words, consulted a book, and said, "That'll be a hundred and eighty-seven fifty." Don counted it out, noting anxiously what a hole that made in his assets.

She glanced at the notes and pushed them back. "Are you kidding?"

"What's the matter?"

"Offering me Federation money. Trying to get me in trouble?"

"Oh." Don felt again a sick feeling at the pit of his stomach that was getting to be almost a habit. "Look—I'm just down in the Nautilus. I haven't had time to exchange this stuff. Can I send the message collect?"

"To Mars?"

"What should I do?"

"Well, there's the bank just down the street. If I were you I'd try there."

"I guess so. Thanks." He started to pick up his message; she stopped him.

"I was 'about to say that you can file your message if you like. You've got two weeks in which to pay for it."

"Huh? Why, thanks!"

"Don't thank me. It can't go out for a couple of weeks and you don't have to pay until we are ready to send it."

"Two weeks? Why?"

"Because Mars is right smacko back of the Sun now; it wouldn't punch through. We'll have to wait on the swing."

"Well, what's the matter with relay?"

"There's a war on—or hadn't you noticed?"

"Oh—" Don felt foolish.

"We're still accepting private messages both ways on the Terra-Venus channel — subject to paraphrase and censoring but we couldn't guarantee that your message would be relayed from Terra to Mars. Or could you instruct someone on Earth to pay for the second transmission?"

"Uh — I'm afraid not."

"Maybe it's just as well. They might not relay it for you even if you could get someone to foot the bill. The Federation censors might kill it. So give me that traffic and I'll file it. You can pay for it later." She glanced at the message. "Looks like you sort of ran into hard luck. How old are you" She glanced again at the form. "—Don Harvey?"

Don told her.

"Hmmm . . . you look older. I'm older than you are; I guess that makes me your grandmother. If you need any more advice, just stop in and ask Grandmother Isobel — Isobel Costello."

"Uh, thanks, Isobel."

"Not at all. Usual I. T. & T. service." She gave him a warm smile. Don left feeling somewhat confused.

The bank was near the center of the island; Don remembered having passed it. The sign on the glass read: BANK OF AMERICA & HONGKONG. Over this had been stuck strips of masking tape and under it was another sign handwritten in whitewash: New London Trust & Investment Company. Don went in, picked the shortest queue, and presently explained his wants. The teller hooked a thumb toward a desk back of a rail. "See him."

At the desk was seated an elderly Chinese dressed in a long black gown. As Don approached he stood up, bowed, and said, "May I help you, sir?"

Don again explained and laid his wad of bills on the banker's desk. The man looked at it without touching it. "I am so sorry."

"What's the matter?"

"You are past the date when one may legally exchange Federation currency for money of the Republic."

"But I haven't had a chance to before! I just got in."

"I am very sorry. I do not make the regulations."

"But what am I to do?"

The banker closed his eyes, then opened them. "In this imperfect world one must have money. Have you something to offer as security?"

"Uh, I guess not. Just my clothes and these bags."

"No jewelry?"

"Well, I've got a ring but I don't suppose it's worth much."

"Let me see it."

Don took off the ring Dr. Jefferson had mailed to him and handed it over. The Chinese stuck a watchmaker's loop in his eye and examined it. "I'm afraid you are right. Not even true amber—merely plastic. Still—a symbol of security will bind the honest man quite as much as chains. I'll advance fifty credits on it."

Don took the ring back and hesitated. The ring could not possibly be worth a tenth of that sum . . . and his stomach was reminding him that flesh has its insistent demands. Still—his mother had spent at least twice that amount to make sure that this ring reached him (or the paper it had been wrapped in, he corrected himself) and Dr. Jefferson had died in a fashion somehow connected with this same bauble.

He put it back on his finger. "That wouldn't be fair. I guess I had better find a job."

"A man of pride. There is always work to be found in a new and growing city; good luck. When you have found employment come back and we can arrange an advance against your wages." The banker reached into the folds of his gown, pulled out a single credit note. "But eat first—a full belly steadies the judgment. Do me the honor of accepting this as our welcome to the newcomer."

His pride said no; his stomach said YES! Don took it and said, "Uh, thanks! That's awfully kind of you. I'll pay it back, first chance."

"Instead, pay it forward to some other brother who needs it." The banker touched a button on his desk, then stood up.

Don said goodbye and left.

There was a man loitering at the door of the bank. He let Don get a step or two ahead, then followed him, but Don paid him no attention, being very busy with his own worries. It was slowly beginning to grow on him that the bottom had dropped out of his world and that there might be no way to put it back together. He had lived in security all his life; he had never experienced emotionally, in his own person, the basic historical fact that mankind lives always by the skin of its teeth, sometimes winning but more often losing—and dying.

But never quitting. In a hundred yards of muddy street he began to grow up, take stock of his situation. He was more than a hundred million miles from where he meant to be. He had no way at once to let his parents know where be was, nor was it a simple matter of waiting two weeks—he was flat broke, unable to pay the high tariff.

Broke, hungry, and no place to sleep . . . no friends, not even an acquaintance unless, he recalled, you counted "Sir Isaac," but, for all he knew, his dragon friend might be on the other side of the planet. Certainly not close enough at hand to affect the ham-and-eggs problem!

He decided to settle that problem at once by spending the note the banker had given him. He recalled a restaurant a short distance back and stopped suddenly, whereupon a man jostled him.

Don said, "Excuse me," and noted that the man was another Chinese—noted it without surprise as nearly half of the contract labor shipped in during the early days of the Venerian colonies had been Orientals. It did seem to him that the man's face was familiar—a fellow passenger in the Nautilus? Then he recalled that he had seen him at the dock at the foot of the street.

"My fault," the man answered. "I should look where I'm going. Sorry I bumped you." He smiled most charmingly.

"No harm done," Don replied, "but it was my fault. I suddenly decided to turn around and go back."

"Back to the bank?"

"Huh?"

"None of my business, but I saw you coming out of the bank."

"As a matter of fact," Don answered, "I wasn't going back to the bank. I'm looking for a restaurant and I remembered seeing one back there."

The man glanced at his bags. "Just get in?"

"Just down in the Nautilus."

"You don't want that restaurant—not unless you have money to throw away. It's strictly a tourist trap."

Don thought about the single credit note in his pocket and worried. "Uh, where can a chap get a bite to eat? A good, cheap restaurant?"

The man took his arm. "I'll show you. A place down by the water, run by a cousin of mine."

"Oh, I wouldn't want to put you to any trouble."

"Not at all. I was about to refresh the inner man myself. By the way, my name is Johnny Ling."

"Glad to know you, Mr. Ling. I'm Don Harvey."

The restaurant was in a blind alley off the foot of Buchanan Street.

Its sign advertised TWO WORLDS DINING ROOM—Tables for Ladies—WELCOME SPACEMEN. Three moveovers were hanging around the entrance, sniffing the odors and pressing their twitching noses against the screen door. Johnny Ling pushed them aside and ushered Don in.

A fat Cantonese stood behind the counter, presiding over both range and cash register. Ling called out, "Hi Charlie!"

The fat man answered, "Hello, Johnny," then broke into fluent cursing, mixing Cantonese, English, Portuguese, and whistle speech impartially. One of the moveovers had managed to slip in when the door was opened and was making a beeline for the pie rack, his little hooves clicking on the floor. Moving very fast despite his size the man called Charlie headed him off, took him by the ear and marched him out. Still cursing, Charlie returned to the pie rack, picked out half a pie that had seen better times and returned to the door. He tossed the pie to the fauns, who scrambled for it, bleating and whimpering.

"If you didn't feed them, Charlie," commented Ling, "they wouldn't hang around."

"You damn mind your own business!"

Several customers were eating at the counter; they paid no attention to the incident. Ling moved closer to the cook and said, "Back room empty?"

Charlie nodded and turned his back. Ling led Don through a swinging door; they ended up in a booth in the back of the building. Don sat down and picked up a menu, wondering what he could get that would stretch his one credit as far as possible. Ling took it from him. "Let me order for you. Charlie really is a number-one cook."

"But. . ."

"You are my guest. No, don't argue. I insist." Charlie showed up at that point, stepping silently through the booth's curtain. He and Ling exchanged remarks in a rapid singsong; he went away, returning shortly with crisp, hot egg rolls. The aroma was wonderful and Don's stomach put a stop to his protests.

The egg rolls were followed by a main dish which Don could not place. It was Chinese cooking but it certainly was not the chop suey of the trade. Don thought that he could identify Venerian vegetables out of his childhood in it but he could not be sure. Whatever it was, it was just what he needed; he began to feel a warm glow of content and ceased to be worried about anything.

While he ate he found that he was telling Ling his life history with emphasis on recent events that had landed him unexpectedly on Venus. The man was easy to talk to and it did not seem polite simply to sit, wolfing his host's food and saying nothing.

Ling sat back presently and wiped his mouth. "You've certainly had an odd time of it, Don. What are you going to do now?"

Don frowned. "I wish I knew. I've got to find a job of some sort and a place to sleep. After that I've got to scrape up, or save up, or borrow, enough money to send word to my folks. They'll be worried."

"You brought some money with you?"

"Huh? Oh, sure, but it's Federation money. I can't spend it."

"And Uncle Tom wouldn't change it for you. He's a flinty hearted old so-and-so in spite of his smiles. He's still a pawnbroker at bottom."

" 'Uncle Tom?' The banker is your uncle?"

"Eh? Oh, no, no—just a manner of speaking. He set up a hock shop here a long time ago. Prospectors would come in and pawn their Geiger counters. Next time out he'd grubstake 'em. Pretty soon he owned half the hot pits around here and was a banker. But we still call him 'Uncle Tom.' "

Don had a vague feeling that Ling was too anxious to deny the relationship but be did not pursue the thought as it did not matter to him. Ling was continuing, "You know, Don, the bank isn't the only place where you can change Federation money."

"What do you mean?"

Ling dipped his forefinger in a puddle of water on the table top and traced out the universal credit sign. "Of course, it's the only legal place. Would that worry you?"

"Well. . ."

"It isn't as if there were anything wrong about changing it. It's an arbitrary law and they didn't ask you when they passed it. After all, it's your money. That's right, isn't it?"

"I suppose so."

"It's your money and you can do what you please with it. But this talk is strictly on the quiet—you understand that?"

Don didn't say anything; Ling went on, "Now just speaking hypothetically—how much Federation money do you have?"

"Uh, about five hundred credits."

"Let's see it."

Don hesitated. Ling said sharply, "Come on. Don't you trust me? After all it's just so much waste paper."

Don got out his money. Ling looked at it and took out his wallet, started counting out bills. "Some of those big bills will be hard to move," he commented. "Suppose we say fifteen per cent." The money he laid down looked exactly like that Don had placed on the table except that each note had been overprinted with VENUS REPUBLIC.

Don did a rapid calculation. Fifteen per cent of what he had came to seventy-five credits, more or less—not even half what he needed to pay for a radiogram to Mars. He picked up his money and started putting it back into his wallet.

"What's the matter?"

"It's no use to me. I told you I needed a hundred eighty-seven fifty to pay for my radiogram."

"Well—twenty per cent. And I'm doing you a favor because you're a youngster in trouble."

Twenty per cent was still only a hundred credits. "No."

"Be reasonable! I can't move it at more than a point or two over that; I might take a loss. Commercial money draws eight per cent now, the way things are booming. This stuff has to go into hiding, losing eight per cent every year. If the war goes on very long, it's a net loss. What do you expect?"

Fiscal theory was over Don's head; he simply knew that anything less than the price of a message to Mars did not interest him. He shook his head.

Ling shrugged and gathered up his money. "It's your loss. Say, that's a handsome ring you're wearing."

"Thanks."

"How much money do you say you needed?"

Don repeated it. "You see, I've just got to get word to my family. I don't really need money for anything else; I can work."

"Mind if I look at that ring?"

Don did not want to pass it over but there seemed no way to avoid it without being rude. Ling slipped it on; it was quite loose on his bony finger. "Just my size. And it's got my initial, too."

"Huh?"

"My milk name, 'Henry.' I'll tell you, Don, I'd really like to help you out. Suppose we say twenty per cent on your money and I'll take the ring for the balance of what you need to send your 'gram. Okay?"

Don could not have told why he refused. But be was beginning to dislike Ling, beginning to regret being obligated to him for a meal. The sudden switch aroused his stubborn streak. "It's a family keepsake," he answered. "Not for sale."

"Eh? You're in no position to be sentimental. The ring is worth more here than it is on Earth—but I'm still offering you much more than it's worth. Don't be a fool!"

"I know you are," Don answered, "and I don't understand why you are. In any case the ring is not for sale. Give it back to me."

"And suppose I don't?"

Don took a deep breath. "Why then," he said slowly, "I suppose I'll have to fight you for it."

Ling looked at him for a moment, then took off the ring and dropped it on the table. He then walked out of the booth without saying anything more.

Don stared after him and tried to figure it out. He was still wondering when the curtain was pushed aside and the restaurant keeper came in. He dropped a chit on the table. "One and six," he said stolidly.

"Didn't Mr. Ling pay for it? He invited me to have dinner with him."

"One and six," Charlie repeated. "You ate. You pay."

Don stood up. "Where do you wash dishes around here? I might as well get started."

IX

"BONE" MONEY

BEFORE the evening was over the job of washing dishes for his dinner developed into a fixed arrangement. The salary was small—Don calculated that it would take him roughly forever to save enough money to send a radiogram to his parents—but it included three meals a day of Charlie's superlative cooking. Charlie himself seemed a very decent sort under his gruffness. He expressed a complicated and most disparaging opinion of Johnny Ling, using the same highly spiced lingua franca that he had used on the moveovers. He also denied any relationship to Ling while attributing to Ling other relationships which were on the face of them improbable.

After the last customer was gone and the last dish dried Charlie made up a pallet for Don on the floor of the back room in which Don had dined. As Don undressed and crawled into bed he remembered that he should have phoned the space port security office and told them his address. Tomorrow would do, he thought sleepily; anyhow the restaurant had no phone.

He woke up in darkness with a feeling of oppression. For a terrified moment he thought someone was holding him down and trying to rob him. As he came wider awake he realized where he was and what was causing the oppressed feeling—moveovers. There were two of them in bed with him; one was snuggled up to his back and was holding onto his shoulders; the other was cradled in his lap, spoon-fashion. Both were snoring gently. Someone had undoubtedly left a door open for a moment and they had sneaked in.

Don chuckled to himself. It was impossible to be angry with the affectionate little creatures. He scratched the one in front of him between its horns and said, "Look, kids, this is my bed. Now get out of here before I get tough."

They both bleated and snuggled closer. Don got up, got each of them by an ear and evicted them through the curtain. "Now stay out!"

They were back in bed before he was.

Don thought about it and gave up. The back room had no door that could be closed. As for chucking them outside the building, the place was dark and still strange to him and he was not sure of the locations of light switches. Nor did he want to wake Charlie. After all there was no harm in bedding down with a moveover; they were cleanly little things, no worse than having a dog curl up against one—better, for dogs harbor fleas. "Move over," he ordered, unintentionally renaming them, "and give me some room."

He did not go at once to sleep; the dream that had awakened him still troubled him. He sat up, fumbled in the dark, and found his money, which he tucked under him. He then remembered the ring, and, feeling somewhat foolish, he pulled on a sock and stuffed the ring far down into the sock.

Presently all three of them were snoring.

He was awakened by a frightened bleating in his ear. The next few moments were quite confused. He sat up, whispered, "Pipe down!" and started to smack his bedmate, when he felt his wrist grasped by a hand—not the thumbless little paw of a moveover, but a human hand.

He kicked out and connected with something. There was a grunt, more anguished bleating, and the click-click-click of little hooves on bare floor. He kicked again and almost broke his toe; the hand let go.

He backed away while getting to his feet. There were sounds of struggle near him and loud bleating. The sounds died down while he was still trying to peer through the darkness to find out what was happening. Then a light came on blindingly and he saw Charlie standing in the door, dressed in a wraparound and a big, shiny cleaver. "What's the matter with you?" Charlie demanded.

Don did his best to explain but moveovers, dreams, and clutching hands in the dark were badly mixed together. "You eat too much late at night," Charlie decided. Nevertheless he checked the place, with Don trailing after.

When he came to a window with a broken catch he did not say anything but went at once to the cash register and the lock box. Neither seemed to have been disturbed. Charlie nailed up the broken catch, shoved the moveovers back into the night, and said, "Go to sleep," to Don. He returned to his own room.

Don tried to do so but it was some time before he could quiet down. Both his money and the ring were still at hand. He put the ring back on his finger and went to sleep with his fist clenched.

Next morning Don had plenty of time to think as he coped with an unending stack of dirty dishes. The ring was on his mind. He was not wearing it; not only did he wish to avoid plunging it repeatedly into hot water but also was now reluctant to display it.

Could it be possible that the thief was after the ring rather than his money? It seemed impossible—a half-credit piece of souvenir counter junk! Or perhaps five credits, he corrected himself, here on Venus where every important item was expensive. Ten at the outside.

But he was beginning to wonder; too many people had taken an interest in it. He reviewed in his mind how he had come by it. On the face of it, Dr. Jefferson had risked death—had died—to make sure that the ring went to Mars. But that was preposterous and because it was he had concluded by what seemed to be strict logic that it must have been the paper in which the ring was wrapped that must reach his parents on Mars. That conclusion had been confirmed when the I.B.I. had searched him and confiscated the wrapping paper.

Suppose he did assume the wild possibility that it was the ring itself that was important? Even so, how could anyone here on Venus be looking for that ring? He had just landed; he had not even known that he was coming to Venus.

He might have thought of several ways that that news could have gone on before him, but he did not. Moreover, he found it difficult to imagine why anyone would take any special pains on his account.

But he had one quality in a high degree; he was stubborn. He swore a mighty oath into the dishwater that he and the ring, together, would travel to Mars and that he would deliver it to his father as Dr. Jefferson had asked him to.

Business slacked off a little in the middle of the afternoon; Don got caught up. He dried his hands and said to Charlie, "I want to go uptown for a while."

"What's a matter? You lazy?"

"We work tonight, don't we?"

"Sure we do. You think this is a tea room?" "Okay, I work mornings and evenings—so I take a little time off in the afternoon. You've got enough clean dishes to last you for hours."

Charlie shrugged and turned his hack. Don left.

He picked his way through the mud and the crowd back up the street to the I. T. & T. Building. The outer room held several customers but most of them were using the automatic phones or waiting outside the booths for a chance to do so. Isobel Costello was back of the desk and did not seem too busy, although she was chatting with a soldier. Don went to the far end of the desk and waited for her to he free.

Presently she brushed off the enterprising soldier and came to him. "Well, if it isn't my problem child! How are you making out, son? Get your money changed?"

"No, the bank wouldn't take it. I guess you had better give me back my 'gram."

"No hurry; Mars is still in conjunction. Maybe you'll strike it rich."

Don laughed ruefully. "Not likely!" He told her what he was doing and where.

She nodded. "You could do worse. Old Charlie is all right. But that's a rough part of town, Don. Be careful, especially after dark."

"I will be. Isobel, would you do me a favor?"

"If it's not impossible, illegal, or scandalous—yes."

Don fished the ring out of his pocket. "Would you take care of this for me? Keep it safe until I want it back?"

She took it, held it up to look at it. "Careful!" Don urged. "Keep it out of sight."

"Huh?"

"I don't want anyone to know you have it. Get it out of sight."

"Well—" She turned away; when she turned back the ring was gone. "What's the mystery, Don?"

"I wish I knew."

"Huh?"

"I can't tell you any more than that. I just want to keep that ring safe. Somebody is trying to get it away from me."

"But— Look, does it belong to you?"

"Yes. That's all I can tell you."

She searched his face. "All right, Don. I'll take care of it."

"Thanks."

"No trouble—I hope. Look—stop in again soon. I want you to meet the manager."

"Okay, I will."

She turned away to take care of a customer. Don waited around until a phone booth was free, then reported his address to the security office at the space port. That done, he returned to his dishes.

Around midnight, hundreds of dishes later, Charlie turned away the last customer and locked the front door. Together they ate a meal there had been no time for earlier, one with chopsticks, one with fork. Don found himself almost too tired to eat. "Charlie," he asked, "how did you run this place with no help?"

"Had two helpers. Both joined up. Boys don't want to work these days; all they think about is playing soldier."

"So I'm filling two jobs, eh? Better hire another boy, or I might join up, too."

"Work is good for you."

"Maybe. You certainly take your own advice; I've never seen anybody work as hard as you do."

Charlie leaned back and rolled a cigarette of the shaggy native "crazy weed." "While I work I think about how someday I go home. A little garden with a wall around it. A little bird to sing to me." He waved his hand through choking smoke at the dreary walls of the restaurant. "While I cook, I don't see this. I see my little garden."

"Oh."

"I save money to go home." He puffed furiously. "I go home—or my bones will."

Don understood him; he had heard of "bone money" in his childhood. All the immigrant Chinese planned to go home; too often it was only a package of bones that made the trip. The younger, Venus-born Chinese laughed at the idea; to them Venus was home and China only a much-gummed tale.

He decided to tell Charlie his own troubles and did so, omitting any mention of the ring and all connected with it. "So you see, I'm just as anxious to get to Mars as you are to go home to China."

"Mars is a long way off."

"Yes—but I've got to get there."

Charlie finished his cigarette and stood up. "You stick with Charlie. Work hard and I cut you in on the profits. Someday this war nonsense will be over—then we both go." He turned to go. "G'night."

"Good night." This time Don checked personally to see that no moveovers had managed to sneak in, then retired to his cubbyhole. He was asleep almost at once, to dream of climbing endless mountain ranges of dishes, with Mars somewhere beyond.

Don was lucky to have a cubbyhole in a cheap restaurant as a place to sleep; the city was bursting at its seams. Even before the political crisis which had turned it into the capital of a new nation, New London had been a busy place, market place for a million square miles of back country and principal space port of the planet. The de facto embargo on interplanetary shipping resulting from the outbreak of war with the mother planet might eventually starve the fat off the city but as yet the only effect had been to spill into the town grounded spacemen who prowled the streets and sampled what diversions the town offered.

The spacemen were hardly noticed; much more numerous were the politicians. On Governor's Island, separated from Main Island by a stagnant creek, the Estates General of the new republic was in session; nearby, in what had been the gubernatorial mansion, the Executive General, his chief of State, and the departmental ministers bickered with each other over office space and clerical help. Already a budding bureaucracy was spilling over onto Main Island, South Island, East Spit, and Tombstone Island, vying with each other for buildings and sending rents sky high. In the wake of the statesmen and elected officials—and much more numerous—were the small fry and hangers-on of government, clerks who worked and special assistants who did not, world savers, men with Messages, lobbyists for and lobbyists against, men who claimed to speak for the native dragons but had never gotten around to learning whistle speech, and dragons who were quite capable of speaking on their own behalf—and did.

Nevertheless Governor's Island did not sink under the load

North of the city on Buchanan Island another city was burgeoning training camps for the Middle Guard and the Ground Forces. It was protested bitterly in the Estates that the presence of training grounds at the national capital was an invitation to national suicide, as one H-bomb could wipe out both the government and most of the armed forces of Venus—nevertheless nothing had been done about it. It was argued that the men had to have some place for recreation; if the training grounds were moved out into the trackless bush, the men would desert and go back to their farms and mines.

Many had deserted. In the meantime New London swarmed with soldiery. The Two Worlds Dining Room was jammed from morning until night. Old Charlie left the range only to tend the cash register; Don's hands were raw from hot water and detergent. Between times he stoked the water boiler back of the shack, using oily Chika logs hauled in by a dragon known as "Daisy" (but male despite the chosen name). Electric water heating would have been cheaper; electric power was an almost costless byproduct of the atomic pile west of the city—but the equipment to use electric power was very expensive and almost unobtainable.

New London was full of such frontier contrasts. Its muddy, unpaved streets were lighted, here and there, by atomic power. Rocket-powered sky shuttles connected it with other human settlements but inside its own boundaries transportation was limited to shank's ponies and to the gondolas that served in lieu of taxis and tubes—some of these were powered, more moved by human muscle.

New London was ugly, uncomfortable, and unfinished, but it was stimulating. Don liked the gusty, brawling drive of the place, liked it much better than the hothouse lushness of New Chicago. It was as alive as a basketful of puppies, as vital as a punch in the jaw. There was a feeling in the air of new things about to happen, new hopes, new problems.

After a week in the restaurant Don felt almost as if he had been there all his life. Furthermore he was not unhappy at it. Oh, to be sure, the work was hard, and he still was determined to get to Mars—eventually—but in the meantime he slept well, ate well, and had his hands busy . . . and there were always the customers to talk and argue with—spacemen, guardsmen, smalltime politicians who could not afford the better restaurants. The place was a political debating club, city news desk, and rumor mill; the gossip swapped over Charlie's food was often tomorrow's headline in the New London Times.

Don kept up the precedent of a midafternoon break, even when he had no business to transact. If Isobel was not too busy, he would take her across the street for a coke; she was, as yet, his only friend outside the restaurant. On one such occasion she said, "No—come on inside. I want you to meet the manager."

"Eh?"

"About your 'gram."

"Oh, yes—I'd been meaning to, Isobel, but there's no point in it yet. I haven't got the money. I'm going to wait another week and hit Old Charlie for a loan. He can't replace me very easily; I think he'll come across to keep me in durance vile."

"That's no good—you ought to get a better job as soon as you can. Come on."

She opened the gate in the counter desk and led him into an office in the rear where she introduced him to a worried-looking middle-aged man. "This is Don Harvey, the young man I was telling you about."

The older man shook hands. "Oh, yes—something about a message to Mars, I think my daughter said."

Don turned to Isobel. "'Daughter'? You didn't tell me the manager was your father."

"You didn't ask me."

"But— Never mind. Glad to know you, sir."

"And you. Now about that message?"

"I don't know why Isobel brought me in here. I can't pay for it. All I have is Federation money."

Mr. Costello examined his nails and looked troubled. "Mr. Harvey, under the rules I am supposed to require cash payment for interplanetary traffic. I'd like to accept your Federation notes. But I can't; it's against the law." He stared at the ceiling. "Of course there is a black market in Federation money." Don grinned ruefully. "So I found out. But fifteen, or even twenty per cent, is too low a rate. I still couldn't pay for my 'gram."

"Twenty per cent! The going rate is sixty per cent."

"It is? I guess I must have looked like a sucker."

"Never mind. I was not going to suggest that you go to the black market. In the first place—Mr. Harvey, I am in the odd position of representing a Federation corporation which has not been expropriated, but I am loyal to the Republic. If you walked out of here and returned shortly with money of the Republic instead of Federation notes, I would simply call the police."

"Oh, Daddy, you wouldn't! "

"Quiet, Isobel. In the second place, it's not good for a young man to have such dealings." He paused. "But perhaps we can work something out. Your father would pay for this message, would he not?"

"Oh, certainly!"

"But I can't send it collect. Very well; write a draft on your father for the amount; I'll accept it as payment."

Instead of answering at once, Don thought about it. It seemed to be the same thing as sending a message collect which he was willing to do—but running up debts in his father's name and without his knowledge stuck in his craw. "See here, Mr. Costello, you couldn't cash such a draft any time soon in any case: why don't I just give you an I.O.U and pay it back as quickly as possible? Isn't that better?"

"Yes and no. Your personal note is simply a case of letting you have interplanetary service on credit—which is what the rules forbid. On the other hand, a draft on your father's commercial paper, equivalent to cash even if I can't cash it right away. A space lawyer's difference, granted—but it's the difference between what I can do and can't do with the corporation's affairs."

"Thanks," Don said slowly, "but I think I'll wait a while. I may be able to borrow the money elsewhere."

Mr. Costello looked from Don to Isobel, shrugged helplessly. "Oh, give me your I.O.U." he said snappishly. "Make it out to me, not to the company. You can pay me when you can." He looked again at his daughter who was smiling approval.

Don made out the note. When Isobel and he were out o earshot of her father, Don said, "That was a mighty generous thing for your father to do."

"Pooh!" she answered. "It just goes to show how far a doting father will go not to crimp his daughter's chances."

"Huh? What do you mean?"

She grinned at him. "Nothing. Nothing at all. Grandmother Isobel was pulling your leg. Don't take me. seriously."

He grinned back. "Then where should I take you? Across to the Dutchman's for a coke?"

"You've talked me into it."

When he got back to the restaurant he found, in addition to the inevitable stack of dishes, a heated discussion about the draft bill pending in the Estates General. He pricked up his ears; if conscription came, he was sure fodder for it and he wanted to beat them to it by enlisting in the High Guard. McMasters' advice about the "only way to get to Mars" stuck in his mind.

Most of the opinions seemed to favor a draft, nor could Don argue against it; it seemed reasonable to him even though he would be caught in it. One quiet little man heard the others out, then cleared his throat. "There will be no draft," he announced.

The last speaker, a copilot still wearing the triple globe on his collar, answered, "Huh? What do you know about it, Shorty?"

"Quite a bit. Let me introduce myself—Senator Ollendorf of CuiCui

Province. In the first place we don't need a draft; the nature of our dispute with the Federation is not such as to employ a large army. Secondly, our people are not of the temperament to put up with it. By the drastic process of selective immigration we have here on Venus a nation of hardy individualists almost anarchists. They don't take to forced service. Thirdly, the taxpayers will not support a mass army; we have more volunteers now than we can find money to pay for. Lastly, my colleagues and I are going to vote it down about three to one."

"Shorty," complained the copilot, "why did you bother with the first three reasons?"

"Just practicing the speech I mean to make tomorrow," apologized the Senator. "Now, sir, since you are so strong for the draft, pray tell why you haven't joined the High Guard? You are obviously qualified."

"Well, I'll tell you, just like you told me. First or firstly, I'm not a colonial, so it's not my war. Secondly, this is my first vacation since the time they grounded the Comet-class ships. And thirdly, I joined up yesterday and I'm drinking up my bounty money before reporting in. Does that satisfy you?"

"Completely, sir! May I buy you a drink?"

"Old Charlie doesn't serve anything but coffee—you ought to know that. Here, have a mug and tell us what's cooking over on Governor's Island. Give us the inside data."

Don kept his ears open and his mouth (usually) shut. Among other things he learned why the "war" was producing no military action—other than the destruction of Circum-Terra. It was not alone that a distance varying from about thirty million to better than one hundred, fifty million miles was, to say the least, awkwardly inconvenient for military communications; more important was the fear of retaliation which seemed to have produced a stalemate.

A sergeant technician of the Middle Guard outlined it to anyone who would listen: "Now they want to keep everybody up half the night with space raid alerts. Malarky! "

"Terra won't attack—the big boys that run the Federation know better. The war's over."

"Why do you figure they won't attack?" Don asked. "Seems to me we're sitting ducks here."

"Sure we are. One bomb and they blow this mudhole out of the swamp. Same for Buchanan. Same for CuiCui Town. What good does that do them?"

"I don't know, but I don't relish being Abombed."

"You won't be! Use your head. They knock out a few shopkeepers and a lot of politicians—and they don't touch the back country. Venus Republic is as strong as ever—because those three spots are the only targets fit to bomb on this whole fogbound world. Then what happens?"

"It's your story; you tell me."

"A dose of reprisal, that's what—with all those bombs Commodore Higgins snagged out of Circum-Terra. We've got some of their fastest ships and we'd have the juiciest targets in history to shoot at. Everything from Detroit to Bolivarsteel mills, power plants, factories. They won't risk pulling our nose when they know we're all set to kick them in the belly. Let's be logical!" The sergeant set down his cup and looked around triumphantly.

A quiet man at the end of the counter had been listening. Now he said softly, "Yes—but how do you know that the strong men in the Federation will use logic?"

The sergeant looked surprised. "Huh? Oh, come off it! The war's over, I tell you. We ought to go home. I've got forty acres of the best rice paddies on the planet; somebody's got to get the crop in. Instead I'm sitting around here, playing space raid drill. The government ought to do something."

X

"WHILE I WAS MUSING THE FIRE BURNED"

THE GOVERNMENT did do something; the draft act was passed the next day. Don heard about it at noon; as soon as the lunch hour rush was over he dried his hands and went uptown to the recruiting station. There was a queue in front of it; he joined its tail and waited.

Over an hour later he found himself facing a harried-looking warrant officer seated at a table. He shoved a form at Don. "Print your name. Sign at the bottom and thumb it. Then hold up your right hand."

"Just a minute," Don answered. "I want to enlist in the High Guard. This forms reads for the Ground Forces."

The officer swore mildly. "Everybody wants the High Guard. Listen, son, the quota for the High Guard was filled at nine o'clock this morning—now I'm not even accepting them for the waiting list."

"But I don't want the Ground Forces. I'm—I'm a spaceman."

The man swore again, not so mildly. "You don't look it. You last-minute patriots make me sick—trying to join the sky boys so you won't have to soldier in the mud. Go on home; when we want you we'll send for you—and it won't be for the High Guard. You'll be a duckfoot and like it."

"But. . ."

"Get out, I said."

Don got. When he reached the restaurant Old Charlie looked at the clock then at him. "You soldier boy now?"

"They wouldn't have me."

"Good thing. Get me up some cups."

He had time to think about it while bending over suds. Although not inclined to grieve over spilt milk Don could see now that Sergeant McMasters' advice had been shrewd; he had missed what was probably his only chance (slim as it might have been) to get to Mars. It seemed a vacuum-tight certainty that he would spend the war (months? years?) as a duckfoot in the Ground Forces — getting no nearer to Mars than opposition distance—say sixty, seventy million miles. Hardly shouting distance.

He thought about the possibility of claiming exemption on the basis of Terran citizenship—but discarded it at once. He had already claimed the right to come here as a citizen of Venus; blowing hot and cold from the same mouth did not suit him. His sympathies lay with Venus anyhow, no matter what the lawyers eventually decided about his nationality.

More than that, even if he could stomach making such a claim, he could not see himself behind wire in an enemy alien camp. There was such a camp, he knew, over on East Spit. Sit out the war there and let Isobel bring him packages on Sunday afternoons?

Don't kid yourself, Don, my boy—Isobel was fiercely patriotic; she'd drop you like a mud louse.

"What can't be cured must be endured"—Confucius or somebody. He was in it and that was that—he didn't feel too upset about it; the Federation didn't have any business throwing its weight around on Venus anyhow. Whose planet was it?

He was most anxious to get in touch with his parents and to let them know he had Dr. Jefferson's ring, even if he couldn't deliver it right away. He would have to get up to the I. T. & T. office and check —there might be communication today. Charlie ought to have a phone in this dump.

He remembered that he had one possible resource that he had not exploited—"Sir Isaac." He had sincerely intended to get in touch with his dragon friend as soon as he landed, but it had not proved to be easy: "Sir Isaac" had not landed at New London, nor had he been able to find out from the local office where he had landed. Probably at CuiCui Town or at Buchanan—or, possibly, since "Sir Isaac" was a V.I.P., the Middle Guard might have accommodated him with a special landing. He might be anywhere on a planet with more land surface than Earth.

Of course, such an important personage could be traced down—

but the first step would be to consult the Office of Aborigine Affairs over on Governor's Island. That meant a two-hour trip, what with a gondola ride both ways and the red tape he was sure to run into. He told himself that he just hadn't had time.

But now he must take time. "Sir Isaac" might be able to get him assigned, or transferred, to the High Guard, quotas or no. The government was extremely anxious to keep the dragons happy and friendly to the new regime. Mankind remained on Venus at the sufferance of the dragons; the politicians knew that.

He felt a little bit sheepish about resorting to political influence—but there were times when nothing else would work.

"Charlie."

"Huh?"

"Go easy on the spoons; I've got to go uptown again."

Charlie grunted grumpily; Don hung up his apron and left. Isobel was not on the desk at I.T.&T.; Don sent in his name via the clerk on duty and got in to see her father. Mr. Costello looked up as he came in and said, "I'm glad you came in, Mr. Harvey. I wanted to see you."

"My message got through?"

"No, I wanted to give you back your note."

"Huh? What's the matter?"

"I haven't been able to send your message and I don't know when I shall be able to send it. If it turns out later that it can be sent, I'll accept your note—or cash, if you have it."

Don had an unpleasant feeling that he was being given a polite brushoff. "Just a moment, sir. I understood that today was the earliest that communication could be expected. Won't conditions be better tomorrow—and still better the next day?"

"Yes, theoretically. But conditions were satisfactory today. There is no communication with Mars."

"But tomorrow?"

"I haven't made myself clear. We tried to signal Mars; we got no answer. So we used the radar check. The bounce came back right on schedule—two thousand two hundred and thirty-eight seconds, no chance of a ghost blip. So we know that the channel was satisfactory and that our signal was getting through. But Schiaparelli Station fails to answer —no communication."

"Out of order, maybe?"

"Most unlikely. It's a dual station. They depend on it for astrogation, you know. No, I'm afraid the answer is obvious."

"Yes?"

"The Federation forces have taken the station over for their own uses. We won't be able to communicate with Mars until they let us."

Don left the manager's office looking as glum as he felt. He ran into Isobel just coming into the building. "Don!"

"Oh—hi, Grandma."

She was excited and failed to notice his mood. "Don—I'm just back from Governor's Island. You know what? They're going to form a women's corps!"

"They are?"

"The bill is in committee now. I can't wait—I'll be in it, of course. I've already put my name in."

"You will be? Yes, I guess you would be." He thought about it and added, "I tried to join up this morning."

She threw her arms around his neck, much to the interest of customers in the lobby. "Don!" She untangled herself, to his blushing relief, and added, "Nobody really expected that of you, Don. After all, it's not your fight; your home is on Mars."

"Well, I don't know. Mars isn't exactly my home, either: And they didn't take me, they told me to wait for my draft call."

"Well—anyway, I'm proud of you."

He went back to the restaurant, feeling ashamed that he had not had the courage to tell her why he had tried to enlist and why he had been turned down. By the time he reached Charlie's place he had about decided to go again to the recruiting office the next day and let them swear him in as a duckfoot. He told himself that the severance of communication with Mars had cut off his last connection with his old life; he might as well accept this new life with both arms. It was better to volunteer than to be dragged.

On second thought he decided to go over to Governor's Island first and send some sort of message to "Sir Isaac"—no use staying in the Ground Forces if his friend could wangle a transfer to the High Guard. It was a dead cinch now that the High Guard would eventually send an expedition to Mars; he might as well be in it. He'd get to Mars yet!

On third thought he decided that it might be well to wait a day or two to hear from "Sir Isaac"; it would certainly be easier to get assigned to the Guard in the first place than to get a transfer later.

Yes, that was the sensible thing to do. Unfortunately it did not make him feel pleased with himself.

That night the Federation attacked.

The attack should not have happened, of course. The rice farmer sergeant had been perfectly right; the Federation could not afford to risk its own great cities to punish the villagers of Venus. He was right —from his viewpoint.

A rice farmer has one logic, men who live by and for power have another and entirely different logic. Their lives are built on tenuous assumptions, fragile as reputation; they cannot afford to ignore a challenge to their power—the Federation could not afford not to punish the insolent colonists.

The Valkyrie, orbiting Venus in free fall, flashed into radioactive gas without warning. The Adonis, in the same orbit a thousand miles astern, saw the explosion and reported it to PHQ at New London; then she, too, became an expanding ball of fire.

Don was awakened from work-drugged sleep by the ululation of sirens. He sat up in the dark, shook his head to clear it, and realized with leaping excitement what the sound was and what it meant. Then he told himself not to be silly; there had been talk lately of holding a night alert—that's what it was: practice.

But he got up and fumbled for the light switch, only to find that the power seemed to be off. He felt around for his clothes, got his right leg in his left trouser leg, tripped. Despite this he was practically dressed by the time a small flickering light came toward him. It was Charlie, carrying a candle in one hand and in the other his favorite cleaver, the one used both for business and social purposes.

The cyclic moan of the sirens continued. "What is it, Charlie?" asked Don. "Do you suppose we've actually been attacked?"

"More likely some dumbhead leaned against the switch."

"Could be. Tell you what—I'm going uptown and find out what's happening."

"Better you stay home."

"I won't be gone long."

In leaving he had to push his way through a crowd of moveovers, all bleating with fright and trying to crowd inside to be close to their friend Charlie. He got through and groped his way to the street, closely escorted by two moveovers who seemed to want to climb into his pockets.

The nights of Venus make the darkest night on Earth feel like twilight. The power seemed to be off all over town; until he turned into Buchanan Street Don could not have counted his own fingers without feeling them. Along Buchanan Street there was an occasional flicker of a lighter and a window or two with dim lights inside. Far up the street someone held a hand torch; Don set his sights on that.

The streets were crowded. He kept bumping into persons in the dark and hearing snatches of speech. "—completely destroyed." "It's a routine drill. I'm a space warden; I know." "Why turn off the lights? Their detectors can pick up the power pile in any case." "Hey—get off my feet!" Somewhere along the way he lost his escort; no doubt the gregarians found someone warmer to snuggle up to.

He stopped where the crowd was thickest, around the office of the New London TIMES. There were emergency lights inside by which it was possible to read the bulletins being pasted up in the window. At the top was: FLASH BULLETIN (UNOFFICIAL) CRUISER VALKYRIE REPORTED BY CRUISER ADONIS TO HAVE EXPLODED 0030 TONITE. CAUSE NOT REPORTED. LOCAL AUTHORITIES DISCOUNT ATTACK POSSIBILITY, FAVOR POSSIBLE SABOTAGE. FURTHER REPORT EXPECTED COMMANDING OFFICER ADONIS.

BERMUDA (INTERCEPTED) DISORDERS IN WEST AFRICA TERMED "MINOR INCIDENT" STIRRED UP BY RELIGIOUS AGITATORS. LOCAL POLICE ASSISTED BY FEDERATION PATROL HAVE SITUATION WELL IN HAND (IT IS CLAIMED).

BERMUDA (INTERCEPTED) A SOURCE CLOSE TO THE MINISTER OF EXTERNAL AFFAIRS STATES THAT AN EARLY SETTLEMENT OF THE VENUS INCIDENT IS EXPECTED. REPRESENTATIVES OF INSURGENT COLONISTS SAID TO BE CONFERRING WITH FEDERATION PLENIPOTENTIARIES SOMEWHERE ON LUNA IN AN ATMOSPHERE OF GOOD WILL AND MUTUAL UNDERSTANDING. (NOTE: THIS REPORT HAS BEEN UNOFFICIALLY DENIED FROM GOVERNOR'S ISLAND.)

NEW LONDON (PHQ-OFFICIAL) CHIEF OF STAFF CONFIRMED DAMAGE TO VALKYRIE BUT STATES EXTENT GREATLY EXAGGERATED. LIST OF CASUALTIES WITHHELD PENDING NOTIFICATION OF NEXT OF KIN. FULL REPORT FROM COMMANDING OFFICER ADONIS EXPECTED MOMENTARILY.

FLASH BULLETIN (UNOFFICIAL) CUICUI—UNIDENTIFIED SHIPS REPORTED RADAR-TRACKED TO LANDINGS NORTH AND NORTHWEST OF SETTLEMENT. LOCAL GARRISON ALERTED. PHQ REFUSES COMMENT. NO THIRTY, MORE COMING.

Don crowded up, managed to read the bulletins and listened to the talk. A faceless voice said, "They wouldn't land—that's as obsolete as a bayonet charge. If they actually have blitzed our ships—which I doubt

—they would simply hang in orbit and radio an ultimatum."

"But suppose they did?" someone objected.

"They won't. That bulletin—nerve warfare, that's all. There are traitors among us."

"That's no news."

A shadowy shape inside was posting a new bulletin. Don used his elbows and forced his way closer. FLASH—it read —PHQ (OFFICIAL) PUBLIC INFORMATION OFFICER GENERAL STAFF CONFIRMS REPORT THAT AN ATTACK HAS BEEN MADE ON SOME OF OUR SHIPS BY UNIDENTIFIED BUT PRESUMABLY FEDERATION FORCES. THE SITUATION IS FLUID BUT NOT CRITICAL. ALL CITIZENS ARE URGED TO REMAIN IN THEIR HOMES, AVOID PANIC AND LOOSE TALK, AND GIVE FULL COOPERATION TO LOCAL AUTHORITIES. MORE DETAILS MAY BE EXPECTED LATER IN THE DAY. REPEAT—STAY HOME AND COOPERATE.

A self-appointed crier up front read the bulletin in a loud voice. The crowd took it in silence. While he was reading the sirens died away and the street lights came on. The same voice which had complained of the blackout before now expostulated, "What do they want to turn on the lights for? That's simply inviting them to bomb us!"

No more bulletins showed up; Don backed out, intending to go to the I. T. & T. Building, not with the expectation of finding Isobel there at that hour but in hopes of picking up more news. He had not quite reached the building when he ran into a squad of M. P.'s, clearing the streets. They turned him back and dispersed the crowd at the newspaper office. As Don left the only person there was a dragon with his eyestalks pointed in several directions; he appeared to be reading all the bulletins at once. Don wanted to stop and ask him if be knew "Sir Isaac" and, if so, where his friend might be found, but an M. P. hustled him along. The squad made no attempt to send the dragon about his business; he was left in undisputed possession of the street.

Old Charlie was still up, seated at a table and smoking. His cleaver lay in front of him. Don told him what he had found out. "Charlie, do you think they will land?"

Charlie got up, went to a drawer and got out a whetstone, came back and commenced gently stroking the blade of his cleaver. "Can happen."

"What do you think we ought to do?"

"Go to bed."

"I'm not sleepy. What are you sharpening that thing for?"

"This is my restaurant." He held up the tool, balanced it. "And this is my country." He threw the blade; it turned over twice and chunked into a wood post across the room.

"Be careful with that! You might hurt somebody."

"You go to bed."

"But. . ."

"Get some sleep. Tomorrow you wish you had." He turned away and Don could get no more out of him. He gave up and went to his own cubbyhole, not intending to sleep but simply to think things over. For a long time after he lay down he could hear the soft swishing of stone on steel.

The sirens awoke him again; it was already light. He went out into the front room; Charlie was still there, standing over the range. "What's going on?"

"Breakfast." With one hand Charlie scooped a fried egg out of a pan, placed it on a slice of bread, while with the other hand he broke another egg into the grease. He slapped a second slice of bread over the egg and handed the sandwich to Don.

Don accepted it and took a large bite before replying, "Thanks. But what are they running the sirens for?"

"Fighting. Listen."

From somewhere in the distance came the muted WhaHoom! of an explosion; cutting through the end of it and much nearer was the dry sibilance of a needle beam. Mixed with the fog drifting in the window was a sharp smell of wood burning. "Say!" Don exclaimed, his voice high, "they really did it." Automatically, his mind no longer on food, his jaws clamped down on the sandwich.

Charlie grunted. Don went on, "We ought to get out of here."

"And go where?"

Don had no answer for that. He finished the sandwich while still watching out the window. The smell of smoke grew stronger. A half squad of men showed up at the end of the alley, moving at a dog trot. "Look! Those aren't our uniforms!"

"Of course not."

The group paused at the foot of the street, then three men detached themselves and came down the alley, stopping at each door to pound on it. "Outside! Wake up in there—outside, everybody!" Two of them reached the Two Worlds Dining Room; one of them kicked on the door. It came open. "Outside! We're going to set fire to the place."

The man who had spoken was wearing a mottled green uniform with two chevrons; in his hands was a Reynolds one-man gun and on his back the power pack that served it. He looked around. "Say, this is a break!" He turned to the other. "Joe, keep :in eye out for the lieutenant." He looked back at Old Charlie. "You, Jack—scramble up about a dozen eggs. Make it snappy—we got to burn this place right away."

Don was caught flatfooted, could think of nothing to do or say. A

Reynolds gun brooks no argument. Charlie appeared to feel the same way for he turned back to the range as if to comply.

Then he turned again toward the soldier and in his hand was his cleaver. Don could hardly follow what happened—a flash of blue steel through the air, a meaty, butcher-shop sound, and the cleaver was buried almost to its handle in the soldier's breastbone.

He uttered no cry; he simply looked mildly surprised, then squatted slowly where he stood, his hands still clasping the gun. When he reached the floor, his head bowed forward and the gun slipped from his grasp.

While this went on the other soldier stood still, his own gun at the ready. When his petty officer dropped his gun it seemed to act as a signal to him; he raised his own gun and shot Charlie full in the face. He swung and trained his gun on Don. Don found himself staring into the dark cavity of the projector.

XI

"YOU COULD GO BACK TO EARTH"

They stayed that way for three heart beats . . . then the soldier lowered his weapon about an inch and rapped out, "Outside! Fast!"

Don looked at the gun; the soldier gestured with it.

Don went outside. His heart was raging; he wanted to kill this soldier who had killed Old Charlie. It meant nothing to him that his boss had been killed strictly in accordance with the usages of warfare; Don was in no frame of mind to juggle legalisms. But he was naked against an overpowering weapon; he obeyed. Even as he left the soldier was fanning out with the Reynolds gun; Don heard the hiss as the beam struck dry wood.

The soldier put the torch to the building wastefully; it seemed almost to explode. It was burning in a dozen places as soon as Don was out the door. The soldier jumped out behind him and prodded him in the seat with the hot projector. "Get moving! Up the street." Don broke into a trot, ran out the alley and into Buchanan Street.

The street was filled with people, and green-suited soldiers were herding them uptown. Buildings were burning on both sides of the street; the invaders were destroying the whole city but giving the inhabitants some chance to escape the holocaust. As a part of a faceless mob Don found himself being pushed along and then forced into a side street which was not yet burning. Presently they were beyond the town but the road continued; Don had never been out in this direction but he learned from the talk around him where they were headed—out East Spit.

And into the fenced camp which the new government had used for enemy aliens. Most of the crowd seemed too stunned to care. Somewhere near Don a woman was screaming, her voice rising and falling like a siren.

The camp was crowded to more than ten times its capacity. The camp buildings did not provide standing room; even outdoors the colonists were elbow to elbow. The guards simply shoved them inside and ignored them; they stood there or milled around, while the soft gray ashes of their former homes drifted down on them from the misty sky.

Don had regained his grip on himself during the march out to the camp. Once inside, he tried to find Isobel Costello. He threaded his way through the crowd, searching, asking, peering at faces. More than once he thought he had found her, only to be disappointed—nor did he find her father. Several times he talked to persons who thought they had seen her; each time the clue failed to lead him to her. He began to have waking nightmares of his impetuous young friend dead in the fire, or lying in an alley with a hole in her head.

He was stopped in his weary search by an iron voice bellowing out of the air and reaching all parts of the camp through the camp's announcing system. "Attention!" it called out. "Quiet! Attention to orders—this is Colonel Vanistart of the Federation Peace Forces, speaking for the Military Governor of Venus. Conditional amnesty has been granted to all colonists with the exception of those holding office in the rebel government and commissioned officers in the rebel forces. You will be released as quickly as you can be identified. The code of laws in force before the rebellion is restored, subject to such new laws as may be promulgated by the military governor. Attention to Emergency Law Number One! The cities of New London, Buchanan, and CuiCui Town are abolished. Hereafter no community of more than one thousand population will be permitted. Not more than ten persons may assemble without license from the local provost. No military organization may be formed, nor may any colonist possess power weapons under penalty of death.'

The voice paused. Don heard someone behind him say, "But what do they expect us to do? We've no place to go, no way to live—"

The rhetorical question was answered at once. The voice went on, "No assistance will be furnished to dispersed rebels by the Federation. Relief to refugees must be provided by colonists who have not been dispossessed. When you are liberated you are advised to spread out into the surrounding countryside and seek temporary shelter with farmers and in the smaller villages."

A bitter voice said, "There's your answer, Clara—they don't give a hoot whether we live or die."

The first voice answered, "But how can we get away? We don't even own a gondola."

"Swim, I guess. Or walk on water."

Soldiers came inside and delivered them to the gate in groups of fifty, cutting them out like cowpunchers handling cattle. Don had pushed toward the gate, hoping to spot Isobel during the processing, and got picked up against his will in the second group. He produced his I. D.s when demanded and immediately ran into a hitch; his name did not appear in the city lists. He explained that he had come in on the last trip of the Nautilus.

"Why didn't you say so?" grumbled the soldier doing the checking. He turned and produced another list: "Hannegan. . . Hardecker . . . here it is: Harvey, Donald J.—Yikes! Wait a minute—it's flagged. Hey, sarge! This bird has a polit flag against his name."

"Inside with him," came the bored answer.

Don found himself shoved into the guardroom at the gate, along with a dozen other worried-looking citizens. Almost at once he was conducted on into a little office at the rear. A man who would have seemed tall had he not been so fat stood up and said, "Donald James Harvey?"

"That's right."

The man came to him and looked him over, his face wreathed in a happy grin. "Welcome, my boy, welcome! Am I glad to see you!"

Don looked puzzled. The man went on, "I suppose I should introduce myself—Stanley Bankfield, at your service. Political Officer First Class, I.B.I., at the moment special adviser to his excellency, the Governor."

At the mention of the I.B.I., Don stiffened. The man noticed it—his little fat-enfolded eyes seemed to notice everything. He said, "Easy, son! I mean you no harm; I'm simply delighted to see you. But I must say you have led me a merry chase—half around the system. At one point I thought you had been killed in the late lamented Glory Road, and I cried tears over your demise. Yes, sir! real tears. But that's over with, and all's well that ends well. So let's have it."

"Have what?"

"Come, now! I know all about you—almost every word you've uttered back to your babyhood. I've even fed sugar to your stock pony, Lazy. So hand it over."

"Hand what over?"

"The ring, the ring!" Bankfield put out a pudgy hand.

"I don't know what you are talking about."

Bankfield shrugged mightily. "I am talking about a plastic ring, marked with an initial 'H', given to you by the late Dr. Jefferson. You see, I know what I am talking about; I know you have it, and I mean to have it. An officer in my own service was so stupid as to let you walk out with it—and was broken for it. You wouldn't want that to happen to me, I'm sure. So give it to me."

"Now I know what ring you are talking about," Don answered, "but I don't have it."

"Eh? What's that you are saying? Where is it, then?"

Don's mind was racing ahead. It took him no time at all to decide not to set the I.B.I. to looking for Isobel—no, not if he had to bite his tongue out. "I suppose it's burned up," he answered.

Bankfield cocked his head on one side. "Donald, my boy, I believe you are fibbing to me—I do indeed! You hesitated just a teeny-weeny bit before you answered. No one but a suspicious old man like myself would have noticed it."

"It's true," Don insisted. "Or, at least, I think it is. One of those monkeys you have working for you set fire to the building just as I left. I suppose the building burnt down and the ring with it. But maybe it didn't."

Bankfield looked doubtful. "What building?"

"Two Worlds Dining Room, at the end of Paradise Alley off the foot of Buchanan Street."

Bankfield moved rapidly to the door, gave orders. "Use as many men as needed," he concluded, "and sift every ounce of ash. Move!" He turned back, sighing. "Mustn't neglect any possibilities," he said, "but now we will go back to the probability that you lied. Why should you have taken off your ring in a restaurant?"

"To wash dishes."

"Eh?"

"I was working for my meals, living there. I didn't like putting it in the hot water so I kept it in my room."

Bankfield pursed his lips. "You almost convince me. Your story holds together. And yet, let us both pray that you are deceiving me. If you are and can lead me to the ring, I would be very grateful. You could go back to Earth in style and comfort. I think I could even promise a moderate annuity; we have special funds for such purposes."

"I'm not likely to collect it—unless they find the ring in the restaurant."

"Dear me! In that case I don't suppose either one of us will go back to Earth. No, sir, I think that in such a case I would find it better to stay right here—devoting my declining years to making your life miserable."

He smiled. "I was joking—I'm sure we'll find the ring, with your help. Now, Don, tell me what you did with it." He put an arm around Don's shoulders in a fatherly fashion.

Don tried to shrug the arm off, found that he could not. Bankfield went on, "We could settle it quickly if I had proper equipment at hand. Or I could do this—" The arm around Don's shoulders dropped suddenly; Bankfield seized Don's left little finger and bent it back sharply. Involuntarily Don grunted with pain.

"Sorry! I don't like such methods. The operator, in an excess of zeal, frequently damages the client so that no truth of any sort is forthcoming. No, Don, I think we will wait a few minutes while I get word to the medical department—sodium pentothal seems to be indicated. It will make you more cooperative, don't you think?" Bankfield stepped again to the door. "Orderly! Put this one on ice. And send in that Mathewson character."

Don was conducted outside the guardhouse and into a pen, a fenced enclosure used to receive prisoners. It was some thirty feet wide and a hundred feet long; one of its longer sides was common with the fence that ran around the entire camp, the other shut it off from the free world. The only entrance to it lay through the guardhouse.

There were several dozen prisoners in the receiving pen, most of them civilian men, although Don saw a number of women and quite a few officers of the Middle Guard and of the Ground Forces—still in uniform but disarmed.

He at once checked the faces of the women; none was Isobel. He had not expected to find her, yet found himself vastly disappointed. His time was running out; he realized with panic that it was probably only minutes until he would be held down, drug injected into his veins—and be turned thereby into a babbling child with no will to resist their questioning. He had never been subjected to narco-interrogation but he knew quite well what the drug would do. Even deep-hypnotic suggestion could not protect against it in the hands of a skilled operator.

Somehow he felt sure that Bankfield was skilled.

He went to the far end of the pen, pointlessly, as a frightened animal will retreat to the back of a cage. He stood there, staring up at the top of the fence several feet above his head. The fence was tight and strong, proof against almost anything but a dragon, but one could get handholds in the mesh—it could be climbed. However, above the mesh were three single strands of wire; every ten feet or so on the lowest strand was a little red sign—a skull-and-crossbones and the words HIGH VOLTAGE.

Don glanced back over his shoulder. The everpresent fog, reinforced by smoke from the burning city, almost obscured the guardhouse. The breeze had shifted and the smoke was getting thicker; he felt reasonably sure that no one could see him but other prisoners.

He tried it, found that his shoes would not go into the mesh, kicked them off and tried again.

"Don't!" said a voice behind him.

Don looked back. A major of the Ground Forces, cap missing and one sleeve torn and bloody, stood behind him. "Don't try it," the major said reasonably. "It will kill you quickly. I know; I supervised its installation."

Don dropped to the ground. "Isn't there some way to switch it off?"

"Certainly—outside." The officer grinned wryly. "I took care of that. A locked switch in the guardhouse—and another at the main distribution board in the city. Nowhere else." He coughed. "Pardon me—the smoke."

Don looked toward the burning city. "The distribution board back in the powerhouse," he said softly. "I wonder—"

"Eh?" The major followed his glance. "I don't know—I couldn't say. The powerhouse is fireproof."

A voice behind them in the mist shouted, "Harvey! Donald J. Harvey! Front and center!"

Don swarmed up the fence.

He hesitated just before touching the lowest of the three strands, flipped it with the back of his hand. Nothing happened—then he was over and falling. He hit badly, hurting a wrist, but scrambled to his feet and ran.

There were shouts behind him; without stopping he risked a look over his shoulder. Someone else was at the top of the fence. Even as he looked he heard the hiss of a beam. The figure jerked and contracted, like a fly touched by flame.

The figure raised its head. Don heard the major's voice in a clear triumphant baritone: "Venus and Freedom!" He fell back inside the fence.

XII

WET DESERT

Don plunged ahead, not knowing where he was going, not caring as long as it was away. Again he heard the angry, deadly hissing; he cut to the left and ran faster, then cut back again beyond a clump of witch's brooms. He pounded ahead, giving it all he had, with his breath like dry steam in his throat—then skidded to a stop at water's edge.

He stood still for a moment, looked and listened. Nothing to see but grey mist, nothing to hear but the throbbing of his own heart. No, not quite nothing—someone shouted in the distance and he heard the sounds of booted feet crashing through the brush. It seemed to come from the right; he turned left and trotted along the waterfront, his eyes open for a gondola, a skiff, anything that would float.

The bank curled back to the left; he followed it, then stopped as he realized that it was leading him to the narrow neck of land that joined Main Island to East Spit. It was a cinch, he thought, that there would be a guard at the bottleneck; it seemed to him that there had been one there when he and the other dispossessed had been herded across it to the prison camp.

He listened—yes, they were still behind him—and flanking him. There was nothing in front of him but the bank curving back to certain capture.

For a moment his face was contorted in an agony of frustration, then his features suddenly relaxed to serenity and he stepped firmly into the water and walked away from the land.

Don could swim, in which respect he differed from most Venus colonials. On Venus no one ever swims; there is no water fit to swim in. Venus has no moon to pile up tides; the solar tide disturbs her waters but little. The waters never freeze, never approach the critical 4° C. which causes terrestrial lakes and streams and ponds to turn over and "ventilate." The planet is almost free of weather in the boisterous sense. Her waters lie placid on their surface—and accumulate vileness underneath, by the year, by the generation, by the eon.

Don walked straight out, trying not to think of the black and sulphurous muck he was treading in. The water was shallow; fifty yards out with the shore line dim behind him, he was still in only up to his knees. He glanced back and decided to go out farther; if he could not see the shore, then they could not see him. He reminded himself that he would have to keep his wits about him not to get turned around.

Presently the bottom suddenly dropped away a foot or more; he stepped off the edge; lost his balance and thrashed around; recovered himself and scrambled back up on the ledge, congratulating himself that he had not gotten his face and eyes into the stuff.

He heard a shout and almost at once the sound of water striking a hot stove, enormously amplified. Ten feet away from him a cloud of steam lifted from the water's surface, climbed lazily into the mist. He cringed and wanted to dodge, but there was no way to dodge. The shouting resumed and the sounds carried clearly across the water muffled by the fog but still plain: "Over here! Over here! He's taken to the water."

Much more distantly he heard the answer: "Coming!"

Most cautiously Don moved forward, felt the edge of the drop off, tried it and found that he could still stand beyond it, almost up to his armpits but still wading. He was moving, forward slowly, trying to avoid noise and minding his precarious, half-floating balance, when he heard the sibilant sound of the beam.

The soldier back on the bank had imagination; instead of firing again at random into the drifting mist he was fanning the flat surface of the water, doing his best to keep his beam horizontal and playing it like a hose. Don squatted down until his face alone was out of the water.

The beam passed only inches over his head; he could hear it pass, smell the ozone.

The hissing stopped abruptly to be followed by the age-old, monotonous cursing of the barrackroom. "But, sergeant—" someone protested.

"I'll 'sergeant' you! Alive—do you hear? You heard the orders. If you've killed him, I'll take you apart with a rusty knife. No, I won't; I'll turn you over to Mr. Bankfield. You hopeless fool!"

"But, sergeant, he was escaping by water; I had to stop him."

" 'But sergeant!' 'But sergeant!'—is that all you can say! Get a boat! Get a snooper! Get a two-station portable bounce rig. Call base and find out if they've got a copter down."

"Where would I get a boat?"

"Get one! He can't get away. We'll find him—or his body. If it's his body, you'd better cut your throat."

Don listened, then moved silently forward—or away from the direction the voices seemed to come from. He could no longer tell true direction; there was nothing but the black surface of water and a horizon of mist. For some distance the bottom continued fairly level, then he realized that it was again dropping away. He was forced to stop, able to wade no further.

He thought it over, trying to avoid panic. He was still close to Main Island with nothing but mist between himself and the shore. It was a certainty that with proper search gear—infrared or any of the appropriate offspring of radar—they could pin him like a beetle to cork. It was merely a matter of waiting for the gear to be brought up.

Should he surrender now and get out of this poisonous swill? Surrender and go back and tell Bankfield to find Isobel Costello if he wanted the ring? He let himself sink forward and struck out strongly, swimming breast stroke to try to keep his face out of the water.

Breast stroke was far from being his strongest stroke and it was made worse by trying so hard to keep his face dry. His neck began to ache presently the ache spread through his shoulder muscles and into his back. Indefinite time and endless gallons later he ached everywhere, even to his eyeballs—yet for all he could tell about it he might have been swimming in a bathtub, one whose walls were grey mist. It did not seem possible that, in the archipelago which made up Buchanan Province, one could swim so far without running into something . . . a sand spit, a mud bar.

He stopped to tread water, barely moving his tired legs and fluttering his palms. He thought he heard the rushing sound of a powered boat, but he could not be sure. At that moment he would not have cared; capture would have been relief. But the sound, or ghost of a sound, died away and he was again in a grey and featureless wilderness.

He arched his back to shift again to swimming and his toe struck bottom. Gingerly he felt for it—yes, bottom . . . with his chin out of water. He stood for a moment or two and rested, then felt around. Bottom dropped away on one side, seemed level or even to rise a little in another direction.

Shortly his shoulders were out with his feet still in the muck. Feeling his way like a blind man, his eyes useless save for balancing, he groped out the contour, finding bits that rose, then forced to retreat as the vein played out.

He was out of water to his waist when his eyes spotted a darker streak through the fog; he went toward it, was again up to his neck. Then the bottom rose rapidly; a few moments later he scrambled up on dry land.

He did not have the courage yet to do anything more than move inland a few feet and place between himself and the water a clump of Chika trees. Screened thus from search operations conducted from boats he looked himself over. Clinging to his legs were a dozen or more mud lice, each as large as a child's hand. With repugnance he brushed them off, then removed his shorts and shirt, found several more and disposed of them. He told himself that he was lucky not to have encountered anything worse—the dragons had many evolutionary cousins, bearing much the same relationship to them that gorillas do to men. Many of these creatures are amphibious—another reason why Venus colonials do not swim.

Reluctantly Don put his wet and filthy clothes back on, sat down with his back to a tree trunk, and rested. He was still doing so when he again heard the sound of a power boat; this time there was no mistaking it. He sat still, depending on the trees to cover him and hoping that it would go away.

It came in close to shore and cruised along it to his right. He was beginning to feel relief when the turbine stopped. In the stillness he could hear voices. "We'll have to reconnoiter this hunk of mud. Okay, Curly—you and Joe."

"What does this guy look like, corporal?"

"Now, I'll tell you—the captain didn't say. He's a young fellow, though, about your age. You just arrest anything that walks. He's not armed."

"I wish I was back in Birmingham."

"Get going."

Don got going, too — in the other direction, as fast and as silently as possible. The island was fairly well covered; he hoped that it was large as well—a precarious game of hide-and-seek was all the tactics he could think of. He had covered perhaps a hundred yards when he was scared out of his wits by movement up ahead; he realized with desperation that the boat party might have landed two patrols.

His panic died down when he discovered that what he was seeing were not men but gregarians. They spotted him, too, and came dancing up, bleating welcome, and crowding up against him.

"Quiet!" he said in a sharp whisper. "You'll get me caughtl"

The moveovers paid no attention to that; they wanted to play. He endeavored to pay no attention to them but moved forward again, closely accompanied by the whole group, some five. He was still wondering how to keep from being loved to death—or at least back into captivity—when they came out into the clearing.

Here was the rest of the herd, more than two hundred head, from babies that butted against his knees up to the grey-bearded old patriarch, fat in the belly and reaching as high as Don's shoulder. They all welcomed him and wanted him to stay a while.

One thing that had worried him was now cleared up—he had not swum in a circle and blundered back onto Main Island. The only moveovers on Main Island were half-domesticated scavengers such as those which had hung around the restaurant; there were no herds.

It suddenly occurred to him that it was barely possible that he might turn the ubiquitous friendliness of the bipeds into an advantage rather than a sure giveaway. They would not let him be; that was sure. If he left the herd, some of them were certain to trail along, bleating and snorting and making themselves and him conspicuous. On the other hand. . .

He moved straight out into the clearing, pushing his friends aside as he went. He shoved himself right into the center of the herd and sat down on the ground.

Three of the babies promptly climbed into his lap. He let them stay. Adults and half-grown bucks crowded around him bleating and snuffling and trying to nuzzle the top of his head. He let them—he was now surrounded by a wall of flesh. From time to time one of the inner circle would be shouldered out of the way and would go back to grazing but there were always enough around him to block out his view of his surroundings. He waited.

After a considerable time he heard more excited bleating from the fringe of the herd. For a moment be thought his personal guard would be seduced away by this new excitement, but the inner circle preferred to keep their privileged positions the wall held. Again he heard voices.

"For Pete's sake—it's a whole flock of those silly billies!" Then —"Hey! Get down! Quit licking my face!"

Carly's voice replied, "I think he's fallen in love with you, Joe. Say —Soapy said to arrest anything that walks: shall we take this one back to him?"

"Stow it!" There were sounds of scuffling, then the high bleating of a moveover both surprised and hurt.

"Maybe we ought to burn one and take it back anyway,'" Curly went on. "I hear they are mighty tasty eating."

"You turn this into a hunting party and Soapy will haul you up before the Old Man. Come on—we got work to do."

Don could follow their progress around the edge of the herd. He could even tell by the sounds when the two soldiers managed to cuff and kick the most persistent of the creatures off their trail. He continued to sit there long after they were gone, tickling the chin of a baby which had gone to sleep in his lap, and resting himself.

Presently it began to grow dark. The herd started to bed down for the night. By the time it was fully dark they were all lying down except the sentries around the edge. Because he was dead tired and completely lacking in any plan of action Don bedded down with them, his head cradled on a soft and velvety back and himself in turn half supporting a couple of youngsters.

For a while he thought about his predicament, then he thought about nothing.

The herd stirred and he awakened. There was much snorting and stomping mixed with the whimpering complaints of the young, still not fully awake. Don got his bearings and got to his own feet; he knew vaguely what to expect—the herd was about to migrate. Gregarians rarely grazed the same island two days in a row. They slept the first part of the night, then moved out before dawn when their natural enemies were least active. They forded from one island to another, using paths through the water known—possibly by instinct—to the herd leaders. For that matter, gregarians could swim, but they rarely did so.

Don thought: well, I'll soon be rid of them. Nice people, but too much is too much. Then he thought better of it—if the moveovers were moving to another island it was sure that it would not be Main Island and it would certainly have to be farther away from Main

Island than was this one. What could he lose?

He felt a bit lightheaded but the logic seemed right; when the herd moved out he worked his way up near the van. The leader took them down the island about a quarter of a mile, then stepped off into the water. It was still so nearly pitch dark that Don was not aware of it until he too stepped into it. It was only up to his ankles and did not get much deeper. Don splashed along almost at a dogtrot, trying to stay inside the body of the herd so that he would run no chances of blundering into deeper water in the darkness. He hoped that this was not one of the migrations involving swimming.

It began to grow truly light and the pace quickened; Don was hard put to keep up. At one point the old buck in the lead stopped, snorted, and made a sharp turn; Don could not guess why he had turned, for the morning mist was very thick and one piece of water looked exactly like another. Yet the way chosen turned out to be shallow. They followed it for another kilometer or more, twisting and turning at times, then at last the leader clambered up a bank with Don on his heels.

Don threw himself down, exhausted. The old buck stopped, plainly puzzled, while the herd gained the land and crowded around them. The leader snorted and looked disgusted, then turned away and continued his duty of leading his people to good pasture. Don pulled himself together and followed them.

They were just coming out of the trees that hedged the shore when Don saw a fence off to the right. He felt like singing. "So long, folksl" he called out. "Here's where I get off." He headed for the fence, while the main herd moved on. When he reached the fence he reluctantly slapped and swatted his attendants until he managed to shoo them off, then headed along the wire. Eventually, he told himself, I will find a gate and that will lead me to people. It did not matter much who the people were; they would feed him and let him rest and help him to hide from the invaders.

The fog was very thick; it was good to have the fence to guide him. He stumbled along by it, feeling feverish and somewhat confused, but cheerful.

"Halt."

Don froze automatically, shook his head and tried to remember where he was.

"I've got you spotted," the voice went on. "Move forward slowly with your hands up."

Don strained his eyes to see through the fog, wondered if he dared to run for it. But, with a feeling of utter and final defeat, he realized that he had run as far as he could.

XIII

FOGEATERS

"SNAP out of it!" the voice said, "or I shoot."

"Okay," he answered dully and moved forward with his hands over his head. A few paces advance let him see a man's shape; a few more and he made out a soldier with a hand gun trained on him. His eyes were covered by snooper goggles, making him look like some bug-eyed improbability from another planet.

The soldier halted Don again a few steps from him, made him turn around slowly. When Don turned back he had shoved the snoopers up on his forehead, revealing pleasant blue eyes. He lowered his gun. "Jack, you're sure a mess," he commented. "What in the name of the Egg have you been doing?"

It was only then that Don realized that the soldier was wearing not the mottled green of the Federation but the tans of the Ground Forces of Venus Republic.

The soldier's commanding officer, a Lieutenant Busby, tried to question him in the kitchen of the farm house inside the fence, but he saw very quickly that the prisoner was in no shape to be questioned. He turned Don over to the farmer's wife for food, a hot bath, and emergency medical attention. It was late that afternoon that Don, much refreshed and with the patches left by the mud lice covered with poultices, finally gave an account of himself.

Busby listened him out and nodded. "I'll take your word for it, mainly because it is almost inconceivable that a Federation spy could have been where you were, dressed the way you were, and in the shape you were in." He went on to question him closely about what he had seen in New London, how many soldiers there seemed to be, how they were armed, and so forth. Unfortunately Don could not tell him much. He did recite "Emergency Law Number One" as closely as he could remember it.

Busby nodded, "We got it over Mr. Wong's radio." He hooked a thumb at the corner of the room. He thought for a moment. "They played it smart; they took a leaf from Commodore Higgins' book and played it real smart. They didn't bomb our cities; they just bombed our ships—then they moved in and burned us out."

"Have we got any ships left?" Don asked.

"I don't know. I doubt it—but it doesn't matter."

"Huh?"

"Because they played it too smart. There's nothing left they can do to us; from here on they're fighting the fog. And we fogeaters know this planet better than they do."

Don was allowed to rest up the balance of that day and the following night. By listening to the gossip of the soldiers he came to the conclusion that Busby was not simply an optimist; the situation was not completely hopeless. It was admittedly very bad; so far as anyone knew all the ships of the High Guard had been destroyed. The Valkyrie, the Nautilus and the Adonis were reported bombed and with them Commodore Higgins and most of his men. There was no word of the Spring Tide—which meant nothing; what little information they had was compounded of equal parts rumor and Federation official propaganda.

The Middle Guard might have saved some of their ships, might have them hidden out in the bush, but the usefulness at this time of superstratospheric shuttles which required unmovable launching catapults was conjectural. As for the Ground Forces a good half of them had been captured or killed at Buchanan Island Base and at lesser garrisons. While the enlisted survivors were being released, the only officers still free were such as Lieutenant Busby, those who had been on detached duty when the attack came. Busby's unit had been manning a radar station outside New London; he had saved his command by abandoning the now useless station.

The civil government of the baby republic was, of course, gone; almost every official had been captured. The command organization of the armed forces was equally out of action, captured in the initial attack. This raised a point that puzzled Don; Busby did not act as if his commanding generals were missing; he continued to behave as if he were a unit commander of an active military organization, with task and function clearly defined. Esprit de corps was high among his men; they seemed to expect months, perhaps years of bush warfare, harrying and raiding the Federation forces, but eventual victory at the end.

As one of them put it to Don, "They can't catch us. We know these swamps; they don't. They won't be able to go ten miles from the city, even with boat radar and deadreckoning bugs. We'll sneak in at night and cut their throats —and sneak out again for breakfast. We won't let them lift a ton of radioactive off this planet, nor an ounce of drugs. We'll make it so expensive in money and men that they'll get sick of it and go home."

Don nodded. "Sick of fighting the fog, as Lieutenant Busby puts it."

"Busby?"

"Huh? Lieutenant Busby—your C. O."

"Is that his name? I didn't catch it." Don's face showed bewilderment. The soldier went on, "I've only been here since morning, you see. I was turned loose with the other duckfeet from the Base and was dragging my tail back home, feeling lower than swamp muck. I stopped off here, meaning to cadge a meal from Wong, and found the Lieutenant here—Busby, did you say? with a going concern. He attached me and put me back on duty. I tell you, it put the heart back into me. Got a light on you?"

Before he turned in that night—in Mr. Wong's barn, with two dozen soldiers—Don had found that most of those present were not of Busby's original detail, which had consisted of only five men, all electronics technicians. The rest were stragglers, now formed into a guerilla platoon. As yet few of them had arms; they made up for that in restored morale.

Before he went to sleep Don had made up his mind. He would have looked up Lieutenant Busby at once but decided that it would not do to disturb the officer so late at night. He woke up next morning to find the soldiers gone. He rushed out, found Mrs. Wong feeding her chickens, and was directed by her down to the waterfront. There Busby was superintending the moving out of his command. Don rushed up to him. "Lieutenant! May I have a word with you?"

Busby turned impatiently. "I'm busy."

"Just a single moment—please!"

"Well, speak up."

"Just this—where can I go to enlist?" Busby frowned; Don raced ahead with explanation, insisting that he had been trying to join up when the attack came.

"If you meant to enlist, I should think you would have done so long ago. Anyway, by your own story you've lived a major portion of your life on Earth. You're not one of us."

"Yes, I am!"

"I think you're a kid with your head stuffed with romantic notions. You're not old enough to vote."

"I'm old enough to fight."

"What can you do?"

"Uh, well, I'm a pretty good shot, with a hand gun anyway."

"What else?"

Don thought rapidly; it had not occurred to him that soldiers were expected to have anything more than willingness. Ride horseback? It meant nothing here. "Uh, I talk 'true speech' fairly well."

"That's useful—we need men who can palaver with the dragons. What else?"

Don thought about the fact that he had been able to make his escape through the bush without disaster—but the Lieutenant knew that; it simply proved that he was truly a fogeater in spite of his mixed background. He decided that Busby would not be interested in the details of his ranch school education. "Well, I can wash dishes."

Busby grudged a faint smile. "That is unquestionably a soldierly virtue. Nevertheless, Harvey, I doubt if you're suited. This won't be parade-ground soldiering. We'll live off the country and probably never get paid at all. It means going hungry, going dirty, always on the move. You not only risk being killed in action; if you are captured, you'll be burned for treason."

"Yes, sir. I figured that out last night."

"And you still want to join?"

"Yes, sir."

"Hold up your right hand."

Don did so. Busby continued. "Do you solemnly swear to uphold and defend the Constitution of the Venus Republic against all enemies, domestic and foreign; and to serve faithfully in the armed forces of the Republic for the duration of this emergency unless sooner discharged by competent authority; and to obey the lawful orders of superior officers placed over you?"

Don took a deep breath. "I do."

"Very well, soldier—get in the boat."

"Yes, sirl"

There were many, many times thereafter that Don regretted having enlisted—but so has every man who ever volunteered for military service. More of the time he was reasonably content, though he would have denied this sincerely—he acquired considerable talent at the most common of soldiers' pastimes, griping about the war, the weather, the food, the mud, the stupidities of high command. The old soldier can substitute for recreation, or even for rest or food, this ancient, conventional, and harmless form of literary art.

He learned the ways of the guerilla—to infiltrate without a sound, to strike silently, and to fade back into the dark and the mist before the alarm can be raised. Those who learned it lived; those who did not, died. Don lived. He learned other things—to sleep for ten minutes when opportunity offered, to come fully and quietly awake at a touch or a sound, to do without sleep for a night, or two nights—or even three. He acquired deep lines around his mouth, lines beyond his years, and a white, puckered scar on his left forearm.

He did not stay long with Busby but was transferred to a company of gondola infantry operating between CuiCui and New London. They called themselves proudly "Marsten's Raiders"; he was assigned as "true speech" interpreter for his outfit. While most colonials can whistle a few phrases of dragon talk—or, more usually, can understand a bit of a pidgin sufficient for buying and selling—few of them can converse freely in it. Don, for all his lack of practice during his years on Earth, had been taught it young and taught it well by a dragon who had taken an interest in him as a child. And both his parents used it as easily as they did Basic English; Don had been drilled in it by daily use at home until he was eleven.

The dragons were of great use to the resistance fighters; while not belligerents themselves, their sympathies lay with the colonials—more accurately, they despised the Federation soldiers. The colonials had managed to make a home on Venus through getting along with the dragons—an enlightened self-interest policy instituted by Cyrus Buchanan himself. To a human born on Venus there was never any doubt that there existed another race—dragons—as intelligent, as wealthy, and as civilized as their own. But to the great majority of the Federation soldiers, new to the planet, the dragons were merely ugly, uncouth animals, incapable of speech and giving themselves airs, arrogating to themselves privileges that no animal had a right to claim.

This orientation cut below the conscious level; no general order issued to the Federation troops, no amount of disciplinary action for violations, could cope with it. It was stronger and less reasoned than any analogous Earthly trouble—white versus black, gentile versus Jew, Roman versus barbarian, or whatever—had ever been. The very officers issuing the orders could not feel the matter correctly; they were not Venus born. Even the governor's prime political adviser, the shrewd and able Stanley Bankfield, could not really grasp that one does not ingratiate oneself with a dragon by (so to speak) patting him on the head and talking down.

Two serious incidents had set the pattern on the very day of the original attack; in New London a dragon—the same one Don had seen reading the Times' bulletins had been, not killed, but seriously damaged by a flamethrower; he had been silent partner in the local bank and lessor of many ichthorium pits. Still worse, in CuiCui a dragon had been killed by a rocket; through mischance he had had his mouth open. And this dragon had been related collaterally to the descendants of the Great Egg.

It does not do to antagonize highly intelligent creatures each of whom is physically equivalent to, say three rhinoceri or a medium tank. Nevertheless they were not themselves belligerents, as our convention of warfare is not part of their culture. They work in different ways to their ends.

When in the course of his duties Don had to speak to dragons he sometimes inquired whether or not this particular citizen or the dragon nation knew his friend "Sir Isaac" using, of course, "Sir Isaac's true name. He found that those who could not claim personal acquaintance at least knew of him; he found, too, that it raised his own prestige to claim acquaintanceship. But he did not attempt to send a message to "Sir Isaac"; there was no longer any occasion for it —no need to try to wangle a transfer to a High Guard that no longer existed.

He did try and try repeatedly to learn what had happened to Isobel Costello—through refugees, through dragons, and through the increasingly numerous clandestine resistance fighters who could move fairly freely from one side to the other. He never found her. He heard once that she was confined in the prison camp on East Spit; he heard again that she and her father had been deported to Earth—neither rumor could be confirmed. He suspected, with a dull, sick feeling inside, that she had been killed in the original attack.

He was grieved about Isobel herself—not about the ring that he had left with her. He had tried to guess what it could possibly be about the ring, which would cause him to be chased from planet to planet. He could not think of an answer and concluded that Bankfield, for all his superior airs, had been mistaken; the important thing must have been the wrapping paper but the I.B.I. had been too stupid to figure it out. Then he quit thinking about it at all; the ring was gone and that was that.

As for his parents and Mars — sure, sure, someday! Someday when the war was over and ships were running again—in the meantime why let the worry mice gnaw at one's mind?

His company was at this time spread out through four islands south-southwest of New London; they had been camped there for three days, about the longest they ever stayed in one place. Don, being attached to headquarters, was on the same island as Captain Marsten and was, at the moment, stretched out in his hammock, which he had slung between two trees in the midst of a clump of broom.

The company headquarters runner sought him out and awakened him—by standing well clear and giving the hammock rope a sharp tap. Don came instantly awake, a knife in his hand. "Easy!" cautioned the runner. "The Old Man wants to see you."

Don made a rhetorical and most ungracious suggestion as to what the Captain could do about it and slid silently to his feet. He stopped to roll up the hammock and stuff it into his pocket—it weighed only four ounces and had cost the Federation a nice piece of change on cost-plus contract. Don was very careful of it; its former owner had not been careful and now had no further need for it. He gathered up his weapons as well.

The company commander was sitting at a field desk under a screen of boughs. Don slid into his presence and waited. Marsten looked up and said, "Got a special job for you, Harvey. You move out at once."

"Change in the plan?"

"No, you won't be on tonight's raid. A high mugamug among the dragons wants palaver. You're to go to see him. At once."

Don thought it over. "Cripes, Skipper, I was looking forward to tonight's scramble. I'll go tomorrow—those people don't care about time; they're patient."

"That'll do, soldier. I'm putting you on leave status; according to the despatch from HQ, you may be gone quite a while."

Don looked up sharply. "If I'm ordered to go, it's not leave; it's detached duty."

"You're a mess hall lawyer at heart, Harvey."

"Yes, sir."

"Turn in your weapons and take off your insignia; you'll make the first leg of the trip as a jolly farmer boy. Pick up some props from stores. Larsen will boat you. That's all."

"Yes sir." Don tamed to go, adding, "Good hunting tonight, Skipper."

Marsten smiled for the first time. "Thanks, Don."

The first part of the trip was made through channels so narrow and devious that electronic seeing devices could reach no further than could the bare eye. Don slept through most of it, his head pillowed on a sack of sour-corn seed.

He did not worry about the job ahead—no doubt the officer he was to interpret for, whoever he was, would rendezvous and let him know what he was to do.

Early in the next afternoon they reached the brink of the Great South Sea and Don was transferred to a crazy wagon, a designation which applied to both boat and crew—a flat, jet-propelled saucer fifteen feet across manned by two young extroverts who feared neither man nor mud. The upper works of the boat were covered by a low, polished cone of sheet metal intended to reflect horizontal radar waves upward, or vice versa. It could not protect against that locus in the sky, cone-shaped like the reflector itself, where reflections would bounce straight back to originating stations—but the main dependence was on speed in any case.

Don lay flat on the bottom of the boat, clinging to hand holds and reflecting on the superior advantages of rocket flight, while the crazy wagon skipped and slid over the surface of the sea. He tried not to think about what would happen if the speeding boat struck a floating log or one of the larger denizens of the water. They covered nearly three hundred kilometers in somewhat less than two hours, then the boat skidded and slewed to a stop. "End of the line," called out the downy-cheeked skipper. "Have your baggage checks ready. Women and children use the center escalator." The anti-radar lid lifted.

Don stood up on wobbly legs. "Where are we?"

"Dragonville-by-the-Mud. There's your welcoming committee. Mind your step."

Don peered through the mist. There seemed to be several dragons on the shore. He stepped over the side, went into mud to his boot tops, scrambled up to firmer soil. Behind him, the crazy wagon lowered its cover and gunned away at once, going out of sight while still gathering speed. "They might at least have waved," Don muttered and turned back to the dragons. He was feeling considerably perplexed; there seemed to be no men around and he had been given no instructions. He wondered if the officer he had expected to find—surely by this time! — had failed to run the gauntlet safely.

There were seven of the dragons, now moving toward him. He looked them over and whistled a polite greeting, while thinking how much one dragon looks like another. Then the center one of the seven spoke to him in an accent richly reminiscent of fish-and-chips. "Donald, my dear boy! How very happy I am to see you! Shucks!"

XIV

"LET'S HAVE IT, THEN."

DON gulped and stared and almost lost track of his manners. "Sir Isaac! Sir Isaac!" He stumbled toward him.

It is not practical to shake hands with a dragon, kiss it, nor hug it. Don contented himself with beating Sir Isaac's armored sides with his fists while trying to regain control of himself. Long-suppressed emotions shook him, spoiling voice and vision. Sir Isaac waited patiently, then said, "Now, Donald, if I may present my family.

Don pulled himself together, cleared his throat, and wet his whistle. None of the others had a voder; it was possible that they did not even understand Basic.

"May they all die beautifully!"

"We thank you."

A daughter, a son, a granddaughter, a grandson, a great granddaughter, a great grandson—counting Sir Isaac himself, a four generation welcome, only one short of maximum dragon protocol; Don was overwhelmed. He knew that Sir Isaac was friendly to him, but he decided that this degree of ceremony must be a compliment to his parents.

"My Father and my Mother thank you all for the kindness you do to their egg."

"As the first egg, so the last. We are very happy to have you here, Donald."

A dragon visitor, honored by an escort, would have made a leisurely progress to the family seat flanked by the family members. But a dragon's leisurely progress is about twice as fast as a brisk walk for a man. Sir Isaac settled himself down and said, "Suppose you borrow my legs, dear boy; we have considerable distance to go."

"Oh, I can walk"

"Please — I insist."

"Well. . ."

"'Upsy-daisy'! then — if I recall the idiom correctly."

Don climbed aboard and settled himself just abaft the last pair of eyestalks; they turned around and surveyed him. He found that Sir Isaac had thoughtfully had two rings riveted to his neck plates to let him hold on. "All set?"

"Yes, indeed."

The dragon reared himself up again and they set out, with Don feeling like Toomai-of-the-Elephants.

They went up a crowded dragon path so old that it was impossible to tell whether it was an engineering feat or a natural conformation. The path paralleled the shore for a mile or so; they passed dragons at work in their watery fields, then the path swung inland. Shortly, in the dry uplands, his party turned out of the traffic into a tunnel. This was definitely art not nature; it was one of the sort the floor of which slides quietly and rapidly away in the direction one walks (provided the walker is a dragon or weighs as much as a dragon); their ambling gait was multiplied by a considerable factor. Don could not judge the true speed nor the distance covered.

They came at last out into a great hall, large even for dragons; the flowing floor merged into the floor of the hall imperceptibly and stopped. Here were gathered the rest of the tribe symbolized by the seven who had met him. But Don was not required then to rack his brain for compliments, but was taken, still in accordance with etiquette, at once to his own chambers to rest and refresh himself.

The chambers were merely comfortable by Venerian standards; to Don, of course, they were huge. The wallowing trough in the center of the main room was less than six feet deep only at the ramp and it was long enough for him to take several strokes—which he did very soon with great pleasure. The water was as pure as the Sea he had just crossed was dirty and it was, as nearly as he could tell, heated for him to exactly the 98.6° of a human's blood.

He turned over on his back and floated, staring up into the artificial mist that concealed the remote ceiling. This, he thought, was certainly the life! It was the best bath he had had since—well, since that dilly of a bath in the Caravansary back in New Chicago, how long ago? Don thought with a sudden twinge of nostalgia that his class in school had graduated long since.

Growing tired even of such luxury he climbed out, then took his clothes and scrubbed out ancient dirt as best he could, while wishing for detergent, or even for the grey homemade soap the farmers used. He paddled around in bare feet, looking for somewhere to hang his wash. In the "small" retiring room he stopped suddenly.

Supper was ready. Someone had set a table for him, complete to fine napery—a card table, it was, with "Grand Rapids" spelled out in its lines. The chairs drawn up to it actually did have "Grand Rapids" stamped into its under side; Don turned it over and looked.

The table had been set in accordance with human customs. True, the soup was in the coffee cup' and the soup plate contained coffee, but Don was in no mood to care about such details—they were both hot. So was the sour bread toast and the scrambled eggs—shell eggs, if he was a judge.

He spread his wet clothes on the warm, tiled floor, hastily patted them smooth, drew up the chair and fell to. "As you say, Skipper," he muttered, "we never had it so good."

There was a foam mattress on the floor of another bay of the same room; Don did not need to look to see that it was Greenie general issue (officers). There was no bedframe and no blankets, but neither was necessary. Knowing that he would not be disturbed nor expected to put in an appearance until it suited him, he spread himself out on it after dinner. He was very tired, he now realized, and he certainly had much to think about.

The reappearance of Sir Isaac caused buried memories to lift their heads, fresh and demanding. He thought again of his school, wondered where his roommate was. Had he joined up on the other side? He hoped not . . . yet knew in his heart that Jack had. You did what you had to do, judging it from where you were. Jack wasn't his enemy, couldn't be. Good old Jack! He hoped strongly that the wild chances of war would never bring them face to face.

He wondered if Lazy still remembered him.

He saw again Old Charlie's face, suddenly blasted out of human shape . . . and again his heart raged with the thought. Well, he had paid back for Old Charlie, with interest. He grieved again for Isobel.

Finally he wondered about the orders, all the way from HQ, that had sent him to Sir Isaac. Was there actually a military job here? Or had Sir Isaac simply found out where he was and sent for him? The last seemed more likely; HQ would regard a request from a prince of the Egg as a military "must", dragons being as important as they were to operations.

He scratched the scar on his left arm and fell asleep.

Breakfast was as satisfactory as supper. This time there was no mystery about its appearance; it was wheeled in by a young dragon—Don knew that she was young as her rear pair of eyestalks were still buds; she could not have been more than a Venus century old. Don whistled his thanks; she answered politely and left.

Don wondered if Sir Isaac employed human servants; the cooking puzzled him, dragons simply do not cook. They prefer their fodder fresh, with a little of the bottom mud still clinging to it, for flavor. He could imagine a dragon boiling an egg the proper length of time, the time having been stated, but his imagination boggled at anything more complicated. Human cookery is an esoteric and strictly racial art.

His puzzlement did not keep him from enjoying breakfast.

After breakfast, his self-confidence shored up by clean and reasonably neat clothes, he braced himself for the ordeal of meeting Sir Isaac's numerous family. Used as he was to acting as a "true speech" interpreter, the prospect of so much ceremoniousness in which he himself would be expected to play a central and imaginative part made him nervous. He hoped that he would be able to carry it off in a fashion that would reflect honor on his parents and not embarrass his sponsor.

He had shaved sketchily, having no mirror, and was ready to make his sortie, when he heard his name called. It surprised him, as he knew that he should not have been disturbed—being a guest freshly arrived—even if he chose to stay in his chambers for a week, or a month—or forever.

Sir Isaac lumbered in. "My dear boy, will you forgive an old man in a hurry for treating you with the informality ordinarily used only with one's own children?"

"Why, certainly, Sir Isaac." Don was still puzzled. If Sir Isaac were a dragon in a hurry, he was the first one in history.

"If you are refreshed, then please come with me." Don did so, reflecting that they must have had him under observation; Sir Isaac's entrance was too timely. The old dragon led him out of his chambers, down a passage, and into a room which might have been considered cozy by dragon standards; it was less than a hundred feet across.

Don decided that it must be Sir Isaac's study, as there were roll upon roll of ribbon books racked on the walls and the usual sort of rotating bench set at the height of his handling tentacles. Above the racks on one wall was what Don judged to be a mural, but it looked like meaningless daubs to him; the three colors in the infrared which dragons see and we do not produced the usual confusion. On second thought he decided that it might actually be meaningless; certainly a lot of human art did not seem to mean anything.

But the point which he noticed most and wondered about was that the room contained not one but two chairs meant for humans.

Sir Isaac invited him to sit down. Don did so and found that the chair was of the best powered furniture; it felt out his size and shape and conformed to it. He found out at once for whom the other terrestrial chair was intended; a man strode in—fiftyish, lean and hard in the belly, wiry grey hair around a bald pate. He had an abrupt manner and gave the impression that his orders were always obeyed. "Morning, gentlemen!" He turned to Don. "You're Don Harvey. My name's Phipps—Montgomery Phipps." He spoke as if that were sufficient explanation. "You've grown some. Last time I saw you I walloped your britches for biting my thumb."

Don felt put off by the man's top-sergeant air. He supposed that it was some acquaintance of his parents whom he had met in the dim reaches of his childhood, but he could not place him. "Did I have reason to bite it?" he asked.

"Eh?" The man suddenly gave a barking laugh. "I suppose that is a matter of opinion. But we were even; I spanked you properly." He turned to Sir Isaac. "Is Malath going to be here?"

"He told me that he would make the effort. He should be along shortly."

Phipps threw himself in the other chair and drummed on the arms of it. "Well, I suppose we must wait, though I don't see the need of his attending. There has been much too much delay now—we should have had this meeting last night."

Sir Isaac managed to drag a shocked tone out of his voder. "Last night? With a guest newly arrived?"

Phipps shrugged. "Never mind." He turned back to Don. "How did you like your dinner, son?"

"Very much."

"My wife cooked it. She's busy in the lab now, but you'll meet her later. Top flight chemist—in or out of the kitchen."

"I'd like to thank her," Don said sincerely. "Did you say 'lab'?"

"Eh? Yes, yes—quite a place. You'll see it later. Some of the best talent on Venus here. The Federation's loss is our gain."

The questions that immediately popped into Don's mind were held up; someone, something was coming in. Don's eyes widened when he saw that it was a Martian's "pram"—the self-propelled personal environment without which a Martian cannot live either on Earth or Venus. The little car wheeled in and joined the circle; the figure inside raised itself to a sitting position with the aid of its powered artificial exoskeleton, tried feebly to spread its pseudowings and spoke, its thin, tired voice amplified through a speaking system. "Malath da Thon greets you, my friends."

Phipps stood up. "Malath old boy, you should be back in your tank. You'll kill yourself exerting like this."

"I shall live as long as is necessary."

"Here's the Harvey kid. Looks like his old man, doesn't he?"

Sir Isaac, shocked by such casualness, intervened with a formal introduction. Don tried feverishly to recall more than two words of High Martian, gave up and let it go with, "I'm glad to know you, sir."

"The honor is mine," answered the tired voice. " 'A tall father casts a long shadow.'"

Don wondered what to answer while reflecting that the rowdy lack of manners of the moveovers had its points. Phipps broke in with, "Well, let's get down to business before Malath wears himself out. Sir Isaac?"

"Very well. Donald, you know that you are welcome in my house."

"Uh—why, yes, Sir Isaac, thank you."

"You know that I urged you to visit me before I knew aught of you but your parentage and your own good spirit."

"Yes, sir, you asked me to look you up. And I tried to, I really did—but I didn't know where you had landed. I was just getting organized to do a little detective work on it when the Greenies landed. I'm sorry." Don felt vaguely uncomfortable, knowing that he had put the matter off until he had a favor to ask.

"And I tried to find you, Donald—and was caught by the same mischance. Most recently, by rumors that are carried on the mist, did I discover where you were and what you were doing." Sir Isaac paused as if he found the choice of words difficult. "Knowing that this house is yours, knowing that you were welcome in any case, can you forgive me when you discover you were summoned also for a most practical reason?"

Don decided that this called for "true speech." " 'How can the eyes offend the tail? Or father offend son?' What can I do to help, Sir Isaac? I had already gathered that something was up."

"How shall I begin? Should I speak of your Cyrus Buchanan who died far from his people, yet died happily since he had made us his people, too? Or should I speak of the strange and complicated customs of your own people wherein you sometimes—or so it appears to us—cause the jaw to bite its own leg? Or should I discuss directly the events that have happened here since first you and I shared mud in the sky?"

Phipps stirred uneasily. "Let me handle it, Sir Isaac. Remember that this young man and I are of the same race. We won't have to beat around the bush; I can put it up to him in two words. It isn't complicated."

Sir Isaac lowered his massive head. "As you wish, my friend."

Phipps turned to Don. "Young fellow, you didn't know it, but when your parents called you home to Mars, you were a courier with a message."

Don looked at him sharply. "But I did know it." His mind raced ahead, adjusting himself to this new situation.

"You did? Well, that's fine! Let's have it, then."

"Have what?"

"The ring—the ring, of course. Give it to us."

XV

"JUDGE NOT ACCORDING TO THE APPEARANCE" JOHN VII:24

"WAIT a minute," Don protested. "You're mixed up. I know what ring you mean, all right, but it wasn't the ring; it was the paper that it was wrapped in. And the I.B.I. got that."

Phipps looked perplexed, then laughed. "They did, eh? Then they made the same mistake you did. But it's the ring itself that is important. Let's have it."

"You must be mistaken," Don answered slowly. "Or maybe we aren't talking about the same ring." He thought about it. "It's possible that the I.B.I. swapped rings before the package ever reached me. But it's a dead cinch that the ring that was delivered to me couldn't have contained a message. It was transparent plastic—styrene, probably—and there wasn't even a fly speck in it. No message. No way to hide a message."

Phipps shrugged impatiently. "Don't quibble with me as to whether or not a message could be concealed in the ring—it's the right ring; be sure of that. The I.B.I. didn't switch rings—we know."

"How do you know?"

"Confound it, boyl Your function was to deliver the ring, that's all. You let us worry about the message in it."

Don was beginning to feel sure that when his younger self had bitten Phipps' thumb, he must have been justified. "Wait a minute! I was to deliver the ring, yes—that is what Dr. Jefferson—you know who he is?"

"I knew who he was. I've never met him."

"That's what Dr. Jefferson wanted. He's dead, or so they told me. In any case I can't consult him. But he was ,very specific about to whom I was to deliver it—to my father. Not to you."

Phipps pounded the arm of the chair. "I know it, I know it! If things had gone properly, you would have delivered it to your father and we would have been saved no end of trouble. But those eager lads in New London had to— Never mind. The rebellion occurring when it did caused you to wind up here instead of on Mars. I'm trying to pick up the pieces. You can't deliver it to your father, but you can get the same result by turning it over to me. Your father and I are working toward the same end."

Don hesitated before answering, "I don't wish to be rude —but you ought to give some proof of that."

Sir Isaac produced with his voder a sound exactly like a man clearing his throat. "Ahem!" They both turned their heads toward him. "Perhaps," he went on, "I should enter the discussion. I have known Donald, if I may say so, more recently, my dear Phipps."

"Well—go ahead."

Sir Isaac turned most of his eyes on Don. "My dear Donald, do you trust me?"

"Uh, I think so, Sir Isaac—but it seems to me that I am obligated to insist on proof. It isn't my ring."

"Yes, you have reason. Then let us consider what would be proof. If I say. . .

Don interrupted, feeling that the whole matter was out of hand. "I'm sorry I let this grow into an argument. You see, it does not matter."

"Eh?"

"Well, you see, I don't have the ring any longer. It's gone."

There was a dead silence for a long minute. Then Phipps said, "I think Malath has fainted."

There was scurrying excitement while the Martian's cart was removed to his chambers, tension until it was reported that he was floating in his very special bed and resting comfortably. The conference resumed with three members. Phipps glowered at Don. "It's your fault, you know. What you said took the heart out of him."

"Me? I don't understand."

"He was a courier, too—he was stranded here the same way you were. He has the other half of the message—of the message you lost. And you removed the last possible chance he has of getting home before high gravity kills him. He's a sick man—and you jerked the rug out from under him."

Donald said, "But—"

Sir Isaac interrupted. "Donald is not at fault. The young should be blamed only with just cause and after deliberation, lest the family sorrow."

Phipps glanced at the dragon, then back at Don. "I'm sorry. I'm tired and bad tempered. What's done is done. The important point is: what happened to the ring? Is there any possibility of locating it?"

Don looked unhappy. "I'm afraid not." He explained rapidly about the attempt to get the ring from him and how he had had no proper place to protect it. "I didn't know that it was really important but I was determined to carry out Dr. Jefferson's wishes—maybe I'm sort of stubborn at times. So I did the best I could think of to do; I turned it over to a friend for safekeeping. I figured that was best because no one would think of looking for it in the hands of a person who wouldn't be expected to have it."

"Sound enough," agreed Phipps, "but to whom did you give it?"

"A young lady." Don's features contorted. "I think she was killed when the Greenies attacked."

"You don't know?"

"I'm fairly certain. I've been doing work that gives me opportunities to ask and nobody has laid eyes on her since the attack. I'm sure she's dead."

"You could be wrong. What was her name?"

"Isobel Costello. Her father managed the I. T. & T. branch."

Phipps looked utterly astounded, then lay back in his chair and roared. Presently he wiped his eyes and said, "Did you hear that, Sir Isaac? Did you hear that? Talk about the Blue Bird in your own back yard! Talk about Grandma's spectacles!"

Don looked from one to the other. "What do you mean?" he asked in offended tones.

"What do I mean? Why, son, Jim Costello and his daughter have been right here since two days after the attack." He jumped out of his chair. "Don't move! Stay where you are—I'll be right back."

And he was back quickly. "I always have trouble with those funny house phones of yours, Sir Ike," he complained. "But they're coming." He sat down and heaved a sigh. "Some days I'm tempted to turn myself in as an idiot."

Phipps shut up, save for a suppressed chuckle or two. Sir Isaac seemed to be contemplating his nonexistent navel. Don was preoccupied with turbulent thoughts, relief too great to be pleasure. Isobel alive!

Presently, calm somewhat restored, he spoke up. "Look, isn't it about time somebody told me what this is all about?"

Sir Isaac lifted his head and his tendrils played over the keys. "Your pardon, dear boy. I was thinking of something else. Long, long ago when my race was young and when your race had not yet—"

Phipps cut in. "Excuse me, old boy, but I can brief it and you can fill him in on the details later." He assumed assent and turned to Don. "Harvey, there is an organization—a cabal, a conspiracy, a secret lodge call it what you like—we just call it 'The Organization'. I'm a member, so is Sir Isaac, so is old Malath—and so are both of your parents. And so was Dr. Jefferson. It's made up mostly of scientists but it is not limited to them; the one thing we all have in common is a belief in the dignity and natural worth of free intelligence. In many different ways we have fought—and fought unsuccessfully, I should add—against the historical imperative of the last two centuries—the withering away of individual freedom under larger and even more pervasive organizations, both governmental and quasi-governmental.

"On Earth our group derives from dozens of sources, way back in history —associations of scientists fighting against secrecy and the straitjacketing of thought, artists fighting against censorship, legal aid societies, many other organizations, most of them unsuccessful, and some downright stupid. About a century ago all such things were pushed underground; the weak sisters dropped out, the talkative got themselves arrested and liquidated—and the remnants consolidated.

"Here on Venus our origins go clear back to the rapprochement between Cyrus Buchanan and the dominant natives. On Mars, in addition to many humans—more about them later—the organization is affiliated with what we call the 'priest class'—a bad translation, for they aren't priests; 'judges' would be closer."

Sir Isaac interrupted. "Elder brothers."

"Eh? Well, maybe that is a fair poetical rendering. Never mind. The point is, the whole organization, Martian, Venerian, Terrestrial, has been striving—"

"Just a minute," put in Don. "If you can answer me one question, it would clear up a whole lot. I'm a soldier of the Venus Republic and we've got a war on. Tell me this: is this organization—here on Venus, I mean—helping in our fight to chuck the Greenies out?"

"Well, not precisely. You see—"

Don did not then find out what it was he was supposed to see; another voice cut through Phipps' words: "Don! Donald!"

He found himself swarmed by a somewhat smaller and female member of his own race. Isobel seemed determined to break his neck. Don was embarrassed and upset and most happy. He gently removed her arms from his neck and tried to pretend that it had not happened —when he caught sight of her father looking at him quite oddly. "Uh, hello, Mr. Costello."

Costello advanced and shook hands with him. "How do you do, Mr. Harvey? It's good to see you again."

"It's good to see you. I'm mighty glad to see you folks alive and in one piece. I thought you had had it."

"Not quite. But it was a near thing."

Isobel said, "Don, you look older—much older. And how thin you are!"

He grinned at her. "You look just the same, Grandma."

Phipps interrupted, "Much as I dislike breaking up Old Home Week we have no time to waste. Miss Costello, we want the ring."

"The ring?"

"He means," explained Don, "the ring I left with you."

"Ring?" said Mr. Costello. "Mr. Harvey, did you give my daughter a ring?"

"Well, not exactly. You see. . ."

Phipps interrupted again. "It's the ring, Jim—the message ring. Harvey was the other courier—and it seems he made your daughter sort of a deputy courier."

"Eh? I must say I'm confused." He looked at his daughter.

"You have it?" Don asked her. "You didn't lose it?"

"Lose your ring? Of course not, Don. But I had thought—never mind; you want it back now." She glanced around at the eyes on her—fourteen, counting Sir Isaac's—then moved away and turned her back. She turned around again almost immediately and held out her hand. "Here it is."

Phipps reached for it. Isobel drew her hand away and handed it to Don. Phipps opened his mouth, closed it again, then reopened it. "Very well—now let's have it, Harvey."

Don put it in a pocket. "You never did get around to explaining why I should turn it over to you."

"But—" Phipps turned quite red. "This is preposterous! Had we known it was here, we would never have bothered to send for you—we would have had it without your leave."

"Oh, no!"

Phipps swung his eyes to Isobel. "What's that, young lady? Why not?"

"Because I wouldn't have given it to you—not ever. Don told me that someone was trying to get it away from him. I didn't know that you were the one."

Phipps, already red-faced, got almost apoplectic. "I've had all this childish kidding around with serious matters that I can stand." He took two long strides to Don and grasped him by the arm. "Cut out the nonsense and give us that message!"

Don shook him off and backed away half a step, all in one smooth motion—and Phipps looked down to see the point of a blade almost touching his waistband. Don held the knife with the relaxed thumb-and-two-finger grip of those who understand steel.

Phipps seemed to have trouble believing what he saw. Don said to him softly, "Get away from me."

Phipps backed away. "Sir Isaac!"

"Yes," agreed Don. "Sir Isaac—do I have to put up with this in your house?"

The dragon's tentacles struck the keys, but only confused squawking came out. He stopped and started again and said very slowly, "Donald—this is your house. You are always safe in it. Please—by the service you did me—put away your weapon."

Don glanced at Phipps, straightened up and caused his knife to disappear. Phipps relaxed and turned to the dragon. "Well, Sir Isaac? What are you going to do about it?"

Sir Isaac did not bother with the voder. "Remove thyself!"

"Eh?"

"You have brought dissension into this house. Were you not both in my house and of my family? Yet you menaced him. Please go—before you cause more sorrow."

Phipps started to speak, thought better of it—left. Don said, "Sir Isaac, I am terribly sorry. I—"

"Let the waters close over it. Let the mud bury it. Donald, my dear boy, how can I assure you that what we ask of you is what your honored parents would have you do, were they here to instruct you?"

Don considered this. "I think that's just the trouble, Sir Isaac—I'm not your 'dear boy.' I'm not anybody's 'dear boy.' My parents aren't here and I'm not sure that I would let them instruct me if they were. I'm a grown man now—I'm not as old as you are, not by several centuries. I'm not very old even by human standards—Mr. Phipps still classes me as a boy and that was what was wrong. But I'm not a boy and I've got to know what's going on and make up my own mind. So far, I've heard a lot of sales talk and I've been subjected to a lot of verbal pushing around. That won't do; I've got to know the real facts." Before Sir Isaac could reply they were interrupted by another sound—Isobel was applauding. Don said to her. "How about you, Isobel? What do you know about all this?"

"Me? Nothing. I couldn't be more in the dark if I were stuffed in a sack. I was just cheering your sentiments."

"My daughter," Mr. Costello put in crisply, "knows nothing at all of these things. But I do—and it appears that you are entitled to answers."

"I could certainly use some!"

"By your leave, Sir Isaac?" The dragon ponderously inclined his head; Costello went on, "Fire away. I'll try to give you straight answers."

"Okay—what's the message in the ring?"

"Well, I can't answer that exactly or we wouldn't need the message ourselves. I know that it's a discussion of certain aspects of physics—gravitation and inertia and spin and things like that. Field theory. It's certainly very long and very complicated and I probably wouldn't understand it if I knew exactly what was in it. I'm simply a somewhat rusty communications engineer, not a topflight theoretical physicist."

Don looked puzzled. "I don't get it. Somebody tucks a physics book into a ring—and then we play cops-and-robbers all around the system. It sounds silly. Furthermore, it sounds impossible." He took the ring out and looked at it; the light shone through it clearly. It was just a notions counter trinket—how could a major work on physics be hidden in it?

Sir Isaac said, "Donald, my dear— I beg pardon. Shucks! You mistake simple appearance for simplicity. Be assured; it is in there. It is theoretically possible to have a matrix in which each individual molecule has a meaning—as they do in the memory cells of your brain. If we had such subtlety, we could wrap your Encyclopedia Britannica into the head of a pin—it would be the head of that pin. But this is nothing so difficult."

Don looked again at the ring and put it back in his pocket. "Okay, if you say so. But I still don't see what all the shooting is about."

Mr. Costello answered, "We don't either—not exactly. This message was intended to go to Mars, where they are prepared to make the best use of it. I myself had not even heard about the project except in the most general terms until I was brought here. But the main idea is this: the equations that are included in this message tell how space is put together—and how to manipulate it. I can't even imagine all the implications of that—but we do know a couple of things that we expect from it, first, how to make a force field that will stop anything, even a fusion bomb, and second, how to hook up a space drive that would make rocket travel look like walking. Don't ask me how—I'm out of my depth. Ask Sir Isaac."

"Ask me after I've studied the message," the dragon commented dryly.

Don made no comment. There was silence for some moments which Costello broke by saying, "Well? Do you want to ask anything? I do not know quite what you do know; I hardly know what to volunteer."

"Mr. Costello, when I talked to you in New London, did you know about this message?"

Costello shook his head. "I knew that our organization had great hopes from an investigation going on on Earth. I knew that it was intended to finish on Mars—you see, I was the key man, the 'drop box,' for communication to and from Venus, because I was in a position to handle interplanetary messages. I did not know that you were a courier—and I certainly did not know that you had entrusted an organization message to my only daughter." He smiled wryly. "I might add that I did not even identify you in my mind as the son of two members of our organization, else there would have been no question about handling your traffic whether you could pay for it or not. There were means whereby I could spot organization messages—identifications that your message lacked. And Harvey is a fairly common name."

"You know," Don said slowly, "it seems to me that if Dr. Jefferson had told me what it was I was carrying—and if you had trusted Isobel here with some idea of what was going on, a lot of trouble could have been saved."

"Perhaps. But men have died for knowing too much. Conversely, what they don't know they can't tell."

"Yes, I suppose so. But there ought to be some way of running things so that people don't have to go around loaded with secrets and afraid to speak!"

Both the dragon and the man inclined their heads. Mr. Costello added, "That's exactly what we're after—in the long run. That sort of a world."

Don turned to his host. "Sir Isaac, when we met in the E Glory Road, did you know that Dr. Jefferson was using me as a messenger?"

"No, Donald—though I should have suspected it when I learned who you were." He paused, then added, "Is there anything more you wish to know?"

"No, I just want to think." Too many things had happened too fast, too many new ideas— Take what Mr. Costello had said about what was in the ring, now—he could see what that would mean—if Costello knew what he was talking about. A fast space drive, one that would run rings around the Federation ships . . . a way to guard against atom bombs, even fusion bombs—Why, if the Republic had such things they could tell the Federation to go fly a kite!

But that so-and-so Phipps had admitted that all this hankypanky was not for the purpose of fighting the Greenies. They wanted to send the stuff to Mars, whatever it was. Why Mars? Mars didn't even have a permanent human settlement—just scientific commissions and expeditions, like the work his parents did. The place wasn't fit for humans, not really. So why Mars?

Whom could he trust? Isobel, of course—he had trusted her and it had paid off. Her father? Isobel and her father were two different people and Isobel didn't know anything about what her father was doing. He looked at her; she stared back with big, serious eyes. He looked at her father. He didn't know, he just didn't know.

Malath? A voice out of a tank! Phipps? Phipps might be kind to children and have a heart of gold, but Don had no reason to trust him.

To be sure, all these people knew about Dr. Jefferson, knew about the ring, seemed to know about his parents—but so had Bankfield. He needed proof, not words. He knew enough now, enough had happened now, to prove to him that what he carried was of utmost importance. He must not make a mistake.

It occurred to him that there was one possible way of checking: Phipps had told him that Malath carried the other half of the same message—that the ring carried only one half. If it turned out that his half fitted the part that Malath carried, it would pretty well prove that these people had a right to the message.

But, confound it all!—that test required him to break the egg to discover that it was bad. He had to know before he turned it over to them. He had met the two-piece message system before; it was a standard military dodge—but used and used only when it was so terribly, terribly important not to let a message be compromised that you would rather not have it delivered than take any risk at all of having it fall into the wrong hands.

He looked up at the dragon. "Sir Isaac?"

"Yes, Donald?"

"What would happen if I refused to give up the ring?"

Sir Isaac answered at once but with grave deliberation. "You are my own egg, no matter what. This is your house—where you may dwell in peace—or leave in peace—as is your will."

"Thank you, Sir Isaac." Don trilled it in dragon symbols—and used "Sir Isaac's" true name.

Costello said urgently, "Mr. Harvey—"

"Yes?"

"Do you know why the speech of the dragon people is called 'true speech'?"

"Uh, why, no, not exactly."

"Because it is true speech. See here—I've studied comparative semantics—the whistling talk does not even contain a symbol for the concept of falsehood. And what a person does not have symbols for he can't think about! Ask him, Mr. Harveyl Ask him in his own speech. If he answers at all, you can believe him."

Donald looked at the old dragon. The thought went racing through his mind that Costello was right—there was no symbol in dragon speech for "lie," the dragons apparently never had arrived at the idea —or the need. Could Sir Isaac tell a lie? Or was he so far humanized that he could behave and think like a man? He stared at Sir Isaac and eight blank, oscillating eyes looked back at him. How could a man know what a dragon was thinking?

"Ask him!" insisted Costello.

He didn't trust Phipps; he couldn't logically trust Costello—he had no reason to. And Isobel didn't figure into it. But a man had to trust somebody, some time! A man couldn't go it alone—all right, let it be this dragon who had "shared mud" with him. "It isn't necessary," Don said suddenly. "Here." He reached into his pocket, took out the ring and slipped it over one of Sir Isaac's tentacles.

The tentacle curled through it and withdrew it into the slowly writhing mass. "I thank you, Mist-on-the-Waters."

XVI

MULTUM IN PARVO

DONALD looked at Isobel and found her still solemn, unsmiling, but she seemed to show approval. Her father sat down heavily in the other chair. "Phew!" he sighed "Mr. Harvey, you are a hard nut. You had me worried."

"I'm sorry. I had to think."

"No matter now." He turned to Sir Isaac. "I guess I had better dig up Phipps. Yes?"

"It won't be necessary." The voice came from behind them; they all turned—all but Sir Isaac who did not need to turn his body. Phipps stood just inside the door. "I came in on the tail end of your remark, Jim. If you want me, I'm here."

"Well, yes."

"Just a moment, then. I came for another reason." He faced Don. "Mr. Harvey, I owe you an apology."

"Oh, that's all right."

"No, let me say my say. I had no business trying to bullyrag you into cooperating. Don't mistake me; we want that ring—we must have it. And I mean to argue until we get it. But I've been under great strain and I went about it the wrong way. Very great strain—that's my only excuse."

"Well," said Don, "come to think about it, so have I. So let's forget it." He turned to his host. "Sir Isaac, may I?" He reached toward Sir Isaac's handling tentacles, putting out his palm. The ring dropped into it; he turned and handed it to Phipps.

Phipps stared at it stupidly for a moment. When he looked up Don was surprised to see that the man's eyes were filled with tears. "I won't thank you," he said, "because when you see what will come of this it will mean more to you than any person's thanks. What is in this ring is of life and death importance to many, many people. You'll see."

Don was embarrassed by the man's naked emotion. "I can guess," he said gruffly. "Mr. Costello told me that it meant bomb protection and faster ships—and I bet on my hunch that you people and I are on the same side in the long run. I just hope I didn't guess wrong."

"Guess wrong? No, you haven't guessed wrong—and not just in the long run, as you put it, but right now! Now that we have this—" he held up the ring, "we stand a fighting chance to save our people on Mars."

"Mars?" repeated Don. "Hey, wait a minute—what's this about

Mars? Who's going to be saved? And from what?"

Phipps looked just as puzzled. "Eh? But wasn't that what persuaded you to turn over the ring?"

"Wasn't what persuaded me?"

"Didn't Jim Costello—" "Why, I thought of course you had—" and Sir Isaac's voder interrupted with, "Gentlemen, apparently it was assumed that. . ."

"Quiet!" Don shouted as Phipps opened his mouth again ; Don hurriedly added, "Things seem to have gotten mixed up again. Can somebody—just one of you—tell me what goes on?"

Costello could and did. The Organization had for many years been quietly building a research center on Mars. It was the one place in the system where the majority of humans were scientists. The Federation maintained merely an outpost there, with a skeleton garrison. Mars was not regarded as being of any real importance—just a place where harmless longhairs could dig among the ruins and study the customs of the ancient and dying race.

The security officers of the I.B.I. gave Mars little attention; there seemed no need. The occasional agent who did show up could be led around and allowed to see research of no military importance.

The group on Mars did not have the giant facilities available on Earth—the mastodonic cybernetic machines, the unlimited sources of atomic power, the superpowerful particle accelerators, the enormous laboratories—but they did have freedom. The theoretical groundwork for new advances in physics had been worked out on Mars, spurred on by certain mystifying records of the First Empire—that almost mythical earlier epoch when the solar system had been one political unit. Don was warmly pleased to hear that his parents' researches had contributed largely at this point in the problem. It was known—or so the ancient Martian records seemed to state—that the ships of the First Empire had traveled between the planets, not in journeys of weary months, or even weeks, but of days.

The descriptions of these ships and of their motive power were extensive, but differences in language, in concept, and in technology created obstacles enough to give comparative semanticists nervous breakdowns—had done so, in fact. A treatise on modern electronics written in Sanskrit poetry with half the thoughts taken for granted would have been lucid in comparison.

It had simply been impossible to make fully intelligible translation of the ancient records. What was missing had to be worked out by genius and sweat.

When the theoretical work had been carried as far as it could be the problem was sent to Earth via members of the Organization for sub rosa testing and for conversion of theory into present-day engineering. At first there was a steady traffic of information back and forth between planets, but, as the secret grew, the members of the Organization were less and less inclined to travel for fear of compromising what they knew. By the time of the Venus crisis it had been standard practice for some years to send critical information by couriers who knew nothing and therefore could not talk—such as Don—or by nonterrestrials who were physically immune to the interrogation methods of the security police—giving a Venerian dragon the "third degree" was not only impractical, but ridiculous. For different but equally obvious reasons Martians too were safe from the thought police.

Don himself was a last-minute choice, a "channel of opportunity"—the Venus crisis had rushed things. How badly it had rushed things no one knew until after Commodore Higgins' spectacular raid on Circum-Terra. The engineering data so urgently needed on Mars had gone to Venus instead, there to be lost (Don's half of it) in the confusion of rebellion and counterblow. The rebelling colonists, driving toward the same goal as the Organization, had unknowingly thwarted their best chance for overthrowing the Federation.

Communication between the Organization members on Venus, on Earth, and on Mars had been precariously and imperfectly reestablished right under the noses of the Federation police. The Organization had members working for I. T. & T. on all three planets—members such as Costello. Costello himself had been helped to make his escape, with Isobel, because he knew too much; they could not afford to have him questioned—but a new "drop box" had been set up at Governor's Island in the person of a Federation communications technical sergeant. The channel to the sergeant was a dragon who had the garbage disposal contract for the "Greenie" base. The dragon had no voder; the sergeant knew no whistle talk—but a tentacle can pass a note to a human hand.

Communication, though difficult and dangerous, was possible; travel between planets for members of the Organization was now utterly impossible. The only commercial line as yet reestablished was the EarthMoon run. The group on Venus was attempting the almost impossible task of completing a project all preliminary preparations for which had been made for Mars. The task was not quite impossible—provided they could find the missing half of the message, they might yet outfit a ship, send it to Mars, and finish the job.

So they hoped . . . and continued to hope until recently, when disastrous news had gotten through to them from Earth—the Organization had been penetrated on Earth; a very senior member, one who knew much too much, had been arrested and had not been able to suicide in time.

And a task force of Federation ships was already on its way to attack the group on Mars.

"Wait a minute!" Don interrupted. "I thought—Mr. Costello, didn't you tell me, back in New London, that the Federation had already moved in on Mars?"

"Not exactly. I told you that I had inferred. . . that the Federation had taken over Schiaparelli Station, the I. T. & T. branch there. And so they had—to the extent of censoring all traffic and putting a stop to all traffic with Venus. They could do that with a squad of soldiers from the pint-sized garrison they've always had there. But this is an attack in force. They mean to liquidate the Organization."

Liquidate the Organization—Don translated the jawbreakers into real words: kill all the people who were against them. That meant his parents

He shook his head to clear it. The thought did not mean anything to him inside. It had been too many years; he could not see their faces—and he could not imagine them dead. He wondered if he himself had become dead inside, unable to feel things. No matter—something had to be done. "What do we do? How can we stop it?"

"We quit wasting time!" answered Phipps. "We've lost half a day already. Sir Isaac?"

"Yes, my friend. Let us hurry."

The room was a laboratory shop, but of dragon proportions. It needed to be, for it held a round dozen of dragons as well as fifty-odd men and a sprinkling of women. Everyone who could manage it wanted to see the opening of the ring. Even Malath da Thon was there, sitting up in his cell with the aid of his powerdriven corset and with the colors of emotion rippling gently across his frail body.

Don and Isobel had climbed to the top of the entrance ramp, where they could see without being in the way. Opposite them was a large stereo tank, lighted but with no picture growing in it. Below them was a micromanipulator, dragon style; other pieces of apparatus and power tools filled the rest of the room. They were strange to Don, not because they were of dragon construction and for dragon use, for many of them were not—they were strange in the way in which laboratory equipment is always exotic to the layman. He was used to dragon artifacts; the two technologies, human and dragon, had interpenetrated sufficiently that a human, especially one living on Venus, found nothing odd in joints that were wrung instead of welded or bolted, nothing unusual in interlocking ovoids where a man would use screws.

Sir Isaac was at the micromanipulator, his tendrils at the controls; down over his head fitted a frame with eight eyepieces. He touched the control rack; the tank rippled and a picture built in it—the ring, in full color and three dimensions. It seemed to be about eight feet across. The boss of the ring faced out, displaying the enamel-filled initial cut into it—a capital "H" framed with a simple circle of white enamel.

The picture flickered and changed. Only a portion of the initial was now visible, but so greatly magnified that the enamel rubbed into the shallow grooves of the letter looked like broken paving blocks. A shadowy pointed cylinder, out of focus save at its very end, moved across the picture; a great oily globe formed on the end of it, detached itself and settled on the enamel. The "paving blocks" started to break up.

Montgomery Phipps climbed the ramp, saw Don and Isobel, and sat down on the edge beside them. He seemed to want to be friendly. "This will be something to tell your grandchildren about," he remarked. "Old Sir Ike at work. The best microtechnician in the system—can darn near pick out a single molecule, make it sit up and beg."

"It rather surprises me," Don admitted. "I hadn't known that Sir Isaac was a laboratory technician."

"He's more than that; he's a great physicist; hadn't the significance of his chosen name struck you?"

Don felt foolish. He knew how dragons went about picking vocalized names, but he took such names for granted, just as he took his own Venerian name for granted. "His whole tribe tends to be scientific," Phipps went on. "There's a grandson who calls himself 'Galileo Galilei'; have you met him? And there's a 'Doctor Einstein' and a 'Madame Curie' and there's an integrating chemist who calls herself—Egg alone knows why!—'Little Buttercup.' But old Sir Ike is the boss man, the top brain—he made a trip to Earth to help with some of the work on this project. But you knew that, didn't you?"

Donald admitted that he had not known why Sir Isaac was on Earth. Isobel put in, "Mr. Phipps, if Sir Isaac was working on this on Earth, why doesn't he know what is in the ring before he opens it?"

"Well, he does and he doesn't. He worked on the theoretical end. But what we will find—unless we get a terrific disappointment—will be detailed engineering instructions worked out for man-type tools and techniques. Very different."

Don thought about it. "Engineering" and "science" were more or less lumped together in his mind; he lacked the training to appreciate the enormous difference. He changed the subject. "You are a laboratory man yourself, Mr. Phipps?"

"Me? Heavens, no! My fingers are all thumbs. The dynamics of history is my game. Theoretical once—applied now. Well, that's a dry hole." His eyes were on the tank; the solvent, sluiced in by what seemed to be hogshead amounts, had washed the enamel out of the groove that defined that part of the initial "H"; the floor of the groove could be seen, bare, amber, and transparent.

Phipps stood up. "I can't sit still—I get nervous. Excuse me, please."
.

"Surely."

A dragon was lumbering up the ramp. He stopped by them just as Phipps was turning away. "Howdy, Mr. Phipps. Mind if I park here?"

"Not at all. Know these people?"

"I've met the lady."

Don acknowledged the introduction, giving both his names and receiving those of the dragon in turn—Refreshing Rain and Josephus ("Just call me 'Joe'"). Joe was the first dragon, other than Sir Isaac, whom Don had met there who was voder trained and equipped; Don looked at him with interest. One thing was certain: Joe had learned English from some master other than the nameless Cockney who had taught Sir Isaac . . . a Texan, Don felt quite sure.

"I am honored to be in your house," Don said to him.

The dragon settled himself comfortably, letting his chin come about to their shoulders. "Not my house. These snobs wouldn't have me around if there wasn't a job I can do a little better than the next hombre. I just work here."

"Oh." Don wanted to defend Sir Isaac against the charge of snobbery but taking sides between dragons seemed unwise. He looked back at the tank. The scan had shifted to the circle of enamel which framed the "H"; fifteen or twenty degrees of it appeared in the tank. The magnification started to swell enormously until one tiny sector filled the huge picture. Again the solvent floated into the enamel; again it washed away.

"Now we are getting someplace, maybe," commented Joe.

The enamel was dissolving like snow in spring rain, but, instead of washing down to a bare floor, something dark was revealed under the paint—a bundle of steel pipes, it seemed to be, nested in the shallow groove.

There was dead silence—then somebody cheered. Don found that he had been holding his breath. "What is it?" he asked Joe.

"Wire. What would you expect?"

Sir Isaac stepped up the magnification and shifted to another sector. Slowly, as carefully as a mother bathing her first born, he washed the covering off the upper layer of the coiled wire. Presently a microscopic claw reached in, felt around most delicately, and extracted one end.

Joe got to his feet. "Got to get to work," he keyed. "That's my cue." He ambled down the ramp. Don noticed that he was growing a new starboardmidships leg and the process was not quite complete; it gave him a lopsided, one-flatwheel gait.

Slowly, tenderly, the wire was cleaned and uncoiled. More than an hour later the tiny hands of the micromanipulator stretched out their prize—four feet of steel wire so gossamer fine that it could not be seen at all by naked eye, even by a dragon.

Sir Isaac backed his head out of the eyepiece rack. "Is Malath's wire ready?" he inquired.

"All set."

"Very well, my friends. Let us commence."

They were fed into two ordinary microwire speakers, rigged in parallel. Seated at a control panel for synchronizing the fragmented message latent in the two wires was a worried-looking man wearing earphones—Mr. Costello. The steel spider threads started very slowly through and a highpitched gabbling came out of the horn. There were very rapid momentary interruptions, like high frequency code.

"Not in synch," announced Mr. Costello. "Rewind."

An operator sitting in front of him said, "I hate to rewind, Jim. These wires would snap if you breathed on them."

"So you break a wire—Sir Isaac will splice it. Rewind!"

"Maybe you've got one in backwards."

"Shut up and rewind."

Presently the gabbling resumed. To Don it sounded the same as before and utterly meaningless, but Mr. Costello nodded. "That's got it. Was it recorded from the beginning?"

Don heard Joe's Texas accents answering, "In the can!"

"Okay, keep it rolling and start playing back the recording. Try slowing the composite twenty to one." Costello threw a switch; the gabbling stopped completely although the machines continued to unreel the invisible threads. Shortly a human voice came out of the loudspeaker horn; it was deep, muffled, dragging, and almost unintelligible. Joe stopped it and made an adjustment, started over. When the voice resumed it was a clear, pleasant, most careful enunciated contralto.

"Title," the voice said, " 'Some Notes on the Practical Applications of the Horst-Milne Equations. Table of Contents: Part One—On the Design of Generators to Accomplish Strain-Free Molar Translation. Part Two—The Generation of SpaceTime Discontinuities, Closed, Open, and Folded. Part Three —On the Generation of Temporary Pseudo-Acceleration Loci. Part One, Chapter One—Design Criteria for a Simple Generator and Control System. Referring to equation seventeen in Appendix A, it will be seen that—' "

The voice flowed on and on, apparently tireless. Don was interested, intensely so, but he did not understand it. He found himself growing sleepy when the voice suddenly rapped out: "Facsimile! Facsimile! Facsimile!"

Costello touched a switch, stopping the voice, and demanded, "Cameras ready?"

"Hot and rolling!"

"Shift!"

They watched the picture build up—a wiring diagram, Don decided it must be—or else a plate of spaghetti. When the picture was complete the voice resumed.

After more than two hours of this, broken only by desultory conversation, Don turned to Isobel. "I'm not doing any good here and I'm certainly not learning anything. What do you say we leave?"

"Suits."

They went down the ramp and headed for a tunnel that led toward living quarters. On the way they ran into Phipps, his face glowing with happiness. Don nodded and started to push on past; Phipps stopped him. "I was just going to hunt you up."

"Me?"

"Yes. I thought you might want this for a souvenir." He held out the ring.

Don took it and examined it curiously. There was a very tiny break in one branch of the "H" where the enamel had been eaten away. The framing circle was an empty, slightly shadowed groove, a groove so narrow and shallow that Don could hardly catch his fingernail in it.

"You've no more use for it?"

"It's squeezed dry. Keep it. You'll be able to sell it to a museum some day, for a high price."

"No," said Don. "I reckon I'll deliver it to my father—eventually."

XVII

TO RESET THE CLOCK

DON moved out of the Gargantuan chambers he had been given and in with the other humans. Sir Isaac would have let him stay until the Sun grew cold, monopolizing an acre or so of living space, but to Don it seemed not only silly for one person to clutter up chambers built big enough for dragons but not entirely comfortable—so much open space made a man tuned to bush fighting uneasy.

The human guests occupied one dragon apartment with the great rooms partitioned off into cubicles. They shared its wallowing trough as a plunge bath and had a communal mess. Don roomed with Dr. Roger Conrad, a tall and shaggy young man with a perpetual grin.

Don was a bit surprised to find that Conrad was held in high esteem by the other scientists.

He saw very little of his roommate, nor of any of the others—even Isobel was busy with clerical work. The team worked night and day with driving intensity. The ring had been opened and they had engineering data to work from, true—but that task force was already swinging toward Mars. Nobody knew—nobody could know—whether or not they could finish in time to save their colleagues.

Conrad had tried to explain it to Don one night late as he was turning in. "We don't have adequate facilities here. The instructions were conceived in terms of Earth-and Mars-type techniques. The dragons do things differently. We've got mighty little of our own stuff and it's hard to jury-rig what we need from their stuff. The original notion was to install the gear in—you know those little jumpbug ships that people use to get around in on Mars?"

"Seen pictures of them."

"Never actually seen 'em myself. Useless as rocketships, of course, but they are pressurized and big enough. Now we've got to adapt for a shuttle." A superstratospheric shuttle "with its ears trimmed"—the spreading glider wings unshipped and carried away—waited in a covered bayou outside Sir Isaac's family seat. It would make the trip to Mars if it could be prepared. "It's a headache," he added.

"Well, can we do it?"

"We'll have to do it. We can't possibly do the design calculations over again; we don't have the machines, even if we had time to reengineer the job—which we haven't."

"That's what I meant. Will you finish in time?"

Conrad sighed. "I wish I knew."

The pressure of time sat heavily on all of them. In their mess hall they had set up a large chart showing Earth, Sun, Venus, and Mars, each in its proper position. At lunch each day the markers were moved along the scribed orbits, the Earth by one degree, Venus a bit more, Mars by only half a degree and a trifle.

A long dotted line curved from a point on Earth's orbit to a rendezvous with Mars—their best estimate of the path and arrival date of the Federation task force. The departure date was all they knew with certainty; the trajectory itself and the arrival date were based on the relative positions of the two planets and what was believed to be the maximum performance of any Federation ship, assuming refueling in parking orbit around Earth.

For a rocket ship some orbits are possible, some are impossible. A military ship in a hurry would not, of course, use the economical doubly-tangent ellipse; such a trip from Earth to Mars would require 258 Earth days. But, even using hyperboloids and wasting fuel, there are severe limits to how quickly a reaction-driven ship can make an interplanetary voyage.

An Earth calendar hung beside the chart; near it was a clock showing Earth Greenwich time. Posted near these was a figure, changed each time the clock read twenty-four hundred, the number of days till M-day—by their best estimate, now only thirty-nine.

Don was enjoying a combat soldier's paradise—hot food sharp on the hour, well cooked and plenty of it, all the sack time he cared to soak up, clean clothes, clean skin, no duties and no hazards. The only trouble was that he soon grew to hate it.

The intense activity around him shamed him into wanting to help—and try to help he did—until he found out that he was being given makework to shut him up. Actually there was nothing he could do to help; the sweating specialists, trying their level best to haywire improbable circuits into working, had no time to waste on an untrained assistant. He gave up and went back to loafing, found that he could sleep all right in the afternoons but that the practice kept him awake at night.

He wondered why he could not enjoy so pleasant a leave. It was not that—he was worried about his parents.

Yes, he was! Though they had grown dim in his memory his conscience was biting him that he was doing nothing helpful for them. That was why he wanted to get out, away from here where he could do no good, back to his outfit, back to his trade—back to where there was nothing to worry about between scrambles—and plenty to worry about then. With the blackness around you and the sound of your mate's breathing on your right and the same for the man on your left—the slow move forward, trying to feel out what dirty tricks the Greenie techs had thought of this time to guard their sleep . . . the quick strike—and the pounding drive back to the boat with nothing to guide you through the dark but the supersonics in your head bones

He wanted to go back.

He went to see Phipps about it, sought him out in his office. "You, eh? Have a cigarette."

"No, thanks."

"Real tobacco—none of your 'crazy weed.'"

"No, thanks, I don't use 'em."

"Well, maybe you've got something. The way my mouth tastes these mornings—" Phipps lit up himself, sat back and waited.

Don said, "Look—you're the boss around here."

Phipps exhaled, then said carefully, "Let's say I'm the coordinator. I certainly don't try to boss the technical work."

Don brushed it aside. "You're the boss for my purposes. See here, Mr. Phipps, I feel useless around here. Can you arrange to get me back to my outfit?"

Phipps carefully made a smoke ring. "I'm sorry you feel that way. I could give you work to do. You could be an executive assistant to me."

Don shook his head. "I've had enough of 'pick up sticks and lay them straight. I want real work—my own work. I'm a soldier and there's a war going on—that's where I belong. Now when can I get transportation?"

"You can't."

"Huh?"

"Mr. Harvey, I can't let you go; you know too much. If you had turned over the ring without asking questions, you could have gone back to your outfit the next hour—but you had to know, you had to know everything. Now we don't dare risk your capture. You know the Greenies put every prisoner through full interrogation; we can't dare risk that—not yet."

"But—Dog take it, sir, I'll never be captured! I made up my mind about that a long time ago."

Phipps shrugged. "If you get yourself killed, that's all right. But we can't be sure of that, no matter how resolute you are. We can't risk it; there's too much at stake."

"You can't hold me here! You have no authority over me!"

"No. But you can't leave."

Don opened his mouth, closed it, and walked out.

He woke up the next morning determined to do something about it. But Dr. Conrad was up before he was and stopped to make a suggestion before he left. "Don?"

"Yeah, Rog?"

"If you can tear yourself out of that sack, you might come around to the power lab this morning. There will be something worth looking at—I think."

"Huh? What? What time?"

"Oh, say about nine o'clock."

Don showed up, along with apparently every human in the place and about half of Sir Isaac's numerous family. Roger Conrad was in charge of the demonstration. He was busy at a control console which told the uninstructed observer nothing. He busied himself with adjustments, looked up and said, "Just keep your eyes on the birdie, folks—right over that bench." He pressed a key.

There flicked into being over the bench, hanging in the air unsupported, a silvery ball some two feet across. It seemed to be a perfect sphere and a perfect reflector and, more than anything else in the world, it made Don think of a Christmas tree ornament. Conrad grinned triumphantly. "Okay, Tony—give it the ax!"

Tony Vincente, the most muscular of the laboratory crew, picked up a broadbladed ax he had ready. "How would you like it split—up and down, or sideways?"

"Suit yourself."

Vincente swung the ax over his head and brought it down hard.

It bounced off.

The sphere did not quiver, nor was there any mar on its perfect mirror surface. Conrad's boyish grin got even wider. "End of act one," he announced and pressed another button. The sphere disappeared, left nothing to show where it had been.

Conrad bent over his controls. "Act two," he announced. "We now cancel out half the locus. Stand clear of the bench." Shortly he looked up. "Ready! Aim! Fire!" Another shape took being, a perfect sphere otherwise like the last. Its curved outer surface was faced up. "Stick the props in, Tony."

"Just a sec, while I light up." Vincente lit a cigarette, puffed it vigorously, then propped it in an ash tray and slid it under the half globe. Conrad again manipulated his controls; the shape descended, rested on the bench, covering the burning cigarette on its tray. "Anybody want to try the ax on it, or anything else?" asked Conrad.

Nobody seemed anxious to tamper with the unknown. Conrad again operated his board and the silver bowl lifted. The cigarette still smoldered in the tray, unaffected. "How," he asked, "would you like to put a lid like that over the Federation's capital at Bermuda—and leave it in place until they decided to come to terms?"

The idea quite evidently met with unanimous approval. The members of the Organization present were all, or almost all, citizens of Venus, emotionally involved in the rebellion no matter what else they were doing. Phipps cut through the excited comment with a question. "Dr. Conrad—would you give us a popular explanation of what we have seen? Why it works, I mean; we can guess at its enormous potentials."

Conrad's face got very serious. "Mmm . . . Chief, perhaps it would be clearest to say that the fasarta modulates the garbab in such a phase relationship that the thrimaleen is forced to bast—or, to put it another way, somebody loosed mice in the washroom. Seriously, there is no popular way to explain it. If you were willing to spend five hard years with me, working up through the math, I could probably bring you to the same level of ignorance and confusion that I enjoy. Some of the tensor equations involved are, to put it mildly, unique. But the instructions were clear enough and we did it."

Phipps nodded. "Thanks—if that is the word I want. I'll ask Sir Isaac."

"Do, please. I'd like to listen."

Despite the proof that the lab crew had been able to jury-rig at least part of the equipment described by the message in the two wires, Don's jitters got no better. Each day the sign in the mess hall reminded him that time was running out—and that he was sucking his thumb while it did so. He thought no more about trying to get them to send him back to the war zone; instead he began to make plans to get there on his own.

He had seen maps of the Great South Sea and knew roughly where he was. To the north there was territory uninhabited even by dragons—but not uninhabited by their carnivorous cousins. It was considered impassable. The way to the south around the lower end of the sea was much farther, but it was dragon country all the way right up to outlying human farms. With whistle speech and food enough to last at least a week he might get through to some settler who could pass him along to the next. As for the rest he had his knife and he had his wits and he was much more swampwise than he had been when he had made his escape from Bankfield's men.

He began to sneak food out of the mess hall and cache it in his room.

He was within a day and a night of attempting his break when Phipps sent for him. He considered not showing up but decided that it would be less suspicion-arousing to comply.

"Sit down," Phipps began. "Cigarette? No—I forgot. What have you been doing with yourself lately? Keeping busy?"

"Not a darn thing to do!"

"Sorry. Mr. Harvey, have you given any thought to what sort of a world we will have when this is over?"

"Well, no, not exactly." He had thought about it, but his own imaginings were too poorly worked out for him to care to express them. As for himself, someday the war would be over—he supposed—and then he would carry out his long-postponed intention of seeking out his parents. After that, well ..."

"What sort of world would you like it to be?"

"Uh? Well, I don't know." Don pondered. "I guess I'm not what you call 'politically minded.' I don't much care how they run it—except, well, there ought to be a sort of looseness about it. You know—a man ought to be able to do what he wants to, if he can, and not be pushed around."

Phipps nodded. "You and I have more in common than you may have thought. I'm not a purist in political theory myself. Any government that gets to be too big and too successful gets to be a nuisance. The Federation got that way—it started out decently enough—and now it has to be trimmed down to size. So that the citizens can enjoy some looseness. "

Don said, "Maybe the dragons have the right idea—no organization bigger than a family."

Phipps shook his head. "What's right for dragons is not right for us. Anyhow, families can be just as oppressive as government—take a look at the youngsters around here; five hundred years or so to look forward to before they can sneeze without permission. I asked your opinion because I don't know the answer myself—and I've studied the dynamics of history longer than you've been alive. All I know is that we are about to turn loose into the world forces the outcome of which I cannot guess."

Don looked startled. "We've got space travel now; I don't see what important difference it will make to make it faster. As for the other gimmick, it seems to me a swell idea to be able to put a lid on a city so that it can't be atom-bombed."

"Granted. But that is just the beginning. I've been making a list of some of the things that will come about—I think. In the first place you vastly underestimate the importance of speeding up transportation. As for the other possibilities, I'm stumped. I'm too old and my imagination needs greasing. But here's one for a starter: we might be able to move water, lots of water, significant amounts, from here to Mars." His brow wrinkled. "We might even be able to move planets themselves."

Don looked up suddenly. Somewhere he had heard almost those same words . . . the memory evaded him.

"But never mind," Phipps went on. "I was just trying to get a younger, fresher viewpoint. You might think about it. Those laboratory laddies won't, that's sure. These physicists—they produce wonders but they never know what other wonders their wonders will beget." He paused and added, "We are resetting the clock, but we don't know what time it will be."

When he added nothing more Don decided with relief that the interview was over and started to get up. "No, no, don't go," Phipps put in. "I had another matter on my mind. You've been getting ready to leave, haven't you?"

Don stuttered and stammered. "What gave you that idea?"

"I'm right. Some morning we would wake up and find your bed empty. Then I'd be put to a lot of trouble when effort can't be spared to try to find you and bring you back."

Don relaxed. "Conrad snitched to you," he said bitterly.

"Conrad? No. I doubt if the good doctor ever notices anything larger than an electron. No, credit me with some sense. My business is people. True, I did badly with you when you first arrived—but I still plead that I was bone weary. Tiredness is a mild insanity. The point is: you're leaving and I can't stop you. I know dragons well enough to know that Sir Isaac wouldn't let me if you wanted to go. You're 'his' confounded 'egg'! But I can't let you go; the reasons are just as compelling as before. So—rather than let you go, I'd have to try to kill you."

Don leaned forward, shifting his weight onto his feet. "Do you think you could?" he said very softly.

Phipps grinned. "No, I don't. That's why I've had to think up another scheme. You know that we are making up the ship's crew. How would you like to go along?"

XVIII

LITTLE DAVID

Don let his mouth drop open and left it that way. To his credit, while he had thought about it, he had never given it the slightest serious consideration; he was not conceited enough to think that he would be allowed to hitch a ride, just to suit his personal wishes, on this trip.

Phipps went on, "Frankly, I'm doing it to get rid of you, to put you on ice, safe from the Federation's inquisitors, until it no longer matters. But I think I can justify it. We want to train as many as the Little David can carry on this trip as cadres for more ships. But my choice is limited—most of our group here are too old, or they are nearsighted, narrow-chested young geniuses suitable only for laboratories. You are young, you are healthy, your reflexes are fast—I know! —and you are spacewise from babyhood. True, you are not a qualified shiphandler, but that won't matter too much; these ships will be new to everyone. Mr. Harvey, how would you like to go to Mars and return as 'Captain Harvey,' master of your own ship—a ship strong enough to strike at these Federation vermin orbiting around Venus?

"Or executive officer, at least," Phipps qualified, reflecting that in a two-man ship Don could hardly be less.

Like it? He'd love it! Don's tongue got twisted trying to accept too quickly. Then almost at once he was struck by a cold thought; Phipps saw from his expression that something was wrong. "What's the matter?" Phipps said sharply. "Are you afraid?"

"Afraid?" Don looked annoyed. "Of course I'll be afraid! I've been afraid so many times that I am no longer scared to be afraid again. That's not the trouble."

"What is it, then? Speak up!"

"It's just this—I'm still on active duty. I can't go gallivanting off a hundred million miles or so. Properly speaking, it would be desertion.

Why, when they laid hands on me, they'd probably hang me first and ask questions afterwards."

Phipps relaxed. "Oh. Perhaps that can be managed. You let me worry about it."

It could be managed. It was only three days later that Don received new orders, written this time, and delivered by devious means that he could only guess at. They read:

To: Harvey, Donald J., Sergeant—Specialist 1/c Via: Channels

1. You are assigned to special temporary duty of indefinite duration.

2. You will travel as necessary to carry out this duty.

3. This assignment is deemed in the best interests of the Republic. When, in your opinion, your duties are completed, you will report to the nearest competent authority and request transportation to enable you to report in person to the Chief of Staff.

4. For the duration of this duty you are brevetted to the rank of sublieutenant.

J. S. Busby, Wing Colonel (brevet)

For the Commanding General

First Endorsement:

1. Delivered (via courier)

Henry Marsten, Captain (brevet) Commanding 16th Gondola Combat Team

Clipped to the orders was a scrawled note which read:

P.S. Dear "Lieutenant,"

These are the silliest orders I have ever had to endorse. What the devil have you been up to? Did you marry one of the dragons? Or did you catch a Big Brass with his finger off his number? Anyway, have fun—and good hunting! Marsten

Don tucked the orders and the note into his pocket. Every now and then he would reach in and touch them.

The days trickled away; the dotted line got ever closer to Mars: and the whole group got more and more jumpy. Another date was posted on the mess hall wall, a date by which the Little David must be ready —if they were to arrive in time.

The calendar marked that deadline the day the ship was finally manned. At raise-ship-minus-twenty-minutes Don was still in Sir Isaac's study, his baggage (such as it was) already aboard. Saying goodbye to Sir Isaac, he discovered, was rather more difficult than he had expected it to be. His head was not cluttered with ideas about "father images" and the like; he was simply aware that this dragon was all the family he had, much more so than that remote pair on the planet where he was headed.

He was almost relieved when a glance at his watch told him that he was late. "Got to run," he said. "Nineteen minutes."

"Yes, my dear Donald. Your short-lived race must always live in frantic haste."

"Well—g'bye."

"Farewell, Mist on the Waters."

He stopped outside Sir Isaac's study to blow his nose and pull himself together. Isobel stepped out from behind a massive pillar. "Don—I wanted to say goodbye to you."

"Huh? Sure, sure—but aren't you coming out to see 'raise ship'?"

"No."

"Well, as you like, but I've got to hurry, Grandma."

"I told you to stop calling me 'Grandma'!"

"So you fibbed about your age. So you're stuck with it—Grandma."

"Don, you stubborn beast! Don—you come back. You understand me?"

"Why, sure! We'll be back in jig time."

"See that you do! You're not bright enough to take care of yourself. Well—Open sky!" She grabbed him by both ears and kissed him quickly, then ran away.

Don stared after her, rubbing his mouth. Girls, he reflected, were much odder than dragons. Probably another race entirely. He hurried on down to the takeoff point. The entire colony seemed to be there and he was the last of the crew to arrive, winning thereby a dirty look from Captain Rhodes, skipper of the Little David. Rhodes, once of Interplanet and now of the Middle Guard, had appeared three days ago; he had not been inclined to talk and had spent the whole time with Conrad. Don touched the pocket and wondered if Rhodes carried orders that read as oddly as his.

The Little David had been dragged up on shore, where she rested in skids. No catapult would be needed for her takeoff, nor was any available: the three shuttle catapults on Venus were all in the hands of the Federation forces. The ship had been concealed by a screen of boughs; these were now cut back, giving her open sky, room to lift.

Don looked at her, thinking that she looked more like an oversized and unusually ugly concrete mixer than a space ship. The roots of her amputated wings stubbed out sadly to port and starboard. Her needle nose had been trimmed off and replaced by a bulbous special radar housing. She was scarred here and there by the marks of cutting torches where modifications had been done hastily and with no attempt to pretty up, smooth out, and make shipshape after the surgery.

Her rocket tubes were gone and the space formerly occupied by rocket fuel tanks now held an atomic power pile, while a major part of what had been her passenger space was now taken up by a massive bulkhead, the antiradiation shield to protect the crew from the deadly emanations of the pile. All over her outer surface, disfiguring what had been sleek streamlines, were bulging discoids—"antennas" Conrad had called them, antennas used to strain the very shape of space. They did not look much like antennas to Don.

The Little David carried a crew of nine, Rhodes, Conrad, Harvey, and six others, all young and all on "makeelearnee"—except Roger Conrad who carried the undignified title of "Gadget Officer," that being shorter than "Officer in Charge of Special Appliances." She carried one passenger, Old Malath. He was not in sight and Don did not look for him; the after part of the remaining cabin space had been sealed off for his use and airconditioned thin, dry, and cold.

All were aboard, the lock was sealed, and Don sat down. Despite the space taken up by the new equipment enough passenger seats had been left in the little ship to accommodate them. Captain Rhodes settled himself in his control seat and barked, "Acceleration stations! Fasten beltsl" Don did so.

Rhodes turned to Conrad who was still standing. Conrad said conversationally, "About two minutes, gentlemen. Since we had no time for a test run, this will be a very interesting experiment. Any of three things can happen.

He paused.

Rhodes snapped, "Yes? Go on!"

"First, nothing might happen. We might bog down on a slight theoretical oversight. Second, it might work. And third—it might blow up." He grinned. "Anyone want to place a small bet?"

Nobody answered. He glanced down and said, "Okay, Captain—twist her tail!"

It seemed to Don that it had suddenly become night and that they had gone immediately into free fall. His stomach, long used to the fairly high gravity of Venus, lurched and complained. Conrad, not strapped down, was floating, anchored by one hand to his control board. "Sorry, gentlemen!" he said. "Slight oversight. Now let's adjust this locus to Mars normal, as an accommodation to our passenger." He fiddled with his dials.

Don's stomach went abruptly back into place as a quite satisfactory weight of more than one-third g took over. Conrad said, "Very well, Captain, you can let them unstrap."

Someone behind Don said, "What's the matter? Didn't it work?"

Conrad said, "Oh, yes, it worked. In fact we have been accelerating at about—" He stopped to study his dials. "—twenty gravities ever since we left the atmosphere."

The ship remained surrounded by darkness, cut off from the rest of the universe by what was inadequately described as a "discontinuity," save for a few minutes every other watch when Conrad cut the field to enable Captain Rhodes to see out and thereby take direct star sights. During these periods they were in free fall and the stars shone sharp through the ports. Then the darkness again would close in and the Little David would revert to a little world of its own.

Captain Rhodes showed a persisting tendency to swear softly to himself after each fix and to work his calculations through at least three times.

In between times Conrad conducted "gadget class" for as many hours each day as he could stand it. Don found most of the explanations as baffling as the one Conrad had given Phipps. "I just don't get it, Rog," he confessed after their instructor had been over the same point three times.

Conrad shrugged and grinned. "Don't let it throw you. By the time you have helped install the equipment in your own ship, you'll know it the way your foot knows your shoe. Meantime, let's run through it again."

Aside from instructions there was nothing to do and the ship was too small and too crowded in any case. A card game ran almost continuously. Don had very little money to start with; very soon he had none and was no longer part of the game. He slept and he thought.

Phipps had been right, he decided; travel at this speed would change things—people would go planet-jumping as casually as they now went from continent to continent on Earth. It would be like—well, like the change from sailing ships to transocean rockets, only the change would be overnight, instead of spread over three centuries.

Maybe he would go back to Earth someday; Earth had its points—horseback riding, for instance. He wondered if Lazy still remembered him?

He'd like to teach Isobel to ride a horse. He'd like to see her face when she first laid eyes on a horse!

One thing he knew: he would not stay on Earth, even if he did go back. Nor would he stay on Venus—nor on Mars. He knew now where he belonged—in space, where he was born. Any planet was merely a hotel to him; space was his home.

Maybe he would go out in the Pathfinder, out to the stars. He had a sneaking hunch that, if they came through this stunt alive, a member of the original crew of the Little David would be able to wangle it to be chosen for the Long Trip. Of course, the Pathfinder was limited to married couples only, but that was not an obstacle. He was certain that he would be married in time to qualify although he could not remember clearly just when he had come by that knowledge. And Isobel was the whither-thou-goest sort; she wouldn't hold him back. The Pathfinder would not leave right away in any case; they would wait to change over to the Horst-Milne-Conrad drive, once they knew about it.

In any event he meant to stir around a bit, do some traveling, once the war was over. They would surely have to transfer him to the High Guard when he got back, then High Guard experience would stand him in good stead when he was a discharged veteran. Come to think about it, maybe he was already in the High Guard, so to speak.

McMasters had certainly been right; there was just one way to get to Mars—in a spacing task force.

He looked around him. The inevitable card game was still in progress and two of his mates were shooting dice on the deckplates, the cubes spinning lazily in the low paragravity field. Conrad had opened up his chair and was stretched out asleep, his mouth open. He decided that it certainly did not look like a world-saving task force; the place had more the air of an unmade bed.

They were due to "come out" on the eleventh day, within easy free fall of Mars, and—if all guesses had been right—close by the Federation task force, making almost a photo finish with those ships. "Gadget class" gave way to drill at battle stations. Rhodes picked Art Frankel, who had had some shiphandling experience, as his copilot; Conrad was assisted by Franklyn Chiang, a physicist like himself. Of the other four, two were on radio, two on radar.

Don's battle station was a saddle amidships, back of the pilots' chairs—the "dead man's" seat. Here he guarded a springloaded demolition switch, a type of switch known through the centuries as a "deadman" switch for the contrary reason that it operated only if its operator were dead.

At first drill Conrad got the others squared away, then came back to Don's station. "You savvy what you are to do, Don?"

"Sure. I throw this switch to arm the bomb, then I hang onto the deadman switch."

"No, no! Grab the deadman switch first—then close the arming switch"

"Yes, sure. I just said it backwards."

"Be sure you don't do it backwards! Just remember this, Lieutenant: if you let go, everything does."

"Okay. Say, Rog, this thing triggers an A-bomb—right?"

"Wrong. We should waste so much money! But the load of H.E. in there is plenty for a little can like this, I assure you. So, anxious as we are to blow up this packet rather than let it be captured, don't let go of that switch otherwise. If you feel a need to scratch, rise above it."

Captain Rhodes came aft and with a motion of his head sent Conrad forward. He spoke to Don in a low voice, such that his words did not reach the others. "Harvey, are you satisfied with this assignment? You don't mind it?"

"No, I don't mind," Don answered. "I know the others all have more technical training than I have. This is my speed."

"That's not what I mean," the Captain corrected. "You could fill any of the other seats, except mine and Dr. Conrad's. I want to be sure you can do this job."

"I don't see why not. Grab onto this switch, and then close that one—and hang on for dear life. It sure doesn't take any higher mathematics to do that."

"That's still not what I mean. I don't know you, Harvey. I understand you have had combat experience. These others haven't—which is why you have this job. Those who do know you think you can do it. I'm not worried that you might forget to hang on; what I want to know is this: if it becomes necessary to let go of that switch, can you do it?"

Don answered almost at once—but not before there had been time for him to think of several things—Dr. Jefferson, who had almost certainly suicided, not simply died—Old Charlie with his mouth quivering but his cleaver hand steady and sure—and an undying voice ringing through the fog, "Venus and Freedom!"

"Guess I can if I have to."

"Good. I'm by no means sure that I could. I'm depending on you, sir, if worse comes to worst, not to let my ship be captured." He went forward.

Tension mounted, tempers got edgy. They had no way to be sure that they would come out near the Federation task force; that force might be using something other than what was assumed to be the maximum-performance orbit. They could not even be certain that the Federation forces were not already on Mars, already in command and difficult to dislodge. The Little David's laboratory miracles were designed for ship-to-ship encounter in space, not for mopping up on the surface of a planet.

Conrad had another worry, one that he did not voice, that the ship's weapons might not work as planned. More than any of the rest he knew the weakness of depending on theoretical predictions. He knew how frequently the most brilliant computations were confounded by previously unsuspected natural laws. There was no substitute for test—and these weapons had not been tested. He lost his habitual grin and even got into a bad-tempered difference of opinion with Rhodes as to the calculated time of "coming out."

The difference of opinion was finally settled; a half hour later Rhodes said quietly, "It's almost time, gentlemen. Battle stations." He went to his own seat, strapped himself in, and snapped, "Report!'"

"Copilot."

"Radio!"

"Radar!"

"Special weapons ready."

"Dead man!" Don finished.

There was a long wait while the seconds oozed slowly away. Rhodes spoke quietly into a microphone, warning Malath to be ready for free fall, then called out, "Stand by!" Don took a tighter grip on the demolition switch.

Suddenly he was weightless; ahead of him and in the passenger ports on each side the stars burst into being. He could not see Mars and decided that it must be "under" the ship. The Sun was somewhere aft; it was not in his eyes. But his view ahead was excellent; the Little David, having begun life as a winged shuttle, had an airplane-type conning port in front of the piloting chairs. Don's position let him see as clearly as Rhodes and his copilot and much better than could the others.

"Radar?" inquired Rhodes.

"Take it easy, Skipper. Even the speed of light is—Oh, oh! Blips!"

"Coordinates and range!"

"Theta three five seven point two; phi minus zero point eight; range radius six eight oh."

"I'm feeding it in automatically," Conrad cut in sharply.

"Tracking?"

"Not yet."

"In range?"

"No. I think we should sit tight and close range as much as possible. They may not have seen us."

They had slowed their headlong flight earlier to permit maneuvering; nevertheless they were closing with the "blips" at more than ninety miles a second. Don strained his eyes to try to make out the ships, if such the radar reflections were. No use—his protoplasmic scanners were no match for electronic ones.

They stayed that way, nerves on edge and stomachs tight, and range steadily closing, until it seemed that the blips must not be the task force, perhaps were even some wandering uncharted asteroid—when the radio alarm, sweeping automatically the communication frequencies, clangingly broke the silence. "Get it!" shouted Rhodes.

"Coming up." There was a short wait. "They demanded that we identify. They're our babies, all right."

"Switch it over here." Rhodes turned to Conrad. "How about it?"

"I ought to be closer. Stall 'em!" Conrad's face was grey and wet with sweat.

Rhodes touched a key and spoke into his mike. "What ship are you? Identify yourself."

The answer was amplified through the horn over the Captain's head. "Identify or be fired upon."

Rhodes glanced again at Conrad, who was too busy to look back. Rhodes spoke into the mike, "This is the destroyer Little David, commissioned privateer, Venus Republic. Surrender immediately."

Don strained his eyes again. It seemed to him that there were three new "stars" dead ahead.

The answer came back with hardly more than transmission delay. "Federation flagship Peacemaker to pirate ship Little David: surrender or be destroyed."

To Rhodes' inquiry Conrad turned a face contorted with uncertainty. "It's still pretty far. The track hunts on me. I might miss."

"No time! Go ahead!"

Don could see them now—ships, growing unbelievably. Then, most suddenly, one was a silver globe, then a second—and a third. A cluster of incredible, Gargantuan Christmas tree ornaments where had been three mighty warships. They continued to swell, drew to the left and flashed past the ship . . . the "battle" was over.

Conrad sighed shakily. "That's all, Captain." He turned and said, "Don, you'd make us all feel easier if you'd open that arming switch. We're not going to need it."

Mars swam below them, ruddy and beautiful. Schiaparelli Station, I. T. & T.'s powerful interplanetary radio, had already had a silvery "hat" placed on it to guard the secret of their strike; Captain Rhodes had spoken with a lesser station, warning of their arrival. In less than an hour they would ground near da Thon. Malath himself had come out of his icebox, no longer sick and weary but pert as a cricket, willing to risk the warm, thick, moist air of the cabin for a view of home.

Don climbed back into his battle-station saddle for a better view. The fabulous canali were already plain to the eye; he could see them cutting through the soft greens and the dominant orange and brick red. It was winter in the south; the planet wore its south pole cap jauntily, like a chef's hat. The fancy reminded him of Old Charlie; he thought of him with gentle melancholy, memory softened by all that had gone between.

Mars at last . . . he'd be seeing his parents perhaps before the day was out—and give his father the ring. This was certainly not the way they had planned it.

Next time he would try not to take the long way round.

Rolling Stones

I - THE UNHEAVENLY TWINS

The two brothers stood looking the old wreck over. 'Junk,' decided Castor.

'Not junk,' objected' Pollux. 'A jalopy - granted. A heap any way you look at it A clunker possibly. But not junk.'

'You're an optimist, Junior.' Both boys were fifteen; Castor was twenty minutes older than his brother.

'I'm a believer, Grandpa - and you had better be, too. Let me point out that we don't have money enough for anything better. Scared to gun it?'

Castor stared up the side of the ship. 'Not at all - because that thing will never again rise high enough to crash. We want a ship that will take us out to the Asteroids - right? This superannuated pogo stick wouldn't even take us to Earth.'

'It will when I get through hopping it up - with your thumb-fingered help. Let's look through it and see what it needs.'

Castor glanced at the sky. 'Its getting late.' He looked not at the Sun making long shadows on the lunar plain, but at Earth, reading the time from the sunset line now moving across the Pacific.

Look, Grandpa, are we buying a ship or are we getting to supper on time?'

Castor shrugged. 'As you say, Junior.' He lowered his antenna, then started swarming up the rope ladder left there for the accommodation of prospective customers. He used his hands only and despite his cumbersome vacuum suit his movements were easy and graceful.

Pollux swarmed after him. Castor cheered up a bit when they reached the control room. The ship had not been stripped for salvage as completely as had many of the ships on the lot. True, the ballistic computer was missing but the rest of the astrogation instruments were in place and the controls to the power room seemed to be complete. The space-battered old hulk was not a wreck, but merely obsolete. A hasty look at the power room seemed to confirm this.

Ten minutes later Castor, still mindful of supper, herded Pollux down the ladder. When Castor reached the ground Pollux said, 'Well?'

'Let me do the talking.'

The sales office of the lot was a bubble dome nearly a mile away; they moved toward it with the easy, fast lope of old Moon hands. The office airlock was marked by a huge sign:

DEALER DAN
THE SPACESHIP MAN
CRAFT OF ALL TYPES ** SCRAP METAL *** SPARE PARTS
FUELING & SERVICE
(AEC License No. 739024)

They cycled through the lock and unclamped each other's helmets. The outer office was crossed by a railing; back of it sat a girl receptionist. She was watching a newscast while buffing her nails. She spoke without taking her eyes off the TV tank:

'We're not buying anything, boys - nor hiring anybody.'

Castor said 'You sell spaceships?'

She looked up. 'Not often enough.'

'Then tell your boss we want to see him.'

Her eyebrows went up. 'Whom do you think you are kidding, sonny boy? Mr Ekizian is a busy man.'

Pollux said to Castor, 'Let's go over to the Hungarian, Cas. These people don't mean business.'

'Maybe you're right.'

The girl looked from one to the other, shrugged, and flipped a switch. 'Mr Ekizan - there are a couple of Boy Scouts out here who say they want to buy a spaceship. Do you want to bother with them?'

A deep voice responded, 'And why not? We got ships to sell' Shortly a baldheaded, portly man, dressed in a cigar and a wrinkled moonsuit came out of the inner office and rested his hands on the rail. He looked them over shrewdly but his voice was jovial. 'You wanted to see me?'

'You're the owner?' asked Castor.

'Dealer Dan Ekizian, the man himself. What's on your mind' boys? Time is money.'

'Your, secretary told you,' Castor said ungraciously. 'Spaceships.

Dealer Dan took his cigar out of his mouth and examined it. 'Really? What would you boys want with a spacehip?'

Pollux muttered something; Castor said, 'Do you usually do business out here?' He glanced at the girl.

Ekizan followed his glance. 'My mistake. Come inside.' He opened the gate for them, led them into his office, and seated them. He ceremoniously offered them cigars; the boys refused politely. 'Now out with it kids. Let's not joke.'

Castor repeated, 'Spaceships.'

He pursed his lips. 'A luxury liner, maybe? I haven't got one on the field at the moment but I can always broker a deal.' Pollux stood up. 'He's making fun of us, Cas. Let's go see the Hungarian.'

'Wait a moment Pol. Mr Ekizian, you've got a heap out there on the south side of the field, a class VII, model '93 Detroiter. What's your scrapmetal price on her and what does she mass?' The dealer looked surprised. 'That sweet little job? Why, I couldn't afford to let that go as scrap. And anyhow, even at scrap that would come to a lot of money. If it is metal you boys want' I got it. Just tell me how much and what sort'

'We were talking about that Detroiter.'

'I don't believe I've met you boys before?'

'Sorry, sir. I'm Castor Stone. This is my brother Pollux.'

'Glad to meet you, Mr Stone. Stone,.. Stone? Any relation to - The "Unheavenly Twins" - that's it.'

'Smile when you say that,' said Pollux.

'Shut up, Pol. We're the Stone twins.'

'The frostproof rebreather valve, you invented it, didn't you?'

'That's right.'

'Say' I got one in my own suit. A good gimmick - you boys are quite the mechanics.' He looked them over again. 'Maybe you were really serious about a ship.'

'Of course we were.'

'Hmm . . . you're not looking for scrap; you want something to get around it. I've got just the job for you, a General Motors Jumpbug, practically new. It's been out on one grubstake job to a couple of thorium prospectors and I had to reclaim it. The hold ain't even radiosative.'

'Not interested.'

'Better look at it. Automatic landing and three hops takes you right around the equator. Just the thing for a couple of lively, active boys.'

'About that Detroiter - what's your scrap price?'

Ekizian looked hurt. 'That's a deepspace vessel, son - It's no use to you, as a ship. And I can't let it go for scrap; that's a clean job. It was a family yacht - never been pushed over six g, never had an emergency landing. It's got hundreds of millions of miles still in it. I couldn't let you scrap that ship, even if you were to pay me the factory price. It would be a shame. I love ships. Now take this Jumpbug. . .'

'You can't sell that Detroiter as anything but scrap,' Castor answered. 'It's been sitting there two years that I know of. If you had hoped to sell her as a ship you wouldn't have salvaged the computer. She's pitted, her tubes are no good, and an overhaul would cost more than she's worth. Now what's her scrap price?'

Dealer Dan rocked back and forth in his chair; he seemed to be suffering. 'Scrap that ship? Just fuel her up and she's ready to go - Venus, Mars, even the Jovian satellites.'

'What's your cash price?'

'Cash?'

'Cash.'

Ekizian hesitated, then mentioned a price. Castor stood up and said, 'You were right, Pollux. Let's go see the Hungarian.'

The dealer looked pained. 'If I were to write it off for my own use, I couldn't cut that price - not in fairness to my partners.'

'Come on, Pol.'

'Look, boys, I can't let you go over to the Hungarian's. He'll cheat you.'

Pollux looked savage. 'Maybe he'll do it politely.'

'Shut *up,* Poll!' Castor went on, 'Sorry, Mr Ekizian, my brother isn't housebroken. But we can't do business.' He stood up.

'Wait a minute. That's a good valve you boys thought up. I use it; I feel I owe you something.' He named another and lower sum.

'Sorry. We can't afford it.' He started to follow Pollux out 'Wait!' Ekizian mentioned a third price. 'Cash,' he added.

'Of course. And you pay the sales tax?'

'Well . . . for a cash deal, yes.'

'Good.'

'Sit down, gentlemen. I'll call in my girl and we'll stat the papers.'

'No hurry,' answered Castor. 'We've still got to see what the Hungarian has on his lot - and the government salvage lot, too.'

'Huh? That price doesn't stand unless you deal right now. Dealer Dan, they call me. I got no time to waste dickering twice.'

'Nor have we. See you tomorrow. If it hasn't sold we can take up where we left off.'

'If you expect me to hold that price, I'll have to have a nominal option payment.'

'Oh, no, I wouldn't expect you to pass up a sale for us. If you can sell it by tomorrow, we wouldn't think of standing in your way. Come on, Pol.'

Ekizian shrugged. 'Been nice meeting you, boys.'

'Thank you, sir.'

As they closed the lock behind them and waited for it to cycle, Pollux said 'you should have paid him an option.'

His brother looked at him. 'You're retarded, Junior.'

On leaving Dealer Dan's office the boys headed for the spaceport, intending to catch the passenger tube back to the city, fifty miles west of the port. They had less than thirty minutes if they were to get home for supper on time - unimportant in itself but Castor disliked starting a family debate on the defensive over a side issue. He kept hurrying Pollux along.

Their route took them through the grounds of General Synthetics Corporation, square miles of giant cracking plants, sun screens, condensers, fractionating columns, all sorts of huge machinery to take advantage of the burning heat, the bitter cold, and the endless vacuum for industrial chemical engineering purposes - a Dantesque jungle of unlikely shapes. The boys paid no attention to it; they were used to it. They hurried down the company road in the flying leaps the Moon's low gravity permitted, making twenty miles an hour. Half way to the port they were overtaken by a company tractor; Pollux flagged it down.

As he ground to a stop, the driver spoke to them via his cab radio: 'What do you want?'

'Are you meeting the Terra shuttle?'

'Subject to the whims of fate - yes.'

'It's Jefferson,' said Pollux. 'Hey, Jeff - it's Cas and Pol. Drop us at the tube station, will you?'

'Climb on the rack. "Mind the volcano - come up the usual way."' As they did so he went on, 'What brings you two carrot-topped accident-prones to this far reach of culture?'

Castor hesitated and glanced at Pollux. They had known Jefferson James for some time, having bowled against him in the city league. He was an old Moon hand but not a native, having come to Luna before they were born to gather color for a novel. The novel was still unfinished.

Pollux nodded. Castor said, 'Jeff, can you keep a secret?'

'Certainly - but permit me to point out that these radios are not directional. See your attorney before admitting any criminal act or intention.'

Castor looked around; aside from two tractor trucks in the distance no one seemed to be in line-of-sight. 'We're going into business.'

'When were you out of it?'

'This is a new line - interplanetary trade. We're going to buy our own ship and run it ourselves.'

The driver whistled. 'Remind me to sell Four-Planet Export short. When does this blitz take place?'

'We're shopping for a ship now. Know of a good buy?'

'I'll alert my spies.' He shut up, being busy thereafter with the heavier traffic near the spaceport. Presently he said, 'Here's your stop.' As the boys climbed down from the rack of the truck he added, 'If you need a crewman, keep me in mind.'

'Okay, Jeff. And thanks for the lift.'

Despite the lift they were late. A squad of marine M.P.s heading into the city on duty preempted the first tube car; by the time the next arrived the ship from Earth had grounded and its passengers took priority Thereafter they got tangled with the changing shift from the synthetics plant. It was well past suppertime when they arrived at their family's apartment a half mile down inside Luna city

Mr Stone looked up as they came in 'Well! the star boarders,' he announced. He was sitting with a small recorder in his lap, a throat mike clipped to his neck.

'Dad' it was unavoidable,' Castor began. 'We -'

'It always is,' his father cut in. 'Never mind the details. Your dinner is in the cozy. I wanted to send it back but your mother went soft and didn't let me.'

Dr Stone looked up from the far end of the living room, where she was modelling a head of their older sister, Meade. 'Correction', she said. 'Your father went soft; I would have let you starve. Meade, quit turning your head.'

'Check,' announced their four-year old brother and got up from the floor where he had been playing chess with their grand mother. He ran towards them. 'Hey, Cas, Pol - where you been? Did you go to the port? Why didn't you take me? Did you bring me anything?'

Castor swung him up by his heels and held him upside down. 'Yes. No. Maybe. And why should we? Here, Pol - catch.' He sailed the child through the air; his twin reached out and caught him, still by the heels.

'Check yourself,' announced Grandmother, 'and mate in three moves. Shouldn't let your social life distract you from your gaane, Lowell.'

The youngster looked back at the board from his upside down position. 'Wrong, Hazel. Now I let you take my queen, then - *Blammie!'*

His grandmother looked again at the board. 'Huh? Wait a minute - suppose I refuse your queen, then - Why, the little scamp! He's trapped me again.

Meade said, 'Souldn't let him beat you so often, Hazel. It's not good for him.'

'Meade, for the ninth time, quit turning your head!'

'Sorry, Mother. Let's take a rest.'

Grandmother snorted. 'You don't think I let him beat me on purpose, do you? You play him; I am giving up the game for good.'

Meade answered just as her mother spoke; at the same time Pollux chucked the boy back at Castor. 'You - take him. I want to eat.' The child squealed. Mr Stone shouted, 'QUIET!'

'And stay quiet,' he went on, while unfastening the throat mike. 'How is a man to make a living in all this racket? This episode has to be done over completely, sent to New York. tomorrow, shot, canned, distributed, and on the channels by the end of the week. It's not possible.'

'Then don't do it,' Dr Stone answered serenely. 'Or work in your room - it's soundproof.'

Mr Stone turned to his wife. 'My dear, I've explained a thousand times that I can't work in there by myself. I get no stimulation. I fall asleep.'

Castor said, 'How's it going, Dad? Rough?'

'Well, now that you ask me, the villains are way ahead and I don't see a chance for our heroes.'

'I thought of a gimmick while Pol and I were out. You have this young kid you introduced into the story slide into the control room while everybody is asleep. They don't suspect him, see? - he's too young so they haven't put him in irons. Once in the control room - ' Castor stopped and looked crestfallen. 'No, it won't do; he's too young to handle the ship. He wouldn't know how.'

'Why do you say that?' his father objected. 'All I have to do is to plant that he has had a chance to. . . let me see -' He stopped; his face went blank. 'No,' he said presently.

'No good, huh?'

'Eh? What? It smells - but I think I can use it. Stevenson did something like it in *Treasure Island* - and I think he got it from Homer. Let's see; if we - ' He again went into his trance.

Pollux had opened the warming cupboard Castor dropped his baby brother on the floor and accepted a dinner pack from his twin. He opened it. 'Meat pie again,' he stated bleakly and sniffed it. 'Synthetic, too.'

'Say that over again and louder,' his sister urged him. 'I've been trying for weeks to get Mother to subscribe to another restaurant.'

'Don't talk, Meade,' Dr Stone answered. 'I'm modelling your mouth.'

Grandmother Stone snorted. 'You youngsters have it too easy. When I came to the Moon there was a time when we had nothing but soya beans and coffee powder for three months.'

Meade answered, 'Hazel, the last time you told us about that it was two months and it was tea instead of coffee.'

'Young lady, who's telling this lie? You, or me?' Hazel stood up and came over to her twin grandsons. 'What were you two doing on Dan Ekizian's lot?'

Castor looked at Pollux, who looked back. Castor said cautiously, 'Who told you that we were there?'

'Don't try to kid your grandmother. When you have been on -'

The entire family joined her in chorus: '"- on the Moon as long as I have!"'

Hazel sniffed. 'Sometimes I wonder why I married!' Her son said, 'Don't try to answer that question,' then continued to his sons, 'Well, what *were* you doing there?' Castor consulted Pollux by eye, then answered, 'Well, Dad, it's like this -'

His father nodded. 'Your best flights of imagination always start that way. Attend carefully, everybody.'

'Well, you know that money you are holding for us?'

'What about it?' 'Three per cent isn't very much.' Mr Stone shook his head vigorously. 'I will not invest your royalties in some wildcat stock. Financial genius may have skipped my generation but when I turn that money over to you, it will be intact'

'That's just it. It worries you. You could turn it over to us now and quit worrying about it.'

'No. You are too young.'

'We weren't too young to earn it'

His mother snickered. 'They got you, Roger. Come here and I'll see if I can staunch the blood'

Dr Stone said serenely, 'Don't heckle Roger when he is coping with the twins, Mother. Meade, turn a little to the left.'

Mr Stone answered, 'You've got a point there, Cas. But you may still be too young to hang on to it. What is this leading up to?'

Castor signalled with his eyes; Pollux took over. 'Dad, we've got a really swell chance to take that money and put it to work. Not a wildcat stock, not a stock at all. We'll have every penny right where we can see it, right where we could cash in on it at any time. And in the meantime we'll be making lots more money.'

'Hmmm...how?'

'We buy a ship and put it to work.'

His father opened his mouth; Castor cut in swiftly, 'We can pick up a Detroiter VII cheap and overhaul it ourselves; we won't be out a cent for wages.'

Pollux filled in without a break. 'You've said yourself, Dad, that we are both born mechaics; we've got the hands for it.'

Castor went on. 'We'd treat it like a baby because it would be our own.'

Pollux: 'We've both got both certificates, control and power. We wouldn't need any crew.'

Castor: 'No overhead - that's the beauty of it.'

Pollux: 'so we carry trade goods out to the Asteroids and we bring back a load of high-grade. We can't lose.'

Castor: 'Four hundred percent, maybe five hundred.'

Pollux: 'More like six hundred.'

Castor: 'And no worries for you.'

Pollux: 'And we'd be out of your hair.'

Castor: 'Not late for dinner.'

Pollux had his mouth open when his father again yelled, 'QUIET!' He went on, 'Edith, bring the barrel. This time we use it.' Mr Stone had a theory, often expressed, that boys should be raised in a barrel and fed through the bunghole. The barrel had no physical existence.

Dr Stone said, 'Yes, dear,' and went on modelling.

Grandmother Stone said, 'Don't waste your money on a Detroiter. They're unstable; the gyro system is no good. Wouldn't have one as a gift. Get a Douglas.'

Mr Stone turned to his mother. 'Hazel, if you are going to encourage the boys in this nonsense -'

'Not at all! Not at all! Merely intellectual discussion. Now with a Douglas they could make some money. A Douglas has a very favorable -'

'Hazel!'

His mother broke off, then said thoughtfully, as if to herself, 'I know there is free speech on the Moon: I wrote it into the charter myself.'

Roger Stone turned back to his sbns. 'See here, boys - when the Chamber of Commerce decided to include pilot training in their Youth-Welfare program I was all for it. I even favored it when they decided to issue junior licenses to anybody who graduated high in the course. When you two got your jets I was proud as could be. It's a young man's game; they license commercial pilots at eighteen and -'

'And they retire them at thirty,' added Castor. 'We haven't any time to waste. We'll be too old for the game before you know it.'

'Pipe down. I'll do the talking for a bit. If you think I'm going to draw that money out of the bank and let you two young yahoos go gallivanting around the system in a pile of sky junk that will probably blow the first time you go over two g's, you had better try another think. Besides, you're going down to Earth for school next September.'

'We've been to Earth,' answered Castor.

'We didn't like it' added Pollux.

'Too dirty

'Likewise too noisy.'

'Groundhogs everywhere,' Castor finished.

Mr Stone brushed it aside. 'Two weeks you were there - not time enough to find out what the place is like. You'll love it, once you get used to it. Learn to ride horseback, play baseball, see the Ocean'

'A lot of impure water,' Castor answered.

'Horses are to eat'

'Take baseball,' Castor continued. 'It's not practical. How can you figure a one-g trajectory and place your hand at the point of contact in the free-flight time between bases? We're not miracle men.'

'*I* played it.'

'But you grew up in a one-g field; you've got a distorted notion of physics. Anyhow, why would we want to learn to play baseball? When we come back, we wouldn't be able to play it here. Why, you might crack your helmet'

Mr Stone shook his head. 'Games aren't the point. Play baseball or not, as suits you. But you should get an education.'

'What does Luna City Technical lack that we need? And if so, why? After all, Dad, you were on the Board of Education'

'I was not; I was mayor.'

'Which made you a member ex-officio - Hazel told us.'

Mr Stone glanced at his mother; she was looking elsewhere. He went on, 'Tech is a good school, of its sort' but we don't pretend to offer everything at Tech. After all, the Moon is still an outpost, a frontier -'

'But you said' Pollux interrupted, 'in your retiring speech as mayor, that Luna City was the Athens of the future and the hope of the new age.'

'Poetic license. Tech is still not Harvard. Don't you boys want to see the world's great works of art? Don't you want to study the world's great literature?'

'We've read *lvanhoe,'* said Castor.

'And we don't want to read *The Mill on the Floss,'* added Pollux.

'We prefer your stuff.'

'My stuff? My stuff isn't literature. It's more of an animated comic strip.'

'We like it' Castor said firmly.

His father took a deep breath. 'Thank you. Which reminds me that I still have a full episode to sweat out tonight, so I will cut this discussion short. In the first place you can't touch the money without my thumbprint - from now on I am going to wear gloves. In the second place both of you are too young for an unlimited license.'

'You could get us a waiver for out-system. When we got back we'd probahly be old enough for unlimited.'

'You're too young!'

Castor said, 'Why, Dad, not half an hour ago you accepted a gimmick from me in which you were going to have an eleven-year-old kid driving a ship.'

'I'll raise his age!'

'It'll ruin your gimmick.'

'Confound it! That's just fiction - and poor fiction at that It's hokum, dreamed up to sell merchandise.' He suddenly looked suspiciously at his son. 'Cas, you planted that gimmick on me. Just to give yourself an argument in favor of this hair-brained scheme - didn't you?'

Castor looked pious. 'Why, Father, how could you think such a thing?'

'Don't Father me! I can tell a hawk from a handsaw.'

'Anybody can,' Grandmother Hazel commented. 'The Hawk class is a purely commercial type while the Hanshaw runabout is a sport job. Come to think about it, boys, a Hanshaw might be better than a Douglas. I like its fractional controls and -'

'Hazel!' 'napped her. son. 'Quit encouraging the boys. And quit showing off. You're not the only engineer in the family.'

'I'm the only good one,' she answered smugly.

'Oh, yes? Nobody ever complained about my work.'

'Then why did you quit?'

'You know why. Fiddle with finicky figures for months on end - and what have you got? A repair dock. Or a stamping mill. And who Ceres?'

'So you aren't an engineer. You're merely a man who knows engineering.'

'What about yourself? You didn't stick with it.'

'No,' she admitted, 'but my reasons were different. I saw three big, hairy, male men promoted over my head and not one of them could do a partial integration without a pencil. Presently I figured out that the Atomic Energy Commission had a bias on the subject of women no matter what the civil service rules said. So I took a job dealing blackjack. Luna City didn't offer much choice in those days - and I had you to support.'

The argument seemed about to die out; Castor judged it was time to mix it up again. 'Hazel, do you really think we should get a Hanshaw? I'm not sure we can afford it.'

'Well, now, you really need a third crewnaan for a -'

'Do you want to buy in?'

'Mr Stone interrupted. 'Hazel, I will not stand by and let you ecourage this. I'm putting my foot down.'

'You look silly standing there on one foot. Don't try to bring me up, Roger. At ninety-five my habits are fairly well set.'

'Ninety-five indeed! Last week you were eighty-five.'

'It's been a hard week. Back to our muttons - why don't you buy in with them? You could go along and keep them out of trouble.'

'What? Me?' Mr Stone took a deep breath. '(A) a marine guard couldn't keep these two junior-model Napoleons out of trouble. I know; Ive tried. (B) I do not like a Hanshaw; they are fuel hogs. (C) l have to turn out three episodes a week of *The Scourge of the Spaceways* - including one which must be taped tonight, if this family will ever quiet down!'

'Roger,' his mother answered' 'trouble in this family is like water for fish. And nobody asked you to buy a Hanshaw, As to your third point' give me a blank spool and I'll dictate the next three episodes tonight while I'm brushing my hair.' Hazel's hair was still thick and quite red. So far, no one had caught her dyeing it. 'It's about time you broke that contract anyway; you've won your bet.'

Her son winced. Two years before be had let himself be trapped into a bet that he could write better stuff than was being channeled up from Earth - and had gotten himself caught in a quicksand of fat checks and options. 'I can't afford to quit' he said feebly.

'What good is money if you don't have time to spend it? Give me that spool and the box'

'You can't write it.'

'Want to bet?'

Her son backed down; no one yet had won a bet with Hazel.

'That's beside the point I'm a family man; I've got Edith and Buster and Meade to think about, too.'

Meade turned her head again. 'If you're thinking about me, Daddy, I'd *like* to go. Why, I've never been any place - except that one trip to Venus and twice to New York.'

'Hold still. Meade,' Dr Stone said quietly. She went on to her husband, 'You know, Roger, I was thinking just the other day how caamped this apartment is. And we haven't been any place, as Meade says, since we got back from Venus.'

Mr Stone stared. 'You too? Edith, this apartment is bigger than any ship compartment; you know that.'

'Yes, but a ship seems bigger. In free fall one gets so much more use out of the room.'

'My deer, do I undersand that you are supporting this junket?'

'Oh' not at all! I was speaking in general terms. But you do sleep better aboard ship. You never snore in free fall.'

'I do not snore!'

Dr Stone did not answer. Hazel snickered. Pollux caught Castor's eye and Castor nodded; the two slipped quietly away to their own room. It was a lot of trouble to get mother involved in a family argument, but worth the effort; nothing important was ever decided until she joined in.

Meade tapped on their door a little later; Castor let her in and looked her over; she was dressed in the height of fashion for the American Old West. 'Square dancing again, huh?'

'Eliminations tonight. Look here, Cas, even if Daddy breaks loose from the money you two might be stymied by being underage for an unlimited license - right?'

'We figure on a waiver. They had also discussed blasting off without a waiver, but it did not seem the time to mention it.

'But you might not get it. Just bear in mind that I will be eighteen next week. Bye now!'

'Good night.'

When she had gone Pollux said, 'That's silly. She hasn't even taken her limited license.'

'No, but she's had astrogation in school and we could coach her.'

'Cas, you're crazy. We can't drag her all around the system; girls are a nuisance.'

'You've got that wrong, Junior. You mean "sisters" - girls are okay.'

Pollux considered this. 'Yeah, I guess you're right.' 'I'm always right.'

'Oh, so? How about the time you tried to use liquid air to -'

'Let's not be petty!'

Grandmother Hazel stuck her head in next. 'Just a quick battle report, boys. Your father is groggy but still fighting gamely.'

'Is he going to let us use the money?'

'Doesn't look like it, as now. Tell me, how much did Ekizian ask you for that Detroiter?'

Castor told her; she whistled. 'The gonoph,' she said softly. 'That unblushing groundhog - I'll have his license lifted.'

'Oh, we didn't agree to pay it.'

'Don't sign with him at all unless I'm at your elbow. I know where the body is buried.'

'Okay. Look, Hazel, you really think a Detroiter VII is unstable?'

She wrinkled her brow. 'Its gyros are too light for the ship's moment of inertia. I hate a ship that wobbles. If we could pick up a war-surplus triple-duo gyro system, cheap, you would have something. I'll inquire around.'

It was much later when Mr Stone looked in. 'Still awake, boys?'

'Oh, sure, come in.'

'About that matter we were discussing tonight -'

Pollux said, 'Do we get the money?'

Castor dug him in the ribs but it was too late. Their father said, 'I told you that was out. But I wanted to ask you: did you, when you were shopping around today, happen to ask, us, about any larger ships?'

Castor looked blank. 'Why, no sir. We couldn't afford anything larger could we, Pol?'

'Gee, no! Why do you ask, Dad?'

'Oh, nothing, nothing at all! Uh, good night.'

He left. The twins turned to each other and solemn!y shook hands.

II - A CASE FOR DRAMATIC LICENSE

At breakfast the next morning - 'morning' by Greenwich time, of course; itwas still late afternoon by local sun time and would be for a couple of days - the Stone family acted out the episode Hazel had dictated the night before of Mr Stone's marathon adventure serial. Grandma Hazel had stuck the spool of dictation into the autotyper as soon as she had gotten up; there was a typed copy for each of them. Even Buster had a small side to read and Hazel played several parts, crouching and jumping around and shifting her voice from rusty bass to soprano.

Everybody got into the act - everybody but Mr Stone; he listened with a dour try-to-make-me-laugh expression.

Hazel finished her grand cliff-hanging finale by knocking over her coffee She plucked the cup out of the air and had a napkin under the brown flood before it could reach the floor under the urge of the Moon's leisurely field. 'Well?' she said breathlessly to her son, while still panting from the Galactic Overlord's frantic attempts to escape a just fate. 'How about it? Isn't that a dilly? Did we scare the dickens out of 'em or didn't we?'

Roger Stone did not answer; he merely held his nose. Hazel looked amazed. 'You didn't *like* it? Why, Roger, I do believe you're jealous. To think I would raise a son with spirit so mean that he would be envious of his own mother!'

Buster spoke up. '*I* liked it Let's do that part over where I shoot the space pirate.' He pointed a finger and made a zizzing noise. 'Whee! Blood all over the bulkheads!'

'There's your answer, Roger. Your public. If Buster likes it, you're in.'

'I thought it was exciting,' Meade put in. 'What was wrong with it' Daddy?'

'Yes,' agreed Hazel belligerently. 'Go ahead. Tell us.'

'Very well. In the first place, spaceships do not make hundred-and eighty-degree turns.'

'This one does!'

'In the second place, what in blazes is this "Galactic Overlord" nonsense? When did he creep in?'

'Oh, that! Son, your show was dying on its feet, so I gave it a transfusion.'

'But "Galactic Overlords" - now, really! It's not only preposterous: it's been used over and over again.'

'Is that bad? Next week I'm going to equip *Hamlet* with atomic propulsion and stir it in with *The Comedy of Errors.* I suppose you think Shakespeare will sue me?'

'He will if he can stop spinning.' Roger Stone shrugged 'I'll send it in. There's no time left to do another one and the contract doesn't say it has to be good: it just says I have to deliver it. They'll rewrite it in New York anyway.'

His mother answered, 'Even money says your fan mail is up twenty-five per cent on this episode.'

'No, thank you. I don't want you wearing yourself out writing fan mail - not at your age.'

'What's wrong with my age? I used to paddle you twice a week and I can still do it. Come on; put up your dukes!'

'Too soon after breakfast.'

'Sissy! Pick your way of dying - Marquis of Queensbury, dockside, or kill-quick.'

'Send around your seconds; let's do this properly. In the meantime - ' He turned to his sons. 'Boys, have you any plans for today?'

Castor glanced at his brother, then said cautiously, 'well, we were thinking of doing a little more shopping for ships.

'I'll go with you.'

Pollux looked up sharply. 'You mean we get the money?' His brother glared at him. Their father answered, 'No, your money stays in the bank where it belongs.'

'Then why bother to shop?' He got an elbow in the ribs for this remark.

'I'm interested in seeing what the market has to offer,' Mr Stone answered. 'Coming, Edith?'

Dr Stone answered, 'I trust your judgement, my dear.'

Hazel gulped more coffee and stood up. 'I'm coming along.'

Buster bounced down out of his chair. 'Me, too!'

Dr. Stone stopped him. 'No, dear. Finish your oatmeal.'

'No! I'm going, too. Can't I, Grandma Hazel?'

Hazel considered it. Riding herd on the child outside the pressurised city was a full-time chore; he was not old enough to be trusted to handle his vacuum-suit controls properly. On this occasion she wanted to be free to give her full attention to other matters. 'I'm afraid not, Lowell. Tell you what, sugar, I'll keep my phone open and we'll play chess while I'm away.'

'It's no fun to play chess by telephone. I can't tell what you are thinking.'

Hazel stared at him. 'So that's it? I've suspected it for some time. Maybe I can win a game once. No, don't start whimpering - or I'll take your slide rule away from you for a week.' The child thought it over, shrugged, and his face became placid. Hazel turned to her son. 'Do you suppose he really does hear thoughts?'

Her son looked at his least son. 'I'm afraid to find out.' He sighed and added, 'Why couldn't I have been born into a nice, normal, stupid family? Your fault, Hazel.'

'His mother patted his arm. 'Don't fret' Roger. You pull down the average.'

'Hummph! Give me that spool. I'd better shoot it off to New York before I lose my nerve.'

Hazel fetched it; Mr Stone took it to the apartment phone, punched in the code for RCA New York with the combination set for highspeed transcription relay. As he slipped the spool into its socket he added, 'I shouldn't do this. In addition to that "Galactic Overlord" nonsense, Hazel, you messed up the continuity by killing off four of my standard characters.'

Hazel kept her eye on the spool; it had started to revolve. 'Don't worry about it. I've got it all worked out. You'll see.'

'Eh? What do you mean? Are you intending to write more episodes? I'm tempted to go limp and let you struggle with it - I'm sick of it and it would serve you right. Galactic Overlords indeed!'

His mother continued to watch the spinning spool in the telephone. At highspeed relay the thirty-minute spool zipped through in thirty seconds. Shortly it went spung! and popped up out of the socket; Hazel breathed relief. The episode was now either in New York, or was being held automatically in the Luna City telephone exchange, waiting for a break in the live Luna-to-Earth traffic. In either case it was out of reach, as impossible to recall as an angry word.

'Certainly I plan to do more episodes' she told him. 'Exactly seven, in fact.'

Huh! Why seven?'

Haven't you figued out why I am kiling off characters? Seven episodes is the end of this quarter and a new option date. This time they won't pick up your option because every last one of the characters will be dead and the story will be over. I'm taking you off the hook, son.'

'What? Hazel, you can't do that! Adventure serials never end.'

'Does it say so in your contract?'

'No, but -'

'You've been grousing about how you wanted to get off this golden treadmill. You would never have the courage to do it yourself, so your loving mother has come to the rescue. You're a free man again, Roger.'

'But -' His face relaxed. 'I suppose you're right Though I would prefer to commit suicide, even literary suicide, in my own way and at my own time. Mmm. .. see here, Hazel, when do you plan to kill off John Sterling?'

'Him? Why, Our Hero has to last until the final episode, naturally. He and the Galactic Overlord do each other in at the very end. Slow music.'

'Yes. Yes, surely... that's the way it would have to be. But you can't do it'

'Why not?'

'Because I insist on writing that scene myself. I've hated that mealymouthed Galahad ever since I thought him up. I'm not going to let anyone else have the fun of killing him; he's mine!'

His mother bowed. 'Your honour, sir.'

Mr Stone's face brightened; he reached for his pouch and slung it over his shoulder. 'And now let's look at some spaceships!'

'Geronimo!'

As the four left the apartment and stepped on the slid eway that would take them to the pressure lfft to the surface Pollux said to his grandmother, 'Hazel, what does "Geronimo" mean?'

'Ancient Druid phrase meaning "Let's get out of here even if we have to walk." So pick up your feet.'

III - THE SECONDHAND MARKET

They stopped at the Locker Rooms at East Lock and suited up. As usual, Hazel unbelted her gun and strapped it to her vacuum suit. None of the others was armed; aside from civic guards and military police no one went armed in Luna City at this late date except a few of the very oldtimers like Hazel herself. Castor said' 'Hazel, why do you bother with that?'

'To assert my right. Besides, I might meet a rattlesnake.'

'Rattlesnakes? On the Moon? Now, Hazel!'

'"Now, Hazel"' yourself. More rattlesnakes walking around on their hind legs than ever wriggled in the dust. Anyhow, do you remember the reason the White Knight gave Alice for keeping a mouse trap on his horse?'

'Uh, not exactly.'

'Look it up when we get home. You kids are ignorant Give me a hand with this helmet.'

The conversation stopped, as Buster was calling his grandmother and insisting that they start their game. Castor could read her lips through her helmet; when he had his own helmet in place and his suit radio switched on he could hear them arguing about which had the white men last game. Hazel was preoccupied thereafter as Buster, with the chess board in front of him, was intentionally hurrying the moves, whereas Hazel was kept busy visualising the board.

They had to wait at the lock for a load of tourists, just arrived in the morning shuttle from Earth, to spill out. One of two women passengers stopped and stared at them. 'Thelma', she said to her companion, 'that little man - he's wearing a *gun.'*

The other woman urged her along. 'Don't take notice', she said. 'It's not polite.' She went on, changing the subject 'I wonder where we can buy souvenir turtles around here? I promised Herbert.'

Hazel turned and glared at them; Mr Stone took her arm and urged her into the now empty lock. She continued to fume as the lock cycled. 'Groundhogs! Souvenir turtles indeed!'

'Mind your blood pressure, Hazel', her son advised.

'You mind yours.' She looked up at hiin and suddenly grinned. 'I should ha' drilled her, podnuh - like this.' She made a fast draw to demonstrate, then, before returning the weapon to its holster, opened the charge chamber and removed a cough drop. This she inserted through the pass valve of her helmet and caught it on her tonue. Sucking it, she continued. 'Just the same, son, that did it. Your mind may not be made up; mine is. Luna is getting to be like any other ant hill. I'm going out somewhere to find elbow room, about a quarter of a billion miles of it'

'How about your pension?'

'Pension be hanged! I got along all right before I had it' Hazel' along with the other remaining Founding Fathers - and mothers - of the lunar colony, had been awarded a lifetime pension from a grateful city. This might be for a long period, despite her age, as the normal human life span under the biologically easy conditions of the Moon's low gravity had yet to be determined; the Luna city geriatrics clinic regularly revised the estimate upwards.

She continued, 'How about you? Are you going to stay here, like a sardine in a can? Better grab your chance, son, before they run you for office again. Oueen to king's bishop three, Lowell.'

'We'll see. Pressure is down; let's get moving.'

Castor and Pollux carefully stayed out of the discussion; things were shaping up.

As well as Dealer Dan's lot, the government salvage yard and that of the Bankrupt Hungarian were, of course, close by the spaceport The Hungarian's lot sported an ancient sun-tarnished sign - BARGAINS! BARGAINS!! BARGAINS!!! GOING OUT OF BUSINESS - but there were no bargains there, as Mr Stone decided in ten minutes and Hazel in five. The government salvage yard held mostly robot freighters without living quarters - one-trip ships, the interplanetary equivalent of disarded packing cases - and obsolete military craft unsuited for most private uses. They ended up at Ekizian's lot.

Pollux headed at once for the ship he and his brother had picked out. His father immediately called him back 'Hey,' Pol! What's your hurry?'

'Don't you want to see our ship?'

'Your ship? Are you still laboring under the fancy that I am going to let you two refugees from a correction school buy that *Deiroiter?'*

'Huh? Then what did we come out here for?'

'I want to look at some ships. But I am not interested in a Detroiter VII.'

Pollux said, 'Huh! See here, Dad, we aren't going to settle for a jumpbug. We need a - 'The rest of his protest was cut off as Castor reached over and switched off his walkie-talkie; Castor picked it up:

'What sort of a ship, Dad? Pol and I have looked over most of these heaps, one time or another.'

'Well, nothing fancy. A conservative family job. Let's look at that Hanshaw up ahead.'

Hazel said' 'I thought you said Hanshaws were fuel hogs, Roger?'

'True, but they are very comfortable. You can't have everything.'

'Why not?'

Pollux had switched his radio back on immediately. He put in, 'Dad, we don't want a runabout. No cargo space.' Castor reached again for his belt switch; he shut up.

But Mr Stone answered him. 'Forget about cargo space. You two boys would lose your shirts if you attempted to compete with the sharp traders running around the system. I'm looking for a ship that will let the family make an occasional pleasure trip; I'm not in the market for a commercial freighter.'

Pollux shut up; they all went to the Hanshaw Mr Stone had pointed out and swarmed up into her control room. Hazel used both hands and feet in climbing the rope ladder but was only a little behind her descendants. Once they were in the ship she went down the hatch into the power room; the others looked over the control roof and the living quarters, combined in one compartment. The upper or bow end was the control station with couches for pilot and copilot. The lower or after end had two more acceleration couches for passengers, all four couches were reversible, for the ship could be tumbled in flight' caused to spin end over end to give the ship arificial 'gravity' through centrifugal force - in which case the forward direction would be 'down', just the opposite of the 'down' of flight under power.

Pollux looked over these arrangements with distaste. The notion of cluttering up a ship with gadgetry to coddle the tender stomachs of groundhogs disgusted him. No wonder Hanshaws were fuel hogs I

But his father thought differently. He was happily stretched out in the pilot's couch, fingering the controls. 'This baby might do', he announced, 'if the price is right.'

Castor said, 'I thought you wanted this for the family, 'I do.'

'Be pretty cramped in here once you rigged extra couches. Edith won't like that'

'You let me worry, about your mother. Anyhow, there are enough couches now.

'With only four? How do you figure?'

'Me, your mother, your grandmother, and Buster. If Meade is along we'll rig something for the baby. By which you may conclude that I am really serious about you two juvenile delinquents finishing your schooling. Now don't blow your safeties! - I have it in mind that you two can use this crate to run around in after you finish school. Or even during vacations, once you get your unlimited licenses. Fair enough?'

The twins gave him the worst sort of argument to answer; neither of them said anything. Their expressions said everything that was necessary. Their father went on, 'See here - I'm trying to be fair and I'm trying to. be generous. But how many boys your age do you know, or have even heard of, who have their own ship? None - right? You should get it through your heads that you are not supermen.'

Castor grabbed at it. 'How do you know that we are not "supermen"?'

Poliux followed through with, 'Conjecture, pure conjecture.' Before Mr Stone could think of an effective answer his mother poked her head up the power room hatch. Her expression seemed to say she had whiffed a very bad odor. Mr Stone said, 'What's the trouble, Hazel? Power plant on the blink?'

'"On the blink", he says! Why, I wouldn't lift this clunker at two gravities.'

'What's the matter with it?'

'I never saw a more disgracefully abused - No, I won't tell you. Inspect it yourself; you don't trust my engineering ability.'

'Now see here, Hazel, I've never told you I don't trust your engineering.'

'No, but you don't. Don't try to sweettalk me; I *know.* So check the power room yourself. Pretend I haven't seen it'

Her son turned away and headed for the outer door, saying huffily, 'I've never suggested that you did not know power plants. If you are talking about that Gantry design, that was ten years ago; by now you should have forgiven me for being right about it.'

To the surprise of the twins Hazel did not continue the argument but followed her son docilely into the air lock. Mr Stone started down the rope ladder; Castor pulled his grandmother aside, switched off both her radio and and pushed his helmet into contact with hers so that he might speak with her in private. 'Hazel, what was wrong with the power plant? Pol and I went through this ship last week - I didn't spot anything too bad.'

Hazel look at him pityingly. 'You've been losing sleep lately? It's obvious - only four couches.'

'Oh.' Castor switched on his radio and silently followed his brother and father to the ground.

Etched on the stern of the next ship they visited was *Cherub, Roma, Terra,* and she actually was of the Carlotti Motors *Angel* series, though she resembled very little the giant Archangels, She was short - barely a hundred fifty feet high - and slender, and she was at least twenty years old. Mr Stone had been reluctant to inspect her. 'She's too big for us', he protested' 'and I'm not looking for a cargo ship.'

'Too big how?' Hazel asked '"Too big" is a financial term, not a matter of size. And with her cargo hold empty, think how lively she'll be. I like a ship that jumps when I twist its tail - and so do you.'

'Mmmm, yes,' he admitted. 'Well, I suppose it doesn't cost anything to look her over.'

'You're talking saner every day, son.' Hazel reached for the rope lader.

The ship was old and old-fashioned and she had plied many a lonely million miles of space, but, thanks to the preservative qualities of the Moon's airless waste, she had not grown older since the last time her jets bad blasted. She had simply slumbered timelessly, waiting for someone to come along and appreciate her sleeping beauty. Her air had been. salvaged; there was no dust in her compartments. Many of her auxiliary fittings had been stripped and sold, but she herself was bright and clean and spaceworthy.

The light Hazel could see in her son's eyes she judged to be love at first sight. She hung back and signaled the twins to keep quiet. The open airlock had let them into the living quarters; a galley-saloon, two little staterooms, and a bunkroom. The control room was separate, above them, and was a combined conn. & comm. Roger Stone immeiately climbed into it.

Below the quarters was the cargo space and below that the power room. The little ship was a passenger-carrying freighter, conversely a pasenger ship with cargo space; it was this dual nature which had landed her, an unwanted orphan, in Dealer Dan's secondhand lot. Too slow when carrying cargo to compete with the express liners, she could carry too few passengers to make money without a load of freight, Although of sound construction she did not fit into the fiercely competitive business world.

The twins elected to go on down into the power room. Hazel poked around the living quarters, nodded approvingly at the galley, finally climbed up into the control room. There she found her son stretched out in the pilot's couch and fingering the controls. Hazel promptly swung herself into the copilot's couch, settled down in the bare rack - the pneumatic pads were missing - and turned her head toward Roger Stone. She called out 'All stations manned and ready, Captain !'

He looked at her and grinned. 'Stand by to raise ship!'

She answered, 'Board green! Clear from tower! Ready for count off!'

'Minus thirty! Twenty-nine - twentyeight - ' He broke off and added sheepishly, 'It *does* feel good.'

'You're dern tootin' it does. Let's grab ourselves a chunk of it before we're too old. This city life is getting us covered with moss.'

Roger Stone swung his long legs out of the pilot's couch. 'Um, maybe we should. Yes, we really should.'

Hazel's booted feet hit the deck plates by his. 'That's my boy! I'll raise you up to man size yet. Let's go see what the twins have taken apart.'

The twins were still in the power room. Roger went down first; he said to Castor, 'Well, son, how does it look? Will she raise high enough to crash?'

Castor wrinkled his forehead. 'We haven't found anything wrong, exactly, but they've taken her boost units out. The pile is just a shell.'

Hazel said, 'What do you expect? For 'em to leave "hot" stuff sitting in a decommissioned ship? In time the whole stern would be radioactive, even if somebody didn't steal it.

Her son answered, 'Quit showing off, Hazel, Cas knows that. We'll check the log data and get a metallurgical report later - if we ever talk business.'

Hazel answered, 'King's knight to queen bishop five. What's the matter, Roger? Cold feet?'

'No, I like this ship. . . but I don't know that I can pay for her. And even if she were a gift, it will cost a fortune to overhaul her and get her ready for space.'

'Pooh! I'll run the overhaul myself, with Cas and Pol to do the dirty work. Won't cost you anything but dockage. As for the price, we'll burn that bridge when we come to it.'

'I'll supervise the overhaul, myself.'

'Want to fight? Let's go down and find out just what inflated notions Dan Ekizian has this time. And remember - let me do the talking.'

'Now wait a minute - I never said I was going to buy this bucket.'

'Who said you were? But it doesn't cost anything to dicker. I can make Dan see reason.'

Dealer Dan Ekizian was glad to see them, doubly so when he found that they were interested, not in the Detroiter VII, but in a larger, more expensive ship. At Hazel's insistence she and Ekizian went into his inner office alone to discuss prices. Mr Stone let her get away with it, knowing that his mother drove a merciless bargain. The twins and he waited outside for quite a while; presently Mr Ekizian called his office girl in.

She came out a few minutes later, to be followed shortly by Ekizian and Hazel. 'It's all settled', she announced, looking smug.

The dealer smiled grudgingly around his cigar. 'Your mother is a very smart woman, Mister Mayor.'

'Take it easy!' Roger Stone protested. 'You are both mixed up in your timing. I'm no longer mayor, thank heaven - and nothing is settled yet. What are the terms?'

Ekizian glanced at Hazel, who pursed her lips. 'Well, now, son', she said slowly, 'it's like this. I'm too old a woman to fiddle around. I might die in bed, waiting for you to consider all sides of the question. So I bought it'

'You?'

'For all practical purposes. It's a syndicate. Dan puts up the ship; I wangle the cargo - and the boys and I take the stuff out to the Asteroids for a fat profit. I've always wanted to be a skipper.'

Castor and Pollux had been lounging in the background, listening and watching faces. At Hazel's announcement Pollux started to speak; Castor caught his eye and shook his head. Mr Stone said explosively, 'That's preposterous! I won't let you do it'

'I'm of age, son.' -

'Mr Ekizian, you must be out of your mind.'

The dealer took his cigar and stared at the end of it. 'Business is business.'

'Well...at least you won't get my boys mixed up in it That's out!'

'Mmm. . . ' said Hazel. 'Maybe. Maybe not. Let's ask them.'

'They're not of age.'

'No. . . not quite. But suppose they went into court and asked that I be appointed their guardian?'

Mr Stone listened to this quietly, then turned to his sons.'Cas. . .

Pol . . . did you frame this with your grandmother?'

Pollux answered, 'No, sir.'

'Would you do what she suggests?'

Castor answered, 'Now, Dad, you know we wouldn't like to do anything like that.'

'But would you do it, eh?'

'I didn't say so, sir.'

'Hmm - ' Mr Stone turned back. 'This is pure blackmail - and I won't stand for it. Mr Ekizian, you knew that I came in here to bid on that ship. You knew that my mother was to bargain for it as *my agent.* You both knew that - but you made a deal behind my back. Now either you set that so-called deal aside and we start over - or I haul both of you down to the Better Business Bureau.

Hazel was expressionless; Mr. Ekizan examined his rings.

'There's something in what you say, Mr Stone. Suppose we go inside and talk it over?'

'I think we had better.'

Hazel followed them in and plucked at her son's sleeve before he had a chance to start anydung. 'Roger? You really want to buy this ship?'

'I do.'

She pointed to papers spread on Ekizian's desk. 'Then just sign right there and stamp your thumb.'

He picked up the papers instead. They contained no suggestion of the deal Hazel had outlined; instead they conveyed to him all right, title and interest in the vessel he had just inspected, and at a price much lower than he had been prepared to pay. He did some hasty mental arithmetic and concluded that Hazel had not only gotten the ship at scrapmetal prices but also must have bulldozed Ekizian into discounting the price by what it would have cost him to cut the ship up into pieces for salvage.

In dead silence he reached for Mr Ekizian's desk stylus, signed his name, then carefully affixed his thumb print. He looked up and caught his mother's eye. 'Hazel, there is no honesty in you and you'll come to a bad end.'

She smiled. 'Roger, you do say the sweetest things.'

Mr Ekizian sighed. 'As I said, Mr Stone, your mother is a very smart woman. I offered her a partnership.'

'Then there *was* a deal?'

Oh, no, no, not that deal - I offered her a partnership in the lot.'

'But I didn't take it.' Hazel added. 'I want elbow room.'

Roger Stone grinned and shigged, stood up. 'Well, anyway - who's skipper now?'

'You are - Captain.'

As they came out both twins said, 'Dad' did you buy it?'

Hazel answered, 'Don't call him "Dad" - he prefers to be called "Captain".'

'Oh.'

'Likewise "Oh",' Pol repeated.

Dr Stone's only comment was, 'Yes, dear, I gave them notice on the lease.' Meade was almost incoherent; Lowell was incoherent After dinner Hazel and the twins took Meade and the baby out to see their ship; Dr Stone - who had shown no excitement even during the Great Meteor Shower - stayed home wrth her husband. He spent the time making lists of things that must be attended to, both in the city and on the ship itself, before they could leave. He finished by making a list that read as follows:

Myself - skipper
Castor - 1st officer & pilot
Meade - 2nd officer & asst. cook
Hazel - chief engineer
Pollux - asst. eng. & relief pilot
Edith - ship's surgeon & cook
Buster - 'supercargo'

He stared at it for a while, then said softly to himself, 'Something tells me this isn't going to work.'

IV - ASPECTS OF DOMESTIC ENGINEERING

Mr Stone did not show his ship's organisation bill to the rest of the family; he knew in his heart that the twins were coming along, but he was not ready to concede it publicly. The subject was not mentioned while they were overhauling the ship and getting it ready for space.

The twins did most of the work with Hazel supervising and their father, from time to time, arguing with her about her engineering decisions. When this happened the twins usually went ahead and did it in the way they thought it ought to be done. Neither of them had much confidence in the skill and knowledge of their elders; along with their great natural talent for mechanics and their general brilliance went a cocksure, half-baked conceit which led them to think that they knew a great deal more than they did.

This anarchistic and unstable condition came to a head over the overhaul of the intermediate injector sequence. Mr Stone had decreed, with Hazel concurring, that all parts which could be disassembled would so be, interior surfaces inspected, tolerances checked, and gaskets replaced with new ones. The intermediate sequence in this model was at comparatively low pressure; the gasketing was of silicone-silica laininate rather than wrung metal.

Spare gaskets were not available in Luna city, but had to be ordered up from Earth; this Mr Stone had done. But the old gaskets appeared to be in perfect condition, as Pollux pointed when they opened the sequence. 'Hazel, why don't we put these back in? They look brand new.'

His grandmother took one of the gaskets, looked it over, flexed it, and handed it back. 'Lots of life left in it; that's sure. Keep it for a spare.'

Castor said, 'That wasn't what Pol said. The new gaskets have to be flown from Rome to Pikes Peak, then jumped here. Might be three days, or it might be a week. And we can't do another thing until we get this mess cleaned up.'

'You can work in the control room. Your father wants all new parts on everything that wears out.'

'Oh, bother! Dad goes too much by the book; you've said so yourself.'

Hazel looked up at her grandson, bulky in his pressure suit. 'Listen, runt, your father is an A-one engineer. I'm privileged to criticise him; you aren't.'

Pollux cut in hastily, 'Just a Sec, Hazel, let's keep personalities out of this. I want your unbiased professional opimon; are those gaskets fit to put back in, or aren't they? Cross your heart and shame the devil.'

'Well. . . I say they are fit to use. You can tell your father I said so. He ought to be here any minute now; I expect he will agree.' She straightened up. 'I've got to go.'

Mr Stone failed to show up when expected. The twins fiddled around, doing a little prelimiharv work on the preheater. Finally Pollux said, 'What time is it?'

'Past four.'

'Dad won't show up this afternoon. Look, those gaskets are all right and, anyhow, two gets you five he'd never know the difference.'

'Well - he would okay them if he saw them.'

'Hand me that wrench.'

Hazel did show up again but by then they had the sequence put back together and had opened up the preheater. She did not ask about the injector sequence but got down on her belly with a flashlight and mirror and inspected the preheater's interior. Her frail body, although still agile as a cricket under the Moon's weak pull, was not up to heavy work with a wrench, but her eyes were sharper - and much more experienced - than those of the twins. Presently she wiggled out. 'Looks good,' she announced. 'We'll put it back together tomorrow. Let's go see what the cook ruined tonight.' She helped them disconnect their oxygen hoses from the ship's tank and reconnect to their back packs, then the three went down out of the ship and back to Luna City.

Dinner was monopolised by a hot argument over the next installment of *The Scourge of the Spaceways.* Hazel was still writing it but the entire family, with the exception of Dr Stone, felt free to insist on their own notions of just what forms of mayhem. and violence the characters should indulge in next. It was not until his first pipe after dinner that Mr Stone got around to inquiring about the day's progress.

Castor explained that they were about to close up the preheater. Mr Stone nodded. 'Moving right along - good! Wait a minute; You'll just have to tear it down again to put in the - Or did they send those gaskets out to the ship? I didn't think they had come in yet?'

'What gaskets?' Pollux said innocently. Hazel glanced quickly at him but said nothing.

'The gaskets for the intermediate injector sequence, of course.'

'Oh, *those!'* Pollux shrugged. 'They were okay, absolutely perfect to nine decimal places - so we put 'em back in.'

'Oh, you did? That's interesting. Tomorrow you can take them out again - and I'll stand over you when you put the new ones in.'

Castor took over. 'But Dad, Hazel said they were okay!'

Roger Stone looked at his mother. 'Well, Hazel?'

She hesitated. She knew that she had not been sufficiently emphatic in telling the twins that their father's engineering instructions were to be carried out to the letter; on the other hand she had told them to check with him. Or had she? 'The gaskets were okay, Roger. No harm done.'

He looked at her thoughtfully. 'So you saw fit to change my instructions? Hazel, are you itching to be left behind?'

She noted the ominously gentle tone of his voice and checked an angry reply. 'No,' she said simply.

'"No" what?'

'No, Captain.'

'Not captain yet, perhaps, but that's the general idea.' He turned to his sons. 'I wonder if you two yahoos understand the nature of this situation?'

Castor bit his lip. Pollux looked at his twin, then back at his father. 'Dad, *you're* the one who doesn't understand the nature of the situation. You're making a fuss over nothing. If it'll give you any satisfaction, we'll open it up again - but you'll simply see that we were right. If you had seen those gaskets, you would have passed them.'

'Probably. Almost certainly. But a skipper's orders as to how he wants his ship gotten ready for space are not subject to change by a dockyard mechanic - which is what you both rate at the moment.

Understand me?'

'Okay, so we should have waited: Tomorrow we'll open her up, you'll see that we were right and we'll close it up again.'

'Wrong. Tomorrow you will go out, open it up, and bring the old gaskets back to me. Then you will both stay right here at home until the new gaskets arrive. You can spend the time contemplating the notion that orders are meant to be carried out.'

Castor said, 'Now just a minute, Dad! You'll put us days behind.'

Pollux added, 'Not to mention the hours of work you are making us waste already.'

Castor: 'You can't expect us to get the ship ready if you insist on jiggling our elbows!'

Pollux: 'And don't forget the money we're saving you.'

Castor: 'Right! It's not costing you a square shilling!'

Pollux: 'And yet you pull this "regulation skipper" act on us.'

Castor: 'Discouraging! That's what it is!'

'Pipe down!' Without waiting for them to comply he stood up and grasped each of them by the scruff of his jacket. Luna's one-sixth gravity permitted him to straight-arm them both; he held them high up off the floor and wide apart. They struggled helplessly, unable to reach anything.

'Listen to me,' he ordered. 'Up to now I hadn't quite decided whether to let you two wild men go along or not. But now my mind's made up.'

There was a short silence from the two, then Pollux said mournfully, 'You mean we don't go?'

'I mean you do go. You need a taste of strict ship's discipline a durn sight more than you need to go to school; these modern schools aren't tough enough for the likes of you. I mean to run a taut ship - prompt, cheerful obedience, on the bounce! Or I throw the book at you. Understand me? Castor?'

'Uh, yes, sir.'

'Pollux?'

'Ayeaye,sir!'

'See that you remember it. Pull a fast-talk like that on me when we're in space and I'll stuff you down each other's throat.' He cracked their heads together smartly and threw them away.

The next day, on the way back from the field with the old gaskets, the twins stopped for a few minutes at the city library. They spent the four days they had to wait boning up on space law. They found it rather sobering reading, particularly the part which asserted that a commanding officer in space, acting independently, may and must maintain his authority against any who might attempt to usurp or dispute it. Some of the cited cases were quite grisly. They read of a freighter captain who, in his capacity as chief magistrate, had caused a mutineer to be shoved out an airlock, there to rupture his lungs in the vacuum of space, drown in his own blood

Pollux made a face. 'Grandpa,' he inquired, 'how would you like to be spaced?'

'No future in it. Thin stuff, vacuum. Low vitamin content'

'Maybe we had better be careful not to irritate Dad. This "captain" pose has gone to his head.'

'It's no pose. Once we raise ship it's legal as church on Sunday. But Dad won't space us, no matter what we do.'

'Don't count on it. Dad is a very tough hombre when he forgets that he's a loving father'

'Junior, you worry too much.'

'So? When you feel the pressure drop remember what I said.'

It had been early agreed that the ship could not stay the *Cherub.* There had been no such agreement on what the new name should be. After several noisy arguments Dr Stone, who herself had no special preference, suggested that they place a box on the dining table into which proposed names might be placed without debate. For one week the slips accumulated; then the box was opened.

Dr Stone wrote them down:

Dauntless Icarus
Jabberwock Susan B. Anthony
H. M. S. Pinafore Iron Duke
The Clunker Morning Star
Star Wagon Tumbleweed
Go-Devil Oom Paul
Onward Viking

'One would think,' Roger grumbled, 'that with all the self-declared big brains there are around this table someone would show some originality. Almost every name on the list can be found in the Big Register - half of them for ships still in commission. I move we strike out those tired, secondhand, wed-before names and consider only fresh ones.'

Hazel looked at him suspiciously. 'What ones will that leave?'

'Well -'

'You've looked them up, haven't you? I thought I caught you sneaking a look at the slips before breakfast.'

'Mother, 'your allegntion is immaterial, irrelevant, and unworthy of you.'

'But true. Okay; let's have a vote. Or does someone want to make a campaign speech?'

Dr Stone rapped on the table with her thimble. 'We'll vote. I've still got a medical association meeting to get to tonight.' As chairman she ruled that any name receiving less than two votes in the first round would be eliminated. Secret ballot was used; when Meade canvassed the vote, seven names had gotten one vote each, none had received two.

Roger Stone pushed back his chair. 'Agreement from this famlly is too much to expect . I'm going to bed. Tomorrow morning I'm going to register her as the R. S. *Deadlock.'*

'Daddy, you wouldn't!' Meade protested.

'Just watch me. The R. S. *Hair Shirt* might be better. Or the R. S. *Madhouse.'*

'Not bad,' agreed Hazel. 'It sounds like us. Never a dull moment.'

'I, for one,' retorted her son, 'could stand a little decent monotony.'

'Rubbish! We thrive on trouble. Do you want to get covered with moss?'

'What's "moss", Grandma Hazell?' Lowell demanded.

'Huh? It's. . . well, it's what rolling stones don't gather.'

Roger snapped his fingers. 'Hazel, you've just named the ship.'

'Eh? Come again.'

'The *Rolling Stones.* No, the *Rolling Stone.'*

Dr Stone glanced up. 'I like that, Roger.'

'Meade?'

'Sounds good, Daddy.'

'Hazel?'

'This is one of your brighter days, son.'

'Stripped of the implied insult, I take it that means "yes."'

'I don't like it,' objected Pollux. 'Castor and I plan to gather quite a bit of moss.'

'It's four to three, even if you get Buster to go along with you and your accomplice. Overruled. The *Roiling Stone* it is.'

Despite their great sizes and tremendous power spaceships are surprisingly simple machines. Every technology goes through three stages: first, a crudely simple and quite unsatisfactory gadget; second, an enormously complicated group of gadgets designed to overcome the shortcomings of the original and achieving thereby somewhat satisfactory performance through extremely complex compromise; third, a final stage of smooth simplicity and efficient performance based on correct understanding of natural laws and proper design therefrom.

In transportation, the ox cart and the rowboat represent the first stage of technology.

The second stage might well be represented by the automobiles of the middle twentieth century just before the opening of interplanetary travel. These unbelievable museum pieces were for the time fast, sleek and powerful -. but inside their skins were assembled a preposterous collection of mechanical buffoonery. The prime mover for such a juggernaut might have rested in one's lap; the rest of the mad assembly consisted of afterthoughts intended to correct the uncorrectable, to repair the original basic mistake in design - for automobiles and even the early aeroplanes were 'powered' (if one may call it that) by 'reciprocating engines.'

A reciprocating engine was a collection of miniature heat engines using (in a basically inefficient cycle) a small percentage of an exothermic chemical reaction, a reaction which was started and stopped every split second. Much of the heat was intentionally thrown away into a 'water jacket' or 'cooling system,' then wasted into the atmosphere through a heat exchanger.

What little was left caused blocks of metal to thump foolishly back-and-forth (hence the name 'reciprocating') and thence through a linkage to cause a shaft and flywheel to spin around. The flywheel (believe it if you can) had no gyroscopic function; it was used to store kinetic energy in a futile attempt to cover up the sins of reciprocation. The shaft at long last caused wheels to turn and thereby propelled this pile of junk over the countryside.

The prime mover was used only to accelerate and to overcome 'friction' - a concept then in much wider engineering use. To decelerate, stop, or turn the heroic human operator used their *own muscle power,* multiplied precariously through a series of levers.

Despite the name 'automobile' these vehicles had no autocontrol circuits; control, such as it was, was exercised second by second for hours on end by a human being peering out through a small pane of dirty silica glass, and judging unassisted and often disastrously his own motion and those of other objects. In almost all cases the operator had no notion of the kinetic energy stored in his missile and could not have written the basic equation. Newton's Laws of Motion were to him mysteries as profound as the meaning of the universe.

Nevertheless millions of these mechanical jokes swarmed over our home planet, dodging each other by inches or failing to dodge. None of them ever worked right; by their nature they could not work right; and they were constantly getting out of order. Their operators were usually mightily pleased when they worked at all. When they did not, which was every few hundred miles *(hundred,* not hundred thousand) they hired a member of a social class of arcane specialists to make inadequate and always expensive temporary repairs.

Despite their mad shortconaings, these 'automobiles' were the most characteristic form of wealth and the most cherished possessions of their time. Three whole generations were slaves to them.

The *Rolling Stone* was the third stage of technology. Her power plant was nearly 100% efficient, and, save for her gyroscopes, she contained almost no moving parts - the power plant used no moving parts at all; a rocket engine is the simplest of all possible heat engines. Castor and Pollux might have found themselves baffled by the legendary Model-T Ford automobile, but the *Roiling Stone* was not nearly that complex, she was merely much larger. Many of the fittings they had to handle were very massive, but the Moon's one-sixth gravity was an enormous advantage; only occasionally did they have to resort to handling equipment.

Having to wear a vacuum suit while doing mechanic's work was a handicap but they were not conscious of it. They had worn space suits whenever they were outside the pressurised underground city since before they could remember; they worked in them and wore them without thinking about them, as their grandfather had worn overalls. They conducted the entire overhaul without pressurising the ship because it was such a nuisance to have to be forever cycling an airlock, dressing and undressing, whenever they wanted anything outside the ship.

An IBM company representative from the city installed the new ballistic computer and ran it in, but after he had gone the boys took it apart and checked it throughout themselves, being darkly suspicious of any upcheck given by a manufacturer's employee. The ballistic computer of a space ship has to be right; without perfect performance from it a ship is a mad robot, certain to crash and kill its passengers. The new computer was of the standard 'I-tell-you-three-times' variety, a triple brain each third of which was capable of solving the whole problem; if one triplet failed, the other two would outvote it and cut it off from action, permitting thereby at least one perfect landing and a chance to correct the failure.

The twins made personally sure that the multiple brain was sane in all its three lobes, then, to their disgust, their father and grandinother checked everything that they had done.

The last casting had bein x-rayed, the last metallurgical report had been received from the spaceport laboratories, the last piece of tubing had been reinstalled and pressure tested; it was time to move the *Rolling Stone* from Dan Ekizian's lot to the port, where a technician of the Atomic Energy Commission - a grease monkey with a Ph.D - would install and seal the radioactive bricks which fired her 'boiler.' There, too, she would take on supplies and reactive mass, stablised monatomic hydrogen; in a pinch the *Rolling Stone* could eat anything, but she performed best on 'singleH.'

The night before the ship was to be towed to the spaceport the twins tackled their father on a subject dear to their hearts - money. Castor made an indirect approach. 'See here, Dad, we want to talk with you seriously.'

'So? Wait till I phone my lawyer.'

'Aw, Dad! Look, we just want to know whether or not you've made up your mind where we are going?'

'Eh? What do you care? I've already promised you that it will be some place new to you. We won't go to Earth, nor to Venus, not this trip.'

'Yes, but *where?'*

'I may just close my eyes, set up a prob on the computer by touch, and see what happens. If the prediction takes us close to any rock bigger than the ship, we'll scoot off and have a look at it. That's the way to enjoy traveling.'

Pollux said, 'But, Dad, you can't load a ship if you don't know where it's going.'

Castor glared at him; Roger Stone stared at him. 'Oh,' he said slowly, 'I begin to see. But don't worry about it. As skipper, it is my responsibility to see that we have whatever we need aboard before we blast.'

Dr Stone said quietly, 'Don't tease them, Roger.'

'I'm not teasing.'

'You're managing to tease me, Daddy,' Meade said suddenly. 'Let's settle it. I vote for Mars.'

Hazel said, 'The deuce it ain't!'

'Pipe down, Mother. Time was, when the senior male member of a family spoke, everybody did what he -'

'Roger, if you think I am going to roll over and play dead-'

'I said' "pipe down." But everybody in this family thinks it's funny to try to get around Pop. Meade sweettalks me. The twins fast-talk me. Buster yells until he gets what he wants. Hazel bullies me and pulls seniority.' He looked at his wife. 'You, too, Edith. You give in until you get your own way.'

'Yes, dear.'

'See what I mean? You all think papa is a schnook. But I'm not. I've got a soft head, a pliable nature, and probably the lowest I.Q. in the family, but this clambake is going to be run to suit me.'

'What's a clambake?' Lowell wanted to know.

'Keep your child quiet, Edith.'

'Yes, dear.'

'I'm going on a picnic, a *wanderjahr*. Anyone who wants to come along is invited. But I refuse to deviate by as much as a million miles from whatever trajectory suits me. I bought this ship from money earned in spite of the combined opposition of my whole family; I did not touch one thin credit of the money I hold in trust for our two young robber barons - and I don't propose to let them run the show.'

Dr Stone said quietly, 'They merely asked where we were going. I would like to know, too.'

'So they did. But why? Castor, you want to know so that you can figure a cargo, don't you?'

'Well - yes. Anything wrong with that? Unless we know what market we're taking it to, we won't know what to stock.'

'True enough. But I don't recall authorising any such commercial ventures. The *Rolling Stone* is a family yacht.'

Pollux cut in with, 'For the love of Pete, Dad! With all that cargo space just going to waste, you'd think that -'

'An empty hold gives us more cruising range.'

'But -'

'Take it easy. This subject is tabled for the moment. What do you two propose to do about your educations?'

Castor said, 'I thought that was settled. You said we could go along.'

'That part is settled. But we'll be coming back this way in a year or two. Are you prepared to go down to Earth to school then - and stay there - until you get your degrees?'

The twins looked at each other; neither one of them said anything. Hazel butted in: 'Quit being so offensively orthodox, Roger. I'll take over their educations. I'll give them the straight data. What they taught me in school durn near ruined me, before I got wise and started teaching myself.'

Roger Stone looked bleakly at his mother. 'You would teach them, all right. No, thanks, I prefer a somewhat more normal approach.'

'"Normal!" Roger, that's a word with no meaning.'

'Perhaps not, around here. But I'd like the twins to grow up as near normal as possible.'

'Roger, have you ever met any normal people? I never have. The so-called normal man is a figment of the imagination; every member of the human race, from Jojo the cave man right down to that final culmination of civilisation, namely me, has been as eooentric as a pet coon - once you caught him with his mask off.'

'I won't dispute the part about yourself.'

'It's true for everybody. You try to make the twins "normal" and you'll simply stunt their growth.'

Roger Stone stood up. 'That's enough. Castor, Pollux - come with me. Excuse us, everybody.'

'Yes, dear.'

'Sissy,' said Hazel. 'I was just warming up to my rebuttal.'

He led them into his study, closed the door. 'Sit down.'

The twins did so. 'Now we can settle this quietly. Boys, I'm quite serious about your educations. You can do what you like with your lives - turn pirate or get elected to the Grand Council. But I won't let you grow up ignorant.'

Castor answered, 'Sure, Dad, but we do study. We study all the time. You've said yourself that we are better engineers than half the young snots that come up from Earth.'

'Granted. But it's not enough. Oh, you can learn most things on your own but I want you to have a formal, disciplined, really sound grounding in mathematics.'

'Huh? Why, we cut our teeth on differential equations!'

Pollux added, "We know Hudson's Manual by heart We can do a triple integration in our heads faster than Hazel can. If there's one thing we *do* know, it's mathematics.'

Roger Stone shook his head sadly. 'You can count on your fingers but you can't reason. You probably think that the interval from zero to one is the same as the interval from ninetynine to one hundred.'

'Isn't it?'

'Is it? If so, can you prove it?' Their father reached up to the spindles on the wall, took down a book spool, and inserted it in the to his study projector. He spun the selector, stopped with a page displayed on the wall screen. It was a condensed chart of fields of mathematics invented, thus far by the human mind. 'Let's see you find your way around that page.'

The twins blinked at it. In the upper lefthand corner of the chart they spotted the names of subjects they had studied; the rest of the array was unknown territory; in most cases they did not even recognise the names of the subjects. In the ordinary engineering forms of the calculus they actually were adept; they had not been boasting. They knew enough of vector analysis to find their way around unassisted in electrical engineering and electronics; they knew classical geometry and trigonometry well enough for the astrogating of a space ship, and they had had enough of non-Euclidean geometry, tensor calculus, statistical mechanics, and quantum theory to get along with an atomic power plant

But it had never occurred to them that they had not yet really penetrated the enormous and magnificent field of mathematics.

'Dad' asked Pollux in a small voice, 'what's a "hyperideal"?'

'Time you found out.'

Castor looked quickly at his father. 'How many of these things have *you* studied, Dad?'

'Not enough. Not nearly enough. But my sons should know more than I do.'

It was agreed that the twins would study mathematics intensively the entire time the family was in space, and not simply under the casual supervision of their father and grandmother but formally and systematically through I.C.S. correspondence courses ordered up from

Earth. They would take with them spools enough to keep them busy for at least a year and mail their completed lessons from any port they might touch. Mr Stone was satisfied, being sure in his heart that any person skilled with mathematical tools could learn anything else he needed to know, with or without a master.

'Now, boys, about this matter of cargo-'

The twins waited; he went on: 'I'll lift the stuff for you -'

'Gee, Dad, that's swell!'

'- at cost.'

'You figure it and I'll check your figures. Don't try to flummox me or I'll stick on a penalty. If you're going to be businessmen, don't confuse the vocation with larceny.'

'Right, sir. Uh. . . we still can't order until we know where we are going.'

'True. Well, how would Mars suit you, as the first stop?'

'Mars?' Both boys got faraway looks in their eyes; their lips moved soundlessly.

'Well? Quit figuring your profits; you aren't there yet'

'Mars? Mars is fine, Dad!'

'Very well. One more thing: fail to keep up your studies and I won't let you sell a tin whistle.'

'Oh, we'll study!' The twins 'got out while they were ahead. Roger Stone looked at the closed door with a fond smile on his face, an expression he rarely let them see, Good boys! Thank heaven he hadn't been saddled with a couple of obedient, well-behaved little nincompoops!

When the twins reached their own room Castor got down the general catalog of Four Planets Export. Pollux said, 'Cas?'

'Don't bother me.'

'Have you ever noticed that Dad always gets pushed around until he gets his own way?'

'Sure. Hand me that slide rule.'

V - BICYCLES AND BLASTOFF

The *Rolling Stone* was moved over to the spaceport by the port's handling & spotting crew - over the protests of the twins, who wanted to rent a tractor and dolly and do it themselves. They offered to do so at half price, said price to be applied against freightage on their trade goods to Mars.

'Insurance?' inquired their father.

'Well, not exactly,' Pol answered.

"W'e'd carry our own risk,' added Castor. 'After all, we've got assets to cover it.'

But Roger Stone was not to be talked into it; he preferred, not unreasonably, to have the ticklish job done by bonded professionals. A spaceship on the ground is about as helpless and unwieldly as a beached whale. Sitting on her tail fins with her bow pointed at the sky and with her gyros dead a ship's precarious balance is protected by her lateral jacks, slanting down in three directions. To drag her to a new position requires those jacks to be raised clear of the ground, leaving the ship ready to topple, vuinerable to any jar. The *Rolling Stone* had to be moved thus through a pass in the hills to the port ten miles away. First she was jacked higher until her fins were two feet off the ground, then a broad dolly was backed under her; to this she was clamped. The bottom handler ran the tractor; the top handler took position in the control room. With his eyes on a bubble level, his helmet hooked by wire phone to his mate, he nursed a control stick which let him keep the ship upright. A hydraulic mercury capsule was under each fin of the ship; by tilting the stick the top handler could force pressure into any capsule to offset any slight irregularity in the road.

The twins followed the top handler up to his station. 'Looks easy,' remarked Pol while the handler tested his gear with the jack still down.

'It is easy,' agreed the handler, 'provided you can outguess the old girl and do the opposite of what she does - only do it first. Get out now; we're ready to start.'

'Look, Mister,' said Castor, we want to learn how. We'll hold still and keep quiet.'

'Not even strapped down - you might twitch an eyebrow and throw me half a degree off.'

'Well, for the love of Pete!' complained Pollux. 'Whose ship do you think this is?'

'Mine, for the time being,' the man answered without rancor. 'Now do you prefer to climb down, or simply be kicked clear of the ladder?'

The twins climbed out and clear, reluctantly but promptly. The *Rolling Stone,* designed for the meteoric speeds of open space, took off for the spaceport at a lively two miles an hour. It took most of a Greenwich day to get her there. There was a bad time in the pass when a slight moonquake set her to rocking, but the top handler had kept her jacks lowered as far as the terrain perraitted. She bounced once on number-two jack, then he caught her and she resumed her stately progress.

Seeing this, Pollux admitted to Castor that he was glad they had not gotten the contract. He was beginnng to realise that this was an estoric skill, like glassblowing or chipping flint arrowheads. He recalled stories of the Big Quake of '31 when nine ships had toppled.

No more temblors were experienced save for the microscopic shivers Luna continually experiences under the massive tidal strains of her eighty-times-heavier cousin Terra. The *Rolling Stone* rested at last on a launching flat on the east side of Leyport, her jet pointed down into splash baffles. Fuel bricks, water, and food, and she was ready to go - anywhere.

The mythical average man needs three and a half pounds of food each day, four pounds of water (for drinking, not washing), and thirty-four pounds of air. By the orbit most economical of fuel, the trip to Mars from the EarthMoon system takes thirty-seven weeks. Thus it would appear that the seven rolling Stones would require some seventy-five thousand pounds of consumable supplies for the trip, or about a ton a week.

Fortunately the truth was brighter or they would never have raised ground. Air and water in a space ship can be used over and over again with suitable refreshing, just as they can be on a planet. Uncounted trillions of animals for uncounted millions of years have breathed the air of Terra and drunk of her streams, yet air of Earth is still fresh and her rivers still run full. The Sun sucks clouds up from the ocean brine and drops it as sweet rain; the plants swarming over the cool green hills and lovely plains of Earth take the carbon dioxide of animal exhalation from the winds and convert it into carbohydrates, replacing it with fresh oxygen.

With suitable engineering a spaceship can be made to behave in the same way.

Water is distilled; with a universe of vacuum around the ship, low-temperature, low-pressure distillation is cheap and easy. Water is no problem - or, rather, shortage of water is no problem. The trick is to get rid of excess, for the human body creates water as one of the by-prodncts of its metabolism, in 'burning' the hydrogen in food. Carbon dioxide can be replaced by oxygen through 'soilless' gardening' - hydroponics. Short-jump ships, such as the EarthMoon shuttles, do not have such equipment, any more than a bicycle has staterooms or a galley, but the *Rolling Stone,* being a deepspace vessel, was equipped to do these things.

Instead of forty-one and a half pounds of supplies per person per day the *Rolling Stone* could get along with two; as a margin of safety and for luxury she carried about three, or a total of about eight tons, which included personal belongings. They would grow their own vegetables en route; most foods carried along would be dehydrated. Meade wanted them to carry shell eggs, but she was overruled both by the laws of physics and her mother - dried eggs weigh so very much less.

Baggage included a tossed salad of books as well as hundreds of the more usual flim spools. The entire family, save the twins tended to be old-fashioned about books; they liked books with covers, volumes one could hold in the lap. Film spools were not quite the same.

Roger Stone required his sons to submit lists of what they proposed to carry to Mars for trade. The first list thus submitted caused him to call them into conference. 'Castor, would you mind explaining this proposed manifest to me?'

'Huh? What is there to explain? Pol wrote it up. I thought it was clear enough.'

'I'm afraid it's entirely too clear. Why all this copper tubing?'

'Well, we picked it up as scrap. Always a good market for copper on Mass.'

'You mean you've already bought it?'

'Oh, no. We just put down a little to hold it.'

'Same for the valves and fittings I suppose?'

'Yes, sir.'

'That's good. Now these other items - cane sugar, wheat, dehydrated potatoes, polished rice. How about those?'

Pollux answered. 'Cas thought we ought to buy hardware; I favored foodstuffs. So compromised.'

'Why did you pick the foods you did?'

'Well, they're all things they grow in the city's airconditioning tanks, so they're cheap. No Earth imports on the list, you noticed.'

'I noticed.'

'But most of the stuff we raise here carries too high a percentage of water. You wouldn't want to carry *cucumbers* to Mars, would you?'

'I don't want to carry anything to Mars; I'm just going for the ride.' Mr Stone put down the cargo list, picked up another. 'Take a look at this.'

Pollux accepted it gingerly. 'What about it?'

'I used to be a pretty fair mechanic myself. I got to wondering just what one could build from the 'hardware' you two want to ship. I figure I could build a fair-sized still. With the "foodstuffs" you want to take a man would be in a position to make anything from vodka to grain alcohol. But I don't suppose you two young innocents noticed that?'

Castor looked at the list. 'Is that so?'

'Hmm - Tell me: did you plan to sell this stuff to the government import agency, or peddle it on the open market?'

'Well, Dad, you know you can't make much profit unless you deal on the open market.'

'So I thought. You didn't expect me to notice what the stuff was good for - and you didn't expect the customs agents on Mars to notice, either.' He looked them over. 'Boys, I intend to try to keep you out of prison until you are of age. After that I'll try to come to see you. each visiting day.' He chucked the list back at them. 'Guess again. And bear in mind that we raise ship Thursday - and that I don't care whether we carry cargo or not.'

Pollux said, 'Oh, for pity's sake, Dad! Abraham Lincoin used to sell whiskey. They taught us that in history. And Winston Churchill used to drink it.'

'And George Washington kept slaves,' his father agreed. 'None of which has anything to do with you two. So scram!'

They left his study and passed through the living room; Hazel was there. She cocked a brow at them. 'Did you get away withit?'

'No.'

She stuck out a hand, palm up. 'Pay me. And next time don't bet that you can outsmart your Pop. He's my boy.'

Cas and Pol settled on bicycles as their primary article of export. On both Mars and Luna prospecting by bicycle was much more efficient than prospecting on foot; on the Moon the oldstyle rock sleuth with nothing but his skis and Shank's ponies to enable him to scout the area where he had landed his jumpbug had almost disappeared; all the prospectors took bicycles along as a matter of course, just as they carried climbing ropes and spare oxygen. In the Moon's one-sixth gravity it was an easy matter to shift the bicycles to one's back and carry it over any obstacle to further progress.

Mars' surface gravity is more than twice that of Luna, but it is still only slightly more than one-third Earth normal, and Mars is a place of flat plains and very gentle slopes; a cyclist could maintain fifteen to twenty miles an hour. The solitary prospector, deprived of his traditional burro, found the bicycle an acceptable and reliable, if somewhat less congenial, substitute. A miner's bike would have looked odd in the streets of Stockholm; oversized wheels, doughnut sand tires, towing yoke and trailer, battery trickle charger, two-way radio, saddle bags, and Geiger-counter mount made it not the vehicle for a spin in the perk - but on Mars or on the Moon it fitted its purpose the way a canoe fits a Canadian stream.

Both planets imported their bicycles from Earth - until recently. Lunar Steel Products Corporation had lately begun making steel tubing, wire, and extrusions from native ore; Sears & Montgomery had subsidised an assembly plant to manufacture miner's bikes on the Moon under the trade name 'Lunocycle' and Looney bikes, using less than twenty per cent. by weight of parts raised up from Earth, undersold imported bikes by half.

Castor and Pollux decided to buy up secondhand bicycles which were consequently flooding the market and ship them to Mars. In interplanetary trade cost is always a matter of where a thing is gravity-wise - not how far away. Earth is a lovely planet but all her products lie at the bottom of a very deep 'gravity well,' deeper than that of Venus, enormously deeper than Luna's. Although Earth and Luna average exactly the same distance from Mars in miles, Luna is about five miles per second 'closer' to Mars in terms of fuel and shipping cost.

Roger Stone released just enough of their assets to cover the investment. They were still loading their collection of tired bikes late Wednesday afternoon, with Cas weighing them in, Meade recording for him, and Pol hoisting. Everything else had been loaded; trial weight with the crew aboard would be taken by the port weightmaster as soon as the bicycles were loaded Roger Stone supervised the stowing, he being personally responsible for the ship being balanced on take off.

Castor and he went down to help Pol unload the last flat. 'Some of these. seem hardly worth shipping,' Mr Stone remarked.

'Junk, if you ask me,' added Meade.

'Nobody asked you,' Pol told her.

'Keep a civil tongue in your head,' Meade answered sweetly, 'or go find yourself another secretary.'

'Stow it' Junior,' admonished Castor. 'Remember she's working free. Dad, I admit they aren't much to look at, but wait a bit. Pol and I will overhaul them and paint them in orbit. Plenty of time to do a good job - like new.'

'Mind you don't try to pass them off as new. But it looks to me as if you had taken too big a bite. When we get these inside and clamped down, there won't be room enough in the hold to swing a cat' much less do repair work. If you were thinking of monopolising the living space, consider it vetoed.'

'Why would anyone want to swing a cat?' asked Meade. 'The cat wouldn't like it. Speaking of that, why don't we take a cat?'

'No cats,' her father replied. 'I traveled with a cat once and I was in executive charge of its sand box. No cats.'

'Please, Cap'n Daddy! I saw the prettiest little kitten over at the Haileys' yesterday and -'

'No cats. And don't call me "Captain Daddy." One or the other, but the combination sounds silly.'

'Yes, Captain Daddy.'

'We weren't planning on using the living quarters.' Castor answered. 'Once we are in orbit we'll string 'em outside and set up shop in the hold. Plenty of room.'

A goodly portion of Luna City came out to see them off. The current mayor, the Honorable Thomas Beasley, was there to say good-by to Roger Stone; the few surviving members of the Founding Fathers turned out to honor Hazel. A delegation from the Junior League and what appeared to be approximately half of the male members of the senior class of City Tech showed up to mourn Meade's departure. She wept and hugged them all, but kissed none of them; kissing while wearing a space suit is a futile, low-caloric business.

The twins were attended only by a dealer who wanted his payment and wanted it now and wanted it in full.

Earth hung in half phase over them and long shadows of the Obelisk Mountains stretched over most of the field. The base of the *Rolling Stone* was floodlighted; her slender bow thrust high above the circle of brightness. Beyond her, masking the far side of the field, the peaks of Rodger Young Range were still shining in the light of the setting Sun. Glorious Orion glittered near Earth; north and east of it, handle touching the horizon, was the homely beauty of the Big Dipper. The arching depth of sky and the mighty and timeless monuments of the Moon dwarfed the helmeted, squatty figures at the base of the spaceship.

A searchlight on the distant control tower pointed at them; blinked red three times. Hazel turned to her son. 'Thirty minutes, Captain.'

'Right.' He whistled into his microphone. 'Silence, everyone! Please keep operational silence until you are underground Thanks for coming, everybody. Good-by!'

' 'Bye, Rog!' 'Good trip, folks!' 'Aloha!' 'Hurry back'

Their friends started filing down a ramp mto one of the field tunnels; Mr Stone turned to his family. 'Thirty minutes. Man the ship!'

'Aye aye, sir.'

Hazel started up the ladder with Pollux after her. She stopped suddenly, backed down and stepped on his fingers. 'Out of my way, youngster!' She jumped down and ran toward the group disappearing down the ramp. 'Hey, Tom! Beasley! Wait! Half a mo-'

The mayor paused and turned around; she thrust a package into his hand. 'Mail this stuff for me?'

'Certainly. Hazel.'

'That's a good boy. 'Bye!'

She came back to the ship; her son inquired, 'What was the sudden crisis, Hazel?'

'Six episodes. I stay up all night getting them ready. . . then I didn't even notice I still had 'em until I had trouble climbing with one hand.'

'Sure your head's on tight?'

'None of your lip, boy.'

'Get in the ship.'

'Aye aye, sir.'

Once they were all inboard the port's weightmaster made his final check, reading the scales on the launching flat under each fin, adding them together. 'Two and seven-tenths pounds under, Captain. Pretty close figuring.' He fastened trim weights in that amount to the foot of the ladder. 'Take it up.'

'Thank you, sir.' Roger Stone hauled up the ladder, gathered in the trim weights, and closed the door of the air lock. He let himself into the ship proper, closed and dogged the inner door behind him, then stuck his head up into the control room. Castor was already in the copilot's couch. 'Time?'

'Minus seventeen minutes, Captain.'

'She tracking?' He reached out and set the trim weights on a spindle at the central axis of the ship.

'Pretty as could be.' The main problem and the exact second of departure had been figured three weeks earlier; there is only one short period every twenty-six months' when a ship' may leave the Luna-Terra system for Mars by the most economical orbit. After trial weight had been taken the day before Captain Stone had figured his secondary problem, i.e., how much thrust for how long a period was required to put this particular ship into that orbit. It was the answer to this second problem which Castor was now tracking in the automatic pilot.

The first leg of the orbit would not be towards Mars but toward Earth, with a second critical period, as touchy as the take off, as they rounded Earth. Captain Stone frowned at the thought, then shrugged; that worry had to come later. 'Keep her tracking. I'm going below.'

He went down into the power room, his eyes glancing here and there as he went. Even to a merchant skipper, to whom it is routine, the last few minutes before blastoff are worry making. Blastoff for a spaceship has a parachute-jump quality; once you jump it is usually too late to correct any oversights. Space skippers suffer nightmares about misplaced decimal points.

Hazel and Pollux occupied the couches of the chief and assistant. Stone stuck his head down without going down. 'Power Room?'

'She'll be ready. I'm letting her warm slowly.'

Dr Stone, Meade, and Buster were riding out the lift in the bunkroom, for company; he stuck his head in. 'Everybody okay?'

His wife looked up from her couch. 'Certainly, dear. Lowell has had his injection.' Buster was stretched out on his back, strapped down and sleeping. He alone had never experienced acceleration thrust and free falling; his mother had decided to drug him lest he be frightened.

Roger Stone looked at his least son. 'I envy him.'

Meade sat up. 'Head pretty bad, Daddy?'

'I'll live. But today I regard farewell parties as much overrated affairs, especially for the guest of honor.'

The horn over his head said in Castor's voice, 'Want me to boost her, Dad? I feel fine.'

'Mind your own business, copilot. She still tracking?'

'Tracking, sir. Eleven minutes.'

Hazel's voice came out of the horn.' "The wages of sin are death".'

'Look who's talking! No more unauthorised chatter over the intercom. That's an order.'

'Aye aye, Captain.'

He started to leave; his wife stopped him. 'I want you to take this, dear.' She held out a capsule.

'I don't need it.'

'Take it.'

'Yes, Doctor darling.' He swallowed it, made a face, and went up to the control room. As he climbed into his couch he said, 'Call tower for clearance.'

'Aye aye, sir. *Rolling Stone,* Luna City registry, to Tower - request clearance to lift according to approved plan.'

'Tower to Rolling Stone - you are cleared to lift! 'Rolling Stone to Tower - roger!' Castor answered. Captain Stone looked over his board. All green, except one red light from power room which would not wink green until he told his mother to unlock the safety on the cadmium damper plates. He adjusted the microvernier on his tracking indicator, satisfied himself that the autopilot was tracking to perfection as Castor had reported. 'All stations, report in succession -power room !'

'She's sizzling, Skipper!' came back Hazel's reply.

'Passengers!'

'We're ready, Roger.' 'Copilot!'

'Clear and green, sir! Check off completed. Five minutes.'

'Strap down and report!'

'Power gang strapped.' - 'We're strapped, dear.' - 'Strapped, sir all stations.'

'Power room, unlock for lift.'

The last red light on his board winked green as Hazel reported, 'Power board unlocked, Skipper. Ready to blast.'

Another voice followed hers, more softly: 'Now I lay me down to sleep -'

'Shut up, Meade!' Roger Stone snapped. 'Copilot, commence the count!'

Castor started singsonging: 'Minus two minutes ten. . . minus two minutes. . . minus one minute fifty. . . minus one minute forty -'

Roger Stone felt his blood begin to pound and wished heartily that he had had the sense to come home early, even if the party had been in his honor.

'Minus one minute!. . . minus fifty-five. . . minus fifty -'

He braced his right hand with his forefinger over the manual firing key, ready to blast if the autopilot should fail - then quickly took it away. This was no military vessel! If it failed to fire, the thing to do was to cancel - not risk his wife and kids with imperfect machinery. After all, he held only a private license - 'Minus thiry-five. . . *half minute!'*

His head felt worse. Why leave a warm apartment to bounce around in a tin covered wagon?

'Twenty-*eight*, twenty-*sev'n,* twenty-*six* -'

Well, if anything went wrong, at least there wouldn't be any little orphans left around. The whole Stone family was here, root and branch. The rolling Stones -

'Nineteen. . . eighteen. . . seventeen -,

He didn't fancy going back and meeting all those people who had just come out to say good-by - telling them, 'It's like this: we swung and we missed -'

'Twelve! Eleven! and ten! and nine! '

He again placed his forefinger over the manual button, ready to stab.

'And *five!*

'And *four!*

'And *three!*

'And *two!*

'And - ' Castor's chant was blanked out by the blazing 'white noise' of the jet; the *Rolling Stone* cast herself into the void.

VI - BALLISIICS AND BUSTER

Blasting off from Luna is not the terrifying and oppressive experience that a lift from Earth is. The Moon's field is so weak, her gravity well so shallow, that a boost of one-g would suffice - just enough to produce Earth-normal weight.

Captain Stone chose to use two gravities, both to save time and to save fuel by getting quickly away from Luna - 'quickly' because any reactive mass spent simply to hold a spaceship up against the pull of a planet is an 'overhead' cost; it does nothing toward getting one where one wants to go. Furthermore, while the *Rolling Stone* would operate at low thrust she could do so only by being very wasteful of reactive mass, i.e., by not letting the atomic pile heat the hydrogen hot enough to produce a really efficient jet speed.

So he caused the *Stone* to boost at two gravities for slightly over two minutes. Two gravities - a mere nothing! The pressure felt by a wrestler pinned to the mat by the body of his opponent - the acceleration experienced by a child in a schoolyard swing - hardly more than the push resulting from standing up very suddenly.

But the Stone family had been living on Luna; all the children had been born there - two gravities was twelve times what they were used to.

Roger's headache, which had quieted under the sedative his wife had prescribed for him, broke out again with renewed strength. His chest felt caved in; he fought for breath and he had to read and reread the accelerometer to convince himself that the ship had not run wild.

After checking over his board and assuring himself that all was going according to plan even if it did feel like a major catastrophe he turned his head heavily. 'Cas? You all right?'

Castor gasped, 'Sure Skipper . . . tracking to flight plan.

'Very well, sir.' He turned his face to his intercom link. 'Edith -'

There was no answer. *'Edith"*

This time a strained voice replied, 'Yes, dear.'

'Are you alnght?'

'Yes, dear. Meade and I. . . are all right. The baby is having a bad time.'

He was about to call the power room when Castor reminded him of the passage of time. 'Twenty seconds! Nineteen! Eighteen -'

He tumed his eyes to the *brennschluss* timer and poised his hand on the cut-off switch, ready to choke the jet if the autopilot should fail. Across from him Castor covered him should *he* fail; below in the power room Hazel was doing the same thing, hand trembling over the cut-off.

As the timer flashed the last half second, as Castor shouted, *'Brennschluss!',* three hands slammed at three switches - but the autopilot had beaten them to it. The jet gasped as its liquid food was suddenly cut off from it; damper plates quenched the seeking neutrons in the atomic pile - and the *Stone* was in free orbit, falling toward Earth in a sudden, aching silence broken only by the whispering of the airconditioner.

Roger Stone reswallowed his stomach, 'Power room!' he rasped. 'Report!'

He could hear Hazel sighing heavily. 'Okay, son,' she said feebly, 'but mind that top step - it's a dilly!'

'Cas, call the port. Get a doppler check.'

'Aye aye, sir.' Castor called the radar & doppler station at Leyport. The *Rolling Stone* had all the usual radar and piloting instruments but a spaceship cannot possibly carry equipment of the size and accuracy of those mounted as pilot aids at all ports and satellite stations. *'Rolling Stone* to *Luna Pilot* - come in, *Luna Pilot.'* While he called he was warming up their own radar and doppler-radar, preparing to check the performance of their own instruments against the land-based standards. He did this without being told, it being a copilot's routine duty.

'Luna Pilot to *Rolling' Stone.'*

'Rolling Stone to *Luna Pilot* - request range, bearing and separation rate, and flight plan deviations, today's flight fourteen - plan as field; no variations.'

'We're on you. Stand by to record.'

'Standing by,' answered Castor and flipped the switch on the recorder. They were still so close to the Moon that the speed-of-light lag in transmission was unnoticeable.

A bored voice read off the reference time to the nearest half second, gave the double coordinates of their bearing in terms of system standard - corrected back to where the Moon *had been* at their blastoff - then gave their speed and distance relative to Luna with those figures also corrected back to where the Moon had been. The corrections were comparatively small since the Moon ambles along at less than two-thirds of a mile per second, but the corrections were utterly necessary. A pilot who disregarded them would find himself fetching up thousands or even millions of miles from his destination.

The operator added, 'Deviation from flight plan negligible. A very pretty departure, *Rolling Stone.'*

Castor thanked him and signed off. 'In the groove, Dad!'

'Good. Did you get our own readings?'

'Yes, sir. About seven seconds later than theirs.'

'Okay. Run 'em back on the flight line and apply the vectors. I want a check.' He looked more closely at his son; Castor's complexion was a delicate chartreuse. 'Say, didn't you take your pills?'

'Uh, yes, sir. It always hits me this way at first. I'll be all right.'

'You look like a week-old corpse.'

'You don't look so hot yourself, Dad.'

'I don't feel so hot, just betwen us. Can you work that prob, or do you want to sack in for a while?'

'Sure I can!'

'Well. . . mind your decimal places.'

'Aye aye, Captain.'

'I'm going aft.' He started to unstrap, saying into the intercom as he did so, 'All hands, unstrap at will. Power room, secure the pile and lock your board.'

Hazel answered, 'I heard the flight report' Skipper. Power room secured.'

'Don't anticipate my orders, Hazel - unless you want to walk back.'

She answered, 'I expressed myself poorly, Captain. What I mean to say is, we are now securing the power room, as per your orders, sir. There - it's done. Power room secured!'

'Very well, Chief.' He smiled grimly, having noted by the tell.tales on his own board that the first report was the correct one; she had secured as soon as she had known they were in the groove. Just as he had feared: playing skipper to a crew of rugged individualists was not going to be a picnic. He grasped the centre stanchion, twisted around so that he faced aft and floated through the hatch into the living quarters.

He wiggled into the bunkroom and checked himself by a handhold. His wife, daughter, and least child were all unstrapped. Dr Stone was manipulating the child's chest and stomach. He could not see just what she was doing but it was evident that Lowell had become violently nauseated - Meade, glassy-eyed herself, was steadying herself with one hand and trying to clean up the mess with the other. The boy was still unconscious.

Roger Stone felt suddenly worse himself. 'Good grief!' His wife looked over her shoulder. 'Get my injection kit,' she ordered. 'In the locker behind you. I've got to give him the antidote and get him awake. He keeps trying to swallow his tongue.'

He gulped. 'Yes, dear, Which antidote?'

'Neocaffeine - one c.c. *Move!'*

He found the case, loaded the injector, handed it to Dr Stone. She pressed it against the child's side. 'What else can I do?' he asked.

'Nothing.'

'Is he in any danger?'

'Not while I have an eye on him. Now get out and ask Hazel to come here.'

'Yes, dear. Right away.' He swam on aft, found his mother sitting in midair, looking pleased with herself. Pollux was still loosely secured to his control couch. 'Everything all right back here?' he asked.

'Sure. Why not? Except my assistant, maybe. I believe he wants off at the next stop.'

Pollux growled. 'I'm feeling okay. Quit riding me.'

Roger Stone said, 'Edith could use your help, Mother. Buster has thrown up all over the bunkroom.'

'Why, the little devil! He didn't have a thing to eat today; I rode herd on him myself.'

'You must have let him out of your sight for a few minutes, from the evidence. Better go give Edith a hand.'

'To hear is to obey, Master.' She kicked one heel against the bulkhead behind her and zipped out the hatch. Roger turned to his son.

'How's it going?'

'I'll be all right in a couple of hours. It's just one of those things you have to go through with, like brushing your teeth.'

'Check. I'd like to rent a small planet myself. Have you written up the engineering log?'

'Not yet.'

'Do so. It will take your mind off your stomach.' Roger Stone went forward again and looked into the bunkroom. Lowell was awake and crying; Edith had him sheeted to a bunk to give him a feeling of pressure and stability.

The child wailed, 'Mama! Make it hold *still'*

'Shush, dear. You're all right. Mother is here,'

'I want to go *home!'*

She did not answer but caressed his forehead. Roger Stone backed hastily out and pulled himself forward.

By supper time all hands except Lowell were over the effects of free fall - a sensation exactly like stepping off into an open elevator shaft in the dark. Nevertheless no one wanted much to eat; Dr Stone limited the menu to a clear soup, crackers, and stewed dried apricots. Ice cream was available but there were no takers.

Except for the baby none of them had any reason to expect more than minor and temporary discomfort from the change from planet-surface weight to the endless falling of free orbit. Their stomachs and the semicircular canals of their ears had been through the ordeal before; they were inured to it, salted.

Lowell was not used to it; his physical being rebelled against it, nor was he old enough to meet it calmly and without fear. He cried and made himseff worse, alternating that with gagging and choking. Hazel and Meade took turns trying to quiet him. Meade finished her skimpy dinner and relieved the watch; when Hazel came into the control room where they were eating Roger Stone said, 'How is he now?'

Hazel shrugged. 'I tried to get him to play chess with me. He spat in my face.'

'He must be getting better.'

'Not so you could notice it.'

Castor said, 'Gee whiz, Mother, can't you dope him up till he gets his balance?'

'No,' answered Dr Stone, 'I'm giving him the highest dosage now that his body mass will tolerate.'

'How long do you think it will take him to snap out of it?' asked her husband.

'I can't make a prediction. Ordinarily children adapt more readily than adults, as you know, dear - but we know also that some people never do adapt. They simply are constitutionally unable to go out into space.'

Pollux let his jaw sag. 'You mean Buster is a natural-born *groundhog?'* He made the word sound like both a crippling disability and a disgrace.

'Pipe down,' his father said sharply.

'I mean nothing of the sort,' his mother said crisply. 'Lowell is having a bad time but he may adjust very soon.'

There was glum silence for some minutes. Pollux refilled his soup bag, got himself some crackers, and eased back to his perch with one leg hooked around a stanchion. He glanced at Castor; the two engaged in a conversation that consisted entirely of facial expressions and shrugs. Their father looked at them and looked away; the twins often talked to each other that way; the code - if it was a code - could not be read by anyone else. He turned to his wife. 'Edith, do you honestly think there is a chance that Lowell may not adjust?'

'A chance, of course.' She did not elaborate, nor did she need to. Spacesickness like seasickness does not itself kill, but starvation and exhaustion do.

Castor whistled. 'A fine time to find it out, after it's too late. We're akeady in orbit for Mars.'

Hazel said sharply. 'You know better than that, Castor.'

'Huh?'

'Of course, dopy,' his twin answered. 'We'll have to tack back.' :1

'Oh.' Castor frowned. 'I forgot for the moment that this was a two-legged jump.' He sighed. 'Well, that's that. I guess we go back.' There was one point and one only at which they could decide to return to the Moon. They were falling now toward Earth in a conventional 'S-orbit" practically a straight line. They would pass very close to Earth in an hyperboloid at better than five miles per second, Earth relative. To continue to Mars they planned to increase this speed by firing the jet at the point of closest approach, falling thereby into an ellipsoid, relative to the Sun, which would let them fall to a rendezvous with Mars. They could reverse this maneuver, check their plunging progress by firing the jet against their motion and thereby force the *Stone* into an ellipsoid relative to Earth, a curve which, if correctly calculated, would take them back to Luna, back home before their baby brother could starve or wear himself out with retching. 'Yep, that's that,' agreed Pollux. He suddenly grinned. 'Anybody want to buy a load of bicycles? Cheap?'

'Don't be in too big a hurry to liquidate,' his father told him, 'but we appreciate your attitude. Edith, what do you think?'

'I say we mustn't take any chances,' announced Hazel. 'That baby is sick.'

Dr Stone hesitated: 'Roger, how long is it to perigee?'

He glanced at his control board. 'About thirty-five hours.'

'Why don't you prepare both maneuvers? Then we will not have to decide until it's time to turn ship.'

'That makes sense, Hazel, you and Castor work the homing problem; Pol and I will work the Mars vector. First approximations only; we'll correct when we're closer. Everyone work independently, then we'll swap and check. Mind your decimals!'

'You mind *yours.'* Hazel answered.

Castor gave his father a sly grin. 'You picked the easy one, eh, Dad?'

His father looked at him. 'Is it too hard for you? Do you want to swap?'

'Oh, no, Sir! I can do it.'

'Then get on with it - and bear in mind you are a crew member in space.'

'Aye aye, sir.'

He had in fact 'picked the easy one'; the basic tack-around-Earth-for-Mars problem had been solved by the big computers of Luna Pilot Station before they blasted off. To be sure, Luna Pilot's answer would have to be revised to fit the inevitable errors, or deviations from flight plan, that would show up when they reached perigee rounding Earth - they might be too high, too low, too fast, too slow, or headed somewhat differently from the theoretical curve which had bem computed for them. In fact they could be sure to be wrong in all three factors; the tiniest of errors at blastoff had a quarter of a million miles in which to multiply.

But nothing could be done to compute the corrections for those errors for the next fifteen or twenty hours; the deviations had to be allowed to grow before they could be measured accurately.

But the blast back to shape an ellipsoid home to Luna was a brand-new, unpremeditated problem. Captain Stone had not refused it out of laziness; he intended to do both problems but had kept his intention to himself. In the meantime he had another worry; strung out behind him were several more ships, all headed for Mars. For the next several days there would be frequent departures from the Moon, all ships taking advantage of the one favorable period in every twenty-six months when the passage to Mars was relatively 'cheap', i.e., when the minimum-fuel ellipse tangent to both planet's orbits would actually make rendezvous with Mars rather than arrive foolishly at some totally untenanted part of Mars' orbit. Except for military vessels and super expensive passenger-ships, all traffic for Mars left at this one time.

During the four-day period bracketing the ideal instant of departure ships leaving Leyport paid a fancy premium for the privilege over and above the standard service fee. Only a large ship could afford such a fee; the saving in cost of singleH reactive mass had to be greater than the fee. The *Rolling Stone* had departed just before the premium charge went into effect; consequently she had trailing her like beads on a string a round dozen of ships, all headed down to Earth, to tack around her toward Mars.

If the *Rolling Stone* vectored back and shaped course for Luna rather than Mars, there was a possibility of traffic trouble.

Collisions between spaceships are almost unheard of; space is very large and ships are very tiny. But they are possible, particularly when many ships are doing much the same thing at the same time ia the same region of space. Spacemen won't forget the *Rising Star* and the patrol vessel *Trygve Lie* - four hundred and seven dead, no survivors.

Ships for Mars would be departing Luna for the next three days and more; the *Rolling Stone,* in rounding Earth and heading back to Luna (toward where Luna would be on her arrival) would cut diagonally across their paths. Besides these hazards, there were Earth's three radio-satellites and her satellite space station; each ship's flight plan, as approved by Luna Pilot Station, took into consideration these four orbits, but the possible emergency maneuver of the *Rolling Stone* had had no such safety check. Roger Stone mentally chewed his nails at the possibility that Traffic Control might refuse permission for the Rolling *Stone* to change its approved flight plan - which they would do if there was the slightest possibility of collision, sick child or no.

And Captain Stone would ignore their refusal, risk collision and take his child home - there to lose his pilot's license certainly and to face a stiff sentence from the Admiralty court possibly.

Besides the space station and the radio satellites there were the robot atom-bomb peace rockets of the Patrol, circling the Earth from pole to pole, but it was most unlikely that the *Rolling Stone's* path would intersect one of their orbits; they moved just outside the atmosphere, lower than a spaceship was allowed to go other than in landing, whereas in order to tack the *Rolling Stone* would necessarily go inside the orbits of the radio satellites and that of the space station wait a minute - Roger Stone thought over that last idea. Would it be possible to match in with the space station instead of going back to Luna?

If he could, he could get Lowell back to weight a couple of days sooner - in the spinning part of the space station!

The ballistic computer was not in use; Castor and Hazel were still in the tedious process of setting up their problems. Captain Stone moved to it and started making a rough set-up directly on the computer itself, ignoring the niceties of ballistics, simply asking the machine, 'Can this, or can this not, be done?'

Half an hour later he gave up, let his shoulders sag. Oh, yes, he could match in with the space station's orbit - but at best only at a point almost a hundred degrees away from the station. Even the most lavish expenditure of reaction mass would not permit him to reach the station itself.

He cleared the computer almost violently. Hazel glanced toward him. 'What's eating you, son?'

'I thought we might make port at the station. We can't.'

'I could have told you that'

He did not answer but went aft. Lowell, he found, was as sick as ever.

Earth was shouldering into the starboard port, great and round and lovely; they were approaching her rapidly, less than ten hours from the critical point at which they must maneuver, one way or the other. Hazel's emergency flight plan, checked and rechecked by the Captain, had been radioed to Traffic Control. They were all resigned to a return to Luna; nevertheless Pollux was, with the help of Quito Pilot, Ecuador, checking their deviations from the original flight plan and setting up the problem of preparing a final ballistic for Mars.

Dr Stone came into the control room, poised near the hatch, caught her husband's eye and beckoned him to come with her.

He floated after her into their stateroom. 'What is it?' he asked. 'Is Lowell worse?'

'No, he's better.'

'Eh?'

'Dear, I don't think he was spacesick at all.'

'What's that?'

'Oh, a little bit, perhaps. But I think his symptoms were largely allergy; I think he is sensitive to the sedative.'

'Huh? I never heard of anyone being sensitive to that stuff before.'

'Neither have I, but there can always be a first time I withdrew the drug several hours ago since it did not seem to help him. His symptoms eased off gradually and his pulse is better now.'

'Is he okay? Is it. safe to go on to Mars?'

'Too early to say. I'd like to keep him under observation another day or two.'

'But - Edith, you know that's impossible. I've got to maneuver.' He was wretched from strain and lack of sleep; neither had slept since blastoff more than twenty-four hours earlier.

'Yes, I know. Give me thirty minutes warning before you must have an answer. I'll decide then.'

'Okay. I'm sorry I snapped at you.'

'Dear Roger!'

Before they were ready to 'round the corner' on their swing past Earth the child was much better. His mother kept him under a light hypnotic for several hours; when he woke from it he demanded food. She tried letting him have a few mouthfuls of custard; he choked on the first bite but that was simply mechanical trouble with no gravity - on the second bite he learned how to swallow and kept it down.

He kept several more down and was still insisting that he was starved when she made him stop. Then he demanded to be untied from the couch. His mother gave in on this but sent for Meade to keep him under control and in the bunkroom. She pulled herself forward and found her husband. Hazel and Castor were at the computer; Castor was reading off to her a problem program while she punched the keys; Pollux was taking a doppler reading on Earth. Edith drew Roger Stone away from them and whispered, 'Dear, I guess we can relax. He has eaten - and he didn't get sick.'

'Are you sure? I wouldn't want to take even a slight chance.'

She shrugged. 'How can I be sure? I'm a doctor, not a fortuneteller.'

'What's your decision?'

She frowned, 'I would say to go on to Mars.'

'It's just as well.' He sighed. 'Traffic turned down my alternate flight plan. I was just coming back to tell you.'

'Then we have no choice.'

'You know better than that. I'd rather tell it to the judge than read the burial service. But I have one more card up my sleeve.'

She looked her query; he went on. 'The *War God* is less than ten thousand miles behind us. If necessary, by using our mass margin, in less than a week I could match with her and you and the baby could transfer. She's a "tumbling. pigeon" since they refitted her - anything from Luna-surface to a full gravity.'

'I hadn't thought of that. Well, I don't think it will be necessary but it's a comfort to know that there is help close by.' She frowned. 'I would not like to leave you and the children to shift for yourselves - and besides, it's risky to use your margin; you may need it badly when we approach Mars.'

'Not if we handle the ship properly. Don't you worry; Hazel and I will get it there if we have to get out and push.'

Pollux had stopped what he was doing and had been trying to overhear his parents' conversation. He was unsuccessful; they had had too many years' practice in keeping the kids from hearing. But he could see their intent expressions and the occasional frowns; he signaled his twin.

Castor said, 'Hold it, Hazel. Time out to scratch. What goes, Pol?'

'"Now is the time for all good men".' He nodded toward their parents.

'Right. I'll do the talking.' They moved aft.

Roger Stone looked at them and frowned. 'What is it, boys? We're busy.'

'Yes, sir. But this seems like a salubrious time to make an announcement.'

'Yes?'

'Pol and I vote to go back home.

'Huh?'

'We figure that there's no percentage in taking a chance with Buster.'

Pol added, 'Sure, he's a brat, but look how much you've got invested in him.'

'If he died on us', Castor went on, 'it would spoil all the fun.'

'And even if he didn't, who wants to clean up after him for weeks on end?'

'Right', agreed Pol. 'Nobody likes to play room steward to a sick groundhog.'

'And if he did *die,* the rest of you would blame us for the rest of our lives.'

'Longer than that', Pol added.

'Don't worry about that "negat" from Traffic. Hazel and I are working out a skew path that will let us miss the *Queen Mary* ,with minutes to spare - seconds anyhow. Course it may scare em a little.'

'Quiet!' said Captain Stone. 'One at a time - Castor, let me get this straight: do I understand that you and your brother are sufficiently concerned about your younger brother's welfare that you want to return to Luna in any case?'

'Yes, sir.'

'Even if your mother decides that it is safe for him to continue?'

'Yes, sir. We talked it over. Even if he's looking pretty good now, he was one sick pup and anybody that sick might not make it to Mars. It's a long haul. We don't want to risk it.'

Hazel had come aft and listened; now she said, 'Nobility ill-becomes you, Cas. You were more convincing with the other routine.'

'You butt out of this, Mother. Pol?'

'Cas told you. Shucks, we can make other trips"

Roger Stone looked at his sons. 'I must say', he said slowly, 'that it is surprising and gratifying to find so much family solidarity in this aggregation of individualists. Your mother and I will remember it with pride. But I am glad to say that it is unnecessary. We will continue for Mars.'

Hazel scowled at him. 'Roger, did you bump your head on the takeoff? This is no time to take a chance; we take the kid back to Luna. I've talked with the boys and they mean it. So do I.'

Castor said, 'Dad, if you're afraid of that skew orbit, I'll pilot. I know-'

'Silence!' When he got it he went on as if to himself, 'It says right here in the book to give orders, not explanations, and never to let them be argued. So help me, I'm going to run a taut ship if I have to put my own mother in irons.' He raised his voice. 'All hands! Prepare for maneuvering. Departure for Mars, gravity-well procedure.'

Edith Stone said softly to Hazel, 'The baby is all right. Mother. I'm sure.' Then she turned to her sons. 'Castor, Pollux - come here, dears.'

'But Dad said -'

'I know. Come here first.' She kissed each of them and said, 'Now man your stations.'

Mead appeared at the hatch, towing Lowell behind her like a toy balloon. He seemed cheerful and his face was cheerfully smeared with chocolate. 'What's all the racket about?' she demanded. 'You not only woke us; you must be disturbing people three ships behind.'

VII - IN THE GRAVITY WELL

A gravity-well maneuver involves what appears to be a contradiction in the law of conservation of energy. A ship leaving the Moon or a space station for some distant planet can go faster on less fuel by dropping first toward Earth, then performing her principal acceleration while as close to Earth as possible. To be sure, a ship gains kinetic energy (speed) in falling towards Earth, but one would expect that she would lose exactly the same amount of kinetic energy as she coasted away from Earth.

The trick lies in the fact that the reactive mass or 'fuel' is itself *mass* and as such has potential energy of position when the ship leaves the Moon. The reactive mass used in accelerating near Earth (that is to say, at the bottom of the gravity well) has lost its energy of position by falling down the gravity well. That energy has to go somewhere, and so it does - into the ship, as kinetic energy. The ship ends up going faster for the same force and duration of thrust than she possibly could by departing directly from the Moon or from a space station. The mathematics of this is somewhat baffling - but it works.

Captain Stone put both the boys in the power room for this maneuver and placed Hazel as second pilot. Castor's feelings were hurt but he did not argue, as the last discussion of ship's discipline was still echoing. The pilot has his hands full in this maneuver, leaving it up to the copilot to guard the autopilot, to be ready to fire manually if need he, and to watch for *brennschluss.* It is the pilot's duty to juggle his ship on her gyros and flywheel with his eyes glued to a measuring telescope, a 'coelostat', to be utterly sure to the extreme limit of the accuracy of his instruments that his ship is aimed exactly right when the jet fires.

In the passage from Earth to Mars a mistake in angle of one minute of arc, one sixtieth of a degree, will amount to - at the far end - about fifteen thousand miles. Such mistakes must be paid for in reactive mass by maneuvering to correct, or, if the mistake is large enough, it will he paid for tragically and inexorably with the lives of captain and crew while the ship plunges endlessly on into the empty depths of space.

Roger Stone had a high opinion of the abilities of his twins, but' on this touchy occasion, he wanted the copilot backing him up to have the steadiness of age and experience. With Hazel riding the other. couch he could give his whole mind to his delicate task.

To establish a frame of reference against which to aim his ship he had three stars, Spica, Deneb, and Fomalhaut, lined up in his scope, their images brought together by prisms. Mars was still out of sight beyond the bulging breast of Earth, nor would it have helped to aim for Mars; the road to Mars is a long curve, not a straight line. One of the images seemed to drift a trifle away from the others; sweating, he unclutched his gyros and nudged the ship by flywheel. The errant image crept back into position. 'Doppler?' he demanded.

'In the groove.'

'Time?'

'About a minute. Son, keep your mind on your duck shooting and don't fret.'

He wiped his hands on his shirt and did not answer. For some seconds silence obtained, then Hazel said quietly, 'Unidentified radar beacon blip on the screen, sir. Robot response and a string of numbers.'

'Does it concern us?'

'Closing north and starboard. Possible collision course.'

Roger Stone steeled himself not to look at his own screen; a quick glance would tell him nothing that Hazel had not reported. He kept his face glued to the eyeshade of the coelostat. 'Evasive maneuver indicated?

'Son, you're as likely to dodge into it as duck away from it. Too late to figure a ballistic.'

He forced himself to watch the star images and thought about it. Hazel was right, one did not drive a spaceship by the seat of the pants. At the high speeds and tight curves at the bottom of a gravity well, close up to a planet, an uncalculated maneuver might bring on a collision. Or it might throw them into an untenable orbit, one which would never allow them to reach Mars.

But what could it be? Not a spaceship, it was unmanned. Not a meteor, it carried a beacon. Not a bomb rocket, it was too high. He noted that the images were steady and stole a glance, first at his own screen, which told him nothing, and then through the starboard port.

Good heavens! he could *see* it!

A great gleaming star against the black of space... growing growing!

'Mind your scope, son,' said Hazel. 'Nineteen seconds.'

He put his eye back to the scope; the images were steady. Hazel continued, 'It seems to be drawing ahead slightly.'

He had to look. As he did so something flashed up and obscured the starboard port and at once was visible in the portside port - visible but shrinking rapidly. Stone had a momentary impression of a winged torpedo shape.

'Whew!' Hazel sighed. 'They went that-a-way, podnuh!' She added briskly, 'All hands, brace for acceleration - five seconds!'

He had his eye on the star images, steady and perfectly matched, as the jet slammed him into his pads. The force was four gravities, much more than the boost from Luna, but they held it for only slightly more than one minute. Captain Stone kept watching the star images, ready to check her if she started to swing, but the extreme care with which he had balanced his ship in loading was rewarded: she held her attitude.

He heard Hazel shout, *'Brennschluss!'* just as the noise and pressure dropped off and died. He took a deep breath and said to the mike, 'You all right, Edith?'

'Yes, dear', she answered faintly. 'We're all right.'

'Power room?'

'Okay!' Pollux answered.

'Secure and lock.' There was no need to have the power room stand by, any correction to course and speed on this leg would be made days or weeks later, after much calculation.

'Aye aye, sir. Say, Dad, what was the chatter about a blip?'

'Pipe down', Hazel interrupted. 'I've got a call coming in.' She added, *'Rolling Stone,* Luna, to Traffic - come in, Traffic.'

There was a whir and a click and a female voice chanted:

'Traffic Control to *Rolling Stone,* Luna - routine traffic precautionary: your plan as filed will bring you moderately close to experimental rocket satellite of Harvard Radiation Laboratory. Hold to flight plan; you will fail contact by ample safe margin. End of message; repeat - ' The transcription ran itself through once more and shut off.

'Now they tell us!' Hazel exploded. 'Oh, those cushion warmers! Those bureaucrats! I'll bet that message has been holding in the tank for the past hour waiting for some idiot to finish discussing his missing laundry.'

She went on fuming: '"Moderately close!" "Ample safe margin!" Why, Roger, the consarned thing singed my eyebrows!'

'"A miss is as good as a mile".'

'A mile isn't nearly enough, as you know darn well. It took ten years off my life - and at my age I can't afford that.'

Roger Stone shrugged. After the strain and excitement he was feeling let down and terribly weary; since blastoff he had been running on stimulants instead of sleep. 'I'm going to cork off for the next twelve hours. Get a preliminary check on our, vector; if there's nothing seriously wrong, don't wake me. I'll look at it when I turn out.'

'Aye aye, Captain Bligh.'

First check showed nothing wrong with their orbit: Hazel followed him to bed - 'bed' in a figurative sense, for Hazel never strapped herself to her bunk in free fall, preferring to float loosely wherever air currents wafted her. She shared a stateroom with Meade. The three boys were assigned to the bunkroom and the twins attempted to turn in - but Lowell was not sleepy. He felt fine and was investigating the wonderful possibilities of free fall. He wanted to play tag. The twins did not want to play tag; Lowell played tag anyhow,.

Pollux snagged him by an ankle. 'Listen, you! Weren't you enough trouble by being sick?'

'I was not sick!'

'So? Who was it we had to clean up after? Santa Claus?'

'There ain't any Santa Claus. I was not sick. You're a fibber, you're a fibber, you're a fibber!'

'Don't argue with him,' Castor advised. 'Just choke him and stuff him out the lock. We can explain and correct the ship's mass factor tomorrow.'

'I was not sick!'

Pollux said, 'Meade had quite a bit of sack time on the leg down. Maybe you can talk her into taking him off our hands?'

'I'll try'.'

Meade was awake; she considered it. 'Cash?'

'Sis, don't be that way!'

'Well ... three days' dishwashing?'

'Skinflint! It's a deal; come take charge of the body.' Meade had to use the bunkroom as a nursery; the boys went forward and slept in the control room, each strapping himself loosely to a control couch as required by ship's regulations to avoid the chance of jostling instruments during sleep.

VIII - THE MIGHTY BOOM

Captain Stone had all hands with the exception of Dr Stone and Lowell compute their new orbit. They all worked from the same. data, using readings supplied by Traffic Control and checked against their own instruments. Roger Stone waited until all had finished before comparing results.

'What do you get, Hazel?'

'As I figure, Captain, you won't miss Mars by more than a million miles or so.'

'I figure it right on.'

'Well, now that you mention it, so do I.'

'Cas? Pol? Meade?'

The twins were right together to six decimal places and checked with their father and grandmother to five, but Meade's answer bore no resemblance to any of the others. Her father looked it over curiously. 'Baby girl, I can't figure out how you got this out of the computer. As near as I can tell you have us headed for Proxima Centauri.'

Meade looked at it with interest. 'Is that so? Tell you what let's use mine and see what happens. It ought to be interesting.'

'But not practical. You have us going faster than light.'

'I *thought* the figures were a bit large.'

Hazel stuck out a bony forefinger. 'That ought to be a minus sign, hon.'

'That's not all that's wrong', announced Ppllux. 'Look at this - ' He held out Meade's programming sheet.

'That will do, Pol', his father interrupted. 'You are not called on to criticise Meade's astrogation.'

'But -'

'Stow it.'

'I don't mind, Daddy,' Meade put in. 'I knew I was wrong.' She shrugged. 'It's the first one I've ever worked outside of school. Somehow it makes a difference when it's real.'

'It certainly does as every astrogator learns. Never mind' Hazel has the median figures. We'll log hers.'

Hazel shook hands with herself. 'The winnah and still champeen!'

Castor said, 'Dad, that's final? No more maneuvers until you calculate your approach to Mars?'

'Of course not. No changes for six months at least. Why?'

'Then Pol and I respectfully request the Captain's permission to decompress the hold and go outside. We want to get to work on our bikes.'

'Never mind the fake military-vessel phraseology. But I have news for you.' He took a sheet of paper out of his belt pouch. 'Just a moment while I make a couple of changes.' He wrote on it, then fastened it to the control room bulletin board. It read:

SHIP'S ROUTINE
0700 Reveille (optional for Edith, Hazel, & Buster)
0745 Breakfast (Meade cooks. Twins wash dishes)
0900 School C & P, math
Meade, astrogation, coached by Hazel
Lowell, reeling, writhing, and fainting in coils - or whatever his mother deems necessary
1200 End of morning session
1215 Lunch
1300 SchoolC&P,math
Hydroponics chores, Meade
1600 End of afternoon session
1800 Dinner - All Hands initial ship's maintenance schedule.

SATURDAY ROUTINE - turn to after breakfast and clean ship, Hazel in charge. Captain's inspection at 1100. Personal laundry in afternoon.

SUNDAY ROUTINE - meditation, study, and recreation. Make & Mend in afternoon.

Hazel looked it over. 'Where are we headed, Rog? Botany Bay? You forgot to set a time to flog the peasants.'

'It seems very reasonable to me.'

'Possibly. Six gets you ten it won't last a week.'

'Done. Let's see your money.'

The twins had read it with dismay. Pollux blurted out, 'But Dad! You haven't left us any time to repair our bikes - do you want us to lose our investment?'

'I've assigned thirty hours of study a week. That leaves one hundred and thirty-eight other hours. How you use them is your business as long as you keep our agreement about studying.'

Castor said, 'Suppose we want to start math at eight-thirty and again right after lunch? Can we get out of school that much earlier?'

'I see no objection.'

'And suppose we study evenings sometimes? Can we work up some velvet?'

Their father shrugged. 'Thirty hours a week - any reasonable variations in the routine will be okay, provided you enter in the log the exact times.'

'Now that that's settled', Hazel commenced, 'I regret to inform you, Captain, that there is one other little item on that Procrustean program that will have to be canceled for the time being at least. Much as I would enjoy inducing our little blossom into the mysteries of astrogation I don't have the time right now. You'll have to teach her yourself.'

'Why?'

'"Why" the man asks? You should know better than anyone. *The Scourge of the Spaceways,* that's why. I've got to hole up and write like mad for the next three or four weeks; I've got to get several months of episodes ahead before we get out of radio range.'

Roger Stone looked at his mother sadly. 'I knew it was bound to come, Hazel, but I didn't expect it to hit you so young. The mental processes dull, the mind tends to wander, the -'

'Whose mind does what? Why you young -'

'Take it easy. If you'll look over your left shoulder out the starboard port and squint your eyes, you might imagine that you see a glint on the *War* God. It can't be much over ten thousand miles away.'

'What's that got to do with me?' she demanded suspiciously.

'Poor Hazel! We'll take good care of you, Mother, we're riding in orbit with several large commercial vessels; every one of them has burners powerful enough to punch through to Earth. We won't *ever* be out of radio contact with Earth.'

Hazel stared out the port as if she could actually spot the *War God.* 'Well, I'll be dogged', she breathed. 'Roger, lead me to my room - that's a good boy. It's senile decay, all right You'd better take back your show; I doubt if I can write it.'

'Huh, uh! You let them pick up that option; you've *got* to write it. Speaking of *The Scum* of *the Waste Spaces,* I've been meaning to ask you a couple of questions about it and this is the first spare moment we've had. In the first place, why did you let them sign us up again?'

'Because they waved too much money under my nose, as you know full well. It's an aroma we Stones have hardly ever been able to resist.'

'I just wanted to make you admit it. You were going to get me off the hook - remember? So you swallowed it yourself.'

'More bait.'

'Surely. Now the other point: I don't see how you dared to go ahead with it, no matter how much money they offered. The last episode you showed me, while you had killed off the Galactic

Overlord you had also left Our Hero in a decidedly untenable position. Sealed in a radioactive sphere, if I remember correctly, at the bottom of an ammonia ocean on Jupiter. The ocean was swarming with methane monsters, whatever they are, each hypnotised by the Overlord's mind ray to go after John Sterling at the frst whiff - and him armed only with his Scout knife. How did you get him out of it?'

'We found a way', put in Pol. 'If you assume -'

'Quiet infants. Nothing to it, Roger. By dint of superhuman effort Our Hero extricated himself from his predicament and-'

'That's no answer.'

'You don't understand. I open the next episode on Ganymede. John Sterling is telling Special Agent Dolores O'Shanahan about his adventure. He's making light of it, see? He's noble so he really wouldn't want to boast to a girl. Just as he is jokingly disparaging his masterly escape the next action starts and it's so fast and so violent and so bloody that our unseen audience doesn't have time to think about it until the commercial. And by then they've got too much else to think about.'

Roger shook his head. 'That's literary cheating.'

'Who said this was literature? It's a way to help corporations take tax deductions. I've got three new sponsors.'

'Hazel', asked Pollux, 'where have you got them now? What's the situation?'

Hazel glanced at the chronometer. 'Roger, does that schedule take effect today? Or can we start fresh tomorrow?'

He smiled feebly. 'Tomorrow, I guess.'

'If this is going to degenerate into a story conference, I'd better get Lowell. I get my best ideas from Lowell; he's just the mental age of my average audience.'

'If I were Buster, I would resent that.'

'Quiet!' She slithered to the hatch and called out' 'Edith! May I borrow your wild animal for a while?'

Meade said, 'I'll get him, Grandmother. But wait for me.'

She returned quickly with the child. Lowell said, 'What do you want, Grandma Hazel? Bounce tag?'

She gathered him in an arm. 'No, son - blood. Blood and gore. We're going to kill off some villains.'

'Swell!

'Now as I recall it - and mind you, I was only there once - I left them lost in the Dark Nebula. Their food is gone and so is the Q-fuel. They've made a temporary truce with their Arcturian prisoners and set them free to help - which is safe enough because they are silicon-chemistry people and can't eat humans. Which is about what they are down to; the real question is - who gets barbecued for lunch? They need the help of the Arcturian prisoners because the Space Entity they captured in the last episode and imprisoned in an empty fuel tank has eaten its way through all but the last bulkhead and *it* doesn't have any silly previous prejudices about body chemistry. Carbon or silicon; it's all one to it.'

'I don't believe that's logical,' commented Roger stone. 'If its own chemistry was based-'

'Out of order,' ruled Hazel. 'Helpful suggestions only, please. Pol? You seem to have a gleam in your eye'

'This, Space Entity jigger can he stand up against radar wave lengths?'

'Now we're getting somewhere. But we've got to complicate it a bit Well, Meade?'

The twins started moving their bicycles outside the following day. The suits they wore were the same ones they had worn outdoors on the Moon, With the addition of magnetic boots and small rocket motors. These latter were strapped to their backs with the nozzles sticking straight out from their waists. An added pressure bottle to supply the personal rocket motor was mounted on the shoulders of each boy but, being weightless, the additional mass was little handicap.

'Now remember,' their father warned them, 'those boost units are strictly for dire emergency. Lifelines at all times. And don't depend on your boots when you shift lines, snap on the second line before you loose the first.'

'Shucks, Dad, we'll be careful.'

'No doubt. But you can expect me to make a surprise inspection at any time. Oue slip on a safety precaution and it's the rack and thumb screws, plus fifty strokes of bastinado.'

'No boiling oil?'

'Can't afford it. See here, you think I'm joking. If one of you should happen to get loose and drift away from the ship, don't expect me to come after you. One of you is a spare anyway.'

'Which one?' asked Pollux. 'Cas, maybe?'

'Sometimes I think it's one, sometimes the other. Strict compliance with ship's orders will keep me from having to decide at this time.'

The cargo hatch had no airlock; the twins decompressed the entire hold, then opened the door, remembering just in time to snap on their lines as the door opened. They looked out and both hesitated. Despite their lifelong experience with vacuum suits on the face of the Moon this was the first time either one had ever been outside a ship in orbit.

The hatch framed endless cosmic night, blackness made colder and darker by the unwinking diamond stars many lightyears away. They were on the night side of the *Stone*; there was nothing but stars and the swallowing depths. It was one thing to see it from the safety of Luna or through the strong quartz of a port; it was quite another to see it with nothing at all between one's frail body and the giddy, cold depths of eternity.

Pollux said, 'Cas, I don't like this.'

'There's nothing to be afraid of.'

'Then why are my teeth chattering?'

'Go ahead; I'll keep a tension on your line.'

'You are too good to me, dear brother - a darn sight too good! You go and I'll keep a tension on *your* line.'

'Don't be silly! Get on out there.'

'After you, Grandpa.'

'Oh, well!' Castor grasped the frame of the hatch and swung himself out. He scrambled to click his magnetic boots to the side of the ship but the position was most awkward, the suit was cumbersome, and he had no. gravity to help him. Instead, he swung around and his momentum pulled his fingers loose from the smooth frame. His floundering motions bumped the side of the ship and pushed him gently away. He floated out, still floundering, until his line checked him three or four feet from the side. 'Pull me in!'

'Put your feet down, clumsy!'

'I can't. Pull me in, you redheaded moron!'

'Don't call me "redheaded".' Pollux let out a couple of feet more line.

'Pol, quit fooling. I don't like this.'

'I thought you were brave. Grandpa?'

Castor's reply was incoherent. Pollux decided that it had gone far enough; he pulled Castor in and, while holding firmly to a hatch dog himself, he grabbed one of Castor's boots and set it firmly against the side; it clicked into place. 'Snap on your other line,' he ordered.

Castor, still breathing heavily, looked for a padeye in the side of the ship. He found one nearby and walked over to it, picking up his feet as if he walked in sticky mud. He snapped his second line to the ring of the padeye and straightened up. 'Catch,' Pollux called out and sent his own second line snaking out to his twin

Castor caught it and fastened it beside his own. 'All set?' asked Pollux. 'I'm going to unsnap us in here.'

'All secure.' Castor moved closer to the hatch.

'Here I come.'

'So you do.' Castor gave Pollux's line a tug; Pollux came sailing out of the hatch - and Castor let him keep on sailing. Castor checked the line gently through his fingers, soaking up the momentum, so that Pollux reached the end of the fifty-foot line and stayed there without bouncing back.

Pollux had been quite busy on the way out but to no effect -sawing vacuum is futile. When he felt himself snubbed to a stop he quit straggling. 'Pull me back!'

'Say "uncle".'

Pollux said several other things, some of which he had picked up dockside on Luna, plus some more colorful expressions derived from his grandmother. 'You had better get off this ship,' he concluded, 'because I'm coming down this line and take your helmet off.' He made a swipe for the line with one hand; Castor flipped it away.

'Say "even-Steven" then.'

Pollux had the line now, having remembered to reach for his belt where it was hooked instead of grabbing for the bight.' Suddenly he grinned. 'Okay - "even-Steven".'

'Even-Steven it is. Hold still; I'll bring you in.' He towed him in gently, grabbing Pol's feet and clicking them down as he approached. 'You looked mighty silly out there,' he commented when Pollux was firm to the ship's side.

His twin invoked their ritual. 'Even-Steven!'

'My apologies, Junior. Let's get to work.'

Padeyes were spaced about twenty feet apart all over the skin of the ship. They had been intended for convenience in rigging during overhauls and to facilitate outside inspections while underway; the twins now used them to park bicycles. They removed the bicycles from the hold half a dozen at a time, strung on a wire loop like a catch of fish. They fastened each clutch of bikes to a padeye; the machines floated loosely out from the side like boats tied up to an ocean ship.

Stringing the clusters of bicycles shortly took them over the 'horizon' to the day side of the ship. Pollux was in front carrying six bicycles in his left hand. He stopped suddenly. 'Hey, Grandpa! Get a load of this!'

'Don't look at the Sun,' Castor said sharply.

'Don't be silly. But come see this.'

Earth and Moon swam in the middle distance in slender crescent phase. The *Stone* was slowly dropping behind Earth in her orbit, even more slowly drifting outward away from the Sun. For many weeks yet Earth would appear as a ball, a disc, before distance cut her down to a brilliant star. Now she appeared about as large as she had from Luna but she was attended by Luna herself. Her day side was green and dun and lavished with cottony clouds; her night side showed the jewels of cities.

But the boys were paying no attention to the Earth; they were looking at the Moon. Pollux sighed. 'Isn't she beautiful?'

'What's the matter, Junior? Homesick?'

'No. But she's beautiful, just the same. Look, Cas, whatever ships we ever own, let's always register them out of Luna City. Home base.'

'Suits. Can you make out the burg?'

'I think so.'

'Probably just a spot on your helmet. I can't. Let's get back to work.'

They had used all the padeyes conveniently close to the hatch and were working aft when Pollux said, 'Wups I Take it easy. Dad said not to go aft of frame 65.'

'Shucks, it must be "cool" back to 90, at least. We've used the jet less than five minutes.'

'Don't be too sure; neutrons are slippery customers. And you know what a stickler Dad is, anyway.'

'He certainly is,' said a third voice.

They did not jump out of their boots because they were zipped tight. Instead they turned around and saw their father standing, hands on hips, near the passenger airlock. Pollux gulped and said, 'Howdy, Dad.'

'You sure gave us a start' Castor added sheepishly.

'Sorry. But don't let me disturb you; I just came out to enjoy the view.' He looked over their work. 'You've certainly got my ship looking like a junkyard.'

'Well, we had to have room to work. Anyhow, who's to see?'

'In this location you have the Almighty staring down the back of your neck. But I don't suppose He'll mind.'

'Say, Dad, Pol and I sort of guessed that you wouldn't want us to do any welding inside the hold?'

'You sort of guessed correctly - not after what happened in the *Kong Christian.'*

'So we figured we could jury-rig a rack for welding out here. Okay?'

'Okay. But it's too nice a day to talk business.' He raised his open hands to the stars and looked out. 'Swell place. Lots of elbow room. Good scenery.'

'That's the truth; But come around to the Sun side if you want to see something.'

'Right. Here, help me shift my lines.' They walked around the hull and into the sunlight. Captain Stone, Earth born, looked first at the mother planet. 'Looks like a big storm is working up around the Philippines.'

Neither of the twins answered; weather was largely a mystery to them, nor did they approve of weather. Presently he turned to them and said softly, 'I'm glad we came, boys. Are you?'

'Oh, you bet!' 'Sure!' They had forgotten how cold and unfriendly the black depths around them had seemed only a short time before. Now it was an enormous room, furnished in splendor, though not yet fully inhabited. It was their own room, to live in, to do with as they liked.

They stood there for quite a long time, enjoying it At last Captain Stone said, 'I've had all the sun I can stand for a while. Let's work around back into the shade.' He shook his head to dislodge a drop of sweat from his nose.

'We ought to get back to work anyhow.'

'I'll help you; we'll get done faster.'

The *Rolling Stone* swung on and outward toward Mars; her crew fell into routine habits. Dr Stone was handy at weightless cooking, unusually skillful, in fact, from techniques she had picked up during a year's internship in the free-fall research clinic in Earth's station. Meade was not so skilled but very little can be done to ruin breakfast. Her father supervised her hydroponics duties, supplementing thereby the course she had had in Luna City High School. Dr Stone split the care of her least child with his grandmother and used her leisure placidly collating some years of notes for a paper 'On the Cumulative Effects of Marginal Hypoxia.'

The twins discovered that mathematics could be even more interesting than they had thought and much more difficult - it required even more 'savvy' than they thought they had (already a generous estimate) and they were forced to stretch their brains. Their father caught up on the back issues of *The Reactomotive World* and studied his ship's manual but still had plenty of time to coach them and quiz them. Pollux, he discovered, was deficient in the ability to visualise a curve on glancing at ,an equation.

'I don't understand it,' he said. 'You got good marks in analytical geometry.'

Pollux turned red. 'What's biting you?' his father demanded.

'Well, Dad, you see it's this way -'

'Go on.'

'Well, I didn't *exactly* get good marks in analyt.'

Eh? What is this? You both got top marks; I remember clearly.'

'Well, now, you see - Well, we were awfully busy that semester and, well, it seemed logical. . . ' His voice trailed off.

'Out with it! Out with it!'

'Cas took both courses in analyt.' Pollux blurted out, 'and I took both courses in history. But I did read the book.'

'Oh, my!' Roger Stone sighed. 'I suppose it's covered by the statute of limitations by this time. Anyhow, you are finding out the hard way that such offences carry their own punishments. When you need it, you don't know it worth a hoot.'

'Yessir.'

'But an extra hour a day for you, just the same - until you can visualise instantly from the equation a four-cooordinate hypersurface in a non-Euclidean continuum - standing on your head in a cold shower.'

'Yessir.'

'Cas, what course did you fudge? Did you read the book?'

'Yes, sir. It was medieval European history, sir.'

'Hmm . . . You're equally culpable, but I'm not too much concerned with any course that does not require a slide rule and tables. You coach your brother.'

'Aye aye, sir.'

'If you are pinched for time, I'll give you a hand with those broken-down bicycles, though I shouldn't.'

The twins pitched into it, hard. At the end of two weeks Roger Stone announced himself satisfied with Pollux's proficiency in analytical geometry. They moved on to more rarefied heights . . . the complex logics of matrix algebra, frozen in beautiful arrays. . . the tensor calculus that unlocks the atom. . . the wild and wonderful field equations that make Man king of the universe . . . the crashing, mind-splitting intuition of Forsyte's Solution that had opened the 21st century and sent mankind another mighty step toward the stars. By the time Mars shone larger in the sky than Earth they had gone beyond the point where their father could reach them; they ploughed on together.

They usually studied together, out of the same book, floating head to head in their bunkroom, one set of feet pointed to celestial south, the other pair to the north. The twins had early gotten into the habit of reading the same book at the same time; as a result either of them could read upside down as easily as in the conventional attitude. While so engaged Pollux said to his brother, 'You know, Grandpa, some of this stuff makes me think we ought to go into research rather than business. After all, money isn't everything.'

'No,' agreed Castor, 'there are also stocks, bonds, and patent rights, not to mention real estate and chattels.'

'I'm serious.

'We'll do both. I've finished this page; flip the switch when you're ready.'

The *War* God, riding in a slightly different orbit, had been gradually closing on them until she could be seen as a 'star' by naked eye - a variable star that winked out and flared up every sixteen seconds. Through the *Stone's* coelostat the cause could easily be seen; the *War God* was tumbling end over end, performing one full revolution every thirty-two seconds to provide centrifugal 'artificial gravity' to coddle the tender stomachs of her groundhog passengers. Each half revolution the Sun's rays struck her polished skin at the proper angle to flash a dazzling gleam at the *Stone.* Through the 'scope the reflection was bright enough to hurt the eyes.

The observation turned out to be both ways. A radio message came in; Hazel printed it and handed it with a straight face to her son: 'WAR GOD TO ROLLING STONE - PVT - ROG OLD BOY, I HAVE YOU IN THE SCOPE. WHAT IN SPACE HAVE YOU GOT ON YOU? FUNGUS? OR SEA WEEDS? YOU LOOK LIKE A CHRISI'MAS TREE. P. VANDENBERGH, MASTER.'

Captain Stone glared at the message stat. 'Why, that fat Dutchman'! I'll "fungus" him. Here, Mother, send this: "Master to Master - private message: In that drunken tumbling pigeon how do you keep your eye to a scope? Do you enjoy playing nursemaid to a litter of groundhogs? No doubt the dowagers fight over a chance to eat at the captain's table. Fun, I'll bet. R. Stone, Master".'

The answer came back: 'ROGER DODGER YOU OLD CODGER, I'VE LIMITED MY TABLE TO FEMALE PASSENGERS CIRCA AGE TWENTY SO I CAN KEEP AN EYE ON THEM - PREFERENCE GIVEN TO BLONDES AROUND FIFTY KILOS MASS. COME OVER FOR DINNER. VAN.'

Pollux looked out the port, caught the glint on the *War God.* 'Why don't you take him up, Dad? I'll bet I could make it across on my suit jet with one spare oxy bottle.'

'Don't be silly. We haven't that much safety line, even at closest approach. Hazel, tell him: "Thanks a million but I've got the prettiest little girl in the system cooking for me right now."'

Meade said, 'Me, Daddy? I thought you didn't like my cooking?'

'Don't give yourself airs, snub nose. I mean your mother, of course.'

Meade considered this. 'But I look like her, don't I?'

'Some. Send it, Hazel.'

'RIGHT YOU ARE! MY RESPECTS TO EDITH. 'TRUTHFULLY, WHAT IS THAT STUFF? SHALL I SEND OVER WEEDKILLER, OR BARNACLE REMOVER? OR COULD WE BEAT IT TO DEATH WITH A STICK?'

'Why not tell him, Dad?' Castor inquired

'Very well, I will, send: "Bicycles: want to buy one?"'

To their surprise Captain Vandenbergh answered:

'MAYBE. GOT A RALEIGH "SANDMAN"?'

'Tell him, "Yes!" 'Pollux put in. 'A-number-one condition and brand-new tires. A bargain.'

'Slow up there,' his father interrupted. 'I've seen your load. If you've got a bike in first-class condition, Raleigh or any other make, you've got it well hidden.'

'Aw, Dad, it will be - by the time we deliver.'

'What do you suppose he wants a bicycle for, dear?' Dr Stone asked. 'Prospecting? Surely not.'

'Probably just sightseeing. All right, Hazel, you can send it - but mind you, boys, I'll inspect that vehicle-myself; Van trusts me.'

Hazel pushed herself away from the rig. 'Let the boys tell their own whoppers. I'm getting bored with this chitchat.'

Castor took over at the key, started to dicker. The passenger skipper, it developed, really was willing to buy a bicycle. After a leisurely while they settled on a price well under Castor's asking price, attractively under the usual prices on Mars, but profitably over what the boys had paid on Luna - this for delivery F.O.B. Phobos, circum Mars.

Roger Stone exchanged affectionate insults and gossip with his friend from time to time over the next several days. During the following week the *War God* came within phone range, but the conversations dropped off and stopped; they had exhausted topics of conversation. The *War God* had made her closest approach and was pulling away again; they did not hear from her for more than three weeks.

The call was taken by Meade. She hurried aft to the hold where her father was helping the twins spray enamel on reconditioned bicycles. 'Daddy, you're wanted on the phone? *War God,* master to master - official.'

'Coming.' He hurried forward and took the call. *'Rolling Stone,* Captain Stone speaking.'

'War God, commanding officer speaking. Captain, can you -

'Just a moment. This does not sound like Captain Vandenbergh.'

'It isn't. This is Rowley, Second Officer. I -'

'I understand that your captain wanted me, officially. Let me speak with him.'

'I'm trying to explain, Captain.' The officer sounded strained and irritable. 'I *am* the commanding officer. Both Captain Vandenbergh and Mr O'Flynn are on the binnacle list.'

'Eh? Sorry. Nothing serious, I hope?'

'I'm afraid it is, sir. Thirty-seven cases on the sick list this morning - and four deaths.'

'Great Scott, man! What is it?'

'I don't know, sir.'

'Well, what does your medical officer *say* it is?'

'That's it, sir. The Surgeon died during the midwatch.'

'Oh-'

'Captain, can you possibly match with us? Do you have enough maneuvering margin?'

'What? Why?'

'You have a medical officer aboard. Haven't you?'

'Huh? But she's my wife!' -

'She's an M.D., is she not?'

Roger Stone remained silent for a long moment. Then he said, 'I'll call you back shortly, sir.'

It was a top level conference, limited to Captain Stone, Dr Stone, and Hazel. First, Dr Stone insisted on calling the *War God* and getting a full report on symptoms and progress of the disease. When she switched off her husband said, 'Well, Edith, what is it?'

'I don't know. I'll have to see it.'

'Now, see here, I'm not going to have you risking -'

'I'm a doctor, Roger.'

'You're not in practice, not now. And you are the mother of a family. It's quite out of the ques -'

'I am a doctor, Roger.'

He sighed heavily. 'Yes, dear.'

'The only thing to be determined is whether or not you can match in with the *War God.* Have you two reached an answer?'

'We'll start computing.'

'I'm going aft and check over my supplies.' She frowned. '1 didn't expect to have to cope with an epidemic.'

When she was gone Roger turned his face, twisted with indecision, to Hazel. 'What do you think, Mother?'

'Son, you don't stand a chance. She takes her oath seriously. You've known that a long time.'

'I haven't taken the Hippocratic oath! If I won't move the ship, there's nothing she can do about it.'

'You're not a doctor, true. But you're a master in space. I guess the "succour & rescue" rule might apply.'

'The devil with rules! This is *Edith.'*

'Well,' Hazel said slowly, 'I guess I might stack the Stone family up against the welfare of the entire human race in a pinch, myself. But I can't decide it for you.'

'I won't let her do it! It's not me. There's Buster - he's no more than a baby still; he needs his mother.'

'Yes, he does.'

'That settles it. I'm going aft and tell her.'

'Wait a minute! If that's your decision, Captain, you won't mind me saying that's the wrong way to do it.'

'Eh?'

'The only way you'll get it past your wife is to get on that computer and come out with the answer you're looking for. . . an answer that says it's physically impossible for us to match with them and still reach Mars.'

'Oh. You're right. Look, will you help me fake it?'

'I suppose so.'

'Then let's get busy.'

'As you say, sir. You know, Roger, if the *War God* comes in with an unidentified and uncontrolled disease aboard, they'll never let her make port at Mars. They'll swing her in a parking orbit, fuel her up again, and send her back at next optimum.'

'What of it? It's nothing to me if fat tourists and a bunch of immigrants are disappointed.'

'Check. But I was thinking of something else. With Van and the first officer sick, maybe about to check in, if the second officer comes down with it, too, the *War God* might not even get as far as a parking orbit.'

Roger Stone did not have to have the thought elaborated; a ship approaching a planet, unless manoeuvred at the last by a skilled pilot, can do one of only two things - crash, or swing on past and out endlessly into empty space to take up a comet-like orbit which arrives nowhere ever.

He covered his face with his hands. 'What do I do, Mother?'

'You are captain, son.'

He sighed. 'I suppose I knew it all along.'

'Yes, but you had to struggle with it first.' She kissed him. 'Orders, son?'

'Let's get to it. It's a good thing we didn't waste any margin in departure.'

'That it is.'

When Hazel told the others the news Castor asked, 'Does Dad want us to compute a ballistic?'

'No.'

'A good thing - for we've got to get those bikes inboard, fast! Come on, Pol. Meade, how about suiting up and giving us a hand? Unless Mother needs you?'

'She does,' answered Hazel, 'to take care of Lowell and keep him out of the way. But you won't be bringing the bikes inboard.'

'What? You can't balance the ship for maneuvers with them where they are. Besides, the first blast would probably snap the wires and change your mass factor.'

'Cas, where are your brains? Can't you see the situation? We jettison.'

'Huh? We throw away our *bikes?* After dragging almost to Mars?'

'Your bikes, all our books, and everything else we can do without. The rough run-through on the computer made that clear as quartz; it's the only way we can do this maneuver and still be sure of having a safe margin for homing in. Your father is checking over the weight schedule right now.'

'But -, Castor's face suddenly relaxed and became impassive. 'Aye aye, ma'am.'

The twins were suiting up but had not yet gone outside when Pollux was struck by a notion. 'Cas? We cut the bikes loose; then what happens?'

'We charge it off to experience - and try to recover from Four-Planets Transit. They won't pay up, of course.'

'Use your skull. Where do the bikes end up?'

'Huh? Why, at *Mars!'*

'Right. Or pretty near. In the orbit we're in now, they swing in mighty close and then head down Sunside again. Suppose, on closest approach, we are standing there waiting to snag 'em?'

'Not a chance. It will take us just as long to get to Mars - and in a different orbit, same as the *War God's?*

'Yes, but just supposing. You know, I wish I had a spare radar beacon to hang on them. Then if we could reach them, we'd know where they were.'

'Well, we haven't got one. Say! Where did you put that used reflecting foil?'

'Huh? Oh, I see. Grandpa, sometimes your senile decay is not quite so noticeable.' The *Stone* had started out, of course, covered on one side of her living quarters by mirror-bright aluminium foil. As she drifted farther and farther from the Sun, reflecting the Sun's heat had grown less necessary, absorbing it more desirable. To reduce the load on the ship's heating and cooling system, square yards of it were peeled up and taken inside to store from week to week.

'Let's ask Dad.'

Hazel stopped them at the hatch to the control room. 'He's at the computer. What's the complaint?'

'Hazel, the reflecting foil we've been salvaging - is it on the jettison list?'

'Certainly. We'll pick up some more on Mars for the trip back. Why?'

'A radar corner - that's why!' They explained the plan. She nodded. 'A long chance, but it makes sense. See here, wire everything we jettison to the bikes. We might get it all back.'

'Sure thing!' The twins got busy. While Pollux gathered together the bunches of bicycles, all but a few in good repair and brave with new paint. Castor constructed a curious geometrical toy. With 8-gauge wire, aluminium foil, and sticky tape he made a giant square of foil, edged and held flat with wire. This he bisected at right angles with a second square. The two squares he again bisected at the remaining possible right angle with a third square. The result was eight shiny right-angled corners facing among them in all possible directions - a radar reflector. Each corner would bounce radar waves directly back to source, a principle easily illustrated with a rubber ball and any room or box corner. The final result was to step up the effectiveness or radar from an inverse fourth-power law to an inverse square law - in theory, at least. In practice it would be somewhat less than perfectly efficient but the radar response of the assembly would be increased enormously. A mass so tagged would stand out on a radar screen like a candle in a cave.

This flimsy giant kite Castor anchored to the ball of bicycles and other jetsam with an odd bit of string. No stronger link was necessary; out here no vagrant wind would blow it away, no one would cut it loose. 'Pol', he said, 'go bang on the port and tell 'em we're ready.'

Pollux walked forward and did so, rapping on the quartz first to attract his grandmother's attention, then tapping code to report. While he was gone Castor attached a piece of paper reading:

NOT FOR SALVAGE

This cargo is in free transit by intention. The undersigned owner intends to recover it and warns all parties not to claim it as abandoned. U.P. Rev. Stat. # 193401

Roger Stone, Master

P.Y. *Rolling Stone,* Luna

When Pollux came back he said, 'Hazel says go ahead but take it easy.'

'Of course.' Castor untwisted the single wire that held the ungainly mass to the ship, then stood back and watched it. It did not move. He reached out and gave it the gentlest shove with his little finger, then continued watching. Slowly, slowly it separated from the ship. He wished to disturb its orbit as little as possible, to make it easy to find. The petty vector he had placed on it - an inch a minute was his guess - would act for all the days from there to Mars; he wanted the final sum to remain small.

Pollux twisted around and picked out the winking gleam of the *War God.* 'Will the jet be clear of it when we swing ship?' he asked anxiously.

'Quit worrying. I already figured that.'

The maneuver to he performed was of the simplest - point to point in space in a region which could be treated as free of gravity strain since the two ships were practically the same distance from the Sun and Mars was too far away to matter. There were four simple steps: cancellation of the slight vector difference between the two ships (the relative speed with which the *War* God was puffing away), acceleration toward the *War* God, transit of the space between them, deceleration to match orbits and lie dead in space relative to each other on arrival.

Steps one and two would be combined by vector addition; step three was simply waiting time. The operation would be two maneuvers, two blasts on the jet.

But step three, the time it would take to reach the *War God,* could be enormously cut down by lavish use of reactive mass. Had time been no object they could have, as Hazel put it, closed the gap 'by throwing rocks off the stern.' There was an infinite number of choices, each requiring different amounts of reactive mass. One choice would have saved the bicycles and their personal possessions - but it would have stretched the transit time out to over two weeks.

This was a doctor's emergency call - Roger Stone elected to jettison.

But he did not tell the twins this and he did not require them to work a ballistic. He did not care to let them know of the choice between sacrificing their capital or letting strangers wait for medical attention. After all, he reflected, the twins were pretty young.

Eleven hours from blast time the *Stone* hung in space close by the *War God.* The ships were still plunging toward Mars at some sixteen miles per second; relative to each other they were stationary - except that the liner continued her stately rotation, end over end. Dr Stone, her small figure encumbered not only with space suit, pressure bottles, radio, suit jet, and life lines, but also with a Santa Claus pack of surgical supplies, stood with her husband on the side of the *Stone* nearest the liner. Not knowing exactly what she might need she had taken all that she believed could be spared from the stock of their own craft -drugs, antibiotics, instruments, supplies.

The others had been kissed good-by inside and told to stay there. Lowell had cried and tried to keep his mother from entering the lock. He had not been told what was going on, but the emotions of the others were contagious.

Roger Stone was saying anxiously, 'Now see here, the minute you have this under control, back you come - you hear?'

She shook her head. 'I'll see you on Mars, dearest.'

'No indeed! You -'

'No, Roger. I might act as a carrier. We can't risk it.'

'You might act as a carrier corning back to us on Mars, too. Don't you *ever* expect to come back?'

She ignored the rhetorical question. 'On Mars there will be hospitals. But I can't risk a family epidemic in space.'

'Edith I've a good mind to refuse to-'

'They're ready for me, dear. See?'

Over their heads, two hundred yards away, a passenger lock on the rotation axis of the mighty ship had opened; two small figures spilled silently out, flipped neatly to boot contact, stood on the ship's side, their heads pointing 'down' at Mr and Mrs Stone. Roger Stone called into his microphone, *'War God!'*

'WarGod aye aye!'

'Are you ready?'

'Whenever you are.'

'Stand by for transfer.'

Acting Captain Rowley had proposed sending a man over to conduct Dr Stone across the gap. She had refused, not wishing to have anyone from the infected ship in contact with the *Rolling Stone.* Now she said, 'Are my lines free for running, Roger?'

'Yes, dearest.' He had bent several lines together, one end to her waist, the other to a padeye.

'Will you do my boots, dear?'

He kneeled and unzipped her magnetic boots without speaking, his voice having become uncertain. He straightened and she put her arms around him. They embraced awkwardly, hampered by the suits, hampered by the extra back pack she carried. 'Adios, my darling,' she said softly. 'Take care of the children.'

'Edith! Take care of yourself!'

'Yes, dear. Steady me now.'

He slipped his hands to her hips; she stepped out of the boots, was now held against the ship only by his hands.

'Ready! One! Two!' They crouched down together. 'Three!' She jumped straight away from the ship, her lines snaking after her. For long, long seconds she sailed straight out over his head, closing the gap between her and the liner. Presently it became evident that she had not leapt quite straight; her husband got ready to haul her back in.

But the reception committee was ready for the exigency. One of them was swinging a weighted line around his head; he let the end of it swing farther and farther out. As she started to move past the side of the *War God* he swung it against her safety line; the weighted end wrapped itself around her line. Back at the *Rolling Stone* Roger Stone snubbed her line and stopped her; the man on the liner gently pulled her in.

The second man caught her and snapped a hook to her belt, then unfastened the long line from the *Stone.* Before she entered the lock she waved, and the door closed.

Roger Stone looked at the closed door for a moment, then pulled in the line. He let his eyes drop to the pair of little boots left standing empty beside him. He pulled them loose, held them to him, and plodded back to his own airlock.

IX - ASSETS RECOVERABLE

The twins kept out of their father's way for the next several days. He was unusually tender and affectionate with all of them but he never smiled and his mood was likely to flare suddenly and unexpectedly into anger. They stayed in their bunkroom and pretended to study they actually did study some of the time. Meade and Hazel split the care of Lowell between them; the child's feeling of security was damaged by the absence of his mother. He expressed it by temper tantrums and demands for attention.

Hazel took over the cooking of lunch and dinner; she was no better at it than Meade. She could be heard twice a day, burning herself and swearing and complaining that she was not the domestic type and never had had any ambitions that way. Never!

Dr Stone phoned once a day, spoke briefly with her husband, and begged off from speaking to anyone else for the reason that she was much too busy. Roger Stone's explosions of temper were most likely to occur shortly after these daily calls.

Hazel alone had the courage to quiz him about the calls. On the sixth day at lunch she said, 'Well, Roger? What was the news today? Give.'

'Nothing much. Hazel, these chops are atrocious.'.

'They ought to be good; I flavored 'em with my own blood.' She held out a bandaged thumb. 'Why don't you try cooking? But back to the subject. Don't evade me, boy.'

'She thinks she's on the track of something. So far as she can tell from their medical records, nobody has caught it so far who is known to have had measles.'

Meade said, 'Measles? People don't die of *that,* do they?'

'Hardly ever,' agreed her grandmother, 'though it can be fairly serious in an adult.'

'I didn't say it was measles,' her father answered testily, 'nor did your mother. She thinks it's related to measles, a mutant strain maybe more virulent.'

'Call it "neomeasles",' suggested Hazel. 'That's a good question-begging tag and it has an impressive scientific sound to it Any more deaths, Roger?'

'Well, yes.'

'How many?'

'She wouldn't say. Van is still alive, though, and she says that he is recovering. She *told* me,' he added, as if trying to convince himself, 'that she thought she was learning how to treat it.'

'Measles,' Hazel said thoughtfully. 'You've never had it, Roger.'

'No.'

'Nor any of the kids.'

'Of course not' put in Pollux. Luna City was by long odds the healthiest place in the known universe; the routine childhood diseases of Earth had never been given a chance to establish.

'How did she sound, Son?'

'Dog tired.' He frowned. 'She even snapped at me.'

'Not Mummy!'

'Quiet, Meade.' Hazel went on, 'I've had measles, seventy or eighty years ago. Roger, I had better go over and help her.'

He smiled without humor. 'She anticipated that. She said to tell you thanks but she had all the unskilled help she could use.'

'"Unskilled help!" I like that! Why, during the epidemic of '93 there were times when I was the only woman in the colony able to change a bed. Hummph!'

Hazel deliberately waited around for the phone call the next day, determined to get a few words at least with her daughter-in-law. The call came in about the usual time; Roger took it. It was not his wife.

'Captain Stone? Turner, sir Charlie Turner. I'm the third engineer. Your wife asked me to phone you.'

'What's the matter? She busy?'

'Quite busy.'

'Tell her to call me as soon as she's free. I'll wait by the board.'

'I'm afraid that's no good, sir. She was quite specific that she would not be calling you today. She won't have time.'

'Fiddlesticks! It will only take her thirty seconds. In a big ship like yours you can hook her in wherever she is.'

The man sounded embarrassed. 'I'm sorry, sir. Dr. Stone gave strict orders not to be disturbed'

'But confound it' I -'

'I'm very sorry, sir. Good-by.' He left him sputtering into a dead circuit.

Roger Stone remained quiet for several moments, then turned a stricken face to his mother. 'She's caught it.'

Hazel answered quietly, 'Don't jump to conclusions, Son.' But in her own heart she had already reached the same conclusion. Edith Stone had contracted the disease she had gone to treat.

The same barren stall was given Roger Stone on the following day; by the third day they gave up the pretence. Dr. Stone was ill, but her husband was not to worry. She had already, before she gave into it herself, progressed far enough in standardizing a treatment that all the new cases - hers among them - were doing nicely. So they said.

No, they would not arrange a circuit to her bed. No, he could not talk to Captain Vandenbergh; the Captain was still too ill.

'I'm coming over!' Roger Stone shouted.

Turner hesitated. 'That's up to you, Captain. But if you do, we'll have to quarantine you here. Dr. Stone's written orders.'

Roger Stone switched off. He knew that that settied it; in matters medical Edith was a Roman judge - and he could not abandon his own ship, his family, to get to Mars by themselves. One frail old woman, two cocksure half-trained student pilots - no, he had to take his ship in.

They sweated it out The cooking got worse, when anyone bothered to cook. It was seven endless, Earth-standard days later when the daily call was answered by, 'Roger - hello, darling!'

'Edith! Are you all right?'

'Getting that way.'

'What's your temperature?'

'Now, darling, I won't have you quack-doctoring me. My temperature is satistactory, as is the rest of my physical being. I've lost a little weight, but I could stand to - don't you think?'

'No, I don't. Listen - you come home! You hear me?'

'Roger dearest! I can't and that's settled. This entire ship is under quarantine. But how is the rest of my family?'

'Oh, shucks, fine, fine! We're all in the pink.'

'Stay that way. I'll call you tomorrow. Bye, dear.'

Dinner that night was a celebration. Hazel cut her thumb again, but not even she cared.

The daily calls, no longer a naging worry but a pleasure, continued. It was a week later that Dr. Stone concluded by saying 'Hold on, dear. A friend of yours wants to speak with you.'

'Okay, darling: Love and stuff - good-by.'

'Roger Dodger?' came a bass voice.

'Van! You squareheaded bay window! I knew you were too mean to die.'

'Alive and kicking, thanks to your wonderful wife. But no longer with a bay window; I haven't had time to regrow it yet'

'You will.'

'No doubt. But I was asking the good doctor about something and she couldn't give me much data. Your department Rog, how did this speed run leave you for singleH? Could you use some g-juice?'

Captain Stone considered it. 'Have you any surplus, Captain?'

'A little. Not much for this wagon, but it might be quite a lot for a kiddie cart like yours.'

'We had to jettison, did you know?'

'I know - and I'm sorry. I'll see that a claim is pushed through promptly. I'd advance it myself, Captain, if alimony on three planets left me anything to advance.'

'Maybe it won't be necessary.' He explained about the radar reflector. 'If we could nudge back into the old groove we just might get together with our belongings.'

Vandenbergh chuckled. 'I want to meet those kids of yours again; they appear to have grown up a bit in the last seven years.'

'Don't. They'll stea! your bridgework. Now about this singleH: how much can you spare?'

'Enough, enough, I'm sure. This caper is worth trying, just for the sport. I'm sure it has never been done before. Never.'

The two ships, perfectly matched to eye and almost so by instrument, nevertheless had drifted a couple. of miles apart while the epidemic in the liner raged and died out. The undetectable gravitational attraction between them gave them mutual escape velocity much less than their tiny residual relative motion. Up to now nothing had been done about it since they were still in the easiest of phone range. But now it was necessary to pump reactive mass from one to the other.

Roger Stone threw a weight fastened to a light messenger line as straight and as far as he could heave. By the time it was slowed to a crawl by the drag of the line a crewman from the *War God* came out after it on his suit jet, In due course the messenger line brought over a heavier line which was fastened to the smaller ship. Hand power alone took a strain on the line. While the mass of *Rolling Stone* was enormous by human muscle standards, the vector involved was too small to handle by jet and friction was nil. In warping in a space ship the lack of brakes is a consideration more important than numerous dents to ships and space stations testify.

As a result of that gentle tug, two and a half days later the ships were close enough to permit a fuel hose to be connected between them. Roger and Hazel touched the hose only with wrench and spacesuit gauntlet, not enough contact to affect the quarantine even by Dr. Stone's standards. Twenty minutes later even that connection was broken and the *Stone* had a fresh supply of jet juice.

And not too soon. Mars was a ruddy gibbous moon, bulging ever bigger in the sky; it was time to prepare to maneuver.

'There it is!' Pollux was standing watch on the radar screen; his yelp brought his grandmother floating over.

'More likely a flock of geese,' she commented, 'Where?'

'Right there. Can't you see it?'

Hazel grudgingly conceded that the blip might be real. The next several hours were spent in measuring distance, bearing, and relative motion by radar and doppler and in calculating the cheapest maneuver to let them match with the errant bicycles, baggage, and books. Roger Stone took it as easily as he could, being hurried somewhat by the growing nearness of Mars. He finally settled them almost dead in space relative to the floating junk pile, with a slight drift which would bring them within three hundred yards of the mass - so he calculated - at closest approach a few hours hence.

They spent the waiting time figuring the maneuvers to rendezvous with Mars. The *Rolling Stone* would not, of course, land on Mars but at the port on Phobos. First they must assume an almost circular ellipse around Mars matching with Phobos, then as a final maneuver they must settle the ship on the tiny moon - simple maneuvers made fussy by one thing only; Phobos has a period of about ten hours; the *Stone* would have to arrive not only at the right place with the right speed and direction, but also at the right time. After the bicycles were taken aboard the ship would have to be nursed along while still fairly far out if she were to fall to an exact rendezvous.

Everybody worked on it but Buster, Meade working under Hazel's tutelage. Pollux continued to check by radar their approach to their cargo. Roger Stone had run through and discarded two trial solutions and was roughing out another which, at last, seemed to be making sense when Pollux announced that his latest angulation of the radar data showed that they were nearly as close as they would get.

His father unstrapped himself and floated to a port. 'Where is it? Good heavens, we're practically sitting on it. Let's get busy, boys.'

'I'm coming, too,' announced Hazel.

'Me, too!' agreed Lowell.

Meade reached out and snagged him. 'That's what you think, Buster. You and Sis are going to play a wonderful game called, "What's for dinner?" Have fun, folks.' She headed aft, towing the infant against his opposition.

Outside the bicycles looked considerably farther away. Cas glanced at the mass and said. 'Maybe I ought to go across on my suit jet, Dad? It would save time.'

'I strongly doubt it. Try the heaving line, Pol.' Pollux snapped the light messenger line to a padeye. Near the weighted end had been fastened a half a dozen large hooks fashioned of 6-gauge wire. His first heave seemed to be strong enough but it missed the cluster by a considerable margin,

'Let me have it, Pol,' Castor demanded.

'Let him be,' ordered their father. 'So help me, this is the last time I'm going into space without a proper line-throwing gun. Make note of that, Cas. Put it on the shopping list when we go inside.'

'Aye aye, sir.'

The second throw was seen to hit the mass, but when Pol heaved in the line came away, the hooks having failed to catch. He tried again. This time the floating line came taut.

'Easy, now!' his father cautioned. 'We don't want a bunch of bikes in our lap. There - 'vast heaving. She's started.' They waited.

Castor became impatient and suggested that they give the line another tug. His father shook his head. Hazel added, 'I saw a green hand at the space station try to hurry a load that way. Steel plate, it was.'

'What happened?'

'He had started it with a pull; he thought he could stop it with a shove. They had to amputate both legs but they saved his life.' Castor shut up.

A few minutes later the disorderly mass touched down, bending a handlebar of one bike that got pinched but with no other damage. The twins and Hazel swarmed over the mass, working free on their safety lines and clicking on with their boots only to pass bicycles into the hold, where Roger Stone stowed them according to his careful mass distribution' schedule.

Present!y Pollux came across Castor's 'Not for Salvage' warning. 'Hey, Cas! Here's your notice.'

'It's no good now.' Nevertheless he accepted it and glanced at it. Then his eyes snapped wider.

An endorsement had been added at the bottom:

'Sez you!

'The Galactic Overlord.'

Captain Stone came out to investigate the delay, took the paper and read it. He looked at his mother. 'Hazel!'

'Me? Why, I've been right here in plain sight the whole time. How could I have done it?'

Stone crumpled the paper. 'I do not believe in ghosts, inside straights, nor "Galactic Overlords."'

If Hazel did it, no one saw her and she never admitted it. She persisted in the theory that the Galactic Overlord wasn't really dead after all. To prove it, she revived him in her next episode.

X - PHOBOS PORT

Mars has two readymade space stations, her two tiny, close-in moons - Phobos and Deimos, the dogs of the War God, Fear and Panic. Deimos is a jagged, ragged mass of rock; a skipper would he hard put to find a place to put down a ship. Phobos was almost spherical and fairly smooth as we found her; atomic power has manicured her into one big landing field all around her equator - a tidying-up that may have been over hasty; by one very plausible theory the Martian ancients used her themselves as a space station. The proof, if such there be, may lie buried under the slag of Phobos port.

The *Rolling Stone* slid inside the orbit of Deimos, blasted as she approached the orbit of Phobos and was matched in with Phobos, following an almost identical orbit around Mars only a scant five miles from that moon. She was falling now, falling *around* Mars but falling *toward* Phobos, for no vector had been included as yet to prevent that. The fall could not be described as a headlong plunge; at this distance, one radius of Phobos, the moon attracted the tiny mass of the spaceship with a force of less than three ten-thousandths of one Earth surface gravity. Captain Stone had ample time in which to calculate a vector which would let him land; it would take the better part of an hour for the *Stone* to sink to the surface of the satellite.

However, he had chosen to do it the easy way, through outside help. The jet of the *Rolling Stone,* capable of blasting at six gravities, was almost too much of a tool for the thin gravity field of a ten-mile rock - like swatting a fly with a pile-driver. A few minutes after they had ceased blasting, a small scooter rocket up from Phobos matched with them and anchored to their airlock.

The spacesuited figure who swam in removed his helmet and said, 'Permission to board, sir? Jason Thomas, port pilot - you asked for pilot-and-tow?'

'That's right' Captain Thomas.'

'Just call me Jay. Got your mass schedule ready?'

Roger Stone gave it to him; he look it over while they looked him over. Meade thought privately that he looked more like a bookkeeper than a dashing spaceman - certainly nothing like the characters in Hazel's show. Lowell stared at him gravely and said, 'Are you a Martian, Mister?'

The port pilot answered him with equal gravity. 'Sort of, son.'

'Then where's your other leg?'

Thomas looked startled, but recovered. 'I guess I'm a cut-rate Martian.'

Lowell seemed doubtful but did not pursue the point. The port official returned the schedule and said, 'Okay, Captain. Where are your outside control-circuit jacks?'

'Just forward of the lock. The inner terminals are here on the board.'

'Be a few minutes.' He went back outside, moving very rapidly. He was back inside in less than ten minutes.

'That's all the time it took you to mount auxiliary rockets?' Roger Stone asked incredulously.

'Done it a good many times. Gets to be a routine. Besides, I've got good boys working with me.' Quickly he plugged a small portable control board to the jacks pointed out to him earlier, and tested his controls. 'All set.' He glanced at the radar screen. 'Nothing to do but loaf for a bit You folks immgrating?'

'Not exactly. It's more of a pleasure trip.'

'Now ain't that nice! Though it beats me what pleasure you expect to find on Mars.' He glanced out the port where the reddish curve of Mars pushed up into the black.

'We'll do some sightseeing I expect'

'More to see in the State of Vermont than on this whole planet I know.' He looked around. 'This your whole family?'

'All but my wife.' Roger Stone explained the situation.

'Oh, yes! Read about it in the daily *War Cry*. They got the name of your ship wrong, though.'

Hazel snorted in disgust 'Newspapers!'

Yes, mum. I put the *War God* down just four hours ago. Berths 32 & 33. She's in quarantine, though.' He pulled out a pipe 'You folks got static precipitation?'

Yes,' agreed Hazel. 'Go ahead and smoke, young man.'

'Thanks on both counts.' He made almost a career of getting it lighted; Pollux began to wonder when he intended to figure his ballistic.

But Jason Thomas did not bother even to glance at the radar screen; instead he started a long and meandering story about his brother-in-law back Earthside. It seemed that this connection of his had tried to train a parrot to act as an alarm clock.

The twins knew nothing of parrots and cared less. Castor began to get worried. Was this moron going to crash the *Stone?* He began to doubt that Thomas was a pilot of any sort. The story ambled on and on. Thomas interrupted himself to say, 'Better hang on, everybody. And somebody ought to hold the baby.'

'I'm not a baby,' Lowell protested.

'I wish I was one, youngster.' His hand sought his control panel as Hazel gathered Lowell in. 'But the joke of the whole thing was - A deafening rumble shook the ship, a sound somehow more earsplitting than their own jet. It continued for seconds only, as it died Thomas continued triumphantly:

- the bird never did learn to tell time. Thanks, folks. The office'll bill you.' He stood up with a catlike motion, slid across or without lifting his feet 'Glad to have met you. G'bye!'

They were down on Phobos.

Pollux got up from where he had sprawled on the deckplates - and bumped his head on the overhead. After that he tried to walk like Jason Thomas. He had weight, real weight, for the first time since Luna, but it amounted to only two ounces in his clothes. 'I wonder how high I can jump here?' he said.

'Don't try it,' Hazel advised. 'Remember the escape velocity of this piece of real estate is only sixty-six feet a second.'

'I don't think a man could jump that fast'

'There was Ole Gunderson. He dived right around Phobos - a free circular orbit thirty-five miles long. Took him eighty-five minutes. He'd have been traveling yet. If they hadn't grabbed as he came back around.'

'Yes, but wasn't he an Olympic jumper or something? And didn't he have to have a special rack or some such to take off from?'

'You wouldn't have to jump,' Castor put in. 'Sixty-six feet a second is fortyfive miles an hour, so the circular speed comes out a bit more than thirty miles an hour. A man can run twenty miles an hour back home, easy. He could certainly get up to fortyfive here.'

Pollux shook tiis head. 'No traction.'

'Special spiked shoes and maybe a tangent launching ramp for the last hundred yards - then *woosh!* off the end and you're gone for good.'

'Okay, you try it, Grandpa. I'll wave good-by to you.'

Roger Stone whistled loudly. 'Quiet, please! If you armchair athletes are quite through, I have an announcement to make.'

'Do we go groundside now, Dad?'

'Not if you don't quit interrupting me. I'm going over to the *War God.* Anyone who wants to come along, or wishes to take a stroll outside, may do so - just as long as you settle the custody of Buster among you. Wear your boots; I understand they have steel strip walkways for the benefit of transients.'

Pollux was the first one suited up and into the lock, where he was surprised to find the rope ladder still rolled up. He wondered about Jason Thomas and decided that he must have jumped. . . a hundred-odd feet of drop wouldn't hurt a man's arches here. But when he opened the outer door he discovered that it was quite practical to walk straight down the side of the ship like a fly on a wall. He had heard of this but had not quite believed it, not on a *planet* . . . well, a moon.

The others followed him, Hazel carrying Lowell. Roger Stone stopped when they were down and looked around. 'I could have sworn,' he said with a puzzled air, 'that I spotted the *War God* not very far east of us just before we landed.'

'There is something sticking up over there,' Castor said, pointing north. The object was a rounded dome swelling up above the extremely near horizon - an horizon only two hundred yards away for Castor's height of eye: The dome looked enormous but it grew rapidly smaller as they approached it and finally got it entirely above the horizon. The sharp curvature of the little globe played tricks on them;

it was so small that it was possible to see that it was curved, but the habit of thinking of anything over the horizon as distant stayed with them.

Before they reached the dome they encountered one of the steel walking strips running across their path, and on it a man. He was spacesuited as they were and was carrying with ease a large coil of steel line, a hand-powered winch, and a ground anchor with big horns. Roger Stone stopped him. 'Excuse me, friend but could you tell me the way to the R.S. *War God?* Berths thirty-two and -three, I believe she is.'

Off east there. Just follow this strip about five miles; you'll raise her. Say, are you from the *Rolling Stone?'*

'Yes. I'm her master. My name's Stone, too.'

'Glad to know you, Captain. I'm just on my way out to respot your ship. You'll find her in berth thirteen, west of here when you come back.'

The twins looked curiously at the equipment he was carrying. 'Just with that?' asked Castor, thinking of the ticklish problem it had been to move the *Stone* on Luna.

'Did you leave your gyros running?' asked the port jockey.

'Yes,' answered Captain Stone.

'I won't have any trouble. See you around.' He headed out to the ship. The family party turned east along the strip; the traction afforded by their boot magnets against steel made much easier walking. Hazel put Lowell down and let him run.

They were walking toward Mars, a great arc of which filled much of the eastern horizon. The planet rose appreciably as they progressed; like Earth in the Lunar sky Mars never rose nor set for any particular point of the satellite's surface - but they were moving over the curve of Phobos so rapidly that theff own walking made it rise. About a mile farther along Meade spotted the bow of the *War God* silhouetted against the orange-red face of Mars. They hurried, but it was another three miles before they had her in sight down. to her fins.

At last they reached her - to find a temporary barrier of line and posts around her and signs prominently displayed:

'WARNING! - QUARANTINE - no entrance by order of Phobos Port Authority.'

I can t read,' said Hazel.

Roger Stone pondered it 'The rest of you stay here, or go for a walk - whatever you please. I'm going in. Mind you stay off the field proper.'

'Shucks,' answered Hazel, 'there's plenty of time to see a ship coming in and run for it, the way they float in here. That's all the residents do. But don't you want me to come with you, boy?'

'No its my pidgin.' He left them at the barrier, went toward the liner. They waited. Hazel passed the time by taking a throat lozenge from her gun and popping it in through her mouth valve; she gave one to Lowell. Presently they saw Roger walk up the side of the ship to a view port. He stayed there quite a whlle, then walked down again.

When he got back to them his face was stormy. Hazel said 'No go, I take it?'

'None at all. Oh, I saw Van and he rapped out some irrelevant insults. But he did let me see Edith - through the port'

'How did she look?'

'Wonderful, just wonderful! A little bit thinner perhaps, but not much. She blew a kiss for all of you.' He paused and frowned. 'But I can't get in and I can't get her out.'

'You can't blame Van,' Hazel pointed out. 'It would mean his ticket.'

'I'm not blaning anybody! I'm just mad, that's all.'

'Well, what next?'

He thought about it. 'The rest of you do what you like for the next hour or so. I'm going to the administration building - it's that dome back there. I'll meet you all at the ship - berth thirteen.'

The twins elected to walk on east while Meade and Hazel returned at once to the ship Buster was getting restless. The boys wanted a really good look at Mars. They had watched it through the *Stone's* ports, of course, on the approach - but this was different. . . more real, somehow - not framed like a television shot. Three more miles brought all of it in sight, or all of it that was illuminated, for the planet was in half phase to them, the Sun being at that point almost overhead.

They studied the ruddy orange deserts, the olive green fertile stretches, the canals stretching straight as truth across her fiat landscape. The south polar cap was tipped slightly toward them; it had almost disappeared. Facing them was the great arrowhead of Syrtis Major.

They agreed that it was beautiful, almost as beautiful as Luna - more beautiful perhaps than Earth in spite of Earth's spectacular and always changing cloud displays. But after a while they grew bored with it and headed back to the ship.

They found berth thirteen without trouble and walked up into the ship. Meade had dinner ready; Hazel was playing with Buster. Their father came in just as they were ready to eat. 'You,' announced Hazel, 'looked as if you had bribed a chairwarmer.'

'Not quite.' He hesitated, then said, 'I'm going into quarantine with Edith. I'll come out when she does.'

'But Daddy -' protested Meade.

'I'm not through. While I'm gone Hazel takes command. She is also head of this family.'

'I always have been,' Hazel said smugly.

'Please, Mother. Boys, if she finds it necessary to break your arms, please be advised that the action is authorised in advance. You understand me?'

'Yes sir. - 'Aye aye, sir.'

'Good. I'm going to pack now and leave.'

'But Daddy!' Meade objected, almost in tears, 'aren't you going to wait for dinner?'

He stopped and smiled. 'Yes, sugar pie. You are getting to be a good cook, did you know?'

Castor glanced at Pollux, then said, 'Uh, Dad, let me get this straight We are simply to wait here in the ship - on this undersized medicine ball until you and Mother get out of hock?'

'Why, yes - no, that isn't really necessary. I simply hadn't thought about it. If Hazel is willing, you can close down the ship and go down to Mars. Phone us your address and we'll join you there. Yes, I guess that's the best scheme.'

The twins sighed with relief.

XI - 'WELCOME TO MARS!'

Roger Stone promptly caught the epidemic disease and had to be nursed through it - and thereby extended the quarantine time It gave the twins that much more time in which to exercise their talent for trouble. The truncated family went from Phobos down to Marsport by shuttle - not the sort of shuttle operating between Pikes Peak and Earth's station, but little glider rockets hardly more powerful than the ancient German war rockets. Mars' circular-orbit speed is only a trifle over two miles per second.

Nevertheless the fares were high . . . and so were freight charges The twins had unloaded their cargo, moved it to the freight lots between the customs shed and the administration building and arranged for it to follow them down, all before they boarded the shuttle. They had been horrified when they were presented with the bill - payable in advance. It had come to more than the amount they had paid their father for the added ship's costs of boosting the bicycles all the way to Mars.

Castor was still computing their costs and possible profits as the five Stones were strapping down for the trip down to Marsport. 'Pol, he said fretfully, 'we'd better by a darn sight get a good price for those bikes.'

'We will, Grandpa, we will. They're good bikes.'

The thuttle swooped to a landing on the Grand Canal and was towed into a slip, rocking gently the while. The twins were glad to climb out; they had never before been in a waterborne vehicle and it seemed to them an undependable if not outright dangerous mode of travel. The little ship was unsealed with a soft sigh and they were breathing the air of Mars. It was thin but the pressure was not noticeably lower than that they had maintained in the *Rolling Stone* - a generation of the atmosphere project had made skin suits and respirators unnecessary. It was not cold; the Sun was right at the zenith. Meade sniffed as she climbed to the dock. 'What's the funny smell, Hazel?'

'Fresh air. Odd stuff, isn't it? Come on, Lowell.' They all went inside the Hall of Welcome, that being the only exit. from the dock. Hazel looked around, spotted a desk marked 'Visas' and headed for it. 'Come on, kids Let's stick together.'

The clerk looked over their papers as if he had never seen anything of the sort before and didn't want to now. 'You had your physical examinations at Phohos port?' he said doubtfully.

'See for yourself. They're all endorsed.'

'Well. . . you don't have your property declaration filled out for immigration.'

'We're not imrnjgrants; we're visitors.'

'Why didn't you say so? You haven't posted a bond; all terrestrial citizens have to post bonds.'

Pollux looked at Castor and shook his head. Hazel counted up to ten and replied, 'We're not terrestrials; we're citizens of Luna Free State - and entitled to full reciprocity under the treaty of '07. Look it up and see.'

'Oh.'. The clerk looked baffled and endorsed and stamped their papers. He stuck them in the stat machine, then handed them back. 'That'll be five pounds.'

'Five pounds?'

'Pounds Martian, of course. If you apply for citizenship it's returnable.'

Hazel counted it out. Pollux converted the figure into System credit in his head and swore under his breath; he was beginning to think that Mars was the Land of the Fee. The clerk. recounted the money, then reached for a pile of pamphlets, handed them each one. 'Welcome to Mars,' he said, smiling frigidly. 'I know you'll like it here.'

'I was beginning to wonder,' Hazel answered, accepting a pamphlet

'Eh?'

'Never mind. Thank you.'

They turned away. Castor glanced at his pamphlet; it was titled:

WELCOME TO MARS! ! !
Compliments
of the Marsport
Chamber of Commerce &
Booster Club

He skimmed the table of contents: What to See - Where to Eat - And Now to Sleep - 'When in Rome-' - In Ancient Times - Souvenirs? of course - Business Opportunities - Facts & Figures about Marsport, Fastest Growing City in the System.

The inside, he found, contained more advertising space than copy. None of the pictures were stereo. Still, it was free; he stuck it in his pouch.

They had not gotten more than ten steps away when the clerk suddenly called out, 'Hey I Madam I Just a moment, please-comeback!'

Hazel turned around and advanced on him, her mouth set grimly. 'What's biting you, bub?'

He pointed to her holster. 'That gun. You can't wear that - not in the city limits.'

'I can't, eh?' She drew it, opened the charge chamber, and offered it to him with a sudden grin. 'Have a cough drop?'

A very pleasant lady at the Travellers' Aid desk, after determining that they really did not want to rent an ancient Martian tower believed to be at least a million years old but sealed and airconditioned nevertheless, made out for them a list of housekeeping apartments for rent. Hazel had vetoed going to any of the tourist hotels even for one night, after telephoning three and getting their rates. They tramped through a large part of the city, searching. There was no public transit system; many of the inhabitants used powered roller skates, most of them walked. The city was laid out in an oblong checkerboard with the main streets parallel to the canal. Except for a few remaining pressurised domes in 'Old Town' the buildings were all one-storey prefabricated boxlike structures without eaves or windows, all of depressing monotony.

The first apartment turned out to be two little stalls in the back of a private home - share refresher with family. The second was large enough but was in sniffing range of a large plastics plant; one of its exhaltations seemed to be butyl mersaptan though Hazel insisted it put her more in mind of a dead goat The third - but none of them approached the standard of comfort they had enjoyed on the Moon, nor even that of the *Rolling Stone.*

Hazel came out of the last one they had jooked at, jumped back suddenly to keep from being run over by a delivery boy pulling a large hand truck, caught her breath and said, 'What'll it be, children? Pitch a tent, or go back up to the *Stone?'*

Pollux protested, 'But we can't do that We've got to sell our bicycles.'

'Shut up, Junior,' his brother told him 'Hazel, I thought there was one more? "Casa" something?'

'Casa Mañana Apartments, way out south along the canal - and likely no better than the rest Okay, troops, mush on!'

The buildings thinned out and they saw some of the heliotropic

Martian vegetation, spreading greedy hands to the Sun. Lowell began to complain at the walk. 'Carry me, Grandma Hazel!'

'Nothing doing, pet', she said emphatically, 'your legs are younger than mine.'

Meade stopped. 'My feet hurt, too.'

'Nonsense! This is just a shade over one-third gravity.'

'Maybe so, but it's twice what it is back home and we've been in free fall for half a year and more. Is it much farther?'

'Sissy!'

The twins' feet hurt, too, but they would not admit it They alternated taking Buster piggyback the rest of the way. Casa Mañana turned out to be quite new and, by their suddenly altered standards, acceptable. The walls were of compacted sand, doubled against the bitter nights; the roof was of sheet metal sandwich with glass-wool core for insulation. It was a long, low building which made Hazel think of chicken coops but she kept the thought to herself. It had no windows but there were sufficient glow tubes and passable air ducting.

The apartment which the owner and manager showed to them consisted of two tiny cubicles, a refresher, and a general room. Hazel looked them over. 'Mr d'Avril, don't you have something a bit larger?'

'Well, yes, ma'am, I do - but I hate to rent larger ones to such a small family with the tourist season just opening up: I'll bring in a cot for the youngster.'

She explained that two more adults would be coming. He considered this. 'You dbn't know how long the *War God* will *be* quarantined?

'Not the slightest'

'Then why don't we play that hand after it's dealt? We'll accomodate you somehow; that's a promise.'

Hazel decided to close the deal; her feet were killing her. 'How much?'

'Four hundred and fifty a month - four and a quarter if you take a lease for the whole season.'

At first Hazel was too surprised to protest She had not inquired rents at the other places since she had not considered renting them. 'Pounds or credits?' she said feebly.

'Why, pounds, of course.'

'See here, I don't want to buy this du - this place. I just want to use it for a while.'

Mr d'Avril looked hurt. 'You needn't do either one, ma'am. With ships arriving every day now I'll have my pick of tenants. My prices are considered very reasonable. The Property Owner's Association has tried to get me to up 'em - and that's a fact'

Hazel dug into her memory to recall how to compare a hotel price with a monthly rental - add a zero to the daily rate; that was it Why, the man must be telling the truth! - if the hotel rates she had gotten were any guide. She shook her head. 'I'm just a country girl, Mr d'Avril. How much did this place cost to build?'

Again he looked hurt 'You're not looking at it properly, ma'am. Every so often we have a big load of tourists dumped on us. They stay awhile, then they go away and we have no rent coming in at all. And you'd be surprised how these cold nights nibble away at a house. We can't build the way the Martians could.'

Hazel gave up. 'Is that season discount you mentioned good from now to Venus departure?'

'Sorry, ma'am. It has to be the whole season.' The next favorable time to shape an orbit for Venus was ninety-six Earth-standard days away - ninety-four Mars days - whereas the 'whole season' ran for the next fifteen months, more than half a Martian year before Earth and Mars would again be in a position to permit a minimum-fuel orbit.

'We'll take it by the month. May I borrow your stylus? I don't have that much cash on me.'

Hazel felt better after dinner. The Sun was down and the night would soon be too bitter for any human not in a heated suit, but inside Casa Mañana it was cozy, even though cramped. Mr d'Avril, for an extra charge only mildly extortionate, had consented to plug in television for them and Hazel was enjoying for the first time in months one of her own shows. She noted that they had rewritten it in New York, as usual, and, again as usual, she found the changes no improvement. But she could recognise some of the dialogue and most of the story line.

That Galactic Overlord - he was a baddy, he was! Maybe she should kill him off agaih.

They could try to find a cheaper place tomorrow. At least as long as the show kept up its audience rating the family wouldn't starve, but she hated to think of Roger's face when he heard what rent he was paying. Mars! All right to visit, maybe, but no place to live. She frowned.

The twins were whispering in their own cubicle about some involved financial dealing; Meade was kitting quietly and watching the screen. She caught Hazel's expression. 'What were you thinking about, Grandmother?'

'*I* know what she's thinking about!' announced Lowell.

'If you do, keep it to yourself. Nothing much, Meade - that pipsqueak clerk. Imagine the nerve of him, saying I couldn't pack a gun!'

XII - FREE ENTERPRISE

The twins started out to storm the marts of trade next morning after breakfast Hazel cautioned them. 'Be back in time for dinner. And try not to commit any capital crimes.'

'What are they here?'

'Um, let me see. Abandonment without shelter. . . pollution of the water supply . . . violation of treaty regulations with the natives - I think. that's about all.'

'Murder?'

'Killing is largely a civil matter here - but they stick you for the prospective earnings of your victim for whatever his life expectancy was. Expensive. Very expensive, if the prices we've run into are any guide. Probably leave you indentured the rest of your life.'

'Hmm - We'll be careful. Take note of that, Pol. Don't kill anybody.'

'*You* take note of it. You're the one with the bad temper.'

'Back sharp at six, boys. Have you adjusted your watches?'

'Pol slowed his down; I'm leaving mine on Greenwich rate.'

'Sensible.'

'Pol!' put in Lowell. 'Cas! Take me along!'

'Can't. do it, sprout. Business.'

'Take me! I want to see a Martian. Grandma Hazel, *when* am I going to. see a Martian?'

She hesitated. Ever since an unfortunate but instructive incident forty years earlier a prime purpose of the planetary government had been to keep humans as far away from the true Martians as possible - tourists most especially. Lowell had less chance of getting his wish than a European child visiting Manhattan would have of seeing an American Indian. 'Well, Lowell, it's like this -The twins left hastily, not wishing to be drawn into what was sure to be a fruitless debate.

They soon found the street catering to the needs of prospectors. They picked a medium-sized shop displaying the sign of Angelo & Sons, Ltd., General Outfitters, which promised 'Bedrolls, Geiger Counters, Sand Cycles, Assaying Service, BlackLight Lamps, Firearms, Hardware-Ironmongery - Ask for It; We've Got It or Can Get It'.

Inside they found a single shopkeeper leaning against a counter while picking his teeth and playing with something that moved on the counter top. Pollux glanced curiously at it; aside from the fact that it was covered with fur and seemed to be rougly circular, he could not make out what it was. Some sort of Martian dingus probably. He would investigate later - business first.

The shopkeeper straightened up and remarked with professional cheer, 'Good morning, gentlemen. Welcome to Mars.'

'How did you know?' asked Castor.

'Know what?'

'That we had just gotten here.'

'Eh? That's hard to say. You've still got some free fall in your walk and - oh, I don't know. Little things that add up automatically. You get to know.'

Pollux shot Castor a glance of warning; Castor nodded. This man's ancestors, he realised subconsciously, had plied the Mediterranean, sizing up customers, buying cheap and selling dear. 'You're Mr Angelo?'

'I'm Tony Angelo. Which one did you want?'

'Uh, no one in particular, Mr Angelo. We were just looking around.'

'Help yourselves. Looking for souvenirs?'

'Well, maybe.'

'How about this?' Mr Angelo reached into a box behind him and pulled out a battered face mask. 'A sandstorm mask with the lenses pitted by the sands of Mars. You can hang it up in your parlor and tell a real thiller about how it got that way and how lucky you are to be alive. It won't add much to your baggage weight allowance and I can let you have it cheap - I'd have to replace the lenses before I could sell it to the trade.'

Pollux was beginning to prowl the stock, edging towards the bicycles; Castor decided that he should keep Mr Angelo engaged while his brother picked up a few facts, 'Well, I don't know,' he replied. 'I wouldn't want to tell a string of lies about it'

'Not Lies, just creative storytelling. After all, it could have happened - it did happen to the chap that wore it; I know him. But never mind.' He put the mask back. 'I've got some honest-to-goodness Martian gems, only K'Raath HimseIf knows how old - but they are very expensive. And I've got some others that can't be told from the real ones except in a laboratory under polarised light; *they* come from New Jersey and aren't expensive at all. What's your pleasure?'

'Well, I don't know,' Castor repeated, 'Say Mr Angelo, what is this? At first I thought it was a fur cap; now I see its alive'

Castor pointed to the furry heap on the counter. It was slowly slithering toward the edge.

The shopkeeper reached out and headed it back to the middle. 'That? That's a "flat cat".'

'"Flat cat?"'

'It has a Latin name but I never bothered to learn it.' Angelo tickled it with a forefinger; it began to purr like a highpitched buzzer. It had no discernible features, being merely a pie-shaped mass of sleek red fur a little darker than Castor's own hair. 'They're affectionate little things and many of the sand rats keep them for pets - a man has to have someone to talk to when he's out prospecting and a flat cat is better than a wife because it can't talk back. It just purrs and snuggles up to you. Pick it up.'

Castor did so, trying not seem gingerly about it The flat cat promptly plastered itself to Castor's shirt, fattened its shape a little to fit better the crook of the boy's arm, and changed its purr to a low throbbing which Castor could feel vibrate in his chest. He looked down and three beady little eyes stared trust-fully back up at him, then closed and disappeared completely. A little sigh interrupted the purrs and the creature snuggled closer.

Castor chuckled 'It is like a cat, isn't it?

'Except that it doesn't scratch. Want to buy it?'

Castor hesitated. He found himself thinking of Lowell's anxiety to see a 'real Martian'. Well, this was a 'Martian', wasn't it? A sort of a Martian. 'I wouldn't know how to take care of it'

'No trouble at all. In the first place they're cleanly little heasties - no problem that way. And they'll eat anything; they *love* garbage. Feed it every week or so and let it have all the water it will take every month or six weeks - it doesn't matter really; if it isn't fed or watered it just slows down until it is. Doesn't hurt a bit And you don't even have see that it keeps warm. Let me show you.' He reached out and took the flat cat back, jiggled it in his hand. It promptly curled up into a ball.

'See that? Like everything else on Mars, it can wrap itself up when the weather is bad. A real survivor type.' The shopkeeper started to mention another of its survival characteristics, then decided it had no bearing on the transaction. 'How about it? I'll make you a good price.'

Castor decided that Lowell would love it - and besides, it was a legitimate business expense, claargeable to good will. 'How much?'

Angelo hesitated, trying to estimate what the traffic would bear, since a flat cat on Mars had roughly the cash value of still another kitten on a Missouri farm. Still, the boys must be rich or they wouldn't be here - just in and with spending money burning holes in their pockets, no doubt Business had been terrible lately anyhow. 'A pound and a half', he said firmly.

Castor was surprised at how reasonable the price was. 'That seems like quite a lot,' he said automatically.

Angelo shrugged. 'It likes you. Suppose we say a pound?' Castor was again surprised, this time at the speed and the size of the mark-down. 'I don't know,' he murmured.

"Well. . . ten per cent off for cash.'

Out of the corner of his eye Castor could see that Pollux had finished inspecting the rack of bicycles and was coming back. He decided to clear the decks and establish that good will, if possible, before Pol got down to business. 'Done.' He fished out a pound note, received his change, and picked up the flat cat 'Come to papa, Fuzzy Britches.' Fuzzy Britches came to papa, snuggled up and purred.

Pollux came back, stared at the junior Martian. 'What in the world?'

'Meet the newest member of the family. We just bought a flat cat'

'We?' Pollux started to protest that it was no folly of his, but caught the warning in Castor's eye in time. 'Uh, Mr. Angelo, I don't see any prices marked?'

The shopkeeper nodded. 'That's right The sand rats like to haggle and we accommodate them. It comes to the same thing in the long run. We always settle at list: they know it and we know it, but it's part of their social life. A prospector doesn't get much.'

'That Raleigh Special over there - what's the list on it?' Pollux had picked it because it looked very much like the sand-cycle their father had delivered for them to Captain Vandenbergh when he had gone into quarantine.

'You. want to buy that bike?'

Castor shook his head a sixteenth of an inch; Pollux answered, 'Well, no, I was just pricing it. I couldn't take it Sunside. you know.'

'Well, seeing that there are no regular customers around, I'll tell you. List is three hundred and seventy-five - and a bargain!'

'Whew! That seems high.'

'A bargain. She's a real beauty. Try any of the other dealers.'

'Mr. Angelo,' Castor said carefully, 'suppose I offered to sell you one just like it, not new but reconditioned as good as new and looking new, for just half that?'

'Eh? I'd probably say you were crazy'

'I mean it I've got it to sell. You might as well have the benefit of the low price as one of your competitors, I'm not going to offer it retail; this is for dealers.'

'Mmm. . . you didn't come in here to buy souvenirs, did you?'

'No, sir.'

'If you had come to me with that proposition four months ago, and could have backed it up, I'd have jumped at it. Now. . . well, no.'

'Why not? it's a good bike I'm offering you. A real bargain.'

'I'm not disputing it' He reached out and stroked the flat cat 'Shucks, it can't hurt anything to tell you why. Come along.'

He led them into the rear, past shelves crammed with merchandise, and on out behind the store. He waved a hand at stacks of merchandise that looked all too familiar. 'See that? Secondhand bikes. That shed back there is stuffed with 'em; that's why I've got these stored in the open.'

Castor tried to keep surprise and dismay out of his voice. 'So you've got secoud-hand bikes', he said, 'all beat-up and sand pitted. I've got secondhand bikes that look like new and will wear like new - and I can sell them cheaper than you can sell these, a lot cheaper. Don't you want to bid on them, at least?'

Angelo shook his head. 'Brother, I admit that I didn't take you for a jobber. But I have bad news for you. You can't sell them to me; you can't sell them to my competitors; you can't sell them anywhere.'

'Why not?'

'Because there aren't any retail customers.'

'Huh?'

'Haven't you heard of the Hallelujah Node? Didn't you notice I didn't have any customers? Three fourths of the sand rats on Mars are swarming into town - but they're not buying, leastwise not bicycles. They're stocking up for the Asteroids and kicking in together to charter ships. That's why I have used bikes; I had to take them back on chattel mortgages -and that's why you can't sell bikes. Sorry - I'd like to do business with you.'

The twins had heard of the Hallelujah, all right - the news bad reached them in space: a strike of both uraniuna and core metal out in the Asteroids. But they had given it only intellectual attention, the Asteroids no longer figuring into their plans.

'Two of my brothers have aleady gone', Angelo went on, 'and I might give it a whirl myself if I weren't stuck with the store. But I'd close and reopen as strictly a tourist trap if I could unload my present stock. That's how bad things are.'

They crept out into the street as soon as they could do so gracefully. Pollux looked at Castor. 'Want to buy a bicycle, sucker?'

'Thanks, I've got one. Want to buy a flat cat?'

'Not likely. Say, let's go over to the receiving dock. If any tourists are coming in, we might find another sucker to unload that thing on. We might even show a small profit - on flat cats, that is.'

'No, you don't. Fuzzy Britches is for Buster - that's settled. But let's go over anyway; our bikes might be down.'

'Who Ceres?'

'I do. Even if we can't sell them, we can ride a couple of them. My feet hurt.'

Their shipment was not yet down from Phobos but it was expected about an hour hence. They stopped in the Old Southern Dining Room & Soda Fountain across from the Hall of Welcome. There they nursed sodas, petted Fuzzy Britches, and considered their troubles. 'I don't mind losing the money so much - ' Castor started in.

'I do!'

'Well, so do I. But what really hurts is the way Dad will laugh when he finds out. And what he'll say.'

'Not to mention Hazel.'

'Yes, Hazel. Junior, weve just got to figure out some way of picking up some money before we have to tell them.'

'With what? Our capital is gone. And Dad wouldn't let us touch any more of our money even if he were here - which he isn't.'

'Then it has to be a way without capital.'

'Not many. Not for real money.'

'Hazel makes plenty credits without capital.'

'You aren't suggesting that we write a television serial?' Pollux sounded almost shocked.

'Of course not. We don't have a customer for one. But there must be a way. Start thinking.'

After a glum silence Pollux said, 'Grandpa, did you notice that announcement in the Hall of Welcome of the Mars chess championship matches next month?'

'No. Why?'

'People bet on 'em here - same as race horses Earthside.'

'I don't like bets. You can lose.'

'Sometimes. But suppose we entered Buster?'

'Huh? Are you crazy? Enter him against the best players on Mars?'

'Why not? Hazel used to be Luna champion, but Buster beats her regularly.'

'But you know why. He reads her mind.'

'That's precisely what I am talking about'

Castor shook his head. 'It wouldn't be honest, Junior.'

'Since when did they pass a law against telepathy?'

'Anyhow you don't know for certain that he does read her mind. And you don't know that he could read a stranger's mind. And it would take plenty cash to set up a good bet - which we haven't got. And besides, we might lose.

'Okay, okay, it was just a thought You produce one.'

Castor frowned. 'I don't have one. Let's go back over and see if our bikes are in. If they are, let's treat ourselves to a day off and go sightseeing. We might as well get some use out of those bikes; they cost us enough.' He stood up.

Pollux sat still and stared at his glass. Castor added, 'Come on.'

Pollux said, 'Sit down, Grandpa. I think I'm getting an idea.'

'Don't frighten it'

'Quiet' Presently Pollux said, 'Grandpa, you and I have just arrived here. We want to go sightseeing - so we immediately think of our bikes. Why wouldn't tourists like to do the same thing - and pay for it?'

'Huh?' Castor thought about it 'There must be some catch in it - or somebody would have done it long before this.'

'Not necessarily. it has only been the past few years that you could get a tourist visa to Mars; you came as a colonist or you didn't come at all. I'd guess that nobody has thought of shipping bikes to Mars for tourists. Bikes cost plenty and they have been imported just for prospectors - for *work,* because a sand rat could cover four or five times as much territory on a sand cycle as on foot I'll bet nobody here has ever thought of them for pleasure.'

'What do you want us to do? Paint a sign and then stand under it, shouting, "Bicycles! Get your bicycle here! You can't see the sights of Mars without a bicycle".'

Pollux thought it over. 'We could do worse. But we would do better to try to sell somebody else on it, somebody who has the means to get it going. Shucks, we couldn't even rent a lot for our bike stand.'

'There's the soft point in the whole deal. We tell somebody and what does he do? He doesn't buy our bikes; he goes to Tony Angelo and makes a deal with him to put Angelo's bikes to work, at a lower cost.'

'Use your head, Grandpa. Angelo and the other dealers won't rent their new machines to tourists; they cost too much. And tourists won't rent that junk Angelo has in his back lot, they're in a holiday mood; they'll go for something new and shiny and cheerful. And for rental purposes. Remember, our bikes aren't just practically new; they are new. Anybody who rents anything knows it has been used before; he's satisfied if it looks new.

Castor stood up again. 'Okay, you've sold me. Now let's see if you can sell it to somebody else. Pick a victim.'

'Sit down; what's your hurry? Our benfactor is probably right under this roof.'

'Huh?'

'What's the first thing a tourist sees when he first comes out of the Hall of Welcome? The Old Southern Dining Room, that's what. The bike stand ought to be right out in front of this restaurant'

'Let's find the owner.'

Joe Pappalopoulis was in the kitchen; he came out wiping his hands on his apron. 'What's the matter, boys? You don't like your soda?

'Oh, the sodas were swell! Look, Mr Pappalopoulis, can you spare us a few minutes?'

'Call me "Poppa"; you wear yourself out. Sure.'

'Thanks. I'm Cas Stone; this is my brother Pol. We live on Luna and we came in with a load you might be interested in.'

'You got a load of imported food? I don't use much. Just coffee and some flavors.'

'No, no, not food. How would you like to add a new line that would fit right in with your restaurant business? Twice as much volume and only one overhead.'

The owner took out a knife and began to pare his nails. 'Keep talking.'

Pollux took over, explained his scheme with infectious enthusiasm. Pappalopoulis looked up from time to time, said nothing. When Pollux seemed to be slowing down Castor took over; 'Besides renting them by the hour, day, or week, you set up sightseeing tours and charge extra for those.'

'The guides don't cost you any salary; you make 'em pay for the concession and then allow them a percentage of the guide fee.'

'They rent their own bikes from you, too.'

'No overhead; you've already got the best spot in town. You just arrange to be out in front every time a shuttle comes down and maybe pay one of your guides a commission on rentals he makes to watch the stand in between times.'

'But the best deal is the long-term lease. A tourist uses a bike one day; you point out to him how cheap he can get it for the full time of his stay and you get the full price of the bike back in one season. From then on you're operating on other people's money.

The restaurateur put his knife away and said, 'Tony Angelo is a good businessman. Why don't I buy secondhand bikes from him - cheap?

Castor took the plunge. 'Go look at his bikes. Just look at them, sand pits and wornout tires and all. Then we'll meet his price - with better bikes.'

'Any price he names?'

'Any firm price, not a phony. If his price is really low, we'll buy his bikes ourselves.' Pollux looked a warning but Castor ignored it 'We can undersell any legitimate price he can afford to make - with better merchandise. Let's go see his bikes.'

Pappalopoulis stood up. 'I've seen bikes in from the desert We go see yours.'

'They may not be down yet' But they were down. Joe Poppa looked them over without expression, but the twins were very glad of the hours they had spent making them brave with paint, gaudy with stripes, polish and new decals.

Castor picked out three he knew to be in tiptop shape and said, 'How about a ride? I'd like to do some sightseeing myself - free.

Pappalopoulis smiled for the first time. 'Why not?'

They rode north along the canal clear to the power pile station, then back to the city, skirted it, and right down Clarke Boulevard to the Hall of Welcome and the Old Southern Dining Room. After they had dismounted and returned the vehicles to the pile. Castor signaled Pollux and waited silently.

The cafe owner said nothing for several moments. At last he said, 'Nice ride, boys. Thanks.'

'Don't mention it'

He stared at the heap of bikes. 'How much?'

Castor named a price. Pappalopoulis shook his head sadly, 'That's a lot of money.'

Before Pollux could name a lower price Castor said, 'Make it easy on yourself. We'd rather be cut in on the gravy but we thought you might prefer to own them yourselves. So let's make it a partnership; you run the business, we put up the bikes. Even split on the gross and you absorb the overhead. Fair enough?'

Pappalopoulis reached over and stroked the flat cat 'Partnerships make quarrels,' he said thoughtfully.

'Have it your own way,' Castor answered. 'Five per cent for cash.

Pappalopoulis pulled out a roll that would have choked a medium-large Venerian sand hog. 'I buy 'em.'

The twins spent the afternoon exploring the city on foot and looking for presents for the rest of the family. When they started home their way led them back through the square between the receiving station and Poppa's restaurant The sign now read:

THE OLD SOUTHERN DINING ROOM
AND
TOURIST BUREAU
Sodas Souvenirs Candy
Sightseeing Trips
BICYCLES RENTED
Guide Service
See the Ancient Martian Ruins!!!

Pollux looked at it. 'He's a fast operator, all right. Maybe you should have insisted on a partnership.'

'Don't be greedy. We turned a profit, didn't we?'

'I told you we would. Well, let's get Fuzzy Britches home to Buster.'

XIII - CAVEAT VENDOR

Fuzzy Britches was not an immediate success with Lowell. 'Where its legs?' he said darkly. 'If it's a Martian, it ought to have three legs.'

'Well,' argued Castor, 'some Martians don't have legs.'

'Prove it!'

'This one doesn't That proves it'

Meade picked Fuzzy Britches up; it immediately began to buzz - whereupon Lowell demanded to hold it Meade passed it over. 'I don't see,' she remarked, 'why anything as helpless as that would have such bright colors.'

'Think again, honey lamb,' advised Hazel. 'Put that thing out on the desert sand and you would lose it at ten feet, Which might be a good idea.'

'No!' answered Lowell.

'"No" what, dear?'

'Don't you lose Fuzzy Britches. He's mine.' The child left carrying the flat cat and cooing a lullaby to it. Fuzzy Britches might lack legs but it knew how to win friends; anyone who picked it up hated to put it down. There was something intensely satisfying about petting the furry thing. Hazel tried to analyse it but could not.

No one knew when the quarantine of the *War God* would be lifted. Therefore Meade was much surprised one morning to return to Casa Mañana and fined her father in the general room. 'Daddy!' she yelled, swarring over him. 'When did you get down?.

'Just now.'

'Mummy, too?'

'Yes. She's in the 'fresher.'

Lowell stood in the doorway, watching them impassively. Roger Stone loosed himself from his daughter and said, 'Good morning, Buster.'

'Good morning, Daddy. This is Fuzzy Britches. He's a Martian. He's also a flat cat.'

'Glad to know you, Fuzzy Britches. Did you say "flat cat"?'

'Yes.'

'Very well. But it looks more like a wig.'

Dr Stone entered, was subjected to the same treatment by Meade, then turned to Lowell. He permitted her to kiss him, then said, 'Mama, this is Fuzzy Britches. Say hello to him.'

'How do you do, Fuzzy Britches? Meade, where are your brothers? And your grandmother?'

Meade looked upset. 'I was afraid you would get around to that. The twins are in jail again.'

Roger Stone groaned. 'Oh, no, not again! Edith, we should have stayed on Phobos.'

'Yes, dear.'

'Well, let's face it What is the charge this time, Meade?'

'Fraud and conspiring to evade the customs duties.'

'I feel better. The last time but one, you'll remember, it was experimenting with atomics inside the city limits and without license. But why aren't they out on bail? Or is there something worse you haven't told us?'

'No, it's just that the court has tied up their bank account and

Hazel wouldn't get them bond. She said they were safer where they were.'

'Good for Hazel!'

'Daddy, if we hurry we can get back downtown for the hearing. I'll tell you and Mummy about it on the way.'

The 'fraud' part of it came from Mr Pappalopoulis; the rest of it came straight from the planetary government. Mars, being in a state of expanding economy, just beginning to be self-supporting and only recently of declared sovereignty, had a strongly selective tariff. Being forced to import much and having comparatively little to export which could not be had cheaper Earthside, all her economic statutes and regulations were bent toward relieving her chronic credit gap; Articles not produced on Mars but needed for her economy came in duty free; articles of luxury or pleasure carried very high rates; articles manufactured on Mars were completely protected by embargo against outside competition.

Bicycles were classed by the Import Conimission as duty free since they were necessary to prospecting - but bicycles used for pleasure became 'luxury items'. The customs authorities had gotten around to noticing the final dlsposition of the cargo of the *Rolling Stone.* 'Of courss somebody put them up to it,' continued Meade, 'but Mr Angelo swears he didn't do it and I believe him. He's nice.'

'That's clear enough. What's the fraud angle?'

'Oh, that!' The bicycles had at once been impounded for unpaid duty penalties and costs whereupon their new owner had sworn an information charging fraud. 'He's getting a civil suit, too, but I think Hazel has it under control. Mr Poppa says he just wants his bicycles back; he's losing business. He's not mad at anybody.'

'I would be,' Roger Stone answered grimly. 'I intend to skin those two boys with a dull knife. What makes Hazel think she can square Mr Pappa-et-cetera? Just what, I'd like to know?'

'She got a temporary court order freeing the bicycles to Mr Poppa pending the outcome of the hearing; she had to put up a delivery bond on the bicycles. So Mr Poppa dropped the fraud matter and is waiting on the civil suit to see if he's hurt'

'Hmm - My bank account feels a little better anyway. Well, dear, we might as well go down and get it over with. There doesn't seem to be anything here that a long check book can't cover.'

'Yes, dear.'

'Remind me to buy a pair of Oregon boots on the way home. Meade, how much is this tariff?'

'Forty per cent.'

'Not too bad. They probably made more profit than that'

'But that's not all, Daddy. Forty per cent, plus another forty per cent penalty - plus confiscation of the bicycles.'

'Plus two weeks in pillory, I hope?'

'Don't do anything hasty, Daddy. Hazel is arguing the case.'

'Since when was she admitted to the bar?'

'I don't know, but it seems to be all right She got that court order.'

'Dear,' said Dr Stone, 'Shouldn't the boys have a regular lawyer? Your mother is a wonderful person, but she is sometimes just a bit impetuous.'

'If you mean she's as crazy as a skew orbit, I agree with you. But I'm betting on Hazel anyhow. We'll let her have her turn at the board. It probably won't cost me much more.'

'As you say, dear.'

They slipped into the back of the courtroom, which appeaed to be a church on some other days. Hazel was up front, talking to the judge. She saw them come in but did not appear to recognise them. The twins, looking very sober, were sitting together near the bench; they recogised their parents but took their cue from their grandmother.

'May it please the court,' said Hazel, 'I am a stranger here in a strange lans I am not skilled in your laws nor sophisticate in your customs. If I err, I pray the court to forgive me in advance and help me back to the proper path.'

The judge leaned back and looked at her. 'We were over all that earlier this morning.'

'Sure, judge, but it looks good in the record.'

'Do you expect to get me reversed?'

'Oh, no! We'll settle the whole thing right here and now, I'd guess.'

'I wouldn't venture to guess. I told you this morning that I would advise you as to the law, if need be. As to courtroom formalities, this Is a frontier. I can remember the time when, if one of us became involved in a misadventure which caused public disapproval, the matter was settled by calling a town meeting and taking a show of hands - and I've no doubt that as much justice was dispensed that way as any other. Times have changed but I don't think you will find this court much bothered by etiquette. Proceed.'

'Thanks, judge. This young fellow here - ' She hooked a thumb at the prosecutor's table. ' - would have you believe that my boys cooked up a nefarious scheme to swindle the citizens of this nation out of their rightful and lawful taxes. I deny that. Then he asks you to believe that, having hatched this Machiavellian plot, they carried it through and got away with it, until the hand of justice, slow but sure, descended on them and grabbed them. That's a pack of nonsense, too.'

'One moment I thought you stipulated this morning to the alleged facts?'

'I admitted that my boys didn't pay duty on those bikes. I didn't admit anything else. They didn't pay duty because nobody asked them to pay.'

'I see your point You'll have to lay a foundation for that and get it in by proper evidence later. I can see that this is going to be a little involved.'

'It needn't be, if we'll all tell the truth and shame the devil.' She paused and looked puzzled. 'Warburton . . . Warburton . . .' she said slowly, 'Your name is Warburton, Judge? Any kinfolk on Luna?'

The judge squared his shoulders. 'I'm a hereditary citizen of the Free State,' he said proudly. 'Oscar Warburton was my grandfather.'

'That's it!' agreed Hazel. 'It's been bothering me all morning but the numbers didn't click into place until I noticed your profile just now. I knew your, granddaddy well. I'm a Founding Father, too.'

'How's that? There weren't any Stones on the roster.'

'Hazel Meade Stone.'

'You're Hazel Meade? But you can't beyou must be dead!'

'Take another look, Judge. I'm Hazel Meade.'

'Well, by the breath of K'Raath! Excuse me, ma'am. We must get together when this is over.' He straightened up again. 'In the meantime I trust you realize that thism no way affects the case before us?'

'Oh, naturally not! But I must say it makes me feel better to know who's sitting on this case. Your granddaddy was a just man.'

'Thank you. And now shall we proceed?'

The young prosecutor was on his feet. 'May it please the court!'

'May what. please the court?'

'We feel that this is most irregular. We feel that under the circumstances the only proper procedure is for this court to disqualify itself. We feel -'

'Cut out that "we" stuff, Herbert You're neither an editor nor a potentate. Motion denied. You know as well as I do that Judge Bonelli is laid up sick. I don't propose to clutter up the calendar on the spurious - theory that I can't count fingers in front of my face.' He glanced at the clock. 'In fact, unless one of you has new facts to produce - facts, not theories - I'm going to assume that you have both stipulated to the same body of facts. Objection?'

'Okay with me, Judge.'

'No objection,' the prosecutor said wearily.

'You may continue, ma'am. I think we ought to wind this up in about ten minutes, if you both will stick to the subject. Let's have your theory.'

'Yes, your honor. First, I want you to take a look at those two young and innocent lads and see for yourself that they could not be up to anything criminal.' Castor and Pollux made a mighty effort to look the description; they were not notably successful.

Judge Warburton looked at them and scratched his chin. 'That's a conclusion, ma'am. I can't see any wings sprouting from here.'

'Forget it, then. They're a couple of little hellions, both of them. They've given me plenty of grief. But this time they didn't do anything wrong and they deserve a vote of thanks from your chamber of commerce - and from the citizens of Mars Cornmonwealth.

'The first part sounds plausible. The latter part is outside the jurisdiction of this court'

'You'll see. The key to this case is whether or not a bicycle is a production item, or a luxury. Right?'

'Correct And the distinction depends on the end use of the imported article. Our tariff schedule is flexible in that respect. Shall I cite the pertinent cases?'

'Oh, don't bother!'

Her son looked her over. 'Hazel, it occurs to me that the the end use of sightseeing, that the defendants knew that, that they even suggested that end use and made it part of their sales argument, and that they neglected to inform the buyer of the customs status of the articles in question. Correct?'

'Right to nine decimals, Judge.'

'I've not yet gotten a glimpse of your theory. Surely you are not contending that sightseeing is anything but a luxury?'

'Oh, it's a luxury all right!'

'Madam, it seems to me that you are doing your grandsons no good. If you will withdraw, I will appoint counsel.'

'Better ask them, Judge.'

'I intended to.' He looked inquiringly at the twins. 'Are you satisfied with your representation?'

Castor caught Pollux's eye, then answered promptly, 'We're as much in the dark as you are, sir - but we'll string along with grandmother.'

'I admire your courage at least Proceed, ma'am'

'We agreed that sightseeing is a luxury. But "luxury" is a relative term. Luxury for *whom?* Roast suckling pig is a luxury for you and me-'

'It certainly is. I haven't tasted one on this planet'

'- but it's an early death for the pig. Will the court take judicial notice of an activity known as "Mars" Invisible Export?"'

'The tourist trade? Certainly, if it's necessary to your theory.'

'Objection!'

'Just hang on to that objection, Herbert; she may not establish a connection. Proceed.'

'Let's find out who eats that pig. Your tariff rules, so it has been explained, are to keep citizens of the Commonwealth from wasting valuable foreign exchange on unnecessary frills. You've got a credit gap -'

'Regrettably, we have. We don't propose to increase it'

'That's my point Who pays the bill? Do *you* go sightseeing? Does he?' She pointed again at the prosecutor. 'Shucks, no! It's old stuff to both of you. But *1* do - I'm a tourist I rented one of those bicycles not a week ago - and helped close your credit gap. Your honor, we contend that the renting of bicycles to tourists, albeit a luxury to the tourist, is a productive activity for export to the unmixed benefit of every citizen of the Commonwealth and that therefore those bicycles are "articles of production" within the meaning and intent of your tariff laws!'

'Finished?' She nodded. 'Herbert?'

'Your honor, this is ridiculous! The prosecution has clearly established its case and the defense does not even dare to dispute it I have never heard a more outlandish mixture of special pleading and distortion of the facts. But I am sure the facts are clear to the court. The end use is sightseeing, which the defense agrees is a luxury. Now a luxury is a luxury -,

'Not to the pig, son.'

'."The pig?" What pig? There are no pigs in this case; there isn't a pig on Mars. If we -'

'Herbert! Have you anything to add?'

'I - ' The young prosecutor slumped. 'Sorry Dad, I got excited. We rest'

The judge turned to Hazel. 'He a good boy, but he's impetuous - like yours. I'll make a lawyer out of him yet.' He straightened up. 'And the court rests - ten minutes out for a pipe. Don't go away.' He ducked out

The twins whispered and fidgeted; Hazel caught the eyes of her son and daughter-in-law and gave them a solemn wink. Judge Warburton returned in less than ten minutes and the bailiff shouted for order. The judge stared at the prisoners. 'The court rules,' he said solemnly, 'that the bicycles in question are "articles of production" within the meaning of the tariff code. The prisoners are acquitted and discharged. The clerk will release the delivery bond.'

There was very scattered applause, led by Hazel. 'No demonstrations!' the judge said sharply. He looked again at the twins. 'You're extremely lucky - you know that' don't you?'

'Yessir!'

'Then get out of my sight and try to stay out of trouble.'

Dinner was a happy family reunion despite the slight cloud that still hung over the twins. It was also quite good, Dr Stone having quietly taken over the cooking. Captain Vandenbergh, down on the same shuttle, joined them for dinner. By disconnecting the TV receiver and placing it temporarily on Meade's bunk and by leaving open the door to the twins' cubicle so that Captain Vandenbergh's chair could be backed into the door frame, it was just possible for all of them to sit down at once. Fuzzy Britches sat in Lowell's lap; up till now the flat cat had had its own chair.

Roger Stone tried to push back his chair to make more room for his knees, found himself chock-a-block against the wall 'Edith, we will just have to get a larger place.'

'Yes, dear. Hazel and I spoke to the landlord this afternoon.'

'What did he say?'

Hazel took over. 'I'm going to cut his gizaard out I reminded him that he had promised to take care of us when you two got down. He looked saintly and pointed out that he had given us two more cots. Lowell, quit feeding that mop with your own spoon!'

'Yes, Grandma Hazel. May I borrow yours?'

'No. But he did say that we could have the flat the Burkhardts are in, come Venus depasture. It has one more cubicle.'

'Better,' agreed Roger Stone, 'but hardly a ballroom - and Venus departure is still three weeks away. Edith, we should have kept our nice room in the *War God.* How about it, Van? Want some house guests? Until you blast for Venus, that is?'

'Certainly.'

'Daddy! You wouldn't go away *again?'*

'I'm joking, snub nose.'

'I wasn't'' answered the liner's captain. 'Until Venus departure - or all the way to Venus and then back to Luna, if you choose. I got official approval of my recommendation this afternoon; you two can drag free in the *War God* until death or decommission do you past How about it? Come on to Venus with me?'

'We've been to Venus,' announced Meade. 'Gloomy place.'

'Whether they take you up or not,' Hazel commented, 'that's quite a concession to get out of Four-Planets. Ordinarily that bunch of highbinders wouldn't give away a bucketful of space.'

'They were afraid of the award an admiralty court might hand out' Vandenbergh said drily. 'Speaking of courts, I understand you put in a brilliant defense today, Hazel. Are you a lawyer, along with your other accomplishments?'

'No,' answered her son, 'but she's a fast talker.'

'Who's not a lawyer?'

'You aren't'

'of course I am!'

'When and where? Be specific.'

'Years and years ago, back in Idaho - before you were born. I just never got around to mentioning it'

Her son looked her over. 'Hazel, it occurs to me that the records in Idaho are conveniently far away.'

'None of your sass, boy. Anyway, the courthouse burned down.'

'I thought as much'

'In any case,' Vandenbergh put in soothingly, 'Hazel got the boys off. When I heard about it, I expected that they would have to pay the duty at least You young fellows must have made quite a tidy profit'

'We did all right' Castor admitted.

'Nothing spectacular,' Pollux hedged.

'Figure it up,' Hazel said happily, 'because I am going to collect a fee from you of exactly two-thirds your net profit for getting your necks out of a bight'

The twins stared at her. 'Hazel, you wouldn't?' Castor said uncertainly.

'Wouldn't I!'

'Don't tease them, Mother,' Dr Stone suggested.

'I'm not teasing. I want this to be a lesson to them. Boys, anybody who sits in a game without knowing the house rules is a sucker. Time you knew it'

Vandenbergh put in smoothly, 'It doesn't matter too much these days when the government -' He stopped suddenly. 'What in the world!'

'What's the matter, Van?' demanded Roger. Vandenbergh's face cleared and he grinned sheepishly. Nothing. Just your flat cat' crawling up my leg. For a moment I thought I had wandered into your television show.'

Roger Stone shook his head. 'Not mine, Hazel's. And it wouldn't have been a flat cat; it would have been human gore.'

Captain Vandenbergh picked up Fuzzy Britches, stroked it, then returned it to Lowell

'It's a Martian,' announced Lowell.'

'Yes?'

Hazel caught his attention. 'The situation has multifarious ramifications not immediately apparent to the unassisted optic. This immature zygote holds it as the ultimate desideratum to consort with the dominate aborigine of the trifurcate variety. Through a judicious use of benign mendacity, Exhibit "A" performs as a surrogate in spirit if not in letter. Do you dig me, boy?'

Vandenbergh blinked. 'I think so. Perhaps it's just as well. They are certainly engaging little pets - though I wouldn't have one in any ship of mine. They -'

'She means,' Lowell explained, 'that I want to see a Martian with legs. I still do. Do you know one?'

Hazel said, 'Coach, I tried, but they were too big for me.'

Captain Vandenbergh stared at Lowell. 'He's quite serious about it, isn't he?'

'I'm afraid he is'

He turned to Dr Stone. 'Ma'asn, I've fair connections around here and these things can always be arranged, in spite of treaties. Of course, there would be a certain element of danger - not much in my opinion.'

Dr Stone answered, Captain, I have never considered danger to be an evaluating factor.'

'Um, no, you wouldn't, ma'am. Shall I try it?'

'If you would be so kind.'

'It will pay interest on my debt. I'll let you know.' He dismissed the matter and turned again to the twins. 'What profit-tax classification does your enterprise come under?'

'Profit tax?'

'Haven't you figured it yet?'

'We didn't know there was one.'

'I can see you haven't done much importing and exporting, not on Mars anyhow. If you are a Commonwealth citizen, it all goes into income tax, of course. But if you come from out planet, you pay a single-shot tax on each transaction. Better find yourself a tax expert; the formula is somewhat complicated'

'We won't pay it!' said Pollux.

His father answered quietly, 'Haven't you two been in jail in enough lately?'

Pollux shut up. For the next few minutes they exchanged glances, whispers, and shrugs. Presently Castor stood up.

'Dad, Mother - may we be excused?'

'Certainly. If you can manage to squeeze out.'

'No dessert, boys?'

'We aren't very hungry.'

They went into town, to return an hour later not with a tax expert but with a tax guide they had picked up at the Chamber of Commerce. The adults were still seated in the general room, chatting; the table had been folded up to the ceiling. They threaded through the passageway of knees into their cubicle; they could be heard whispering in there from time to time.

Presently they came out. 'Excuse us, folks. Uh, Hazel?'

'What is it, Cas?'

'You said your fee was two-thirds of our net.'

'Huh? Did your leg come away in my hand, chum? I wouldn't -'

'Oh, no, we'd rather pay it.' He reached out, dropped half a dozen small coins in her hand 'There it is.'

She looked at it *'This is* two-thirds of all you made on the deal?'

'Of course,' added Pollux, 'it wasn't a total loss. We had the use of the bicycles for a couple of hundred million miles.'

XIV - FLAT CATS FACTORIAL

Vandenbergh made good his offer. Lowell and he went by stratorocket to the treaty town of Richardson, were gone about three days. When Lowell came back he had seen a Martian, he had talked with one. But he had been cautioned not to talk about it and his family could get no coherent account out of him.

But the simple matter of housing was more difficult than the presumably impossible problem of meeting a Martian. Roger Stone had had no luck in finding larger and more comfortable quarters, even after he had resigned himself to fantastic rentals. The town was bursting with tourists and would be until Venus departure, at which time those taking the triangular trip would leave - a majority, in fact. In the meantime they crowded the restaurants, took pictures of everything including each other, and ran their bicycles over the toes of pedestrians. Further packing a city already supersaturated were sand rats in from the desert and trying to arrange some way, any way, to get out to the Hallelujah Node in the Asteroid Belt.

Dr Stone said one night at dinner, 'Roger, tomorrow is rent day. Shall I pay it for a full month? Mr d'Avril says that the Burkhardts are talking about staying on.'

'Pay it for six days only,' Hazel advised. 'We can do better than this after Venus departure - I hope.'

Roger Stone looked up and scowled. 'Look here, why pay the rent at all?'

'What are you saying, dear?'

'Edith, I've been chewing this over in my mind. When we first came here our plans, such as they were, called for living here through one wait.' He referred to the fifteen months elapsed time from arrival Mars to Earth departure from Mars, using the economical orbits. Then we planned to shape orbit home. Fair enough, if this overrated tourist trap had decent housing. But I haven't been able to start writing my book. When Buster isn't climbing into my lap, his pet is slithering down the back of my neck.'

'What do you suggest, dear?'

'Go to Phobos tomorrow, get the old *Rock* ready to go, and blast for Venus when the others do.'

'Loud cheers!' agreed Meade. 'Let's go!'

Dr Stone said, 'Meade, I thought you didn't like Venus?'

'I don't. But I don't like it here and I'm tired all the time. I'd like to get back into free fall.'

'You shouldn't be tired. Perhaps I had better check you over.'

'Oh, Mother, I'm perfectly well! I don't want to be poked at' Lowell grinned. 'I know why she wants to go to Venus - Mr Magill.'

'Don't be a snoop, Snoop!' Meade went on with quiet dignity. 'In case anyone is interested, I am not interested in Second Officer Magill - and I wouldn't be going in the *Caravan* in any case. Besides, I found out he afready has a wife in Colorado.' Hazel said, 'Well, that's legal. He's still eligible off Earth,'

'Perhaps it is, but I don't like it.'

'Neither do I,' Roger Stone cut in. 'Meade, you weren't really getting interested in this wolf in sheep's clothing, were you?'

'Of course not, Daddy!' She added, 'But I suppose I'll get married one of these days.'

'That's the trouble with girls,' Castor commented. 'Give them educations - *boom!* They get married. Wasted.'

Hazel glared at them, 'Oh, so? Where would you be if I hadn't married?'

'It didn't happen that way,' Roger Stone cut in, 'so there is no use talking about other possibilities. They probably aren't really possibilities at all, if only we understood it'

Pollux: 'Predestination.'

Castor: 'Very shaky theory.'

Roger grinned. 'I'm not a determinist and you can't get my goat. I believe in free will.'

Pollux: 'Another very shaky theory.'

'Make up your minds,' their father told them. 'You can't have it both ways.'

'Why not?' asked Hazel. 'Free will is a golden thread running through the frozen matrix of fixed events.'

'Not mathematical,' objected Pollux.

Castor nodded. 'Just poetry.'

'And not very good poetry.'

'Shut up!' ordered their father. 'Boys, it's quite evident that you have gone to considerable trouble to change the subject. Why?'

The twins swapped glances; Castor got the go-ahead. 'Uh, Dad, the way we see it, this Venus proposition hasn't been thought out'

'Go on. I suppose you have an alternative suggestion?'

'Well, yes. But we didn't mean to bring it up until after Venus depauture.'

'I begin to whiff something. What you mean is that you intended to wait until the planetary aspects were wrong - too late to shape orbit for Venus.'

'Well, there was no use in letting the matter get cluttered up with a side issue.'

'What matter? Speak up.'

Castor said worriedly, 'Look, Dad, we aren't unreasonable. We can compromise. How about this: you and Mother and Buster and Meade go to Venus in the *War God.* Captain Van would love to have you do it - you know that. And -'

'Slow up. And what would you be doing? And Hazel? Mother, are you in on this?'

'Not that I know of. But I'm getting interested.'

'Castor, what's on your mind? Speak up.'

Well, I will if you'll just let me, sir. You and the rest of the family could have a pleasant trip back home - in a luxury liner. Hazel and Pol and I - well, I suppose you know that Mars will be in a favorable position for the Hallelujah Node in about six weeks?'

'For a cometary-type orbit, that is,' Pollux added.

'So it's the Asteroids again,' their father said slowly. 'We settled that about a year ago.'

'But we're a year older now.'

'More experienoed.'

'You're still not old enough for unlimited licenses. I suppose that is why you included your grandmother.'

'Oh,no! Hazel is an asset.'

'Thank you, boys.'

'Hazel, you had no inkling of this latest wild scheme?'

'No. But I don't think it's so wild. I'm caught up and then some on my episodes - and I'm tired of this place. I've seen the Martian ruins; they're in a poor state of repair. I've seen a canal; it has water in it. I understand that the rest of the planet is much the same, right through to chapter eighty-eight. And I've seen Venus. I've never seen the Asteroids.'

'Right!' agreed Castor. 'We don't like Mars. The place is one big clip joint'

'Sharp operators,' added Pollux.

'Sharper than you are, you mean,' said Hazel.

'Never mind, Mother. Boys, it is out of the question. I brought my ship out from Luna; I intend to take her back.' He stood up. 'You can give Mr d'Avril notice, dear.'

'Dad!"

'Yes, Castor?'

'That was just a compromise offer. What we really hoped you would do - what we *wanted* you to do - was for all of us to go out to the Hallelujah.'

'Eh? Why, that's silly! I'm no meteor miner.'

'You could learn to be. Or you could just go for the ride. And make a profit on it, too.'

'Yes? How?'

Castor wet his lips. 'The sand rats are offering fabulous prices just for coldsleep space. We could carry about twenty of them at least And we could put them down on Ceres on the way, let them outfit there'.

'Cas! I suppose you are aware that only seven out of ten coldsleep passengers arrive alive in a long orbit?'

'Well. . . they know that That's the risk they are taking.' Roger Stone shook his head. 'We aren't going, so I won't have to find out if you are as cold-blooded as you sound. Have you ever seen a burial in space?'

'No, sir'.'

'I have. Let's hear no more about coldsleep freight.'

Castor passed it to Pollux, who took over: 'Dad, if you won't listen to us all going, do you have any objections to Cas and me going?'

'Eh? How 'do you mean?'

'As Asteroid miners, of course. We're not afraid of coldsleep. If we haven't got a ship, that's how we would have to go.'

'Bravo!' said Hazel. 'I'm going with you, boys,'

'Please, Mother!' He turned to his wife. 'Edith, I sometimes wonder if we brought the right twins back from the hospital.'

'They may not be yours,' said Hazel, 'but they are my grandsons, I'm sure of that. Hallelujah, here I come! Anybody coming with me?'

Dr Stone said quietly, 'You know, dear, I don't much care for Venus, either. And it *would* give you leisure for your book'

The *Rolling Stone* shaped orbit from Phobos outward bound for the Asteroids six weeks later. This was no easy lift like the one from Luna to Mars; in choosing to take a 'cometary' or fast orbit to the Hallelujah the Stones had perforce to accept an expensive changeof-motion of twelve and a half miles per second for the departure maneuver. A fast orbit differs from a maximum-economy orbit in that it cuts the orbit being abandoned at an angle instead of being smoothly tangent to it. . . *much* more expensive in reaction mass. The far end of the cometary orbit would be tangent to the orbit of the Hallelujah; matching at that point would be about the same for either orbit; it was the departure from Phobos-circum-Mars that would be rugged.

The choice of a cometary orbit was not a frivolous one. In the first place, it would have been necessry to wait more than one Earth year for Mars to be in the proper relation, orbit-wise, with the Hallelujah Node for the economical orbit; secondly, the travel time itself would be more than doubled - five hundred and eighty days for the economical orbit versus two hundred and sixty-nine days for the cometary orbit (a mere three days longer than the Luna-Mars trip).

Auxiliary tanks for singleH were fitted around the *Stone's* middle, giving her a fat and sloppy appearance, but greatly improving her mass-ratio for the ordeal. Port Pilot Jason Thomas supervised the refitting; the twins helped. Castor got up his nerve to ask Thomas how he had managed to conn the *Stone* in to a landing on their arrival. 'Did you figure a ballistic before you came aboard, sir?'

Thomas put down his welding torch. 'A ballistic? Shucks, no, son, I've been doing it so long that I know every little bit of space hereabouts by its freckles.'

Which was all the satisfaction Cas could get out of him The twins talked it over and concluded that piloting must be something more than a mathematical science.

In addition to more space for singleH certain modifications were made inside the ship. The weather outside the orbit of Mars is a steady 'clear but cold'; no longer would they need reflecting foil against the Sun's rays. Instead one side of the ship was painted with carbon black and the capacity of the air-heating system was increased by two coils. In the control room a time-delay variable-baseline stereoscopic radar was installed by means of which they would be able to see the actual shape of the Hallelujah when they reached it.

All of which was extremely expensive and the Galactic Overlord had to work overtime to pay for it Hazel did not help with the refitting. She stayed in her room and ground out, with Lowell's critical help, more episodes in the gory but virtuous career of Captain John Sterling - alternating this activity with sending insulting messages and threats of blackmail and/or sit-down strike to her producers back in New York; she wanted an unreasonably large advance and she wanted it right now. She got it, by sending on episodes equal to the advance. She had to write the episodes in advance anyhow; this time the *Rolling Stone* would be alone, no liners comfortably near by. Once out of radio range of Mars, they would not be able to contact Earth again until Ceres was in range of the *Stone's m*odest equipment. They were not going to Ceres but would be not far away; the Hallelujah was riding almost the same orbit somewhat ahead of that tiny planet.

The boost to a cometary orbit left little margin for cargo but what there was the twins wanted to use, undeterred by their father's blunt disapproval of the passengers-in-coldsleep idea. Their next notion was to carry full outfits for themselves for meteor mining - rocket scooter, special suits, emergency shelter, keyed radioactive claiming stakes, centrifuge speegee tester, black lights, Geiger counters, prospecting radar, portable spark spectroscope, and everything else needed to go quietly rock-happy.

Their father said simply, 'Your money?'

'Of course. And we pay for the boost.'

'Go ahead. Go right ahead. Don't let me discourage you. Any objections from me would simply confirm your preconceptions.'

Castor was baffled by the lack of opposition. 'What's the matter with it, Dad? You worried about the danger involved?'

'Danger? Heavens, no! It's your privilege to get yourselves killed in your own way. Anyhow, I don't think you will. You're young and you're both smart, even if you don't show it sometimes, and you're both in tiptop physical condition, and I'm sure you'll know your equipment.'

'Then what is it?'

'Nothing. For myself, I long since came to the firm conclusion that a man can do more productive work, and make more money if this is his object, by sitting down with his hands in his pockets than by any form of physical activity. Do you happen to know the average yearly income of a meteor miner?'

'Well, no, but -'

'Less than six hundred a year.'

'But some of them get rich!'

'Sure they do. And some make much less than six hundred a year; that's an average, including the rich strikes. Just as a matter of curiosity, bearing in mind that most of those miners are experienced and able, what is it that you two expect to bring to this trade that will enable you to raise the yearly average? Speak up; don't be shy.'

'Doggone it, Dad, what would *you* ship?'

'Me? Nothing. I have no talent for trade. I'm going out for the ride - and to take a look at the bones of Lucifer. I'm beginning to get interested in planetology. I may do a book about it-'

'What happened to your other book?'

'I hope that isn't sarcasm, Cas. I expect to have it finished before we get there.' He adjourned the discussion by leaving.

The twins turned to leave, found Hazel griamng at them. Castor scowled at her. 'What are you smirking at, Hazel?'

'You two.'

'Well. . . why shouldn't we have a whirl at meteor mining?'

'No reason. Go ahead; you can afford the luxury. But see here, boys, do you really want to know what to ship to make some money?'

'Sure!'

'What's your offer?'

'Percentage cut? Or flat fee? But we don't pay if we don't take your advice.'

'Oh, rats! I'll give it to you free. If you get advice free, you won't take it and I'll be able to say, "I told you so!"'

'You would, too.'

'Of course I would. There's no warmer pleasure than being able to tell a smart aleck, "I told you so, but you wouldn't listen." Okay, here it is, in the form of a question, just like an oracle: Who made money in all the other big mining rushes of history?'

'Why, the chaps who struck it rich, I' suppose.'

'That's a laugh. There are so few cases of prospectors who actually hung on to what they had found and died rich that they stand out like supernovae. Let's take a famous rush, the California Gold Rush back in 1861-no, 1861 was something else; I forget. 1849, that was it - the 'Forty-niners. Read about 'em in history?'

'Some.'

'There was a citizen named Sutter; they found gold on his place. Did it make him rich? It *ruined* him. But who did get rich?'

'Tell us, Hazel. Don't bother to dramatise it'

'Why not? I may put it in the show - serial numbers rubbed off, of course. I'll tell you: everybody who had something the miners had to buy. Grocers, mostly. Boy, did *they* get rich! Hardware dealers. Men with stamping mills, Everybody but the poor miner. Even laundries in Honolulu.'

'Honolulu? But that's way out in the Pacific, off China somewhere.'

'It was in Hawaii the last time I looked. But they used to ship dirty laundry from California clear to Honolulu to have it washed - both Ways by sailing ship. That's about like having your dirty shirts shipped from Marsport to Luna. Boys, if you want to make money, set up a laundry in the Hallelujah. But it doesn't have to be a laundry - just anything, so long as the miners want it and you've got it If your father wasn't a Puritan at heart, I'd set up a well-run perfectly honest gambling hall! That's like having a rich uncle.'

The twins considered their grandmother's advice and went into the grocery business, with a few general store sidelines. They decided to stock only luxury foods, things that the miners would not be likely to have and which would bring highest prices per pound. They stocked antibiotics and surgical drugs and vitamins as well, and some lightweight song-and-story projectors and a considerable quantity of spools to go with them. Pollux found a supply of pretty-girl pictures, printed on thin stock in Japan and intended for calendars on Mars, and decided to take a flyer on them, since they didn't weigh much. He pointed out to Castor that they could not lose entirely, since they could look at them themselves.

Dr Stone found them, ran through them, and required him to send some of them back. The rest passed her censorship; they took them along.

The last episode was speeding toward Earth; the last weld had been approved; the last pound of food and supplies was at last aboard.

The *Stone* lifted gently from Phobos and dropped toward Mars. A short gravity-well maneuver around Mars at the *Stone's* best throat temperature - which produced a spine-grinding five gravities - and she was headed out and fast to the lonely reaches of space inhabited only by the wreckage of the Ruined Planet.

They fell easily and happily back into free fall routine. More advanced mathematical texts had been obtained for the boys on Mars; they did not have to be urged to study, having grown really interested - and this time they had no bicycles to divert their minds. Fuzzy Britches took to free fall if the creature had been born in space; if it was not being held and stroked by someone (which it usually was) it slithered over wall and bulkhead, or floated gently around the compartments, undulating happily.

Castor maintained that it could swim through the air; Pollux insisted that it could not and that its maneuvers arose entirely from the air currents of the ventilation system, They wasted considerable time, thought, and energy in trying to devise scientific tests to prove the matter, one way or the other. They were unsuccessful.

The flat cat did not care; it was warm, it was well fed, it was happy. It had numerous friends all willing to take time off to reward its tremendous and undiscriminating capacity for affection. Only one incident marred its voyage.

Roger Stone was strapped to his pilot's chair, blocking out - so he said - a chapter in his book. If so, the snores may have helped. Fuzzy Britches was cruising along about its lawful occasions, all three eyes open and merry. It saw one of its friends; good maneuvering or a random air current enabled it to make a perfect landing - on Captain Stone's face.

Roger came out of the chair with a yell, clutching at his face. He bounced against the safety belt, recovered, and pitched the flat cat away from him. Fuzzy Britches, offended but not hurt, flipped itself flat to its progress, air-checked and made another landing on the far wall.

Roger Stone used several other words, then shouted, 'Who put that animated toupee on my face?'

But the room was otherwise empty. Dr Stone appeared at the hatch and said, 'What is it, dear?'

'Oh, nothing - nothing important. Look, dear, would you return this tailend offspring of a dying planet to Buster? I'm trying to think.'

'Of course, dear.' She took it aft and gave it to Lowell, who promptly forgot it, being busy working out a complicated gambit against Hazel. The flat cat was not one to hold a grudge; there was not a mean bone in its body, had it had bones, which it did not The only emotion it could feel wholeheartedly was love. It got back to Roger just as he had. again fallen asleep.

It again settled on his face, purring happily.

Captain Stone proved himself a mature man. Knowing this time what it was,.he detached it gently and himself returned it to Lowell. 'Keep it,' he said. 'Don't let go of it' He was careful to close the door behind him.

He was equally careful that nlght to close the door of the stateroom he shared with his wife. The *Rolling Stone,* being a small private ship, did not have screens guarding her ventilation ducts; they of course had to be left open at all times. The flat cat found them a broad highway. Roger Stone had a nightmare in which he was saffocating, before his wife woke him and removed Fuzzy Britches from his face. He used some more words.

'It's all right, dear,' she answered soothingly. 'Go back to sleep.' She cuddled it in her arms and Fuzzy Britches settled for that.

The ship's normal routine was disturbed the next day while everyone who could handle a wrench or a spot welder installed screens in the ducts.

Thirty-seven days out Fuzzy Britches had eight golden little kittens, exactly like their parent but only a couple of inches across when flat, marble-sized when contracted. Everyone, including Captain Stone thought they were cute; everyone enjoying petting them, stroking them with a gentle forefinger and listening carefully for the tiny purr, so high as to be almost beyond human ear range. Everyone enjoyed feeding them and they seemed to be hungry all the time.

Sixty-four days later the kittens had kittens, eight each. Sixty-four days after that, the one hundred and forty-sixth day after Phobos departure, the kittens' kittens had kittens; that made five hundred and thirteen.

'This,' said Captain Stone, 'has *got* to stop!'

'Yes, dear.'

'I mean it At this rate we'll run out of food before we get there, including the stuff the twins hope to sell. Besides that we'll be suffocated under a mass of buzzing fur mats. What's eight times five hundred and twelve? Then what's eight times *that?'*

'Too many, I'm sure.'

'My dear, that's the most masterly understatement since the death of Mercutio. And I don't think I've figured it properly anyway; its an exponential expansion, not a geometric - provided we don't all starve first'

'Roger.'

'I think we should-Eh? What?'

'I believe there is a simple solution. These are Martian creatures; they hibernate in cold weather.'

'Yes?'

'We'll put them in the hold - fortunately there is room.'

'I agree with all but the "fortunately."'

'And we'll keep it cold.'

'I wouldn't want to kill the little things. I can't manage to hate them. Drat it' they're too cute.'

'We'll hold it about a hundred below, about like a normal Martian winter night. Or perhaps warmer will do.'

'We certainly will. Get a shovel. Get a net Get a barrel.' He began snagging flat cats out of the air.

'You aren't going to freeze Fuzzy Britches!' Lowell was floating in the stateroom door behind them, clutching an adult flat cat to his small chest. It may or may not have been Fuzzy Britches; none of the others could tell the adults apart and nasning had been dropped after the first litter. But Lowell was quite sure and it did not seem to matter whether or not he was right The twins had discussed slipping in a ringer on him while he was asleep, but they had been overheard and the project forbidden. Lowell was content and his mother did not wish him disturbed in his belief.

'Dear, we aren't going to hurt your pet'

'You better not! You do and I'll - I'll *space* you!'

'Oh, dear, he's been helping Hazel with her serial!' Dr Stone got face to face with her son. 'Lowell, Mother has never lied to you, has she?'

'Uh, I guess not'

'We aren't going to hurt Fuzzy Britches. We aren't going to hurt any of the flat kitties. But we haven't got room for all of them. You can keep Fuzzy Britches, but the other kittens, are going for a long nap. They'll be perfectly safe; I promise.

'By the code of the Galaxy?'

'By the code of the Galaxy.'

Lowell left, still guarding his pet. Roger said, 'Edith, we've got to put a stop to that collaboration.'

'Don't worry dear; it won't harm him.' She frowned. 'But I'm afraid I will have to disappoint him on another score.'

'Such as?'

'Roger, I didn't have much time to study the fauna of Mars - and I certainly didn't study flat cats, beyond making sure that they were harmless.'

'Harmless!' He batted a couple of them out of the way. 'Woman, I'm drowning.'

'But Martian fauna have certain definite patterns, survival adaptations. Except for the waterseekers, which probab,ly aren't Martian in origin anyhow, their methods are both passive and persistent. Take the flat cat-'

'You take it!' He removed one gently from his chest.

'It is defenseless. It can't even seek its own food very well. I understand that in its native state it is a benign parasite attaching itself to some more mobile animal-'

'If only they would quit attaching to me! And you look as if you were wearing *a fur* coat Let's put 'em in *freeze!*'

'Patience, dear. Probably it has somewhat the same pleasing effect on the host that it has on us; consequently the host tolerates it and lets it pick up the crumbs. But its other characteristic it shares with almost anything Martian. It can last long periods in hibernation, or if that isn't necessary, in a state of lowered vitality and activity - say when there is no food available. But with any increase in the food supply, then at once - almost like throwing a switch - it expands, multiplies to the full extent of the food 'supply.'

'I'll say it does!'

'Cut off the food supply and it simply waits for more good times. Pure theory, of course, since I am reasoning by analogy from other Martian life forms - but that's why I'm going to have to disappoint Lowell - Fuzzy Britches will have to go on very short rations.'

Her husband frowned. 'That won't be easy; he feeds it all the time. We'll just have to watch him - or there will be more little visitors from heaven. Honey, let's get busy. Right now.'

'Yes, dear. I just had to get my thoughts straight'

Roger called them all to general quarters; Operation Roundup began. They shooed them aft and into the hold; they slithered back, purring and seeking companionship. Pollux got into the hold and tried to keep them herded together while the others scavenged through the ship. His father stuck his head in; tried to make out his son in a cloud of flat cats; 'How many have you got so far?'

'I can't count them - they keep moving around. Close the door!'

'How can I keep the door closed and still send them in to you?'

'How can I keep them in here if you keep opening the door?' Finally they all got into space suits - Lowell insisted on taking Fuzzy Britches inside with him, apparently not trusting even 'the code of the Galaxy' too far. Captain Stone reduced the temperature of the entire ship down to a chilly twenty below; the flat cats, frustrated by the space suits and left on their own resources, gave up and began forming themselves into balls, like fur-covered grape fruit. They were then easy to gather in, easy to count, easy to store in the hold.

Nevertheless the Stones kept finding and incarcerating fugitives for the next several days.

XV - 'INTER JOVEM ET MARTEM PLANETAM INTERPOSUI'

The great astronomer Kepler wrote: 'Between Mars and Jupiter I put a planet.' His successors devised a rule for planetary distances, called 'Bode's Law', which seemed to require a planet at precisely two and eight/tenths the distance from Sun to Earth, 2.8 astro units.

On the first night of the new nineteenth century the Monk Giuseppe Piazzi discovered a new heavenly body. It was the Asteroid Ceres - just where a planet should have been. It was large for an Asteroid, the largest in fact - diameter 485 miles. In the ensuing two centuries hundreds and thousands more were discovered, down to size of rocks. 'The Asteroids' proved a poor name; they were not little stars, nor were they precisely planetoids. It was early suggested that they were the remains of a once sizable planet and by the middle of the twentieth century mathematical investigation of their orbits seemed to prove it.

But it was not until the first men in the early days of the exploration of space actually went out to the lonely reaches between the orbits of Mars and Jupiter and *looked* that we learned for certain that the Asteroids were indeed fragments of a greater planet - destroyed Lucifer, long dead brother of Earth.

As the *Rolling Stone* rose higher and ever higher above the Sun, she slowed, curved her path in, and approached the point where she would start to fall back toward the Sun. She was then at the orbit of Ceres and not far in front of that lady. The *Stone* had been in the region of the Asteroids for the past fifty million miles. The ruins of Lucifer are scattered over a wide belt of space; the Hallelujah Node was near the middle of that belt.

The loose group of rocks, sand, random molecules, and microplanetoids known as the Hallelujah Node was travelling in company around the Sun at a speed of eleven miles per second. The *Stone's* vector was eight miles per, second and in the same direction. Captain Stone speeded up his ship to match in by a series of blasts during the last two days, coming by a radar beacon deep in the swarm and thereby sneaking up on the collection of floating masses at a low relative speed.

The final blast that positioned them dead with the swarm was a mere love tap; the *Stone* did clear her throat - and she was one with the other rolling space stones of space.

Captain Stone took a last look into the double eyepiece of the stereo radar, swung the sweep control fore and aft and all around; the masses of the Hallelujah, indistinguishable from the background of stars by naked eye, hung in greatly exaggerated perspective in the false 'space' of the stereo tank while the true stars showed not at all. None of them displayed the crawling trail of relative motion.

A point brighter than the rest glowed in a fluctuating pattern fairly close by and a few degrees out-orbit; it was the radar beacon on which he had homed. It too, seemed steady by stereo; he turned to Castor and said, 'Take a doppler on City Hall.'

'Just getting it, Captain.' In a moment he added, 'Uh, relative about ten miles an hour - nine point seven and a whisper. And just under seven hundred miles away.'

'Vector?'

'Closing almost for it We ought to slide past maybe ten, fifteen miles south and in-orbit'

Roger Stone relaxed and grinned. 'How's that for shooting? Your old man can still figure them, eh?'

'Pretty good, Dad - considering.'

'Considering what?'

'Considering you used Pol's figures.'

'When I figure out which one of us you are insulting, I'll answer that.' He spoke to the mike: 'All hands, secure from maneuvers. Power room, report when secure. Edith, how soon can we have dinner?'

'It's wrapped up, son,' Hazel reported.

'About thirty minutes, dear,' his wife answered.

'A fine thing! A man slaves over a hot control board and then has to wait thirty minutes for his dinner. What kind of a hotel is this?'

'Yes, dear. By the way, I'm cutting your calorie ration again.'

'Mutiny! What would John Sterling do?'

'Daddy's getting fat! Daddy's getting fat!' Lowell chanted. 'And strangle your child. Anybody want to come out with me while I set jato units?'

'I will, Daddy!'

'Meade, you're just trying to get out of helping with dinner.'

'I can spare her, dear.'

'Spare the child and spoil the fodder. Come with your fodder, baby.'

'Not very funny, Daddy.'

'And I'm not getting paid for it, either.' Captain Stone went aft, whistling. The twins as well as Meade went out with him; they made quick work of setting jato units, the young people locking them in place and the Captain seeing to the wiring personally. They set a belt of them around the waist of the ship and matched pairs on the bow and quarter. Wired for triggering to the piloting radar, set at minimum range, they would give the ship a sharp nudge in the unlikely event that any object came toward them on a collision course at a relative speed high enough to be dangerous.

Coming through the Asteroid Belt to their present location deep in it, they had simply taken their chances. Although one is inclined to think of the Belt as thick with sky junk, the statistical truth is that there is so enormously more space than rock that the chance of being hit is negligible. Inside a node the situation was somewhat different, the concentration of mass being several hundred times as great as in the ordinary reaches of the Belt. But most of the miners took no precautions even there, preferring to bet that this unending game of Russian roulette would always work out in their favor rather than go to the expense and trouble of setting up a meteor guard. This used up a few miners, but not often; the accident rate in Hallelujah node was about the same as that of Mexico City.

They went inside and found dinner ready. 'Call for you, Captain.' announced Hazel.

'Already?'

'City Hall. Told 'em you were out but would call back. Nine point six centimeters.'

'Come eat your dinner, dear, while it's hot'

'You all go ahead. I won't be long.'

Nor was he. Dr Stone looked inquiringly at him as he joined them. 'The Mayor,' he told her and the others. 'Welcome to Rock City and all that sort of thing. Advised me that the Citizen's Committee has set a speed limit of a hundred miles an hour for ships, five hundred miles an hour for scooters, anywhere within a thousand miles of City Hall.'

Hazel bristled. 'I suppose you told him what they could do with their speed limits?'

'I did not I apologized sweetly for having unwittingly offended on my approach and said that I would be over to pay my respects tomorrow or the next day.'

'I thought Mars would have some elbow room,' Hazel grumbled. 'It turned out to be nothing but scissorbills and pantywaists and tax collectors. So we come on out to the wide open spaces and what do we find? Traffic cops! And my only son without the spunk to talk back to them. I think I'll go to Saturn.'

'I hear that Titan Base is awfully chilly,' her son answered without rancor. ''Why not Jupiter? Pol, flip the salt over this way, please.'

'Jupiter? The position isn't favorable. Besides I hear that, Ganymede has more regulations than a girls' school.'

'Mother, you are the only juvenile delinquent old enough for a geriatrics clinic whom I have ever known. You know perfectly well that an artificial colony has to have regulations.'

'An excuse for miniature Napoleons! This whole system has taken to wearing corsets.'

'What's a corset?' inquired Lowell.

'Uh . . . a predecessor to the spacesuit, sort of.'

Lowell still looked puzzled; his mother said, 'Never mind, dear. When we get back, Mother will show you one, in the museum.'

Captain Stone proposed that they all turn in right after supper; they had all run short on sleep during the maneuvering approach. 'I keep seeing spots before my eyes,' he said, rubbing them, 'from staring into the tank. I think I'll sleep the clock around.'

Hazel started to answer when an alarm shrilled; he passed instantly from sleepy to alert. 'Object on collision course! Grab something, everybody.' He clutched at a stanchion with one hand, gathered in Lowell with the other.

But no shove from a firing jato followed. 'Green,' Hazel announced quietly. 'Whatever it is, it isn't moving fast enough to hurt us. Chances favor a near miss, anyway.'

Captain Stone took a deep breath, 'I hope you're right, but I've been on the short end of too many long shots to place much faith in statistics. I've been jumpy ever since we entered the Belt'

Meade went aft with dirty dishes. She returned in a hurry, round eyed. 'Daddy - somebody's at the *door.'*

'What? Meade, you're imagining things.'

'No, I'm not I *heard* him. Listen.'

'Quiet, everyone.' In the silence they could hear the steady hiss of an air injector; the lock was cycling. Roger Stone lunged toward the airlock; he was stopped by a sharp warning from his mother. 'Son! Hold it a second'

'What?'

'Keep back from that door.' She had her gun out and at the ready.

'Huh? Don't be silly. And put that thing away; it isn't charged anyhow.'

'He won't know that. Whoever is coming in that lock.'

Dr Stone said quietly, 'Mother Hazel, what are you nervous about?'

'Can't you see? We've got a ship here with food in it. And oxy. And a certain amount of singleH. This isn't Luna City; there are men out here who would be tempted.'

Dr Stone did not answer but turned to her husband. He hesitated only momentarily, then snapped, 'Go forward, dear. Take Lowell. Meade, you go along and lock the access hatch. Leave the ship's phones open. If you hear anything wrong, radio City Hall and tell them we are being hijacked. Move!' He was already ducking into his stateroom, came out with his own gun.

By the time the hatch to the control room had clanged shut the airlock finished cycling. The four remaining waited, surrounding the airlock inner door. 'Shall we jump him, Dad?' Castor whispered.

'No just stay out of my line of ifre.'

Slowly the door swung open. A spacesuited figure crouched in the frame, its features indistinct in its helmet. It looked around, saw the guns trained on it, and spread both its hands open in front of it. 'What's the matter?' a muffled voice said plaintively. 'I haven't done anything.'

Captain Stone could see that the man, besides being empty-handed, carried no gun at his belt. He put his own away. 'Sorry. Let me give you a hand with that helmet'

The helmet revealed a middle-aged, sandy-haired man with mild eyes. 'What was the matter?' he repeated.

'Nothing. Nothing at all. We didn't know who was boarding us and we were a bit nervous. My name's Stone, by the way. I'm master.'

'Glad to know you, Captain Stone. I'm Shorty Devine.'

'I'm glad to know you, Mr Devine. Welcome aboard.'

'Just Shorty.' He looked around. 'Uh, excuse me for bursting in on you and scaring you but I heard you had a doctor aboard. A real doctor, I mean - not one of those science johnnies.'

'We have.'

'Gee, that's wonderful! The town hasn't had a real doctor since old Doc Schultz died. And I need one, bad.'

'Sorry! Pol, get your mother.'

'I heard, dear', the speaker horn answered. 'Coming.' The hatch opened and Dr Stone came in. 'I'm the doctor, Mr Devine. Dear, I'll use this room, I think. If you will all go somewhere else, please?'

The visitor said hastily, 'Oh, they needn't'

'I prefer to make examinations without an audience,' she said firmly.

'But I didn't explain, ma'am - Doctor. It isn't me; it's my partner.'

'Oh?'

'He broke his leg. Got careless with two big pieces of core material and got his leg nipped between 'em. Broke it. I guess I didn't do too well by him for he's a powerfully sick man. Could you come over right away, Doctor?'

'Certainly.'

'Now, Edith!'

'Castor, get my surgical kit - the black one. Will you help me suit up, dear?'

'But Edith, you -'

'It's all right, Captain; I've got my scooter right outside. We're only eight-five, ninety miles away; we won't be gone long.'

Captain Stone sighed. 'I'm going with you. Will your scooter take three?'

'Sure, sure! It's got Reynolds saddles; set any balance you need.'

'Take command, Hazel'

'Aye aye, sir!'

They were gone all night, ship's time, rather than a short while. Hazel sat at the control board, tracking them all the way out - then watched and waited until she spotted them leaving, and tracked them back. Devine, profuse with tannks, had breakfast with them. Just before he left Lowell came into the saloon earrying Fuzzy Britches. Devine stopped with a bite on the way to his mouth and stared. 'A flat cat! Or am I seeing things?'

'Of course it is. Its name is Fuzzy Britches. It's a Martian.'

'You bet it is! Say, do you mind if I pet her for a moment?'

Lowell looked him over suspiciously, granted the boon. The prospector held it like one who knows flat cats, cooed to it, and stroked it. 'Now ain't that nice! Almost makes me wish I had never left Mars - not but what its better here.' He handed it back reluctantly, thanked them all around again, and left

Dr Stone flexed her fingers. 'That's the first time I've done surgery in free fall since the old clinic days. I must review my techniques.'

'My dear, you were magnificent. And Jock Donaher is mighty lucky that you were near by.'

'Was he pretty bad, Mummy?' asked Meade.

'Quite,' answered her father. 'You wouldn't enjoy the details. But your Mother knew what to do and did it And I was a pretty fair scrub nurse myself, if I do say so as shouldn't.'

'You do say so and shouldn't,' agreed Hazel.

'Roger', asked Dr Stone, 'that thing they were living in could it be operated as a ship?'

'I doubt it, not the way they've got it rigged now. I wouldn't call it a ship; I'd call it a raft'

'What do they do when they want to leave?'

'They probably don't want to leave. They'll probably die within hailing distance of Rock City - as Jock nearly did. I suppose they sell their high grade at Ceres, by scooter - circum Ceres, that is. Or maybe the sell it here.'

'But the whole town is migratory. They have to move sometime.'

'Oh, I imagine you could move that hulk with a few jato units, if you were gentle about it and weren't in any hurry. I think I'd decompress it before I tried it, though.'

XVI - ROCK CITY

The Asteroid Belt is a flattened torus ring or doughnut in space encompassing thirteen thousand five hundred thousand million trillion cubic miles. This very conservative figure is arrived at by casting out of the family the vagrant blacksheep who wander in down to Mars and farther - even down close, to Sun itself - and by ignoring those which strayed too far out and became slaves to mighty Jove, such as the Trojan Asteroids which make him a guard of honor sixty degrees ahead and behind him, in orbit. Even those that swing too far north or south are excluded; an arbitrary limit of six degrees deviation from ecliptic has been assumed.

13,500,000,000,000,000,000,000,000 cubic miles of space.

Yet the entire human race could be tucked into one corner of a single cubic mile; the average human body is about two cubic feet in bulk.

Even Hazel's dauntless hero 'Captain John Sterling' would he hard put to police such a beat. He would need to be twins, at least.

Write the figure as 1.35 x $10^{25\text{th}}$ cubic miles; that makes it easier to see if no easier to grasp. At the time the *Rolling Stone* arrived among the rolling stones of Rock City the Belt had a population density of one human soul for every two billion trillion cubic miles - read 2 x 10^{21}. About half of these six thousand-odd lived on the larger planetoids. Ceres, Pallas, Vesta, Juno; one of the few pleasant surprises in the exploration of our system was the discovery that the largest Asteroids were unbelievably dense and thus had respectable surface gravitations. Ceres, with a diameter of only 485 miles, has an average density five times that of Earth and a surface gravity about the same as Mars. These large planetoids are believed to be mainly core material of lost Lucifer, covered with a few miles of lighter debris.

The other three thousand inhabitants constitute the Belt's floating population in a most literal sense; they live and work in free fall. Almost all of them are gathered into half a dozen loose communities working the nodes or clusters of the Belt. The nodes are several hundred times as dense as the main body of the Belt - if 'dense' is the proper word; a transport for Ganymede could have ploughed through the Hallelujah node and Rock City and never noticed it except by radar. The chance that such a liner would hit anything is extremely small.

The miners worked the nodes for uranium, transuranics, and core material, selling their high grade at the most conveniently positioned large Asteroid and occasionally moving on to some other node. Before the strike in the Hallelujah the group calling themselves Rock City had been working Kaiser Wilhelm node behind Ceres in orbit; at the good news they moved, speeding up a trifle and passing in-orbit of Ceres, a ragtag caravan nudged through the sky by scooters, chemical rocket engines, jato units, and faith. Theirs was the only community well placed to migrate. Grogan's Boys were in the same orbit but in Heartbreak node beyond the Sun, half a billion miles away. New Joburg was not far away but was working the node known as Reynolds Number Two, which rode the Themis orbital pattern, inconveniently far out.

None of these cities in the sky was truly self-supporting, nor perhaps ever would be; but the ravenous appetite of Earth's industries for power metal and for the even more valuable planetary-core materials for such uses as jet throats and radiation shields - this insatiable demand for what the Asteroids could yield - made certain that the miners could swap what they had for what they needed Yet in many ways they were almost self-supporting; uranium refined no further away than Ceres gave them heat and light and power; all of their vegetables and much of their protein came from their own hydroponic tanks and yeast vats, SingleH and oxygen came from Ceres or Pallas.

Wherever there is power and mass to manipulate, Man can live.

For almost three days, the *Rolling Stone* coasted slowly through Rock City. To the naked eye looking out a port or even to a person standing outside on the hull Rock City looked like any other stretch of space - empty, with a backdrop of stars. A sharp-eyed person who knew the constellations well would have noticed far too many planets distorting the classic configurations, planets which did not limit their wanderings to the Zodiac. Still sharper attention would have spotted motion on the part of these 'planets', causing them to open out and draw aft from the direction the *Stone* was heading.

Just before lunch on the third day Captain Stone slowed his ship still more and corrected her vector by firing a jato unit; City Hall and several other shapes could be seen ahead. Later in the afternoon he fired one more jato unit, leaving the *Stone* dead in space relative to City Hall and less than an eighth of a mile from it He turned to the phone and called the Mayor.

'Rolling Stone, Luna, Captain Stone speaking.'

'We've been watching you come in, Captain,' came the voice of the Mayor.

'Good. Mr Fries, I'm going to try to get a line over to you. With luck. I'll be over to see you in a half-hour or so.'

'Using a line-throwing gun? I'll send someone out to pick it up.'

'No gun, worse luck. With the best of intentions I forgot to stock one.'

Fries hesitated. 'Uh, Captain, pardon me, but are you in good practice for free-fall suit work?'

'Truthfully, no.'

'Then let me send a boy across to put a line on you. No, no! I insist'

Hazel, the Captain, and the twins suited up, went outside, and waited. They could make out a small figure on the ship across from them; the ship itself looked larger now, larger than the *Stone.* City Hall was an obsolete space-to-space vessel, globular, and perhaps thirty years old. Roger Stone surmised correctly that she had made a one-way freighter trip after she was retired from a regular run.

In close company with City Hall was a stubby cylinder; it was either smaller than the spherical ship or farther away. Near it was an irregular mass impossible to make out; the sunlight on it was bright enough but the unfilled black shadows gave no clear clues. All around them were other ships or shapes close enough to be distinguished from the stars; Pollux estimated that there must be two dozen within as many miles. While he watched a scooter left a ship a mile or more away and headed toward City Hall.

The figure they had seen launched himself across the gap. He seemed to swell; in half a minute he was close by, checking himself by the line he carried. He dropped to an easy landing near the bow of the *Stone;* they went to meet him.

'Howdy, Captain. I'm Don Whitsitt, Mr. Fries' bookkeeper.'

'Howdy, Don.' He introduced the others; the twins helped haul in the light messenger line and coil it; it was followed by a steel line which Don Whitsitt shackled to the ship.

'See you at the store,' he said. 'So long.' He launched himself back the way he came, carrying the coiled messenger line and not bothering with the line he had rigged.

Pollux watched him draw away. 'I think I could do that'

'Just keep on thinking it', his father said, 'and loop yourself to that guide line.'

One leap took them easily across the abyss, provided one did not let one's loop twist around the guide line. Castor's loop did so; it braked him to a stop. He had to unsnarl it, then gain momentum again by swarming along the line hand over hand

Whitsitt had gone inside but he had recycled the lock and left it open for them. They went on in, to be met there by the Honorable Jonathan Fries, Mayor of Rock City. He was a small, bald, potbellied man with a sharp, merry look in his eye and a stylus tucked back of his ear. He shook hands with Roger Stone enthusiastically. 'Welcome, welcome! We're honored to have you with us, Mister Mayor. I ought to have a key to the city, or some such, for you. Dancing girls and brass bands.'

Roger shook his head. 'I'm an ex-mayor and a private traveler. Never mind the brass bands.'

'But you'll take the dancing girls?'

'I'm a married man. Thanks anyhow.'

'If we had any dancing girls I'd keep 'em for myself. And I'm a married man, too.'

'You certainly are!' A plump, plain but very jolly woman had floated up behind them.

Yes, Martha.' They completed the rest of the introductions; Mrs Fries took Hazel in tow; the twins trailed along with the two men, into the forward half of the globe. It was a storeroom and a shop; racks had been fitted to the struts and thrust members; goods and provisions of every sort were lashed or netted to them. Don Whitsitt clung with his knees to a saddle in the middle of the room with a desk folded into his lap. In his reach were ledgers on lazy tongs and a rack of clips holding several hundred small account books. A miner floated in front of him. Several more were burrowing through the racks of merchandise.

Seeing the display of everything a meteor miner could conceivably need, Pollux was glad that they had concentrated on luxury goods then remembered with regret that they had precious little left to sell; the flat cats, before they were placed in freeze, had eaten so much that the family had been delving into their trade goods, from caviar to Chicago sausage. He whispered to Castor, 'I had no idea the competition would be so stiff.'

'Neither did I.'

A miner slithered up to Mr Fries. 'One-Price, about that centrifuge -'

'Later, Sandy. I'm busy.'

Captain Stone protested, 'Don't let me keep you from your customers.'

'Oh, Sandy hasn't got anything to do but wait. Right, Sandy? Shake hands with Captain Stone - it was his wife who fixed up old Jocko.'

'It was? Say, I'm mighty proud to know you, Captain! You're the best news we've had in quite a while.' Sandy turned to Fries. 'You better put him right on the Committee.'

'I shall. I'm going to call a phone meeting this evening.'

'Just a moment!' objected Roger Stone. 'I'm just a visitor. I don't belong on your Citizens' Committee.'

Fries shook his head. 'You don't know what it means to our people to have a medical doctor with us again. The Committee ain't any work, really. It's just to let you know we're glad you've joined us. And we'll make Mrs Stone - I mean Doctor Stone - a member if she wants it. She won't have time for it, though.'

Captain Stone was beginning to feel hemmed in. 'Slow down! We expect to be leaving here come next Earth departure - and my wife is not now engaged in regular practice, anyhow. We're on a pleasure trip.'

Fries looked worried. 'You mean she won't attend the sick? But she operated on Jock Donaher.'

Stone was about to say that she positively would not under any circumstances take over a regular practice when he realized that he had very little voice in the matter. 'She'll attend the sick. She's a doctor.'

'Good!'

'But, confound it, man! We didn't come here for that She's on a vacation.'

Fries nodded. 'We'll see what we can work out to make it easy on her. We won't expect the lady to go hopping rocks the way Doc Schultz did. Get that, Sandy? We can't have every rock-happy rat in the swarm hollering for the doctor every time he gets a sore finger. We want to get the word around that if a man gets sick or gets hurt it's up to him and his neighbours to drag him in to City Hall if he can possibly wear a suit. Tell Don to draft me a proclamation.'

The miner nodded solemnly. 'That's right, One-Price.'

Sandy moved away; Fries went on, 'Let's go back into the restaurant and see if Martha has some fresh coffee. I'd like to get your opinion on several civic matters'

'Frankly, I couldn't possibly have opinions on your public affairs here. Things are so different'

'Oh, why don't I be truthful and admit I want to gossip about politics with another pro. I don't meet one every day. First, though, did you have any shopping in mind today? Anything you need? Tools? Oxy? Catalysts? Planning on doing any prospecting and if so, do you have your gear?'

'Nothing especial today - except one thing: we need to buy, or by preference rent, a scooter. We'd like to explore a bit'

Fries shook his head. 'Friend, I wish you hadn't asked me that. That's one thing I haven't got All these sand rats booming in here from Mars, and even from Luna, half of 'em with no equipment They lease a scooter and a patent igloo and away they go, red hot to make their fortunes. Tell you what I can do, though - I've got more rocket motors and tanks coming in from Ceres two months from now. Don and I can weld you up one and have it ready to slap the motor in when the *Firefly* gets here.'

Roger Stone frowned, 'With Earth departure only five months away that's a long time to wait'

'Well, we'll just have to see what we can scare up. Certainly the new doctor is entitled to the best - and the doctor's family. Say -".

A miner tapped him on the shoulder. 'Say, storekeeper, I -'

Fries' face darkened. 'You can address me as "Mr Mayor!"'

'Huh?'

'And beat it! Can't you see I'm busy?' The man backed away; Fries fumed, '"One Price" I'm known as, to my friends and to my enemies, from here to the Trojans. If he doesn't know that, he can call me by my title - or take his trade elsewhere. Where was I? Oh, yes! You might try old Charlie.'

'Eh?'

'Did you notice that big tank moored to City Hall? That's Charlie's hole. He's a crazy old coot, rock-happy as they come, and he's a hermit by intention. Used to hang around the edge of the community, never mixing - but with this boom and ten strangers swarming in for every familiar face Charlie got timid and asked could he please tie in at civic center? I guess he was afraid that somebody would slit his throat and steal his hoorah's nest Some of the boomers are a rough lot at that'

'He sounds like some of the oldtimers on Luna. What about him?'

'Oh! Too much on my mind these days; it wanders. Charlie runs a sort of a fourth-hand shop, and I say that advisedly. He has stuff I won't handle. Every time a rock jumper dies, or goes Sunside, his useless plunder winds up in Charlie's hole. Now I don't say he's got a scooter - though you just might lease his own now that he's moored in-city. But he might have parts that could be jury-rigged. Are you handy with tools?'

'Moderately. But I've got just the team for such a job.' He looked around for the twins, finally spotted them pawing through merchandise. 'Cas! Pol! Come here.'

The storekeeper explained what he had in mind. Castor nodded. 'If it worked once, we'll fix it'

'That's the spirit Now let's go test that coffee.'

Castor hung back 'Dad? Why don't Pol and I go over there and see what he's got? It'll save you time.'

'Well-'

'It's just a short jump',' said Fries.

'Okay, but don't jump. Use your lines and follow the mooring line over.'

The twins left Once in the airlock Pollux started fuming. 'Stow it,' said Cas. 'Dad just wants us to be careful.'

'Yes, but why does he have to say it where everybody can hear?'

Charlie's hole, they decided, had once been a tow tank to deliver oxygen to a colony. They let themselves into the lock, started it cycling. When pressure was up, they tried the inner door; it wouldn't budge. Pollux started pounding on it with his belt wrench while Castor searched for a switch or other signal. The lock was miserably lighted by a scant three inches of glow tube.

'Cut the racket,' Castor told Pollux. 'If he's alive, he's heard you by now.' Pollux complied and tried the door again - still locked.

They heard a muffled voice: 'Who's there?'

Castor looked around for the source of the voice, could not spot it. 'Castor and Pollux Stone,' he answered, 'from the *Rolling Stone,* out of Luna'

Somebody chuckled. 'You don't fool me. And you *can't* arrest me without a warrant Anyhow I won't let you in.'

Castor started to explode,' Pollux patted his arm. 'We aren't cops.

Shucks, we aren't old enough to be cops.'

'Take your. helmets off.'

'Don't do it,' Castor cautioned. 'He could recycle while we're unsealed.'

Pollux went ahead and took his off; Castor hesitated, then followed. 'Let us in,' Pollux said mildly.

'Why should I?'

'We're customers. We want to buy things.'

'What you got to trade?'

'We'll pay cash'

'Cash!' said the voice. 'Banks! Governments! What you got to *trade?* Any chocolate?'

'Cas,' Pollux whispered, 'have we got *any* chocolate left?'

'Maybe six or seven pounds. Not more.'

'Sure we got chocolate.'

'Let me see it.'

Castor interrupted. 'What sort of nonsense is this? Pol, let's go back and see Mr Fries again. He's a businessman.'

The voice moaned, 'Oh, don't do that! He'll cheat you.'

'Then open up!'

After a few seconds of silence the voice said wheedlingly,. 'You look like nice boys. You wouldn't hurt Charlie? Not old Charlie?'

'Of course not We want to trade with you.'

The door opened at last In the gloom a face, etched by age and darkened by raw sunlight, peered out at them 'Come in easy. Don't try any tricks - I know you.'

Wondering if it were the sensible thing to do the boys pulled themselves in. When their eyes adjusted to the feeble circle of glow tube in the middle of the space they looked around while their host looked at them. The tank, large outside, seemed smaller by the way it was stuffed. As in Fries' shop, every inch, every strut, every nook was crammed, but where the City Hall was neat, this was rank disorder, where Fries' 'shop was rational, this was nightmare confusion. The air was rich enough but ripe with ancient and nameless odors.

Their host was a skinny monkey of a man, covered with a single dark garment, save for head, hands, and bare feet. It had once been, Pollux decided, heated underwear for spacesuit use far out starside, or in caves.

Old Charlie stared at them, then grinned, reached up and scratched his neck with his big toe. 'Nice boys,' he said. 'I knew you wouldn't hurt Charlie. I was just foolin'.'

'We wouldn't hurt anybody. We just wanted to get aquainted, and do a little business.'

'We want a - ' Pollux started; Castor's elbow cut off the rest; Castor 'went on,

'Nice place you've got here.'

'Comfortable. Practical. Just right for a man with no nonsense about him. Good place for a man who likes to be quiet and think. Good place to read a book You boys like to read?'

'Sure. Love to.'

'You want to see my books?' Without waiting for an answer he dared like a bat into the gloom, came back In a few moments with books in both hands and a half dozen held by his feet. He bumped to a stop with his elbows and offered them

There were oldstyle bound books, most of them, the twins saw, ships' manuals of ships long dead. Castor's eyes widened when he saw the dates on some of them, and wondered what the Astrogation Institute would pay for them. Among them was a dog-eared copy of Mark Twain's *Life on the Mississippi.*

'Look 'em over, boys. Make yourselves comfortable. Bet you didn't expect to find a literary man out here among these yokels. You boys can read, can't you?'

'Sure we can''

'Didn't know. They teach such funny things nowadays. Quote a bit of latin to 'em and they look like you're crazy in the head. You boys hungry? You want something to eat?' He looked anxious.

They both assured him that they had fed well and recently; he looked relieved. 'Old Charlie ain't one to let a man go hungry, even if he hasn't got enough for himself.' Castor had noted a net of sealed rations; there must have been a thousand of them by conservative estimate. But the old man continued, 'Seen the time, right herein this node - no, it was the Emmy Lou - when a man didn't dare make breakfast without he barred his lock first and turned off his beacon. It was about that time that Lafe Dumont ate High-Grade Henderson. He was dead first, naturally - but it brought on a crisis in our community affairs. They formed up the vigilantes, what they call the Committee nowadays.'

'Why did he eat him?'

'Why, he was *dead.* I told you that Just the same, I don't think a man ought to eat his own partner, do you?'

The boys agreed that it was a breech of etiquette.

'I think he ought to limit it to members of his own family, unless the two of them have got a signed and sealed contract. See any ghosts yet?'

The acceleration was so sharp that it left both the twins a bit oonfuted. 'Ghosts?'

'You will. Many's the time I've talked to High-Grade Henderson. Said he didn't blame Lafe a bit, would 'a' done the same thing in his place. Ghosts all around here. All the rockmen that have died out here, they can't get back to Earth. They're in a permanent orbit - see? And it stands to reason that you can't accelerate anything that doesn't have mass.' He leaned toward them confidentially. 'Sometimes you see 'em, but mostly they whisper in your earphones. And when they do, *listen* - because that's the only way you'll ever find any of the big strikes that got found and then got lost again. I'm telling you this because I like you, see? So listen. If it's too faint, just close your chin valve and hold your breath; then it comes clearer.'

They agreed and thanked him. 'Now tell me about yourselves, boys.' To their surprise he appeared to mean it; when they slowed down he taxed them for details, filling in only occasionally with his own disjointed anecdotes. At last Castor described the fiasco of the flat cats. 'So that's why we don't have much food to trade with. But we do have some chocolate left and lots of other things.'

Charlie rocked back and forth from his perch in the air. 'Flat cats, eh? I ain't had my hands on a flat cat in a power of years. Nice to hold, they are. Nice to have around. Philosophical, if we just understand 'em.' He suddenly fixed Castor with his eye. 'What you planning to do with all those flat cats?'

'Why, nothing, I guess.'

'That's just what I thought You wouldn't mind giving a poor old man who hasn't kith nor kin nor wife nor chick one of those harmless flat cats? An old man who would always give you a bite to eat and a charge for your suit bottle?'

Castor glanced at Pollux and agreed cautiously that any dicker they reached would certainly include a flat cat as a mark of faith in dealing. 'Then what do you want? You talked about scooters. You know old Charlie hasn't got a scooter - except the one I have to have myself to stay alive.'

Castor broached the notion about repairing old parts, fitting together a scooter. Charlie scratched an inch-long stubble. 'Seems. to me I did have a rocket motor - you wouldn't mind if it lacked a valve or two? Or did I trade that to Swede Gonzalez? No, that was another one. I think - just a second while I take a look.' He was gone more nearly 600 seconds, buried in the mass; he came out dragging a piece of junk behind. 'There you are! Practically new. Nothing a couple of bright boys couldn't fix.'

Pollux looked at Castor. 'What do you think it's worth?'

Castor's lips moved silently: 'He ought to pay us to take it away.' It took them another twenty minutes but they got it for three pounds of chocolate and one flat cat.

XVII - FLAT CATS FINANCIAL

It took the better part of two weeks to miake the ancient oxyalcohol engine work; another week to build a scooter rack to receive it, using tubing from Fries' secondhand supply. It was not a pretty thing, but, with the *Stone's* stereo gear mounted on it, it was an efficient way to get around the node. Captain Stone shook his head over it and subjected it to endless tests before he conceded that it was safe even though ugly.

In the meantime the Committee had decreed a taxi service for the doctor lady; every miner working within fifty miles of City Hall was required to take his turn at standby watch with his scooter, with a fixed payment in high grade for any run he might have to make. The Stones saw very little of Edith Stone during this time: it seemed as if every citizen of Rock City had been saving up ailments.

But they were not forced to fall back on Hazel's uninspired cooking. Fries had the *Stone* warped into contact with City Hall and a passenger tube sealed from the *Stone's* lock to an unused hatch of the bigger ship; when Dr Stone was away they ate in his restaurant Mrs Fries was an excellent cook and she raised a great variety in her hydroponics garden.

While they were rigging the scooter the twins had time to mull over the matter of the flat cats. It had dawned on them that here in Rock City was a potential, unexploited market for flat cats. The question was: how best to milk it for all the traffic would bear?

Pol suggested that they peddle them in the scooter; he pointed out that a man's sales resistance 'was lowest, practically zero, when he actually had a flat cat in his hands. His brother shook his head 'No good,' Junior.'

'Why not?'

'One, the Captain won't let us monopolize the scooter; you know he regards it as ship's equipment, built by the crew, namely us. Two, we would burn up our profits in scooter fuel. Three, it's too slow; before we could move a third of them, some idiot would have fed our first sale too much, it has kittens - and there you are, with the market flooded with flat cats. The idea is to sell them as nearly as possible all at one time.'

'We could stick up a sign in the store - One-Price would let us - and sell them right out of the *Stone.'*

'Better but not good enough. Most of these rats shop only every three or four months. No, sir, we've got to build that better mouse trap and make the world beat a path to our door.'

'I've never been able to figure out why anybody would want to trap a mouse. Decompress a compartment and you kill all of them, every time.'

'Just a figure of speech, no doubt Junior, what can we do to make Rock City flat-cat conscious?'

They found a way. The Belt, for all its lonely reaches - or because of them - was as neighbourly as a village. They gossiped among themselves, by suit radio. Out in the shining blackness it was good to know that, if something went wrong, there was a man listening not five hundred miles away who would come and investigate if you broke off and did not answer.

They gossiped from node to node by their more powerful ship's radios. A rumor of death, of a big strike, or of accident, would bounce around the entire belt, relayed from rockman to rockman, at just short of the speed of light. Heartbreak node was sixty-six light minutes away, following orbit; big news often reached it in less than two hours, including numerous manual relays.

Rock City even had its own broadcast. Twice a day One-Price picked up the news from Earthside, then rebroadcast it with his own salty comments. The twins decided to follow it with one of their own, on the same wave length - a music & chatter show, with commercials. Oh, decidedly with commercials. They had hundreds of spools in stock which they could use, then sell, along with the portable projectors they had bought on Mars.

They started in; the show never was very good, but, on the other hand, it had no competition and it was free. Immediately following Fries' sign-off Castor would say, 'Don't go away, neighbours! Here we are again with two hours of fun and music - and a few tips on bargains. But first, our theme - the warm and friendly purr of a Martian flat cat.' Pollux would hold Fuzzy Britches up to the microphone and stroke it; the good-natured little creature would always respond with a loud buzz. 'Wouldn't that be nice to come home to? And now for some music: Harry Weinstein's Sunbeam Six in "High Gravity". Let me remind you that this tape, like all other music on this program, may be purchased at an amazing saving in Flat Cat Alley, right off the City Hall - as well as Ajax three-way projectors in the Giant, Jr. model, for sound, sight, and stereo. The Sunbeam Six - hit it, Harry!'

Sometimes they would do interviews:

Castor: 'A few words with one of our leading citizens, Rocks-in-his-Head Rudolf. Mr Rudolf, all Rock City is waiting to hear from you. Tell me, do you like it out here?'

Pollux: 'Naw!'

Castor: 'But you're making lots of money, Mr Rudolf?'

Pollux: 'Naw!'

Castor: 'At least you bring in enough high grade to eat well

'Naw!'

'No? Tell me, why did you come out here in the first place?'

Pollux, 'Bub, was *you* ever married?'

Sound effect of blow with blunt instrument, groan, and the unmistakable cycling of an air lock - Castor: 'Sorry, folks. My assistant has just spaced Mr Rudolf. To the purchaser of the flat cat we had been saving for Mr Rudolf we will give away - absolutely free! - a beautiful pin-up picture printed in gorgeous living colors on fireproof paper. I hate to tell you what these pictures ordinarily sell for on Ceres; it hurts me to say how little we are letting them go for now, until our limited stock is exhausted. To the very first customer who comes in that door wanting to purchase a flat cat we will - Lock that door! Lock that door! All right, all right - all three of you will receive pin-up pictures; we don't want anyone fighting here. But you'll have to wait until we finish this broadcast Sorry, neighbours - a slight interruption but we settled it without bloodshed. But I find myself in a dilemma. I made you a promise and I did not know what would happen, but the truth is, too many customers were already here, pounding on the door of Flat Cat Alley. But to make good our promise I am enlarging it: not to the first customer, not to the second, nor to the third - but to the next *twenty* persons purchasing flat cats will go, absolutely free, one of these gorgeous pictures. Bring no money - we accept high grade or core material at the standard rates.'

Sometimes they varied it by having Meade sing. She was not of concert standards, but she had a warm, intimate contralto. After hearing her, a man possessing not even a flat cat felt lonely indeed. She pulled even better than the slick professional recordings; the twins found it necessary to cut her in for a percentage.

But in the main they depended on the flat cats themselves. The boomers from Mars, almost to a man, bought flat cats as soon as they heard that they were available, and each became an unpaid travelling salesman for the enterprise. Hardrock men from Luna, or directly from Earth, who had never seen a flat cat, now had opportunities to see them, pet them, listen to their hypnotic purr - and were lost. The little things not only stirred to aching suppressed loneliness, but, having stimulated it, gave it an outlet.

Castor would hold Fuzzy Britches to the mike and coo, 'Here is a little darling - Molly Malone. Sing for the boys, honey pet.' While he stroked Fuzzy Britches Pollux would step up the power. 'No, we can't let Molly go - she's a member of the family. But here is Bright Eyes. We'd like to keep Bright Eyes, too, but we mustn't be selfish. Say hello to the folks,. Bright Eyes.' Again he would stroke Fuzzy Britches. 'Mr P., now hand me Velvet.'

The stock of flat cats in deep freeze steadily melted. Their stock of high grade grew.

Roger Stone received their suggestion that they save out a few for breeding stock with one of his more emphatic refusals; once, he declaimed, was enough to be swamped in flat cats. Fuzzy Britches could stay, safely on short rations - but one was enough.

They had reached the last few at the back of the hold and were thinking about going out of business when a tired-looking, grey-haired man showed up after their broadcast. There were several other customers; he hung back and let the twins sell flat cats to the others. He had with him a girl child, little older than Lowell. Castor had not seen him before but he guessed that he might be Mr Erska; bachelors far outnumbered families in the node and families with children were very rare. The Erskas picked up a precarious living down orbit and north; they were seldom seen at City Hall. Mr Erska spoke Basic with some difficulty; Mrs Erska spoke it not at all. The family used some one of the little lingos - Icelandic, it might have been.

When the other customers had left the *Stone* Castor put on his professional grin and introduced himself. Yes, it was Mr Erska. 'And what can I do for you today, sir? A flat cat?'

'I'm afraid not'

'How about a projector? With a dozen tapes thrown in? Just the thing for a family evening.'

Mr Erska seemed nervous. 'Uh, very nice, I'm sure. No.' He tugged at the little girl's hand. 'We better go now, babykin.'

'Don't rush off. My baby brother is around somewhere - or was. He'd like to meet your kid. Maybe he's wandered over into the store. I'll look for him''

'We better go.'

'What's the rush? He can't be far.'

Mr Erska swallowed in embarrassment 'My little girl. She heard your program and she wanted to see a flat cat. Now she's seen one, so we go.'

'Oh-' Castor brought himself face to face with the child. 'Would you like to hold one, honey?' She did not answer, but nodded solemnly. 'Mr P.,. bring up the Duchess.'

'Right, Mr C.' Pollux went aft and fetched the Duchess - the first flat cat that came to hand, of course. He came back, warming it against his belly to revive it quickly.

Castor took it and massaged it until it flattened out and opened its eyes. 'Here, honeybunch. Don't be afraid'

Still silent, the child took it, cuddled it The small furry bundle sighed and began to purr. Castor turned to her father. 'Don't you want to get it for her?'

The man turned red. 'No, no!'

'Why not? They're no trouble. She'll love it. So will you.'

'No!' He reached out and tried to take the flat cat from his daughter, speaking to her in another language.

She clung to it, replying in what was clearly the negative. Castor looked at them thoughtfully. 'You would like to buy it for her, wouldn't you?'

The man looked away. 'I can't buy it'

'But you want to.' Castor glanced at Pollux. 'Do you know what you are, Mr Erska. You are the five *hundredth* customer of Flat Cat Alley.'

'Uh?'

'Didn't you hear our grand offer? You must have missed one of our programs. The five hundredth flat cat is *absolutely free.'*

The little girl looked puzzled but clung to the flat cat Her father looked doubtful. 'You're fooling?'

Castor laughed. 'Ask Mr P.'

Pollux nodded solemnly. 'The bare truth, Mr Erska. It's a celebration of a successful season. One flat cat, absolutely free with the compliments of the management And with it goes either one pin-up, or two candy bars - your choice.'

Mr Erska seemed only half convinced, but they left with the child clinging to 'Duchess' and the candy bars. When the door was closed behind them Castor said fretfully, 'You didn't need to chuck in the candy bars They were the last; I didn't mean us to sell them"

'Well, we didn't sell them; we gave 'em away.'

Castor grinned and shrugged. 'Okay, I hope they don't make her sick. What was her name?'

'I didn't get it'

'No matter. Our Mrs Fries will know.' He turned around, saw Hazel behind them in the hatch. 'What are *you* grinning about?'

'Nothing, nothing. I just enjoy seeing a couple of cold-cash businessmen at work'

'Money isn't everything I'

'Besides,' added Pollux, 'it's good advertising.'

'Advertising? With your stock practically gone?' She snickered. 'There wasn't any "grand offer" - and Ill give you six to one it wasn't your five hundredth sale.'

Castor looked embarrassed. 'Aw, she wanted it! What would you have done?'

Hazel moved up to them, put an arm around the neck of each. 'My boys! I'm beginning to think you may grow up yet. In thirty, forty, fifty more years you may be ready to join the human race.'

'Aw, lay off it!'

XVIII - THE WORM IN THE MUD

Cost-accounting on the flat-cat deal turned out to be complicated. The creatures were all descendants of Fuzzy Britches, chattel of Lowell. But the increase was directly attributable to food fed to them by everyone - which in turn had forced them to eat most of the luxury foods stocked by the twins for trade. But it had been the twins' imaginative initiative which had turned a liability into an asset. On the other hand they had used freely the capital goods (ship and electronic equipment) belonging to the entire family. But how to figure the probable worth of the consumed luxury foods? Whatever the figure was, it was not just original cost plus lift fuel.

Roger Stone handed down a Solomon's decision. From the gross proceeds would be subtracted Meade's percentage for singing; the twins would be reimbursed for the trade goods that had been commandeered; the balance would be split three ways among the twins and Lowell - all to be settled after they had traded high grade for refined metal at Ceres, then sold their load at Luna.

In the meantime he agreed to advance the twins' money to operate further. Fries having promised to honor his sight draft on Luna City National.

But for once the twins found no immediate way to invest money. They toyed with the idea of using their time to prospect on their own, but a few trips out in the scooter convinced them that it was a game for experts and one in which even the experts usually made only a bare living. It was the fixed illusion that the next mass would be 'the glory rock' - the one that would pay for years of toil - that kept the old rockmen going. The twins knew too much about statistics now, and they believed in their ability rather than their luck. Finding a glory rock was sheer gamble.

'Ihey made one fairly long trip into the thickest part of the node, fifteen hundred miles out and back taking all one day and the following night to do it. They got the scooter up to a dawdling hundred and fifty miles per hour and let it coast, planning to stop and investigate if they found promising masses having borrowed a stakeout beacon from Fries with the promise that they would pay for it they kept it

They did not need it. Time after time they would spot a major blip in the stereo radar, only to have someone else's beacon wink on when they got within thirty miles of the mass. At the far end they did find a considerable collection of rock travelling loosely in company; they matched, shackled on their longest lines (their father had emphatically forbidden free jumping) and investigated. Having neither experience nor a centrifuge, their only way of checking on specific gravity was by grasping a mass and clutching it to them vigorously, then getting a rough notion of its inertia by its resistance to being shoved around. A Geiger counter (borrowed) had shown no radioactivity; they were searching for the more valuable core material.

Two hours of this exercise left them tired but no richer. 'Grandpa,' announced Pollux, 'this is a lot of leftover country rock.'

'Not even that. Most of it's pumice, I'd say.'

'Git for home?'

'Check.'

They turned the scooter around by flywheel and homed on the City Hall beacon, boosting it up to four hundred miles per hour before. letting it coast, that being the top maneuver they could figure on for the juice they had left in their tanks. They would have preferred to break the speed limit, being uneasily aware that they were late - and being anxious to get home; the best designed suit is not comfortable for too long periods. They knew that their parents would not be especially worried; while they were out of range for their suit radios, they had reported in by the gossip grapevine earlier.

Their father was not worried. But the twins spent the next week under hatches, confined to the ship for failing to get back on time.

For a longer period nothing more notable took place than the incident in which Roger Stone lost his breathing mask while taking a shower and almost drowned (so he claimed) before he could find the water cut-off valve. There are very few tasks easier to do in a gravity field than in free fall, but bathing is one of them.

Dr Stone continued her practice, now somewhat reduced. Sometimes she was chauffeured by the miner assigned to that duty; sometimes the twins took her around. One morning following her office hours in City Hall she came back into the *Stone* looking for the twins. 'Where are the boys?'

'Haven't seen them since breakfast,' answered Hazel. 'Why?'

Dr Stone frowned slightly. 'Nothing, really. I'll ask Mr Fries to call a scooter for me.'

'Got to make a call? I'll take you unless those lunks have taken our scooter.'

'You needn't, Mother Hazel.'

'I'd enjoy it I've been promising Lowell a ride for weeks. Or will it take too long?'

'Shouldn't. It's only eight hundred miles or so out.' The doctor was not held down to the local speed limit in her errand of mercy.

'Do it in two hours, with juice to spare.' Off they went, with Buster much excited. Hazel allotted one-fourth her fuel as safety margin, allotted the working balance for maximum accelerations, figuring the projected mass-ratios in her head. Quite aside from the doctor's privilege to disregard the law, high speed was not dangerous in the sector they would be in, it being a 'thin' volume of the node.

Their destination was an antiquated winged rocket, the wings of which had been torched off and welded into a tent-shaped annex to give more living room. Hazel thought that it had a shanty-town air - but so did many of the ships in Rock City. She was pleased enough to go inside and have a sack of tea and let Lowell out of his spacesuit for a time. The patient, Mr Bakers, was in a traction splint; his wife could not pilot their scooter, which was why Dr Stone granted the house call. Dr Stone received a call by radio while they were there; she came back into the general room looking troubled. 'Smatter?' inquired Hazel.

'Mrs Silva. I'm not really surprised; it's her first child.'

'Did you get the coordinates and beacon pattern? I'll run you right

'Lowell?'

'Oh. Oh, yes,' It would be a long time in a suit for a youngster.

Mrs Eakers suggested that they leave the child with her.

Before Lowell could cloud up at the suggestion Dr Stone said, 'Thanks, but it isn't necessary. Mr Silva is on his way here. What I was trying to say, Mother Hazel, is that I probably had better go with him and let you and Lowell go back alone. Do you mind?'

'Of course not. Pipe down, Lowell! I'll have us home in three-quarters of an hour and Lowell can have his nap or his spanking on time, as the case may be.'

She gave Dr Stone one of two spare oxygen bottles before she left; Dr Stone refused to take both of them. Hazel worked the new mass figures over; with Edith, her suit, and the spare bottle subtracted she had spare fuel. Better hit it up pretty fast and get home before the brat got cranky -

She lined up on City Hall by flywheel and stereo, spun on that axis to get the sun out of her eyes, clutched her gyros, and gave it the gun.

The next thing she knew she was tumbling like a liner in free fall. She remembered from long habit to cut the throttle but only after a period of aimless acceleration, for she had been chucked around in her saddle, thrown against her belts, and could not at first find the throttle.

When they were in free fall again she remembered to laugh. 'Some ride, eh, Lowell?'

'Do it again, Grandma!'

'I hope not' Quickly she checked things over. There was not much that could go wrong with the little craft, it being only a rocket motor, an open rack with saddles and safety harness, and a minimum of instruments and controls. It was the gyros, of course; the motor had been sweet and hot. They were hunting the least bit, she found, that being the only evidence that they had just tumbled violently. Delicately she adjusted them by hand, putting her helmet against the case so that she could hear what she was doing.

Only then did she try to find where they were and where they were going. Let's see - the Sun is over there and that's Betelgeuse over yonder - so City Hall must be out that way. She ducked her helmet into the hemispherical 'eye shade' of the stereo. Yup! there she be!

The Eakers place was the obvious close-by point on which to measure her vector. She looked around for it, was startled to discover how far away it was. They must have coasted quite a distance while she was fiddling with the gyros. She measured the vector in amount and direction, then whistled. There were, she thought, few grocery shops out that way - darn few neighbours of any sort. She decided that it might be smart to call Mrs Eakers and tell her what had happened and ask her to call City Hall - just in case.

She could not raise Mrs Eakers. The sloven, she thought bitterly, has probably switched off her alarm so she could sleep. Lazy baggage! Her house looked it - and smelled it, too.

But she kept trying to call Mrs Eakers, or anyone else in range of her suit radio while she again lined up the ship for City, with offset to compensate for the now vector. She was cautious and most alert this time - in consequence she wasted only a few seconds of fuel when the gyros again turnbled.

She unclutched the gyros and put them out of her mind, then took careful measure of the situation. The Eakers dump was now a planetary light in the sky, shrinking almost noticeably, but it was still the proper local reference point. She did not like the vector she got. As always, they seemed to be standing still in the exact center of a starry globe - but her instruments showed them speeding for empty space, headed clear outside the node.

'What's the matter, Grandma Hazel?'

'Nothing, son, nothing. Grandma has to stop and look at some road signs, that's all.' She was thinking that she would gladly swap her chance of eternal bliss for an automatic distress signal and a beacon. She reached over, switched off the child's receiver, then repeatedly called for help.

No answer. She switched Lowell's receiver back on. 'Why. did you do that, Grandma Hazel?'

'Nothing. Just checking it'

'You can't fool me! You're scared! Why?'

'Not scared, pet Worried a little, maybe. Now shut up; Grandma's got work to do.'

Carefully she lined up the craft by flywheel; carefully she checked it when it tried to swing past She aimed both to offset the new and disastrous vector and to create a vector for City Hall. She intentionally left the gyros unclutched. Then she restrapped Lowell in his saddle, checked its position. 'Hold still,' she warned. 'Move your little finger and Grandma will scalp you'

Just as carefully she positioned herself, considering lever arms, masses, and angular moments in her head Without gyros the craft must be balanced just so. 'Now,' she said to herself, 'Hazel, we find out whether you are a pilot - or just a Sunday pilot.' She ducked her helmet into the eyeshade, picked a distant blip on which to center her crosshairs, and gunned the craft

The blip wavered; she tried to rebalance by shifting her body. When the blip suddenly slipped off to one side she cut the throttle quickly. Again she checked her vector. Their situation was somewhat improved. Again she called for help, not stopping to cut the child out of hearing. He said nothing and looked grave.

She went through the same routine, cutting power again when the craft 'fell off its tail.' She measured the vector, called for help - and did it all again. A dozen times she tried it. On the last try the thrust stopped with the throttle still wide open. With all fuel gone there was no need to be in a hurry. She measured her vector most carefully on the Eakers' ship, now far away, then checked the results against the City Hall blip, all the while calling for help. She ran through the figures again; in a fashion she had been successful. They were now unquestionably headed for City Hall, could not miss it by more than a few miles at most - almost jumping distance. But, while the vector was correct in direction, it was annoyingly small in quantity - six hundred and fifty miles at about forty miles an hour; they would be closest in about sixteen hours.

She wondered whether Edith really had needed that other spare oxygen bottle. Her own gauge showed about half full. She called for help again, then decided to go through the problem once more; maybe she had dropped a decimal in her head. While she was lining up on City Hall, the tiny light in the stereo tank faded and died. Her language caused Lowell to inquire, 'What's the matter now, Grandma?'

'Nothing more than I should have expected, I guess. Some days, hon, it just isn't worth while to wake up in the morning.' The trouble, she soon found, was so simple as to be beyond repair. The stereo radar would no longer work because all three cartridges in the power pack were dead. She was forced to admit that she had been using it rather continuously - and it took a lot of power.

'Grandma Hazel! I want to go home!' She pulled out of her troubled thoughts to answer the child.

'We're going home, dear. But it's going to take quite a while.'

'I want to go home *right now?'*

'I'm sorry but you can't"

'But -'

'Shut it up - or when I get you out of that sack, I'll give you something to yelp for. I mean it" She again called for help.

Lowell made one of his lightning changes to serenity. 'That's better,' approved Hazel. 'Want to play a game of chess?'

'No.'

'Sissy. You're afraid I'll beat you. I'll bet you three spanks and a knuckle rub.'

Lowell considered this. 'I get the white men?'

'Take 'em. I'll beat you anyhow.'

To her own surprise she did. It was a long drawn-out game; Lowell was not as practised as she was in visualising a board and they had had to recount the moves on several occasions before he would concede the arrangement of men . . . and between each pair of moves she had again called for help. About the middle of the game she had found it necessary to remove her oxygen bottle and replace it with the one spare. She and the child had started out even but Lowell's small mass demanded much less oxygen.

'How about another one? Want to get your revenge?'

'No! I want to go *home.'*

'We're going home, dear.'

'How soon?'

'Well... it'll be a while yet I'll tell you a story.'

'What story?'

'Well, how about the one about the worm that crawled up out of the mud?'

'Oh, I know that one! I'm tired of it'

'There are parts I've never told you, And you can't get tired of it, not really, because there is never any end to it. Always something new.' So she told him again about the worm that crawled up out of the slime, not because it didn't have enough to eat, not because it wasn't nice and warm and comfortable down there under the water - but because the worm was restless. How it crawled up on dry land and grew legs. How part of it got to be the Elephant's Child and part of it got to be a monkey, grew hands, and fiddled with things. How, still insatiably restless, it grew wings and reached up for the stars. She spun it out a long, long time, pausing occasionally to call for aid.

Thechild was either bored and ignored her, or liked it and kept quiet on that account. But when she stopped he said, 'Tell me another one'

'Not just now, dear.' His oxygen gauge showed empty.

'Go on! Tell me a new one - a better one.'

'Not now, dear. That's the best story Hazel knows. The very best. I told it to you again because I want you to remember it' She watched his anoxia warning signal turn red, then quietly disconnected the partly filled bottle on her own suit, closing the now useless suit valves, and replaced his empty bottle with hers. For a moment she considered cross-connecting the bottle to both suits, then shrugged and let it stand. 'Lowell -'

'What, Grandma?'

'Listen to me, dear. You've heard me caning for help. You've got to do it now. Every few minutes, all the time.'

'Why?'

'Because Hazel is tired, dear. Hazel has to sleep. Promise me you'll do it'

'Well... all right'

She tried to hold perfectly still, to breathe as little of the air left in her suit as possible. It wasn't so bad, she thought She *had* wanted to see the Rings - but there wasn't much else she had missed. She supposed everyone had his Carcassonne; she had no regrets.

'Grandma! Grandma Hazel!' She did not answer. He waited, then began to cry, endlessly and without hope.

Dr Stone arrived back at the *Rolling Stone* to find only her husband there. She greeted him and added, 'Where's Hazel, dear? and Lowell?'

'Eh? Didn't they come back with you? I supposed they had stopped in the store.'

'No, of course not'

'Why "of course not"?'

She explained the arrangement; he looked at her in stunned astonishment 'They left the same time you did?'

'They intended to. Hazel said she would be home in fortyfive minutes.'

'There's a bare possibility that they are still with the Eakers. We'll find out.' He lunged toward the door.

The twins returned to find their home and City Hall as well in turmoil. They had been spending an interesting and instructive several hours with old Charlie.

Their father turned away from the *Stone's* radio and demanded, 'Where have you two been?'

'Just over in Charlie's hole. What's the trouble?'

Roger Stone explained. The twins looked at each other. 'Dad,' Castor said painfully, 'you mean Hazel took Mother out in *our* scooter?'

'Certainly.' The twins questioned each other wordlessly again.

'Why shouldn't she? Speak up.'

'Well, you . . . well, it was like this -'

'Speak up!'

'There was a bearing wobble, or something, in one of the gyros,' Pollux admitted miserably. We were working on it'

'You were? In Charlie's place!'

'Well, we went over there to see what he had in the way of spare parts and, well, we got detained, sort of.'

Their father looked at them for several seconds with no expression of any sort. He then said in a flat voice, 'You left a piece of ship's equipment out of commission. You failed to log it. You failed to report it to the Captain. He paused. 'Go to your room.'

'But Dad! We want to help!'

'Stay in your room; you are under arrest'

The twins did as they were ordered. While they waited, the whole of Rock City was alerted. The word went out: the doctor's little boy is missing; the boy's grandmother is missing. Fuel up your scooters; stand by to help. Stay on this wave length.

'Pol, quit muttering!'

Pollux turned to his brother. 'How can I help it?'

'They can't be lost, not really lost Why, the stereo itself would stand out on a screen like a searchlight'

Pollux thought about it 'I don't know. You remember I said I thought we might have a high-potential puncture in the power pack?'

'I thought you fixed that?'

'I planned to, just as soon as we got the bugs smoothed out in the gyros.'

Castor thought about it 'That's bad. That could be really bad.' He added suddenly, 'But quit muttering, just the same. Start thinking instead. What happened? We've got to reconstruct it'

'"What happened?" Are you kidding? Look, the pesky thing tumbles, then anything can happen. No control.'

'Use your head, I said. What would *Hazel* do in this situation?'

They both kept quiet for some moments, then Pollux said, 'Cas, that derned thing always tumbled to the left, didn't it? Always.'

'What good does that do us? Left can be any direction.'

'No! You asked what Hazel would do. She'd be along her homing line, of course - and Hazel *always* oriented around her drive line so as to get the Sun on the back of her neck, if possible. Her eyes aren't too good.'

Castor screwed up his face, trying to visualise it. 'Say Eakers' is off that way and City Hall over here; if the Sun is over on this side, then, when it tumbles, she'd vector off that way.' He acted it with his hands.

'Sure, sure! When you put in the right coordinates, that is. But what else would she do? What would *you* do? You'd vector back I mean vector home.'

'Huh? How could she? With no gyros?'

'Think about it Would you quit? Hazel is a *pilot.* She'd ride that thing like a broomstick.' He shaped the air with his hands. 'So she'd be coming back, or trying to, along here - and everybody will be looking for her way over here.'

Castor scowled. 'Could be.'

'It had better be. They'll be looking for her in a cone with its vertex at Eakers' - and they ought to be looking in a cone with its vertex right *here,* and along one side of it at that'

Castor said, 'Come along!'

'Dad said we were under arrest'

'Come along!'

City Hall was empty, save for Mrs Fries who was standing watch, red-eyed and tense, at the radio. She shook her head. 'Nothing yet.'

'Where can we find a scooter?'

'You can't Everybody is out searching.'

Castor tugged at Pollux's sleeve. 'Old Charlie.'

'Huh?' Say, Mrs Fries, is old Charlie out searching?'

'I doubt if he knows about it.'

They rushed into their suits, cycled by spilling and wasting air, did not bother with safety lines. Old Charlie let them in. 'What's all the fuss about, boys?'

Castor explained Charlie shook his head. 'That's too bad, that really is. I'm right sorry.'

'Charlie, we've got to have your scooter.'

'Right now!' added Pollux.

Charlie looked astorsished. 'Are you fooling? I'm the only one can gun that rig.'

'Charlie, this serious! We've *got* to have it'

'You couldn't gun it'

'We're both pilots.'

Charlie scratched meditatively while Castor considered slugging him for his keys - but his keys probably weren't on him - and how would one find anything in that trash pile? Charlie finally said, 'If you've just got to, I suppose I better gun it for you.'

'Okay, okay! Hurry up! Get your suit on!'

'Don't be in such a rush. It just slows you down.'

Charlie disappeared into the underbush, came out fairly promptly with a suit that seemed to consist mostly of vulcanized patches. 'Dog take it,' he complained as he began to struggle with it, 'if your mother would stay home and mind her own business, these things wouldn't happen.'

'Shut up and hurry!'

'I am hurrying. She made me take a bath. I don't need no doctors. All the bugs that ever bit me, died.'

When Charlie had dug his scooter out of the floating junkyard moored to his home they soon saw why he had refused to lend it. It seemed probable that no one else could possibly pilot it Not only was it of vintage type, repaired with parts from many other sorts, but also the controls were arranged for' a man with four hands. Charlie had been in free fall so long that he used his feet almost as readily for grasping and handling as does an ape; his space suit had had the feet thereof modified so that he could grasp things between the big toe and the second, as with Japanese stockings.

'Hang on. Where we going?'

'Do you know where the Eakers live?'

'Sure. Used to live out past that way myself. Lonely stretch.' He pointed. 'Right out there, 'bout half a degree right of that leetle second-magnitude star - say eight hundred, eight hundred ten miles.'

'Cas, maybe we'd better check the drift reports in the store?'

Charlie seemed annoyed. 'I know Rock City. I keep up with the drifts. I have to.'

'Then let's go.'

'To Eakers'?'

'No, no - uh, just about. . .' He strained his neck, figured the position of the Sun, tried to imagine himself in Hazel's suit, heading back. 'About there - would you say, Pol?'

'As near as we can guess it.'

The crate was old but Charlie had exceptionally large tanks on it; it could maintain a thrust for plenty of changeof-motion. Its jet felt as sweet as any. But it had no radar of any sort. 'Charlie, how do you tell where you are in this thing?'

'That'

'That' proved to be an antiquated radio compass loop. The twins had never seen one, knew how it worked only by theory. They were radar pilots, not used to conning by the seats of their suits. Seeing their faces Charlie added, 'Shucks, if you've got any eye for angle, you don't need fancy gear. Anywhere within twenty miles of the City Hall, I don't even turn on my suit jet - I just jump.'

They cruised out the line that the twins had picked. Once in free fall Charlie taught them how to handle the compass loop. 'Just plug it into your suit in place of your regular receiver. If you pick up a signal, swing the loop until it's least loud.

'That's the direction of the signal - an arrow right through the middle of the loop.'

'But which way? The loop faces both ways.'

'You have to know that. Or guess wrong and go back and try again.'

Castor took the first watch. He got plenty of signals; the node was buzzing with talk - all bad news. He found, too, that the loop, while not as directional as a 'salad bowl' antenna, usually did not pick up but one signal at a time. As they scooted along, endlessly he swung the loop, staying with each signal just long enough to be sure that the sound could not be Hazel.

Pollux tapped his arm and put his helmet in contact with Castor's. 'Anything?'

'Just chatter.'

'Keep trying. We'll stay out until we find them. Want me to spell you?'

'No. If we don't find them. I'm not going back.'

'Quit being a cheap hero and listen. Or give me that loop.'

City Hall dropped astern until it was no longer a shape - Castor at last reluctantly gave over the watch to Pollux. His twin had been at it for perhaps ten minutes when he suddenly made motions waving them to silence even though he could not have heard them in any case. Castor spoke to him helmet to helmet. 'What is it?'

'Sounded like a kid crying. Might have been Buster.'

'Where?'

'I've lost it I tried to get a minimum. Now I can't raise it'

Charlie, anticipating what would be needed, had swung ship as soon as he had quit accelerating. Now he blasted back as much as he had accelerated, bringing them dead in space relative to City Hall and the node. He gave it a gentle extra bump to send them cruising slowly back the way they had come. Pollux listened, slowly swinging his loop. Castor strained his eyes, trying to see something, anything, other than the cold stars.

'Got it again!' Pollux pounded his brother.

Old Charlie killed their relative motion; waited. Pollux cautiously tried for a minimum, then swung the loop, and tried again. He pointed, indicating that it had to be one of two directions, a hundred and eighty degrees apart

'Which way?' Castor asked Charlie.

'Over that way.'

'I can't see anything.'

'Me neither. I got a hunch.'

Castor did not argue. Either direction was equally likely.

Charlie gunned it hard in the direction he had picked, roughly toward Vega. He had hardly cut the gun and let it coast in free fall when Pollux was nodding vigorously. They coasted for some minutes, with Pollux reporting the signal stronger and the minimum sharper . .

. but still nothing in sight Castor longed for radar. By now he could hear crying in his own phones. It could he Buster - it *must b*e Buster.

'There she is!'

It was Charlie's shout. Castor could not see anything, even though old Charlie pointed it out to him. At last he got it - a point of light, buried in stars. Pollux unplugged from the compass when it was clear that what they saw was a mass, not a star, and in the proper direction. Old Charlie handled his craft as casually as a bicycle, bringing them up to it fast and killing his headway so that they were dead with it. He insisted on making the jump himself. Lowell was too hysterical to be coherent. Seeing that he was alive and not hurt, they turned at once to Hazel. She was still strapped in her seat, eyes open, a charateristic half-smile on her face. But she neither greeted them nor answered.

Charlie looked at her and shook his head. 'Not a chance, boys. She ain't even wearing an oxy bottle.'

Nevertheless they hooked a bottle to her suit - Castor's bottle; no one had thought to bring a spare. The twins went back cross-connected on what was left in Pollux's bottle, temporarily Siamese twins. The family scooter they left in orbit, to he picked up and towed in by someone else. Charlie used almost all his fuel on the way back, gunning as high a speed as he dared while still saving boost to brake them at City Hall.

They shouted the news all the way back. Somewhere along the line someone picked up their signal; passed it along.

They took her into Fries' store, there being more room there. Mrs Fries pushed the twins aside and applied artificial respiration herself, to be displaced ten minutes later by Dr Stone. She used the free-fall method without strapping down, placing herself behind Hazel and rhythmically squeezing her ribs with both arms.

It seemed that all of Rock City wanted to come inside. Fries chased them out, and, for the first time in history, barred the door to his store. After a while Dr Stone swapped off with her husband, then took back the task after only a few minutes' rest

Meade was weeping silently; old Charlie was wringing his hands and looking out of place and unhappy. Dr Stone worked with set face, her features hardened to masculine, professional lines. Lowell, his hand in Meade's was dry-eyed but distressed, not understanding, not yet knowing death. Castor's mouth was twisted, crying heavily as a man cries, the sobs wrung from him; Pollux, emotion already exhausted, was silent.

When Edith Stone relieved him, Roger Stone backed away, turned toward the others. His face was without anger but without hope. Pollux whispered, 'Dad? Is she?'

Roger Stone then noticed them, came over and put an arm around

Castor's heaving shoulders. 'You must remember, boy, that she is very old. They don't have much comeback at her age.'

Hazel's eyes opened. '*Who* doesn't boy?'

XIX - THE ENDLESS TRAIL

Hazel had used the ancient fakir's trick, brought to the west, so it is said, by an entertainer called Houdini, of breathing as shallowly as possible and going as quickly as may be into a coma. To hear her tell it, there never had been any real danger. Die? Shucks, you couldn't suffocate in a coffin in that length of time. Sure, she had had to depend on Lowell to keep up the cry for help; he used less oxygen. But deliberate suicide to save the boy? Ridiculous! There hadn't been any need to.

It was not until the next day that Roger Store called the boys in. He told them, 'You did a good job on the rescue. We'll forget the technical breach of confinement to the ship.'

Castor answered, 'It wasn't anything. Hazel did it, really. I mean, it was an idea that we got out of her serial, the skew orbit episode.'

'I must not have read that one.'

'Well, it was a business about how to sort out one piece of space from another when you don't have too much data to go on. You see, Captain Sterling had to -'

'Never mind. That's not what I wanted to talk with you about, you did a good job, granted, no matter what suggested it to you. If only conventional search methods had been used, your grandmother would unquestionably now be dead. You are two very intelligent men - when you take the trouble. But you didn't take the trouble soon enough. Not about the gyros.'

'But Dad, we never dreamed -'

'Enough' He reached for his waist; the twins noticed that he was wearing an old-fashioned piece of apparel - a leather belt. He took it off. 'This belonged to your great grandfather. He left it to your grandfather - who in turn left it to me. I don't know how far back it goes - but you might say that the Stone family was founded on it.' He doubled it and tried it on the palm of his hand. 'All of us, all the way back, have very tender memories of it. Very tender. Except you two.' He again whacked his palm with it.

Castor said, 'You mean you're going to beat us with that?'

'Have you any reason to offer why I shouldn't?'

Castor looked at Pollux, sighed and moved forward, I'll go first, I'm the older.'

Roger moved to a drawer, put the belt inside. 'I should have used it ten years ago.' He closed the drawer. 'It's too late, now.'

'Aren't you going to do it?'

'I never said I was going to. No.'

The twins swapped glances. Castor went on' 'Dad - Captain. We'd rather you did,'

Pollux added quickly, 'Much rather.'

'I know you would. That way you'd be through with it. But instead you're going to have to live with it. That's the way adults have to do it'

'But Dad -'

'Go to your quarters, sir.'

When it was time for the *Rolling Stone* to leave for Ceres a good proportion of the community crowded into City Hall to bid the doctor and her family good-by; all the rest were hooked in by radio, a full town meeting. Mayor Fries made a speech and presented them with a scroll which made them all honorary citizens of Rock City, now and forever; Roger Stone tried to answer and choked up. Old Charlie, freshly bathed, cried openly. Meade sang one more time into the microphone, her soft contralto unmixed this time with commercialism. Ten minutes later the *Stone* drifted out-orbit and back.

As at Mars, Roger Stone left her circum Ceres, not at a station or satellite - there was none - but in orbit. Hazel, the Captain, and Meade went down by shuttle to Ceres City, Meade to see the sights. Roger to arrange the disposal of their high grade and core material and for a cargo of refined metal to take back to Luna, Hazel to take care of business or pleasure of her own. Doctor Stone chose not to go - on Lowell's account; the shuttle was no more than an oversized scooter with bumper landing gear.

The twins were still under hatches, not allowed to go.

Meade assured them, on return, that they had not missed anything. 'It's just like Luna City, only little and crowded and no fun.'

Their father added, 'She's telling the truth, boys, so don't take it too hard. You'll be seeing Luna itself next stop anyway.

'Oh, we weren't kicking!' Castor said stiffly.

'Not a bit,' insisted Pollux. 'We're willing to wait for Luna'

Roger Stone grinned, 'You're not fooling anyone. But we will be shaping orbit home in a couple of weeks. In a way I'm sorry. All in all, it's been two good years.'

Meade said suddenly, 'Did you say "home" Daddy? It seems to me we *are* home. We're going back to Luna, but we're taking home with us.'

'Eh? Yes, I suppose you're right; the good old *Rolling Stone* is home, looked at that way. She's taken us through a lot.' He patted a bulkhead affectionately. 'Right, Mother?'

Hazel had been unusually silent. Now she looked at her son and said, 'Oh, sure, sure. Of course.'

Dr Stone said, 'What did you do downside, Mother Hazel?'

'Me? Oh, not much. Swapped lies with a couple of oldtimers. And sent off that slough episodes. By the way, Roger, better start thinking about story lines.'

'Eh? What was that, Mother?'

'That's my last. I'm giving the show back to you.'

'Well, all right - but why?'

'Uh, I'm not going to find it so convenient now.' She seemed embarrassed. 'You see - well, would any of you mind very much if I checked out now?'

'What do you mean?'

'The *Helen of Troy* is shaping for the Trojans and the *Wellington* is matching there for singleH and a passenger. Me. I'm going on out to Titan.'

Before they could object she went on, 'Now don't look at me that way. I've always wanted to see the Rings, close up - close enough to file my nails on 'em. They must be the gaudiest sight in the System. I got to thinking right seriously about it when the air was getting a little stuffy back - well, back youknow-when. I said to myself; Hazel, you aren't getting any younger; you catch the next chance that comes your way. I missed one once, Roger, when you were three. A good chance, but they wouldn't take a child and well, never mind. So now I'm going.'

She paused, then snapped, 'Don't look so much like a funeral! You don't need me now. What I mean is, Lowell is bigger now and not such a problem''

'I'll always need you, Mother Hazel,' her daughter-in-law said quietly.

'Thanks. But not true. I've taught Meade all the astrogation I know, She could get a job with Four-Planets tomorrow if they weren't so stuffy about hiring female pilots. The twins -well, they've soaked up all the meanness I can pass on to them; they'll put up a good fight, whatever comes up. And you, Son, I finished with you when you were in short pants. You've been bringing me up ever since.'

'Mother!'

'Yes, Son?'

'What's your real reason? Why do you want to go?'

'Why? Why does anybody want to go anywhere? Why did the bear go round the mountain? To see what he could see! I've never seen the Rings. That's reason enough to go anywhere. The race has been doing it for all time. The dull ones stay home - and the bright ones stir around and try to see what trouble they can dig up. It's the human pattern. It doesn't need a reason, any more than a flat cat needs a reason to buzz. Why anything?'

'When are you coming back?'

'I may never come back. I *like* free fall. Doesn't take any muscle. Take a look at old Charlie. You know how old he is? I did some checking. He's at least a hundred and sixty. That's encouraging at my age - makes me feel like a young girl. I may see quite a few things yet,'

Dr Stone said, 'Of course you will, Mother Hazel.'

Roger Stone turned to his wife. 'Edith?'

'Yes, dear?'

'What's your opinion?'

'Well . . . there's actually no reason why we should go back to Luna, not just now.'

'So I was thinking. But what about Meade?'

'Me?' said Meade.

Hazel put in drily, 'They're thinking you are about husband-high, hon.'

Dr Stone looked at her daughter and nodded slightly. Meade looked surprised, then said, 'Pooh! I'm in no hurry. Besides - there's a Patrol base on Titan. There ought to be lots of young officers.'

Hazel answered, 'It's a Patrol *research* base, hon - probably nothing but dedicated scientists.'

'Well, perhaps when I get through with them they won't be quite so dedicated!'

Roger Stone turned to the twins. 'Boys?'

Castor answerd for the team. 'Do we get a vote? Sure!'

Roger Stone grasped a stanchion, pulled himself forward. 'Then it's settled. All of you - Hazel, boys, Meade - set up trial orbits. I'll start the mass computations'

'Easy, son - count me out on that,'

'Eh?'

'Son, did you check the price they're getting for singleH here? If we are going to do a cometary for Saturn instead of a tangential for Earth, it's back to the salt mines for me. I'll radio New York for an advance, then I'll go wake Lowell and we'll start shoveling gore.'

'Well... okay. The rest of you-mind your decimals!'

All stations were manned and ready; from an instruction couch rigged back of the pilot and copilot Meade was already running down the count-off. Roger Stone glanced across at his mother and whispered, 'What are you smiling about?'

'And *five!* And *four!'* chanted Meade.

'Nothing much. After we get to Titan we might-'

The blast cut off her words; the *Stone* trembled and threw herself outward bound, toward Saturn. In her train followed hundreds and thousands and hundreds of thousands of thousands of restless rolling Stones. . . to Saturn. . . to Uranus, to Pluto. . . rolling on out to the stars. . . outward bound to the ends of the Universe.

Starman Jones

1 — THE *TOMAHAWK*

Max liked this time of day, this time of year. With the crops in, he could finish his evening chores early and be lazy. When he had slopped the hogs and fed the chickens, instead of getting supper he followed a path to a rise west of the barn and lay down in the grass, unmindful of chiggers. He had a book with him that he had drawn from the county library last Saturday, Bonforte's *Sky Beasts: A Guide to Exotic Zoology*, but he tucked it under his head as a pillow. A blue jay made remarks about his honesty, then shut up when he failed to move. A red squirrel sat on a stump and stared at him, then went on burying nuts.

Max kept his eyes to the northwest. He favored this spot because from it he could see the steel stilts and guide rings of the Chicago, Springfield, & Earthport Ring Road emerge from a slash in the ridge to his right. There was a guide ring at the mouth of the cut, a great steel hoop twenty feet high. A pair of stilt-like tripods supported another ring a hundred feet out from the cut. A third and last ring, its stilts more than a hundred feet high to keep it level with the others, lay west of him where the ground dropped still more sharply into the valley below. Half way up it he could see the power-link antenna pointing across the gap.

On his left the guides of the C.S.&E. picked up again on the far side of the gap. The entering ring was larger to allow for maximum windage deviation; on its stilts was the receptor antenna for the power link. That ridge was steeper; there was only one more ring before the road disappeared into a tunnel. He had read that, on the Moon, entrance rings were no larger than pass-along rings, since there was never any wind to cause variation in ballistic. When he was a child this entrance ring had been slightly smaller and, during an unprecedented windstorm, a train had struck the ring and produced an unbelievable wreck, with more than four hundred people killed. He had not seen it and his father had not allowed him to poke around afterwards because of the carnage, but the scar of it could still be seen on the lefthand ridge, a darker green than the rest.

He watched the trains go by whenever possible, not wishing the passengers any bad luck—but still, if there should happen to be a catastrophe, he didn't want to miss it.

Max kept his eyes fixed on the cut; the *Tomahawk* was due any instant. Suddenly there was a silver gleam, a shining cylinder with needle nose burst out of the cut, flashed through the last ring and for a breathless moment was in free trajectory between the ridges. Almost before he could swing his eyes the projectile entered the ring across the gap and disappeared into the hillside—just as the sound hit him.

It was a thunderclap that bounced around the hills. Max gasped for air. "Boy!" he said softly. "Boy, oh boy!" The incredible sight and the impact on his ears always affected him the same way. He had heard that for the passengers the train was silent, with the sound trailing them, but he did not know; he had never ridden a train and it seemed unlikely, with Maw and the farm to take care of, that he ever would.

He shifted to a sitting position and opened his book, holding it so that he would be aware of the southwestern sky. Seven minutes after the passing of the *Tomahawk* he should be able to see, on a clear evening, the launching orbit of the daily Moonship. Although much father away and much less dramatic than the nearby jump of the ring train it was this that he had come to see. Ring trains were all right, but spaceships were his love—even a dinky like the moon shuttle.

But he had just found his place, a description of the intelligent but phlegmatic crustaceans of Epsilon Ceti IV, when he was interrupted by a call behind him. "Oh, Maxie! Maximilian! Max… mil… *yan!"*

He held still and said nothing.

"*Max!* I can see you, Max—you come at once, hear me?"

He muttered to himself and got to his feet. He moved slowly down the path, watching the sky over his shoulder until the barn cut off his view. Maw was back and that was that—she'd make his life miserable if he didn't come in and help. When she had left that morning he had had the impression that she would be gone overnight—not that she had said so; she never did—but he had learned to read the signs. Now he would have to listen to her complaints and her petty gossip when he wanted to read, or just as bad, be disturbed by the slobbering stereovision serials she favored. He had often been tempted to sabotage the pesky SV set—by rights with an ax! He hardly ever got to see the programs he liked.

When he got in sight of the house he stopped suddenly. He had supposed that Maw had ridden the bus from the Corners and walked up the draw as usual. But there was a sporty little unicycle standing near the stoop—and there was someone with her.

He had thought at first it was a "foreigner"—but when he got closer he recognized the man. Max would rather have seen a foreigner, any foreigner. Biff Montgomery was a hillman but he didn't work a farm; Max couldn't remember having seen him do any honest work. He had heard it said that Montgomery sometimes hired out as a guard when one of the moonshine stills back in the hills was operating and it might be so—Montgomery was a big, beefy man and the part might fit him.

Max had known Montgomery as long as he could remember, seen him loafing around Clyde's Corners. But he had ordinarily given him "wagon room" and had had nothing to do with him—until lately: Maw had started being seen with him, even gone to barn dances and huskings with him. Max had tried to tell her that Dad wouldn't have liked it. But you couldn't argue with Maw—what she didn't like she just didn't hear.

But this was the first time she had ever brought him to the house. Max felt a slow burn of anger starting in him.

"Hurry up, Maxie!" Maw called out. "Don't stand there like a dummy." Max reluctantly moved along and joined them. Maw said, "Maxie, shake hands with your new father," then looked roguish, as if she had said something witty. Max stared and his mouth sagged open.

Montgomery grinned and stuck out a hand. "Yep, Max, you're Max Montgomery now—I'm your new pop. But you can call me Monty."

Max stared at the hand, took it briefly. "My name is Jones," he said flatly.

"Maxie!" protested Maw.

Montgomery laughed jovially. "Don't rush him, Nellie my love. Let Max get used to it. Live and let live; that's my motto." He turned to his wife. "Half a mo', while I get the baggage." From one saddlebag of the unicycle he extracted a wad of mussed clothing; from the other, two flat pint bottles. Seeing Max watching him he winked and said, "A toast for the bride."

His bride was standing by the door; he started to brush on past her. She protested, "But Monty darling, aren't you going to—"

Montgomery stopped. "Oh. I haven't much experience in these things. Sure." He turned to Max—"Here, take the baggage"—and shoved bottles and clothes at him. Then he swung her up in his arms, grunting a bit, and carried her over the threshold, put her down and kissed her while she squealed and blushed. Max silently followed them, put the items on the table and turned to the stove. It was cold, he had not used it since breakfast. There was an electric range but it had burned out before his father had died and there had never been money to repair it. He took out his pocket knife, made shavings, added kindling and touched the heap with an Everlite. When it flared up he went out to fetch a pail of water.

When he came back Montgomery said, "Wondered where you'd gone. Doesn't this dump even have running water?"

"No." Max set the pail down, then added a couple of chunks of cord wood to the fire.

His Maw said, "Maxie, you should have had dinner ready."

Montgomery interceded pleasantly with, "Now, my dear, he didn't know we were coming. And it leaves time for a toast." Max kept his back to them, giving his full attention to slicing side meat. The change was so overwhelming that he had not had time to take it in.

Montgomery called to him. "Here, son! Drink your toast to the bride."

"I've got to get supper."

"Nonsense! Here's your glass. Hurry up."

Montgomery had poured a finger of amber liquid into the glass; his own glass was half full and that of his bride at least a third. Max accepted it and went to the pail, thinned it with a dipper of water.

"You'll ruin it."

"I'm not used to it."

"Oh, well. Here's to the blushing bride—and our happy family! Bottoms up!"

Max took a cautious sip and put it down. It tasted to him like the bitter tonic the district nurse had given him one spring. He turned back to his work, only to be interrupted again. "Hey, you didn't finish it."

"Look, I got to cook. You don't want me to burn supper, do you?"

Montgomery shrugged. "Oh, well—the more for the rest of us. We'll use yours for a chaser. Sonny boy, when I was your age I could empty a tumbler neat and then stand on my hands."

Max had intended to sup on side meat and warmed-over biscuits, but there was only half a pan left of the biscuits. He scrambled eggs in the grease of the side meat, brewed coffee, and let it go at that. When they sat down Montgomery looked at it and announced, "My dear, starting tomorrow I'll expect you to live up to what you told me about your cooking. Your boy isn't much of a cook." Nevertheless he ate heartily. Max decided not to tell him that he was a better cook than Maw—he'd find out soon enough.

Presently Montgomery sat back and wiped his mouth, then poured himself more coffee and lighted a cigar. Maw said, "Maxie, dear, what's the dessert?"

"Dessert? Well—there's that ice cream in the freezer, left over from Solar Union Day."

She looked vexed. "Oh, dear! I'm afraid it's not there."

"Huh?"

"Well, I'm afraid I sort of ate it one afternoon when you were out in the south field. It was an awfully hot day."

Max did not say anything, he was unsurprised. But she was not content to leave it. "You didn't fix any dessert, Max? But this is a *special* occasion."

Montgomery took his cigar out of his mouth. "Stow it, my dear," he said kindly. "I'm not much for sweets, I'm a meat-and-potatoes man—sticks to the ribs. Let's talk of pleasanter things." He turned to Max. "Max, what can you do besides farm?"

Max was startled. "Huh? I've never done anything else. Why?"

Montgomery touched the ash of the cigar to his plate. "Because you are all through farming."

For the second time in two hours Max had more change than he could grasp. "Why? What do you mean?"

"Because we've sold the farm."

Max felt as if he had had a rug jerked out from under him. But he could tell from Maw's face that it was true. She looked the way she always did when she had put one over on him—triumphant and slightly apprehensive.

"Dad wouldn't like that," he said to her harshly. "This land has been in our family for four hundred years."

"Now, Maxie! I've told you I don't know how many times that I wasn't cut out for a farm. I was city raised."

"Clyde's Corners! Some city!"

"It wasn't a farm. And I was just a young girl when your father brought me here—you were already a big boy. I've still got my life before me. I can't live it buried on a farm."

Max raised his voice. "But you promised Dad you'd…"

"Stow it," Montgomery said firmly. "And keep a civil tongue in your head when you speak to your mother—and to me."

Max shut up.

"The land is sold and that's that. How much do you figure this parcel is worth?"

"Why, I've never thought about it."

"Whatever you thought, I got more." He gave Max a wink. "Yes, sir! It was a lucky day for your mother and you when she set her cap for me. I'm a man with his ear to the ground. I knew why an agent was around buying up these wornout, worthless pieces of property. I…"

"I use government fertilizers."

"Worthless I said and worthless I meant. For farming, that is." He put his finger along his nose, looked sly, and explained. It seemed that some big government power project was afoot for which this area had been selected—Montgomery was mysterious about it, from which Max concluded that he didn't know very much. A syndicate was quietly buying up land in anticipation of government purchase. "So we held 'em up for five times what they expected to pay. Pretty good, huh?"

Maw put in, "You see, Maxie? If your father had known that we would ever get…"

"Quiet, Nellie!"

"But I was just going to tell him how much…"

"'Quiet!' I said."

She shut up. Montgomery pushed his chair back, stuck his cigar in his mouth, and got up. Max put water on to heat for the dishes, scraped the plates and took the leavings out to the chickens. He stayed out quite a spell, looking at the stars and trying to think. The idea of having Biff Montgomery in the family shook him to his bones. He wondered just what rights a stepfather had, or, rather a step-stepfather, a man who had married his stepmother. He didn't know.

Presently he decided that he had to go back inside, much as he hated to. He found Montgomery standing at the bookshelf he had built over the stereo receiver; the man was pawing at the books and had piled several on the receiver. He looked around. "You back? Stick around, I want you to tell me about the live stock."

Maw appeared in the doorway. "Darling," she said to Montgomery, "can't that wait till morning?"

"Don't be in a hurry, my dear," he answered. "That auctioneer fellow will be here early. I've got to have the inventory ready." He continued to pull books down. "Say, these are pretty things." He held in his hands half a dozen volumes, printed on the finest of thin paper and bound in limp plastic. "I wonder what they're worth? Nellie, hand me my specs."

Max advanced hastily, reached for them. "Those are mine!"

"Huh?" Montgomery glanced at him, then held the books high in the air. "You're too young to own anything. No, everything goes. A clean sweep and a fresh start."

"They're mine! My uncle gave them to me." He appealed to his mother. "Tell him, Maw."

Montgomery said quietly, "Yes, Nellie, set this youngster straight—before I have to correct him."

Nellie looked worried. "Well, I don't rightly know. They did belong to Chet."

"And Chet was your brother? Then you're Chet's heir, not this young cub."

"He wasn't her brother, he was her brother-in-law!"

"So? No matter. Your father was your uncle's heir, then, and your mother is your father's heir. Not you, you're a minor. That's the law, son. Sorry." He put the books on the shelf but remained standing in front of them.

Max felt his right upper lip begin to twitch uncontrollably; he knew that he would not be able to talk coherently. His eyes filled with tears of rage so that he could hardly see. "You... you *thief!*"

Nellie let out a squawk. "Max!"

Montgomery's face became coldly malignant. "Now you've gone too far. I'm afraid you've earned a taste of the strap." His fingers started unbuckling his heavy belt.

Max took a step backward. Montgomery got the belt loose and took a step forward. Nellie squealed, "Monty! *Please!*"

"Keep out of this, Nellie." To Max he said, "We might as well get it settled once and for all who is boss around here. Apologize!"

Max did not answer. Montgomery repeated, "Apologize, and we'll say no more about it." He twitched the belt like a cat lashing its tail. Max took another step back; Montgomery stepped forward and grabbed at him.

Max ducked and ran out the open door into darkness. He did not stop until he was sure that Montgomery was not following. Then he caught his breath, still raging. He was almost sorry that Montgomery had not chased him; he didn't think that anyone could match him on his home grounds in the dark. He knew where the wood pile was; Montgomery didn't. He knew where the hog wallow was. Yes, he knew where the well was—even *that.*

It was a long time before he quieted down enough to think rationally. When he did, he was glad it had ended so easily, Montgomery outweighed him a lot and was reputed to be a mean one in a fight.

If it *had* ended, he corrected. He wondered if Montgomery would decide to forget it by morning. The light was still on in the living room; he took shelter in the barn and waited, sitting down on the dirt floor and leaning against the planks. After a while he felt terribly tired. He considered sleeping in the barn but there was no fit place to lie down, even though the old mule was dead. Instead he got up and looked at the house.

The light was out in the living room, but he could see a light in the bedroom; they were still awake, surely. Someone had closed the outer door after his flight; it did not lock so there was no difficulty getting in, but he was afraid that Montgomery might hear him. His own room was a shed added at the kitchen end of the main room, opposite the bedroom, but it had no outside door.

No matter—he had solved that problem when he had first grown old enough to wish to get in and out at night without consulting his elders. He crept around the house, found the saw horse, placed it under his window, got on and wiggled loose the nail that held the window. A moment later he stepped silently down into his own room.

The door to the main part of the house was closed but he decided not to risk switching on the light; Montgomery might take it into his head to come out into the living room and see a crack of light under his door. He slipped quietly out of his clothes and crawled into his cot.

Sleep wouldn't come. Once he began to feel that warm drowsiness, then some tiny noise had brought him wide, stiff awake. Probably just a mouse—but for an instant he had thought that Montgomery was standing over his bed. With his heart pounding, he sat up on the edge of his cot, still in his skin.

Presently he faced up to the problem of what he was to do—not just for the next hour, not just tomorrow morning, but the following morning and all the mornings after that. Montgomery alone presented no problem; he would not voluntarily stay in the same county with the man. But how about Maw?

His father had told him, when he had known that he was dying, "Take care of your mother, son." Well, he had done so. He had made a crop every year—food in the house and a little money, even if things had been close. When the mule died, he had made do, borrowing McAllister's team and working it out in labor.

But had Dad meant that he had to take care of his stepmother even if she remarried? It had never occurred to him to consider it. Dad had told him to look out for her and he had done so, even though it had put a stop to school and did not seem to have any end to it.

But she was no longer Mrs. Jones but Mrs. Montgomery. Had Dad meant for him to support Mrs. Montgomery?

Of course not! When a woman married, her husband supported her. Everybody knew that. And Dad wouldn't expect him to put up with Montgomery. He stood up, his mind suddenly made up.

The only question was what to take with him.

There was little to take. Groping in the dark he found the rucksack he used for hunting hikes and stuffed into it his other shirt and his socks. He added Uncle Chet's circular astrogation slide rule and the piece of volcanic glass his uncle had brought back for him from the Moon. His citizen's identification card, his toothbrush, and his father's razor—not that he needed *that* very often—about completed the plunder.

There was a loose board back of his cot. He felt for it, pulled it out and groped between the studs—found nothing. He had been hiding a little money from time to time against a rainy day, as Maw couldn't or wouldn't save. But apparently she had found it on one of her snooping tours. Well, he still had to leave; it just made it a little more difficult.

He took a deep breath. There was something he *must* get… Uncle Chet's books… and they were still (presumably) on the shelf against the wall common with the bedroom. But he *had* to get them, even at the risk of meeting Montgomery.

Cautiously, most slowly, he opened the door into the living room, stood there with sweat pouring down him. There was still a crack of light under the bedroom door and he hesitated, almost unable to force himself to go on. He heard Montgomery muttering something and Maw giggle.

As his eyes adjusted he could see by the faint light leaking out under the bedroom door something piled at the outer door. It was a deadfall alarm of pots and pans, sure to make a dreadful clatter if the door were opened. Apparently Montgomery had counted on him coming back and expected to be ready to take care of him. He was very glad that he had sneaked in the window.

No use putting it off—he crept across the floor, mindful of the squeaky board near the table. He could not see but he could feel and the volumes were known to his fingers. Carefully he slid them out, being sure not to knock over the others.

He was all the way back to his own door when he remembered the library book. He stopped in sudden panic.

He couldn't go back. They might hear him this time—or Montgomery might get up for a drink of water or something.

But in his limited horizon, the theft of a public library book—or failure to return it, which was the same thing—was, if not a mortal sin, at least high on the list of shameful crimes. He stood there, sweating and thinking about it.

Then he went back, the whole long trek, around the squeaky board and tragically onto one he had not remembered. He froze after he hit it, but apparently it had not alarmed the couple in the room beyond. At last he was leaning over the SV receiver and groping at the shelf.

Montgomery, in pawing the books, had changed their arrangement. One after another he had to take them down and try to identify it by touch, opening each and feeling for the perforations on the title page.

It was the fourth one he handled. He got back to his room hurrying slowly, unbearably anxious but afraid to move fast. There at last, he began to shake and had to wait until it wore off. He didn't chance closing his door but got into his clothes in the dark. Moments later he crept through his window, found the saw horse with his toe, and stepped quietly to the ground.

His shoes were stuffed on top of the books in his rucksack; he decided to leave them there until he was well clear of the house, rather than chance the noise he might make with his feet shod. He swung wide around the house and looked back. The bedroom light was still on; he started to angle down toward the road when he noticed Montgomery's unicycle. He stopped.

If he continued he would come to the road the bus passed along. Whether he turned right or left there, Montgomery would have a fifty-fifty chance of catching him on the unicycle. Having no money he was dependent on Shank's ponies to put distance under him; he could not take the bus.

Shucks! Montgomery wouldn't try to fetch him back. He would say good riddance and forget him!

But the thought fretted him. Suppose Maw urged him? Suppose Montgomery wouldn't forget an insult and would go to any trouble to "get even"?

He headed back, still swinging wide of the house, and cut across the slopes toward the right of way of the C.S.&E.

2 — GOOD SAMARITAN

He wished for a light, but its lack did not bother him much. He knew this country, every slope, almost every tree. He stayed high, working along the hillside, until he reached the exit ring where the trains jumped the gap, and there he came out on the road used by the ring road's maintenance crews. He sat down and put on his shoes.

The maintenance road was no more than a track cut through trees; it was suited to tractor treads but not to wheels. But it led down across the gap and up to where the ring road disappeared in the tunnel through the far ridge. He followed it, making good time in the born mountaineer's easy, loose-jointed walk.

Seventy minutes later he was across the gap and passing under the entrance ring. He went on until he was near the ring that marked the black entrance to the tunnel. He stopped at what he judged to be a safe distance and considered his chances.

The ridge was high, else the rings would have been built in a cut rather than a tunnel. He had often hunted on it and knew that it would take two hours to climb it—in daylight. But the maintenance road ran right through the hill, under the rings. If he followed it, he could go through in ten or fifteen minutes.

Max had never been through the ridge. Legally it was trespass—not that that bothered him, he was trespassing now. Occasionally a hog or a wild animal would wander into the tunnel and be trapped there when a train hurtled through. They died, instantly and without a scratch. Once Max had spotted the carcass of a fox just inside the tunnel and had ducked in and salvaged it. There were no marks on it, but when he skinned it he found that it was a mass of tiny hemorrhages. Several years earlier a man had been caught inside; the maintenance crew brought out the body.

The tunnel was larger than the rings but no larger than necessary to permit the projectile to ride ahead of its own reflected shock wave. Anything alive in the tunnel could not avoid the wave; that unbearable thunderclap, painful at a distance, was so loaded with energy as to be quick death close up.

But Max did not want to climb the ridge; he went over the evening schedule of trains in his mind. The *Tomahawk* was the one he had watched at sundown; the *Javelin* he had heard while he was hiding in the barn. The *Assegai* must have gone by quite a while ago though he didn't remember hearing it; that left only the midnight *Cleaver*. He then looked at the sky.

Venus had set, of course, but he was surprised to see Mars still in the west. The Moon had not risen. Let's see—full moon was last Wednesday. Surely…

The answer he got seemed wrong, so he checked himself by taking a careful eyesight of Vega and compared it with what the Big Dipper told him. Then he whistled softly—despite everything that had happened it was only ten o'clock, give or take five minutes; the stars could not be wrong. In which case the *Assegai* was not due for another three-quarters of an hour. Except for the faint chance of a special train he had plenty of time.

He headed into the tunnel. He had not gone fifty yards before he began to be sorry and a bit panicky; it was as dark as a sealed coffin. But the going was much easier as the bore was lined to permit smooth shockwave reflections. He had been on his way several minutes, feeling each step but hurrying, when his eyes, adjusting to complete darkness, made out a faint grey circle far ahead. He broke into a trot and then into a dead run as his fear of the place piled up.

He reached the far end with throat burned dry and heart laboring; there he plunged downhill regardless of the sudden roughening of his path as he left the tunnel and hit the maintenance track. He did not slow up until he stood under stilt supports so high that the ring above looked small. There he stood still and fought to catch his breath.

He was slammed forward and knocked off his feet.

He picked himself up groggily, eventually remembered where he was and realized that he had been knocked cold. There was blood on one cheek and his hands and elbows were raw. It was not until he noticed these that he realized what had happened; a train had passed right over him.

It had not been close enough to kill, but it had been close enough to blast him off his feet. It could not have been the *Assegai*; he looked again at the stars and confirmed it. No, it must have been a special—and he had beaten it out of the tunnel by about a minute.

He began to shake and it was minutes before he pulled himself together, after which he started down the maintenance road as fast as his bruised body could manage. Presently he became aware of an odd fact; the night was silent.

But night is never silent. His ears, tuned from babyhood to the sounds and signs of his hills, should have heard an endless pattern of little night noises—wind in the leaves, the scurrying of his small cousins, tree frogs, calls of insects, owls.

By brutal logic he concluded correctly that he could not hear —"deef as a post"—the shock wave had left him deaf. But there was no way to help it, so he went on; it did not occur to him to return home. At the bottom of this draw, where the stilts were nearly three hundred feet high, the maintenance road crossed a farm road. He turned down hill onto it, having accomplished his first purpose of getting into territory where Montgomery would be less likely to look for him. He was in another watershed now; although still only a few miles from home, nevertheless by going through the ridge he had put himself into a different neighborhood.

He continued downhill for a couple of hours. The road was hardly more than a cart track but it was easier than the maintenance road. Somewhere below, when the hills gave way to the valley where the "foreigners" lived, he would find the freight highway that paralleled the ring road on the route to Earthport—Earthport being his destination although he had only foggy plans as to what he would do when he got there.

The Moon was behind him now and he made good time. A rabbit hopped onto the road ahead, sat up and stared, then skittered away. Seeing it, he regretted not having brought along his squirrel gun. Sure, it was worn out and not worth much and lately it had gotten harder and harder to buy the slugs thrown by the obsolete little weapon—but rabbit in the pot right now would go mighty nice, mighty nice! He realized that he was not only weary but terribly hungry. He had just picked at his supper and it looked like he'd breakfast on his upper lip.

Shortly his attention was distracted from hunger to a ringing in his ears, a ringing that got distressingly worse. He shook his head and pounded his ears but it did not help; he had to make up his mind to ignore it. After another half mile or so he suddenly noticed that he could hear himself walking. He stopped dead, then clapped his hands together. He could hear them smack, cutting through the phantom ringing. With a lighter heart he went on.

At last he came out on a shoulder that overlooked the broad valley. In the moonlight he could make out the sweep of the freight highway leading southwest and could detect, he thought, its fluorescent traffic guide lines. He hurried on down.

He was nearing the highway and could hear the rush of passing freighters when he spotted a light ahead. He approached it cautiously, determined that it was neither vehicle nor farm house. Closer approach showed it to be a small open fire, visible from uphill but shielded from the highway by a shoulder of limestone. A man was squatting over it, stirring the contents of a can resting on rocks over the fire.

Max crept nearer until he was looking down into the hobo jungle. He got a whiff of the stew and his mouth watered. Caught between hunger and a hillman's ingrown distrust of "foreigners" he lay still and stared. Presently the man set the can off the fire and called out, "Well, don't hide there! Come on down."

Max was too startled to answer. The man added, "Come on down into the light. I won't fetch it up to you."

Max got to his feet and shuffled down into the circle of firelight. The man looked up. "Howdy. Draw up a chair."

"Howdy." Max sat down across the fire from the tramp. He was not even as well dressed as Max and he needed a shave. Nevertheless he wore his rags with a jaunty air and handled himself with a sparrow's cockiness.

The man continued to stir the mess in the can then spooned out a sample, blew on it, and tasted it. "About right," he announced. "Four-day mulligan, just getting ripe. Find yourself a dish." He got up and picked over a pile of smaller cans behind him, selected one. Max hesitated, then did the same, settling on one that had once contained coffee and appeared not to have been used since. His host served him a liberal portion of stew, then handed him a spoon. Max looked at it.

"If you don't trust the last man who used it," the man said reasonably, "hold it in the fire, then wipe it. Me, I don't worry. If a bug bites me, he dies horribly." Max took the advice, holding the spoon in the flames until the handle became too hot, then wiped it on his shirt.

The stew was good and his hunger made it superlative. The gravy was thick, there were vegetables and unidentified meat. Max didn't bother his head about the pedigrees of the materials; he simply enjoyed it. After a while his host said, "Seconds?"

"Huh? Sure. Thanks!"

The second can of stew filled him up and spread through his tissues a warm glow of wellbeing. He stretched lazily, enjoying his fatigue. "Feel better?" the man asked.

"Gee, yes. Thanks."

"By the way, you can call me Sam."

"Oh, my name is Max."

"Glad to know you, Max."

Max waited before raising a point that had been bothering him.

"Uh, Sam? How did you know I was there? Did you hear me?"

Sam grinned. "No. But you were silhouetted against the sky. Don't ever do that, kid, or it may be the last thing you do."

Max twisted around and looked up at where he had lurked. Sure enough, Sam was right. He'd be dogged!

Sam added, "Traveled far?"

"Huh? Yeah, quite a piece."

"Going far?"

"Uh, pretty far, I guess."

Sam waited, then said, "Think your folks'll miss you?"

"Huh? How did you know?"

"That you had run away from home? Well, you have, haven't you?"

"Yeah. Yeah, I guess I have."

"You looked beat when you dragged in here. Maybe it's not too late to kill the goose before your bridges are burned. Think about it, kid. It's rough on the road. I know."

"Go back? I won't ever go back!"

"As bad as that?"

Max stared into the fire. He needed badly to get his thoughts straight, even if it meant telling a foreigner his private affairs—and this soft-spoken stranger was easy to talk to. "See here, Sam, did you ever have a stepmother?"

"Eh? Can't remember that I ever had any. The Central Jersey Development Center for State Children used to kiss me good night."

"Oh." Max blurted out his story with an occasional sympathetic question from Sam to straighten out its confusion. "So I lit out," he concluded. "There wasn't anything else to do. Was there?"

Sam pursed his lips. "I reckon not. This double stepfather of yours—he sounds like a mouse studying to be a rat. You're well shut of him."

"You don't think they'll try to find me and haul me back, do you?"

Sam stopped to put a piece of wood on the fire. "I am not sure about that."

"Huh? Why not? I'm no use to him. He doesn't like me. And Maw won't care, not really. She may whine a bit, but she won't turn her hand."

"Well, there's the farm."

"The farm? I don't care about that, not with Dad gone. Truthfully, it ain't much. You break your back trying to make a crop. If the Food Conservation Act hadn't forbidden owners to let farm land fall out of use, Dad would have quit farming long ago. It would take something like this government condemnation to make it possible to find anybody to take it off your hands."

"That's what I mean. This joker got your mother to sell it. Now my brand of law may not be much good, but it looks as if that money ought to come to you."

"What? Oh, I don't care about the money. I just want to get away from them."

"Don't talk that way about money; the powers-that-be will have you shut up for blasphemy. But it probably doesn't matter how you feel, as I think Citizen Montgomery is going to want to see you awful bad."

"Why?"

"Did your father leave a will?"

"No. Why? He didn't have anything to leave but the farm."

"I don't know the ins and outs of your state laws, but it's a sure thing that at least half of that farm belongs to you. Possibly your stepmother has only lifetime tenure in her half, with reversion to you when she dies. But it's a certainty that she can't grant a good deed without your signature. Along about time your county courthouse opens up tomorrow morning the buyers are going to find that out. Then they'll come hightailing up, looking for her—and you. And ten minutes later this Montgomery hombre will start looking for you, if he hasn't already."

"Oh, me! If they find me, can they make me go back?"

"Don't let them find you. You've made a good start."

Max picked up his rucksack. "I guess I had better get moving. Thanks a lot, Sam. Maybe I can help you someday."

"Sit down."

"Look, I had better get as far away as I can."

"Kid, you're tired out and your judgment has slipped. How far can you walk tonight, the shape you're in? Tomorrow morning, bright and early, we'll go down to the highway, follow it about a mile to the freighters' restaurant south of here and catch the haulers as they come out from breakfast, feeling good. We'll promote a ride and you'll go farther in ten minutes than you could make all night."

Max had to admit that he was tired, exhausted really, and Sam certainly knew more about these wrinkles than he did. Sam added, "Got a blanket in your bindle?"

"No. Just a shirt… and some books."

"Books, eh? Read quite a bit myself, when I get a chance. May I see them?"

Somewhat reluctantly Max got them out. Sam held them close to the fire and examined them. "Well, I'll be a three-eyed Martian! Kid, do you know what you've got here?"

"Sure."

"But you ought not to have these. You're not a member of the Astrogators' Guild."

"No, but my uncle was. He was on the first trip to Beta Hydrae," he added proudly.

"No foolin'!"

"Sure as taxes."

"But you've never been in space yourself? No, of course not."

"But I'm going to be!" Max admitted something that he had never told anyone, his ambition to emulate his uncle and go out to the stars. Sam listened thoughtfully. When Max stopped, he said slowly, "So you want to be an astrogator?"

"I certainly do."

Sam scratched his nose. "Look, kid, I don't want to throw cold water, but you know how the world wags. Getting to be an astrogator is almost as difficult as getting into the Plumbers' Guild. The soup is thin these days and there isn't enough to go around. The guild won't welcome you just because you are anxious to be apprenticed. Membership is hereditary, just like all the other high-pay guilds."

"But my uncle was a member."

"Your uncle isn't your father."

"No, but a member who hasn't any sons gets to nominate someone else. Uncle Chet explained it to me. He always told me he was going to register my nomination."

"And did he?"

Max was silent. At the time his uncle had died he had been too young to know how to go about finding out. When his father had followed his uncle events had closed in on him—he had never checked up, subconsciously preferring to nurse the dream rather than test it. "I don't know," he said at last. "I'm going to the Mother Chapter at Earthport and find out."

"Hmmm—I wish you luck, kid." He stared into the fire, sadly it seemed to Max. "Well, I'm going to grab some shuteye, and you had better do the same. If you're chilly, you'll find some truck back under that rock shelf—burlap and packing materials and such. It'll keep you warm, if you don't mind risking a flea or two."

Max crawled into the dark hole indicated, found a halfway cave in the limestone. Groping, he located the primitive bedding. He had expected to be wakeful, but he was asleep before Sam finished covering the fire.

He was awakened by sunlight blazing outside. He crawled out, stood up and stretched the stiffness out of his limbs. By the sun he judged it to be about seven o'clock in the morning. Sam was not in sight. He looked around and shouted, not too loudly, and guessed that Sam had gone down to the creek for a drink and a cold wash. Max went back into the shelter and hauled out his rucksack, intending to change his socks.

His uncle's books were missing.

There was a note on top of his spare shirt: "Dear Max," it said, "There is more stew in the can. You can warm it up for breakfast. So long—Sam P.S. Sorry."

Further search disclosed that his identification card was missing, but Sam had not bothered with his other pitiful possessions. Max did not touch the stew but set out down the road, his mind filled with bitter thoughts.

3 — EARTHPORT

The farm road crossed under the freight highway; Max came up on the far side and headed south beside the highway. The route was marked by "NO TRESPASS" signs but the path was well worn. The highway widened to make room for a deceleration strip. At the end of its smooth reach, a mile away, Max could see the restaurant Sam had mentioned.

He shinnied over the fence enclosing the restaurant and parking grounds and went to the parking stalls where a dozen of the big land ships were lined up. One was quivering for departure, its flat bottom a few inches clear of the metallic pavement. Max went to its front end and looked up at the driver's compartment. The door was open and he could see the driver at his instrument board. Max called out, "Hey, Mister!"

The driver stuck his head out. "What's itching you?"

"How are the chances of a lift south?"

"Beat it, kid." The door slammed.

None of the other freighters was raised off the pavement; their control compartments were empty. Max was about to turn away when another giant scooted down the braking strip, reached the parking space, crawled slowly into a stall, and settled to the ground. He considered approaching its driver, but decided to wait until the man had eaten. He went back toward the restaurant building and was looking through the door, watching hungry men demolish food while his mouth watered, when he heard a pleasant voice at his shoulder.

"Excuse me, but you're blocking the door."

Max jumped aside. "Oh! Sorry."

"Go ahead. You were first." The speaker was a man about ten years older than Max. He was profusely freckled and had a onesided grin. Max saw on his cap the pin of the Teamsters' Guild. "Go on in," the man repeated, "before you get trampled in the rush."

Max had been telling himself that he might catch Sam inside—and, after all, they couldn't charge him just for coming in, if he didn't actually *eat* anything. Underlying was the thought of asking to work for a meal, if the manager looked friendly. The freckled-faced man's urging tipped the scales; he followed his nose toward the source of the heavenly odors pouring out the door.

The restaurant was crowded; there was one vacant table, for two. The man slid into a chair and said, "Sit down." When Max hesitated, he added, "Go ahead, put it down. Never like to eat alone." Max could feel the manager's eyes on him, he sat down. A waitress handed them each a menu and the hauler looked her over appreciatively. When she left he said, "This dump used to have automatic service—and it went broke. The trade went to the *Tivoli*, eighty miles down the stretch. Then the new owner threw away the machinery and hired girls and business picked up. Nothing makes food taste better than having a pretty girl put it in front of you. Right?"

"Uh, I guess so. Sure." Max had not heard what was said. He had seldom been in a restaurant and then only in the lunch counter at Clyde's Corners. The prices he read frightened him; he wanted to crawl under the table.

His companion looked at him. "What's the trouble, chum?"

"Trouble? Uh, nothing."

"You broke?" Max's miserable expression answered him. "Shucks, I've been there myself. Relax." The man waggled his fingers at the waitress. "Come here, honey chile. My partner and I will each have a breakfast steak with a fried egg sitting on top and this and that on the side. I want that egg to be just barely dead. If it is cooked solid, I'll nail it to the wall as a warning to others. Understand me?"

"I doubt if you'll be able to get a nail through it," she retorted and walked away, swaying gently. The hauler kept his eyes on her until she disappeared into the kitchen. "See what I mean? How can machinery compete?"

The steak was good and the egg was not congealed. The hauler told Max to call him "Red" and Max gave his name in exchange. Max was pursuing the last of the yolk with a bit of toast and was considering whether it was time to broach the subject of a ride when Red leaned forward and spoke softly. "Max—you got anything pushing you? Free to take a job?"

"What? Why, maybe. What is it?"

"Mind taking a little run southwest?"

"Southwest? Matter of fact, I was headin' that way."

"Good. Here's the deal. The Man says we have to have two teamsters to each rig—or else break for eight hours after driving eight. I can't; I've got a penalty time to meet—and my partner washed out. The flathead got taken drunk and I had to put him down to cool. Now

I've got a check point to pass a hundred thirty miles down the stretch. They'll make me lay over if I can't show another driver."

"Gee! But I don't know how to drive, Red. I'm awful sorry."

Red gestured with his cup. "You won't have to. You'll always be the offwatch driver. I wouldn't trust little *Molly Malone* to somebody who didn't know her ways. I'll keep myself awake with Pep pills and catch up on sleep at Earthport."

"You're going all the way to *Earthport?*"

"Right."

"It's a deal!"

"Okay, here's the lash up. Every time we hit a check point you're in the bunk, asleep. You help me load and unload—I've got a partial and a pick-up at Oke City—and I'll feed you. Right?"

"Right!"

"Then let's go. I want to scoot before these other dust jumpers get underway. Never can tell, there might be a spotter." Red flipped a bill down and did not wait for change.

The *Molly Malone* was two hundred feet long and stream lined such that she had negative lift when cruising. This came to Max's attention from watching the instruments; when she first quivered and raised, the dial marked ROAD CLEARANCE showed nine inches, but as they gathered speed down the acceleration strip it decreased to six.

"The repulsion works by an inverse-cube law," Red explained. "The more the wind pushes us down the harder the road pushes us up. Keeps us from jumping over the skyline. The faster we go the steadier we are."

"Suppose you went so fast that the wind pressure forced the bottom down to the road? Could you stop soon enough to keep from wrecking it?"

"Use your head. The more we squat the harder we are pushed up—inverse-cube, I said."

"Oh." Max got out his uncle's slide rule. "If she just supports her own weight at nine inches clearance, then at three inches the repulsion would be twenty-seven times her weight and at an inch it would be seven hundred and twenty-nine, and at a quarter of an inch —"

"Don't even think about it. At top speed I can't get her down to five inches."

"But what makes her go?"

"It's a phase relationship. The field crawls forward and Molly tries to catch up—only she can't. Don't ask me the theory, I just push the buttons." Red struck a cigarette and lounged back, one hand on the tiller. "Better get in the bunk, kid. Check point in forty miles."

The bunk was thwartships abaft the control compartment, a shelf above the seat. Max climbed in and wrapped a blanket around himself. Red handed him a cap. "Pull this down over your eyes. Let the button show." The button was a teamster's shield, Max did as he was told.

Presently he heard the sound of wind change from a soft roar to a sigh and then stop. The freighter settled to the pavement and the door opened. He lay still, unable to see what was going on. A strange voice said, "How long you been herding it?"

"Since breakfast at Tony's."

"So? How did your eyes get so bloodshot?"

"It's the evil life I lead. Want to see my tongue?"

The inspector ignored this, saying instead, "Your partner didn't sign his trick."

"Whatever you say. Want me to wake the dumb geek?"

"Umm… don't bother. You sign for him. Tell him to be more careful."

"Right."

The *Molly Malone* pulled out and picked up speed. Max crawled down. "I thought we were sunk when he asked for my signature."

"That was on purpose," Red said scornfully. "You have to give them something to yap about, or they'll dig for it."

Max liked the freighter. The tremendous speed so close to the ground exhilarated him; he decided that if he could not be a spaceman, this life would not be bad—he'd find out how high the application fee was and start saving. He liked the easy way Red picked out on the pavement ahead the speed line that matched the *Molly's* speed and then laid the big craft into a curve. It was usually the outermost line, with the *Molly* on her side and the horizon tilted up at a crazy angle.

Near Oklahoma City they swooped under the ring guides of the C.S.&E. just as a train went over—the *Razor*, by Max's calculations. "I used to herd those things," Red remarked, glancing up.

"You *did*?"

"Yep. But they got to worrying me. I hated it every time I made a jump and felt the weight sag out from under me. Then I got a notion that the train had a mind of its own and was just waiting to turn aside instead of entering the next guide ring. That sort of thing is no good. So I found a teamster who wanted to better himself and paid the fine to both guilds to let us swap. Never regretted it. Two hundred miles an hour when you're close to the ground is enough."

"Uh, how about space ships?"

"That's another matter. Elbow room out there. Say, kid, while you're at Earthport you should take a look at the big babies. They're quite something."

The library book had been burning a hole in his rucksack; at Oklahoma City he noticed a postal box at the freight depot and, on impulse, dropped the book into it. After he had mailed it he had a twinge of worry that he might have given a clue to his whereabouts which would get back to Montgomery, but he suppressed the worry—the book *had* to be returned. Vagrancy in the eyes of the law had not worried him, nor trespass, nor impersonating a licensed teamster—but filching a book was a sin.

Max was asleep in the bunk when they arrived. Red shook him. "End of the line, kid."

Max sat up, yawning. "Where are we?"

"Earthport. Let's shake a leg and get this baby unloaded."

It was two hours past sunrise and growing desert hot by the time they got the *Molly* disgorged. Red stood him to a last meal. Red finished first, paid, then laid a bill down by Max's plate. "Thanks, kid. That's for luck. So long." He was gone while Max still had his mouth hanging open. He had never learned his friend's name, did not even know his shield number.

Earthport was much the biggest settlement Max had ever seen and everything about it confused him—the hurrying self-centered crowds, the enormous buildings, the slidewalks in place of streets, the noise, the desert sun beating down, the flatness—why, there wasn't anything you could call a hill closer than the skyline!

He saw his first extraterrestrial, an eight-foot native of Epsilon Gemini V, striding out of a shop with a package under his left arms—as casually, Max thought, as a farmer doing his week's shopping at the Corners. Max stared. He knew what the creature was from pictures and SV shows, but seeing one was another matter. Its multiple eyes, like a wreath of yellow grapes around the head, gave it a grotesque faceless appearance. Max let his own head swivel to follow it.

The creature approached a policeman, tapped the top of his cap, and said, "Excuse me, sahr, but can you tirect me to the Tesert Palms Athletic Club?" Max could not tell where the noise came out.

Max finally noticed that he seemed to be the only one staring, so he walked slowly on, while sneaking looks over his shoulder—which resulted in his bumping into a stranger. "Oh, excuse me!" Max blurted. The stranger looked at him. "Take it easy, cousin. You're in the big city now." After that he tried to be careful.

He had intended to seek out the Guild Hall of the Mother Chapter of Astrogators at once in the forlorn hope that even without his books and identification card he might still identify himself and find that Uncle Chet had provided for his future. But there was so much to see that he loitered. He found himself presently in front of Imperial House, the hotel that guaranteed to supply any combination of pressure, temperature, lighting, atmosphere, pseudogravitation, and diet favored by any known race of intelligent creatures. He hung around hoping to see some of the guests, but the only one who came out while he was there was wheeled out in a pressurized travel tank and he could not see into it.

He noticed the police guard at the door eyeing him and started to move on—then decided to ask directions, reasoning that if it was all right for a Geminian to question a policeman it certainly must be all right for a human being. He found himself quoting the extraterrestrial. "Excuse me, sir, but could you direct me to the Astrogators' Guild Hall?"

The officer looked him over. "At the foot of the Avenue of Planets, just before you reach the port."

"Uh, which way do..."

"New in town?"

"Yeah. Yes, sir."

"Where are you staying?"

"Staying? Why, nowhere yet. I just got here. I..."

"What's your business at the Astrogators' Hall?"

"It's on account of my uncle," Max answered miserably.

"Your uncle?"

"He... he's an astrogator." He mentally crossed his fingers over the tense.

The policeman inspected again. "Take this slide to the next intersection, change and slide west. Big building with the guild sunburst over the door—can't miss it. Stay out of restricted areas." Max left without waiting to find out how he was to know a restricted area. The Guild Hall did prove easy to find; the slidewalk to the west ducked underground and when it emerged at its swing-around Max was deposited in front of it.

But he had not eyes for it. To the west where avenue and buildings ended was the field and on it space ships, stretching away for miles—fast little military darts, stubby Moon shuttles, winged ships that served the satellite stations, robot freighters, graceless and powerful. But directly in front of the gate hardly half a mile away was a great ship that he knew at once, the starship *Asgard*. He knew her history, Uncle Chet had served in her. A hundred years earlier she had been built out in space as a space-to-space rocket ship; she was then the *Prince of Wales*. Years passed, her tubes were ripped out and a mass-conversion torch was kindled in her; she became the *Einstein*. More years passed, for nearly twenty she swung empty around Luna, a lifeless, outmoded hulk. Now in place of the torch she had Horst-Conrad impellers that clutched at the fabric of space itself; thanks to them she was now able to touch Mother Terra. To commemorate her rebirth she had been dubbed *Asgard*, heavenly home of the gods.

Her massive, pear-shaped body was poised on its smaller end, steadied by an invisible scaffolding of thrust beams. Max knew where they must be, for there was a ring of barricades spotted around her to keep the careless from wandering into the deadly loci.

He pressed his nose against the gate to the field and tried to see more of her, until a voice called out, "Away from there, Jack! Don't you see that sign?"

Max looked up. Above his head was a sign: RESTRICTED AREA. Reluctantly he moved away and walked back to the Guild Hall.

4 — THE ASTROGATORS' GUILD

Everything about the hall of the Mother Chapter was to Max's eyes lavish, churchlike, and frightening. The great doors opened silently as he approached, dilating away into the walls. His feet made no sound on the tesselated floor. He started down the long, high foyer, wondering where he should go, when a firm voice stopped him. "May I help you, please?"

He turned. A beautiful young lady with a severe manner held him with her eye. She was seated behind a desk. Max went up to her. "Uh, maybe you could tell me, Ma'am, who I ought to see. I don't rightly know just..."

"One moment. Your name, please?" Several minutes later she had wormed out of him the basic facts of his quest. "So far as I can see, you haven't any status here and no excuse for appealing to the Guild."

"But I told you..."

"Never mind. I'm going to put it up to the legal office." She touched a button and a screen raised up on her desk; she spoke to it. "Mr. Hanson, can you spare a moment?"

"Yes, Grace?"

"There is a young man here who claims to be a legacy of the Guild. Will you talk with him?"

The voice answered, "Look, Grace, you know the procedures. Get his address, send him on his way, and send his papers up for consideration."

She frowned and touched another control. Although Max could see that she continued to talk, no sound reached him. Then she nodded and the screen slid back into the desk. She touched another button and said, "Skeeter!"

A page boy popped out of a door behind her and looked Max over with cold eyes. "Skeeter," she went on, "take this visitor to Mr. Hanson."

The page sniffed. "Him?"

"Him. And fasten your collar and spit out that gum."

Mr. Hanson listened to Max's story and passed him on to his boss, the chief legal counsel, who listened to a third telling. That official then drummed his desk and made a call, using the silencing device the girl had used.

He then said to Max, "You're in luck, son. The Most Worthy High Secretary will grant you a few minutes of his time. Now when you go in, don't sit down, remember to speak only when spoken to, and get out quickly when he indicates that the audience is ended."

The High Secretary's office made the lavishness that had thus far filled Max's eyes seem like austerity. The rug alone could have been swapped for the farm on which Max grew up. There was no communication equipment in evidence, no files, not even a desk. The High Secretary lounged back in a mammoth easy chair while a servant massaged his scalp. He raised his head as Max appeared and said, "Come in, son. Sit down there. What is your name?"

"Maximilian Jones, sir."

They looked at each other. The Secretary saw a lanky youth who needed a haircut, a bath, and a change of clothes; Max saw a short, fat little man in a wrinkled uniform. His head seemed too big for him and Max could not make up his mind whether the eyes were kindly or cold.

"And you are a nephew of Chester Arthur Jones?"

"Yes, sir."

"I knew Brother Jones well. A fine mathematician." The High Secretary went on, "I understand that you have had the misfortune to lose your government Citizen's Identification. Carl."

He had not raised his voice but a young man appeared with the speed of a genie. "Yes, sir?"

"Take this young man's thumb print, call the Bureau of Identification—not here, but the main office at New Washington. My compliments to the Chief of Bureau and tell him that I would be pleased to have immediate identification while you hold the circuit."

The print was taken speedily; the man called Carl left. The High Secretary went on, "What was your purpose in coming here?" Diffidently Max explained that his uncle had told him that he intended to nominate him for apprenticeship in the guild.

The man nodded. "So I understand. I am sorry to tell you, young fellow, that Brother Jones made no nomination."

Max had difficulty in taking in the simple statement. So much was his inner pride tied to his pride in his uncle's profession, so much had he depended on his hope that his uncle had named him his professional heir, that he could not accept at once the verdict that he was nobody and nothing. He blurted out, "You're *sure?* Did you look?"

The masseur looked shocked but the High Secretary answered calmly, "The archives have been searched, not once, but twice. There is no possible doubt." The High Secretary sat up, gestured slightly, and the servant disappeared. "I'm sorry."

"But he *told* me," Max said stubbornly. "He said he was going to."

"Nevertheless he did not." The man who had taken the thumb print came in and offered a memorandum to the High Secretary, who glanced at it and waved it away. "I've no doubt that he considered you. Nomination to our brotherhood involves a grave responsibility; it is not unusual for a childless brother to have his eye on a likely lad for a long time before deciding whether or not he measures up. For some reason your uncle did not name you."

Max was appalled by the humiliating theory that his beloved uncle might have found him unworthy. It could not be true—why, just the day before he died, he had said—he interrupted his thoughts to say, "Sir—I think I know what happened."

"Eh?"

"Uncle Chester died suddenly. He meant to name me, but he didn't get a chance. I'm sure of it."

"Possibly. Men have been known to fail to get their affairs in order before the last orbit. But I must assume that he knew what he was doing."

"But—"

"That's all, young man. No, don't go away. I've been thinking about you today." Max looked startled, the High Secretary smiled and continued, "You see, you are the second 'Maximilian Jones' who has come to us with this story."

"Huh?"

"Huh indeed." The guild executive reached into a pocket of his chair, pulled out some books and a card, handed them to Max, who stared unbelievingly.

"Uncle Chet's books!"

"Yes. Another man, older than yourself, came here yesterday with your identification card and these books. He was less ambitious than you are," he added dryly. "He was willing to settle for a rating less lofty than astrogator."

"What happened?"

"He left suddenly when we attempted to take his finger prints. I did not see him. But when you showed up today I began to wonder how long a procession of 'Maximilian Jones's' would favor us. Better guard that card in the future—I fancy we have saved you a fine."

Max placed it in an inner pocket. "Thanks a lot, sir." He started to put the books in his rucksack. The High Secretary gestured in denial.

"No, no! Return the books, please."

"But Uncle Chet gave them to me."

"Sorry. At most he loaned them to you—and he should not have done even that. The tools of our profession are never owned individually; they are loaned to each brother. Your uncle should have turned them in when he retired, but some of the brothers have a sentimental fondness for having them in their possession. Give them to me, please."

Max still hesitated. "Come now," the guildsman said reasonably. "It would not do for our professional secrets to be floating around loose, available to anyone. Even the hairdressers do not permit that. We have a high responsibility to the public. Only a member of this guild, trained, tested, sworn, and accepted, may lawfully be custodian of those manuals."

Max's answer was barely audible. "I don't see the harm. I'm not going to get to use them, it looks like."

"You don't believe in anarchy, surely? Our whole society is founded on entrusting grave secrets only to those who are worthy. But don't feel sad. Each brother, when he is issued his tools, deposits an earnest with the bursar. In my opinion, since you are the nearest relative of Brother Jones, we may properly repay the earnest to you for their return. Carl."

The young man appeared again. "The deposit monies, please." Carl had the money with him—he seemed to earn his living by knowing what the High Secretary was about to want. Max found himself accepting an impressive sheaf of money, more than he had ever touched before, and the books were taken from him before he could think of another objection.

It seemed time to leave, but he was motioned back to his chair. "Personally, I am sorry to disappoint you, but I am merely the servant of my brothers; I have no choice. However… " The High Secretary fitted his finger tips together. "Our brotherhood takes care of its own.

There are funds at my disposal for such cases. How would you like to go into training?"

"For the *Guild?*"

"No, no! We don't grant brotherhood as charity. But for some respectable trade, metalsmith, or chef, or tailor—what you wish. Any occupation not hereditary. The brotherhood will sponsor you, pay your 'prentice fee and, if you make good, lend you your contribution when you are sworn in."

Max knew he should accept gratefully. He was being offered an opportunity free that most of the swarming masses never got on any terms. But the cross-grained quirk in him that had caused him to spurn the stew that Sam had left behind made this generous offer stick in his craw. "Thanks just the same," he answered in tones almost surly, "but I don't rightly think I can take it."

The High Secretary looked bleak. "So? It's your life." He snapped his fingers, a page appeared, and Max was led quickly out of the Hall.

He stood on the steps of the Guild Hall and wondered dejectedly what he should do next. Even the space ships on the field at the foot of the street did not attract; he could not have looked at one without feeling like crying. He looked to the east instead.

A short distance away a jaunty figure leaned against a trash receptacle. As Max's eyes rested on the man he straightened up, flipped a cigarette to the pavement, and started toward him.

Max looked at him again. "Sam!" It was undoubtedly the wayfarer who had robbed him—well dressed, clean shaved—but Sam nonetheless. Max hurried toward him.

"Howdy, Max," Sam greeted him with an unembarrassed grin, "how did you make out?"

"I ought to have you arrested!"

"Now, now—keep your voice down. You're making yourself conspicuous."

Max took a breath and lowered his voice. "You stole my books."

"*Your* books? They weren't yours—and I returned them to their owners. You want to arrest me for that?"

"But you… Well, anyhow you…"

A voice, civil, firm, and official, spoke at Max's elbow. "Is this person annoying you, sir?" Max turned and found a policeman standing behind him. He started to speak, then bit off the words as he realized the question had been addressed to Sam.

Sam took hold of Max's upper arm in a gesture that was protective and paternal, but quite firm. "Not at all, officer, thank you."

"Are you sure? I received word that this chico was headed this way and I've had my eye on him."

"He's a friend of mine. I was waiting for him here."

"As you say. We have a lot of trouble with vagrants. They all seem to head for Earthport."

"He's not a vagrant. He's a young friend of mine from the country and I'm afraid he's gotten a bit confused. I'll be responsible."

"Very well, sir."

"Not at all." Max let himself be led away. When they were out of earshot Sam said, "That was close. That nosy clown would have had us both in the bull pen. You did all right, kid—kept your lip zipped at the right time."

They were around the corner into a less important street before Sam let go his grip. He stopped and faced Max, grinning. "Well, kid?"

"I should a' told that cop about you!"

"Why didn't you? He was right there."

Max found himself caught by contradictory feelings. He was angry with Sam, no doubt about it, but his first unstudied reaction at seeing him had been the warm pleasure one gets from recognizing a familiar face among strangers—the anger had come a split second later. Now Sam looked at him with easy cynicism, a quizzical smile on his face. "Well, kid?" he repeated. "If you want to turn me in, let's go back and get it over with. I won't run."

Max looked back at him peevishly. "Oh, forget it!"

"Thanks. I'm sorry about it, kid. I really am."

"Then why did you do it?"

Sam's face changed suddenly to a sad, faraway look, then resumed its cheerful cynicism. "I was tempted by an idea, old son—every man has his limits. Some day I'll tell you. Now, how about a bit to eat and a gab? There's a joint near here where we can talk without having the nosies leaning over our shoulders."

"I don't know as I want to."

"Oh, come now! The food isn't much but it's better than mulligan."

Max had been ready with a stiff speech about how he would not turn Sam in, but he certainly did not want to eat with him; the mention of mulligan brought him up short. He remembered uneasily that Sam had not inquired as to *his* morals, but had shared his food.

"Well… okay."

"That's my boy!" They went on down the street. The neighborhood was a sort to be found near the port in any port city; once off the pompous Avenue of the Planets it became more crowded, noisier, more alive, and somehow warmer and more friendly despite a strong air of "keep your hand on your purse." Hole-in-the-wall tailor shops, little restaurants none too clean, cheap hotels, honky-tonks, fun arcades, exhibits both "educational" and "scientific," street vendors, small theaters with gaudy posters and sounds of music leaking out, shops fronting for betting parlors, tattoo parlors fronting for astrologers, and the inevitable Salvation Army mission gave the street flavor its stylish cousins lacked. Martians in trefoil sunglasses and respirators, humanoids from Beta Corvi III, things with exoskeletons from Allah knew where, all jostled with humans of all shades and all blended in easy camaraderie.

Sam stopped at a shop with the age-old symbol of three golden spheres. "Wait here. Be right out."

Max waited and watched the throng. Sam came out shortly without his coat. "Now we eat."

"Sam! Did you pawn your coat?"

"Give the man a cigar! How did you guess?"

"But… Look, I didn't know you were broke; you looked prosperous. Get it back, I'll… I'll pay for our lunch."

"Say, that's sweet of you, kid. But forget it. I don't need a coat this weather. Truth is, I was dressed up just to make a good impression at —well, a little matter of business."

Max blurted out, "But how did you… ", then shut up. Sam grinned. "Did I steal the fancy rags? No. I encountered a citizen who believed in percentages and engaged him in a friendly game. Never bet on percentages, kid; skill is more fundamental. Here we are."

The room facing the street was a bar, beyond was a restaurant. Sam led him on through the restaurant, through the kitchen, down a passage off which there were card rooms, and ended in a smaller, less pretentious dining room; Sam picked a table in a corner. An enormous Samoan shuffled up, dragging one leg. Sam nodded, "Howdy, Percy." He turned to Max. "A drink first?"

"Uh, I guess not."

"Smart lad. Lay off the stuff. Irish for me, Percy, and we'll both have whatever you had for lunch." The Samoan waited silently. Sam shrugged and laid money on the table, Percy scooped it up.

Max objected, "But I was going to pay."

"You can pay for the lunch. Percy owns the place," he added. "He's offensively rich, but he didn't get that way by trusting the likes of me. Now tell me about yourself, old son. How you got here? How you made out with the astrogators… everything. Did they kill the fatted calf?"

"Well, no." There seemed to be no reason not to tell Sam and he found that he wanted to talk. Sam nodded at the end.

"About what I had guessed. Any plans now?"

"No. I don't know what to do now, Sam."

"Hmm… it's an ill wind that has no turning. Eat your lunch and let me think."

Later he added, "Max, what do you *want* to do?"

"Well… I wanted to be an astrogator…"

"That's out."

"I know."

"Tell me, did you want to be an astrogator and nothing else, or did you simply want to go into space?"

"Why, I guess I never thought about it any other way."

"Well, think about it."

Max did so. "I want to space. If I can't go as an astrogator, I want to go anyhow. But I don't see how. The Astrogators' Guild is the only one I stood a chance for."

"There are ways."

"Huh? Do you mean put in for emigration?"

Sam shook his head. "It costs more than you could save to go to one of the desirable colonies—and the ones they give you free rides to I wouldn't wish on my worst enemies."

"Then what do you mean?"

Sam hesitated. "There are ways to wangle it, old son—if you do what I say. This uncle of yours—you were around him a lot?"

"Why, sure."

"Talked about space with you?"

"Certainly. That's all we talked about."

"Hmm… how well do you know the patter?"

5 — "…YOUR MONEY AND MY KNOW-HOW… "

"The patter?" Max looked puzzled. "I suppose I know what everybody knows."

"Where's the worry hole?"

"Huh? That's the control room."

"If the cheater wants a corpse, where does he find it?"

Max looked amused. "That's just stuff from SV serials, nobody talks like that aboard ship. The cook is the cook, and if he wanted a side of beef, he'd go to the reefer for it."

"How do you tell a 'beast' from an animal?"

"Why, a 'beast' is a passenger, but an animal is just an animal, I guess."

"Suppose you were on a ship for Mars and they announced that the power plant had gone blooie and the ship was going to spiral into the Sun? What would you think?"

"I'd think somebody was trying to scare me. In the first place, you wouldn't be 'on' a ship—'in' is the right word. Second, a spiral isn't one of the possible orbits. And third, if a ship was headed for Mars from Earth, it couldn't fall into the Sun; the orbit would be incompatible."

"Suppose you were part of a ship's crew in a strange port and you wanted to go out and look the place over. How would you go about asking the captain for permission?"

"Why, I wouldn't."

"You'd just jump ship?"

"Let me finish. If I wanted to hit dirt, I'd ask the first officer; the captain doesn't bother with such things. If the ship was big enough, I'd have to ask my department head first." Max sat up and held Sam's eye. "Sam—you've been spaceside. Haven't you?"

"What gave you that notion, kid?"

"What's your guild?"

"Stow it, Max. Ask me no questions and I'll sell you no pigs in a poke. Maybe I've studied up on the jive just as you have."

"I don't believe it," Max said bluntly.

Sam looked pained. Max went on, "What's this all about? You ask me a bunch of silly questions—sure, I know quite a bit about spaceside; I've been reading about it all my life and Uncle Chet would talk by the hour. But what of it?"

Sam looked at him and said softly, "Max—the *Asgard* is raising next Thursday—for starside. Would you like to be in her?"

Max thought about it. To be in the fabulous *Asgard*, to be heading out to the stars, to be—he brushed the vision aside. "Don't talk that way, Sam! You know I'd give my right arm. Why needle me?"

"How much money have you?"

"Huh? Why?"

"How much?"

"I haven't even had time to count it." Max started to haul out the wad of bills he had been given; Sam hastily and unobtrusively stopped him.

"Psst!" he protested. "Don't flash a roll in here. Do you want to eat through a slit in your throat? Keep it down!"

Startled, Max took the advice. He was still more startled when he finished the tally; he had known that he had been given quite a lot of money but this was more than he had dreamed. "How much?" Sam persisted. Max told him, Sam swore softly. "Well, it will just have to do."

"Do for what?"

"You'll see. Put it away."

As Max did so he said wonderingly, "Sam, I had no idea those books were so valuable."

"They aren't."

"Huh?"

"It's malarkey. Lots of guilds do it. They want to make it appear that their professional secrets are precious, so they make the candidate put up a wad of dough for his reference books. If those things were published in the ordinary way, they'd sell at a reasonable price."

"But that's right, isn't it? As the Worthy High Secretary explained, it wouldn't do for just anybody to have that knowledge."

Sam made a rude noise and pretended to spit. "What difference would it make? Suppose you still had them—you don't have a ship to conn."

"But… " Max stopped and grinned. "I can't see that it did any good to take them away from me anyhow. I've read them, so I know what's in them."

"Sure you know. Maybe you even remember some of the methods. But you don't have all those columns of figures so you can look up the one you need when you need it. That's what they care about."

"But I do! I read them, I tell you." Max wrinkled his forehead, then began to recite: "'Page 272, Calculated Solutions of the Differential Equation of Motion by the Ricardo Assumption—" He began to reel off a series of seven-place figures. Sam listened in growing surprise, then stopped him.

"Kid, you really remember that? You weren't making it up?"

"Of course not, I *read* it."

"Well, I'll be a beat up… Look, you're a page-at-aglance reader? Is that it?"

"No, not exactly. I'm a pretty fast reader, but I do have to read it. But I don't forget. I never have been able to see how people forget. I can't forget anything."

Sam shook his head wonderingly. "I've been able to forget a lot of things, thank Heaven." He thought for a moment. "Maybe we should forget the other caper and exploit this talent of yours. I can think of angles."

"What do you mean? And what other caper?"

"Hmm… no, I was right the first time. The idea is to get away from here. And with your funny memory the chances are a whole lot better. Even though you sling the slang pretty well I was worried. Now I'm not."

"Sam, stop talking riddles. What are you figuring on?'

"Okay, kid, I'll lay it on the table." He glanced around, leaned forward, and spoke even more quietly. "We take the money and I spread it around carefully. When the *Asgard* raises, we're signed on as crewmen."

"As apprentices? We wouldn't even have time for ground school. And besides you're too old to 'prentice."

"Use your head! We don't have enough to pay one apprentice fee, let alone two, in any space guild—and the *Asgard* isn't signing 'prentices anyhow. We'll be experienced journeymen in one of the guilds, with records to prove it."

When the idea soaked in, Max was shocked. "But they put you in jail for that!"

"Where do you think you are now?"

"Well, I'm not in jail. And I don't want to be."

"This whole planet is one big jail, and a crowded one at that. What chance have you got? If you aren't born rich, or born into one of the hereditary guilds, what can you do? Sign up with one of the labor companies."

"But there are non-hereditary guilds."

"Can you pay the fee? You've got a year, maybe two until you're too old to 'prentice. If you were sharp with cards you might manage it—but can you earn it? You should live so long! Your old man should have saved it; he left you a farm instead." Sam stopped suddenly, bit his thumb. "Max, I'll play fair. Your old man did leave you a fair start in life. With the money you've got you can go home, hire a shyster, and maybe squeeze that Montgomery item out of the money he swindled for your farm. Then you can buy your apprenticeship in some guild. Do it, kid. I won't stand in your way." He watched Max narrowly.

Max reflected that he had just refused a chance to pick a trade and be given a free start. Maybe he should reconsider. Maybe… "No! That's not what I want. This… this, uh, scheme of yours; how do we do it?"

Sam relaxed and grinned. "My boy!"

Sam got them a room over Percy's restaurant. There he coached him. Sam went out several times and Max's money went with him. When Max protested Sam said wearily, "What do you want? To hold my heart as security? Do you want to come along and scare 'em out of the dicker? The people I have to reason with will be taking chances. Or do you think you can arrange matters yourself? It's your money and my know-how… that's the partnership."

Max watched him leave the first time with gnawing doubts, but Sam came back. Once he brought with him an elderly, gross woman who looked Max over as if he were an animal up for auction. Sam did not introduce her but said, "How about it? I thought a mustache would help."

She looked at Max from one side, then the other. "No," she decided, "that would just make him look made up for amateur theatricals." She touched Max's head with moist, cold fingers; when he drew back, she admonished, "Don't flinch, honey duck. Aunt Becky has to work on you. No, we'll move back his hair line above his temples, thin it out on top, and kill its gloss. Some faint wrinkles tattooed around his eyes.

Mmm… that's all. Mustn't overdo it."

When this fat artist was through Max looked ten years older. Becky asked if he wanted his hair roots killed, or would he prefer to have his scalp return to normal in time? Sam started to insist on permanence, but she brushed him aside. "I'll give him a bottle of 'Miracle Gro'—no extra charge, it's just rubbing alcohol—and he can make a big thing of using it. How about it, lover? You're too pretty to age you permanently."

Max accepted the "Miracle Gro"—hair restored or your money back.

Sam took away his citizen's identification card, returned with another one. It had his right name, a wrong age, his right serial number, a wrong occupation, his own thumb print, and a wrong address. Max looked at it curiously. "It looks real."

"It should. The man who made it makes thousands of real ones—but he charges extra for this." That night Sam brought him a book titled *Ship Economy* and embossed with the seal of the Guild of Space Stewards, Cooks, and Purser's Clerks. "Better stay up all night and see how much you can soak up. The man it belongs to won't sleep more than ten hours even with the jolt Percy slipped into his nightcap. Want a pill to keep you awake?"

"I don't think so." Max examined it. It was in fine print and quite thick. But by five in the morning he had finished it. He woke Sam and gave it back, then went to sleep, his head buzzing with stowage and dunnage, moment arms and mass calculations, hydroponics techniques, cargo records, tax forms, diets, food preservation and preparation, daily, weekly, and quarterly accounts, and how to get rats out of a compartment which must not be evacuated. Simple stuff, he decided—he wondered why such things were considered too esoteric for laymen.

On the fourth day of his incarceration Sam fitted him out with spaceside clothes, none of them new, and gave him a worn plastileather personal record book. The first page stated that he was an accepted brother of the Stewards, Cooks, and Purser's Clerks, having honorably completed his apprenticeship. It listed his skills and it appeared that his dues had been paid each quarter for seven years. What appeared to be his own signature appeared above that of the High Steward, with the seal of the guild embossed through both. The other pages recorded his trips, his efficiency ratings, and other permanent data, each properly signed by the first officers and pursers concerned. He noted with interest that he had been fined three days pay in the *Cygnus* for smoking in an unauthorized place and that he had once for six weeks been allowed to strike for chartsman, having paid the penalty to the Chartsmen & Computers Guild for the chance.

"See anything odd?" asked Sam.

"It all looks funny to me."

"It says you've been to Luna. Everybody's been to Luna. But the ships you served in are mostly out of commission and none of the pursers happens to be in Earthport now. The only starship you ever jumped in was lost on the trip immediately after the one you took. Get me?"

"I think so."

"When you talk to another spaceman, no matter what ship he served in, it's not one you served in—you won't be showing this record to anybody but the purser and your boss anyhow."

"But suppose *they* served in one of these?"

"Not in the *Asgard*. We made darn sure. Now I'm going to take you out on an evening of gaiety. You'll drink warm milk on account of your ulcer and you'll complain when you can't get it. And that's just about all you'll talk about—your symptoms. You'll start a reputation right now for being untalkative; you can't make many mistakes with your mouth shut. Watch yourself, kid, there will be spacemen around you all evening. If you mess it up, I'll leave you dirtside and raise without you. Let me see you walk again."

Max walked for him. Sam cursed gently. "Cripes, you still walk like a farmer. Get your feet out of those furrows, boy."

"No good?"

"It'll have to do. Grab your bonnet. We'll strike while the iron's in the fire and let the bridges fall where they may."

6 — "SPACEMAN" JONES

The *Asgard* was to raise the next day. Max woke early and tried to wake Sam, but this proved difficult. At last the older man sat up. "Oh, what a head! What time is it?"

"About six."

"And you woke me? Only my feeble condition keeps me from causing you to join your ancestors. Go back to sleep."

"But today's the day!"

"Who cares? She raises at noon. We'll sign on at the last minute; that way you won't have time to make a slip."

"Sam? *How do you know they'll take us?*"

"Oh, for Pete's sake! It's all arranged. Now shut up. Or go downstairs and get breakfast—but don't talk to anybody. If you're a pal, you'll bring me a pot of coffee at ten o'clock."

"And breakfast?"

"Don't mention food in my presence. Show some respect." Sam pulled the covers up over his head.

It was nearly eleven thirty when they presented themselves at the gate of the port; ten minutes later before the bus deposited them at the base of the ship. Max looked up at its great, bulging sides but was cut short by a crewman standing at the lift and holding a list. "Names."

"Anderson."

"Jones."

He checked them off. "Get in the ship. You should have been here an hour ago." The three climbed into the cage; it swung clear of the ground and was reeled in, swaying, like a bucket on a well rope.

Sam looked down and shuddered. "Never start a trip feeling good," he advised Max. "It might make you sorry to be leaving." The cage was drawn up inside the ship; the lock closed after them and they stepped out into the *Asgard.* Max was trembling with stage fright.

He had expected to be sworn into the ship's company by the first officer, as called for by law. But his reception was depressingly unceremonious. The crewman who had checked them into the ship told them to follow him; he led them to the Purser's office. There the Chief Clerk had them sign and thumbprint the book, yawning the while and tapping his buck teeth. Max surrendered his forged personal record book, while feeling as if the deception were stamped on it in bold letters. But Mr. Kuiper merely chucked it into a file basket. He then turned to them. "This is a taut ship. You've started by very nearly missing it. That's a poor start."

Sam said nothing. Max said, "Yessir."

The Chief Clerk went on, "Stow your gear, get your chow, and report back." He glanced at a wall chart. "One of you in D-112, the other in E-009."

Max started to ask how to get there, but Sam took his elbow and eased him out of the office. Outside he said, "Don't ask any questions you can avoid. We're on Baker deck, that's all we need to know." Presently they came to a companionway and started back down. Max felt a sudden change in pressure, Sam grinned. "She's sealed. Won't be long now."

They were in D-112, an eight-man bunkroom, and Sam was showing him how to set the lock on the one empty locker when there was a distant call on a loudspeaker. Max felt momentarily dizzy and his weight seemed to pulse. Then it stopped. Sam remarked, "They were a little slow synchronizing the field—or else this bucket of bolts has an unbalanced phaser." He clapped Max on the back. "We made it, kid."

They were in space.

E-009 was down one more deck and on the far side; they left Sam's gear there and started to look for lunch. Sam stopped a passing engineer's mate. "Hey, shipmate—we're fresh caught. Where's the crew's mess?"

"Clockwise about eighty and inboard, this deck." He looked them over. "Fresh caught, eh? Well, you'll find out."

"Like that, huh?"

"Worse. A madhouse squared. If I wasn't married, I'd 'a' stayed dirtside." He went on his way.

Sam said, "Ignore it, kid. All the oldtimers in a ship claim its the worst madhouse in space. A matter of pride." But their next experience seemed to confirm it; the serving window in the mess room had closed at noon, when the ship lifted; Max mournfully resigned himself to living with a tight belt until supper. But Sam pushed on into the galley and came out presently with two loaded trays. They found empty places and sat down.

"How did you do it?"

"Any cook will feed you if you let him explain first what a louse you are and how by rights he doesn't have to."

The food was good—real beef patties, vegetables from the ship's gardens, wheat bread, a pudding, and coffee. Max polished his platter and wondered if he dared ask for seconds. He decided against it. The talk flowed around him and only once was there danger that his tyro status might show up, that being when a computerman asked him a direct question as to his last trip.

Sam stalled it off. "Imperial survey," he answered briefly. "We're both still covered."

The computerman grinned knowingly. "Which jail were you in? The Imperial Council hasn't ordered a secret survey in years."

"This one was so secret they forgot to tell you about it. Write 'em a letter and burn them out about it," Sam stood up. "Finished, Max?"

On the way back to the Purser's Office Max worried as to his probable assignment, checking over in his mind the skills and experience he was alleged to have. He need not have worried; Mr. Kuiper, with a fine disregard for such factors, assigned him as stableman.

The *Asgard* was a combined passenger liner and freighter. She carried this trip Hereford breeding stock, two bulls and two dozen cows, and an assortrnent of other animals consigned for ecologic and economic reasons to colonies—pigs, chickens, sheep, a pair of Angora goats, a family of llamas. It was contrary to Imperial policy to plant most terrestrial fauna on other planets; the colonials were expected to establish economy with indigenous flora and fauna—but some animals have been bred for so many generations for the use of man that they are not easily replaced by exotic creatures. On Gamma Leonis VI (b), New Mars, the saurians known locally as "chuckleheads" or "chucks" could and did replace Percherons as draft animals with greater efficiency and economy—but men disliked them. There was never the familial trust that exists between horses and men; unless a strain of chucks should develop a degree of rapport with men (which seemed unlikely) they would eventually die out and be replaced by the horse, for the unforgivable sin of failing to establish a firm treaty with the most ravenous, intolerant, deadly, and successful of the animals in the explored universe, Man.

There was also a cage of English sparrows. Max never did find out where these noisy little scavengers were believed to be necessary, nor was he acquainted with the complex mathematical analysis by which such conclusions were reached. He simply fed them and tried to keep their quarters clean.

There were cats in the *Asgard*, too, but most of these were free citizens and crewmen, charged with holding down the rats and mice that had gone into space along with mankind. One of Max's duties was to change the sand boxes on each deck and take the soiled ones to the oxydizer for processing. The other cats were pets, property of passengers, unhappy prisoners in the kennel off the stables. The passengers' dogs lived there, too; no dogs were allowed to run free.

Max wanted to look back at Earth and see it as a shrinking globe in the sky, but that was a privilege reserved for passengers. He spent the short period when it would have been possible in hauling (by hand) green timothy hay from the hydroponics airconditioning plant to the stables and in cleaning said stables. It was a task he neither liked nor disliked; by accident he had been assigned to work that he understood.

His immediate boss was the Chief Ship's Steward, Mr. Giordano. Mr. "Gee" split the ship's housekeeping with Mr. Dumont, Chief Passengers' Steward; their domains divided at Charlie deck. Thus Mr. Dumont had passengers' quarters, officers' country, offices, and the control and communication stations, while Giordano was responsible for everything down (or aft) to but not including the engineering space—crew's quarters, mess, and galley, stores, stables and kennel, hydroponics deck, and cargo spaces. Both worked for the Purser, who in turn was responsible to the First Officer.

The organization of starships derived in part from that of military vessels, in part from ocean liners of earlier days, and in part from the circumstances of interstellar travel. The first officer was boss of the ship and a wise captain did not interfere with him. The captain, although by law monarch of his miniature world, turned his eyes outward; the first officer turned his inward. As long as all went well the captain concerned himself only with the control room and with astrogation; the first officer bossed everything else. Even astrogators, communicators, computermen, and chartsmen were under the first officer, although in practice he had nothing to do with them when they were on duty since they worked in the "worry hole" under the captain.

The chief engineer was under the first officer, too, but he was nearly an autonomous satrap. In a taut, well-run ship he kept his bailiwick in such shape that the first officer did not need to worry about it. The chief engineer was responsible not only for the power plant and the Horst-Conrad impellers but for all auxiliary engineering equipment wherever located—for example the pumps and fans of the hydroponics installations, even though the purser, through his chief ship's steward, took care of the farming thereof.

Such was the usual organization of starship liner-freighters and such was the *Asgard*. It was not identical with the organization of a man-of-war and very different from that of the cheerless transports used to ship convicts and paupers out to colonies that were being forced—in *those* ships, the purser's department was stripped to a clerk or two and the transportees did all the work, cooking, cleaning, handling cargo, everything. But the *Asgard* carried paid passengers, some of whom measured their wealth in megabucks; they expected luxury hotel service even lightyears out in space. Of the three main departments of the *Asgard*, astrogation, engineering, and housekeeping, the Purser's was by far the largest.

A first officer could reach that high status from chief astrogator, from chief engineer, or from purser, but only if he were originally an astrogator could he go on to captain. The three officer types were essentially mathematicians, business managers, or physicists; a captain necessarily had to be able to practice the mathematical skill of astrogation. First Officer Walther, as was usually the case with a liner, had formerly been a purser.

The *Asgard* was a little world, a tiny mobile planet. It had its monarch the captain, its useless nobility the passengers, its technical and governing class, and its hewers of wood and drawers of water. It contained flora and fauna in ecological balance; it carried its miniature sun in its power plant. Although its schedule contemplated only months in space, it was capable of staying in space indefinitely. The chef might run out of caviar, but there would be no lack of food, nor of air, nor of heat and light.

Max decided that he was lucky to be assigned to Mr. Giordano rather than to Chief Clerk Kuiper. Mr. Kuiper supervised his clerks minutely, but Mr. Gee did not often stir his fat frame out of his office-stateroom. He was a jovial boss—provided everything ran to suit him. Mr. Gee found it an effort to go all the way down to the stables; once he became convinced that Max was giving the animals proper care and keeping the place clean he gave up inspecting, merely requiring Max to report daily. This gave Giordano more time for his principal avocation, which was distilling a sort of vodka in a cubby in his stateroom, using materials grown in the hydroponds—also in his charge. He carried on a clandestine trade in his product with the crew. By keeping his mouth shut and his ears open Max learned that this was a usual prerogative of a chief ship's steward, ignored as long as the steward had the judgment to limit his operations. The ship, of course, had a wine mess and bar, but that was for the "beasts"—crewmen could not patronize it.

"I was once in a ship," Sam told Max, "where the First clamped down—busted up the still, busted the steward to cleaning decks, and generally threw the book." He stopped to puff on his cigar, a gift from the passenger steward; they were hiding out in Max's stables, enjoying a rest and a gab. "Didn't work out."

"Why not?"

"Use your head. Forces must balance, old son. For every market there is a supplier. That's the key to the nutshell. In a month there was a still in durn near every out-of-the-way compartment in the ship and the crew was so demoralized it wasn't fit to stuff vacuum. So the Captain had a talk with the First and things went back to normal."

Max thought it over. "Sam? Were you that ship's steward?"

"Huh? What gave you that idea?"

"Well… you've been in space before; you no longer make any bones about it. I just thought—well, you've never told me what your guild was, nor why you were on dirt, or why you had to fake it to get back to space again. I suppose it's none of my business."

Sam's habitual cynical smile gave way to an expression of sadness. "Max, a lot of things can happen to a man when he thinks he has the world by the tail. Take the case of a friend of mine, name of Roberts. A sergeant in the Imperial Marines, good record, half a dozen star jumps, a combat decoration or two. A smart lad, boning to make warrant officer. But he missed his ship once—hadn't been on Terra for some time and celebrated too much. Should have turned himself in right away, of course, taken his reduction in rank and lived it down. Trouble was he still had money in his pocket. By the time he was broke and sober it was too late. He never quite had the guts to go back and take his court martial and serve his sentence. Every man has his limits."

Max said presently, "You trying to say you used to be a marine?"

"Me? Of course not, I was speaking of this guy Richards, just to illustrate what can happen to a man when he's not looking. Let's talk of more pleasant things. Kid, what do you plan to do next?"

"What do you mean?"

"Well, what do you figure on doing after this jump?'

"Oh. More of the same, I guess. I like spacing. I suppose I'll try to keep my nose clean and work up to chief steward or chief clerk."

Sam shook his head. "Think it through, kid. What happens when your record in this ship is mailed to the guild? And another copy is mailed to the Department of Guilds and Labor?"

"*What*?"

"I'll tell you. Maybe nothing happens at first, maybe you can space for another cruise. But eventually the red tape unwinds, they compare notes and see that while your ship lists you as an experienced steward's mate, there isn't any Max Jones in their files. Comes the day you ground at Terra and a couple of clowns with sidearms are waiting at the foot of the lift to drag you off to the calabozo."

"But Sam! I thought it was all fixed?"

"Don't blow a gasket. Look at me, I'm relaxed—and it applies to me, too. More so, for I have other reasons we needn't go into to want to let sleeping dogs bury their own dead. As for it being 'all fixed,' it is —everything I promised. You're here, aren't you? But as for the files: old son, it would have taken ten times the money to tamper with guild files, and as for locating a particular microfilm in New Washington and substituting a fake that would show the record you are supposed to have—well, I wouldn't know how to start, though no doubt it could be done, with enough time, money, and finesse."

Max felt sensations almost identical with those he had experienced when Montgomery had announced that the farm was sold. Despite his menial position he liked it aboard ship, he had had no intention of ever doing anything else. He got along with his boss, he was making friends, he was as cozy as a bird in its nest. Now the nest was suddenly torn down. Worse, he was in a trap.

He turned white. Sam put a hand on his shoulder. "Stop spinning, kid! You're not in a jam."

"Jail—"

"Jail my aunt's Sunday hat! You're safe as dirt until we get back. You can walk away from the *Asgard* at Earthport with your wages in your pocket and have days at least, maybe weeks or months, before anyone will notice, either at the guild mother hall or at New Washington. You can lose yourself among four billion people. You won't be any worse off than you were when you first ran into me—you were trying to get lost then, remember?—and you'll have one star trip under your belt to tell your kids about. Or they may never look for you; some clerk may chuck your trip record into the file basket and leave it there until it gets lost rather than bother. Or you might be able to persuade a clerk in Mr. Kuiper's office to lose the duplicates, not mail them in. Nelson, for example; he's got a hungry look." Sam eyed him carefully, then added, "Or you might do what I'm going to do."

Only part of what Sam had said had sunk in. Max let the record play back and gradually calmed down as he began to understand that his situation was not entirely desperate. He was inclined to agree about Nelson, as Nelson had already suggested indirectly that sometimes the efficiency marks on the ship's books were not necessarily the ones that found their way into the permanent records —under certain circumstances. He put the idea aside, not liking it and having no notion anyhow of how to go about offering a bribe.

When he came, in his mental play back, to Sam's last remark, it brought him to attention. "What are *you* going to do?"

Sam eyed the end of his cigar stub. "I'm not going back."

This required no diagram to be understood. But, under Imperial decrees, the suggested offense carried even heavier punishment than faking membership in a guild. Deserting was almost treason. "Keep talking," Max said gruffly.

"Let's run over where we touch this cruise. Garson's Planet—domed colonies, like Luna and Mars. In a domed colony you do exactly what the powers-that-be say, or you stop breathing. You might hide out and have a new identity grafted on, but you would still be in the domes. No good, there's more freedom even back on Terra. Nu Pegasi VI, Halcyon—not bad though pretty cold at aphelion. But it is still importing more than it exports which means that the Imperials run the show and the locals will help dig out a wanted man. Now we come to Nova Terra, Beta Aquarü X—and that, old son, is what the doctor ordered and why the preacher danced."

"You've been there?"

"Once. I should have stayed. Max, imagine a place like Earth, but sweeter than Terra ever was. Better weather, broader richer lands… forests aching to be cut, game that practically jumps into the stew pot. If you don't like settlements, you move on until you've got no neighbors, poke a seed in the ground, then jump back before it sprouts. No obnoxious insects. Practically no terrestrial diseases and no native diseases that like the flavor of our breed. Gushing rivers. Placid oceans. Man, I'm telling you!"

"But wouldn't they haul us back from there?"

"Too big. The colonists *want* more people and they won't help the Imperials. The Imperial Council has a deuce of a time just collecting taxes. They don't even try to arrest a deserter outside the bigger towns." Sam grinned. "You know why?"

"Why?"

"Because it didn't pay. An Imperial would be sent to Back-and-Beyond to pick up someone; while he was looking he would find some golden-haired daughter of a rancher eyeing him—they run to eight or nine kids, per family and there are always lots of eligible fillies, husband-high and eager. So pretty quick he is a rancher with a beard and a new name and a wife. He was a bachelor and he hasn't been home lately—or maybe he's married back on Terra and doesn't want to go home. Either way, even the Imperial Council can't fight human nature."

"I don't want to get married."

"That's your problem. But best of all, the place still has a comfortable looseness about it. No property taxes, outside the towns. Nobody would pay one; they'd just move on, if they didn't shoot the tax collector instead. No guilds—you can plow a furrow, saw a board, drive a truck, or thread a pipe, all the same day and never ask permission. A man can do anything and there's no one to stop him, no one to tell him he wasn't born into the trade, or didn't start young enough, or hasn't paid his contribution. There's more work than there are men to do it and the colonists just don't care."

Max tried to imagine such anarchy and could not, he had never experienced it. "But don't the guilds object?"

"What guilds? Oh, the mother lodges back earthside squawked when they heard, but not even the Imperial Council backed them up. They're not fools—and you don't shovel back the ocean with a fork."

"And that's where you mean to go. It sounds lovely," Max said wistfully.

"I do. It is. There was a girl—oh, she'll be married now; they marry young—but she had sisters. Now here is what I figure on—and you, too, if you want to tag along. First time I hit dirt I'll make contacts. The last time I rate liberty, which will be the night before the ship raises if possible, I'll go dirtside, then in a front door and out the back and over the horizon so fast I won't even be a speck. By the time I'm marked 'late returning' I'll be hundreds of miles away, lying beside a chuckling stream in a virgin wilderness, letting my beard grow and memorizing my new name. Say the word and you'll be on the bank, fishing."

Max stirred uneasily. The picture aroused in him a hillbilly homesickness he had hardly been aware of. But he could not shuffle off his proud *persona* as a spaceman so quickly. "I'll think about it."

"Do that. It's a good many weeks yet, anyhow." Sam got to his feet. "I'd better hurry back before Ole Massa Dumont wonders what's keeping me. Be seeing you, kid—and remember: it's an ill wind that has no turning.

7 — ELDRETH

Max's duties did not take him above "C" deck except to service the cats' sand boxes and he usually did that before the passengers were up. He wanted to visit the control room but he had no opportunity, it being still higher than passengers' quarters. Often an owner of one of the seven dogs and three cats in Max's custody would come down to visit his pet. This sometimes resulted in a tip. At first his cross-grained hillbilly pride caused him to refuse, but when Sam heard about it, he swore at him dispassionately. "Don't be a fool! They can afford it. What's the sense?"

"But I would exercise their mutts anyhow. It's my job." He might have remained unconvinced had it not been that Mr. Gee asked him about it at the end of his first week, seemed to have a shrewd idea of the usual take, and expected a percentage—"for the welfare fund."

Max asked Sam about the fund, was laughed at. "That's a very interesting question. Are there any more questions?"

"I suppose not."

"Max, I like you. But you haven't learned yet that when in Rome, you shoot Roman candles. Every tribe has its customs and what is moral one place is immoral somewhere else. There are races where a son's first duty is to kill off his old man and serve him up as a feast as soon as he is old enough to swing it—civilized races, too. Races the Council recognizes diplomatically. What's your moral judgment on that?"

Max had read of such cultures—the gentle and unwarlike Bnathors, or the wealthy elephantine amphibians of Paldron who were anything but gentle, probably others. He did not feel disposed to pass judgment on nonhumans. Sam went on, "I've known stewards who would make Jelly Belly look like a philanthropist. Look at it from his point of view. He regards these things as prerogatives of his position, as rightful a part of his income as his wages. Custom says so. It's taken him years to get to where he is; he expects his reward."

Sam, Max reflected, could always out-talk him.

But he could not concede that Sam's thesis was valid; there were things that were right and others that were wrong and it was not just a matter of where you were. He felt this with an inner conviction too deep to be influenced by Sam's cheerful cynicism. It worried Max that he was where he was as the result of chicanery, he sometimes lay awake and fretted about it.

But it worried him still more that his deception might come to light. What to do about Sam's proposal was a problem always on his mind.

The only extraterrestrial among Max's charges was a spider puppy from the terrestrian planet Hespera. On beginning his duties in the *Asgard* Max found the creature in one of the cages intended for cats; Max looked into it and a sad, little, rather simian face looked back at him. "Hello, Man."

Max knew that some spider puppies had been taught human speech, after a fashion, but it startled him; he jumped back. He then recovered and looked more closely. "Hello yourself," he answered. "My, but you are a fancy little fellow." The creature's fur was a deep, rich green on its back, giving way to orange on the sides and blending to warm cream color on its little round belly.

"Want out," stated the spider puppy.

"I can't let you out. I've got work to do." He read the card affixed to the cage: "Mr. Chips" it stated, *Pseudocanis hexapoda hesperae,* Owner: Miss E. Coburn, A-092; there followed a detailed instruction as to diet and care. Mr. Chips ate grubs, a supply of which was to be found in freezer compartment H-118, fresh fruits and vegetables, cooked or uncooked, and should receive iodine if neither seaweed nor artichokes was available. Max thumbed through his mind, went over what he had read about the creatures, decided the instructions were reasonable.

"*Please* out!" Mr. Chips insisted.

It was an appeal hard to resist. No maiden fayre crying from a dungeon tower had ever put it more movingly. The compartment in which the cats were located was small and the door could be fastened; possibly Mr. Chips could be allowed a little run—but later; just now he had to take care of other animals.

When Max left, Mr. Chips was holding onto the bars and sobbing gently. Max looked back and saw that it was crying real tears; a drop trembled on the tip of its ridiculous little nose; it was hard to walk out on it. He had finished with the stables before tackling the kennel; once the dogs and cats were fed and their cages policed he was free to give attention to his new friend. He had fed it first off, which had stopped the crying. When he returned, however, the demand to be let out resumed.

"If I let you out, will you get back in later?"

The spider puppy considered this. A conditional proposition seemed beyond its semantic attainments, for it repeated, "Want out." Max took a chance.

Mr. Chips landed on his shoulder and started going through his pockets. "Candy," it demanded. "Candy?"

Max stroked it. "Sorry, chum. I didn't know."

"Candy?"

"No candy." Mr. Chips investigated personally, then settled in the crook of Max's arm, prepared to spend a week or more. It wasn't, Max decided, much like a puppy and certainly not like a spider, except that six legs seemed excessive. The two front ones had little hands; the middle legs served double duty. It was more like a monkey, but felt like a cat. It had a slightly spicy fragrance and seemed quite clean.

Max tried talking to it, but found its intellectual attainments quite limited. Certainly it used human words meaningfully but its vocabulary was not richer than that which might be expected of a not-too-bright toddler.

When Max tried to return it to its cage there ensued twenty minutes of brisk exercise, broken by stalemates. Mr. Chips swarmed over the cages, causing hysterics among the cats. When at last the spider puppy allowed itself to be caught it still resisted imprisonment, clinging to Max and sobbing. He ended by walking it like a baby until it fell asleep.

This was a mistake. A precedent had been set and thereafter Max was not permitted to leave the kennel without walking the baby.

He wondered about the "Miss Coburn" described on the tag as Mr. Chips' owner. All of the owners of cats and dogs had shown up to visit their pets, but Mr. Chips remained unvisited. He visualized her as a sour and hatchet-faced spinster who had received the pet as a going-away present and did not appreciate it. As his friendship with the spider puppy grew his mental picture of Miss E. Coburn became even less attractive.

The *Asgard* was over a week out and only days from its first spatial transition before Max had a chance to compare conception with fact. He was cleaning the stables, with Mr. Chips riding his shoulder and offering advice, when Max heard a shrill voice from the kennel compartment. "Mr. *Chips!* Chipsie! Where are you?"

The spider puppy sat up suddenly and turned its head. Almost immediately a young female appeared in the door; Mr. Chips squealed, "Ellie!" and jumped to her arms. While they were nuzzling each other Max looked her over. Sixteen, he judged, or seventeen. Or maybe even eighteen—shucks, how was a fellow to tell when womenfolk did such funny things to their faces? Anyhow she was no beauty and the expression on her face didn't help it any.

She looked up at him and scowled. "What were you doing with Chipsie? Answer me that!"

It got his back fur up. "Nothing," he said stiffly. "If you will excuse me, ma'am, I'll get on with my work." He turned his back and bent over his broom.

She grabbed his arm and swung him around. "Answer me! Or… or

—I'll tell the Captain, that's what I'll do!"

Max counted ten, then just to be sure, recalled the first dozen 7-place natural logarithms. "That's your privilege, ma'am," he said with studied calmness, "but first, what's your name and what is your business here? I'm in charge of these compartments and responsible for these animals—as the Captain's representative." This he knew to be good space law, although the concatenation was long.

She looked startled. "Why, I'm Eldreth Coburn," she blurted as if anyone should know.

"And your business?"

"I came to see Mr. Chips—of course!"

"Very well, ma'am. You may visit your pet for a reasonable period," he added, quoting verbatim from his station instruction sheet. "Then he goes back in his cage. Don't disturb the other animals and don't feed them. That's orders."

She started to speak, decided not to and bit her lip. The spider puppy had been looking from face to face and listening to a conversation far beyond its powers, although it may have sensed the emotions involved. Now it reached out and plucked Max's sleeve. "Max," Mr. Chips announced brightly. "Max!"

Miss Coburn again looked startled. "Is that your name?"

"Yes, ma'am. Max Jones. I guess he was trying to introduce me. Is that it, old fellow?"

"Max," Mr. Chips repeated firmly. "Ellie."

Eldreth Coburn looked down, then looked up at Max with a sheepish smile. "You two seem to be friends. I guess I spoke out of turn. Me and my mouth."

"No offense meant I'm sure, ma'am."

Max had continued to speak stiffly; she answered quickly, "Oh, but I was rude! I'm sorry—I'm always sorry afterwards. But I got panicky when I saw the cage open and empty and I thought I had lost Chipsie."

Max grinned grudgingly. "Sure. Don't blame you a bit. You were scared."

"That's it—I was scared." She glanced at him. "Chipsie calls you Max. May I call you Max?"

"Why not? Everybody does—and it's my name."

"And you call me Eldreth, Max. Or Ellie."

She stayed on, playing with the spider puppy, until Max had finished with the cattle. She then said reluctantly, "I guess I had better go, or they'll be missing me."

"Are you coming back?"

"Oh, of course!"

"Ummm… Miss Eldreth…"

"Ellie."

"—May I ask a question?" He hurried on, "Maybe it's none of my business, but what took you so long? That little fellow has been awful lonesome. He thought you had deserted him."

"Not 'he'—'she'."

"Huh?"

"Mr. Chips is a girl," she said apologetically. "It was a mistake anyone could make. Then it was too late, because it would confuse her to change her name."

The spider puppy looked up brightly and repeated, "'Mr. Chips is a girl.' Candy, Ellie?"

"Next time, honey bun."

Max doubted if the name was important, with the nearest other spider puppy lightyears away. "You didn't answer my question?"

"Oh. I was so mad about that I wanted to bite. They wouldn't let me."

"Who's 'they'? Your folks?"

"Oh, no! The Captain and Mrs. Dumont." Max decided that it was almost as hard to extract information from her as it was from Mr. Chips. "You see, I came aboard in a stretcher—some silly fever, food poisoning probably. It couldn't be much because I'm tough. But they kept me in bed and when the Surgeon did let me get up, Mrs. Dumont said I mustn't go below 'C' deck. She had some insipid notion that it wasn't proper."

Max understood the stewardess's objection; he had already discovered that some of his shipmates were a rough lot—though he doubted that any of them would risk annoying a girl passenger. Why, Captain Blaine would probably space a man for that.

"So I had to sneak out. They're probably searching for me right now. I'd better scoot."

This did not fit in with Mr. Chips' plans; the spider puppy clung to her and sobbed, stopping occasionally to wipe tears away with little fists. "Oh, dear!"

Max looked perturbed. "I guess I've spoiled him—her. Mr. Chips, I mean." He explained how the ceremony of walking the baby had arisen.

Eldreth protested, "But I must go. What'll I do?"

"Here, let's see if he—she—will come to me." Mr. Chips would and did. Eldreth gave her a pat and ran out, whereupon Mr. Chips took even longer than usual to doze off. Max wondered if spider puppies could be hypnotized; the ritual was getting monotonous.

Eldreth showed up next day under the stern eye of Mrs. Dumont. Max was respectful to the stewardess and careful to call Eldreth "Miss Coburn." She returned alone the next day. He looked past her and raised his eyebrows. "Where's your chaperone?"

Eldreth giggled. "La Dumont consulted her husband and he called in your boss—the fat one. They agreed that you were a perfect little gentleman, utterly harmless. How do you like that?"

Max considered it. "Well, I'm an ax murderer by profession, but I'm on vacation."

"That's nice. What have you got there?"

It was a three-dimensional chess set. Max had played the game with his uncle, it being one that all astrogators played. Finding that some of the chartsmen and computermen played it, he had invested his tips in a set from the ship's slop chest. It was a cheap set, having no attention lights and no arrangements for remote-control moving, being merely stacked transparent trays and pieces molded instead of carved, but it sufficed.

"It's solid chess. Ever seen it?"

"Yes. But I didn't know you played it."

"Why not? Ever play flat chess?"

"Some."

"The principles are the same, but there are more pieces and one more direction to move. Here, I'll show you.

She sat tailor-fashion opposite him and he ran over the moves. "These are robot freighters… pawns. They can be commissioned anything else if they reach the far rim. These four are starships; they are the only ones with funny moves, they correspond with knights. They have to make interspace transitions, always off the level they're on to some other level and the transition has to be related a certain way, like this—or this. And this is the Imperial flagship; it's the one that has to be checkmated. Then there is… " They ran through a practice game, with the help of Mr. Chips, who liked to move the pieces and did not care whose move it was.

Presently he said, "You catch on pretty fast."

"Thanks."

"Of course, the *real* players play four-dimensional chess."

"Do you?"

"Well, no. But I hope to learn some day. It's just a matter of holding in your mind one more spatial relationship. My uncle used to play it. He was going to teach me, but he died." He found himself explaining about his uncle. He trailed off without mentioning his own disappointment.

Eldreth picked up one of the starship pieces from a tray. "Say, Max, we're pretty near our first transition, aren't we?"

"What time is it?"

"Uh, sixteen twenty-one—say, I'd better get upstairs."

"Then it's, uh, about thirty-seven hours and seven minutes, according to the computer crew."

"Mmm… you seem to know about such things. Could you tell me just what it is we do? I heard the Astrogator talking about it at the table but I couldn't make head nor tail. We sort of duck into a space warp; isn't that right?"

"Oh no, not a space warp. That's a silly term—space doesn't 'warp' except in places where *pi* isn't exactly three point one four one five nine two six five three five eight nine seven nine three two three eight four six two six four three three eight three two seven, and so forth—like inside a nucleus. But we're heading out to a place where space is *really* flat, not just mildly curved the way it is near a star. Anomalies are always flat, otherwise they couldn't fit together—be congruent."

She looked puzzled. "Come again?"

"Look, Eldreth, how far did you go in mathematics?"

"Me? I flunked improper fractions. Miss Mimsey was very vexed with me."

"Miss Mimsey?"

"Miss Mimsey's School for Young Ladies, so you see I can listen with an open mind." She made a face. "But you told me that all you went to was a country high school and didn't get to finish at that. Huh?"

"Yes, but I learned from my uncle. He was a great mathematician. Well, he didn't have any theorems named after him—but a great one just the same, *I* think." He paused. "I don't know exactly how to tell you; it takes equations. Say! Could you lend me that scarf you're wearing for a minute?"

"Huh? Why, sure." She removed it from her neck.

It was a photoprint showing a stylized picture of the solar system, a souvenir of Solar Union Day. In the middle of the square of cloth was the conventional sunburst surrounded by circles representing orbits of solar planets, with a few comets thrown in. The scale was badly distorted and it was useless as a structural picture of the home system, but it sufficed. Max took it and said, "Here's Mars."

Eldreth said, "You read it. That's cheating."

"Hush a moment. Here's Jupiter. To go from Mars to Jupiter you have to go from here to here, don't you?"

"Obviously."

"But suppose I fold it so that Mars is on top of Jupiter? What's to prevent just stepping across?"

"Nothing, I guess. Except that what works for that scarf wouldn't work very well in practice. Would it?"

"No, not that near to a star. But it works fine after you back away from a star quite a distance. You see, that's just what an anomaly is, a place where space is folded back on itself, turning a long distance into no distance at all."

"Then space *is* warped."

"No, no, no! Look, I just folded your scarf. I didn't stretch it out of shape! I didn't even wrinkle it. Space is the same way; it's crumpled like a piece of waste paper—but it's not warped, just crumpled. Through some extra dimensions, of course."

"I don't see any 'of course' about it."

"The math of it is simple, but it's hard to talk about because you can't see it. Space—*our* space—may be crumpled up small enough to stuff into a coffee cup, all hundreds of thousands of lightyears of it. A four-dimensional coffee cup, of course."

She sighed. "I don't see how a four-dimensional coffee cup could even hold coffee, much less a whole galaxy."

"No trouble at all. You could stuff this sheer scarf into a thimble. Same principle. But let me finish. They used to think that nothing could go faster than light. Well, that was both right and wrong. It…"

"How can it be both?"

"That's one of the Horst anomalies. You can't go faster than light, not in our space. If you do, you burst out of it. But if you do it where space is folded back and congruent, you pop right back into our own space again—but a long way off. How far off depends on how it's folded. And that depends on the mass in the space, in a complicated fashion that can't be described in words but can be calculated."

"But suppose you do it just anywhere?"

"That's what happened to the first ones who tried it. They didn't come back. And that's why surveys are dangerous; survey ships go poking through anomalies that have been calculated but never tried. That's also why astrogators get paid so much. They have to head the ship for a place you can't see and they have to put the ship there just under the speed of light and they have to give it the gun at just the right world point. Drop a decimal point or use a short cut that covers up an indeterminancy and it's just too bad. Now we've been gunning at twenty-four gee ever since we left the atmosphere. We don't feel it of course because we are carried inside a discontinuity field at an artificial one gravity—that's another of the anomalies. But we're getting up close to the speed of light, up against the Einstein Wall; pretty soon we'll be squeezed through like a watermelon seed between your finger and thumb and we'll come out near Theta Centauri fifty-eight lightyears away. Simple, if you look at it right."

She shivered. "*If* we come out, you mean."

"Well… I suppose so. But it's not as dangerous as helicopters. And look at it this way: if it weren't for the anomalies, there never would have been any way for us to reach the stars; the distances are too great. But looking back, it is obvious that all that emptiness couldn't be real—there *had* to be the anomalies. That's what my uncle used to say."

"I suppose he must have been right, even if I don't understand it." She scrambled to her feet. "But I do know that I had better hoof it back upstairs, or Mrs. Dumont may change her mind." She hugged Mr. Chips and shoved the little creature into Max's arms. "Walk the baby—that's a pal."

8 — THREE WAYS TO GET AHEAD

Max intended to stay awake during the first transition, but he slept through it. It took place shortly after five in the morning, ship's time. When he was awakened by idlers' reveille at six it was all over. He jerked on his clothes, fuming at not having awakened earlier, and hurried to the upper decks. The passageways above Charlie deck were silent and empty; even the early risers among the passengers would not be up for another hour. He went at once to the Bifrost Lounge and crossed it to the view port, placed there for the pleasure of passengers.

The stars looked normal but the familiar, age-old constellations were gone. Only the Milky Way, our own galaxy, seemed as usual—to that enormous spiral of stars, some hundred thousand lightyears across, a tiny displacement of less than sixty lightyears was inconsequential.

One extremely bright yellow-white star was visible; Max decided that it must be Theta Centauri, sun of Garson's Planet, their first stop. He left shortly, not wanting to chance being found loafing in passengers' country. The sand boxes which constituted his excuse were then replaced with greater speed than usual and he was back in crew's quarters in time for breakfast.

The passage to Garson's Planet took most of a month even at the high boost possible to Horst-Conrad ship. Eldreth continued to make daily trips to see Mr. Chips—and to talk with and play 3-dee chess with Max. He learned that while she had not been born on Hespera, but in Auckland on Terra, nevertheless Hespera was her home. "Daddy sent me back to have them turn me into a lady, but it didn't take."

"What do you mean?"

She grinned. "I'm a problem. That's why I've been sent for. You're in check, Max. Chipsie! Put that back. I think the little demon is playing on your side."

He gradually pieced together what she meant. Miss Mimsey's school had been the third from which she had been expelled. She did not like Earth, she was determined to go home, and she had created a reign of terror at each institution to which she had been entrusted.

Her widower father had been determined that she must have a "proper" education, but she had been in a better strategic position to impose her will—her father's Earthside attorneys had washed their hands of her and shipped her home.

Sam made the mistake of joshing Max about Eldreth. "Have you gotten her to set the day yet, old son?"

"Who set what day?"

"Now, now! Everybody in the ship knows about it, except possibly the Captain. Why play dumb with your old pal?"

"I don't know what you are talking about!"

"I wasn't criticizing, I was admiring. I'd never have the nerve to plot so high a trajectory myself. But as grandpop always said, there are just three ways to get ahead; sweat and genius, getting born into the right family, or marrying into it. Of the three, marrying the boss's daughter is the best, because—Hey! Take it easy!" Sam skipped back out of range.

"Take that back!"

"I do, I do. I was wrong. But my remarks were inspired by sheer admiration. Mistaken, I admit. So I apologize and withdraw the admiration."

"But… " Max grinned in spite of himself. It was impossible to stay angry at Sam. Sure, the man was a scamp, probably a deserter, certainly a belittler who always looked at things in the meanest of terms, but—well, there it was. Sam was his friend.

"I knew you were joking. How could I be figuring on getting married when you and I are going to…"

"Keep your voice down." Sam went on quietly, "You've made up your mind?"

"Yes. It's the only way out, I guess. I don't want to go back to Earth."

"Good boy! You'll never regret it." Sam looked thoughtful. "We'll need money."

"Well, I'll have some on the books."

"Don't be silly. You try to draw more than spending money and they'll never let you set foot on dirt. But don't worry—save your tips, all that Fats will let you keep, and I'll get us a stake. It's my turn."

"How?"

"Lots of ways. You can forget it."

"Well… all right. Say, Sam, just what did you mean when you—I mean, well, suppose I did want to marry Ellie—I don't of course; she's just a kid and anyhow I'm not the type to marry—but just supposing? Why should anybody care?"

Sam looked surprised. "You don't know?"

"Why would I be asking?"

"You don't know who she is?"

"Huh? Her name's Eldreth Coburn and she's on her way home to Hespera, she's a colonial. What of it?"

"You poor boy! She didn't mention that she is the only daughter of His Supreme Excellency, General Sir John FitzGerald Coburn, O.B.E., K.B., O.S.U., and probably X.Y.Z., Imperial Ambassador to Hespera and Resident Commissioner Plenipotentiary?"

"*Huh?* Oh my gosh!"

"Catch on, kid? With the merest trifle of finesse you can be a remittance man, at least. Name your own planet, just as long as it isn't Hespera."

"Oh, go boil your head! She's a nice kid anyhow."

Sam snickered. "She sure is. As grandpop used to say, 'It's an ill wind that gathers no moss.'"

The knowledge disturbed Max. He had realized that Eldreth must be well to do—she was a passenger, wasn't she? But he had no awe of wealth. Achievement as exemplified by his uncle held much more respect in his eyes. But the notion that Eldreth came from such an impossibly high stratum—and that he, Maximilian Jones, was considered a fortune-hunter and social climber on that account—was quite upsetting.

He decided to put an end to it. He started by letting his work pile up so that he could say truthfully that he did not have time to play three-dee chess. So Ellie pitched in and helped him. While he was playing the unavoidable game that followed he attempted a direct approach. "See here, Ellie, I don't think you ought to stay down here and play three-dee chess with me. The other passengers come down to see their pets and they notice. They'll gossip."

"Pooh!"

"I mean it. Oh, you and I know it's all right, but it doesn't look right."

She stuck out her lower lip. "Am I going to have trouble with you? You talk just like Miss Mimsey."

"You can come down to see Chipsie, but you'd better come down with one of the other pet owners."

She started to make a sharp answer, then shrugged, "Okay, this isn't the most comfortable place anyhow. From now on we play in Bifrost Lounge, afternoons when your work is done and evenings."

Max protested that Mr. Giordano would not let him; she answered quickly, "Don't worry about your boss. I can twist him around my little finger." She illustrated by gesture.

The picture of the gross Mr. Gee in such a position slowed up Max's answer, but he finally managed to get out, "Ellie, crew members can't use the passenger lounge. It's..."

"They can so. More than once, I've seen Mr. Dumont having a cup of coffee there with Captain Blaine."

"You don't understand. Mr. Dumont is almost an officer, and if the Captain wants him as his guest, well, that's the Captain's privilege."

"You'd be my guest."

"No, I wouldn't be." He tried to explain to her the strict regulation that crew members were not to associate with passengers. "The Captain would be angry if he could see us right now—not at you, at me. If he caught me in the passengers' lounge he'd kick me all the way clown to 'H' deck."

"I don't believe it."

"But… " He shrugged. "All right. I'll come up this evening. He won't kick me, actually; that would be beneath him. He'll just send Mr. Dumont over to tell me to leave, then he'll send for me in the morning. I don't mind being fined a month's pay if that is what it takes to show you the way things are."

He could see that he had finally reached her. "Why, I think that's perfectly rotten! Everybody is equal. Everybody! That's the law."

"They are? Only from on top."

She got up suddenly and left. Max again had to soothe Mr. Chips, but there was no one to soothe him. He decided that the day that he and Sam disappeared over a horizon and lost themselves could not come too soon.

Eldreth returned next day but in company with a Mrs. Mendoza, the devoted owner of a chow who looked much like her. Eldreth treated Max with the impersonal politeness of a lady "being nice" to servants, except for a brief moment when Mrs. Mendoza was out of earshot.

"Max?"

"Yes, Miss?"

"I'll 'Yes, Miss' you! Look, Max, what was your uncle's name? Was it *Chester* Jones?"

"Why, yes, it was. But why…"

"Never mind." Mrs. Mendoza rejoined them. Max was forced to drop it.

The following morning the dry-stores keeper sought him out. "Hey, Max! The Belly wants you. Better hurry—I think you're in some sort of a jam."

Max worried as he hurried. He couldn't think of anything he had done lately; he tried to suppress the horrid fear that Ellie was involved.

It was clear that Mr. Giordano was not pleased but all that he said was, "Report to the Purser's Office. Jump." Max jumped.

The Purser was not there; Mr. Kuiper received him and looked him over with a cold eye. "Put on a clean uniform and make it quick. Then report to the Captain's cabin."

Max stood still and gulped. Mr. Kuiper barked, "Well? Move!"

"Sir," Max blurted, "I don't know where the Captain's cabin is."

"What? I'll be switched! Able deck, radius nine oh and outboard." Max moved.

The Captain was in his cabin. With him was Mr. Samuels the Purser, Mr. Walther the First Officer, and Dr. Hendrix the Astrogator. Max concluded that whatever it was he was about to be tried for, it could be nothing trivial. But he remembered to say, "Steward's Mate Third Class Jones reporting, sir."

Captain Blaine looked up. "Oh, yes. Find a chair." Max found one, sat down on the edge of it. The Captain said to the First Officer, "Under the circumstances, Dutch, I suppose it's the best thing to do—though it seems a little drastic. You agree, Hal?"

The Purser agreed. Max wondered just how drastic it was and whether he would live through it.

"We'll log it as an exception, then, Doc, and I'll write up an explanation for the board. After all, regulations were made to be broken. That's the end of it." Max decided that they were simply going to space him and explain it later.

The Captain turned back to his desk in a manner that signified that the meeting was over. The First Officer cleared his throat. "Captain… " He indicated Max with his eyes.

Captain Blaine looked up again. "Oh, yes! Young man, your name is Jones?"

"Yessir."

"I've been looking over your record. I see that you once tried out for chartsman for a short time in the *Thule?*"

"Uh, yes, Captain."

"Didn't you like it?"

"Well, sir." Max asked himself what Sam would say when confronted by such a ghost. "It was like this… to tell you the truth I didn't do much except empty ash trays in the Worry—in the control room." He held his breath.

The Captain smiled briefly. "It can sometimes work out that way. Would you be interested in trying it again?"

"What? Yes, *sir!*"

"Dutch?"

"Captain, ordinarily I see no point in a man striking twice for the same job. But there is this personal matter."

"Yes, indeed. You can spare him, Hal?"

"Oh, certainly, Captain. He's hardly a key man where he is." The Purser smiled. "Bottom deck valet."

The Captain smiled and turned to the Astrogator. "I see no objection, Doc. It's a guild matter, of course."

"Kelly is willing to try him. He's short a man, you know."

"Very well, then…"

"Just a moment, Captain." The Astrogator turned to Max. "Jones… you had a relative in my guild?"

"My uncle, sir. Chester Jones."

"I served under him. I hope you have some of his skill with figures."

"Uh, I hope so, sir."

"We shall see. Report to Chief Computerman Kelly."

Max managed to find the control room without asking directions, although he could hardly see where he was going.

9 — CHARTSMAN JONES

The change in Max's status changed the whole perspective of his life. His social relations with the other crew members changed not entirely for the better. The control room gang considered themselves the gentry of the crew, a status disputed by the power technicians and resented by the stewards. Max found that the guild he was leaving no longer treated him quite as warmly while the guild for which he was trying out did not as yet accept him.

Mr. Gee simply ignored him—would walk right over him if Max failed to jump aside. He seemed to regard Max's trial promotion as a personal affront.

It was necessary for him to hit the slop chest for dress uniforms. Now that his duty station was in the control room, now that he must pass through passengers' country to go to and from work, it was no longer permissible to slouch around in dungarees. Mr. Kuiper let him sign for them; his cash would not cover it. He had to sign as well for the cost of permission to work out of his guild, with the prospect of going further in debt to both guilds should he be finally accepted. He signed cheerfully.

The control department of the *Asgard* consisted of two officers and five men—Dr. Hendrix the Astrogator, his assistant astrogator Mr. Simes, Chief Computerman Kelly, Chartsman First Class Kovak, Chtsmn 2/C Smythe, and computermen Noguchi and Lundy, both second class. There was also "Sack" Bennett, communicator first class, but he was not really a part of the control gang, even though his station was in the Worry Hole; a starship was rarely within radio range of anything except at the very first and last parts of a trip.

Bennett doubled as Captain Blaine's secretary and factotum and owed his nickname to the often-stated belief of the others that he spent most of his life in his bunk.

Since the *Asgard* was always under boost a continuous watch was kept; not for them were the old, easy days of rocket ships, with ten minutes of piloting followed by weeks of free fall before more piloting was required. Since the *Asgard* carried no apprentice astrogator, there were only two officers to stand watches (Captain Blaine was necessarily an astrogator himself, but skippers do not stand watches); this lack was made up by Chief Computerman Kelly, who stood a regular watch as control officer-of-thewatch. The other ratings stood a watch in four; the distinction between a computerman and a chartsman was nominal in a control room dominated by "Decimal Point" Kelly—what a man didn't know he soon learned, or found another ship.

Easy watches for everyone but Max—he was placed on watch-and-watch for instruction, four hours on followed by four hours off in which he must eat, keep himself clean, relax, and—if he found time—sleep.

But he thrived on it, arriving early and sometimes having to be ordered out of the Worry Hole. Not until much later did he find out that this stiff regime was Kelly's way of trying to break him, discover his weakness and get rid of him promptly if he failed to measure up.

Not all watches were pleasant. Max's very first watch was under Mr. Simes. He crawled up the hatch into the control room and looked around him in wonderment. On four sides were the wonderfully delicate parallax cameras. Between two of them Lundy sat at the saddle of the main computer; he looked up and nodded but did not speak. Mr. Simes sat at the control console, facing the hatch; he must have seen Max but gave no sign of it.

There were other instruments crowded around the walls, some of which Max recognized from reading and from seeing pictures, some of which were strange—telltales and gauges from each of the ship's compartments, a screen to reproduce the view aft or "below," microphone and controls for the ship's announcing system, the "tank" or vernier stereograph in which plates from the parallax cameras could be compared with charts, spectrostellograph, dopplerscope, multipoint skin temperature recorder, radar repeater for landing, too many things to take in at once.

Overhead through the astrogation dome was the starry universe. He stared at it, mouth agape. Living as he had been, inside a steel cave, he had hardly seen the stars; the firmament had been more with him back home on the farm.

"Hey! You!"

Max shook his head and found Mr. Simes looking at him. "Come here." Max did so, the assistant astrogator went on, "Don't you know enough to report to the watch officer when you come on duty?"

"Uh—sorry, sir."

"Besides that, you're late." Max slid his eyes to the chronometer in the console; it still lacked five minutes of the hour. Simes continued, "A sorry state of affairs when crewmen relieve the watch later than the watch officer. What's your name?"

"Jones, sir."

Mr. Simes sniffed. He was a red-faced young man with thin, carroty hair and a sniff was his usual conversational embellishment, at least with juniors. "Make a fresh pot of coffee."

"Aye aye, sir." Max started to ask where and how, but Mr. Simes had gone back to his reading. Max looked helplessly at Lundy, who indicated a direction with his eyes. Behind the chart safe Max found a coffee maker and under it cups, saucers, sugar, and tins of cream.

He burned himself before getting the hang of the gear's idiosyncrasies. Mr. Simes accepted the brew without looking at him. Max wondered what to do next, decided to offer a cup to Lundy. The computerman thanked him quietly and Max decided to risk having one himself, since it seemed to be accepted. He took it over beside the computer to drink it.

He was still doing so when the watch officer spoke up. "What is this? A tea party? Jones!"

"Yes, sir?"

"Get the place policed up. Looks as if a herd of chucks had been wallowing in it."

The room seemed clean, but Max found a few scraps of paper to pick up and stuff down the chute, after which he wiped already-gleaming brightwork. He had started to go over things a second time when Lundy motioned him over. Max then helped Lundy change plates in the parallax cameras and watched him while he adjusted the electronic timer. Mr. Simes pushed the ready button himself, which seemed to be his sole work during the watch.

Lundy removed the plates and set them up in the tank for chart comparison, took the readings and logged them. Max gave him nominal help and gathered some notion of how it was done, after which he again wiped brightwork.

It was a long watch. He went to his bunk drained of the elation he had felt.

But watches with Dr. Hendrix and with Chief Kelly were quite different. The Worry Hole was a jolly place under Kelly; he ruled as a benevolent tyrant, shouting, cursing, slandering the coffee, slurring his juniors and being sassed back. Max never touched a polish rag when

Kelly was at control; he was kept too busy not merely helping but systematically studying everything in the room. "We haven't a condemned thing to do," Kelly shouted at him, "until we hit Carson's Folly. Nothing to do but to ride this groove down until we hit dirt. So you, my laddy buck, are going to do plenty. When we get there you are going to know this condemned hole better than your mother knew your father—or you can spend your time there learning what you've missed while your mates are dirtside getting blind. Get out the instruction manual for the main computer, take off the back plate and get lost in them wires. I don't want to see anything but your ugly behind the rest of this watch."

Within ten minutes Kelly was down on his knees with him, helping him trace the intricate circuits.

Max learned, greatly assisted by his photographic memory and still more by the sound grounding in theory he had gotten from his uncle. Kelly was pleased. "I reckon you exaggerated a mite when you said you hadn't learned anything in the *Thule*."

"Well, not much."

"Johansen have the Worry Hole when you were striking?"

"Uh, yes." Max hoped frantically that Kelly would not ask other names.

"I thought so. That squarehead wouldn't tell his own mother how old he was."

There came a watch when Kelly trusted him to do a dry run for a transition approach on the computer, with Noguchi handling the tables and Kelly substituting for the astrogator by following records of the actual transition the ship had last made. The programming was done orally, as is the case when the astrogator is working under extreme pressure from latest data, just before giving the crucial signal to boost past the speed of light.

Kelly took it much more slowly than would happen in practice, while Noguchi consulted tables and called out figures to Max. He was nervous at first, his fingers trembling so that it was hard to punch the right keys—then he settled down and enjoyed it, feeling as if he and the machine had been born for each other.

Kelly was saying, "—times the binary natural logarithm of zero point eight seven oh nine two." Max heard Noguchi's voice call back the datum while he thumbed for the page—but in his mind Max saw the page in front of his eyes long before Noguchi located it; without conscious thought he depressed the right keys.

"Correction!" sang out Kelly. "Look, meathead, you don't put in them figures; you wait for translation by Noggy here. How many times I have to tell you?"

"But I did—" Max started, then stopped. Thus far he had managed to keep anyone aboard the *Asgard* from learning of his embarrassingly odd memory.

"You did what?" Kelly started to clear the last datum from the board, then hesitated. "Come to think of it, you can't possibly feed decimal figures into that spaghetti mill. Just what *did* you do?"

Max knew he was right and hated to appear not to know how to set up a problem. "Why, I put in the figures Noguchi was about to give me."

"How's that again?" Kelly stared at him. "You a mind reader?"

"No. But I put in the right figures."

"Hmm… " Kelly bent over the keyboard. "Call 'em off, Noggy." The computerman reeled off a string of ones and zeroes, the binary equivalent of the decimal expression Kelly had given him; Kelly checked the depressed keys, his lips moving in concentration. He straightened up. "I once saw a man roll thirteen sevens with honest dice. Was it fool luck, Max?"

"No."

"Well! Noggy, gimme that book." Kelly went through the rest of the problem, giving Max raw data and the operations to be performed, but not translating the figures into the binary notation the computer required. He kept thumbing the book and glancing over Max's shoulder. Max fought off stage fright and punched the keys, while sweat poured into his eyes.

At last Kelly said, "Okay. Twist its tail." Max flipped the switch which allowed the computer to swallow the program and worry it for an instant; the answer popped out in lights, off or on—the machine's equivalent of binary figures.

Kelly translated the lights back into decimal notation, using the manual. He then glanced at the recorded problem. He closed the record book and handed it to Noguchi. "I think I'll have a cup of coffee," he said quietly and walked away.

Noguchi reopened it, looked at the lights shining on the board and consulted the manual, after which he looked at Max very oddly. Max saw Kelly staring at him over a cup with the same expression. Max reached up and cleared the board entirely; the lights went out. He got down out of the computerman's saddle. Nobody said anything.

Max's next watch was with Dr. Hendrix. He enjoyed watches with the Astrogator almost as much as those with Kelly; Dr. Hendrix was a friendly and soft-spoken gentleman and gave as much attention to training Max as Kelly did. But this time Kelly lingered on after being relieved—in itself nothing, as the Chief Computerman frequently consulted with, or simply visited with, the Astrogator at such times. But today, after relieving the watch, Dr. Hendrix said pleasantly, "Kelly tells me that you are learning to use the computer, Jones?"

"Uh, yes, sir."

"Very well, let's have a drill." Dr. Hendrix dug out an old astrogation log and selected a transition-approach problem similar to the one Max had set up earlier. Kelly took the manual, ready to act as his "numbers boy"—but did not call the translations. Max waited for the first one; when it did not come, he read the figures from the page shining in his mind and punched them in.

It continued that way. Kelly said nothing, but wet his lips and checked what Max did each time the doctor offered a bit of the problem. Kovak watched from nearby, his eyes moving from actor to actor.

At last Dr. Hendrix closed the book. "I see," he agreed, as if it were an everyday occurrence. "Jones, that is an extremely interesting talent. I've read of such cases, but you are the first I have met. You've heard of Blind Tom?"

"No, sir."

"Perhaps the ship's library has an account of him." The Astrogator was silent for a moment. "I don't mean to belittle your talent, but you are not to use it during an actual maneuver. You understand why?"

"Yes, sir. I guess I do."

"Better say that you are not to use it unless you think an error has been made—in which case you will speak up at once. But the printed tables remain the final authority."

"Aye aye, sir."

"Good. See me, please, in my room when you come off watch."

It was "day time" by the ship's clocks when he went off watch. He went to the passageway outside Dr. Hendrix's room and waited; there Ellie came across him. "Max!"

"Oh. Hello, Ellie." He realized uncomfortably that he had not seen her since his tentative promotion.

"Hello he says!" She planted herself in front of him. "You're a pretty sight—with your bloodshot eyes matching the piping on your shirt. Where have you been? Too good for your old friends? You haven't even been to see Chipsie."

He had been, once, although he had not run into Ellie. He had not repeated the visit because the shipmate who had replaced him had not liked being assigned as chambermaid to cows, sheep, llamas, *et al.*; he had seemed to feel that it was Max's fault. "I'm sorry," Max said humbly, "but I haven't had time."

"A feeble excuse. Know what you are going to do now? You're going straight to the lounge and I am going to trim your ears—I've figured out a way to box your favorite gambit that will leave you gasping."

Max opened his mouth, closed it, opened it again. "No."

"Speak louder. You used a word I don't understand."

"Look, Ellie, be reasonable. I'm waiting for Dr. Hendrix and as soon as he lets me go I've got to get some sleep. I'm about ten hours minus."

"You can sleep any time."

"Not when you're standing four hours on and four off. You nap anytime you get a chance."

She looked perplexed. "You don't mean you work every other watch? Why, that's criminal."

"Maybe so but that's how it is."

"But—I'll fix that! I'll speak to the Captain."

"Ellie! Don't you dare!"

"Why not? Captain Blaine is old sugar pie. Never you mind, I'll fix it."

Max took a deep breath, then spoke carefully. "Ellie, don't say anything to the Captain, not anything. It's a big opportunity for me and I don't mind. If you go tampering with things you don't understand, you'll ruin my chances. I'll be sent back to the stables."

"Oh, he wouldn't do that."

"You don't understand. He may be an 'old sugar pie' to you; to me he is the Captain. So don't."

She pouted. "I was just trying to help."

"I appreciate it. But don't. And anyhow, I can't come to the lounge, ever. It's off limits for me."

"But I thought—I think you're just trying to avoid me. You run around up here now and you dress in pretty clothes. Why not?"

They were interrupted by Dr. Hendrix returning to his room. "Morning, Jones. Good morning, Miss Coburn." He went on in.

Max said desperately, "Look, Ellie, I've got to go." He turned and knocked on the Astrogator's door.

Dr. Hendrix ignored having seen him with Ellie. "Sit down, Jones. That was a very interesting exhibition you put on." The Astrogator went on, "I'm curious to know how far your talent extends. Is it just to figures?"

"Why, I guess not, sir."

"Do you have to study hard to do it?"

"No, sir."

"Hmm… We'll try something. Have you read—let me see—any of the plays of Shakespeare?"

"Uh, we had *Hamlet* and *As You Like It* in school, and I read *A Winter's Tale*. But I didn't like it," he answered honestly.

"In that case I don't suppose you reread it. Remember any of it?"

"Oh, certainly, sir."

"Hmm—" Dr. Hendrix got down a limp volume.

"Let me see. Act two, scene three; Leontes says, 'Nor night nor day nor rest: it is but weakness... '"

Max picked it up. "... it is but weakness to bear the matter thus; mere weakness. If the cause were not in being... " He continued until stopped.

"That's enough. I don't care much for that play myself. Even the immortal Will had his off days. But how did you happen to have read that book of tables? Shakespeare at his dullest isn't that dull. I've never read them, not what one would call'reading.'"

"Well, sir, Uncle Chet had his astrogation manuals at home after he retired and he used to talk with me a lot. So I read them."

"Do I understand that you have memorized the entire professional library of an astrogator?"

Max took a deep breath. "Well, sir, I've read them."

Dr. Hendrix took from his shelves his own tools of his profession. He did not bother with the binary tables, that being the one Max had shown that he knew. He leafed through them, asked Max questions, finally identifying what he wanted only by page number. He closed the last of them. "Whew!" he commented, and blinked. "While I am aware that there are numerous cases of your talent in the history of psychology, I must admit it is disconcerting to encounter one." He smiled. "I wonder what Brother Witherspoon would think of this."

"Sir?"

"Our High Secretary. I'm afraid he would be shocked; he has conservative notions about protecting the'secrets' of our profession."

Max said uncomfortably, "Am I likely to get into trouble, sir? I didn't know it was wrong to read Uncle's books."

"What? Nonsense. There are no'secrets' to astrogation. You use these books on watch, so does every member of the 'Worry' gang. The passengers can read them, for all I care. Astrogation isn't secret; it is merely difficult. Few people are so endowed as to be able to follow accurately the mathematical reasoning necessary to plan a—oh, a transition, let us say. But it suits those who bother with guild politics to make it appear an arcane art—prestige, you know." Dr. Hendrix paused and tapped on his chair arm. "Jones, I want you to understand me. Kelly thinks you may shape up."

"Uh, that's good, sir."

"But don't assume that you know more than he does just because you have memorized the books."

"Oh, no, sir!"

"Actually, your talent isn't necessary in the control room. The virtues needed are those Kelly has—unflagging attention to duty, thorough knowledge of his tools, meticulous care for details, deep loyalty to his job and his crew and his ship and to those placed over him professionally. Kelly doesn't need eidetic memory, ordinary good memory combined with intelligence and integrity are what the job takes—and that's what I want in my control room."

"Yes, sir."

The Astrogator hesitated. "I don't wish to be offensive but I want to add this. Strange talents are sometimes associated with ordinary, or even inferior, mentality—often enough so that the psychologists use the term '*idiot savant.*' Sorry. You obviously aren't an idiot, but you are not necessarily a genius, even if you can memorize the Imperial Encyclopedia. My point is: I am more interested in your horse sense and your attention to duty than I am in your phenomenal memory."

"Uh, I'll try, sir."

"I think you'll make a good chartsman, in time." Dr. Hendrix indicated that the interview was over; Max got up. "One more thing."

"Yes, sir?"

"There are excellent reasons of discipline and efficiency why crew members do not associate with passengers."

Max gulped. "I know, sir."

"Mind your P's and Q's. The members of my department are careful about this point—even then it is difficult."

Max left feeling deflated. He had gone there feeling that he was about to be awarded something—even a chance to become an astrogator. He now felt sweated down to size.

10 — GARSON'S PLANET

Max did not see much of Sam during the weeks following; the stiff schedule left him little time for visiting. But Sam had prospered.

Like all large ships the *Asgard* had a miniature police force, experienced ratings who acted as the First Officer's deputies in enforcing ship's regulations. Sam, with his talent for politics and a faked certfication as steward's mate first class, managed during the reshuffle following Max's transfer to be assigned as master-at-arms for the Purser's department. He did well, treading on no toes, shutting his eyes to such violations as were ancient prerogatives and enforcing those rules of sanitation, economy, and behavior which were actually needed for a taut, happy ship… all without finding it necessary to haul offenders up before the First Officer for punishment—which suited both Mr. Walther and the crew. When Stores Clerk Maginnis partook too freely of Mr. Gee's product and insisted on serenading his bunk mates, Sam merely took him to the galley and forced black coffee down him—then the following day took him down to 'H' deck, laid his own shield of office aside, and gave Maginnis a scientific going over that left no scars but deeply marked his soul. In his obscure past Sam had learned to fight, not rough house, not in the stylized mock combat of boxing, but in the skilled art in which an unarmed man becomes a lethal machine.

Sam had selected his victim carefully. Had he reported him Maginnis would have regarded Sam as a snoop, a mere busybody to be outwitted or defied, and had the punishment been severe he might have been turned into a permanent discipline problem—not forgetting that reporting Maginnis might also have endangered a sacred cow, Chief Steward Giordano. As it was, it turned Maginnis into Sam's strongest supporter and best publicist, as Maginnis's peculiar but not unique pride required him to regard the man who defeated him as "the hottest thing on two feet, sudden death in each hand, a *real* man! No nonsense about old Sam—try him yourself and see how *you* make out. Go on, I want to lay a bet."

It was not necessary for Sam to set up a second lesson.

A senior engineer's mate was chief master-at-arms and Sam's nominal superior; these two constituted the police force of their small town. When the technician asked to go back to power room watchstanding and was replaced by an engineer's mate third, it was natural that Walther should designate Sam as Chief Master-at-Arms.

He had had his eye on the job from the moment he signed on. Any police chief anywhere has powers far beyond those set forth by law. As long as Sam stayed well buttered up with Mr. Kuiper, Mr. Giordano, and (to a lesser extent) with Mr. Dumont, as long as he was careful to avoid exerting his authority in either the engineering spaces or the Worry Hole, he was the most powerful man in the ship—more powerful in all practical matters than the First Officer himself since he was the First Officer's visible presence.

Such was the situation when the ship grounded at Garson's Planet.

Garson's Planet appears to us to be a piece of junk left over when the universe was finished. It has a surface gravity of one-and-a-quarter, too much for comfort, it is cold as a moneylender's heart, and it has a methane atmosphere unbreathable by humans. With the sky swarming with better planets it would be avoided were it not an indispensable way station. There is only one survey Horst congruency near Earth's Sun and transition of it places one near Theta Centauri—and of the thirteen planets of that sun, Carson's Planet possesses the meager virtue of being least unpleasant.

But there are half a dozen plotted congruencies accessible to Theta Centauri, which makes Carson's Planet the inevitable crossroads for trade of the Solar Union.

Max hit dirt there just once, once was plenty. The colony at the space port, partly domed, partly dug in under the domes, was much like the Lunar cities and not unlike the burrows under any major Earth city, but to Max it was novel since he had never been on Luna and had never seen a big city on Terra other than Earthport. He went dirtside with Sam, dressed in his best and filled with curiosity. It was not necessary to put on a pressure suit; the port supplied each passenger liner with a pressure tube from ship's lock to dome lock.

Once inside Sam headed down into the lower levels. Max protested, "Sam, let's go up and look around."

"Huh? Nothing there. A hotel and some expensive shops and clip joints for the pay passengers. Do you want to pay a month's wages for a steak?"

"No. I want to see *out*. Here I am on a strange planet and I haven't *seen* it at all. I couldn't see it from the control room when we landed and now I haven't seen anything but the inside of a trans tube and this." He gestured at the corridor walls.

"Nothing to see but a dirty, thick, yellow fog that never lifts. Worse than Venus. But suit yourself. I've got things to do, but if you don't want to stick with me you certainly don't have to."

Max decided to stick. They went on down and came out in a wide, lighted corridor not unlike that street in Earthport where Percy's restaurant was located, save that it was roofed over. There were the same bars, the same tawdry inducements for the stranger to part with cash, even to the tailor shop with the permanent "CLOSING OUT" sale. Several other ships were in and the sector was crowded. Sam looked around. "Now for a place for a quiet drink and a chat."

"How about there?" Max answered, pointing to a sign reading THE BETTER 'OLE. "Looks clean and cheerful."

Sam steered him quickly past it. "It is," he agreed, "but not for us."

"Why not?"

"Didn't you notice the customers? Imperial Marines."

"What of that? I've got nothing against the Imperials."

"Mmm… no," Sam agreed, still hurrying, "but those boys stick together and they have a nasty habit of resenting a civilian who has the bad taste to sit down in a joint they have staked out. Want to get your ribs kicked in?"

"Huh? That wouldn't happen if I minded my own business, would it?"

"Maybe. Maybe not. Suppose a hostess decides that you're 'cute'—and the spit-and-polish boy she was with wants to make something of it? Max, you're a good boy—but there just ain't no demand for good boys. To stay out of trouble you have to stay away from it."

They threaded their way through the crowd for another hundred yards before Sam said, "Here we are—provided Lippy is still running the place." The sign read THE SAFE LANDING; it was larger but not as pleasant as THE BETTER 'OLE.

"Who's Lippy?"

"You probably won't meet him." Sam led the way in and picked out a table.

Max looked around. It looked like any other fifth-rate bar grille. "Could I get a strawberry soda here? I've had a hankering for one for ages—I used always to get one Saturdays when I went to the Corners."

"They can't rule you out for trying."

"Okay. Sam, something you said—you remember the story you told me about your friend in the Imperials? Sergeant Roberts?"

"Who?"

"Or Richards. I didn't quite catch it."

"Never heard of the guy."

"But..."

"Never heard of him. Here's the waiter."

Nor had the humanoid Sirian waiter heard of strawberry soda. He had no facial muscles but his back skin crawled and rippled with embarrassed lack of comprehension. Max settled for something called "Old Heidelberg" although it had never been within fifty lightyears of Germany. It tasted to Max like cold soap suds, but since Sam had paid for it he nursed it along and pretended to drink it.

Sam bounced up almost at once. "Sit tight, kid. I won't be long." He spoke to the barman, then disappeared toward the back. A young woman came over to Max's table.

"Lonely, spaceman?"

"Uh, not especially."

"But *I* am. Mind if I sit down?" She sank into the chair that Sam had vacated.

"Suit yourself. But my friend is coming right back."

She didn't answer but turned to the waiter at her elbow. "A brown special, Giggles."

Max made an emphatic gesture of denial. "No!"

"What's that, dear?"

"Look," Max answered, blushing, "I may look green as paint—I am, probably. But I don't buy colored water at house prices. I don't have much money."

She looked hurt. "But you have to order or I can't sit here."

"Well... " He glanced at the menu. "I could manage a sandwich, I guess."

She turned again to the waiter. "Never mind the special, Giggles. A cheese on rye and plenty of mustard." She turned back to Max. "What's your name, honey?"

"Max."

"Mine's Dolores. Where are you from?"

"The Ozarks. That's Earthside."

"Now isn't that a coincidence! I'm from Winnipeg—we're neighbors!"

Max decided that it might appear so, from that distance. But as Dolores babbled on it became evident that she knew neither the location of the Ozarks nor that of Winnipeg, had probably never been on Terra in her life. She was finishing the sandwich while telling Max that she just adored spacemen, they were so romantic, when Sam returned.

He looked down at her. "How much did you take him for?"

Dolores said indignantly, "That's no way to talk! Mr. Lipski doesn't permit…"

"Stow it, kid," Sam went on, not unkindly. "You didn't know that my partner is a guest of Lippy. Get me? No'specials,' no 'pay-me's'—you're wasting your time. Now how much?"

Max said hastily, "It's okay, Sam. All I bought her was a sandwich."

"Well… all right. But you're excused, sister. Later, maybe."

She shrugged and stood up. "Thanks, Max."

"Not at all, Dolores. I'll say hello to the folks in Winnipeg."

"Do that."

Sam did not sit down. "Kid, I have to go out for a while."

"Okay."

Max started to rise, Sam motioned him back. "No, no. This I'd better do by myself. Wait here, will you? They won't bother you again—or if they do, ask for Lippy."

"I won't have any trouble."

"I hope not." Sam looked worried. "I don't know why I should fret, but there is something about you that arouses the maternal in me. Your big blue eyes I guess."

"Huh? Oh, go sniff space! Anyway, my eyes are brown."

"I was speaking," Sam said gently, "of the eyes of your dewy pink soul. Don't speak to strangers while I'm gone."

Max used an expression he had picked up from Mr. Gee; Sam grinned and left.

But Sam's injunction did not apply to Mr. Simes. Max saw the assistant astrogator appear in the doorway. His face was redder than usual and his eyes looked vague. He let his body revolve slowly as he surveyed the room. Presently his eyes lit on Max and he grinned unpleasantly.

"Well, well, well!" he said as he advanced toward Max. "If it isn't the Smart Boy."

"Good evening, Mr. Simes." Max stood up.

"So it's 'good evening, Mr. Simes'! But what did you say under your breath?'

"Nothing, sir."

"Humph! I know! But I think the same thing about you, only worse." Max did not answer, Simes went on, "Well, aren't you going to ask me to sit down?"

"Have a seat, sir," Max said without expression.

"Well, what do you know? The Smart Boy wants me to sit with him." He sat, called the waiter, ordered, and turned back to Max. "Smart Boy, do you know why I'm sitting with you?"

"No, sir."

"To put a flea in your ear, that's why. Since you pulled that hankypanky with the computer, you've been Kelly's hair-faired—fair-haired—boy. Fair-haired boy," he repeated carefully. "That gets you nowhere with me. Get this straight: you go sucking around the Astrogator the way Kelly does and I'll run you out of the control room. Understand me?"

Max felt himself losing his temper. "What do you mean by 'hankypanky,' Mr. Simes?"

"You know. Probably memorized the last half dozen transitions—now you've got Kelly and the Professor thinking you've memorized the book. A genius in our midst! You know what that is? That's a lot of…"

Fortunately for Max they were interrupted; he felt a firm hand on his shoulder and Sam's quiet voice said, "Good evening, Mr. Simes."

Simes looked confused, then recognized Sam and brightened. "Well, if it isn't the copper. Sit down, Constable. Have a drink."

"Don't mind if I do." Sam pulled up another chair.

"Do you know Smart Boy here?"

"I've seen him around."

"Keep your eye on him. That's an order. He's very, very clever. Too clever. Ask him a number. Pick a number between one and ten."

"Seven."

Mr. Simes pounded the table. "What did I tell you? He memorized it before you got here. Someday he's going to memorize one and they'll stencil it across his chest. You know what, Constable? I don't trust smart boys. They get ideas."

Reinforced by Sam's calming presence Max kept quiet. Giggles had come to the table as soon as Sam joined them; Max saw Sam write something on the back of a menu and pass it with money to the humanoid. But Mr. Simes was too busy with his monologue to notice. Sam let him ramble on, then suddenly interrupted. "You seem to have a friend here, sir."

"Huh? Where?"

Sam pointed. At the bar Dolores was smiling and gesturing at the assistant navigator to join her. Simes focused his eyes, grinned and said, "Why, so I do! It's my Great Aunt Sadie." He got up abruptly.

Sam brushed his hands together. "That disposes of that. Give you a bad time, kid?"

"Sort of. Thanks, Sam. But I hate to see him dumped on Dolores. She's a nice kid."

"Don't worry about her. She'll roll him for every thin he has on him—and a good job, too." His eyes became hard. "I like an officer who acts like an officer. If he wants to pin one on, he should do it in his own part of town. Oh, well." Sam relaxed. "Been some changes, eh, kid? Things are different from the way they were when we raised ship at Terra."

"I'll say they are!"

"Like it in the Worry gang?"

"It's more fun than I ever had in my life. And I'm learning fast—so Mr. Kelly says. They're a swell bunch—except for *him*." He nodded toward Simes.

"Don't let him worry you. The best soup usually has a fly in it. Just don't let him get anything on you."

"I sure don't intend to."

Sam looked at him, then said softly, "Ready to take the dive?"

"Huh?"

"I'm getting our stake together. We'll be all set."

Max found it hard to answer. He had known that his transfer had not changed anything basic; he was still in as much danger as ever. But he had been so busy with the joy of hard, interesting work, so dead for sleep when he was not working, that the subject had been pushed back in his mind. Now he drew patterns on the table in the sweat from the glasses and thought about it. "I wish," he said slowly, "that there was some way to beat it."

"There is a way, I told you. Your record gets lost."

Max raised his eyes. "What good would that do? Sure, it would get me another trip. But I don't want just another trip; I want to stay with it." He looked down at the table top and carefully sketched an hyperboloid. "I'd better go with you. If I go back to Terra, it's the labor companies for me—even if I stay out of jail."

"Nonsense."

"What?"

"Understand me, kid. I'd like to have you with me. A time like that, having a partner at your elbow is the difference between—well, being down in the dumps and being on top. But you can stay in space, with a record as clean as a baby's."

"Huh? How?"

"Because you are changing guilds. Now only *one* paper has to get lost—your strike-out record with the stewards, cooks, and clerks. And they will never miss it because you aren't on their books, anyhow. You start fresh with the chartsmen and computers, all neat and legal."

Max sat still and was tempted. "How about the report to the Department of Guilds and Labor?"

"Same thing. Different forms to different offices. I checked. One form gets lost, the other goes in—and Steward's Mate Jones vanishes into limbo while Apprentice Chartsman Jones starts a clean record."

"Sam, why don't *you* do it? With the drag you've got now you could switch to... uh, well, to..."

"To what?" Sam shook his head sadly. "No, old son, there is nothing I can switch to. Besides, there are reasons why I had better be buried deep." He brightened. "Tell you what—I'll pick my new name before I take the jump and tell you. Then some day, two years, ten, twenty, you'll lay over at Nova Terra and look me up. We'll split a bottle and talk about when we were young and gay. Eh?"

Max smiled though he did not feel happy. "We will, Sam. We surely will." Then he frowned. "But, Sam, I don't know how to wangle the deal—and you'll be gone."

"I'll fix it before I leave. I've got Nelson eating out of my hand now. Like this: half cash down and half on delivery—and I'll fix it so that you have something on him—never mind what; you don't need to know yet. When you ground at Earthport, he asks you to mail the reports because you are going dirtside and he has work to finish. You check to see that the two reports you want are there, then you give him his pay off. Done."

Max said slowly, "I suppose that's best."

"Quit fretting. Everybody has a skeleton in the closet; the thing is to keep 'em there and not at the feast." He pushed an empty glass aside. "Kid, would you mind if we went back to the ship? Or had you planned to make a night of it?"

"No, I don't mind." Max's elation at setting foot on his first strange planet was gone—Garson's Hole was, he had to admit, a sorry sample of the Galaxy.

"Then let's get saddled up. I've got stuff to carry and I could use help."

It turned out to be four fairly large bundles which Sam had cached in public lockers. "What are they?" Max asked curiously.

"Tea cozies, old son. Thousands of them. I'm going to sell 'em to Procyon pinheads as skull caps." Somewhat affronted, Max shut up.

Everything coming into the ship was supposed to be inspected, but the acting master-at-arms on watch at the lock did not insist on examining the items belonging to the Chief Master-at-Arms any more than he would have searched a ship's officer. Max helped Sam carry the bundles to the stateroom which was the prerogative of the ship's chief of police.

11 — "THROUGH THE CARGO HATCH"

From Garson's Planet to Halcyon around Nu Pegasi is a double dogleg of three transitions, of 105, 487, and 19 lightyears respectively to achieve a "straight line" distance of less than 250 lightyears. But neither straight-line distance nor pseudo-distance of transition is important; the *Asgard* covered less than a lightyear between gates. A distance "as the crow flies" is significant only to crows.

The first transition was barely a month out from Carson's Planet. On raising from there Kelly placed Max on a watch in three, assigning him to Kelly's own watch, which gave Max much more sleep, afforded him as much instruction (since the watch with Simes was worthless, instruction-wise), and kept Max out of Simes' way, to his enormous relief. Whether Kelly had planned that feature of it Max never knew—and did not dare ask.

Max's watch was still an instruction watch, he had no one to relieve nor to be relieved by. It became his habit not to leave the control room until Kelly did, unless told to do so. This resulted in him still being thrown into the company of Dr. Hendrix frequently, since the Astrogator relieved the Chief Computerman and Kelly would usually hang around and chat... during which time the Astrogator would sometimes inquire into Max's progress.

Occasionally the Captain would show up on Dr. Hendrix's watch. Shortly after leaving Garson's Planet Dr. Hendrix took advantage of one such occasion to have Max demonstrate for Captain Blaine and First Officer Walther his odd talent. Max performed without a mistake although the Captain's presence made him most selfconscious. The Captain watched closely with an expression of gentle surprise. Afterwards he said, "Thank you, lad. That was amazing. Let me see—what is your name?"

"Jones, sir."

"Jones, yes." The old man blinked thoughtfully. "It must be terrifying not to be able to forget—especially in the middle of the night. Keep a clear conscience, son."

Twelve hours later Dr. Hendrix said to him, "Jones, don't go away. I want to see you."

"Yes, sir."

The Astrogator spoke with Kelly for a few moments, then again spoke to Max. "The Captain was impressed by your vaudeville act, Jones. He is wondering whether you have any parallel mathematical ability."

"Well—no, sir. I'm not a lightning calculator, that is. I saw one in a sideshow once. He could do things I couldn't."

Hendrix brushed it aside. "Not important. I believe you told me that your uncle taught you some mathematical theory?"

"Just for astrogation, sir."

"What do you think I am talking about? Do you know how to compute a transition approach?"

"Uh, I think so, sir."

"Frankly, I doubt it, no matter how much theoretical drill Brother Jones gave you. But go ahead."

"*Now,* sir?"

"Try it. Pretend you're the officer of the watch. Kelly will be your assistant. I'll just be audience. Work the approach we are on. I realize that we aren't close enough for it to matter—but you are to assume that the safety of the ship depends on it."

Max took a deep breath. "Aye aye, sir." He started to get out fresh plates for the cameras.

Hendrix said, "No!"

"Sir?"

"If you have the watch, where's your crew? Noguchi, help him."

"Aye aye, sir." Noguchi grinned and came over. While they were bending over the first camera, Noguchi whispered, "Don't let him rattle you, pal. We'll give him a good show. Kelly will help you over the humps."

But Kelly did not help; he acted as "numbers boy" and nothing else, with no hint to show whether Max was right, or wildly wrong. After Max had his sights and had taken his comparison data between plates and charts he did not put the problem through the computer himself, but let Noguchi man the machine, with Kelly translating. After a long time and much sweat the lights blinked what he hoped was the answer.

Dr. Hendrix said nothing but took the same plates to the tank and started to work the problem again, with the same crew. Very quickly the lights blinked on again; the Astrogator took the tables from Kelly and looked up the translation himself. "We differ only in the ninth decimal place. Not bad."

"I was wrong only in the ninth place, sir?"

"I didn't say that. Perhaps I was more in error."

Max started to grin, but Dr. Hendrix frowned. "Why didn't you take doppler spectra to check?"

Max felt a cold chill. "I guess I forgot, sir."

"I thought you were the man who never forgot?"

Max thought intuitively—and correctly—that two kinds of memory were involved, but he did not have a psychologist's jargon with which to explain. One sort was like forgetting one's hat in a restaurant, that could happen to anyone; the other was being unable to recall what the mind had once known.

Hendrix went on, "A control room man must not forget things necessary to the safety of the ship. However as an exercise you solved it very well—except that you have no speed. Had we been pushing close to the speed of light, ready to cross, your ship would have been in Hades and crashed in the River Styx before you got the answer. But it was a good first try."

He turned away. Kelly jerked his head toward the hatch and Max went below.

As he was falling asleep Max turned over in his mind the notion that Dr. Hendrix might even be thinking of him for—Oh no! He put the thought aside. After all, Kelly could have done it; he had seen him do early approaches many times, and faster, too. Probably Noguchi could have done it.

Certainly Noguchi could have done it, he corrected. After all, there weren't any "secrets."

As they approached the first anomaly the easy watch in three for officers and watch in four for the men changed to watch-and-watch, with an astrogator, an assistant, a chartsman, and a computerman on each watch. Max was at last assigned to a regular watch; the first watch was Dr. Hendrix assisted by Chartsman 1/c Kovak, Max as chartsman of the watch and Noguchi on the computer; the other watch was Mr. Simes assisted by Chief Kelly, Smythe as chartsman and Lundy as computerman. Max noticed that Dr. Hendrix had assigned his "first team" to Simes and had taken the less experienced technicians himself. He wondered why, but was pleased not to be working for Simes.

He learned at last why they called it the "Worry Hole." Dr. Hendrix became a frozen-masked automaton, performing approach correction after correction and demanding quick, accurate, and silent service. During the last twenty hours of the approach the Astrogator never left the control room, nor did anyone else other than for short periods when nominally off watch. Simes continued to take his regular watch but Dr. Hendrix hung over him, checking everything that he did. Twice he required the junior astrogator to reperform portions of his work and once elbowed him aside and did it himself. The first time it happened Max stared—then he noticed that the others were careful to be busy doing something else whenever Dr. Hendrix spoke privately to Simes.

The tension grew as the critical instant approached. The approach to an anomalous intraspatial transition can hardly be compared to any other form of piloting ever performed by human beings, though it might be compared to the impossible trick of taking off in an atmosphere plane, flying a thousand miles blind—while performing dead reckoning so perfectly as to fly through a narrow tunnel at the far end, without ever seeing the tunnel. A Horst congruency cannot be seen, it can only be calculated by abstruse mathematics of effects of mass on space; a "gateway" is merely unmarked empty space in vaster emptiness. In approaching a planet an astrogator can see his destination, directly or by radar, and his speed is just a few miles per second. But in making a Horstian approach the ship's speed approaches that of light—and reaches it, at the last instant. The nearest landmarks are many billions of miles away, the landmarks themselves are moving with stellar velocities and appear to be crowding together in the exaggerated parallax effects possible only when the observer is moving almost as fast as is his single clue to location and speed—the wave fronts of the electromagnetic spectrum.

Like searching at midnight in a dark cellar for a black cat that isn't there.

Toward the last Kelly himself was on the computer with Lundy at his ear. Smythe and Kovak were charting, passing new data to Dr. Hendrix, who was programming orally to the computer crew, setting up the problems in his head and feeding them to the electronic brain almost without delay. The power room was under his direct control now; he had a switch led out from the control console in each hand, one to nurse the ship along just below speed of light, the other to give the *Asgard* the final kick that would cause her to burst through.

Max was pushed aside, no task remained in which there was not someone more experienced. On a different level, Simes too had been pushed aside; there was place for only one astrogator at the moment of truth.

Of all those in the Worry Hole only Captain Blaine seemed to be relaxed. He sat in the chair sacred to him, smoking quietly and watching Hendrix. The Astrogator's face was gray with fatigue, greasy with unwashed sweat. His uniform was open at the collar and looked slept in, though he certainly had not slept. Max looked at him and wondered why he had ever longed to be an astrogator, ever been foolish enough to wish to bear this undivided and unendurable burden.

But the doctor's crisp voice showed no fatigue; the endless procession of numbers marched out, sharp as print, each spoken so that there could be no mistake, no need to repeat, "nine" always sounded as one syllable, "five" always stretched into two. Max listened and learned and wondered.

He glanced up through the dome, out into space itself, space shown distorted by their unthinkable speed. The stars ahead, or above, had been moving closer together for the past several watches, the huge parallax effect displacing them to the eye so that they seemed to be retreating in the very sector of the sky they were approaching. They were seeing by infrared waves now, ploughing into oncoming wave trains so fast that doppler effect reduced heat wave lengths to visible light.

The flood of figures stopped. Max looked down, then looked up hastily as he heard Dr. Hendrix say, "Stand by!"

The stars seemed to crawl together, then instantly they were gone to be replaced without any lapse of time whatever by another, new and totally different starry universe.

Hendrix straightened up and sighed, then looked up. "There's the Albert Memorial," he said quietly. "And there is the Hexagon. Well, Captain, it seems we made it again." He turned to Simes. "Take it, Mister." He let the Captain go first, then followed him down the hatch.

The control gang went back to easy watches; the next transition was many days away. Max continued as chartsman-of -thewatch in place of Kovak, who temporarily replaced Dr. Hendrix while the Astrogator got a week of rest: There was truly not much to do during the early part of a leg and the doctor's superb skill was not needed. But Max greatly enjoyed the new arrangements; it made him proud to sign the rough log "M. Jones, Chtsmn o/W." He felt that he had arrived—even though Simes found fault with him and Kelly continued to drill him unmercifully in control room arts.

He was surprised but not apprehensive when he was told, during an offwatch period, to report to the Astrogator. He put on a fresh uniform, slicked his hair clown, and went above "C" deck. "Apprentice Chartsman Jones reporting, sir."

Kelly was there, having coffee with the Astrogator. Hendrix acknowledged Max's salutation but left him standing. "Yes, Jones." He turned to Kelly. "Suppose you break the news."

"If you say so, sir." Kelly looked uncomfortable. "Well, Jones, it's like this—you don't really belong in my guild."

Max was so shocked that he could not answer. He was about to say that he had thought—he had understood—he hadn't known—But he got nothing out; Kelly continued, "The fact is, you ought to buck for astrogator. The Doctor and I have been talking it over."

The buzzing in his head got worse. He became aware that Dr. Hendrix was repeating, "Well, Jones? Do you want to try it? Or don't you?"

Max managed to say, "Yes. Yes, sir."

"Good. Kelly and I have been watching you. He is of the opinion and so am I that you may, just possibly, have the latent ability to develop the skill and speed necessary. The question is: do *you* think so?"

"Uh… that is—I hope so, sir!"

"So do I," Hendrix answered dryly. 'We shall see. If you haven't, you can revert to your own guild and no harm is done. The experience will make you a better chartsman." The Astrogator turned to Kelly. "I'll quiz Jones a bit, Kelly. Then we can make up our minds."

"Very good, sir." Kelly stood up.

When the Chief Computerman had gone Hendrix turned to his desk, hauled out a crewman's personal record. To Max he said harshly, "Is this yours?"

Max looked at it and gulped. "Yes, sir."

Dr. Hendrix held his eye. "Well? How good a picture is it of your career thus far? Any comment you want to make?"

The pause might have been a dozen heart beats, though to Max it was an endless ordeal. Then a catharsis came bursting up out of him and he heard himself answering, "It's not a good picture at all, sir. It's phony from one end to the other."

Even as he said it, he wondered why. He felt that he had kicked to pieces his one chance to achieve his ambition. Yet, instead of feeling tragic, he felt oddly relaxed.

Hendrix put the personal record back on his desk. "Good," he answered. "Very good. If you had given any other answer, I would have run you out of my control room. Now, do you want to tell me about it? Sit down."

So Max sat down and told him. All that he held back was Sam's name and such details as would have identified Sam. Naturally Dr Hendrix noticed the omission and asked him point blank.

"I won't tell you, sir."

Hendrix nodded. "Very well. Let me add that I shall make no attempt to identify this, ah, friend of yours—if by chance he is in this ship."

"Thank you, sir."

There followed a considerable silence. At last Hendrix said, "Son, what led you to attempt this preposterous chicanery? Didn't you realize you would be caught?"

Max thought about it. "I guess I knew I would be, sir—eventually. But I wanted to space and there wasn't any other way to do it." When Hendrix did not answer Max went on. After the first relief of being able to tell the truth, he felt defensive, anxious to justify himself—and just a little bit irked that Dr. Hendrix did not see that he had simply done what he *had* to do—so it seemed to Max. "What would you have done, sir?"

"Me? How can I answer that? What you're really asking is: do I consider your actions morally wrong, as well as illegal?"

"Uh, I suppose so, sir."

"Is it wrong to lie and fake and bribe to get what you want? It's worse than wrong, it's undignified!"

Dr. Hendrix chewed his lip and continued. "Perhaps that opinion is the sin of the Pharisees... my own weakness. I don't suppose that a young, penniless tramp, such as you described yourself to be, can afford the luxury of dignity. As for the rest, human personality is a complex thing, nor am I a judge. Admiral Lord Nelson was a liar, a libertine, and outstandingly undisciplined. President Abraham Lincoln was a vulgarian and nervously unstable. The list is endless. No, Jones, I am not going to pass judgment; you must do that yourself. The authorities having jurisdiction will reckon your offenses; I am concerned only with whether or not you have the qualities I need."

Max's emotions received another shock. He had already resigned himself to the idea that he had lost his chance. "Sir?"

"Don't misunderstand me." Hendrix tapped the forged record. "I don't like this. I don't like it at all. But perhaps you can live down your mistake. In the meantime, I badly need another watch officer; if you measure up, I can use you. Part of it is personal, too; your uncle taught me, I shall try to teach you."

"Uh, I'll try, sir. Thank you."

"Don't thank me. I'm not even feeling particularly friendly to you, at the moment. Don't talk with anyone. I'll ask the Captain to call a guild meeting and he and Mr. Simes and I will vote on you. We'll make you a probationary apprentice which will permit the Captain to appoint you to the temporary rank of merchant cadet. The legalities are a bit different from those of the usual route as you no doubt know."

Max did not know, though he was aware that officers sometimes came up "through the cargo hatch"—but another point hit him. "Mr. Simes, sir?"

"Certainly. By this procedure, all the astrogators you serve with must pass on you."

"Uh, does it have to unanimous, sir?"

"Yes."

"Then—Well, sir, you might as well forget it. I mean, I appreciate your willingness to, uh, but… " His voice trailed off.

Dr. Hendrix smiled mirthlessly. "Hadn't you better let me worry about that?"

"Oh. Sorry, sir."

"When it has been logged, I'll notify you. Or 'when and if,' if you prefer."

"Yes, sir." Max stood up. "Sir? There were, uh, a couple of other things I wondered about."

Hendrix had turned back to his desk. He answered, "Well?" somewhat impatiently.

"Would you mind telling me—just for my curiosity—how you caught me?"

"Oh, that. No doubt you've given yourself away to several people. I'm sure Kelly knows, from the subjects he avoided. For example, I once heard Lundy mention to you Kiefer's Ritz on Luna. Your answer, though noncommittal, implied that you did not really know what dive he was talking about—and it is impossible for a spaceman not to know that place, its entrance faces the east lock to the space port."

"Oh."

"But the matter came to the top of my mind in connection with this." He again indicated the false record. "Jones, I deal in figures and my mind can no more help manipulating them for all the information they contain than I can help breathing. This record says that you went to space a year before your uncle retired—I remember what year that was. But you told me that your uncle had trained you at home and your performance bore out that statement. Two sets of alleged facts were contradictory; need I add that I was fairly sure of the truth?"

"Oh. I guess I wasn't very smart?'

"No, you weren't. Figures are sharp things, Jones. Don't juggle them, you'll get cut. What was the other matter?"

"Well, sir, I was kind of wondering what was going to happen to me. I mean about *that.*"

"Oh," Hendrix answered indifferently, "that's up to the Stewards & Clerks. My guild won't take action concerning a disciplinary matter of another guild. Unless, of course, they call it 'moral turpitude' and make it stick."

With that faint comfort Max left, Nevertheless he felt easier than he had at any time since he had signed on. The prospect of punishment seemed less a burden than constantly worrying about getting caught. Presently he forgot it and exulted in the opportunity—at last!—to take a crack at astrogator.

He wished he could tell Sam… or Ellie.

12 — HALCYON

The probationary appointment was logged later that same day. The Captain called him in, swore him in, then congratulated him and called him "Mister" Jones. The ceremony was simple, with no spectator but Hendrix and the Captain's secretary.

The commonplaces attendant on the change were, for a while, more startling to Max than the promotion itself. They started at once. "You had better take the rest of the day to shake down, Mr. Jones," the Captain said, blinking vaguely. "Okay, Doc?"

"Certainly, sir."

"Good. Bennett, will you ask Dumont to step in?"

The Chief Passengers' Steward was unblinkingly unsurprised to find the recent steward's mate third a ship's officer. To the Captain's query he said, "I was planning to put Mr. Jones in stateroom B-014, sir. Is that satisfactory?"

"No doubt, no doubt."

"I'll have boys take care of his luggage at once."

"Good. You trot along with Dumont, Mr. Jones. No, wait a moment. We must find you a cap." The Captain went to his wardrobe, fumbled around. "I had one that would do here somewhere."

Hendrix had been standing with his hands behind him. "I fetched one, Captain. Mr. Jones and I wear the same size, I believe."

"Good. Though perhaps his head has swelled a bit in the past few minutes. Eh?"

Hendrix grinned savagely. "If it has, I'll shrink it." He handed the cap to Max. The wide gold strap and sunburst the Astrogator had removed; substituted was a narrow strap with tiny sunburst surrounded by the qualifying circle of the apprentice. Max thought it must be old insignia saved for sentimental reasons by Hendrix himself. He choked up as he mumbled his thanks, then followed Dumont out of the Captain's cabin, stumbling over his feet.

When they reached the companionway Dumont stopped. "There is no need to go down to the bunkroom, sir. If you will tell me the combination of your locker, we'll take care of everything."

"Oh, gee, Mr. Dumont! I've got just a small amount of truck. I can carry it up myself."

Dumont's face had the impassivity of a butler's. "If I may make a suggestion, sir, you might like to see your stateroom while I have the matter taken care of." It was not a question; Max interpreted it correctly to mean: "*Look, dummy, I know the score and you don't. Do what I tell you before you make a terrible break*!"

Max let himself be guided. It is not easy to make the jump from crewman to officer while remaining in the same ship. Dumont knew this, Max did not. Whether his interest was fatherly, or simply a liking for correct protocol—or both—Dumont did not intend to allow the brand-new junior officer to go lower than "C" deck until he had learned to carry his new dignity with grace. So Max sought out stateroom B-014.

The bunk had a real foam mattress and a spread. There was a tiny wash basin with running water and a mirror. There was a bookshelf over the bunk and a wardrobe for his uniforms. There was even a shelf desk that let down for his convenience. There was a telephone on the wall, a buzzer whereby he could summon the steward's mate on watch! There was a movable chair all his own, a wastebasket, and—yes!—a little rug on the deck. And best of all, there was a door with a lock.

The fact that the entire room was about as large as a piano box bothered him not at all.

He was opening drawers and poking into things when Dumont returned. Dumont was not carrying Max's meager possessions himself; that task was delegated to one of his upper-decks staff. The steward's mate followed Dumont in and said, "Where shall I put this, sir?"

Max realized with sudden embarrassment that the man waiting on him had eaten opposite him for past months. "Oh! Hello, Jim. Just dump it on the bunk. Thanks a lot."

"Yes, sir. And congratulations!"

"Uh, thanks!" They shook hands. Dumont let that proper ceremony persist for a minimum time, then said, "That's all now, Gregory. You can go back to the pantry." He turned to Max. "Anything else, sir?"

"Oh, no, everything is fine."

"May I suggest that you probably won't want to sew insignia on these uniforms yourself? Unless you are better with a needle than I am," Dumont added with just the right chuckle.

"Well, I guess I could."

"Mrs. Dumont is handy with a needle, taking care of the lady passengers as she does. Suppose I take this one? It can be ready and pressed in time for dinner."

Max was happy to let him. He was suddenly appalled by a terrifying notion—he was going to have to eat in the Bifrost Lounge!

But there were further disturbances before dinner. He was completing the small task of stowing his possessions when there came a knock on the door, followed immediately by someone coming in. Max found himself nose to nose with Mr. Simes.

Simes looked at the cap on his head and laughed. "Take that thing off before you wear out your ears."

Max did not do so. He said, "You wanted me, sir?"

"Yes. Just long enough, Smart Boy, to give you a word of advice."

"Yes?"

Simes tapped himself on the chest. "Just this. There is only one assistant astrogator in this ship—and I'm it. Remember that. I'll still be it long after you've been busted back to sweeping up after cows. Which is where you belong."

Max felt a flush crawl up his neck and burn his cheeks. "Why," he asked, "if you think that, didn't you veto my appointment?"

Simes laughed again. "Do I look like a fool? The Captain says yes, the Astrogator says yes—should I stick my neck out? It's easier to wait and let you stick your neck out—which you will. I just wanted to let you know that a dinky piece of gold braid doesn't mean a thing. You're still junior to me by plenty. Don't forget it."

Max clenched his jaw and did not answer. Simes went on, "Well?"

"'Well' what?"

"I just gave you an order."

"Oh. Aye aye, Mr. Simes. I won't forget it. I certainly won't."

Simes looked at him sharply, said, "See that you don't," and left. Max was still facing his door, clenching his fists, when Gregory tapped on the door. "Dinner, sir. Five minutes."

Max delayed as long as he could, wishing mightily that he could slide down to Easy deck and take his usual place in the warm, noisy, relaxed comfort of the crew's mess. He hesitated in the lounge doorway, paralyzed with stage fright. The beautiful room was blazing with light and looked unfamiliar; he had never been in it save in early morning, to change the sandbox located down the pantry passage—at which times only standing lights were burning.

He was barely in time; some of the ladies were seated but the Captain was still standing. Max realized that he should be near his chair, ready to sit down when the Captain did—or as soon as the ladies were seated, he amended—but where should he go? He was still jittering when he heard his name shouted. "Max!"

Ellie came running up and threw her arms around his neck. "Max! I just heard. I think it's *wonderful!"* She looked at him, her eyes shining, then kissed him on both cheeks.

Max blushed to his ears. He felt as if every eye was turned on him—and he was right. To add to his embarrassment Ellie was dressed in formal evening dress of Hesperan high style, which not only made her look older and much more female, but also shocked his puritanical hillbilly standards.

She let go of him, which was well but left him in danger of collapsing at the knees. She started to babble something, Max did not know what, when Chief Steward Dumont appeared at her elbow. "The Captain is waiting, Miss," he said firmly.

"Bother to the Captain! Oh, well—see you after dinner, Max." She headed for the Captain's table. Dumont touched Max's sleeve and munnured, "This way, sir."

His place was at the foot of the Chief Engineer's table. Max knew Mr. Compagnon by sight but had never spoken to him. The Chief glanced up and said, "Evening, Mr. Jones. Glad to have you with us. Ladies and gentlemen, our new astrogation officer, Mr. Jones. On your right, Mr. Jones, is Mrs. Daigler. Mr. Daigler on her right, then—" and so on, around the table: Dr. and Mrs. Weberbauer and their daughter Rebecca, Mr. and Mrs. Scott, a Mr. Arthur, Senhor and Senhora Vargas.

Mrs. Daigler thought it was *lovely*, his being promoted. And so *nice* to have more young people at the table. She was much older than Max but young enough to be handsome and aware of it. She wore more jewels than Max had ever seen and her hair was lacquered into a structure a foot high and studded with pearls. She was as perfectly finished and as expensive as a precision machine and she made Max uncomfortable.

But he was not yet as uncomfortable as he could be. Mrs. Daigler produced a wisp of a handkerchief from her bosom, moistened it and said, "Hold still, Mr. Jones." She scrubbed his cheek. "Turn your head." Blushing, Max complied.

"There, that's better," Mrs. Daigler announced. "Mama fixed." She turned away and said, "Don't you think, Mr. Compagnon, that science, with all the wonderful things they do these days, could discover a lip paint that wouldn't come off?"

"Stop it, Maggie," her husband interrupted. "Pay no attention, Mr. Jones. She's got a streak of sadism as wide as she is."

"George, you'll pay for that. Well, Chief?"

The Chief Engineer patted his lips with snowy linen. "I think it must already have been invented, but there was no market. Women like to brand men, even temporarily."

"Oh, bosh!"

"It's a woman's world, ma'am."

She turned to Max. "Eldreth is a dear, isn't she? I suppose you knew her 'dirtside'?—as Mr. Compagnon calls it."

"No, ma'am."

"Then how? I mean, after all, there isn't much opportunity. Or is there?"

"Maggie, stop pestering him. Let the man eat his dinner."

Mrs. Weberbauer on his other side was as easy and motherly as Mrs. Daigler was difficult. Under her soothing presence Max managed to start eating. Then he noticed that the way he grasped a fork was not the way the others did, tried to change, made a mess of it, became aware of his untidy nails, and wanted to crawl under the table. He ate about three hundred calories, mostly bread and butter.

At the end of the meal Mrs. Daigler again gave her attention to him, though she addressed the Chief Engineer. "Mr. Compagnon, isn't it customary to toast a promotion?"

"Yes," the Chief conceded. "But he must pay for it. That's a requirement."

Max found himself signing a chit presented by Dumont. The price made him blink—his first trip might be a professional success, but so far it had been financial disaster. Champagne, iced in a shiny bucket, accompanied the chit and Dumont cut the wires and drew the cork with a flourish.

The Chief Engineer stood up. "Ladies and gentlemen—I give you Astrogator Jones. May he never misplace a decimal point!"

"Cheers!"—"Bravo!"—"Speech, speech!"

Max stumbled to his feet and muttered, "Thank you."

His first watch was at eight o'clock the next morning. He ate breakfast alone and reflected happily that as a watch stander he would usually eat either before or after the passengers. He was in the control room a good twenty minutes early.

Kelly glanced up and said, "Good morning, sir."

Max gulped. "Er—good morning, Chief!" He caught Smythe grinning behind the computer, turned his eyes hastily away.

"Fresh coffee, Mr. Jones. Will you have a cup?" Max let Kelly pour for him; while they drank Kelly quietly went over the details—acceleration schedule, position and vector, power units in use, sights taken, no special orders, *etc.* Noguchi relieved Smythe, and shortly before the hour Dr. Hendrix appeared.

"Good morning, sir."

"Good morning, Doctor."

"Morning." Hendrix accepted coffee, turned to Max. "Have you relieved the officer of the watch?"

"Uh, why no, sir."

"Then do so. It lacks less than a minute of eight."

Max turned to Kelly and shakily saluted. "I relieve you, sir."

"Very well, sir." Kelly went below at once. Dr. Hendrix sat down, took out a book and started to read. Max realized with a chilly feeling that he had been pushed in, to swim or not. He took a deep breath and went over to Noguchi. "Noggy, let's get the plates ready for the middle o' watch sights."

Noguchi glanced at the chronometer. "As you say, sir."

"Well… I guess it is early. Let's take a few dopplers."

"Aye aye, sir." Noguchi climbed out of the saddle where he had been loafing.

Max said in a low voice, "Look, Noggy, you don't have to say'sir' to me."

Noguchi answered just as quietly. "Kelly wouldn't like it if I didn't. Better let it ride."

"Oh." Max frowned. "Noggy? How does the rest of the Worry gang feel about it?"

Noguchi did not pretend not to understand. He answered, "Shucks, they're all rooting for you, if you can swing it."

"You're sure?"

"Certain. Just as long as you don't try to make a big hairy thing out of yourself like—well, like some I could mention." The computerman added, "Maybe Kovak isn't exactly cheering. He's been having a watch of his own, you know—for the first time."

"He's sore?"

"Not exactly. He couldn't expect to keep it long anyhow, not with a transition coming up. He won't go out of his way to give you trouble, he'll be fair."

Max made a mental note to see what he could do to swing Kovak over to his side. The two manned the dopplerscope, took readings on stars forward of vector, checked what they found by spectrostellograph, and compared both with standard plates from the chart safe. At first Max had to remember that he was in charge; then he got so interested in fussy details of measurements that he was no longer selfconscious. At last Noguchi touched his sleeve. "Pushing ten o'clock, sir. I'd better get set up."

"Huh? Sure, go ahead." He reminded himself not to help Noggy; the chartsman has his prerogatives, too. But he checked the set up just as Hendrix always did, as Simes rarely did, and as Kelly sometimes did, depending on who had made it.

After they had gotten the new data Max programmed the problem on paper (there being plenty of time), then called it off to Noguchi at the computer. He thumbed the book himself, there being no "numbers boy" available. The figures were as clear in his recollection as ever, but he obeyed Hendrix's injunction not to depend on memory.

The result worried him. They were not "in the groove." Not that the *Asgard* was far out, but the discrepancy was measurable. He checked what he had done, then had Noguchi run the problem again, using a different programming method. The result came out the same.

Sighing, he computed the correction and started to take it to Hendrix for approval. But the Astrogator still paid no attention; he sat at the console, reading a novel from the ship's library.

Max made up his mind. He went to the console and said, "Excuse me, sir. I need to get there for a moment." Hendrix got up without answering and found another seat. Max sat down and called the power room. "Control officer speaking. I intend to increase boost at eleven o'clock. Stand by for time check."

Hendrix must have heard him, he thought, but the Astrogator gave no sign. Max fed in the correction, set the control chronometer to execute his wishes at eleven plus-or-minus nothing.

Shortly before noon Simes showed up. Max had already written his own log, based on Noguchi's log, and had signed it "M. Jones." He had hesitated, then added "C. O. o/W." Simes went to Dr. Hendrix, saluted, and said, "Ready to relieve you, sir."

Hendrix spoke his first word since eight o'clock. "He's got it."

Simes looked non-plussed, then went to Max. "Ready to relieve you." Max recited off the situation data while Simes read the log and the order book. Simes interrupted him while he was still listing minor ship's data. "Okay, I relieve you. Get out of my control room, Mister." Max got out. Dr. Hendrix had already gone down.

Noguchi had loitered at the foot of the ladder. He caught Max's eye, made a circle with thumb and finger and nodded. Max grinned at him, started to ask a question; he wanted to know if that discrepancy was a booby trap, intentionally left in by Kelly. Then he decided that it would not be fitting; he'd ask Kelly himself, or figure it from the records. "Thanks, Noggy."

That watch turned out to be typical only in the one respect that Dr. Hendrix continued to require Max to be officer of the watch himself. He did not again keep quiet but rode Max steadily, drilling him hour after hour, requiring him to take sights and set up problems continuously, as if the *Asgard* were actually close to transition. He did not permit Max to program on paper but forced him to pretend that time was too short and that data must immediately go into the computer, be acted on at once. Max sweated, with remote controls in each fist and with Hendrix himself acting as "numbers boy." The Astrogator kept pushing him for speed, speed, and more speed—never at the sacrifice of accuracy, for any error was unforgivable. But the goal was always greater speed.

Once Max objected. "Sir, if you would let me put it right into the machine, I could cut it down a lot."

Hendrix snapped, "When you have your own control room, you can do that, if you think it wise. Now you'll do it *my* way."

Occasionally Kelly would take over as his supervisor. The Chief Computerman was formal, using such phrases as, "May I suggest, sir —" or "I think I'd do it this way, sir." But once he broke out with, "Confound it, Max! Don't ever pull a dumb stunt like that!"

Then he started to amend his remarks. Max grinned. "Please, Chief. For a moment you made me feel at home. Thanks."

Kelly looked sheepish. "I'm tired, I guess. I could do with a smoke and some java."

While they were resting Max noted that Lundy was out of earshot and said, "Chief? You know more than I'll ever learn. Why didn't *you* buck for astrogator? Didn't you ever get a chance?"

Kelly suddenly looked bleak. "I once did," he said stiffly. "Now I know my limitations." Max shut up, much embarrassed. Thereafter Kelly reverted to calling him Max whenever they were alone.

Max did not see Sam for more than a week after he moved up to Baker deck. Even then the encounter was chance; he ran across him outside the Purser's office. "Sam!"

"Good morning, sir!" Sam drew up in a smart salute with a broad grin on his face.

"Huh? 'Good morning, sir' my foot! How's it going, Sam?"

"Aren't you going to return my salute? In my official capacity I can report you, you know. The Captain is very, very fussy about ship's etiquette."

Max made a rude noise. "You can hold that salute until you freeze, you clown."

Sam relaxed. "Kid, I've been meaning to get up and congratulate you—but every time I find you're on watch. You must live in the Worry Hole."

"Pretty near. Look, I'll be off this evening until midnight. What do you say I stop down to see you?"

Sam shook his head. "I'll be busy."

"Busy how? You expecting a jail break? Or a riot, maybe?"

Sam answered soberly, "Kid, don't get me wrong—but you stick to your end of the ship and I'll stick to mine. No, no, keep quiet and listen. I'm as proud as if I had invented you. But you can't fraternize in crew's quarters, not even with the Chief Master-at-Arms. Not yet."

"Who'll know? Who's to care?"

"You know blamed well that Giordano would love to tell Kuiper that you didn't know how to behave like an officer—and Old Lady Kuiper would pass it along to the Purser. Take my advice. Have I ever thrown you a curve?"

Max dropped the matter, though he badly wanted a chin with Sam. He needed to tell him that his faked record had been breached and to consult with him as to probable consequences.

Of course, he considered as he returned to his stateroom, there wasn't a thing to keep him from carrying out his orginal intention of jumping ship with Sam at Nova Terra—except that it was now no longer possible to imagine it. He was an officer.

They were approaching the middle transition; the control room went on watch-and-watch. But still Dr. Hendrix did not take the watch; Simes and Jones alternated. The Astrogator stood every watch with Max but required him to do the work and carry the responsibility himself. Max sweated it out and learned that practice problems and study of theory were nothing like having it matter when he had no way and no time to check. You had to be *right*, every time—and there was always doubt.

When, during the last twenty-four hours, the Worry gang went on continuous watch, Max thought that Dr. Hendrix would push him aside. But he did not. Simes was pushed aside, yes, but Max took the worry seat, with Hendrix bending over him and watching everything he did, but not interfering. "Great heavens!" Max thought. "Surely he isn't going to let me make this transition? I'm not ready for it, not yet. I'll never keep up."

But data was coming too fast for further worry; he had to keep processing it, see the answers, and make decisions. It was not until twenty minutes before transition that Hendrix pushed him aside without a word and took over. Max was still recovering when they burst through into a new sky.

The last approach-and-transition before Halcyon was much like the second. There were a couple of weeks of easy watches, headed by Simes, Jones, and Kovak, with both Kelly and Hendrix getting a little rest. Max liked it, both on and off watch. On watch he continued to practice, trying to achieve the inhuman speed of Dr. Hendrix. Off watch he slept and enjoyed himself. The Bifrost Lounge no longer terrified him. He now played three-dee with Ellie there, with Chipsie on his shoulder, giving advice. Ellie had long since waved her eyes at Captain Blaine and convinced him that a pet so well behaved, so well housebroken, and in particular so well mannered (she had trained the spider puppy to say, "Good morning, Captain," whenever it saw Blaine)—in all respects so civilized should not be forced to live in a cage.

Max had even learned to swap feeble repartee with Mrs. Daigler, thinking up remarks and waiting for a chance. Ellie was threatening to teach him to dance, although he managed to stall her until resumption of watch-and-watch before transition made it impossible.

Again he found himself shoved into the worry seat for the last part of the approach. This time Dr. Hendrix did not displace him until less than ten minutes before burst through.

On the easy drop down to Halcyon Ellie's determination won out. Max learned to dance. He found that he liked it. He had good rhythm, did not forget her instructions, and Ellie was a fragrant, pleasant armful. "I've done all I can," she announced at last. "You're the best dancer with two left feet I've ever met." She required him to dance with Rebecca Weberbauer and with Mrs. Daigler. Mrs. Daigler wasn't so bad after all, as long as she kept her mouth shut—and Rebecca was cute. He began to look forward to the fleshpots of Halcyon, that being Ellie's stated reason for instructing him; he was to be conscripted as her escort.

Only one thing marred the final leg; Sam was in trouble. Max did not find out about it until after the trouble broke. He got up early to go on watch and found Sam cleaning decks in the silent passages of passenger quarters. He was in dungarees and wearing no shield. "Sam!"

Sam looked up. "Oh. Hi, kid. Keep your voice down, you'll wake people."

"But Sam, what in Ned are you doing?"

"Me? I seem to be manicuring this deck."

"But why?"

Sam leaned on his broom. "Well, kid, it's like this. The Captain and I had a difference of opinion. He won."

"You've been busted?"

"Your intuition is dazzling."

"What happened?"

"Max, the less you know about it the better. Don't fret. *Sic transit gloria mundi*—Tuesday is usually worse."

"But—See here, I've got to grab chow and go on watch. I'll look you up later."

"Don't."

Max got the story from Noguchi. Sam, it appeared, had set up a casino in an empty storeroom. He might have gotten away with it indefinitely had it remained a cards-and-dice set up, with a rake off for the house—the "house" being the Chief Master-at-Arms. But Sam had added a roulette wheel and that had been his downfall; Giordano had come to suspect that the wheel had less of the element of chance than was customary in better-run gambling halls—and had voiced his suspicion to Chief Clerk Kuiper. From there events took an inevitable course.

"When did he put in this wheel?"

"Right after we raised from Garson's Planet." Max thought uncomfortably of the "tea cozies" he had helped Sam bring aboard there. Noguchi went on, "Uh, didn't you know, sir? I thought you and him were pretty close before—you know, before you moved up decks."

Max avoided an answer and dug into the log. He found it under the previous day, added by Bennett to Simes' log. Sam was restricted to the ship for the rest of the trip, final disciplinary action postponed until return to Terra.

That last seemed to mean that Captain Blaine intended to give Sam a chance to show good behavior before making his recommendation to the guilds—the Captain was a sweet old guy, he certainly was. But "restricted"? Then Sam would never get his chance to run away from whatever it was he was running away from. He located Sam as soon as he was off watch, digging him out of his bunkroom and taking him out into the corridor.

Sam looked at him sourly. "I thought I told you not to look me up?"

"Never mind! Sam, I'm worried about you. This'restricted' angle... it means you won't have a chance to—"

"*Shut up!"* It was a whisper but Max shut up. "Now look here," Sam went on, "Forget it. I got my stake and that's the important point."

"But..."

"Do you think they can seal this ship tight enough to keep me in when I decide to leave? Now stay away from me. You're teacher's pet and I want to keep it that way. I don't want you lectured about bad companions, meaning me."

"But I want to help, Sam. I..."

"Will you kindly get up above 'C' deck where you belong?"

He did not see Sam again that leg; presently he stopped worrying about it. Hendrix required him to compute the planetary approach—child's play compared with a transition—then placed Max at the conn when they grounded. This was a titulary responsibility since it was precomputed and done on radar-automatic. Max sat with the controls under his hands, ready to override the autopilot—and Hendrix stood behind him, ready to override him—but there was no need; the *Asgard* came down by the plotted curve as easy as descending stairs. The thrust beams bit in and Max reported, "Grounded, sir, on schedule."

"Secure."

Max spoke into the ship's announcers. "Secure power room. Secure all space details. Dirtside routine, second section."

Of the four days they were there he spent the first three nominally supervising, and actually learning from, Kovak in the routine ninety-day inspection and overhaul of control room instruments. Ellie was vexed with him, as she had had different plans. But on the last day he hit dirt with her, chaperoned by Mr. and Mrs. Mendoza.

It was a wonderful holiday. Compared with Terra, Halcyon is a bleak place and Bonaparte is not much of a city. Nevertheless Halcyon is an earth-type planet with breathable air, and the party from the *Asgard* had not set foot outdoors since Earthport, months of time and unthinkable lightyears behind. The season was postaphelion, midsummer, Nu Pegasi burned warm and bright in blue sky. Mr. Mendoza hired a carriage and they drove out into green, rolling countryside behind four snuffling little Halcyon ponies. There they visited a native pueblo, a great beehive structure of mud, conoid on conoid, and bought souvenirs—two of which turned out to have "Made in Japan" stamped inconspicuously on them.

Their driver, Herr Eisenberg, interpreted for them. The native who sold the souvenirs kept swiveling his eyes, one after another, at Mrs. Mendoza. He twittered some remarks to the driver, who guffawed. "What does he say?" she asked.

"He was complimenting you."

"So? But how?"

"Well… he says you are for a slow fire and no need for seasoning; you'd cook up nicely. And he'd do it, too," the colonist added, "if you stayed here after dark."

Mrs. Mendoza gave a little scream. "You didn't tell us they were *cannibals*. Josie, take me back!"

Herr Eisenberg looked horrified. "Cannibals? Oh, no, lady! They don't eat each other, they just eat us—when they can get us, that is. But there hasn't been an incident in twenty years."

"But that's worse!"

"No, it isn't, lady. Look at it from their viewpoint. They're civilized. This old fellow would never break one of their laws. But to them we are just so much prime beef, unfortunately hard to catch."

"Take us back at once! Why, there are hundreds of them, and only five of us."

"Thousands, lady. But you are safe as long as Gneeri is shining." He gestured at Nu Pegasi. "It's bad juju to kill meat during daylight. The spirit stays around to haunt."

Despite his reassurances the party started back. Max noticed that Eldreth had been unfrightened. He himself had wondered what had kept the natives from tying them up until dark.

They dined at the Josephine, Bonaparte's best (and only) hotel. But there was a real three-piece orchestra, a dance floor, and food that was at least a welcome change from the menus of the Bifrost Lounge. Many ship's passengers and several officers were there; it made a jolly party. Ellie made Max dance between each course. He even got up his nerve to ask Mrs. Daigler for a dance, once she came over and suggested it.

During the intermission Eldreth steered him out on the adjacent balcony. There she looked up at him. "You leave that Daigler hussy alone, hear me?"

"Huh? I didn't do anything."

She suddenly smiled warmly. "Of course not, you big sweet ninny. But Ellie has to take care of you." She turned and leaned on the rail. Halcyon's early night had fallen, her three moons were chasing each other. The sky blazed with more stars than can be seen in Terra's lonely neighborhood. Max pointed out the strange constellations and showed her the departure direction they would take tomorrow to reach transition for Nova Terra. He had learned four new skies so far, knew them as well as he knew the one that hung over the Ozarks—and he would learn many more. He was already studying, from the charts, other skies they would be in this trip.

"Oh, Max, isn't it *lovely!*"

"Sure is. Say, there's a meteor. They're scarce here, mighty scarce."

"Make a wish! Make a wish quick!"

"Okay." He wished that he would get off easy when it came to the showdown. Then he decided that wasn't right; he ought to wish old Sam out of his jam—not that he believed in it, either way.

She turned and faced him. "What did you wish?"

"Huh?" He was suddenly selfconscious. "Oh, mustn't tell, that spoils it."

"All right. But I'll bet you get your wish," she added softly.

He thought for a moment that he could have kissed her, right then, if he had played his cards right. But the moment passed and they went inside. The feeling stayed with him on the ride back, made him elated. It was a good old world, even if there were some tough spots. Here he was, practically a junior astrogator on his first trip—and it hadn't been more than weeks since he was borrowing McAllister's mules to work the crop and going barefooted a lot to save shoes.

And yet here he was in uniform, riding beside the best-dressed girl in four planets.

He fingered the insignia on his chest. Marrying Ellie wasn't such an impossible idea now that he was an officer—if he ever decided to marry. Maybe her old man wouldn't consider an officer—and an astrogator at that—completely ineligible. Ellie wasn't bad; she had spunk and she played a fair game of three-dee—most girls wouldn't even be able to learn the rules.

He was still in a warm glow when they reached the ship and were hoisted in.

Kelly met him at the lock. "Mr. Jones—the Captain wants to see you."

"Huh? Oh. G'night, Ellie—I'll have to run." He hurried after Kelly.

"What's up?"

"Dr. Hendrix is dead."

13 — TRANSITION

Max questioned Kelly as they hurried up to the Captain's cabin.

"I don't know. I just don't know, Max." Kelly seemed close to tears. "I saw him before dinner—he came into the Hole to check what you and Kovak have been doing. He seemed all right. But the Purser found him dead in his bunk, the middle of the evening." He added worriedly, "I don't know what is going to happen now."

"What do you mean?"

"Well... if I was captain, I'd lay over and send for a relief. But I don't know."

For the first time Max realized that this change would make Mr. Simes the astrogator. "How long would it take to get a relief?"

"Figure it out. The *Dragon* is about three months behind us; she'd pick up our mail. A year about." In the contradictions of interstellar travel the ships themselves were the fastest method of communication; a radio message (had such a silly thing been attempted) would have taken more than two centuries to reach Earth, a like time for a reply.

Max found the Captain's cabin open and crowded with officers, all standing around, saying nothing, and looking solemn; he slipped inside without announcing himself and tried to be inconspicuous. Kelly did not go in. Captain Blaine sat at his desk with head bent. Several stragglers, members of the gay party at the Josephine, arrived after Max; First Officer Walther checked them off with his eyes, then said quietly to Blaine, "Ship's officers all present, sir."

Captain Blaine raised his head and Max was shocked to see how old he looked. "Gentlemen," he said in a low voice, "you know the sad news. Dr. Hendrix was found dead in his room this evening. Heart attack. The Surgeon tells me that he passed on about two hours before he was found—and that his death was probably almost painless."

His voice broke, then he continued. "Brother Hendrix will be placed in his last orbit two hours after we raise ship tomorrow. That is how he would have wished it, the Galaxy was his home. He gave unstintingly of himself that men should ride safely among the stars."

He paused so long that Max thought that the old man had forgotten that others were present. But when he resumed his voice was almost brisk. "That is all, gentlemen. Astrogators will please remain."

Max was not sure that he counted as an astrogator but the use of the plural decided him. First Officer Walther started to leave; Blaine called him back. When the four were alone, the Captain said, "Mr. Simes, you will take over head-of-department duties at once. Mr., uh… "; his eyes rested on Max.

"Jones, sir."

"Mr. Jones will assume your routine duties, of course. This tragedy leaves you shorthanded; for the rest of this trip I will stand a regular watch."

Simes spoke up. "That isn't necessary, Captain. We'll make out."

"Perhaps. But those are my wishes."

"Aye aye, sir."

"Prepare to lift on schedule. Any questions?"

"No, sir."

"Goodnight, gentlemen. Dutch, stay a moment, please?"

Outside the door Simes started to turn away; Max stopped him. "Mr. Simes?"

"Huh? Yes?"

"Any instructions for me, sir?"

Simes looked him over. "You stand your watch, Mister. I'll handle everything else."

The next morning Max found a crepe armband on his desk and a notice from the First Officer that mourning would continue for one week. The *Asgard* raised on schedule, with the Captain sitting quietly in his chair, with Simes at the control console. Max stood near the Captain, with nothing to do. Aside from the absence of Hendrix all was routine—except that Kelly was quite bad-tempered. Simes, Max admitted, handled the maneuver smartly—but it was precomputed, anyone could have done it; shucks, Ellie could have been sitting there. Or Chipsie.

Max had the first watch. Simes left him after enjoining him not to deviate from schedule without phoning him first. An hour later Kovak relieved Max temporarily and Max hurried to the passenger lock. There were five honorary pall bearers, the Captain, Mr. Walther, Simes, Max, and Kelly. Behind them, crowding the passageways, were officers and most of the crew. Max saw no passengers.

The inner door of the lock was opened; two steward's mates carried the body in and placed it against the outer door. Max was relieved to see that it had been wrapped in a shroud covering it completely. They closed the inner door and withdrew.

The Captain stood facing the door, with Simes and the First Officer standing guard on one side of the door and, on the other side facing them, Max and Kelly. The Captain flung one word over his shoulder: "Pressure!"

Behind stood Bennett wearing a portable phone; he relayed the word to the power room. The pressure gauge over the lock door showed one atmosphere; now it started to crawl upward. The Captain took a little book from his pocket and began to read the service for the dead. Feeling that he could not stand to listen Max watched the pressure gauge. Steadily it climbed. Max reflected that the ship had already passed escape speed for the Nu Pegasi system before he had been relieved; the body would take an open orbit.

The gauge reached ten atmospheres; Captain Blaine closed his book. "Warn the passengers," he said to Bennett.

Shortly the loudspeakers sounded: "All hands! All passengers! The ship will be in free fall for thirty seconds. Anchor yourselves and do not change position." Max reached behind him, found one of the many hand holds always present around an airlock and pulled down so that his grip would keep his feet in contact with the deck. A warning siren howled—then suddenly he was weightless as the ship's boost and the artificial anomalous gravity field were both cut out.

He heard the Captain say loudly and firmly, "'Ashes to ashes, dust to dust.' Let the body be cast forth."

The pressure gauge dropped suddenly to zero and Dr. Hendrix was launched into space, there to roam the stars for all eternity.

Max felt weight again as the power room brought them back to ship-normal. The pressure gauge showed gradually building pressure. People turned away and left, their voices murmuring low. Max went up and relieved the watch.

The following morning Simes moved into Dr. Hendrix's cabin. There was trouble with First Officer Walther about it—Max heard only third-hand reports—but the Captain upheld Simes; he stayed in the Astrogator's quarters. The Worry Hole settled into routine not much different from what had gone before, except that Simes' personality spread through everything. There had never been a posted watch list before; Kelly had always assigned the crewmen and the Doctor had simply informed the topwatch standers orally of his wishes. Now a typed list appeared:

FIRST WATCH Randolph Simes, Astrogator
SECOND WATCH Captain Blaine
(M. Jones, acting apprentice, under instruction)
THIRD WATCH Kelly, Ch. Cmptrmn.
(*signed*) Randolph Simes, Astrogator

Below was a four-watch list for crewmen, also signed by Simes.

Max looked at it and shrugged it off. It was obvious that Simes had it in for him, though he could not figure out why. It was equally obvious that Simes did not intend to let him do any astrogation and that Max's chances of being accepted in time as a fullfledged brother had now, with the death of Dr. Hendrix, sunk to zero. Unless, of course, Captain Blaine overrode Simes and forced a favorable report, which was extremely unlikely. Max again began to think of going along with Sam at Nova Terra.

Well, in the meantime he'd stand his watches and try to stay out of trouble. That was that.

There was only one transition to be made between Halcyon and Nova Terra, a leap of ninety-seven lightyears three weeks out from Halcyon at a boost of seventeen gravities—the boost always depended on the distance from the star to the gateway, since the purpose was to arrive there just under the speed of light. The Worry Hole stayed on a watch in three for the officers and one in four for crewmen for the first two weeks. Captain Blaine showed up each watch but seemed quite willing for Max to carry out the light duties of that portion of the leg. He gave little instruction—when he did, he was likely to wander off into anecdotes, amusing but not useful.

Max tried to continue his own drill, carrying out the routine middle o' watch computation as if it were the frantic matter it would have been near transition. Captain Blaine watched him, then said mildly, "Don't get yourself into a state, son. Always program on paper when possible—always. And take time to check. Hurrying causes mistakes." Max said nothing, thinking of Dr. Hendrix, but carried out the orders.

At the end of his first watch under the Captain Max signed the log as usual. When Simes came on watch four hours later, Max was dug out of bed and required to report to the control room. Simes pointed to the log. "What's the idea, Mister?"

"Of what, sir?"

"Signing the log. You weren't officer of the watch."

"Well, sir, the Captain seemed to expect it. I've signed a lot of logs and he's always approved them in the past."

"Hmm—I'll speak to the Captain. Go below."

At the end of his next watch, having received no instructions, Max prepared the log and took it to the Captain. "Sir? Do you want to sign this? Or shall I?"

"Eh?" Blaine looked at it. "Oh, I suppose I had better. Always let a head of department do things his own way if possible. Remember that when you are a skipper, son." He signed it.

That settled it until the Captain started a habit of not being there, first for short periods, then for longer. The time came when he was absent at the end of the watch; Max phoned Mr. Simes. "Sir, the Captain isn't here. What do you want me to do?"

"So what? It's his privilege to leave the control room."

"But Kelly is ready to relieve and the log isn't signed. Shall I sign it? Or shall I phone him?"

"Phone him? Jumping jeepers, no! Are you crazy?"

"What are your orders, sir?"

Simes was silent, then answered, "Print his name, then sign under it 'By direction'—and after this use your head."

They changed to watch-and-watch for the last week. Max continued under the Captain; Kelly assisted Simes. Once the shift was made Blaine became meticulous about being present in the control room and, when Max started to make the first computation, gently pushed him aside. "I had better take over, lad. We're getting closer now."

So Max assisted him—and became horrifyingly aware that the Captain was not the man he must once have been. His knowledge of theory was sound and he knew all the short cuts—but his mind tended to wander. Twice in one computation Max had to remind him diplomatically of details. Yet the Old Man seemed unaware of it, was quite cheerful.

It went on that way. Max began to pray that the Captain would let the new Astrogator make the transition himself—much as he despised Simes. He wanted to discuss his misgivings with Kelly—there was no one else with whom it would have been possible—but Kelly was on the opposite watch with Simes. There was nothing to do but worry.

When the last day arrived he discovered that Captain Blaine neither intended to take the ship through himself nor to let Simes do it; he had a system of his own. When they were all in the Worry Hole the Captain said, "I want to show you all a wrinkle that takes the strain out of astrogating. With no reflections on our dear brother, Dr. Hendrix, while he was a great astrogator, none better—nevertheless he worked too hard. Now here is a method taught me by my own master. Kelly, if you will have the remote controls led out, please."

He had them seat themselves in a half circle, himself, Simes, and Max, around the saddle of the computer, with Kelly in the saddle. Each of them was armed with programming forms and Captain Blaine held the remote-control switches in his lap. "Now the idea is for us each to work a sight in succession, first me, then Mr. Simes, then Mr. Jones. That way we keep the data flowing without strain. All right, lads, start pitching. Transition stations everyone."

They made a dry run, then the Captain stood up. "Call me, Mr. Simes, two hours before transition. I believe you and Mr. Jones will find that this method gives you enough rest in the meantime."

"Yes, sir. But Captain—may I make a suggestion?"

"Eh? Certainly, sir."

"This is a fine system, but I suggest that Kelly be put in the astrogating group instead of Jones. Jones is not experienced. We can put Kovak in the saddle and Lundy on the book."

Blaine shook his head. "No. Accuracy is everything, sir, so we must have our best operator at the computer. As for Mr. Jones, this is how he must get experience—if he gets rattled, you and I can always fill in for him." He started to leave, then added, "But Kovak can alternate with Kelly until I return. Mustn't have anyone getting tired, that way mistakes are made."

"Aye aye, sir."

Simes said nothing more to Max. They started working sights, alternately, using written programming on printed forms. The sights were coming in on a twenty-minute schedule, giving each of them forty minutes for a problem if he cared to take it. Max began to think that the Captain's method did have its points. Certainly Dr. Hendrix had worked himself to death—ships did not wear out but men did.

He had plenty of time to work not only his own problems, but those of Simes. The data came out orally and there was nothing to keep Max from programming Simes' sights in his head and checking on what went into the computer. So far as he could see Simes was doing all right—though of course there was no real strain involved, not yet.

They ate sandwiches and drank coffee where they sat, leaving their seats only for five minutes or so at a time. Captain Blaine showed up twenty minutes early. He smiled and said cheerily, "Everyone happy and relaxed? Now we really get down to it. I have just time for a cup of coffee."

A few minutes later he sat down and took over the control switches from Simes. The sights were coming through on a ten-minute schedule now, still ample time. Max continued to work them all, his own on paper and the others in his head. He was always through in time to catch the data for the next sight, program it mentally and check translations as Lundy thumbed the book. It gave him a running picture of how closely they were in the groove, how much hunting they were having to do in approaching their invisible target. It seemed to him that Simes tended to over-correct and that the Captain was somewhat optimistically under-correcting, but neither was so far out as to endanger the ship.

Maybe he was wrong about the Captain—the Old Man seemed to steady down when it mattered. His own corrections, he was glad to see, the Captain applied without question.

After more than an hour with transition fortyfive. minutes away Captain Blaine looked up and said, "All right, boys, we're getting close. Slam them to us as fast as you can now."

Smythe and Kovak, with Noguchi and Bennett running for them, slipped into high gear; data poured out in a steady stream. Max continued to work every sight, programming his own in his head and calling off figures faster than he wrote them down. He noticed that Simes was sweating, sometimes erasing and starting over. But the figures Simes called out agreed with what Max thought they should be, from his own mental programming. Captain Blaine seemed relaxed, though he had not speeded up materially and sometimes was still using the computer when Max was ready to pour his sight into it.

At one point Simes spoke too rapidly, slurring his figures, Lundy promptly said, "Repeat, sir!"

"Confound it! Clean out your ears!" But Simes repeated. The Captain glanced up, then bent back to his own problem. As soon as the computer was free Captain Blaine called his own figures to Lundy. Max had already set up the Captain's sight in his mind, was subconsciously listening while watching Simes.

An alarm bell rang in his mind. "Captain! I don't check you!"

Captain Blaine stopped. "Eh?"

"That program is wrong, sir."

The Captain did not seem angry. He simply handed his programming board to Simes. "Check me, sir."

Simes glanced quickly at the figures. "I check you, sir!"

Blaine said, "Drop out, Jones. Mr. Simes and I will finish."

"But—"

"Drop out, Mister!"

Max got out of the circle, seething inside. Simes' check of the Captain's set up hadn't meant anything, unless Simes had listened to and remembered (as Max had) the data as it came in. The Captain had transposed an eight and a three in the fifth and sixth decimal places—the set up would look okay unless one knew the correct figures. If Simes had even bothered to check it, he added bitterly.

But Max could not keep from noting and processing the data in his mind. Simes' next sight should catch the Captain's error; his correction should repair it. It would be a big correction, Max knew; traveling just under the speed of light the ship clipped a million miles in less than six seconds.

Max could see Simes hesitate as the lights from his next sight popped up on the computer and Lundy translated them back. Why, the man looked frightened! The correction called for would push the ship extremely close to critical speed—Simes paused, then ordered less than half the amount that Max believed was needed.

Blaine applied it and went on with his next problem. When the answer came out the error, multiplied by time and unthinkable velocity, was more glaring than ever. The Captain threw Simes a glance of astonishment, then promptly made a correction. Max could not tell what it was, since it was done without words by means of the switch in his lap.

Simes licked the dryness from his lips. "Captain?"

"Time for just one more sight," Blaine answered. "I'll take it myself, Mr. Simes."

The data were passed to him, he started to lay his problem out on the form. Max saw him erase, then look up; Max followed his gaze. The pre-set on the chronometer above the computer showed the seconds trickling away. "Stand by!" Blaine announced.

Max looked up. The stars were doing the crawling together that marked the last moments before transition. Captain Blaine must have pressed the second switch, the one that would kick them over, while Max was watching, for the stars suddenly blinked out and were replaced instantaneously by another starry firmament, normal in appearance.

The Captain lounged back, looked up. "Well," he said happily, "I see we made it again." He got up and headed for the hatch, saying over his shoulder, "Call me when you have laid us in the groove, Mr. Simes." He disappeared down the hatch.

Max looked up again, trying to recall from the charts he had studied just what piece of this new sky they were facing. Kelly was looking up, too. "Yes, we came through," Max heard him mutter. "But *where?*"

Simes also had been looking at the sky. Now he swung around angrily. "What do you mean?"

"What I said," Kelly insisted. "That's not any sky I ever saw before."

"Nonsense, man! You just haven't oriented yourself. Everybody knows that a piece of sky can look strange when you first glance at it. Get out the flat charts for this area; we'll find our landmarks quickly enough."

"They are out, sir. Noguchi."

It took only minutes to convince everyone else in the control room that Kelly was right, only a little longer to convince even Simes. He finally looked up from the charts with a face greenish white. "Not a word to anybody," he said. "That's an order—and I'll bust any man who slips. Kelly, take the watch."

"Aye aye, sir."

"I'll be in the Captain's cabin." He went below to tell Blaine that the *Asgard* had come out in unknown space—was lost.

14 — ANYWHERE

Two hours later Max climbed wearily up into the Worry Hole. He had just had a bad half hour, telling the truth as he saw it. Captain Blaine had been disinclined to blame anyone but himself, but had seemed stunned and bewildered. Simes had been nasty. His unstated logic seemed to be that, since it could not possibly be his fault and since it was unthinkable to blame the Captain, it must be Max's fault. Since Max had been relieved some minutes before transition, his theory seemed to be that Max had caused it by making a disturbance as they were approaching the critical instant—joggled their elbows, so to speak.

Mr. Walther had been present, a mute judge. They spoke of matters' outside his profession; he had seemed to be studying their faces. Max had stuck doggedly to his story.

He found Kelly still on watch. Kovak and Smythe were taking spectrograms; Noguchi and Lundy were busy with papers. "Want to be relieved?" he said to Kelly.

Kelly looked troubled. "I'm sorry, but you can't."

"Huh?"

"Mr. Simes phoned while you were on your way up. He says you are not to stand duty until further notice."

"He did? Well, I'm not surprised."

"He also said that you were to stay out of the control room."

Max made a violent statement about Simes. He added, "Well, it was nice while it lasted. Be seeing you."

He turned away but Kelly stopped him. "Don't be in a hurry, Max. He won't be up for a while. I want to know what happened. From the computer I can't tell what goes on."

Max told him, drawing on his memory for the figures. Kelly nodded at last. "That confirms what I've been able to dig out. The Captain flubbed with a transposition—easy to do. Then Simes didn't have the guts to make a big correction when it came around to him. But one more thing you don't know. Neither do they—yet."

"Huh? What?"

"The power room recorder shows it. Guenther had the watch down there and gave it to me over the phone. No, I didn't tell him anything was wrong. I just asked for the record; that's not unusual. By the way, any excitement down below? Passengers blowing their tops?"

"Not when I came up."

"Won't be long. They can't keep this quiet forever. Back to my story—things were already sour but the Captain had one last chance. He applied the correction and a whopping big one. But he applied it with the wrong sign, just backwards."

Profanity was too weak. All Max could say was, "Oh, my!"

"Yeah. Well, there's the devil to pay and him out to lunch."

"Any idea where we are?"

Kelly pointed to Kovak and Smythe at the spectrostellograph. "They're fishing, but no bites. Bright stars first, B-types and O's. But there is nothing that matches the catalogues so far."

Noguchi and Lundy were using a hand camera. Max asked, "What are *they* doing?"

"Photographing the records. All of 'em—programming sheets, the rough data from the chartsmen, the computer tape, everything."

"What good will that do?"

"Maybe none. But sometimes records get lost. Sometimes they even get changed. But not this time. I'm going to have a set of my own."

The unpleasant implications of Kelly's comments were sinking into Max's mind when Noguchi looked up. "That's all, Boss."

"Good." Kelly turned to Max. "Do me a favor. Stick those films in your pocket and take them with you. I want them out of here. I'll pick them up later."

"Well… all right." While Noguchi was unloading the camera Max added to Kelly, "How long do you think it will take to figure out where we are, checking spectra?"

Kelly looked more troubled than ever. "Max, what makes you think there is anything to find?"

"I don't follow you."

"Why should anything out there… " He made a sweeping gesture. "… match up with any charts we've got here?"

"You mean," Max said slowly, "that we might not be in our own galaxy at all? Maybe in another, like the Andromeda Nebula, say?"

"Maybe. But that's not all. Look, Max, I'm no theoretical physicist, that's sure, but so far as I know all that theory says is that when you pass the speed of light you have to go out of your own space, somewhere else. You've become irrelevant and it won't hold you. But *where* you go, unless you are set just right for a Horst congruency, that's another matter. The theory doesn't say. Does it?"

Max's head started to ache. "Gee, I don't know."

"Neither do I. But since we weren't set to duck back into our own space at another point, we may be anywhere. And I mean *anywhere*. We may be in some other spacetime totally unconnected with our own." He glanced up at the strange stars.

Max went below feeling worse than ever. He passed Simes going up; the Astrogator scowled at him but did not say anything. When Max reached his stateroom he put the films in a drawer—then thought about it, removed the drawer and cached them in dead space behind the drawer.

Max stayed in his room and worried. He fretted over being kept out of the control room, wanting very badly himself to check the sky for known stars. B-and O-type stars—well, that was all right, but there were half a dozen other ways. Globular star clusters, now—they'd be easy to identify; snag four of them and you'd know where you were as clear as reading a street sign. Then it would be just a case of fining it down, because you'd know what to look for and where. After which you'd hightail it for the nearest charted congruency, whether it took you a week or a year. The ship couldn't *really* be lost.

But suppose they weren't even in the right galaxy?

The thought dismayed him. If that were the case, they'd never get home before the end of time. It was chased out by another thought—suppose Kelly's suspicion had been correct, that this was an entirely different universe, another system of space and time? What then? He had read enough philosophical fancies to know that there was no theoretical reason for such to be impossible; the Designer might have created an infinity of universes, perhaps all pretty much alike—or perhaps as different as cheese and Wednesday. Millions, billions of them, all side by side from a multidimensional point of view.

Another universe might have different laws, a different speed of light, different gravitational ballistics, a different time rate—why they might get back to find that ten million years had passed and Earth burnt to a cinder!

But the light over his desk burned steadily, his heart pumped as always, obeying familiar laws of hydraulics, his chair pressed up against him—if this was a different sort of space the differences weren't obvious. And if it *was* a different universe, there was nothing to be done about it.

A knock came at the door, he let Kelly in and gave him the chair, himself sitting on the bed. "Any news?"

"No. Golly I'm tired. Got those pix?"

Max took out the drawer, fished around behind it, gave them to Kelly. "Look, Chief, I got an idea."

"Spill it."

"Let's assume that we're in the right galaxy, because—"

"Because if we ain't, there isn't any point in trying!"

"Well, yes. All right, we're in the Milky Way. So we look around, make quick sample star counts and estimate the distance and direction of the center. Then we try to identify spectra of stars in that direction, after deciding what ones we ought to look for and figuring apparent magnitudes for estimated distance. That would…"

"—save a lot of time," Kelly finished wearily. "Don't teach your grandpop how to suck eggs. What the deuce do you think I've been doing?"

"Oh. Sorry."

"Don't be. It's more than our revered boss thought of. While I been trying to work he's been bellyachin' around, finding fault, and trying to get me to say that he was dead right in everything—worrying about himself instead of worrying about his ship. Pfui! By the way, he grabbed the records just like I thought he would—'to show the Captain.' *He* says." Kelly stood up. "I'd better go."

"Don't rush. I'll ring for coffee."

"Running out of my ears now." Kelly took the films from his pocket and looked at them dutifully. "I had Noggy make two shots of everything; this is a double set. That's a good hidey-hole you've got. What say we stick one set in there and let it cool? Never can tell."

"Kelly, you aren't really expecting trouble over those records? Seems to me we've got trouble enough with the ship being lost."

"Huh? Max, you're going to make a good officer some day. But you're innocent. Now I'm a suspenders *and* belt man. I like to take as few chances as possible. Doc Hendrix—rest his soul!—was the same way." Kelly waited until Max had returned the spare set to the space back of the drawer, then started to leave. He paused.

"One thing I forgot to tell you, Max. We happened to come out pretty close to a star and a G-type at that."

"Oh." Max considered it. "Not one we know?"

"Of course not, or I would have said so. Haven't sized it yet, but figuring normal range in the G's we could reach it in not less than four weeks, not more than a year, at high boost. Thought you'd like to know."

"Well, yes. Thanks. But I can't see that it makes much difference."

"No? Doesn't it seem like a good idea to have a Sol-type star, with maybe Earth-type planets around it, not far off?"

"Well..."

"It does to me. The Adam-and-Eve business is rugged at best—and we might be in for a long stay." With that he left.

No steward's mate came to tell Max it was time for dinner; when he noticed that it was past time, he went to the lounge. Most of the passengers were already seated, although some were standing around talking. It was impossible to miss the feeling of unrest in the room. Max saw that the Captain was not at his table, nor was Mr. Walther at his. As he headed for his own table a Mr. Hornsby tried to grab his arm. Max shook him off. "Sorry, sir. I'm in a hurry."

"Wait a minute! I want to ask you..."

"Sorry." He hurried on and sat down. Chief Engineer Compagnon was not at the table, but the usual passengers were present. Max said, "Good evening," and reached for his soup spoon, just to keep busy.

There was no soup to be toyed with, nor were there rolls and butter on the table, although it was ten minutes past the hour. Such things simply did not happen in Chief Steward Dumont's jurisdiction. Come to think about it, Dumont was not in sight.

Mrs. Daigler put a hand on his arm. "Max? Tell me, dear—what is this silly rumor going around?"

Max tried to maintain a poker face. "What rumor, ma'am?"

"You must have heard it! After all, you're in astrogation. They say that the Captain turned the wrong corner or something and that we're falling into a star."

Max tried to give a convincing chuckle. "Who told you that? Whoever it was probably couldn't tell a star from his elbow."

"You wouldn't fool your Aunt Maggie?"

"I can assure you positively that the *Asgard* is not falling into a star. Not even a small star." He turned in his chair. "But it does look like something's fallen into the galley. Dinner is awfully late."

He remained turned, trying to avoid further questions. It did not work. Mr. Arthur called out sharply, "Mr. Jones!"

He turned back. "Yes?"

"Why stall us? I have been informed authoritatively that the ship is lost."

Max tried to look puzzled. "I don't follow you. We seem to be in it."

Mr. Arthur snorted. "You know what I mean! Something went wrong with that whatyoumucallit—transition. We're lost."

Max put on a school-teacherish manner, ticking off points on his fingers. "Mr. Arthur, I assure you that the ship is in absolutely no danger. As for being lost, I assure you just as firmly that if we are, the Captain neglected to tell me so. I was in the control room at transition and he seemed quite satisfied with it. Would you mind telling me who has been spreading this story? It's a serious thing, starting such rumors. People have been known to panic."

"Well… it was one of the crew. I don't know his name."

Max nodded. "I thought so. Now in my experience in space… " He went on, quoting from his uncle. "… I have learned that the only thing faster than light is the speed with which a story can spread through a ship. It doesn't have to have any foundation, it spreads just the same." He looked around again. "I wonder what has happened to dinner? I'd hate to go on watch hungry."

Mrs. Weberbauer said nervously, "Then we are all right, Maxie?"

"We're all right, ma'am."

Mrs. Daigler leaned toward him again and whispered, "Then why are you sweating, Max?"

He was saved by a steward's mate rushing up to the table and starting to deal out plates of soup. Max stopped him when he came around and said quietly, "Jim, where's Dumont?"

Out of the corner of his mouth the waiter said, "Cooking."

"Huh? Where's the chef?"

The steward's mate leaned down and whispered, "Frenchy is boiled as a judge. I guess he couldn't take it. You know."

Max let him go. Mr. Arthur said sharply, "What did he tell you?"

"I was trying to find out what went wrong in the galley," Max answered. "Seems the cook incapacitated himself." He spooned up a mouthful of the soup. "From the taste I'd say he had burned his thumb in this so-called chowder. Pretty bad, isn't it?"

Max was saved from further evasions by the arrival of the First Officer. Mr. Walther went to the Captain's table and banged on a glass with a spoon. "Your attention, please!"

He waited for quiet, then took a paper from his pocket. "I have an announcement to make on behalf of the Captain. Those of you who are familiar with the theory of astrogation are aware that space is changing constantly, due to the motions of the stars, and that consequently no two trips are exactly alike. Sometimes it is necessary, for this reason, to make certain changes in a ship's routing. Such a circumstance has arisen in this present trip and the *Asgard* will be somewhat delayed in reaching her next destination. We regret this, but we can't change the laws of nature. We hope that you will treat it as a minor inconvenience—or even as additional vacation, in the friendly and comfortable atmosphere of our ship. Please remember, too, that the insurance policy accompanying your ticket covers you completely against loss or damage you may be cost through the ship being behind schedule."

He put away the paper; Max had the impression that he had not actually been reading from it. "That is all that the Captain had to say, but I want to add something myself. It has come to my attention that someone has been spreading silly rumors about this minor change in schedule. I am sorry if any of you have been alarmed thereby and I assure you that I will take very strict measures if the originator can be identified." He risked a dignified smile. "But you know how difficult it is to trace down a bit of gossip. In any case, I want to assure you all that the *Asgard* is in no danger of any sort. The old girl was plying space long before any of us were born, she'll still be going strong after we all die of old age—bless her sturdy bones!" He turned and left at once.

Max had listened in open-mouthed admiration. He came from country where the "whopper" was a respected literary art and it seemed to him that he had never heard a lie told with more grace, never seen one interwoven with truth with such skill, in his life. Piece by piece, it was impossible to say that anything the First Officer had said was untrue; taken as a whole it was a flat statement that the *Asgard* was not lost—a lie if he ever heard one. He turned back toward his table mates. "Will someone pass the butter, please?"

Mr. Arthur caught his eye. "And you told us," he said sharply, "that nothing was wrong!"

Mr. Daigler growled, "Lay off him, Arthur. Max did pretty well, under the circumstances."

Mrs. Weberbauer looked bewildered. "But Mr. Walther said that everything was all right?"

Daigler looked at her with compassion. "We're in trouble, Mama Weberbauer. That's obvious. But all we can do is keep calm and trust the ship's officers. Right, Max?"

"I guess that's right, sir."

15 — "THIS ISN'T A PICNIC"

Max kept to his room that evening and the next day, wishing neither to be questioned by passengers nor to answer questions about why he had been relieved of duty. In consequence he missed the riot, having slept through it. He first heard of it when the steward's mate who tended his room showed up with a black eye. "Who gave you the shiner, Garcia?"

"I'm not sure, sir. It happened in the ruckus last night."

"Ruckus? What ruckus?"

"You mean you don't know?"

"This is the first I've heard of it. What happened?"

Garcia Lopez stared at the overhead. "Well—I wouldn't want to say too much. You know how it is—nobody wants to testify against a mate. No?"

"Who asked you to peach on a mate? You don't have to mention names—but what happened?"

"Well, sir. Some of those chicos, they ain't got much sense." Slowly Max learned that the unrest among the crew had been greater than that among the passengers, possibly because they understand more clearly the predicament. Some of them had consulted with Giordano's poor-man's vodka, then had decided to call on the Captain in a body and demand straight talk. The violence had taken place when the master-at-arms had attempted to turn them back at the companionway to "C" deck.

"Anybody hurt?"

"Not what you'd call hurt. Cut up a little. I picked this up… " He touched his eye tenderly. "… from being too anxious to see what was going on. Slats Kovak busted an ankle."

"Kovak! Why would *he* be in it?" It did not make sense that a member of the Worry gang should take part in anything so unreasonable.

"He was coming down, coming off watch, I guess. Maybe he was backing up the constable. Or maybe he just got caught in the swinging doors. Your friend Sam Anderson was sure in the thick of it."

Sam! Max felt sick at heart—Sam in trouble *again!* "You're sure?"

"I was there."

"Uh, he wasn't leading it, was he?"

"Oh, you got me wrong, M—Mr. Jones. He settled it. I never see a man who could use his hands like that. He'd grab two of 'em… *clop!* their heads would come together. Then he would grab two more."

Max decided to come out of hiding and do two things; look up Kovak, find out how he was and what he might need or want, and second, look up Sam. But before he could leave Smythe arrived with a watch list to initial. He found that he was assigned watch-and-watch with Simes—and that he himself was due on watch immediately. He went up, wondering what had caused Simes to relent.

Kelly was in the control room; Max looked around, did not see Simes. "You got it, Chief?"

"Until you relieve me. This is my last watch."

"How's that? Are you his pet peeve now?"

"You could say so. But not the way you think, Max. He drew up a watch list with him and me heel-and-toe. I politely pointed out the guild rules, that I wasn't being paid to take the responsibility of top watch."

"Oh, brother! What did he say?"

"What could he say? He could order me in writing and I could accept in writing, with my objection to the orders entered in the log—and his neck is out a yard. Which left him his choice of putting you back on the list, asking the Captain to split it with him, or turning his cap around and relieving himself for the next few weeks. With Kovak laid up it didn't leave him much choice. You heard about Kovak?"

"Yes. Say, what was that?" Max glanced over where Noguchi was loafing at the computer and lowered his voice. "Mutiny?"

Kelly's eyes grew round. "Why, as I understand it, sir, Kovak slipped and fell down a companionway."

"Oh. Like that, huh?"

"That's what it says in the log."

"Hmm… well, I guess I had better relieve you. What's the dope?"

They were in orbit under power for the nearby G-type star; the orders were entered in the Captain's order book… in Simes' handwriting but with Captain Blaine's signature underneath. To Max it looked shaky, as if the Old Man had signed it under emotional stress. Kelly had already placed them in the groove. "Have we given up trying to find out where we are?" Max asked.

"Oh, no. Orders are to spend as much time as routine permits on it. But I'll lay you seven to two you don't find anything. Max, this is somewhere else entirely."

"Don't give up. How do you know?"

"I feel it."

Nevertheless Max spent the watch "fishing." But with no luck. Spectrograms, properly taken and measured, are to stars what fingerprints are to men; they can be classified and comparisons made with those on file which are most nearly similar. While he found many which matched fairly closely with catalogued spectra, there was always the difference that makes one identical twin not quite like his brother.

Fifteen minutes before the end of the watch he stopped, and made sure that he was ready to be relieved. While waiting he thought about the shenanigan Kelly had pulled to get him back on duty. Good old Kelly! He knew Kelly well enough to know that he must not thank him; to do so would be to attribute to the Chief Computerman a motive which was "improper"—just wink the other eye and remember it.

Simes stomped in five minutes past the hour. He said nothing but looked over the log and records of observations Max had made. Max waited several minutes while growing more and more annoyed. At last he said, "Are you ready to relieve me, sir?"

"All in good time. I want to see first what you've loused up this time." Max kept his mouth shut. Simes pointed at the log where Max had signed it followed by "C.O. o/W." "That's wrong, to start with. Add 'under instruction.'"

Max breathed deeply. "Whose instruction, sir?"

"Mine."

Max hesitated only momentarily before answering, "No, sir. Not unless you are present during my watch to supervise me."

"Are you defying me?"

"No, sir. But I'll take written orders on that point… entered in the log."

Simes closed the log book and looked him slowly up and down. "Mister, if we weren't shorthanded you wouldn't be on watch. You aren't ready for a top watch—and it's my opinion that you won't ever be."

"If that's the way you feel, sir, I'd just as lief go back to chartsman. Or steward's mate."

"That's where you belong!" Simes' voice was almost a scream.

Noguchi had hung around after Lundy had relieved him; they both looked up, then turned their heads away.

Max made no effort to keep his answer private. "Very good, sir. Will you relieve me? I'll go tell the First Officer that I am surrendering my temporary appointment and reverting to my permanent billet."

Max expected a blast. But Simes made a visible effort to control himself and said almost quietly, "See here, Jones, you don't have the right attitude."

Max thought to himself, "What have I got to lose?" Aloud he said, "You're the one who doesn't have the right attitude, sir."

"Eh? What's that?"

"You've been riding me ever since I came to work in the Hole. You've never bothered to give me any instruction and you've found fault with everything I did. Since my probationary appointment it's been four times worse. You came to my room and told me that you were opposed to my appointment, that you didn't want me…"

"You can't prove that!"

"I don't have to. Now you tell me that I'm not fit to stand the watch you've just required me to stand. You've made it plain that you will never recommend me for permanent appointment, so obviously I'm wasting my time. I'll go back to the Purser's gang and do what I can there. Now, will you relieve me, sir?"

"You're insubordinate."

"No, sir, I am not. I have spoken respectfully, stating facts. I have requested that I be relieved—my watch was over a good half hour ago—in order that I may see the First Officer and revert to my permanent billet. As allowed by the rules of both guilds," Max added.

"I won't let you."

"It's my option, sir. You have no choice."

Simes' face showed that he indeed had no choice. He remained silent for some time, then said more quietly, "Forget it. You're relieved. Be back up here at eight o'clock."

"Not so fast, sir. You have stated publicly that I am not competent to take the watch. Therefore I can't accept the responsibility."

"Confound it! What are you trying to do? Blackmail me?

Max agreed in his mind that such was about it, but he answered, "I wouldn't say so, sir. You can't have it both ways."

"Well—I suppose you are competent to stand this sort of watch. There isn't anything to do, actually."

"Very good, sir. Will you kindly log the fact?"

"Huh?"

"In view of the circumstances, sir, I insist on the letter of the rules and ask you to log it."

Simes swore under his breath, then grabbed the stylus and wrote quickly. He swung the log book around. There!"

Max read: "M. Jones is considered qualified to stand a top watch in space, not involving anomaly. (s) R. Simes, Astrogator."

Max noted the reservation, the exception that would allow Simes to keep him from ever reaching permanent status. But Simes had stayed within the law. Besides, he admitted to himself, he didn't want to leave the Worry gang. He comforted himself with the thought that since they were all lost together it might never matter what Simes recommended.

"Quite satisfactory, sir."

Simes grabbed the book. "Now get out. See that you're back here on time."

"Aye aye, sir." Max could not refrain from having the last word, standing up to Simes had gone to his head. "Which reminds me, sir: will you please relieve me on time after this?"

"*What*?"

"Under the law a man can't be worked more than four hours out of eight, except for a logged emergency."

"Go below!"

Max went below, feeling both exultant and sick. He had no taste for fights, never had; they left him with a twisted lump inside. He burst into his room, and almost fell over Sam.

"Sam!"

"The same. What's eating you, boy? You look like the goblins had been chasing you."

Max flopped on his bunk and sighed. "I feel that way, too." He told Sam about the row with Simes.

Sam nodded approval. "That's the way to deal with a jerk like that—insult him until he apologizes. Give him lumps enough times and he'll eat out of your hand."

Max shook his head dolefully. "Today was fun, but he'll find some way to take it out on me. Oh, well!"

"Not so, my lad. Keep your nose clean and wait for the breaks. If a man is stupid and bad-tempered—which he is, I sized him up long ago—if you are smart and keep *your* temper, eventually he leaves himself wide open. That's a law of nature."

"Maybe." Max swung around and sat up. "Sam—you're wearing your shield again."

Sam stuck his thumb under the badge of office of Chief Master-at-Arms. "Didn't you notice?"

"I guess I was spinning too fast. Tell me about it—did the First decide to forgive and forget?"

"Not precisely. You know about that little excitement last night?"

"Well, yes. But I understand that officially nothing happened?"

"Correct. Mr. Walther knows when to pull his punches."

"What did happen? I heard you cracked some skulls together."

"Nothing much. And not very hard. I've seen ships where it would have been regarded as healthy exercise to settle your dinner. Some of the lads got scared and that made them lap up happy water. Then a couple with big mouths and no forehead got the inspiration that it was their right to talk to the Captain about it. Being sheep, they had to go in a flock. If they had run into an officer, he could have sent them back to bed with no trouble. But my unfortunate predecessor happened to run into them and told them to disperse. Which they didn't. He's not the diplomatic type, I'm afraid. So he hollered, 'Hey, Rube!' in his quaint idiom and the fun began."

"But where do you figure? You came to help him?"

"Hardly. I was standing at a safe distance, enjoying the festivities, when I noticed Mr. Walther's bedroom slippers coming down the ladder. Whereupon I waded in and was prominent in the ending. The way to win a medal, Max, is to make sure the general is watching, then act."

Max grinned. "Somehow I hadn't figured you for the hero type."

"Heaven forbid! But it worked out. Mr. Walther sent for me, ate me out, told me that I was a scoundrel and a thief and a nogoodnick—then offered me my shield back if I could keep order below decks. I looked him in the eye, a sincere type look, and told him I would do my best. So here I am."

"I'm mighty pleased, Sam."

"Thanks. Then he looked me in the eye and told me that he had reason to suspect—as if he didn't know!—that there might be a still somewhere in the ship. He ordered me to find it, and then destroy any liquor I found."

"So? How did Mr. Gee take that?"

"Why, Fats and I disassembled his still and took the pieces back to stores, then we locked up his stock in trade. I pleaded with him not to touch it until the ship was out of its mess. I explained that I would break both his arms if he did."

Max chuckled. "Well, I'm glad you're back in good graces. And it was nice of you to come tell me about it." He yawned. "Sorry. I'm dead for sleep."

"I'll vamoose. But I didn't come to tell you, I came to ask a question."

"Huh? What?"

"Have you seen the Skipper lately?"

Max thought back. "Not since transition. Why?"

"Nor has anyone else. I thought he might be spending his time in the Worry Hole."

"No. Come to think, he hasn't been at his table either—at least when I've been in the lounge."

"He's been eating in his cabin." Sam stood up. "Very, very interesting. Mmm… I wouldn't talk about it, Max."

Simes was monosyllabic when Max relieved him. Thereafter they had no more words; Simes acted as if Max did not exist except for the brief formalities in relieving. The Captain did not show up in the control room. Several times Max was on the point of asking Kelly about it, but each time decided not to. But there were rumors around the ship—the Captain was sick, the Captain was in a coma, Walther and the Surgeon had relieved him of duty, the Captain was constantly at his desk, working out a new and remarkable way to get the ship back to where it belonged.

By now it was accepted that the ship was lost, but the time for hysteria had passed; passengers and crew were calm and there seemed to be general consent that the decision to put down around the solar-type star toward which they were headed was the only reasonable decision. They were close enough now that it had been determined that the star did have planets—no G-class star had ever been found to be without planets, but to pick them up on a stereoplate was consoling.

It came to a choice between planet #3 and planet #4. Bolometric readings showed the star to have a surface temperature slightly over 6000° Kelvin, consistent with its spectrum; it was not much larger than Father Sol; calculated surface temperatures for the third and fourth planets gave a probability that the third might be uncomfortably hot whereas number four might be frigid. Both had atmospheres.

A fast hyperboloid swing past both settled the matter. The bolometer showed number three to be too hot and even number four to be tropical. Number four had a moon which the third did not—another advantage for four, for it permitted, by examining the satellite's period, an easy calculation of its mass; from that and its visible diameter its surface gravity was a matter of substitution in classic Newtonian formula… ninety-three percent of Earth-normal, comfortable and rather low in view of its over ten-thousand-mile diameter. Absorption spectra showed oxygen and several inert gases.

Simes assisted by Kelly placed the *Asgard* in a pole-to-pole orbit to permit easy examination—Max, as usual, was left to chew his nails.

The Captain did not come to the control room even to watch this maneuver.

They hung in parking orbit while their possible future home was examined from the control room and stared at endlessly from the lounge. It was in the lounge that Ellie tracked Max down. He had hardly seen her during the approach, being too busy and too tired with a continuous heel-and-toe watch and in the second place with much on his mind that he did not want to have wormed out of him. But, once the orbit was established and power was off, under standard doctrine Simes could permit the watch to be taken by crewmen—which he did and again told Max to stay out of the control room.

Max could not resist the fascination of staring at the strange planet; he crowded into the lounge along with the rest. He was standing back and gazing over heads when he felt his arm grabbed. "Where have you been?"

"Working." He reached out and caressed Chipsie; the spider puppy leaped to his shoulders and started searching him.

"Hmmmph! You don't work all the time. Do you know that I sent *nine* notes to your room this past week?"

Max knew. He had saved them but had not answered. "Sorry."

"Sorry he says. Never mind—Max, tell me all about it." She turned and looked out. "What have they named it? Is there anybody on it? Where are we going to land? *When* are we going to land? Max, aren't you *excited?"*

"Whew! They haven't named it yet—we just call it'the planet' or 'number four.' Kelly wants to name it 'Hendrix.' Simes is hedging; I think he wants to name it after himself. The Captain hasn't made any decision that I know of."

"They ought to name it 'Truth' or 'Hope' or something like that. Where is the Captain, Max? I haven't seen the old dear for *days*."

"He's working. This is a busy time for him, of course." Max reflected that his evasion might be true. "About your other questions, we haven't seen any signs of cities or towns or anything that looks like civilization."

"What do you mean by 'civilization'? Not a lot of dirty old cities surely?"

Max scratched his head and grinned. "You've got me. But I don't see how you could have it, whatever it is, without cities."

"Why not? Bees have cities, ants have cities, challawabs have cities. None of them is civilized. I can think of a lovely civilization that would just sit around in trees and sing and think beautiful thoughts."

"Is that what you want?"

"No, it would bore me to death. But I can think about it, can't I? You didn't say when we were going to land?"

"I don't know. When they decide it's safe."

"I wish they would hurry. Isn't it thrilling? Just like Robinson Crusoe, or Swiss Family Robinson—I can't keep those two straight. Or the first men on Venus."

"They died."

"So they did. But we won't, not on—" She waved her hand at the lovely green and blue and cloudy-white globe. "—not on, uh, I'm going to call it 'Charity' because that's what it looks like."

Max said soberly, "Ellie, don't you realize this is serious?" He kept his voice low in order not to alarm others. "This isn't a picnic. If this place doesn't work out, it might be pretty awful."

"Why?"

"Look, don't quote me and don't talk about it. But I don't think any of us will ever get home again."

She sobered momentarily, then shrugged and smiled. "You can't frighten me. Sure, I'd like to go home—but if I can't, well, Charity is going to be good to us. I know it."

Max shut up.

16 — "—OVER A HUNDRED YEARS—"

The *Asgard* landed on Charity the following day. Eldreth affixed her choice by the statistical process of referring to the planet by that name, assuming that it was official, and repeating it frequently.

When word was passed that landing would commence at noon, ship's time, Max went to the control room and simply assumed that it was his right to be present. Simes looked at him sourly but said nothing—for an evident reason: Captain Blaine was present.

Max was shocked at his appearance. The Captain seemed to have aged ten to fifteen years since the bad transition. In place of his habitual cheerful expression was one that Max had trouble tagging—until he recalled that he had seen it on horses, on horses too old to work but still working—head bent, eyes dull, mute and resigned against a fate both inescapable and unbearable. The old man's skin hung loose, as if he had not eaten for days or weeks. He seemed hardly interested in what was going on around him.

He spoke only once during the maneuver. Just before the chronometer showed noon Simes straightened up from the console and looked at his skipper. Blaine lifted his head and said in a hoarse whisper, "Take her down, Mister."

An Imperial military ship in landing on a strange spot would normally guide a radar-beacon robot down first, then home in on the beacon. But the *Asgard* was a merchant liner; she expected to land nowhere but at ports equipped with beams and beacons and other aids. Consequently the landing was made blind by precomputed radar-automatic and was planned for an open valley selected by photograph. The planet was densely wooded in most areas, choice was limited.

Simes presented a picture of the alert pilot, hands poised at the controls, eyes on the radar screen portraying the view below them, while racked in front of him were comparison photographs, radar and visual. The let down was without incident; starry black sky gave way to deep purple, then to blue. There was not even a jar as the ship touched, for its private gravity inside its Horstian field kept them from feeling impressed acceleration. Max knew they were down when he saw Simes cut in the thrust beams to cradle the ship upright.

Simes said to the microphone, "Power room, start auxiliaries and secure. All hands, dirtside routine, first section." He turned to Blaine. "Grounded, Captain."

Blaine's lips shaped the words, "Very good, sir." He got up and shuffled toward the hatch. When he had gone Simes ordered, "Lundy, take standby watch. The rest of you clear the control room."

Max went down with Kelly. When they reached "A" deck Max said grudgingly, "It was a smart landing I'll have to admit."

"Thanks," said Kelly.

Max glanced at him. "So you calculated it?"

"I didn't say that. I just said, 'Thanks.'"

"So? Well, you're welcome." Max felt his weight pulse and suddenly he was a trifle lighter. "They cut the field. Now we're really down."

He was about to invite Kelly into his room for the inevitable coffee when the ship's speakers sounded: "All hands! All passengers! Report to Bifrost Lounge for an important announcement. Those on watch are ordered to listen in by phone."

"What's up?" asked Max.

"Why wonder? We'll go see."

The lounge was crowded with passengers and crew. First Officer Walther stood near the Captain's table, counting the crowd with his eyes. Max saw him speak to Bennett, who nodded and hurried away. The large view port was across the lounge from Max; he stretched on his toes and tried to see out. All he could see was hilltops and blue sky.

There was a lessening of the murmur of voices; Max looked around to see Bennett preceding Captain Blaine through the crowd. The Captain went to his table and sat down; the First Officer glanced at him, then cleared his throat loudly. "Quiet, please."

He went on, "I've called you together because Captain Blaine has something he wants to say to you." He stopped and stepped back respectfully.

Captain Blaine slowly stood up, looked uncertainly around. Max saw him square his thin shoulders and lift his head. "Men," he said, his voice suddenly firm and strong. "My guests and friends—" he went on, his voice sinking. There was a hush in the lounge, Max could hear the Captain's labored breathing. He again asserted control of himself and continued, "I have brought you… I have brought you as far as I can… " His voice trailed off. He looked at them for a long moment, his mouth trembling. It seemed impossible for him to continue. The crowd started to stir.

But he did continue and they immediately quieted. "I have something else to say," he began, then paused. This pause was longer, when he broke it his voice was a whisper. "I'm sorry. God keep you all." He turned and started for the door.

Bennett slipped quickly in front of him. Max could hear him saying quietly and firmly: "Gangway, please. Way for the Captain." No one said anything until he was gone, but a woman passenger at Max's elbow was sobbing softly.

Mr. Walther's sharp, clear voice rang out. "Don't go away, anyone! I have additional announcements to make." His manner ignored what they had all just seen. "The time has come to sum up our present situation. As you can see, this planet is much like our Mother Earth. Tests must be made to be sure that the atmosphere is breathable, and so forth; the Surgeon and the Chief Engineer are making them now. But it seems likely that this new planet will prove to be eminently suitable for human beings, probably even more friendly than Earth.

"So far, we have seen no indications of civilized life. On the whole, that seems a good thing. Now as to our resources—The *Asgard* carries a variety of domestic animals, they will be useful and should be conserved as breeding stock. We have an even wider variety of useful plants, both in the ship's hydroponic gardens and carried as seeds. We have a limited but adequate supply of tools. Most important of all the ship's library contains a fair cross-section of our culture. Equally important, we ourselves have our skills and traditions…"

"Mr. Walther!"

"Yes, Mr. Hornsby?"

"Are you trying to tell us that you are dumping us here?"

Walther looked at him coldly. "No. Nobody is being'dumped' as you put it. You can stay in the ship and you will be treated as a guest as long as the *Asgard*—or you yourself—is alive. Or until the ship reaches the destination on your ticket. If it does. No, I have been trying to discuss reasonably an open secret; this ship is lost."

A voiceless sigh went through the room. All of them knew it, but up till now it had not been admitted officially. The flat announcement from a responsible officer echoed like the sentence of a court.

"Let me state the legal position," Mr. Walther went on. "While this ship was in space you passengers were subject to the authority of the

Captain, as defined by law, and through him you were subject to me and the other ship's officers. Now we have landed. You may go freely… or you may stay. Legally this is an unscheduled stopover; if the ship ever leaves here you may return to it and continue as passengers. That is my responsibility to you and it will be carried out. But I tell you plainly that at present I have no hope to offer that we will ever leave here—which is why I spoke of colonizing. We are lost."

In the rear of the room a woman began to scream hysterically, with incoherent sounds of, "… home! I want to go home! Take me…"

Walther's voice cut through the hubbub. "Dumont! Flannigan! Remove her. Take her to the Surgeon."

He continued as if nothing had happened. "The ship and the ship's crew will give every assistance possible, consistent with my legal responsibility to keep the ship in commission, to aid any of you who wish to colonize. Personally I think…"

A surly voice cut in, "Why talk about 'law'? There is no law here!"

Walther did not even raise his voice. "But there is. As long as this ship is in commission, there is law, no matter how many lightyears she may be from her home port. Furthermore, while I have no authority over any who choose to leave the ship, I strongly advise you to make it your first act dirtside to hold a town meeting, elect officers, and found a constitutional government. I doubt that you can survive otherwise."

"Mr. Walther."

"Yes, Mr. Daigler?"

"This is obviously no time for recriminations…"

"Obviously!"

Daigler grinned wryly. "So I won't indulge, though I could think of some. But it happens that I know something professionally about the economics of colonizing."

"Good! We'll use your knowledge."

"Will you let me finish? A prime principle in maintaining a colony out of touch with its supply base is to make it large enough. It's a statistical matter, too small a colony can be overwhelmed by a minor setback. It's like going into a dice game with too little money: three bad rolls and you're sunk. Looking around me, it's evident that we have much less than optimal minimum. In fact—"

"It's what we have, Mr. Daigler."

"I see that. I'm not a wishful thinker. What I want to know is, can we count on the crew as well?"

Mr. Walther shook his head. "This ship will not be decommissioned as long as there are men capable of manning it. There is always hope, no matter how small, that we may find a way home. It is even possible that an Imperial survey ship might discover us. I'm sorry—no."

"That isn't quite what I asked. I was two jumps ahead of you, I figured you wouldn't let the crew colonize. But can we count on their help? We seem to have about six females, give or take one, who will probably help to carry on the race. That means that the next generation of our new nation is going to be much smaller. Such a colony would flicker and die, by statistical probability—unless every man jack of us works ten hours a day for the rest of his life, just to give our children a better chance of making it. That's all right with me, if we all make an all-out try. But it will take all the manpower we have to make sure that some young people who aren't even born yet get by thirty years from now. Will the crew help?"

Mr. Walther said quietly, "I think you can count on it."

"Good enough."

A small, red-faced man whose name Max had never learned interrupted. "Good enough, my eye! I'm going to sue the company, I'm going to sue the ship's officers individually. I'm going to shout it from the… " Max saw Sam slipping through the crowd to the man's side, the disturbance stopped abruptly.

"Take him to the Surgeon," Mr. Walther said wearily. "He can sue us tomorrow. The meeting is adjourned."

Max started for his room. Eldreth caught up with him. "Max! I want to talk with you."

"All right." He started back toward the lounge.

"No, I want to talk privately. Let's go to your room."

"Huh? Mrs. Dumont would blow her top, then she'd tell Mr. Walther."

"Bother with all that! Those silly rules are dead. Didn't you listen at the meeting?"

"You're the one who didn't listen."

He took her firmly by the arm, turned her toward the public room. They ran into Mr. and Mrs. Daigler coming the other way. Daigler said, "Max? Are you busy?"

"Yes," answered Eldreth.

"No," said Max.

"Hmm… you two had better take a vote. I'd like to ask Max some questions. I've no objection to your being with us, Eldreth, if you will forgive the intrusion.

She shrugged. "Oh, well, maybe you can handle him. I can't."

They went to the Daiglers' stateroom, larger and more luxurious than Max's and possessing two chairs. The two women perched on the bed, the men took the chairs. Daigler began, "Max, you impress me as a man who prefers to give a straight answer. There are things I want to know that I didn't care to ask out there. Maybe you can tell me."

"I will if I can."

"Good. I've tried to ask Mr. Simes, all I get is a snottily polite brush off. I haven't been able to get in to see the Captain—after today I see that there wouldn't have been any point anyhow. Now, can you tell me, with the mathematics left out, what chance we have to get home? Is it one in three, or one in a thousand—or what?"

"Uh, I couldn't answer it that way."

"Answer it your own way."

"Well, put it this way. While we don't know where we are, we know positively where we aren't. We aren't within, oh, say a hundred lightyears of any explored part of the Galaxy."

"How do you know? It seems to me that's a pretty big space to be explored in the weeks since we got off the track."

"It sure is. It's a globe twelve hundred trillion miles thick. But we didn't have to explore it, not exactly."

"Then how?"

"Well, sir, we examined the spectra of all first magnitude stars in sight—and a lot more. None of them is in our catalogues. Some are giants that would be first magnitude anywhere within a hundred lightyears of them—they'd be certain to be in the catalogues if a survey ship had ever been that close to them. So we are absolutely certain that we are a long, long way from anywhere that men have ever been before. Matter of fact, I spoke too conservatively. Make it a globe twice as thick, eight times as big, and you'd still be way over on the conservative side. We're *really* lost."

"Mmm… I'm glad I didn't ask those questions in the lounge. Is there any possibility that we will ever know where we are?"

"Oh, sure! There are thousands of stars left to examine. Chief Kelly is probably shooting one this minute."

"Well, then, what are the chances that we will eventually find ourselves?"

"Oh, I'd say they were excellent—in a year or two at the outside. If not from single stars, then from globular star clusters. You realize that the Galaxy is a hundred thousand lightyears across, more or less, and we can see only stars that are fairly close. But the globular clusters make good landmarks, too." Max added the mental reservation, *if we aren't in the wrong galaxy*. There seemed no point in burdening them with that dismaying possibility.

Daigler relaxed and took out a cigar. "This is the last of my own brand, but I'll risk smoking it now. Well, Maggie, I guess you won't have to learn how to make soap out of wood ashes and hog drippings after all. Whether it's one year or five, we can sweat it out and go home."

"I'm glad." She patted her ornate coiffure with soft, beautifully manicured hands. "I'm hardly the type for it."

"But you don't understand!"

"Eh? What's that, Max?"

"I didn't say we could get back. I just said I thought it was fairly certain we would find out where we are."

"What's the difference? We find out, then we go home."

"No, because we *can't* be less than a hundred lightyears from explored space."

"I don't see the hitch. This ship can do a hundred lightyears in a split second. What was the longest leap we made this cruise? Nearly five hundred lightyears, wasn't it?"

"Yes, but—" Max turned to Eldreth. "You understand? Don't you?"

"Well, maybe. That folded-scarf thing you showed me?"

"Yes, yes. Mr. Daigler, sure the *Asgard* can transit five hundred lightyears in no time—or any other distance. But *only* at calculated and surveyed congruencies. We don't know of any within a hundred lightyears, at least… and we won't know of any even if we find out where we are because we know where we *aren't*. Follow me? That means that the ship would have to travel at top speed for something over a hundred years and maybe much longer, just for the first leg of the trip."

Mr. Daigler stared thoughtfully at his cigar ash, then took out a pen knife and cut off the burning end. "I'll save the rest. Well, Maggie, better study up on that homemake soap deal. Thanks, Max. My father was a farmer, I can learn."

Max said impulsively, "I'll help you, sir."

"Oh yes, you did tell us that you used to be a farmer, didn't you? You should make out all right." His eyes swung to Eldreth. "You know what I would do, if I were you kids? I'd get the Captain to marry you right away. Then you'd be all set to tackle colonial life right."

Max blushed to his collar and did not look at Ellie. "I'm afraid I can't. I'm a crew member, I'm not eligible to colonize."

Mr. Daigler looked at him curiously. "Such devotion to duty. Well, no doubt Ellie can take her pick among the single men passengers."

Eldreth smoothed her skirt demurely. "No doubt."

"Come, Maggie. Coming, Eldreth?"

17 — CHARITY

"Charityville" was a going concern within a week. It had a mayor, Mr. Daigler, a main street, Hendrix Avenue, even its first wedding, performed by the mayor in the presence of the villagers—Mr. Arthur and little Becky Weberbauer. The first cottage, now building, was reserved for the newlyweds. It was a log cabin and a very sloppy job, for, while there were those among them who had seen pictures or had even seen log cabins, there was no one who had ever built one before.

There was an air of hope, of common courage, even of gaiety in the new community. The place was fragrant with new starts, forward-looking thoughts. They still slept in the ship and breakfasted there, then carried their lunches and labored mightily, men and women alike, through the short day—Charity spun on her axis in twenty-one-plus hours. They returned at nightfall, dined in the ship, and some found energy to dance a bit before going to bed.

Charity seemed to be all that her name implied. The days were balmy, the nights were mild—and beautiful beyond anything yet found in the Galaxy. Its star (they simply called it "the Sun") was accompanied by more comets than had yet been seen around any star. A giant with a wide tail stretched from zenith to western horizon, diving at their Sun. Another, not yet so grand but awesome enough to have caused watchers for the end of the world on Earthly hilltops, approached from the north, and two more decorated the southern sky with lace of icy fire.

Concomitant with comets was, necessarily, an equal abundance of meteors. Every night was a shower of falling stars, every day ended like Solar Union Day with a display of fireworks.

They had seen no dangerous animals. Some of the settlers reported seeing centaurlike creatures about the size of Shetland ponies, but they seemed timid and had scurried away when discovered. The prevalent life form appeared to be marsupial mammals in various sizes and shapes. There were no birds, but there was another sort of flying life not found elsewhere—jellyfishlike creatures four or five feet high with dangling tendrils, animated balloons. They appeared to have muscular control over their swollen bladders for they could rise and fall, and could even, by some not evident means, go upwind against a gentle breeze—in higher winds they anchored to treetops, or floated free and let the wind carry them.

They seemed curious about Charityville and would hang over a work site, turning slowly around as if to see everything. But they never got within reach. Some of the settlers wanted to shoot one down and examine it; Mayor Daigler forbade it.

There was another animal too—or might be. They were called "peekers" because all that anyone had seen was something that ducked quickly behind a rock or tree when anyone tried to look. Between the possibly mythical peeker and the ubiquitous balloons the colonists felt that their new neighbors took a deep but not unfriendly interest in what they were doing.

Maggie Daigler—she was "Maggie" to everyone now—had put away her jewels, drawn dungarees from ship's stores, and chopped off her hair. Her nails were short and usually black with grime. But she looked years younger and quite happy.

In fact, everyone seemed happy but Max.

Ellie was avoiding him. He cursed himself and his big mouth thrice daily and four times at night. Sure, Daigler had spoken out of turn—but was that any reason for him to open his mouth and put his foot in it? Of course, he had never figured on marrying Ellie—but shucks, maybe they were stuck here forever. "Probably," not "maybe," he corrected. The ban on joining the colony would be let up in time—in which case, what was the sense in getting in bad with the only eligible girl around?

An astrogator ought to be a bachelor but a farmer needed a wife. Mighty nice to have some one cooking the turnip greens and jointing a chicken while a man was out in the fields. He ought to know—Maw had let it slide often enough. Ellie wouldn't be like Maw. She was strong and practical and with just a little teaching would do all right.

Besides she was about the prettiest thing he ever saw, if you looked at her right.

When Mr. and Mrs. Dumont, by special dispensation, joined the colony it caused him to act. Since the steward and stewardess would have no duties in a ship without passengers no one could reasonably object—but it gave Max an approach. He went to see the First Officer.

"Probationary Apprentice Jones, sir."

Walther glanced up. "I think I'd say 'Assistant Astrogator Jones' if I were you. Closer to the facts. Come in."

"Uh, that's what I wanted to speak with you about, sir."

"So? How?"

"I want to revert to my billet."

"Eh? Why would you rather be a chartsman than an astrogator? And what difference does it make—now?"

"No, sir. I'm electing to resume my permanent appointment, steward's mate third."

Walther looked amazed. "There must be more to this. Explain yourself."

With much stammering Max explained his trouble with Simes. He tried to be fair and finished with the dismal feeling that he had sounded childish. Walther said, "You're sure about this? Mr. Simes has said nothing to me about you."

"He wouldn't, sir. But it's true. You can ask Kelly."

Walther thought for a while. "Mr. Jones, I wouldn't attach too much importance to this. At your age these conflicts of personality often seem more serious than they are. My advice is to forget it and do your work. I'll speak to Mr. Simes about his keeping you out of the control room. That isn't proper and I am surprised to hear it."

"No, sir."

"'No, sir' what?"

"I want to return to steward's mate."

"Eh? I don't understand you."

"Because, sir, I want to join the colony. Like Chief Steward Dumont."

"Oh… A light begins to dawn." Walther slapped the desk emphatically. "Absolutely no! Under no circumstances."

"Sir?"

"Please understand me. This is not discrimination. If you were a steward's mate and nothing else, I would consider your request—under the special circumstances which I believe pertain. But you are an astrogator. You know our situation. Dr. Hendrix is dead. Captain Blaine—well, you have seen him. He may recover, I cannot plan on it. Mr. Jones, as long as there is any faint hope that this ship will ever lift again, as long as we have crew to work her, no astrogator, no chartsman, no computerman will be relieved from duty for any reason whatsoever. You see that, don't you?"

"I guess so, sir. Uh, aye aye, sir."

"Good. By the way, keep this to yourself, but as soon as the colony can get along without us temporarily, I want the ship placed in a parking orbit so that you specialists can maintain a search. You can't work very well through this atmosphere, can you?"

"No, sir. Our instruments were designed for open space."

"So we must see that you get it." The First Officer sat silent, then added, "Mr. Jones—Max, isn't it? May I speak to you man to man?"

"Uh? Certainly, sir."

"Mmm… Max, this is none of my business, but treat it as fatherly advice. If you have an opportunity to marry—and want to—you don't have to join the colony to do it. If we stay, it won't matter in the long run whether you are crew or a charter member of the village. If we leave, your wife goes with you."

Max's ears burned. He could think of nothing to say.

"Hypothetical question, of course. But that's the proper solution." Walther stood up. "Why don't you take the day off? Go take a walk or something. Fresh air will do you good. I'll speak to Mr. Simes."

Instead, Max went looking for Sam, did not find him in the ship, discovered that he had gone dirtside. He followed him down and walked the half mile to Charityville.

Before he reached the building that was being worked on he saw a figure separate itself from the gang. He soon saw that it was Eldreth. She stopped in front of him, a sturdy little figure in dirty dungarees. She planted her feet and set fists on her hips.

"Uh, howdy, Ellie."

"Up to your old tricks! Avoiding me. Explain yourself."

The injustice of it left him stuttering. "But… Now see here, Ellie, it's not that way at all. You've been…"

"A likely story. You sound like Chipsie caught with her hand in a candy dish. I just wanted to tell you, you reluctant Don Juan, that you have nothing to worry about. I'm not marrying anyone this season. So you can resume the uneven tenor of your ways."

"But, Ellie… " he started desperately.

"Want me to put it in writing? Put up a bond?" She looked fiercely at him, then began to laugh, wrinkling her nose. "Oh, Max, you large lout, you arouse the eternal maternal in me. When you are upset your face gets as long as a mule's. Look, forget it."

"But, Ellie… Well, all right."

"Pals?"

"Pals."

She sighed. "I feel better. I don't know why, but I don't like to be on the outs with you. Where were you going?"

"Uh, nowhere. Taking a walk."

"Fine. I'll go too. Half a sec while I gather in Chipsie." She turned and called, "Mister Chips! Chipsie!"

"I don't see her."

"I'll get her." She ran off, to return quickly with the spider puppy on her shoulder and a package in her hand. "I picked up my lunch. We can split it."

"Oh, we won't be gone that long. Hi, Chipsie baby."

"Hi, Max. Candy?"

He dug into a pocket, found a sugar cube that he had saved several days ago for the purpose; the spider puppy accepted it gravely and said, "Thank you."

"Yes, we will," Ellie disagreed, "because some of the men saw a herd of those centaur ponies the other side of that ridge. It's quite a hike."

"I don't think we ought to go that far," he said doubtfully. "Won't they miss you?"

"I've been doing my share. See my callouses?" She stuck out a grimy paw. "I told Mr. Hornsby that I was suddenly come down with never-get-overs and he would have to find somebody else to hold while he hammered."

He was pleased to give in. They went up rising ground and into an arroyo and soon were in a grove of primitive conifers. Mr. Chips jumped down from Ellie's shoulders and scurried up a tree. Max stopped. "Hadn't we better catch her?"

"You worry too much. Chipsie wouldn't run away. She'd be scared to death. Chipsie! Here, honey!"

The spider puppy hustled through branches, got directly above them, dropped a cone on Max. Then she laughed, a high giggle. "See? She just wants to play."

The ridge was high and Max found that his hillbilly's wind had been lost somewhere among the stars. The arroyo meandered slowly upwards. He was still woodsman enough to keep a sharp eye out for landmarks and directions. At weary last they topped the crest. Ellie paused. "I guess they're gone," she said disappointedly, staring out over flatter country below them. "No! Look over there. See them! About two dozen little black dots."

"Uh huh. Yeah."

"Let's go closer. I want a good look."

"I wonder if that's smart? We're a far piece from the ship and I'm not armed."

"Oh, they're harmless."

"I was thinking of what else might be in these woods."

"But we're already in the woods, and all we've seen are the hobgoblins." She referred to the balloonlike creatures, two of which had trailed them up the arroyo. The humans had grown so used to their presence that they no longer paid them any attention.

"Ellie, it's time we went back."

"No."

"Yes. I'm responsible for you. You've seen your centaurs."

"Max Jones, I'm a free citizen. You may be starting back; I'm going to have a close look at those underslung cow ponies." She started down.

"Well—Wait a moment. I want to get my bearings." He took a full look around, fixed the scene forever in his mind, and followed her. He was not anxious to thwart her anyhow; he had been mulling over the notion that this was a good time to explain why he had said what he had said to Mr. Daigler—and perhaps lead around to the general subject of the future. He wouldn't go so far as to talk about marriage—though he might bring it up in the abstract if he could figure out an approach.

How did you approach such a subject? You didn't just say, "There go the hobgoblins, let's you and me get married!"

Ellie paused. "There go the hobgloblins. Looks as if they were heading right for the herd."

Max frowned. "Could be. Maybe they talk to them?"

She laughed. "Those things?" She looked him over carefully. "Maxie, I've just figured out why I bother with you."

Huh? Maybe she was going to lead up to it for him. "Why?"

"Because you remind me of Putzie. You get the same puzzled look he does."

"'Putzie?' Who is Putzie?"

"Putzie is the man my father shipped me off to Earth to get me away from—and the reason I crushed out of three schools to get back to Hespera. Only Daddy will probably have shipped him off, too. Daddy is tricky. Come here, Chipsie. Don't go so far."

She continued, "You'll love Putzie. He's nice. Stop it, Chipsie."

Max despised the man already. "I don't like to fret you," he said, "but it's a long way to Hespera."

"I know. Let's not borrow trouble." She looked him over again. "I might keep you in reserve, if you weren't so jumpy."

Before he could think of the right answer she had started down.

The centaurs—it seemed the best name, though the underparts were not much like horses and the parts that stuck up were only vaguely humanoid—clustered near the foot of the hill, not far out from the trees. They weren't grazing, it was hard to tell what they were doing. The two hobgoblins were over the group, hovering as if in interest just as they did with humans. Ellie insisted on going to the edge of the clearing to see them better.

They reminded Max of clowns made up to look like horses. They had silly, simple expressions and apparently no room for a brain case. They appeared to be marsupials, with pouches almost like bibs. Either they were all females or with this species the male had a pouch too. Several little centaurs were cavorting around, in and out the legs of their elders.

One of the babies spied them, came trotting toward them, sniffling and bleating. Behind it the largest adult pulled out of the herd to watch the young one. The colt scampered up and stopped about twenty feet away.

"Oh, the darling!" Ellie said and ran out a few feet, dropped to one knee. "Come here, pet. Come to mama."

Max started for her. "Ellie! Come back here!"

The large centaur reached into its pouch, hauled out something, swung it around its head like a gaucho's throwing rope. "Ellie!"

He reached her just as it let go. The thing struck them, wound around and held them. Ellie screamed and Max struggled to tear it loose—but they were held like Laocoön.

Another line came flying through the air, clung to them. And another.

Mr. Chips had followed Ellie. Now she skittered away, crying. She stopped at the edge of the clearing and shrilled, "Max! Ellie! Come *back*. *Please* back!"

18 — CIVILIZATION

Ellie did not faint nor grow hysterical. After that involuntary scream, her next remark was simply, "Max, I'm sorry. My fault."

The words were almost in his ear, so tightly were they tied together by the clinging ropes. He answered, "I'll get us loose!" and continued to strain at their bonds.

"Don't struggle," she said quietly, "It just makes them tighter. We'll have to talk our way out of this."

What she said was true; the harder he strained the tighter the pythonlike bonds held them. "Don't," Ellie pleaded. "You're making it worse. It's hurting me." Max desisted.

The largest centaur ambled up and looked them over. Its broad simple face was still more ludicrous close up and its large brown eyes held a look of gentle astonishment. The colt approached from the other side and sniffed curiously, bleated in a high voice. The adult bugled like an elk; the colt shied sideways, then rejoined the herd on a dead run.

"Take it easy," Ellie whispered. "I think they were scared that we would hurt the baby. Maybe they'll just look us over and let us go."

"Maybe. But I wish I could get at my knife."

"I'm glad you can't. This calls for diplomacy."

The rest of the herd came up, milled around and looked them over, while exchanging calls that combined bugling, whinnying, and something between a cough and a snort. Max listened. "That's language," he decided.

"Of course. And how I wish I had studied it at Miss Mimsey's."

The largest centaur leaned over them, smoothed at their bonds; they became looser but still held them. Max said sharply, "I think they are going to untie us. Get ready to run."

"Yes, boss."

Another centaur reached into its builtin pouch, took out another of the ropelike things. It dropped to its fore knees, flipped the end so that it curled around Max's left ankle. The end seemed to weld into a loop, hobbling Max as effectively as a bowline knot; Ellie was treated the same way. The biggest centaur then patted their bonds, which fell off and writhed gently on the ground. It picked them up and stuffed them into its pouch.

The centaur which had hobbled them wrapped the ends of their tethers around its upright trunk, they merged into a belt. After an exchange of sour bugle calls with the leader, it patted the leashes… which then stretched like taffy, becoming quite twenty feet long and much more slender. Max pressed his knife on Ellie and said, "Try to cut yourself loose. If you can, then run for it. I'll keep them busy."

"No, Max."

"Yes! Dawggone it, quit being a brat! You've made enough trouble."

"Yes, Max." She took the knife and tried to saw through the strange rope near her ankle. The centaurs made no attempt to stop her, but watched with the same air of gentle astonishment. It was as if they had never seen a knife, had no notion of what one was. Presently she gave up. "No good, Max. It's like trying to slice duraplastic."

"Why, I keep that knife like a razor. Let me try."

He had no better luck. He was forced to stop by the herd moving out—walk or be dragged. He managed to close the knife while hopping on one foot to save his balance. The group proceeded at a slow walk for a few steps, then the leader bugled and the centaurs broke into a trot, exactly like ancient cavalry.

Ellie stumbled at once and was dragged. Max sat down, managed to grab his hobble and hang on while shouting, "Hey! Stop!"

Their captor stopped and looked around almost apologetically. Max said, "Look, stupid. We can't keep up. We're not horses," while helping Ellie to her feet. "Are you hurt, kid?"

"I guess not." She blinked back tears. "If I could lay hands on that hayburning oaf, he'd be hurt—plenty!"

"You skinned your hand."

"It won't kill me. Just tell him to slow down, will you?"

Seeing them on their feet the monster immediately started to trot again. Down they went again, with Max trying to drag them to a halt. This time the leader trotted back from the main herd and consulted their custodian. Max took part, making up in vehemence what he lacked in semantic efficiency.

Perhaps he was effective; their keeper slowed to a fast walk, letting the others go ahead. Another centaur dropped back and became a rear guard. One of the animated balloons, which had continued to hover over the herd, now drifted back and remained over Max and Ellie.

The pace was just bearable, between a fast walk and a dogtrot. The route led across the open, flat floor of the valley and through knee-high grass. The grass saved them somewhat, as the centaur leading them seemed to feel that a fall or two every few hundred yards represented optimum efficiency. He never seemed impatient and would stop and let them get up, but always started off again at a clip brisk for humans. Max and Ellie ceased trying to talk, their throats being burned dry by their panting efforts to keep up. A tiny stream meandered through the bottom of the valley; the centaur jumped easily across it. It was necessary for the humans to wade. Ellie paused in midstream, leaned down and started to drink. Max objected, "Ellie! Don't drink that—you don't know that it's safe."

"I hope it poisons me so I can lie down and die. Max, I can't go much farther."

"Chin up, kid. We'll get out of this. I've been keeping track of where we've gone." He hesitated, then drank also, being terribly thirsty. The centaur let them, then tugged them on.

It was as far again to the rising ground and forest on the other side. They had thought that they were as tired as they could be before they started up hill; they were mistaken. The centaur was agile as a goat and seemed surprised that they found it difficult. Finally Ellie collapsed and would not get up; the centaur came back and stirred her roughly with a three-toed hoof.

Max struck him with both fists. The centaur made no move to retaliate but looked at him with that same stupid astonishment. Their rear guard came up and conversed with it, after which they waited for perhaps ten minutes. Max sat down beside Ellie and said anxiously, "Feeling any better?"

"Don't talk."

Presently the guard edged between them and drove Max back by stepping on him, whereupon the other centaur tugged on Ellie's leash. It contracted and she was forced to scramble to her feet. The centaurs let them rest twice after that. After an endless time, when the local sun was dropping low in the west, they came out on flat table land, still heavily wooded. They continued through trees for a distance which Max's count of paces told him was under a mile but seemed like ten, then stopped.

They were in a semi-clearing, a space carpeted with fallen needles. Their guard came up to the other centaur and took from him the end of Max's leash, flipped it around the base of a tree, to which it clung. The other centaur did the same with Ellie's leash to another tree about forty feet away. Having done so, they roughly urged the two together, while stopping to stroke their bonds until they were stretched out very thin. It allowed Max and Ellie enough slack that they might have passed each other.

This did not seem to please the centaurs. One of them shifted Max's leash farther back into the surrounding bushes, dragging him with it. This time at the extreme limit allowed by their bonds they were about six feet apart. "What are they doing?" asked Ellie.

"Looks like they don't want us to combine forces."

Finished, the centaurs trotted away. Ellie looked after them, began to sob, then cried openly, tears running down her dirty face and leaving tracks. "Stow it," Max said harshly. "Sniffling will get us nowhere."

"I can't help it," she bawled. "I've been brave all day—at least I've tried to be. I… " She collapsed face down and let herself go.

By getting down prone and stretching Max could just reach her head. He patted her tangled hair. "Take it easy, kid," he said softly. "Cry it out, if you'll feel better."

"Oh, Maxie! Tied up… like a dog."

"We'll see about that." He sat up and examined his tether.

Whatever the ropelike leash was, it was not rope. It had a smooth shiny surface which reminded him more of a snake, though the part that wound around his ankle showed no features; it simply flowed around his ankle and merged back into itself.

He lifted the bight and detected a faint throbbing. He stroked it as he had seen the centaurs do and it responded with flowing pulsations, but it neither shrank nor grew longer, nor did it loosen its grip. "Ellie," he announced, "This thing is *alive*."

She lifted a woebegone face. "What thing?"

"This rope."

"Oh, that! Of course."

"At least," he went on, "if it isn't, it's not really dead." He tried his knife again, there was no effect. "I'll bet if I had a match I could make it cry 'Uncle.' Got an Everlite, Ellie?"

"I don't smoke."

"Neither do I. Well, maybe I can make a fire some other way. Rubbing two sticks together, or something."

"Do you know how?"

"No." He continued stroking and patting the living rope, but, though he always got a response in pulsations, he did not seem to have the right touch; the bond stayed as before. He was continuing this fruitless attempt when he heard his name called. "Max! Ellie!"

Ellie sat up with a jerk. "Chipsie! Oh, Max, she followed us. Come here, darling!"

The spider puppy was high above them in a tree. She looked carefully around, then scurried down, making the last ten feet a flying leap into Ellie's arms. They cuddled and made soft noises, then Ellie straightened up, her eyes shining. "Max, I feel so much better."

"So do I." He added, "Though I don't know why."

The spider puppy announced gravely, "Chipsie follow."

Max reached across and petted her. "Yes, Chipsie did. Good girl!"

Ellie hugged the spider puppy. "I don't feel deserted now, Max. Maybe everything will come out all right."

"Look, Ellie, we're not in too bad a spot. Maybe I'll find the combination to tickle these ropes or snakes or whatever so they'll give up. If I do, we'll sneak back tonight."

"How would we find our way?"

"Don't worry. I watched every foot of the way, every change of direction, every landmark."

"Even in the dark?"

"Easier in the dark. I know these stars—I sure ought to. But suppose we don't get loose; we still aren't licked."

"Huh? I don't relish spending my life tied to a tree."

"You won't. Look—I think these things are just curious about us. They won't eat us, that's sure—they probably live on grass. Maybe they'll get bored and turn us loose. But if they don't, it'll be rough on them."

"Huh? Why?"

"Because of Mr. Walther and George Daigler—and Sam, Sam Anderson; that's why. They're probably beating the bushes for us right now. We are less than ten miles from the ship—five by a straight line. They'll find us. Then if these silly-looking centaurs want to get tough, they'll learn about modern weapons. They and their fool throwing ropes!"

"It might take a long time to find us. Nobody knows where we went."

"Yes," he admitted. "If I had a pocket radio. Or some way to signal. Or even a way to build a fire. But I don't."

"I never thought. It just seemed like going for a stroll in the park."

Max thought darkly that he had tried to warn her. Why, even the hills around home weren't safe if a body didn't keep his eyes peeled... you could run into a mean old bobcat, or even a bear. Person like Ellie never 'ud had enough hard knocks to knock sense into her, that was her trouble.

Presently he admitted that he himself hadn't looked for grief from anything as apparently chuckled-headed and harmless as these centaur things. Anyhow, as Sam would say, no use cryin' over spilt milk when the horse was already stolen.

"Ellie."

"Huh?"

"Do you suppose Chipsie could find her way back?"

"Why, I don't know."

"If she could, we could send a message."

Chipsie looked up. "Back?" she inquired. "Please back. Go home."

Ellie frowned. "I'm afraid Chipsie doesn't talk that well. She'd probably just hiccup and get incoherent."

"I don't mean that. I know Chipsie is no mental giant. I..."

"Chipsie is smart!"

"Sure. But I want to send a written message and a map." He fumbled in a pocket, pulled out a stylus. "Do you have any paper?"

"I'll see." She found a folded paper in a dungaree pocket. "Oh, dear! I was supposed to take this to Mr. Giordano. Mr. Hornsby will be so vexed with me."

"What is it?"

"A requisition for number-ten wire."

"It doesn't matter now." He took the paper, scratched out the memorandum, turned it over and began to draw, stopping to consult the pictures filed in his mind for distances, which way the local sun lay, contours, and other details.

"Max?"

"Quiet, can't you?" He continued to sketch, then added: "URGENT—to First Officer Walther: Eldreth Coburn and self captured by centaurs. Be careful and watch out for their throwing ropes. Respectfully, M. Jones." He handed it to Ellie. "That ought to do it. Is there any way to fasten it to her? I sure don't want her to drop it."

"Mmm... let me see. Turn your back, Max."

"Why?"

"Don't be difficult. Turn your back."

He did so, shortly she said, "All right now." He faced her and she handed him a ribbon. "How's this?"

"Swell!" They managed to tie the ribbon, with the note folded and firmly attached, around Mr. Chips' waist, anchoring it to a middle limb… not too easy as the spider puppy seemed to think it was a game and was ticklish as well.

"There! Stop squirming, Chipsie, and listen. Ellie wants you to go home."

"Home?"

"Yes, home. Go back to the ship."

"Ellie go home?"

"Ellie can't go home."

"No."

"Honey, you've *got* to."

"No."

"Look, Chipsie. You find Maggie and tell her Ellie said to give you some candy. You give Maggie this." She tugged at the tied note.

"Candy?"

"Go home. Find Maggie. Maggie will give you candy."

"Ellie go home."

"Please, Chipsie."

"Ellie," Max said urgently, "something is coming."

Eldreth looked up, saw a centaur coming through the trees. She pointed. "Look, Chipsie! They're coming! They'll catch Chipsie! Go home! Run!"

The spider puppy squealed in terror and scurried for the trees. Once on a branch she looked back and whimpered. "Go home!" screamed Ellie. "Find Maggie!"

Mr. Chips shot a glance at the centaur, then disappeared. They had no time to worry further, the centaur was almost up to them. He glanced at them and went on by; it was what followed the centaur that grabbed their attention. Ellie suppressed a shriek. "Max! They've caught everybody."

"No," he corrected grimly. "Look again." The gathering gloom had caused him to make the same mistake; it seemed that the entire ship's company trotted after the centaur in single file, ankle leashed to ankle by living ropes. But only the first glance gave such an impression. These creatures were more than humanoid—but such degraded creatures had never sailed between the stars.

They shuffled quickly along like well-trained animals. One or two looked at Ellie and Max in passing, but their stares were bovine, incurious. Small children not on leash trotted with their mothers, and once Max was startled to see a wrinkled little head peeping out of a pouch—these man-creatures were marsupials, too.

Max controlled a desire to retch and as they passed out of sight he turned to Ellie. "Gosh!"

"Max," Eldreth said hoarsely, "do you suppose we've died and gone to our punishment?"

"Huh? Don't be silly. Things are bad enough."

"I mean it. That was something right out of Dante's Inferno."

Max was swallowing uneasily and not feeling good-tempered. "Look, you can pretend you're dead if you want to. Me, I'm alive and I mean to stay so. Those things weren't men. Don't let it throw you."

"But they *were* men. Men and women and children."

"No, they weren't. Being shaped like us doesn't make them men. Being a man is something else entirely." He scowled. "Maybe the centaurs are 'men.'"

"Oh, no—"

"Don't be too sure. They seem to run things in this country."

The discussion was cut short by another arrival. It was almost dark and they did not see the centaur until he entered their clearing. He was followed by three of the—Max decided to call them 'men' though he resented the necessity—followed by three men. They were not on leashes. All three were bearing burdens. The centaur spoke to them; they distributed what they carried.

One of them set down a large clay bowl filled with water in the space separating Max and Ellie. It was the first artifact that any human had seen on Charity and did not indicate a high level of mechanical culture, being crudely modeled and clearly not thrown on a potter's wheel; it held water, no more could be said for it. A second porter dumped a double armful of small fruits beside the bowl. Two of them splashed into the bowl, he did not bother to fish them out.

Max had to look twice to see what the third slave was carrying. It looked as if he had three large ovoid balls slung by ropes in each of his hands; second inspection showed them to be animals about the size of opossums which he carried by their tails. He went around the clearing, stopping every few feet and lifting one of his burdens to a lower branch. When he had finished they were surrounded by six small creatures, each hanging by its tail. The centaur followed the slave, Max saw him stroke each animal and press a spot on its neck. In each case the entire body of the little animal lit up, began to shine like a firefly with soft silvery light.

The clearing was softly illuminated thereby—well enough, Max thought, to read large print. One of the hobgoblins balloons came sailing silently between trees and anchored to a point thirty feet above them; it seemed to settle down for the night.

The centaur came over to Max and prodded him with a hoof, snorting inquiringly. Max listened carefully, then repeated the sound. The centaur answered and again Max mimicked. This useless exchange continued for a few phrases, then the centaur gave up and left, his train trotting after him.

Ellie shivered. "Phew!" she exclaimed, "I'm glad they're gone. I can stand the centaurs, a little, but those men… ugh!"

He shared her disgust; they looked less human close up, having hair lines that started where their eyebrows should have been. They were so flatheaded that their ears stuck up above their skulls. But it was not this that had impressed Max. When the centaur had spoken to him Max had gotten his first good look into a centaur's mouth. Those teeth were never meant for munching grain, they were more like the teeth of a tiger—or a shark.

He decided not to mention this. "Say, wasn't that the same one that was leading the herd that caught us?"

"How would I know? They all look alike."

"But they don't, any more than two horses look alike."

"Horses all look alike."

"But… " He stopped, baffled by a city viewpoint at which communication failed. "I think it was the same one."

"I can't see that it matters."

"It might. I'm trying to learn their language."

"I heard you swallowing your tonsils. How did you do that?"

"Oh, you just remember what a sound sounds like, then do it." He threw his head back and made a very plaintive sound.

"What was *that?*"

"A shote stuck in a fence. Little shote by the name of Abner I had once."

"It sounds tragic."

"It was, until I helped him loose. Ellie, I think they've bedded us down for the night." He gestured at the bowl and the fruit beside it. "Like feeding the hogs."

"Don't put it that way. Room service. Room service and maid service and lights. Food and drink." She picked up one of the fruits. It was about the size and shape of a cucumber. "Do you suppose this is fit to eat?"

"I don't think you ought to try it. Ellie, it would be smart not to eat or drink anything until we are rescued."

"Well, maybe we could go hungry but we certainly can't go without water. You die of thirst in a day or two."

"But we may be rescued before morning."

"Maybe." She peeled the fruit. "It smells good. Something like a banana."

He peeled one and sniffed it. "More like a pawpaw."

"Well?"

"Mmm—Look here, I'll eat one. If it hasn't made me sick in a half hour, then you can try one."

"Yes, sir, boss man." She bit into the one she held. "Mind the seeds."

"Ellie, you're a juvenile delinquent."

She wrinkled her nose and smiled. "You say the sweetest things! I try to be."

Max bit into his. Not bad—not as much flavor as a pawpaw, but not bad. Some minutes later he was saying, "Maybe we should leave some for breakfast?"

"All right. I'm full anyway." Ellie leaned over and drank. Without words they had each concluded that the cloying meal required them to risk the water. "There, I feel better. At least we'll die comfortably. Max? Do you think we dare sleep? I'm dead."

"I think they are through with us for the night. You sleep, I'll sit up."

"No, that's not fair. Honest, what good would it do to keep watch? We can't get away."

"Well… here, take my knife. You can sleep with it in your hand."

"All right." She reached across the bowl and accepted it. "Good night, Max. I'm going to count sheep."

"Good night." He stretched out, shifted and got a tree cone out of his ribs, then tried to relax. Fatigue and a full stomach helped, the knowledge of their plight hindered—and that hobgoblin hanging up there. Maybe *it* was keeping watch—but not for their benefit.

"Max? Are you asleep?"

"No, Ellie."

"Hold my hand? I'm *scared.*"

"I can't reach it."

"Yes, you can. Swing around the other way."

He did so, and found that he could reach over his head past the water bowl and clasp her hand. "Thanks, Max. Good night some more."

He lay on his back and stared up through the trees. Despite the half light given by the luminiferous animals he could see stars and the numerous meteor trails crisscrossing the sky. To avoid thinking he started counting them. Presently they started exploding in his head and he was asleep.

The light of the local sun through the trees awakened him. He raised his head. "I wondered how long you would sleep," Eldreth announced. "Look who's here."

He sat up, wincing with every move, and turned around. Mr. Chips was sitting on Ellie's middle and peeling one of the papaya-like fruits.

"Lo, Maxie."

"Hello, Chipsie." He saw that the note was still tied to her. "Bad girl!"

Mr. Chips turned to Ellie for comfort. Tears started to leak out. "No, no," corrected Ellie. "Good girl. She's promised to go find Maggie as soon as she finishes breakfast. Haven't you, dear?"

"Go find Maggie," the spider puppy agreed.

"Don't blame her, Max. Spider puppies aren't nocturnal back home. She just waited until we were quiet, then came back. She couldn't help it. I found her sleeping in my arm."

The spider puppy finished eating, then drank daintily from the bowl. Max decided that it didn't matter, considering who had probably used it before they had. This thought he suppressed quickly. "Find Maggie," Mr. Chips announced.

"Yes, dear. Go straight back to the ship as fast as you can and find Maggie. Hurry."

"Find Maggie. Hurry fast. 'Bye, Maxie." The spider puppy took to the trees and scampered away in the right direction.

"Do you think she'll get there?" asked Max.

"I think so. After all, her ancestors found their way through forests and such for a lot of generations. She knows it's important; we had a long talk."

"Do you really think she understands that much?"

"She understands about pleasing me and that's enough. Max, do you suppose they can possibly reach us today? I don't want to spend another night here."

"Neither do I. If Chipsie can move faster than we can…"

"Oh, she can."

"Then maybe—if they start quickly."

"I hope so. Ready for breakfast?"

"Did Chipsie leave anything?"

"Three apiece. I've had mine. Here."

"Sure you're lying? There were only five when we went to sleep." She looked sheepish and allowed him to split the odd one. While they were eating he noticed a change. "Hey, what became of the oversized lightning bugs?"

"Oh. One of those awful creatures came at dawn and carried them away. I was set to scream but he didn't come close to me, so I let you sleep."

"Thanks. I see our chaperone is with us." The hobgoblin still hung in the tree tops.

"Yes, and there have been peekers around all morning, too."

"Did you get a look at one?"

"Of course not." She stood up, stretched and winced. "Now to see what beautiful surprises this lovely day brings forth." She made a sour face. "The program I would pick is to sit right here and never lay eyes on anything until George Daigler shows up with about a dozen armed men. I'd kiss him. I'd kiss all of them."

"So would I."

Until well past noon Eldreth's chosen schedule prevailed, nothing happened. They heard from time to time the bugling and snorting of centaurs but saw none. They talked in desultory fashion, having already disposed of both hopes and fears, and were dozing in the sunshine, when they suddenly came alert to the fact that a centaur was entering the clearing.

Max felt sure that it was the leader of the herd, or at least that it was the one who had fed and watered them. The creature wasted no time, making it clear with kicks and prods that they were to allow themselves to be leashed for travel.

Never once were they free of the living ropes. Max thought of attacking the centaur, perhaps leaping on his back and cutting his throat. But it seemed most unlikely that he could do it quietly enough; one snort might bring the herd down on them. Besides which he knew no way to get free of their bonds even if he killed the centaur. Better wait—especially with a messenger gone for help.

They were led, falling and being dragged occasionally, along the route taken by the party of slaves. It became apparent that they were entering a large centaur settlement. The path opened out into a winding, well-tended road with centaurs going both directions and branching off onto side roads. There were no buildings, none of the outward marks of a civilized race—but there was an air of organization, of custom, of stability. Little centaurs scampered about, got in the way, and were ordered aside. There was activity of various sorts on both sides of the road and grotesque human slaves were almost as numerous as centaurs, carrying burdens, working in unexplained fashions—some with living-rope bonds, some allowed to run free. They could not see much because of the uncomfortable pace they were forced to maintain.

Once Max noted an activity on his side of the road that he wished to see better. He did not mention it to Ellie, not only because talking was difficult but because he did not wish to worry her—but it had looked like an outdoor butcher shop to him. The hanging carcasses were not centaurs.

They stopped at last in a very large clearing, well filled with centaurs. Their master patted the lines that bound them and thereby caused them to shorten until they were fetched close to his sides. He then took his place in a centaur queue.

A large, grizzled, and presumably elderly centaur was holding court on one side of the "square." He stood with quiet dignity as single centaurs or groups came in succession before him. Max watched with interest so great that he almost lost his fear. Each case would be the cause of much discussion, then the centaur chieftain would make a single remark and the case would be over. The contestants would leave quietly. The conclusion was inescapable that law or custom was being administered, with the large centaur as arbiter.

There was none of the travesties of men in the clearing but there were underfoot odd animals that looked like flattened-out hogs. Their legs were so short that they seemed more like tractor treads. They were mostly mouth and teeth and snuffling snouts, and whatever they came to, if it was not a centaur's hoof, they devoured. Max understood from watching them how the area, although thickly inhabited, was kept so clean; these scavengers were animated street cleaners.

Their master gradually worked up toward the head of the line. The last case before theirs concerned the only centaur they had seen which did not seem in vibrant health. He was old and skinny, his coat was dull and his bones stuck pitifully through his hide. One eye was blind, a blank white; the other was inflamed and weeping a thick ichor.

The judge, mayor, or top herd leader discussed his case with two younger healthy centaurs who seemed to be attending him almost as nurses. Then the boss centaur moved from his position of honor and walked around the sick one, inspecting him from all sides. Then he spoke to him.

The old sick one responded feebly, a single snorted word. The chief centaur spoke again, got what seemed to Max the same answer. The chief backed into his former position, set up a curious whinnying cry.

From all sides the squatty scavengers converged on the spot. They formed a ring around the sick one and his attendants, dozens of them, snuffling and grunting. The chief bugled once; one attendant reached into its pouch and hauled forth a creature curled into a knot, the centaur stroked it and it unwound. To Max it looked unpleasantly like an eel.

The attendant extended it toward the sick centaur. It made no move to stop him, but waited, watching with his one good eye. The head of the slender thing was suddenly touched to the neck of the sick centaur; he jerked in the characteristic convulsion of electric shock and collapsed.

The chief centaur snorted once—and the scavengers waddled forward with surprising speed, swarming over the body and concealing it. When they backed away, still snuffling, there were not even bones.

Max called out softly, "Steady, Ellie! Get a grip on yourself, kid."

She answered faintly, "I'm all right."

19 — A FRIEND IN NEED

For the first time they were turned loose. Their master tickled their bonds, which dropped from their ankles. Max said softly to Ellie, "If you want to run for it, I'll keep them busy."

Ellie shook her head. "No good. They'd have me before I went fifty feet. Besides—I can't find my way back."

Max shut up, knowing that she was right but having felt obliged to offer. The chief centaur inspected them with the characteristic expression of gentle surprise, exchanged bugling comments with their captor. They were under discussion for some time, there appeared to be some matter to be decided. Max got out his knife. He had no plan, other than a determination that no centaur would approach either one of them with that electric-shock creature, or any other menace, without a fight.

The crisis faded away. Their captor flicked their leashes about their ankles and dragged them off. Fifteen minutes later they were again staked out in the clearing they had occupied. Ellie looked around her after the centaur had gone and sighed. "'Be it ever so humble… ' Max, it actually feels good to get back here."

"I know."

The monotony that followed was varied by one thing only: fading hope and mounting despair. They were not treated unkindly; they were simply domestic animals—fed and watered and largely ignored. Once a day they were given water and plenty of the native papayas. After the first night they no longer had the luxury of "artificial" light, nor did the hobgoblin hang over their clearing. But there was no way of escape, short of gnawing off a leg and crawling away.

For two or three days they discussed the possibility of rescue with mounting anxiety, then, having beaten the subject to death they dropped it; it simply added to their distress. Ellie rarely smiled now and she had quit her frivolous back talk; it seemed that it had finally gotten through her armor that this could happen to Eldreth Coburn, only daughter of the rich and almost all-powerful Mr. Commissioner Coburn—a chattel, a barnyard animal of monsters themselves suitable only for zoos.

Max took it a little more philosophically. Never having had much, he did not expect much—not that he enjoyed it. He kept his worst fear secret. Ellie referred to their status as "animals in a zoo" because most of their visitors were small centaurs who came sniffling and bleating around with a curiosity that their elders seemed to lack. He let her description stand because he believed their status worse than that—he thought that they were being fattened for the table.

One week after their capture Eldreth declined to eat breakfast and stayed silent all morning. All that Max could think of to say evoked only monosyllables. In desperation he said, "I'll beat you at three-dee and spot you two starships."

That roused her. "You and who else?" she said scornfully. "And with what?"

"Well, we could play it in our heads. You know—blindfold."

She shook her head. "No good. You'd claim your memory was better than mine and I wouldn't be able to prove you were cheating."

"Nasty little brat."

She smiled suddenly. "That's better. You've been too gentle with me lately—it depresses me. Max, we could make a set."

"How?"

"With these." She picked up one of many tree cones that littered the clearing. "A big one is a flagship. We can pick various sizes and break the thingamajigs off and such."

They both got interested. The water bowl was moved aside so that it no longer occupied the center of the space marked by the limits of their tethers and the no-man's-land between them was brushed free of needles and marked with scratches as boards. The boards had to be side by side; they must stack them in their minds, but that was a common expedient for players with good visualization when using an unpowered set—it saved time between moves.

Pebbles became robots; torn bits of cloth tied to cones distinguished sides and helped to designate pieces. By midafternoon they were ready. They were still playing their first game when darkness forced them to stop. As they lay down to sleep Max said, "I'd better not take your hand. I'd knock over men in the dark."

"I won't sleep if you don't—I won't feel safe. Besides, that gorilla messed up one board changing the water."

"That's all right. I remember where they were."

"Then you can just remember where they all are, Stretch out your arm."

He groped in the darkness, found her fingers. "Night, Max. Sleep tight."

"Good night, Ellie."

Thereafter they played from sunup to sundown. Their owner came once, watched them for an hour, went away without a snort. Once when Ellie had fought him to a draw Max said, "You know, Ellie, you play this game awfully well—for a girl."

"Thank you too much."

"No, I mean it. I suppose girls are probably as intelligent as men, but most of them don't act like it. I think it's because they don't have to. If a girl is pretty, she doesn't have to think. Of course, if she can't get by on her looks, then—well, take you for example. If you..."

"*Oh!* So I'm ugly, Mr. Jones!"

"Wait a minute. I didn't say that. Let's suppose that you were the most beautiful woman since Helen of Troy. In that case, you would... " He found that he was talking to her back. She had swung round, grabbed her knees, and was ignoring him.

He stretched himself to the limit of his tether, bound leg straight out behind him, and managed to touch her shoulder. "Ellie?"

She shook off his hand. "Keep your distance! You smell like an old goat."

"Well," he said reasonably, "you're no lily yourself. You haven't had a bath lately either."

"I know it!" she snapped, and started to sob. "And I hate it. I just... h-h- *hate* it. I look *awful.*"

"No, you don't. Not to. me."

She turned a tear-wet and very dirty face. "Liar."

"Nothing wrong that some soap and water won't fix."

"Oh, if only I had some." She looked at him. "You aren't at your best yourself, Mr. Jones. You need a haircut and the way your beard grows in patches is ghastly."

He fingered the untidy stubble on his chin. "I can't help it."

"Neither can I." She sighed. "Set up the boards again."

Thereafter she beat him three straight games, one with a disgraceful idiot's mate. He looked at the boards sadly when it was over. "And you are the girl who flunked improper fractions?"

"Mr. Jones, has it ever occurred to you, the world being what it is, that women sometimes prefer not to appear too bright?" He was digesting this when she added, "I learned this game at my father's knee, before I learned to read. I was junior champion of Hespera before I got shanghaied. Stop by sometime and I'll show you my cup."

"Is that true? Really?"

"I'd rather play than eat—when I can find competition. But you're learning. Someday you'll be able to give me a good game."

"I guess I don't understand women."

"That's an understatement."

Max was a long time getting to sleep that night. Long after Eldreth was gently snoring he was still staring at the shining tail of the big comet, watching the shooting star trails, and thinking. None of his thoughts was pleasant.

Their position was hopeless, he admitted. Even though Chipsie had failed (he had never pinned much hope on her), searching parties should have found them by now. There was no longer any reason to think that they would be rescued.

And now Ellie was openly contemptuous of him. He had managed to hurt her pride again—again with his big, loose, flapping jaw! Why, he should have told her that she was the prettiest thing this side of paradise, if it would make her feel good—she had mighty little to feel good about these days!

Being captive had been tolerable because of her, he admitted—now he had nothing to look forward to but day after day of losing at three-dee while Ellie grimly proved that girls were as good as men and better. At the end of it they would wind up as an item in the diet of a thing that should never have been born.

If only Dr. Hendrix hadn't died!

If only he had been firm with Ellie when it mattered.

To top it off, and at the moment almost the worst of all, he felt that if he ate just one more of those blasted pawpaws it would gag him.

He was awakened by a hand on his shoulder and a whisper in his ear. "Max!"

"What the—?"

"*Quiet!* Not a sound."

It was Sam crouching over him—Sam!

As he sat up, sleep jarred out of him by adrenalin shock, he saw Sam move noiselessly to where Ellie slept. He squatted over her but did not touch her. "Miss Eldreth," he said softly.

Ellie's eyes opened and stared. She opened her mouth, Max was terrified that she might cry out. Sam hastily signed for silence; she looked at him and nodded. Sam knelt over her, seemed to study something in the shadow-laced moonlight, then took out a hand gun. There was the briefest of low-energy discharges, entirely silent, and Ellie stood up—free. Sam returned to Max. "Hold still," he whispered. "I don't want to burn you." He knelt over Max's bound ankle.

When the gun flared Max felt an almost paralyzing constriction around his ankle, then the thing fell off. The amputated major part contracted and jerked away into the shadows. Max stood up. "How—"

"Not a word. Follow me." Sam led off into the bushes with Ellie behind him and Max following closely. They had gone only twenty yards when there was a whimpering cry of "Ellie!" and the spider puppy landed in Eldreth's arms. Sam turned suddenly.

"Keep her quiet," he whispered, "for your life."

Ellie nodded and started petting the little creature, crooning to it voicelessly. When Chipsie tried to talk, she silenced it, then stuffed it inside her shirt. Sam waited these few moments, now started on without speaking.

They proceeded for several hundred yards as near silently as three people who believe their lives hang on it can manage. Finally Sam stopped. "This is as far as we dare go," he said in a low voice. "Any farther in the dark and I'd be lost. But I'm pretty sure we are outside their sleeping grounds. We'll start again at the first light."

"How did you get here in the dark, then?"

"I didn't. Chips and I have been hiding in thick bushes since midafternoon, not fifty feet from you."

"Oh." Max looked around, looked up at the stars. "I can take us back in the dark."

"You can? It 'ud be a darn good thing. These babies don't stir out at night—I think."

"Let me get in the lead. You get behind Ellie."

It took more than an hour to get to the edge of the tableland. The darkness, the undergrowth, the need for absolute silence, and the fact that Max had to take it slowly to keep his bearings despite his photographic memory all slowed them down. The trip downhill into the valley was even slower.

When they reached the edge of the trees with comparatively flat grassland in front Sam halted them and surveyed the valley by dim moonlight. "Mustn't get caught in the open," he whispered. "They can't throw those snakes too well among trees, but out in the open—oh, brother!"

"You know about the throwing ropes?"

"Sure."

"Sam," whispered Ellie. "Mr. Anderson, why did…"

"Sssh!" he cautioned. "Explanations later. Straight across, at a dogtrot. Miss Eldreth, you set the pace. Max, pick your bearings and guide us. We'll run side by side. All set?"

"Just a minute." Max took the spider puppy from Eldreth, zipping it inside his shirt as she had done. Mr. Chips did not even wake up, but moaned softly like a disturbed baby. "Okay."

They ran and walked and ran again for a half hour or more, wasting no breath on words, putting everything into gaining distance from the centaur community. Knee-high grass and semi-darkness made the going hard. They were almost to the bottom of the valley and Max was straining to spot the stream when Sam called out, "Down! Down flat!"

Max hit dirt, taking it on his elbows to protect Chips; Ellie flopped beside him. Max turned his head cautiously and whispered, "Centaurs?"

"No. Shut up."

A hobgoblin balloon, moving at night to Max's surprise, was drifting across the valley at an altitude of about a hundred feet. Its course would take it past them, missing them by perhaps a hundred yards. Then it veered and came toward them.

It lost altitude and hovered almost over them. Max saw Sam aim carefully, steadying his pistol with both bands. There was momentarily a faint violet pencil from gun to hobgoblin; the creature burst and fell so close by that Max could smell burned meat. Sam returned his weapon and got to his feet. "One less spy," he said with satisfaction. "Let's get going, kids."

"You think those things spy?"

"'Think'? We know. Those polo ponies have this place *organized.* Pipe down and make miles."

Ellie found the stream by falling into it. They hauled her out and waded across, stopping only to drink. On the other bank Sam said, "Where's your left shoe, Miss Eldreth?"

"It came off in the brook."

Sam stopped to search but it was useless; the water looked like ink in the faint light. "No good," he decided. "We could waste the whole night. You're due for sore feet—sorry. Better throw away your other shoe."

It did not slow them until they reached the far ridge beyond which lay Charityville and the ship. Soon after they started up Ellie cut her right foot on a rock. She did her best, setting her jaw and not complaining, but it handicapped them. There was a hint of dawn in the air by the time they reached the top. Max started to lead them down the arroyo that he and Ellie had come up so many year-long days ago. Sam stopped him. "Let me get this straight. This isn't the draw that faces the ship, is it?"

"No, that one is just north of this." Max reconstructed in his mind how it had looked from the ship and compared it with his memory of the photomap taken as the ship landed. "Actually a shoulder just beyond the next draw faces the ship."

"I thought so. This is the one Chips led me up, but I want us to stay in the trees as long as possible. It'll be light by the time we'd be down to the flat."

"Does it matter? There have never been any centaurs seen in the valley the ship is in."

"You mean you never saw any. You've been away, old son. We're in danger now—and in worse danger the closer we get to the ship. Keep your voice down—and lead us to that shoulder that sticks out toward the ship. If you can."

Max could, though it meant going over strange terrain and keeping his bearings from his memory of a small-scale map. It involved "crossing the furrows," too, instead of following a dry water course—which led to impasses such as thirty-foot drops that had to be gone painfully around. Sam grew edgy as the light increased and urged them to greater speed and greater silence even as Ellie's increasingly crippled condition made his demands harder to meet.

"I really am sorry," he whispered after she had to slide and scramble down a rock slope, checking herself with bare and bloody feet. "But it's better to get there on stumps than to let them catch you."

"I know." Her face contorted but she made no sound. It was daylight by the time Max led them out on the shoulder. Silently he indicated the ship, a half mile away. They were about level with its top.

"Down this way, I think," he said quietly to Sam.

"No."

"Huh?"

"Chilluns, it's Uncle Sam's opinion that we had better lie doggo in those bushes, holding still and letting the beggar flies bite us, until after sundown."

Max eyed the thousand yard gap. "We could run for it."

"And four legs run faster than two legs. We've learned that lately."

The bushes selected by Sam grew out to the edge of the shoulder. He crawled through them until he reached a place where he could spy the valley below while still hidden. Ellie and Max wriggled after him. The ground dropped off sharply just beyond them. The ship faced them, to their left and nearer was Charityville.

"Get comfortable," Sam ordered, "and we'll take turns keeping guard. Sleep if you can, this will be a long watch."

Max tried to shift Mr. Chips around so that he might lie flat. A little head poked out of his collar. "Good morning," the spider puppy said gravely. "Breakfast?"

"No breakfast, hon," Ellie told her. "Sam, is it all right to let her out?"

"I guess so. But keep her quiet." Sam was studying the plain below. Max did the same.

"Sam? Why don't we head for the village? It's closer."

"Nobody there. Abandoned."

"What? Look, Sam, can't you tell us now what's happened?"

Sam did not take his eyes off the plain. "Okay. But hold it down to whispers. What do you want to know?"

That was a hard one—Max wanted to know everything. "What happened to the village?"

"Gave it up. Too dangerous."

"Huh? Anybody caught?"

"Not permanently. Daigler had a gun. But then the fun began. We thought that all they had were those throwing snakes and that we had scared them off. But they've got lots more than that. Things that burrow underground, for example. That's why the village had to be abandoned."

"Anybody hurt?"

"Well… the newlyweds were already in residence. Becky Weberbauer is a widow."

Ellie gasped and Sam whispered sharply to be quiet. Max mulled it over before saying, "Sam, I don't see why, after they got my message, they didn't…"

"What message?"

Max explained. Sam shook his head. "The pooch got back all right. By then we knew you were missing and were searching for you—armed, fortunately. But there was no message."

"Huh? How did you find us?"

"Chips led me, I told you. But that was all. Somebody stuffed her into her old cage and that's where I found her yesterday. I stopped to pet her, knowing you were gone, Miss Eldreth—and found the poor little thing nearly out of her mind. I finally got it through my head that she knew where you two were. So… " He shrugged.

"Oh. But I can't see," Max whispered, "why you risked it alone. You already knew they were dangerous; you should have had every man in the ship with you, armed."

Sam shook his head. "And we would have lost every man. A sneak was possible; the other wasn't. And we had to get you back."

"Thanks. I don't know how to say it, Sam. Anyhow, thanks."

"Yes," added Ellie, "and stop calling me 'Miss Eldreth.' I'm Ellie to my friends."

"Okay, Ellie. How are the feet?"

"I'll live."

"Good." He turned his head to Max. "But I didn't say we *wanted* to get you back, I said we *had* to. You, Max. No offense, Ellie."

"Huh? Why me?"

"Well… " Sam seemed reluctant. "You'll get the details when you get back. But it looks like you'll be needed if they take the ship off. You're the only astrogator left."

"Huh? What happened to Simes?"

"*Quiet!* He's dead."

"For Pete's sake." Max decided that, little as he liked Simes, death at the hands of the centaurs he would not have wished on any human; he said so.

"Oh, no, it wasn't that way. You see, when Captain Blaine died…"

"The Captain, *too?*"

"Yes."

"I knew he was sick, I didn't know he was that sick."

"Well, call it a broken heart. Or honorable hara-kiri. Or an accident. I found an empty box for sleeping pills when I helped pack his things. Maybe he took them, or maybe your pal Simes slipped them in his tea. The Surgeon certified 'natural causes' and that's how it was logged. What is a natural cause when a man can't bear to live any longer?"

Ellie said softly, "He was a good man."

"Yes," agreed Sam. "Too good, maybe."

"But how about Simes?"

"Well, now, that was another matter. Simes seemed to feel that he was crown prince, but the First wouldn't stand for it. Something about some films the Chief Computerman had. Anyhow, he tried to get tough with Walther and I sort of broke his neck. There wasn't time to be gentle," Sam added hastily. "Simes pulled a gun."

"Sam! You aren't in trouble?"

"None, except here and now. If we—quiet, kids!" He peered more sharply through the bushes. "Not a sound, not a movement," he whispered. "It may miss us."

A hobgoblln was drifting down from north, paralleling the ridge above and out from it, as if it were scouting the high land. Max said in Sam's ear, "Hadn't we better scrunch back?"

"Too late. Just hold still."

The balloon drifted abreast of them, stopped, then moved slowly toward them. Max saw that Sam had his gun out. He held his fire until the hobgoblin hovered above them. The shot burned needles and branches but it brought down the thing.

"Sam! There's another one!"

"Where?" Sam looked where Max pointed. The second hobgoblin apparently had been covering the first, higher and farther out. Even as they watched it veered away and gained altitude.

"Get it, Sam!"

Sam stood up. "Too late. Too far and too late. Well, kids, away we go. No need to keep quiet. Sit down and slide, Ellie; it'll save your feet some."

Down they went, scattering rocks and tearing their clothes, with Mr. Chips on her own and enjoying it. At the bottom Sam said, "Max, how fast can you do a half mile?"

"I don't know. Three minutes."

"Make it less. Get going. I'll help Ellie."

"No."

"You get there! You're needed."

"No!"

Sam sighed. "Always some confounded hero. Take her other arm."

They made a couple of hundred yards half carrying Eldreth, when she shook them off. "I can go faster alone," she panted.

"Okay, let's go!" Sam rasped.

She proved herself right. Ignoring her injured feet she pumped her short legs in a fashion which did not require Max's best speed to keep up, but nevertheless kept him panting. The ship grew larger ahead of them. Max saw that the cage was up and wondered how long it would take to attract attention and get it lowered.

They were half way when Sam shouted, "Here comes the cavalry! Speed it up!"

Max glanced over his shoulder. A herd of centaurs—a dozen, two dozen, perhaps more—was sweeping toward them from the hills on a diagonal plainly intended to cut them off. Ellie saw them too and did speed up, with a burst that momentarily outdistanced Max.

They had cut the distance to a few hundred yards when the cage swung free of the lock and sank lazily toward the ground. Max started to shout that they were going to make it when he heard the drum of hooves close behind. Sam yelled, "Beat it, kids! Into the ship." He stopped.

Max stopped too, while shouting, "*Run*, Ellie!

Sam snarled, "Run for it, I said! What can *you* do? Without a gun?"

Max hesitated, torn by an unbearable decision. He saw that Ellie had stopped. Sam glanced back, then backhanded Max across the mouth. "Get moving! Get her inside!"

Max moved, gathering Ellie in one arm and urging her on. Behind them Sam Anderson turned to face his death… dropping to one knee and steadying his pistol over his left forearm in precisely the form approved by the manual.

20 — "—A SHIP IS NOT JUST STEEL—"

The cage hit the ground, four men swarmed out as Max stumbled inside and dumped Ellie on the floor. The door clanged shut behind them, but not too quickly for Mr. Chips. The spider puppy ran to Ellie, clutched her arm and wailed. Eldreth tried to sit up.

"You all right?" Max demanded.

"Uh, sure. But… " She shut up as Max whirled around and tried to open the cage door.

It would not open. It was not until then that he realized that the lift was off the ground and rising slowly. He punched the "stop" control.

Nothing happened, the car continued upward. About ten feet off the ground it stopped. Max looked up through the grille roof and shouted, "Hey! In the lock, there! Lower away!"

He was ignored. He tried the door again—uselessly, as its safety catch prevented it being opened when the cage was in the air. Frustrated and helpless, he grabbed the bars and looked out. He could see nothing of Sam. The centaurs were milling around in the middle distance. He saw one stumble and go down and then another. Then he saw the four men who had passed him. They were on their bellies in fair skirmish line not far from the cage, each with a shoulder gun and each firing carefully. The range was not great, about three hundred yards; they were taking steady toll. Each silent, almost invisible bolt picked off a centaur.

Max counted seven more centaur casualties—then the monsters broke and ran, scattering toward the hills. The firing continued and several more dropped before distance made firing uncertain.

Somebody shouted, "Hold your fire!" and one of the men stumbled to his feet and ran toward the center of the battle. The others got up and followed him.

When they came back they were carrying something that looked like a bundle of clothing. The cage lowered to the ground, they came inside and laid it gently on the floor. One of them glanced at Eldreth, then quickly removed his jacket and laid it over Sam's face. Not until then did Max see that it was Mr. Walther.

The other three were Mr. Daigler, a power man whom Max knew only by sight, and Chief Steward Giordano. The fat man was crying openly. "The filthy vermin!" he sobbed. "He never had a chance. They just rode him down and trompled him." He choked, then added, "But he got at least five of 'em." His eyes rested on Max without recognition. "He made 'em pay."

Eldreth said gently, "Is he dead?"

"Huh? Of course. Don't talk silly." The steward turned his face away.

The car bumped to a stop. Walther looked in through the lock and said angrily, "Get those bystanders out of the way. What is this? A circus?" He turned back. "Let's get him in, men."

As he was bending to help, Max saw Eldreth being led away by Mrs. Dumont. Tenderly they carried Sam in and deposited him on the deck where the Surgeon was waiting. Walther straightened up and seemed to notice Max for the first time. "Mr. Jones? Will you see me in my stateroom as quickly as possible, please?"

"Aye aye, sir. But… " Max looked down at his friend. "I'd like to…"

Walther cut him short. "There's nothing you can do. Come away." He added more gently, "Make it fifteen minutes. That will give you time for a wash and a change."

Max presented himself on time, showered, his face hastily scraped, and in clean clothes—although lacking a cap. His one cap was somewhere in the far valley, lost on capture. He found Chief Engineer Compagnon and Mr. Samuels, the Purser, with the First Officer. They were seated around a table, having coffee. "Come in, Mr. Jones," Walther invited. "Sit down. Coffee?"

"Uh, yes, sir." Max discovered that he was terribly hungry. He loaded the brew with cream and sugar.

They sat for a few minutes, talking of unimportant matters, while Max drank his coffee and steadied down. Presently Walther said, "What shape are you in, Mr. Jones?"

"Why, all right, I guess, sir. Tired, maybe."

"I imagine so. I'm sorry to have to disturb you. Do you know the situation now?"

"Partly, sir. Sam told me… Sam Anderson… " His voice broke.

"We're sorry about Anderson," Mr. Walther said soberly. "In many ways he was one of the best men I ever served with. But go on."

Max recounted what Sam had had time to tell him, but shortened the statements about Simes and Captain Blaine to the simple fact that they were dead. Walther nodded. "Then you know what we want of you?"

"I think so, sir. You want to raise the ship, so you want me to astrogate." He hesitated. "I suppose I can."

"Mmm… yes. But that's not all."

"Sir?"

"You must be Captain."

All three had their eyes fixed on him. Max felt lightheaded and for a moment wondered what was wrong. Their faces seemed to swell and then recede. He realized vaguely that he had had little to eat and almost no sleep for many hours and had been running on nerve—yes, that must be what was wrong with him. From a long distance away he heard Walther's voice: "… utterly necessary to leave this planet without delay. Now our legal position is clear. In space, only an astrogation officer may command. You are being asked to assume command responsibility while very young but you are the only qualified person—therefore you *must* do it."

Max pulled himself together, the wavering figures came into focus. "Mr. Walther?"

"Yes?"

"But I'm not an astrogator. I'm just a probationary apprentice.

Chief Engineer Compagnon answered him. "Kelly says you're an astrogator," he growled.

"Kelly is more of an astrogator than I am!"

Compagnon shook his head. "You can't pass judgment on yourself." Samuels nodded agreement.

"Let's dispose of that," Walther added. "There is no question of the Chief Computerman becoming captain. Nor does your rank in your guild matter. Line of command, underway, necessarily is limited to astrogators. You are senior in that line, no matter how junior you feel. At this moment, I hold command—until I pass it on. But I can't take a ship into space. If you refuse… well, I don't know what we will have to do. I don't know."

Max gulped and said, "Look, sir, I'm not refusing duty. I'll astrogate—shucks, I suppose it's all right to call me the astrogator, under the circumstances. But there is no reason to pretend that I'm captain. You stay in command while I conn the ship. That's best, sir—I wouldn't know how to *act* like a captain."

Walther shook his head. "Not legally possible."

Compagnon added, "I don't care about the legalities. But I know that responsibility can't be divided. Frankly, young fellow, I'd rather have Dutch as skipper than you—but he can't astrogate. I'd be delighted to have Doc Hendrix—but he's gone. I'd rather hold the sack myself than load it on you—but I'm a physicist and I know just enough of the math of astrogation to know that I couldn't in a lifetime acquire the speed that an astrogator *has* to have. Not my temperament. Kelly says you've got it already. I've shipped with Kelly a good many years, I trust him. So it's your pidgin, son; you've got to take it—and the authority that goes with it. Dutch will help—we'll all help—but you can't duck out and hand him the sack."

Mr. Samuels said quietly, "I don't agree with the Chief Engineer about the unimportance of legal aspects; most of these laws have wise reasons behind them. But I agree with what else he says. Mr. Jones, a ship is not just steel, it is a delicate political entity. Its laws and customs cannot be disregarded without inviting disaster. It will be far easier to maintain morale and discipline in this ship with a young captain—with all his officers behind him—than it would be to let passengers and crew suspect that the man who must make the crucial decisions, those life-and-death matters involving the handling of the ship, that this all-powerful man nevertheless can't be trusted to command the ship. No, sir, such a situation would frighten me; that is how mutinies are born."

Max felt his heart pounding, his head was aching steadily. Walther looked at him grimly and said, "Well?"

"I'll take it." He added, "I don't see what else I can do."

Walther stood up. "What are your orders, Captain?"

Max sat still and tried to slow his heart. He pressed his fingers to throbbing temples and looked frightened. "Uh, continue with routine. Make preparations to raise ship."

"Aye aye, sir." Walther paused, then added, "May I ask when the Captain plans to raise ship?"

He was having trouble focusing again. "When? Not before tomorrow—tomorrow at noon. I've got to have a night's sleep." He thought to himself that Kelly and he could throw it into a parking orbit, which would get them away from the centaurs—then stop to figure out his next move.

"I think that's wise, sir. We need the time."

Compagnon stood up. "If the Captain will excuse me, sir, I'll get my department started."

Samuels joined him. "Your cabin is ready, sir—I'll have your personal effects moved in in a few minutes."

Max stared at him. He had not yet assimilated the side implications of his new office. Use Captain Blaine's holy of holies? Sleep in his bed? "Uh, I don't think that's necessary. I'm comfortable where I am."

Samuels glanced at the First Officer, then said, "If you please, Captain, this is one of the things I was talking about when I said that a ship is a delicate political entity."

"Eh?" Max thought about it, then suddenly felt both the burden descend on him and the strength to meet it. "Very well," he answered, his voice deepening. "Do it."

"Yes, sir." Samuels looked at him. "Also, Captain—if you wish it—I'll have Lopez stop in and trim your hair."

Max pushed locks back of his ear. "It *is* shaggy, isn't it? Very well."

The Purser and the Chief Engineer left. Max stood for a moment uncertainly, not sure what his next cue was in this new role. Walther said, "Captain? Can you spare me a few more minutes?"

"Oh, certainly." They sat down and Walther poured more coffee. Max said, "Mr. Walther? Do you suppose we could ring the pantry and get some toast? I haven't eaten today."

"Why, surely! Sorry, sir." Instead of ringing, the First Officer phoned and ordered a high tea. Then he turned to Max. "Captain, I didn't give you all the story—nor did I wish to until we were alone."

"So?"

"Don't misunderstand me. My turning over command to you did not depend on these other matters—nor is it necessary for your officers to know everything that the Captain knows… even your department heads."

"Uh, I suppose not."

Walther stared at his coffee. "Have you heard how Mr. Simes happened to die?"

Max told him what little he had learned from Sam. Walther nodded. "That is essentially correct. Mmmm… It is not good to speak ill of the dead, but Simes was an unstable character. When Captain

Blaine passed on, he took it for granted that he was immediately captain of this ship."

"Well—I suppose it looked that way to him, from the legal standpoint."

"Not at all! Sorry to correct you, Captain, but that is one hundred percent wrong."

Max frowned. "I guess I'm dumb—but I thought that was the argument that was used on me?"

"No, sir. The ship being on the ground, command devolved on me, the senior. I am not required to turn command over to an astrogator until—and *unless*—the ship goes into space. Even then it is not automatically a matter of turning it over to the senior astrogating officer. I have a clearly defined responsibility, with numerous adjudicated cases in point: I must turn command over only to a man I believe can handle it.

"Now I have long had doubts about Mr. Simes, his temperament, I mean. Nevertheless, in this emergency, I would have found it terribly hard not to turn command over to him, once it was decided to raise ship. But before we lost the Captain I had had occasion to dig into Mr. Simes' ability as an astrogator—partly as a result of a conversation with you. I talked with Kelly—as you have gathered, Kelly is very well thought of. I believe I know now how that last transition went sour; Kelly took pains to show me. That and the fact that Kelly told me bluntly that there wasn't a member of the Worry gang willing to go into space under Mr. Simes made me decide that, if it ever came up, I'd let this ship sit here forever before I would let Simes be captain. That was just thinking ahead; the Captain was sick and prudence forced me to consider possibilities.

"Then the Captain did die—and Simes announced that he was captain. The fool even moved into the cabin and sent for me. I told him he was not in command and never would be. Then I left, got witnesses and took my chief of police along to eject him. You know what happened. Your life isn't the only one that Anderson saved; I owe him mine, too."

Walther abruptly changed the subject. "That phenomenal trick of memory you do—computing without tables or reference books. Can you do it all the time?"

"Uh? Why, yes."

"Do you know all the tables? Or just some of them?"

"I know all the standard tables and manuals that are what an astrogator calls his 'working tools.'" Max started to tell about his uncle, Walther interrupted gently.

"If you please, sir. I'm glad to hear it. I'm *very* glad to hear it. Because the only such books in this ship are the ones in your head."

Kelly had missed the books, of course—not Walther. When he disclosed his suspicions to Walther the two conducted a search. When that failed, it was announced that one (but only one) set was missing; Walther had offered a reward, and the ship had been combed from stern to astrodome—no manuals.

"I suppose he ditched them dirtside," Walther finished. You know where that leaves us—we're in a state of seige. And we'd find them only by accident if we weren't. So I'm very glad you have the same confidence in your memory that Kelly has."

Max was beginning to have misgivings—it is one thing to do something as a stunt, quite another to do it of necessity. "It isn't that bad," he answered. "Perhaps Kelly never thought of it, but logarithms and binary translation tables can probably be borrowed from engineering—with those we could fudge up methods for any straight hop. The others are needed mostly for anomalous transitions."

"Kelly thought of that, too. Tell me, Captain, how does a survey ship go back after it penetrates a newly located congruency?"

"Huh? So *that* is what you want me to do with the ship?"

"It is not for me," Walther said formally, "to tell the Captain where to take his ship."

Max said slowly, "I've thought about it. I've had a lot of time to think lately." He did not add that he had dwelt on it nights in captivity to save his reason. "Of course, we don't have the instruments that survey ships carry, nor does applied astrogation go much into the theory of calculating congruencies. And even some survey ships don't come back."

"But… " They were interrupted by a knock on the door. A steward's mate came in and loaded the table with food. Max felt himself starting to drool.

He spread a slice of toast with butter and jam, and took a big bite. "My, this is good!"

"I should have realized. Have a banana, sir? They look quite good—I believe hydroponics has had to thin them out lately."

Max shuddered. "I don't think I'll ever eat bananas again. Or pawpaws."

"Allergic, Captain?"

"Not exactly. Well… yes."

He finished the toast and said, "About that possibility. I'll let you know later."

"Very well, Captain."

Shortly before the dinner hour Max stood in front of the long mirror in the Captain's bedroom and looked at himself. His hair was short again and two hours sleep had killed some of his fatigue. He settled a cap on his head at the proper angle—the name in the sweat band was "Hendrix"; he had found it laid out with one of his own uniforms to which captain's insignia had been added. The sunburst on his chest bothered him—that he was indeed captain he conceded, even though it seemed like a wild dream, but he had felt that he was not entitled to anything but the smaller sunburst and circle, despite his four stripes.

Walther and Samuels had been respectful but firm, with Samuels citing precedents that Max could not check on. Max had given in.

He looked at himself, braced his shoulders, and sighed. He might as well go face them. As he walked down the companionway to the lounge he heard the speakers repeating, "All hands! All passengers! Report to Bifrost Lounge!"

The crowd made way for him silently. He went to the Captain's table—his table!—and sat down at its head. Walther was standing by the chair. "Good evening, Captain."

"Evening, Mr. Walther."

Ellie was seated across from him. She caught his eye and smiled. "Hello, Ellie." He felt himself blushing.

"Good evening, Captain," she said firmly. She was dressed in the same high style she had worn the first time he had ever seen her in the lounge; it did not seem possible that this lady could be the same girl whose dirty face had looked at him over three-dee boards scratched in dirt.

"Uh, how are your feet?"

"Bandages and bedroom slippers. But the Surgeon did a fine job. I'll be dancing tomorrow."

"Don't rush it."

She looked at his stripes and his chest. "You should talk."

Before he could answer the unanswerable Walther leaned over and said quietly, "We're ready, Captain."

"Oh. Go ahead." Walther tapped on a water glass.

The First Officer explained the situation in calm tones that made it seem reasonable, inevitable. He concluded by saying, "... and so, in accordance with law and the custom of space, I have relinquished my temporary command to your new captain. Captain Jones!"

Max stood up. He looked around, swallowed, tried to speak, and couldn't. Then, as effectively as if it had been a dramatic pause and not desperation, he picked up his water tumbler and took a sip. "Guests and fellow crewmen," he said, "we can't stay here. You know that. I have been told that our Surgeon calls the system we are up against here'symbiotic enslavement'—like dog to man, only more so, and apparently covering the whole animal kingdom on this planet.

Well, men aren't meant for slavery, symbiotic or any sort. But we are too few to win out now, so we must leave."

He stopped for another sip and Ellie caught his eye, encouraging him. "Perhaps someday other men will come back—better prepared. As for us, I am going to try to take the *Asgard* back through the… uh, 'hole' you might call it, where we came out. It's a chancy thing. No one is forced to come along—but it is the only possible way to get home. Anyone who's afraid to chance it will be landed on the north pole of planet number three—the evening star we have been calling 'Aphrodite.' You may be able to survive there, although it is pretty hot even at the poles. If you prefer that alternative, turn your names in this evening to the Purser. The rest of us will try to get home." He stopped, then said suddenly, "That's all," and sat down.

There was no applause and he felt glumly that he had muffed his first appearance. Conversation started up around the room, crewmen left, and steward's mates quickly started serving. Ellie looked at him and nodded quietly. Mrs. Mendoza was on his left; she said, "Ma—I mean 'Captain'—is it really so dangerous? I hardly like the thought of trying anything *risky*. Isn't there something else we can do?"

"No."

"But surely there must be?"

"No. I'd rather not discuss it at the table."

"But… " He went on firmly spooning soup, trying not to tremble. When he looked up he was caught by a glittering eye across the table, a Mrs. Montefiore, who preferred to be called "Principessa"—a dubious title. "Dolores, don't bother him. We want to hear about his adventures—don't we, Captain?"

"No."

"Come now! I hear that it was terribly *romantic*." She drawled the word and gave Ellie a sly, sidelong look. She looked back at Max with the eye of a predatory bird and showed her teeth. She seemed to have more teeth than was possible. "Tell us *all* about it!"

"No."

"But you simply *can't* refuse!"

Eldreth smiled at her and said, "Princess darling—your mouth is showing."

Mrs. Montefiore shut up.

After dinner Max caught Walther alone. "Mr. Walther?"

"Oh—yes, Captain?"

"Am I correct in thinking that it is my privilege to pick the persons who sit at my table?"

"Yes, sir."

"In that case—that Montefiore female. Will you have her moved, please? Before breakfast?"

Walther smiled faintly. "Aye aye, sir."

21 — THE CAPTAIN OF THE *ASGARD*

They took Sam down and buried him where he had fallen. Max limited it to himself and Walther and Giordano, sending word to Ellie not to come. There was a guard of honor but it was armed to kill and remained spread out around the grave, eyes on the hills. Max read the service in a voice almost too low to be heard—the best he could manage.

Engineering had hurriedly prepared the marker, a pointed slab of stainless metal. Max looked at it before he placed it and thought about the inscription. "Greater love hath no man"?—no, he had decided that Sam wouldn't like that, with his cynical contempt of all sentimentality. He had considered, "He played the cards he was dealt"—but that didn't fit Sam either; if Sam didn't like the cards, he sometimes slipped in a whole new deck. No, this was more Sam's style; he shoved it into the ground and read it:

IN MEMORY OF
SERGEANT SAM ANDERSON
LATE OF THE
IMPERIAL MARINES
"*He ate what was set before him.*"

Walther saw the marker for the first time. "So that's how it was? Somehow I thought so."

"Yes. I never did know his right name. Richards. Or maybe Roberts."

"Oh." Walther thought over the implication. "We could get him reinstated, sir, posthumously. His prints will identify him."

"I think Sam would like that."

"I'll see to it, sir, when we get back."

"*If* we get back."

"If you please, Captain—when we get back."

Max went straight to the control room. He had been up the evening before and had gotten the first shock of being treated as captain in the Worry Hole over with. When Kelly greeted him with, "Good morning, Captain," he was able to be almost casual.

"Morning, Chief. Morning, Lundy."

"Coffee, sir?"

"Thanks. About that parking orbit—is it set up?"

"Not yet, sir."

"Then forget it. I've decided to head straight back. We can plan it as we go. Got the films?"

"I picked them up earlier." They referred to the films cached in Max's stateroom. Simes had managed to do away with the first set at the time of Captain Blaine's death; the reserve set was the only record of when and where the *Asgard* had emerged into this space, including records of routine sights taken immediately after transition.

"Okay. Let's get busy. Kovak can punch for me."

The others were drifting in, well ahead of time, as was customary in Kelly's gang. "If you wish, sir. I'd be glad to compute for the Captain."

"Kovak can do it. You might help Noguchi and Lundy with the films."

"Aye aye, sir." Data flowed to him presently. He had awakened twice in the night in cold fright that he had lost his unique memory. But when the data started coming, he programmed without effort, appropriate pages opening in his mind. The problem was a short departure to rid themselves of the planet's influence, an adjustment of position to leave the local sun "behind" for simpler treatment of its field, then a long, straight boost for the neighborhood in which they had first appeared in this space. It need not be precise, for transition would not be attempted on the first pass; they must explore the area, taking many more photographic sights and computing from them, to establish a survey that had never been made.

Departure was computed and impressed on tape for the autopilot and the tape placed in the console long before noon. The ship had been keeping house on local time, about fifty-five standard minutes to the hour; now the ship would return to Greenwich, the time always kept in the control room—dinner would be late and some of the "beasts" would as usual reset their watches the wrong way and blame it on the government.

They synchronized with the power room, the tape started running, there remained nothing to do but press the button a few seconds before preset time and thereby allow the autopilot to raise ship. The phone rang, Smythe took it and looked at Max. "For you, Captain. The Purser."

"Captain?" Samuels sounded worried. "I dislike to disturb you in the control room."

"No matter. What is it?"

"Mrs. Montefiore. She wants to be landed on Aphrodite."

Max thought a moment. "Anybody else change his mind?"

"No, sir."

"They were all notified to turn in their names last night."

"I pointed that out to her, sir. Her answers were not entirely logical."

"Nothing would please me more than to dump her there. But after all, we are responsible for her. Tell her no.

"Aye aye, sir. May I have a little leeway in how I express it?"

"Certainly. Just keep her out of my hair."

Max flipped off the phone, found Kelly at his elbow. "Getting close, sir. Perhaps you will take the console now and check the set up? Before you raise?"

"Eh? No, you take her up, Chief. You'll have the first watch."

"Aye aye, Captain." Kelly sat down at the console, Max took the Captain's seat, feeling selfconscious. He wished that he had learned to smoke a pipe—it looked right to have the Captain sit back, relaxed and smoking his pipe, while the ship maneuvered.

He felt a slight pulsation and was pressed more firmly into the chair cushions; the *Asgard* was again on her own private gravity, independent of true accelerations. Moments later the ship raised, but with nothing to show it but the change out the astrodome from blue sky to star-studded ebony of space.

Max got up and found that he was still holding an imaginary pipe, he hastily dropped it. "I'm going below, Chief. Call me when the departure sights are ready to compute. By the way, what rotation of watches do you plan on?"

Kelly locked the board, got up and joined him. "Well, Captain. I had figured on Kovak and me heel-and-toe, with the boys on one in three. We'll double up later."

Max shook his head. "No. You and me and Kovak. And we'll stay on one in three as long as possible. No telling how long we'll fiddle around out there before we take a stab at it."

Kelly lowered his voice. "Captain, may I express an opinion?"

"Kelly, any time you stop being frank with me, I won't have a chance of swinging this. You know that."

"Thank you, sir. The Captain should not wear himself out. You have to do all the computing as it is." Kelly added quietly, "The safety of your ship is more important than—well, perhaps 'pride' is the word."

Max took a long time to reply. He was learning, without the benefit of indoctrination, that a commanding officer is not permitted foibles commonplace in any other role; he himself is ruled more strongly by the powers vested in him than is anyone else. The Captain's privileges—such as chucking a tiresome female from his table—were minor, while the penalties of the inhuman job had unexpected ramifications.

"Chief," he said slowly, "is there room to move the coffee mess over behind the computer?"

Kelly measured the space with his eye. "Yes, sir. Why?"

"I was thinking that would leave room over here to install a cot."

"You intend to sleep up here, sir?"

"Sometimes. But I was thinking of all of us—you shave up here half the time, as it is. The watches for the next few weeks do not actually require the O.W. to be awake most of the time, so we'll all doss off when we can. What do you think?"

"It's against regulations, sir. A bad precedent… and a bad example." He glanced over at Noguchi and Smythe.

"You would write it up formal and proper, for my signature, citing the regulation and suspending it on an emergency basis 'for the safety of the ship.'"

"If you say so, sir."

"You don't sound convinced, so maybe I'm wrong. Think it over and let me know."

The cot appeared and the order was posted, but Max never saw either Kelly or Kovak stretched out on the cot. As for himself, had he not used it, he would have had little sleep.

He usually ate in the control room as well. Although there was little to do on their way out to rendezvous with nothingness but take sights to determine the relations of that nothingness with surrounding sky, Max found that when he was not computing he was worrying, or discussing his worries with Kelly.

How did a survey ship find its way back through a newly calculated congruency? And what had gone wrong with those that failed to come back? Perhaps Dr. Hendrix could have figured the other side of an uncharted congruency using only standard ship's equipment—or perhaps not. Max decided that Dr. Hendrix could have done it; the man had been a fanatic about his profession, with a wide knowledge of the theoretical physics behind the routine numerical computations—much wider, Max was sure, than most astrogators.

Max knew that survey ships calculated congruencies from both sides, applying to gravitational field theory data gathered on the previously unknown side. He made attempts to rough out such a calculation, then gave up, having no confidence in his results—he was sure of his mathematical operations but unsure of theory and acutely aware of the roughness of his data. There was simply no way to measure accurately the masses of stars lightyears away with the instruments in the *Asgard*.

Kelly seemed relieved at his decision. After that they both gave all their time to an attempt to lay out a "groove" to the unmarked point in the heavens where their photosights said that they had come out—in order that they might eventually scoot down that groove, arriving at the locus just below the speed of light, then kick her over and hope.

A similar maneuver on a planet's surface would be easy—but there is no true parallel with the situation in the sky. The "fixed" stars move at high speeds and there are no other landmarks; to decide what piece of featureless space corresponds with where one was at another time requires a complicated series of calculations having no "elegant" theoretical solutions. For each charted congruency an astrogator has handed to him a table of precalculated solutions—the "Critical Tables for Charted Anomalies." Max and Kelly had to fudge up their own.

Max spent so much time in the control room that the First Officer finally suggested that passenger morale would be better if he could show himself in the lounge occasionally. Walther did not add that Max should wear a smile and a look of quiet confidence, but he implied it. Thereafter Max endeavored to dine with his officers and passengers.

He had of course seen very little of Eldreth. When he saw her at the first dinner after Walther's gentle suggestion she seemed friendly but distant. He decided that she was treating him with respect, which made him wonder if she were ill. He recalled that she had originally come aboard in a stretcher, perhaps she was not as rugged as she pretended to be. He made a mental note to ask the Surgeon—indirectly, of course!

They were dawdling over coffee and Max was beginning to fidget with a desire to get back to the Worry Hole. He reminded himself sharply that Walther expected him not to show anxiety—then looked around and said loudly, "This place is like a morgue. Doesn't anyone dance here these days? Dumont!"

"Yes, Captain?"

"Let's have some dance music. Mrs. Mendoza, would you honor me?"

Mrs. Mendoza tittered and accepted. She turned out to be a disgrace to Argentina, no sense of rhythm. But he piloted her around with only minor collisions and got her back to her chair, so timed that he could bow out gracefully. He then exercised the privilege of rank by cutting in on Mrs. Daigler. Maggie's hair was still short but her splendor otherwise restored.

"We've missed you, Captain."

"I've been working. Shorthanded, you know."

"I suppose so. Er… Captain, is it pretty soon now?'

"Before we transit? Not long. It has taken this long because we have had to do an enormous number of fiddlin' calculations—to be safe, you know."

"Are we *really* going home?"

He gave what he hoped was a confident smile. "Absolutely. Don't start any long book from the ship's library; the Purser won't let you take it dirtside."

She sighed. "I feel better."

He thanked her for the waltz, looked around, saw Mrs. Montefiore and decided that his obligation to maintain morale did not extend that far. Eldreth was seated, so he went to her. "Feet still bothering you, Ellie?"

"No, Captain. Thank you for asking."

"Then will you dance with me?"

She opened her eyes wide. "You mean the Captain has time for po' li'l ole me?"

He leaned closer. "One more crack like that, dirty face, and you'll be tossed into irons."

She giggled and wrinkled her nose. "Aye aye, Captain, sir."

For a while they danced without talking, with Max a little overpowered by her nearness and wondering why he had not done this sooner. Finally she said, "Max? Have you given up three-dee permanently?"

"Huh? Not at all. After we make this transit I'll have time to play—if you'll spot me two starships."

"I'm sorry I ever told you about that. But I do wish you would say hello to Chipsie sometimes. She was asking this morning, 'Where Maxie?'"

"Oh, I *am* sorry. I'd take her up to the control room with me occasionally, except that she might push a button and lose us a month's work. Go fetch her."

"The crowd would make her nervous. We'll go see her."

He shook his head. "Not to your room."

"Huh? Don't be silly. I've got no reputation left anyhow, and a captain can do as he pleases."

"That shows you've never been a captain. See that vulture watching us?" He indicated Mrs. Montefiore with his eyes. "Now go get Chipsie and no more of your back talk."

"Aye aye, Captain."

He scratched Chipsie's chin, fed her sugar cubes, and assured her that she was the finest spider puppy in that part of the sky. He then excused himself.

He was feeling exhilarated and oddly reassured. Seeing Mr. Walther disappearing into his room, he paused at the companionway and on impulse followed him. A matter had been worrying him, this was as good a time as any.

"Dutch? Are you busy?"

The First Officer turned. "Oh. No, Captain. Come in."

Max waited during the ceremonial coffee, then broached it. "Something on my mind, Mr. Walther—a personal matter."

"Anything I can do?"

"I don't think so. But you're a lot more experienced than I am; I'd like to tell you about it."

"If the Captain wishes."

"Look, Dutch, this is a 'Max' matter, not a 'Captain' matter."

Walther smiled. "All right. But don't ask me to change my form of address. I might pick up a bad habit."

"Okay, okay." Max had intended to sound out Walther about his phony record: had Dr. Hendrix reported it? Or hadn't he?

But he found it impossible to follow that line; being a captain had forced him into a different mold. "I want to tell you how I got into this ship." He told it all, not suppressing Sam's part now that it no longer could hurt Sam. Walther listened gravely.

"I've been waiting for you to mention this, Captain," he said at last. "Dr. Hendrix reported it to me, in less detail, when he put you up for apprentice astrogator. We agreed that it was a matter that need not be raised inside the ship."

"It's what happens after we get back that frets me. If we get back."

"When we get back. Are you asking for advice? Or help? Or what?"

"I don't know. I just wanted to tell you."

"Mmmm… there are two alternatives. One we could handle here, by altering a not very important report. In which…"

"No, Dutch. I won't have phony reports going out of the *Asgard*."

"I was fairly certain you would say that. I feel the same way, except that I would feel obligated for—well, various reasons—to cover up for you if you asked it."

"I once intended to arrange a phony on it. I even felt justified. But I can't do it now."

"I understand. The remaining alternative is to report it and face the music. In which case I'll see it through with you—and so will the Chief Engineer and the Purser, I feel sure."

Max sat back, feeling warm and happy. "Thanks, Dutch. I don't care what they do to me… just as long as it doesn't keep me out of space."

"I don't think they'll try to do that, not if you bring this ship in. But if they do—well, they'll know they've been in a fight. Meantime try to forget it."

"I'll try." Max frowned. "Dutch? Tell me the truth, what do *you* think about the stunt I pulled?"

"That's a hard question, Captain. More important is, how do you feel about it?"

"Me? I don't know. I know how I used to feel—I felt belligerent."

"Eh?"

"I was always explaining—in my mind of course—why I did it, justifying myself, pointing out that the system was at fault, not me. Now I don't want to justify myself. Not that I regret it, not when I think what I would have missed. But I don't want to duck out of paying for it, either."

Walther nodded. "That sounds like a healthy attitude. Captain, no code is perfect. A man must conform with judgment and commonsense, not with blind obedience. I've broken rules; some violations I paid for, some I didn't. This mistake you made could have turned you into a moralistic prig, a 'Regulation Charlie' determined to walk the straight and narrow and to see that everyone else obeyed the letter of the law. Or it could have made you a permanent infant who thinks rules are for everyone but him. It doesn't seem to have had either effect; I think it has matured you."

Max grinned. "Well, thanks, Dutch." He stood up. "I'll get back up to the Hole and mess up a few figures."

"Captain? Are you getting enough sleep?"

"Me? Oh, sure, I get a nap almost every watch."

"Minus four hours, Captain." Max sat up on the cot in the control room, rubbing sleep out of his eyes. The *Asgard* was in the groove, had been boosting along it for days, working up to that final burst that would squeeze them out of this space and into another—one they knew or some other, depending on how well their "fudging" had conformed to the true structure of the universe.

Max blinked at Kelly. "How long have you been up here?"

"Not long, Captain."

"Did you get *any* sleep?"

"Well, now, Captain..."

"Forget it, you're incorrigible. Got one ready?"

"Yes, sir."

"Shoot." Max sat on the cot while they passed data to him, eyes closed while he programmed the problem and translated it into the binary numbers the computer understood. He had not been out of the Hole more than a few minutes at a time for days. He would doze between sights, wake up and process one, then lie down again.

He had kept Kelly and Kovak on watch-and-watch as long as possible—although it was hard to get Kelly to rest. Lundy, Smythe, and Noguchi had continued to rotate, overlapping when the going got faster in order to help each other with plate changing and readings. For Max there could be no relief; he must process each sight, supplying from his card-file memory the information in the missing manuals.

All the Worry gang were there but Lundy. He came up as Max finished and ordered the correction. "Compliments of cookie," he announced, setting down a gallon of ice cream.

"What flavor?" asked Max.

"Chocolate chip, sir."

"My favorite. Just remember when you are dishing it that efficiency marks will be coming up one of these days."

"Now, Captain, that's not fair. The Chief has a lot more mass to feed than you have."

"And I have a very high metabolic rate," announced Noguchi. "I need more."

"Noggy, you have a builtin space warp in each leg. We'll let Kelly dish it and hope that pride will restrain him." Max turned to Kelly. "What schedule are we on?"

"Twenty minutes, Captain."

"Think we need that so soon?"

"Just to be safe, sir."

"Okay." They ran another sight and ate the ice cream, after which Max shifted them to transition stations. Kelly did not take the computer. A key punched by Kovak gave the same answer as one punched by Kelly, and Max wanted Kelly on the vernier stereograph where his long experience could make the best of poor data. Lundy assisted Kelly, with Smythe and Noguchi shooting and running.

At minus two hours Max called Compagnon, told him that they were narrowing down; the Chief Engineer assured him that he would nurse boost and vector himself from there on. "Good hunting, Captain."

On a ten minute schedule Max still found it easy, though he had to admit he wasn't as fresh as a still-warm egg. But he was kept comfortably busy and the corrections were pleasantly small—Compagnon must be doing a real job down there. When the preset on the computer said less than one hour to zero, he stood up and stretched. "Everybody all set. Somebody wake up Noggy. Everybody got a pepper pill in him? And who's got one for me?"

Kovak leaned back and handed him one, Max popped it into his mouth and downed it with a swig of coffee. "Grab a last sandwich if you're going to. All right, gang—let's hit it!"

The data flowed in a steady stream. After a while Max began to tire. He would no more than pick one correction off the lights on the computer and feed it to the power room than Kelly would have more data ready. A correction showed up that seemed off the curve, as if they were "hunting" excessively. He glanced back at the lights before applying it—then realized that a new set of data was being offered.

"Repeat!" he called out.

Kelly repeated. Max ran the figures over in his mind and found that they meant nothing to him. What had that last correction implied? Had he used a legitimate method in surveying this anomaly? Could you even call it surveying? Was this what a survey ship did to get out? How could they expect a man to…

"Captain!" Kelly said sharply.

He shook his head and sat up. "Sorry. Hold the next one." With a feeling of panic he reviewed the data in his mind and tried to program. He knew at last how it felt to have the deadline bearing down fast as light—and to lose confidence.

He told himself that he must abort—slide past under the speed of light, spend weeks swinging back, and try again. But he knew that if he did, his nerve would never sustain him for a second try.

At that bad moment a feeling came over him that someone was standing behind his chair, resting hands on his shoulders—quieting him, soothing him. He began clearly and sharply to call off figures to Kovak.

He was still calling them out with the precision of an automaton twenty minutes later. He accepted one more sight, digested it, sent it on to Kovak with his eyes on the preset. He applied the correction, a tiny one, and called out, "Stand by!" He pressed the button that allowed the chronometer to kick it over on the microsecond. Only then did he look around, but there was no one behind him.

"There's the Jeep!" he heard Kelly say exultantly. "And there's the Ugly Duckling!" Max looked up. They were back in the familiar sky of Nu Pegasi and Halcyon.

Five minutes later Kelly and Max were drinking cold coffee and cleaning up the remains of a plate of sandwiches while Noguchi and Smythe completed the post-transition sights. Kovak and Lundy had gone below for a few minutes relief before taking the first watch. Max glanced again at the astrodome. "So we made it. I never thought we would."

"Really, Captain? There was never any doubt in my mind after you took command."

"Hmmm! I'm glad you didn't know how I felt."

Kelly ignored this. "You know, sir, when you are programming your voice sounds amazingly like the Doctor's."

Max looked at him sharply. "I had a bad time there once," he said slowly. "Shortly before zip."

"Yes, sir. I know."

"Then—Look, this was just a *feeling,* you see? I don't go for ghosts. But I had the notion that Doc was standing over me, the way he used to, checking what I did. Then everything was all right."

Kelly nodded. "Yes. He was here. I was sure he would be."

"Huh? What do you mean?" Kelly would not explain. He turned instead to inspect post-transition plates, comparing them happily with standard plates from the chart safe—the first such opportunity since the ship was lost.

"I suppose," said Max when Kelly was through, "that we had better rough out an orbit for Nu Pegasi before we sack in." He yawned. "Brother, am I dead!"

Kelly said, "For Nu Pegasi, sir?"

"Well, we can't shoot for Halcyon itself at this distance. What did you have in mind?"

"Nothing, sir."

"Spill it."

"Well, sir, I guess I had assumed that we would reposition for transit to Nova Terra. But if that is what the Captain wants—"

Max drummed on the chart safe. It had never occurred to him that anyone would expect him to do anything, after accomplishing the impossible, but to shape course for the easy, targetin-sight destination they had left from, there to wait for competent relief.

"You expected me to take her on through? With no tables and no help?"

"I did not intend to presume, Captain. It was an unconscious assumption."

Max straightened up. "Tell Kovak to hold her as she goes. Phone Mr. Walther to see me at once in my cabin."

"Aye aye, sir."

The First Officer met him outside his cabin. "Hello, Dutch. Come in." They entered and Max threw his cap on his desk. "Well, we made it."

"Yes, sir. I was watching from the lounge."

"You don't seem surprised."

"Should I be, Captain?"

Max sprawled in his easy chair, stretching his weary back muscles. "You should be. Yes, sir, you should be."

"All right. I'm surprised."

Max looked up and scowled. "Dutch, where is this ship going now?"

Walther answered, "The Captain has not yet told me."

"Confound it! You know what I mean. Our schedule calls for Nova Terra. But there is Halcyon sitting right over there—a blind man could find it with a cane. What destination did you have in mind when you boosted me into command? Tell me what you expected then? Before you tagged me."

"I had in mind," Walther answered, "getting a captain for the *Asgard*."

"That's no answer. See here, the passengers have a stake in this.

Sure, I had to take this risk for them, no choice. But now there is a choice. Shouldn't we tell them and let them vote on it?"

Walther shook his head emphatically. "You don't ask passengers anything, sir. Not in a ship underway. It is not fair to them to ask them. You *tell* them."

Max jumped up and strode the length of the cabin. "'Fair,' you say. Fair! It's not fair to *me*." He swung and faced Walther. "Well? You're not a passenger. You're my First Officer. What do you think we should do?"

Walther stared him in the eye. "I can't decide that for the Captain. That is why you are Captain."

Max stood still and closed his eyes. The figures stood out clearly, in neat columns. He went to his phone and savagely punched the call for the control room. "Captain speaking. Is Kelly still there? Oh—good, Chief. We reposition for Nova Terra. Start work—I'll be up in a minute."

22 — THE *TOMAHAWK*

Max liked this time of day, this time of year. He was lying in the grass on the little rise west of the barn, with his head propped up so that he could see to the northwest. If he kept his eyes there, on the exit ring of the C.S.&E. Ring Road, he would be able, any instant now, to see the *Tomahawk* plunge out and shoot across the gap in free trajectory. At the moment he was not reading, no work was pushing him, he was just being lazy and enjoying the summer evening.

A squirrel sat up near by, stared at him, decided he was harmless and went about its business. A bird swooped past.

There was a breathless hush, then suddenly a silver projectile burst out of the exit ring, plunged across the draw and entered the ring on the far side—just as the sound hit him.

"Boy, oh boy!" he said softly. "It never looks like they'd make it."

It was all that he had climbed the rise to see, but he did not get up at once. Instead he pulled a letter from his pocket and reread the ending: "… I guess Daddy was glad to get me back in one piece because he finally relented. Putzie and I were married a week ago—and oh Max, I'm so *happy!* You must visit us the next time you hit dirt at Hespera." She had added, "P.S. Mr. Chips sends her love—and so do I."

Quite a gal, Ellie. She usually got her own way, one way or another. He felt a bit sorry for Putzie. Now if they had all stayed on Charity…

Never mind—an astrogator ought not to get married. Fondly he fingered the sunburst on his chest. Too bad he had not been able to stay with the *Asgard*—but of course they were right; he could not ship as assistant in a ship where he had once been skipper. And assistant astrogator of the *Elizabeth Regina* was a good billet, too; everybody said the *Lizzie* was a taut ship.

Besides that, not every young A.A. had a new congruency to his credit, even now being surveyed. He had nothing to kick about. He didn't even mind the whopping big fine the Council of the Guilds had slapped on him, nor the official admonition that had been entered in his record. They had let him stay in space, which was the important thing, and the admonition appeared right along with the official credit for the "Hendrix" congruency.

And, while he didn't argue the justice of the punishment—he'd been in the wrong and he knew it—nevertheless the guilds were set up wrong; the rules ought to give everybody a chance. Some day he'd be senior enough to do a little politicking on that point.

In the meantime, if he didn't get moving, he'd have to buy that taxi. Max got up and started down the slope. The helicab was parked in front of the house and the driver was standing near it, looking out over the great raw gash of the Missouri-Arkansas Power Project. The fields Max once had worked were gone, the cut reached clear into the barn yard. The house was still standing but the door hung by one hinge and some kid had broken all the windows. Max looked at the house and wondered where Maw and the man she had married were now?—not that he really cared and no one around Clyde's Corners seemed to know. They had told him at the courthouse that Maw had collected her half of the government-condemnation money and the pair of them had left town.

Probably their money was gone by now—Max's half of the money was gone completely, it hadn't quite paid his fine. If they were broke, maybe Montgomery was having to do some honest work, for Maw wasn't the woman to let a man loaf when she was needing. The thought pleased Max; he felt he had a score to settle with Montgomery, but Maw was probably settling it for him.

The driver turned toward him. "Be a big thing when they get this finished. You ready to go, sir?"

Max took a last glance around. "Yes. I'm all through here."

They climbed into the cabin. "Where to? Back to the Corners?"

Max thought about it. He really ought to save money—but shucks, he would save plenty this next trip. "No, fly me over to Springfield and drop me at the southbound ring road station. I'd like to make it in time to catch the *Javelin*."

That would put him in Earthport before morning.

The Star Beast

I

L-Day

Lummox was bored and hungry. The latter was a normal state; creatures of Lummox's breed were always ready for a little snack, even after a full meal. Being bored was less usual and derived directly from the fact that Lummox's chum and closest associate, John Thomas Stuart, had not been around all day, having chosen to go off somewhere with his friend Betty.

One afternoon was a mere nothing; Lummox could hold his breath that long. But he knew the signs and understood the situation; John Thomas had reached the size and age when he would spend more and more time with Betty, or others like her, and less and less time with Lummox. Then there would come a fairly long period during which John Thomas would spend practically no time with Lummox but at the end of which there would arrive a new John Thomas which would presently grow large enough to make an interesting playmate.

From experience Lummox recognized this cycle as necessary and inevitable; nevertheless the immediate prospect was excruciatingly boring. He lumbered listlessly around the back yard of the Stuart home, looking for anything-a grasshopper, a robin, anything at all that might be worth looking at. He watched a hill of ants for a while. They seemed to be moving house; an endless chain was dragging little white grubs in one direction while a countermarching line returned for more grubs. This killed a half hour.

Growing tired of ants, he moved away toward his own house. His number-seven foot came down on the ant hill and crushed it, but the fact did not come to his attention. His own house was just big enough for him to back into it and was the end building of a row of decreasing size; the one at the far end would have made a suitable doghouse for a chihuahua.

Piled outside his shed were six bales of hay. Lummox pulled a small amount off one bale and chewed it lazily. He did not take a second bite because he had taken as much as he thought he could steal and not have it noticed. There was nothing to stop him from eating the entire pile-except the knowledge that John Thomas would bawl him out bitterly and might even refuse for a week or more to scratch him with the garden rake. The household rules required Lummox not to touch food other than natural forage until it was placed in his manager; Lummox usually obeyed as he hated dissension and was humiliated by disapproval.

Besides, he did not want hay. He had had hay for supper last night, he would have it again tonight, and again tomorrow night. Lummox wanted something with more body and a more interesting flavor. He ambled over to the low fence which separated the several acres of back yard from Mrs. Stuart's formal garden, stuck his head over and looked longingly at Mrs. Stuart's roses. The fence was merely a symbol marking the line he must not cross. Lummox had crossed it once, a few years earlier, and had sampled the rose bushes. . . just a sample, a mere appetizer, but Mrs. Stuart had made such a fuss that he hated to think about it even now. Shuddering at the recollection, he backed hastily away from the fence.

But he recalled some rose bushes that did not belong to Mrs. Stuart, and therefore in Lummox's opinion, did not belong to anybody. They were in the garden of the Donahues, next door west. There was a possible way, which Lummox had been thinking about lately, to reach these "ownerless" rose bushes.

The Stuart place was surrounded by a ten-foot concrete wall. Lummox had never tried to climb over it, although he had nibbled the top of it in places. In the rear there was one break in it, where the gully draining the land crossed the property line. The gap in the wall was filled by a massive grating of eight-by-eight timbers, bolted together with extremely heavy bolts. The vertical timbers were set in the stream bed and the contractor who had erected it had assured Mrs. Stuart that it would stop Lummox, or a herd of elephants, or anything else too big-hipped to crawl between the timbers.

Lummox knew that the contractor was mistaken, but his opinion had not been asked and he had not offered it. John Thomas had not expressed an opinion either, but he had seemed to suspect the truth; he had emphatically ordered Lummox not to tear the grating down.

Lummox had obeyed. He had sampled it for flavor, but the wooden timbers had been soaked in something which gave them a really unbearable taste; he let them be.

But Lummox felt no responsibility for natural forces. He had noticed, about three months back, that spring rains had eroded the gully so that two of the vertical timbers were no longer imbedded but were merely resting on the dry stream bed. Lummox had been thinking about this for several weeks and had found that a gentle nudge tended to spread the timbers at the bottom. A slightly heavier nudge might open up a space wide enough without actually tearing down the grating. . .

Lummox lumbered down to check up. Still more of the stream bed had washed away in the last rain; one of the vertical timbers hung a few inches free of the sand. The one next to it was barely resting on the ground. Lummox smiled like a simple-minded golliwog and carefully, delicately insinuated his head between the two big posts. He pushed gently.

Above his head came a sound of rending wood and the pressure suddenly relieved. Startled, Lummox pulled his head out and looked up. The upper end of one eight-by-eight had torn free of its bolts; it pivoted now on a lower horizontal girder. Lummox clucked to himself. Too bad. . . but it couldn't be helped. Lummox was not one to weep over past events; what has been, must be. No doubt John Thomas would be vexed but in the meantime here was an opening through the grating. He lowered his head like a football linesman, set himself in low gear, and pushed on through. There followed several sounds of protesting and rending wood and sharper ones of broken bolts, but Lummox ignored it all; he was on the far side now, a free agent.

He paused and raised up like a caterpillar, lifting legs one and three, two and four, off the ground, and looked around. It was certainly nice to be outside; he wondered why he had not done it sooner. It had been a long time since John Thomas had taken him out, even for a short walk.

He was still looking around, sniffing free air, when an unfriendly character charged at him, yapping and barking furiously. Lummox recognized him, an oversized and heavily muscled mastiff that .ran ownerless and free in the neighborhood; they had often exchanged insults through the grating. Lummox had nothing against dogs; in the course of his long career with the Stuart family he had known several socially and had found them pretty fair company in the absence of John Thomas. But this mastiff was another matter. He fancied himself boss of the neighborhood, bullied other dogs, terrorized cats, and repeatedly challenged Lummox to come out and fight like a dog.

Nevertheless Lummox smiled at him, opened his mouth wide and, in a lisping, baby-girl voice from somewhere far back inside him, called the mastiff a very bad name. The dog gasped. it is likely that he did not comprehend what Lummox had said, but he did know that he had been insulted. He recovered himself and renewed the attack, barking louder than ever and raising an unholy ruckus while dashing around Lummox and making swift sorties at his flanks to nip at Lummox's legs.

Lummox remained reared up, watching the dog but making no move. He did add to his earlier remark a truthful statement about the dog's ancestry and an untruthful one about his habits; they helped to keep the mastiff berserk. But on the dog's seventh round trip he cut fairly close to where Lummox's first pair of legs would have been had Lummox had all eight feet on the ground; Lummox ducked his head the way a frog strikes at a fly. His mouth opened like a wardrobe trunk and gobbled the mastiff.

Not bad, Lummox decided as he chewed and swallowed. Not bad at all. . . and the collar made a crunchy tidbit. He considered whether or not to go back through the grating, now that he had had a little snack, and pretend that he had never been outside at all. However, there were still those ownerless rose bushes and no doubt John Thomas would make it inconvenient for him to get out again soon. He ambled away parallel to the Stuart's rear wall, then swung around the end onto the Donahue land.

John Thomas Stuart XI got home shortly before dinner time, having already dropped Betty Sorensen at her home. He noticed, as he landed, that Lummox was not in sight, but he assumed that his pet was in his shed. His mind was not on Lummox, but on the age-old fact that females do not operate by logic, at least as logic is understood by males.

He was planning to enter Western Tech; Betty wanted them both to attend the state university. He had pointed out that he could not get the courses he wanted at State U.; Betty had insisted that he could and had looked up references to prove her point. He had rebutted by saying that it was not the name of a course that mattered, but who taught it. The discussion had fallen to pieces when she had refused to concede that he was an authority.

He had absentmindedly unstrapped his harness copter, while dwelling on the illogic of the feminine mind, and was racking it in the hallway, when his mother burst into his presence. "John Thomas! Where have you been?"

He tried to think what he could have slipped on now. It was a bad sign when she called him "John Thomas". . . "John" or "Johnnie" was okay, or even "Johnnie Boy." But "John Thomas" usually meant that he had been accused, tried, and convicted in absentia.

"Huh? Why, I told you at lunch, Mum. Out hopping with Betty. We flew over to. . ."

"Never mind that! Do you know what that beast has done?"

Now he had it. Lummox. He hoped it wasn't Mum's garden. Maybe Lum had just knocked over his own house again. If so, Mum would level off presently. Maybe he had better build a new one, bigger. "What's the trouble?" he asked cautiously.

"'What's the trouble?' What isn't the trouble? John Thomas, this time you simply will have to get rid of it. This is the last straw."

"Take it easy, Mum," he said hastily. "We can't get rid of Lum. You promised Dad."

She made no direct answer. "With the police calling every ten minutes and that great dangerous beast rampaging around and. . ."

"Huh? Wait a minute, Mum, Lum isn't dangerous; he's gentle as a kitten. What happened?"

"Everything!"

He gradually drew out of her some of the details. Lummox had gone for a stroll; that much was clear. John Thomas hoped without conviction that Lummox had not got any iron or steel while he was out; iron had such an explosive effect on his metabolism. There was the time Lummox had eaten that secondhand Buick . . .

His thoughts were interrupted by his mother's words. and Mrs. Donahue is simply furious! And well she might be. . . her prize roses."

Oh oh, that was bad. He tried to recall the exact amount in his savings account. He would have to apologize, too, and think of ways to butter up the old biddy. In the meantime he would beat Lummox's ears with an ax; Lummox knew about roses, there was no excuse.

"Look, Mum, I'm awfully sorry. I'll go right out and pound some sense into his thick head. When I get through with him, he won't dare sneeze without permission." John Thomas started edging around her.

"Where are you going?" she demanded.

"Huh? Out to talk with Lum, of course. When I get through with him. . ."

"Don't be silly. He isn't here."

"Huh? Where is he?" John Thomas swiftly rearranged his prayers to hope that Lummox hadn't found very much iron. The Buick hadn't really been Lummox's fault and anyhow it had belonged to John Thomas, but. . .

"No telling where he is now. Chief Dreiser said. . ."

"The police are after Lummox?"

"You can just bet they are, young man! The entire safety patrol is after him. Mr. Dreiser wanted me to come downtown and take him home, but I told him we would have to get you to handle that beast."

"But Mother, Lummox would have obeyed you. He always does. Why did Mr. Dreiser take him downtown? He knows Lum belongs here. Being taken downtown would frighten Lum. The poor baby is timid; he wouldn't like. . ."

"Poor baby indeed! He wasn't taken downtown."

"But you said he was."

"I said no such thing. If you'll be quiet, I'll tell you what happened."

It appeared that Mrs. Donahue had surprised Lummox when he had eaten only four or five of her rose bushes. With much courage and little sense she had run at him with a broom, to scream and belabor him about the head. She had not followed the mastiff, though he could have managed her with one gulp; Lummox had a sense of property as nice as that of any house cat. People were not food; in fact, people were almost invariably friendly.

So his feelings were hurt. He had lumbered away from there, pouting.

The next action report on Lummox was for a point two miles away and about thirty minutes later. The Stuarts lived in a suburban area of Westville; open country separated it from the main part of town. Mr. Ito had a small farm in this interval, where he handraised vegetables for the tables of gourmets. Mr. Ito apparently had not known what it was that he had found pulling up his cabbages and gulping them down. Lummox's long residence in the vicinity was certainly no secret, but Mr. Ito had no interest in other people's business and had never seen Lummox before.

But he showed no more hesitation than had Mrs. Donahue. He dashed into his house and came out with a gun that had been handed down to him from his grandfather-a relic of the Fourth World War of the sort known affectionately as a "tank killer."

Mr. Ito steadied the gun on a potting bench and let Lummox have it where he would have sat down had Lummox been constructed for such. The noise scared Mr. Ito (he had never heard the weapon fired) and the flash momentarily blinded him. When he blinked his eyes and recovered, the thing had gone.

But it was easy to tell the direction in which it had gone. This encounter had not humiliated Lummox as had the brush with Mrs. Donahue; this frightened him almost out of his wits. While busy with his fresh green salad he had been faced toward a triplet of Mr. Ito's greenhouses. When the explosion ticked him and the blast assailed his hearing, Lummox shifted into high gear and got underway in the direction he was heading. Ordinarily he used a leg firing order of 1,4,5,8,2,3,6,7 and repeat, good for speeds from a slow crawl to fast as a trotting horse; he now broke from a standing start into a double-ended gallop, moving legs 1, 2, 5, 6 together, alternated with 3, 4, 7, 8.

Lummox was through the three greenhouses before he had time to notice them, leaving a tunnel suitable for a medium truck. Straight ahead, three miles away, lay downtown Westville. It might have been better if he had been headed in the opposite direction toward the mountains.

John Thomas Stuart listened to his mother's confused account with growing apprehension. When he heard about Mr. Ito's greenhouses, he stopped thinking about his savings account and started wondering what assets he could convert into cash. His jump harness was almost new. . . but shucks! it wouldn't pay the damage. He wondered if there was any kind of a dicker he could work with the bank? One sure thing: Mum wouldn't help him out, not the state she was in.

Later reports were spotty. Lummox seemed to have gone across country until he hit the highway leading into town. A transcontinental trucker had complained to a traffic officer, over a cup of coffee, that he had just seen a robot pedatruck with no license plates and that the durned thing had been paying no attention to traffic lanes. But the trucker had used it as an excuse to launch a diatribe about the danger of robot drivers and how there was no substitute for a human driver, sitting in the cab and keeping his eyes open for emergencies. The traffic patrolman had not seen Lummox, being already at his coffee when Lummox passed, and had not been impressed since the trucker was obviously prejudiced. Nevertheless he had phoned in.

Traffic control center in Westville paid no attention to the report; control was fully occupied with a reign of terror.

John Thomas interrupted his mother. "Has anybody been hurt?"

"Hurt? I don't know. Probably. John Thomas, you've got to get rid of that beast at once."

He ignored that statement; it seemed the wrong time to argue it. "What else happened?"

Mrs. Stuart did not know in detail. Near the middle of town Lummox came down a local chute from the overhead freeway. He was moving slowly now and with hesitation; traffic and large numbers of people confused him. He stepped off the street onto a slidewalk. The walk ground to a stop, not being designed for six tons of concentrated load; fuses had blown, circuit breakers had opened, and pedestrian traffic at the busiest time of day was thrown into confusion for twenty blocks of the shopping district.

Women had screamed, children and dogs had added to the excitement, safety officers had tried to restore order, and poor Lummox, who had not meant any harm and had not intended to visit the shopping district anyway, made a perfectly natural mistake. . . the big display windows of the Bon March, looked like a refuge where he could get away from it all. The duraglass of the windows was supposed to be unbreakable, but the architect had not counted on Lummox mistaking it for empty air. Lummox went in and tried to hide in a model bedroom display. He was not very successful.

John Thomas's next question was cut short by a thump on the roof; someone had landed. He looked up. "You expecting anyone, Mum?"

"It's probably the police. They said they would. . ."

"The police? Oh, my!"

"Don't go away. . . you've got to see them."

"I wasn't going anywhere," he answered miserably and punched a button to unlock the roof entrance.

Moments later the lazy lift from the roof creaked to a stop and the door opened; a safety sergeant and a patrolman stepped out. "Mrs. Stuart?" the sergeant began formally. " 'In your service, ma'am.' We. . ." He caught sight of John Thomas, who was trying not to be noticed. "Are you John T. Stuart?"

John gulped. "Yessir."

"Then come along, right away. 'Scuse us, ma'am. Or do you want to come too?"

"Me? Oh, no, I'd just be in the way."

The sergeant nodded relieved agreement. "Yes, ma'am. Come along, youngster. Minutes count." He took John by the arm.

John tried to shrug away. "Hey, what is this? You got a warrant or something?"

The police officer stopped, seemed to count ten, then said slowly, "Son, I do not have a warrant. But if you are the John T. Stuart I'm looking for. . . and I know you are. . . then unless you want something drastic and final to happen to that deepspace what-isit you've been harboring, you'd better snap to and come with us."

"Oh, I'll come," John said hastily.

"Okay. Don't give me any more trouble."

John Thomas Stuart kept quiet and went with him.

In the three minutes it took the patrol car to fly downtown John Thomas tried to find out the worst. "Uh, Mister Patrol Officer? There hasn't been anybody hurt? Has there?"

"Sergeant Mendoza," the sergeant answered. "I hope not. I don't know."

John considered this bleak answer. "Well. . . Lummox is still in the Bon March,?"

"Is that what you call it?-Lummox? It doesn't seem strong enough. No, we got it out of there. It's under the West Arroyo viaduct.. . I hope."

The answer sounded ominous. "What do you mean: 'you hope'?"

"Well, first we blocked off Main and Hamilton, then we chivvied it out of the store with fire extinguishers. Nothing else seemed to bother it; solid slugs just bounced off. Say, what's that beast's hide made of? Ten-point steel?"

"Uh, not exactly." Sergeant Mendoza's satire was closer to fact than John Thomas cared to discuss; he still was wondering if Lummox had eaten any iron. After the mishap of the digested Buick Lummox's growth had taken an enormous spurt; in two weeks he had jumped from the size of a misshapen hippopotamus to his present unlikely dimensions, more growth than he had shown in the preceding generation. It had made him extremely gaunt, like a canvas tarpaulin draped over a scaffolding, his quite unearthly skeleton pushing through his skin; it had taken three years of a high-caloric diet to make him chubby again. Since that time John Thomas had tried to keep metal away from Lummox, most especially iron, even though his father and his grandfather had always fed him tidbits of scrap metal.

"Um. Anyhow the fire extinguishers dug him out-only he sneezed and knocked two men down. After that we used more fire extinguishers to turn him down Hamilton, meaning to herd him into open country where he couldn't do so much damage. . . seeing as how we couldn't find you. We were making out pretty well, with only an occasional lamp post knocked down, or ground car stepped on, or such, when we came to where we meant to turn him off on Hillcrest and head him back to your place. But he got away from us and headed out onto the viaduct, ran into the guard rail and went off, and. . . well, you'll see, right now. Here we are."

Half a dozen police cars were hovering over the end of the viaduct Surrounding the area were many private air cars and an air bus or two; the patrol cars were keeping them back from the scene. There were several hundred harness flyers as well, darting like bats in and out among the vehicles and making the police problem more difficult On the ground a few regular police, supplemented by emergency safety officers wearing arm bands, were trying to hold the crowd back and were diverting traffic away from the viaduct and from the freight road that ran under it down the arroyo. Sergeant Mendoza's driver threaded his way through the cars in the air, while speaking into a hushophone on his chest. Chief Dreiser's bright red command car detached itself from the knot over the end of the viaduct and approached them.

Both cars stopped, a few yards apart and a hundred feet above the viaduct. John Thomas could see the big gap in the railing where Lummox had gone over, but could not see Lummox himself; the viaduct blocked his view. The door of the command car opened and Chief Dreiser leaned out; he looked harassed and his bald head was covered with sweat. "Tell the Stuart boy to stick his head out."

John Thomas ran a window down and did so. "Here, sir."

"Lad, can you control that monster?"

"Certainly, sir."

"I hope you're right. Mendoza! Land him. Let him try it."

"Yes, Chief." Mendoza spoke to the driver, who moved the car past the viaduct and started letting down beyond it. Lummox could be seen then; he had taken refuge under the end of the bridge, making himself small. . . for him. John Thomas leaned out and called to him,

"Lum! Lummie boy! Come to papa."

The creature stirred and the end of the viaduct stirred with him. About twelve feet of his front end emerged from under the structure and he looked around wildly.

"Here, Lum! Up here!"

Lummox caught sight of his friend and split his head in an idiot grin. Sergeant Mendoza snapped, "Put her down, Slats. Let's get this over."

The driver lowered a bit, then said anxiously, "That's enough, Sergeant. I saw that critter rear up earlier."

"All right, all right." Mendoza opened the door and kicked out a rope ladder used in rescue work. "Can you go down that, son?"

"Sure." With Mendoza to give him a hand John Thomas shinnied out of the door and got a grip on the ladder. He felt his way down and came to the point where there was no more ladder; he was still six feet above Lummox's head. He looked down. "Heads up, baby. Take me down."

Lummox lifted another pair of legs from the ground and carefully placed his broad skull under John Thomas, who stepped onto it, staggering a little and grabbing for a hand hold. Lummox lowered him gently to the ground.

John Thomas jumped off and turned to face him. Well, the fall apparently had not hurt Lum any; that was a relief. He would get him home first and then go over him inch by inch.

In the meantime Lummox was nuzzling his legs and making a sound remarkably like a purr. John looked stern. "Bad Lummie! Bad, bad Lummie. . . you're a mess, aren't you?"

Lummox looked embarrassed. He lowered his head to the ground, looked up at his friend, and opened his mouth wide. "I didn't mean to," he protested in his baby-girl voice.

"You didn't mean to. You didn't mean to! Oh, no, you never do. I'm going to take your front feet and stuff them down your throat. You know that, don't you? I'm going to beat you to a pulp and then use you for a rug. No supper for you. You didn't mean to, indeed!"

The bright red car came close and hovered. "Okay?" demanded Chief Dreiser.

"Sure."

"All right. Here's the plan. I'm going to move that barrier up ahead. You get him back up on Hillcrest, going out the upper end of the draw. There will be an escort waiting; you fall in behind and stay with it all the way home. Get me?"

"Okay." John Thomas saw that in both directions the arroyo road had been blocked with riot shields, tractors with heavy armor mounted on their fronts, so that a temporary barrier could be thrown across a street or square. Such equipment was standard for any city safety force since the Riots of '91, but he could not recall that Westville had ever used them; he began to realize that the day that

Lummox went to town would not soon be forgotten.

But he was happy that Lummox had been too timid to munch on those steel shields. He was beginning to hope that his pet had been too busy all afternoon to eat any ferrous metal. He turned back to him. "All right, get your ugly carcass out of that hole. We're going home."

Lummox complied eagerly; the viaduct again trembled as he brushed against it. "Make me a saddle."

Lummox's midsection slumped down a couple of feet. He thought about it very hard and his upper surface shaped itself into contours resembling a chair. "Hold still," John Thomas ordered. "I don't want any mashed fingers." Lummox did so, quivering a little, and the young man scrambled up, grabbing at slip folds in Lummox's durable hide. He sat himself like a rajah ready for a tiger hunt.

"All right. Slow march now, up the road. No, no! Gee around, you numskull. Uphill, not down."

Docilely, Lummox turned and ambled away.

Two patrol ground cars led the way, two others brought up the rear. Chief Dreiser's tomato-red runabout hung over them at a safe distance. John Thomas lounged back and spent the time composing first, what he was going to say to Lummox, and second, what he was going to say to his mother. The first speech was much easier; he kept going back and embellishing it with fresh adjectives whenever he found himself running into snags on the second.

They were halfway home when a single flier, hopping free in a copter harness, approached the little parade. The flier ignored the red warning light stabbing out from the police chiefs car and slanted straight down at the huge star beast. John Thomas thought that he recognized Betty's slapdash style even before he could make out features; he was not mistaken. He caught her as she cut power.

Chief Dreiser slammed a window open and stuck his head out. He was in full flow when Betty interrupted him. "Why, Chief Dreiser! What a terrible way to talk!"

He stopped and took another look. "Is that Betty Sorenson?"

"Of course it is. And I must say, Chief, that after all the years you've taught Sunday School I never thought I would live to hear you use such language. If that is setting a good example, I think I'll. . ."

"Young lady, hold your tongue."

"Me? But you were the one who was using. . ."

"Quiet! I've had all I can take today. You get that suit to buzzing and hop out of here. This is official business. Now get out."

She glanced at John Thomas and winked, then set her face in cherubic innocence. 'But, Chief, I can't."

"Huh? Why not?"

"I'm out of juice. This was an emergency landing."

'Betty, you quit fibbing to me."

"Me? Fibbing? Why, Deacon Dreiser!"

"I'll deacon you. If your tanks are dry, get down off that beast and walk home. He's dangerous."

"Lummie dangerous? Lummie wouldn't hurt a fly. And besides, do you want me to walk home alone? On a country road? When it's almost dark? I'm surprised at you."

Dreiser sputtered and closed the window. Betty wiggled out of her harness and settled back in the wider seat that Lummox had provided without being told. John Thomas looked at her. "Hi, Slugger."

"Hi, Knothead."

"I didn't know you knew the Chief."

"I know everybody. Now shut up. I've gotten here, with all speed and much inconvenience, as soon as I heard the newscast. You and Lummox between you could not manage to think your way out of this, even with Lummox doing most of the work-so I rallied around. Now give me the grisly details. Don't hold anything back from mama."

"Smart Alec."

"Don't waste time on compliments. This will probably be our only chance for a private word before they start worrying you, so you had better talk fast."

"Huh? What do you think you are? A lawyer?"

"I'm better than a lawyer, my mind is not cluttered with stale precedents. I can be creative about it."

"Well. . ." Actually he felt better now that Betty was present It was no longer just Lummox and himself against an unfriendly world. He poured out the story while she listened soberly.

"Anybody hurt?" she asked at last.

"I don't think so. At least they didn't mention it."

"They would have." She sat up straight. "Then we've got nothing to worry about."

"What? With hundreds, maybe thousands, in damage? I'd like to know what you call trouble?"

"People getting hurt," she answered. "Anything else can be managed. Maybe we'll have Lummox go through bankruptcy."

"Huh? That's silly!"

"If you think that is silly, you've never been in a law court."

"Have you?"

"Don't change the subject. After all, Lummox was attacked with a deadly weapon."

"It didn't hurt him; it just singed him a little."

"Beside the point. It undoubtedly caused him great mental anguish. I'm not sure he was responsible for anything that happened afterwards. Be quiet and let me think."

"Do you mind if I think, too?"

"Not as long as I don't hear the gears grind. Pipe down."

The parade continued to the Stuart home in silence. Betty gave him one piece of advice as they stopped. "Admit nothing. Nothing. And don't sign anything. Holler if you need me."

Mrs. Stuart did not come out to meet them. Chief Dreiser inspected the gap in the grating with John Thomas, with Lummox hanging over their shoulders. The Chief watched in silence as John Thomas took a string and tied it across the opening.

"There! Now he can't get out again."

Dreiser pulled at his lip. "Son, are you all right in the head?"

"You don't understand, sir. The grating wouldn't stop him even if we did repair it. . . not if he wanted to get out. I don't know anything that would. But that string will. Lummox!"

"Yes, Johnnie?"

"See that string?"

"Yes, Johnnie."

"You bust that string and I'll bust your silly head. Understand me?"

"Yes, Johnnie."

"You won't go out of the yard again, not ever, unless I take you."

"All right, Johnnie."

"Promise? Cross your heart?"

"Cross my heart."

"He hasn't really got a heart," Johnnie went on. "He has an uncentralized circulatory system. It's like. . ."

"I don't care if he has rotary pumps, as long as he stays home."

"He will. He's never broken 'Cross my heart,' even if he hasn't got one."

Dreiser chewed his thumb. "All right. I'll leave a man out here with a portophone tonight. And tomorrow we'll put some steel I-beams in there in place of that wood."

John started to say, "Oh, not steel," but he thought better of it. Dreiser said, "What's the matter?"

"Uh, nothing."

"You keep an eye on him, too."

"He won't get out"

"He had better not. You realize that you are both under arrest, don't you? But I've got no way to lock that monstrosity up."

John Thomas did not answer. He had not realized it; now he saw that it was inevitable. Dreiser went on in a kindly voice, "Try not to worry about it. You seem like a good boy and everybody thought well of your father. Now I've got to go in and have a word with your mother. You had better stay here until my man arrives. . . and then maybe sort of introduce him to, uh, this thing." He passed a doubtful eye over Lummox.

John Thomas stayed while the police chief went back to the house. Now was the time to give Lummox what for, but he did not have the heart for it. Not just then.

II

The Department of Spatial Affairs

To John Thomas Stuart XI the troubles of himself and Lummox seemed unique and unbearable, yet he was not alone, even around Westville. Little Mr. Ito was suffering from an always fatal disease-old age. It would kill him soon. Behind uncounted closed doors in Westville other persons suffered silently the countless forms of quiet desperation which can close in on a man, or woman, for reasons of money, family, health, or face.

Farther away, in the state capital, the Governor stared hopelessly at a stack of papers-evidence that would certainly send to prison his oldest and most trusted friend. Much farther away, on Mars, a prospector abandoned his wrecked sandmobile and got ready to attempt the long trek back to Outpost. He would never make it.

Incredibly farther away, twenty-seven light years, the Starship Bolivar was entering-an interspatial transition. A flaw in a tiny relay would cause that relay to operate a tenth of a second later than it should. The S.S. Bolivar would wander between the stars for many years. . . but she would never find her way home.

Inconceivably farther from Earth, half way across the local star cloud, a race of arboreal crustaceans was slowly losing to a younger, more aggressive race of amphibians. It would be several thousands Earth years before the crustaceans were extinct, but the issue was not in doubt. This was regrettable (by human standards) for the crustacean race had mental and spiritual abilities which complemented human traits in a fashion which could have permitted a wealth of civilized cooperation with them. But when the first Earthhumans landed there, some eleven thousand years in the future, the crustaceans would be long dead.

Back on Earth at Federation Capital His Excellency the Right Honorable Henry Gladstone Kiku, M.A. (Oxon,) Litt.D. honoris causa (Capetown), O.B.E., Permanent Under Secretary for Spatial Affairs, was not worried about the doomed crustaceans because he would never know of them. He was not yet worried about S.S. Bolivar but he would be. Aside from the ship, the loss of one passenger in that ship would cause a chain reaction of headaches for Mr. Kiku and all his associates for years to come.

Anything and everything outside Earth's ionosphere was Mr. Kiku's responsibility and worry. Anything which concerned the relationships between Earth and any part of the explored universe was also his responsibility. Even affairs which were superficially strictly Earthside were also his concern, if they affected or were in any way affected by anything which was extraterrestrial, interplanetary, or interstellar in nature-a very wide range indeed.

His problems included such things as the importation of Martian sand grass, suitably mutated, for the Tibetan plateau. Mr. Kiku's office had not approved that until after a careful mathematical examination of the possible effect on the Australian sheep industry-and a dozen other factors. Such things were done cautiously, with the gruesome example of Madagascar and the Martian berryroot always before them. Economic decisions did not upset Mr. Kiku, no matter how many toes he stepped on; other sorts kept him awake nights-such as his decision not to give police escorts to Goddard exchange students from Procyon VII despite the very real danger to them from provincial Earthmen with prejudices against beings having unearthly arrangements of limbs or eyes or such-the cephalopods of that planet were a touchy people and something very like a police escort was their own usual punishment for criminals.

Mr. Kiku had an extremely large staff to help him, of course, and, also of course, the help of the Secretary himself. The Secretary made speeches, greeted Very Important Visitors, gave out interviews, and in many other ways eased for Mr. Kiku an otherwise unbearable load-Mr. Kiku would be first to admit this. As long as the current Secretary behaved himself, minded his business, took care of public appearances, and let the Under Secretary get on with the department's work, he had Mr. Kiku's approval. Of course, if he failed to pull his load or threw his weight around, Mr. Kiku was capable of finding ways to get rid of him. But it had been fifteen years since he had found it necessary to be so drastic; even the rawest political appointee could usually be broken to harness.

Mr. Kiku had not made up his mind about the current Secretary, but was not now thinking about him. Instead he was looking over the top-sheet synopsis for Project Cerberus, a power proposal for the research station on Pluto. A reminder light on his desk flashed and he looked up to see the door between his office and that of the Secretary dilate. The Secretary walked in, whistling Take Me Out to the Ball Game; Mr. Kiku did not recognize the tune.

He broke off. "Greetings, Henry. No, don't get up."

Mr. Kiku had not started to get up. "How do you do, Mr. Secretary?

What can I do for your"

"Nothing much, nothing much." He paused by Mr. Kiku's desk and picked up the project folder. "What are you swotting now? Cerberus, eh? Henry, that's an engineering matter. Why should we worry about it?"

"There are aspects," Mr. Kiku answered carefully, "that concern us."

"I suppose so. Budget and so forth." His eye sought the boldfaced line reading: ESTIMATED COST: 3.5 megabucks and 7.4 lives. "What's this? I can't go before the Council and ask them to approve this. It's fantastic."

"The first estimate," Mr. Kiku said evenly, "was over eight megabucks and more than a hundred lives."

"I don't mind the money, but this other. . . You are in effect asking the Council to sign death warrants for seven and four-tenths men: You can't do that, it isn't human. Say, what the deuce is four-tenths of a man anyway? How can you kill a fraction of a man?"

"Mr. Secretary," his subordinate answered patiently, "any project bigger than a schoolyard swing involves probable loss of life. But that hazard factor is low; it means that working on Project Cerberus will be safer, on the average, than staying Earthside. That's my rule of thumb."

"Eh?" The Secretary looked again at the synopsis. "Then why not say so? Put the thing in the best light and so forth?"

"This report is for my eyes. . . for our eyes, only. The report to the Council will emphasize safety precautions and will not include an estimate of deaths-which, after all, is a guess."

"Mmm, 'a guess.' Yes, of course." The Secretary put the report down, seemed to lose interest.

"Anything else, sir?"

"Oh, yes! Henry, old man, you know that Rargyllian dignitary I am supposed to receive today? Dr. What's-his-name?"

"Dr. Ftaeml." Mr. Kiku glanced at his desk control panel. "Your appointment is, uh, an hour and seven minutes from now."

"That's just it. I'm afraid I'll have to ask you to substitute. Apologies to him and so forth. Tell him I'm tied up with affairs of state."

"Sir? I wouldn't advise that. He will expect to be received by an official of your rank. . . and the Rargyllians are extremely meticulous about protocol."

"Oh, come now, this native won't know the difference."

"But he will, sir."

"Well, let him think that you're me. . . I don't care. But I won't be here and that's that The Secretary General has invited me to go to the ball game with him-and an invitation from the S. C. is a 'must,' y'know."

Mr. Kiku knew that it was nothing of the sort, had the commitment been explained. But he shut up. "Very well, sir."

'Thanks, old chap." The Secretary left, again whistling.

When the door closed, Mr. Kiku with an angry gesture slapped a row of switches on the desk panel He was locked in now and could not be reached by phone, video, tube, autowriter, or any other means, save by an alarm button which his own secretary had used only once in twelve years. He leaned elbows on his desk, covered his head with his hands and rubbed his fingers through his woolly pate.

This trouble, that trouble, the other trouble. . . and always some moron to jiggle his elbow Why had he ever left Africa? Where came this itch for public service? An itch that had long, since turned into mere habit. . .

He sat up and opened his middle drawer. It was bulging with real estate prospectuses from Kenya; he took out a handful and soon was comparing relative merits of farms. Now here was a little honey, if a man had the price-better than eight hundred acres, half of it in cultivation, and seven proved wells on the property. He looked at map and photographs and presently felt better. After a while he put them away and closed the drawer.

He was forced to admit that, while what he had told the chief was true, his own nervous reaction came mostly from his lifelong fear of snakes. If Dr. Ftaeml were anything but a Rargyllian. . . or if the Rargyllians had not been medusa humanoids, he wouldn't have minded. Of course, he knew that those tentacles growing out of a Rargyllian's head were not snakes-but his stomach didn't know it. He would have to find time for a hypnotic treatment before-no, there wasn't time; he'd have to take a pill instead.

Sighing, he flipped the switches back on. His incoming basket started to fill up at once and all the communication instruments showed lights. But the lights were amber rather than blinking red; he ignored them and glanced through the stuff falling into his basket. Most of the items were for his information only: under doctrine his subordinates or their subordinates had taken action. Occasionally he would check a name and a suggested action and drop the sheet in the gaping mouth of the outgoing basket.

A radiotype came in that was not routine, in that it concerned a creature alleged to be extraterrestrial but unclassified as to type and origin. The incident involved seemed unimportant-some nonsense in one of the native villages in the western part of the continent. But the factor of an extraterrestrial creature automatically required the local police to report it to Spatial Affairs, and the lack of classification of the e.-t. prevented action under doctrine and resulted in the report being kicked upstairs.

Mr. Kiku had never seen Lummox and would have had no special interest if he had. But Mr. Kiku knew that each contact with "Out There" was unique. The universe was limitless in its variety. To assume without knowledge, to reason by analogy, to take the unknown for granted, all meant to invite disaster.

Mr. Kiku looked over his list to see whom he could send. Any of his career officers could act as a court of original and superior jurisdiction in any case involving extraterrestrials, but who was on Earth and free? Hmm. . .

Sergei Greenberg, that was the man. System Trade Intelligence could get along without a chief for a day or two. He flipped a switch. "Sergei?"

"Yes, boss?"

"Busy?"

"Well, yes and no. I'm paring my nails and trying to figure a reason why the taxpayers should pay me more money."

"Should they, now? I'm sending a bluesheet down." Mr. Kiku checked Greenberg's name on the radiotype, dropped it in his outgoing basket, waited a few seconds until he saw Greenberg pick it out of his own incoming basket. "Read it."

Greenberg did so, then looked up. "Well, boss?"

"Phone the local justice that we are assuming tentative jurisdiction, then buzz out and look into it."

"Thy wish is my command, O King. Even money the critter is terrestrial after all, two to one I can identify if it isn't."

"No wager, not at those odds. You're probably right. But it might be a 'special situation'; we can't take chances."

"I'll keep the local yokels in line, boss. Where is this hamlet? Westville? Or whatever it is?"

"How would I know? You have the sheet in front of you.

Greenberg glanced at it. "Hey! What do you know? It's in the mountains. . . this may take two or three weeks, boss. Hot enough for you?"

"Take more than three days and I'll charge it off your annual leave." Mr. Kiku switched off and turned to other matters. He disposed of a dozen calls, found the bottom of his incoming basket and lost it again, then noticed that it was time for the Rargyllian. Goose flesh crawled over him and he dug hastily into his desk for one of the special pills his doctor had warned him not to take too frequently. He had just gulped it when his secretary's light started blinking.

"Sir? Dr. Ftaeml is here."

"Show him in." Mr. Kiku muttered in a language his ancestors had used in making magic-against snakes, for example. As the door dilated he hung on his face the expression suitable for receiving visitors.

III
"-An Improper Question"

The intervention by the Department of Spatial Affairs in the case of Lummox did not postpone the hearing; it speeded it up. Mr. Greenberg phoned the district judge, asked for the use of his courtroom, and asked him to have all parties and witnesses in court at ten o'clock the next morning-including, of course, the extraterrestrial that was the center of the fuss. Judge O'Farrell questioned the last point.

"This creature. . . you need him, too?"

Greenberg said that he most decidedly wanted the e.t. present, since his connection with the case was the reason for intervention. "Judge, we people in DepSpace don't like to butt into your local affairs. After I've had a look at the creature and have asked half a dozen questions, I can probably bow out. . . which will suit us both. This alleged e.t. is my only reason for coming out. So have the beastie present, will you?"

"Eh, he's rather too large to bring into the courtroom. I haven't seen him for several years and I understand he has grown a bit. . . but he would have been too large to bring indoors even then. Couldn't you look at him where he is?"

"Possibly, though I admit to a prejudice for having everything pertinent to a hearing in one spot. Where is he?"

"Penned up where he lives, with his owner. They have a suburban place a few miles out"

Greenberg thought about it. Although a modest man, one who cared not where he ate or slept, when it came to DepSpace business he operated on the rule of making the other fellow do the running around; otherwise the department's tremendous load of business would never get done. "I would like to avoid that trip out into the country, as I intend to hold my ship and get back to Capital tomorrow afternoon, if possible. It's rather urgent. . . a matter of the Martian treaty." This last was Greenberg's standard fib when he wanted to hurry someone not in the department.

Judge O'Farrell said that he would arrange it. "We'll rig a temporary pen on the lawn outside the court house."

"Swell! See you tomorrow, Judge. Thanks for everything.

Judge O'Farrell had been on a fishing trip two days earlier when Lummox had gone for his walk. The damage had been cleaned up by his return and, as a fixed principle, he avoided hearing or reading news reports or chitchat concerning cases he might have to try. When he phoned Chief-of-Safety Dreiser he expected no difficulty about moving Lummox.

Chief Dreiser went through the roof. "Judge, are you out of your head?"

"Eh? What's ailing you, Deacon?"

Dreiser tried to explain; the judge shrugged off his objections. Whereupon they both phoned the mayor. But the mayor had been on the same fishing trip; he threw his weight on O'Farrell's side. His words were: "Chief, I'm surprised at you. We can't have an important Federation official thinking that our little city is so backwoods that we can't handle a small thing like that." Dreiser groaned and called the Mountain States Steel & Welding Works.

Chief Dreiser decided to move Lummox before daylight, as he wished to get him penned up before the streets were crowded. But nobody had thought to notify John Thomas; he was awakened at four in the morning with a sickening shock; the wakening had interrupted a nightmare, he believed at first that something dreadful had happened to Lummox.

Once the situation was clear he was noncooperative; he was a "slow starter," one of those individuals with a low morning blood-sugar count who is worth nothing until after a hearty breakfast-which he now insisted on.

Chief Dreiser looked angry. Mrs. Stuart looked mother-knows-best and said, "Now, dear, don't you think you had better. . ."

"I'm going to have my breakfast. And Lummox, too."

Dreiser said, "Young man, you don't have the right attitude. First thing you know you'll be in eyen worse trouble; Come along. You can get breakfast downtown."

John Thomas looked stubborn. His mother said sharply, "John Thomas! I won't have it, do you hear? You're being difficult, just like your father was."

The reference to his father rubbed him even more the wrong way. He said bitterly, "Why don't you stand up for me, Mum? They taught me in school that a citizen can't be snatched out of his home any time a policeman gets a notion. But you seem anxious to help him instead of me. Whose side are you on?"

She stared at him, astounded, as he had a long record of docile obedience. "John Thomas! You can't speak to your mother that way!"

"Yes," agreed Dreiser. "Be polite to your mother, or I'll give you the back of my hand-unofficially, of course. If there is one thing I can't abide it's a boy who is rude to his elders." He unbuttoned his tunic, pulled out a folded paper. "Sergeant Mendoza told me about the quibble you pulled the other day. . . so I came prepared. There's my warrant. Now, will you come? Or will I drag you?"

He stood there, slapping the paper against his palm, but did not offer it to John Thomas. But when John Thomas reached for it, he let him have it and waited while he read it. At last Dreiser said, "Well? Are you satisfied?"

"This is a court order," John Thomas said, "telling me to appear and requiring me to bring Lummox."

"It certainly is."

"But it says ten o'clock. It doesn't say I can't eat breakfast first.., as long as I'm there by ten."

The Chief took a deep breath, expanding visibly. His face, already pink, got red, but he did not answer.

John Thomas said, "Mum? I'm going to fix my breakfast. Shall I fix some for you, too?"

She glanced at Dreiser, then back at her son and bit her lip. "Never mind," she said grudgingly. "I'll get breakfast. Mr. Dreiser, will you have coffee with us?"

"Eh? That's kind of you, ma'am. I don't mind if I do. I've been up all night."

John Thomas looked at them. "I'll run out and take a quick look at Lummox." He hesitated, then added, "I'm sorry I was rude, Mum."

"We'll say no more about it, then," she answered coldly.

He had been intending to say several things, in self-justification, but he thought better of it and left. Lummox was snoring gently, stretched half in and half out of his house. His sentry eye was raised above his neck, as it always was when he was asleep; it swivelled around at John Thomas's approach and looked him over, but that portion of Lummox that stood guard for the rest recognized the youth; the star creature did not wake. Satisfied, John Thomas went back inside.

The atmosphere mellowed during breakfast; by the time John Thomas had two dishes of oatmeal, scrambled eggs and toast, and a pint of cocoa inside him, he was ready to concede that Chief Dreiser had been doing his duty and probably didn't kick dogs for pleasure. In turn, the Chief, under the influence of food, had decided that there was nothing wrong with the boy that a firm hand and an occasional thrashing would not cure. . . too bad his mother had to raise him alone; she seemed like a fine woman. He pursued a bit of egg with toast, captured it, and said, "I feel better, Mrs. Stuart, I really do. It's a treat to a widower to taste home cooking. . . but I won't dare tell my men."

Mrs. Stuart put a hand to her mouth. "Oh, I forgot about them!" She added, "I can have more coffee in a moment. How many are there?"

"Five. But don't bother, ma'am; they'll get breakfast when they go off duty." He turned to John Thomas. "Ready to go, young fellow?"

"Uh. . ." He turned to his mother. "Why not fix breakfast for them, Mum? I've still got to wake Lummox and feed him."

By the time Lummox had been wakened and fed and had had matters explained to him, by the time five patrolmen had each enjoyed a second cup of coffee after a hot meal, the feeling was more that of a social event than an arrest. It was long past seven before the procession was on the road.

It was nine o'clock before they got Lummox backed into the temporary cage outside the courthouse. Lummox had been delighted by the smell of steel and had wanted to stop and nibble it; John Thomas was forced to be firm. He went inside with Lummox and petted him and talked to him while the door was welded shut, He had been worried when he saw the massive steel cage, for he had never got around to telling Chief Dreiser that steel was less than useless against Lummox.

Now it seemed too late, especially as the Chief was proud of the pen. There had been no time to pour a foundation, so the Chief had ordered an openwork box of steel girders, top, bottom, and sides, with one end left open until Lummox could be shut in.

Well, thought John Thomas, they all knew so much and they didn't bother to ask me. He decided simply to warn Lummox not to eat a bite of the cage, under dire threats of punishment. . . and hope for the best.

Lummox was inclined to argue; from his point of view it was as silly as attempting to pen a hungry boy by stacking pies around him. One of the workmen paused, lowered his welding torch and said, "You know, it sounded just like that critter was talking."

"He was," John Thomas answered briefly.

"Oh." The man looked at Lummox, then went back to work. Human speech on the part of extraterrestrials was no novelty, especially on stereo programs; the man seemed satisfied. But shortly he paused again. "I don't hold with animals talking," he announced. John Thomas did not answer; it did not seem to be a remark to which an answer could be made.

Now that he had time John Thomas was anxious to examine something on Lummox which had been worrying him. He had first noticed the symptoms on the morning following Lummox's disastrous stroll-two swellings located where Lummox's shoulders would have been had he been so equipped. Yesterday they had seemed larger, which disturbed him, for he had hoped that they were just bruises. . . not that Lummox bruised easily.

But they fretted him. It seemed possible that Lummox had hurt himself during the accidental gymkhana he had taken part in. The shot that Mr. Ito had taken at him had not damaged him; there had been a slight powder burn where the explosive charge had struck him but that was all; a charge that would destroy a tank was to Lummox about like a hearty kick to a mule-startling, but not harmful.

Lummox might have bruised himself in plunging through the greenhouses, but that seemed unlikely. More probably he had been hurt in falling off the viaduct. John Thomas knew that such a fall would kill any Earth animal big enough to have an unfavorable cube-square ratio, such as an elephant. Of course Lummox, with his unearthly body chemistry, was not nearly as fragile as an elephant. . . still, he might have bruised himself badly.

Dog take it! the swellings were bigger than ever, real tumors now, and the hide over them seemed softer and thinner, not quite the armor that encased Lummox elsewhere. John Thomas wondered if a person like Lummox could get cancer, say from a bruise? He did not know and he did not know anyone who would. Lummox had never been ill as far back as John Thomas could remember, nor had his father ever mentioned Lummox having anything wrong with him. Lummox was the same today, yesterday, and always-except that he kept getting bigger.

He would have to look over his grandfather's diary tonight and his great grandfather's notes. Maybe he had missed something. . .

He pressed one of the swellings, trying to dig his fingers in; Lummox stirred restlessly. John Thomas stopped and said anxiously, "Does that hurt?"

"No," the childish voice answered, "it tickles."

The answer did not reassure him. He knew that Lummox was ticklish, but it usually took something like a pickaxe to accomplish it. The swellings must be very sensitive. He was about to investigate farther when he was hailed from behind.

"John! Johnnie!"

He turned. Betty Sorenson was outside the cage. "Hi, Slugger," he called to her. "You got my message?"

"Yes, but not until after eight o'clock. You know the dorm rules. Hi, Lummox. How's my baby?"

"Fine," said Lummox.

"That's why I recorded," John Thomas answered. The idiots rousted me out of bed before daylight. Silly."

"Do you good to see a sunrise. But what is all this rush? I thought the hearing was next week?"

"It was supposed to be. But some heavyweight from the Department of Space is coming out from Capital. He's going to try it,"

"What?"

"What's the matter?"

"The matter? Why, everything! I don't know this man from Capital. I thought I was going to deal with Judge O'Farrell. . . I know what makes him tick. This new judge. . . well, I don't know. In the second place, I've got ideas I haven't had time to work out yet." She frowned. "We'll have to get a postponement."

"What for?" asked John Thomas. "Why don't we just go into court and tell the truth?"

"Johnnie, you're hopeless. If that was all there was to it, there wouldn't be any courts."

"Maybe that would be an improvement."

"But. . . Look, Knothead, don't stand there making silly noises. If we have to appear in less than an hour. . ." She glanced up at the clock tower on the ancient courthouse. 'A good deal less. We've got to move fast. At the very least, we've got to get that homestead claim recorded."

"That's silly. They won't take it, I tell you. We can't homestead Lummox. He's not a piece of land."

"A man can homestead a cow, two horses, a dozen pigs. A carpenter can homestead his tools. An actress can homestead her wardrobe."

"But that's not 'homesteading.' I took the same course in commercial law that you did. They'll laugh at you."

"Don't quibble. It's section II-of the same law. If you were exhibiting Lummie in a carnival, he'd be the 'tools of your trade,' wouldn't he? It's up to them to prove he isn't. The thing is to register Lummox as exempt from lien before somebody gets a judgment against you."

"If they can't collect from me, they'll collect from my mother."

"No, they won't. I checked that. Since your father put the money in a trust, legally she hasn't got a dime."

"Is that the law?" he asked doubtfully.

"Oh, hurry up! The law is whatever you can convince a court it is."

"Betty, you've got a twisted mind." He slid out between the bars, turned and said, "Lummie, I'll only be gone a minute. You stay right here."

"Why?" asked Lummox.

"Never mind 'why.' You wait for me here."

"All right."

There was a crowd on the courthouse lawn, people gawking at Lummox in his new notoriety. Chief Dreiser had ordered rope barriers erected and a couple of his men were present to see that they were respected, The two young people ducked under the ropes and pushed through the crowd to the courthouse steps. The county clerk's office was on the second floor; there they found his chief deputy, an elderly maiden lady.

Miss Schreiber took the same view of registering Lummox as free from judgment that John Thomas did. But Betty pointed out that it was not up to the county clerk to decide what was an eligible chattel under the law, and cited an entirely fictitious case about a man who homesteaded a multiple echo. Miss Schreiber reluctantly filled out forms, accepted the modest fee, and gave them a certified copy.

It was almost ten o'clock. John Thomas hurried out and started downstairs. He stopped when he saw that Betty had paused at a penny weighing machine. "Come on, Betty," he demanded. "This is no time for that."

"I'm not weighing myself," she answered while staring into the mirror attached to it. "I'm checking my makeup. I've got to look my best."

"You look all right."

"Why, Johnnie, a compliment!"

"It wasn't a compliment. Hurry up. I've got to tell Lummox something."

"Throttle back and hold at ten thousand. I'll bring you in." She wiped off her eyebrows, painted them back in the smart Madame Satan pattern, and decided that it made her look older. She considered adding a rolling-dice design on her right cheek, but skipped it as Johnnie was about to boil over. They hurried down and outdoors.

More moments were wasted convincing a policeman that they belonged inside the barrier. Johnnie saw that two men were standing by Lummox's cage. He broke into a run. "Hey! You two! Get away from there!"

Judge O'Farrell turned around and blinked. "What is your interest, young man?" The other man turned but said nothing.

"Me? Why, I'm his owner. He's not used to strangers. So go back of the rope, will you?" He turned to Lummox. "It's all right, baby. Johnnie's here."

"Howdy, Judge."

"Oh. Hello, Betty." The judge looked at her as if trying to decide why she was present, then turned to John Thomas. 'You must be the Stuart boy. I'm Judge O'Farrell."

"Oh. Excuse me, Judge," John Thomas answered, his ears turning pink. "I thought you were a sightseer."

"A natural error. Mr. Greenberg, this is the Stuart boy. . . John Thomas Stuart. Young man, this is the Honorable Sergei Greenberg, Special Commissioner for the Department of Spatial Affairs." He looked around. "Oh yes. . . this is Miss Betty Sorenson, Mr. Commissioner. Betty, why have you done those silly things to your face?"

She ignored him with dignity. "Honored to meet you, Mr. Commissioner."

"Just 'Mr. Greenberg,' please, Miss Sorenson." Greenberg turned to Johnnie. "Any relation to the John Thomas Stuart?"

"I'm John Thomas Stuart the Eleventh," Johnnie answered simply. "I suppose you mean my great-great-great grandfather."

"I guess that would be it. I was born on Mars, almost within sight of his statue. I had no idea your family was mixed up in this. Perhaps we can have a gab about Martian history later."

"I've never been to Mars," Johnnie admitted.

"No? That's surprising. But you're young yet."

Betty listened, ears almost twitching, and decided that this judge, if that was what he was, would be an even softer mark than Judge O'Farrell. It was hard to remember that Johnnie's name meant anything special. . . especially since it didn't. Not around Westville.

Greenberg went on, "You've made me lose two bets, Mr. Stuart."

"Sir?"

"I thought this creature would prove not to be from 'Out There.' I was wrong; that big fellow is certainly not native to Earth. But I was equally sure that, if he was e.-t., I could attribute him, I'm not an exotic zoologist, but in my business one has to keep skimming such things. . . look at the pictures at least. But I'm stumped. What is be and where did he come from?"

"Uh, why, he's just Lummox. That's what we call him. My great grandfather brought him back in the Trail Blazer. . . her second trip."

"That, long ago, eh? Well, that clears up some of the mystery; that was before DepSpace kept records. . . in fact before there was such a department. But I still don't see how this fellow could have missed making a splash in the history books. I've read about the Trail Blazer and I remember she brought back many exotica. But I don't remember this fellow. . . and, after all, extraterrestrials were news in those days."

"Oh, that. . . Well, sir, the captain didn't know Lummox was aboard. Great-granddad brought him aboard in his jump bag and sneaked him off the ship the same way."

"In his lump bag?" Greenberg stared at Lummox's outsized figure.

"Yes, sir. Of course Lummie was smaller then."

"So I am forced to believe."

"I've got pictures of him. He was about the size of a collie pup. More legs of course."

"Mmmm, yes. More legs. And he puts me, more in mind of a triceratops than a collie. Isn't he expensive to feed?"

"Oh, no, Lummie eats anything. Well, almost anything," John Thomas amended hastily, glancing selfconsciously at the steel bars.

"Or he can go without eating for a long time. Can't you, Lummie?"

Lummox had been lying with his legs retracted, exhibiting the timeless patience which he could muster when necessary. He was listening to his chum and Mr. Greenberg while keeping an eye on Betty and the judge. He now opened his enormous mouth. "Yes, but I don't like it."

Mr. Greenberg raised his eyebrows and said, "I hadn't realized that he was a speech-center type."

"A what? Oh, sure. Lummie's been talking since my father was a boy; he just sort of picked it up. I meant to introduce you. Here, Lummie. . .I want you to meet Mr. Commissioner Greenberg."

Lummox looked at Greenberg without interest and said, "How do you do, Mr. Commissioner Greenberg," saying the formula phrase clearly but not doing so well on the name and title.

"Uh, how do you do, Lummox." He was staring at Lummox when the courthouse clock sounded the hour. Judge O'Farrell turned and spoke to him.

"Ten o'clock, Mr. Commissioner. I suppose we had better get started."

"No hurry," Greenberg answered absentmindedly, "since the party can't start until we get there. I'm interested in this line of investigation. Mr. Stuart, what is Lummox's R.I.Q. on the human scale?"

"Huh? Oh, his relative intelligence quotient. I don't know, sir."

"Good gracious, hasn't anyone ever tried to find out?"

"Well, no, sir. . . I mean 'yes, sir.' Somebody did run some tests on him back in my grandfather's time, but granddad got so sore over the way they were treating Lummie that he chucked them out. Since then we?ve kept strangers away from Lummie, mostly. But he's real bright. Try him."

Judge O'Farrell whispered to Greenberg, "The brute isn't as bright as a good bird dog, even if he can parrot human speech a little. I know."

John Thomas said indignantly, "I heard that, Judge. You're just prejudiced!"

The judge started to answer but Betty cut across him. "Johnnie! You know what I told you. . . I'll do the talking."

Greenberg ignored the interruption. "Has any attempt been made to learn his language?"

"Sir?"

"Mmm, apparently not. And he may have been brought here before he was old enough to talk. . . his own language I mean. But he must have had one; it's a truism among xenists that speech centers are found only in nervous systems that use them. That is to say, he could not have learned human speech as speech even poorly, unless his own breed used oral communication. Can he write?"

"How could he, sir? He doesn't have hands."

"Mmm, yes. Well, taking a running jump with the aid of theory, I'll bet on a relative score of less than 40, then. Xenologists have found that high types, equivalent to humans, always have three characteristics: speech centers, manipulation, and from these two, record keeping. So we can assume that Lummox's breed was left at the post. Studied any xenology?"

"Not much, sir," John Thomas admitted shyly, "except books I could find in the library. But I mean to major in xenology and exotic biology in college."

"Good for you. It's a wide open field. You'd be surprised how difficult it is to hire enough xenists just for DepSpace. But my reason for asking was this: as you know, the department has intervened in this case. Because of him." Greenberg gestured at Lummox. "There was a chance that your pet might be of a race having treaty rights with us. Once or twice, strange as it may seem, a foreigner visiting this planet has been mistaken for a wild animal, with. . . shall we say 'unfortunate' results?" Greenberg frowned, recalling the terrible hushed-up occasion when a member of the official family of the Ambassador from Llador had been found, dead and stuffed-in a curiosity shop in the Virgin Islands. "But no such hazard exists here."

"Oh. I guess not, sir. Lummox is. . . well, he's just a member of our family."

"Precisely." The Commissioner spoke to Judge O'Farrell. "May I consult you a moment, Judge? Privately?"

"Certainly, sir."

The men moved, away; Betty joined John Thomas. "It's a cinch," she whispered, "if you can keep from making more breaks."

"What did I do?" he protested. "And what makes you think it's going to be easy?"

"It's obvious. He likes you, he likes Lummox."

"I don't see how that pays for the ground floor of the Bon March,. Or all those lamp posts."

"Just keep your blood pressure down and follow my lead. Before we are through, they'll be paying us. You'll see."

A short distance away Mr. Greenberg was saying to Judge O'Farrell, "Judge, from what I have learned it seems to me that the Department of Spatial Affairs should withdraw from this case."

"Eh? I don't follow you, sir."

"Let me explain. What I would like to do is to postpone the hearing twenty-four hours while I have my conclusions checked by the department. Then I can withdraw and let the local authorities handle it. Meaning you, of course."

Judge O'Farrell pursed his lips. "I don't like last-minute postponements, Mr. Commissioner. It has always seemed unfair to me to order busy people to gather together, to their expense and personal inconvenience, then tell them to come back another day. It doesn't have the flavor of justice."

Greenberg frowned. "True. Let me see if we can arrive at it another way. From what young Stuart tells me I am certain that this ease is not one calling for intervention under the Federation's xenic policies, even though the center of interest is extraterrestrial and therefore a legal cause for intervention if needed. Although the department has the power, that power is exercised only when necessary to avoid trouble with governments of other planets. Earth has hundreds of' thousands of e.-t. animals; it has better than thirty thousand nonhuman xenians, either residents or-visitors, having legal status under treaties as 'human' even though they are obviously nonhuman. Xenophobia being what it is, particularly in our cultural backwaters. . . no, I wasn't referring to Westville! Human nature-being what it is, each of those foreigners is a potential source of trouble in our foreign relations.

"Forgive me for saying what you already know; it is a necessary foundation. The department can't go around wiping the noses of all our xenic visitors - even those that have noses. We haven't the personnel and certainly not the inclination. If one of them gets into trouble, it is usually sufficient to advise the local magistrate of our treaty obligations to the xenian's home planet. In rare cases the department intervenes. This, in my opinion, is not such a case. In the first place it seems that our friend Lummox here is an 'animal under the law and. . ."

"Was there doubt?" the judge asked in astonishment. ""There might have been. That's why I am here. But, despite his limited ability to talk, his other limitations would keep such a breed from rising to a level where we could accept it as civilized; therefore he is an animal. Therefore he has only the usual rights of animals under our humane laws. Therefore the department need not concern itself."

"I see. Well, no one is going to be cruel to him, not in my court."

"Certainly. But for another quite sufficient reason the department is not interested. Let us suppose that this creature is 'human' in the sense that law and custom and treaty have attached to that word since we first made contact with the Great Race of Mars. He is not, but suppose it."

"Stipulated." agreed Judge O'Farrell.

"We stipulate it. Nevertheless he cannot be a concern of the department because. . . Judge, do you know the history of the Trail

Blazer?"

"Vaguely, from grammar school days. I'm not a student of spatial exploration. Our own Earth is confusing enough."

"Isn't it, though? Well, the Trail Blazer made three of the first interspatial transition flights, when such flights were as reckless as the voyage Columbus attempted. They did not know where they were going and they had only hazy notions about how to get back in fact the Trail Blazer never came back from her third trip."

"Yes, yes. I remember."

"The point is, young Stuart-I can't call him by his full name; it doesn't seem right-Stuart tells me that this loutish creature with the silly smile is a souvenir of the Trail Blazer's second cruise. That's all I need to know. We have no treaties with any of the planets she visited, no trade, no intercourse of any sort. Legally they don't exist. Therefore the only laws that apply to Lummox are our own domestic laws; therefore the department should not intervene-and even if it did, a special master such as myself would be obliged to rule entirely by domestic law. Which you are better qualified to do than I."

Judge O'Farrell nodded. "Well, I have no objection to resuming jurisdiction. Shall we go in?"

"Just a moment. I suggested a delay because this case has curious features. I wanted to refer back to the department to make sure that my theory is correct and that I have not missed some important precedent or law. But I am willing to withdraw at once if you can assure me of one thing. This creature. . . I understand that, despite its mild appearance, it turned out to be destructive, even dangerous?"

O'Farrell nodded. "So I understand. . . unofficially of course."

"Well, has there been any demand that it be destroyed?"

"Well," the judge answered slowly, "again unofficially, I know that such a demand will be made. It has come to my attention privately that our chief of police intends to ask the court to order the animal's destruction as a public safety measure. I anticipate prayers from private sources as well."

Mr. Greenberg looked worried. "As bad as that? Well, Judge, what is your attitude? If you try the case, are you going to let the animal be destroyed?"

Judge O'Farrell retorted, "Sir, that is an improper question."

Greenberg turned red. "I beg your pardon. But I must get at it in some fashion. You realize that this specimen is unique? Regardless of what it has done, or how dangerous it may be (though I'm switched if I'm convinced of that), nevertheless its interest to science is such that it should be preserved. Can't you assure me that you will not order it destroyed?"

"Young man, you are urging me to prejudge a case, or a portion of a case. Your attitude is most improper!"

Chief Dreiser chose this bad time to come hurrying up. "Judge, rye been looking all over for you. Is this hearing going to take place? I've got seven men who. . ."

O'Farrell interrupted him. "Chief, this is Mr. Commissioner Greenberg. Mr. Commissioner, our Chief of Safety."

"Honored, Chief."

"Howdy, Mr. Commissioner. Gentlemen, about this hearing. I'd like to know. . ."

"Chief," the judge interrupted brusquely, "just tell my bailiff to hold things in readiness. Now leave us in private, if you please."

"But. . ." The chief shut up and backed away, while muttering something excusable in a harassed policeman. O'Farrell turned back to Greenberg.

The Commissioner had had time during the interruption to recall that he was supposed to be without personal emotions. He said smoothly, "I withdraw the question, Judge. I had no intention of committing an impropriety." He grinned. "Under other circumstances I might have found myself slapped for contempt, eh?"

O'Farrell grudged a smile. "It is possible."

"Do you have a nice jail? I have over seven months leave saved up and no chance to take it."

"You shouldn't overwork, young man. I always find time to fish, no matter how full the docket. 'Allah does not subtract from man's allotted time those hours spent in fishing.'"

"That's a good sentiment. But I still have a problem. You know that I could insist on postponement while I consult the department?"

"Certainly. Perhaps you should. Your decision should not be affected by my opinions."

"No. But I agree with you; last-minute postponements are vexations." He was thinking that to refer to the department, in this odd case, meant to consult Mr. Kiku and he could hear the Under Secretary making disgusted remarks about "initiative" and 'responsibility" and "for heaven's sake, couldn't anyone else around this madhouse make a simple decision?" Greenberg made up his mind. "I think it is best for the department to continue intervention. I'll take it, at least through a preliminary hearing."

O'Farrell smiled broadly. "I had hoped that you would. I'm looking forward to hearing you. I understand that you gentlemen from the Department of Spatial Affairs sometimes hand out an unusual brand of law."

"Really? I hope not. I mean to be a credit to Harvard Law."

"Harvard? Why, so am I! Do they still shout for Reinhardt?"

"They did when I was there."

"Well, well, it's a small world! I hate to wish this case on a schoolmate; I'm afraid it is going to be a hot potato."

"Aren't they all? Well, let's start the fireworks. Why don't we sit en banc? You'll probably have to finish."

They started back to the courthouse. Chief Dreiser, who had been fuming some distance away, saw that Judge O'Farrell had forgotten him. He started to follow, then noted that the Stuart boy and Betty Sorenson were still on the other side of Lummox's cage. They had their heads together and did not notice that the two magistrates were leaving. Dreiser strode over to them.

"Hey! Inside with you, Johnnie Stuart! You were supposed to be in court twenty minutes ago."

John Thomas looked startled. "But I thought. . . he began, then noticed that the judge and Mr. Greenberg had gone. "Oh! Just a minute, Mr. Dreiser. . . I've got something to say to Lummox."

"You've got nothing to say to that beast now. Come along."

"But, Chief. . ."

Mr. Dreiser grabbed his arm and started to move away. Since he outweighed John Thomas by nearly one hundred pounds Johnnie moved with him. Betty interrupted with, "Deacon Dreiser! What a nasty way to behave!"

"That'll be enough out of you, young lady," Dreiser answered. He continued toward the courthouse with John Thomas in tow. Betty shut up and followed. She considered tripping the police chief, but decided not to.

John Thomas gave in to the inevitable. He had intended to impress on Lummox, at the very last minute, the necessity of remaining quiet, staying put, and not eating the steel bars. But Mr. Dreiser would not listen. It seemed to John that most of the older people in the world spent much of their time not listening.

Lummox had not missed their exit. He stood up, filling the enclosed space, and stared after John Thomas, while wondering what to do. The bars creaked as he brushed against them. Betty looked back and said, "Lummox! You wait there! We'll be back."

Lummox remained standing, staring after them and thinking about it. An order from Betty wasn't really an order. Or was it? There were precedents in the past to think over.

Presently he lay down again.

IV

The Prisoner at the Bars

As O'Farrell and Greenberg entered the room the bailiff shouted, "Order in the court!" The babble died down and spectators tried to find seats. A young man wearing a hat and hung about with paraphernalia stepped into the path of the two officials. "Hold it!" he said and photographed them. "One more. . . and give us a smile, Judge, like the Commissioner had just said something funny."

"One is enough. And take off that hat." O'Farrell brushed past him. The man shrugged but did not take off his hat.

The clerk of the court looked up as they approached. His face was red and sweaty, and he had his tools spread out on the justice's bench. "Sorry, Judge," he said. "Half a moment." He bent over a microphone and intoned, "Testing. . . one, two, three, four. . . Cincinnati. . . sixty-six." He looked up. "I've had more grief with this recording system today."

"You should have checked it earlier."

"So help me, Judge, if you can find anybody. . . Never mind. I did check it, it was running sweet. Then when I switched it on at ten minutes to ten, a transistor quit and it's been an endless job to locate the trouble."

"All right," O'Farrell answered testily, annoyed that it should happen in the presence of a distinguished visitor. "Get my bench clear of your implements, will you?"

Greenberg said hastily, "If it's all the same to you, I won't use the bench. We'll gather around a big table, courtmartial style. I find it speeds things up."

O'Farrell looked unhappy. "I have always maintained the ancient formalities in this court. I find it worthwhile."

"Very likely. I suppose that those of us who have to try cases anywhere and everywhere get into sloppy habits. But we can't help it. Take Minatare for example; suppose you attempted, out of politeness, to conform to their customs in trying a case. They don't think a judge is worth a hoot unless he undergoes a cleansing fast before he mounts the judge's sphere. . . then he has to stay up there without food or drink until he reaches a decision. Frankly, I couldn't take it. Could you?"

Judge O'Farrell felt annoyed that this glib young man should imply that there could be a parallel between the seemly rituals of his court and such heathen practices. He recalled uneasily the three stacks of wheat cakes, adorned with sausage and eggs, with which he had started the day. "Well. . . 'other times, other customs,'" he said grudgingly."

"Exactly. And thanks for indulging me." Greenberg motioned to the bailiff; the two started shoving attorneys' tables together to make one big one before O'Farrell could make clear that he had quoted the old saw for the purpose of rebutting it. Shortly, about fifteen people were seated around the composite table and Greenberg had sent the bailiff out to find ash trays. He turned to the clerk, who was now at his control desk, wearing earphones and crouching over his instruments in the awkward pose of all electronics technicians. "Is your equipment working now?"

The clerk pressed a thumb and forefinger together. "Rolling."

"Very well. Court's in session."

The clerk spoke into his mike, announcing time, date, place, nature and jurisdiction of the court, and the name and title of the special master presiding, reading the last and mispronouncing Sergei Greenberg's first name; Greenberg did not correct him. The bailiff came in, his hands full of ash trays, and said hastily, "Oyez! Oyez! Let all who have business before this court gather nigh and. . ."

'Never mind," Greenberg interrupted. "Thanks anyhow. This court will now hold a preliminary hearing on any and all issues relating to the actions last Monday of an extraterrestrial creature locally resident and known as 'Lummox? I refer to that big brute in a cage outside this building. Bailiff, go get a picture of him, please, and insert it in the record."

"Right away, your honor."

"The court wishes to announce that this hearing may be converted to a final determination on any or all issues at any time, if the court so announces and subject to objection and ruling at the time. In other words, don't hold your fire; this may be your only day in court. Oh yes. . . the court will receive petitions relating to this extraterrestrial as well as hear issues."

"Question, your honor."

"Yes?"

"May it please the court: my client and I have no objection if all that we are engaged in is a preliminary inquiry. But will we return to accepted procedures if we go on to terminer?"

"This court, being convened by the Federation and acting in accordance with the body of law called 'Customs of Civilizations' in brief and consisting of agreements, treaties, precedents, et cetera, between two or more planets of the Federation, or with other civilizations with which member planets of the Federation have diplomatic relations, is not bound by local procedures. It is the purpose of this court to arrive at the truth and, from there, to reach equity. . . equity under the Law. The court will not trample on local law and custom except where they are hopelessly opposed to superior law. But where local custom is merely ritualistic, this court will ignore formality and get on with its business. Understand me?"

"Er, I believe so, sir. I may take exception later." The small, middle-aged man who spoke seemed embarrassed.

"Any one may object at any time for any reason atid be heard. Also you may appeal from my decisions. However. . ." Greenberg grinned warmly.". . . I doubt if it will do you much good. So far I have been pretty lucky in having my decisions upheld."

"I did not intend to imply,'" the man answered stiffly, "that the court was not properly. . ."

"Sure, sure! Let's get on with it." Greenberg picked up a stack of papers. "Here is a civil action. 'Bon March, Merchandising Corporation versus 'Lummox,' John Thomas Stuart XI. . ." ("That name still bothers me," he said in an aside to Judge O'Farrell.) ". . . Marie Brandley Stuart. et al., and another one like it for the Western Mutual Assurance Company, insurers of Bon March,. Here is another, same defendants, brought by K. Ito and his insurance company, um, New World Casualty, Ltd., and one from the City of Westville, same defendants again . . . and still another brought by Mrs. Isabelle Donahue. Also some criminal matters one is for harboring a dangerous animal, one for felonious harboring of same, another for negligence and another for maintaining a public nuisance."

John Thomas had been steadily turning white. Greenberg glanced at him and said, "They haven't skipped much, have they, son? Cheer up. . . the condemned man always eats a hearty breakfast." John Thomas managed a sickly grin. Betty found his knee under the table and patted it.

There was another paper in the stack; Greenberg shuffled it in with the others without reading it into the record. It was a petition signed by the Chief-of-Safety on behalf of the City of Westville praying the court to order the destruction of a dangerous animal known as "Lummox" and further identified as, *etc.* Instead Greenberg looked up and said, "Now who's who? You, sir?"

The man addressed was the lawyer who had questioned the court's methods; he identified himself as Alfred Schneider and stated that he was acting both for Western Mutual and for the Bon March,. "This gentleman beside me is Mr. deGrasse, manager of the store."

"Good. Now the next man, please." Greenberg established that all principals were present, with their attorneys; the roster included, besides himself, Judge O'Farrell, John Thomas, Betty, and Chief Dreiser, the following: Mrs. Donahue and her lawyer Mr. Beanfield, Messrs. Schneider and deGrasse for Bon March,, Mr. Lombard, city attorney of Westville, the attorney for Mr. Ito's insurance company and Mr. Ito's son (acting for his father), Officers Karnes and Mendoza (witnesses), and John Thomas's mother with the Stuart family lawyer, Mr. Postle.

Greenberg said to Postle, "I take it you are also acting for Mr. Stuart."

Betty interrupted with, "Heavens, no! I'm representing Johnnie."

Greenberg raised his eyebrows. "I was about to ask what you were doing here. Uh, you are an attorney?"

"Well. . . I'm his counsel."

O'Farrell leaned over and whispered, "This is preposterous, Mr. Commissioner. Of course she is not a lawyer. I know the child. I'm rather fond of her. . . but frankly, I don't think she is quite bright." He added severely, "Betty, you have no business here. Get out and quit making a fool of yourself."

"Now, see here, Judge. . ."

"One moment, young lady," Greenberg put in. "Do you have any qualifications to act as counsel for Mr. Stuart?"

"I certainly do. I'm the counsel he wants."

"Mmm, a very strong point. Though perhaps not sufficient." He spoke to John Thomas. "Is that correct?"

"Uh, yes. sir."

Judge O'Farrell whispered, "Don't do it, son! You'll be reversed."

Greenberg whispered back, "That's what I "am afraid of." He frowned, then spoke to Mr. Postle. "Are you prepared to act for both mother and son?"

"Yes."

"No!" Betty contradicted.

"Eh? Wouldn't Mr. Stuart's interests be better protected in the hands of an attorney than in yours? No, don't answer; I want Mr. Stuart to answer."

John Thomas turned pink and managed to mutter, "I don't want him."

"Why?"

John Thomas looked stubborn. Betty said scornfully, "Because his mother doesn't like Lummox, that's why. And. . ."

'That's not true!" Mrs. Stuart cut in sharply.

"It is true. . . and that old fossil Postle is stringing along with her. They want to get rid of Lummie, both of them!"

O'Farrell coughed in his handkerchief. Postle turned red. Greenberg said gravely, "Young lady, you will stand and apologize to Mr. Postle."

Betty looked at the Commissioner, dropped her eyes and stood up. She said humbly, "Mr. Postle, I'm sorry you're a fossil. I mean I'm sorry I said you were a fossil."

"Sit down," Greenberg said soberly. "Mind your manners hereafter. Mr. Stuart, no one is required to accept counsel not of his choice. But you place me in a dilemma. Legally you are a minor child; you have chosen as counsel another minor child. It won't look well in the record." He pulled at his chin. "Could it be that you. . . or your counsel. . . or both of you. . . are trying to cause a mistrial?"

"Uh, no, sir." Betty looked smugly virtuous; it was a possibility she had counted on but had not mentioned to Johnnie.

"Hmm. . ."

"Your honor. . ."

"Yes, Mr. Lombard?"

"This strikes me as ridiculous. This girl has no standing. She is not a member of the bar; obviously she can't function as an attorney. I dislike finding myself in the position of instructing the court but the obvious thing to do is to put her outside the bar and appoint counsel. May I suggest that the Public Defender is present and prepared?"

"You may so suggest. Is that all, Mr. City Attorney?"

"Uh, yes, your honor."

"May I say that the court also finds it distasteful for you to instruct the court; you will not do so again."

"Er. . . yes, your honor."

"This court will, make its own mistakes in its own way. Under the customs by which this court is convened it is not necessary that a counsel be qualified formally. . . in your idiom, be a 'member of the bar,' a licensed lawyer. If you find that rule unusual, let me assure you that the hereditary lawyer-priests of Deflai find it much more astonishing. But it is the only rule which can be applied everywhere. Nevertheless I thank you for your suggestion. Will the Public Defender stand up?"

"Here, your honor. Cyrus Andrews."

"Thank you. Are you prepared to act?"

"Yes. I'll need a recess to consult with my principal." "Naturally. Well, Mr. Stuart? Shall the court appoint Mr. Andrews as your counsel? Or associate counsel?"

"No!" Again Betty answered.

"I was addressing Mr. Stuart, Miss Sorenson. Well?" John Thomas glanced at Betty. "No, your honor."

"Why not?"

"I'll answer that," Betty put in. "I talk faster than he does; that's why I'm counsel. We won't take Mr. Andrews because the City Attorney is against us on one of these silly things they've got about Lummox. . . and the City Attorney and Mr. Andrews are law partners when they are not fighting sham battles in court!"

Greenberg turned to Andrews. "Is that correct, sir?"

"Why, yes, we're law partners, your honor. You will understand that, in a town this size. . ."

"I quite understand. I also understand Miss Sorenson's objection.

Thank you, Mr. Andrews. Stand down."

"Mr. Greenberg?"

"What is it now, young lady?"

"I can get you part way off the spot. You see, I had a dirty hunch that some busybody would try to keep me out of it. So we fixed it up ahead of time. I'm half owner."

"Half owner?"

"Of Lummox. See?" She took a paper from her bag and offered it. "A bill of sale, all legal and proper. At least it ought to be, I coped it out of the book."

Greenberg studied it. "The form appears correct. The date is yesterday. . . which would make you voluntarily liable to the extent of your interest, from a civil standpoint. It would not affect criminal matters of earlier date."

"Oh, pooh! There aren't any criminal matters."

"That remains to be determined. And don't say 'pooh'; it is not a legal term The question here is whether or not the signer can vend this interest. Who owns Lummox?"

'Why, Johnnie does! It was in his father's will."

"So? Is that stipulated, Mr. Postle?"

Mr. Postle whispered with Mrs. Stuart, then answered, "So stipulated, your honor. This creature called 'Lummox' is a chattel of John Thomas Stuart, a minor child. Mrs. Stuart's interest is through her son."

"Very well." Greenberg handed the bill of sale to the clerk. "Read it into the record."

Betty settled back. "All right, your honor. . . appoint anybody you want to. Just as long as I can have my say."

Greenberg sighed. "Would it make any difference if I did?"

"Not much, I guess."

"Let the record show that you two, having been duly warned and advised, persist in acting as your own counsel. The court regretfully assumes the burden of protecting your rights and advising you as to the law."

"Oh, don't feel bad, Mr. Greenberg. We trust you."

"I'd rather you didn't," he said dryly. "But let's move on. That gentleman down at the end. . . who are you?"

"Me, Judge? I'm the Galactic Press stringer around here. Name of Hovey."

"So? The clerk will supply a transcript for the press. I'll be available for the usual interview later, if anyone wants it. No pictures of me with this creature Lummox, however. Are there any more gentlemen of the press?"

Two others stood up. "The bailiff will place chairs for you just beyond the rail."

"Yes, Judge. But first. . ."

"Outside the rail, please." Greenberg looked around. "I think that's all. . . no, that gentleman down there. Your name, sir?"

The man addressed stood up. He was dressed in formal jacket and striped gray shorts and held himself with selfconscious dignity. "May it please the court, my name, sir, is T. Omar Esklund, Doctor of Philosophy."

"It neither pleases nor displeases the court, Doctor. Are you a party to any of these issues?"

"I am, sir. I appear here as amicus curiae, a friend of the court."

Greenberg frowned. "This court insists on choosing its own friends. State your business, Doctor."

"Sir, if you will permit me. I am state executive secretary of the Keep Earth Human League." Greenberg suppressed a groan but Esklund did not notice as he had looked down to pick up a large manuscript. "As is well known, ever since the inception of the ungodly practice of space travel, our native Earth, given to us by Divine law, has been increasingly overrun by creatures. . . 'beasts' rather let us say. . . of dubious origin. The pestilential consequences of this unholy traffic are seen on every. . ."

"Doctor Esklund!"

"Sir?"

"What is your business with this court? Are you a principal to any of the issues before it?"

"Well, not in so many words, your honor. In a broader sense, I am advocate for all mankind. The society of which I have the honor. . ."

"Do you have any business? A petition, perhaps?"

"Yes," Esklund answered sullenly, "I have a petition."

"Produce it."

Esklund fumbled among his papers, drew out one; it was passed to Greenberg, who did not look at it. "Now state briefly, for the record, the nature of your petition. Speak clearly and toward the nearest microphone."

"Well. . . may it please the court: the society of which I have the honor of being an officer. . . a league, if I may so say, embracing all mankind, prays. . . nay, demands that this unearthly beast which has already ravaged this fair community be destroyed. Such destruction is sanctioned and, yes, commanded by those sacred-"

"Is that your petition? You want this court to order the destruction of the e.t. known as Lummox?"

"Yes, but more than that, I have here a careful documentation of the arguments. . . unanswerable arguments I may say, to. . ."

"Just a moment. That word 'demands' which you used; does it appear in the petition?"

"No, your honor, that came from my heart, from the fullness of. . ."

"Your heart has just led you into contempt. Do you wish to rephrase it?"

Esklund stared, then said grudgingly, "I withdraw the word. No contempt was intended."

"Very well. The petition is received; the clerk will record it. Decision later. Now as to that speech you wished to make: from the size of your manuscript I surmise that you will require about two hours?"

"I believe that will be ample, your honor," Eskiund answered, somewhat mollified.

"Good. Bailiff!"

"Your honor?"

"Can you dig up a soap box?"

"Why, I believe so, sir."

"Excellent. Place it on the lawn outside. Doctor Esklund, everyone of us enjoys free speech . . . so enjoy yourself. That soap box is yours for the next two hours."

Dr. Esklund turned the color of eggplant. "You'll hear from us!"

"No doubt."

"We know your sort! Traitors to mankind. Renegades! Trifling with. . ."

"Remove him."

The bailiff did so, grinning. One of the reporters followed them out. Greenberg said gently, "We seem to have trimmed it down to inclispensables now. We have several issues before us, but they have in common the same sheaf of facts. Unless there is objection, we will hear testimony for all issues together, then pass on the issues one at a time. Objection?"

The lawyers looked at each other. Finally Mr. Ito's attorney said, "Your honor, it would seem to me to be fairer to try them one at a time."

"Possibly. But if we do, we'll be here until Christmas. I dislike to make so many busy people go over the same ground repeatedly. But a separate trial of the facts to a jury is your privilege. . . bearing in mind, if you lose, your principal will have to bear the added costs alone."

Mr. Ito's son tugged at the sleeve of the lawyer and whispered to him. The lawyer nodded and said, "We'll go along with a joint hearing. . . as to facts."

"Very well. Further objection?" There was none. Greenberg turned to O'Farrell. "Judge, is this room equipped with truth meters?"

"Eh? Why, yes. I hardly ever use them."

"I like them." He turned to the others. "Truth meters will be hooked up. No one is required to use one, but anyone choosing not to will be sworn. This court, as is its privilege, will take judicial notice of and will comment on the fact if anyone refuses the use of a truth meter."

John Thomas whispered to Betty, "Watch your step, Slugger."

She whispered back, "I will, smarty! You watch yours." Judge O'Farrell said to Greenberg, "It will take some time to rig them. Hadn't we better break for lunch?"

"Oh yes, lunch. Attention, everyone. . . this court does not recess for lunch. I'll ask the bailiff to take orders for coffee and sandwiches, or whatever you like while the clerk is rigging the meters. We will eat here at the table. In the meantime. . ." Greenberg fumbled for cigarettes, fumbled again. ". . . has anybody got a match?"

Out on the lawn, Lummox, having considered the difficult question of Betty's right to give orders, had come to the conclusion that she possibly had a special status. Each of the John Thomases had introduced into his life a person equivalent to Betty; each had insisted that the person in question must be humored in every whim. This John Thomas had already begun the process with Betty; therefore, it was best to go along with what she wanted as long as it was not too much trouble. He lay down and went to sleep, leaving his watchman eye on guard.

He slept restlessly, disturbed by the tantalizing odor of steel. After a time he woke up and stretched, causing the cage to bulge. It seemed to him that John Thomas had been gone an unnecessarily long time. On second thought, he had not liked the way that man had taken John Thomas away. . . no, he hadn't liked it a bit. He wondered what he should do, if anything? What would John Thomas say, if he were here?

The problem was too complex. He lay down and tasted the bars of his cage. He refrained from eating them; he merely tried them for flavor. A bit grucky, he decided, but good.

Inside, Chief Dreiser had completed his testimony and had been followed by Karnes and Mendoza. No argument had developed and the truth meters had stayed steady; Mr. deGrasse had insisted on amplifying parts of the testimony. Mr. Ito's lawyer stipulated that Mr. Ito had fired at Lummox; Mr. Ito's son was allowed to describe and show photographs of the consequences. Only Mrs. Donahue's testimony was needed to complete the story of L-day.

Greenberg turned to her lawyer. "Mr. Beanfield, will you examine your client, or shall the court continue?"

"Go ahead, your honor. I may add a question or two."

"Your privilege. Mrs. Donahue, tell us what happened."

"I certainly shall. Your honor, friends, distinguished visitors, unaccustomed as I am to public speaking, nevertheless, in my modest way, I believe I am. . ."

"Never mind that, Mrs. Donahue. Just the facts. Last Monday afternoon."

"But I was!"

"Very well, go ahead. Keep it simple."

She sniffed. "Well! I was lying down, trying to snatch a few minutes rest. . . I have so many responsibilities, clubs and charitable committees and things. . ."

Greenberg was watching the truth meter over her head. The needle wobbled restlessly, but did not kick over into the red enough to set off the warning buzzer. He decided that it was not worth while to caution her.

". . . when suddenly I was overcome with a nameless dread."

The needle swung far into the red, a ruby light flashed and the buzzer gave out a loud rude noise. Somebody started to giggle; Greenberg said hastily, "Order in the court. The bailiff is instructed to remove any spectator making a disturbance."

Mrs. Donahue broke off suddenly when the buzzer sounded. Mr. Beanfield, looking grim, touched her sleeve and said, "Never mind that, dear lady. Just tell the court about the noise you heard and what you saw and what you did."

"He's leading the witness," objected Betty.

"Never mind," said Greenberg. "Somebody has to."

"But. . ."

"Objection overruled. Witness will continue."

"Well! Uh. . . well, I heard this noise and I wondered what in the world it was. I peeked out and there was this great ravening beast charging back and forth and. . ."

The buzzer sounded again; a dozen spectators laughed. Mrs. Donahue said angrily, 'Will somebody shut that silly thing off? How anyone can be expected to testify with that going on is more than I can see."

"Order!" called Greenberg. "If there is more demonstration, the court will find it necessary to hold someone in contempt." He went on to Mrs. Donahue: "Once a witness has accepted the use of the truth meter the decision cannot be changed. But the data supplied by it is instructive merely; the court is not bound by it. Continue."

"Well, I should hope so. I never told a lie in my life?"

The buzzer remained silent; Greenberg reflected that she must believe it. "I mean," he added, "that the court makes up its own mind. It does not allow a machine to do so for it."

"My father always said that gadgets like that were spawn of the devil. He said that an honest business man should not. . ."

"Please, Mrs. Donahue"

Mr. Beanfield whispered to her. Mrs. Donahue went on more quietly, "Well, there was that thing, that enormous beast kept by that boy next door. It was eating my rose bushes."

"And what did you do?"

"I didn't know what to do. I grabbed the first thing at hand. . . a broom, it was. . . and rushed out doors. The beast came charging at me and. . ."

Buzzzzzzz!

"Shall we go over that again, Mrs. Donahue?"

"Well. . . anyhow, I rushed at it and began to beat it on the head. It snapped at me. Those great teeth. . ."

Buzzzzz!

"Then what happened, Mrs. Donahue?"

"Well, it turned away, the cowardly thing, and ran out of my yard. I don't know where it went. But there was my lovely garden, just ruined." The needle quivered but the buzzer did not sound.

Greenberg turned to the lawyer. "Mr. Beanfield, have you examined the damage to Mrs. Donahue's garden?"

"Yes, your honor."

"Will you tell us the extent of the damage?"

Mr. Beanfield decided that he would rather lose a client than be buzzed in open court by that confounded toy. "Five bushes were eaten, your honor, in whole or in part. There was minor damage to the lawn and a hole made in an ornamental fence."

"Financial damage?"

Mr. Beanfield said carefully, "The amount we are suing for is before you, your honor."

"That is not responsive, Mr. Beanfield."

Mr. Beanfield shrugged mentally and struck Mrs. Donahue off his list of paying properties. "Oh, around a couple of hundred, your honor, in property damage. But the court should allow for inconvenience and mental anguish."

Mrs. Donahue yelped. "That's preposterous! My prize roses."

The needle jumped and fell back too quickly to work the buzzer. Greenberg said wearily, "What prizes, Mrs. Donahue?"

Her lawyer cut in, "They were right next to Mrs. Donahue's well-known champion plants. Her courageous action saved the more valuable bushes, I am happy to say."

"Is there more to add?"

"I think not. I have photographs, marked and identified, to offer."

"Very well."

Mrs. Donahue glared at her lawyer. "Well! I have something to add. There is one thing I insist on, absolutely insist on, and that is that

that dangerous, bloodthirsty beast be destroyed!"

Greenberg turned to Beanfield. "Is that a formal prayer, counsellor? Or may we regard it as rhetoric?" Beanfield looked uncomfortable. "We have such a petition, your honor."

"The court will receive it."

Betty butted in with, "Hey, wait a minute! All Lummie did was eat a few of her measly old. . ."

"Later, Miss Sorenson."

"But. . ."

"Later, please. You will have your chance. The court is now of the opinion that it has all the pertinent facts. Does anyone have any new facts to bring out, or does anyone wish to question further any witness? Or bring forward another witness?"

"We do," Betty said at once.

"You do what?"

"We want to call a new witness."

"Very well. Do you have him here?"

"Yes, your honor. Just outside. Lummox."

Greenberg looked thoughtful. "Do I understand that you are proposing to put, uh, Lummox on the stand in his own defense?"

"Why not? He can talk."

A reporter turned suddenly to a colleague and whispered. to him, then hurried out of the room. Greenberg chewed his lip. "I know that," he admitted. "I exchanged a few words with him myself. But the ability to talk does not alone make a competent witness. A child may learn to talk, after a fashion, before it is a year old, but only rarely is a child of tender years. . . less than five, let us say. . . found competent to give testimony. The court takes judicial notice that members of nonhuman races. . . nonhuman in the biological sense. . . may give evidence. But nothing has been presented to show that this particular extraterrestrial is competent."

John Thomas whispered worriedly to Betty, "Have you slipped your cams? There's no telling what Lummie would say."

"Hush!" She went on to Greenberg. "Look, Mr. Commissioner, you've said a fancy lot of words, but what do they mean? You are about to pass judgment on Lummox. . . and you won't even bother to ask him a question. You say he can't give competent evidence. Well, I've seen others around here who didn't do so well. I'll bet if you hook a truth meter to Lummie, it won't buzz. Sure, he did things he shouldn't have done. He ate some scrawny old rose bushes and he ate Mr. Ito's cabbages. What's horrible about that? When you were a kid, did you ever swipe a cookie when you thought nobody was looking?"

She took a deep breath. "Suppose when you swiped that cookie, somebody hit you in the face with a broom? Or fired a gun at you?

Wouldn't you be scared? Wouldn't you run? Lummie is friendly. Everybody around here knows that. . . or at least if they don't they are stupider and more irresponsible than he is. But did anybody try to reason with him? Oh, no! They bullied him and fired off guns at him and scared him to death and chased him off bridges. You say Lummie is incompetent. Who is incompetent? All these people who were mean to him? Or Lummie? Now they want to kill him. If a little boy swiped a cookie, I suppose they'd chop his head off, just to be sure he wouldn't do it again. Is somebody crazy? What kind of a farce is this?"

She stopped, tears running down her cheeks. It was a talent which had been useful in school dramatics; to her own surprise she found that these tears were real.

"Are you through?" asked Greenberg.

"I guess so. For now, anyway?'

"I must say that you put it very movingly. But a court should not be swayed by emotion. Is it your theory that the major portion of the damage. . . let us say everything but the rose bushes and the cabbages. . . arose from improper acts of human beings and therefore cannot be charged to Lummox or his owner?"

"Figure it yourself, your honor. The tail generally follows the dog. Why not ask Lummie how it looked to him?"

"We'll get to that. On another issue: I cannot grant that your analogy is valid. We are dealing here, not with a little boy, but with an animal. If this court should order the destruction of this animal, it would not be in spirit of vengeance nor of punishment, for an animal is presumed not to understand such values. The purpose would be preventive, in order that a potential danger might not be allowed to develop into damage to life or limb or property. Your little boy can be restrained by the arms of his nurse. . . but we are dealing with a creature weighing several tons, capable of crushing a man with a careless step. There is no parallel in your cookie-stealing small boy."

"There isn't, huh? That little boy can grow up and wipe out a whole city by pushing one teeny little button. So off with his head before he grows up. Don't ask him why he took the cookie, don't ask him anything! He's a bad boy-chop his head off and save trouble."

Greenberg found himself again biting his lip. He said, "It is your wish that we examine Lummox?"

"I said so, didn't I?"

"I'm not sure what you said. The court will consider it."

Mr. Lombard said quickly, "Objection, your honor. If this extraordinary. . ."

"Hold your objection, please. Court will recess for ten minutes. All will remain." Greenberg got up and walked away. He took out a cigarette, found again that he had no light, stuck the pack back in his pocket.

Blast the girl! He had had it figured how to dispose of this case smoothly, with credit to the department and everybody satisfied. . . except the Stuart boy, but that could not be helped. . . the boy and this precocious preposterous young mammal who had him under her wing. And under her thumb, too, he added.

He could not allow this unique specimen to be destroyed. But he had meant to do it suavely. . . deny the petition of that old battleaxe, since it was obviously from malice, and tell the police chief privately to forget the other one. The Save-the-World-for-the-Neanderthals petition didn't matter. But this cocky girl; by talking when she should have listened, was going to make it appear that a departmental court could be pushed into risking public welfare over a lot of sentimental, anthropomorphic bosh!

Confound her pretty blue eyes!

They would accuse him of being influenced by those pretty blue eyes, too. Too bad the child wasn't homely.

The animal's owner was responsible for the damage; there were a thousand "strayed animal" cases to justify a ruling-since this was not the planet Tencora. That stuff about it being the fault of the persons who frightened him off was a lot of prattle. But the e.-t., as a specimen for science, was worth far more than the damage; the decision would not hurt the boy financially.

He realized that he had allowed himself to fall into a most unjudicial frame of mind. The defendant's ability to pay was not his business.

"Excuse me, your honor. Please don't monkey with those things."

He looked up, ready to snap somebody's head off, to find himself looking at the clerk of the court. He then saw that he had been fiddling with the switches and controls of the clerk's console. He snatched his hands away. "Sorry."

"A person who doesn't understand these things," the clerk said apologetically, "can cause an awful lot of trouble."

"True. Unfortunately true." He turned away sharply. "The court will come to order."

He sat down and turned at once to Miss Sorenson. "The court rules that Lummox is not a competent witness."

Betty gasped. "Your honor, you are being most unfair!" -

"Possibly."

She thought for a moment. "We want a change of venue."

"Where did you learn that word? Never mind, you had one when the department intervened. That ends it. Now keep quiet for a change."

She turned red. "You ought to disqualify yourself!"

Greenberg had intended to be calm, positively Olympian, in his manner. He now found it necessary to take three slow breaths. "Young lady," he said carefully, "you have been trying to confuse the issue all day. There is no need for you to speak now; you have said too much already. Understand me?"

"I have not, I will too, and I didn't either!"

"What? Repeat that, please?"

She looked at him. "No, I had better take it back. . . or you will be talking about 'contempt'."

"No, no. I wanted to memorize it. I don't think I have ever heard quite so sweeping a statement. Never mind. Just hold your tongue. If you know how. You'll be allowed to talk later."

"Yes, sir."

He turned to the others. "The court announced earlier that there would be due notice if we were to continue to terminer. The court sees no reason not to. Objection?"

The attorneys shifted uncomfortably and looked at each other. Greenberg turned to Betty. "How about you?"

"Me? I thought I wasn't allowed to vote."

"Shall we conclude these issues today?"

She glanced at John Thomas, then said dully, "No objection," then leaned to him and whispered, "Oh, Johnnie, I tried!"

He patted her hand under the table. "I know you did, Slugger."

Greenberg pretended not to hear. He went on in a cold, official voice. "This court has before it a petition asking for the destruction of the extraterrestrial Lummox on the grounds that it is dangerous and uncontrollable. The facts have not sustained that view; the petition is denied.?"

Betty gasped and squealed. John Thomas looked startled, then grinned for the first time. "Order, please," Greenberg said mildly. "We have here another petition to the same end, but for different reasons." He held up the one submitted. by the Keep Earth Human League. "This court finds itself unable to follow the alleged reasoning. Petition denied."

"We have four criminal charges, I am dismissing all four. The law requires. . ."

The city attorney looked startled. "But, your honor-"

"If you have a point, will you save it? No criminal intent can be found here, which therefore would make it appear that there could be no crime. However, constructive intent may appear where the law requires a man to exercise due prudence to protect others and it is on this ground that these issues must be judged. Prudence is based on experience, personal or vicarious, not on impossible prescience. In the judgment of this court, the precautions taken were prudent in the light of experience. . . experience up to last Monday afternoon, that is to say." He turned and addressed John Thomas. "What I mean, young man, is this: your precautions were 'prudent' so far as you knew. Now you know better. If that beast gets loose again, it will go hard with you."

Johnnie swallowed. "Yessir."

"We have remaining the civil matters of damage, Here the criteria are different. The guardian of a minor, or the owner of an animal, is responsible for damage committed by that child or that animal, the law holding that it is better that the owner or guardian suffer than the innocent third party. Except for one point, which I will reserve for the moment, these civil actions fall under that rule. First, let me note that one or more of these issues ask for real, punitive, and exemplary damages. Punitive and exemplary damages are denied; there are no grounds. I believe that we have arrived at real damages in each case and counsels have so stipulated. As to costs, the Department of Spatial Affairs has intervened in the public interest; costs will be borne by the department."

Betty whispered, "A good thing we homesteaded him. Look at those insurance vultures grin."

Greenberg went on, "I reserved one point. The question has been raised indirectly that this Lummox may not be an animal. . . and therefore not a chattel but may be a sentient being within the meaning of 'the Customs of Civilizations'. . . and therefore his own master." Greenberg hesitated. He was about to add his bit to the "Customs of Civilizations"; he was anxious not to be overruled. "We have long disavowed slavery; no sentient being may be owned. But if Lummox is sentient, what have we? May Lummox be held personally responsible? It would not appear that he has sufficient knowledge of our customs, nor does it appear that he is among us by his own choice. Are the putative owners in fact his guardians and in that way responsible? All these questions turn on this: is Lummox a chattel, or a free being?

"This court expressed its opinion when it ruled that Lummox might not testify. . . at this time. But this court is not equipped to render a final decision, no matter how strongly it may believe that Lummox is an animal."

"The court will therefore start proceedings on its own motion to determine the status of Lummox. In the meantime the local authorities will take charge of Lummox and will be held responsible both for his safety and for public safety with respect to him." Greenberg shut up and sat back.

A fly would have had his choice of open mouths. First to recover was the attorney for Western Mutual, Mr. Schneider. "Your honor?

Where does that leave us?"

"I don't know."

"But. . . see here, your honor, let's face the facts. Mrs. Stuart hasn't any property or funds that can be attached; she's the beneficiary of a trust. Same for the boy. We expected to levy against the beast itself; he will bring a good price in the proper market. Now you have, if you will permit me, upset the apple cart. If one of those scientific. . . hrrumph! . . . persons starts a long series of tests, years long perhaps, or throws doubt on the beast's status as a chattel. . . well, where should we look for relief? Should we sue the city?"

Lombard was on his feet instantly. "Now, look here, you can't sue the city! The city is one of the damaged parties. On that theory. . ."

"Order," Greenberg said sternly. "None of those questions can be answered now. All civil actions will be continued until the status of Lummox is clarified." He looked at the ceiling. "There is another possibility. It would seem that this creature came to Earth in the Trail Blazer. If my memory of history serves, all specimens brought back by that ship were government property. If Lummox is a chattel, he may nevertheless not be private property. In that event, the source of relief may be a matter of more involved litigation."

Mr. Schneider looked stunned, Mr. Lombard looked angry, John Thomas looked confused and whispered to Betty, "What's he trying to say? Lummox belongs to me.

"Ssh. . ." Betty whispered. "I told you we would get out of it. Oh, Mr. Greenberg is a honey lamb!"

"But. . ."

"Hush up! We're ahead."

Mr. Ito's son had kept quiet except when testifying. Now he stood up. "Your honor?"

"Yes, Mr. Ito?"

"I don't understand any of this. I'm just a farmer. But I do want to know one thing. Who's going to pay for my father's greenhouses?"

John Thomas got to his feet. "I am," he said simply.

Betty tugged at his sleeve. "Sit down, you idiot!"

"You hush up, Betty. You've talked enough." Betty hushed up. "Mr. Greenberg, everybody else has been talking. Can I say something?"

"Go ahead."

"I've listened to a lot of stuff all day. People trying to make out that Lummox is dangerous, when he's not People trying to have him killed, just for spite, yes, I mean you, Mrs. Donahue!"

"Address the court, please," Greenberg said quietly.

"I've heard you say a lot of things, too. I didn't follow all of them but, if you will pardon me, sir, some of them struck me as pretty silly. Excuse me."

"No contempt intended, I'm sure."

"Well. . . take this about whether Lummox is or isn't a chattel. Or whether he's bright enough to vote. Lummox is pretty bright, I guess nobody but me knows just how bright. But he's never had any education and he's never been anywhere. But that hasn't anything to do with who he belongs to. He belongs to me. Just the way I belong to him. . . we grew up together. Now I know I'm responsible for that damage last Monday. . . will you keep quiet, Betty! I can't pay for it now, but I'll pay for it. I. . ."

"Just a moment, young man. The court will not permit you to admit liability without counsel. If that is your intention, court will appoint counsel."

"You said I could have my say."

"Continue. Noted for the record that this is not binding."

"Sure, it's binding, because I'm going to do it. Pretty soon my education trust comes due and it would about cover it. I guess I can. . ."

"John Thomas!" his mother called out sharply. "You'll do no such thing!"

"Mother, you had better keep out of this, too. I was just going to say. . ."

"You're not to say anything. Your honor, he is. . ."

"Order!" Greenberg interrupted. "None of this is binding. Let the lad speak."

"Thank you, sir. I was through, anyway. But I've got something to say to you, sir, too. Lummie is timid. I can handle him because he trusts me-but if you think I'm going to let a lot of strangers poke him and prod him and ask him silly questions and put him through mazes and things, you'd just better think again-because I won't stand for it! Lummie is sick right now. He's had more excitement than is good for him. The poor thing. . ."

Lummox had waited for John Thomas longer than he liked because he was not sure where John Thomas had gone. He had seen him disappear in the crowd without being sure whether or not Johnnie had gone into the big house nearby. He had tried to sleep after he woke up the first time, but people had come poking around, and he had had to wake himself up repeatedly because his watchman circuit did not have much judgment. Not that he thought of it that way; he was merely aware that he had come to with his alarms jangling time after time.

At last he decided that it was time he located John Thomas and went home. Figuratively, he tore up Betty's orders; after all, Betty was not Johnnie.

So he stepped up his hearing to "search" and tried to locate

Johnnie. He listened for a long time, heard Betty's voice several times-but he was not interested in Betty. He continued to listen.

There was Johnnie now! He tuned out everything else and listened. He was in the big house all right. Hey! Johnnie sounded just the way he did when he had arguments with his mother. Lummox spread his hearing a little and tried to find out what was going on.

They were talking about things he knew nothing about. But one thing was clear: somebody was being mean to Johnnie. His mother? Yes, be heard her once and he knew that she had the privilege of being mean to Johnnie, just as Johnnie could talk mean to him and it didn't really matter. But there was somebody else. . . several others, and not a one of them had any such privilege.

Lummox decided that it was time to act. He heaved to his feet.

John Thomas got no farther in his peroration than "The poor thing. . ." There were screams and shouts from outside; everybody in court turned to look. The noises got rapidly closer and Mr. Greenberg was just going to send the bailiff to find out about it when suddenly it became unnecessary. The door to the courtroom bulged, then burst off its hinges. The front end of Lummox came in, tearing away part of the wall, and ending with him wearing the door frame as a collar. He opened his mouth. "Johnnie!" he piped.

"Lummox!" cried his friend. "Stand still. Stay right where you are. Don't move an inch!"

Of all the faces in the room, that of Special Commissioner Greenberg presented the most interesting mixed expression.

V

A Matter of Viewpoint

The Right Honorable Mr. Kiku, Under Secretary for Spatial Affairs, opened a desk drawer and looked over his collection of pills. There was no longer any doubt; his stomach ulcer was acting up again. He selected one and turned wearily back to his tasks.

He read an order from the departmental Bureau of Engineering grounding all Pelican-class interplanetary ships until certain modifications were accomplished. Mr. Kiku did not bother to study the attached engineering report, but signed approval, checked "EFFECTIVE IMMEDIATELY" and dropped the papers in the outgoing basket. Engineering safety in space was the responsibility of BuEng; Kiku himself knew nothing of engineering and did not wish to; he would back up the decisions of his chief engineer, or fire him and get another one.

But he realized glumly that the financial lords who owned the Pelican-class ships would soon be knocking the ear of the Secretary. . . and, shortly thereafter, the Secretary, out of his depth and embarrassed by the political power wielded by those fine gentlemen, would dump them in his lap.

He was beginning to have his doubts about this new Secretary; he was not shaping up.

The next item was for his information only and had been routed to him because of standing orders that anything concerning the Secretary must reach his desk, no matter how routine. This item appeared routine and unimportant: according to the synopsis an organization calling itself "The Friends of Lummox" and headed by a Mrs. Beulah Murgatroyd was demanding an audience with the Secretary of Spatial Affairs; they were being shunted to the Special Assistant Secretary (Public Relations).

Mr. Kiku read no farther. Wes Robbins would kiss them to death and neither he nor the Secretary would be disturbed. He amused himself with the idea of punishing the Secretary by inflicting Mrs. Murgatroyd on him, but it was merely a passing fantasy; the Secretary's time must be reserved for really important cornerstone-layings, not wasted on crackpot societies. Any organization calling itself "The Friends of This or That" always consisted of someone with an axe to grind, plus the usual assortment of prominent custard heads and professional stuffed shirts. But such groups could be a nuisance. . . therefore never grant them the Danegeld they demanded.

He sent it to files and picked up a memorandum from BuEcon: a virus had got into the great yeast plant at St. Louis; the projection showed a possibility of protein shortage and more drastic rationing. Even starvation on Earth was no direct interest to Mr. Kiku. But he stared thoughtfully while the slide rule in his head worked a few figures, then he called as assistant. "Wong, have you seen BuEcon Ay0428?"

"Uh, I believe so, boss. The St. Louis yeast thing?"

"Yes. What have you don't about it?"

"Er, nothing. Not my pidgin, I believe."

"You believe, eh? Our outstations are your business, aren't they? Look over your shipping schedules for the next eighteen months, correlate with Ay0428, and project. You may have to buy Australian sheep. . . and actually get them into our possession. We can't have our people going hungry because some moron in St Louis dropped his socks in a yeast vat."

"Yes, sir."

Mr. Kiku turned back to work. He realized unhappily that he had been too brusque with Wong. His present frame of mind, he knew, was not Wong's fault, but that of Dr. Ftaeml.

No, not Ftaeml's fault. . . his own! He knew that he should not harbor race prejudice, not in this job. He was aware intellectually that he himself was relatively safe from persecution that could arise from differences of skin and hair and facial contour for the one reason that weird creatures such as Dr. Ftaeml had made the differences between breeds of men seem less important.

Still, there it was. . . he hated Ftaeml's very shadow. He could not help it.

If the so-and-so would wear a turban, it would help. . . instead of walking around with those dirty snakes on his head wiggling like a can of worms. But oh no! the Rargyllians were proud of them. There was a suggestion in their manner that anyone without them was not quite human.

Come now! . . . Ftaeml was a decent chap. He made a note to invite Ftaeml to dinner, not put it off any longer. After all, he would make certain of deep-hypnotic preparation; the dinner need not be difficult. But his ulcer gave a fresh twinge at the thought.

Kiku did not hold it against the Rargyllian that he had dropped an impossible problem in the department's tired lap; impossible problems were routine. It was just. . . well, why didn't the monster get a haircut?

The vision of the Chesterfieldian Dr. Ftaeml with a shingle cut, his scalp all lumps and bumps, enabled Mr. Kiku to smile; he resumed work feeling better. The next item was a brief of a field report. . . oh yes! Sergei Greenberg. Good boy, Sergei. He was reaching for his pen to approve the recommendation even before he had finished reading it.

Instead of signing, he stared for almost half a second, then punched a button. "Files! Send up the full report of Mr. Greenberg's field job, the one he got back from a few days ago."

"Do you have the reference number, sir?"

"That intervention matter. . . you find it. Wait it's, uh, Rt0411, dated Saturday. I want it right now."

He had only time to dispose of half a dozen items when, seconds later, the delivery tube went thwong! and a tiny cylinder popped out on his desk. He stuck it into his reading machine and relaxed, with his right thumb resting on a pressure plate to control the speed with which the print fled across the screen.

In less than seven minutes he had zipped through not only a full transcript of the trial but also Greenberg's report of all else that had happened. Mr. Kiku could read at least two thousand words a minute with the aid of a machine; oral recordings and personal interviews he regarded as time wasters. But when the machine clicked off he decided on an oral report, He leaned to his interoffice communicator and flipped a switch. "Greenberg."

Greenberg looked up from his desk. "Howdy, boss."

"Come here, please." He switched off without politenesses.

Greenberg decided that the bossman's stomach must be bothering him again. But it was too late to find some urgent business outside the departmental building; he hurried upstairs and reported with his usual cheery grin. "Howdy, Chief."

"Morning. I've been reading your intervention report."

"So?"

"How old are you, Greenberg?"

"Eh? Thirty-seven."

"Hmm. What is your present rank?"

"Sir? Diplomatic officer second class. . . acting first."

What the deuce? Uncle Henry knew the answers. . . he probably knew what size shoes he wore.

"Old enough to have sense," Kiku mused. "Rank enough to be assigned as ambassador. . . or executive deputy to a politically-appointed ambassador. Sergei, how come you are so confounded stupid?"

Greenberg's jaw muscles clamped but he said nothing.

"Well?"

"Sir," Greenberg answered icily, "you are older and more experienced than I am. May I ask why you are so confounded rude?"

Mr. Kiku's mouth twitched but he did not smile. "A fair question. My psychiatrist tells me that it is because I am an anarchist in the wrong job. Now sit down and we'll discuss why you are so thickheaded. Cigarettes in the chair arm." Greenberg sat down, discovered that he did not have a light, and asked for one.

"I don't smoke," answered Kiku. "I thought those were the self-striking kind. Aren't they?"

"Oh. So they are." Greenberg lit up.

"See? You don't use your eyes and ears. Sergei, once that beast talked, you should have postponed the hearing until we knew all about him."

"Mmmm. . . I suppose so."

"You suppose so! Son, your subconscious alarms should have been clanging like a bed alarm on Monday morning. As it is, you let the implications be sprung on you when you thought the trial was over. And by a girl, a mere child. I'm glad I don't read the papers; I'll bet they had fun."

Greenberg blushed. He did read the papers.

"Then when she had you tangled up like a rangtangtoo trying to find its own feet, instead of facing her challenge and meeting it. . .

Meeting it how? By adjourning, of course, and ordering the investigation you should have ordered to start with, you. . ."

"But I did order it."

"Don't interrupt me; I want you browned on both sides. Then you proceeded to hand down a decision the like of which has not been seen since Solomon ordered the baby sawed in half. What mail-order law school did you attend?"

"Harvard," Greenberg answered sullenly.

"Hmm. . . Well, I shouldn't be too harsh on you; you're handicapped. But by the seventy-seven seven sided gods of the Sarvanchil, what did you do next? First you deny a petition from the local government itself to destroy this brute in the interest of public-safety. . . then you reverse yourself, grant the prayer and tell them to kill him. . . subject only to routine approval of this department. All in ten minutes. Exeunt omnes, laughing. Son, I don't mind you making a fool of yourself, but must you include the department?"

"Boss," Greenberg said humbly, "I made a mistake. When I saw the mistake, I did the only thing I could do; I reversed myself. The beast really is dangerous and there are no proper facilities for confining it in Westville. If it had not been beyond my power, I would have ordered it destroyed at once, without referring back for the department's approval.. . for your approval."

"Hummph!"

"You weren't sitting where I was, sir. You didn't see that solid wall bulge in. You didn't see the destruction."

"I'm not impressed. Did you ever see a city that had been flattened by a fusion bomb? What does one courthouse wall matter? . . . probably some thieving contractor didn't beef it up."

"But, boss, you should have seen the cage he broke out of first. Steel I-beams, welded. He tore them like straw."

"I recall that you inspected him in that cage. Why didn't you see to it that he was confined so that he couldn't get out?"

"Huh? Why, it's no business of the department to provide jails."

"Son, a factor concerning in any way anything from 'Out There' is the very personal business of this department. You know that. Once you know it awake and asleep, clear down to your toes, you'll begin to trot through a perfunctory routine, like an honorary chairman sampling soup in a charity hospital. You were supposed to be there with your nose twitching and your ears quivering, on the lookout for 'special situations.' You flubbed. Now tell me about this beast. I read the report, I saw his picture. But I don't feel him."

"Well, it's a non-balancing multipedal type, eight legs and about seven feet high at the dorsal, ridge. It's. . ."

Kiku sat up straight. "Eight legs? Hands?"

"Hands? No."

"Manipulative organs of any sort? A modified foot?"

"None, chief. . . if there had been, I would have ordered a full-scale investigation at once. The feet are about the size of nail kegs, and as dainty. Why?"

"Never mind. Another matter. Go on."

"The impression is something like a rhinoceros, something like a triceratops, though the articulation is unlike anything native to this planet. 'Lummox' his young master calls him and the name fits. It's a rather engaging beast, but stupid. That's the danger; it's so big and powerful that it is likely to hurt people through clumsiness and stupidity. It does talk, but about as well as a four-year-old child. . . in fact it sounds as if it had swallowed a baby girl."

"Why stupid? I note that its master with the history book name claims that it is bright."

Greenberg smiled. "He is prejudiced. I talked with it, boss. It's stupid."

"I can't see that you have established that. Assuming that an e.-t. is stupid because he can't speak our language well is like assuming that an Italian is illiterate because he speaks broken English. A non-sequitur."

"But look, boss, no hands. Maximum intelligence lower than monkeys. Maybe as high as a dog. Though not likely."

"Well, I'll concede that you are orthodox in xenological theory, but that is all. Some day that assumption is going to rise up and slap the classic xenist in the face. We'll find a civilization that doesn't need to pick at things with pattypaws, evolved beyond it."

"Want to bet?"

"No. Where is this 'Lummox' now?"

Greenberg looked flustered. "Boss, this report I am about to make is now in the microfilm lab. It should be on your desk any minute."

"Okay, so you were on the ball-this time. Let's have it."

"I got chummy with the local judge and asked him to keep me advised. Of course they couldn't throw this critter into the local Bastille; in fact they did not have anything strong enough to hold him. . . so they had learned, the hard way. And nothing could be built in a hurry that would be strong enough. . . believe me, that cage he crushed out of was strong. But the local police chief got a brain storm; they had an empty reservoir with sides about thirty feet high, reinforced concrete. . . part of the fire system. So they built a ramp and herded him down into it, then removed the ramp. It looked like a good dodge; the creature isn't built for jumping."

"Sounds okay."

"Yes, but that isn't all. Judge O'Farrell told me that the chief of police was so jittery that he decided not to wait for departmental okay; he went ahead with the execution.

"What?"

"Let me finish. He did not tell anybody but-accidentally-on-purpose the intake valve was opened-that night and the reservoir filled up. In the morning there was Lummox, on the bottom. So Chief Dreiser assumed that his 'accident' had been successful and that he had drowned the beast."

"So?"

"It did not bother Lummox at all. He had been under water several hours, but when the water drained off, he woke up, stood up, and said, 'Good morning.'"

"Amphibious, probably. What steps have you taken to put a stop to this highhandedness?"

"Just a second, sir. Dreiser knew that firearms and explosives were useless. . . you saw the transcript. . . at least of power safe enough to use inside a town. So he tried poison. Knowing nothing about the creature, he used half a dozen sorts in quantities sufficient for a regiment and concealed in several kinds of food."

"Well?"

"Lummox gobbled them all. They didn't even make him sleepy; in fact it seemed to stimulate his appetite, for the next thing he did was to eat the intake valve and the reservoir started to fill up again. They had to shut it off from the pumping station."

Kiku snickered. "I'm beginning to like this Lummox. Did you say he ate the valve? What was it made of?"

"I don't know. The usual alloy, I suppose."

"Hmm.. . seems to like a bit of roughage in its diet. Perhaps it has a craw like a bird."

"I wouldn't be surprised."

"What did the Chief do next?"

"Nothing as yet. I asked O'Farrell to impress on Dreiser that he was likely to end up in a penal colony thirty lightyears from Westville if he persisted in bucking the department. So he is waiting and trying to figure out his problem. His latest notion is to cast Lummox in concrete and let him die at his own convenience. But O'Farrell put the nix on that one-inhumane."

"So Lummox is still in the reservoir, waiting for us to act, eh?"

"I believe so, sir. He was yesterday."

"Well, be can wait there, I suppose, until other action can be taken." Mr. Kiku picked up Greenberg's shortform report and recommendation.

Greenberg said, "I take it that you are overruling me, sir?"

"No. What gave you that idea?" He signed the order permitting the destruction of Lummox and let it be swallowed by the outgoing basket. "I don't reverse a man's decision without firing him. . . and I have another job for you."

"Oh." Greenberg felt a twinge of compassion; he had been expecting, with relief, that the chief would reprieve Lummox's death sentence. Well. . . too bad. . . but the beast was dangerous.

Mr. Kiku went on, "Are you afraid of snakes?"

"No. I rather like them."

"Excellent! Though it's a feeling I can't imagine. I've always been deathly afraid of them. Once when I was a boy in Africa. . . never mind. Have you ever worked closely with Rargyllians? I don't recall."

Greenberg suddenly understood. "I used a Rargyllian interpreter in the Vega-VI affair. I get along all right with Rargyllians."

"I wish I did. Sergei, I have some business which involves a Rargyllian interpreter, a Dr. Ftaeml. You may have heard of him."

"Yes, of course, sir."

"I'll admit that, as Rargyllians go. . ." He made the noun sound like a swear word. ". . . Ftaeml is all right. But this involvement has the odor of trouble. . . and I find my own nose for trouble blanked out by this phobia of mine. So I'm putting you on as my assistant to sniff for me."

"I thought you didn't trust my nose, boss?"

"We'll let the blind lead the blind, if you'll forgive a switch in metaphor. Perhaps between us we'll sniff it out."

"Yes, sir. May I ask the nature of the assignment?"

"Well. . ." Before Mr. Kiku could answer, his secretary's light flashed and her voice stated, "Your hypnotherapist is here, sir."

The Under Secretary glanced at his clock and said, "Where does the time go?". . . then to the communicator: "Put him in my dressing room. I'll be in." He continued to Greenberg, "Ftaeml will be here in thirty minutes. I can't stop to talk, I've got to get braced for it. You'll find what there is. . . little enough!. . . in my 'pending-urgent' file." Mr. Kiku glanced at his incoming basket, which had filled to overflowing while they talked. "It won't take five minutes. Spend the rest of the time clearing up that stack of waste paper. Sign my name and hold anything that you think I must see but it had better be no more than half a dozen items, or I'll send you back to Harvard!"

He got up hurriedly, while making a mental note to tell his secretary, from his dressing room, to note everything that went through in the next half hour and let him see it later. . . he wanted to see how the lad worked. Mr. Kiku was aware that he would die someday and he intended to see to it that Greenberg replaced him. In the meantime life should be as tough for the boy as possible.

The Under Secretary headed for his dressing room, the door ducked aside, contracted behind him; Greenberg was left alone. He was reaching for the pending urgent file when a paper dropped into the incoming basket just as the light on it blinked red and a buzzer sounded.

He picked up the paper, ran his eye down the middle and had just realized that it really was urgent when a similar light-and-buzzer combination showed at the interoffice communicator and its screen came to life;

Greenberg recognized the chief of the bureau of system liaison. "Boss?" the image said excitedly.

Greenberg touched the two-way switch. "Greenberg here," he answered. "I'm keeping the chief's chair warm for him. Your memo just came in, Stan. I'm reading it?

Iba¤ez looked annoyed. "Never mind that. Get me the boss."

Greenberg hesitated. Iba¤ez's problem was simple, but sticky. Ships from Venus were regularly granted pratique without delay, each ship's doctor being a public health deputy. But the Ariel, already due at Port Libya, had suddenly been placed under quarantine by her doctor and was now waiting in a parking orbit. The Venerian foreign minister was aboard. . . most unfortunately, as Venus was expected to support Terra's position against Mars in the impending triangular conference.

Greenberg could stall the touchy problem until the boss was free; he could break in on the boss; he could go over the boss's head to the Secretary himself (which meant picking an answer and presenting it so as to get that answer approved); or. . . he could act, using Mr. Kiku's authority.

Mr. Kiku could not have predicted the emergency. . . but the boss had a pesky habit of pushing people off the deep end.

Greenberg's summing up had been quick. He answered, "Sorry, Stan, you can't talk to the boss. I am acting for him."

"Eh? Since when?"

"Just temporarily, but I am."

Iba¤ez frowned. "Look, chum, you had better find the boss. Maybe you are signing his name on routine matters. . . but this is not routine. We've got to bring that ship down in a hurry. Your neck would be out a yard if you took it upon yourself to authorize me to overlook a basic rule like quarantine. Use your head."

Break quarantine? Greenberg recalled the Great Plague of '51, back in the days when the biologist serenely believed that each planetary life group was immune to the ills of other planets. "We won't break quarantine."

Iba¤ez looked pained. "Sergei, we can jeopardize this conference. . . 'jeopardize?' What am I saying? We can't toss away ten years' work because some crewman has a slight fever. The quarantine must be broken. But I don't expect you to do it."

Greenberg hesitated. "He's under hypnosis, for a tough job coming up. It may be a couple of hours before you can see him."

Iba¤ez looked blank. "I'll have to tackle the Secretary. I don't dare wait two hours. That sacred cow from Venus is like as not to order his skipper to head home. . . we can't risk that."

"And we can't risk bringing in an epidemic, either. Here's what you do. Call him and tell him you are coming to get him in person. Use a fast scout. Get him aboard and leave the Ariel in quarantine orbit. Once you get him aboard the scout. . . and not before. . . tell him that both you and he will attend the conference in isolation suits." The isolation suit was a sealed pressure suit; its primary use was to visit planets whose disease hazards had not yet been learned. "The scout ship and crew will have to go into quarantine, too, of course."

"Isolation suit! Oh, he'll love that. Sergei, it would be less damaging to call off the conference. An indignity like that would put him against us for certain. The jerk is poisonously proud."

"Sure he'll love it," Greenberg explained, "once you suggest how to play it. 'Great personal self-sacrifice'. . . 'unwilling to risk the welfare of our beloved sister planet'. . . 'the call of duty takes precedence over any et cetera.' If you don't feel sure of it, take one of the public relations boys along. And look, all through the conference he must be attended by a physician. . . in a white suit. . . and a couple of nurses. The conference must stop every now and then while he rests. . . put a cot and hospital screens in the Hall of Heroes near the conference table. The idea is that he's come down with it himself but is carrying on as his dying act. Get it? Tell him before you land the scout ship. . . indirectly, of course."

Iba¤ez looked perturbed. "Do you think that will work?"

"It's up to you to make it work. I'm sending down your memo, ordering quarantine to continue but telling you to use your initiative to insure his presence at the conference."

"Well. . . all right." Iba¤ez suddenly grinned. "Never mind the memo. I'm on my way." He switched off.

Greenberg turned back to the desk, feeling exhilarated by the sensation of playing God. He wondered what the boss would have done?. . . but did not care. There might be many correct solutions, but this was one; it felt right. He reached again for the pending urgent file.

He stopped. Something was gnawing at the back of his mind. The boss had not wanted to approve that death sentence; he had felt it. Shucks, the boss had told him that he was wrong; the proper action was a full investigation. But the boss, as a matter of loyalty to his subordinates, had not reversed him.

But he himself was sitting in the boss's chair at the moment. Well?

Was that why the boss had placed him there? To let him correct his own mistake? No, the boss was subtle but not omniscient; he could not have predicted that Greenberg would consider reopening the matter.

Still. . . He called the boss's private secretary. "Mildred?"

"Yes, Mr. Greenberg?"

"That brief-and-rec on that intervention I carried out Rt0411, it was. It went out fifteen minutes ago.

I want it back."

"It may have been dispatched," she said doubtfully.

"The communications desk has been running only about seven minutes behind demand today."

"There is such a thing as too much efficiency. If the order has left the building, send a cancellation and a more-to-follow, will you? And get the original document back to me."

Finally he got to the pending-urgent file. As Mr. Kiku had said, the jacket marked "Ftaeml" was not large. He found it subtitled: "Beauty & the Beast" and wondered why. The boss had a sense of humor. . . but it veered so much that other people had a hard time following it.

Presently his eyebrows lifted. Those tireless interpreters, brokers, go-betweens, and expounders, the Rargyllians, were always popping up in negotiations between diverse races; the presence of Dr. Ftaeml on Earth had tipped Greenberg that something was up with a nonhumanoid people. . . nonhuman in mentality, creatures so different psychologically that communication was difficult. But he had not expected the learned doctor was representing a race that he had never heard of. . . something termed "the Hroshii."

It was possible that Greenberg had simply forgotten these people with a name like a sneeze; they might be some unimportant breed, at a low cultural level, or economically inconsequential, or not possessing space travel. Or they might have been brought into the Community of Civilizations while Greenberg had been up to his ears in Solar System affairs. Once the human race had made contact with other races having interstellar travel the additions to the family of legal "humans" had come so fast that a man could hardly keep up; the more mankind widened its horizons the harder those horizons were to see.

Or perhaps he knew of the Hroshii under another name? Greenberg turned to Mr. Kiku's universal dictionary and keyed in the name.

The machine considered it, then the reading plate flashed: NO INFORMATION.

Greenberg tried dropping the aspirate on the assumption that the word might have degenerated in the mouths of non-Hroshii. . . still the same negative.

He dropped the matter. The. universal dictionary in the British Museum was not more knowledgeable than the one in the Under Secretary's office; its working parts occupied an entire building in another part of Capital, and a staff of cyberneticists, semanticians and encyclopedists endlessly fed its hunger for facts. He could be sure that, whatever the "Hroshii" were, the Federation had never heard of them before.

Which was astounding.

Having let astonishment persist a full second Greenberg went on reading. He learned that the Hroshii were already here, not landed on Earth but within waving distance. . . in a parking orbit fifty thousand miles out. He let himself be astonished for two whole seconds before going on to discover that the reason he had not heard of their advent was that Dr. Ftaeml had urgently advised Mr. Kiku to keep patrol ships and such from challenging and attempting to board the stranger.

He was interrupted by the return of his report of the Lummox matter, bearing on it Mr. Kiku's confirmation of the sentence. He thought for a moment, then added to the endorsement so that it read: "Recommendation approved. . . but this action is not to be carried out until after a complete scientific analysis of this creature has been made. Local authorities will surrender custody when required to the Bureau of Xenic Science, which will arrange transportation and select the agency to pursue the evaluation."

Greenberg signed Kiku's name to the change and put it back into the. system. He admitted sheepishly that the order was now weasel-worded. . . for it was a sure thing that once the xenobiologists got their hands on Lummox they would never let him go. Nevertheless his heart felt suddenly lighter. The other action was wrong; this one was right.

He turned his attention back to the Hroshii. . . and again his eyebrows went up. The Hroshii were not here to establish relations with Earth; they were here to rescue one of their own. According to Dr. Ftaeml, they were convinced that Terra was holding this Hroshia and were demanding that she be surrendered.

Greenberg felt as if he had blundered into a bad melodrama. These people with the asthmatic name had picked the wrong planet for cops-and-robbers nonsense. A nonhuman on Earth without a passport, without a dossier in the hands of the department, without an approved reason for visiting Earth, would be as helpless as a bride without a ration book. She would be picked up in no time. . . idiot's delight! she could not even get through quarantine.

Why didn't the boss simply tell them to take their wagon and go home?

Besides, how did they figure she had reached the surface of Earth? Walked? Or taken a swan dive? Star ships did not land; they were served by shuttles. He could just see her tackling the purser of one of those shuttles: "Excuse me, sir, but I am fleeing from my husband hi a distant part of the Galaxy. Do you mind if I hide under this seat and sneak down to your planet?"

"No tickee, no washee". . . that's what the purser would say. Those shuttle companies hated deadheads; Greenberg could feel it every time he presented his own diplomatic pass.

Something was niggling at him. . . then he remembered the boss's inquiry; did Lummox have hands? He realized that the boss must have been wondering whether Lummox could be the missing Hroshia, since Hroshii, according to Ftaeml, had eight legs. Greenberg chuckled. Lummox was not the boy to build and operate star ships, not he nor any of his cousins. Of course the boss had not seen Lummox and did not know how preposterous it was.

And besides that, Lummox had been here more than a hundred years. That would make him very late for supper.

The real question was what to do with the Hroshii now that we were in contact with them. Anything from "Out There" was interesting, educational, and profitable to mankind, once it was analyzed. . . and a race that had its own interstellar drive was sure to be all of that, squared and cubed. No doubt the boss was kidding them along while developing permanent relations.

Very well, it was up to Greenberg to foster that angle and help the boss get past his emotional handicap in dealing through a Rargyllian.

He skimmed the rest of the report. What he had learned so far he had gotten from the synopsis; the rest was a transcript of Ftaeml's flowery circumlocutions. Then he handed the jacket back to the file and tackled the boss's work.

Mr. Kiku announced himself by looking over his shoulder and saying, "That basket is as full as ever."

"Oh. Howdy, boss. Yes, but think of the shape it would have been in if I hadn't torn up every second item without reading it." Greenberg moved from the chair.

Mr. Kiku nodded. "I know. Sometimes I just check 'disapproved' on all the odd-numbered ones."

"Feeling better?"

"Ready to spit in his face. What's a snake got that I haven't got more of?"

"That's the spirit."

"Dr. Morgan is very adept. Try him sometime if your nerves ever act up."

Greenberg grinned. "Boss, the only thing that bothers me is insomnia during working hours. I can't sleep at my desk the way I used to."

"That's the earliest symptom. The mind mechanics will get you yet." Mr. Kiku glanced at the clock. "No word from our friend with the animated hair?"

"Not yet." Greenberg told about the quarantine for the Ariel and what he had done. Mr. Kiku nodded, which was equivalent to a citation in front of the regiment in some circles; Greenberg felt a warm glow and went on to tell about the revision in the order for Lummox. He sidled up to it selfconsciously.

"Boss, sitting in that chair puts a different slant on things."

"So I discovered, years ago."

"Um, yes. While I was there I got to thinking about that intervention matter."

"Why? We settled it."

"So I thought. Nevertheless. . . well, anyhow. . ." He blurted out his change in the order and waited.

Mr. Kiku nodded again. He considered telling Greenberg that it had saved him thinking up a face-saving way of accomplishing the same end, but decided not to. Instead he leaned to his desk, "Mildred? Heard anything from Dr. Ftaeml?"

"Just arrived, sir."

"Good. East conference room, please." He switched off and turned to Greenberg. "Well, son, now for some snake charming. Got your flute with you?"

VI

"Space Is Deep, Excellency"

"Dr. Ftaeml, this is my associate, Mr. Greenberg."

The Rargyllian bowed low, his double knees and unhuman articulation making it an impressive rite. "I know the distinguished Mr. Greenberg by reputation, through a compatriot who was privileged to work with him. I am honored, sir."

Greenberg answered with the same sort of polite amphigory the cosmic linguist had selected. "I have long wished for the boon of experiencing in person the scholarly aura of Dr. Ftaeml, but I had never dared let the wish blossom into hope. Your servant and pupil, sir."

"Hrrump!" Mr. Kiku interrupted. "Doctor, this delicate affair you are negotiating is of such importance that I, with my constant housekeeping chores, have not been able to give it the close attention it demands. Mr. Greenberg is ambassador extraordinary and minister plenipotentiary of the Federation, commanded for this purpose."

Greenberg's eyes flicked toward his boss, but showed no surprise. He had noticed that the boss had earlier said "associate" rather than "assistant" and had spotted it as the elementary maneuver of enhancing the prestige of one's own negotiators for advantage in protocol-but he had not expected this sudden brevet. He was reasonably sure that Mr. Kiku had not bothered to have the rank approved by the Council; nevertheless the boss could make it stick and his credentials would probably show up on his desk. He wondered if his pay check would show it?

He decided that the boss must have a hunch that this silly business had importance not evident. Or was he simply getting the medusoid off his back?

Dr. Ftaeml bowed again. "Most gratifying to work with his excellency." Greenberg suspected that the Rargyllian was not fooled; nevertheless it probably was really gratifying to him, since it implied that the medusoid was himself of ambassadorial rank.

A female aide brought in refreshments; they stopped for ritual. Ftaeml selected a French wine, while Greenberg and Kiku chose, by Hobson's choice, the only Rargyllian item available-some stuff called "wine" through failure of language but which looked like bread mushed into milk and tasted as if sulphuric acid had been added. Greenberg went through the motions of enjoying it while not letting it pass his lips.

He noticed with respect that the boss actually consumed the stuff.

The rite common to seven out of ten civilizations gave Greenberg time to size up Ftaeml. The medusoid was dressed in an expensive parody of terrestrial formal clothes. . . cutaway jacket, lacy jabot, and striped shorts. It helped to hide the fact that, while he was a bifurcate humanoid with two legs, two arms, and head at the top of an elongated trunk, he was not remotely human in any but the legal sense.

But Greenberg had grown up in the presence of the Great Martians and had dealt with many other peoples since; he did not expect "men" to look like men and had no prejudice in favor of human form. Ftaeml was, to his eye, handsome and certainly graceful. His dry chitinous skin, purple with green highlights, was as neat as a leopard's pelt and as decorative. The absence of a nose was no matter and was made up for by the mobile, sensitive mouth.

Greenberg decided that Ftaeml must have his tail wrapped around him under his clothes in order to carry out the pretense that he looked like a terrestrial as well as being dressed like one-Rargyllians would go to any trouble to conform to the ancient, urbane rule that when in Rome, one should shoot Roman candles. The other Rargyllian Greenberg had worked with had worn no clothes at all (since the people of Vega-VI wore none) and had carried his tail aloft, like a proud cat. Thinking of Vega-VI made Greenberg shiver, be had found it necessary to bundle up to his ears.

He glanced at the medusoid's tendrils. Pshaw! they weren't snakelike. The boss must have a neurosis as big as a house. Sure, they were about a foot long and as thick as his thumb, but they didn't have eyes, they didn't have mouths or teeth-they were just tendrils. Most races had tendrils of some sort. What were fingers but short tendrils?

Mr. Kiku put down his cup when Dr. Ftaeml set down his glass. "Doctor, you have consulted with your principals?"

"Sir, I have had that honor. And may I take this opportunity to thank you for the scout ship you so graciously placed at my disposal for the unavoidable trips back and forth from the surface of your lovely planet to the vessel of the people I have the privilege of assisting? It is, I may say without casting any reflections on the great people I now serve, more suited to the purpose and more comfortable to one of my build than are the auxiliary craft of their vessel."

"Not at all, Glad to do a favor to a friend."

"You are gracious, Mr. Under Secretary."

"Well, what did they say?"

Dr. Ftaeml shrugged his whole body. "It pains me to inform you that they are unmoved. They insist that their she child be returned to them without delay."

Mr. Kiku frowned. "No doubt you explained that we don't have their missing child, have never heard of it, have no reason to think that she has ever been on this planet and strong reason to believe that she never could have been?"

"I did. You will pardon my inurbanity if I translate their answer in terms crude but unmistakable." He shrugged apologetically. "They say you are lying."

Mr. Kiku took no offense, being aware that a Rargyllian when acting as go-between was as impersonal as a telephone. "It would be better if I were lying. Then I could hand over their brat and the matter would be finished."

"I believe you," Dr. Ftaeml said suddenly.

"Thank you. Why?"

"You used the subjunctive."

"Oh. Did you tell them that there were over seven thousand varieties of nonterrestrial creatures on Earth, represented by some hundreds of thousands of individuals? That of these individuals some thirty thousand are sentient beings? But of these sentient beings only a very few have anything like the physical characteristics of your Hroshii? And that all those few we can account for as to race and planet of origin?"

"I am Rargyllian, sir. I told them all that and more, in their own language, putting it more clearly than you could explain it to another Earthmen. I made it live."

"I believe you." Mr. Kiku tapped the table top. "Do you have a suggestion?"

"Just a moment," put in Greenberg. "Don't you have a picture of a typical Hroshii? It might help."

" 'Hroshiu,' " corrected Ftaeml. "Or, in this case, 'Hroshia? I am sorry. They do not use symbology of the picture type. Unfortunately I am not equipped to take one of your pictures."

"An eyeless race?"

"No, Excellency. Their sight is quite good, quite subtle. But their eyes and nervous systems abstract somewhat differently from yours. Their analog of 'picture' would be meaningless to you. Even I find it difficult and my race is admitted to be the most subtle of all in the interpretation of symbolic abstraction. If a Rargyllian. . ." He stopped and preened himself.

"Well. . . describe one to us. Use your justly famed semantic talents."

"A pleasure. The Hroshii manning this vessel are all about of a size, being of the military class. . ."

Mr. Kiku interrupted. "Military class? Doctor, is this a war vessel? You did not tell me this."

Dr. Ftaeml looked pained. "I considered the fact both obvious and distasteful."

"I suppose so." Mr. Kiku wondered if he should alert the Federation General Staff. Not now, he decided. Mr. Kiku was strongly prejudiced against the introduction of military might into negotiations, since he believed that a show of force not only was an admission of failure on the part of diplomats but also poisoned the chances of accomplishing anything more by negotiation. He could rationalize this opinion but he held it as an emotion. "Go on, please."

"The military class are of three sexes, the differences in the types being not readily apparent and need not concern us. My shipmates and hosts are perhaps six inches higher than this table and half again your height in length. Each has four pairs of legs and two arms. Their hands are small and supple and extremely dexterous. In my opinion the Hroshii are unusually beautiful, form serving function with rare grace. They are remarkably adroit with machines, instruments, and delicate manipulations of every sort."

Greenberg relaxed a little as Ftaeml talked. Despite everything, the vagrant notion had still been bothering him that this creature "Lummox" might be of the Hroshii. . . but he saw now that the thought came from nothing more than accidental similarity in leg number. . . as if an ostrich were a man because of two legs! His mind wanted to file Lummox into a category and no doubt would keep on trying, but this category did not fit.

Dr. Ftaeml was continuing: '. . . but the outstanding characteristic of the Hroshii, not covered by these mere facts of size, shape, body structure, and mechanical function, is an overwhelming impression of great mental power. So overwhelming, in fact . ." The medusoid chuckled in embarrassment". . . that I was almost persuaded to waive my professional fee and serve them as a privilege."

Greenberg was impressed. These Hroshti really must have something; the Rargyllians, honest brokers though they were, would let a man die of thirst rather than tell him the local word for water, unless cash was in band. Their mercenary attitude had the quality of devoutness.

"The only thing," Ftaeml added, "that saved me from this excess was the knowledge that in one thing I excelled them. They are not linguists. Rich and powerful as their own speech is, it is the only language they ever learn well. They are even less talented linguistically than is your own race." Ftaeml spread his grotesque hands in a gesture that was purely Gallic (or a perfect, studied imitation) and added, "So I repaired my self esteem and charged twice my usual fee."

He ceased talking. Mr. Kiku stared glumly at the table and Greenberg merely waited. Finally Kiku said, "What do you suggest?"

"My esteemed friend, there is only one course that is of any use. The Hroshia they seek must be delivered up."

"But we do not have this Hroshia."

Ftaeml simulated a human sigh. "That is regrettable." Greenberg looked at him sharply; the sigh did not carry conviction. He felt that Ftaeml regarded the impasse as somehow tremendously exciting. . . which was ridiculous; a Rargyllian, having accepted the role of go-between, was invariably anxious that the negotiation be successful; anything less than success caused. them to lose face in their own eyes.

So he spoke up. "Dr. Ftaeml, when you undertook this commission for the Hroshii, did you expect that we would be able to produce this, uh, Hroshia?"

The creature's tendrils suddenly slumped; Greenberg cocked an eyebrow and said dryly, "No, I see that you did not. May I ask why, then, you accepted this cornmission?"

Ftaeml answered slowly and without his usual confidence: "Sir, one does not refuse a commission of the Hroshii. Believe me, one does not."

"Hmm. . . these Hroshii. Doctor, will you pardon me if I say that you have not yet conveyed to me a full understanding of these people? You tell us that they are mentally very powerful, so much so that a leading mind of a highly-advanced race. . . yourself is almost 'overwhelmed' by them. You imply that they are powerful in other ways. . . that you, a member of a proud, free race, must obey their wishes. Now here they are in a single ship, facing an entire planet, a planet so powerful that it has been able to create hegemony more extensive than any before in this portion of space. . . yet you say that it would be 'regrettable' if we were not to satisfy their impossible demand."

"All that is true," Ftaeml answered carefully.

"When a Rargyllian speaks professionally I cannot disbelieve him. Yet this I have trouble believing. These superbeings. . . why have we never heard of them?"

"Space is deep, Excellency."

"Yes, yes. No doubt there are thousands of great races that we of Earth have never met, will never meet. Am I to infer that this is also the first contact of your race with the Hroshii?"

"No. We have long known of them. . . longer than we have known of you,"

"Eh?" Greenberg glanced sharply at Mr, Kiku. He went on, "What are the relations of Rargyll with the Hroshii? And why has not this been reported to the Federation?"

"Excellency, is that last question a rebuke? If so, I must answer that I am not acting for my government."

"No," Greenberg assured him, "it was a simple inquiry. The Federation always seeks to extend its diplomatic linkage as far as possible. I was surprised to learn that your race, which claims friendship with ours, could know of a mighty civilization and not make that fact known to the Federation."

"May I say, Excellency, that I am surprised at your surprise? Space is deep. . . and my race have long been great travelers. Perhaps the Federation has not asked the right questions? As for the other, my people have no diplomatic relations, no relations of any sort, with the mighty Hroshii. They are a people who, as you say, mind their own business, and we are very happy to (as you would phrase it). . . to stay out of their yard. It has been years, more than five of your centuries, since the last time a Hroshii ship appeared in our skies and demanded service from us. It is better so."

Greenberg said, "I seem to be getting more confused the more I know. They stopped at Rargyll to pick up an interpreter instead of coming straight here?"

"Not precisely. They appeared in our skies and asked if we had ever heard of you people. We answered that we knew you. . . for when the Hroshii ask, they are answered! We identified your star and I had the unsought honor to be chosen to represent them." He shrugged. "Here I am. Let me add that it was not until we were deep in space that I learned the object of their search."

Greenberg had made note earlier of a loose end. "Just a moment. They retained you, they started for Earth, then told you that they were searching for a missing Hroshia. It must have been then that you decided that this mission would fail. Why?"

"Is it not evident? We Rargyllians, in your lovely and precise idiom, are the greatest gossips in space. Perhaps you would say 'historians' but I mean something more lively than that. Gossips. We go everywhere, we know everyone, we speak all languages. I did not need to 'check the files' to know that men of Earth had never been to the capital planet of the Hroshii. Had you made such contact you would have forced your attentions on them and started a war. It would have been a 'scandal to the jaybirds'. . . a lovely phrase, that; I must see a jaybird while I am here. It would have been discussed with many a fine anecdote wherever two Rargyllians got together. So I knew that they must be mistaken; they would not find what they sought."

"In other words," Greenberg answered, "you people identified the wrong planet. . . and wished this problem on us."

"Please," protested Dr. Ftaeml. "Our identification was perfect, I assure you-not of your planet, for the Hroshii did not know where you came from-but of you yourself. The creatures-they wished to locate were men of Earth, in every possible detail-down to your fingernails, your internal organs."

"Yet you knew they were mistaken. Doctor, I am not the semantician you are. I seem to see a contradiction. . . or a paradox."

"Permit me to explain. We who deal professionally in words know how cheap words are. A paradox can exist only in words, never in the facts behind the words. Since the Hroshii described exactly the men of Earth and since I knew that the men of Earth knew not the Hroshii, I concluded what I must conclude-that there is another race in this galaxy as like to your race as twin Sornia in their shellas two peas in the pod. Peas? You like beans better?"

"'Peas' is the correct idiom," Mr. Kiku answered soberly.

"Thank you. Your language is rich; I must refresh myself of it while I am here. Would you believe it? The man from whom I first learned it intentionally taught me idioms unacceptable in your polite society. For example 'as cold as. . .'"

"Yes, yes," Mr. Kiku said hastily. "I can believe it. Some of our compatriots have an odd sense of humor. You concluded that there is somewhere in this star cloud a race so like ours as to be our twin brothers? I find that notion statistically unlikely to the point of impossibility."

"The entire universe, Mr. Under Secretary, is wildly unlikely to the point of ridiculousness. Therefore, we of Rargyll know that God is a humorist." The medusoid made a gesture peculiar to his breed, then politely repeated it in idiom by making one of the most common Earthly gestures of reverence.

"You explained this conclusion to your clients?"

"I did. . . and I repeated it most carefully in my lastest consultation. The result was foreseeable."

"Yes?"

"Each race has its talent, each its weakness. The Hroshii, once having with mighty intellect arrived at an opinion, are not easily swayed. 'Pigheaded' is your precise term."

"Pigheadedness breeds pigheadedness, Dr. Ftaeml."

"Please, my dear sir! I hope that you will not be so tempted. Let me report, if I must, that you have been unable to find their treasured one, but that you are instituting new and more thorough searches. I am your friend. . . do not admit that this negotiation has failed."

"I never broke off a negotiation in my life," Mr. Kiku answered sourly. "If you can't out-argue the other fellow, sometimes you can outlive him. But I do not see what more we have to offer them. Except for that one possibility we spoke of last time. . . did you bring the coordinates of their planet? Or did they refuse?"

"I have them. I told you that they would not refuse; the Hroshii are not in the least afraid of having other races know where to find them. . . they are merely indifferent" Dr. Ftaeml opened a brief case which was either an imitation of a terrestrial one, or might have been purchased on Earth. "Nevertheless it was not easy. The where-and-when had to be translated from their concepts to those using Rargyll as the true center of the universe, for which purpose it required that I first convince them of the necessity, then explain to them spacetime units as used on Rargyll. Now, since I must shame myself by admitting that I am not skilled in your methods of reckoning the shape of the universe, it is necessary that I have help in translating our figures into yours."

"No need to feel shamefaced," Mr. Kiku answered, "for I don't know anything about our astrogation methods myself. We use specialists for that sort of thing. Just a moment." He touched an ornamental knob on the conference table. "Get me BuAstro."

"They've all gone home for the day," a disembodied female voice answered, "except the astrogation duty officer.

"Then that's who I want. Hurry it up."

Very shortly a male voice said, "Dr. Warner, night duty officer."

"Kiku here. Doctor, you solve spacetime correlations?"

Of course, sir."

"Can you do it from Rargyllian data?"

"Rargyllian?" The duty officer whistled softly. "That's a tough one, sir. Dr. Singh is the man for that"

"Get him up here, right away."

"Uh, why, he's gone home, sir. He'll be here in the morning."

"I didn't ask where he was; I said, 'Get him up here. . . right away.' Use police alarm and general call, if necessary. I want him now."

"Er. . . yes, sir."

Mr. Kiku turned back to Dr. Ftaeml. "I expect to be able to show that no terrestrial starship ever visited the Hroshii. Fortunately we do have astrogation records for every interstellar trip. My thought is this: it is time that the principals met face to face in this negotiation. With your skillful interpretation we can show them that we have nothing to hide, that the facilities of our civilization are at their disposal, and that we would like to help them find their missing sibling. . . but that she is not here. Then, if they have any thing to suggest, we will. . ." Mr. Kiku broke off as a door at the end of the room opened. He said tonelessly, "How do you do, Mr. Secretary?"

The Most Honorable Mr. Roy MacClure, Secretary for Spatial Affairs for the Federated Community of Civilizations, was entering. His eye seemed to light only on Mr. Kiku. "There you are, Henry! Been looking all over. That stupid girl didn't know where you had gone, but I found that you had not left the building. You must. . ."

Mr. Kiku took him firmly by the elbow and said loudly, "Mr. Secretary, allow me to present Dr. Ftaeml, Ambassador de facto of the mighty Hroshii."

Mr. MacClure met the occasion. "How do you do, Doctor? Or should I say 'Excellency'?" He had the grace not to stare.

'Doctor' will do nicely, Mr. Secretary. I am well, thank you. May I enquire as to your health?"

"Oh, good enough, good enough. . . if everything didn't pop at once. Which reminds me. . . can you spare me my chief assistant? I'm awfully sorry but something urgent has come up.

"Certainly, Mr. Secretary. Your pleasure is my greatest wish."

Mr. MacClure looked sharply at the medusoid but found himself unable to read his expression. . . if the thing had expressions, he amended. "Uh, I trust you are being well taken care of, Doctor?"

"Yes, thank you."

"Good. I really am sorry, but.. . Henry, if you please?"

Mr. Kiku bowed to the Rargyllian, then left the table while wearing an expression so mask-like that Greenberg shivered. Kiku spoke in a whisper to MacClure as soon as they were away from the table.

MacClure glanced back at the other two, then answered in a whisper that Greenberg could catch. "Yes, yes! But this is crucially important, I tell you. Henry, what in the world possessed you to ground those ships without consulting me first?"

Mr. Kiku's reply was inaudible. MacClure went on, "Nonsense! Well, you will just have to come out and face them. You can't. . ."

Mr. Kiku turned back abruptly. "Dr. Ftaeml, was it your intention to return to the Hroshii ship tonight?"

"There is no hurry. I am at your service, sir."

"You are most gracious. May I leave you in Mr. Greenberg's care? We speak as one."

The Rargyllian bowed. "I shall count it an honor."

"I look forward to the pleasure of your company tomorrow."

Dr. Ftaeml bowed again. "Until tomorrow. Mr. Secretary, Mr. Under Secretary. . . your servant."

The two left. Greenberg did not know whether to laugh or cry; he felt embarrassed for his whole race. The medusoid was watching him silently.

Greenberg grinned with half his mouth and said, "Doctor, does the Rargyllian tongue include swear words?"

"Sir, I can use profanity in more than a thousand tongues. . . some having curses that will addle an egg at a thousand paces. May I teach you some of them?"

Greenberg sat back and laughed heartily. "Doctor, I like you. I really like you. . . quite aside from our mutual professional duty to be civil."

Ftaeml shaped his lips in a good imitation of a human smile. "Thank you, sir. The feeling is mutual. . . and gratifying. May I say without offense that the reception given my sort on your great planet is sometimes something that one must be philosophical about?"

"I know. I'm sorry. My own people, most of them, are honestly convinced that the prejudices of their native village were ordained by the Almighty. I wish it were different."

"You need not be ashamed. Believe me, sir, that is the one conviction which is shared by all races everywhere. . . the only thing we all have in common. I do not except my own race. If you knew languages. . . All languages carry in them a portrait of their users and the idioms of every language say over and over again, 'He is a stranger and therefore a barbarian.'"

Greenberg grinned wryly. "Discouraging, isn't it?"

"Discouraging? Why, sir? It is sidesplitting. It is the only joke that God ever repeats, because its humor never grows stale." The medusoid added, "What is your wish, sir? Are we to continue to explore this matter? Or is your purpose merely to stetch the palaver until the return of your. . . associate?"

Greenberg knew that the Rargyllian was saying as politely as possible that Greenberg could not act without Kiku. Greenberg decided that there was no sense in pretending otherwise. . . and besides, he was hungry. "Haven't we worked enough today, Doctor? Would you do me the honor of having dinner with me?"

"I would be delighted! But. . . you know our peculiarities of diet?"

"Certainly. Remember, I spent some weeks with one of your compatriots. We can go to the Hotel Universal."

"Yes, of course." Dr. Ftaeml seemed unenthusiastic.

"Unless there is something you would like better?"

"I have heard of your restaurants with entertainment. . . would it be possible? Or is it. . .?"

"A night club?" Greenberg thought. "Yes! The Club Cosmic. Their kitchen can do anything the Universal can.

They were about to leave when a door dilated and a slender, swarthy man stuck his head in. "Oh. Excuse me. I thought Mr. Kiku was here."

Greenberg remembered suddenly that the boss had summoned a relativity mathematician. "Just a moment You must be Dr. Singh."

"Yes."

"Sorry. Mr. Kiku had to leave, I am here for him."

He introduced the two and explained the problem. Dr. Singh looked over the Rargyllian's scroll and nodded. "This will take a while."

"May I help you, Doctor?" asked Ftaeml.

"It won't be necessary. Your notes are quite complete." Thus assured, Greenberg and Ftaeml went out on the town.

The floor show at the Club Cosmic included a juggler, which delighted Ftaeml, and girls, which delighted Greenberg. It was late by the time Greenberg left Ftaeml in one of the special suites reserved for nonhuman guests of DepSpace at Hotel Universal. Greenberg was yawning as he came down the lift, but decided that the evening had been worth while in the interest of good foreign relations.

Tired though he was, he stopped by the department. Dr. Ftaeml had spilled one item during the evening that he thought the boss should know. . . tonight if he could reach him, or leave it on his desk if not. The Rargyllian, in an excess of pleasure over the juggler, had expressed regret that such things must so soon cease to be.

"What do you mean?" Greenberg had asked.

"When mighty Earth is volatilized. . ." the medusoid had begun, then stopped.

Greenberg had pressed him about it. But the Rargylhan insisted that he had been joking.

Greenberg doubted if it meant anything. But Rargylhan humor was usually much more subtle; he decided to tell the boss about it as quickly as possible. Maybe that strange ship needed a shot of paralysis frequencies, a "nutcracker" bomb, and a dose of vacuum.

The night guard at the door stopped him. "Mr. Greenberg. . . the Under Secretary has been looking for you for the past half hour."

He thanked the guard and hurried upstairs. Mr. ICiku he found bent over his desk; the incoming basket was clogged as always but the Under Secretary was paying no attention. He glanced up and said quietly, "Good evening, Sergei. Look at this." He passed over a report.

It was Dr. Singh's rework of Dr. Ftaeml's notes. Greenberg picked out at the bottom the geocentric coordinates and did a quick sum. "Over nine hundred lightyears!" he commented. "And out in that direction, too. No wonder we've never encountered them. Not exactly next door neighbors, eh?"

"Never mind that," Mr. Kiku admonished. "Not the date. This computation is the Hroshii's claim as to when and where they were visited by one of our ships."

Greenberg looked and felt his eyebrows crawl up toward his scalp. He turned to the answer machine and started to code an inquiry. "Don't bother," Kiku told him. "Your recollection is correct. The Trail Blazer. Second trip." ?

"The Trail Blazer," Greenberg repeated foolishly.

"Yes. We never knew where she went, so we couldn't have guessed. But we know exactly when she went. It matches. Much simpler hypothesis than Dr. Ftaeml's twin races."

"Of course." He looked at his boss. "Then it is-Lummox."

"Yes, it's Lummox."

"But it can't be Lummox. No hands. Stupid as a rabbit."

"No, it can't be. But it is."

VII
"Mother Knows Best"

Lummox was not in the reservoir. He had got tired and had gone home. It had been necessary to tear a notch in the reservoir to get out comfortably, but he had damaged it no more than was needful. He did not care to have any arguments with John Thomas over such silly matters-not any more arguments, that is.

Several people made a fuss over his leaving, but he ignored them. He was careful not to step on anybody and their actions he treated with dignified reserve. Even when they turned loose hated spray things on him he did not let them herd him thereby, the way they had herded him out of that big building the day he had gone for a walk; he simply closed his eyes and his rows of nostrils, put his head down and slogged for home.

John Thomas met him on the way, having been fetched by the somewhat hysterical chief of safety.

Lummox stopped and made a saddle for John Thomas, after mutual greetings and reassurances, then resumed his steady march homeward.

Chief Dreiserwas almost incoherent. "Turn that brute around and head him back!" he screamed.

"You do it," Johnnie advised grimly.

"I'll have your hide for this! I'll-I'll-"

"What have I done?"

"You-It's what you haven't done. That beast broke out and-"

"I wasn't even there," John Thomas pointed out while Lummox continued plodding.

"Yes, but. . . That's got nothing to do with it! He's out now; it's up to you to assist the law and get him penned up again. John Stuart, you're getting in serious trouble."

"I don't see how you figure. You took him away from me. You got him condemned and you say he doesn't belong to me any longer. You tried to kill him. . . you know you did, without waiting to see if the government would okay it. If he belongs to me, I ought to sue you. If he doesn't belong to me, it's no skin off my nose if Lummox climbs out of that silly tank." John Thomas leaned over and looked down. "Why don't you climb into your car, Chief, instead of running along beside us and getting yourself winded?"

Chief Dreiser ungraciously accepted the advice and let his driver pick him up. By the time this was done he had somewhat recovered his balance. He leaned out and said, "John Stuart, I won't bandy words with you. What I have or have not done hasn't anything to do with the case. Citizens are required to assist peace officers when necessary. I am demanding officially-and I've got this car's recorder going while I ask it-that you assist me in returning that beast to the reservoir."

John Thomas looked innocent. "Then can I go home?"

"Huh? Of course."

"Thanks, Chief. Uh, how long do you figure he will stay in the reservoir after I put him in it and go home? Or were you planning on hiring me in as a permanent member of your police force?"

Chief Dreiser gave up; Lummox went home.

Nevertheless Dreiser regarded it as only a temporary setback; the stubbornness that made him a good police officer did not desert him. He admitted to himself that the public was probably safer with the beast penned up at home while he figured out a surefire way to kill him. The order from the Under Secretary for Spatial Affairs, permitting him to destroy Lummox arrived and that made Dreiser feel better.. . old Judge O'Farrell had been pretty sarcastic about his jumping the gun.

The cancellation of that order and the amended order postponing Lummox's death indefinitely never reached him. A new clerk in the communications office of DepSpace made a slight error, simply a transposition of two symbols; the cancellation went to Pluto. . . and the amended order, being keyed to the cancellation, followed it.

So Dreiser sat in his office with the death order clutched in his hand and thought about ways to kill the beast Electrocution? Maybe. . . but he could not even guess at how much of a jolt it would take to do it. Cut his throat like butchering a hog? The Chief had serious doubts about what sort of knife to use and what the brute would be doing in the meantime.

Firearms and explosives were no good. Wait a minute! Get the monster to open its mouth, wide, then shoot straight down its throat, using an explosive charge that would blow his innards to bits. Kill him instantly-yes, sir! Lots of animals had armor-turtles, rhinos, armadillos, and things-but always outside, not inside. This brute was no exception; Chief Dreiser had had several looks down inside that big mouth the time he had tried poison. The beast might be armor plate outside; inside he was pink and moist and soft like everybody else.

Now let's see; he'd have the Stuart boy tell the brute to hold its mouth open and. . . no, that wouldn't do. The boy would see what was up and like as not would order the beast to charge. . . and then some cops' widows would draw pensions. That boy was going bad, no doubt of it. . . funny how a good boy could take a wrong turn and wind up in prison.

No, the thing to do was to get the kid downtown on some excuse and carry out the order while he wasn't around. They could entice the brute into saying "ah!" by offering him food. . . "tossing it to him," Dreiser amended.

He glanced at his clock. Today? No, he wanted to choose the weapon and then rehearse everybody so that it would go like clockwork. Tomorrow early. . . better have the boy picked up right after breakfast.

Lummox seemed contented to be home, ready to let bygones be bygones. He never said a word about Chief Dreiser and, if he realized that anyone had tried to harm him, he did not mention it. His naturally sunny disposition displayed itself by wanting to put his head in Johnnie's lap for cuddling. It had been a long time since his head was small enough for this; he merely placed the end of his muzzle on the boy's thigh, carrying the weight himself, while Johnnie stroked his nose with a brickbat.

Johnnie was happy only on one side. With the return of Lummox he felt much better, but he knew that nothing had been settled; presently Chief Dreiser would again try to kill Lummox. What to do about it was an endless ache in his middle.

His mother had added to his unhappiness by raising a loud squawk when she saw "that beast!" returned to the Stuart home. John Thomas had ignored her demands, threats, and orders and had gone ahead stabling his friend and feeding and watering him; after a while she had stormed back into the house, saying that she was going to phone Chief Dreiser. Johnnie bad expected that and was fairly sure that nothing would come of it . . . and nothing did; his mother remained in the house. But Johnnie brooded about it; he had a lifelong habit of getting along with his mother, deferring to her, obeying her. Bucking her was even more distressing to him than it was to her. Every time his father had left (including the time his ship had not come back) he had told Johnnie, "Take care of your mother, son. Don't cause her any trouble."

Well, he had tried . . . he really had! But it was sure that Dad had never expected Mum to try to get rid of Lummox. Mum ought to know better; she had married Dad. knowing that Lummox was part of the package. Well, hadn't she?

Betty would never switch sides like that. Or would she?

'Women were very strange creatures. Maybe he and Lum ought to bach it together and not take chances. He continued to brood until evening, spending his time with the star beast and petting him. Lummie's tumors were another worry. One of them seemed very tender and about to burst; John Thomas wondered if it ought to be lanced? But no one knew any more about it than he did and he did not know.

On top of everything else, here Lummie was ill. . . it was just too much!

He did not go in to dinner. Presently his mother came out with a tray. "I thought you might like to picnic out here with Lummox," she said blandly.

Johnnie looked at her sharply. "Why, thanks, Mum uh, thanks."

"How is Lummie?"

"Uh, he's all right, I guess."

"That's good."

He stared after her as she went in. Mum angry was bad enough, but Mum with that secret, catlike look, all sweetness and light, he was even more wary of. Nevertheless he polished off the excellent dinner, not having eaten since breakfast. She came out again a half hour later and said, "Finished, dear?"

"Uh, yes. . . thanks, it was good."

"Thank you, dear. Will you bring the tray in? And come in yourself; there is a Mr. Perkins coming to see you at eight."

"Mr. Perkins? Who's he?" But the door was closing behind her.

He found his mother downstairs, resting and knitting socks. She smiled and said, "Well? How are we now?"

"All right. Say, Mum, who is this Perkins? Why does he want to see me?'

"He phoned this afternoon for an appointment. I told him to come at eight."

"But didn't he say what he wanted?"

"Well. . . perhaps he did, but mother thinks it is better for Mr. Perkins to explain his errand himself."

"Is it about Lummox?"

"Don't cross-examine Mum. You'll know quickly enough."

"But, look here, I. . ."

"We'll say no more about it, do you mind? Take off your shoe, dear. I want to measure for the foot."

Baffled, he started to remove his shoe. Suddenly he stopped. "Mum, I wish you wouldn't knit socks for me.

"What, dear? But mother enjoys doing it for you."

"Yes, but.. . Look, I don't like hand-knit socks. They make creases on the soles of my feet . . . I've showed you often enough!"

"Don't be silly! How could soft wool do your feet any harm? And think what you would have to pay for real wool, real handwork, if you bought it. Most boys would be grateful."

"But I don't like it, I tell you!"

She sighed. "Sometimes, dear, I don't know what to do with you, I really don't." She rolled up her knitting and put it aside. "Go wash your hands. . . yes, and your face, too. . . and comb your hair. Mr. Perkins will be here any moment."

"Say, about this Mr. Perkins. . ."

"Hurry, dear. Don't make things difficult for mother." Mr. Perkins turned out to be pleasant; John Thomas liked him despite his supiscions. After a few polite inanities, with coffee served for ritual hospitality, he came to the point.

He repesented the Exotic Life Laboratory of the Museum of Natural History. As a result of the news picture of Lummox in connection with the story of the trial the beast had come to the attention of the Museum. . . which now wanted to buy him.

'To my surprise," he added, "in searching the files I discovered that on another occasion the Museum attempted to buy this specimen. . . from your grandfather, I believe. The name was the same as yours and the date fitted. Are you any relation to. . ."

"My great great great grandfather. . . sure," John Thomas interrupted. "And it was probably my grandfather they tried to buy Lummox from. But he was not for sale then-and he's not for sale now!"

His mother looked up from knitting and said, "Be reasonable, dear. You are in no position to take that attitude."

John Thomas looked stubborn. Mr. Perkins went on with a warm smile, "I sympathize with your feelings, Mr. Stuart. But our legal department looked into the matter before I came out here and I am familiar with your present problems. Believe me, I'm not here to make them worse; we have a solution that will protect your pet and clear up your troubles."

"I'm not going to sell Lummox," John Thomas persisted.

"Why not? If it turns out to be the only solution?"

"Well. . . because I can't. Even if I wanted to. He wasn't left to me to sell, he was left to me to keep and take care of. He was in this family before I was. . . before my mother was, for that matter." He looked sternly at his mother. "Mum, I don't know what's gotten into you."

She answered quietly, "That will be enough of that, dear. Mother does what is best for you."

Mr. Perkins changed the subject smoothly as John Thomas began to cloud up. "In any case, now that I've come all this way, may I see the creature? I'm terribly interested."

"Uh, I suppose so." Johnnie got up slowly and led the stranger outside.

Mr. Perkins looked up at Lummox, took a deep breath and let it out. "Marvelous!" He walked around him, admiring. "Absolutely marvelous! Unique. . . and the biggest e.-t. specimen I've ever seen. How in the world was he shipped?"

"Why, he's grown some," John Thomas admitted.

"I understand he parrots human speech a bit. Can you coax him to do it?"

"Huh? He doesn't 'parrot'. . . he talks."

"Really?"

"Of course. Hey, Lummie, how are you, boy?"

"I'm all right," Lummox piped. "What does he want?"

"Oh, nothing, nothing. He just wanted to see you." Mr. Perkins stared. "He talks! Mr. Stuart, the laboratory must have this specimen."

"That's out, I told you."

"I'm prepared to go much higher, now that I've seen him. . . and heard him."

John Thomas started to say something rude, checked himself and said instead, "Look, Mr. Perkins, are you married?"

"Why, yes. Why?"

"Any kids?"

"One, a little girl. She's just five." His face softened.

"I'll make you a deal. We'll swap even. No questions asked and each of us does as he likes with his 'specimen.'"

Perkins started to flare up, then suddenly grinned. "Touch,! I'll shut up. But," he went on, "you were taking a chance. One or two of my colleagues would have taken you up. You can't understand what a temptation a specimen like this is to a man of science. Really." He looked longingly at Lummox and added, "Shall we go in?"

Mrs. Stuart looked up as they came in; Mr. Perkins shook his head briefly. They sat down and Mr. Perkins fitted his finger tips together. "Mr. Stuart, you have forbidden me to discuss a possible sale, but if I tell the director of the Lab that I didn't even put the proposition, I will look foolish. Would you let me state what the museum has in mind. . . just for the record?"

"Well. . ." John Thomas frowned. "I guess there's no harm in that."

"Thanks. I must do something to justify my travel expenses. Let me analyze the situation. That creature your friend Lummox. . . or let's say 'our friend Lummox' for I liked him as soon as I saw him. Our friend Lummox is under sentence of death, isn't he? A court order."

"Yes," John Thomas admitted. "But it hasn't been confirmed by the Space Department yet."

"I know. But the police have already made attempts to kill him, without waiting for final approval. Right?"

John started to use bad language, then glanced at his mother and refrained. "The stupid idiots! Anyhow, they can't kill Lummox; they're too dumb."

"I agree with your sentiments. . . privately. That buffoon chief of. police ought to have his commission taken away. Why, he might have destroyed an absolutely unique specimen. Imagine!"

Mrs. Stuart said crisply, "Chief Dreiser is a fine gentleman."

Mr. Perkins turned to her and said, "Mrs. Stuart, I did not mean to cast slurs on a friend of yours. But I stick by my guns; the Chief had no right to take things into his own hands. Such behavior is worse on the part of a public official than it is when done by a lay citizen."

"He had public safety to think about,". she insisted.

"True. Perhaps that is an extenuating circumstance. I take back my remarks. They are off the subject and I did not intend to start an argument."

"I'm glad to hear you did not, Mr. Perkins. Shall we get back to the subject?"

John Thomas felt himself warming a little to the scientist-Mum had slapped Perkins down just the way she did him-and, besides, he liked Lummox. Mr. Perkins continued, "Any time now, tomorrow, or even today, the Department of Spatial Affairs will approve the destruction of Lummox and. . ."

"Maybe they'll turn it down."

"Can you risk Lummox's life on that unjustified hope? The Chief of Police will show up again-and this time he'll kill Lummox."

"No, he won't! He doesn't know how. We'll laugh at him!"

Mr. Perkins shook his head slowly. "That's not your head talking, that's your heart. The Chief will make sure this time. He's been made to look silly; he won't let it happen again. If he can't figure out a sure way himself, he'll get expert advice. Mr. Stuart, any biologist could run a rough analysis on Lummox and tell almost offhand two or three certain ways to kill him. . . kill him quickly and safely. I've already thought of one, just from seeing him."

John Thomas looked at him in alarm. "You won't tell Chief Dreiser?"

"Of course not! I'd be strung up by the thumbs first But there are thousands of others who can advise him. Or he may hit on a method himself. Be sure of this: if you wait until that death sentence is approved, it will be too late. They'll kill Lummox. And that would be a great pity."

John Thomas did not answer. Mr. Perkins added quietly, "You can't oppose the forces of society singlehanded. If you are stubborn you yourself will make certain that Lummox will be killed."

John Thomas pushed his fist hard against his mouth. Then he said almost inaudibly, "What can I do?"

"Much, if you let me help you. First, let me make this clear. If you entrust your pet to us, he will never be harmed in any way. You hear talk about vivisection and such. . . well, forget it. Our object is to put specimens into environments as much like their home planets as possible, then study them. We want them to be healthy and happy, and we go to a lot of trouble to accomplish those ends. Eventually Lummox will die a natural death. . . then we'll mount the hide and skeleton, as a permanent exhibit."

"How would you like to be stuffed and exhibited?" Johnnie asked bitterly.

"Eh?" Perkins looked surprised, then laughed. "It wouldn't bother me at all; I'm leaving my carcass to the medical school of my alma mater. And it won't bother Lummox. The point is to get him out of the clutches of the police. . . so that he can live to a ripe old age."

"Wait a minute. If you buy him, that doesn't get him~ off. They'll still kill him. Won't they?"

"Yes and no. Mostly no. Selling him to the Museum doesn't cancel the order to destroy him, but, believe me, it will never be carried out. I've been coached by our legal department as to what to do. First, we agree on terms and you give me a bill of sale; that gives the Museum legal standing. At once, tonight, I get hold of your local judge and get a temporary order postponing *he execution for a few days; it is definitely within his discretion to postpone it while this new factor of a change in ownership is considered. That's all we need. We can get straight to the Secretary for Spatial Affairs if we need to. . . and I promise you that, once the Museum holds title, Lummox will never be destroyed."*

"You're sure?"

"Sure enough to risk the Museum's money. If I'm wrong, I might be out of a job." Perkins grinned. "But I'm not wrong. Once I have the temporary order and have phoned the Museum to get busy on a permanent order my next step is to settle all the damage. I'll carry cash, enough to do it. . . cash has a convincing effect. That done, we'll have only the Chief of Safety against us. . . and, while he may seem an obstacle to you, he will never be able to stand up against the weight that the Museum can bring to bear, when needed. And everybody lives happily ever after!" Perkins smiled. "Anything wrong with it?"

John Thomas traced out a pattern on the rug with his toe, then looked up. "Look, Mr. Perkins, I know I have to do something to save Lummox. But up to now I haven't seen any way. . . and I guess I haven't had the courage to look the facts in the face."

"Then you'll do it?"

"Just a minute, please! This isn't any good either. Lummie would be miserable with loneliness. He'd never get used to it. It would just be swapping death for life imprisonment. I'm not sure but what he'd rather be dead. . . than to be all alone, with a lot of strangers and them poking him and bothering him and making tests of him. But I can't even ask him what he wants because I'm not sure Lummie understands about death. But he does understand about strangers."

Mr. Perkins chewed his lip and reflected that it was very hard to do this young man a favor. "Mr. Stuart? If you were to go with Lummox, would it make a difference?"

"Huh? How?"

"I think I can promise you a job as an animal handler. . . In fact I have a vacancy in my own department; I could hire you tonight and we could sort the red tape later. After all, there is a real advantage in having an exotic animal cared for by someone who knows his ways."

Before Johnnie could answer his mother said, "No!"

"Eh? What, Mrs. Stuart?"

"Out of the question. Mr. Perkins, I had hoped that you would provide a rational way out of this silly unpleasantness. But I cannot agree to that last suggestion. My son is to go to college. I will not have him waste his life sweeping out that beast's cage. . . like a roustabout! No indeed!"

"Now look here, Mother. . ."

"John Thomas! If you please! The subject is closed."

Mr. Perkins looked from the boy's smoldering face to his mother's set expression. "After all," he said, "that is no business of the Museum. Let me put it this way, Mrs. Stuart. I'll keep that job open for, oh, say six months. . . no, please, Mrs. Stuart! Whether or not your son takes it is your problem. . . and I am sure you don't need my advice. I just want to assure your son that the Museum won't keep him away from his pet. Is that fair?"

Her needles were clicking like machinery. "I suppose so," she admitted.

"Mr. Stuart?"

"Wait a minute. Mother, you don't think I'd. . ."

"Please, Mr. Stuart! The Museum of Natural History has no place in a family discussion. You know our offer. Will you accept?"

Mrs. Stuart interrupted. "I don't believe you mentioned the price, Mr. Perkins."

"Why, so I didn't! Shall we say twenty thousand?"

Net?"

"Net? Oh, no. . . subject to the claims we'll have to settle, of course."

"'Net,' Mr. Perkins," she said firmly.

He shrugged. "Net."

"We accept."

"Good."

"Hey, wait a minute!" protested John Thomas. "We don't either. Not if this other thing isn't settled. I'm not going to turn Lummox over to. . ."

"Quiet! Dear, I've been patient but we'll have no more of this nonsense. Mr. Perkins, he accepts. Do you have the papers with you?"

"We don't either accept!"

"Just a moment," Mr. Perkins appealed. "Ma'am, am I correct in thinking that I must have your son's signature for a valid bill of sale?"

"You'll get it."

"Hmm. Mr. Stuart?"

"I'm not going to sign unless it's settled that Lummox and I stay together."

"Mrs. Stuart?"

"This is ridiculous."

"I think so, too. But there is nothing I can do." Perkins stood up. "Good night, Mr. Stuart. Thanks for letting me speak my piece-and for letting me see Lummox. No, don't get up; I can find the door."

He started to leave, while the Stuarts were busy not looking at each other. He paused at the door. "Mr. Stuart?"

"Huh? Yes, Mr. Perkins?"

"Would you do me a favor? Get as many pictures of Lummox as possible? Color-stereo-motion-sound if you can: I would have a professional crew flown here but there may not be time. You know. It would be a shame indeed if there were not some scientific record left of him. So do what you can." He turned away again.

John Thomas gulped and was up out of his chair. "Mr. Perkins! Hey! Come back."

A few minutes later he found himself, signing a bill of sale. His signature was shaky but legible. "Now Mrs. Stuart," Mr. Perkins said smoothly, "if you will sign underneath, where it says 'Guardian'. . . thanks! Oh yes! I must scratch out that part about 'subject to settlement of claim.' I don't have the cash with me; I got here after the banks had closed, so I'll pass over a nominal sum to bind it and we'll settle the rest before we move the specimen."

"No," said John Thomas.

"Eh?"

"I forgot to tell you. The Museum can settle the claims, since I can't and after all Lummox did it. But I'm not going to take any money. I'd feel like Judas."

His mother said sharply, "John Thomas! I won't let you. . ."

"Better not say it, Mum," he said dangerously. "You know what Dad would have thought."

"Hrrumph!" Mr. Perkins cleared his throat loudly. "I'm going to fill in the usual legal fiction of a nominal sum. I won't stay longer; Judge O'Farrell told me that he goes to bed at ten. Mrs. Stuart, I consider the Museum bound by my offer. Mr. Stuart, I'll leave you to settle with your mother in your own way. Good night all!" He shoved the bill of sale in his pocket and left quickly.

An hour later they were still facing each other wearily and angrily across the living room. John Thomas had let himself be bullied into conceding that his mother could take the money, as long as he was not required to touch it. He had given this in exchange, he thought, for permission to accept the job with Lummox.

But she shook her head. "Quite out of the question. After all, you are about to go to college. You couldn't take that beast along. So you had no reason to expect to keep him with you anyhow."

"Huh? But I thought you had meant to take care of him. . . the way you promised Dad. . .and I would have seen him on week ends."

"Keep your father out of this! I might as well tell you right now that I made up my mind long ago that the day you went away to school this household would cease to be a zoo. This present mix-up has simply moved up the date a few days."

He stared at her, unable to answer.

Presently she came over and put a hand on his shoulder. "Johnnie? Johnnie dear. . ."

"Huh?"

"Look at me, darling. We've had some bitter words and I'm sorry they were ever spoken. . . I'm sure you did not mean them. But Mum has only been thinking of your welfare, you know that? Don't you?"

"Uh, I suppose so."

"That's all Mum ever thinks about. . . what's best for her big boy. You're young, and when a person is young, things seem important that aren't. But as you grow older, you will find that Mum knew best. Don't you see that?"

"Well. . . Mum, about that job. If I could only. . ."

"Please, dear. Mother has a splitting headache. We'll say no more about it now. Get a good night's sleep and tomorrow you'll see things differently." She patted his cheek, bent down and kissed him. "Good night, dear."

"G'night."

He sat there long after she had gone up, trying to figure things out. He knew that he should feel good. . . he'd saved Lummie; hadn't he?

But he did not feel good; he felt like an animal that has chewed a leg off to escape a trap. . . shock and misery, not relief.

At last he got up and went outside to see Lummox.

VIII
The Sensible Thing To Do

John Thomas stayed with Lummox a short time only, as he could not bear to tell him the truth and there was nothing else to talk about. Lummox sensed his distress and asked questions; at last John Thomas pulled himself together and said, "There's nothing wrong I tell you! Shut up and go to sleep. And be darn sure you stay in the yard, or I'll beat you bowlegged."

"Yes, Johnnie. I don't like it outside anyway. People did funny things."

"Just remember that and don't do it again."

"I won't Johnnie. Cross my heart."

John Thomas went in and up to bed. But he did not go to sleep. After a while he got up, dressed in part, and went up to the attic. The house was very old and. had a real garret, reached by a ladder and scuttle hole in an upper hallway closet. Once there had been a proper staircase but it had been squeezed out when the landing flat was built on the roof, as the space had been needed for the lazy lift.

But the attic was still there and it was John Thomas's only private place. His room his mother "tidied" sometimes, even though it was has duty (and wish) to do it himself. Anything might happen when Mum tidied. Papers might be lost, destroyed, or even read, for Mum believed that there should be no secrets between parents and children.

So anything he wanted to keep to himself he kept in the attic; Mum never went there-ladders made her dizzy. He had a small, almost airless and very dirty room there which he was supposed to use only for "storage." Its actual uses were varied: he had raised snakes there some years before; there he kept the small collection of books which every boy comes by but does not discuss with parents; he even had a telephone there, an audio extension run from the usual sound & sight instrument in his bedroom. This last was a practical result of his highschool course in physics and it had been real work to wire it, as it not only had to be rigged when Mum was out of the house and in such a way that she would not notice it but also it had to be done so as not to advertise its presence to the phone company's technicians.

But it worked, jury-rigged though it was, and he had added a "servant" circuit which flashed a warning light if anyone was listening from any other instrument in the house.

Tonight he had no wish to call anyone and it was past the hour when direct messages were permitted at the dormitory where Betty lived. He simply wanted to be alone . . . and to look over some papers he had not looked at in a long time. He fumbled under his work table, flipped a toggle; a panel opened in what appeared to be blank wall. In the cupboard thus exposed were books and papers. He took them out.

One item was a thin-paper notebook, his great grandfather's diary of the Trail Blazer's second voyage of exploration. It was more than a hundred years old and showed the wear of many hands. John Thomas had read it a dozen times; he supposed that his father and his grandfather had done the same. All the pages were fragile, many had been repaired.

He thumbed through it, turned the pages carefully, but browsing rather than reading. His eye lit on one remembered item:

". . . some of the lads are panicky, especially the married men. But they should of thought of it before they signed up. Everybody knows the score now; we burst through and came out somewhere not close to home. Who cares? We meant to travel, didn't we?"

John Thomas turned a few more pages. He had always known the story of the Trail Blazer; it produced in him neither awe nor wonder. One of the first interstellar ships, her crew had plied the profession of discovery with the same acceptance of the unknown that bad marked the golden days of the fifteenth century, when men had braved uncharted seas in wooden vessels. The Trail Blazer and her sisters had gone out the same way, burst through. the Einstein barrier, taken their chances on getting back. John Thomas Stuart VIII had been aboard her that second voyage, had come home in one piece, married, begat a male child, and settled down. . . it was he who had built the landing flat on the roof.

Then one night he had heard the call of the wild goose, signed up again. He had not come back.

John Thomas located the first mention of Lummox:

"This planet is a fair imitation of good old Terra, which is a relief after the last three, since we can hit dirt without suiting up. But evolution must have been playing double-or-nothing here, instead of the four-limbed arrangement considered stylish at home practically everything here has at least eight legs. . . 'mice' that look like centipedes, rabbitlike creatures with six short legs and one pair of tremendous jumping legs, all sorts up to things as big as giraffes. I caught one little fellow (if you can call it that. . . fact is, he came up and crawled into my lap) and I was so taken with him that I am going to try to keep him as a mascot. He puts me in mind of a dachshund puppy, only better engineered. Cristy had the airlock watch, so I was able to get him aboard without turning him over to Biology."

The next day's entry did not mention Lummox, being concerned with a more serious matter:

"We hit the jackpot this time . . . Civilization. The officers are, so excited they are almost off their heads. I've seen one of the dominant race at a distance. The same multi-legged pattern, but otherwise making you wonder what would have happened to Earth if the dinosaurs had made good."

Still further on. . .

"I've been wondering what to feed Cuddle pup. I needn't have worried. He likes everything I've sneaked out of the mess for him. . . but he will eat anything that is not riveted down. Today he ate my Everlasting stylus and it has me worried. I don't suppose the ink cartridge will poison him but how about the metal and plastic? He's just like a baby; everything he can reach goes in his mouth.

"Cuddlepuppy gets cuter every day. The little tyke seems to be trying to talk; he whines at me and I whine back at him. Then he crawls into my lap and tells me that he loves me, plain as anything. I'll be switched if I'll let Biology have him, even if they catch me. Those birds would likely as not cut him up just to see what makes him tick. He trusts me and i'm not going to let him down."

The diary skipped a couple of days; the Trail Blazer had made an emergency raise-ship and Assistant Power man J. T. Stuart had been too busy to write. John Thomas knew why . . . the negotiations opened so hopefully with the dominant race had failed. . . no one knew why.

The captain fled to save his ship and his crew. They had blasted away and had again broken through the Einstein barrier without obtaining from the sentient race the astronomical data they had hoped to get.

There were only a few more entries concerning Lummox-Cuddlepup; John Thomas put the diary aside, finding that reading about Lummox was more than he could stand. He started to put everything back into his hideaway; his hand fell on a small, privately-printed book titled A FEW NOTES ABOUT MY FAMILY. It had been written by his grandfather. John Thomas Stuart IX, and Johnnie's father had brought it up to date before he had gone on his last patrol. It belonged in the family library, beside the massive official biography of John Thomas Stuart VI, but Johnnie had sneaked it upstairs and his mother had never missed it. He knew it as well as he knew the diary, but he started thumbing through it to get his mind off Lummox.

The record started in 1880, with John Thomas Stuart. Who his people had been nobody knew, as he had come from a little Illinois town that kept no birth records in that remote day. He himself had confused the record beyond recovery by running away to sea at fourteen. He had sailed the China trade, lived through beatings and bad food, and eventually had 'swallowed the anchor,' a retired sea captain of the dying age of sail. He had built the old house John Thomas was in.

John Thomas, Junior, had not gone to sea. Instead he had killed himself flying a boxkite affair termed an "aeroplane." That had been before the first of the World Wars; for several years thereafter the house had. received "paying guests."

J. T. Stuart III had died to greater purpose; the submarine of which he was gunnery officer had penetrated Tsushima Straits to the Sea of Japan, but had failed to return.

John Thomas Stuart IV was killed on the first trip to the Moon.

John Thomas V had emigrated to Mars; his son, the famous name in the family, Johnnie skipped over quickly; he had long since grown tired of being reminded that he bore the same name as General Stuart, first governor of the Martian Commonwealth after the revolution. Johnnie wondered what would have happened to his great great great grandfather if the revolution had failed? Would they have hanged him?. . . instead of putting up statues of him?

Much of the book was devoted to an attempt by Johnnie's grandfather to clear the name of his own grandfather-for the son of General Stuart was no public hero; instead he had sweated out his last fifteen years of life in the Triton penal colony. His wife had returned to her family on Earth and taken back her maiden name, for herself and her son.

But her son had gone proudly into court the day he was of age and had had his name changed from "Carlton Gimmidge" to "John Thomas Stuart VIII" It was he who had fetched Lummox back and he had used his bonus money from the second trip of the Trail Blazer to buy back the old homestead. He had apparently impressed on his own son that his son's grandfather had gotten a dirty deal; the son had made a great point of it in this record.

Johnnie's grandfather could himself have used an advocate to defend his name. The record stated simply that John Thomas Stuart IX had resigned from the service and had never gone into space again, but Johnnie knew that it had been a choice of that or a court martial; his own father had told him . . . but he had told him also that his grandfather could have got off scotfree had he been willing to testify. His father had added, "Johnnie, I'd rather see you loyal to your friends than with your chest decked out in medals."

The old man had still been living at the time Johnnie's father told him this. On a later occasion, while Johnnie's father was out on patrol, Johnnie had tried to let him know that he knew.

Granddad had been furious. "Poppycock!" he had shouted. "They had me dead to rights."

"But Dad said your skipper was actually the one who. . ."

"Your Dad wasn't there. Captain Dominic was the finest skipper that ever trod steel. . . may his soul rest in peace. Set up the checkers, son. I'm going to beat you."

Johnnie had tried to get the straight of it after his grandfather died, but his father's answer was not direct. "Your grandfather was a romantic sentimentalist, Johnnie. It's the flaw in our make-up. Hardly sense enough in the whole line to balance a check book." He had puffed his pipe and added, "But we do have fun."

Johnnie put the books and papers away, feeling dully that it had not done him much good to read about his forebears; Lummox was still on his mind. He guessed he ought to go down and try to get some sleep.

He was turning away as the phone flashed; he grabbed it before the light could change to sound signal; he did not want his mother to wake. "Yes?"

"That you, Johnnie?"

"Yeah. I can't see you, Betty; I'm up in the attic."

"That isn't the only reason you can't. I haven't got my face on, so I've got the video switched off. Besides it's pitch dark in this hallway, since I'm not allowed to phone this time o' night. Uh, the Duchess isn't listening, is she?"

Johnnie glanced at his warning signal. "No."

"I'll make this brief. My spies report that Deacon Dreiser got the okay to go ahead."

"No!"

"Yes. Point is, what do we do about it? We can't sit still and let him."

"Uh, I've done something."

"What? Nothing silly, I hope. I shouldn't have been away today."

"Well, a Mr. Perkins. . ."

"Perkins? The chap who went to see Judge O'Farrell tonight?"

"Yes. How did you know?"

"Look, don't waste time. I always know. Tell me your end."

"Well . . ." John Thomas gave a confused report. Betty listened without comment, which made him defensive; he found himself expounding the viewpoints of his mother and of Mr. Perkins, rather than his own. "So that's how it was," he finished lamely.

"So you told them to go climb-a tree? Good, Now here is our next move. If the Museum. can do it, we can do it. It's just a case of getting Grandpa O'Farrell to. . ."

"Betty, you don't understand. I sold Lummox."

"What? You sold Lummox?"

"Yes. I had to. If I didn't. . ."

"You sold Lummox."

"Betty, I couldn't help my. . ."

But she had switched off on him.

He tried to call back, got a recorded voice that said, "This instrument is out of direct service until tomorrow morning at eight. If you wish to record a message stand by for. . ." He switched off.

He sat holding his head and wishing he were dead. The worst of it was, Betty was right. He had let himself be badgered into doing something he knew was wrong, just because it had seemed that there was nothing else he could do.

Betty had not been fooled. Maybe what she wanted to try wasn't any good either. . . but she had known a wrong answer when she heard it.

He sat there, flailing himself but not knowing what to do. The more he thought, the angrier he got. He had let himself be talked into something that wasn't right. . . just because it was reasonable. . . just because it was logical. . . just because it was common sense.

The deuce with common sense! His ancestors hadn't used common sense, any of 'em! 'Who was he to start such a practice?

None of them had ever done the sensible thing. Why, take his great great great grandfather . . . he'd found a situation he hadn't liked and he had turned a whole planet upside down through seven bloody years. Sure, they called him a hero. . . but does starting a revolution come under the head of common sense?

Or take. . . Oh, shucks, take any of 'em! There hadn't been a "good" boy in the bunch. Would granddad have sold Lummox? Why, granddad would have torn down the courthouse with his bare hands. If granddad was here, he'd be standing guard over Lummox with a gun and daring the world to touch one spine.

He certainly wasn't going to take any of Perkins' dirty money; he knew that.

But what could he do?

He could go to Mars. Under the Lafayette Law he was a citizen and could claim land. But how could he get there? Worse, how could he get Lummox there?

The trouble with that, he told himself savagely, is that it almost makes sense. And sense is no use to me.

At last he hit on a plan. It had the one virtue of having no sense to it at all; it was compounded of equal parts of folly and of risk. He felt that granddad would have liked it.

IX

Customs and an Ugly Duckling

He went down to the upper hallway and listened at his mother's door. He did not expect to hear anything as her bedroom was soundproofed; the action was instinctive. Then he returned to his own room and made rapid preparations, starting by dressing in camping clothes and mountain boots. His sleeping bag he kept in a drawer of his desk; he got it out, tucked it in a side pocket of his coat and shoved its power pack in a breast pocket. Other items of hiking and camping gear he distributed among other pockets and he was almost ready to go.

He counted his cash and swore softly; his other assets were in a savings account and now he would have no chance to draw from it. Well, it couldn't be helped. . . he started downstairs, then remembered an important matter. He went back to his desk.

"Dear Mum," he wrote. "Please tell Mr. Perkins that the deal is off. You can use my college money to pay back the insurance people. Lummie and I are going away and it won't do any good to try to find us. I'm sorry but we have to." He looked at the note, decided that there was no more to be said, added "Love," and signed it.

He started a note to Betty, tore it up, tried again, and finally told himself that he would send her a letter when he had more to say. He went downstairs, left the note on the dining table, then went to the pantry and picked out supplies. A few minutes later, carrying a large sack crammed with tins and packages, he went out to Lummox's house.

His friend was asleep. The watchman eye accepted him; Lummox did not stir. John Thomas hauled back and kicked him as hard as possible. "Hey, Lum! Wake up."

The beast opened his other eyes, yawned daintily, and piped, "Hello, Johnnie."

"Pull yourself together. We're going for a hike."

Lummox extended his legs and stood up, letting a ripple run from head to stern. "All right."

"Make me a seat-and leave room for this." Johnnie held up the bag of groceries. Lummox complied without comment; John Thomas chucked the sack up on the beast, then scrambled up himself. Soon they were on the road in front of the Stuart home.

Almost irrational as he was, John Thomas nevertheless knew that running away and hiding Lummox was a project almost impossible; Lummox anywhere would be about as conspicuous as a bass drum in a bathtub. However there was a modicum of method in his madness; concealing Lummox near Westville was not quite the impossibility it would have been some places.

Westville lay in an open mountain valley; immediately west the backbone of the continent shoved its gaunt ridges into the sky. A few miles beyond the city commenced one of the great primitive areas, thousands of square miles of up-and-down country almost the same as it had been when the Indians greeted Columbus. During a short season each year it swarmed with redcoated sportsmen, blazing away at deer and elk and each other; most of the year it was deserted.

If he could get Lummox there without being seen, it was barely possible that they could avoid being caught-until his food supplies ran out. When that time came-well, he might live off the country just as Lummox would. . . eat venison, maybe. Or maybe go back to town without Lummox and argue it out again from the strong position of being able to refuse to tell where Lummox was until they listened to reason. The possibilities were not thought out; he simply intended to get Lummox under cover and then think about it. . . get him somewhere where that old scoundrel Dreiser couldn't try out ways to hurt him!

John Thomas could have turned Lummox to the west and set off across country toward the mountains, Lummox being no more dependent on pavement than is a tank. . . but Lummox left a track in soft earth as conspicuous as that of a tank. It was necessary to. stay on paved road.

Johnnie had a solution in mind. In an earlier century a transcontinental highway had crossed the mountains here, passing south of Westville and winding ever higher toward the Great Divide. It had long since been replaced by a modern powered road which tunneled through the wall of rock instead of climbing it. But the old road remained, abandoned, overgrown in many places, its concrete slabs heaved and tilted from frost and summer heat. . . but still a paved road that would show little sign of Lummox's ponderous progress,

He led Lummox by back ways, avoiding houses and working toward a spot three miles west where the expressway entered the first of its tunnels and the old highway started to climb. Ht did not go quite to the fork, but stopped a hundred yards short, parked Lummox in front of a vacant lot, warned him not to move, and scouted the lay of the land. He did not dare take Lummox onto the expressway to reach the old road; not only might they be seen but also it would be dangerous to Lummox.

But John Thomas found what he thought he remembered: a construction road looping around the junction. It was not paved but was hard-packed granite gravel and he judged that even Lummox's heavy steps would not leave prints. He went back and found Lummox placidly eating a "For Sale" sign. He scolded him and took it away, then decided that he might as well get rid of the evidence and gave it back. They continued while Lummox munched the sign.

Once on the old highway John Thomas relaxed. For the first few miles it was in good repair, for it served homes farther up the canyon. But there was no through traffic, it being a dead end, and no local traffic at this hour. Once or twice an air car passed overhead, party or theater goers returning home, but if the passengers noticed the great beast plodding on the road below they gave no sign.

The road meandered up the canyon and came out on a tableland; here was a barrier across the pavement: ROAD CLOSED. . . VEHICULAR PASSAGE FORBIDDEN BEYOND THIS POINT. Johnnie got down and looked it over. It was a single heavy timber supported at the chest height. "Lummie, can you walk over that without touching it?"

"Sure, Johnnie."

"All right Take it slowly. You mustn't knock it down. Don't even brush against it."

"I won't, Johnnie." Nor did he. Instead of stepping over it as a horse might step over a lower barrier Lummox retracted pairs of legs in succession and flowed over it.

Johnnie crawled under the barrier and joined him. "I didn't know you could do that."

"Neither did I."

The road was rough ahead. Johnnie stopped to lash down the groceries with a line under Lummox's keel, then added a bight across his own thighs. "All right, Lummie. Let's have some speed. But don't gallop; I don't want to fall off."

"Hang on, Johnnie!" Lummox picked up speed, retaining. his normal foot pattern. He rumbled along at a. fast trot, his gait smoothed out by his many legs. Johnnie found that he was very tired, both in body and spirit. He felt safe, now that they were away from houses and traveled roads, and fatigue hit him. He leaned back and Lummox adjusted his contours to him. The swaying motion and steady pounding of massive feet had soothing effect. Presently he slept.

Lummox went on surefootedly over the broken slabs, He was using his night sight and there was no danger of stumbling in the dark. He knew that Johnnie was asleep and kept his gait as smooth as possible. But in time he got bored and decided on a nap, too. He had not slept well the nights he had spent away from home. . . always some silliness going on and it had fretted him not to know where Johnnie was. So now he rigged out his guardian eye, closed his others and shifted control over to the secondary brain back in his rump. Lummox proper went to sleep, leaving that minor fraction that never slept to perform the simple tasks of watching for road hazards and of supervising the tireless pounding of his eight great legs.

John Thomas woke as the stars were fading in the morning sky. He stretched his sore muscles and shivered, There were high mountains all around and the road crawled along the side of one, with a sheer drop to a stream far below. He sat up. "Hey, Lummie!"

No answer. He shouted again. This time Lummox answered sleepily, "What's the matter, Johnnie?'

"You've been asleep," he accused.

"You didn't say not to, Johnnie."

"Well.. . all right. Are we on the same road?"

Lummox consulted his alter ego and answered. "Sure. Did you want another road?"

"No. But we've got to get off this one. It's getting light."

"Why?"

John Thomas did not know how to answer that question; trying to explain to Lummox that he was under sentence of death and must hide did not appeal to him. "We have to, that's why. But just keep going now. I'll let you know."

The stream climbed up to meet them; in a mile or so the road lay only a few feet above it. They came to a place where the stream bed widened out into a boulder field, with water only in a central channel. "Whoa!" called out Johnnie.

"Breakfast?" inquired Lummox.

"Not yet. See those rocks down there?"

"I want you to step wide onto those rocks. Don't put your big feet on that soft shoulder dirt. Step from the pavement to the rocks. Get me?

"Don't leave tracks?" Lummox asked doubtfully.

"That's right. If anybody comes along and sees tracks, you'll have to go back downtown again-because they'll follow the tracks and find us. See?" .

"I won't leave any tracks, Johnnie."

Lummox went down onto the dry stream bed like a gargantuan inchworm. The maneuver caused John Thomas to grab for his safety line with one hand and for his supplies with the other. He yelped.

Lummox stopped and said, "You all right, Johnnie?"

"Yes. You just surprised me. Upstream now and stay on the rocks." They followed the stream, found a place to cross, then followed it on the other side. It swung away from the road and soon they were several hundred yards from it. It was now almost broad daylight and John Thomas was beginning to worry about air reconnaissance, even though it was unlikely that the alarm would be out so soon.

Up ahead a grove of lodgepole pines came down to the bank. It seemed dense enough; even if Lummox were not invisible in it, nevertheless holding still he would look like a big, mountain-country boulder. It would have to do; there was no time to pick a better place. "Up the bank and into those trees, Luni, and don't, break the bank down. Step easy."

They entered the grove and stopped; Johnnie dismounted. Lummox tore down a branch of pine and started to eat. It reminded John Thomas that he himself had ,not eaten lately but he was so dead tired that he was not hungry. He wanted to sleep, really sleep not half awake and clutching a safety line.

But he was afraid that if he let Lummox graze while he slept the big stupid lunk would wander into the open and be spotted. "Lummie? Let's take a nap before we have breakfast."

"Why?"

"Well, Johnnie's awful tired. You just lie down here and I'll put my sleeping bag beside you. Then when we wake up, we'll eat."

"Not eat until you wake up?"

"That's it."

"Well. .. all right," Lummox said regretfully.

John Thomas took his sleeping bag out of his picket, flipped the light membrane open, and plugged in the power pack. He set the thermostat and switched it on, then while it heated he inflated the mattress side. The thin mountain air made it heavy work; he stopped with it only partly blown up and peeled off all his clothes. Shivering in the frosty air he slid inside, closed it to a nose hole. "G'night, Lummie."

"G'night, Johnnie."

Mr. Kiku slept badly and was up early. He breakfasted without disturbing his wife and went to the Spatial Affairs hall, arriving while the great building was quiet except for the handful on night duty. Seated at his desk, he tried to think.

His subconscious had been nagging him all night, telling him that he had missed something important. Mr. Kiku had high respect for his subconscious, holding a theory that real thinking was never done at the top of the mind, which he regarded merely as a display window for results arrived at elsewhere, like the "answer" windows in a calculator.

Something young Greenberg had said. . . something about the Rargyllian believing that the Hroshii, with only one ship, were a serious menace to Earth. Mr. Kiku had discounted it as a clumsy attempt by the snake boy to bluff from weakness. Not that it mattered; the negotiation was about over. . . the one remaining detail being to set up permanent relations with the Hroshii.

His subconscious had not thought so.

He leaned to his desk and spoke to the night communications supervisor. "Kiku. Call the Hotel Universal. There's a Dr. Ftaeml there, a Rargyllian. As soon as he orders breakfast I want to talk a him. No, don't wake him, a man is entitled to his rest."

Having done what could be done, he turned to the mind-soothing routine of clearing up accumulated work.

His incoming basket was empty for the first time in some days and the building was beginning to stir when his desk communicator showed a blinking red light.

"Kiku here."

"Sir," the face said anxiously, "on that call to Hotel Universal. Dr. Ftaeml did not order breakfast"

"Sleeping late perhaps. His privilege."

"No, sir. I mean he skipped breakfast. He's on his way to space port."

"How long ago?"

"Five to ten minutes. I just found out."

"Very well." Call space port, tell them not to clear his ship. Make certain that they understand that it has diplomatic clearance and that they must actually do something. . . not just scratch its clearance on the board and go back to sleep. Then reach Dr. Ftaeml himself-my compliments to the Doctor and will he do me the honor of waiting a few minutes to see me? I am on my way to the port"

"Yes, sir!"

"That done, there is a matter of a special efficiency report for you. . . uh, Znedov, is it? Make out the form and grade yourself; I want to see your opinion of yourself."

"Yes, sir."

Mr. Kiku switched off and called Transportation. "Kiku. I am leaving for the space port as quickly as I can reach the roof. Provide a dart and a police escort."

"Yes, sir!"

Mr. Kiku stopped only to tell his secretary where he was going, then stepped into his private lift to the roof.

At the space port Dr. Ftaeml was waiting out on the passengers' promenade, watching the ships and pretending to smoke a cigar. Mr. Kiku came up and bowed. "Good morning, Doctor. It was most gentle of you to wait for me."

The Rargyllian tossed the cigar aside. "The honor is mine, sir. To be attended at the port by a person of your rank and pressing duties. . ." He finished with a shrug which expressed both surprise and pleasure.

"I will not keep you long. But I had promised myself the pleasure of seeing you today and I had not known that you intended to leave."

"My fault, Mr. Under Secretary I had intended to pop up and pop back and then to wait your pleasure this afternoon."

"Good. Well, perhaps by tomorrow I shall be able to present an acceptable solution of this problem."

Ftaeml was plainly surprised. "Successful?"

"I hope so. The data you provided yesterday has given us a new clue."

"Do I understand that you have found the missing Hroshia?"

"Possibly. Do you know the fable of the Ugly Duckling?"

"'Ugly Duckling'?" The Rargyllian seemed to be searching his files. "Yes, I know the idiom."

"Mr. Greenberg, following the clue you provided, has gone to fetch the Ugly Duckling. If by wild chance it turns out to be the swan that we are seeking, then. . ." Mr. Kiku gave a shrug-unconsciously like that of Ftaeml.

The Rargyllian seemed to have trouble believing it. "And is it the. . . 'swan,' Mr. Under Secretary?"

"We will see. Logic says that it must be; probability says that it cannot be."

"Mmmm . .. and may I report this to my clients?'"

"Suppose we wait until I hear from Mr. Greenberg. He has left Capital, to investigate. Can I reach you through the scout ship?"

"Certainly, sir."

"Uh, Doctor.. . there was one more thing."

"Yes, sir?"

"You made an odd remark to. Mr. Greenberg last night supposedly a joke. . . or perhaps an accident. You said something about Earth being 'volatilized'."

For a moment the Rargyllian said nothing. When he did speak he changed the subject "Tell me, sir, in what way does logic state that your 'Ugly Duckling' is a swan?"

Mr. Kiku spoke carefully. "A Terran ship visited a strange planet at the time defined by your data. The dominant race could have been Hroshii; the identification is not exact except as to time. A life form was removed and brought here. This being is still alive after more than one hundred twenty years; Mr. Greenberg has gone to fetch it for identification by your principals."

Dr. Ftaeml said softly, "It must be. I did not believe. it but it must be." He went on, louder and quite cheerfully, "Sir, you have made me happy."

"Indeed?"

"Very. You have also made it possible for me to speak freely."

"You have always been free to speak, Doctor, so far as we were concerned. I do not know what instructions you have from your clients."

"They have placed no check on my tongue. But. . . You are aware, sir, that the customs of a race are implicit in its speech?"

"I have sometimes had cause to suspect so," Mr. Kiku answered dryly.

"To be sure. If you visited a friend in a hospital, knowing him to be dying, knowing that you could not help him, would you speak to him of his doom?"

"No. Not unless he brought up the subject."

"Precisely! Speaking to you and to Mr. Greenberg I was perforce bound by your customs."

"Dr. Ftaeml," Mr. Kiku said slowly, "let us be blunt. Am I to believe that you are convinced that this single foreign ship could do a serious damage to this planet, with its not inconsiderable defenses?"

"I will be blunt, sir. Should the Hroshui eventually conclude that, through the actions of this planet or some member of its culture, their Hroshia had died or was forever lost, Earth would not be damaged; Earth would be destroyed."

"By this one ship?"

"Unassisted."

Mr. Kiku shook his head. "Doctor, I am sure that you are convinced of what you say. I am not. The extent and thoroughness of the defenses of this, the leading planet of the Federation, cannot possibly be known to you. But should they be so foolish they will learn that we have teeth."

Ftaeml looked sorrowful. "In all the many tongues of civilization I find no words to convince you. But believe me. . . anything that you could do against them would be as futile as throwing stones at one of your modern warships."

"We shall see. Or, fortunately, we shall not see. I do not like weapons, Doctor; they are the last resort of faulty diplomacy. Have you spoken to them of the willingness of the Federation to accept them into the Community of Civilizations?"

"I have had grave difficulty in explaining to them the nature of your offer."

"Are they, then, so hopelessly warlike?"

"They are not warlike at all. How can I put it? Are you warlike when you smash. . . strike. . . swat. . . yes, swat a fly? The Hroshii are practically immortal by your standards, and even by mine. They are so nearly invulnerable to all ordinary hazards that they tend to look down. . . how is your idiom? . . . 'Olympian'. they look down on us from Olympian heights. They cannot see any purpose in relations with lesser races; therefore your proposal was not taken seriously, though, believe me, I put it."

"They sound stupid," Kiku answered sourly.

"Not true, sir. They evaluate your race and mine most exactly. They know that any culture possessing star travel has at least some minor skill in the physical arts. They know therefore that you will regard yourselves as powerful. For that reason they are even now contemplating a display of force, to convince you that you must forthwith deliver up their Hroshia. . . they think of this as being like a goad to a draft animal, a sign which he will be able to understand."

"Hmm. . . You know the nature of this demonstration?"

"I do. My trip this morning to their ship is to persuade them to wait They intend to touch lightly the face of your satellite, leave on it an incandescent mark perhaps a thousand miles long, to convince you that they uh. . . 'ain't foolin'."

"I am not impressed. We could order a force of ships and make such a sign ourselves. Not that we would."

"Could you do it with one ship, in a matter of seconds, without fuss, from a distance of a quarter million miles?"

"You think they could?"

"I am sure of it, A minor demonstration. Mr. Under Secretary, there are novae in their part of the sky which were not accidents of nature."

Mr. Kiku hesitated. If it all were true, then such a demonstration might serve his own needs by causing the Hroshul to show their hand. The loss of a few worthless lunar mountains would not matter. . . but it would be difficult to evacuate such an area of even the few who might be in it. "Have you told them that our Moon is inhabited?"

It is not inhabited by their Hroshia, which is all that matters to them."

"Hmm. . . I suppose so. Doctor, could you suggest to them, first, that you may be about to find their Hroshia, and second, that their Hroshia may be somewhere on our satellite, which is why the search has taken so long?"

The Rargyllian simulated a wide human grin. "Sir, I salute you. I shall be happy to convey such a suggestion. I am sure there will be no demonstration of force."

"Good health, Doctor. I'll be in touch with you."

"Your good health, sir."

On his way back Mr. Kiku realized that he had felt not a single twinge in the presence of the medusoid why, the blighter was rather likable, in a horrid way. Dr. Morgan was certainly an adroit hypnotherapist.

His work basket was choked as usual; he put the Hroshii out of mind and worked happily. Late that afternoon communications informed him that they were holding a circuit for Mr. Greenberg. "Put him on," Mr. Kiku said, feeling that at last the pieces were falling into place.

"Boss?" Greenberg began.

"Eh? Yes, Sergei. What the deuce are you, looking upset about?"

"Because I'm wondering how I'm going to like it as a private in the Outer Legion."

"Quit trying to break it gently. What happened?"

"The bird has flown."

"Flown? Where?"

"I wish I knew. The most likely place is a forest preserve west of here."

"Then why are you wasting time telling me? Get in there and find it."

Greenberg sighed. "I knew you would say that. Look, boss, this haystack has over ten million acres in it, tall trees, tall mountains, and no roads. And the local police chief is there ahead of me, with all his own men and half the sheriffs deputies in the state. He's ordered them to kill on sight and has posted a reward for the ship making the kill."

"What?"

"Just what I said. Your authorization to carry out the judgment of the court came through; the cancellation of it got lost. . . how, I don't know. But the acting chief is an old relic with the soul of a file clerk; he points to the order and won't budge. . . he won't even let me call them on police frequency. With our intervention withdrawn I haven't an ounce of authority to force him."

"You are accepting that, I suppose?" Mr. Kiku said bitterly. "Just waiting for it to blow up in your face?"

"Just about. I've got a call in for the mayor-he's out of town.

Another for the governor-he's in a closed grand jury session. And another for the chief forest rangerI think he's out after the reward. As soon as I, switch off I'm going to twist the arm of the acting chief until he sees the light and. . ."

"You should be doing that now."

"I won't dally. I called to suggest that you turn on heat from back there. I need help."

"You'll get it"

"Not just to reach the governor, not just to start a fresh intervention. Even after we reach this wild police chief and persuade him to call off his dogs I'll still need help. Ten million acres of mountains, boss. . . it means men and ships, lots of men, lots of ships. It's no job for one man with a brief case. Besides, I'm going to join the Outer Legion."

"We'll both join," Kiku said glumly. "All right, get on it. Move."

"It's been nice knowing you."

Mr. Kiku switched off, then moved very fast, initiating a fresh departmental intervention, sending an emergency-priority message to the state governor, another to the mayor of Westville, another to the Westville district court. Formal action completed, he sat for a few seconds, bracing himself for what he must do next. . . then went in to tell the Secretary that they must ask for help from the military authorities of the Federation.

X

The Cygnus Decision

When John Thomas woke up he had trouble remembering where he was. The sleeping bag was toasty warm, he felt good, rested but lazy. Gradually the picture of where he was and why he was there built up and he poked his head out. The sun was high and it was pleasantly warm. Lummox was nearby. "Hi, Lummie.

"Hi, Johnnie. You slept a long time. You were noisy, too."

"Was I?" He crawled out and pulled his clothes on, switched off the sleeping bag. He folded it and turned to Lummox-and started. "What's that?"

Near Lummox's head, lying squashed out as if it had been stepped on, was a very dead grizzly bear. . . about a six-hundred-pound male. Blood had gushed from mouth and nostrils, then dried. Lummox glanced at it. "Breakfast," he explained.

John Thomas looked at it with distaste. "Not for me, it's not. Where did you get it?"

"I catched it," Lummox answered and simpered.

"Not 'catched it'. . . 'caught it.'"

"But I did catch it. It tried to get in with you and I catched it."

"Well, all right. Thanks." John Thomas looked at the bear again, turned away and opened his food bag. He selected a can of ham and eggs, twisted off the top, and waited for it to heat.

Lummox took this as a signal that it was now all right for him to breakfast, too, which he did-first the bear, then a couple of small pine trees, a peck or so of gravel for crunchiness, and the empty container of John Thomas's breakfast. They went down to the stream afterwards, with Johnnie going first to search the sky; Lummox washed down his meal with a few hogsheads of clear mountain water. Johnnie knelt and drank, then washed his face and hands and wiped them on his shirt. Lummox asked, "What do we do now, Johnnie? Go for a walk? Catch things, maybe?"

"No," Johnnie denied. "We go back up in those trees and lie low until dark. You've got to pretend you're a rock." He went up the bank, Lummox followed. "Settle down," John Thomas ordered. "I want to look at those bumps."

Lummox did so; it brought the tumors down where his master could inspect them without stretching. Johnnie looked them over with increasing worry. They were larger and seemed to have lumps and bumps inside; Johnnie tried to remember whether such a development was a sign of malignancy. The skin over them had stretched and thinned until it was hardly more than thick leather, not in the least like the rest of Lummox's armor. It was dry and hot to his touch. Johnnie kneaded the left one gently; Lummox pulled away.

"Is it that tender?" Johnnie asked anxiously.

"I can't stand it," Lummox protested. He extended his legs and walked over to a large pine tree, started rubbing the tumor against it.

"Hey!" said Johnnie. "Don't do that! You'll hurt yourself."

"But it itches." Lummox went on scratching.

John Thomas ran to him, intending to be firm. But just as he reached him the tumor split open. He watched in horror.

Something dark and wet and writhing emerged, caught on the ruptured skin, held there inchoate, then burst free to dangle and flop like a jungle snake from a branch. For an agonized moment all that Johnnie could think was that it was indeed something like that some giant, parasitic worm eating its way out of its unlucky host. He thought with dumb self-blame that he had forced Lummie to climb over the mountains when he was sick to death with that.

Lummox sighed and wiggled. "Gee!" he said with satisfaction. "That feels better!"

"Lummox! Are you all right?"

"Huh? Why shouldn't I be, Johnnie?"

"Why? Why, that!"

"What?" Lummox looked around; the strange growth bent forward and he glanced at it. "Oh, that. . ." he answered, dismissing the matter.

The end of the thing opened out like a blossoming flower. . . and Johnnie realized at last what it was.

Lummox had grown an arm.

The arm dried rapidly, lightened in color and seemed to firm. Lummox did not have much control over it yet, but John Thomas could begin to see its final form. It had two elbows, a distinct hand with thumbs on each side. There were five fingers, seven digits in all, and the middle finger was longer and fully flexible, like an elephant's trunk. The hand did not resemble a human hand much but there was no doubt that it was at least as useful-or would become so; at the moment the digits wiggled aimlessly.

Lummox let him examine it, but did not himself seem especially interested in the development; Lummox acted as if it were something he always did right after breakfast.

Johnnie said, "Let me have a look at the other bump," and walked around Lummox. The rightside tumor was still more bloated. When John Thomas touched it Lummox shrugged away and turned as if to rub it against the tree. "Hold it!' Johnnie called out. "Stand still."

"I've got to scratch."

"You might lame yourself for life. Hold still, I want to try something." Lummox sulkily complied; Johnnie took out his belt knife and gently nicked the center of the swelling.

The nick spread and Lummox's right arm came out almost in Johnnie's face. He jumped back.

"Thanks, Johnnie!"

"Any time, any time." He sheathed the knife and stared at the newborn arms, his face thoughtful.

He could not figure all the implications of Lummox's unexpected acquisition of hands. But he did realize that it was going to change things a lot. In what way, he did not know. Perhaps Lummie would not need so much care after this. On the other hand he might have to be watched or he would be forever getting into things he shouldn't. He remembered uneasily someone saying what a blessing it was cats did not have hands well, Lummie had more curiosity than any cat.

But he felt without knowing why that such things were side issues; this was important.

In any case, he decided fiercely, this doesn't change one thing: Chief Dreiser isn't going to get another crack at him!

He searched the sky through the branches and wondered if they could be spotted. "Lum. . ."

"Yes, Johnnie?"

"Haul in your legs. It's time to play like a rock."

"Aw, let's go for a walk, Johnnie."

"We'll go for a walk tonight. But until it gets dark I want you to stay put and hold still."

"Aw, Johnnie!"

"Look, you don't want to go downtown again, do you? All right, then, quit arguing."

"Well, if you feel that way about it." Lummox settled to the ground. John Thomas sat down, leaned against him, and thought.

Maybe there was a way in this for Lummie and him to make a living. . . in a carnival or something. E.-t.s were big stuff in carnivals; they couldn't run without them-even though half of them were fakes-and Lummie wasn't a fake. Probably he could learn to do tricks with his hands, play something or something. Maybe a circus was still better.

No, that wasn't the thing for Lummie; crowds made him nervous. Uh, what could the two of them do to make a living?. . . after this, mess with the authorities was straightened out, of course. A farm, maybe? Lummie would be better than a tractor and with hands he would be a farm hand, too. Maybe that was the ticket, even though he had never thought about farming.

In his mind's eye he saw himself and Lummox growing great fields of grain. . . and hay. . . and vegetables and. . . unaware that he had fallen asleep.

He was awakened by a cracking noise and knew vaguely that he had heard several of them. He opened his eyes, looked around and found that he was lying beside Lummox. The creature had not left the spot. . . but he was moving his arms. One arm flailed past Lummox's head, there was a blur and another crack. . . and a small aspen some distance away suddenly came down. Several others were down near it.

John Thomas scrambled to his feet. "Hey, stop that!"

Lummox stopped. "What's the matter, Johnnie?" he asked in a hurt voice. There was a pile of rocks in front of him; he was just reaching for one.

"Don't throw rocks at trees."

"But you do, Johnnie."

"Yes, but I don't ruin them. It's all right to eat trees, but don't just spoil them."

"I'll eat them. I was going to."

"All right." Johnnie looked around. It was dusk, they could start again in a few minutes. "Go ahead and have them for supper. Here, wait a minute." He examined Lummox's arms. They were the same color as the rest of him, and beginning to get armor hard. But the most striking change was that they were twice as thick as they had been at first-as big around as Johnnie's thighs. Most of the loose hide had sloughed off; Johnnie found that he could tear off the rest. "Okay. Chow time."

Lummox finished the aspens in the time it took John Thomas to prepare and eat his simple meal, and was ready to eat the empty container as a sweet. It was dark by then; they took to the road.

The second night was even less eventful than the first. It grew steadily colder as they wound even higher; presently Johnnie plugged the power pack of his sleeping bag into his suit. Shortly he was warm and drowsy. "Lum-if I go to sleep, call me when it starts to get light."

"Okay, Johnnie." Lummox stored the order in his after brain, just in case. Cold did not bother him, he was not conscious of it, as his body thermostat was more efficient than was Johnnie's-even more efficient than the one controlling the power pack.

John Thomas dozed and woke up and dozed. He was dozing when Lummox called him, just as the first rays brushed distant peaks. Johnnie sat up and began watching for a place to pull out and hide. Luck was against him; it was straight up on one side and the other side swung over a deep, dismal drop. As minutes wore away and it turned broad daylight he began to get panicky.

But there was nothing to do but plod ahead.

A stratoship passed in the distance. He could hear the thunderclap, but he could not see it; he could only hope that it was not scanning for him. A few minutes later, while searching all around, he spotted behind them a dot that he hoped was an eagle.

Very soon he was forced to admit that it was a single human in a flight harness. "Stop, Lummox! Pull over to the wall. You're a landslide."

"A landslide, Johnnie?"

"Shut up and do it!" Lummox shut up and did it. John Thomas slid down and hid behind Lummox's head, making himself small. He waited for the flier to pass over.

The flier did not pass, but swooped in a familiar shoot-the-works style and came in for a landing. Johnnie sighed with relief as Betty Sorenson landed on the spot he had just vacated. She called out, "Howdy, Lummie," then turned to Johnnie, put her hands on her hips and said, "Well! Aren't you a pretty sight! Running off without telling me!"

"Uh, I meant to, Slugger, I really did. But I didn't have a chance to. . . I'm sorry."

She dropped her fierce expression and smiled. "Never mind. I think better of you than I have in some time. At least you did something.

Johnnie, I was afraid you were just a big lummox yourself-pushed around by anybody."

John Thomas decided not to argue, being too pleased to see her to take offense. "Uh. . . well, anyway, how did you manage to spot us?"

"Huh? Knothead, you've been gone two nights and you are still only a short flight from town. . . how could you expect not to be spotted?"

"Yes, but how did you know where to look?"

She shrugged. "The old rule: I thought like a mule and went where the mule would. I knew you would be along this road, so I started out at barely 'can-see' and swooped along it. And if you don't want to be caught in the next few minutes we had better boost out of here and get under cover. Come on! Lummie old boy, start your engines."

She put down a hand and Johnnie swung aboard; the procession started up. "I've been trying to get off the road," Johnnie explained nervously, "but we haven't come to a spot."

"I see. Well, hold your breath, 'cause around this bend is Adam-and-Eve Falls and we can get off the road just above them."

"Oh, is that where we are?"

"Yes." Betty leaned forward in a futile attempt to see around a rock shoulder ahead. So doing, she caught her first glimpse of Lummox's arms. She grabbed John Thomas. "Johnnie! There's a boa constrictor on Lummie!"

"What? Don't be silly. That's just his right arm."

"His what? Johnnie, you're ill."

"Level off and quit grabbing me. I said 'arms'-those tumor things were arms."

"The tumors. . . were arms?" She sighed. "I got up too early and I haven't had breakfast. I can't take shocks like that. All right, tell him to stop. I got to see this."

"How about getting under cover?"

"Oh. Yes, you're right You're usually right, Johnnie-two or three weeks late."

"Don't strain yourself. There are the falls." They passed the falls; the floor of the canyon thereby came up to meet them. John Thomas took the first chance to get off the road, a spot like their bivouac of the day before. He felt much better to have Lummox back under thick trees again. While he prepared breakfast, Betty examined Lummox's brand-new arms.

"Lummox," she said reprovingly, "you didn't tell mama about this."

"You didn't ask me," he objected.

"Excuses, always excuses. Well, what can you do with them?"

"I can throw rocks. Johnnie, is it all right?"

"No!" John Thomas said hastily. "Betty, how do you want your coffee?"

"Just barefooted," she answered absently and went on inspecting the limbs. There was a notion hovering in her mind about them, but it would not light . which annoyed her, as she expected her mind to work for her with the humming precision of a calculator and no nonsense, please! Oh, well. . . breakfast first.

After they had fed the dirty dishes to Lummox, Betty lounged back and said to John Thomas, "Problem child, have you any idea what a storm you have stirred up?"

"Uh, I guess I've got Chief Dreiser's goat."

"No doubt and correct. But you might as well turn it loose; there won't be room in the pen."

"Mr. Perkins?"

"Right. Keep trying."

"Mum, of course."

"Of course. She alternates between weeping for her lost baby and announcing that you are no son of hers?'

"Yeah. I know Mum," he admitted uneasily. "Well, I don't care. . . I knew they'd all be sore at me. But I had to."

"Of course you had to, Knothead darling, even though you did it with the eager grace of a hippopotamus. But I don't mean them."

"Huh?"

"Johnnie, there is a little town in Georgia named Adrian. It's too small to have a regular safety force, just a constable. Do you happen to know that constable's name?"

"Huh? Of course not."

"Too bad. For as near as I was able to find out, that constable is the only cop who isn't looking for you, which is why I rallied around-even though you, you dirty name, ran off without bothering to alert me."

"I told you I was sorry!"

"And I forgave you. I'll let you forget it in ten years or so."

"What's this nonsense about this constable? And why should everybody be out after me? Aside from Chief Dreiser, I mean?"

"Because he has put out a general alarm and offered a reward for Lummie, alive or dead. . . preferably dead. They are serious about it, Johnnie. . . terribly serious. So whatever plan you had we now junk and shift to a good one. What did you have in mind? Or did you?"

John Thomas turned pale and answered slowly, "Well. . . I meant to keep on like this for a night or two, until we reached a place to hide."

She shook her head. "No good. In their stumbling official way they will have concluded by now that this is where you would head. . . since it is the only place near Westville where a creature the size of Lummox could possibly hide. And. . ."

"Oh, we'd get off the road!"

"Of course. And they will search this forest tree by tree. They really mean it, chum."

"You didn't let me finish. You know that old uranium mine? The Power and Glory? You go over Dead Wolf Pass and then take off north on a gravel road. That's where we're heading. I can put Lummox completely out of sight there; the main tunnel is big enough."

"Flashes of sense in that. But not good enough for what you are up against"

She was silent. Johnnie stirred uneasily and said, "Well? If that's no good, what do we do?"

"Pipe down. I'm thinking." She lay still, staring up at the deep blue mountain sky. At last she said, "You didn't solve anything by running away."

"No. . . but I sure mixed it up."

"Yes, and so far so good. Everything ought to be turned upside down occasionally; it lets in air and light. But now we've got to see that the pieces fall back where we want them. To do that we've got to gain time. Your notion of the Power and Glory Mine isn't too bad; it will do until I can make better arrangements."

"I don't see why they would ever find him there. It's about as lonely as you can get."

"Which is why it is sure to be searched. Oh, it might fool Deacon Dreiser; I doubt he could find his own hat without a search warrant. But he's dug up an air posse the size of a small army; they are certain to find you. You took your sleeping bag and food; therefore you are camping out. I found you, they will find you. I did it by knowing what makes you tick, whereas they have to work by logic, which is slower. But just as certain. They'll find you. . . and that's the end of Lummox. They won't take chances. . . bomb him, probably."

John Thomas considered the dismal prospect. "Then what's the sense of hiding him in the mine?"

"Just to gain a day or so, because I'm not ready to take him out yet."

"Huh?"

"Of course. We'll hide him in town."

"What? Slugger, the altitude has got you."

"In town and under cover. . . because it is the only place in the wide, wide world they won't look for him." She added, "Maybe in Mr. Ito's greenhouses."

"Huh? Now I know you're crazy."

"Can you think of a safer place? Mr. Ito's son is not hard to reason with; I had a nice talk with him just yesterday. I stood short and looked up at him and let him explain things. One of his greenhouses would be perfect. . . snug, maybe, but this is an emergency. You can't see through that milky glass they are built out of and nobody would dream that Lummie might be inside."

"I don't see how you can do it."

"You let me handle it. If I don't get the greenhouse. . . but I will! . . . then I'll get an empty warehouse or something. We'll put Lummie in the mine tonight, then I'll fly back and arrange things. Tomorrow night Lummie and I will go back to town and. . ."

"Huh? It took us two nights to get this far-and it will take us most of tonight to get to the mine. You can't ride him back in one night."

"How fast can he go when he tries?"

"But nobody can ride him when he gallops. Not even me."

"I won't ride him; I'll fly over him, pacing him and making him slow down for curves. Three hours, maybe?. . . and another hour to sneak him into the greenhouse."

"Well. . . maybe it would work."

"It will because it's got to. Then you get caught"

"Huh? Why don't I just go home?"

"No, that would be a giveaway. They catch you, you've been doing amateur uranium prospecting. I'll fetch out a radiation counter. You don't know where Lummox is; you kissed him goodbye and turned him loose, then came up here to forget your sorrows. You'll have to be convincing. . . and don't let them use a truth meter."

"Yes, but. . . Look, Slugger, what's the good? Lummie can't stay in a greenhouse forever."

"We're simply buying time. They are ready to kill him on sight. . . and they will. So we keep him out of sight until we can change that."

"I suppose I should have gone through with the sale to the Museum," John Thomas answered miserably.

"No! Your instincts are sound, Johnnie, even though you've got less brains than a door knob. Look. . . do you remember the Cygnus Decision?"

The Cygnus Decision? We had it in elementary Customs of Civilization?"

"Yes. Quote it."

"What is this? A mid-semester quiz?" John Thomas frowned and dug into his memory. " 'Beings possessed of speech and manipulation must be presumed to be sentient and therefore to have innate human rights, unless conclusively proved otherwise.' " He sat up. "Hey! They can't kill Lummox-he's got hands!"

XI

"Mind your air speed," she cautioned. "Do you know the old one about the man whose lawyer assured him that they could not put him in jail for that?"

"What was 'that'?"

"Never mind. His client answered, 'But, counsellor, I'm speaking from the jail.' Point is, the Cygnus Decision is just theory; we've got to keep Lummox out of sight until we can get the court to change its mind."

"Unh, I see. I guess you're right."

"I'm always right," Betty admitted with dignity. "Johnnie, I'm dying of thirst; thinking is dry work. Did you bring any water up from the creek?"

"No, I didn't."

"Got a bucket?"

"Yeah, somewhere." He felt in his pockets, found it and pulled it out. He stopped to blow it up to semi-rigidity, then said, "I'll fetch it."

"No, give it to me. I want to stretch my legs."

"'Ware fliers!"

"Don't teach your grandmother." She took it and went down hill, keeping to the trees until she reached the bank. Johnnie watched her slim figure catching shafts of cathedral light among the pines and thought how pretty she was. . . very nearly as good a head on her as a man and pretty to boot. Aside from being bossy the way females always were, Slugger was all right.

She came back carrying the plastic bucket carefully.

"Help yourself," she offered.

"Go ahead."

"I drank from the creek."

"All right" He drank deeply. "You know, Betty, if you weren't knock-kneed, you'd be pretty good-looking."

"Who's knock-kneed?"

"And there's always your face, of course," he went on pleasantly. "Aside from those two shortcomings you're not-"

He did not finish-she dived and hit him low. The water went all down his front and partly on her. The scuffle continued until he got her right arm locked up behind her, holding her helpless. "Say 'Pretty please'," he advised.

"Darn you, Johnnie Stuart! 'Pretty please.'"

"With sugar on it?"

"With sugar on it-and spit, too. Let me up."

"All right."

He got to his feet. She rolled to a sitting position, looked up at him and laughed. They were both dirty, scratched, and somewhat bruised and they both felt very fine indeed. Lummox had watched the mock fight with interest but-no alarm, since Johnnie and Betty could never really be mad at each other. He commented, "Johnnie's all wet."

"He certainly is, Lummie-more ways than one." She looked him over. "If I had two clothes pins, I'd hang you on a tree. By your ears, of course."

We'll be dry in five minutes, a day like this."

"I'm not wet, not through a flying suit. But you look like a dunked cat."

"I don't mind." He lay down, found a pine needle and bit it. "Slugger, this is a swell place. I wish I didn't have to go on up to the mine."

"Tell you what-after we get this mess straightened out and before we start school, we'll come back up here and camp a few days. We'll bring Lummox, too-won't we, Lummie?"

"Sure," agreed Lummox. "Catch things. Throw rocks. Fun."

John Thomas looked at her reprovingly. "And get me talked about all over town? No, thanks."

"Don't be prissy. We're here now, aren't we?"

"This is an emergency."

"You and your nice-nice reputation!"

"Well, somebody ought to watch such things. Mum says that boys had to start worrying when girls quit. She says things used to be different"

"Of course they were-and they will be again. They run the whole program over and over again." She looked thoughtful. "But, Johnnie, you pay too much attention to what your mother says."

"I suppose so," he admitted.

"You had better break yourself of it. Otherwise no girl is going to take a chance on marrying you."

He grinned. "That's my insurance policy."

She dropped her eyes and blushed. "I wasn't speaking for myself! I don't want you-I'm just taking care of you for practice."

He decided not to pursue that angle. "Honestly," he said, "a person gets in the habit of behaving a certain way and it's hard to stop. For instance, I've got an aunt-my Aunt Tessie, remember her? -who believes in astrology."

"No! She doesn't!"

"Surest thing. She doesn't look nutty, does she? But she is and it's embarrassing because she will talk about it and mother insists that I have to be polite. If I could just tell her she has holes in her head, it wouldn't matter. But oh no! I have to listen to her rave and pretend that she's a sane, responsible adult-when she can't count above ten without an abacus."

"An 'abacus'?"

"You know-a slipstick with beads. I said 'abacus' because there isn't a prayer that she could ever learn to read a slipstick. She likes being a lame brain-and I have to cater to it."

"Don't do it," Betty said suddenly. "Pay no attention to what your mother says."

"Slugger, you are a subversive influence."

"Sorry, Johnnie," she answered mildly. She added, "Did I ever tell you why I divorced my parents?"

"No, you never did. That's your business."

"So it is. But I think I'll tell you, you might understand me better. Bend down." She grabbed him by an ear, whispered into it.

As John Thomas listened he took on an expression of extreme surprise. "Not really?"

"Fact. They didn't contest it so I never had to tell anyone. But that's why."

"I don't see how you put up with it."

"I didn't I stood up in court and divorced them and got a professional guardian who doesn't have nutty ideas. But look, Johnnie, I didn't bare my soul just to make your chin drop. Heredity isn't everything; I'm myself, an individual. You aren't your parents. You're not your father, you are not your mother. But you are a little late realizing it." She sat up straight. "So be yourself, Knothead, and have the courage to make your own mess of your life. Don't imitate somebody else's mess."

"Slugger, when you talk that stuff, you make it sound rational."

"That's because I'm always rational. How well fixed are you for groceries? I'm hungry."

"You're as bad as Lummox. The grub sack is over there."

"Lunch?" inquired Lummox, hearing his name.

"Umm. . . Betty, I don't want him tearing down trees, not in daylight. How long will it take them to track me down?"

"I wouldn't count on over three days, big as this place is."

"Well. . . I'll hold back food for five, just in case." He selected a dozen canned rations and gave them to Lummox. He did not open them as Lummox rather liked having the packages suddenly become hot when he bit into them. He finished them off before Betty had their own lunches opened.

After they ate Johnnie started to bring up the subject again. "Betty, do you really think that-" He broke off suddenly. "Hear anything?"

She listened, then nodded solemnly.

"How fast?"

"Not over two hundred."

He nodded. "Then they are scanning. Lummox! Don't move a muscle!"

"I won't, Johnnie. Why not move a muscle?"

"Do it!"

"Don't get excited," Betty advised. "They are probably just laying out their search pattern. Chances are they couldn't identify us either in the scope or visually with these trees to break up the image." But she looked worried. "I wish Lummie were already in the mine tunnel, though. If anyone is smart enough to run a selective scan straight down that road while we're on it tonight. . . well, we've had it."

John Thomas was not really listening. He was leaning forward, cupping his ears with both hands. "Hush!" he whispered, "Betty-they're coming back!"

"Don't panic. It's probably the other leg of the search pattern."

But even as she said it she knew that she was wrong. The sound came over them, hovered and dropped in pitch. They looked up, but the denseness of the forest and the altitude of the craft kept them from seeing it.

Suddenly there was a light so bright that it made the sharp sunlight seem dusky when it passed. Betty gulped. "What was that?"

"Ultraflash photo," he answered soberly. "They're checking what they picked up on the scope."

The sound above them squealed higher, then dropped; the eyeburning flash occurred again. "Stereoed it," Johnnie announced solemnly. "They'll really see us now, if they only suspected before."

"Johnnie, we've got to get Lummox out of here!"

"How? Take him up on the road and let them pinpoint him with bomb? No, kid, our only hope now is that they decide he is a big boulder-I'm glad I made him stay tucked in." He added, "We mustn't move, either. They may go away."

Even that outside hope passed. One after another, four more ships were heard. Johnnie ticked them off. "That one has taken station to the south. The third one was north, I think. Now they'll cover to the west. . . a pinwheel guard. They've got us boxed, Slugger." She looked at him, her face dead white. "What do we do, Johnnie?"

"Huh? Why, noth-No, Betty look. You duck down through the trees to the creek. Take your flight harness with you. Then follow the stream a good distance and take to the air. Keep low until you get out from under their umbrella. They'll let you go-they don't want you."

"And what will you be doing?"

"Me? I stay here."

"And so do I."

Johnnie said fretfully, "Don't make me any trouble, Slugger. You'd just be in the way."

"What do you think you can do? You don't even have a gun."

"I have this," John Thomas answered grimly, touching his sheath knife, "-and Lummox can throw rocks."

She stared at him, then laughed wildly. "What? Rocks indeed! Oh, Johnnie-"

"They're not going to take us without a fight. Now will you get out of here-fast!-and quit being a nuisance?"

"No!"

"Look, Slugger, there isn't time to argue. You get clear and fast. I stay with Lummox; that's my privilege. He's mine."

She burst into tears. "And you're mine, you big stupid oaf."

He tried to answer her and could not. His face began to break in the spasmodic movements of a man trying to control tears. Lummox stirred uneasily. "What's the matter, Johnnie?" he piped.

"Huh?" John Thomas replied in a choked voice. "Nothing." He reached up and patted his friend. "Nothing at all, old fellow. Johnnie's here. It's all right."

"All right, Johnnie."

"Yes," agreed Betty faintly. "It's all right, Lummie." She added in a low voice to John Thomas. "It'll be quick, won't it, Johnnie? We won't feel it?"

"Uh, I guess so! Hey! None of that-in just one half second I'm going to punch you right on the button and then dump you off the bank. That ought to protect you from the blast."

She shook her head slowly, without anger nor fear. "It's too late, Johnnie. You know it is. Don't scold me-just hold my hand."

"But-" He stopped. "Hear that?"

"More of them."

"Yeah. They're probably building an octagon. . . to make sure we don't get out."

A sudden thunderclap spared her the need to answer. It was followed by the squeal of a hovering ship; this time they could see it, less than a thousand feet over their heads. Then an iron voice rumbled out of the sky. "Stuart! John Stuart! Come out in the open!"

Jobnnie took out his sheath knife, threw back his head and shouted, "Come and get me!"

Betty looked up at him, her face shining, and patted his sleeve. "Tell 'em, Johnnie!" she whispered. "That's my Johnnie."

The man behind the giant voice seemed to have a directional mike trained on him; he was answered: "We don't want you and we don't want to hurt anybody. Give up and come out."

He threw back a one-word defiance and added, "We aren't coming out!"

The thundering voice went on, "Final warning, John Stuart. Come out with your hands empty. We'll send a ship down for you."

John Thomas shouted back, "Send it down and we'll wreck it!" He added hoarsely to Lummox, "Got some rocks, Lummie?"

"Huh? Sure! Now, Johnnie?"

"Not yet. I'll tell you."

The voice remained silent; no ship came down to them. Instead a ship other than the command ship dropped swiftly, squatted a hundred feet above the pines and about the same distance from them laterally. It started a slow circle around them, almost a crawl.

Immediately there was a rending sound, then a crash as a forest giant toppled to the ground. Another followed at once. Like a great invisible hand a drag field from the ship knocked over trees and swept them aside. Slowly it cut a wide firebreak around them. "Why are they doing that?" Betty whispered.

"It's a forestry service ship. They're cutting us off."

"But why? Why don't they just do it and get it over with?" She began to shake, he put an arm around her.

"I don't know, Slugger. They're driving."

The ship closed the circle, then faced them and seemed to settle back on its haunches. With the delicate care of a dentist pulling a tooth the operator reached in, selected one tree, plucked it out of the ground, and tossed it aside. He picked another and still another. Gradually a wide path was being cut through the timber to the spot where they waited.

And there was nothing to do but wait. The ranger's ship removed the last tree that shielded them; the tractor field brushed them as he claimed it, making them stagger and causing Lummox to squeal with terror. John Thomas recovered himself and slapped the beast's side. "Steady, boy. Johnnie is here."

He thought about having them retreat back from the clearing now in front of them, but there seemed no use in it.

The logging ship lay off; an attack ship moved in. It dropped suddenly and touched ground at the end of the corridor. Johnnie gulped and said, "Now, Lummox. Anything that comes out of that ship-see if you can hit it."

"You bet, Johnnie!" Lummox reached with both hands for ammunition.

But he never picked up the rocks. John Thomas felt as if he had been dumped into wet concrete up to his chest; Betty gasped and Lummox squealed. Then he piped, "Johnnie! The rocks are stuck!"

John Thomas labored to speak. "It's all right, boy, Don't struggle. Just hold still. Betty, you all right?"

"Can't breathe!" she gasped.

"Don't fight it. They've got us."

Eight figures poured out of the door of the ship. They looked not human, being covered head to foot with heavy metal mesh. Each wore a helmet resembling a fencer's mask and carried as a back pack a field antigenerator. They trotted confidently in open double file toward the passage through the trees; as they struck the field they slowed slightly, sparks flew, and a violet nimbus formed around each. But on they came.

The second four were carrying a large metal-net cylinder, high as a man and of equal width. They balanced it easily up in the air. The man in the lead called out, "Swing wide of the beast. We'll get the kids out first, then dispose of him." He sounded quite cheerful.

The squad came up to the odd group of three, cutting around without passing close to Lummox. "Easy! Catch them both," the leader called out. The barrellike cage was lowered over Betty and John Thomas, setting slowly until the man giving orders reached inside and flipped a switch-whereupon it struck sparks and dropped to the ground.

He gave them a red-faced grin. "Feels good to get the molasses off you, doesn't it?"

Johnnie glared at him with his chin quivering, and replied insultingly while he tried to rub cramps out of his leg muscles. "Now, now!" the officer answered mildly. "No good to feel that way. You made us do it." He glanced up at Lummox. "Good grief! He is a big beast, isn't he? I'd hate to meet him in a dark alley, without weapons."

Johnnie found that tears were streaming down his face and that he could not stop them. "Go ahead!" he cried, his voice misbehaving. "Get it over with!"

"He never meant any harm! So kill him quickly . . . don't play cat-and-mouse with him." He broke down and sobbed, covering his face with his hands. Betty put her hands on his shoulders and sobbed with him.

The officer looked distressed. "What are you talking about, son? We aren't here to hurt him. We have orders to bring him in without a scratch on him-even if we lost men in the process. Craziest orders I ever had to carry out.

XII
Concerning PidgieWidgie

Mr. Kiku was feeling good. Breakfast was not a burning lump in his middle; he felt no need to shop in his pill drawer, nor even a temptation to get out his real estate folders. The Triangular Conference was going well and the Martian delegates were beginning to talk sense. Ignoring the various amber lights on his desk he began singing: "Frankie and Johnnie were lovers. . . and oh boy how they could love. . . swore to be true to each other. . ."

He had a fair baritone voice and no sense of pitch.

Best of all that silly, confused Hroshian affair was almost over. . . and no bones broken. Good old Doc Ftaeml seemed to think that there was an outside chance of establishing diplomatic relations, so delighted the Hroshii had been at recovering their missing Hroshia.

With a race as powerful as the Hroshii diplomatic relations were essential. . . they must be allies, though that might take a while. Perhaps not too long, he decided; they certainly did nip-ups at the sight of Lummox. . . almost idolatrous.

Looking back, the things that had confused them were obvious. Who would have guessed that a creature half as big as a house and over a century old was a baby? Or that this race attained hands only when old enough to use them? For that matter, why was this Hroshia so much bigger than its co-racials? Its size had misled Greenberg and himself as much as anything. Interesting point. . . he'd have the xenologists look into it.

No matter. By now Lummox was on his. . . her way to the Hroshian ship. No fuss, no ceremony, no publicity, and the danger was over. Could they actually have volatilized Terra? Just as well not to have found out. All's well that ends well. He went back to singing.

He was still singing when the "urgent" light began jittering and he delivered the last few bars into Greenberg's face: ". . . just as true as the stars above!" He added. "Sergei, can you sing tenor?"

"Why should you care, boss? That wasn't a tune."

"You're jealous. What do you want, son? See them off okay?"

"Unh, boss, there's a slight hitch. I've got Dr. Ftaeml with me. Can we see you?"

"What is it?"

"Let's wait until we are alone. One of the conference rooms?"

"Come into the office," Mr. Kiku said grimly. He switched off, opened a drawer, selected a pill and took it.

Greenberg and the medusoid came in at once: Greenberg flopped down in a chair as if exhausted, pulled out a cigarette, felt in his pockets, then put it away. Mr. Kiku greeted Dr. Ftaeml formally, then said to Greenberg, "Well?"

"Lummox didn't leave."

"Lummox refused to leave. The other Hroshii are boiling like ants. I've kept the barricades up and that part of the space port around their landing craft blocked off. We've got to do something."

"Why? This development is startling, but I fail to see that it's our responsibility. Why the refusal to embark?"

"Well. . ." Greenberg looked helplessly at Ftaeml.

The Rargyllian said smoothly, "Permit me to explain, sir. The Hroshia refuses to go aboard without her pet."

"Pet?"

"The kid, boss. John Thomas Stuart."

"Exactly," agreed Ftaeml. "The Hroshia states that she has been raising 'John Thomases' for a long time; she refuses to go home unless she can take her John Thomas with her. She was quite imperious about it."

"I see," agreed Kiku. "To put it in more usual language the boy and the Hroshia are attached to each other. That's not surprising; they grew up together. But Lummox will have to put up with the separation, just as John Thomas Stuart had to. As I recall, he made a bit of fuss; we told him to shut up and shipped him home. That's what the Hroshia must do: tell her to shut up, force her, if necessary, into their landing craft and take her along. That's what they came here for,"

The Rargyllian answered, "Permit me to say, sir, that by putting it into 'more usual language' you have missed the meaning. I have been discussing it with her in her own tongue."

"Eh? Has she learned so quickly?"

"She has long known it. The Hroshii, Mr. Under Secretary, know their own language almost from the shell. One may speculate that this use of language almost on the instinctive level is one reason, perhaps the reason, why they find other languages difficult and never learn to use them well. The Hroshia speaks your language hardly as well as one of your four-year-old children, though I understand that she began acquiring it one of your generations ago. But in her own language she is scathingly fluent. . . so I learned, much to my sorrow."

"So? Well, let her talk. Words can't hurt us."

"She has talked. . . she has given orders to the commander of the expedition to recover her pet at once. Otherwise, she states, she will remain here and continue raising 'John Thomases.'"

"And," Greenberg added, "the commander has handed us an ultimatum to produce John Thomas Stuart at once. . . or else."

"'Or else' meaning what I think it means?" Kiku answered slowly.

"The works," Greenberg said simply. "Now that I've seen their ground craft I'm not sure but what they can."

"You must understand, sir," Ftaeml added earnestly, "that the commander is as distressed as you are. But he must attempt to carry out the wishes of the Hroshia. This mating was planned more than two thousand of your years ago; they will not give it up lightly. He cannot allow her to remain. . . nor can he force her to leave. He is very much upset."

"Aren't we all?" Mr. Kiku took out two more pills. "Dr. Ftaeml, I have a message for your principals. Please convey it exactly."

"I shall, sir."

"Please tell them that their ultimatum is rejected with contempt. Please. . ."

"Sir! I beg of you!"

"Attend me. Tell them that and do not soften it. Tell them that we tried in every way to help them, that we succeeded, and that they have answered kindness with threats. Tell them that their behavior is unworthy of civilized people and that the invitation to join the Community of Civilizations is withdrawn. Tell them that we spit in their faces. . . find an idiom of equal strength.. Tell them that free men may die, but they are never bullied."

Greenberg was grinning widely and clasping both hands in the ancient sign of approval. Dr. Ftaeml seemed to grow pale under his outer chitin.

"Sir," he said, "I greatly regret being required to deliver this message."

Kiku smiled icily. "Deliver it as given. But before you do, find opportunity to speak to the Hroshia Lummox. You can do so?"

"Most assuredly, sir."

"Tell her that the commander of the expedition, in his zeal, seems bent on killing the human, John Thomas Stuart. See that she understands what is threatened."

The Rargyllian arranged his mouth in a broad smile. "Forgive me, sir; I underestimated you. Both messages will be delivered, in the proper order."

"That is all."

"Your good health, sir." The Rargyllian turned to Greenberg, put a loose-jointed arm around his shoulders. "My brother Sergei, we have already found our way together out of one tight maze. Now, with the help of your spiritual father, we shall find our way out of another. Eh?"

"Right, Doc."

Ftaeml left. Kiku turned to Greenberg and said, "Get the Stuart boy here. Get him at once, yourself, personally. Umm. . . bring his mother, too. He's under age, isn't he?"

"Yes. Boss, what's the plan? You aren't going to turn him over to them?. . . after that wonderful kick in the teeth you handed them?"

"Of course I am. But on my own terms. I don't intend to let those animated pool tables think they can push us around, We'll use this to get what we want. Now get going!"

"I'm gone."

Mr. Kiku stayed at his desk, checking papers with part of his mind while letting his subconscious feel out the problem of Lummox. He had a strong hunch that tide was at flood. . . for humans. It was necessary to judge how to ride it. He was in this revery when the door opened and the Most Honorable Mr. Roy MacClure walked in. "There you are, Henry! Pull yourself together, man. . . Beulah Murgatroyd is coming to call."

"Beulah who?"

"Beaulah Murgatroyd. The Beulah Murgatroyd."

"Should I know?"

"What? Man, don't you ever watch stereovision?"

"Not if I can possibly avoid it."

MacClure shook his head indulgently. "Henry, you don't get around enough. You bury yourself in here and push your little buttons and don't even know what is going on in the world."

"Possibly."

"Positively. You're out of touch, man. . . it's a good thing you don't have to deal with people."

Mr. Kiku permitted himself a wintry smile, "I suppose so."

"I'll bet you three to one you don't know who is ahead in the World Series."

"The World Series? That's baseball, isn't it? I'm sorry but I haven't even had time to follow the cricket matches of late years."

"See what I mean? Though how you can mention cricket in the same breath with baseball. . . Never mind. Since you don't know who the famous Beulah Murgatroyd is, I'll tell you. She's PidgieWidgie's mother, so to speak."

"'PidgieWidgie'?" Mr. Kiku echoed.

"You're pulling my leg. The creator of the PidgieWidgie stories for children. You know-Pidgie-Widgie on the Moon, PidgieWidgie Goes to Mars, PidgieWidgie and the Space Pirates."

"I'm afraid I don't."

"That's hard to believe. But you don't have any kids, do you?"

"Three."

But Mr. MacClure was still talking. "Now she's taken PidgieWidgie on the air and it's really something. For the kids of course but so comical that the grownups follow it, too. You see, PidgieWidgie is a puppet about a foot high. He goes zooming through space, rescuing people and blasting pirates and having a grand ole time. . . the kids love him. And at the end of each installment Mrs. Murgatroyd comes on and they have a bowl of Hunkies together and talk. You like Hunkies?"

Mr. Kiku shuddered. "No."

"Well, you can just pretend to eat them, I suppose. But it is the biggest breakfast-food show on the air, reaches everybody."

"And this is important?"

"Important? Man, do you know how many people eat breakfast every morning?"

"No. Not too many, I hope. I wish I had not."

Mr. MacClure glanced at his watch. "We'll have to hurry. The technicians are setting up the gear now. She'll be here any moment."

"Technicians?"

"Didn't I say? Mrs. Murgatroyd will interview us, with PidgieWidgie in her lap and taking part. Then they'll patch it into the show. A wonderful boost for the department."

"No!"

"Eh? Mr. Kiku, did I understand you correctly?"

"Mr. Secretary," Mr. Kiku said tensely, "I couldn't possibly do that. I. . . I'm subject to stage fright."

"What? Why, that's absurd! You helped me open the Triangular Conference. You spoke without notes for thirty minutes."

"That's different. That's shop talk, with other professionals."

The Secretary frowned. "I hate to insist, if it really makes you nervous. But Mrs. Murgatroyd asked for you especially. You see. . ." MacClure looked mildly embarrassed. '. . . PidgieWidgie preaches racial tolerance and so forth. Brothers under the skin. . . the sort of thing we all want to encourage. So?"

Mr. Kiku said fimly, "I'm sorry."

"Come now! Surely you're not going to force me to insist?"

"Mr. Secretary," Kiku answered quietly, "you will find that my job description does not require me to be a stereovision actor. If you will give me a written order, I will submit it to our legal bureau for opinion, then answer you officially."

Mr. MacClure frowned. "Henry, you can be a stubborn little beast, can't you? I wonder how you got so high in the heap?"

Mr. Kiku did not answer; MacClure went on, "I won't let you pull the rule book on me; I'm too old a fox. Though I must say I didn't think you would do that tome."

"Sorry, sir. I really am."

"So am I. I'll try to. convince you that it is important to the department, whether a civil servant can be ordered to do it or not. You see, Beulah Murgatroyd is the power behind 'The Friends of Lummox.' So. . ."

"'The Friends of Lummox'?"

"I knew you would see it differently. After all, you've been handling that whoop-te-do. Therefore. . ."

"What in heaven's name are 'The Friends of Lummox'?"

"Why, you set up the original interview with them yourself. But if I hadn't happened to lunch with Wes Robbins, we might have missed the boat on it."

"I seem to recall a memorandum. A routine matter."

"Mrs. Murgatroyd is not routine, I've been trying to tell you. You precedent-and-protocol boys lose touch with the people. If you don't mind my saying so, that's why you never quite get to the top."

"I don't mind in the least," Mr. Kiku said gently.

"Eh?" The Secretary looked slightly embarrassed. "I mean, there's a place for a grassroots politician, like me, with his finger on the pulse.. . though I admit I don't have your special training. You see?"

"There is work for both our talents, sir. But go on. Perhaps I did 'miss the boat' in this instance. The 'Friends of Lummox' memorandum must have come through before the name meant anything to me."

"Probably. I wasn't criticizing your attention to duty, Henry. Fact is, you work too hard. . . the universe won't run down if you don't wind it. But about this F. of L. deal-we intervened in some silly case out west; you know about it, you sent one of our people-the case turned out to be about his Hoorussian Lummox, The court's verdict. . . our verdict, you might say, was to destroy the beast. By the way, Henry, have you disciplined the man responsible?"

"No, sir."

"Why the delay?"

"He won't be disciplined, sir. He was perfectly right, on the evidence."

"I don't see it that way. Better send his file jacket to my office. I want to consider it myself."

"Sir," Mr. Kiku said softly, "were you thinking of reversing me on a matter of administrative discipline?"

"Eh? I intend to review the matter."

"Because if you are, sir, you can have my resignation now. My usefulness will be at an end."

"What? Henry, don't be nasty." The Secretary drummed on Mr. Kiku's desk. "Confound it, man, let's be frank with each other. I know that you career men can make it hard for an appointee if you try. . . I didn't get into politics yesterday. But as long as I am holding the sack, I intend to have discipline around here. My privilege?"

"Yes. . . your privilege."

"And my responsibility. Probably you are right about this man, whoever he is. . . you're usually right, or we couldn't keep things going. But it is my responsibility to review things whenever I think it necessary. However, there is no call for you to talk about resigning until I actually do reverse you. Since you have forced the issue, if I do find it necessary to reverse you on this, I'll ask for your resignation. But until I do, keep your shirt on. Fair enough?"

"Fair enough. I was hasty, Mr. Secretary. The file jacket will be on your desk."

"On second thought, don't bother. If you are carrying one of your favorites. . ."

"I have no favorites, Mr. MacClure. I dislike them all, impersonally."

"Sometimes I think you hate yourself. Now where were we? Oh yes! Well, when we made that terrible bust about the Hoorussian, Mrs. Murgatroyd saw a chance to do a good deed. Oh, I suppose she was out to pep up her program, but that's beside the point. Right away, PidgieWidgie started telling all his little friends about this. terrible thing and asked them all to write in and join the Friends of Lummox. She got over three million replies in the first twenty-four hours. By now half the kids on this continent and nobody knows how many elsewhere are 'Friends of Lummox,' pledged to protect him from persecution."

"Her," corrected Mr. Kiku.

"Eh?"

"I beg your pardon. I suppose neither term is correct. The Hroshii come in six assorted sexes. You can call Lummox either 'him' or 'her'. . . we really need new, words. But it doesn't matter."

"Well, it certainly doesn't to me," agreed MacClure. "But if we had actually put the quietus on this Lummox, I believe the kids would have started a revolution. I really do. Not to mention the adults who are PidgieWidgie fans. Even so, the department got a black eye out of it. But Beulah Murgatroyd is willing to go along with a deal to help us out. She interviews us and I answer the general questions and you back me on the details-all about how the department is careful to protect the rights of our nonhuman friends and how everybody ought to be tolerant-the usual line. Then PidgieWidgie asks what happened to Lummox and you tell the kiddies how Lummox was really sort of a fairy prince in disguise. . . or princess. . . and how Lummox has gone away to his home in the sky. It will be terrific."

MacClure added, "That's all you have to do. They patch in a shot of Lummox getting into the Hoorussian ship and waving goodbye. Then we all eat a bowl of Hunkies-don't worry, I'll see that your bowl is empty!-and PidgieWidgie sings his 'Skylarker' song. End. It won't take twenty minutes and it will be a big thing for the department. Okay?"

"No."

"Now, Henry. . . All right, you won't even have to pretend to eat Hunkies."

"No."

"Henry, you're impossible. Don't you agree that it is our business to help train up the kids to understand their responsibilities and have right attitudes in this modern age-the age of the Community of Civilizations?"

"No, sir, I do not. That is the business of parents and educators, not of government. This department has more than it can do just to try to hold things together in the face of ever-increasing xenic problems." Mr. Kiku added to himself: even if I did agree, I wouldn't do it by eating Hunkies!

"Hmm. . . A narrow attitude, Henry. A bureaucratic one, if I may say so. You know perfectly well that we are in hot water about this Hoorussian thing from other directions, too, with The Society for the Preservation of the Status Quo screaming for isolation and the Keep Earth Human League jumping on us. It gets the Council uneasy. Along comes a chance to build up public opinion against such crackpots and you won't even help. You don't have the Status Quo people and the Human-Earth jokers bothering you-because I keep them off your neck."

"I'm sorry, sir. But you shouldn't waste time on them either. No doubt you know that there is a money motive back of every one of those apparently crackpot organizations. Let the people with opposing economic interests fight them-the shipping lines and the importers and the scientists. Our business is foreign relations. When we are bothered by pressure groups, we should let our public relations people handle them; that is what they are for."

"What am I but a glorified public relations man?" MacClure answered angrily. "I haven't any illusions about this confounded job."

"Not true, sir. You have the prime policy responsibility. I carry out policy-within the limits of my job."

"Hummph! You set policy. You drive me like a horse. I'm beginning to realize it."

"Sorry, sir. I suppose everyone makes policy. . . even the doorman. . . to some extent It's unavoidable. But I try to do my job."

Mr. Kiku's private secretary called in by voice. "Mr. Kiku, is the Secretary with you? Mrs. Beulah Murgatroyd is waiting."

"Be right in," called out MacClure.

Kiku added quietly, "Mildred, see that she is entertained. There will be a slight delay."

"Yes, sir. The Secretary's aide is taking care of her."

"Good."

"There will be no delay," MacClure said to Mr. Kiku. "If you won't, you won't. . . though I'm disappointed in you. But I can't keep her waiting."

"Sit down, Mr. Secretary."

"Eh?"

"Sit down, sir. Even the mighty Mrs. Murgatroyd must wait on some things. A major emergency has come up; you will certainly have to face the Council about it. . . possibly a special session this evening."

"What? Why didn't you say so?"

"I was organizing my thoughts preparatory to briefing you, sir, when you came in. For the past several minutes I have been trying to tell you that this department has really important things to do-besides selling Hunkies."

The Secretary stared at him, then reached across Kiku's desk. "Uh, Mildred? This is the Secretary. Tell Commodore Murthi that I am unavoidably detained and that he is to do his best to keep Mrs. Murgatroyd happy."

"Yes. Mr. Secretary."

MacClure turned back. "Now, Henry, quit lecturing me and spill it."

Mr. Kiku began a full report of the new Hroshii crisis. Mr. MacClure listened without comment. Just as Mr. Kiku concluded his account of the rejection of the ultimatum the sound communicator again came to life. "Chief? Murthi here. Mrs. Murgatroyd has another appointment."

Mr. MacClure turned toward the voice. "Hush circuit?"

"Of course, sir."

"Listen, Jack, I'll be a few minutes yet. Keep her happy."

But-"

"Make love to her, if necessary. Now switch off. I'm busy!" He turned back to Mr. Kiku and scowled. "Henry, you've shoved me out on a limb again. You've left me nothing to do but back your play."

"May I ask what the Secretary would have done?"

"Huh?" MacClure frowned. "Why, I would have said exactly what you said, I suppose. . . but in nastier language. I admit that I probably wouldn't have thought of cutting inside them through this Lummox creature. That was cute."

"I see, sir. It being a rejection of a formal ultimatum, what precautionary action would the Secretary have taken? I should add that I wanted to avoid having the department advise the Council to order battle stations for the entire planet."

"What are you saying? Nothing like that would have been necessary. I would have ordered the Inner Guard to close and blast them out of the sky, on my own responsibility. After all, they are at our inner defense zone and breathing threats. . . a simple emergency police action."

Mr. Kiku thought, that is what I guessed you would do. . . but what he said was, "Suppose it turned out that their ship failed to blast out of the sky. . . and blasted back?"

"What? Preposterous!"

"Mr. Secretary, the only thing I have learned in forty years at this trade is that when you are dealing with 'Out There' nothing is preposterous."

"Well, I'll be. . . Henry, you actually believed they could hurt us. You were frightened." He searched Mr. Kiku's face. "Are you holding something back? Do you have evidence that they might be able to carry out this preposterous threat?"

"No, sir."

"Well?"

"Mr. MacClure, in my country hardly more than three hundred years ago there lived a very valiant tribe. A small force of Europeans made certain demands on them. . . taxes, they called it. The chief was a brave man and his warriors were numerous and well trained. They knew the strangers had guns, but they even had some guns of their own. But mostly they relied on numbers and courage. They planned cleverly and caught the enemy in a box canyon. So they thought."

"Yes?"

"They had never heard of machine guns. They learned about them in a very final way-for they were very brave and kept coming on. That tribe is no more, no survivors."

"If you are trying to scare me, well. . . never mind. But you still haven't given me evidence. After all, we are not an ignorant tribe of savages. No parallel."

"Perhaps. Yet, after all, the machine gun of that era was only a minor improvement over the ordinary gun of the time. We have weapons which make a machine gun seem like a boy's knife. And yet. . ."

"You are suggesting that these Hoorussians have weapons that would make our latest developments as useless as clubs. Frankly, I don't want to believe it and I don't. The power in the nucleus of the atom is the ultimate possible power in the universe. You know that, I know that. We've got it. No doubt they've got it, too, but we outnumber them millions to one and we are on our home grounds."

"So the tribal chief reasoned."

"Eh? Not the same thing."

"Nothing ever is," Mr. Kiku answered wearily. "I was not speculating about magic weapons beyond the concepts of our physicists; I was merely wondering what some refinement might do to a known weapon. . . some piece of tinkering already implicit in the theories. I don't know, of course. I know nothing of such things."

"Well, neither do I but I've been assured that. . . See here, Henry; I'm going to order that police action, right away."

"Yes, sir."

"Well? Don't sit there frozen-faced saying 'Yes, sir. You don't know, do you? So why shouldn't I do it?"

"I did not object, sir. Do you want a sealed circuit? Or do you want the base commander to report here?"

"Henry, you are without question the most irritating man in seventeen planets. I asked you why I should not do it?"

"I know of no reason, sir. I can only tell you why I did not recommend it to you."

"Well?"

"Because I did not know. Because I had only the fears of a nonhuman who might be even more timid than myself, or badly misled by what appears to be almost superstitious awe. Since I did not know, I did not choose to play Russian roulette with our planet at stake. I chose to fight with words as long as possible. Do you want to give the order, sir? Or shall I take care of the details?"

"Quit badgering me." He glared at his Under Secretary, his face red. "I suppose your next move is to threaten to resign."

Mr. Kiku grudged a small smile. "Mr. MacClure, I never offer to resign twice in the same day." He added, "No, I will wait until after the police action. Then, if we are both alive, I will have been proved wrong on a major matter; my resignation will be necessary. May I add, sir, that I hope you are right? I would much rather enjoy a quiet old age than to have my judgment vindicated posthumously."

MacClure worked his mouth but did not speak. Mr. Kiku went on quietly, "May I offer a suggestion to the Secretary in my official capacity?"

"What? Of course. You are required to by law. Speak up."

"May I urge that the attack commence in the next few minutes? We may achieve by haste what might fail by delay. BuAstro can supply us with the orbit elements of the enemy ship." Kiku leaned toward his communicator.

It came to life before he could touch it. "Chief? Murthi here. I've done my best, but she . . ."

"Tell her I can't see her!"

"Sir?"

"Uh. . . butter it on. You know how. Now shut up and don't call me again."

"Aye aye, sir."

Mr. Kiku called BuAstro. "The chief ballistician, please at once. Ah, Carrier. . . seal your end; this end is sealed. And put a hush on it. All right, I want the tactical elements of the. . ."

MacClure reached out and broke the connection. "All right," he said savagely, "you've out-bluffed me."

"I was not bluffing, sir."

"All right, all right, you've convinced me that you have a wise head on you. I. can't take a blind chance with the lives of five billion people any more than you can. Want me to crawl?"

"No, sir. But I am much relieved. Thank you."

"You're relieved? How about me? Now tell me how you intend to play this. I'm still in the dark."

"Very well, Mr. Secretary. In the first place I have sent for the Stuart boy'.."

"The Stuart boy? Why?"

"To persuade him to go. I want his consent."

The Secretary looked as if he could not believe his ears. "Do I understand, Mr. Kiku, that after rejecting their ultimatum your only plan is to capitulate?"

"That is not how I would describe it."

"I don't care what diplomatese you phrase it in. We will not surrender the boy. I was not willing to take a risk blindly, but this is another matter. I will not surrender one human being no matter what the pressure is. . . and I can assure you that the Council will agree. There is such a thing as human dignity. I must add that I am astonished. . . and disgusted."

"May I continue, sir?"

"Well. . . go ahead. Speak your piece."

"No thought of surrendering the boy was ever in my mind. In the science of diplomacy appeasement has long been an exploded theory. Had I even considered sacrificing the boy, I would applaud your disgust. As it is, it missed me."

"But you said. . ."

"Please, sir. I know what I said. I sent for the boy to explore his own wishes. From what I know of him it is possible that he will be willing, even eager."

MacClure shook his head. "It's not something we could permit, even if the lad were crazy enough to do it. Nine hundred lightyears from other human beings? I would as soon offer poison to a baby."

"That's not the picture at all, sir. . . If I have his consent, I can keep the fact to myself during negotiations play from a concealed ace. There is much to negotiate."

"Such as?"

"Their science. Their trade. A whole new volume of space. The possibilities can be only dimly seen."

MacClure stirred restlessly. "I'm not sure but what that attack is still the thing to do. If men are men, some risks must be taken. Snuggling up to vermin who threaten us. . . I. don't like it."

"Mr. Secretary, if my plans do not work. . . or fail to meet your approval, then I will join you in shouting defiance at the sky. We should bargain. . . but bargain as men."

"Well. . . go on. Tell me the rest."

XIII
"No, Mr. Secretary"

Mr. Kiku's wife let him sleep late the next morning. She did this occasionally, reasoning that no crisis was important enough to wake him when he needed rest. When he got to his office he found Wesley Robbins, Special Assistant Secretary for public relations, asleep in his chair. Robbins was not a diplomat, did not want to be one, and made a point of showing it.

"Good morning, Wes," Mr. Kiku said mildly.

"What's good about it?" Robbins chucked a copy of the CAPITAL TIMES at the Under Secretary. "Seen this?"

"No." Mr. Kiku unfolded it.

"Twentythree years in the newspaper business . . to be scooped on my own beat."

Mr. Kiku read:

ALIEN INVADERS THREATEN WAR! ! !

Demand Hostages

Capital Enclave, Sep. 12 (GP). . . Space Secretary MacClure revealed today that the xenic visitors dubbed "Hroshii" now landed at Capital port have demanded, under threats of war, that the Federation. . .

Kiku scanned down, saw that a distortion of his answer to the Hroshii had been credited to Secretary MacClure, with no mention of the possibility of peaceful settlement. A trailer story reported the Chief of the General Staff as assuring Earth and all the federated planets that there was nothing to fear from the insolent aliens. A South Asian senator demanded to know what steps were being taken. . . Kiku glanced at it all but discarded the meaningless 90%, including a blast from the Keep Earth Human League and a "We Stand at the Crossroads" editorial. There was an interview with Mrs. Murgatroyd but he did not take time to find out which side PidgieWidgie was on.

"Ain't that a mess?" Robbins demanded. "Where do you hide your cigarettes?"

"It does seem a rather lavish waste of paper," Kiku agreed. "In the arm of the visitor's chair."

"Well, how do we handle it? I was caught flatfooted. Why doesn't somebody tell me these things?"

"Just a moment." Mr. Kiku leaned to his desk. "Security? Ah, O'Neill. . . place more special police around the Hroshii landing craft. . ."

"You've got 'em, boss. But why doesn't somebody tell us these things?"

"A fair question. Whatever guard you are using, use more. There must not only be no riot; there must be no incidents. Station as many trained tension-dispersal technicians in the crowd as you can scrape up, then borrow more from other agencies. Then give special attention to lunatic-fringe organizations. . . xenophobic ones, I mean. Any trouble yet?"

"Nothing we couldn't snuff out. But I'm making no promises. I still think somebody ought to tell. . ."

"No doubt. Keep in touch with me." Kiku turned to Robbins. "Do you know how the interview happened to be granted?"

"Do I act like it? He was going to the 'Tri Con' citation dinner, safe as houses. I got his approval on his speech, gave him his copy and passed the others around to the boys, with suggestions on how to play it. Everybody happy. I get up this morning feeling ninety and before I've had my coffee I feel a hundred and fifty. Know anybody wants my job? I'm going to study how to be a beachcomber."

"A reasonable thought. Wes, let me bring you up to date. Nothing was to be released about this matter until it was concluded, but now. . ." He quickly outlined the latest Hroshii crisis.

Robbins nodded, "I see. And Number One jerked the rug out from under you. A fine playmate."

"Well, we had better see him. Is he here?"

"Yes. I was waiting for you, pal. Will you hold him while I hit him? Or the other way around?"

"Whichever you wish. Shall we get it over with?"

The Secretary was in; they were admitted and MacClure got up to seat them. After which they just sat. Robbins waited for Mr. Kiku to speak, but Kiku held still, face expressionless, a statue carved of ebony.

MacClure began to fidget. "Well, Henry? This is a busy morning. . . I've already been tied up with the S.G."

"I had thought that you would want to instruct us, Mr. Secretary."

"What for?"

"Have you seen the morning papers, sir?"

"Well. . . yes."

"There has been a change in policy. Assistant Secretary Robbins and I would like to be briefed on the new policy."

"What new policy?"

"Your new policy concening the Hroshii, Mr. Secretary. Or are the newspapers in error?"

"Eh? Well, no, not precisely. Exaggerated of course. But no change in policy. I simply told the people what they were entitled to know."

"The people are entitled to know." Mr. Kiku fitted his fingers together. "Ah, yes. In a government based on free consent of free men the people are always entitled to know. An old bureaucrat, such as myself, sometimes loses track of that fundamental. Thank you for reminding me." He seemed lost in cosmic thought for a moment, then added, "I suppose the thing now is to repair my failure and tell the people everything."

"Eh? What do you mean?" .

"Why, the whole story, Mr. Secretary. How through our own ignorance and disregard for the rights of others, both now and in the past, we kidnapped a member of a civilized race. How blind luck alone kept that xenian alive. How as a result of this we now find our own planet threatened with destruction-and how a highly intelligent citizen of a friendly power (I refer to Dr. Ftaeml) assures us that these Hroshii can indeed destroy us. It would be necessary to tell them also that yesterday we were within minutes of ordering an attack on these xenians-but that we lost our nerve and decided to negotiate, since we had no knowledge of our strength relative to theirs, but only the very sobering opinion of Dr. Ftaeml to guide us. Yes, we must tell them that"

Secretary MacClure's mouth was as wide as his eyes. "Heavenly days, Henry! Are you trying to set off riots?"

"Sir? I have taken countermeasures to prevent riots. . . xenophobia is always ready to flare up and that. . ." He gestured at the newspaper. ". . . will have an inflammatory effect on some. But you must not be deterred. We bureaucrats become paternalistic; it is so much simpler to do what seems best and let the people know it afterwards. . . negotiate, or blast a ship out of the sky, or whatever. Mr. Secretary, you have kept in mind, of course, that this Secretariat of which you are a member is responsible not to the North American Union, nor even to the peoples of Earth, but to all sovereignties of the Federation, both on Terra and elsewhere?"

"What's that got to do with it? We're the leading power."

"Whom do you mean by 'we'? Not my little country certainly. No, I was thinking that this will now be settled by vote of the Council and I was wondering whether the Council might possibly vote to surrender one unimportant citizen of North America rather than risk an interstellar war? I wonder how Mars will vote?"

The Secretary got up and strode up and down his office. It was a large room, much larger than Mr. Kiku's. He stopped at the far end and stared out at the Tower of Three Planets and the Hall of Civilizations, while Kiku sat quietly. Wes Robbins slumped in a chair, his bony legs stretched in front of him. He was trimming his nails with a. pocket knife; they were long and black and needed the attention.

MacClure turned suddenly to Kiku. "See here, Henry, you confounded word splitter, I won't be bullied."

"Bullied, Mr. Secretary?"

"Yes, bullied. Oh, you dressed it up in your usual doubletalk, but I wasn't born yesterday. You know perfectly well that if we give the press these unnecessary details. . . that nonsense this Dr. Fatima or whatever his name is, this Rargyllian monster, filled you with. . . yes, and you threatening to tell the press that I got cold feet about an attack. . . that's a threat if I ever heard one!. . . you give 'em all that junk and we'd have a row in the Council that would be heard from here to Pluto! With the home governments sending special instructions to their delegates and maybe the Terran bloc getting outvoted. Right on top of this ticklish Triangular Conference it could be disastrous. Yes, that's the word. . . disastrous." MacClure stopped and struggled for breath. "Well, you won't get away with it. You're fired!. . . understand me? Fired! I'll take care of having you removed for cause, or transferring you to the retired list, or whatever the red tape calls for, but you are done, right now. I'm relieving you. You can go home."

"Very well, Mr. Secretary," Mr. Kiku said evenly and started for the door to his office.

In the silence Wes Robbins knife clicked shut loudly. He stood up. "Hold it, Henry! Mac. . ."

Mr. MacClure looked around. "Huh? What's the matter with you? And don't call me 'Mac'; this is official business. I'm still Secretary around here, as I just told Kiku."

"Yes, you are still Secretary-for about two hours, maybe."

"What? Don't be ridiculous! Wes, you will force me to fire you too if you talk that way. Mr. Kiku, you are excused."

"Don't go away, Henry. And quit shoving that stuff, Mac. You can't fire me, I quit ten minutes ago. Mac, are you a complete stuffed shirt? Remember, I knew you when you were a shorthorned Senator, anxious to get a two-inch squib in a gossip column. I liked you then. You seemed to have horse sense, which is scarce in this business. Now you are ready to dump me and I don't like you either. But tell me, for old times' sake: why are you anxious to cut your own throat?"

"What? Not my throat. I'm not the Charlie to let a subordinate cut my throat. I've seen it done. . . but Kiku picked the wrong man."

Robbins shook his head slowly. "Mac, you are dead set on scuttling yourself. Hadn't you better cut Henry's tongue out before the newsboys reach him? Here, you can borrow my knife."

"What?" MacClure looked stunned. He swung around and snapped, "Mr. Kiku! You are not to speak to the press. That's an order."

Robbins bit off some cuticle, spat it out, and said, "Mac, for Pete's sake! You can't both fire him and keep him from talking."

"Departmental secrets. . ."

" 'Departmental secrets' my bald spot! Maybe you could fine him severance pay under the official-secrets rule but do you think that will stop him? Henry is a man with no fears, no hopes, and no illusions; you can't scare him. What he can tell the reporters will do you more harm if you classify it 'secret' than it would if you didn't try to gag him."

"May I say something?" asked the center of the storm.

"Eh? Go ahead, Mr. Kiku."

"Thank you, Mr. Secretary. I had no intention of telling the press about the messier aspects of this affair. I was simply trying to show, by reductio ad absurdum, that the rule of keeping the public informed can. . . like any rule. . . lead to disaster if applied blindly. I felt that you had been indiscreet, sir. I hoped to keep you from further indiscretions while we sought means to repair the damage."

MacClure studied him. "You mean that, Henry?"

"I always mean what I say, sir. It saves time."

MacClure turned to Robbins. "You see, Wes? You were barking up the wrong tree. Henry is an honorable man, even if we do have our differences. See here, Henry, I was too hasty. I honestly thought you were threatening me. Let's forget what I said about asking for your resignation and get on with our jobs. Eh?"

"No, sir."

"What? Come, man, don't be small. I was angry, I was hurt, I made a mistake. I apologize. After all, we have public welfare to consider."

Robbins made a rude noise; Mr. Kiku answered gently, "No, Mr. Secretary, it wouldn't work. Once having been fired by you, I would not again be able to act with confidence under your delegated authority. A diplomat must always act with confidence; it is often his only weapon."

"Um. . . Well, all I can say is I'm sorry. I really am."

"I believe you, sir. May I make a last and quite unofficial suggestion?"

"Why, certainly, Henry."

"Kampf would be a good man to keep routine moving until you work out your new team."

"Why, surely. If you say he is the man for it, I'm sure he must be. But Henry. . . we'll keep him there on a temporary basis and you think it over. We'll call it sick leave or something."

"No," Mr. Kiku answered coldly and turned again toward his own office.

Before he could reach it Robbins spoke up loudly. "Take it easy, you two. We aren't through." He spoke to MacClure: "You said that Henry was an honorable man. But you forgot something."

"Eh? What?"

"I ain't."

Robbins went on, "Henry wouldn't do anything that wasn't cricket. Me, I was raised in a river ward. and I'm not bothered by niceties. I'm going to gather the boys together and give 'em the word. I'm going to tell them where the body is buried, how the apple cart was upset, and who put the overalls in the chowder."

MacClure said angrily, "You hand out an unauthorized interview and you'll never hold another job with the administration!"

"Don't threaten me, you overripe melon. I'm not a career man; I'm an appointee. After I sing my song I'll get a job on the Capital Upside Down column and let the public in on the facts about life among the supermen."

MacClure stared at him. "You don't have any sense of loyalty at all."

"From you, Mac, that sounds real sweet. What are you loyal to? Aside from your political skin?"

Mr. Kiku interposed mildly, "That's not exactly fair, Wes. The Secretary has been quite firm that the Stuart boy must not be sacrificed to expediency."

Robbins nodded. "Okay, Mac, we'll give you that. But you were willing to sacrifice Henry's forty years of service to save your own ugly face. Not to mention shooting off that face without checking with me, just to grab a front-page story. Mac, there is nothing a newspaper man despises more than headline hunger. There is something lascivious and disgusting about a man overanxious to see his name in headlines. I can't reform you and don't want to, but be sure that you are going to see your name in headlines, big ones. . . but for the last time. Unless. . ."

"What do you mean?. . . 'unless'?"

"Unless we put Humpty-Dumpty together again."

"Uh, how? Now look, Wes, I'll do anything within reason."

"You sure will." Robbins frowned. "There's the obvious way. We can serve Henry's head up on a platter. Blame that interview yesterday on him. He gave you bad advice. He's been fired and all is sweetness and light."

Mr. Kiku nodded. "That's how I had envisioned it. I'd be happy to cooperate. . . provided my advice is taken on how to conclude the Hroshii affair."

"Don't look relieved, Mac!" Robbins growled. "That's the obvious solution and it would work. . . because Henry is loyal to something bigger than he is. But that is not what we are going to do."

"But, if Henry is willing, then in the best interests-"

"Stow it. It won't be Henry's head on the platter; it will be yours."

Their eyes locked. At last MacClure said, "If that is your scheme, Robbins, forget it and get out. If you are looking for a fight, you'll get one. The first story to break will be about how I had to fire you two for disloyalty and incompetence."

Robbins grinned savagely. "I hope you play it that way. I'll have fun. But do you want to hear how it could be worked?"

"Well. . . go ahead."

"You can make it easy or hard. Either way, you are through. Now. . . keep quiet and let me tell it! You're done, Mac. I don't claim to be a scholar of xenic affairs, but even I can see that civilization can't afford your county-courthouse approach to delicate relations with nonhuman races. . So you're through. The question is: do you do it the hard way? Or do you go easy on yourself and get a nice puff in the history books?"

MacClure glowered but did not interrupt. "Force me to spill what I know, and one of two things happens. Either the Secretary General throws you to the wolves, or he decides to back you up and risk a vote of 'no confidence' from the Council. Which is what he would get. The Martian Commonwealth would gleefully lead the stampede, Venus would follow, the outer colonies and the associated xenic cultures would join in. At the end you would have most of the Terran nations demanding that the North American Union surrender this one individual to avert a bust-up of the Federation.

"All you have to do is to shove the first domino; all the others would fall. . . and you would be buried under the pile. You couldn't be elected dogcatcher. But the easy way runs like this. You resign. . . but we don't publish the fact, not for a couple of weeks. . . Henry, do you think two weeks will be long enough?"

"It should be ample," Mr. Kiku agreed gravely.

"During that time you don't wipe your nose without Henry's permission. You don't say a word unless I okay it. Then you resign in a blaze of glory, with the conclusion of the Hroshian Affair to crown your career. Possibly some way can be found to kick you upstairs to a gaudier job. . . if you are a good boy. Eh, Henry?"

Mr. Kiku nodded.

MacClure looked around from Kiku's expressionless face to Robbins' contemptuous one. "You two have it neatly plotted," he said bitterly. 'Suppose I told you both to go to the devil?"

Robbins yawned. 'It won't matter in the long run, believe me. After the administration falls, the new Secretary General will call Henry out of retirement, a safe man will be stuck in your place, and Henry will get on with outmaneuvering the Hroshii. Probably lose three days maybe less. Whitewashing you is harder, but we meant to give you a break. Right, Henry?"

"It would be better so. Dirty linen is best kept in a cupboard."

MacClure chewed his lip. "I'll think it over."

"Good! And I'll wait while you do. Henry, why don't you get back to work? I'll bet that trick desk is lighted up like a Christmas tree."

"Very well." Mr. Kiku left the room.

His desk did look like a fireworks celebration, with three blinking red lights and a dozen amber ones. He disposed of urgent matters, brushed off lesser ones, and began to reduce the stack in his basket, signing without bothering to consider whether his signature continued to carry authority.

He was just sustaining a veto on a passport for a very prominent lecturer-the last time the idiot had been off Earth, he had broken into a temple and taken pictures-when Robbins walked in and chucked a paper on his desk. "Here's his resignation. Better see the Secretary General at once."

Mr. Kiku took it. "I shall."

"I didn't want you there when I twisted his arm. It's harder for a man to say 'Uncle' with a witness. You understood?"

"Yes."

"I had to bring up the time we covered up for him about the convention with Kondor."

"Regrettable."

"Don't waste tears. Enough is enough. Now I am going to write the speech he will make before the Council. After that I'll look up the boys he talked to last night and beg them, for the sake of their dear old home planet, to take the proper line on the follow-up story. They won't like it."

"I suppose not."

"But they'll go along. Us humans have got to stick together; we are badly outnumbered."

"So I have always felt. Thanks, Wes."

"A pleasure. Just one thing I didn't mention to him. . ."

"So?"

"I didn't remind him that the boy's name was John Thomas Stuart. I'm not sure the Martian Commonwealth would have bolted, in view of that one fact, The Council might have sustained Mac, after all and we might have found out whether the Hroshian laddies can do what they say they can."

Kiku nodded. 'I thought of that, too. It didn't seem time to mention it."

"No. There are so many swell places for a man to keep his mouth shut. What are you smiling at?"

"I was thinking," Mr. Kiku explained, "that it is a good thing that the Hroshii do not read our newspapers."

XIV

"Destiny? Fiddlesticks!"

Mrs. Stuart did read newspapers. Greenberg had had great trouble persuading her to come to Capital and to bring her son, because he was not free to tell her why. But he did persuade her and she had agreed to go the following morning.

When Greenberg arrived the next morning to pick them up he found himself persona non grata. She was in a white fury and simply shoved the newspaper into his hand. He glanced at it. "Yes? I saw a copy at the hotel. Nonsense, of course."

"That's what I've been trying to tell mother," John Thomas said sullenly, "but she won't listen,"

"John Thomas, you keep quiet. Well, Mr. Greenberg? What have you to say for yourself?"

Greenberg did not have a good answer. He had tried to call Mr. Kiku as soon as he saw the news story and had been told by Mildred that the boss and Mr. Robbins were with, the Secretary and could not be disturbed. He told her that he would call later, realizing uneasily that trouble was not all at his end.

"Mrs. Stuart, surely you know that news reports are often distorted. There has been no talk of hostages and. . ."

"How can you say that when it says so right there! That's an interview with the Secretary of Space. Who knows more about it? You? Or the Secretary?"

Greenberg had his own opinion but did not dare express it. "Please, Mrs. Stuart. Newspaper stories should not be accepted at face value. This wild report has nothing to do with the case. I am simply asking you to come to Capital for a quiet talk with the Under Secretary."

"Not likely! If the Under Secretary wants to see me, let him come here."

"Madam, he will, if necessary. Mr. Kiku is an old fashioned gentleman who would not ask a lady to come to him were it not for the press of public affairs. You know that there is an interplanetary conference in progress?"

She answered smugly, "I make it a rule never to pay attention to politics."

He sighed. "Some of us must. Mr. Kiku is unable to come here today because of that conference. We had hoped that you, as a private citizen, would come to him."

"Mr. Greenberg, I reluctantly consented. Now I find that you have deceived me. How do I know but what this is a trick? A plot to turn my-son over to those monsters?"

"Ma'am, on my honor as an officer of the Federation I assure you. . ."

"Spare yourself, Mr. Greenberg. Now, if you will excuse me.. ."

"Mrs. Stuart, I beg you. If you will only. . ."

"Mr. Greenberg, do not force me to be rude to a guest. But I have nothing more to say."

Greenberg left. He looked around, intending to bring the boy into the argument, but John Thomas had quietly left. Greenberg went back to his hotel, with no intention of returning to Capital with mission incomplete but judging it useless to argue until she had time to simmer down.

He had his taxi driver drop him on the hotel roof in order to avoid reporters, but a man was waiting there, armed with an interview phone. "Half a mo', Mr. Commissioner. My name's Hovey. How about a few words on Secretary MacClure's announcement?"

"No comment."

"In other words you agree with it?"

"No comment."

"Then you disagree?"

"No comment. I'm in a hurry." This was true; he was anxious to call in and find out what in the name of blue blazing galaxies had happened.

"Just a second, please. Westville has a big local angle. I'd like to get a story before the main office sends heavyweights here to push me aside."

Greenberg relaxed a little. . . no sense in antagonizing the press and the fellow had a point; he knew how it felt to have someone senior sent to cope with a problem that had started as his. "Okay. But keep it brief; I really am in a hurry." He took out cigarettes. Got a light on you?"

"Sure." They lighted up, Hovey continued, "People are saying that this blast of the Secretary's is just a smoke screen and that you have come here to get the Stuart boy and turn him over to the Hroshii people. How about it?"

"No com. . . No, don't say that; say this and quote me. No citizen of the Federation ever has been or ever will be surrendered as a hostage to any power whatsoever."

"That's official?"

"That's official," Greenberg said firmly.

"Then what are you doing here? I understand you are trying to take the Stuart kid and his mother back to Capital. Capital Enclave isn't legally part of the North American Union, is it? If you got him there, our local and national officials couldn't protect him."

Greenberg shook his head angrily. "Any citizen of the Federation is on his home grounds in the Enclave. He has all rights there that he has at home."

"Why do you want him there?"

Greenberg lied fast and fluently. "John Thomas Stuart has knowledge of the psychology of the Hroshii held by no other human being. We want his help in dealing with them."

"That's more like it. 'Westville Boy Recruited as Diplomatic Aide.' How's that for a lead?"

"Sounds good," Greenberg agreed. "Got enough? I'm in a rush."

"Sure," agreed Hovey. 'I can pad this to a couple of thousand words. Thanks, Commissioner. See you later."

Greenberg went down and locked himself in, then turned to the phone, intending to call the department, but it came to life first. Chief Dreiser looked out at him. 'Mr. Commissioner Greenberg.

"How do you do, Chief?"

'Well enough, thank you. But Mr. Greenberg-I've just had a call from Mrs. Stuart."

"Yes?" Greenberg had a sudden wish for one of those pills the boss ate.

"Mr. Greenberg, we always try to cooperate with you gentlemen."

Greenberg attempted a stop thrust. "So? Were you cooperating when you attempted to kill the Hroshia without waiting for authority?"

Dreiser turned red. 'That was a mistake. It has nothing to do with what I must say now."

"Which is?"

"Mrs. Stuart's son is missing. She thinks he might be with you."

"So? She's mistaken. I don't know where he is."

"Is that true, Mr. Commissioner?"

"Chief, I do not tolerate being called a liar."

Dreiser went doggedly ahead. "Sorry. But I must add this. Mrs. Stuart does not want her son to leave town. The police department backs her up a hundred per cent."

"Naturally."

"Don't mistake me, Mr. Commissioner. You are a very important. official-but you are just another citizen if you get out of line. I read that news story and I didn't like it."

"Chief, if you find that I am doing anything illegal, I urge you to do your duty."

"I shall, sir. I certainly shall."

Greenberg switched off, started again to call in, and thought better of it. If the boss had new instructions, he would send them. . . and Kiku despied field agents who chased back to mama whenever there was a slight shift in the wind. He must change Mrs. Stuart's mind-or hole up here for the winter.

While he was thinking the phone again signaled; be answered and found himself looking at Betty Sorenson. She smiled and said, "This is Miss Smith speaking."

"Umm.. . how do you do, Miss Smith."

"Well, thank you. But busy. I have a client, a Mr. Brown. He is being urged to take a trip. What he wants to know is this: he has a friend at the city of his destination; if he makes this trip, will he be allowed to see his friend?"

Greenberg thought rapidly. The other Hroshii would be around Lummox as thick as flies; it might be dangerous to let the boy go where they were and he was sure Mr. Kiku had not so intended.

Oh, the police could throw a tanglefoot field over the whole space port if necessary! The Hroshii weren't superhuman. "Tell Mr. Brown that he will see his friend."

"Thank you. Uh, Mr. Jones, where could your pilot pick us up?"

Greenberg hesitated. "It would be better for Mr. Brown to make the trip by the commercial lines. Just a moment." He found the flight schedule folder provided in most hotel rooms. "There is a ship leaving Stateport in about an hour. Could he catch it?"

"Oh, yes. But. . . well, there is a matter of money."

"Oh. Suppose I make you a personal loan? You, not Mr. Brown."

She broke into a grin. "That would be lovely!"

"Have you any suggestion as to how to get it to you?" Betty did have-a snack shop called The Chocolate Bar across from Central High School. A few minutes later he was waiting in it, sipping a chocolate-and-milk mess. Betty showed up, he passed her an envelope and she left. He stayed there until he could no longer face the contents of his glass, then went back to the hotel.

He waited two hours, then called Mrs. Stuart. "I have just heard that your son left for Capital on his own."

He waited for her to quiet down, then added, "Mrs. Stuart, I'm still in Westville but am about to fly back to Capital. Would you care to come with me? My ship is faster than the commercial liners."

Half an hour later they left for Capital.

Mr. Kiku saw John Thomas Stuart first. Old enough to be John Thomas's grandfather, he treated John Thomas as an equal, thanking him for coming, offering refreshment. He explained briefly that Lummox was unwilling to return home unless John Thomas went along. "It is extremely important to the Hroshii that Lummox return. To us it is important for other reasons."

"You mean," John Thomas said bluntly, "that they are going to fight us if I don't? That's what the papers say."

Mr. Kiku hesitated briefly. "They may. But that is not the reason I have consulted you. I doubt if the Hroshii would attempt anything if your friend Lummox opposed it-which I think Lummox would if it was something dangerous to you, such as an attack on this planet."

"Oh, I'm sure of that, if Lummie has anything to say about it. But why should they listen to him? Uh, is he royal, or something?"

"Perhaps 'royal' will do, since we don't understand their customs. But Lummox's wishes are important."

John Thomas shook his head in wonder. "Seems funny. The way I used to boss him around."

"In any case I am not asking you to save us from a possible war. I am thinking of positive benefits, not negative ones; we want to establish friendly relations with these people. I asked you here to find out your own wishes. If I make it possible for you to go with Lummox to their planet-Hroshijud it is called-what would your answer be? Think it over, you need not answer now."

John Thomas gulped. "I don't need to think it over. I'd go, of course."

"Don't be hasty."

"I'm not being hasty. Lummie will need me. He's never happy with strangers. Anyhow, he wants me to. You don't think I'd let him down, do you?"

"No. But this is a serious decision. You'll be going almost a thousand lightyears from home."

John Thomas shrugged. "My great grandfather went there. Why shouldn't I?"

"Mmm. . . yes. I keep forgetting your ancestry. But aren't you interested in knowing what other human beings are going with you? Or even if there are to be any?"

"Huh?" John Thomas thought about it. "Oh, those details will work themselves out. It's not my business."

'They will be worked out," Mr. Kiku answered. He stood up. "Thank you for coming."

'Not at all, sir. Uh. . . when do I get to see Lummox?"

Mr. Kiku pursed his lips. "Not right away; I have matters to settle first. In the meantime, enjoy yourself. I'm assigning a man to guide you around and pay your expenses. He will act as bodyguard, too."

"A bodyguard? What for? I'm grown up."

"So you are. But, if for no other reason, I don't want you talking to reporters. Do you mind? I have no authority to tell you not to."

"Oh no, Mr. Kiku. . . if it will help."

"It will help."

Mr. Kiku had received John Thomas at his desk, Mrs. Stuart he received in a lavish room, one without a conference table and which had been designed by subtle psychologists to impress visitors. Mr. Kiku knew that he was in for a bad time.

He fended her off with tea and formality, forced the talk to trivia. "So good of you to come, madame. Sugar? Lemon?"

"Uh, neither, thank you. Mr. Kiku, I must make clear firstoff that. . ."

"Try these little puffs. Did Mr. Greenberg make you comfortable?"

"What? Oh, yes, a nice suite, overlooking the Gardens of Heaven. But Mr. Kiku. . ."

"I was sorry to ask you to come to me. But I am the prisoner of my job. You understand?" He spread his hands helplessly. "I can't leave Capital at certain times."

"That's understandable, I suppose. Now. . ."

"Your kindness is appreciated. You must remain, as an official guest, as long as you see fit. Capital is worth seeing, even if one has seen it often. . . which no doubt you have. I understand that the shopping is excellent, too."

"Well, as a matter of fact I haven't seen it before. Some of the shops do look intriguing."

"Then enjoy it, dear lady. No reason not to mix pleasure with business. Which brings us to business, I suppose. I have been talking with your son."

"Mr. Kiku. . ."

"Indulge me, I will be brief. We are sending an extensive cultural and scientific mission to the home planet of the Hroshii. I want to send your son as a special aide. He has agreed to go." He waited for the explosion.

"Utterly unthinkable! Out of the question!"

"Why, Mrs. Stuart?"

"Mr. Kiku, what sort of inhuman beast are you? I know what you mean. . . you plan to turn my son, my only son, over to those monstrosities as a hostage. Unspeakable!"

He shook his head. "Ma'am, you have been misled by a wild newspaper story. Have you seen the later story? The Secretary's speech before the Council?"

"No, but. . ."

"I will supply a copy. It explains how that nonsense got into print. It also affirms the ancient policy of the Federation, 'All for One'. . . against the Galaxy if necessary. In this case your son is that 'one'; he has many planets behind him. But no such issues arises; your son will join a peaceful mission to a friendly people. He will help build a cultural bridge between two civilized but very different races."

"Hmmph! The paper said that these Hroshii demanded that you turn my son over to them. Explain that if you can!"

"Difficulties of translation. They asked for your son by name, but on behalf of that Hroshia which was for years part of your own household, Lummox. Because Lummox is deeply attached to your son. This friendship between these two, transcending form and kind and source and mind, is one of the greatest fortunes which has happened to our race since our people first discovered that we were not sole heirs of the Almighty. This unlikely circumstance will let us bridge in one leap a chasm of misunderstanding ordinarily spanned by years of trial and tragic error." He paused. "One is tempted to think of them as children of destiny."

Mrs. Stuart snorted. "'Destiny'! Fiddlesticks!"

"Can you be sure, ma'am?"

"I can be sure of this: my son is not going to the other side of nowhere. In another week he is entering college, which is where he belongs."

"Is it his education which worries you, ma'am?"

"What? Why, of course. I want him to get a good education. His father set up a trust fund for it; I intend to carry out his wishes."

"I can put your mind at rest. In addition to an embassy, we will send a cultural mission, a scientific mission, an economics and trade mission, and many specialists, all topflight minds. No single college could hire such an aggregation of talent; even the largest institutions of learning would be hard put to match it. Your son will be taught, not casually but systematically. If he earns a degree, it will be awarded by, uh. . . by the Institute of Outer Sciences." He smiled. "Does that suit you?"

"Why, I never heard of such a silly arrangement. Anyway, the Institute isn't a college."

"It can bestow a degree. Or, if not, we will have its charter amended. But degrees are unimportant, ma'am, the point his that your son will have an unparalleled higher education. I understand that he wishes to study xenic science. Well, not only will his teachers be the finest possible, but also he will live in a new field laboratory of xenology and take part in the research. We know little of the Hroshii; he will labor on the frontiers of science."

"He's not going to study xenology."

"Eh? He told Mr. Greenberg that he meant to."

"Oh, he has that silly idea but I have no intention of indulging him. He will study some sound profession-the law, probably."

Mr. Kiku's brows went up. "Please, Mrs. Stuart," he said plaintively. "Not that. I am a lawyer-he might wind up where I am."

She looked at him sharply. He went on, "Will you tell me why you plan to thwart him?"

"But I won't be. . . No, I see no reason why I should. Mr. Kiku, this discussion is useless."

"I hope not, ma'am. May I tell a story?" He assumed consent and went on, "These Hroshii are most unlike us. What is commonplace to us is strange to them, and vice versa. All we seem to have in common is that both races are intelligent

"To us they seem unfriendly, so remote that I would despair, were it not for one thing. Can you guess what that is?"

"What? No, I can't"

"Your son and Lummox. They prove that the potential is there if we will only dig for it. But I digress. More than a hundred years ago a young Hroshia encountered a friendly stranger, went off with him. You know our-half of that story. Let me tell you their side, as I have learned it with the help of an interpreter and our xenologists. This little Hroshia was important to them; they wanted her back very badly. Their patterns are not ours; they interweave six distinct sorts of a genetic scheme we will be a long time understanding.

"This little Hroshia had a role to play, a part planned more than two thousand years ago, around the time of Christ. And her part was a necessary link in a larger planning, a shaping of the race that has been going on, I am told, for thirty-eight thousand of our years. Can you grasp that, Mrs. Stuart? I find it difficult. A plan running back to when Cro-Magnon man was disputing with Neanderthals for the prize of a planet. . . but perhaps my trouble lies in the fact that we are ourselves the shortest-lived intelligent race we have yet found.

"What would we do if a child was missing for more than a century? No need to discuss it; it in no way resembles what the Hroshii did. They were not too worried about her welfare; they did not think of her as dead. . . but merely misplaced. They do not die easily. They do not even starve to death. Uh, perhaps you have heard of flatworrns? Euplanaria?"

"I have never taken any interest in xenobiology, Mr. Kiku."

"I made the same error, ma'am; I asked, 'What planet is it from?' Euplanaria are relatives of ours; there are many more flatworms on Earth than there are men. But they have a characteristic in common with Hroshii; both breeds grow when fed, shrink when starved and seem to be immortal, barring accidents. I had wondered why Lummox was so much larger than the other Hroshii. No mystery. . . you fed Lummox too much."

"I told John Thomas that repeatedly!"

"No harm done. They are already shrinking her down. The Hroshii were not angry, it seems, over the theft or kidnapping or luring away of their youngster. They knew her-a lively, adventuresome disposition was part of what had been bred into her. But they did want her back and they searched for her year after year, following the single clue that she must have gone off with a certain group of visitors from space; they knew what those visitors looked like but not from what part of the sky they came.

"It would have discouraged us. . . but not them. I have a misty impression that the century they spent chasing rumors, asking questions, and checking strange planets was-to them-about what a few months would be to us. In time they found her. Again, they were neither grateful nor angry; we simply did not count.

"That might have been our only contact with the noble Hroshii had not a hitch developed; the Hroshia, now grown big but still young, refused to leave without her monstrous friendI speak from the Hroshian viewpoint This was terrible to them, but they had no way to force her. How bitter a disappointment it was I ask you to imagine. . . a mating planned when Caesar fought the Gauls all now in readiness, with the other strains matured and ready. . . and Lummox refuses to go home. She shows no interest in her destiny. . . remember, she is very young; our own children do not develop social responsibility very early. In any case she won't budge without John Thomas Stuart." He spread his hands. "You see the predicament they are in?"

Mrs. Stuart set her mouth. "I'm sorry but it is no business of mine."

"True. I suppose that the simplest thing to do is to let Lummox go home . . . to your home, I mean. . . and. . ."

"What? Oh, no!"

"Ma'am?"

"You can't send that beast back! I won't stand for it."

Mr. Kiku stroked his chin. "I don't understand you, ma'am. It's Lummox's home; it has been the Hroshia's home much longer than it has been yours, about five times as long I believe. If I remember correctly, it isn't your property, but your son's. Am I right?"

"That has nothing to do with sit! You can't load me down with that beast."

"A court might decide that it was up to your son. But why cross that bridge? I am trying to find out why you oppose something so clearly to your son's advantage."

She sat silent, breathing hard, and Mr. Kiku let her sit. At last she said, "Mr. Kiku, I lost my husband to space; I won't let my son go the same way. I intend to see to it that he stays and lives on Earth."

He shook his head sadly. "Mrs. Stuart, sons are lost from the beginning."

She took out a handkerchief and dabbed at her eyes. "I can't let him go off into the sky. . . he's only a little boy!"

"He's a man, Mrs. Stuart. Younger men have died in battle."

"Is that what you think makes a man?"

"I know of no better gauge."

He went on, "I call my assistants 'boys' because I am an old man. You think of your son as a boy because you are, by comparison, an old woman. Forgive me. But the notion that a boy becomes a man only on a certain birthday is a mere legal fiction. Your son is a man; you have no moral right to keep him an infant."

"What a wicked thing to say! It's not true; I am merely trying to help him and guide him."

Mr. Kiku smiled grimly. "Madam, the commonest weakness of our race is our ability to rationalize our most selfish purposes. I repeat, you have no right to force him into your mold."

"I have more right than you have! I'm his mother."

"Is 'parent' the same as 'owner'? No matter, we are poles apart; you are trying to thwart him, I am helping him to do what he wants to do."

"From the basest motives!"

"My motives are not an issue and neither are yours." He stood up.

"As you have already said, it seems pointless to continue. I am sorry."

"I won't let him! He's still a minor. . . I have rights."

"Limited rights, ma'am. He could divorce you."

She gasped. 'He wouldn't do that to me! His own mother!"

"Perhaps. Our children's courts have long taken a dim view of the arbitrary use of parental authority; coercion in choice of career is usually open-and-shut. Mrs. Stuart, it is best to give into the inevitable gracefully.

Don't oppose him too far, or you will lose him completely. He is going."

XV
Undiplomatic Relations

Mr. Kiku returned to his office with his stomach jumping but he did not stop to cater to it. Instead he leaned across his desk and said, "Sergei. Come in now."

Greenberg entered and laid down two spools of sound tape. "I'm glad to get rid of these. Whoo!"

"Wipe them, please. Then forget you ever heard them."

"Delighted." Greenberg dipped them in a cavity. "Cripes, boss, couldn't you have given him an anesthetic?"

'Unfortunately, no."

"Wes Robbins was pretty rough on him. I felt like a window peeper. Why did you want me to hear them? I don't have to deal with the mess. Or do I?"

"No. But someday you will need to know how it is done."

"Mmmm. . . Boss. . . did you have any intention of letting it stick when he fired you?"

"Don't ask silly questions."

"Sorry. How did you make out with the hard case?"

"She won't let him go."

"So?"

"So he is going."

"She'll scream her head off to the papers."

"So she will." Mr. Kiku leaned toward his desk. "Wes?"

"Mr. Robbins is at the funeral of the Venerian foreign minister," a female voice answered, "with the Secretary."

"Oh, yes. Ask him to see me when he returns, please."

"Yes, Mr. Kiku."

"Thank you, Shizuko." The Under Secretary turned to Greenberg. "Sergei, your acting appointment as diplomatic officer first class was made permanent when you were assigned to this affair."

"Was it?"

"Yes. The papers will no doubt reach you. You are now being promoted to chief diplomatic officer, acting. I will hold up the permanent appointment for ninety days to let some noses get back in joint."

Greenberg's face showed no expression. "Nice," he said. "But why? Because I brush my teeth regularly? Or the way I keep my brief case polished?"

"You are going to Hroshijud as deputy and chief of mission. Mr. MacClure will be ambassador, but I doubt that he will learn the tongue. . . which will of course place the burden of dealing with them on you. So you must acquire a working knowledge of their language at once. Follow me?"

Greenberg translated it to read: MacClure will have to talk to them through you, which keeps him in line.

"Yes," he answered thoughtfully, "but how about Dr. Ftaeml? The Ambassador will probably use him as interpreter rather than myself." To himself he added: boss, you can't do this to me. MacClure can short me out through Ftaeml. . . and there I am, nine hundred lightyears from help.

"Sorry," Kiku answered, "but I can't spare Ftaeml. I shall retain him to interpret for the Hroshij mission they will leave behind. He accepted the job."

Greenberg frowned. "I'll start picking his brain in earnest, then, I've soaked up some Hroshija already. . . makes your throat raw. But when did they agree to all this? Have I slept through something? While I was in Westville?"

"They haven't agreed. They will."

"I admire your confidence, boss. They strike me as being as stubborn as Mrs. Stuart. Speaking of such, Ftaeml spoke to me while you were bickering with her. He says they are getting insistent about the Stuart kid. Now that you know he's going shouldn't we quiet them down? Ftaeml is jittery. He says the only thing that restrains them from giving us the worlth is that it would displease our old pal Lummox."

"No," answered Kiku, "we do not tell them. Nor do we tell Ftaeml. I want him to remain apprehensive."

Greenberg chewed a knuckle. "Boss," he said slowly, "isn't that asking for trouble? Or do you have a hunch that they aren't the heavyweights they claim to be? If it comes to a slugging match, can we outslug them?"

"I doubt it extremely. But the Stuart boy is my hole card."

"I suppose so. Far be it from me to quote youknow-who. . . but if the risk is that great, aren't the people entitled to know?"

"Yes. But we can't tell them."

"How's that again?"

Mr. Kiku frowned. "Sergei," he said slowly, "this society has been in crisis ever since the first rocket reached our Moon. For three centuries scientists and engineers and explorers have repeatedly broken through to new areas, new dangers, new situations; each time the political managers have had to scramble to hold things together, like a juggler with too much in the air. It's unavoidable.

"But we have managed to keep a jury-rigged republican form of government and to maintain democratic customs. We can be proud of that. But it is not now a real democracy and it can't be. I conceive it to be our duty to hold this society together while it adjusts to a strange and terrifying world. It would be pleasant to discuss each problem, take a vote, then repeal it later if the collective judgment proved faulty. But it's rarely that easy. We find ourselves oftener like pilots of a ship in a life-and-death emergency. Is it the pilot's duty to hold powwows with passengers? Or is it his job to use his skill and experience to by to bring them home safely?"

"You make it sound convincing, boss. I wonder if you are right?"

"I wonder also." Mr. Kiku went on, "I intended to hold the conference with the Hroshii tomorrow morning."

"Okay. I'll tell Ftaeml. They ought to stay quiet overnight."

"But, since they are anxious, we will postpone until the following day and let them grow still more anxious." Kiku thought. "Have Ftaeml tell them this. Our customs require that a party wishing to negotiate send presents ahead; therefore they must send us presents. Tell them that the lavishness of the gifts gauge the seriousness of the matter to be discussed; too poor a gift will prejudice their petition."

Greenberg frowned. "You have some swindle in mind, but I miss the point. Ftaeml knows that our customs don't call for it."

"Can you convince him that this is a custom which he has not encountered? Or can you take him into your confidence? I see conflict in him; his loyalty is to his clients but his sympathies appear to be with us."

"I had better not try to kid him. But getting a Rargyllian to lie when he is interpreting professionally. . . I doubt if he can."

"Then phrase it so that it is not a lie. Tell him that it is a very old custom. . . which is true. . . and that we resort to it only on sufficiently important occasions. . . which this is. Give him an out, let him see your purpose, gain a sympathetic translation."

"Can do. But why, boss? Just for bulge?"

"Precisely. We are negotiating from weakness; it Is imperative that we start with the upper hand. I have hopes that the symbolism of the petitioner bearing presents is as universal as we have found it to be up to now."

"Suppose they won't kick through with the loot?"

"Then we sit tight until they change their minds." Kiku added, "Start selecting your team. Let me see a list tomorrow."

Greenberg groaned. "I was going to turn in early."

"Never count on it in this business. Oh yes. . . as soon as the conference is over, send a good man. . . Peters, perhaps. . . up to their ship to see what changes are needed for human passengers. Then we'll tell the Hroshii what we require."

"Wait a minute, boss. I prefer one of our own ships. How do you know they've got room for us?"

"Our ships will follow. But the Hroshia Lummox goes with them and young Stuart goes with Lummox, therefore our mission goes in their ship in order that the boy will be accompanied by humans."

"I see. Sorry."

"There will be room. They will leave their own mission behind at this same time. . . or no one will go. One hundred Hroshii, to pluck a figure, will certainly vacate living space for one hundred of our sort."

"In other words, boss," Greenberg said softly, "you are insisting on hostages."

"'Hostage'," Mr. Kiku said primly, "is a word that no diplomat should ever use." He turned back to his desk.

The ground floor auditorium of the Spatial Affairs building was selected for the conference because its doors were large enough and its floors strong enough. It might have been safer to hold it at the space port, as Dr. Ftaeml urged, but Mr. Kiku insisted on the Hroshii coming to him for reasons of protocol.

Their presents preceded them.

The gifts were stacked on both sides of the great hall and were lavish in quantity; their values and qualities were still unknown. The departmental xenologists were as eager as a child faced with birthday presents, but Mr. Kiku had ordered them to hold off until the conference was over.

Sergei Greenberg joined Mr. Kiku in the retiring room behind the rostrum as the Hroshii delegation entered the hall. He looked worried. "I don't like this, boss."

Kiku looked up. "Why not?"

Greenberg glanced at the others present-Mr. MacClure and a double for the Secretary General. The double, a skilled actor, nodded and went back to studying the speech he was about to deliver, but MacClure said sharply, "What's the trouble, Greenberg? Those devils up to something?"

"I hope not." Greenberg addressed Kiku, "I checked arrangements from the air and they look good.. We've got the Boulevard of the Suns barricaded from here to the port and enough reserves on each side for a small war. Then I picked up the head of their column as it left the port and flew above it. They dropped off reserves of their own about every quarter of a mile and set up gear of some sort at each strong point. It might just be communication links back to their ship. I doubt it. I think it must be weapons."

"So do I," agreed Kiku.

The Secretary said worriedly, "Now look here, Mr. Kiku. . ."

"If you please, Mr. MacClure. Sergei, the Chief of Staff reported this earlier. I advised the Secretary General that we should make no move unless they try to pass our barricades."

"We could lose a lot of men."

"So we could. But what will you do, Sergei, when you are required to enter a stranger's camp to palaver? Trust him completely? Or try to cover your retreat?"

"Mmm.. . yes."

"I consider this the most hopeful sign we have had yet. If those are weapons, as I hope they are, it means that they do not regard us as negligible opponents. One does not set up artillery against mice." He looked around. "Shall we go? I think we have let them stew long enough. Ready, Arthur?"

"Sure." The Secretary-General's double chucked his script aside. "That boy Robbins knows how to write a speech. He doesn't load up a sentence with sibilants and make me spray the first five rows."

"Good." They went in, the actor first, then the Secretary, then the Permanent Under Secretary followed by his assistant.

Of the long procession of Hroshii that had left the space port only a dozen had entered the auditorium, but even that number made the hail seem filled. Mr. Kiku looked down at them with interest, it being the first time that he had laid eyes on a Hroshiu. It was true, he saw, that these people did not present the golliwog friendliness shown in the pictures of the Hroshia Lummox. These were adults, even though smaller than Lummox. The one just in front of the platform and flanked by two others was staring back at him. The stare was cold and confident. Mr. Kiku found that the creature's gaze made him uneasy; he wanted to shift his eyes. Instead he stared back and reminded himself that his own hypnotherapist could do it as well or better than the Hroshiu.

Greenberg touched his elbow. "They've set up weapons in here, too," he whispered. "See that? In the back?"

Mr. ICiku answered, "We are not supposed to know that it is a weapon. Assume that it is apparatus for their own record of the conference." Dr. Ftaeml was standing beside the foremost Hroshiu; the Under Secretary said to him, "Tell them what our Secretary General is. Describe him as chief of seventeen powerful planets."

'The Rargyllian hesitated. "What about the President of your Council?"

"The Secretary General embodies both of them for this occasion."

"Very well, my friend." The Rargyillan spoke in highpitched speech which reminded Kiku of puppies whining. The Hroshiu answered him briefly in the same tongue, and suddenly Mr. Kiku no longer felt the dread that had been inspired by the creature's stare. It was not possible to feel awe for a person who sounded like a lonesome puppy. But he reminded himself that deadly orders could be given in any speech.

Ftaeml was speaking. "Here beside me is . ." He broke into a multiple squeal of the strange tongue. ". . . who is commander of the ship and the expedition. She. . . no, perhaps 'he' would be better. . . he is hereditary marshal and. . ." The Rargyllian broke off and fretted. "You have no equivalent rank. Perhaps I should say 'mayor of the palace.'"

Greenberg suddenly said, "How about 'boss,' Doc?"

"A happy suggestion! Yes, this is the Boss. Her. . . his social position is not highest but his practical authority is almost without limit."

Kiku asked, "Is his authority such that he may conduct plenipotentiary bargaining?"

"Ah, yes, certainly!"

'Then we will get on with it." He turned to the actor and nodded. Then he spoke to the desk in front of him, using a hush circuit: "Getting all this?"

A voice answered his ears alone. "Yes, sir. The picture pick-up faded once but it's all right now."

"Are the Secretary General and the Chief of Staff listening?"

"I believe so, sir. Their offices are monitoring."

"Very well" Mr. Kiku listened to the Secretary General's speech. It was short but delivered with great dignity and the actor paced it so that Ftaeml might translate. The Secretary General welcomed the Hroshii to Earth, assured them that the peoples of the Federation were happy that the Hroshii had at long last found their lost sibling, and added that this happy accident should be the occasion for the Hroshii to take their rightful place in the Community of Civilizations.

He sat down and promptly went to sleep for all practical purposes, eyes open and face fixed in kindly dignity. The double could hold this Roman-Emperor pose for hours without really noticing the review, or ceremony, or whatever he might be chaperoning.

Mr. Macclure spoke briefly, seconding the Secretary General and adding that the Federation was now prepared to discuss any matters of business between the Federation and the noble Hroshii.

Greenberg leaned to Kiku and whispered, "Should we clap, boss? Somebody ought to and I don't think they know how."

"Shut up," Kiku said amiably. "Dr. Ftaeml, does the commander have a speech of formality to deliver?"

"I think not." Ftaeml spoke to the leading Hroshiu, then answered, "The reply is a serious comment on the two speeches made, rather than an answer of formality. He states that the Hrosliii have no need of other lesser. . . breeds and says we should not get to business without further, ah. . . trivia."

"If it is true that they have no need for other peoples, please ask him why they have come to us and why they have offered us presents?"

"But you insisted on it, my friend," Ftaeml answered in surprise.

"Thank you, Doctor, but I do not want your comment. Require him to answer. Please do not coach him."

"I will try." Ftaeml exchanged several sentences of the high whining with the Hroshij commander, then turned back to Kiku. "Forgive me. He says that he acceded to your childishness as the simplest means of accomplishing his purpose. He wishes to discuss now the surrender of John Thomas Stuart."

"Please tell him that the matter is not open to discussion. The agenda requires that we first settle the question of diplomatic relations."

"Pardon me, sir. 'Diplomatic relations' is a concept difficult to translate. I have been working on it for days."

"Tell him that what he sees now is an example of diplomatic relations. Free peoples, negotiating as equals, with peaceful intentions, to their mutual benefit."

The Ragyllian simulated a sigh. "Each of those concepts is almost equally difficult. I will try."

Presently he answered, "The hereditary marshal says that if what we are doing constitutes diplomatic relations you have them now. Where is the Stuart boy?"

"Not so fast. The agenda must be taken up point by point. They must accept an embassy and a mixed mission for cultural, scientific, and trade purposes. They must leave with us a similar embassy and mission. Regular travel between our two sovereignties must be planned. Not until these are disposed of can there be any mention of the Stuart boy."

"I will try again." Ftaeml spoke to the 'Boss' Hroshiu at length; the reply was short. "He tells me to tell you that all those points are rejected as not worthy of consideration. Where is the Stuart boy?"

"In that case," Mr. Kiku answered quietly, "tell them that we do not bargain with barbarians. Tell them to pick up the trash-be sure of forceful translation!-with which they have littered our home, and get. quickly back to their ship. They are required to take off at once. They must bundle their precious Hroshia aboard, by force if need be, if they ever expect to see her again-they will never again be allowed to land."

Ftaeml looked as if he were about to burst into tears he was incapable of shedding. "Please! I beg you not to antagonize them. I tell tales out of school. . . I go beyond my professional duties. . . but they could now destroy this city without recourse to their ship."

"Deliver the message. The conference is ended." Mr. Kiku stood up, picked up the others with his eyes, and headed for the retiring room.

The double went ahead. MacClure caught Kiku by the arm and fell into step. "Henry. . . you're running this, granted. But shouldn't you talk it over? They're savage beasts. It could. . ."

"Mr. MacClure," Kiku said softly, "as a distinguished predecessor once said, in dealing with certain types you must step on their toes until they apologize." He urged the Secretary toward the door.

"But suppose they won't?"

"That is the hazard. Please. . . let us not argue in their presence." They went into the retiring room; the door closed behind them.

Greenberg turned to Kiku. "Nice try, boss. . . but what do we do now?"

"We wait."

"Okay." Greenberg went nervously to a wall relay, picked up the scene inside the auditorium. The Hroshii had not left. He could just make out Ftaeml, surrounded by creatures much larger than the medusoid.

The double said to Kiku, 'Through with me, sir?"

"Yes, Arthur. A good job."

"Thanks. I've got time to get this make-up off and catch the second game of the doubleheader."

"Good. Perhaps you had better change your appearance here."

"Shucks, the photographers know. They play along." He left, whistling. MacClure sat down, lit a cigar, took a puff, put it down. "Henry, you ought to notify the Chief of Staff."

"He knows. We wait."

They waited. Greenberg said suddenly, "Here comes Ftaeml." He hurried to the door and let the Rargyllian in.

Dr. Ftaeml seemed very tense. "My dear Mr. Kiku-the Hroshij commander states that they will agree to your strange wishes for sake of prompt settlement. He insists that you now deliver the Stuart boy."

"Please tell him that he misunderstands entirely the nature of friendly relations between civilized people. We do not barter the freedom of one of our citizens against their worthless favors, even as they would not barter the freedom of their Hroshia Lummox. Then tell him that I order them to leave at once."

Ftaeml said earnestly, "I reluctantly deliver your message."

He was back quickly. "They agree to your terms."

"Good. Come, Sergei. . . Mr. MacClure, there is no need for you to appear unless it suits you." He went out into the hall, followed by Greenberg and Ftaeml.

The Hroshij "boss," it seemed to Kiku was more baleful than ever. But the details went promptly forward-an equal number of Hroshii and of humans to constitute the, missions, passage to be provided in the Hroshij ship, one of the Hroshii there present to be ambassador to the Federation. Ftaeml assured them that this Hroshiu was of practical rank second only to the expedition commander.

And now, said the Hroshij commander, it is time to turn over to us John Thomas Stuart. Ftaeml added anxiously, "I trust you have made arrangements, my friend? I dislike the tenor of this. It has been too easy."

With a feeling of satisfaction soothing his troubled stomach Mr. Kiku answered, "I see no difficulty. The Stuart boy is willing to go, now that we are assured of civilized relations. Please make sure that they understand that he goes as a free being, not a slave, not a pet. The Hroshii must guarantee his status and his return passage, in one of their own ships, whenever he so wishes."

Ftaeml translated. Presently he answered. "All of that is satisfactory except for something which I will translate as a 'minor detail.' The Stuart boy will be a member of the household of the Hroshia Lummox. Naturally-I translate here most carefully-naturally the question of the boy returning, if ever, is a personal prerogative of the Hroshia Lummox. Should she grow tired of him and wish to return him, a ship would be made available."

"No."

"No what, sir?"

"A simple negative. The subject of the Stuart boy is finished."

Ftaeml turned back to his clients.

"They say," he answered presently, "that there is no treaty."

"I know that. Treaties are not signed with . . . they have a word meaning 'servant'?"

"They have servants of several sorts, some higher, some lower."

"Use the word for the lowest sort. Tell them that there is no treaty because servants have no power to treat. Tell them to go and be quick about it."

Ftaeml looked, at Kiku sadly. "I admire you, my friend, but I do not envy you." He turned to the expedition commander and whined for several moments.

The Hroshiu opened his mouth wide, looked at Kiku, and squealed like a kicked puppy. Ftaeml gave a start and moved away. "Very bad profanity, untranslatable. . ."The monster continued to make noises; Ftaeml tried frantically to translate: "Contempt. . . lower animal. . . eat you with relish. . . follow back your ancestors and eat them as well. . . your despicable race must be taught manners. . . kidnappers. . . child stealers. . ." He stopped in great agitation.

The Hroshiu lumbered toward the platform, reared up until he was eye to eye with Mr. Kiku. Greenberg slid a hand under his desk and located a control that would throw a tanglefoot field over the lower floor. . . a permanent installation; the hall had seen other disturbances.

But Mr. Kiku sat like stone. They eyed each other, the massive thing from "Out There" and the little elderly human. Nothing moved in the great hall, nothing was said.

Then from the back of the hall broke out a whining as if a whole basket of puppies had been disturbed at once. The Hroshij commander whirled around, making the floor shake, and shrilled to his retainers. He was answered and he whined back sharp command. All twelve Hroshii swarmed out the door moving with speed incredible for beings so ungainly.

Kiku stood up and watched them. Greenberg grabbed his arm. "Boss! The Chief of Staff is trying to reach you."

Kiku shook him off. "Tell him not to be hasty. It is most important that he not be hasty. Is our car waiting?"

XVI

"Sorry We Messed Things Up"

John Thomas Stuart XI had wanted to attend the conference; it required a flat refusal to keep him away. He was in the Hotel Universal in the suite provided for him and his mother, playing checkers with his bodyguard, when Betty Sorenson showed up with Miss Holtz. Myra Holtz was an operative for BuSec of DepSpace, and concealed her policewoman profession under a pleasant fa‡ade. Mr. Kiku's instructions to her concerning Betty had been: "Keep a sharp eye on her. She has a taste for excitement."

The two guards greeted each other; Betty said, "Hi, Johnnie. Why aren't you over at the heap big smoke?"

"They wouldn't let me."

"Me, too." She glanced around. "Where's the Duchess?"

"Cone shopping. I'm still getting the silent treatment. Seventeen hats she's bought. What have you done to your face?"

Betty turned to a mirror. 'Like it? It's called 'Cosmic Contouring' and it's the latest thing."

"Makes you look like a zebra with the pip."

"Why, you country oaf. Ed, you like it. Don't you?"

Ed Cowen looked up from the checker board and said hastily, "I wouldn't know. My wife says I have no taste."

"Most men haven't. Johnnie, Myra and I have come to invite you two to go out on the town. How about it?"

Cowen answered, "I don't favor that, Myra."

"It was her idea," Miss Holz answered.

John Thomas said to Cowen, "Why not? I'm sick of checkers."

"Well. . . I'm supposed to keep in touch with the office. They might want you any time now."

"Pooh!" put in Betty. "You carry a bodyphone. Anyhow Myra does."

Cowen shook his head. "Let's play it safe."

"Am I under arrest?" Betty persisted. "Is Johnnie?"

"Mmm. . . no. It's more protective custody."

'Then you can protectively cuss him wherever be is. Or stay here and play checkers with yourself. Come on, Johnnie."

Cowen looked at Miss Holtz; she answered slowly, "I suppose it's all right, Ed. We'll be with them."

Cowen shrugged and stood up. Johnnie said to Betty, "I'm not going out in public with you looking like that. Wash your face."

"But Johnnie! It took two hours to put it on."

"The taxpayers paid for it, didn't they?"

"Well, yes, but. . ."

"Wash your face. Or we go nowhere. Don't you agree, Miss Holtz?"

Special Operative Holtz had only a flower pattern adorning her left cheek, aside from the usual tinting. She said thoughtfully, "Betty doesn't need it. Not at her age."

"Oh, you're a couple of Puritans!" Betty said bitterly, stuck her tongue at Johnnie and slouched into the bath. She came out with her face glowing pink from scrubbing. "Now I'm stark naked. Let's go."

There was another tussle at the lift, which Ed Cowen won. They went to the roof to take an air taxi for sightseeing, instead of going down to the streets. "Both you kids have had your faces spread around the papers the past few days. And this town has more crackpots than a secondhand shop. I don't want any incidents."

"If you hadn't let them bully me, my face wouldn't be recognizable."

"But his would."

"We could paint him, too. Any male face would be improved with make-up." But she entered the lift and they took an air taxi.

"Where to, Chief?"

"Oh," said Cowen, "cruise around and show us sights. Put it on the hourly rate."

"You're the doctor. I can't fly across the Boulevard of Suns. Some parade, or something."

"I know."

"Look," put in Johnnie, "take us to the space port."

"No," Cowen corrected. "Not out there."

"Why not, Ed? I haven't seen Lummox yet. I want to look at him. He may not be well."

"That's one thing you can't do," Cowen told him. "The Hroshii ship is out of bounds."

"Well, I can see him from the air, can't I?"

"No!"

"But. . ."

"Never mind him," Betty advised. "We'll get another taxi. I've got money, Johnnie. So long, Ed."

"Look," complained the driver. "I'll take you to Timbuctu. But I can't hang around over a landing flat. The cops get rude about it."

"Head for the space port," Cowen said resignedly. There was a barricade around the many acres assigned to the Hroshii except where it had been broken to let their delegation enter the Boulevard of Suns, and even then the barricade joined others carrying on down the avenue toward the administrative group. Inside the enclosure the landing craft of the Hroshii sat squat and ugly, almost as large as a terrestrial star ship. Johnnie looked at it and wondered what it was going to be like to be on Hroshijud. He was uncomfortable at the thought, not because he was fearful but because he had not yet told Betty that he was going. He had started a couple of times but it had not worked out right.

Since she had not raised the subject he assumed that she did not know.

There were other sightseers in the air, and a crowd, not very thick, outside the barricade. No single wonder lasted long in Capital; its residents prided themselves on being blas, and in fact, the Hroshii were not fantastic compared with a dozen other friendly races, some of them members of the Federation.

The Hroshii swarmed around the base of their ship, doing unexplained things with artifacts they had erected. Jo'hnnie tried to estimate their number, found it like guessing beans in a bottle. Dozens, surely. . . how many more?

The taxi cruised just outside the point patrol of police air cars.

Johnnie suddenly called out, "Hey! There's Lummie!"

Betty craned her neck. "Where, Johnnie?"

"Corning into sight on the far side of their ship. There!" He turned to the driver. "Say, mister, could you put us around on the far side as close in as they'll let you?"

The driver glanced at Cowen, who nodded. They swung around, the police sentries and came in toward the Hroshij craft from the far side. The driver picked a point between two police cars and back a little. Lummox could be seen clearly now, closely attended by a group of Hroshii and towering over them.

"I wish I had binox," Johnnie complained. "I can't really see."

"Pair in the glove compartment," offered the driver. Johnnie got them out. They were a simple optical type, without electronic magnification, but they brought Lummox up much closer. He stared into his friend's face.

"How does Lummie look, Johnnie?"

"Okay. Kind of skinny, though. I wonder if they are feeding him right?"

"Mr. Greenberg tells me they aren't feeding Lummie at all. I thought you knew?"

"What? They can't do that to Lummie!"

"I don't see what we can do about it."

"Well. . ." John Thomas lowered the window and tried to get a better look. "Say, can't you take it in closer? And lower maybe? I want to give him a good checking over."

Cowen shook his head. The driver grumbled, "I don't want no words with the cops." But he did move in a little closer until he was lined up with the police cars.

Almost at once the speaker in the car's overhead blared, "Hey, you! Number four eighty-four! Where do you think you're going with that can? Drag it out of there!"

The driver muttered and started to obey. John Thomas, still with the glasses to his eyes, said, "Aw!". . . then added, "I wonder if he can hear me? Lummie!" he shouted into the wind. "Oh Lummox!"

The Hroshia raised her head and looked wildly around.

Cowen grabbed John Thomas and reached for the window closure; But Johnnie shook free. "Oh, you go fry eggs!" he said angrily. "I've been pushed around long enough. Lummox! It's Johnnie, boy! Over here! Come over this way. . ."

Cowen dragged him inside and slammed the window shut. "I knew we shouldn't have come out. Driver, let's get out of here."

"Only too happy!"

"But hold it just back of the police lines. I want to check on this."

"Make up your mind."

It needed no binoculars to see what was happening. Lummox headed straight for the barrier, on a bee line with the taxi, scattering other Hroshii right and left. On reaching the barrier no attempt was made to flow over it; Lummox went through it.

"Jumping jeepers!" Cowen said softly. "But the tanglefoot will stop her."

It did not. Lummox slowed down, but one mighty foot followed another, as if the charged air had been deep mud. With the persistence of a glacier the Hroshia was seeking the point most closely under the taxi.

And more Hroshii were pouring out the gap. They made still heavier weather of the immobilizing field, but still they came. As Cowen watched, Lummox broke free of the zone and came on at a gallop, with people scattering ahead of her.

Cowen snapped, "Myra, get through on another circuit to the military! I'll call the office."

Betty grabbed his sleeve. "No!"

'Huh? You again! Shut up or you'll get the back of my hand."

"Mr. Cowen, will you listen." She went on hastily, "It?s no good calling for help. There isn't anybody who can make Lummox listen but Johnnie-and they won't listen to anybody but Lummox. You know that. So put him down where he can talk to Lummie-or you're going to have a lot of people hurt and it will be all your fault."

Security Operative First Class Edwin Cowen stared at her and reviewed in his mind his past career and future hopes. Then he made a brave decision almost instantly. "Take her down," he snapped. "Land her and let the kid and me out."

The driver groaned. "I'm charging extra for this." But he landed the car so fast that it jarred them. Cowen snatched the door open and he and John Thomas burst out; Myra Holtz tried to grab Betty, was unsuccessful. She herself jumped out as the driver was already raising.

"Johnnie!" squealed Lummox and held out mighty arms in a universal gesture of welcome.

John Thomas ran to the star beast. "Lummie! Are you all right?"

"Sure," agreed Lummox. "Why not? Hi, Betty."

"Hi, Lummie."

"Hungry, though," Lummox added thoughtfully.

"We'll change that."

"It's all right. I'm not supposed to eat now."

John Thomas started to answer this amazing statement when he noticed Miss Holtz ducking away from one of the Hroshii. Others were milling around as if uncertain how to treat this development. When Johnnie saw Ed Cowen draw his gun and place himself between the Hroshiu and Myra he said suddenly, "Lummox! These are my friends.

Tell your friends to leave them alone-and get back inside. Quickly!"

"Whatever you say, Johnnie." The Hroshia spoke in the whining speech to her kin; at once she was obeyed.

"And make us a saddle. We'll go with you and have a long talk."

"Sure, Johnnie."

They got aboard, Johnnie giving Betty a hand up, and started in through the break in the barrier. When Lummox struck the tanglefoot field again they stopped and Lummox spoke sharply to one of the others.

That Hroshiu called out to one inside; the tanglefoot field disappeared. They moved on in without difficulty.

When Mr. Kiku, Sergei Greenberg, and Dr Ftaeml arrived they found an armed truce, tense on both sides. All the Hroshii were back inside the broken barrier; military craft in quantity had replaced the police patrol and far overhead, out of sight, bombers were ready in final extremity to turn the area into a radioactive desert.

The Secretary General and the Chief of Staff met them at the barricade. The Secretary General looked grave. "Ah, Henry. It seems we have failed. Not your fault."

Mr. Kiku looked out at the massed Hroshii. "Perhaps." The Chief of Staff added, "We are evacuating the blast radius as rapidly as possible. But if we have to do it, I don't know what we can do for those two youngsters in there."

"Then let's not do anything, shall we? Not yet."

"I don't think you understand the seriousness of the situation, Mr. Under Secretary. For example, we placed an immobilizing locus entirely around this area. It's gone. They cancelled it out. Not just here. Everywhere."

"So. Perhaps you do not understand the seriousness of the situation, General. In any case, a few words can do no harm. Come, Sergei. Coming, Doctor?" Mr. Kiku left the group around the Secretary General and headed for the break in the barricade. Wind sweeping across the miles-wide field forced him to clutch his hat. "I do not like wind," he complained to Dr. Ftaeml. "It is disorderly."

"There is a stronger wind ahead," the Rargyllian answered soberly. "My friend, is this wise? They will not hurt me; I am their employee. But you. . ."

"What else can I do?"

"I do not know. But there are situations in which courage is useless."

"Possibly. I've never found one yet."

"One finds such a situation but once."

They were approaching the solid mass of Hroshti around Lummox.

They could make Out the two humans on the back of the Hroshia a good hundred yards beyond. Kiku stopped. "Tell them to get out of my way. I wish to approach the Hroshia Lummox."

Ftaeml translated. Nothing happened, though the Hroshii stirred uneasily. Greenberg said, "Boss, how about asking Lummox and the kids to come out here? That crowd doesn't smell friendly."

"No. I dislike shouting into this wind. Please call out to the Stuart lad and tell him to have them make way."

"Okay, boss. It will be fun to tell my grandchildren-if I have grandchildren." He cupped his mouth and shouted, "Johnnie! John Stuart! Tell Lummox to have them clear a path."

"Sure!"

A path wide enough for a column of troops opened as if swept with a broom. The little procession moved down the ranks of Hroshii. Greenberg felt goose flesh crawl up and down his back.

Mr. Kiku's only worry seemed to be keeping his hat on in the wind. He swore primly while clutching at his head. They stopped in front of Lummox. "Howdy, Mr. Kiku," John Thomas called out. "Shall we come down?"

"Perhaps it would be best."

Johnnie slid off, then caught Betty. "Sorry we messed things up."

"So am I. If you did. Will you introduce me to your friend, please?"

"Oh, sure. Lummox, this is Mr. Kiku. He's a nice fellow, a friend of mine."

"How do you do, Mr. Kiku."

"How do you do, Lummox." Mr. Kiku looked, thoughtful. "Doctor, is not that the commander, there by the Hroshia? The one with the ugly glint in his eye?"

The Rargyllian looked. "Yes, it is he."

"Um. Ask him if he has reported the conference to his mistress."

"Very well." The medusoid spoke to the Hroshij commander, was answered. "He says not."

"Um. John Thomas, we concluded a treaty with the Hroshii to permit all that I discussed with you. Suddenly they repudiated the agreement when they discovered that we would not surrender your person without guarantees. Will you help me find out if such were the wishes of your friend?"

"You mean Lummox? Sure."

"Very well. Wait a moment. Dr. Ftaeml, will you report the essentials of our agreement to the Hroshia Lummox-in the presence of the commander? Or are the concepts beyond her?"

"Eh? Why should they be? She was perhaps two hundred of your years old when she was brought here."

"So much? Well, speak ahead."

The Rargyllian commenced the curious whines of the Hroshij tongue, addressing Lummox. Once or twice Lummox interrupted, then allowed him to continue. When Dr. Ftaeml had finished she spoke to the expedition commander. Ftaeml said to the humans, "She asks, 'Can this be true?'"

The commander made as wide a circle as space permitted, crept up in front of her, with the little group representing the Federation giving way. His legs were retracted so that he crawled like a caterpillar. Without lifting his head from the ground he whined his answer.

"He is admitting the truth but pleading necessity."

"I wish he would hurry with it," Kiku fretted. "I'm getting chilly." His thin knees trembled.

"She is not accepting the explanation. I will spare you the exact tenor of her language-but her rhetoric is superb."

Suddenly Lummox spat out one squeal, then reared up with four legs clear of the ground. With arms retracted the great beast swung down her head and struck the unfortunate commander a smashing sidewise blow,

It lifted him off the ground, bowled him into the crowd. Slowly he regained his feet, slunk back to the spot in front of Lummox.

Lummox began to speak. "She is saying. . . I wish you could hear this in her language!.. . that so long as the Galaxy shall last the friends of Johnnie are her friends. She adds that those who are not friends of her friends are nothing, less than nothing, never to be suffered in her sight. She commands this in the names of. . . it is a recitation of her ancestry with all its complicated branches and is somewhat tedious. Shall I attempt to translate?"

"Don't bother," Mr. Kiku told him. " 'Yes' is 'yes' in any language."

"But she tells it with great beauty," Ftaeml said. "She is recalling to them things dreadful and wonderful, reaching far into the past."

"I am interested only in how it affects the future. . . and in getting out of this pesky wind." Mr. Kiku sneezed.

"Oh dear!"

Dr. Ftaeml took his cape off and hung it around Mr. Kiku's narrow shoulders. "My friend. . . my brother. I am sorry."

"No, no, you will be cold."

"Not I."

"Let us share it, then."

"I am honored," the medusoid answered softly, his tendrils twitching with emotion. He spread it around them and they huddled together while Lummox finished her peroration. Betty turned to Johnnie.

"That's more than you ever did for me."

"Now, Slugger, you know you're never cold."

"Well, put your arm around me at least."

"Huh? In front of everybody? Go snuggle up to Lummox."

While speaking Lummox had stayed reared up. As the oration progressed the assembled Hroshii sank down, retracting their legs until they were all in the humble position of the commander. At last it was over and Lummox added one sharp remark. The Hroshii stirred and began to move. "She says," translated Ftaeml, "that she now wishes to be alone with her friends."

"Ask her;" directed Kiku, "please to assure her friend John Thomas that all she has said is true and binding."

"Very well." As the other Hroshii hurried away Ftaeml spoke briefly to Lummox.

Lummox listened, then turned to John Thomas. Out of the great mouth came the piping, little-girl voice. "That's right, Johnnie. Cross my heart."

John Thomas nodded solemn agreement. "Don't worry, Mr. Kiku. You can depend on it."

XVII
Ninety-Seven Pickle Dishes

"Send her in."

Mr. Kiku composed himself nervously, giving the tea tray one last glance, making sure that the intimate little conference room was all that he wished of it. While he was thus fussing a door dilated and Betty Sorenson walked in, said sweetly, 'Hello, Mr. Kiku," and seated herself with composure.

He said, "How do you do, Miss Sorenson?"

"Call me Betty. My friends all do."

"Thank you. I would wish to be one." He looked her over and shuddered. Betty had been experimenting with a new design of bars; it made her face somewhat like a checker board. Besides that she had evidently been shopping and was dressed in styles far too old for her. Mr. Kiku was forced to remind himself that customs varied. "Um. . . my dear young lady, the purpose of this consultation is somewhat difficult to explain."

"Make it easy on yourself. I'm in no hurry."

"Will you have tea?"

"Let me pour for us. It's chummier." He allowed her to, then sat back with his cup in a relaxed attitude he did not feeL

"I trust you have been enjoying your stay?"

"Oh my, yes! I've never been able to shop before without counting pennies. Everybody should have an expense account."

"Enjoy it I assure you it will never show in the annual budget. . . literally. Our discretionary fund. Uh, you are an orphan, are you not?"

"A legal orphan. I'm a Free Child. My guardian is the Westville Home for Free Children. Why?"

"Then you are not of age?"

"Depends on how you look at it. I think I am, the court says I'm not. But it won't be long now, thank goodness."

"Um, yes. Perhaps I should say that I knew all this,"

"I figured you did. What's it all about?"

"Um. Perhaps I should tell a little story. Did you ever raise rabbits? Or cats?"

"I've had cats."

"We have run into a difficulty with the Hroshia we know as Lummox. Nothing disastrous; our treaty with them is not affected, since she has given her word. But, uh, shall we say that if we could oblige Lummox in a certain matter, it would make for better feelings, better future relations?"

"I suppose we shall say so, if you say so. What is it, Mr. Kiku?"

'Um. We are both aware that this Hroshia Lummox has long been a pet of John Thomas Stuart."

"Why, certainly. It worked out funny, didn't it?"

"Um, yes. And that Lummox was the pet of John Thomas's father before him, and so on for four generations."

"Yes, of course. Nobody could want a sweeter pet."

"Now, that is just the point, Miss Sorenson. . . Betty. That is the point of view of John Thomas and his forebears. But there are always at least two points of view. From the viewpoint of Lummox she. . . he. . . was not a pet. Quite the contrary. John Thomas was his pet. Lummox was engaged in raising John Thomases."

Betty's eyes widened, then she started to laugh and choked. "Mr. Kiku! Oh no!"

"I am quite serious. It is a matter of viewpoint and made more reasonable by considering relative lifetimes. Lummox had raised several generations of John Thomases. It was Lummox's only hobby and principal interest. Childish, but Lummox was, and still is, a child."

Betty got herself under control to the point where she could talk through giggles. "Raising John Thomases." Does Johnnie know about this?"

"Well, yes, but I explained it to him somewhat differently."

"Does Mrs. Stuart know about this?"

"Ah. . . I haven't found it necessary to tell her."

"May I tell her? I want to see her face. 'John Thomases'. . . oh my!"

"I think that would be cruel," Mr. Kiku answered stiffly.

"I suppose so. All right, I won't do it. But I can dream about it, can't I?"

"We all can dream. But to continue: Lummox appears to have been perfectly happy with this innocent hobby. It was the Hroshia's intention to continue it indefinitely. That was the reason that we found ourselves faced with this curious dilemma of being unable to get the Hroshii to leave after their sibling had been restored. Lummox wished to continue, uh, raising John Thomases." He hesitated.

Finally Betty said, "Well, Mr. Kiku? Go on."

"Uh, what are your own plans, Betty. . . Miss Sorenson?"

"Mine? I haven't discussed them with anyone."

"Um. Pardon me if I was unduly personal. You see, there are requirements in any endeavor and Lummox, it appears, is aware of one of the requirements. . . uh, let's put it this way. If we have here a rabbit. . . or a cat. . ." He stopped dead, unable to go on.

She searched his unhappy face. "Mr. Kiku, are you trying to say that it takes two rabbits to have more rabbits?"

"Well, yes. That was part of it."

"Now, really! Why make such a fuss about it? Everybody knows it. I suppose the rest is that Lummox knows that the same rule applies to John Thomases?"

He could only nod dumbly.

"You poor dear, you should have written me a note about it. It would have been less of a strain on you. I suppose I'll have to help you with the rest, too. You thought I might figure in this plan?"

"I had no wish to intrude. . . but I did want to sound out your intentions."

"Am I going to marry John Thomas? I've never had any other intention. Of course."

Mr. Kiku sighed. "Thank you."

"Oh, I won't be doing it to please you."

"Oh no! I was thanking you for assisting me."

"Thank Lummie. Good old Lummie! You can't fool Lummox."

"I take it that this is all settled?"

"Huh? I haven't proposed to him yet. But I will. . . I was waiting until it was a little nearer time for the ship to leave. You know how men are-nervous and skittery. I didn't want to leave him time to worry. Did your wife propose to you right off? Or did she wait until you were ripe for the kill?"

"Uh, well, the customs of my people are somewhat different. Her father arranged it with my father."

Betty looked shocked. "Slavery," she stated baldly.

"No doubt. However I have not been unhappy under it." He stood up. "I'm glad that we have concluded our talk so amiably."

"Just a moment, Mr. Kiku. There are one or two other matters. Just what are you doing for John Thomas?"

"Eh?"

"What's the contract?"

"Oh. Financially we mean to be liberal. He will devote most of his time to his education, but I had thought of giving him a nominal title in the embassy-special attach„ or assistant secretary, or some such."

Betty remained silent. "Of course, since you are going along, it might be well to give you a semi-official status, too. Say special aide, with the same salary? It would give you two a nice nest egg if you return. . .when you return."

She shook her head. "Johnnie isn't ambitious. I am."

"Yes?"

"Johnnie is to be ambassador to the Hroshii."

Mr. Kiku had grave trouble talking. At last he managed to say, "My dear young lady. Quite impossible."

"That's what you think. Look, Mr. MacClure got cold feet and welched on you, didn't he? Don't beat around the bush; by now I have my connections inside your department. He did. Therefore the job is open. It's for Johnnie."

"But, my dear," he said weakly, "it is not a job for an untrained boy. . . much as I think of Mr. Stuart."

"MacClure was going to be dead wood, wasn't he? Everybody knows that. Johnnie would not be dead wood. Who knows the most about Hroshii? Johnnie."

"My dear, I admit his special knowledge; I grant that we will make use of it. But ambassador? No."

"Yes."

"Charg, d'Affaires? That's an awfully high rank, but I'm willing to stretch a point But Mr. Greenberg must be the ambassador. We require a diplomat."

"What's so hard about being a diplomat? Or to put it another way, what could Mr. MacClure do that my Johnnie can't do better?"

He sighed deeply. "You have me there. All I can say is that there are situations which I am forced to accept, knowing them to be wrong, and others that I need not accept. If you were my own daughter I would paddle you. No."

She grinned at him. "I'll bet I outweigh you. But that's not the point. I don't think you understand the situation."

"No?"

"No. Johnnie and I are important to you in this dicker, aren't we? Especially Johnnie."

"Yes. Especially Johnnie. You are not essential . . even in the, uh, raising of John Thomases."

"Want to put it to a test? Do you think you can get John Thomas Stuart one half inch off this planet if I set myself against it?"

"Hmm. . . I wonder."

"So do I. But I've got nerve enough to put it to a trial. If I win, where are you? Out on a windy field, trying to talk your way out of a mess again. . . without Johnnie to help you."

Mr. Kiku went over to a window and looked out. Presently he turned. "More tea?" Betty asked politely.

"Thank you, no. Miss, do you have any idea what an ambassador extraordinary and minister plenipotentiary is?"

"I've heard the term."

"It is the same rank and pay as an ambassador, except that it is a special case. This is a special case. Mr. Greenberg will be the ambassador and carry the authority; the special, and purely nominal, rank will be created for John Thomas."

"Rank and pay," she answered. "I'm acquiring a taste for shopping."

"And pay," he agreed. "Young lady, you have the morals of a snapping turtle and the crust of a bakery pie. Very well, it's a deal. . . if you can get your young man to agree to it."

She giggled. "I. won't have any trouble."'

"I didn't mean that. I'm betting on his horse sense and natural modesty against your avarice. I think he'll settle for assistant embassy secretary. We'll see."

"Oh, Yes, we'll see. By the way, where is he?"

"Eh?"

"He's not at the hotel. You have him here, don't you?"

"He is here, as a matter of fact."

"Good." She walked up and patted him on the cheek. "I like you, Mr. Kiku. Now trot Johnnie in here and leave us alone. It will take me about twenty minutes. You don't have a thing to worry about."

"Miss Sorenson," Mr. Kiku asked wonderingly, "how does it happen that you do not ask to be ambassador yourself?"

Lummox was the only nonhuman to attend the wedding. Mr. Kiku stood up for the bride. He noticed that she was wearing no make-up, which made him wonder if possibly the embassy's junior secretary might not be master in his own home after all.

They received the usual ninety-seven pickle dishes, mostly from strangers, and other assorted costly junk that they would not take with them, including an all-expense trip to Hawaii for which they had no possible use. Mrs. Stuart wept and had her picture taken and greatly enjoyed herself; all in all it was a very successful wedding. Mr. Kiku leaked a few tears during the responses, but Mr. Kiku was a very sentimental man.

He was sitting at his desk the next morning, ignoring lights, with his Kenya-farm brochures spread out before him, but he was not looking at them. Dr. Ftaeml and he had gone out together and done the town after they got the kids safely married-and Mr. Kiku was feeling it somewhat, in a pleasant, relaxed manner. Even though his head buzzed and his coordination was poor, his stomach was not troubling him. He felt fine.

He was trying fuzzily to sum up the affair in his mind. All this fuss, all this grief, because some fool spaceman more than a century ago didn't have sense enough not to tamper with native life until protocol had been worked out. Oh my people, my people!

On second thought, he told himself not to point the finger of scorn; he might be looking in a mirror.

There was something that good old Ftaeml had said last night. . . something. . . now what was it he had said? Something which, at the time, convinced Kiku that the Hroshii never had had any weapons capable of seriously damaging Earth. Of course a Rargyllian would not lie, not professionally. . . but would one skate around the truth in order to conclude successfully a negotiation which seemed about to fail?

Well, since it had all been settled without violence he could only wonder. Just as well, perhaps.

Besides, the next heathens to show up might not be bluffing. That would not be good.

Mildred's voice came to him. "Mr. Kiku, the Randavian delegation is waiting."

"Tell them I'm molting!"

"Sir?"

"Never mind. Tell them I'll be right in. East conference room."

He sighed, decided to treat himself to just one pill, then got up and headed for the door, ready to stick his finger in another hole in the dike. Chinese obligation, be thought; once you take it on you can't drop it.

But he still felt cheerful and sang a snatch of the only song he knew all the way through: ". . . this story has no moral, this story has no end. This story only goes to show that there ain't no good in men."

In the meantime, out at the space port, the new Secretary for Spatial Affairs was seeing off the noble Hroshii. Her Imperial Highness, the Infanta of that race, 213th of her line, heiress to the matriarchy of the Seven Suns, future ruler over nine billion of her own kind, and lately nicknamed "The Lummox" contentedly took her pair of pets aboard the imperial yacht.

TUNNEL IN THE SKY

Chapter One

The Marching Hordes

The bulletin board outside lecture hall 1712-A of Patrick Henry High School showed a flashing red light. Rod Walker pushed his way into a knot of students and tried to see what the special notice had to say. He received an elbow in the stomach, accompanied by: "Hey! Quit shoving!"

"Sorry. Take it easy, Jimmy." Rod locked the elbow in a bone breaker but put no pressure on, craned his neck to look over Jimmy Throxton's head. "What's on the board?"

"No class today."

"Why not?"

A voice near the board answered him. "Because tomorrow it's 'Hail, Caesar, we who are about to die'—"

"So?" Rod felt his stomach tighten as it always did before an examination. Someone moved aside and he managed to read the notice:

PATRICK HENRY HIGH SCHOOL

Department of Social Studies

SPECIAL NOTICE to all students Course 410

(elective senior seminar) Advanced Survival, instr. Dr. Matson, 1712-A MWF

1. There will be no class Friday the 14th.

2. *Twenty-Four Hour Notice* is hereby given of final examination in Solo Survival. Students will present themselves for physical check at 0900 Saturday in the dispensary of Templeton Gate and will start passing through the gate at 1000, using three-minute intervals by lot.

3. *TEST CONDITIONS:*

(a) ANY planet, ANY climate, ANY terrain;

(b) NO rules, ALL weapons, ANY equipment;

(c) TEAMING IS PERMITTED but teams will not be allowed to pass through the gate in company;

(d) TEST DURATION is not less than fortyeight hours, not more than ten days.

4. Dr. Matson will be available for advice and consultation until 1700 Friday.

5. Test may be postponed Only on recommendation of examining physician, but any student may withdraw from the course without administrative penalty up until 1000 Saturday.

6. Good luck and long life to you all!

(s) B. P. Matson, Sc.D.

Approved:

J. R. ROERICH, *for the Board*

Rod Walker reread the notice slowly, while trying to quiet the quiver in his nerves. He checked off the test conditions—why, those were not "conditions" but a total lack of conditions, no limits of any sort! They could dump you through the gate and the next instant you might be facing a polar bear at forty below—or wrestling an Octopus deep in warm salt water.

Or, he added, faced up to some three-headed horror on a planet you had never heard of.

He heard a soprano voice complaining, "'Twenty-four hour notice!' Why, it's less than twenty hours now. That's not fair."

Another girl answered, "What's the difference? I wish we were starting this minute. I won't get a wink of sleep tonight."

"If we are supposed to have twenty-four hours to get ready, then we ought to have them. Fair is fair."

Another student, a tall, husky Zulu girl, chuckled softly. "Go on in. Tell the Deacon that."

Rod backed out of the press, taking Jimmy Throxton with him. He felt that he knew what "Deacon" Matson would say… something about the irrelevancy of fairness to survival. He chewed over the bait in paragraph five; nobody would say boo if he dropped the course. After all, "Advanced Survival' was properly a college. course; he would graduate without it.

But he knew down deep that if he lost his nerve now, he would never take the course later.

Jimmy said nervously, "What d'you think of it, Rod?"

"All right, I guess. But I'd like to know whether or not to wear my long-handled underwear. Do you suppose the Deacon would give us a hint?"

"Him? Not him! He thinks a broken leg is the height of humor. That man would eat his own grandmother—without salt."

"Oh, come now! He'd use salt. Say, Jim? You saw what it said about teaming."

"Yeah… what about it?" Jimmy's eyes shifted away. Rod felt a moment's irritation. He was making a suggestion as delicate as a proposal of marriage, an offer to put his own life in the same basket with Jimmy's. The greatest risk in a solo test was that a fellow just had to sleep sometime… but a team could split it up and stand watch over each other.

Jimmy must know that Rod was better than he was, with any weapon or bare hands; the proposition was to his advantage. Yet here he was hesitating as if he thought Rod might handicap him. "What's the matter, Jim?" Rod said bleakly. "Figure you're safer going it alone?"

"Uh, no, not exactly."

"You mean you'd rather not team with *me*0?"

"No, no, I didn't mean that!"

"Then what did you mean?"

"I meant—Look, Rod, I surely do thank you. I won't forget it. But that notice said something else, too."

"What?"

"It said we could dump this durned course and still graduate. And I just happened to remember that I don't need it for the retail clothing business."

"Huh? I thought you had ambitions to become a wideangled lawyer?"

"So exotic jurisprudence loses its brightest jewel… so what do I care? It will make my old man very happy to learn that I've decided to stick with the family business."

"You mean you're scared."

"Well, that's one way of putting it. Aren't you?"

Rod took a deep breath. "Yes. I'm scared."

"Good! Now let's both give a classic demonstration of how to survive and stay alive by marching down to the Registrar's office and bravely signing our names to withdrawal slips."

"Uh, no. You go ahead."

"You mean you're sticking?"

"I guess so."

"Look, Rod, have you looked over the statistics on last year's classes?"

"No. And I don't want to. So long." Rod turned sharply and headed for the classroom door, leaving Jimmy to stare after him with a troubled look.

The lecture room was occupied by a dozen or so of the seminar's students. Doctor Matson, the "Deacon," was squatting tailor-fashion on one corner of his desk and holding forth informally. He was a small man and spare, with a leathery face, a patch over one eye, and most of three fingers missing from his left hand. On his chest were miniature ribbons, marking service in three famous first expeditions; one carried a tiny diamond cluster that showed him to be the last living member of that group.

Rod slipped into the second row. The Deacon's eye flicked at him as he went on talking. "I don't understand the complaints," he said jovially. "The test conditions say 'all weapons' so you can protect yourself any way you like… from a slingshot to a cobalt bomb. I think final examination should be bare hands, not so much as a nail file. But the Board of Education doesn't agree, so we do it this sissy way instead." He shrugged and grinned.

"Uh, Doctor, I take it then that the Board knows that we are going to run into dangerous animals?"

"Eh? You surely will! The most dangerous animal known."

"Doctor, if you mean that literally—"

"Oh, I do, I do!"

"Then I take it that we are either being sent to Mithra and will have to watch out for snow apes, or we are going to stay on Terra and be dumped where we can expect leopards. Am I right?"

The Deacon shook his head despairingly. "My boy, you had better cancel and take this course over. Those dumb brutes aren't dangerous."

"But Jasper says, in *Predators and Prey*, that the two trickiest, most dangerous—"

"Jasper's maiden aunt! I'm talking about the real King of the Beasts, the only animal that is always dangerous, even when not hungry. The two-legged brute. Take a look around you!"

The instructor leaned forward. "I've said this nineteen dozen times but you still don't believe it. Man is the one animal that can't be tamed. He goes along for years as peaceful as a cow, when it suits him. Then when it suits him not to be, he makes a leopard look like a tabby cat. Which goes double for the female of the species. Take another look around you. All friends. We've been on group-survival field tests together; we can depend on each other. So? Read about the Donner Party, or the First Venus Expedition. Anyhow, the test area will have several other classes in it, all strangers to you." Doctor Matson fixed his eye on Rod. "I hate to see some of you take this test, I really do. Some of you are city dwellers by nature; I'm afraid I have not managed to get it through your heads that there are no policemen where you are going. Nor will I be around to give you a hand if you make some silly mistake."

His eye moved on; Rod wondered if the Deacon meant him. Sometimes he felt that the Deacon took delight in rawhiding him. But Rod knew that it was serious; the course was required for all the Outlands professions for the good reason that the Outlands were places where you were smart—or you were dead. Rod had chosen to take this course before entering college because he hoped that it would help him to get a scholarship—but that did not mean that he thought it was just a formality. He looked around, wondering who would be willing to team with him now that Jimmy had dropped out. There was a couple in front of him, Bob Baxter and Carmen Garcia. He checked them off, as they undoubtedly would team together; they planned to become medical missionaries and intended to marry as soon as they could.

How about Johann Braun? He would make a real partner, all right —strong, fast on his feet, and smart. But Rod did not trust him, nor did he think that Braun would want him. He began to see that he might have made a mistake in not cultivating other friends in the class besides Jimmy.

That big Zulu girl, Caroline something-unpronounceable. Strong as an ox and absolutely fearless. But it would not do to team with a girl; girls were likely to mistake a cold business deal for a romantic gambit. His eyes moved on until at last he was forced to conclude that there was no one there to whom he wished to suggest partnership.

"Prof, how about a hint? Should we take suntan oil? Or chilblain lotion?"

Matson grinned and drawled, "Son, I'll tell you every bit that I know. This test area was picked by a teacher in Europe… and I picked one for his class. But I don't know what it is any more than you do. Send me a post card."

"But—" The boy who had spoken stopped. Then he suddenly stood up. "Prof, this isn't a fair test. I'm checking out."

"What's unfair about it? Not that we meant to make it fair."

"Well, you could dump us any place—"

"That's right."

"—the back side of the Moon, in vacuum up to our chins. Or onto a chlorine planet. Or the middle of an ocean. I don't know whether to take a space suit, or a canoe. So the deuce with it. Real life isn't like that."

"It isn't, eh?" Matson said softly. "That's what Jonah said when the whale swallowed him." He added, "But I will give you some hints. We mean this test to be passed by anyone bright enough to deserve it. So we won't let you walk into a poisonous atmosphere, or a vacuum, without a mask. If you are dumped into water, land won't be too far to swim. And so on. While I don't know where you are going, I did see the list of test areas for this year's classes. A smart man can survive in any of them. You ought to realize, son, that the Board of Education would have nothing to gain by killing off all its candidates for the key professions."

The student sat down again as suddenly as he had stood up. The instructor said, "Change your mind again?"

"Uh, yes, sir. If it's a fair test, I'll take it."

Matson shook his head. "You've already flunked it. You're excused. Don't bother the Registrar; I'll notify him."

The boy started to protest; Matson inclined his head toward the door. "Out!" There was an embarrassed silence while he left the room, then Matson said briskly, "This is a class in applied philosophy and I am sole judge of who is ready and who is not. Anybody who thinks of the world in terms of what it 'ought' to be, rather than what it is, isn't ready for final examination. You've got to relax and roll with the punch… not get yourself all worn out with adrenalin exhaustion at the slings and arrows of outrageous fortune. Any more questions?"

There were a few more but it became evident that Matson either truthfully did not know the nature of the test area, or was guarding the knowledge; his answers gained them nothing. He refused to advise as to weapons, saying simply that the school armorer would be at the gate ready to issue all usual weapons, while any unusual ones were up to the individual. "Remember, though, your best weapon is between your ears and under your scalp—provided it's loaded."

The group started to drift away; Rod got up to leave.

Matson caught his eye and said, "Walker, are you planning to take the test?"

"Why, yes, of course, sir."

"Come here a moment." He led him into his office, closed the door and sat down. He looked up at Rod, fiddled with a paperweight on his desk and said slowly, "Rod, you're a good boy… but sometimes that isn't enough."

Rod said nothing.

"Tell me," Matson continued, "why you want to take this test?"

"Sir?"

"'Sir' yourself," Matson answered grumpily. "Answer my question."

Rod stared, knowing that he had gone over this with Matson before he was accepted for the course. But he explained again his ambition to study for an Outlands profession. "So I have to qualify in survival. I couldn't even get a degree in colonial administration without it, much less any of the planetography or planetology specialties."

"Want to be an explorer, huh?"

"Yes, sir."

"Like me."

"Yes, Sir. Like you."

"Hmm… would you believe me if I told you that it was the worst mistake I ever made?"

"Huh? No, sir!"

"I didn't think you would. Son, the cutest trick of all is how to know *then* what you know *now*. No way to, of course. But I'm telling you straight: I think you've been born into the wrong age.

"Sir?"

"I think you are a romantic. Now this is a very romantic age, so there is no room in it for romantics; it calls for practical men. A hundred years ago you would have made a banker or lawyer or professor and you could have worked out your romanticism by reading fanciful tales and dreaming about what you might have been if you hadn't had the misfortune to be born into a humdrum period. But this happens to be a period when adventure and romance are a part of daily existence. Naturally it takes very practical people to cope with it."

Rod was beginning to get annoyed. "What's the matter with me?"

"Nothing. I like you. I don't want to see you get hurt. But you are 'way too emotional, too sentimental to be a real survivor type."

Matson pushed a hand toward him. "Now keep your shirt on. I know you can make fire by rubbing a couple of dry words together. I'm well aware that you won merit badges in practically everything. I'm sure you can devise a water filter with your bare hands and know which side of the tree the moss grows on. But I'm not sure that you can beware of the Truce of the Bear."

"'The Truce of the Bear?'"

"Never mind. Son, I think you ought to cancel this course. If you must, you can repeat it in college."

Rod looked stubborn. Matson sighed. "I could drop you. Perhaps I should."

"But *why*, sir?"

"That's the point. I couldn't give a reason. On the record, you're as promising a student as I have ever had." He stood up and put out his hand. "Good luck. And remember—when it gets down to fundamentals, do what you have to do and shed no tears."

Rod should have gone straight home. His family lived in an out-county of Greater New York City, located on the Grand Canyon plateau through Hoboken Gate. But his commuting route required him to change at Emigrants' Gap and he found himself unable to resist stopping to rubberneck.

When he stepped out of the tube from school he should have turned right, taken the rotary lift to the level above, and stepped through to Arizona Strip. But he was thinking about supplies, equipment, and weapons for tomorrow's examination; his steps automatically bore left, he got on the slideway leading to the great hall of the planetary gates.

He told himself that he would watch for only ten minutes; he would not be late for dinner. He picked his way through the crowd and entered the great hall— not Onto the emigration floor itself, but onto the spectator's balcony facing the gates. This was the new gate house he was in, the one opened for traffic in '68; the original Emigrants' Gap, now used for Terran traffic and trade with Luna, stood on the Jersey Flats a few kilometers east alongside the pile that powered it.

The balcony faced the six gates. It could seat eighty-six hundred people but was half filled and crowded only in the center. It was here, of course, that Rod wished to sit so that he might see through all six gates. He wormed his way down the middle aisle, squatted by the railing, then spotted someone leaving a front row seat. Rod grabbed it, earning a dirty look from a man who had started for it from the other aisle.

Rod fed coins into the arm of the seat; it opened out, he sat down and looked around. He was opposite the replica Statue of Liberty, twin to the one that had stood for a century where now was Bedloe Crater. Her torch reached to the distant ceiling; on both her right and her left three great gates let emigrants into the outer worlds.

Rod did not glance at the statue; he looked at the gates. It was late afternoon and heavily overcast at east coast North America, but gate one was open to some planetary spot having glaring noonday sun; Rod could catch glimpses through it of men dressed in shorts and sun hats and nothing else. Gate number two had a pressure lock rigged over it; it carried a big skull & crossbones sign and the symbol for chlorine. A red light burned over it. While he watched, the red light flickered out and a blue light replaced it; the door slowly opened and a traveling capsule for a chlorine-breather crawled out. Waiting to meet it were eight humans in diplomatic full dress. One carried a gold baton.

Rod considered spending another half pluton to find out who the important visitor was, but his attention was diverted to An auxiliary gate had been set up on the floor, facing gate five and almost under the balcony. Two high steel fences joined the two gates, forming with them an alley as wide as the gates and as long as the space between, about fifteen meters by seventy-five. This pen was packed with humanity moving from the temporary gate toward and through gate five—and onto some planet lightyears away. They poured out of nowhere, for the floor back of the auxiliary gate was bare, hurried like cattle between the two fences, spilled through gate five and were gone. A squad of brawny Mongol policemen, each armed with a staff as tall as himself, was spread out along each fence. They were using their staves to hurry the emigrants and they were not being gentle. Almost underneath Rod one of them prodded an old coolie so hard that he stumbled and fell. The man had been carrying his belongings, his equipment for a new world, in two bundles supported from a pole balanced on his right shoulder.

The old coolie fell to his skinny knees, tried to get up, fell flat. Rod thought sure he would be trampled, but somehow he was on his feet again—minus his baggage. He tried to hold his place in the torrent and recover his possessions, but the guard prodded him again and he was forced to move on barehanded. Rod lost sight of him before he had moved five meters.

There were local police outside the fence but they did not interfere. This narrow stretch between the two gates was, for the time, extraterritory; the local police had no jurisdiction. But one of them did seem annoyed at the brutality shown the old man; he put his face to the steel mesh and called out something in lingua terra. The Mongol cop answered savagely in the same simple language, telling the North American what he could do about it, then went back to shoving and shouting and prodding still more briskly.

The crowd streaming through the pen were Asiatics—Japanese, Indonesians, Siamese, some East Indians, a few Eurasians, but predominantly South Chinese. To Rod they all looked much alike—tiny women with babies on hip or back, or often one on back and one in arms, endless runny-nosed and shaven-headed children, fathers with household goods ill enormous back packs or pushed ahead on barrows. There were a few dispirited ponies dragging two-wheeled carts much too big for them but most of the torrent had only that which they could carry.

Rod had heard an old story which asserted that if all the Chinese on Terra were marched four abreast past a given point the column would never pass that point, as more Chinese would be born fast enough to replace those who had marched past. Rod had taken his slide rule and applied arithmetic to check it— to find, of course, that the story was nonsense; even if one ignored deaths, while counting all births, the last Chinese would pass the reviewing stand in less than four years. Nevertheless, while watching this mob being herded like brutes into a slaughterhouse, Rod felt that the old canard was true even though its mathematics was faulty. There seemed to be no end to them.

He decided to risk that half pluton to find out what was going on. He slid the coin into a slot in the chair's speaker; the voice of the commentator reached his ears:

"—the visiting minister. The prince royal was met by officials of the Terran Corporation including the Director General himself and now is being escorted to the locks of the Ratoonian enclave. After the television reception tonight staff level conversations will start. A spokesman close to the Director General has pointed out that, in view of the impossibility of conflict of interest between oxygen types such as ourselves and the Ratoonians, any outcome of the conference must be to our advantage, the question being to what extent.

"If you will turn your attention again to gate five, we will repeat what we said earlier: gate five is on fortyeight hour loan to the Australasian Republic. The temporary gate you see erected below is hyperfolded to a point in central Australia in the Arunta Desert, where this emigration has been mounting in a great encampment for the past several weeks. His Serene Majesty Chairman Fung Chee Mu of the Australasian Republic has informed the Corporation that his government intends to move in excess of two million people in fortyeight hours, a truly impressive figure, more than forty thousand each hour. The target figure for this year for all planetary emigration gates taken together—Emigrants' Gap, Peter the Great, and Witwatersrand Gates—is only seventy million emigrants or an average of eight thousand per hour. This movement proposes a rate five times as great using only *one* gate!"

The commentator continued: "Yet when we watch the speed, efficiency and the, uh—*forthrightness* with which they are carrying out this evolution it seems likely that they will achieve their goal. Our own figures show them to be slightly ahead of quota for the first nine hours. During those same nine hours there have been one hundred seven births and eighty-two deaths among the emigrants, the high death rate, of course, being incident to the temporary hazards of the emigration.

"The planet of destination, GO-8703-IV, to be called henceforth 'Heavenly Mountains' according to Chairman Fung, is classed as a bounty planet and no attempt had been made to colonize it. The Corporation has been assured that the colonists are volunteers." It seemed to Rod that the announcer's tone was ironical. "This is understandable when one considers the phenomenal population pressure of the Australasian Republic. A brief historical rundown may be in order. After the removal of the remnants of the former Australian population to New Zealand, pursuant to the Peiping Peace Treaty, the first amazing effort of the new government was the creation of the great inland sea of—

Rod muted the speaker and looked back at the floor below. He did not care to hear schoolbook figures on how the Australian Desert had been made to blossom like the rose… and nevertheless had been converted into a slum with more people in it than all of North America. Something new was happening at gate four—

Gate four had been occupied by a moving cargo belt when he had come in; now the belt had crawled away and lost itself in the bowels of the terminal and an emigration party was lining up to go through.

This was no poverty-stricken band of refugees chivvied along by police; here each family had its own wagon… long, sweeping, boat-tight Conestogas drawn by three-pair teams and housed in sturdy glass canvas square and businesslike Studebakers with steel bodies, high mudcutter wheels, and pulled by one or two-pair teams. The draft animals were Morgans and lordly Clydesdales and jugheaded Missouri mules with strong shoulders and shrewd, suspicious eyes. Dogs trotted between wheels, wagons were piled high with household goods and implements and children, poultry protested the indignities of fate in cages tied on behind, and a little Shetland pony, riderless but carrying his saddle and just a bit too tall to run underneath with the dogs, stayed close to the tailgate of one family's rig.

Rod wondered at the absence of cattle and stepped up the speaker again. But the announcer was still droning about the fertility of Australasians; he muted it again and watched. Wagons had moved onto the floor and taken up tight echelon position close to the gate, ready to move, with the tail of the train somewhere out of sight below. The gate was not yet ready and drivers were getting down and gathering at the Salvation Army booth under the skirts of the Goddess of Liberty, for a cup of coffee and some banter. It occurred to Rod that there probably was no coffee where they were going and might not be for years, since Terra never exported food—on the contrary, food and fissionable metals were almost the only permissible imports; until an Outland colony produced a surplus of one or the other it could expect precious little help from Terra.

It was extremely expensive in terms of uranium to keep an interstellar gate open and the people in this wagon train could expect to be out of commercial touch with Earth until such a time as they had developed surpluses valuable enough in trade to warrant reopening the gate at regular intervals. Until that time they were on their own and must make do with what they could take with them… which made horses more practical than helicopters, picks and shovels more useful than bulldozers. Machinery gets out of order and requires a complex technology to keep it going— but good old "hayburners" keep right on breeding, cropping grass, and pulling loads.

Deacon Matson had told the survival class that the real hardships of primitive Outlands were not the lack of plumbing, heating, power, light, nor weather conditioning, but the shortage of simple things like coffee and tobacco.

Rod did not smoke and coffee he could take or let alone; he could not imagine getting fretful over its absence. He scrunched down in his seat, trying to see through the gate to guess the cause of the hold up. He could not see well, as the arching canvas of a prairie schooner blocked his view, but it did seem that the gate operator had a phase error; it looked as if the sky was where the ground ought to be. The extradimensional distortions necessary to match places on two planets many lightyears apart were not simply a matter of expenditure of enormous quantities of energy; they were precision problems fussy beyond belief, involving high mathematics and high art—the math was done by machine but the gate operator always had to adjust the last couple of decimal places by prayer and intuition.

In addition to the dozen-odd proper motions of each of the planets involved, motions which could usually be added and canceled out, there was also the rotation of each planet. The problem was to make the last hyperfold so that the two planets were internally tangent at the points selected as gates, with their axes parallel and their rotations in the *same* direction. Theoretically it was possible to match two points in contra-rotation, twisting the insubstantial fabric of spacetime in exact step with "real' motions; practically such a solution was not only terribly wasteful of energy but almost unworkable—the ground surface beyond the gate tended to skid away like a slidewalk and tilt at odd angles.

Rod did not have the mathematics to appreciate the difficulties. Being only about to finish high school his training had gone no farther than tensor calculus, statistical mechanics, simple transfinities, generalized geometries of six dimensions, and, on the practical side, analysis for electronics, primary cybernetics and robotics, and basic design of analog computers; he had had no advanced mathematics as yet. He was not aware of his ignorance and simply concluded that the gate operator must be thumb-fingered. He looked back at the emigrant party.

The drivers were still gathered at the booth, drinking coffee and munching doughnuts. Most of the men were growing beards; Rod concluded from the beavers that the party had been training for several months. The captain of the party sported a little goatee, mustaches, and rather long hair, but it seemed to Rod that he could not be many years older than Rod himself. He was a professional, of course, required to hold a degree in Outlands arts—hunting, scouting, jackleg mechanics, gunsmithing, farming, first aid, group psychology, survival group tactics, law, and a dozen other things the race has found indispensable when stripped for action.

This captain's mount was a Palomino mare, lovely as a sunrise, and the captain was dressed as a California don of an earlier century—possibly as a compliment to his horse. A warning light flashed at the gate's annunciator panel and he swung into saddle, still eating a doughnut, and cantered down the wagons for a final inspection, riding toward Rod. His back was straight, his seat deep and easy, his bearing confident. Carried low on a fancy belt he wore two razor guns, each in a silver-chased holster that matched the ornate silver of his bridle and saddle.

Rod held his breath until the captain passed out of sight under the balcony, then sighed and considered studying to be like him, rather than for one of the more intellectual Outlands professions. He did not know just what he did want to be… except that he meant to get off Earth as soon as he possibly could and get out there where things were going on!

Which reminded him that the first hurdle was tomorrow; in a few days he would either be eligible to matriculate for whatever it was he decided on, or he would be—but no use worrying about *that.* He remembered uneasily that it was getting late and he had not even decided on equipment, nor picked his weapons. This party captain carried razor guns; should he carry one? No, this party would fight as a unit, if it had to fight. Its leader carried that type of weapon to enforce his authority—not for solo survival. Well, what should he take?

A siren sounded and the drivers returned to their wagons. The captain came back at a brisk trot. "Reins up!" he called out. "Reeeeeeiiiins up!" He took station by the gate, facing the head of the train; the mare stood quivering and tending to dance.

The Salvation Army lassie came out from behind her counter carrying a baby girl. She called to the party captain but her voice did not carry to the balcony.

The captain's voice did carry. "Number four! Doyle! Come get your child!" A redheaded man with a spade beard climbed down from the fourth wagon and sheepishly reclaimed the youngster to a chorus of cheers and cat calls. He passed the baby up to his wife, who upped its skirt and commenced paddling its bottom. Doyle climbed to his seat and took his reins.

"Call off!" the captain sang out.

"One."

"Tuh!"

"Three!"

"Foah!"

"*Five*!"

The count passed under the balcony, passed down the chute out of hearing. In a few moments it came back, running down this time, ending with a shouted "*ONE*!" The captain held up his right arm and watched the lights of the order panel.

A light turned green. He brought his arm down smartly with a shout of "Roll 'em! *Ho!*" The Palomino took off like a race horse, cut under the nose of the nigh lead horse of the first team, and shot through the gate.

Whips cracked. Rod could hear shouts of "Git, Molly! Git, Ned!" and "No, no, you jugheads!" The train began to roll. By the time the last one on the floor was through the gate and the much larger number which had been in the chute below had begun to show it was rolling at a gallop, with the drivers bracing their feet wide and their wives riding the brakes. Rod tried to count them, made it possibly sixty-three wagons as the last one rumbled through the gate… and was gone, already half a galaxy away.

He sighed and sat back with a warm feeling sharpened with undefined sorrow. Then he stepped up the speaker volume: "—onto New Canaan, the premium planet described by the great Langford as 'The rose without thorns.' These colonists have paid a premium of sixteen thousand four hundred per person—not counting exempt or co-opted members—for the privilege of seeking their fortunes and protecting their posterity by moving to New Canaan. The machines predict that the premium will increase for another twentyeight years; therefore, if you are considering giving your children the priceless boon of citizenship on New Canaan, the time to act is now. For a beautiful projection reel showing this planet send one pluton to 'Information, Box One, Emigrants' Gap, New Jersey County, Greater New York.' For a complete descriptive listing of all planets now open plus a special list of those to be opened in the near future add another half pluton. Those seeing this broadcast in person may obtain these items at the information booth in the foyer outside the great hall."

Rod did not listen. He had long since sent for every free item and most of the non-free ones issued by the Commission for Emigration and Trade. Just now he was wondering why the gate to New Canaan had not relaxed.

He found out at once. Stock barricades rose up out of the floor, forming a fenced passage from gate four to the chute under him. Then a herd of cattle filled the gate and came flooding toward him, bawling and snorting. They were prime Hereford steers, destined to become tender steaks and delicious roasts for a rich but slightly hungry Earth. After them and among them rode New Canaan cowpunchers armed with long goads with which they urged the beasts to greater speed—the undesirability of running weight off the animals was offset by the extreme cost of keeping the gate open, a cost which had to be charged against the cattle.

Rod discovered that the speaker had shut itself off; the half hour he had paid for was finished. He sat up with sudden guilt, realizing that he would have to hurry or he would be late for supper. He rushed out, stepping on feet and mumbling apologies, and caught the slideway to Hoboken Gate.

This gate, being merely for Terra-surface commuting, was permanently dilated and required no operator, since the two points brought into coincidence were joined by a rigid frame, the solid Earth. Rod showed his commuter's ticket to the electronic monitor and stepped through to Arizona, in company with a crowd of neighbors.

"The (almost) solid Earth—" The gate robot took into account tidal distortions but could not anticipate minor seismic variables. As Rod stepped through he felt his feet quiver as if to a small earthquake, then the *terra* was again *firma*. But he was still in an airlock at sea-level pressure. The radiation from massed bodies triggered the mechanism, the lock closed and air pressure dropped. Rod yawned heavily to adjust to the pressure of Grand Canyon plateau, North Rim, less than three quarters that of New Jersey. But despite the fact that he made the change twice a day he found himself rubbing his right ear to get rid of an ear ache.

The lock opened, he stepped out. Having come two thousand miles in a split second he now had ten minutes by slide tube and a fifteen minute walk to get home. He decided to dogtrot and be on time after all. He might have made it if there had not been several thousand other people trying to use the same facilities.

Chapter Two

The Fifth Way

ROCKET SHIPS DID NOT CONQUER SPACE; THEY MERELY challenged it. A rocket leaving Earth at seven miles per second is terribly slow for the vast reaches beyond. Only the Moon is reasonably near—four days, more or less. Mars is thirty-seven weeks away, Saturn a dreary six years, Pluto an impossible half century, by the elliptical orbits possible to rockets.

Ortega's torch ships brought the Solar System within reach. Based on mass conversion, Einstein's deathless $e = Mc^2$, they could boost for the entire trip at any acceleration the pilot could stand. At an easy one gravity the inner planets were only hours from Earth, far Pluto only eighteen days. It was a change like that from horseback to jet plane.

The shortcoming of this brave new toy was that there was not much anywhere to go. The Solar system, from a human standpoint, is made up of remarkably unattractive real estate—save for lovely Terra herself, lush and green and beautiful. The steel-limbed Jovians enjoy gravity 2.5 times ours and their poisonous air at inhuman pressure keeps them in health. Martians prosper in near vacuum, the rock lizards of Luna do not breathe at all. But these planets are not for men.

Men prosper on an oxygen planet close enough to a G-type star for the weather to cycle around the freezing point of water… that is to say, on Earth.

When you are already there why go anywhere? The reason was babies, too many babies. Malthus pointed it out long ago; food increases by arithmetical progression, people increase by geometrical progression. By World War I half the world lived on the edge of starvation; by World War II Earth's population was increasing by 55,000 people *every day*; before World War III, as early as 1954, the increase had jumped to 100,000 mouths and stomachs per day, 35,000,000 additional people each year… and the population of Terra had climbed well beyond that which its farm lands could support.

The hydrogen, germ, and nerve gas horrors that followed were not truly political. The true meaning was more that of beggars fighting over a crust of bread.

The author of *Gulliver's Travels* sardonically proposed that Irish babies be fattened for English tables; other students urged less drastic ways of curbing population—none of which made the slightest difference. Life, *all* life, has the twin drives to survive and to reproduce. Intelligence is an aimless byproduct except as it serves these basic drives.

But intelligence *can* made to serve the mindless demands of life. Our Galaxy contains in excess of one hundred thousand Earth-type planets, each as warm and motherly to men as sweet Terra. Ortega's torch ships could reach the stars. Mankind could colonize, even as the hungry millions of Europe had crossed the Atlantic and raised more babies in the New World.

Some did… hundreds of thousands. But the entire race, working as a team, cannot build and launch a hundred ships a day, each fit for a thousand colonists, and keep it up day after day, year after year, time without end. Even with the hands and the will (which the race never had) there is not that much steel, aluminum, and uranium in Earth's crust. There is not one hundredth of the necessary amount.

But intelligence can find solutions where there are none. Psychologists once locked an ape in a room, for which they had arranged only four ways of escaping. Then they spied on him to see which of the four he would find.

The ape escaped a fifth way.

Dr. Jesse Evelyn Ramsbotham had not been trying to solve the baby problem; he had been trying to build a time machine. He had two reasons: first, because time machines are an impossibility; second, because his hands would sweat and he would stammer whenever in the presence of a nubile female. He was not aware that the first reason was compensation for the second, in fact he was not aware of the second reason—it was a subject his conscious mind avoided.

It is useless to speculate as to the course of history had Jesse Evelyn Ramsbotham's parents had the good sense to name their son Bill instead of loading him with two girlish names. He might have become an All-American halfback and ended up selling bonds and adding his quota of babies to a sum already disastrous. Instead he became a mathematical physicist.

Progress in physics is achieved by denying the obvious and accepting the impossible. Any nineteenth century physicist could have given unassailable reasons why atom bombs were impossible if his reason were not affronted at the question; any twentieth century physicist could explain why time travel was incompatible with the real world of spacetime. But Ramsbotham began fiddling with the three greatest Einsteinian equations, the two relativity equations for distance and duration and the mass-conversion equation; each contained the velocity of light. "Velocity" is first derivative, the differential of distance with respect to time; he converted those equations into differential equations, then played games with them. He would feed the results to the Rakitiac computer, remote successor to Univac, Eniac and Maniac. While he was doing these things his hands never sweated nor did he stammer, except when he was forced to deal with the young lady who was chief programmer for the giant computer.

His first model produced a time-stasis or low-entropy field no bigger than a football—but a lighted cigarette placed inside with full power setting was still burning a week later. Ramsbotham picked up the cigarette, resumed smoking and thought about it.

Next he tried a day-old chick, with colleagues to witness. Three months later the chick was unaged and no hungrier than chicks usually are. He reversed the phase relation and cut in power for the shortest time he could manage with his breadboarded hook-up.

In less than a second the newly-hatched chick was long dead, starved and decayed.

He was aware that he had simply changed the slope of a curve, but he was convinced that he was on the track of true time travel. He never did find it, although once he thought that he had—he repeated by request his demonstration with a chick for some of his colleagues; that night two of them picked the lock on his lab, let the little thing out and replaced it with an egg. Ramsbotham might have been permanently convinced that he had found time travel and then spent the rest of his life in a blind alley had they not cracked the egg and showed him that it was hard-boiled.

But he did not give up. He made a larger model and tried to arrange a dilation, or anomaly (he did not call it a "Gate") which would let him get in and out of the field himself.

When he threw on power, the space between the curving magnetodes of his rig no longer showed the wall beyond, but a steaming jungle. He jumped to the conclusion that this must be a forest of the Carboniferous Period. It had often occurred to him that the difference between space and time might simply be human prejudice, but this was not one of the times; he believed what he wanted to believe.

He hurriedly got a pistol and with much bravery and no sense crawled between the magnetodes.

Ten minutes later he was arrested for waving firearms around in Rio de Janeiro's civic botanical gardens. A lack of the Portuguese language increased both his difficulties and the length of time he spent in a tropical pokey, but three days later through the help of the North American consul he was on his way home. He thought and filled notebooks with equations and question marks on the whole trip.

The short cut to the stars had been found.

Ramsbotham's discoveries eliminated the basic cause of war and solved the problem of what to do with all those dimpled babies. A hundred thousand planets were no farther away than the other side of the street. Virgin continents, raw wildernesses, fecund jungles, killing deserts, frozen tundras, and implacable mountains lay just beyond the city gates, and the human race was again going out where the street lights do not shine, out where there was no friendly cop on the corner nor indeed a corner, out where there were no well-hung, tender steaks, no boneless hams, no packaged, processed foods suitable for delicate minds and pampered bodies. The biped omnivore again had need of his biting, tearing, animal teeth, for the race was spilling out (as it had so often before) to kill or be killed, eat or be eaten.

But the human race's one great talent is survival. The race, as always, adjusted to conditions, and the most urbanized, mechanized, and civilized, most upholstered and luxurious culture in all history trained its best children, its potential leaders, in primitive pioneer survival—man naked against nature.

Rod Walker knew about Dr. J. E. Ramsbotham, just as he knew about Einstein, Newton, and Columbus, but he thought about Ramsbotham no oftener than he thought about Columbus. These were figures in books, each larger than life and stuffed with straw, not real. He used the Ramsbotham Gate between Jersey and the Arizona Strip without thinking of its inventor the same way his ancestors used elevators without thinking of the name "Otis." If he thought about the miracle at all, it was a half-formed irritation that the Arizona side of Hoboken Gate was so far from his parents' home. It was known as Kaibab Gate on this side and was seven miles north of the Walker residence.

At the time the house had been built the location was at the extreme limit of tube delivery and other city utilities. Being an old house, its living room was above ground, with only bedrooms, pantry, and bombproof buried. The living room had formerly stuck nakedly above ground, an ellipsoid monocoque shell, but, as Greater New York spread, the neighborhood had been zoned for underground apartments and construction above ground which would interfere with semblance of virgin forest had been forbidden.

The Walkers had gone along to the extent of covering the living room with soil and planting it with casual native foliage, but they had refused to cover up their view window. It was the chief charm of the house, as it looked out at the great canyon. The community corporation had tried to coerce them into covering it up and had offered to replace it with a simulacrum window such as the underground apartments used, with a relayed view of the canyon. But Rod's father was a stubborn man and maintained that with weather, women, and wine there was nothing "just as good." His window was still intact.

Rod found the family sitting in front of the window, watching a storm work its way up the canyon—his mother, his father, and, to his great surprise, his sister. Helen was ten years older than he and an assault captain in the Amazons; she was seldom home.

The warmth of his greeting was not influenced by his realization that her arrival would probably cause his own lateness to pass with little comment. "Sis! Hey, this is *swell*—I thought you were on Thule."

"I was… until a few hours ago." Rod tried to shake hands; his sister gathered him in a bear hug and bussed him on the mouth, squeezing him against the raised ornaments of her chrome corselet. She was still in uniform, a fact that caused him to think that she had just arrived—on her rare visits home she usually went slopping around in an old bathrobe and go-ahead slippers, her hair caught up in a knot. Now she was still in dress armor and kilt and had dumped her side arms, gauntlets, and plumed helmet on the floor.

She looked him over proudly. "My, but you've grown! You're almost as tall as I am."

"I'm taller."

"Want to bet? No, don't try to wiggle away from me; I'll twist your arm. Slip off your shoes and stand back to back."

"Sit down, children," their father said mildly. "Rod, why were you late?"

"Uh…" He had worked out a diversion involving telling about the examination coming up, but he did not use it as his sister intervened.

"Don't heckle him, Pater. Ask for excuses and you'll get them. I learned that when I was a sublieutenant."

"Quiet, daughter. I can raise him without your help." Rod was surprised by his father's edgy answer, was more surprised by Helen's answer: "So? Really?" Her tone was odd.

Rod saw his mother raise a hand, seem about to speak, then close her mouth. She looked upset. His sister and father looked at each other; neither spoke. Rod looked from one to the other, said slowly, "Say, what's all this?"

His father glanced at him. "Nothing. We'll say no more about it. Dinner is waiting. Coming, dear?" He turned to his wife, handed her up from her chair, offered her his arm.

"Just a minute," Rod said insistently. "I was late because I was hanging around the Gap."

"Very well. You know better, but I said we would say no more about it." He turned toward the lift.

"But I wanted to tell you something else, Dad. I won't be home for the next week or so."

"Very well—*eh?* What did you say?"

"I'll be away for a while, sir. Maybe ten days or a bit longer."

His father looked perplexed, then shook his head. "Whatever your plans are, you will have to change them. I can't let you go away at this time."

"But, Dad—"

"I'm sorry, but that is definite."

"But, Dad, I *have* to!"

"No."

Rod looked frustrated. His sister said suddenly, "Pater, wouldn't it be well to find out why he wants to be away?"

"Now, daughter—"

"Dad, I'm taking my solo survival, starting tomorrow morning!"

Mrs. Walker gasped, then began to weep. Her husband said, "There, there, my dear!" then turned to his son and said harshly, "You've upset your mother."

"But, Dad, I…" Rod shut up, thinking bitterly that no one seemed to give a hoot about *his* end of it. After all, *he* was the one who was going to have to sink or swim. A lot they knew or—

"You see, Pater," his sister was saying. "He does have to be away. He has no choice, because—"

"I see nothing of the sort! Rod, I meant to speak about this earlier, but I had not realized that your test would take place so soon. When I signed permission for you to take that course, I had, I must admit, a mental reservation. I felt that the experience would be valuable later when and if you took the course in college. But I never intended to let you come up against the final test while still in high school. You are too young.

Rod was shocked speechless. But his sister again spoke for him. "Fiddlesticks!"

"Eh? Now, daughter, please remember that—"

"Repeat fiddlesticks! Any girl in my company has been up against things as rough and many of them are not much older than Buddy. What are you trying to do, Pater? Break his nerve?"

"You have no reason to… I think we had best discuss this later."

"I think that is a good idea." Captain Walker took her brother's arm and they followed their parents down to the refectory. Dinner was on the table, still warm in its delivery containers; they took their places, standing, and Mr. Walker solemnly lighted the Peace Lamp. The family was evangelical Monist by inheritance, each of Rod's grandfathers having been converted in the second great wave of proselyting that swept out of Persia in the last decade of the previous century, and Rod's father took seriously his duties as family priest.

As the ritual proceeded Rod made his responses automatically, his mind on this new problem. His sister chimed in heartily but his mother's answers could hardly be heard.

Nevertheless the warm symbolism had its effect; Rod felt himself calming down. By the time his father intoned the last "—one Principle, one family, one flesh!" he felt like eating. He sat down and took the cover off his plate.

A yeast cutlet, molded to look like a chop and stripped with real bacon, a big baked potato, and a grilled green lobia garnished with baby's buttons… Rod's mouth watered as he reached for the catsup.

He noticed that Mother was not eating much, which surprised him. Dad was not eating much either but Dad often just picked at his food… he became aware with sudden warm pity that Dad was thinner and grayer than ever. How old was Dad?

His attention was diverted by a story his sister was telling: "—and so the Commandant told me I would have to clamp down. And I said to her, 'Ma'am, girls will be girls. It I have to bust a petty officer everytime one of them does something like that, pretty soon I won't have anything but privates. And Sergeant Dvorak is the best gunner I have."

"Just a second," her father interrupted. "I thought you said 'Kelly,' not 'Dvorak.'"

"I did and she did. Pretending to misunderstand which sergeant she meant was my secret weapon—for I had Dvorak cold for the same offense, and Tiny Dvorak (she's bigger than I am) is the Squadron's white hope for the annual corps-wide competition for best trooper. Of course, losing her stripes would put her, and us, out of the running.

"So I straightened out the 'mix up' in my best wide-eyed, thickheaded manner, let the old gal sit for a moment trying not to bite her nails, then told her that I had both women confined to barracks until that gang of college boys was through installing the new 'scope, and sang her a song about how the quality of mercy is not strained, it droppeth as the gentle rain from heaven, and made myself responsible for seeing to it that she was not again embarrassed by scandalous—her word, not mine—scandalous incidents… especially when she was showing quadrant commanders around.

"So she grumpily allowed as how the company commander was responsible for her company and she would hold me to it and now would I get out and let her work on the quarterly training report in peace? So I threw her my best parade ground salute and got out so fast I left a hole in the air."

"I wonder," Mr. Walker said judicially, "if you should oppose your commanding officer in such matters? After all, she is older and presumably wiser than you are."

Helen made a little pile of the last of her baby's buttons, scooped them up and swallowed them. "Fiddlesticks squared and cubed. Pardon me, Pater, but if you had any military service you would know better. I am as tough as blazes to my girls myself… and it just makes them boast about how they've got the worst fire-eater in twenty planets. But if they're in trouble higher up, I've got to take care of my kids. There always comes a day when there is something sticky up ahead and I have to stand up and walk toward it. And it will be all right because I'll have Kelly on my right flank and Dvorak on my left and each of them trying to take care of Maw Walker all by her ownself. I know what I'm doing. 'Walker's Werewolves' are a team."

Mrs. Walker shivered. "Gracious, darling, I wish you had never taken up a calling so… well, so *dangerous*."

Helen shrugged. "The death rate is the same for us as for anybody… one person, one death, sooner or later. What would you want, Mum? With eighteen million more women than men on this continent did you want me to sit and knit until my knight comes riding? Out where I operate, there are more men than women; I'll wing one yet, old and ugly as I am.

Rod asked curiously, "Sis, would you really give up your commission to get married?"

"Would I! I won't even count his arms and legs. If he is still warm and can nod his head, he's had it. My target is six babies and a farm."

Rod looked her over. "I'd say your chances are good. You're quite pretty even if your ankles are thick."

"Thanks, pardner. Thank you too much. What's for dessert, Mum?"

"I didn't look. Will you open it, dear?"

Dessert turned out to be iced mangorines, which pleased Rod. His sister went on talking. "The Service isn't a bad shake, on active duty. It's garrison duty that wears. My kids get fat and sloppy and restless and start fighting with each other from sheer boredom. For my choice, barracks casualties are more to be dreaded than combat. I'm hoping that our squadron will be tagged to take part in the pacification of Byer's Planet."

Mr. Walker looked at his wife, then at his daughter. "You have upset your mother again, my dear. Quite a bit of this talk has hardly been appropriate under the Light of Peace."

"I was asked questions, I answered."

"Well, perhaps so."

Helen glanced up. "Isn't it time to turn it out, anyway? We all seem to have finished eating."

"Why, if you like. Though it is hardly reverent to hurry."

"The Principle knows we haven't all eternity." She turned to Rod. "How about making yourself scarce, mate? I want to make palaver with the folks."

"Gee, Sis, you act as if I was—"

"Get lost, Buddy. I'll see you later."

Rod left, feeling affronted. He saw Helen blow out the pax lamp as he did so.

He was still making lists when his sister came to his room. "Hi, kid."

"Oh. Hello, Sis."

"What are you doing? Figuring what to take on your solo?"

"Sort of."

"Mind if I get comfortable?" She brushed articles from his bed and sprawled on it. "We'll go into that later."

Rod thought it over. "Does that mean Dad won't object?"

"Yes. I pounded his head until he saw the light. But, as I said, well go into that later. I've got something to tell you, youngster."

"Such as?"

"The first thing is this. Our parents are not as stupid as you probably think they are. Fact is, they are pretty bright."

"I never said they were stupid!" Rod answered, comfortably aware of what his thoughts had been.

"No. But I heard what went on before dinner and so did you. Dad was throwing his weight around and not listening. But, Buddy, it has probably never occurred to you that it is hard work to be a parent, maybe the hardest job of all—particularly when you have no talent for it, which Dad hasn't. He knows it and works hard at it and is conscientious. Mostly he does mighty well. Sometimes he slips, like tonight. But, what you did not know is this: Dad is going to die."

"*What?*" Rod looked stricken. "I didn't know he was ill!"

"You weren't meant to know. Now climb down off the ceiling; there is a way out. Dad is terribly ill, and he would die in a few weeks at the most— unless something drastic is done. But something is going to be. So relax."

She explained the situation bluntly: Mr. Walker was suffering from a degenerative disease under which he was slowly starving to death. His condition was incurable by current medical art; he might linger on, growing weaker each day, for weeks or months— but he would certainly die soon.

Rod leaned his head on his hands and chastised himself. Dad dying… and he hadn't even *noticed.* They had kept it from him, like a baby, and he had been too stupid to see it.

His sister touched his shoulder. "Cut it out. If there is anything stupider than flogging yourself over something you can't help, I've yet to meet it. Anyhow, we are doing something about it."

"What? I thought you said nothing could be done?"

"Shut up and let your mind coast. The folks are going to make a Ramsbotham jump, five hundred to one, twenty years for two weeks. They've already signed a contract with Entropy, Incorporated. Dad has resigned from General Synthetics and is closing up his affairs; they'll kiss the world good-by this coming Wednesday—which is why he was being stern about your plans to be away at that time. You're the apple of his eye—Heaven knows why."

Rod tried to sort out too many new ideas at once. A time jump… of course! It would let Dad stay alive another twenty years. But— "Say, Sis, this doesn't get them anything! Sure, it's twenty years but it will be just two weeks to them… and Dad will be as sick as ever. I know what I'm talking about; they did the same thing for Hank Robbin's great grandfather and he died anyhow, right after they took him out of the stasis. Hank told me."

Captain Walker shrugged. "Probably a hopeless case to start with. But Dad's specialist, Dr. Hensley, says that he is morally certain that Dad's case is not hopeless twenty years from now. I don't know anything about metabolic medicine, but Hensley says that they are on the verge and that twenty years from now they ought to be able to patch Dad up as easily they can graft on a new leg today."

"You really think so?"

"How should I know? In things like this you hire the best expert you can, then follow his advice. The point is, if we don't do it, Dad is finished. So we do it."

"Yeah. Sure, sure, we've got to."

She eyed him closely and added, "All right. Now do you want to talk with them about it?"

"Huh?" He was startled by the shift. "Why? Are they waiting for me?"

"No. I persuaded them that it was best to keep it from you until it happened. Then I came straight in and told you. Now you can do as you please—pretend you don't know, or go have Mum cry over you, and listen to a lot of last-minute, man-to-man advice from Dad that you will never take. About midnight, with your nerves frazzled, you can get back to your preparations for your survival test. Play it your own way—but I've rigged it so you can avoid that, if you want to. Easier on everybody. Myself, I like a cat's way of saying good-by."

Rod's mind was in a turmoil. Not to say good-by seemed unnatural, ungrateful, untrue to family sentiment—but the prospect of saying good-by seemed almost unbearably embarrassing. "What's that about a cat?"

"When a cat greets you, he makes a big operation of it, humping, stropping your legs, buzzing like mischief. But when he leaves, he just walks off and never looks back. Cats are smart."

"Well . ."

"I suggest," she added, "that you remember that they are doing this for their convenience, not yours.

"But Dad has to—"

"Surely, Dad must, if he is to get well." She considered pointing out that the enormous expense of the time jump would leave Rod practically penniless; she decided that this was better left undiscussed. "But Mum does not have to."

"But she has to go with Dad!"

"So? Use arithmetic. She prefers leaving you alone for twenty years in order to be with Dad for two weeks. Or turn it around: she prefers having you orphaned to having herself widowed for the same length of time."

"I don't think that's quite fair to Mum," Rod answered slowly.

"I wasn't criticizing. She's making the right decision. Nevertheless, they both have a strong feeling of guilt about you and—"

"About *me?*"

"About you. I don't figure into it. If you insist on saying good-by, their guilt will come out as self-justification and self-righteousness and they will find ways to take it out on you and everybody will have a bad time. I don't want that. You are all my family."

"Uh, maybe you know best."

"I didn't get straight A's in emotional logic and military leadership for nothing. Man is not a rational animal; he is a rationalizing animal. Now let's see what you plan to take with you."

She looked over his lists and equipment, then whistled softly. "Whew! Rod, I never saw so much plunder. You won't be able to move. Who are you? Tweedledum preparing for battle, or the White Knight?"

"Well, I was going to thin it down," he answered uncomfortably.

"I should think so!"

"Uh, Sis, what sort of gun should I carry?"

"Huh? Why the deuce do you want a gun?"

"Why, for what I might run into, of course. Wild animals and things. Deacon Matson practically said that we could expect dangerous animals."

"I doubt if he advised you to carry a gun. From his reputation, Dr. Matson is a practical man. See here, infant, on this tour you are the rabbit, trying to escape the fox. You aren't the fox."

"What do you mean?"

"Your only purpose is to stay alive. Not to be brave, not to fight, not to dominate the wilds—but just stay breathing. One time in a hundred a gun might save your life; the other ninetynine it will just tempt you into folly. Oh, no doubt Matson would take one, and I would, too. But we are salted; we know when not to use one. But consider this. That test area is going to be crawling with triggerhappy young squirts. If one shoots you, it won't matter that you have a gun, too—because you will be dead. But if you carry a gun, it makes you feel cocky; you won't take proper cover. If you don't have one, then you'll know that you are the rabbit. You'll be careful."

"Did you take a gun on your solo test?"

"I did. And I lost it the first day. Which saved my life."

"How?"

"Because when I was caught without one I ran away from a Bessmer's griffin instead of trying to shoot it. You savvy Bessmer's griffin?"

"Uh, Spica V?"

"Spica IV. I don't know how much outer zoology they are teaching you kids these days—from the ignoramuses we get for recruits I've reached the conclusion that this newfangled 'functional education' has abolished studying in favor of developing their cute little personalities.

"Why I had one girl who wanted to—never mind; the thing about the griffin is that it does not really have vital organs. Its nervous system is decentralized, even its assimilation system. To kill it quickly you would have to grind it into hamburger. Shooting merely tickles it. But not know that; if I had had my gun I would have found out the hard way. As it was, it treed me for three days, which did my figure good and gave me time to think over the philosophy, ethics, and pragmatics of self-preservation."

Rod did not argue, but he still had a conviction that a gun was a handy thing to have around. It made him feel good, taller, stronger and more confident, to have one slapping against his thigh. He didn't have to use it—not unless he just had to. And he knew enough to take cover; nobody in the class could do a silent sneak the way he could. While Sis was a good soldier, still she didn't know everything and—

But Sis was still talking. "I know how good a gun feels. It makes you bright-eyed and bushy-tailed, three meters tall and covered with hair. You're ready for anything and kind of hoping you'll find it. Which is exactly what is dangerous about it—because you aren't anything of the sort. You are a feeble, hairless embryo, remarkably easy to kill. You could carry an assault gun with two thousand meters precision range and isotope charges that will blow up a hill, but you still would not have eyes in the back of your head like a janus bird, nor be able to see in the dark like the Thetis pygmies. Death can cuddle up behind you while you are drawing a bead on something in front."

"But, Sis, your own company carries guns.

"Guns, radar, bombs, black scopes, gas, warpers, and some things which we lightheartedly hope are secret. What of it? You aren't going to storm a city. Buddy, sometimes I send a girl out on an infiltration patrol, object: information—go out, find out, come back alive. How do you suppose I equip her?"

"Never mind. In the first place I don't pick an eager young recruit; I send some unkillable oldtimer. She peels down to her underwear, darkens her skin if it is not dark, and goes out barehanded and barefooted, without so much as a fly swatter. I have yet to lose a scout that way. Helpless and unprotected you do grow eye's in the back of your head, and your nerve ends reach out and feel everything around you. I learned that when I was a brash young j.o., from a salty trooper old enough to be my mother."

Impressed, Rod said slowly, "Deacon Matson told us he would make us take this test barehanded, if he could."

"Dr. Matson is a man of sense.

"Well, what would *you* take?"

"Test conditions again?"

Rod stated them. Captain Walker frowned. "Mmm… not much to go on. Two to ten days probably means about five. The climate won't be hopelessly extreme. I suppose you own a Baby Bunting?"

"No, but I've got a combat parka suit. I thought I would carry it, then if the test area turned out not to be cold, I'd leave it at the gate. I'd hate to lose it; it weighs only half a kilo and cost quite a bit."

"Don't worry about that. There is no point in being the best dressed ghost in Limbo. Okay, besides your parka I would make it four kilos of rations, five of water, two kilos of sundries like pills and matches, all in a vest pack… and a knife."

"That isn't much for five days, much less ten."

"It is all you can carry and still be light on your feet.

"Let's see your knife, dear."

Rod had several knives, but one was "his" knife, a lovely all-purpose one with a 21-cm. molysteel blade and a fine balance. He handed it to his sister, who cradled it lightly. "Nice!" she said, and glanced around the room.

"Over there by the outflow."

"I see." She whipped it past her ear, let fly, and the blade sank into the target, sung and quivered. She reached down and drew another from her boot top. "This is a good one, too." She threw and it bit into the target a blade's width from the first.

She retrieved both knives, stood balancing them, one on each hand. She flipped her own so that the grip was toward Rod. "This is my pet, 'Lady Macbeth.' I carried her on my own solo, Buddy. I want you to carry her on yours.

"You want to trade knives? All right." Rod felt a sharp twinge at parting with "Colonel Bowie" and a feeling of dismay that some other knife might let him down. But it was not an offer that he could refuse, not from Sis.

"My very dear! I wouldn't deprive you of your own knife, not on your solo. I want you to carry both, Buddy. You won't starve nor die of thirst, but a spare knife may be worth its weight in thorium."

"Gee, Sis! But I shouldn't take your knife, either—you said you were expecting active duty. I can carry a spare of my own."

"I won't need it. My girls haven't let me use a knife in years. I want you to have Lady Macbeth on your test." She removed the scabbard from her boot top, sheathed the blade; and handed it to him. "Wear it in good health, brother."

Chapter Three

Through the Tunnel

Rod arrived at templeton gate the next morning feeling not his best. He had intended to get a good night's sleep in preparation for his ordeal, but his sister's arrival in conjunction with overwhelming changes in his family had defeated his intention. As with most children Rod had taken his family and home for granted; he had not thought about them much, nor placed a conscious value on them, any more than a fish treasures water. They simply were.

Now suddenly they were not.

Helen and he had talked late. She had begun to have strong misgivings about her decision to let him know of the change on the eve of his test. She had weighed it, decided. that it was the "right" thing to do, then had learned the ages-old sour truth that right and wrong can sometimes be determined only through hindsight. It had not been fair, she later concluded, to load anything else on his mind just before his test; But it had not seemed fair, either, to let him leave without knowing… to return to an empty house.

The decision was necessarily hers; she had been his guardian since earlier that same day. The papers had been signed and sealed; the court had given approval. Now she found with a sigh that being a "parent" was not unalloyed pleasure; it was more like the soul-searching that had gone into her first duty as member of a court martial.

When she saw that her "baby" was not quieting, she had insisted that he go to bed anyhow, then had given him a long back rub, combining it with hypnotic instructions to sleep, then had gone quietly away when he seemed asleep.

But Rod had not been asleep; he had simply wanted to be alone. His mind raced like an engine with no load for the best part of an hour, niggling uselessly at the matter of his father's illness, wondering what it was going to be like to greet them again after twenty years—why, he would be almost as old as Mum! —switching over to useless mental preparations for unknown test conditions.

At last he realized that he had to sleep—forced himself to run through mental relaxing exercises, emptying his mind and hypnotizing himself. It took longer than ever before but finally he entered a great, golden, warm cloud and was asleep.

His bed mechanism had to call him twice. He woke bleary-eyed and was still so after a needle shower. He looked in a mirror, decided that shaving did not matter where he was going and anyhow he was late—then decided to shave after all… being painfully shy about his sparse young growth.

Mum was not up, but she hardly ever got up as early as that. Dad rarely ate breakfast these days… Rod recalled why with a twinge. But he had expected Sis to show up. Glumly he opened his tray and discovered that Mum had forgotten to dial an order, something that had not happened twice in his memory. He placed his order and waited for service—another ten minutes lost.

Helen showed up as he was leaving, dressed surprisingly in a dress. "Good morning."

"Hi, Sis. Say, you'll have to order your own tucker. Mother didn't and I didn't know what you wanted."

"Oh, I had breakfast hours ago. I was waiting to see you off."

"Oh. Well, so long. I've got to run, I'm late."

"I won't hold you up." She came over and embraced him. "Take it easy, mate. That's the important thing. More people have died from worry than ever bled to death. And if you do have to strike, strike low."

"Uh, I'll remember."

"See that you do. I'm going to get my leave extended today so that I'll be here when you come back." She kissed him. "Now run."

Dr. Matson was sitting at a desk outside the dispensary at Templeton Gate, checking names on his roll. He looked up as Rod arrived. "Why, hello, Walker. I thought maybe you had decided to be smart."

"I'm sorry I'm late, sir. Things happened."

"Don't fret about it. Knew a man once who didn't get shot at sunrise because he overslept the appointment."

"Really? Who was he?"

"Young fellow I used to know. Myself."

"Hunh? You really did, sir? You mean you were—"

"Not a word of truth in it. Good stories are rarely true. Get on in there and take your physical, before you get the docs irritated."

They thumped him and x-rayed him and made a wavy pattern from his brain and did all the indignities that examining physicians do. The senior examiner listened to his heart and felt his moist hand. "Scared, son?"

"Of course I am!" Rod blurted.

"Of course you are. If you weren't, I wouldn't pass you. What's that bandage on your leg?"

"Uh—" The bandage concealed Helen's knife "Lady Macbeth." Rod sheepishly admitted the fact.

"Take it off."

"Sir?"

"I've known candidates to pull dodges like that to cover up a disqualification. So let's have a look."

Rod started removing it; the physician let him continue until he was sure that it was a cache for a weapon and not a wound dressing. "Get your clothes on. Report to your instructor.

Rod put on his vest pack of rations and sundries, fastened his canteen under it. It was a belt canteen of flexible synthetic divided into half-litre pockets. The weight was taken by shoulder straps and a tube ran up the left suspender, ending in a nipple near his mouth, so that he might drink wit out taking it off. He planned, if possible, to stretch his meager supply through the whole test, avoiding the hazards of contaminated water and the greater hazards of the water hole—assuming that fresh water could be found at all.

He wrapped twenty meters of line, light, strong, and thin, around his waist. Shorts, overshirt, trousers, and boot moccasins completed his costume; he belted "Colonel Bowie" on outside. Dressed, he looked fleshier than he was; only his knife showed. He carried his parka suit over his left arm. It was an efficient garment, hooded, with builtin boots and gloves, and with pressure seams to let him use bare hands when necessary, but it was much too warm to wear until he needed it. Rod had learned early in the game that Eskimos don't dare to sweat.

Dr. Matson was outside the dispensary door. "The late Mr. Walker," he commented, then glanced at the bulkiness of Rod's torso. "Body armor, son?"

"No, sir. Just a vest pack."

"How much penalty you carrying?"

"Eleven kilograms. Mostly water and rations."

"Mmm...well, it will get heavier before it gets lighter. No Handy-Dandy Young Pioneer's Kit? No collapsible patent wigwam?"

Rod blushed. "No, sir."

"You can leave that snow suit. I'll mail it to your home."

"Uh, thank you, sir." Rod passed it over, adding, wasn't sure I'd need it, but I brought it along, just in case.

"You did need it."

"Sir?"

"I've already flunked five for showing up without their snuggies… and four for showing up with vacuum suits. Both ways for being stupid. They ought to know that the Board would not dump them into vacuum or chlorine or such without specifying space suits in the test notice. We're looking for graduates, not casualties. On the other hand, cold weather is within the limits of useful test conditions."

Rod glanced at the suit he had passed over. "You're sure I won't need it, sir?"

"Quite. Except that you would have flunked if you hadn't fetched it. Now bear a hand and draw whatever pig shooter you favor; the armorer is anxious to close up shop. What gun have you picked?"

Rod gulped. "Uh, I was thinking about not taking one, Deacon—I mean 'Doctor.'"

"You can call me 'Deacon' to my face—ten days from now. But this notion of yours interests me. How did you reach that conclusion?"

"Uh, why, you see, sir… well, my sister suggested it."

"So? I must meet your sister. What's her name?"

"Assault Captain Helen Walker," Rod said proudly, "Corps of Amazons."

Matson wrote it down. "Get on in there. They are ready for the drawing.

Rod hesitated. "Sir," he said with sudden misgiving, "if I did carry a gun, what sort would you advise?"

Matson looked disgusted. "I spend a year trying to spoonfeed you kids with stuff I learned the hard way. Comes examination and you ask me to slip you the answers. I can no more answer that than I would have been justified yesterday in telling you to bring a snow suit."

"Sorry, sir.

"No reason why you shouldn't ask; it's just that I won't answer. Let's change the subject. This sister of yours she must be quite a girl."

"Oh, she is, sir."

"Mmm… maybe if I had met a girl like that I wouldn't be a cranky old bachelor now. Get in there and draw your number. Number one goes through in six minutes."

"Yes, Doctor." His way led him past the school armorer, who had set up a booth outside the door. The old chap was wiping off a noiseless Summerfield. Rod caught his eye. "Howdy, Guns."

"Hi, Jack. Kind of late, aren't you? What'll it be?"

Rod's eye ran over the rows of beautiful weapons. Maybe just a little needle gun with poisoned pellets .

He wouldn't have to *use* it .

Then he realized that Dr. Matson had answered his question, with a very broad hint. "Uh, I'm already heeled, Guns. Thanks."

"Okay. Well, good luck, and hurry back."

"Thanks a lot." He went into the gate room.

The seminar had numbered more than fifty students; there were about twenty waiting to take the examination. He started to look around, was stopped by a gate attendant who called out, "Over here! Draw your number."

The lots were capsules in a bowl. Rod reached in, drew one out, and broke it open. "Number seven."

"Lucky seven! Congratulations. Your name, please."

Rod gave his name and turned away, looking for a seat, since it appeared that he had twenty minutes or so to wait. He walked back, staring with interest at what his schoolmates deemed appropriate for survival, any and all conditions.

Johann Braun was seated with empty seats on each side of him. The reason for the empty seats crouched at his feet—a big, lean, heavily-muscled boxer dog with unfriendly eyes. Slung over Braun's shoulder was a General Electric Thunderbolt, a shoulder model with telescopic sights and cone-of-fire control; its power pack Braun wore as a back pack. At his belt were binoculars, knife, first aid kit, and three pouches.

Rod stopped and admired the gun, wondering how much the lovely thing had cost. The dog raised his head and growled.

Braun put a hand on the dog's head. "Keep your distance," he warned. "Thor is a one-man dog."

Rod gave back a pace. "Yo, you are certainly equipped."

The big blond youth gave a satisfied smile. "Thor and I are going to live off the country."

"You don't need him, with that cannon.

"Oh, yes, I do. Thor's my burglar alarm. With him at my side I can sleep sound. You'd be surprised at the things he can do. Thor's smarter than most people."

"Shouldn't wonder."

"The Deacon gave me some guff that the two of us made a team and should go through separately. I explained to him that Thor would tear the joint apart if they tried to separate us." Braun caressed the dog's ears. "I'd rather team with Thor than with a platoon of Combat Pioneers."

"Say, Yo, how about letting me try that stinger? After we come out, I mean.

"I don't mind. It really is a honey. You can pick off a sparrow in the air as easily as you can drop a moose at a thousand meters. Say, you're making Thor nervous. See you later."

Rod took the hint, moved on and sat down. He looked around, having in mind that he might still arrange a survival team. Near the shuttered arch of the gateway there was a priest with a boy kneeling in front of him, with four others waiting.

The boy who had been receiving the blessing stood up—and Rod stood up hastily. "Hey! *Jimmy!*"

Jimmy Throxton looked around, caught his eye and grinned, hurried over. "Rod!" he said, "I thought you had ducked out on me. Look, you haven't teamed?"

"Still want to?"

"Huh? Sure."

"Swell! I can declare the team as I go through as long as you don't have number two. You don't, do you?"

"No."

"Good! Because I'm—"

"*NUMBER ONE!*" the gate attendant called out. "'Throxton, James.'"

Jimmy Throxton looked startled. "Oh, gee!" He hitched at his gun belt and turned quickly away, then called over his shoulder, "See you on the other side!" He trotted toward the gate, now unshuttered.

Rod called out, "Hey, Jimmy! How are we going to find—" But it was too late. Well, if Jimmy had sense enough to drive nails, he would keep an eye on the exit.

"Number two! Mshiyeni, Caroline." Across the room the big Zulu girl who had occurred to Rod as a possible team mate got up and headed for the gate. She was dressed simply in shirt and shorts, with her feet and legs and hands bare. She did not appear to be armed but she was carrying an overnight bag.

Someone called out, "Hey, Carol! What you got in the trunk?"

She threw him a grin. "Rocks."

"Ham sandwiches, I'll bet. Save me one.

"I'll save you a rock, sweetheart."

Too soon the attendant called out, "Number seven—Walker, Roderick L."

Rod went quickly to the gate. The attendant shoved a paper into his hand, then shook hands. "Good luck, kid. Keep your eyes open." He gave Rod a slap on the back that urged him through the opening, dilated to man size.

Rod found himself on the other side and, to his surprise, still indoors. But that shock was not as great as immediate unsteadiness and nausea; the gravity acceleration was much less than earth-normal.

He fought to keep from throwing up and tried to figure things out. Where was he? On Luna? On one of Jupiter's moons? Or somewhere 'way out there?

The Moon, most likely—Luna. Many of the longer jumps were relayed through Luna because of the danger of mixing with a primary, particularly with binaries. But surely they weren't going to leave him here; Matson had promised them no airless test areas.

On the floor lay an open valise; he recognized it absentmindedly as the one Caroline had been carrying. At last he remembered to look at the paper he had been handed.

It read:

SOLO SURVIVAL TEST-Recall Instructions

1. You must pass through the door ahead in the three minutes allowed you before another candidate is started through. An

overlapping delay will disqualify you.

2. Recall will be by standard visual and sound signals. You are warned that the area remains hazardous even after recall is sounded.

3. The exit gate will not be the entrance gate. Exit may be as much as twenty kilometers in the direction of sunrise.

4. There is no truce zone outside the gate. Test starts at once. Watch out for stobor. Good luck!

—B. P.M.

Rod was still gulping at low gravity and staring at the paper when a door opened at the far end of the long, narrow room he was in. A man shouted, "Hurry up! You'll lose your place."

Rod tried to hurry, staggered and then recovered too much and almost fell. He had experienced low gravity on field trips and his family had once vacationed on Luna, but he was not used to it; with difficulty he managed to skate toward the far door.

Beyond the door was another gate room. The attendant glanced at the timer over the gate and said, "Twenty seconds. Give me that instruction sheet."

Rod hung onto it. "I'll use the twenty seconds."—*as much as twenty kilometers in the direction of sunrise.* A nominal eastward direction—call it "east." But what the deuce was, or were, "stobor"?

"Time! Through you go." The attendant snatched the paper, shutters rolled back, and Rod was shoved through a dilated gate.

He fell to his hands and knees; the gravity beyond was something close to earth-normal and the change had caught him unprepared. But he stayed down, held perfectly still and made no sound while he quickly looked around him. He was in a wide clearing covered with high grass and containing scattered trees and bushes; beyond was dense forest.

He twisted his neck in a hasty survey. Earth-type planet, near normal acceleration, probably a G-type sun in the sky… heavy vegetation, no fauna in sight—but that didn't mean anything; there might be hundreds within hearing. Even a stobor, whatever that was.

The gate was behind him, tall dark-green shutters which were in reality a long way off. They stood unsupported in the tall grass, an anomalism unrelated to the primitive scene. Rod considered wriggling around behind the gate, knowing that the tangency was onesided and that he would be able to see through the locus from the other side, see anyone who came out without himself being seen.

Which reminded him that he himself could be seen from that exceptional point; he decided to move.

Where was Jimmy? Jimmy ought to be behind the gate, watching for him to come out… or watching from some other spy point. The only certain method of rendezvous was for Jimmy to have waited for

Rod's appearance; Rod had no way to find him now.

Rod looked around more slowly and tried to spot anything that might give a hint as to Jimmy's whereabouts. Nothing… but when his scanning came back to the gate, the gate was no longer there.

Rod felt cold ripple of adrenalin shock trickle down his back and out his finger tips. He forced himself to quiet down and told himself that it was better this way. He had a theory to account for the disappearance of the gate; they were, he decided, refocusing it between each pair of students, scattering them possibly kilometers apart.

No, that could not be true—"twenty kilometers toward sunrise" had to relate to a small area.

Or did it? He reminded himself that the orientation given in the sheet handed him might not be that which appeared in some other student's instruction sheet. He relaxed to the fact that he did not really know anything… he did not know where he was, nor where Jimmy was, nor any other member of the class, he did not know what he might find here, save that it was a place where a man might stay alive if he were smart—and lucky.

Just now his business was to stay alive, for a period that he might as well figure as ten Earth days. He wiped Jimmy Throxton out of his mind, wiped out everything but the necessity of remaining unceasingly alert to all of his surroundings. He noted wind direction as shown by grass plumes and started crawling cautiously down wind.

The decision to go down wind had been difficult. To go up wind had been his first thought, that being the natural direction for a stalk. But his sister's advice had already paid off; he felt naked and helpless without a gun and it had reminded him that he was not the hunter. His scent would carry in any case; if he went down wind he stood a chance of seeing what might be stalking him, while his unguarded rear would be comparatively safe.

Something ahead in the grass!

He froze and watched. It had been the tiniest movement; he waited. There it was again, moving slowly from right to left across his front. It looked like a dark spike with a tuft of hair on the tip, a tail possibly, carried aloft.

He never saw what manner of creature owned the tail, if it was a tail. It stopped suddenly at a point Rod judged to be directly down wind, then moved off rapidly and he lost Sight of it. He waited a few minutes, then resumed crawling.

It was extremely hot work and sweat poured down him and soaked his overshirt and trousers. He began to want a drink very badly but reminded himself that five liters of water would not last long if he started drinking the first hour of the test. The sky was overcast with high cirrus haze, but the primary or "sun"—he decided to call it the Sun—seemed to burn through fiercely. It was low in the sky behind him; he wondered what it would be like overhead? Kill a man, maybe. Oh, well, it would be cooler in that forest ahead, or at least not be the same chance of sunstroke.

There was lower ground ahead of him and hawklike birds were circling above the spot, round and round. He held still and watched. Brothers, he said softly, if you are behaving like vultures back home, there is something dead ahead of me and you are waiting to make sure it stays dead before you drop in for lunch. If so, I had better swing wide, for it is bound to attract other things… some of which I might not want to meet.

He started easing to the right, quartering the light breeze. It took him onto higher ground and close to a rock outcropping. Rod decided to spy out what was in the lower place below, making use of cover to let him reach an overhanging rock.

It looked mightily like a man on the ground and a child near him. Rod reached, fumbled in his vest pack, got out a tiny 8-power monocular, took a better look. The man was Johann Braun, the "child" was his boxer dog. There was no doubt but that they were dead, for Braun was lying like a tossed rag doll, with his head twisted around and one leg bent under. His throat and the side of his head were a dark red stain.

While Rod watched, a doglike creature trotted out, sniffed at the boxer, and began tearing at it… then the first of the buzzard creatures landed to join the feast. Rod took the glass from his eye, feeling queasy. Old Yo had not lasted long—jumped by a "stobor" maybe—and his smart dog had not saved him. Too bad! But it did prove that there were carnivores around and it behooved him to be careful if he did not want to have jackals and vultures arguing over the leavings!

He remembered something and put the glass back to his eye. Yo's proud Thunderbolt gun was nowhere in sight and the corpse was not wearing the power pack that energized it. Rod gave a low whistle in his mind and thought. The only animal who would bother to steal a gun ran around on two legs. Rod reminded himself that a Thunderbolt could kill at almost any line-of-sight range—and now somebody had it who obviously took advantage of the absence of law and order in a survival test area.

Well, the only thing to do was not to be in line of sight. He backed off the rock and slid into the bushes.

The forest had appeared to be two kilometers away, or less, when he had started. He was close to it when he became uncomfortably aware that sunset was almost upon him. He became less cautious, more hurried, as he planned to spend the night in a tree. This called for light to climb by, since he relished a night on the ground inside the forest still less than he liked the idea of crouching helpless in the grass.

It had not taken all day to crawl this far. Although it had been morning when he had left Templeton Gate the time of day there had nothing to do with the time of day here. He had been shoved through into late afternoon; it was dusk when he reached the tall trees.

So dusky that he decided that he must accept a calculated risk for what he must do. He stopped at the edge of the forest, still in the high grass, and dug into his pack for his climbers. His sister had caused him to leave behind most of the gadgets, gimmicks, and special-purpose devices that he had considered bringing; she had not argued at these. They were climbing spikes of a style basically old, but refined, made small and light—the pair weighed less than a tenth of a kilogram—and made foldable and compact, from a titanium alloy, hard and strong.

He unfolded them, snapped them under his arches and around his shins, and locked them in place. Then he eyed the tree he had picked, a tall giant deep enough in the mass to allow the possibility of crossing to another tree if the odds made a backdoor departure safer and having a trunk which, in spite of its height, he felt sure he could get his arms around.

Having picked his route, he straightened up and at a fast dogtrot headed for the nearest tree. He went past it, cut left for another tree, passed it and cut right toward the tree he wanted. He was about fifteen meters from it when something charged him.

He closed the gap with instantaneous apportation which would have done credit to a Ramsbotham hyperfold. He reached the first branch, ten meters above ground, in what amounted to levitation. From there on he climbed more conventionally, digging the spurs into the tree's smooth bark and setting his feet more comfortably on branches when they began to be close enough together to form a ladder.

About twenty meters above ground he stopped and looked down. The branches interfered and it was darker under the trees than it had been out in the open; nevertheless he could see, prowling around the tree, the denizen that had favored him with attention.

Rod tried to get a better view, but the light was failing rapidly. But it looked like… well, if he had not been certain that he was on some uncolonized planet 'way out behind and beyond, he would have said that it was a *lion*.

Except that it looked eight times as big as any lion ought to look.

He hoped that, whatever it was, it could not climb trees. Oh, quit fretting, Rod!—if it had been able to climb you would have been lunch meat five minutes ago. Get busy and rig a place to sleep before it gets pitch dark. He moved up the tree, keeping an eye out for the spot he needed.

He found it presently, just as he was beginning to think that he would have to go farther down. He needed two stout branches far enough apart and near enough the same level to let him stretch a hammock. Having found such, he worked quickly to beat the failing light. From a pocket of his vest pack he took out his hammock, a web strong as spider silk and almost as thin and light. Using the line around his waist he stretched it, made sure his lashings would hold and then started to get into it.

A double-jointed acrobat with prehensile toes might have found it easy; a slack-wire artist would simply have walked into it and sat down. But Rod found that he needed sky hooks. He almost fell out of the tree.

The hammock was a practical piece of equipment and Rod had slept in it before. His sister had approved it, remarking that it was a better model than the field hammock they gave her girls. "Just don't sit up in your sleep."

"I won't," Rod had assured her. "Anyway, I always fasten the chest belt."

But he had never slung it in this fashion. There was nothing to stand on under the hammock, no tree limb above it close enough to let him chin himself into it. After several awkward and breath-catching attempts he began to wonder whether he should perch like a bird the rest of the night, or drape himself in the notch of a limb. He did not consider spending the night on the ground—not with that *thing* prowling around.

There was another limb higher up almost directly over the hammock. Maybe if he tossed the end of his line over it and used it to steady himself…

He tried it. But it was almost pitch dark now; the only reason he did not lose his line was that one end was bent to the hammock. At last he gave up and made one more attempt to crawl into the hammock by main force and extreme care. Bracing both hands wide on each side of the head rope he scooted his feet out slowly and cautiously. Presently he had his legs inside the hammock, then his buttocks. From there on it was a matter of keeping his center of gravity low and making no sudden moves while he insinuated his body farther down into the cocoon.

At last he could feel himself fully and firmly supported. He took a deep breath, sighed, and let himself relax. It was the first time he had felt either safe or comfortable since passing through the gate.

After a few minutes of delicious rest Rod located the nipple of his canteen and allowed himself two swallows of water, after which he prepared supper. This consisted in digging out a quarter-kilo brick of field ration, eleven hundred calories of yeast protein, fat, starch, and glucose, plus trace requirements. The label on it, invisible in the dark, certified that it was "tasty, tempting and pleasing in texture," whereas chewing an old shoe would have attracted a gourmet quite as much.

But real hunger gave Rod the best of sauces. He did not let any crumb escape and ended by licking the wrapper. He thought about opening another one, quelled the longing, allowed himself one more mouthful of water, then pulled the insect hood of the hammock down over his face and fastened it under the chest belt. He was immune to most insect-carried Terran diseases and was comfortably aware that humans were not subject to most Outlands diseases, but he did not want the night fliers to use his face as a drinking fountain, nor even as a parade ground.

He was too hot even in his light clothing. He considered shucking down to his shorts; this planet, or this part of this planet, seemed quite tropical. But it was awkward; tonight he must stay as he was, even if it meant wasting a day's ration of water in sweat. He wondered what planet this was, then tried to peer through the roof of the forest to see if he could recognize stars. But either the trees were impenetrable or the sky was overcast; he could see nothing. He attempted to draw everything out of his mind and sleep.

Ten minutes later he was wider awake than ever. Busy with his hammock, busy with his dinner, he had not paid attention to distant sounds; now he became aware of all the voices of the night. Insects buzzed and sang and strummed, foliage rustled and whispered, something coughed below him. The cough was answered by insane laughter that ran raggedly up, then down, and died in asthmatic choking.

Rod hoped that it was a bird.

He found himself straining to hear every sound, near and far, holding his breath. He told himself angrily to stop it; he was safe from at least nine-tenths of potential enemies. Even a snake, if this place ran to such, would be unlikely to crawl out to the hammock, still less likely to attack—if he held still. Snakes, button-brained as they were, showed little interest in anything too big to swallow. The chances of anything big enough to hurt him—and interested in hurting him—being in this treetop were slim. So forget those funny noises, pal, and go to sleep. After all, they're no more important than traffic noises in a city.

He reminded himself of the Deacon's lecture on alarm reaction, the thesis that most forms of death could be traced to the body's coming too urgently to battle stations, remaining too long at full alert. Or, as his sister had put it, more people worry themselves to death than bleed to death. He set himself conscientiously to running through the mental routines intended to produce sleep.

He almost made it. The sound that pulled him out of warm drowsiness came from far away; involuntarily he roused himself to hear it. It sounded almost human… no, it *was* human—the terrible sound of a grown man crying with heartbreak, the deep, retching, bass sobs that tear the chest.

Rod wondered what he ought to do. It was none of his business and everyone there was on his own—but it went against the grain to hear such agony from a fellow human and ignore it. Should he climb down and feel his way through the dark to wherever the poor wretch was? Stumbling into tree roots, he reminded himself, and falling into holes and maybe walking straight into the jaws of something hungry and big.

Well, should he? Did he have any right *not* to?

It was solved for him by the sobs being answered by more sobs, this time closer and much louder. This new voice did not sound human, much as it was like the first, and it scared him almost out of his hammock. The chest strap saved him.

The second voice was joined by a third, farther away. In a few moments the peace of the night had changed to sobbing, howling ululation of mass fear and agony and defeat unbearable. Rod knew now that this was nothing human, nor anything he had ever heard, or heard of, before. He suddenly had a deep conviction that these were the stobor he had been warned to avoid.

But what were they? How was he to avoid them? The one closest seemed to be higher up than he was and no farther than the next tree… good grief, it might even be *this* tree!

When you meet a stobor in the dark what do you do? Spit in its face? Or ask it to waltz?

One thing was certain: anything that made that much noise in the jungle was not afraid of anything; therefore it behooved him to be afraid of it. But, there being nothing he could do, Rod lay quiet, his fear evidenced only by tense muscles, gooseflesh, and cold sweat. The hellish concert continued with the "stobor" closest to him sounding almost in his pocket. It seemed to have moved closer.

With just a bit more prodding Rod would have been ready to sprout wings and fly. Only at home on the North American continent of Terra had he ever spent a night alone in the wilderness. There the hazards were known and minor… a few predictable bears, an occasional lazy rattlesnake, dangers easily avoided.

But how could he guard against the utterly unknown? That stobor—he decided that he might as well call it that—that stobor might be moving toward him now, sizing him up with night eyes, deciding whether to drag him home, or eat him where it killed him.

Should he move? And maybe move right into the fangs of the stobor? Or should he wait, helpless, for the stobor to pounce? It was possible that the stobor could not attack him in the tree. But it was equally possible that stobor were completely arboreal and his one chance lay in climbing down quickly and spending the night on the ground.

What was a stobor? How did it fight? Where and when was it dangerous? The Deacon evidently expected the class to know what to do about them. Maybe they had studied the stobor those days he was out of school right after New Year's? Or maybe he had just plain forgotten… and would pay for it with his skin. Rod was good at Outlands zoology—but there was just too much to learn it all. Why, the zoology of Terra alone used to give oldstyle zoologists more than they could handle; how could they expect him to soak up all there was to learn about dozens of planets?

It wasn't *fair!*

When Rod heard himself think that ancient and useless protest he had a sudden vision of the Deacon's kindly, cynical smile. He heard his dry drawl: Fair? You expected this to be *fair*, son? This is not a game. I tried to tell you that you were a city boy, too soft and stupid for this. You would not listen.

He felt a gust of anger at his instructor; it drove fear out of his mind. Jimmy was right; the Deacon would eat his own grandmother! A cold, heartless fish!

All right, what would the Deacon do?

Again he heard his teacher's voice inside his head, an answer Matson had once given to a question put by another classmate: "There wasn't anything I could do, so I took a nap.

Rod squirmed around, rested his hand on "Colonel Bowie" and tried to take a nap. The unholy chorus made it almost impossible, but he did decide that the stobor in his tree—or was it the next tree?—did not seem to be coming closer. Not that it could come much closer without breathing on his neck, but at least it did not seem disposed to attack.

After a long time he fell into restless sleep, sleep that was no improvement, for he dreamed that he had a ring of sobbing, ululating stobor around him, staring at him, waiting for him to move. But he was trussed up tight and could not move.

The worst of it was that every time he turned his head to see what a stobor looked like it would fade back into the dark, giving him just a hint of red eyes, long teeth.

He woke with an icy shock, tried to sit up, found himself restrained by his chest strap, forced himself to lie back. What was it? What had happened?

In his suddenly-awakened state it took time to realize what had happened: the noise had stopped. He could not hear the cry of a single stobor, near or far. Rod found it more disturbing than their clamor, since a noisy stobor advertised its location whereas a silent one could be anywhere—why, the nearest one could now be sitting on the branch behind his head. He twisted his head around, pulled the insect netting off his face to see better. But it was too dark; stobor might be queued up three abreast for all he could tell.

Nevertheless the silence was a great relief. Rod felt himself relax as he listened to the other night sounds, noises that seemed almost friendly after that devils' choir. He decided that it must be almost morning and that he would do well to stay awake.

Presently he was asleep.

He awoke with the certainty that someone was looking at him. When he realized where he was and that it was still dark, he decided that it was a dream. He stirred, looked around, and tried to go back to sleep.

Something *was* looking at him!

His eyes, made sensitive by darkness, saw the thing as a vague shape on the branch at his foot. Black on black, he could not make out its outline—but two faintly luminous eyes stared unwinkingly back into his.

"—nothing I could do, so I took a nap." Rod did not take a nap. For a time measured in eons he and the thing in the tree locked eyes. Rod tightened his grip on his knife and held still, tried to quell the noise of his pounding heart, tried to figure out how he could fight back from a hammock. The beast did not move, made no sound; it simply stared and seemed prepared to do it all night.

When the ordeal had gone on so long that Rod felt a mounting impulse to shout and get it over, the creature moved with light scratching sounds toward the trunk and was gone. Rod could feel the branch shift; he judged that the beast must weigh as much as he did.

Again he resolved to stay awake. Wasn't it getting less dark? He tried to tell himself so, but he still could not see his own fingers. He decided to count to ten thousand and bring on the dawn.

Something large went down the tree very fast, followed at once by another, and still a third. They did not stop at Rod's bedroom but went straight down the trunk. Rod put his knife back and muttered, "Noisy neighbors! You'd think this was Emigrants' Gap." He waited but the frantic procession never came back.

He was awakened by sunlight in his face. It made him sneeze; he tried to sit up, was caught by his safety belt, became wide awake and regretted it. His nose was stopped up, his eyes burned, his mouth tasted like a ditch, his teeth were slimy, and his back ached. When he moved to ease it he found that his legs ached, too—and his arms—and his head. His neck refused to turn to the right.

Nevertheless he felt happy that the long night was gone. His surroundings were no longer terrifying, but almost idyllic. So high up that he could not see the ground he was still well below the roof of the jungle and could not see sky; he floated in a leafy cloud. The morning ray that brushed his face was alone, so thoroughly did trees shut out the sky.

This reminded him that he had to mark the direction of sunrise. Hmm… not too simple. Would he be able to see the sun from the floor of the jungle? Maybe he should climb down quickly, get out in the open, and mark the direction while the sun was still low. But he noticed that the shaft which had wakened him was framed by a limb notch of another forest giant about fifteen meters away. Very well, that tree was "east" of his tree; he could line them up again when he reached the ground.

Getting out of his hammock was almost as hard as getting in; sore muscles resented the effort. At last he was balanced precariously on one limb. He crawled to the trunk, pulled himself painfully erect and, steadied by the trunk, took halfhearted setting-up exercises to work the knots out. Everything loosened up but his neck, which still had a crick like a toothache.

He ate and drank sitting on the limb with his back to the trunk. He kept no special lookout, rationalizing that night feeders would be bedded down and day feeders would hardly be prowling the tree tops —not big ones, anyway; they would be on the ground, stalking herbivores. The truth was that his green hideaway looked too peaceful to be dangerous.

He continued to sit after he finished eating, considered drinking more of his precious water, even considered crawling back into his hammock. Despite the longest night he had ever had he was bone tired and the day was already hot and sleepy and humid; why not stretch out? His only purpose was to survive; how better than by sleeping and thereby saving food and water?

He might have done so had he known what time it was. His watch told him that it was five minutes before twelve, but he could not make up his mind whether that was noon on Sunday or midnight coming into Monday. He was sure that this planet spun much more slowly than did Mother Earth; the night before had been at least as long as a full Earth day.

Therefore the test had been going on at least twenty six hours and possibly thirty-eight—and recall could be any time after fortyeight hours. Why, it might be today, before sunset, and here he was in fine shape, still alive, still with food and water he could trust.

He felt good about it. What did a stobor have that a man did not have more of and better? Aside from a loud voice, he added.

But the exit gate might be as much as twenty kilometers "east" of where he had come in; therefore it behooved him to reach quickly a point ten kilometers east of where he had come in; he would lay money that that would land him within a kilometer or two of the exit. Move along, hole up, and wait—why, he might sleep at home tonight, after a hot bath!

He started unlashing his hammock while reminding himself that he must keep track of hours between sunrise and sunset today in order to estimate the length of the local day. Then he thought no more about it as he had trouble folding the hammock. It had to be packed carefully to fit into a pocket of his vest pack. The filmy stuff should have been spread on a table, but where he was the largest, flattest area was the palm of his hand.

But he got it done, lumpy but packed, and started down. He paused on the lowest branch, looked around. The oversized and hungry thing that had chased him up the tree did not seem to be around, but the undergrowth was too dense for him to be sure. He made a note that he must, all day long and every day, keep a climbable tree in mind not too far away; a few seconds woolgathering might use up his luck.

Okay, now for orientation—Let's see, there was the tree he had used to mark "east." Or was it? Could it be that one over there? He realized that he did not know and swore at himself for not checking it by compass. The truth was that he had forgotten that he was carrying a compass. He got it out now, but it told him nothing,

Since east by compass bore no necessary relation to direction of sunrise on this planet. The rays of the primary did not penetrate where he was; the forest was bathed by a dim religious light unmarked by shadows.

Well, the clearing could not be far away. He would just have to check. He descended by climbing spurs, dropped to spongy ground, and headed the way it should be. He counted his paces while keeping an eye peeled for hostiles.

One hundred paces later he turned back, retracing his own spoor. He found "his" tree; this time he examined it. There was where he had come down; he could see his prints. Which side had he gone up? There should be spur marks.

He found them… and was amazed at his own feat; they started high as his head. "I must have hit that trunk like a cat!" But it showed the direction from which he had come; five minutes later he was at the edge of the open country he had crossed the day before.

The sun made shadows here, which straightened him out and he checked by compass. By luck, east was "east" and he need only follow his compass. It took him back into the forest.

He traveled standing up. The belly sneak which he had used the day before was not needed here; he depended on moving noiselessly, using cover, and keeping an eye out behind as well as in front. He zigzagged in order to stay close to trees neither too big nor too small but corrected his course frequently by compass.

One part of his mind counted paces. At fifteen hundred broken-country steps to a kilometer Rod figured that fifteen thousand should bring him to his best-guess location for the exit gate, where he planned to set up housekeeping until recall.

But, even with part of his mind counting paces and watching a compass and a much larger part watching for carnivores, snakes, and other hazards, Rod still could enjoy the day and place. He was over his jitters of the night before, feeling good and rather cocky. Even though he tried to be fully alert, the place did not feel dangerous now —stobor or no stobor.

It was, he decided, jungle of semi-rainforest type, not dense enough to require chopping one's way. It was interlaced with game paths but he avoided these on the assumption that carnivores might lie waiting for lunch to come down the path—Rod had no wish to volunteer.

The place seemed thick with game, mostly of antelope type in many sizes and shapes. They were hard to spot; they faded into the bush with natural camouflage, but the glimpses he got convinced him that they were plentiful. He avoided them as he was not hunting and was aware that even a vegetarian could be dangerous with hooves and horns in self or herd defense.

The world above was inhabited, too, with birds and climbers. He spotted families of what looked like monkeys and speculated that this world would probably have developed its own race of humanoids. He wondered again what planet it was? Terrestrial to several decimal places it certainly seemed to be—except for the inconveniently long day—and probably one just opened, or it would be swarming with colonists. It would be a premium planet certainly; that clearing he had come through yesterday would make good farm land once it was burned off. Maybe he would come back some day and help clean out the stobor.

In the meantime he watched where he put his hands and feet, never walked under a low branch without checking it, and tried to make his eyes and ears as efficient as a rabbit's. He understood now what his sister had meant about how being unarmed makes a person careful, and realized also how little chance he would have to use a gun if he let himself be surprised.

It was this hyperacuteness that made him decide that he was being stalked.

At first it was just uneasiness, then it became a conviction. Several times he waited by a tree, stood frozen and listened; twice he did a sneak through bushes and doubled back on his tracks. But whatever it was seemed as good as he was at silent movement and taking cover and (he had to admit) a notch better.

He thought about taking to the trees and outwaiting it. But his wish to reach his objective outweighed his caution; he convinced himself that he would be safer if he pushed on. He continued to pay special attention to his rear, but after a while he decided that he was no longer being followed.

When he had covered, by his estimate, four kilometers, he began to smell water. He came to a ravine which sliced across his route. Game tracks led him to think it might lead down to a watering place, just the sort of danger area he wished to avoid, so Rod crossed quickly and went down the shoulder of the ravine instead. It led to a bank overlooking water; he could hear the stream before he reached it.

He took to the bushes and moved on his belly to a point where he could peer out from cover. He was about ten meters higher than the water. The ground dropped off on his right as well as in front; there the ravine joined the stream and an eddy pool formed the watering place he had expected. No animals were in sight but there was plenty of sign; a mud flat was chewed with hoof marks.

But he had no intention of drinking where it was easy; would be too easy to die there. What troubled him was that he must cross the stream to reach the probable recall area. It was a small river or wide brook, not too wide to swim, probably not too deep to wade if he picked his spot. But he would not do either one unless forced—and not then without testing the water by chucking a lure into it… a freshly killed animal. The streams near his home were safe, but a tropical stream must be assumed to have local versions of alligator, piranha, or even worse.

The stream was too wide to cross through the tree tops. He lay still and considered the problem, then decided that he would work his way upstream and hope that it would narrow, or split into two smaller streams which he could tackle one at a time.

It was the last thing he thought about for some time.

When Rod regained consciousness it was quickly; a jackal-like creature was sniffing at him. Rod lashed out with one hand and reached for his knife with the other. The dog brute backed away, snarling, then disappeared in the leaves.

His knife was gone! The realization brought him groggily alert; he sat up. It made his head swim and hurt. He felt it and his fingers came away bloody. Further gingerly investigation showed a big and very tender swelling on the back of his skull, hair matted with blood, and failed to tell him whether or not his skull was fractured. He gave no thanks that he had been left alive; he was sure that the blow had been intended to kill.

But not only his knife was gone. He was naked, save for his shorts. Gone were his precious water, his vest pack with rations and a dozen other invaluable articles—his antibiotics, his salt, his compass, his climbers, his matches, his hammock… everything.

His first feeling of sick dismay was replaced by anger. Losing food and gear was no more than to be expected, since he had been such a fool as to forget his rear while he looked at the stream—but taking the watch his father had given him, that was stealing; he would make somebody pay for that!

His anger made him feel better. It was not until then that he noticed that the bandage on his left shin was undisturbed.

He felt it. Sure enough! Whoever it was who had hijacked him had not considered a bandage worth stealing; Rod unwrapped it and cradled Lady Macbeth in his hand.

Somebody was going to be sorry.

Chapter Four

Savage

Rod Walker was crouching on a tree limb. He had not moved for two hours, he might not move for as long a time. In a clearing near him a small herd of yearling bachelor buck were cropping grass; if one came close enough Rod intended to dine on buck. He was very hungry.

He was thirsty, too, not having drunk that day. Besides that, he was slightly feverish. Three long, imperfectly healed scratches on his left arm accounted for the fever, but Rod paid fever and scratches no attention —he was alive; he planned to stay alive.

A buck moved closer to him; Rod became quiveringly alert. But the little buck tossed his head, looked at the branch, and moved away. He did not appear to see Rod; perhaps his mother had taught him to be careful of overhanging branches—or perhaps a hundred thousand generations of harsh survival had printed it in his genes.

Rod swore under his breath and lay still. One of them was bound to make a mistake eventually; then he would eat. It had been days since he had thought about anything but food… food and how to keep his skin intact, how to drink without laying himself open to ambush, how to sleep without waking up in a fellow-denizen's belly.

The healing wounds on his arm marked how expensive his tuition had been. He had let himself get too far from a tree once too often, had not even had time to draw his knife. Instead he had made an impossible leap and had chinned himself with the wounded arm. The thing that had clawed him he believed to be the same sort as the creature that had treed him the day of his arrival; furthermore he believed it to be a lion. He had a theory about that, but had not yet been able to act on it.

He was gaunt almost to emaciation and had lost track of time. He realized that the time limit of the survival test had probably—almost certainly—passed, but he did not know how long he had lain in the crotch of a tree, waiting for his arm to heal, nor exactly how long it had been since he had come down, forced by thirst and hunger. He supposed that the recall signal had probably been given during one of his unconscious periods, but he did not worry nor even think about it. He was no longer interested in survival tests; he was interested in survival.

Despite his weakened condition his chances were better now than when he had arrived. He was becoming sophisticated, no longer afraid of things he had been afraid of, most acutely wary of others which had seemed harmless. The creatures with the ungodly voices which he had dubbed "stobor" no longer fretted him; he had seen one, had disturbed it by accident in daylight and it had given voice. It was not as big as his hand, and reminded him of a horned lizard except that it had the habits of a tree toad. Its one talent was its voice; it could blow up a bladder at its neck to three times its own size, then give out with that amazing, frightening sob.

But that was all it could do.

Rod had guessed that it was a love call, then had filed the matter. He still called them "stobor."

He had learned about a forest vine much like a morning glory, but its leaves carried a sting worse than that of a nettle, toxic and producing numbness. Another vine had large grape-like fruits, deliciously tempting and pleasant to the palate; Rod had learned the hard way that they were a powerful purgative.

He knew, from his own narrow brushes and from kills left half-eaten on the ground, that there were carnivores around even though he had never had a good look at one. So far as he knew there were no carnivorous tree-climbers large enough to tackle a man, but he could not be certain; he slept with one eye open.

The behavior of this herd caused him to suspect that there must be carnivores that hunted as he was now hunting, even though he had had the good fortune not to tangle with one. The little buck had wandered all over the clearing, passed close by lesser trees, yet no one of them had grazed under the tree Rod was in.

Steady, boy… here comes one. Rod felt the grip of "Lady Macbeth," got ready to drop onto the graceful little creature as it passed under. But five meters away it hesitated, seemed to realize that it was straying from its mates, and started to turn.

Rod let fly.

He could hear the meaty *tunk!* as blade bit into muscle; he could see the hilt firm against the shoulder of the buck. He dropped to the ground, hit running and moved in to finish the kill.

The buck whipped its head up, turned and fled. Rod dived, did not touch it. When he rolled to his feet the clearing was empty. His mind was filled with bitter thoughts; he had promised himself never to throw his knife when there was any possibility of not being able to recover it, but he did not let regrets slow him; he got to work on the tracking problem.

Rod had been taught the first law of hunting sportsmanship, that a wounded animal must always be tracked down and finished, not left to suffer and die slowly. But there was no trace of "sportsmanship" in his present conduct; he undertook to track the buck because he intended to eat it, and—much more urgently—because he had to recover that knife in order to stay alive.

The buck had not bled at once and its tracks were mixed up with hundreds of other tracks. Rod returned three times to the clearing and started over before he picked up the first blood spoor. After that it was easier but he was far behind now and the stampeded buck moved much faster than he could track. His quarry stayed with the herd until it stopped in a new pasture a half kilometer away. Rod stopped still in cover and looked them over. His quarry did not seem to be among them.

But blood sign led in among them; he followed it and they stampeded again. He had trouble picking it up; when he did he found that it led into brush instead of following the herd. This made it easier and harder—easier because he no longer had to sort one spoor from many, harder because pushing through the brush was hard in itself and much more dangerous, since he must never forget that he himself was hunted as well as hunter, and lastly because the signs were so much harder to spot there. But it cheered him up, knowing that only a weakened animal would leave the herd and try to hide. He expected to find it down before long.

But the beast did not drop; it seemed to have a will to live as strong as his own. He followed it endlessly and was beginning to wonder what he would do if it grew dark before the buck gave up. He *had* to have that knife.

He suddenly saw that there were two spoors.

Something had stepped beside a fresh, split-hooved track of the little antelope; something had stepped on a drop of blood. Quivering, his subconscious "bush radar" at full power, Rod moved silently forward. He found new marks again… a man!

The print of a shod human foot—and so wild had he become that it gave him no feeling of relief; it made him more wary than ever.

Twenty minutes later he found them, the human and the buck. The buck was down, having died or perhaps been finished off by the second stalker. The human, whom Rod judged to be a boy somewhat younger and smaller than himself, was kneeling over it, slicing its belly open. Rod faded back into the bush. From there he watched and thought. The other hunter seemed much preoccupied with the kill… and that tree hung over the place where the butchering was going on —

A few minutes later Rod was again on a branch, without a knife but with a long thorn held in his teeth. He looked down, saw that his rival was almost under him, and transferred the thorn to his right hand. Then he waited.

The hunter below him laid the knife aside and bent to turn the carcass. Rod dropped.

He felt body armor which had been concealed by his victim's shirt. Instantly he transferred his attention to the bare neck, pushing the thorn firmly against vertebrae. "Hold still or you've had it!"

The body under him suddenly quit struggling.

"That's better," Rod said approvingly. "Cry pax?"

No answer. Rod jabbed the thorn again. "I'm not playing games, he said harshly. "I'm giving you one chance stay alive. Cry pax and mean it, and well both eat. Give me any trouble and you'll never eat again. It doesn't make the least difference."

There was a moments hesitation, then a muffled voice said, "Pax."

Keeping the thorn pressed against his prisoner's neck, Rod reached out for the knife which had been used to gut the buck. It was, he saw, his own Lady Macbeth. He sheathed it, felt around under the body he rested on, found another where he expected it, pulled it and kept in his hand. He chucked away the thorn and stood up. "You can get up."

The youngster got up and faced him sullenly. "Give me my knife."

"Later… if you are a good boy."

"I said 'Pax.'"

"So you did. Turn around, I want to make sure you don't have a gun on you."

"I left—I've nothing but my knife. Give it to me."

"Left it where?"

The kid did not answer. Rod said, "Okay, turn around," and threatened with the borrowed knife. He was obeyed. Rod quickly patted all the likely hiding places, confirmed that the youngster was wearing armor under clothes and over the entire torso. Rod himself was dressed only in tan, scratches, torn and filthy shorts, and a few scars. "Don't you find that junk pretty hot this weather?" he asked cheerfully. "Okay, you can turn around. Keep your distance."

The youngster turned around, still with a very sour expression. "What's your name, bud?"

"Uh, Jack."

"Jack what? Mine's Rod Walker."

"Jack Daudet."

"What school, Jack?"

"Ponce de Leon Institute."

"Mine's Patrick Henry High School."

"*Matson's* class?"

"The Deacon himself."

"I've heard of him." Jack seemed impressed.

"Who hasn't? Look, let's quit jawing; we'll have the whole county around our ears. Let's eat. You keep watch that way; I'll keep watch behind you."

"Then give me my knife. I need it to eat."

"Not so fast. I'll cut you off a hunk or two. Special Waldorf service.

Rod continued the incision Jack had started, carried it on up and laid the hide back from the right shoulder, hacked off a couple of large chunks of lean. He tossed one to Jack, hunkered down and gnawed his own piece while keeping sharp lookout. "You keeping your eyes peeled?" he asked.

"Sure."

Rod tore off a rubbery mouthful of warm meat. "Jack, how did they let a runt like you take the test? You aren't old enough."

"I'll bet I'm as old as you are!"

"I doubt it."

"Well… I'm qualified."

"You don't look it."

"I'm *here*, I'm alive."

Rod grinned. "You've made your point. I'll shut up. Once his portion was resting comfortably inside, Rod got up, split the skull and dug out the brains. "Want a handful?"

"Sure."

Rod passed over a fair division of the dessert. Jack accepted it, hesitated, then blurted out, "Want some salt?"

"*Salt!*" You've got *salt?*"

Jack appeared to regret the indiscretion. "Some. Go easy on it."

Rod held out his handful. "Put some on. Whatever you can spare."

Jack produced a pocket shaker from between shirt and armor, sprinkled a little on Rod's portion, then shrugged and made it liberal. "Didn't you bring salt along?"

"Me?" Rod answered, tearing his eyes from the mouthwatering sight. "Oh, sure! But—Well, I had an accident." He decided that there was no use admitting that he had been caught off guard.

Jack put the shaker firmly out of sight. They munched quietly, each watching half their surroundings. After a while Rod said softly, "Jackal behind you, Jack."

"Nothing else?"

"No. But it's time we whacked up the meat and got Out of here; we're attracting attention. How much can you use?"

"Uh, a haunch and a chunk of liver. I can't carry any more."

"And you can't eat more before it spoils, anyway." Rod started butchering the hind quarters. He cut a slice of hide from the belly, used it to sling his share around his neck. "Well, so long, kid. Here's your knife. Thanks for the salt."

"Oh, that's all right."

"Tasted mighty good. Well, keep your eyes open."

"Same to you. Good luck."

Rod stood still. Then he said almost reluctantly, "Uh, Jack, you wouldn't want to team up, would you?" He regretted it as soon as he said it, remembering how easily he had surprised the kid.

Jack chewed a lip. "Well… I don't know."

Rod felt affronted. "What's the matter? Afraid of me?" Didn't the kid see that Rod was doing him a favor?

"Oh, no! You're all right, I guess."

Rod had an unpleasant suspicion. "You think I'm trying to get a share of your salt, don't you?"

"Huh? Not at all. Look, I'll divvy some salt with you."

"I wouldn't touch it! I just thought—" Rod stopped. He had been thinking that they had both missed recall; it looked like a long pull.

"I didn't mean to make you mad, Rod. You're right. We ought to team."

"Don't put yourself out! I can get along."

"I'll bet you can. But let's team up. Is it a deal?"

"Well… Shake."

Once the contract was made Rod assumed leadership. There was no discussion; he simply did so and Jack let it stand. "You lead off," Rod ordered, "and I'll cover our rear."

"Okay. Where are we heading?"

"That high ground downstream. There are good trees there, better for all night than around here. I want us to have time to settle in before dark—so a quick sneak and no talking."

Jack hesitated. "Okay. Are you dead set on spending the night in a tree?"

Rod curled his lip. "Want to spend it on the ground? How did you stay alive this long?"

"I spent a couple of nights in trees," Jack answered mildly. "But I've got a better place now, maybe."

"Huh? What sort?"

"A sort of a cave."

Rod thought about it. Caves could be death traps. But the prospect of being able to stretch out swayed him. "Won't hurt to look, if it's not too far."

"It's not far."

Chapter Five

The Nova

Jack's hideaway was in a bluff overlooking the stream by which Rod had been robbed. At this point the bluffs walled a pocket valley and the stream meandered between low banks cut in an alluvial field between the bluffs. The cave was formed by an overhang of limestone which roofed a room water-carved from shale in one bluff. The wall below it was too sheer to climb; the overhanging limestone protected it above and the stream curved in sharply almost to the foot of the bluff. The only way to reach it was to descend the bluff farther upstream to the field edging the creek, then make a climbing traverse of the shale bank where it was somewhat less steep just upstream of the cave.

They slanted cautiously up the shale, squeezed under an overhang at the top, and stepped out on a hard slaty floor. The room was open on one side and fairly long and deep, but it squeezed in to a waist-high crawl space; only at the edge was there room to stand up. Jack grabbed some gravel, threw it into the dark hole, waited with knife ready. "Nobody home, I guess." They dropped to hands and knees, crawled inside. "How do you like it?"

"It's swell… provided we stand watches. Something could come up the way we did. You've been lucky."

"Maybe." Jack felt around in the gloom, dragged out dry branches of thorn bush, blocked the pathway, jamming them under the overhang. "That's my alarm."

"It wouldn't stop anything that got a whiff of you and really wanted to come in."

"No. But I would wake up and let it have some rocks in the face. I keep a stack over there. I've got a couple of scare-flares, too."

"I thought—Didn't you say you had a gun?"

"I didn't say, but I do. But I don't believe in shooting when you can't see."

"It looks all right. In fact it looks good, I guess I did myself a favor when I teamed with you." Rod looked around. "You've had a *fire!*"

"I've risked it a couple of times, in daylight. I get so tired of raw meat."

Rod sighed deeply. "I know. Say, do you suppose?"

"It's almost dark. I've never lighted one when it could show. How about roast liver for breakfast, instead? With salt?"

Rod's mouth watered. "You're right, Jack. I do want to get a drink before it is too dark, though. How about coming along and we cover each other?"

"No need. There's a skin back there. Help yourself."

Rod congratulated himself on having teamed with a perfect housekeeper. The skin was of a small animal, not identifiable when distended with water. Jack had scraped the hide but it was uncured and decidedly unsavory. Rod was not aware that the water tasted bad; he drank deeply, wiped his mouth with his hand and felt at peace.

They did not sleep at once, but sat in the dark and compared notes. Jack's class had come through one day earlier, but with the same instructions. Jack agreed that recall was long overdue.

"I suppose I missed it while I was off my head," Rod commented. "I don't know how long I was foggy… I guess I didn't miss dying by much."

"That's not it, Rod."

"Why not?"

"I've been okay and keeping track of the time. There never was any recall."

"You're sure?"

"How could I miss? The siren can be heard for twenty kilometers, they use a smoke flare by day and a searchlight at night, and the law says they have to keep it up at least a week unless everybody returns… which certainly did not happen this time."

"Maybe we are out of range. Matter of fact—well, I don't know about you, but I'm lost. I admit it."

"I'm not. I'm about four kilometers from where they let my class through; I could show you the spot. Rod, let's face it; something has gone wrong. There is no way of telling how long we are going to be here." Jack added quietly, "That's why I thought it was a good idea to team."

Rod chewed it over, decided it was time to haul out his theory. "Me, too."

"Yes. Solo is actually safer, for a few days. But if we are stuck here indefinitely, then—"

"Not what I meant, Jack."

"Huh?"

"Do you know what planet this is?"

"No. I've thought about it, of course. It has to be one of the new list and it is compatible with—"

"I *know* what one it is."

"Huh? Which one?"

"It's Earth. Terra herself."

There was a long silence. At last Jack said, "Rod, are you all right? Are you still feverish?"

"I'm fine, now that I've got a full belly and a big drink of water. Look, Jack, I know it sounds silly, but you just listen and I'll add it up. We're on Earth and I think I know about where, too. I don't think they meant to sound recall; they meant us to figure out where we are and walk out. It's a twist Deacon Matson would love."

"But—"

"Keep quiet, can't you? Yapping like a girl. Terrestrial planet, right?"

"Yes, but—"

"Stow it and let me talk. G-type star. Planetary rotation same as Earth."

"But it's not!"

"I made the same mistake. The first night I thought was a week long. But the truth was I was scared out of my skin and that made it seem endless. Now I know better. The rotation matches."

"No, it doesn't. My watch shows it to be about twenty-six hours."

"You had better have your watch fixed when we get back. You banged it against a tree or something."

"But—Oh, go ahead. Keep talking; it's your tape.

"You'll see. Flora compatible. Fauna compatible. I know how they did it and why and where they put us. It's an economy measure."

"A what?"

"Economy. Too many people complaining about school taxes being too high. Of course, keeping an interstellar gate open is expensive and uranium doesn't grow on trees. I see their point. But Deacon Matson says it is false economy. He says, sure, it's expensive—but that the only thing more expensive than a properly trained explorer or pioneer leader is an improperly trained dead one.

"He told us after class one day," Rod went on, "that the penny-pinchers wanted to run the practices and tests in selected areas on Earth, but the Deacon claims that the essence of survival in the Outlands is the skill to cope with the unknown. He said that if tests were held on Earth, the candidates would just study up on terrestrial environments. He said any Boy Scout could learn the six basic Earth environments and how to beat them out of books… but that it was criminal to call that survival training and then dump a man in an unEarthly environment on his first professional assignment. He said that it was as ridiculous as just teaching a kid to play chess and then send him out to fight a duel."

"He's right," Jack answered. "Commander Benboe talks the same way."

"Sure he's right. He swore that if they went ahead with this policy this would be the last year he would teach. But they pulled a gimmick on him."

"How?"

"It's a good one. What the Deacon forgot is that any environment is as unknown as any other if you don't have the slightest idea where you are. So they rigged it so that we could not know. First they shot us to Luna; the Moon gates are always open and that doesn't cost anything extra. Of course that made us think we were in for a long jump. Besides, it confused us; we wouldn't know we were being dumped back into the gravity field we had left—for that was what they did next; they shoved us back on Earth. Where? Africa, I'd say. I think they used the Luna Link to jump us to Witwatersrand Gate outside Johannesburg and there they were all set with a matched-in temporary link to drop us into the bush. Tshaka Memorial Park or some other primitive preserve, on a guess. Everything matches. A wide variety of antelope-type game, carnivores to feed on them—I've seen a couple of lions and—"

"You *have?*"

"Well, they will do for lions until I get a chance to skin one. But they threw in other dodges to confuse us, too. The sky would give the show away, particularly if we got a look at Luna. So they've hung an overcast over us. You can bet there are cloud generators not far away. Then they threw us one more curve. Were you warned against 'stobor'?"

"Yes."

"See any?"

"Well, I'm not sure what stobor are."

"Neither am I. Nor any of us, I'll bet. 'Stobor' is the bogeyman, chucked in to keep our pretty little heads busy. There aren't any 'stobor' on Terra so naturally we must be somewhere else. Even a suspicious character like me would be misled by that. In fact, I was. I even picked out something I didn't recognize and called it that, just as they meant me to do."

"You make it sound logical, Rod."

"Because it *is* logical. Once you realize that this is Earth—" He patted the floor of the cave. "—but that they have been trying to keep us from knowing it, everything falls into place. Now here is what we do. I was going to tackle it alone, as soon as I could—I haven't been able to move around much on account of this bad arm—but I decided to take you along, before you got hurt. Here's my plan. I think this is Africa, but it might be South America, or anywhere in the tropics. It does not matter, because we simply follow this creek downstream, keeping our eyes open because there really are hazards; you can get just as dead here as in the Outlands. It may take a week, or a month, but one day well come to a bridge. We'll follow the road it serves until somebody happens along. Once in town we'll check in with the authorities and get them to flip us home… and we get our solo test certificates. Simple."

"You make it sound too simple," Jack said slowly.

"Oh, we'll have our troubles. But we can do it, now that we know what to do. I didn't want to bring this up before, but do you have salt enough to cure a few kilos of meat? If we did not have to hunt every day, we could travel faster. Or maybe you brought some Kwik-Kure?"

"I did, but—"

"Good!"

"Wait a minute, Rod. That won't do."

"Huh? We're a team, aren't we?"

"Take it easy. Look, Rod, everything you said is logical, but—"

"No 'buts' about it."

"It's logical… but it's all *wrong!*"

"Huh? Now, listen, Jack—"

"*You* listen. You've done all the talking so far."

"But—Well, all right, say your say."

"You said that the sky would give it away, so they threw an overcast over the area.

"Yes. That's what they must have done, nights at least. They wouldn't risk natural weather; it might give the show away.

"What I'm trying to tell you is that it did give the show away. It hasn't been overcast every night, though maybe you were in deep forest and missed the few times it has been clear. But I've seen the night sky, Rod. I've seen stars.

"So? Well?"

"They aren't *our* stars, Rod. I'm sorry."

Rod chewed his lip. "You probably don't know southern constellations very well?" he suggested.

"I knew the Southern Cross before I could read. These aren't our stars, Rod; I know. There is a pentagon of bright stars above where the sun sets; there is nothing like that to be seen from Earth. And besides, anybody would recognize Luna, if it was there."

Rod tried to remember what phase the Moon should be in. He gave up, as he had only a vague notion of elapsed time. "Maybe the Moon was down?"

"Not a chance. I didn't see our Moon, Rod, but I saw *moons*...two of them, little ones and moving fast, like the moons of Mars."

"You don't mean this is *Mars?*" Rod said scornfully.

"Think I'm crazy? Anyhow, the stars from Mars are exactly like the stars from Earth. Rod, what are we jawing about? It was beginning to clear when the sun went down; let's crawl out and have a look. Maybe you'll believe your eyes.

Rod shut up and followed Jack. From inside nothing was visible but dark trees across the stream, but from the edge of the shelf part of the sky could be seen. Rod looked up and blinked.

"Mind the edge," Jack warned softly.

Rod did not answer. Framed by the ledge above him and by tree tops across the stream was a pattern of six stars, a lopsided pentagon with a star in its center. The six stars were as bright and unmistakable as the seven stars of Earth's Big Dipper… nor did it take a degree in astrography to know that this constellation had never been seen from Terra.

Rod stared while the hard convictions he had formed fell in ruins. He felt lost and alone. The trees across the way seemed frightening. He turned to Jack, his cocky sophistication gone. "You've convinced me," he said dully. "What do we do now?"

Jack did not answer.

"Well?" Rod insisted. "No good standing here."

"Rod," Jack answered, "that star in the middle of the Pentagon—it wasn't there before."

"Huh? You probably don't remember."

"No, no, I'm sure! Rod, you know what? We're seeing a *nova*."

Rod was unable to arouse the pure joy of scientific discovery; his mind was muddled with reorganizing his personal universe. A mere stellar explosion meant nothing. "Probably one of your moonlets."

"Not a chance. The moons are big enough to show disks. It's a nova; it has to be. What amazing luck to see one!"

"I don't see anything lucky about it," Rod answered moodily. "It doesn't mean anything to us. It's probably a hundred lightyears away, maybe more."

"Yes, but doesn't it thrill you?"

"No." He stooped down and went inside. Jack took another look, then followed.

There was silence, moody on Rod's part. At last Jack said, "Think I'll turn in."

"I just can't see," Rod answered irrelevantly, "how I could be so wrong. It was a logical certainty."

"Forget it," Jack advised. "My analytics instructor says that all logic is mere tautology. She says it is impossible to learn anything through logic that you did not already know."

"Then what use is logic?" Rod demanded.

"Ask me an easy one. Look, partner, I'm dead for sleep; I want to turn in."

"All right. But, Jack, if this isn't Africa—and I've got to admit it isn't—what do we do? They've gone off and *left* us."

"Do? We do what we've been doing. Eat, sleep, stay alive. This is a listed planet; if we just keep breathing, someday somebody will show up. It might be just a power breakdown; they may pick us tomorrow."

"In that case, then—"

"In that case, let's shut up and go to sleep."

Chapter Six

"I Think He Is Dead"

Rod was awakened by heavenly odors. he rolled over, blinked at light streaming under the overhang, managed by great effort to put himself back into the matrix of the day before. Jack, he saw, was squatting by a tiny fire on the edge of the shelf; the wonderful fragrance came from toasting liver.

Rod got to his knees, discovering that he was slightly stiff from having fought dream stobor in his sleep. These nightmare stobor were bug-eyed monsters fit for a planet suddenly strange and threatening. Nevertheless he had had a fine night's sleep and his spirits could not be daunted in the presence of the tantalizing aroma drifting in.

Jack looked up. "I thought you were going to sleep all day. Brush your teeth, comb your hair, take a quick shower, and get on out here. Breakfast is ready." Jack looked him over again. "Better shave, too."

Rod grinned and ran his hand over his chin. "You're jealous of my manly beard, youngster. Wait a year or two and you'll find out what a nuisance it is. Shaving, the common cold, and taxes… my old man says those are the three eternal problems the race is never going to lick." Rod felt a twinge at the thought of his parents, a stirring of conscience that he had not thought of them in he could not remember how long. "Can I help, pal?"

"Sit down and grab the salt. This piece is for you."

"Let's split it."

"Eat and don't argue. I'll fix me some." Rod accepted the charred and smoky chunk, tossed it in his hands and blew on it. He looked around for salt. Jack Was slicing a second piece; Rod's eyes passed over the operation then whipped back.

The knife Jack was using was "Colonel Bowie."

The realization was accompanied by action; Rod's hand darted out and caught Jack's wrist in an anger-hard grip. "You stole my knife!"

Jack did not move. "Rod… have you gone crazy?"

"You slugged me and stole my knife."

Jack made no attempt to fight, nor even to struggle. "You aren't awake yet, Rod. Your knife is on your belt. This is another knife… mine.

Rod did not bother to look down. "The one I'm wearing is Lady Macbeth. I mean the knife you're using, Colonel Bowie—*my* knife."

"Let go my wrist."

"Drop it!"

"Rod… you can probably make me drop this knife. You're bigger and you've got the jump on me. But yesterday you teamed with me. You're busting that team right now. If you don't let go right away, the team is broken. Then you'll have to kill me… because if you don't, I'll trail you. I'll keep on trailing you until I find you asleep. Then you've had it."

They faced each other across the little fire, eyes locked. Rod breathed hard and tried to think. The evidence was against Jack. But had this little runt tracked him, slugged him, stolen everything he had? It looked like it.

Yet it did not *feel* like it. He told himself that he could handle the kid if his story did not ring true. He let go Jack's wrist. "All right," he said angrily, "tell me how you got my knife."

Jack went on slicing liver. "It's not much of a story and I don't know that it is *your* knife. But it was not mine to start with—you've seen mine. I use this one as a kitchen knife. Its balance is wrong.

"Colonel Bowie! Balanced wrong? That's the best throwing knife you ever saw!"

"Do you want to hear this? I ran across this hombre in the bush, just as the jackals were getting to him. I don't know what got him—stobor, maybe; he was pretty well clawed and half eaten. He wasn't one of my class, for his face wasn't marked and I could tell. He was carrying a Thunderbolt and—"

"Wait a minute. A Thunderbolt gun?"

"I said so, didn't I? I guess he tried to use it and had no luck. Anyhow, I took what I could use—this knife and a couple of other things; I'll show you. I left the Thunderbolt; the power pack was exhausted and it was junk."

"Jack, look at me. You're not lying?"

Jack shrugged. "I can take you to the spot. There might not be anything left of him, but the Thunderbolt ought to be there."

Rod stuck out his hand. "I'm sorry. I jumped to conclusions."

Jack looked at his hand, did not shake it. "I don't think you are much of a team mate. We had better call it quits." The knife flipped over, landed at Rod's toes. "Take your toadsticker and be on your way."

Rod did not pick up the knife. "Don't get sore, Jack. I made an honest mistake."

"It was a mistake, all right. You didn't trust me and I'm not likely to trust you again. You can't build a team on that." Jack hesitated. "Finish your breakfast and shove off. It's better that way."

"Jack, I truly am sorry. I apologize. But it was a mistake anybody could make—you haven't heard my side of the story."

"You didn't wait to hear my story!"

"So I was wrong, I said I was wrong." Rod hurriedly told how he had been stripped of his survival gear. "—so naturally, when I saw Colonel Bowie, I assumed that you must have jumped me. That's logical, isn't it?" Jack did not answer; Rod persisted: "Well? Isn't it?"

Jack said slowly, "You used 'logic' again. What you call 'logic.' Rod, you use the stuff the way some people use dope. Why don't you use your head, instead?"

Rod flushed and kept still. Jack went on, "If I had swiped your knife, would I have let you see it? For that matter, would I have teamed with you?"

"No, I guess not. Jack, I jumped at a conclusion and lost my temper."

"Commander Benboe says," Jack answered bleakly, "that losing your temper and jumping at conclusions is a one-way ticket to the cemetery."

Rod looked sheepish. "Deacon Matson talks the same way."

"Maybe they're right. So let's not do it again, huh? Every dog gets one bite, but only one."

Rod looked up, saw Jack's dirty paw stuck out at him. "You mean we're partners again?"

"Shake. I think we had better be; we don't have much choice." They solemnly shook hands. Then Rod picked up Colonel Bowie, looked at it longingly, and handed it hilt first to Jack.

"I guess it's yours, after all."

"Huh? Oh, no. I'm glad you've got it back."

"No," Rod insisted. "You came by it fair and square.

"Don't be silly, Rod. I've got 'Bluebeard'; that's the knife for me."

"It's yours. I've got Lady Macbeth."

Jack frowned. "We're partners, right?"

"Huh? Sure."

"So. We share everything. Bluebeard belongs just as much to you as to me. And Colonel Bowie belongs to both of us. But you are used to it, so it's best for the team for you to wear it. Does that appeal to your lopsided sense of logic?"

"Well…"

"So shut up and eat your breakfast. Shall I toast you another slice? That one is cold."

Rod picked up the scorched chunk of liver, brushed dirt and ashes from it. "This is all right."

"Throw it in the stream and have a hot piece. Liver won't keep anyhow."

Comfortably stuffed, and warmed by companionship, Rod stretched out on the shelf after breakfast and stared at the sky. Jack put out the fire and tossed the remnants of their meal downstream. Something broke water and snapped at the liver even as it struck. Jack turned to Rod. "Well, what do we do today?"

"Mmm... what we've got on hand ought to be fit to eat tomorrow morning. We don't need to make a kill today."

"I hunt every second day, usually, since I found this place. Second-day meat is better than first, but by the third... phewy!"

"Sure. Well, what do you want to do?"

"Well, let's see. First I'd like to buy a tall, thick chocolate malted milk—or maybe a fruit salad. Both. I'd eat those—"

"Stop it, you're breaking my heart!"

"Then I'd have a hot bath and get all dressed up and flip out to Hollywood and see a couple of good shows. That superspectacle that Dirk Manleigh is starring in and then a good adventure show. After that I'd have another malted milk... strawberry, this time, and then—"

"*Shut up!*"

"You asked me what I wanted to do."

"Yes, but I expected you to stick to possibilities."

"Then why didn't you say so? Is that 'logical'? I thought you always used logic?"

"Say, lay off, will you? I apologized."

"Yeah, you apologized," Jack admitted darkly. "But I've got some mad I haven't used up yet."

"Well! Are you the sort of pal who keeps raking up the past?"

"Only when you least expect it. Seriously, Rod, I think we ought to hunt today."

"But you agreed we didn't need to. It's wrong, and dangerous besides, to make a kill you don't need."

"I think we ought to hunt people."

Rod pulled his ear. "Say that again."

"We ought to spend the day hunting people."

"Huh? Well, anything for fun I always say. What do we do when we find them? Scalp them, or just shout 'Beaver!'?"

"Scalping is more definite. Rod, how long will we be here?"

"Huh? All we know is that something has gone seriously cockeyed with the recall schedule. You say we've been here three weeks. I would say it was longer but you have kept a notch calendar and I haven't. Therefore..." He stopped.

"Therefore what?"

"Therefore nothing. They might have had some technical trouble, which they may clear up and recall us this morning. Deacon Matson and his fun-loving colleagues might have thought it was cute to double the period and not mention it. The Dalai Lama might have bombed the whiskers off the rest of the World and the Gates may be radioactive ruins. Or maybe the three-headed serpent men of the Lesser Magellanic Cloud have landed and have the situation well in hand—for them. When you haven't data, guessing is illogical. We might be here forever."

Jack nodded. "That's my point."

"Which point? We know we may be marooned; that's obvious."

"Rod, a two-man team is just right for a few weeks. But suppose this runs into months? Suppose one of us breaks a leg? Or even if we don't, how long is that thornbush alarm going to work? We ought to wall off that path and make this spot accessible only by rope ladder, With somebody here all the time to let the ladder down. We ought to locate a salt lick and think about curing hides and things like that—that water skin I made is getting high already. For a long pull we ought to have at least four people."

Rod scratched his gaunt ribs thoughtfully. "I know. I thought about it last night, after you jerked the rug out from under my optimistic theory. But I was waiting for you to bring it up."

"Why?"

"This is your cave. You've got all the fancy equipment, a gun and pills and other stuff I haven't seen. You've got salt. All I've got is a knife—two knives now, thanks to you. I'd look sweet suggesting that you share four ways."

"We're a team, Rod."

"Mmm… yes. And we both figure the team would be strengthened with a couple of recruits. Well, how many people are there out there?" He gestured at the wall of green across the creek.

"My class put through seventeen boys and eleven girls. Commander Benboe told us there would be four classes in the same test area.

"That's more than the Deacon bothered to tell us. However, my class put through about twenty."

Jack looked thoughtful. "Around a hundred people, probably."

"Not counting casualties."

"Not counting casualties. Maybe two-thirds boys, one-third girls. Plenty of choice, if we can find them."

"No girls on this team, Jack."

"What have you got against girls?"

"Me? Nothing at all. Girls are swell on picnics, they are just right on long winter evenings. I'm one of the most enthusiastic supporters of the female race. But for a hitch like this, they are pure poison."

Jack did not say anything. Rod went on, "Use your head, brother. You get some pretty little darling on this team and we'll have more grief inside than stobor, or such, can give us from outside. Quarrels and petty jealousies and maybe a couple of boys knifing each other. It will be tough enough without that trouble."

"Well," Jack answered thoughtfully, "suppose the first one we locate is a girl? What are you going to do? Tip your hat and say, 'It's a fine day, ma'am. Now drop dead and don't bother me.'?"

Rod drew a pentagon in the ashes, put a star in the middle, then rubbed it out. "I don't know," he said slowly. "Let's hope we get our team working before we meet any. And let's hope they set up their own teams."

"I think we ought to have a policy."

"I'm clean out of policies. You would just accuse me of trying to be logical. Got any ideas about how to find anybody?"

"Maybe. Somebody has been hunting upstream from here."

"So? Know who it is?"

"I've seen him only at a distance. Nobody from my class. Half a head shorter than you are, light hair, pink skin—and a bad sunburn. Sound familiar?"

"Could be anybody," Rod answered, thinking fretfully that the description did sound familiar. "Shall we see if we can pick up some sign of him?"

"I can put him in your lap. But I'm not sure we want him."

"Why not? If he's lasted this long, he must be competent."

"Frankly, I don't see how he has. He's noisy when he moves and he has been living in one tree for the past week."

"Not necessarily bad technique."

"It is when you drop your bones and leavings out of the tree. It was jackals sniffing around that tipped me off to where he was living."

"Hmm... well, if we don't like him, we don't have to invite him."

"True."

Before they set out Jack dug around in the gloomy cave and produced a climbing line. "Rod, could this be yours?"

Rod looked it over. "It's just like the one I had. Why?"

"I got it the way I got Colonel Bowie, off the casualty. If it is not yours, at least it is a replacement." Jack got another, wrapped it around and over body armor. Rod suspected that Jack had slept in the armor, but he said nothing. If Jack considered such marginal protection more important than agility, that was Jack's business—each to his own methods, as the Deacon would say.

The tree stood in a semi-clearing but Jack brought Rod to it through bushes which came close to the trunk and made the final approach as a belly sneak. Jack pulled Rod's head over and whispered in his ear, "If we lie still for three or four hours, I'm betting that he will either come down or go up.

"Okay. You watch our rear."

For an hour nothing happened. Rod tried to ignore tiny flies that seemed to be all bite. Silently he shifted position to ward off stiffness and once had to kill a sneeze. At last he said, "Pssst!"

"Yeah, Rod?"

"Where those two big branches meet the trunk, could that be his nest?"

"Maybe."

"You see a hand sticking out?"

"Where? Uh, I think I see what you see. It might just be leaves."

"I think it's a hand and I think he is dead; it hasn't moved since we got here."

"Asleep?"

"Person asleep ordinarily doesn't hold still that long.

I'm going up. Cover me. If that hand moves, yell."

"You ought not to risk it, Rod."

"You keep your eyes peeled." He crept forward..

The owner of the hand was Jimmy Throxton, as Rod had suspected since hearing the description. Jimmy was not dead, but he was unconscious and Rod could not rouse him.

Jim lay in an aerie half natural, half artificial; Rod could see that Jim had cut small branches and improved the triple crotch formed by two limbs and trunk. He lay cradled in this eagle's nest, one hand trailing out.

Getting him down was awkward; he weighed as much as Rod did. Rod put a sling under Jim's armpits and took a turn around a branch, checking the line by friction to lower him—but the hard part was getting Jim out of his musty bed without dropping him.

Halfway down the burden fouled and Jack had to climb and free it. But with much sweat all three reached the ground and Jim was still breathing.

Rod had to carry him. Jack offered to take turns but the disparity in sizes was obvious; Rod said angrily for Jack to cover them, front, rear, all sides; Rod would be helpless if they had the luck to be surprised by one of the pseudolions.

The worst part was the climbing traverse over loose shale up to the cave. Rod was fagged from carrying the limp and heavy load more than a kilometer over rough ground; he had to rest before he could tackle it. When he did, Jack said anxiously, "Don't drop him in the drink! It won't be worthwhile fishing him out—I know."

"So do I. Don't give silly advice."

"Sorry."

Rod started up, as much worried for his own hide as for Jim's. He did not know what it was that lived in that stream; he did know that it was hungry. There was a bad time when he reached the spot where the jutting limestone made it necessary to stoop to reach the shelf. He got down as low as possible, attempted it, felt the burden on his back catch on the rock, started to slip.

Jack's hand steadied him and shoved him from behind. Then they were sprawled safe on the shelf and Rod gasped and tried to stop the trembling of his abused muscles.

They bedded Jimmy down and Jack took his pulse. "Fast and thready. I don't think he's going to make it."

"What medicines do you have?"

"Two of the neosulfas and verdomycin. But I don't know what to give him."

"Give him all three and pray.

"He might be allergic to one of them."

"He'll be more allergic to dying. I'll bet he's running six degrees of fever. Come on."

Rod supported Jim's shoulders, pinched his ear lobe, brought him partly out of coma. Between them they managed to get the capsules into Jim's mouth, got him to drink and wash them down. After that there was nothing they could do but let him rest.

They took turns watching him through the night. About dawn his fever broke, he roused and asked for water. Rod held him while Jack handled the waterskin. Jim drank deeply, then went back to sleep.

They never left him alone. Jack did the nursing and Rod hunted each day, trying to find items young and tender and suited to an invalid's palate. By the second day Jim, although weak and helpless, was able to talk without drifting off to sleep in the middle. Rod returned in the afternoon with the carcass of a small animal which seemed to be a clumsy cross between a cat and a rabbit. He encountered Jack heading down to fill the water skin. "Hi."

"Hi. I see you had luck. Say, Rod, go easy when you skin it. We need a new water bag. Is it cut much?"

"Not at all. I knocked it over with a rock."

"Good!"

"How's the patient?"

"Healthier by the minute. I'll be up shortly."

"Want me to cover you while you fill the skin?"

"I'll be careful. Go up to Jim."

Rod went up, laid his kill on the shelf, crawled inside. "Feeling better?"

"Swell. I'll wrestle you two falls out of three."

"Next week. Jack taking good care of you?"

"You bet. Say, Rod, I don't know how to thank you two. If it hadn't been for—"

"Then don't try. You don't owe me anything, ever. And Jack's my partner, so it's right with Jack."

"Jack is swell."

"Jack is a good boy. They don't come better. He and I really hit it off."

Jim looked surprised, opened his mouth, closed it suddenly. "What's the matter?" Rod asked. "Something bite you? Or are you feeling bad again?"

"What," Jim said slowly, "did you say about Jack?"

"Huh? I said they don't come any better. He and I team up like bacon and eggs. A number-one kid, that boy."

Jimmy Throxton looked at him. "Rod… were you born that stupid? Or did you have to study?"

"Huh?"

"Jack is a *girl*."

Chapter Seven

"I Should Have Baked a Cake"

There followed a long silence. "Well," said Jim, "close your mouth before something flies in."

"Jimmy, you're still out of your head."

"I may be out of my head, but not so I can't tell a girl from a boy. When that day comes, I won't be sick; I'll be dead."

"But…"

Jim shrugged. "Ask her."

A shadow fell across the opening; Rod turned and saw Jack scrambling up to the shelf. "Fresh water, Jimmy!"

"Thanks, kid." Jim added to Rod, "Go on, dopy!"

Jack looked from one to the other. "Why the tableau? What are you staring for, Rod?"

"Jack," he said slowly, "what is your name?"

"Huh? Jack Daudet. I told you that."

"No, no! What's your full name, your legal name?" Jack looked from Rod to Jimmy's grinning face and back again. "My full name is… Jacqueline Marie Daudet—if it's any business of yours. Want to make something of it?"

Rod took a deep breath. "Jacqueline," he said carefully, "I didn't know. I—"

"You weren't supposed to."

"Look, if I've said anything to offend you, I surely didn't mean to."

"You haven't said anything to offend me, you big stupid dear. Except about your knife."

"I didn't mean that."

"You mean about girls being poison? Well, did it ever occur to you that maybe boys are pure poison, too? Under these circumstances? No, of course it didn't. But I don't mind your knowing now… now that there are three of us."

"But, Jacqueline—"

"Call me 'Jack,' please." She twisted her shoulders uncomfortably. "Now that you know, I won't have to wear this beetle case any longer. Turn your backs, both of you.

"Uh…" Rod turned his back. Jimmy rolled over, eyes to the wall.

In a few moments Jacqueline said, "Okay." Rod turned around. In shirt and trousers, without torso armor, her shoulders seemed narrower and she herself was slender now and pleasantly curved. She was scratching her ribs. "I haven't been able to scratch properly since I met you, Rod Walker," she said accusingly. "Sometimes I almost died."

"I didn't make you wear it."

"Suppose I hadn't? Would you have teamed with me?"

"Uh... well, it's like this. I..." He stopped.

"You see?" She suddenly looked worried. "We're still partners?"

"Huh? Oh, sure, sure!"

"Then shake on it again. This time we shake with Jimmy, too. Right, Jim?"

"You bet, Jack."

They made a three-cornered handshake. Jack pressed her left hand over the combined fists and said solemnly, "All for one!"

Rod drew Colonel Bowie with his left hand, laid the flat of the blade on the stacked hands. "And one for all!"

"Plus sales tax," Jimmy added. "Do we get it notarized?"

Jacqueline's eyes were swimming with tears. "Jimmy Throxton," she said fiercely, "someday I am going to make you take life seriously!"

"I take life seriously," he objected. "I just don't want life to take me seriously. When you're on borrowed time, you can't afford not to laugh."

"We're all on borrowed time," Rod answered him. "Shut up, Jimmy. You talk too much."

"Look who's preaching! The Decibel Kid himself."

"Well... you ought not to make fun of Jacqueline. She's done a lot for you.

"She has indeed!"

"Then—"

"'Then' nothing!" Jacqueline said sharply. "My name is 'Jack.' Rod. Forget 'Jacqueline.' If either of you starts treating me with gallantry we'll have all those troubles you warned me about. 'Pure poison' was the expression you used, as I recall."

"But you can reasonably expect—"

"Are you going to be 'logical' again? Let's be practical instead. Help me skin this beast and make a new water bag."

The following day Jimmy took over housekeeping and Jack and Rod started hunting together. Jim wanted to come along; he ran into a double veto. There was little advantage in hunting as a threesome whereas Jack and Rod paired off so well that a hunt was never hours of waiting, but merely a matter of finding game. Jack would drive and Rod would kill; they would pick their quarry from the fringe of a herd, Jack would sneak around and panic the animals, usually driving one into Rod's arms.

They still hunted with the knife, even though Jack's gun was a good choice for primitive survival, being an air gun that threw poisoned darts. Since the darts could be recovered and re-envenomed, it was a gun which would last almost indefinitely; she had chosen it for this reason over cartridge or energy guns.

Rod had admired it but decided against hunting with it. "The air pressure might bleed off and let you down."

"It never has. And you can pump it up again awfully fast."

"Mmm… yes. But if we use it, someday the last dart will be lost no matter how careful we are… and that might be the day we would need it bad. We may be here a long time, what do you say we save it?"

"You're the boss, Rod."

"No, I'm not. We all have equal say."

"Yes, you are. Jimmy and I agreed on that. Somebody has to boss."

Hunting took an hour or so every second day; they spent most of daylight hours searching for another team mate, quartering the area and doing it systematically. Once they drove scavengers from a kill which seemed to have been butchered by knife; they followed a spoor from that and determined that it was a human spoor, but were forced by darkness to return to the cave. They tried to pick it up the next day, but it had rained hard in the night; they never found it.

Another time they found ashes of a fire, but Rod judged them to be at least two weeks old.

After a week of fruitless searching they returned one late afternoon. Jimmy looked up from the fire he had started. "How goes the census?"

"Don't ask," Rod answered, throwing himself down wearily. "What's for dinner?"

"Raw buck, roast buck, and burned buck. I tried baking some of it in wet clay. It didn't work out too well, but I've got some awfully good baked clay for dessert."

"Thanks. If that is the word."

"Jim," Jack said, "we ought to try to bake pots with that clay."

"I did. Big crack in my first effort. But I'll get the hang it. Look, children," he went on, "has it ever occurred to your bright little minds that you might be going about this the wrong way?"

"What's wrong with it?" Rod demanded.

"Nothing… if it is exercise you are after. You are and scurrying over the countryside, getting in and nowhere else. Maybe it would be better to sit back and let them come to you."

"How?"

"Send up a smoke signal."

"We've discussed that We don't want just anybody and we don't want to advertise where we live. We want people who will strengthen the team."

"That is what the engineers call a self-defeating criterion. The superior woodsman you want is just the laddy you will never find by hunting for him. *He* may find *you*, as you go tramping noisily through the brush, kicking rocks and stepping on twigs and scaring the birds. He may shadow you to see what you are up to. But *you* won't find *him*."

"Rod, there is something to that," Jack said.

"We found *you* easily enough," Rod said to Jim. "Maybe you aren't the high type we need."

"I wasn't myself at the time," Jimmy answered blandly. "Wait till I get my strength back and my true nature will show. Ugh-Ugh, the ape man, that's me. Half Neanderthal and half sleek black leopard." He beat his chest and coughed.

"Are those the proportions? The Neanderthal strain seems dominant."

"Don't be disrespectful. Remember, you are my debtor."

"I think you read the backs of those cards. They are getting to be like waffles." When rescued, Jimmy had had on him a pack of playing cards, and had later explained that they were survival equipment.

"In the first place," he had said, "if I got lost I could sit down and play solitaire. Pretty soon somebody would come along and—"

"Tell you to play the black ten on the red jack. We've heard that one."

"Quiet, Rod. In the second place, Jack, I expected to team with old Stoneface here. I can always beat him at cribbage but he doesn't believe it. I figured that during the test I could win all his next year's allowance. Survival tactics."

Whatever his reasoning, Jimmy had had the cards. The three played a family game each evening at a million plutons a point. Jacqueline stayed more or less even but Rod owed Jimmy several hundred millions. They continued the discussion that evening over their game. Rod was still wary of advertising their hideout.

"We might burn a smoke signal somewhere, though," he said thoughtfully. "Then keep watch from a safe spot. Cut 'em, Jim."

"Consider the relative risks—a five, just what I needed! If you put the fire far enough away to keep this place secret, then it means a trek back and forth at least twice a day. With all that running around you'll use up your luck; one day you won't come back. It's not that I'm fond you, but it would bust up the game. Whose crib?"

"Jack's. But if we burn it close by and in sight, then we sit up here safe and snug. I'll have my back to the wall facing the path, with Jack's *phht* gun in my lap. If an unfriendly face sticks up—*blooie!* Long pig for dinner. But if we like them, we cut them into the game.

"Your count."

"Fifteen-six, fifteen-twelve, a pair, six for jacks and the right jack. That's going to cost you another million, my friend."

"One of those jacks is a queen," Rod said darkly.

"Sure enough? You know, it's getting too dark to play. Want to concede?"

They adopted Jim's scheme. It gave more time for cribbage and ran Rod's debt up into billions. The signal fire was kept burning on the shelf at the downstream end, the prevailing wind being such that smoke usually did not blow back into the cave—when the wind did shift was unbearable; they were forced to flee, eyes streaming.

This happened three times in four days. Their advertising had roused no customers and they were all getting tired of dragging up dead wood for fuel and green branches for smoke. The third time they fled from smoke Jimmy said, "Rod, I give up. You win. This is not the way to do it."

"No!"

"Huh? Have a heart, chum. I can't live on smoke—no vitamins. Let's run up a flag instead. I'll contribute my shirt."

Rod thought about it. "We'll do that."

"Hey, wait a minute. I was speaking rhetorically. I'm the delicate type. I sunburn easily."

"You can take it easy and work up a tan. We'll use your shirt as a signal flag. But we'll keep the fire going, too. Not up on the shelf, but down there—on that mud flat, maybe."

"And have the smoke blow right back into our summer cottage."

"Well, farther downstream. We'll make a bigger fire and a column of smoke that can be seen a long way. The flag we will put up right over the cave."

"Thereby inviting eviction proceedings from large, hairy individuals with no feeling for property rights."

"We took that chance when we decided to use a smoke signal. Let's get busy."

Rod picked a tall tree on the bluff above. He climbed to where the trunk had thinned down so much that it would hardly take his weight, then spent a tedious hour topping it with his knife. He tied the sleeves of Jim's shirt to it, then worked down, cutting foliage away as he went. Presently the branches became too large to handle with his knife, but the stripped main stem stuck up for several meters; the shirt could be seen for a long distance up and down stream. The shirt caught the wind and billowed; Rod eyed it, tired but satisfied—it was unquestionably a signal flag.

Jimmy and Jacqueline had built a new smudge farther downstream, carrying fire from the shelf for the purpose. Jacqueline still had a few matches and Jim had a pocket torch almost fully charged but the realization that they were marooned caused them to be miserly. Rod went down and joined them. The smoke was enormously greater now that they were not limited in space, and fuel was easier to fetch.

Rod looked them over. Jacqueline's face, sweaty and none too clean to start with, was now black with smoke, while Jimmy's pink skin showed the soot even more. "A couple of pyromaniacs."

"You ordered smoke," Jimmy told him. "I plan to make the burning of Rome look like a bonfire. Fetch me a violin and a toga."

"Violins weren't invented then. Nero played a lyre."

"Let's not be small. We're getting a nice mushroom cloud effect, don't you think?"

"Come on, Rod," Jacqueline urged, Wiping her face without improving it. "It's fun!" She dipped a green branch in the stream, threw it on the pyre. A thick cloud of smoke and steam concealed her. "More dry wood, Jimmy."

"Coming!"

Rod joined in, soon was as dirty and scorched as the other two and having more fun than he had had since the test started. When the sun dropped below the tree tops they at last quit trying to make the fire bigger and better and smokier and reluctantly headed up to their cave. Only then did Rod realize that he had forgotten to remain alert.

Oh well, he assured himself, dangerous animals would avoid a fire.

While they ate they could see the dying fire still sending up smoke. After dinner Jimmy got out his cards, tried to riffle the limp mass. "Anyone interested in a friendly game? The customary small stakes."

"I'm too tired," Rod answered. "Just chalk up my usual losses."

"That's not a sporting attitude. Why, you won a game just last week. How about you, Jack?"

Jacqueline started to answer; Rod suddenly motioned for silence. "Sssh! I heard something."

The other two froze and silently got out their knives. Rod put Colonel Bowie in his teeth and crawled out to the edge. The pathway was clear and the thorn barricade was undisturbed. He leaned out and looked around, trying to locate the sound.

"Ahoy below!" a voice called out, not loudly. Rod felt himself tense. He glanced back, saw Jimmy moving diagonally over to cover the pathway. Jacqueline had her dart gun and was hurriedly pumping it up.

Rod answered, "Who's there?"

There was a short silence. Then the voice answered, "Bob Baxter and Carmen Garcia. Who are you?"

Rod sighed with relief. "Rod Walker, Jimmy Throxton. And one other, not our class . . Jack Daudet."

Baxter seemed to think this over. "Uh, can we join you? For tonight, at least?"

"Sure!"

"How can we get down there? Carmen can't climb very well; she's got a bad foot."

"You're right above us?"

"I think so. I can't see you."

"Stay there. I'll come up." Rod turned, grinned at the others. "Company for dinner! Get a fire going, Jim."

Jimmy clucked mournfully. "And hardly a thing in the house. I should have baked a cake."

By the time they returned Jimmy had roast meat waiting. Carmen's semi-crippled condition had delayed them. It was just a sprained ankle but it caused her to crawl up the traverse on her hands, and progress to that point had been slow and painful.

When she realized that the stranger in the party was another woman she burst into tears. Jackie glared at the males, for no cause that Rod could see, then led her into the remote corner of the cave where she herself slept.

There they whispered while Bob Baxter compared notes with Rod and Jim.

Bob and Carmen had had no unusual trouble until Carmen had hurt her ankle two days earlier… except for the obvious fact that something had gone wrong and they were stranded. "I lost my grip," he admitted, "when I realized that they weren't picking us up. But Carmen snapped me out of it. Carmen is a very practical kid."

"Girls are always the practical ones," Jimmy agreed. Now take me —I'm the poetical type."

"Blank verse, I'd say," Rod suggested.

"Jealousy ill becomes you, Rod. Bob, old bean, can I interest you in another slice? Rare, or well carbonized?"

"Either way. We haven't had much to eat the last couple of days. Boy, does this taste good!"

"My own sauce," Jimmy said modestly. "I raise my own herbs, you know. First you melt a lump of butter slowly in a pan, then you—"

"Shut up, Jimmy. Bob, do you and Carmen want to team with us? As I see it, we can't count on ever getting back. Therefore we ought to make plans for the future."

"I think you are right."

"Rod is always right," Jimmy agreed. "'Plans for the future—' Hmm, yes… Bob, do you and Carmen play cribbage?"

"No."

"Never mind. I'll teach you."

Chapter Eight

"Fish, or Cut Bait"

The decision to keep on burning the smoke signal and thereby to call in as many recruits as possible was never voted on; it formed itself. The next morning Rod intended to bring the matter up but Jimmy and Bob rebuilt the smoke fire from its embers while down to fetch fresh water. Rod let the accomplished fact stand; two girls drifted in separately that day.

Nor was there any formal contract to team nor any selection of a team captain; Rod continued to direct operations and Bob Baxter accepted the arrangement. Rod did not think about it as he was too busy. The problems of food, shelter, and safety for their growing population left him no time to worry about it.

The arrival of Bob and Carmen cleaned out the larder; it was necessary to hunt the next day. Bob Baxter offered to go, but Rod decided to take Jackie as usual. "You rest today. Don't let Carmen put her weight on that bad ankle and don't let Jimmy go down alone to tend the fire. He thinks he is well again but he is not."

"I see that."

Jack and Rod went out, made their kill quickly. But Rod failed to kill clean and when Jacqueline moved in to help finish the thrashing, wounded buck she was kicked in the ribs. She insisted that she was not hurt; nevertheless her side was sore the following morning and Bob Baxter expressed the opinion that she had cracked a rib.

In the meantime two new mouths to feed had been added, just as Rod found himself with three on the sick list. But one of the new mouths was a big, grinning one belonging to Caroline Mshiyeni; Rod picked her as his hunting partner.

Jackie looked sour. She got Rod aside and whispered, 'You haven't any reason to do this to me. I can hunt. My side is all right, just a little stiff."

"It is, huh? So it slows you down when I need you. I can't chance it, Jack."

She glanced at Caroline, stuck out her lip and looked stubborn. Rod said urgently, "Jack, remember what I said about petty jealousies? So help me, you make trouble and I'll paddle you."

"You aren't big enough!"

"I'll get help. Now, look—are we partners?"

"Well, I *thought* so."

"Then be one and don't cause trouble."

She shrugged. "All right. Don't rub it in—I'll stay home."

"I want you to do more than that. Take that old bandage of mine—it's around somewhere—and let Bob Baxter strap your ribs."

"No!"

"Then let Carmen do it. They're both quack doctors, sort of." He raised his voice. "Ready, Carol?"

"Quiverin' and bristlin'."

Rod told Caroline how he and Jacqueline hunted, explained what he expected of her. They located, and avoided, two family herds; old bulls were tough and poor eating and attempting to kill anything but the bull was foolishly dangerous. About noon they found a yearling herd upwind; they split and placed themselves cross wind for the kill. Rod waited for Caroline to flush the game, drive it to him.

He continued to wait. He was getting fidgets when Caroline showed up, moving silently. She motioned for him to follow. He did so, hard put to keep up with her and still move quietly. Presently she stopped; he caught up and saw that she had already made a kill. He looked at it and fought down the anger he felt.

Caroline spoke. "Nice tender one, I think. Suit you, Rod?"

He nodded. "Couldn't be better. A clean kill, too. Carol?"

"Huh?"

"I think you are better at this than I am.

"Oh, shucks, it was just luck." She grinned and looked sheepish.

"I don't believe in luck. Any time you want to lead the hunt, let me know. But be darn sure you let me know."

She looked at his unsmiling face, said slowly, "By any chance are you bawling me out?"

"You could call it that. I'm saying that any time you want to lead the hunt, you tell me. Don't switch in the middle. Don't ever. I mean it."

"What's the matter with you, Rod? Getting your feelings hurt just because I got there first—that's silly!"

Rod sighed. "Maybe that's it. Or maybe I don't like having a girl take the kill away from me. But I'm dead sure about one thing: I don't like having a partner on a hunt who can't be depended on. Too many ways to get hurt. I'd rather hunt alone."

"Maybe I'd rather hunt alone! I don't need any help."

"I'm sure you don't. Let's forget it, huh, and get this carcass back to camp."

Caroline did not say anything while they butchered. When they had the waste trimmed away and were ready to pack as much as possible back to the others Rod said, "You lead off. I'll watch behind."

"Rod?"

"Huh?"

"I'm sorry."

"What? Oh, forget it."

"I won't ever do it again. Look, I'll tell everybody you made the kill."

He stopped and put a hand on her arm. "Why tell anybody anything? It's nobody's business how we organize our hunt as long as we bring home the meat."

"You're still angry with me."

"I never was angry," he lied. "I just don't want us to get each other crossed up."

"Roddie, I'll never cross you up again! Promise."

Girls stayed in the majority to the end of the week. The cave, comfortable for three, adequate for twice that number, was crowded for the number that was daily accumulating. Rod decided to make it a girls' dormitory and moved the males out into the open on the field at the foot of the path up the shale. The spot was unprotected against weather and animals but it did guard the only access to the cave. Weather was no problem; protection against animals was set up as well as could be managed by organizing a night watch whose duty it was to keep fires burning between the bluff and the creek on the upstream side and in the bottleneck downstream. Rod did not like the arrangements, but they were the best he could do at the time. He sent Bob Baxter and Roy Kilroy downstream to scout for caves and Caroline and Margery Chung upstream for the same purpose. Neither party was successful in the one-day limit he had imposed; the two girls brought back another straggler.

A group of four boys came in a week after Jim's shirt had been requisitioned; it brought the number up to twenty-five and shifted the balance to more boys than girls. The four newcomers could have been classed as men rather than boys, since they were two or three years older than the average. Three of the four classes in this survival-test area had been about to graduate from secondary schools; the fourth class, which included these four, came from Outlands Arts College of Teller University.

"Adult" is a slippery term. Some cultures have placed adult age as low as eleven years, others as high as thirty-five-and some have not recognized any such age as long as an ancestor remained alive. Rod did not think of these new arrivals as senior to him. There were already a few from Teller U. in the group, but Rod was only vaguely aware which ones they were—they fitted in. He was too busy with the snowballing problems of his growing colony to worry about their backgrounds on remote Terra.

The four were Jock McGowan, a brawny youth who seemed all hands and feet, his younger brother Bruce, and Chad Ames and Dick Burke. They had arrived late in the day and Rod had not had time to get acquainted, nor was there time the following morning, as a group of four girls and five boys poured in on them unexpectedly. This had increased his administrative problems almost to the breaking point; the cave would hardly sleep four more females. It was necessary to find, or build, more shelter.

Rod went over to the four young men lounging near the cooking fire. He squatted on his heels and asked, "Any of you know anything about building?"

He addressed them all, but the others waited for Jock McGowan to speak. "Some," Jock admitted. "I reckon I could build anything I wanted to."

"Nothing hard," Rod explained. "Just stone walls. Ever tried your hand at masonry?"

"Sure. What of it?"

"Well, here's the idea. We've got to have better living arrangements right away—we've got people pouring out of our ears. The first thing we are going to do is to throw a wall from the bluff to the creek across this flat area. After that we will build huts, but the first thing is a kraal to stop dangerous animals."

McGowan laughed. "That will be some wall. Have you seen this dingus that looks like an elongated cougar?

One of those babies would go over your wall before you could say 'scat.'"

"I know about them," Rod admitted, "and I don't like them." He rubbed the long white scars on his left arm. "They probably could go over any wall we could build. So we'll rig a surprise for them." He picked up a twig and started drawing in the dirt. "We build the wall and bring it around to here. Then, inside for about six meters, we set up sharpened poles. Anything comes over the wall splits its gut on the poles."

Jock McGowan looked at the diagram. "Futile."

"Silly," agreed his brother.

Rod flushed but answered, "Got a better idea?"

"That's beside the point."

"Well," Rod answered slowly, "unless somebody comes down with a better scheme, or unless we find really good caves, we've got to fortify this spot the best we can… so we'll do this. I'm going to set the girls to cutting and sharpening stakes. The rest of us will start on the wall. If we tear into it we ought to have a lot of it built before dark. Do you four want to work together? There will be one party collecting rock and another digging clay and making clay mortar. Take your choice."

Again three of them waited. Jock McGowan lay back and laced his hands under his head. "Sorry. I've got a date to hunt today."

Rod felt himself turning red. "We don't need a kill today," he said carefully.

"Nobody asked you, youngster."

Rod felt the cold tenseness he always felt in a hunt He was uncomfortably aware that an audience had gathered. He tried to keep his voice steady and said, "Maybe I've made a mistake. I—"

"You have."

"I thought you four had teamed with the rest of us. Well?"

"Maybe. Maybe not."

"You'll have to fish or cut bait. If you join, you work like anybody else. If not—well, you're welcome to breakfast and stop in again some time. But be on your way. I won't have you lounging around while everybody else, is working."

Jock McGowan sucked his teeth, dug at a crevice with his tongue. His hands were still locked back of his head. "What you don't understand, sonny boy, is that nobody gives the McGowans orders. Nobody. Right, Bruce?"

"Right, Jock."

"Right, Chad? Dick?"

The other two grunted approval. McGowan continued to stare up at the sky. "So," he said softly, "I go where I want to go and stay as long as I like. The question is not whether we are going to join up with you, but what ones am going to let team with us. But not you, sonny boy; you are still wet behind your ears.

"Get up and get Out of here!" Rod started to stand up. He was wearing Colonel Bowie, as always, but he did not reach for it. He began to straighten up from squatting.

Jock McGowan's eyes flicked toward his brother. Rod was hit low… and found himself flat on his face with his breath knocked out. He felt the sharp kiss of a knife against his ribs; he held still. Bruce called out, "How about it, Jock?"

Rod could not see Jock McGowan. But he heard him answer, "Just keep him there."

"Right, Jock."

Jock McGowan was wearing both gun and knife. Rod now heard him say, "Anybody want to dance? Any trouble out of the rest of you lugs?"

Rod still could not see Jock, but he could figure from the naked, startled expressions of a dozen others that McGowan must have rolled to his feet and covered them with his gun. Everybody in camp carried knives; most had guns as well and Rod could see that Roy Kilroy was wearing his—although most guns were kept when not in use in the cave in a little arsenal which Carmen superintended.

But neither guns nor knives were of use; it had happened too fast, shifting from wordy wrangling to violence with no warning. Rod could see none of his special friends from where he was; those whom he could see did not seem disposed to risk death to rescue him.

Jock McGowan said briskly, "Chad—Dick—got 'em all covered?"

"Right, Skipper."

"Keep 'em that way while I take care of this cholo." His hairy legs appeared in front of Rod's face. "Pulled his teeth, Bruce?"

"Not yet."

"I'll do it. Roll over, sonny boy, and let me at your knife. Let him turn over, Bruce."

Bruce McGowan eased up on Rod and Jock bent down. As he reached for Rod's knife a tiny steel flower blossomed in Jock's side below his ribs. Rod heard nothing, not even the small sound it must have made when it struck. Jock straightened up with a shriek, clutched at his side.

Bruce yelled, Jock! What's the matter?"

"They got me." He crumpled to the ground like loose clothing.

Rod still had a man with a knife on his back but the moment was enough; he rolled and grabbed in one violent movement and the situation was reversed, with Bruce's right wrist locked in Rod's fist, with Colonel Bowie threatening Bruce's face.

A loud contralto voice sang out, "Take it easy down there! We got you covered."

Rod glanced up. Caroline stood on the shelf at the top of the path to the cave, with a rifle at her shoulder. At the downstream end of the shelf Jacqueline sat with her little dart gun in her lap; she was frantically pumping up again. She raised it, drew a bead on some one past Rod's shoulder.

Rod called out, "Don't shoot!" He looked around. "Drop it, you two!"

Chad Ames and Dick Burke dropped their guns. Rod added, "Roy! Grant Cowper! Gather up their toys. Get their knives, too." He turned back to Bruce McGowan, pricked him under the chin. "Let's have your knife." Bruce turned it loose; Rod took it and got to his feet.

Everyone who had been up in the cave was swarming down, Caroline in the lead. Jock McGowan was writhing on the ground, face turned blue and gasping in the sort of paralysis induced by the poison used on darts. Bob Baxter hurried up, glanced at him, then said to Rod, "I'll take care of that cut in your ribs in a moment." He bent over Jock McGowan.

Caroline said indignantly, "You aren't going to try to save him?"

"Of course."

"Why? Let's chuck him in the stream."

Baxter glanced at Rod. Rod felt a strong urge to order Caroline's suggestion carried out. But he answered, "Do what you can for him, Bob. Where's Jack? Jack—you've got antidote for your darts, haven't you? Get it."

Jacqueline looked scornfully at the figure on the ground. "What for? He's not hurt."

"Huh?"

"Just a pin prick. A practice dart—that's all I keep in Betsey. My hunting darts are put away so that nobody can hurt themselves—and I didn't have time to get them."

She prodded Jock with a toe. "He's not poisoned. He's scaring himself to death."

Caroline chortled and waved the rifle she carried. "And this one is empty. Not even a good club."

Baxter said to Jackie, "Are you sure? The reactions look typical."

"Sure I'm sure! See the mark on the end sticking out? A target dart."

Baxter leaned over his patient, started slapping his face. "Snap out of it, McGowan! Stand up. I want to get that dart out of you."

McGowan groaned and managed to stand. Baxter took the dart between thumb and forefinger, jerked it free; Jock yelled. Baxter slapped him again. "Don't you faint on me," he growled. 'you're lucky. Let it drain and you'll be all right." He turned to Rod. "You're next."

"Huh? There's nothing the matter with *me*."

"That stuff on your ribs is paint, I suppose." He looked around. "Carmen, get my kit."

"I brought it down."

"Good. Rod, sit down and lean forward. This is going to hurt a little."

It did hurt. Rod tried to chat to avoid showing that he minded it. "Carol," he asked, "I don't see how you and Jackie worked out a plan so fast. That was smooth."

"Huh? We didn't work out a plan; we both just did what we could and did it fast." She turned to Jacqueline and gave her a clap on the shoulder that nearly knocked her over. "This kid is solid, Roddie, solid!"

Jacqueline recovered, looked pleased and tried not to show it. "Aw, Carol!"

"Anyway I thank you both."

"A pleasure. I wish that pea shooter had been loaded. Rod, what are you going to do with them?"

"Well… ummph!"

"Whoops!" said Baxter, behind him. "I said it was going to hurt. I had better put one more clip in. I'd like to put a dressing on that, but we can't, so you lay off heavy work for a while and sleep on your stomach."

"Unh!" said Rod.

"That's the last. You can get up now. Take it easy and give it a chance to scab."

"I still think," Caroline insisted, "that we ought to make them swim the creek. We could make bets on whether or not any of 'em make it across."

"Carol, you're uncivilized."

"I never claimed to be civilized. But I know which end wags and which end bites."

Rod ignored her and went to look at the prisoners. Roy Kilroy had caused them to lie down one on top of the other; it rendered them undignified and helpless. "Let them sit up."

Kilroy and Grant Cowper had been guarding them. Cowper said, "You heard the Captain. Sit up." They unsnarled and sat up, looking glum.

Rod looked at Jock McGowan. "What do you think we ought to do with you?"

McGowan said nothing. The puncture in his side was oozing blood and he was pale. Rod said slowly, "Some think we ought to chuck you in the stream. That's the same as condemning you to death—but if we are going to, we ought to shoot you or hang you. I don't favor letting anybody be eaten alive. Should we hang you?"

Bruce McGowan blurted out, "We haven't done anything."

"No. But you sure tried. You aren't safe to have around other people."

Somebody called out, "Oh, let's shoot them and get it over with!" Rod ignored it. Grant Cowper came close to Rod and said, "We ought to vote on this. They ought to have a trial."

Rod shook his head. "No." He went on to the prisoners,

I don't favor punishing you—this is personal. But we can't risk having you around either." He turned to Cowper. "Give them their knives."

"Rod? You're not going to fight them?"

"Of course not." He turned back. "You can have your knives; we're keeping your guns. When we turn you loose, head downstream and keep going. Keep going for at least a week. If you ever show your faces again, you won't get a chance to explain. Understand me?"

Jock McGowan nodded. Dick Burke gulped and said, "But turning us out with just knives is the same as killing us.

"Nonsense! No guns. And remember, if you turn back this way, even to hunt, it's once too many. There may be somebody trailing you —with a gun.

"Loaded this time!" added Caroline. "Hey, Roddie, I want that job. Can I? Please?"

"Shut up, Carol. Roy, you and Grant start them on their way."

As exiles and guards, plus sightseers, moved off they ran into Jimmy Throxton coming back into camp. He stopped and stared. "What's the procession? Rod what have you done to your ribs, boy? Scratching yourself again?"

Several people tried to tell him at once. He got the gist of it and shook his head mournfully. "And there I was, good as gold, looking for pretty rocks for our garden wall. Every time there's a party people forget to ask *me*. Discrimination."

"Stow it, Jim. It's not funny."

"That's what I said. It's discrimination."

Rod got the group started on the wall with an hour or more of daylight wasted. He tried to work on the wall despite Bob Baxter's medical orders, but found that he was not up to it; not only was his wound painful but also he felt shaky with reaction.

Grant Cowper looked him up during the noon break. "Skipper, can I talk with you? Privately?"

Rod moved aside with him. "What's on your mind?"

"Mmm… Rod, you were lucky this morning. You know that, don't you? No offense intended."

"Sure, I know. What about it?"

"Uh, do you know *why* you had trouble?"

"What? Of course I know—now. I trusted somebody when I should not have."

Cowper shook his head. "Not at all. Rod, what do you know about theory of government?"

Rod looked surprised. "I've had the usual civics courses. Why?"

"I doubt if I've mentioned it, but the course I'm majoring in at Teller U. is colonial administration. One thing we study is how authority comes about in human society and how it is maintained. I'm not criticizing but to be blunt, you almost lost your life because you've never studied such things."

Rod felt annoyed. "What are you driving at?"

"Take it easy. But the fact remains that you didn't have any authority. McGowan knew it and wouldn't take orders. Everybody else knew it, too. When it came to a showdown, nobody knew whether to back you up or not. Because you don't have a milligram of real authority."

"Just a moment! Are you saying I'm not leader of this team?"

"You are *de facto* leader, no doubt about it. But you've never been elected to the job. That's your weakness."

Rod chewed this over. "I know," he said slowly. "It's just that we have been so confounded busy."

"Sure, I know. I'd be the last person to criticize. But a captain ought to be properly elected."

Rod sighed. "I meant to hold an election but I thought getting the wall built was more urgent. All right, let's call them together."

"Oh, you don't need to do it this minute."

"Why not? The sooner the better, apparently."

"Tonight, when it's too dark to work, is soon enough."

"Well… okay."

When they stopped for supper Rod announced that there would be an organization and planning meeting. No one seemed surprised, although he himself had mentioned it to no one. He felt annoyed and had to remind himself that there was nothing secret about it; Grant had been under no obligation to keep it quiet. He set guards and fire tenders, then came back into the circle of firelight and called out, "Quiet, everybody! Let's get started. If you guys on watch can't hear, be sure to speak up" He hesitated. "We're going to hold an election. Somebody pointed out that I never have been elected captain of this survival team. Well, if any of you have your noses out of joint, I'm sorry. I was doing the best I could. But you are entitled to elect a captain. All right, any nominations?"

Jiminy Throxton shouted, "I nominate Rod Walker!" Caroline's voice answered, "I second it! Move the nominations be closed."

Rod said hastily, "Carol, your motion is out of order."

"Why?"

Before he could answer Roy Kilroy spoke up. "Rod, can I have the floor a moment? Privileged question."

Rod turned, saw that Roy was squatting beside Grant Cowper. "Sure. State your question."

"Matter of procedure. The first thing is to elect a temporary chairman."

Rod thought quickly. "I guess you're right. Jimmy, your nomination is thrown out. Nominations for temporary chairman are in order."

"Rod Walker for temporary chairman!"

"Oh, shut up, Jimmy! I don't want to be temporary chairman."

Roy Kilroy was elected. He took the imaginary gavel and announced, "The chair recognizes Brother Cowper for a statement of aims and purposes of this meeting."

Jimmy Throxton called out, "What do we want any speeches for? Let's elect Rod and go to bed. I'm tired—and I've got a two-hour watch coming up."

"Out of order. The chair recognizes Grant Cowper." Cowper stood up. The firelight caught his handsome features and curly, short beard.

Rod rubbed the scraggly growth on his own chin and wished that he looked like Cowper. The young man was dressed only in walking shorts and soft bush shoes but he carried himself with the easy dignity of a distinguished speaker before some important body. "Friends," he said, "brothers and sisters, we are gathered here tonight not to elect a survival-team captain, but to found a new nation."

He paused to let the idea sink in. "You know the situation we are in. We fervently hope to be rescued, none more so than I. I will even go so far as to say that I think we will be rescued… eventually. But we have no way of knowing, we have no data on which to base an intelligent guess, as to *when* we will be rescued.

"It might be tomorrow… it might be our descendants a thousand years from now." He said the last very solemnly.

"But when the main body of our great race reestablishes contact with us, it is up to us, this little group here tonight, whether they find a civilized society...or flea-bitten animals without language, without arts, with the light of reason grown dim… or no survivors at all, nothing but bones picked clean."

"Not mine!" called out Caroline. Kilroy gave her a dirty look and called for order.

"Not yours, Caroline," Cowper agreed gravely. "Nor mine. Not any of us. Because tonight we will take the step that will keep this colony alive. We are poor in things; we will make what we need. We are rich in knowledge; among us we hold the basic knowledge of our great race. We must preserve it… we *will!*"

Caroline cut through Cowper's dramatic pause with a stage whisper. "Talks pretty, doesn't he? Maybe I'll marry him."

He did not try to fit this heckling into his speech. "What is the prime knowledge acquired by our race? That without which the rest is useless? What flame must we guard like vestal virgins?"

Some one called out, "Fire." Cowper shook his head.

"Writing!"

"The decimal system."

"Atomics!"

"The wheel, of course.

"No, none of those. They are all important, but they are not the keystone. The greatest invention of mankind is government. It is also the hardest of all. More individualistic than cats, nevertheless we have learned to cooperate more efficiently than ants or bees or termites. Wilder, bloodier, and more deadly than sharks, we have learned to live together as peacefully as lambs. But these things are not easy. That is why that which we do tonight will decide our future… and perhaps the future of our children, our children's children, our descendants far into the womb of time. We are not picking a temporary survival leader; we are setting up a government. We must do it with care. We must pick a chief executive for our new nation, a mayor of our city-state. But we must draw up a constitution, sign articles binding us together. We must organize and plan."

"Hear, hear!"

"Bravo!"

"We must establish law, appoint judges, arrange for orderly administration of our code. Take for example, this morning—" Cowper turned to Rod and gave him a friendly smile. "Nothing personal, Rod, you understand that. I think you acted with wisdom and I was happy that you tempered justice with mercy. Yet no one could have criticized if you had yielded to your impulse and killed all four of those, uh… antisocial individuals. But justice should not be subject to the whims of a dictator. We can't stake our lives on your temper… good or bad. You see that, don't you?"

Rod did not answer He felt that he was being accused of bad temper, of being a tyrant and dictator, of being a danger to the group. But he could not put his finger on it. Grant Cowper's remarks had been friendly… yet they felt intensely personal and critical.

Cowper insisted on an answer. "You do see that, Rod? Don't you? You don't want to continue to have absolute power over the lives and persons of our community? You don't want *that?* Do you?" He waited.

"Huh? Oh, yeah, sure! I mean, I agree with you."

"Good! I was sure you would understand. And I must ay that I think you have done a very good job in getting us together. I don't agree with any who have criticized you. You were doing your best and we should let bygones be bygones." Cowper grinned that friendly grin and Rod felt as if he were being smothered with kisses.

Cowper turned to Kilroy. "That's all I have to say, Mr. Chairman." He flashed his grin and added as he sat down, "Sorry I talked so long, folks. I had to get it off my chest."

Kilroy clapped his hands once. "The chair will entertain nominations for—Hey, Grant, if we don't call it 'captain,' then what should we call it?"

"Mmm…" Cowper said judicially. "'President' seems a little pompous. I think 'mayor' would be about right-mayor of our city-state, our village."

"The chair will entertain nominations for mayor.

"Hey!" demanded Jimmy Throxton. "Doesn't anybody else get to shoot off his face?"

"Out of order."

"No," Cowper objected, "I don't think you should rule Jimmy out of order, Roy. Anyone who has something to contribute should be encouraged to speak. We mustn't act hastily."

"Okay, Throxton, speak your piece."

"Oh, I didn't want to sound off. I just didn't like the squeeze play."

"All right, the chair stands corrected. Anybody else? If not, we will entertain—"

"One moment, Mr. Chairman!"

Rod saw that it was Arthur Nielsen, one of the Teller University group. He managed to look neat even in these circumstances but he had strayed into camp bereft of all equipment, without even a knife. He had been quite hungry.

Kilroy looked at him. "You want to talk, Waxie?"

"Nielsen is the name. Or Arthur. As you know. Yes."

"Okay. Keep it short."

"I shall keep it as short as circumstances permit. Fellow associates, we have here a unique opportunity, probably one which has not occurred before in history. As Cowper pointed out, we must proceed with care. But, already we have set out on the wrong foot. Our object should be to found the first truly scientific community. Yet what do I find? You are proposing to select an executive by counting noses! Leaders should not be chosen by popular whim; they should be determined by rigorous scientific criteria. Once selected, those leaders must have full scientific freedom to direct the bio-group in accordance with natural law, unhampered by such artificial anachronisms as statutes, constitutions, and courts of law. We have here an adequate supply of healthy females; we have the means to breed scientifically a new race, a super race, a race which, if I may say so—"

A handful of mud struck Nielsen in the chest; he stopped suddenly. "I saw who did that!" he said angrily. Just the sort of nincompoop who always—"

"Order, order, please!" Kilroy shouted. "No mudsling or I'll appoint a squad of sergeants-at-arms. Are you through, Waxie?"

"I was just getting started."

"Just a moment," put in Cowper. "Point of order Mr. Chairman. Arthur has a right to be heard. But I think he speaking before the wrong body. We're going to have a constitutional committee, I'm sure. He should present his arguments to them. Then, if we like them, we can adopt his ideas."

"You're right, Grant. Sit down, Waxie."

"Huh? I appeal!"

Roy Kilroy said briskly, "The chair has ruled this out of order at this time and the speaker has appealed to the house, a priority motion not debatable. All in favor of supporting the chair's ruling, which is for Waxie to shut up, make it known by saying 'Aye.'"

There was a shouted chorus of assent. "Opposed: 'No.' Sit down, Waxie."

Kilroy looked around. "Anybody else?"

"Yes."

"I can't see. Who is it?"

"Bill Kennedy, Ponce de Leon class. I don't agree with Nielsen except on one point: we are fiddling around with the wrong things. Sure, we need a group captain but, aside from whatever it takes to eat, we shouldn't think about anything but how to get back. I don't want a scientific society; I'd settle for a hot bath and decent food."

There was scattered applause. The chairman said, "I'd like a bath, too… and I'd fight anybody for a dish of cornflakes. But, Bill, how do you suggest that we go about it?"

"Huh? We set up a crash-priority project and build a gate. Everybody works on it."

There was silence, then several talked at once: "Crazy! No uranium." —"We might *find* uranium." —"Where do we get the tools? Shucks, I don't even have a screwdriver." —"But where are we?" —"It is just a matter of—"

"*Quiet!*" yelled Kilroy. "Bill, do you know how to build a gate?"

"No."

"I doubt if anybody does."

"That's a defeatist attitude. Surely some of you educated blokes from Teller have studied the subject. You should get together, pool what you know, and put us to work. Sure, it may take a long time. But that's what we ought to do."

Cowper said, just a minute, Roy. Bill, I don't dispute what you say; every idea should be explored. We're bound to set up a planning committee. Maybe we had better elect a mayor, or a captain, or whatever you want to call him-and then dig into your scheme when we can discuss it in detail. I think it has merit and should be discussed at length. What do you think?"

"Why, sure, Grant. Let's get on with the election. I just didn't want that silly stuff about breeding a superman to be the last word."

"Mr. Chairman! I protest—"

"Shut up, Waxie. Are you ready with nominations for mayor? If there is no objection, the chair rules debate closed and will entertain nominations."

"I nominate Grant Cowper!"

"Second!"

"I second the nomination."

"Okay, I third it!"

"Let's make it unanimous! Question, question!"

Jimmy Throxton's voice cut through the shouting, "I NOMINATE ROD WALKER!"

Bob Baxter stood up. "Mr. Chairman?"

"Quiet, everybody. Mr. Baxter."

"I second Rod Walker."

"Okay. Two nominations, Grant Cowper and Rod Walker. Are there any more?"

There was a brief silence. Then Rod spoke up. "Just a second, Roy." He found that his voice was trembling and he took two deep breaths before he went on. "I don't want it. I've had all the grief I want for a while and I'd like a rest. Thanks anyhow, Bob. Thanks, Jimmy."

"Any further nominations?"

"Just a sec, Roy… point of personal privilege." Grant Cowper stood up. "Rod, I know how you feel. Nobody in his right mind seeks public office… except as a duty, willingness to serve. If you withdraw, I'm going to exercise the same privilege; I don't want the headaches any more than you do."

"Now wait a minute, Grant. You—"

"*You* wait a minute. I don't think either one of us should withdraw; we ought to perform any duty that is handed to us, just as we stand a night watch when it's our turn. But I think we ought to have more nominations." He looked around. "Since that mix-up this morning we have as many girls as men . . yet both of the candidates are male. That's not right. Uh, Mr. Chairman, I nominate Caroline Mshiyeni."

"Huh? Hey, Grant, don't be silly. I'd look good as a lady mayoress, wouldn't I? Anyhow, I'm for Roddie."

"That's your privilege, Caroline. But you ought to let yourself be placed before the body, just like Rod and myself."

"Nobody's going to vote for *me!*"

"That's where you're wrong. I'm going to vote for you. But we still ought to have more candidates."

"Three nominations before the house," Kilroy announced. "Any more? If not, I declare the—"

"Mr. Chairman!"

"Huh? Okay, Waxie, you want to nominate somebody?"

"Yes."

"Who?"

"Me."

"You want to nominate *yourself?*"

"I certainly do. What's funny about that? I am running on a platform of strict scientific government. I want the rational minds in this group to have someone to vote for."

Kilroy looked puzzled. "I'm not sure that is correct parliamentary procedure. I'm afraid I'll have to over—"

"Never mind, never mind!" Caroline chortled. "*I* nominate him. But I'm going to vote for Roddie," she added.

Kilroy sighed. "Okay, four candidates. I guess we'll have to have a show of hands. We don't have anything for ballots."

Bob Baxter stood up. "Objection, Mr. Chairman. I call for a secret ballot. We can find some way to do it."

A way was found. Pebbles would signify Rod, a bare twig was a note for Cowper, a green leaf meant Caroline, while one of Jimmy's ceramic attempts was offered as a ballot box. "How about Nielsen?" Kilroy asked.

Jimmy spoke up. "Uh, maybe this would do: I made another pot the same time I made this one, only it busted. I'll get chunks of it and all the crackpots are votes for Waxie."

"Mr. Chairman, I resent the insinua—"

"Save it, Waxie. Pieces of baked clay for you, pebbles for Walker, twigs for Grant, leaves for Carol. Get your votes, folks, then file past and drop them in the ballot box. Shorty, you and Margery act as tellers."

The tellers solemnly counted the ballots by firelight. There were five votes for Rod, one for Nielsen, none for Caroline, and twentytwo for Cowper. Rod shook hands with Cowper and faded back into the darkness so that no one would see his face. Caroline looked at the results and said, "Hey, Grant! You promised to vote for me. What happened? Did you vote for yourself? Huh? How about that?"

Rod said nothing. He had voted for Cowper and was certain that the new mayor had not returned the compliment… he was sure who his five friends were. Dog take it!—he had seen it coming; why hadn't Grant let him bow out?

Grant ignored Caroline's comment. He briskly assumed the chair and said, "Thank you. Thank you all. know you want to get to sleep, so I will limit myself tonight to appointing a few committees—"

Rod did not get to sleep at once. He told himself that there was no disgrace in losing an election—shucks, hadn't his old man lost the time he had run for community corporation board? He told himself, too, that trying to ride herd on those apes was enough to drive a man crazy and he was well out of it—he had never *wanted* the job! Nevertheless there was a lump in his middle and a deep sense of personal failure.

It seemed that he had just gone to sleep… his father was looking at him saying, "You know we are proud of you, son. Still, if you had had the foresight to—" when someone touched his arm.

He was awake, alert, and had Colonel Bowie out at once.

"Put away that toothpick," Jimmy whispered, "before you hurt somebody. Me, I mean."

"What's up?"

"I'm up, I've. got the fire watch. You're about to be, because we are holding a session of the inner sanctum."

"Huh?"

"Shut up and come along. Keep quiet, people are asleep."

The inner sanctum turned out to be Jimmy, Caroline, Jacqueline, Bob Baxter, and Carmen Garcia. They gathered inside the ring of fire but as far from the sleepers as possible. Rod looked around at his friends.

"What's this all about?"

"It's about this," Jimmy said seriously. "You're our Captain. And we like that election as much as I like a crooked deck of cards."

"That's right," agreed Caroline. "All that fancy talk!"

"Huh? Everybody got to talk. Everybody got to vote."

"Yes," agreed Baxter. "Yes… and no."

"It was all proper. I have no kick."

"I didn't expect you to kick, Rod. Nevertheless well, I don't know how much politicking you've seen, Rod. I haven't seen much myself, except in church matters and we Quakers don't do things that way; we wait until the Spirit moves. But, despite all the rigamarole, that was a slick piece of railroading. This morning you would have been elected overwhelmingly; tonight you did not stand a chance."

"The point is," Jimmy put in, "do we stand for it?"

"What can we do?"

"What can we do? We don't have to stay here. We've still got our own group; we can walk out and find another place… a bigger cave maybe."

"Yes, sir!" agreed Caroline. "Right tonight."

Rod thought about it. The idea was tempting; they didn't need the others… guys like Nielsen—and Cowper. The discovery that his friends were loyal to him, loyal to the extent that they would consider exile rather than let him down choked him up. He turned to Jacqueline. "How about you, Jackie?"

"We're partners, Rod. Always."

"Bob—do you want to do this? You and Carmen?"

"Yes. Well . .

"'Well' what?"

"Rod, we're sticking with you. This election is all very well—but you took us in when we needed it and teamed with us. We'll never forget it. Furthermore I think that you make a sounder team captain than Cowper is likely to make. But there is one thing."

"Yes."

"If you decide that we leave, Carmen and I will appreciate it if you put it off a day."

"Why?" demanded Caroline. "Now is the time."

"Well—they've set this up as a formal colony, a village with a mayor. Everybody knows that a regularly elected mayor can perform weddings."

"Oh!" said Caroline. "Pardon my big mouth."

"Carmen and I can take care of the religious end—it's not very complicated in our church. But, just in case we ever are rescued, we would like it better and our folks would like it if the civil requirements were all perfectly regular and legal. You see?"

Rod nodded. "I see."

"But if you say to leave tonight…"

"I don't," Rod answered with sudden decision. "We'll stay and get you two properly married. Then—"

"Then we all shove off in a shower of rice," Caroline finished.

"Then we'll see. Cowper may turn out to be a good mayor. We won't leave just because I lost an election." He looked around at their faces. "But… but I certainly do thank you. I—"

He could not go on. Carmen stepped forward and kissed him quickly. "Goodnight, Rod. Thanks."

Chapter Nine

"A Joyful Omen"

Mayor Cowper got off to a good start. He approved, took over, and embellished a suggestion that Carmen and Bob should have their own quarters. He suspended work on the wall and set the whole village to constructing a honeymoon cottage. Not until his deputy, Roy Kilroy, reminded him did he send out hunting parties.

He worked hard himself, having set the wedding for that evening and having decreed that the building must be finished by sundown. Finished it was by vandalizing part of the wall to supply building stone when the supply ran short Construction was necessarily simple since they had no tools, no mortar but clay mud, no way to cut timbers. It was a stone box as tall as a man and a couple of meters square, with a hole for a door. The roof was laid up from the heaviest poles that could be cut from a growth upstream of giant grass much like bamboo—the colonists simply called it "bamboo." This was thatched and plastered with mud; it sagged badly.

But it was a house and even had a door which could be closed—a woven grass mat stiffened with bamboo. It neither hinged nor locked but it filled the hole and could be held in place with a stone and a pole. The floor was clean sand covered with fresh broad leaves.

As a doghouse for a St. Bernard it would have been about right; as a dwelling for humans it was not much. But it was better than that which most human beings had enjoyed through the history and prehistory of the race. Bob and Carmen did not look at it critically.

When work was knocked off for lunch Rod selfconsciously sat down near a group around Cowper. He had wrestled with his conscience for a long time in the night and had decided that the only thing to do was to eat sour grapes and pretend to like them. He could start by not avoiding Cowper.

Margery Chung was cook for the day; she cut Rod a chunk of scorched meat. He thanked her and started to gnaw it. Cowper was talking. Rod was not trying to overhear but there seemed to be no reason not to listen.

"—which is the only way we will get the necessary discipline into the group. I'm sure you agree. Cowper glanced up, caught Rod's eye, looked annoyed, then grinned. "Hello, Rod."

"Hi, Grant."

"Look, old man, we're having an executive committee meeting. Would you mind finding somewhere else to eat lunch?"

Rod stood up blushing. "Oh! Sure."

Cowper seemed to consider it. "Nothing private, of course—just getting things done. On second thought maybe you should sit in and give us your advice."

"Huh? Oh, no! I didn't know anything was going on." Rod started to move away.

Cowper did not insist. "Got to keep working, lots to do. See you later, then. Any time." He grinned and turned away.

Rod wandered off, feeling conspicuous. He heard himself hailed and turned gratefully, joined Jimmy Throxton. "Come outside the wall," Jimmy said quietly. "The Secret Six are having a picnic. Seen the happy couple?"

"You mean Carmen and Bob?"

"Know any other happy couples? Oh, there they are—staring hungrily at their future mansion. See you outside."

Rod went beyond the wall, found Jacqueline and Caroline sitting near the water and eating. From habit he glanced around, sizing up possible cover for carnivores and figuring escape routes back into the kraal, but his alertness was not conscious as there seemed no danger in the open so near other people. He joined the girls and sat down on a rock. "Hi, kids."

"Hello, Rod."

"H'lo, Roddie," Caroline seconded. "What news on the Rialto?"

"None, I guess. Say, did Grant appoint an executive committee last night?"

"He appointed about a thousand committees but no executive committee unless he did it after we adjourned. Why an executive committee? This gang needs one the way I need a bicycle."

"Who is on it, Rod?" asked Jacqueline.

Rod thought back and named the faces he had seen around Cowper. She looked thoughtful. "Those are his own special buddies from Teller U."

"Yes, I guess so.

"I don't like it," she answered.

"What's the harm?"

"Maybe none… maybe. It is about what we could expect. But I'd feel better if all the classes were on it, not just that older bunch. You know."

"Shucks, Jack, you've got to give him some leeway."

"I don't see why, put in Caroline. "That bunch you named are the same ones Hizzonor appointed as chairmen of the other committees. It's a tight little clique. You notice none of us unsavory characters got named to any important committee—I'm on waste disposal and camp sanitation, Jackie is on food preparation, and you aren't on any. You should have been on the constitution, codification, and organization committee, but he made himself chairman and left you out. Add it up."

Rod did not answer. Caroline went on, "I'll add it if you won't. First thing you know there will be a nominating committee. Then we'll find that only those of a certain age, say twenty-one, can hold office. Pretty soon that executive committee will turn into a senate (called something else, probably) with a veto that can be upset only by a three-quarters majority that we will never get. That's the way my Uncle Phil would have rigged it."

"Your Uncle Phil?"

"Boy, there was a politician! I never liked him—he had kissed so many babies his lips were puckered. I used to hide when he came into our house. But I'd like to put him up against Hizzonor. It'ud be a battle of dinosaurs. Look, Rod, they've got us roped and tied; I say we should fade out right after the wedding." She turned to Jacqueline. "Right… pardner?"

"Sure… if Rod says so."

"Well, I don't say so. Look, Carol, I don't like the situation. To tell the truth… well, I was pretty sour at being kicked out of the captaincy. But I can't let the rest of you pull out on that account. There aren't enough of us to form another colony, not safely."

"Why, Roddie, there are three times as many people still back in those trees as there are here in camp. This time we'll build up slowly and be choosy about whom we take. Six is a good start. We'll get by."

"Not six, Carol. Four."

"Huh? Six! We shook on it last night before Jimmy woke you."

Rod shook his head. "Carol, how can we expect Bob and Carmen to walk out… right after the rest have made them a wedding present of a house of their own?"

"Well… darn it, we'd build them another house!"

"They would go with us, Carol—but it's too much to ask."

"I think," Jacqueline said grudgingly, "that Rod has something, Carol."

The argument was ended by the appearance of Bob, Carmen, and Jimmy. They had been delayed, explained Jimmy, by the necessity of inspecting the house. "As if I didn't know every rock in it. Oh, my back!"

"I appreciate it, Jim," Carmen said softly. "I'll rub your back."

"Sold!" Jimmy lay face down.

"Hey!" protested Caroline. "I carried more rocks than he did. Mostly he stood around and bossed."

"Supervisory work is exceptionally tiring," Jimmy said smugly. "You get Bob to rub your back."

Neither got a back rub as Roy Kilroy called to them from the wall.

"Hey! You down there—lunch hour is over. Let's get back to work."

"Sorry, Jimmy. Later." Carmen turned away.

Jimmy scrambled to his feet. "Bob, Carmen—don't go 'way yet. I want to say something."

They stopped. Rod waved to Kilroy. "With you in a moment!" He turned back to the others.

Jimmy seemed to have difficulty in choosing words. "Uh, Carmen… Bob. The future Baxters. You know we think a lot of you. We think it's swell that you are going to get married—every family ought to have a marriage. But… well, shopping isn't what it might be around here and we didn't know what to get you. So we talked it over and decided to give you this. It's from all of us. A wedding present." Jimmy jammed a hand in his pocket, hauled out his dirty, dog-eared playing cards and handed them to Carmen.

Bob Baxter looked startled. "Gosh, Jimmy, we can't take your cards —your *only* cards."

"I—we want you to have them."

"But—"

"Be quiet, Bob!" Carmen said and took the cards. "Thank you, Jimmy. Thank you very much. Thank you all." She looked around. "Our getting married isn't going to make any difference, you know. It's still one family. We'll expect you all… to come play cards… at our house just as—" She stopped suddenly and started to cry, buried her head on Bob's shoulder. He patted it. Jimmy looked as if he wanted to cry and Rod felt nakedly embarrassed.

They started back, Carmen with an arm around Jimmy and the other around her bethrothed. Rod hung back with the other two. "Did Jimmy," he whispered, "say anything to either of you about this?"

"No," Jacqueline answered.

"Not me," Caroline agreed. "I was going to give 'em my stew pan, but now I'll wait a day or two." Caroline's "bag of rocks" had turned out to contain an odd assortment for survival—among other things, a thin-page diary, a tiny mouth organ, and a half-litre sauce pan. She produced other unlikely but useful items from time to time. Why she had picked them and how she had managed to hang on to them after she discarded the bag were minor mysteries, but, as Deacon Matson had often told the class: "Each to his own methods. Survival is an art, not a science." It was undeniable that she had appeared at the cave healthy, well fed, and with her clothing surprisingly neat and clean in view of the month she had been on the land.

"They won't expect you to give up your stew pan, Caroline."

"I can't use it now that the crowd is so big, and they can set up housekeeping with it. Anyhow, I want to."

"I'm going to give her two needles and some thread. Bob made her leave her sewing kit behind in favor of medical supplies. But I'll wait a while, too."

"I haven't anything I can give them," Rod said miserably.

Jacqueline turned gentle eyes on him. "You can make them a water skin for their house, Rod," she said softly. "They would like that. We can use some of my Kwik-Kure so that it will last."

Rod cheered up at once. "Say, that's a swell idea!"

"We are gathered here," Grant Cowper said cheerfully, "to join these two people in the holy bonds of matrimony. I won't give the usual warning because we all know that no impediment exists to this union. In fact it is the finest thing that could happen to our little community, a joyful omen of things to come, a promise for the future, a guarantee that we are firmly resolved to keep the torch of civilization, now freshly lighted on this planet, forever burning in the future. It means that—"

Rod stopped listening. He was standing at the groom's right as best man. His duties had not been onerous but now he found that he had an overwhelming desire to sneeze. He worked his features around, then in desperation rubbed his upper lip violently and overcame it. He sighed silently and was glad for the first time that Grant Cowper had this responsibility. Grant seemed to know the right words and he did not.

The bride was attended by Caroline Mshiyeni. Both girls carried bouquets of a flame-colored wild bloom. Caroline was in shorts and shirt as usual and the bride was dressed in the conventional blue denim trousers and overshirt. Her hair was arranged *en brosse*; her scrubbed face shone in the firelight and she was radiantly beautiful.

"Who giveth this woman?"

Jimmy Throxton stepped forward and said hoarsely, "I do!"

"The ring, please."

Rod had it on his little finger; with considerable fumbling he got it off. It was a Ponce de Leon senior-class ring, borrowed from Bill Kennedy. He handed it to Cowper.

"Carmen Eleanora, do you take this man to be your lawfully wedded husband, to have and to hold, for better and for worse, in sickness and in health, till death do you part?"

"I do."

"Robert Edward, do you take this woman to be your lawfully wedded wife? Will you keep her and cherish her, cleaving unto her only, until death do you part?"

"I do. I mean, I will. Both."

"Take her hand in yours. Place the ring on her finger. Repeat after me—

Rod's sneeze was coming back again; he missed part of it.

"—so, by authority vested in me as duly elected Chief Magistrate of this sovereign community, I pronounce you man and wife! Kiss her, chum, before I beat you to it."

Carol and Jackie both were crying; Rod wondered what had gone wrong. He missed his turn at kissing the bride, but she turned to him presently, put an arm around his neck and kissed him. He found himself shaking hands with Bob very solemnly. "Well, I guess that does it. Don't forget you are supposed to carry her through the door."

"I won't forget."

"Well, you told me to remind you. Uh, may the Principle bless you both."

Chapter Ten

"I So Move"

There was no more talk of leaving. Even Caroline dropped the subject.

But on other subjects talk was endless. Cowper held a town meeting every evening. These started with committee reports—the committee on food resources and natural conservation, the committees on artifacts and inventory, on waste disposal and camp sanitation, on exterior security, on human resources and labor allotment, on recruitment and immigration, on conservation of arts and sciences, on constitution, codification, and justice, on food preparation, on housing and city planning—

Cowper seemed to enjoy the endless talk and Rod was forced to admit that the others appeared to have a good time, too—he surprised himself by discovering that he too looked forward to the evenings. It was the village's social life, the only recreation. Each session produced wordy battles, personal remarks and caustic criticisms; what was lacking in the gentlemanly formality found in older congresses was made up in spice. Rod liked to sprawl on the ground with his ear near Jimmy Throxton and listen to Jimmy's slanderous asides about the intelligence, motives, and ancestry of each speaker. He waited for Caroline's disorderly heckling.

But Caroline was less inclined to heckle now; Cowper had appointed her Historian on discovering that she owned a diary and could take shorthand. "It is extremely important," he informed her in the presence of the village, "that we have a full record of these pioneer days for posterity. You've been writing in your diary every day?"

"Sure. That's what it's for."

"Good! From here on it will be an official account. I want you to record the important events of each day."

"All right. It doesn't make the tiniest bit of difference, I do anyhow."

"Yes, yes, but in greater detail. I want you to record our proceedings, too. Historians will treasure this document, Carol."

"I'll bet!"

Cowper seemed lost in thought. "How many blank leaves left in your diary?"

"Couple of hundred, maybe."

"Good! That solves a problem I had been wondering about. Uh, we will have to requisition half of that supply for official use—public notices, committee transactions, and the like. You know."

Caroline looked wide-eyed. "That's a lot of paper, isn't it? You had better send two or three big husky boys to carry it."

Cowper looked puzzled. "You're joking."

"Better make it *four* big huskies. I could probably manage three… and somebody is likely to get hurt."

"Now, see here, Caroline, it is just a temporary requisition, in the public interest. Long before you need all of your diary we will devise other writing materials."

"Go ahead and devise! That's *my* diary."

Caroline sat near Cowper, diary in her lap and style in her hand, taking notes. Each evening she opened proceedings by reading the minutes of the previous meeting. Rod asked her if she took down the endless debates.

"Goodness no!"

"I wondered. It seemed to me that you would run out of paper. Your minutes are certainly complete."

She chuckled. "Roddie, want to know what I really write down? Promise not to tell."

"Of course I won't."

"When I 'read the minutes' I just reach back in my mind and recall what the gabble was the night before—I've got an awfully good memory. But what I actually dirty the paper with… well, here—" She took her diary from a pocket. "Here's last night: 'Hizzoner called us to disorder at half-past burping time. The committee on cats and dogs reported. No cats, no dogs. The shortage was discussed. We adjourned and went to sleep, those who weren't already.'"

Rod grinned. "A good thing Grant doesn't know shorthand."

"Of course, if anything *real* happens, I put it down. But not the talk, talk, talk."

Caroline was not adamant about not sharing her supply of paper when needed. A marriage certificate, drawn up in officialese by Howard Goldstein, a Teller law student, was prepared for the Baxters and signed by Cowper, the couple themselves, and Rod and Caroline as witnesses. Caroline decorated it with flowers and turtle doves before delivering it.

There were others who seemed to feel that the new government was long on talk and short on results. Among them was Bob Baxter, but the Quaker couple did not attend most of the meetings. But when Cowper had been in office a week, Shorty Dumont took the floor after the endless committee reports:

"Mr. Chairman!"

"Can you hold it, Shorty? I have announcements to make before we get on to new business."

"This is still about committee reports. When does the committee on our constitution report?"

"Why, I made the report myself."

"You said that a revised draft was being prepared and the report would be delayed. That's no report. What I want to know is: when do we get a permanent set-up? When do we stop floating in air, getting along from day to day on 'temporary executive notices'?"

Cowper flushed. "Do you object to my executive decisions?"

"Won't say that I do, won't say that I don't. But Rod was let out and you were put in on the argument that we needed constitutional government, not a dictatorship. That's why I voted for you. All right, where's our laws? When do we vote on them?"

"You must understand," Cowper answered carefully, "that drawing up a constitution is not done overnight. Many considerations are involved."

"Sure, sure—but it's time we had some notion of what sort of a constitution you are cooking up. How about a bill of rights? Have you drawn up one?"

"All in due time."

"Why wait? For a starter let's adopt the Virginia Bill of Rights as article one. I so move.

"You're out of order. Anyhow we don't even have a copy of it."

"Don't let that bother you; I know it by heart. You ready, Carol? Take this down .

"Never mind," Caroline answered. "I know it, too. I'm writing it."

"You see? These things aren't any mystery, Grant; most of us could quote it. So let's quit stalling."

Somebody yelled, "Whoopee! That's telling him, Shorty. I second the motion."

Cowper shouted for order. He went on, "This is not the time nor the place. When the committee reports, you will find that all proper democratic freedoms and safeguards have been included—modified only by the stern necessities of our hazardous position." He flashed his smile. "Now let's get on with business. I have an announcement about hunting parties. Hereafter each hunting party will be expected to—"

Dumont was still standing. "I said no more stalling, Grant. You argued that what we needed was laws, not a captain's whim. You've been throwing your weight around quite a while now and I don't see any laws. What are your duties? How much authority do you have? Are you both the high and the low justice? Or do the rest of us have rights?"

"Shut up and sit down!"

"How long is your term of office?"

Cowper made an effort to control himself. "Shorty, if you have suggestions or, such things, you must take them up with the committee.

"Oh, slush! Give me a straight answer."

"You are out of order."

"I am *not* out of order. I'm insisting that the committee on drawing up a constitution tell us what they are doing. I won't surrender the floor until I get an answer. This is a town meeting and I have as much right to talk as anybody."

Cowper turned red. "I wouldn't be too sure," he said ominously. just how old are you, Shorty?"

Dumont stared at him. "Oh, so *that's* it? And the cat is out of the bag!" He glanced around. "I see quite a few here who are younger than I am. See what he's driving at, folks? Second-class citizens. He's going to stick an age limit in that so-called constitution. Aren't you, Grant? Look me in the eye and deny it."

"Roy! Dave! Grab him and bring him to order."

Rod had been listening closely; the show was better than usual. Jimmy had been adding his usual flippant commentary. Now Jimmy whispered, "That tears it. Do we choose up sides or do we fade back and watch the fun?"

Before he could answer Shorty made it clear that he needed no immediate help. He set his feet wide and snapped, "Touch me and somebody gets hurt!" He did not reach for any weapon but his attitude showed that he was willing to fight.

He went on, "Grant, I've got one thing to say, then I'll shut up." He turned and spoke to all. "You can see that we don't have any rights and we don't know where we stand—but we are already organized like a straitjacket. Committees for this, committees for that—and what good has it done? Are we better off than we were before all these half-baked committees were appointed? The wall is still unfinished, the camp is dirtier than ever, and nobody knows what he is supposed to do. Why, we even let the signal fire go out yesterday. When a roof leaks, you don't appoint a committee; you fix the leak. I say give the job back to Rod, get rid of these silly committees, and get on with fixing the leaks. Anybody with me? Make some noise!"

They made plenty of noise. The shouts may have come from less than half but Cowper could see that he was losing his grip on them. Roy Kilroy dropped behind Shorty Dumont and looked questioningly at Cowper; Jiminy jabbed Rod in the ribs and whispered, "Get set, boy."

But Cowper shook his head at Roy. "Shorty," he said quietly, "are you through making your speech?"

"That wasn't a speech, that was a motion. And you had better not tell me it's out of order."

"I did not understand your motion. State it."

"You understood it. I'm moving that we get rid of you and put Rod back in."

Kilroy interrupted. "Hey, Grant, he can't do that. That's not according to—"

"Hold it, Roy. Shorty, your motion is not in order."

"I thought you would say that!"

"And it is really two motions. But I in not going to bother with trifles. You say people don't like the way I'm doing things, so we'll find out." He went on briskly, "Is there a second to the motion?"

"Second!"

"I second it."

"Moved and seconded. The motion is to recall me and put Rod in office. Any remarks?"

A dozen people tried to speak. Rod got the floor by outshouting the others. "Mr. Chairman, *Mr. Chairman!* Privileged question!"

"The chair recognizes Rod Walker."

"Point of personal privilege. I have a statement to make."

"Well? Go ahead."

"Look, Grant, I didn't know Shorty planned to do this. Tell him, Shorty."

"That's right."

"Okay, okay," Cowper said sourly. "Any other remarks? Don't yell, just stick up your hands."

"I'm not through," insisted Rod.

"Well?"

"I not only did not know, I'm not for it. Shorty, I want you to withdraw your motion."

"No!"

"I think you should. Grant has only had a week; you can't expect miracles in that time—I know; I've had grief enough with this bunch of wild men. You may not like the things he's done—I don't myself, a lot of them. That's to be expected. But if you let that be an excuse to run him out of office, then sure as daylight this gang will break up."

"I'm not busting it up—he is! He may be older than I am but if he thinks that makes the least difference when it comes to having a say—well… he'd better think twice. I'm warning him. You hear that, Grant?"

"I heard it. You misunderstood me."

"Like fun I did!"

"Shorty," Rod persisted, "will you drop this idea? I'm asking you *please.*"

Shorty Dumont looked stubborn. Rod looked helplessly at Cowper, shrugged and sat down. Cowper turned away and growled, "Any more debate? You back there… Agnes? You've got the floor."

Jimmy whispered, "Why did you pull a stunt like that, Rod? Nobility doesn't suit you."

"I wasn't being noble. I knew what I was doing," Rod answered in low tones.

"You messed up your chances to be reelected."

"Stow it." Rod listened; it appeared that Agnes Fries had more than one grievance. Jim?"

"Huh?"

"Jump to your feet and move to adjourn."

"What? Ruin this when it's getting good? There is going to be some hair pulled… I hope."

"Don't argue; do it!—or I'll bang your heads together."

"Oh, all right. Spoilsport." Jimmy got reluctantly to his feet, took a breath and shouted, "I move we adjourn!"

Rod bounced to his feet. "SECOND THE MOTION!" Cowper barely glanced at them. "Out of order. Sit down."

"It is *not* out of order," Rod said loudly. "A motion to adjourn is always in order, it takes precedence, and it cannot be debated. I call for the question."

"I never recognized you. This recall motion is going to be voted on if it is the last thing I do." Cowper's face was tense with anger. "Are you through, Agnes? Or do you want to discuss my table manners, too?"

"You *can't* refuse a motion to adjourn," Rod insisted. "Question! Put the question."

Several took up the shout, drowning out Agnes Fries, preventing Cowper from recognizing another speaker. Boos and catcalls rounded out the tumult.

Cowper held up both hands for silence, then called out, "It has been moved and seconded that we adjourn. Those in favor say, 'Aye.'"

"*AYE!!*"

"Opposed?"

"No," said Jimmy.

"The meeting is adjourned." Cowper strode out of the circle of firelight.

Shorty Dumont came over, planted himself in front of Rod and looked up. "A fine sort of a pal you turned out to be!" He spat on the ground and stomped off.

"Yeah," agreed Jimmy, "what gives? Schizophrenia? Your nurse drop you on your head? That noble stuff in the right doses might have put us back in business. But you didn't know when to stop."

Jacqueline had approached while Jimmy was speaking. "I wasn't pulling any tricks," Rod insisted. "I meant what I said. Kick a captain out when he's had only a few days to show himself and you'll bust us up into a dozen little groups. *I* wouldn't be able to hold them together. Nobody could."

"Bosh! Jackie, tell the man."

She frowned. "Jimmy, you're sweet, but you're not bright."

"*Et tu,* Jackie?"

"Never mind, Jackie will take care of you. A good job, Rod. By tomorrow everybody will realize it. Some of them are a little stirred up tonight."

"What I don't see," Rod said thoughtfully, "is what got Shorty stirred up in the first place?"

"Hadn't you heard? Maybe it was while you were out hunting. I didn't see it, but he got into a row with Roy, then Grant bawled him out in front of everybody. I think Shorty is selfconscious about his height," she said seriously. "He doesn't like to take orders."

"Does anybody?"

The next day Grant Cowper acted as if nothing had happened. But his manner had more of King Log and less of King Stork. Late in the afternoon he looked up Rod. "Walker? Can you spare me a few minutes?"

"Let's go where we can talk." Grant led him to a spot out of earshot. They sat on the ground and Rod waited. Cowper seemed to have difficulty in finding words.

Finally he said, "Rod, I think I can depend on you." He threw in his grin, but it looked forced.

"Why?" asked Rod.

"Well… the way you behaved last night."

"So? Don't bank on it, I didn't do it for you." Rod paused, then added, "Let's get this straight. I don't like you."

For once Cowper did not grin. "That makes it mutual. I don't like you a little bit. But we've got to get along and I think I can trust you.

"Maybe."

"I'll risk it."

"I agree with every one of Shorty's gripes. I just didn't agree with his solution."

Cowper gave a wry smile unlike his usual expression. For an instant Rod found himself almost liking him. "The sad part is that I agree with his gripes myself."

"Huh?"

"Rod, you probably think I'm a stupid jerk but the fact is I do know quite a bit about theory of government. The hard part is to apply it in a… a transitional period like this. We've got fifty people here and not a one with any practical experience in government—not even myself. But every single one considers himself an expert. Take that bill-of-rights motion; I couldn't let that stand. I know enough about such things to know that the rights and duties needed for a cooperative colony like this can't be taken over word for word from an agrarian democracy, and they are still different from those necessary for an industrial republic." He looked worried. "It is true that we had considered limiting the franchise."

"You do and they'll toss you in the creek!"

"I know. That's one reason why the law committee hasn't made a report. Another reason is—well, confound it, how can you work out things like a constitution when you practically haven't any writing paper? Ifs exasperating. But about the franchise: the oldest one of us is around twentytwo and the youngest is about sixteen. The worst of it is that the youngest are the most precocious, geniuses or near-geniuses." Cowper looked up. "I don't mean you.

"Oh, no," Rod said hastily. "I'm no genius!"

"You're not sixteen, either. These brilliant brats worry me. 'Bush lawyers,' every blessed one, with always a smart answer and no sense. We thought with an age limit—a reasonable one—the older heads could act as ballast while they grow up. But it won't work."

"No. It won't."

"But what am I to *do?* That order about hunting teams not being mixed—that wasn't aimed at teams like you and Carol, but she thought it was and gave me the very deuce. I was just trying to take care of these kids. Confound it, I wish they were all old enough to marry and settle down—the Baxters don't give me trouble."

"I wouldn't worry. In a year or so ninety per cent of the colony will be married."

"I hope so! Say… are *you* thinking about it?"

"Me?" Rod was startled. "Farthest thing from my mind."

"Um? I thought—Never mind; I didn't get you out here to ask about your private affairs. What Shorty had to say was hard to swallow—but I'm going to make some changes. I'm abolishing most of the committees."

"So?"

"Yes. Blast them, they don't *do* anything; they just produce reports. I'm going to make one girl boss cook—and one man boss hunter. I want you to be chief of police."

"Huh? Why in Ned do you want a chief of police?"

"Well… somebody has to see that orders are carried out. You know, camp sanitation and such. Somebody has to keep the signal smoking—we haven't accounted for thirty-seven people, aside from known dead. Somebody has to assign the night watch and check on it. The kids run hog wild if you don't watch them. You are the one to do it."

"Why?"

"Well… let's be practical, Rod. I've got a following and so have you. We'll have less trouble if everybody sees that we two stand together. It's for the good of the community."

Rod realized, as clearly as Grant did, that the group had to pull together. But Cowper was asking him to shore up his shaky administration, and Rod not only resented him but thought that Cowper was all talk and no results.

It was not just the unfinished wall, he told himself, but a dozen things. Somebody ought to search for a salt lick, every day. There ought to be a steady hunt for edible roots and berries and things, too —he, for one, was tired of an all-meat diet. Sure, you could stay healthy if you didn't stick just to lean meat, but who wanted to eat nothing but meat, maybe for a life time? And there were those stinking hides… Grant had ordered every kill skinned, brought back for use.

"What are you going to do with those green hides?" he asked suddenly.

"Huh? Why?"

"They stink. If you put me in charge, I'm going to chuck them in the creek."

"But we're going to need them. Half of us are in rags now.

"But we're not short on hides; tanning is what we need. Those hides won't sun-cure this weather."

"We haven't got tannin. Don't be silly, Rod."

"Then send somebody out to chew bark till they find some. You can't mistake the puckery taste. And get rid of those hides!"

"If I do, will you take the job?"

"Maybe. You said, 'See that orders are carried out.' Whose orders? Yours? Or Kilroy's?"

"Well, both. Roy is my deputy."

Rod shook his head. "No, thanks. You've got him, so you don't need me. Too many generals, not enough privates."

"But, Rod, I *do* need you. Roy doesn't get along with the younger kids. He rubs them the wrong way."

"He rubs me the wrong way, too. Nothing doing, Grant. Besides, I don't like the title anyhow. It's silly."

"Pick your own. Captain of the Guard… City Manager. I don't care what you call it; I want you to take over the night guard and see that things run smoothly around camp—and keep an eye on the younger kids. You can do it and it's your duty."

"What will you be doing?"

"I've got to whip this code of laws into shape. I've got to think about long-range planning. Heavens, Rod, I've got a thousand things on my mind. I can't stop to settle a quarrel just because some kid has been teasing the cook. Shorty was right; we can't wait. When I give an order I want a law to back it and not have to take lip from some young snotty. But I can't do it all, I need help."

Cowper put it on grounds impossible to refuse, nevertheless… "What about Kilroy?"

"Eh? Confound it, Rod, you can't ask me to kick out somebody else to make room for *you*."

"I'm not *asking* for the job!" Rod hesitated. He needed to say that it was a matter of stubborn pride to him to back up the man who had beaten him, it was that more than any public-spiritedness. He could not phrase it, but he did know that Cowper and Kilroy were not the same case.

"I won't pull Kilroy's chestnuts out of the fire. Grant, I'll stooge for you; you were elected. But I won't stooge for a stooge."

"Rod, be reasonable! If you got an order from Roy, it would be *my* order. He would simply be carrying it out."

Rod stood up. "No deal."

Cowper got angrily to his feet and strode away.

There was no meeting that night, for the first time. Rod was about to visit the Baxters when Cowper called him aside. "You win. I've made Roy chief hunter."

"Huh?"

"You take over as City Manager, or Queen of the May, or whatever you like. Nobody has set the night watch. So get busy."

"Wait a minute! I never said I would take the job."

"You made it plain that the only thing in your way was Roy. Okay, you get your orders directly from me.

Rod hesitated. Cowper looked at him scornfully and said, "So you can't cooperate even when you have it all your own way?"

"Not that, but—"

"No 'buts.' Do you take the job? A straight answer: yes, or no.

"Uh… yes.

"Okay." Cowper frowned and added, "I almost wish you had turned it down."

"That makes two of us."

Rod started to set the guard and found that every boy he approached was convinced that he had had more than his share of watches. Since the exterior security committee had kept no records—indeed, had had no way to—it was impossible to find out who was right and who was shirking. "Stow it!" he told one. "Starting tomorrow we'll have an alphabetical list, straight rotation. I'll post it even if we have to scratch it on a rock." He began to realize that there was truth in what Grant had said about the difficulty of getting along without writing paper.

"Why don't you put your pal Baxter on watch?"

"Because the Mayor gave him two weeks honeymoon, as you know. Shut up the guff. Charlie will be your relief; make sure you know where he sleeps."

"I think I'll get married. I could use two weeks of loafing."

"I'll give you five to one you can't find a girl that far out of her mind. You're on from midnight to two."

Most of them accepted the inevitable once they were assured of a square deal in the future, but Peewee Schneider, barely sixteen and youngest in the community, stood on his "rights"—he had stood a watch the night before, he did not rate another for at least three nights, and nobody could most colorfully make him.

Rod told Peewee that he would either stand his watch, or Rod would slap his ears loose—and then he would still stand his watch. To which he added that if he heard Peewee use that sort of language around camp again he would wash Peewee's mouth out with soap.

Schneider shifted the argument. "Yah! Where are you going to find soap?"

"Until we get some, I'll use sand. You spread that word, Peewee: no more rough language around camp. We're going to be civilized if it kills us. Four to six, then, and show Kenny where you sleep." As he left Rod made a mental note that they should collect wood ashes and fat; while he had only a vague idea of how to make soap probably someone knew how… and soap was needed for other purposes than curbing foul-mouthed pip squeaks. He had felt a yearning lately to be able to stand upwind of himself… he had long ago thrown away his socks.

Rod got little sleep. Everytime he woke he got up and inspected the guard, and twice he was awakened by watchmen who thought they saw something prowling outside the circle of firelight. Rod was not sure, although it did seem once that he could make out a large, long shape drifting past in the darkness. He stayed up a while each time, another gun in case the prowler risked the wall or the fires in the gap. He felt great temptation to shoot at the prowling shadows, but suppressed it. To carry the attack to the enemy would be to squander their scanty ammunition without making a dent in the dangerous beasts around them. There were prowlers every night; they had to live with it.

He was tired and cranky the next morning and wanted to slip away after breakfast and grab a nap in the cave. He had not slept after four in the morning, but had checked on Peewee Schneider at frequent intervals. But there was too much to do; he promised himself a nap later and sought out Cowper instead. "Two or three things on my mind, Grant."

"Spill it."

"Any reason not to put girls on watch?"

"Eh? I don't think it's a good idea."

"Why not? These girls don't scream at a mouse. Everyone of them stayed alive by her own efforts at least a month before she joined up here. Ever seen Caroline in action?"

"Mmm… no.

"You should. It's a treat. Sudden death in both hands, and eyes in the back of her head. If she were on watch, I would sleep easy. How many men do we have now?"

"Uh, twenty-seven, with the three that came in yesterday."

"All right, out of twenty-seven who doesn't stand watch?"

"Why, everybody takes his turn."

"You?"

"Eh? Isn't that carrying it pretty far? I don't expect you to take a watch; you run it and check on the others."

"That's two off. Roy Kilroy?"

"Uh, look, Rod, you had better figure that he is a department head as chief hunter and therefore exempt. You know why—no use looking for trouble."

"I know, all right. Bob Baxter is off duty, too."

"Until next week."

"But this is this week. The committee cut the watch down to one at a time; I'm going to boost it to two again. Besides that I want a sergeant of the guard each night. He will be on all night and sleep all next day… then I don't want to put him on for a couple of days. You see where that leaves me? I need twelve watchstanders every night; I have less than twenty to draw from."

Cowper looked worried. "The committee didn't think we had to have more than one guard at a time."

"Committee be hanged!" Rod scratched his scars and thought about shapes in the dark. "Do you want me to run this the way I think it has to be run? Or shall I just go through the motions?"

"Well..."

"One man alone either gets jittery and starts seeing shadows—or he dopes off and is useless. I had to wake one last night—I won't tell you who; I scared him out of his pants; he won't do it again. I say we need a real guard, strong enough in case of trouble to handle things while the camp has time to wake up. But if you want it your way, why not relieve me and put somebody else in?"

"No, no, you keep it. Do what you think necessary."

"Okay, I'm putting the girls on. Bob and Carmen, too, And *you*."

"Huh?"

"And me. And Roy Kilroy. Everybody. That's the only way you will get people to serve without griping; that way you will convince them that it is serious, a first obligation, even ahead of hunting."

Cowper picked at a hangnail, "Do you honestly think I should stand watch? And you?"

"I do. It would boost morale seven hundred percent. Besides that, it would be a good thing, uh, politically."

Cowper glanced up, did not smile. "You've convinced me. Let me know when it's my turn."

"Another thing. Last night there was barely wood to keep two fires going."

"Your problem. Use anybody not on the day's hunting or cooking details."

"I will. You'll hear some beefs. Boss, those were minor items; now I come to the major one. Last night I took a fresh look at this spot. I don't like it, not as a permanent camp. We've been lucky."

"Eh? Why?"

"This place is almost undefendable. We've got a stretch over fifty meters long between shale and water on the upstream side. Downstream isn't bad, because we build a fire in the bottleneck. But upstream we have walled off less than half and we need a lot more stakes behind the wall. Look," Rod added, pointing, "you could drive an army through there—and last night I had only two little bitty fires. We ought to finish that wall."

"We will."

"But we ought to make a real drive to find a better place. This is makeshift at best. Before you took over I as trying to find more caves—but I didn't have time to explore very far. Ever been to Mesa Verde?"

"In Colorado? No."

"Cliff dwellings, you've seen pictures. Maybe somewhere up or down stream—more likely down—we will find pockets like those at Mesa Verde where we can build homes for the whole colony. You ought to send a team out for two weeks or more, searching. I volunteer for it."

"Maybe. But you can't go; I need you."

"In a week I'll have this guard duty lined up so that it will run itself. Bob Baxter can relieve me; they respect him…" He thought for a moment. Jackie? Jimmy? "I'll team with Carol."

"Rod, I told you I want you here. But are you and Caroline planning to marry?"

"Huh? What gave you that notion?"

"Then you can't team with her in any case. We are trying to re-introduce amenities around here."

"Now see here, Cowper!"

"Forget it."

"Unh… all right. But the first thing—the very first—is to finish that wall. I want to put everybody to work right away."

"Mmm…" Cowper said. "I'm sorry. You can't."

"Why not?"

"Because we are going to build a house today. Bill Kennedy and Sue Briggs are getting married tonight."

"Huh? I hadn't heard."

"I guess you are the first to hear. They told me about it privately, at breakfast."

Rod was not surprised, as Bill and Sue preferred each other's company. "Look, do they have to get married tonight? That wall is urgent, Grant; I'm telling you."

"Don't be so intense, Rod. You can get along a night or two with bigger fires. Remember, there are human values more important than material values."

Chapter Eleven

The Beach of Bones

"July 29—Bill and Sue got married tonight. Hizzoner never looked lovelier. He made a mighty pretty service out of it—I cried and so did the other girls. If that boy could *do* the way he can talk! I played Mendelssohn's Wedding March on my harmonica with tears running down my nose and gumming up the reeds—that's a touch I wanted to put into darling Carmen's wedding but I couldn't resist being bridesmaid. The groom got stuck carrying his lady fair over the threshold of their 'house'—if I may call it that—and had to put her down and shove her in ahead of him. The ceiling is lower than it ought to be which is why he got stuck, because we ran out of rock and Roddie raised Cain when we started to use part of the wall. Hizzoner was leading the assault on the wall and both of them got red in the face and shouted at each other. But Hizzoner backed down after Roddie got him aside and said something—Bill was pretty sore at Roddie but Bob sweettalked him and offered to swap houses and Roddie promised Bill that we would take the roof off and bring the walls up higher as soon as the wall is finished. That might not be as soon as he thinks, though—usable rock is getting hard to find. I've broken all my nails trying to pry out pieces we could use. But I agree with Roddie that we ought to finish that wall and I sleep a lot sounder now that he is running the watch and I'll sleep sounder yet when that wall is tight and the pincushion back of it finished. Of course we girls sleep down at the safe end but who wants to wake up and find a couple of our boys missing? It is not as if we had them to spare, bless their silly little hearts. Nothing like a man around the house, Mother always said, to give a home that lived-in look.

"July 30—I'm not going to write in this unless something happens. Hizzoner talks about making papyrus like the Egyptians but I'll believe it when I see it.

"Aug 5—I was sergeant of the guard last night and Roddie was awake practically all night. I turned in after breakfast and slept until late afternoon—when I woke up there was Roddie, red-eyed and cross, yelling for more rocks and more firewood. Sometimes Roddie is a little hard to take.

"Aug 9—the salt lick Alice found is closer than the one Shorty found last week, but not as good.

"Aug 14—Jackie finally made up her mind to marry Jim and I think Roddie is flabbergasted—but I could have told him a month ago.

Roddie is stupid about such things. I see another house & wall crisis coming and Roddie will get a split personality because he will want Jimmy and Jacqueline to have a house right away and the only decent stone within reach is built into the wall.

"Aug 15—Jimmy and Jackie, Agnes and Curt, were married today in a beautiful double ceremony. The Throxtons have the Baxter house temporarily and the Pulvermachers have the Kennedy's doll house while we partition the cave into two sets of married quarters and a storeroom.

"Sep 1—the roots I dug up didn't poison me, so I served a mess of them tonight. The shield from power pack of that Thunderbolt gun we salvaged—Johann's, it must have been—made a big enough boiler to cook a little helping for everybody. The taste was odd, maybe because Agnes had been making soap in it—it wasn't very good soap, either. I'm going to call these things yams because they look like yams although they taste more like parsnips. There are a lot of them around. Tomorrow I in going to try boiling them with greens, a strip of side meat, and plenty of salt. Yum, yum! I'm going to bake them in ashes, too.

"Sep 16—Chad Ames and Dick Burke showed up with their tails tucked in; Hizzoner got soft-hearted and let em stay. They say Jock McGowan is crazy. I can believe it.

"Sep 28—Philip Schneider died today, hunting. Roy carried him in, but he was badly clawed and lost a lot of blood and was D.O.A. Roy resigned as boss hunter and Hizzoner appointed Cliff. Roy is broken up about it but nobody blames him. The Lord giveth and the Lord taketh away. Blessed be the Name of the Lord.

"Oct 7—I've decided to marry M.

"Oct 10—seems I was mistaken—M. is going to marry Margery Chung. Well, they are nice kids and if we ever get out of this I'll be glad I'm single since I want to buck for a commission in the Amazons. Note: be a little more standoffish, Caroline. Well, *try!*

"Oct 20—Carmen????

"Oct 21—Yes.

"Nov 1—well Glory be! I'm the new *City Manager*. Little Carol, the girl with two left feet. Just a couple of weeks, temporary and acting while Roddie is away, but say 'sir' when you speak to me. Hizzoner finally let Roddie make the downriver survey he has been yipping about, accompanying it with a slough of advice and injunctions that Roddie will pay no attention to once he is out of sight—if I know Roddie. It's a two-man team and Roddie picked Roy as his teamer. They left this morning.

"Nov 5—being City Manager is not all marshmallow sundae. I wish Roddie would get back.

"Nov 11 —Hizzoner wants me to copy off in here the 'report of the artifacts committee'! Mick Mahmud has been keeping it in his head which strikes me as a good place. But Hizzoner has been very jumpy since Roddie and Roy left, so I guess I will humor him—here it is:

"12 spare knives (besides one each for everybody)

"53 firearms and guns of other sorts—but only about half of them with even one charge left.

"6 Testaments

"2 Peace of the Flame

"1 Koran

"1 Book of Mormon

"1 Oxford Book of English Verse, Centennial Edition

"1 steel bow and 3 hunting arrows

"1 boiler made from a wave shield and quite a bit of metal and plastic junk (worth its weight in uranium, I admit) from the Thunderbolt Jackie salvaged.

"1 stew pan (Carmen's)

"1 pack playing cards with the nine of hearts missing

"13 matches, any number of pocket flamers no longer working, and 27 burning glasses

"1 small hand ax

"565 meters climbing line, some of it chopped up for other uses

"91 fishhooks (and no fish fit to eat!)

"61 pocket compasses, some of them broken

"19 watches that still run (4 of them adjusted to our day)

"2 bars of scented soap that Theo has been hoarding

"2 boxes Kwik-Kure and part of a box of Tan-Fast

"Several kilos of oddments that I suppose we will find a use for but I won't list. Mick has a mind like a pack rat.

"Lots of things we have made and can make more of—pots, bows and arrows, hide scrapers, a stone-age mortar & pestle we can grind seeds on if you don't mind grit in your teeth, *etc.* Hizzoner says the Oxford Verse is the most valuable thing we have and I agree, but not for his reasons. He wants me to cover all the margins with shorthand, recording all special knowledge that any of us have—everything from math to pig-raising. Cliff says go ahead as long as we don't deface the verses. I don't see when I'm going to find time. I've hardly been out of the settlement since Roddie left and sleep is something I just hear about.

"Nov 13—only two more days. 'For this relief, much thanks…"

"Nov 16—I didn't think they would be on time.

"Nov 21—We finally adopted our constitution and basic code today, the first town meeting we've had in weeks. It covers the flyleaves of two Testaments, Bob's and Georgia's. If anybody wants to refer to it, which I doubt, that's where to look.

"Nov 29—Jimmy says old Rod is too tough to kill. I hope he's right. Why, oh, why didn't I twist Hizzoner's arm and make him let me go?

"Dec 15—there's no use kidding ourselves any longer.

"Dec 21—The Throxtons and Baxters and myself and Grant gathered privately in the Baxter house tonight and Grant recited the service for the dead. Bob said a prayer for both of them and then we sat quietly for a long time, Quaker fashion. Roddie always reminded me of my brother Rickie, so I privately asked Mother to take care of him, and Roy, too—Mother had a lap big enough for three, any time.

"Grant hasn't made a public announcement; officially they are just 'overdue."

"Dec 25—Christmas"

Rod and Roy traveled light and fast downstream, taking turns leading and covering. Each carried a few kilos of salt meat but they expected to eat off the land. In addition to game they now knew of many edible fruits and berries and nuts; the forest was a free cafeteria to those who knew it. They carried no water since they expected to follow the stream. But they continued to treat the water with respect; in addition to ichthyosaurs that sometimes pulled down a drinking buck there were bloodthirsty little fish that took very small bites—but they traveled in schools and could strip an animal to bones in minutes."

Rod carried both Lady Macbeth and Colonel Bowie; Roy Kilroy carried his Occam's Razor and a knife borrowed from Carmen Baxter. Roy had a climbing rope wrapped around his waist. Each had a hand gun strapped to his hip but these were for extremity; one gun had only three charges. But Roy carried Jacqueline Throxton's air pistol, with freshly envenomed darts; they expected it to save hours of hunting, save time for travel.

Three days downstream they found a small cave, found living in it a forlorn colony of five girls. They powwowed, then headed on down as the girls started upstream to find the settlement. The girls had told them of a place farther down where the creek could be crossed. They found it, a wide rocky shallows with natural stepping stones… then wasted two days on the far side before crossing back.

By the seventh morning they had found no cave other than one the girls had occupied. Rod said to Roy, "Today makes a week. Grant said to be back in two weeks."

"That's what the man said. Yes, sir!"

"No results."

"Nope. None."

"We ought to start back."

Roy did not answer. Rod said querulously, "Well, what do you think?"

Kilroy was lying down, watching the local equivalent of an ant. He seemed in no hurry to do anything else. Finally he answered, "Rod, you are bossing this party. Upstream, downstream—just tell me."

"Oh, go soak your head."

"On the other hand, a bush lawyer like Shorty might question Grant's authority to tell us to return at a given time. He might use words like 'free citizen' and 'sovereign autonomy.' Maybe he's got something—this neighborhood looks awfully far 'West of the Pecos.'"

"Well... we could stretch it a day, at least?. We won't be taking that side trip going back."

"Obviously. Now, if I were leading the party—but I'm not."

"Cut the double talk! I asked for advice."

"Well, I say we are here to find caves, not to keep a schedule."

Rod quit frowning. "Up off your belly. Let's go."

They headed downstream.

The terrain changed from forest valley to canyon country as the stream cut through a plateau. Game became harder to find and they used some of their salt meat. Two days later they came to the first of a series of bluffs carved eons earlier into convolutions, pockets, blank dark eyes. "This looks like it."

"Yes," agreed Roy. He looked around. "It might be even better farther down."

"It might be."

They went on.

In time the stream widened out, there were no more caves, and the canyons gave way to a broad savannah, treeless except along the banks of the river. Rod sniffed. "I smell salt."

"You ought to. There's ocean over there somewhere."

"I don't think so." They went on.

They avoided the high grass, kept always near the trees. The colonists had listed more than a dozen predators large enough to endanger a man, from a leonine creature twice as long as the biggest African lion down to a vicious little scaly thing which was dangerous if cornered. It was generally agreed that the leonine monster was the "stobor" they had been warned against, although a minority favored a smaller carnivore which was faster, trickier, and more likely to attack a man.

One carnivore was not considered for the honor. It was no larger than a jack rabbit, had an oversize head, a big jaw, front legs larger than hind, and no tail. It was known as "dopy joe" from the silly golliwog expression it had and its clumsy, slow movements when disturbed. It was believed to live by waiting at burrows of field rodents for supper to come out. Its skin cured readily and made a good water bag. Grassy fields such as this savannah often were thick with them.

They camped in a grove of trees by the water. Rod said, "Shall I waste a match, or do it the hard way?"

"Suit yourself. I'll knock over something for dinner."

"Watch yourself. Don't go into the grass.

"I'll work the edges. Cautious Kilroy they call me, around the insurance companies.

Rod counted his three matches, hoping there would be four, then started making fire by friction. He had just succeeded, delayed by moss that was not as dry as it should have been, when Roy returned and dropped a small carcass. "The durnedest thing happened."

The kill was a dopy joe; Rod looked at it with distaste. "Was that the best you could do? They taste like kerosene."

"Wait till I tell you. I wasn't hunting him; he was hunting *me*."

"Don't kid me!"

"Truth. I had to kill him to keep him from snapping my ankles. So I brought him in.

Rod looked at the small creature. "Never heard the like. Must be insanity in his family."

"Probably." Roy started skinning it.

Next morning they reached the sea, a glassy body untouched by tide, unruffled by wind. It was extremely briny and its shore was crusted with salt They concluded that it was probably a dead sea, not a true ocean. But their attention was not held by the body of water. Stretching away along the shore apparently to the horizon were millions on heaping millions of whitened bones. Rod stared. "Where did they all come from?"

Roy whistled softly. "Search me. But if we could sell them at five pence a metric ton, we'd be millionaires."

"Billionaires, you mean.

"Let's not be fussy." They walked out along the beach, forgetting to be cautious, held by the amazing sight. There were ancient bones, cracked by sun and sea, new bones with gristle clinging, big bones of the giant antelope the colonists never hunted, tiny bones of little buck no larger than terriers, bones without number of all sorts. But there were no carcasses.

They inspected the shore for a couple of kilometers, awed by the mystery. When they turned they knew that they were turning back not just to camp but to head home. This was as far as they could go.

On the trip out they had not explored the caves. On their way back Rod decided that they should try to pick the best place for the colony, figuring game, water supply, and most importantly, shelter and ease of defense.

They were searching a series of arched galleries water-carved in sandstone cliff. The shelf of the lowest gallery was six or seven meters above the sloping stand of soil below. The canyon dropped rapidly here; Rod could visualize a flume from upstream, bringing running water right to the caves… not right away, but when they had time to devise tools and cope with the problems. Someday, someday—but in the meantime here was plenty of room for the colony in a spot which almost defended itself. Not to mention, he added, being in out of the rain. Roy was the better Alpinist; he inched up, flat to the rock, reached the shelf and threw down his line to Rod—snaked him up quickly. Rod got an arm over the edge, scrambled to his knees, stood up—and gasped, "What the deuce!"

"That," said Roy, "is why I kept quiet. I thought you would think I was crazy.

"I think we both are." Rod stared around. Filling the depth of the gallery, not seen from below, was terrace on terrace of cliff dwellings.

They were not inhabited, nor had they ever been by men. Openings which must have been doors were no higher than a man's knee, not wide enough for shoulders. But it was clear that they were dwellings, not merely formations carved by water. There were series of rooms arranged in half a dozen low stories from floor to ceiling of the gallery. The material was a concrete of dried mud, an adobe, used with wood.

But there was nothing to suggest what had built them.

Roy started to stick his head into an opening; Rod shouted, "Hey! Don't do that!"

"Why not? It's abandoned."

"You don't know what might be inside. Snakes, maybe."

"There are no snakes. Nobody's ever seen one.

"No… but take it easy."

"I wish I had a torch light."

"I wish I had eight beautiful dancing girls and a Cadillac copter. Be careful. I don't want to walk back alone."

They lunched in the gallery and considered the matter. "Of course they were intelligent," Roy declared. "We may find them elsewhere. Maybe really civilized now—these look like ancient ruins."

"Not necessarily intelligent," Rod argued. "Bees make more complicated homes."

"Bees don't combine mud and wood the way these people did. Look at that lintel."

"Birds do. I'll concede that they were bird-brained, no more.

"Rod, you won't look at the evidence."

"Where are their artifacts? Show me one ash tray marked 'Made in Jersey City.'"

"I might find some if you weren't so jumpy."

"All in time. Anyhow, the fact that *they* found it safe shows that we can live here."

"Maybe. What killed them? Or why did they go away?"

They searched two galleries after lunch, found more dwellings. The dwellers had apparently formed a very large community. The fourth gallery they explored was almost empty, containing a beginning of a hive in one corner. Rod looked it over. "We can use this. If may not be the best, but we can move the gang in and then find the best at our leisure."

"We're heading back?"

"Uh, in the morning. This is a good place to sleep and tomorrow we'll travel from 'can' to 'can't'—I wonder what's up there?" Rod was looking at a secondary shelf inside the main arch.

Roy eyed it. "I'll let you know in a moment."

"Don't bother. It's almost straight up. We'll build ladders for spots like that."

"My mother was a human fly, my father was a mountain goat. Watch me.

The shelf was not much higher than his head. Roy had a hand over —when a piece of rock crumbled away. He did not fall far.

Rod ran to him. "You all right, boy?"

Roy grunted, "I guess so," then started to get up. He yelped.

"What's the matter?"

"My right leg. I think… ow! I think it's broken." Rod examined the break, then went down to cut splints. With a piece of the line Roy carried, used economically, for he needed most of it as a ladder, he bound the leg, padding it with leaves. It was a simple break of the tibia, with no danger of infection.

They argued the whole time. "Of course you will," Roy was saying. "Leave me a fresh kill and what salt meat there is. You can figure some way to leave water."

"Come back and find your chawed bones!"

"Not at all. Nothing can get at me. If you hustle, you can make it in three days."

"Four, or five more likely. Six days to lead a party back. Then you want to go back in a stretcher? How would you like to be helpless when a stobor jumps us?"

"But I wouldn't go back. The gang would be moving down here."

"Suppose they do? Eleven days, more likely twelve—Roy, you didn't just bang your shin; you banged your head, too."

The stay in the gallery while Roy's leg repaired was not difficult nor dangerous; it was merely tedious. Rod would have liked to explore all the caves, but the first time he was away longer than Roy thought necessary to make a kill Rod returned to find his patient almost hysterical. He had let his imagination run away, visioning Rod as dead and thinking about his own death, helpless, while he starved or died of thirst. After that Rod left him only to gather food and water. The gallery was safe from all dangers; no watch was necessary, fire was needed only for cooking. The weather was getting warmer and the daily rains dropped off.

They discussed everything from girls to what the colony needed, what could have caused the disaster that had stranded them, what they would have to eat if they could have what they wanted, and back to girls again. They did not discuss the possibility of rescue; they took it for granted that they were there to stay. They slept much of the time and often did nothing, in animal-like torpor.

Roy wanted to start back as soon as Rod removed the splints, but it took him only seconds to discover that he no longer knew how to walk. He exercised for days, then grew sulky when Rod still insisted that he was not able to travel; the accumulated irritations of invalidism spewed out in the only quarrel they had on the trip.

Rod grew as angry as he was, threw Roy's climbing rope at him and shouted, "Go ahead! See how far you get on that gimp leg!"

Five minutes later Rod was arranging a sling, half dragging Roy, white and trembling and thoroughly subdued, back up onto the shelf. Thereafter they spent ten days getting Roy's muscles into shape, then started back.

Shorty Dumont was the first one they ran into as they approached the settlement. His jaw dropped and he looked scared, then he ran to greet them, ran back to alert those in camp. "Hey, everybody! They're *back!*"

Caroline heard the shout, outdistanced the others in great flying leaps, kissed and hugged them both. "Hi, Carol," Rod said. "What are you bawling about?"

"Oh, Roddie, you bad, *bad* boy!"

Chapter Twelve

"It Won't Work, Rod"

In the midst of jubilation Rod had time to notice many changes. There were more than a dozen new buildings, including two long shedlike affairs of bamboo and mud. One new hut was of sunbaked brick; it had windows. Where the cooking fire had been was a barbecue pit and by it a Dutch oven. Near it a stream of water spilled out of bamboo pipe, splashed through a rawhide net, fell into a rock bowl, and was led away to the creek… he hardly knew whether to be pleased or irked at this anticipation of his own notion.

He caught impressions piecemeal, as their triumphal entry was interrupted by hugs, kisses; and bone-jarring slaps on the back, combined with questions piled on questions. "No, no trouble—except that Roy got mad and busted his leg… yeah, sure, we found what we went after; wait till you *see*… no… yes… Jackie!… Hi, Bob!—it's good to see you, too, boy! Where's Carmen… Hi, Grant!"

Cowper was grinning widely, white teeth splitting his beard. Rod noticed with great surprise that the man looked *old*—why, shucks, Grant wasn't more than twentytwo, twentythree at the most. Where did he pick up those lines?

"Rod, old boy! I don't know whether to have you two thrown in the hoosegow or decorate your brows with laurel."

"We got held up."

"So it seems. Well, there is more rejoicing for the strayed lamb than for the ninety and nine. Come on up to the city hall."

"The what?"

Cowper looked sheepish. "They call it that, so I do. Better than 'Number Ten, Downing Street' which it started off with. It's just the hut where I sleep—it doesn't belong to me," he added. "When they elect somebody else, I'll sleep in bachelor hall." Grant led them toward a little building apart from the others and facing the cooking area.

The wall was gone.

Rod suddenly realized what looked strange about the upstream end of the settlement; the wall was gone completely and in its place was a thornbush barricade. He opened his mouth to make a savage comment—then realized that it really did not matter. Why kick up a row when the colony would be moving to the canyon of the Dwellers? They would never need walls again; they would be up high at night, with their ladders pulled up after them. He picked another subject.

"Grant, how in the world did you guys get the inner partitions out of those bamboo pipes?"

"Eh? Nothing to it. You tie a knife with rawhide to a thinner bamboo pole, then reach in and whittle. All it takes is patience. Waxie worked it out. But you haven't seen anything yet. We're going to have *iron*.

"Huh?"

"We've got ore; now we are experimenting. But I do wish we could locate a seam of coal. Say, you didn't spot any, did you?"

Dinner was a feast, a *luau*, a celebration to make the weddings look pale. Rod was given a real plate to eat on—unglazed, lopsided, ungraceful, but a plate. As he took out Colonel Bowie, Margery Chung Kinksi put a wooden spoon in his hand. "We don't have enough to go around, but the guests of honor rate them tonight." Rod looked at it curiously. It felt odd in his hand.

Dinner consisted of boiled greens, some root vegetables new to him, and a properly baked haunch served in thin slices. Roy and Rod were served little unleavened cakes like tortillas. No one else had them, but Rod decided that it was polite not to comment on that. Instead he made a fuss over eating bread again.

Margery dimpled. "We'll have plenty of bread some day. Maybe next year.

There were tart little fruits for dessert, plus a bland, tasteless sort which resembled a dwarf banana with seeds. Rod ate too much.

Grant called them to order and announced that he was going to ask the travelers to tell what they had experienced. "Let them get it all told—then they won't have to tell it seventy times over. Come on, Rod. Let's see your ugly face."

"Aw, let Roy. He talks better than I do."

"Take turns. When your voice wears out, Roy can take over.

Between them they told it all, interrupting and supplementing each other. The colonists were awed by the beach of a billion bones, still more interested in the ruins of the Dwellers. "Rod and I are still arguing," Roy told them. "I say that it was a civilization. He says that it could be just instinct. He's crazy with the heat; the Dwellers were *people*. Not humans, of course, but people."

"Then where are they now?"

Roy shrugged. "Where are the Selenites, Dora? What became of the Mithrans?"

"Roy is a romanticist," Rod objected. "But you'll be able to form your own opinions when we get there."

"That's right, Rod," Roy agreed.

"That covers everything," Rod went on. "The rest was just waiting while Roy's leg healed. But it brings up the main subject. How quickly can we move? Grant, is there any reason not to start at once? Shouldn't we break camp tomorrow and start trekking? I've been studying it—how to make the move, I mean—and I would say to send out an advance party at daybreak. Roy or I can lead it. We go downstream an easy day's journey, pick a spot, make a kill, and have fire and food ready when the rest arrive. We do it again the next day. I think we can be safe and snug in the caves in five days."

"Dibs on the advance party!"

"Me, too!"

There were other shouts but Rod could not help but realize that the response was not what he had expected. Jimmy did not volunteer and Caroline merely looked thoughtful. The Baxters he could not see; they were in shadow.

He turned to Cowper. "Well, Grant? Do you have a better idea?"

"Rod," Grant said slowly, "your plan is okay… but you've missed a point."

"Why do you assume that we are going to move?"

"*Huh?* Why, that's what we were sent for! To find a better place to live. We found it—you could hold those caves against an army. What's the hitch? Of *course* we move!"

Cowper examined his nails. "Rod, don't get sore. I don't see it and I doubt if other people do. I'm not saying the spot you and Roy found is not good. It may be better than here—the way this place used to be. But we are doing all right here—and we've got a lot of time and effort invested. Why move?"

"Why, I told you. The caves are safe, completely safe. This spot is exposed… it's *dangerous*."

"Maybe. Rod, in the whole time we've been here, nobody has been hurt inside camp. We'll put it to a vote, but you can't expect us to abandon our houses and everything we have worked for to avoid a danger that may be imaginary."

"Imaginary? Do you think that a stobor couldn't jump that crummy barricade?" Rod demanded, pointing.

"I think a stobor would get a chest full of pointed stakes if he tried it," Grant answered soberly. "That crummy barricade' is a highly efficient defense. Take a better look in the morning."

"Where we were you wouldn't need it. You wouldn't need a night watch. Shucks, you wouldn't need houses. Those caves are better than the best house here!"

"Probably. But, Rod, you haven't seen all we've done, how much we would have to abandon. Let's look it over in the daylight, fellow, and then talk."

"Well… no, Grant, there is only one issue: the caves are safe; this place isn't. I call for a vote."

"Easy now. This isn't a town meeting. It's a party in your honor. Let's not spoil it."

"Well… I'm sorry. But we're all here; let's vote."

"No." Cowper stood up. "There will be a town meeting on Friday as usual. Goodnight, Rod. Goodnight, Roy. We're awfully glad you're back. Goodnight all."

The party gradually fell apart. Only a few of the younger boys seemed to want to discuss the proposed move. Bob Baxter came over, put a hand on Rod and said, "See you in the morning, Rod. Bless you." He left before Rod could get away from a boy who was talking to him.

Jimmy Throxton stayed, as did Caroline. When he got the chance Rod said, Jimmy? Where do you stand?"

"Me? You know me, pal. Look, I sent Jackie to bed; she wasn't feeling well. But she told me to tell you that we were back of you a hundred percent, always."

"Thanks. I feel better."

"See you in the morning? I want to check on Jackie."

"Sure. Sleep tight."

He was finally left with Caroline. "Roddie? Want to inspect the guard with me? You'll do it after tonight, but we figured you could use a night with no worries.

"Wait a minute. Carol… you've been acting funny."

"Me? Why, Roddie!"

"Well, maybe not. What do you think of the move? I didn't hear you pitching in."

She looked away. "Roddie," she said, "if it was just me, I'd say start tomorrow. I'd be on the advance party."

"Good! What's got into these people? Grant has them buffaloed but I can't see why." He scratched his head. "I'm tempted to make up my own party—you, me, Jimmy and Jack, the Baxters, Roy, the few who were rarin' to go tonight, and anybody else with sense enough to pound sand."

She sighed. "It won't work, Roddie."

"Huh? Why not?"

"I'll go. Some of the youngsters would go for the fun of it. Jimmy and Jack would go if you insisted… but they would beg off if you made it easy for them. The Baxters should not and I doubt if Bob would consent. Carmen isn't really up to such a trip."

Chapter Thirteen

Unkillable

The matter never came to a vote. Long before Friday Rod knew how a vote would go—about fifty against him, less than half that for him, with his friends voting with him through loyalty rather than conviction or possibly against him in a showdown.

He made an appeal in private to Cowper. "Grant, you've got me licked. Even Roy is sticking with you now. But you could swing them around."

"I doubt it. What you don't see, Rod, is that we have taken root. You may have found a better place… but it's too late to change. After all, you picked this spot."

"Not exactly, it… well, it just sort of happened."

"Lots of things in life just sort of happen. You make the best of them."

"That's what I'm *trying* to do! Grant, admitted that the move is hard; we could manage it. Set up way stations with easy jumps, send our biggest huskies back for what we don't want to abandon. Shucks, we could move a person on a litter if we had to—using enough guards."

"If the town votes it, I'll be for it. But I won't try to argue them into it. Look, Rod, you've got this fixed idea that this spot is dangerously exposed. The facts don't support you. On the other hand see what we have. Running water from upstream, waste disposal downstream, quarters comfortable and adequate for the climate. Salt—do you have salt there?"

"We didn't look for it-but it would be easy to bring it from the seashore."

"We've got it closer here. We've got prospects of metal. You haven't seen that ore outcropping yet, have you? We're better equipped every day; our standard of living is going up. We have a colony nobody need be ashamed of and we did it with bare hands; we were never meant to be a colony. Why throw up what we have gained to squat in caves like savages?"

Rod sighed. "Grant, this bank may be flooded in the rainy season—aside from its poor protection now."

"It doesn't look it to me, but if so, we'll see it in time. Right now we are going into the dry season. So let's talk it over a few months from now.

Rod gave up. He refused to resume as "City Manager" nor would

Caroline keep it when Rod turned it down. Bill Kennedy was appointed and Rod went to work under Cliff as a hunter, slept in the big shed upstream with the bachelors, and took his turn at night watch. The watch had been reduced to one man, whose duty was simply to tend fires. There was talk of cutting out the night fires, as fuel was no longer easy to find nearby and many seemed satisfied that the thorn barrier was enough.

Rod kept his mouth shut and stayed alert at night.

Game continued to be plentiful but became skittish. Buck did not come out of cover the way they had in rainy weather; it was necessary to search and drive them out. Carnivores seemed to have become scarcer. But the first real indication of peculiar seasonal habits of native fauna came from a very minor carnivore. Mick Mahmud returned to camp with a badly chewed foot; Bob Baxter patched him up and asked about it.

"You wouldn't believe it."

"Try me."

"Well, it was just a dopy joe. I paid no attention to it, of course. Next thing I knew I was flat on my back and trying to shake it loose. He did all that to me before I got a knife into him. Then I had to cut his jaws loose."

"Lucky you didn't bleed to death."

When Rod heard Mick's story, he told Roy. Having had one experience with a dopy joe turned aggressive, Roy took it seriously and had Cliff warn all hands to watch out; they seemed to have turned nasty.

Three days later the migration of animals started.

At first it was just a drifting which appeared aimless except that it was always downstream. Animals had long since ceased to use the watering place above the settlement and buck rarely appeared in the little valley; now they began drifting into it, would find themselves baffled by the thorn fence, and would scramble out. Nor was it confined to antelope types; wingless birds with great "false faces," rodents, rooters, types nameless to humans, all joined the migration. One of the monstrous leonine predators they called stobor approached the barricade in broad daylight, looked at it, lashed his tail, then clawed his way up the bluff and headed downstream again.

Cliff called off his hunting parties; there was no need to hunt when game walked into camp.

Rod found himself more edgy than usual that night as it grew dark. He left his seat near the barbecue pit and went over to Jimmy and Jacqueline. "What's the matter with this place? It's spooky."

Jimmy twitched his shoulders. "I feel it. Maybe it's the funny way the animals are acting. Say, did you hear they killed a joe inside camp?"

"I know what it is," Jacqueline said suddenly. "No 'Grand Opera.'"

"Grand Opera" was Jimmy's name for the creatures with the awful noises, the ones which had turned Rod's first night into a siege of terror. They serenaded every evening for the first hour of darkness. Rod's mind had long since blanked them out, heeded them no more than chorusing cicadas. He had not consciously heard them for weeks.

Now they failed to wail on time; it upset him.

He grinned sheepishly. "That's it, Jack. Funny how you get used to a thing. Do you suppose they are on strike?"

"More likely a death in the family," Jimmy answered. "They'll be back in voice tomorrow."

Rod had trouble getting to sleep. When the night watch gave an alarm he was up and out of bachelors' barracks at once, Colonel Bowie in hand. "What's up?"

Arthur Nielsen had the watch. "It's all right now," he answered nervously. "A big buffalo buck crashed the fence. And this got through." He indicated the carcass of a dopy joe.

"You're bleeding."

"Just a nip."

Others gathered around. Cowper pushed through, sized the situation and said, "Waxie, get that cut attended to. Bill… where's Bill? Bill, put somebody else on watch. And let's get that gap fixed as soon as it's light."

It was greying in the east. Margery suggested, "We might as well stay up and have breakfast. I'll get the fire going." She left to borrow flame from a watch fire.

Rod peered through the damaged barricade. A big buck was down on the far side and seemed to have at least six dopy joes clinging to it. Cliff was there and said quietly, "See a way to get at them?"

"Only with a gun."

"We can't waste ammo on that."

"No." Rod thought about it, then went to a pile of bamboo poles, cut for building. He selected a stout one a head shorter than himself, sat down and began to bind Lady Macbeth to it with rawhide, forming a crude pike spear.

Caroline came over and squatted down. "What are you doing?"

"Making a joe-killer."

She watched him. "I'm going to make me one," she said suddenly and jumped up.

By daylight the animals were in full flight downstream as if chased by forest fire. As the creek had shrunk with the dry season a miniature beach, from a meter to a couple of meters wide, had been exposed below the bank on which the town had grown. The thorn kraal had been extended to cover the gap, but the excited animals crushed through this weak point and now streamed along the water past the camp.

After a futile effort no attempt was made to turn them back. They were pouring into the valley; they had to go somewhere, and the route between water and bank made a safety valve. It kept them from shoving the barricade aside by sheer mass. The smallest animals came through it anyhow, kept going, paid no attention to humans.

Rod stayed at the barricade, ate breakfast standing up. He had killed six joes since dawn while Caroline's score was still higher. Others were making knives into spears and joining them. The dopy joes were not coming through in great numbers; most of them continued to chase buck along the lower route past camp. Those who did seep through were speared; meeting them with a knife gave away too much advantage.

Cowper and Kennedy, inspecting defenses, stopped by Rod; they looked worried. "Rod," said Grant "how long is this going to last?"

"How should I know? When we run out of animals. It looks like—get him, Shorty! It looks as if the joes were driving the others, but I don't think they are. I think they've all gone crazy."

"But what would cause that?" demanded Kennedy. "Don't ask me. But I think I know where all those bones on that beach came from. But don't ask why. Why does a chicken cross the road? Why do lemmings do what they do? What makes a plague of locusts? Behind you! *Jump!*"

Kennedy jumped, Rod finished off a joe, and they went on talking. "Better detail somebody to chuck these into the water, Bill, before they stink. Look, Grant, we're okay now, but I know what I would do."

"What? Move to your caves? Rod, you were right—but it's too late."

"No, no! That's spilt milk; forget it. The thing that scares me are these mean little devils. They are no longer dopy; they are fast as can be and nasty… and they can slide through the fence. We can handle them now—but how about when it gets dark? We've got to have a solid line of fire inside the fence and along the bank. Fire is one thing they can't go through… I hope."

"That'll take a lot of wood." Grant looked through the barricade and frowned.

"You bet it will. But it will get us through the night. See here, give me the ax and six men with spears. I'll lead the party."

Kennedy shook his head. "It's my job."

"No, Bill," Cowper said firmly. "I'll lead it. You stay here and take care of the town."

Before the day was over Cowper took two parties out and Bill and Rod led one each. They tried to pick lulls in the spate of animals but Bill's party was caught on the bluff above, where it had been cutting wood and throwing it down past the cave. They were treed for two hours. The little valley had been cleaned out of dead wood months since; it was necessary to go into the forest above to find wood that would burn.

Cliff Pawley, hunter-in-chief, led a fifth party in the late afternoon, immediately broke the handle of the little ax. They returned with what they could gather with knives. While they were away one of the giant buck they called buffalo stampeded off the bluff, fell into camp, broke its neck. Four dopy joes were clinging to it. They were easy to kill as they would not let go.

Jimmy and Rod were on pike duty at the barricade. Jimmy glanced back at where a couple of girls were disposing of the carcasses. "Rod," he said thoughtfully, we got it wrong. *Those* are stobor… the *real* stobor."

"Huh?"

"The big babies we've been calling that aren't 'stobor.' *These* things are what the Deacon warned us against."

"Well… I don't care what you call them as long as they're dead. On your toes, boy; here they come again."

Cowper ordered fires laid just before dark and was studying how to arrange one stretch so as not to endanger the flume when the matter was settled; the structure quivered and water ceased to flow. Upstream something had crashed into it and broken the flimsy pipe line.

The town had long since abandoned waterskins. Now they were caught with only a few liters in a pot used by the cooks, but it was a hardship rather than a danger; the urgent need was to get a ring of fire around' them. There had already been half a dozen casualties—no deaths but bites and slashings, almost all from the little carnivores contemptuously known as dopy joes. The community's pool of antiseptics, depleted by months of use and utterly irreplaceable, had sunk so low that Bob Baxter used it only on major wounds.

When fuel had been stretched ready to burn in a long arc inside the barricade and down the bank to where it curved back under the cave, the results of a hard day's work looked small; the stockpile was not much greater than the amount already spread out. Bill Kennedy looked at it. "It won't last the night, Grant."

"It's *got* to, Bill. Light it."

"If we pulled back from the fence and the bank, then cut over to the bluff—what do you think?"

Cowper tried to figure what might be saved by the change. "It's not much shorter. Uh, don't light the downstream end unless they start curving back in on us. But let's move; it's getting dark." He hurried to the cooking fire, got a brand and started setting the chain of fire.

Kennedy helped and soon the townsite was surrounded on the exposed sides by blaze. Cowper chucked his torch into the fire and said, "Bill, better split the men into two watches and get the women up into the cave—they can crowd in somehow."

"You'll have trouble getting thirty-odd women in there, Grant."

"They can sit up all night. But send them up. Yes, and the wounded men, too."

"Can do." Kennedy started passing the word. Caroline came storming up, spear in hand.

"Grant, what's this nonsense about the girls having to go up to the cave? If you think you're going to cut me out of the fun you had better think again!"

Cowper looked at her wearily. "Carol, I haven't time to monkey. Shut your face and do as you are told."

Caroline opened her mouth, closed it, and did as she was told. Bob Baxter claimed Cowper's attention; Rod noticed that he looked very upset. "Grant? You ordered all the women up to the cave?"

"Yes."

"I'm sorry but Carmen can't."

"You'll have to carry her. She is the one I had most on my mind when I decided on the move.

"But—" Baxter stopped and urged Grant away from the others. He spoke insistently but quietly. Grant shook his head.

"It's not safe, Grant," Baxter went on, raising his voice. "I don't dare risk it. The interval is nineteen minutes now.

"Well… all right. Leave a couple of women with her. Use Caroline, will you? That'll keep her out of my hair."

"Okay." Baxter hurried away.

Kennedy took the first watch with a dozen men spread out along the fire line; Rod was on the second watch commanded by Cliff Pawley. He went to the Baxter house to find out how Carmen was doing, was told to beat it by Agnes. He then went to the bachelors' shed and tried to sleep.

He was awakened by yells, in time to see one of the leonine monsters at least five meters long go bounding through the camp and disappear downstream. It had jumped the barrier, the stakes behind it, and the fire behind that, all in one leap.

Rod called out, "Anybody hurt?"

Shorty Dumont answered. "No. It didn't even stop to wave." Shorty was bleeding from a slash in his left calf; he seemed unaware of it. Rod crawled back inside tried again to sleep.

He was awakened again by the building shaking. He hurried out. "What's up?"

"That you, Rod? I didn't know anybody was inside. Give me a hand; we're going to burn it." The voice was Baxter's; he was prying at a corner post and cutting rawhide strips that held it.

Rod put his spear where it would not be stepped on, resheathed Colonel Bowie, and started to help. The building was bamboo and leaves, with a mud-and-thatch roof; most of it would burn. "How's Carmen?"

"Okay. Normal progress. I can do more good here. Besides they don't *want* me." Baxter brought the corner of the shed down with a crash, gathered a double armful of wreckage and hurried away. Rod picked up a load and followed him.

The reserve wood pile was gone; somebody was tearing the roof off the "city hall" and banging pieces on the ground to shake clay loose. The walls were sunbaked bricks, but the roof would burn. Rod came closer, saw that it was Cowper who was destroying this symbol of the sovereign community. He worked with the fury of anger. "Let me do that, Grant. Have you had any rest?"

"Huh? No."

"Better get some. It's going to be a long night. What time is it?"

"I don't know. Midnight, maybe." Fire blazed up and Cowper faced it, wiping his face with his hand. "Rod, take charge of the second watch and relieve Bill. Cliff got clawed and I sent him up."

"Okay. Burn everything that will burn—right?"

"Everything but the roof of the Baxter house. But don't use it up too fast; it's got to last till morning."

"Got it." Rod hurried to the fire line, found Kennedy. Okay, Bill, I'll take over—Grant's orders. Get some sleep. Anything getting through?"

"Not much. And not far." Kennedy's spear was dark with blood in the firelight. "I'm not going to sleep, Rod. Find yourself a spot and help out."

Rod shook his head. "You're groggy. Beat it. Grant's orders."

"No!"

"Well… look, take your gang and tear down the old maids' shack. That'll give you a change, at least."

"Uh—all right." Kennedy left, almost staggering. There was a lull in the onrush of animals; Rod could see none beyond the barricade. It gave him time to sort out his crew, send away those who had been on duty since sunset, send for stragglers. He delegated Doug Sanders and Mick Mahmud as firetenders, passed the word that no one else was to put fuel on the fires.

He returned from his inspection to find Bob Baxter, spear in hand, holding his place at the center of the line. Rod put a hand on his shoulder. "The medical officer doesn't need to fight. We aren't that bad off."

Baxter shrugged. "I've got my kit, what there is left of it. This is where I use it."

"Haven't you enough worries?"

Baxter grinned wanly. "Better than walking the floor. Rod, they're stirring again. Hadn't we better build up the fires?"

"Mmm… not if we're going to make it last. I don't think they can come through that."

Baxter did not answer, as a joe came through at that instant. It ploughed through the smouldering fire and Baxter speared it. Rod cupped his hands and shouted, "Build up the fires! But go *easy*.

"Behind you, Rod!"

Rod jumped and whirled, got the little devil. "Where did that one come from? I didn't see it."

Before Bob could answer Caroline came running out of darkness. "Bob! Bob Baxter! I've got to find Bob Baxter!"

"Over here!" Rod called.

Baxter was hardly able to speak. "Is she—is she?" His face screwed up in anguish.

"No, no!" yelled Caroline. "She's all right, she's fine. *It's a girl!*"

Baxter quietly fainted, his spear falling to the ground. Caroline grabbed him and kept him from falling into the fire. He opened his eyes and said, "Sorry. You scared me. You're sure Carmen is all right?"

"Right as rain. The baby, too. About three kilos. Here, give me that sticker—Carmen wants you."

Baxter stumbled away and Caroline took his place. She grinned at Rod. "I feel *swell!* How's business, Roddie? Brisk? I feel like getting me eight or nine of these vermin.

Cowper came up a few minutes later. Caroline called out, "Grant, did you hear the good news?"

"Yes. I just came from there." He ignored Caroline's presence at the guard line but said to Rod, "We're making a stretcher out of pieces of the flume and they're going to haul Carmen up. Then they'll throw the stretcher down and you can burn it."

"Good."

"Agnes is taking the baby up. Rod, what's the very most we can crowd into the cave?"

"Gee!" Rod glanced up at the shelf. "They must be spilling off the edge now.

"I'm afraid so. But we've just *got* to pack them in. I want to send up all married men and the youngest boys. The bachelors will hold on here."

"I'm a bachelor!" Caroline interrupted. Cowper ignored her. "As soon as Carmen is safe we do it—we can't keep fires going much longer." He turned away, headed up to the cave.

Caroline whistled softly. "Roddie, we're going to have fun."

"Not my idea of fun. Hold the fort, Carol. I've got to line things up." He moved down the line, telling each one to go or to stay.

Jimmy scowled at him. "I won't go, not as long as anybody stays. I couldn't look Jackie in the face."

"You'll button your lip and do as Grant says—or I'll give you a mouthful of teeth. Hear me?"

"I hear you. I don't like it."

"You don't have to like it, just do it. Seen Jackie? How is she?"

"I snuck up a while ago. She's all right, just queasy. But the news about Carmen makes her feel so good she doesn't care."

Rod used no age limit to determine who was expendable. With the elimination of married men, wounded, and all women he had little choice; he simply told those whom he considered too young or not too skilled that they were to leave when word was passed. It left him with half a dozen, plus himself, Cowper, and—possibly—Caroline. Trying to persuade Caroline was a task he had postponed.

He returned and found Cowper. "Carmen's gone up," Cowper told him. "You can send the others up now.

"Then we can burn the roof of the Baxter house."

"I tore it down while they were hoisting her." Cowper looked around. "Carol! Get on up.

She set her feet. "I won't!"

Rod said softly, "Carol, you heard him. Go up—*right now!*"

She scowled, stuck out her lip, then said, "All right for *you*, Roddie Walker!"—turned and fled up the path.

Rod cupped his hands and shouted, "All right, everybody! All hands up but those I told to stay. Hurry!"

About half of those leaving had started up when Agnes called down, "Hey! Take it slow! Somebody will get pushed over the edge if you don't quit shoving."

The queue stopped. Jimmy called out, "Everybody exhale. That'll do it."

Somebody called back, "Throw Jimmy off… *that* will do it." The line moved again, slowly. In ten minutes they accomplished the sardine-packing problem of fitting nearly seventy people into a space comfortable for not more than a dozen. It could not even be standing room since a man could stand erect only on the outer shelf. The girls were shoved inside, sitting or squatting, jammed so that they hardly had air to breathe. The men farthest out could stand but were in danger of stepping off the edge in the dark, or of being elbowed off.

Grant said, "Watch things, Rod, while I have a look." He disappeared up the path, came back in a few minutes. "Crowded as the bottom of a sack," he said. "Here's the plan. They can scrunch back farther if they have to. It will be uncomfortable for the wounded and

Carmen may have to sit up—she's lying down—but it can be done. When the fires die out, we'll shoehorn the rest in. With spears poking out under the overhang at the top of the path we ought to be able to hold out until daylight. Check me?"

"Sounds as good as can be managed."

"All right. When the time comes, you go up next to last, I go up last."

"Unh… I'll match you."

Cowper answered with surprising vulgarity and added, "I'm boss; I go last. We'll make the rounds and pile anything left on the fires, then gather them all here. You take the bank, I take the fence."

It did not take long to put the remnants on the fires, then they gathered around the path and waited—Roy, Kenny, Doug, Dick, Charlie, Howard, and Rod and Grant. Another wave of senseless migration was rolling but the fires held it, bypassed it around by the water.

Rod grew stiff and shifted his spear to his left hand. The dying fires were only glowing coals in spots. He looked for signs of daylight in the east. Howard Goldstein said, "One broke through at the far end."

"Hold it, Goldie," Cowper said. "We won't bother it unless it comes here." Rod shifted his spear back to his right hand.

The wall of fire was now broken in many places. Not only could joes get through, but worse, it was hard to see them, so little light did the embers give off. Cowper turned to Rod and said, "All right, everybody up. You tally them." Then he shouted, "Bill! Agnes! Make room, I'm sending them up."

Rod threw a glance at the fence, then turned. "Okay, Kenny first. Doug next, don't crowd. Goldie and then Dick. Who's left? Roy—" He turned, uneasily aware that something had changed.

Grant was no longer behind him. Rod spotted him bending over a dying fire. "Hey, Grant!"

"Be right with you." Cowper selected a stick from the embers, waved it into flame. He hopped over the coals, picked his way through sharpened stakes, reached the thornbush barrier, shoved his torch into it. The dry branches flared up. He moved slowly away, picking his way through the stake trap.

"I'll help you!" Rod shouted. "I'll fire the other end." Cowper turned and light from the burning thorn showed his stern, bearded face. "Stay back. Get the others up. That's an order!"

The movement upward had stopped. Rod snarled, "Get on up, you lunkheads! Move!" He jabbed with the butt of his spear, then turned around.

Cowper had set the fire in a new place. He straightened up, about to move farther down, suddenly turned and jumped over the dying line of fire. He stopped and jabbed at something in the darkness… then screamed.

"Grant!" Rod jumped down, ran toward him. But Grant was down before he reached him, down with a joe worrying each leg and more coming. Rod thrust at one, jerked his spear out, and jabbed at the other, trying not to stab Grant. He felt one grab his leg and wondered that it did not hurt.

Then it did hurt, terribly, and he realized that he was down and his spear was not in his hand. But his hand found his knife without asking; Colonel Bowie finished off the beast clamped to his ankle.

Everything seemed geared to nightmare slowness. Other figures were thrusting leisurely at shapes that hardly crawled. The thornbush, flaming high, gave him light to see and stab a dopy joe creeping toward him. He got it, rolled over and tried to get up.

He woke with daylight in his eyes, tried to move and discovered that his left leg hurt. He looked down and saw a compress of leaves wrapped with a neat hide bandage. He was in the cave and there were others lying parallel to him. He got to one elbow. "Say, what—"

"Sssh!" Sue Kennedy crawled over and knelt by him. "The baby is asleep."

"Oh…"

"I'm on nurse duty. Want anything?"

"I guess not. Uh, what did they name her?"

"Hope. Hope Roberta Baxter. A pretty name. I'll tell Caroline you are awake." She turned away.

Caroline came in, squatted and looked scornfully at his ankle. "That'll teach you to have a party and not invite *me*.

"I guess so. Carol, what's the situation?"

"Six on the sick list. About twice that many walking wounded. Those not hurt are gathering wood and cutting thorn. We fixed the ax."

"Yes, but… we're not having to fight them off?"

"Didn't Sue tell you? A few buck walking around as if they were dazed. That's all."

"They may start again."

"If they do, we'll be ready."

"Good." He tried to raise up. "Where's Grant? How bad was he hurt?"

She shook her head. "Grant didn't make it, Roddie."

"Huh?"

"Bob took off both legs at the knee and would have taken off one arm, but he died while he was operating." She made a very final gesture. "In the creek."

Rod started to speak, turned his head and buried his face. Caroline put a hand on him. "Don't take it hard, Roddie. Bob shouldn't have tried to save him. Grant is better off."

Rod decided that Carol was right—no frozen limb banks on *this* planet. But it did not make him feel better. "We didn't appreciate him," he muttered.

"Stow it!" Caroline whispered fiercely. "He was a fool."

"Huh? Carol, I'm ashamed of you."

He was surprised to see tears rolling down her cheeks. "You *know* he was a fool, Roddie Walker. Most of us knew… but we loved him anyhow. I would'uv *married* him, but he never asked me." She wiped at tears. "Have you seen the baby?"

"No."

Her face lit up. "I'll fetch her. She's beautiful."

"Sue said she was asleep."

"Well… all right. But what I came up for is this: what do you want us to do?"

"Huh?" He tried to think. Grant was dead. "Bill was his deputy. Is Bill laid up?"

"Didn't Sue tell you?"

"Tell me what?"

"You're the mayor. We elected you this morning. Bill and Roy and I are just trying to hold things together."

Rod felt dizzy. Caroline's face kept drawing back, then swooping in; he wondered if he were going to faint..

"—plenty of wood," she was saying, "and we'll have the kraal built by sundown. We don't need meat; Margery is butchering that big fellow that fell off the bluff and busted his neck. We can't trek out until you and Carmen and the others can walk, so we're trying to get the place back into shape temporarily. Is there anything you want us to do now?"

He considered it. "No. Not now.

"Okay. You're supposed to rest." She backed out, stood up. "I'll look in later." Rod eased his leg and turned over. After a while he quieted and went to sleep.

Sue brought broth in a bowl, held his head while he drank, then fetched Hope Baxter and held her for him to see. Rod said the usual inanities, wondering if all new babies looked that way.

Then he thought for a long time.

Caroline showed up with Roy. "How's it going, Chief?" Roy said.

"Ready to bite a rattlesnake."

"That's a nasty foot, but it ought to heal. We boiled the leaves and Bob used sulfa."

"Feels all right. I don't seem feverish."

"Jimmy always said you were too mean to die," added Caroline.

"Want anything, Roddie? Or to tell us anything?"

"Yes."

"What?"

"Get me out of here. Help me down the path." Roy said hastily, "Hey, you can't do that. You're not in shape."

"Can't I? Either help, or get out of my way. And get everybody together. We're going to have a town meeting."

They looked at each other and walked out on him. He had made it to the squeeze at the top when Baxter showed up. "Now, Rod! Get back and lie down."

"Out of my way."

"Listen, boy, I don't like to get rough with a sick man. But I will if you make me."

"Bob… how bad is my ankle?"

"It's going to be all right… *if* you behave. If you don't—well, have you ever seen gangrene? When it turns black and has that sweetish odor?"

"Quit trying to scare me. Is there any reason not to put a line under my arms and lower me?"

"Well…"

They used two lines and a third to keep his injured leg free, with Baxter supervising. They caught him at the bottom and carried him to the cooking space, laid him down. "Thanks," he grunted. "Everybody here who can get here?"

"I think so, Roddie. Shall I count?"

"Never mind. I understand you folks elected me cap—I mean 'mayor'—this morning?"

"That's right," agreed Kennedy.

"Uh, who else was up? How many votes did I get?"

"Huh? It was unanimous.

Rod sighed. "Thanks. I'm not sure I would have held still for it if I'd been here. I gathered something else. Do I understand that you expect me to take you down to the caves Roy and I found? Caroline said something…"

Roy looked surprised. "We didn't vote it, Rod, but that was the idea. After last night everybody knows we can't stay here."

Rod nodded. "I see. Are you all where I can see you? I've got something to say. I hear you adopted a constitution and things while Roy and I were away. I've never read them, so I don't know whether this is legal or not. But if I'm stuck with the job, I expect to run things. If somebody doesn't like what I do and we're both stubborn enough for a showdown, then you will vote. You back me up, or you turn me down and elect somebody else. Will that work? How about it, Goldie? You were on the law committee, weren't you?"

Howard Goldstein frowned. "You don't express it very well, Rod."

"Probably not. Well?"

"But what you have described is the parliamentary vote-of-confidence. That's the backbone of our constitution. We did it that way to keep it simple and still democratic. It was Grant's notion."

"I'm glad," Rod said soberly. "I'd hate to think that I had torn up Grant's laws after he worked so hard on them. I'll study them, I promise, first chance I get. But about moving to the caves—we'll have a vote of confidence right now."

Goldstein smiled. "I can tell you how it will come out. We're convinced."

Rod slapped the ground. "You don't understand! If you want to move, move… but get somebody else to lead you. Roy can do it. Or Cliff, or Bill. But if you leave it to me, no dirty little beasts, all teeth and no brains, are going to drive us out. We're *men*&#8230; and men don't *have* to be driven out, not by the likes of those. Grant paid for this land—and I say stay here and keep it for him!"

Chapter Fourteen

Civilization

The Honorable Roderick L. Walker, Mayor of Cowpertown, Chief of State of the sovereign planet GO-73901-II (Lima Catalog), Commander-in-Chief of the Armed Forces, Chief Justice, and Defender of Freedoms, was taking his ease in front of the Mayor's Palace. He was also scratching and wondering if he should ask somebody to cut his hair again—he suspected lice only this planet did not have lice.

His Chief of Government, Miss Caroline Beatrice Mshiyeni, squatted in front of him. "Roddie, I've told them and told them and told them… and it does no good. That family makes more filth than everybody else put together. You should have seen it this morning. Garbage in front of their door… flies!"

"I saw it."

"Well, what do I do? If you would let me rough him up a little. But you're too soft."

"I guess I am." Rod looked thoughtfully at a slab of slate erected in the village square. It read:

ULYSSES GRANT COWPER,
First Mayor
—who died for his city

The carving was not good; Rod had done it.

"Grant told me once," he added, "that government was the art of getting along with people you don't like."

"Well, I sure don't like Bruce and Theo!"

"Neither do I. But Grant would have figured out a way to keep them in line without getting rough."

"You figure it out, I can't. Roddie, you should never have let Bruce come back. That was bad enough. But when he married that little… well!"

"They were made for each other," Rod answered. "Nobody else would have married either of them."

"It's no joke. It's almost—*Hope!* Quit teasing Grantie!" She bounced up.

Miss Hope Roberta Baxter, sixteen months, and Master Grant Roderick Throxton, thirteen months, stopped what they were doing, which was, respectively, slapping and crying. Both were naked and very dirty. It was "clean" dirt; each child had been bathed by Caroline an hour earlier, and both were fat and healthy.

Hope turned up a beaming face. "*'Ood* babee!" she asserted.

"I *saw* you." Caroline upended her, gave her a spat that would not squash a fly, then picked up Grant Throxton.

"Give her to me," Rod said.

"You're welcome to her," Caroline said. She sat down with the boy in her lap and rocked him. "Poor baby! Show Auntie Carol where it hurts."

"You shouldn't talk like that. You'll make a sissy of him."

"Look who's talking! Wishy-Washy Walker."

Hope threw her arms around Rod, part way, and cooed, "Woddie!" adding a muddy kiss. He returned it. He considered her deplorably spoiled; nevertheless he contributed more than his share of spoiling.

"Sure," agreed Carol. "Everybody loves Uncle Roddie. He hands out the medals and Aunt Carol does the dirty work."

"Carol, I've been thinking."

"Warm day. Don't strain any delicate parts."

"About Bruce and Theo. I'll talk to them."

"Talk!"

"The only real punishment is one we never use—and I hope we never have to. Kicking people out, I mean. The McGowans do as they please because they don't think we would. But I would love to give them the old heave-ho… and if it comes to it, I'll make an issue of it before the town—either kick them out or I quit."

"They'd back you. Why, I bet he hasn't taken a bath this week!"

"I don't care whether they back me or not. I've ridden out seven confidence votes; someday I'll be lucky and retire. But the problem is to convince Bruce that I am willing to face the issue, for then I won't have to. Nobody is going to chance being turned out in the woods, not when they've got it soft here. But he's got to be convinced."

"Uh, maybe if he thought you were carrying a grudge about that slice in the ribs he gave you?"

"And maybe I am. But I can't let it be personal, Carol; I'm too stinkin' proud."

"Uh… Turn it around. Convince him that the town is chompin' at the bit—which isn't far wrong—and you are trying to restrain them."

"Um, that's closer. Yes, I think Grant would have gone for that. I'll think it over."

"Do that." She stood up. "I'm going to give these children another bath. I declare I don't know where they find so much dirt."

She swung away with a child on each hip, heading for the shower sheds. Rod watched her lazily. She was wearing a leather bandeau and a Maori grass skirt, long leaves scraped in a pattern, curled, and dried. It was a style much favored and Caroline wore it around town, although when she treated herself to a day's hunting she wore a leather breechclout such as the men wore.

The same leaf fibre could be retted and crushed, combed and spun, but the cloth as yet possessed by the colony was not even enough for baby clothes. Bill Kennedy had whittled a loom for Sue and it worked, but neither well nor fast and the width of cloth was under a half meter. Still, Rod mused, it was progress, it was civilization. They had come a long way.

The town was stobor-tight now. An adobe wall too high and sheer for any but the giant lions covered the upstream side and the bank, and any lion silly enough to jump it landed on a bed of stakes too wide now for even their mighty leaps—the awning under which Rod lolled was the hide of one that had made that mistake. The wall was pierced by stobor traps, narrow tunnels just big enough for the vicious little beasts and which gave into deep pits, where they could chew on each other like Kilkenny cats—which they did.

It might have been easier to divert them around the town, but Rod wanted to kill them; he would not be content until their planet was rid of those vermin.

In the meantime the town was safe. Stobor continued to deserve the nickname "dopy joe" except during the dry season and then they did not become dangerous until the annual berserk migration—the last of which had passed without loss of blood; the colony's defenses worked, now that they understood what to defend against. Rod had required mothers and children to sit out the stampede in the cave; the rest sat up two nights and stayed on guard… but no blade was wet.

Rod thought sleepily that the next thing they needed was paper; Grant had been right… even a village was hard to run without writing paper. Besides, they must avoid losing the habit of writing. He wanted to follow up Grant's notion of recording every bit of knowledge the gang possessed. Take logarithms—logarithms might not be used for generations, but when it came time to log a couple of rhythms, then… he went to sleep.

"You busy, Chief?"

Rod looked up at Arthur Nielsen. "Just sleeping a practice I heartily recommend on a warm Sabbath afternoon. What's up, Art? Are Shorty and Doug pushing the bellows alone?"

"No. Confounded plug came out and we lost our fire. The furnace is ruined." Nielsen sat down wearily. He was hot, very red in the face, and looked discouraged. He had a bad burn on a forearm but did not seem to know it. "Rod, what are we doing wrong? Riddle me that."

"Talk to one of the brains. If you didn't know more about it than I do, we'd swap jobs."

"I wasn't really asking. I know two things that are wrong. We can't build a big enough installation and we don't have coal. Rod, we've *got* to have coal; for cast iron or steel we need coal. Charcoal won't do for anything but spongy wrought iron."

"What do you expect to accomplish overnight, Art? Miracles? You are years ahead of what anybody could ask. You've turned out metal, whether it's wrought iron or uranium. Since you made that spit for the barbecue pit, Margery thinks you are a genius."

"Yes, yes, we've made iron—but it ought to be lots better and more of it. This ore is wonderful... the real Lake Superior hematite. Nobody's seen such ore in commercial quantity on Terra in centuries. You ought to be able to breathe on it and make steel. And I could, too, if I had coal. We've got clay, we've got limestone, we've got this lovely ore—but I can't *get* a hot enough fire."

Rod was not fretted; the colony was getting metal as fast as needed. But Waxie was upset. "Want to knock off and search for coal?"

"Uh... no, I don't. I want to rebuild that furnace." Nielsen gave a bitter description of the furnace's origin, habits, and destination.

"Who knows most about geology?"

"Uh, I suppose I do."

"Who knows next most?"

"Why, Doug I guess.

"Let's send him out with a couple of boys to find coal. You can have Mick in his place on the bellows—no, wait a minute. How about Bruce?"

"Bruce? *He* won't work."

"Work him. If you work him so hard he runs away and forgets to come back, we won't miss him. Take him, Art, as a favor to me.

"Well... okay, if you say so.

"Good. You get one bonus out of losing your batch. You won't miss the dance tonight. Art, you shouldn't start a melt so late in the week; you need your day of rest... and so do Shorty and Doug."

"I know. But when it's ready to go I want to fire it off.

Working the way we do is discouraging; before you can make anything you have to make the thing that makes it—and usually you have to make something else to make that. Futile!"

"You don't know what 'futile' means. Ask our 'Department of Agriculture.' Did you take a look at the farm before you came over the wall?"

"Well, we walked through it."

"Better not let Cliff catch you, or he'll scalp you. I might hold you for him."

"Humph! A lot of silly grass! Thousands of hectares around just like it."

"That's right. Some grass and a few rows of weeds. The pity is that Cliff will never live to see it anything else. Nor little Cliff. Nevertheless our great grandchildren will eat white bread, Art. But you yourself will live to build precision machinery—you know it can be done, which, as Bob Baxter says, is two-thirds of the battle. Cliff *can't* live long enough to eat a slice of light, tasty bread. It doesn't stop him."

"You should have been a preacher, Rod." Art stood up and sniffed himself. "I'd better get a bath, or the girls won't dance with me."

"I was just quoting. You've heard it before. Save me some soap."

Caroline hit two bars of *Arkansas Traveler,* Jimmy slapped his drum, and Roy called, "Square 'em up, folks!" He waited, then started in high, nasal tones:

"Honor y'r *par*tners!

"Honor y'r *cor*ners!

"Now *all* jump *up* and *when* y' come *down*—"

Rod was not dancing; the alternate set would be his turn. The colony formed eight squares, too many for a caller, a mouth organ, and a primitive drum all unassisted by amplifying equipment. So half of them babysat and gossiped while the other half danced. The caller and the orchestra were relieved at each intermission to dance the other sets.

Most of them had not known how to squaredance. Agnes Pulvermacher had put it over almost singlehanded, in the face of kidding and resistance—training callers, training dancers, humming tunes to Caroline, cajoling Jimmy to carve and shrink a jungle drum. Now she had nine out of ten dancing.

Rod had not appreciated it at first (he was not familiar with the history of the Mormon pioneers) and had regarded it as a nuisance which interfered with work. Then he saw the colony, which had experienced a bad letdown after the loss in one night of all they had built, an apathy he had not been able to lift—he saw this same colony begin to smile and joke and work hard simply from being exposed to music and dancing.

He decided to encourage it. He had trouble keeping time and could not carry a tune, but the bug caught him, too; he danced not well but with great enthusiasm.

The village eventually limited dances to Sabbath nights, weddings, and holidays—and made them "formal"… which meant that women wore grass skirts. Leather shorts, breechclouts, and slacks (those not long since cut up for rags) were not acceptable. Sue talked about making a real square dance dress as soon as she got far enough ahead in her weaving, and a cowboy shirt for her husband… but the needs of the colony made this a distant dream.

Music stopped, principals changed, Caroline tossed her mouth organ to Shorty, and came over. "Come on, Roddie, let's kick some dust."

"I asked Sue," he said hastily and truthfully. He was careful not to ask the same girl twice, never to pay marked attention to any female; he had promised himself long ago that the day he decided to marry should be the day he resigned and he was not finding it hard to stay married to his job. He liked to dance with Caroline; she was a popular partner—except for a tendency to swing her partner instead of letting him swing her—but he was careful not to spend much social time with her because she was his right hand, his alter ego.

Rod went over and offered his arm to Sue. He did not think about it; the stylized amenities of civilization were returning and the formal politenesses of the dance made them seem natural. He led her out and assisted in making a botch of *Texas Star*.

Later, tired, happy, and convinced that the others in his square had made the mistakes and he had straightened them out, Rod returned Sue to Bill, bowed and thanked him, and went back to the place that was always left for him. Margery and her assistants were passing out little brown somethings on wooden skewers. He accepted one. "Smells good, Marge. What are they?"

"Mock Nile birds. Smoked baby-buck bacon wrapped around hamburger. Salt and native sage, pan broiled. You'd better like it; it took us *hours*."

"Mmmm! I do! How about another?"

"Wait and see. Greedy."

"But I need more. I work hardest. I have to keep up my strength."

"That was *work* I saw you doing this afternoon?" She handed him another.

"I was planning. The old brain was buzzing away.

"I heard the buzzing. Pretty loud, when you lie on your back."

He snagged a third as she turned away, looked up to catch Jacqueline smiling; he winked and grinned.

"Happy, Rod?"

"Yes indeedy. How about you, Jackie?"

"I've never been happier," she said seriously.

Her husband put an arm around her. "See what the love of a good man can do, Rod?" Jimmy said. "When I found this poor child she was beaten, bedraggled, doing your cooking and afraid to admit her name. Now look at her!—fat and sassy."

"I'm not *that* fat!"

"Pleasingly plump."

Rod glanced up at the cave. "Jackie, remember the night I showed up?"

"I'm not likely to forget."

"And the silly notion I had that this was Africa? Tell me—if you had it to do over, would you rather I had been right?"

"I never thought about it. I knew it was not."

"Yes, but 'if'? You would have been home long ago."

Her hand took her husband's. "I would not have met James."

"Oh, yes, you would. You had already met me. You could not have avoided it—my best friend."

"Possibly. But I would not change it. I have no yearning to go 'home,' Rod. *This* is home."

"Me neither," asserted Jimmy. "You. know what? This colony gets a little bigger—and it's getting bigger fast—Goldie and I are going to open a law office. We won't have any competition and can pick our clients. He'll handle the criminal end, I'll specialize in divorce, and we'll collaborate on corporate skulduggery. We'll make *millions*. I'll drive a big limousine drawn by eight spanking buck, smoking a big cigar and sneering at the peasants." He called out, "Right, Goldie?"

"Precisely, colleague. I'm making us a shingle: 'Goldstein & Throxton-Get bailed, not jailed!'"

"Keerect. But make that: 'Throxton & Goldstein.'"

"I'm senior. I've got two more years of law."

"A quibble. Rod, are you going to let this Teller U. character insult an old Patrick Henry man?"

"Probably. Jimmy, I don't see how you are going to work this. I don't think we have a divorce law. Let's ask Caroline."

"A trifle. You perform the marriages, Rod; I'll take care of the divorces."

"Ask Caroline what?" asked Caroline.

"Do we have a divorce law?"

"Huh? We don't even have a getting-married law."

"Unnecessary," explained Goldstein. "Indigenous in the culture. Besides, we ran out of paper.

"Correct, Counselor," agreed Jimmy.

"Why ask?" Caroline demanded. "Nobody is thinking about divorce or I would know before they would."

"We weren't talking about that," Rod explained. "Jackie said that she had no wish to go back to Terra and Jimmy was elaborating. Uselessly, as usual."

Caroline stared. "Why would anybody want to go back?"

"Sure," agreed Jimmy. "This is the place. No income tax. No traffic, no crowds, no commercials, no telephones. Seriously, Rod, every one here was aiming for the Outlands or we wouldn't have been taking a survival test. So what difference does it make? Except that we've got everything sooner." He squeezed his wife's hand. "I was fooling about that big cigar; I'm rich now, boy, rich!"

Agnes and Curt had drawn into the circle, listening. Agnes nodded and said, "For once you aren't joking, Jimmy. The first months we were here I cried myself to sleep every night, wondering if they would ever find us. Now I know they never will—and I don't care! I wouldn't go back if I could; the only thing I miss is lipstick."

Her husband's laugh boomed out. "There you have the truth, Rod. The fleshpots of Egypt… put a cosmetics counter across this creek and every woman here will walk on water."

"That's not fair, Curt! Anyhow, you promised to make lipstick."

"Give me time."

Bob Baxter came up and sat down by Rod. "Missed you at the meeting this morning, Rod."

"Tied up. I'll make it next week."

"Good." Bob, being of a sect which did not require ordination, had made himself chaplain as well as medical officer simply by starting to hold meetings. His undogmatic ways were such that Christian, Jew, Monist, or Moslem felt at ease; his meetings were well attended.

"Bob, would *you* go back?"

"Go where, Caroline?"

"Back to Terra."

"Yes."

Jimmy looked horrified. "Boil me for breakfast! *Why?*"

"Oh, I'd want to come back! But I need to graduate from medical school." He smiled shyly. "I may be the best surgeon in the neighborhood, but that isn't saying much."

"Well…" admitted Jimmy, "I see your point. But you already suit us. Eh, Jackie?"

"Yes, Jimmy."

"It's my only regret," Bob went on. "I've lost ones I should have saved. But it's a hypothetical question. 'Here we rest.'"

The question spread. Jimmy's attitude was overwhelmingly popular, even though Bob's motives were respected. Rod said goodnight; he heard them still batting it around after he had gone to bed; it caused him to discuss it with himself.

He had decided long ago that they would never be in touch with Earth; he had not thought of it for—how long?—over a year. At first it had been mental hygiene, protection of his morale. Later it was logic: a delay in recall of a week might be a power failure, a few weeks could be a technical difficulty—but months on months was cosmic disaster; each day added a cipher to the infinitesimal probability that they would ever be in touch again.

He was now able to ask himself: was this what he wanted?

Jackie was right; this was home. Then he admitted that he *liked* being big frog in a small puddle, he loved his job. He was not meant to be a scientist, nor a scholar, he had never wanted to be a businessman—but what he was doing suited him… and he seemed to do it well enough to get by.

"'Here we rest!'"

He went to sleep in a warm glow.

Cliff wanted help with the experimental crops. Rod did not take it too seriously; Cliff always wanted something; given his head he would have everybody working dawn to dark on his farm. But it was well to find out what he wanted—Rod did not underrate the importance of domesticating plants; that was basic for all colonies and triply so for them. It was simply that he did not know much about it.

Cliff stuck his head into the mayor's hut. "Ready?"

"Sure." Rod got his spear. It was no longer improvised but bore a point patiently sharpened from steel salvaged from Braun's Thunderbolt. Rod had tried wrought iron but could not get it to hold an edge. "Let's pick up a couple of boys and get a few stobor."

"Okay."

Rod looked around. Jimmy was at his potter's wheel, kicking the treadle and shaping clay with his thumb. Jim! Quit that and grab your pike. We're going to have some fun."

Throxton wiped at sweat. "You've talked me into it." They added Kenny and Mick, then Cliff led them upstream. "I want you to look at the animals."

"All right," agreed Rod. "Cliff, I had been meaning to speak to you. If you are going to raise those brutes inside the wall, you'll have to be careful about their droppings. Carol has been muttering."

"Rod, I can't do everything! And you can't put them outside, not if you expect them to live."

"Sure, sure! Well, we'll get you more help, that's the only—Just a second!"

They were about to pass the last hut; Bruce McGowan was stretched in front of it, apparently asleep. Rod did not speak at once; he was fighting down rage. He wrestled with himself, aware that the next moment could change his future, damage the entire colony. But his rational self was struggling in a torrent of anger, bitter and self-righteous. He wanted to do away with this parasite, destroy it. He took a deep breath and tried to keep his mouth from trembling.

"Bruce!" he called softly.

McGowan opened his eyes. "Huh?"

"Isn't Art working his plant today?"

"Could be," Bruce admitted.

"Well?"

"'Well' what? I've had a week and it's not my dish. Get somebody else."

Bruce wore his knife, as did each of them; a colonist was more likely to be caught naked than without his knife. It was the all-purpose tool, for cutting leather, preparing food, eating, whittling, building, basketmaking, and as make-do for a thousand other tools; their wealth came from knives, arrows were now used to hunt—but knives shaped the bows and arrows.

But a knife had not been used by one colonist against another since that disastrous day when Bruce's brother had defied Rod. Over the same issue, Rod recalled; the wheel had turned full circle. But today he would have immediate backing if Bruce reached for his knife.

But he knew that this must not be settled by five against one; he alone must make this dog come to heel, or his days as leader were numbered.

It did not occur to Rod to challenge Bruce to settle it with bare hands. Rod had read many a historical romance in which the hero invited someone to settle it man to man, in a stylized imitation fighting called "boxing." Rod had enjoyed such stories but did not apply them to himself any more than he considered personally the sword play of *The Three Musketeers*; nevertheless, he knew what "boxing" meant—they folded their hands and struck certain restricted blows with fists. Usually no one was hurt.

The fighting that Rod was trained in was not simply strenuous athletics. It did not matter whether they were armed; if he and Bruce fought bare hands or otherwise, someone would be killed or badly hurt. The *only* dangerous weapon was man himself.

Bruce stared sullenly. "Bruce," Rod said, striving to keep his voice steady, "a long time ago I told you that people worked around here or got out. You and your brother didn't believe me so we had to chuck you out. Then you crawled back with a tale about how Jock had been killed and could you please join up? You were a sorry sight. Remember?"

McGowan scowled. "You promised to be a little angel," Rod went on. "People thought I was foolish—and I was. But I thought you might behave."

Bruce pulled a blade of grass, bit it. "Bub, you remind me of Jock. He was always throwing his weight around, too.

"Bruce, get up and get out of town! I don't care where, but if you are smart, you will shag over and tell Art you've made a mistake—then start pumping that bellows. I'll stop by later. If sweat isn't pouring off you when I arrive… then you'll never come back. You'll be banished for life."

McGowan looked uncertain. He glanced past Rod, and Rod wondered what expressions the others wore. But Rod kept his eyes on Bruce. "Get moving. Get to work, or don't come back."

Bruce got a sly look. "You can't order me kicked out. It takes a majority vote."

Jimmy spoke up. "Aw, quit taking his guff, Rod. Kick him out now.

Rod shook his head. "No. Bruce, if that is your answer, I'll call them together and we'll put you in exile before lunch—and I'll bet my best knife that you won't get three votes to let you stay. Want to bet?"

Bruce sat up and looked at the others, sizing his chances. He looked back at Rod. "Runt," he said slowly, you aren't worth a hoot without stooges… or a couple of girls to do your fighting."

Jimmy whispered, "Watch it, Rod!" Rod licked dry lips, knowing that it was too late for reason, too late for talk. He would have to try to take him… he was not sure he could.

"I'll fight you," he said hoarsely. "Right now!" Cliff said urgently, "Don't, Rod. We'll manage him."

"No. Come on, McGowan." Rod added one unforgivable word.

McGowan did not move. "Get rid of that joe sticker."

Rod said, "Hold my spear, Cliff."

Cliff snapped, "Now wait! I'm not going to stand by and watch this. He might get lucky and kill you, Rod."

"Get out of the way, Cliff."

"No." Cliff hesitated, then added, "Bruce, throw your knife away. Go ahead—or so help me I'll poke a joe-sticker in your belly myself. Give me your knife, Rod."

Rod looked at Bruce, then drew Colonel Bowie and handed it to Cliff. Bruce straightened up and flipped his knife at Cliff's feet. Cliff rasped, "I still say not to, Rod. Say the word and we'll take him apart."

"Back off. Give us room.

"Well—no bone breakers. You hear me, Bruce? Make a mistake and you'll never make another."

"'No bone breakers,'" Rod repeated, and knew dismally that the rule would work against him; Bruce had him on height and reach and weight.

"Okay," McGowan agreed. "Just cat clawing. I am going to show this rube that one McGowan is worth two of him."

Cliff sighed. "Back off, everybody. Okay—get going!" Crouched, they sashayed around, not touching. Only the preliminaries could use up much time; the textbook used in most high schools and colleges listed twenty-seven ways to destroy or disable a man hand to hand; none of the methods took as long as three seconds once contact was made. They chopped at each other, feinting with their hands, too wary to close.

Rod was confused by the injunction not to let the fight go to conclusion. Bruce grinned at him. "What's the matter? Scared? I've been waiting for this, you loudmouthed pimple—now you're going to get it!" He rushed him.

Rod gave back, ready to turn Bruce's rush into his undoing. But Bruce did not carry it through; it had been a feint and Rod had reacted too strongly. Bruce laughed. "Scared silly, huh? You had better be."

Rod realized that he *was* scared, more scared than he had ever been. The conviction flooded over him that Bruce intended to kill him… the agreement about bonebreakers meant nothing; this ape meant to finish him.

He backed away, more confused than ever… knowing that he must forget rules if he was to live through it… but knowing, too, that he *had* to abide by the silly restriction even if it meant the end of him. Panic shook him; he wanted to run.

He did not quite do so. From despair itself he got a cold feeling of nothing to lose and decided to finish it. He exposed his groin to a *savate* attack.

He saw Bruce's foot come up in the expected kick; with fierce joy he reached in the proper *shinobi* counter. He showed the merest of hesitation, knowing that a full twist would break Bruce's ankle.

Then he was flying through air; his hands had never touched Bruce. He had time for sick realization that Bruce had seen the gambit, countered with another—when he struck ground and Bruce was on him.

"Can you move your arm, Rod?"

He tried to focus his eyes, and saw Bob Baxter's face floating over him. "I licked him?"

Baxter did not answer. An angry voice answered, "Cripes, no! He almost chewed you to pieces."

Rod stirred and said thickly, "Where is he? I've got to whip him."

Baxter said sharply, "Lie still!" Cliff added, "Don't worry, Rod. We fixed him." Baxter insisted, "Shut up. See if you can move your left arm."

Rod moved the arm, felt pain shoot through it, jerked and felt pain everywhere. "It's not broken," Baxter decided. "Maybe a greenstick break. We'll put it in sling. Can you sit up? I'll help."

"I want to stand." He made it with help, stood swaying. Most of the villagers seemed to be there; they moved jerkily. It made him dizzy and he blinked.

"Take it easy, boy," he heard Jimmy say. "Bruce pretty near ruined you. You were crazy to give him the chance."

"I'm all right," Rod answered and winced. "Where is he?"

"Behind you. Don't worry, we fixed him."

"Yes," agreed Cliff. "We worked him over. Who does he think he is? Trying to shove the Mayor around!" He spat angrily.

Bruce was face down, features hidden in one arm; he was sobbing. "How bad is he hurt?" Rod asked.

"Him?" Jimmy said scornfully. "He's not hurt. I mean, he hurts all right—but he's not hurt. Carol wouldn't let us.

Caroline squatted beside Bruce, guarding him. She got up. "I should have let 'em," she said angrily. "But I knew you would be mad at me if I did." She put hands on hips. "Roddie Walker, when are you going to get sense enough to yell for me when you're in trouble? These four dopes stood around and let it happen."

"Wait a minute, Carol," Cliff protested. "I tried to stop it. We all tried, but—"

"But I wouldn't listen," Rod interrupted. "Never mind, Carol, I flubbed it."

"If you would listen to me—

"Never mind!" Rod went to McGowan, prodded him. "Turn over."

Bruce slowly rolled over. Rod wondered if he himself looked as bad. Bruce's body was dirt and blood and bruises; his face looked as if someone had tried to file the features off. "Stand up.

Bruce started to speak, then got painfully to his feet. Rod said, "I told you to report to Art, Bruce. Get over the wall and get moving."

McGowan looked startled. "Huh?"

"You heard me. I can't waste time playing games. Check in with Art and get to work. Or keep moving and don't come back. Now *move!*"

Bruce stared, then hobbled toward the wall. Rod turned and said, "Get back to work, folks. The fun is over. Cliff, you were going to show me the animals."

"Huh? Look Rod, it'll keep."

"Yes, Rod," Baxter agreed. "I want to put a sling on that arm. Then you should rest."

Rod moved his arm gingerly. "I'll try to get along without it. Come on, Cliff. Just you and me—we'll skip the stobor hunt."

He had trouble concentrating on what Cliff talked about… something about gelding a pair of fawns and getting them used to harness. What use was harness when they had no wagons? His head ached, his arm hurt and his brain felt fuzzy. What would Grant have done?

He had failed… but what should he have said, or not said? Some days it wasn't worth it.

"—so we've got to. You see, Rod?"

"Huh? Sure, Cliff." He made a great effort to recall what Cliff had been saying. "Maybe wooden axles would do. I'll see if Bill thinks he can build a cart."

"But besides a cart, we need—"

Rod stopped him. "Cliff, if you say so, we'll try it. I think I'll take a shower. Uh, we'll look at the field tomorrow.

A shower made him feel better and much cleaner, although the water spilling milk-warm from the flume seemed too hot, then icy cold. He stumbled back to his hut and lay down. When he woke he found Shorty guarding his door to keep him from being disturbed.

It was three days before he felt up to inspecting the farm. Neilsen reported that McGowan was working, although sullenly. Caroline reported that Theo was obeying sanitary regulations and wearing a black eye. Rod was selfconscious about appearing in public, had even considered one restless night the advisability of resigning and letting someone who had not lost face take over the responsibility. But to his surprise his position seemed firmer than ever. A minority from Teller University, which he had thought of wryly as "loyal opposition," now no longer seemed disposed to be critical. Curt Pulvermacher, their unofficial leader, looked Rod up and offered help. "Bruce is a bad apple, Rod. Don't let him get down wind again. Let me know instead."

"Thanks, Curt."

"I mean it. It's hard enough to get anywhere around here if we all pull together. We can't have him riding roughshod over us. But don't stick your chin out. We'll teach him."

Rod slept well that night. Perhaps he had not handled it as Grant would have, but it had worked out. Cowpertown was safe. Oh, there would be more troubles but the colony would sweat through them. Someday there would be a city here and this would be Cowper Square. Upstream would be the Nielsen Steel Works. There might even be a Walker Avenue…

He felt up to looking over the farm the next day. He told Cliff so and gathered the same party, Jimmy, Kent, and Mick. Spears in hand they climbed the stile at the wall and descended the ladder on the far side. Cliff gathered up a handful of dirt, tasted it. "The soil is all right. A little acid, maybe. We won't know until we can run soil chemistry tests. But the structure is good. If you tell that dumb Swede that the next thing he has to make is a plough…

"Waxie isn't dumb. Give him time. Hell make you ploughs and tractors, too."

"I'll settle for a hand plough, drawn by a team of buck. Rod, my notion is this. We weed and it's an invitation to the buck to eat the crops. If we built another wall, all around and just as high—"

"A wall! Any idea how many man-hours that would take, Cliff?"

"That's not the point."

Rod looked around the alluvial flat, several times as large as the land enclosed in the city walls. A thorn fence, possibly, but not a wall, not yet… Cliff's ambitions were too big. "Look, let's comb the field for stobor, then send the others back. You and I can figure out afterwards what can be done."

"All right. But tell them to watch where they put their big feet."

Rod spread them in skirmish line with himself in the center. "Keep dressed up," he warned, "and don't let any get past you. Remember, every one we kill now means six less on S-Day."

They moved forward. Kenny made a kill, Jimmy immediately made two more. The stobor hardly tried to escape, being in the "dopy joe" phase of their cycle.

Rod paused to spear one and looked up to speak to the man on his right. But there was no one there. "Hold it! Where's Mick?"

"Huh? Why, he was right here a second ago."

Rod looked back. Aside from a shimmer over the hot field, there was nothing where Mick should have been. Something must have sneaked up in the grass, pulled him down—"Watch it, everybody! Something's wrong. Close in… and keep your eyes peeled." He turned back, moved diagonally toward where Mick had disappeared.

Suddenly two figures appeared in front of his eyes—Mick and a stranger.

A stranger in coveralls and shoes… The man looked around, called over his shoulder, "Okay, Jake! Put her on automatic and clamp it." He glanced toward Rod but did not seem to see him, walked toward him, and disappeared.

With heart pounding Rod began to run. He turned and found himself facing into an open gate… and down a long, closed corridor.

The man in the coveralls stepped into the frame. "Everybody back off," he ordered. "We're going to match in with the Gap. There may be local disturbance."

Chapter Fifteen

In Achilles' Tent

It had been a half hour since Mick had stumbled through the gate as it had focused, fallen flat in the low gravity of Luna. Rod was trying to bring order out of confusion, trying to piece together his own wits. Most of the villagers were out on the field, or sitting on top of the wall, watching technicians set up apparatus to turn the locus into a permanent gate, with controls and communications on both sides. Rod tried to tell one that they were exposed, that they should not run around unarmed; without looking up the man had said, "Speak to Mr. Johnson."

He found Mr. Johnson, tried again, was interrupted. Will you kids *please* let us work? We're glad to see you—but we've got to get a power fence around this area. No telling what might be in that tall grass."

Oh," Rod answered. "Look, I'll set guards. We know what to expect. I'm in ch—"

"Beat it, will you? You kids mustn't be impatient."

So Rod went back inside his city, hurt and angry. Several strangers came in, poked around as if they owned the place, spoke to the excited villagers, went out again. One stopped to look at Jimmy's drum, rapped it and laughed. Rod wanted to strangle him.

"Rod?"

"Uh?" He whirled around. "Yes, Margery?"

"Do I cook lunch, or don't I? All my girls have left and Mel says its silly because we'll all be gone by lunch time—and I don't know *what* to do."

"Huh? Nobody's leaving… that I know of."

"Well, maybe not but that's the talk."

He was not given time to consider this as one of the ubiquitous strangers came up and said briskly, "Can you tell me where to find a lad named Roderick Welker?"

"Walker," Rod corrected. "I'm Rod Walker. What do you want?"

"My name is Sansom, Clyde B. Sansom—Administrative Officer in the Emigration Control Service. Now, Welker, I understand you are group leader for these students. You can—"

"I am Mayor of Cowpertown," Rod said stonily. "What do you want?"

"Yes, yes, that's what the youngster called you. 'Mayor.'" Sansom smiled briefly and went on. "Now, Walker, we want to keep things orderly. I know you are anxious to get out of your predicament as quickly as possible—but we must do things systematically. We are going to make it easy—just delousing and physical examination, followed by psychological tests and a relocation interview. Then you will all be free to return to your homes—after signing a waiver-of-liability form, but the legal officer will take care of that. If you will have your little band line up alphabetically—uh, here in this open space, I think, then I will—" He fumbled with his briefcase.

"*Who the deuce are you to give orders around here?*"

Sansom looked surprised. "Eh? I told you. If you want to be technical, I embody the authority of the Terran Corporation. I put it as a request—but under field conditions I can compel cooperation, you know."

Rod felt himself turn red. "I don't know anything of the sort! You may be a squad of angels back on Terra but you are in Cowpertown."

Mr. Sansom looked interested but not impressed. "And what, may I ask, is Cowpertown?"

"Huh? *This* is Cowpertown, a Sovereign nation, with its own constitution, its own laws—and its own territory." Rod took a breath. "If the Terran Corporation wants anything, they can send somebody and arrange it. But don't tell us to line up alphabetically!"

"Atta boy, Roddie!"

Rod said, "Stick around, Carol," then added to Sansom, "Understand me?"

"Do I understand," Sansom said slowly, "that you are suggesting that the Corporation should appoint an *ambassador* to your group?"

"Well… that's the general idea."

"Mmmm… an interesting theory, Welker."

"'Walker.' And until you do, you can darn well clear the sightseers out—and get out yourself. We aren't a zoo."

Sansom looked at Rod's ribs, glanced at his dirty, calloused feet and smiled. Rod said, "Show him out, Carol. Put him out, if you have to."

"Yes, *sir!*" She advanced on Sansom, grinning.

"Oh, I'm leaving," Sansom said quickly. "Better a delay than a mistake in protocol. An ingenious theory, young man. Good-by. We shall see each other later. Uh… a word of advice? May I?"

Huh? All right."

"Don't take yourself too seriously. Ready, young lady?"

Rod stayed in his hut. He wanted badly to see what was going on beyond the wall, but he did not want to run into Sansom. So he sat and gnawed his thumb and thought. Apparently some weak sisters were going back—wave a dish of ice cream under their noses and off they would trot, abandoning their land, throwing away all they had built up. Well, *he* wouldn't! This was home, his place, he had earned it; he wasn't going back and maybe wait half a lifetime for a chance to move to some other planet probably not as good.

Let them go! Cowpertown would be better and stronger without them.

Maybe some just wanted to make a visit, show off grandchildren to grandparents, then come back. Probably . . in which case they had better make sure that Sansom or somebody gave them written clearance to come back. Maybe he ought to warn them.

But *he* didn't have anyone to visit. Except Sis—and Sis might be anywhere—unlikely that she was on Terra.

Bob and Carmen, carrying Hope, came in to say good-by. Rod shook hands solemnly. "You're coming back, Bob, when you get your degree… aren't you?"

"Well, we hope so, if possible. If we are permitted to."

"Who's going to stop you? It's your *right*. And when you do, you'll find us here. In the meantime we'll try not to break legs."

Baxter hesitated. "Have you been to the gate lately, Rod?"

"No. Why?"

"Uh, don't plan too far ahead. I believe some have already gone back."

"How many?"

"Quite a number." Bob would not commit himself further. He gave Rod the addresses of his parents and Carmen's, soberly wished him a blessing, and left.

Margery did not come back and the fire pit remained cold. Rod did not care, he was not hungry. Jimmy came in at what should have been shortly after lunch, nodded and sat down. Presently he said, "I've been out at the gate."

"So?"

"Yup. You know, Rod, a lot of people wondered why you weren't there to say good-by."

"They could come *here* to say good-by!"

"Yes, so they could. But the word got around that you didn't approve. Maybe they were embarrassed."

"Me?" Rod laughed without mirth. "I don't care how many city boys run home to mama. It's a free country." He glanced at Jim. "How many are sticking?"

"Uh, I don't know."

"I've been thinking. If the group gets small, we might move back to the cave just to sleep, I mean. Until we get more colonists."

"Maybe."

"Don't be so glum! Even if it got down to just you and me and Jackie and Carol, we'd be no worse off than we once were. And it would just be temporary. There'd be the baby, of course—I almost forgot to mention my god-son.

"There's the baby," Jimmy agreed.

"What are you pulling a long face about? Jim...*you're* not thinking of leaving?"

Jimmy stood up. Jackie said to tell you that we would stick by whatever you thought was best."

Rod thought over what Jimmy had not said. "You mean she wants to go back? Both of you do."

"Now, Rod, we're partners. But I've got the kid to think about. You see that?"

"Yes. I see."

"Well—"

Rod stuck out his hand. "Good luck, Jim. Tell Jackie good-by for me.

"Oh, she's waiting to say good-by herself. With the kid."

"Uh, tell her not to. Somebody once told me that saying good-by was a mistake. Be seeing you."

"Well—so long, Rod. Take care of yourself."

"You, too. If you see Caroline, tell her to come in. Caroline was slow appearing; he guessed that she had been at the gate. He said bluntly, "How many are left?"

"Not many," she admitted.

"*How* many?"

"You and me—and a bunch of gawkers."

"*Nobody* else?"

"I checked them off the list. Roddie, what do we do now?"

"Huh? It doesn't matter. Do *you* want to go back?"

"You're boss, Roddie. You're the Mayor."

"Mayor of what? Carol, do you *want* to go back?"

"Roddie, I never thought about it. I was happy here. But—"

"But what?"

"The town is gone, the kids are gone—and I've got only a year if I'm ever going to be a cadet Amazon." She blurted out the last, then added, "But I'll stick if you do."

"No."

"I will so!"

"No. But I want you to do something when you go back."

"What?"

"Get in touch with my sister Helen. Find out where she is stationed. Assault Captain Helen Walker—got it? Tell her I'm okay... and tell her I said to help you get into the Corps."

"Uh... Roddie, I don't *want* to go!"

"Beat it. They might relax the gate and leave you behind."

"You come, too."

"No. I've got things to do. But you hurry. Don't say good-by. Just go."

"You're mad at me, Roddie?"

"Of course not. But go, *please*, or you'll have me bawling, too."

She gave a choked cry, grabbed his head and smacked his cheek, then galloped away, her sturdy legs pounding. Rod went into his shack and lay face down. After a while he got up and began to tidy Cowpertown. It was littered, dirtier than it had been since the morning of Grant's death.

It was late afternoon before anyone else came into the village. Rod heard and saw them long before they saw him—two men and a woman. The men were dressed in city garb; she was wearing shorts, shirt, and smart sandals. Rod stepped out and said, "What do you want?" He was carrying his spear.

The woman squealed, then looked and added, "Wonderful!"

One man was carrying a pack and tripod which Rod recognized as multi-recorder of the all-purpose sight-smell-sound-touch sort used by news services and expeditions. He said nothing, set his tripod down, plugged in cables and started fiddling with dials. The other man, smaller, ginger haired, and with a terrier mustache, said, "You're Walker? The one the others call 'the Mayor'?"

"Yes."

"Kosmic hasn't been in here?"

"Cosmic what?"

"Kosmic Keynotes, of course. Or anybody? LIFETIME-SPACE? Galaxy Features?"

"I don't know what you mean. There hasn't been anybody here since morning."

The stranger twitched his mustache and sighed. "That's all I want to know. Go into your trance, Ellie. Start your box, Mac."

"Wait a minute," Rod demanded. "Who are you and what do you want?"

"Eh? I'm Evans of Empire… Empire Enterprises."

"Pulitzer Prize," the other man said and went on working;

"With Mac's help," Evans added quickly. "The lady is Ellie Ellens herself."

Rod looked puzzled. Evans said, "You don't *know?* Son, where have you—never mind. She's the highest paid emotional writer in the system. She'll interpret you so that every woman reader from the *Outlands Overseer* to the *London Times* will cry over you and want to comfort you. She's a *great* artist."

Miss Ellens did not seem to hear the tribute. She wandered around with a blank face, stopping occasionally to look or touch.

She turned and said to Rod, "Is this where you held your primitive dances?"

"What? We held square dances here, once a week."

"'Square dances'... Well, we can change that." She went back into her private world.

"The point is, brother," Evans went on, "we don't want just an interview. Plenty of that as they came through. That's how we found out you were here—and dropped everything to see you. I'm not going to dicker; name your own price—but it's got to be exclusive, news, features, commercial rights, everything. Uh..." Evans looked around. "Advisory service, too, when the actors arrive.

"Actors?!"

"Of course. If the Control Service had the sense to sneeze, they would have held you all here until a record was shot. But we can do it better with actors. I want you at my elbow every minute—we'll have somebody play your part. Besides that—"

"Wait a minute!" Rod butted in. "Either I'm crazy or you are. In the first place I don't want your money.

"Huh? You signed with somebody? That guard let another outfit in ahead of us?"

"What guard? I haven't seen anybody."

Evans looked relieved. "We'll work it out. The guard they've got to keep anybody from crossing your wall—I thought he might have both hands out. But don't say you don't need money; that's immoral."

"Well, I don't. We don't use money here."

"Sure, sure... but you've got a family, haven't you? Families always need money. Look, let's not fuss. We'll treat you right and you can let it pile up in the bank. I just want you to get signed up."

"I don't see why I should."

"Binder," said Mac.

"Mmm... yes, Mac. See here, brother, think it over. Just let us have a binder that you won't sign with anybody else. You can still stick us for anything your conscience will let you. Just a binder, with a thousand plutons on the side."

"I'm not going to sign with anybody else."

"Got that, Mac?"

"Canned."

Evans turned to Rod. "You don't object to answering questions in the meantime, do you? And maybe a few pictures?"

"Uh, I don't care." Rod was finding them puzzling and a little annoying, but they were company and he was bitterly lonely.

"Fine!" Evans drew him out with speed and great skill. Rod found himself telling more than he realized he knew. At one point Evans asked about dangerous animals. "I understand they are pretty rough here. Much trouble?"

"Why, no," Rod answered with sincerity. "We never had real trouble with animals. What trouble we had was with people… and not much of that."

"You figure this will be a premium colony?"

"Of course. The others were fools to leave. This place is like Terra, only safer and richer and plenty of land. In a few years—say!"

"Say what?"

"How did it happen that they left us here? We were only supposed to be here ten days."

"Didn't they tell you?"

"Well… maybe the others were told. I never heard."

"It was the supernova, of course. Delta, uh—"

"Delta Gamma one thirteen," supplied Mac.

"That's it. Spacetime distortion, but I'm no mathematician."

"Fluxion," said Mac.

"Whatever that is. They've been fishing for you ever since. As I understand it, the wave front messed up their figures for this whole region. Incidentally, brother, when you go back—"

"I'm not going back."

"Well, even on a visit. Don't sign a waiver. The Board is trying to call it an 'Act of God' and duck responsibility. So let me put a bug in your ear: don't sign away your rights. A friendly hint, huh?"

"Thanks. I won't—well, thanks anyhow."

"Now how about action pix for the lead stories?"

"Well… okay."

"Spear," said Mac.

"Yeah, I believe you had some sort of spear. Mind holding it?"

Rod got it as the great Ellie joined them. "Wonderful!" she breathed. "I can feel it. It shows how thin the line is between man and beast. A hundred cultured boys and girls slipping back to illiteracy, back to the stone age, the veneer sloughing away… reverting to savagery. Glorious!"

"Look here!" Rod said angrily. "Cowpertown wasn't that way at all! We had laws, we had a constitution, we kept clean. We—" He stopped; Miss Ellens wasn't listening.

"Savage ceremonies," she said dreamily. "A village witch doctor pitting ignorance and superstition against nature. Primitive fertility rites—" She stopped and said to Mac in a businesslike voice, "We'll shoot the dances three times. Cover 'em a little for 'A' list; cover 'em up a lot for the family list—and peel them down for the 'B' list. Got it?"

"Got it," agreed Mac.

"I'll do three commentaries she added. "It will be worth the trouble." She reverted to her trance.

"Wait a minute!" Rod protested. "If she means what I think she means, there won't be any pictures, with or without actors."

"Take it easy," Evans advised. "I said you would be technical supervisor, didn't I? Or would you rather we did it without you? Ellie is all right, brother. What you don't know—and *she* does—is that you have to shade the truth to get at the real truth, the underlying truth. You'll see.

"But—"

Mac stepped up to him. "Hold still."

Rod did so, as Mac raised his hand. Rod felt the cool touch of an air brush.

"Hey! What are you doing?"

"Make up." Mac returned to his gear.

"Just a little war paint," Evans explained. "The pic needs color. It will wash off."

Rod opened his mouth and eyes in utter indignation; without knowing it he raised his spear. "Get it, Mac!" Evans ordered.

"Got it," Mac answered calmly.

Rod fought to bring his anger down to where he could talk. "Take that tape out," he said softly. "Throw it on the ground. Then get out."

"Slow down," Evans advised. "You'll like that pic. We'll send you one.

"Take it out. Or I'll bust the box and anybody who gets in my way!" He aimed his spear at the multiple lens.

Mac slipped in front, protected it with his body. Evans called out, "Better look at *this*."

Evans had him covered with a small but businesslike gun. "We go a lot of funny places, brother, but we go prepared. You damage that recorder, or hurt one of us, and you'll be sued from here to breakfast. It's a serious matter to interfere with a news service, brother. The public has rights, you know." He raised his voice. "Ellie! We're leaving."

"Not yet," she answered dreamily. "I must steep myself in—"

"Right now! It's an 'eight-six' with the Reuben Steuben!"

"Okay!" she snapped in her other voice.

Rod let them go. Once they were over the wall he went back to the city hall, sat down, held his knees and shook.

Later he climbed the stile and looked around. A guard was on duty below him; the guard looked up but said nothing. The gate was relaxed to a mere control hole but a loading platform had been set up and a power fence surrounded it and joined the wall. Someone was working at a control board set up on a flatbed truck; Rod decided that they must be getting ready for major immigration. He went back and prepared a solitary meal, the poorest he had eaten in more than a year. Then he went to bed and listened to the jungle "Grand Opera" until he went to sleep.

"Anybody home?"

Rod came awake instantly, realized that it was morning—and that not all nightmares were dreams. "Who's there?"

"Friend of yours." B. P. Matson stuck his head in the door. "Put that whittler away. I'm harmless."

Rod bounced up. "Deacon! I mean 'Doctor.'"

"'Deacon,'" Matson corrected. "I've got a visitor for you." He stepped aside and Rod saw his sister.

Some moments later Matson said mildly, "If you two can unwind and blow your noses, we might get this on a coherent basis."

Rod backed off and looked at his sister. "My, you look *wonderful*, Helen." She was in mufti, dressed in a gay tabard and briefs. "You've lost weight."

"Not much. Better distributed, maybe. You've gained, Rod. My baby brother is a man."

"How did you—" Rod stopped, struck by suspicion. "You didn't come here to talk me into going back? If you did, you can save your breath."

Matson answered hastily. "No, no, no! Farthest thought from our minds. But we heard about your decision and we wanted to see you—so I did a little politicking and got us a pass." He added, "Nominally I'm a temporary field agent for the service.

"Oh. Well, I'm certainly glad to see you… as long as that is understood."

"Sure, sure!" Matson took out a pipe, stoked and fired it. "I admire your choice, Rod. First time I've been on Tangaroa."

"On what?"

"Huh? Oh. Tangaroa. Polynesian goddess, I believe. Did you folks give it another name?"

Rod considered it. "To tell the truth, we never got around to it. It… well, it just *was*."

Matson nodded. "Takes two of anything before you need names. But it's lovely, Rod. I can see you made a lot of progress.

"We would have done all right," Rod said bitterly, "if they hadn't jerked the rug out." He shrugged. "Like to look around?"

"I surely would."

"All right. Come on, Sis. Wait a minute—I haven't had breakfast; how about you?"

"Well, when we left the Gap is was pushing lunch time. I could do with a bite. Helen?"

"Yes, indeed."

Rod scrounged in Margery's supplies. The haunch on which he had supped was not at its best. He passed it to Matson. "Too high?"

Matson sniffed it. "Pretty gamy. I can eat it if you can.

"We should have hunted yesterday, but… things happened." He frowned. "Sit tight. I'll get cured meat." He ran up to the cave, found a smoked side and some salted strips. When he got back Matson had a fire going. There was nothing else to serve; no fruit had been gathered the day before. Rod was uneasily aware that their breakfasts must have been very different.

But he got over it in showing off how much they had done—potter's wheel, Sue's loom with a piece half finished, the flume with the village fountain and the showers that ran continuously, iron artifacts that Art and Doug had hammered out. "I'd like to take you up to Art's iron works but there is no telling what we might run into."

"Come now, Rod, I'm not a city boy. Nor is your sister helpless."

Rod shook his head. "I know this country; you don't. I can go up there at a trot. But the only way for you would be a slow sneak, because I can't cover you both."

Matson nodded. "You're right. It seems odd to have one of my students solicitous over my health. But you are right. We don't know this set up.

Rod showed them the stobor traps and described the annual berserk migration. "Stobor pour through those holes and fall in the pits. The other animals swarm past, as solid as city traffic for hours."

"Catastrophic adjustment," Matson remarked.

"Huh? Oh, yes, we figured that out. Cyclic catastrophic balance, just like human beings. If we had facilities, we could ship thousands of carcasses back to Earth every dry season. He considered it. "Maybe we will, now.

"Probably."

"But up to now it has been just a troublesome nuisance. These stobor especially—I'll show you one out in the field when—say!" Rod looked thoughtful. "These *are* stobor, aren't they? Little carnivores heavy in front, about the size of a tom cat and eight times as nasty?"

"Why ask me?"

"Well, you warned us against stobor. All the classes were warned."

"I suppose these must be stobor," Matson admitted, "but I did not know what they looked like."

"Huh?"

"Rod, every planet has its 'stobor'… all different. Sometimes more than one sort." He stopped to tap his pipe. "You remember me telling the class that every planet has unique dangers, different from every other planet in the Galaxy?"

"Yes…"

"Sure, and it meant nothing, a mere intellectual concept. But you have to be afraid of the thing behind the concept, if you are to stay alive. So we personify it… but we don't tell you what it is. We do it differently each year. It is to warn you that the unknown and deadly can lurk anywhere… and to plant it deep in your guts instead of in your head."

"Well, I'll be a—Then there *weren't* any stobor! There never were!"

"Sure there were. You built these traps for them, didn't you?"

When they returned, Matson sat on the ground and said, "We can't stay long, you know.

"I realize that. Wait a moment." Rod went into his hut, dug out Lady Macbeth, rejoined them. "Here's your knife, Sis. It saved my skin more than once. Thanks."

She took the knife and caressed it, then cradled it and looked past Rod's head. It flashed by him, went tuck*spong!* in a corner post. She recovered it, came back and handed it to Rod. "Keep it, dear, wear it always in safety and health."

"Gee, Sis, I shouldn't. I've had it too long now."

"Please. I'd like to know that Lady Macbeth is watching over you, wherever you are. And I don't need a knife much now."

"Huh? Why not?"

"Because I married her," Matson answered.

Rod was caught speechless. His sister looked at him and said, "What's the matter, Buddy? Don't you approve?"

"Huh? Oh, sure! It's…" He dug into his memory, fell back on quoted ritual: "'May the Principle make you one. May your union be fruitful.'"

"Then come here and kiss me."

Rod did so, remembered to shake hands with the Deacon. It was all right, he guessed, but—well, how old were they? Sis must be thirtyish and the Deacon… why the Deacon was *old*—probably past forty. It did not seem quite decent.

But he did his best to make them feel that he approved. After he thought it over he decided that if two people, with their lives behind them, wanted company in their old age, why, it was probably a good thing.

"So you see," Matson went on, "I had a double reason to look you up. In the first place, though I am no longer teaching, it is vexing to mislay an entire class. In the second place, when one of them is your brother—in-law it is downright embarrassing."

"You've quit teaching?"

"Yes. The Board and I don't see eye to eye on policy. Secondly, I'm leading a party out… and this time your sister and I are going to settle down and prove a farm." Matson looked at him. "Wouldn't be interested, would you? I need a salted lieutenant."

"Huh? Thanks, but as I told you, this is my place. Uh, where are you going?"

"Territa, out toward the Hyades. Nice place—they are charging a stiff premium."

Rod shrugged. "Then I couldn't afford it."

"As my lieutenant, you'd be exempt. But I wasn't twisting your arm; I just thought you ought to have a chance to turn it down. I have to get along with your sister, you know."

Rod glanced at Helen. "Sorry, Sis."

"It's all right, Buddy. We're not trying to live your life."

"Mmm… no. Matson puffed hard; then went on. "However, as your putative brother and former teacher I feel obligated to mention a couple of things. I'm not trying to sell you anything, but I'll appreciate it if you'll listen. Okay?"

"Well… go ahead."

"This is a good spot. but you might go back to school, you know. Acquire recognized professional status. If you refuse recall, here you stay… forever. You won't see the rest of the Outlands. They won't give you free passage back later. But a professional gets around, he sees the world. Your sister and I have been on some fifty planets. School does not look attractive now—you're a man and it will be hard to wear boy's shoes. But—" Matson swept an arm, encompassed all of Cowpertown, "—this counts. You can skip courses, get field credit. I have some drag with the Chancellor of Central Tech. Hmmm?"

Rod sat with stony face, then shook his head. "Okay," said Matson briskly. "No harm done."

"Wait. Let me tell you." Rod tried to think how to explain how he felt… "Nothing, I guess," he said gruffly.

Matson smoked in silence. "You were leader here," he said at last.

"Mayor," Rod corrected. "Mayor of Cowpertown. I *was* the Mayor, I mean."

"You *are* the Mayor. Population one, but you are still boss. And even those bureaucrats in the control service wouldn't dispute that you've proved the land. Technically you are an autonomous colony—I hear you told Sansom that." Matson grinned. "You're alone, however. You can't live alone, Rod… not and stay human."

"Well, yes—but aren't they going to settle this planet?"

"Sure. Probably fifty thousand this year, four times that many in two years. But, Rod, you would be part of the mob. They'll bring their own leaders."

"*I* don't have to be boss! I just—well, I don't want to give up Cowpertown."

"Rod, Cowpertown is safe in history, along with Plymouth Rock, Botany Bay, and Dakin's Colony. The citizens of Tangaroa will undoubtedly preserve it as a historical shrine. Whether you stay is another matter. Nor am I trying to persuade you. I was simply pointing out alternatives." He stood up. "About time we started, Helen."

"Yes, dear." She accepted his hand and stood up.

"Wait a minute!" insisted Rod. "Deacon… Sis! I know I sound like a fool. I know this is gone… the town, and the kids, and everything. But I *can't* go back." He added, "It's not that I don't want to."

Matson nodded. "I understand you."

"I don't see how. *I* don't."

"Maybe I've been there. Rod, everyone of us is beset by two things: a need to go home, and the impossibility of doing it. You are at the age when these hurt worst. You've been thrown into a situation that makes the crisis doubly acute. You—don't interrupt me—you've been a man here, the old man of the tribe, the bull of the herd. That is why the others could go back but you can't. Wait, please! I suggested that you might find it well to go back and be an adolescent for a while… and it seems unbearable. I'm not surprised. It would be easier to be a small child. Children are another race and adults deal with them as such. But adolescents are neither adult nor child. They have the impossible, unsolvable, tragic problems of all fringe cultures. They don't belong, they are second-class citizens, economically and socially insecure. It is a difficult period and I don't blame you for not wanting to return to it. I simply think it might pay. But you have been king of a whole world; I imagine that term papers and being told to wipe your feet and such are out of the question. So good luck. Coming, dear?"

"Deacon," his wife said, "Aren't you going to *tell* him?"

"It has no bearing. It would be an unfair way to influence his judgment."

"You *men!* I'm glad I'm not male!"

"So am I," Matson agreed pleasantly.

"I didn't mean that. Men behave as if logic were stepping on crack in a sidewalk. I'm going to tell him."

"On your head be it."

"Tell me *what?*" demanded Rod.

"She means," said Matson, "that your parents are back."

"*What?*"

"Yes, Buddy. They left stasis a week ago and Daddy came out of the hospital today. He's well. But we haven't told him all about you—we haven't known *what* to say."

The facts were simple, although Rod found them hard to soak up. Medical techniques had developed in two years, not a pessimistic twenty; it had been possible to relax the stasis, operate, and restore

Mr. Walker to the world. Helen had known for months that such outcome was likely, but their father's physician had not approved until he was sure. It had been mere coincidence that Tangaroa had been located at almost the same time. To Rod one event was as startling as the other; his parents had been dead to him for a long time.

"My dear," Matson said sternly, "now that you have thrown him into a whingding, shall we go?"

"Yes. But I had to tell him." Helen kissed Rod quickly, turned to her husband. They started to walk away.

Rod watched them, his face contorted in an agony of indecision.

Suddenly he called out, "Wait! I'm coming with you."

"All right," Matson answered. He turned his good eye toward his wife and drooped the lid in a look of satisfaction that was not quite a wink. "If you are sure that is what you want to do, I'll help you get your gear together."

"Oh, I haven't any baggage. Let's go."

Rod stopped only long enough to free the penned animals.

Chapter Sixteen

The Endless Road

Matson chaperoned him through Emigrants' Gap, saved from possible injury a functionary who wanted to give Rod psychological tests, and saw to it that he signed no waivers. He had him bathed, shaved, and barbered, then fetched him clothes, before he let him be exposed to the Terran world. Matson accompanied them only to Kaibab Gate. "I'm supposed to have a lodge dinner, or something, so that you four can be alone as a family. About nine, dear. See you, Rod." He kissed his wife and left.

"Sis? Dad doesn't know I'm coming?"

Helen hesitated. "He knows. I screened him while Deacon was primping you." She added, "Remember, Rod, Dad has been ill... and the time has been only a couple of weeks to him."

"Oh, that's so, isn't it?" Used all his life to Ramsbotham anomalies, Rod nevertheless found those concerned with time confusing—planet-hopping via the gates did not seem odd. Besides, he was extremely edgy without knowing why, the truth being that he was having an attack of fear of crowds. The Matsons had anticipated it but had not warned him lest they make him worse.

The walk through tall trees just before reaching home calmed him. The necessity for checking all cover for dangerous animals and keeping a tree near him always in mind gave his subconscious something familiar to chew on. He arrived home almost cheerful without being aware either that he had been frightened by crowds or soothed by nonexistent dangers of an urban forest.

His father looked browned and healthy—but shorter and smaller. He embraced his son and his mother kissed him and wept. "It's good to have you home, son. I understand you had quite a trip."

"It's good to be home, Dad."

"I think these tests are much too strenuous, I really do."

Rod started to explain that it really had not been a test, that it had not been strenuous, and that Cowpertown—Tangaroa, rather—had been a soft touch. But he got mixed up and was disturbed by the presence of "Aunt" Nora Peascoat—no relation but a childhood friend of his mother. Besides, his father was not listening.

But Mrs. Peascoat was listening, and looking—peering with little eyes through folds of flesh. "Why, Roderick Walker, I *knew* that couldn't have been a picture of you."

"Eh?" asked his father. "What picture?"

"Why, that wild-man picture that had Roddie's name on it. You must have seen it; it was on facsimile and Empire Hour both. I knew it wasn't him. I said to Joseph, 'Joseph,' I said, 'that's not a picture of Rod Walker—its a fake.'"

"I must have missed it. As you know, I—"

"I'll send it to you; I clipped it. I knew it was a fake. It's a horrible thing, a great naked savage with pointed teeth and a fiendish grin and a long spear and war paint all over its ugly face. I said to Joseph—"

"As you know, I returned from hospital just this morning, Nora. Rod, there was no picture of you on the news services, surely?"

"Uh, yes and no. Maybe."

"I don't follow you. Why should there be a picture of you?"

"There wasn't any reason. This bloke just took it."

"Then there *was* a picture?"

"Yes." Rod saw that "Aunt" Nora was eyeing him avidly: "But it was a fake—sort of."

"I still don't follow you.

"Please, Pater," Helen intervened. "Rod had a tiring trip. This can wait."

"Oh, surely. I don't see how a picture can be 'a sort of a fake.'"

"Well, Dad, this man painted my face when I wasn't looking. I—" Rod stopped, realizing that it sounded ridiculous.

"Then it *was* your picture?"

"Aunt" Nora insisted.

"I'm not going to say any more.

Mr. Walker blinked. "Perhaps that is best."

"Aunt" Nora looked ruffled. "Well, I suppose *anything* can happen way off in those odd places. From the teaser on Empire Hour I understand some very strange things did happen… not all of them *nice*."

She looked as if daring Rod to deny it. Rod said nothing. She went on, "I don't know what you were thinking of, letting a boy do such things. My father always said that if the Almighty had intended us to use those gate things instead of rocket ships He would have provided His own holes in the sky."

Helen said sharply, "Mrs. Peascoat, in what way is a rocket ship more natural than a gate?"

"Why, Helen Walker! I've been 'Aunt Nora' all your life. 'Mrs. Peascoat' indeed!"

Helen shrugged. "And *my* name is Matson, not Walker—as you know."

Mrs. Walker, distressed and quite innocent, broke in to ask Mrs. Peascoat to stay for dinner. Mr. Walker added, "Yes, Nora, join us Under the Lamp."

Rod counted to ten. But Mrs. Peascoat said she was *sure* they wanted to be *alone*, they had so *much* to talk about… and his father did not insist.

Rod quieted during ritual, although he stumbled in responses and once left an awkward silence. Dinner was wonderfully good, but he was astonished by the small portions; Terra must be under severe rationing. But everyone seemed happy and so he was.

"I'm sorry about this mix-up," his father told him. "I suppose it means that you will have to repeat a semester at Patrick Henry."

"On the contrary, Pater," Helen answered, "Deacon is sure that Rod can enter Central Tech with advanced standing."

"Really? They were more strict in my day."

"All of that group will get special credit. What they learned cannot be learned in classrooms."

Seeing that his father was inclined to argue Rod changed the subject. "Sis, that reminds me. I gave one of the girls your name, thinking you were still in the Corps—she wants to be appointed cadet, you see. You can still help her, can't you?"

"I can advise her and perhaps coach her for the exams. Is this important to you, Buddy?"

"Well, yes. And she is number-one officer material. She's a big girl, even bigger than you are—and she looks a bit like you. She is smart like you, too, around genius, and always good-natured and willing—but strong and fast and incredibly violent when you need it… sudden death in all directions."

"Roderick." His father glanced at the lamp.

"Uh, sorry, Dad. I was just describing her."

"Very well. Son… when did you start picking up your meat with your fingers?"

Rod dropped the tidbit and blushed. "Excuse me. We didn't have forks."

Helen chuckled. "Never mind, Rod. Pater, it's perfectly natural. Whenever we paid off any of our girls we always put them through reorientation to prepare them for the perils of civil life. And fingers were made before forks."

"Mmm . . no doubt. Speaking of reorientation, there is something we must do, daughter, before this family will be organized again."

"So?"

"Yes. I mean the transfer of guardianship. Now that I am well, by a miracle, I must reassume my responsibilities."

Rod's mind slipped several cogs before it penetrated that Dad was talking about *him*. Guardian? Oh… Sis was his guardian, wasn't she? But it didn't mean anything.

Helen hesitated. "I suppose so, Pater," she said, her eyes on Rod, "if

Buddy wants to."

"Eh? That is not a factor, daughter. Your husband won't want the responsibility of supervising a young boy—and it is my obligation… and privilege."

Helen looked annoyed. Rod said, "I can't see that it matters, Dad. I'll be away at college—and after all I am nearly old enough to vote."

His mother looked startled. "Why, Roddie dear!"

"Yes," agreed his father. "I'm afraid I can't regard a gap of three years as negligible."

"What do you mean, Dad? I'll be of age in January."

Mrs. Walker clasped a hand to her mouth. "Jerome we've forgotten the time lag again. Oh, my baby boy!"

Mr. Walker looked astonished, muttered something about "—very difficult" and gave attention to his plate. Presently he looked up. "You'll pardon me, Rod. Nevertheless, until you are of age I must do what I can; I hardly think I want you to live away from home while at college."

"Sir? Why not?"

"Well—I feel that we have drifted apart, and not all for the best. Take this girl you spoke of in such surprising terms. Am I correct in implying that she was, eh a close chum?"

Rod felt himself getting warm. "She was my city manager," he said flatly.

"Your *what?*"

"My executive officer. She was captain of the guard, chief of police, anything you want to call her. She did everything. She hunted, too, but that was just because she liked to. Carol is, uh—well, Carol is *swell.*"

"Roderick, are you *involved* with this girl?"

"Me? Gosh, no! She was more like a big sister. Oh, Carol was sweet on half a dozen fellows, one time or another, but it never lasted."

"I am very glad to hear that you are not seriously interested in her. She does not sound like desirable companionship for a young boy."

"Dad—you don't know what you are saying!"

"Perhaps. I intend to find out. But what is this other matter? 'City Manager!' What were *you?*"

"I," Rod said proudly, "was Mayor of Cowpertown."

His father looked at him, then shook his head. "We'll speak of this later. Possibly you need, eh—medical help." He looked at Helen. "We'll attend to the change in guardianship tomorrow. I can see that there is much I must take care of."

Helen met his eyes. "Not unless Buddy consents."

"Daughter!"

"The transfer was irrevocable. He will have to agree or I won't do it!"

Mr. Walker looked shocked, Mrs. Walker looked stricken. Rod got up and left the room… the first time anyone had ever done so while the Lamp of Peace was burning. He heard his father call after him but he did not turn back.

He found Matson in his room, smoking and reading. "I grabbed a bite and let myself in quietly," Matson explained. He inspected Rod's face. "I told you," he said slowly, "that it would be rough. Well, sweat it out, son, sweat it out."

"I can't *stand* it!"

"Yes, you can.

In Emigrants' Gap the sturdy cross-country wagons were drawn up in echelon, as they had been so often before and would be so many times again. The gate was not ready; drivers gathered at the booth under Liberty's skirts, drinking coffee and joking through the nervous wait. Their professional captain was with them, a lean, homely young man with deep lines in his face, from sun and laughing and perhaps some from worry. But he did not seem to be worrying now; he was grinning and drinking coffee and sharing a doughnut with a boy child. He was dressed in fringed buckskin, in imitation of a very old style; he wore a Bill Cody beard and rather long hair. His mount was a little pinto, standing patiently by with reins hanging. There was a boot scabbard holding a hunting rifle on the nigh side of the saddle, but the captain carried no guns on his person; instead he wore two knives, one on each side.

A siren sounded and a speaker above the Salvation Army booth uttered: "Captain Walker, ready with gate four."

Rod waved at the control booth and shouted, "Call off!" then turned back to Jim and Jacqueline. "Tell Carol I'm sorry she couldn't get leave. I'll be seeing you."

"Might be sooner than you think," asserted Jim. "My firm is going to bid this contract."

"Your firm? Where do you get that noise? Have they made him a partner, Jackie?"

"No," she answered serenely, "but I'm sure they will as soon as he is admitted to the Outlands bar. Kiss Uncle Rod good-by, Grant."

"No," the youngster answered firmly.

"Just like his father," Jimmy said proudly. "Kisses women only."

The count was running back down; Rod heard it and swung into saddle. "Take it easy, kids." The count passed him, finished with a shouted, "*ONE!*"

"Reins up! Reeeiins *UP!*" He waited with arm raised and glanced through the fully-dilated gate past rolling prairie at snow-touched peaks beyond. His nostrils widened.

The control light turned green. He brought his arm down hard and shouted, "Roll 'em! *Ho!*" as he squeezed and released the little horse with his knees. The pinto sprang forward, cut in front of the lead wagon, and Captain Walker headed out on his long road.

Double Star

Chapter One

If a man walks in dressed like a hick and acting as if he owned the place, he's a spaceman.

It is a logical necessity. His profession makes him feel like boss of all creation; when he sets foot dirtside he is slumming among the peasants. As for his sartorial inelegance, a man who is in uniform nine tenths of the time and is more used to deep space than to civilization can hardly be expected to know how to dress properly. He is a sucker for the alleged tailors who swarm around every spaceport peddling "ground outfits."

I could see that this big-boned fellow had been dressed by Omar the Tentmaker—padded shoulders that were too big to start with, shorts cut so that they crawled up his hairy thighs as he sat down, a ruffled chemise that might have looked well on a cow.

But I kept my opinion to myself and bought him a drink with my last half-Imperial, considering it an investment, spacemen being the way they are about money. "Hot jets!" I said as we touched glasses. He gave me a quick glance.

That was my initial mistake in dealing with Dak Broadbent. Instead of answering, "Clear space!" or, "Safe grounding!" as he should have, he looked me over and said softly, "A nice sentiment, but to the wrong man. I've never been out."

That was another good place to keep my mouth shut Spacemen did not often come to the bar of Casa Mariana; it was not their sort of hotel and it's miles from the port. When one shows up in ground clothes, seeks a dark corner of the bar, and objects to being called a spaceman, that's *his* business. I had picked that spot myself so that I could see without being seen—I owed a little money here and there at the time, nothing important but embarrassing. I should have assumed that he had his reasons, too, and respected them.

But my vocal cords lived their own life, wild and free. "Don't give me that, shipmate," I replied. "If you're a ground hog, I'm Mayor of Tycho City. I'll wager you've done more drinking on Mars," I added, noticing the cautious way he lifted his glass, a dead giveaway of low-gravity habits, "than you've ever done on Earth."

"Keep your voice down!" he cut in without moving his lips. "What makes you sure that I am a *voyageur*? You don't know me."

"Sorry," I said. "You can be anything you like. But I've got eyes. You gave yourself away the minute you walked in."

He said something under his breath. "How?"

"Don't let it worry you. I doubt if anyone else noticed. But I see things other people don't see." I handed him my card, a little smugly perhaps. There is only one Lorenzo Smythe, the One-Man Stock Company. Yes, I'm "The Great Lorenzo"—stereo, canned opera, legit —"Pantomimist and Mimicry Artist Extraordinary."

He read my card and dropped it into a sleeve pocket— which annoyed me; those cards had cost me money—genuine imitation hand engraving. "I see your point," he said quietly, "but what was wrong with the way I behaved?"

"I'll show you," I said. "I'll walk to the door like a ground hog and come back the way you walk. Watch." I did so, making the trip back in a slightly exaggerated version of his walk to allow for his untrained eye—feet sliding softly along the floor as if it were deck plates, weight carried forward and balanced from the hips, hands a trifle forward and clear of the body, ready to grasp.

There are a dozen other details which can't be set down in words; the point is you have to fee a spaceman when you do it, with a spaceman's alert body and unconscious balance— you have to live it. A city man blunders along on smooth floors all his life, steady floors with Earth-normal gravity, and will trip over a cigarette paper, like as not. Not so a spaceman.

"See what I mean?" I asked, slipping back into my seat.

"I'm afraid I do," he admitted sourly. "Did I walk like that?"

"Yes."

"Hmm… Maybe I should take lessons from you."

"You could do worse," I admitted.

He sat there looking me over, then started to speak— changed his mind and wiggled a finger at the bartender to refill our glasses. When the drinks came, he paid for them, drank his, and slid out of his seat all in one smooth motion. "Wait for me," he said quietly.

With a drink he had bought sitting in front of me I could not refuse. Nor did I want to; he interested me. I liked him, even on ten minutes acquaintance; he was the sort of big ugly-handsome galoot that women go for and men take orders from.

He threaded his way gracefully through the room and passed a table of four Martians near the door. I didn't like Martians. I did not fancy having a thing that looks like a tree trunk topped off by a sun helmet claiming the privileges of a man. I did not like the way they grew pseudo limbs; it reminded me of snakes crawling out of their holes. I did not like the fact that they could look all directions at once without turning their heads—if they had had heads, which of course they don't. And I could not *stand* their smell!

Nobody could accuse me of race prejudice. I didn't care what a man's color, race, or religion was. But men were men, whereas Martians were *things*. They weren't even animals to my way of thinking. I'd rather have had a wart hog around me any day.

Permitting them in restaurants and bars used by men struck me as outrageous. But there was the Treaty, of course, so what could I do?

These four had not been there when I came in, or I would have whiffed them. For that matter, they certainly could not have been there a few moments earlier when I had walked to the door and back. Now there they were, standing on their pedestals around a table, pretending to be people. I had not even heard the air conditioning speed up.

The free drink in front of me did not attract me; I simply wanted my host to come back so that I could leave politely. It suddenly occurred to me that he had glanced over that way just before he had left so hastily and I wondered if the Martians had anything to do with it. I looked over at them, trying to see if they were paying attention to our table—but how could you tell what a Martian was looking at or what it was thinking? That was another thing I didn't like about them.

I sat there for several minutes fiddling with my drink and wondering what had happened to my spaceman friend. I had hoped that his hospitality might extend to dinner and, if we became sufficiently *simpatico*, possibly even to a small temporary loan. My other prospects were—I admit it!—slender. The last two times I had tried to call my agent his autosecretary had simply recorded the message, and unless I deposited coins in the door, my room would not open to me that night… That was how low my fortunes had ebbed: reduced to sleeping in a coin-operated cubicle.

In the midst of my melancholy ponderings a waiter touched me on the elbow. "Call for you, sir."

"Eh? Very well, friend, will you fetch an instrument to the table?"

"Sorry, sir, but I can't transfer it. Booth 12 in the lobby."

"Oh. Thank you," I answered, making it as warm as possible since I was unable to tip him. I swung wide around the Martians as I went out.

I soon saw why the call had not been brought to the table; No. 12 was a maximum-security booth, sight, sound, and scramble. The tank showed no image and did not clear even after the door locked behind me. It remained milky until I sat down and placed my face within pickup, then the opalescent clouds melted away and I found myself looking at my spaceman friend.

"Sorry to walk out on you," he said quickly, "but I was in a hurry. I want you to come at once to Room 2106 of the Eisenhower."

He offered no explanation. The Eisenhower is just as unlikely a hotel for spacemen as Casa Manana. I could smell trouble. You don't pick up a stranger in a bar and then insist that he come to a hotel room—well, not one of the same sex, at least.

"Why? I asked.

The spaceman got that look peculiar to men who are used to being obeyed without question; I studied it with professional interest—it's not the same as anger; it is more like a thundercloud just before a storm. Then he got himself in hand and answered quietly, "Lorenzo, there is no time to explain. Are you open to a job?"

"Do you mean a *professional* engagement?" I answered slowly. For a horrid instant I suspected that he was offering me… Well, *you* know—a *job*. Thus far I had kept my professional pride intact, despite the slings and arrows of outrageous fortune.

"Oh, professional, of course!" he answered quickly. "This requires the best actor we can get."

I did not let my relief show in my face. It was true that I was ready for *any* professional work—I would gladly have played the balcony in *Romeo and Juliet*—but it does not do to be eager. "What is the nature of the engagement?" I asked. "My calendar is rather full."

He brushed it aside. "I can't explain over the phone. Perhaps you don't know it, but any scrambler circuit can be unscrambled—with the proper equipment. Shag over here fast!"

He was eager; therefore I could afford not to be eager. "Now really," I protested, "what do you think I am? A bellman? Or an untried juvenile anxious for the privilege of carrying a spear? I am Lorenzo!" I threw up my chin and looked offended. "What is your offer?"

"Uh… Damn it, I *can't* go into it over the phone. How much do you get?"

"Eh? You are asking my professional salary?"

"Yes, yes!"

"For a single appearance? Or by the week? Or an option contract?"

"Uh, never mind. What do you get by the day?"

"My minimum fee for a one-evening date is one hundred Imperials." This was simple truth. Oh, I have been coerced at times into paying some scandalous kickbacks, but the voucher never read less than my proper fee. A man has his standards. I'd rather starve.

"Very well," he answered quickly, "one hundred Imperials in cash, laid in your hand the minute you show up here. But hurry!"

""Eh?" I realized with sudden dismay that I could as easily have said two hundred, or even two fifty. "But I have not agreed to accept the engagement."

"Never mind that! Well talk it over when you get here. The hundred is yours even if you turn us down. If you accept—well, call it bonus, over and above your salary. Now will you sign off and get over here?"

I bowed. "Certainly, sir. Have patience."

Fortunately the Eisenhower is not too far from the Casa, for I did not even have a minum for tube fare. However, although the art of strolling is almost lost, I savor it—and it gave me time to collect my thoughts. I was no fool; I was aware that when another man is too anxious to force money on one, it is time to examine the cards, for there is almost certainly something illegal, or dangerous, or both, involved in the matter. I was not unduly fussy about legality *qua* legality; I agreed with the Bard that the Law is often an idiot. But in the main I had stayed on the right side of the street.

But presently I realized that J had insufficient facts, so I put it out of my mind, threw my cape over my right shoulder, and strode along, enjoying the mild autumn weather and the rich and varied odors of the metropolis. On arrival I decided to forego the main entrance and took a bounce tube from the sub-basement to the twenty-first floor, I having at the time a vague feeling that this was not the place to let my public recognize me. My *voyageur* friend let me in. "You took long enough," he snapped.

"Indeed?" I let it go at that and looked around me. It was an expensive suite, as I had expected, but it was littered and there were at least a dozen used glasses and as many coffee cups scattered here and there; it took no skill to see that I was merely the latest of many visitors. Sprawled on a couch, scowling at me, was another man, whom I tabbed tentatively as a spaceman. I glanced inquiringly but no introduction was offered.

"Well, you're here, at least. Let's get down to business."

"Surely. Which brings to mind," I added, "there was mention of a bonus, or retainer."

"Oh, yes." He turned to the man on the couch. "Jock, pay him."

"For what?"

"Pay him!"

I now knew which one was boss—although, as I was to learn, there was usually little doubt when Dak Broadbent was in a room. The other fellow stood up quickly, still scowling, and counted out to me a fifty and five tens. I tucked it away casually without checking it and said, "I am at your disposal, gentlemen."

The big man chewed his lip. "First, I want your solemn oath not even to talk in your sleep about this job."

"If my simple word is not good, is my oath better?" I glanced at the smaller man, slouched again on the couch. "I don't believe we have met. I am Lorenzo."

He glanced at me, looked away. My barroom acquaintance said hastily, "Names don't matter in this."

"No? Before my revered father died he made me promise him three things: first, never to mix whisky with anything but water; second, always to ignore anonymous letters; and lastly, never to talk with a stranger who refuses to give his name. Good day, sirs." I turned toward the door, their hundred Imperials warm in my pocket.

"Hold it!" I paused. He went on, "You are perfectly right My name is———"

"Skipper!"

"Stow it, Jock. I'm Dak Broadbent; that's Jacques Dubois glaring at us. We're both *voyageurs*—master pilots, all classes, any acceleration."

I bowed. "Lorenzo Smythe," I said modestly, "jongleur and artist—care of The Lambs Club." I made a mental note to pay my dues.

"Good. Jock, try smiling for a change. Lorenzo, you agree to keep our business secret?"

"Under the rose. This is a discussion between gentlemen."

"Whether you take the job or not?"

"Whether we reach agreement or not. I am human, but, short of illegal methods of questioning, your confidences are safe with me."

"I am well aware of what neodexocaine will do to a man's forebrain, Lorenzo. We don't expect the impossible."

"Dak," Dubois said urgently, "this is a mistake. We should at least ———"

"Shut up, Jock. I want no hypnotists around at this point. Lorenzo, we want you to do an impersonation job. It has to be so perfect that no one—I mean *no one*—will ever know it took place. Can you do that sort of a job?"

I frowned. "The first question is not 'Can *IT* but 'Will I?' What are the circumstances?"

"Uh, well go into details later. Roughly, it is the ordinary doubling job for a well-known public figure. The difference is that the impersonation will have to be so perfect as to fool people who know him well and must see him close up. It won't be just reviewing a parade from a grandstand, or pinning medals on girl scouts." He looked at me shrewdly. "It will take a real artist"

"No," I said at once.

"Huh? You don't know anything about the job yet. If your conscience is bothering you, let me assure you that you will not be working against the interests of the man you will impersonate—nor against anyone's legitimate interests. This is a job that really needs to be done."

"No."

"Well, for Pete's sake, why? You don't even know how much we will pay."

"Pay is no object," I said firmly. "I am an actor, not a double."

"I don't understand you. There are lots of actors picking up spare money making public appearances for celebrities."

"I regard them as prostitutes, not colleagues. Let me make myself clear. Does an author respect a ghost writer? Would you respect a painter who allowed another man to sign his work—for *money*? Possibly the spirit of the artist is foreign to you, sir, yet perhaps I may put it in terms germane to your own profession. Would you, simply for *money*, be content to pilot a ship while some other man, not possessing your high art, wore the uniform, received the credit, was publicly acclaimed as the Master? Would you?"

Dubois snorted. "How much money?"

Broadbent frowned at him. "I think I understand your objection."

"To the artist, sir, kudos comes first. Money is merely the mundane means whereby he is enabled to create his art."

"Hmm… All right, so you won't do it just for money. Would you do it for other reasons? If you felt that it had to be done and you were the only one who could do it successfully?"

"I concede the possibility; I cannot imagine the circumstances."

"You won't have to imagine them; we'll explain them to you."

Dubois jumped up off the couch. "Now see here, Dak, you can't ———"

"Cut it, Jock! He has to know."

"He doesn't have to know now—and here. And you haven't any right to jeopardize everybody else by telling him. You don't know a thing about him."

"It's a calculated risk." Broadbent turned back to me.

Dubois grabbed his arm, swung him around. "Calculated risk be damned! Dak, I've strung along with you in the past— but this time before I'll let you shoot off your face, well, one or the other of us isn't going to be in any shape to talk."

Broadbent looked startled, then grinned coldly down at Dubois. "Think you're up to it, Jock old son?"

Dubois glared up at him, did not flinch. Broadbent was a head taller and outweighed him by twenty kilos. I found myself for the first time liking Dubois; I am always touched by the gallant audacity of a kitten, the fighting heart of a bantam cock, or the willingness of a little man to die in his tracks rather than knuckle under… And, while I did not expect Broadbent to kill him, I did think that I was about to see Dubois used as a dust rag.

I had no thought of interfering. Every man is entitled to elect the time and manner of his own destruction.

I could see tension grow. Then suddenly Broadbent laughed and clapped Dubois on the shoulder. "Good for you, Jock!" He turned to me and said quietly, "Will you excuse us a few moments? My friend and I must make heap big smoke."

The suite was equipped with a hush corner, enclosing the autograph and the phone. Broadbent took Dubois by the arm and led him over there; they stood and talked urgently.

Sometimes such facilities in public places like hotels are not all that they might be; the sound waves fail to cancel out completely. But the Eisenhower is a luxury house and in this case, at least, the equipment worked perfectly; I could see their lips move but I could hear no sound.

But I could indeed see their lips move. Broadbent's face was toward me and Dubois I could glimpse in a wall mirror. When I was performing in my famous mentalist act, I found out why my father had beaten my tail until I learned the silent language of lips—in my mentalist act I always performed in a brightly lighted hall and made use of spectacles which—but never mind; I could read lips.

Dubois was saying: "Dak, you bloody, stupid, unprintable, illegal and highly improbable obscenity, do you want us both to wind up counting rocks on Titan? This conceited pipsqueak will spill his guts."

I almost missed Broadbent's answer. Conceited indeed! Aside from a cold appreciation of my own genius I felt that I was a modest man.

Broadbent: "… doesn't matter if the game is crooked when it's the only game in town. Jock, there is nobody else we can use."

Dubois: "All right, then get Doc Scortia over here, hypnotize him, and shoot him the happy juice. But don't tell him the score—not until he's conditioned, not while we are still on dirt."

Broadbent: "Uh, Scortia himself told me that we could not depend on hypno and drugs, not for the performance we need. We've got to have his cooperation, his intelligent cooperation."

Dubois snorted. "What intelligence? Look at him. Ever see a rooster strutting through a barnyard? Sure, he's the right size and shape and his skull looks a good bit like the Chief—but there is nothing behind it. He'll lose his nerve, blow his top, and give the whole thing away. He can't play the part—he's just a ham actor!"

If the immortal Caruso had been charged with singing off key, he could not have been more affronted than I. But I trust I justified my claim to the mantle of Burbage and Booth at that moment; I went on buffing my nails and ignored it—merely noting that I would someday make friend Dubois both laugh and cry within the span of twenty seconds. I waited a few moments more, then stood up and approached the hush corner. When they saw that I intended to enter it, they both shut up. I said quietly, "Never mind, gentlemen, I have changed my mind."

Dubois looked relieved. "You don't want the job."

"I mean that I accept the engagement. You need not make explanations. I have been assured by friend Broadbent that the work is such as not to trouble my conscience—and I trust him. He has assured me that he needs an actor. But the business affairs of the producer are not my concern. I accept."

Dubois looked angry, but shut up. I expected Broadbent to look pleased and relieved: instead he looked worried. "All right," he agreed, "let's get on with it. Lorenzo, I don't know exactly how long we will need you. No more than a few days, I'm certain—and you will be on display only an hour or so once or twice in that time."

"That does not matter as long as I have time to study the role—the impersonation. But approximately how many days will you need me? I should notify my agent."

"Oh no! Don't do that."

"Well—how long? As much as a week?"

"It will be less than that—or we're sunk."

"Eh?"

"Never mind. Will a hundred Imperials a day suit you?"

I hesitated, recalling how easily he had met my minimum just to interview me—and decided this was a time to be gracious. I waved it aside. "Let's not speak of such things. No doubt you will present me with an honorarium consonant with the worth of my performance."

"All right, all right." Broadbent turned away impatiently. "Jock, call the field. Then call Langston and tell him we're starting Plan Mardi Gras. Synchronize with him. Lorenzo…" He motioned for me to follow and strode into the bath. He opened a small case and demanded, "Can you do anything with this junk?"

"Junk" it was—the sort of overpriced and unprofessional make-up kit that is sold over the counter to stage-struck youngsters. I stared at it with mild disgust. "Do I understand, sir, that you expect me to start an impersonation *now*? Without time for study?"

"Huh? No, no, no! I want you to change your face—on the outside chance that someone might recognize you as we leave here. That's possible, isn't it?"

I answered stiffly that being recognized in public was a burden that all celebrities were forced to carry. I did not add that it was certain that countless people would recognize The Great Lorenzo in any public place.

"Okay. So change your phiz so it's not yours." He left abruptly.

I sighed and looked over the child's toys he had handed me, no doubt thinking they were the working tools of my profession—grease paints suitable for clowns, reeking spirit gum, crepe hair which seemed to have been raveled from Aunt Maggie's parlor carpet. Not an ounce of Silicoflesh, no electric brushes, no modern amenities of any sort. But a true artist can do wonders with a burnt match, or oddments such as one might find in a kitchen—and his own genius. I arranged the lights and let myself fall into creative reverie.

There are several ways to keep a well-known face from being recognized. The simplest is misdirection. Place a man in uniform and his face is not likely to be noticed—do you recall the *face* of the last policeman you encountered? Could you identify him if you saw him next in mufti? On the same principle is the attention-going special feature. Equip a man with an enormous nose, disfigured perhaps with *acne rosacea;* the vulgar will stare in fascination at the nose itself, the polite will turn away—but neither will see the face.

I decided against this primitive maneuver because I judged that my employer wished me not to be noticed at all rather than remembered for an odd feature without being recognized. This is much more difficult: anyone can be conspicuous but it takes real skill not to be noticed. I needed a face as commonplace, as impossible to remember as the true face of the immortal Alec Guinness. Unfortunately my aristocratic features are entirely too distinguished, too handsome —a regrettable handicap for a character actor. As my father used to say, "Larry, you are too damned pretty! If you don't get off your lazy duff and learn the business, you are going to spend fifteen years as a juvenile, under the mistaken impression that you are an actor—then wind up selling candy in the lobby. 'Stupid' and 'pretty' are the two worst vices in show business—and you're *both*."

Then he would take off his belt and stimulate my brain. Father was a practical psychologist and believed that warming the *glutei maximi* with a strap drew excess blood away from a boy's brain. While the theory may have been shaky, the results justified the method; by the time I was fifteen I could stand on my head on a slack wire and quote page after page of Shakespeare and Shaw—or steal a scene simply by lighting a cigarette.

I was deep in the mood of creation when Broadbent stuck his face in. "Good grief!" he snapped. "Haven't you done anything yet?"

I stared coldly. "I assumed that you wanted my best creative work —which cannot be hurried. Would you expect a *cordon bleu* to compound a new sauce on the back of a galloping horse?"

"Horses be damned!" He glanced at his watch finger. "You have six more minutes. If you can't do anything in that length of time, we'll just have to take our chances."

Well! Of course I prefer to have plenty of time—but I had understudied my father in his -quick-change creation, *The Assassination of Huey Long*, fifteen parts in seven minutes —and had once played it in nine seconds less time than he did. "Stay where you are!" I snapped back at him. "I'll be with you at once." I then put on "Benny Grey," the colorless handy man who does the murders in *The House with No Doors*—two quick strokes to put dispirited lines into my cheeks from nose to mouth corners, a mere suggestion of bags under my eyes, and Factor's #5 sallow over all, taking not more than twenty seconds for everything—I could have done it in my sleep; *House* ran on boards for ninety-two performances before they recorded it

Then I faced Broadbent and he gasped. "Good God! I don't believe it."

I stayed in "Benny Grey" and did not smile acknowledgment. What Broadbent could not realize was that the grease paint really was not necessary. It makes it easier, of course, but I had used a touch of it primarily because he expected it; being one of the yokels, he naturally assumed that makeup consisted of paint and powder.

He continued to stare at me. "Look here," he said in a hushed voice, "could you do something like that for *me*? In a hurry!

I was about to say no when I realized that it presented an interesting professional challenge. I had been tempted to say that if my father had started in on him at five he might be ready now to sell cotton candy at a punkin' doin's, but I thought better of it "You simply want to be sure that you will not be recognized?" I asked.

"Yes, yes! Can you paint me up, or give me a false nose, or something?"

I shook my head. "No matter what we did with make-up, it would simply make you look like a child dressed up for Trick or Treat. You can't act and you can never learn, at your age. We won't touch your face."

"Huh? But with this beak on me———"

"Attend me. Anything I could do to that lordly nose would just call attention to it, I assure you. Would it suffice if an acquaintance looked at you and said, 'Say, that big fellow reminds me of Dak Broadbent. It's not Dak, of course, but looks a little like him.' Eh?"

"Huh? I suppose so. As long as he was sure it wasn't me. I'm supposed to be on… Well, I'm not supposed to be on Earth just now."

"He'll be quite sure it is not you, because we'll change your walk. That's the most distinctive thing about you. If your walk is wrong, it cannot possibly be *you*—so it must be some other big-boned, broadshouldered man who looks a bit like you."

"Okay, show me how to walk."

"No, you could never learn it. I'll force you to walk the way I want you to."

"How?"

"We'll put a handful of pebbles or the equivalent in the toes of your boots. That will force you back on your heels and make you stand up straight. It will be impossible for you to sneak along in that catfooted spaceman's crouch. Mmm… I'll slap some tape across your shoulder blades to remind you to keep your shoulders back, too. That will do it."

"You think they won't recognize me just because I'll walk differently?"

"Certain. An acquaintance won't know why he is sure it is not you, but the very fact that the conviction is subconscious and unanalyzed will put it beyond reach of doubt. Oh, I'll do a little something to your face, just to make you feel easier—but it isn't necessary."

We went back into the living room of the suite. I was still being "Benny Grey" of course; once I put on a role it takes a conscious effort of will to go back to being myself. Dubois was busy at the phone; he looked up, saw me, and his jaw dropped. He hurried out of the hush locus and demanded, "Who's *he*? And where's that actor fellow?" After his first glance at me, he had looked away and not bothered to look back—"Benny Grey" is such a tired, negligible little guy that there is no point in looking at him.

"What actor fellow?" I answered in Benny's flat, colorless tones. It brought Dubois' eyes back to me. He looked at me, started to look away, his eyes snapped back, then he looked at my clothes. Broadbent guffawed and clapped him on the shoulder.

"And *you* said he couldn't act!" He added sharply, "Did you get them all, Jock?"

"Yes." Dubois looked back at me, looked perplexed, and looked away.

"Okay. We've got to be out of here in four minutes. Let's see how fast you can get me fixed up, Lorenzo."

Dak had one boot off, his blouse off, and his chemise pulled up so that I could tape his shoulders when the light over the door came on and the buzzer sounded. He froze. "Jock? We expecting anybody?"

"Probably Langston. He said he was going to try to get over here before we left." Dubois started for the door.

"It might not be him. It might be———" I did not get to hear Broadbent say who he thought it might be as Dubois dilated the door. Framed in the doorway, looking like a nightmare toadstool, was a Martian.

For an agony-stretched second" I could see nothing but the Martian. I did not see the human standing behind him, nor did I notice the life wand the Martian cradled in his pseudo limb.

Then the Martian flowed inside, the man with him stepped in behind him, and the door relaxed. The Martian squeaked, "Good afternoon, gentlemen. Going somewhere?"

I was frozen, dazed, by acute xenophobia. Dak was handicapped by disarranged clothing. But little Jock Dubois acted with a simple heroism that made him my beloved brother even as he died… He flung himself at that life wand. Right at it—he made no attempt to evade it.

He must have been dead, a hole burned through his belly you could poke a fist through, before he hit the floor. But he hung on and the pseudo limb stretched like taffy—then snapped, broken off a few inches from the monster's neck, and poor Jock still had the life wand cradled in his dead arms.

The human who had followed that stinking, reeking thing into the room had to step to one side before he could get in a shot—and he made a mistake. He should have shot Dak first, then me. Instead he wasted his first one on Jock and he never got a second one, as Dak shot him neatly in the face. I had not even known Dak was armed.

Deprived of his weapon, the Martian did not attempt to escape. Dak bounced to his feet, slid up to him, and said, "Ah, Rrringriil. I see you."

"I see you, Captain Dak Broadbent," the Martian squeaked, then added, "You will tell my nest?"

"I will tell your nest, Rrringriil."

"I thank you, Captain Dak Broadbent."

Dak reached out a long bony finger and poked it into the eye nearest him, shoving it on home until his knuckles were jammed against the brain case. He pulled it out and his finger was slimed with green ichor. The creature's pseudo limbs crawled back into its trunk in reflex spasm but the dead thing continued to stand firm on its base. Dak hurried into the bath; I heard him washing his hands. I stayed where I was, almost as frozen by shock as the late Rrringriil.

Dak came out, wiping his hands on his shirt, and said, "We'll have to clean this up. There isn't much time." He could have been speaking of a spilled drink.

I tried to make clear in one jumbled sentence that I wanted no part of it, that we ought to call the cops, that I wanted to get away from there before the cops came, that he knew what he could do with his crazy impersonation job, and that I planned to sprout wings and fly out the window. Dak brushed it all aside. "Don't jitter, Lorenzo. We're on minus minutes now. Help me get the bodies into the bathroom."

"Huh? Good God, man! Let's just lock up and run for it. Maybe they will never connect us with it."

"Probably they wouldn't," he agreed, "since neither one of us is supposed to be here. But they would be able to see that Rrringriil had killed Jock—and we can't have *that*. Not now we can't."

"Huh! "

"We can't afford a news story about a Martian killing a human. So shut up and help me."

I shut up and helped him. It steadied me to recall that "Benny Grey" had been the worst of sadistic psychopaths, who had enjoyed dismembering his victims. I let "Benny Grey" drag the two human bodies into the bath while Dak took the life wand and sliced Rrringriil into pieces small enough to handle. He was careful to make the first cut below the brain case so the job was not messy, but I could not help him with it—it seemed to me that a dead Martian stank even worse than a live one.

The oubliette was concealed in a panel in the bath just beyond the bidet; if it had not been marked with the usual radiation trefoil it would have been hard to find. After we had shoved the chunks of Rrringriil down it (I managed to get my spunk up enough to help), Dak tackled the messier problem of butchering and draining the human corpses, using the wand and, of course, working in the bath tub.

It is amazing how much blood a man holds. We kept the water running the whole time; nevertheless, it was bad. But when Dak had to tackle the remains of poor little Jock, he just wasn't up to it. His eyes flooded with tears, blinding him, so I elbowed him aside before he sliced off his own fingers and let "Benny Grey" take over.

When I had finished and there was nothing left to show that there had ever been two other men and a monster in the suite, I sluiced out the tub carefully and stood up. Dak was in the doorway, looking as calm as ever. "I've made sure the floor is tidy," he announced. "I suppose a criminologist with proper equipment could reconstruct it—but we are counting on no one ever suspecting. So let's get out of here. We've got to gain almost twelve minutes somehow. Come on!"

I was beyond asking where or why. "All right. Let's fix your boots."

He shook his head. "It would slow me up. Right now speed is more essential than not being recognized."

"I am in your hands." I followed him to the door; he stopped and said, "There may be others around. If so, shoot first—there's nothing else you can do." He had the life wand in his hand, with his cloak drawn over it

"Martians?"

"Or men. Or both."

"Dak? Was Rrringriil one of those four at the Manana bar?"

"Certainly. Why do you think I went around Robinson's barn to get you out of there and over here? They either tailed you, as we did, or they tailed me. Didn't you recognize him?"

"Heavens, no! Those monsters all look alike to me."

"And *they* say *we* all look alike. The four were Rrringriil, his conjugate-brother Rrringlath, and two others from his nest, of divergent lines. But shut up. If you see a Martian, shoot You have the other gun?"

"Uh, yes. Look, Dak, I don't know what this is all about

But as long as those beasts are against you, I'm with you. I despise Martians."

He looked shocked. "You don't know what you are saying. We're not fighting Martians; those four are renegades."

"Huh!"

"There are lots of good Martians—almost all of them. Shucks, even Rrringriil wasn't a bad sort in most ways— I've had many a fine chess game with him."

"What? In that case, I'm———"

"Stow ft. You're in too deep to back out. Now quick-march, straight to the bounce tube. I'll cover our rear."

I shut up. I was in much too deep—that was unarguable.

We hit the sub-basement and went at once to the express tubes. A two-passenger capsule was just emptying; Dak shoved me in so quickly that I did not see him set the control combination. But I was hardly surprised when the pressure let up from my chest and I saw the sign blinking JEFFERSON SKYPORT—*All Out*.

Nor did I care what station it was as long as it was as far as possible from Hotel Eisenhower. The few minutes we had been crammed in the vactube had been long enough for me to devise a plan —sketchy, tentative, and subject to change without notice, as the fine print always says, but a plan. It could be stated in two words: Get lost!

Only that morning I would have found the plan very difficult to execute; in our culture a man with no money at all is baby-helpless. But with a hundred slugs in my pocket I could go far and fast. I felt no obligation to Dak Broadbent. For reasons of his own—not *my* reasons! —he had almost got me killed, then had crowded me into covering up a crime, made me a fugitive from justice. But we had evaded the police, temporarily at least, and now, simply by shaking off Broadbent, I could forget the whole thing, shelve it as a bad dream. It seemed most unlikely that I could be connected with the affair even if it were discovered—fortunately a gentleman always wears gloves, and I had had mine off only to put on make-up and later during that ghastly house cleaning.

Aside from the warm burst of adolescent heroics I had felt when I thought Dak was fighting Martians I had no interest in his schemes— and even that sympathy had shut off when I found that he liked Martians in general. His impersonation job I would not now touch with the proverbial eleven-foot pole. To hell with Broadbent! All I wanted out of life was money enough to keep body and soul together and a chance to practice my art; cops-and-robbers nonsense did not interest me—poor theater at best.

Jefferson Port seemed handmade to carry out my scheme.

Crowded and confused, with express tubes spiderwebbing from it, in it, if Dak took his eyes off me for half a second I would be halfway to Omaha. I would lie low a few weeks, then get in touch with my agent and find out if any inquiries had been made about me.

Dak saw to it that we climbed out of the capsule together, else I would have slammed it shut and gone elsewhere at once. I pretended not to notice and stuck close as a puppy to him as we went up the belt to the main hall just under the surface, coming out between the Pan-Am desk and American Skylines. Dak headed straight across the waiting-room floor toward Diana, Ltd., and I surmised that he was going to buy tickets for the Moon shuttle—how he planned to get me aboard without passport or vaccination certificate I could not guess but I knew that he was resourceful. I decided that I would fade into the furniture while he had his wallet out; when a man counts money there are at least a few seconds when his eyes and attention are fully occupied.

But we went right on past the Diana desk and through an archway marked *Private Berths*. The passageway beyond was not crowded and the walls were blank; I realized with dismay that I had let slip my best chance, back there in the busy main hall. I held back. "Dak? Are we making a jump?"

"Of course."

"Dak, you're crazy. I've got no papers, I don't even have a tourist card for the Moon."

"You won't need them."

"Huh? They'll stop me at 'Emigration.' Then a big, beefy cop will start asking questions."

A hand about the size of a cat closed on my upper arm. "Let's not waste time. Why should you go through 'Emigration,' when officially you aren't leaving? And why should I, when officially I never arrived? Quick-march, old son."

I am well muscled and not small, but I felt as if a traffic robot were pulling me out of a. danger zone. I saw a sign reading MEN and I made a desperate attempt to break it up. "Dak, half a minute, please. Got to see a man about the plumbing."

He grinned at me. "Oh, yes? You went just before we left the hotel." He did not slow up or let go of me.

"Kidney trouble———"

"Lorenzo old son, I smell a case of cold feet. Tell you what I'll do. See that cop up ahead?" At the end of the corridor, in the private berths station, a defender of the peace was resting his big feet by leaning over a counter. "I find I have a sudden attack of conscience. I feel a need to confess—about how you killed a visiting Martian and two local citizens—about how you held a gun on me and forced me to help you dispose of the bodies. About———"

"You're crazy!"

"Almost out of my mind with anguish and remorse, shipmate."

"But—you've got nothing on me."

"So? I think my story will sound more convincing than yours. I know what it is all about and you don't. I know all about you and you know nothing about me. For example…" He mentioned a couple of details in my past that I would have sworn were buried and forgotten. All right, so I did have a couple of routines useful for stag shows that are not for the family trade—a man has to eat. But that matter about Bebe; that was hardly fair, for I certainly had not known that she was underage. As for that hotel bill, while it is true that bilking an "innkeeper" in Miami Beach carries much the same punishment as armed robbery elsewhere, it is a very provincial attitude—I would have paid if I had had the money. As for that unfortunate incident in Seattle—well, what I am trying to say is that Dak did know an amazing amount about my background but he had the wrong slant on most of it. Still…

"So," he continued, "let's walk right up to yon gendarme and make a clean breast of it. I'll lay you seven to two as to which one of us is out on bail first."

So we marched up to the cop and on past him. He was talking to a female clerk back of the railing and neither one of them looked up. Dak took out two tickets reading, GATE PASS—MAINTENANCE PERMIT—Berth K-127, and stuck them into the monitor. The machine scanned them, a transparency directed us to take an upper-level car, code King 127; the gate let us through and locked behind us as a recorded voice said, "Watch your step, please, and heed radiation warnings. The Terminal Company is not responsible for accidents beyond the gate."

Dak punched an entirely different code in the little car; it wheeled around, picked a track, and we took off out under the field. It did not matter to me, I was beyond caring.

When we stepped out of the little car it went back where it came from. In front of me was a ladder disappearing into the steel ceiling above. Dak nudged me. "Up you go." There was a scuttle hole at the top and on it a sign: RADIATION HAZARD—Optimax 13 Seconds. The figures had been chalked in. I stopped. I have no special interest in offspring but I am no fool. Dak grinned and said, "Got your lead britches on? Open it, go through at once and straight up the ladder into the ship. If you don't stop to scratch, you'll make it with at least three seconds to spare."

I believe I made it with five seconds to spare. I was out in the sunlight for about ten feet, then I was inside a long tube in the ship. I used about every third rung.

The rocket ship was apparently small. At least the control room was quite cramped; I never got a look at the outside. The only other spaceships I had ever been in were the Moon shuttles *Evangeline* and her sister ship the *Gabriel*, that being the year in which I had incautiously accepted a lunar engagement on a co-op basis—our impresario had had a notion that a juggling, tightrope, and acrobatic routine would go well in the one-sixth gee of the Moon, which was correct as far as it went, but he had not allowed rehearsal time for us to get used to low gravity. I had to take advantage of the Distressed Travelers Act to get back and I had lost my wardrobe.

There were two men in the control room; one was lying in one of three acceleration couches fiddling with dials, the other was making obscure motions with a screw driver. The one in the couch glanced at me, said nothing. The other one turned, looked worried, then said past me, "What happened to Jock?"

Dak almost levitated out of the hatch behind me. "No time!" he snapped. "Have you compensated for his mass?"

"Yes."

"Red, is she taped? Tower?"

The man in the couch answered lazily, "I've been recomputing every two minutes. You're clear with the tower. Minus forty-, uh, seven seconds."

"Out of that bunk! Scram! I'm going to catch that tick!"

Red moved lazily out of the couch as Dak got in. The other man shoved me into the copilot's couch and strapped a safety belt across my chest. He turned and dropped down the escape tube. Red followed him, then stopped with his head and shoulders out. 'Tickets, please!" he said cheerfully.

"Oh, cripes!" Dak loosened a safety belt, reached for a pocket, got out the two field passes we had used to sneak aboard, and shoved them at him.

"Thanks," Red answered. "See you in church. Hot jets, and so forth." He disappeared with leisurely swiftness; I heard the air lock close and my eardrums popped. Dak did not answer his farewell; his eyes were busy on the computer dials and he made some minor adjustment.

"Twenty-one seconds," he said to me. "There'll be no rundown. Be sure your arms are inside and that you are relaxed. The first step is going to be a honey."

I did as I was told, then waited for *hours* in that curtain-going-up tension. Finally I said, "Dak?"

"Shut up!"

"Just one thing: where are we going?"

"Mars." I saw his thumb jab at a red button and I blacked out.

Chapter Two

What is so funny about a man being dropsick? Those dolts with cast-iron stomachs always laugh—I'll bet they would laugh if Grandma broke both legs.

I was spacesick, of course, as soon as the rocket ship quit blasting and went into free fall. I came out of it fairly quickly as my stomach was practically empty—I'd eaten nothing since breakfast—and was simply wanly miserable the remaining eternity of that awful trip. It took us an hour and forty-three minutes to make rendezvous, which is roughly equal to a thousand years in purgatory to a ground hog like myself.

say this for Dak, though: he did not laugh. Dak was a professional and he treated my normal reaction with the impersonal good manners of a flight nurse—not like those flatheaded, loud-voiced jackasses you'll find on the passenger list of a Moon shuttle. If I had my way, those healthy self-panickers would be spaced in mid-orbit and allowed to laugh themselves to death in vacuum.

Despite the turmoil in my mind and the thousand questions I wanted to ask we had almost made rendezvous with a torchship, which was in parking orbit around Earth, before I could stir up interest in anything. I suspect that if one were to inform a victim of spacesickness that he was to be shot at sunrise his own answer would be, "Yes? Would you hand me that sack, please?"

But I finally recovered to the point where instead of wanting very badly to die the scale had tipped so that I had a flickering, halfhearted interest in continuing to live. Dak was busy most of the time at the ship's communicator, apparently talking on a very tight beam for his hands constantly nursed the directional control like a gunner laying a gun under difficulties. I could not hear what he said, or even read his lips, as he had his face pushed into the rumble box. I assumed that he was talking to the long-jump ship we were to meet.

But when he pushed the communicator aside and lit a cigarette I repressed the stomach retch that the mere sight of tobacco smoke had inspired and said, "Dak, isn't it about time you told me the score?"

"Plenty of time for that on our way to Mars."

"Huh? Damn your arrogant ways," I protested feebly. "I don't want to go to Mars. I would never have considered your crazy offer if I had known it was on Mars."

"Suit yourself. You don't have to go."

"Eh?"

"The air lock is right behind you. Get out and walk. Mind you close the door."

I did not answer the ridiculous suggestion. He went on, "But if you can't breathe space the easiest thing to do is to go to Mars—and I'll see that you get back. The *Can Do*— that's this bucket—is about to rendezvous with the *Go For Broke,* which is a high-gee torchship. About seventeen seconds and a gnat's wink after we make contact the *Go For Broke* will torch for Mars—for we've *got* to be there by Wednesday."

I answered with the petulant stubbornness of a sick man. "I'm not going to Mars. I'm going to stay right in this ship. Somebody has to take it back and land it on Earth. You can't fool me."

"True," Broadbent agreed. "But you won't be in it. The three blokes who are supposed to be in this ship—according to the records back at Jefferson Field—are in the *Go For Broke* right now. This is a three-man ship, as you've noticed. I'm afraid you will find them stuffy about giving up a place to you. And besides, how would you get back through 'Immigration'?"

"I don't care! I'd be back on ground."

"And in jail, charged with everything from illegal entry to mopery and dopery in the spaceways. At the very least they would be sure that you were smuggling and they would take you to some quiet back room and run a needle in past your eyeball and find out just what you were up to. They would know what questions to ask and you wouldn't be able to keep from answering. But you wouldn't be able to implicate me, for good old Dak Broadbent hasn't been back to Earth in quite a spell and has unimpeachable witnesses to prove it."

I thought about it sickly, both from fear and the continuing effects of spacesickness. "So you would tip off the police? You dirty, slimy ———" I broke off for lack of an adequately insulting noun.

"Oh no! Look, old son, I might twist your arm a bit and let you think that I would cry copper—but I never would. But Rrringriil's conjugate-brother Rrringlath certainly knows that old 'Griil' went in that door and failed to come out . He will tip off the noises. Conjugate-brother is a relationship so close that we will never understand it, since we don't reproduce by fission."

I didn't care whether Martians reproduced like rabbits or the stork brought them in a little black bag. The way he told it I could never go back to Earth, and I said so. He shook his head. "Not at all. Leave it to me and we will slide you back in as neatly as we slid you out. Eventually you will walk off that field or some other field with a gate pass which shows that you are a mechanic who has been making's some last-minute adjustment—and you'll have greasy coveralls and a tool kit to back it up. Surely an actor of your skill can play the part of a mechanic for a few minutes?"

"Eh? Why, certainly! But———"

"There you are! You stick with ol' Doc Dak; hell take care of you. We shuffled eight guild brothers in this current caper to get me on Earth and both of us off; we can do it again. But you would not stand a chance without *voyageurs* to help you." He grinned. "Every *voyageur* is a free trader at heart. The art of smuggling being what it is, we are all of us always ready to help out one another in a little innocent deception of the port guards. But a person outside the lodge does not ordinarily get such cooperation."

I tried to steady my stomach and think about it. "Dak, - this a smuggling deal? Because———"

"Oh no! Except that we are smuggling you."

"I was going to say that I don't regard smuggling as a crime."

"Who does? Except those who make money off the rest of us by limiting trade. But this is a straight impersonation job, Lorenzo, and you are the man for it. It wasn't an accident that I ran across you in the bar; there had been a tail on you for two days. As soon as I hit dirt I went where you were." He frowned. "I wish I could be sure our honorable antagonists had been following *me*, and not you."

"Why?"

"If they were following me they were trying to find out what I was after—which is okay, as the lines were already drawn; we knew we were mutual enemies. But if they were following *you*, then they *knew* what I was after—an actor who could play the role."

"But how could they know that? Unless you told them?"

"Lorenzo, this thing is big, much bigger than you imagine. I don't see it all myself—and the less you know about it until you must, the better off you are. But I can tell you this: a set of personal characteristics was fed into the big computer at the System Census Bureau at The Hague and the machine compared them with the personal characteristics of every male professional actor alive. It was done as discreetly as possible but somebody might have guessed—and talked. The specifications amounted to identification both of the principal and the actor who could double for him, since the job had to be *perfect*."

"Oh. And the machine told you that I was the man for it?"

"Yes. You—and one other."

This was another good place for me to keep my mouth shut. But I could not have done so if my life had depended on it—which in a way it did. I just had to know who the other actor was who was considered competent to play a role which called for my unique talents. "This other one? Who is he?"

Dak looked me over; I could see him hesitate. "Mmm— fellow by the name of Orson Trowbridge. Know him?"

"*That* ham!" For a moment I was so furious that I forgot my nausea.

"So? I hear that he is a very good actor."

I simply could not help being indignant at the idea that anyone should even think about that oaf Trowbridge for a role for which I was being considered. "That arm-waver! That word-mouther!" I stopped, realizing that it was more dignified to ignore such colleagues—if the word fits. But that popinjay was so conceited that—well, if the role called for him to kiss a lady's hand, Trowbridge would fake it by kissing his own thumb instead. A narcissist, a poseur, a double fake—how could such a man *live* a role?

Yet such is the injustice of fortune that his sawings and rantings had paid him well while real artists went hungry.

"Dak, I simply cannot see why you considered him for it."

"Well, we didn't want him; he is tied up with some long-term-contract that would make his absence conspicuous and awkward. It was lucky for us that you were—uh, 'at liberty.' As soon as you agreed to the job I had Jock send word to call off the team that was trying to arrange a deal with Trowbridge."

"I should think so!"

"But—see here, Lorenzo, I'm going to lay it on the line. While you were busy whooping your cookies after *Brennschluss* I called the *Go For Broke* and told them to pass the word down to get busy on Trowbridge again."

"What?"

"You asked for it, shipmate. See here, a man in my racket contracts to herd a heap to Ganymede, that means he will pilot that pot to Ganymede or die trying. He doesn't get fainthearted and try to welsh while the ship is being loaded. You told me you would take this job—no 'ifs' or 'ands' or 'huts'—you took the job. A few minutes later there is a fracas; you lose your nerve. Later you try to run out on me at the field. Only ten minutes ago you were screaming to be taken back dirtside. Maybe you are a better actor than Trowbridge. I wouldn't know. But I know we need a man who can be depended on not to lose his nerve when the time comes. I understand that Trowbridge is that sort of bloke. So if we can get him, we'll use him instead, pay you off and tell you nothing and ship you back. Understand?"

Too well I understood. Dak did not use the word—I doubt if he would have understood it—but he was telling me that I was not a trouper. The bitter part about it was that he was justified. I could not be angry; I could only be ashamed. I had been an idiot to accept the contract without knowing more about it—but I had agreed to play the role, without conditions or escape clauses. Now I was trying to back out, like a rank amateur with stage fright.

"The show must go on" is the oldest tenet of show business. Perhaps it has no philosophical verity, but the things men live by are rarely subject to logical proof. My father had believed it—I had seen him play two acts with a burst appendix and then take his bows before he had let them rush him to a hospital. I could see his face now, looking at me with the contempt of a trouper for a so-called actor who would let an audience down.

"Dak," I said humbly, "I am very sorry. I was wrong."

He looked at me sharply. "You'll do the job?"

"Yes." I meant it sincerely. Then I suddenly remembered a factor which could make the part as impossible for me as the role of Snow White in *The Seven Dwarfs*. "That is—well, *I want* to. But———"

"But what?" he said scornfully. "More of your damned temperament?"

"No, no! But you said we were going to Mars. Dak, am I going to be expected to do this impersonation with Martians around me?"

"Eh? Of course. How else on Mars?"

"Uh… But, Dak, I can't *stand* Martians! They give me the heebie jeebies, I wouldn't want to—I would try not to— but I might fall right out of the characterization."

"Oh. If that is all that is worrying you, forget it."

"Huh? But I can't forget it. I can't help it. I———"

"I said, 'Forget it.' Old son, we knew you were a peasant in such matters—we know all about you. Lorenzo, your fear of Martians is as childish and irrational as a fear of spiders or snakes. But we had anticipated it and it will be taken care of. So forget it."

"Well—all right." I was not much reassured, but he had flicked me where it hurt. "Peasant"—why, "*peasant*?" were the audience! So I shut up.

Dak pulled the communicator to him, did not bother to silence his message with the rumble box: "Dandelion to Tumbleweed—cancel Plan Inkblot. We will complete Mardi Gras."

"Dak?" I said as he signed *off*.

"Later," he answered. "I'm about to match orbits. The contact may be a little rough, as I am not going to waste time worrying about chuck holes. So pipe down and hang on."

And it *was* rough. By the time we were in the torchship I was glad to be comfortably back in free fall again; surge nausea is even worse than everyday dropsickness. But we did not stay in free fall more than five minutes; the three men who were to go back in the *Can Do* were crowding into the transfer lock even as Dak and I floated into the torchship. The next few moments were extremely confused. I suppose I am a ground hog at heart for I disorient very easily when I can't tell the floor from the ceiling. Someone called out, "Where is he?" Dak replied, "Here!" The same voice replied, "Him?" as if he could not believe his eyes.

"Yes, yes!" Dak answered. "He's got make-up on. Never mind, it's all right. Help me get him into the cider press."

A hand grabbed my arm, towed me along a narrow passage and into a compartment. Against one bulkhead and flat to it were two bunks, or "cider presses," the bathtub-shaped, hydraulic, pressure-distribution tanks used for high acceleration in torchships. I had never seen one before but we had used quite convincing mockups in the space opus *The Earth Raiders*.

There was a stenciled sign on the bulkhead behind the bunks: *WARNING!!! Do Not Take More than Three Gravities without a Gee Suit. By Order of*——— I rotated slowly out of range of vision before. I could finish reading it and someone shoved me into one cider press. Dak and the other men were hurriedly strapping me against it when a horn somewhere near by broke into a horrid hooting. It continued for several seconds, then a voice replaced it: "Red warning! Two gravities! Three minutes! Red warning! Two gravities! Three minutes!" Then the hooting started again.

Through the racket I heard Dak ask urgently, "Is the projector all set? The tapes ready?"

"Sure, sure!"

"Got the hypo?" Dak squirmed around in the air and said to me, "Look, shipmate, we're going to give you a shot. It's all right. Part of it is Nullgrav, the rest is a stimulant—for you are going to have to stay awake and study your lines.

It will make your eyeballs feel hot at first and it may make you itch, but it won't hurt you."

"Wait, Dak, I———"

"No time! I've got to smoke this scrap heap!" He twisted and was out the door before I could protest. The second man pushed up my left sleeve, held an injection gun against the skin, and I had received the dose before I knew it. Then he was gone. The hooting gave way to: "Red warning! Two gravities! Two minutes!"

I tried to look around but the drug made me even more confused. My eyeballs did feel hot and my teeth as well and I began to feel an almost intolerable itching along my spine—but the safety straps kept me from reaching the tortured area—and perhaps kept me from breaking an arm at acceleration. The hooting stopped again and this time Dak's self-confident baritone boomed out, "Last red warning! Two gravities! One minute! Knock off those pinochle games and spread your fat carcasses—we're goin' to smoke!" The hooting was replaced this time by a recording of Arkezian's *Ad Astra*, opus 61 in C major. It was the controversial London Symphony version with the 14-cycle "scare" notes buried in the timpani. Battered, bewildered, and doped as I was, they seemed to have no effect on me—you can't wet a river.

A mermaid came in the door. No scaly tail, surely, but a mermaid is what she looked like. When my eyes refocused I saw that it was a very likely looking and adequately mammalian young woman in singlet and shorts, swimming along head first in a way that made clear that free fall was no novelty to her. She glanced at me without smiling, placed herself against the other cider press, and took hold of the hand grips—she did not bother with safety belts. The music hit the rolling finale and I felt myself grow very heavy.

Two gravities is not bad, not when you are floating in a liquid bed. The skin over the top of the cider press pushed up around me, supporting me inch by inch; I simply felt heavy and found it hard to breathe. You hear these stories about pilots torching at ten gravities and ruining themselves and I have no doubt that they are true—but two gravities, taken in the cider press, simply makes one feel languid, unable to move.

It was some time before I realized that the horn in the ceiling was speaking to me. "Lorenzo! How are you doing, shipmate?"

"All right." The effort made me gasp. "How long do we have to put up with this?"

"About two days.".

I must have moaned, for Dak laughed at me. "Quit bellyaching, chum! My first trip to Mars took thirty-seven weeks, every minute of it free fall in an elliptical orbit. You're taking the luxury route, at a mere double gee for a couple of days —with a one-gee rest at turnover, I might add. We ought to charge you for it"

I started to tell him what I thought of his humor in scathing green-room idiom, then recalled that there was a lady present. My father had taught me that a woman will forgive any action, up to and including assault with violence, but is easily insulted by language; the lovelier half of our race is symbol-oriented—very strange, in view of their extreme practicality. In any case, I have never let a taboo word pass my lips when it might offend the ears of a lady since the time I last received the back of my father's hard hand full on my mouth… Father could have given Professor Pavlov pointers in reflex conditioning.

But Dak was speaking again. "Penny! You there, honey chile?"

"Yes, Captain," the young woman with me answered.

"Okay, start him on his homework. I'll be down when I have this firetrap settled in its groove."

"Very well, Captain." She turned her head toward me and said in a soft, husky, contralto voice, "Dr. Capek wants you simply to relax and look at movies for several hours. I am here to answer questions as necessary."

I sighed. "Thank goodness someone is at last going to answer questions!"

She did not answer, but raised an arm with some difficulty and passed it over a switch. The lights in the compartment died out and a sound and stereo image built up in front of my eyes. I recognized the central figure—just as any of the billions of citizens of the Empire would have recognized him —and I realized at last how thoroughly and mercilessly Dak Broadbent had tricked me.

It was Bonforte.

The Bonforte, I mean—the Right Honorable John Joseph Bonforte, former Supreme Minister, leader of the loyal opposition, and head of the Expansionist coalition—the most loved (and the most hated!) man in the entire Solar System.

My astonished mind made a standing broad jump and arrived at what seemed a logical certainty. Bonforte had lived through at least three assassination attempts—or so the news reports would have us believe. At least two of his escapes had seemed almost miraculous. Suppose they were not miraculous? Suppose they had all been successful—but dear old Uncle Joe Bonforte had always been somewhere else at the time?

You could use up a lot of actors that way.

Chapter Three

I had never meddled in politics. My father had warned against it. "Stay out of it, Larry," he had told me solemnly. "The publicity you get that way is bad publicity. The peasants don't like it." I had never voted —not even after the amendment of '98 made it easy for the floating population (which includes, of course, most members of the profession) to exercise franchise.

However, insofar as I had political leanings of any sort, they certainly did not lean toward Bonforte. I considered him a dangerous man and very possibly a traitor to the human race. The idea of standing up and getting killed in his place was—how shall I put it?—distasteful to me.

But—*what* a role!

I had once played the lead in *L'Aiglon* and I had played Caesar in the only two plays about him worthy of the name. But to play such a role *in life*—well, it is enough to make one understand how a man could go to the guillotine in another man's place—just for the chance to play, even for a few moments, the ultimately exacting role, in order to create the supreme, the perfect, work of art.

I wondered who my colleagues had been who had been unable to resist that temptation on those earlier occasions. They had been artists, that was certain—though their very anonymity was the only tribute to the success of their characterizations. I tried to remember just when the earlier attempts on Bonforte's life had taken place and which colleagues who might have been capable of the role had died or dropped out of sight at those times. But it was useless. Not only was I not too sure of the details of current political history but also actors simply fade out of view with depressing frequency; it is a chancy profession even for the best of us.

I found that I had been studying closely the characterization.

I realized I could play it. Hell, I could play it with one foot in a bucket and a smell of smoke backstage. To begin with, there was no problem of physique; Bonforte and I could have swapped clothes without a wrinkle. These childish conspirators who had shanghaied me had vastly overrated the importance of physical resemblance, since it means nothing if not backed up by art—and need not be at all close if the actor is competent. But I admit that it does help and their silly game with the computer machine had resulted (quite by accident!) in selecting a true artist, as well as one who was in measurements and bony structure the twin of the politician. His profile was much like mine; even his hands were long, narrow, and aristocratic like mine—and hands are harder than faces.

That limp, supposedly the result of one of the attempts on his life —nothing to it! After watching him for a few minutes I knew that I could get up from that bed (at one gravity, that is) and walk in precisely the same way and never have to think about it. The way he had of scratching his collarbone and then brushing his chin, the almost imperceptible tic which preceded each of his sentences—such things were no trouble; they soaked into my subconscious like water into sand.

To be sure, he was fifteen or twenty years older than I was, but it is easier to play a role older than oneself than one younger. In any case, age to an actor is simply a matter of inner attitude; it has nothing to do with the steady march of catabolism.

I could have played him on boards, or read a speech in his place, within twenty minutes. But this part, as I understood it, would be more than such an interpretation; Dak had hinted that I would have to convince people who knew him well, perhaps in intimate circumstances. This is surpassingly more difficult. Does he take sugar in his coffee? If so, how much? Which hand does he use to strike a cigarette and with what gesture? I got the answer to that one and planted it deep in my mind even as I phrased the question; the simulacrum in front of me struck a cigarette in a fashion that convinced me that he had used matches and the old-fashioned sort of gasper for years before he had gone along with the march of so-called progress.

Worst of all, a man is not a single complexity; he is a *different* complexity to every person who knows him—which means that, to be successful, an impersonation must change for each "audience"?—for each acquaintance of the man being impersonated. This is not merely difficult; it is statistically impossible. Such little things could trip one up. What shared experiences does your principal have with acquaintance John Jones? With a hundred, or a thousand, John Joneses? How could an impersonator possibly know?

Acting *per se*, like all art, is a process of abstracting, of retaining only significant detail. But in impersonation *any* detail can be significant In time, something as silly as not crunching celery could let the cat out of the bag.

Then I recalled with glum conviction that my performance probably need be convincing only long enough for a marksman to draw a bead on me.

But I was still studying the man I was to replace (what else could I do?) when the door opened and I heard Dak in his proper person call out, "Anybody home?" The lights came on, the three-dimensional vision faded, and I felt as if I had been wrenched from a dream. I turned my head; the young woman called Penny was struggling to lift her head from the other hydraulic bed and Dak was standing braced in the doorway.

I looked at him and said wonderingly, "How do you manage to stand up?" Part of my mind, the professional part that works independently, was noting how he stood and filing it in a new drawer marked: "How a Man Stands under Two Gravities."

He grinned at me. "Nothing to it. I wear arch supports."

"Hmmmph!"

"You can stand up, if you want to. Ordinarily we discourage passengers from getting out of the boost tanks when we are torching at anything over one and a half gees—too much chance that some idiot win fall over his own feet and break a leg. But I once saw a really tough weight-lifter type climb out of the press and walk at five gravities—but he was never good for much afterwards. But two gees is okay— about like carrying another man piggyback." He glanced at the young lady. "Giving him the straight word, Penny?"

"He hasn't asked anything yet."

"So? Lorenzo, I thought you were the lad who wanted all the answers."

I shrugged. "I cannot now see that it matters, since it is evident that I will not live long enough to appreciate them."

"Eh? What soured your milk, old son?"

"Captain Broadbent," I said bitterly, "I am inhibited in expressing myself by the presence of a lady; therefore I cannot adequately discuss your ancestry, personal habits, morals, and destination. Let it stand that I knew what you had tricked me into as soon as I became aware of the identity of the man I am to impersonate. I will content myself with one question only: who is about to attempt to assassinate Bonforte? Even a clay pigeon should be entitled to know who is shooting at him."

For the first time I saw Dak register surprise. Then he laughed so hard that the acceleration seemed to be too much for him; he slid to the deck and braced his back against a bulkhead, still laughing.

"I don't see anything funny about it," I said angrily.

He stopped and wiped his eyes. "Lorrie old son, did you honestly think that I had set you up as a sitting duck?"

"It's obvious." I told him my deductions about the earlier assassination attempts.

He had the sense not to laugh again. "I see. You thought it was a job about like food taster for a Middle Ages king. Well, well have to try to straighten you out; I don't suppose it helps your acting to think that you are about to be burned down where you stand. Look, I've been with the Chief for six years. During that time I *know* he has never used a double… Nevertheless, I was present on two occasions when attempts were made on his life—one of those times I shot the hatchet man. Penny, you've been with the Chief longer than that. Has he ever used a double before?"

She looked at me coldly. "Never. The very idea that the Chief would let anybody expose himself to danger in his place is—well, I ought to slap your face; that's what I ought to do!"

"Take it easy, Penny," Dak said mildly. "You've both got jobs to do and you are going to have to work with him. Besides, his wrong guess isn't too silly, not from the outside. By the way, Lorenzo, this is Penelope Russell. She is the Chiefs personal secretary, which makes her your number-one coach."

"I am honored to meet you, mademoiselle."

"I wish I could say the same!"

"Stow it, Penny, or I'll spank your round fanny—at two gravities. Lorenzo, I concede that doubling for John Joseph Bonforte isn't as safe as riding in a wheel chair—shucks, as we both know, several attempts have been made to close out his life insurance. But that is not what we are afraid of this time. Matter of fact, this time, for political reasons you will presently understand, the laddies we are up against won't dare to try to kill the Chief—or to kill you when you are doubling for the Chief. They are playing rough—as you *know*!—and they would kill me, or even Penny, for the slightest advantage. They would kill you right now, if they could get at you. But when you make this public appearance *as the Chief* you'll be safe; the circumstances will be such that they can't afford to kill."

He studied my face. "Well?"

I shook my head. "I don't follow you."

"No, but you will. It is a complicated matter, involving Martian ways of looking at things. Take it for granted; you'll know all about it before we get there."

I still did not like it. Thus far Dak had told me no outright lies that I knew of—but he could lie effectively by not telling all that he knew, as I had learned the bitter way. I said, "See here, I have no reason to trust you, or to trust this young lady—if you will pardon me, miss. But while I

haven't any liking for Mr. Bonforte, he does have the reputation for being painfully, even offensively, honest. When do I get to talk to *him? As* soon as we reach Mars?"

Dak's ugly, cheerful face was suddenly shadowed with sadness. "I'm afraid not. Didn't Penny tell you?"

"Tell me what?"

"Old son, that's why we've got to have a double for the Chief. They've kidnapped him."

My head ached, possibly from the double weight, or perhaps from too many shocks. "Now you know," Dak went on. "You know why Jock Dubois didn't want to trust you with it until after we raised ground. It is the biggest news story since the first landing on the Moon, and we are sitting on it, doing our damnedest to keep it from ever being known. We hope to use you until we can find him and get him back. Matter of fact, you have already started your impersonation. This ship is not really the *Go For Broke;* it is the Chiefs private yacht and traveling office, the *Tom Paine*. The *Go For Broke* is riding a parking orbit around Mars, with its transponder giving out the recognition signal of this ship—a fact known only to its captain and comm officer —while the *Tommie* tucks up her skirts and rushes to Earth to pick up a substitute for the Chief. Do you begin to scan it, old son?"

I admit that I did not. "Yes, but—see here, Captain, if Mr. Bonforte's political enemies have kidnapped him, why keep it secret? I should expect you to shout it from the housetops."

"On Earth we would. At New Batavia we would. On Venus we would. But here we are dealing with Mars. Do you know the legend of Kkkahgral the Younger?"

"Eh? I'm afraid I don't."

"You must study it; it will give you insight into what makes a Martian tick. Briefly, this boy Kkkah was to appear at a certain time and place, thousands of years ago, for a very high honor—like being knighted. Through no fault of his own (the way we would look at it) he failed to make it on time. Obviously the only thing to do was to kill him— by Martian standards. But because of his youth and his distinguished record some of the radicals present argued that he should be allowed to go back and start over. But Kkkahgral would have none of it. He insisted on his right to prosecute the case himself, won it, and was executed. Which makes him the very embodiment, the patron saint, of propriety on Mars."

"That's crazy!"

"Is it? We aren't Martians. They are a very old race and they have worked out a system of debts and obligations to cover every possible situation—the greatest formalists conceivable. Compared with them, the ancient Japanese, with their *girl* and *gimu,* were outright anarchists. Martians don't have 'right' and 'wrong'—instead they have propriety and impropriety, squared, cubed, and loaded with gee juice. But where it bears on this problem is that the Chief was about to be adopted into the nest of Kkkahgral the Younger himself. Do you scan me now?"

I still did not. To my mind this Kkkah character was one of the more loathsome items from *Le Grand Guignol*. Broadbent went on, "It's simple enough. The Chief is probably the greatest practical student of Martian customs and psychology. He has been working up to this for years. Comes local noon on Wednesday at Lacus Soli, the ceremony of adoption takes place. If the Chief is there and goes through his paces properly, everything is sweet. If he is not there— and it makes no difference at all why he is not there—his name is mud on Mars, in every nest from pole to pole—and the greatest interplanetary and interracial political coup ever attempted falls flat on its face. Worse than that, it will backfire. My guess is that the very least that will happen is for Mars to withdraw even from its present loose association with the Empire. Much more likely there will be reprisals and human beings will be killed—maybe every human on Mars. Then the extremists in the Humanity Party would have their way and Mars would be brought into the Empire by force— but only after every Martian was dead. And all set off just by Bonforte failing to show up for the adoption ceremony... Martians take these things very seriously."

Dak left as suddenly as he had appeared and Penelope Russell turned on the picture projector again. It occurred to me fretfully that I should have asked him what was to keep our enemies from simply killing *me*, if all that was needed to upset the political applecart was to keep Bonforte (in his proper person, or through his double) from attending some barbaric Martian ceremony. But I had forgotten to ask —perhaps I was subconsciously afraid of being answered.

But shortly I was again studying Bonforte, watching his movements and gestures, feeling his expressions, subvocalizing the tones of his voice, while floating in that detached, warm reverie of artistic effort. Already I was "wearing his head."

I was panicked out of it when the images shifted to one in which Bonforte was surrounded by Martians, touched by their pseudo limbs. I had been so deep inside the picture that I could actually feel them myself—and the stink was unbearable. I made a strangled noise and clawed at it. "*Shut it off*!"

The lights came up and the picture disappeared. Miss Russell was looking at me. "What in the world is the matter with you?"

I tried to get my breath and stop trembling. "Miss Russell —I am very sorry—but please—don't turn that on again. I can't *stand* Martians."

She looked at me as if she could not believe what she saw but despised it anyhow. "I told them," she said slowly and scornfully, "that this ridiculous scheme would not work."

"I am very sorry. I cannot help it."

She did not answer but climbed heavily out of the cider press. She did not walk as easily at two gravities as Dak did, but she managed. She left without another word, closing the door as she went.

She did not return. Instead the door was opened by a man who appeared to be inhabiting a giant kiddie stroller. "Howdy there, young fellow!" he boomed out. He was sixtyish, a bit too heavy, and bland; I did not have to see his diploma to be aware that his was a "bedside" manner.

"How do you do, sir?"

"Well enough. Better at lower acceleration." He glanced down at the contrivance he was strapped into. "How do you like my corset-on-wheels? Not stylish, perhaps, but it takes some of the strain off my heart. By the way, just to keep the record straight, I'm Dr. Capek, Mr. Bonforte's personal therapist. I know who you are. Now what's this we hear about you and Martians?"

I tried to explain it clearly and unemotionally.

Dr. Capek nodded. "Captain Broadbent should have told me. I would have changed the order of your indoctrination program. The captain is a competent young fellow in his way but his muscles run ahead of his brain on occasion… He is so perfectly normal an extrovert that he frightens me. But no harm done. Mr. Smythe, I want your permission to hypnotize you. You have my word as a physician that it will be used only to help you in this matter and that I will in no wise tamper with your personal integration." He pulled out an old-fashioned pocket watch of the sort that is almost a badge of his profession and took my pulse.

I answered, "You have my permission readily, sir—but it won't do any good. I can't go under." I had learned hypnotic techniques myself during the time I was showing my mentalist act, but my teachers had never had any luck hypnotizing me. A touch of hypnotism is very useful to such an act, especially if the local police aren't too fussy about the laws the medical association has hampered us with.

"So? Well, we'll just have to do the best we can, then. Suppose you relax, get comfortable, and we'll talk about your problem." He still kept the watch in his hand, fiddling with it and twisting the chain, after he had stopped taking my pulse. I started to mention it, since it was catching the reading light just over my head, but decided that it was probably a nervous habit of which he was not aware and really too trivial a matter to call to the attention of a stranger.

"I'm relaxed," I assured him. "Ask me anything you wish. Or free association, if you prefer."

"Just let yourself float," he said softly. Two gravities makes you feel heavy, doesn't it? I usually just sleep through it myself. It pulls the blood out of the brain, makes one sleepy. They are beginning to boost the drive again. We'll all have to sleep… We'll be heavy… We'll have to sleep…"

I started to tell him that he had better put his watch away—or it would spin right out of his hand. Instead I fell asleep.

When I woke up, the other acceleration bunk was occupied by Dr. Capek. "Howdy, bub," he greeted me. "I got tired of that confounded perambulator and decided to stretch out here and distribute the strain."

"Uh, are we back on two gravities again?"

"Eh? Oh yes! We're on two gravities."

"I'm sorry I blacked out. How long was I asleep?"

"Oh, not very long. How do you feel?"

"Fine. Wonderfully rested, in fact."

"It frequently has that effect. Heavy boost, I mean. Feel like seeing some more pictures?"

"Why, certainly, if you say so, Doctor."

"Okay." He reached up and again the room went dark.

I was braced for the notion that he was going to show me more pictures of Martians; I made up my mind not to panic. After all, I had found it necessary on many occasions to pretend that they were not present; surely motion pictures of them should not affect me—I had simply been surprised earlier.

They were indeed stereos of Martians, both with and without Mr. Bonforte. I found it possible to study them with detached mind, without terror or disgust.

Suddenly I realized that I was *enjoying* looking at them!

I let out some exclamation and Capek stopped the film. •Trouble?"

"Doctor—you hypnotized me!"

"You told me to."

"But I can't be hypnotized."

"Sorry to hear it."

"Uh—so you managed it. I'm not too dense to see that."

I added, "Suppose we try those pictures again. I can't really believe it."

He switched them on and I watched and wondered. Martians were not disgusting, if one looked at them without prejudice: they weren't even ugly. In fact, they possessed the same quaint grace as a Chinese pagoda. True, they were not human in form, but neither is a bird of paradise—and birds of paradise are the loveliest things alive.

I began to realize, too, that their pseudo limbs could be very expressive; their awkward gestures showed some of the bumbling friendliness of puppies. I knew now that I had looked at Martians all my life through the dark glasses of hate and fear.

Of course, I mused, their stench would still take getting used to, but—and then I suddenly realized that I was smelling them, the unmistakable odor—and I didn't mind it a bit! In fact, I liked it. "Doctor!" I said urgently. "This machine has a 'smellie' attachment—

doesn't it?"

"Eh? I believe not. No, I'm sure it hasn't—too much parasitic weight for a yacht."

"But it must. I can smell them very plainly."

"Oh, yes." He looked slightly shamefaced. "Bub, I did one thing to you that I hope will cause you no inconvenience."

"Sir?"

"While we were digging around inside your skull it became evident that a lot of your neurotic orientation about Martians was triggered by their body odor. I didn't have time to do a deep job so I had to offset it. I asked Penny— that's the youngster who was in here before—for a loan of some of the perfume she uses. I'm afraid that from here on out, bub, Martians are going to smell like a Parisian house of joy to you. If I had had time I would have used some homelier pleasant odor, like ripe strawberries or hot cakes and syrup. But I had to improvise."

I sniffed. Yes, it did smell like a heavy and expensive perfume—and yet, damn it, it was unmistakably the reek of Martians. "I like it."

"You can't help liking it."

"But you must have spilled the whole bottle in here. The place is drenched with it."

"Huh? Not at all. I merely waved the stopper under your nose a half hour ago, then gave the bottle back to Penny and she went away with it." He sniffed. "The odor is gone now. 'Jungle Lust,' it said on the bottle. Seemed to have a lot of musk in it. I accused Penny of trying to make the crew space-happy and she just laughed at me." He reached up and switched off the stereopix. "We've had enough of those for now. I want to get you onto something more useful."

When the pictures faded out, the fragrance faded with them, just as it does with smellie equipment. I was forced to admit to myself that it as all in the head. But, as an actor, I was intellectually aware of that truth anyhow.

When Penny came back in a few minutes later, she had a fragrance exactly like a Martian.

I loved it.

Chapter Four

My education continued in that room. (Mr. Bonforte's guest room, it was) until turnover. I had no sleep, other than under hypnosis, and did not seem to need any. Either Doc Capek or Penny stuck with me and helped me the whole time. Fortunately my man was as thoroughly photographed and recorded as perhaps any man in history and I had, as well, the close cooperation of his intimates. There was endless material; the problem was to see how much I could assimilate, both awake and under hypnosis.

I don't know at what point I quit disliking Bonforte. Capek assured me—and I believe him—that he did not implant a hypnotic suggestion on this point; I had not asked for it and I am quite certain that Capek was meticulous about the ethical responsibilities of a physician and hypnotherapist. But I suppose that it was an inevitable concomitant of the role—I rather think I would learn to like Jack the Ripper if I studied for the part. Look at it this way: to learn a role truly, you must for a time become that character. And a man either likes himself, or he commits suicide, one way or another.

"To understand all is to forgive all"—and I was beginning to understand Bonforte.

At turnover we got that one-gravity rest that Dak had promised. We never were in free fall, not for an instant; instead of putting out the torch, which I gather they hate to do while under way, the ship described what Dak called a 180-degree skew turn. It leaves the ship on boost the whole time and is done rather quickly, but it has an oddly disturbing effect on the sense of balance. The effect has a name something like Coriolanus. Coriolis?

All I know about spaceships is that the ones that operate from the surface of a planet are true rockets but the *voyageurs* call them "teakettles" because of the steam jet of water or hydrogen they boost with. They aren't considered real atomic-power ships even though the jet is heated by an atomic pile. The long-jump ships such as the *Tom Paine*, torchships that is, are (so they tell me) the real thing, making use of E equals MC squared, or is it M equals EC squared? You know—the thing Einstein invented.

Dak did his best to explain it all to me, and no doubt it is very interesting to those who care for such things. But I can't imagine why a gentleman should bother with such. It seems to me that every time those scientific laddies get busy with then-slide rules life becomes more complicated. What was wrong with things the way they were?

During the two hours we were on one gravity I was moved up to Bonforte's cabin. I started wearing his clothes and his face and everyone was careful to call me "Mr. Bonforte" or "Chief or (in the case of Dr. Capek) "Joseph," the idea being, of course, to .help me build the part

Everyone but Penny, that is... She simply would not call me "Mr. Bonforte." She did her best to help but she could not bring herself to that. It was clear as scripture that she was a secretary who silently and hopelessly loved her boss, and she resented me with a deep, illogical, but natural bitterness. It made it hard for both of us, especially as I was finding her most attractive. No man can do his best work with a woman constantly around him who despises him. But I could not dislike her in return; I felt deeply sorry for her—even though I was decidedly irked.

We were on a tryout-in-the-sticks basis now, as not everyone in the *Tom Paine* knew that I was not Bonforte. I did not know exactly which ones knew of the substitution, but I was allowed to relax and ask questions only in the presence of Dak, Penny, and Dr. Capek. I was fairly sure that Bonforte's chief clerk, Mr. Washington, knew but never let on; he was a spare, elderly mulatto with the tight-lipped mask of a saint There were two others who certainly knew, but they were not in the *Tom Paine;* they were standing by and covering up from the *Go For Broke*, handling press releases and routine dispatches—Bill Corpsman, who was Bonforte's front man with the news services, and Roger Clifton. I don't know quite how to describe Clifton's job. Political deputy? He had been Minister without Portfolio, you may remember, when Bonforte was Supreme Minister, but that says nothing. Let's put it symbolically: Bonforte handed out policy and Clifton handed out patronage.

This small group had to know; if any others knew it was not considered necessary to tell me. To be sure, the other members of Bonforte's staff and all the crew of the *Tom Paine* knew that something odd was going on; they did not necessarily know what it was. A good many people had seen me enter the ship—but as "Benny Grey." By the time they saw me again I was already "Bonforte."

Someone had had the foresight to obtain real make-up equipment, but I used almost none. At close range make-up can be seen; even Silicoflesh cannot be given the exact texture of skin. I contented myself with darkening my natural complexion a couple of shades with Semiperm and wearing his face, from inside. I did have to sacrifice quite a lot of hair and Dr. Capek inhibited the roots. I did not mind; an actor can always wear hair-pieces—and I was sure that this job was certain to pay me a fee that would let me retire for life, if I wished.

On the other hand, I was sometimes queasily aware that "life" might not be too long—there are those old saws about the man who knew too much and the one about dead men and tales. But truthfully I was beginning to trust these people. They were all darn nice people—which told me as much about Bonforte as I had learned by listening to his speeches and seeing his pix. A political figure is not a single man, so I was learning, but a compatible team. If Bonforte himself had not been a decent sort he would not have had these people around him.

The Martian language gave me my greatest worry. Like most actors, I had picked up enough Martian, Venerian, Outer Jovian, etc., to be able to fake in front of a camera or on stage. But those rolled or fluttered consonants are very difficult. Human vocal cords are not as versatile as a Martian's tympanus, I believe, and, in any case, the semi-phonetic spelling out of those sounds in Roman letters, for example "kkk" or "jjj" or "rrr," have no more to do with the true sounds than the *g* in "Gnu" has to do with the inhaled click with which a Bantu pronounces "Gnu."

"Jjj," for instance, closely resembles a Bronx cheer.

Fortunately Bonforte had no great talent for other languages-and I am a professional; my ears really hear, I can imitate any sound, from a buzz saw striking a nail in a chunk of firewood to a setting hen disturbed on her nest. It was necessary only to acquire Martian as poorly as Bonforte spoke it. He had worked hard to overcome his lack of talent, and every word and phrase of Martian that he knew had been sight-sound recorded so that he could study his mistakes.

So I studied his mistakes, with the projector moved into his office and Penny at my elbow to sort out the spools for me and answer questions.

Human languages fall into four groups: inflecting ones as in Anglo-American, positional as in Chinese, agglutinative as in Old Turkish, polysynthetic (sentence units) as in Eskimo—to which, of course, we now add alien structures as wildly odd and as nearly impossible for the human brain as non-repetitive or emergent Venerian. Luckily Martian is analogous to human speech forms. Basic Martian, the trade language, is positional and involves only simple concrete ideas—like the greeting: "I see you." High Martian is polysynthetic and very stylized, with an expression for every nuance of their complex system of rewards and punishments, obligations and debts. It had been almost too much for Bonforte; Penny told me that be could read those arrays of dots they use for writing quite easily but of the spoken form of High Martian he could say only a few hundred sentences.

Brother, how I studied those few he had mastered!

The strain on Penny was even greater than it was on me. Both she and Dak spoke some Martian but the chore of coaching me fell on her as Dak had to spend most of his time in the control room; Jock's death had left him shorthanded. We dropped from two gravities to one for the last few million miles of the approach, during which time he never came below at all. I spent it learning the ritual I would have to know for the adoption ceremony, with Penny's help.

I had just completed running through the speech *in* which I was to accept membership in the Kkkah nest—a speech not unlike that, in spirit, with which an orthodox Jewish boy assumes the responsibilities of manhood, but as fixed, as invariable, as Hamlet's soliloquy. I had read it, complete with Bonforte's mispronunciations and facial tic; I finished and asked, "How was that?"

"That was quite good," she answered seriously.

"Thanks, Curly Top." It was a phrase I had lifted from the language-practice spools in Bonforte's files; it was what Bonforte called her when he was feeling mellow—and it was perfectly in character.

"Don't you dare call me that!"

I looked at her in honest amazement and answered, still in character, "Why, Penny my child!"

"Don't you call me *that*, either! You *fake*! You *phony!* You—*actor*!" She jumped up, ran as far as she could—which was only to the door—and stood there, faced away from me, her face buried in her hands and her shoulders shaking with sobs.

I made a tremendous effort and lifted myself out of the character—pulled in my belly, let my own face come up, answered in my own voice. "Miss Russell!"

She stopped crying, whirled around, looked at me, and her jaw dropped. I added, still in my normal self, "Come back here and sit down."

I thought she was going to refuse, then she seemed to think better of it, came slowly back and sat down, her hands in her lap but with her face that of a little girl who is "saving up more spit."

I let her sit for a moment, then said quietly, "Yes, Miss Russell, I am an actor. Is that a reason for you to insult me?"

She simply looked stubborn.

"As an actor, I am here to an actor's job. You know why. You know, too, that I was tricked into taking it—it is not a job I would have accepted with my eyes open, even in my wildest moments. I hate having to do it considerably more than you hate having me do it—for despite Captain Broadbent's cheerful assurances r I am not at all sure that I will come out of it with my skin intact—and I'm awfully fond of my skin; it's the only one I have. I believe, too, that I know why you find it hard to accept me. But is that any reason for you to make my job harder than it has to be?"

She mumbled. I said sharply, "Speak up!"

"It's dishonest! It's *indecent*!"

I sighed. "It certainly is. More than that, it is impossible —without the wholehearted support of the other members of the cast. So let's call Captain Broadbent down here and tell him. Let's call it off."

She jerked her face up and said, "Oh no! We can't do that."

"Why can't we? A far better thing to drop it now than to present it and have it flop. I can't give a performance under these conditions. Let's admit it."

"But—but—we've *got* to! It's necessary."

"Why is it necessary, Miss Russell? Political reasons? I have not the slightest interest in politics—and I doubt if you have any really deep interest. So why must we do it?"

"Because—because *he*———" She stopped, unable to go on, strangled by sobs.

I got up, went over, and put a hand on her shoulder. "I know. Because if we don't, something that *he* has spent years building up will fall to pieces. Because he can't do it himself and his friends are trying to cover up and do it for him. Because his friends are loyal to him. Because *you* are loyal to him. Nevertheless, it hurts you to see someone else in the place that is rightfully his. Besides that, you are half out of your mind with grief and worry about him. Aren't you?"

"Yes." I could barely hear it.

I took hold of her chin and tilted her face up. "I know why you find it so hard to have me here, in his place. You love him. But I'm doing the best job for him I know how. *Confound it, woman! Do you have to make my job six times harder by treating me like dirt*?"

She looked shocked. For a moment I thought she was going to slap me. Then she said brokenly, "I am sorry. I am very sorry. I won't let it happen again."

I let go her chin and said briskly, "Then let's get back to work."

She did not move. "Can you forgive me?"

"Huh? There's nothing to forgive. Penny. You were acting up because you love him and you were worried. Now let's get to work. I've got to be letter-perfect—and it's only hours away." I dropped at once back Into the role.

She picked up a spool and started the projector again. I watched him through it once, then did the acceptance speech with the sound cut out but stereo on, matching my voice—*his* voice, I mean—to the moving image. She watched me, looking from the image back to my face with a dazed look on her own. We finished and I switched it off myself. "How was that?"

"That was perfect!"

I smiled his smile. "Thanks, Curly Top."

"Not at all—'Mr. Bonforte.' "

Two hours later we made rendezvous with the *Go For Broke*.

Dak brought Roger Clifton and Bill Corpsman to my cabin as soon as the *Go For Broke* had transferred them. I knew them from pictures. I stood up and said, "Hello, Rog. Glad to see you, Bill." My voice was warm but casual; on the level at which these people operated, a hasty trip to Earth and back was simply a few days' separation and nothing more. I limped over and offered my hand. The ship was at the moment under low boost as it adjusted to a much tighter orbit than the *Go For Broke* had been riding in.

Clifton threw me a quick glance, then played up. He took his cigar out of his mouth, shook hands, and said quietly, "Glad to see you back, Chief." He was a small man, baldheaded and middle-aged, and looked like a lawyer and a good poker player.

"Anything special while I was away?"

"No. Just routine. I gave Penny the file."

"Good." I turned to Bill Corpsman, again offered my hand.

He did not take it Instead he put his fists on his hips, looked up at me, and whistled. "Amazing! I really do believe we stand a chance of getting away with it." He looked me up and down, then said, "Turn around, Smythe. Move around. I want to see you walk."

I found that I was actually feeling the annoyance that Bonforte would have felt at such uncalled-for impertinence, and, of course, it showed in my face. Dak touched Corpsman's sleeve and said quickly, "Knock it off, Bill. You remember what we agreed?"

"Chicken tracks!" Corpsman answered. "This room is soundproof. I just want to make sure he is up to it. Smythe, how's your Martian? Can you spiel it?"

I answered with a single squeaking polysyllabic in High Martian, a sentence meaning roughly, "Proper conduct demands that one of us leave!"—but it means far more than that, as it is a challenge which usually ends in someone's nest being notified of a demise.

I don't think Corpsman understood it, for he grinned and answered, "I've got to hand it to you, Smythe. That's good."

But Dak understood it. He took Corpsman by the arm and said, "Bill, I told you to knock it off. You're in my ship and that's an order. We play it straight from here on—every second."

Clifton added, "Pay attention to him, Bill. You know we agreed that was the way to do it. Otherwise somebody might slip."

Corpsman glanced at him, then shrugged. "All right, all right. I was just checking up—after all, this was my idea." He gave me a onesided smile and said, "Howdy, Mister Bonforte. Glad to see you back."

There was a shade too much emphasis on "Mister" but I answered, "Good to be back, Bill. Anything special I need to know before we go down?"

"I guess not. Press conference at Goddard City after the ceremonies." I could see him watching me to see how I would take it.

I nodded. "Very well."

Dak said hastily, "Say, Rog, how about that? Is it necessary? Did you authorize it?"

"I was going to add," Corpsman went on, turning to Clifton, "before the Skipper here got the jitters, that I can take it myself and tell the boys that the Chief has dry laryngitis from the ceremonies—or we can limit it to written questions submitted ahead of time and I'll get the answers written out for him while the ceremonies are going on. Seeing that he looks and sounds so good close up, I would say to risk it. How about it, Mister—'Bonforte'? Think you can swing it?"

"I see no problem involved in it, Bill." I was thinking that if I managed to get by the Martians without a slip I would undertake to ad-lib double talk to a bunch of human reporters as long as they wanted to listen. I had good command of Bonforte's speaking style by now and at least a rough notion of his policies and attitudes—and I need not be specific.

But Clifton looked worried. Before he could speak the ship's horn brayed out, "Captain is requested to come to the control room. Minus four minutes."

Dak said quickly, "You all will have to settle it. I've got to put this sled in its slot—I've got nobody up there but young Epstein." He dashed for the door.

Corpsman called out, "Hey, Skip! I wanted to tell you———" He was out the door and following Dak without waiting to say good-by.

Roger Clifton closed the door Corpsman had left open, came back, and said slowly, "Do you want to risk this press conference?"

"That is up to you. I want to do the job."

"Mmm… Then I'm inclined to risk it—if we use the written-questions method. But I'll check Bill's answers myself before you have to give them."

"Very well." I added, "If you can find a way to let me have them ten minutes or so ahead of time, there shouldn't be any difficulty. I'm a very quick study."

He inspected me. "I quite believe it—Chief. All right, I'll have Penny slip the answers to you right after the ceremonies. Then you can excuse yourself to go to the men's room and just stay there until you are sure of them."

"That should work."

"I think so. Uh, I must say I feel considerably better now that I've seen you. Is there anything I can do for you?"

"I think not, Rog. Yes, there is, too. Any word about— *him*?"

"Eh? Well, yes and no. He's still in Goddard City; we're sure of .that. He hasn't been taken off Mars, or even out in the country. We blocked them on that, if that was their intention."

"Eh? Goddard City is not a big place, is it? Not more than a hundred thousand? What's the hitch?"

"The hitch is that we don't dare admit that you—I mean that *he*—is missing. Once we have this adoption thing wrapped up, we can put you out of sight, then announce the kidnapping as if it had just taken place—and make them take the city apart rivet by rivet. The city authorities are all

Humanity Party appointees, but they will have to cooperate —after the ceremony. It will be the most wholehearted cooperation you ever saw, for they will be deadly anxious to produce him before the whole Kkkahgral nest swarms over them and tears the city down around their ears."

"Oh. I'm still learning about Martian psychology and customs."

"Aren't we all!"

"Rog? Mmm… What leads you to think that he is still alive? Wouldn't their purpose be better served—and with less risk—just by killing him?" I was thinking queasily how simple it had turned out to be to get rid of a body, if a man was ruthless enough.

"I see what you mean. But that, too, is tied up with Martian notions about 'propriety.'" (He used the Martian word.) "Death is the one acceptable excuse for not carrying out an obligation. If he were simply killed, they would adopt him into the nest after his death—and then the whole nest and probably every nest on Mars would set out to avenge him. They would not mind in the least if the whole human race were to die or be killed—but to kill this one human being to keep him from being adopted, that's another kettle of fish entirely. Matter of obligation and propriety— in some ways a Martian's response to a situation is so automatic as to remind one of instinct. It is not, of course, since they are incredibly intelligent. But they do the damnedest things." He frowned and added, "Sometimes I wish I had never left Sussex."

The warning hooter broke up the discussion by forcing us to hurry to our bunks. Dak had cut it fine on purpose; the shuttle rocket from Goddard City was waiting for us when we settled into free fall. All five of us went down, which just filled the passenger couches—again a matter of planning, for the Resident Commissioner had expressed the intention of coming up to meet me and had been dissuaded only by Dak's message to him that our party would require all the space.

I tried to get a better look at the Martian surface as we went down, as I had had only one glimpse of it, from the control room of the *Tom Paine*—since I was supposed to have been there many times I could not show the normal curiosity of a tourist. I did not get much of a look; the shuttle pilot did not turn us so that we could see until he leveled off for his glide approach and I was busy then putting on my oxygen mask.

That pesky Mars-type mask almost finished us; I had never had a chance to practice with it—Dak did not think of it and I had not realized it would be a problem; I had worn both space suit and aqua lung on other occasions and I thought this would be about the same. It was not. The model Bonforte favored was a mouth-free type, a Mitsubushi "Sweet Winds" which pressurizes directly at the nostrils—a nose clamp, nostril plugs, tubes up each nostril which then run back under each ear to the supercharger on the back of your neck. I concede that it is a fine device, once you get used to it, since you can talk, eat, drink, etc., while wearing it. But I would rather have a dentist put both hands in my mouth.

The real difficulty is that you have to exercise conscious control on the muscles that close the back of your mouth, or you hiss like a teakettle, since the durn thing operates on a pressure difference. Fortunately the pilot equalized to Mars-surface pressure once we all had our masks on, which gave me twenty minutes or so to get used to it. But for a few moments I thought the jig was up, just over a silly piece of gadgetry. But I reminded myself that I had worn the thing hundreds of times before and that I was as used to it as I was to my toothbrush. Presently I believed it.

Dak had been able to avoid having the Resident Commissioner chitchat with me for an hour on the way down but it had not been possible to miss him entirely; he met the shuttle at the sky field. The close timing did keep me from haying to cope with other humans, since I had to go at once into the Martian city. It made sense, but it seemed strange that I would be safer among Martians than among my own kind.

It seemed even stranger to be on Mars.

Chapter Five

Mr. Commissioner Boothroyd was a Humanity Party appointee, of course, as were all of his staff except for civil service technical employees. But Dak had told me that it was at least sixty-forty that Boothroyd had not had a finger in the plot; Dak considered him honest but stupid. For that matter, neither Dak nor Rog Clifton believed that Supreme Minister Quiroga was in it; they attributed the thing to the clandestine terrorist group inside the Humanity Party who called themselves the "Actionists"—and they attributed *them* to some highly respectable big-money boys who stood to profit heavily.

Myself, I would not have known an Actionist from an auctioneer.

But the minute we landed something popped up that made me wonder whether friend Boothroyd was as honest and stupid as Dak thought he was. It was a minor thing but one of those little things that can punch holes in an impersonation. Since I was a Very Important Visitor the Commissioner met me; since I held no public office other than membership in the Grand Assembly and was traveling privately no official honors were offered. He was alone save for his aide—and a little girl about fifteen.

I knew him from photographs and I knew quite a bit about him; Rog and Penny had briefed me carefully. I shook hands, asked about his sinusitis, thanked him for the pleasant time I had had on my last visit, and spoke with his aide in that warm man-to-man fashion that Bonforte was so good at. Then I turned to the young lady. I knew Boothroyd had children and that one of them was about this age and sex; I did not know—perhaps Rog and Penny did not know—whether or not I had ever met her.

Boothroyd himself saved me. "You haven't met my daughter Deirdre, I believe. She insisted on coming along."

Nothing in the pictures I had studied had shown Bonforte dealing with young girls—so I simply had to *be* Bonforte—a widower in his middle fifties who had no children of his own, no nieces, and probably little experience with teenage girls—but with lots of experience in meeting strangers of every sort. So I treated her as if she were twice her real age; I did not quite kiss her hand. She blushed and looked pleased.

Boothroyd looked indulgent and said, "Well, ask him, my dear. You may not have another chance."

She blushed deeper and said, "Sir, could I have your autograph? The girls in my school collect them. I have Mr. Quiroga's… I ought to have yours." She produced a little book which she had been holding behind her.

I felt like a copter driver asked for his license—which is home in his other pants. I had studied hard but I had not expected to have to forge Bonforte's signature. Damn it, you can't do *everything* in two and a half days!

But it was simply impossible for Bonforte to refuse such a request —and I was Bonforte. I smiled jovially and said, "You have Mr. Quiroga's already?"

"Yes, sir."

"Just his autograph?"

"Yes. Er, he put 'Best Wishes' on it."

I winked at Boothroyd. "Just 'Best Wishes,' eh? To young ladies I never make it less than 'Love.' Tell you what I'm going to do———" I took the little book from her, glanced through the pages.

"Chief," Dak said urgently, "we are short on minutes."

"Compose yourself," I said without looking up. "The entire Martian nation can wait, if necessary, on a young lady." I handed the book to Penny. "Will you note the size of this book? And then remind me to send a photograph suitable for pasting in it—and properly autographed, of course."

"Yes, Mr. Bonforte."

"Will that suit you, Miss Deirdre?"

"Gee!"

"Good. Thanks for asking me. We can leave now, Captain. Mr. Commissioner, is that our car?"

"Yes, Mr. Bonforte." He shook his head wryly. "I'm afraid you have converted a member of my own family to your Expansionist heresies. Hardly sporting, eh? Sitting ducks, and so forth?"

"That should teach you not to expose her to bad company—eh, Miss Deirdre?" I shook hands again. "Thanks for meeting us, Mr. Commissioner. I am afraid we had better hurry along now."

"Yes, certainly. Pleasure."

"Thanks, Mr., Bonforte!"

"Thank *you,* my dear."

I turned away slowly, so as not to appear jerky or nervous in stereo. There were photographers around, still, news pickup, stereo, and so forth, as well as many reporters. Bill was keeping the reporters away from us; as we turned to go he waved and said, "See you later, Chief," and turned back to talk to one of them. Rog, Dak, and Penny followed me into the car. There was the visual skyfield crowd, not as numerous as at any earthport, but numerous. I was not worried about them as long as Boothroyd accepted the impersonation—though there were certainly some present who *knew* that I was not Bonforte.

But I refused to let those individuals worry me, either. They could cause us no trouble without incriminating themselves.

The car was a Rolls Outlander, pressurized, but I left my oxygen mask on because the others did. I took the righthand seat, Rog sat beside me, and Penny beside him, while Dak wound his long legs around one of the folding seats. The driver glanced back through the partition and started up.

Rog said quietly, "I was worried there for a moment."

"Nothing to worry about. Now let's all be quiet, please. I want to review my speech."

Actually I wanted to gawk at the Martian scene; I knew the speech perfectly. The driver took us along the north edge of the field, past many godowns. I read signs for Verwijs Trading Company, Diana Outlines, Ltd., Three Planets, and I. G. Farbenindustrie. There were almost as many Martians as humans in sight. We ground hogs get the impression that Martians are slow as snails—and they are, on our comparatively heavy planet On their own world they skim along on their bases like a stone sliding over water.

To the right, south of us past the flat field, the Great Canal dipped into the too-close horizon, showing no shore line beyond. Straight ahead of us was the Nest of Kkkah, a fairy city. I was staring at it, my heart lifting at its fragile beauty, when Dak moved suddenly.

We were well past the traffic around the godowns but there was one car ahead, coming toward us; I had seen it without noticing it. But Dak must have been edgily ready for trouble; when the other car was quite close, he suddenly slammed down the partition separating us from the driver, swarmed over the man's neck, and grabbed the wheel. We slewed to the right, barely missing the other car, slewed again to the left and barely stayed on the road. It was a near thing, for we were past the field now and here the highway edged the canal.

I had not been much use to Dak a couple of days earlier in the Eisenhower, but I had been unarmed and not expecting trouble. This day I was still unarmed, not so much as a poisoned fang, but I comported myself a little better. Dak was more than busy trying to drive the car while leaning over from the back seat. The driver, caught *off* balance at first, now tried to wrestle him away from the wheel.

I lunged forward, got my left arm around the driver's neck, and shoved my right thumb into his ribs. "Move and you've had it!" The voice belonged to the hero-villain in *The Second-Story Gentleman;* the line of dialogue was his too.

My prisoner became very quiet.

Dak said urgently, "Rog, what are they doing?"

Clifton looked back and answered, "They're turning around."

Dak answered, "Okay. Chief, keep your gun on that character while I climb over." He was doing so even as he spoke, an awkward matter in view of his long legs and the crowded car. He settled into the seat and said happily, "I doubt if anything on wheels can catch a Rolls on a straightaway." He jerked on the damper and the big car shot forward. "How am I doing, Rog?"

"They're just turned around."

"All right. What do we do with this item? Dump him out!

My victim squirmed and said, "I didn't do anything!" I jabbed my thumb harder and he quieted.

"Oh, not a thing," Dak agreed, keeping his eyes on the road. "All you did was try to cause a little crash—just enough to make Mr. Bonforte late for his appointment. If I had not noticed that you were slowing down to make it easy on yourself, you might have got away with it. No guts, eh?" He took a slight curve with the tires screaming and the gyro fighting to keep us upright. "What's the situation, Rog?"

"They've given up."

"So." Dak did not slacken speed; we must have been doing well over three hundred kilometers. "I wonder if they would try to bomb us with one of their own boys aboard? How about it, bub? Would they write you off as expendable?"

"I don't know what you're talking about! You're going to be in trouble over this!"

"Really? The word of four respectable people against your jailbird record? Or aren't you a transportee? Anyhow, Mr. Bonforte prefers to have me drive him—so naturally you were glad to do a favor for Mr. Bonforte." We hit something about as big as a worm cast on that glassy road and my prisoner and I almost went through the roof.

" 'Mr. Bonforte!'" My victim made it a swear word.

Dak was silent for several seconds. At last he said, "I don't think we ought to dump this one, Chief. I think we ought to let you off, then take him to a quiet place. I think he might talk if we urged him."

The driver tried to get away. I tightened the pressure on his neck and jabbed him again with my thumb knuckle. A knuckle may not feel too much like the muzzle of a heater—but who wants to find out? He relaxed and said sullenly, "You don't dare give me the needle."

"Heavens, no!" Dak answered in shocked tones. "That would be illegal. Penny girl, got a bobby pin?"

"Why, certainly, Dak." She sounded puzzled and I was. She did not sound frightened, though, and I certainly was.

"Good. Bub, did you ever have a bobby pin shoved up under your fingernails? They say it will even break a hypnotic command not to talk. Works directly on the subconscious or something. Only trouble is that the patient makes the most unpleasant noises. So we are going to take you out in the dunes where you won't disturb anybody but sand scorpions. After you have talked—now here comes the nice part! After you talk we are going to turn you loose, not do anything, just let you walk back into town. But— listen carefully now!—if you are real nice and cooperative, you get a prize. Well let you have your mask for the walk."

Dak stopped talking; for a moment there was no sound but the keening of the thin Martian air past the roof. A human being can walk possibly two hundred yards on Mars without an oxygen mask, if he is in good condition. I believe I read of a case where a man walked almost half a mile before he died. I glanced at the trip meter and saw that we were about twentythree kilometers from Goddard City.

The prisoner said slowly, "Honest, I don't know anything about it I was just paid to crash the car."

"We'll try to stimulate your memory." The gates of the Martian city were just ahead of us; Dak started slowing the car. "Here's where you get out, Chief. Rog, better take your gun and relieve the Chief of our guest."

"Right, Dak." Rog moved up by me, jabbed the man in the ribs—again with a bare knuckle. I moved out of the way. Dak braked the car to a halt, stopping right in front of the gates.

"Four minutes to spare," he said happily. "This is a nice car. I wish I owned it. Rog, ease up a touch and give me room."

Clifton did so, Dak chopped the driver expertly on the side of his neck with the edge of his hand; the man went limp. "That will keep him quiet while you get clear. Cant have any unseemly disturbance under the eyes of the nest. Let's check time."

We did so. I was about three and a half minutes ahead of the deadline. "You are to go in exactly on time, you understand? Not ahead, not behind, but on the dot."

"That's right," Clifton and I answered in chorus.

"Thirty seconds to walk up the ramp, maybe. What do you want to do with the three minutes you have left?"

I sighed. "Just get my nerve back."

"Your nerve is all right. You didn't miss a trick back there. Cheer up, old son. Two hours from now you can head for home, with your pay burning holes in your pocket. We're on the last lap."

"I hope so. It's been quite a strain. Uh, Dak?"

"Yes?"

"Come here a second." I got out of the car, motioned him to come with me a short distance away. "What happens if I made a mistake—in there?"

"Eh?" Dak looked surprised, then laughed a little too heartily. "You won't make a mistake. Penny tells me you've got it down Jo-block perfect."

"Yes, but suppose I slip?"

"You won't slip. I know how you feel; I felt the same way on my first solo grounding. But when it started, I was so busy doing it I didn't have time to do it wrong."

Clifton called out, his voice thin in thin air, "Dak! Are you watching the time?"

"Gobs of time. Over a minute."

"Mr. Bonforte!" It was Penny's voice. I turned and went back to the car. She got out and put out her hand. "Good luck, Mr. Bonforte."

"Thanks, Penny."

Rog shook hands and Dak clapped me on the shoulder. "Minus thirty-five seconds. Better start."

I nodded and started up the ramp. It must have been within a second or two of the exact, appointed time when I reached the top, for the mighty gates rolled back as I came to them. I took a deep breath and cursed that damned air mask.

Then I took my stage.

It doesn't make any difference how many times you do it, that first walk on as the "curtain goes up on the first night of any run is a breath-catcher and a heartstopper. Sure, you know your sides. Sure, you've asked the manager to count the house. Sure, you've done it all before. No matter—when you first walk out there and know that all those eyes are on you, waiting for you to speak, waiting for you to do something—maybe even waiting for you to go up on your lines, brother, you feel it. This is why they have prompters.

I looked out and saw my audience and I wanted to run. I had stage fright for the first time in thirty years.

The siblings of the nest were spread out before me as far as I could "see. There was an open lane in front of me, with thousands on each side, set close together as asparagus. I knew that the first thing I must do was slow-march down the center of that lane, clear to the far end, to the ramp leading down into the inner nest.

I could not move.

I said to myself, "Look, boy, you're John Joseph Bonforte. You've been here dozens of times before. These people are your friends. You're here because you want to be here—and because they want you here. So march down that aisle. Tum tum te *tum!* 'Here comes the bride!'"

I began to feel like Bonforte again. I was Uncle Joe Bonforte, determined to do this thing perfectly—for the honor and welfare of my own people and my own planet —and for my friends the Martians. I took a deep breath and one step.

That deep breath saved me; it brought me that heavenly fragrance. Thousands on thousands of Martians packed close together—it smelled to me as if somebody had dropped and broken a whole case of Jungle Lust. The conviction that I smelled it was so strong that I involuntarily glanced back to see if Penny had followed me in. I could feel her handclasp warm in my palm.

I started limping down that aisle, trying to make it about the speed a Martian moves on his own planet. The crowd closed in behind me. Occasionally kids would get away from their elders and skitter out in front of me. By "kids" I mean post-fission Martians, half the mass and not much over half the height of an adult. They are never out of the nest and we are inclined to forget that there can be little Martians. It takes almost five years, after fission, for a Martian to regain his full size, have his brain fully restored, and get all of his memory back. During this transition he is an idiot studying to be a moron. The gene rearrangement and subsequent regeneration incident to conjugation and fission put him out of the running for a long time. One of Bonforte's spools was a lecture on the subject, accompanied by some not very good amateur stereo.

The kids, being cheerful idiots, are exempt from propriety and all that that implies. But they are greatly loved.

Two of the kids, of the same and smallest size and looking just alike to me, skittered out and stopped dead in front of me, just like a foolish puppy in traffic. Either I stopped or I ran them down.

So I stopped. They moved even closer, blocking my way completely, and started sprouting pseudo limbs while chittering at each other. I could not understand them at all. Quickly they were plucking at my clothes and snaking their pattypaws into my sleeve pockets.

The crowd was so tight that I could hardly go around them. I was stretched between two needs. In the first place they were so dam cute that' I wanted to see if I didn't have a sweet tucked away somewhere for them—but in a still firster place was the knowledge that the adoption ceremony was timed like a ballet. If I didn't get on down that street, I was going to commit the classic sin against propriety made famous by Kkkahgral the Younger himself.

But the kids were not about to get out of my way. One of them had found my watch.

I sighed and was almost overpowered by the perfume. Then I made a bet with myself. I bet that baby-kissing was a Galactic Universal and that it took precedence even over Martian propriety. I got on one knee, making myself about the height they were, and fondled them for a few moments, patting them and running my hands down their scales.

Then I stood up and said carefully, "That is all now. I must go," which used up a large fraction of my stock of Basic Martian.

The kids clung to me but I moved them carefully and gently aside and went on down the double line, hurrying to make up for the time I had lost. No life wand burned a hole in my back. I risked a hope that my violation of propriety had not yet reached the capital offense level. I reached the ramp leading down into the inner nest and suited on down.

That line of asterisks represents the adoption ceremony. Why? Because it is limited to members of the Kkkah nest. It is a family matter.

Put it this way: A Mormon may have very close gentile friends—but does that friendship get a gentile inside the Temple at Salt Lake City? It never has and it never will. Martians visit very freely back and forth between their nests —but a Martian enters the inner nest only of his own family. Even his conjugate-spouses are not thus privileged. I have no more right to tell the details of the adoption ceremony than a lodge brother has to be specific about ritual outside the lodge.

Oh, the rough outlines do not matter, since they are the same for any nest, just as my part was the same for any candidate. My sponsor —Bonforte's oldest Martian friend, Kkkahrrreash—met me at the door and threatened me with a wand. I demanded that he kill me at once were I guilty of any breach. To tell the truth, I did not recognize him, even though I had studied a picture of him. But it had to be him because ritual required it.

Having thus made clear that I stood foursquare for Motherhood, the Home, Civic Virtue, and never missing Sunday school, I was permitted to enter. 'Rrreash conducted me around all the stations, I was questioned and I responded. Every word, every gesture, was as stylized as a classical Chinese play, else I would not have stood a chance. Most of the time I did not know what they were saying and half of the time I did not understand my own replies; I simply knew my cues and the responses. It was not made easier by the low light level the Martians prefer; I was groping around like a mole.

I played once with Hawk Mantell, shortly before he died, after he was stone-deaf. There was a trouper! He could not even use a hearing device because the eighth nerve was dead. Part of the time he could cue by lips but that is not always possible. He directed the production himself and he timed it perfectly. I have seen him deliver a line, walk away—then whirl around and snap out a retort to a line that he had never heard, precisely on the timing.

This was like that. I knew my part and I played it. If *they* blew it, that was their lookout.

But it did not help my morale that there were never less than half a dozen wands leveled at me the whole time. I kept telling myself that they wouldn't burn me down for a slip. After all, I was just a poor stupid human being and at the very least they would give me a passing mark for effort But I didn't believe it.

After what seemed like days—but was not, since the whole ceremony times exactly one ninth of Mars' rotation—after an endless time, we ate. I don't know what and perhaps it is just as well. It did not poison me.

After that the elders made their speeches, I made my acceptance speech in answer, and they gave me my name and my wand. I was a Martian.

I did not know how to use the wand and my name sounded like a leaky faucet, but from that instant on it was my legal name on Mars and I was legally a blood member of the most aristocratic family on the planet—exactly fiftytwo hours after a ground hog down on his luck had spent his last half-Imperial buying a drink for a stranger in the bar of Casa Manana.

I guess this proves that one should never pick up strangers.

I got out as quickly as possible. Dak had made up a speech for me in which I claimed proper necessity for leaving at once and they let me go. I was nervous as a man upstairs in a sorority house because there was no longer ritual to guide me. I mean to say even casual social behavior was still hedged around with airtight and risky custom and I did not know the moves. So I recited my excuse and headed out. 'Rrreash and another elder .went with me and I chanced playing with another pair of the kids when we were outside—or maybe the same pair. Once I reached the gates the two elders said good-by in squeaky English and let me go out alone; the gates closed behind me and I reswallowed my heart.

The Rolls was waiting where they had let me out; I hurried down, a door opened, and I was surprised to see that Penny was in it alone. But not displeased. I called out, "Hi, Curly Top! I made ill"

"I knew you would."

I gave a mock sword salute with my wand and said, "Just call me Kkkahjjjerrr"—spraying the front rows with the second syllable.

"Be careful with that thing!" she said nervously.

I slid in beside her on the front seat and asked, "Do you know how to use one of these things?" The reaction was setting in and I felt exhausted but gay; I wanted three quick drinks and a thick steak, then to wait up for the critics' reviews.

"No. But do be careful."

"I think all you have to do is to press it here," which I did, and there was a neat two-inch hole in the windshield and the car wasn't pressurized any longer.

Penny gasped. I said, "Gee, I'm sorry. I'll put it away until Dak can coach me."

She gulped. "It's all right. Just be careful where you point it." She started wheeling the car and I found that Dak was not the only one with a heavy hand on the damper.

Wind was whistling in through the hole I had made. I said, "What's the rush? I need some time to study my lines for the press conference. Did you bring them. And where are the others?" I had forgotten completely the driver we had grabbed; I had not thought about him from the time the gates of the nest opened.

"No. They couldn't come."

"Penny, what's the matter? What's happened?" I was wondering if I could possibly take a press conference without coaching. Perhaps I could tell them a little about the adoption; I wouldn't have to fake that.

"It's Mr. Bonforte—*they've found him*."

Chapter Six

I had not noticed until then that she had not once called me "Mr. Bonforte." She could not, of course, for I was no longer he; I was again Lorrie Smythe, that actor chap they had hired to stand in for him.

I sat back and sighed, and let myself relax. "So it's over at last—and we got away with it." I felt a great burden lift off me; I had not known how heavy it was until I put it down. Even my "lame" leg stopped aching. I reached over and patted Penny's hand on the wheel and said in my own voice, "I'm glad it's over. But I'm going to miss having you around, pal. You're a trouper. But even the best run ends and the company breaks up. I hope I'll see you again sometime."

"I hope so too."

"I suppose Dak has arranged some shenanigan to keep me under cover and snake me back into the *Tom Paine*?"

"I don't know." Her voice sounded odd and I gave her a quick glance and saw that she was crying. My heart gave a skip. Penny crying? Over us separating? I could not believe it and yet I wanted to. One might think that, between my handsome features and cultivated manners, women would find me irresistible, but it is a deplorable fact that all too many of them have found me easy to resist. Penny had seemed to find it no effort at all.

"Penny," I said hastily, "why all the tears, hon? You'll wreck this car."

"I can't help it."

"Well—put me in it. What's wrong? You told me they had got him back; you didn't tell me anything else." I had a sudden horrid but logical suspicion. "He was *alive*— wasn't he?"

"Yes—he's alive—but, oh, they've *hurt* him I" She started to sob and I had to grab the wheel.

She straightened up quickly. "Sorry."

"Want me to drive?"

"I'll be all right. Besides, you don't know how—I mean you aren't supposed to know how to drive."

"Huh? Don't be silly. I do know how and it no longer matters that ———" I broke off, suddenly realizing that it might still matter. If they had roughed up Bonforte so that it showed, then he could not appear in public in that shape— at least not only fifteen minutes after being adopted into the Kick ah nest. Maybe I would have to take that press conference and depart publicly, while Bonforte would be the one they would sneak aboard. Well, all right- -hardly more than a curtain call. "Penny, do Dak and Rog want me to stay in character for a bit? Do I play to the reporters? Or don't I?"

"I don't know. There wasn't time."

We were already approaching the stretch of godowns by the field, and the giant bubble domes of Goddard City were in sight. "Penny, slow this car down and talk sense. I've got to have my cues."

The driver had talked—I neglected to ask whether or not the bobby-pin treatment had been used. He had then been turned loose to walk back but had not been deprived of his mask; the others had barreled back to Goddard City, with Dak at the wheel. I felt lucky to have been left behind; *voyageurs* should not be allowed to drive anything but spaceships.

They went to the address the driver had given them, in Old Town under the original bubble. I gathered that it was the sort of jungle every port has had since the Phoenicians sailed through the shoulder of Africa, a place of released transportees, prostitutes, monkey-pushers, rangees, and other dregs—a neighborhood where policemen travel only in pairs.

The information they had squeezed out of the driver had been correct but a few minutes out of date. The room had housed the prisoner, certainly, for there was a bed in it which seemed to have been occupied continuously for at least a week, a pot of coffee was still hot—and wrapped in a towel on a shelf was an old-fashioned removable denture which Clifton identified as belonging to Bonforte. But Bonforte himself was missing and so were his captors.

They had left there with the intention of carrying out the original plan, that of claiming that the kidnapping had taken place immediately after the adoption and putting pressure on Boothroyd by threatening to appeal to the Nest of Kkkah. But they had found Bonforte, had simply run across him in the street before they left Old Town—a poor old stumblebum with a week's beard, dirty and dazed. The men had not recognized him, but Penny had known him and made them stop.

She broke into sobs again as she told me this part and we almost ran down a-truck train snaking up to one of the loading docks.

A reasonable reconstruction seemed to be that the laddies in the second car—the one that was to crash us—had reported back, whereupon the faceless leaders of our opponents had decided that the kidnapping no longer served their purposes. Despite the arguments I had heard about it, I was surprised that they had not simply killed him; it was not until later that I understood that what they had done was subtler, more suited to then' purposes, and much crueler than mere killing.

"Where is he now?" I asked.

"Dak took him to the *voyageurs"* hostel in Dome 3."

"Is that where we are headed?"

"I don't know. Rog just said to go pick you up, then they disappeared in the service door of the hostel. Uh, no, I don't think we dare go there. I don't know what to do."

"Penny, stop the car."

"Huh?"

"Surely this car has a phone. We won't stir another inch until we find out—or figure out—what we should do. But I am certain of one thing: I should stay in character until Dak or Rog decides that I should fade out. Somebody has to talk to the newsmen. Somebody has to make a public departure for the *Tom Paine*. You're sure that Mr. Bonforte can't be spruced up so that he can do it?"

"What? Oh, he couldn't possibly. You didn't *see* him."

"So I didn't. I'll take your word for it. All right, Penny, I'm 'Mr. Bonforte' again and you're my secretary. We'd better get with it"

"Yes—Mr. Bonforte."

"Now try to get Captain Broadbent on the phone, will you, please?"

We couldn't find a phone list in the car and she had to go through "Information," but at last she was tuned with the clubhouse of the *voyageurs. I* could hear both sides. "Pilots' Club, Mrs. Kelly speaking."

Penny covered the microphone. "Do I give my name?"

"Play it straight. We've nothing to hide."

"This is Mr. Bonforte's secretary," she said gravely. "Is his pilot there? Captain Broadbent."

"I know him, dearie." There was a shout: "Hey! Any of you smokers see where Dak went?" After a pause she went on, "He's gone to his room. I'm buzzing him."

Shortly Penny said "Skipper? The Chief wants to talk to you," and handed me the phone.

"This is the Chief, Dak."

"Oh. Where are you—sir?"

"Still in the car. Penny picked me up. Dak, Bill scheduled a press conference, I believe. Where is it?"

He hesitated. "I'm glad you called in, sir. Bill canceled it. There's been a—slight change in the situation."

"So Penny told me. I'm just as well pleased; I'm rather tired. Dak, I've decided not to stay dirtside tonight: my gimp leg has been bothering me and I'm looking forward to a real rest in free fall." I hated free fall but Bonforte did not. "Will you or Rog make my apologies to the Commissioner, and so forth?"

"We'll take care of everything, sir."

"Good. How soon can you arrange a shuttle for me?"

"The *Pixie* is still standing by for you, sir. If you will go to Gate 3, I'll phone and have a field car pick you up."

"Very good. Out"

"Out, sir."

I handed the phone to Penny to put back in its clamp. "Curly Top, I don't know whether that phone frequency is monitored or not—or whether possibly the whole car is bugged. If either is the case, they may have learned two things—where Dak is and through that where *he* is, and second, what I am about to do next. Does that suggest anything to your mind?"

She looked thoughtful, then took out her secretary's notebook, wrote in it: *Let's get rid of the car*.

I nodded, then took the book from her and wrote in it: *How far away is Gate 3*?

She answered: *Walking distance*.

Silently we climbed out and left. She had pulled into some executive's parking space outside one of the warehouses when she had parked the car; no doubt in time it would be returned where it belonged—and such minutiae no longer mattered.

We had gone about fifty yards, when I stopped. Something was the matter. Not the day, certainly. It was almost balmy, with the sun burning brightly in clear, purple Martian sky. The traffic, wheel and foot, seemed to pay no attention to us, or at least such attention was for the pretty young woman with me rather than directed at me. Yet I felt uneasy.

"What is it, Chief?"

"Eh? *That* is what it is!"

"Sir?"

"I'm not being the 'Chief.' It isn't in character to go dodging off like this. Back we go, Penny."

She did not argue, but followed me back to the car. This time I climbed into the back seat, sat there looking dignified, and let her chauffeur me to Gate 3.

It was not the gate we had come in. I think Dak had chosen it because it ran less to passengers and more to freight. Penny paid no attention to signs and ran the big Rolls right up to the gate. A terminal policeman tried to stop her; she simply said coldly, "Mr. Bonforte's car. And will you please send word to the Commissioner's office to call for it here?"

He looked baffled, glanced into the rear compartment, seemed to recognize me, saluted, and let us stay. I answered with a friendly wave and he opened the door for me. "The lieutenant is very particular about keeping the space back of the fence clear, Mr. Bonforte," he apologized, "but I guess it's all right."

"You can have the car moved at once," I said. "My secretary and I are leaving. Is my field car here?"

"I'll find out at the gate, sir." He left. It was just the amount of audience I wanted, enough to tie it down solid that "Mr. Bonforte" had arrived by official car and had left for his space yacht. I tucked my life wand under my arm like Napoleon's baton and limped after him, with Penny tagging along. The cop spoke to the gatemaster, then hurried back to us, smiling. "Field car is waiting, sir."

"Thanks indeed." I was congratulating myself on the perfection of the timing.

"Uh…" The cop looked flustered and added hurriedly, in a low voice, "I'm an Expansionist, too, sir. Good job you did today." He glanced at the life wand with a touch of awe.

I knew exactly how Bonforte should look in this routine.

"Why, thank you. I hope you have lots of children. We need to work up a solid majority."

He guffawed more than it was worth. "That's a good one! Uh, mind if I repeat it?"

"Not at all." We had moved on and I started through the gate. The gatemaster touched my arm. "Er… Your passport, Mr. Bonforte."

I trust I did not let my expression change. "The passports, Penny."

She looked frostily at the official. "Captain Broadbent takes care of all clearances."

He looked at me and looked away. "I suppose it's all right But I'm supposed to check them and take down the serial numbers."

"Yes, of course. Well, I suppose I must ask Captain Broadbent to run out to the field. Has my shuttle been assigned a takeoff time? Perhaps you had better arrange with the tower to 'hold.'"

But Penny appeared to be cattily angry. "Mr. Bonforte, this is ridiculous! We've *never* had this red tape before—certainly not on *Mars*."

The cop said hastily, "Of course it's all right, Hans. After all, this is Mr. Bonforte."

"Sure, but———"

I interrupted with a happy smile. "There's a simpler way out. If you —what is your name, sir?"

"Haslwanter. Hans Haslwanter," he answered reluctantly.

"Mr. Haslwanter, if you will call Mr. Commissioner Boothroyd, I'll speak to him and we can save my pilot a trip out to the field—and save me an hour or more of time."

"Uh, I wouldn't like to do that, sir. I could call the port captain's office?" he suggested hopefully.

"Just get me Mr. Boothroyd's number. I will call him." This time I put a touch of frost into my voice, the attitude of the busy and important man who wishes to be democratic but has had all the pushing around and hampering by underlings that he intends to put up with.

That did it. He said hastily, "I'm sure it's all right, Mr. Bonforte. It's just—well, regulations, you know."

"Yes, I know. Thank you." I started to push on through.

"Hold it, Mr. Bonforte! Look this way."

I glanced around. That i-dotting and t-crossing civil servant had held us up just long enough to let the press catch up with us. One man had dropped to his knee and was pointing a stereobox at me; he looked up and said, "Hold the wand where we can see it." Several others with various types of equipment were gathering around us; one had climbed up on the roof of the Rolls. Someone else was shoving a microphone at me and another had a directional mike aimed like a gun.

I was as angry as a leading woman with her name in small type but I remembered who I was supposed to be. I smiled and moved slowly. Bonforte had a good grasp of the fact that motion appears faster in pictures; I could afford to do it properly.

"Mr. Bonforte, why did you cancel the press conference?"

"Mr. Bonforte, it is asserted that you intend to demand that the Grand Assembly grant full Empire citizenship to Martians; will you comment?"

"Mr. Bonforte, how soon are you going to force a vote of confidence in the present government?"

I held up my hand with the wand in it and grinned. "One at a time, please! Now what was that first question?"

They all answered at once, of course; by the time they had sorted out precedence I had managed to waste several moments without having to answer anything. Bill Corpsman came charging up at that point. "Have a heart, boys. The Chief has had a hard day. I gave you all you need."

I held out a palm at him. "I can spare a minute or two, Bill. Gentlemen, I'm just about to leave but I'll try to cover the essentials of what you have asked. So far as I know the present government does not plan any reassessment of the relation of Mars to the Empire. Since I am not in office my own opinions are hardly pertinent. I suggest that you ask Mr. Quiroga. On the question of how soon the opposition will force a vote of confidence all I can say is that we won't do it unless we are sure we can win it—and you know as much about that as I do."

Someone said, "That doesn't say much, does it?"

"It was not intended to say much," I retorted, softening it with a grin. "Ask me questions I can legitimately answer and I will. Ask me those loaded 'Have-you-quit-beating-your-wife?' sort and I have answers to match." I hesitated, realizing that Bonforte had a reputation for bluntness and honesty, especially with the press. "But I am not trying to stall you. You all know why I am here today. Let me say this about it—and you can quote me if you wish." I reached back into my mind and hauled up an appropriate bit from the speeches of Bonforte I had studied. "The real meaning of what happened today is not that of an honor to one man. This"—I gestured with the Martian wand—"is proof that two great races can reach out across the gap of strangeness with understanding. Our own race is spreading out to the stars. We shall find—we *are* finding—that we are vastly outnumbered. If we are to succeed in our expansion to the stars, we must deal honestly, humbly, with open hearts. I have heard it said that our Martian neighbors would overrun

. Earth if given the chance. This is nonsense; Earth is not suited to Martians. Let us protect our own—but let us not be seduced by fear and hatred into foolish acts. The stars will never be won by little minds; we must be big as space itself."

The reporter cocked an eyebrow. "Mr. Bonforte, seems to me I heard you make that speech last February."

"You will hear it next February. Also January, March, and all the other months. Truth cannot be too often repeated." I glanced back at the gatemaster and added, "I'm sorry but I'll have to go now—or I'll miss the tick." I turned and went through the gate, with Penny after me.

We climbed into the little lead-armored field car and the door sighed shut. The car was automatized, so I did not have to play up for a driver; I threw myself down and relaxed. "Whew!"-

"I thought you did beautifully," Penny said seriously.

"I had a bad moment when he spotted the speech I was cribbing."

"You got away with it. It was an inspiration. You—you sounded just like *him*."

"Was there anybody there I should have called by name?"

"Not really. One or two maybe, but they wouldn't expect it when you were so rushed."

"I was caught in a squeeze. That fiddlin' gatemaster and his passports. Penny, I should think that you would carry them rather than Dak."

"Dak doesn't carry them. We all carry our own." She reached into her bag, pulled out a little book. "I had mine— but I did not dare admit it"

"Ehh."

"*He* had *his* on him when they got him. We haven't dared ask for a replacement—not at this time."

I was suddenly very weary.

Having no instructions from Dak or Rog, I stayed in character during the shuttle trip up and on entering the *Tom Paine*. It wasn't difficult; I simply went straight to the owner's cabin and spent long, miserable hours in free fall, biting my nails and wondering what was happening down on the surface. With the aid of antinausea pills I finally managed to float off into fitful sleep—which was a mistake, for I had a series of no-pants nightmares, with reporters pointing at me and cops touching me on the shoulder and Martians aiming their wands at me. They all knew I was phony and were simply arguing over who had the privilege of taking me apart and putting me down the oubliette.

I was awakened by the hooting of the acceleration alarm. Dak's vibrant baritone was booming, "First and last red warning! One third gee! One minute!" I hastily pulled myself over to my bunk and held on. I felt lots better when it hit; one third gravity is not much, about the same as Mars' surface I think, but it is enough to steady the stomach and make the floor a real floor.

About five minutes later Dak knocked and let himself in as I was going to the door. "Howdy, Chief."

"Hello, Dak. I'm certainly glad to see you back."

"Not as glad as I am to be back," he said wearily. He eyed my bunk. "Mind if I spread out there?"

"Help yourself."

He did so and sighed. "Gripes, am I pooped! I could sleep for a week… I think I will."

"Let's both of us. Uh… You got him aboard?"

"Yes. What a gymkhana!"

"I suppose so. Still, it must be easier to do a job like that in a small, informal port like this than it was to pull the stunts you rigged at Jefferson."

"Huh? No, it's much harder here."

"Eh?"

"Obviously. Here everybody knows everybody—and people • will talk." Dak smiled wryly. "We brought him aboard as a case of frozen canal shrimp. Had to pay export duty, too."

"Dak, how is he?"

"Well…" Dak frowned. "Doc Capek says that he will make a complete recovery—mat it is just a matter of time." He added explosively, "If I could lay my hands on those rats! It would make you break down and bawl to see what they did to him—and yet we have to let them get away with it cold —for *his* sake."

Dak was fairly close to bawling himself. I said gently, "I gathered from Penny that they had roughed him up quite a lot. How badly is he hurt?"

"Huh? You must have misunderstood Penny. Aside from being filthy-dirty and needing a shave he was not hurt physically at all."

I looked stupid. "I thought they beat him up. Something about like working him over with a baseball bat."

"I would rather they had! Who cares about a few broken bones? No, no, it was what they did to his *brain*."

"Oh…" I felt ill. "Brainwash?"

"Yes. Yes and no. They couldn't have been trying to make him talk because he didn't have any secrets that were of any possible political importance. He always operated out in the open and everybody knows it. They must have been using it simply to keep him under control, keep him from trying to escape."

He went on, "Doc says that he thinks they must have been using the minimum daily dose, just enough to keep him docile, until just before they turned him loose. Then they shot him with a load that would turn an elephant into a gibbering idiot. The front lobes of his brain must be soaked like a bath sponge."

I felt so ill that I was glad I had not eaten. I had once read up on the subject; I hate it so much that it fascinates me. To my mind there is something immoral and degrading in an absolute cosmic sense in tampering with a man's personality. Murder is a clean crime in comparison, a mere peccadillo. "Brainwash" is a term that comes down to us from the Communist movement of the Late Dark Ages; it was first applied to breaking a man's will and altering his personality by physical indignities and subtle torture. But that might take months; later they found a "better" way, one which would turn a man into a babbling slave in seconds—simply inject any one of several cocaine derivatives into his frontal brain lobes.

The filthy practice had first been developed for a legitimate purpose, to quiet disturbed patients and make them accessible to psychotherapy. As such, it was a humane advance, for it was used instead of lobotomy—"lobotomy" is a term almost as obsolete as "chastity girdle" but it means stirring a man's brain with a knife in such a fashion as to destroy his personality without killing him. Yes, they really used to do that—just as they used to beat them to "drive the devils out."

The Communists developed the new brainwash-by-drugs to an efficient technique, then when there were no more Communists, the Bands of Brothers polished it up still further until they could dose a man so lightly that he was simply receptive to leadership—or load him until he was a mindless mass of protoplasm—all in the sweet name of brotherhood. After all, you can't have "brotherhood" if a man is stubborn enough to want to keep his own secrets, can you? And what better way is there to be sure that he is not holding out on you than to poke a needle past his eyeball and slip a shot of babble juice into his brain? "You can't make an omelet without breaking eggs." The sophistries of villains—bah!

Of course, it has been illegal for a long, long time now, except for therapy, with the express consent of a court. But criminals use it and cops are sometimes not lily white, for it does make a prisoner talk and it does not leave any marks at all. The victim can even be told to forget that it has been done.

I knew most of this at the time Dak told me what had been done to Bonforte and the rest I cribbed out of the ship's Encyclopedia Batavia. See the article on "Psychic Integration" and the one on 'Torture."

I shook my bead and tried to put the nightmares out of my mind. "But he's going to recover?"

"Doc says that the drug does not alter the brain structure; it just paralyzes it. He says that eventually the blood stream picks up and carries away all of the dope; it reaches the kidneys and passes out of the body. But it takes time." Dak looked up at me. "Chief?"

"Eh? About time to knock off that 'Chief stuff, isn't it? He's back."

"That's what I wanted to talk to you about. Would it be too much trouble to you to keep up the impersonation just a little while longer?"

"But why? There's nobody here but just us chickens."

"That's not quite true. Lorenzo, we've managed to keep this secret awfully tight. There's me, there's you." He ticked it off on his fingers. "There's Doc and Rog and Bill. And Penny, of course. There's a man by the name of Langston back Earthside whom you've never met. I think Jimmie Washington suspects but he wouldn't tell his own mother the right time of day. We don't know how many took part in the kidnapping, but not many, you can be sure. In any case, *they* don't dare talk—and the joke of it is they no longer could prove that he had ever been missing even if they wanted to. But my point is this: here in the *Tommie* we've got all the crew and all the idlers not in on it. Old son, how about staying with it and letting yourself be seen each day by crewmen and by Jimmie Washington's girl and such—while *he* gets well? Huh?"

"Mmm... I don't see why not. How long will it be?"

"Just the trip back. We'll take it slow, at an easy boost You'll enjoy it."

"Okay. Dak, don't figure this into my fee. I'm doing this piece of it just because I *hate* brainwashing."

Dak bounced up and clapped me on the shoulder. "You're my kind of people, Lorenzo. Don't worry about your fee; you'll be taken care of." His manner changed. "Very well, Chief. See you in the morning, sir."

But one thing leads to another. The boost we had started on Dak's return was a mere shift of orbits, to one farther out where there would be little chance of a news service sending up a shuttle for a follow-up story. I woke up in free fall, took a pill, and managed to eat breakfast.

Penny showed up shortly thereafter. "Good morning, Mr. Bonforte."

"Good morning, Penny." I inclined my head in the direction of the guest room. "Any news?"

"No, sir. About the same. Captain's compliments and would it be too much trouble for you to come to his cabin?"

"Not at all." Penny followed me in. Dak was there, with his heels hooked to his chair to stay in place; Rog and Bill were strapped to the couch.

Dak looked around and said, "Thanks for coming in, Chief. We need some help."

"Good morning. What is it?"

Clifton answered my greeting with his usual dignified deference and called me Chief; Corpsman nodded. Dak went on, "To clean this up in style you should make one more appearance."

"Eh? I thought—

"Just a second. The networks were led to expect a major speech from you today, commenting on yesterday's event. I thought Rog intended to cancel it, but Bill has the speech worked up. Question is, will you deliver it?"

The trouble with adopting a cat is that they always have kittens. "Where? Goddard City?"

"Oh no. Right in your cabin. We beam it to Phobos; they can it for Mars and also put it on the high circuit for New Batavia, where the Earth nets will pick it up and where it will be relayed for Venus, Ganymede, et cetera. Inside of four hours it will be all over the system but you'll never have to stir out of your cabin."

There is something very tempting about a grand network. I had never been on one but once and that time my act got clipped down to the point where my face showed for only twenty-seven seconds. But to have one all to myself———

Dak thought I was reluctant and added, "It won't be a strain, as we are equipped to can it right here in the *Tommie*. Then we can project it first and clip out anything if necessary."

"Well—all right. You have the script, Bill?"

"Yes."

"Let me check it."

"What do you mean? You'll have it in plenty of time."

"Isn't that it in your hand?"

"Well, yes."

"Then let me read it."

Corpsman looked annoyed. "You'll have it an hour before we record. These things go better if they sound spontaneous."

"Sounding spontaneous is a matter of careful preparation, Bill. It's my trade. I know."

"You did all right at the skyfield yesterday without rehearsal. This is just more of the same old hoke: I want you to do it the same way."

Bonforte's personality was coming through stronger the longer Corpsman stalled; I think Clifton could see that I

was about to cloud up and storm, for he said, "Oh, for Pete's, sake, Bill! Hand him the speech."

Corpsman snorted and threw the sheets at me. In free fall they sailed but the air spread them wide. Penny gathered them together, sorted them, and gave them to me. I thanked her, said nothing more, and started to read.

I skimmed through it in a fraction of the time it would take to deliver it. Finally I finished and looked up.

"Well?" said Rog.

"About five minutes of this concerns the adoption. The rest is an argument for the policies of the Expansionist Party. Pretty much the same as I've heard in the speeches you've had me study."

"Yes," agreed Clifton. "The adoption is the hook we hang the rest on. As you know, we expect to force a vote of confidence before long."

"I understand. You can't miss this chance to beat the drum. Well, it's all right, but———"

"But what? What's worrying you?"

"Well—characterization. In several places the wording should be changed. It's not the way *he* would express it."

Corpsman exploded with a word unnecessary in the presence of a lady; I gave him a cold glance. "Now see here, Smythe," he went on, "who knows how Bonforte would say it? You? Or the man who has been writing his speeches the past four years?"

I tried to keep my temper; he had a point. "It is nevertheless the case," I answered, "that a line which looks okay in print may not deliver well. Mr. Bonforte is a great orator, I have already learned. He belongs with Webster, Churchill, and Demosthenes—a rolling grandeur expressed in simple words. Now take this word 'intransigent,' which you have used twice. I might say that, but I have a weakness for polysyllables; I like to exhibit my literary erudition. But Mr. Bonforte would say 'stubborn' or 'mulish' or 'pigheaded.' The reason he would is, naturally, that they convey emotion much more effectively."

"You see that you make the delivery effective! I'll worry about the words."

"You don't understand, Bill. I don't care whether the speech is politically effective or not; my job is to carry out a characterization. I can't do that if I put into the mouth of the character words that he would never use; it would sound as forced and phony as a goat spouting Greek. But if I read the speech in words he *would* use, it will automatically be effective. He's a great orator."

"Listen, Smythe, you're not hired to write speeches. You're hired to ———"

"Hold it, Bill!" Dak cut in. "And a little less of that 'Smythe' stuff, too. Well, Rog? How about it?"

Clifton said, "As I understand it, Chief, your only objection is to some of the phrasing?"

"Well, yes. I'd suggest cutting out that personal attack on Mr. Quiroga, too, and the insinuation about his financial backers. It doesn't sound like real Bonforte to me."

He looked sheepish. "That's a bit I put in myself. But you may be right. He always gives a man the benefit of the doubt." He remained silent for a moment. "You make the changes you think you have to. We'll can it and look at the playback. We can always clip it—or even cancel completely 'due to technical difficulties.'" He smiled grimly. "That's what we'll do, Bill."

"Damn it, this is a ridiculous example of———"

"That's how it is going to be, Bill."

Corpsman left the room very suddenly. Clifton sighed. "Bill always has hated the notion that anybody but Mr. B. could give him instructions. But he's an able man. Uh, Chief, how soon can you be ready to record? We patch in at sixteen hundred."

"I don't know. I'll be ready in time."

Penny followed me back into my office. When she closed the door I said, "I won't need you for the next hour or so, Penny child. But you might ask Doc for more of those pills. I may need them."

"Yes, sir." She floated with her back to the door. "Chief?"

"Yes, Penny?"

"I just wanted to say don't believe what Bill said about writing his speeches!"

"I didn't I've heard his speeches—and I've read this."

"Oh, Bill does submit drafts, lots of times. So does Rog. I've even done it myself. He—*he* will use ideas from anywhere if he thinks they are good. But when he delivers a speech, it is *his*, every word of it."

"I believe you. I wish he had written this one ahead of time."

"You just do your best!"

I did. I started out simply substituting synonyms, putting in the gutty Germanic words in place of the "intestinal" Latin jawbreakers. Then I got excited and red in the face and tore it to pieces. It's a lot of fun for an actor to mess around with lines; he doesn't get the chance very often.

I used no one but Penny for my audience and made sure from Dak that I was not being tapped elsewhere in the ship— though I suspect that the big-boned galoot cheated on me and listened in himself. I had Penny in tears in the first three minutes; by the time I finished (twentyeight and a half minutes, just time for station announcements, she was limp). I took no liberties with the straight Expansionist doctrine, as proclaimed by its official prophet, the Right Honorable John Joseph Bonforte; I simply reconstructed his message and his delivery, largely out of phrases from other speeches.

Here's an odd thing—I believed every word of it while I was talking.

But, brother, I made a speech!

Afterwards we all listened to the playback, complete with full stereo of myself. Jimmie Washington was present, which kept Bill Corpsman quiet. When it was over I said, "How about it, Rog? Do we need to clip anything?"

He took his cigar out of his mouth and said, "No. If you want my advice, Chief, I'd say to let it go as it is."

Corpsman left the room again—but Mr. Washington came over with tears leaking out of his eyes—tears are a nuisance in free fall; there's nowhere for them to go. "Mr. Bonforte, that was *beautiful*."

"Thanks, Jimmie."

Penny could not talk at all.

I turned in after that; a topnotch performance leaves me fagged. I slept for more than eight hours, then was awakened by the hooter. I had strapped myself to my bunk—I hate to float around while sleeping in free fall—so I did not have to move. But I had not known that we were getting under way so I called the control room between first and second warning. "Captain Broadbent?"

"Just a moment, sir," I heard Epstein answer.

Then Dak's voice came over. "Yes, Chief? We are getting under way on schedule—pursuant to your orders."

"Eh? Oh yes, certainly."

"I believe Mr. Clifton is on his way to your cabin."

"Very well, Captain." I lay back and waited.

Immediately after we started to boost at one gee Rog Clifton came in; he had a worried look on his face I could not interpret—equal parts of triumph, worry, and confusion. "What is it, Rog?"

"Chief! They've jumped the gun on us! The Quiroga government has resigned!"

Chapter Seven

I was still logy with sleep; I shook my head to try to. clear it. "What are you in such a spin about, Rog? That's what you were trying to accomplish, wasn't it?"

"Well, yes, of course. But———" He stopped.

"But what? I don't get it. Here you chaps have been working and scheming for years to bring about this very thing. Now you've won—and you look like a bride who isn't sure she wants to go through with it. Why? The no-good-nicks are out and now God's chillun get their innings. No?"

"Uh—you haven't been in politics much."

"You know I haven't. I got trimmed when I ran for patrol leader in my scout troop. That cured me."

"Well, you see, timing is everything."

"So my father always told me. Look here, Rog, do I gather that if you had your druthers you'd druther Quiroga was still in office? You said he had 'jumped the gun.'"

"Let me explain. What we really wanted was to move a vote of confidence and win it, and thereby force a general election on them—but at our own time, when we estimated that we could win the election."

"Oh. And you don't figure you can win now? You think Quiroga will go back into office for another five years—or at least the Humanity Party will?"

Clifton looked thoughtful. "No, I think our chances are pretty good to win the election."

"Eh? Maybe I'm not awake yet. Don't you *want* to win? "

"Of course. But don't you see what this resignation has done to us?"

"I guess I don't."

"Well, the government in power can order a general election at any time up to the constitutional limitation of five years. Ordinarily they will go to the people when the time seems most favorable to them. But they don't resign between the announcement and the election unless forced to. You follow me?"

I realized that the event did seem odd, little attention as I paid to politics. "I believe so."

"But in this case Quiroga's government scheduled a general election, then resigned in a body, leaving the Empire without a government. Therefore the sovereign must call on someone else to form a 'caretaker' government to serve until the election. By the letter of the law he can ask any member of the Grand Assembly, but as a matter of strict constitutional precedent he has no choice. When a government resigns in a body—not just reshuffling portfolios but quits as a whole—then the sovereign *must* call on the leader of the opposition to form the 'caretaker' government. It's indispensable to our system; it keeps resigning from being just a gesture. Many other methods have been tried in the past; under some of them governments were changed as often as underwear. But our present system insures responsible government."

I was so busy trying to see the implications that I almost missed his next remark. "So, naturally, the Emperor has summoned Mr. Bonforte to New Batavia."

"Eh? New Batavia? Well!" I was thinking that I had never seen the Imperial capital. The one time I had been on the Moon the vicissitudes of my profession had left me without time or money for the side trip. "Then that is why we got under way? Well, I certainly don't mind. I suppose you can always find a way to send me home if the *Tommie* doesn't go back to Earth soon."

"What? Good heavens, don't worry about that now. When the time comes, Captain Broadbent can find any number of ways to deliver you home."

"Sorry. I forget that you have more important matters on your mind, Rog. Sure, I'm anxious to get home now that the job is done. But a few days, or even a month, on Luna would not matter. I have nothing pressing me. But thanks for taking time to tell me the news." I searched his face. "Rog, you look worried as hell."

"Don't you see? The Emperor has sent for Mr. Bonforte. The *Emperor*, man! And Mr. Bonforte is in no shape to appear at an audience. They have risked a gambit—and perhaps trapped us in a checkmate!"

"Eh? Now wait a minute. Slow up. I see what you are driving at—but, look, friend, we aren't at New Batavia. We're a hundred million miles away, or two hundred million, or whatever it is. Doc Capek-will have him wrung out and ready to speak his piece by then. Won't he?"

"Well—we hope so."

"But you aren't sure?"

"We can't be sure. Capek says that there is little clinical data on such massive doses. It depends on the individual's body chemistry and on the exact drug used."

I suddenly remembered a time when an understudy had slipped me a powerful purgative just before a performance.

(But I went on anyhow, which proves the superiority of mind over matter—then I got him fired.) "Rog—they gave him that last, unnecessarily big dose not just out of simple sadism— but to set up this situation!"

"I think so. So does Capek."

"Hey! In that case it would mean that Quiroga himself is the man behind the kidnapping—and that we've had a *gangster* running the Empire!"

Rog shook his head. "Not necessarily. Not even probably. But it would indeed mean that the same forces who control the Actionists also control the machinery of the Humanity Party. But you will never pin anything on *them;* they are unreachable, ultrarespectable. Nevertheless, they could send word to Quiroga that the time had come to roil over and play dead—and have him do it. Almost certainly," he added, "without giving him a hint of the real reason why the moment was timely."

"Criminy! Do you mean to tell me that the top man in the Empire would fold up and quit, just like that? Because somebody behind the scenes ordered him to?"

"I'm afraid that is just what I do think."

I shook my head. "Politics is a dirty game!"

"No," Clifton answered insistently. "There is no such thing as a dirty game. But you sometimes run into dirty players."

"I don't see the difference."

"There is a world of difference. Quiroga is a third-rater and a stooge—in my opinion, a stooge for villains. But there is nothing third-rate about John Joseph Bonforte and he has never, *ever* been a stooge for anyone. As a follower, he believed in the cause; as the leader, he has led from conviction!"

"I stand corrected," I said humbly. "Well, what do we do? Have Dak drag his feet so that the *Tommie* does not reach New Batavia until he is back in shape to do the job?"

"We *can't* stall. We don't have to boost at more than one gravity; nobody would expect a man Bonforte's age to place unnecessary strain on his heart. But we can't delay. When the Emperor sends for you, you come."

"Then what?"

Rog looked at me without answering. I began to get edgy. "Hey, Rog, don't go getting any wild notions! This hasn't anything to do with *me*. I'm through, except for a few casual appearances around the ship. Dirty or not, politics is not my game—just pay me off and ship me home and I'll guarantee never even to register to vote!"

"You probably wouldn't have to do anything. Dr. Capek will almost certainly have him in shape for it. But it isn't as if it were anything *hard*—not like that adoption ceremony —just an audience with the Emperor and———"

"The Emperor!" I almost screamed. Like most Americans, I did not understand royalty, did not really approve of the institution in my heart—and had a sneaking, unadmitted awe of kings. After all, we

Americans came in by the back door. When we swapped associate status under treaty for the advantages of a full voice in the affairs of the Empire, it was explicitly agreed that our local institutions, our own constitution, and so forth, would not be affected—and tacitly agreed that no member of the royal family would ever visit America. Maybe that is a bad thing. Maybe if we were used to royalty we would not be so impressed by them. In any case, it is notorious that "democratic" American women are more quiveringly anxious to be presented at court than is anybody else.

"Now take it easy," Rog answered. "You probably won't have to do it at all. We just want to be prepared. What I was trying to tell you is that a 'caretaker' government is no problem. It passes no laws, changes no policies. I'll take care of all the work. All you will have to do—if you have to do anything—is make the formal appearance before King Willem—and possibly show up at a controlled press conference or two, depending on how long it is before *he* is well again. What you have already done is much harder—and you will be paid whether we need you or not."

"Damn it, pay has nothing to do with it! It's—well, in the words of a famous character in theatrical history, 'Include me *out*.'"

Before Rog could answer, Bill Corpsman came bursting into my cabin without knocking, looked at us, and said sharply to Clifton, "Have you told him?"

"Yes," agreed Clifton. "He's turned down the job."

"Huh? Nonsense!"

"It's not nonsense," I answered, "and by the way, Bill, that door you just came through has a nice spot on it to knock. In the profession the custom is to knock and shout, 'Are you decent?" I wish you would remember it."

"Oh, dirty sheets! We're in a hurry. What's this guff about your refusing?"

"It's not guff. This is not the job I signed up for."

"Garbage! Maybe you are too stupid to realize it, Smythe, but you are in too deep to prattle about backing out. It wouldn't be healthy."

I went to him and grabbed his arm. "Are you threatening me? If you are, let's go outside and talk it over."

He shook my hand off. "In a spaceship? You really are simple, aren't you? But haven't you got it through your thick head that you caused this mess yourself?"

"What do you mean?"

"He means," Clifton answered, "that he is convinced that the fall of the Quiroga government was the direct result of the speech you made earlier today. It is even possible that he is right. But it is beside the point. Bill, try to be reasonably polite, will you? We get nowhere by bickering."

I was so surprised by the suggestion that I had caused Quiroga to resign that I forgot all about my desire to loosen Corpsman's teeth. Were they serious? Sure, it was one duly of a fine speech, but was such a result possible?

Well, if it was, it was certainly fast, service.

I said wonderingly, "Bill, do I understand that you are complaining that the speech I made was too effective to suit you?"

"Huh? Hell, no! It was a lousy speech."

"So? You can't have it both ways. You're saying that a lousy speech went over so big that it scared the Humanity Party right out of office. Is that what you meant?"

Corpsman looked annoyed, started to answer, and caught sight of Clifton suppressing a grin. He scowled, again started to reply—finally shrugged and said, "All right, buster, you proved your point; the speech could not have had anything to do with the fall of the Quiroga government. Nevertheless, we've got work to do. So what's this about you not being willing to carry your share of the load?"

I looked at him and managed to keep my temper—Bonforte's influence again; playing the part of a calm-tempered character tends to make one calm inside. "Bill, again you cannot have it two ways. You have made it emphatically clear that you consider me just a hired hand. Therefore I have no obligation beyond my job, which is finished. You can't hire me for another job unless it suits me. It doesn't."

He started to speak but I cut in. "That's all. Now get out. You're not welcome here."

He looked astounded. "Who the hell do you think you are to give orders around here?"

"Nobody. Nobody at all, as you have pointed out. But this is my private room, assigned to me by the Captain. So now get out or be thrown out. I don't like your manners."

Clifton added quietly, "Clear out, Bill. Regardless of anything else, it is his private cabin at the present time. So you had better leave." Rog hesitated, then added, "I think we both might as well leave; we don't seem to be getting anywhere. If you will excuse us—Chief?"

"Certainly."

I sat and thought about it for several minutes. I was sorry that I had let Corpsman provoke me even into such a mild exchange; it lacked dignity. But I reviewed it in my mind and assured myself that my personal differences with Corpsman had not affected my decision; my mind had been made up before he appeared.

A sharp knock came at the door. I called out, "Who is it?"

"Captain Broadbent."

"Come in, Dak."

He did so, sat down, and for some minutes seemed interested only in pulling hangnails. Finally he looked up and said, "Would it change your mind if I slapped the blighter in the brig?"

"Eh? Do you have a brig in the ship?"

"No. But it would not be hard to jury-rig one."

I looked at him sharply, trying to figure what went on inside that bony head. "Would you actually put Bill in the brig if I asked for it?"

He looked up, cocked a brow, and grinned wryly. "No. A man doesn't get to be a captain operating on any such basis as that. I would not take that sort of order even from *him*." He inclined his head toward the room Bonforte was in. "Certain decisions a man must make himself."

"That's right."

"Mmm—I hear you've made one of that sort."

"That's right."

"So. I've come to have a lot of respect for you, old son. First met you, I figured you for a clotheshorse and a face-maker, with nothing inside. I was wrong."

"Thank you."

"So I won't plead with you. Just tell me: is it worth our time to discuss the factors? Have you given it plenty of thought?"

"My mind is made up, Dak. This isn't my pidgin."

"Well, perhaps you're right. I'm sorry. I guess we'll just have to hope he pulls out of it in time." He stood up. "By the way, Penny would like to see you, if you aren't going to turn in again this minute."

I laughed without pleasure. "Just 'by the way," eh? Is this the proper sequence? Isn't it Dr. Capek's turn to try to twist my arm?"

"He skipped his turn; he's busy with Mr. B. He sent you a message, though."

"Eh?"

"He said you could go to hell. Embroidered it a bit, but that was the gist."

"He did? Well, tell him I'll save him a seat by the fire."

"Can Penny come in?"

"Oh, sure! But you can tell her that she is wasting her time; the answer is still 'No.' "

So I changed my mind. Confound it, why should an argument seem so much more logical when underlined with a whiff of Jungle Lust? Not that Penny used unfair means, she did not even shed tears—not that I laid a finger on her —but I found myself conceding points, and presently there were no more points to concede. There is no getting around it, Penny is the world-saver type and her sincerity is contagious.

The boning I did on the trip out to Mars was as nothing to the hard study I put in on the trip to New Batavia. I already had the basic character; now it was necessary to fill in the background, prepare myself to *be* Bonforte under almost any circumstances. While it was the royal audience I was aiming at, once we were at New Batavia I might have to meet any of hundreds or thousands of people. Rog planned to give me a defense in depth of the sort that is routine for any public figure if he is to get work done; nevertheless, I would have to see people—a public figure is a public figure, no way to get around that.

The tightrope act I was going to have to attempt was made possible only by Bonforte's Farleyfile, perhaps the best one ever compiled. Farley was a political manager of the twentieth century, of Eisenhower I believe, and the method he invented for handling the personal relations of politics was as revolutionary as the German invention of staff command was to warfare. Yet I had never heard of the device until Penny showed me Bonforte's.

It was nothing but a file about people. However, the art of politics is "nothing but" people. This file contained all, or almost all, of the thousands upon thousands of people Bonforte had met in the course of his long public life; each dossier consisted of what he knew about that person *from Bonforte's own personal contact*. Anything at all, no matter how trivial—in fact, trivia were always the first entries: names and nicknames of wives, children, and pets, hobbies, tastes in food or drink, prejudices, eccentricities. Following this would be listed date and place and comments for *every occasion* on which Bonforte had talked to that particular man.

When available, a photo was included. There might or might not be "below-the-line" data, *i.e.* information which had been researched rather than learned directly by Bonforte. It depended on the political importance of the person. In some cases the "below-the-line" part was a formal biography running to thousands of words.

Both Penny and Bonforte himself carried minicorders powered by their body heat. If Bonforte was alone he would dictate into his own when opportunity offered—in rest rooms, while riding, etc.; if Penny went along she would take it down in hen, which was disguised to look like a wrist watch. Penny could not possibly do the transcribing and microfilming; two of Jimmie Washington's girls did little else.

When Penny showed me the Farleyfile, showed me the very bulk of it—and it was bulky, even at ten thousand words or more to the spool—and then told me that this represented personal information about Mr. Bonforte's acquaintances, I scroaned (which is a scream and groan done together, with intense feeling). "God's mercy, child! I tried to tell you this job could not be done. How could anyone memorize all that?"

"Why, you can't, of course."

"You just said that this was what *he* remembered about his friends and acquaintances."

"Not quite. I said that this is what he wanted to remember. But since he can't, not possibly, this is how he does it. Don't worry; you don't have to memorize anything. I just want you to know that it is available. It is my job to see that he has at least a minute or two to study the appropriate Farleyfile before anybody gets in to see him. If the need turns up, I can protect you with the same service."

I looked at the typical file she had projected on the desk reader. A Mr. Saunders of Pretoria, South Africa, I believe it was. He had a bulldog named Snuffles Bullyboy, several assorted uninteresting offspring, and he liked a twist of lime in his whisky and splash. "Penny, do you mean to tell me that Mr. B. pretends to remember minutiae like that? It strikes me as rather phony."

Instead of getting angry at the slur on her idol Penny nodded soberly. "I thought so once. But you don't look at correctly, Chief. Do you ever write down the telephone number of a friend?"

"Eh? Of course."

"Is it dishonest? Do you apologize to your friend for caring so little about him that you can't simply remember his number?"

"Ehh! All right, I give up. You've sold me."

"These are things he would like to remember if his memory were perfect. Since it isn't, it is no more phony to do it this way than it is to use a tickler file in order not to forget a friend's birthday—that's what it is: a giant tickler file, to cover *anything*. But there is more to it. Did you ever meet a really important person?"

I tried to think. Penny did not mean the greats of the theatrical profession; she hardly knew they existed. "I once met President Warfield. I was a kid of ten or eleven."

"Do you remember the details?"

"Why, certainly. He said, 'How did you break that arm, son?' and I said, 'Riding a bicycle, sir,' and he said, 'Did the same thing myself, only it was a collarbone.'"

"Do you think he would remember it if he were still alive?"

"Why, no."

"He might—be may have had you Farleyfiled. This Farleyfile includes boys of that age, because boys grow up and become men. The point is that top-level men like President Warfield meet many more people than they can remember. Each one of that faceless throng remembers his own meeting with the famous man and remembers it in detail. But the supremely important person in any one's life is *himself*—and a politician must never forget that. So it is polite and friendly and warmhearted for the politician to have a way to be able to remember about other people the sort of little things that they are likely to remember about him. It is also essential—in politics."

I had Penny display the Farleyfile on King Willem. It was rather short, which dismayed me at first, until I concluded that it meant that Bonforte did not know the Emperor well and had met him only on a few official occasions—Bonforte's first service as Supreme Minister had been before old Emperor Frederick's death. There was no biography below the line, but just a notation, "*See* House of Orange." I didn't —there simply wasn't time to plow through a few million words of Empire and pre-Empire history and, anyhow, I got fair-to-excellent marks in history when I was in school. All I wanted to know about the Emperor was what Bonforte knew about him that other people did not.

It occurred to me that the Farleyfile must include everybody in the ship since they were (a) people (b) whom Bonforte had met. I asked Penny for them. She seemed a little surprised.

Soon I was the one surprised. The *Tom Paine* had in her *six* Grand Assemblymen. Rog Clifton and Mr. Bonforte, of course—but the first item in Dak's file read: "Broadbent, Darius K., the Honorable, G. A. for League of Free Travelers, Upper Division." It also mentioned that he held a Ph.D. in physics, had been reserve champion with the pistol in the Imperial Matches nine years earlier, and had published three volumes of verse under the nom de plume of "Acey Wheelwright." I resolved never again to take a man at merely his face value.

There was a notation in Bonforte's sloppy handwriting: "Almost irresistible to women—and vice versa I"

Penny and Dr. Capek were also members of the great parliament. Even Jimmie Washington was a member, for a "safe" district, I realized later—he represented the Lapps, including all the reindeer and Santa Claus, no doubt. He was also ordained in the First Bible Truth Church of the Holy Spirit, which I had never heard of, but which accounted for his tight-lipped deacon look.

I especially enjoyed reading about Penny—the Honorable Miss Penelope Taliaferro Russell. She was an M.A. in government administration from Georgetown and a B.A. from Wellesley, which somehow did not surprise me. She represented districtless university women, another "safe" constituency (I learned) since they are about five to one Expansionist Party members.

On down below were her glove size, her other measurements, her preferences in colors (I could teach her something about dressing), her preference in scent (Jungle Lust, of course), and many other details, most of them innocuous enough. But there was "comment":

"Neurotically honest—arithmetic unreliable—prides herself on her sense of humor, or which she has none—watches her diet but is gluttonous about candied cherries—little-mother-of-all-living complex—unable to resist reading the printed word in any form."

Underneath was another of Bonforte's handwritten addenda: "Ah, Curly Top! Snooping again, I see."

As I turned them back to her I asked Penny if she had read her own Farleyfile. She told me snippily to mind my own business! Then turned red and apologized.

Most of my time was taken up with study but I did take time to review and revise carefully the physical resemblance, checking the Semi perm shading by colorimeter, doing an extremely careful job on the wrinkles, adding two moles, and setting the whole job with electric brush. It was going to mean a skin peel before I could 'get my own face back but that was a small price to pay for a make-up job that could not be damaged, could not be smeared even with acetone, and was proof against such hazards as napkins. I even added the scar on the "game" leg, using a photograph Capek had kept in Bonforte's health history. If Bonforte had had wife or mistress, she would have had difficulty in telling the impostor from the real thing simply on physical appearance. It was a lot of trouble but it left my mind free to worry about the really difficult part of the impersonation.

But the all-out effort during the trip was to steep myself in what Bonforte thought and believed, in short the policies of the Expansionist Party. In a manner of speaking, he himself was the Expansionist Party, not merely its most prominent leader but its political philosopher and greatest statesman. Expansionism had hardly been more than a "Manifest Destiny" movement when the party was founded, a rabble coalition of groups who had one thing in common: the belief that the frontiers in the sky were the most important issue in the emerging future of the human race. Bonforte had given the party a rationale and an ethic, the theme that freedom and equal rights must run with the Imperial banner; he kept harping on the notion that the human race must never again make the mistakes that the white subrace had made in Africa and Asia.

But I was confused by the fact—I was awfully unsophisticated in such matters—that the early history of the Expansionist Party sounded remarkably like the present Humanity Party. I was not aware that political parties often change as much in growing up as people do. I had known vaguely that the Humanity Party had started as a splinter of the Expansionist movement but I had never thought about it. Actually it was inevitable; as the political parties which did not have their eyes on the sky dwindled away under the imperatives of history and ceased to elect candidates, the one party ,which had been on the right track was bound to split into two factions.

But I am running ahead; my political education did not proceed so logically. At first I simply soaked myself in Bonforte's public utterances. True, I had done that on the trip out, but then I was studying how he spoke; now I was studying what he said.

Bonforte was an orator in the grand tradition but he could be vitriolic in debate, *e.g.* a speech he made in New Paris during the ruckus over the treaty with the Martian nests, the Concord of Tycho. It was this treaty which had knocked him out of office before; he had pushed it through but the strain on the coalition had lost him the next vote of confidence. Nevertheless, Quiroga had not dared denounce the treaty. I listened to this speech with special interest since I had not liked the treaty myself; the idea that Martians must be granted the same privileges on Earth that humans enjoyed on Mars had been abhorrent to me—until I visited the Kkkah nest.

"My opponent," Bonforte had said with a rasp in his voice, "would have you believe that the motto of the so-called Humanity Party, 'Government of human beings, by human beings, and for human beings,' is no more than an updating of the immortal words of Lincoln. But while the voice is the voice of Abraham, the hand is the hand of the Ku Klux Klan. The true meaning of that innocent-seeming motto is 'Government of all races everywhere, by human beings alone, for the profit of a privileged few.'

"But, my opponent protests, we have a God-given mandate to spread enlightenment through the stars, dispensing our own brand of Civilization to the savages. This is the Uncle Remus school of sociology—the good dahkies singin' spirituals and Ole Massa lubbin' every one of dem! It is a beautiful picture but the frame is too small; it fails to show the whip, the slave block—and the counting house!"

I found myself becoming, if not an Expansionist, then at least a Bonfortite. I am not sure that I was convinced by the logic of his words—indeed, I am not sure that they were logical. But I was in a receptive frame of mind. I wanted to understand what he said so thoroughly that I could rephrase it and say it in his place, if need be.

Nevertheless, here was a man who knew what he wanted and (much rarer 1) why he wanted it. I could not help but be impressed, and it forced me to examine my own beliefs. What did I live by?

My profession, surely! I had been brought up in it, I liked it, I had a deep though unlogical conviction that art was worth the effort—and, besides, it was the only way I knew to make a living. But what else?

I have never been impressed by the formal schools of ethics. I had sampled them—public libraries are a ready source of recreation for an actor short of cash—but I had found them as poor in vitamins as a motherin-law's kiss. Given time and plenty of paper, a philosopher can prove anything.

I had the same contempt for the moral instruction handed to most children. Much of it is prattle and the parts they really seem to mean are dedicated to the sacred proposition that a "good" child is one who does not disturb mother's nap and a "good" man is one who achieves a muscular bank account without getting caught. No, thanks!

But even a dog has rules of conduct. What were mine? How did I behave—or, at least, how did I like to think I behaved?

"The show must go on." I had always believed that and lived by it. But why must the show go on?—seeing that some shows are pretty terrible. Well, because you agreed to do it, because there is an audience out there; they have paid and each one of them is entitled to the best you can give. You owe it to them. You owe it also to stagehands and manager and producer and other members of the company— and to those who taught you your trade, and to others stretching back in history to open-air theaters and stone seats and even to storytellers squatting in a market place. *Noblesse oblige*.

I decided that the notion could be generalized into any occupation. "Value for value." Building "on the square and on the level." The Hippocratic oath. Don't let the team down. Honest work for honest pay. Such things did not have to be proved; they were an essential part of life—true throughout eternity, true in the farthest reaches of the Galaxy.

I suddenly got a glimpse of what Bonforte was driving at. If there were ethical basics that transcended time and place, then they were true both for Martians and for men. They were true on any planet around any star—and if the human race did not behave accordingly they weren't ever going to win to the stars because some better race would slap them down for double-dealing.

The price of expansion was virtue. "Never give a sucker an even break" was too narrow a philosophy to fit the broad reaches of space.

But Bonforte was not preaching sweetness and light. "I am not a pacifist. Pacifism is a shifty doctrine under which a man accepts the benefits of the social group without being willing to pay—and claims a halo for his dishonesty. Mr. Speaker, life belongs to those who do not fear to lose it. This bill must pass!" And with that he had got up and crossed the aisle in support of a military appropriation his own party had refused in caucus.

Or again: "Take sides! Always take sides! You will sometimes be wrong—but the man who refuses to take sides must *always* be wrong! Heaven save us from poltroons who fear to make a choice. Let us stand up and be counted." (This last was in a closed caucus but Penny had caught it on her minicorder and Bonforte had saved it—Bonforte had a sense of history; he was a record keeper. If he had not been, I would not have had much to work with.)

I decided that Bonforte was my kind of man. Or at least the kind I liked to think I was. His was a *persona* I was proud to wear.

So far as I can remember I did not sleep on that trip after I promised Penny that I would take the royal audience if Bonforte could not be made ready. I intended to sleep— there is no point in taking your stage with your eyes bagging like hound's ears—but I got interested in what I was studying and there was a plentiful supply of pepper pills in Bonforte's desk. It is amazing how much ground you can cover working a twenty-four-hour day, free from interruptions and with all the help you could ask for.

But shortly before we were due at New Batavia, Dr. Capek came in and said, "Bare your left forearm."

"Why?" I asked.

"Because when you go before the Emperor we don't want you falling flat on your face with fatigue. This will make you sleep until we ground. Then I'll give you an antidote."

"Eh? I take it that you don't think *he* will be ready?"

Capek did not answer, but gave me the shot. I tried to finish listening to the speech I was running but I must have been asleep in seconds. The next thing I knew Dak was saying deferentially, "Wake up, sir. Please wake up. We're grounded at Lippershey Field."

Chapter Eight

Our Moon being an airless planet, a torchship can land on it. But the *Tom Paine*, being a torchship, was really intended to stay in space and be serviced only at space stations in orbit; she had to be landed in a cradle. I wish I had been awake to see it, for they say that catching an egg on a plate is easy by comparison. Dak was one of the half dozen pilots who could do it.

But I did not even get to see the *Tommie* in her cradle; all I saw was the inside of the passenger bellows they fastened to her air lock and the passenger tube to New Batavia —those tubes are so fast that, under the low gravity of the Moon, you are again in free fall at the middle of the trip.

We went first to the apartments assigned to the leader of the loyal opposition, Bonforte's official residence until (and if) he went back into power after the coming election. The magnificence of them made me wonder what the Supreme Minister's residence was like. I suppose that New Batavia is odds-on the most palatial capital city in all history; it is a shame that it can hardly be seen from outdoors—but that minor shortcoming is more than offset by the fact that it is the only city in the Solar System that is actually impervious to fusion bombs. Or perhaps I should say "effectively impervious" since there are some surface structures which could be destroyed. Bonforte's apartments included an upper living room in the side of a cliff, which looked out through a bubble balcony at the stars and Mother Earth herself—but his sleeping room and offices were a thousand feet of solid rock below, by private lift.

I had no time to explore the apartments; they dressed me for the audience. Bonforte had no valet even dirtside, but Rog insisted on "helping" me (he was a hindrance) while going over last-minute details. The dress was ancient formal court dress, shapeless tubular trousers, a silly jacket with a claw-hammer tail, both in black, and a chemise consisting of a stiff white breastplate, a "winged" collar, and a white bow tie. Bonforte's chemise was all in one piece, because (I suppose) he did not use a dresser; correctly it should be assembled piece by piece and the bow tie should be tied poorly enough to show that it has been tied by hand—but it is too much to expect a man to understand both politics and period costuming.

It is an ugly costume, but it did make a fine background for the Order of Wilhelmina stretched in colorful diagonal across my chest. I looked at myself in a long glass and was pleased with the effect; the one color accent against the dead black and white was good showmanship. The traditional dress might be ugly but it did have dignity, something like the cool stateliness of a *maitre d'hotel.* I decided that I looked the part to wait on the pleasure of a sovereign.

Rog Clifton gave me the scroll which was supposed to list the names of my nominations for the ministries and he tucked into an inner pocket-of my costume a copy of the typed list thereof—the original had gone forward by hand of Jimmie Washington to the Emperor's State Secretary as soon as we had grounded. Theoretically the purpose of the audience was for the Emperor to inform me that it was his pleasure for me to form a government and for me to submit humbly my suggestions; my nominations were supposed to be secret until the sovereign graciously approved.

Actually the choices were all made; Rog and Bill had spent most of the trip lining up the Cabinet and making sure the nominees would serve, using state-scramble for the radio messages. I had studied the Farleyfiles on each nomination and each alternate. But the list really was secret in the sense that the news services would not receive it until after the Imperial audience.

I took the scroll and picked up my life wand. Rog looked horrified. "Good Lord, man, you can't carry that thing into the presence of the Emperor!"

"Why not?"

"Huh? It's a *weapon.*"

"It's a ceremonial weapon. Rog, every duke and every pipsqueak baronet will be wearing his dress sword. So I wear this."

He shook his head. "They have to. Don't you understand the ancient legal theory behind it? Their dress swords symbolize the duty they owe their liege lord to support and defend him by force of arms, in their own persons. But you are a commoner; traditionally you come before him unarmed."

"No, Rog. Oh, I'll do what you tell me to, but you are missing a wonderful chance to catch a tide at its flood. This is good theater, this is *right.*"

"I'm afraid I don't follow you."

"Well, look, will the word get back to Mars if I carry this wand today? Inside the nests, I mean?"

"Eh? I suppose so. Yes."

"Of course. I would guess that every nest has stereo receivers; I certainly noticed plenty of them in Kkkah nest. They follow the Empire news as carefully as we do. Don't they?"

"Yes. At least the elders do."

"If I carry the wand, they'll know it; if I fail to carry it, they will know it. It matters to them; it is tied up with propriety. No adult Martian would appear outside his nest without his life wand, or inside on ceremonial occasions. Martians have appeared before the Emperor in the past; they carried their wands, didn't they? I'd bet my life on it"

"Yes, but you———"

"You forget that *I am a Martian.*"

Rog's face suddenly blanked out. I went on, "I am not only 'John Joseph Bonforte'; I am Kkkahjjjerrr of Kkkah nest. If I fail to carry that wand, I commit a great impropriety —and frankly I do not know what would happen when the word got back; I don't know enough about Martian customs. Now turn it around and look at it the other way. When I walk down that aisle carrying this wand, *I am a Martian citizen about to be named His Imperial Majesty's first minister*. How will that affect the nests?"

"I guess I had not thought it through," he answered slowly.

"Nor would I have done so, had I not had to decide whether or not to carry the wand. But don't you suppose Mr. B. thought it through—before he ever let himself be invited to be adopted? Rog, we've got a tiger by the tail; the only thing to do is to swarm aboard and ride it. We can't let go."

Dak arrived at that point, confirmed my opinion, seemed surprised that Clifton had expected anything else. "Sure, we're setting a new precedent, Rog—but we're going to set a lot of new ones before we are through." But when he saw how I was carrying the wand he let out a scream. "Gripes, man! Are you trying to kill somebody? Or just carve a hole in the wall?"

"I wasn't pressing the stud."

"Thank God for small favors! You don't even have the safety on." He took it from me very gingerly and said, "You twist this ring—and shove this in that slot—then it's just a stick. Whew!"

"Oh. Sorry."

They delivered me to the robing room of the Palace and turned me over to King Willem's equerry, Colonel Pateel, a bland-faced Hindu with perfect manners and the dazzling dress uniform of the Imperial space forces. His bow to me must have been calculated on a slide rule; it suggested that I was about to be Supreme Minister but was not quite there yet, that I was his senior but nevertheless a civilian—then subtract five degrees for the fact that he wore the Emperor's aiguillette on his right shoulder.

He glanced at the wand and said smoothly, "That's a Martian wand, is it not, sir? Interesting. I suppose you will want to leave it here—it will be safe."

I said, "I'm carrying it."

"Sir?" His eyebrows shot up and he waited for me to correct my obvious mistake.

I reached into Bonforte's favorite cliches and picked one he used to reprove bumptiousness. "Son, suppose you tend to your knitting and I tend to mine."

His face lost all expression. "Very well, sir. If you will come this way?"

We paused at the entrance to the throne room. Far away, on the raised dais, the throne was empty. On both sides the entire length of the great cavern the nobles and royalty of the court were standing and waiting. I suppose Pateel passed along some sign, for the Imperial Anthem welled out and we all held still for it, Pateel in robotlike attention, myself in a tired stoop suitable to a middle-aged and overworked man who must do this thing because he must, and all the court like show-window pieces. I hope we never dispense with the pageantry of a court entirely; all those noble dress extras and spear carriers make a beautiful sight

In the last few bars he came in from behind and took his throne—Willem, Prince of Orange, Duke of Nassau, Grand Duke of Luxembourg, Knight Commander of the Holy Roman Empire, Admiral General of the Imperial Forces, Adviser to the Martian Nests, Protector of the Poor, and, by the Grace of God, King of the *Lowlands and* Emperor of the Planets and the Spaces Between.

I could not see his face, but the symbolism produced in me a sudden warm surge of empathy. I no longer felt hostile to the notion of royalty.

As King Willem sat down the anthem ended; he nodded acknowledgment of the salute and a wave of slight relaxation rippled down the courtiers. Pateel withdrew and, with my wand tucked under my arm, I started my long march, limping a little in spite of the low gravity. It felt remarkably like the progress to the Inner Nest of Kkkah, except that I was not frightened; I was simply warm and tingling. The Empire medley followed me down, the music sliding from "Kong Christian" to "Marseillaise" to "The Star-Spangled Banner" and all the others.

At the first balk line I stopped and bowed, then again at the second, then at last a deep bow at the third, just before the steps. I did not kneel; nobles must kneel but commoners share sovereignty with the Sovereign. One sees this point incorrectly staged sometimes in stereo and theater, and Rog had made sure that I knew what to do.

"*Ave, Imperator*!" Had I been a Dutchman I would have said "Rex" as well, but I was an American. We swapped schoolboy Latin back and forth by rote, he inquiring what I wanted, I reminding him that he had summoned me, *etc*. He shifted into Anglo-American, with a slight "down-East" accent.

"You served our father well. It is now our thought that you might serve us. How say you?"

"My sovereign's wish is my will, Majesty."

"Approach us."

Perhaps I made too good a thing of it but the steps up the dais are high and my leg actually was hurting—and a psychosomatic pain is as bad as any other. I almost stumbled—and Willem was up out of his throne like a shot and steadied my arm. I heard a gasp go around the hall. He smiled at me and said *sotto voce*, "Take it easy, old friend. We'll make this short."

He helped me to the stool before the throne and made me sit down an awkward moment sooner than he himself was again seated. Then he held out his hand for the scroll and I passed it over. He unrolled it and pretended to study the blank page.

There was chamber music now and the court made a display of enjoying themselves, ladies laughing, noble gentlemen uttering gallantries, fans gesturing. No one moved very far from his place, no one held still. Little page boys, looking like Michelangelo's cherubim, moved among them offering trays of sweets. One knelt to Willem and he helped himself without taking his eyes off the nonexistent list. The child then offered the tray to me and I took one, not knowing whether it was proper or not. It was one of those wonderful, matchless chocolates made only in Holland.

I found that I knew a number of the court faces from pictures. Most of the unemployed royalty of Earth were there, concealed under their secondary titles of duke or count. Some said that Willem kept them on as pensioners to brighten his court; some said he wanted to keep an eye on them and keep them out of politics and other mischief. Perhaps it was a little of both. There were the nonroyal nobility of a dozen nations present, too; some of them actually worked for a living.

I found myself trying to pick out the Habsburg lips and the Windsor nose.

At last Willem put down the scroll. The music and the conversation ceased instantly. In dead silence he said, "It is a gallant company you have proposed. We are minded to confirm it."

"You are most gracious, Majesty."

"We will ponder and inform you." He leaned forward and said quietly to me alone, "Don't try to back down those damned steps. Just stand up. I am going to leave at once."

I whispered back, "Oh. Thank you, Sire."

He stood up, whereupon I got hastily to my feet, and he was gone in a swirl of robes. I turned around and noticed some startled looks. But the music started up at once and I was let to walk out while the noble and regal extras again made polite conversation.

Pateel was at my elbow as soon as I was through the far archway. "This way, sir, if you please."

The pageantry was over; now came the real audience.

He took me through a small door, down an empty corridor, through another small door, and into a quite ordinary office. The only thing regal about it was a carved wall plaque, the coat of arms of the House of Orange, with its deathless motto, "*I Maintain!*" There was a big, flat desk, littered with papers. In the middle of it, held down by a pair of metal-plated baby shoes, was the original of the typed list in my pocket. In a copper frame there was a family group picture of the late Empress and the kids. A somewhat battered couch was against one wall and beyond it was a small bar. There were a couple of armchairs as well as the swivel chair at the desk. The other furnishings might have suited the office of a busy and not fussy family physician.

Pateel left me alone there, closing the door behind him. I did not have time to consider whether or not it was-proper for me to sit down, as the Emperor came quickly in through a door opposite. "Howdy, Joseph," he called out. "Be with you in a moment." He strode through the room, followed closely by two servants who were undressing him as he walked, and went out a third door. He was back again almost at once, zipping up a suit of coveralls as he came in. "You took the short route; I had to come long way around. I'm going to insist that the palace engineer cut another tunnel through from the back of the throne room, dammed if I'm not. I have to come around three sides of a square—either that or parade through semipublic corridors dressed like a circus horse." He added meditatively, "I never wear anything but underwear under those silly robes."

I said, "I doubt if they are as uncomfortable as this monkey jacket I am wearing, Sire."

He shrugged. "Oh well, we each have to put up with the inconveniences of our jobs. Didn't you get yourself a drink?" He picked up the list of nominations for cabinet ministers. "Do so, and pour me one."

"What will you have, Sire?"

"Eh?" He looked up and glanced sharply at me. "My usual. Scotch on ice, of course."

I said nothing and poured them, adding water to my own. I had had a sudden chill; if Bonforte knew that the Emperor always took scotch over bare cubes it should have been in his Farleyfile. It was not.

But Willem accepted the drink without comment, murmured, "Hot jets!" and went on looking at the list. Presently he looked up and said, "How about these lads, Joseph?"

"Sire? It is a skeleton cabinet, of course." We had doubled up on portfolios where possible and Bonforte would hold Defense and Treasury as well as first. In three cases we had given temporary appointments to the career deputy ministers—Research, Population Management, and Exterior. The men who would hold the posts in the permanent government were all needed for campaigning.

"Yes, yes, it's your second team. Mmm… How about this man Braun?"

I was considerably surprised. It had been my understanding that Willem would okay the list without comment, but that he might want to chat about other things. I had not been afraid of chatting; a man can get a reputation as a sparkling conversationalist simply by letting the other man do all the talking.

Lothar Braun was what was known as a "rising young statesman." What I knew about him came from his Farleyfile and from Rog and Bill. He had come up since Bonforte had been turned out of office and so had never had any cabinet post, but had served as caucus sergeant at arms and junior whip. Bill insisted that Bonforte had planned to boost him rapidly and that he should try his wings in the caretaker government; he proposed him for Minister of External Communications.

Rog Clifton had seemed undecided; he had first put down the name of Angel Jesus de la Tone y Perez, the career subminister. But Bill had pointed out that if Braun flopped, now was a good time to find it out and no harm done. Clifton had given in.

"Braun?" I answered. "He's a coming young man. Very brilliant"

Willem made no comment, but looked on down the list. I tried to remember exactly what Bonforte had said about Braun in the Farleyfile. Brilliant… hardworking… analytical mind. Had he said anything against him? No-well, perhaps—"a shade too affable." That does not condemn a man. But Bonforte had said nothing at all about such affirmative virtues as loyalty and honesty. Which might mean nothing, as the Farleyfile was not a series of character studies; it was a data file.

The Emperor put the list aside. "Joseph, are you planning to bring the Martian nests into the Empire at once?"

"Eh? Certainly not before the election, Sire."

"Come now, you know I was talking about after the election. And have you forgotten how to say 'Willem'? 'Sire' from a man six years older than I am, under-these circumstances, is silly."

"Very well, Willem."

"We both know I am not supposed to notice politics. But we know also that the assumption is silly. Joseph, you have spent your off years creating a situation in which the nests would wish to come wholly into the Empire." He pointed a thumb at my wand. "I believe you have done it. Now if you win this election you should be able to get the Grand Assembly to grant me permission to proclaim it. Well?"

I thought about it. "Willem," I said slowly, "you know that is exactly what we have planned to do. You must have some reason for bringing the subject up."

He swizzled his glass and stared at me, managing to look like a New England groceryman about to tell off one of the summer people. "Are you asking my advice? The constitution requires you to advise me, not the other way around."

"I welcome your advice, Willem. I do not promise to follow it."

He laughed. "You damned seldom promise anything. Very well, let's assume that you win the election and go back into office—but with a majority so small that you might have difficulty in voting the nests into full citizenship. In such case I would not advise you to make it a vote of confidence. If you lose, take your licking and stay in office; stick the full term."

"Why, Willem?

"Because you and I are patient men. See that?" He pointed at the plaque of his house. " 'I Maintain!' It's not a flashy rule but it is not a king's business to be flashy; his business is to conserve, to hang on, to roll with the punch. Now, constitutionally speaking, it should not matter to me whether you stay in office or not. But it does matter to me whether or not the Empire holds together. I think that if you miss on the Martian issue immediately after the election, you can afford to wait—for your other policies are going to prove very popular. You'll pick up votes in by-elections and eventually you'll come around and tell me I can add 'Emperor of Mars' to the list. So don't hurry."

"I will think about it," I said carefully.

"Do that. Now how about the transportee system?"

"We're abolishing it immediately after the election and suspending it at once." I could answer that one firmly; Bonforte hated it.

"They'll attack you on it."

"So they will. Let them. Well pick up votes."

"Glad to hear that you still have the strength of your convictions, Joseph. I never liked having the banner of Orange on a convict ship. Free trade?"

"After the election, yes."

"What are you going to use for revenue?"

"It is our contention that trade and production will expand so rapidly that other revenues will make up for the loss of the customs."

"And suppose it ain't so?"

I had not been given a second-string answer on that one—and economics was largely a mystery to me. I grinned. "Willem, I'll have to have notice on that question. But the whole program of the Expansionist Party is founded on the notion that free trade, free travel, common citizenship, common currency, and a minimum of Imperial laws and restrictions are good not only for the citizens of the Empire but for the Empire itself. If we need the money, we'll find it—but not by chopping the Empire up into tiny bailiwicks." All but the first sentence was pure Bonforte, only slightly adapted.

"Save your campaign speeches," he grunted. "I simply asked." He picked up the list again. "You're quite sure this line-up is the way you want it?"

I reached for the list and he handed it to me. Damnation, it was clear that the Emperor was telling me as emphatically as the constitution would let him that, in his opinion, Braun was a wrong 'un. But, hell's best anthracite, I had no business changing the list Bill and Rog had made up.

On the other hand, it was not *Bonforte's* list; it was merely what they thought Bonforte would do if he were *compos mentis*.

I wished suddenly that I could take time out and ask Penny what she thought of Braun.

Then I reached for a pen from Willem's desk, scratched out "Braun," and printed in "de la Torre"—in block letters; I still could not risk Bonforte's handwriting. The Emperor merely said, "It looks like a good team to me. Good luck, Joseph. You'll need it."

That ended the audience as such. I was anxious to get away, but you do not walk out on a king; that is one prerogative, they have retained. He wanted to show me his workshop and his new train models. I suppose he has done more to revive that ancient hobby than anyone else; personally I can't see it as an occupation for a grown man. But I made polite noises about his new toy locomotive, intended for the "Royal Scotsman."

"If I had had the breaks," he said, getting down on his hands and knees and peering into the innards of the toy engine, "I could have been a very fair shop superintendent, I think—a master machinist. But the accident of birth discriminated against me."

"Do you really think you would have preferred it, Willem?"

"I don't know. This job I have is not bad. The hours are easy and the pay is good—and the social security is first-rate—barring the outside chance of revolution, and my line has always been lucky on that score. But much of the work is tedious and could be done as well by any second-rate actor." He glanced up at me. "I relieve your office of a lot of tiresome cornerstone-laying and parade-watching, you know."

"I do know and I appreciate it."

"Once in a long time I get a chance to give a little push in the right direction—what I think is the right direction. Kinging is a very odd profession, Joseph. Don't ever take it up."

"I'm afraid it's a bit late, even if I wanted to."

He made some fine adjustment on the toy. "My real function is to keep you from going crazy."

"Eh?"

"Of course. Psychosis-situational is the occupational disease of heads of states. My predecessors in the king trade, the ones who actually ruled, were almost all a bit balmy. And take a look at your American presidents; the job used frequently to kill them in their prime. But me, I don't have to run things; I have a professional like yourself to do it for me. And you don't have the killing pressure either; you, or those in your shoes, can always quit if things get too tough

—and the old Emperor—it's almost always the 'old' Emperor; we usually mount the throne about the age other men retire —the Emperor is always there, maintaining continuity, preserving the symbol of the state, while you professionals work out a new deal." He blinked solemnly. "My job is not glamorous, but it *is* useful."

Presently he let up on me about his childish trams and we went back into his office. I thought I was about to be dismissed. In fact, he said, "I should let you get back to your work. You had a hard trip?"

"Not too hard. I spent it working."

"I suppose so. By the way, who *are* you?"

There is the policeman's tap on the shoulder, the shock of the top step that is not there, there is falling out of bed, and there is having her husband return home unexpectedly—I would take any combination of those in preference to that simple inquiry. I aged inside to match my appearance and more.

"Sire?"

"Come now," he said impatiently, "surely my job carries with it some privileges. Just tell me the truth. I've known for the past hour that you were not Joseph Bonforte— though you could fool his own mother; you even have his mannerisms. But who are you?"

"My name is Lawrence Smith, Your Majesty," I said faintly.

"Brace up, man! I could have called the guards long since, if I had been intending to. Were you sent here to assassinate me?"

"No, Sire. I am—loyal to Your Majesty."

"You have an odd way of showing it. Well, pour yourself another drink, sit down, and tell me about it."

I told him about it, every bit. It took more than one drink, and presently I felt better. He looked angry when I told him of the kidnapping, but when I told him what they had done to Bonforte's mind his face turned dark with a Jovian rage.

At last he said quietly, "It's just a matter of days until he is back in shape, then?"

"So Dr. Capek says."

"Don't let him go to work until he is fully recovered. He's a valuable man. You know that, don't you? Worth six of you and me. So you carry on with the doubling job and let him get well. The Empire needs him."

"Yes, Sire."

"Knock off that 'Sire.' Since you are standing in for him, call me 'Willem,' as he does. Did you know that was how I spotted you?"

"No, Si—no, Willem."

"He's called me Willem for twenty years. I thought it decidedly odd that he would quit it in private simply because he was seeing me on state business. But I did not suspect, not really. But, remarkable as your performance was, it set me thinking. Then when we went in to see the trains, I knew."

"Excuse me? How?"

"You were *polite*, man! I've made him look at my trains in the past—and he always got even by being as rude as possible about what a way for a grown man to waste time. It was a little act we always went through. We both enjoyed it."

"Oh. I didn't know."

"How could you have known?" I was thinking that I should have known, that damned Farleyfile should have told me… It was not until later that I realized that the file had not been defective, in view of the theory on which it was based, *i.e.* it was intended to let a famous man remember details about the *less* famous. But that was precisely what the Emperor was *not*—less famous, I mean. Of *course* Bonforte needed no notes to recall personal details about Willem! Nor would he consider it proper to set down personal matters about the sovereign in a file handled by his clerks.

I had muffed the obvious—not that I see how I could have avoided it, even if I had realized that the file would be incomplete.

But the Emperor was still talking. "You did a magnificent job—and after risking your life in a Martian nest I am not surprised that you were willing to tackle me. Tell me, have I ever seen you in stereo, or anywhere?"

I had given my legal name, of course, when the Emperor demanded it; I now rather timidly gave my professional name. He looked at me, threw up his hands, and guffawed. I was somewhat hurt. "Er, have you heard of me?"

"Heard of you? I'm one of your staunchest fans." He looked at me very closely. "But you still look like Joe Bonforte. I can't' believe that you are Lorenzo."

"But I am."

"Oh, I believe it, I believe it. You know that skit where you are a tramp? First you try to milk a cow—no luck. Finally you end up eating out of the cat's dish—but even the cat pushes you away?"

I admitted it.

"I've almost worn out my spool of that I laugh and cry at the same time."

"That is the idea." I hesitated, then admitted that the barnyard "Weary Willie" routine had been copied from a very great artist of another century. "But I prefer dramatic roles."

"Like this one?"

"Well—not exactly. For this role, once was quite enough. I wouldn't care for a long run."

"I suppose so. Well, tell Roger Clifton——— No, don't tell

Clifton anything. Lorenzo, I see nothing to be gained by ever telling anyone about our conversation this past hour. If you tell Clifton, even though you tell him that I said not to worry, it would just give him nerves. And he has work to do. So we keep it tight, eh?"

"As my emperor wishes."

"None of that, please. We'll keep it quiet because it's best so. Sorry I can't make a sickbed visit on Uncle Joe. Not that I could help him—although they used to think the King's Touch did marvels. So we'll say nothing and pretend that I never twigged."

"Yes—Willem."

"I suppose you had better go now. I've kept you a very long time."

"Whatever you wish."

"I'll have Pateel go back with you—or do you know your way around? But just a moment———" He dug around in his desk, muttering to himself. "That girl must have been straightening things again. No—here it is." He hauled out a little book. "I probably won't get to see you again—so would you mind giving me your autograph before you go?"

Chapter Nine

Rog and Bill I found chewing their nails in Bonforte's upper Living room. The second I showed up Corpsman started toward me. "Where the hell have you been?"

"With the Emperor," I answered coldly.

"You've been gone five or six times as long as you should have been."

I did not bother to answer. Since the argument over the speech Corpsman and I had gotten along together and worked together, but it was strictly a marriage of convenience, with no love. We cooperated, but we did not really bury the hatchet—unless it was between my shoulder blades. I had made no special effort to conciliate him and saw no reason why I should—in my opinion his parents had met briefly at a masquerade ball.

I don't believe-in rowing with other members of the company, but the only behavior Corpsman would willingly accept from me was that of a servant, hat in hand and very 'umble, sir. I would not give him that, even to keep peace. I was a professional, retained to do a very difficult professional job, and professional men do not use the back stairs; they are treated with respect.

So I ignored him and asked Rog, "Where's Penny?"

"With *him. So* are Dak and Doc, at the moment."

"He's here?"

"Yes." Clifton hesitated. "We put him in what is supposed to be the wife's room of your bedroom suite. It was the only place where we could maintain utter privacy and still give him the care he needs. I hope you don't mind."

"Not at all."

"It won't inconvenience you. The two bedrooms are joined, you may have noticed, only through the dressing rooms, and we've shut off that door. It's soundproof."

"Sounds like a good arrangement. How is he?"

Clifton frowned. "Better, much better—on the whole. He is lucid much of the time." He hesitated. "You can go in and see him, if you like."

I hesitated still longer. "How soon does Dr. Capek think he will be ready to make public appearances?"

"It's hard to say. Before long."

"How long? Three or four days? A short enough time that we could cancel all appointments and just put me out of sight? Rog, I don't know just how to make this clear but, much as I would like to call on him and pay my respects, I don't think it is smart for me to see him at all until after I have made my last appearance. It might well ruin my characterization." I had made the terrible mistake of going to my father's funeral; for years thereafter when I thought of him I saw him dead in his coffin. Only very slowly did I regain the true image of him —the virile, dominant man who had reared me with a firm hand and taught me my trade. I was afraid of something like that with Bonforte; I was now impersonating a well man at the height of his powers, the way I had seen him and heard him in the many stereo records of him. I was very much afraid that if I saw him ill, the recollection of it would blur and distort my performance.

"I was not insisting," Clifton answered. "You know best. It's possible that we can keep from having you appear in public again, but I want to keep you standing by and ready until he is fully recovered."

I almost said that the Emperor wanted it done that way. But I caught myself—the shock of having the Emperor find me out had shaken me a little out of character. But the thought reminded me of unfinished business. I took out the revised cabinet list and handed it to Corpsman. "Here's the approved roster for the news services, Bill. You'll see that there is one change on it—De la Torre for Braun."

"What?"

"Jesus de la Torre for Lothar Braun. That's the way the Emperor wanted it."

Clifton looked astonished; Corpsman looked both astonished and angry. "What difference does that make? He's got no goddamn right to have opinions!"

Clifton said slowly, "Bill is right, Chief. As a lawyer who has specialized in constitutional law I assure you that the sovereign's confirmation is purely nominal. You should not have let him make any changes." felt like shouting at them, and only the imposed calm personality of Bonforte kept me from it. I had had a hard day and, despite a brilliant performance, the inevitable disaster had overtaken me. I wanted to tell Rog that if Willem had not been a really big man, kingly *la* the fine sense of the word, we would all be in the soup—simply because I had not been adequately coached for the role. Instead I answered sourly, "It's done and that's that."

Corpsman said, "That's what *you* think! I gave out the correct list to the reporters two hours ago. Now you've got to go back and straighten it out. Rog, you had better call the Palace right away and———"

I said, "Quiet!"

Corpsman shut up. I went on in a lower key. "Rog, from a legal point of view, you may be right. I wouldn't know. I do know that the Emperor felt free to question the appointment of Braun. Now if either one of you wants to go to the Emperor and argue with him, that's up to you. But I'm not going anywhere. I'm going to get out of this anachronistic strait jacket, take my shoes off, and have a long, tall drink. Then I'm going to bed."

"Now wait, Chief." Clifton objected. "You've got a five-minute spot on grand network to announce the new cabinet."

"*You* take it. You're first deputy in this cabinet."

He blinked. "All right."

Corpsman said insistently, "How about Braun? He was promised the job."

Clifton looked at him thoughtfully. "Not in any dispatch that I saw, Bill. He was simply asked if he was willing to serve, like all the others. Is that what you meant?"

Corpsman hesitated like an actor not quite sure of his lines. "Of course. But it amounts to a promise."

"Not until the public announcement is made, it doesn't."

"But the announcement was made, I tell you. Two hours ago."

"Mmm... Bill, I'm afraid that you will have to call the boys in again and tell them that you made a mistake. Or I'll call them in and tell them that through an error a preliminary list was handed out before Mr. Bonforte had okayed it. But we've got to correct it before the grand network announcement."

"Do you mean to tell me you are going to let *him* get away with it?"

By "him" I think Bill meant me rather than Willem, but Rog's answer assumed the contrary. "Yes. Bill, this is no time to force a constitutional crisis. The issue isn't worth it. So will you phrase the retraction? Or shall I?"

Corpsman's expression reminded me of the way a cat submits to the inevitable—"just barely." He looked grim, shrugged, and said, "I'll do it. I want to be damned sure it is phrased properly, so we can salvage as much as possible out of the shambles."

"Thanks, Bill," Rog answered mildly.

Corpsman turned to leave. I called out, "Bill! As long as you are going to be talking to the news service I have another announcement for them."

"Huh? What are you after now?"

"Nothing much." The fact was I was suddenly overcome with weariness at the role and the tensions it created. "Just tell them that Mr. Bonforte has a cold and his physician has ordered him to bed for a rest I've had a bellyful."

Corpsman snorted. "I think I'll make it 'pneumonia.'"

"Suit yourself."

When he had gone Rog turned to me and said, "Don't let it get you, Chief. In this business some days are better than others."

"Rog, I really am going on the sick list. You can mention it on stereo tonight."

"So?"

"I'm going to take to my bed and stay there. There is no reason at all why Bonforte can't 'have a cold' until he is ready to get back into harness himself. Every time I make an appearance it just increases the probability that somebody will spot something wrong—and every time I do make, an appearance that sorehead Corpsman finds something to yap about. An artist can't do his best work with somebody continually snarling at him. So let's let it go at this and ring down the curtain."

"Take it easy, Chief. I'll keep Corpsman out of your hair from now on. Here we won't be in each other's laps the way we were in the ship."

"No, Rog, my mind is made up. Oh, I won't run out on you. I'll stay here until Mr. B. is able to see people, in case some utter emergency turns up"—I was recalling uneasily that the Emperor had told me to hang on and had assumed that I would—"but it is actually better to keep me out of sight. At the moment we have gotten away with it completely, haven't we? Oh, *they* know—somebody knows— that Bonforte was not the man who went through the adoption ceremony—but they don't dare raise that issue, nor could they prove it if they did. The same people may suspect that a double was used today, but they don't *know*, they can't be sure—because it is always possible that Bonforte recovered quickly enough to carry it off today. Right?"

Clifton got an odd, half-sheepish look on his face. "I'm afraid they are fairly sure you were a double, Chief."

"Eh?"

"We shaded the truth a little to keep you from being nervous. Doc Capek was certain from the time he first examined him that only a miracle could get him in shape to make the audience today. The people who dosed him would know that too."

I frowned. "Then you were kidding me earlier when you told me how well he was doing? How is he, Rog? Tell me the truth."

"I was telling you the truth that time, Chief. That's why I suggested that you see him—whereas before I was only too glad to string along with your reluctance to see him." He added, "Perhaps you had better see him, talk with him."

"Mmm—no." The reasons for not seeing him still applied; if I did have to make another appearance I did not want my subconscious playing me tricks. The role called for a well man. "But, Rog, everything I said applies still more emphatically on the basis of what you have just told me. If they are even reasonably sure that a double was used today, then we don't dare risk another appearance. They were caught by surprise today—or perhaps it was impossible to unmask me, under the circumstances. But it will not be later. They can rig some deadfall, some test that I can't pass—then *blooey!* There goes the old ball game." I thought about it. "I had better be 'sick' as long as necessary. Bill was right; it had better be 'pneumonia.'"

Such is the power of suggestion that I woke up the next morning with a stopped-up nose and a sore throat. Dr. Capek took time to dose me and I felt almost human by suppertime; nevertheless, he issued bulletins about "Mr. Bonforte's virus infection." The sealed and airconditioned cities of the Moon being what they are, nobody was anxious to be exposed to an air-vectored ailment; no determined effort was made to get past my chaperones. For four days I loafed and read from Bonforte's library, both his own collected papers and his many books… I discovered that both politics and economics could make engrossing reading; those subjects had never been real to me before. The Emperor sent me flowers from the royal greenhouse—or were they for *me*?

Never mind. I loafed and soaked in the luxury of being Lorenzo, or even plain Lawrence Smith. I found that I dropped back into character automatically if someone came in, but I can't help that. It was not necessary; I saw no one but Penny and Capek, except for one visit from Dak.

But even lotus-eating can pall. By the fourth day I was as tired of that room as I had ever been of a producer's waiting room and I was lonely. No one bothered with me; Capek's visits had been brisk and professional, and Penny's visits had been short and few. She had stopped calling me "Mr. Bonforte."

When Dak showed up I was delighted to see him. "Dak! What's new?"

"Not much. I've been trying to get the *Tommie* overhauled with one hand while helping Rog with political chores with the other. Getting this campaign lined up is going to give him ulcers, three gets you eight." He sat down. "Politics!"

"Hmm… Dak, how did you ever get into it? Offhand, I would figure *voyageurs* to be as unpolitical as actors. And you in particular."

"They are and they aren't. Most ways they don't give a damn whether school keeps or not, as long as they can keep on herding junk through the sky. But to do that you've got to have cargo, and cargo means trade, and profitable trade means wide-open trade, with any ship free to go anywhere, no customs nonsense and no restricted areas. Freedom! And there you are; you're in politics. As for myself, I came here first for a spot of lobbying for the 'continuous voyage' rule, so that goods on the triangular trade would not pay two duties. It was Mr. B.'s bill, of course. One thing led to another and here I am, skipper of his yacht the past six years and representing my guild brothers since the last general election." He sighed. "I hardly know how it happened myself."

"I suppose you are anxious to get out of it. Are you going to stand for reelection?"

He stared at me. "Huh? Brother, until you've been in politics you haven't been *alive*."

"But you said———"

"I know what I said. It's rough and sometimes it's duty and it's always hard work and tedious details. But it's the only sport for grownups. All other games are for kids. All of "em." He stood up. "Gotta run."

"Oh, stick around."

"Can't With the Grand Assembly convening tomorrow I've got to give Rog a hand. I shouldn't have stopped in at all."

"It is? I didn't know." I was aware that the G.A., the outgoing G.A. that is, had to meet one more time, to accept the caretaker cabinet. But I had not thought about it. It was a routine matter, as perfunctory as presenting the list to the Emperor. "Is *he* going to be able to make it?"

"No. But don't you worry about it. Rog will apologize to the house for your—I mean *his*—absence and will ask for a proxy rule under no-objection procedure. Then he will read the speech of the Supreme Minister Designate—Bill is working on it right now. Then in his own person he will move that the government be confirmed. Second. No debate. Pass. Adjourn sine die—and everybody rushes for home and starts promising the voters two women in every bed and a hundred Imperials every Monday morning. Routine." He added, "Oh yes! Some member of the Humanity Party will move a resolution of sympathy and a basket of flowers, which will pass in a fine hypocritical glow. They'd rather send flowers to Bonforte's funeral." He scowled.

"It is actually as simple as that? What would happen if the proxy rule were refused? I thought the Grand Assembly didn't recognize proxies."

"They don't, for all ordinary procedure. You either pair, or you show up and vote. But this is just the idler wheels going around in parliamentary machinery. If they don't let him appear by proxy tomorrow, then they've got to wait around until he is well before they can adjourn sine die and get on with the serious business of hypnotizing the voters. As it is, a mock quorum has been meeting daily and adjourning ever since Quiroga resigned. This Assembly is as dead as Caesar's ghost, but it has to be buried constitutionally."

"Yes—but suppose some idiot *did* object?"

"No one will. Oh, it could force a constitutional crisis. But it won't happen."

Neither one of us said anything for a while. Dak made no move to leave. "Dak, would it make things easier if I showed up and gave that speech?"

"Huh? Shucks, I thought that was settled. You decided that it wasn't safe to risk another appearance short of an utter save-the-baby emergency. On the whole, I agree with you. There's the old saw about the pitcher and the well."

"Yes. But this is just a walk-through, isn't it? Lines as fixed as a play? Would there be any chance of anyone pulling any surprises on me that I couldn't handled'

"Well, no. Ordinarily you would be expected to talk to the press afterwards, but your recent illness is an excuse. We could slide you through the security tunnel and avoid them entirely." He smiled grimly. "Of course, there is always the chance that some crackpot in the visitors' gallery has managed to sneak in a gun… Mr. B. always referred to it as the 'shooting gallery' after they winged him from it"

My leg gave a sudden twinge. "Are you trying to scare me off?"

"No."

"You pick a funny way to encourage me. Dak, be level with me. Do you *want* me to do this job tomorrow? Or don't you?"

"Of course I do! Why the devil do you think I stopped in on a busy day? Just to chat?"

The Speaker pro tempore banged his gavel, the chaplain gave an invocation that carefully avoided any differences between one religion and another—and everyone kept silent. The seats themselves were only half filled but the gallery was packed with tourists.

We heard the ceremonial knocking amplified over the speaker system; the Sergeant at Arms rushed the mace to the door. Three times the Emperor demanded to be admitted, three times he was refused. Then he prayed the privilege; it was granted by acclamation. We stood while Willem entered and took his seat back of the Speaker's desk. He was in uniform as Admiral General and was unattended, as was required, save by escort of the Speaker and the Sergeant at Arms.

Then I tucked my wand under my arm and stood up at my place at the front bench and, addressing the Speaker as if the sovereign were not present, I delivered my speech. It was not the one Corpsman had written; that one went down the oubliette as soon as I had read it. Bill had made it a straight campaign speech, and it was the wrong time and place.

Mine was short, non-partisan, and cribbed right straight out of Bonforte's collected writings, a paraphrase of the one the time before when he formed a caretaker government. I stood foursquare for good roads and good weather and wished that everybody would love everybody else, just the way all us good democrats loved our sovereign and he loved us. It was a blank-verse lyric poem of about five hundred words and if I varied from Bonforte's earlier speech then

I simply went up on my lines.

They had to quiet the gallery.

Rog got up and moved that the names I had mentioned in passing be confirmed—second and no objection and the clerk cast a white ballot As I marched forward, attended by one member of my own party and one member of the opposition, I could see members glancing at their watches and wondering if they could still catch the noon shuttle.

Then I was swearing allegiance to my sovereign, under and subject to the constitutional limitations, swearing to defend and continue the rights and privileges of the Grand Assembly, and to protect the freedoms of the citizens of the Empire wherever they might be—and incidentally to carry out the duties of His Majesty's Supreme Minister. The chaplain mixed up the words once, but I straightened him out.

I thought I was breezing through it as easy as a curtain speech—when I found that I was crying so hard that I could hardly see. When I was done, Willem said quietly to me, "A good performance, Joseph." I don't know whether he thought he was talking to me or to his old friend—and I did not care. I did not wipe away the tears; I just let them drip as I turned back to the Assembly. I waited for Willem to leave, then adjourned them.

Diana, Ltd., ran four extra shuttles that afternoon. New Batavia was deserted—that is to say there were only the court and a million or so butchers, bakers, candlestick makers, and civil servants left in town —and a skeleton cabinet.

Having gotten over my "cold" and appeared publicly in the Grand Assembly Hall, it no longer made sense to hide out. As the supposed Supreme Minister I could not, without causing comment, never be seen; as the nominal head of a political party entering a campaign for *a.* general election I had to see people—some people, at least. So I did what I had to do and got a daily report on Bonforte's progress toward complete recovery. His progress was good, if slow; Capek reported that it was possible, if absolutely necessary, to' let him appear any time now—but he advised against it; he had lost almost twenty pounds and his coordination was poor.

Rog did everything possible to protect both of us. Mr. Bonforte knew now that they were using a double for him and, after a first fit of indignation, had relaxed to necessity and approved it. Rog ran the campaign, consulting him only on matters of high policy, and then passing on his answers to me to hand out publicly when necessary.

But the protection given me was almost as great; I was as hard to see as a topflight agent. My office ran on into the mountain beyond the opposition leader's apartments (we did not move over into the Supreme Minister's more palatial quarters; while it would have been legal, it just "was not done" during a caretaker regime)—they could not be reached from the rear directly from the lower living room, but to get at me from the public entrance a man had to pass about five check points—except for the favored few who were conducted directly by Rog through a bypass tunnel to Penny's office and from there into mine.

The setup meant that I could study the Farleyfile on anyone before he got to see me. I could even keep it in front of me while he was with me, for the desk had a recessed viewer the visitor could not see, yet I could wipe it out instantly if he turned out to be a floor pacer. The viewer had other uses; Rog could give a visitor the special treatment, rushing him right in to see me, leave him alone with me— and stop in Penny's office and write me a note, which would then be projected on the viewer—such quick tips as, "Kiss him to death and promise nothing," or, "All he really wants is for his wife to be presented at court. Promise him that and get rid of him," or even, "Easy on this one. It's a 'swing' district and he is smarter than he looks. Turn him over to me and I'll dicker."

I don't know who ran the government. The senior career men, probably. There would be a stack of papers on my desk each morning, I would sign Bonforte's sloppy signature to them, and Penny would take them away. I never had time to read them. The very size of the Imperial machinery dismayed me. Once when we had to attend a meeting outside the offices, Penny had led me on what she called a short cut through the Archives—miles on miles of endless files, each one chockablock with microfilm and all of them with moving belts scooting past them so that a clerk would not take all day to fetch one file.

But Penny told me that she had taken me through only one wing of it. The file of the files, she said, occupied a cavern the size of the Grand Assembly Hall. It made me glad that government was not a career with me, but merely a passing hobby, so to speak.

Seeing people was an unavoidable chore, largely useless since Rog, or Bonforte through Rog, made the decisions. My real job was to make campaign speeches. A discreet rumor had been spread that my doctor had been afraid that' my heart had been strained by the "virus infection" and had advised me to stay in the low gravity of the Moon throughout the campaign. I did not dare risk taking the impersonation on a tour of Earth, much less make a trip to Venus; the Farleyfile system would break down if I attempted to mix with crowds, not to mention the unknown hazards of the Actionist goon squads—what I would babble with a minim dose of neodexocaine in the forebrain none of us liked to think about, me least of all.

Quiroga was hitting all continents on Earth, making his stereo appearances as personal appearances on platforms in front of crowds. But it did not worry Rog Clifton. He shrugged and said, "Let him. There are no new votes to be picked up by personal appearances at political rallies. All it does is wear out the speaker. Those rallies are attended only by the faithful."

I hoped that he knew what he was talking about. The campaign was short, only six weeks from Quiroga's resignation to the day he had set for the election before resigning, and I was speaking almost every day, either on a grand network with time shared precisely with the Humanity Party, or speeches canned and sent by shuttle for later release to particular audiences. We had a set routine; a draft would come **to** me, perhaps from Bill although I never saw him, and then I would rework it. Rog would take the revised draft away; usually it would come back approved—and once in a while there would be corrections made in Bonforte's handwriting, now so sloppy as to be almost illegible.

I never ad-libbed at all on those parts he corrected, though I often did on the rest—when you get rolling there is often a better, more alive way to say a thing. I began to notice the nature of his corrections; they were almost always eliminations of qualifiers—make it blunter, let 'em like it or lump ill

After a while there were fewer corrections. I was getting with it.

I still never saw him. I felt that I could not "wear his head" if I looked at him on his sickbed. But I was not the only one of his intimate family who was not seeing him; Capek had chucked Penny out—for her own good. I did not know it at the time. I did know that Penny had become irritable, absentminded, and moody after we reached New Batavia. She got circles under her eyes like a raccoon—all of which I could not miss, but I attributed it to the pressure of the campaign combined with worry about Bonforte's health, I was only partly right. Capek spotted it and took action, put her under light hypnosis and asked her questions —then he flatly forbade her to see Bonforte again until I was done and finished and shipped away.

The poor girl was going almost out of her mind from visiting the sickroom of the man she hopelessly loved—then going straight in to work closely with a man who looked and talked and sounded just like him, but in good health. She was probably beginning to hate me.

Good old Doc Capek got at the root of her trouble, gave her helpful and soothing posthypnotic suggestions, and kept her out of the sick room after that. Naturally I was not told about it at the time; it wasn't any of my business. But Penny perked up and again was her lovable, incredibly efficient self.

It made a lot of difference to me. Let's admit it; at least twice I would have walked out on the whole incredible rat race if it had not been for Penny.

There was one sort of meeting I had to attend, that of the campaign executive committee. Since the Expansionist Party was a minority party, being merely the largest fraction of a coalition of several parties held together by the leadership and personality of John Joseph Bonforte, I had to stand in for him and peddle soothing syrup to those prima donnas. I was briefed for it with painstaking care, and Rog sat beside me and could hint the proper direction if I faltered. But it could not be delegated.

Less than two weeks before election day we were due for a meeting at which the safe districts would be parceled out. The organization always had thirty to forty districts which could be used to make someone eligible for cabinet office, or to provide for a political secretary (a person like Penny was much more valuable if he or she was fully qualified, able to move and speak on the floor of the Assembly, had the right to be present at closed caucuses, and so forth), or for other party reasons. Bonforte himself represented a "safe" district; it relieved him from the necessity of precinct campaigning. Clifton had another. Dak would have had one if he had needed it, but he actually commanded the support of his guild brethren. Rog even hinted to me once that if I wanted to come back in my proper person, I could say the word and my name would go on the next list

Some of the spots were always saved for party wheel horses willing to resign at a moment's notice and thereby provide the Party with a place through a by-election if it proved necessary to qualify a man for cabinet office, or something.

But the whole thing had somewhat the flavor of patronage and, the coalition being what it was, it was necessary for Bonforte to straighten out conflicting claims and submit a list to the campaign executive committee. It was a last-minute job, to be done just before the ballots were prepared, to allow for late changes.

When Rog and Dak came in I was working on a speech and had told Penny to hold off anything but five-alarm fires. Quiroga had made a wild statement in Sydney, Australia, the night before, of such a nature that we could expose the lie and make him squirm. I was trying my hand at a speech in answer, without waiting for a draft to be handed me; I had high hopes of getting my own version approved.

When they came in I said, "Listen to this," and read them the key paragraph. "How do you like it?"

"That ought to nail his hide to the door," agreed Rog.

"Here's the 'safe' list, Chief. Want to look it over? We're due there in twenty minutes."

"Oh, that damned meeting. I don't see why I should look at the list. Anything you want to tell me about it?" Nevertheless, I took the list and glanced down it. I knew them all from their Farleyfiles and a few of them from contact; I knew already why each one had to be taken care of.

Then I struck the name: *Corpsman, William 1.*

fought down what I felt was justifiable annoyance and said quietly, "I see Bill is on the list, Rog."

"Oh, yes. I wanted to tell you about that. You see, Chief, as we all know, there has been a certain amount of bad blood between you and Bill. Now I'm not blaming you; it's been Bill's fault. But there are always two sides. What you may not have realized is that Bill has been carrying around a tremendous inferiority feeling; it gives him a chip on the shoulder. This will fix it up."

"So?"

"Yes. It is what he has always wanted. You see, the rest of us all have official status, we're members of the G.A., I mean. I'm talking about those who work closely around, uh, you. Bill feels it. I've heard him say, after the third drink, that he was just a hired man. He's bitter about it. You don't mind, do you? The Party can afford it and it's an easy price to pay for elimination of friction at headquarters."

I had myself under full control by now. "It's none of my business. Why should I mind, if that is what Mr. Bonforte wants?"

I caught just a flicker of a glance from Dak to Clifton. I added, "That *is* what Mr. B. wants? Isn't it, Rog?"

Dak said harshly, "Tell him, Rog."

Rog said slowly, "Dak and I whipped this up ourselves. We think it is for the best."

"Then Mr. Bonforte did not approve it? You asked him, surely?"

"No, we didn't"

"Why not?"

"Chief, this is not the sort of thing to bother him with. He's a tired, old, sick man. I have not been worrying him with anything less than major policy decisions—which this isn't. It is a district we command no matter who stands for it."

"Then why ask my opinion about it at all?"

"Well, we felt you should know—and know why. We think you ought to approve it."

"Me? You're asking me for a decision as if I were Mr. Bonforte. I'm not." I tapped the desk in his nervous gesture. "Hither this decision is at his level, and you should ask *him*—or it's not, and you should never have asked *me*."

Rog chewed his cigar, then said, "All right, I'm not asking you."

"No!"

"What do you mean?"

"I mean 'No!' You did ask me; therefore there is doubt in your mind. So if you expect me to present that name to the committee—*as if* I were Bonforte—then go in and ask him."

They both sat and said nothing. Finally Dak sighed and said, "Tell the rest, Rog. Or I will."

I waited. Clifton took his cigar out of his mouth and said, "Chief, Mr. Bonforte had a stroke four days ago. He's in no shape to be disturbed."

I held still, and recited to myself all of "the cloud-capped towers, the gorgeous palaces," and so forth. When I was back in shape I said, "How is his mind?"

"His mind seems clear enough, but he is terribly tired. That week as a prisoner was more of an ordeal than we realized. The stroke left him in a coma for twenty-four hours. He's out of it now, but the left side of his face is paralyzed and his entire left side is partly out of service."

"Uh, what does Dr. Capek say?"

"He thinks that as the clot clears up, you'll never be able to tell the difference. But he'll have to take it easier than he used to. But, Chief, right now he is ill. We'll just have to carry on through the balance of the campaign without him."

I felt a ghost of the lost feeling I had had when my father died. I had never seen Bonforte, I had had nothing from him but a few scrawled corrections on typescript. But I leaned on him all the way. The fact that he was in that room next door had made the whole thing possible.

I took a long breath, let it out, and said, "Okay, Rog. Well have to."

"Yes, Chief." He stood up. "We've got to get over to that meeting. How about *that*?" He nodded toward the safe-districts list.

"Oh." I tried to think. Maybe it was possible that Bonforte would reward Bill with the privilege of calling himself "the Honorable," just to keep him happy. He wasn't small about such things; he did not bind the mouths of the kine who tread the grain. In one of his essays on politics he had said, "I am not an intellectual man. If I have any special talent, it lies in picking men of ability and letting them work."

"How long has Bill been with him?" I asked suddenly.

"Eh? About four years. A little over."

Bonforte evidently had liked his work. "That's past one general election, isn't it? Why didn't he make him an Assemblyman then?"

"Why, I don't know. The matter never came up."

"When was Penny put in?"

"About three years ago. A by-election."

"There's your answer, Rog."

"I don't follow you."

"Bonforte could have made Bill a Grand Assemblyman at any time.

He didn't choose to. Change that nomination to a 'resigner.' Then if Mr. Bonforte wants Bill to have it, he can arrange a by-election for him later—when he's feeling himself."

Clifton showed no expression. He simply picked up the list and said, "Very well, Chief."

Later that same day Bill quit. I suppose Rog had to tell him that his arm-twisting had not worked. But when Rog told me about h I felt sick, realizing that my stiff-necked attitude had us all in acute danger. I told him so. He shook his head.

"But he knows it *all*! It was his scheme from the start. Look at the load of dirt he can haul over to the Humanity camp."

"Forget it, Chief. Bill may be a louse—I've no use for a man who will quit in the middle of a campaign; you just don't do that, ever. But he is not a rat. In his profession you don't spill a client's secrets, even if you fall out with him."

"I hope you are right"

"You'll see. Don't worry about it. Just get on with the job."

As the next few days passed I came to the conclusion that Rog knew Bui better than I did. We heard nothing from him or about him and the campaign went ahead as usual, getting rougher all the time, but with not a peep to show that our giant hoax was compromised. I began to feel better and buckled down to making the best Bonforte speeches I could manage—sometimes with Rog's help; sometimes just with his okay. Mr. Bonforte was steadily improving again, but Capek had him on absolute quiet.

Rog had to go to Earth during the last week; there are types of fence-mending that simply can't be done by remote control. After all, votes come from the precincts and the field managers count for more than the speechmakers. But speeches still had to be made and press conferences given; I carried on, with Dak and Penny at my elbow—of course I was much more closely with it now; most questions I could answer without stopping to think.

There was the usual twice-weekly press conference in the offices the day Rog was due back. I had been hoping that he would be back in time for it, but there was no reason I could not take it alone. Penny walked in ahead of me, carrying her gear; I heard her gasp.

I saw then that Bill was at the far end of the table.

But I looked around the room as usual and said, "Good morning, gentlemen."

"Good morning, Mr. Minister!" most of them answered.

I added, "Good morning, Bill. Didn't know you were here. Whom are you representing?"

They gave him dead silence to reply. Every one of them knew that Bill had quit us—or had been fired. He grinned at me, and answered, "Good morning, *Mister Bonforte*. I'm with the Krein Syndicate."

I knew it was coming then; I tried not to give him the satisfaction of letting it show. "A fine outfit. I hope they are paying you what you are worth. Now to business———

The written questions first. You have them, Penny?"

I went rapidly through the written questions, giving out answers I had already had time to think over, then sat back as usual and said, "We have time to bat it around a bit, gentlemen. Any other questions?"

There were several. I was forced to answer "No comment" only once—an answer Bonforte preferred to an ambiguous one. Finally I glanced at my watch and said, "That will be all this morning, gentlemen," and started to stand up.

"Smythe!" Bill shouted.

I kept right on getting to my feet, did not look toward him.

"I mean you, Mr. Phony Bonforte-Smythe!" he went on angrily, raising his voice still more.

This time I did look at him, with astonishment—just the amount appropriate, I think, to an important official subjected to rudeness under unlikely conditions. Bill was pointing at me and his face was red. "You impostor! You smalltime actor! You *fraud*!"

The London *Times* man on my right said quietly, "Do you want me to call the guard, sir?"

I said, "No. He's harmless."

Bill laughed. "So I'm harmless, huh? You'll find out."

"I really think I should, sir," the *Times* man insisted.

"No." I then said sharply, "That's enough, Bill. You had better leave quietly."

"Don't you wish I would?" He started spewing forth the basic story, talking rapidly. He made no mention of the kidnapping and did not mention his own part in the hoax, but implied that he had left us rather than be mixed up in any such swindle. The impersonation was attributed, correctly as far as it went, to illness on the part of Bonforte —with a strong hint that we might have doped him.

I listened patiently. Most of the reporters simply listened at first, with that stunned expression of outsiders exposed unwillingly to a vicious family argument. Then some of them started scribbling or dictating into minicorders.

When he stopped I said, "Are you through, Bill?"

"That's enough, isn't it?"

"More than enough. I'm sorry, Bill. That's all, gentlemen. I must get back to work."

"Just a moment, Mr. Minister!" someone called out. "Do you want to issue a denial?" Someone else added, "Are you going to sue?"

I answered the latter question first. "No, I shan't sue. One doesn't sue a sick man."

"Sick, am I?" shouted Bill.

"Quiet down, Bill! As for issuing a denial, I hardly think it is called for. However, I see that some of you have been taking notes. While I doubt if any of your publishers would run this story, if they do, this anecdote may add something to it. Did you ever hear of the professor who spent forty years of his life proving that the *Odyssey* was not written by Homer—but by another Greek of the *same name*?"

It got a polite laugh. I smiled and started to turn away again. Bill came rushing around the table and grabbed at my arm. "You can't laugh it off!" The *Times* man—Mr. Ackroyd, it was—pulled him away from me.

I said, "Thank you, sir." Then to Corpsman I added, "What do you want me to do, Bill? I've tried to avoid having you arrested."

"Call the guards if you like, you phony! Well see who stays in jail longest! *Wait until they take your fingerprints*!" sighed and made the understatement of my life. "This is ceasing to be a joke. Gentlemen, I think I had better put an end to this. Penny my dear, will you please have someone send in fingerprinting equipment?" I knew I was sunk—but, damn it, if you are caught by the Birkenhead Drill, the least you owe yourself is to stand at attention while the ship goes down. Even a villain should make a good exit.

Bill did not wait. He grabbed the water glass that had been sitting in front of me; I had handled it several times. "The hell with that! This will do."

"I've told you before, Bill, to mind your language in the presence of ladies. But you may keep the glass."

"You're bloody well right I'll keep it."

"Very well. Please leave. If not, I'll be forced to summon the guard."

He walked out. Nobody said anything. I said, "May I provide fingerprints for any of the rest of you?"

Ackroyd said hastily, "Oh, I'm sure we don't want them, Mr. Minister."

"Oh, by all means! If there is a story in this, you'll want to be covered." I insisted because it was in character—and in the second and third place, you can't be a little bit pregnant, or slightly unmasked—and I did not want my friends present to be scooped by Bill; it was the last thing I could do for them.

We did not have to send for formal equipment. Penny had carbon sheets and someone had one of those lifetime memo pads with plastic sheets; they took prints nicely. Then I said good morning and left.

We got as far as Penny's private office; once inside she fainted dead. I carried her into my office, laid her on the couch, then sat down at my desk and simply shook for several minutes.

Neither one of us was worth much the rest of the day. We carried on as usual except that Penny brushed off all callers, claiming excuses of some sort. I was due to make a speech that night and thought seriously of canceling it. But I left the news turned on all day and there was not a word about the incident of that morning. I realized that they were checking the prints before risking it—after all, I *was* supposed to be His Imperial Majesty's first minister; they would want confirmation. So I decided to make the speech since I had already written it and the time was scheduled. I couldn't even consult Dak; he was away in Tycho City.

It was the best one I had made. I put into it the same stuff a comic uses to quiet a panic in a burning theater. After the pickup was dead I just sunk my face in my hands and wept, while Penny patted my shoulder. We had not discussed the horrible mess at all.

Rog grounded at twenty hundred Greenwich, about as I finished, and checked in with me as soon as he was back. In a dull monotone I told him the whole dirty story; he listened, chewing on a dead cigar, his face expressionless.

At the end I said almost pleadingly, "I *had* to give the fingerprints, Rog. You see that, don't you? To refuse would not have been in character."

Rog said, "Don't worry."

"Huh?"

"I said, 'Don't worry.' When the reports on those prints come back from the Identification Bureau at The Hague, you are in for a small but pleasant surprise—and our ex-friend Bill is in for a much bigger one, but not pleasant. If he has collected any of his blood money in advance, they will probably take it out of his hide. I hope they do."

I could not mistake what he meant. "Oh! But, Rog—they won't stop there. There are a dozen other places. Social Security… Uh, lots of places."

"You think perhaps we were not thorough? Chief, I knew this could happen, one way or another. From the moment Dak sent word to complete Plan Mardi Gras, the necessary coverup started. Everywhere. But I didn't think it necessary to tell Bill." He sucked on his dead cigar, took it out of his mouth, and looked at it "Poor Bill."

Penny sighed softly and fainted again.

Chapter Ten

Somehow we got to the final day. We did not hear from Bill again; the passenger lists showed that he went Earthside two days after his fiasco. If any news service ran anything I did not hear of it, nor did Quiroga's speeches hint at it.

Mr. Bonforte steadily improved until it was a safe bet that he could take up his duties after the election. His paralysis continued in part but we even had that covered: he would go on vacation right after election, a routine practice that almost every politician indulges in. The vacation would be in the *Tomnde*, safe from everything. Sometime in the course of the trip I would be transferred and smuggled back—and the Chief would have a mild stroke, brought on by the strain of the campaign.

Rog would have to unsort some fingerprints, but he could safely wait a year or more for that.

Election day I was happy as a puppy in a shoe closet The impersonation was over, although I was going to do one more short turn. I had already canned two five-minute speeches for grand network, one magnanimously accepting victory, the other gallantly conceding defeat; my job was finished. When the last one was in the can, I grabbed Penny and kissed her. She didn't even seem to mind.

The remaining short turn was a command performance; Mr. Bonforte wanted to see me—as *him*—before he let me drop it I did not mind. Now that the strain was over, it did not worry me to see him; playing him for his entertainment would be like a comedy skit, except that I would do it straight. What am I saying? Playing straight is the essence of comedy.

The whole family would gather in the upper living room—there because Mr. Bonforte had not seen the sky in some weeks and wanted to—and there we would listen to the returns, and either drink to victory or drown our sorrows and swear to do better next time. Strike me out of the last part; I had had my first and last political campaign and I wanted no more politics. I was not even sure I wanted to act again. Acting every minute for over six weeks adds up to about five hundred ordinary performances. That's a long run.

They brought him up the lift in a wheel chair. I stayed out of sight and let them arrange him on a couch before I came in; a man is entitled not to have his weakness displayed before strangers. Besides, I wanted to make an entrance.

I was almost startled out of character. He looked like my father! Oh, it was just a "family" resemblance; he and I looked much more alike than either one of us looked like my father, but the likeness was there—and the age was right, for he looked *old. I* had not guessed how much he had aged. He was thin and his hair was white.

I made an immediate mental note that during the coming vacation in space I must help them prepare for the transition, the resubstitution. No doubt Capek could put weight back on him; if not, there were ways to make a man appear fleshier without obvious padding. I would dye his hair myself. The delayed announcement of the stroke he had suffered would cover the inevitable discrepancies. After all, he *had* changed this much in only a few weeks; the need was to keep the fact from calling attention to the impersonation.

But these practical details were going on by themselves in a corner of my mind; my own being was welling with emotion. HI though he was, the man gave off a force both spiritual and virile. I felt that warm, almost holy, shock one feels when first coming into sight of the great statue of Abraham Lincoln. I was reminded of another statue, too, seeing him lying there with his legs and his helpless left side covered with a shawl: the wounded Lion of Lucerne. He had that massive strength and dignity, even when helpless: "The guard dies, but never surrenders."

He looked up as I came in and smiled the warm, tolerant, and friendly smile I had learned to portray, and motioned with his good hand for me to come to him. I smiled the same smile back and went to him. He shook hands with a grip surprisingly strong and said warmly, "I am happy to meet you at last." His speech was slightly blurred and I could not see the slackness on the side of his face away from " me.

"I am honored and happy to meet you, sir." I had to think about it to keep from matching the blurring of paralysis.

He looked me up and down, and grinned. "It looks to me as if you had already met me."

I glanced down at myself. "I have tried, sir."

" 'Tried'! You succeeded. It is an odd thing to see one's own self."

I realized with sudden painful empathy that he was not emotionally aware of his own appearance; my present appearance was "his"—and any change in himself was merely incidental to illness, temporary, not to be noticed. But he went on speaking. "Would you mind moving around a bit for me, sir? I want to see me—you—us. I want the audience's viewpoint for once."

So I straightened up, moved around the room, spoke to Penny (the poor child was looking from one to the other of us with a dazed expression), picked up a paper, scratched my collarbone and rubbed my chin, moved his wand from under my arm to my hand and fiddled with it

He was watching with delight. So I added an encore. Taking the middle of the rug, I gave the peroration of one of his finest speeches, not trying to do it word for word, but interpreting it, letting it roll and thunder as he would have done—and ending with his own exact ending: "A slave cannot be freed, save he do it himself. Nor can you enslave a free man; the very most you can do is kill nun!"

There was that wonderful hushed silence, then a ripple of clapping and Bonforte himself was pounding the couch with his good hand and calling, "Bravo!"

It was the only applause I ever got in the role. It was enough.

He had me pull up a chair then and sit with him. I saw him glance at the wand, so I handed it to him. "The safety is on, sir."

"I know how to use it." He looked at it closely, then handed it back. I had thought perhaps he would keep it. Since he did not, I decided to turn it over to Dak to deliver to him. He asked me about myself and told me that he did not recall ever seeing me play, but that he had seen my father's *Cyrano*. He was making a great effort to control the errant muscles of his mouth and his speech was clear but labored.

Then he asked me what I intended to do now. I told him that I had no plans as yet. He nodded and said, "We'll see. There is a place for you. There is work to be done." He made no mention of pay, which made me proud.

The returns were beginning to come in and he turned his attention to the stereo tank. Returns had been coming in, of course, for fortyeight hours, since the outer worlds and the districtless constituencies vote before Earth does, and even on Earth an election "day" is more than thirty hours long, as the globe turns. But now we began to get the important districts of the great land masses of Earth. We had forged far ahead the day before in the outer returns and Rog had had to tell me that it meant nothing; the Expansionists always carried the outer worlds. What the billions of people still on Earth who had never been out and never would thought about it was what mattered.

But we needed every outer vote we could get. The Agarian Party on Ganymede had swept five out of six districts; they were part of our coalition, and the Expansionist Party as such did not put up even token candidates. The situation on Venus was more ticklish, with the Venerians split into dozens of splinter parties divided on fine points of theology impossible for a human being to understand. Nevertheless, we expected most of the native vote, either directly or through caucused coalition later, and we should get practically all of the human vote there. The Imperial restriction that the natives must select human beings to represent them at New Batavia was a thing Bonforte was pledged to remove; it gained us votes on Venus; we did not know yet how many votes it would lose us on Earth.

Since the nests sent only observers to the Assembly the only vote we worried about on Mars was the Human vote. We had the popular sentiment; they had the patronage. But with an honest count we expected a shoo-in there.

Dak was bending over a slide rule at Rog's side; Rog had a big sheet of paper laid out in some complicated weighting formula of his own. A dozen or more of the giant metal brains through the Solar System were doing the same thing that night, but Rog preferred his own guesses. He told me once that he could walk through a district, "sniffing" it, and come within two per cent of its results. I think he could.

Doc Capek was sitting back, with his hands over his paunch, as relaxed as an angleworm. Penny was moving around, pushing straight things crooked and vice versa and fetching us drinks. She never seemed to look directly at either me or Mr. Bonforte.

I had never before experienced an election-night party; they were not like any other. There is a cozy, warm rapport of all passion spent. It really does not matter too much how the people decide; you have done your best, you are with your friends and comrades, and for a while there is no worry and no pressure despite the overall excitement, like frosting on a cake, of the incoming returns.

I don't know when I've had so good a time.

Rog looked up, looked at me, then spoke to Mr. Bonforte. "The Continent is seesaw. The Americans are testing the water with a toe before coming in on our side; the only question is, how deep?"

"Can you make a projection, Rog?"

"Not yet. Oh, we have the popular vote but in the GA. it could swing either way by half a dozen seats." He stood up. "I think I had better mosey out into town."

Properly speaking, I should have gone, as "Mr. Bonforte." The Party leader should certainly appear at the main headquarters of the Party sometime during election night. But I had never been in headquarters, it being the sort of a buttonholing place where my impersonation might be easily breached. My "illness" had excused me from it during the campaign; tonight it was not worth the risk, so Rog would go instead, and shake hands and grin and let the keyed-up girls who had done the hard and endless paperwork throw their arms around him and weep. "Back in an hour."

Even our little party should have been down on the lower level, to include all the office staff, especially Jimmie Washington. But it would not work, not without shutting Mr. Bonforte himself out of it. They were having their own party of course. I stood up. "Rog, I'll go down with you and say hello to Jimmie's harem."

"Eh? You don't have to, you know."

"It's the proper thing to do, isn't it? And it really isn't any trouble or risk." I turned to Mr. Bonforte. "How about it, sir?"

"I would appreciate it very much."

We went down the lift and through the silent, empty private quarters and on through my office and Penny's. Beyond her door was bedlam. A stereo receiver, moved in for the purpose, was blasting at full gain, the floor was littered, and everybody was drinking, or smoking, or both. Even Jimmie Washington was holding a drink while he listened to the returns. **He** was not drinking it; he neither drank nor smoked. No doubt someone had handed it to him and he had kept it. Jimmie had a fine sense of fitness.

I made the rounds, with Rog at my side, thanked Jimmie warmly and very sincerely, and apologized that I was feeling tired. "I'm going up and spread the bones, Jimmie. Make my excuses to people, will you?"

"Yes, sir. You've got to take care of yourself, Mr. Minister."

I went back up while Rog went on out into the public tunnels.

Penny shushed me with a finger to her lips when I came into the upper living room. Bonforte seemed to have dropped off to sleep and the receiver was muted down. Dak still sat in front of it, filling in figures on the big sheet against Rog's return. Capek had not moved. He nodded and raised his glass to me.

I let Penny fix me a scotch and water, then stepped out into the bubble balcony. It was night both by clock and by fact and Earth was almost full, dazzling in a Tiffany spread of stars. I searched North America and tried to pick out the little dot I had left only weeks earlier, and tried to get my emotions straight.

After a while I came back in; night on Luna is rather overpowering. Rog returned a little later and sat back down at his work sheets without speaking. I noticed that Bonforte was awake again.

The critical returns were coming in now and everybody kept quiet, letting Rog with his pencil and Dak with his slide rule have peace to work. At long, long last Rog shoved his chair back. "That's it, Chief," he said without looking up. "We're in. Majority not less than seven seats, probably nineteen, possibly over thirty."

After a pause Bonforte said quietly, "You're sure?"

"Positive. Penny, try another channel and see what we get."

I went over and sat by Bonforte; I could not talk. He reached out and patted my hand in a fatherly way and we both watched the receiver. The first station Penny got said: "—doubt about it, folks; eight of the robot brains say yes, *Curiac* says maybe. The Expansionist Party has won a decisive———" She switched to another.

"—confirms his temporary post for another five years. Mr. Quiroga cannot be reached for a statement but his general manager in New Chicago admits that the present trend cannot be over———"

Rog got up and went to the phone; Penny muted the news down until nothing could be heard. The announcer continued mouthing; he was simply saying in different words what we already knew.

Rog came back; Penny turned up the gain. The announcer went on for a moment, then stopped, read something that was handed to him, and turned back with a broad grin. "Friends and fellow citizens, I now bring you for a statement the *Supreme Minister!"*

The picture changed to my victory speech.

I sat there luxuriating in it, with my feelings as mixed up as possible but all good, painfully good. I had done a job on the speech and I knew it; I looked tired, sweaty, and calmly triumphant. It sounded ad-lib.

I had just reached: "Let us go forward together, with freedom for all———" when I heard a noise behind me.

"Mr. Bonforte!" I said. "Doc! *Doc*! Come quickly!"

Mr. Bonforte was pawing at me with his right hand and trying very urgently to tell me something. But it was no use; his poor mouth failed him and his mighty indomitable will could not make the weak flesh obey.

I took him in my arms—then he went into Cheyne-Stokes breathing and quickly into termination.

They took his body back down in the lift, Dak and Capek together; I was no use to them. Rog came up and patted me on the shoulder, then he went away. Penny had followed the others down. Presently I went again out onto the balcony. I needed "fresh air" even though it was the same machine-pumped air as the living room. But it felt fresher.

They had killed him. His enemies had killed him as certainly as if they had put a knife in his ribs. Despite all that we had done, the risks we had taken, in the end they had murdered him. "Murder most foul"!

I felt dead inside me, numb with the shock. I had seen "myself' die, I had again seen my father die. I knew then why they so rarely manage to save one of a pair of Siamese twins. I was empty.

I don't know how long I stayed out there. Eventually I heard Rog's voice behind me. "Chief?"

I turned. "Rog," I said urgently, "don't call me that. Please!"

"Chief," he persisted, "you know what you have to do now? Don't you?'

I felt dizzy and his face blurred. I did not know what he was talking about—I did not -*want* to know what he was talking about.

"What do you mean?"

"Chief—one man dies—but the show goes on. You can't quit now."

My head ached and my eyes would not focus. He seemed to pull toward me and away while his voice drove on. "... robbed him of his chance to finish his work. So you've got to do it for him. You've got to make him live again!"

I shook my head and made a great effort to pull myself together and reply. "Rog, you don't know what you are saying. It's preposterous—ridiculous! I'm no statesman. I'm just a bloody actor! I make faces and make people laugh. That's all I'm good for."

To my own horror I heard myself say it in Bonforte's voice.

Rog looked at me. "Seems to me you've done all right so far."

I tried to change my voice, tried to gain control of the situation. "Rog, you're upset. When you've calmed down you will see how ridiculous this is. You're right; the show goes on. But not that way. The proper thing to do—the *only* thing to do—is for you yourself to move on up. The election is won; you've got your majority—now you take office and carry out the program."

He looked at me and shook his head sadly. "I would if I could. I admit it. But I can't. Chief, you remember those confounded executive committee meetings? You kept them in line. The whole coalition has been kept glued together by the personal force and leadership of one man. If you don't follow through now, all that he lived for—and died for— will fall apart."

I had no answering argument; he might be right—I had seen the wheels within wheels of politics in the past month and a half. "Rog, even if what you say is true, the solution you offer is impossible. We've barely managed to keep up this pretense by letting me be seen only under carefully stage-managed conditions—and we've just missed being caught out as it is. But to make it work week after week, month after month, even year after year, if I understand you—no, it couldn't be done. It is impossible. I *can't* do ill"

"You *can*!" He leaned toward me and said forcefully, "We've all talked it over and we know the hazards as well as you do. But you'll have a chance to grow into it. Two weeks in space to start with—hell, a month if you want it! You'll study all the time—his journals, his boyhood diaries, his scrapbooks, you'll soak yourself in them. And we'll all help you."

I did not answer. He went on, "Look, Chief, you've learned that a political personality is not one man; it's a team—it's a team bound together by common purposes and common beliefs. We've lost our team captain and we've got to have another one. But the team is still there."

Capek was out on the balcony; I had not seen him come out. I turned to him. "Are you for this too?"

"Yes."

"It's your duty," Rog added.

Capek said slowly, "I won't go that far. I hope you win do it. But, damn it, I won't be your conscience. I believe in free will, frivolous as that may sound from a medical man." He turned to Clifton. "We had better leave him alone, Rog. He knows. Now it's up to him." But, although they left, I was not to be alone just yet

Dak came out. To my relief and gratitude he did not call me "Chief."

"Hello, Dak."

"Howdy." He was silent for a moment, smoking and looking out at the stars. Then he turned to me. "Old son, we've been through some things together. I know you now, and I'll back you with a gun, or money, or fists any time, and never ask why. If you choose to drop out now, I won't have a word of blame and I won't think any the less of you. You've done a noble best."

"Uh, thanks, Dak."

"One more word and I'll smoke out. Just remember this: if you decide you can't do it, the foul scum who brainwashed him will win. In spite of everything, they win." He went inside.

I felt torn apart in my mind—then I gave way to sheer selfpity. It wasn't fair! I had my own life to live. I was at the top of my powers, with my greatest professional triumphs still ahead of me. It wasn't right to expect me to bury myself, perhaps for years, in the anonymity of another man's role—while the public forgot me, producers and agents forgot me—would probably believe I was dead.

It wasn't fair. It was too much to ask.

Presently I pulled out of it and for a time did not think. Mother Earth was still serene and beautiful and changeless in the sky; I wondered what the election-night celebrations there sounded like. Mars and Jupiter and Venus were all in sight, strung like prizes along the zodiac. Ganymede I could not see, of course, nor the lonely colony out on far Pluto.

"Worlds of Hope," Bonforte had called them.

But he was dead. He was gone. They had taken away from him his birthright at its ripe fullness. He was dead.

And they had put it up to me to re-create him, make him live again.

Was I up to it? Could I possibly measure up to his noble standards? What would he want me to do? If he were in my place—what would Bonforte do? Again and again in the campaign I had asked myself: "What would Bonforte do?"

Someone moved behind me, I turned and saw Penny. I looked at her and said, "Did they send you out? Did you come to plead with me?"

"No."

She added nothing and did not seem to expect me to answer, nor did we look at each other. The silence went on. At last I said, "Penny? If I try to do it—will you help?"

She turned suddenly toward me. "Yes. Oh yes, Chief! I'll help!"

"Then I'll try," I said humbly.

I wrote all of the above twenty-five years ago to try to straighten out my own confusion. I tried to tell the truth and not spare myself because it was not meant to be read by anyone but myself and my therapist, Dr. Capek. It is strange, after a quarter of a century, to reread the foolish and emotional words of that young man. I remember him, yet I have trouble realizing that I was ever he. My wife Penelope claims that she remembers him better than I do—and that she never loved anyone else. So time changes us.

I find I can "remember" Bonforte's early life better than I remember my actual life as that rather pathetic person, Lawrence Smith, or—as he liked to style himself—"The Great Lorenzo." Does that make me insane? Schizophrenic, perhaps? If so, it is a necessary insanity for the role I have had to play, for in order to let Bonforte live again, that seedy actor had to be suppressed—completely.

Insane or not, I am aware that he once existed and that I was he. He was never a success as an actor, not really— though I think he was sometimes touched with the true madness. He made his final exit still perfectly in character; I have a yellowed newspaper clipping somewhere which states that he was "found dead" in a Jersey City hotel room from an overdose of sleeping pills—apparently taken in a fit of despondency, for his agent issued a statement that he had not had a part in several months. Personally, I feel that they need not have mentioned that about his being out of work; if not libelous, it was at least unkind. The date of the clipping proves, incidentally, that he would not have been in New Batavia, or anywhere else, during the campaign of '15.

I suppose I should burn it.

But there is no one left alive today who knows the truth other than Dak and Penelope—except the men who murdered Bonforte's body.

I have been in and out of office three times now and perhaps this term will be my last. I was knocked out the first time when we finally put the eetees—Venetians and Martians and Outer Jovians—into the Grand Assembly. But the nonhuman peoples are still there and I came back. The people will take a certain amount of reform, then they want a rest But the reforms stay. People don't really want change, any change at all—and xenophobia is very deep-rooted. But we progress, as we must—if we are to go out to the stars.

Again and again I have asked myself: "What would Bonforte do?" I am not sure that my answers have always been right (although I am sure that I am the best-read student in his works in the System). But I have tried to stay in character in his role. A long time ago someone—Voltaire?—someone said, "If Satan should ever replace God he would find it necessary to assume the attributes of Divinity."

I have never regretted my lost profession. In a way, I have not lost it; Willem was right. There is other applause besides handclapping and there is always the warm glow of a good performance. I have tried, I suppose, to create the perfect work of art. Perhaps I have not fully succeeded— but I think my father would rate it as a "good performance."

No, I do not regret it, even though I was happier then— at least I slept better. But there is solemn satisfaction in doing the best you can for eight billion people.

Perhaps their lives have no cosmic significance, but they have feelings. They can hurt.

Time For The Stars

I THE LONG RANGE FOUNDATION

According to their biographies, Destiny's favored children usually had their lives planned out from scratch. Napoleon was figuring on how to rule France when he was a barefoot boy in Corsica, Alexander the Great much the same, and Einstein was muttering equations in his cradle.

Maybe so. Me, I just muddled along.

In an old book that belonged to my great grandfather Lucas I once saw a cartoon of a man in evening clothes, going over a ski jump. With an expression of shocked unbelief he is saying: "How did I get up here?"

I know how he felt. How did I get way up here?

I was not even planned on. The untaxed quota for our family was three children, then my brother Pat and I came along in one giant economy package. We were a surprise to everyone, especially to my parents, my three sisters, and the tax adjusters. I don't recall being surprised myself but my earliest recollection is a vague feeling of not being quite welcome, even though Dad and Mum, and Faith, Hope, and Charity treated us okay.

Maybe Dad did not handle the emergency right. Many families get an extra child quota on an exchange basis with another family, or something, especially when the tax-free limit has already been filled with all boys or all girls. But Dad was stubborn, maintaining that the law was unconstitutional, unjust, discriminatory, against public morals, and contrary to the will of God. He could reel off a list of important people who were youngest children of large families, from Benjamin Franklin to the first governor Of Pluto, then he would demand to know where the human race would have been without them?–after which Mother would speak soothingly.

Dad was probably accurate as he was a student of almost everything, even his trade, which was micromechanics–but especially of history. He wanted to name us for his two heroes in American history, whereas Mother wanted to name us for her favorite artists: This is how I ended up as Thomas Paine Leonardo da Vinci Bartlett and my twin became Patrick Henry Michelangelo Bartlett. Dad called us Tom and Pat and Mother called us Leo and Michel and our sisters called us Useless and Double-Useless. Dad won by being stubborn.

Dad was stubborn. He could have paid the annual head tax on us supernumeraries, applied for a seven-person flat, and relaxed to the inevitable. Then he could have asked for reclassification. Instead be claimed exemption for us twins each year, always ended by paying our head tax with his check stamped “Paid under Protest!” and we seven lived in a five-person flat. When Pat and I were little we slept in homemade cribs in the bathroom which could not have been convenient for anybody, then when we were bigger we slept on the livingroom couch, which was inconvenient for everybody, especially our sisters, who found it cramping to their social life.

Dad could have solved all this by putting in for family emigration to Mars or Venus, or the Jovian moons, and he used to bring up the subject. But this was the one thing that would make Mum more stubborn than he was. I don’t know which part of making the High Jump scared her, because she would just settle her mouth and not answer. Dad would point out that big families got preferred treatment for emigration and that the head tax was earmarked to subsidize colonies off Earth and why shouldn’t we benefit by the money we were being robbed of? To say nothing of letting our children grow up with freedom and elbow room, out where there wasn’t a bureaucrat standing behind every productive worker dreaming up more rules and restrictions? Answer me that?

Mother never answered and we never emigrated,

We were always short of money. Two extra mouths, extra taxes, and no family assistance for the two extras make the stabilized family income law as poor a fit as the clothes Mum cut down for us from Dad’s old ones. It was darn’ seldom that we could afford to dial for dinner like other people and Dad even used to bring home any of his lunch that he didn’t eat. Mum went back to work as soon as we twins were in kindergarten, but the only household robot we had was an obsolete model "Morris Garage" *Mother's Helper* which was always burning out valves and took almost as long to program as the job would have taken. Pat and I got acquainted with dish water and detergents–at least I did; Pat usually insisted on doing the sterilizing or had a sore thumb or something.

Dad used to talk about the intangible benefits of being poor–learning to stand on your own feet, building character, and all that. By the time I was old enough to understand I was old enough to wish they weren't so intangible, but, thinking back, maybe he had a point. We did have fun. Pat and I raised hamsters in the service unit and Mum never objected. When we turned the bath into a chem lab the girls did make unfriendly comments but when Dad put his foot down, they sweettalked him into picking it up again and after that they hung their laundry somewhere else, and later Mum stood between us and the house manager when we poured acid down the drain and did the plumbing no good.

The only time I can remember when Mum put her foot down was when her brother, Uncle Steve, came back from Mars and gave us some canal worms which we planned to raise and sell at a profit. But when Dad stepped on one in the shower (we had not discussed our plans with him) she made us give them to the zoo, except the one Dad had stepped on, which was useless. Shortly after that we ran away from home to join the High Marines–Uncle Steve was a ballistics sergeant–and when lying about our age did not work and they fetched us back, Mum not only did not scold us but had fed our snakes and our silkworms while we were gone.

Oh, I guess we were happy. It is hard to tell at the time. Pat and I were very close and did everything together but I want to get one thing straight: being a twin is not the Damon-and-Pythias dream that throb writers would have you think. It makes you close to another person to be born with him, share a room with him, eat with him, play with him, work with him, and hardly ever do anything without him as far back as you can remember, and farther according to witnesses. It makes you close; it makes you almost indispensable to each other–but it does not necessarily make you love him.

I want to get this straight because there has been a lot of nonsense talked about it since twins got to be suddenly important. I'm me; I'm not my brother Pat. I could always tell us apart, even if other people couldn't. He is the righthanded one; I'm the lefthanded one. And from my point of view I'm the one who almost always got the small piece of cake.

I can remember times when he got both pieces through a fast shuffle. I'm not speaking in general; I'm thinking of a certain white cake with chocolate icing and how he confused things so that he got my piece, too, Mum and Dad thinking he was both of us, despite my protests. Dessert can be the high point of the day when you are eight, which was what we were then.

I am not complaining about these things ... even though I feel a dull lump of anger even now, after all the years and miles, at the recollection of being punished because Dad and Mum thought I was the one who was trying to wangle two desserts. But I'm just trying to tell the truth. Doctor Devereaux said to write it all down and where I have to start is how it feels to be a twin. You aren't a twin, are you? Maybe you are but the chances are forty-four to one that you aren't–not even a fraternal, whereas Pat and I are identicals which is four times as unlikely.

They say that one twin is always retarded–I don't think so. Pat and I were always as near alike as two shoes of a pair. The few times we showed any difference I was a quarter inch taller or a pound heavier, then we would even out. We got equally good marks in school; we cut our teeth together. What he did have was more grab than I had, something the psychologists call "pecking order." But it was so subtle you could not define it and other people could not see it. So far as I know, it started from nothing and grew into .a pattern that neither of us could break even if we wanted to.

Maybe if the nurse had picked me up first when we were born I would have been the one who got the bigger piece of cake. Or maybe she did–I don't know how it started.

But don't think that being a twin is all bad even if you are on the short end; it is mostly good. You go into a crowd of strangers and you are scared and shy–and there is your twin a couple of feet away and you aren't alone any more. Or somebody punches you in the mouth and while you are groggy your twin has punched him and the fight goes your way. You flunk a quiz and your twin has flunked just as badly and you aren't alone.

But do not think that being twins is like having a very close and loyal friend. It isn't like that at all and it is a great deal closer.

Pat and I had our first contact with the Long Range Foundation when this Mr. Geeking showed up at our home. I did not warm to him. Dad didn't like him either and wanted to hustle him out, but he was already seated with coffee at his elbow for Mother's notions of hospitality were firm.

So this Geeking item was allowed to state his business. He was, he said, a field representative of "Genetics Investigations."

"What's that?" Dad said sharply.

'Genetics Investigations' is a scientific agency, Mr. Bartlett. This present project is one of gathering data concerning twins. It is in the public interest and we hope that you will cooperate."

Dad took a deep breath and hauled out the imaginary soapbox he always had ready. "More government meddling! I'm a decent citizen; I pay my bills and support my family. My boys are just like other boys and I'm sick and tired of the government's attitude about them. I'm not going to have them poked and prodded and investigated to satisfy some bureaucrat. All we ask is to be left alone–and that the government admit the obvious fact that my boys have as much right to breathe air and occupy space as anyone else!"

Dad wasn't stupid; it was just that he had a reaction pattern where Pat and I were concerned as automatic as the snarl of a dog who has been kicked too often. Mr. Geeking tried to soothe him but Dad can't be interrupted when he has started that tape. "You tell the Department of Population Control that I'm not having their 'genetics investigations.' What do they want to find out? How to keep people from having twins, probably. What's wrong with twins? Where would Rome have been without Romulus and Remus?–answer me that! Mister, do you know how many–"

"Please, Mr. Bartlett, I'm not from the government."

"Eh? Well, why didn't you say so? Who are you from?"

"Genetics Investigations is an agency of the Long Range Foundation." I felt Pat's sudden interest. Everybody has heard of the Long Range Foundation, but it happened that Pat and I had just done a term paper on nonprofit corporations and had used the Long Range Foundation as a type example.

We got interested in the purposes of the Long Range Foundation. Its coat of arms reads: "Bread Cast Upon the Waters," and its charter is headed: "Dedicated to the Welfare of Our Descendants." The charter goes on with a lot of lawyers' fog but the way the directors have interpreted it has been to spend money only on things that no government and no other corporation would touch. It wasn't enough for a proposed project to be interesting to science or socially desirable; it also had to be so horribly expensive that no one else would touch it and the prospective results had to lie so far in the future that it could not be justified to taxpayers or shareholders. To make the LRF directors light up with enthusiasm you had to suggest something that cost a billion or more and probably wouldn't show results for ten generations, if ever ... something like how to control the weather (they're working on that) or where does your lap go when you stand up.

The funny thing is that bread cast upon waters does come back seven hundred fold; the most preposterous projects made the LRF embarrassing amounts of money–"embarrassing" to a nonprofit corporation that is. Take space travel: it seemed tailormade, back a couple of hundred years ago, for LRF, since it was fantastically expensive and offered no probable results comparable with the investment: There was a time when governments did some work on it for military reasons, but the Concord of Bayreuth in 1980 put a stop even to that.

So the Long Range Foundation stepped in and happily began wasting money. It came at a time when the corporation unfortunately had made a few billions on the Thompson mass-converter when they had expected to spend at least a century on pure research; since they could not declare a dividend (no stockholders), they had to get rid of the money somehow and space travel looked like a rat hole to pour it down.

Even the kids know what happened to that: Ortega's torch made space travel inside the solar system cheap, fast, and easy, and the one-way energy screen made colonization practical and profitable; the LRF could not unload fast enough to keep from making lots more money.

I did not think all this that evening; LRF was just something that Pat and I happened to know more about than most high school seniors ... more than Dad knew, apparently, for he snorted and answered, "The Long Range Foundation, eh? I'd almost rather you were from the government. If boondoggles like that were properly taxed, the government wouldn't be squeezing head taxes out of its citizens."

This was not a fair statement, not a "flat-curve relationship," as they call it in Beginning Mathematical Empiricism. Mr. McKeefe had told us to estimate the influence, if any, of LRF on the technology "yeast-form" growth curve; either I should have flunked the course or LRF had kept the curve from leveling off early in the 21st century–I mean to say, the "cultural inheritance," the accumulation of knowledge and wealth that keeps us from being savages, had increased greatly as a result of the tax-free status of such nonprofit research corporations. I didn't dream up that opinion; there are figures to prove it. What would have happened if the tribal elders had forced Ugh to hunt with the rest of the tribe instead of staying home and whittling out the first wheel while the idea was bright in his mind?

Mr. Geeking answered, "I can't debate the merits of such matters, Mr. Bartlett. I'm merely an employee.

"And I'm paying your salary, indirectly and unwillingly, but paying it nevertheless."

I wanted to get into the argument but I could feel Pat holding back. It did not matter; Mr. Geeking shrugged and said, "If so, I thank you. But all I came here for was to ask your twin boys to take a few tests and answer some questions. The tests are harmless and the results will be kept confidential."

"What are you trying to find out?"

I think Mr. Geeking was telling the truth when he answered, “I don’t know. I’m merely a field agent; I’m not in charge of the project.”

Pat cut in. “I don’t see why not, Dad. Do you have the tests in your briefcase, Mr. Geeking?”

“Now, Patrick–”

“It’s all right, Dad. Let’s see the tests, Mr. Geeking.”

“Uh, that’s not what we had in mind. The Project has set up local offices in the TransLunar Building. The tests take about half a day.”

“All the way downtown, huh, and a half day’s ‘time ... what do you pay?”

“Eh? The subjects are asked to contribute their time in the interests of science.”

Pat shook his head. “Sorry, Mr. Geeking. This is exam week ... and my brother and I have parttime school jobs, too.”

I kept quiet. Our exams were over, except Analysis of History, which is a snap course involving no math but statistics and pseudospatial calculus, and the school chem lab we worked in was closed for examinations. I was sure Dad did not know these things, or he would have butted in; Dad can shift from prejudice to being a Roman judge at the drop of a hint.

Pat stood up, so I stood up. Mr. Geeking sat tight. “Arrangements can be made,” he said evenly.

Pat stuck him as much as we made for a month of washing bottles in the lab, just for one afternoon’s work–then upped the ante when it was made clear that we would be obliged to take the tests together (as if we would have done it any other way!). Mr. Geeking paid without a quiver, in cash, in advance.

II THE NATURAL LOGARITHM OF TWO

I never in my life saw so many twins as were waiting on the fortieth floor of the TransLunar Building the following Wednesday afternoon. I don’t like to be around twins, they make me think I’m seeing double. Don’t tell me I’m inconsistent; I *never* saw the twins I am part of–I just saw Pat.

Pat felt the same way; we had never been chummy with other twins. He looked around and whistled. “Tom, did you over see such a mess of spare parts?”

“Never.”

“If I were in charge, I’d shoot half of them.” He hadn’t spoken loud enough to offend anyone; Pat and I used a prison-yard whisper that no one else could hear although we never had trouble understanding it.

"Depressing, isn't it?"

Then he whistled softly and I looked where he was looking. Twins of course, but this was a case of when once is good, twice is better. They were redheaded sisters, younger than we were but not too young–sixteen, maybe–and cute as Persian kittens.

Those sisters had the effect on us that a light has on a moth. Pat whispered, "Tom, we owe it to them to grant them a little of our time," and headed toward them, with me in step. They were dressed in fake Scottish outfits, green plaid which made their hair flame like bonfires and to us they looked as pretty as a new fall of snow.

And just as chilly. Pat got halfway through his opening speech when he trailed off and shut up; they were staring through him. I was blushing and the only thing that kept it from being a major embarrassing incident was a loudspeaker that commenced to bray:

"Attention, please! You are requested to report to the door marked with your surname initial." So we went to door A-to-D and the redheaded sisters headed toward the other end of the alphabet without ever having seen us at all. As we queued up Pat muttered, "Is there egg on my chin? Or have they taken a vow to be old maids?"

"Probably both," I answered. "Anyhow, I prefer blondes." This was true, since Maudie was a blonde. Pat and I had been dating Maudie Kauric for about a year–going steady you could call it, though in my case it usually meant that I was stuck with Maudie's chum Hedda Staley, whose notion of dazzling conversation was to ask me if I didn't think Maudie was the cutest thing ever? Since this was true and unanswerable, our talk did not sparkle.

"Well, so do I," Pat agreed, without saying which blonde–Maudie was the only subject on which we were reticent with each other. "But I have never had a closed mind." He shrugged and added cheerfully, "Anyhow, there are other possibilities."

There certainly were, for of the hundreds of twins present maybe a third were near enough our age not to be out of the question and half of them, as near as I could tell without counting, were of the sex that turns a mere crowd into a social event. However, none came up to the high standards of the redheads, so I began looking over the crowd as a whole.

The oldest pair I saw, two grown men, seemed to be not older than the early thirties and I saw one set of little girls about twelve–they had their mother in tow. But most of them were within a loud shout of twenty. I had concluded that "Genetics Investigations" was picking its samples by age groups when I found that we were at the head of the line and a clerk was saying, "Names, please?"

For the next two hours we were passed from one data collector to another, being fingerprinted, giving blood samples, checking "yes" or "no" to hundreds of silly questions that can't be answered "yes" or "no." The physical examination was thorough and involved the usual carefully planned nonsense of keeping a person standing in bare feet on a cold floor in a room five degrees too chilly for naked human skin while prodding the victim and asking him rude personal questions.

I was thoroughly bored and was not even amused when Pat whispered that we should strip the clothes off the doctor now and prod *him* in the belly and get the nurse to record how he liked it? My only pleasant thought was that Pat had stuck them plenty for their fun. Then they let us get dressed and ushered us into a room where a rather pretty woman sat behind a desk. She had a transparency viewer on her desk and was looking at two personality profiles superimposed on it. They almost matched and I tried to sneak a look to see where they did not. But I could not tell Pat's from my own and anyhow I'm not a mathematical psychologist.

She smiled and said, "Sit down, boys. I'm Doctor Arnault." She held up the profiles and a bunch of punched cards and added, "Perfect mirror twins, even to dextrocardia. This should be interesting."

Pat tried to look at the papers. "What's our I.Q. this time, Doctor?"

"Never mind." She put the papers down and covered them, then picked up a deck of cards. "Have you ever used these?"

Of course we had, for they were the classic Rhine test cards, wiggles and stars and so forth. Every high school psychology class has a set and a high score almost always means that some bright boy has figure out a way to cold-deck the teacher. In fact Pat had worked out a simple way to cheat when our teacher, with a tired lack of anger, split us up and made us run tests only with other people–whereupon our scores dropped to the limits of standard error. So I was already certain that Pat and I weren't ESP freaks and the Rhine cards were just another boring test.

But I could feel Pat become attentive. "Keep your ears open, kid," I heard him whisper, "and we'll make this interesting." Dr. Arnault did not hear him, of course.

I wasn't sure we ought to but I knew if he could manage to signal to me I would not be able to refrain from fudging the results. But I need not have worried; Dr. Arnault took Pat out and returned without him. She was hooked by microphone to the other test room but there was no chance to whisper through it; it was hot only when she switched it on.

She started right in. "First test run in twenty seconds, Mabel," she said into the mike and switched it off, then turned to me. "Look at the cards as I turn them," she said.

"Don't try, don't strain. Just look at them."

So I looked at the cards. This went on with variations for maybe an hour. Sometimes I was supposed to be receiving, sometimes sending. As far as I was concerned nothing happened, for they never told us our scores.

Finally Dr. Arnault looked at a score sheet and said, “Tom, I want to give you a mild injection. It won’t hurt you and it’ll wear off before you go home. Okay?”

“What sort?” I said suspiciously.

“Don’t fret; it is harmless. I don’t want to tell you or you might unconsciously show the reaction you expected.”

“Uh, what does my brother say? Does he get one, too?”

“Never mind, please. I’m asking you.”

I still hesitated. Dad did not favor injections and such unless necessary; he had made a fuss over our taking part in the encephalitis program. “Are you an M.D.?” I asked.

“No, my degree is in science. Why?”

“Then how do you know it’s harmless?”

She bit her lip, then answered, “I’11 send for a doctor of medicine, if you prefer.”

“Uh, no, I guess that won’t be necessary.” I was remembering something that Dad had said about the sleeping sickness shots and I added, “Does the Long Range Foundation carry liability insurance for this?”

“What? Why, I think so. Yes, I’m sure they do.” She looked at me and added, “Tom, how does a boy your age get to be so suspicions?”

“Huh? Why ask me? You’re the psychologist, ma’am. Anyhow,” I added, “if you had sat on as many tacks as I have, you’d be suspicions too.”

“Mmm ... never mind. I’ve been studying for years and I still don’t know what the younger generation is coming to. Well, are you going to take the injection?”

“Uh, I’ll take it–since the LRF carries insurance. Just write out what it is you are giving me and sign it.”

She got two bright pink spots in her cheeks. But she took out stationery, wrote on it, folded it into an envelope and sealed it. “Put it in your pocket,” she said briskly. “Don’t look at it until the experiments are over. Now bare your left forearm.”

As she gave me the shot she said sweetly, “This is going to sting a little...I hope.” It did.

She turned out all the lights except the light in the transparency viewer. “Are you comfortable?”

“Sure.”

“I’m sorry if I seemed vexed. I want you to relax and be comfortable.” She came over and did something to the chair I was in; it opened out gently until I was practically lying in a hammock. “Relax and don't fight it. If you find yourself getting sleepy, that is to be expected." She sat down and all I could see was her face, illuminated by the viewer. She was awfully pretty, I decided, even though she was too old for it to matter ... at least thirty, maybe older. And she was nice, too. She spoke for a few minutes in her gentle voice but I don't remember exactly what she said.

I must have gone to sleep, for next it was pitch dark and Pat was right there by me, although I hadn't noticed the light go out nor the door being opened. I started to speak when I heard him whisper:

"Tom, did you ever see such nonsensical rigamarole?"

I whispered back, "Reminds me of the time we were initiated into the Congo Cannibals."

"Keep your voice down; they'll catch on."

"You're the one who is talking too loud: Anyhow, who cares? Let's give 'em the Cannibal war whoop and scare 'em out of their shoes."

"Later, later. Right now my girl friend Mabel wants me to give you a string of numbers. So we'll let them have their fun first. After all, they're paying for it."

"Okay."

"Point six nine three one."

"That's the natural logarithm of two."

"What did you think it was? Mabel's telephone number? Shut up and listen. Just repeat the numbers back. Three point one four one five nine..."

It went on quite a while. Some were familiar numbers like the first two; the rest may have been random or even Mabel's phone number, for all of me. I got bored and was beginning to think about sticking in a war whoop on my own when Dr. Arnault said quietly, "End of test run. Both of you please keep quiet and relax for a few minutes. Mabel, I'll meet you in the data comparison room." I heard her go out, so I dropped the war whoop notion and relaxed. Repeating all those numbers in the dark had made me dopey anyhow–and as Uncle Steve says, when you get a chance to rest, do so; you may not get another chance soon.

Presently I heard the door open again, then I was blinking at bright lights. Dr. Arnault said, "That's all today, Tom ... and thank you very much. We want to see you and your brother at the same time tomorrow."

I blinked again and looked around. "Where's Pat? What does he say?"

"You'll find him in the outer lobby. He told me that you could come tomorrow. You can, can't you?"

"Uh, I suppose so, if it's all right with him." I was feeling sheepish about the trick we had pulled, so I added, "Dr. Arnault? I'm sorry I annoyed you."

She patted my hand and smiled. “That’s all right, You were right to be cautious and you were a good subject. You should see the wild ones we sometimes draw. See you tomorrow.”

Pat was waiting in the big room where we had seen the redheads. He fell into step and we headed for the drop.

“I raised the fee for tomorrow,” he whispered smugly.

“You did? Pat, do you think we should do this? I mean, fun is fun, but if they ever twig that we are faking, they’ll be sore. They might even make us pay back what they’ve already paid us.”

“How can they? We’ve been paid to show up and take tests. We’ve done that. It’s up to them to rig tests that can’t be beaten. I could, if I were doing it.”

“Pat, you’re dishonest and crooked, both.” I thought about Dr. Arnault... she was a nice lady. “I think I’ll stay home tomorrow.”

I said this just as Pat stepped off the drop. He was ten feet below me all the way down and had forty stories in which to consider his answer. As I landed beside him he answered by changing the subject. “They gave you a hypodermic?”

“Yes.”

“Did you think to make them sign an admission of liability, or did you goof?”

“Well, sort of.” I felt in my pocket for the envelope; I’d forgotten about it. “I made Dr. Arnault write down what she was giving us.”

Pat reached for the envelope. “My apologies, maestro. With my brains and your luck we’ve got them where we want them.” He started to open the envelope. “I bet it was neopentothal–or one of the barbiturates.”

I snatched it back. “That’s mine.”

“Well, open it,” he answered, “and don’t obstruct traffic. I want to see what dream drug they gave us.”

We had come out into the pedestrian level and his advice did have merit. Before opening it I led us across the change strips onto the fast-west strip and stepped behind a wind break. As I unfolded the paper Pat read over my shoulder:

“‘Long Range Fumbling, and so forth-injections given to subjects 7L435 & -6 T. P. Bartlett & P. H. Bartlett (iden-twins)–each one-tenth c.c. distilled water raised to normal salinity,’ signed ‘Doris Arnault, Sc.D., for the Foundation.’ Tom, we’ve been hoaxed!”

I stared at it, trying to fit what I had experienced with what the paper said. Pat added hopefully, “Or is this the hoax? Were we injected with something else and they didn’t want to admit it?”

“No,” I said slowly. I was sure Dr. Arnault wouldn’t write down “water” and actually give us one of the sleeping drugs–she wasn’t that sort of person. “Pat, we weren’t drugged...we were *hypnotized.”*

He shook his head. “Impossible. Granting that I could be hypnotized, you couldn’t be. Nothing there to hypnotize. And I wasn’t hypnotized, comrade. No spinning lights, no passes with the hands–why, my girl Mabel didn’t even stare in my eyes. She just gave me the shot and told me to take it easy and let it take effect.”

“Don’t be juvenile, Pat. Spinning lights and such is for suckers. I don’t care whether you call it hypnotism or salesmanship. They gave us hypos and suggested that we would be sleepy–so we fell asleep.”

“So I was sleepy! Anyhow that wasn’t quite what Mabel did. She told me not to go to sleep, or if I did, to wake up when she called me. Then when they brought you in, she–”

“Wait a minute. You mean when they moved you back into the room I was in–”

“No, I don’t mean anything of the sort. After they brought you in, Mabel gave me this list of numbers and I read them to you and–”

“Wait a minute,” I said. “Pat, you’re mixed up. How could you *read* them in pitch darkness? She must have read them to you. I mean–” I stopped, for I was getting mixed up myself. Well, she could have read to him from another room. “Were you wearing headphones?”

“What’s that got to do with it? Anyhow, it wasn’t pitch dark, not after they brought you in. She held up the numbers on a board that was rigged with a light of its own, enough to let me see the numbers and her hands.”

“Pat, I wish you wouldn’t keep repeating nonsense. Hypnotized or not, I was never so dopey that I couldn’t notice anything that happened. I was never moved anywhere; they probably wheeled you in without disturbing you. And the room we were in was pitch dark, not a glimmer.”

Pat did not answer right away, which wasn’t like him. At last he said, “Tom, are you sure?”

“Sure I’m sure!”

He sighed. “I hate to say this, because I know what you will say. But what are you supposed to do when none of your theories fits?”

“Huh? Is this a quiz? You throw ‘em away and try a new one. Basic methodology, freshman year.”

“Okay, just slip this on for size, don’t mind the pattern: Tom, my boy, brace yourself-we’re *mind* readers.”

I tried it and did not like it. “Pat, just because you can’t explain everything is no reason to talk like the fat old women who go to fortune tellers. We’re muddled, I admit, whether it was drugs or hypnosis. But we couldn’t have been reading each other’s minds or we would have been doing it years ago. We would have noticed.”

“Not necessarily. There’s never anything much going on in your mind, so why should I notice?”

"But it stands to reason–"

"What's the natural log of two?"

"'Point six nine three one' is what you said, though I've got very little use for four-place tables. What's that got to do with it?"

"I used four-place because she gave it to me that way. Do you remember what she said just before I gave you that number?"

"Huh? Who?"

"Mabel. Dr. Mabel Lichtenstein. What did she say?"

"Nobody said anything."

"Tom, my senile symbiote, she told me what to do, to wit, read the numbers to you. She told me this in a clear, penetrating soprano. You didn't hear her?"

"No."

"Then you weren't in the same room. You weren't within earshot, even though I was prepared to swear that they had shoved you in right by me. I knew you were there. But you weren't. So it was telepathy."

I was confused. I didn't feel telepathic; I merely felt hungry.

"Me, too, on both counts," Pat agreed. "So let's stop at Berkeley Station end get a sandwich."

I followed him off the strips, feeling not quite as hungry and even more confused. Pat had answered a remark I had not made.

III PROJECT LEBENSRAUM

Even though I was told to take my time and tell everything, it can't be done. I haven't had time to add to this for days, but even if I didn't have to work I still could not "tell all," because it takes *more* than a day to write down what happens in one day. The harder you try the farther behind you get. So I'm going to quit trying and just hit the high spots.

Anyhow everybody knows the general outline of Project Lebensraum.

We did not say anything to Mum and Dad about that first day. You can't expose parents to that sort of thing; they get jittery and start issuing edicts. We just told them the tests would run a second day and that nobody had told us what the results were.

Dr. Arnault seemed unsurprised when we told her we knew the score, even when I blurted out that we thought we had been faking but apparently weren't. She just nodded and said that it had been necessary to encourage us to think that everything was commonplace, even if there had to be a little fibbing on both sides. "I had the advantage of having your personality analyses to guide me," she added. "Sometimes in psychology you have to go roundabout to arrive at the truth.

"We'll try a more direct way today," she went on. "We'll put you two back to back but close enough together that you unquestionably can hear each other. But I am going to use a sound screen to cut you off partly or completely from time to time without your knowing it."

It was a lot harder the second time. Naturally we tried and naturally we flubbed. But Dr. Arnault was patient and so was Dr. Lichtenstein–Pat's "Dr. Mabel." She preferred to be called Dr. Mabel; she was short and pudgy and younger than Dr. Arnault and about as cute as a female can be and still look like a sofa pillow. It wasn't until later that we found out she was boss of the research team and world famous. "Giggly little fat girl" was an act she used to put ordinary people, meaning Pat and myself, at their ease.

I guess this proves you should ignore the package and read the fine print.

So she giggled and Dr. Arnault looked serious and we could not tell whether we were reading minds or not. I could hear Tom's whispers–they told us to go ahead and whisper–and he could hear mine and sometimes they would fade. I was sure we weren't getting anything, not telepathy I mean, for it was just the way Pat and I used to whisper answers back and forth in school without getting caught.

Finally Dr. Mabel giggled sheepishly and said, "I guess that's enough for today. Don't you think so, Doctor?"

Dr. Arnault agreed and Pat and I sat up and faced each other. I said, "I suppose yesterday was a fluke. I guess we disappointed you."

Dr. Mabel looked like a startled kitten. Dr. Arnault answered soberly, "I don't know what you expected, Tom, but for the past hour you and your brother have been cut off from hearing each other during every test run."

"But I *did* hear him."

"You certainly did. But not with your ears. We've been recording each side of the sound barrier. Perhaps we should play back part of it."

Dr. Mabel giggled. "That's a good idea." So they did. It started out with all four voices while they told us what they wanted, then there were just my whispers and Pat's, reading lines back and forth from *The Comedy of Errors.* They must have had parabolic mikes focused on us for our whispers sounded like a wind storm.

Pat's whispers gradually faded out. But mine kept right on going...answering a dead silence.

We signed a research contract with the Foundation and Dad countersigned it, after an argument. He thought mindreading was folderol and we did not dispute him, since the clincher was that money was scarce as always and it was a better-paying job than any summer job we could get, fat enough to insure that we could start college even if our scholarships didn't come through.

But before the summer was over they let us in on the connection between "Genetics Investigations" and "Project Lebensraum." That was a horse of another color–a very dark black, from our parents' standpoint.

Long before that time Pat and I could telepath as easily as we could talk and just as accurately, without special nursing and at any distance. We must have been doing it for years without knowing it–in fact Dr. Arnault made a surprise recording of our prison-yard whispering (when we weren't trying to telepath, just our ordinary private conversation) and proved that neither one of us could understand our recorded whispers when we were keeping it down low to keep other people from hearing.

She told us that it was theoretically possible that everyone was potentially telepathic, but that it had proved difficult to demonstrate it except with identical twins–and then only with about ten per cent. "We don't know why, but think of an analogy with tuned radio circuits."

"Brain waves?" I asked.

"Don't push the analogy too far. It can't be the brain waves we detect with an encephalograph equipment or we would have been selling commercial telepathic equipment long since. And the human brain is not a radio. But whatever it is, two persons from the same egg stand an enormously better chance of being 'tuned in' than two non-twins do. I can't read your mind and you can't read mine and perhaps we never will. There have been only a few cases in all the history of psychology of people who appeared to be able to 'tune in' on just anyone, and most of those aren't well documented."

Pat grinned and winked at Dr. Mabel. "So we are a couple of freaks."

She looked wide-eyed and started to answer but Dr. Arnault beat her to it. "Not at all, Pat. In you it is normal. But we do have teams in the project who are not identical twins. Some husbands and wives, a few fraternal siblings, even some pairs who were brought together by the research itself. They are the 'freaks.' If we could find out how they do it, we. might be able to set up conditions to let anyone do it."

Dr. Mabel shivered. "What a terrible thought! There is too little privacy now."

I repeated this to Maudie (with Pat's interruptions and corrections) because the news services had found out what was going on in "Genetics Investigations" and naturally we "mind readers" came in for a lot of silly publicity and just as naturally, under Hedda Staley's mush-headed prodding, Maudie began to wonder if a girl had any privacy? She had, of course; I could not have read her mind with a search warrant, nor could Pat. She would have believed our simple statement if Hedda had not harped on it. She nearly managed to bust us up with Maudie, but we jettisoned her instead and we had threesome dates with Maudie until Pat was sent away.

But that wasn't until nearly the end of the summer after they explained Project Lebensraum.

About a week before our contract was to run out they gathered us twins together to talk to us. There had been hundreds that first day, dozens the second day, but just enough to crowd a big conference room by the end of summer. The redheads were among the survivors but Pat and I did not sit by them even though there was room; they still maintained their icicle attitude and were self-centered as oysters. The rest of us were all old friends by now.

A Mr. Howard was introduced as representing the Foundation. He ladled out the usual guff about being happy to meet us and appreciating the honor and so forth. Pat said to me. *"Hang onto your wallet, Tom. This bloke is selling something."* Now that we knew what we were doing Pat and I talked in the presence of other people even more than we used to. We no longer bothered to whisper since we had had proved to us that we weren't hearing the whispers. But we did subvocalize the words silently, as it helped in being understood. Early in the summer we had tried to do without words and read minds directly but it did not work. Oh, I could latch on to Pat, but the silly, incoherent rumbling that went on his mind in place of thought was confusing and annoying, as senseless as finding yourself inside another person's dream. So I learned not to listen unless he "spoke" to me and he did the same. When we did, we used words and sentences like anybody else. There was none of this fantastic, impossible popular nonsense about instantly grasping the contents of another person's mind; we simply "talked."

One thing that had bothered me was why Pat's telepathic "voice" sounded like his real one. It had not worried me when I did not know what we were doing, but once I realized that these "sounds" weren't sounds, it bothered me. I began to wonder if I was all there and for a week I could not "hear" him–psychosomatic telepathic-deafness Dr. Arnault called it.

She got me straightened out by explaining what hearing is. You don't hear with your ears, you hear with your brain; you don't see with your eyes, you see with your brain. When you touch something, the sensation is not in your finger, it is inside your head. The ears and eyes and fingers are just data collectors; it is the brain that abstracts order out of a chaos of data and gives it meaning. “A new baby does not really see,” she said. “Watch the eyes of one and you can see that it doesn’t. Its eyes work but its brain has not yet learned to see. But once the brain has acquired the habits of abstracting as ‘seeing’ and ‘hearing,’ the habit persists. How would you expect to ‘hear’ what your twin says to you telepathically? As little tinkling bells or dancing lights? Not at all. You expect words, your brain ‘hears’ words; it is a process it is used to and knows how to handle.”

I no longer worried about it, I could hear Pat’s voice clearer than I could hear the voice of the speaker addressing us. No doubt there were fifty other conversations around us, but I heard no one but Pat and it was obvious that the speaker could not hear anybody (and that he did not know much about telepathy) for he went on:

“Possibly a lot of you wonderful people–” (This with a sickening smile) “–are reading my mind right now. I hope not, or if you are I hope you will bear with me until I have said my say.”

“What did I tell you?” Pat put in. *“Don’t sign anything until l check it.”*

(“Shut up,”). I told him. (“I want to listen.”) His voice used to sound like a whisper; now it tended to drown out real sounds. “

Mr. Howard went on, “Perhaps you have wondered why the Long Range Foundation has sponsored this research. The Foundation is always interested in anything which will add to human knowledge. But there is a much more important reason, a supremely important reason ... and a grand purpose to which you yourselves can be supremely important.”

“See? Be sure to count your change.”

(“Quiet, Pat.”)

“Let me quote,” Mr. Howard continued, “from the charter of the Long Range Foundation: ‘Dedicated to the welfare of our descendants.’ “ He paused dramatically–I think that was what he intended; “Ladies and gentlemen, what one thing above all is necessary for our descendants?”

“Ancestors!” Pat answered promptly. For a second I thought that he had used his vocal cords, But nobody else noticed.

“There can be only one answer–living room! Room to grow, room to raise families, broad acres of fertile grain, room for parks and schools and homes. We have over five billion human souls on this planet; it was crowded to the point of marginal starvation more than a century ago with only half that number. Yet this afternoon there are a quarter of a million more of us than there were at this same hour yesterday–ninety million more people each year. Only by monumental efforts of reclamation and conservation, plus population control measures that grow daily more difficult, have we been able to stave off starvation. We have placed a sea in the Sahara, we have melted the Greenland ice cap, we have watered the windy steppes, yet each year there is more and more pressure for more and more room for endlessly more people."

I don't care for orations and this was all old stuff. Shucks, Pat and I knew it if anyone did; we were the kittens that should have been drowned; our old man paid a yearly fine for our very existence.

"It has been a century since the inception of interplanetary travel; man has spread through the Solar System. One would think that nine planets would be ample for a race too fertile for one. Yet you all know that such has not been the case. Of the daughters of Father Sol only fair Terra is truly suited to Man."

"I'll bet he writes advertising slogans."

("Poor ones,") I agreed.

"Colonize the others we have done, but only at a great cost. The sturdy Dutch in pushing back the sea have not faced such grim and nearly hopeless tasks as the colonists of Mars and Venus and Ganymede. What the human race needs and must have are not these frozen or burning or airless discards of creation. We need more planets like this gentle one we are standing on. And there *are* more, many more!" He waved his hands at the ceiling and looked up.

"There are dozens, hundreds, thousands, countless hordes of them ... out there. Ladies and gentlemen, *it is time for the stars!"*

"Here comes the pitch," Pat said quietly. *"A fast curve, breaking inside."*

("Pat, what the deuce is he driving at?")

"He's a real estate agent."

Pat was not far off: but I am not going to quote the rest of Mr. Howard's speech. He was a good sort when we got to know him but he was dazzled by the sound of his own voice, so I'll summarize. He reminded us that the Torchship *Avant-Garde* had headed out to Proxima Centauri six years back. Pat and I knew about it not only from the news but because mother's brother, Uncle Steve, had put in for it–he was turned down, but for a while we enjoyed prestige just from being related to somebody on the list–I guess we gave the impression around school that Uncle Steve was certain to be chosen.

Nobody had heard from the *Avant-Garde* and maybe she would be back in fifteen or twenty years and maybe not. The reason we hadn't heard from her, as Mr. Howard pointed out and everybody knows, is that you don't send radio messages back from a ship lightyears away and traveling just under the speed of light. Even if you assumed that a ship could carry a power plant big enough to punch radio messages across lightyears (which may not be impossible in some cosmic sense but surely is impossible in terms of modem engineering)–even so, what use are messages which travel just barely faster than the ship that sends them? The *Avant-Garde* would be home almost as quickly as any report she could send, even by radio.

Some fuzzbrain asked about messenger rockets. Mr. Howard looked pained and tried to answer and I didn't listen. If radio isn't fast enough, how can a messenger rocket be faster? I'll bet Dr. Einstein spun in his grave.

Mr. Howard hurried on before there were any more silly interruptions. The Long Range Foundation proposed to send out a dozen more starships in all directions to explore Sol-type solar systems for Earth-type planets, planets for coloniza tion. The ships might be gone a long time, for each one would explore more than one solar system.

"And this, ladies and gentlemen, is where you are indispensable to this great project for living room–for *you* will be the means whereby the captains of those ships report back what they have found!"

Even Pat kept quiet.

Presently a man stood up in the back of the room. He was one of the oldest twins among us; he and his brother were about thirty-five. "Excuse me, Mr. Howard, but may I ask a question?"

"Surely."

"I am Gregory Graham; this is my brother Grant Graham. We're physicists. Now we don't claim to be expert in cosmic phenomena but we do know something about communication theory. Granting for the sake of argument that telepathy would work over interstellar distances–I don't think so but I've no proof that it wouldn't–even granting that, I can't see where it helps. Telepathy, light, radio waves, even gravity, are all limited to the speed of light. That is in the very nature of the physical universe, an ultimate limit for all communication. Any other view falls into the ancient philosophical contradiction of actionat-adistance. It is just possible that you might use telepathy to report findings and let the ship go on to new explorations–but the message would still take lightyears to come back. Communication back and forth between a starship and Earth, even by telepathy, is utterly impossible, contrary to the known laws of physics." He looked apologetic and sat down.

I thought Graham had him on the hip. Pat and I got good marks in physics and what Graham had said was the straight word, right out of the book. But Howard did not seem bothered. "I'll let an expert answer. Dr. Lichtenstein? If you please–"

Dr. Mabel stood up and blushed and giggled and looked flustered and said, "I'm terribly sorry, Mr. Graham, I really am, but telepathy isn't like that at all." She giggled again and said, "I shouldn't be saying this, since you are telepathic and I'm not, but telepathy doesn't pay the least bit of attention to the speed of light."

"But it has to. The laws of physics–"

"Oh, dear! Have we given you the impression that telepathy is physical?" She twisted her hands. "It probably isn't."

"Everything is physical. I include 'physiological,' of course."

"It is? You do? Oh, I wish I could be sure ... but physics has always been much too deep for me. But I don't know how you can be sure that telepathy is physical; we haven't been able to make it register on any instrument. Dear me, we don't even know how consciousness hooks into matter. Is consciousness physical? I'm sure I don't know. But we do know that telepathy is faster than light because we measured it."

Pat sat up with a jerk, *"Stick around, kid. I think we'll stay for the second show."*

Graham looked stunned. Dr. Mabel said hastily, "I didn't do it; it was Dr; Abernathy."

"Horatio Abernathy?" demanded Graham.

"Yes, that's his first name, though I never dared call him by it. He's rather important."

"Just the Nobel prize," Graham said grimly, "in field theory. Go on. What did he find?"

"Well, we sent this one twin out to Ganymede–such an awfully long way. Then we used simultaneous radiotelephony and telepathy messages, with the twin on Ganymede talking by radio while he was talking directly–telepathically, I mean–to his twin back in Buenos Aires. The telepathic message always beat the radio message by about forty minutes. That would be right, wouldn't it? You can see the exact figures in my office."

Graham managed to close his month. "When did this happen? Why hasn't it been published? Who has been keeping it secret? It's the most important thing since the Michelson-Morley experiment–it's terrible!"

Dr. Mabel looked upset and Mr. Howard butted in soothingly. "Nobody has been suppressing knowledge, Mr. Graham, and Dr. Abernathy is preparing an article for publication in the *Physical Review.* However I admit that the Foundation did ask him not to give out an advance release in order to give us time to go ahead with another project–the one you know as 'Genetics Investigations'–on a crash-priority basis. We felt we were entitled to search out and attempt to sign up potential telepathic teams before every psychological laboratory and, for that matter, every ambitious showman, tried to beat us to it. Dr. Abernathy was willing–he doesn't like premature publication."

"If it will make you feel better, Mr. Graham," Dr. Mabel said diffidently, "telepathy doesn't pay attention to the inverse-square law either. The signal strength was as strong at half a billion miles as when the paired telepaths were in adjoining rooms."

Graham sat down heavily. "I don't know whether it does or it doesn't. I'm busy rearranging everything I have ever believed."

The interruption by the Graham brothers had explained some things but had pulled us away from the purpose of the meeting, which was for Mr. Howard to sell us on signing up as spacemen. He did not have to sell me. I guess every boy wants to go out into space; Pat and I had run away from home once to enlist in the High Marines–and this was much more than just getting on the Earth-Mars-Venus run; this meant exploring the stars.

The Stars!

"We've told you about this before your research contracts run out," Mr. Howard explained, "so that you will have time to consider it, time for us to explain the conditions and advantages."

I did not care what the advantages were. If they had invited me to hook a sled on behind, I would have said yes, not worrying about torch blast or space suits or anything.

"Both members of each telepathic team will be equally well taken care of," he assured us. "The starside member will have good pay and good working conditions in the finest of modern torchships in the company of crews selected for psychological compatibility as well as for special training; the earthside member will have his financial future assured, as well as his physical welfare." He smiled. "Most assuredly his physical welfare, for it is necessary that he be kept alive and well as long as science can keep him so. It is not too much to say that signing this contract will add thirty years to your lives."

It burst on me why the twins they had tested had been young people. The twin who went out to the stars would not age very much, not at the speed of light. Even if he stayed away a century it would not seem that long to him–but his twin who stayed behind would grow older. They would have to pamper him like royalty, keep him alive–or their "radio" would break down.

Pat said, *"Milky Way, here I come!"*

But Mr. Howard was still talking. "We want you to think this over carefully; it is the most important decision you will ever make. On the shoulders of you few and others like you in other cities around the globe, all told just a tiny fraction of one per cent of the human race, on you precious few rest the hopes of all humanity. So think carefully and give us a chance to explain anything which may trouble you. Don't act hastily."

The redheaded twins got up and walked out, noses in the air. They did not have to speak to make it clear that they would have nothing to do with anything so unladylike, so rude and crude, as exploring space.

In the silence in which they paraded out Pat said to me, *"There go the Pioneer Mothers. That's the spirit that discovered America."* As they passed us he cut loose with a loud razzberry–and I suddenly realized that he was not telepathing when the redheads stiffened and hurried faster. There was an embarrassed laugh and Mr. Howard quickly picked up the business at hand as if nothing had happened while I bawled Pat out.

Mr. Howard asked us to come back at the usual time tomorrow, when Foundation representatives would explain details. He invited us to bring our lawyers, or (those of us who were under age, which was more than half) our parents and their lawyers.

Pat was bubbling over as we left, but I had lost my enthusiasm. In the middle of Mr. Howard's speech I had had a great light dawn: one of us was going to have to stay behind and I knew as certainly as bread falls butter side down which one it would be. A possible thirty more years on my life was no inducement to me. What use is thirty extra years wrapped in cottonwool? There would be no spacing for the twin left behind, not even inside the Solar System ... and I had never even been to the Moon.

I tried to butt in on Pat's enthusiasm and put it to him fair and square, for I was darned if I was going to take the small piece of cake this time without argument.

"Look, Pat, I'll draw straws with you for it. Or match coins."

"Huh? What are you talking about?"

"You know what I'm talking about!"

He just brushed it aside and grinned. "You worry too much, Tom. They'll pick the teams the way they want to. It won't be up to us."

I know he was determined to go and I knew I would lose.

IV HALF A LOAF

Our parents made the predictable uproar. A conference in the Bartlett family always sounded like a zoo at feeding time but this one set a new high. In addition to Pat and myself, Faith, Hope, and Charity, and our parents, there was Faith's fairly new husband, Frank Dubois, and Hope's brand-new fiancé, Lothar Sembrich. The last two did not count and both of them seemed to me to be examples of what lengths a girl will go to in order to get married, but they used up space and occasionally contributed remarks to confuse the issue. But Mother's brother, Uncle Steve, was there, too, having popped up on Earthside furlough.

It was Uncle Steve's presence that decided Pat to bring it out in the open instead of waiting to tackle Dad and Mum one at a time. Both of them considered Uncle Steve a disturbing influence but they were proud of him; one of his rare visits was always a holiday.

Mr. Howard had given us a sample contract to take home and look over. After dinner Pat said, “By the way, Dad, the Foundation offered us a new contract today, a long-term one.” He took it out of his pocket but did not offer it to Dad.

“I trust you told them that you were about to start school again?”

“Sure, we told them that, but they insisted that we take the contract home to show our parents. Okay, we knew what your answer would be.” Pat started to put the contract into his pocket.

I said to Pat privately, (“What’s the silly idea? You’ve made him say ‘no’ and now he can’t back down.”)

“Not yet he hasn’t,” Pat answered on our private circuit. *“Don’t joggle my elbow.”*

Dad was already reaching out a hand. “Let me see it, You should never make up your mind without knowing the facts.”

Pat was not quick about passing it over. “Well, there is a scholarship clause,” he admitted, “but Tom and I wouldn’t be able to go to school together the way we always have.”

“That’s not necessarily bad. You two are too dependent on each other. Some day you will have to face the cold, cruel world alone ... and going to different schools might be a good place to start.”

Pat stuck out the contract, folded to the second page, “It’s paragraph ten.”

Dad read paragraph ten first, just as Pat meant him to do, and his eyebrows went up. Paragraph ten agreed that the party of the first part, the LRF, would keep the party of the second part in any school of his choice, all expenses, for the duration of the contract, or a shorter time at his option, and agreed to do the same for the party of the third part after the completion of the active period of the contract, plus tutoring during the active period–all of which was a long-winded way of saying that the Foundation would put the one who stayed home through school now and the one who went starside through school when he got back... all this in addition to our salaries; see paragraph seven.

So Dad turned to paragraph seven and his eyebrows went higher and his pipe went out. He looked at Pat. “Do I understand that they intend to appoint you two ‘communications technicians tenth grade’ with no experience?”

Uncle Steve sat up and almost knocked his chair over.

“Bruce, did you say ‘tenth grade’?”

“So it says.”

“Regular LRF pay scales?”

"Yes. I don't know how much that is, but I believe they ordinarily hire skilled ratings beginning at third grade."

Uncle Steve whistled. "I'd hate to tell you how much money it is, Bruce–but the chief electron pusher on Pluto is tenth pay grade ... and it took him twenty years and a doctor's degree to get there." Uncle Steve looked at us.

"Give out, shipmates. Where did they bury the body? Is it a bribe?" Pat did not answer. Uncle Steve turned to Dad and said, "Never mind the fine print, Bruce; just have the kids sign it. Each one of them will make more than you and me together. Never argue with Santa Claus."

But Dad was already reading the fine print, from sub-paragraph one-A to the penalty clauses. It was written in lawyer language but what it did was to sign us up as crew members for one voyage of an LRF ship, except that one of us was required to perform his duties Earthside. There was lots more to nail it down so that the one who stayed Earthside could not wiggle out, but that was all it amounted to.

The contact did not say where the ship would go or how long the voyage would last.

Dad finally put the contract down and Charity grabbed it. Dad took it from her and passed it over to Mother. Then he said, "Boys, this contract looks so favorable that I suspect there must be a catch. Tomorrow morning I'm going to get hold of Judge Holland and ask him to go over it with me. But if I read it correctly, you are being offered all these benefits-and an extravagant salary-provided one of you makes one voyage in the *Lewis and Clark."*

Uncle Steve said suddenly, "The *Lewis and Clark,* Bruce?"

"The *Lewis and Clark,* or such sister ship as may be designated. Why? You know the ship, Steve?"

Uncle Steve got poker-faced and answered, "I've never been in her. New ship, I understand. Well equipped."

"I'm glad to hear it." Dad looked at Mum. "Well, Molly?"

Mother did not answer. She was reading the contract and steadily getting whiter. Uncle Steve caught my eye and shook his head very slightly. I said to Pat, ("Uncle Steve has spotted the catch in it.")

"He won't hinder. "

Mother looked up at last and spoke to Dad in a high voice. "I suppose you are going to consent?" She sounded sick. She put down the contract and Charity grabbed it again just as Hope grabbed it from the other side. It ended with our brother-in-law Frank Dubois holding it while everybody else read over his shoulders.

"Now, my dear," Dad said mildly, "remember that boys do grow up. I would like to keep the family together forever–but it can't be that way and you know it."

"Bruce, you promised that they would not go out into space."

Her brother shot her a glance–his chest was covered with ribbons he had won in space. But Dad went on just as mildly. “Not quite, dear. I promised you that I would not consent to minority enlistment in the peace forces; I want them to finish school and I did not want you upset. But this is another matter ... and, if we refuse, it won’t be long before they can enlist whether we like it or not.”

Mother turned to Uncle Steve and said bitterly, “Stephen, you put this idea in their heads.”

He looked annoyed then answered as gently as Dad.

“Take it easy, Sis. I’ve been away; you can’t pin this on me. Anyhow, you don’t put ideas in boys’ heads; they grow them naturally.”

Frank Dubois cleared his throat and said loudly, “Since this seems to be a family conference, no doubt you would like my opinion.”

I said, to Pat only, (‘Nobody asked your opinion, you lard head!”)

Pat answered, *“Let him talk. He’s our secret weapon, maybe.”*

“If you want the considered judgment of an experienced businessman, this so-called contract is either a practical joke or a proposition so preposterous as to be treated with contempt. I understand that the twins are supposed to have some freak talent–although I’ve seen no evidence of it–but the idea of paying them more than a man receives in his mature years, well, it’s just not the right way to raise boys. If they were sons of mine, I would forbid it. Of course, they’re not–”

“No, they’re not,” Dad agreed.

Frank looked sharply at him. “Was that sarcasm, Father Bartlett? I’m merely trying to help. But as I told you the other day, if the twins will go to some good business school and work hard, I’d find a place for them in the bakery. If they make good, there is no reason why they should not do as well as I have done.” Frank was his father’s junior partner in an automated bakery; he always managed to let people know how much money he made. “But as for this notion of going out into space, I’ve always said that if a man expects to make anything of himself, he should stay home and work. Excuse me, Steve.”

Uncle Steve said woodenly, “I’d be glad to excuse you.”

“Eh?”

“Forget it, forget it. You stay out of space and I’ll promise not to bake any bread. By the way, there’s flour on your lapel.”

Frank glanced down hastily. Faith brushed at his jacket and said, “Why, that’s just powder.”

“Of course it is,” Frank agreed, brushing at it himself. “I’ll have you know, Steve, that I’m usually much too busy to go down on the processing floor. I’m hardly ever out of the office.”

“So I suspected.”

Frank decided that he and Faith were late for another appointment and got up to go, when Dad stopped them.

"Frank? What was that about my boys being freaks?"

"What? I never said anything of the sort."

"I'm glad to hear it."

They left in a sticky silence, except that Pat was humming silently and loudly the *March of the Gladiators. "We've got it won, kid!"*

It seemed so to me, too–but Pat had to press our luck. He picked up the contract. "Then it's okay, Dad?"

"Mmm ... I want to consult Judge Holland–and I'm not speaking for your mother." That did not worry us; Mum wouldn't hold out if Dad agreed, especially not with Uncle Steve around. "But you could say that the matter has not been disapproved." He frowned. "By the way, there is no time limit mentioned in there."

Uncle Steve fielded that one for us; "That's customary on a commercial ship, Bruce ... which is what this is, legally. You sign on for the voyage, home planet to home planet."

"Uh, no doubt. But didn't they give you some idea, boys?"

I heard Pat moan, *"There goes the ball game. What'll we tell him, Tom"* Dad waited and Uncle Steve eyed us.

Finally Uncle Steve said, "Better speak up, boys. Perhaps I should have mentioned that I'm trying to get a billet on one of those ships myself–special discharge and such. So I know."

Pat muttered something. Dad said sharply, "Speak up, son."

"They told us the voyage would probably last ... about a century."

Mum fainted and Uncle Steve caught her and everybody rushed around with cold compresses getting in each other's way and we were all upset. Once she pulled out of it Uncle Steve said to Dad, "Bruce? I'm going to take the boys out and buy them a tall, strong sarsaparilla and get them out from under foot. You won't want to talk tonight anyhow."

Dad agreed absently that it was a good. idea. I guess Dad loved all of us; nevertheless, when the chips were down, nobody counted but Mother.

Uncle Steve took us to a place where be could get something more to his taste than sarsaparilla, then vetoed it when Pat tried to order beer. "Don't try to show off, youngster. You are not going to put me in the position of serving liquor to my sister's kids."

"Beer can't hurt you."

"So? I'm still looking for the bloke who told me it was a soft drink. I'm going to beat him to a pulp with a stein. Pipe down." So we picked soft drinks and he drank some horrible mixture he called a Martian shandy and we talked about Project Lebensraum. He knew more about it than we did even though no press release had been made until that day–I suppose the fact that he had been assigned to the Chief of Staff's office had something to do with it, but he did not say.

Presently Pat looked worried and said, "See here, Uncle Steve, is there any chance that they will let us? Or should Tom and I just forget it?"

"Eh? Of course they are going to let you do it."

"Huh? It didn't look like it tonight. If I know Dad, he would skin us for rugs rather than make Mum unhappy."

"No doubt. And a good idea. But believe me, boys, this is in the bag ... provided you use the right arguments."

"Which is?"

"Mmm ... boys, being a staff rating, I've served with a lot of high brass. When you are right and a general is wrong, there is only one way to get him to change his mind. You shut up and don't argue. You let the facts speak for themselves and give him time to figure out a logical reason for reversing himself."

Pat looked unconvinced; Uncle Steve went on, "Believe me. Your pop is a reasonable man and, while your mother is not, she would rather be hurt herself than make anybody she loves unhappy. That contract is all in your favor and they can't refuse–provided you give them time to adjust to the idea. But if you tease and bulldoze and argue the way you usually do, you'll get them united against you."

"Huh? But I never tease, I merely use logical–"

"Stow it, you make me tired. Pat, you were one of the most unlovable brats that ever squawled to get his own way ... and, Tom, you weren't any better. You haven't mellowed with age; you've simply sharpened your techniques. Now you are being offered something free that I would give my right arm to have. I ought to stand aside and let you flub it. But I won't. Keep your flapping mouths shut, play this easy, and it's yours. Try your usual loathsome tactics and you lose."

We would not take that sort of talk from most people. Anybody else and Pat would have given me the signal and he'd 've hit him high while I hit him low. But you don't argue that way with a man who wears the Ceres ribbon; you listen. Pat didn't even mutter to me about it.

So we talked about Project Lebensraum itself. Twelve ships were to go out, radiating from Sol approximately in axes of a dodecahedron–but only approximately, as each ship's mission would be, not to search a volume of space, but to visit as many Sol-type stars as possible in the shortest time. Uncle Steve explained how they worked out a "minimax" search curve for each ship but I did not understand it; it involved a type of calculus we had not studied.. Not that it mattered; each ship was to spend as much time exploring and as little time making the jumps as possible.

But Pat could not keep from coming back to the idea of how to sell the deal to our parents. “Uncle Steve? Granting that you are right about playing it easy, here’s an argument that maybe they should hear? Maybe you could use it on them?”

“Um?”

“Well, if half a loaf is better than none, maybe they haven’t realized that this way one of us stays home.” I caught a phrase of what Pat had started to say, which was not “one of us stays home,” but “Tom stays home.” I started to object, then let it ride. He hadn’t said it. Pat went on, “They know we want to space. If they don’t let us do this, we’ll do it any way we can. If we joined your corps, we might come home on leave–but not often. If we emigrate, we might as well be dead; very few emigrants make enough to afford a trip back to Earth, not while their parents are still alive, at least. So if they keep us home now, as soon as we are of age they probably will never see us again. But if they agree, not only does one stay home, but they are always in touch with the other one–that’s the whole purpose in using us telepath pairs.” Pat looked anxiously at Uncle Steve.

“Shouldn’t we point that out? Or will you slip them the idea?”

Uncle Steve did not answer right away, although I could not see anything wrong with the logic. Two from two leaves zero, but one from two still leaves one.

Finally he answered slowly, “Pat, can’t you get it through your thick head to leave well enough alone?”

“I don’t see what’s wrong with my logic.”

“Since when was an emotional argument won by logic? You should read about the time King Solomon proposed to divvy up the baby.” He took a pull at his glass and wiped his mouth. “What I am about to tell you is strictly confidential. Did you know that the Planetary League considered commissioning these ships as warships?”

“Huh? Why? Mr. Howard didn’t say–”

“Keep your voice down. Project Lebensraum is of supreme interest to the Department of Peace. When it comes down to it, the root cause of war is always population pressure no matter what other factors enter in.”

“But we’ve abolished war.”

“So we have. So chaps like me get paid to stomp out brush fires before they burn the whole forest. Boys, if I tell you the rest of this, you’ve *got* to keep it to yourselves now and forever.”

I don’t like secrets. I’d rather owe money. You can’t pay back a secret. But we promised.

“Okay. I saw the estimates the Department of Peace made on this project at the request of LRF. When the *Avant-Garde* was sent out, they gave her one chance in nine of returning. We’ve got better equipment now; they figure one chance in six for each planetary system visited. Each ship visits an average of six stars on the schedule laid out–so each ship has one chance in thirty-six of coming back. For twelve ships that means one chance in three of maybe one ship coming back. That's where you freaks come in."

"Don't call us 'freaks'!" We answered together.

" 'Freaks,' " he repeated. "And everybody is mighty glad you freaks are around, because without you the thing is impossible. Ships and crews are expendable–ships are just money and they can always find people like me with more curiosity than sense to man the ships. But while the ships are expendable, the knowledge they will gather is not expendable. Nobody at the top expects these ships to come back–but we've got to locate those earth-type planets; the human race needs them. That is what you boys are for: to report back. Then it won't matter that the ships won't come back."

"I'm not scared," I said firmly.

Pat glanced at me and looked away. I hadn't telepathed but I had told him plainly that the matter was not settled as to which one of us would go. Uncle Steve looked at me soberly and said, "I didn't expect you to be, at your age. Nor am I; I've been living on borrowed time since I was nineteen. By now I'm so convinced of my own luck that if one ship comes back, I'm sure it will be mine. But do you see why it would be silly to argue with your mother that half a set of twins is better than none? Emotionally your argument is all wrong. Go read the Parable of the Lost Sheep. You point out to your mother that one of you will be safe at home and it will simply fix her mind on the fact that the other one *isn't* safe and *isn't* home. If your Pop tries to reassure her, he is likely to stumble onto these facts–for they aren't secret, not the facts on which the statisticians based their predictions; it is just that the publicity about this project will emphasize the positive and play down the negative."

"Uncle Steve," objected Pat, "I don't see how they can be sure that most of the ships will be lost."

"They can't be sure. But these are actually optimistic assumptions based on what experience the race has had with investigating strange places. It's like this, Pat: you can be right over and over again, but when it comes to exploring strange places, the first time you guess wrong is the last guess you make. You're dead. Ever looked at the figures about it in just this one tiny solar system? Exploration is like Russian roulette; you can win and win, but if you keep on, it will kill you, certain. So don't get your parents stirred up on this phase of the matter. I don't mind–a man is entitled to die the way he wants to; that's one thing they haven't taxed. But there is no use in drawing attention to the fact that one of you two isn't coming back."

V THE PARTY OF THE SECOND PART

Uncle Steve was right about the folks giving in; Pat left for the training course three weeks later.

I still don’t know just how it was that Pat got to be the one. We never matched for it, we never had a knock-down argument, and I never agreed. But Pat went.

I tried to settle it with him several times but he always put me off, telling me not to worry and to wait and see how things worked out. Presently I found it taken for granted that Pat was going and I was staying. Maybe I should have made a stand the day we signed the contract, when Pat hung back and let me sign first, thereby getting me down on paper as the party of the second part who stayed home, instead of party of the third part who went. But it had not seemed worth making a row about, as the two were interchangeable by agreement among the three parties to the contact. Pat pointed this out to me just before we signed; the important thing was to get the contract signed while our parents were holding still–get *their* signatures.

Was Pat trying to put one over on me right then? If so, I didn’t catch him wording his thoughts. Contrariwise, would I have tried the same thing on him if I had thought of it? I don’t know, I just don’t know. In any case, I gradually became aware that the matter was settled; the family took it for granted and so did the LRF people. So I told Pat it was not settled. He just shrugged and reminded me that it had not been his doing. Maybe I could get them to change their minds... if I didn’t care whether or not I upset the applecart.

I didn’t want to do that. We did not know that the LRF would have got down on its knees and wept rather than let any young and healthy telepath pair get away from them; we thought they had plenty to choose from. I thought that if I made a fuss they might tear up the contract, which they could do up till D-Day by paying a small penalty.

Instead I got Dad alone and talked to him. This shows how desperate I was; neither Pat nor I ever went alone to our parents about the other one. I didn’t feel easy about it, but stammered and stuttered and had trouble making Dad understand why I felt swindled.

Dad looked troubled and said, “Tom, I thought you and your brother had settled this between you?”

“That’s what I’m trying to tell you! We didn’t.”

“What do you expect me to do?”

“Why, I want you to make him be fair about it. We ought to match for it, or something. Or you could do it for us and keep it fair and square. Would you?"

Dad gave attention to his pipe the way he does when he is stalling. At last he said, "Tom, I don't see how you can back out now, after everything is settled. Unless you want me to break the contract? It wouldn't be easy but I can."

"But I don't have to break the contract. I just want an even chance. If I lose, I'll shut up. If I win, it won't change anything–except that I would go and Pat would stay."

"Mmm …" Dad puffed on his pipe and looked thoughtful. "Tom, have you looked at your mother lately?"

I had, but I hadn't talked with her much. She was moving around like a zombie, looking grief-stricken and hurt. "Why?"

"I can't do this to her. She's already going through the agony of losing your brother; I can't put her through it on your account, too. She couldn't stand it."

I knew she was feeling bad, but I could not see what difference it would make if we swapped. "You're not suggesting that Mum wants it this way? That she would rather have Pat go than me?"

"I am not. Your mother loves you both, equally,"

"Then it would be just the same to her."

"It would not. She's undergoing the grief of losing one of her sons. If you swapped now, she would have to go through it afresh for her other son. That wouldn't be fair." He knocked his pipe against an ash tray, which was the same as gaveling that the meeting was adjourned. "No, son, I'm afraid that you will just have to stand by your agreement."

It was hopeless so I shut up. With Dad, bringing Mum's welfare into it was the same as trumping an ace.

Pat left for the training center four days later. I didn't see much of him except the hours we spent down at the TransLunar Building for he was dating Maudie every night and I was not included. He pointed out that this was the last he would see of her whereas I would have plenty of time–so get lost, please. I did not argue; it was not only fair, taken by itself, but I did not want to go along on their dates under the circumstances. Pat and I were farther apart those last few days than we had ever been.

It did not affect our telepathic ability, however, whatever this "tuning" was that some minds could do went right on and we could do it as easily as we could talk … and turn it off as easily, too. We didn't have to "concentrate" or "clear our minds" or any of that Eastern mysticism nonsense. When we wanted to "talk," we talked.

When Pat left I felt lost. Sure, I was in touch with him four hours a day and any other time I cared to call him, but you can't live your whole life doing things by two's without getting out of joint when you have to do things by one's. I didn't have new habits yet. I'd get ready to go someplace, then I would stop at the door and wonder what I had forgotten. Just Pat. It is mighty lonesome to start off somewhere by yourself when you've always done it with someone.

Besides that, Mum was being brightly cheerful and tender and downright unbearable, and my sleep was all broken up. The training center worked on Switzerland's time zone which meant that I, and all other twins who were staying behind no matter where on. Earth they were, worked our practice messages on Swiss time, too. Pat would whistle in my ears and wake me at two in the morning each night and then I would work until dawn and try to catch up on sleep in the daytime.

It was inconvenient but necessary and I was well paid. For the first time in my life I had plenty of money. So did all of our family, for I started paying a fat board bill despite Dad's objections. I even bought myself a watch (Pat had taken ours with him) without worrying about the price, and we were talking about moving into a bigger place.

But the LRF was crowding more and more into my life and I began to realize that the contract covered more than just recording messages from my twin. The geriatrics program started at once. "Geriatrics" is a funny term to use about a person not old enough to vote but it had the special meaning here of making me live as long as possible by starting on me at once. What I ate was no longer my business; I had to follow the diet they ordered, no more sandwiches picked up casually. There was a long list of "special hazard" things I must not do. They gave me shots for everything from housemaid's knee to parrot fever and I had a physical examination so thorough as to make every other one seem like a mere laying on of hands.

The only consolation was that Pat told me they were doing. the same to him. We might be common as mud most ways but we were irreplaceable communication equipment to LRF, so we got the treatment a prize race horse or a prime minister gets and which common people hardly ever get. It was a nuisance.

I did not call Maudie the first week or ten days after Pat left; I didn't feel easy about her. Finally she called me and asked if I were angry with her or was she in quarantine? So we made a date for that night. It was not festive. She called me "Pat" a couple of times, which she used to do every now and then and it had never mattered, since Pat and I were used to people mixing up our names. But now it was awkward, because Pat's ghost was a skeleton at the feast.

The second time she did it I said angrily, "If you want to talk to Pat, I can get in touch with him in half a second!"

"What? Why, Tom!"

"Oh, I know you would rather I was Pat! If you think I enjoy being second choice, think again."

She got tears in her eyes and I got ashamed and more difficult. So we had a bitter argument and then I was telling her how I had been swindled.

Her reaction wasn't what I expected. Instead of sympathy she said, "Oh, Tom, Tom! Can't you see that Pat didn't do this to you? You did it to yourself."

"Huh?"

"It's not his fault; it's your own. I used to get so tired of the way you let him push you around. You *liked* having him push you around. You've got a 'will to fail.'"

I was so angry I had trouble answering. "What are you talking about? That sounds like a lot of cheap, chimney-corner psychiatry to me. Next thing you know you'll be telling me I have a 'death wish.'"

She blinked back tears. "No. Maybe Pat has that. He was always kidding about it but, just the same, I know how dangerous it is. I know we won't see him again."

I chewed that over. "Are you trying to say," I said slowly, "that I let Pat do me out of it because I was afraid to go?"

"What? Why, Tom dear, I never said anything of the sort."

"It sounded like it." Then I knew why it sounded like it. Maybe I was afraid. Maybe I had struggled just hard enough to let Pat win... because I knew what was going to happen to the one who went.

Maybe I was a coward.

We made it up and the date seemed about to end satisfactorily. When I took her home I was thinking of trying to kiss her good night–I never had, what with the way Pat and I were always in each other's hair. I think she expected me to, too.., when Pat suddenly whistled at me.

"Hey! You awake, mate?"

("Certainly,") I answered shortly. ("But I'm busy.")

"How busy? Are you out with my girl?"

("What makes you think that?")

"You are, aren't you? I figured you were. How are you making out?"

("Mind your own business!")

"Sure, sure! Just say hello to her for me. Hi, Maudie!"

Maudie said, "Tom, what are you so preoccupied about?"

I answered, "Oh, it's just Pat. He says to say hello to you."

"Oh... well, hello to him from me."

So I did. Pat chuckled. *"Kiss her good night for me."*

So I didn't, not for either of us.

But I called her again the next day and we went out together regularly after that. Things began to be awfully pleasant where

Maudie was concerned ... so pleasant that I even thought about the fact that college students sometimes got married and now I would be able to afford it, if it happened to work out that way. Oh, I wasn't dead sure I wanted to tie myself down so young, but it is mighty lonely to be alone when you've always had somebody with you.

Then they brought Pat home on a shutter.

It was actually an ambulance craft, specially chartered. The idiot had sneaked off and tried skiing, which he knew as much about as I know about pearl diving. He did not have much of a tumble; he practically fell over his own feet. But there he was, being carried into our flat on a stretcher, numb from the waist down and his legs useless. He should have been taken to a hospital, but he wanted to come home and Mum wanted him to come home, so Dad insisted on it. He wound up in the room Faith had vacated and I went back to sleeping on the couch.

The household was all upset, worse than it had been when Pat went away. Dad almost threw Frank Dubois out of the house when Frank said that now that this space travel nonsense was disposed of, he was still prepared to give Pat a job if he would study bookkeeping, since a bookkeeper could work from a wheelchair. I don't know; maybe Frank had good intentions, but I sometimes think "good intentions" should be declared a capital crime.

But the thing that made me downright queasy was the way Mother took it. She was full of tears and sympathy and she could not do enough for Pat–she spent hours rubbing his legs, until she was ready to collapse. But I could see, even if Dad couldn't, that she was indecently happy–she had her "baby" back. Oh, the tears weren't fake ... but females seem able to cry and be happy at the same time.

We all knew that the "space travel nonsense" was washed up, but we did not discuss it, not even Pat and I; while he was flat on his back and helpless and no doubt feeling even worse than I did was no time to blame him for hogging things and then wasting our chance. Maybe I was bitter but it was no time to let him know. I was uneasily aware that the fat LRF cheeks would stop soon and the family would be short of money again when we needed it most and I regretted that expensive watch and the money I had blown in taking Maudie to places we had never been able to afford, but I avoided thinking about even that; it was spilt milk. But I did wonder what kind of a job I could get instead of starting college.

I was taken off guard when Mr. Howard showed up–I had halfway expected that LRF would carry us on the payroll until after Pat was operated on, even though the accident was not their fault and was the result of Pat's not obeying their regulations. But with the heaps of money they had I thought they might be generous.

But Mr. Howard did not even raise the question of the Foundation paying for, or not paying for, Pat's disability; he simply wanted to know how soon I would be ready to report to the training center?

I was confused and Mother was hysterical and Dad was angry and Mr. Howard was bland. To listen to him you would have thought that nothing had happened, certainly nothing which involved the slightest idea of letting us out of our contract. The parties of the second part and of the third part were interchangeable; since Pat could not go, naturally I would. Nothing had happened which interfered with our efficiency as a communication team. To be sure, they had let us have a few days to quiet down in view of the sad accident–but could I report at once? Time was short.

Dad got purple and almost incoherent. Hadn't they done enough to his family? Didn't they have any decency? Any consideration?

In the middle of it, while I was trying to adjust to the new situation and wandering what I should say, Pat called me silently. *"Tom! Come here!"*

I excused myself and hurried to him. Pat and I had hardly telepathed at all since he had been hurt. A few times he had called me in the night to fetch him a drink of water or something like that, but we had never really talked, either out loud or in our minds. There was just this black, moody silence that shut me out. I didn't know how to cope with it; it was the first time either of us had ever been ill without the other one.

But when he called I hurried in. "Shut the door."

I did so. He looked at me grimly. "I caught you before you promised anything, didn't I?"

"Yeah."

"Go out there and tell Dad I want to see him right away. Tell Mum I asked her to please quit crying, because she is getting me upset." He smiled sardonically. "Tell Mr. Howard to let me speak to my parents alone. Then you beat it."

"Huh?"

"Get out, don't stop to say good-by and don't say where you are going. When I want you, I'll tell you. If you hang around, Mother will work on you and get you to promise things." He looked at me bleakly. "You never did have any will power."

I let the dig slide off; he was ill. "Look, Pat, you're up against a combination this time. Mother is going to get her own way no matter what and Dad is so stirred up that I'm surprised he hasn't taken a poke at Mr. Howard."

"I'll handle Mother, and Dad, too. Howard should have stayed away. Get going. Split 'em up, then get lost."

"All right," I said uneasily. "Uh... look, Pat, I appreciate He looked at me and his lip curled. "Think I'm doing this for you?"

"Why, I thought–"

"You never think … and I've been doing nothing else for days. If I'm going to be a cripple, do you fancy I'm going to spend my life in a public ward? Or here, with Mother drooling over me and Dad pinching pennies and the girls getting sick of the sight of me? Not Patrick! If I have to be like this, I'm going to have the best of everything ... nurses to jump when I lift a finger and dancing girls to entertain me–and you are going to see that the LRF pays for it. We can keep our contract and we're going to. Oh, I know you don't want to go, but now you've got to."

"Me? You're all mixed up. You crowded me out. You–"

"Okay, forget it. You're rarin' to go." He reached, up and punched me in the ribs, then grinned. "So we'll both go–for you'll take me along every step of the way. Now get out there and break that up."

I left two days later. When Pat handed Mum his reverse–twist whammie, she did not even fight. If getting the money to let her sick baby have proper care and everything else he wanted meant that I had to space, well, it was too bad but that was how it was. She told me how much it hurt to have me go but I knew she was not too upset. But *I* was, rather ... I wondered what the score would have been if it had been I who was in Pat's fix? Would she have let Pat go just as easily simply to get me anything I wanted? But I decided to stop thinking about it; parents probably don't know that they are playing favorites even when they are doing it.

Dad got me alone for a man-to-man talk just before I left. He hemmed and hawed and stuck in apologies about how he should have talked things over with me before this and seemed even more embarrassed than I was, which was plenty. When he was floundering I let him know that one of our high school courses had covered most of what he was trying to say. (I didn't let him know that the course had been an anticlimax.) He brightened up and said, "Well, son, your mother and I have tried to teach you right from wrong. Just remember that you are a Bartlett and you won't make too many mistakes. On that other matter, well, if you will always ask yourself whether a girl is the sort you would be proud to bring home to meet your mother, I'll be satisfied."

I promised–it occurred to me that I wasn't going to have much chance to fall into bad company, not with psychologists practically dissecting everybody in Project Lebensraum. The bad apples were never going into the barrel

When I see how naive parents are I wonder how the human race keeps on being born. Just the same it was touching and I appreciate the ordeal he put himself through to get me squared away–Dad was always a decent guy and meant well.

I had a last date with Maudie but it wasn't much; we spent it sitting around Pat's bed, She did kiss me good-by–Pat told her to. Oh, well!

VI TORCHSHIP "LEWIS AND CLARK"

I was in Switzerland only two days. I got a quick look at the lake at Zurich and that was all; the time was jammed with trying to hurry me through all the things Pat had been studying for weeks. It couldn't be done, so they gave me spools of minitape which I was to study after the trip started.

I had one advantage: Planetary League Auxiliary Speech was a required freshman course at our high school–P-L lingo was the working language of Project Lebensraum. I can't say I could speak it when I got there, but it isn't hard. Oh, it seems a little silly to say "goed" when you've always said "gone" but you get used to it, and of course all technical words are Geneva-International and always have been.

Actually, as subproject officer Professor Brunn pointed out, there was not a lot that a telepathic communicator had to know before going aboard ship; the principal purpose of the training center had been to get the crews together, let them eat and live together, so that the psychologists could spot personality frictions which had not been detected through tests.

"There isn't any doubt about you, son. We have your brother's record and we know how close your tests come to matching his. You telepaths have to deviate widely from accepted standards before we would disqualify one of you."

"Sir?'

"Don't you see? We can turn down a ship's captain just for low blood sugar before breakfast and a latent tendency to be short tempered therefrom until he has had his morning porridge. We can fill most billets twenty times over and juggle them until they are matched like a team of acrobats. But not you people. You are so scarce that we must allow you any eccentricity which won't endanger the ship: I wouldn't mind if you believed in astrology–you don't, do you?"

"Goodness, no!" I answered, shocked.

"You see? You're a normal, intelligent boy; you'll do. Why, we would take your twin, on a stretcher, if we had to."

Only telepaths were left when I got to Zurich. The captains and the astrogation and torch crews had joined the ships first, and then the specialists and staff people. All the "idlers" were aboard but us. And I hardly had time to get acquainted even with my fellow mind readers.

They were an odd bunch and I began to see what Professor Brunn meant by saying that we freaks had to be allowed a little leeway. There were a dozen of us–just for the *Lewis and Clark,* I mean; there were a hundred and fifty for the twelve ships of the fleet, which was every telepathic pair that LRF had been able to sign up. I asked one of them, Bernhard van Houten, why each ship was going to carry so many telepaths?

He looked at me pityingly. "Use your head, Tom. If a radio burns out a valve, what do you do?"

"Why, you replace it."

"There's your answer. We're spare parts. If either end of a telepair dies or anything, that 'radio' is burned out, permanently. So they plug in another one of us. They want to be sure they have at least one telepair still working right up to the end of the trip…they hope."

I hardly had time to learn their names before we were whisked away. There was myself and Bernhard van Houten, a Chinese-Peruvian girl named Mei-Ling Jones (only she pronounced it "Hone-Ace"), Rupert Hauptman, Anna Horoshen, Gloria Maria Antonita Docampo, Sam Rojas, and Prudence Mathews. These were more or less my age. Then there was Dusty Rhodes who looked twelve and claimed to be fourteen. I wondered how LRF had persuaded his parents to permit such a child to go. Maybe they hated him; it would have been easy to do.

Then there were three who were older than the rest of us: Miss Gamma Furtney, Cas Warner, and Alfred McNeil. Miss Gamma was a weirdie, the sort of old maid who never admits to more than thirty; she was our triplet. LRF had scraped up four sets of triplets who were m-r's and could be persuaded to go; they were going to be used to tie the twelve ships together into four groups of three, then the groups could be hooked with four sets of twins.

Since triplets are eighty-six times as scarce as twins it was surprising that they could find enough who were telepathic and would go, without worrying about whether or not they were weirdies. I suspect that the Misses Alpha, Beta, and Gamma Furtney were attracted by the Einstein time effect; they could get even with all the men who had not married them by not getting older while those men died of old age.

We were a "corner" ship and Cas Warner was our sidewise twin, who would hook us through his twin to the *Vasco da Gama,* thus linking two groups of three. Other sidewise twins tied the other comers. The ones who worked ship-to-ship did not have to be young, since their twins (or triplets) were not left back on Earth, to grow older while their brothers or sisters stayed young through relativity. Cas Warner was fortyfive, a nice quiet chap who seemed to enjoy eating with us kids.

The twelfth was Mr. ("Call me 'Uncle Alfred' ") McNeil, and he was an old darling. He was a Negro, his age was anything from sixtyfive on up (I couldn't guess), and he had the saintliness that old people get when they don't turn sour and self-centered instead…to look at him you would bet heavy odds that he was a deacon in his church.

I got acquainted with him because I was terribly homesick the first night I was in Zurich and he noticed it and invited me to his room after supper and sort of soothed me. I thought he was one of the Foundation psychologists, like Professor Brunn–but no, he was half of a telepair himself…and not even a sidewise twin; his partner was staying on Earth.

I couldn't believe it until be showed me a picture of his pair partner–a little girl with merry eyes and pigtails–and I finally got it through my thick head that here was that rarity, a telepathic pair who were not twins. She was Celestine Regina Johnson, his great-niece–only be called her "Sugar Pie" after he introduced me to the photograph and had told her who I was.

I had to pause and tell Pat about it, not remembering that he had already met them.

Uncle Alfred was retired and had been playmate-in-chief to his baby great-niece, for he had lived with his niece and her husband. He had taught the baby to talk. When her parents were both killed in an accident he had gone back to work rather than let the child be adopted. "I found out that I could keep tabs on Sugar Pie even when I couldn't see her. She was always a good baby and it meant I could watch out for her even when I had to be away. I knew it was a gift; I figured that the Lord in His infinite mercy had granted what I needed to let me take care of my little one."

The only thing that had worried him was that he might not live long enough; or, worse still, not be able to work long enough, to permit him to bring up Sugar Pie and get her started right. Then Project Lebensraum had solved everything. No, he didn't mind being away from her because be was *not* away from her; he was with her every minute.

I gathered an impression that he could actually see her but I didn't want to ask. In any case, with him stone walls did not a prison make nor lightyears a separation. He knew that the Infinite Mercy that had kept them together this long would keep them together long enough for him to finish his appointed task. What happened after that was up to the Lord.

I had never met anybody who was so quietly, serenely happy. I didn't feel homesick again until I left him and went to bed. So I called Pat and told him about getting acquainted with Uncle Alfred. He said sure, Uncle All was a sweet old codger... and now I should shut up and go to sleep, as I had a hard day ahead of me tomorrow.

Then they zoomed us out to the South Pacific and we spent one night on Canton Atoll before we went aboard They wouldn't let us swim in the lagoon even though Sam had arranged a picnic party of me and himself and Mei-Ling and Gloria; swimming was one of the unnecessary hazards. Instead we went to bed early and were awakened two hours before dawn–a ghastly time of day, particularly when your time sense has been badgered by crossing too many time zones too fast. I began to wonder what I was doing there and why?

The *Lewis and Clark* was a few hundred miles east of there in an unused part of the ocean. I had not realized how much water there was until I took a look at it from the air–and at that you see just the top. If they could figure some way to use all those wet acres as thoroughly as they use the Mississippi Valley they wouldn't need other planets.

From the air the *Lewis and Clark* looked like a basketball floating in water; you could not see that it was really shaped like a turnip. It floated with the torch down; the hemispherical upper part was all that showed. I got one look at her, with submersible freighters around her looking tiny in comparison, then our bus was hovering over her and we were being told to mind our step on the ladder and not leave anything behind in the bus. It occurred to me that it wouldn't do any good to write to Lost-and-Found if we did. It was a chilly thought ... I guess I was still homesick, but mostly I was excited.

I got lost a couple of times and finally found my stateroom just as the speaker system was booming: "All hands, prepare for acceleration. Idlers strap down. Boost stations report in order. Minus fourteen minutes." The man talking was so matter of fact that he might as well have been saying, "Local passengers change at Birmingham."

The stateroom was big enough, with a double wardrobe and a desk with a builtin viewer-recorder and a little washstand and two pull-down beds. They were down, which limited the floor space. Nobody else was around so I picked one, lay down and fastened the three safety belts. I had just done so when that little runt Dusty Rhodes stuck his head in. "Hey! You got my bed!"

I started to tell him off, then decided that just before boost was no time for an argument. "Suit yourself," I answered, unstrapped, and moved into the other one, strapped down again.

Dusty looked annoyed; I think he wanted an argument. Instead of climbing into the one I had vacated, he stuck his head out the door and looked around. I said, “Better strap down. They already passed the word.”

“Tripe,” he answered without turning. “There’s plenty of time. I’ll take a quick look in the control room.”

I was going to suggest that he go outside while he was about it when a ship’s officer came through, checking the rooms. “In you get, son,” he said briskly, using the no-nonsense tone in which you tell a dog to heel. Dusty opened his mouth, closed it, and climbed in. Then the officer “baby-strapped” him, pulling the buckles around so that they could not be reached by the person in the bunk. He even put the chest strap around Dusty’s arms.

He then checked my belts. I had my arms outside the straps but all he said was, “Keep your arms on the mattress during boost,” and left.

A female voice said, “All special communicators link with your telepartners.”

I had been checking with Pat ever since I woke up and had described the *Lewis and Clark* to him when we first sighted her and then inside as well. Nevertheless I said, (“Are you there, Pat?”)

“Naturally. I’m not going anyplace. What’s the word?”

(“Boost in about ten minutes. They just told us to link with our partners during boost.”)

“You had better stay linked, or I’ll beat your ears off! I don’t want to miss anything.

(“Okay, okay, don’t race your engine. Pat? This isn’t quite the way I thought it would be.”)

“Huh? How?”

(“I don’t know. I guess I expected brass bands and speeches and such. After all, this is a big day. But aside from pictures they took of us last night at Canton Atoll, there was more fuss made when we started for Scout camp.”)

Pat chuckled. *“Brass bands would get wet where you are–not to mention soaked with neutrons.”*

(“Sure, sure.”) I didn’t have to be told that a torchship needs elbow room for a boost. Even when they perfected a way to let them make direct boost from Earth-zero instead of from a space station, they still needed a few thousand square miles of ocean–and at that you heard ignorant prattle about how the back wash was changing the climate and the government ought to do something.

“Anyhow, there are plenty of brass bands and speeches. We are watching one by the Honorable J. Dillberry Egghead... shall I read it back?”

(“Uh, don’t bother. Who’s ‘we’?”)

“All of us. Faith and Frank just came in.”

I was about to ask about Maudie when a new voice came over the system: "Welcome aboard, friends. This is the Captain. We will break loose at an easy three gravities; nevertheless, I want to warn you to relax and keep your arms inside your couches. The triple boost will last only six minutes, then you will be allowed to get up. We take off in number two position, just after the *Henry Hudson."*

I repeated to Pat what the Captain was saying practically as fast as he said it; this was one of the things we had practiced while he was at the training center: letting your directed thoughts echo what somebody else was saying so that a telepair acted almost like a microphone and a speaker. I suppose he was doing the same at the other end, echoing the Captain's words to the family a split second behind me–it's not hard with practice.

The Captain said, "The *Henry is* on her final rundown ... ten seconds... five seconds... now!"

I saw something like heat lightning even though I was in a closed room. For a few seconds there was a sound over the speaker like sleet on a window, soft and sibilant and far away. Pat said, *"Boy!"*

("What is it, Pat?")

"She got up out of there as if she had sat on a bee. Just a hole in the water and a flash of light. Wait a sec-they're shifting the view pick-up from the space station to Luna."

("You've got a lot better view than I have. All I can see is the ceiling of this room.")

The female voice said, "Mr. Warner! Miss Furtney! Tween-ships telepairs start recording."

The Captain said, "All hands, ready for boost. Stand by for count down," and another voice started in, "Sixty seconds ... fifty-five ... fifty ... fortyfive ... holding on-forty-five ... holding fortyfive... holding... holding..."

–until I was ready to scream.

"Tom, what's wrong?"

("How should I know?")

"Forty... thirty-five ... thirty..."

"Tom, Mum wants me to tell you to be very careful."

("What does she think I can do? I'm just lying here, strapped down.")

"I know." Pat chuckled. *"Hang on tight to the brush, you lucky stiff; they are about to take away the ladder."*

"... four!... Three!... Two!... ONE!"

I didn't see a flash, I didn't hear anything. I simply got very heavy–like being on the bottom of a football pile-up.

"There's nothing but steam where you were."

I didn't answer, I was having trouble breathing.

"They've shifted the pick-up. They're following you with a telephoto now. Tom, you ought to see this ... you look just like a sun. It burns the rest of the picture right out of the tank."

("How can I see it?") I said crossly. ("I'm *in* it.')

"You sound choked up. Are you all right?"

("You'd sound choked, too, if you had sand bags piled across your chest.")

"Is it bad?"

("It's not good. But it's all right, I guess.")

Pat let up on me and did a right good job of describing what he was seeing by television. The *Richard E. Byrd* took off just after we did, before we had finished the high boost to get escape velocity from Earth; he told me all about it. I didn't have anything to say anyhow; I couldn't see anything and I didn't feel like chattering. I just wanted to hold still and feel miserable.

I suppose it was only six minutes but it felt more like an hour. After a long, long time, when I had decided the controls were jammed and we were going to keep on at high boost until we passed the speed of light, the pressure suddenly relaxed and I felt light as a snowflake ... if it hadn't been for the straps I would have floated up to the ceiling.

"We have reduced to one hundred and ten per cent of one gravity," the Captain said cheerfully. "Our cruising boost will be higher, but we will give the newcomers among us a while to get used to it." His tone changed and he said briskly, "All stations, secure from blastoff and set space watches, third section."

I loosened my straps and sat up and then stood up. Maybe we were ten per cent heavy, but it did not feel like it; I felt fine. I started for the door, intending to look around more than I had been able to when I came aboard.

Dusty Rhodes yelled at me. "Hey! Come back here and unstrap me! That moron fastened the buckles out of my reach."

I turned and looked at him. "Say 'please.'"

What Dusty answered was not "please." Nevertheless I let him loose. I should have made him say it; it might have saved trouble later.

VII 19,900 WAYS

The first thing that happened in the *L.C.* made me think I was dreaming–I ran into Uncle Steve.

I was walking along the circular passageway that joined the staterooms on my deck and looking for the passage inboard, toward the axis of the ship. As I turned the comer I bumped into someone. I said, "Excuse me," and started to go past when the other person grabbed my arm and clapped me on the shoulder. I looked up and it was Uncle Steve, grinning and shouting at me. "Hi, shipmate! Welcome aboard!"

"Uncle Steve! What are you doing here?"

"Special assignment from the General Staff ... to keep *you* out of trouble."

"Huh?"

There was no mystery when he explained. Uncle Steve had known for a month that his application for special discharge to take service with the LRF for Project Lebensraum had been approved; he had not told the family but had spent the time working a swap to permit him to be in the same ship as Pat–or, as it turned out, the one I was in.

"I thought your mother might take it easier if she knew I was keeping an eye on her boy. You can tell her about it the next time you are hooked in with your twin."

"I'll tell her now," I answered and gave a yell in my mind for Pat. He did not seem terribly interested; I guess a reaction was setting in and he was sore at me for being where he had expected to be. But Mother was there and he said he would tell her. "Okay, she knows."

Uncle Steve looked at me oddly. "Is it as easy as that?"

I explained that it was just like talking ... a little faster, maybe, since you can think words faster than you can talk, once you are used to it. But he stopped me. "Never mind. You're trying to explain color to a blind man. I just wanted Sis to know."

"Well, okay." Then I noticed that his uniform was different. The ribbons were the same and it was an LRF company uniform, like my own, which did not surprise me–but his chevrons were gone: "Uncle Steve ... you're wearing major's leaves!"

He nodded. "Home town boy makes good. Hard work, clean living, and so on."

"Gee, that's swell!"

"They transferred me at my reserve rank, son, plus one bump for exceptionally neat test papers. Fact is, if I had stayed with the Corps, I would have retired as a ship's sergeant at best–there's no promotion in peacetime. But the Project was looking for certain men, not certain ranks, and I happened to have the right number of hands and feet for the job."

"Just what is your job, Uncle?"

"Commander of the ship's guard."

"Huh? What have you got to guard?"

"That's a good question. Ask me in a year or two and I can give you a better answer. Actually, ‘Commander Landing Force’ would be a better title. When we locate a likely looking planet–’when and if,’ I mean–I’m the laddie who gets to go out and check the lay of the land and whether the natives are friendly while you valuable types stay safe and snug in the ship.” He glanced at his wrist. “Let’s go to chow.”

I wasn’t hungry and wanted to look around, but Uncle Steve took me firmly by the arm and headed for the mess room. “When you have soldiered as long as I have, lad, you will learn that you sleep when you get a chance and that you are never late for chow line.”

It actually was a chow line, cafeteria style. The *L.C.* did not run to table waiters nor to personal service of any sort, except for the Captain and people on watch. We went through the line and I found that I was hungry after all. That meal only, Uncle Steve took me ever to the heads-of-departments table. “Ladies and gentlemen, this is my nephew with two heads, Tom Bartlett. He left his other head dirtside–he’s a telepair twin. If he does anything he shouldn’t, don’t tell me, just clobber him.” He glanced at me; I was turning red. “Say ‘howdy,’ son ... or just nod if you can’t talk.”

I nodded and sat down. A sweet old girl with the sort of lap babies like to sit on was next to me. She smiled and said, “Glad to have you with us, Tom.” I learned that she was the Chief Ecologist. Her name was Dr. O’Toole, only nobody called her that, and she was married to one of the relativists.

Uncle Steve went around the table, pointing out who was who and what they did: the Chief Engineer. the Relativist (Uncle Steve called him the “Astrogator” as the job would be called in an ordinary ship), Chief Planetologist Harry Gates and the Staff Xenologist, and so forth–I couldn’t remember the names at the time–and Reserve Captain Urqhardt. I didn’t catch the word “reserve” and was surprised at how young he was. But Uncle Steve corrected me: “No, no! He’s not the Captain. He’s the man who will be captain if it turns out we need a spare. Across from you is the Surgeon-don’t let that fool you, either; he never does surgery himself. Dr. Devereaux is the boss headshrinker.”

I looked puzzled and Uncle Steve went on, “You don’t savvy? Psychiatrist. Doc Dev is watching every move we make, trying to decide how quick he will have to be with the straitjacket and the needle. Correct, Doc?”

Dr. Devereaux buttered a roll. “Essentially, Major. But finish your meal; we’re not coming for you until later in the day.” He was a fat little toad, ugly as could be, and with a placid, unbreakable calm. He went on, “I just had an up setting thought, Major.”

“I thought that thoughts never upset you?”

“Consider. Here I am charged with keeping quaint characters like you sane ... but they forgot to assign anybody to keep me sane. What should I do?"

"Mmm..." Uncle Steve seemed to study it. "I didn't know that headshrinkers were supposed to be sane, themselves."

Dr. Devereaux nodded. "You've put your finger on it. As in your profession, Major, being crazy is an asset. Pass the salt, please."

Uncle Steve shut up and pretended to wipe off blood.

A man came in and sat down; Uncle Steve introduced me and said, "Staff Commander Frick, the Communications Officer. Your boss, Tom."

Commander Frick nodded and said, "Aren't you third section, young man?"

"Uh, I don't know, sir."

"I do ... and you should have known. Report to the communications office."

"Uh, you mean now, sir?"

"Right away. You are a half hour late."

I said, "Excuse me," and got up in a hurry, feeling silly. I glanced at Uncle Steve but he wasn't looking my way; he seemed not to have heard it.

The communications office was two decks up, right under the control room; I had trouble finding it. Van Houten was there and Mei-Ling and a man whose name was Travers, who was communicator-of-thewatch. Mei-Ling was reading a sheaf of papers and did not look up; I knew that she was telepathing. Van said, "Where the deuce have you been? I'm hungry."

"I didn't know," I protested.

"You're supposed to know."

He left and I turned to Mr. Travers. "What do you want me to do?"

He was threading a roll of tape into an autotransmitter; he finished before he answered me. "Take that stack of traffic as she finishes it, and do whatever it is you do with it. Not that it matters."

"You mean read it to my twin?"

"That's what I said."

"Do you want him to record?"

"Traffic is always recorded. Didn't they teach you anything?"

I thought about explaining that they really hadn't because there had not been time, when I thought, oh what's the use? He probably thought I was Pat and assumed that I had had the full course. I picked up papers Mei-Ling was through with and sat down.

But Travers went on talking. "I don't know what you freaks are up here for now anyhow. You're not needed; we're still in radio range."

I put the papers down and stood up: "Don't call us 'freaks.' "

He glanced at me and said, "my, how tall you've grown. Sit down and get to work."

We were about the same height but he was ten years older and maybe thirty pounds heavier. I might have passed it by if we had been alone, but not with Mei-Ling present.

"I said not to call us 'freaks.' It's not polite."

He looked tired and not amused but he didn't stand up. I decided he didn't want a fight and felt relieved. "All right, all right," he answered. "Don't be so touchy. Get busy on that traffic."

I sat down and looked over the stuff I had to send, then called Pat and told him to start his recorder; this was not a practice message.

He answered, *"Call back in half an hour. I'm eating dinner."*

("I was eating lunch but I didn't get to finish. Quit stalling, Pat. Take a look at that contract you were so anxious to sign.")

"You were just as anxious. What's the matter, kid? Cold feet already?"

("Maybe, maybe not. I've got a hunch that this isn't going to be one long happy picnic. But I've learned one thing already; when the Captain sends for a bucket of paint, he wants a full bucket and no excuses. So switch on that recorder and stand by to take down figures.")

Pat muttered and gave in, then announced that he was ready after a delay that was almost certainly caused by Mother insisting that he finish dinner. *"Ready."*

The traffic was almost entirely figures (concerning the takeoff, I suppose) and code. Being such, I had to have Pat repeat back everything. It was not hard, but it was tedious. The only message in clear was one from the Captain, ordering roses sent to a Mrs. Detweiler in Brisbane and charged to his LRF account, with a message: "Thanks for a wonderful farewell dinner."

Nobody else sent personal messages; I guess they had left no loose ends back on Earth.

I thought about sending some roses to Maudie, but I didn't want to do it through Pat. It occurred to me that I could do it through Mei-Ling, then I remembered that, while I had money in the bank, I had appointed Pat my attorney; if I ordered them, he would have to okay the bill I decided not to cross any bridges I had burned behind me.

Life aboard the L.C., or the *Elsie as* we called her, settled into a routine. The boost built up another fifteen per cent which made me weigh a hundred and fifty-eight pounds; my legs ached until I got used to it–but I soon did; there are advantages in being kind of skinny. We freaks stood a watch in five, two at a time–Miss Gamma and Cas Warner were not on our list because they hooked sidewise with other ships. At first we had a lot of spare time, but the Captain put a stop to that.

Knowing that the LRF did not really expect us to return, I had not thought much about that clause in the contract which provided for tutoring during the trip but I found out that the Captain did not intend to forget it. There was school for everybody, not just for us telepaths who were still of school age. He appointed Dr. Devereaux, Mrs. O'Toole, and Mr. Krishnamurti a school board and courses were offered in practically everything, from life drawing to ancient history. The Captain himself taught that last one; it turned out he knew Sargon the Second and Socrates like brothers.

Uncle Alfred tried to sign up for everything, which was impossible, even if he didn't eat, sleep, nor stand watch. He had never, he told me, had time for all the schooling he wanted and now at last he was going to get it. Even my real uncle, Steve, signed up for a couple of courses. I guess I showed surprise at this, for he said, "Look, Tom, I found out my first cruise that the only way to make space bearable is to have something to learn and learn it. I used to take correspondence courses. But this bucket has the finest assemblage of really bright minds you are ever likely to see. If you don't take advantage of it, you are an idiot. Mama O'Toole's cooking course, for example: where else can you find a *Cordon Bleu* graduate willing to teach you her high art free? I ask you!"

I objected that I would never need to know how to cook high cuisine.

"What's that got to do with it? Learning isn't a means to an end; it is an end in itself. Look at Uncle Alf. He's as happy as a boy with a new slingshot. Anyhow, if you don't sign up for a stiff course, old Doc Devereaux will find some way to keep you busy, even if it is counting rivets. Why do you think the Captain made him chairman of the board of education?"

"I hadn't thought about it. "

"Well, think about it. The greatest menace in space is going coffin crazy. You are shut up for a long time in a small space and these is nothing outside but some mighty thin vacuum ... no street lights, no bowling alleys. Inside are the same old faces and you start hating them. So a smart captain makes sure you have something to keep you interested and tired–and ours is the smartest you'll find or he wouldn't be on this trip."

I began to realize that a lot of arrangements in the *Elsie* were simply to see that we stayed healthy and reasonably happy. Not just school, but other things. Take the number we bad aboard, for example–almost two hundred. Uncle Steve told me that the Elsie could function as a ship with about ten: a captain, three control officers, three engineer officers, one communicator, one farmer, and a cook. Shucks, you could cut that to five: two control officers (one in command), two torch watchstanders, and a farmer-cook.

Then why two hundred?

In the first place there was room enough. The *Elsie* and the other ships had been rebuilt from the enormous freighters the LRF use to haul supplies out to Pluto and core material back to Earth. In the second place they needed a big scientific staff to investigate the planets we hoped to find. In the third place some were spare parts, like Reserve Captain Urqhardt and, well, me myself. Some of us would die or get killed; the ship had to go on.

But the real point, as I found out, is that no small, isolated social group can be stable. They even have a mathematics for it, with empirical formulas and symbols for "lateral pressures" and "exchange valences" and "exogamic relief." (That last simply means that the young men of a small village should find wives outside the village.)

Or look at it this way. Suppose you had a one-man space ship which could cruise alone for several years. Only a man who was already nutty a certain way could run it–otherwise he would soon go squirrelly some other way and start tearing the controls off the panels. Make it a two-man ship: even if you used a couple as fond of each other as Romeo and Juliet, by the end of the trip even Juliet would start showing black-widow blood.

Three is as bad or worse, particularly if they gang up two against one. Big numbers are much safer. Even with only two hundred people there are exactly nineteen thousand nine hundred ways to pair them off, either as friends or enemies, so you see that the social possibilities shoot up rapidly when you increase the numbers. A bigger group means more chances to find friends and more ways to avoid people you don't like. This is terribly important aboard ship.

Besides elective courses we had required ones called "ship's training"–by which the Captain meant that every body had to learn at least one job he had not signed up for. I stood two watches down in the damping room, whereupon Chief Engineer Roch stated in writing that he did not think that I would ever make a torcher as I seemed to have an innate lack of talent for nuclear physics. As a matter of fact it made me nervous to be that close to an atomic power plant and to realize the unleashed hell that was going on a few feet away from me.

I did not make out much better as a farmer, either. I spent two weeks in the airconditioning plant and the only thing I did right was to feed the chickens. When they caught me cross-pollinating the wrong way some squash plants which were special pets of Mrs. O'Toole, she let me go, more in sorrow than in anger. "Tom," she said, "what do you do well?"

I thought about it. "Uh, I can wash bottles... and I used to raise hamsters."

So she sent me over to the research department and I washed beakers in the chem lab and fed the experimental animals. The beakers were unbreakable. They wouldn't let me touch the electron microscope. It wasn't bad–I could have been assigned to the laundry.

Out of the 19,900 combinations possible in the *Elsie,* Dusty Rhodes and I were one of the wrong ones. I hadn't signed up for the life sketching class because he was teaching it; the little wart really was a fine draftsman. I know, I'm pretty good at it myself and I would have liked to have been in that class. What was worse, he had an offensively high I.Q., genius plus, much higher than mine, and he could argue rings around me. Along with that he had the manners of a pig and the social graces of a skunk–a bad go, any way you looked at it.

"Please" and "Thank you" weren't in his vocabulary. He never made his bed unless someone in authority stood over him, and I was likely as not to come in and find him lying on mine, wrinkling it and getting the cover dirty. He never hung up his clothes, he always left our wash basin filthy, and his best mood was complete silence.

Besides that, he didn't bathe often enough. Aboard ship that is a crime.

First I was nice to him, then I bawled him out, then I threatened him. Finally I told him that the next thing of his I found on my bed was going straight into the mass converter. He just sneered and the next day I found his camera on my bed and his dirty socks on my pillow.

I tossed the socks into the wash basin, which he had left filled with dirty water, and locked his camera in my wardrobe, intending to let him stew before I gave it back.

He didn't squawk. Presently I found his camera gone from my wardrobe, in spite of the fact that it was locked with a combination which Messrs. Yale & Towne had lightheartedly described as "Invulnerable." My clean shirts were gone, too ... that is, they weren't clean; somebody had carefully dirtied every one of them.

I had not complained about him. It had become a point of pride to work it out myself; the idea that I could not cope with somebody half my size and years my junior did not appeal to me.

But I looked at the mess he had made of my clothes and I said to myself, "Thomas Paine, you had better admit that you are licked and holler for help–else your only chance will be to plead justifiable homicide."

But I did not have to complain. The Captain sent for me; Dusty had complained about me instead.

"Bartlett, young Rhodes tells me you are picking on him. What's the situation from your point of view?"

I started to swell up and explode. Then I let out my breath and tried to calm down; the Captain really wanted to know.

“I don’t think so, sir, though it is true that we have not been getting along.”

“Have you laid hands on him?”

“Uh ... I haven’t smacked him, sir. I’ve jerked him off my bed more than once–and I wasn’t gentle about it.”

He sighed. “Maybe you should have smacked him. Out of my sight, of course. Well, tell me about it. Try to tell it straight–and complete.”

So I told him. It sounded trivial and I began to be ashamed of myself ... the Captain had more important things to worry about than whether or not I had to scrub out a hand basin before I could wash my face. But he listened.

Instead of commenting, maybe telling me that I should be able to handle a younger kid better, the Captain changed the subject.

“Bartlett, you saw that illustration Dusty had in the ship’s paper this morning?”

“Yes, sir. A real beauty,” I admitted. It was a picture of the big earthquake in Santiago, which had happened after we left Earth.

“Mmm... we have to allow you special-talent people a little leeway. Young Dusty is along because he was the only m-r available who could receive and transmit pictures.”

“Uh, is that important, sir?”

“It could be. We won’t know until we need it. But it could be crucially important. Otherwise I would never have permitted a spoiled brat to come aboard this ship.” He frowned. “However, Dr. Devereaux is of the opinion that Dusty is not a pathological ease.”

“Uh, I never said he was, sir.”

“Listen, please. He says that the boy has an unbalanced personality–a brain that would do credit to a grown man but with greatly retarded social development. His attitudes and evaluations would suit a boy of five, combined with this clever brain. Furthermore Dr. Devereaux says that he will force the childish part of Dusty’s personality to grow up, or he’ll turn in his sheepskin.”

“So? I mean, “Yes, sir?’ “

“So you should have smacked him. The only thing wrong with that boy is that his parents should have walloped him, instead of telling him how bright he was.” He sighed again.

“Now *I’ve* got to do it. Dr. Devereaux tells me I’m the appropriate father image.”

“Yes, sir.”

“ ‘Yes, sir,’ my aching head. This isn’t a ship; it’s a confounded nursery. Are you having any other troubles?”

“No, sir.”

“I wondered. Dusty also complained that the regular communicators call you people ‘freaks.’ “ He eyed me.

I didn’t answer. I felt sheepish about it.

“In any case, they won’t again. I once saw a crewman try to knife another one, just because the other persisted in calling him ‘skin head.’ My people are going to behave like ladies and gentlemen or I’ll bang some heads together.” He frowned. “I’m moving Dusty into the room across from my cabin. If Dusty will leave you alone, you let him alone. If he won’t ... well, use your judgment, bearing in mind that you are responsible for your actions–but remember that I don’t expect any man to be a doormat. That’s all. Good-by.”

VIII RELATIVITY

I had been in the *Elsie* a week when it was decided to operate on Pat. Pat told me they were going to do it, but he did not talk about it much. His attitude was the old iron-man, as if he meant to eat peanuts and read comics while they were chopping on him. I think he was scared stiff ... I would have been.

Not that I would have understood if I had known the details; I’m no neural surgeon, nor any sort; removing a splinter is about my speed.

But it meant we would be off the watch list for a while, so I told Commander Frick. He already knew from messages passed between the ship and LRF; he told me to drop off the watch list the day before my brother was operated and to consider myself available for extra duty during his convalescence. It did not make any difference to him; not only were there other telepairs but we were still radio-linked to Earth.

Two weeks after we started spacing and the day before Pat was to be cut on I was sitting in my room, wondering whether to go to the communications office and offer my valuable services in cleaning waste baskets and microfilming files or just sit tight until somebody sent for me.

I had decided on the latter, remembering Uncle Steve’s advice never to volunteer, and was letting down my bunk, when the squawker boomed: “T. P. Bartlett, special communicator, report to the Relativist!”

I hooked my bunk up while wandering if there was an Eye-Spy concealed in my room–taking down my bunk during working hours seemed always to result in my being paged. Dr. Babcock was not in the control room and they chased me out, but not before I took a quick look around–the control room was off limits to anyone who did not work there. I found him down in the computation room across from the communications office, where I would have looked in the first place if I hadn't wanted to see the control room.

I said, "T. P. Bartlett, communicator tenth grade, reporting to the Relativist as ordered."

Dr. Babcock swung around in his chair and looked at me. He was a big raw-boned man, all hands and feet, and looked more like a lumberjack than a mathematical physicist. I think he played it up–you know, elbows on the table and bad grammar on purpose. Uncle Steve said Babcock had more honorary degrees than most people had socks.

He stared at me and laughed. "Where did you get that fake military manner, son? Siddown. You're Bartlett?"

I sat. "Yes, sir."

"What's this about you and your twin going off the duty list?"

"Well, my brother is in a hospital, sir. They're going to do something to his spine tomorrow."

"Why didn't you tell me?" I didn't answer because it was so unreasonable; I wasn't even in his department. "Frick never tells me anything, the Captain never tells me anything, now you never tell me anything. I have to bang around the galley and pick up gossip to find out what's going on. I was planning on working you over tomorrow. You know that don't you?"

"Uh, no, sir."

"Of course you don't, became I never tell anybody anything either. What a way to run a ship! I should have stayed in Vienna. There's a nice town. Ever have coffee and pastries in the Ring?" He didn't wait for an answer. "Nevertheless I was going to work you and your twin over tomorrow–so now we'll have to do it today. Tell him to stand by."

"Uh; what do you want him to do, Doctor? He's already been moved to a hospital."

"Just tell him to stand by. I'm going, to calibrate you two, that's what. Figure out your index error."

"Sir?"

"Just tell him–"

So I called Pat. I hadn't spoken to him since breakfast; I wondered how he was going to take it

But he already knew. *"Yes, yes,"* he said in a tired voice. *"They're setting up apparatus in my hospital room right now. Mother made such a fuss I had to send her out."*

("Look, Pat, if you don't want to do this, whatever it is, I'll tell them nothing doing. It's an imposition.")

"What difference does it make?" he said irritably. *"I've got to sweat out the next sixteen hours somehow. Anyhow, this may be the last time we*

work together."

It was the first time he had shown that it was affecting his nerve. I said hastily, ("Don't talk that way, Pat. You're going to get well. You're going to walk again. Shucks, you'll even be able to ski if you want to.")

"Don't give me that Cheerful Charlie stuff. I'm getting more of it from the folks than I can use. It makes me want to throw up."

("Now see here, Pat–")

"Stow it, stow it! Let's get on with what they want us to do."

("Well, all right.") I spoke aloud: "He's ready, Doctor."

"Half a minute. Start your camera, O'Toole." Dr. Babcock touched something on his desk. "Commander Frick?"

"Yes, Doctor," Frick's voice answered.

"We're ready. You coming in?"

"All set here," I heard my boss answer. "We'll come in."

A moment later he entered, with Anna Horoshen. In the meantime I took a look around. One whole wall of the computation room was a computer, smaller than the one at Los Alamos but not much. The blinking lights must have meant something to somebody. Sitting at right angles to it at a console was Mr. O'Toole and above the console was a big display scope; at about one-second intervals a flash of light would peak in the center of it.

Anna nodded without speaking; I knew she must be linked. Pat said, *"Tom, you've got a girl named Anna Horoshen aboard: Is she around?"*

("Yes. Why?")

"Say hello to her for me–1 knew her in Zurich. Her sister Becky is here." He chuckled and I felt better. *"Good looking babes, aren't they? Maudie is jealous."*

Babcock said to Frick, "Tell them to stand by. First synchronizing run, starting from their end."

"Tell them, Anna,"

She nodded. I wondered why they bothered with a second telepair when they could talk through myself and Pat. I soon found out: Pat and I were too busy.

Pat was sounding out ticks like a clock; I was told to repeat them... and every time I did another peak of light flashed on the display scope. Babcock watched it, then turned me around so that I couldn't see and taped a microphone to my voice box. "Again."

Pat said, *"Stand by–"* and started ticking again. I did my best to tick right with him but it was the silliest performance possible. I heard Babcock say quietly, "That cut out the feedback and the speed-of-sound lag. I wish there were some way to measure the synaptic rate arose closely."

Frick said, “Have you talked to Dev about it?”

I went on ticking.

“A reverse run now, young lady,” Babcock said, and slipped headphones on me. I immediately heard a ticking like the ticks Pat had been sending. “That’s a spectral metronome you’re listening to, young fellow, timed by monochrome light. It was synchronized with the one your brother is using before we left Earth. Now start ticking at him,”

So I did. It had a hypnotic quality; it was easier to get into step and tick with it than it was to get out of step. It was impossible to ignore it. I began to get sleepy but I kept on ticking; I couldn’t stop.

“End of run,” Babcock announced. The ticking stopped and I rubbed my ears.

“Dr. Babcock?”

“ “Huh?”

“How can you tell one tick from another?”

“Eh? You can’t. But O’Toole can, he’s got it all down on film. Same at the other end. Don’t worry about it; just try to stay in time.”

This silliness continued for more than an hour, sometimes with Pat sending, sometimes myself. At last O’Toole looked up and said, “Fatigue factor is cooking our goose, Doc. The second differences are running all over the lot.”

“Okay, that’s all,” Babcock announced. He turned to me.

“You can thank your brother for me and sign off.”

Commander Frick and Anna left. I hung around. Presently Dr. Babcock looked up from his desk and said, “You can go, bub. Thanks.”

“Uh, Dr. Babcock?”

“Huh? Speak up.”

“Would you mind telling me what this is all about?”

He looked surprised, then said, “Sorry. I’m not used to using people instead of instruments; I forget. Okay, sit down. This is why you m-r people were brought along: for research into the nature of time.”

I stared. “Sir? I thought we were along to report back on the planets we expect to find.”

“Oh, that– Well, I suppose so, but this is much more important. There are too many people as it is; why encourage new colonies? A mathematician could solve the population problem in jig time–just shoot every other one.”

Mr. O’Toole said, without looking up, “The thing I like about you, Chief, is your big warm heart.”

“Quiet in the gallery, please. Now today, son, we have been trying to find out what time it is.”

I must have looked as puzzled as I felt for he went on, “Oh, we *know* what time it is … but too many different ways. See that?" He pointed at the display scope, still tirelessly making a peak every second. "That's the Greenwich time tick, pulled in by radio and corrected for relative speed and change of speed. Then there is the time you were hearing over the earphones; that is the time the ship runs by. Then there is the time you were getting from your brother and passing to us. We're trying to compare them all, but the trouble is that we have to have people in the circuit and, while a tenth of a second is a short time for the human nervous system, a microsecond is a measurably long time in physics. Any radar system splits up a microsecond as easily as you slice a pound of butter. So we use a lot of runs to try to even out our ignorance."

"Yes, but what do you expect to find out?"

"If I 'expected,' I wouldn't be doing it. But you might say that we are trying to find out what the word "simultaneous" means."

Mr. O'Toole looked up from the console. "If it means anything," he amended.

Dr. Babcock glanced at him. "You still here? 'If it means anything.' Son, ever since the great Doctor Einstein, 'simultaneous' and 'simultaneity' have been dirty words to physicists. We chucked the very concept, denied that it had meaning, and built up a glorious structure of theoretical physics without it. Then you mind readers came along and kicked it over. Oh, don't look guilty; every house needs a housecleaning now and then. If you folks had done your carnival stunt at just the speed of light, we would have assigned you a place in the files and forgotten you. But you rudely insisted on doing it at something enormously greater than the speed of light, which made you as welcome as a pig at a wedding. You've split us physicists into two schools, those who want to class you as a purely psychological phenomenon and no business of physics–these are the 'close your eyes and it will go away' boys–and a second school which realizes that since measurements can be made of whatever this is you do, it is therefore the business of physics to measure and include it … since physics is, above all, the trade of measuring things and assigning definite numerical values to them."

O'Toole said, "Don't wax philosophical, Chief."

"You get back to your numbers, O'Toole; you have no soul These laddies want to measure how fast you do it. They don't care how fast–they've already recovered from the blow that you do it faster than light–but they want to know exactly how fast. They can't accept the idea that you do it 'instantaneously,' for that would require them to go to a different church entirely. They want to assign a definite speed of propagation, such-and-such number of times faster than the speed of light. Then they can modify their old equations and go right on happily doing business at the old stand."

"They will," agreed O'Toole.

"Then there is a third school of thought, the right one…my own."

O'Toole, without looking up, made a rude noise.

"Is that your asthma coming back?" Babcock said anxiously. "By the way, you got any results?"

"They're still doing it in nothing flat. Measured time negative as often as positive and never greater than inherent observational error."

"You see, son? That's the correct school. Measure what happens and let the chips fly where they may."

"Hear hear!"

"Quiet, you renegade Irishman. Besides that, you m-r's give us our first real chance to check another matter. Are you familiar with the relativity transformations?"

"You mean the Einstein equations?

"Surely. You know the one for time?"

I thought hard Pat and I had taken first-year physics our freshman year; it had been quite a while. I picked up a piece of paper and wrote down what I thought it was:

[image]

"That's it," agreed Dr. Babcock. "At a relative velocity of 'v' time interval at first frame of reference equals time interval at second frame of reference multiplied by the square root of one minus the square of the relative velocity divided by the square of the speed of light. That's just the special case, of course, for constant speeds; it is more complicated for acceleration. But there has been much disagreement as to what the time equations meant, or if they meant anything."

I blurted out, "Huh? But I thought the Einstein theory had been proved?" It suddenly occurred to me that, if the relativity equations were wrong, we were going to be away a mighty long time–Tau Ceti, our first stop, was eleven lightyears from the Sun... and that was just our first one; the others were a lot farther.

But *everybody* said that once we got up near the speed of light the months would breeze past like days. The equations *said* so.

"Attend me. How do you prove that there are eggs in a bird's nest? Don't strain your gray matter: go climb the tree and find out. There is no other way. Now we are climbing the tree."

"Fine!" said O'Toole. "Go climb a tree."

"Noisy in here. One school of thought maintained that the equations simply meant that a clock would read differently if you could read it from a passing star ... which you can't... but that there was no real stretching or shrinking of time-whatever ‘real’ means. Another school pointed to the companion equations for length and mass, maintaining that the famous Michelson-Morley experiment showed that the length transformation was ‘real’ and pointing out that the increase of mass was regularly computed and used for particle-accelerator ballistics and elsewhere in nuclear physics–for example, in the torch that pushes this ship. So, they reasoned, the change in time rates must be real, because the corollary equations worked in practice. But nobody knew. You have to climb the tree and look.”

“When will we know?” I was still worrying. Staying several years, Einstein time, in the ship I had counted on. Getting killed in the course of it, the way Uncle Steve said we probably would, I refused to worry about. But dying of old age in the *Elsie* was not what I had counted on. It was a grim thought, a life sentence shut up inside these steel walls.

“When? Why, we know right now.”

“You do? What’s the answer?”

“Don’t hurry me, son. We’ve been gone a couple of weeks, at a boost of 124% of one gee; we’re up to about 9,000 miles per second now. We still haven’t come far–call it seven and a half light-hours or about 5,450,000,000 miles. It will be the better part of a year before we are crowding the speed of light. Nevertheless we have reached a sizable percentage of that speed, about five per cent; that’s enough to show. Easy to measure, with the aid of you mind readers.”

“Well, sir? Is it a real time difference? Or is it just relative?”

“You’re using the wrong words. But it’s ‘real,’ so far as the word means anything. The ratio right now is about 99.9%.”

“To put it exactly,” added Mr. O’Toole, “Bartlett’s slippage–that’s a technical term I just invented–his ‘slippage’ in time rate from that of his twin has now reached twelve parts in ten thousand.”

“So you would make me a liar for one fiftieth of one per cent?” Babcock complained. “O’Toole, why did I let you come along?”

“So you would have some one to work your arithmetic,” his assistant answered smugly.

Pat told me he did not want me around when they operated, but I came anyway. I locked myself in my room so nobody could disturb me and stuck with him. He didn’t really object; whenever I spoke he answered and the it got to the deadline the more he talked… a cheerful babble about nothing and everything. It did not fool me.

When they wheeled him into surgery, he said, *“Tom, you should see my anesthetist. Pretty as a sunny day and just lap size.”*

(“Isn’t her face covered with a mask?”)

“Well, not completely. I can see her pretty blue eyes. 1 think I’ll ask her

what she's doing tonight."

("Maudie won't like that.")

"You keep Maudie out of this; a sick man is entitled to privileges. Wait a sec, I'll ask her."

("What did she say?")

"She said, 'Nothing much,' and that I would be doing the same for a few days. But I'll get her phone number."

("Two gets you five she won't give it to you.")

"Well, I can try... uh uh! Too late, they're starting in ... Tom, you wouldn't believe this needle; it's the size of an air hose. She says she wants me to count. Okay, anything for a laugh... one ... two... three..."

Pat got up to seven and I counted with him. All the way through I kept winding up tighter and tighter to unbearable tension and fear. I knew now what he apparently had been sure of all along, that he was not coming out of it. At the count of seven he lost track but his mind did not go silent. Maybe those around the operating table thought they had him unconscious but I knew better; he was trapped inside and screaming to get out.

I called to him and he called back but we couldn't find each other. Then I was as trapped and lost and confused as he was and we groped around in the dark and the cold and the aloneness of the place where you die.

Then I felt the knife whittling at my back and I screamed.

The next thing I remember is a couple of faces floating over me. Somebody said, "I think he's coming around, Doctor." The voice did not belong to anyone; it was a long way off.

Then there was just one face and it said, "Feeling better?"

"I guess so. What happened?"

"Drink this. Here, I'll hold up your head."

When I woke up again I felt fairly wide awake and could see that I was in the ship's infirmary. Dr. Devereaux was there, looking at me. "You decided to come out of it, young fellow?"

"Out of what, Doctor? What happened?"

"I don't know precisely, but you gave a perfect clinical picture of a patient terminating in surgical shock. By the time we broke the lock on your door, you were far gone–you gave us a bad time. Can you tell me about it?"

I tried to think, then I remembered. Pat! I called him in my mind. *("Pat!* Where are you, boy?")

He didn't answer. I tried again and he still didn't answer, so I knew. I sat up and managed to choke out, "My brother ... he *died!"*

Dr. Devereaux said, "Wups! Take it easy. Lie down. He's not dead ... unless he died in the last ten minutes, which I doubt."

“But I can’t reach him! How do you know? I can’t reach him, I tell you!”

“Come down off the ceiling. Because I’ve been checking on him all morning via the m-r’s on watch. He’s resting easily under an eighth grain of hypnal, which is why you can’t raise him. I may be stupid, son–I *was* stupid, not to warn you to stay out of it–but I’ve been tinkering with the human mind long enough to figure out approximately what happened to you, given the circumstances. My only excuse is that I have never encountered such circumstances before.”

I quieted a little. It made sense that I couldn’t wake Pat if they had him under drugs. Under Dr. Devereaux’s questions I managed to tell him more or less what had happened–not perfectly, because you can’t really tell someone else what goes on inside your head. “Uh, was the operation successful, Doctor?”

“The patient came through in good shape. We’ll talk about it later. Now turn over.”

“Huh?”

“Turn over. I want to take a look at your back.”

He looked at it, then called two of his staff to see it. Presently he touched me. “Does that hurt?”

“Ouch! Uh, yes, it’s pretty tender. What’s wrong with my back, Doctor?”

“Nothing, really. But you’ve got two perfect stigmata, just matching the incisions for Macdougal’s operation ... which is the technique they used on your brother.”

“Uh, what does that mean?”

“It means that the human mind is complicated and we don’t know much about it. Now roll over and go to sleep. I’m going to keep you in bed a couple of days.”

I didn’t intend to go to sleep but I did. I was awakened by Pat calling me. *“Hey, Tom! Where are you? Snap out of it.”*

(“I’m right here. What’s the matter?”)

“Tom... I’ve got my legs back!”

I answered, (“Yeah, I know,”) and went back to sleep.

IX RELATIVES

Once Pat was over his paralysis I should have had the world by the tail, for I had everything I wanted. Somehow it did not work that way. Before he was hurt, I had known why I was down in the dumps: it was because he was going and I wasn’t. After he was hurt, I felt guilty because I was getting what I wanted through his misfortune. It didn't seem right to be happy when he was crippled–especially when his crippled condition had got me what I wanted.

So I should have been happy once he was well again.

Were you ever at a party where you were supposed to be having fun and suddenly you realized that you weren't? No reason, just no fun and the whole world gray and tasteless?

Some of the things that were putting me off my feed I could see. First there had been Dusty, but that had been cleared up. Then there had been the matter of other people, especially the electron pushers we stood watch with, calling us freaks and other names and acting as if we were. But the Captain had tromped on that, too, and when we got better acquainted people forgot about such things. One of the relativists, Janet Meers, was a lightning calculator, which made her a freak, too, but everybody took it for granted in her and after a while they took what we did for granted.

After we got out of radio range of Earth the Captain took us out from under Commander Frick and set us up as a department of our own, with "Uncle" Alfred McNeil as head of department and Rupert Hauptman as his assistant–which meant that Rupe kept the watch list while Uncle Alf was in charge of our mess table and sort of kept us in line. We liked old Unc too well to give him much trouble and if somebody did get out of line Unc would look sad and the rest of us would slap the culprit down. It worked.

I think Dr. Devereaux recommended it to the Captain. The fact was that Commander Frick resented us. He was an electrical engineer and had spent his whole life on better and better communication equipment ... then we came along and did it better and faster with no equipment at all. I don't blame him; I would have been sore, too. But we got along better with Uncle Alf.

I suppose that the *Vasco da Gama* was part of my trouble. The worst thing about space travel is that absolutely nothing happens. Consequently the biggest event in our day was the morning paper. All day long each mind reader on watch (when not busy with traffic, which wasn't much) would copy news. We got the news services free and all the features and Dusty would dress it up by copying pictures sent by his twin Rusty. The communicator on the midwatch would edit it and the m-r and the communicator on the early morning watch would print it and have it in the mess room by breakfast.

There was no limit to the amount of copy we could have; it was just a question of how much so few people could prepare. Besides Solar System news we carried ships' news, not only of the *Elsie* but of the eleven others. Everybody (except myself) knew people in the other ships. Either they had met them at Zurich, or the old spacehands, like the Captain and a lot of others, had friends and acquaintances reaching back for years.

It was mostly social news, but we enjoyed it more than news from Earth and the System, because we felt closer to the ships in the fleet, even though they were billions of miles away and getting farther by the second. When Ray Gilberti and Sumire Watanabe got married in the *Leif Ericsson,* every ship in the fleet held a celebration. When a baby was born in the *Pinta* and our Captain was named godfather, it made us all proud.

We were hooked to the *Vasco da Gama* through Cas Warner, and Miss Gamma Furtney linked us with the *Marco Polo* and the *Santa Maria* through her triplets Miss Alpha and Miss Beta, but we got news from all the ships by pass-down-the-line. Fleet news was never cut, even if dirtside news had to be. As it was, Mama O'Toole complained that if the editions got any larger, she would either have to issue clean sheets and pillow cases only once a week or engineering would have to build her another laundry just to wash newspapers. Nevertheless, the ecology department always had clean paper ready, freshly pressed, for each edition.

We even put out an occasional extra, like the time Lucille LaVonne won "Miss Solar System" and Dusty did a pic of her so perfect you would have sworn it was a photograph. We lost some paper from that as quite a number of people kept their copies for pin-ups instead of turning them back for reclamation–I did myself. I even got Dusty to autograph it. It startled him but pleased him even though he was rude about it–an artist is entitled to credit for his work, I say, even if he is a poisonous little squirt.

What I am trying in say is that the *Elsie Times* was the high point of each day and fleet news was the most important part of it.

I had not been on watch the night before; nevertheless, I was late for breakfast. When I hurried in, everybody was busy with his copy of the *Times as* usual–but nobody was eating. I sat down between Van and Prudence and said, "What's the matter? What's aching everybody?"

Pru silently handed me a copy of the *Times.*

The first page was bordered in black. There were oversize headlines: *VASCO DA GAMA LOST*

I couldn't believe it. The *Vasco was* headed out for Alpha Centauri but she wouldn't get there for another four years, Earth time; she wasn't even close to the speed of light. There was nothing to have may trouble with, out where she was. It must be a mistake.

I turned to see-story-on-page-two. There was a boxed dispatch from the Commodore in the *Santa Maria: "(Official)* At 0334 today Greenwich time TS *Vasco da Gama* (LRF 172) fell out of contact. Two special circuits were operating at the time, one Earthside and one to the *Magellan.* In both cases transmission ceased without warning in midst of message and at the same apparent instant by adjusted times. The ship contained eleven special communicators; it has not proved possible to raise any of them. It must therefore be assumed that the ship is lost, with no survivors."

The LRF dispatch merely admitted that the ship was out of contact. There was a statement by our Captain and a longer news story which included comments from other ships; I read them but the whole story was in the headlines ... the *Vasco* was gone wherever it is that ships go when they don't come back.

I suddenly realized something and looked up. Cas Warner's chair was empty. Uncle All caught my eye and said quietly, "He knows, Tom. The Captain woke him and told him soon after it happened. The only good thing about it is that he wasn't linked with his brother when it happened."

I wasn't sure that Uncle Alf had the right slant. If Pat got it, I'd want to be with him when it happened, wouldn't I? Well, I thought I would. In any case I was sure that Unc would want to be holding Sugar Pie's hand if something happened and she had to make the big jump before he did. And Cas and his brother Caleb were close; I knew that.

Later that day the Captain held memorial services and Uncle Alfred preached a short sermon and we all sang the "Prayer for Travelers." After that we pretended that there never had been a ship named the *Vasco da Gama,* but it was all pretense.

Cas moved from our table and Mama O'Toole put him to work as an assistant to her. Cas and his brother had been hotel men before LRF tapped them and Cas could be a lot of help to her; keeping a ship with two hundred people in it in ecological balance is no small job. Goodness, just raising food for two hundred people would be a big job even if it did not have to be managed so as to maintain atmospheric balance; just managing the yeast cultures and the hydroponics took all the time of nine people.

After a few weeks Cas was supervising entering and housekeeping and Mama O'Toole could give all of her time to the scientific and technical end–except that she continued to keep an eye on the cooking.

But the *Vasco da Gama* should not have made me brood; I didn't know anybody in that ship. If Cas could pull out of it and lead a normal, useful life, I certainly should not have had the mulligrubs. No, I think it was my birthday as much as anything.

The mess room had two big electric clocks in it, controlled from the relativists' computation room, and two bank-style calendars over them. When we started out they were all right together, showing Greenwich time and date. Then, as we continued to accelerate and our speed got closer to that of light, the "slippage" between *Elsie* and the Earth began to show and they got farther and farther out of phase. At first we talked about it, but presently we didn't notice the Greenwich set… for what good does it do you to know that it is now three in the morning next Wednesday at Greenwich when it is lunch time in the ship? It was like time zones and the date line back on Earth: not ordinarily important. I didn't even notice when Pat groused about the odd times of day he had to be on duty because I stood watches any time of day myself.

Consequently I was caught flatfooted when Pat woke me with a whistle in the middle of the night and shouted, *"Happy birthday!"*

("Huh? Whose?")

"Yours, dopey. Ours. What's the matter with you? Can't you count?"

("But–")

"Hold it. They are just bringing the cake in and they are going to sing "Happy Birthday." I'll echo it for you."

While they were doing so I got up and slipped on a pair of pants and went down to the mess room. It was the middle of "night" for us and there was just a standing light here. But I could see the clocks and calendars–sure enough, the Greenwich date was our birthday and figuring back zone time from Greenwich to home made it about dinner time at home.

But it wasn't my birthday. I was on the other schedule and it didn't seem right.

"Blew 'em all out, kid," Pat announced happily, *"That ought to hold us for another year. Mum wants to know if they baked a cake for you there?"*

("Tell her 'yes.' ") They hadn't, of course. But I didn't feel like explaining. Mother got jittery easily enough without trying to explain Einstein time to her. As for Pat, he ought to know better.

The folks had given Pat a new watch and he told me that there was a box of chocolates addressed to me–should he open it and pass it around? I told him to go ahead, not knowing whether to be grateful that I was remembered or to be annoyed at a "present" I couldn't possibly see or touch. After a while I told Pat that I had to get my sleep and please say good night and thank you to everybody for me. But I didn't get to sleep; I lay awake until the passageway lights came on,

The following week they did have a birthday cake for me at our table and everybody sang to me and I got a lot of pleasantly intended but useless presents–you can't give a person much aboard ship when you are eating at the same mess and drawing from the same storerooms. I stood up and thanked them when somebody hollered "Speech!" and I stayed and danced with the girls afterwards. Nevertheless it still did not seem like my birthday because it had already *been* my birthday, days earlier.

It was maybe the next day that my Uncle Steve came around and dug me out of my room. "Where you been keeping yourself, youngster?"

"Huh? Nowhere."

"That's what I thought." He settled in my chair and I lay back down on my bunk. "Every time I look for you, you aren't in sight. You aren't on watch or working all the time. Where are you?"

I didn't say anything. I had been right where I was a lot of the time, just staring at the ceiling. Uncle Steve went on, "When a man takes to crouching in a corner aboard ship, it is usually best, I've found, to let him be. Either he will pull out of it by himself, or he'll go out the airlock one day without bothering with a pressure suit. Either way, he doesn't want to be monkeyed with. But you're my sister's boy and I've got a responsibility toward you. What's wrong? You never show up for fun and games in the evenings and you go around with a long face; what's eating you?"

"There's nothing wrong with me!" I said angrily.

Uncle Steve disposed of that with a monosyllable. "Open up, kid. You haven't been right since the *Vasco* was lost. Is that the trouble? Is your nerve slipping? If it is, Doc Devereaux has synthetic courage in pills. Nobody need know you take ‘em and no need to be ashamed–everybody finds a crack in his nerve now and again. I’d hate to tell you what a repulsive form it took the first time I went into action.”

“No, I don’t think that is it.” I thought about it–maybe it was it. “Uncle Steve, what happened to the *Vasco?”*

He shrugged. “Either her torch cut loose, or they bumped into something.”

“But a torch *can’t* cut loose... can it? And there is nothing to bump into out here.”

“Correct on both counts. But suppose the torch did blow? The ship would be a pocket-sized *nova* in an umpteenth second. But I can’t think of an easier way to go. And the other way would be about as fast, near enough you would never notice. Did you ever think how much kinetic energy we have wrapped up in this bucket at this speed? Doc Babcock says that as we reach the speed of light we’ll be just a flat wave front, even though we go happily along eating mashed potatoes and gravy and never knowing the difference.”

“But we never quite reach the speed of light.”

“Doc pointed that out, too. I should have said ‘if.’ Is that what is bothering you, kid? Fretting that we might go *boom!* like the *Vasco?* If so, let me point out that almost all the ways of dying in bed are worse ... particularly if you are silly enough to die of old age–a fate I hope to avoid.”

We talked a while longer but did not get anywhere. Then be left, after threatening to dig me out if I spent more than normal sack time in my room. I suppose Uncle Steve reported me to Dr. Devereaux, although both of them claimed not.

Anyhow, Dr. Devereaux tackled me the next day, took me around to his room and sat me down and talked to me. He bad a big sloppy-comfortable stateroom; he never saw anybody in surgery.

I immediately wanted to know why he wanted to talk to me.

He opened his frog eyes wide and looked innocent. “Just happened to get around to you, Tom.” He picked up a pile of punched cards. “See these? That’s how many people I’ve had a chat with this week. I’ve got to pretend to earn my pay.”

“Well, you don’t have to waste time on me. I’m doing all right.”

“But I like to waste time, Tom. Psychology is a wonderful racket. You don’t scrub for surgery, you don’t have to stare down people’s dirty throats, you just sit and pretend to listen while somebody explains that when he was a little boy he didn’t like to play with the other little boys. Now you talk for a while. Tell me anything you want to, while I take a nap. If you talk long enough, I can get rested up from the poker party I sat in on last night and still chalk up a day’s work.”

I tried to talk and say nothing. While I was doing so, Pat called me. I told him to call hack; I was busy. Dr. Devereaux was watching my face and said suddenly, “What was on your mind then?”

I explained that it could wait; my twin wanted to talk to me.

“Hmm... Tom, tell me about your twin. I didn’t have time to get well acquainted with him in Zurich.”

Before I knew it I had told him a lot about both of us. He was remarkably easy to talk to. Twice I thought he had gone to sleep but each time I stopped, he roused himself and asked another question that got me started all over again.

Finally he said, “You know, Tom, identical twins are exceptionally interesting to psychologists–not to mention geneticists, sociologists, and biochemists. You start out from the same egg, as near alike as two organic complexes can be. Then you become two different people. Are the differences environmental? Or is there something else at work?”

I thought about this. “You mean the soul, Doctor?”

“Mmm ... ask me next Wednesday. One sometimes holds personal and private views somewhat different from one’s public and scientific opinions. Never mind. The point is that you m-r twins are interesting. I fancy that the serendipitous results of Project Lebensraum will, as usual, be far greater than the intended results.”

“The “Sarah” what, Doctor?”

“Eh? ‘Serendipitous.’ The Adjective for ‘Serendipity.’ Serendipity means that you dig for worms and strike gold. Happens all the time in science. It is the reason why ‘useless’ pure research is always so much more practical than ‘practical’ work. But let’s talk about you. I can’t help you with your problems–you have to do that yourself. But let’s kick it around and pretend that I can, so as to justify my being on the payroll. Now two things stick out like a sore thumb: the first is that you don’t like your brother.”

I started to protest but he brushed it aside. “Let me talk. Why are you sure that I am wrong? Answer: because you have been told from birth that you love him. Siblings always `love’ each other; that is a foundation of our civilization like Mom’s apple pie. People usually believe anything that they are told early and often. Probably a good thing they believe this one, because brothers and sisters often have more opportunity and more reason to hate each other than anyone else.”

“But I *like* Pat. It’s just–”

“ ‘It’s just’ what?” he insisted gently when I did not finish.

I did not answer and he went on, “It is just that you have every reason to dislike him. He has bossed you and bullied you and grabbed what he wanted. When he could not get it by a straight fight, he used your mother to work on your father to make it come his way. He even got the girl you wanted. Why should you like him? If a man were no relation-instead of being your twin brother–would you like him for doing those things to you? Or would you hate him?"

I didn't relish the taste of it. "I wasn't being fair to him, Doctor. I don't think Pat knew he was hogging things ... and I'm sure our parents never meant to play favorites. Maybe I'm just feeling sorry for myself."

"Maybe you are. Maybe there isn't a word of truth in it and you are constitutionally *unable* to see what's fair when you yourself are involved. But the point is that this is the way you do feel about it ... and you certainly would not like such a person–except that he is your twin brother, so of course you must 'love' him. The two ideas fight each other. So you will continue to be stirred up inside until you figure out which one is false and get rid of it. That's up to you."

"But... doggone it, Doctor, I do like Pat!"

"Do you? Then you had better dig out of your mind the notion that he has been handing you the dirty end of the stick all these years. But I doubt if you do. You're fond of him–we're all fond of things we are used to, old shoes, old pipes, even the devil we know is better than a strange devil. You're loyal to him. He's necessary to you and you are necessary to him. But 'like' him? It seems most improbable. On the other hand, if you could get it through your head that there is no longer any need to 'love' him, nor even to like him, then you might possibly get to like him a little for what he is. You'll certainly grow more tolerant of him, though I doubt if you will ever like him much. He's a rather unlikeable cuss."

"That's not true! Pat's always been very popular."

"Not with me. Mmm ... Tom, I cheated. I know your brother better than I let on. Neither one of you is very likeable, matter of fact, and you are very much alike. Don't take offense. I can't abide 'nice' people; 'sweetness and light' turns my stomach. I like ornery people with a good, hard core of self-interest–a lucky thing, in view of my profession. You and your brother are about equally selfish, only he is more successful at it. By the way, he likes you."

"Huh?"

"Yes. The way he would a dog that always came when called. He feels protective toward you, when it doesn't conflict with his own interests. But he's rather contemptuous of you; he considers you a weakling–and, in his book, the meek are not entitled to inherit the earth; that's for chaps like himself."

I chewed that over and began to get angry. I did not doubt that Pat felt that way about me–patronizing and willing to see to it that I got a piece of cake ... provided that he got a bigger one.

"The other thing that stands out," Dr. Devereaux went on, "is that neither you nor your brother wanted to go on this trip."

This was so manifestly untrue and unfair that I opened my mouth and left it open. Dr. Devereaux looked at me. "Yes? You were about to say?"

"Why, that's the silliest thing I ever heard, Doctor! The only real trouble Pat and I ever had was because both of us wanted to go and only one of us could."

He shook his head. "You've got it backwards. Both of you wanted to stay behind and only one of you could. Your brother won, as usual."

"No, he didn't... well, yes, he did, but the chance to go; not the other way around. And he would have, too, if it hadn't been for that accident."

" 'That accident.' Mmm ... yes." Dr. Devereaux held still, with his head dropped forward and his hands folded across his belly, for so long that I thought again that he was asleep. "Tom, I'm going to tell you something that is none of your business, because I think you need to know. I suggest that you never discuss it with your twin ... and if you do, I'll make you out a liar, net. Because it would be bad for him. Understand me?"

"Then don't tell me," I said surlily.

"Shut up and listen." He picked up a file folder. "Here is a report on your brother's operation, written in the talk we doctors use to confuse patients. You wouldn't understand it and, anyhow, it was sent sidewise, through the *Santa Maria* and in code. You want to know what they found when they opened your brother up?"

"Uh, not especially."

"There was no damage to his spinal cord of any sort."

"Huh? Are you trying to tell me that he was *faking* his legs being paralyzed? I don't believe it!"

"Easy, now. He wasn't faking. His legs *were* paralyzed. He could not possibly fake paralysis so well that a neurologist could not detect it. I examined him myself; your brother was paralyzed. But not from damage to his spinal cord–which I knew and the surgeons who operated on him knew."

"But–" I shook my head. "I guess I'm stupid."

"Aren't we all? Tom, the human mind is not simple; it is very complex. Up at the top, the conscious mind has its own ideas and desires, some of them real, some of them impressed on it by propaganda and training and the necessity for putting up a good front and cutting a fine figure to other people. Down below is the unconscious mind, blind and deaf and stupid and sly, and with–usually–a different set of desires and very different motivations. It wants its own way ... and when it doesn't get it, it raises a stink until it is satisfied. The trick in easy living is to find out what your unconscious mind really wants and give it to it on the cheapest terms possible, before it sends you through emotional bankruptcy to get its own way. You know what a psychotic is, Tom?"

"Uh... a crazy person."

"Crazy' is a word we're trying to get rid of, A psychotic is a poor wretch who has had to sell out the shop and go naked to the world to satisfy the demands of his unconscious mind. He's made a settlement, but it has ruined him. My job is to help people make settlements that won't ruin them–like a good lawyer, We never try to get them to evade the settlement, just arrange it on the best terms.

"What I'm getting at is this: your brother managed to make a settlement with his unconscious on fairly good terms, very good terms considering that he did it without professional help. His conscious mind signed a contract and his unconscious said flatly that he must not carry it out. The conflict was so deep that it would have destroyed some people. But not your brother. His unconscious mind elected to have an accident instead, one that could cause paralysis and sure enough it did–*real* paralysis, mind you; no fakery. So your brother was honorably excused from an obligation he could not carry out. Then, when it was no longer possible to go on this trip; be was operated on. The surgery merely corrected minor damage to the bones. But he was encouraged to think that his paralysis would go away–and so it did." Devereaux shrugged.

I thought about it until I was confused. This conscious and unconscious stuff–I'd studied it and passed quizzes in it ... but I didn't take any stock in it. Doc Devereaux could talk figures of speech until he was blue in the face but it didn't get around the fact that both Pat and I had wanted to go and the only reason Pat had to stay behind was because be had hurt himself in that accident. Maybe the paralysis was hysterical, maybe be had scared himself into thinking he was hurt worse than he was. But that didn't make any difference.

But Doc Devereaux talked as if the accident wasn't an accident. Well, what of it? Maybe Pat was scared green and had been too proud to show it–I still didn't think he had taken a tumble on a mountainside on purpose.

In any case, Doc was dead wrong on one thing: *I* had wanted to go. Oh, maybe I had been a little scared and I knew I had been homesick at first–but that was only natural.

("Then why are you so down in dumps, stupid?")

That wasn't Pat talking; that was me, talking to myself. Shucks, maybe it was my unconscious mind, talking out loud for once, "Doc?"

"Yes, Tom."

"You say I didn't really want to come along?"

"It looks that way."

"But you said the unconscious mind always wins. You can't have it both ways."

He sighed. "That isn't quite what I said. You were hurried into this. The unconscious is stupid and often slow; yours did not have time to work up anything as easy as a skiing accident. But it is stubborn. It's demanding that you go home ... which you can't. But it won't listen to reason. It just keeps on nagging you to give it the impossible, like a baby crying for the moon."

I shrugged. "To hear you tell it, I'm in an impossible moss."

"Don't look so danged sourpuss! Mental hygiene is a process of correcting the correctable and adjusting to the inevitable. You've got three choices."

"I didn't know I had any."

"Three. You can keep on going into a spin until your mind builds up a fantasy acceptable to your unconscious…a psychotic adjustment, what you would call 'crazy.' Or you can muddle along as you are, unhappy and not much use to yourself or your shipmates... and always with the possibility of skidding over the line. Or you can dig into your own mind, get acquainted with it, find out what it really wants, show it what it can't have and why, and strike a healthy bargain with it on the basis of what is possible. If you've got guts and gumption, you'll try the last one. It won't be easy." He waited, looking at me.

"Uh, I guess I'd better try. But how do I do it?"

"Not by moping in your room about might-have-beens, that's sure."

"My Uncle Steve–Major Lucas, I mean"–I said slowly, "told me I shouldn't do that. He wants me to stir around and associate with other people. I guess I should."

"Surely, surely. But that's not enough. You can't chin yourself out of the hole you are in just by pretending to be the life of the party. You have to get acquainted with yourself."

"Yes, sir. But *how?"*

"Well, we can't do it by having you talk about yourself every afternoon while I hold your hand. Mmm ... I suggest that you try writing down who you are and where you've been and how you got from there to here. You make it thorough enough and maybe you will begin to see 'why' as well as 'how.' Keep digging and you may find out who you are and what you want and how much of it you can get."

I must have looked baffled for he said, "Do you keep a diary?"

"Sometimes. I've got one along."

"Use it as an outline. 'The Life and Times of T. P. Bartlett, Gent.' Make it complete and try to tell the truth–all the truth."

I thought that over. Some things you don't want to tell anybody.

"Uh, I suppose you'll want to read it, Doctor?"

"Me? Heaven forbid! I get too little rest without misguided people. This is for *you,* son; you'll be writing to yourself ... only write it as if you didn't know anything about yourself and had to explain everything. Write it as if you expected to lose your memory and wanted to be sure you could pick up the strings again. Put it all down." He frowned and added grudgingly, "If you feel that you have found out something important and want a second opinion, I suppose I could squeeze in time to read part of it, at least. But I won't promise. Just write it to yourself–to the one with amnesia."

So I told him I would try... and I have. I can't see that it has done any special good (I pulled out of the slump anyhow) and there just isn't time to do the kind of job he told me to do. I've had to hurry over the last part of this because this is the first free evening I've had in a month.

But it's amazing how much you can remember when you really try.

X RELATIONS

There have been a lot of changes around the *Elsie.* For one thing we are over the hump now and backing down the other side, decelerating as fast as we boosted; we'll be at Tau Ceti in about six months, ship's time.

But I am getting ahead of myself. It has been about a year, S-time, since I started this, and about twelve years, Earth time, since we left Earth. But forget E-time; it doesn't mean anything. We've been thirteen months in the ship by S-time and a lot has happened. Pat getting married–no, that didn't happen in the ship and it's the wrong place to start.

Maybe the place to start is with another marriage, when Chet Travers married Mei-Ling Jones. It met with wide approval, except on the part of one of the engineers who was sweet on her himself. It caused us freaks and the electron pushers to bury the hatchet to have one of us marry one of them, especially when Commander Frick came down the aisle in the mess room with the bride on his arm, looking as proud and solemn as if she had been his daughter. They were a good match; Chet was not yet thirty and I figure that Mei-Ling is at least twentytwo.

But it resulted in a change in the watch list and Rupe put me on with Prudence Mathews.

I had always liked Pru without paying much attention to her. You had to look twice to know that she was pretty. But she had a way of looking up at you that made you feel important. Up to the time I started standing watches with her I had more or less left the girls alone; I guess I was "being true to Maudie." But by then I was writing this confession story for Doe Devereaux; somehow writing things down gives them finality. I said to myself, "Why not? Tom, old boy, Maudie is as definitely out of your life as if one of you were dead. But life goes on, right here in this bucket of wind."

I didn't do anything drastic; I just enjoyed Pru's company as much as possible... which turned out to be a lot.

I've heard that when the animals came aboard the *Ark* two by two, Noah separated them port and starboard. The *Elsie* isn't run that way. Chet and Mei-Ling had found it possible to get well enough acquainted to want to make it permanent. A little less than half of the crew had come aboard as married couples; the rest of us didn't have any obstacles put in our way if we had such things on our minds.

But somehow without its ever showing we were better chaperoned than is usual back dirtside. It didn't seem organized ... and yet it must have been. If somebody was saying good night a little too long in a passageway after the lights were dimmed, it would just happen that Uncle Alfred had to get up about then and shuffle down the passageway. Or maybe it would be Mama O'Toole, going to make herself a cup of chocolate "to help her get to sleep."

Or it might be the Captain. I think he had eyes in the hack of his head for everything that went on in the ship. I'm convinced that Mama O'Toole had. Or maybe Unc was actually one of those hypothetical wide-range telepaths but was too polite and too shrewd to let anybody know it.

Or maybe Doe Devereaux had us all so well analyzed those punched cards of his that he always knew which way the rabbit would jump and could send his dogs to head him off. I wouldn't put it past him.

But it was always just enough and not too much. Nobody objected to a kiss or two if somebody wanted to check on the taste; on the other hand we never had any of the scandals that pop up every now and then in almost any community. I'm sure we didn't; you can't keep such things quiet in a ship. But nobody seemed to see a little low-pressure lalligagging.

Certainly Pru and I never did anything that would arouse criticism.

Nevertheless we were taking up more and more of each other's time, both on and off watch. I wasn't serious, not in the sense of thinking about getting married; but I was serious in that it was becoming important. She began to look at me privately and a bit possessively, or maybe our hands would touch in passing over a stack of traffic and we could feel the sparks jump.

I felt fine and alive and I didn't have time to write in these memoirs. I gained four pounds and I certainly wasn't homesick.

Pru and I got in the habit of stopping off and raiding the pantry whenever we came off a night watch together. Mama O'Toole didn't mind; she left it unlocked so that anyone who wanted a snack could find one–she said this was our home, not a jail. Pru and I would make a sandwich, or concoct a creative mess, and eat and talk before we turned in. It didn't matter what we talked about; what mattered was the warm glow we shared.

We came off watch at midnight one night and the mess room was deserted; the poker players had broken up early and there wasn't even a late chess game. Pru and I went into the pantry and were just getting set to grill a yeast-cheese sandwich. The pantry is rather cramped; when Pru turned to switch on the small grill, she brushed against me:

I got a whiff of her nice, clean hair and something like fresh clover or violets. Then I put my arms around her.

She didn't make any fuss. She stopped dead for an instant, then she relaxed.

Girls are nice. They don't have any bones and I think they must be about five degrees warmer than we are, even if fever thermometers don't show it. I put my face down and she put her face up and closed her eyes and everything was wonderful

For maybe half a second she kissed me and I knew she was as much in favor of it as I was, which is as emphatic as I can put it.

Then she had broken out of my arms like a wrestler and was standing pressed against the counter across from me and looking terribly upset. Well, so was I. She wasn't looking at me; she was staring at nothing and seemed to be listening … so I knew; it was the expression she wore when she was linked–only she looked terribly unhappy too.

I said, "Pru! What's the matter?"

She did not answer; she simply started to leave. She had taken a couple of steps toward the door when I reached out and grabbed her wrist. "Hey, are you mad at me?"

She twisted away, then seemed to realize that I was still there. "I'm sorry, Tom," she said huskily. "My sister is angry."

I had never met Patience Mathews–and now I hardly wanted to. "Huh? Well, of all the silly ways to behave I–"

"My sister doesn't like you, Tom," she answered firmly, as if that explained everything. "Good night."

"But–"

"Good night, Tom."

Pru was as nice as ever at breakfast but when she passed me the rolls the sparks didn't jump, I wasn't surprised when Rupe reshuffled the watch list that day but I did not ask why. Pru didn't avoid me and she would even dance with me when there was dancing, but the fire was out and neither of us tried to light it again.

A long time later I told Van about it. I got no sympathy.

"Think you're the first one to get your finger mashed in the door? Pru is a sweet little trick, take it from Grandfather van Houten. But when Sir Galahad himself comes riding up on a white charger, he's going to have to check with Patience before he can speak to Pru... and I'll bet you the answer is 'No!' Pru is willing, in her sweet little half-witted way, but Patience won't okay anything more cozy than 'Pease Porridge Hot.'"

"I think it's a shame. Mind you, it doesn't matter to me now. But her sister is going to ruin her life."

"It's her business. Myself, I reached a compromise with my twin years ago–we beat each other's teeth in and after that we cooperated on a businesslike basis. Anyhow, how do you know that Pru isn't doing the same to Patience? Maybe Pru started it."

It didn't sour me on girls, not even on girls who had twin sisters who were mind readers, but after that I enjoyed the company of all of them. But for a while I saw more of Unc. He liked to play dominoes, then when we had finished all even up for the evening he liked to talk about Sugar Pie–and to her, of course. He would look at his big photograph of her and so would I and the three of us would talk, with Unc echoing for both of us. She really was a nice little girl and it was a lot of fun to get to know a little six-year-old girl–it's very quaint what they think about.

One night I was talking with them and looking at her picture, as always, when it occurred to me that time had passed and that Sugar Pie must have changed–they grow up fast at that age. I got a brilliant idea. "Unc, why don't you have Sugar Pie mail a new photograph to Rusty Rhodes? Then he could transmit it to Dusty and Dusty could draw you one as perfect as that one, only it would be up to date, show you what she looks like now, huh? How about it, Sugar Pie? Isn't that a good idea?"

"It isn't necessary."

I was looking at the picture and I nearly popped my fuses. For a moment it wasn't the same picture. Oh, it was the same merry little girl, but she was a little older, she was shy a front tooth, and her hair was different.

And she was alive. Not just a trukolor stereo, but alive. There's a difference.

But when I blinked it was the same old picture.

I said hoarsely, "Unc, who said, 'It isn't necessary?' You? Or Sugar Pie?"

"Why, Sugar Pie did. I echoed,"

"Yes, Unc ... but I didn't hear *you;* I heard *her."* Then I told him about the photograph.

He nodded. "Yes, that's the way she looks. She says to tell you that her tooth is coming in, however."

"Unc... there's no way to get around it. For a moment I crowded in on your private wave length." I was feeling shaky.

"I knew. So did Sugar Pie. But you didn't crowd in, son; a friend is always welcome."

I was still trying to soak it in. The implications were more mindstretching, even, than when Pat and I found out we could do it. But I didn't know what they were yet. "Uh, Uric, do you suppose we could do it again? Sugar Pie?"

"We can try."

But it didn't work... unless I heard her voice as well as Unc's when she said, "Good night, Tommie." I wasn't sure.

After I got to bed I told Pat about it. He was interested after I convinced him that it really had happened. *"This is worth digging into, old son. I'd better record it. Doc Mabel will want to kick it around."*

("Uh, wait until I check with Uncle Alf.")

"Well, all right. I guess it is his baby ... in more ways than one. Speaking of his baby, maybe I should go see her? With two of us at each end it might be easier to make it click again. Where does his niece live?"

("Uh, Johannesburg.")

"Mmm ... that's a far stretch down the road, but I'm sure the LRF would send me there if Doc Mabel got interested."

("Probably. But let me talk to Unc.")

But Unc talked to Dr. Devereaux first. They called me in and Doc wanted to try it again at once. He was as near excited as I ever saw him get. I said, "I'm willing, but I doubt if we'll got anywhere; we didn't last night. I think that once was just a fluke."

"Fluke, spook. If it can be done once, it can be done again, We've got to be clever enough to set up the proper conditions." He looked at me. "Any objection to a light dose of hypnosis?"

"Me? Why, no, sir. But I don't hypnotize easily."

"So? According to your record, Dr. Arnault found it not impossible. Just pretend I'm she."

I almost laughed in his face. I look more like Cleopatra than he looks like pretty Dr. Arnault. But I agreed to go along with the gag.

"All either of you will need is a light trance to brush distractions aside and make you receptive."

I don't know what a "light trance" is supposed to feel like. I didn't feel anything and I wasn't asleep.

But I started hearing Sugar Pie again.

I think Dr. Devereaux's interest was purely scientific; any new fact about what makes people tick could rouse him out of his chronic torpor. Uncle Alf suggested that Doc was anxious also to set up a new telepathic circuit, just in case. There was a hint in what Unc said that he realized that he himself would not last forever.

But there was a hint of more than that. Uncle Alf let me know very delicately that, if it should come to it, it was good to know that somebody he trusted would be keeping an eye on his baby. He didn't quite say it, not that baldly, so I didn't have to answer, or I would have choked up. It was just understood–and it was the finest compliment I ever received. I wasn't sure I deserved it so I decided I would just have to manage to deserve it if I ever had to pay off.

I could "talk" to Uncle Alf now, of course, as well as to Sugar Pie. But I didn't, except when all three of us were talking together; telepathy is an imposition when it isn't necessary. I never called Sugar Pie by myself, either, save for a couple of test runs for Doc Devereaux's benefit to establish that I *could* reach her without Unc's help. That took drugs; Unc would wake up from an ordinary sleep if anyone shouted on that "wave length." But otherwise I left: her alone; I had no business crowding into a little girl's mind unless she was ready and expecting company.

It was shortly after that that Pat got married.

Xl SLIPPAGE

My relations with Pat got steadily better all during that first boost, after Dr. Devereaux took me in hand. I found out, after I admitted that I despised and resented Pat, that I no longer did either one. I cured him of bothering me unnecessarily by bothering him unnecessarily–he could shut off an alarm clock but he couldn't shut off me. Then we worked out a live-and-let-live formula and got along better. Presently I found myself looking forward to whatever time we had set for checking with each other and I realized I liked him, not "again" but "at last," for I had never felt that warm toward him before.

But even while we were getting closer we were falling apart; "slippage" was catching up with us. As anyone can see from the relativity formulas, the relationship is not a straight-line one; it isn't even noticeable at the beginning but it builds up like the dickens at the other end of the scale.

At three-quarters the speed of light he complained that I was drawling, while it seemed to me that he was starting to jabber. At nine-tenths of the speed of light it was close to two for one, but we knew what was wrong now and I talked fast and he talked slow.

At 99% of c, it was seven to one and all we could do to make ourselves understood. Later that day we fell out of touch entirely.

Everybody else was having the same trouble. Sure, telepathy is instantaneous, at least the trillions of miles between us didn't cause any lag, not even like the hesitation you get in telephoning from Earth to Luna nor did the signal strength drop off. But brains are flesh and blood, and thinking takes time... and our time rates were out of gear. I was thinking so slowly (from Pat's viewpoint) that he could not slow down and stay with me; as for him, I knew from time to time that he was trying to reach me but it was just a squeal in the earphones so far as making sense was concerned.

Even Dusty Rhodes couldn't make it. His twin couldn't concentrate on a picture for the long hours necessary to let Dusty "see" it.

It was upsetting, to say the least, to all of us. Hearing voices is all right, but not when you can't tell what they are saying and can't shut them off. Maybe some of the odd cases in psychiatry weren't crazy at all; maybe the poor wretches were tuned in on a bad wave length.

Unc took it the worst at first and I sat with him all one evening while we both tried together. Then he suddenly regained his serenity; Sugar Pie was thinking about him; that he knew; so being, words weren't really necessary.

Pru was the only one who flourished; she was out from under the thumb of her sister. She got really kissed, probably for the first time in her life. No, not by me; I just happened to be wandering down for a drink at the scuttlebutt, then I backed away quietly and let the drink wait. No point in saying who it was, as it didn't mean anything–I think Pru would have kissed the Captain at that point if he had held still. Poor little Pru!

We resigned ourselves to having to wait until we slid back down closer into phase. We were still hooked ship-to-ship because the ships were accelerating to the same schedule, and there was much debate back and forth about the dilemma, one which apparently nobody had anticipated. In one way it was not important, since we would not have anything to report until we slowed down and started checking the stars we were headed for, but in another way it was: the time the *Elsie* spent at the speed of light (minus a gnat's whisker) was going to seem very short to us–but it was going to be ten solid years and a bit over to those back Earth side. As we learned later, Dr. Devereaux and his opposite numbers in the other ships and back in LRF were wondering bow many telepathic pairs they would have still functioning (if any) after a lapse of years. They had reason to worry. It had already been established that identical twins were hardly ever telepairs if they had lived apart for years–that was the other reason why most of those picked were young; most twins are separated by adult life.

But up to then, we hadn't been "separated" in Project Lebensraum. Sure, we were an unthinkable distance apart but each pair had been in daily linkage and in constant practice by being required to stand regular watches, even if there was nothing to send but the news.

But what would a few years of being out of touch do to rapport between telepartners?

This didn't bother me; I didn't know about it. I got a sort of an answer out of Mr. O'Toole which caused me to think that a couple of weeks of ship's time would put us back close enough in phase to make ourselves understood. In the meantime, no watches to stand so it wasn't all bad. I went to bed and tried to ignore the squeals inside my head.

I was awakened by Pat.

"Tom ... answer me, Tom. Can you hear me, Tom? An- ("Hey, Pat, I'm here!") I was wide awake, out of bed and standing on the floor plates, so excited I could hardly talk.

"Tom! Oh, Tom! It's good to hear you, boy-it's been two years since I was last able to raise you."

("But–") I started to argue, then shut up. It had been less than a week to me. But I would have to look at the Greenwich calendar and a check with the computation office before I could even guess how long it had been for Pat.

"Let me talk, Tom, 1 can't keep this up long. They've had me under deep hypnosis and drugs for the past six weeks and it has taken me this long to get in touch with you. They don't dare keep me under much longer."

("You mean they've got you hypped right now?")

"Of course, or I couldn't talk to you at all. Now–" His voice faded out for a second "Sorry. *They had to stop to give me another shot and an intravenous feeding. Now listen and record this schedule: Van Houten–"* He reeled off precise Greenwich times and dates, to the second, for each of us, and faded out while I was reading them back. I caught *a "So long"* that went up in pitch, then there was silence.

I pulled on pants before I went to wake the Captain but I did not stop for shoes. Then everybody was up and all the daytime lights were turned on even though it was officially night and Mama O'Toole was making coffee and everybody was talking. The relativists were elbowing each other in the computation room and Janet Meers was working out ship's time for Bernie van Houten's appointment with his twin without bothering to put it through the computer because he was first on the list.

Van failed to link with his brother and everybody got jittery and Janet Meers was in tears because somebody suggested that she had made a mistake in the relative times, working it in her head; But Dr. Babcock himself pushed her solution through the computer and checked her to nine decimals. Then he announced in a chilly tone that he would thank everyone not to criticize his staff thereafter; that was his privilege.

Gloria linked with her sister right after that and everybody felt better. The Captain sent a dispatch to the flagship through Miss Gamma and got an answer back that two other ships were back in contact, the *Nautilus* and the *Cristoforo Colombo.*

There was no more straggling up to relieve the watch and stopping to grab a bite as we passed the pantry. If the recomputed time said your opposite number would be ready to transmit at 3:17:06 and a short tick, ship's time, you were waiting for him from three o'clock on and no nonsense, with the recorder rolling and the mike in front of your lips. It was easy for us in the ship, but each one of us knew that his telepair was having to undergo both hypnosis and drastic drugging to stay with us at all–Dr. Devereaux did not seem happy about it.

Nor was there any time for idle chitchat, not with your twin having to chop maybe an hour out of his life for each word. You recorded what he sent, right the first time and no fumbles; then you transmitted what the Captain had initialed. If that left a few moments to talk, all right. Usually it did not ... which was how I got mixed up about Pat's marriage.

You see, the two weeks bracketing our changeover from boost to deceleration, during which time we reached our peak speed, amounted to about ten years Earthside. That's 250 to 1 on the average. But it wasn't all average; at the middle of that period the slippage was much greater, I asked Mr. O'Toole what the maximum was and he just shook his head. There was no way to measure it, he told me, and the probable errors were larger than the infinitesimal values he was working with.

"Let's put it this way," he finished. "I'm glad there is no hay fever in this ship, because one hard sneeze would push us over the edge."

He was joking, for, as Janet Meers pointed out, as our speed approached the speed of light, our mass approached infinity.

But we fell out of phase again for a whole day.

At the end of one of those peak "watches" (they were never more than a couple of minutes long, S-time) Pat told me that he and Maudie were going to get married. Then he was gone before I could congratulate him. I started to tell him that I thought Maudie was a little young and wasn't he rushing things and missed my chance. He was off our band.

I was not exactly jealous. I examined myself and decided that I was not when I found out that I could not remember what Maudie looked like. Oh, I knew what she looked like–blonde, and a little snub nose with a tendency to get freckles across it in the summertime. But I couldn't call up her face the way I could Pru's face, or Janet's. All I felt was a little left out of things.

I did remember to check on the Greenwich, getting Janet to relate it back to the exact time of my last watch. Then I saw that I bad been foolish to criticize. Pat was twentythree and Maudie was twenty-one, almost twentytwo.

I did manage to say, "Congratulations," on my next linkage but Pat did not have a chance to answer. Instead he answered on the next. "Thanks for the congratulations. We've named her after Mother but I think she is going to look like Maudie."

This flabbergasted me. I had to ask for Janet's help again and found that everything was all right–I mean, when a couple has been married two years a baby girl is hardly a surprise, is it? Except to me.

All in all, I had to make quite a few readjustments those two weeks. At the beginning Pat and I were the same age, except for an inconsequential slippage. At the end of that period (I figure the end as being the time when it was no longer necessary to use extreme measures to let us telepairs talk) my twin was more than eleven years older than I was and had a daughter seven years old.

I stopped thinking about Maudie as a girl, certainly not as one I had been sweet on. I decided that she was probably getting fat and sloppy and very, very domestic–she never could resist that second chocolate éclair. As a matter of fact; Pat and I had grown very far apart, for we had little in common now. The minor gossip of the ship, so important to me, bored him; on the other hand, I couldn't get excited about his flexible construction units and penalty dates. We still telecommunicated satisfactorily but it was like two strangers using a telephone. I was sorry, for I had grown to like him before he slipped away from me.

But I did want to see my niece. Knowing Sugar Pie had taught me that baby girls are more fun than puppies and even cuter than kittens. I remembered the idea I had had about Sugar Pie and braced Dusty on the subject.

He agreed to do it; Dusty can't turn down a chance to show how well he can draw. Besides, he had mellowed, for him; he no longer snarled when you tried to pet him even though it might be years before he would learn to sit up and beg.

Dusty turned out a beautiful picture. All Baby Molly lacked was little wings to make her a cherub. I could see a resemblance to myself–to her father, that is. "Dusty, this is a beautiful picture. Is it a good likeness?"

He bristled. "How should I know? But if there is a micron's s difference, or a shade or tone off that you could pick up with a spectrophotometer, from the pic your brother mailed to my brother, I'll eat it! But how do I know how the proud parents had the thing prettied up?"

"Sorry, sorry! It's a swell picture. I wish there were some way I could pay you."

"Don't stay awake nights; I'll think of something. My services come high."

I took down my pic of Lucille LaVonne and put Molly in her place. I didn't throw away the one of Lucille, though.

It was a couple of months later that I found out that Dr. Devereaux had seen entirely different possibilities in my being able to use the "wave length" of Uncle Alf and Sugar Pie from the obvious ones I had seen. I had continued to talk with both of them, though not as often as I had at first. Sugar Pie was a young lady now, almost eighteen, in normal school at Witwatersrand and already started practice teaching. Nobody but Unc and I called her "Sugar Pie" and the idea that I might someday substitute for Unc was forgotten–at the rate we were shifting around pretty soon *she* could bring me up.

But Doe Devereaux had not forgotten the matter. However the negotiations had been conducted by him with LRF without consulting me. Apparently Pat had been told to keep it to himself until they were ready to try it, for the first I knew of it was when I told him to stand by to record some routine traffic (we were back on regular watches by then). *"Skip it, old son,"* he said. *"Pass the traffic to the next victim. You and I are going to try something fresh."*

("What?")

"LRF orders, all the way down from the top. Molly has an interim research contract all of her own, just like you and I had."

("Huh? She's not a twin.")

"Let me count her. No, there's just one of her–though she sometimes seems like an entire herd of wild elephants. But she's here, and she wants to say hello to Uncle Tom."

("Oh, fine. Hello, Molly.")

"Hello, Uncle Tom."

I almost jumped out of my skin. I had caught it right off, with no fumbling. ("Hey, who was that? Say that again!")

"Hello, Uncle Tom." She giggled. ``*I've got a new hair bow."*

I gulped. ("I'll bet you look mighty cute in it, honey. I wish I could see you. Pat! When did this happen?")

"On and off, for the past ten weeks. It took some tough sessions with Dr. Mabel to make it click. By the way, it took some tougher sessions with, uh, the former Miss Kouric before she would agree to let us try it."

"He means Mommy," Molly told me in a conspirator's whisper. *"She*

didn’t like it. But I do, Uncle Tom. I think it’s nice.”

“I’ve got no privacy from either one of them,” Pat complained. *“Look, Tom, this is just a test run and I’m signing off. I’ve got to get the terror back to her mother.”*

“She’s going to make me take a nap,” Molly agreed in a resigned voice, ``*and I’m too old for naps. Good-by, Uncle Tom. I love you.”*

(“I love you, Molly.”)

I turned around and Dr. Devereaux and the Captain were standing behind me, ears flapping. “How did it go?” Dr. Devereaux demanded, eagerly–for him.

I tried to keep my face straight. “Satisfactorily. Perfect reception.” ....

“The kid, too?”

“Why, yes, sir. Did you expect something else?”

He let out a long breath. “Son, if you weren’t needed, I’d beat your brains out with an old phone list.”

I think Baby Molly and I were the first secondary communication team in the fleet. We were not the last. The LRF, proceeding on a hypothesis suggested by the case of Uncle Alfred and Sugar Pie, assumed that it was possible to form a new team where the potential new member was very young and intimately associated with an adult member of an old team. It worked in some eases. In other cases it could not even be tried because no child was available.

Pat and Maude had a second baby girl just before we reached the Tau Ceti system. Maudie put her foot down with respect to Lynette; she said two freaks in her family were enough.

XII TAU CETI

By the time we were a few light-hours from Tan Ceil we knew that we had not drawn a blank; by stereo and doppler-stereo Harry Gates had photographed half a dozen planets. Harry was not only senior planetologist; he was boss of the research department. I suppose he had enough degrees to string like beads, but I called him “Harry” because everybody did. He was not the sort you call “Doctor”; he was eager and seemed younger than he was.

To Harry the universe was a complicated toy somebody had given him; he wanted to take it apart and see what made it go. He was delighted with it and willing to discuss it with anybody at any time. I got acquainted with him in the bottle-washing business because Harry didn’t treat lab assistants like robots; he treated them like people and did not mind that he knew so much more than they did–he even seemed to think that he could learn something from them.

How he found time to marry Barbara Kuiper I don't know, but Barbara was a torch watchstander, so it probably started as a discussion of physics and drifted over into biology and sociology; Harry was interested in everything. But he didn't find time to he around the night their first baby was born, as that was the night he photographed the planet he named Constance, after the baby. There was objection to this, because everybody wanted to name it, but the Captain decided that the ancient rule applied: finders of astronomical objects were entitled to name them.

Finding Constance was not an accident. (I mean the planet, not the baby; the baby wasn't lost.) Harry wanted a planet about fifty to fifty-one million miles from Tau, or perhaps I should say that the LRF wanted one of that distance. You see, while Tau Ceti is a close relative of the Sun, by spectral types, Tau is smaller and gives off only about threetenths as much sunshine–so, by the same old tired inverse square law you use to plan the lights for a living room or to arrange a photoflash picture, a planet fifty million miles from Tau would catch the same amount of sunlight as a planet ninety-three million miles from Sol, which is where Earth sits. We weren't looking for just any planet, or we would have stayed home in the Solar System; we wanted a reasonable facsimile of Earth or it would not he worth colonizing.

If you go up on your roof on a dear night, the stars look so plentiful you would think that planets very much like Earth must he as common as eggs in a hen yard. Well, they are: Harry estimates that there arc between a hundred thousand and a hundred million of them in our own Milky Way-and you can multiply that figure by anything you like for the whole universe.

The hitch is that they aren't conveniently at hand. Tau Ceti was only eleven lightyears from Earth; most stars in our own Galaxy average more like fifty thousand lightyears from Earth. Even the Long Range Foundation did not think in those terms; unless a star was within a hundred lightyears or so it was silly to think of colonizing it even with torchships. Sure, a torchship can go as far as necessary, even across the Galaxy–but who is going to he interested in receiving its real estate reports after a couple of ice ages have come and gone? The population problem would he solved one way or another long before then ... maybe the way the Kilkenny cats solved theirs.

But there are only fifteen-hundred-odd stars within a hundred lightyears of Earth and only about a hundred and sixty of these are of the same general spectral type as the Sun. Project Lebensraum hoped to check not more than half of these, say seventy-five at the outside–less since we had lost the *Vasco da Gama.*

If even one real Earth-type planet was turned up in the search, the project would pay off. But there was no certainty that it would. A Sol-type star might not have an Earth-type planet; a planet might be too close to the fire, or too far, or too small to hold an atmosphere, or too heavy for humanity's fallen arches, or just too short on the H_20 that figures into everything we do.

Or it might be populated by some rough characters with notions about finders-keepers.

The Vasco da Gama had had the best chance to find the first Earth-type planet as the star she had been beading for, Alpha Centauri Able, is the *only* star in this part of the world which really is a twin of the Sun. (Able's companion, Alpha Centauri Baker, is a different sort, spectral type K.) We had the next best chance, even though Tau Ceti is less like the Sun than is Alpha Centauri-B, for the next closest G-type is about thirteen light years from Earth ... which gave us a two-year edge over the *Magellan* and nearly four over the *Nautilus.*

Provided we found anything, that is. You can imagine how jubilant we were when Tau Ceti turned out to have pay dirt.

Harry was jubilant, too, but fur the wrong reasons. I had wandered into the observatory, hoping to get a sight of the sky–one of the *Elsie's* shortcomings was that it was almost impossible to see out–when he grabbed me and said, "Look at this, pal!"

I looked at it. It was a sheet of paper with figures on it; it could have been Mama O'Toole's crop-rotation schedule.

"What is it?"

"Can't you read? It's Bodes Law, that's what it is!"

I thought back. Let me see…no, that was Ohm's Law–then I remembered; Bode's Law was a simple geometrical progression that described the distances of the Solar planets from the Sun. Nobody had ever been able to find a reason for it and it didn't work well in some cases, though I seemed to remember that Neptune, or maybe Pluto, had been discovered by calculations that made use of it. It looked like an accidental relationship.

"What of it?" I asked.

"'What of it?' the man says! Good grief! This is the most important thing since Newton got conked with the apple."

"Maybe so, Harry, but I m a little slow today. I thought Bode's Law was just an accident. Why couldn't it be an accident here, too?"

"Accident! Look, Tom, if you roll a seven once, that's an accident. When you roll a seven eight hundred times in a row, somebody has loaded the dice."

"But this is only twice."

"It's not the same thing. Get me a big enough sheet of paper and I'll write down the number of zeros it takes to describe how unlikely this 'accident' is." He looked thoughtful. "Tommie, old friend, this is going to be the key that unlocks how planets are made. They'll bury us right alongside Galileo for this. Mmm ... Tom, we can't afford to spend much time in this neighborhood; we've got to get out and take a look at the Beta Hydri system and make sure it checks the same way–just to convince the mossbacks back Earthside, for it will, it will! I gotta go tell the Captain we'll have to change the schedule." He stuffed the paper in a pocket and hurried away. I looked around but the anti–radiation shutters were over the observatory ports; I didn't get to see out.

Naturally the Captain did not change the schedule; we were out there looking for farm land, not trying to unscrew the inscrutable. A few weeks later we were in orbit around Constance. It put us into free-fall for the first time during the trip, for we had not even been so during acceleration–deceleration changeover but had done it in a skew path instead; chief engineers don't like to shut a torch down unless there is time for an overhaul before starting up again–there was the case of the *Peter the Great* who shut hers off, couldn't light up again, and fell into the Sun.

I didn't like free-fall. But it's all right if you don't overload your stomach.

Harry did not seem disappointed. He had a whole new planet to play with, so he tabled Bode's Law and got busy. We stayed in orbit, a thousand miles up, while research found out everything possible about Connie without actually touching it: direct visual search, radiation survey, absorption-spectra of her atmosphere. She had two moons, one a nice size, though smaller than Luna, so they were able to measure her surface gravity exactly.

She certainly looked like a home away from home. Commander Frick had his boys and girls set up a relay tank in the mess room, with color and exaggerated stereo, so that we all could see. Connie looked like the pictures they show of Earth from space stations, green and blue and brown and half covered with clouds and wearing polar ice like skullcaps. Her air pressure was lower than ours but her oxygen ratio was higher; we could breathe it. Absorption spectra showed higher carbon dioxide but not as high as Earth had during the Coal Age.

She was smaller but had a little more land area than Earth; her oceans were smaller. Every dispatch back to Earth carried good news and I even managed to get Pat's mind off his profit-and-loss for a while ... he had incorporated us as "Bartlett Brothers, Inc." and seemed to expect me to be interested in the bookkeeping simply because my accumulated LRF salary had gone into the capitalization. Shucks, I hadn't touched money for so long I had forgotten anybody used the stuff.

Naturally our first effort was to find out if anybody was already in occupation ... intelligent animal life I mean, capable of using tools, building things, and organizing. If there was, we were under orders to scoot out of there without landing, find fuel somewhere else in that system, and let a later party attempt to set up friendly relations; the LRF did not want to repeat the horrible mistake that had been made with Mars.

But the electromagnetic spectrum showed nothing at all, from gamma radiation right up to the longest radio wavelengths. If there were people down there, they didn't use radio and they didn't show city lights and they didn't have atomic power. Nor did they have aircraft, nor roads, nor traffic on the surface of their oceans, nor anything that looked like cities. So we moved down just outside the atmosphere in an "orange slice" pole-to-pole orbit that let us patrol the whole surface, a new sector each half turn.

Then we searched visually, by photography, and by radar. We didn't miss anything more conspicuous than a beaver dam, I'm sure. No cities, no houses, no roads, no bridges, no ships, nobody home; Oh, animals, surely–we could see herds gazing on the plains and we got lesser glimpses of other things. But it looked like a squatter's paradise.

The Captain sent a dispatch: "I am preparing to land."

I promptly volunteered for the reconnaissance party. First I braced my uncle Major Lucas to let me join his guard. He told me to go roll my hoop. "If you think I have any use for an untrained recruit, you're crazier than you apparently think I am. If you wanted to soldier, you should have thought of it as soon as we torched off."

"But you've got men from all the departments in your guard."

"Every one of 'em trained soldiers. Seriously, Tom, I can't afford it. I need men who will protect *me;* not somebody so green I'll have to protect him. Sorry."

So I tackled Harry Gates to let me join the scientific party the ship's guard would protect. He said, "Certainly, why not? Plenty of dirty work that my gang of prima donnas won't want to do. You can start by checking this inventory."

So I checked while he counted. Presently he said, "How does it feel to be a little green man in a flying saucer?"

"What?"

"An oofoe. We're an oofoe, do you realize that?"

I finally understood him–an U.F.O., an "unidentified flying object." There were accounts of the U.F.O. hysteria in all the histories of space flight. "I suppose we *are an* U.F.O., sort of."

"It's exactly what we are. The U.F.O.'s were survey ships, just as we are. They looked us over, didn't like what they saw, and went away. If they hadn't found Earth crawling with hostile natives, they would have landed and set up housekeeping, just as we are going to do."

"Harry, do you *really* believe the U.F.O.'s were anything but imagination or mistakes in reporting? I thought that theory was exploded long ago."

"Take another look at the evidence, Tom. There was *something* going on up in our sky shortly before we took up space jumping ourselves. Sure, most of the reports were phonies. But some weren't. You have to believe evidence when you have it in front of you, or else the universe is just too fantastic. Surely you don't think that human beings are the only ones who ever built star ships?"

"Well ... maybe not. But if somebody else has, why haven't they visited us long ago?"

"Simple arithmetic, pal; it's a big universe and we're just one small corner of it. Or maybe they did. That's my own notion; they surveyed us and Earth wasn't what they wanted–maybe us, maybe the climate. So the U.F.O.'s went away." He considered it. "Maybe they landed just long enough to fuel."

That was all I got out of my tenure as a member of the scientific party; when Harry submitted my name an his list, the Captain drew a line through it. "No special communicators will leave the ship."

That settled it; the Captain had a will of iron. Van got to go, as his brother had been killed in an accident while we were at peak–so I called Pat and told him about Van and suggested that Pat drop dead. He didn't see anything funny in it.

The *Elsie* landed in ocean comfortably deep, then they used the auxiliaries to bring her close to the shore. She floated high out of the water, as two-thirds of her tanks were empty, burned up, the water completely disintegrated in boosting us first up to the speed of light, then backing us down again. The engineers were already overhauling her torch before we reached final anchorage. So far as I know, none of them volunteered for the landing party; I think that to most of the engineers the stop on Constance was just a chance to pick up more boost mass and take care of repairs and overhauls they had been unable to do while underway. They didn't care where they were or where they were going so long as the torch worked and all the machinery ticked. Dr. Devereaux told me that the Staff Metallurgist had been out to Pluto six times and had never set foot on any planet but Earth.

"Is that normal?" I asked, thinking how fussy Doc had been about everybody else, including me.

"For his breed of cat, it's robust mental health. Any other breed I would lock up and feed through the keyhole."

Sam Rojas was as annoyed as I was at the discrimination against us telepaths; he had counted on planting his feet on strange soil, like Balboa and Columbus and Lundy. He came around to see me about it. “Tom, are you going to stand for it?”

“Well, I don’t want to–but what can we *do?*

“I’ve been talking to some of the others. It’s simple. We don’t.”

“We don’t what?”

“Mmm ... we just don’t. Tom, ever since we slowed down, I’ve detected a falling off in my telepathic ability. It seems to be affecting all of us–those I’ve talked to. How about yourself?”

“Why, I haven’t–”

“Think hard,” he interrupted. “Surely you’ve noticed it. Why, I doubt if I could raise my twin right now. It must have something to do with where we are ... maybe there is something odd about the radiation of Tau Ceti, or something. Or maybe it comes from Connie. Who knows? And, for that matter, who can check on us?”

I began to get the pattern. I didn’t answer, because it was a tempting idea.

“If we can’t communicate,” he went on, “we ought to be useful for something else ... like the landing party, for instance. Once we are out of range of this mysterious influence probably we would be able to make our reports back to Earth all right. Or maybe it would turn out that some of the girls who didn’t want to go with the landing party could manage to get in touch with Earth and carry the reports ... provided us freaks weren’t discriminated against.”

“It’s an idea,” I admitted.

“Think about it. You’ll find your special talent getting weaker and weaker. Me, I’m stone deaf already.” He went away.

I toyed with the idea. I knew the Captain would recognize a strike when he saw one ... but what could he do? Call us all liars and hang us by our thumbs until we gave in? How could he be certain that we hadn’t all gone sour as m-r’s? The answer was that he could not be certain; nobody but a mind reader knows what it feels like, nobody but the mind reader himself can tell that he is doing it. When we slipped out of contact at peak he hadn’t doubted us, he had just accepted it. He would have to accept it now, no matter what he thought.

For he had to have us; we were indispensable.

Dad used to he arbitration representative in his guild local; I remembered his saying once that the only strike worth calling was one in which the workers were so badly needed that the strike would be won before a walkout. That was the pinch we had the Captain in; he had to have us. No strikebreakers closer than eleven lightyears. He wouldn’t dare get rough with us.

Except that any one of us could break the strike. Let’s see–Van was out of it and so was Cas Warner; they were no longer telepaired, their twins were dead. Pru's sister Patience was still alive, but that telepair had never been mended after peak–her sister had refused the risky drugs and hypnosis routine and they never got back into rapport. Miss Gamma did not count, because the ships her two sisters were in were still peaking, so we were cut off from sidewise relay back to Earth until one of them decelerated. Not counting Sam and myself, whom did that leave? And could they be counted on? There was Rupe, Gloria, Anna, and Dusty ... and Unc of course. And Mei-Ling.

Yes, they were solid. Making us feel that we were freaks when we first came aboard had consolidated us, Even if one or two didn't feel right about it, nobody would let the others down. Not even Mei-Ling who was married to an outsider. It would work. If Sam could line them up.

I wanted to go dirtside the worst way…and maybe this was the worst way, but I still wanted to.

Just the same, there was something sneaky about it, like a kid spending his Sunday School collection money.

Sam had until noon the next day to get it lined up, because we were down to one watch a day. A continuous communication watch was not necessary and them was more ship's work to do now that we were getting ready to explore. I tabled the matter and went down to tag the rats that would he used by the scientific survey.

But I did not have to wait until the following day; Unc called us together that evening and we crowded into his room–all but Miss Gamma and Van and Pru and Cas. Unc looked around, looking horsefaced and sad, and said he was sorry we couldn't all sit down but he wouldn't keep us long. Then he started a meandering speech about how he thought of us all as his children and he had grown to love us and we would always be his children, no matter what. Then he started talking about the dignity of being a human being.

"A man pays his bills, keeps himself clean, respects other people, and keeps his word. He gets no credit for this; he has to do this much just to stay even with himself. A ticket to heaven comes higher."

He paused and added, "Especially he keeps his promises." He looked around and added, "That's all I had to say. Oh, I might as well make one announcement while we are here. Rupe has had to shift the watch list around a little bit." He picked out Sam Rojas with his eyes. "Sam, I want you to take next watch, tomorrow noon. Will you do it?"

There wasn't a sound for about three heart heats. Then Sam said slowly, "Why, I guess so, Unc, if you want me to."

"I'd he much obliged, Sam. One way and another, I don't want to put anybody else on that watch…and I wouldn't feel like standing it myself if you couldn't do it. I guess I would just have to tell the

Captain there wasn't anybody available. So I'm pleased that you'll do it."

"Uh, why, sure, Unc. Don't worry about it,"

And that was the end of the strike.

Unc didn't let us go quite yet. "I thought I'd tell you about the change in the watch list while I had you here and save Rupe from having to take it around to have you initial it. But I called you together to ask you about something else. The landing party will be leaving the ship before long. Nice as Constance looks, I understand that it will he risky ... diseases that we don't know about; animals that might turn out to he deadly in ways we didn't expect, almost anything. It occurred to me that we might be able to help. We could send one of us with the landing party and keep one of us on watch in the ship–and we could arrange for their telepairs to relay by telephone. That way we'd always be in touch with the landing party, even if radios broke down or no matter what. It would be a lot of extra work and no glory…but it would be worth it if it saved the life of one shipmate."

Sam said suddenly, "Who are you figuring on to go with the landing party, Unc?"

"Why, I don't know. It isn't expected of us and we don't rate special-hazard pay, so I wouldn't feel like *ordering* anybody–I doubt if the Captain would back me up. But I was hoping for enough volunteers so that we could rotate the dirtside watch." He blinked and looked unsure of himself. "But nobody is expected to volunteer. I guess you had better let me know privately. "

He didn't have to wait; we all volunteered. Even Mei-Ling did and then got mad and cried when Unc pointed out gently that she had better have her husband's consent–which she wasn't going to get; the Travers family was expecting a third.

Unc tackled the Captain the next morning. I wanted to hang around and hear the outcome but there was too much work to do. I was surprised, a half hour later, to be paged by speaker down in the lab; I washed my hands and hurried up to the Old Man's cabin.

Unc was there, looking glum, and the Captain was looking stern. I tried to call Unc on the Sugar-Pie band, to find out where things stood, but for once he ignored me. The Captain looked at me coldly and said, "Bartlett, Mr. McNeil has proposed a plan whereby the people in your department want to help out in the dirtside survey. I'll tell you right off that I have turned it down. The offer is appreciated–but I have no more intention of risking people in your special category in such duty than I would approve of modifying the ship's torch to sterilize the dinner dishes. First things first!"

He drummed on his desk. "Nevertheless, the suggestion has merit.

I won't risk your whole department ...but I might risk one special communicator to increase the safeguards for the landing party. Now it occurred in me that we have one sidewise pair right in this ship, without having to relay through Earth. You and Mr. McNeil. Well? What have you to say?"

I started to say, "Sure!"–then thought frantically. If I got to go after all that had happened, Sam was going to take a very dark view of it...and so was everybody. They might think I had framed it.

"Well? Speak up!"

Doggone, no matter what they thought, it wasn't a thing you could refuse. "Captain, you know perfectly well I volunteered for the landing party several days ago."

"So you did. All right, I'll take your consent for granted. But you misunderstood me. You aren't going; that will he Mr. McNeil's job. You'll stay here and keep in touch with him."

I was so surprised that I almost missed the next thing the Captain said. I shot a remark to Unc privately: ("What's this, Unc? Don't you know that all of them will think you swindled them?")

This time he answered me, distress in his voice: *"I know it, son. He took me by surprise."*

("Well, what are you going to do?")

"I don't know. I'm wrong both ways."

Sugar Pie suddenly cut in with, *"Hey! What are you two fussing about?"*

Unc said gently: *"Go away, honey. This is man talk."*

"Well!" But she didn't interrupt again. Perhaps she listened.

The Captain was saying: "–in any doubly-manned position, we will never risk the younger when the older can serve.

That is standard and applies as much to Captain Urqhardt and myself as it does to any other two. The mission comes first. Bartlett, your expected usefulness is at least forty years longer than that of Mr. McNeil. Therefore he must be preferred for a risk task. Very well, gentlemen. You'll receive instructions later."

("Unc–what are you going to tell Sam? Maybe *you* agree–I don't!")

"Don't joggle my elbow, son." He went on aloud: "No, Captain."

The Captain stared. "Why, you old scoundrel! Are you that fond of your skin?"

Unc faced him right back. "It's the only one I have, Captain. But that doesn't have anything to do with the case. And maybe you were a little hasty in calling me names."

"Eh?" The Captain turned red. "I'm sorry, McNeil. I take that back. But I think you owe me an explanation for your attitude."

"I'm going to give it, sir. We're old men, both of us. I can get along without setting foot on this planet and so can you. But it looks different to young people. You know perfectly well that my people volunteered for the landing party not because they are angels, not scientists, not philanthropists…but because they are aching to go ashore. You know that; you told me as much, not ten minutes ago. If you are honest with yourself, you know that most of these children would never have signed up for this trip if they had suspected that they were to be locked up, never permitted to have what they call an "adventure.' They didn't sign up for money; they signed up for the far horizons. Now you rob them of their reasonable expectations."

The Captain looked grim. He clenched end unclenched a fist, then said, "There may be something in what you say. But I must make the decisions; I can't delegate that. My decision stands. You go and Bartlett stays."

I said: ("Tell him he won't get a darn' message through!")

Unc didn't answer me. "I'm afraid not, Captain. This is a volunteer job…and I'm not volunteering."

The Captain said slowly, "I'm not sure that volunteering is necessary. My authority to define a man's duty is broad. I rather think you are refusing duty."

"Not so; Captain. I didn't say I wouldn't take your orders; I just said I was not volunteering. But I'd ask for written orders, I think, and I would endorse them: 'Accepted under protest,' and ask to have a copy transmitted to the Foundation. I don't volunteer."

"But–confound it, man! You volunteered with the rest. That's what you came in here for. And I picked you."

Unc shook his head. "Not quite, Captain. We volunteered as a group. You turned us down as a group. If I gave you the impression that I was volunteering, any other way, I am sorry ... but that's how it is. Now if you will excuse me, sir, I'll go back and tell my people you won't have us."

The Captain turned pink again. Then he suddenly started to roar with laughter. He jumped up and put his arm around Unc's narrow shoulders. "You old scoundrel! You *are* an old scoundrel, a mutinous blackhearted scoundrel. You make me long for the days of bread-and-water and the rope's end. Now sit back down and we'll work this out. Bartlett, you can go,"

I left, reluctantly, and then stayed away from the other freaks because I didn't want to answer questions. But Unc was thoughtful; he called me, mind to mind, as soon as he was out of the Captain's cabin and told me the upshot. It was a compromise. He and I and Rupe and Sam would rotate, with the first trick (considered to be the most dangerous) to be his. The girls would take the shipside watch, with Dusty classed with them because of age. But a bone was thrown to them: once medicine and research classed the planet as safe, they would be allowed sightseeing, one at a time. *"I had to twist his arm on that part,"* Unc admitted, *"but he agreed."*

Then it turned out to be an anticlimax; Connie was about as dangerous as Kansas. Before any human went outside the ship other than encased in a quarantine suit we exposed rats and canaries and hamsters to natural atmosphere; they loved it. When the first party went ashore, still in quarantine suits but breathing Connie's air after it had passed through electrostatic precipitators, two more experimental animals went with them–Bernhard van Houten and Percival the Pig.

Van had been down in the dumps ever since his twin was killed; he volunteered and I think Dr. Devereaux urged the Captain to let him. Somebody had to do it; you can make all the microscopic and chemical tests you like–the day comes when a living man has to expose his. skin to a planet to find out if it is friendly. As Dr. Babcock says, eventually you must climb the tree. So Van went ashore without a quarantine suit, wearing shorts and shirt and shoes and looking like a scoutmaster.

Percival the Pig did not volunteer, but he thought it was a picnic. He was penned in natural bush and allowed to forage, eating anything from Connie's soil that he thought was fit to eat. A pig has advantages as an experimental animal; he eats anything, just as rats and men do, and I understand that his metabolism is much like ours–pigs even catch many of the same diseases. If Percival prospered, it was almost certain that we would, particularly as Percy had not been given the inoculations that we had, not even the wide-spectrum G.A.R. serum which is supposed to give some protection even against diseases mankind has never encountered before.

Percy got fat, eating anything and drinking brook water, Van got a sunburn and then tanned. Both were healthy and the pioneer party took off their quarantine suits. Then almost everybody (even Percy) came down with a three-day fever and a touch of diarrhea, but everybody recovered and nobody caught it twice.

They rotated after that and all but Uncle Steve and Harry and certain ones whom they picked swapped with someone in the ship. Half of the second party were inoculated with serum made from the blood of those who bad recovered from three-day fever; most of these did not catch it. But the ones who returned were not allowed back in the ship at once; they were quarantined on a temporary deck rigged above the top bulge of the *Elsie.*

I don't mean to say that the planet was just like a city park–you can get killed, even in Kansas. There was a big, lizardlike carnivore who was no bargain. One of those got Lefty Gomez the first time our people ran into one and the beast would have killed at least two more if Lefty had been the kind of man who insists on living forever. I would never have figured Lefty as a hero–he was assistant pastry cook and dry-stores keeper back in the ship–but Uncle Steve says that ultimate courage is the commonest human virtue and that seven out of ten are Medal of Honor men, given the circumstances.

Maybe so. I must be one of the other three. I don't think I would have stood my ground and kept poking away at the thing's eyes, armed only with a campfire spit.

But *tyrannosaurus ceti* was not dangerous enough to give the planet a down check, once we knew he was there and what he was. Any big cat would have been much more dangerous, because cats are smart and he was stupid. You had to shoot first, but an explosive bullet made him lie down and be a rug. He had no real defense against men and someday men would exterminate him.

The shore party camped within sight of the ship on the edge of beautiful Babcock Bay, where we were anchored. The two helicopters patrolled each day, always together so that one could rescue the men in the other if it went down, and never more than a few hundred miles from base. Patrols on foot never went more than ten miles from base; we weren't trying to conquer the country, but simply trying to find out if men could conquer and hold it. They could…at least around Babcock Bay…and where men can get a toe hold they usually hang on.

My turn did not come until the fourth rotation and by then they were even letting women go ashore; the worry part was over.

The oddest thing about being outdoors was the sensation of weather; I had been in airconditioning for two years and I had forgotten rain and wind and sunshine in your face. Aboard the *Elsie* the engineer on watch used to cycle the temperature and humidity and ozone content on a random schedule, which was supposed to be good for our metabolisms. But it wasn't weather; it was more like kissing your sister.

The first drop of rain I felt startled me; I didn't know what it was. Then I was running up and down and dancing like a kid and trying to catch it in my mouth. It was rain, real rain and it was wonderful!

I couldn't sleep that night. A breeze on my face and the sounds of others sleeping around me and the distant noises of live things outside our snooper fences and the lack of perfect darkness all kept me awake. A ship is alive, too, and has its noises, but they are different from those outdoors; a planet is alive in another way.

I got up quietly and tiptoed outside. In front of the men's quarters about fifty feet away I could see the guardsman on watch. He did not notice me, as he had his head bent over dials and displays from the inner and outer fences and from the screen over us. I did not want to talk, so I went around behind the hut, out of sight of even the dim light from his instruments. Then I stopped and looked up.

It was the first good view of the sky I had had since we had left Earth and the night was clear. I stood there, dazzled and a little drunk from it.

Then I started trying to pick out constellations.

It was not hard; eleven lightyears is just down the street for most stars. The Dipper was overhead, looking a little more battered than it does from Earth but perfectly recognizable. Orion blazed near the horizon ahead of me but Procyon had moved over a long way and Sirius was not even in sight–skidded below the skyline, probably, for Sirius is even closer to the Earth than is Tau Ceti and our position would shift him right across the sky. I tried to do a spherical triangle backwards in my head to figure where to look for Sirius and got dizzy and gave up.

Then I tried to find Sol. I knew where he would be, in Boötes, between Arcturus and Virgo–but I had to find Boötes, before I could look for Father Sol.

Boötes was behind me, as close to the skyline as Orion was on the other side. Arcturus had shifted a little and spoiled the club shape of Bootes but there was no doubt in my mind.

There it was! A yellow-white star, the color of Capella, but dimmer, about second magnitude, which was right, both position and magnitude. Besides, it had to be the Sun, because there hadn't been any star that bright in that location when Pat and I were studying for our astrogation merit badge. It was the Sun.

I stared at it, in a thoughtful melancholy, warm rather than sad. I wondered what Pat was doing? Walking the baby, maybe. Or maybe not; I couldn't remember what the Greenwich ought to be. There he was, thirty years old and a couple of kids, the best part of his life behind him... and here I was, just old enough to be finishing my sophomore year in college if I were home.

No, I wouldn't be; I'd be Pat's age.

But I *wasn't* thirty.

I cheered up and decided that I had the best break after all, even if it had seemed not so good at first. I sighed and walled around a bit, not worrying, for not even one of those lizard brutes could get close to our night defenses without bringing thunder and lightning down around his ears. If he had ears. Percy's pen was not far in that rear direction; he heard me and came to his fence, so I walked up and scratched his snout. "Nice place, eh, boy?" I was thinking that when the *Elsie* did get home–and I no longer believed Uncle Steve's dire predictions–when I did get back, I would still be in my early twenties, just a good age to emigrate. And Connie looked like a fine place to come back to.

Percy answered with a snuffling grunt which I interpreted to mean: "You didn't bring me anything to eat? A fine way to treat a pal!" Percy and I were old friends; aboard ship I fed him, along with his brothers and the hamsters and the rats.

"Percy, you're a pig."

He did not argue but continued to snuffle into my empty hand. I was thinking that eleven lightyears wasn't far; it was about right. The stars were still familiar.

Presently Percy got tired of it and so did I, so I wiped my hand on my pants and went back to bed.

XIII IRRELEVANT RELATIONS

Beyond Beta Hydri: I ought to bring this up to date, or else throw it away. I hardly ever have time to write now, since we are so short handed. Whatever it was we picked up on Constance–or, possibly, caught from improperly fumigated stores–has left us with more than enough to do, especially in my department. There are only six left now to handle all the traffic, Unc, myself, Mei-Ling, Anna, Gloria, and Sam. Dusty lived through it but he is out of touch, apparently permanently. His brother had no kids for a secondary team and they just slipped apart on the last peak and never matched in again.

I am dependent on my great-niece Kathleen and on Molly, her mother. Pat and I can still talk, but only with their help; if we try it alone, it's like trying to make yourself understood in a machine shop. You know the other fellow is saying something but the more you strain the less you hear. Pat is fifty-four, now that we have peaked on this leg; we just don't have anything in common. Since Maude's death he isn't interested in anything but business–and I am not interested in that.

Unc is the only one who doesn't feel his original telepartner slipping away. Celestine is forty-two now; they are coming together instead of separating. I still call her "Sugar Pie," just to hear her chuckle. It is hard to realize that she is twice my age; she ought to have braids and a missing front tooth.

All in all, we lost thirty-two people in the Plague. I had it and got well. Doe Devereaux didn't get well and neither did Prudence nor Rupe. We have to fill in and act as if the others had never been with us. Mei-Ling's baby died and for a while we thought we were going to lose Mei-Ling, but now she takes her watch and does her work and even laughs.

I guess the one we all miss the most is Mama O'Toole.

What else of importance has happened? Well, what can happen in a ship? Nothing. Beta Hydri was a washout. Not only nothing resembling an Earth-type planet, but no oceans–no water oceans, I mean; it was a choice for fuel between ammonia and methane, and the Chief Engineer and the Captain had long worried conferences before they settled for ammonia. Theoretically the *Elsie* will burn anything; give her mass-converter something to chew on and the old "e equals mc^2" gets to work; the torch spits the mass out as radiation at the speed of light and neutrons at almost the speed of light. But while the converter does not care, all of the torch's auxiliary equipment is built to handle fluid, preferably water.

We had a choice between ammonia, already liquid, and an outer planet that was mostly ice, but ice not much warmer than absolute zero. So they crossed their fingers, put her down in an ocean of ammonia, and filled up the old girl's tanks. The planet we named Inferno and then called it nastier names. We had to sit there four days at two gravities and it was cold, even with the ship's air heaters going full blast.

The Beta Hydri system is one I am not going back to; creatures with other metabolisms can have it and welcome. The only one who was pleased was Harry Gates, because the planetary arrangements followed Bode's Law. I wouldn't care if they had been in Vee formation.

The only other thing that sticks in my mind was (of all things!) political trouble. Our last peak started just as that war broke out between the Afro-European Federation and Estados Unidos de Sud. It shouldn't have meant anything to us–it did not, to most of us, or at least we kept our sympathies to ourselves. But Mr. Roch, our Chief Engineer, is from the Federation and his first assistant was born in Buenos Aires. When Buenos Aires got it, probably including some of Mr. Regato's relatives, he blamed his boss personally. Silly, but what can you expect?

After that, the Captain gave orders that he would check Earthside news before it was printed and he reminded us of the special restrictions on communicators in re security of communications. I think I would have been bright enough to submit that dispatch to the Captain before printing it, but I can't be sure. We'd had always had free press in the *Elsie.*

The only thing that got us out of that mess was that we peaked right after. When we came out of peak, fourteen years had passed and the latest political line-up had Argentina friends with her former enemies and on the outs with the rest of South America. After a while Mr. Roch and Mr. Regato were back playing chess together, just as if the Captain had never had to restrict them to keep them from each other's throats.

Everything that happens back on Earth is a little unreal to me, even though we continue to get the news when we are not at peak. You get your mind adjusted to a new situation; the *Elsie* goes through a peak ... years have passed and everything has changed. They are calling the Planetary League the "United System" now and they say that the new constitution makes war impossible.

It's still the Planetary League to me–and it was supposed to make war impossible, too. I wonder what they changed besides the names?

Half of the news I don't understand. Kathleen tells me that her class has pooled their eveners to buy a Fardie for their school as a graduation present and that they are going to outswing it for the first time at the commencement exercises–then she had to hurry away because she had been co-opted in charge. That was just last watch. Now what is a "Fardie" and what was wrong with it where it was?

The technical news that reaches us I don't understand, either, but at least I know why and usually somebody aboard does understand it. The relativists are excited about stuff coming in which is so technical that it has to be retransmitted and confirmed before it is released–this with Janet Meers standing behind you and trying to snatch spools out of the recorder. Mr. O'Toole gets excited too, only the way he shows it is for the end of his nose to get pink. Dr. Babcock never shows excitement, but he missed coming in for meals two days running after I copied a monograph called "Sumner on Certain Aspects of Irrelevance." At the end of that time I sent one back to LRF which Dr. Babcock had written. It was just as crammed with indigestible mathematics, but I gathered that Dr. Babcock was politely calling Professor Sumner a fool.

Janet Meers tried to explain it to me, but all that I got out of it was that the concept of simultaneity was forcing a complete new look at physics.

"Up to now," she told me, "we've concentrated on the relative aspects of the spacetime continuum. But what you m-r people do is *irrelevant* to spacetime. Without time there is no space; without space there can be no time. Without spacetime there can be no conservation of energy-mass. Heavens, there's *nothing.* It has driven some of the oldtimers out of their minds. But now we are beginning to see how you people may possibly fit into physics–the new physics, I mean; it's all changed."

I had had enough trouble with the oldstyle physics; having to learn a new one made my head ache just to think about it. "What use is it?" I asked.

She looked shocked. "Physics doesn't have to have any *use.* It just *is.*"

“Well, I don’t know. The old physics was useful. Take the torch that drives us, for example–”

“Oh, that! That’s not physics, that’s just engineering”–as if I had mentioned something faintly scandalous.

I will never understand Janet and perhaps it is just as well that she promised to “be a sister to me.” She said that she did not mind my being younger than she was, but that she did not think she could look up to a man who could not solve a fourth-degree function in his head. “… and a wife should always look up to her husband, don’t you think?”

We were making the boosts at 1.5 gravity now. What with slippage, it cuts each up-boost and each down-boost to about four months, S-time, even though the jumps are longer, During boost I weigh 220 pounds and I’ve started wearing arch supports, but 50% extra weight is all right and is probably good for us, since it is too easy not to get enough exercise aboard ship.

The LRF has stopped using the drug stuff to help communications at peak, which would have pleased Dr. Devereaux since he disapproved of it so. Now your telepartner patches in with the help of hypnosis and suggestion alone, or you don’t patch. Kathleen managed to cross the last peak with me that way, but I can see that we are going to lose communication teams all through the fleet, especially those who have not managed to set up tertiary telepartners. I don’t knew where my own team would be without Kathleen. In the soup, I guess. As it is, the *Niña* and the *Henry Hudson* are each down to two teams and the other four ships still in contact with Earth are not much better off. We are probably in the best shape, although we don’t get much fleet news since Miss Gamma fell out of step with her sisters–or lost them, as the case may be; the *Santa Maria* is listed as “missing” but the *Marco Polo* is simply carried as “out of contact” as she was approaching peak when last heard from and won’t be out of it for several Greenwich years.

We are headed now for a little G-type star so dim from Earth that it doesn’t rate a name, nor even a Greek-letter constellation designation, but just a catalog number. From Earth it lies in Phoenix, between Hydrus the Sea Serpent and Cetus the Whale. (“Hydrus,” not “Hydra”–Hydra is six R.A. hours over and farther north.) Unc called it a “Whistle Stop” so that is what we dubbed it, because you can’t reel off a Palomar Catalog number each time you speak of where you are going. No doubt it will get an impressive name if it turns out to have a planet half as good as Connie. Incidentally, Connie will he colonized in spite of the epidemic we may have picked up there; the first shiploads are on their way. Whatever the bug was that bit us (and it very possibly may have come from Earth), it is no worse than half a dozen other diseases men have had and have fought back at and licked. At least, that is the official view and the pioneer ships are going on the assumption that they will probably catch it and have to conquer it.

Personally, I figure that one way of dying is as dangerous as another; when you're dead, you're dead–even if you die from "nothing serious." And the Plague, bad as it was, didn't kill me.

"Whistle Stop" wasn't worth a stop. We're on our way to Beta Ceti, sixty-three lightyears from Earth.

I wish Dusty were still hooked up to transmit pictures; I would like one of my great-grandniece Vicky. I know what she looks like–carroty red hair, freckles across her nose, green eyes, a big mouth and braces on her teeth. At present she is sporting a black eye as well, picked up at school when somebody called her a freak and she resented it–I would love to have seen that fight! Oh, I know what she looks like but I'd like a picture anyhow.

It is funny how our family has run to girls. No, when I add it up, counting all descendants of my sisters as well as my brother, it comes out about even. But Maude and Pat had two girls and no boys, and I went away and did not get married, so the Bartlett name has died out,

I certainly would like to have a picture of Vicky. I know she is homely, but I'll bet she is cute, too–the kind of tomboy who always has scabs on her knees because she won't play the ladylike games. She generally hangs around for a while after we are through transmitting and we talk. Probably she is just being polite, for she obviously thinks of me as being as old as her greatgrandfather Bartlett even though her mother has told her that I am not. I suppose it depends on where you sit. I ought to be in my last year in college now, but she knows that I am Pat's twin.

If she wants to put a long white beard on me, that is all right with me, for the sake of her company. She was in a hurry this morning but nice about it. *"Will you excuse me, please, Uncle Tom? I've got to go study for a quiz in algebra."*

("Realio trulio?") I said.

"Realio trulio, cross my heart. I'd like to stay."

("Run along, Freckle Face. Say hello to the folks.")

" Bye! I'll call you a little early tomorrow."

She really is a nice child.

XIV ELYSIA

Beta Ceti is a big star in the main spectral sequence, almost big enough to be classed as a giant–a small giant, thirty-seven times as bright as the Sun. It looks so bright from Earth that it has a name of its own, Deneb Kaitos, but we never call it that because "Deneb" brings to mind the other Deneb, Alpha Cygni, which is a real giant in a different part of the sky almost sixteen hundred lightyears away.

Since Beta Ceti is so much brighter than the Sun, the planet we had been looking for, if it existed at all, had to be nearly six hundred million miles out, farther than Jupiter is from Sol.

We've found one, at five hundred and eighty million miles, which is close enough. Better yet, it is the smallest planet in a system that seems to run to outsizes; the one in the next track beyond is bigger than Jupiter.

I scheduled most of the routine skyside survey of Elysia, under Harry Gates' absentminded supervision. Harry is as eager as a fox terrier to finish his *magnum* opus before he has to knock off and take charge of the ground survey. He wants to transmit it back Earthside and preserve his name in science's hall of fame–not that he puts it that way, for Harry isn't stuck up; nevertheless, he thinks he has worked out a cosmogony for solar systems which includes Bode's Law. He says that if he is right, any star in the main spectral sequence will have planets.

Maybe ... I would not know. But I can't see what use a star is without planets and I don't believe all this complicated universe got here by accident. Planets are meant to be used.

Acting as Harry's Man Friday has not been difficult. All I had to do was to dig the records of the preliminary survey of Connie out of the microfilms and write up similar schedules for Elysia, modified to allow for our loss of personnel. Everybody was eager to help, because (so far as we know) we are the only ship to draw a lucky number twice and only one of four to hit even once. But we are down now, waterborne, and waiting for medicine to okay Elysia for ground survey; I'm not quite so rushed. I tried to get in touch with Vicky and just chat this evening. But it happens to be evening back home, too, and Vicky is out on a date and politely put me off.

Vicky grew up some when we peaked this last jump; she now takes notice of boys and does not have as much time for her ancient uncle. ("Is it George?") I asked when she wanted to know if my call was important.

"Well, if you must know, it is George!" she blurted out.

("Don't get excited, Freckle Face,") I answered. ("I just asked.")

"Well, I told you."

("Sure, sure. Have a good time, hon, and don't stay out too late.")

"You sound just like Daddy."

I suppose I did. The fact is I don't have much use for George, although I have never seen him, never will, and don't know much about him, except that Vicky says that be is "the tenth power" and "first with the worst" in spite of being "ruffily around the round" if I knew what she meant, but she would equalize that.

I didn't know what she meant, but I interpreted it to mean approval slightly qualified and that she expected him to be perfect, or "ricketty all through" when she got through making him over. I suspect him of being the kind of pimply-faced, ignorant young bore that I used to be myself and have always disliked–something about like Dusty Rhodes at the present without Dusty's amazing mind.

This sounds as if I were jealous of a boy I'll never see over a girl I have never seen, but that is ridiculous. My interest is fatherly, or big-brotherly, even though I am effectively no relation to her; i.e., my parents were two of her sixteen great-great-grandparents–a relationship so distant that most people aren't even aware of relatives of that remote degree.

Or maybe Van's wild theory has something to it and we are all getting to be cranky old men–just our bodies are staying young. But that is silly. Even though seventy-odd Greenwich years have passed, it has been less than four for me since we left Earth. My true time is hunger and sleep; I've slept about fourteen hundred times in the *Elsie* and eaten three meals and a snack or two for each sleep. That is four years, not seventy.

No, I'm just disappointed that on my first free evening in a couple of weeks I have nothing better to do than write in my diary. But, speaking of sleep, I had better get some; the first party will go ashore tomorrow, if medicine approves, and I will be busy. I won't be on it but there is plenty to do to get them off.

We are a sorry mess. I don't know what we can do now.

I had better begin at the beginning. Elysia checked out in all ways on preliminary survey–breathable atmosphere, climate within Earth limits and apparently less extreme; a water, oxygen and carbon dioxide life cycle; no unusual hazards. No signs of intelligent life, of course, or we would have skipped it. It is a watery world even more than Terra is, with over 90% oceans and there was talk of naming it "Aquaria" instead of Elysia, but somebody pointed out that there was no sense in picking a name which might make it unattractive to colonists when there seemed to be nearly as much usable land as Earth had.

So we cuddled up to an island as big as Madagascar–almost a continent for Elysia–with the idea that we could cover the whole island in the detailed survey and be able to report that a colony could settle there as fast as LRF could send a ship–we knew that Connie was already settled and we wanted to get this one settled and make it a clean sweep for the *Elsie.*

I gave Percy a pat and told him to size up the lay of the land and to let me know if he found any lady pigs. Uncle Lucas took the guard ashore and the science party followed the same day. It was clear that Elysia was going to be no more of a problem than Connie had been and almost as big a prize–except for the remote possibility of exotic infection we could not handle.

That was two weeks ago.

It started out routine as breakfast. Percy and the other experimental animals flourished on an Elysian diet; Van failed to catch anything worse than an itch and presently he was trying Elysian food himself–there were awkward looking four-winged birds which broiled nicely; Van said they reminded him of roast turkey with an overtone of cantaloupe. But Percy the Pig would not touch some fish that were caught and the rats that did eat them died, so sea food was put off until further investigation could be made. The fish did not look like ours; they were flat the wrong way, like a flounder, and they had tendrils something like a catfish which raveled on the ends instead of being spiny. Harry Gates was of the opinion that they were feeling organs and possibly manipulative as well.

The island had nothing like the bigmouthed carnivorous lizards that got Lefty Gomez. However, there was no telling what might be on other islands, since the land masses were so detached that totally different lines of evolution might have been followed in each island group. Our report was going to recommend that Devereaux Island be settled first, then investigate the others cautiously.

I was due to go ashore on third rotation, Unc having taken the first week, then a week of rest, and now would take shipside watch while I linked with him from ashore. But at the last minute I agreed to swap, as Anna was anxious to go.

I did not want to swap, but I had been running the department's watch list since Rupe's death and it would have been awkward to refuse. Gloria was going, too, since her husband was on that rotation, but Gloria did not count as her telepartner was on vacation back Earthside.

When they left, I was on top of the *Elsie* glumly watching them get into the boats. There was a "monkey island" deck temporarily rigged up there, outside the airlock; it was a good place to watch the boats being loaded at the cargo ports lower down. Engineering had completed inspection and overhaul and had about finished filling the boost-mass tanks; the *Elsie* was low in the water and the cargo ports were not more than ten feet above waterline. It made loading convenient; at the time we put the first party ashore the tanks were empty and the boats had to be lowered nearly a hundred feet and passengers had to go down rope ladders–not easy for people afraid of heights, as so many are. But it was a cinch that day.

The airlock was only large enough for people; anything bigger had to go through the cargo ports. It was possible to rig the cargo ports as airlocks and we had done so on Inferno around Beta Hydri, but when the air was okay we just used them as doors. They were at the cargo deck, underneath the mess deck and over the auxiliary machinery spaces; our three boats and the two helicopters were carried just inside on that deck. The boats could be swung out on gooseneck davits from where they nested but the helicopters had to be hooked onto boat falls, swung out, then a second set of falls hooked to them from the monkey island above, by which a helicopter could be scooted up the *Elsie's* curved side and onto the temporary top deck, where her jet rotors would be attached.

Mr. Regato cursed the arrangement every time we used it, "Mechanical buffoonery!" was his name for it. "I've never seen a ship's architect who wasn't happy as soon as he had a pretty picture. He never stops to think that some poor fool is going to have to use his pretty picture."

As may be, the arrangement did let the helis be unloaded with a minimum of special machinery to get out of order–which, I understand, was a prime purpose in refitting the ships for the Project. But that day the helicopters were outside and ready, one of them at camp and the other tied down near me on the monkey island. All we had to do was to load the boats.

The boats were whale boats molded of glass and teflon and made nonsinkable by plastic foam in all dead spaces. They were so tough that, while you might be able to bash one in, you could not puncture it with anything short of a drill or a torch, yet they were so light that four men could lift one that was empty. It did them no harm to drive them up onto a rocky beach, then they could be unloaded and easily dragged higher. They were driven by alcohol jets, just as the helis were, but they had oars and sails as well. We never used the oars although all the men had gone through a dry drill under my Uncle Steve's watchful eye.

The boats had come in the night before loaded with specimens for the research department; now they were going back with people who would replace those ashore. From the monkey island I could see, half a mile away, the people who were coming back, waiting on the beach for the boats. Two of the boats were lying off, waiting for the third; each had about eighteen people in it and a few bundles of things requisitioned by Harry Gates for his scientific uses ashore, as well as a week's supplies for the whole party.

I noticed a movement behind me, turned, and saw that it was the Old Man coming up the airlock hatch. “Good morning, Captain.”

“Morning, Bartlett.” He looked around. “Nice day.”

“Yes, sir…and a nice place.”

“It is indeed.” He looked toward the shore. “I’m going to find *some* excuse to hit dirt before we leave here. I’ve been on steel too long.”

“I don’t see why not, sir. This place is friendly as a puppy. Not like Inferno.”

“Not a bit.” He turned away, so I did too; you don’t press conversation on the Captain unless he wants it. The third boat was loaded now and cast loose; all three were about fifty yards away and were forming a column to go in together. I waved to Gloria and Anna.

At each boat, a long, wet rope as thick as my waist came up out of the water, passed across it amidships and back into the water on the other side. I yelled, “Hey, Captain! *Look!”*

He turned. The boats rolled sideways and sank–they were *pulled* under. I heard somebody scream and the water was crowded with struggling bodies.

The Captain leaned past me at the raft and looked at the disaster. He said in an ordinary tone, “Can you start that chopper?”

“Uh, I think so, Captain.” I was not a helicopter pilot but I knew how it worked.

“Then do it.” He leaned far over and yelled, *“Get that cargo door closed!”* He turned and dived down the hatch. I caught a glimpse of what had made him yell as I turned to climb into the helicopter. It was another of those wet ropes slithering up the *Elsie’s* side toward the cargo port.

Starting the helicopter was more complicated than I had realized, but there was a checkoff list printed on the instrument panel. I had fumbled my way down to “step four: start impeller” when I was pushed aside by Ace Wenzel the torchman who was the regular pilot. Ace did something with both hands, the blades started to revolve, making shadows across our faces, and he yelled, “Cast her loose!”

I was shoved out the door as the Surgeon was climbing in; I fell four feet to the deck as the down blast hit me. I picked myself up and looked around.

There was nothing in the water, *nothing.* Not a body, not a person struggling to keep afloat, no sign of the boats. There was not even floating cargo although some of the packages would float. I knew; I had packed some of them.

Janet was standing next to me, shaking with dry sobs. I said stupidly, “What happened?”

She tried to control herself and said shakily, “I don’t know. I saw one of them get Otto. It just…it just–” She started to bawl again and turned away.

There wasn't anything on the water, but now I saw that there was something *in* the water, under it. From high up you can see down into water if it is fairly smooth; arranged around the ship in orderly ranks were things of some sort. They looked like whales–or what I think a whale would look like in water; I've never seen a whale;

I was just getting it through my confused head that I was looking at the creatures who had destroyed the boats when somebody yelled and pointed. On shore the people who were to return were still on the beach, but they were no longer alone–they were surrounded. The things had come ashore, on each side of them and had flanked them. I could not see well at that distance but I could see the sea creatures because they were so much bigger than we were. They didn't have legs, so far as I could tell, but it did not slow them down–they were *fast.*

And our people were being herded into the water.

There was nothing we could do about it, not *anything.* Under us we had a ship that was the end product of centuries of technical progress; its torch could destroy a city in the blink of an eye. Ashore the guard had weapons by which one man was equal to an army of older times and there were more such weapons somewhere in the ship. But at the time I did not even know where the armory was, except that it was somewhere in the auxiliary deck–you can live a long time in a ship and never visit all her compartments.

I suppose I should have been down in the auxiliary deck, searching for weapons. But what I did was stand there, frozen, with a dozen others, and watch it happen.

But somebody had been more alert than I had been. Two men came bursting up through the hatch; they threw down two ranger guns and started frantically to plug them in and break open packages of ammunition. They could have saved the effort; by the time they were ready to sight in on the enemy, the beach was as empty as the surface of the water. Our shipmates had been pushed and dragged under. The helicopter was hovering over the spot; its rescue ladder was down but there was no one on it.

The helicopter swung around over the island and across our camp site, then returned to the ship.

While it was moving in to touch down, Chet Travers hurried up the ladder. He looked around, saw me and said, "Tom, where's the Captain?"

"In the chopper."

"Oh." He frowned. "Well, give him this. Urgent. I've got to get back down." He shoved a paper at me and disappeared. I glanced at it, saw that it was a message form, saw who it was from, and grabbed the

Captain's arm as he stepped out of the heli.

He shrugged me off. "Out of my way!"

"Captain, you've got to–it's a message from the island–from Major Lucas."

He stopped then and took it from me, then fumbled for his reading glasses, which I could see sticking out of a pocket. He shoved the dispatch form back at me before I could help him and said, "Read it to me, boy."

So I did. " 'From: Commander Ship's Guard–To: Commanding Officer *Lewis and Clark*–Oh nine three one–at oh nine oh five survey camp was attacked by hostile natives, believed to be amphibious. After suffering initial heavy losses the attack was beaten off and I have withdrawn with seven survivors to the hilltop north of the camp. We were forced to abandon survey craft number two. At time of attack, exchange party was waiting on beach; we are cut off from them and their situation is not known but must be presumed to be desperate.

" 'Discussion: The attack was intelligently organized and was armed. Their principal weapon appears to be a jet of sea water at very high pressure but they use also a personal weapon for stabbing and cutting. It must be assumed that they have other weapons. It must be conditionally assumed that they are as intelligent as we are, as well disciplined, and possibly as well armed for the conditions Their superior numbers give them a present advantage even if they had no better weapons.

" 'Recommendations: My surviving command can hold out where it is against weapons thus far encountered. It is therefore urgently recommended that immediate measures be limited to rescuing beach party. Ship should then be placed in orbit until a plan can be worked out and weapons improvised to relieve my command without hazard to the ship.–S. Lucas, Commandant, oh nine three six.'"

The Captain took the message and turned toward the hatch without speaking. Nobody said anything although there were at least twenty of us crowded up there. I hesitated, then when I saw that others were going down, I pushed in and followed the Captain.

He stopped two decks down and went into the communications office. I didn't follow him, but he left the door open. Chet Travers was in there, bent over the gear he used to talk with the camp, and Commander Frick was leaning over him with a worried look on his face: The Captain said, "Get me Major Lucas."

Commander Frick looked up. "We're trying to, Captain. Transmission cut off while they were sending us a list of casualties."

The Captain chewed his lip and looked frustrated, then he said "Keep trying," and turned. He saw me.

"Bartlett!"

"Yes, sir!"

"You have one of your people over there. Raise him."

I thought rapidly, trying to remember the Greenwich even as I was calling Vicky–if Vicky was home, she could get through on the direct line to LRF and they could hook her with Sam Rojas's telepartner and thence to Sam, and the Captain could talk to Uncle Steve on a four-link relay almost as fast as he could by radio. ("Vicky! Come in, Vicky! Urgent!")

"Yes; Uncle Tom? What is it? I was asleep."

Commander Frick said, "I don't think that will work, Captain. Rojas isn't on the list of survivors. He was scheduled for rotation; he must have been down at the beach."

Of course, of course! Sam would have been down at the beach–I had stood by and must have watched him being herded into the water!

"What is it, Uncle Tom?"

("Just wait, hon. Stay linked.")

"Then get me somebody else," the Captain snapped.

"There isn't anyone else, Captain," Frick answered. "Here's the list of survivors. Rojas was the only fr–the only special communicator we had ashore."

The Captain glanced at the list, said, "Pass the word for all hands not on watch to assemble in the mess room on the double." He turned and walked right through me. I jumped out of the way.

"What's the matter, Uncle Tom? You sound worried."

I tried to control my voice. ("It was a mistake, hon. Just forget it and try to get back to sleep. I'm sorry.")

"All right. But you still sound worried."

I hurried after the Captain. Commander Frick's voice was calling out the order over the ship's system as we hurried down the ladders, yet he was only a moment or two behind me in reaching the mess room. In a matter of seconds we were all there ... just a handful of those who had left Earth–about forty. The Captain looked around and said to Cas Warner, "Is this all?"

"I think so, Captain, aside from the engineering watch."

"I left Travers on watch," added Frick.

"Very well" The Captain turned and faced us. "We are about to rescue the survivors ashore. Volunteers step forward."

We didn't step, we surged, all together. I would like to say that I was a split second ahead, because of Uncle Steve, but it wouldn't be true. Mrs. Gates was carrying young Harry in her arms and she was as fast as I was.

"Thank you," the Captain said stiffly. "Now will the women please go over there by the pantry so that I can pick the men who will go."

“Captain?”

“Yes, Captain Urqhardt?”

“I will lead the party.”

“You’ll do nothing of the sort, sir. I will lead: You will now take some women and go down and fetch what we need.”

Urqhardt barely hesitated, then said, “Aye, aye, sir.”

“That rule–our standing rule for risk–will apply to all of you. In doubly-manned jobs the older man will go. In other jobs, if the job can be dispensed with, the man will go; if it cannot be, the man will stay.” He looked around.

“Dr. Babcock!”

“Righto, Skipper!”

Mr. O’Toole said, “Just a moment, Captain. I am a widower and Dr. Babcock is much more-”

“Shut *up.”*

“But–”

“Confound it, sir, must I debate every decision with every one of you? Must I remind you that every second counts? Get over there with the women.”

Red-faced and angry Mr. O’Toole did as he was told. The Captain went on, “Mr. Warner. Mr. Bach. Dr. Severin–” Quickly he picked those he wanted, then waved the rest of us over toward the pantry.

Uncle Alfred McNeil tried to straighten his stooped shoulders. “Captain, you forgot me. I’m the oldest in my department.”

The Captain’s face softened just a hair. “No, Mr. McNeil, I didn’t forget,” he said quietly, “but the capacity of the chopper is limited–and we have seven to bring back. So I must omit you.”

Unc’s shoulders sagged and I thought he was going to cry, than he shuffled over away from the selected few. Dusty Rhodes caught my eye and looked smug and proud; he was one of the chosen. He still did not look more than sixteen and I don’t think he had ever shaved; this was probably the first time in his life that he had ever been treated in all respects as a man.

In spite of the way the others had been shut off short I couldn’t let it stand. I stepped forward again and touched the Captain’s sleeve. “Captain ... you’ve got to let me go! My uncle is over there.”

I thought he was going to explode, but he caught himself.

“I see your point. But you arc a special communicator and we haven’t any spare. I’ll tell Major Lucas that you tried.”

“But–”

“Now shut up and do as you are told–before I kick you half across the compartment.” He turned away as if I didn’t exist.

Five minutes later arms had been issued and we were all crowding up the ladders to see them off. Ace Wenzel started the helicopter at idling speed and jumped out. They filed in, eight of them, with the Captain last. Dusty had a bandolier ever each shoulder and a ranger gun in his hands; he was grinning excitedly. He threw me a wink and said, "I'll send you a postcard."

The Captain paused and said, "Captain Urqhardt."

"Yes, sir."

The Captain and the reserve captain conferred for a moment; I couldn't hear them and I don't think we were meant to hear. Then Captain Urqhardt said loudly, "Aye, aye, sir. It shall be done."

"Very good, sir." The Captain stepped in, slammed the door, and took the controls himself. I braced myself against the down blast.

Then we waited.

I alternated between monkey island and the comm office. Chet Travers still could not raise Uncle Steve but he was in touch with the heli. Every time I went top side I looked for the sea things but they seemed to have gone away.

Finally I came down again to the comm room and Chet was looking joyful. "They've got 'em!" he announced.

"They're off the ground." I started to ask him about it but he was turning to announce the glad news over the ship's system; I ran up to see if I could spot the heli.

I saw it, near the hilltop, about a mile and a half away. It moved rapidly toward the ship. Soon we could see people inside. As it got closer someone opened a window on the side toward us.

The Captain was not really skilled with a helicopter. He tried to make a landing straight in but his judgment of wind was wrong and be had to swing on past and try again. The maneuver brought the craft so close to the ship that we could see the passengers plainly. I saw Uncle Steve and he saw me and waved; he did not call out, he just waved. Dusty Rhodes was beside him and saw me, too. He grinned and waved and shouted, "Hey, Tom, I rescued your buddy!" He reached back and then Percy's head and cloven forehooves showed above the frame, with Dusty holding the pig with one hand and pointing to him with the other. They were both grinning.

"Thanks!" I yelled back. "Hi, Percy!"

The chopper turned a few hundred feet beyond the ship and headed back into the wind.

It was coming straight toward the ship and would have touched down soon when something came out of the water right under it. Some said it was a machine–to me it looked like an enormous elephant's trunk. A stream of water so solid, hard, and bright that it looked like steel shot out of the end of it; it struck a rotor tip and the heli staggered.

The Captain leaned the craft over and it slipped out of contact. The stream followed it, smashed against the fuselage and again caught a rotor; the heli tilted violently and began to fall.

I'm not much in an emergency; it is hours later when I figure out what I should have done. This time I acted without thinking. I dived down the ladder without hitting the treads and was on down in the cargo deck almost at once. The port of that side was closed, as it had been since the Captain ordered it closed earlier; I slapped the switch and it began to grind open. Then I looked around and saw what I needed: the boat falls, coiled loosely on deck, not yet secured. I grabbed a bitter end and was standing on the port as it was still swinging down to horizontal.

The wrecked helicopter was floating right in front of me and there were people struggling in the water. "Uncle Steve!" I yelled *"Catch*!" I threw the line as far as I could.

I had not even seen him as I yelled. It was just the idea that was in the top of my mind. Then I did see him, far beyond where I had been able to throw the line. I heard him call back, "Coming, Tom!" and he started swimming strongly toward the ship.

I was so much in a daze that I almost pulled the line in to throw it again when I realized that I had managed to throw far enough for some one. I yelled again. "Harry! Right behind you! Grab on!"

Harry Gates rolled ever in the water, snatched at the line and got it. I started to haul him in.

I almost lost him as I got him to the ship's skin. One of his arms seemed almost useless and he nearly lost his grasp. But between us we managed to manhandle him up and into the port; we would not have made it if the Ship had not been so low in the water. He collapsed inside and lay on his face, gasping and sobbing.

I jerked the fall loose from his still clenched hand and turned to throw it to Uncle Steve.

The helicopter was gone, Uncle Steve was gone, again the water was swept clean–except for Percy, who, with his head high out of water, was swimming with grim determination toward the ship.

I made sure that there were no other people anywhere in the water. Then I tried to think what I could do for Percy.

The poor little porkchop could not grab a line, that was sure. Maybe I could lasso him. I fumbled to get a slip knot in the heavy line. I had just managed it when Percy gave a squeal of terror and I jerked my head around just in time to see him pulled under the water.

It wasn't a mouth that got him. I don't think it was a mouth.

XV "CARRY OUT HER MISSION"

I don't know what I expected after the attack by the behemoths. We just wandered around in a daze. Some of us tried to look out from the monkey island deck until that spouter appeared again and almost knocked one of us off, then Captain Urqhardt ordered all hands to stay inside and the hatch was closed.

I certainly did not expect a message that was brought around after supper (if supper had been served; some made themselves sandwiches) telling me to report at once for heads-of-departments conference. "That's you, isn't it, Tom?" Chet Travers asked me. "They tell me Unc Alfred is on the sick list. His door is closed."

"I suppose it's me." Unc had taken it hard and was in bed with a soporific in him, by order of the one remaining medical man, Dr. Pandit.

"Then you had better shag up there."

First I went to Captain Urqhardt's room and found it dark, then I got smart and went to the Captain's cabin. The door was open and some were already around the table with Captain Urqhardt at the head. "Special communications department, sir," I announced myself.

"Sit down, Bartlett."

Harry came in behind me and Urqhardt got up and shut the door and sat down. I looked around, thinking it was a mighty funny heads-of-departments meeting. Harry Gates was the only boss there who had been such when we left Earth. Mr. Eastman was there instead of Commander Frick. Mama O'Toole was long dead but now Cas was gone too; ecology was represented by Mr. Krishnamurti who had merely been in charge of airconditioning and hydroponics when we had left. Mr. O'Toole was there in place of Dr. Babcock, Mr. Regato instead of Mr. Roch. Sergeant Andreeli, who was also a machinist in engineering, was there in place of Uncle Steve and he was the only member of the ship's guard left alive–because he had been sent back to the ship with a broken arm two days earlier. Dr. Pandit sat where Dr. Devereaux should have been.

And myself of course but I was just fill-in; Unc was still aboard. Worst of all, there was Captain Urqhardt sitting where the Captain should have been.

Captain Urqhardt started in. "There is no need to detail our situation; you all know it. We will dispense with the usual departmental reports, too. In my opinion our survey of this planet is as complete as we can make it with present personnel and equipment... save that an additional report must be made of the hazard encountered today in order that the first colonial party will be prepared to defend itself. Is there disagreement? Dr. Gates, do you wish to make further investigations here?"

Harry looked surprised and answered, “No, Captain. Not under the circumstances.”

“Comment?” There was none. “Very well,” Urqhardt continued. “I propose to shape course for Alpha Phoenicis. We will hold memorial services at nine tomorrow morning and boost at noon. Comment? Mr. O’Toole.”

“Eh? Do you mean can we have the figures ready? I suppose so, if Janet and I get right on it.”

“Do so, as soon as we adjourn. Mr. Regato?”

Regato was looking astounded. “I didn’t expect this, Captain.

“It is short notice, but can your department be ready? I believe you have boost mass aboard.”

“It isn’t that,. Captain. Surely, the torch will be ready. But I thought we would make one long jump for Earth.”

“What led you to assume that?”

“Why, uh ...” The new Chief Engineer stuttered and almost slipped out of P-L lingo into Spanish. “The shape we are in, sir. The engineering department will have to go on watch-and-watch, heel and toe. I can’t speak for other departments, but they can’t be in much better shape.”

“No, you can’t and I am not asking you to. With respect to your own department, is it mechanically ready?”

Regato swallowed. “Yes, sir. But people break down as well as machinery.”

“Wouldn’t you have to stand watch-and-watch to shape course for Sol?” Urqhardt did not wait for the obvious answer, but went on, “I should not have to say this. We are not here for our own convenience; we are here on an assigned mission ... as you all know. Earlier today, just before Captain Swanson left, he said to me, “Take charge of my ship, sir. Carry out her mission.” I answered, ‘Aye, aye, sir.’ Let me remind you of that mission: we were sent out to conduct the survey we have been making, with orders to continue the search as long as we were in communication with Earth–when we fell out of communication, we were free to return to Earth, if possible. Gentlemen, we are still in touch with Earth; our next assigned survey point is Alpha Phoenicis. Could anything be clearer?”

My thoughts were boiling up so that I hardly heard him. I was thinking: who does this guy think he is? Columbus? Or the Flying Dutchman? There were only a little over thirty of us left alive-in a ship that had started with two hundred. The boats were gone, the heli’s were–I almost missed his next remark.

“Bartlett?”

“Sir?”

“What about your department?”

It dawned on me that *we* were the key department–us freaks. When *we* fell out of touch, he *had* to turn back. I was tempted to say that we had all gone deaf, but I knew I couldn't get away with it. So I stalled.

"As you pointed out, sir, we are in touch with Earth."

"Very well." His eyes turned toward Dr. Pandit.

"Just a moment, Captain," I insisted. "There's more to it."

"Eh? State it."

"Well, this next jump is about thirty years, isn't it? Greenwich I mean."

"Of that order. Somewhat less."

" 'Of that order.' There are three special communicators left, myself, Unc–I mean Mr. McNeil–and Mei-Ling Travers. I think you ought to count Unc out."

"Why?"

"Because he has his original telepartner and she is now as old as he is. Do you think Unc will live another thirty years?"

"But it won't be thirty years for him–oh, sorry! I see your point. She would be well past a hundred if she lived at all. Possibly senile."

"Probably, sir. Or more likely dead."

"Very well, we won t count McNeil. That leaves two of you. Plenty for essential communication.

"I doubt it, sir. Mei-Ling is a poor bet. She has only a secondary linkage and her partner is over thirty, with no children. Based on other telepairs, I would say that it is most unlikely that they will stay in rapport through another peak ... not a thirty-year one."

"That still leaves yourself."

I thought suddenly that if I had the guts to jump over the side, they could all go home. But it was just a thought; when I die, it won't be suicide. "My own case isn't much better, sir. My telepartner is about–" I had to stop and count up, then the answer did not seem right. "–is about nineteen, sir. No kids. No chance of kids before we peak... and I couldn't link in with a brand-new baby anyhow. She'll be fiftyish when we come out. So far as I know, there hasn't been a case in the whole fleet of bridging that long a period out of rapport."

He waited several moments before be answered. "Have you any reason to believe that it is impossible?"

"Well... no, sir. But it is extremely unlikely."

"Hmm ... do you consider yourself an authority in theory of telepathy?"

"Huh? No, sir. I am just a telepath, that's all."

"I think he is probably right," put in Dr. Pandit, "are you an authority, Doctor?"

"Me, sir? As you know, my specialty is exotic pathology. But–"

"In that case, we will consult authorities Earthside. Perhaps they can suggest some way to improve our chances. Very probably, under the circumstances, the Foundation will again authorize use of drugs to reduce the possibility that our special communicators might fall out of touch during peak. Or something."

I thought of telling him that Vicky wasn't going to risk dangerous habit-forming drugs. Then I thought better of it. Pat had-and Vicky might.

"That is all, gentlemen. We will boost at noon tomorrow. Uh, one more thing ... One of you implied that morale is not too high in the ship. That is correct and I am perhaps more aware of it than you are. But morale will shake down to normal and we will best be able to forget the losses we have suffered if we all get quickly back to work. I want only to add that you all, as senior officers of this ship, have most to do with morale by setting an example. I am sure that you will." He stood up.

I don't know how news travels in a ship but by the time I got down to the mess room everybody knew that we were boosting tomorrow ... and not for home. It was buzz-buzz and yammer all over. I ducked out because I didn't want to discuss it; my thoughts were mixed. I thought the Captain was insisting on one more jump from which he couldn't possibly report his results, if any–and with a nice fat chance that none of us would ever get home. On the other hand I admired the firm way he faced us up to our obligations and brushed aside panic. He had guts.

So did the Flying Dutchman have guts–but at last report he was still trying to round the Cape and not succeeding.

The Captain–Captain Swenson, I corrected–would not have been that bullheaded.

Or would he? According to Urqhardt, the last thing the Captain had said had been to remind Urqhardt that it was up to him to carry out the mission. All of us had been very carefully chosen (except us freaks) and probably the skipper and the relief skipper of each ship were picked primarily for bulldog stubbornness, the very quality that had kept Columbus going on and on when he was running out of water and his crew was muttering mutiny. I remembered Uncle Steve had once suggested as much.

I decided to go talk to Uncle Steve ... then I remembered I couldn't and I really felt bad. When my parents had died, two peaks back, I had felt bad because I didn't feel as bad as I knew I should have felt. When it happened–or rather, by the time I knew about it–they were long dead, people I had not seen in a long time and just faces in a photograph. But Uncle Steve I had seen every day–I had seen *today.*

And I had been in the habit of kicking my troubles around with him whenever they were too much for me.

I felt his loss then, the delayed shock you get when you are hit hard. The hurt doesn't come until you pull yourself together and realize you're hit.

It was just as well that somebody tapped on my door then, or I would have bawled.

It was Mei-Ling and her husband, Chet. I invited them in and they sat down on the bed. Chat got to the point.

"Tom, where do you stand on this?"

"On what?"

"This silly business of trying to go on with a skeleton crew."

"It doesn't matter where I stand," I said slowly. "I'm not running the ship."

"Ah, but you are!"

"Huh?"

"I don't mean quite that, but I do mean you can put a stop to the nonsense. Now, look, Tom, everybody knows what you told the Captain and–"

"Who's been talking?"

"Huh? Never mind. If it didn't leak from you, it probably did from everybody else present; it's common knowledge. What you told him made sense. What it comes down to is that Urqhardt is depending on you and you alone to keep him in touch with the home office. So you're the man with the stick. You can stop him."

"Huh? Now wait. I'm not the only one. Granted that he isn't counting on Unc–how about Mei-Ling?"

Chat shook his head. "Mei-Ling isn't going to 'think-talk' for him."

His wife said, "Now, Chet; I haven't said so."

He looked at her fondly. "Don't be super-stupid, my lovely darling. You know that there is no chance at all that you will be any use to him after peak. If our brave Captain Urqhardt hasn't got that through his head now, he will ... even if I have to explain to him in words of one syllable."

"But I *might* stay linked."

"Oh, no, you won't ... or I'll bash your pretty head in. Our kids are going to grow up on Earth."

She looked soberly at him and patted his hand. The Travers's were not expecting again, but everybody knew they were hoping; I began to see why Chet was adamant... and I became quite sure that Mei-Ling would not link again after peak–not after her husband had argued with her for a while. What Chet wanted was more important to her than what the Captain wanted, or any abstract duty to a Foundation back on Earth.

Chet went on, "Think it over, Tom, and you will see that you can't let your shipmates down. To go on is suicidal and everybody knows it but the Captain. It's up to you."

"Uh, I'll think it over."

"Do that. But don't take too long." They left.

I went to bed but didn't sleep. The deuce of it was that Chet was almost certainly right ... including the certainty that Mei-Ling would never patch in with her telepair after another peak, for she was beginning to slip even now. I had been transmitting mathematical or technical matter which would have fallen to her ever since last peak, because her linking was becoming erratic. Chet wouldn't have to bash her admittedly-pretty head in; she was falling out of touch.

On the other hand...

When I had reached "On the other hand" about eighteen times, I got up and dressed and went looking for Harry Gates; it occurred to me that since he was a head of department and present at the meeting, it was proper to talk to him about it.

He wasn't in his room; Barbara suggested that I try the laboratory. He was there, alone, unpacking specimens that had been sent over the day before. He looked up. "Well, Tom, how is it going?"

"Not too good."

"I know. Say, I haven't had a proper chance to thank you. Shall I write it out, or will you have it right off my chest?"

"Uh, let's take it for granted." I had not understood him at first, for it is the simple truth that I had forgotten about pulling him out of the water; I hadn't had time to think about it.

"As you say. But I won't forget it. You know that, don't you?"

"Okay. Harry, I need advice."

"You do? Well, I've got it in all sizes. All of it free and all of it worth what it costs, I'm afraid."

"You were at the meeting tonight."

"So were you." He looked worried.

"Yes." I told him all that had been fretting me, then thought about it and told him all that Chet had said. "What am I to do, Harry? Chet is right; the chance of doing any good on another jump isn't worth it. Even if we find a planet worth reporting–a chance that is never good, based on what the fleet has done as a whoIe–even so, we almost certainly won't be able to report it except by going back, two centuries after we left. It's ridiculous and, as Chet says, suicidal, with what we've got left. On the other hand, the Captain is right; this is what we signed up for. The ship's sailing orders say for us to go on."

Harry carefully unpacked a package of specimens before he answered.

"Tommie, you should ask me an easy one. Ask me whether or not to get married and I'll tell you like a shot. Or anything else. But there is one thing no man can tell another man and that is whore his duty lies. That you must decide for yourself."

I thought about it. "Doggone it, Harry, how do you feel about it?"

"Me?" He stopped what he was doing. "Tom, I just don't know. For myself personally ... well, I've been happier in this ship than I have ever been before in my life. I've got my wife and kids with me and I'm doing just the work I want to do. With others it may be different."

"How about your kids?"

"Aye, there's the rub. A family man–" He frowned. "I can't advise you, Tom. If I even hint that you should not do what you signed up to do, I'd be inciting to mutiny ... a capital crime, for both of us. If I tell you that you must do what the Captain wants, I'd be on safe legal grounds–but it might mean the death of you and me and my kids and all the rest of us... because Chet has horse sense on his side even if the law is against him." He sighed. "Tom, I just missed checking out today–thanks to you–and my judgment isn't back in shape. I can't advise you; I'd be prejudiced."

I didn't answer. I was wishing that Uncle Steve had made it; he always had an answer for everything.

"All I can do," Harry went on, "is to make a weaselly suggestion."

"Huh? What is it?"

"You might go to the Captain privately and tell him just how worried you are. It might affect his decisions. At least he ought to know."

I said I would think about it and thanked him and left. I went to bed and eventually got to sleep. I was awakened in the middle of the night by the ship shaking. The ship always swayed a little when waterborne, but not this way, nor this much; not on Elysia.

It stopped and then it started again…and again it stopped...and started. I was wondering what...when it suddenly quivered in an entirely different way, one that I recognized; it was the way the torch felt when it was just barely critical. The engineers called it "clearing her throat" and was a regular part of overhaul and inspection. I decided that Mr. Regato must be working late, and I quieted down again. The bumping did not start up again.

At breakfast I found out what it was: the behemoths had tried something, nobody knew what, against the ship itself…whereupon the Captain had quite logically ordered Mr. Regato to use the torch against them. Now, although we still did not know much about them, we did know one thing: they were not immune to superheated steam and intense radioactivity.

This brush with the sea devils braced my spine; I decided to see the Captain as Harry had suggested.

He let me in without keeping me waiting more than five minutes. Then he kept quiet and let me talk as long as I wanted to. I elaborated the whole picture, as I saw it, without attributing anything to Chet or Harry. I couldn't tell from his face whether I was reaching him or not, so I put it strongly: that Unc and Mei-Ling were both out of the picture and that the chance that I would be of any use after the next peak was so slight that he was risking his. ship and his crew on very long odds.

When I finished I still didn't know, nor did he make a direct answer. Instead he said, "Bartlett, for fifty-five minutes yesterday evening you had two other members of the crew in your room with your door closed."

"Huh? Yes, sir."

"Did you speak to them of this?"

I wanted to lie. "Uh...yes, sir."

"After that you looked up another member of the crew and remained with him until quite late...or quite early, I should say. Did you speak to him on the same subject?"

"Yes, sir."

"Very well I am holding you for investigation on two counts: suspicion of inciting to mutiny and suspicion of intent to mutiny. You are under arrest. Go to your room and remain there. No visitors."

I gulped, Then something Uncle Steve had told me came to my aid-Uncle had been a jawbone space-lawyer and loved to talk about it. "Aye, aye, sir. But I insist that I be allowed to see counsel of my choice...and that I be given a public hearing."

The Captain nodded as if I had told him that it was raining. "Certainly. Your legal rights will be respected. But those matters will have to wait; we are now preparing to get underway. So place yourself under arrest and get to your quarters."

He turned away and left me to confine myself. He didn't even seem angry.

So here I sit, alone in my room. I had to tell Unc he couldn't come in and, later, Chet. I can't believe what has happened to me.

XVI "JUST A MATHEMATICAL ABSTRACTION"

That morning seemed a million years long. Vicky checked with me at the usual time, but I told her that the watch list was being switched around again and that I would get in touch with her later. *"Is something wrong?"* she asked.

"No, hon, we're just having a little reorganization aboard ship."

"All right. But you sound worried."

I not only didn't tell her that I was in a jam, I didn't tell her anything about the disaster. Time enough later, after it had aged–

unless she found out from official news. Meanwhile there was no reason to get a nice kid upset over something she couldn't help.

Twenty minutes later Mr. Eastman showed up. I answered the door when he knocked and told him, "I'm not to have any visitors. Sorry."

He didn't leave. "I'm not a visitor, Tom; I'm here officially, for the Captain."

"Oh." I let him in.

He had a tool kit with him. He set it down and said, "The regular and special communication departments have been consolidated, now that we are so shorthanded, so it looks like I'm your boss. It won't make any difference, I'm sure. But I'm to make a reconnection on your recorder, so that you can record directly into the comm office."

"Okay. But why?"

He seemed embarrassed, "Well...you were due to go on watch a half hour ago. We're going to fix this so that you can stand your watches conveniently from here. The Captain is annoyed that I didn't arrange it earlier." He started unscrewing the access plate to the recorder.

I was speechless. Then I remembered something Uncle Steve had told me. "Hey, wait a minute!"

"Eh?"

"Oh, go ahead and rewire it, I don't care. But I won't stand any watches."

He straightened up and looked worried. "Don't talk like that, Tom, You're in enough trouble now; don't make it worse. Let's pretend you never said it. Okay?"

Mr. Eastman was a decent sort and the only one of the electronics people who had never called us freaks. I think he was really concerned about me. But I said, "I don't see how it can be worse. You tell the Captain that I said he could take his watches and–" I stopped. That wasn't what Uncle Steve would say. "Sorry. Please tell him this: 'Communicator Bartlett's respects to the Captain and he regrets that he cannot perform duty while under arrest' Got it?"

"Now look here, Tom, that's not the proper attitude. Surely, there is something in what you say from a standpoint of regulations. But we are shorthanded; everybody has to pitch in and help. You can't stand on the letter of the law; it isn't fair to the rest."

"Can't I?" I was breathing hard and exulting in the chance to hit back. "The Captain can't have his cake and eat it too. A man under arrest doesn't perform duty. It's always been that way end it always will be. You just tell him what I said."

He silently finished the reconnection with quick precision.

"You're sure that's what you want me to tell him?"

"Quite sure."

"All right. Hooked the way that thing is now"–he added, pointing a thumb at the recorder–"you can reach me on if you change your mind. So long."

"One more thing–"

"Eh?"

"Maybe the Captain hasn't thought about it, since his cabin has a bathroom, but I've been in here some hours. Who takes me down the passageway and when? Even a prisoner is entitled to regular policing."

"Oh. I guess I do. Come along."

That was the high point of the morning. I expected Captain Urqhardt to show up five minutes after Mr. Eastman had left me at my room–breathing fire and spitting cinders. So I rehearsed a couple of speeches in my head, carefully phrased to keep me inside the law and quite respectful. I knew I had him.

But nothing happened. The Captain did not show up; nobody showed up. It got to be close to noon. When no word was passed about standing by for boost, I got in my bunk with five minutes to spare and waited.

It was a long five minutes.

About a quarter past twelve I gave up and got up. No lunch either. I heard the gong at twelve-thirty, but still nothing and nobody. I finally decided that I would skip one meal before I complained, because I didn't want to give him the chance to change the subject by pointing out that I had broken arrest. It occurred to me that I could call Unc and tell him about the failure in the beans department, then I decided that the longer I waited, the more wrong the Captain would be.

About an hour after everybody else had finished eating Mr. Krishnamurti showed up with a tray. The fact that he brought it himself instead of sending whoever had pantry duty convinced me that I must be a Very Important Prisoner–particularly as Kris was unanxious to talk to me and even seemed scared of being near me. He just shoved it in and said, "Put it in the passageway when you are through."

"Thanks, Kris."

But buried in the food on the tray was a note: "Bully for you! Don't weaken and we'll trim this bird's wings. Everybody is pulling for you." It was unsigned and I did not recognize the handwriting. It wasn't Krishnamurti's; I knew his from the time when I was fouling up his farm. Nor was it either of the Travers's, and certainly not Harry's.

Finally I decided that I didn't want to guess whose it was and tore it in pieces and chewed it up, just like the Man in the Iron Mask or the Count of Monte Cristo. I don't really qualify as a romantic hero, however, as I didn't swallow it; I just chewed it up and spat it out. But

I made darn sure that note was destroyed, for I not only did not want to know who had sent it, I didn't want anybody ever to know.

Know why? That note didn't make me feel good; it worried me. Oh, for two minutes it bucked me up; I felt larger than life, the champion of the downtrodden.

Then I realized what the note meant...

Mutiny.

It's the ugliest word in space. Any other disaster is better.

One of the first things Uncle Steve had told me–told Pat and myself, way back when we were kids–was: "The Captain is right even when he is wrong." It was years before I understood it; you have to live in a ship to know why it is true. And I didn't understand it in my heart until I read that encouraging note and realized that somebody was seriously thinking of bucking the Captain's authority ... and that I was the symbol of their resistance.

A ship is not just a little world; it is more like a human body. You can't have democracy in it, not democratic consent at least, no matter how pleasant and democratic the Captain's manner may be. If you're in a pinch, you don't take a vote from your arms and legs and stomach and gizzard and find out what the majority wants. Darn well you don't! Your brain makes a decision and your whole being carries it out.

A ship in space is like that all the time and has to be. What Uncle Steve meant was that the Captain had *better* be right, you had better pray that he is right even if you disagree with him... because it won't save the ship to be right yourself if he is wrong.

But a ship is not a human body; it is people working together with a degree of selflessness that doesn't come easy–not to me, at least. The only thing that holds it together is a misty something called its morale, something you hardly know it has until the ship loses it. I realized then that the *Elsie* had been losing hers for some time. First Doc Devereaux had died and then Mama O'Toole and both of those were body blows. Now we had lost the Captain and most of the rest... and the *Elsie* was falling to pieces.

Maybe the new captain wasn't too bright, but he was trying to stop it. I began to realize that it wasn't just machinery breaking down or attacks from hostile natives that lost ships; maybe the worst hazard was some bright young idiot deciding that he was smarter than the Captain and convincing enough others that he was right. I wondered how many of the eight ships that were out of contact had died proving that their captains were wrong and that somebody like me was right.

It wasn't nearly enough to be right.

I got so upset that I thought about going to the Captain and telling him I was wrong and what could I do to help? Then I realized that I couldn't do that, either. He had told me to stay in my room–no 'if's' or 'maybe's.' If it was more important to back up the Captain and respect his authority than anything else, then the only thing was to do as I had been ordered and sit tight.

So I did.

Kris brought me dinner, almost on time. Late that evening the speakers blared the usual warning, I lay down and the, *Elsie* boosted off Elysia. But we didn't go on, we dropped into an orbit, for we went into free fall right afterwards. I spent a restless night; I don't sleep well when I'm weightless.

I was awakened by the ship going into light boost, about a half gravity. Kris brought me breakfast but I didn't ask what was going on and he didn't offer to tell me. About the middle of the morning the ship's system called out: "Communicator Bartlett, report to the Captain." It was repeated before I realized it meant me ... then I jumped up, ran my shaver over my face, decided that my uniform would have to do, and hurried up to the cabin.

He looked up when I reported my presence. "Oh, yes. Bartlett, Upon investigation I find that there is no reason to prefer charges. You are released from arrest and restored to duty. See Mr. Eastman."

He looked back at his desk and I got sore. I had been seesawing between a feeling of consecrated loyalty to the ship and to the Captain as the head thereof, and an equally strong desire to kick Urqhardt in the stomach. One kind word from him and I think I would have been his boy, come what may. As it was, I was sore.

"Captain!"

He looked up. "Yes?"

"I think you owe me an apology."

"You do? I do not think so. I acted in the interest of the whole ship. However, I harbor no ill feelings, if that is of any interest to you." He looked back at his work, dismissing me ... as if my hard feelings, if any, were of no possible importance.

So I got out and reported to Mr. Eastman. There didn't seem to be anything else to do.

Mei-Ling was in the comm office, sending code groups. She glanced up and I noticed that she looked tired. Mr. Eastman said, "Hello, Tom. I'm glad you're here; we need you. Will you raise your telepartner, please?"

One good thing about having a telepath run the special watch list is that other people don't seem to realize that the other end of each pair–the Earthside partner–is not a disembodied spirit. They eat and sleep and work and raise families, and they can't be on call whenever somebody decides to send a message. "Is it an emergency?" I asked, glancing at the Greenwich and then at the ship's clock, Vicky wouldn't check with me for another half hour; she might be at home and free, or she might not be.

“Perhaps not ‘emergency’ but ‘urgent’ certainly.”

So I called Vicky and she said she did not mind. (“Code groups, Freckle Face,”) I told her. (“So set your recorder on ‘play back.’ “)

“It’s quivering, Uncle Tom. Agitate at will.”

For three hours we sent code groups, than which there is nothing more tedious. I assumed that it was probably Captain Urqhardt’s report of what had happened to us on Elysia, or more likely his second report after the LRF had jumped him for more details. There was no reason to code it so far as I was concerned; I had been there–so it must be to keep it from our telepartners until LRF decided to release it. This suited me as I would not have relished passing all that blood and slaughter, in clear language, to little Vicky.

While we were working the Captain came in and sat down with Mr. Eastman; I could see that they were cooking up more code groups; the Captain was dictating and Eastman was working the encoding machine. Mei-Ling had long since gone. Finally Vicky said faintly, *“Uncle Tom, how urgent are these anagrams? Mother called me to dinner half an hour ago.*

(“Hang on and I’ll find out.”) I turned to the Captain and Mr. Eastman, not sure of which one to ask. But I caught Eastman’s eye and said, “Mr. Eastman, how rush is this stuff? We want to–”

“Don’t interrupt us,” the Captain cut in. “Just keep on transmitting. The priority is not your concern.”

“Captain, you don’t understand; I’m not speaking for myself. I was about to say–”

“Carry on with your work.”

I said to Vicky, (“Hold on a moment, hon.”) Then I sat back and said, “Aye aye, Captain. I’m perfectly willing to keep on spelling eye charts all night. But there is nobody at the other end.”

“What do you mean?”

“I mean it is dinner time and way past for my partner. If you want special duty at the Earthside end, you’d better coordinate with the LRF comm office. Seems to me that somebody has the watch list all mixed up.”

“I see.” As usual he showed no expression. I was beginning to think he was all robot, with wires instead of veins.

“Very well, Mr. Eastman, get Mr. McNeil and have him relieve Mr. Bartlett.”

“Yes, Captain.”

“Excuse me, Captain...”

“Yes, Bartlett?”

“Possibly you don’t know that Unc’s partner lives in Greenwich zone minus-two. It’s the middle of the night there–and she is an old lady, past seventy-five. I thought maybe you would want to know.”

“Mmm, is that right, Eastman?”

“I believe so, sir.”

“Cancel that last order. Bartlett, is your partner willing to go on again after an hour’s break for chow? Without clearing it with LRF?”

“I’ll see, sir.” I spoke to Vicky; she hesitated. I said, (“What is it, Freckle Face? A date with George? Say the word and I’ll tell Captain Bligh he can’t have you.”)

“Oh, it’s all right. I’ll throw the switch on George. I just wish they would give us something besides alphabet soup. Okay, one hour.”

(“One hour, sugar plum. Run and eat your salad. Mind your waistline.”)

“My waistline is just fine, thank you.”

“Okay, Captain.”

“Very well. Please thank him for me.”

He was so indifferent about it that I added a touch of my own. “My partner is a girl, Captain, not a “him.” Her mother has placed a two-hour curfew on it. Otherwise it must be arranged with LRF.”

“So. Very well.” He turned to Eastman. “Can’t we manage to coordinate these communication watches?”

“I’m trying, Captain. But it is new to me…and we have only three watchstanders left.”

“A watch in three should not be too difficult. Yet there always seems to be some reason why we can’t transmit. Comment?”

“Well, sir, you saw the difficulty just now. It’s a matter of coordinating with Earth. Uh, I believe the special communicators usually arranged that themselves. Or one of them did.”

“Which one? Mr. McNeil?”

“I believe Bartlett usually handled it, sir.”

“So. Bartlett?”

“I did, sir.”

“Very well, you have the job again. Arrange a continuous watch.” He started to get up.

How do you tell the Captain he can’t have his bucket of paint? Aye aye, sir. But just a minute, Captain–”

“Yes?”

“Do I understand you are authorizing me to arrange a continuous watch with LRF? Signed with your release number?”

“Naturally.”

“Well, what do I do if they won’t agree to such long hours for the old lady? Ask for still longer hours for the other two? In the case of my partner, you’ll run into parent trouble; she’s a young girl.”

“So. I can’t see why the home office hired such people.”

I didn't say anything. If he didn't know that you don't hire telepaths the way you hire butchers I wasn't going to explain.

But he persisted. "Comment?"

"I have no comment, sir. You can't get more than three or four hours a day out of any of them, except in extreme emergency. Is this one? If it is, I can arrange it without bothering the home office."

He did not answer directly. Instead he said, "Arrange the best watch list you can. Consult with Mr. Eastman." As he turned to leave I caught a look of unutterable weariness on his face and suddenly felt sorry for him. At least I didn't want to swap jobs with him.

Vicky took a trick in the middle of the night, over Kathleen's objections. Kathleen wanted to take it herself, but the truth was that she and I could no longer work easily without Vicky in the circuit, at least not anything as difficult as code groups.

The Captain did not come in to breakfast and I got there late. I looked around and found a place by Janet Meers. We no longer sat by departments–just one big horseshoe table, with the rest of the mess room arranged to look like a lounge, so that it would not seem so empty.

I was just digging into scrambled yeast on toast when Mr. Eastman stood up and tapped a glass for attention. He looked as if he had not slept for days. "Quiet, please. I have a message from the Captain." He pulled out a sheet and started to read:

" 'Notice to All Hands: By direction of the Long Range Foundation the mission of this ship has been modified. We will remain in the neighborhood of Beta Ceti pending rendezvous with Foundation Ship *Serendipity.* Rendezvous is expected in approximately one month. Immediately thereafter we will shape orbit for Earth.

" 'F. X. Urqhardt, commanding *Lewis and Clark.'"*

My jaw dropped. Why, the silent creeper! All the time I had been lambasting him in my mind he had been arguing the home office into canceling our orders ... no wonder he had used code; you don't say in clear language that your ship is a mess and your crew has gone to pot. Not if you can help it, you don't. I didn't even resent that he had not trusted us freaks to respect the security of communications; I wouldn't have trusted myself, under the circumstances.

Janet's eyes were shining... like a woman in love, or like a relativistic mathematician who has just found a new way to work a transformation. "So they've done it!" she said in a hushed voice.

"Done what?" I asked. She was certainly taking it in a big way; I hadn't realized she was that anxious to get home.

"Tommie, don't you *see?* They've done it, they've done it, they've applied irrelevance. Dr. Babcock was right."

"Huh?"

"Why, it's perfectly plain. What kind of a ship can get here in a month? An *irrelevant* ship, of course. One that is faster than light." She frowned. "But I don't see why it should take even a month. It shouldn't take any time at all. It wouldn't use time."

I said, "Take it easy, Janet. I'm stupid this morning–I didn't have much sleep last night. Why do you say that ship…uh, the *Serendipity* ... is faster than light? That's impossible."

"Tommie, Tommie ... look, dear, if it was an ordinary ship, in order to rendezvous with us here, it would have had to have left Earth over sixty-three years ago."

"Well, maybe it did."

"Tommie! It couldn't possibly–because that long ago nobody knew that we would be here now. How could they?"

I figured back. Sixty-three Greenwich years ago... mmm, that would have been sometime during our first peak. Janet seemed to be right; only an incredible optimist or a fortune teller would have sent a ship from Earth at that time to meet us here now. "I don't understand it."

"Don't you see, Tommie? I've explained it to you, I know I have. Irrelevance. Why, you telepaths were the reason the investigation started; you proved that "simultaneity' was an admissible concept … and the inevitable logical consequence was that time and space do not exist."

I felt my head begin to ache. "They don't? Then what is that we seem to be having breakfast in?"

"Just a mathematical abstraction, dear. Nothing more." She smiled and looked motherly. "Poor 'Sentimental Tommie.' You worry too much."

I suppose Janet was right, for we made rendezvous with F. S. *Serendipity* twenty-nine Greenwich days later. We spent the time moseying out at a half gravity to a locus five billion miles Galactic-north of Beta Ceti, for it appeared that the *Sarah* did not want to come too close to the big star. Still, at sixty-three lightyears, five billion miles is close shooting–a *very* near miss. We also spent the time working like mischief to arrange and prepare specimens and in collating data. Besides that, Captain Urqhardt suddenly discovered, now that we were expecting visitors, that lots and lots of things had not been cleaned and polished lately. He even inspected staterooms, which I thought was snoopy.

The *Sarah* had a mind reader aboard, which helped when it came time to close rendezvous. She missed us by nearly two light-hours; then their m-r and myself exchanged coordinates (referred to Beta Ceti) by relay back Earthside and got each other pinpointed in a hurry. By radar and radio alone we could have fiddled around for a week–if we had ever made contact at all.

But once that was done, the *Sarah* turned out to be a fast ship, lively enough to bug your eyes out. She was in our lap, showing on our short-range radar, as I was reporting the coordinates she had just had to the Captain. An hour later she was made fast and sealed to our lock. And she was a *little* ship. The *Elsie* had seemed huge when I first joined her; then after a while she was just the right size, or a little cramped for some purposes. But the *Sarah* wouldn't have made a decent EarthMoon shuttle.

Mr. Whipple came aboard first. He was an incredible character to find in space; he even carried a briefcase. But he took charge at once. He had two men with him and they got busy in a small compartment in the cargo deck. They knew just what compartment they wanted; we had to clear potatoes out of it in a hurry. They worked in there half a day, installing something they called a "null-field generator," working in odd clothes made entirely of hair-fine wires, which covered them like mummies. Mr. Whipple stayed in the door, watching while they worked and smoking a cigar–it was the first I had seen in three years and the smell of it made me ill. The relativists stuck close to him, exchanging excited comments, and so did the engineers, except that they looked baffled and slightly disgusted. I heard Mr. Regato say, "Maybe so. But a torch is reliable. You can depend on a torch."

Captain Urqhardt watched it all, Old Stone Face in person.

At last Mr. Whipple put out his cigar and said, "Well, that's that, Captain. Thompson will stay and take you in and Bjorkenson will go on in the *Sarah.* I'm afraid you will have to put up with me, too, for I am going back with you."

Captain Urqhardt's face was a gray-white. "Do I understand, sir, that you are relieving me of my command?"

"What? Good heavens, Captain, what makes you say that?"

"You seem to have taken charge of my ship…on behalf of the home office. And now you tell me that this man…er, Thompson–will take us in."

"Gracious, no. I'm sorry. I'm not used to the niceties of field work; I've been in the home office too long. But just think of Thompson as a … mmm, a sailing master for you. That's it; he'll be your pilot. But no one is displacing you; you'll remain in command until you can return home and turn over your ship. Then she'll be scrapped, of course."

Mr. Regato said in a queer, high voice, "Did you say "scrapped," Mr. Whipple?" I felt my stomach give a twist. Scrap the *Elsie? No!*

"Eh? I spoke hastily. Nothing has been decided Possibly she will be kept as a museum. In fact, that is a good idea." He took out a notebook and wrote in it. He put it away and said, "And now, Captain, if you will, I'd like to speak to all your people. There isn't much time."

Captain Urqhardt silently led him back to the mess deck.

When we were assembled, Mr. Whipple smiled and said, “I’m not much at speechmaking. I simply want to thank you all, on behalf of the Foundation, and explain what we are doing. I won’t go into detail, as I am not a scientist; I am an administrator, busy with the liquidation of Project Lebensraum, of which you are part. Such salvage and rescue operations as this are necessary; nevertheless, the Foundation is anxious to free the *Serendipity,* and her sister ships, *the Irrelevant, the Infinity, and Zero,* for their proper work, that is to say, their survey of stars in the surrounding space.”

Somebody gasped. “But that’s what *we* were doing!”

“Yes, yes, of course. But times change. One of the null-field ships can visit more stars in a year than a torchship can visit in a century. You’ll be happy to know that the *Zero* working alone has located seven Earth-type planets this past month.”

It didn’t make me happy.

Uncle Alfred McNeil leaned forward and said in a soft, tragic voice that spoke for all of us, “Just a moment, sir. Are you telling us that what we did ... *wasn’t necessary?”*

Mr. Whipple looked startled. “No, no, no! I’m terribly sorry if I gave that impression. What you did was utterly necessary, or there would not be any null ships today. Why, that’s like saying that what Columbus did wasn’t necessary, simply because we jump across oceans as if they were mud puddles nowadays.”

“Thank you, sir, “ Unc said quietly.

“Perhaps no one has told you just how indispensably necessary Project Lebensraum has been. Very possibly–things have been in a turmoil around the Foundation for some time–I know I’ve had so little sleep myself that I don’t know what I’ve done and left undone. But you realize, don’t you, that without the telepaths among you, all this progress would not have taken place?” Whipple looked around. “Who are they? I’d like to shake hands with them. In any case–I’m not a scientist, mind you; I’m a lawyer–in any case, if we had not had it proved beyond doubt that telepathy is truly instantaneous, proof measured over many lightyears, our scientists might still be looking for errors in the sixth decimal place and maintaining that telepathic signals do not propagate instantaneously but simply at a speed so great that its exact order was concealed by instrumental error. So I understand, so I am told. So you see, your great work has produced wondrous results, much greater than expected, even if they are not quite the results you were looking for.”

I was thinking that if they had told us just a few days sooner, Uncle Steve would still be alive.

But he never did want to die in bed.

"But the fruition of your efforts," Whipple went on, "did not show at once. Like so many things in science, the new idea had to grow for a long time, among specialists … then the stupendous results burst suddenly on the world. For myself, if anyone had told me six months ago that I would be out here among the stars today, giving a popular lecture on the new physics, I wouldn't have believed him. I'm not sure that I believe it now. But here I am. Among other things, I am here to help you get straightened away when we get back home." He smiled and bowed.

"Uh, Mr. Whipple," Chet Travers asked, "just when will we get home?"

"Oh, didn't I tell you? Almost immediately … say soon after lunch."

XVII OF TIME AND CHANGE

I might as well finish this off and give it a decent burial. I'll never have time to write again.

They held us in quarantine for a week at Rio. If it had not been for the LRF man with us, they might have been holding us yet. But they were nice to us. Emperor Dom Pedro III of Brazil presented us each with the Richardson Medal on behalf of the United System and made a speech which showed that he was not quite sure who we were or where we had been, but nevertheless our services were appreciated.

But not as much attention was paid to us as I had expected. Oh, I don't mean that the news services ignored us; they did take our pictures and they interviewed each of us. But the only news story I saw was headed: THIRD LOAD OF RIP VAN WINKLES ARRIVE TODAY.

The reporter or whoever it was who wrote the piece had fun with it and I hope he chokes. It seems that our clothes were quaint and our speech was quaint and we were all deliciously old-fashioned and a bit simple-minded. The picture was captioned: "Off Hats, Chuckies! Grandpa Towncomes."

I didn't look at the stories.

It didn't worry Unc; I doubt if he noticed. He was simply eager to see Celestine. "I do hope," he said to me half seriously, "that child can cook the way her mother could."

"You'll be living with her?" I asked.

"Of course. Haven't we always?"

That was so logical that I had no answer. Then we exchanged addresses. That was logical, too, but it seemed odd–all the address any of us had had was the *Elsie.* But I exchanged addresses with everybody and made a note to look up Dusty's twin, if he was still alive, and tell him he could be proud of his brother–perhaps I could locate him through the Foundation.

When they turned us loose and Celestine Johnson did show up I did not recognize her. I saw this tall, handsome old lady rush up and put her arms around Unc, almost lifting him off his feet, and I wondered if I should rescue him.

But then she looked up and caught my eye and smiled and I yelled, "Sugar Pie!"

She smiled still more and I felt myself washed through with sweetness and love. *"Hello, Tommie. It's good to see you again."*

Presently I promised to visit them at my very first chance and left them; they didn't need me for their homecoming. Nobody had come to meet me; Pat was too old and no longer traveled, Vicky was too young to be allowed to travel alone, and as for Molly and Kathleen, I think their husbands didn't see any reason for it. Neither of them liked me, anyhow. I don't blame them, under the circumstances ... even though it had been a long time (years to them) since I had mindtalked to their wives other than with Vicky's help. But I repeat, I don't blame them. If telepathy ever becomes common, such things could cause a lot of family friction.

Besides, I was in touch with Vicky whenever I wanted to be. I told her to forget it and not make a fuss; I preferred not to be met.

In fact, save for Unc, almost none of us was met other than by agents of LRF. After more than seventy-one years there was simply no one to meet them. But Captain Urqhardt was the one I felt sorriest for. I saw him standing alone while we were all waiting outside quarantine for our courier-interpreters. None of the rest was alone; we were busy, saying good-by. But he didn't have any friends–I suppose he couldn't afford to have any friends aboard ship, even while he was waiting to become Captain.

He looked so bleak and lonely and unhappy that I walked up and stuck out my hand. "I want to say good-by, Captain. It's been an honor to serve with you... and a pleasure." The last was not a lie; right then I meant it.

He looked surprised; then his face broke into a grin that I thought would crack it; his face wasn't used to it. He grabbed my hand and said, "It's been my pleasure, too, Bartlett. I wish you all the luck in the world. Er ... what are your plans?"

He said it eagerly and I suddenly realized he wanted to chat, just to visit. "I don't have any firm plans, Captain. I'm going home first, then I suppose I'll go to school. I want to go to college, but I suppose I'll have some catching up to do. There have been some changes."

"Yes, there have been changes," he agreed solemnly. "We'll all have catching up to do." Uh, what are your plans, sir?"

"I don't have any. I don't know what I can do."

He said it simply, a statement of fact; with sudden warm pity I realized that it was true. He was a torchship captain, as specialized a job as ever existed ... and now there were no more torchships. It was as if Columbus had come back from his first voyage and found nothing but steamships. Could he go to sea again? He wouldn't even have been able to find the bridge, much less know what to do when he got there.

There was no place for Captain Urqhardt; he was an anachronism. One testimonial dinner and then thank you, good night.

"I suppose I could retire," he went on, looking away. "I've been figuring my back pay and it comes to a preposterous sum."

"I suppose it would, sir." I hadn't figured my pay; Pat had collected it for me

"Confound it, Bartlett! I'm too young to retire."

I looked at him. I had never thought of him as especially old and he was not, not compared with the Captain–with Captain Swenson. But I decided that he must be around forty, ship's time. "Say, Captain, why don't you go back to school too? You can afford it."

He looked unhappy. "Perhaps I should. I suppose I ought to. Or maybe I should just chuck it and emigrate. They say there are a lot of places to choose from now."

"I'll probably do that myself, eventually. If you ask me, things have become too crowded around here. I've been thinking about Connie, and how pretty Babcock Bay looked." I really had been thinking about it during the week we had spent in quarantine. If Rio was a sample, Earth didn't have room enough to fall down; we were clear down in the Santos District and yet they said it was Rio. "If we went back to Babcock Bay, we'd be the oldest settlers."

"Perhaps I will. Yes, perhaps I will." But he still looked lost.

Our courier-interpreters had instructions to take us all home, or wherever we wanted to go, but I let mine leave once I had my ticket for home. She was awfully nice but she bothered me. She treated me as a cross between grandfather who must be watched over in traffic and a little boy who must be instructed. Not but what I needed instruction But once I had clothes that would not be stared at, I wanted to be on my own. She had taught me enough System Speech in a week so that I could get by in simple matters and I hoped that my mistakes would be charged up to a local accent from somewhere. Actually, I found that System Speech, when it wasn't upgained to tears, was just P-L lingo with more corners knocked off and some words added. English, in other words, trimmed and stretched to make a trade lingo.

So I thanked Senhorita Guerra and told her good-by and waved my ticket at a sleepy gatekeeper. He answered in Portuguese and I looked stupid, so he changed it to, “Outdowngo rightwards. Ask from allone.” I was on my way.

Somehow everybody in the ship seemed to know that I was a Rip Van Winkle and the hostess insisted on helping me make the change at White Sands. But they were friendly and did not laugh at me. One chap wanted to know about the colony being opened up on Capella VIII and did not understand why I hadn’t been there if I had spaced all that time. I tried to explain that Capella was clear across the sky and more than a hundred lightyears from where I had been, but I didn’t put the idea across.

But I did begin to see why we had not made a big splash in the news. Colony planets were the rage and there was a new one every day, so why should anyone be excited over one that we had found sixty years back? Or even over one just a few months back which did not compare with ones being turned up now? As for starships–see the latest news for current departures.

We were going to be a short paragraph in history and a footnote in science books; there wasn’t room for us in the news. I decided that even a footnote averaged well and forgot it.

Instead I started thinking about my reeducation which, I was beginning to realize, was going to have to be extensive; the changes had been more than I had bargained for. Take female styles, for example–look, I’m no Puritan, but they didn’t dress, if you want to call it that, this way when I was a kid. Girls running around without a thing on their heads, not even on top ... heads bare-naked, like an animal.

It was a good thing that Dad hadn’t lived to see it. He never let our sisters come to the table without a hat, even if Pat and I were the only unmarried males present.

Or take the weather. I had known that LRF was working on it, but I never expected them to get anywhere. Don’t people find it a little dull to have it rain only at night? Or take trucks. Of course, all you expect of a truck is that it haul things from here to there. But the lack of wheels does make them look unstable.

I wonder how long it will be before there is not a wheel on Earth?

I had decided that I would just have to get used to it all, when the hostess came by and put something in my lap and when I picked it up, it spoke to me. It was just a souvenir of the trip.

Pat’s town house was eight times as big as the flat seven of us used to live in; I decided that he had managed to hang onto at least some of the money. His robutler took my cape and boots and ushered me in to see him.

He didn't get up. I wasn't sure he could get up. I had known that he was old, but I hadn't realized that he was *old!* He was–let me see, eighty-nine. Yes, that was right; we had our ninetieth birthday coming up.

I tried to keep it casual. "Hi, Pat."

"Hi, Tom." He touched the arm of his chair and it rolled toward me. "Don't move. Stand there and let me look at you." He looked me up and down, then said wonderingly, "I knew intellectually that you would not have changed with the years. But to see it, to realize it, is quite another thing, eh? 'The Picture of Dorian Gray.' "

His voice was old.

"Where is the family?" I said uncomfortably.

"I've told the girls to wait. I wanted to see my brother alone at first. If you mean Gregory and Hans as well, no doubt you will meet them at dinner tonight. But never mind them, lad; just let me visit with you, for a while. It's been a long time." I could see tears, the ready tears of old age, in his eyes and it embarrassed me.

"Yes, I guess it has."

He leaned forward and gripped the arms of his chair.

"Tell me just one thing. Was it fun?

I thought about it. Doc Devereaux... Mama O'Toole... poor little Pru who had never lived to grow up, not really. Uncle Steve. Then I switched it off and gave him the answer he wanted. "Yes, it was fun, lots of fun."

He sighed. "That's good. I quit regretting years ago. But if it hadn't been fun, it would have been such a terrible waste."

"It was."

"That's all I wanted to hear you say. I'll call the girls down in a moment. Tomorrow I'll show you around the plant and introduce you to the key men. Not that I expect you to take hold right away. Take a long vacation if you like. But not too long, Tom ... for I guess I'm getting old. I can't look ahead the way I used to."

I suddenly realized that Pat had everything planned out, just as he always had. "Wait a minute, Pat. I'll be pleased to have you show me around your plant–and honored. But don't count on anything. First I'm going to school. After that–well, we'll see."

"Eh? Don't be silly. And don't call it 'my' plant; it's 'Bartlett Brothers, Incorporated.' It always has been. It's your responsibility as much as mine."

"Now, take it easy, Pat. I was just–"

"Quiet!" His voice was thin and shrill but it still had the sound of command. "I won't have any nonsense out of you, young man. You've had your own way and you've been off on a long picnic–I won't criticize how you managed it. That's bygones. But now you must buckle down and assume your responsibilities in the family business." He stopped and breathed heavily, then went on more softly, almost to himself. "I had no sons, I have no grandsons; I've had to carry the burden alone. To have my brother, to have my own brother..." His voice faded out.

I went up and took him by the shoulder–then I let go; it felt like match sticks. But I decided that I might as well settle it once and for all; I told myself it would be kinder. "Listen to me, Pat. I don't want to seem ungrateful, but you must get this straight. I'm going to live my own life. Understand me. It might include "Bartlett Brothers'; it might not. Probably not. But I will decide. I'll never be told again."

He brushed it aside. "You don't know your own mind; you're just a boy. Never mind, we'll speak of it tomorrow, Today is a day of gladness."

"No, Pat. I am not a boy, I am a man. You'll have to accept that. I'll make my own mistakes and I'll not be told."

He wouldn't look at me. I insisted, "I mean it, Pat. I mean it so much that if you can't accept it and abide by it, I'm walking out right now. Permanently."

Then he looked up. "You wouldn't do that to me."

"I would."

He searched my eyes. "I believe you would. You always were a mean one. You gave me a lot of trouble."

"I'm still mean... if you want to call it that."

"Uh... but you wouldn't do it to the girls? Not to little Vicky?"

"I will if you force my hand."

He held any eyes for a second, then his shoulders sagged and he buried his face in his hands. I thought he was going to cry and I felt like a villain, bullying an old man like that. I patted his shoulders, wishing that I had stalled, rather than forcing the issue.

I remembered that this frail old man had risked his health and his sanity to get in touch with me at first peak, and I thought: if he wants it so badly, maybe I should humor him. After all, he did not have long to live.

No!

It wasn't right for one person to impose his will on another, through strength or even through weakness. I was myself ... and I was going out to the stars again. Suddenly I knew it. Oh, college perhaps, first–but I was going. I owed this old man gratitude ... but I did not owe him the shape of my life. That was mine.

I took his hand and said, "I'm sorry, Pat."

He said without looking up, "All right, Tom. Have it your own way. I'm glad to have you home anyway ... on your own terms."

We talked inanities for a few moments, then he had the robutler fetch me coffee–he had milk. At last he said, "I'll call the girls." He touched the arm of his chair, a light glowed and he spoke to it.

Molly came down with Kathleen behind her. I would have known either of them anywhere, though I had never seen them. Molly was a woman in her late sixties, still handsome. Kathleen was fortyish and did not look it–no, she looked her age and wore it regally. Molly stood on tiptoe, holding both my hands, and kissed me. "We're glad you are home, Tommie."

"So we are," Kathleen agreed, and her words echoed in my mind. She kissed me, too, then said just with her voice.

"So this is my aged and ageless great-uncle. Tom, you make me wish for a son. You aren't uncle-ish and I'll never call you "uncle" again."

"Well, I don t feel uncle-ish. Except to Molly, maybe."

Molly looked startled, then giggled like a girl. "All right, Uncle Tom. I'll remember your years... and treat you with respect."

"Where's Vicky?"

"I'm here, Uncle Tom. Down in a split."

("Hurry, hon.")

Kathleen looked sharply at me, then let it pass–I'm sure she did not mean to listen. She answered, "Vicky will be down in a moment, Tom. She had to get her face just so. You know how girls are."

I wondered if I did. But Vicky was down, almost at once.

There were no freckles on her face, no braces on her teeth. Her mouth wasn't large; it was simply perfectly right for her. And the carroty hair that had worried her so was a crown of flame.

She did not kiss me; she simply came straight to me as if we had been alone, took my hands and looked up at me.

"Uncle Tom. Tom."

("Freckle Face...")

I don't know how long we played statues. Presently she said, *"After we are married, there will he none of this many-light-years-apart stuff ... Understand me? I go where you go. To Babcock Bay, if that's what you want. But I go."*

("Huh? When did you decide to marry me?")

"You seem to forget that I have been reading your mind since I was a baby–and a lot more thoroughly than you think I have! I'm still doing it."

("But how about George?")

"Nothing about George. He was a mere make-do when I thought you would not be back until I was an old lady. Forget him."

("All right.")

Our "courtship" had lasted all of twenty seconds. Without letting go my hands Vicky spoke aloud, “Tom and I are going downtown and get married. We’d like you all to come along.”

So we did.

I saw Pat eyeing me after the ceremony, sizing up the new situation and mulling over how he would use it. But Pat doesn’t understand the new setup; if I get bossed, it won’t be by him. Vicky says that she will soon have me “ricketty all through.” I hope not but I suppose she will. If so, I trust I’ll be able to adjust to it … I’ve adjusted to stranger things.

The Door Into Summer

For A.P. and Phyllis, Mick and Annette;
Aelurophiles All.

CHAPTER 1

One winter shortly before the Six Weeks War my tomcat, Petronius the Arbiter, and I lived in an old farmhouse in Connecticut. I doubt if it is there any longer, as it was near the edge of the blast area of the Manhattan near miss, and those old frame buildings burn like tissue paper. Even if it is still standing it would not be a desirable rental because of the fallout, but we liked it then, Pete and I. The lack of plumbing made the rent low and what had been the dining room had a good north light for my drafting board.

The drawback was that the place had eleven doors to the outside.

Twelve, if you counted Pete's door. I always tried to arrange a door of his own for Pete-in this case a board fitted into a window in an unused bedroom and in which I had cut a cat strainer just wide enough for Pete's whiskers. I have spent too much of my life opening doors for cats. I once calculated that, since the dawn of civilization, nine hundred and seventy-eight man-centuries have been used up that way. I could show you figures.

Pete usually used his own door except when he could bully me into opening a people door for him, which he preferred. But he would not use his door when there was snow on the ground.

While still a kitten, all fluff and buzzes, Pete had worked out a simple philosophy. I was in charge of quarters, rations, and weather; he was in charge of everything else. But he held me especially responsible for weather. Connecticut winters are good only for Christmas cards; regularly that winter Pete would check his own door, refuse to go out it because of that unpleasant white stuff beyond it (he was no fool), then badger me to open a people door.

He had a fixed conviction that at least one of them must lead into summer weather. Each time this meant that I had to go around with him to each of eleven doors, held it open while he satisfied himself that it was winter out that way, too, then go on to the next door, while his criticisms of my mismanagement grew more bitter with each disappointment.

Then he would stay indoors until hydraulic pressure utterly forced him outside. When he returned the ice in his pads would sound like little clogs on the wooden floor and he would glare at me and refuse to purr until he had chewed it all out. . . whereupon he would forgive me until the next time.

But he never gave up his search for the Door into Summer.

On 3 December, 1970, 1 was looking for it too.

My quest was about as hopeless as Pete's had been in a Connecticut January. What little snow there was in southern California was kept on mountains for skiers, not in downtown Los Angeles-the stuff probably couldn't have pushed through the smog anyway. But the winter weather was in my heart.

I was not in bad health (aside from a cumulative hangover), I was still on the right side of thirty by a few days, and I was far from being broke. No police were looking for me, nor any husbands, nor any process servers; there was nothing wrong that a slight case of amnesia would not have cured. But there was winter in my heart and I was looking for the door to summer.

If I sound like a man with an acute case of selfpity, you are correct. There must have been well over two billion people on this planet in worse shape than I was. Nevertheless, I was looking for the Door into Summer.

Most of the ones I had checked lately had been swinging doors, like the pair in front of me then-the SANS SOUCI Bar Grill, the sign said. I went in, picked a booth hallway back, placed the overnight bag I was carrying carefully on the seat, slid in by it, and waited for the waiter.

The overnight bag said, "Waarrrh?"

I said, "Take it easy, Pete."

"Naaow!"

"Nonsense, you just went. Pipe down, the waiter is coming."

Pete shut up. I looked up as the waiter leaned over the table, and said to him, "A double shot of your bar Scotch, a glass of plain water, and a split of ginger ale."

The waiter looked upset. "Ginger ale, sir? With Scotch?'

"Do you have it or don't you?"

"Why, yes, of course. But-"

"Then fetch it. I'm not going to drink it; I just want to sneer at it. And bring a saucer too."

"As you say, sir." He polished the table top. "How about a small steak, sir? Or the scallops are very good today."

"Look, mate, I'll tip you for the scallops if you'll promise not to serve them. All I need is what I ordered. . . and don't forget the saucer."

He shut up and went away. I told Pete again to take it easy, the Marines had landed. The waiter returned, his pride appeased by carrying the split of ginger ale on the saucer. I had him open it while I mixed the Scotch with the water. "Would you like another glass for the ginger ale, sir?"

"I'm a real buckaroo; I drink it out of the bottle."

He shut up and let me pay him and tip him, not forgetting a tip for the scallops. When he had gone I poured ginger ale into the saucer and tapped on the top of the overnight bag. "Soup's on, Peter."

It was unzipped; I never zipped it with him inside. He spread it with his paws, poked his head out, looked around quickly, then levitated his forequarters and placed his front feet on the edge of the table. I raised my glass and we looked at each other. "Here's to the female race, Pete-find `em and forget `em!"

He nodded; it matched his own philosophy perfectly. He bent his head daintily and started lapping up ginger ale. "If you can, that is," I added, and took a deep swig. Pete did not answer. Forgetting a female was no effort to him; he was the natural-born bachelor type.

Facing me through the window of the bar was a sign that kept changing. First it would read: WORK WHILE YOU SLEEP. Then it would say: AND DREAM YOUR TROUBLES AWAY. Then it would flash in letters twice as big:

MUTUAL ASSURANCE COMPANY

I read all three several times without thinking about them. I knew as much and as little about suspended animation as everybody else did. I had read a popular article or so when it was first announced and two or three times a week I'd get an insurance-company ad about it in the morning mail; I usually chucked them without looking at them since they didn't seem to apply to me any more than lipstick ads did.

In the first place, until shortly before then, I could not have paid for cold sleep; it's expensive. In the second place, why should a man who was enjoying his work, was making money, expected to make more, was in love and about to be married, commit semi-suicide?

If a man had an incurable disease and expected to die anyhow but thought the doctors a generation later might be able to cure him-and he could afford to pay for suspended animation while medical science caught up with what was wrong with him-then cold sleep was a logical bet. Or if his ambition was to make a trip to Mars and he thought that clipping one generation out of his personal movie film would enable him to buy a ticket, I supposed that was logical too-there had been a news story about a cafe-society couple who got married and went right straight from city hail to the sleep sanctuary of Western World Insurance Company with an announcement that they had left instructions not to be called until they could spend their honeymoon on an interplanetary liner although I had suspected that it was a publicity gag rigged by the insurance company and that they had ducked out the back door under assumed names. Spending your wedding night cold as a frozen mackerel does not have the ring of truth in it.

And there was the usual straightforward financial appeal, the one the insurance companies bore down on: "Work while you sleep." Just hold still and let whatever you have saved grow into a fortune. If you are fifty-five and your retirement fund pays you two hundred a month, why not sleep away the years, wake up still fifty-five, and have it pay you a thousand a month? To say nothing of waking up in a bright new world which would probably promise you a much longer and healthier old age in which to enjoy the thousand a month? That one they really went to town on, each company proving with incontrovertible figures that its selection of stocks for its trust fund made more money faster than any of the others. "Work while you sleep!"

It had never appealed to me. I wasn't fifty-five, I didn't want to retire, and I hadn't seen anything wrong with 1970.

Until recently, that is to say. Now I was retired whether I liked it or not (I didn't); instead of being on my honeymoon I was sitting in a second-rate bar drinking Scotch purely for anesthesia; instead of a wife I had one much-scarred tomcat with a neurotic taste for ginger ale; and as for liking right now, I would have swapped it for a case of gin and then busted every bottle.

But I wasn't broke.

I reached into my coat and took out an envelope, opened it. It had two items in it. One was a certified check for more money than I had ever had before at one time; the other was a stock certificate in Hired Girl, Inc. They were both getting a little mussed; I had been carrying them ever since they were handed to me.

Why not?

Why not duck out and sleep my troubles away? Pleasanter than joining the Foreign Legion, less messy than suicide, and it would divorce me completely from the events and the people who had made my life go sour. So why not?

I wasn't terribly interested in the chance to get rich. Oh, I had read H. G. Wells's When The Sleeper Wakes, not only when the insurance companies started giving away free copies, but before that, when it was just another classic novel; I knew what compound interest and stock appreciation could do. But I was not sure that I had enough money both to buy the Long Sleep and to set up a trust large enough to be worth while. The other argument appealed to me more: go beddy-bye and wake up in a different world. Maybe a lot better world, the way the insurance companies would have you believe . . . or maybe worse. But certainly different.

I could make sure of one important difference: I could doze long enough to be certain that it was a world without Belle Darkin-or Miles Gentry, either, but Belle especially. If Belle was dead and buried I could forget her, forget what she had done to me, cancel her out . . instead of gnawing my heart with the knowledge that she was only a few miles away.

Let's see, how long would that have to be? Belle was twentythree-

or claimed to be (I recalled that once she had seemed to let slip that she remembered Roosevelt as President). Well, in her twenties anyhow. If I slept seventy years, she'd be an obituary. Make it seventy-five and be safe.

Then I remembered the strides they were making in geriatrics; they were talking about a hundred and twenty years as an attainable "normal" life span. Maybe I would have to sleep a hundred years. I wasn't certain that any insurance company offered that much.

Then I had a gently fiendish idea, inspired by the warm glow of Scotch. It wasn't necessary to sleep until Belie was dead; it was enough, more than enough, and just the fitting revenge on a female to be young when she was old. Just enough younger to rub her nose in it-say about thirty years.

I felt a paw, gentle as a snowflake, on my arm. "Mooorrre!" announced Pete.

"Greedy gut," I told him, and poured him another saucer of ginger ale. He thanked me with a polite wait, then started lapping it.

But he had interrupted my pleasantly nasty chain of thought. What the devil could I do about Pete?

You can't give away a cat the way you can a dog; they won't stand for it. Sometimes they go with the house, but not in Pete's case; to him I had been the one stable thing in a changing world ever since he was taken from his mother nine years earlier. . . I had even managed to keep him near me in the Army and that takes real wangling.

He was in good health and likely to stay that way even though he was held together with scar tissue. If he could just correct a tendency to lead with his right he would be winning battles and siring kittens for another five years at least.

I could pay to have him kept in a kennel until he died (unthinkable!) or I could have him chloroformed (equally unthinkable)-or I could abandon him. That is what it boils down to with a cat: you either carry out the Chinese obligation you have assumed-or you abandon the poor thing, let him go wild, destroy its faith in the eternal rightness.

The way Belle had destroyed mine.

So, Danny Boy, you might as well forget it. Your own life may have gone as sour as dill pickles; that did not excuse you in the slightest from your obligation to carry out your contract to this super-spoiled cat.

Just as I reached that philosophical truth Pete sneezed; the bubbles had gone up his nose. "Gesundheit," I answered, "and quit trying to drink it so fast."

Pete ignored me. His table manners averaged better than mine and he knew it. Our waiter had been hanging around the cash register, talking with the cashier. It was the after-lunch slump and the only other customers were at the bar. The waiter looked up when I said "Gesundheit," and spoke to the cashier. They both looked our way, then the cashier lifted the flap gate in the bar and headed toward us.

I said quietly, "MPs, Pete."

He glanced around and ducked down into the bag; I pushed the top together. The cashier came over and leaned on my table, giving the seats on both sides of the booth a quick double-O. "Sony, friend," he said flatly, "but you'll have to get that cat out of here."

"What cat?"

"The one you were feeding out of that saucer."

"I don't see any cat."

This time he bent down and looked under the table. "You've got him in that bag," he accused.

"Bag? Cat?" I said wonderingly. "My friend, I think you've come down with an acute figure of speech."

"Huh? Don't give me any fancy language. You've got a cat in that bag. Open it up."

"Do you have a search warrant?"

"What? Don't be silly."

"You're the one talking silly, demanding to see the inside of my bag without a search warrant. Fourth Amendment-and the war has been over for years. Now that we've settled that, please tell my waiter to make it the same all around-or fetch it yourself."

He looked pained. "Brother, this isn't anything personal, but I've got a license to consider. `No dogs, no cats-it says so right up there on the wall. We aim to run a sanitary establishment."

"Then your aim is poor." I picked up my glass. "See the lipstick marks? You ought to be checking your dishwasher, not searching your customers."

"I don't see no lipstick."

"I wiped most of it off. But let's take it down to the Board of Health and get the bacteria count checked."

He sighed. "You got a badge?"

“No.”

"Then we're even. I don't search your bag and you don't take me down to the Board of Health. Now if you want another drink, step up to the bar and have it. . . on the house. But not here." He turned and headed up front.

I shrugged. "We were just leaving anyhow."

As I started to pass the cashier's desk on my way out he looked up. "No hard feelings?"

"Nope. But I was planning to bring my horse in here for a drink later. Now I won't."

"Suit yourself. The ordinance doesn't say a word about horses. But just one more thing-does that cat really drink ginger ale?"

"Fourth Amendment, remember?"

"I don't want to see the animal; I just want to know."

"Well," I admitted, "he prefers it with a dash of bitters, but he'll drink it straight if he has to."

"It'll ruin his kidneys. Look here a moment, friend."

"At what?"

"Lean back so that your head is close to where mine is. Now look up at the ceiling over each booth . . . the mirrors up in the decorations. I knew there was a cat there-because I saw it."

I leaned back and looked. The ceiling of the joint had a lot of junky decoration, including many mirrors; I saw now that a number of them, camouflaged by the design, were so angled as to permit the cashier to use them as periscopes without leaving his station. "We need that," he said apologetically. "You'd be shocked at what goes on in those booths . . . if we didn't keep an eye on `em. It's a sad world."

"Amen, brother." I went on out

Once outside, I opened the bag and carried it by one handle; Pete stuck his head out. "You heard what the man said, Pete. `It's a sad world.' Worse than sad when two friends can't have a quiet drink together without being spied on. That settles it."

"Now?" asked Pete.

"If you say so. If we're going to do it, there's no point in stalling."

"Now!" Pete answered emphatically.

"Unanimous. It's right across the street."

The receptionist at the Mutual Assurance Company was a fine example of the beauty of functional design. In spite of being streamlined for about Mach Four, she displayed frontal-mounted radar housings and everything else needed for her basic mission. I reminded myself that she would be Whistler's Mother by the time I was out and told her that I wanted to see a salesman.

"Please be seated. I will see if one of out' client executives is free." Before I could sit down she added, "Our Mr. Powell will see you. This way, please."

Our Mr. Powell occupied an office which made me think that Mutual did pretty well for itself. He shook hands moistly, sat me down, offered me a cigarette, and attempted to take my bag. I hung onto it. "Now, sir, how can we serve you?"

"I want the Long Sleep."

His eyebrows went up and his manner became more respectful. No doubt Mutual would write you a camera floater for seven bucks, but the Long Sleep let them get their pattypaws on all of a client's assets. "A very wise decision," he said reverently. "I wish I were free to take it myself. But . . . family responsibilities, you know." He reached out and picked up a form. "Sleep clients are usually in a hurry. Let me save you time and bother by filling this out for you . . . and we'll arrange for your physical examination at once."

"Just a moment."

“Yes?”

"One question. Are you set up to arrange cold sleep for a cat?"

He looked surprised, then pained. "You're jesting."

I opened the top of the bag; Pete stuck his head out. "Meet my side-kick. Just answer the question, please. If the answer is `no,' I want to sashay up to Central Valley Liability. Their offices are in this same building, aren't they?"

This time he looked horrified. "Mister-Uh, I didn't get your name?"

"Dan Davis."

"Mr. Davis, once a man enters our door he is under the benevolent protection of Mutual Assurance. I couldn't let you go to Central Valley."

"How do you plan to stop me? Judo?"

"Please!" He glanced around and looked upset. "Our company is an ethical company."

"Meaning that Central Valley is not?"

"I didn't say that; you did. Mr. Davis, don't let me sway you-"

"You won't."

"-but get sample contracts from each company. Get a lawyer, better yet, get a licensed semanticist. Find out what we offer-and actually deliver-and compare it with what Central Valley claims to offer." He glanced around again and leaned toward me. "I shouldn't say this-and I do hope you won't quote me-but they don't even use the standard actuarial tables."

"Maybe they give the customer a break instead."

"What? My dear Mr. Davis, we distribute every accrued benefit. Our charter requires it . . . while Central Valley is a stock company."

"Maybe I should buy some of their-Look, Mr. Powell, we're wasting time. Will Mutual accept my pal here? Or not? If not, I've been here too long already."

"You mean you want to pay to have that creature preserved alive in hypothermia?"

"I mean I want both of us to take the Long Sleep. And don't call him `that creature'; his name is Petronius."

"Sorry. I’ll rephrase my question. You are prepared to pay two custodial fees to have both of you, you and, uh, Petronius committed to our sanctuary?"

"Yes. But not two standard fees. Something extra, of course, but you can stuff us both in the same coffin; you can't honestly charge as much for Pete as you charge for a man."

"This is most unusual."

"Of course it is. But we'll dicker over the price later . . . or I'll dicker with Central Valley. Right now I want to find out if you can do it."

"Uh. . ." He drummed on his desk top. "Just a moment." He picked up his phone and said, "Opal, get me Dr. Berquist." I didn't hear the rest of the conversation, for he switched on the privacy guard. But after a while he put down the instrument and smiled as if a rich uncle had died. "Good news, sir! I had overlooked momentarily the fact that the first successful experiments were made on cats. The techniques and critical factors for cats are fully established. In fact there is a cat at the Naval Research Laboratory in Annapolis which is and has been for more than twenty years alive in hypothermia."

"I thought NRL was wiped out when they got Washington?"

"Just the surface buildings, sir, not the deep vaults. Which is a tribute to the perfection of the technique; the animal was unattended save by automatic machinery for more than two years, yet it still lives, unchanged, unaged. As you will live, sir, for whatever period you elect to entrust yourself to Mutual.”

I thought he was going to cross himself. "Okay, okay, now let's get on with the dicker."

There were four factors involved: first, how to pay for our care while we were hibernating; second, how long I wanted us to sleep; third, how I wanted my money invested while I was in the freezer; and last, what happened if I conked out and never woke up.

I finally settled on the year 2000, a nice round number and only thirty years away. I was afraid that if I made it any longer I would be completely out of touch. The changes in the last thirty years (my own lifetime) had been enough to bug a man's eyes out-two big wars and a dozen little ones, the downfall of communism, the Great Panic, the artificial satellites, the change to atomic power-why, when I was a kid they didn't even have multimorphs.

I might find 2000 A.D. pretty confusing. But if I didn't jump that far Belle would not have time to work up a fancy set of wrinkles.

When it came to how to invest my dough I did not consider government bonds and other conservative investments; our fiscal system has inflation built into it. I decided to hang onto my Hired Girl stock and put the cash into other common stocks, with a special eye to some trends I thought would grow. Automation was bound to get bigger. I picked a San Francisco fertilizer firm too; it had been experimenting with yeasts and edible algae - there were more people every year and steak wasn't going to get any cheaper. The balance of the money I told him to put into the company's managed trust fund.

But the real choice lay in what to do if I died in hibernation. The company claimed that the odds were better than seven out of ten that I would live through thirty years of cold sleep . . . and the company would take either end of the bet. The odds weren't reciprocal and I didn't expect them to be; in any honest gambling there is a breakage to the house. Only crooked gamblers claim to give the sucker the best of it, and insurance is legalized gambling. The oldest and most reputable insurance firm in the world, Lloyd's of London, makes no bones about it-Lloyd's associates will take either end of any bet. But don't expect better-than-track odds: somebody has to pay for Our Mr. Powell's tailormade suits.

I chose to have every cent go to the company trust fund in case I died. . . which made Mr. Powell want to kiss me and made me wonder just how optimistic those seven-out-of-ten odds were. But I stuck with it because it made me an heir (if I lived) of everyone else with the same option (if they died), Russian roulette with the survivors picking up the chips . . . and with the company, as usual, raking in the house percentage.

I picked every alternative for the highest possible return and no hedging if I guessed wrong; Mr. Powell loved me, the way a croupier loves a sucker who keeps playing the zero. By the time we had settled my estate he was anxious to be reasonable about Pete; we settled for 15 per cent of the human fee to pay for Pete's hibernation and drew up a separate contract for him.

There remained consent of court and the physical examination. The physical I didn't worry about; I had a hunch that, once I elected to have the company bet that I would die, they would accept me even in the last stages of the Black Death. But I thought that getting a judge to okay it might be lengthy. It had to be done, because a client in cold sleep was legally in chancery, alive but helpless.

I needn't have worried. Our Mr. Powell had quadruplicate originals made of nineteen different papers. I signed till I got finger cramps, and a messenger rushed away with them while I went to my physical examination; I never even saw the judge.

The physical was the usual tiresome routine except for one thing. Toward the end the examining physician looked me sternly in the eye and said, "Son, how long have you been on this binge?"

"Binge?"

"Binge."

"What makes you think that, Doctor? I'm as sober as you are. `Peter Piper picked a peck of pickled-"

"Knock it off and answer me."

`Mmm. . . I'd say about two weeks. A little over."

"Compulsive drinker? How many times have you pulled this stunt in the past?"

"Well, as a matter of fact, I haven't. You see-" I started to tell him what Belle and Miles had done to me, why did.

He shoved a palm at me. "Please. I've got troubles of my own and I'm not a psychiatrist. Really, all I'm interested in is finding out whether or not your heart will stand up under the ordeal of putting you down to four degrees centigrade. Which it will. And I ordinarily don't care why anyone is nutty enough to crawl into a hole and pull it in after him; I just figure it is one less damn fool underfoot. But some residual tinge of professional conscience prevents me from letting any man, no matter how sorry a specimen, climb into one of those coffins while his brain is sodden with alcohol. Turn around."

"Huh?"

"Turn around; I'm going to inject you in your left buttock."

I did and he did. While I was rubbing it he went on, "Now drink this. In about twenty minutes you will be more sober than you've been in a month. Then, if you have any sense-which I doubt-you can review your position and decide whether to run away from your troubles . . . or stand up to them like a man."

I drank it.

"That's all; you can get dressed. I'm signing your papers, but I'm warning you that I can veto it right up to the last minute. No more alcohol for you at all, a light supper and no breakfast. Be here at noon tomorrow for final check."

He turned away and didn't even say good-by. I dressed and Went out of there, sore as a boil. Powell had all my papers ready. When I picked them up he said, "You can leave them here if you wish and pick them up at noon tomorrow…the set that goes in the vault with you, that is."

"What happens to the others?"

"We keep one set ourselves, then after you are committed we file one set with the court and one in the Carlsbad Archives. Uh, did the doctor caution you about diet?"

"He certainly did." I glanced at the papers to cover my annoyance.

Powell reached for them. "I'll keep them safe overnight."

I pulled them back. "I can keep them safe. I might want to change some of these stock selections."

"Uh, it's rather late for that, my dear Mr. Davis."

"Don't rush me. If I do make any changes I'll come in early." I opened the overnight bag and stuck the papers down in a side flap beside Pete. I had kept valuable papers there before; while it might not be as safe as the public archives in the Carlsbad Caverns, they were safer than you might think. A sneak thief had tried to take something out of that flap on another occasion; he must still have the scars of Pete's teeth and claws.

CHAPTER 2

My car was parked under Pershing Square where I had left it earlier in the day. I dropped money into the parking attendant, set the bug on arterial-west, got Pete out and put him on the seat, and relaxed.

Or tried to relax. Los Angeles traffic was too fast and too slashingly murderous for me to be really happy under automatic control; I wanted to redesign their whole installation-it was not a really modern "fail safe." By the time we were west of Western Avenue and could go back on manual control I was edgy and wanted a drink. "There's an oasis, Pete."

"Blurrrt?"

"Right ahead."

But while I was looking for a place to park-Los Angeles was safe from invasion; the invaders wouldn't find a place to park-I recalled the doctor's order not to touch alcohol.

So I told him emphatically what he could do with his orders.

Then I wondered if he could tell, almost a day later, whether or not I had taken a drink. I seemed to recall some technical article, but it had not been in my line and I had just skimmed it.

Damnation, he was quite capable of refusing to let me coldsleep. I'd better play it cagey and lay off the stuff.

"Now?" inquired Pete.

"Later. We're going to find a drive-in instead." I suddenly realized that I didn't really want a drink; I wanted food and a night's sleep. Doc was correct; I was more sober and felt better than I had in weeks. Maybe that shot in the fanny had been nothing but B1 if so, it was jet-propelled. So we found a drive-in restaurant. I ordered chicken in the rough for me and a half pound of hamburger and some milk for Pete and took him out for a short walk while it was coming. Pete and I ate in drive-ins a lot because I didn't have to sneak him in and out.

A half hour later I let the car drift back out of the busy circle, stopped it, lit a cigarette, scratched Pete under the chin, and thought.

Dan, my boy, the doe was right; you've been trying to dive down the neck of a bottle. That's okay for your pointy head but it's too narrow for your shoulders. Now you're cold sober, you've got your belly crammed with food and it's resting comfortably for the first time in days. You feel better.

What else? Was the doc right about the rest of it? Are you a spoiled infant? Do you lack the guts to stand up to a setback? Why are you taking this step? Is it the spirit of adventure? Or are you simply hiding from yourself, like a Section Eight trying to crawl back into his mother's womb?

But I do want to do it, I told myself-the year 2000. Boy!

Okay, so you want to. But do you have to run off without settling the beefs you have right here?

All right, all right!-but how can I settle them? I don't want Belle back, not after what she's done. And what else can I do? Sue them? Don't be silly, I've got no evidence-and anyhow, nobody ever wins a lawsuit but the lawyers.

Pete said, "Wellll? Y'know!"

I looked down at his waffle-scarred head. Pete wouldn't sue anybody; if he didn't like the cut of another cat's whiskers, he simply invited him to come out and fight like a cat. "I believe you're right, Pete. I'm going to look up Miles, tear his arm off, and beat him over the head with it until he talks. We can take the Long Sleep afterward. But we've got to know just what it was they did to us and who rigged it."

There was a phone booth back of the stand. I called Miles, found him at home, and told him to stay there; I'd be out.

My old man named me Daniel Boone Davis, which was his way of declaring for personal liberty and self-reliance. I was born in 1940, a year when everybody was saying that the individual was on the skids and the future belonged to mass man. Dad refused to believe it; naming me was a note of defiance. He died under brainwashing in North Korea, trying to the last to prove his thesis.

When the Six Weeks War came along I had a degree in mechanical engineering and was in the Army. I had not used my degree to try for a commission because the one thing Dad had left me was an overpowering yen to be on my own, giving no orders, taking no orders, keeping no schedules-I simply wanted to serve my hitch and get out. When the Cold War boiled over, I was a sergeant-technician at Sandia Weapons Center in New Mexico, stuffing atoms in atom bombs and planning what I would do when my time was up. The day Sandia disappeared I was down in Dallas drawing a fresh supply of Schrecklichkeit. The fallout on that was toward Oklahoma City, so I lived to draw my GI benefits.

Pete lived through it for a similar reason. I had a buddy, Miles Gentry, a veteran called back to duty. He had married a widow with one daughter, but his wife had died about the time he was called back. 1-fe lived off post with a family in Albuquerque so as to have a home for his stepchild Frederica. Little Picky (we never called her "Frederica") took care of Pete for me. Thanks to the cat-goddess Bubastis, Miles and Picky and Pete were away on a seventy-two that awful weekend-Ricky took Pete with them because I could not take him to Dallas.

I was as surprised as anyone when it turned out we had divisions stashed away at Thule and other places that no one suspected. It had been known since the `30s that the human body could be chilled until it slowed down to almost nothing. But it had been a laboratory trick, or a last-resort therapy, until the Six Weeks War. I'll say this for military research: if money and men can do it, it gets results. Print another billion, hire another thousand scientists and engineers, then in some incredible, lefthanded, inefficient fashion the answers come up. Stasis, cold sleep, hibernation, hypothermia, reduced metabolism, call it what you will-the logistics-medicine research teams had found a way to stack people like cordwood and use them when needed. First you drug the subject, then hypnotize him, then cool him down and hold him precisely at four degrees centigrade; that is to say, at the maximum density of water with no ice crystals. If you need him in a hurry he can be brought up by diathermy and posthypnotic command in ten minutes (they did it in seven at Nome), but such speed tends to age the tissues and may make him a little stupid from then on. If you aren't in a hurry two hours minimum is better. The quick method is what professional soldiers call a "calculated risk."

The whole thing was a risk the enemy had not calculated, so when the war was over I was paid off instead of being liquidated or sent to a slave camp, and Miles and I went into business together about the time the insurance companies started selling cold sleep.

We went to the Mojave Desert, set up a small factory in an Air Force surplus building, and started making Hired Girl, my engineering and Miles's law and business experience. Yes, I invented Hired Girl and all her kinfolk-Window Willie and the rest-even though you won't find my name on them. While I was in the service I had thought hard about what one engineer can do. Go to work for Standard, or du Pont, or General Motors? Thirty years later they give you a testimonial dinner and a pension. You haven't missed any meals, you've had a lot of rides in company airplanes. But you are never your own boss. The other big market for engineers is civil service-good starting pay, good pensions, no worries, thirty days annual leave, liberal benefits. But I had just had a long government vacation and wanted to be my own boss.

What was there small enough for one engineer and not requiring six million man-hours before the first model was on the market? Bicycle-shop engineering with peanuts for capital, the way Ford and the Wright brothers had started-people said those days were gone forever; I didn't believe it.

Automation was booming-chemical-engineering plants that required only two gauge-watchers and a guard, machines that printed tickets in one city and marked the space "sold" in six other cities, steel moles that mined coal while the 13MW boys sat back and watched. So while I was on Uncle Sam's payroll I soaked up all the electronics, linkages, and cybernetics that a clearance would permit.

What was the last thing to go automatic? Answer: any housewife's house. I didn't attempt to figure out a sensible scientific house; women didn't want one; they simply wanted a better upholstered cave. But housewives were still complaining about the Servant Problem long after servants had gone the way of the mastodon. I had rarely met a housewife who did not have a touch of slaveholder in her; they seemed to think there really ought to be strapping peasant girls grateful for a chance to scrub floors fourteen hours a day and eat table scraps at wages a plumber's helper would scorn.

That's why we called the monster Hired Girl-it brought back thoughts of the semi-slave immigrant girl whom Grandma used to bully. Basically it was just a better vacuum cleaner and we planned to market it at a price competitive with ordinary suck brooms.

What Hired Girl would do (the first model, not the semi-intelligent robot I developed it into) was to clean floors . . . any floor, all day long and without supervision. And there never was a floor that didn't need cleaning.

It swept, or mopped, or vacuum-cleaned, or polished, consulting tapes in its idiot memory to decide which. Anything larger than a BB shot it picked up and placed in a tray on its upper surface, for someone brighter to decide whether to keep or throw away. It went quietly looking for dirt all day long, in search curves that could miss nothing, passing over clean floors in its endless search for dirty floors. It would get out of a room with people in it, like a well-trained maid, unless its mistress caught up with it and flipped a switch to tell the poor thing it was welcome. Around dinnertime it would go to its stall and soak up a quick charge-this was before we installed the everlasting power pack.

There was not too much difference between Hired Girl, Mark One, and a vacuum cleaner. But the difference-that it would clean without supervision-was enough; it sold.

I swiped the basic prowl pattern from the "Electric Turtles" that were written up in Scientific American in the late forties, lifted a memory circuit out of the brain of a guided missile (that's the nice thing about top-secret gimmicks; they don't get patented), and I took the cleaning devices and linkages out of a dozen things, including a floor polisher used in army hospitals, a soft-drink dispenser, and those "hands" they use in atomics plants to handle anything "hot." There wasn't anything really new in it; it was just the way I put it together. The "spark of genius" required by our laws lay in getting a good patent lawyer.

The real genius was in the production engineering; the whole thing could be built with standard parts ordered out of Sweet's Catalogue, with the exception of two three-dimensional cams and one printed circuit. The circuit we subcontracted; the cams I made myself in the shed we called our "factory," using war-surplus automated tools. At first Miles and I were the whole assembly line-bash to fit, file to hide, paint to cover. The pilot model cost $4317.09; the first hundred cost just over $39 each-and we passed them on to a Los Angeles discount house at $60 and they sold them for $85. We had to let them go on consignment to unload them at all, since we could not afford sales promotion, and we darn near starved before receipts started coming in. Then Life ran a two-page on Hired Girl . . . and it was a case of having enough help to assemble the monster.

Belle Darkin joined us soon after that. Miles and I had been pecking out letters on a 1908 Underwood; we hired her as a typewriter jockey and bookkeeper and rented an electric machine with executive type face and carbon ribbon and I designed a letterhead. We were ploughing it all back into the business and Pete and I were sleeping in the shop while Miles and Ricky had a nearby shack. We incorporated in self-defense. It takes three to incorporate; we gave Belle a share of stock and designated her secretary-treasurer. Miles was president and general manager; I was chief engineer and chairman of the board . . . with 51 per cent of the stock.

I want to make clear why I kept control. I wasn't a hog; I simply wanted to be my own boss. Miles worked like a trouper, I give him credit. But better than 60 per cent of the savings that got us started were mine and 100 per cent of the inventiveness and engineering were mine. Miles could not possibly have built Hired Girl, whereas I could have built it with any of a dozen partners, or possibly without one-although I might have flopped in trying to make money out of it; Miles was a businessman while I am not.

But I wanted to be certain that I retained control of the shop, and I granted Miles equal freedom in the business end . . . too much freedom, it turned out.

Hired Girl, Mark One, was selling like beer at a ball game and I was kept busy for a while improving it and setting up a real assembly line and putting a shop master in charge, then I happily turned to thinking up more household gadgets. Amazingly little real thought had been given to housework, even though it is at least 50 per cent of all work in the world. The women's magazines talked about "labor saving in the home" and "functional kitchens," but it was just prattle; their pretty pictures showed living-working arrangements essentially no better than those in Shakespeare's day; the horse-to-jet-plane revolution had not reached the home.

I stuck to my conviction that housewives were reactionaries. No "machines for living"; just gadgets to replace the extinct domestic servant, that is, for cleaning and cooking and baby tending.

I got to thinking about dirty windows and that ring around the bathtub that is so hard to scrub, as you have to bend double to get at it. It turned Out that an electrostatic device could make dirt go spung! off any polished silica surface, window glass, bathtubs, toilet bowls-anything of that sort. That was Window Willie and it's a wonder that somebody hadn't thought of him sooner. I held him back until I had him down to a price that people could not refuse. Do you know what window washing used to cost by the hour?

I held Willie out of production much longer than suited Miles. He wanted to sell it as soon as it was cheap enough, but I insisted on one more thing: Willie had to be easy to repair. The great shortcoming of most household gadgets was that the better they were and the more they did, the more certain they were to get out of order when you needed them most-and then require an expert at five dollars an hour to make them move again. Then the same thing will happen the following week, if not to the dishwasher, then to the air conditioner . . . usually late Saturday night during a snowstorm.

I wanted my gadgets to work and keep on working and not to cause ulcers in their owners.

But gadgets do get out of order, even mine. Until that great day when all gadgets are designed with no moving parts, machinery will continue to go sour. If you stuff a house with gadgets some of them will always be out of order.

But military research does get results and the military had licked this problem years earlier. You simply can't lose a battle, lose thousands or millions of lives, maybe the war itself, just because some gadget the size of your thumb breaks down. For military purposes they used a lot of dodges: "fail safe," standby circuits, "tell me three times," and so forth. But one they used that made sense for household equipment was the plug-in component principle.

It is a moronically simple idea: don't repair, replace. I wanted to make every part of Window Willie which could go wrong a plug-in unit, then include a set of replacements with each Willie. Some components would be thrown away, some would be sent out for repair, but Willie himself would never break down longer than necessary to plug in the replacement part.

Miles and I had our first row. I said the decision as to when to go from pilot model to production was an engineering one; he

claimed that it was a business decision. If I hadn't retained control Willie would have gone on the market just as maddeningly subject to acute appendicitis as all other sickly, half-engineered "laborsaving" gadgets.

Belle Darkin smoothed over the row. If she had turned on the pressure I might have let Miles start selling Willie before I thought it was ready, for I was as goofed up about Belle as is possible for a man to be.

Belle was not only a perfect secretary and office manager, she also had personal specs which would have delighted Praxiteles and a fragrance which affected me the way catnip does Pete. With topnotch office girls as scarce as they were, when one of the best turns out to be willing to work for a shoestring company at a below-standard salary, one really ought to ask "why?", but we didn't even ask where she had worked last, so happy were we to have her dig us out of the flood of paper work that marketing Hired Girl had caused.

Later on I would have indignantly rejected any suggestion that we should have checked on Belle, for by then her bust measurement had seriously warped my judgment. She let me explain how lonely my life had been until she came along and she answered gently that she would have to know me better but that she was inclined to feel the same way.

Shortly after she smoothed out the quarrel between Miles and myself she agreed to share my fortunes. "Dan darling, you have it in you to be a great man. . . and I have hopes that I am the sort of woman who can help you."

"You certainly are!"

"Shush, darling. But I am not going to marry you right now and burden you with kids and worry you to death. I'm going to work with you and build up the business first. Then we'll get married."

I objected, but she was firm. "No, darling, We are going a long way, you and I. Hired Girl will be as great a name as General Electric. But when we marry I want to forget business and just devote myself to making you happy. But first I must devote myself to your welfare and your future. Trust me, dear."

So I did. She wouldn't let me buy her the expensive engagement ring I wanted to buy; instead I signed over to her some of my stock as a betrothal present. I went on voting it, of course. Thinking back, I'm not sure who thought of that present.

I worked harder than ever after that, thinking about wastebaskets that would empty themselves and a linkage to put dishes away after the dishwasher was through. Everybody was happy ...everybody but Pete and Ricky, that is. Pete ignored Belle, as he did anything he disapproved of but could not change, but Ricky was really unhappy.

My fault. Ricky had been "my girl" since she was a six-year-old at Sandia, with hair ribbons and big solemn dark eyes. I was "going to marry her" when she grew up and we would both take care of Pete. I thought it was a game we were playing, and perhaps it was, with little Ricky serious only to the extent that it offered her eventual full custody of our cat. But how can you tell what goes on in a child's mind?

I am no: sentimental about kids. Little monsters, most of them, who don't civilize until they are grown and sometimes not then. But little Frederica reminded me of my own sister at that age, and besides, she liked Pete and treated him properly. I think she liked me because I never talked down (I had resented that myself as a child) and took her Brownie activities seriously. Ricky was okay; she had quiet dignity arid, was not a banger, nor a squealer, nor a lap climber. We were friends, sharing the responsibility for Pete, and, so far as I knew, her being "my girl" was just a sophisticated game we were playing.

I quit playing it after my sister and mother got it the day they bombed us. No conscious decision-I just didn't feel like joking and never went back to it. Ricky was seven then; she was ten by the time Belie joined us and possibly eleven when Belle and I became engaged. She hated Belle with an intensity that I think only I was aware of, since it was expressed only by reluctance to talk to her-Belle called it "shyness" and I think Miles thought it was too.

But I knew better and tried to talk Ricky out of it. Did you ever try to discuss with a subadolescent something the child does not want to talk about? You'll get more satisfaction shouting in Echo Canyon. I told myself it would wear off as Ricky learned how very lovable Belle was.

Pete was another matter, and it I had not been in love I would have seen it as a clear sign that Belle and I would never understand each other. Belle "liked" my cat-oh, sure, sure! She adored cats and she loved my incipient bald spot and admired my choice in restaurants and she liked everything about me.

But liking cats is hard to fake to a cat person. There are cat people and there are others, more than a majority probably, who "cannot abide a harmless, necessary eat." If they try to pretend, out of politeness or any reason, it shows, because they don't understand how to treat eats-and cat protocol is more rigid than that of diplomacy.

It is based on self-respect and mutual respect and it has the same flavor as the dignidad de hombre of Latin America which you may offend only at risk to your life.

Cats have no sense of humor, they have terribly inflated egos, and they are very touchy. If somebody asked me why it was worth anyone's time to cater to them I would be forced to answer that there is no logical reason. I would rather explain to someone who detests sharp cheeses why he "ought to like" Limburger. Nevertheless, I fully sympathize with the mandarin who cut off a priceless embroidered sleeve because a kitten was sleeping on it.

Belle tried to show that she "liked" Pete by treating him like a dog . . . so she got scratched. Then, being a sensible cat, he got out in a hurry and stayed out a long time-which was well, as I would have smacked him, and Pete has never been smacked, not by me. Hitting a cat is worse than useless; a cat can be disciplined only by patience, never by blows.

So I put iodine on Belle's scratches, then tried to explain what she had done wrong. "I'm sorry it happened: I'm terribly sorry! But it will happen again if you do that again!"

"But I was just petting him!"

"Uh, yes ... but you weren't cat-petting him; you were dogpetting him. You must never pat a eat, you stroke it. You must never make sudden movements in range of its claws. You must never touch it without giving it a chance to see that you are about to . . . and you must always watch to see that it likes it. If it doesn’t want to be petted, it will put up with a little out of politeness-eats are very polite-but you can tell if it is merely enduring it and stop before its patience is exhausted." I hesitated. "You don't like cats, do you?"

`What? Why, how silly! Of course I like cats." But she added, "I haven't been around them much, I suppose. She's pretty touchy, isn't she?"

"`He.' Pete is a he-male cat. No, actually he's not touchy, since he's always been well treated. But you do have to learn how to behave with cats. Uh, you must never laugh at them."

"What? Forevermore, why?"

"Not because they aren't funny; they're extremely comical. But they have no sense of humor and it offends them. Oh, a cat won't scratch you for laughing; he'll simply stalk off and you'll have trouble making friends with him. But it's not too important. Knowing how to pick up a cat is much more important. When Pete comes back in I'll show you how."

But Pete didn't come back in, not then, and I never showed her. Belle didn't touch him after that. She spoke to him and acted as if she liked him, but she kept her distance and he kept his. I put it out of my mind; I couldn't let so trivial a thing make me doubt the woman who was more to me than anything in life.

But the subject of Pete almost reached a crisis later. Belle and I were discussing where we were going to live. She still wouldn't set the date, but we spent a lot of time on such details. I wanted a ranchette near the plant; she favored a flat in town until we could afford a Bel-Air estate.

I said, "Darling, it's not practical; I've got to be near the plant. Besides, did you ever try to take care of a tomcat in a city apartment?"

"Oh, that! Look, darling, I'm glad you mentioned it. I've been studying up on cats, I really have. We'll have him altered. Then he'll be much gentler and perfectly happy in a flat."

I stared at her, unable to believe my ears. Make a eunuch of that old warrior? Change him into a fireside decoration? "Bell; you don't know what you're saying!"

She tut-tutted me with the old familiar "Mother knows best," giving the stock arguments of people who mistake cats for property . . . how it wouldn't hurt him, that it was really for his own good, how she knew how much I valued him and she would never think of depriving me of him, how it was really very simple and quite safe and better for everybody.

I cut in on her. "Why don't you arrange it for both of us?"

"What, dear?"

"Me, too. I'd be much more docile and I'd stay home nights and I'd never argue with you. As you pointed out, it doesn't hurt and I'd probably be a lot happier."

She turned red. "You're being preposterous."

"So are you!"

She never mentioned it again. Belle never let a difference of opinion degenerate into a row; she shut up and bided her time. But she never gave up, either. In some ways she had a lot of cat in her. . . which may have been why I couldn't resist her.

I was glad to drop the matter. I was up to here in Flexible Frank. Willie and Hired Girl were bound to make us lots of money, but I had a bee in my bonnet about the perfect, all-work household automaton, the general-purpose servant. All right, call it a robot, though that is a much-abused word and I had no notion of building a mechanical man.

I wanted a gadget which could do anything inside the home-cleaning and cooking, of course, but also really hard jobs, like changing a baby's diaper, or replacing a typewriter ribbon. Instead of a stable of Hired Girls and Window Willies and Nursemaid Nans and Houseboy Harries and Gardener Guses I wanted a man and wife to be able to buy one machine for, oh, say about the price of a good automobile, which would be the equal of the Chinese servant you read about but no one in my generation had ever seen.

If I could do that it would be the Second Emancipation Proclamation, freeing women from their age-old slavery. I wanted to abolish the old saw about how "women's work is never done." Housekeeping is repetitious and unnecessary drudgery; as an engineer it offended me.

For the problem to be within the scope of one engineer, almost all of Flexible Frank had to be standard parts and must not involve any new principles. Basic research is no job for one man alone; this had to be development from former art or I couldn't do it

Fortunately there was an awful lot of former art in engineering and I had not wasted my time while under a "Q" clearance. What I wanted wasn't as complicated as the things a guided missile was required to do.

Just what did I want Flexible Frank to do? Answer: any work a human being does around a house. He didn't have to play cards, make love, eat, or sleep, but he did have to clean up after the card game, cook, make beds, and tend babies-at least he had to keep track of a baby's breathing and call someone if it changed. I decided he did not have to answer telephone calls, as A.T.&T. was already renting a gadget for that. There was no need for him to answer the door either, as most new houses were being equipped with door answerers.

But to do the multitude of things I wanted him to do, he had to have hands, eyes, ears, and a brain. . . a good enough brain.

Hands I could order from the atomics-engineering equipment companies who supplied Hired Girl's hands, only this time I would want the best, with wide-range servos and with the delicate feedback required for microanalysis manipulations and for weighing radioactive isotopes. The same companies could supply eyes-only they could be simpler, since Frank would not have to see and manipulate from behind yards of concrete shielding the way they do in a reactor plant.

The ears I could buy from any of a dozen radio-TV houses-though I might have to do some circuit designing to have his hands controlled simultaneously by sight, sound, and touch feedback the way the human hand is controlled.

But you can do an awful lot in a small space with transistors and printed circuits.

Frank wouldn't have to use stepladders. I would make his neck stretch like an ostrich and his arms extend like lazy tongs. Should I make him able to go up and down stairs?

Well, there was a powered wheel chair that could. Maybe I should buy one and use it for the chassis, limiting the pilot model to a space no bigger than a wheel chair and no heavier than such a chair could carry-that would give me a set of parameters. I'd tie its power and steering into Frank's brain.

The brain was the real hitch. You can build a gadget linked like a man's skeleton or even much better. You can give it a feedback control system good enough to drive nails, scrub floors, crack eggs-or not crack eggs. But unless it has that stuff between the ears that a man has, it is not a man, it's not even a corpse.

Fortunately I didn't need a human brain; I just wanted a docile moron, capable of largely repetitive household jobs.

Here is where the Thorsen memory tubes came in. The intercontinental missiles we had struck back with "thought" with Thorsen tubes, and traffic-control systems in places like Los Angeles used an idiot form of them. No need to go into theory of an electronic tube that even Bell Labs doesn't understand too well, the point is that you can hook a Thorsen tube into a control circuit, direct the machine through an operation by manual control, and the tube will "remember" what was done and can direct the operation without a human supervisor a second time, or any number of times. For an automated machine tool this is enough; for guided missiles and for Flexible Frank you add side circuits that give the machine "judgment." Actually it isn't judgment (in my opinion a machine can never have judgment); the side circuit is a hunting circuit, the programming of which says "look for so-and-so within such-and-such limits; when you find it, carry out your basic instruction." The basic instruction can be as complicated as you can crowd into one Thorsen memory tube-which is a very wide limit indeed!-and you can program so that your "judgment" circuits (moronic backseat drivers, they are) can interrupt the basic instructions any time the cycle does not match that originally impressed into the Thorsen tube.

This meant that you need cause Flexible Frank to clear the table and scrape the dishes and load them into the dishwasher only once, and from then on he could cope with any dirty dishes he ever encountered. Better still, he could have an electronically duplicated Thorsen tube stuck into his head and could handle dirty dishes the first time he ever encountered them . . - and never break a dish.

Stick another "memorized" tube alongside the first one and he could change a wet baby first time, and never, never, never stick a pin in the baby.

Frank's square head could easily hold a hundred Thorsen tubes, each with an electronic "memory" of a different household task. Then throw a guard circuit around all the "judgment" circuits, a circuit which required him to hold still and squawl for help if he ran into something not covered by his instructions-that way you wouldn't use up babies or dishes.

So I did build Frank on the framework of a powered wheel chair. He looked like a hat rack making love to an octopus but, boy, how he could polish silverware!

Miles looked over the first Frank, watched him mix a martini and serve it, then go around emptying and polishing ash trays (never touching ones that were clean), open a window arid fasten it open, then go to my bookcase and dust and tidy the books in it. Miles took a sip of his martini and said, "Too much vermouth."

"It's the way I like them. But we can tell him to fix yours one way and mine another; he's got plenty of blank tubes in him. Flexible."

Miles took another sip. "How soon can he be engineered for production?"

"Uh, I'd like to fiddle with him for about ten years." Before he could groan I added, "But we ought to be able to put a limited model into production in five."

"Nonsense! We'll get you plenty of help and have a Model-T job ready in six months."

"The devil you will. This is my magnum opus. I'm not going to turn him loose until he is a work of art . . . about a third that size, everything plug-in replaceable but the Thorsens, and so all out flexible that he'll not only wind the cat and wash the baby, he'll even play ping-pong if the buyer wants to pay for the extra programming." I looked at him; Frank was quietly dusting my desk and putting every paper back exactly where he found it. "But ping-pong with him wouldn't be much fun; he'd never miss. No, I suppose we could teach him to miss with a random-choice circuit. Mmm. . - yes, we could. We will, it would make a nice selling demonstration."

"One year, Dan, and not a day over. Fm going to hire somebody away from Loewy to help you with the styling."

I said, "Miles, when are you going to learn that I boss the engineering? Once I turn him over to you, he's yours. . - but not a split second before."

Miles answered, "It's still too much vermouth."

I piddled along with the help of the shop mechanics until I had Frank looking less like a three-car crash and more like something you might want to brag about to the neighbors. In the meantime I smoothed a lot of bugs out of his control system. I even taught him to stroke Pete and scratch him under the chin in such a fashion that Pete liked it-and, believe me, that takes negative feedback as exact as anything used in atomics labs. Miles didn't crowd me, although he came in from time to time and watched the progress. I did most of my work at night, coming back after dinner with Belle and taking her home. Then I would sleep most of the thy, arrive late in the afternoon, sign whatever papers Belle had for me, see what the shop had done during the day, then take

Belle out to dinner again. I didn't try to do much before then, because creative work makes a man stink like a goat. After a hard night in the lab shop nobody could stand me but Pete.

Just as we were finishing dinner one day Belie said to me, "Going back to the shop, dear?"

"Sure. Why not?"

"Good. Because Miles is going to meet us there."

"Huh?"

"He wants a stockholders' meeting."

"A stockholders' meeting? Why?"

"It won't take long. Actually, dear, you haven't been paying much attention to the firm's business lately. Miles wants to gather up loose ends and settle some policies."

"I've been sticking close to the engineering. What else am I supposed to do for the firm?"

"Nothing, dear. Miles says it won't take long."

"What's the trouble? Can't Jake handle the assembly line?"

"Please, dear. Miles didn't tell me why. Finish your coffee."

Miles was waiting for us at the plant and shook hands as solemnly as if we had not met in a month. I said, "Miles, what's this all about?"

He turned to Belle. "Get the agenda, will you?" This alone should have told me that Belle had been lying when she claimed that Miles had not told her what he had in mind. But I did not think of it-hell, I trusted Belle!-and my attention was distracted by something else, for Belle went to the safe, spun the knob, and opened it.

I said, "By the way, dear, I tried to open that last night and couldn't. Have you changed the combination?"

She was hauling papers out and did not turn. "Didn't I tell you? The patrol asked me to change it after that burglar scare last week."

"Oh. You'd better give me the new numbers or some night I'll have to phone one of you at a ghastly hour."

"Certainly." She closed the safe and put a folder on the table we used for conferences.

Miles cleared his throat and said, "Let's get started."

I answered, "Okay. Darling, if this is a formal meeting, I guess you had better make pothooks . . . Uh, Wednesday, November eighteenth, 1970, 9:20 P.M., all stockholders present-put our names down-D. B. Davis, chairman of the board and presiding. Any old business?"

There wasn't any. "Okay, Miles, it's your show. Any new business?"

Miles cleared his throat. "I want to review the firm's policies, present a program for the future, and have the board consider a financing proposal."

"Financing? Don't be silly. We're in the black and doing better every month. What's the matter, Miles? Dissatisfied with your drawing account? We could boost it."

"We wouldn't stay in the black under the new program. We need a broader capital structure."

"What new program?"

"Please, Dan. I've gone to the trouble of writing it up in detail. Let Belle read it to us."

"Well. . . okay."

Skipping the gobbledegook-like all lawyers, Miles was fond of polysyllables-Miles wanted to do three things: (a) take Flexible Frank away from me, hand it over to a production-engineering team, and get it on the market without delay; (-but I stopped it at that point.) "No!"

"Wait a minute, Dan. As president and general manager, I'm certainly entitled to present my ideas in an orderly manner. Save your comments. Let Belle finish reading."

"Well…all right. But the answer is still `no.'"

Point (b) was in effect that we should quit frittering around as a one-horse outfit. We had a big thing, as big as the automobile had been, and we were in at the start; therefore we should at once expand and set up organization for nationwide and worldwide selling and distribution, with production to match.

I started drumming on the table. I could just see myself as chief engineer of an outfit like that. They probably wouldn't even let me have a drafting table and if I picked up a soldering gun, the union would pull a strike. I might as well have stayed in the Army and tried to make general.

But I didn't interrupt. Point (c) was that we couldn't do this on pennies; it would take millions. Mannix Enterprises would put up the doughÄwhat it amounted to was that we would sell out to Mannix, lock, stock, and Flexible Frank, and become a daughter corporation. Miles would stay on as division manager and I would stay on as chief research engineer, but the free old days would be gone; we'd both be hired hands.

"Is that all?" I said.

"Mmm. . . yes. Let's discuss it and take a vote."

"There ought to be something in there granting us the right to sit in front of the cabin at night and sing spirituals."

"This is no joke, Dan. This is how it's got to be."

"I wasn't joking. A slave needs privileges to keep him quiet. Okay, is it my turn?"

"Go ahead."

I put up a counterproposal, one that had been growing in my mind. I wanted us to get out of production. Jake Schmidt, our production shop master, was a good man; nevertheless I was forever being jerked out of a warm creative fog to straighten out bugs in production-which is like being dumped out of a warm bed into ice water. This was the real reason why I had been doing so much night work and staying away from the shop in the daytime. With more war-surplus buildings being moved in and a night shift contemplated I could see the time coming when I would get no peace to create, even though we turned down this utterly unpalatable plan to rub shoulders with General Motors and Consolidated. I certainly was not twins; I couldn't be both inventor and production manager.

So I proposed that we get smaller instead of bigger-license Hired

Girl and Window Willie, let someone else build and sell them while we raked in the royalties. When Flexible Frank was ready we would license him too. If Mannix wanted the licenses and would outbid the market, swell! Meantime, we'd change our name to Davis & Gentry Research Corporation and hold it down to just the three of us, with a machinist or two to help me jackleg new gadgets. Miles and Belie could sit back and count the money as it rolled in.

Miles shook his head slowly. "No, Dan. Licensing would make us some money, granted. But not nearly the money we would make if we did it ourselves."

"Confound it, Miles, we wouldn't be doing it ourselves; that's just the point. We'd be selling our souls to the Mannix people. As for money, how much do you want? You can use only one yacht or one swimming pool at a time . . . and you'll have both before the year is out if you want them."

"I don't want them."

"What do you want?"

He looked up. "Dan, you want to invent things. This plan lets you do so, with all the facilities and all the help and all the expense money in the world. Me, I want to run a big business. A big business. I've got the talent for it." He glanced at Belle. "I don't want to spend my life sitting out here in the middle of the Mojave Desert acting as business manager to one lonely inventor."

I stared at him. "You didn't talk that way at Sandia. You want out, Pappy? Belle and I would hate to see you go. . . but if that is the way you feel, I guess I could mortgage the place or something and buy you out. I wouldn't want any man to feel tied down." I was shocked to my heels, but if old Miles was restless I had no right to hold him to my pattern.

"No, I don't want out; I want us to grow. You heard my proposal. It's a formal motion for action by the corporation. I so move."

I guess I looked puzzled. "You insist on doing it the hard way? Okay, Belle, the vote is `no.' Record it. But I won't put up my counterproposal tonight. We'll talk it over and exchange views. I want you to be happy, Miles."

Miles said stubbornly, "Let's do this properiy. Roll call, Belle."

"Very well, sir. Miles Gentry, voting stock shares number-" She read off the serial numbers. "How say you?"

"Aye."

She wrote in her book.

"Daniel B. Davis, voting stock shares number-" She read off a string of telephone numbers again; 1 didn't listen to the formality. "How say you?"

"No. And that settles it. I'm sorry, Miles."

"Belle S. Darkin," she went on, "voting shares number-" She recited figures again. "I vote `aye.'"

My mouth dropped open, then I managed to stop gasping and say, "But, baby, you can't do that! Those are your shares, sure, but you know perfectly well that-"

"Announce the tally," Miles growled.

"The `ayes' have it. The proposal is carried."

"Record it."

"Yes, sir."

The next few minutes were confused. First I yelled at her, then I reasoned with her, then I snarled and told her that what she had done was not honest-true, I had assigned the stock to her but she knew as well as I did that I always voted it, that I had had no intention of parting with control of the company, that it was an engagement present, pure and simple. Hell, I had even paid the income tax on it last April. If she could pull a stunt like this when we were engaged, what was our marriage going to be like?

She looked right at me and her face was utterly strange to me. "Dan Davis, if you think we are still engaged after the way you have talked to me, you are even stupider than I've always known you were." She turned to Gentry. "Wifi you take me home, Miles?"

"Certainly, my dear."

I started to say something, then shut up and stalked out of there without my hat. It was high time to leave, or I would probably have killed Miles, since I couldn't touch Belle.

I didn't sleep, of course. About 4 A.M. I got out of bed, made phone calls, agreed to pay more than it was worth, and by five-thirty was in front of the plant with a pickup truck. I went to the gate, intending to unlock it and drive the truck to the loading dock so that I could run Flexible Frank over the tail gate-Frank weighed four hundred pounds.

There was a new padlock on the gate.

I shinnied over, cutting myself on barbed wire. Once inside, the gate would give me no trouble, as there were a hundred tools in the shop capable of coping with a padlock.

But the lock on the front door had been changed too.

I was looking at it, deciding whether it was easier to break a window with a tire iron, or get the jack out of the truck and brace it between the doorframe and the knob, when somebody shouted, "Hey, you! Hands up!"

I didn't put my hands up but I turned around. A middie-aged man was pointing a hogleg at me big enough to bombard a city. "Who the devil are you?"

"Who are you?"

"I'm Dan Davis, chief engineer of this outfit."

"Oh." He relaxed a little but still aimed the field mortar at me. "Yeah, you match the description. But if you have any identification on you, better let me see it."

"Why should I? I asked who you are?"

"Me? Nobody you'd know. Name of Joe Todd, with the Desert Protective & Patrol Company. Private license. You ought to know who we are; we've had you folks as clients for the night patrol for months. But tonight I'm on as special guard."

"You are? Then if they gave you a key to the place, use it. I want to get in. And quit pointing that blunderbuss at me."

He still kept it leveled at me. "I couldn't rightly do that, Mr. Davis. First place, I don't have a key. Second place, I had particular orders about you. You aren't to go in. I'll let you out the gate."

"I want the gate opened, all right, but I'm going in." I looked around for a rock to break a window.

"Please, Mr. Davis . .

"Huh?"

"I'd hate to see you insist, I really would. Because I couldn't chance shooting you in the legs; I ain't a very good shot. I'd have to shoot you in the belly. I've got soft-nosed bullets in this iron; it'ud be pretty messy."

I suppose that was what changed my mind, though I would like to think it was something else; *i.e.* when I looked again through the window I saw that Flexible Frank was not where I had left him.

As he let me out the gate Todd handed me an envelope. "They said to give this to you if you showed up."

I read it in the cab of the truck. It said:

Dear Mr. Davis,

18 November, 1970

At a regular meeting of the board of directors, held this date, it was voted to terminate all your connection (other than as stockholder) with the corporation, as permitted under paragraph three of your contract. It is requested that you stay off company property. Your personal papers and belongings will be forwarded to you by safe means.

- The board wishes to thank you for your services and regrets the differences in policy opinion which have forced this step on us.

Sincerely yours,

Miles Gentry

Chairman of the Board and General Manager by B. S. Darkin, Sec'y-Treasurer

I read it twice before I recalled that I had never had any contract with the corporation under which to invoke paragraph three or any other paragraph.

Later that day a bonded messenger delivered a package to the motel where I kept my clean underwear. It contained my hat, my desk pen, my other slide rule, a lot of books and personal correspondence, and a number of documents. But it did not contain my notes and drawings for Flexible Frank.

Some of the documents were very interesting. My "contract," for example-sure enough, paragraph three let them fire me without notice subject to three months' salary. But paragraph seven was even more interesting. It was the latest form of the yellowdog clause, one in which the employee agrees to refrain from engaging in a competing occupation for five years by letting his former employers pay him cash to option his services on a first-refusal basis; i.e., I could go back to work any time I wanted to just by going, hat in hand, and asking Miles and Belle for a job-maybe that was why they sent the hat back.

But for five long years I could not work on household appliances without asking them first. I would rather have cut my throat.

There were copies of assignments of all patents, duly registered, from me to Hired Girl, Inc., for Hired Girl and Window Willie and a couple of minor things. (Flexible Frank, of course, had never been patented-well, I didn't think he had been patented; I found out the truth later.)

But I had never assigned any patents, I hadn't even formally licensed their use to Hired Girl, Inc.; the corporation was my own creature and there hadn't seemed to be any hurry about it.

The last three items were my stock-shares certificate (those I had not given to Belle), a certified check, and a letter explaining each item of the check-accumulated "salary" less thawing-account disbursements, three months' extra salary in lieu of notice, option money to invoke "paragraph seven" . . . and a thousand dollar bonus to express "appreciation of services rendered." That last was real sweet of them.

While I reread that amazing collection I had time to realize that I had probably not been too bright to sign everything that Belle put in front of me. There was no possible doubt that the signatures were mine.

I steadied down enough the next day to talk it over with a lawyer, a very smart and money-hungry lawyer, one who didn't mind kicking and clapper-clawing and biting in the clinches. At first he was anxious to take it on a contingent-fee basis. But after he finished looking over my exhibits and listening to the details he sat back and laced his fingers over his belly and looked sour. "Dan, I'm going to give you some advice and it's not going to cost you anything."

"Well?"

"Do nothing. You haven't got a prayer."

"But you said-"

"I know what I said. They rooked you. But how can you prove it? They were too smart to steal your stock or cut you off without a penny. They gave you exactly the deal you could have reasonably expected if everything had been kosher and you had quit, or had been fired over-as they express it-a difference of policy opinion. They gave you everything you had coming to you. . . and a measly thousand to boot, just to show there are no hard feelings."

"But I didn't have a contract! And I never assigned those patents!"

"These papers say you did. You admit that's your signature. Can you prove what you say by anyone else?"

I thought about it. I certainly could not. Not even Jake Schmidt knew anything that went on in the front office. The only witnesses I had were. . . Miles and Belle.

"Now about that stock assignment," he went on, "that's the one chance to break the log jam. If you..."

"But that is the only transaction in the whole stack that really is legitimate. I signed over that stock to her."

"Yes, but why? You say that you gave it to her as an engagement present in expectation of marriage. Never mind how she voted it; that's beside the point. If you can prove that it was given as a betrothal gift in full expectation of marriage, and that she knew it when she accepted it, you can force her either to marry you or to disgorge. McNulty vs. Rhodes. Then you're in control again and kick them out. Can you prove it?"

"Damn it, I don't want to marry her now. I wouldn't have her."

"That's your problem. But one thing at a time. Have you any witnesses or any evidence, letters or anything, which would tend to show that she accepted it, understanding that you were giving it to her as your future wife?"

I thought. Sure, I had witnesses . . . the same old two. Miles and Belle.

"You see? With nothing but your word against both of theirs, plus a pile of written evidence, you not only won't get anywhere, but you might wind up committed to a Napoleon factory with a diagnosis of paranoia. My advice to you is to get a job in some other line. . . or at the very most go ahead and buck their yellowdog contract by setting up a competitive business-I'd like to see that phraseology tested, as long as I didn't have to fight it myself. But don't charge them with conspiracy. They'll win, then they'll sue you and clean you out of what they let you keep." He stood up.

I took only part of his advice. There was a bar on the ground floor of the same building; I went in and had a couple or nine drinks.

I had plenty of time to recall all this while I was driving out to see Miles. Once we had started making money, he had moved Ricky and himself to a nice little rental in San Fernando Valley to get out of the murderous Mojave heat and had started commuting via the Air Force Slot. Ricky wasn't there now, I was happy to recall; she was up at Big Bear Lake at Girl Scout camp-I didn't want to chance Ricky's being witness to a row between me and her stepdaddy.

I was bumper to bumper in Sepulveda Tunnel when it occurred to me that it would be smart to get the certificate for my Hired Girl stock off my person before going to see Miles. I did not expect any rough stuff (unless I started it), but it just seemed a good idea. . . like a cat who has had his tail caught in the screen door once, I was permanently suspicious.

Leave it in the car? Suppose I was hauled in for assault and battery; it wouldn't be smart to have it in the car when the car was towed in and impounded.

I could mall it to myself, but I had been getting my mail lately from general delivery at the G.P.O., while shifting from hotel to hotel as often as they found out I was keeping a cat.

I had better mail it to someone I could trust.

But that was a mighty short list.

Then I remembered someone I could trust.

Ricky.

I may seem a glutton for punishment to decide to trust one female just after I had been clipped by another. But the cases are not parallel. I had known Ricky half her life and if there ever was a human being honest as a Jo block, Ricky was she. . . and Pete thought so too. Besides, Ricky didn't have physical specifications capable of warping a man's judgment. Her femininity was only in her face; it hadn't affected her figure yet.

When I managed to escape from the log jam in Sepulveda Tunnel I got off the throughway and found a drugstore; there I bought stamps and a big and a little envelope and some note paper. I wrote to her:

Dear Rikki-tikki-tavi,

I hope to see you soon but until I do, 1 want you to keep this inside envelope for me. It's a secret, just between you and me.

I stopped and thought. Doggone it, if anything happened to me oh, even a car crash, or anything that can stop breathing, while Ricky had this, eventually it would wind up with Miles and Belle. Unless I rigged things to prevent it. I realized as I thought about it that I had subconsciously reached a decision about the coldsleep deal; I wasn't going to take it. Sobering up and the lecture the doc had read me had stiffened my spine; I wasn't going to run away, I was going to stay and fight-and this stock certificate was my best weapon. It gave me the right to examine the books; it entitled me to poke my nose into any and all affairs of the company. If they tried again simply to keep me out with a hired guard I could go back next time with a lawyer and a deputy sheriff and a court order.

I could drag them into court with it too. Maybe I couldn't win but I could make a stink and perhaps cause the Mannix people to shy off from buying them out.

Maybe I shouldn't send it to Ricky at all.

No, if anything happened to me I wanted her to have it. Ricky and Pete were all the "family" I had. I Went on writing:

If by any chance 1 don't see you for a year, you'll know something has happened to me. If that happens, take care of Pete, if you can find him-and without telling anybody take the inside envelope to a branch of the Bank of America, give it to the trust officer and tell him to open it.

Uncle Danny

Then I took another sheet and wrote:

"3 December, 1970, Los Angeles, California

For one dollar in hand received and other valuable considerations I assign"-here I listed legal descriptions and serial numbers of my Hired Girl, Inc., stock shares-"to the Bank of America in trust for Frederica Virginia Gentry and to be reassigned to her on her twenty-first birthday," and signed it.

The intent was clear and it was the best I could do on a drugstore counter with a juke box blaring in my ear. It should make sure that Ricky got the stock if anything happened to me, while making darn sure that Miles and Belle could not grab it away from her.

But if all went well, I would just ask Ricky to give the envelope back to me when I got around to it. By not using the assignment form printed on the back of the certificate, I avoided all the red tape of having a minor assign it back to me; I could just tear up the separate sheet of paper.

I sealed the stock certificate with the note assigning it into the smaller envelope, placed it and the letter to Ricky in the larger envelope, addressed it to Ricky at the Girl Scout camp, stamped it, and dropped it in the box outside the drugstore. I noted that it would be picked up in about forty minutes and climbed back into my car feeling positively lighthearted . . . not because I had safeguarded the stock but because I had solved my greater problems.

Well, not "solved" them, perhaps, but had decided to face them, not run off and crawl in a hole to play Rip van Winkle.

nor try to blot them out again with ethanol in various flavors. Sure, I wanted to see the year 2000, but just by sitting tight I Would see it. . . when I was sixty, and still young enough, probably, to whistle at the girls. No hurry. Jumping to the next century in one long nap wouldn't be satisfactory to a normal man anyhow-about like seeing the end of a movie without having seen what goes before. The thing to do with the next thirty years was to enjoy them while they unfolded; then when I came to the year 2000 I would understand it.

In the meantime I was going to have one lulu of a fight with Miles and Belle. Maybe I wouldn't win, but I would sure let them know they had been in a scrap-like the times Pete had come home bleeding in six directions but insisting loudly, "You ought to see the other cat!"

I didn't expect much Out of this interview tonight. All it would amount to was a formal declaration of war. I planned to ruin Miles's sleep. . . and he could phone Belle and ruin hers.

CHAPTER 3

By the time I got to Miles's house I was whistling. I had quit worrying about that precious pair and had worked out in my head, in the last fifteen miles, two brand-new gadgets, either one of which could make me rich. One was a drafting machine, to be operated like an electric typewriter. I guessed that there must be easily fifty thousand engineers in the U.S. alone bending over drafting boards every day and hating it, because it gets you in your kidneys and ruins your eyes. Not that they didn't want to design-they did want to-but physically it was much too hard work.

This gismo would let them Sit down in a big easy chair and tap keys and have the picture unfold on an easel above the keyboard. Depress three keys simultaneously and have a horizontal line appear just where you want it; depress another key and you fillet it in with a vertical line; depress two keys and then two more in succession and draw a line at an exact slant.

Cripes, for a small additional cost as an accessory, I could add a second easel, let an architect design in isometric (the only easy way to design), and have the second picture come out in perfect perspective rendering without his even looking at it. Why, I could even set the thing to pull floor plans and elevations right out of the isometric.

The beauty of it was that it could be made almost entirely with standard parts, most of them available at radio shops and camera stores. All but the control board, that is, and I was sure I could breadboard a rig for that by buying an electric typewriter, tearing its guts out, and hooking the keys to operate these other circuits. A month to make a primitive model, six weeks more to chase bugs.

But that one I just tucked away in the back of my mind, certain that I could do it and that it would have a market. The thing that really delighted me was that I had figured out a way to outflex poor old Flexible Frank. I knew more about Frank than anyone else could learn, even if they studied him a year. What they could not know, what even my notes did not show, was that there was at least one workable alternative for every choice I had made-and that my choices had been constrained by thinking of him as a household servant. To start with, I could throw away the restriction that he had to live in a powered wheel chair. From there on I could do anything, except that I would need the Thorsen memory tubes-and Miles could not keep me from using those; they were on the market for anyone who wanted to design a cybernetic sequence.

The drafting machine could wait; I'd get busy on the unlimited all purpose automaton, capable of being programmed for anything a man could do, just as long as it did not require true human judgment.

No, I'd rig a drafting machine first, then use it to design Protean Pete. "How about that, Pete? We're going to name the world's first real robot after you."

"Mrrrarr?"

"Don't be so suspicious; it's an honor." After breaking in on Frank, I could design Pete right at my drafting machine, really refine it, and quickly. I'd make it a killer, a triple-threat demon that would displace Frank before they ever got him into production. With any luck I'd run them broke and have them begging me to come back. Kill the goose that lays the golden eggs, would they?

There were lights on in Miles's house and his car was at the curb. I parked in front of Miles's car, said to Pete, "You'd better stay here, fellow, and protect the car. Holler `halt' three times fast, then shoot to kill."

"Nooo!"

"If you go inside you'll have to stay in the bag."

"Bleerrrt?"

"Don't argue. If you want to come in, get in your bag."

Pete jumped into the bag.

Miles let me in. Neither of us offered to shake hands. He led me into his living room and gestured at a chair.

Belle was there. I had not expected her, but I suppose it was not surprising. I looked at her and grinned. "Fancy meeting you here! Don't tell me you came all the way from Mojave just to talk to little old me?" Oh, I'm a gallus-snapper when I get started; you should see me wear women's hats at parties.

Belle frowned. "Don't be funny, Dan. Say what you have to say, if anything, and get out."

"Don't hurry me. I think this is cozy . . . my former partner my former fiance. All we lack is my former business."

Miles said placatingly, "Now, Dan, don't take that attitude. We did it for your own good. . . and you can come back to work any tune you want to. I'd be glad to have you back."

"For my own good, eh? That sounds like what they told the horse thief when they hanged him. As for coming back-how about it, Belle? Can I come back?"

She bit her lip. "If Miles says so, of course."

"It seems like only yesterday that it used to be: `If Dan says so, of course.' But everything changes; that's life. And I'm not coming back, kids; you can stop fretting. I just came here tonight to find out some things."

Miles glanced at Belle. She answered, "Such as?"

"Well, first, which one of you cooked up the swindle? Or did you plan it together?"

Miles said slowly, "That's an ugly word, Dan. I don't like it."

"Oh, come, come, let's not be mealymouthed. If the word is ugly, the deed is ten times as ugly. I mean faking a yellowdog contract, faking patent assignments-that one is a federal offense, Miles; I think they pipe sunlight to you on alternate Wednesdays. I'm not sure, but no doubt the FBI can tell me. Tomorrow," I added, seeing him flinch.

"Dan, you're not going to be silly enough to try to make trouble about this?"

"Trouble? I'm going to hit you in all directions, civil and criminal, on all counts. You'll be too busy to scratch . . . unless you agree to do one thing. But I didn't mention your third peccadillo; theft of my notes and drawings of Flexible Frank . . . and the working model, too, although you may be able to make me pay for the materials for that, since I did bill them to the company."

"Theft, nonsense!" snapped Belle. "You were working for the company."

"Was I? I did most of it at night. And I never was an employee, Belle, as you both know. I simply drew living expenses against profits earned by my shares. What is the Mannix outfit going to say when I file a criminal complaint, charging that the things they were interested in buying Hired Girl, Willie, and Frank never did belong to the company but were stolen from me?"

"Nonsense," Belle repeated grimly. "You were working for the company. You had a contract."

I leaned back and laughed. "Look, kids, you don't have to lie now; save it for the witness stand. There ain't nobody here but just us chickens. What I really want to know is this: who thought it up? I know how it was done. Belle, you used to bring in papers for me to sign. If more than one copy had to be signed, you would paper-clip the other copies to the first-for my convenience, of course; you were always the perfect secretary-and all I would see of the copies underneath would be the place to sign my name. Now I know that you slipped some jokers into some of those neat piles. So I know that you were the one who conducted the mechanics of the swindle; Miles could not have done it. Shucks, Miles can't even type very well. But who worded those documents you horsed me into signing? You? I don't think so . . . unless you've had legal training you never mentioned. How about it, Miles? Could a mere stenographer phrase that wonderful clause seven so perfectly? Or did it take a lawyer? You, I mean."

Miles's cigar had long since gone out. He took it from his mouth, looked at it, and said carefully, "Dan, old friend, if you think you'll trap us into admissions, you're crazy."

"Oh, come off it; we're alone. You're both guilty either way. But I'd like to think that Delilah over there came to you with the whole thing wrapped up, complete, and then tempted you into a moment of weakness. But I know it's not true. Unless Belle is a lawyer herself, you were both in it, accomplices before and after. You wrote the double talk; she typed it and tricked me into signing. Right?"

"Don't answer, Miles!"

"Of course I won't answer," Miles agreed. "He may have a recorder hidden in that bag."

"I should have had," I agreed, "but I don't." I spread the top of the bag and Pete stuck his head out. "You getting it all, Pete? Careful what you say, folks; Pete has an elephant's memory. No, I didn't bring a recorder-I'm just good old lunkheaded Dan Davis who never thinks ahead. I go stumbling along, trusting my friends the way I trusted you two. Is Belle a lawyer, Miles? Or did you yourself sit down in cold blood and plan how you could hogtie me and rob me and make it look legal?"

"Miles!" interrupted Belle. "With his skill, he could make a recorder the size of a pack of cigarettes. It may not be in the bag. It may be on him."

"That's a good idea, Belle. Next time I'll have one."

"I'm aware of that, my dear," Miles answered. "If he has, you are talking very loosely. Mind your tongue."

Belle answered with a word I didn’t know she used. My eyebrows went up. "Snapping at each other? Trouble between thieves already?"

Miles's temper was stretching thin, I was happy to see. He answered, "Mind your tongue, Dan . . . if you want to stay healthy."

"Tsk, tsk! I'm younger than you are and I've had the judo course a lot more recently. And you wouldn't shoot a man; you'd frame him with some sort of fake legal document. `Thieves,' I said, and `thieves' I meant. Thieves and liars, both of you." I turned to Belle. "My old man taught me never to call a lady a liar, sugar face, but you aren't a lady. You're a liar . . . and a thief. . . and a tramp."

Belle tuned red and gave me a look in which all her beauty vanished and the underlying predatory animal was all that remained. "Miles!" she said shrilly. "Are you going to sit there and let him-"

"Quiet!" Miles ordered. "His rudeness is calculated. Ifs intended to make us get excited and say things we'll regret. Which you are almost doing. So keep quiet." Belle shut up, but her face was still feral. Miles tuned to me. "Dan, I'm a practical man always, I hope. I tried to make you see reason before you walked out of the firm. In the settlement I tried to make it such that you would take the inevitable gracefully."

"Be raped quietly, you mean."

"As you `will. I still want a peaceful settlement. You couldn't win any sort of suit, but as a lawyer I know that it is always better to stay out of court than to win. If possible. You mentioned a while ago that there was some one thing I could do that would placate you. Tell me what it is; perhaps we can reach terms."

"Oh, that. I was coming to it. You can't do it, but perhaps you can arrange it. It's simple. Get Belle to assign back to me the stock I assigned to her as an engagement present."

"No!" said Belle.

Miles said, "I told you to keep quiet."

I looked at her and said, "Why not, my former dear? I've taken advice on this point, as the lawyers put it, and, since it was given in consideration of the fact that you promised to marry me, you are not only morally but legally bound to return it. It was not a `free gift,' as I believe the expression is, but something handed over for an expected and contracted consideration which I never received, to wit, your somewhat lovely self. So how about coughing up, huh? Or have you changed your mind again and are now willing to marry me?"

She told me where and how I could expect to marry her.

Miles said tiredly, "Belle, you're only making things worse. Don't you understand that he is trying to get our goats?" He turned back to me. "Dan, if that is what you came over for, you may as well leave. I stipulate that if the circumstances had been as you alleged, you might have a point. But they were not. You transferred that stock to Belle for value received."

"Huh? What value? Where's the canceled check?"

"There didn't need be any. For services to the company beyond her duties."

I stared. "What a lovely theory! Look, Miles old boy, if it was for service to the company and not to me personally, then you must have known about it and would have been anxious to pay her the same amount-after all, we split the profits fifty-fifty even if I had. . . or thought I had. . . retained control. Don't tell me you gave Belle a block of stock of the same size?"

Then I saw them glance at each other and I got a wild hunch. "Maybe you did! I'll bet my little dumpling made you do it, or she wouldn't play. Is that right? If so, you can bet your life she registered the transfer at once . . . and the dates will show that I transferred stock to her at the very time we got engaged-shucks, the engagement was in the Desert Herald-while you transferred stock to her when you put the skids under me and she jilted me and it’s all a matter of record! Maybe a judge will believe me, Miles? What do you think?"

I had cracked them, I had cracked them! I could tell from the way their faces went blank that I had stumbled on the one circumstance they could never explain and one I was never meant to know. So I crowded them. . . and had another wild guess. Wild? No, logical. "How much stock, Belle? As much as you got out of me, just for being `engaged'? You did more for him; you should have gotten more." I stopped suddenly. "Say. . . I thought it was odd that Belle came all the way over here just to talk to me, seeing how she hates that trip. Maybe you didn't come all that way; maybe you were here all along. Are you two shacked up? Or should I say `engaged'? Or . . . are you already married?" I thought about it. "I'll bet you are. Miles, you aren't as starry-eyed as I am; I'll bet my other shirt that you would never, never transfer stock to Belle simply on promise of marriage. But you might for a wedding present-provided you got back voting control of it. Don't bother to answer; tomorrow I'm going to start digging for the facts. They'll be on record too."

Miles glanced at Belle and said, "Don't waste your time. Meet Mrs. Gentry."

"So? Congratulations, both of you. You deserve each other. Now about my stock. Since Mrs. Gentry obviously can't marry me, then-"

"Don't be silly, Dan. I've already offset your ridiculous theory. I did make a stock transfer to Belle just as you did. For the same reason, services to the firm. As you say, these things are matters of record. Belle and I were married just a week ago . . . but you will find the stock registered to her quite some time ago if you care to look it up. You can't connect them. No, she received stock from both of us, because of her great value to the firm. Then after you jilted her and after you left the employ of the firm, we were married."

It set me back. Miles was too smart to tell a lie I could check on so easily. But there was something about it that was not true, something more than I had as yet found out.

"When and where were you married?"

"Santa Barbara courthouse, last Thursday. Not that it is your business.

"Perhaps not. When was the stock transfer?"

"I don't know exactly. Look it up if you want to know."

Damn it, it just did not ring true that he had banded stock over to Belle before he had her committed to him. That was the sort of sloppy stunt I pulled; it wasn't in character for him. "I'm wondering something, Miles. If I put a detective to work on it, might I find that the two of you got married once before a little earlier than that? Maybe in Yuma? Or Las Vegas? Or maybe you ducked over to Reno that time you both went north for the tax hearings? Maybe it would turn out that there was such a marriage recorded, and maybe the date of the stock transfer and the dates my patents were assigned to the firm all made a pretty pattern. Huh?"

Miles did not crack; he did not even look at Belle. As for Belle, the hate in her face could not have been increased even by a lucky stab in the dark. Yet it seemed to fit and I decided to ride the hunch to the limit.

Miles simply said, "Dan, I've been patient with you and have tried to be conciliatory. All it's got me is abuse. So I think it's time you left. Or I'll bloody well make a stab at throwing you out-you and your flea-bitten cat!"

"Ole!" I answered. "That's the first manly thing you've said tonight. But don't call Pete `flea-bitten.' He understands English and he is likely to take a chunk out of you. Okay, former pal, I'll get out, but I want to make a short curtain speech, very short. It's probably the last word I'll ever have to say to you. Okay?"

"Well . . . okay. Make it short."

Belle said urgently, "Miles, I want to talk to you."

He motioned her to be quiet without looking at her. "Go ahead. Be brief."

I turned to Belle. "You probably won't want to hear this, Belle. I suggest that you leave."

She stayed, of course. I wanted to be sure she would. I looked back at him. "Miles, I'm not too angry with you. The things a man will do for a larcenous woman are beyond belief. If Samson and Mark Antony were vulnerable, why should I expect you to be immune? By rights, instead of being angry I should be grateful to you. I guess I am, a little. I do know I'm sorry for you." I looked over at Belle. "You've got her now and she's all your problem and all it has cost me is a little money and temporarily my peace of mind. But what will she cost you? She cheated me, she even managed to persuade you, my trusted friend, to cheat me...what day will she team up with a new cat's-paw and start cheating you? Next week? Next month? As long as next year? As surely as a dog returns to its vomit-“

"Miles!" Belle shrilled.

Miles said dangerously, "Get out!" and I knew he meant it. So I stood up.

"We were just going. I’m sorry for you, old fellow. Both of us made just one mistake originally, and it was as much my fault as yours. But you've got to pay for it alone. And that's too bad, because it was such an innocent mistake."

His curiosity got him. "What do you mean?"

"We should have wondered why a woman so smart and beautiful and competent and all-around high-powered was willing to come to work for us at clerk-typist's wages. If we had taken her fingerprints the way the big firms do, and run a routine check, we might not have hired her . . . and you and I would still be partners."

Pay dirt again! Miles looked suddenly at his wife and she looked-well, "cornered rat" is wrong; rats aren't shaped like Belle.

And I couldn't leave well enough alone; I just had to pick at it. I walked toward her, saying, "Well, Belle? If I took that highball glass sitting beside you and had the fingerprints checked, what would I find? Pictures in post offices? The big con? Or bigamy? Marrying suckers for their money, maybe? Is Miles legally your husband?" I reached down and picked up the glass.

Belle slapped it out of my hand.

And Miles shouted at me.

And I had finally pushed my luck too far. I had been stupid to go into a cage of dangerous animals with no weapons, then I forgot the first tenet of the animal tamer; I turned my back. Miles shouted and I turned toward him. Belle reached for her purse, and I remember thinking that it was a hell of a time for her to be reaching for a cigarette.

Then I felt the stab of the needle.

I remember feeling just one thing as my knees got weak and I started slipping toward the carpet: utter astonishment that Belle would do such a thing to me. When it came right down to it, I still trusted her.

I never was completely unconscious. I got dizzy and vague as the drug hit me-it hits even quicker than morphine. But that was all. Miles yelled something at Belle and grabbed me around the chest as my knees folded. As he dragged me over and let me collapse into a chair, even the dizziness passed.

But while I was awake, part of me was dead. I know now what they used on me: the "zombie" drug, Uncle Sam's answer to brainwashing. So far as I know, we never used it on a prisoner, but the boys whipped it up in the investigation of brainwashing and there it was, illegal but very effective. It's the same stuff they now use in one-day psychoanalysis, but I believe it takes a court order to permit even a psychiatrist to use it.

God knows where Belle laid hands on it. But then God alone knows what other suckers she had on the string.

But I wasn't wondering about that then; I wasn't wondering about anything. I just lay slumped there, passive as a vegetable, hearing what went on, seeing anything in front of my eyes-but if Lady Go diva had strolled through without her horse I would not have shifted my eyes as she passed out of my vision.

Unless I was told to.

Pete jumped out of his bag, trotted over to where I slouched, and asked what was wrong. When I didn't answer he started stropping my shins vigorously back and forth while still demanding an explanation. When still I did not respond he levitated to my knees, put his forepaws on my chest, looked me right in the face, and demanded to know what was wrong, right now and no nonsense.

I didn't answer and he began to wail.

That caused Miles and Belle to pay attention to him. Once Miles had me in the chair he had turned to Belle and had said bitterly, "Now you've done it! Have you gone crazy?"

Belle answered, "Keep your nerve, Chubby. We're going to settle him once and for all."

"What? If you think I'm going to help in a murder-"

"Stuff it! That would be the logical thing to do . . . but you don't have the guts for it. Fortunately it's not necessary with that stuff in him."

"What do you mean?"

"He's our boy now. He'll do what I tell him to. He won't make any more trouble."

"But . . . good God, Belle, you can't keep him doped up forever. Once he comes out of it-"

"Quit talking like a lawyer. I know what this stuff will do; you don't. When he comes out of it he'll do whatever I've told him to do. I'll tell him never to sue us; he'll never sue us. I tell him to quit sticking his nose into our business; okay, he'll leave us alone. I tell him to go to Timbuktu; he'll go there. I tell him to forget all this; he'll forget . . . but he'll do it just the same."

I listened, understanding her but not in the least interested. If somebody had shouted, "The house is on fire!" I would have understood that, too, and I still would not have been interested.

"I don't believe it."

"You don't, eh?" She looked at him oddly. "You ought to."

"Huh? What do you mean?"

"Skip it, skip it. This stuff works, Chubby. But first we've got to-"

It was then that Pete started wailing. You don't hear a cat wail very often; you could go a lifetime and not hear it. They don't do it when fighting, no mailer how badly they are hurt; they never do it out of simple displeasure. A cat does it only in ultimate distress, when the situation is utterly unbearable but beyond its capacity and there is nothing left to do but keen.

It puts one in mind of a banshee. Also it is hardly to be endured; it hits a nerve-racking frequency.

Miles turned and said, "That confounded cat! We've got to get it out of here."

Belle said, "Kill it."

"Huh? You're always too drastic, Belle. Why, Dan would raise more Cain about that worthless animal than he would if we had stripped him completely. Here-" He turned and picked up Pete's travel bag.

"I'll kill it!" Belle said savagely. "I've wanted to kill that damned cat for months." She looked around for a weapon and found one, a poker from the fireplace set; she ran over and grabbed it.

Miles picked up Pete and tried to put him into the bag.

"Tried" is the word. Pete isn't anxious to be picked up by anyone but me or Ricky, and even I would not pick him up while he was wailing, without very careful negotiation; an emotionally disturbed cat is as touchy as mercury fulminate. But even if he were not upset, Pete certainly would never permit himself without protest to be picked up by the scruff of the neck.

Pete got him with claws in the forearm and teeth in the fleshy part of Miles's left thumb. Miles yelped and dropped him.

Belle shrilled, "Stand clear, Chubby!" and swung at him with the poker.

Belle's intentions were sufficiently forthright and she had the strength and the weapon. But she wasn't skilled with her weapon, whereas Pete is very skilled with his. He ducked under that roundhouse swipe and hit her four ways, two paws for each of her legs.

Belle screamed and dropped the poker.

I didn't see much of the rest of it. I was still looking straight ahead and could see most of the living room, but I couldn't see anything outside that angle because no one told me to look in any other direction. So I followed the rest of it mostly by sound, except once when they doubled back across my cone of vision, two people chasing a cat-then with unbelievable suddenness, two people being chased by a cat. Aside from that one short scene I was aware of the battle by the sounds of crashes, running, shouts, curses, and screams.

But I don't think they ever laid a glove on him.

The worst thing that happened to me that night was that in Pete's finest hour, his greatest battle and greatest victory, I not only did not see all the details, but I was totally unable to appreciate any of it. I saw and I heard but I had no feeling about it; at his supreme Moment of Truth I was numb.

I recall it now and conjure up emotion I could not feel then. But it's not the same thing; I'm forever deprived, like a narcolept on a honeymoon.

The crashes and curses ceased abruptly, and shortly Miles and Belle came back into the living room. Belle said between gasps, "Who left that censorable screen door unhooked?"

"You did. Shut up about it. It's gone now." Miles had blood on his face as well as his hands; he dabbed at the fresh scratches on his face and did them no good. At some point he must have tripped and gone down, for his clothes looked it and his coat was split up the back.

"I will like hell shut up. Have you got a gun in the house?"

"Huh?"

"I'm going to shoot that damned cat." Belle was in even worse shape than Miles; she had more skin where Pete could get at it-legs, bare arms and shoulders. It was clear that she would not be wearing strapless dresses again soon, and unless she got expert attention promptly she was likely to have scars. She looked like a harpy after a no-holds-barred row with her sisters.

Miles said, "Sit down!"

She answered him briefly and, by implication, negatively. "I'm going to kill that cat."

"Then don't sit down. Go wash yourself. I'll help you with iodine and stuff and you can help me. But forget that cat; we're well rid of it."

Belle answered rather incoherently, but Miles understood her. "You too," he answered, "in spades. Look here, Belle, if I did have a gun-I'm not saying that I have-and you went out there and started shooting, whether you got the cat or not you would have the police here inside of ten minutes, snooping around and asking questions. Do you want that with him on our hands?" He jerked a thumb in my direction. "And if you go outside the house tonight without a gun that beast will probably kill you." He scowled even more deeply. "There ought to be a law against keeping an animal like that. He's a public danger. Listen to him."

We could all hear Pete prowling around the house. He was not wailing now; he was voicing his war cry-inviting them to choose weapons and come outside, singly or in bunches.

Belle listened to it and shuddered. Miles said, "Don't worry; he can't get in. I not only hooked the screen you left open, I locked the door."

"I did not leave it open!"

"Have it your own way." Miles went around checking the window fastenings. Presently Belle left the room and so did he. Sometime while they were gone Pete shut up. I don't know how long they were gone; time didn't mean anything to me.

Belle came back first. Her make-up and hairdo were perfect; she had put on a long-sleeved, high-necked dress and had replaced the ruined stockings. Except for Band-Aid strips on her face, the results of battle did not show. Had it not been for the grim look on her phiz I would have considered her, under other circumstances, a delectable sight.

She came straight toward me and told me to stand up, so I did. She went through me quickly and expertly, not forgetting watch pocket, shirt pockets, and the diagonal one on the left inside of the jacket which most suits do not have. The take was not much; my wallet with a small amount of cash, ID cards, driver's license, and such, keys, small change, a nasal inhaler against the smog, minor miscellaneous junk, and the envelope containing the certified check which she herself had bought and had sent to me. She turned it over, read the closed endorsement I had made on it, and looked puzzled.

"What's this, Dan? Buying a slug of insurance?"

"No." I would have told her the rest, but answering the last question asked of me was the best I could do.

She frowned and put it with the rest of the contents of my pockets. Then she caught sight of Pete's bag and apparently recalled the flap in it I used for a brief case, for she picked it up and opened the flap.

At once she found the quadruplicate sets of the dozen and a half forms I had signed for Mutual Assurance Company. She sat down and started to read them. I stood where she had left me, a tailor's dummy waiting to be put away.

Presently Miles came in wearing bathrobe and slippers and quite a large amount of gauze and adhesive tape. He looked like a fourth-rate middleweight whose manager has let him be outmatched. He was wearing one bandage like a scalp lock, fore and aft on his bald head; Pete must have got to him while he was down.

Belle glanced up, waved him to silence, and indicated the stack of papers she was through with. He sat down and started to read. He caught up with her and finished the last one reading over her shoulder.

She said, "This puts a different complexion on things."

"An understatement. This commitment order is for December fourth-that's tomorrow. Belle, he's as hot as noon in Mojave; we've got to get him out of here!" He glanced at a clock. "They'll be looking for him in the morning."

"Miles, you always get chicken when the pressure is on. This is a break, maybe the best break we could hope for."

"How do you figure?"

"This zombie soup, good as it is, has one shortcoming. Suppose you dose somebody with it and load him up with what you want him to do. Okay, so he does it. He carries out your orders; he has to. Know anything about hypnosis?"

"Not much."

"Do you know anything but law, Chubby? You haven't any curiosity. A posthypnotic command-which is what this amounts to-may conflict, in fact it's almost certain to conflict, with what the subject really wants to do. Eventually that may land him in the hands of a psychiatrist. If the psychiatrist is any good, he's likely to find out what the trouble is. It is just possible that Dan here might go to one and get unstuck from whatever orders I give him. If he did, he could make plenty of trouble."

"Damn it, you told me this drug was surefire."

"Good God, Chubby, you have to take chances with everything in life. That's what makes it fun. Let me think."

After a bit she said, "The simplest thing and the safest is to let him go ahead with this sleep jump he is all set to take. He wouldn't be any more out of our hair if he was dead-and we don't have to take any risk. Instead of having to give him a bunch of complicated orders and then praying that he won't come unstuck, all we have to do is order him to go ahead with the cold sleep, then sober him up and get him out of here . . . or get him out of here and then sober him." She tuned to me. "Dan, when are you going to take the Sleep?"

"I'm not."

"Huh? What's all this?" She gestured at the papers from my bag.

"Papers for cold sleep. Contracts with Mutual Assurance."

"He's nutty," Miles commented.

"Mmm . . . of course he is. I keep forgetting that they can't really think when they're under it. They can hear and talk and answer questions . . . but it has to be just the right questions. They can't think." She came up close and looked me in the eyes. "Dan, I want you to tell me all about this coldsleep deal. Start at the beginning and tell it all the way through. You've got all the papers here to do it; apparently you signed them just today. Now you say you aren't going to do it. Tell me all about it, because I want to know why you were going to do it and now you say you aren't."

So I told her. Put that way, I could answer. It took a long time to tell as I did just what she said and told it all the way through in detail.

"So you sat there in that drive-in and decided not to? You decided to come out here and make trouble for us instead?"

"Yes." I was about to go on, tell about the trip out, tell her what I had said to Pete and what he had said to me, tell her how I had stopped at a drugstore and taken care of my Hired Girl stock, how I had driven to Miles's house, how Pete had not wanted to wait in the car, how-But she did not give me a chance. She said, "You've changed your mind again, Dan. You want to take the cold sleep. You're going to take the cold sleep. You won't let anything in the world stand in the way of your taking the cold sleep. Understand me? What are you going to do?"

"I'm going to take the cold sleep. I want to take. . ." I started to sway. I had been standing like a flagpole for more than an hour, I would guess, without moving any muscle, because no one had told me to. I started collapsing slowly toward her.

She jumped back and said sharply, "Sit down!"

So I sat down.

Belle turned to Miles. "That does it. I'll hammer away at it until I'm sure he can't miss."

Miles looked at the clock. "He said that doctor wanted him there at noon."

"Plenty of time. But we had better drive him there ourselves, just to be-No, damn it!"

"What's the trouble?"

"The time is too short. I gave him enough soup for a hone, because I wanted it to hit him fast-before he hit me. By noon he'd be sober enough to convince most people. But not a doctor."

"Maybe it'll just be perfunctory. His physical examination is already here and signed."

"You heard what he said the doctor told him. The doctor's going to check him to see if he's had anything to drink. That means he'll test his reflexes and take his reaction time and peer in his eyes and-oh, all the things we don't want done. The things we don't dare let a doctor do. Miles, it won't work."

"How about the next day? Call `em up and tell them there has been a slight delay?"

"Shut up and let me think."

Presently she started looking over the papers I had brought with me. Then she left the room, returned immediately with a jeweler's loop, which she screwed into her right eye like a monocle, and proceeded to examine each paper with great care. Miles asked her what she was doing, but she brushed his question aside.

Presently she took the loop out of her eye and said, "Thank goodness they all have to use the same government forms. Chubby, get me the yellow-pages phone book."

"What for?"

"Get it, get it. I want to check the exact phrasing of a firm name-oh, I know what it is but I want to be sure."

Grumbling, Miles fetched it. She thumbed through it, then said, "Yes, `Master Insurance Company of California' . . . and there's room enough on each of them. I wish it could be `Motors' instead of `Master'; that would be a cinch-but I don't have any connections at `Motors Insurance,' and besides, I'm not sure they even handle hibernation; I think they're just autos and trucks." She looked up. "Chubby, you're going to have to drive me out to the plant right away."

"Huh?"

"Unless you know of some quicker way to get an electric typewriter with executive type face and carbon ribbon. No, you go out by yourself and fetch it back; I've got telephoning to do."

He frowned. "I'm beginning to see what you plan to do. But, Belle, this is crazy. This is fantastically dangerous."

She laughed. "That's what you think. I told you I had good connections before we ever teamed up. Could you have swung the Mannix deal alone?"

"Well . . . I don't know."

"I know. And maybe you don't know that Master Insurance is part of the Mannix group."

"Well, no, I didn't. And I don't see what difference it makes."

"It means my connections are still good. See here, Chubby, the firm I used to work for used to help Mannix Enterprises with their tax losses . . . until my boss left the country. How do you think we got such a good deal without being able to guarantee that Danny boy went with the deal? I know all about Mannix. Now hurry up and get that typewriter and I'll let you watch an artist at work. Watch out for that cat."

Miles grumbled but started to leave, then returned. "Belle? Didn't Dan park right in front of the house?"

"Why?"

"His car isn't there now." He looked worried.

"Well, he probably parked around the corner. It's unimportant. Go get that typewriter. Hurry!"

He left again. I could have told them where I had parked but, since they did not ask me, I did not think about it. I did not think at all.

Belle went elsewhere in the house and left me alone. Sometime around daylight Miles got back, looking haggard and carrying our heavy typewriter. Then I was left alone again.

Once Belle came back in and said, "Dan, you've got a paper there telling the insurance company to take care of your Hired Girl stock. You don't want to do that; you want to give it to me."

I didn't answer. She looked annoyed and said, "Let's put it this way. You do want to give it to me. You know you want to give it to me. You know that, don't you?"

"Yes. I want to give it to you."

"Good. You want to give it to me. You have to give it to me. You won't be happy until you give it to me. Now where is it? Is it in your car?"

“No.”

"Then where is it?"

"I mailed it."

"What?" She grew shrill. "When did you mail it? Who did you mail it to? Why did you do it?"

If she had asked the second question last I would have answered it. But I answered the last question, that being all I could handle. "I assigned it."

Miles came in. "Where did he put it?"

"He says he's mailed it . . . because he has assigned it! You had better find his car and search it-he may just think he actually mailed it. He certainly had it with him at the insurance company."

"Assigned it!" repeated Miles. "Good Lord! To whom?"

"I'll ask him. Dan, to whom did you assign your stock?"

"To the Bank of America." She didn't ask me why or I would have told her about Ricky.

All she did was slump her shoulders and sigh. "There goes the ball game, Chubby. We can forget about the stock. It'll take more than a nail file to get it away from a bank." She straightened up suddenly. "Unless he hasn't really mailed it yet. If he hasn't I'll clean that assignment off the back so pretty you'll think it's been to the laundry. Then he'll assign it again. . . to me."

"To us," corrected Miles.

"That's just a detail. Go find his car."

Miles returned later and announced, "It's not anywhere within six blocks of here. I cruised around all the streets, and the alleys too. He must have used a cab."

"You heard him say he drove his own car."

"Well, it's not out there. Ask him when and where he mailed the stock."

So Belle did and I told them. "Just before I came here. I mailed it at the postbox at the corner of Sepulveda and Ventura Boulevard."

"Do you suppose he's lying?" asked Miles.

"He can't lie, not in the shape he's in. And he's too definite about it to be mixed up. Forget it, Miles. Maybe after he's put away it will turn out that his assignment is no good because he had already sold it to us . . . at least I'll get his signature on some blank sheets and be ready to try it."

She did try to get my signature and I tried to oblige. But in the shape I was in I could not write well enough to satisfy her. Finally she snatched a sheet out of my hand and said viciously, "You make me sick! I can sign your name better than that." Then she leaned over me and said tensely, "I wish I had killed your cat."

They did not bother me again until later in the day. Then Belle came in and said, "Danny boy, I'm going to give you a hypo and then you'll feel a lot better. You'll feel able to get up and move around and act just like you always have acted. You won't be angry at anybody, especially not at Miles and me. We're your best friends. We are, aren't we? Who are your best friends?"

"You are. You and Miles."

"But I'm more than that. I'm your sister. Say it."

"You're my sister."

"Good. Now we're going for a ride and then you are going for a long sleep. You've been sick and when you wake up you'll be well. Understand me?"

"Yes."

"Who am I?"

"You're my best friend. You're my sister."

"Good boy. Push your sleeve back."

I didn't feel the hypo go in, but it stung after she pulled it out. I sat up and shrugged and said, "Gee, Sis, that stung. What was it?"

"Something to make you feel better. You've been sick."

"Yeah, I'm sick. Where's Miles?"

"He'll be here in a moment. Now let's have your other aim. Push back the sleeve."

I said, "What for?" but I pushed back the sleeve and let her shoot me again. I jumped.

She smiled. "That didn't really hurt, did it?"

"Huh? No, it didn't hurt. What's it for?"

"It will make you sleepy on the ride. Then when we get there you'll wake up."

"Okay. I'd like to sleep. I want to take a long sleep." Then I felt puzzled and looked around. "Where's Pete? Pete was going to sleep with me."

"Pete?" Belle said. "Why, dear, don't you remember? You sent Pete to stay with Ricky. She's going to take care of him."

"Oh yes!" I grinned with relief. I had sent Pete to Ricky; I remembered mailing him. That was good. Ricky loved Pete and she would take good care of him while I was asleep.

They drove me out to the Consolidated Sanctuary at Sawtelle, one that many of the smaller insurance companies used-those that didn't have their own. I slept all the way but came awake at once when Belle spoke to me. Miles stayed in his car and she took me in.

The girl at the desk looked up and said, "Davis?"

"Yes," agreed Belle. "I'm his sister. Is the representative for Master Insurance here?"

"You'll find him down in Treatment Room Nine-they're ready and waiting. You can give the papers to the man from Master." She looked at me with interest. "He's had his physical examination?"

CHAPTER 5

I was complaining to the bartender about the air conditioning; it was turned too high and we were all going to catch cold. "No matter," he assured me. "You won't feel it when you're asleep. Sleep . . . sleep . . . soup of the evening, beautiful sleep." He had Belle's face.

"Oh yes!" Belle assured her. "Brother is a therapy-delay case, you know. He's under an opiate . . . for the pain."

The receptionist clucked sympathetically. "Well, hurry on in then. Through that door and turn left."

In Room Nine there was a man in street clothes and one in white coveralls and a woman in a nurse's uniform. They helped me get undressed and treated me like an idiot child while Belle explained again that I was under a sedative for the pain. Once he had me stripped and up on the table, the man in white massaged my belly, digging his fingers in deeply. "No trouble with this one," he announced. "He's empty."

"He hasn't had anything to eat or drink since yesterday evening," agreed Belle.

"That's fine. Sometimes they come in here stuffed like a Christmas turkey. Some people have no sense."

"True. Very true."

"Uh-huh. Okay, son, clench your fist tight while I get this needle in."

I did and things began to get really hazy. Suddenly I remembered something and tried to sit up. "Where's Pete? I want to see Pete."

Belle took my head and kissed me. "There, there, Buddy! Pete couldn't come, remember? Pete had to stay with Ricky." I quieted down and she said gently to the others, "Our brother Peter has a sick little girl at home."

I dropped off to sleep.

Presently I felt very cold. But I couldn't move to reach the covers.

"How about a warm drink then?" I wanted to know. "A Tom and Jerry? Or a hot buttered bum?"

"You're a bum!" the doctor answered. "Sleeping's too good for him; throw the bum out!"

I tried to hook my feet around the brass rail to stop them. But this bar had no brass rail, which seemed funny, and I was flat on my back, which seemed funnier still, unless they had installed bedside service for people with no feet. I didn't have feet, so how could I hook them under a brass rail? No hands, either. "Look, Maw, no hands!" Pete sat on my chest and wailed.

I was back in basic training . . . advanced basic, it must have been, for I was at Camp Hale at one of those silly exercises where they throw snow down your neck to make a man of you. I was having to climb the damnedest biggest mountain in all Colorado and it was all ice and I had no feet. Nevertheless, I was carrying the biggest pack anybody ever saw-I remembered that they were trying to find out if GIs could be used instead of pack mules and I had been picked because I was expendable. I wouldn't have made it at all if little Ricky hadn't got behind me and pushed.

The top sergeant turned and he had a face just like Belle's and he was livid with rage. "Come on, you! I can't afford to wait for you. I don't care whether you make it or not. . . but you can't sleep until you get there."

My no-feet wouldn't take me any farther and I fell down in the snow and it was icy warm and I did fall asleep while little Ricky wailed and begged me not to. But I had to sleep.

I woke up in bed with Belle. She was shaking me and saying, "Wake up, Dan! I can't wait thirty years for you; a girl has to think of her future." I tried to get up and hand her the bags of gold I had under the bed, but she was gone. . . and anyhow a Hired Girl with her face had picked all the gold up and put it in its tray on top and scurried out of the room. I tried to run after it but I had no feet, no body at all, I discovered. "I ain't got no body, and no body cares for me. . ." The world consisted of top sergeants and work. . . so what difference did it make where you worked or how? I let them put the harness back on me and I went back to climbing that icy mountain. It was all white and beautifully rounded and if I could just climb to the rosy tip they would let me sleep, which was what I needed. But I never made it…no hands, no feet, no nothing.

There was a forest fire on the mountain. The snow did not melt, but I could feel the heat in waves beating against me while I kept on struggling. The top sergeant was leaning over me and saying, "Wake up. . . wake up. . . wake up."

He no more than got me awake before he wanted me to sleep again. I'm vague about what happened then for a while. Part of the time I was on a table which vibrated under me and there were lights and snaky-looking equipment and lots of people. But when I was fully awake I was in a hospital bed and I felt all right except for that listless half-floating feeling you have after a Turkish bath. I had hands and feet again. But nobody would talk to me and every time I tried to ask a question a nurse would pop something into my mouth. I was massaged quite a lot.

Then one morning I felt fine and got out of bed as soon as I woke up. I felt a little dizzy but that was all. I knew who I was, I knew how I had got there, and I knew that all that other stuff had been dreams.

I knew who had put me there. If Belle had given me orders while I was drugged to forget her shenanigans, either the orders had not taken or thirty years of cold sleep had washed out the hypnotic effect. I was blurry about some details but I knew how they had shanghaied me.

I wasn't especially angry about it. True, it had happened just "yesterday," since yesterday is the day just one sleep behind you-but the sleep had been thirty years long. The feeling cannot be precisely defined, since it is entirely subjective, but, while my memory was sharp for the events of "yesterday," nevertheless my feelings about those events were to things far away. You have seen double images in television of a pitcher making his windup while his picture sits as a ghost on top of a long shot of the whole baseball diamond? Something like that . . . my conscious recollection was a closeup; my emotional reaction was to something long ago and far away.

I fully intended to look up Belle and Miles and chop them into cat meat, but there was no hurry. Next year would do-right now I was eager to have a look at the year 2000.

But speaking of cat meat, where was Pete? He ought to be around somewhere . . . unless the poor little beggar hadn't lived through the Sleep.

Then-and not until then-did I remember that my careful plans to bring Pete along had been wrecked.

I took Belle and Miles out of the "Hold" basket and moved them over to "Urgent." Try to kill my cat, would they?

They had done worse than kill Pete; they had turned him out to go wild: to wear out his days wandering back alleys in search of scraps, while his ribs grew thin and his sweet pixie nature warped into distrust of all two-legged beasts.

They had let him die-for he was surely dead by now-let him die thinking that I had deserted him.

For this they would pay. . . if they were still alive. Oh, how I hoped they were still alive-unspeakable!

I found that I was standing by the foot of my bed, grasping the rail to steady myself and dressed only in pajamas. I looked around for some way to call someone. Hospital rooms had not changed much. There was no window and I could not see where the light came from; the bed was high and narrow, as hospital beds had always been in my recollection, but it showed signs of having been engineered into something more than a place to sleep-among other things, it seemed to have some sort of plumbing under it which I suspected was a mechanized bedpan, and the side table was part of the bed structure itself. But, while I ordinarily would have been intensely interested in such gadgetry, right now I simply wanted to find the pear-shaped switch which summons the nurse-I wanted my clothes.

It was missing, but I found what it had been transformed into: a pressure switch on the side of the table that was not quite a table. My hand struck it in trying to find it, and a transparency opposite where my head would have been had I been in bed shone out with: SERVICE CALL. Almost immediately it blinked out and was replaced with: ONE MOMENT, PLEASE.

Very quickly the door silently rolled aside and a nurse came in. Nurses had not changed much. This one was reasonably cute, had the familiar firm manners of a drill sergeant, wore a perky little white hat perched on short orchid-colored hair, and was dressed in a white uniform. It was strangely cut and covered her here and uncovered her there in a fashion different from 1970-but women's clothes, even work uniforms, were always doing that. She would still have been a nurse in any year, just by her unmistakable manner.

"You get back in that bed!"

"Where are my clothes?"

"Get back in that bed. Now!"

I answered reasonably, "Look, nurse, I'm a free citizen, over twenty-one, and not a criminal. I don't have to get back into that bed and I'm not going to. Now are you going to show me where my clothes are or shall I go out the way I am and start looking?"

She looked at me, then turned suddenly and went out; the door ducked out of her way.

But it would not duck out of my way. I was still trying to study out the gimmick, being fairly sure that if one engineer could dream it up, another could figure it out, when it opened again and a man came in.

"Good morning," he said. "I'm Dr. Albrecht."

His clothes looked like a cross between a Harlem Sunday and a picnic to me, but his brisk manner and his tired eyes were convincingly professional; I believed him. "Good morning, Doctor. I'd like to have my clothes."

He stepped just far enough inside to let the door slide into place behind him, then reached inside his clothes and pulled out a pack of cigarettes. He got one out, waved it briskly in the air, placed it in his mouth and puffed on it; it was lighted. He offered me the pack. “Have one?"

"Uh, no, thanks."

"Go ahead. It won't hurt you."

I shook my head. I had always worked with a cigarette smoldering beside me; the progress of a job could be judged by the overflowing ash trays and the bums on the drafting board. Now I felt a little faint at the sight of smoke and wondered if I had dropped the nicotine habit somewhere in the slept-away years. "Thanks just the same."

"Okay. Mr. Davis, I've been here six years. I'm a specialist in hypnology, resuscitation, and like subjects. Here and elsewhere I've helped eight thousand and seventy-three patients make the comeback from hypothermia to normal life-you're number eight thousand and seventy-four. I've seen them do all sorts of odd things when they came out-odd to laymen; not to me. Some of them want to go right back to sleep again and scream at me when I try to keep them awake. Some of them do go back to sleep and we have to ship them off to another sort of institution. Some of them start weeping endlessly when they realize that it is a one-way ticket and it's too late to go home to whatever year they started from. And some of them, like you, demand their clothes and want to run out into the street."

"Well? Why not? Am I a prisoner?"

"No. You can have your clothes. I imagine you'll find them out of style, but that is your problem. However, while I send for them, would you mind telling me what it is that is so terribly urgent that you must attend to it right this minute . . . after it has waited thirty years? That's how long you've been at subtemperature-thirty years. Is it really urgent? Or would later today do as well? Or even tomorrow?"

I started to blurt out that it damn well was urgent, then stopped and looked sheepish. "Maybe not that urgent."

"Then as a favor to me, will you get back into bed, let me check you over, have your breakfast, and perhaps talk with me before you go galloping off in all directions? I might even be able to tell you which way to gallop."

"Oh, okay, Doctor. Sorry to have caused trouble." I climbed into bed. It felt good-I was suddenly tired and shaky.

"No trouble. You should see some that we get. We have to pull them down off the ceiling." He straightened the covers around my shoulders, then leaned over the table built into the bed. "Dr. Albrecht in Seventeen. Send a room orderly with breakfast, uh. . . menu four-minus."

He turned to me and said, "Roll over and pull up your jacket; I want to get at your ribs. While I'm checking you, you can ask questions. If you want to."

I tried to think while he prodded my ribs. I suppose it was a stethoscope he used although it looked like a miniaturized hearing aid. But they had not improved one thing about it; the pickup he pushed against me was as cold and hard as ever.

What do you ask after thirty years? Have they reached the stars yet? Who's cooking up "The War to End War" this time? Do babies come out of test tubes? "Doc, do they still have popcorn machines in the lobbies of movie theaters?"

"They did the last time I looked. I don't get much time for such things. By the way, the word is `grabbie' now, not `movie.'"

"So? Why?"

"Try one. You'll find out. But be sure to fasten your seat belt; they null the whole theater on some shots. See here, Mr. Davis, we're faced with this same problem every day and we've got it down to routine. We've got adjustment vocabularies for each entrance year, and historical and cultural summaries. It's quite necessary, for malorientation can be extreme no matter how much we lackweight the shock."

"Uh, I suppose so."

"Decidedly. Especially in an extreme lapse like yours. Thirty years."

"Is thirty years the maximum?"

"Yes and no. Thirty-five years is the very longest we've had experience with, since the first commercial client was placed in subtemperature in December 1965. You are the longest Sleeper I have revived. But we have clients in here now with contract times up to a century and a half. They should never have accepted you for as long as thirty years; they didn't know enough then. They were taking a great chance with your life. You were lucky."

"Really?"

"Really. Turn over." He went on examining me and added, "But with what we've learned now I'd be willing to prepare a man for a thousand-year jump if there were any way to finance it . . . hold him at the temperature you were at for a year just to check, then crash him to minus two hundred in a millisecond. He'd live. I think. Let's try your reflexes."

That "crash" business didn't sound good to me. Dr. Albrecht went on: "Sit up and cross your knees. You won't find the language problem difficult. Of course I've been careful to talk in 1970 vocabulary-I rather pride myself on being able to talk selectively in the entrance speech of any of my patients; I've made a hypnostudy of it. But you'll be speaking contemporary idiom perfectly in a week; it's really just added vocabulary."

I thought of telling him that at least four times he had used words not used in 1970, or at least not that way, but I decided it wouldn't be polite. "That's all for now," he said presently. "By the way, Mrs. Schultz has been trying to reach you."

"Huh?"

"Don't you know her? She insisted that she was an old friend of yours."

"`Schultz,'" I repeated. "I suppose I've known several `Mrs. Schultzes' at one time and another, but the only one I can place was my fourth-grade teacher. But she'd be dead by now."

"Maybe she took the Sleep. Well, you can accept the message when you feel like it. I'm going to sign a release on you. But if you're smart, you'll stay here for a few days and soak up reorientation. I'll look in on you later. So `twentythree, skiddoo' as they used to say in your day. Here comes the orderly with your breakfast."

I decided that he was a better doctor than a linguist. But I stopped thinking about it when I saw the orderly. It rolled in, carefully avoiding Dr. Albrecht, who walked straight out, paying no attention to it and making no effort himself to avoid it.

It came over, adjusted the builtin bed table, swung it over me, opened it out, and arranged my breakfast on it. "Shall I pour your coffee?"

"Yes, please." I did not really want it poured, as I would rather have it stay hot until I'd finished everything else. But I wanted to see it poured.

For I was in a delighted daze . . . it was Flexible Frank!

Not the jackleg, breadboarded, jury-rigged first model Miles and Belle had stolen from me, of course not. This one resembled the first Frank the way a turbospeedster resembles the first horseless carriages. But a man knows his own work. I had set the basic pattern and this was the necessary evolution . . . Frank's great-grandson, improved, slicked up, made more efficient-but the same bloodline.

"Will that be all?"

"Wait a minute."

Apparently I had said the wrong thing, for the automaton reached inside itself and pulled out a stiff plastic sheet and handed it to me. The sheet remained fastened to him by a slim steel chain. I looked at it and found printed on it:

VOICE CODE-Eager Beaver Model XVJI-a

IMPORTANT NOTICE!! This service automaton DOES NOT understand human speech. it has no understanding at all, being merely a machine. But for your convenience it has been designed to respond to a list of spoken orders. It will ignore anything else said in its presence, or (if any phrase triggers it incompletely or such that a circuit dilemma is created) it will offer this instruction sheet. Please read it carefully.

Thank you,

Aladdin Autoengineering Corporation Manufacturers of EAGER BEAVER, WILL! WA W, DRAFTING DAN, BUILDER BILL, GREEN THUMB, and NANNY. Custom Designers and Consultants in Automation Problems

"At Your Service!"

The motto appeared on their trademark showing Aladdin rubbing his lamp and a genie appearing.

Below this was a long list of simple orders-STOP, GO, YES, NO, SLOWER, FASTER, COME HERE, FETCH A NURSE, *etc.* Then there was a shorter list of tasks common in hospitals, such as back rubs, and including some that I had never heard of. The list closed abruptly with the statement: "Routines 87 through 242 may be ordered only by hospital staff members and the order phrases are therefore not listed here."

I had not voicecoded the first Flexible Frank; you had to punch buttons on his control board. It was not because I had not thought of it, but because the analyzer and telephone exchange for the purpose would have weighed and bulked and cost more than all the rest of Frank, Sr., net. I decided that I would have to learn some new wrinkles in miniaturization and simplification before I would be ready to practice engineering here. But I was anxious to get started on it, as I could see from Eager Beaver that it was going to be more fun than ever-lots of new possibilities. Engineering is the art of the practical and depends more on the total state of the art than it does on the individual engineer. When railroading time comes you can railroad-but not before. Look at poor Professor Langley, breaking his heart on a flying machine that should have flown-he had put the necessary genius in it-but he was just a few years too early to enjoy the benefit of collateral art he needed and did not have. Or take the great Leonardo da Vinci, so far out of his time that his most brilliant concepts were utterly unbuildable.

I was going to have fun here-I mean "now."

I handed back the instruction card, then got out of bed and looked for the data plate. I had halfway expected to see "Hired Girl, Inc." at the bottom of the notice and I wondered if "Aladdin" was a daughter corporation of the Mannix group. The data plate did not tell me much other than model, serial number, factory, and such, but it did list the patents, about forty of them-.and the earliest, I was very interested to see, was in 1970 . . . almost certainly based on my original model and drawings.

I found a pencil and memo pad on the table and jotted down the number of that first patent, but my interest was purely intellectual. Even if it had been stolen from me (I was sure it had been), it had expired in 1987-unless they had changed the patent laws-and only those granted later than 1983 would still be valid. But I wanted to know.

A light glowed on the automaton and he announced: "I am being called. May I leave?"

"Huh? Sure. Run along." It started to reach for the phrase list; I hastily said, "Go!"

"Thank you. Good-by." It detoured around me.

"Thank you."

"You are welcome."

Whoever had dictated the gadget's sound responses had a very pleasant baritone voice.

I got back into bed and ate the breakfast I had let get cold-only it turned out not to be cold. Breakfast four-minus was about enough for a medium-sized bird, but I found that it was enough, even though I had been very hungry. I suppose my stomach had shrunk. It wasn't until I had finished that I remembered that this was the first food I had eaten in a generation. I noticed it then because they had included a menu-what I had taken for bacon was listed as "grilled yeast strips, country style."

But in spite of a thirty-year fast, my mind was not on food; they had sent a newspaper in with breakfast: the Great Los Angeles Times, for Wednesday, 13 December, 2000.

Newspapers had not changed much, not in format. This one was tabloid size, the paper was glazed instead of rough pulp and the illustrations were either full color, or black-and-white stereo-I couldn't puzzle out the gimmick on that last. There had been stereo pictures you could look at without a viewer since I was a small child; as a kid I had been fascinated by ones used to advertise frozen foods in the `50s. But those had required fairly thick transparent plastic for a grid of tiny prisms; these were simply on thin paper. Yet they had depth.

I gave it up and looked at the rest of the paper. Eager Beaver had arranged it on a reading rack and for a while it seemed as if the front page was all I was going to read, for I could not find out how to open the damned thing. The sheets seemed to have frozen solid.

Finally I accidentally touched the lower righthand corner of the first sheet; it curled up and out of the way . . . some surface charge phenomenon, triggered at that point. The other pages got neatly out of the way in succession whenever I touched that spot.

At least half of the paper was so familiar as to make me homesick-"Your Horoscope Today, Mayor Dedicates New Reservoir, Security Restrictions Undermining Freedom of Press Says N. Y. Solon, Giants Take DoubleHeader, Unseasonable Warmth Perils Winter Sports, Pakistan Warns India"-et cetera, ad tedium. This is where I came in.

Some of the other items were new but explained themselves:

LUNA SHUTTLE STILL SUSPENDED FOR GEMINTDS-Twenty-Four-Hour Station Suffers Two Punctures, No Casualties; FOUR WHITES LYNCHED IN CAPETOWN-UN Action Demanded; HOSTMOTHERS ORGANIZE FOR HIGHER FEES-Demand "Amateurs" Be Outlawed; MISSISSIPPI PLANTER INDICTED UNDER ANTI-ZOMBIE LAW-His Defense: "Them Boys Hain't Drugged, They're Just Stupid!"

I was fairly sure that I knew what that last one meant . . . from experience.

But some of the news items missed me completely. The "wogglies" were still spreading and three more French towns had been evacuated; the King was considering ordering the area dusted. King? Oh well, French politics might turn up anything, but what was this "Poudre Sarntaire" they were considering using on the "wogglies"?-whatever they were. Radioactive, maybe? I hoped they picked a dead calm day . . . preferably the thirtieth of February. I had had a radiation overdose myself once, through a mistake by a damn-fool WAC technician at Sandia. I had not reached the point-of-no-return vomiting stage, but I don't recommend a diet of curies.

The Laguna Beach division of the Los Angeles police had been equipped with Leycoils and the division chief warned all Teddies to get out of town. "My men have orders to nark first and subspeck afterward. This has got to stop!"

I made a mental note to keep clear of Laguna Beach until I found out what the score was. I wasn't sure I wanted to be subspecked, or subspected, even afterward.

Those are just samples. There were any number of news stories that started out trippingly, then foundered in what was, to me, double talk.

I started to breeze on past the vital statistics when my eye caught some new subheads. There were the old familiar ones of births, deaths, marriages, and divorces, but now there were "commitments" and "withdrawals" as well, listed by sanctuaries. I looked up "Sawtelle Cons. Sanc." and found my own name. It gave me a warm feeling of "belonging."

But the most intensely interesting things in the paper were the ads. One of the personals stuck in my mind: "Attractive still young widow with yen to travel wishes to meet mature man similarly inclined. Object: two-year marriage contract." But it was the display advertising that got me.

Hired Girl and her sisters and her cousins and her aunts were all over the place-and they were still using the trademark, a husky girl with a broom, that I had designed originally for our letterhead. I felt a twinge of regret that I had been in such a jumping hurry to get rid of my stock in Hired Girl, Inc.; it looked as if it was worth more than all the rest of my portfolio. No, that was wrong; if I had kept it with me at the time, that pair of thieves would have lifted it and faked an assignment to themselves. As it was, Ricky had gotten it-and if it had made Ricky rich, well, it couldn't happen to a nicer person.

I made a note to track down Ricky first thing, top priority. She was all that was left to me of the world I had known and she loomed very large in my mind. Dear little Ricky! If she had been ten years older I would never have looked at Belle . . . and wouldn't have got my fingers burned.

Let's see, how old would she be now? Forty-no, forty-one. It was hard to think of Ricky as forty-one. Still, that wouldn't be old in a woman these days-or even those days. From forty feet you frequently couldn't tell forty-one from eighteen.

If she was rich I'd let her buy me a drink and we would drink to Pete's dear departed funny little soul.

And if something had slipped and she was poor in spite of the stock I had assigned her, then-by damn, I'd marry her! Yes, I would. It didn't matter that she was ten years or so older than I was; in view of my established record for flubbing the dud I needed somebody older to look out for me and tell me no-and Ricky was just the girl who could do it. She had run Miles and Miles's house with serious little-girl efficiency when she was less than ten; at forty she would be just the same, only mellowed.

I felt really warm and no longer lost in a strange land for the first time since I had wakened. Picky was the answer to everything.

Then deep inside me I heard a voice: "Look, stupid, you can't marry Ricky, because a girl as sweet as she was going to be would now have been married for at least twenty years. She'll have four kids. . maybe a son bigger than you are-and certainly a husband who won't be amused by you in the role of good old Uncle Danny."

I listened and my jaw sagged. Then I said feebly, "All right, all right-so I've missed the boat again. But I'm still going to look her up. They can't do mote than shoot me. And, after all, she’s the only other person who really understood Pete."

I turned another page, suddenly very glum at the thought of having lost both Ricky and Pete. After a while I fell asleep over the paper and slept until Eager Beaver or his twin fetched lunch.

While I was asleep I dreamed that Picky was holding me on her lap and saying, "It's all right, Danny. I found Pete and now we're both here to stay. Isn't that so, Pete?"

"YeeeoW!"

The added vocabularies were a cinch; I spent much more time on the historical summaries. Quite a lot can happen in thirty years, but why put it down when everybody else knows it better than I do? I wasn't surprised that the Great Asia Republic was crowding us out of the South American trade; that had been in the cards since the Formosall treaty. Nor was I surprised to find India more Balkanized than ever. The notion of England being a province of Canada stopped me for a moment. Which was the tail and which was the dog? I skipped over the panic of `87; gold was a wonderful engineering material for some uses; I could not regard it as a tragedy to find that it was now cheap and no longer a basis for money, no matter how many people lost their shirts in the changeover.

I stopped reading and thought about the things you could do with cheap gold, with its high density, good conductivity, extreme ductility . . . and stopped when I realized I would have to read the technical literature first. Shucks, in atomics alone it would be invaluable. The way the stuff could be worked, far better than any other metal, if you could use it in - I stopped, morally certain that Eager Beaver had had his "head" crammed full of gold. I would just have to get busy and find out what the boys had been doing in the "small back rooms" while I bad been away.

The Sawtelle Sanctuary wasn't equipped to let me read up on engineering, so I told Doc Albrecht I was ready to check out. He shrugged, told me I was an idiot, and agreed. But I did stay one more night; I found that I was fagged just from lying back and watching words chase past in a book scanner.

They brought me modern clothes right after breakfast the next morning...and I had to have help in dressing. They were not so odd in themselves (although I had never worn cerise trousers with bell bottoms before) but I could not manage the fastenings without coaching. I suppose my grandfather might have had the same trouble with zippers if he had not been led into them gradually. It was the Sticktite closure seams, of course-I thought I was going to have to hire a little boy to help me go to the bathroom before I got it through my head that the pressure-sensitive adhesion was axially polarized.

Then I almost lost my pants when I tried to ease the waistband. No one laughed at me.

Dr. Albrecbt asked, "What are you going to do?"

"Me? First I'm going to get a map of the city. Then I'm going to find a place to sleep. Then I'm going to do nothing but professional reading for quite a while . . . maybe a year. Doc, I'm an obsolete engineer. I don't aim to stay that way."

“Mmmm. Well, good luck. Don't hesitate to call if I can help."

I stuck out my hand. "Thanks, Doc. You've been swell. Uh, maybe I shouldn't mention this until I talk to the accounting office of my insurance company and see just how well off I am-but I don't intend to let it go with words. Thanks for the sort of thing you've done for me should be more substantial. Understand me?"

He shook his head. "I appreciate the thought. But my fees are covered by my contract with the sanctuary."

"But-"

"No. I can't take it, so please let's not discuss it." He shook hands and said, "Good-by. If you'll stay on this slide it will take you to the main offices." He hesitated. "If you find things a bit tiring at first, you're entitled to four more days recuperation and reorientation here without additional charge under the custodial contract. It's paid for. Might as well use it. You can come and go as you like."

I grinned. "Thanks, Doc. But you can bet that I won't be back-other than to say hello someday."

I stepped off at the main office and told the receptionist there who I was. It handed me an envelope, which I saw was another phone message from Mrs. Schultz. I still had not called her, because I did not know who she was, and the sanctuary did not permit visits nor phone calls to a revivified client until he wanted to accept them. I simply glanced at it and tucked it in my blouse, while thinking that I might have made a mistake in making Flexible Frank too flexible. Receptionists used to be pretty girls, not machines.

The receptionist said, "Step this way, please. Our treasurer would like to see you."

Well, I wanted to see him, too, so I stepped that way. I was wondering how much money I had made and was congratulating myself on having plunged in common stocks rather than playing it "safe." No doubt my stocks had dropped in the Panic of `87, but they ought to be back up now-in fact I knew that at least two of them were worth a lot of dough now; I had been reading the financial section of the Times. I still had the paper with me, figuring I might want to look up some others.

The treasurer was a human being, even though he looked like a treasurer. He gave me a quick handshake. "How do you do, Mr. Davis. I'm Mr. Doughty. Sit down, please."

I said, "Howdy, Mr. Doughty. I probably don't need to take that much of your time. Just tell me this: does my insurance company handle its settlements through your office? Or should I go to their home offices?"

"Do please sit down. I have several things to explain to you."

So I sat. His office assistant (good old Frank again) fetched a file folder for him and he said, "These are your original contracts. Would you like to see them?"

I wanted very much to see them, as I had kept my fingers crossed ever since I was fully awake, wondering if Belle had figured out some way to bite the end off that certified check. A certified check is much harder to play hankypanky with than is a personal check, but Belle was a clever gal.

I was much relieved to see that she had left my commitments unchanged, except of course that the side contract for Pete was missing and also the one concerning my Hired Girl stock. I supposed that she had just burned those, to keep from raising questions. I examined with care the dozen or more places where she had changed

"Mutual Assurance Company" to "Master Insurance Company of California."

The gal was a real artist, no question. I suppose a scientific criminologist armed with microscope and comparison stereo and chemical tests and so forth could have proved that each of those documents had been altered, but I could not. I wondered how she had coped with the closed endorsement on the back of the certified check, since certified checks are always on paper guaranteed nonerasable. Well, she probably had not used an eraser-what one person can dream up another person can outsmart . . . and Belle was very smart.

Mr. Doughty cleared his throat. I looked up. "Do we settle my account here?"

"Yes."

"Then I can put it in two words. How much?"

"Mmm ... Mr. Davis, before we go into that question, I would like to invite your attention to one additional document and to one circumstance. This is the contract between this Sanctuary and Master Insurance Company of California for your hypothermia, custody, and revivification. You will note that the entire fee is paid in advance. This is both for our protection and for yours, since it guarantees your safe-being while you are helpless. The funds-all such funds-are placed in escrow with the superior-court division handling chancery matters and are paid quarterly to us as earned."

"Okay. Sounds like a good arrangement."

"It is. It protects the helpless. Now you must understand clearly that this sanctuary is a separate corporation from your insurance company; the custodial contract with us was a contract entirely separate from the one for the management of your estate."

"Mr. Doughty, what are you getting at?"

"Do you have any assets other than those you entrusted to Master Insurance Company?"

I thought it over. I had owned a car once . . . but God alone knew what had become of it. I had closed out my checking account in Mojave early in the binge, and on that busy day when I ended up at Miles's place-and in the soup-I had started with maybe thirty or forty dollars in cash. Books, clothes, slide rule-I had never been a pack rat-and that minor junk was gone anyhow. "Not even a bus transfer, Mr. Doughty."

"Then-I am very sorry to have to tell you this-you have no assets of any sort."

I held still while my head circled the field and came in for a crash landing. "What do you mean? Why, some of the stocks I invested in are in fine shape. I know they are. It says so right here." I held up my breakfast copy of the Times.

He shook his head. "I'm sorry, Mr. Davis, but you don't own any stocks. Master Insurance went broke."

I was glad he had made me sit down; I felt weak. "How did this happen? The Panic?"

"No, no. It was part of the collapse of the Mannix Group but of course you don't know about that. It happened after the Panic, and I suppose you could say that it started from the Panic. But Master Insurance would not have gone under if it had not been systematically looted . . . gutted-'milked' is the vulgar word. If it had been an ordinary receivership, something at least would have been salvaged. Hut it was not. By the time it was discovered there was nothing left of the company but a hollow shell and the men who had done it were beyond extradition. Uh, if it is any consolation to you, it could not happen under our present laws."

No, it was no consolation, and besides, I didn't believe it. My old man claimed that the more complicated the law the more opportunity for scoundrels.

But he also used to say that a wise man should be prepared to abandon his baggage at any time. I wondered how often I was going to have to do it to qualify as "wise." "Uh, Mr. Doughty, just out of curiosity, how did Mutual Assurance make out?"

"Mutual Assurance Company? A fine firm. Oh, they took their licking during the Panic along with everybody else. But they weathered it. You have a policy with them, perhaps?"

"No." I did not offer explanation; there was no use. I couldn't look to Mutual; I had never executed my contract with them. I couldn't sue Master Insurance; there is no point in suing a bankrupt corpse.

I could sue Belle and Miles if they were still around-but why be silly? No proof, none.

Besides, I did not want to sue Belle. It would be better to tattoo her all over with "Null and Void" ... using a dull needle. Then I'd take up the matter of what she had done to Pete. I hadn't figured out a punishment to suit the crime for that one yet.

I suddenly remembered that it was the Mannix group that Miles and Belle had been about to sell Hired Girl, Inc., to when they had booted me out. "Mr. Doughty? Are you sure that the Mannix people haven't any assets? Don't they own Hired Girl?"

"Hired Girl?' Do you mean the domestic autoappliance firm?"

"Yes, of course."

"It hardly seems possible. In fact, it is not possible, since the Mannix empire, as such, no longer exists. Of course I can't say that there never was any connection between Hired Girl Corporation and the Mannix people. But I don't believe it could have been much, if any, or I think I would have heard of it."

I dropped the matter. If Miles and Belie had been caught in the collapse of Mannix, that suited me fine. But, on the other hand, if Mannix had owned and milked Hired Girl, Inc., it would have hit Ricky as hard as it hit them. I didn't want Ricky hurt, no matter what the side issues were.

I stood up. "Well, thanks for breaking it gently, Mr. Doughty. I'll be on my way."

"Don't go yet. Mr. Davis . . . we of this institution feel a responsibility toward our people beyond the mere letter of the contract. You understand that yours is by no means the first case of this sort. Now our board of directors has placed a small discretionary fund at my disposal to ease such hardships. It-"

"No charity, Mr. Doughty. Thanks anyhow."

"Not charity, Mr. Davis. A loan. A character loan, you might call it. Believe me, our losses have been negligible on such loans and we don't want you to walk out of here with your pockets empty."

I thought that one over twice. I didn't even have the price of a haircut. On the other hand, borrowing money is like trying to swim with a brick in each hand. . . and a small loan is tougher to pay back than a million. "Mr. Doughty," I said slowly, "Dr. Albrecht said that I was entitled to four more days of beans and bed here."

"I believe that is right-I'd have to consult your card. Not that we throw people out even when their contract time is up if they are not ready."

"I didn't suppose that you did. But what are the rates on that room I had, as hospital room and board?"

"Eh? But our rooms are not for rent in that way. We aren't a hospital; we simply maintain a recovery infirmary for our clients."

"Yes, surely. But you must figure it, at least for cost accounting purposes."

"Mmm . . . yes and no. The figures aren't allocated on that basis. The subheads are depreciation, overhead, operation, reserves, diet kitchen, personnel, and so forth. I suppose I could make an estimate."

"Uh, don't bother. What would equivalent room and board in a hospital come to?"

"That's a little out of my line. Still ... well, you could call it about one hundred dollars per day, I suppose."

"I had four days coming. Will you lend me four hundred dollars?"

He did not answer but spoke in a number code to his mechanical assistant. Then eight fifty-dollar bills were being counted into my hand. "Thanks," I said sincerely as I tucked it away. "I'll do my damnedest to see that this does not stay on the books too long. Six per cent? Or is money tight?"

He shook his head. "It's not a loan. Since you put it as you did, I canceled it against your unused time."

"Huh? Now, see here, Mr. Doughty, I didn't intend to twist your arm. Of course, I'm going to-"

"Please. I told my assistant to enter the charge when I directed it to pay you. Do you want to give our auditors headaches all for a fiddling four hundred dollars? I was prepared to loan you much more than that."

"Well-I can't argue it now. Say, Mr. Doughty, how much money is this? How are price levels now?"

"Mmmm . . . that is a complex question."

"Just give me an idea? What does it cost to eat?"

"Food is quite reasonable. For ten dollars you can get a very satisfactory dinner . . . if you are careful to select moderately priced restaurants."

I thanked him and left with a really warm feeling. Mr. Doughty reminded me of a paymaster I used to have in the Army. Paymasters come in only two sizes: one sort shows you where the book says that you can't have what you've got coming to you; the second sort digs through the book until he finds a paragraph that lets you have what you need even if you don't rate it.

Doughty was the second sort.

The sanctuary faced on the Wilshire Ways. There were benches in front of it and bushes and flowers. I sat down on a bench to take stock and to decide whether to go east or west. I had kept a stiff lip with Mr. Doughty but, honestly, I was badly shaken, even though I had the price of a week's meals in my jeans.

But the sun was warm and the drone of the Ways was pleasant and I was young (biologically at least) and I had two hands and my brain. Whistling "Hallelujah, I'm a Bum," I opened the Times to the "Help Wanted" columns.

I resisted the impulse to look through "Professional Engineers" and turned at once to "Unskilled."

That classification was darned short. I almost couldn't find it.

I got a job the second day, Friday, the fifteenth of December. I also had a mild run-in with the law and had repeated tangles with new ways of doing things, saying things, feeling about things. I discovered that "reorientation" by reading about it is like reading about sex-not the same thing.

I suppose I would have had less trouble if I had been set down in Omsk, or Santiago, or Djakarta. In going to a strange city in a strange land you know that the customs are going to be different, but in Great Los Angeles I subconsciously expected things to be unchanged even though I could see that they were changed. Of course thirty years is nothing; anybody takes that much change and more in a lifetime. But it makes a difference to take it in one bite.

Take one word I used all in innocence. A lady present was offended and only the fact that I was a Sleeper-which I hastily explained-kept her husband from giving me a mouthful of knuckles. I won't use the word here-oh yes, I will; why shouldn't I? I'm using it to explain something. Don't take my word for it that the word was in good usage when I was a kid; look it up in an old dictionary. Nobody scrawled it in chalk on sidewalks when I was a kid.

The word was "kink."

There were other words which I still do not use properly without stopping to think. Not taboo words necessarily, just ones with changed meanings. "Host" for example-"host" used to mean the man who took your coat and put it in the bedroom; it had nothing to do with the birth rate.

But I got along. The job I found was crushing new ground limousines so that they could be shipped back to Pittsburgh as scrap. Cadillacs, Chryslers, Eisenhowers, Lincolns-all sorts of great, big, new powerful turbobuggies without a kilometer on their clocks. Drive `em between the jaws, then crunch! smash! Crash!-scrap iron for blast furnaces.

It hurt me at first, since I was riding the Ways to work and didn't own so much as a gravJumper. I expressed my opinion of it and almost lost my job . . . until the shift boss remembered that I was a Sleeper and really didn't understand.

"It's a simple matter of economics, son. These are surplus cars the government has accepted as security against price-support loans. They're two years old now and they can never be sold, so the government junks them and sells them back to the steel industry. You can't run a blast furnace just on ore; you have to have scrap iron as well. You ought to know that even if you are a Sleeper. Matter of fact, with high-grade ore so scarce, there's more and more demand for scrap. The steel industry needs these cars."

"But why build them in the first place if they can't be sold? It seems wasteful."

"It just seems wasteful. You want to throw people out of work? You want to run down the standard of living?"

"Well, why not ship them abroad? It seems to me they could get more for them on the open market abroad than they are worth as Scrap."

"What!-and ruin the export market? Besides, if we started dumping cars abroad we'd get everybody sore at us-Japan, France, Germany, Great Asia, everybody. What are you aiming to do? Start a war?" He sighed and went on in a fatherly tone. "You go down to the public library and draw out some books. You don't have any right to opinions on these things until you know something about them."

So I shut up. I didn't tell him that I was spending all my off time at the public library or at U.C.L.A.'s library; I had avoided admitting that I was, or used to be, an engineer-to claim that I was now an engineer would be too much like walking up to du Pont's and saying, "Sirrah, I am an aichymiste. Hast need of art such as mine?"

I raised the subject just once more because I noticed that very few of the price-support cars were really ready to run. The workmanship was sloppy and they often lacked essentials like instrument dials or air conditioners. But when one day I noticed from the way the teeth of the crusher came down on one that it lacked even a power plant, I spoke up about it.

The shift boss just stared at me. "Great jumping Jupiter, son, surely you don't expect them to put their best workmanship into cars that are just surplus? These cars had price-support loans against them before they ever came off the assembly line."

So that time I shut up and stayed shut. I had better stick to engineering; economics is too esoteric for me.

But I had plenty of time to think. The job I had was not really a "job" at all in my book; all the work was done by Flexible Frank in his various disguises. Frank and his brothers ran the crusher, moved the cars into place, hauled away the scrap, kept count, and weighed the loads; my job was to stand on a little platform (I wasn't allowed to sit) and hang onto a switch that could Stop the whole operation if something went wrong. Nothing ever did, but I soon found that I was expected to spot at least one failure in automation each shift, stop the job, and send for a trouble crew.

Well, it paid twenty-one dollars a day and it kept me eating. First things first.

After social security, guild dues, income tax, defense tax, medical plan, and the welfare mutual fund I took home about sixteen of it. Mr. Doughty was wrong about a dinner costing ten dollars; you could get a very decent plate dinner for three if you did not insist on real meat, and I would defy anyone to tell whether a hamburger steak started life in a tank or out on the open range. With the stories going around about bootleg meat that might give you radiation poisoning I was perfectly happy with surrogates.

Where to live had been somewhat of a problem. Since Los Angeles had not been treated to the one-second slum-clearance plan in the Six Weeks War, an amazing number of refugees had gone there (I suppose I was one of them, although I hadn't thought of myself as such at the time) and apparently none of them had ever gone home, even those that had homes left to go back to. The city-if you can call Great Los Angeles a city; it is more of a condition-had been choked when I went to sleep; now it was as jammed as a lady's purse. It may have been a mistake to get rid of the smog; back in the `60s a few people used to leave each year because of sinusitis.

Now apparently nobody left, ever.

The day I checked out of the sanctuary I had had several things on my mind, principally (1) find a job, (2) find a place to sleep, (3) catch up in engineering, (4) find Ricky, (5) get back into engineering-on my own if humanly possible, (6) find Belle and Miles and settle their hash-without going to jail for it, and (7) a slug of things, like looking up the original patent on Eager Beaver and checking my strong hunch that it was really Flexible Frank (not that it mattered now, just curiosity), and looking up the corporate history of Hired Girl, Inc., etc., *etc.*

I have listed the above in order of priority, as I had found out years ago (through almost flunking my freshman year in engineering) that if you didn't use priorities, when the music stopped you were left standing. Some of these priorities ran concurrently, of course; I expected to search out Ricky and probably Belle & Co. as well, while I was boning engineering. But first things first and second things second; finding a job came even ahead of hunting

for a sack because dollars are the key to everything else. . . when you haven't got them.

After getting turned down six times in town I had chased an ad clear out to San Bernardino Borough, only to get there ten minutes too late. I should have rented a flop at once; instead I played it real smart and went back downtown, intending to find a room, then get up very early and be first in line for some job listed in the early edition.

How was I to know? I got my name on four rooming-house waiting lists and wound up in the park. I stayed there, walking to keep warm, until almost midnight, then gave up-Great Los Angeles winters are subtropical only if you accent the "sub." I then took refuge in a station of Wilshire Ways . . . and about two in the morning they rounded me up with the rest of the vagrants.

Jails have improved. This one was warm and I think they required the cockroaches to wipe their feet.

I was charged with barracking. The judge was a young fellow who didn't even look up from his newspaper but simply said, "These all first offenders?"

"Yes, your honor."

"Thirty days, or take a labor-company parole. Next."

They started to march US Out but I didn't budge. "Just a minute, Judge."

"Eh? Something troubling you? Are you guilty or not guilty?"

"Uh, I really don't know because I don't know what it is I have done. You see-"

"Do you want a public defender? If you do you can be locked up until one can handle your case. I understand they are running about six days late right now. . . but it's your privilege."

"Uh, I still don't know. Maybe what I want is a labor-company parole, though I'm not sure what it is. What I really want is some advice from the Court, if the Court pleases."

The judge said to the bailiff, "Take the others out." He turned back to me. "Spill it. But I'll warrant you won't like my advice. I've been on this job long enough to have heard every phony story and to have acquired a deep disgust toward most of them."

"Yes, sir. Mine isn't phony; it's easily checked. You see, I just got out of the Long Sleep yesterday and-"

But he did look disgusted. "One of those, eh? I've often wondered what made our grandparents think they could dump their riffraff on us. The last thing on earth this city needs is more people especially ones who couldn't get along in their own time. I wish I could boot you back to whatever year you came from with a message to everybody there that the future they're dreaming about is not, repeat not, paved with gold." He sighed. "But it wouldn't do any good, I'm sure. Well, what do you expect me to do? Give you another chance? Then have you pop up here again a week from now?"

"Judge, I don't think I'm likely to. I've got enough money to live until I find a job and-"

"Eh? If you've got money, what were you doing barracking?"

"Judge, I don't even know what that word means." This time he let me explain. When I came to how I had been swindled by Master Insurance Company his whole manner changed.

"Those swine! My mother got taken by them after she had paid premiums for twenty years. Why didn't you tell me this in the first place?" He took out a card, wrote something on it, and said, "Take this to the hiring office at the Surplus & Salvage Authority. If you don't get a job come back and see me this afternoon. But no more barracking. Not only does it breed crime and vice, but you yourself are running a terrible risk of meeting up with a zombie recruiter."

That's how I got a job smashing up brand-new ground cars. But I still think I made no mistake in logic in deciding to jobhunt first. Anywhere is home to the man with a fat bank account-the cops leave him alone.

I found a decent room, too, within my budget, in a part of West Los Angeles which had not yet been changed over to New Plan. I think it had formerly been a coat closet.

I would not want anyone to think I disliked the year 2000, as compared with 1970. I liked it and I liked 2001 when it rolled around a couple of weeks after they wakened me. In spite of recurrent spasms of almost unbearable homesickness, I thought that Great Los Angeles at the dawn of the Third Millennium was odds-on the most wonderful place I had ever seen. It was fast and clean and very exciting, even if it was too crowded . . . and even that was being coped with on a mammoth, venturesome scale. The New Plan parts of town were a joy to an engineer's heart. If the city government had had the sovereign power to stop immigration for ten years, they could have licked the housing problem. Since they did not have that power, they just had to do their best with the swarms that kept rolling over the Sierras-and their best was spectacular beyond belief and even the failures were colossal.

It was worth sleeping thirty years just to wake up in a time when they had licked the common cold and nobody had a postnasal drip. That meant more to me than the research colony on Venus.

Two things impressed me most, one big, one little. The big one was NullGrav, of course. Back in 1970 I had known about the Babson Institute gravitation research but I had not expected anything to come of it-and nothing had; the basic field theory on which NullGrav is based was developed at the University of Edinburgh. But I had been taught in school that gravitation was something that nobody could ever do anything about, because it was inherent in the very shape of space.

So they changed the shape of space, naturally. Only temporarily and locally, to be sure, but that's all that's needed in moving a heavy object. It still has to stay in field relation with Mother Terra, so it's useless for space ships-or it is in 2001; I've quit making bets about the future. I learned that to make a lift it was still necessary to expend power to overcome the gravity potential, and conversely, to lower something you had to have a power pack to store all those foot-pounds in, or something would go Phzzt!Spung! But just to transport something horizontally, say from San Francisco to Great Los Angeles, just lift it once, then float along, no power at all, like an ice skater riding a long edge.

Lovely!

I tried to study the theory of it, but the math starts in where tensor calculus leaves off; it's not for me. But an engineer is rarely a mathematical physicist and he does not have to be; he simply has to savvy the skinny of a thing well enough to know what it can do in practical applications-know the working parameters. I could learn those.

The "little thing" I mentioned was the changes in female styles made possible by the Sticktite fabrics. I was not startled by mere skin on bathing beaches; you could see that coming in 1970. But the weird things that the ladies could do with Sticktite made my Jaw sag.

My grandpappy was born in 1890; I suppose that some of the sights in 1970 would have affected him the same way.

But I liked the fast new world and would have been happy in it if I had not been so bitterly lonely so much of the time. I was out of joint. There were times (in the middle of the night, usually) when I would gladly have swapped it all for one beat-up tomcat, or for a chance to spend an afternoon taking little Ricky to the zoo . . . or for the comradeship Miles and I had shared when all we had was hard work and hope.

It was still early in 2001 and I wasn't halfway caught up on my homework, when I began to itch to leave my featherbedded job and get back to the old drawing board. There were so many, many things possible under current art which had been impossible in 1970; 1 wanted to get busy and design a few dozen.

For example I had expected that there would be automatic secretaries in use-I mean a machine you could dictate to and get back a business letter, spelling, punctuation, and format all perfect, without a human being in the sequence. But there weren't any. Oh, somebody had invented a machine which could type, but it was suited only to a phonetic language like Esperanto and was useless in a language in which you could say: "Though the tough cough and hiccough plough him through."

People won't give up the illogicalities of English to suit the convenience of an inventor. Mohammed must go to the mountain.

If a highschool girl could sort out the cockeyed spelling of English and usually type the right word, how could a machine be taught to do it?

"Impossible" was the usual answer. It was supposed to require human judgment and understanding.

But an invention is something that was "impossible" up to then-that's why governments grant patents.

With memory tubes and the miniaturization now possible-I had been right about the importance of gold as an engineering material-with those two things it would be easy to pack a hundred thousand sound codes into a cubic foot. . . in other words, to soundkey every word in a Webster's Collegiate Dictionary. But that was unnecessary; ten thousand would be ample. Who expects a stenographer to field a word like "kourbash" or "pyrophylilte"? You spell such words for her if you must use them. Okay, we code the machine to accept spelling when necessary. We sound-code for punctuation . . . and for various formats . . . and to look up addresses in a file . . . and for how many copies . . . and routing and provide at least a thousand blank word-codings for special vocabulary used in a business or profession-and make it so that the owner-client could put those special words in himself, spell a word like "stenobenthic" with the memory key depressed and never have to spell it again.

All simple. Just a matter of hooking together gadgets already on the market, then smoothing it into a production model.

The real hitch was homonyms. Dictation Dairy wouldn't even slow up over that "tough cough and hiccough" sentence because each of those words carries a different sound. But choices like "they're" and "their," "right" and "write" would give her trouble.

Did the L. A. Public Library have a dictionary of English homonyms? It did…and I began counting the unavoidable homonym pairs and trying to figure how many of these could be handled by information theory through context statistics and how many would require special coding.

I began to get jittery with frustration. Not only was I wasting thirty hours a week on an utterly useless job, but also I could not do real engineering in a public library. I needed a drafting room, a shop where I could smooth out the bugs, trade catalogues, professional journals, calculating machines, and all the rest.

I decided that I would just have to get at least a subprofessional job. I wasn't silly enough to think that I was an engineer again; there was too much art I had not yet soaked up-repeatedly I had thought of ways to do something, using something new that I had learned, only to find out at the library that somebody had solved the same problem, neater, better, and cheaper than my own first stab at it and ten or fifteen years earlier.

I needed to get into an engineering office and let these new things soak in through my skin. I had hopes that I could land a job as a junior draftsman.

I knew that they were using powered semiautomatic drafting machines now; I had seen pictures of them even though I had not had one under my hands. But I had a hunch that I could learn to play one in twenty minutes, given the chance, for they were remarkably like an idea I had once had myself: a machine that bore the same relation to the old-fashioned drawing-board-and-T-square method that a typewriter did to writing in longhand. I had worked it all out in my head, how you could put straight lines or curves anywhere on an easel just by punching keys.

However, in this case I was just as sure that my idea had not been stolen, as I was certain that Flexible Frank had been stolen, because my drafting machine had never existed except in my head. Somebody had had the same idea and had developed it logically the same way. When it's time to railroad, people start railroading.

The Aladdin people, the same firm that made Eager Beaver, made one of the best drawing machines, Drafting Dan. I dipped into my savings, bought a better suit of clothes and a secondhand brief case, stuffed the latter with newspapers, and presented myself at the Aladdin salesrooms with a view to "buying" one. I asked for a demonstration.

Then, when I got close to a model of Drafting Dan, I had a most upsetting experience. Deja vu, the psychologists call it-"I have been here before." The damned thing had been developed in precisely the fashion in which I would have developed it, had I had time to do so . . . instead of being kidnapped into the Long Sleep.

Don't ask me exactly why I felt that way. A man knows his own style of work. An art critic will say that a painting is a Rubens or a Rembrandt by the brushwork, the treatment of light, the composition, the choice of pigment, a dozen things. Engineering is not science, it is an art, and there is always a wide range of choices in how to solve engineering problems. An engineering designer "signs" his work by those choices just as surely as a painter does.

Drafting Dan had the flavor of my own technique so strongly that I was quite disturbed by it. I began to wonder if there wasn't something to telepathy after all.

I was careful to get the number of its first patent. In the state I was in I wasn't surprised to see that the date on the first one was 1970. I resolved to find out who had invented it. It might have been one of my own teachers, from whom I had picked up some of my style. Or it might be an engineer with whom I had once worked. The inventor might still be alive. If so, I'd look him up someday get acquainted with this man whose mind worked just like mine.

But I managed to pull myself together and let the salesman show me how to work it. He hardly need have bothered; Drafting Dan and I were made for each other. In ten minutes I could play it better than he could. At last I reluctantly quit making pretty pictures with it, got list price, discounts, service arrangements, and so forth, then left saying that I would call him, just as he was ready to get my signature on the dotted line. It was a dirty trick, but all I cost him was an hour's time.

From there I went to the Hired Girl main factory and applied for a job.

I knew that Belle and Miles were no longer with Hired Girl, Inc. In what time I could spare between my job and the compelling necessity to catch up in engineering I had been searching for Belle and Miles and most especially for Ricky. None of the three was listed in the Great Los Angeles telephone system, nor for that matter anywhere in the United States, for I had paid to have an "information" search made at the national office in Cleveland. A quadruple fee, it was, as I had had Belle searched for under both "Gentry" and "Darkin."

I had the same luck with the Register of Voters for Los Angeles County.

Hired Girl, Inc., in a letter from a seventeenth vice-president in charge of foolish questions, admitted cautiously that they had once had officers by those names thirty years ago but they were unable to help me now.

Picking up a trail thirty years cold is no job for an amateur with little time and less money. I did not have their fingerprints, or I might have tried the FBI. I didn't know their social-security numbers. My Country `Tis of Thee had never succumbed to police state nonsense, so there was no bureau certain to have a dossier on each citizen, nor was I in a position to tap such a file even if there had been.

Perhaps a detective agency, lavishly subsidized, could have dug through utilities' records, newspaper files, and God knows what, and traced them down. But I didn't have the lavish subsidy, nor the talent and time to do it myself.

I finally gave up on Miles and Belle while promising myself that I would, as quickly as I could afford it, put professionals to tracing Ricky. I had already determined that she held no Hired Girl stock and I had written to the Bank of America to see if they held, or ever had held, a trust for her. I got back a form letter informing me that such things were confidential, so I had written again, saying that I was a Sleeper and she was my only surviving relative. That time I got a nice letter, signed by one of the trust officers and saying that he regretted that information concerning trust beneficiaries could not be divulged even to one in my exceptional circumstances, but he felt justified in giving me the negative information that the bank had not at any time through any of its branches held a trust in favor of one Frederica Virginia Gentry.

That seemed to settle one thing. Somehow those birds had managed to get the stock away from little Ricky. My assignment of the stock would have had to go through the Bank of America, the way I had written it. But it had not. Poor Ricky! We had both been robbed.

I made one more stab at it. The records office of the Superintendent of Instruction in Mojave did have record of a grade school pupil named Frederica Virginia Gentry . . . but the named pupil had taken a withdrawal transcript in 1971. Further deponent sayeth not.

It was some consolation to know that somebody somewhere admitted that Ricky had ever existed. But she might have taken that transcript to any of many, many thousand public schools in the United States. How long would it take to write to each of them? And were their records so arranged as to permit them to answer, even supposing they were willing?

In a quarter of a billion people one little girl can drop out of sight like a pebble in the ocean.

But the failure of my search did leave me free to seek a job with Hired Girl, Inc., now that I knew Miles and Belle were not running it. I could have tried any of a hundred automation firms, but Hired Girl and Aladdin were the big names in appliance automatons, as important in their own field as Ford and General Motors had been in the heyday of the ground automobile. I picked Hired Girl partly for sentimental reasons; I wanted to see what my old outfit had grown into.

On Monday, 5 March, 2001, I went to their employment office, got into the line for white-collar help, filled out a dozen forms having nothing to do with engineering and one that did . . . and was told don't-call-us-we'll-call-you.

I hung around and managed to bull myself in to see an assistant hiring flunky. He reluctantly looked over the one form that meant anything and told me that my engineering degree meant nothing, since there had been a thirty-year lapse when I had not used my skill.

I pointed out that I had been a Sleeper.

"That makes it even worse. In any case, we don't hire people over fortyfive."

"But I'm not fortyfive. I'm only thirty."

"You were born in 1940. Sorry."

"What am I supposed to do? Shoot myself?"

He shrugged. "If I were you, I'd apply for an old-age pension."

I got out quickly before I gave him some advice. Then I walked three quarters of a mile around to the front entrance and went in. The general manager's name was Curtis; I asked for him.

I got past the first two layers simply by insisting that I had business with him. Hired Girl, Inc., did not use their own automatons as receptionists; they used real flesh and blood. Eventually I reached a place several stories up and (I judged) about two doors from the boss, and here I encountered a firm pass-gauge type who insisted on knowing my business.

I looked around. It was a largish office with about forty real people in it, as well as a lot of machines. She said sharply, "Well? State your business and I'll check with Mr. Curtis's appointment Secretary."

I said loudly, making sure that everybody heard it, "I want to know what he's going to do about my wife!"

Sixty seconds later I was in his private office. He looked up. "Well? What the devil is this nonsense?"

It took half an hour and some old records to convince him that I did not have a wife and that I actually was the founder of the firm. Then things got chummy over drinks and cigars and I met the sales manager and the chief engineer and other heads of departments. "We thought you were dead," Curtis told me. "In fact, the company's official history says that you are."

"Just a rumor. Some other D. B. Davis."

The sales manager, Jack Galloway, said suddenly, "What are you doing now, Mr. Davis?"

"Not much. I've, uh, been in the automobile business. But I'm resigning. Why?"

"`Why?' Isn't it obvious?" He swung around toward the chief engineer, Mr. McBee. "Hear that, Mac? All you engineers are alike; you wouldn't know a sales angle if it came up and kissed you. `Why?' Mr. Davis. Because you're sales copy, that's why. Because you're romance. Founder of Firm Comes Back from Grave to Visit Brain Child. Inventor of the First Robot Servant Views Fruits of His Genius."

I said hastily, "Now wait a minute-I'm not an advertising model nor a grabbie star. I like my privacy. I didn't come here for that; I came here for a job. . . in engineering."

Mr. McBee's eyebrows went up but he said nothing.

We wrangled for a while. Galloway tiled to tell me that it was my simple duty to the firm I had founded. Mr. McBee said little, but it was obvious that he did not think I would be any addition to his department-at one point he asked me what I knew about designing solid circuits. I had to admit that my only knowledge of them was from a little reading of non-classified publications.

Curtis finally suggested a compromise. "See here, Mr. Davis, you obviously occupy a very special position. One might say that you founded not merely this firm but the whole industry. Nevertheless, as Mr. McBee has hinted, the industry has moved on since the year you took the Long Sleep. Suppose we put you on the staff with the title of . . . uh, `Research Engineer Emeritus."

I hesitated. "What would that mean?"

"Whatever you made it mean. However, I tell you frankly that you would be expected to cooperate with Mr. Galloway. We not only make these things, we have to sell them."

"Uh, would I have a chance to do any engineering?"

"That's up to you. You'd have facilities and you could do what you wished."

"Shop facilities?"

Curtis looked at McBee. The chief engineer answered, "Certainly, certainly . . . within reason, of course." He bad slipped so far into Glasgow speech that I could hardly understand him.

Galloway said briskly, "That's settled. May I be excused, B.J.? Don't go away, Mr. Davis-we're going to get a picture of you `with the very first model of Hired Girl."

And he did. I was glad to see her. . the very model I had put together with my own pinkies and lots of sweat. I wanted to see if she still worked, but MeBee `wouldn't let me start her up-I don't think he really believed that I knew how she worked.

I had a good time at Hired Girl all through March and April. I had all the professional tools I could want, technical journals, the indispensable trade catalogues, a practical library, a Drafting Dan (Hired Girl did not make a drafting machine themselves, so they used the best on the market, which was Aladdin's), and the shoptalk of professionals: music to my ears!

I got acquainted especially with Chuck Freudenberg, components assistant chief engineer. For my money Chuck was the only real engineer there; the rest were overeducated slipstick mechanics including McBee, for the chief engineer was, I thought, a clear proof that it took more than a degree and a Scottish accent to make an engineer. After we got better acquainted Chuck admitted that he felt the same way. "Mac doesn't really like anything new; he would rather do things the way his grandpa did on the bonnie banks of the Clyde."

"What's he doing in this job?"

Freudenberg did not know the details, but it seemed that the present firm bad been a manufacturing company which had simply rented the patents (my patents) from Hired Girl, Inc. Then about twenty years ago there had been one of those tax-saving mergers, with Hired Girl stock swapped for stock in the manufacturing firm and the new firm taking the name of the one that I had founded. Chuck thought that MeBee had been hired at that time. "He's got a piece of it, I think."

Chuck and I used to sit over beers in the evening and discuss engineering, what the company needed, and the whichness of what. His original interest in me had been that I was a Sleeper. Too many people, I had found, had a queasy interest in Sleepers (as if we were freaks) and I avoided letting people know that I was one. But Chuck was fascinated by the time jump itself and his interest was a healthy one in what the world had been like before he was born, as recalled by a man who literally remembered it as "only yesterday."

In return be was willing to criticize the new gadgets that were always boiling up in my head, and set me straight when I (as I did repeatedly) would rough out something that was old hat . . . in 2001 Ad). Under his friendly guidance I was becoming a modem engineer, catching up fast.

But when I outlined to him one April evening my autosecretary idea he said slowly, "Dan, have you done work on this on company time?"

"Huh? No, not really. Why?"

"How does your contract read?"

"What? I don't have one." Curtis had put me on the payroll and Galloway had taken pictures of me and had a ghost writer asking me silly questions; that was all.

"Mmm . . . pal, I wouldn't do anything about this until you are sure where you stand. This is really new. And I think you can make it work."

"I hadn't worried about that angle."

"Put it away for a while. You know the shape the company is in. It's making money and we put out good products. But the only new items we've brought out in five years are ones we've acquired by license. I can't get anything new past Mac. But you can bypass Mac and take this to the big boss. So don't . . . unless you want to hand it over to the company just for your salary check."

I took his advice. I continued to design but I burned any drawings I thought were good-I didn't need them once I had them in my head. I didn't feel guilty about it; they hadn't hired me as an engineer, they were paying me to be a show-window dummy for Galloway. When my advertising value was sucked dry, they would give me a month's pay and a vote of thanks and let me go.

But by then I'd be a real engineer again and able to open my own office. If Chuck wanted to take a flyer I'd take him with me.

Instead of handing my story to the newspapers, Jack Galloway played it slow for the national magazines; he wanted Life to do a spread, tying it in with the one they had done a third of a century earlier on the first production model of Hired Girl. Life did not rise to the bait but he did manage to plant it several other places that spring, tying it in with display advertising.

I thought of growing a beard. Then I realized that no one recognized me and would not have cared if they had.

I got a certain amount of crank mail, including one letter from a man who promised me that I would burn eternally in hell for defying God's plan for my life. I chucked it, while thinking that if God had really opposed what had happened to me, He should never have made cold sleep possible. Otherwise I wasn't bothered.

But I did get a phone call, on Thursday, 3 May, 2001. "Mrs. Schultz is on the line, sir. Will you take the call?"

Schultz? Damnation, I had promised Doughty the last time I had called him that I would take care of that. But I had put it off because I did not want to; I was almost sure it was one of those screwballs who pursued Sleepers and asked them personal questions.

But she had called several times, Doughty had told me, since I had checked out in December. In accordance with the policy of the sanctuary they had refused to give her my address, agreeing merely to pass along messages.

Well, I owed it to Doughty to shut her up. "Put her on."

"Is this Danny Davis?" My office phone had no screen; she could not see me.

"Speaking. Your name is Schultz?"

"Oh, Danny darling, it's so good to hear your voice!"

I didn't answer right away. She went on, "Don't you know me?"

I knew her, all right. It was Belle Gentry.

CHAPTER 7

I made a date with her.

My first impulse had been to tell her to go to hell and switch off. I had long since realized that revenge was childish; revenge would not bring Pete back and fitting revenge would simply land me in jail. I had hardly thought about Belle and Miles since I had quit looking for them.

But Belle almost certainly knew where Ricky was. So I made a date.

She wanted me to take her to dinner, but I would not do that I'm not fussy about fine points of etiquette. But eating is something you do only with friends; I would see her but I had no intention of eating or drinking with her. I got her address and told her I would be there that evening at eight.

It was a cheap rental, a walk-up fiat in a part of town (lower La Brea) not yet converted to New Plan. Before I buzzed her door I knew that she had not hung onto what she had bilked me out of, or she would not have been living there.

And when I saw her I realized that revenge was much too late; she and the years had managed it for me.

Belle was not less than fifty-three by the age she had claimed, and probably closer to sixty in fact. Between geriatrics and endocrinology a woman who cared to take the trouble could stay looking thirty for at least thirty extra years, and lots of them did. There were grabbie stars who boasted of being grandmothers while still playing ingenue leads.

Belle had not taken the trouble.

She was fat and shrill and kittenish. It was evident that she still considered her body her principal asset, for she was dressed in a Sticktite negligee which, while showing much too much of her, also showed that she was female, mammalian, overfed, and under exercised.

She was not aware of it. That once-keen brain was fuzzy; all that was left was her conceit and her overpowering confidence in herself. She threw herself on me with squeals of joy and came close to kissing me before I could unwind her.

I pushed her wrists back. "Take it easy, Belle."

"But, darling! I'm so happy-so excited-and so thrilled to see you!”

"I’ll bet." I had gone there resolved to keep my temper just find out what I wanted to know and get out. But I was finding it difficult. "Remember how you saw me last? Drugged to my eyebrows so that you could stuff me into cold sleep."

She looked puzzled and hurt. "But, sweetheart, we only did it for your own good! You were so ill."

I think she believed it. "Okay, okay. Where's Miles? You're Mrs. Schultz now?"

Her eyes grew wide. "Didn't you know?"

"Know what?"

"Poor Miles . . . poor, dear Miles. He lived less than two years, Danny boy, after you left us." Her expression changed suddenly. "The frallup cheated me!"

"That's too bad." I wondered how he had died. Did he fall or was he pushed? Arsenic soup? I decided to stick to the main issue before she jumped the track completely. "What became of Ricky?'

"Ricky'?"

"Miles's little girl. Frederica."

"Oh, that horrible little brat! How should I know? She went to live with her grandmother."

"Where? And what was her grandmother's name?"

"Where? Tucson-or Yuma-or some place dull like that. It might have been Indio. Darling, I don't want to talk about that impossible child-I want to talk about us."

"In a moment. What was her grandmother's name?"

"Danny boy, you're being very tiresome. Why in the world should I remember something like that?"

"What was it'?"

"Oh, Hanolon ... or Haney . . . Heinz. Or it might have been Hinckley. Don't be dull, dear. Let's have a drink. Let's drink a toast to our happy reunion."

I shook my head. "I don't use the stuff." This was almost true. Having discovered that it was an unreliable friend in a crisis, I usually limited myself to a beer with Chuck Freudenberg.

"How very dull, dearest. You won't mind if I have one." She was already pouring it-straight gin, the lonely girl's friend. But before she downed it she picked up a plastic pill bottle and rolled two capsules into her palm. "Have one?"

I recognized the striped casing-euphorion. It was supposed to be non-toxic and non-habit-forming, but opinions differed. There was agitation to class it with morphine and the barbiturates.

"Thanks. I'm happy now."

"How nice." She took both of them, chased them with gin. I decided if I was to learn anything at all I had better talk fast; soon she would be nothing but giggles.

I took her arm and sat her down on her couch, then sat down across from her. "Belle, tell me about yourself. Bring me up to date. How did you and Miles make out with the Mannix people?"

"Uh? But we didn't." She suddenly flared up. "That was your fault!"

"Huh? My fault? I wasn't even there."

"Of course it was your fault. That monstrous thing you built out of an old wheel chair . . . that was what they wanted. And then it was gone."

"Gone? Where was it?"

She peered at me with piggy, suspicious eyes. "You ought to know. You took it."

"Me? Belle, are you crazy? I couldn't take anything. I was frozen stiff, in cold sleep. Where was it? And when did it disappear?" It fitted in with my own notions that somebody must have swiped Flexible Frank, if Belle and Miles had not made use of him. But out of all the billions on the globe, I was the one who certainly had not. I had not seen Frank since that disastrous night when they had outvoted me. "Tell me about it, Belle. Where was it? And what made you think I took it?"

"It bad to be you. Nobody else knew it was important. That pile of junk! I told Miles not to put it in the garage."

"But it somebody did swipe it, I doubt if they could make it work. You still had all the notes and instructions and drawings."

"No, we didn't either. Miles, the fool, had stuffed them all inside it the night we had to move it to protect it."

I did not fuss about the word "protect." Instead I was about to say that he couldn't possibly have stuffed several pounds of paper into Flexible Frank, he was already stuffed like a goose when I remembered that I had built a temporary shelf across the bottom of his wheelchair base to hold tools while I worked on him. A man in a hurry might very well have emptied my working files into that space.

No matter. The crime, or crimes, had been committed thirty years ago. I wanted to find out how Hired Girl, Inc., had slipped away from them. "After the Mannix deal fell through what did you do with the company?"

"We ran it, of course. Then when Jake quit us Miles said we had to shut down. Miles was a weakling . . . and I never liked that Jake Schmidt. Sneaky. Always asking why you had quit, as if we could have stopped you! I wanted us to hire a good foreman and keep going. The company would have been worth more. But Miles insisted."

"What happened then?"

"Why, then we licensed to Geary Manufacturing, of course. You know that; you're working there now."

I did know that; the full corporate name of Hired Girl was now "Hired Girl Appliances and Geary Manufacturing, Inc." although the signs read simply "Hired Girl." I seemed to have found out all I needed to know that this flabby old wreck could tell me.

But I was curious on another point. "You two sold your stock after you licensed to Geary?"

"Huh? Whatever put that silly notion in your head?" Her expression broke and she began to blubber, pawing feebly fox a handkerchief, then giving up and letting the tears go. "He cheated me! He cheated me! The dirty shiker cheated me…he kinked me out of it." She snuffled and added meditatively, "You all cheated me . . . and you were the worst of the lot, Danny boy. After I had been so good to you." She started to bawl again.

I decided that euphorion wasn't worth whatever it cost-or maybe she enjoyed crying. "How did he cheat you, Belle?"

"What? Why, you know. He left it all to that dirty brat of his after all that he had promised me . . . after I nursed him when he hurt so. And she wasn't even his own daughter. That proves it."

It was the first good news I had had all evening. Apparently Ricky had received one good break, even if they had grabbed my stock away from her earlier. So I got back to the main point "Belle, what `was Ricky's grandmother's name? And where did they live?"

"Where did who live?"

"Rickey's grandmother."

"Who's Ricky?"

"Miles's daughter. Try to think, Belle. It's important."

That set her off. She pointed a finger at me and shrilled, "I know you. You were in love with her, that's what. That dirty little sneak . . . her and that horrible cat."

I felt a burst of anger at the mention of Pete. But I tried to suppress it. I simply grabbed her shoulders and shook her a little. "Brace up, Belle. I want to know just one thing. Where did they live? How did Miles address letters when lie wrote to them?"

She kicked at me, "I won't even talk to you! You've been perfectly stinking ever since you got here." Then she appeared to sober almost instantly and said quietly, "I don't know. The grandmother's name was Haneker, or something like that. I only saw her once, in court, when they came to see about the will."

"When was that?"

"Right after Miles died, of course."

"When did Miles die, Belle?"

She switched again. "You want to know too much. You're as bad as the sheriffs . . . questions, questions, questions!" Then she looked up and said pleadingly, "Let's forget everything and just be ourselves. There's just you and me now, dear . . . and we still have our lives ahead of us. A woman isn't old at thirty-nine: Schultzie said I was the youngest thing he ever saw-and that old goat had seen plenty, let me tell you! We could be so happy, dear. We--"

I had had all I could stand, even to play detective. "I've got to go,

Belle."

"What, dear? Why, it's early... and we've got all night ahead of us. I thought-"

"I don't care what you thought. I've got to leave fight now."

"Oh dear! Such a pity. When will I see you again? Tomorrow? I'm terribly busy but I'll break my engagements and-"

"I won't be seeing you again, Belle." I left.

I never did see her again.

As soon as I was home I took a hot bath, scrubbing hard. Then I sat down and tried to add up what I had found out, if anything. Belle seemed to think that Ricky's grandmother's name began with an "H"-if Belle's maunderings meant anything at all, a matter highly doubtful-and that they had lived in one of the desert towns in Arizona, or possibly California. Well, perhaps professional skip-tracers could make something of that.

Or maybe not. In any case it would be tedious and expensive; I'd have to wait until I could afford it.

Did I know anything else that signified?

Miles had died (so Belle said) around 1972. If he had died in this county I ought to be able to find the date in a couple of hours of searching, and after that I ought to be able to track down the hearing on his will . . . if there had been one, as Belle had implied. Through that I might be able to find out where Ricky had lived then. If courts kept such records. (I didn't know.) If I had gained anything by cutting the lapse down to twentyeight years and locating the town she had lived in that long ago.

If there was any point in looking for a woman now forty-one and almost certainly married and with a family. The jumbled ruin that had once been Belle Darkin had shaken me; I was beginning to realize what thirty years could mean. Not that I feared that Ricky grown up would be anything but gracious and good

but would she even remember me? Oh, I did not think she would have forgotten me entirely, but wasn't it likely that I would be just a faceless person, the man she had sometimes called "Uncle Danny" and who had that nice cat?

Wasn't I, in my own way, living in a fantasy of the past quite as much as Belle was?

Oh well, it couldn't hurt to try again to find her. At the least, we could exchange Christmas cards each year. Her husband could not very well object to that.

CHAPTER 8

The next morning was Friday, the fourth of May. Instead of going into the office I went down to the county Hall of Records. They were moving everything and told me to come back next month, so I went to the office of the Times and got a crick in my neck from a microscanner. But I did find out that if Miles had died any date between twelve and thirty-six months after I had been tucked in the freezer, he had not done so in Los Angeles County-if the death notices were correct.

Of course there was no law requiring him to die in L.A. County. You can die anyplace. They've never managed to regulate that.

Perhaps Sacramento had consolidated state records. I decided I would have to check someday, thanked the Times librarian, went out to lunch, and eventually got back to Hired Girl, Inc.

There were two phone calls and a note waiting, all from Belle. I got as far in the note as "Dearest Dan," tore it up and told the desk not to accept any calls for me from Mrs. Schultz. Then I went over to the accounting office and asked the chief accountant if there was any way to check up on past ownership of a retired stock issue. He said he would try and I gave him the numbers, from memory, of the original Hired Girl stock I had once held. It took no feat of memory; we had issued exactly one thousand shares to start with and I had held the first five hundred and ten, and Belle's "engagement present" had come off the front end.

I went back to my cubbyhole and found McBee waiting for me.

"Where have you been?" he wanted to know.

"Out and around. Why?"

"That's hardly a sufficient answer. Mr. Galloway was in twice today looking for you. I was forced to tell him I did not know where you were."

"Oh, for Pete's sake! If Galloway wants me he'll find me eventually. If he spent half the time peddling the merchandise on its merits that he does trying to think up cute new angles, the firm would be better off." Galloway was beginning to annoy me. He was supposed to be in charge of selling, hut it seemed to me that he concentrated on kibitzing the advertising agency that handled our account. But I'm prejudiced; engineering is the only part that interests me. All the rest strikes me as paper shuffling, mere overhead.

I knew what Galloway wanted me for and, to tell the truth, I had been dragging my feet, he wanted to dress me up in 1900 costumes and take pictures. I had told him that he could take all the pix he wanted of me in 1970 costumes, but that 1900 was twelve years before my father was born. He said nobody would know the difference, so I told him what the fortuneteller told the cop. He said I didn't have the right attitude.

These people who deal in fancification to fool the public think nobody can read and write but themselves.

McBee said, "You don't have the right attitude, Mr. Davis."

"So? I'm sorry."

"You're in an odd position. You are charged to my department, but I'm supposed to make you available to advertising and sales when they need you. From here on I think you had better use the time clock like everyone else . . . and you had better check with me whenever you leave the office during working hours. Please see to it."

I counted to ten slowly, using binary notation, "Mac, do you use the time clock?"

“Eh? Of course not. I'm the chief engineer."

"So you are. It says so right over on that door. But see here, Mac, I was chief engineer of this bolt bin before you started to shave. Do you really think that I am going to knuckle under to a time clock?"

He turned red. "Possibly not. But I can tell you this: if you don't, you won't draw your check."

"So? You didn't hire me; you can't fire me."

"Mmm . . . we'll see. I can at least transfer you out of my department and over to advertising where you belong. If you belong anywhere." He glanced at my drafting machine. "You certainly aren't producing anything here. I don't fancy having that expensive machine fled up any longer." He nodded briskly. "Good day."

I followed him out. An Office Boy rolled in and placed a large envelope in my basket, but I did not wait to see what it was; I went down to the staff coffee bar and fumed. Like a lot of other triple-ought-gauge minds, Mac thought creative work could be done by the numbers. No wonder the old firm hadn't produced anything new for years.

Well, to hell with him. I hadn't planned to stick around much longer anyway.

An hour or so later I wandered back up and found an interoffice mail envelope in my basket, I opened it, thinking that Mac had decided to throw the switch on me at once.

But it was from accounting; it read:

Dear Mr. Davis:

Re: the stock you inquired about.

Dividends on the larger block were paid from first quarter 1971 to second quarter 1980 on the original shares, to a trust held in favor of a party named Heinicke. Our reorganization took place in 1980 and the abstract at hand is somewhat obscure, but it appears that the equivalent shares (after reorganization) were sold to Cosmopolitan Insurance Group, which still holds them. Regarding the smaller block of stock, it was held (as you suggested) by Belle D. Gentry until 1972, when it was assigned to Sierra Acceptances Corporation, who broke it up and sold it piecemeal "over the counter." The exact subsequent history of each share and its equivalent after reorganization could be traced if needed, but more time would be required.

If this department can be of any further assistance to you, please feel free to call on us.

Y. E. Reuther, Ch. A ccl.

I called Reuther and thanked him and told him that I had all I wanted. I knew now that my assignment to Ricky had never been effective. Since the transfer of my stock that did show in the record was clearly fraudulent, the deal whiffed of Belle; this third party could have been either another of her stooges or possibly a fictitious person-she was probably already planning on swindling Miles by then.

Apparently she had been short of cash after Miles's death and had sold off the smaller block. But I did not care what had happened to any of the stock once it passed out of Belle's control. I had forgotten to ask Reuther to trace Miles's stock. . . that might give a lead to Ricky even though she no longer held it. But it was late Friday already; I'd ask him Monday. Right now I wanted to open the large envelope still waiting for me, for I had spotted the return address.

I had written to the patent office early in March about the original patents on both Eager Beaver and Drafting Dan. My conviction that the original Eager Beaver was just another name for Flexible Frank had been somewhat shaken by my first upsetting experience with Drafting Dan; I had considered the possibility that the same unknown genius who had conceived Dan so nearly as I had imagined him might also have developed a parallel equivalent of Flexible Frank. The theory was bulwarked by the fact that both patents had been taken out the same year and both patents were held (or had been held until they expired) by the same company, Aladdin.

But I had to know. And if this inventor was still alive I wanted to meet him. He could teach me a thing or four.

I had written first to the patent office, only to get a form letter back that all records of expired patents were now kept in the National Archives in Carlsbad Caverns. So I wrote the Archives and got another form letter with a schedule of fees. So I wrote a third time, sending a postal order (no personal checks, please) for prints of the whole works on both patents-descriptions, claims, drawings, histories.

This fat envelope looked like my answer.

The one on top was 4,307,909, the basic for Eager Beaver. I turned to the drawings, ignoring for the moment both description and claims.

Claims aren't important anyway except in court; the basic notion in writing up claims on an application for patent is to claim the whole wide world in the broadest possible terms, then let the patent examiners chew you down-this is why patent attorneys are born. The descriptions, on the other hand, have to be factual, but I can read drawings faster than I can read descriptions.

I had to admit that it did not look too much like Flexible Frank. It was better than Flexible Frank; it could do more and some of the linkages were simpler. The basic notion was the same-but that had to be true, as a machine controlled by Thorsen tubes and ancestral to Eager Beaver had to be based on the same principles I had used in Flexible Frank.

I could almost see myself developing just such a device sort of a second-stage model of Frank, I had once had something of the sort in mind-Frank without Frank's household limitations.

I finally got around to looking up the inventor's name on the claims and description sheets.

I recognized it all right. It was D. B. Davis.

I looked at it while whistling "Time on My Hands" slowly and off key. So Belle had lied again. I wondered if there was any truth at all in that spate of drivel she had fed me. Of course Belle was a pathological liar, but I had read somewhere that pathological liars usually have a pattern, starting from the truth and embellishing it, rather than indulging in complete fancy. Quite evidently my model of Frank had never been "stolen" but had been turned over to some other engineer to smooth up, then the application had been made in my name.

But the Mannix deal had never gone through; that one fact was certain, since I knew it from company records. But Belle had said that their failure to produce Flexible Frank as contracted had soured the Mannix deal.

Had Miles grabbed Frank for himself, letting Belle think that it had been stolen? Or restolen, rather.

In that case . . . I dropped guessing at it, as hopeless, more hopeless than the search for Ricky. I might have to take a job with Aladdin before I would be able to ferret out where they had gotten the basic patent and who had benefited by the deal. It probably was not worth it, since the patent was expired, Miles was dead, and Belle, if she had gained a dime out of it, had long since thrown it away. I had satisfied myself on the one point important to me, the thing I had set out to prove; i.e., that I myself was the original inventor. My professional pride was salved and who cares about money when three meals a day are taken care of? Not me.

So I turned to 4,307,910, the first Drafting Dan.

The drawings were a delight. I couldn't have planned it better myself; this boy really had it. I admired the economy of the linkages and the clever way the circuits had been used to reduce the moving parts to a minimum. Moving parts are like the vermiform appendix; a source of trouble to be done away with whenever possible.

He had even used an electric typewriter for his keyboard chassis, giving credit on the drawing to an IBM patent series. That was smart, that was engineering: never reinvent something that you can buy down the street.

I had to know who this brainy boy was, so I turned to the papers.

It was D. B. Davis.

After quite a long time I phoned Dr. Albrecht. They rounded him up and I told him who I was, since my office phone had no visual.

"I recognized your voice," he answered. "Hi, there, son. How are you getting along with your new job?"

"Well enough. They haven't offered me a partnership yet."

"Give them time. Happy otherwise? Find yourself fitting back in?"

"Oh, sure! If I had known what a great place here and now is I'd have taken the Sleep earlier. You couldn't hire me to go back to 1970."

"Oh, come now! I remember that year pretty well. I was a kid then on a farm in Nebraska. I used to hunt and fish. I had fun. More than I have now."

"Well, to each his own. I like it now. But look, Doc, I didn't call up just to talk philosophy; I've got a little problem."

"Well, let's have it. It ought to be a relief; most people have big problems."

"Doc? Is it at all possible for the Long Sleep to cause amnesia?"

He hesitated before replying. "It is conceivably possible. I can't say that I've ever seen a case, as such. 1 mean unconnected with other causes."

"What are the things that cause amnesia?"

"Any number of things. The commonest, perhaps, is the patient's own subconscious wish. He forgets a sequence of events, or rearranges them, because the facts are unbearable to him. That's a functional amnesia in the raw. Then there is the old-fashioned knock on the head-amnesia from trauma. Or it might be amnesia through suggestion . . . under drugs or hypnosis. What's the matter, bub? Can't you find your checkbook?"

"It's not that. So far as I know, I'm getting along just fine now. But I can't get some things straight that happened before I took the Sleep . . . and it's got me worried."

"Mmm ... any possibility of any of the causes I mentioned?"

"Yes," I said slowly. "Uh, all of them, except maybe the bump on the head . . . and even that might have happened while I was drunk."

"I neglected to mention," he said dryly, "the commonest temporary amnesia-pulling a blank while under the affluence of alcohol. See here, son, why don't you come see me and we'll talk it over in detail? If I can't tag what is biting you-I'm not a psychiatrist, you know-I can turn you over to a hypno-analyst who will peel back your memory like an onion and tell you why you were late to school on the fourth of February your second-grade year. But he's pretty expensive, so why not give me a whirl first?"

I said, "Cripes, Doe, I've bothered you too much already and you are pretty stuffy about taking money."

"Son, I'm always interested in my people; they're all the family I have."

So I put him off by saying that I would call him the first of the week if I wasn't straightened out. I wanted to think about it anyhow.

Most of the lights went out except in my office; a Hired Girl, scrubwoman type, looked in, twigged that the room was still occupied, and rolled silently away. I still sat there.

Presently Chuck Freudenberg stuck his head in and said, "I thought you left long ago. Wake up and finish your sleep at home."

I looked up. "Chuck, I've got a wonderful idea. Let's buy a barrel of beer and two straws."

He considered it carefully. "Well, it's Friday ... and I always like to have a head on Monday; it lets me know what day it is."

"Carried and so ordered. Wait a second while I stuff some things in this brief case."

We had some beers, then we had some food, then we had more beers at a place where the music was good, then we moved on to another place where there was no music and the booths had hush linings and they didn't disturb you as long as you ordered something about once an hour. We talked. I showed him the patent records.

Chuck looked over the Eager Beaver prototype. "That's a real nice job, Dan. I'm proud of you, boy. I'd like your autograph."

"But look at this one." I gave him the drafting-machine patent papers.

"Some ways this one is even nicer. Dan, do you realize that you have probably had more influence on the present state of the art than, well, than Edison had in his period? You know that, boy?"

"Cut it out, Chuck; this is serious." I gestured abruptly at the pile of photostats. "Okay, so I'm responsible for one of them. But I can't be responsible for the other one. I didn't do it . . . unless I'm completely mixed up about my own life before I took the Sleep. Unless I've got amnesia."

"You've been saying that for the past twenty minutes. But you don't seem to have any open circuits. You're no crazier than is normal in an engineer."

I banged the table, making the stems dance. "I've got to know!"

"Steady there. So what are you going to do?"

"Huh?" I pondered it. "I'm going to pay a psychiatrist to dig it out of me."

He sighed. "I thought you might say that. Now look, Dan, let's suppose you pay this brain mechanic to do this and he reports that nothing is wrong, your memory is in fine shape, and all your relays are closed. What then?"

"That's impossible."

"That's what they told Columbus. You haven't even mentioned the most likely explanation."

"Huh? What?"

Without answering he signaled the waiter and told it to bring back the big phone book, extended area. I said, "What's the matter? You calling the wagon for me?"

"Not yet." He thumbed through the enormous book, then stopped and said, "Dan, scan this."

I looked. He had his finger on "Davis." There were columns of Davises. But where he had his finger there were a dozen "D. B. Davises"-from "Dabney" to "Duncan."

There were three "Daniel B. Davises." One of them was me.

"That's from less than seven million people," he pointed out. "Want to try your luck on more than two hundred and fifty million?"

"It doesn't prove anything," I said feebly.

"No," he agreed, "it doesn't. It would be quite a coincidence, I readily agree, if two engineers with such similar talents happened to be working on the same sort of thing at the same time and just happened to have the same last name and the same initials. By the laws of statistics we could probably approximate just how unlikely it is that it would happen. But people forget-especially those who ought to know better, such as yourself-that while the laws of statistics tell you how unlikely a particular coincidence is, they state just as firmly that coincidences do happen. This looks like one. I like that a lot better than I like the theory that my beer buddy has slipped his cams. Good beer buddies are hard to come by."

"What do you think I ought to do?"

"The first thing to do is not to waste your time and money on a psychiatrist until you try the second thing. The second thing is to find out the first name of this `D. B. Davis' who filed this patent. There will be some easy way to do that. Likely as not his first name will be `Dexter.' Or even `Dorothy.' But don't trip a breaker if it is `Daniel,' because the middle name might be `Berzowski' with a social-security number different from yours. And the third thing to do, which is really the first, is to forget it for now and order another round."

So we did, and talked of other things, particularly women. Chuck had a theory that women were closely related to machinery, but utterly unpredictable by logic. He drew graphs on the table top in beer to prove his thesis.

Sometime later I said suddenly, "If there were real time travel, I know what I would do."

"Huh? What are you talking about?"

"About my problem. Look, Chuck, I got here-got to `now' I mean-by a sort of half-baked, horse-and-buggy time travel. But the trouble is I can't go back. All the things that are worrying me happened thirty years ago. I'd go back and dig out the truth if there were such a thing as real time travel." He stared at me. "But there is."

"What?"

He suddenly sobered. "I shouldn't have said that."

I said, "Maybe not, but you already have said it. Now you'd better tell me what you mean before I empty this here stein over your head."

"Forget it, Dan. I made a slip."

"Talk!"

"That's just what I can't do." He glanced around. No one was near us. "It's classified."

"Time travel classified? Good God, why?"

"Hell, boy, didn't you ever work for the government? They'd classify sex if they could. There doesn't have to be a reason; it's just their policy. But it is classified and I'm bound by it. So lay off."

"But-Quit fooling around about it, Chuck; this is important to me. Terribly important." When he didn't answer and looked stubborn I said, "You can tell me. Shucks, I used to have a ‘Q’ clearance myself. Never suspended, either. It's just that I'm no longer with the government."

"What's a `Q' clearance?"

I explained and presently he nodded. "You mean an `Alpha' status. You must have been hot stuff, boy; I only rated a `Beta.'"

"Then why can't you tell me?"

"Huh? You know why. Regardless of your rated status, you don't have the necessary `Need to Know' qualification."

"The hell I don't! `Need to Know' is what I've got most of."

But he wouldn't budge, so finally I said in disgust, "I don't think there is such a thing. I think you just had a belch back up on you."

He stared at me solemnly for a while, then he said, "Danny."

"Huh?"

"I'm going to tell you. Just remember your `Alpha' status, boy. I'm going to tell you because it can't hurt anything and I want you to realize that it couldn't possibly be of use to you in your problem. It's time travel, all right, but it's not practical. You can't use it."

"Why not?"

"Give me a chance, will you? They never smoothed the bugs out of it and it's not even theoretically possible that they ever will. It's of no practical value whatsoever, even for research. It's a mere byproduct of NullGrav-that's why they classified it."

"But, hell, NullGrav is declassified."

"What's that got to do with it? If this was commercial, too, maybe they'd unwrap it. But shut up."

I'm afraid I didn't, but I'd rather tell this as if I had. During Chuck's senior year at the University of Colorado-Boulder, that is-he had earned extra money as a lab assistant. They had a big cryogenics lab there and at first he had worked in that. But the school had a juicy defense contract concerned with the Edinburgh field theory and they had built a big new physics laboratory in the mountains out of town. Chuck was reassigned there to Professor Twitchell-Dr. Hubert Twitchell, the man who just missed the Nobel Prize and got nasty about it.

"Twitch got the notion that if he polarized around another axis he could reverse the gravitational field instead of leveling it off. Nothing happened. So he fed what he had done back into the computer and got wild-eyed at the results. He never showed them to me, of course. He put two silver dollars into the test cage they still used hard money around those parts then-after making me mark them. He punched the solenoid button and they disappeared.

"Now that is not much of a trick," Chuck went on. `Properly, he should have followed up by making them reappear out of the nose of a little boy who volunteers to come up on the stage. But he seemed satisfied, so I was-I was paid by the hour.

"A week later one of those cartwheels reappeared. Just one. But before that, one afternoon while I was cleaning up after he had gone home, a guinea pig showed up in the cage. It didn't belong in the lab and I hadn't seen it around before, so I took it over to the bio lab on my way home. They counted and weren't short any pigs, although it's hard to be certain with guinea pigs, so I took it home and made a pet out of it.

"After that single silver dollar came back Twitch got so worked up he quit shaving. Next time he used two guinea pigs from the bio lab. One of them looked awfully familiar to me, but I didn't see it long because he pushed the panic button and they both disappeared.

"When one of them came back about ten days later-the one that didn't look like mine-Twitch knew for sure he had it. Then the resident 0-in-C for the department of defense came around-a chair-type colonel who used to be a professor himself, of botany. Very military type . . . Twitch had no use for him. This colonel swore us both to double-dyed secrecy, over and above our `status' oaths. He seemed to think that he had the greatest thing in military logistics since Caesar invented the carbon copy. His idea was that you could send divisions forward or back to a battle you had lost, or were going to lose, and save the day. The enemy would never figure out what had happened. He was crazy in hearts and spades, of course . . . and he didn't get the star he was bucking for. But the `Critically Secret' classification he stuck on it stayed, so far as I know, right up to the present. I've never seen a disclosure on it."

"It might have some military use," I argued, "it seems to me, if you could engineer it to take a division of soldiers at a time. No, wait a minute. I see the hitch. You always had `em paired. It would take two divisions, one to go forward, one to go back. One division you would lose entirely . . . I suppose it would be more practical to have a division at the right time in the first place."

"You're right, but your reasons are wrong. You don't have to use two divisions or two guinea pigs or two anything. You simply have to match the masses. You could use a division of men and a pile of rocks that weighed as much. It's an action-reaction situation, corollary with Newton's Third Law." He started drawing in the beer drippings again. "MV equals MV ... the basic rocket ship formula. The cognate time-travel formula is MT equals MT."

"I still don't see the hitch. Rocks are cheap."

"Use your head, Danny. With a rocket ship you can aim the kinkin' thing. But which direction is last week? Point to it. Just try. You haven't the slightest idea which mass is going back and which one is going forward. There's no way to orient the equipment."

I shut up. It would be embarrassing to a general to expect a division of fresh shock troops and get nothing but a pile of gravel. No wonder the ex-prof never made brigadier. But Chuck was still talking:

"You treat the two masses like the plates of a condenser, bringing them up to the same temporal potential. Then you discharge them on a damping curve that is effectively vertical. Smacko!-one of them heads for the middle of next year, the other one is history. But you never know which one. But that's not the worst of it; you can't come back."

"Look, what use is it for research if you can't come back? Or for commerce? Either way you jump, your money is no good and you can't possibly get in touch with where you started. No equipment-and believe me it takes equipment and power. We took power from the Arco reactors. Expensive . . . that's another drawback."

"You could get back," I pointed out, "with cold sleep."

"Huh? If you went to the past. You might go the other way; you never know. If you went a short enough time back so that they had cold sleep . . . no farther back than the war. But what's the point of that? You want to know something about 1980, say, you ask somebody or you look it up in old newspapers. Now if there was some way to photograph the Crucifixion . . . but there isn't. Not possible. Not only couldn't you get back, but there isn't that much power on the globe. There's an inverse-square law tied up in it too."

"Nevertheless, some people would try it just for the hell of it. Didn't anybody ever ride it?"

Chuck glanced around again. "I've talked too much already."

"A little more won't hurt."

"I think three people tried it. I think. One of them was an instructor. I was in the lab when Twitch and this bird, Leo Vincent, came in; Twitch told me I could go home. I hung around outside. After a while Twitch came out and Vincent didn't. So far as I know, he's still in there. He certainly wasn't teaching at Boulder after that."

"How about the other two?"

"Students. They all three went in together; only Twitch came out. But one of them was in class the next day, whereas the other one was missing for a week. Figure it out yourself."

"Weren't you ever tempted?"

"Me? Does my head look fat? Twitch suggested that it was almost my duty, in the interests of science, to volunteer. I said no, thanks; I'd take a short beer instead . . . but that I would gladly throw the switch for him. He didn't take me up on it."

"I'd take a chance on it. I could check up on what's worrying me . . . and then come back again by cold sleep. It would be worth it."

Chuck sighed deeply. "No more beer for you, my friend; you're drunk. You didn't listen to me. One,"-he started making tallies on the table top-"you have no way of knowing that you'd go back; you might go forward instead."

"I'd risk that. I like now a lot better than I liked then; I might like thirty years from now still better."

"Okay, so take the Long Sleep again; it's safer. Or just sit tight and wait for it to roll around; that's what I'm going to do. But quit interrupting me. Two, even if you did go back, you might miss 1970 by quite a margin. So far as I know, Twitch was shooting in the dark; I don't think he had it calibrated. But of course I was just the flunky. Three, that lab was in a stand of pine trees and it was built in 1980. Suppose you come out ten years before it was built in the middle of a western yellow pine? Ought to make quite an explosion, about like a cobalt bomb, huh? Only you wouldn't know it."

"But-As a matter of fact, I don't see why you would come out anywhere near the lab. Why not to the spot in outer space corresponding to where the lab used to be-I mean where it was.

or rather--"

"You don't mean anything. You stay on the world line you were on. Don't worry about the math; just remember what that guinea pig did. But if you go back before the lab was built, maybe you wind up in a tree. Four, how could you get back to now even with cold sleep, even if you did go the right way, arrive at the right time, and live through it?"

"Huh? I did once, why not twice?"

"Sure. But what are you going to use for money?"

I opened my mouth and closed it. That one made me feel foolish. I had had the money once; I had it no longer. Even what I had saved (not nearly enough) I could not take with me-shucks, even if I robbed a bank (an art I knew nothing about) and took a million of the best back with me, I couldn't spend it in 1970. I'd simply wind up in jail for trying to shove funny money. They had even changed the shape, not to mention serial numbers, dates, colors, and designs. "Maybe I'd just have to save it up."

"Good boy. And while you were saving it, you'd probably wind up here and now again without half trying . . . but minus your hair and your teeth."

"Okay, okay. But let's go back to that last point. Was there ever a big explosion on that spot? Where the lab was?"

"No, I don't think so."

"Then I wouldn't wind up in a tree-because I didn't. Follow me?"

"I'm three jumps ahead of you. The old time paradox again, only I won't buy it. I've thought about theory of time, too, maybe more than you have. You've got it just backward. There wasn't any explosion and you aren't going to wind up in a tree . . . because you aren't ever going to make the jump. Do you follow me?"

"But suppose I did?"

"You won't. Because of my fifth point. It's the killer, so listen closely. You ain't about to make any such jump because the whole thing is classified and you can't. They won't let you. So let's forget it, Danny. It's been a very interesting intellectual evening and the FBI will be looking for me in the morning. So let's have one more round and Monday morning if I'm still out of jail I'll phone the chief engineer over at Aladdin and find out the first name of this other `D. B. Davis' character and who he was or is. He might even be working there and, if so, we'll have lunch with him and talk shop. I want you to meet Springer, the chief over at Aladdin, anyway; he's a good boy. And forget this time-travel nonsense; they'll never get the bugs out of it. I should never have mentioned it, and if you ever say I did I'll look you square in the eye and call you a liar. I might need my classified status again someday."

So we had another beer. By the time I was home and had taken a shower and had washed some of the beer out of my system I knew he was right. Time travel was about as practical a solution to my difficulties as cutting your throat to cure a headache. More important, Chuck would find out what I wanted to know from Mr. Springer just over chips and a salad, no sweat, no expense, no risk. And I liked the year I was living in.

When I climbed into bed I reached out and got the week's stack of papers. The Times came to me by tube each morning, now that I was a solid citizen. I didn't read it very much, because whenever I got my head soaked full of some engineering problem, which was usually, the daily fripperies you find in the news merely annoyed me, either by boring me or, worse still, by being interesting enough to distract my mind from its proper work.

Nevertheless, I never threw out a newspaper until I had at least glanced at the headlines and checked the vital-statistics column, the latter not for births, deaths, and marriages, but simply for "withdrawals," people coming out of cold sleep. I had a notion that someday I would see the name of someone I had known back then, and then I would go around and say hello, bid him welcome, and see if I could give him a hand. The chances were against it, of course, but I kept on doing it and it always gave me a feeling of satisfaction.

I think that subconsciously I thought of all other Sleepers as my "kinfolk," the way anybody who once served in the same outfit is your buddy, at least to the extent of a drink.

There wasn't much in the papers, except the ship that was still missing between here and Mars, and that was not news but a sad lack of it. Nor did I spot any old friend~ among the newly awakened Sleepers. So I lay back and waited for the light to go out.

About three in the morning I sat up very suddenly, wide awake. The light came on and I blinked at it. I had had a very odd dream, not quite a nightmare but nearly, of having failed to notice little Ricky in the vital statistics.

I knew I hadn't. But just the same when I looked over and saw the week's stack of newspapers still sitting there I was greatly relieved; it had been possible that I had stuffed them down the chute before going to sleep, as I sometimes did.

I dragged them back onto the bed and started reading the vital statistics again. This time I read all categories, births, deaths, marriages, divorces, adoptions, changes of name, commitments, and withdrawals, for it had occurred to me that my eye might have caught Ricky's name without consciously realizing it, while glancing down the column to the only subhead I was interested in.Ä Ricky might have got married or had a baby or something.

I almost missed what must have caused the distressing dream. It was in the Times for 2 May, 2001, Tuesday's withdrawals listed in Wednesday's paper: "Riverside Sanctuary . . . F. V. Heinicke."

"F. V. Heinicke!”

"Heinicke" was Ricky's grandmother's name ... I knew it, I was certain of it~ I didn't know why I knew it. But I felt that it had been buried in my head and had not popped up until I read it again. I had probably seen it or heard it at some time from Ricky or Miles, or it was even possible that I had met the old gal at Sandia. No matter, the name, seen in the Times, had fitted a forgotten piece of information in my brain and then I knew.

Only I still had to prove it. I had to make sure that "F. V. Heinicke" stood for "Frederica Heinicke."

I was shaking with excitement, anticipation, and fear. In spite of well-established new habits I tried to zip my clothes instead of sticking the seams together and made a botch of getting dressed. But a few minutes later I was down in the hail where the phone booth was-I didn't have an instrument in my room or I would have used it; I was simply a supplementary listing for the house phone. Then I had to run back up again when I found that I had forgotten my phone credit ID card-I was really disorganized.

Then, when I had it, I was trembling so that I could hardly fit it into the slot. But I did and signaled "Service."

"Circuit desired?"

"Uh, I want the Riverside Sanctuary. That's in Riverside Borough."

"Searching . . . holding . . . circuit free. We are signaling."

The screen lighted up at last and a man looked grumpily at me. "You must have the wrong phasing. This is the sanctuary. We're closed for the night."

I said, "Hang on, please. If this is the Riverside Sanctuary, you're just who I want."

"Well, what do you want? At this hour?"

"You have a client there, F. V. Heinicke, a new withdrawal. I want to know-"

He shook his head. "We don't give out information about clients over the phone. And certainly not in the middle of the night. You'd better call after ten o'clock. Better yet, come here."

"I will, I will. But I want to know just one thing. What do the initials `F. V.' stand for?"

"I told you that--"

"Will you listen, please? I'm not just butting in; I'm a Sleeper myself. Sawtelle. Withdrawn just lately. So I know all about the `confidential relationship' and what's proper. Now you've already published this client's name in the paper. You and I both know that the sanctuaries always give the papers the full names of clients withdrawn and committed . . . but the papers trim the given names to initials to save space. Isn't that true?"

He thought about it. "Could be."

"Then what possible harm is there in telling me what the initials P. V.' stand for?"

He hesitated still longer. "None, I guess, if that's all you want. It's all you're going to get. Hold on."

He passed out of the screen, was gone for what seemed like an hour, came back holding a card. "The light's poor," he said, peering at it. " `Frances'-no, `Frederica.' `Frederica Virginia?"

My ears roared and I almost fainted. "Thank God!"

"You all right?"

"Yes. Thank you. Thank you from the bottom of my heart. Yes, I'm all right."

"Hmm. I guess there's no harm in telling you one more thing. It might save you a trip. She's already checked out."

CHAPTER 9

I could have saved time by hiring a cab to jump me to Riverside, but I was handicapped by lack of cash. I was living in West Hollywood; the nearest twenty-four-hour bank was downtown at the Grand Circle of the Ways. So first I rode the Ways downtown and went to the bank for cash. One real improvement I had not appreciated up to then was the universal checkbook system; with a single cybernet as clearinghouse for the whole city and radioactive coding on my checkbook, I got cash laid in my palm as quickly there as I could have gotten it at my home bank across from Hired Girl, Inc.

Then I caught the express Way for Riverside. When I reached the sanctuary it was lust daylight.

There was nobody there but the night technician I had talked to and his wife, the night nurse. I'm afraid I didn't make a good impression. I had a day's beard, I was wild-eyed, I probably had a beer breath, and I had not worked out a consistent framework of lies.

Nevertheless, Mrs. Larrigan, the night nurse, was sympathetic and helpful. She got a photograph out of a file and said, "Is this your cousin, Mr. Davis?"

It was Ricky. There was no doubt about it, it was Ricky! Oh, not the Ricky I had known, for this was not a little girl but a mature young woman, twentyish or older, with a grownup hairdo and a grownup and very beautiful face. She was smiling.

But her eyes were unchanged and the ageless pixie quality of her face that had made her so delightful a child was still there. It was the same face, matured, filled out, grown beautiful, but unmistakable.

The stereo blurred, my eyes had filled with tears, "Yes," I managed to choke. "Yes. That's Ricky."

Mr. Larrigan said, "Nancy, you shouldn't have showed him that."

"Pooh, Hank, what harm is there in showing a photograph?"

"You know the rules." He turned to me. "Mister, as I told you on the phone, we don't give out information about clients. You come back here at ten o'clock when the administration office opens."

"Or you could come back at eight," his wife added. "Dr. Bernstein will be here then."

"Now, Nancy, you just keep quiet. If he wants information, the man to see is the director. Bernstein hasn't any more business answering questions than we have. Besides, she wasn't even Bernstein's patient."

"Hank, you're being fussy. You men like rules just for the sake of rules. If he's in a hurry to see her, he could be in Brawley by ten o'clock." She turned to me. "You come back at eight. That's best. My husband and I can't really tell you anything anyhow."

"What's this about Brawley? Did she go to Brawley?"

If her husband had not been there I think she would have told me more. She hesitated and he looked stern. She answered, "You see Dr. Bernstein. If you haven't had breakfast, there's a real nice place lust down the street."

So I went to the "real nice place" (it was) and ate and used their washroom and bought a tube of Beardgo from a dispenser in the washroom and a shirt from another dispenser and threw away the one I had been wearing. By the time I returned I was fairly respectable.

But Larrigan must have bent Dr. Bernstein's ear about me. He was a young man, resident in training, and he took a very stiff line. "Mr. Davis, you claim to be a Sleeper yourself. You must certainly know that there are criminals who make a regular business of preying on the gullibility and lack of orientation of a newly awakened Sleeper. Most Sleepers have considerable assets, all of them are unworldly in the world in which they find themselves, they are usually lonely and a bit scared-a perfect setup for confidence men."

"But all I want to know is where she went~ I'm her cousin. But I took the Sleep before she did, so I didn't know she was going to."

"They usually claim to be relatives." He looked at me closely. "Haven't I seen you before?"

"I strongly doubt it. Unless you just happened to pass me on the Ways, downtown." People are always thinking they've seen me before; I've got one of the Twelve Standard Faces, as lacking in uniqueness as one peanut in a sackful. "Doctor, how about phoning Dr. Albrecht at Sawtelle Sanctuary and checking on me?"

He looked judicial. "You come back and see the director. He can call the Sawtelle Sanctuary . . . or the police, whichever he sees fit."

So I left. Then I may have made a mistake. Instead of coming back to see the director and very possibly getting the exact information I needed (with the aid of Albrecht's vouching for me), I hired a jumpcab and went straight to Brawley.

It took three days to pick up her trail in Brawley. Oh, she had lived there and so had her grandmother; I found that out quickly. But the grandmother had died twenty years earlier and Ricky had taken the Sleep. Brawley is a mere hundred thousand compared with the seven million of Great Los Angeles; the twenty-year-old records were not hard to find. It was the trail less than a week old that I had trouble with.

Part of the trouble was that she was with someone; I had been looking for a young woman traveling alone. When I found out she had a man with her I thought anxiously about the crooks preying on Sleepers that Bernstein had lectured me about and got busier than ever.

I followed a false lead to Calexico, went back to Brawley, started over, picked it up again, and traced them as far as Yutna.

At Yuma I gave up the chase, for Ricky had gotten married. What I saw on the register at the county clerk's office there shocked me so much that I dropped everything and jumped a ship for Denver, stopping only to mail a card to Chuck telling him to clear out my desk and pack the stuff in my room.

I stopped in Denver just long enough to visit a dental-supply house. I had not been in Denver since it had become the capital-after the Six Weeks War, Miles and I had gone straight to Californiaand the place stunned me. Why, I couldn't even find Colfax Avenue. I had understood that everything essential to the government was buried back under the Rockies. If that is so, then there must be an awful lot of nonessentials still aboveground the place seemed even more crowded than Great Los Angeles.

At the dental-supply house I bought ten kilograms of gold, isotope 197, in the form of fourteen-gauge wire. I paid $86.10 a kilogram for it, which was decidedly too much, since gold of engineering quality was selling for around $70 a kilogram, and the transaction mortally wounded my only thousand-dollar bill. But engineering gold comes either in alloys never found in nature, or with isotopes 196 and 198 present, or both, depending on the application. For my purposes I wanted fine gold, undetectable from gold refined from natural ore, and I did not want gold that might burn my pants off if I got cozy with it-the overdose at Sandia had given me a healthy respect for radiation poisoning.

I wound the gold wire around my waist and went to Boulder. Ten kilograms is about the weight of a well-filled weekend bag and that much gold bulks almost exactly the same as a quart of milk. But the wire form of it made it bulk more than it would have solid; I can't recommend it as a girdle. But gold slugs would have been still harder to carry, and this way it was always with me.

Dr. Twitchell was still living there, though no longer working; he was professor emeritus and spent most of his waking hours in the bar of the faculty club. It took me four days to catch him in another bar, since the faculty club was closed to outlanders like me. But when I did, it turned out to be easy to buy him a drink.

He was a tragic figure in the classic Greek meaning, a great man-a very great man-gone to ruin. He should have been up there with Einstein and Bohr and Newton; as it was, only a few specialists in field theory were really aware of the stature of his work. Now when I met him his brilliant mind was soured with disappointment, dimmed with age, and soggy with alcohol. It was like visiting the ruins of what had been a magnificent temple after the roof has fallen in, hail the columns knocked down, and vines have grown over it all.

Nevertheless, he was brainier on the skids than I ever was at my best. I'm smart enough myself to appreciate real genius when I meet it.

The first time I saw him he looked up, looked straight at me and said, "You again."

"Sir?"

"You used to be one of my students, didn't you?"

"Why, no, sir, I never had that honor." Ordinarily when people think they have seen me before, I brush it off; this time I decided to exploit it if I could. "Perhaps you are thinking of my cousin, Doctor-class of `86. He studied under you at one time."

"Possibly. What did he major in?"

"He had to drop out without a degree, sir. But he was a great admirer of yours. He never missed a chance to tell people he had studied under you."

You can't make an enemy by telling a mother her child is beautiful. Dr. Twitchell let me sit down and presently let me buy him a drink. The greatest weakness of the glorious old wreck was his professional vanity. I had salvaged part of the four days before I could scrape up an acquaintance with him by memorizing everything there was about him in the university library, so I knew what papers he had written, where he had presented them, what earned and honorary degrees he held, and what books he had written. I had tried one of the latter, but I was already out of my depth on page nine, although I did pick up a little patter from it.

I let him know that I was a camp follower of science myself; right at present I was researching for a book: Unsung Geniuses.

"What's it going to be about?"

I admitted diffidently that I thought it would be appropriate to start the book with a popular account of his life and works, provided he would be willing to relax a bit from his well-known habit of shunning publicity. I would have to get a lot of my material from him, of course.

He thought it was claptrap and could not think of such a thing. But I pointed out that he had a duty to posterity and he agreed to think it over. By the next day he simply assumed that I was going to write his biography-not just a chapter, a whole book. From then on he talked and talked and I took notes . . . real notes; I did not dare try to fool him by faking, as he sometimes asked me to read back.

Finally I said, "Doctor, isn't it true that if it had not been for a certain colonel who was once stationed here you would have had the Nobel Prize hands down?"

He cursed steadily for three minutes with magnificent style. "Who told you about him?"

"Uh, Doctor, when I was doing research writing for the Department of Defense--I've mentioned that, haven't I?"

“No.”

"Well, when I was, I heard the whole story from a young Ph.D. working in another section. He had read the report and he said it was perfectly clear that you would be the most famous name in physics today . . . if you had been permitted to publish your work.”

"Hrrmph! That much is true."

"But I gathered that it was classified. . . by order of this Colonel, uh, Plushbottom."

"Thrushbotham. Thrushbotham, sir. A fat, fatuous, flatulent, foot-kissing fool incompetent to find his hat with it nailed to his head. Which it should have been."

"It seems a great pity."

"What is a pity, sir? That Thrushbotham was a fool? That was nature's doing, not mine."

"It seems a pity that the world should be deprived of the story. I understand that you are not allowed to speak of it."

"Who told you that? I say what I please~"

"That was what I understood, sir . . . from my friend in the Department of Defense."

"Hrrrmph!"

That was all I got out of him that night. It took him a week to decide to show me his laboratory.

Most of the building was now used by other researchers, but his time laboratory he had never surrendered, even though he did not use it now; he fell back on its classified status and refused to let anyone else touch it, nor had he permitted the apparatus to be torn down. When he let me in, the place smelled like a vault that has not been opened in years.

He had had just enough drinks not to give a damn, not so many but what he was still steady. His capacity was pretty high. He lectured me on the mathematics of time theory and temporal displacement (he didn't call it "time travel"), but he cautioned me not to take notes. It would not have helped if I had, as he would start a paragraph with, "It is therefore obvious-" and go on from there to matters which may have been obvious to him and God but to no one else.

When he slowed down I said, "I gathered from my friend that the one thing you had not been able to do was to calibrate it? That you could not tell the exact magnitude of the temporal displacement?"

"What? Poppycock! Young man, if you can't measure it, it's not science." He bubbled for a bit, like a teakettle, then went on, "Here. I'll show you." He turned away and started making adjustments. All that showed of his equipment was what he called the "temporal locus stage"-just a low platform with a cage around it-and a control board which might have served for a steam plant or a low-pressure chamber. I'm fairly sure I could have studied out how to handle the controls had I been left alone to examine them, but I had been told sharply to stay away from them. I could see an eight-point Brown recorder, some extremely heavy-duty solenoid-actuated switches, and a dozen other equally familiar components, but it didn't mean a thing without the circuit diagrams.

He turned back to me and demanded, "Have you any change in your pocket?"

I reached in and hauled out a handful. He glanced at it and selected two five-dollar pieces, mint new, the pretty green plastic hexagonals issued just that year. I could have wished that he had picked half fives, as I was running low.

"Do you have a knife?"

"Yes, sir."

"Scratch your initials on each of them."

I did so. He then had me place them side by side on the stage. "Note the exact time. I have set the displacement for exactly one week, plus or minus six seconds."

I looked at my watch. Dr. Twitchell said, "Five . . four three. . . two. . . one. . . now."

I looked up from my watch. The coins were gone. I didn't have to pretend that my eyes bugged out. Chuck had told me about a similar demonstration-but seeing it was another matter.

Dr. Twitchell said briskly, "We will return here one week from tonight and wait for one of them to reappear. As for the other one-you saw both of them on the stage? You placed them there yourself?"

"Yes, sir."

"Where was I?"

"At the control board, sir." He had been a good fifteen feet from the nearest part of the cage around the stage and had not approached it since.

"Very well. Come here." I did so and he reached into a pocket. "Here's one of your bits. You'll get the other back a week from now." He handed me a green five-dollar coin; it had my initials on it.

I did not say anything because I can't talk very well with my jaws sagging loosely. He went on, "Your remarks last week disturbed me. So I visited this place on Wednesday, something I have not done for-oh, more than a year. I found this coin on the stage, so I knew that it had been . . . would be . . . using the equipment again. It took me until tonight to decide to demonstrate it to you."

I looked at the coin and felt it. "This was in your pocket when we came here tonight?"

"Certainly."

"But how could it be both in your pocket and my pocket at the same time?"

"Good Lord, man, have you no eyes to see with? No brain to reason with? Can't you absorb a simple fact simply because it lies outside your dull existence? You fetched it here in your pocket tonight-and we kicked into last week. You saw. A few days ago I found it here. I placed it in my pocket. I fetched it here tonight. The same coin . . . or, to be precise, a later segment of its spacetime structure, a week more worn, a week more dulled-but what the canaille would call the `same' coin. Although no more identical in fact than is a baby identical with the man the baby grows into. Older."

I looked at it. "Doctor ... push me back in time by a week."

He stared angrily. "Out of the question!"

"Why not? Won't it work with people?"

"Eh? Certainly it will work with people."

"Then why not do it? I'm not afraid. And think what a wonderful thing it would be for the book. . . if I could testify of my own knowledge that the Twitchell time displacement works."

"You can report it of your own knowledge. You just saw it."

"Yes," I admitted slowly, "but I won't be believed. That business with the coins . . . I saw it and I believe it. But anyone simply reading an account of it would conclude that I was gullible, that you had hoaxed me with some simple legerdemain."

"Damn it, sir!"

"That's what they would say. They wouldn't be able to believe that I actually had seen what I reported. But if you were to ship me back just a week, then I could report of my own knowledge-"

"Sit down. Listen to me." He sat down, but there was no place for me to sit, although he did not seem aware of it. "I have experimented with human beings long ago. And for that reason I resolved never to do it again."

"Why? Did it kill them?"

"What? Don't talk nonsense." He looked at me sharply, added, "You are not to put this in the book."

"As you say, sir."

"Some minor experiments showed that living subjects could make temporal displacements without harm. I had confided in a colleague, a young fellow who taught drawing and other matters in the school of architecture. Really more of an engineer than a scientist, but I liked him; his mind was alive. This young chap-it can't hurt to tell you his name: Leonard Vincent-was wild to try it . . . really try it; he wanted to undergo major displacement, five hundred years. I was weak. I let him."

"Then what happened?"

"How should I know? Five hundred years, man! I'll never live to find out."

"But you think he's five hundred years in the future?"

"Or the past. He might have wound up in the fifteenth century. Or the twenty-fifth. The chances are precisely even. There's an indeterminacy-symmetrical equations. I've sometimes thought no, just a chance similarity in names."

I didn't ask what he meant by this because I suddenly saw the similarity, too, and my hair stood on end. Then I pushed it out of my mind; I had other problems. Besides, chance similarity was all it could be-a man could not get from Colorado to Italy, not in the fifteenth century.

"But I resolved not to be tempted again. It wasn't science, it added nothing to the data. If he was displaced forward, well and good. But if he was displaced backward . . - then possibly I sent my friend to be killed by savages. Or eaten by wild animals."

Or even possibly, I thought, to become a "Great White God." I kept the thought to myself. "But you needn't use so long a displacement with me."

"Let's say no more about it, if you please, sir."

"As you wish, Doctor." But I couldn't drop it. "Uh, may I make a suggestion?"

"Eh? Speak up."

"We could get almost the same result by a rehearsal."

"What do you mean?"

"A complete dry run, with everything done just exactly as if you were intending to displace a living subjectI'll act out that part. We'll do everything precisely as if you meant to displace me, right up to the point where you would push that button. Then I'll understand the procedure . . . which I don't quite, as yet."

He grumbled a little but he really wanted to show off his toy. He weighed me and set aside metal weights just equal to my hundred and seventy pounds. "These are the same scales I used with poor Vincent."

Between us we placed them on one side of the stage. "What temporal setting shall we make?" he asked. "This is your show."

"Uh, you said that it could be set accurately?"

"I said so, sir. Do you doubt it?"

"Oh no, no! Well, let's see, this is the twenty-fourth of May-suppose we . . . how about, uh, say thirtyone years, three weeks, one day, seven hours, thirteen minutes, and twenty-five seconds?"

"A poor jest, sir. When I said `accurate' I meant `accurate to better than one part in one hundred thousand.' I have had no opportunity to calibrate to one part in nine hundred million."

"Oh. You see, Doctor, how important an exact rehearsal is to me, since I know so little about it. Uh, suppose we call it thirtyone years and three weeks. Or is that still too finicky?"

"Not at all. The maximum error should not exceed two hours." He made his adjustments. "You can take your place on the stage."

"Is that all?"

"Yes. All but the power. I could not actually make this displacement with the line voltage I used on those coins. But since we aren't actually going to do it, that doesn't matter."

I looked disappointed and was. "Then you don't actually have what is necessary to produce such a displacement? You were speaking theoretically?"

"Confound it, sir, I was not speaking theoretically."

"But if you don't have the power . . . ?"

"I can get the power if you insist. Wait." He went to a corner of the lab and picked up a phone. It must have been installed when the lab was new; I hadn't seen one like it since I was awakened. There followed a brisk conversation with the night superintendent of the university's powerhouse. Dr. Twitchell was not dependent on profanity; he could avoid it entirely and be more biting than most real artists can be when using plainer words. "I am not in the least interested in your opinions, my man. Read your instructions. I have full facilities whenever I wish them. Or can you read? Shall we meet with the president at ten tomorrow morning and have him read them to you? Oh? So you can read? Can you write as well? Or have we exhausted your talents? Then write this down: Emergency full power across the bus bars of the Thornton Memorial Laboratory in exactly eight minutes. Repeat that back."

He replaced the instrument. "People!"

He went to the control board, made some changes, and waited. Presently, even from where I stood inside the cage, I could see the long hands of three sets of meters swing across their dials and a red light came on at the top of the board. "Power," he announced.

"Now what happens?"

"Nothing."

"That's just what I thought."

"What do you mean?"

"What I said. Nothing would happen."

"I'm afraid I don't understand you. I hope I don't understand you. What I meant is that nothing would happen unless I closed this pilot switch. If I did, you would be displaced precisely thirtyone years, three weeks."

"And I still say nothing would happen."

His face grew dark. "I think, sir, you are being intentionally offensive."

"Call it what you want to. Doctor, I came here to investigate a remarkable rumor. Well, I've investigated it. I've seen a control board with pretty lights on it; it looks like a set for a mad scientist in a grabbie spectacular. I've seen a parlor trick performed with a couple of coins. Not much of a trick, by the way, since you selected the coins yourself and told me how to mark them; any parlor magician could do better. I've heard a lot of talk. But talk is cheap. What you claim to have discovered is impossible. By the way, they know that down at the department. Your report wasn't suppressed; it's simply filed in the screwball file. They get it out and pass it around now and then for a laugh."

I thought the poor old boy was going to have a stroke there and then. But I had to stimulate him by the only reflex he had left, his vanity.

"Come out of there, sir. Come out. I'm going to thrash you. With my bare hands I'm going to thrash you."

The rage he was in, I think he might have managed it, despite age and weight and physical condition. But I answered, "You don't scare me, Pappy. That dummy button doesn't scare me either. Go ahead and push it."

He looked at me, looked at the button, but still he didn't do anything. I snickered and said, "A hoax, just as the boys said it was. Twitch, you're a pompous old faker, a stuffed shirt. Colonel Thrushbotham was right."

That did it.

CHAPTER 10

Even as he stabbed at the button I tried to shout at him not to do it. But it was too late; I was already falling. My last thought was an agonized one that I didn't want to go through with it. I had chucked away everything and tormented almost to death a poor old man who hadn't done me any harm-and I didn't even know which way I was going. Worse, I didn't know that I could get there.

Then I hit. I don't think I fell more than four feet but I had not been ready for it. I fell like a stick, collapsed like a sack.

Then somebody was saying, "Where the devil did you come from?"

It was a man, about forty, baldheaded but well built and lean. He was standing facing me with his fists on his hipbones. He looked competent and shrewd and his face was not unpleasant save that at the moment he seemed sore at me.

I sat up and found that I was sitting on granite gravel and pine needles. There was a woman standing by the man, a pleasant pretty woman somewhat younger than he. She was looking at me wide-eyed but not speaking.

"Where am I?" I said foolishly. I could have said, "When am I?" but that would have sounded still more foolish, and besides, I didn't think of it. One look at them and I knew when I was not-I was sure it was not 1970. Nor was I still in 2001; in 2001 they kept that sort of thing for the beaches. So I must have gone the wrong way.

Because neither one of them wore anything but smooth coats of tan. Not even Sticktite. But they seemed to find it enough. Certainly they were not embarrassed by it.

"One thing at a time," he objected. "I asked you how you got here?" He glanced up. "Your parachute didn't stick in the trees, did it? In any case, what are you doing here? This is posted private property; you're trespassing. And what are you doing in that Mardi Gras getup?"

I didn't see anything wrong with my clothes-especially in view of the way they were dressed. But I didn't answer. Other times, other customs-I could see that I was going to have trouble.

She put a hand on his arm. "Don't, John," she said gently. "I think he's hurt."

He looked at her, glanced back sharply at me. "Are you hurt?"

I tried to stand up, managed it. "I don't think so. A few bruises, maybe. Uh, what date is today?"

"Huh? Why, it's the first Sunday in May. The third of May, I think. Is that right, Jenny?"

"Yes, dear."

"Look," I said urgently, "I got an awful knock on the head. I'm confused. What's the date? The whole date?"

"What?"

I should have kept my mouth shut until I could pick it up off something, a calendar or a paper. But I had to know right then; I couldn't stand to wait. "What year?"

"Brother, you did get a lump. It's 1970." I saw him staring at my clothes again.

My relief was almost more than I could stand. I'd made it, I'd made it! I wasn't too late. "Thanks," I said. "Thanks an awful lot. You don't know." He still looked as if he wanted to call out the reserves, so I added nervously, "I'm subject to sudden attacks of amnesia. Once I lost, uh-five whole years."

"I should think that would be upsetting," he said slowly. "Do you feel well enough to answer my questions?"

"Don't badger him, dear," she said softly. "He looks like a nice person. I think he's just made a mistake."

"We'll see. Well?"

"I feel all right . . . now. But I was pretty confused for a minute there."

"Okay. How did you get here? And why are you dressed that way?"

"To tell the truth, I'm not sure how I got here. And I certainly don't know where I am. These spells hit me suddenly. As for how I'm dressed . . . I guess you could call it personal eccentricity. Uh like the way you're dressed. Or not dressed."

He glanced down at himself and grinned. "Oh, yes, I'm quite aware that the way my wife and I are dressed. . . or not dressed would call for explanation under some circumstances. But we prefer to make trespassers do the explaining instead. You see, you don't belong here, dressed that way or any other, while we do-just as we are. These are the grounds of the Denver Sunshine Club."

John and Jenny Sutton were the sort of sophisticated, unshockable, friendly people who could invite an earthquake in for tea. John obviously was not satisfied with my fishy explanations and wanted to cross-examine me, but Jenny held him back. I stuck to my story about "dizzy spells" and said that the last I remembered was yesterday evening and that I had been in Denver, at the New Brown Palace. Finally he said, "Well, it's quite interesting, even exciting, and I suppose somebody who's going into Boulder can drop you there and you can get a bus back into Denver." He looked at me again. "But if I take you back to the clubhouse, people are going to be mighty, mighty curious."

I looked down at myself. I had been made vaguely uneasy by the fact that I was dressed and they were not-I mean I felt like the one out of order, not they. "John . . . would it simplify things if I peeled off my clothes, too?" The prospect did not upset me; I had never been in one of the bareskin camps before, seeing no point in them. But Chuck and I had spent a couple of weekends at Santa Barbara and one at Laguna Beach-at a beach skin makes sense and nothing else does.

He nodded. "It certainly would."

"Dear," said Jenny, "he could be our guest."

"Mmm. . . yes. My only love, you paddle your sweet self into the grounds. Mix around and manage to let it be known that we are expecting a guest from . . . where had it better be, Danny?"

"Uh, from California. Los Angeles. I actually am from there." I almost said "Great Los Angeles" and realized that I was going to have to guard my speech. "Movies" were no longer "grabbies."

"From Los Angeles. That and `Danny' is all that is necessary; we don't use last names, unless offered. So, honey, you spread the word, as if it were something everybody already knew. Then in about half an hour you have to meet us down by the gate. But come here instead. And fetch my overnight bag."

"Why the bag, dear?"

"To conceal that masquerade costume. It's pretty conspicuous, even for anyone who is as eccentric as Danny said he is."

I got up and went at once behind some bushes to undress, since I wouldn't have any excuse for locker-room modesty once Jenny Sutton left us. I had to do it; I couldn't peel down and reveal that I had twenty thousand dollars' worth of gold, figured at the 1970 standard of sixty dollars an ounce, wrapped around my waist. It did not take long, as I had made a belt of the gold, instead of a girdle, the first time I had had trouble getting it off and on to bathe; I had double-looped it and wired it together in front.

When I had my clothes off I wrapped the gold in them and tried to pretend that it all weighed only what clothes should. John Sutton glanced at the bundle but said nothing. He offered me a cigarette-he carried them strapped to his ankle. They were a brand I had never expected to see again.

I waved it but it didn't light. Then I let him light it for me. "Now," he said quietly, "that we are alone, do you have anything you want to tell me? If I'm going to vouch for you to the club, I'm honor-bound to be sure, at the very least, that you won't make trouble."

I took a puff. It felt raw in my throat. "John, I won't make any trouble. That's the last thing on earth that I want."

"Mmm. . . probably. Just `dizzy spells' then?"

I thought about it. It was an impossible situation. The man had a right to know. But he certainly would not believe the truth, at least I would not have in his shoes. But it would be worse if he did believe me; it would kick up the very hoorah that I did not want. I suppose that if I had been a real, honest, legitimate time traveler, engaged in scientific research, I would have sought publicity, brought along indisputable proof, and invited tests by scientists.

But I wasn't; I was a private and somewhat shady citizen, engaged in hankypanky I didn't want to call attention to. I was simply looking for my Door into Summer, as quietly as possible.

"John, you wouldn't believe it if I told you."

"Mmm. . . perhaps. Still, I saw a man fall out of empty sky but he didn't hit hard enough to hurt him. He's wearing funny clothes. He doesn't seem to know where he is or what day it is. Danny, I've read Charles Fort, the same as most people. But I never expected to meet a case. But, having met one, I don't expect the explanation to be as simple as a card trick. So?"

"John, something you said earlier-the way you phrased something-made me think you were a lawyer."

"Yes, I am. Why?"

"Can I make a privileged communication?"

"Hmm-are you asking me to accept you as a client?"

"If you want to put it that way, yes. I'm probably going to need advice."

"Shoot. Privileged."

"Okay. I'm from the future. Time travel."

He didn't say anything for several moments. We were lying stretched out in the sun. I was doing it to keep warm; May in Colorado is sunshiny but brisk. John Sutton seemed used to it and was simply lounging, chewing a pine needle.

"You're right," he answered. "I don't believe it. Let's stick to `dizzy spells.'"

"I told you you wouldn't."

He sighed. "Let's say I don't want to. I don't want to believe in ghosts, either, or reincarnation, or any of this ESP magic. I like simple things that I can understand. I think most people do. So my first advice to you is to keep it a privileged communication. Don't spread it around."

"That suits me."

He rolled over. "But I think it would be a good idea if we burned these clothes. I'll find you something to wear. Will they burn?"

"Uh, not very easily. They'll melt."

"Better put your shoes back on. We wear shoes mostly, and those will get by. Anybody asks you questions about them, they're custom-made. Health shoes."

"They are, both."

"Okay." He started to unroll my clothes before I could stop him. "What the devil!"

It was too late, so I let him uncover it. "Danny," he said in a queer voice, "is this stuff what it appears to be?"

"What does it appear to be?"

"Gold."

"Where did you get it?"

"I bought it."

He felt it, tried the dead softness of the stuff, sensuous as putty, then hefted it. "Cripes! Danny . . . listen to me carefully. I'm going to ask you one question, and be damned careful how you answer it. Because I've got no use for a client who lies to me. I dump him. And I won't be a party to a felony. Did you come by this stuff legally?"

“Yes.”

"Maybe you haven't heard of the Gold Reserve Act of 1968?"

"I have. I came by it legally. I intend to sell it to the Denver Mint, for dollars."

"Jeweler's license, maybe?"

"No. John, I told the simple truth, whether you believe me or not. Where I came from I bought that over the counter, legal as breathing. Now I want to turn it in for dollars at the earliest possible moment. I know that it is against the law to keep it. What can they do to me if I lay it on the counter at the mint and tell them to weigh it?"

"Nothing, in the long run. . . if you stick to your `dizzy spells.' But they can surely make your life miserable in the meantime." He looked at it. "I think you had better kick a little dirt over it."

"Bury it?"

"You don't have to go that far. But if what you tell me is true, you found this stuff in the mountains. That's where prospectors usually find gold."

"Well . . . whatever you say. I don't mind some little white lies, since it is legitimately mine anyhow."

"But is it a lie? When did you first lay eyes on this gold? What was the earliest date when it was in your possession?"

I tried to think back. It was the same day I left Yuma, which was sometime in May, 2001. About two weeks ago.

Huh!

"Put that way, John . . . the earliest date on which I saw that gold. . . was today, May third, 1970."

He nodded. "So you found it in the mountains."

The Suttons were staying over until Monday morning, so I stayed over. The other club members were all friendly but remarkably unnosy about my personal affairs, less so than any group I've ever been in. I've learned since that this constitutes standard good manners in a skin club, but at the time it made them the most discreet and most polite people I had ever met.

John and Jenny had their own cabin and I slept on a cot in the clubhouse dormitory. It was darn chilly. The next morning John gave me a shirt and a pair of blue jeans. My own clothes were wrapped around the gold in a bag in the trunk of his car-which itself was a Jaguar Imperator, all I needed to tell me that he was no cheap shyster. But I had known that by his manner.

I stayed overnight with them and by Tuesday I had a little money. I never laid eyes on the gold again, but in the course of the next few weeks John turned over to me its exact mint value as bullion minus the standard fees of licensed gold buyers. I know that he did not deal with the mint directly, as he always turned over to me vouchers from gold buyers. He did not deduct for his own services and he never offered to tell me the details.

I did not care. Once I had cash again, I got busy. That first Tuesday, 5 May, 1970, Jenny drove me around and I rented a small loft in the old commercial district. I equipped it with a drafting table, a workbench, an army cot, and darn little else; it already had 120, 240, gas, running water, and a toilet that stopped up easily. I didn't want any more and I had to watch every dime.

It was tedious and timewasting to design by the old compass-and-T-square routine and I didn't have a minute to spare, so I built Drafting Dan before I rebuilt Flexible Frank. Only this time Flexible Frank became Protean Pete, the all-purpose automaton, so linked as to be able to do almost anything a man can do, provided its Thorsen tubes were properly instructed. I knew that Protean Pete would not stay that way; his descendants would evolve into a horde of specialized gadgets, but I wanted to make the claims as broad as possible.

Working models are not required for patents, merely drawings and descriptions. But I needed good models, models that would work perfectly and anybody could demonstrate, because these models were going to have to sell themselves, show by their very practicality and by the evident economy designed into them for their eventual production engineering that they would not only work but would be a good investment-the patent office is stuffed with things that work but are worthless commercially.

The work went both fast and slow, fast because I knew exactly what I was doing, slow because I did not have a proper machine shop nor any help. Presently I grudgingly dipped into my precious cash to rent some machine tools, then things went better. I worked from breakfast to exhaustion, seven days a week, except for about one weekend a month with John and Jenny at the bare-bottom club near Boulder. By the first of September I had both models working properly and was ready to start on the drawings and descriptions. I designed and sent out for manufacture pretty speckle lacquer cover plates for both of them and I had the external moving parts chrome-plated; these were the only jobs I farmed out and it hurt me to spend the money, but I felt that it was necessary. Oh, I had made extreme use of catalogue-available standard components; I could not have built them otherwise, nor would they have been commercial when I got through. But I did not like to spend money on custom-made prettiness.

I did not have time to get around much, which was just as well. Once when I was out buying a servo motor I ran into a chap I had known in California. He spoke to me and I answered before I thought. "Hey, Dan! Danny Davis! Imagine bumping into you here. I thought you were in Mojave?"

I shook hands. "Just a quick business trip. I'm going back in a few days."

"I'm going back this afternoon. I'll phone MIles and tell him I saw you."

I looked worried and was. "Don't do that, please."

"Why not? Aren't you and Miles still buddy-buddy budding tycoons together?"

"Well . . . look, Mort, Miles doesn't know I'm here. I'm supposed to be in Albuquerque on business for the company. But I flew up here on the side, on strictly personal and private business. Get me? Nothing to do with the firm. And I don't care to discuss it with Miles."

He looked knowing. "Woman trouble?"

"Weelll . . . yes."

"She married?"

"You might say so."

He dug me in the ribs and winked. "I catch. Old Miles is pretty puritanical isn't he? Okay, I'll cover for you and someday you can cover for me. Is she any good?"

I'd like to cover you with a spade, I thought to myself, you fourth-rate frallup. Mort was the sort of no-good traveling salesman who spends more time trying to seduce waitresses than taking care of his customers-besides which, the line he handled was as shoddy as he was, never up to its specs.

But I bought him a drink and treated him to fairy tales about the "married woman" I had invented and listened while he boasted to me of no doubt equally fictitious exploits. Then I shook him.

On another occasion I tried to buy Dr. Twitchell a drink and failed.

I had seated myself beside him at the restaurant counter of a drugstore on Champa Street, then caught sight of his face in the mirror. My first impulse was to crawl under the counter and hide.

Then I caught hold of myself and realized that, out of all the persons living in 1970, he was the one I had least need to worry about. Nothing could go wrong because nothing had. . . I meant "nothing would." No-Then I quit trying to phrase it, realizing that if time travel ever became widespread, English grammar was going to have to add a whole new set of tenses to describe reflexive situations-conjugations that would make the French literary tenses and the Latin historical tenses look simple.

In any case, past or future or something else, Twitchell was not a worry to me now. I could relax.

I studied his face in the mirror, wondering if I had been misled by a chance resemblance. But I had not been. Twitchell did not have a general-issue face like mine; he had stern, self-assured, slightly arrogant and quite handsome features which would have looked at home on Zeus. I remembered that face only in ruins, but there was no doubt-and I squirmed inside as I thought of the old man and how badly I had treated him. I wondered how I could make it up to him.

Twitchell caught sight of me eying him in the mirror and turned to me. "Something wrong?"

"No. Uh . . you're Dr. Twitchell, aren't you? At the university?"

"Denver University, yes. Have we met?"

I had almost slipped, having forgotten that he taught at the city university in this year. Remembering in two directions is difficult. "No, Doctor, but I've heard you lecture. You might say I'm one of your fans."

His mouth twitched in a half-smile but he did not rise to it. From that and other things I learned that he had not yet acquired a gnawing need for adulation; he was sure of himself at that age and needed only his own self-approval. "Are you sure you haven't got me mixed up with a movie Star?"

"Oh no! You're Dr. Hubert Twitchell . . . the great physicist."

His mouth twitched again. "Let's just say that I am a physicist. Or try to be."

We chatted for a while and I tried to hang onto him after he had finished his sandwich. I said it would be an honor if he would let me buy him a drink. He shook his head. "I hardly drink at all and certainly never before dark. Thanks anyway. It's been nice meeting you. Drop into my lab someday if you are ever around the campus."

I said I would.

But I did not make many slips in 1970 (second time around) because I understood it and, anyhow, most people who might have recognized me were in California. I resolved that if I did meet any more familiar faces I would give them the cold stare and the quick brushoff-take no chances.

But little things can cause you trouble too. Like the time I got caught in a zipper simply because I had become used to the more convenient and much safer Sticktite closures. A lot of little things like that I missed very much after having learned in only six months to take them for granted. Shaving-I had to go back to shaving! Once I even caught a cold. That horrid ghost of the past resulted from forgetting that clothes could get soaked in rain. I wish that those precious esthetes who sneer at progress and prattle about the superior beauties of the past could have been with me-dishes that let food get chilled, shirts that had to be laundered, bathroom mirrors that steamed up when you needed them, runny noses, dirt underfoot and dirt in your lungs-I had become used to a better way of living and 1970 was a series of petty frustrations until I got the hang of it again.

But a dog gets used to his fleas and so did I. Denver in 1970 was a very quaint place with a fine old-fashioned flavor; I became very fond of it. It was nothing like the slick New Plan maze it had been (or would be) when I had arrived (or would arrive) there from Yuma; it still had less than two million people, there were still buses and other vehicular traffic in the streets-there still were streets; I had no trouble finding Colfax Avenue.

Denver was still getting used to being the national seat of government and was not quite happy in the role, like a boy in his first formal evening clothes. Its spirit still yearned for high-heeled boots and its Western twang even though it knew it had to grow up and be an international metropolis, with embassies and spies and famous gourmet restaurants. The city was being jerry-built in all directions to house the bureaucrats and lobbyists and contact men and clerk-typists and flunkies; buildings were being thrown up so fast that with each one there was hazard of enclosing a cow inside the walls. Nevertheless, the city had extended only a few miles past Aurora on the east, to Henderson on the north, and Littleton on the south-there was still open country before you reached the Air Academy. On the west, of course, the city flowed into the high country and the federal bureaus were tunneling back into the mountains.

I liked Denver during its federal boom. Nevertheless, I was excruciatingly anxious to get back to my own time.

It was always the little things. I had had my teeth worked over completely shortly after I had been put on the staff of Hired Girl and could afford it. I had never expected to have to see a dental plastician again. Nevertheless, in 1970 I did not have anti-caries pills and so I got a hole in a tooth, a painful one or I would have ignored it. So I went to a dentist. So help me, I had forgotten what he would see when he looked into my mouth. He blinked, moved his mirror around, and said, "Great jumping Jehosaphat! Who was your dentist?"

"Kah hoo hank?"

He took his hands out of my mouth. "Who did it? And how?"

"Huh? You mean my teeth? Oh, that's experimental work they're doing in . . . India."

"How do they do it?"

"How would I know?"

"Mmm. . . wait a minute. I've got to get some pictures of this." He started fiddling with his X-ray equipment.

"Oh no," I objected. "Just clean out that bicuspid, plug it up with anything, and let me out of here."

"But-"

"I'm sorry, Doctor. But I'm on a dead run."

So he did as I said, pausing now and again to look at my teeth. I paid cash and did not leave my name. I suppose I could have let him have the pics, but covering up had become a reflex. It couldn't have hurt anything to let him have them. Nor helped either, as X rays would not show how regeneration was accomplished, nor could I have told him.

There is no time like the past to get things done. While I was sweating sixteen hours a day on Drafting Dan and Protean Pete I got something else done with my left hand. Working anonymously through John's law office I hired a detective agency with national branches to dig up Belle's past. I supplied them with her address and the license number and model of her car (since steering wheels are good places to get fingerprints) and suggested that she might have been married here and there and possibly might have a police record. I had to limit the budget severely; I couldn't afford the sort of investigation you read about.

When they did not report back in ten days I kissed my money good-by. But a few days later a thick envelope showed up at John's office.

Belle had been a busy girl. Born six years earlier than she claimed, she had been married twice before she was eighteen. One of them did not count because the man already had a wife; if she had been divorced from the second the agency had not uncovered it. She had apparently been married four times since then although once was doubtful; it may have been the "war-widow" racket worked with the aid of a man who was dead and could not object. She had been divorced once (respondent) and one of her husbands was dead. She might still be "married" to the others.

Her police record was long and interesting but apparently she had been convicted of a felony only once, in Nebraska, and granted parole without doing time. This was established only by fingerprints, as she had jumped parole, changed her name, and had acquired a new social-security number. The agency asked if they were to notify Nebraska authorities.

I told them not to bother; she had been missing for nine years and her conviction had been for nothing worse than lure in a badger game. I wondered what I would have done if it had been dope peddling? Reflexive decisions have their complications.

I ran behind schedule on the drawings and October was on me before I knew it. I still had the description only half worded, since they had to tie into drawings, and I had done nothing about the claims. Worse, I had done nothing about organizing the deal so that it would hold up; I could not do it until I had a completed job to show. Nor had I had time to make contacts. I began to think that I had made a mistake in not asking Dr. Twitchell to set the controls for at least thirty-two years instead of thirtyone years and a fiddling three weeks; I had underestimated the time I would need and overestimated my own capacity.

I had not shown my toys to my friends, the Suttons, not because I wanted to hide them, but because I had not wanted a lot of talk and useless advice while they were incomplete. On the last Saturday in September 1 was scheduled to go out to the club camp with them. Being behind schedule, I had worked late the night before, then had been awakened early by the torturing clang of an alarm clock so that I could shave and be ready to go when they came by. I shut the sadistic thing off and thanked God that they had got rid of such horrible devices in 2001, then I pulled myself groggily together and went down to the corner drugstore to phone and say that I couldn't make it, I had to work.

Jenny answered, "Danny, you're working too hard. A weekend in the country will do you good."

"I can't help it, Jenny. I have to. I'm sorry."

John got on the other phone and said, "What's all this nonsense?”

"I've got to work, John. I've simply got to. Say hello to the folks for me."

I went back upstairs, burned some toast, vulcanized some eggs, sat back down at Drafting Dan.

An hour later they banged on my door.

None of us went to the mountains that weekend. Instead I demonstrated both devices. Jenny was not much impressed by Drafting Dan (it isn't a woman's gismo, unless she herself is an engineer), but she was wide-eyed over Protean Pete. She kept house with a Mark II Hired Girl and could see how much more this machine could do.

But John could see the importance of Drafting Dan. When I showed him how I could write my signature, recognizably my own, just by punching keys-I admit I had practiced-his eyebrows stayed up. "Chum, you're going to throw draftsmen out of work by the thousand."

"No, I won't. The shortage of engineering talent in this country gets worse every year; this gadget will just help to fill the gap. In a generation you are going to see this tool in every engineering and architectural office in the nation. They'll be as lost without it as a modern mechanic would be without power tools."

"You talk as if you knew."

"I do know."

He looked over at Protean Pete-I had set him to tidying my workbench-and back at Drafting Dan. "Danny ... sometimes I think maybe you were telling me the truth, you know, the thy we met you."

I shrugged. "Call it second sight . . . but I do know. I'm certain. Does it matter?"

"I guess not. What are your plans for these things?"

I frowned. "That's the hitch, John. I'm a good engineer and a fair jackleg mechanic when I have to be. But I'm no businessman; I've proved that. You've never fooled with patent law?"

"I told you that before. It's a job for a specialist."

"Do you know an honest one? Who's smart as a whip besides? It's reached the point where I've got to have one. I've got to set up a corporation, too, to handle it. And work out the financing. But I haven't got much time; I'm terribly pressed for time."

"Why?"

"I'm going back where I came from."

He sat and said nothing for quite a while. At last he said, "How much time?"

"Uh, about nine weeks. Nine weeks from this coming Thursday to be exact."

He looked at the two machines, looked back at me. "Better revise your schedule. I'd say that you had more like nine months' work cut out for you. You won't be in production even then-just lined up to start moving, with luck."

"John, I can't."

"I'll say you can't."

"I mean I can't change my schedule. That's beyond my control now." I put my face in my hands. I was dead with fatigue, having had less than five hours' sleep and having averaged not much better for days. The shape I was in, I was willing to believe that there was something, after all, to this "fate" business-a man could struggle against it but never beat it.

I looked up. "Will you handle it?"

"Eh? What part of it?"

"Everything. I've done all I know how to do."

"That's a big order, Dan. I could rob you blind. You know that, don't you? And this may be a gold mine."

"It will be. I know."

"Then why trust me? You had better just keep me as your attorney, advice for a fee."

I tried to think while my head ached. I had taken a partner once before-but, damnation, no matter how many times you get your fingers burned, you have to trust people. Otherwise you are a hermit in a cave, sleeping with one eye open. There wasn't any way to be safe; just being alive was deadly dangerous . . . fatal. In the end.

"Cripes, John, you know the answer to that. You trusted me. Now I need your help again. Will you help me?"

"Of course he will," Jenny put in gently, "though I haven't heard what you two were talking about. Danny? Can it wash dishes? Every dish you have is dirty."

"What, Jenny? Why, I suppose he can. Yes, of course he can."

"Then tell him to, please. I want to see it."

"Oh. I've never programmed him for it. I will if you want me to. But it will take several hours to do it right. Of course after that he'll always be able to do it. But the first time. . . well, you see, dishwashing involves a lot of alternate choices. It' s a `judgment' job, not a comparatively simple routine like laying bricks or driving a truck."

"Goodness! I'm certainly glad to find that at least one man understands housework. Did you hear what he said, dear? But don't stop to teach him now, Danny. I'll do them myself." She looked around. "Danny, you've been living like a pig, to put it gently."

To tell the simple truth, it had missed me entirely that Protean Pete could work for me. I had been engrossed in planning how he could work for other people in commercial jobs, and teaching him to do them, while I myself had simply been sweeping dirt into the corner or ignoring it. Now I began teaching him all the household tasks that Flexible Frank had learned; he had the capacity, as I had installed three times as many Thorsen tubes in him as Frank had had.

I had time to do it, for John took over.

Jenny typed descriptions for us; John retained a patent attorney to help with the claims. I don't know whether John paid him cash or cut him in on the cake; I never asked. I left the whole thing up to him, including what our shares should be; not only did it leave me free for my proper work, but I figured that if he decided such things he could never be tempted the way Miles had been. And I honestly did not care; money as such is not important. Either John and Jenny were what I thought they were or I might as well find that cave and be a hermit.

I insisted on just two things. "John, I think we ought to call the firm `The Aladdin Autoengineering Corporation.'"

"Sounds pretty fancy. What's wrong with `Davis & Sutton'?"

"That's how it's got to be, John."

"So? Is your second sight telling you this?"

"Could be, could be. We'll use a picture of Aladdin rubbing his lamp as a trademark, with the genie funning above him. I'll make a rough sketch. And one thing: the home office had better be in Los Angeles."

"What? Now you've gone too far. That is, if you expect me to run it. What's wrong with Denver?"

"Nothing is wrong with Denver, it's a nice town. But it is not the place to set up the factory. Pick a good site here and some bright morning you wake up and find that the federal enclave has washed over it and you are out of business until you get reestablished on a new one. Besides that, labor is scarce, raw materials come overland, building materials are all gray-market. Whereas Los Angeles has an unlimited supply of skilled workmen and more pouring in every thy, Los Angeles is a seaport, Los Angeles is-"

"How about the smog? It's not worth it."

"They'll lick the smog before long. Believe me. And haven't you noticed that Denver is working up smog of its own?"

"Now wait a minute, Dan. You've already made it clear that I will have to run this while you go kiyoodling off on some business of your own. Okay, I agreed. But I ought to have some choice in working conditions."

"It's necessary, John."

"Dan, nobody in his right mind who lives in Colorado would move to California. I was stationed out there during the war; I know. Take Jenny here; she's a native Californian, that's her secret shame. You couldn't hire her to go back. Here you've got winters, changing seasons, brisk mountain air, magnificent-"

Jenny looked up. "Oh, I wouldn't go so far as to say I'd never go back."

"What's that, dear?"

Jenny had been quietly knitting; she never talked unless she really had something to say. Now she put down her knitting, a clear sign. "If we did move there, dear, we could join the Oakdale Club; they have outdoor swimming all year round. I was thinking of that just this last weekend when I saw ice on the pool at Boulder."

I stayed until the evening of 2 December, 1970, the last possible minute. I was forced to borrow three thousand dollars from John-the prices I had paid for components had been scandalous-but I offered him a stock mortgage to secure it. He let me sign it, then tore it up and dropped it in a wastebasket. "Pay me when you get around to it."

"It will be thirty years, John."

"As long as that?"

I pondered it. He had never invited me to tell my whole story since the afternoon, six months earlier, when he had told me frankly that he did not believe the essential part-but was going to vouch for me to their club anyhow.

I told him I thought it was time to tell him. "Shall we wake up Jenny? She's entitled to hear it too."

"Mmm. . . no. Let her nap until just before you have to leave. Jenny is a very uncomplicated person, Dan. She doesn't care who you are or where you came from as long as she likes you. If it seems a good idea, I can pass it on to her later."

"As you will." He let me tell it all, stopping only to fill our glasses-mine with ginger ale; I had a reason not to touch alcohol. When I had brought it up to the point where I landed on a mountainside outside Boulder, I stopped. "That's it," I said. "Though I was mixed up on one point. I've looked at the contour since and I don't think my fall was more than two feet. If they had-I mean `if they were going to'-bulldoze that laboratory site any deeper, I would have been buried alive. Probably would have killed both of you too-if it didn't blow up the whole county. I don't know just what happens when a fiat wave form changes back into a mass where another mass already is."

John went on smoking. "Well?" I said. "What do you think?"

"Danny, you've told me a lot of things about what Los Angeles-I mean `Great Los Angeles'-is going to be like. I'll let you know when I see you just how accurate you've been."

"It's accurate. Subject to minor slips of memory."

"Mmm . . . you certainly make it sound logical. But in the meantime I think you are the most agreeable lunatic I've ever met. Not that it handicaps you as an engineer. . . or as a friend. I like you, boy. I'm going to buy you a new strait jacket for Christmas."

"Have it your own way."

"I have to have it this way. The alternative is that I myself am stark staring mad. . . and that would make quite a problem for Jenny." He glanced at the clock. "We'd better wake her. She'd scalp me if I let you leave without saying good-by to her."

"I wouldn't think of it."

They drove me to Denver International Port and Jenny kissed me good-by at the gate. I caught the eleven o'clock shuttle for Los Angeles.

CHAPTER 11

The following evening, 3 December, 1970, I had a cabdriver drop me a block from Miles's house comfortably early, as I did not know exactly what time I had arrived there the first time. It was already dark as I approached his house, but I saw only his car at the curb, so I backed off a hundred yards to a spot where I could watch that stretch of curb and waited.

Two cigarettes later I saw another car pull up there, stop, and its lights go out. I waited a couple of minutes longer, then hurried toward it. It was my own car.

I did not have a key but that was no hurdle; I was always getting ears-deep in an engineering problem and forgetting my keys; I had long ago formed the habit of keeping a spare ditched in the trunk. I got it now and climbed into the ear. I had parked on a slight grade heading downhill, so, without turning on lights or starting the engine, I let it drift to the corner and turned there, then switched on the engine but not the lights, and parked again in the alley back of Miles's house and on which his garage faced.

The garage was locked. I peered through dirty glass and saw a shape with a sheet over it. By its contours I knew it was my old friend Flexible Frank.

Garage doors are not built to resist a man armed with a tire iron and determination-not in southern California in 1970. It took seconds. Carving Frank into pieces I could carry and stuff into my car took much longer. But first I checked to see that the notes and drawings were where I suspected they were-they were indeed, so I hauled them out and dumped them on the floor of the car, then tackled Frank himself. Nobody knew as well as I did how he was put together, and it speeded up things enormously that I did not care how much damage I did; nevertheless, I was as busy as a one-man band for nearly an hour.

I had just stowed the last piece, the wheelchair chassis, in the car trunk and had lowered the turtleback down on it as far as it would go when I heard Pete start to wail. Swearing to myself at the time it had taken to tear Frank apart I hurried around the garage and into their back yard. Then the commotion started.

I had promised myself that I would relish every second of Pete's triumph. But I couldn't see it. The back door was open and light was streaming out the screen door, but while I could hear sounds of running, crashes, Pete's blood-chilling war cry, and screams from Belle, they never accommodated me by coming into my theater of vision. So I crept up to the screen door, hoping to catch a glimpse of the carnage.

The damned thing was hooked! It was the only thing that had failed to follow the schedule. So I frantically dug into my pocket, broke a nail getting my knife open-and jabbed through and unhooked it just in time to jump out of the way as Pete hit the screen like a stunt motorcyclist hitting a fence.

I fell over a rosebush. I don't know whether Miles and Belle even tried to follow him outside. I doubt it; I would not have risked it in their spot. But I was too busy getting myself untangled to notice.

Once I was on my feet I stayed behind bushes and moved around to the side of the house; I wanted to get away from that open door and the light pouring out of it. Then it was just a case of waiting until Pete quieted down. I would not touch him then, certainly not try to pick him up. I know cats.

But every time he passed me, prowling for an entrance and sounding his deep challenge, I called out to him softly. "Pete. Come here, Pete. Easy, boy, it's all right."

He knew I was there and twice he looked at me, but otherwise ignored me. With cats it is one thing at a time; he had urgent business right now and no time to headbump with Papa. But I knew he would come to me when his emotions had eased off.

While I squatted, waiting, I heard water running in their bathrooms and guessed that they had gone to clean up, leaving me in the living room. I had a horrid thought then: what would happen if I sneaked in and cut the throat of my own helpless body? But I suppressed it; I wasn't that curious and suicide is such a final experiment, even if the circumstances are mathematically intriguing. But I never have figured it out.

Besides, I didn't want to go inside for any purpose. I might run into Miles-and I didn't want any truck with a dead man.

Pete finally stopped in front of me about three feet out of reach.

"Mrrrowrr?" he said-meaning, "Let's go back and clean out the joint. You hit `em high, I'll hit `em low."

"No, boy. The show is over."

"Aw, c'mahnnn!"

"Time to go home, Pete. Come to Danny."

He sat down and started to wash himself. When he looked up, I put my arms out and he jumped into them. "Kwleert?" ("Where the hell were you when the riot started?")

I carried him back to the car and dumped him in the driver's space, which was all there was left. He sniffed the hardware on his accustomed place and looked around reproachfully. "You'll have to sit in my lap," I said. "Quit being fussy."

I switched on the car's lights as we hit the street. Then I turned east and headed for Big Bear and the Girl Scout camp. I chucked away enough of Frank in the first ten minutes to permit Pete to resume his rightful place, which suited us both better. When I had the floor clear, several miles later, I stopped and shoved the notes and drawings down a storm drain. The wheelchair chassis I did not get rid of until we were actually in the mountains, then it went down a deep arroyo, making a nice sound effect.

About three in the morning I pulled into a motor court across the road and down a bit from the turnoff into the Girl Scout camp, and paid too much for a cabin-Pete almost queered it by sticking his head up and making a comment when the owner came out.

"What time," I asked him, "does the morning mail from Los Angeles get up here?"

"Helicopter comes in at seven-thirteen, right on the dot."

"Fine. Give me a call at seven, will you?"

"Mister, if you can sleep as late as seven around here you're better than I am. But I'll put you in the book."

By eight o'clock Pete and I had eaten breakfast and I had showered and shaved. I looked Pete over in daylight and concluded that he had come through the battle undamaged except for possibly a bruise or two. We checked out and I drove into the private road for the camp. Uncle Sam's truck turned in just ahead of me; I decided that it was my day.

I never saw so many little girls in my life. They skittered like kittens and they all looked alike in their green uniforms. Those I passed wanted to look at Pete, though most of them just stared shyly and did not approach. I went to a cabin marked "Headquarters," where I spoke to another uniformed scout who was decidedly no longer a girl.

She was properly suspicious of me; strange men who want to be allowed to visit little girls just turning into big girls should always be suspected.

I explained that I was the child's uncle, Daniel B. Davis by name, and that I had a message for the child concerning her family. She countered with the statement that visitors other than parents were permitted only when accompanied by a parent and, in any case, visiting hours were not until four o'clock.

"I don't want to visit with Frederica, but I must give her this message. It's an emergency."

"In that case you can write it out and I will give it to her as soon as she is through with rhythm games."

I looked upset (and was) and said, "I don't want to do that. It would be much kinder to tell the child in person."

"Death in the family?"

"Not quite. Family trouble, yes. I'm sorry, ma'am, but I am not free to tell anyone else. It concerns my niece's mother."

She was weakening but still undecided. Then Pete joined the discussion. I had been carrying him with his bottom in the crook of my left arm and his chest supported with my right hand; I had not wanted to leave him in the car and I knew Ricky would want to see him. He'll put up with being carried that way quite a while but now he was getting bored. "Krrwarr?"

She looked at him and said, "He's a fine boy, that one. I have a tabby at home who could have come from the same litter."

I said solemnly, "He's Frederica's cat. I had to bring him along because . . . well, it was necessary. No one to take care of him."

"Oh, the poor little fellow!" She scratched him under the chin, doing it properly, thank goodness, and Pete accepted it, thank goodness again, stretching his neck and closing his eyes and looking indecently pleased. He is capable of taking a very stiff line with strangers if he does not fancy their overtures.

The guardian of youth told me to sit down at a table under the trees outside the headquarters. It was far enough away to permit a private visit but still under her careful eye. I thanked her and waited.

I didn't see Ricky come up. I heard a shout, "Uncle Danny!" and another one as I turned, "And you brought Pete! Oh, this is wonderful!"

Pete gave a long bubbling bleerrrt and leaped from my arms to hers. She caught him neatly, rearranged him in the support position he likes best, and they ignored me for a few seconds while exchanging cat protocols. Then she looked up and said soberly, "Uncle Danny, I'm awful glad you're here."

I didn't kiss her; I did not touch her at all. I've never been one to paw children and Ricky was the sort of little girl who only put up with it when she could not avoid it. Our original relationship, back when she was six, had been founded on mutual decent respect for the other's individualism and personal dignity.

But I did look at her. Knobby knees, stringy, shooting up fast, not yet filled out, she was not as pretty as she had been as a baby girl. The shorts and T-shirt she was wearing, combined with peeling sunburn, scratches, bruises, and an understandable amount of dirt, did not add up to feminine glamour. She was a matchstick sketch of the woman she would become, her coltish gawkiness relieved only by her enormous solemn eyes and the pixie beauty of her thin smudged features.

She looked adorable.

I said, "And I'm awful glad to be here, Ricky."

Trying awkwardly to manage Pete with one arm, she reached with her other hand for a bulging pocket in her shorts. "I'm surprised too. I just this minute got a letter from you-they dragged me away from mail call; I haven't even had a chance to open it. Does it say that you're coming today?" She got it out, creased and mussed from being crammed into a pocket too small.

"No, it doesn't, Ricky. It says I'm going away. But after I mailed it, I decided I just had to come say good-by in person."

She looked bleak and dropped her eyes. "You're going away?"

"Yes. I'll explain, Ricky, but it's rather long. Let's sit down and I'll tell you about it." So we sat on opposite sides of the picnic table under the ponderosas and I talked. Pete lay on the table between us, making a library lion of himself with his forepaws on the creased letter, and sang a low song like bees buzzing in deep clover, while he narrowed his eyes in contentment.

I was much relieved to find that she already knew that Miles had married Belle-I hadn't relished having to break that to her. She glanced up, dropped her eyes at once, and said with no expression at all, "Yes, I know. Daddy wrote me about it."

"Oh. I see."

She suddenly looked grim and not at all a child. "I'm not going back there, Danny. I won't go back there."

"But-Look here, Rikki-tikki-tavi, I know how you feel. I certainly don't want you to go back there-I'd take you away myself if I could. But how can you help going back? He's your daddy and you are only eleven."

"I don't have to go back. He's not my real daddy. My grandmother is coming to get me."

"What? When's she coming?"

"Tomorrow. She has to drive up from Brawley. I wrote her about it and asked her if I could come live with her because I wouldn't live with Daddy any more with her there." She managed to put more contempt into one pronoun than an adult could have squeezed out of profanity. "Grandma wrote back and said that I didn't have to live there if I didn't want to because he had never adopted me and she was my `guardian of record.'" She looked up anxiously. "That's right, isn't it? They can't make me?"

I felt an overpowering flood of relief. The one thing I had not been able to figure out, a problem that had worried me for months, was how to keep Ricky from being subjected to the poisonous influence of Belle for-well, two years; it had seemed certain that it would be about two years. "If he never adopted you, Ricky, I'm certain that your grandmother can make it stick if you are both firm about it." Then I frowned and chewed my lip. "But you may have some trouble tomorrow. They may object to letting you go with her."

"How can they stop me? I'll just get in the car and go."

"It's not that simple, Ricky. These people who run the camp, they have to follow rules. Your daddy-Miles, I mean-Miles turned you over to them; they won't be willing to turn you back over to anyone but him."

She stuck out her lower lip. "I won't go. I'm going with Grandma."

"Yes. But maybe I can tell you how to make it easy. If I were you, I wouldn't tell them that I'm leaving camp; I'd just tell them that your grandmother wants to take you for a ride-then don't come back."

Some of her tension relaxed. "All right."

"Uh. . . don't pack a bag or anything or they may guess what you're doing. Don't try to take any clothes but those you are wearing at the time. Put any money or anything you really want to save into your pockets. You don't have much here that you would really mind losing, I suppose?"

"I guess not." But she looked wistful. "I’ve got a brand-new swim suit."

How do you explain to a child that there are times when you just must abandon your baggage? You can't-they'll go back into a burning building to save a doll or a toy elephant. "Mmm. . . Ricky, have your grandmother tell them that she is taking you over to Arrowhead to have a swim with her. . . and that she may take you to dinner at the hotel there, but that she will have you back before taps. Then you can carry your swimming suit and a towel. But nothing else. Er, will your grandmother tell that fib for you?"

"I guess so. Yes, I'm sure she will. She says people have to tell little white fibs or else people couldn't stand each other. But she says fibs were meant to be used, not abused."

"She sounds like a sensible person. You'll do it that way?"

"I'll do it just that way, Danny."

`Good." I picked up the battered envelope. "Picky, I told you I had to go away. I have to go away for a very long time."

"How long?"

"Thirty years."

Her eyes grew wider if possible. At eleven, thirty years is not a long time; it's forever. I added, "I'm sorry, Ricky. But I have to."

"Why?"

I could not answer that one. The true answer was unbelievable and a lie would not do. "Picky, it's much too hard to explain. But I have to. I can't help it." I hesitated, then added, "I'm going to take the Long Sleep. The cold sleep-you know what I mean."

She knew. Children get used to new ideas faster than adults do; cold sleep was a favorite comic-book theme. She looked horrified and protested, "But, Danny, I'll never see you again~"

"Yes, you will. It's a long time but I'll see you again. And so will

Pete. Because Pete is going with me; he's going to coldsleep too."

She glanced at Pete and looked more woebegone than ever.

"But-Danny, why don't you and Pete just come down to Brawley and live with us? That would be ever so much better. Grandma will like Pete. She'll like you too-she says there's nothing like having a man around the house."

"Ricky. . . dear Ricky. . . I have to. Please don't tease me." I started to tear open the envelope.

She looked angry and her chin started to quiver. "I think she has something to do with this!"

"What? If you mean Belle, she doesn't. Not exactly, anyway."

"She's not going to coldsleep with you?"

I think I shuddered. "Good heavens, not I'd run miles to avoid her."

Picky seemed slightly mollified. "You know, I was so mad at you about her. I had an awful outrage."

"I'm sorry, Ricky. I'm truly sorry. You were right and I was wrong. But she hasn't anything to do with this. I'm through with her, forever and forever and cross my heart. Now about this." I held up the certificate for all that I owned in Hired Girl, Inc. "Do you know what it is?"

I explained it to her. "I'm giving this to you, Picky. Because I'm going to be gone so long I want you to have it." I took the paper on which I had written an assignment to her, tore it up, and put the pieces in my pocket; I could not risk doing it that way-it would be too easy for Belle to tear up a separate sheet and we were not yet out of the woods. I turned the certificate over and studied the standard assignment form on the back, trying to plan how to work it in the Bank of America in trust for- "Ricky, what is your full name?"

"Frederica Virginia. Frederica Virginia Gentry. You know."

"Is it `Gentry'? I thought you said Miles had never adopted you?"

"Oh! I've been Ricky Gentry as long as I can remember. But you mean my real name. It's the same as Grandma's ... the same as my real daddy's. Heinicke. But nobody ever calls me that."

"They will now." I wrote "Frederica Virginia Heinicke" and added "and to be reassigned to her on her twenty-first birthday" while prickles ran down my spine-my original assignment might have been defective in any case.

I started to sign and then noticed our watchdog sticking her head out of the office. I glanced at my wrist, saw that we had been talking an hour; I was running out of minutes.

But I wanted it nailed down tight. "Ma'am!"

"Yes?"

"By any chance, is there a notary public around here? Or must I find one in the village?"

"I am a notary. What do you wish?"

"Oh, good! Wonderful! Do you have your seal?"

"I never go anywhere without it."

So I signed my name under her eye and she even stretched a point (on Ricky's assurance that she knew me and Pete's silent testimony to my respectability as a fellow member of the fraternity of cat people) and used the long form: "-known to me personally as being said Daniel B. Davis--" When she embossed her seal through my signature and her own I sighed with relief. Just let Belle try to find a way to twist that one!

She glanced at it curiously but said nothing. I said solemnly, "Tragedies cannot be undone but this will help. The kid's education, you know."

She refused a fee and went back into the office. I turned back to Picky and said, "Give this to your grandmother. Tell her to take it to a branch of the Bank of America in Brawley. They'll do everything else." I laid it in front of her.

She did not touch it. "That's worth a lot of money, isn't it?"

"Quite a bit. It will be worth more."

"I don't want it."

"But, Ricky, I want you to have it."

"I don't want it. I won't take it." Her eyes filled with tears and her voice got unsteady. "You're going away forever and. . . and you don't care about me any more." She sniffed. "Just like when you got engaged to her. When you could just as easily bring Pete and come live with Grandma and me. I don't want your money!"

"Picky. Listen to me, Picky. It's too late. I couldn't take it back now if I wanted to. It's already yours."

"I don't care. I won't ever touch it." She reached out and stroked Pete. "Pete wouldn't go away and leave me . . . only you're going to make him. Now I won't even have Pete."

I answered unsteadily, "Picky? Rikki-tikki-tavi? You want to see Pete. . . and me again?"

I could hardly hear her. "Of course I do. But I won't."

"But you can."

"Huh? How? You said you were going to take the Long Sleep thirty years, you said."

"And I am. I have to. But, Picky, here is what you can do. Be a good girl, go live with your grandmama, go to school-and just let this money pile up. When you are twenty-one-if you still want to see us-you'll have enough money to take the Long Sleep yourself. When you wake up I'll be there waiting for you. Pete and I will both be waiting for you. That's a solemn promise."

Her expression changed but she did not smile. She thought about it quite a long time, then said, "You'll really be there?"

"Yes. But we'll have to make a date. If you do it, Ricky, do it just the way I tell you. You arrange it with the Cosmopolitan Insurance Company and you make sure that you take your Sleep in the Riverside Sanctuary in Riverside. . . and you make very sure that they have orders to wake you up on the first day of May, 2001, exactly. I'll be there that day, waiting for you. If you want me to be there when you first open your eyes, you'll have to leave word for that, too, or they won't let me farther than the waiting room-I know that sanctuary; they're very fussy." I took out an envelope which I had prepared before I left Denver. "You don't have to remember this; I've got it all written out for you. Just save it, and on your twenty-first birthday you can make up your mind. But you can be sure that Pete and I will be there waiting for you, whether you show up or not." I laid the prepared instructions on the stock certificate.

I thought that I had her convinced but she did not touch either of them. She stared at them, then presently said, "Danny?"

"Yes, Ricky?"

She would not look up and her voice was so low that I could barely hear her. But I did hear her. "If I do . . . will you marry me?"

My ears roared and the lights flickered. But I answered steadily and much louder than she had spoken. "Yes, Ricky. That's what I want. That's why I'm doing this."

I had just one more thing to leave with her: a prepared envelope marked "To Be Opened in the Event of the Death of Miles Gentry." I did not explain it to her; I just told her to keep it. It contained proof of Belle's varied career, matrimonial and otherwise. In the hands of a lawyer it should make a court fight over his will no contest at all.

Then I gave her my class ring from Tech (it was all I had) and told her it was hers; we were engaged. "It's too big for you but you can keep it. I'll have another one for you when you wake up."

She held it tight in her fist. "I won't want another one."

"All right. Now better tell Pete good-by, Ricky. I've got to go. I can't wait a minute longer."

She hugged Pete, then handed him back to me, looked me steadily in the eye even though tears were running down her nose and leaving clean streaks. "Good-by, Danny."

"Not `good-by,' Ricky. Just `so long.' We'll be waiting for you."

It was a quarter of ten when I got back to the village. I found that a helicopter bus was due to leave for the center of the city in twenty-five minutes, so I sought out the only used-car lot and made one of the fastest deals in history, letting my car go for half what it was worth for cash in hand at once. It left me just time to sneak Pete into the bus (they are fussy about airsick cats) and we reached Powell's office just after eleven o'clock.

Powell was much annoyed that I had canceled my arrangements for Mutual to handle my estate and was especially inclined to lecture me over having lost my papers. "I can't very well ask the same judge to pass on your committal twice in the same twenty-four hours. It's most irregular."

I waved money at him, cash money with convincing figures on it. "Never mind eating me out about it, Sergeant. Do you want my business or don't you? If not, say so, and I'll beat it on up to Central Valley. Because I'm going today."

He still fumed but he gave in. Then he grumbled about adding six months to the coldsleep period and did not want to guarantee an exact date of awakening. "The contracts ordinarily read `plus or minus' one month to allow for administrative hazards."

"This one doesn't. This one reads 27 April, 2001. But I don't care whether it says `Mutual' at the top or `Central Valley.' Mr. Powell, I'm buying and you're selling. If you don't sell what I want to buy I'll go where they do sell it."

He changed the contract and we both initialed it.

At twelve straight up I was back in for my final check with their medical examiner. He looked at me. "Did you stay sober?"

"Sober as a judge."

"That's no recommendation. We'll see." He went over me almost as carefully as he had "yesterday." At last he put down his rubber hammer and said, "I'm surprised. You're in much better shape than you were yesterday. Amazingly so."

"Doc, you don't know the half of it."

I held Pete and soothed him while they gave him the first sedative. Then I lay back myself and let them work on me. I suppose I could have waited another day, or even longer, just as well as not-but the truth was that I was frantically anxious to get back to 2001.

About four in the afternoon, with Pete's flat head resting on my chest, I went happily to sleep again.

CHAPTER 12

My dreams were pleasanter this time. The only bad one I remember was not too bad, but simply endless frustration. It was a cold dream in which I wandered shivering through branching corridors, trying every door I came to, thinking that the next one would surely be the Door into Summer, with Ricky waiting on the other side. I was hampered by Pete, "following me ahead of me," that exasperating habit cats have of scalloping back and forth between the legs of persons trusted not to step on them or kick them.

At each new door he would duck between my feet, look out it, find it still winter outside, and reverse himself, almost tripping me.

But neither one of us gave up his conviction that the next door would be the right one.

I woke up easily this time, with no disorientation-in fact the F doctor was somewhat irked that all I wanted was some breakfast, the Great Los Angeles Times, and no chitchat. I didn't think it was worth while to explain to him that this was my second time around; he would not have believed me.

There was a note waiting for me, dated a week earlier, from John:

Dear Dan,

All right, I give up. How did you do it? I’m complying with your request not to be met, against Jenny's wishes. She sends her love and hopes that you won't be too long in looking us up-I've tried to explain to her that you expect to be busy for a while. We are both fine although I tend to walk where I used to run. Jenny is even more beautiful than she used to be.

Hasta la vista, amigo,

John

P.S. If the enclosure is not enough, just phone-there is plenty more where it came from. We've done pretty well, I think.

I considered calling John, both to say hello and to tell him about a colossal new idea I had had while asleep-a gadget to change bathing from a chore to a sybaritic delight. But I decided not to; I had other things on my mind. So I made notes while the notion was fresh and then got some sleep, with Pete's head tucked into my armpit. I wish I could cure him of that. It's flattering but a nuisance.

On Monday, the thirtieth of April, I checked out and went over to Riverside, where I got a room in the old Mission Inn. They made the predictable fuss about taking a cat into a room and an autobellhop is not responsive to bribes-hardly an improvement. But the assistant manager had more flexibility in his synapses; he listened to reason as long as it was crisp and rustled. I did not sleep well; I was too excited.

I presented myself to the director of the Riverside Sanctuary at ten o'clock the next morning. "Dr. Rumsey, my name is Daniel B. Davis. You have a committed client here named Frederica Heinicke?"

"I suppose you can identify yourself?"

I showed him a 1970 driver's license issued in Denver, and my withdrawal certificate from Forest Lawn Sanctuary. He looked them over and me, and handed them back. I said anxiously, "I think she's scheduled for withdrawal today. By any chance, are there any instructions to permit me to be present? I don't mean the processing routines; I mean at the last minute, when she's ready for the final restimulant and consciousness."

He shoved his 11ps out and looked judicial. "Our instructions for this client do not read to wake her today."

"No?" I felt disappointed and hurt.

"No. Her exact wishes are as follows: instead of necessarily being waked today, she wished not to be waked at all until you showed up." He looked me over and smiled. "You must have a heart of gold. I can't account for it on your beauty."

I sighed. "Thanks, Doctor."

"You can wait in the lobby or come back. We won't need you for a couple of hours."

I went back to the lobby, got Pete, and took him for a walk. I had parked him there in his new travel bag and he was none too pleased with it, even though I had bought one as much like his old one as possible and had installed a one-way window in it the night before. It probably didn't smell right as yet.

We passed the "real nice place," but I was not hungry even though I hadn't been able to eat much breakfast-Pete had eaten my eggs and had turned up his nose at yeast strips. At eleven-thirty I was back at the sanctuary. Finally they let me in to see her.

All I could see was her face; her body was covered. But it was my Ricky, grown woman size and looking like a slumbering angel.

"She's under posthypnotic instruction," Dr. Rumsey said softly. "If you will stand just there, I'll bring her up. Uh, I think you had better put that cat outside."

"No, Doctor."

He started to speak, shrugged, turned back to his patient. "Wake up, Frederica. Wake up. You must wake up now."

Her eyelids fluttered, she opened her eyes. They wandered for an instant, then she caught sight of us and smiled sleepily. "Danny and Pete." She raised both arms-and I saw that she was wearing my Tech class ring on her left thumb.

Pete chirrlupped and jumped on the bed, started doing shoulder dives against her in an ecstasy of welcome.

Dr. Rumsey wanted her to stay overnight, but Ricky would have none of it. So I had a cab brought to the door and we jumped to Brawley. Her grandmother had died in 1980 and her social links there had gone by attrition, but she had left things in storage there-books mostly. I ordered them shipped to Aladdin, care of John Sutton. Ricky was a little dazzled by the changes in her old home town and never let go my arm, but she never succumbed to that terrible homesickness which is the great hazard of the Sleep. She merely wanted to get out of Brawley as quickly as possible.

So I hired another cab and we jumped to Yuma. There I signed the county clerk's book in a fine round hand, using my full name "Daniel Boone Davis," so that there could be no possible doubt as to which D. B. Davis had designed this magnum opus. A few minutes later I was standing with her little hand in mine and choking over, "I, Daniel, take thee, Frederica - . . till death us do part."

Pete was my best man. The witnesses we scraped up in the courthouse.

We got out of Yuma at once and jumped to a guest ranch near Tucson, where we had a cabin away from the main lodge and equipped with our own Eager Beaver to fetch and carry so that we did not need to see anyone. Pete fought a monumental battle with the tom who until then had been boss of the ranch, whereupon we had to keep Pete in or watch him. This was the only shortcoming I can think of. Ricky took to being married as if she had invented it, and me-well, I had Ricky.

There isn't much more to be said. Voting Ricky's Hired Girl stock-it was still the largest single block-I had McBee eased upstairs to "Research Engineer Emeritus" and put Chuck in as chief engineer. John is boss of Aladdin but keeps threatening to retire-an idle threat. He and I and Jenny control the company, since he was careful to issue preferred stock and to float bonds rather than surrender control. I'm not on the board of either corporation; I don't run them and they compete. Competition is a good idea-Darwin thought well of it.

Me, I'm just the "Davis Engineering Company"-a drafting room, a small shop, and an old machinist who thinks I'm crazy but follows my drawings to exact tolerance. When we finish something I put it out for license.

I had my notes on Twitchell recovered. Then I wrote and told him I had made it and returned via cold sleep . . . and apologized abjectly for having "doubted" him. I asked if he wanted to see the manuscript when I finished. He never answered so I guess he is still sore at me.

But I am writing it and I'll put it in all major libraries even if I have to publish at my own expense. I owe him that much. I owe him much more; I owe him for Ricky. And for Pete. I'm going to title it Unsung

Genius. Jenny and John look as if they would last forever. Thanks to geriatrics, fresh air, sunshine, exercise, and a mind that never worries, Jenny is prettier than ever at ... well, sixty-three is my guess. John thinks that I am "merely" clairvoyant and does not want to look at the evidence. Well, how did I do it? I tried to explain it to Ricky, but she got upset when I told her that while we were on our honeymoon I was actually and no foolin' also up at Boulder, and that while I was visiting her at the Girl Scout camp I was also lying in a drugged stupor in San Fernando Valley.

She turned white. So I said, "Let's put it hypothetically. It's all logical when you look at it mathematically. Suppose we take a guinea pig-white with brown splotches. We put him in the time cage and kick him back a week. But a week earlier we had already found him there, so at that time we had put him in a pen with himself. Now we've got two guinea pigs. . . although actually it's

just one guinea pig, one being the other one a week older. So when you took one of them and kicked him back a week and-"

"Wait a minute! Which one?"

"Which one? Why, there never was but one. You took the one a week younger, of course, because-"

"You said there was just one. Then you said there were two. Then you said the two was just one. But you were going to take one of the two. . . when there was just one-"

"I'm trying to explain how two can be just one. If you take the younger-"

"How can you tell which guinea pig is younger when they look just alike?"

"Well, you could cut off the tail of the one you are sending back. Then when it came back you would--"

"Why, Danny, how cruel! Besides, guinea pigs don't have tails."

She seemed to think that proved something. I should never have tried to explain.

But Ricky is not one to fret over things that aren't important. Seeing that I was upset, she said softly, "Come here, dear." She rumpled what hair I have left and kissed me. "One of you is all I want, dearest. Two might be more than I could manage. Tell me one thing-are you glad you waited for me to grow up?"

I did my darnedest to convince her that I was.

But the explanation I tried to give does not explain everything. I missed a point even though I was riding the merry-go-round myself and counting the revolutions. Why didn't I see the notice of my own withdrawal? I mean the second one, in April 2001, not the one in December 2000. 1 should have; I was there and I used to check those lists. I was awakened (second time) on Friday, 27 April, 2001; it should have been in next morning's Times. But I did not see it. I've looked it up since and there it is: "D. B. Davis," in the Times for Saturday, 28 April, 2001.

Philosophically, just one line of ink can make a different universe as surely as having the continent of Europe missing. Is the old "branching time streams" and "multiple universes" notion correct? Did I bounce into a different universe, different because I had monkeyed with the setup? Even though I found Ricky and Pete in it? Is there another universe somewhere (or somewhen) in which Pete yowled until he despaired, then wandered off to fend for himself, deserted? And in which Ricky never managed to flee with her grandmother but had to suffer the vindictive wrath of Belle?

One line of fine print isn't enough. I probably felt asleep that night and missed reading my own name, then stuffed the paper down the chute next morning, thinking I had finished with it. I am absentminded, particularly when I'm thinking about a job.

But what would I have done if I had seen it? Gone there, met myself-and gone stark mad? No, for if I had seen it, I wouldn't have done the things I did afterward-"afterward" for me-which led up to it. Therefore it could never have happened that way. The control is a negative feedback type, with a builtin "fail safe," because the very existence of that line of print depended on my not seeing it; the apparent possibility that I might have seen it is one of the excluded "not possibles" of the basic circuit design.

"There's a divinity that shapes our ends, rough-hew them how we will." Free will and predestination in one sentence and both true. There is only one real world, with one past and one future. "As it was in the beginning, is now and ever shall be, world without end, amen." Just one . . . but big enough and complicated enough to include free will and time travel and everything else in its linkages and feedbacks and guard circuits. You're allowed to do anything inside the rules . . . but you come back to your own door.

I'm not the only person who has time-traveled. Fort listed too many cases not explainable otherwise and so did Ambrose Bierce. And there were those two ladies in the gardens of the Trianon. I have a hunch, too, that old Doc Twitchell closed that switch oftener than he admitted . . . to say nothing of others who may have learned how in the past or future. But I doubt if much ever comes of it. In my case only three people know and two don't believe me. You can't do much if you do time-travel. As Fort said, you railroad only when it comes time to railroad.

But I can't get Leonard Vincent out of my mind. Was he Leonardo da Vinci? Did he beat his way across the continent and go back with Columbus? The encyclopedia says that his life was such-and-such-but he might have revised the record. I know how that is; I've had to do a little of it. They didn't have social-security numbers, ID cards, nor fingerprints in fifteenth-century Italy; he could have swung it.

But think of him, marooned from everything he was used to, aware of flight, of power, of a million things, trying desperately to picture them so that they could be made-but doomed to frustration because you simply can't do the things we do today without centuries of former art to build on.

Tantalus had it easier.

I've thought about what could be done with time travel commercially if it were declassified-making short jumps, setting up machinery to get back, taking along components. But someday you'd make one jump too many and not be able to set up for your return because it's not time to "railroad." Something simple, like a special alloy, could whip you. And there is that truly awful hazard of not knowing which way you are going. Imagine winding up at the court of Henry VIII with a load of subflexive fasartas intended for the twenty-fifth century. Being becalmed in the horse latitudes would be better.

No, you should never market a gadget until the bugs are out of it.

But I'm not worried about "paradoxes" or "causing anachronisms"-if a thirtieth-century engineer does smooth out the bugs and then sets up transfer stations and trade, it will be because the Builder designed the universe that way. He gave us eyes, two hands, a brain; anything we do with them can't be a paradox. He doesn't need busybodies to "enforce" His laws; they enforce themselves. There are no miracles and the word "anachronism" is a semantic blank.

But I don't worry about philosophy any more than Pete does. Whatever the truth about this world, I like it. I've found my Door into Summer and I would not time-travel again for fear of getting off at the wrong station. Maybe my son will, but if he does I will urge him to go forward, not back. "Back" is for emergencies; the future is better than the past. Despite the crapehangers, romanticists, and anti-intellectuals, the world steadily grows better because the human mind, applying itself to environment, makes it better. With hands . . - with tools . . . with horse sense and science and engineering.

Most of these longhaired belittlers can't drive a nail nor use a slide rule, I'd like to invite them into Dr. Twitchell's cage and ship them back to the twelfth century-then let them enjoy it.

But I am not mad at anybody and I like now. Except that Pete is getting older, a little fatter, and not as inclined to choose a younger opponent; all too soon he must take the very Long Sleep. I hope with all my heart that his gallant little soul may find its Door into Summer, where catnip fields abound and tabbies are complacent, and robot opponents are programmed to fight fiercely -but always lose-and people have friendly laps and legs to strop against, but never a foot that kicks.

Ricky is getting fat, too, but for a temporary, happier reason. It has just made her more beautiful and her sweet eternal Yea! is unchanged, but it isn't comfortable for her. I'm working on gadgets to make things easier. It just isn't very convenient to be a woman; something ought to be done and I'm convinced that some things can be done. There's that matter of leaning over, and also the backaches-I'm working on those, and I've built her a hydraulic bed that I think I will patent. It ought to be easier to get in and out of a bathtub than it is too. I haven't solved that yet.

For old Pete I've built a "cat bathroom" to use in bad weather-automatic, self-replenishing, sanitary, and odorless. However, Pete, being a proper cat, prefers to go outdoors, and he has never given up his conviction that if you just try all the doors one of them is bound to be the Door into Summer.

You know, I think he is right.

Citizen of the Galaxy

Chapter 1

"Lot ninety-seven," the auctioneer announced. "A boy."

The boy was dizzy and half sick from the feel of ground underfoot. The slave ship had come more than forty lightyears; it carried in its holds the stink of all slave ships, a reek of crowded unwashed bodies, of fear and vomit and ancient grief. Yet in it the boy had been someone, a recognized member of a group, entitled to his meal each day, entitled to fight for his right to eat it in peace. He had even had friends.

Now he was again nothing and nobody, again about to be sold.

A lot had been knocked down on the auction block, matched blonde girls, alleged to be twins; the bidding had been brisk, the price high. The auctioneer turned with a smile of satisfaction and pointed at the boy. "Lot ninety-seven. Shove him up here."

The boy was cuffed and prodded onto the block, stood tense while his feral eyes darted around, taking in what he had not been able to see from the pen. The slave market lies on the spaceport side of the famous Plaza of Liberty, facing the hill crowned by the still more famous Praesidium of the Sargon, capitol of the Nine Worlds. The boy did not recognize it; he did not even know what planet he was on. He looked at the crowd.

Closest to the slave block were beggars, ready to wheedle each buyer as he claimed his property. Beyond them, in a semicircle, were seats for the rich and privileged. On each flank of this elite group waited their slaves, bearers, and bodyguards and drivers, idling near the ground cars of the rich and the palanquins and sedan chairs of the still richer. Behind the lords and ladies were commoners, idlers and curious, freedmen and pickpockets and vendors of cold drinks, an occasional commoner merchant not privileged to sit but alert for a bargain in a porter, a clerk, a mechanic, or even a house servant for his wives.

"Lot ninety-seven," the auctioneer repeated. "A fine, healthy lad, suitable as page or tireboy. Imagine him, my lords and ladies, in the livery of your house. Look at—" His words were lost in the scream of a ship, dopplering in at the spaceport behind him.

The old beggar Baslim the Cripple twisted his half-naked body and squinted his one eye over the edge of the block. The boy did not look like a docile house servant to Baslim; he looked a hunted animal, dirty, skinny, and bruised. Under the dirt, the boy's back showed white scar streaks, endorsements of former owners' opinions.

The boy's eyes and the shape of his ears caused Baslim to guess that he might be of unmutated Earth ancestry, but not much could be certain save that he was small, scared, male, and still defiant. The boy caught the beggar staring at him and glared back.

The din died out and a wealthy dandy seated in front waved a kerchief lazily at the auctioneer. "Don't waste our time, you rascal. Show us something like that last lot."

"Please, noble sir. I must dispose of the lots in catalog order."

"Then get on with it! Or cuff that starved varmint aside and show us merchandise."

"You are kind, my lord." The auctioneer raised his voice. "I have been asked to be quick and I am sure my noble employer would agree. Let me be frank. This beautiful lad is young; his new owner must invest instruction in him. Therefore—" The boy hardly listened. He knew only a smattering of this language and what was said did not matter anyhow. He looked over the veiled ladies and elegant men, wondering which one would be his new problem.

"—a low starting price and a quick turnover. A bargain! Do I hear twenty stellars?"

The silence grew awkward. A lady, sleek and expensive from sandaled feet to lace-veiled face, leaned toward the dandy, whispered and giggled. He frowned, took out a dagger and pretended to groom his nails. "I said to get on with it," he growled.

The auctioneer sighed. "I beg you to remember, gentlefolk, that I must answer to my patron. But we'll start still lower. Ten stellars—yes, I said. 'Ten.' Fantastic!"

He looked amazed. "Am I growing deaf? Did someone lift a finger and I fail to see it? Consider, I beg you. Here you have a fresh young lad like a clean sheet of paper; you can draw any design you like. At this unbelievably low price you can afford to make a mute of him, or alter him as your fancy pleases."

"Or feed him to the fish!"

"'Or feed him—' Oh, you are witty, noble sir!"

"I'm bored. What makes you think that sorry item is worth anything? Your son, perhaps?"

The auctioneer forced a smile. "I would be proud if he were. I wish I were permitted to tell you this lad's ancestry—"

"Which means you don't know."

"Though my lips must be sealed, I can point out the shape of his skull, the perfectly rounded curve of his ears." The auctioneer nipped the boy's ear, pulled it.

The boy twisted and bit his hand. The crowd laughed.

The man snatched his hand away. "A spirited lad. Nothing a taste of leather won't cure. Good stock, look at his ears. The best in the Galaxy, some say."

The auctioneer had overlooked something; the young dandy was from Syndon IV. He removed his helmet, uncovering typical Syndonian ears, long, hairy, and pointed. He leaned forward and his ears twitched. "Who is your noble protector?"

The old beggar Baslim scooted near the corner of the block, ready to duck. The boy tensed and looked around, aware of trouble without understanding why. The auctioneer went white—no one sneered at Syndonians face to face . . . not more than once. "My lord," he gasped, "you misunderstood me."

"Repeat that crack about 'ears' and 'the best stock.'"

Police were in sight but not close. The auctioneer wet his lips. "Be gracious, gentle lord. My children would starve. I quoted a common saying—not my opinion. I was trying to hasten a bid for this chattel . . . as you yourself urged."

The silence was broken by a female voice saying, "Oh, let him go, Dwarol. It's not his fault how the slave's ears are shaped; he has to sell him."

The Syndonian breathed heavily. "Sell him, then!"

The auctioneer took a breath. "Yes, my lord." He pulled himself together and went on, "I beg my lords' and ladies' pardons for wasting time on a minor lot. I now ask for any bid at all."

He waited, said nervously, "I hear no bid, I see no bid. No bid once . . . if you do not bid, I am required to return this lot to stock and consult my patron before continuing. No bid twice. There are many beautiful items to be offered; it would be a shame not to show them. No bid three—"

"There's your bid," the Syndonian said.

"Eh?" The old beggar was holding up two fingers. The auctioneer stared. "Are you offering a bid?"

"Yes," croaked the old man, "if the lords and ladies permit."

The auctioneer glanced at the seated circle. Someone in the crowd shouted, "Why not? Money is money."

The Syndonian nodded; the auctioneer said quickly, "You offer two stellars for this boy?"

"No, no, no, no, no!" Baslim screamed. "Two minims!"

The auctioneer lacked at him; the beggar jerked his head aside. The auctioneer shouted, "Get out! I'll teach you to make fun of your betters!"

"Auctioneer!"

"Sir? Yes, my lord?"

The Syndonian said, "Your words were 'any bid at all.' Sell him the boy."

"But—"

"You heard me."

"My lord, I cannot sell on one bid. The law is clear; one bid is not an auction. Nor even two unless the auctioneer has set a minimum. With no minimum, I am not allowed to sell with less than three bids. Noble sir, this law was given to protect the owner, not my unhappy self."

Someone shouted, "That's the law!"

The Syndonian frowned. "Then declare the bid."

"Whatever pleases my lords and ladies." He faced the crowd. "For lot ninety-seven: I heard a bid of two minims. Who'll make it four?"

"Four," stated the Syndonian.

"Five!" a voice called out.

The Syndonian motioned the beggar to him. Baslim moved on hands and one knee, with the stump of the other leg dragging and was hampered by his alms bowl. The auctioneer started droning, "Going at five minims once . . . five minims twice . . ."

"Six!" snapped the Syndonian, glanced into the beggar's bowl, reached in his purse and threw him a handful of change.

"I hear six. Do I hear seven?"

"Seven," croaked Baslim.

"I'm bid seven. You, over there, with your thumb tip. You make it eight?"

"Nine!" interposed the beggar.

The auctioneer glared but put the bid. The price was approaching one stellar, too expensive a joke for most of the crowd. The lords and ladies neither wanted the worthless slave nor wished to queer the Syndonian's jest.

The auctioneer chanted, "Going once at nine . . . going twice at nine . . . going three times—sold at nine minims!" He shoved the boy off the block almost into the beggar's lap. "Take him and get out!"

"Softly," cautioned the Syndonian. "The bill of sale."

Restraining himself, the auctioneer filled in price and new owner on a form already prepared for lot ninety-seven. Baslim paid over nine minims—then had to be subsidized again by the Syndonian, as the stamp tax was more than the selling price. The boy stood quietly by. He knew that he had been sold again and he was getting it through his head that the old man was his new master—not that it mattered; he wanted neither of them. While all were busy with the tax, he made a break.

Without appearing to look the old beggar made a long arm, snagged an ankle, pulled him back. Then Baslim heaved himself erect, placed an arm across the boy's shoulders and used him for a crutch. The boy felt a bony hand clutch his elbow in a strong grip and relaxed himself to the inevitable—another time; they always got careless if you waited.

Supported, the beggar bowed with great dignity. "My lord," he said huskily, "I and my servant thank you."

"Nothing, nothing." The Syndonian flourished his kerchief in dismissal.

From the Plaza of Liberty to the hole where Baslim lived was less than a li, no more than a half mile, but it took them longer than such distance implies. The hopping progress the old man could manage using the boy as one leg was even slower than his speed on two hands and one knee, and it was interrupted frequently by rests for business—not that business ceased while they shuffled along, as the old man required the boy to thrust the bowl under the nose of every pedestrian.

Baslim accomplished this without words. He had tried Interlingua, Space Dutch, Sargonese, half a dozen forms of patois, thieves' kitchen, cant, slave lingo, and trade talk—even System English—without result, although he suspected that the boy had understood him more than once. Then he dropped the attempt and made his wishes known by sign language and a cuff or two. If the boy and he had no words in common, he would teach him—all in good time, all in good time. Baslim was in no hurry. Baslim was never in a hurry; he took the long view.

Baslim's home lay under the old amphitheater. When Sargon Augustus of imperial memory decreed a larger circus only part of the old one was demolished; the work was interrupted by the Second Cetan War and never resumed. Baslim led the boy into these ruins. The going was rough and it was necessary for the old man to resume crawling. But he never let go his grip. Once he had the boy only by breechclout; the boy almost wriggled out of his one bit of clothing before the beggar snatched a wrist. After that they went more slowly.

They went down a hole at the dark end of a ruined passage, the boy being forced to go first. They crawled over shards and rubble and came into a night-black but smooth corridor. Down again . . . and they were in the performers' barracks of the old amphitheater, under the old arena.

They came in the dark to a well-carpentered door. Baslim shoved the boy through, followed him and closed it, pressed his thumb to a personal lock, touched a switch; light came on. "Well, lad, we're home."

The boy stared. Long ago he had given up having expectations of any sort. But what he saw was not anything he could have expected. It was a modest decent small living room, tight, neat, and clean. Ceiling panels gave pleasant glareless light. Furniture was sparse but adequate. The boy looked around in awe; poor as it was, it was better than anything he remembered having lived in.

The beggar let go his shoulder, hopped to a stack of shelves, put down his bowl, and took up a complicated something. It was not until the beggar shucked his clout and strapped the thing in place that the boy figured out what it was: an artificial leg, so well articulated that it rivaled the efficiency of flesh and blood. The man stood up, took trousers from a chest, drew them on, and hardly seemed crippled. "Come here," he said, in Interlingua.

The boy did not move. Baslim repeated it in other languages, shrugged, took the boy by an arm, led him into a room beyond. It was small, both kitchen and wash room; Baslim filled a pan, handed the boy a bit of soap and said, "Take a bath." He pantomimed what he wanted.

The boy stood in mute stubbornness. The man sighed, picked up a brush suitable for floors and started as if to scrub the boy. He stopped with stiff bristles touching skin and repeated, "Take a bath. Wash yourself," saying it in Interlingua and System English.

The boy hesitated, took off his clout and started slowly to lather himself.

Baslim said, "That's better," picked up the filthy breech clout, dropped it in a waste can, laid out a towel, and, turning to the kitchen side, started preparing a meal.

A few minutes later he turned and the boy was gone.

Unhurriedly he walked into the living room, found the boy naked and wet and trying very hard to open the door. The boy saw him but redoubled his futile efforts. Baslim tapped him on the shoulder, hooked a thumb toward the smaller room. "Finish your bath."

He turned away. The boy slunk after him.

When the boy was washed and dry, Baslim put the stew he had been freshening back on the burner, turned the switch to "simmer" and opened a cupboard, from which he removed a bottle and daubs of vegetable flock. Clean, the boy was a pattern of scars and bruises, unhealed sores and cuts and abrasions, old and new. "Hold still."

The stuff stung; the boy started to wiggle. "Hold still!" Baslim repeated in a pleasant firm tone and slapped him. The boy relaxed, tensing only as the medicine touched him. The man looked carefully at an old ulcer on the boy's knee, then, humming softly, went again to the cupboard, came back and injected the boy in one buttock—first acting out the idea that he would slap his head off his shoulders if he failed to take it quietly. That done, he found an old cloth, motioned the boy to wrap himself a clout, turned back to his cooking.

Presently Baslim placed big bowls of stew on the table in the living room, first moving chair and table so that the boy might sit on the chest while eating. He added a handful of fresh green lentils and a couple of generous chunks of country bread, blade and hard. "Soup's on, lad. Come and get it."

The boy sat down on the edge of the chest but remained poised for flight and did not eat.

Baslim stopped eating. "What's the matter?" He saw the boy's eyes flick toward the door, then drop. "Oh, so that's it." He got up, steadying himself to get his false leg under him, went to the door, pressed his thumb in the lock. He faced the boy. "The door is unlocked," he announced. "Either eat your dinner, or leave." He repeated it several ways and was pleased when he thought that he detected understanding on using the language he surmised might be the slave's native tongue.

But he let the matter rest, went back to the table, got carefully into his chair and picked up his spoon.

The boy reached for his own, then suddenly was off the chest and out the door. Baslim went on eating. The door remained ajar, light streaming into the labyrinth.

Later, when Baslim had finished a leisurely dinner, he became aware that the boy was watching him from the shadows. He avoided looking, lounged back, and started picking his teeth. Without turning, he said in the language he had decided might be the boy's own, "Will you come eat your dinner? Or shall I throw it away?"

The boy did not answer. "All right," Baslim went on, "if you won't, I'll have to close the door. I can't risk leaving it open with the light on." He slowly got up, went to the door, and started to close it. "Last call," he announced. "Closing up for the night."

As the door was almost closed the boy squealed, "Wait!" in the language Baslim expected, and scurried inside.

"Welcome," Baslim said quietly. "I'll leave it unlocked, in case you change your mind." He sighed. "If I had my way, no one would ever be locked in."

The boy did not answer but sat down, huddled himself over the food and began wolfing it as if afraid it might be snatched away. His eyes flicked from right to left. Baslim sat down and watched.

The extreme pace slowed but chewing and gulping never ceased until the last bit of stew had been chased with the last honk of bread, the last lentil crunched and swallowed. The final bites appeared to go down by sheer will power, but swallow them he did, sat up, looked Baslim in the eye and smiled shyly. Baslim smiled back.

The boy's smile vanished. He turned white, then a light green. A rope of drool came willy-nilly from a corner of his mouth—and he was disastrously sick.

Baslim moved to avoid the explosion. "Stars in heaven, I'm an idiot!" he exclaimed, in his native language. He went into the kitchen, returned with rags and pail, wiped the boy's face and told him sharply to quiet down, then cleaned the stone floor.

After a bit he returned with a much smaller ration, only broth and a small piece of bread. "Soak the bread and eat it."

"I better not."

"Eat it. You won't be sick again. I should have known better, seeing your belly against your backbone, than to give you a man-sized meal. But eat slowly."

The boy looked up and his chin quivered. Then he took a small spoonful. Baslim watched while he finished the broth and most of the bread.

"Good," Baslim said at last. "Well, I'm for bed, lad. By the way, what's your name?"

The boy hesitated. "Thorby."

"'Thorby'—a good name. You can call me 'Pop.' Good night." He unstrapped his leg, hopped to the shelf and put it away, hopped to his bed. It was a peasant bed, a hard mattress in a corner. He scrunched close to the wall to leave room for the boy and said, "Put out the light before you come to bed." Then he closed his eyes and waited.

There was long silence. He heard the boy go to the door; the light went out. Baslim waited, listening for noise of the door opening. It did not come; instead he felt the mattress give as the boy crawled in. "Good night," he repeated.

"G'night."

He had almost dozed when he realized that the boy was trembling violently. He reached behind him, felt skinny ribs, patted them; the boy broke into sobs.

He turned over, eased his stump into a comfortable position, put an arm around the boy's shaking shoulders and pulled his face against his own chest "It's all right, Thorby," he said gently, "it's all right. It's over now. It'll never happen again."

The boy cried out loud and clung to him. Baslim held him, speaking softly until the spasms stopped. Then he held still until he was sure that Thorby was asleep.

Chapter 2

Thorby's wounds healed, those outside quickly, those inside slowly. The old beggar acquired another mattress and stuck it in the other corner. But Baslim would sometimes wake to find a small warm bundle snuggled against his spine and know thereby that the boy had had another nightmare. Baslim was a light sleeper and hated sharing a bed. But he never forced Thorby to go back to his own bed when this happened.

Sometimes the boy would cry out his distress without waking. Once Baslim was jerked awake by hearing Thorby wail, "Mama, Mama!" Without making a light he crawled quickly to the boy's pallet and bent over him. "There, there, son, it's all right."

"Papa?"

"Go back to sleep, son. You'll wake Mama." He added, "I'll stay with you—you're safe. Now be quiet. We don't want to wake Mama . . . do we?"

"All right, Papa."

The old man waited, almost without breathing, until he was stiff and cold and his stump ached. When he was satisfied that the boy was asleep he crawled to his own bed.

That incident caused the old man to try hypnosis. A long time earlier, when Baslim had had two eyes, two legs, and no reason to beg, he had learned the art. But he had never liked hypnosis, even for therapy; he had an almost religious concept of the dignity of the individual; hypnotizing another person did not fit his basic evaluation.

But this was an emergency.

He was sure that Thorby had been taken from his parents so young that he had no conscious memory of them. The boy's notion of life was a jumbled recollection of masters, some bad, some worse, all of whom had tried to break the spirit of a "bad" boy. Thorby had explicit memories of some of these masters and described them in gutter speech vivid and violent. But he was never sure of time or place —"place" was some estate, or household, or factor's compound, never a particular planet or sun (his notions of astronomy were mostly wrong and he was innocent of galactography) and "time" was simply "before" or "after," "short" or "long." While each planet has its day, its year, its own method of dating, while they are reconciled for science in terms of the standard second as defined by radioactive decay, the standard year of the birthplace of mankind, and a standard reference date, the first jump from that planet, Sol III, to its satellite, it was impossible for an illiterate boy to date anything that way. Earth was a myth to Thorby and a "day" was the time between two sleeps.

Baslim could not guess the lad's age. The boy looked like unmutated Earth stock and was pre-adolescent, but any guess would be based on unproved assumption. Vandorians and Italo-Glyphs look like the original stock, but Vandorians take three times as long to mature—Baslim recalled the odd tale about the consular agent's daughter whose second husband was the great grandson of her first and she had outlived them both. Mutations do not necessarily show up in appearance.

It was conceivable that this boy was "older" in standard seconds than Baslim himself; space is deep and mankind adapted itself in many ways to many conditions. Never mind!—he was a youngster and he needed help.

Thorby was not afraid of hypnosis; the word meant nothing to him, nor did Baslim explain. After supper one evening the old man simply said, "Thorby, I want you to do something."

"Sure, Pop. What?"

"Lie down on your bed. Then I'm going to make you sleepy and we'll talk."

"Huh? You mean the other way around, don't you?"

"No. This is a different sort of sleep. You'll be able to talk."

Thorby was dubious but willing. The old man lighted a candle, switched off the glow plates. Using the flame to focus attention he started the ancient routines of monotonous suggestion, of relaxation, drowsiness . . . sleep.

"Thorby, you are asleep but you can hear me. You can answer."

"Yes, Pop."

"You will stay asleep until I tell you to wake. But you will be able to answer any question I ask."

"Yes, Pop."

"You remember the ship that brought you here. What was its name?"

"The Merry Widow. Only that wasn't what we called it."

"You remember getting into that ship. Now you are in it—you can see it. You remember all about it. Now go back to where you were when you went aboard."

The boy stiffened without waking. "I don't want to!"

"I'll be right with you. You'll be safe. Now what is the name of the place? Go back to it. Look at it."

An hour and a half later Baslim still squatted beside the sleeping boy. Sweat poured down wrinkles in his face and he felt badly shaken. To get the boy back to the time he wanted to explore it had been necessary to force him back through experiences disgusting even to Baslim, old and hardened as he was. Repeatedly Thorby had fought against it, nor could Baslim blame him—he felt now that he could count the scars on the boy's back and assign a villain to each.

But he had achieved his purpose; to delve farther back than the boy's waking memory ran, back into his very early childhood, and at last to the traumatic moment when the baby manchild had been taken from his parents.

He left the boy in deep coma while he collected his shattered thoughts. The last few moments of the quest had been so bad that the old man doubted his judgment in trying to dig out the source of the trouble.

Well, let's see . . . what had he found out?

The boy was born free. But he had always been sure of that.

The boys native language was System English, spoken with an accent Baslim could not place; it had been blurred by baby speech. That placed him inside the Terran Hegemony; it was even possible (though not likely) that the boy had been born on Earth. That was a surprise; he had thought the boy's native language was Interlingua, since he spoke it better than he did the other three he knew.

What else? Well, the boy's parents were certainly dead, if the confused and terror-ridden memory he had pried out of the boy's skull could be trusted. He had been unable to dig out their family name nor any way of identifying them—they were just "Papa" and "Mama"—so Baslim gave up a half-formed plan of trying to get word to relatives of the boy.

Well, now to make this ordeal he had put the lad through worth the cost—

"Thorby?"

The boy moaned and stirred. "Yes, Pop?"

"You are asleep. You won't wake up until I tell you to."

"I won't wake up until you tell me to."

"When I tell you, you will wake at once. You will feel fine and you won't remember anything we've talked about."

"Yes, Pop."

"You will forget. But you will feel fine. About half an hour later you will feel sleepy again. I'll tell you to go to bed and you will go to bed and go right to sleep. You'll sleep all night, good sleep and pleasant dreams. You won't have any more bad dreams. Say it."

"I won't have any more bad dreams."

"You won't ever have any more bad dreams. Not ever."

"Not ever."

"Papa and Mama don't want you to have any bad dreams. They're happy and they want you to be happy. When you dream about them, it will always be happy dreams."

"Happy dreams."

"Everything is all right now, Thorby. You are starting to wake.

You're waking up and you can't remember what we've been talking about. But you'll never have bad dreams again. Wake up, Thorby."

The boy sat up, rubbed his eyes, yawned, and grinned. "Gee, I fell asleep. Guess I played out on you, Pop. Didn't work, huh?"

"Everything's all right, Thorby."

It took more than one session to lay those ghosts, but the nightmares dwindled and stopped. Baslim was not technician enough to remove the bad memories; they were still there. All he did was to implant suggestions to keep them from making Thorby unhappy. Nor would Baslim have removed memories had he been skilled enough; he had a stiff-necked belief that a man's experiences belonged to him and that even the worst should not be taken from him without his consent.

Thorby's days were as busy as his nights had become peaceful. During their early partnership Baslim kept the boy always with him. After breakfast they would hobble to the Plaza of Liberty, Baslim would sprawl on the pavement and Thorby would stand or squat beside him, looking starved and holding the bowl. The spot was always picked to obstruct foot traffic, but not enough to cause police to do more than growl. Thorby learned that none of the regular police in the Plaza would ever do more than growl: Baslim's arrangements with them were beneficial to underpaid police.

Thorby learned the ancient trade quickly—learned that men with women were generous but that the appeal should be made to the woman, that it was usually a waste of time to ask alms of unaccompanied women (except unveiled women), that it was an even bet between a kick and a gift in bracing a man alone, that spacemen hitting dirt gave handsomely. Baslim taught him to keep a little money in the bowl, neither smallest change nor high denominations.

At first, Thorby was just right for the trade; small, half-starved, covered with sores, his appearance alone was enough. Unfortunately he soon looked better. Baslim repaired that with make-up, putting shadows under his eyes and hollows in his cheeks. A horrible plastic device stuck on his shinbone provided a realistic large "ulcer" in place of the sores he no longer had; sugar water made it attractive to flies—people looked away even as they dropped coins in the bowl.

His better-fed condition was not as easy to disguise but he shot up fast for a year or two and continued skinny, despite two hearty meals a day and a bed to doss on.

Thorby soaked up a gutter education beyond price. Jubbulpore, capital of Jubbul and of the Nine Worlds, residence in chief of the Great Sargon, boasts more than three thousand licensed beggars, twice that number of street vendors, more grog shops than temples and more temples than any other city in the Nine Worlds, plus numbers uncountable of sneak thieves, tattoo artists, griva pushers, doxies, cat burglars, back-alley money changers, pickpockets, fortune tellers, muggers, assassins, and grifters large and small. Its inhabitants brag that within a li of the pylon at the spaceport end of the Avenue of Nine anything in the explored universe can be had by a man with cash, from a starship to ten grains of stardust, from the ruin of a reputation to the robes of a senator with the senator inside.

Technically Thorby was not part of the underworld, since he had a legally recognized status (slave) and a licensed profession (beggar). Nevertheless he was in it, with a worm's-eye view. There were no rungs below his on the social ladder.

As a slave he had learned to lie and steal as naturally as other children learn company manners, and much more quickly. But he discovered that these common talents were raised to high art in the seamy underside of the city. As he grew older, learned the language and the streets, Baslim began to send him out on his own, to run errands, to shop for food, and sometimes to make a pitch by himself while the old man stayed in. Thus he "fell into evil company" if one can fall from elevation zero.

He returned one day with nothing in his bowl. Baslim made no comment but the boy explained. "Look, Pop, I did all right!" From under his clout he drew a fancy scarf and proudly displayed it.

Baslim did not smile and did not touch it. "Where did you get that?"

"I inherited it!"

"Obviously. But from whom?"

"A lady. A nice lady, pretty.

"Let me see the house mark. Mmm . . . probably Lady Fascia. Yes, she is pretty, I suppose. But why aren't you in jail?"

"Why, gee, Pop, it was easy! Ziggie has been teaching me. He knows all the tricks. He's smooth—you should see him work."

Baslim wondered how one taught morals to a stray kitten? He did not consider discussing it in abstract ethical terms; there was nothing in the boy's background, nothing in his present environment, to make it possible to communicate on such a level.

"Thorby, why do you want to change trades? In our business you pay the police their commission, pay your dues to the guild, make an offering at the temple on holy day, and you've no worries. Have we ever gone hungry?"

"No, Pop—but look at it! It must have cost almost a stellar!"

"At least two stellars, I'd say. But a fence would give you two minims—if he was feeling generous. You should have brought more than that back in your bowl."

"Well . . . I'll get better at it. And it's more fun than begging. You ought to see how Ziggie goes about it."

"I've seen Ziggie work. He's skillful."

"He's the best!"

"Still, I suppose he could do better with two hands."

"Well, maybe, though you only use one hand. But he's teaching me to use either hand."

"That's good. You might need to know—some day you might find yourself short one, the way Ziggie is. You know how Ziggie lost his hand?"

"Huh?"

"You know the penalty? If they catch you?"

Thorby did not answer. Baslim went on, "One hand for the first offense—that's what it cost Ziggie to learn his trade. Oh, he's good, for he's still around and plying his trade. You know what the second offense carries? Not just the other hand. You know?"

Thorby gulped. "I'm not sure."

"I think you must have heard; you don't want to remember." Baslim drew his thumb across his throat. "That's what Ziggie gets next time—they shorten him. His Serenity's justices figure that a boy who can't learn once won't learn twice, so they shorten him."

"But, Pop, I won't be caught! I'll be awful careful . . . just like today. I promise!"

Baslim sighed. The kid still believed that it couldn't happen to him. "Thorby, get your bill of sale."

"What for, Pop?"

"Get it."

The boy fetched it; Baslim examined it—"one male child, registered number (left thigh) 8XK40367"—nine minims and get out of here, you! He looked at Thorby and noted with surprise that he was a head taller than he had been that day. "Get my stylus. I'm going to free you. I've always meant to, but there didn't seem to be any hurry. But we'll do it now and tomorrow you go to the Royal Archives and register it."

Thorby's jaw dropped. "What for, Pop?"

"Don't you want to be free?"

"Uh . . . well . . . Pop, I like belonging to you."

"Thanks, lad. But I've got to do it."

"You mean you're kicking me out?"

"No. You can stay. But only as a freedman. You see, son, a master is responsible for his bondservant. If I were a noble and you did something, I'd be fined. But since I'm not . . . well, if I were shy a hand, as well as a leg and an eye, I don't think I could manage. So if you're going to learn Ziggie's trade, I had better free you; I can't afford the risk. You'll have to take your own chances; I've lost too much already. Any more and I'd be better off shortened."

He put it brutally, never mentioning that the law in application was rarely so severe—in practice, the slave was confiscated, sold, and his price used in restitution, if the master had no assets. If the master were a commoner, he might also get a flogging if the judge believed him to be actually as well as legally responsible for the slave's misdeed. Nevertheless Baslim had stated the law: since a master exercised high and low justice over a slave, he was therefore liable in his own person for his slave's acts, even to capital punishment.

Thorby started to sob, for the first time since the beginning of their relationship. "Don't turn me loose. Pop—please don't! I've got to belong to you."

"I'm sorry, son. I told you you don't have to go away."

"Please, Pop. I won't ever swipe another thing!"

Baslim took his shoulder. "Look at me, Thorby. I'll make you a bargain."

"Huh? Anything you say. Pop. As long as—"

"Wait till you hear it. I won't sign your papers now. But I want you to promise two things."

"Huh? Sure! What?"

"Don't rush. The first is that you promise never again to steal anything, from anybody. Neither from fine ladies in sedan chairs, nor from poor people like ourselves—one is too dangerous and the other . . . well, it's disgraceful, though I don't expect you know what that means. The second is to promise that you will never lie to me about anything . . . not anything."

Thorby said slowly, "I promise."

"I don't mean just lying about the money you've been holding out on me, either. I mean anything. By the way, a mattress is no place to hide money. Look at me, Thorby. You know I have connections throughout the city."

Thorby nodded. He had delivered messages for the old man to odd places and unlikely people. Baslim went on, "If you steal. I'll find out . . . eventually. If you lie to me, I'll catch you . . . eventually. Lying to other people is your business, but I tell you this: once a man gets a reputation as a liar, he might as well be struck dumb, for people do not listen to the wind. Never mind. The day I learn that you have stolen anything . . . or the day I catch you lying to me . . . I sign your papers and free you."

"Yes, Pop."

"That's not all. I'll kick you out with what you had when I bought you—a breechclout and a set of bruises. You and I will be finished. If I set eyes on you again, I'll spit on your shadow."

"Yes, Pop. Oh, I never will, Pop!"

"I hope not. Go to bed."

Baslim lay awake, worrying, wondering if he had been too harsh.

But, confound it, it was a harsh world; he had to teach the kid to live in it.

He heard a sound like a rodent gnawing; he held still and listened. Presently he heard the boy get up quietly and go to the table; there followed a muted jingle of coins being placed on wood and he heard the boy return to his pallet.

When the boy started to snore he was able to drop off to sleep himself.

Chapter 3

Baslim had long since taught Thorby to read and write Sargonese and Interlingua, encouraging him with cuffs and other inducements since Thorby's interest in matters intellectual approached zero. But the incident involving Ziggie and the realization that Thorby was growing up reminded Baslim that time did not stand still, not with kids.

Thorby was never able to place the time when he realized that Pop was not exactly (or not entirely) a beggar. The extremely rigorous instruction he now received, expedited by such unlikely aids as a recorder, a projector, and a sleep instructor, would have told him, but by then nothing Pop could do or say surprised him—Pop knew everything and could manage anything. Thorby had acquired enough knowledge of other beggars to see discrepancies; he was not troubled by them—Pop was Pop, like the sun and the rain.

They never mentioned outside their home anything that happened inside, nor even where it was; no guest was ever there. Thorby acquired friends and Baslim had dozens or even hundreds and seemed to know the whole city by sight. No one but Thorby had access to Baslim's hideaway. But Thorby was aware that Pop had activities unconnected with begging. One night they went to sleep as usual; Thorby awakened about dawn to hear someone stirring and called out sleepily, "Pop?"

"Yes. Go back to sleep."

Instead the boy got up and switched on the glow plates. He knew it was hard for Baslim to get around in the dark without his leg; if Pop wanted a drink of water or anything, he'd fetch it. "You all right, Pop?" he asked, turning away from the switch.

Then he gasped in utter shock. This was a stranger, a gentleman!

"It's all right, Thorby," the stranger said with Pop's voice. Take it easy, son."

"Pop?"

"Yes, son. I'm sorry I startled you—I should have changed before I came back. Events pushed me." He started stripping off fine clothing.

When Baslim removed the evening headdress, he looked more like Pop . . . except for one thing. "Pop . . . your eye."

"0h, that. It comes out as easily as it went in. I look better with two eyes, don't I?"

"I don't know." Thorby stared at it worriedly. "I don't think I like it."

"So? Well, you won't often see me wear it. As long as you are awake you can help."

Thorby was not much help; everything Pop did was new to him.

First Baslim dug tanks and trays from a food cupboard which appeared to have an extra door in its back. Then he removed the false eye and, handling it with great care, unscrewed it into two parts and removed a tiny cylinder, using tweezers.

Thorby watched the processing that followed but did not understand, except that he could see that Pop was working with extreme care and exact timing. At last Baslim said, "All done. Now well see if I got any pictures."

Baslim inserted the spool in a microviewer, scanned it, smiled grimly and said, "Get ready to go out. Skip breakfast. You can take along a piece of bread."

"Huh?"

"Get moving. No time to waste."

Thorby put on his make-up and clout and dirtied his face. Baslim was waiting with a photograph and a small flat cylinder about the size of a half-minim bit. He shoved the photo at Thorby. "Look at it. Memorize it."

"Why?"

Baslim pulled it back. "Would you recognize that man?"

"Uh . . . let me see it again."

"You've got to know him. Look at it well this time."

Thorby did so, then said, "All right. I'll know him."

"He'll be in one of the taprooms near the port. Try Mother Shaum's first, then the Supernova and the Veiled Virgin. If you don't hit, work both sides of Joy Street until you do. You've got to find him before the third hour."

"I'll find him, Pop."

"When you do, put this thing in your bowl along with a few coins. Then tell him the tale but be sure to mention that you are the son of Baslim the Cripple."

"Got it, Pop."

"Get going."

Thorby wasted no time getting down to the port. It was the morning following the Feast of the Ninth Moon and few were stirring; he did not bother to pretend to beg en route, he simply went the most direct way, through back courts, over fences, or down streets, avoiding only the sleepy night patrol. But, though he reached the neighborhood quickly, he had the Old One's luck in finding his man; he was in none of the dives Baslim had suggested, nor did the rest of Joy Street turn him up. It was pushing the deadline and Thorby was getting worried when he saw the man come out of a place he had already tried.

Thorby ducked across the street, came up behind him. The man was with another man—not good. But Thorby started in:

"Alms, gentle lords! Alms for mercy on your souls!"

The wrong man tossed him a coin; Thorby caught it in his teeth. "Bless you, my lord!" He turned to the other. "Alms, gentle sir. A small gift for the unfortunate. I am the son of Baslim the Cripple and—"

The first man aimed a kick at him. "Get out."

Thorby rolled away from it. "—son of Baslim the Cripple. Poor old Baslim needs soft foods and medicines. I am all alone—"

The man of the picture reached for his purse. "Don't do it," his companion advised. "They're all liars and I've paid him to let us alone."

"'Luck for the jump,'" the man answered. "Now let me see . . ." He fumbled in his purse, glanced into the bowl, placed something in it.

"Thank you, my lords. May your children be sons." Thorby moved on before he looked. The tiny flat cylinder was gone.

He worked on up Joy Street, doing fairly well, and checked the Plaza before heading home. To his surprise Pop was in his favorite pitch, by the auction block and facing the port. Thorby slipped down beside him. "Done."

The old man grunted.

"Why don't you go home, Pop? You must be tired. I've made us a few bits already."

"Shut up. Alms, my lady! Alms for a poor cripple."

At the third hour a ship took off with a whoosh! that dopplered away into subsonics; the old man seemed to relax. "What ship was that?" Thorby asked. "Not the Syndon liner."

"Free Trader Romany Lass, bound for the Rim . . . and your friend was in her. You go home now and get your breakfast. No, go buy your breakfast, for a treat."

Baslim no longer tried to hide his extra-professional activities from Thorby, although he never explained the why or how. Some days only one of them would beg, in which case the Plaza of Liberty was always the pitch, for it appeared that Baslim was especially interested in arrivals and departures of ships and most especially movements of slave ships and the auction that always followed the arrival of one.

Thorby was more use to him after his education had progressed. The old man seemed to think that everyone had a perfect memory and he was stubborn enough to impress his belief despite the boy's grumbles.

"Aw, Pop, how do you expect me to remember? You didn't give me a chance to look at it!"

"I projected that page at least three seconds. Why didn't you read it?"

"Huh? There wasn't time."

"I read it. You can, too. Thorby, you've seen jugglers in the Plaza.

You've seen old Mikki stand on his head and keep nine daggers in the air while he spins four hoops with his feet?"

"Uh, sure."

"Can you do that?"

"No."

"Could you learn to?"

"Uh . . . I don't know."

"Anyone can learn to juggle . . . with enough practice and enough beatings." The old man picked up a spoon, a stylus, and a knife and kept them in the air in a simple fountain. Presently he missed and stopped. "I used to do a little, just for fun. This is juggling with the mind . . . and anyone can learn it, too."

"Show me how you did that, Pop."

"Another time, if you behave yourself. Right now you are learning to use your eyes. Thorby, this mind-juggling was developed a long time ago by a wise man, a Doctor Renshaw, on the planet Earth. You've heard of Earth."

"Well . . . sure, I've heard of it."

"Mmm . . . meaning you don't believe in it?"

"Uh, I don't know . . . but all that stuff about frozen water falling from the sky, and cannibals ten feet tall, and towers higher than the Presidium, and little men no bigger than dolls that live in trees—well, I'm not a fool, Pop."

Baslim sighed and wondered how many thousands of times he had sighed since saddling himself with a son. "Stories get mixed up. Someday—when you've learned to read—I'll let you view books you can trust."

"But I can read now."

"You just think you can. Thorby, there is such a place as Earth and it truly is strange and wonderful—a most unlikely planet. Many wise men have lived and died there—along with the usual proportion of fools and villains—and some of their wisdom has come down to us. Samuel Renshaw was one such wise man. He proved that most people go all their lives only half awake; more than that, he showed how a man could wake up and live—see with his eyes, hear with his ears, taste with his tongue, think with his mind, and remember perfectly what he saw, heard, tasted, thought." The old man shoved his stump out. "This doesn't make me a cripple. I see more with my one eye than you do with two. I am growing deaf . . . but not as deaf as you are, because what I hear, I remember. Which one of us is the cripple? But, son, you aren't going to stay crippled, for I am going to renshaw you if I have to beat your silly head in!"

As Thorby learned to use his mind, he found that he liked to; he developed an insatiable appetite for the printed page, until, night after night, Baslim would order him to turn off the viewer and go to bed. Thorby didn't see any use in much of what the old man forced him to learn—languages, for example, that Thorby had never heard. But they were not hard, with his new skill in using his mind, and when he discovered that the old man had spools and reels which could be read or listened to only in these "useless" tongues, he suddenly found them worth knowing. History and galactography he loved; his personal world, lightyears wide in physical space, had been in reality as narrow as a slave factor's pen. Thorby reached for wider horizons with the delight of a baby discovering its fist.

But mathematics Thorby saw no use in, other than the barbaric skill of counting money. But presently he learned that mathematics need not have use; it was a game, like chess but more fun.

The old man wondered sometimes what use it all was? That the boy was even brighter than he had thought, he now knew. But was it fair to the boy? Was he simply teaching him to be discontented with his lot? What chance on Jubbul had the slave of a beggar? Zero raised to the nth power remained zero.

"Thorby."

"Yeah, Pop. Just a moment, I'm in the middle of a chapter."

"Finish it later. I want to talk with you."

"Yes, my lord. Yes, master. Right away, boss."

"And keep a civil tongue in your head."

"Sorry, Pop. What's on your mind?"

"Son, what are you going to do when I'm dead?"

Thorby looked stricken. "Are you feeling bad, Pop?"

"No. So far as I know, I'll last for years. On the other hand, I may not wake up tomorrow. At my age you never know. If I don't, what are you going to do? Hold down my pitch in the Plaza?"

Thorby didn't answer; Baslim went on, "You can't and we both know it. You're already so big that you can't tell the tale convincingly. They don't give the way they did when you were little."

Thorby said slowly, "I haven't meant to be a burden, Pop."

"Have I complained?"

"No." Thorby hesitated. "I've thought about it . . . some. Pop, you could hire me out to a labor company."

The old man made an angry gesture. "That's no answer! No, son. I'm going to send you away."

"Pop! You promised you wouldn't."

"I promised nothing."

"But I don't want to be freed, Pop. If you free me—well, if you do, I won't leave!"

"I didn't exactly mean that."

Thorby was silent for a long moment. "You're going to sell me,

Pop?"

"Not exactly. Well . . . yes and no."

Thorby's face held no expression. At last he said quietly, "It's one or the other, so I know what you mean . . . and I guess I oughtn't to kick. It's your privilege and you've been the best . . . master . . . I ever had."

"I'm not your master!"

"Paper says you are. Matches the number on my leg."

"Don't talk that way! Don't ever talk that way."

"A slave had better talk that way, or else keep his mouth shut."

"Then, for Heaven's sake, keep it shut! Listen, son, let me explain. There's nothing here for you and we both know it. If I die without freeing you, you revert to the Sargon—"

"They'll have to catch me!"

"They will. But manumission solves nothing. What guilds are open to freedmen? Begging, yes—but you'd have to poke out your eyes to do well at it, after you're grown. Most freedmen work for their former masters, as you know, for the freeborn commoners leave mighty slim pickings. They resent an ex-slave; they won't work with him."

"Don't worry, Pop. I'll get by."

"I do worry. Now you listen. I'm going to arrange to sell you to a man I know, who will ship you away from here. Not a slave ship, just a ship. But instead of shipping you where the bill of lading reads, you'll—"

"No!"

"Hold your tongue. You'll be dropped on a planet where slavery is against the law. I can't tell you which one, because I am not sure of the ship's schedule, nor even what ship; the details have to be worked out. But in any free society I have confidence you can get by." Baslim stopped to mull a thought he had had many times. Should he send the kid to Baslim's own native planet? No, not only would it be extremely difficult to arrange but it was not a place to send a green immigrant . . . get the lad to any frontier world, where a sharp brain and willingness to work were all a man needed; there were several within trading distance of the Nine Worlds. He wished tiredly that there were some way of knowing the boy's own home world. Possibly he had relatives there, people who would help him. Confound it, there ought to be a galaxy-wide method of identification!

Baslim went on, "That's the best I can do. You'll have to behave as a slave between the sale and being shipped out. But what's a few weeks against a chance—"

"No!"

"Don't be foolish, son."

"Maybe I am. But I won't do it. I'm staying."

"So? Son . . . I hate to remind you—but you can't stop me."

"Huh?"

"As you pointed out, there's a paper that says I can."

"Oh."

"Go to bed, son."

Baslim did not sleep. About two hours after they had put out the light he heard Thorby get up very quietly. He could follow every move the lad made by interpreting muffled sounds. Thorby dressed (a simple matter of wrapping his clout), he went into the adjoining room, fumbled in the bread safe, drank deeply, and left. He did not take his bowl, he did not go near the shelf where it was kept.

After he was gone, Baslim turned over and tried to sleep, but the ache inside him would not permit. It had not occurred to him to speak the word that would keep the boy; he had too much self-respect not to respect another person's decision.

Thorby was gone four days. He returned in the night and Baslim heard him but again said nothing. Instead he went quietly and deeply asleep for the first time since Thorby had left. But he woke at the usual time and said, "Good morning, son."

"Uh, good morning. Pop."

"Get breakfast started. I have something to attend to."

They sat down presently over bowls of hot mush. Baslim ate with his usual careful disinterest; Thorby merely picked at his. Finally he blurted out, "Pop, when are you going to sell me?"

"I'm not."

"Huh?"

"I registered your manumission at the Archives the day you left. You're a free man, Thorby."

Thorby looked startled, then dropped his eyes to his food. He busied himself building little mountains of mush that slumped as soon as he shaped them. Finally he said, "I wish you hadn't."

"If they picked you up, I didn't want you to have 'escaped slave' against you."

"Oh." Thorby looked thoughtful. "That's 'F&B,' isn't it? Thanks, Pop. I guess I acted land of silly."

"Possibly. But it wasn't the punishment I was thinking of. Flogging is over quickly, and so is branding. I was thinking of a possible second offense. It's better to be shortened than to be caught again after a branding."

Thorby abandoned his mush entirely. "Pop? Just what does a lobotomy do to you?"

"Mmm . . . you might say it makes the thorium mines endurable. But let's not go into it, not at meal times. Speaking of such, if you are through, get your bowl and let's not dally. There's an auction this morning."

"You mean I can stay?"

"This is your home."

Baslim never again suggested that Thorby leave him. Manumission made no difference in their routine or relationship. Thorby did go to the Royal Archives, paid the fee and the customary gift and had a line tattooed through his serial number, the Sargon's seal tattooed beside it with book and page number of the record which declared him to be a free subject of the Sargon, entitled to taxes, military service, and starvation without let or hindrance. The clerk who did the tattooing looked at Thorby's serial number and said, "Doesn't look like a birthday job, kid. Your old man go bankrupt? Or did your folks sell you just to get shut of you?"

"None of your business!"

"Don't get smart, kid, or you'll find that this needle can hurt even more. Now give me a civil answer. I see it's a factors mark, not a private owner's, and from the way it has spread and faded, you were maybe five or six. When and where was it?"

"I don't know. Honest. I don't."

"So? That's what I tell my wife when she asks personal questions. Quit wiggling; I'm almost through. There . . . congratulations and welcome to the ranks of free men. I've been free a parcel of years now and I predict that you will find it looser but not always more comfortable."

Chapter 4

Thorby's leg hurt for a couple of days; otherwise manumission left his life unchanged. But he really was becoming inefficient as a beggar; a strong healthy youth does not draw the alms that a skinny child can. Often Baslim would have Thorby place him on his pitch, then send him on errands or tell him to go home and study. However, one or the other was always in the Plaza. Baslim sometimes disappeared, with or without warning; when this happened it was Thorby's duty to spend daylight hours on the pitch, noting arrivals and departures, keeping mental notes of slave auctions, and picking up information about both traffics through contacts around the port, in the wineshops, and among the unveiled women.

Once Baslim was gone for a double nineday; he was simply missing when Thorby woke up. It was much longer than he had ever been away before; Thorby kept telling himself that Pop could look out for himself, while having visions of the old man dead in a gutter. But he kept track of the doings at the Plaza, including three auctions, and recorded everything that he had seen and had been able to pick up.

Then Baslim returned. His only comment was, "Why didn't you memorize it instead of recording?"

"Well, I did. But I was afraid I would forget something, there was so much."

"Hummph!"

After that Baslim seemed even quieter, more reserved, than he had always been. Thorby wondered if he had, displeased him, but it was not the sort of question Baslim answered. Finally one night the old man said, "Son, we never did settle what you are to do after I'm gone."

"Huh? But I thought we had decided that, Pop. It's my problem."

"No, I simply postponed it . . . because of your thickheaded stubbornness. But I can't wait any longer. I've got orders for you and you are going to carry them out."

"Now, wait a minute, Pop! If you think you can bully me into leaving you—"

"Shut up! I said, 'After I'm gone.' When I'm dead, I mean; not one of these little business trips . . . you are to look up a man and give him a message. Can I depend on you? Not goof off and forget it?"

"Why, of course, Pop. But I don't like to hear you talk that way. You're going to live a long time—you might even outlive me."

"Possibly. But will you shut up and listen, then do as I tell you?"

"Yes, sir."

"You'll find this man—it may take a while—and deliver this message. Then he will have something for you to do . . . I think. If he does, I want you to do exactly what he tells you to. Will you do that also?"

"Why, of course, Pop, if that's what you want."

"Count it as one last favor to an old man who tried to do right by you and would have done better had he been able. It's the very last thing I want from you, son. Don't bother to burn an offering for me at the temple, just do these two things: deliver a message and one more thing, whatever the man suggests that you do."

"I will, Pop," Thorby answered solemnly.

"All right. Let's get busy."

The "man" turned out to be any one of five men. Each was skipper of a starship, a tramp trader, not of the Nine Worlds but occasionally picking up cargoes from ports of the Nine Worlds. Thorby thought over the list. "Pop, there's only one of these ships I recall ever putting down here."

"They all have, one time or another."

"It might be a long time before one showed up."

"It might be years. But when it happens, I want the message delivered exactly."

"To any of them? Or all of them?"

"The first one who shows up."

The message was short but not easy, for it was in three languages, depending on who was to receive it, and none of the languages was among those Thorby knew. Nor did Baslim explain the words; he wanted it learned by rote in all three.

After Thorby had stumbled through the first version of the message for the seventh time Baslim covered his ears. "No, no! It won't do, son. That accent!"

"I'm doing my best," Thorby answered sullenly.

"I know. But I want the message understood. See here, do you remember a time when I made you sleepy and talked to you?"

"Huh? I get sleepy every night. I'm sleepy now."

"So much the better." Baslim put him into a light trance—with difficulty, as Thorby was not as receptive as he had been as a child. But Baslim managed it, recorded the message in the sleep instructor, set it running and let Thorby listen, with posthypnotic suggestion that he would be able to say it perfectly when he awakened.

He was able to. The second and third versions were implanted in him the following night. Baslim tested him repeatedly thereafter, using the name of a skipper and a ship to bring each version forth.

Baslim never sent Thorby out of the city; a slave required a travel permit and even a freedman was required to check in and out. But he did send him all over the metropolis. Three ninedays after Thorby had learned the messages Baslim gave him a note to deliver in the shipyard area, which was a reserve of the Sargon rather than part of the city. "Carry your freedman's tag and leave your bowl behind. If a policeman stops you, tell him you're looking for work in the yards."

"He'll think I'm crazy."

"But he'll let you through. They do use freedmen, as sweepers and such. Carry the message in your mouth. Who are you looking for?"

"A short, red-haired man," Thorby repeated, "with a big wart on the left side of his nose. He runs a lunch stand across from the main gate. No beard. I'm to buy a meat pie and slip him the message with the money."

"Right."

Thorby enjoyed the outing. He did not wonder why Pop didn't viewphone messages instead of sending him a half-day's journey; people of their class did not use such luxuries. As for the royal mails, Thorby had never sent or received a letter and would have regarded the mails as a most chancy way to send a note.

His route followed one arc of the spaceport through the factory district. He relished that part of the city; there was always so much going on, so much life and noise. He dodged traffic, with truck drivers cursing him and Thorby answering with interest; he peered in each open door, wondering what all the machines were for and why commoners would stand all day in one place, doing the same thing over and over—or were they slaves? No, they couldn't be; slaves weren't allowed to touch power machinery except on plantations—that was what the riots had been about last year and the Sargon had lifted his hand in favor of the commoners.

Was it true that the Sargon never slept and that his eye could see anything in the Nine Worlds? Pop said that was nonsense, the Sargon was just a man, like anybody. But if so, how did he get to be Sargon?

He left the factories and skirted the shipyards. He had never been this far before. Several ships were in for overhaul and two small ships were being built, cradled in lacy patterns of steel. Ships made his heart lift and he wished he were going somewhere. He knew that he had traveled by starship twice—or was it three times?—but that was long ago and he didn't mean traveling in the hold of a slaver, that wasn't traveling!

He got so interested that he almost walked past the lunch stand. The main gate reminded him; it was twice as big as the others, had a guard on it, and a big sign curving over it with the seal of the Sargon on top. The lunch stand was across from it; Thorby dodged traffic pouring through the gate and went to it.

The man behind the counter was not the right man; what little hair he had was black and his nose had no wart.

Thorby walked up the road, killed a half-hour and came back.

There was still no sign of his man. The counterman noticed the inspection, so Thorby stepped forward and said, "Do you have sunberry crush?"

The man looked him over. "Money?"

Thorby was used to being required to prove his solvency; he dug out the coin. The man scooped it up, opened a bottle for him. "Don't drink at the counter, I need the stools."

There were plenty of stools, but Thorby was not offended; he knew his social status. He stood back but not so far as to be accused of trying to abscond with the bottle, then made the drink last a long time. Customers came and went; he checked each, on the chance that the redheaded man might have picked this time to eat. He kept his ears cocked.

Presently the counterman looked up. "You trying to wear that bottle out?"

"Just through, thanks." Thorby came up to put the bottle down and said, "Last time I was over this way a redheaded chap was running this place."

The man looked at him. "You a friend of Red?"

"Well, not exactly. I just used to see him here, when I'd stop for a cold drink, or—"

"Let's see your permit."

"What? I don't need—" The man grabbed at Thorby's wrist. But Thorby's profession had made him adept at dodging kicks, cuffs, canes, and such; the man clutched air.

The man came around the counter, fast; Thorby ducked into traffic. He was halfway across the street and had had two narrow escapes before he realized that he was running toward the gate—and that the counterman was shouting for the guard there.

Thorby turned and started dodging traffic endwise. Fortunately it was dense; this road carried the burden of the yards. He racked up three more brushes with death, saw a side street that dead-ended into the throughway, ducked between two trucks, down the side street as fast as he could go, turned into the first alley, ran down it, hid behind an outbuilding and waited.

He heard no pursuit.

He had been chased many times before, it did not panic him. A chase was always two parts: first breaking contact, second the retiring action to divorce oneself from the incident. He had accomplished the first; now he had to get out of the neighborhood without being spotted—slow march and no suspicious moves. In losing himself he had run away from the city, turned left into the side street, turned left again into the alley; he was now almost behind the lunch stand—it had been a subconscious tactic. The chase always moved away from the center;

the lunch stand was one place where they would not expect him to be. Thorby estimated that in five minutes, or ten, the counterman would be back at his job and the guard back at the gate; neither one could leave his post unwatched. Shortly, Thorby could go on through the alley and head home.

He looked around. The neighborhood was commercial land not yet occupied by factories, jumble of small shops, marginal businesses, hovels, and hopeless minor enterprise. He appeared to be in back of a very small hand laundry; there were poles and lines and wooden tubs and steam came out a pipe in the outbuilding. He knew his location now—two doors from the lunch stand; he recalled a homemade sign: "MAJESTIC HOME LAUNDRY—Lowest Prices."

He could cut around this building and—but better check first. He dropped flat and stuck an eye around the corner of the outbuilding, sighted back down the alley.

Oh, oh!—two patrolmen moving up the alley . . . he had been wrong, wrong! They hadn't dropped the matter, they had sent out the alarm. He pulled back and looked around. The laundry? No. The outbuilding? The patrol would check it. Nothing but to run for it—right into the arms of another patrol. Thorby knew how fast the police could put a cordon around a district. Near the Plaza he could go through their nets, but here he was in strange terrain.

His eye lit on a wornout washtub . . . then he was under it. It was a tight fit, with knees to his chin and splinters in his spine. He was afraid that his clout was sticking out but it was too late to correct it; he heard someone coming.

Footsteps came toward the tub and he stopped breathing. Someone stepped on the tub and stood on it.

"Hi there, mother!" It was a man's voice. "You been out here long?"

"Long enough. Mind that pole, you'll knock the clothes down."

"See anything of a boy?"

"What boy?"

"Youngster, getting man-tall. Fuzz on his chin. Breech clout, no sandals."

"Somebody," the woman's voice above him answered indifferently, "came running through here like his ghost was after him. I didn't really see him—I was trying to get this pesky line up."

"That's our baby! Where'd he go?"

"Over that fence and between those houses."

"Thanks, mother! Come on, Juby."

Thorby waited. The woman continued whatever she was doing; her feet moved and the tub creaked. Then she stepped down and sat on the tub. She slapped it gently. "Stay where you are," she said softly. A moment later he heard her go away.

Thorby waited until his bones ached. But he resigned himself to staying under that tub until dark. It would be chancy, as the night patrol questioned everyone but nobles after curfew, but leaving this neighborhood in daylight had become impossible. Thorby could not guess why he had been honored by a turnout of the guard, but he did not want to find out. He heard someone—the woman?—moving around the yard from time to time.

At least an hour later he heard the creak of ungreased wheels. Someone tapped on the tub. "When I lift the tab, get into the cart, fast. It's right in front of you."

Thorby did not answer. Daylight hit his eyes, he saw a small pushcart—and was in it and trying to make himself small. Laundry landed on him. But before that blanked out his sight he saw that the tub was no longer nakedly in the open; sheets had been hung on lines so that it was screened.

Hands arranged bundles over him and a voice said, "Hold still until I tell you to move."

"Okay . . . and thanks a million! I'll pay you back someday."

"Forget it." She breathed heavily. "I had a man once. Now he's in the mines. I don't care what you've done—I don't turn anybody over to the patrol."

"Oh. I'm sorry."

"Shut up."

The little cart bumped and wobbled and presently Thorby felt the change to pavement. Occasionally they stopped; the woman would remove a bundle, be gone a few minutes, come back and dump dirty clothes into the cart. Thorby took it with the long patience of a beggar.

A long time later the cart left pavement. It stopped and the woman said in a low voice, "When I tell you, get out the righthand side and keep going. Make it fast."

"Okay. And thanks again!"

"Shut up." The cart bumped along a short distance, slowed without stopping, and she said, "Now!"

Thorby threw off his covering, bounced out and landed on his feet, all in one motion. He was facing a passage between two buildings, a serviceway from alley to street. He started down it fast but looked back over his shoulder. The cart was lost disappearing. He never did see her face.

Two hours later he was back in his own neighborhood. He slipped down beside Baslim. "No good."

"Why not?"

"Snoopies. Squads of 'em."

"Alms, gentle sir! You swallowed it? Alms for the sake of your parents!"

"Of course."

"Take the bowl." Baslim got to hands and knee, started away.

"Pop! Don't you want me to help you?"

"You stay here."

Thorby stayed, irked that Pop had not waited for a full report. He hurried home as soon as it was dark, found Baslim in the kitchen-washroom, paraphernalia spread around him and using both recorder and book projector. Thorby glanced at the displayed page, saw that he could not read it and wondered what language it was—an odd one; the words were all seven letters, no more, no less. "Hi, Pop. Shall I start supper?"

"No room . . . and no time. Eat some bread. What happened today?"

Thorby told him, while munching bread. Baslim simply nodded. "Lie down. I've got to use hypnosis on you again. We've got a long night ahead."

The material Baslim wanted him to memorize consisted of figures, dates, and endless three-syllable nonsense words. The light trance felt dreamily pleasant and the droning of Baslim's voice coming out of the recorder was pleasant, too.

During one of the breaks, when Baslim had commanded him to wake up, he said, "Pop, who's this message for?"

"If you ever get a chance to deliver it, you'll know; you won't have any doubts. If you have trouble remembering it, tell him to put you into a light trance; it'll come back."

"Tell whom?"

"Him. Never mind. You are going to sleep. You are asleep." Baslim snapped his fingers.

While the recorder was droning Thorby was vaguely aware once that Baslim had just come in. He was wearing his false leg, which affected Thorby with dreamy surprise; Pop ordinarily wore it only indoors. Once Thorby smelled smoke and thought dimly that something must be burning in the kitchen and he should go check. But he was unable to move and the nonsense words kept droning into his ears.

He became aware that he was droning back to Pop the lesson he had learned. "Did I get it right?"

"Yes. Now go to sleep. Sleep the rest of the night."

Baslim was gone in the morning. Thorby was not surprised; Pop's movements had been even less predictable than usual lately. He ate breakfast, took his bowl and set out for the Plaza. Business was poor—Pop was right; Thorby now looked too healthy and well fed for the profession. Maybe he would have to learn to dislocate his joints like

Granny the Snake. Or buy contact lenses with cataracts built into them.

Midafternoon an unscheduled freighter grounded at the port. Thorby started the usual inquiries, found that it was the Free Trader Sisu, registered home port New Finlandia, Shiva III.

Ordinarily this would have been a minor datum, to be reported to Pop when he saw him. But Captain Krausa of the Sisu was one of the five persons to whom Thorby was someday to deliver a message, if and when.

It fretted Thorby. He knew that he was not to look up Captain Krausa—that was the distant future, for Pop was alive and well. But maybe Pop would be anxious to know that this ship had arrived. Tramp freighters came and went, nobody knew when, and sometimes they were in port only a few hours.

Thorby told himself that he could get home in five minutes—and Pop might thank him. At worst he would bawl him out for leaving the Plaza, but, shucks, he could pick up anything he missed, through gossip.

Thorby left.

The ruins of the old amphitheater extend around one third of the periphery of the new. A dozen holes lead down into the labyrinth which had served the old slave barracks; an unlimited number of routes ran underground from these informal entrances to that part which Baslim had preempted as a home. Thorby and he varied their route in random fashion and avoided being seen entering or leaving.

This time, being in a hurry, Thorby went to the nearest—and on past; there was a policeman at it. He continued as if his destination had been a tiny greengrocer's booth on the street rimming the ruins. He stopped and spoke to the proprietress. "Howdy, Inga. Got a nice ripe melon you're going to have to throw away?"

"No melons."

He displayed money. "How about that big one? Half price and I won't notice the rotten spot." He leaned closer. "What's burning?"

Her eyes flicked toward the patrolman. "Get lost."

"Raid?"

"Get lost, I said."

Thorby dropped a coin on the counter, picked up a bell-fruit and walked away, sucking the juice. He did not hurry.

A cautious reconnaissance showed him that police were staked out all through the ruins. At one entrance a group of ragged troglodytes huddled sadly under the eye of a patrolman. Baslim had estimated that at least five hundred people lived in the underground ruins. Thorby had not quite believed it, as he had rarely seen anyone else enter or heard them inside. He recognized only two faces among the prisoners.

A half-hour later and more worried every minute, Thorby located an entrance which the police did not seem to know. He scanned it for several minutes, then darted from behind a screen of weeds and was down it. Once inside he got quickly into total darkness, then moved cautiously, listening. The police were supposed to have spectacles which let them see in the dark. Thorby wasn't sure this was true as he had always found darkness helpful in evading them. But he took no chances.

There were indeed police down below; he heard two of them and saw them by hand torches they carried—if snoopies could see in the dark these two did not seem equipped for it. They were obviously searching, stun guns drawn. But they were in strange territory whereas Thorby was playing his home field. A specialized speleologist, he knew these corridors the way his tongue knew his teeth; he had been finding his way through them in utter blackness twice a day for years.

At the moment they had him trapped; he kept just far enough ahead to avoid their torches, skirted a hole that reached down into the next level, went beyond it, ducked into a doorway and waited.

They reached the hole, eyed the narrow ledge Thorby had taken so casually in the dark, and one of them said, "We need a ladder."

"Oh, we'll find stairs or a chute." They turned back. Thorby waited, then went back and down the hole.

A few minutes later he was close to his home doorway. He looked and listened and sniffed and waited until he was certain that no one was close, then crept to the door and reached for the thumbhole in the lock. Even as he reached he knew that something was wrong.

The door was gone; there was just a hole.

He froze, straining every sense. There was an odor of strangers but it wasn't fresh and there was no sound of breathing. The only sound was a faint drip-drip in the kitchen.

Thorby decided that he just had to see. He looked behind him, saw no glimmer, reached inside for the light switch and turned it to "dim."

Nothing happened. He tried the switch in all positions, still no light. He went inside, avoided something cluttering Baslim's neat living room, on into the kitchen, and reached for candles. They were not where they belonged but his hand encountered one nearby; he found the match safe and lit the candle.

Ruin and wreckage!

Most of the damage seemed the sort that results from a search which takes no account of cost, aiming solely at speed and thoroughness. Every cupboard, every shelf had been spilled, food dumped on the floor. In the large room the mattresses had been ripped open, stuffing spilled out. But some of it looked like vandalism, unnecessary, pointless.

Thorby looked around with tears welling up and his chin quivering. But when he found, near the door. Pop's false leg, lying dead on the floor with its mechanical perfection smashed as if trampled by boots, he broke into sobs and had to put the candle down to keep from dropping it. He picked up the shattered leg, held it like a doll, sank to the floor and cradled it, rocking back and forth and moaning.

Chapter 5

Thorby spent the next several hours in the black corridors outside their ruined home, near the first branching, where he would hear Pop if he came back but where Thorby would have a chance to duck if police showed up.

He caught himself dozing, woke with a start, and decided that he had to find out what time it was; it seemed as if he had been keeping vigil a week. He went back into their home, found a candle and lit it. But their only clock, a household "Eternal," was smashed. No doubt the radioactive capsule was still reckoning eternity but the works were mute. Thorby looked at it and forced himself to think in practical terms.

If Pop were free, he would come back. But the police had taken Pop away. Would they simply question him and turn him loose?

No, they would not. So far as Thorby knew, Pop had never done anything to harm the Sargon—but he had known for a long time that Pop was not simply a harmless old beggar. Thorby did not know why Pop had done the many things which did not fit the idea of "harmless old beggar" but it was clear that the police knew or suspected. About once a year the police had "cleaned out" the ruins by dropping a few retch-gas bombs down the more conspicuous holes; it simply meant having to sleep somewhere else for a couple of nights. But this was a raid in force. They had intended to arrest Pop and they had been searching for something.

The Sargon's police operated on a concept older than justice; they assumed that a man was guilty, they questioned him by increasingly strong methods until he talked . . . methods so notorious that an arrested person was usually anxious to tell all before questioning started. But Thorby was certain that the police would get nothing out of Pop which the old man did not wish to admit.

Therefore the questioning would go on a long time.

They were probably working on Pop this very minute. Thorby's stomach turned over.

He had to get Pop away from them.

How? How does a moth attack the Presidium? Thorby's chances were not much better. Baslim might be in a back room of the district police barracks, the logical place for a petty prisoner. But Thorby had an unreasoned conviction that Pop was not a petty prisoner . . . in which case he might be anywhere, even in the bowels of the Presidium.

Thorby could go to the district police office and ask where his patron had been taken—but such was the respect in which the

Sargon's police were held that this solution did not occur to him; had he presented himself as next of kin of a prisoner undergoing interrogation Thorby would have found himself in another closed room being interviewed by the same forceful means as a check on the answers (or lack of them) which were being wrung out of Baslim.

Thorby was not a coward; he simply knew that one does not dip water with a knife. Whatever he did for Pop would have to be done indirectly. He could not demand his "rights" because he had none; the idea never entered his head. Bribery was possible—for a man with a poke full of stellars. Thorby had less than two minims. Stealth was all that was left and for that he needed information.

He reached this conclusion as soon as he admitted that there was no reasonable chance that the police would turn Pop loose. But, on the wild chance that Baslim might talk his way free, Thorby wrote a note, telling Pop that he would check back the next day, and left it on a shelf they used as a mail drop. Then he left.

It was night when he stuck his head above ground. He could not decide whether he had been down in the ruins for half a day or a day and a half. It forced him to change plans; he had intended to go first to Inga the greengrocer and find out what she knew. But at least there were no police around now; he could move freely as long as he evaded the night patrol. But where? Who could, or would, give him information?

Thorby had dozens of friends and knew hundreds by sight. But his acquaintances were subject to curfew; he saw them only in daylight and in most cases did not know where they slept. But there was one neighborhood which was not under curfew; Joy Street and its several adjoining courts never closed. In the name of commerce and for the accommodation of visiting spacemen taprooms and gaming halls and other places of hospitality to strangers in that area near the spaceport never closed their doors. A commoner, even a freedman, might stay up all night there, although he could not leave between curfew and dawn without risking being picked up.

This risk did not bother Thorby; he did not intend to be seen and, although it was patrolled inside, he knew the habits of the police there. They traveled in pairs and stayed on lighted streets, leaving their beats only to suppress noisy forms of lawbreaking. But the virtue of the district, for Thorby's purpose, was that the gossip there was often hours ahead of the news as well as covering matters ignored or suppressed by licensed news services.

Someone on Joy Street would know what had happened to Pop.

Thorby got into the honky-tonk neighborhood by scrambling over rooftops. He went down a drain into a dark court, moved along it to Joy Street, stopped short of the street lights, looked up and down for police and tried to spot someone he knew. There were many people about but most of them were strangers on the town. Thorby knew every proprietor and almost every employee up and down the street but he hesitated to walk into one of the joints; he might walk into the arms of police. He wanted to spot someone he trusted, whom he could motion into the darkness of the court.

No police but no friendly faces, either—lust a moment; there was Auntie Singham.

Of the many fortunetellers who worked Joy Street, Auntie Singham was the best; she never purveyed anything but good fortune. If these things failed to come to pass, no customer ever complained; Auntie's warm voice carried conviction. Some whispered that she improved her own fortunes by passing information to the police, but Thorby did not believe it because Pop did not. She was a likely source of news and Thorby decided to chance it—the most she could tell the police was that he was alive and on the loose . . . which they knew.

Around the corner to Thorby's right was the Port of Heaven cabaret; Auntie was spreading her rug on the pavement there, anticipating customers spilling out at the end of a performance now going on.

Thorby glanced each way and hurried along the wall almost to the cabaret. "Psst! Auntie!"

She looked around, looked startled, then her face became expressionless. Through unmoving lips she said, loud enough to reach him, "Beat it, son! Hide! Are you crazy?"

"Auntie . . . where have they got him?"

"Crawl in a hole and pull it in after you. There's a reward out!"

"For me? Don't be silly. Auntie; nobody would pay a reward for me. Just tell me where they're holding him. Do you know?"

"They're not."

"'They're not' what?"

"You don't know? Oh, poor lad! They've shortened him." Thorby was so shocked that he was speechless. Although Baslim had talked of the time when he would be dead, Thorby had never really believed in it; he was incapable of imagining Pop dead and gone.

He missed her next words; she had to repeat. "Snoopers! Get out!"

Thorby glanced over his shoulder. Two patrolmen, moving this way—time to leave! But he was caught between street and blank wall, with no bolt hole but the entrance to the cabaret . . . if he ducked in there, dressed as he was, being what he was, the management would simply shout for the patrol.

But there was nowhere else to go. Thorby turned his back on the police and went inside the narrow foyer of the cabaret. There was no one there; the last act was in progress and even the hawker was not in sight. But just inside was a ladder-stool and on it was a box of transparent letters used to change signs billing the entertainers. Thorby saw them and an idea boiled up that would have made Baslim proud of his pupil—Thorby grabbed the box and stool and went out again.

He paid no attention to the approaching policemen, placed the ladder-stool under the little lighted marquee that surmounted the entrance and climbed up on it, with his back to the patrolmen. It placed most of his body in bright light but his head and shoulders stuck up into the shadow above the row of lights. He began methodically to remove letters spelling the name of the star entertainer.

The two police reached a point right behind him. Thorby tried not to tremble and worked with the steady listlessness of a hired hand with a dull job. He heard Auntie Singham call out, "Good evening, Sergeant."

"Evening, Auntie. What lies are you telling tonight?"

"Lies indeed! I see a sweet young girl in your future, with hands graceful as birds. Let me see your palm and perhaps I can read her name."

"What would my wife say? No time to chat tonight, Auntie." The sergeant glanced at the workman changing the sign, rubbed his chin and said, "We've got to stay on the prowl for Old Baslim's brat. You haven't seen him?" He looked again at the work going on above him and his eyes widened slightly.

"Would I sit here swapping gossip if I had?"

"Hmm . . ." He turned to his partner. "Roj, move along and check Ace's Place, and don't forget the washroom. I'll keep an eye on the street."

"Okay, Sarge."

The senior patrolman turned to the fortuneteller as his partner moved away. "It's a sad thing, Auntie. Who would have believed that old Baslim could have been spying against the Sargon and him a cripple?"

"Who indeed?" She rocked forward. "Is it true that he died of fright before they shortened him?"

"He had poison ready, knowing what was coming. But dead he was, before they pulled him out of his hole. The captain was furious."

"If he was dead already, why shorten him?"

"Come, come, Auntie, the law must be served. Shorten him they did, though it's not a job I'd relish." The sergeant sighed. "It's a sad world, Auntie. Think of that poor boy, led astray by that old rascal . . . and now the captain and the commandant both want to ask the lad questions they meant to ask the old man."

"What good will that do them?"

"None, likely." The sergeant poked gutter filth with the butt of his staff. "But if I were the lad, knowing the old man is dead and not knowing any answers to difficult questions, I'd be far, far from here already. I'd find me a farmer a long way from the city, one who needed willing hands cheap and took no interest in the troubles of the city. But since I'm not, why then, as soon as I clap eyes on him, if I do, I'll arrest him and haul him up before the captain."

"He's probably hiding between rows in a bean field this minute, trembling with fright."

"Likely. But that's better than walking around with no head on your shoulders." The police sergeant looked down the street, called out, "Okay, Roj. Right with you." As he started away he glanced again at Thorby and said, "Night, Auntie. If you see him, shout for us."

"I'll do that. Hail to the Sargon."

"Hail."

Thorby continued to pretend to work and tried not to shake, while the police moved slowly away. Customers trickled out of the cabaret and Auntie took up her chant, promising fame, fortune, and a bright glimpse of the future, all for a coin. Thorby was about to get down, stick the gear back into the entranceway and get lost, when a hand grabbed his ankle.

"What are you doing!"

Thorby froze, then realized it was just the manager of the place, angry at finding his sign disturbed. Without looking down Thorby said, "What's wrong? You paid me to change this blinker."

"I did?"

"Why, sure, you did. You told me—" Thorby glanced down, looked amazed and blurted, "You're not the one."

"I certainly am not. Get down from there."

"I can't. You've got my ankle.

The man let go and stepped back as Thorby climbed down. "I don't know what silly idiot could have told you—" He broke off as Thorby's face came into light. "Hey, it's that beggar boy!"

Thorby broke into a run as the man grabbed for him. He went ducking in and out between pedestrians as the shout of, "Patrol! Patrol! Police!" rose behind him. Then he was in the dark court again and, charged with adrenaline, was up a drainpipe as if it had been level pavement. He did not stop until he was several dozen roofs away.

He sat down against a chimney pot, caught his breath and tried to think.

Pop was dead. He couldn't be but he was. Old Poddy wouldn't have said so if he hadn't known. Why . . . why, Pop's head must be on a spike down at the pylon this minute, along with the other losers. Thorby had one grisly flash of visualization, and at last collapsed, wept uncontrollably.

After a long time he raised his head, wiped his face with knuckles, and straightened up.

Pop was dead. All right, what did he do now?

Anyhow, Pop had beat them out of questioning him. Thorby felt bitter pride. Pop was always the smart one; they had caught him but Pop had had the last laugh.

Well, what did he do now?

Auntie Singham had warned him to hide. Poddy had said, plain as anything, to get out of town. Good advice—if he wanted to stay as tall as he was, he had better be outside the city before daylight. Pop would expect him to put up a fight, not sit still and wait for the snoopies, and there was nothing left that he could do for Pop, now that Pop was dead—hold it!

"When I'm dead, you are to look up a man and give him a message. Can I depend on you? Not goof off and forget it?"

Yes, Pop, you can! I didn't forget—I'll deliver it! Thorby recalled for the first time in more than a day why he had come home early: Starship Sisu was in port; her skipper was on Pop's list. "The first one who shows up"—that's what Pop had said. I didn't goof, Pop; I almost did but I remembered. I'll do it, I'll do it! Thorby decided with fierce resurgence that this message must be the final, important thing that Pop had to get out—since they said he was a spy. All right, he'd help Pop finish his job. I'll do it, Pop. You'll have the best of them yet!

Thorby felt no twinge at the "treason" he was about to attempt; shipped in as a slave against his will, he felt no loyalty to the Sargon and Baslim had never tried to instill any. His strongest feeling toward the Sargon was superstitious fear and even that washed away in the violence of his need for revenge. He feared neither police nor Sargon himself; he simply wanted to evade them long enough to carry out Baslim's wishes. After that . . . well, if they caught him, he hoped to have finished the job before they shortened him.

If the Sisu were still in port . . .

Oh, she had to be! But the first thing was to find out for sure that the ship had not left, then—no, the first thing was to get out of sight before daylight. It was a million times more important to stay clear of the snoopies now that he had it through his thick head that there was something be could do for Pop.

Get out of sight, find out if the Sisu was still dirtside, get a message to her skipper . . . and do all this with every patrolman in the district looking for him—

Maybe he had better work his way over to the shipyards, where he was not known, sneak inside and back the long way to the port and find the Sisu. No, that was silly; he had almost been caught over that way just from not knowing the layout. Here, at least, he knew every building, most of the people.

But he had to have help. He couldn't go on the street, stop spacemen and ask. Who was a close enough friend to help . . . at risk of trouble with police? Ziggie? Don't be silly; Ziggie would turn him in for the reward, for two minims Ziggie would sell his own mother—Ziggie thought that anyone who didn't look out for number one first, last, and always was a sucker.

Who else? Thorby came up against the hard fact that most of his friends were around his age and as limited in resources. Most of them he did not know how to find at night, and he certainly could not hang around in daylight and wait for one to show up. As for the few who lived with their families at known addresses, he could not think of one who could both be trusted and could keep parents concerned from tipping off the police. Most honest citizens at Thorby's level went to great lengths to mind their own business and stay on the right side of the police.

It had to be one of Pop's friends.

He ticked off this list almost as quickly. In most cases he could not be sure how binding the friendship was, blood brotherhood or merely acquaintance. The only one whom he could possibly reach and who might possibly help was Mother Shaum. She had sheltered them once when they were driven out of their cave with retch gas and she had always had a land word and a cold drink for Thorby.

He got moving; daylight was coming.

Mother Shaum's place was a taproom and lodging house, on the other side of Joy Street and near the crewmen's gate to the spaceport. Half an hour later, having crossed many roofs, twice been up and down in side courts and once having ducked across the lighted street, Thorby was on the roof of her place. He had not dared walk in her door; too many witnesses would force her to call the patrol. He had considered the back entrance and had squatted among garbage cans before deciding that there were too many voices in the kitchen.

But when he did reach her roof, he was almost caught by daylight; he found the usual access to the roof but he found also that its door and lock were sturdy enough to defy barehanded burglary.

He went to the rear with the possibility in mind of going down, trying the back door anyhow; it was almost dawn and becoming urgent to get under cover. As he looked down the back he noticed ventilation holes for the low attic, one at each side. They were barely as wide as his shoulders, as deep as his chest—but they led inside.

They were screened but a few minutes and many scratches later he had one kicked in. Then he tried the unlikely task of easing himself over the edge feet first and snaking into the hole. He got in as far as his hips, his clout caught on raw edges of screening and he stuck like a cork, lower half inside the house, chest and head and arms sticking out like a gargoyle. He could not move and the sky was getting lighter.

With a drag from his heels and sheer force of will the cloth parted and he moved inside, almost knocking himself out by banging his head. He lay still and caught his breath, then pushed the screening untidily back into place. It would no longer stop vermin but it might tool the eye from four stories down. It was not until then that he realized that he had almost fallen those four stories.

The attic was no more than a crawl space; he started to explore on hands and knees for the fixture he believed must be here: a scuttle hole for repairs or inspection. Once he started looking and failed to find it, he was not sure that there was such a thing—he knew that some houses had them but he did not know much about houses; he had not lived in them much.

He did not find it until sunrise striking the vent holes gave illumination. It was all the way forward, on the street side.

And it was bolted from underneath.

But it was not as rugged as the door to the roof. He looked around, found a heavy spike dropped by a workman and used it to dig at the wooden closure. In time he worked a knot loose, stopped and peered through the knothole.

There was a room below; he saw a bed with one figure in it.

Thorby decided that he could not expect better luck; only one person to cope with, to persuade to find Mother Shaum without raising an alarm. He took his eye away, put a finger through and felt around; he touched the latch, then gladly broke a fingernail easing the bolt back. Silently he lifted the trap door.

The figure in the bed did not stir.

He lowered himself, hung by his fingertips, dropped the remaining short distance and collapsed as noiselessly as possible.

The person in bed was sitting up with a gun aimed at him. "It took you long enough," she said. "I've been listening to you for the past hour."

"Mother Shaum! Don't shoot!"

She leaned forward, looked closely. "Baslim's kid!" She shook her head. "Boy, you're a mess . . . and you're hotter than a fire in a mattress, too. What possessed you to come here?"

"I didn't know where else to go."

She frowned. "I suppose that's a compliment . . . though I had ruther have had a plague of boils, if I'd uv had my druthers." She got out of bed in her nightdress, big bare feet slapping on the floor, and peered out the window at the street below. "Snoopies here, snoopies there, snoopies checking every joint in the street three times in one night and scaring my customers . . . boy, you've caused more hooraw than I've seen since the factory riots. Why didn't you have the kindness to drop dead?"

"You won't hide me, Mother?"

"Who said I wouldn't? I've never gone out of my way to turn anybody in yet. But I don't have to like it" She glowered at him. "When did you eat last?"

"Uh, I don't remember."

"I'll scare you up something. I don't suppose you can pay for it?" She looked at him sharply.

"I'm not hungry. Mother Shaum, is the Sisu still in port?"

"Huh? I don't know. Yes, I do; she is—a couple of her boys were in earlier tonight. Why?"

"I've got to get a message to her skipper. I've got to see him, I've just got to!"

She gave a moan of utter exasperation. "First he wakes a decent working woman out of her first sleep of the night, he plants himself on her at rare risk to her life and limb and license. He's filthy dirty and scratched and bloody and no doubt will be using my clean towels with laundry prices the way they are. He hasn't eaten and can't pay for his tucker . . . and now he adds insult to injury by demanding that I run errands for him!"

"I'm not hungry . . . and it doesn't matter whether I wash or not. But I've got to see Captain Krausa."

"Don't be giving me orders in my own bedroom. Overgrown and unspanked, you are, if I knew that old scamp you lived with. You'll have to wait until one of the Sisu's lads shows up later in the day, so's I can get a note out to the Captain." She turned toward the door. "Water's in the jug, towel's on the rack. Mind you get clean." She left.

Washing did feel good and Thorby found astringent powder on her dressing table, dusted his scratches. She came back, slapped two slices of bread with a generous slab of meat between them in front of him, added a bowl of milk, left without speaking. Thorby hadn't thought that it was possible to eat, with Pop dead, but found that it was—he had quit worrying when he first saw Mother Shaum.

She came back. "Gulp that last bite and in you go. The word is they're going to search every house."

"Huh? Then I'll get out and run for it."

"Shut up and do as I say. In you go now."

"In where?"

"In there," she answered, pointing.

"In that?" It was a builtin window seat and chest, in a corner; its shortcoming lay in its size, it being as wide as a man but less than a third as long. "I don't think I can fold up that small."

"And that's just what the snoopies will think. Hurry." She lifted the lid, dug out some clothing, lifted the far end of the box at the wall adjoining the next room as if it were a sash, and disclosed thereby that a hole went on through the wall. "Scoot your legs through—and don't think you are the only one who has ever needed to lie quiet."

Thorby got into the box, slid his legs through the hole, lay back; the lid when closed would be a few inches above his face. Mother Shaum threw clothing on top of him, concealing him. "You okay?"

"Yeah, sure. Mother Shaum? Is he really dead?"

Her voice became almost gentle. "He is, lad. A great shame it is, too."

"You're sure?"

"I was bothered by the same doubt, knowing him so well. So I took a walk down to the pylon to see. He is. But I can tell you this, lad, he's got a grin on his face like he'd outsmarted them . . . and he had, too. They don't like it when a man doesn't wait to be questioned." She sighed again. "Cry now, if you need, but be quiet. If you hear anyone, don't even breathe."

The lid slammed. Thorby wondered whether he would be able to breathe at all, but found that there must be air holes; it was stuffy but bearable. He turned his head to get his nose clear of cloth resting on it.

Then he did cry, after which he went to sleep.

He was awakened by voices and footsteps, recalled where he was barely in time to keep from sitting up. The lid above his face opened, and then slammed, making his ears ring; a man's voice called out, "Nothing in this room, Sarge!"

"Well see." Thorby recognized Poddy's voice. "You missed that scuttle up there. Fetch the ladder."

Mother Shaum's voice said, "Nothing up there but the breather space, Sergeant."

"I said, 'We'd see.'"

A few minutes later he added, "Hand me the torch. Hmm . . . you're right. Mother . . . but he has been here."

"Huh?"

"Screen broken back at the end of the house and dust disturbed. I think he got in this way, came down through your bedroom, and out."

"Saints and devils! I could have been murdered in my bed! Do you call that police protection?"

"You're not hurt. But you'd better have that screen fixed, or you'll have snakes and all their cousins living with you." He paused. "It's my thought he tried to stay in the district, found it too hot, and went back to the ruins. If so, no doubt we'll gas him out before the day is over."

"Do you think I'm safe to go back to my bed?"

"Why should he bother an old sack of suet like you?"

"What a nasty thing to say! And just when I was about to offer you a drop to cut the dust."

"You were? Let's go down to your kitchen, then, and we'll discuss it. I may have been wrong." Thorby heard them leave, heard the ladder being removed. At last he dared breathe.

Later she came back, grumbling, and opened the lid. "You can stretch your legs. But be ready to jump back in. Three pints of my best. Policemen!"

Chapter 6

The skipper of the Sisu showed up that evening. Captain Krausa was tall, fair, rugged and had the worry wrinkles and grim mouth of a man used to authority and responsibility. He was irked with himself and everyone for having allowed himself to be lured away from his routine by nonsense. His eye assayed Thorby unflatteringly. "Mother Shaum, is this the person who insisted that he had urgent business with me?"

The captain spoke Nine Worlds trade lingo, a degenerate form of Sargonese, uninflected and with a rudimentary positional grammar. But Thorby understood it. He answered, "If you are Captain Fjalar Krausa, I have a message for you, noble sir."

"Don't call me 'noble sir'; I'm Captain Krausa, yes."

"Yes, nob - yes, Captain."

"If you have a message, give it to me."

"Yes, Captain." Thorby started reciting the message he had memorized, using the Suomish version to Krausa. "'To Captain Fjalar Krausa, master of Starship Sisu from Baslim the Cripple: Greetings, old friend! Greetings to your family, clan, and sib, and my humblest respects to your revered mother. I am speaking to you through the mouth of my adopted son. He does not understand Suomic; I address you privately. When you receive this message, I am already dead—"

Krausa had started to smile; now he let out an exclamation. Thorby stopped. Mother Shaum interrupted with, "What's he saying? What language is that?"

Krausa brushed it aside. "It's my language. Is what he says true?"

"Is what true? How would I know? I don't understand that yammer."

"Uh . . . sorry, sorry! He tells me that an old beggar who used to hang around the Plaza—'Baslim' he called himself—is dead. Is this true?"

"Eh? Of course it is. I could have told you, if I had known you were interested. Everybody knows it."

"Everybody but me, apparently. What happened to him?"

"He was shortened."

"Shortened? Why?"

She shrugged. "How would I know? The word is, he died or poisoned himself, or something, before they could question him—so how would I know? I'm just a poor old woman, trying to make an honest living, with prices getting higher every day. The Sargon's police don't confide in me."

"But if—never mind. He managed to cheat them, did he? It sounds like him." He turned to Thorby. "Go on. Finish your message."

Thorby, thrown off stride, had to go back to the beginning. Krausa waited impatiently until he reached: "—I am already dead. My son is the only thing of value of which I die possessed; I entrust him to your care. I ask that you succor and admonish him as if you were I. When opportunity presents, I ask that you deliver him to the commander of any vessel of the Hegemonic Guard, saying that he is a distressed citizen of the Hegemony and entitled as such to their help in locating his family. If they will bestir themselves, they can establish his identity and restore him to his people. All the rest I leave to your good judgment. I have enjoined him to obey you and I believe that he will; he is a good lad, within the limits of his age and experience, and I entrust him to you with a serene heart. Now I must depart. My life has been long and rich; I am content. Farewell."

The Captain chewed his lip and his face worked in the fashion of a grown man who is busy not crying. Finally he said gruffly, "That's clear enough. Well, lad, are you ready?"

"Sir?"

"You're coming with me. Or didn't Baslim tell you?"

"No, sir. But he told me to do whatever you told me to. I'm to come with you?"

"Yes. How soon can you leave?"

Thorby gulped. "Right now, sir."

"Then come on. I want to get back to my ship." He looked Thorby up and down. "Mother Shaum, can we put some decent clothes on him? That outlandish rig won't do to come aboard in. Or never mind; there's a slop shop down the street; I'll pick him up a kit."

She had listened with growing amazement. Now she said, "You're taking him to your ship?"

"Any objections?"

"Huh? Not at all . . . if you don't care if they rack him apart."

"What do you mean?"

"Are you crazy? There are six snoopers between here and the spaceport gate . . . and each one anxious to pick up the reward."

"You mean he's wanted?"

"Why do you think I've hidden him in my own bedroom? He's as hot as bubbling cheese."

"But why?"

"Again, how would I know? He is."

"You don't really think that a lad like this would know enough about what old Baslim was doing to make it worth—"

"Let's not speak of what Baslim was doing or did. I'm a loyal subject of the Sargon . . . with no wish to be shortened. You say you want to take the boy into your ship. I say, 'Fine!' I'll be happy to be quit of the worry. But how?"

Krausa cracked his knuckles one by one. "I had thought," he said slowly, "that it would be just a matter of walking him down to the gate and paying his emigration tax."

"It's not, so forget it. Is there any way to get him aboard without passing him through the gate?"

Captain Krausa looked worried. "They're so strict about smuggling here that if they catch you, they confiscate the ship. You're asking me to risk my ship . . . and myself . . . and my whole crew."

"I'm not asking you to risk anything. I've got myself to worry about. I was just telling you the straight score. If you ask me, I'd say you were crazy to attempt it."

Thorby said, "Captain Krausa—"

"Eh? What is it, lad?"

"Pop told me to do as you said . . . but I'm sure he never meant you to risk your neck on my account" He swallowed. I'll be all right."

Krausa sawed the air impatiently. "No, no!" he said harshly. "Baslim wanted this done . . . and debts are paid. Debts are always paid!"

"I don't understand."

"No need for you to. But Baslim wanted me to take you with me, so that's how it's got to be." He turned to Mother Shaum. "The question is, how? Any ideas?"

"Mmm . . . possibly. Let's go talk it over." She turned. "Get back in your hideaway, Thorby, and be careful. I may have to go out for a while."

Shortly before curfew the next day a large sedan chair left Joy Street. A patrolman stopped it and Mother Shaum stuck her head out. He looked surprised. "Going out, Mother? Who'll take care of your customers?"

"Mura has the keys," she answered. "But keep an eye on the place, that's a good friend. She's not as firm with them as I am." She put something in his hand and he made it disappear.

"I'll do that. Going to be gone all night?"

"I hope not. Perhaps I had better have a street pass, do you think? I'd like to come straight home if I finish my business."

"Well, now, they've tightened up a little on street passes."

"Still looking for the beggar's boy?"

"As a matter of fact, yes. But we'll find him. If he's fled to the country, they'll starve him out; if he's still in town, we'll run him down."

"Well, you could hardly mistake me for him. So how about a short pass for an old woman who needs to make a private call?" She rested her hand on the door; the edge of a bill stuck out.

He glanced at it and glanced away. "Is midnight late enough?"

"Plenty, I should think."

He took out his book and started writing, tore out the form and handed it to her. As she accepted it the money disappeared. "Don't make it later than midnight."

"Earlier, I hope."

He glanced inside the sedan chair, then looked over her entourage. The four bearers had been standing patiently, saying nothing—which was not surprising, since they had no tongues. "Zenith Garage?"

"I always trade there."

"I thought I recognized them. Well matched."

"Better look them over. One of them might be the beggar's boy."

"Those great hairy brutes! Get along with you, Mother."

"Hail, Shol."

The chair swung up and moved away at a trot. As they rounded the corner she slowed them to a walk and drew all curtains. Then she patted the cushions billowing around her. "Doing all right?"

"I'm squashed," a voice answered faintly.

"Better squashed than shortened. I'll ease over a bit. Your lap is bony."

For the next mile she was busy modifying her costume, and putting on jewels. She veiled her face until only her live, black eyes showed. Finished, she stuck her head out and called instructions to the head porter; the chair swung right toward the spaceport. When they reached the road girdling its high, impregnable fence it was almost dark.

The gate for spacemen is at the foot of Joy Street, the gate for passengers is east of there in the Emigration Control Building. Beyond that, in the warehouse district, is Traders' Gate—freight and outgoing customs. Miles beyond are shipyard gates. But between the shipyards and Traders' Gate is a small gate reserved for nobles rich enough to own space yachts.

The chair reached the spaceport fence short of Traders' Gate, turned and went along the fence toward it. Traders' Gate is several gates, each a loading dock built through the barrier, so that a warehouse truck can back up, unload; the Sargon's inspectors can weigh, measure, grade, prod, open, and ray the merchandise, as may be indicated, before it slides across the dock into spaceport trucks on the other side, to be delivered to waiting ships.

This night dock-three of the gate had its barricade open; Free Trader Sisu was finishing loading. Her master watched, arguing with inspectors, and oiling their functioning in the immemorial fashion. A ship's junior officer helped him, keeping tally with pad and pencil.

The sedan chair weaved among waiting trucks and passed close to the dock. The master of the Sisu looked up as the veiled lady in the chair peered out at the activity. He glanced at his watch and spoke to his junior officer. "One more load, Jan. You go in with the loaded truck and I'll follow with the last one."

"Aye aye, sir." The young man climbed on the tail of the truck and told the driver to take it away. An empty truck pulled into its place. It loaded quickly as the ship's master seemed to find fewer things to argue about with the inspectors. Then he was not satisfied and demanded that it be done over. The boss stevedore was pained but the master soothed him, glanced at his watch again and said, "There's time. I don't want these crates cracked before we get them into the ship; the stuff costs money. So let's do it right."

The sedan chair had moved on along the fence. Shortly it was dark; the veiled lady looked at the glowing face of her finger watch and urged her bearers into a trot.

They came at last to the gate reserved for nobles. The veiled lady leaned her head out and snapped, "Open up!"

There were two guards on the gate, one in a little watch room, the other lounging outside. The one outside opened the gate, but placed his staff across it when the sedan chair started to go through. Stopped, the bearers lowered it to the ground with the righthand or door side facing into the gate.

The veiled lady called out, "Clear the way, you! Lord Marlin's yacht."

The guard blocking the gate hesitated. "My lady has a pass?"

"Are you a fool?"

"If my lady has no pass," he said slowly, "perhaps my lady will suggest some way to assure the guard that My Lord Marlin is expecting her?"

The veiled lady was a voice in the dark—the guard had sense enough not to shine the light in her face; he had long experience with nobles and fumed. "If you insist on being a fool, call my lord at his yacht! Phone him—and I trust you'll find you've pleased him!"

The guard in the watch room came out. "Trouble, Sean?"

"Uh, no." They held a whispered consultation. The junior went inside to phone Lord Marlin's yacht, while the other waited outside.

But it appeared that the lady had had all the nonsense she was willing to endure. She threw open the door of the chair, burst out, and stormed into the watch room with the other startled guard after her. The one making the call stopped punching keys with connection uncompleted and looked up . . . and felt sick. This was even worse than he had thought. This was no flighty young girl, escaped from her chaperones; this was an angry dowager, the sort with enough influence to break a man to common labor or worse—with a temper that made her capable of it. He listened open-mouthed to the richest tongue-lashing it had been his misfortune to endure in all the years he had been checking lords and ladies through their gate.

While the attention of both guards was monopolized by Mother Shaum's rich rhetoric, a figure detached itself from the sedan chair, faded through the gate and kept going, until it was lost in the gloom of the field. As Thorby ran, even as he expected the burning tingle of a stun gun bolt in his guts, he watched for a road on the right joining the one from the gate. When he came to it he threw himself down and lay panting.

Back at the gate, Mother Shaum stopped for breath. "My lady," one of them said placatingly, "if you will just let us complete the call—"

"Forget it! No, remember it!—for tomorrow you'll hear from My Lord Marlin." She flounced back to her chair.

"Please, my lady!"

She ignored them, spoke sharply to the slaves; they swung the chair up, broke into a trot. One guard's hand went to his belt, as a feeling of something badly wrong possessed him. But his hand stopped. Right or wrong, knocking down a lady's bearer was not to be risked, no matter what she might be up to.

And, after all, she hadn't actually done anything wrong.

When the master of the Sisu finally okayed the loading of the last truck, he climbed onto its bed, waved the driver to start, then worked his way forward. "Hey, there!" He knocked on the back of the cab.

"Yes, Captain?" The driver's voice came through faintly.

"There's a stop sign where this road joins the one out to the ships. I notice most of you drivers don't bother with it."

"That one? There's never any traffic on that road. That road is a stop just because the nobles use it."

"That's what I mean. One of them might pop up and I'd miss my jump time just for a silly traffic accident with one of your nobles. They could hold me here for many ninedays. So come to a full stop, will you?"

"Whatever you say. Captain. You're paying the bill."

"So I am." A half-stellar note went through a crack in the cab.

When the truck slowed, Krausa went to the tailgate. As it stopped he reached down and snaked Thorby inside. "Quiet!" Thorby nodded and trembled. Krausa took tools from his pockets, attacked one of the crates. Shortly he had one side open, burlap pulled back, and he started dumping verga leaves, priceless on any other planet. Soon he had a largish hole and a hundred pounds of valuable leaves were scattered over the plain. "Get in!"

Thorby crawled into the space, made himself small. Krausa pulled burlap over him, sewed it, crimped slats back into place, and finished by strapping it and sealing it with a good imitation of the seal used by the inspectors—it was a handcrafted product of his ship's machine shop. He straightened up and wiped sweat from his face. The truck was turning into the loading circle for the Sisu.

He supervised the final loads himself, with the Sargon's field inspector at his elbow, checking off each crate, each bale, each carton as it went into the sling. Then Krausa thanked the inspector appropriately and rode the sling up instead of the passenger hoist. Since a man was riding it, the hoist man let down the sling with more than usual care. The hold was almost filled and stowed for jump; there was very little headroom. Crewmen started wrestling crates free of the sling and even the Captain lent a hand, at least to the extent of one crate. Once the sling was dragged dear, they closed the cargo door and started dogging it for space. Captain Krausa reached into his pocket again and started tearing open that crate.

Two hours later Mother Shaum stood at her bedroom window and looked out across the spaceport. She glanced at her watch. A green rocket rose from the control tower; seconds later a column of white light climbed to the sky. When the noise reached her, she smiled grimly and went downstairs to supervise the business—Mura couldn't really handle it properly alone.

Chapter 7

Inside the first few million miles Thorby was unhappily convinced that he had made a mistake.

He passed out from inhaling fumes of verga leaves and awakened in a tiny, one-bunk stateroom. Waking was painful; although the Sisu maintained one standard gravity of internal field throughout a jump his body had recognized both the slight difference from Jubbul-surface gravity and the more subtle difference between an artificial field and the natural condition. His body decided that he was in the hold of a slaver and threw him into the first nightmare he had had in years.

Then his tired, fume-sodden brain took a long time struggling up out of the horror.

At last he was awake, aware of his surrounding, and concluded that he was aboard the Sisu and safe. He felt a glow of relief and gathering excitement that he was traveling, going somewhere. His grief over Baslim was pushed aside by strangeness and change. He looked around.

The compartment was a cube, only a foot or so higher and wider than his own height. He was resting on a shelf that filled half the room and under him was a mattress strangely and delightfully soft, of material warm and springy and smooth. He stretched and yawned in surprised wonder that traders lived in such luxury. Then he swung his feet over and stood up.

The bunk swung noiselessly up and fitted itself into the bulkhead. Thorby could not puzzle out how to open it again. Presently he gave up. He did not want a bed then; he did want to look around.

When he woke the ceiling was glowing faintly. When he stood up it glowed brightly and remained so. But the light did not show where the door was. There were vertical metal panels on three sides, any of which might have been a door, save that none displayed thumb slot, hinge, or other familiar mark.

He considered the possibility that he had been locked in, but was not troubled. Living in a cave, working in the Plaza, he was afflicted neither with claustrophobia nor agoraphobia; he simply wanted to find the door and was annoyed that he could not recognize it. If it were locked, he did not think that Captain Krausa would let it stay locked unduly long. But he could not find it.

He did find a pair of shorts and a singlet, on the deck. When he woke he had been bare, the way he usually slept. He picked up these garments, touched them timidly, wondered at their magnificence. He recognized them as being the sort of thing most spacemen wore and for a moment let himself be dazzled at the thought of wearing such luxuries. But his mind shied away from such impudence.

Then he recalled Captain Krausa's distaste at his coming aboard in the clothes he normally wore—why, the Captain had even intended to take him to a tailoring shop in Joy Street which catered to spacemen! He had said so.

Thorby concluded that these clothes must be for him. For him! His breech clout was missing and the Captain certainly had not intended him to appear in the Sisu naked. Thorby was not troubled by modesty; the taboo was spotty on Jubbul and applied more to the upper classes. Nevertheless clothes were worn.

Marveling at his own daring, Thorby tried them on. He got the shorts on backwards, figured out his mistake, and put them on properly. He got the pullover shirt on backwards, too, but the error was not as glaring; he left it that way, thinking that he had it right. Then he wished mightily that he could see himself.

Both garments were of simple cut, undecorated light green, and fashioned of strong, cheap material; they were working clothes from the ship's slop chest, a type of garment much used by both sexes on many planets through many centuries. Yet Solomon in all his glory was not arrayed as Thorby! He smoothed the cloth against his skin and wanted someone to see him in his finery. He set about finding the door with renewed eagerness.

It found him. While running his hands over the panels on one bulkhead he became aware of a breeze, turned and found that one panel had disappeared. The door let out into a passageway.

A young man dressed much as Thorby was (Thorby was overjoyed to find that he had dressed properly for the occasion) was walking down the curved corridor toward Thorby. Thorby stepped out and spoke a greeting in Sargonese trade talk.

The man's eyes flicked toward Thorby, then he marched on past as if no one was there. Thorby blinked, puzzled and a little hurt. Then he called out to the receding back in Interlingua.

No answer and the man disappeared before he could try other languages.

Thorby shrugged and let it roll off; a beggar does not gain by being touchy. He set out to explore.

In twenty minutes he discovered many things. First, the Sisu was much larger than he had imagined. He had never before seen a starship close up, other than from the doubtful vantage of a slaver's hold. Ships in the distance, sitting on the field of Jubbul's port, had seemed large but not this enormous. Second, he was surprised to find so many people. He understood that the Sargon's freighters operating among the Nine Worlds were usually worked by crews of six or seven. But in his first few minutes he encountered several times that number of both sexes and all ages.

Third, he became dismally aware that he was being snubbed. People did not look at him, nor did they answer when he spoke; they walked right through him if he did not jump. The nearest he accomplished to social relations was with a female child, a toddler who regarded him with steady, grave eyes in answer to his overtures —until snatched up by a woman who did not even glance at Thorby.

Thorby recognized the treatment; it was the way a noble treated one of Thorby's caste. A noble could not see him, he did not exist— even a noble giving alms usually did so by handing it through a slave. Thorby had not been hurt by such treatment on Jubbul; that was natural, that was the way things had always been. It had made him neither lonely nor depressed; he had had plenty of warm company in his misery and had not known that it was misery.

But had he known ahead of time that the entire ship's company of the Sisu would behave like nobles he would never have shipped in her, snoopies or not. But he had not expected such treatment. Captain Krausa, once Baslim's message had been delivered, had been friendly and gruffly paternal; Thorby had expected the crew of the Sisu to reflect the attitude of her master.

He wandered the steel corridors, feeling like a ghost among living, and at last decided sadly to go back to the cubicle in which he had awakened. Then he discovered that he was lost. He retraced what he thought was the route—and in fact was; Baslim's renshawing had not been wasted—but all he found was a featureless tunnel. So he set out again, uncomfortably aware that whether he found his own room or not, he must soon find where they hid the washroom, even if he had to grab someone and shake him.

He blundered into a place where he was greeted by squeals of female indignation; he retreated hastily and heard a door slam behind him.

Shortly thereafter he was overtaken by a hurrying man who spoke to him, in Interlingua: "What the dickens are you doing wandering around and butting into things?"

Thorby felt a wave of relief. The grimmest place in the world, lonelier than being alone, is Coventry, and even a reprimand is better than being ignored. "I'm lost," he said meekly.

"Why didn't you stay where you were?"

"I didn't know I was supposed to—I'm sorry, noble sir—and there wasn't any washroom."

"Oh. But there is, right across from your bunkie."

"Noble sir, I did not know."

"Mmm . . . I suppose you didn't. I'm not 'noble sir'; I'm First Assistant Power Boss—see that you remember it. Come along." He grabbed Thorby by an arm, hurried him back through the maze, stopped in the same tunnel that had stumped Thorby, ran his hand down a seam in the metal. "Here's your bunkie." The panel slid aside.

The man turned, did the same on the other side. "Here's the starboard bachelors' washroom." The man advised him scornfully when Thorby was confused by strange fixtures, then chaperoned him back to his room. "Now stay here. Your meals will be fetched."

"First Assistant Power Boss, sir?"

"Eh?"

"Could I speak with Captain Krausa?"

The man looked astonished. "Do you think the Skipper has nothing better to do than talk to you?"

"But—"

The man had left; Thorby was talking to a steel panel.

Food appeared eventually, served by a youngster who behaved as if he were placing a tray in an empty room. More food appeared later and the first tray was removed. Thorby almost managed to be noticed; he hung onto the first tray and spoke to the boy in Interlingua. He detected a flicker of understanding, but he was answered by one short word. The word was "Fraki!" and Thorby did not recognize it . . . but he could recognize the contempt with which it was uttered. A fraki is a small, shapeless, semi-saurian scavenger of Alpha Centaura Prime III, one of the first worlds populated by men. It is ugly, almost mindless, and has disgusting habits. Its flesh can be eaten only by a starving man. Its skin is unpleasant to touch and leaves a foul odor.

But "fraki" means more than this. It means a groundhog, an earthcrawler, a dirt dweller, one who never goes into space, not of our tribe, not human, a goy, an auslander, a savage, beneath contempt. In Old Terran cultures almost every animal name has been used as an insult: pig, dog, sow, cow, shark, louse, skunk, worm—the list is endless. No such idiom carries more insult than "fraki."

Fortunately all Thorby got was the fact that the youngster did not care for him . . . which he knew.

Presently Thorby became sleepy. But, although he had mastered the gesture by which doors were opened, he still could not find any combination of swipes, scratches, punches, or other actions which would open the bed; he spent that night on the floorplates. His breakfast appeared next morning but he was unable to detain the person serving it, even to be insulted again. He did encounter other boys and young men in the washroom across the corridor; while he was still ignored, he learned one thing by watching—he could wash his clothing there. A gadget would accept a garment, hold it a few minutes, spew it forth dry and fresh. He was so delighted that he laundered his new finery three times that day. Besides, he had nothing else to do. He again slept on the floor that night.

He was squatting in his bunkie, feeling a great aching loneliness for Pop and wishing that he had never left Jubbul, when someone scratched at his door. "May I come in?" a voice inquired in careful, badly accented Sargonese.

"Come in!" Thorby answered eagerly and jumped up to open the door. He found himself facing a middle-aged woman with a pleasant face. "Welcome," he said in Sargonese, and stood aside.

"I thank you for your gracious—" she stumbled and said quickly, "Do you speak Interlingua?"

"Certainly, madam."

She muttered in System English, "Thank goodness for that—I've run out of Sargonese," then went on in Interlingua, "Then we will speak it, if you don't mind."

"As you wish, madam," Thorby answered in the same language, then added in System English, "unless you would rather use another language."

She looked startled. "How many languages do you speak?"

Thorby thought. "Seven, ma'am. I can puzzle out some others, but I cannot say that I speak them."

She looked even more surprised and said slowly, "Perhaps I have made a mistake. But—correct me if I am wrong and forgive my ignorance—I was told that you were a beggar's son in Jubbulpore."

"I am the son of Baslim the Cripple," Thorby said proudly, "a licensed beggar under the mercy of the Sargon. My late father was a learned man. His wisdom was famous from one side of the Plaza to the other."

"I believe it. Uh . . . are all beggars on Jubbul linguists?"

"What, ma'am? Most of them speak only gutter argot. But my father did not permit me to speak it . . . other than professionally, of course."

"Of course." She blinked. "I wish I could have met your father."

"Thank you, ma'am. Will you sit down? I am ashamed that I have nothing but the floor to offer . . . but what I have is yours."

"Thank you." She sat on the floor with more effort than did Thorby, who had remained thousands of hours in lotus seat, shouting his plea for alms.

Thorby wondered whether to close the door, whether this lady—in Sargonese he thought of her as "my lady" even though her friendly manner made her status unclear—had left it open on purpose. He was floundering in a sea of unknown customs, facing a social situation totally new to him. He solved it with common sense; he asked, "Do you prefer the door open or closed, ma'am?"

"Eh? It doesn't matter. Oh, perhaps you had better leave it open;

these are bachelor quarters of the starboard moiety and I'm supposed to live in port purdah, with the unmarried females. But I'm allowed some of the privileges and immunities of . . . well, of a pet dog. I'm a tolerated 'fraki.'" She spoke the last word with a wry smile.

Thorby had missed most of the key words. "A 'dog'? That's a wolf creature?"

She looked at him sharply. "You learned this language on Jubbul?"

"I have never been off Jubbul, ma'am—except when I was very young. I'm sorry if I do not speak correctly. Would you prefer Interlingua?"

"Oh, no. You speak System English beautifully . . . a better Terran accent than mine—I've never been able to get my birthplace out of my vowels. But it's up to me to make myself understood. Let me introduce myself. I'm not a trader; I'm an anthropologist they are allowing to travel with them. My name is Doctor Margaret Mader."

Thorby ducked his head and pressed his palms together. "I am honored. My name is Thorby, son of Baslim."

"The pleasure is mine, Thorby. Call me 'Margaret.' My title doesn't count here anyhow, since it is not a ship's title. Do you know what an anthropologist is?"

"Uh, I am sorry, ma'am—Margaret."

"It's simpler than it sounds. An anthropologist is a scientist who studies how people live together."

Thorby looked doubtful. "This is a science?"

"Sometimes I wonder. Actually, Thorby, it is a complicated study, because the patterns that men work out to live together seem unlimited. There are only six things that all men have in common with all other men and not with animals—three of them part of our physical makeup, the way our bodies work, and three of them are learned. Everything else that a man does, or believes, all his customs and economic practices, vary enormously. Anthropologists study those variables. Do you understand variable'?"

"Uh," Thorby said doubtfully, "the x in an equation?"

"Correct!" she agreed with delight. "We study the x's in the human equations. That's what I'm doing. I'm studying the way the Free Traders live. They have worked out possibly the oddest solutions to the difficult problem of how to be human and survive of any society in history. They are unique." She moved restlessly. "Thorby, would you mind if I sat in a chair? I don't bend as well as I used to."

Thorby blushed. "Ma'am . . . I have none. I am dis—"

"There's one right behind you. And another behind me." She stood up and touched the wall. A panel slid aside; an upholstered armchair unfolded from the space disclosed.

Seeing his face she said, "Didn't they show you?" and did the same on the other wall; another chair sprang out.

Thorby sat down cautiously, then let his weight relax into cushions as the chair felt him out and adjusted itself to him. A big grin spread over his face. "Gosh!"

"Do you know how to open your work table?"

"Table?"

"Good heavens, didn't they show you anything?"

"Well . . . there was a bed in here once. But I've lost it."

Doctor Mader muttered something, then said, "I might have known it. Thorby, I admire these Traders. I even like them. But they can be the most stiff-necked, self-centered, contrary, self-righteous, uncooperative—but I should not criticize our hosts. Here." She reached out both hands, touched two spots on the wall and the disappearing bed swung down. With the chairs open, there remained hardly room for one person to stand. "I'd better close it. You saw what I did?"

"Let me try."

She showed Thorby other builtin facilities of what had seemed to be a bare cell: two chairs, a bed, clothes cupboards. Thorby learned that he owned, or at least had, two more work suits, two pairs of soft ship's shoes, and minor items, some of which were strange, bookshelf and spool racks (empty, except for the Laws of Sisu), a drinking fountain, a bed reading light, an intercom, a clock, a mirror, a room thermostat, and gadgets which were useless to him as his background included no need. "What's that?" he asked at last.

"That? Probably the microphone to the Chief Officer's cabin. Or it may be a dummy with the real one hidden. But don't worry; almost no one in this ship speaks System English and she isn't one of the few. They talk their 'secret language'—only it isn't secret; it's just Finnish. Each Trader ship has its own language—one of the Terran tongues. And the culture has an overall 'secret' language which is merely degenerate Church Latin—and at that they don't use it; 'Free Ships' talk to each other in Interlingua."

Thorby was only half listening. He had been excessively cheered by her company and now, in contrast, he was brooding over his treatment from others. "Margaret . . . why won't they speak to people?"

"Eh?"

"You're the first person who's spoken to me!"

"Oh." She looked distressed. "I should have realized it. You've been ignored."

"Well . . . they feed me."

"But they don't talk with you. Oh, you poor dear! Thorby, they don't speak to you because you are not 'people.' Nor am I."

"They don't talk to you either?"

"They do now. But it took direct orders from the Chief Officer and much patience on my part." She frowned. "Thorby, every excessively clannish culture—and I know of none more clannish than this—every such culture has the same key word in its language . . . and the word is 'people' however they say it. It means themselves. 'Me and my wife, son John and his wife, us four and no more'—cutting off their group from all others and denying that others are even human. Have you heard the word 'fraki' yet?"

"Yes. I don't know what it means."

"A fraki is just a harmless, rather repulsive little animal. But when they say it, it means 'stranger.'"

"Uh, well, I guess I am a stranger."

"Yes, but it also means you can never be anything else. It means that you and I are subhuman breeds outside the law—their law."

Thorby looked bleak. "Does that mean I have to stay in this room and never, ever talk to anybody?"

"Goodness! I don't know. I'll talk to you—"

"Thanks!"

"Let me see what I can find out. They're not cruel; they're just pigheaded and provincial. The fact that you have feelings never occurs to them. I'll talk to the Captain; I have an appointment with him as soon as the ship goes irrational." She glanced at her anklet. "Heavens, look at the time! I came here to talk about Jubbul and we haven't said a word about it. May I come back and discuss it with you?"

"I wish you would."

"Good. Jubbul is a well-analyzed culture, but I don't think any student has ever had opportunity to examine it from the perspective you had. I was delighted when I heard that you were a professed mendicant."

"Excuse me?"

"A beggar. Investigators who have been allowed to live there have all been guests of the upper classes. That forces them to see . . . well, the way slaves live for example, from the outside, not the inside. You see?"

"I guess so." Thorby added, "If you want to know about slaves, I was one."

"You were?"

"I'm a freedman. Uh, I should have told you," he added uncomfortably, afraid that his new-found friend would scorn him, now that she knew his class.

"No reason to, but I'm overjoyed that you mentioned it. Thorby, you're a treasure trove! Look, dear, I've got to run; I'm late now. But may I come back soon?"

"Huh? Why, surely, Margaret." He added honestly, "I really don't have much else to do."

Thorby slept in his wonderful new bed that night. He was left alone the next morning but he was not bored, as he had so many toys to play with. He opened things out and caused them to fold up again, delighted at how each gadget folded in on itself to occupy minimum space. He concluded that it must be witchcraft. Baslim had taught him that magic and witchcraft were nonsense but the teaching had not fully stuck—Pop had known everything but just the same, how could you fly in the face of experience? Jubbul had plenty of witches and if they weren't practicing magic, what were they doing?

He had just opened his bed for the sixth time when he was almost shocked out of the shoes he had dared to try on by an unholy racket. It was the ship's alarm, calling all hands to General Quarters, and it was merely a drill, but Thorby did not know that. When he reswallowed his heart, he opened the door and looked out. People were running at breakneck speed.

Shortly the corridors were empty. He went back into his bunkie, waited and tried to understand. Presently his sharp ears detected the absence of the soft sigh of the ventilation system. But there was nothing he could do about it. He should have mustered in the innermost compartment, along with children and other noncombatants, but he did not know.

So he waited.

The alarm rang again, in conjunction with a horn signal, and again there were running people in the passageways. Again it was repeated, until the crew had run through General Quarters, Hull Broach, Power Failure, Air Hazard, Radiation Hazard, and so forth—all the general drills of a taut ship. Once the lights went out and once for frightening moments Thorby experienced the bewildering sensation of free fall as the ship's artificial field cut off.

After a long time of such inexplicable buffoonery he heard the soothing strains of recall and the ventilation system whispered back to normal. No one bothered to look for him; the old woman who mustered nonparticipants hadn't noticed the absence of the fraki although she had counted the animal pets aboard.

Immediately thereafter Thorby was dragged up to see the Chief Officer.

A man opened his door, grabbed his shoulder and marched him away. Thorby put up with it for a short distance, then he rebelled; he had his bellyful of such treatment.

The gutter fighting he had learned in order to survive in Jubbulpore was lacking in rules. Unfortunately this man had learned in a school equally cold-blooded but more scientific; Thorby got in one swipe, then found himself pinned against the bulkhead with his left wrist in danger of breaking. "Cut out the nonsense!"

"Quit pushing me around!"

"I said, 'Cut out the nonsense.' You're going up to see the Chief Officer. Don't give me trouble, Fraki, or I'll stuff your head in your mouth."

"I want to see Captain Krausa!"

The man relaxed the pressure and said, "You'll see him. But the Chief Officer has ordered you to report . . . and she can't be kept waiting. So will you go quietly? Or shall I carry you there in pieces?"

Thorby went quietly. Pressure on a wrist joint combined with pressure on a nerve between the bones of the palm carries its own rough logic. Several decks up he was shoved through an open door. "Chief Officer, here's the fraki."

"Thank you, Third Deck Master. You may go."

Thorby understood only the word "fraki." He picked himself up and found himself in a room many times as large as his own. The most prominent thing in it was an imposing bed, but the small figure in the bed dominated the room. Only after he had looked at her did he notice that Captain Krausa stood silent on one side of the bed and that a woman perhaps the Captain's age stood on the other.

The woman in bed was shrunken with age but radiated authority. She was richly dressed—the scarf over her thin hair represented more money than Thorby had ever seen at one time—but Thorby noticed only her fierce, sunken eyes. She looked at him. "So! Oldest Son, I have much trouble believing it." She spoke in Suomic.

"My Mother, the message could not have been faked."

She sniffed.

Captain Krausa went on with humble stubbornness, "Hear the message yourself. My Mother." He turned to Thorby and said in Interlingua, "Repeat the message from your father."

Obediently, not understanding but enormously relieved to be in the presence of Pop's friend, Thorby repeated the message by rote. The old woman heard him through, then turned to Captain Krausa. "What is this? He speaks our language! A fraki!"

"No, My Mother, he understands not a word. That is Baslim's voice."

She looked back at Thorby, spilled a stream of Suomic on him. He looked questioningly at Captain Krausa. She said, "Have him repeat it again."

The Captain gave the order; Thorby, confused but willing, did so. She lay silent after he had concluded while the other waited. Her face screwed up in anger and exasperation. At last she rasped, "Debts must be paid!"

"That was my thought, My Mother."

"But why should the draft be drawn on us?" she answered angrily.

The Captain said nothing. She went on more quietly, "The message is authentic. I thought surely it must be faked. Had I known what you intended I would have forbidden it. But, Oldest Son, stupid as you are, you were right. And debts must be paid." Her son continued to say nothing; she added angrily, "Well? Speak up! What coin do you propose to tender?"

"I have been thinking. My Mother," Krausa said slowly. "Baslim demands that we care for the boy only a limited time . . . until we can turn him over to a Hegemonic military vessel. How long will that be? A year, two years. But even that presents problems. However, we have a precedent—the fraki female. The Family has accepted her—oh, a little grumbling, but they are used to her now, even amused by her. If My Mother intervened for this lad in the same way—"

"Nonsense!"

"But, My Mother, we are obligated. Debts must—"

"Silence!"

Krausa shut up.

She went on quietly, "Did you not listen to the wording of the burden Baslim placed on you? '—succor and admonish him as if you were I.' What was Baslim to this fraki?"

"Why, he speaks of him as his adopted son. I thought—"

"You didn't think. If you take Baslim's place, what does that make you? Is there more than one way to read the words?"

Krausa looked troubled. The ancient went on, "Sisu pays debts in full. No half-measures, no short weights—in full. The fraki must be adopted . . . by you."

Krausa's face was suddenly blank. The other woman, who had been moving around quietly with makework, dropped a tray.

The Captain said, "But, My Mother, what will the Family—"

"I am the Family!" She turned suddenly to the other woman. "Oldest Son's Wife, have all my senior daughters attend me."

"Yes, Husband's Mother." She curtsied and left.

The Chief Officer looked grimly at the overhead, then almost smiled. "This is not all bad, Oldest Son. What will happen at the next Gathering of the People?"

"Why, we will be thanked."

"Thanks buy no cargo." She licked her thin Ups. "The People will be in debt to Sisu . . . and there will be a change in status of ships. We won't suffer."

Krausa smiled slowly. "You always were a shrewd one, My Mother."

"A good thing for Sisu that I am. Take the fraki boy and prepare him. We'll do this quickly."

Chapter 8

Thorby had two choices: be adopted quietly, or make a fuss and be adopted anyhow. He chose the first, which was sensible, as opposing the will of the Chief Officer was unpleasant and almost always futile. Besides, while he felt odd and rather unhappy about acquiring a new family so soon after the death of Pop, nevertheless he could see that the change was to his advantage. As a fraki, his status had never been lower. Even a slave has equals.

But most important, Pop had told him to do what Captain Krausa said for him to do.

The adoption took place in the dining saloon at the evening meal that day. Thorby understood little of what went on and none of what was said, since the ceremonies were in the "secret language," but the Captain had coached him in what to expect. The entire ship's company was there, except those on watch. Even Doctor Mader was there, inside the main door and taking no part but where she could see and hear.

The Chief Officer was carried in and everyone stood. She was settled on a lounge at the head of the officers' table, where her daughter-in-law, the Captain's wife, attended her. When she was comfortable, she made a gesture and they sat down, the Captain seating himself on her right. Girls "from the port moiety, the watch with the day's duty, then served all hands with bowls of thin mush. No one touched it. The Chief Officer banged her spoon on her bowl and spoke briefly and emphatically.

Her son followed her. Thorby was surprised to discover that he recognized a portion of the Captain's speech as being identical with part of the message Thorby had delivered; he could spot the sequence of sounds.

The Chief Engineer, a man older than Krausa, answered, then several older people, both men and women, spoke. The Chief Officer asked a question and was answered in chorus—a unanimous assent. The old woman did not ask for dissenting votes.

Thorby was trying to catch Doctor Mader's eye when the Captain called to him in Interlingua. Thorby had been seated on a stool alone and was feeling conspicuous, especially as persons he caught looking at him did not seem very friendly.

"Come here!"

Thorby looked up, saw both the Captain and his mother looking at him. She seemed irritated or it may have been the permanent set of her features. Thorby hurried over.

She dipped her spoon in his dish, barely licked it. Feeling as if he were doing something horribly wrong but having been coached, he dipped his spoon in her bowl, timidly took a mouthful. She reached up, pulled his head down and pecked him with withered lips on both cheeks. He returned the symbolic caress and felt gooseflesh.

Captain Krausa ate from Thorby's bowl; he ate from the Captain's. Then Krausa took a knife, held the point between thumb and forefinger and whispered in Interlingua, "Mind you don't cry out." He stabbed Thorby in his upper arm.

Thorby thought with contempt that Baslim had taught him to ignore ten times that much pain. But blood flowed freely. Krausa led him to a spot where all might see, said something loudly, and held his arm so that a puddle of blood formed on the deck. The Captain stepped on it, rubbed it in with his foot, spoke loudly again—and a cheer went up. Krausa said to Thorby in Interlingua, "Your blood is now in the steel; our steel is in your blood."

Thorby had encountered sympathetic magic all his life and its wild, almost reasonable logic he understood. He felt a burst of pride that he was now part of the ship.

The Captain's wife slapped a plaster over the cut. Then Thorby exchanged food and kisses with her, after which he had to do it right around the room, every table, his brothers and his uncles, his sisters and his cousins and his aunts. Instead of kissing him, the men and boys grasped his hands and then clapped him across the shoulders. When he came to the table of unmarried females he hesitated—and discovered that they did not kiss him; they giggled and squealed and blushed and hastily touched forefingers to his forehead.

Close behind him, girls with the serving duty cleared away the bowls of mush—purely ritualistic food symbolizing the meager rations on which the People could cross space if necessary—and were serving a feast. Thorby would have been clogged to his ears with mush had he not caught onto the trick: don't eat it, just dip the spoon, then barely taste it. But when at last he was seated, an accepted member of the Family, at the starboard bachelors' table, he had no appetite for the banquet in his honor. Eighty-odd new relatives were too much. He felt tired, nervous, and let down.

But he tried to eat. Presently he heard a remark in which he understood only the word "fraki." He looked up and saw a youth across the table grinning unpleasantly.

The president of the table, seated on Thorby's right, rapped for attention. "We'll speak nothing but Interlingua tonight," he announced, "and thereafter follow the customs in allowing a new relative gradually to acquire our language." His eye rested coldly on the youngster who had sneered at Thorby. "As for you, Cross-Cousin-in-Law by Marriage, I'll remind you—just once—that my Adopted

Younger Brother is senior to you. And I'll see you in my bunkie after dinner."

The younger boy looked startled. "Aw, Senior Cousin, I was just saying—"

"Drop it." The young man said quietly to Thorby, "Use your fork. People do not eat meat with fingers."

"Fork?"

"Left of your plate. Watch me; you'll learn. Don't let them get you riled. Some of these young oafs have yet to learn that when Grandmother speaks, she means business."

Thorby was moved from his bunkie into a less luxurious larger room intended for four bachelors. His roommates were Fritz Krausa, who was his eldest unmarried foster brother and president of the starboard bachelor table, Chelan Krausa-Drotar, Thorby's foster ortho-second-cousin by marriage, and Jeri Kingsolver, his foster nephew by his eldest married brother.

It resulted in his learning Suomic rapidly. But the words he needed first were not Suomish; they were words borrowed or invented to describe family relationships in great detail. Languages reflect cultures; most languages distinguish brother, sister, father, mother, aunt, uncle, and link generations by "great" or "grand." Some languages make no distinction between (for example) "father" and "uncle" and the language reflects tribal custom. Contrariwise, some languages (e.g., Norwegian) split "uncle" into maternal and paternal ("morbror" and "farbror").

The Free Traders can state a relationship such as "my maternal foster half-step-uncle by marriage, once removed and now deceased" in one word, one which means that relationship and no other. The relation between any spot on a family tree and any other spot can be so stated. Where most cultures find a dozen titles for relatives sufficient the Traders use more than two thousand. The languages name discreetly and quickly such variables as generation, lineal or collateral, natural or adopted, age within generation, sex of speaker, sex of relative referred to, sexes of relatives forming linkage, consanguinity or affinity, and vital status.

Thorby's first task was to learn the word and the relationship defined by it with which he must address each of more than eighty new relatives; he had to understand the precise flavor of relationship, close or distant, senior or junior; he had to learn other titles by which he would be addressed by each of them. Until he had learned all this, he could not talk because as soon as he opened his mouth he would commit a grave breach in manners.

He had to associate five things for each member of the Sisu's company, a face, a full name (his own name was now Thorby Baslim-

Krausa), a family title, that person's family title for him, and that person's ship's rank (such as "Chief Officer" or "Starboard Second Assistant Cook"). He learned that each person must be addressed by family title in family matters, by ship's rank concerning ship's duties, and by given names on social occasions if the senior permitted it—nicknames hardly existed, since the nickname could be used only down, never up.

Until he grasped these distinctions, he could not be a functioning member of the family even though he was legally such. The life of the ship was a caste system of such complex obligations, privileges and required reactions to obligatory actions, as to make the stratified, protocol-ridden society of Jubbul seem like chaos. The Captain's wife was Thorby's "mother" but she was also Deputy Chief Officer; how he addressed her depended on what he had to say. Since he was in bachelor quarters, the mothering phase ceased before it started; nevertheless she treated him warmly as a son and offered her cheek for his kiss just as she did for Thorby's roommate and elder brother Fritz.

But as Deputy Chief Officer she could be as cold as a tax collector.

Not that her status was easier; she would not be Chief Officer until the old woman had the grace to die. In the meantime she was hand and voice and body servant for her motherin-law. Theoretically senior officers were elective; practically it was a one-party system with a single slate. Krausa was captain because his father had been; his wife was deputy chief officer because she was his wife, and she would someday become chief officer—and boss him and his ship as his mother did—for the same reason. Meanwhile his wife's high rank carried with it the worst job in the ship, with no respite, for senior officers served for life . . . unless impeached, convicted, and expelled—onto a planet for unsatisfactory performance, into the chilly thinness of space for breaking the ancient and pigheaded laws of Sisu.

But such an event was as scarce as a double eclipse; Thorby's mother's hope lay in heart failure, stroke, or other hazard of old age.

Thorby as adopted youngest son of Captain Krausa, senior male of the Krausa sept, titular head of Sisu clan (the Captain's mother being the real head), was senior to threefourths of his new relatives in clan status (he had not yet acquired ship's rank). But seniority did not make life easier. With rank goeth privileges—so it ever shall be. But also with it go responsibility and obligation, always more onerous than privileges are pleasant.

It was easier to learn to be a beggar.

He was swept up in his new problems and did not see Doctor Margaret Mader for days. He was hurrying down the trunk corridor of fourth deck—he was always hurrying now—when he ran into her.

He stopped. "Hello, Margaret."

"Hello, Trader. I thought for a moment that you were no longer speaking to fraki."

"Aw, Margaret!"

She smiled. "I was joking. Congratulations, Thorby. I'm happy for you—it's the best solution under the circumstances."

"Thanks. I guess so."

She shifted to System English and said with motherly concern, "You seem doubtful, Thorby. Aren't things going well?"

"Oh, things are all right" He suddenly blurted the truth. "Margaret, I'm never going to understand these people!"

She said gently, "I've felt the same way at the beginning of every field study and this one has been the most puzzling. What is bothering you?"

"Uh . . . I don't know. I never know. We'll, take Fritz—he's my elder brother. He's helped me a lot—then I miss something that he expects me to understand and he blasts my ears off. Once he hit me. I hit back and I thought he was going to explode."

"Peck rights," said Margaret.

"What?"

"Never mind. It isn't scientifically parallel; humans aren't chickens. What happened?"

"Well, just as quickly he went absolutely cold, told me he would forget it, wipe it out, because of my ignorance."

"Noblesse oblige."

"Huh?"

"Sorry. My mind is a junk yard. And did he?"

"Completely. He was sweet as sugar. I don't know why he got sore . . . and I don't know why he quit being sore when I hit him." He spread his hands. "It's not natural."

"No, it isn't. But few things are. Mmm . . . Thorby, I might be able to help. It's possible that I know how Fritz works better than he knows. Because I'm not one of the 'People.'"

"I don't understand."

"I do, I think. It's my job to. Fritz was born into the People; most of what he knows—and he is a very sophisticated young man—is subconscious. He can't explain it because he doesn't know he knows it; he simply functions. But what I have learned these past two years I have learned consciously. Perhaps I can advise you when you are shy about asking one of them. You can speak freely with me; I have no status."

"Gee, Margaret, would you?"

"Whenever you have time. I haven't forgotten that you promised to discuss Jubbul with me, either. But don't let me hold you; you seemed in a hurry."

"I wasn't, not really." He grinned sheepishly. "When I hurry I don't have to speak to as many people . . . and I usually don't know how."

"Ah, yes. Thorby, I have photographs, names, family classification, ship's job, on everyone. Would it help?"

"Huh? I should say so! Fritz thinks it's enough just to point somebody out once and say who he is."

"Then come to my room. It's all right; I have a dispensation to interview anyone there. The door opens into a public corridor; you don't cross purdah line."

Arranged by case cards with photographs, the data Thorby had had trouble learning piecemeal he soaked up in half an hour—thanks to Baslim's training and Doctor Mader's orderliness. In addition, she had prepared a family tree for the Sisu; it was the first he had seen; his relatives did not need diagrams, they simply knew.

She showed him his own place. "The plus mark means that while you are in the direct sept, you were not born there. Here are a couple more, transferred from collateral branches to sept . . . to put them into line of command I suspect. You people call yourselves a 'family' but the grouping is a phratry."

"A what?"

"A related group without a common ancestor which practices exogamy—that means marrying outside the group. "The exogamy taboo holds, modified by rule of moiety. You know how the two moieties work?"

"They take turns having the day's duty."

"Yes, but do you know why the starboard watch has more bachelors and the port watch more single women?"

"Uh, I don't think so."

"Females adopted from other ships are in port moiety; native bachelors are starboard. Every girl in your side must be exchanged . . . unless she can find a husband among a very few eligible men. You should have been adopted on this side, but that would have required a different foster father. See the names with a blue circle-and-cross? One of those girls is your future wife . . . unless you find a bride on another ship."

Thorby felt dismayed at the thought. "Do I have to?"

"If you gain ship's rank to match your family rank, you'll have to carry a club to beat them off."

It fretted him. Swamped with family, he felt more need for a third leg than he did for a wife.

"Most societies," she went on, "practice both exogamy and endogamy—a man must marry outside his family but inside his nation, race, religion, or some large group, and you Free Traders are no exception; you must cross to another moiety but you can't marry fraki. But your rules produce an unusual setup; each ship is a patrilocal matriarchy."

"A what?"

"'Patrilocal' means that wives join their husbands' families; a matriarchy . . . well, who bosses this ship?"

"Why, the Captain."

"He does?"

"Well, Father listens to Grandmother, but she is getting old and—"

"No 'buts.' The Chief Officer is boss. It surprised me; I thought it must be just this ship. But it extends all through the People. Men do the trading, conn the ship and mind its power plant—but a woman always is boss. It makes sense within its framework; it makes your marriage customs tolerable."

Thorby wished she would not keep referring to marriage.

"You haven't seen ships trade daughters. Girls leaving weep and wail and almost have to be dragged . . . but girls arriving have dried their eyes and are ready to smile and flirt, eyes open for husbands. If a girl catches the right man and pushes him, someday she can be sovereign of an independent state. Until she leaves her native ship, she isn't anybody—which is why her tears dry quickly. But if men were boss, girl-swapping would be slavery; as it is, it's a girl's big chance."

Doctor Mader turned away from the chart. "Human customs that help people live together are almost never planned. But they are useful, or they don't survive. Thorby, you have been fretted about how to behave toward your relatives."

"I certainly have!"

"What's the most important thing to a Trader?"

Thorby thought. "Why, the Family. Everything depends on who you are in the Family."

"Not at all. His ship."

"Well, when you say 'ship' you mean 'family.'"

"Just backwards. If a Trader becomes dissatisfied, where can he go? Space won't have him without a ship around him; nor can he imagine living on a planet among fraki, the idea is disgusting. His ship is his life, the air he breathes comes from his ship; somehow he must learn to live in it. But the pressure of personalities is almost unbearable and there is no way to get away from each other. Pressure could build up until somebody gets killed . . . or until the ship itself is destroyed. But humans devise ways to adjust to any conditions. You people lubricate with rituals, formalism, set patterns of speech, obligatory actions and responses. When things grow difficult you hide behind a pattern. That's why Fritz didn't stay angry."

"Huh?"

"He couldn't. You had done something wrong . . . but the fact itself showed that you were ignorant. Fritz had momentarily forgotten, then he remembered and his anger disappeared. The People do not permit themselves to be angry with a child; instead they set him back on the proper path . . . until he follows your complex customs as automatically as Fritz does."

"Uh, I think I see." Thorby sighed. "But it isn't easy."

"Because you weren't born to it. But you'll learn and it will be no more effort than breathing—and as useful. Customs tell a man who he is, where he belongs, what he must do. Better illogical customs than none; men cannot live together without them. From an anthropologist's view, 'justice' is a search for workable customs."

"My father—my other father, I mean; Baslim the Cripple—used to say the way to find justice is to deal fairly with other people and not worry about how they deal with you."

"Doesn't that fit what I said?"

"Uh, I guess so."

"I think Baslim the Cripple would regard the People as just." She patted his shoulder. "Never mind, Thorby. Do your best and one day you'll marry one of those nice girls. You'll be happy."

The prophecy did not cheer Thorby.

Chapter 9

By the time Sisu approached Losian, Thorby had a battle station worthy of a man. His first assignment had been to assist in the central dressing station, an unnecessary job. But his background in mathematics got him promoted.

He had been attending the ship's school. Baslim had given him a broad education, but this fact did not stand out to his instructors, since most of what they regarded as necessary—the Finnish language as they spoke it, the history of the People and of Sisu, trading customs, business practices, and export and import laws of many planets, hydroponics and ship's economy, ship safety and damage control—were subjects that Baslim had not even touched; he had emphasized languages, science, mathematics, galactography and history. The new subjects Thorby gobbled with a speed possible only to one renshawed by Baslim's strenuous methods. The Traders needed applied mathematics—bookkeeping and accounting, astrogation, nucleonics for a hydrogen-fusion-powered n-ship. Thorby splashed through the first, the second was hardly more difficult, but as for the third, the ship's schoolmaster was astounded that this ex-fraki had already studied multidimensional geometries.

So he reported to the Captain that they had a mathematical genius aboard.

This was not true. But it got Thorby reassigned to the starboard firecontrol computer.

The greatest hazard to trading ships is in the first and last legs of each jump, when a ship is below speed-of-light. It is theoretically possible to detect and intercept a ship going many times speed-of-light, when it is irrational to the four-dimensional space of the senses; in practice it is about as easy as hitting a particular raindrop with a bow and arrow during a storm at midnight. But it is feasible to hunt down a ship moving below speed-of-light if the attacker is fast and the victim is a big lumbering freighter.

The Sisu had acceleration of one hundred standard gravities and used it all to cut down the hazard time. But a ship which speeds up by a kilometer per second each second will take three and one half standard days to reach speed-of-light.

Half a week is a long, nervous time to wait. Doubling acceleration would have cut danger time by half and made the Sisu as agile as a raider—but it would have meant a hydrogen-fission chamber eight times as big with parallel increases in radiation shielding, auxiliary equipment, and paramagnetic capsule to contain the hydrogen reaction; the added mass would eliminate cargo capacity. Traders are working people; even if there were no parasites preying on them they could not afford to burn their profits in the inexorable workings of an exponential law of multidimensional physics. So the Sisu had the best legs she could afford-but not long enough to outrun a ship unburdened by cargo.

Nor could Sisu maneuver easily. She had to go precisely in the right direction when she entered the trackless night of n-space, else when she came out she would be too far from market; such a mistake could turn the ledger from black to red. Still more hampering, her skipper had to be prepared to cut power entirely, or risk having his in-ship artificial gravity field destroyed—and thereby make strawberry jam of the Family as soft bodies were suddenly exposed to one hundred gravities.

This is why a captain gets stomach ulcers; it isn't dickering for cargoes, figuring discounts and commissions, and trying to guess what goods will show the best return. It's not long jumps through the black —that is when he can relax and dandle babies. It is starting and ending a jump that kills him off, the long aching hours when he may have to make a splitsecond decision involving the lives—or freedom—of his family.

If raiders wished to destroy merchant ships, Sisu and her sisters would not stand a chance. But the raider wants loot and slaves; it gains nothing simply to blast a ship.

Merchantmen are limited by no qualms; an attacking ship's destruction is the ideal outcome. Atomic target-seekers are dreadfully expensive, and using them up is rough on profit-and-loss—but there is no holding back if the computer says the target can be reached—whereas a raider will use destruction weapons only to save himself. His tactic is to blind the trader, burn out her instruments so that he can get close enough to paralyze everyone aboard—or, failing that, kill without destroying ship and cargo.

The trader runs if she can, fights if she must. But when she fights, she fights to kill.

Whenever Sisu was below speed-of-light, she listened with artificial senses to every disturbance in multi-space, the whisper of n-space communication or the "white" roar of a ship boosting at many gravities. Data poured into the ship's astrogational analog of space and the questions were: Where is this other ship? What is its course? speed? acceleration? Can it catch us before we reach n-space?

If the answers were threatening, digested data channeled into port and starboard firecontrol computers and Sisu braced herself to fight. Ordnancemen armed A-bomb target seekers, caressed their sleek sides and muttered charms; the Chief Engineer unlocked the suicide switch which could let the power plant become a hydrogen bomb of monstrous size and prayed that, in final extremity, he would have the courage to deliver his people into the shelter of death; the Captain sounded the clangor calling the ship from watch-and-watch to General Quarters. Cooks switched off fires; auxiliary engineers closed down air circulation; farmers said good-by to their green growing things and hurried to fighting stations; mothers with babies mustered, then strapped down and held those babies tightly.

Then the waiting started.

But not for Thorby—not for those assigned to firecontrol computers. Sweating into their straps, for the next minutes or hours the life of Sisu is in their hands. The firecontrol computer machines, chewing with millisecond meditation data from the analog, decide whether or not torpedoes can reach the target, then offer four answers: ballistic "possible" or "impossible" for projected condition, yes or no for condition changed by one ship, or the other, or both, through cutting power. These answers automatic circuits could handle alone, but machines do not think. Half of each computer is designed to allow the operator to ask what the situation might be in the far future of five minutes or so from now if variables change . . . and whether the target might be reached under such changes.

Any variable can be shaded by human judgment; an intuitive projection by a human operator can save his ship—or lose it. A paralysis beam travels at speed-of-light; torpedoes never have time to get up to more than a few hundred kilometers per second—yet it is possible for a raider to come within beaming range, have his pencil of paralyzing radiation on its way, and the trader to launch a target-seeker before the beam strikes . . . and still be saved when the outlaw flames into atomic mist a little later.

But if the operator is too eager by a few seconds, or overly cautious by the same, he can lose his ship. Too eager, the missile will fail to reach target; too cautious, it will never be launched.

Seasoned oldsters are not good at these jobs. The perfect firecontrolman is an adolescent, or young man or woman, fast in thought and action, confident, with intuitive grasp of mathematical relations beyond rote and rule, and not afraid of death he cannot yet imagine.

The traders must be always alert for such youngsters; Thorby seemed to have the feel for mathematics; he might have the other talents for a job something like chess played under terrific pressure and a fast game of spat ball. His mentor was Jeri Kingsolver, his nephew and roommate. Jeri was junior in family rank but appeared to be older; he called Thorby "Uncle" outside the computer room; on the job Thorby called him "Starboard Senior Firecontrolman" and added "Sir."

During long weeks of the dive through dark toward Losian, Jeri drilled Thorby. Thorby was supposed to be training for hydroponics and Jeri was the Supercargo's Senior Clerk, but the ship had plenty of farmers and the Supercargo's office was never very busy in space; Captain Krausa directed Jeri to keep Thorby hard at it in the computer room.

Since the ship remained at battle stations for half a week while boosting to speed-of-light, each fighting station had two persons assigned watch-and-watch. Jeri's junior controlman was his younger sister Mata. The computer had twin consoles, either of which could command by means of a selector switch. At General Quarters they sat side by side, with Jeri controlling and Mata ready to take over.

After a stiff course in what the machine could do Jeri put Thorby at one console, Mata at the other and fed them problems from the ship's control room. Each console recorded; it was possible to see what decisions each operator had made and how these compared with those made in battle, for the data were from records, real or threatened battles in the past.

Shortly Thorby became extremely irked; Mata was enormously better at it than he was.

So he tried harder and got worse. While he sweated, trying to outguess a slave raider which had once been on Sisu's screens, he was painfully aware of a slender, dark, rather pretty girl beside him, her swift fingers making tiny adjustments among keys and knobs, changing a bias or modifying a vector, herself relaxed and unhurried. It was humiliating afterwards to find that his pacesetter had "saved the ship" while he had failed.

Worse still, he was aware of her as a girl and did not know it—all he knew was that she made him uneasy.

After one run Jeri called from ship's control, "End of drill. Stand by." He appeared shortly and examined their tapes, reading marks on sensitized paper as another might read print. He pursed his lips over Thorby's record. "Trainee, you fired three times . . . and not a one of your beasts got within fifty thousand kilometers of the enemy. We don't mind expense—it's merely Grandmother's blood. But the object is to blast him, not scare him into a fit. You have to wait until you can hit."

"I did my best!"

"Not good enough. Let's see yours, Sis."

The nickname irritated Thorby still more. Brother and sister were fond of each other and did not bother with titles. So Thorby had tried using their names . . . and had been snubbed; he was "Trainee," they were "Senior Controlman" and "Junior Controlman." There was nothing he could do; at drill he was junior. For a week, Thorby addressed Jeri as "Foster Ortho-Nephew" outside of drills and Jeri had carefully addressed him by family title. Then Thorby decided it was silly and went back to calling him Jeri. But Jeri continued to call him "Trainee" during drill, and so did Mata.

Jeri looked over his sister's record and nodded. "Very nice, Sis! You're within a second of post-analyzed optimum, and three seconds better than the shot that got the so-and-so. I have to admit that's sweet shooting . . . because the real run is my own. That raider off Ingstel . . . remember?"

"I certainly do." She glanced at Thorby.

Thorby felt disgusted. "It's not fair!" He started hauling at safety-belt buckles.

Jeri looked surprised. "What, Trainee?"

"I said it's not fair! You send down a problem, I tackle it cold—and get bawled out because I'm not perfect. But all she had to do is to fiddle with controls to get an answer she already knows . . . to make me look cheap!"

Mata was looking stricken. Thorby headed for the door. "I never asked for this! I'm going to the Captain and ask for another job."

"Trainee!"

Thorby stopped. Jeri went on quietly. "Sit down. When I'm through, you can see the Captain—if you think it's advisable."

Thorby sat down.

"I've two things to say," Jeri continued coldly. "First—" He turned to his sister. "Junior Controlman, did you know what problem this was when you were tracking?"

"No, Senior Controlman."

"Have you worked it before?"

"I don't think so."

"How was it you remembered it?"

"What? Why, you said it was the raider off Ingstel. I'll never forget because of the dinner afterwards—you sat with Great Grandmo—with the Chief Officer."

Jeri turned to Thorby. "You see? She tracked it cold . . . as cold as I had to when it happened. And she did even better than I did; I'm proud to have her as my junior tracker. For your information, Mister Stupid Junior Trainee, this engagement took place before the Junior Controlman became a trainee. She hasn't even run it in practice. She's just better at it than you are."

"All right," Thorby said sullenly. "I'll probably never be any good. I said I wanted to quit."

"I'm talking. Nobody asks for this job; it's a headache. Nobody quits it, either. After a while the job quits him, when post-analysis shows that he is losing his touch. Maybe I'm beginning to. But I promise you this: you'll either learn, or I will go to the Captain and tell him you don't measure up. In the meantime . . . if I have any lip out of you, I'll haul you before the Chief Officer!" He snapped, "Extra drill run. Battle stations. Cast loose your equipment." He left the room.

Moments later his voice reached them. "Bogie! Starboard computer room, report!"

The call to dinner sounded; Mata said gravely, "Starboard tracker manned. Data showing, starting run." Her fingers started caressing keys. Thorby bent over his own controls; he wasn't hungry anyhow.
For days Thorby spoke with Jeri only formally. He saw Mata at drill, or across the lounge at meals; he treated her with cold correctness and tried to do as well as she did. He could have seen her at other times; young people associated freely in public places. She was taboo to him, both as his niece and because they were of the same moiety, but that was no bar to social relations.

Jeri he could not avoid; they ate at the same table, slept in the same room. But Thorby could and did throw up a barrier of formality. No one said anything—these things happened. Even Fritz pretended not to notice.

But one afternoon Thorby dropped into the lounge to see a story film with a Sargonese background; Thorby sat through it to pick it to pieces. But when it was over he could not avoid noticing Mata because she walked over, stood in front of him, addressed him humbly as her uncle and asked if he would care for a game of spat ball before supper?

He was about to refuse when he noticed her face; she was watching him with tragic eagerness. So he answered, "Why, thanks, Mata. Work up an appetite."

She broke into smiles. "Good! I've got Ilsa holding a table. Let's!"

Thorby beat her three games and tied one . . . a remarkable score, since she was female champion and was allowed only one point handicap when playing the male champion. But he did not think about it; he was enjoying himself.

His performance picked up, partly through the grimness with which he worked, partly because he did have feeling for complex geometry, and partly because the beggar's boy had had his brain sharpened by an ancient discipline. Jeri never again compared aloud the performances of Mata and Thorby and gave only brief comments on Thorby's results: "Better," or "Coming along," and eventually, "You're getting there." Thorby's morale soared; he loosened up and spent more time socially, playing spat ball with Mata rather frequently.

Toward the end of journey through darkness they finished the last drill one morning and Jeri called out, "Stand easy! I'll be a few minutes." Thorby relaxed from pleasant strain. But after a moment he fidgeted; he had a hunch that he had been in tune with his instruments. "Junior Controlman . . . do you suppose he would mind if I looked at my tape?"

"I don't think so," Mata answered. "I'll take it out; then it's my responsibility."

"I don't want to get you in trouble."

"You won't," Mata answered serenely. She reached back of Thorby's console, pulled out the strip record, blew on it to keep it from curling, and examined it. Then she pulled her own strip, compared the two.

She looked at him gravely. "That's a very good run, Thorby."

It was the first time she had ever spoken his name. But Thorby hardly noticed. "Really? You mean it?"

"It's a very good run . . . Thorby. We both got hits. But yours is optimum between 'possible' and 'critical limit'—whereas mine is too eager. See?"

Thorby could read strips only haltingly, but he was happy to take her word for it. Jeri came in, took both strips, looked at Thorby's, then looked more closely. "I dug up the post-analysis before I came down," he said.

"Yes, sir?" Thorby said eagerly.

"Mmm . . . I'll check it after chow—but it looks as if your mistakes had cancelled out."

Mata said, "Why, Bud, that's a perfect run and you know it!"

"Suppose it is?" Jeri grinned. "You wouldn't want our star pupil to get a swelled head, would you?"

"Pooh!"

"Right back to you, small and ugly sister. Let's go to chow."

They went through a narrow passage into trunk corridor of second deck, where they walked abreast. Thorby gave a deep sigh.

"Trouble?" his nephew asked.

"Not a bit!" Thorby put an arm around each of them. "Jeri, you and Mata are going to make a marksman out of me yet."

It was the first time Thorby had addressed his teacher by name since the day he had received the scorching. But Jeri accepted his uncle's overture without stiffness. "Don't get your hopes up, bunkmate. But I think we've got it licked." He added, "I see Great Aunt Tora is giving us her famous cold eye. If anybody wants my opinion, I think Sis can walk unassisted—I'm sure Great Aunt thinks so."

"Pooh to her, too!" Mata said briskly. "Thorby just made a perfect run."

Sisu came out of darkness, dropping below speed-of-light. Losian's sun blazed less than fifty billion kilometers away; in a few days they would reach their next market. The ship went to watch-and-watch battle stations.

Mata took her watch alone; Jeri required the trainee to stand watches with him. The first watch was always free from strain; even if a raider had accurate information via n-space communicator of Sisu's time of departure and destination, it was impossible in a jump of many lightyears to predict the exact time and place where she would poke her nose out into rational space.

Jeri settled in his chair some minutes after Thorby had strapped down with that age-old tense feeling that this time it was not practice. Jeri grinned at him. "Relax. If you get your blood stream loaded, your back will ache, and you'll never last."

Thorby grinned feebly. "I'll try."

"That's better. We're going to play a game." Jeri pulled a boxlike contrivance out of a pocket, snapped it open.

"What is that?"

"A 'killjoy.' It fits here." Jeri slipped it over the switch that determined which console was in command. "Can you see the switch?"

"Huh? No."

"Hand the man the prize." Jeri fiddled with the switch behind the screen. "Which of us is in control in case we have to launch a bomb now?"

"How can I tell? Take that off, Jeri; it makes me nervous."

"That's the game. Maybe I'm controlling and you are just going through motions; maybe you are the man at the trigger and I'm asleep in my chair. Every so often I'll fiddle with the switch—but you won't know how I've left it. So when a flap comes—and one will; I feel it in my bones—you can't assume that good old Jeri, the man with the micrometer fingers, has the situation under control. You might have to save the firm. You."

Thorby had a queasy vision of waiting men and bombs in the missile room below—waiting for him to solve precisely an impossible problem of life and death, of warped space and shifting vectors and complex geometry. "You're kidding," he said feebly. "You wouldn't leave me in control. Why, the Captain would skin you alive."

"Ah, that's where you're wrong. There always comes a day when a trainee makes his first real run. After that, he's a controlman . . . or an angel. But we don't let you worry at the time. Oh no! we just keep you worried all the time. Now here's the game. Any time I say, 'Now!' you guess who has control. You guess right, I owe you one dessert; you guess wrong, you owe me one. Now!"

Thorby thought quickly. "I guess I've got it."

"Wrong." Jeri lifted the killjoy. "You owe me one dessert—and it's berry tart tonight; my mouth is watering. But faster; you're supposed to make quick decisions. Now!"

"You've still got it!"

"So I have. Even. Now!"

"You!"

"Nope. See? And I eat your tart—I ought to quit while I'm ahead. Love that juice! Now!"

When Mata relieved them, Jeri owned Thorby's desserts for the next four days. "We start again with that score," Jeri said, "except that I'm going to collect that berry tart. But I forgot to tell you the big prize."

"Which is?"

"Comes the real thing, we bet three desserts. After it's over, you guess and we settle. Always bet more on real ones."

Mata sniffed. "Bud, are you trying to make him nervous?"

"Are you nervous, Thorby?"

"Nope!"

"Quit fretting, Sis. Got it firmly in your grubby little hands?"

"I relieve you, sir."

"Come on, Thorby; let's eat. Berry tarts—aaah!"

Three days later the score stood even, but only because Thorby had missed most of his desserts. Sisu was enormously slowed, almost to planetary speeds, and Losian's sun loomed large on the screens. Thorby decided, with mildest regret, that his ability to fight would not be tested this jump.

Then the general alarm made him rear up against safety belts. Jeri had been talking; his head jerked around, he looked at displays, and his hands moved to his controls. "Get on it!" he yelped. "This one's real."

Thorby snapped out of shock and bent over his board. The analog globe was pouring data to them; the ballistic situation had built up. Good heavens, it was close! And matching in fast! How had anything moved in so close without being detected? Then he quit thinking and started investigating answers . . . no, not yet . . . before long though . . . could the bandit turn a little at that boost and reduce his approach? . . . try a projection at an assumed six gravities of turning . . . would a missile reach him? . . . would it still reach him if he did not—

He hardly felt Mata's gentle touch on his shoulder. But he heard Jeri snap, "Stay out, Sis! We're on it, we're on it!"

A light blinked on Thorby's board; the squawk horn sounded, "Friendly craft, friendly craft! Losian planetary patrol, identified. Return to watch-and-watch."

Thorby took a deep breath, felt a great load lift.

"Continue your run!" screamed Jeri.

"Huh?"

"Finish your run! That's no Losian craft; that's a raider! Losians can't maneuver that way! You've got it, boy, you've got it! Nail him!"

Thorby heard Mata's frightened gasp, but he was again at his problem. Change anything? Could he reach him? Could he still reach him in the cone of possible maneuver? Now! He armed his board and let the computer give the order, on projection.

He heard Jeri's voice faintly; Jeri seemed to be talking very slowly. "Missile away. I think you got him . . . but you were eager. Get off another one before their beam hits us."

Automatically Thorby complied. Time was too short to try another solution; he ordered the machine to send another missile according to projection. He then saw by his board that the target was no longer under power and decided with a curiously empty feeling that his first missile had destroyed it.

"That's all!" Jeri announced. "Now!"

"What?"

"Who had it? You or me? Three desserts."

"I had it," Thorby said with certainty. In another level he decided that he would never really be a Trader—to Jeri that target had been—just fraki. Or three desserts.

"Wrong. That puts me three up. I turned coward and kept control myself. Of course the bombs were disarmed and the launchers locked as soon as the Captain gave the word . . . but I didn't have the nerve to risk an accident with a friendly ship."

"Friendly ship!"

"Of course. But for you, Assistant Junior Controlman, it was your first real one . . . as I intended."

Thorby's head floated. Mata said, "Bud, you're mean to collect. You cheated."

"Sure I cheated. But he's a blooded controlman now, just the same. And I'm going to collect, just the very same. Ice cream tonight!"

Chapter 10

Thorby did not stay an assistant junior firecontrolman; Jeri moved up to astrogation trainee; Mata took charge of the starboard room, and Thorby was officially posted as the new Starboard Junior Firecontrolman, with life and death in his forefinger. He was not sure that he liked it.

Then that arrangement tumbled almost as quickly.

Losian is a "safe" planet. Inhabited by civilized nonhumans, it is a port safe from ground raids; no dirtside defensive watches were necessary. Men could leave the ship for pleasure and even women could do so. (Some of the women aboard had not left the ship, save at Gatherings of the People, since being exchanged to Sisu as girls.)

Losian was to Thorby his "first" foreign land, Jubbul being the only planet clear in his memory. So he was very eager to see it. But work came first. When he was confirmed as a firecontrolman, he was transferred from hydroponics into the junior vacancy among the Supercargo's clerks. It increased Thorby's status; business carried more prestige than housekeeping. Theoretically he was now qualified to check cargo; in fact a senior clerk did that while Thorby sweated, along with junior male relatives from every department. Cargo was an allhands operation, as Sisu never permitted stevedores inside, even if it meant paying for featherbedding.

The Losians have never invented tariff; crated bales of verga leaves were turned over to purchaser right outside the ship. In spite of blowers the hold reeked of their spicy, narcotic fragrance and reminded Thorby of months past and lightyears away when he had huddled, a fugitive in danger of being shortened, into a hole in one crate while a friendly stranger smuggled him through the Sargon's police.

It didn't seem possible. Sisu was home. Even as he mused, he thought in the Family's language.

He realized with sudden guilt that he had not thought about Pop very often lately. Was he forgetting Pop? No, no! He could never forget, not anything . . . Pop's tones of voice, the detached look when he was about to comment unfavorably, his creaking movements on chilly mornings, his unfailing patience no matter what—why, in all those years Pop had never been angry with him—yes, he had, once.

"'I am not your master!'"

Pop had been angry that once. It had scared Thorby; he hadn't understood.

Now, across long space and time, Thorby suddenly understood. Only one thing could make Pop angry: Pop had been explosively insulted at the assertion that Baslim the Cripple was master to a slave. Pop, who maintained that a wise man could not be insulted, since truth could not insult and untruth was not worthy of notice.

Yet Pop had been insulted by the truth, for certainly Pop had been his master; Pop had bought him off the block. No, that was nonsense! He hadn't been Pop's slave; he had been Pop's son . . . Pop was never his master, even the times he had given him a quick one across the behind for goofing. Pop . . . was just 'Pop.'

Thorby knew then that the one thing that Pop hated was slavery.

Thorby was not sure why he was sure, but he was. He could not recall that Pop had ever said a word about slavery, as such; all Thorby could remember Pop saying was that a man need never be other than free in his own mind.

"Hey!"

The Supercargo was looking at him. "Sir?"

"Are you moving that crate, or making a bed of it?"

Three local days later Thorby had finished showering, about to hit dirt with Fritz, when the deckmaster stuck his head in the washroom, spotted him, and said, "Captain's compliments and Clerk Thorby Baslim-Krausa will attend him."

"Aye aye, Deckmaster," Thorby answered and added something under his breath. He hurried into clothes, stuck his head into his bunkie, gave the sad word to Fritz and rushed to the Cabin, hoping that the Deckmaster had told the Captain that Thorby had been showering.

The door was open. Thorby started to report formally when the Captain looked up. "Hello, Son. Come in."

Thorby shifted gears from Ship to Family. "Yes, Father."

"I'm about to hit dirt. Want to come along?"

"Sir? I mean, 'Yes, Father!' that 'ud be swell!"

"Good. I see you're ready. Let's go." He reached in a drawer and handed Thorby some twisted bits of wire. "Here's pocket money; you may want a souvenir."

Thorby examined it. "What's this stuff worth. Father?"

"Nothing—once we're off Losian. So give me back what you have left so I can turn it in for credit. They pay us off in thorium and goods."

"Yes, but how will I know how much to pay for a thing?"

"Take their word for it. They won't cheat and won't bargain. Odd ones. Not like Lotarf . . . on Lotarf, if you buy a beer without an hour's dickering you're ahead."

Thorby felt that he understood Lotarfi better than he did Losians. There was something indecent about a purchase without a polite amount of dickering. But fraki had barbaric customs; you had to cater to them—Sisu prided herself on never having trouble with fraki.

"Come along. We can talk as we go."

As they were being lowered Thorby looked at the ship nearest them, Free Trader El Nido, Garcia clan. "Father, are we going to visit with them?"

"No, I exchanged calls the first day."

"I didn't mean that. Will there be any parties?"

"Oh. Captain Garcia and I agreed to dispense with hospitality; he's anxious to jump. No reason why you shouldn't visit them though, subject to your duties." He added, "Hardly worth it; she's like Sisu, only not as modern."

"Thought I might look at her computer rooms."

They hit ground and stepped off. "Doubt if they'd let you. They're a superstitious lot." As they stepped clear of the hoist a baby Losian came streaking up, circled and sniffed their legs. Captain Krausa let the little thing investigate him, then said mildly, "That's enough," and gently pushed it away. Its mother whistled it back, picked it up and spanked it. Captain Krausa waved to her, called out, "Hello, friend!"

"Hello, Trader Man," she answered in Interlingua shrill and sibilant. She was two-thirds Thorby's height, on four legs with forelimbs elevated—the baby had been on all six. Both were sleek and pretty and sharp-eyed. Thorby was amused by them and only slightly put off by the double mouth arrangement—one for eating, one for breathing and talking.

Captain Krausa continued talking. "That was a nice run you made on that Losian craft."

Thorby blushed. "You knew about that, Father?"

"What kind of a captain am I if I don't? Oh, I know what's worrying you. Forget it. If I give you a target, you burn it. It's up to me to kill your circuits if we make friendly identification. If I slap the God-be-thanked switch, you can't get your computer to fire, the bombs are disarmed, the launching gear is locked, the Chief can't move the suicide switch. So even if you hear me call off the action—or you get excited and don't hear—it doesn't matter. Finish your run; it's good practice."

"Oh. I didn't know, Father."

"Didn't Jeri tell you? You must have noticed the switch; it's the big red one, under my right hand."

"Uh, I've never been in the Control Room, Father."

"Eh? I must correct that; it might belong to you someday. Remind me . . . right after we go irrational."

"I will, Father." Thorby was pleased at the prospect of entering the mysterious shrine—he was sure that half of his relatives had never visited it—but he was surprised at the comment. Could a former fraki be eligible for command? It was legal for an adopted son to succeed to the worry seat; sometimes captains had no sons of their own. But an ex-fraki?

Captain Krausa was saying, "I haven't given you the attention I should, Son . . . not the care I should give Baslim's son. But it's a big family and my time is so taken up. Are they treating you all right?"

"Why, sure, Father!"

"Mmm . . . glad to hear it. It's—well, you weren't born among the People, you know."

"I know. But everybody has treated me fine."

"Good. I've had good reports about you. You seem to learn fast, for a—you learn fast."

Thorby sourly finished the phrase in his mind. The Captain went on, "Have you been in the Power Room?"

"No, sir. Just the practice room once."

"Now is a good time, while we're grounded. It's safer and the prayers and cleansing aren't so lengthy." Krausa paused. "No, we'll wait until your status is clear—the Chief is hinting that you are material for his department. He has some silly idea that you will never have children anyway and he might regard a visit as an opportunity to snag you. Engineers!"

Thorby understood this speech, even the last word. Engineers were regarded as slightly balmy; it was commonly believed that radiations from the artificial star that gave Sisu her life ionized their brain tissues. True or not, engineers could get away with outrageous breeches of etiquette—"not guilty by reason of insanity" was an unspoken defense for them once they had been repeatedly exposed to the hazards of their trade. The Chief Engineer even talked back to Grandmother.

But junior engineers were not allowed to stand power room watches until they no longer expected to have children; they took care of auxiliary machinery and stood training watches in a dummy power room. The People were cautious about harmful mutations, because they were more exposed to radiation hazards than were planet dwellers. One never saw overt mutation among them; what happened to babies distorted at birth was a mystery so taboo that Thorby was not even aware of it; he simply knew that power watchstanders were old men.

Nor was he interested in progeny; he simply saw in the Captain's remarks a hint that the Chief Engineer considered that Thorby could reach the exalted status of power watchstander quickly. The idea dazzled him. The men who wrestled with the mad gods of nuclear physics held status just below astrogators . . . and, in their own opinion, higher. Their opinion was closer to fact than was the official one; even a deputy captain who attempted to pull rank on a man standing power room watches was likely to wind up counting stores while the engineer rested in sick bay, then went back to doing as he pleased. Was it possible that an ex-fraki could aspire to such heights? Perhaps someday be Chief Engineer and sass the Chief Officer with impunity? "Father," Thorby said eagerly, "the Chief Engineer thinks I can learn power room rituals?"

"Wasn't that what I said?"

"Yes, sir. Uh . . . I wonder why he thought so?"

"Are you dense? Or unusually modest? Any man who can handle firecontrol mathematics can learn nuclear engineering. But he can learn astrogation, too, which is just as important."

Engineers never handled cargo; the only work they did in port was to load tritium and deuterium, or other tasks strictly theirs. They did no housekeeping. They . . . "Father? I think I might like to be an engineer."

"So? Well, now that you've thought so, forget it."

"But—"

"'But' what?"

"Nothing, sir. Yes, sir."

Krausa sighed. "Son, I have obligations toward you; I'm carrying them out as best I can." Krausa thought over what he could tell the lad. Mother had pointed out that if Baslim had wanted the boy to know the message he had carried, Baslim would have put it in Interlingua. On the other hand, since the boy now knew the Family language perhaps he had translated it himself. No, more likely he had forgotten it. "Thorby, do you know who your family is?"

Thorby was startled. "Sir? My family is Sisu."

"Certainly! I mean your family before that."

"You mean Pop? Baslim the Cripple?"

"No, no! He was your foster father, just as I am now. Do you know what family you were born in?"

Thorby said bleakly, "I don't think I had one."

Krausa realized that he had poked a scar, said hastily, "Now, Son, you don't have to copy all the attitudes of your messmates. Why, if it weren't for fraki, with whom would we trade? How would the People live? A man is fortunate to be born People, but there is nothing to be ashamed of in being born fraki. Every atom has its purpose."

"I'm not ashamed!"

"Take it easy!"

"Sorry sir. I'm not ashamed of my ancestors. I simply don't know who they were. Why, for all I know, they may have been People."

Krausa was startled. "Why, so they could have been," he said slowly. Most slaves were purchased on planets that respectable traders never visited, or were born on estates of their owners . . . but a tragic percentage were People, stolen by raiders. This lad—Had any ship of the People been lost around the necessary time? He wondered if, at the next Gathering, he might dig up identification from the Commodore's files?

But even that would not exhaust the possibilities; some chief officers were sloppy about sending in identifications at birth, some waited until a Gathering. Mother, now, never grudged the expense of a long n-space message; she wanted her children on record at once—Sisu was never slack.

Suppose the boy were born People and his record had never reached the Commodore? How unfair to lose his birthright!

A thought tiptoed through his brain: a slip could be corrected in more ways than one. If any Free Ship had been lost—He could not remember.

Nor could he talk about it. But what a wonderful thing to give the lad an ancestry! If he could . . .

He changed the subject "In a way, lad, you were always of the People."

"Huh? Excuse me, Father?"

"Son, Baslim the Cripple was an honorary member of the People."

"What? How, Father? What ship?"

"All ships. He was elected at a Gathering. Son, a long time ago a shameful thing happened. Baslim corrected it. It put all the People in debt to him. I have said enough. Tell me, have you thought of getting married?"

Marriage was the last thing on Thorby's mind; he was blazing anxious to hear more about what Pop had done that had made him incredibly one of the People. But he recognized the warning with which an elder closed a taboo subject.

"Why, no. Father."

"Your Grandmother thinks that you have begun to notice girls seriously."

"Well, sir. Grandmother is never wrong . . . but I hadn't been aware of it."

"A man isn't complete without a wife. But I don't think you're old enough. Laugh with all the girls and cry with none—and remember our customs." Krausa was thinking that he was bound by Baslim's injunction to seek aid of the Hegemony in finding where the lad had come from. It would be awkward if Thorby married before the opportunity arose. Yet the boy had grown taller in the months he had been in Sisu. Adding to Krausa's fret was an uneasy feeling that his half-conceived notion of finding (or faking) an ancestry for Thorby conflicted with his unbreakable obligations to Baslim.

Then he had a cheerful idea. "Tell you what. Son! It's possible that the girl for you isn't aboard. After all, there are only a few in port side purdah—and picking a wife is a serious matter. She can gain you status or ruin you. So why not take it easy? At the Great Gathering you will meet hundreds of eligible girls. If you find one you like and who likes you, I'll discuss it with your Grandmother and if she approves, we'll dicker for her exchange. We won't be stingy either. How does that sound?"

It put the problem comfortably in the distance. "It sounds fine. Father!"

"I have said enough." Krausa thought happily that he would check the files while Thorby was meeting those "hundreds of girls"—and he need not review his obligation to Baslim until he had done so. The lad might be a born member of the People—in fact his obvious merits made fraki ancestry almost unthinkable. If so, Baslim's wishes would be carried out in the spirit more than if followed to the letter. In the meantime—forget it!

They completed the mile to the edge of the Losian community. Thorby stared at sleek Losian ships and thought uneasily that he had tried to burn one of those pretty things out of space. Then he reminded himself that Father had said it was not a firecontrolman's business to worry about what target was handed him.

When they got into city traffic he had no time to worry. Losians do not use passenger cars, nor do they favor anything as stately as a sedan chair. On foot, they scurry twice as fast as a man can run; in a hurry, they put on a vehicle which makes one think of jet propulsion. Four and sometimes six limbs are encased in sleeves which end in something like skates. A framework fits the body and carries a bulge for the power plant (what sort Thorby could not imagine). Encased in this mechanical clown suit, each becomes a guided missile, accelerating with careless abandon, showering sparks, filling the air with earsplitting noises, cornering in defiance of friction, inertia, and gravity, cutting in and out, never braking until the last minute.

Pedestrians and powered speed maniacs mix democratically, with no perceptible rules. There seems to be no age limit for driver's licenses and the smallest Losians are simply more reckless editions of their elders.

Thorby wondered if he would ever get out into space alive.

A Losian would come zipping toward Thorby on the wrong side of the street (there was no right side), squeal to a stop almost on Thorby's toes, zig aside while snatching breath off his face and heart out of his mouth—and never touch him. Thorby would jump. After a dozen escapes he tried to pattern himself after his foster father. Captain Krausa plowed stolidly ahead, apparently sure that the wild drivers would treat him as a stationary object. Thorby found it hard to live by that faith, but it seemed to work.

Thorby could not make out how the city was organized. Powered traffic and pedestrians poured through any opening and the convention of private land and public street did not seem to hold. At first they proceeded along an area which Thorby classified as a plaza, then they went up a ramp, through a building which had no clear limits—no vertical walls, no defined roof—out again and down, through an arch which skirted a hole. Thorby was lost.

Once he thought they must be going through a private home—they pushed through what must have been a dinner party. But the guests merely pulled in their feet.

Krausa stopped. "We're almost there. Son, we're visiting the fraki who bought our load. This meeting heals the trouble between us caused by buying and selling. He has offended me by offering payment; now we have to become friends again."

"We don't get paid?"

"What would your Grandmother say? We've already been paid—but now I'll give it to him free and hell give me the thorium just because he likes my pretty blue eyes. Their customs don't allow anything as crass as selling."

"They don't trade with each other?"

"Of course they do. But the theory is that one fraki gives another anything he needs. It's sheer accident that the other happens to have money that he is anxious to press on the other as a gift—and that the two gifts balance. They are shrewd merchants, Son; we never pick up an extra credit here."

"Then why this nonsense?"

"Son, if you worry about why fraki do what they do, you'll drive yourself crazy. When you're on their planet, do it their way . . . it's good business. Now listen. We'll have a meal of friendship . . . only they can't, or they'll lose face. So there will be a screen between us. You have to be present, because the Losian's son will be there—only it's a daughter. And the fraki I'm going to see is the mother, not the father. Their males live in purdah . . . I think. But notice that when I speak through the interpreter, I'll use masculine gender."

"Why?"

"Because they know enough about our customs to know that masculine gender means the head of the house. It's logical if you look at it correctly."

Thorby wondered. Who was head of the Family? Father? Or Grandmother? Of course, when the Chief Officer issued an order, she signed it "By Order of the Captain," but that was just because . . . no. Well, anyhow—

Thorby suddenly suspected that the customs of the Family might be illogical in spots. But the Captain was speaking. "We don't actually eat with them; that's another fiction. You'll be served a green, slimy liquid. Just raise it to your lips; it would burn out your gullet. Otherwise—" Captain Krausa paused while a Losian scorcher avoided the end of his nose. "Otherwise listen so that you will know how to behave next time. Oh yes!—after I ask how old my host's son is, you'll be asked how old you are. You answer 'forty.'"

"Why?"

"Because that is a respectable age, in their years, for a son who is assisting his father."

They arrived and seemed still to be in public. But they squatted down opposite two Losians while a third crouched nearby. The screen between them was the size of a kerchief; Thorby could see over it. Thorby tried to look, listen, and learn, but the traffic never let up. It shot around and cut between them, with happy, shrill racket.

Their host started by accusing Captain Krausa of having lured him into a misdeed. The interpreter was almost impossible to understand, but he showed surprising command of scurrilous Interlingua. Thorby could not believe his ears and expected that Father would either walk out, or start trouble.

But Captain Krausa listened quietly, then answered with real poetry—he accused the Losian of every crime from barratry to mopery and dopery in the spaceways.

This put the meeting on a friendly footing. The Losian made them a present of the thorium he had already paid, then offered to throw in his sons and everything he possessed.

Captain Krausa accepted and gave away Sisu, with all contents.

Both parties generously gave back the gifts. They ended at status quo, each to retain as a symbol of friendship what each now had: the Losian many hundredweight of verga leaf, the Trader slugs of thorium. Both agreed that the gifts were worthless but valuable for reasons of sentiment. In a burst of emotion the Losian gave away his son and Krausa made him (her) a present of Thorby. Inquiries followed and it was discovered that each was too young to leave the nest.

They got out of this dilemma by having the sons exchange names and Thorby found himself owner of a name he did not want and could not pronounce. Then they "ate."

The horrid green stuff was not only not fit to drink, but when Thorby inhaled, he burned his nostrils and choked. The Captain gave him a reproving glance.

After that they left. No goodbys, they just walked off. Captain Krausa said meditatively while proceeding like a sleepwalker through the riot of traffic, "Nice people, for fraki. Never any sharp dealing and absolutely honest. I often wonder what one of them would do if I took him up on one of those offers. Pay up, probably."

"Not really!"

"Don't be sure. I might hand you in on that half-grown Losian."

Thorby shut up.

Business concluded. Captain Krausa helped Thorby shop and sightsee, which relieved Thorby, because he did not know what to buy, nor even how to get home. His foster father took him to a shop where Interlingua was understood. Losians manufacture all sorts of things of extreme complexity, none of which Thorby recognized. On Krausa's advice Thorby selected a small polished cube which, when shaken, showed endless Losian scenes in its depths. Thorby offered the shopkeeper his tokens; the Losian selected one and gave him change from a necklace of money. Then he made Thorby a present of shop and contents.

Thorby, speaking through Krausa, regretted that he had nothing to offer save his own services the rest of his life. They backed out of the predicament with courteous insults.

Thorby felt relieved when they reached the spaceport and he saw the homely, familiar lines of old Sisu.

When Thorby reached his bunkie, Jeri was there, feet up and hands back of his head. He looked up and did not smile.

"Hi, Jeri!"

"Hello, Thorby."

"Hit dirt?"

"No."

"I did. Look what I bought!" Thorby showed him the magic cube. "You shake it and every picture is different."

Jeri looked at one picture and handed it back. "Very nice."

"Jeri, what are you glum about? Something you ate?"

"No."

"Spill it."

Jeri dropped his feet to the deck, looked at Thorby. "I'm back in the computer room."

"Huh?"

"Oh, I don't lose status. It's just while I train somebody else."

Thorby felt a cold wind. "You mean I've been busted?"

"No."

"Then what do you mean?"

"Mata has been swapped."

Chapter 11

Mata swapped? Gone forever? Little Mattie with the grave eyes and merry giggle? Thorby felt a burst of sorrow and realized to his surprise that it mattered.

"I don't believe it!"

"Don't be a fool."

"When? Where has she gone? Why didn't you tell me?"

"To El Nido, obviously; it's the only ship of the People in port. About an hour ago. I didn't tell you because I had no idea it was coming . . . until I was summoned to Grandmother's cabin to say good-by." Jeri frowned. "It had to come someday . . . but I thought Grandmother would let her stay as long as she kept her skill as a tracker."

"Then why, Jeri? Why?"

Jeri stood up, said woodenly, "Foster Ortho-Uncle, I have said enough."

Thorby pushed him back into his chair. "You can't get away with that, Jeri. I'm your 'uncle' only because they said I was. But I'm still the ex-fraki you taught to use a tracker and we both know it. Now talk man to man. Spill it!"

"You won't like it."

"I don't like it now! Mattie gone . . . Look, Jeri, there is nobody here but us. Whatever it is, tell me. I promise you, on Sisu's steel, that I won't make an uncle-and-nephew matter of it. Whatever you say, the Family will never know."

"Grandmother might be listening."

"If she is, I've ordered you to talk and it's my responsibility. But she won't be; it's time for her nap. So talk."

"Okay." Jeri looked at him sourly. "You asked for it. You mean to say you haven't the dimmest idea why Grandmother hustled my Sis out of the ship?"

"Huh? None . . . or I wouldn't ask."

Jeri made an impatient noise. "Thorby, I knew you were thick-witted. I didn't know you were deaf, dumb, and blind."

"Never mind the compliments! Tell me the score."

"You're the reason Mata got swapped. You." Jeri looked at Thorby with disgust.

"Me?"

"Who else? Who pairs off at spat ball? Who sits together at story films? What new relative is always seen with a girl from his own moiety? I'll give you a hint—the name starts with 'T.'"

Thorby turned white. "Jeri, I never had the slightest idea."

"You're the only one in the ship who didn't." Jeri shrugged. "I'm not blaming you. It was her fault. She was chasing you, you stupid clown! What I can't figure out is why you didn't know. I tried to give you hints."

Thorby was as innocent of such things as a bird is of ballistics. "I don't believe it."

"It doesn't matter whether you do or don't . . . everybody else saw it. But you both could have gotten away with it, as long as you kept it open and harmless—and I was watching too closely for anything else—if Sis hadn't lost her head."

"Huh? How?"

"Sis did something that made Grandmother willing to part with a crack firecontrolman. She went to Grandmother and asked to be adopted across moiety line. In her simple, addled-pated way she figured that since you were adopted in the first place, it didn't really matter that she was your niece—just shift things around and she could marry you." Jeri grunted. "If you had been adopted on the other side, she could have wangled it. But she must have been clean off her head to think that Grandmother—Grandmother!—would agree to anything so scandalous."

"But . . . well, I'm not actually any relation to her. Not that I had any idea of marrying her."

"Oh, beat it! You make me tired."

Thorby moped around, unwilling to go back and face Jeri. He felt lost and alone and confused; the Family seemed as strange, their ways as difficult to understand, as the Losians.

He missed Mata. He had never missed her before. She had been something pleasant but routine—like three meals a day and the other comforts he had learned to expect in Sisu. Now he missed her.

Well, if that was what she wanted, why hadn't they let her? Not that he had thought about it . . . but as long as you had to get married some day, Mata would be as tolerable as any. He liked her.

Finally he remembered that there was one person with whom he could talk. He took his troubles to Doctor Mader.

He scratched at her door, received a hurried, "Come in!" He found her down on her knees, surrounded by possessions. She had a smudge on her nose and her neat hair was mussed. "Oh. Thorby. I'm glad you showed up. They told me you were dirtside and I was afraid I would miss you."

She spoke System English; he answered in it. "You wanted to see me?"

"To say good-by. I'm going home."

"Oh." Thorby felt again the sick twinge he had felt when Jeri had told about Mata. Suddenly he was wrenched with sorrow that Pop was gone. He pulled himself together and said, "I'm sorry. I'll miss you."

"I'll miss you, Thorby. You're the only one in this big ship that I felt at home with . . . which is odd, as your background and mine are about as far apart as possible. I'll miss our talks."

"So will I," Thorby agreed miserably. "When are you leaving?"

"El Nido jumps tomorrow. But I should transfer tonight; I don't dare miss jump, or I might not get home for years."

"El Nido is going to your planet?" A fantastic scheme began to shape in his mind.

"Oh, no! She's going to That Beta VI. But a Hegemonic mail ship calls there and I can get home. It is too wonderful a chance to miss." The scheme died in Thorby's brain; it was preposterous, anyhow—he might be willing to chance a strange planet, but Mata was no fraki.

Doctor Mader went on, "The Chief Officer arranged it." She smiled wryly. "She's glad to get rid of me. I hadn't had any hope that she could put it over, in view of the difficulty in getting me aboard Sisu; I think your grandmother must have some bargaining point that she did not mention. In any case I'm to go . . . with the understanding that I remain in strict purdah. I shan't mind; I'll use the time on my data."

Mention of purdah reminded Thorby that Margaret would see Mata. He started with stumbling embarrassment to explain what he had come to talk about. Doctor Mader listened gravely, her fingers busy with packing. "I know, Thorby. I probably heard the sad details sooner than you did."

"Margaret, did you ever heard of anything so silly?"

She hesitated. "Many things . . . much sillier."

"But there wasn't anything to it! And if that was what Mata wanted, why didn't Grandmother let her . . . instead of shipping her out among strangers. I . . . well, I wouldn't have minded. After I got used to it."

The fraki woman smiled. "That's the oddest gallant speech I ever heard, Thorby."

"Thorby said, "Could you get a message to her for me?"

"Thorby, if you want to send her your undying love or something, then don't. Your Grandmother did the best thing for her great granddaughter, did it quickly with kindness and wisdom. Did it in Mata's interests against the immediate interests of Sisu, since Mata was a valuable fighting man. But your Grandmother measured up to the high standards expected of a Chief Officer; she considered the long-range interests of everyone and found them weightier than the loss of one firecontrolman. I admire her at last—between ourselves, I've always detested the old girl." She smiled suddenly. "And fifty years from now Mata will make the same sort of wise decisions; the sept of Sisu is sound."

"I'll be flogged if I understand it!"

"Because you are almost as much fraki as I am . . . and haven't had my training. Thorby, most things are right or wrong only in their backgrounds; few things are good or evil in themselves. But things that are right or wrong according to their culture, really are so. This exogamy rule the People live by, you probably think it's just a way to outsmart mutations—in fact that's the way it is taught in the ship's school."

"Of course. That's why I can't see—"

"Just a second. So you can't see why your Grandmother should object. But it's essential that the People marry back and forth among ships, not just because of genes—that's a side issue—but because a ship is too small to be a stable culture. Ideas and attitudes have to be cross-germinated, too, or Sisu and the whole culture will die. So the custom is protected by strongest possible taboo. A 'minor' break in this taboo is like a 'minor' break in the ship, disastrous unless drastic steps are taken. Now . . . do you understand that?"

"Well . . . no, I don't think so."

"I doubt if your Grandmother understands it; she just knows what's right for her family and acts with forthrightness and courage. Do you still want to send a message?"

"Uh, well, could you tell Mata that I'm sorry I didn't get to say good-by?"

"Mmm, yes. I may wait a while."

"All right."

"Feeling better yourself?"

"Uh, I guess so . . . since you say it's best for Mata." Thorby suddenly burst out, "But, Margaret, I don't know what is the matter with me! I thought I was getting the hang of things. Now it's all gone to pieces. I feel like a fraki and I doubt if I'll ever learn to be a Trader."

Her face was suddenly sad. "You were free once. It's a hard habit to get over."

"Huh?"

"You've had violent dislocations, Thorby. Your foster father—your first one, Baslim the Wise—bought you as a slave and made you his son, as free as he was. Now your second foster father, with the best of intentions, adopted you as his son, and thereby made you a slave."

"Why, Margaret!" Thorby protested. "How can you say such a thing?"

"If you aren't a slave, what are you?"

"Why, I'm a Free Trader. At least that's what Father intended, if I can ever get over my fraki habits. But I'm not a slave. The People are free. All of us."

"All of you . . . but not each of you."

"What do you mean?"

"The People are free. It's their proudest boast. Any of them can tell you that freedom is what makes them People and not fraki. The People are free to roam the stars, never rooted to any soil. So free that each ship is a sovereign state, asking nothing of anyone, going anywhere, fighting against any odds, asking no quarter, not even cooperating except as it suits them. Oh, the People are free; this old Galaxy has never seen such freedom. A culture of less than a hundred thousand people spread through a quarter of a billion cubic lightyears and utterly free to move anywhere at any time. There has never been a culture like it and there may never be again. Free as the sky . . . more free than the stars, for the stars go where they must. Ah, yes, the People are free." She paused. "But at what price was this freedom purchased?"

Thorby blinked.

"I'll tell you. Not with poverty. The People enjoy the highest average wealth in history. The profits of your trading are fantastic. Nor has it been with cost to health or sanity. I've never seen a community with less illness. Nor have you paid in happiness or self-respect. You're a smugly happy lot, and your pride is something sinful—of course you do have a lot to be proud of. But what you have paid for your unparalleled freedom . . . is freedom itself. No, I'm not talking riddles. The People are free . . . at the cost of loss of individual freedom for each of you—and I don't except the Chief Officer or Captain; they are the least free of any."

Her words sounded outrageous. "How can we be both free and not free?" he protested.

"Ask Mata. Thorby, you live in a steel prison; you are allowed out perhaps a few hours every few months. You live by rules more stringent than any prison. That those rules are intended to make you all happy—and do—is beside the point; they are orders you have to obey. You sleep where you are told, you eat when you are told and what you are offered—it's unimportant that it is lavish and tasty; the point is you have no choice. You are told what to do ninety percent of the time. You are so bound by rules that much of what you say is not free speech but required ritual; you could go through a day and not utter a phrase not found in the Laws of Sisu. Right?"

"Yes, but—"

"Yes, with no 'buts.' Thorby, what sort of people have so little freedom? Slaves? Can you think of a better word?"

"But we can't be sold!"

"Slavery has often existed where slaves were never bought and sold, but simply inherited. As in Sisu. Thorby, being a slave means having someone as your master, with no hope of changing it. You slaves who call yourselves the 'People' can't even hope for manumission."

Thorby scowled. "You figure that's what's wrong with me?"

"I think your slave's collar is chafing you, in a fashion that does not trouble your shipmates—because they were born with theirs and you were once free." She looked at her belongings. "I've got to get this stuff into El Nido. Will you help me?"

"I'd be glad to."

"Don't expect to see Mata."

"I wasn't," Thorby fibbed. "I want to help you. I hate to see you leave."

"Truthfully, I don't hate to leave . . . but I hate to say good-by to you." She hesitated. "I want to help you, too. Thorby, an anthropologist should never interfere. But I'm leaving and you aren't really part of the culture I was studying. Could you use a hint from an old woman?"

"Why, you aren't old!"

"That's two gallant speeches. I'm a grandmother, though the Chief Officer might be startled to hear me claim that status. Thorby, I thought you would become adjusted to this jail. Now I'm not sure. Freedom is a hard habit to break. Dear, if you decide that you can't stand it, wait until the ship calls at a planet that is democratic and free and human—then hit dirt and run! But, Thorby, do this before Grandmother decides to marry you to someone, because if you wait that long—you're lost!"

Chapter 12

Losian to Finster, Finster to Thoth IV, Thoth IV to Woolamurra, Sisu went skipping around a globe of space nine hundred lightyears in diameter, the center of which was legendary Terra, cradle of mankind. Sisu had never been to Terra; the People operate out where pickings are rich, police protection nonexistent, and a man can dicker without being hampered by finicky regulations.

Ship's history alleged that the original Sisu had been built on Terra and that the first Captain Krausa had been born there, a (whisper it) fraki. But that was six ships ago and ship's history was true in essence, rather than fiddlin' fact. The Sisu whose steel now protected the blood was registered out of New Finlandia, Shiva III . . . another port she had never visited but whose fees were worth paying in order to have legal right to go about her occasions whenever, in pursuit of profit, Sisu went inside the globe of civilization. Shiva III was very understanding of the needs of Free Traders, not fussy about inspections, reports, and the like as long as omissions were repaired by paying penalties; many ships found her registration convenient.

On Finster Thorby learned another method of trading. The native fraki, known to science by a pseudo-Latin name and called "Those confounded slugs!" by the People, live in telepathic symbiosis with lemur-like creatures possessed of delicate, many-boned hands —"telepathy" is a conclusion; it is believed that the slow, monstrous, dominant creatures supply the brains and the lemuroids the manipulation.

The planet offers beautifully carved gem stones, raw copper, and a weed from which is derived an alkaloid used in psychotherapy. What else it could supply is a matter of conjecture; the natives have neither speech nor writing, communication is difficult.

This occasions the method of trading new to Thorby—the silent auction invented by the trading Phoenicians when the shores of Africa ran beyond the known world.

Around Sisu in piles were placed what the traders had to offer: heavy metals the natives needed, everlasting clocks they had learned to need, and trade goods the Family hoped to teach them to need. Then the humans went inside.

Thorby said to Senior Clerk Arly Krausa-Drotar, "We just leave that stuff lying around? If you did that on Jubbul, it would disappear as you turned your back."

"Didn't you see them rig the top gun this morning?"

"I was down in the lower hold."

"It's rigged and manned. These creatures have no morals but they're smart. They'll be as honest as a cashier with the boss watching."

"What happens now?"

"We wait. They look over the goods. After a while . . . a day, maybe two . . . they pile stuff by our piles. We wait. Maybe they make their piles higher. Maybe they shift things around and offer us something else—and possibly we have outsmarted ourselves and missed something we would like through holding out. Or maybe we take one of our piles and split it into two, meaning we like the stuff but not the price.

"Or maybe we don't want it at any price. So we move our piles close to something they have offered that we do like. But we still don't touch their stuff; we wait.

"Eventually nobody has moved anything in quite a while. So, where the price suits us, we take in what they offer and leave our stuff. They come and take our offering away. We take in any of our own stuff where the price isn't right; they take away the stuff we turn down.

"But that doesn't end it. Now both sides know what the other one wants and what he will pay. They start making the offers; we start bidding with what we know they will accept. More deals are made. When we are through this second time, we have unloaded anything they want for stuff of theirs that we want at prices satisfactory to both. No trouble. I wonder if we do better on planets where we can talk."

"Yes, but doesn't this waste a lot of time?"

"Know anything we've got more of?"

The slow-motion auction moved without a hitch on goods having established value; deals were spottier on experimental offerings—gadgets which had seemed a good buy on Losian mostly failed to interest the Finstera. Six gross of folding knives actually intended for Woolamurra brought high prices. But the star item was not properly goods of any sort.

Grandmother Krausa, although bedfast, occasionally insisted on being carried on inspection tours; somebody always suffered. Shortly before arrival at Finster her ire had centered on nursery and bachelor quarters. In the first her eye lit on a stack of lurid picture books. She ordered them confiscated; they were "fraki trash."

The bachelors were inspected when word had gone out that she intended to hit only nursery, purdah, and galley; Grandmother saw their bunkies before they could hide their pin-up pictures.

Grandmother was shocked! Not only did pin-up pictures follow comic books, but a search was made for the magazines from which they had been clipped. The contraband was sent to auxiliary engineering, there to give up identities into elemental particles.

The Supercargo saw them there and got an idea; they joined the offerings outside the ship.

Strangely carved native jewels appeared beside the waste paper—chrysoberyl and garnet and opal and quartz.

The Supercargo blinked at the gauds and sent word to the Captain.

The booklets and magazines were redistributed, each as a separate offering. More jewels—

Finally each item was broken down into pages; each sheet was placed alone. An agreement was reached: one brightly colored sheet, one jewel. At that point bachelors who had managed to hide cherished pin-ups found patriotism and instinct for trade outweighing possessiveness—after all they could restock at the next civilized port. The nursery was combed for more adventure comics.

For the first time in history comic books and pin-up magazines brought many times their weight in fine jewelry.

Thoth IV was followed by Woolamurra and each jump zigzagged closer to the coming Great Gathering of the People; the ship was seized with carnival fever. Crew members were excused from work to practice on musical instruments, watches were rearranged to permit quartets to sing together, a training table was formed for athletes and they were excused from all watches save battle stations in order to train themselves into exhausted sleep. Headaches and tempers developed over plans for hospitality fit to support the exalted pride of Sisu.

Long messages flitted through n-space and the Chief Engineer protested the scandalous waste of power with sharp comments on the high price of tritium. But the Chief Officer cheerfully okayed the charge vouchers. As the time approached, she developed a smile that creased her wrinkles in unaccustomed directions, as if she knew something but wasn't talking. Twice Thorby caught her smiling at him and it worried him; it was better not to catch Grandmother's attention. He had had her full attention once lately and had not enjoyed it—he had been honored by eating with her, for having burned a raider.

The bogie had appeared on Sisu's screens during the lift from Finster—an unexpected place to be attacked since there was not much traffic there. The alarm had come only four hours out, when Sisu had attained barely 5% of speed-of-light and had no hope of running for it.

The matter landed in Thorby's lap; the portside computer was disabled—it had a "nervous breakdown" and the ship's electronics men had been sweating over it since jump. Thorby's nephew Jeri had returned to astrogation, the new trainee having qualified on the long jump from Losian—he was a stripling in whom Thorby had little confidence, but Thorby did not argue when Jeri decided that Kenan Drotar was ready for a watch even though he had never experienced a "real one." Jeri was anxious to go back to the control room for two reasons, status, and an unmentioned imponderable: the computer room was where Jeri had served with his missing kid sister.

So when the raider popped up, it was up to Thorby.

He felt shaky when he first started to test the problem, being acutely aware that the portside computer was out. The greatest comfort to a firecontrolman is faith in the superman abilities of the team on the other side, a feeling of "Well, even if I goof, those bulging brains will nail him," while that team is thinking the same thing. It helps to produce all-important relaxation.

This time Thorby did not have that spiritual safety net. Nor any other. The Finstera are not a spacefaring people; there was no possibility that the bogie would be identified as theirs. Nor could he be a trader; he had too many gravities in his tail. Nor a Hegemonic Guard; Finster was many lightyears outside civilization. Thorby knew with sick certainty that sometime in the next hour his guesses must produce an answer; he must launch and hit—or shortly thereafter he would be a slave again and all his family with him.

It spoiled his timing, it slowed his thoughts.

But presently he forgot the portside computer, forgot the Family, forgot even the raider as such. The raider's movements became just data pouring into his board and the problem something he had been trained to do. His teammate slammed in and strapped himself into the other chair while General Quarters was still clanging, demanded to know the score. Thorby didn't hear him, nor did he hear the clanging stop. Jeri came in thereafter, having been sent down by the Captain; Thorby never saw him. Jeri motioned the youngster out of the twin seat, got into it himself, noted that the switch had Thorby's board in control, did not touch it. Without speaking he glanced over Thorby's setup and began working alternate solutions, ready to back him up by slapping the selector switch as soon as Thorby launched and then launch again, differently. Thorby never noticed.

Presently Krausa's strong bass came over the squawk line. "Starboard tracker . . . can I assist you by maneuvering?"

Thorby never heard it. Jeri glanced at him and answered, "I do not advise it, Captain."

"Very well."

The Senior Portside Firecontrolman, in gross violation of regulations, came in and watched the silent struggle, sweat greasing his face. Thorby did not know it. Nothing existed but knobs, switches, and buttons, all extensions of his nervous system. He became possessed of an overwhelming need to sneeze—repressed it without realizing it.

Thorby made infinitesimal adjustments up to the last moment, then absentmindedly touched the button that told the computer to launch as the projected curve maximized. Two heartbeats later an atomic missile was on its way.

Jeri reached for the selector switch—stopped as he saw Thorby go into frenzied activity, telling his board to launch again on the assumption that the target had cut power. Then incoming data stopped as the ship went blind. Paralysis hit them.

Post-analysis showed that the paralyzing beam was on them seventy-one seconds. Jeri came out of it when it ceased; he saw Thorby looking dazedly at his board . . . then become violently active as he tried to work a new solution based on the last data.

Jeri put a hand on him. "The run is over, Thorby."

"Huh?"

"You got him. A sweet run. Mata would be proud of you."

Sisu was blind for a day, while repairs were made in her n-space eyes. The Captain continued to boost; there was nothing else to do. But presently she could see again and two days later she plunged into the comforting darkness of multi-space. The dinner in Thorby's honor was that night.

Grandmother made the usual speech, giving thanks that the Family was again spared, and noting that the son of Sisu beside her was the instrument of that happy but eminently deserved outcome. Then she lay back and gobbled her food, with her daughter-in-law hovering over her.

Thorby did not enjoy the honor. He had no clear recollection of the run; it felt as if he were being honored by mistake. He had been in semi-shock afterwards, then his imagination started working.

They were only pirates, he knew that. Pirates and slavers, they had tried to steal Sisu, had meant to enslave the Family. Thorby had hated slavers before he could remember—nothing so impersonal as the institution of slavery, he hated slavers in his baby bones before he knew the word.

He was sure that Pop approved of him; he knew that Pop, gentle as he was, would have shortened every slaver in the Galaxy without a tear.

Nevertheless Thorby did not feel happy. He kept thinking about a live ship—suddenly all dead, gone forever in a burst of radiance. Then he would look at his forefinger and wonder. He was caught in the old dilemma of the man with unintegrated values, who eats meat but would rather somebody else did the butchering.

When the dinner in his honor arrived he was three nights short on sleep and looked it. He pecked at his food.

Midway in the meal he became aware that Grandmother was glaring; he promptly spilled food on his dress jacket. "Well!" she snarled. "Have a nice nap?"

"Uh, I'm sorry, Grandmother. Did you speak to me?"

He caught his Mother's warning look but it was too late; Grandmother was off. "I was waiting for you to say something to me!"

"Uh . . . it's a nice day."

"I had not noticed that it was unusual. It rarely rains in space."

"I mean it's a nice party. Yes, a real nice party. Thank you for giving it, Grandmother."

"That's better. Young man, it is customary, when a gentleman dines with a lady, to offer her polite conversation. This may not be the custom among fraki, but it is invariable among People."

"Yes, Grandmother. Thank you. Grandmother."

"Let's start again. It's a nice party, yes. We try to make everyone feel equal, while recognizing the merits of each. It is gratifying to have a chance—at last—to join with our Family in noting a virtue in you . . . one commendable if not exceptional. Congratulations. Now it's your turn."

Thorby slowly turned purple.

She sniffed and said, "What are you doing to get ready for the Gathering?"

"Uh, I don't know, Grandmother. You see, I don't sing, or play, or dance—and the only games I know are chess and spat ball and . . . well, I've never seen a Gathering. I don't know what they're like."

"Hmmph! So you haven't."

Thorby felt guilty. He said, "Grandmother . . . you must have been to lots of Gatherings. Would you tell me about them?"

That did it. She relaxed and said in hushed voice, "They don't have the Gatherings nowadays that they had when I was a girl . . ." Thorby did not have to speak again, other than sounds of awed interest. Long after the rest were waiting for Grandmother's permission to rise, she was saying, ". . . and I had my choice of a hundred ships, let me tell you. I was a pert young thing, with a tiny foot and a saucy nose, and my Grandmother got offers for me throughout the People. But I knew Sisu was for me and I stood up to her. Oh, I was a lively one! Dance all night and as fresh for the games next day as a—"

While it was not a merry occasion, it was not a failure.

Since Thorby had no talent he became an actor.

Aunt Athena Krausa-Fogarth, Chief of Commissary and superlative cook, had the literary disease in its acute form; she had written a play. It was the life of the first Captain Krausa, showing the sterling nobility of the Krausa line. The first Krausa had been a saint with heart of steel. Disgusted with the evil ways of fraki, he had built Sisu (singlehanded), staffed it with his wife (named Fogarth in draft, changed to Grandmother's maiden name before the script got to her) and with their remarkable children. As the play ends they jump off into space, to spread culture and wealth through the Galaxy.

Thorby played the first Krausa. He was dumbfounded, having tried out because he was told to. Aunt Athena seemed almost as surprised; there was a catch in her voice when she announced his name. But Grandmother seemed pleased. She showed up for rehearsals and made suggestions which were happily adopted.

The star playing opposite Thorby was Loeen Garcia, late of El Nido. He had not become chummy with Mata's exchange; he had nothing against her but had not felt like it. But he found Loeen easy to know. She was a dark, soft beauty, with an intimate manner. When Thorby was required to ignore taboo and kiss her, in front of Grandmother and everybody, he blew his lines.

But he tried. Grandmother snorted in disgust. "What are you trying to do! Bite her? And don't let go as if she were radioactive. She's your wife, stupid. You've just carried her into your ship. You're alone with her, you love her. Now do it . . . no, no, no! Athena!"

Thorby looked wildly around. It did not help to catch sight of Fritz with eyes on the overhead, a beatific smile on his face.

"Athena! Come here, Daughter, and show this damp young hulk how a woman should be kissed. Kiss him yourself and then have him try again. Places, everyone."

Aunt Athena, twice Thorby's age, did not upset him so much. He complied clumsily with her instructions, then managed to kiss Loeen without falling over her feet.

It must have been a good play; it satisfied Grandmother. She looked forward to seeing it at the Gathering.

But she died on Woolamurra.

Chapter 13

Woolamurra is a lush pioneer planet barely inside the Terran Hegemony; it was Sisu's last stop before diving deeper for the Gathering. Rich in food and raw materials, the fraki were anxious to buy manufactured articles. Sisu sold out of Losian artifacts and disposed of many Finsteran jewels. But Woolamurra offered little which would bring a profit and money was tight in terms of power metal—Woolamurra had not prospected much and was anxious to keep what radioactives it had for its infant industry.

So Sisu accepted a little uranium and a lot of choice meats and luxury foods. Sisu always picked up gourmet delicacies; this time she stocked tons more than the Family could consume, but valuable for swank at the Gathering.

The balance was paid in tritium and deuterium. A hydrogen-isotopes plant is maintained there for Hegemonic ships but it will sell to others. Sisu had last been able to fuel at Jubbul—Losian ships use a different nuclear reaction.

Thorby was taken dirtside by his Father several times in New Melbourne, the port. The local language is System English, which Krausa understood, but the fraki spoke it with clipped haste and an odd vowel shift; Captain Krausa found it baffling. It did not sound strange to Thorby; it was as if he'd heard it before. So Krausa took him to help out.

This day they went out to complete the fuel transaction and sign a waiver required for private sales. The commercial tenders accepted by Sisu had to be certified by the central bank, then be taken to the fuel plant. After papers were stamped and fees paid, the Captain sat and chatted with the director. Krausa could be friendly with a fraki on terms of complete equality, never hinting at the enormous social difference between them.

While they chatted, Thorby worried. The fraki was talking about Woolamurra. "Any cobber with strong arms and enough brain to hold his ears apart can go outback and make a fortune."

"No doubt," agreed the Captain. "I've seen your beef animals. Magnificent."

Thorby agreed. Woolamurra might be short on pavement, arts, and plumbing; the planet was bursting with opportunity. Besides that, it was a pleasant, decent world, comfortably loose. It matched Doctor Mader's recipe: "—wait until your ship calls at a planet that is democratic, free, and human . . . then run!"

Life in Sisu had become more pleasant even though he was now conscious of the all-enveloping, personally-restricting quality of life with the Family. He was beginning to enjoy being an actor; it was fun to hold the stage. He had even learned to handle the clinch in a manner to win from Grandmother a smile; furthermore, even though it was play-acting, Loeen was a pleasant armful. She would kiss him and murmur: "My husband! My noble husband! We will roam the Galaxy together."

It gave Thorby goose bumps. He decided that Loeen was a great actress.

They became quite friendly. Loeen was curious about what a firecontrolman did, so under the eye of Great Aunt Tora, Thorby showed her the computer room. She looked prettily confused. "Just what is n-space? Length, breadth, and thickness are all you see . . . how about these other dimensions?"

"By logic. You see four dimensions . . . those three, and time. Oh, you can't see a year, but you can measure it."

"Yes, but how can logic—"

"Easy as can be. What is a point? A location in space. But suppose there isn't any space, not even the four ordinary dimensions. No space. Is a point conceivable?"

"Well, I'm thinking about one."

"Not without thinking about space. If you think about a point, you think about it somewhere. If you have a line, you can imagine a point somewhere on it. But a point is just a location and if there isn't anywhere for it to be located, it's nothing. Follow me?"

Great Aunt Tora interrupted. "Could you children continue this in the lounge? My feet hurt."

"Sorry, Great Aunt. Will you take my arm?"

Back in the lounge Thorby said, "Did you soak up that about a point needing a line to hold it?"

"Uh, I think so. Take away its location and it isn't there at all."

"Think about a line. If it isn't in a surface, does it exist?"

"Uh, that's harder."

"If you get past that, you've got it. A line is an ordered sequence of points. But where does the order come from? From being in a surface. It a line isn't held by a surface, then it could collapse into itself. It hasn't any width. You wouldn't even know it had collapsed . . . nothing to compare it with. But every point would be just as close to every other point, no 'ordered sequence.' Chaos. Still with me?"

"Maybe."

"A point needs a line. A line needs a surface. A surface has to be part of solid space, or its structure vanishes. And a solid needs hyperspace to hold it . . . and so on up. Each dimension demands one higher, or geometry ceases to exist. The universe ceases to exist." He slapped the table. "But it's here, so we know that multi-space still functions . . . even though we can't see it, any more than we can see a passing second."

"But where does it all stop?"

"It can't. Endless dimensions."

She shivered. "It scares me."

"Don't worry. Even the Chief Engineer only has to fret about the first dozen dimensions. And—look, you know we turn inside out when the ship goes irrational. Can you feel it?"

"No. And I'm not sure I believe it."

"It doesn't matter, because we aren't equipped to feel it. It can happen while eating soup and you never spill a drop, even though the soup turns inside out, too. So far as we are concerned it's just a mathematical concept, like the square root of minus one—which we tangle with when we pass speed-of-light. It's that way with all multidimensionality. You don't have to feel it, see it, understand it; you just have to work logical symbols about it. But it's real, if 'real' means anything. Nobody has ever seen an electron. Nor a thought. You can't see a thought, you can't measure, weigh, nor taste it—but thoughts are the most real things in the Galaxy." Thorby was quoting Baslim.

She looked at him admiringly. "You must be awfully brainy, Thorby. 'Nobody ever saw a thought.' I like that."

Thorby graciously accepted the praise.

When he went to his bunkie, he found Fritz reading in bed. Thorby was feeling the warm glow that comes from giving the word to an eager mind. "Hi, Fritz! Studying? Or wasting your youth?"

"Hi. Studying. Studying art."

Thorby glanced over. "Don't let Grandmother catch you.

"Got to have something to trade those confounded slugs next time we touch Finster." Woolamurra was "civilization'; the bachelors had replenished their art. "You look as if you had squeezed a bonus out of a Losian. What clicks?"

"Oh, just talking with Loeen. I was introducing her to n-space . . . and darn if she didn't catch on fast."

Fritz looked judicial. "Yes, she's bright" He added, "When is Grandmother posting the banns?"

"What are you talking about!"

"No banns?"

"Don't be silly."

"Mmm . . . you find her good company. Bright, too. Want to know how bright?"

"Well?"

"So bright that she taught in El Nido's school. Her specialty was math. Multidimensional geometry, in fact."

"I don't believe it!"

"Happens I transcribed her record. But ask her."

"I shall! Why isn't she teaching math here?"

"Ask Grandmother. Thorby, my skinny and retarded brother—I think you were dropped on your head. But, sorry as you are, I love you for the fumbling grace with which you wipe drool off your chin. Want a hint from an older and wiser head?"

"Go ahead. You will anyhow."

"Thanks. Loeen is a fine girl and it might be fun to solve equations with her for life. But I hate to see a man leap into a sale before he checks the market. If you just hold off through this next jump, you'll find that the People have several young girls. Several thousand."

"I'm not looking for a wife!"

"Tut, tut! It's a man's duty. But wait for the Gathering, and we'll shop. Now shut up, I want to study art."

"Who's talking?"

Thorby did not ask Loeen what she had done in El Nido, but it did open his eyes to the fact that he was playing the leading role in a courtship without having known it. It scared him. Doctor Mader's words haunted his sleep "—before Grandmother decides to marry you to someone . . . if you wait that long—you're lost!"

Father and the Woolamurra official gossiped while Thorby fretted. Should he leave Sisu? If he wasn't willing to be a trader all his life he had to get out while still a bachelor. Of course, he could stall—look at Fritz. Not that he had anything against Loeen, even if she had made a fool of him.

But if he was going to leave—and he had doubts as to whether he could stand the custom-ridden monotonous life forever—then Woolamurra was the best chance he might have in years. No castes, no guilds, no poverty, no immigration laws—why, they even accepted mutants! Thorby had seen hexadactyls, hirsutes, albinos, lupine ears, giants, and other changes. If a man could work, Woolamurra could use him.

What should he do? Say, "Excuse me, please," leave the room—then start running? Stay lost until Sisu jumped? He couldn't do that! Not to father, not to Sisu; he owed them too much.

What, then? Tell Grandmother he wanted off? If she let him off, it would probably be some chilly spot between stars! Grandmother would regard ingratitude to Sisu as the unforgivable sin.

And besides . . . The Gathering was coming. He felt a great itch to see it. And it wouldn't be right to walk out on the play. He was not consciously rationalizing; although stage-struck, he still thought that he did not want to play the hero in a melodrama—whereas he could hardly wait.

So he avoided his dilemma by postponing it.

Captain Krausa touched his shoulder. "We're leaving."

"Oh. Sorry, Father. I was thinking."

"Keep it up, it's good exercise. Good-by, Director, and thanks. I look forward to seeing you next time we call."

"You won't find me, Captain. I'm going to line me out a station, as far as eye can reach. Land of me own. If you ever get tired of steel decks, there's room here for you. And your boy."

Captain Krausa's face did not show his revulsion. "Thanks. But we wouldn't know which end of a plow to grab. We're traders."

"Each cat his own rat."

When they were outside Thorby said, "What did he mean, Father? I've seen cats, but what is a rat?"

"A rat is a sorci, only thinner and meaner. He meant that each man has his proper place."

"Oh." They walked in silence. Thorby was wondering if he had as yet found his proper place.

Captain Krausa was wondering the same thing. There was a ship just beyond Sisu; its presence was a reproach. It was a mail courier, an official Hegemonic vessel, crewed by Guardsmen. Baslim's words rang accusingly in his mind: "—when opportunity presents, I ask that you deliver him to the commander of any Hegemonic military vessel."

This was not a "military" vessel. But that was a quibble; Baslim's intentions were plain and this ship would serve. Debts must be paid. Unfortunately Mother interpreted the words strictly. Oh, he knew why; she was determined to show off the boy at the Gathering. She intended to squeeze all possible status out of the fact that Sisu had paid the People's debt. Well, that was understandable.

But it wasn't fair to the boy!

Or was it? For his own reasons Krausa was anxious to take the lad to the Gathering. He was certain now that Thorby's ancestry must be of the People—and in the Commodore's files he expected to prove it.

On the other hand—He had agreed with Mother over Mata Kingsolver; a minx should not be allowed to back a taboo lad into a corner, better to ship her at once. But didn't Mother think he could see what she was up to now?

He wouldn't permit it! By Sisu, he wouldn't! The boy was too young and he would forbid it . . . at least until he proved that the boy was of the People, in which case the debt to Baslim was paid.

But that mail courier out there whispered that he was being as unwilling to acknowledge honest debt as he was accusing Mother of being.

But it was for the lad's own good!

What is justice?

Well, there was one fair way. Take the lad and have a showdown with Mother. Tell the lad all of Baslim's message. Tell him that he could take passage in the courier to the central worlds, tell him how to go about finding his family. But tell him, too, that he, the Krausa, believed that Thorby was of the People and that the possibility could and should be checked first. Yes, and tell him bluntly that Mother was trying to tie him down with a wife. Mother would scream and quote the Laws—but this was not in the Chief Officer's jurisdiction; Baslim had laid the injunction on him. And besides, it was right; the boy himself should choose.

Spine stiffened but quaking. Captain Krausa strode back to face his Mother.

As the hoist delivered them up the Deck Master was waiting. "Chief Officer's respects and she wishes to see the Captain, sir."

"That's a coincidence," Krausa said grimly. "Come, Son. We'll both see her."

"Yes, Father."

They went around the passageway, reached the Chief Officer's cabin. Krausa's wife was outside. "Hello, my dear. The Decker said that Mother had sent for me."

"I sent for you."

"He got the message garbled. Whatever it is, make it quick, please. I am anxious to see Mother anyhow."

"He did not get it garbled; the Chief Officer did send for you."

"Eh?"

"Captain, your Mother is dead."

Krausa listened with blank face, then it sank in and he slapped the door aside, ran to his Mother's bed, threw himself down, clutched the tiny, wasted form laid out in state, and began to weep racking, terrible sounds, the grief of a man steeled against emotion, who cannot handle it when he breaks.

Thorby watched with awed distress, then went to his bunkie and thought. He tried to figure out why he felt so badly. He had not loved Grandmother—he hadn't even liked her.

Then why did he feel so lost?

It was almost like when Pop died. He loved Pop—but not her.

He found that he was not alone; the entire ship was in shock. There was not one who could remember, or imagine, Sisu without her. She was Sisu. Like the undying fire that moved the ship, Grandmother had been an unfailing force, dynamic, indispensable, basic. Now suddenly she was gone.

She had taken her nap as usual, grumbling because Woolamurra's day fitted their schedule so poorly—typical fraki inefficiency. But she had gone to sleep with iron discipline that had adapted itself to a hundred time schedules.

When her daughter-in-law went to wake her, she could not be waked.

Her bedside scratch pad held many notes: Speak to Son about this. Tell Tora to do that. Jack up the C.E. about temperature control. Go over banquet menus with Athena. Rhoda Krausa tore out the page, put it away for reference, straightened her, then ordered the Deck Master to notify her husband.

The Captain was not at dinner. Grandmother's couch had been removed; the Chief Officer sat where it had been. In the Captain's absence the Chief Officer signaled the Chief Engineer; he offered the prayer for the dead, she gave the responses. Then they ate in silence. No funeral would be held until Gathering.

The Chief Officer stood up presently. "The Captain wishes to announce," she said quietly, "that he thanks those who attempted to call on him. He will be available tomorrow." She paused. "'The atoms come out of space and to space they return. The spirit of Sisu goes on.'"

Thorby suddenly no longer felt lost.

Chapter 14

The great gathering was even more than Thorby had imagined. Mile after mile of ships, more than eight hundred bulky Free Traders arranged in concentric ranks around a circus four miles across . . . Sisu in the innermost circle—which seemed to please Thorby's Mother—then more ships than Thorby knew existed: Kraken, Deimos, James B. Quinn, Firefly, Bon Marche, Dom Pedro, Cee Squared, Omega, El Nido—Thorby resolved to see how Mata was doing—Saint Christopher, Vega, Vega Prime, Galactic Banker, Romany Lass . . . Thorby made note to get a berthing chart . . . Saturn, Chiang, Country Store, Joseph Smith, Aloha . . .

There were too many. If he visited ten ships a day, he might see most of them. But there was too much to do and see; Thorby gave up the notion.

Inside the circle was a great temporary stadium, larger than the New Amphitheater at Jubbulpore. Here elections would be held, funerals and weddings, athletic contests, entertainments, concerts—Thorby recalled that Spirit of Sisu would be performed there and trembled with stage fright.

Between stadium and ships was a midway—booths, rides, games, exhibits educational and entertaining, one-man pitches, dance halls that never closed, displays of engineering gadgets, fortunetellers, gambling for prizes and cash, open-air bars, soft drink counters offering anything from berry juices of the Pleiades worlds to a brown brew certified to be the ancient, authentic Terran Coca-Cola as licensed for bottling on Hekate.

When he saw this maelstrom Thorby felt that he had wandered into Joy Street—bigger, brighter, and seven times busier than Joy Street with the fleet in. This was the fraki's chance to turn a fairly honest credit while making suckers of the shrewdest businessmen in the Galaxy; this was the day, with the lid off and the Trader without his guards up—they'd sell you your own hat if you laid it on the counter.

Fritz took Thorby dirtside to keep him out of trouble, although Fritz's sophistication was hardly complete, since he had seen just one Great Gathering. The Chief Officer lectured the young people before granting hit-dirt, reminding them that Sisu had a reputation for proper behavior, and then issued each a hundred credits with a warning that it must last throughout the Gathering.

Fritz advised Thorby to cache most of it. "When we go broke, we can sweettalk Father out of pocket money. But it's not smart to take it all."

Thorby agreed. He was not surprised when he felt the touch of a pickpocket; he grabbed a wrist to find out what he had landed.

First he recovered his wallet. Then he looked at the thief. He was a dirty-faced young fraki who reminded Thorby poignantly of Ziggie, except that this kid had two hands. "Better luck next time," he consoled him. "You don't have the touch yet."

The kid seemed about to cry. Thorby started to turn him loose, then said, "Fritz, check your wallet."

Fritz did so, it was gone. "Well, I'll be—"

"Hand it over, kid."

"I didn't take it! You let me go!"

"Cough up . . . before I unscrew your skull."

The kid surrendered Fritz's wallet; Thorby turned him loose. Fritz said, "Why did you do that? I was trying to spot a cop."

"That's why."

"Huh? Talk sense."

"I tried to learn that profession once. It's not easy."

"You? A poor joke, Thorby."

"Remember me? The ex-fraki, the beggar's boy? That clumsy attempt to equalize the wealth made me homesick. Fritz, where I come from, a pickpocket has status. I was merely a beggar."

"Don't let Mother hear that."

"I shan't. But I am what I am and I know what I was and I don't intend to forget. I never learned the pickpocket art, but I was a good beggar, I was taught by the best. My Pop. Baslim the Cripple. I'm not ashamed of him and all the Laws of Sisu can't make me."

"I did not intend to make you ashamed," Fritz said quietly.

They walked on, savoring the crowd and the fun. Presently Thorby said, "Shall we try that wheel? I've spotted the gimmick."

Fritz shook his head. "Look at those so-called prizes."

"Okay. I was interested in how it was rigged."

"Thorby—"

"Yeah? Why the solemn phiz?"

"You know who Baslim the Cripple really was?"

Thorby considered it. "He was my Pop. If he had wanted me to know anything else, he would have told me."

"Mmm . . . I suppose so."

"But you know?"

"Some."

"Uh, I am curious about one thing. What was the debt that made Grandmother willing to adopt me?"

"Uh, 'I have said enough.'"

"You know best."

"Oh, confound it, the rest of the People know! It's bound to come up at this Gathering."

"Don't let me talk you into anything, Fritz."

"Well . . . look, Baslim wasn't always a beggar."

"So I long since figured out."

"What he was is not for me to say. A lot of People kept his secret for years; nobody has told me that it is all right to talk. But one fact is no secret among the People . . . and you're one of the People. A long time ago, Baslim saved a whole Family. The People have never forgotten it. The Hansea, it was . . . the New Hansea is sitting right over there. The one with the shield painted on her. I can't tell you more, because a taboo was placed on it—the thing was so shameful that we never talk about it. I have said enough. But you could go over to the New Hansea and ask to look through her old logs. If you identified yourself—who you are in relation to Baslim—they couldn't refuse. Though the Chief Officer might go to her cabin afterwards and have weeping hysterics."

"Hmm . . . I don't want to know badly enough to make a lady cry. Fritz? Let's try this ride." So they did—and after speeds in excess of light and accelerations up to one hundred gravities, Thorby found a roller coaster too exciting. He almost lost his lunch.

A Great Gathering, although a time of fun and renewed friendships, has its serious purposes. In addition to funerals, memorial services for lost ships, weddings, and much transferring of young females, there is also business affecting the whole People and, most important, the paramount matter of buying ships.

Hekate has the finest shipyards in the explored Galaxy. Men and women have children; ships spawn, too. Sisu was gravid with people, fat with profit in uranium and thorium; it was time that the Family split up. At least a third of the families had the same need to trade wealth for living room; fraki shipbrokers were rubbing their hands, mentally figuring commissions. Starships do not sell like cold drinks; shipbrokers and salesmen often live on dreams. But perhaps a hundred ships would be sold in a few weeks.

Some would be new ships from the yards of Galactic Transport, Ltd., daughter corporation of civilization-wide Galactic Enterprises, or built by Space Engineers Corporation, or Hekate Ships, or Propulsion, Inc., or Hascomb & Sons—all giants in the trade. But there was cake for everyone. The broker who did not speak for a builder might have an exclusive on a secondhand ship, or a line to a rumor of a hint that the owners of a suitable ship might listen if the price was right—a man could make a fortune if he kept his eyes open and his ear to the ground. It was a time to by-pass mails and invest in expensive n-space messages; the feast would soon be over.

A family in need of space had two choices: either buy another ship, split and become two families, or a ship could join with another in purchasing a third, to be staffed from each. Twinning gave much status. It was proof that the family which managed it, were master traders, able to give their kids a start in the world without help. But in practice the choice usually dwindled to one: join with another ship and split the expense, and even then it was often necessary to pledge all three ships against a mortgage on the new one.

It had been thirty years since Sisu had split up. She had had three decades of prosperity; she should have been able to twin. But ten years ago at the last Great Gathering. Grandmother had caused Sisu to guarantee along with parent ships the mortgage against a ship newly born. The new ship gave a banquet honoring Sisu, then jumped off into dark and never came back. Space is vast. Remember her name at Gathering.

The result was that Sisu paid off one-third of forty percent of the cost of the lost ship; the blow hurt. The parent ships would reimburse Sisu—debts are always paid—but they had left the last Gathering lean from having spawned; coughing up each its own liability had left them skin and bones. You don't dun a sick man; you wait.

Grandmother had not been stupid. The parent ships, Caesar Augustus and Dupont, were related to Sisu; one takes care of one's own. Besides, it was good business; a trader unwilling to lend credit will discover that he has none. As it was, Sisu could write a draft on any Free Trader anywhere and be certain that it would be honored.

But it left Sisu with less cash than otherwise at a time when the Family should split.

Captain Krausa hit dirt the first day and went to the Commodore's Flag, Norbert Wiener. His wife stayed aboard but was not idle; since her succession to Chief Officer, she hardly slept. Today she worked at her desk, stopping for face-to-face talks with other chief officers via the phone exchange set up by city services for the Gathering. When her lunch was fetched, she motioned to put it down; it was still untouched when her husband returned. He came in and sat down wearily. She was reading a slide rule and checked her answer on a calculator before she spoke. "Based on a Hascomb F-two ship, the mortgage would run just over fifty percent."

"Rhoda, you know Sisu can't finance a ship unassisted."

"Don't be hasty, dear. Both Gas and Dupont would cosign . . . in their case, it's the same as cash."

"If their credit will stretch."

"And New Hansea would jump at it—under the circumstances—and—"

"Rhoda! You were young, two Gatherings ago, but you are aware that the debt lies equally on all . . . not just Hansea. That was unanimous."

"I was old enough to be your wife, Fjalar. Don't read the Laws to me. But New Hansea would jump at the chance . . . under a secrecy taboo binding till the end of time. Nevertheless the carrying charges would eat too much. Did you get to see a Galactic Lambda?"

"I don't need to; I've seen the specs. No legs."

"You men! I wouldn't call eighty gravities 'no legs.'"

"You would if you had to sit in the worry seat. Lambda class were designed for slow freight inside the Hegemonic sphere; that's all they're good for."

"You're too conservative, Fjalar."

"And I'll continue to be where safety of a ship is concerned."

"No doubt. And I'll have to find solutions that fit your prejudices. However, Lambda class is just a possibility. There is also youknow-which. She'll go cheap."

He frowned. "An unlucky ship."

"It will take powerful cleansing to get those bad thoughts out. But think of the price."

"It's more than bad thoughts in youknow-which-ship. I never heard of a chief officer suiciding before. Or a captain going crazy. I'm surprised they got here."

"So am I. But she's here and she'll be up for sale. And any ship can be cleansed."

"I wonder."

"Don't be superstitious, dear. It's a matter of enough care with the rituals, which is my worry. However, you can forget the youknow-which-one. I think we'll split with another ship."

"I thought you were set on doing it alone?"

"I've merely been exploring our strength. But there are things more important than setting up a new ship singlehanded."

"There certainly are! Power, a good weapons system, working capital, blooded officers in key spots—why, we can't man two ships. Take firecontrolmen alone. If—"

"Stop fretting. We could handle those. Fjalar, how would you like to be Deputy Commodore?"

He braked at full power. "Rhoda! Are you feverish?"

"No."

"There are dozens of skippers more likely to be tapped. I'll never be Commodore—and what's more, I don't want it."

"I may settle for Reserve Deputy, since Commodore Denbo intends to resign after the new deputy is elected. Never mind; you will be Commodore at the next Gathering."

"Preposterous!"

"Why are men so impractical? Fjalar, all you think about is your control room and business. If I hadn't kept pushing, you would never have reached deputy captain."

"Have you ever gone hungry?"

"I'm not complaining, dear. It was a great day for me when I was adopted by Sisu. But listen. We have favors coming from many sources, not just Gus and Dupont. Whatever ship we join with will help. I intend to leave the matter open until after election—and I've had tentative offers all morning, strong ships, well connected. And finally, there's New Hansea."

"What about New Hansea?"

"Timed properly, with the Hanseatics proposing your name, you'll be elected by acclamation."

"Rhoda!"

"You won't have to touch it. And neither will Thorby. You two will simply appear in public and be your charming, male, nonpolitical selves. I'll handle it. By the way, it's too late to pull Loeen out of the play but I'm going to break that up fast. Your Mother did not see the whole picture. I want my sons married—but it is essential that Thorby not be married, nor paired off, until after the election. Now . . . did you go to the flagship?"

"Certainly."

"What ship was he born in? It could be important."

Krausa gave a sigh. "Thorby was not born of the People."

"What? Nonsense! You mean that identification is not certain. Mmm . . . which missing ships are possibilities?"

"I said he was not of the People! There is a not a ship missing, nor a child missing from a ship, which can be matched with his case. He would have to be much older, or much younger, than he is."

She shook her head. "I don't believe it."

"You mean you don't want to!"

"I don't believe it. He's People. You can tell it in his walk, his manner, his good mind, everything about him. Hmm . . . I'll look at the files myself."

"Go ahead. Since you don't believe me."

"Now, Fjalar, I didn't say—"

"Oh, yes, you did. If I told you it was raining dirtside, and you didn't want rain, you—"

"Please, dear! You know it never rains this time of year on Hekate. I was just—"

"Sky around us!"

"There's no need to lose your temper. It doesn't become a captain."

"It doesn't become a captain to have his word doubted in his own ship, either!"

"I'm sorry, Fjalar." She went on quietly, "It won't hurt to look. If I widened the search, or looked through unfiled material—you know how clerks are with deadfile data. Mmm . . . it would help if I knew who Thorby's parents were—before election. While I shan't permit him to marry before then, I might line up important support if it was assumed that immediately after, a wedding could be expec—"

"Rhoda."

"What, dear? The entire Vega group could be swayed, if a presumption could be established about Thorby's birth . . . if an eligible daughter of theirs—"

"Rhoda!"

"I was talking, dear."

"For a moment, I'll talk. The Captain. Wife, he's fraki blood. Furthermore, Baslim knew it . . . and laid a strict injunction on me to help him find his family. I had hoped—yes, and believed—that the files would show that Baslim was mistaken." He frowned and chewed his lip. "A Hegemonic cruiser is due here in two weeks. That ought to give you time to assure yourself that I can search files as well as any clerk."

"What do you mean?"

"Is there doubt? Debts are always paid . . . and there is one more payment due."

She stared. "Husband, are you out of your mind?"

"I don't like it any better than you do. He's not only a fine boy; he's the most brilliant tracker we've ever had."

"Trackers!" she said bitterly. "Who cares about that? Fjalar, if you think that I will permit one of my sons to be turned over to fraki—" She choked up.

"He is fraki."

"He is not. He is Sisu, just as I am. I was adopted, so was he. We are both Sisu, we will always be."

"Have it your way. I hope he will always be Sisu in his heart. But the last payment must be made."

"That debt was paid in full, long ago!"

"The ledger doesn't show it."

"Nonsense! Baslim wanted the boy returned to his family. Some fraki family—if fraki have families. So we gave him a family—our own, clan and sept. Is that not better payment than some flea-bitten fraki litter? Or do you think so little of Sisu?"

She glared up at him, and the Krausa thought bitterly that there must be something to the belief that the pure blood of the People produced better brains. In dickering with fraki he never lost his temper. But Mother—and now Rhoda—could always put him in the wrong.

At least Mother, hard as she had been, had never asked the impossible. But Rhoda . . . well, Wife was new to the job. He said tensely, "Chief Officer, this injunction was laid on me personally, not on Sisu. I have no choice."

"So? Very well, Captain—we'll speak of it later. And now, with all respect to you, sir, I have work to do."

Thorby had a wonderful time at the Gathering but not as much fun as he expected; repeatedly Mother required him to help entertain chief officers of other ships. Often a visitor brought a daughter or granddaughter along and Thorby had to keep the girl busy while the elders talked. He did his best and even acquired facility in the half-insulting small talk of his age group. He learned something that he called dancing which would have done credit to any man with two left feet and knees that bent backwards. He could now put his arm around a girl when music called for it without chills and fever.

Mother's visitors quizzed him about Pop. He tried to be polite but it annoyed him that everyone knew more about Pop than he did—except the things that were important.

But it did seem that duty could be shared. Thorby realized that he was junior son, but Fritz was unmarried, too. He suggested that if Fritz were to volunteer, the favor could be returned later.

Fritz gave a raucous laugh. "What can you offer that can repay me for dirtside time at Gathering?"

"Well . . ."

"Precisely. Seriously, old knucklehead, Mother wouldn't listen, even if I were insane enough to offer. She says you, she means you." Fritz yawned. "Man, am I dead! Little redhead off the Saint Louis wanted to dance all night. Get out and let me sleep before the banquet."

"Can you spare a dress jacket?"

"Do your own laundry. And cut the noise."

But on this morning one month after grounding Thorby was hitting dirt with Father, with no chance that Mother would change their minds; she was out of the ship. It was the Day of Remembrance. Services did not start until noon but Mother left early for something to do with the election tomorrow.

Thorby's mind was filled with other matters. The services would end with a memorial to Pop. Father had told him that he would coach him in what to do, but it worried him, and his nerves were not soothed by the fact that Spirit of Sisu would be staged that evening.

His nerves over the play had increased when he discovered that Fritz had a copy and was studying it. Fritz had said gruffly, "Sure, I'm learning your part! Father thought it would be a good idea in case you fainted or broke your leg. I'm not trying to steal your glory; it's intended to let you relax—if you can relax with thousands staring while you smooch Loeen."

"Well, could you?"

Fritz looked thoughtful. "I could try. Loeen looks cuddly. Maybe I should break your leg myself."

"Bare hands?"

"Don't tempt me. Thorby, this is just precaution, like having two trackers. But nothing less than a broken leg can excuse you from strutting your stuff."

Thorby and his Father left Sisu two hours before the services. Captain Krausa said, "We might as well enjoy ourselves. Remembrance is a happy occasion if you think of it the right way—but those seats are hard and it's going to be a long day."

"Uh, Father . . . just what is it I'll have to do when it comes time for Pop—for Baslim?"

Nothing much. You sit up front during the sermon and give responses in the Prayer for the Dead. You know how, don't you?"

"I'm not sure."

"I'll write it out for you. As for the rest . . . well, you'll see me do the same for my Mother—your Grandmother. You watch and when it comes your turn, you do the same."

"All right, Father."

"Now let's relax."

To Thorby's surprise Captain Krausa took a slideway outside the Gathering, then whistled down a ground car. It seemed faster than those Thorby had seen on Jubbul and almost as frantic as the Losians. They reached the rail station with nothing more than an exchange of compliments between their driver and another, but the ride was so exciting that Thorby saw little of the City of Artemis.

He was again surprised when Father bought tickets. "Where are we going?"

"A ride in the country." The Captain glanced at his watch. "Plenty of time."

The monorail gave a fine sensation of speed. "How fast are we going. Father?"

"Two hundred kilometers an hour, at a guess." Krausa had to raise his voice.

"It seems faster."

"Fast enough to break your neck. That's as fast as a speed can be."

They rode for half an hour. The countryside was torn up by steel mills and factories for the great yards, but it was new and different; Thorby stared and decided that the Sargon's reserve was a puny enterprise compared with this. The station where they got off lay outside a long, high wall; Thorby could see space ships beyond it. "Where are we?"

"Military field. I have to see a man—and today there is just time." They walked toward a gate. Krausa stopped, looked around; they were alone. "Thorby—"

"Yes, Father?"

"Do you remember the message from Baslim you delivered to me?"

"Sir?"

"Can you repeat it?"

"Huh? Why, I don't know. Father. It's been a long time."

"Try it. Start in: To Captain Fjalar Krausa, master of Starship Sisu, from Baslim the Cripple: Greetings, old friend!—'"

"'"Greetings, old friend,"'" Thorby repeated. "'Greetings to your family, clan, and sib, and'—why, I understand it!"

"Of course," the Krausa said gently, "this is the Day of Remembrance. Go on."

Thorby went on. Tears started down his cheeks as he heard Pop's voice coming from his own throat: "'—and my humblest respects to your revered mother. I am speaking to you through the mouth of my adopted son. He does not understand Suomic'—oh, but I do!"

"Go on."

When Thorby reached: "'I am already dead—'" he broke down. Krausa blew his nose vigorously, told him to proceed. Thorby managed to get to the end, though his voice was shaking. Then Krausa let him cry a moment before telling him sternly to wipe his face and brace up. "Son . . . you heard the middle part? You understood it?"

"Yes . . . uh, yes. I guess so."

"Then you know what I have to do."

"You mean . . . I have to leave Sisu?"

"What did Baslim say? 'When opportunity presents—' This is the first opportunity I've had . . . and I've had to squeeze to get it. It's almost certainly the last. Baslim didn't make me a gift of you, Son—just a loan. And now I must pay back the loan. You see that, don't you?"

"Uh . . . I guess so."

"Then let's get on with it." Krausa reached inside his jacket, pulled out a sheaf of bills and shoved them at Thorby. "Put this in your pocket. I would have made it more, but it was all I could draw without attracting your Mother's suspicions. Perhaps I can send you more before you jump."

Thorby held it without looking at it, although it was more money than he had ever touched before. "Father . . . you mean I've already left Sisu?"

Krausa had turned. He stopped. "Better so, Son. Goodbyes are not comfort; only remembrance is a comfort. Besides, it has to be this way."

Thorby swallowed. "Yes, sir."

"Let's go."

They walked quickly toward the guarded gate. They were almost there when Thorby stopped. "Father . . . I don't want to go!"

Krausa looked at him without expression. "You don't have to."

"I thought you said I did have to?"

"No, The injunction laid on me was to deliver you and to pass on the message Baslim sent to me. But there my duty ends, my debt is paid. I won't order you to leave the Family. The rest was Baslim's idea . . . conceived, I am sure, with the best of intentions for your welfare. But whether or not you are obligated to carry out his wishes is something between you and Baslim. I can't decide it for you. Whatever debt you may or may not owe Baslim, it is separate from the debt the People owed to him."

Krausa waited while Thorby stood mute, trying to think. What had Pop expected of him? What had he told him to do? "Can I depend on you? You won't goof off and forget it?" Yes, but what, Pop? "Don't burn any offerings . . . just deliver a message, and then one thing more: do whatever this man suggests." Yes, Pop, but the man won't tell me!

Krausa said urgently, "We haven't much time. I have to get back. But, Son, whatever you decide, it's final. If you don't leave Sisu today, you won't get a second chance. I'm sure of that."

"It's the very last thing that I want from you, son . . . can I depend on you?" Pop said urgently, inside his head.

Thorby sighed. "I guess I have to, Father."

"I think so, too. Now let's hurry."

The gate pass office could not be hurried, especially as Captain Krausa, although identifying himself and son by ship's papers, declined to state his business with the commander of Guard Cruiser Hydra other than to say that it was "urgent and official."

But eventually they were escorted by a smart, armed fraki to the cruiser's hoist and turned over to another. They were handed along inside the ship and reached an office marked "Ship's Secretary—Enter Without Knocking." Thorby concluded that Sisu was smaller than he had thought and he had never seen so much polished metal in his life. He was rapidly regretting his decision.

The Ship's Secretary was a polite, scrubbed young man with the lace orbits of a lieutenant. He was also very firm. "I'm sorry. Captain, but you will have to tell me your business . . . if you expect to see the Commanding Officer."

Captain Krausa said nothing and sat tight.

The nice young man colored, drummed on his desk. He got up. "Excuse me a moment."

He came back and said tonelessly, "The Commanding Officer can give you five minutes." He led them into a larger office and left them. An older man was there, seated at a paper-heaped desk. He had his blouse off and showed no insignia of rank. He got up, put out his hand, and said, "Captain Krausa? Of Free Trader . . . Seezoo, is it? I'm Colonel Brisby, commanding."

"Glad to be aboard, Skipper."

"Glad to have you. How's business?" He glanced at Thorby. "One of your officers?"

"Yes and no."

"Eh?"

"Colonel? May I ask in what class you graduated?"

"What? Oh-Eight. Why do you ask?"

"I think you can answer that. This lad is Thorby Baslim, adopted son of Colonel Richard Baslim. The Colonel asked me to deliver him to you."

Chapter 15

"What?"

"The name means something to you?"

"Of course it does." He stared at Thorby. "There's no resemblance."

"'Adopted' I said. The Colonel adopted him on Jubbal."

Colonel Brisby closed the door. Then he said to Krausa, "Colonel Baslim is dead. Or 'missing and presumed dead,' these past two years."

"I know. The boy has been with me. I can report some details of the Colonel's death, if they are not known."

"You were one of his couriers?"

"Yes."

"You can prove it?"

"X three oh seven nine code FT."

"That can be checked. We'll assume it is for the moment. By what means do you identify . . . Thorby Baslim?" Thorby did not follow the conversation. There was a buzzing in his ears, as if the tracker was being fed too much power, and the room was swelling and then growing smaller. He did figure out that this officer knew Pop, which was good . . . but what was this about Pop being a colonel? Pop was Baslim the Cripple, licensed mendicant under the mercy of . . . under the mercy . . .

Colonel Brisby told him sharply to sit down, which he was glad to do. Then the Colonel speeded up the air blower. He turned to Captain Krausa. "All right. I'm sold. I don't know what regulation I'm authorized to do it under . . . we are required to give assistance to 'X' Corps people, but this is not quite that. But I can't let Colonel Baslim down."

"'Distressed citizen,'" suggested Krausa.

"Eh? I don't see how that can be stretched to fit a person on a planet under the Hegemony, who is obviously not distressed—other than a little white around the gills, I mean. But I'll do it."

"Thank you, Skipper." Krausa glanced at his watch. "May I go? In fact I must."

"Just a second. You're simply leaving him with me?"

"I'm afraid that's the way it must be."

Brisby shrugged. "As you say. But stay for lunch. I want to find out more about Colonel Baslim."

"I'm sorry, I can't. You can reach me at the Gathering, if you need to."

"I will. Well, coffee at least." The ship commander reached for a button.

"Skipper," Krausa said with distress, looking again at his watch, "I must leave now. Today is our Remembrance . . . and my Mother's funeral is in fifty minutes."

"What? Why didn't you say so? Goodness, man! You'll never make it."

"I'm very much afraid so . . . but I had to do this."

"We'll fix that." The Colonel snatched open the door. "Eddie! An air car for Captain Krausa. Speed run. Take him off the top and put him down where he says. Crash!"

"Aye aye, Skipper!"

Brisby turned back, raised his eyebrows, then stepped into the outer office. Krausa was facing Thorby, his mouth working painfully. "Come here. Son."

"Yes, Father."

"I have to go now. Maybe you can manage to be at a Gathering . . . some day."

"I'll try, Father!"

"If not . . . well, the blood stays in the steel, the steel stays in the blood. You're still Sisu."

"'The steel stays in the blood.'"

"Good business, Son. Be a good boy."

"Good . . . business! Oh, Father!"

"Stop it! You'll have me doing it. Listen, I'll take your responses this afternoon. You must not show up."

"Yes, sir."

"Your Mother loves you . . . and so do I."

Brisby tapped on the open door. "Your car is waiting, Captain."

"Coming, Skipper." Krausa kissed Thorby on both cheeks and turned suddenly away, so that all Thorby saw was his broad back.

Colonel Brisby returned presently, sat down, looked at Thorby and said, "I don't know quite what to do with you. But we'll manage." He touched a switch. "Have someone dig up the berthing master-at-arms, Eddie." He turned to Thorby. "We'll make out, if you're not too fussy. You traders live pretty luxuriously, I understand."

"Sir?"

"Yes?"

"Baslim was a colonel? Of your service?"

"Well . . . yes."

Thorby had now had a few minutes to think—and old memories had been stirred mightily. He said hesitantly, "I have a message for you—I think."

"From Colonel Baslim?"

"Yes, sir. I'm supposed to be in a light trance. But I think I can start it." Carefully, Thorby recited a few code groups. "Is this for you?"

Colonel Brisby again hastily closed the door. Then he said earnestly, "Don't ever use that code unless you are certain everyone in earshot is cleared for it and the room has been debugged."

"I'm sorry, sir."

"No harm done. But anything in that code is hot. I just hope that it hasn't cooled off in two years." He touched the talker switch again. "Eddie, cancel the master-at-arms. Get me the psych officer. If he's out of the ship, have him chased down." He looked at Thorby. "I still don't know what to do with you. I ought to lock you in the safe."

The long message was squeezed out of Thorby in the presence only of Colonel Brisby, his Executive Officer Vice Colonel "Stinky" Stancke, and the ship's psychologist Medical-Captain Isadore Krishnamurti. The session went slowly; Dr. Kris did not often use hypnotherapy. Thorby was so tense that he resisted, and the Exec had a blasphemous time with recording equipment. But at last the psychologist straightened up and wiped his face. "That's all, I think," he said wearily. "But what is it?"

"Forget you heard it. Doc," advised Brisby. "Better yet, cut your throat."

"Gee, thanks, Boss."

Stancke said, "Pappy, let's run him through again. I've got this mad scientist's dream working better. His accent may have garbled it."

"Nonsense. The kid speaks pure Terran."

"Okay, so it's my ears. I've been exposed to bad influences—been aboard too long."

"If," Brisby answered calmly, "that is a slur on your commanding officer's pure speech, I consider the source. Stinkpot, is it true that you Riffs write down anything you want understood?"

"Only with Araleshi . . . sir. Nothing personal, you asked. Well, how about it? I've got the noise filtered out."

"Doc?"

"Hmm . . . The subject is fatigued. Is this your only opportunity?"

"Eh? He'll be with us quite a while. All right, wake him."

Shortly Thorby was handed over to the berthing P.O. Several liters of coffee, a tray of sandwiches, and one skipped meal later the Colonel and his second in command had recorded in clear the thousands of words of old Baslim the Beggar's final report. Stancke sat back and whistled. "You can relax, Pappy. This stuff didn't cool off—a half-life of a century, on a guess."

Brisby answered soberly, "Yes, and a lot of good boys will die before it does."

"You ain't foolin'. What gets me is that trader kid—running around the Galaxy with all that 'burn-before-reading' between his ears. Shall I slide down and poison him?"

"What, and have to fill out all those copies?"

"Well, maybe Kris can wipe it out of his tender gray matter without resorting to a transorbital."

"Anybody touches that kid and Colonel Baslim will rise up out of his grave and strangle him, is my guess. Did you know Baslim, Stinky?"

"One course under him in psychological weapons, my last year at the Academy. Just before he went 'X' Corps. Most brilliant mind I've ever met—except yours, of course, Pappy, sir, boss."

"Don't strain yourself. No doubt he was a brilliant teacher—he would be tops at anything. But you should have known him before he was on limited duty. I was privileged to serve under him. Now that I have a ship of my own I just ask myself: 'What would Baslim do?' He was the best commanding officer a ship ever had. It was during his second crack at colonel—he had been up to wing marshal and put in for reduction to have a ship again, to get away from a desk."

Stancke shook his head. "I can't wait for a nice cushy desk, where I can write recommendations nobody will read."

"You aren't Baslim. If it wasn't hard, he didn't like it."

"I'm no hero. I'm more the salt of the earth. Pappy, were you with him in the rescue of the Hansea?"

"You think I would fail to wear the ribbon? No, thank goodness; I had been transferred. That was a hand-weapons job. Messy."

"Maybe you would have had the sense not to volunteer."

"Stinky, even you would volunteer, fat and lazy as you are—if Baslim asked for volunteers."

"I'm not lazy, I'm efficient. But riddle me this: what was a C.O. doing leading a landing party?"

"The Old Man followed regulations only when he agreed with them. He wanted a crack at slavers with his own hands—he hated slavers with a cold passion. So he comes back a hero and what can the Department do? Wait until he gets out of the hospital and courtmartial him? Stinky, even top brass can be sensible when they have their noses rubbed in it. So they cited him for above-and-beyond under unique circumstances and put him on limited duty. But from here on, when 'unique circumstances' arise, every commanding officer knows that he can't thumb through the book for an alibi. It'll be up to him to continue the example."

"Not me," Stancke said firmly.

"You. When you're a C.O. and comes time to do something unpleasant, there you'll be, trying to get your tummy in and your chest out, with your chubby little face set in hero lines. You won't be able to help it. The Baslim conditioned-reflex will hit you."

Around dawn they got to bed. Brisby intended to sleep late but long habit took him to his desk only minutes late. He was not surprised to find his professedly-lazy Exec already at work.

His Paymaster-Lieutenant was waiting. The fiscal officer was holding a message form; Brisby recognized it. The night before, after hours of dividing Baslim's report into phrases, then recoding it to be sent by split routes, he had realized that there was one more chore before he could sleep: arrange for identification search on Colonel Baslim's adopted son. Brisby had no confidence that a waif picked up on Jubbul could be traced in the vital records of the Hegemony—but if the Old Man sent for a bucket of space, that was what he wanted and no excuses. Toward Baslim, dead or not, Colonel Brisby maintained the attitudes of a junior officer. So he had written a dispatch and left word with the duty officer to have Thorby fingerprinted and the prints coded at reveille. Then he could sleep.

Brisby looked at the message. "Hasn't this gone out?" he demanded.

"The photo lab is coding the prints now, Skipper. But the Comm Office brought it to me for a charge, since it is for service outside the ship."

"Well, assign it. Do I have to be bothered with every routine matter?"

The Paymaster decided that the Old Man had been missing sleep again. "Bad news, Skipper."

"Okay, spill it."

"I don't know of a charge to cover it. I doubt if there is an appropriation to fit even if we could figure out a likely-sounding charge."

"I don't care what charge. Pick one and get that message moving. Use that general one. Oh-oh-something."

"'Unpredictable Overhead, Administrative.' It won't work, Skipper. Making an identity search on a civilian cannot be construed as ship's overhead. Oh, I can put that charge number on and you'll get an answer. But—"

"That's what I want. An answer."

"Yes, sir. But eventually it reaches the General Accounting Office and the wheels go around and a card pops out with a red tag. Then my pay is checked until I pay it back. That's why they make us blokes study law as well as accounting."

"You're breaking my heart. Okay, Pay, if you're too sissy to sign it, tell me what charge number that overhead thing is; I'll write it in and sign my name and rank. Okay?"

"Yes, sir. But, Skipper—"

"Pay, I've had a hard night."

"Yes, sir. I'm required by law to advise you. You don't have to take it, of course."

"Of course," Brisby agreed grimly.

"Skipper, have you any notion how expensive an identification search can be?"

"It can't be much. I can't see why you are making such an aching issue of it. I want a clerk to get off his fundament and look in the files. I doubt if they'll bill us. Routine courtesy."

"I wish I thought so, sir. But you've made this an unlimited search. Since you haven't named a planet, first it will go to Tycho City, live files and dead. Or do you want to limit it to live files?"

Brisby thought. If Colonel Baslim had believed that this young man had come from inside civilization, then it was likely that the kid's family thought he was dead. "No."

"Too bad. Dead files are three times as big as the live. So they search at Tycho. It takes a while, even with machines—over twenty billion entries. Suppose you get a null result. A coded inquiry goes to vital bureaus on all planets, since Great Archives are never up to date and some planetary governments don't send in records anyhow. Now the cost mounts, especially if you use n-space routing; exact coding on a fingerprint set is a fair-sized book. Of course if you take one planet at a time and use mail—"

"No."

"Well . . . Skipper, why not put a limit on it? A thousand credits, or whatever you can afford if—I mean 'when'—they check your pay."

"A thousand credits? Ridiculous!"

"If I'm wrong, the limitation won't matter. If I'm right—and I am, a thousand credits could just be a starter—then your neck isn't out too far."

Brisby scowled. "Pay, you aren't working for me to tell me I can't do things."

"Yes, sir."

"You're here to tell me how I can do what I'm going to do anyhow. So start digging through your books and find out how. Legally. And free."

"Aye aye, sir."

Brisby did not go right to work. He was fuming—some day they would get the service so fouled up in red tape they'd never get a ship off the ground. He bet that the Old Man had gone into the Exotic Corps with a feeling of relief—"X" Corps agents didn't have red tape; one of 'em finds it necessary to spend money, he just did so, ten credits or ten million. That was how to operate—pick your men, then trust them. No regular reports, no forms, no nothing—just do what needs to be done.

Whereupon he picked up the ship's quarterly fuel and engineering report. He put it down, reached for a message form, wrote a follow-up on Baslim's report, informing Exotic Bureau that the unclassified courier who had delivered report was still in jurisdiction of signer and in signer's opinion additional data could be had if signer were authorized to discuss report with courier at discretion.

He decided not to turn it over to the code and cipher group; he opened his safe and set about coding it. He had just finished when the Paymaster knocked. Brisby looked up. "So you found the paragraph."

"Perhaps, Skipper, I've been talking with the Executive Officer."

"Shoot."

"I see we have subject person aboard."

"Now don't tell me I need a charge for that!"

"Not at all, Skipper. I'll absorb his ration in the rush. You keep him aboard forever and I won't notice. Things don't get awkward until they get on the books. But how long do you expect to keep him? It must be more than a day or two, or you wouldn't want an identity search."

The Commanding Officer frowned. "It may be quite a while. First I've got to find out who he is, where he's from. Then, if we're going that way, I intend to give him an unlogged lift. If we aren't—well, I'll pass him along to a ship that is. Too complicated to explain, Pay—but necessary."

"Okay. Then why not enlist him?"

"Huh?"

"It would clear up everything."

Brisby frowned. "I see. I could take him along legally . . . and arrange a transfer. And it would give you a charge number. But . . . well, suppose Shiva III is the spot—and his enlistment is not up. Can't just tell him to desert. Besides I don't know that he wants to enlist."

"You can ask him. How old is he?"

"I doubt if he knows. He's a waif."

"So much the better. You ship him. Then when you find out where he has to go, you discover an error in his age . . . and correct it. It turns out that he reaches his majority in time to be paid off on his home planet."

Brisby blinked. "Pay, are all paymasters dishonest?"

"Only the good ones. You don't like it, sir?"

"I love it. Okay, I'll check. And I'll hold up that dispatch. We'll send it later."

The Paymaster looked innocent. "Oh, no, sir, we won't ever send it."

"How's that?"

"It won't be necessary. We enlist him to fill vacancy in complement. We send in records to BuPersonnel. They make the routine check, name and home planet—Hekate, I suppose, since we got him here. By then we're long gone. They don't find him registered here. Now they turn it over to BuSecurity, who sends us a priority telling us not to permit subject personnel to serve in sensitive capacity. But that's all, because it's possible that this poor innocent citizen never got registered. But they can't take chances, so they start the very search you want, first Tycho, then everywhere else, security priority. So they identify him and unless he's wanted for murder it's a routine muddle. Or they can't identify him and have to make up their minds whether to register him, or give him twenty-four hours to get out of the Galaxy—seven to two they decide to forget it—except that someone aboard is told to watch him and report suspicious behavior. But the real beauty of it is that the job carries a BuSecurity cost charge."

"Pay, do you think that Security has agents in this vessel I don't know about?"

"Skipper, what do you think?"

"Mmm . . . I don't know—but if I were Chief of Security I would have! Confound it, if I lift a civilian from here to the Rim, that'll be reported too—no matter what I log."

"Shouldn't be surprised, sir."

"Get out of here! I'll see if the lad will buy it." He flipped a switch. "Eddie!" Instead of sending for Thorby, Brisby directed the Surgeon to examine him, since it was pointless to pressure him to enlist without determining whether or not he could. Medical-Major Stein, accompanied by Medical-Captain Krishnamurti, reported to Brisby before lunch.

"Well?"

"No physical objection. Skipper. I'll let the Psych Officer speak for himself."

"All right. By the way, how old is he?"

"He doesn't know."

"Yes, yes," Brisby agreed impatiently, "but how old do you think he is?"

Dr. Stein shrugged. "What's his genetic picture? What environment? Any age-factor mutations? High or low gravity planet? Planetary metabolic index? He could be as young as ten standard years, as old as thirty, on physical appearance. I can assign a fictional adjusted age, on the assumption of no significant mutations and Terra-equivalent environment—an unjustified assumption until they build babies with data plates—an adjusted age of not less than fourteen standard years, not more than twentytwo."

"Would an adjusted age of eighteen fit?"

"That's what I said."

"Okay, make it just under that—minority enlistment."

"There's a tattoo on him," Dr. Krishnamurti offered, "which might give a clue. A slave mark."

"The deuce you say!" Colonel Brisby reflected that his follow-up dispatch to "X" Corps was justified. "Dated?"

"Just a manumission—a Sargonese date which fits his Story. The mark is a factor's mark. No date."

"Too bad. Well, now that he is clear with Medical, I'll send for him."

"Colonel."

"Eh? Yes, Kris?"

"I cannot recommend enlistment."

"Huh? He's as sane as you are."

"Surely. But he is a poor risk."

"Why?"

"I interviewed subject under light trance this morning. Colonel, did you ever keep a dog?"

"No. Not many where I come from."

"Very useful laboratory animals, they parallel many human characteristics. Take a puppy, abuse him, kick him, mistreat him—he'll revert to feral carnivore. Take his litter brother, pet him, talk to him, let him sleep with you, but train him—he's a happy, well-behaved house pet. Take another from that same litter, pet him on even days and kick him on odd days. You'll have him so confused that he'll be ruined for either role; he can't survive as a wild animal and he doesn't understand what is expected of a pet. Pretty soon he won't eat, he won't sleep, he can't control his functions; he just cowers and shivers."

"Hmm . . . do you psychologists do such things often?"

"I never have. But it's in the literature . . . and this lad's case parallels it. He's undergone a series of traumatic experiences in his formative years, the latest of which was yesterday. He's confused and depressed. Like that dog, he may snarl and bite at any time. He ought not to be exposed to new pressures; he should be cared for where he can be given psychotherapy."

"Phooey!"

The psychological officer shrugged. Colonel Brisby added, "I apologize, Doctor. But I know something about this case, with all respect to your training. This lad has been in good environment the past couple of years." Brisby recalled the farewell he had unwillingly witnessed. "And before that, he was in the hands of Colonel Richard Baslim. Heard of him?"

"I know his reputation."

"If there is any fact I would stake my ship on, it is that Colonel Baslim would never ruin a boy. Okay, so the kid has had a rough time. But be has also been succored by one of the toughest, sanest, most humane men ever to wear our uniform. You bet on your dogs; I'll back

Colonel Richard Baslim. Now . . . are you advising me not to enlist him?"

The psychologist hesitated. Brisby said, "Well?"

Major Stein interrupted. "Take it easy, Kris; I'm overriding you."

Brisby said, "I want a straight answer, then I'll decide."

Dr. Krishnamurti said slowly, "Suppose I record my opinions but state that there are no certain grounds for refusing enlistment?"

"Why?"

"Obviously you want to enlist this boy. But if he gets into trouble—well, my endorsement could get him a medical discharge instead of a sentence. He's had enough bad breaks."

Colonel Brisby clapped him on the shoulder. "Good boy, Kris! That's all, gentlemen."

Thorby spent an unhappy night. The master-at-arms billeted him in senior P.O.s quarters and he was well treated, but embarrassingly aware of the polite way in which those around him did not stare at his gaudy Sisu dress uniform. Up till then he had been proud of the way Sisu's dress stood out; now he was learning painfully that clothing has its proper background. That night be was conscious of snores around him . . . strangers . . . fraki—and he yearned to be back among People, where he was known, understood, recognized.

He tossed on a harder bed than he was used to and wondered who would get his own?

He found himself wondering whether anyone had ever claimed the hole he still thought of as "home." Would they repair the door? Would they keep it clean and decent the way Pop liked? What would they do with Pop's leg?

Asleep, he dreamt of Pop and of Sisu, all mixed up. At last, with Grandmother shortened and a raider bearing down. Pop whispered, "No more bad dreams, Thorby. Never again, son. Just happy dreams."

He slept peacefully then—and awoke in this forbidding place with gabbling fraki all around him. Breakfast was substantial but not up to Aunt Athena's high standards; however he was not hungry.

After breakfast he was quietly tasting his misery when he was required to undress and submit to indignities. It was his first experience with medical men's offhand behavior with human flesh—he loathed the poking and prodding.

When the Commanding Officer sent for him Thorby was not even cheered by seeing the man who knew Pop. This room was where he had had to say a last "good-business" to Father; the thoughts lingering there were not good.

He listened listlessly while Brisby explained. He woke up a little when he understood that he was being offered status—not much, he gathered. But status. The fraki had status among themselves. It had never occurred to him that fraki status could matter even to fraki.

"You don't have to," Colonel Brisby concluded, "but it will make simpler the thing Colonel Baslim wanted me to do—find your family, I mean. You would like that, wouldn't you?"

Thorby almost said that he knew where his Family was. But he knew what the Colonel meant: his own sib, whose existence he had never quite been able to imagine. Did he really have blood relatives somewhere?

"I suppose so," he answered slowly. "I don't know."

"Mmm . . ." Brisby wondered what it was like to have no frame to your picture. "Colonel Baslim was anxious to have me locate your family. I can handle it easier if you are officially one of us. Well? It's Guardsman third class . . . thirty credits a month, all you can eat and not enough sleep. And glory. A meager amount."

Thorby looked up. "This is the same Fam—service my Pop—Colonel Baslim, you call him—was in? He really was?"

"Yes. Senior to what you will be. But the same service. I think you started to say 'family.' We like to think of the Service as one enormous family. Colonel Baslim was one of the more distinguished members of it."

"Then I want to be adopted."

"Enlisted."

"Whatever the word is."

Chapter 16

Fraki weren't bad when you got to know them.

They had their secret language, even though they thought they talked Interlingua. Thorby added a few dozen verbs and a few hundred nouns as he heard them; after that he tripped over an occasional idiom. He learned that his lightyears as a trader were respected, even though the People were considered odd. He didn't argue; fraki couldn't know better.

H.G.C. Hydra lifted from Hekate, bound for the Rim worlds. Just before jump a money order arrived accompanied by a supercargo's form which showed the draft to be one eighty-third of Sisu's appreciation from Jubbulpore to Hekate—as if, thought Thorby, he were a girl being swapped. It was an uncomfortably large sum and Thorby could find no entry charging him interest against a capital share of the ship—which he felt should be there for proper accounting; it wasn't as if he had been born in the ship. Life among the People had made the beggar boy conscious of money in a sense that alms never could—books must balance and debts must be paid.

He wondered what Pop would think of all that money. He felt easier when he learned that he could deposit it with the Paymaster.

With the draft was a warm note, wishing him good business wherever he went and signed: "Love, Mother." It made Thorby feel better and much worse.

A package of belongings arrived with a note from Fritz: "Dear Brother, Nobody briefed me about recent mysterious happenings, but things were crisp around the old ship for a few days. If such were not unthinkable, I would say there had been a difference of opinion at highest level. Me, I have no opinions, except that I miss your idle chatter and blank expressions. Have fun and be sure to count your change.

"Fritz.

"P.S. The play was an artistic success—and Loeen is cuddly."

Thorby stored his Sisu belongings; he was trying to be a Guardsman and they made him uncomfortable. He discovered that the Guard was not the closed corporation the People were; it required no magic to make a Guardsman if a man had what it took, because nobody cared where a man came from or what he had been. The Hydra drew its company from many planets; there were machines in BuPersonnel to ensure this. Thorby's shipmates were tail and short, bird-boned and rugged, smooth and hairy, mutated and superficially unmutated. Thorby hit close to norm and his Free Trader background was merely an acceptable eccentricity; it made him a spaceman of sorts even though a recruit.

In fact, the only hurdle was that he was a raw recruit. "Guardsman 3/c" he might be but a boot he would remain until he proved himself, most especially since he had not had boot training.

But he was no more handicapped than any recruit in a military outfit having proud esprit de corps. He was assigned a bunk, a mess, a working station, and a petty officer to tell him what to do. His work was compartment cleaning, his battle station was runner for the Weapons Officer in case phones should fail—it meant that he was available to fetch coffee.

Otherwise he was left in peace. He was free to join a bull session as long as he let his seniors sound off, he was invited into card games when a player was needed, he was not shut out of gossip, and he was privileged to lend jumpers and socks to seniors who happened to be short. Thorby had had experience at being junior; it was not difficult.

The Hydra was heading out for patrol duty; the mess talk centered around "hunting" prospects. The Hydra had fast "legs," three hundred gravities; she sought action with outlaws where a merchantman such as the Sisu would avoid it if possible. Despite her large complement and heavy weapons, the Hydra was mostly power plant and fuel tanks.

Thorby's table was headed by his petty officer. Ordnanceman 2/c Peebie, down as "Decibel." Thorby was eating one day with his ears tuned down, while he debated visiting the library after dinner or attending the stereo show in the messroom, when he heard his nickname: "Isn't that right. Trader?"

Thorby was proud of the nickname. He did not like it in Peebie's mouth but Peebie was a self-appointed wit—he would greet Thorby with the nickname, inquire solicitously, "How's business?" and make gestures of counting money. So far, Thorby had ignored it.

"Isn't what right?"

"Why'n't y'keep y'r ears open? Can't you hear anything but rustle and clink? I was telling 'em what I told the Weapons Officer: the way to rack up more kills is to go after 'em, not pretend to be a trader, too scared to fight and too fat to run."

Thorby felt a simmer. "Who," he said, "told you that traders were scared to fight?"

"Quit pushin' that stuff! Whoever heard of a trader burning a bandit?"

Peebie may have been sincere; kills made by traders received no publicity. But Thorby's burn increased. "I have."

Thorby meant that he had heard of traders' burning raiders; Peebie took it as a boast "Oh, you did, did you? Listen to that, men—our peddler is a hero. He's burned a bandit all by his own little self! Tell us about it. Did you set tire to his hair? Or drop potassium in his beer?"

"I used," Thorby stated, "a Mark XIX one-stage target-seeker, made by Bethlehem-Antares and armed with a 20 megaton plutonium warhead. I launched a timed shot on closing to beaming range on a collision-curve prediction."

There was silence. Finally Peebie said coldly, "Where did you read that?"

"It's what the tape showed after the engagement. I was senior starboard firecontrolman. The portside computer was out—so I know it was my shot that burned him."

"Now he's a weapons officer! Peddler, don't peddle it here."

Thorby shrugged. "I used to be. A weapons control officer, rather. I never learned much about ordnance."

"Modest, isn't he? Talk is cheap, Trader."

"You should know, Decibel."

Peebie was halted by his nickname; Thorby did not rate such familiarity. Another voice cut in, saying sweetly, "Sure, Decibel, talk is cheap. Now you tell about the big kills you've made. Go ahead." The speaker was nonrated but was a clerk in the executive office and immune to Peebie's displeasure.

Peebie glowered. "Enough of this prattle," he growled. "Baslim, I'll see you at oh eight hundred in combat control—we'll find out how much you know about firecontrol."

Thorby was not anxious to be tested; he knew nothing about the Hydra's equipment. But an order is an order; he was facing Peebie's smirk at the appointed time.

The smirk did not last. Hydra's instruments bore no resemblance to those in the Sisu, but the principles were the same and the senior gunnery sergeant (cybernetics) seemed to find nothing unlikely in an extrader knowing how to shoot. He was always looking for talent; people to handle ballistic trackers for the preposterous problems of combat at sublight-speed were as scarce among Guardsmen as among the People.

He questioned Thorby about the computer he had handled. Presently he nodded. "I've never seen anything but schematics on a Dusseldorf tandem rig; that approach is obsolete. But if you can get a hit with that junk, we can use you." The sergeant turned to Peebie. "Thanks, Decibel. I'll mention it to the Weapons Officer. Stick around, Baslim."

Peebie looked astonished. "He's got work to do, Sarge."

Sergeant Luter shrugged. "Tell your leading P.O. that I need Baslim here."

Thorby had been shocked to hear Sisu's beautiful computers called "junk." But shortly he knew what Luter meant; the massive brain that fought for the Hydra was a genius among computers. Thorby would never control it alone—but soon he was an acting ordnanceman 3/c (cybernetics) and relatively safe from Peebie's wit. He began to feel like a Guardsman—very junior but an accepted shipmate.

Hydra was cruising above speed-of-light toward the Rim world Ultima Thule, where she would refuel and start prowling for outlaws. No query had reached the ship concerning Thorby's identity. He was contented with his status in Pop's old outfit; it made him proud to feel that Pop would be proud of him. He did miss Sisu, but a ship with no women was simpler to live in; compared with Sisu the Hydra had no restrictive regulations.

But Colonel Brisby did not let Thorby forget why he had been enlisted. Commanding officers are many linkages away from a recruit; a nonrated man might not lay eyes on his skipper except at inspections. But Brisby sent for Thorby repeatedly.

Brisby received authorization from the Exotic Corps to discuss Colonel Baslim's report with Baslim's courier, bearing in mind the critical classification of the subject. So Brisby called Thorby in.

Thorby was first warned of the necessity of keeping his mouth shut. Brisby told him that the punishment for blabbing would be as heavy as a courtmartial could hand out. "But that's not the point. We have to be sure that the question never arises. Otherwise we can't discuss it."

Thorby hesitated. "How can I know that I'll keep my mouth shut when I don't know what it is?"

Brisby looked annoyed. "I can order you to."

"Yes, sir. And I'll say, 'Aye aye, sir.' But does that make you certain that I wouldn't risk a courtmartial?"

"But—This is ridiculous! I want to talk about Colonel Baslim's work. But you're to keep your yap shut, you understand me? If you don't, I'll tear you to pieces with my bare hands. No young punk is going to quibble with me where the Old Man's work is concerned!"

Thorby looked relieved. "Why didn't you say it was that, Skipper? I wouldn't blab about anything of Pop's—why, that was the first thing he taught me."

"Oh." Brisby grinned. "I should have known. Okay."

"I suppose," Thorby added thoughtfully, "that it's all right to talk to you."

Brisby looked startled. "I hadn't realized that this cuts two ways. But it does. I can show you a dispatch from his corps, telling me to discuss his report with you. Would that convince you?"

Brisby found himself showing a "Most Secret" dispatch to his most Junior, acting petty officer, to convince said junior that his C.O. was entitled to talk with him. At the time it seemed reasonable; it was not until later that the Colonel wondered.

Thorby read the translated dispatch and nodded. "Anything you want. Skipper. I'm sure Pop would agree."

"Okay. You know what he was doing?"

"Well . . . yes and no. I saw some of it. I know what sort of things he was interested in having me notice and remember. I used to carry messages for him and it was always very secret. But I never knew why." Thorby frowned. "They said he was a spy."

"Intelligence agent sounds better."

Thorby shrugged. "If he was spying, he'd call it that. Pop never minced words."

"No, he never minced words," Brisby agreed, wincing as he recalled being scorched right through his uniform by a dressing-down. "Let me explain. Mmm . . . know any Terran history?"

"Uh, not much."

"It's a miniature history of the race. Long before space travel, when we hadn't even filled up Terra, there used to be dirtside frontiers. Every time new territory was found, you always got three phenomena: traders ranging out ahead and taking their chances, outlaws preying on the honest men—and a traffic in slaves. It happens the same way today, when we're pushing through space instead of across oceans and prairies. Frontier traders are adventurers taking great risks for great profits. Outlaws, whether hill bands or sea pirates or the raiders in space, crop up in any area not under police protection. Both are temporary. But slavery is another matter—the most vicious habit humans fall into and the hardest to break. It starts up in every new land and it's terribly hard to root out. After a culture falls ill of it, it gets rooted in the economic system and laws, in men's habits and attitudes. You abolish it; you drive it underground—there it lurks, ready to spring up again, in the minds of people who think it is their 'natural' right to own other people. You can't reason with them; you can kill them but you can't change their minds."

Brisby sighed. "Baslim, the Guard is just the policeman and the mailman; we haven't had a major war in two centuries. What we do work at is the impossible job of maintaining order on the frontier, a globe three thousand lightyears in circumference—no one can understand how big that is; the mind can't swallow it.

"Nor can human beings police it. It gets bigger every year. Dirtside police eventually close the gaps. But with us, the longer we try the more there is. So to most of us it's a job, an honest job, but one that can never be finished.

"But to Colonel Richard Baslim it was a passion. Especially he hated the slave trade, the thought of it could make him sick at his stomach—I've seen. He lost his leg and an eye—I suppose you know—while rescuing a shipload of people from a slaving compound.

"That would satisfy most officers—go home and retire. Not old Spit-and-Polish! He taught a few years, then he went to the one corps that might take him, chewed up as he was, and presented a plan.

"The Nine Worlds are the backbone of the slave trade. The Sargony was colonized a long time ago, and they never accepted Hegemony after they broke off as colonies. The Nine Worlds don't qualify on human rights and don't want to qualify. So we can't travel there and they can't visit our worlds.

"Colonel Baslim decided that the traffic could be rendered uneconomic if we knew how it worked in the Sargony. He reasoned that slavers had to have ships, had to have bases, had to have markets, that it was not just a vice but a business. So he decided to go there and study it.

"This was preposterous—one man against a nine-planet empire . . . but the Exotic Corps deals in preposterous notions. Even they would probably not have made him an agent if he had not had a scheme to get his reports out. An agent couldn't travel back and forth, nor could he use the mails—there aren't any between us and them—and he certainly couldn't set up an n-space communicator; that would be as conspicuous as a brass band.

"But Baslim had an idea. The only people who visit both the Nine Worlds and our own are Free Traders. But they avoid politics like poison, as you know better than I, and they go to great lengths not to offend local customs. However Colonel Baslim had a personal 'in' to them.

"I suppose you know that those people he rescued were Free Traders. He told 'X' Corps that he could report back through his friends. So they let him try. It's my guess that no one knew that he intended to pose as a beggar—I doubt if he planned it; he was always great at improvising. But he got in and for years he observed and got his reports out.

"That's the background and now I want to squeeze every possible fact out of you. You can tell us about methods—the report I forwarded never said a word about methods. Another agent might be able to use his methods."

Thorby said soberly, "I'll tell you anything I can. I don't know much."

"You know more than you think you do. Would you let the psych officer put you under again and see if we can work total recall?"

"Anything is okay if it'll help Pop's work."

"It should. Another thing—" Brisby crossed his cabin, held up a sheet on which was the silhouette of a spaceship. "What ship is this?"

Thorby's eyes widened. "A Sargonese cruiser."

Brisby snatched up another one. "This?"

"Uh, it looks like a slaver that called at Jubbulpore twice a year."

"Neither one," Brisby said savagely, "is anything of the sort. These are recognition patterns out of my files—of ships built by our biggest shipbuilder. If you saw them in Jubbulpore, they were either copies, or bought from us!"

Thorby considered it. "They build ships there."

"So I've been told. But Colonel Baslim reported ships' serial numbers—how he got them I couldn't guess; maybe you can. He claims that the slave trade is getting help from our own worlds!" Brisby looked unbearably disgusted.

Thorby reported regularly to the Cabin, sometimes to see Brisby, sometimes to be interviewed under hypnosis by Dr. Krishnamurti. Brisby always mentioned the search for Thorby's identity and told him not to be discouraged; such a search took a long time. Repeated mention changed Thorby's attitude about it from something impossible to something which was going to be true soon; he began thinking about his family, wondering who he was?—it was going to be nice to know, to be like other people.

Brisby was reassuring himself; he had been notified to keep Thorby off sensitive work the very day the ship jumped from Hekate when he had hoped that Thorby would be identified at once. He kept the news to himself, holding fast to his conviction that Colonel Baslim was never wrong and that the matter would be cleared up.

When Thorby was shifted to Combat Control, Brisby worried when the order passed across his desk—that was a "security" area, never open to visitors—then he told himself that a man with no special training couldn't learn anything there that could really affect security and that he was already using the lad in much more sensitive work. Brisby felt that he was learning things of importance—that the Old Man, for example, had used the cover personality of a one-legged beggar to hide two-legged activities . . . but had actually been a beggar; he and the boy had lived only on alms. Brisby admired such artistic perfection—it should be an example to other agents.

But the Old Man always had been a shining example.

So Brisby left Thorby in combat control. He omitted to make permanent Thorby's acting promotion in order that the record of change in rating need not be forwarded to BuPersonnel. But he became anxious to receive the dispatch that would tell him who Thorby was.

His executive was with him when it came in. It was in code, but Brisby recognized Thorby's serial number; he had written it many times in reports to "X" Corps. "Look at this, Stinky! This tells us who our foundling is. Grab the machine; the safe is open."

Ten minutes later they had processed it; it read:

—"NULL BESULT FULL IDENTSEARCH BASLIM THORBY GDSMN THIRD. AUTH & DRT TRANSFER ANY RECEIVING STATION RETRANSFER HEKATE INVESTIGATION DISPOSITION—CHFBUPEBS."

"Stinky, ain't that a mess?"

Stancke shrugged. "It's how the dice roll, boss."

"I feel as if I had let the Old Man down. He was sure the kid was a citizen."

"I misdoubt there are millions of citizens who would have a bad time proving who they are. Colonel Baslim may have been right—and still it can't be proved."

"I hate to transfer him. I feel responsible."

"Not your fault."

"You never served under Colonel Baslim. He was easy to please . . . all he wanted was one-hundred-percent perfection. And this doesn't feel like it."

"Quit blaming yourself. You have to accept the record."

"Might as well get it over with. Eddie! I want to see Ordnanceman Baslim."

Thorby noticed that the Skipper looked grim—but then he often did. "Acting Ordnanceman Third Class Baslim reporting, sir."

"Thorby . . ."

"Yes, sir?" Thorby was startled. The Skipper sometimes used his first name because that was what he answered to under hypnosis—but this was not such a time.

"The identification report on you came."

"Huh?" Thorby was startled out of military manners. He felt a surge of joy—he was going to know who he was!

"They can't identify you." Brisby waited, then said sharply, "Did you understand?"

Thorby swallowed. "Yes, sir. They don't know who I am. I'm not . . . anybody."

"Nonsense! You're still yourself."

"Yes, sir. Is that all, sir? May I go?"

"Just a moment. I have to transfer you back to Hekate." He added hastily, seeing Thorby's expression, "Don't worry. They'll probably let you serve out your enlistment if you want to. In any case, they can't do anything to you; you haven't done anything wrong."

"Yes, sir," Thorby repeated dully.

Nothing and nobody—He had a blinding image of an old, old nightmare . . . standing on the block, hearing an auctioneer chant his description, while cold eyes stared at him. But he pulled himself together and was merely quiet the rest of the day. It was not until the compartment was dark that he bit his pillow and whispered brokenly, "Pop . . . oh, Pop!"

The Guards uniform covered Thorby's legs, but in the showers the tattoo on his left thigh could be noticed. When this happened, Thorby explained without embarrassment what it signified. Responses varied from curiosity, through half-disbelief, to awed surprise that here was a man who had been through it—capture, sale, servitude, and miraculously, free again. Most civilians did not realize that slavery still existed; Guardsmen knew better.

No one was nasty about it.

But the day after the null report on identification Thorby encountered "Decibel" Peebie in the showers. Thorby did not speak; they had not spoken much since Thorby had moved out from under Peebie, even though they sat at the same table. But now Peebie spoke. "Hi, Trader!"

"Hi." Thorby started to bathe.

"What's on your leg? Dirt?"

"Where?"

"On your thigh. Hold still. Let's see."

"Keep your hands to yourself!"

"Don't be touchy. Turn around to the light. What is it?"

"It's a slaver's mark," Thorby explained curtly.

"No foolin'? So you're a slave?"

"I used to be."

"They put chains on you? Make you kiss your master's foot?"

"Don't be silly!"

"Look who's talking! You know what, Trader boy? I heard about that mark—and I think you had it tattooed yourself. To make big talk. Like that one about how you blasted a bandit ship."

Thorby cut his shower short and got out.

At dinner Thorby was helping himself from a bowl of mashed potatoes. He heard Peebie call out something but his ears filtered out "Decibel's" endless noise.

Peebie repeated it "Hey, Slave! Pass the potatoes! You know who I mean! Dig the dirt out of your ears!"

Thorby passed him the potatoes, bowl and all, in a flat trajectory, open face of the bowl plus potatoes making perfect contact with the open face of Decibel.

The charge against Thorby was "Assaulting a Superior Officer, the Ship then being in Space in a Condition of Combat Readiness." Peebie appeared as complaining witness.

Colonel Brisby stared over the mast desk and his jaw muscles worked. He listened to Peebie's account: "I asked him to pass the potatoes . . . and he hit me in the face with them."

"That was all?"

"Well, sir, maybe I didn't say please. But that's no reason—"

"Never mind the conclusions. The fight go any farther?"

"No, sir. They separated us."

"Very well. Baslim, what have you to say for yourself?"

"Nothing, sir."

"Is that what happened?"

"Yes, sir."

Brisby stopped to think, while his jaw muscles twitched. He felt angry, an emotion he did not permit himself at mast—he felt let down. Still, there must be more to it.

Instead of passing sentence be said, "Step aside. Colonel Stancke—"

"Yes, sir?"

"There were other men present. I want to hear from them."

"I have them standing by, sir."

"Very well."

Thorby was convicted—three days bread & water, solitary, sentence suspended, thirty days probation; acting rank stricken.

Decibel Peebie was convicted (court trial waived when Brisby pointed out how the book could be thrown at him) of "Inciting to Riot, specification: using derogatory language with reference to another Guardsman's Race, Religion, Birthplace, or Condition previous to entering Service, the Ship then being etc."—sentence three days B & W, sol., suspended, reduction one grade, ninety days probation in ref. B & W, sol., only.

The Colonel and Vice Colonel went back to Brisby's office. Brisby was looking glum; mast upset him at best. Stancke said, "Too bad you had to clip the Baslim kid. I think he was justified."

"Of course he was. But 'Inciting to riot' is no excuse for riot. Nothing is."

"Sure, you had to. But I don't like that Peebie character. I'm going to make a careful study of his efficiency marks."

"Do that. But, confound it, Stinky—I have a feeling I started the fight myself."

"Huh?"

"Two days ago I had to tell Baslim that we hadn't been able to identify him. He walked out in a state of shock. I should have listened to my psych officer. The lad has scars that make him irresponsible under the right—I mean the 'wrong'—stimulus. I'm glad it was mashed potatoes and not a knife."

"Oh, come now, boss! Mashed potatoes are hardly a deadly weapon."

"You weren't here when he got the bad news. Not knowing who he is hurts him."

Stancke's pudgy face pouted in thought "Boss? How old was this kid when he was captured?"

"Eh? Kris thinks he was about four."

"Skipper, that backwoods place where you were born; at what age were you fingerprinted, blood-typed, retina-photographed and so forth?"

"Why, when I started school."

"Me, too. I'll bet they wait that long most places."

Brisby blinked. "That's why they wouldn't have anything on him!"

"Maybe. But on Riff they take identity on a baby before he leaves the delivery room."

"My people, too. But—"

"Sure, sure! It's common practice. But how?"

Brisby looked blank, then banged the desk. "Footprints! And we didn't send them in." He slapped the talkie. "Eddie! Get Baslim here on the double!"

Thorby was glumly removing the chevron he had worn by courtesy for so short a time. He was scared by the peremptory order; it boded ill. But he hurried. Colonel Brisby glared at him. "Baslim, take off your shoes!"

"Sir?"

"Take off your shoes!"

Brisby's dispatch questioning failure to identify and supplying BuPers with footprints was answered in fortyeight hours. It reached the Hydra as she made her final approach to Ultima Thule. Colonel Brisby decoded it when the ship had been secured dirtside.

It read; "—GUARDSMAN THORBY BASLIM IDENTIFIED MISSING PERSON THOR BRADLEY RUDBEK TERRA NOT HEKATE TRANSFER RUDBEK FASTEST MILORCOM TERRA DISCHARGE ARRIVAL. NEXTKIN NOTIFIED REPEAT FASTEST CHFBUPERS."

Brisby was chuckling. "Colonel Baslim is never wrong. Dead or alive, he's never wrong!"

"Boss . . ."

"Huh?"

"Read it again. Notice who he is."

Brisby reread the dispatch. Then he said in a hushed voice, "Why do things like this always happen to Hydra?" He strode over and snatched the door. "Eddie!"

Thorby was on beautiful Ultima Thule for two hours and twenty-seven minutes; what he saw of the famous scenery after coming three hundred lightyears was the field between the Hydra and Guard Mail Courier Ariel. Three weeks later he was on Terra. He felt dizzy.

Chapter 17

Lovely Terra, Mother of Worlds! What poet, whether or not he has been privileged to visit her, has not tried to express the homesick longing of men for mankind's birthplace . . . her cool green hills, cloud-graced skies, restless oceans, her warm maternal charm.

Thorby's first sight of legendary Earth was by view screen of G.M.C. Ariel. Guard Captain N'Gangi, skipper of the mail ship, stepped up the gain and pointed out arrow-sharp shadows of the Egyptian Pyramids. Thorby didn't realize the historical significance and was looking in the wrong place. But he enjoyed seeing a planet from space; he had never been thus privileged before.

Thorby had a dull time in the Ariel. The mail ship, all legs and tiny payload, carried a crew of three engineers and three astrogators, all of whom were usually on watch or asleep. He started off badly because Captain N'Gangi had been annoyed by a "hold for passenger" dispatch from the Hydra—mail ships don't like to hold; the mail must go through.

But Thorby behaved himself, served the precooked meals, and spent his time plowing through the library (a drawer under the skipper's bunk); by the time they approached Sol the commanding officer was over his pique . . . to have the feeling brought back by orders to land at Galactic Enterprises' field instead of Guard Base. But N'Gangi shook hands as he gave Thorby his discharge and the paymaster's draft.

Instead of scrambling down a rope ladder (mail couriers have no hoists), Thorby found that a lift came up to get him. It leveled off opposite the hatch and offered easy exit. A man in spaceport uniform of Galactic Enterprises met him. "Mr. Rudbek?"

"That's me—I guess."

"This way, Mr. Rudbek, if you please."

The elevator took them below ground and into a beautiful lounge. Thorby, mussed and none too clean from weeks in a crowded steel box, was uneasy. He looked around.

Eight or ten people were there, two of whom were a gray-haired, self-assured man and a young woman. Each was dressed in more than a year's pay for a Guardsman. Thorby did not realize this in the case of the man but his Trader's eye spotted it in the female; it took money to look that demurely provocative.

In his opinion the effect was damaged by her high-fashion hairdo, a rising structure of green blending to gold. He blinked at the cut of her clothes; he had seen fine ladies in Jubbulpore where the climate favored clothing only for decoration, but the choice in skin display seemed different here. Thorby realized uneasily that he was again going to have to get used to new customs.

The important-looking man met him as he got out of the lift "Thor! Welcome home, lad!" He grabbed Thorby's hand. "I'm John Weemsby. Many is the time I've bounced you on my knee. Call me Uncle Jack. And this is your cousin Leda."

The girl with green hair placed hands on Thorby's shoulders and kissed him. He did not return it; he was much too startled. She said, "It's wonderful to have you home, Thor."

"Uh, thanks."

"And now you must greet your grandparents," Weemsby announced. "Professor Bradley . . . and your Grandmother Bradley."

Bradley was older than Weemsby, slight and erect, a paunch, neatly trimmed beard; he was dressed like Weemsby in daytime formal jacket, padded tights and short cape, but not as richly. The woman had a sweet face and alert blue eyes; her clothing did not resemble that of Leda but seemed to suit her. She pecked Thorby on the cheek and said gently, "It's like having my son come home."

The elderly man shook hands vigorously. "It's a miracle, son! You look just like our boy—your father. Doesn't he, dear?"

"He does!"

There was chitchat, which Thorby answered as well as he could. He was confused and terribly selfconscious; it was more embarrassing to meet these strangers who claimed him as their blood than it had been to be adopted into Sisu. These old people—they were his grandparents? Thorby couldn't believe it even though he supposed they were.

To his relief the man—Weemsby?—who claimed to be his Uncle Jack said with polite authority, "We had better go. I'll bet this boy is tired. So I'll take him home. Eh?"

The Bradley's murmured agreement; the party moved toward the exit. Others in the room, all men none of whom had been introduced, went with them. In the corridor they stepped on a glideway which picked up speed until walls were whizzing past. It slowed as they neared the end—miles away, Thorby judged—and was stationary for them to step off.

This place was public; the ceiling was high and the walls were lost in crowds; Thorby recognized the flavor of a transport station. The silent men with them moved into blocking positions and their party proceeded in a direct line regardless of others. Several persons tried to break through and one man managed it. He shoved a microphone at Thorby and said rapidly, "Mr. Rudbek, what is your opinion of the—"

A guard grabbed him. Mr. Weemsby said quickly, "Later, later! Call my office; you'll get the story."

Lenses were trained on them, but from high up and far away. They moved into another passageway, a gate closed behind them. Its glideway deposited them at an elevator which took them to a small enclosed airport. A craft was waiting and beyond it a smaller one, both sleek, smooth, flattened ellipsoids. Weemsby stopped. "You'll be all right?" he asked Mrs. Bradley.

"Oh, surely," answered Professor Bradley.

"The car was satisfactory?"

"Excellent. A nice hop—and, I'm sure, a good one back."

"Then we'll say good-by. I'll call you—when he's had a chance to get oriented. You understand?"

"Oh, surely. We'll be waiting." Thorby got a peck from his grandmother, a clap on the shoulder from his grandfather. Then he embarked with Weemsby and Leda in the larger car. Its skipper saluted Mr. Weemsby, then saluted Thorby—Thorby managed to return it.

Mr. Weemsby paused in the central passage. "Why don't you kids go forward and enjoy the hop? I've got calls waiting."

"Certainly, Daddy."

"You'll excuse me, Thor? Business goes on—it's back to the mines for Uncle Jack."

"Of course . . . Uncle Jack."

Leda led him forward and they sat down in a transparent bubble on the forward surface. The car rose straight up until they were several thousand feet high. It made a traffic-circle sweep over a desert plain, then headed north toward mountains.

"Comfy?" asked Leda.

"Quite. Uh, except that I'm dirty and mussed."

"There's a shower abaft the lounge. But we'll be home shortly—so why not enjoy the trip?"

"All right." Thorby did not want to miss any of fabulous Terra. It looked, he decided, like Hekate—no, more like Woolamurra, except that he had never seen so many buildings. The mountains—

He looked again. "What's that white stuff? Alum?"

Leda looked. "Why, that's snow. Those are the Sangria de Cristos."

"'Snow,'" Thorby repeated. "That's frozen water."

"You haven't seen snow before?"

"I've heard of it. It's not what I expected."

"It is frozen water—and yet it isn't exactly; it's more feathery." She reminded herself of Daddy's warning; she must not show surprise at anything.

"You know," she offered, "I think I'll teach you to ski."

Many miles and some minutes were used explaining what skiing was and why people did it. Thorby filed it away as something he might try, more likely not. Leda said that a broken leg was "all that could happen." This is fun? Besides, she had mentioned how cold it could be. In Thorby's mind cold was linked with hunger, beatings, and fear. "Maybe I could learn," he said dubiously, "but I doubt it."

"Oh, sure you can!" She changed the subject. "Forgive my curiosity, Thor, but there is a faint accent in your speech."

"I didn't know I had an accent—"

"I didn't mean to be rude."

"You weren't. I suppose I picked it up in Jubbulpore. That's where I lived longest."

"'Jubbulpore' . . . let me think. That's—"

"Capital of the Nine Worlds."

"Oh, yes! One of our colonies, isn't it?"

Thorby wondered what the Sargon would think of that. "Uh, not exactly. It is a sovereign empire now—their tradition is that they were never anything else. They don't like to admit that they derive from Terra."

"What an odd point of view."

A steward came forward with drinks and dainty nibbling foods. Thor accepted a frosted tumbler and sipped cautiously. Leda continued, "What were you doing there, Thor? Going to school?"

Thorby thought of Pop's patient teaching, decided that was not what she meant. "I was begging."

"What?"

"I was a beggar."

"Excuse me?"

"A beggar. A licensed mendicant. A person who asks for alms."

"That's what I thought you said," she answered. "I know what a beggar is; I've read books. But—excuse me, Thor; I'm just a home girl—I was startled."

She was not a "home girl"; she was a sophisticated woman adjusted to her environment. Since her mother's death she had been her father's hostess and could converse with people from other planets with aplomb, handling small talk of a large dinner party with gracious efficiency in three languages. Leda could ride, dance, sing, swim, ski, supervise a household, do arithmetic slowly, read and write if necessary, and make the proper responses. She was an intelligent, pretty, well-intentioned woman, culturally equivalent to a superior female headhunter—able, adjusted and skilled.

But this strange lost-found cousin was a new bird to her. She said hesitantly, "Excuse my ignorance, but we don't have anything like that on Earth. I have trouble visualizing it. Was it terribly unpleasant?"

Thorby's mind flew back; he was squatting in lotus seat in the great Plaza with Pop sprawled beside him, talking. "It was the happiest time of my life," he said simply.

"Oh." It was all she could manage.

But Daddy had left them so that she could get to work. Asking a man about himself never failed. "How does one get started, Thor? I wouldn't know where to begin."

"I was taught. You see, I was up for sale and—" He thought of trying to explain Pop, decided to let it wait. "—an old beggar bought me."

"'Bought' you?"

"I was a slave."

Leda felt as if she had stepped off into water over her head. Had he said "cannibal," "vampire," or "warlock" she could have been no more shocked. She came up, mentally gasping. "Thor—if I have been rude. I'm sorry—but we all are curious about the time—goodness! it's been over fifteen years—that you have been missing. But if you don't want to answer, just say so. You were a nice little boy and I was fond of you —please don't slap me down if I ask the wrong question."

"You don't believe me?"

"How could I? There haven't been slaves for centuries."

Thorby wished that he had never had to leave the Hydra, and gave up. He had learned in the Guard that the slave trade was something many fraki in the inner worlds simply hadn't heard of. "You knew me when I was little?"

"Oh, yes!"

"Why can't I remember you? I can't remember anything back before I was a—I can't remember Terra."

She smiled. "I'm three years older than you. When I saw you last, I was six—so I remember—and you were three, so you've forgotten."

"Oh." Thorby decided that here was a chance to find out his own age. "How old are you now?"

She smiled wryly. "Now I'm the same age you are—and I'll stay that age until I'm married. Turn about, Thorby—when you ask the wrong question, I shan't be offended. You don't ask a lady her age on Terra; you assume that she is younger than she is."

"So?" Thorby pondered this curious custom. Among People a female claimed the highest age she could, for status.

"So. For example, your mother was a lovely lady but I never knew her age. Perhaps she was twenty-five when I knew her, perhaps forty."

"You knew my parents?"

"Oh, yes! Uncle Creighton was a darling with a boomy voice. He used to give me handfuls of dollars to buy candy sticks and balloons with my own sweaty little hand." She frowned. "But I can't remember his face. Isn't that silly? Never mind, Thor; tell me anything you want to. I'd be happy to hear anything you don't mind telling."

"I don't mind," Thorby answered, "but, while I must have been captured, I don't remember it. As far as I remember, I never had parents; I was a slave, several places and masters—until I reached Jubbulpore. Then I was sold again and it was the luckiest thing that ever happened to me."

Leda lost her company smile. She said in a still voice, "You really mean it. Or do you?"

Thorby suffered the ancient annoyance of the returned traveler. "If you think that slavery has been abolished . . . well, it's a big galaxy. Shall I roll up my trouser leg and show you?"

"Show me what, Thor?"

"My slave's mark. The tattoo a factor uses to identify merchandise." He rolled up his left trouser. "See? The date is my manumission—it's Sargonese, a sort of Sanskrit; I don't suppose you can read it."

She stared, round-eyed. "How horrible! How perfectly horrible!"

He covered it. "Depends on your master. But it's not good."

"But why doesn't somebody do something?"

He shrugged. "It's a long way off."

"But—" She stopped as her father came out.

"Hi, kids. Enjoying the hop, Thor?"

"Yes, sir. The scenery is wonderful."

"The Rockies aren't a patch on the Himalayas. But our Tetons are pretty wonderful . . . and there they are. We'll be home soon." He pointed. "See? There's Rudbek."

"That city is named Rudbek?"

"It used to be Johnson's Hole, or some such, when it was a village. But I wasn't speaking of Rudbek City; I meant our home—your home—'Rudbek.' You can see the tower above the lake . . . with the Grand Tetons behind it. Most magnificent setting in the world. You're Rudbek of Rudbek at Rudbek . . . 'Rudbek Cubed.' your father called it . . . but he married into the name and wasn't impressed by it. I like it; it has a rolling thunder, and it's good to have a Rudbek back in residence."

Thorby wallowed in his bath, from needle shower, through hot pool whose sides and bottom massaged him with a thousand fingers, to lukewarm swimming plunge that turned cooler while he was in it. He was cautious in the last, having never learned to swim.

And he had never had a valet. He had noticed that Rudbek had dozens of people in it—not many for its enormous size, but he began to realize that most of them were servants. This impressed him not as much as it might have; he knew how many, many slaves staffed any rich household on Jubbul; he did not know that a living servant on Terra was the peak of ostentatious waste, greater than sedan chairs on Jubbul, much greater than the lavish hospitality at the Gatherings. He simply knew that valets made him nervous and now he had a squad of three. Thorby refused to let anyone bathe him; he gave in to being shaved because the available razor was a classic straight-edge and his own would not work on Rudbek's power supply. Otherwise he merely accepted advice about unfamiliar clothing.

The clothing waiting for him in wardrobe loads did not fit perfectly; the chief valet snipped and rewelded, muttering apologies. He had Thorby attired, ruffled jabot to tights, when a footman appeared. "Mr. Weemsby sends greetings to Rudbek and asks that he come to the great hall."

Thorby memorized the route as he followed.

Uncle Jack, in midnight and scarlet, was waiting with Leda, who was wearing . . . Thorby was at loss; colors kept changing and some it was hardly there. But she looked well. Her hair was now iridescent. He spotted among her jewels a bauble from Finster and wondered if it had shipped in Sisu—why, it was possible that he had listed it himself!

Uncle Jack said jovially, "There you are, lad! Refreshed? We won't wear you out, just a family dinner."

The dinner included twelve people and started with a reception in the great hall, drinks, appetizers, passed by soft-footed servants, music, while others were presented. "Rudbek of Rudbek, Lady Wilkes—your Aunt Jennifer, lad, come from New Zealand to welcome you"—"Rudbek of Rudbek, Judge Bruder and Mrs. Bruder—Judge is Chief Counsel," and so on. Thorby memorized names, linked them with faces, thinking that it was like the Family—except that relationship titles were not precise definitions; he had trouble estimating status. He did not know which of eighty-odd relations "cousin" meant with respect to Leda, though he supposed that she must be a first cross-cousin, since Uncle Jack had a surname not Rudbek; so he thought of her as taboo—which would have dismayed her.

He did realize that he must be in the sept of a wealthy family. But what his status was nobody mentioned, nor could he figure out status of others. Two of the youngest women dropped him curtseys. He thought the first had stumbled and tried to help her. But when the second did it, he answered by pressing his palms together.

The older women seemed to expect him to treat them with respect. Judge Bruder he could not classify. He hadn't been introduced as a relative—yet this was a family dinner. He fixed Thorby with an appraising eye and barked, "Glad to have you back, young man! There should be a Rudbek at Rudbek. Your holiday has caused trouble—hasn't it, John?"

"More than a bit," agreed Uncle Jack, "but we'll get straightened out. No hurry. Give the lad a chance to find himself."

"Surely, surely. Thumb in the dike."

Thorby wondered what a dike was, but Leda came up and placed her hand on his elbow. She steered him to the banquet hall; others followed. Thorby sat at one end of a long table with Uncle Jack at the other; Aunt Jennifer was on Thorby's right and Leda on his left. Aunt Jennifer started asking questions and supplying answers. He admitted that he had just left the Guard, she had trouble understanding that he had not been an officer; he let it ride and mentioned nothing about Jubbulpore—Leda had made him wary of the subject. It did not matter; he asked a question about New Zealand and received a guidebook lecture.

Then Leda turned from Judge Bruder and spoke to Thorby; Aunt Jennifer turned to the man on her right.

The tableware was in part strange, especially chop tongs and skewers. But spoons were spoons and forks were forks; by keeping his eye on Leda he got by. Food was served formally, but he had seen Grandmother so served; table manners were not great trouble to a man coached by Fritz's sharp-tongued kindness.

Not until the end was he stumped. The Butler-in-Chief presented him with an enormous goblet, splashed wetness in it and waited. Leda said softly, "Taste it, nod, and put it down." He did so; as the butler moved away, she whispered, "Don't drink it, it's bottled lightning. By the way, I told Daddy, 'No toasts.'"

At last the meal was over. Leda again cued him. "Stand up." He did and everyone followed.

The "family dinner" was just a beginning. Uncle Jack was in evidence only at dinners, and not always then. He excused his absences with, "Someone has to keep the fires burning. Business won't wait." As a trader Thorby understood that Business was Business, but he looked forward to a long talk with Uncle Jack, instead of so much social life. Leda was helpful but not informative. "Daddy is awfully busy. Different companies and things. It's too complicated for me. Let's hurry; the others are waiting."

Others were always waiting. Dancing, skiing—Thorby loved the flying sensation but considered it a chancy way to travel, particularly when he fetched up in a snow bank, having barely missed a tree—card parties, dinners with young people at which he took one end of the table and Leda the other, more dancing, hops to Yellowstone to feed the bears, midnight suppers, garden parties. Although Rudbek estate lay in the lap of the Tetons with snow around it, the house had an enormous tropical garden under a dome so pellucid that Thorby did not realize it was there until Leda had him touch it. Leda's friends were fun and Thorby gradually became sophisticated in small talk. The young men called him "Thor" instead of "Rudbek" and called Leda

"Slugger." They treated him with familiar respect, and showed interest in the fact that he had been in the Guard and had visited many worlds; but they did not press personal questions. Thorby volunteered little, having learned his lesson.

But he began to tire of fun. A Gathering was wonderful but a working man expects to work.

The matter came to a head. A dozen of them were skiing and Thorby was alone on the practice slope. A man glided down and snowplowed to a stop. People hopped in and out at the estate's field day and night; this newcomer was Joel de la Croix.

"Hi, Thor."

"Hi, Joe."

"I've been wanting to speak to you. I've an idea I would like to discuss, after you take over. Can I arrange to see you, without being baffled by forty-'leven secretaries?"

"When I take over?"

"Or later, at your convenience. I want to talk to the boss; after all, you're the heir. I don't want to discuss it with Weemsby . . . even if he would see me." Joe looked anxious. "All I want is ten minutes. Say five if I don't interest you at once. 'Rudbek's promise.' Eh?"

Thorby tried to translate. Take over? Heir? He answered carefully, "I don't want to make any promises now, Joel."

De la Croix shrugged. "Okay. But think about it. I can prove it's a moneymaker."

"I'll think about it," Thorby agreed. He started looking for Leda. He got her alone and told her what Joe had said.

She frowned slightly. "It probably wouldn't hurt, since you aren't promising anything. Joel is a brilliant engineer. But better ask Daddy."

"That's not what I meant. What did he mean: 'take over'?"

"Why, you will, eventually."

"Take over what?"

"Everything. After all, you're Rudbek of Rudbek.

"What do you mean by 'everything'?"

"Why, why—" She swept an arm at mountain and lake, at Rudbek City beyond. "All of it, Rudbek. Lots of things. Things personally yours, like your sheep station in Australia and the house in Majorca. And business things. Rudbek Associates is many things—here and other planets. I couldn't begin to describe them. But they're yours, or maybe 'ours' for the whole family is in it. But you are the Rudbek of Rudbek. As Joe said, the heir."

Thorby looked at her, while his lips grew dry. He licked them and said, "Why wasn't I told?"

She looked distressed. "Thor dear! We've let you take your time. Daddy didn't want to worry you."

"Well," he said, "I'm worried now. I had better talk to Uncle Jack."

John Weemsby was at dinner but so were many guests. As they were leaving Weemsby motioned Thorby aside. "Leda tells me you're fretting."

"Not exactly. I want to know some things."

"You shall—I was hoping that you would tire of your vacation. Let's go to my study."

They went there; Weemsby dismissed his second-shift secretary and said, "Now what do you want to know?"

"I want to know," Thorby said slowly, "what it means to be 'Rudbek of Rudbek.'"

Weemsby spread his hands. "Everything . . . and nothing. You are titular head of the business, now that your father is dead . . . if he is."

"Is there any doubt?"

"I suppose not. Yet you turned up."

"Supposing he is dead, what am I? Leda seems to think I own just about everything. What did she mean?"

Weemsby smiled. "You know girls. No head for business. The ownership of our enterprises is spread around—most of it is in our employees. But, if your parents are dead, you come into stock in Rudbek Associates, which in turn has an interest in—sometimes a controlling interest—in other things. I couldn't describe it now. I'll have the legal staff do it—I'm a practical man, too busy making decisions to worry about who owns every share. But that reminds me . . . you haven't had a chance to spend much money, but you might want to." Weemsby opened a drawer, took out a pad. "There's a megabuck. Let me know if you run short."

Thorby thumbed through it. Terran currency did not bother him: a hundred dollars to the credit—which he thought of as five loaves of bread, a trick the Supercargo taught him—a thousand credits to the supercredit, a thousand supercredits to the megabuck. So simple that the People translated other currencies into it, for accounting.

But each sheet was ten thousand credits . . . and there were a hundred sheets. "Did I . . . inherit this?"

"Oh, that's just spending money—checks, really. You convert them at dispensers in stores or banks. You know how?"

"No."

"Don't get a thumbprint on the sensitized area until you insert it in the dispenser. Have Leda show you—if that girl could make money the way she spends it, neither you nor I would have to work. But," Weemsby added, "since we do, let's do a little." He took out a folder and spread papers. "Although this isn't hard. Just sign at the bottom of each, put your thumbprint by it, and I'll call Beth in to notarize. Here, we can open each one to the last page. I had better hold 'em—the consarned things curl up."

Weemsby held one for Thorby's signature. Thorby hesitated, then instead of signing, reached for the document. Weemsby held on. "What's the trouble?"

"If I'm going to sign, I ought to read it." He was thinking of something Grandmother used to be downright boring about.

Weemsby shrugged. "They are routine matters that Judge Bruder prepared for you." Weemsby placed the document on the others, tied the stack, and closed the folder. "These papers tell me to do what I have to do anyway. Somebody has to do the chores."

"Why do I have to sign?"

"This is a safety measure."

"I don't understand."

Weemsby sighed. "The fact is, you don't understand business. No one expects you to; you haven't had any chance to learn. But that's why I have to keep slaving away; business won't wait." He hesitated. "Here's the simplest way to put it. When your father and mother went on a second honeymoon, they had to appoint someone to act while they were gone. I was the natural choice, since I was their business manager and your grandfather's before that—he died before they went away. So I was stuck with it while they went jaunting. Oh, I'm not complaining; it's not a favor one would refuse a member of the family. Unfortunately they did not come back so I was left holding the baby.

"But now you are back and we must make sure everything is orderly. First it is necessary for your parents to be declared legally dead—that must be done before you can inherit. That will take a while. So here I am, your business manager, too—manager for all the family—and I don't have anything from you telling me to act. These papers do that."

Thorby scratched his cheek. "If I haven't inherited yet, why do you need anything from me?"

Weemsby smiled. "I asked that myself. Judge Bruder thinks it is best to tie down all possibilities. Now since you are of legal age—"

"'Legal age'?" Thorby had never heard the term; among the People, a man was old enough for whatever he could do.

Weemsby explained. "So, since the day you passed your eighteenth birthday, you have been of legal age, which simplifies things—it means you don't have to become a ward of a court. We have your parents' authorization; now we add yours—and then it doesn't matter how long it takes the courts to decide that your parents are dead, or to settle their wills. Judge Bruder and I and the others who have to do the work can carry on without interruption. A time gap is avoided . . . one that might cost the business many megabucks. Now do you understand?"

"I think so."

"Good. Let's get it done." Weemsby started to open the folder.

Grandmother always said to read before signing—then think it over. "Uncle Jack, I want to read them."

"You wouldn't understand them."

"Probably not." Thorby picked up the folder. "But I've got to learn."

Weemsby reached for the folder. "It isn't necessary."

Thorby felt a surge of obstinacy. "Didn't you say Judge Bruder prepared these for me?"

"Yes."

"Then I want to take them to my apartment and try to understand them. If I'm 'Rudbek of Rudbek' I ought to know what I'm doing."

Weemsby hesitated, then shrugged. "Go ahead. You'll find that I'm simply trying to do for you what I have always been doing."

"But I still ought to understand what I'm doing."

"Very well! Good night."

Thorby read till he fell asleep. The language was baffling but the papers did seem to be what Uncle Jack said they were—instructions to John Weemsby to continue the routine business of a complex setup. He fell asleep full of terms like "full power of attorney," "all manner of business," "receive and pay monies," "revocable only by mutual consent," "waiver of personal appearance," "full faith and credence," and "voting proxy in all stockholding and/or directorial meetings, special or annual."

As he dozed off it occurred to him that he had not asked to see the authorizations given by his parents.

Sometime during the night he seemed to hear Grandmother's impatient voice: "—then think it over! If you don't understand it, and the laws under which it will be executed, then don't sign it!—no matter how much profit may appear to be in store. Too lazy and too eager can ruin a trader."

He stirred restlessly.

Chapter 18

Hardly anyone came down for breakfast in Rudbek. But breakfast in bed was not in Thorby's training; he ate alone in the garden, luxuriating in hot mountain sunshine and lush tropical flowers while enjoying the snowy wonderland around him. Snow fascinated him—he had never dreamed that anything could be so beautiful.

But the following morning Weemsby came into the garden only moments after Thorby sat down. A chair was placed under Weemsby; a servant quickly laid a place. He said, "Just coffee. Good morning, Thor."

"Good morning, Uncle Jack."

"Well, did you get your studying done?"

"Sir? Oh, yes. That is, I fell asleep reading."

Weemsby smiled. "Lawyerese is soporific. Did you satisfy yourself that I had told you correctly what they contained?"

"Uh, I think so."

"Good." Weemsby put down his coffee and said to a servant, "Hand me a house phone. Thor, you irritated me last night."

"I'm sorry, sir."

"But I realize you were right. You should read what you sign—I wish I had time to! I have to accept the word of my staff in routine matters or I would never have time for policy . . . and I assumed that you would do the same with me. But caution is commendable." He spoke into the phone. "Carter, fetch those papers from Rudbek's apartment. The garden."

Thorby wondered if Carter could find the stuff—there was a safe in his study but he had not learned to use it, so he had hidden the papers behind books. He started to mention it but Uncle Jack was talking.

"Here is something you will want to see . . .an Inventory of real property you own—or will own, when the wills are settled. These holdings are unconnected with the business."

Thorby looked through it with amazement. Did he really own an island named Pitcairn at fifteen something south and a hundred and thirty west—whatever that meant? A domehouse on Mars? A shooting lodge in Yukon—where was "Yukon" and why shoot there? You ought to be in free space to risk shooting. And what were all these other things?

He looked for one item. "Uncle Jack? How about Rudbek?"

"Eh? You're sitting on it."

"Yes . . . but do I own it? Leda said I did."

"Well, yes. But it's entailed—that means your great-great-grandfather decided that it should never be sold . . . so that there would always be a Rudbek at Rudbek."

"Oh."

"I thought you might enjoy looking over your properties. I've ordered a car set aside for you. Is that one we hopped here in satisfactory?"

"What? Goodness, yes!" Thorby blinked.

"Good. It was your mother's and I've been too sentimental to dispose of it. But it has had all latest improvements added. You might persuade Leda to hop with you; she is familiar with most of that list. Take some young friends along and make a picnic of it, as long as you like. We can find a congenial chaperone."

Thorby put the list down. "I probably will. Uncle Jack . . . presently. But I ought to get to work."

"Eh?"

"How long does it take to learn to be a lawyer here?"

Weemsby's face cleared. "I see. Lawyers' quaint notions of language can shock a man. It takes four or five years."

"It does?"

"The thing for you is two or three years at Harvard or some other good school of business."

"I need that?"

"Definitely."

"Unh . . . you know more about it than I do—"

"I should! By now."

"—but couldn't I learn something about the business before I go to school? I haven't any idea what it is."

"Plenty of time."

"But I want to learn now."

Weemsby started to cloud, then smiled and shrugged. "Thor, you have your mother's stubbornness. All right. I'll order a suite for you at the main office in Rudbek City—and staff it with people to help you. But I warn you, it won't be fun. Nobody owns a business; the business owns him. You're a slave to it."

"Well . . . I ought to try."

"Commendable spirit." The phone by Weemsby's cup blinked; he picked it up, frowned, said, "Hold on." He turned to Thorby. "That idiot can't find those papers."

"I meant to tell you. I hid them—I didn't want to leave them out."

"I see. Where are they?"

"Uh, I'll have to dig them out."

Weemsby said in the phone, "Forget it" He tossed the phone to a servant and said to Thorby, "Then fetch them, if you don't mind."

Thorby did mind. So far he had had four bites; it annoyed him to be told to run an errand while eating. Besides . . . was he "Rudbek of

Rudbek"? or still messenger for the weapons officer? "I'll be going up after breakfast."

Uncle Jack looked vexed. But he answered, "I beg your pardon. If you can't tear yourself away, would you please tell me where to find them? I have a hard day ahead and I would like to dispose of this triviality and go to work. If you don't mind."

Thorby wiped his mouth. "I would rather not," he said slowly, "sign them now."

"What? You told me that you had satisfied yourself."

"No, sir, I told you that I had read them. But I don't understand them. Uncle Jack, where are the papers that my parents signed?"

"Eh?" Weemsby looked at him sharply. "Why?"

"I want to see them."

Weemsby considered. "They must be in the vault at Rudbek City."

"All right. I'll go there."

Weemsby suddenly stood up. "If you will excuse me, I've got to work," he snapped. "Young man, some day you will realize what I have done for you! In the meantime, since you choose to be uncooperative, I still must get on with my duties."

He left abruptly. Thorby felt hurt—he didn't want to be uncooperative . . . but if they had waited for years, why couldn't they wait a little longer and give him a chance?

He recovered the papers, then phoned Leda. She answered, with vision switched off. "Thor dear, what are you doing up in the middle of the night?"

He explained that he wanted to go to the family's business offices. "I thought maybe you could direct me."

"You say Daddy said to?"

"He's going to assign me an office."

"I won't just direct you; I'll take you. But give a girl a chance to get a face on and swallow orange juice."

He discovered that Rudbek was connected with their offices in Rudbek City by highspeed sliding tunnel. They arrived in a private foyer guarded by an elderly receptionist. She looked up. "Hello, Miss Leda! How nice to see you!"

"You, too, Aggie. Will you tell Daddy we're here?"

"Of course." She looked at Thorby.

"Oh," said Leda. "I forgot. This is Rudbek of Rudbek."

Aggie jumped to her feet "Oh, dear me! I didn't know—I'm sorry, sir!"

Things happened quickly. In minutes Thorby found himself with an office of quiet magnificence, with a quietly magnificent secretary who addressed him by his double-barreled title but expected him to call her "Dolores." There seemed to he unlimited genies ready to spring out of walls at a touch of her finger.

Leda stuck with him until he was installed, then said, "I'll run along, since you insist on being a dull old businessman." She looked at Dolores. "Or will it be dull? Perhaps I should stay." But she left.

Thorby was intoxicated with being immensely wealthy and powerful. Top executives called him "Rudbek," junior executives called him "Rudbek of Rudbek," and those still more junior crowded their words with "sirs"—he could judge status by how he was addressed.

While he was not yet active in business—he saw Weemsby rarely and Judge Bruder almost never—anything he wanted appeared quickly. A word to Dolores and a respectful young man popped in to explain legal matters; another word and an operator appeared to show moving stereocolor of business interests anywhere, even on other planets. He spent days looking at such pictures, yet still did not see them all.

His office became so swamped with books, spools, charts, brochures, presentations, file jackets, and figures, that Dolores had the office next door refitted as a library. There were figures on figures, describing in fiscal analog enterprises too vast to comprehend otherwise. There were so many figures, so intricately related, that his head ached. He began to have misgivings about the vocation of tycoon. It wasn't all just being treated with respect, going through doors first and always getting what you asked for. What was the point if you were so snowed under that you could not enjoy it? Being a Guardsman was easier.

Still, it was nice to be important. Most of his life he had been nobody, and at best he had been very junior.

If only Pop could see him now!—surrounded by lavish furnishings, a barber to trim his hair while he worked (Pop used to cut it under a bowl), a secretary to anticipate his wishes, and dozens of people eager to help. But Pop's face in this dream was wearing Pop's reproving expression; Thorby wondered what he had done wrong, and dug harder into the mess of figures.

Eventually a pattern began to emerge. The business was Rudbek & Associates, Ltd. So far as Thorby could tell this firm did nothing. It was chartered as a private Investment trust and just owned things. Most of what Thorby would own, when his parents' wills were proved, was stock in this company. Nor would he own it all; he felt almost poverty-stricken when he discovered that mother and father together held only eighteen percent of many thousand shares.

Then he found out about "voting" and "nonvoting; the shares coming to him were eighteen-fortieths of the voting shares; the remainder was split between relatives and non-relatives.

Rudbek & Assocs. owned stock in other companies—and here it got complicated. Galactic Enterprises, Galactic Acceptance Corporation, Galactic Transport, Interstellar Metals, Three Planets Fiscal (which operated on twenty-seven planets), Havermeyer Laboratories (which ran barge lines and bakeries as well as research stations)—the list looked endless. These corporations, trusts, cartels, and banking houses seemed as tangled as spaghetti. Thorby learned that he owned (through his parents) an interest in a company called "Honace Bros., Pty." through a chain of six companies—18% of 31% of 43% of 19% of 44% of 27%, a share so microscopic that he lost track. But his parents owned directly seven per cent of Honace Brothers—with the result that his indirect interest of one-twentieth of one per cent controlled it utterly but paid little return, whereas seven per cent owned directly did not control—but paid one hundred and forty times as much.

It began to dawn on him that control and ownership were only slightly related; he had always thought of "ownership" and "control" as being the same thing; you owned a thing, a begging bowl, or a uniform jacket—of course you controlled it!

The converging, diverging, and crossing of corporations and companies confused and disgusted him. It was as complex as a firecontrol computer without a computer's cool logic. He tried to draw a chart and could not make it work. The ownership of each entity was tangled in common stocks, preferred stocks, bonds, senior and junior issues, securities with odd names and unknown functions; sometimes one company owned a piece of another directly and another piece through a third, or two companies might each own a little of the other, or sometimes a company owned part of itself in a tail-swallowing fashion. It didn't make sense.

This wasn't "business"—what the People did was business . . . buy, sell, make a profit. But this was a silly game with wild rules.

Something else fretted him. He had not known that Rudbek built spaceships. Galactic Enterprises controlled Galactic Transport, which built ships in one of its many divisions. When he realized it he felt a glow of pride, then discovered gnawing uneasiness—something Colonel Brisby had said . . . something Pop had proved: that the "largest" or it might have been "one of the largest" builders of starships was mixed up in the slave trade.

He told himself he was being silly—this beautiful office was about as far from the dirty business of slave traffic as anything could be. But as he was dropping to sleep one night he came wide awake with the black, ironic thought that one of those slave ships in whose stinking holds he had ridden might have been, at that very time, the property of the scabby, frightened slave he was then.

It was a nightmare notion; he pushed it away. But it took the fun out of what he was doing.

One afternoon he sat studying a long memorandum from the legal department—a summary, so it said, of Rudbek & Assocs.' interests—and found that he had dragged to a halt. It seemed as if the writer had gone out of his way to confuse things. It would have been as intelligible in ancient Chinese—more so; Sargonese included many Mandarin words.

He sent Dolores out and sat with his head in his hands. Why, oh, why hadn't he been left in the Guard? He had been happy there; he had understood the world he was in.

Then he straightened up and did something he had been putting off; he returned a vuecall from his grandparents. He had been expected to visit them long since, but he had felt compelled to try to learn his job first.

Indeed he was welcome! "Hurry, son—we'll be waiting." It was a wonderful hop across prairie and the mighty Mississippi (small from that height) and over city-pocked farmland to the sleepy college town of Valley View, where sidewalks were stationary and time itself seemed slowed. His grandparents' home, imposing for Valley View, was homey after the awesome halls of Rudbek.

But the visit was not relaxing. There were guests at dinner, the president of the college and department heads, and many more after dinner—some called him "Rudbek of Rudbek," others addressed him uncertainly as "Mr. Rudbek," and still others, smug with misinformation as to how the nabob was addressed by familiars, simply as "Rudbek." His grandmother twittered around, happy as only a proud hostess can be, and his grandfather stood straight and addressed him loudly as "Son."

Thorby did his best to be a credit to them. He soon realized that it was not what he said but the fact of talking to Rudbek that counted.

The following night, which his grandmother reluctantly kept private, he got a chance to talk. He wanted advice.

First information was exchanged. Thorby learned that his father, on marrying the only child of his grandfather Rudbek, had taken his wife's family name. "It's understandable," Grandfather Bradley told him. "Rudbek has to have a Rudbek. Martha was heir but Creighton had to preside—board meetings and conferences and at the dinner table for that matter. I had hoped that my son would pursue the muse of history, as I have. But when this came along, what could I do but be happy for him?"

His parents and Thorby himself had been lost as a consequence of his father's earnest attempt to be in the fullest sense Rudbek of Rudbek—he had been trying to inspect as much of the commercial empire as possible. "Your father was always conscientious and when your Grandfather Rudbek died before your father completed his apprenticeship, so to speak, Creighton left John Weemsby in charge—John is, I suppose you know, the second husband of your other grandmother's youngest sister Aria—and Leda, of course, is Aria's daughter by her first marriage."

"No, I hadn't known." Thorby translated the relationships into Sisu terms . . . and reached the startling conclusion that Leda was in the other moiety!—if they had such things here, which they didn't. And Uncle Jack—well, he wasn't "uncle"—but how would you say it in English?

"John had been a business secretary and factotum to your other grandfather and he was the perfect choice, of course; he knew the inner workings better than anyone, except your grandfather himself. After we got over the shock of our tragic loss we realized that the world must go on and that John could handle it as well as if he had been Rudbek himself."

"He's been simply wonderful!" grandmother chirped.

"Yes, he has. I must admit that your grandmother and I became used to a comfortable scale of living after Creighton married. College salaries are never what they should be; Creighton and Martha were very generous. Your grandmother and I might have found it difficult after we realized that our son was gone, never to come back, had not. John told us not to worry. He saw to it that our benefit continued just as before."

"And increased it," Grandmother Bradley added emphatically.

"Well, yes. All the family—we think of ourselves as part of Rudbek family even though we bear a proud name of our own—all of the family have been pleased with John's stewardship."

Thorby was interested in something other than "Uncle Jack's" virtues. "You told me that we left Akka, jumping for Far-Star, and never made it? That's a long, long way from Jubbul."

"I suppose it is. The College has only a small Galactovue and I must admit that it is hard to realize that what appears to be an inch or so is actually many lightyears."

"About a hundred and seventy lightyears, in this case."

"Let me see, how much would that be in miles?"

"You don't measure it that way, any more than you measure that couchomat you're on in microns."

"Come now, young man, don't be pedantic."

"I wasn't being, Grandfather. I was thinking that it was a long way from where I was captured to where I was last sold. I hadn't known it."

"I heard you use that term 'sold' once before. You must realize that it is not correct. After all, the serfdom practiced in the Sargony is not chattel slavery. It derives from the ancient Hindu gild or 'caste' system

—a stabilized social order with mutual obligations, up and down. You must not call it 'slavery.'"

"I don't know any other word to translate the Sargonese term."

"I could think of several, though I don't know Sargonese . . . it's not a useful tongue in scholarship. But, my dear Thor, you aren't a student of human histories and culture. Grant me a little authority in my own field."

"Well . . ." Thorby felt baffled. "I don't know System English perfectly and there's a lot of history I don't know—there's an awful lot of history."

"So there is. As I am the first to admit."

"But I can't translate any better—I was sold and I was a slave!"

"Now, Son."

"Don't contradict your grandfather, dear, that's a good boy."

Thorby shut up. He had already mentioned his years as a beggar—and discovered that his grandmother was horrified, had felt that he had disgraced himself, though she did not quite say so. And he had already found that while his grandfather knew much about many things, he was just as certain of his knowledge when Thorby's eyes had reported things differently. Thorby concluded glumly that it was part of being senior and nothing could be done about it. He listened while Grandfather Bradley discoursed on the history of the Nine Worlds. It didn't agree with what the Sargonese believed but wasn't too far from what Pop had taught him—other than about slavery. He was glad when the talk drifted back to the Rudbek organization. He admitted his difficulties.

"You can't build Rome in a day, Thor."

"It looks as if I never would learn! I've been thinking about going back into the Guard."

His grandfather frowned. "That would not be wise."

"Why not, sir?"

"If you don't have talent for business, there are other honorable professions."

"Meaning the Guard isn't?"

"Mmm . . . your grandmother and I are philosophical pacifists. It cannot be denied that there is never a moral justification for taking human life."

"Never," agreed grandmother firmly.

Thorby wondered what Pop would think? Shucks, he knew!—Pop cut 'em down like grass to rescue a load of slaves. "What do you do when a raider jumps you?"

"A what?"

"A pirate. You've got a pirate on your tail and closing fast."

"Why, you run, I suppose. It's not moral to stay and do battle. Thor, nothing is ever gained by violence."

"But you can't run; he has more legs. It's you or him."

"You mean 'he.' Then you surrender; that defeats his purpose . . . as the immortal Gandhi proved."

Thorby took a deep breath. "Grandfather, I'm sorry but it doesn't defeat his purpose. You have to fight. Raiders take slaves. The proudest thing I ever did was to burn one."

"Eh? 'Burn one'?"

"Hit him with a target-seeker. Blast him out of the sky."

Grandmother gasped. At last his grandfather said stiffly, "Thor, I'm afraid you've been exposed to bad influences. Not your fault, perhaps. But you have many misconceptions, both in fact and in evaluation. Now be logical. If you 'burned him' as you say, how do you know he intended—again, as you say—to 'take slaves'? What could he do with them? Nothing."

Thorby kept silent. It made a difference which side of the Plaza you saw a thing from . . . and if you didn't have status, you weren't listened to. That was a universal rule.

Grandfather Bradley continued, "So we'll say no more about it. On this other matter I'll give you the advice I would give your departed father: if you feel that you have no head for trade, you don't have to enter it. But to run away and join the Guard, like some childish romantic—no, Son! But you needn't make up your mind for years. John is a very able regent; you don't have a decision facing you." He stood up. "I know, for I've discussed this with John, and he's willing, in all humility, to carry the burden a little farther . . . or much farther, if need be. And now we had all better seek our pillows. Morning comes early."

Thor left the next morning, with polite assurances that the house was his—which made him suspect that it was. He went to Rudbek City, having reached a decision during a restless night. He wanted to sleep with a live ship around him. He wanted to be back in Pop's outfit; being a billionaire boss wasn't his style.

He had to do something first; dig out those papers that father and mother had signed, compare them with the ones prepared for him—since father must have known what was needed—sign them, so that Uncle Jack could get on with the work after he was gone. Grandfather was right about that; John Weemsby knew how to do the job and he didn't. He should be grateful to Uncle Jack. He would thank him before he left. Then off Terra and out to where people talked his language!

He buzzed Uncle Jack's office as soon as he reached his own, was told that he was out of town. He decided that he could write a note and make it sound better—oh yes! Must say good-by to Leda. So he buzzed the legal department and told him to dig his parents' authorizations out of the vault and send them to his office.

Instead of papers, Judge Bruder arrived. "Rudbek, what's this about your ordering certain papers from the vault?"

Thorby explained. "I want to see them."

"No one but officers of the company can order papers from the vault."

"What am I?"

"I'm afraid you are a young man with confused notions. In time, you will have authority. But at the moment you are a visitor, learning something about your parents' affairs."

Thorby swallowed it; it was true, no matter how it tasted. "I've been meaning to ask you about that. What's the progress in the court action to have my parents declared dead?"

"Are you trying to bury them?"

"Of course not. But it has to be done, or so Uncle Jack says. So where are we?"

Bruder sniffed. "Nowhere. Through your doing."

"What do you mean?"

"Young man, do you think that the officers of this company will initiate a process which would throw affairs of the firm into incredible confusion unless you take necessary steps to guard against it? Why, it may take years to settle the wills—during which, business would come to a stop . . . simply because you neglected to sign a few simple instruments which I prepared weeks ago."

"You mean nothing will be done until I sign?"

"That is correct."

"I don't understand. Suppose I were dead—or had never been born. Does business stop every time a Rudbek dies?"

"Mmm . . . well, no. A court authorizes matters to proceed. But you are here and we must take that into consideration. Now see here, I'm at the very end of my patience. You seem to think, simply because you've read a few balance sheets, that you understand business. You don't. For example your belief that you can order instruments turned over to you that were given to John Weemsby personally and are not even company property. If you were to attempt to take charge of the firm at this time—if we proceeded with your notion to have your parents declared dead—I can see that we would have all sorts of confusion while you were finding your balance. We can't afford it. The company can't afford it. Rudbek can't afford it. So I want those papers signed today and no more shilly-shallying. You understand?"

Thorby lowered his head. "I won't."

"What do you mean, 'You won't'?"

"I won't sign anything until I know what I'm doing. If I can't even see the papers my parents signed, then I certainly won't."

"We'll see about that!"

"I'm going to sit tight until I find out what's going on around here!"

Chapter 19

Thorby discovered that finding out was difficult. Things went on much as before but were not the same. He had vaguely suspected that the help he was being given in learning the business had sometimes been too much not well enough organized; he felt smothered in unrelated figures, verbose and obscure "summaries," "analyses" that did not analyze. But he had known so little that it took time to become even a suspicion.

The suspicion became certainty from the day he defied Judge Bruder. Dolores seemed eager as ever and people still hopped when he spoke but the lavish flow of information trickled toward a stop. He was stalled with convincing excuses but could never quite find out what he wanted to know. A "survey is being prepared" or the man who "has charge of that is out of the city" or "those are vault files and none of the delegated officers are in today." Neither Judge Bruder nor Uncle Jack was ever available and their assistants were politely unhelpful. Nor was he able to corner Uncle Jack at the estate. Leda told him that "Daddy often has to go away on trips."

Things began to be confused in his own office. Despite the library Dolores had set up she could not seem to find, or even recall, papers that he had marked for retention. Finally he lost his temper and bawled her out.

She took it quietly. "I'm sorry, sir. I'm trying very hard."

Thorby apologized. He knew a slow-down when he saw one; he had checked enough stevedores to know. But this poor creature could not help herself; he was lashing out at the wrong person. He added placatingly, "I really am sorry. Take the day off."

"Oh, I couldn't, sir."

"Who says so? Go home."

"I'd rather not, sir."

"Well . . . suit yourself. But go lie down in the ladies' lounge or something. That's an order. I'll see you tomorrow."

She looked worried and left. Thorby sat at his chaste, bare, unpowered executive desk and thought.

It was what he needed: to be left alone without a flood of facts and figures. He started digesting what he had soaked up. Presently he started listing the results.

Item: Judge Bruder and Uncle Jack had put him in Coventry for refusing to sign the proxies.

Item: He might be "Rudbek of Rudbek"—but Uncle Jack would continue to run things until Thorby's parents were legally dead.

Item: Judge Bruder had told him bluntly that no steps would be taken about the above until he admitted his incompetence and signed proxies.

Item: He did not know what his parents had signed. He had tried to force a showdown—and had failed.

Item: "Ownership" and "control" were very different. Uncle Jack controlled everything that Thorby owned; Uncle Jack owned merely a nominal one share to qualify him as acting chairman of the board. (Leda owned a chunk, as she was a Rudbek while Uncle Jack wasn't—but Uncle Jack probably controlled her stock too; Leda paid no attention to business.)

Conclusions:—

What conclusions? Was Uncle Jack doing something crooked and didn't dare let him find out? Well, it didn't look like it. Uncle Jack had salary and bonuses so large that only a miser would want more money simply as money. His parents' accounts seemed in order—they showed a huge balance; the megabuck Uncle Jack had handed him hardly made a dent. The only other withdrawals were for Grandfather and Grandmother Bradley, plus a few sums around the family or charge to the estates—nothing important, another couple of megabucks.

Conclusion: Uncle Jack was boss, liked being boss, and meant to go on being boss if possible.

"Status" . . . Uncle Jack had high status and was fighting to keep it. Thorby felt that he understood him at last. Uncle Jack put up with the overwork he complained about because he liked being boss—just as captains and chief officers worked themselves silly, even though every member of a Free Trader family owned the same share. Uncle Jack was "chief officer" and didn't intend to surrender his supreme status to someone a third of his age who (let's face it!) wasn't competent for the work the status required.

In this moment of insight Thorby felt that he ought to sign those proxies for Uncle Jack, who had earned the job whereas Thorby had merely inherited it. Uncle Jack must have been terribly disappointed when he had turned up alive; it must have seemed an utterly unfair twist of fate.

Well, let him have it! Settle things and join the Guard.

But Thorby was not ready to back down to Judge Bruder. He had been pushed around—and his strongest reflex was resistance to any authority he had not consented to; it had been burned into his soul with whips. He did not know this—he just knew that he was going to be stubborn. He decided that Pop would want him to be.

Thought of Pop reminded him of something. Was Rudbek connected, even indirectly, with the slave trade? He realized now why Pop wanted him to hang on—he could not quit until he knew . . . nor until he had put a stop to it if the unspeakable condition did exist. But how could he find out? He was Rudbek of Rudbek . . . but they had him tied with a thousand threads, like the fellow in that story Pop had told . . . "Gulliver and his Starship," that was it.

Well, let's see. Pop had reported to "X" Corps that there was a tie-up among some big spaceship outfit, the Saigon's government, and the raider-slavetraders. Raiders had to have ships. Ships . . . there was a book he had read last week, Galactic Transport's history of every ship they had built, from #0001 to the latest. He went into his library. Hmm . . . tall red book, not a tape.

Confounded thing was missing . . . like a lot of things lately. But he had almost renshawed the book, being interested in ships. He started making notes.

Most of them were in service inside the Hegemony, some in Rudbek interests, some in others. Some of his ships had been sold to the People, a pleasing thought. But some had wound up registered to owners he could not place . . . and yet he thought he knew the names, at least, of all outfits engaged in legitimate interstellar trade under the Hegemony—and he certainly would recognize any Free Trader clan.

No way to be sure of anything from his desk, even if he had the book. Maybe there was no way, from Terra . . . maybe even Judge Bruder and Uncle Jack would not know if something fishy were going on.

He got up and switched on the Galactovue he had had installed. It showed only the explored traction of the Galaxy—even so, the scale was fantastically small.

He began operating controls. First he lighted in green the Nine Worlds. Then he added, in yellow, pestholes avoided by the People. He lighted up the two planets between which he and his parents had been captured, then did the same for every missing ship of the People concerning which he happened to know the span of the uncompleted jump.

The result was a constellation of colored lights, fairly close together as star distances go and in the same sector as the Nine Worlds. Thorby looked at it and whistled. Pop had known what he was talking about—yet it would be hard to spot unless displayed like this.

He began thinking about cruising ranges and fueling stations maintained by Galactic Transport out that way . . . then added in orange the banking offices of Galactic Acceptance Corporation in the "neighborhood."

Then he studied it.

It was not certain proof—yet what other outfit maintained such activities facing that sector?

He intended to find out.

Chapter 20

Thorby found that Leda had ordered dinner in the garden. They were alone, and falling snow turned the artificial sky into an opalescent bowl. Candles, flowers, a string trio, and Leda herself made the scene delightful but Thorby failed to enjoy it, even though he liked Leda and considered the garden the best part of Rudbek Hall. The meal was almost over when Leda said, "A dollar for your thoughts."

Thorby looked guilty. "Uh, nothing."

"It must be a worrisome nothing."

"Well . . . yes."

"Want to tell Leda?"

Thorby blinked. Weemsby's daughter was the last one he could talk to. His gloom was caused by wonder as to what he could do if he became convinced that Rudbek was mixed up in slavery. "I guess I'm not cut out to be a businessman."

"Why, Daddy says you have a surprising head for figures."

Thorby snorted. "Then why doesn't he—" He stopped.

"Why doesn't he what?"

"Uh . . ." Doggone it, a man had to talk to somebody . . . someone who sympathized—or bawled him out if necessary. Like Pop. Like Fritz. Yeah, like Colonel Brisby. He was surrounded by people, yet utterly alone—except that Leda seemed to want to be friendly. "Leda, how much of what I say to you do you tell your father?"

To his amazement she blushed. "What made you say that, Thor?"

"Well, you are pretty close to him. Aren't you?"

She stood up suddenly. "If you've finished, let's walk."

Thorby stood up. They strolled paths, watched the storm, listened to its soft noises against the dome. She guided them to a spot away from the house and shielded by bushes and there sat down on a boulder. "This is a good spot—for private conversation."

"It is?"

"When the garden was wired, I made sure that there was somewhere I could be kissed without Daddy's snoopers listening in."

Thorby stared. "You mean that?"

"Surely you realize you are monitored almost everywhere but the ski slopes?"

"I didn't. And I don't like it."

"Who does? But it is a routine precaution with anything as big as Rudbek; you mustn't blame Daddy. I just spent some credits to make sure the garden wasn't as well wired as he thought. So if you have anything to say you don't want Daddy to hear, you can talk now. He'll never know. That's a cross-my-heart promise."

Thorby hesitated, then checked the area. He decided that if a microphone were hidden nearby it must be disguised as a flower . . . which was possible. "Maybe I ought to save it for the ski slope."

"Relax, dear. If you trust me at all, trust me that this place is safe."

"Uh, all right" He found himself blurting out his frustrations . . . his conclusion that Uncle Jack was intentionally thwarting him unless he would turn over his potential power. Leda listened gravely. "That's it. Now—am I crazy?"

She said, "Thor, you know that Daddy has been throwing me at you?"

"Huh?"

"I don't see how you could miss it. Unless you are utterly—but then, perhaps you are. Just take it as true. It's one of those obvious marriages that everyone is enthusiastic about . . . except maybe the two most concerned."

Thorby forgot his worries in the face of this amazing statement "You mean . . . well, uh, that you—" He trailed off.

"Heavens, dear! If I intended to go through with it, would I have told you anything? Oh, I admit I promised, before you arrived, to consider it. But you never warmed to the idea—and I'm too proud to be willing under those circumstances even if the preservation of Rudbek depended on it. Now what's this about Daddy not letting you see the proxies that Martha and Creighton gave him?"

"They won't let me see them; I won't sign until they do."

"But you'll sign if they do?"

"Uh . . . maybe I will, eventually. But I want to see what arrangements my parents made."

"I can't see why Daddy opposes such a reasonable request. Unless . . ." She frowned.

"Unless what?"

"What about your shares? Have those been turned over to you?"

"What shares?"

"Why, yours. You know what shares I hold. They were given to me when I was born, by Rudbek—your grandfather, I mean. My uncle. You probably got twice as many, since you were expected to become the Rudbek someday."

"I haven't any shares."

She nodded grimly. "That's one reason Daddy and the Judge don't want you to see those papers. Our personal shares don't depend on anyone; they're ours to do as we please with, since we are both legal age. Your parents voted yours, just as Daddy still votes mine—but any proxy they assigned concerning your shares can't be any good now. You can pound the desk and they'll have to cough up, or shoot you." She frowned. "Not that they would shoot. Thor, Daddy is a good sort, most ways."

"I never said he wasn't."

"I don't love him but I'm fond of him. But when it comes down to it, I'm a Rudbek and he's not. That's silly, isn't it? Because we Rudbeks aren't anything special; we're just shrewd peasants. But I've got a worry, too. You remember Joel de la Croix?"

"He's the one that wanted an interview with me?"

"That's right. Joey doesn't work here any more."

"I don't understand."

"He was a rising star in the engineering department of Galactic—didn't you know? The office says he left to accept other employment; Joey says he was fired for going over their heads to speak to you." She frowned. "I didn't know what to believe. Now I believe Joey. Well, Thor, are you going to take it lying down? Or prove that you are Rudbek of Rudbek?"

Thorby chewed his lip. "I'd like to go back into the Guard and forget the whole mess. I used to wonder what it was like to be rich. Now I am and it turns out to be mostly headaches."

"So you'd walk out on it?" Her voice was faintly scornful.

"I didn't say that. I'm going to stay and find out what goes on. Only I don't know how to start. You think I should pound Uncle Jack's desk and demand my shares?"

"Unnh . . . not without a lawyer at your side."

"There are too many lawyers in this now!"

"That's why you need one. It will take a sharp one to win a scrap with Judge Bruder."

"How do I find one?"

"Goodness, I don't use lawyers. But I can find out. Now let's stroll and chat—in case anybody is interested."

Thorby spent a glum morning studying corporation law. Just past lunch Leda called. "Thor, how about taking me skiing? The storm is over and the snow is just right" She looked at him eagerly.

"Well—"

"Oh, come on!"

He went. They said nothing until they were far from the house. Then Leda said, "The man you need is James J. Garsch, New Washington."

"I thought that must be why you called. Do you want to ski? I'd like to go back and call him."

"Oh, my!" she shook her head sadly. "Thor, I may have to marry you just to mother you. You go back to the house and call a lawyer outside Rudbek—one whose reputation is skyhigh. What happens?"

"What?"

"You might wake up in a quiet place with big muscular nurses around you. I've had a sleepless night and I'm convinced they mean business. So I had to make up my mind. I was willing for Daddy to run things forever . . . but if he fights dirty. I'm on your side."

"Thanks, Leda."

"'Thanks' he says! Thor, this is for Rudbek. Now to business. You can't grab your hat and go to New Washington to retain a lawyer. If I know Judge Bruder, he has planned what to do if you try. But you can go look at some of your estate . . . starting with your house in New Washington."

"That's smart, Leda."

"I'm so smart I dazzle myself. If you want it to look good, you'll invite me along—Daddy has told me that I ought to show you around."

"Why, sure, Leda. If it won't be too much trouble."

"I'll simply force myself. We'll actually do some sightseeing, in the Department of North America, at least. The only thing that bothers me is how to get away from the guards."

"Guards?"

"Nobody high up in Rudbek ever travels without bodyguards. Why, you'd be run ragged by reporters and crackpots."

"I think," Thorby said slowly, "that you must be mistaken in my case. I went to see my grandparents. There weren't any guards."

"They specialize in being unobtrusive. I'll bet there were always at least two in your grandmother's house while you were there. See that solitary skier? Long odds he's not skiing for fun. So we have to find a way to get them off your neck while you look up Counselor Garsch. Don't worry, I'll think of something."

Thorby was immensely interested in the great capital but still more interested in getting on with his purpose. Leda did not let him hurry. "First we sightsee. We naturally would."

The house, simple compared with Rudbek—twenty rooms, only two of them large—was as ready as if he had stepped out the day before. Two of the servants he recognized as having been at Rudbek. A ground car, with driver and footman in Rudbek livery, was waiting. The driver seemed to know where to take them; they rode around in the semitropic winter sunshine and Leda pointed out planetary embassies and consulates. When they passed the immense pile, which is headquarters of the Hegemonic Guard, Thorby had the driver slow down while he rubbernecked. Leda said, "That's your alma mater, isn't it?" Then she whispered, "Take a good look. The building opposite its main door is where you are going."

They got out at the Replica Lincoln Memorial, walked up the steps and felt the same hushed awe that millions have felt when looking at that brooding giant figure. Thorby had a sudden feeling that the statue looked like Pop—not that it did, but still it did. His eyes filled with tears.

Leda whispered, "This place always gets me—it's like a haunted church. You know who he was? He founded America. Ancient history is awesome."

"He did something else."

"What?"

"He freed slaves."

"Oh." She looked up with sober eyes. "That means something special to you . . . doesn't it?"

"Very special." He considered telling Leda his strongest reason for pushing the fight, since they were alone and this was a place that wouldn't be bugged. But he couldn't. He felt that Pop would not mind—but he had promised Colonel Brisby.

He puzzled over inscriptions on the walls, in letters and spelling used before English became System English. Leda tugged his sleeve and whispered, "Come on. I can never stay here long or I start crying." They tiptoed away.

Leda decided that she just had to see the show at the Milky Way. So they got out and she told the driver to pick them up in three hours and ten minutes, then Thorby paid outrageous scalpers' prices for a double booth and immediate occupancy.

"There!" she sighed as they started inside. "That's half of it. The footman will drop off as they round the corner, but we're rid of the driver for a while; there isn't a place to park around here. But the footman will be right behind us, if he wants to keep his job. He's buying a ticket this minute. Or maybe he's already inside. Don't look."

They started up the escalator. "This gives us a few seconds; he won't get on until we curve out of sight. Now listen. The people holding these seats will leave as soon as we show the tickets—only I'm going to hang onto one, pay him to stay. Let's hope it's a man because our nursemaid is going to spot that booth in minutes . . . seconds, if he was able to get our booth number down below. You keep going. When he finds our booth he'll see me in it with a man. He won't see the man's face in the dark but he'll be certain of me because of this outlandish, night-glow outfit I'm wearing. So he'll be happy. You zip out any exit but the main lobby; the driver will probably wait there. Try to be in the outer lobby a few minutes before the time I told them to have the car. If you don't make it, hire a flea-cab and go home. I'll complain aloud that you didn't like the show and went home."

Thorby decided that the "X" Corps had missed a bet in Leda. "Won't they report that they lost track of me?"

"They'll be so relieved they'll never breathe it. Here we are—keep moving. See you!"

Thorby went out a side exit, got lost, got straightened out by a cop, at last found the building across from Guard SHQ. The building directory showed that Garsch had offices on the 34th terrace; a few minutes later he faced a receptionist whose mouth was permanently pursed in "No."

She informed him frostily that the Counselor never saw anyone except by appointment. Did he care to make an inquiry appointment with one of the Counselor's associates? "Name, please!"

Thorby glanced around, the room was crowded. She slapped a switch. "Speak up!" she snapped. "I've turned on the privacy curtain."

"Please tell Mr. Garsch that Rudbek of Rudbek would like to see him."

Thorby thought that she was about to tell him not to tell fibs. Then she got up hastily and left.

She came back and said quietly, "The Counselor can give you five minutes. This way, sir."

James J. Garsch's private office was in sharp contrast with building and suite; he himself looked like an unmade bed. He wore trousers, not tights, and his belly bulged over his belt. He had not shaved that day; his grizzled beard matched the fringe around his scalp. He did not stand up. "Rudbek?"

"Yes, sir. Mr. James J. Garsch?"

"The same. Identification? Seems to me I saw your face in the news but I don't recollect."

Thorby handed over his ID folder. Garsch glanced at the public ID, studied the rare and more difficult-to-counterfeit ID of Rudbek & Assocs.

He handed it back. "Siddown. What can I do for you?"

"I need advice . . . and help."

"That's what I sell. But Bruder has lawyers running out of his ears. What can I do for you?"

"Uh, is this confidential?"

"Privileged, son. The word is 'privileged.' You don't ask a lawyer that; he's either honest or he ain't. Me, I'm middlin' honest. You take your chances."

"Well . . . it's a long story."

"Then make it short. You talk. I listen."

"You'll represent me?"

"You talk, I listen," Garsch repeated. "Maybe I'll go to sleep. I ain't feeling my best today. I never do."

"All right." Thorby launched into it. Garsch listened with eyes closed, fingers laced over his bulge.

"That's all," concluded Thorby, "except that I'm anxious to get straightened out so that I can go back into the Guard."

Garsch for the first time showed interest. "Rudbek of Rudbek? In the Guard? Let's not be silly, son."

"But I'm not really 'Rudbek of Rudbek.' I'm an enlisted Guardsman who got pitched into it by circumstances beyond my control."

"I knew that part of your story; the throb writers ate it op. But we all got circumstances we can't control. Point is, a man doesn't quit his job. Not when it's his."

"It's not mine," Thorby answered stubbornly.

"Let's not fiddle. First, we get your parents declared dead. Second, we demand their wills and proxies. If they make a fuss, we get a court order . . . and even the mighty Rudbek folds up under a simple subpoena-or-be-locked-up-for-contempt." He bit a fingernail. "Might be some time before the estate is settled and you are qualified. Court might appoint you to act, or the wills may say who, or the court might appoint somebody else. But it won't be those two, if what you say is correct. Even one of Bruder's pocket judges wouldn't dare; it would be too raw and he'd know he'd be reversed."

"But what can I do if they won't even start the action to have my parents declared dead?"

"Who told you you had to wait on them? You're the interested party; they might not even qualify as amicus curiae. If I recall the gossip, they're hired hands, qualified with one nominal share each. You're the number-one interested party, so you start the action. Other relatives? First cousins, maybe?"

"No first cousins. I don't know what other heirs there may be. There's my grandparents Bradley."

"Didn't know they were alive. Will they fight you?"

Thorby started to say no, changed his mind. "I don't know."

"Cross it when we come to it. Other heirs . . . well, we won't know till we get a squint at the wills—and that probably won't happen until a court forces them. Any objection to hypnotic evidence? Truth drugs? Lie detectors?"

"No. Why?"

"You're the best witness that they are dead, not just long time missing."

"But if a person is missing long enough?"

"Depends. Any term of years is just a guide to the court, not a rule of law. Time was when seven years would do it—but that's no longer true. Things are roomier now."

"How do we start?"

"Got any money? Or have they got you hogtied on that? I come high. I usually charge for each exhale and inhale."

"Well, I've got a megabuck . . . and a few thousand more. About eight."

"Hmm . . . Haven't said I'd take this case. Has it occurred to you that your life may be in danger?"

"Huh! No, it hasn't."

"Son, people do odd things for money, but they'll do still more drastic things for power over money. Anybody sittin' close to a billion credits is in danger; it's like keeping a pet rattlesnake. If I were you and started feeling ill, I'd pick my own doctor. I'd be cautious about going through doors and standing close to open windows." He thought. "Rudbek is not a good place for you now; don't tempt them. Matter of fact, you ought not to be here. Belong to the Diplomatic Club?"

"No, sir."

"You do now. People 'ud be surprised if you didn't. I'm often there, around six. Got a room there, sort of private. Twenty eleven."

"'Twenty eleven.'"

"I still haven't said I'd take it. Got any idea what I'd have to do if I lose this case?"

"Eh? No, sir."

"What was the place you mentioned? Jubbulpore? That's where I'd have to move." Suddenly he grinned. "But I've been spoiling for a fight. Rudbek, eh? Bruder. You mentioned a megabuck?"

Thorby got out his book of checking certificates, passed them over. Garsch riffled through it, shoved it into a drawer. "We won't convert this now; they're almost certainly noting your withdrawals. Anyhow, it's going to cost you more. G'bye. Say in a couple of days."

Thorby left, feeling bucked up. He had never met a more mercenary, predatory old man—he reminded Thorby of the old, scarred freedmen professionals who swaggered around the New Amphitheater.

As he came outdoors he saw Guard Headquarters. He looked again—then ducked through murderous traffic and ran up its steps.

Chapter 21

Thorby found a circle of receptionist booths around the great foyer. He pushed through crowds pouring out and went into one. A contralto voice said, "Punch your name. State department and office into the microphone. Wait until the light appears, then state your business. You are reminded that working hours are over and only emergencies are now handled."

Thorby punched, "Thorby Baslim," into the machine, then said, "Exotic Corps."

He waited. The tape repeated, "Punch your name. State the department and office into—" It suddenly cut off. A man's voice said, "Repeat that."

"Exotic Corps."

"Business?"

"Better check my name in your files."

At last another female voice chanted, "Follow the light immediately over your head. Do not lose it."

He followed it up escalators, down slideways, and into an unmarked door, where a man not in uniform led him through two more. He faced another man in civilian clothes who stood up and said, "Rudbek of Rudbek. I am Wing Marshal Smith."

"Thorby Baslim, please, sir. Not 'Rudbek.'"

"Names aren't important but identities are. Mine Isn't 'Smith,' but it will do. I suppose you have identification?"

Thorby produced his ID again. "You probably have my fingerprints."

"They'll be here in a moment. Do you mind supplying them again?"

While Thorby had his prints taken, a print file card popped out onto the Marshal's desk. He put both sets into a comparator, seemed to pay no attention but until it flashed green he spoke only politenesses.

Then he said, "All right, Thorby Baslim . . . Rudbek. What can I do for you?"

"Maybe it's what I can do for you?"

"So?"

"I came here for two reasons," Thorby stated. "The first is, I think I can add something to Colonel Baslim's final report. You know who I mean?"

"I knew him and admired him very much. Go on."

"The second is—I'd like to go back into the Guard and go 'X' Corps." Thorby couldn't recall when he had decided this, but he had—not just Pop's outfit, Pop's own corps. Pop's work.

"Smith" raised his brows. "So? Rudbek of Rudbek?"

"I'm getting that fixed." Thorby sketched rapidly how he must settle his parents' estate, arrange for handling of their affairs. "Then I'm free. I know it's presumptuous of an acting ordnanceman third class—no, I was busted from that; I had a fight—for a boot Guardsman to talk about 'X' Corps, but I think I've got things you could use. I know the People . . . the Free Traders, I mean. I speak several languages. I know how to behave in the Nine Worlds. I've been around a bit, not much and I'm no astrogator . . . but I've traveled a little. Besides that, I've seen how Pop—Colonel Baslim—worked. Maybe I could do some of it."

"You have to love this work to do it. Lots of times it's nasty . . . things a man wouldn't do, for his own self-respect, if he didn't think it was necessary."

"But I do! Uh, I was a slave. You knew that? Maybe it would help if a man knew how a slave feels."

"Perhaps. Though it might make you too emotional. Besides, slave traffic isn't all we are interested in. A man comes here, we don't promise him certain work. He does what he's told. We use him. We usually use him up. Our casualty rate is high."

"I'll do what I'm told. I just happen to be interested in the slave traffic. Why, most people here don't seem to know it exists."

"Most of what we deal in the public wouldn't believe. Can you expect the people you see around you to take seriously unbelievable stories about faraway places? You must remember that less than one percent of the race ever leaves its various planets of birth."

"Uh, I suppose so. Anyhow they don't believe it."

"That's not our worst handicap. The Terran Hegemony is no empire; it is simply leadership in a loose confederation of planets. The difference between what the Guard could do and what it is allowed to do is very frustrating. If you have come here thinking that you will see slavery abolished in your lifetime, disabuse your mind. Our most optimistic target date is two centuries away—and by that time slavery will have broken out in planets not even discovered today. Not a problem to be solved once and for all. A continuing process."

"All I want to know is, can I help?"

"I don't know. Not because you describe yourself as a junior enlisted man . . . we're all pretty much the same rank in this place. The Exotic Corps is an idea, not an organization chart. I'm not worried about what Thorby Baslim can do; he can do something, even if it's only translating. But Rudbek of Rudbek . . . mmm, I wonder."

"But I told you I was getting rid of that!"

"Well—let's wait until you have. By your own statement you are not presenting yourself for enrollment today. What about the other reason? Something to add to Colonel Baslim's report?"

Thorby hesitated. "Sir, Colonel Brisby, my C.O., told me that P— Colonel Baslim had proved a connection between the slave trade and some big starshipbuilding outfit."

"He told you that?"

"Yes, sir. You could look it up in Colonel Baslim's report."

"I don't need to. Go on."

"Well . . . is it Rudbek he was talking about? Galactic Transport, that is?"

"Smith" considered it. "Why ask me if your company is mixed up in slave trade? You tell us."

Thorby frowned. "Is there a Galactovue around here?"

"Down the hall."

"May I use it?"

"Why not?" The Wing Marshal led him through a private corridor into a conference room dominated by a star-flecked stereo display. It was much the biggest Thorby had ever seen.

He had to ask questions; it had complicated controls. Then he got to work. His face puckering with strain, Thorby painted in colored lights amid fairy stars the solid picture he had built in the Galactovue in his office. He did not explain and the officer watched in silence. Thorby stepped back at last "That's all I know now."

"You missed a few." The Wing Marshal added some lights in yellow, some in red, then working slowly, added half a dozen missing ships. "But that's quite a feat to do from memory and a remarkable concatenation of ideas. I see you included yourself—maybe it does help to have a personal interest." He stepped back. "Well, Baslim, you asked a question. Are you ready to answer it?"

"I think Galactic Transport is in it up to here! Not everybody, but enough key people. Supplying ships. And repairs and fuel. Financing, maybe."

"Mmm . . ."

"Is all this physically possible otherwise?"

"You know what they would say if you accused them of slave trading—"

"Not the trade itself. At least I don't think so."

"Connected with it. First they would say that they had never heard of any slave trade, or that it was just a wild rumor. Then they would say that, in any case, they just sell ships—and is a hardware dealer who sells a knife responsible if a husband carves his wife?"

"The cases aren't parallel."

"They wouldn't concede that. They would say that they were not breaking any laws and even stipulating that there might be slavery somewhere, how can you expect people to get worked up over a possible evil lightyears away? In which they are correct; you can't expect people to, because they won't. Then some smarmy well-dressed character will venture the opinion that slavery—when it existed—was not so bad, because a large part of the population is really happier if they don't have the responsibilities of a free man. Then he'll add that if they didn't sell ships, someone else would—it's just business."

Thorby thought of nameless little Thorbys out there in the dark, crying hopelessly with fear and loneliness and hurt, in the reeking holds of slavers—ships that might be his. "One stroke of the lash would change his slimy mind!"

"Surely. But we've abolished the lash here. Sometimes I wonder if we should have." He looked at the display. "I'm going to record this; it has facets not yet considered together. Thanks for coming in. If you get more ideas, come in again."

Thorby realized that his notion of joining the corps had not been taken seriously. "Marshal Smith . . . there's one other thing I might do."

"What?"

"Before I join, if you let me . . . or maybe after; I don't know how you do such things . . . I could go out as Rudbek of Rudbek, in my own ship, and check those places—the red ones, ours. Maybe the boss can dig out things that a secret agent would have trouble getting close to."

"Maybe. But you know that your father started to make an inspection trip once. He wasn't lucky in it." Smith scratched his chin. "We've never quite accounted for that one. Until you showed up alive, we assumed that it was natural disaster. A yacht with three passengers, a crew of eight and no cargo doesn't look like worthwhile pickings for bandits in business for profit—and they generally know what they're doing."

Thorby was shocked. "Are you suggesting that—"

"I'm not suggesting anything. But bosses prying into employees' sidelines have, in other times and places, burned their fingers. And your father was certainly checking."

"About the slave trade?"

"I couldn't guess. Inspecting. In that area. I've got to excuse myself. But do come see me again . . . or phone and someone will come to you."

"Marshal Smith . . . what parts of this, if any, can be talked over with other people?"

"Eh? Any of it. As long as you don't attribute it to this corps, or to the Guard. But facts as you know them—" He shrugged, "—who will believe you? Although if you talk to your business associates about your suspicions, you may arouse strong feelings against you personally

. . . some of those feelings sincere and honest. The others? I wish I knew."

Thorby was so late that Leda was both vexed and bursting with curiosity. But she had to contain it not only because of possible monitoring but because of an elderly aunt who had called to pay her respects to Rudbek of Rudbek, and was staying the night. It was not until next day, while examining Aztec relics in the Fifth of May Museum, that they were able to talk.

Thorby recounted what Garsch had said, then decided to tell more. "I looked into rejoining the Guard yesterday."

"Thor!"

"Oh, I'm not walking out. But I have a reason. The Guard is the only organization trying to put a stop to slave traffic. But that is all the more reason why I can't enlist now." He outlined his suspicions about Rudbek and the traffic.

Her face grew pale. "Thor, that's the most horrible idea I ever heard. I can't believe it."

"I'd like to prove it isn't true. But somebody builds their ships, somebody maintains them. Slavers are not engineers; they're parasites."

"I still have trouble believing that there is such a thing as slavery."

He shrugged. "Ten lashes will convince anybody."

"Thor! You don't mean they whipped you?"

"I don't remember clearly. But the scars are on my back."

She was very quiet on the way home.

Thorby saw Garsch once more, then they headed for the Yukon, in company with the elderly aunt, who had somehow attached herself. Garsch had papers for Thorby to sign and two pieces of information. "The first action has to be at Rudbek, because that was the legal residence of your parents. The other thing is, I did some digging in newspaper files."

"Yes?"

"Your grandfather did give you a healthy block of stock. It was in stories about the whoop-te-do when you were born. The Bourse Journal listed the shares by serial numbers. So we'll hit 'em with that, too—on the same day. Don't want one to tip off the other."

"You're the doctor."

"But I don't want you in Rudbek until the clerk shouts 'Oyez!' Here's a mail drop you can use to reach me . . . even phone through, if you have to. And right smartly you set up a way for me to reach you."

Thorby puzzled over that requirement, being hemmed in as he was by bodyguards. "Why don't you, or somebody—a young man, maybe—phone my cousin with a code message? People are always phoning her and most of them are young men. She'll tell me and I'll find a place to phone back."

"Good idea. He'll ask if she knows how many shopping days left till Christmas. All right—see you in court." Garsch grinned. "This is going to be fun. And very, very expensive for you. G'bye."

Chapter 22

"Have a nice vacation?" Uncle Jack smiled at him. "You've led us quite a chase. You shouldn't do that, boy."

Thorby wanted to hit him but, although the guards let go his arms when they shoved him into the room, his wrists were tied. Uncle Jack stopped smiling and glanced at Judge Bruder. "Thor, you've never appreciated that Judge Bruder and I worked for your father, and for your grandfather. Naturally we know what's best. But you've given us trouble and now we'll show you how we handle little boys who don't appreciate decent treatment. We teach them. Ready, Judge?"

Judge Bruder smiled savagely and took the whip from behind him. "Bend him over the desk!"

Thorby woke up gasping. Whew, a bad one! He looked around the small hotel room he was in and tried to remember where he was. For days he had moved daily, sometimes half around the planet. He had become sophisticated in the folkways of this planet, enough not to attract attention, and even had a new ID card, quite as good as a real one. It had not been difficult, once he realized that underworlds were much the same everywhere.

He remembered now—this was America de Sud.

The bed alarm sounded—just midnight, time to leave. He dressed and glanced at his baggage, decided to abandon it. He walked down the backstairs, out the back way.

Aunt Lizzie had not liked the Yukon cold but she put up with it. Eventually someone called and reminded Leda that there were few shopping days to Christmas, so they left. At Uranium City Thorby managed to return the call. Garsch grinned. "I'll see you in the district court in-and-for the county of Rudbek, division four, at nine-fifty-nine the morning of January fourth. Now get lost completely."

So at San Francisco Thorby and Leda had a tiff in the presence of Aunt Lizzie; Leda wanted to go to Nice, Thorby insisted on Australia. Thorby said angrily, "Keep the car! I'll go by myself." He flounced out and bought a ticket for Great Sydney.

He pulled a rather old washroom trick, tubed under the Bay, and, convinced that his bodyguard had been evaded, counted the cash Leda had slipped him as privately as they had quarreled publicly. It came to a little under two hundred thousand credits. There was a note saying that she was sorry it wasn't more but she had not anticipated needing money.

While waiting at the South American field Thorby counted what was left of Leda's money and reflected that he had cut it fine, both time and money. Where did it all go?

Photographers and reporters gave him a bad time at Rudbek City; the place swarmed with them. But he pushed through and met Garsch inside the bar at nine-fifty-eight. The old man nodded. "Siddown. Hizzoner will be out soon."

The judge came out and a clerk intoned the ancient promise of justice: "—draw nigh and ye shall be heard!" Garsch remarked, "Bruder has this judge on a leash."

"Huh? Then why are we here?"

"You're paying me to worry. Any judge is a good judge when he knows he's being watched. Look behind you."

Thorby did so. The place was so loaded with press that a common citizen stood no chance. "I did a good job, if I do say so." Garsch hooked a thumb at the front row. "The galoot with the big nose is the ambassador from Proxima. The old thief next to him is chairman of the judiciary committee. And—" He broke off.

Thorby could not spot Uncle Jack but Bruder presided over the other table—he did not look at Thorby. Nor could Thorby find Leda. It made him feel very much alone. But Garsch finished opening formalities, sat down and whispered. "Message for you. Young lady says to say 'Good luck.'"

Thorby was active only in giving testimony and that after many objections, counter objections, and warnings from the bench. While he was being sworn, he recognized in the front row a retired chief justice of the Hegemonic Ultimate Court who had once dined at Rudbek. Then Thorby did not notice anything, for he gave his testimony in deep trance surrounded by hypnotherapists.

Although every point was chewed endlessly, only once did the hearing approach drama. The court sustained an objection by Bruder in such fashion that a titter of unbelief ran around the room and someone stamped his feet. The judge turned red. "Order! The bailiff will clear the room!"

The move to comply started, over protests of reporters. But the front two rows sat tight and stared at the judge. The High Ambassador from the Vegan League leaned toward his secretary and whispered; the secretary started slapping a Silent-Steno.

The judge cleared his throat "—unless this unseemly behavior ceases at once! This court will not tolerate disrespect."

Thorby was almost surprised when it ended: "—must therefore be conclusively presumed that Creighton Bradley Rudbek and Martha Bradley Rudbek did each die, are now dead, and furthermore did meet their ends in common disaster. May their souls rest in peace. Let it be so recorded." The court banged his gavel. "If custodians of wills of the decedents, if wills there be, are present in this court, let them now come forward."

There was no hearing about Thorby's own shares; Thorby signed a receipt for certificates thereto in the judge's chambers. Neither Weemsby nor Bruder was present.

Thorby took a deep breath as Garsch and he came out of chambers. "I can hardly believe that we've won."

Garsch grinned. "Don't kid yourself. We won the first round on points. Now it begins to get expensive."

Thorby's mouth sagged. Rudbek guards moved in and started taking them through the crowd.

Garsch had not overstated it. Bruder and Weemsby sat tight, still running Rudbek & Assocs. and continued to fight. Thorby never did see his parents' proxies—his only interest in them now was to see whether, as he suspected, the differences between the papers Bruder had prepared and those of his parents lay in the difference between "revocable" and "revocable only by mutual agreement."

But when the court got around to ordering them produced, Bruder claimed that they had been destroyed in routine clearing from files of expired instruments. He received a ten-day sentence for contempt, suspended, and that ended it.

But, while Weemsby was no longer voting the shares of Martha and Creighton Rudbek, neither was Thorby; the shares were tied up while the wills were being proved. In the meantime, Bruder and Weemsby remained officers of Rudbek & Assocs. with a majority of directors backing them. Thorby was not even allowed in Rudbek Building, much less in his old office.

Weemsby never went back to Rudbek estate; his belongings were sent to him. Thorby moved Garsch into Weemsby's apartment. The old man slept there often; they were very busy.

At one point Garsch told him that there were ninety-seven actions, for or against, moving or pending, relating to the settlement of his estate. The wills were simple in essence; Thorby was the only major heir. But there were dozens of minor bequests; there were relatives who might get something if the wills were set aside; the question of "legally dead" was again raised, the presumption of "common disaster" versus deaths at different times was hashed again; and Thorby's very identity was questioned. Neither Bruder nor Weemsby appeared in these actions; some relative or stockholder was always named as petitioner—Thorby was forced to conclude that Uncle Jack had kept everyone happy.

But the only action that grieved him was brought by his grandparents Bradley, asking that he be made their ward because of incompetence. The evidence, other than the admitted fact that he was new to the complexities of Terran life, was his Guardsman medical record—a Dr. Krishnamurti had endorsed that he was "potentially emotionally unstable and should not be held fully answerable for actions under stress."

Garsch had him examined in blatant publicity by the physician to the Secretary General of the Hegemonic Assembly. Thorby was found legally sane. It was followed by a stockholders suit asking that Thorby be found professionally unequipped to manage the affairs of Rudbek & Assocs, in private and public interest.

Thorby was badly squeezed by these maneuvers; he was finding it ruinously expensive to be rich. He was heavily in debt from legal costs and running Rudbek estate and had not been able to draw his own accumulated royalties as Bruder and Weemsby continued to contend, despite repeated adverse decisions, that his identity was uncertain.

But a weary time later a court three levels above the Rudbek district court awarded to Thorby (subject to admonitions as to behavior and unless revoked by court) the power to vote his parents' stock until such time as their estates were settled.

Thorby called a general meeting of stockholders, on stockholders' initiative as permitted by the bylaws, to elect officers.

The meeting was in the auditorium of Rudbek Building; most stockholders on Terra showed up even if represented by proxy. Even Leda popped in at the last minute, called out merrily, "Hello, everybody!" then turned to her stepfather. "Daddy, I got the notice and decided to see the fun—so I jumped into the bus and hopped over. I haven't missed anything, have I?"

She barely glanced at Thorby, although he was on the platform with the officers. Thorby was relieved and hurt; he had not seen her since they had parted at San Francisco. He knew that she had residence at Rudbek Arms in Rudbek City and was sometimes in town, but Garsch had discouraged him from getting in touch with her —"Man's a fool to chase a woman when she's made it plain she doesn't want to see him."

So he simply reminded himself that he must pay back her loan—with interest—as soon as possible.

Weemsby called the meeting to order, announced that to accordance with the call the meeting would nominate and elect officers. "Minutes and old business postponed by unanimous consent." Bang! "Let the secretary call the roll for nominations for chairman of the board." His face wore a smile of triumph.

The smile worried Thorby. He controlled, his own and his parents', just under 45% of the voting stock. From the names used in bringing suits and other indirect sources he thought that Weemsby controlled about 31%, Thorby needed to pick up 6%. He was counting on the emotional appeal of "Rudbek of Rudbek"—but he couldn't be sure, even though Weemsby needed more than three times as many "uncertain" votes . . . uncertain to Thorby; they might be in Weemsby's pocket.

But Thorby stood up and nominated himself, through his own stock. "Thor Rudbek of Rudbek!"

After that it was pass, pass, pass, over and over again—until Weemsby was nominated. There were no other nominations.

"The Secretary will call the roll," Weemsby intoned.

"Announce your votes by shares as owners, followed by votes as proxy. The Clerk will check serial numbers against the Great Record. Thor Rudbek . . . of Rudbek."

Thorby voted all 45%-minus that he controlled, then sat down feeling very weary. But he got out a pocket calculator. There were 94,000 voting shares; he did not trust himself to keep tally in his head. The Secretary read on, the clerk droned his checks on the record. Thorby needed to pick up 5657 votes, to win by one vote.

He began slowly to pick up odd votes—232, 906, 1917—some of them directly, some through proxy. But Weemsby picked up votes also. Some shareholders answered, "Pass to proxy," or failed to respond—as the names marched past and these missing votes did not appear, Thorby was forced to infer that Weemsby held those proxies himself. But still the additional votes for "Rudbek of Rudbek" mounted—2205, 3036, 4309 . . . and there it stuck. The last few names passed.

Garsch leaned toward him. "Just the sunshine twins left."

"I know." Thorby put away his calculator, feeling sick—so Weemsby had won, after all.

The Secretary had evidently been instructed what names to read last. "The Honorable Curt Bruder!"

Bruder voted his one qualifying share for Weemsby. "Our Chairman, Mr. John Weemsby."

Weemsby stood up and looked happy. "In my own person, I vote one share. By proxies delivered to me and now with the Secretary I vote—" Thorby did not listen; he was looking for his hat.

"The tally being complete, I declare—" the Secretary began.

"No!"

Leda was on her feet. "I'm here myself. This is my first meeting and I'm going to vote!"

Her stepfather said hastily, "That's all right, Leda—mustn't interrupt." He turned to the Secretary. "It doesn't affect the result."

"But it does! I cast one thousand eight hundred and eighty votes for Thor, Rudbek of Rudbek!"

Weemsby stared. "Leda Weemsby!"

She retorted crisply, "My legal name is Leda Rudbek."

Bruder was shouting, "Illegal! The vote has been recorded. It's too —"

"Oh, nonsense!" shouted Leda. "I'm here and I'm voting. Anyhow, I cancelled that proxy—I registered it in the post office in this very building and saw it delivered and signed for at the 'principal offices of this corporation'—that's the right phrase, isn't it, Judge?—ten minutes before the meeting was called to order. If you don't believe me, send down for it. But what of it?—I'm here. Touch me." Then she turned and smiled at Thorby.

Thorby tried to smile back, and whispered savagely to Garsch, "Why did you keep this a secret?"

"And let 'Honest John' find out that he had to beg, borrow, or buy some more votes? He might have won. She kept him happy, just as I told her to. That's quite a girl, Thorby. Better option her."

Five minutes later Thorby, shaking and white, got up and took the gavel that Weemsby had dropped. He faced the crowd. "We will now elect the rest of the board," he announced, his voice barely under control. The slate that Garsch and Thorby had worked out was passed by acclamation—with one addition: Leda.

Again she stood up. "Oh, no! You can't do this to me."

"Out of order. You've assumed responsibility, now accept it."

She opened her mouth, closed it, sat down.

When the Secretary declared the result, Thorby turned to Weemsby. "You are General Manager also, are you not?"

"Yes."

"You're fired. Your one share reverts. Don't try to go back to your former office; just get your hat and go."

Bruder jumped up. Thorby turned to him. "You, too. Sergeant-at-Arms, escort them out of the building."

Chapter 23

Thorby looked glumly at a high stack of papers, each item flagged "URGENT." He picked up one, started to read—put it down and said, "Dolores, switch control of my screen to me. Then go home."

"I can stay, sir."

"I said, 'Go home.' How are you going to catch a husband with circles under your eyes?"

"Yes, sir." She changed connections. "Good night, sir."

"Good night."

Good girl, there. Loyal, he thought. Well, he hoped. He hadn't dared use a new broom all the way; the administration had to have continuity. He signaled a number.

A voice without a face said, "Scramble Seven."

"'Prometheus Bound,'" Thorby answered, "and nine makes sixteen."

"Scramble set up."

"Sealed," Thorby agreed.

The face of Wing Marshal "Smith" appeared. "Hi, Thor."

"Jake, I've got to postpone this month's conference again. I hate to—but you should see my desk."

"Nobody expects you to devote all your time to corps matters."

"Doggone it, that's exactly what I planned to do—clean this place up fast, put good people in charge, grab my hat and enlist for the corps! But it's not that simple."

"Thor, no conscientious officer lets himself be relieved until his board is all green. We both knew that you had lots of lights blinking red."

"Well . . . all right, I can't make the conference. Got a few minutes?"

"Shoot," agreed "Smith."

"I think I've got a boy to hunt porcupines. Remember?"

"'Nobody eats a porcupine.'"

"Right! Though I had to see a picture of one to understand what you meant. To put it in trader terms, the way to kill a business is to make it unprofitable. Slave raiding is a business, the way to kill it is to put it in the red. Porcupine spines on the victims will do it."

"If we had the spines," the "X" Corps director agreed dryly. "You have an idea for a weapon?"

"Me? What do you think I am? A genius? But I think I've found one. Name is Joel de la Croix. He's supposed to be about the hottest thing MIT ever turned out. I've gossiped with him about what I used to do as a firecontrolman in Sisu. He came up with some brilliant ideas without being prodded. Then he said, 'Thor, it's ridiculous for a ship to be put out of action by a silly little paralysis beam when it has enough power in its guts to make a small star.'"

"A very small star. But I agree."

"Okay. I've got him stashed in our Havermeyer Labs in Toronto. As soon as your boys okay him, I want to hand him a truckload of money and give him a free hand. I'll feed him all I know about raider tactics and so forth—trance tapes, maybe, as I won't have time to work with him much. I'm being run ragged here."

"He'll need a team. This isn't a home-workshop project."

"I know. I'll funnel names to you as fast as I have them. Project Porcupine will have all the men and money it can use. But, Jake, how many of these gadgets can I sell to the Guard?"

"Eh?"

"I'm supposed to be running a business. If I run it into the ground, the courts will boost me out. I'm going to let Project Porcupine spend megabucks like water—but I've got to justify it to directors and stockholders. If we come up with something, I can sell several hundred units to Free Traders, I can sell some to ourselves—but I need to show a potential large market to justify the expenditure. How many can the Guard use?"

"Thor, you're worrying unnecessarily. Even if you don't come up with a superweapon—and your chances aren't good—all research pays off. Your stockholders won't lose."

"I am not worrying unnecessarily! I've got this job by a handful of votes; a special stockholders meeting could kick me out tomorrow. Sure research pays off, but not necessarily quickly. You can count on it that every credit I spend is reported to people who would love to see me bumped—so I've got to have reasonable justification."

"How about a research contract?"

"With a vice colonel staring down my boy's neck and telling him what to do? We want to give him a free hand."

"Mmm . . . yes. Suppose I get you a letter-of-intent? We'll make the figure as high as possible. I'll have to see the Marshal-in-Chief. He's on Luna at the moment and I can't squeeze time to go to Luna this week. You'll have to wait a few days."

"I'm not going to wait; I'm going to assume that you can do it. Jake, I'm going to get things rolling and get out of this crazy job—if you won't have me in the corps I can always be an ordnanceman."

"Come on down this evening. I'll enlist you—then I'll order you to detached duty, right where you are."

Thorby's chin dropped. "Jake! You wouldn't do that to me!"

"I would if you were silly enough to place yourself under my orders, Rudbek."

"But—" Thorby shut up. There was no use arguing; there was too much work to be done.

"Smith" added, "Anything else?"

"I guess not."

"I'll have a first check on de la Croix by tomorrow. See you."

Thorby switched off, feeling glummer than ever. It was not the Wing Marshal's half-whimsical threat, nor even his troubled conscience over spending large amounts of other people's money on a project that stood little chance of success; it was simply that he was swamped by a job more complex than he had believed possible.

He picked up the top item again, put it down, pressed the key that sealed him through to Rudbek estate. Leda was summoned to the screen. "I'll be late again. I'm sorry."

"I'll delay dinner. They're enjoying themselves and I had the kitchen make the canapes substantial."

Thorby shook his head. "Take the head of the table. I'll eat here. I may sleep here."

She sighed. "If you sleep. Look, my stupid dear, be in bed by midnight and up not before six. Promise?"

"Okay. If possible."

"It had better be possible, or you will have trouble with me. See you."

He didn't even pick up the top item this time; he simply sat in thought. Good girl, Leda . . . she had even tried to help in the business—until it had become clear that business was not her forte. But she was one bright spot in the gloom; she always bucked him up. If it wasn't patently unfair for a Guardsman to marry—But he couldn't be that unfair to Leda and he had no reason to think she would be willing anyhow. It was unfair enough for him to duck out of a big dinner party at the last minute. Other things. He would have to try to treat her better.

It had all seemed so self-evident: just take over, fumigate that sector facing the Sargony, then pick somebody else to run it. But the more he dug, the more there was to do. Taxes . . . the tax situation was incredibly snarled; it always was. That expansion program the Vegan group was pushing—how could he judge unless he went there and looked? And would he know if he did? And how could he find time?

Funny, but a man who owned a thousand starships automatically never had time to ride in even one of them. Maybe in a year or two—

No, those confounded wills wouldn't even be settled in that time!—two years now and the courts were still chewing it. Why couldn't death be handled decently and simply the way the People did it?

In the meantime he wasn't free to go on with Pop's work.

True, he had accomplished a little. By letting "X" Corps have access to Rudbek's files some of the picture had filled in—Jake had told him that a raid which had wiped out one slaver pesthole had resulted directly from stuff the home office knew and hadn't known that it knew.

Or had somebody known? Some days he thought Weemsby and Bruder had had guilty knowledge, some days not—for all that the files showed was legitimate business . . . sometimes with wrong people. But who knew that they were the wrong people?

He opened a drawer, got out a folder with no "URGENT" flag on it simply because it never left his hands. It was, he felt, the most urgent thing in Rudbek, perhaps in the Galaxy—certainly more urgent than Project Porcupine because this matter was certain to cripple, or at least hamper, the slave trade, while Porcupine was a long chance. But his progress had been slow—too much else to do.

Always too much. Grandmother used to say never to buy too many eggs for your basket. Wonder where she got that?—the People never bought eggs. He had both too many baskets and too many eggs for each. And another basket every day.

Of course, in a tough spot he could always ask himself; "What would Pop do?" Colonel Brisby had phrased that—"I just ask myself, 'What would Colonel Baslim do?'" It helped, especially when he had to remember also what the presiding judge had warned him about the day his parents' shares had been turned over to him; "No man can own a thing to himself alone, and the bigger it is, the less he owns it. You are not free to deal with this property arbitrarily nor foolishly. Your interest does not override that of other stockholders, nor of employees, nor of the public."

Thorby had talked that warning over with Pop before deciding to go ahead with Porcupine.

The Judge was right. His first impulse on taking over the business had been to shut down every Rudbek activity in that infected sector, cripple the slave trade that way. But you could not do that. You could not injure thousands, millions, of honest men to put the squeeze on criminals. It required more judicious surgery.

Which was what he was trying to do now. He started studying the unmarked folder.

Garsch stuck his head in. "Still running under the whip? What's the rush, boy?"

"Jim, where can I find ten honest men?"

"Huh? Diogenes was satisfied to hunt for one. Gave him more than he could handle."

"You know what I mean—ten honest men each qualified to take over as a planetary manager for Rudbek." Thorby added to himself, "—and acceptable to 'X' Corps."

"Now I'll tell one."

"Know any other solution? I'll have each one relieve a manager in the smelly sector and send the man he relieves back—we can't fire them; we'll have to absorb them. Because we don't know. But the new men we can trust and each one will be taught how the slave trade operates and what to look for."

Garsch shrugged. "It's the best we can do. But forget the notion of doing it in one bite; we won't find that many qualified men at one time. Now look, boy, you ain't going to solve it tonight no matter how long you stare at those names. When you are as old as I am, you'll know you can't do everything at once—provided you don't kill yourself first. Either way, someday you die and somebody else has to do the work. You remind me of the man who set out to count stars. Faster he counted, the more new stars kept turning up. So he went fishing. Which you should, early and often."

"Jim, why did you agree to come here? I don't see you quitting work when the others do."

"Because I'm an old idiot. Somebody had to give you a hand. Maybe I relished a chance to take a crack at anything as dirty as the slave trade and this was my way—I'm too old and fat to do it any other way."

Thorby nodded. "I thought so. I've got another way—only, confound it, I'm so busy doing what I must do that I don't have time for what I ought to do . . . and I never get a chance to do what I want to do!"

"Son, that's universal. The way to keep that recipe from killing you is occasionally to do what you want to do anyhow. Which is right now. There's all day tomorrow ain't touched yet . . . and you are going out with me and have a sandwich and look at pretty girls."

"I'm going to have dinner sent up."

"No, you aren't. Even a steel ship has to have time for maintenance. So come along."

Thorby looked at the stack of papers. "Okay."

The old man munched his sandwich, drank his lager, and watched pretty girls, with a smile of innocent pleasure. They were indeed pretty girls; Rudbek City attracted the highest-paid talent in show business.

But Thorby did not see them. He was thinking.

A person can't run out on responsibility. A captain can't, a chief officer can't. But he did not see how, if he went on this way, he would ever be able to join Pop's corps. But Jim was right; here was a place where the filthy business had to be fought, too.

Even if he didn't like this way to tight it? Yes. Colonel Brisby had once said, about Pop: "It means being so devoted to freedom that you are willing to give up your own . . . be a beggar . . . or a slave . . . or die—that freedom may live."

Yes, Pop, but I don't know how to do this job. I'd do it . . . I'm trying to do it. But I'm just fumbling. I don't have any talent for it.

Pop answered, "Nonsense! You can learn to do anything if you apply yourself. You're going to learn if I have to beat your silly head in!"

Somewhere behind Pop Grandmother was nodding agreement and looking stern. Thorby nodded back at her. "Yes, Grandmother. Okay, Pop. I'll try."

"You'll do more than try!"

"I'll do it. Pop."

"Now eat your dinner."

Obediently Thorby reached for his spoon, then noticed that it was a sandwich instead of a bowl of stew. Garsch said, "What are you muttering about?"

"Nothing. I just made up my mind."

"Give your mind a rest and use your eyes instead. There's a time and place for everything."

"You're right, Jim."

"Goodnight, son," the old beggar whispered. "Good dreams . . . and good luck!"

Have Spacesuit Will Travel

Chapter 1

You see, I had this space suit.

How it happened was this way:

"Dad," I said, "I want to go to the Moon."

"Certainly," he answered and looked back at his book. It was Jerome K. Jerome's Three Men in a Boat, which he must know by heart.

I said, "Dad, please! I'm serious."

This time he closed the book on a finger and said gently, "I said it was all right. Go ahead."

"Yes ... but how?"

"Eh?" He looked mildly surprised. "Why, that's your problem, Clifford."

Dad was like that. The time I told him I wanted to buy a bicycle he said, "Go right ahead," without even glancing up-so I had gone to the money basket in the dining room, intending to take enough for a bicycle. But there had been only eleven dollars and forty-three cents in it, so about a thousand miles of mowed lawns later I bought a bicycle. I hadn't said anymore to Dad because if money wasn't in the basket, it wasn't anywhere; Dad didn't bother with banks-just the money basket and one next to it marked "UNCLE SAM," the contents of which he bundled up and mailed to the government once a year. This caused the Internal Revenue Service considerable headache and once they sent a man to remonstrate with him.

First the man demanded, then he pleaded. "But, Dr. Russell, we know your background. You've no excuse for not keeping proper records."

"But I do," Dad told him. "Up here." He tapped his forehead.

"The law requires written records."

"Look again," Dad advised him. "The law can't even require a man to read and write. More coffee?"

The man tried to get Dad to pay by check or money order. Dad read him the fine print on a dollar bill, the part about "legal tender for all debts, public and private."

In a despairing effort to get something out of the trip he asked Dad please not to fill in the space marked "occupation" with "Spy."

"Why not?"

"What? Why, because you aren't-and it upsets people."

"Have you checked with the F.B.I.?"

"Eh? No."

"They probably wouldn't answer. But you've been very polite. I'll mark it 'Unemployed Spy.' Okay?"

The tax man almost forgot his brief case. Nothing fazed Dad, he meant what he said, he wouldn't argue and he never gave in. So when he told me I could go to the Moon but the means were up to me, he meant just that. I could go tomorrow-provided I could wangle a billet in a space ship.

But he added meditatively, "There must be a number of ways to get to the Moon, son. Better check 'em all. Reminds me of this passage I'm reading. They're trying to open a tin of pineapple and Harris has left the can opener back in London. They try several ways." He started to read aloud and I sneaked out-I had heard that passage five hundred times. Well, three hundred.

I went to my workshop in the barn and thought about ways. One way was to go to the Air Academy at Colorado Springs-if I got an appointment, if I graduated, if I managed to get picked for the Federation Space Corps, there was a chance that someday I would be ordered to Lunar Base, or at least one of the satellite stations.

Another way was to study engineering, get a job in jet propulsion, and buck for a spot that would get me sent to the Moon. Dozens, maybe hundreds, of engineers had been to the Moon, or were still therefor all sorts of work: electronics, cryogenics, metallurgy, ceramics, air conditioning, as well as rocket engineering.

Oh, yes! Out of a million engineers a handful got picked for the Moon. Shucks, I rarely got picked even playing post office.

Or a man could be an M.D., or a lawyer, or geologist, or toolmaker, and wind up on the Moon at a fat salary-provided they wanted him and nobody else. I didn't care about salary-but how do you arrange to be number one in your specialty?

And there was the straightforward way: trundle in a wheelbarrow of money and buy a ticket.

This I would never manage-I had eighty-seven cents at that moment -but it had caused me to think about it steadily. Of the boys in our school half admitted that they wanted to space, half pretended not to care, knowing how feeble the chances were-plus a handful of creeps who wouldn't leave Earth for any reason. But we talked about it and some of us were determined to go. I didn't break into a rash until American Express and Thos. Cook & Son announced tourist excursions.

I saw their ads in National Geographic while waiting to have my teeth cleaned. After that I never was the same.

The idea that any rich man could simply lay cash on the line and go was more than I could stand. I just had to go. I would never be able to pay for it-or, at least, that was so far in the future there was no use thinking about it. So what could I do to be sent?

You see stories about boys, poor-but-honest, who go to the top because they're smarter than anyone in the county, maybe the state. But they're not talking about me. I was in the top quarter of my graduating class but they do not give scholarships to M.I.T. for that-not from Centerville High. I am stating a fact; our high school isn't very good. It's great to go to-we're league champions in basketball and our squaredance team is state runner-up and we have a swell sock hop every Wednesday. Lots of school spirit.

But not much studying.

The emphasis is on what our principal, Mr. Hanley, calls "preparation for life" rather than on trigonometry. Maybe it does prepare you for life; it certainly doesn't prepare you for CalTech.

I didn't find this out myself. Sophomore year I brought home a questionnaire cooked up by our group project in "Family Living" in social studies. One question read: "How is your family council organized?"

At dinner I said, "Dad, how is our family council organized?"

Mother said, "Don't disturb your father, dear."

Dad said, "Eh? Let me see that."

He read it, then told me to fetch my textbooks. I had not brought them home, so he sent me to school to get them. Fortunately the building was open-rehearsals for the Fall BlowOut. Dad rarely gave orders but when he did he expected results.

I had a swell course that semester-social study, commercial arithmetic, applied English (the class had picked "slogan writing" which was fun), handicrafts (we were building sets for the BlowOut), and gym-which was basketball practice for me; I wasn't tall enough for first team but a reliable substitute gets his varsity letter his senior year. All in all, I was doing well in school and knew it.

Dad read all my textbooks that night; he is a fast reader. In social study I reported that our family was an informal democracy; it got by-the class was arguing whether the chairmanship of a council should rotate or be elective, and whether a grandparent living in the home was eligible. We decided that a grandparent was a member but should not be chairman, then we formed committees to draw up a constitution for an ideal family organization, which we would present to our families as the project's findings.

Dad was around school a good bit the next few days, which worried me -when parents get overactive they are always up to something.

The following Saturday evening Dad called me into his study. He had a stack of textbooks on his desk and a chart of Centerville High School's curriculum, from American Folk Dancing to Life Sciences. Marked on it was my course, not only for that semester but for junior and senior years the way my faculty advisor and I had planned it.

Dad stared at me like a gentle grasshopper and said mildly, "Kip, do you intend to go to college?"

"Huh? Why, certainly, Dad!"

"With what?"

I hesitated. I knew it cost money. While there had been times when dollar bills spilled out of the basket onto the floor, usually it wouldn't take long to count what was in it. "Uh, maybe I'll get a scholarship. Or I could work my way."

He nodded. "No doubt ... if you want to. Money problems can always be solved by a man not frightened by them. But when I said, 'With what?' I was talking about up here." He tapped his skull.

I simply stared. "Why, I'll graduate from high school, Dad. That'll get me into college."

"So it will. Into our State University, or the State Aggie, or State Normal. But, Kip, do you know that they are flunking out 40 per cent of each freshman class?"

"I wouldn't flunk!"

"Perhaps not. But you will if you tackle any serious subject-engineering, or science, or pre-med. You would, that is to say, if your preparation were based on this." He waved a hand at the curriculum.

I felt shocked. "Why, Dad, Center is a swell school." I remembered things they had told us in P.T.A. Auxiliary. "It's run along the latest, most scientific lines, approved by psychologists, and—"

"-and paying excellent salaries," he interrupted, "for a staff highly trained in modern pedagogy. Study projects emphasize practical human problems to orient the child in democratic social living, to fit him for the vital, meaningful tests of adult life in our complex modern culture. Excuse me, son; I've talked with Mr. Hanley. Mr. Hanley is sincere-and to achieve these noble purposes we are spending more per student than is any other state save California and New York."

"Well… what's wrong with that?"

"What's a dangling participle?"

I didn't answer. He went on, "Why did Van Buren fail of reelection? How do you extract the cube root of eighty-seven?"

Van Buren had been a president; that was all I remembered. But I could answer the other one. "If you want a cube root, you look in a table in the back of the book."

Dad sighed. "Kip, do you think that table was brought down from on high by an archangel?" He shook his head sadly. "It's my fault, not yours. I should have looked into this years ago-but I had assumed, simply because you liked to read and were quick at figures and clever with your hands, that you were getting an education."

"You think I'm not?"

"I know you are not. Son, Centerville High is a delightful place, well equipped, smoothly administered, beautifully kept. Not a 'blackboard jungle,' oh, no!-I think you kids love the place. You should. But this-" Dad slapped the curriculum chart angrily. "Twaddle! Beetle tracking! Occupational therapy for morons!"

I didn't know what to say. Dad sat and brooded. At last he said, "The law declares that you must attend school until you are eighteen or have graduated from high school."

"Yes, sir."

"The school you are in is a waste of time. The toughest course we can pick won't stretch your mind. But it's either this school, or send you away."

I said, "Doesn't that cost a lot of money?"

He ignored my question. "I don't favor boarding schools, a teenager belongs with his family. Oh, a tough prep school back east can drill you so that you can enter Stanford, or Yale, or any of the best-but you can pick up false standards, too-nutty ideas about money and social position and the right tailor. It took me years to get rid of ones I acquired that way. Your mother and I did not pick a small town for your boyhood unpurposefully. So you'll stay in Centerville High."

I looked relieved.

"Nevertheless you intend to go to college. Do you intend to become a professional man? Or will you look for snap courses in more elaborate ways to make bayberry candles? Son, your life is yours, to do with as you wish. But if you have any thought of going to a good university and studying anything of importance, then we must consider how to make best use of your next three years."

"Why, gosh, Dad, of course I want to go to a good—"

"See me when you've thought it over. Good night."

I did for a week. And, you know, I began to see that Dad was right. Our project in "Family Living" was twaddle. What did those kids know about running a family? Or Miss Finchley?-unmarried and no kids. The class decided unanimously that every child should have a room of his own, and be given an allowance "to teach him to handle money." Great stuff… but how about the Quinlan family, nine kids in a five-room house? Let's not be foolish.

Commercial arithmetic wasn't silly but it was a waste of time. I read the book through the first week; after that I was bored.

Dad switched me to algebra, Spanish, general science, English grammar and composition; the only thing unchanged was gym. I didn't have it too tough catching up; even those courses were watered down. Nevertheless, I started to learn, for Dad threw a lot of books at me and said, "Clifford, you would be studying these if you were not in overgrown kindergarten. If you soak up what is in them, you should be able to pass College Entrance Board Examinations. Possibly."

After that he left me alone; he meant it when he said that it was my choice. I almost bogged down-those books were hard, not the predigested pap I got in school. Anybody who thinks that studying Latin by himself is a snap should try it.

I got discouraged and nearly quit-then I got mad and leaned into it. After a while I found that Latin was making Spanish easier and vice versa. When Miss Hernandez, my Spanish teacher, found out I was studying Latin, she began tutoring me. I not only worked my way through Virgil, I learned to speak Spanish like a Mexicano.

Algebra and plane geometry were all the math our school offered; I went ahead on my own with advanced algebra and solid geometry and trigonometry and might have stopped so far as College Boards were concerned-but math is worse than peanuts. Analytical geometry seems pure Greek until you see what they're driving at-then, if you know algebra, it bursts on you and you race through the rest of the book. Glorious!

I had to sample calculus and when I got interested in electronics I needed vector analysis. General science was the only science course the school had and pretty general it was, too-about Sunday supplement level. But when you read about chemistry and physics you want to do it, too. The barn was mine and I had a chem lab and a darkroom and an electronics bench and, for a while, a ham station. Mother was perturbed when I blew out the windows and set fire to the barn-just a small fire-but Dad was not. He simply suggested that I not manufacture explosives in a frame building.

When I took the College Boards my senior year I passed them.

It was early March my senior year that I told Dad I wanted to go to the Moon. The idea had been made acute by the announcement of commercial flights but I had been "space happy" ever since the day they announced that the Federation Space Corps had established a lunar base. Or earlier. I told Dad about my decision because I felt that he would know the answer. You see. Dad always found ways to do anything he decided to do.

When I was little we lived lots of places-Washington, New York/ Los Angeles, I don't know where-usually in hotel apartments. Dad was always flying somewhere and when he was home there were visitors; I never saw him much. Then we moved to Centerville and he was always home, his nose in a book or working at his desk. When people wanted to see him they had to come to him. I remember once, when the money basket was empty, Dad told Mother that "a royalty was due." I hung around that day because I had never seen a king (I was eight) and when a visitor showed up I was disappointed because he didn't wear a crown. There was money in the basket the next day so I decided that he had been incognito (I was reading The Little Lame

Prince) and had tossed Dad a purse of gold-it was at least a year before I found out that a "royalty" could be money from a patent or a book or business stock, and some of the glamour went out of life. But this visitor, though not king, thought he could make Dad do what he wanted rather than what Dad wanted:

"Dr. Russell, I concede that Washington has an atrocious climate. But you will have airconditioned offices."

"With clocks, no doubt. And secretaries. And soundproofing."

"Anything you want. Doctor."

"The point is, Mr. Secretary, I don't want them. This household has no clocks. Nor calendars. Once I had a large income and a larger ulcer; I now have a small income and no ulcer. I stay here."

"But the job needs you."

"The need is not mutual. Do have some more meat loaf."

Since Dad did not want to go to the Moon, the problem was mine. I got down college catalogs I had collected and started listing engineering schools. I had no idea how I could pay tuition or even eat-but the first thing was to get myself accepted by a tough school with a reputation.

If not, I could enlist in the Air Force and try for an appointment. If I missed, I could become an enlisted specialist in electronics; Lunar Base used radar and astrar techs. One way or another, I was going.

Next morning at breakfast Dad was hidden behind the New York Times while Mother read the Herald-Trib. I had the Centerville Clarion but it's fit only for wrapping salami. Dad looked over his paper at me. "Clifford, here's something in your line."

"Huh?"

"Don't grunt; that is an uncouth privilege of seniors. This." He handed it to me.

It was a soap ad.

It announced that tired old gimmick, a gigantic supercolossal prize contest. This one promised a thousand prizes down to a last hundred, each of which was a year's supply of Skyway Soap.

Then I spilled cornflakes in my lap. The first prize was- "-AN ALL-EXPENSE TRIP TO THE MOON!!!"

That's the way it read, with three exclamation points-only to me there were a dozen, with bursting bombs and a heavenly choir.

Just complete this sentence in twenty-five words or less: "I use Skyway Soap because…" (And send in the usual soap wrapper or reasonable facsimile.)

There was more about"-joint management of American Express and Thos. Cook-" and "-with the cooperation of the United States Air Force-" and a list of lesser prizes. But all I saw, while milk and soggy cereal soaked my pants, was: "-TRIP TO THE MOON!!!"

Chapter 2

First I went skyhigh with excitement… then as far down with depression. I didn't win contests-why, if I bought a box of Cracker Jack, I'd get one they forgot to put a prize in. I had been cured of matching pennies. If I ever-

"Stop it," said Dad.

I shut up.

"There is no such thing as luck; there is only adequate or inadequate preparation to cope with a statistical universe. Do you intend to enter this?"

"Do I!"

"I assume that to be affirmative. Very well, make a systematic effort."

I did and Dad was helpful-he didn't just offer me more meat loaf. But he saw to it I didn't go to pieces; I finished school and sent off applications for college and kept my job-I was working after school that semester at Charton's Pharmacy-soda jerk, but also learning about pharmacy. Mr. Charton was too conscientious to let me touch anything but packaged items, but I learned-materia medica and nomenclature and what various antibiotics were for and why you had to be careful. That led into organic chemistry and biochemistry and he lent me Walker, Boyd and Asimov-biochemistry makes atomic physics look simple, but presently it begins to make sense.

Mr. Charton was an old widower and pharmacology was his life. He hinted that someone would have to carry on the pharmacy someday-some young fellow with a degree in pharmacy and devotion to the profession. He said that he might be able to help such a person get through school. If he had suggested that I could someday run the dispensary at Lunar Base, I might have taken the bait. I explained that I was dead set on spacing, and engineering looked like my one chance.

He didn't laugh. He said I was probably right-but that I shouldn't forget that wherever Man went, to the Moon, on Mars, or the farthest stars, pharmacists and dispensaries would go along. Then he dug out books for me on space medicine-Strughold and Haber and Stapp and others. "I once had ideas along that line. Kip," he said quietly, "but now it's too late."

Even though Mr. Charton was not really interested in anything but drugs, we sold everything that drugstores sell, from bicycle tires to home permanent kits.

Including soap, of course.

We were selling darned little Skyway Soap; Centerville is conservative about new brands-I'll bet some of them made their own soap. But when I showed up for work that day I had to tell Mr. Charton about it. He dug out two dustcovered boxes and put them on the counter. Then he phoned his jobber in Springfield.

He really did right by me. He marked Skyway Soap down almost to cost and pushed it-and he almost always got the wrappers before he let the customer go. Me, I stacked a pyramid of Skyway Soap on each end of the fountain and every coke was accompanied by a spiel for good old Skyway, the soap that washes cleaner, is packed with vitamins, and improves your chances of Heaven, not to mention its rich creamy lather, finer ingredients, and refusal to take the Fifth Amendment. Oh, I was shameless! Anybody who got away without buying was deaf or fast on his feet.

If he bought soap without leaving the wrappers with me he was a magician. Adults I talked out of it; kids, if I had to, I paid a penny for each wrapper. If they brought in wrappers from around town, I paid a dime a dozen and threw in a cone. The rules permitted a contestant to submit any number of entries as long as each was written on a Skyway Soap wrapper or reasonable facsimile.

I considered photographing one and turning out facsimiles by the gross, but Dad advised me not to. "It is within the rules, Kip, but I've never yet known a skunk to be welcome at a picnic."

So I used soap. And I sent in wrappers with slogans:

"I use Skyway Soap because-

-it makes me feel so clean."

-highway or byway, there's no soap like Skyway!"

-its quality is skyhigh."

-it is pure as the Milky Way."

-it is pure as Interstellar Space."

-it leaves me fresh as a rain-swept sky."

And so on endlessly, until I tasted soap in my dreams. Not just my own slogans either; Dad thought them up, and so did Mother and Mr. Charton. I kept a notebook and wrote them down in school or at work or in the middle of the night. I came home one evening and found that Dad had set up a card file for me and after that I kept them alphabetically to avoid repeating. A good thing, too, for toward the last I sent in as many as a hundred a day. Postage mounted, not to mention having to buy some wrappers.

Other kids in town were in the contest and probably some adults, but they didn't have the production line I had. I'd leave work at ten o'clock, hurry home with the day's slogans and wrappers, pick up more slogans from Dad and Mother, then use a rubber stamp on the inside of each wrapper: "I use Skyway Soap because-" with my name and address. As I typed, Dad filled out file cards. Each morning I mailed the bunch on my way to school.

I got laughed at but the adults most inclined to kid me were quickest to let me have their wrappers.

All but one, an oaf called "Ace" Quiggle. I shouldn't class Ace as an adult; he was an overage juvenile delinquent. I guess every town has at least one Ace. He hadn't finished Centerville High, a distinction since Mr. Hanley believed in promoting everybody "to keep age groups together." As far back as I remember Ace hung around Main Street, sometimes working, mostly not.

He specialized in "wit." He was at our fountain one day, using up two dollars' worth of space and time for one thirty-five-cent malt. I had just persuaded old Mrs. Jenkins to buy a dozen cakes and had relieved her of the wrappers. As she left, Ace picked one off my counter display and said, "You're selling these. Space Cadet?"

"That's right, Ace. You'll never find such a bargain again."

"You expect to go to the Moon, just selling soap, Captain? Or should I say 'Commodore'? Yuk yuk yukkity yuk!" That's how Ace laughed, like a comic strip.

"I'm trying," I said politely. "How about some?"

"You're sure it's good soap?"

"Positive."

"Well, I'll tell you. Just to help you out-I'll buy one bar."

A plunger. But this might be the winning wrapper. "Sure thing, Ace. Thanks a lot." I took his money, he slipped the cake into his pocket and started to leave. "Just a second, Ace. The wrapper. Please?"

He stopped. "Oh, yes." He took out the bar, peeled it, held up the wrapper. "You want this?"

"Yes, Ace. Thanks."

"Well, I'll show you how to get the best use of it." He reached across to the cigar lighter on the tobacco counter and set fire to it, lit a cigarette with it, let the wrapper bum almost to his fingers, dropped it and stepped on it.

Mr. Charton watched from the window of the dispensary.

Ace grinned. "Okay, Space Cadet?"

I was gripping the ice-cream scoop. But I answered, "Perfectly okay, Ace. It's your soap."

Mr. Charton came out and said, "I'll take the fountain, Kip. There's a package to deliver."

That was almost the only wrapper I missed. The contest ended May 1 and both Dad and Mr. Charton decided to stock up and cleaned out the last case in the store. It was almost eleven before I had them written up, then Mr. Charton drove me to Springfield to get them postmarked before midnight.

I had sent in five thousand seven hundred and eighty-two slogans. I doubt if Centerville was ever so scrubbed.

The results were announced on the Fourth of July. I chewed my nails to the elbows in those nine weeks. Oh, other things happened. I graduated and Dad and Mother gave me a watch and we paraded past Mr. Hanley and got our diplomas. It felt good, even though what Dad had persuaded me to learn beat what I learned at dear old Center six ways from zero. Before that was Sneak Day and Class Honeymoon and Senior Prom and the Class Play and the Junior-Senior Picnic and all the things they do to keep the animals quiet. Mr. Charton let me off early if I asked, but I didn't ask often as my mind wasn't on it and I wasn't going steady anyhow. I had been earlier in the year, but she-Elaine McMurty-wanted to talk boys and clothes and I wanted to talk space and engineering so she put me back into circulation.

After graduation I worked for Mr. Charton full time. I still didn't know how I was going to college. I didn't think about it; I just dished sundaes and held my breath until the Fourth of July.

It was to be on television at 8 P.M. We had a TV-a black and white flatimage job-but it hadn't been turned on in months; after I built it I lost interest. I dug it out, set it up in the living room and tested the picture. I killed a couple of hours adjusting it, then spent the rest of the day chewing nails. I couldn't eat dinner. By seven-thirty I was in front of the set, not-watching a comedy team and fiddling with my file cards. Dad came in, looked sharply at me, and said, "Take a grip on yourself, Kip. Let me remind you again that the chances are against you."

I gulped. "I know, Dad."

"Furthermore, in the long run it won't matter. A man almost always gets what he wants badly enough. I am sure you will get to the Moon someday, one way or another."

"Yes, sir. I just wish they would get it over with."

"They will. Coming, Emma?"

"Right away, dearest," Mother called back. She came in, patted my hand and sat down.

Dad settled back. "Reminds me of election nights."

Mother said, "I'm glad you're no longer up to your ears in that."

"Oh, come now, sweetheart, you enjoyed every campaign."

Mother sniffed.

The comics went back where comics go, cigarettes did a cancan, then dived into their packs while a soothing voice assured us that carcinogenous factors were unknown in Coronets, the safe. Safe, SAFE smoke with the true tobacco flavor. The program cut to the local station; we were treated to a thrilling view of Center Lumber & Hardware and I started pulling hairs out of the back of my hand.

The screen filled with soap bubbles; a quartet sang that this was the Skyway Hour, as if we didn't know. Then the screen went blank and sound cut off and I swallowed my stomach.

The screen lighted up with: "Network Difficulty-Do Not Adjust Your Sets."

I yelped, "Oh, they can't do that! They can't!"

Dad said, "Stop it, Clifford."

I shut up. Mother said, "Now, dearest, he's just a boy."

Dad said, "He is not a boy; he is a man. Kip, how do you expect to face a firing squad calmly if this upsets you?"

I mumbled; he said, "Speak up." I said I hadn't really planned on facing one.

"You may need to, someday. This is good practice. Try the Springfield channel; you may get a skip image."

I tried, but all I got was snow and the sound was like two cats in a sack. I jumped back to our local station.

"-jor General Bryce Gilmore, United States Air Force, our guest tonight, who will explain to us, later in this program, some hitherto unreleased pictures of Federation Lunar Base and the infant Luna City, the fastest growing little city on the Moon. Immediately after announcing the winners we will attempt a television linkage with Lunar Base, through the cooperation of the Space Corps of the—"

I took a deep breath and tried to slow my heartbeat, the way you steady down for a free-throw in a tie game. The gabble dragged on while celebrities were introduced, the contest rules were explained, an improbably sweet young couple explained to each other why they always used Skyway Soap. My own sales talks were better.

At last they got to it. Eight girls paraded out; each held a big card over her head. The M.C. said in an awestruck voice: "And now… and now -the winning Skyway slogan for the ... FREE TRIP TO THE MOON!"

I couldn't breathe.

The girls sang, "I like Skyway Soap because-" and went on, each turning her card as a word reached her: "-it ... is ... as ... pure ... as ... the ... sky ... itself!"

I was fumbling cards. I thought I recognized it but couldn't be sure-not after more than five thousand slogans. Then I found it-and checked the cards the girls were holding.

"Dad! Mother! I've won, I've won!"

Chapter 3

"Hold it, Kip!" Dad snapped. "Stop it."

Mother said, "Oh, dear!"

I heard the M.C. saying, "-present the lucky winner, Mrs. Xenia Donahue, of Great Falls, Montana.… Mrs. Donahue!"

To a fanfare a little dumpy woman teetered out. I read the cards again. They still matched the one in my hand. I said, "Dad, what happened? That's my slogan."

"You didn't listen."

"They've cheated me!"

"Be quiet and listen,"

"-as we explained earlier, in the event of duplicate entries, priority goes to the one postmarked first. Any remaining tie is settled by time of arrival at the contest office. Our winning slogan was submitted by eleven contestants. To them go the first eleven prizes. Tonight we have with us the six top winners-for the trip to the Moon, the weekend in a satellite space station, the jet flight around the world, the flight to Antarctica, the—"

"Beaten by a postmark. A postmark!"

"-sorry we can't have every one of the winners with us tonight. To the rest this comes as a surprise." The M.C. looked at his watch. "Right this minute, in a thousand homes across the land… right this second-there is a lucky knock on a lucky door of some loyal friend of Skyway —"

There was a knock on our door.

I fell over my feet. Dad answered. There were three men, an enormous crate, and a Western Union messenger singing about Skyway Soap. Somebody said, "Is this where Clifford Russell lives?"

Dad said, "Yes."

"Will you sign for this?"

"What is it?"

"It just says 'This Side Up.' Where do you want it?"

Dad passed the receipt to me and I signed, somehow. Dad said, "Will you put it in the living room, please?"

They did and left and I got a hammer and sidecutters. It looked like a coffin and I could have used one.

I got the top off. A lot of packing got all over Mother's rugs. At last we were down to it.

It was a space suit.

Not much, as space suits go these days. It was an obsolete model that Skyway Soap had bought as surplus material-the tenth-to-hundredth prizes were all space suits. But it was a real one, made by

Goodyear, with air conditioning by York and auxiliary equipment by General Electric. Its instruction manual and maintenance-and-service log were with it and it had racked up more than eight hundred hours in rigging the second satellite station.

I felt better. This was no phony, this was no toy. It had been out in space, even if Ihad not. But would!-someday. I'd learn to use it and someday I'd wear it on the naked face of the Moon.

Dad said, "Maybe we'd better carry this to your workshop. Eh, Kip?"

Mother said, "There's no rush, dearest. Don't you want to try it on, Clifford?"

I certainly did. Dad and I compromised by toting the crate and packing out to the barn. When we came back, a reporter from the Clarion was there with a photographer-the paper had known I was a winner before I did, which didn't seem right.

They wanted pictures and I didn't mind.

I had an awful time getting into it-dressing in an upper berth is a cinch by comparison. The photographer said, "Just a minute, kid. I've seen 'em do it at Wright Field. Mind some advice?"

"Uh? No. I mean, yes, tell me."

"You slide in like an Eskimo climbing into a kayak. Then wiggle your right arm in—"

It was fairly easy that way, opening front gaskets wide and sitting down in it, though I almost dislocated a shoulder. There were straps to adjust for size but we didn't bother; he stuffed me into it, zippered the gaskets, helped me to my feet and shut the helmet.

It didn't have air bottles and I had to live on the air inside while he got three shots. By then I knew that the suit had seen service; it smelled like dirty socks. I was glad to get the helmet off.

Just the same, it made me feel good to wear it. Like a spacer.

They left and presently we went to bed, leaving the suit in the living room.

About midnight I catfooted down and tried it on again.

The next morning I moved it out to my shop before I went to work. Mr. Charton was diplomatic; he just said he'd like to see my space suit when I had time. Everybody knew about it-my picture was on the front page of the Clarion along with the Pikes Peak Hill Climb and the holiday fatalities. The story had been played for laughs, but I didn't mind. I had never really believed I would win-and I had an honest-to-goodness space suit, which was more than my classmates had.

That afternoon Dad brought me a special delivery letter from Skyway Soap. It enclosed a property title to one suit, pressure, serial number so-and-so, ex-US-AF. The letter started with congratulations and thanks but the last paragraphs meant something:

Skyway Soap realizes that your prize may not be of immediate use to you. Therefore, as mentioned in paragraph 4 (a) of the rules. Skyway offers to redeem it for a cash premium of five hundred dollars ($500.00). To avail yourself of this privilege you should return the pressure suit via express collect to Goodyear Corporation (Special Appliances Division, attn: Salvage), Akron, Ohio, on or before the 15th of September.

Skyway Soap hopes that you have enjoyed our Grand Contest as much as we have enjoyed having you and hopes that you will retain your prize long enough to appear with it on your local television station in a special Skyway Jubilee program. A fee of fifty dollars ($50.00) will be paid for this appearance. Your station manager will be in touch with you. We hope that you will be our guest.

All good wishes from Skyway, the Soap as Pure as the Sky Itself.

I handed it to Dad. He read it and handed it back.

I said, "I suppose I should."

He said, "I see no harm. Television leaves no external scars."

"Oh, that. Sure, it's easy money. But I meant I really ought to sell the suit back to them." I should have felt happy since I needed money, while I needed a space suit the way a pig needs a pipe organ. But I didn't, even though I had never had five hundred dollars in my life.

"Son, any statement that starts 'I really ought to-' is suspect. It means you haven't analyzed your motives."

"But five hundred dollars is tuition for a semester, almost."

"Which has nothing to do with the case. Find out what you want to do, then do it. Never talk yourself into doing something you don't want. Think it over." He said goodbye and left.

I decided it was foolish to burn my bridges before I crossed them. The space suit was mine until the middle of September even if I did the sensible thing-by then I might be tired of it.

But I didn't get tired of it; a space suit is a marvelous piece of machinery-a little space station with everything miniaturized. Mine was a chrome-plated helmet and shoulder yoke which merged into a body of silicone, asbestos, and glass-fibre cloth. This hide was stiff except at the joints. They were the same rugged material but were "constant volume" -when you bent a knee a bellows arrangement increased the volume over the knee cap as much as the space back of the knee was squeezed. Without this a man wouldn't be able to move; the pressure inside, which can add up to several tons, would hold him rigid as a statue. These volume compensators were covered with dural armor; even the finger joints had little dural plates over the knuckles.

It had a heavy glass-fibre belt with clips for tools, and there were the straps to adjust for height and weight. There was a back pack, now empty, for air bottles, and zippered pockets inside and out, for batteries and such.

The helmet swung back, taking a bib out of the yoke with it, and the front opened with two gasketed zippers; this left a door you could wiggle into. With helmet clamped and zippers closed it was impossible to open the suit with pressure inside.

Switches were mounted on the shoulder yoke and on the helmet; the helmet was monstrous. It contained a drinking tank, pill dispensers six on each side, a chin plate on the right to switch radio from "receive" to "send," another on the left to increase or decrease flow of air, an automatic polarizer for the face lens, microphone and earphones, space for radio circuits in a bulge back of the head, and an instrument board arched over the head. The instrument dials read backwards because they were reflected in an inside mirror in front of the wearer's forehead at an effective fourteen inches from the eyes.

Above the lens or window there were twin headlights. On top were two antennas, a spike for broadcast and a horn that squirted microwaves like a gun-you aimed it by facing the receiving station. The horn antenna was armored except for its open end.

This sounds as crowded as a lady's purse but everything was beautifully compact; your head didn't touch anything when you looked out the lens. But you could tip your head back and see reflected instruments, or tilt it down and turn it to work chin controls, or simply turn your neck for water nipple or pills. In all remaining space sponge-rubber padding kept you from banging your head no matter what. My suit was like a fine car, its helmet like a Swiss watch. But its air bottles were missing; so was radio gear except for builtin antennas; radar beacon and emergency radar target were gone, pockets inside and out were empty, and there were no tools on the belt. The manual told what it ought to have-it was like a stripped car.

I decided I just had to make it work right.

First I swabbed it out with Clorox to kill the locker-room odor. Then I got to work on the air system.

It's a good thing they included that manual; most of what I thought I knew about space suits was wrong.

A man uses around three pounds of oxygen a day-pounds mass, not pounds per square inch. You'd think a man could carry oxygen for a month, especially out in space where mass has no weight, or on the Moon where three pounds weigh only half a pound. Well, that's okay for space stations or ships or frogmen; they run air through soda lime to take out carbon dioxide, and breathe it again. But not space suits.

Even today people talk about "the bitter cold of outer space"-but space is vacuum and if vacuum were cold, how could a Thermos jug keep hot coffee hot? Vacuum is nothing-it has no temperature, it just insulates.

Threefourths of your food turns into heat-a lot of heat, enough each day to melt fifty pounds of ice and more. Sounds preposterous, doesn't it? But when you have a roaring fire in the furnace, you are cooling your body; even in the winter you keep a room about thirty degrees cooler than your body. When you turn up a furnace's thermostat, you are picking a more comfortable rate for cooling. Your body makes so much heat you have to get rid of it, exactly as you have to cool a car's engine.

Of course, if you do it too fast, say in a subzero wind, you can freeze-but the usual problem in a space suit is to keep from being boiled like a lobster. You've got vacuum all around you and it's hard to get rid of heat.

Some radiates away but not enough, and if you are in sunlight, you pick up still more-this is why space ships are polished like mirrors.

So what can you do?

Well, you can't carry fifty-pound blocks of ice. You get rid of heat the way you do on Earth, by convection and evaporation-you keep air moving over you to evaporate sweat and cool you off. Oh, they'll learn to build space suits that recycle like a space ship but today the practical way is to let used air escape from the suit, flushing away sweat and carbon dioxide and excess heat-while wasting most of the oxygen.

There are other problems. The fifteen pounds per square inch around you includes three pounds of oxygen pressure. Your lungs can get along on less than half that, but only an Indian from the high Andes is likely to he comfortable on less than two pounds oxygen pressure. Nine-tenths of a pound is the limit. Any less than nine-tenths of a pound won't force oxygen into bloodthis is about the pressure at the top of Mount Everest.

Most people suffer from hypoxia (oxygen shortage) long before this, so better use two p.s.i. of oxygen. Mix an inert gas with it, because pure oxygen can cause a sore throat or make you drunk or even cause terrible cramps. Don't use nitrogen (which you've breathed all your life) because it will bubble in your blood if pressure drops and cripple you with "bends." Use helium which doesn't. It gives you a squeaky voice, but who cares?

You can die from oxygen shortage, be poisoned by too much oxygen, be crippled by nitrogen, drown in or be acid-poisoned by carbon dioxide, or dehydrate and run a killing fever. When I finished reading that manual I didn't see how anybody could stay alive anywhere, much less in a space suit.

But a space suit was in front of me that had protected a man for hundreds of hours in empty space.

Here is how you beat those dangers. Carry steel bottles on your back; they hold "air" (oxygen and helium) at a hundred and fifty atmospheres, over 2000 pounds per square inch; you draw from them through a reduction valve down to 150 p.s.i. and through still another reduction valve, a "demand" type which keeps pressure in your helmet at three to five pounds per square inch-two pounds of it oxygen. Put a silicone-rubber collar around your neck and put tiny holes in it, so that the pressure in the body of your suit is less, the air movement still faster; then evaporation and cooling will be increased while the effort of bending is decreased. Add exhaust valves, one at each wrist and ankle-these have to pass water as well as gas because you may be ankle deep in sweat.

The bottles are big and clumsy, weighing around sixty pounds apiece, and each holds only about five mass pounds of air even at that enormous pressure; instead of a month's supply you will have only a few hours-my suit was rated at eight hours for the bottles it used to have. But you will be okay for those hours-if everything works right. You can stretch time, for you don't die from overheating very fast and can stand too much carbon dioxide even longer-but let your oxygen run out and you die in about seven minutes. Which gets us back where we started-it takes oxygen to stay alive.

To make darn sure that you're getting enough (your nose can't tell) you clip a little photoelectric cell to your ear and let it see the color of your blood; the redness of the blood measures the oxygen it carries. Hook this to a galvanometer. If its needle gets into the danger zone, start saying your prayers.

I went to Springfield on my day off, taking the suit's hose fittings, and shopped. I picked up, second hand, two thirty-inch steel bottles from a welding shop-and got myself disliked by insisting on a pressure test. I took them home on the bus, stopped at Pring's Garage and arranged to buy air at fifty atmospheres. Higher pressures, or oxygen or helium, I could get from the Springfield airport, but I didn't need them yet.

When I got home I closed the suit, empty, and pumped it with a bicycle pump to two atmospheres absolute, or one relative, which gave me a test load of almost four to one compared with space conditions. Then I tackled the bottles. They needed to be mirror bright, since you can't afford to let them pick up heat from the Sun. I stripped and scraped and wire-brushed, and buffed and polished, preparatory to nickel-plating.

Next morning, Oscar the Mechanical Man was limp as a pair of long johns.

Getting that old suit not just airtight but helium-tight was the worst headache. Air isn't bad but the helium molecule is so small and agile that it migrates right through ordinary rubber-and I wanted this job to be right, not just good enough to perform at home but okay for space. The gaskets were shot and there were slow leaks almost impossible to find.

I had to get new silicone-rubber gaskets and patching compound and tissue from Goodyear; small-town hardware stores don't handle such things. I wrote a letter explaining what I wanted and why-and they didn't even charge me. They sent me some mimeographed sheets elaborating on the manual.

It still wasn't easy. But there came a day when I pumped Oscar full of pure helium at two atmospheres absolute.

A week later he was still tight as a six-ply tire.

That day I wore Oscar as a self-contained environment. I had already worn him many hours without the helmet, working around the shop, handling tools while hampered by his gauntlets, getting height and size adjustments right. It was like breaking in new ice skates and after a while I was hardly aware I had it on-once I came to supper in it. Dad said nothing and Mother has the social restraint of an ambassador; I discovered my mistake when I picked up my napkin.

Now I wasted helium to the air, mounted bottles charged with air, and suited them. Then I clamped the helmet and dogged the safety catches.

Air sighed softly into the helmet, its flow through the demand valve regulated by the rise and fall of my chest-I could reset it to speed up or slow down by the chin control. I did so, watching the gauge in the mirror and letting it mount until I had twenty pounds absolute inside. That gave me five pounds more than the pressure around me, which was as near as I could come to space conditions without being in space.

I could feel the suit swell and the joints no longer felt loose and easy. I balanced the cycle at five pounds differential and tried to move-And almost fell over. I had to grab the workbench.

Suited up, with bottles on my back, I weighed more than twice what I do stripped. Besides that, although the joints were constant-volume, the suit didn't work as freely under pressure. Dress yourself in heavy fishing waders, put on an overcoat and boxing gloves and a bucket over your head, then have somebody strap two sacks of cement across your shoulders and you will know what a space suit feels like under one gravity.

But ten minutes later I was handling myself fairly well and in half an hour I felt as if I had worn one all my life. The distributed weight wasn't too great (and I knew it wouldn't amount to much on the Moon). The joints were just a case of getting used to more effort. I had had more trouble learning to swim.

It was a blistering day: I went outside and looked at the Sun. The polarizer cut the glare and I was able to look at it. I looked away; polarizing eased off and I could see around me.

I stayed cool. The air, cooled by semi-adiabatic expansion (it said in the manual), cooled my head and flowed on through the suit, washing away body heat and used air through the exhaust valves. The manual said that heating elements rarely cut in, since the usual problem was to get rid of heat; I decided to get dry ice and force a test of thermostat and heater.

I tried everything I could think of. A creek runs back of our place and beyond is a pasture. I sloshed through the stream, lost my footing and fell -the worst trouble was that I could never see where I was putting my feet. Once I was down I lay there a while, half floating but mostly covered. I didn't get wet, I didn't get hot, I didn't get cold, and my breathing was as easy as ever even though water shimmered over my helmet.

I scrambled heavily up the bank and fell again, striking my helmet against a rock. No damage, Oscar was built to take it. I pulled my knees under me, got up, and crossed the pasture, stumbling on rough ground but not falling. There was a haystack there and I dug into it until I was buried.

Cool fresh air ... no trouble, no sweat.

After three hours I took it off. The suit had relief arrangements like any pilot's outfit but I hadn't rigged it yet, so I had come out before my air was gone. When I hung it in the rack I had built, I patted the shoulder yoke. "Oscar, you're all right," I told it. "You and I are partners. We're going places." I would have sneered at five thousand dollars for Oscar.

While Oscar was taking his pressure tests I worked on his electrical and electronic gear. I didn't bother with a radar target or beacon; the first is childishly simple, the second is fiendishly expensive. But I did want radio for the space-operations band of the spectrum-the antennas suited only those wavelengths. I could have built an ordinary walkie-talkie and hung it outside-but I would have been kidding myself with a wrong frequency and gear that might not stand vacuum. Changes in pressure and temperature and humidity do funny things to electronic circuits; that is why the radio was housed inside the helmet.

The manual gave circuit diagrams, so I got busy. The audio and modulating circuits were no problem, just battery-operated transistor circuitry which I could make plenty small enough. But the microwave part-It was a two-headed calf, each with transmitter and receiver-one centimeter wavelength for the horn and three octaves lower at eight centimeters for the spike in a harmonic relationship, one crystal controlling both. This gave more signal on broadcast and better aiming when squirting out the horn and also meant that only part of the rig had to be switched in changing antennas. The output of a variable-frequency oscillator was added to the crystal frequency in tuning the receiver. The circuitry was simple-on paper.

But microwave circuitry is never easy; it takes precision machining and a slip of a tool can foul up the impedance and ruin a mathematically calculated resonance.

Well, I tried. Synthetic precision crystals are cheap from surplus houses and some transistors and other components I could vandalize from my own gear. And I made it work, after the fussiest pray-and-try-again I have ever done. But the consarned thing simply would not fit into the helmet.

Call it a moral victory-I've never done better work.

I finally bought one, precision made and embedded in plastic, from the same firm that sold me the crystal. Like the suit it was made for, it was obsolete and I paid a price so low that I merely screamed. By then I would have mortgaged my soul-I wanted that suit to work.

The only thing that complicated the rest of the electrical gear was that everything had to be either "fail-safe" or "no-fail"; a man in a space suit can't pull into the next garage if something goes wrong-the stuff has to keep on working or he becomes a vital statistic. That was why the helmet had twin headlights; the second cut in if the first failed-even the peanut lights for the dials over my head were twins. I didn't take short cuts; every duplicate circuit I kept duplicate and tested to make sure that automatic changeover always worked.

Mr. Charton insisted on filling the manual's list on those items a drugstore stocks-maltose and dextrose and amino tablets, vitamins, dexedrine, dramamine, aspirin, antibiotics, antihistamines, codeine, almost any pill a man can take to help him past a hump that might kill him. He got Doc Kennedy to write prescriptions so that I could stock Oscar without breaking laws.

When I got through Oscar was in as good shape as he had ever been in Satellite Two. It had been more fun than the time I helped Jake Bixby turn his heap into a hotrod.

But summer was ending and it was time I pulled out of my daydream. I still did not know where I was going to school, or how-or if. I had saved money but it wasn't nearly enough. I had spent a little on postage and soap wrappers but I got that back and more by one fifteen-minute appearance on television and I hadn't spent a dime on girls since March-too busy. Oscar cost surprisingly little; repairing Oscar had been mostly sweat and screwdriver. Seven dollars out of every ten I had earned was sitting in the money basket.

But it wasn't enough.

I realized glumly that I was going to have to sell Oscar to get through the first semester. But how would I get through the rest of the year? Joe Valiant the all-American boy always shows up on the campus with fifty cents and a heart of gold, then in the last chapter is tapped for Skull-and-Bones and has money in the bank. But I wasn't Joe Valiant, not by eight decimal places. Did it make sense to start if I was going to have to drop out about Christmas? Wouldn't it be smarter to stay out a year and get acquainted with a pick and shovel?

Did I have a choice? The only school I was sure of was State U. - and there was a row about professors being fired and talk that State U. might lose its accredited standing. Wouldn't it be comical to spend years slaving for a degree and then have it be worthless because your school wasn't recognized?

State U. wasn't better than a "B" school in engineering even before this fracas.

Rensselaer and CalTech turned me down the same day-one with a printed form, the other with a polite letter saying it was impossible to accept all qualified applicants.

Little things were getting my goat, too. The only virtue of that television show was the fifty bucks. A person looks foolish wearing a space suit in a television studio and our announcer milked it for laughs, rapping the helmet and asking me if I was still in there. Very funny. He asked me what I wanted with a space suit and when I tried to answer he switched off the mike in my suit and patched in a tape with nonsense about space pirates and flying saucers. Half the people in town thought it was my voice.

It wouldn't have been hard to live down if Ace Quiggle hadn't turned up. He had been missing all summer, in jail maybe, but the day after the show he took a seat at the fountain, stared at me and said in a loud whisper, "Say, ain't you the famous space pirate and television star?"

I said, "What'll you have, Ace?"

"Gosh! Could I have your autograph? I ain't never seen a real live space pirate before!"

"Give me your order, Ace. Or let someone else use that stool."

"A choc malt. Commodore-and leave out the soap."

Ace's "wit" went on every time he showed up. It was a dreadfully hot summer and easy to get tempery. The Friday before Labor Day weekend the store's cooling system went sour, we couldn't get a repairman and I spent three bad hours fixing it, ruining my second-best pants and getting myself reeking. I was back at the fountain and wishing I could go home for a bath when Ace swaggered in, greeting me loudly with "Why, if it isn't Commander Comet, the Scourge of the Spaceways! Where's your blaster gun, Commander? Ain't you afraid the Galactic Emperor will make you stay in after school for running around bare-nekkid? Yuk yuk yukkity yuk!"

A couple of girls at the fountain giggled.

"Lay off, Ace," I said wearily. "It's a hot day."

"That's why you're not wearing your rubber underwear?" The girls giggled again.

Ace smirked. He went on: "Junior, seein' you got that clown suit, why don't you put it to work? Run an ad in the Clarion: 'Have Space Suit-Will Travel.' Yukkity yuk! Or you could hire out as a scarecrow."

The girls snickered. I counted ten, then again in Spanish, and in Latin, and said tensely, "Ace, just tell me what you'll have."

"My usual. And snap it up-I've got a date on Mars."

Mr. Charton came out from behind his counter, sat down and asked me to mix him a lime cooler, so I served him first. It stopped the flow of wit and probably saved Ace's life.

The boss and I were alone shortly after. He said quietly, "Kip, a reverence for life does not require a man to respect Nature's obvious mistakes."

"Sir?"

"You need not serve Quiggle again. I don't want his trade."

"Oh, I don't mind. He's harmless."

"I wonder how harmless such people are? To what extent civilization is retarded by the laughing jackasses, the empty-minded belittlers? Go home; you'll want to make an early start tomorrow."

I had been invited to the Lake of the Forest for the long Labor Day weekend by Jake Bixby's parents. I wanted to go, not only to get away from the heat but also to chew things over with Jake. But I answered, "Shucks, Mr. Charton, I ought not to leave you stuck."

"The town will be deserted over the holiday; I may not open the fountain. Enjoy yourself. This summer has worn you a bit fine. Kip."

I let myself be persuaded but I stayed until closing and swept up. Then I walked home, doing some hard thinking.

The party was over and it was time to put away my toys. Even the village halfwit knew that I had no sensible excuse to have a space suit. Not that I cared what Ace thought… but I did have no use for it-and I needed money. Even if Stanford and M.I.T. and Carnegie and the rest turned me down, I was going to start this semester. State U. wasn't the best-but neither was I and I had learned that more depended on the student than on the school.

Mother had gone to bed and Dad was reading. I said hello and went to the barn, intending to strip my gear off Oscar, pack him into his case, address it, and in the morning phone the express office to pick it up. He'd be gone before I was back from the Lake of the Forest. Quick and clean.

He was hanging on his rack and it seemed to me that he grinned hello. Nonsense, of course. I went over and patted his shoulder. "Well, old fellow, you've been a real chum and it's been nice knowing you. See you on the Moon-I hope."

But Oscar wasn't going to the Moon. Oscar was going to Akron, Ohio, to "Salvage." They were going to unscrew parts they could use and throw the rest of him on the junk pile.

My mouth felt dry.

("It's okay, pal," Oscar answered.)

See that? Out of my silly head! Oscar didn't really speak; I had let my imagination run wild too long. So I quit patting him, hauled the crate out and took a wrench from his belt to remove the gas bottles.

I stopped.

Both bottles were charged, one with oxygen, one with oxy-helium. I had wasted money to do so because I wanted, just once, to try a spaceman's mix.

The batteries were fresh and power packs were charged.

"Oscar," I said softly, "we're going to take a last walk together. Okay?"

("Swell!")

I made it a dress rehearsal-water in the drinking tank, pill dispensers loaded, first-aid kit inside, vacuum-proof duplicate (I hoped it was vacuum-proof) in an outside pocket. All tools on belt, all lanyards tied so that tools wouldn't float away in free fall. Everything.

Then I heated up a circuit that the F.C.C. would have squelched had they noticed, a radio link I had salvaged out of my effort to build a radio for Oscar, and had modified as a test rig for Oscar's ears and to let me check the aiming of the directional antenna. It was hooked in with an echo circuit that would answer back if I called it-a thing I had bread hoarded out of an old Webcor wire recorder, vintage 1950.

Then I climbed into Oscar and buttoned up. "Tight?"

("Tight!")

I glanced at the reflected dials, noticed the blood-color reading, reduced pressure until Oscar almost collapsed. At nearly sea-level pressure I was in no danger from hypoxia; the trick was to avoid too much oxygen.

We started to leave when I remembered something. "Just a second, Oscar." I wrote a note to my folks, telling them that I was going to get up early and catch the first bus to the lake. I could write while suited up now, I could even thread a needle. I stuck the note under the kitchen door.

Then we crossed the creek into the pasture. I didn't stumble in wading;

I was used to Oscar now, surefooted as a goat.

Out in the field I keyed my talkie and said, "Junebug, calling Peewee. Come in, Peewee."

Seconds later my recorded voice came back: " 'Junebug, calling Peewee. Come in, Peewee.'"

I shifted to the horn antenna and tried again. It wasn't easy to aim in the dark but it was okay. Then I shifted back to spike antenna and went on calling Peewee while moving across the pasture and pretending that I was on Venus and had to stay in touch with base because it was unknown terrain and unbreathable atmosphere. Everything worked perfectly and if it had been Venus, I would have been all right.

Two lights moved across the southern sky, planes I thought, or maybe helis. Just the sort of thing yokels like to report as "flying saucers." I watched them, then moved behind a little rise that would tend to spoil reception and called Peewee. Peewee answered and I shut up; it gets dull talking to an idiot circuit which can only echo what you say to it.

Then I heard: "Peewee to Junebug! Answer!"

I thought I had been monitored and was in trouble-then decided that some ham had picked me up. "Junebug here. I read you. Who are you?"

The test rig echoed my words.

Then the new voice shrilled, "Peewee here! Home me in!"

This was silly. But I found myself saying, "Junebug to Peewee, shift to directional frequency at one centimeter—and keep talking, keep talking!" I shifted to the horn antenna.

"Junebug, I read you. Fix me. One, two, three, four, five, six, seven-—"

"You're due south of me, about forty degrees. Who are you?"

It must be one of those lights. It had to be.

But I didn't have time to figure it out. A space ship almost landed on me.

Chapter 4

I said "space ship," not "rocket ship." It made no noise but a whoosh and there weren't any flaming jets-it seemed to move by clean living and righteous thoughts.

I was too busy keeping from being squashed to worry about details. A space suit in one gravity is no track suit; it's a good thing I had practiced. The ship sat down where I had just been, occupying more than its share of pasture, a big black shape.

The other one whooshed down, too, just as a door opened in the first. Light poured through the door; two figures spilled out and started to run. One moved like a cat; the other moved clumsily and slowly-handicapped by a space suit. S'help me, a person in a space suit does look silly. This one was less than five feet tall and looked like the Gingerbread Man.

A big trouble with a suit is your limited angle of vision. I was trying to watch both of them and did not see the second ship open. The first figure stopped, waiting for the one in the space suit to catch up, then suddenly collapsed-just a gasping sound, "Eeeah!"-and clunk.

You can tell the sound of pain. I ran to the spot at a lumbering dogtrot, leaned over and tried to see what was wrong, tilting my helmet to bring the beam of my headlight onto the ground.

A bug-eyed monster—

That's not fair but it was my first thought. I couldn't believe it and would have pinched myself except that it isn't practical when suited up.

An unprejudiced mind (which mine wasn't) would have said that this monster was rather pretty. It was small, not more than half my size, and its curves were graceful, not as a girl is but more like a leopard, although it wasn't shaped like either one. I couldn't grasp its shape-I didn't have any pattern to fit it to; it wouldn't add up.

But I could see that it was hurt. Its body was quivering like a frightened rabbit. It had enormous eyes, open but milky and featureless, as if nictitating membranes were across them. What appeared to be its mouth—

That's as far as I got. Something hit me in the spine, right between the gas bottles.

I woke up on a bare floor, staring at a ceiling. It took several moments to recall what had happened and then I shied away because it was so darn silly. I had been out for a walk in Oscar… and then a space ship had landed… and a bug-eyed—

I sat up suddenly as I realized that Oscar was gone. A light cheerful voice said, "Hi, there!"

I snapped my head around. A kid about ten years old was seated on the floor, leaning against a wall. He-I corrected myself. Boys don't usually clutch rag dolls. This kid was the age when the difference doesn't show much and was dressed in shirt, shorts and dirty tennis shoes, and had short hair, so I didn't have much to go on but the rag dolly.

"Hi, yourself," I answered. "What are we doing here?"

"I'm surviving. I don't know about you."

"Huh?"

"Surviving. Pushing my breath in and out. Conserving my strength. There's nothing else to do at the moment; they've got us locked in."

I looked around. The room was about ten feet across, four-sided but wedge-shaped, and nothing in it but us. I couldn't see a door; if we weren't locked, we might as well be. "Who locked us in?"

"Them. Space pirates. And him."

"Space pirates? Don't be silly!"

The kid shrugged. "Just my name for them. But better not think they're silly if you want to keep on surviving. Are you 'Junebug'?"

"Huh? You sound like a junebug yourself. Space pirates, my aunt!" I was worried and very confused and this nonsense didn't help. Where was Oscar? And where was I?

"No, no, not a junebug but 'Junebug'-a radio call. You see, I'm Peewee."

I said to myself, Kip old pal, walk slowly to the nearest hospital and give yourself up. When a radio rig you wired yourself starts looking like a skinny little girl with a rag doll, you've flipped. It's going to be wet packs and tranquilizers and no excitement for you-you've blown every fuse.

"You're 'Peewee'?"

"That's what I'm called-I'm relaxed about it. You see, I heard, 'Junebug, calling Peewee,' and decided that Daddy had found out about the spot I was in and had alerted people to help me land. But if you aren't 'Junebug,' you wouldn't know about that. Who are you?"

"Wait a minute, I am 'Junebug.' I mean I was using that call. But I'm Clifford Russell-'Kip' they call me."

"How do you do. Kip?" she said politely.

"And howdy to you, Peewee. Uh, are you a boy or a girl?"

Peewee looked disgusted. "I'll make you regret that remark. I realize I am undersized for my age but I'm actually eleven, going on twelve. There's no need to be rude. In another five years I expect to be quite a dish-you'll probably beg me for every dance."

At the moment I would as soon have danced with a kitchen stool, but I had things on my mind and didn't want a useless argument. "Sorry, Peewee. I'm still groggy. You mean you were in that first ship?"

Again she looked miffed. "I was piloting it."

Sedation every night and a long course of psychoanalysis. At my age. "You were-piloting?"

"You surely don't think the Mother Thing could? She wouldn't fit their controls. She curled up beside me and coached. But if you think it's easy, when you've never piloted anything but a Cessna with your Daddy at your elbow and never made any kind of landing, then think again. I did very well!-and your landing instructions weren't too specific. What have they done with the Mother Thing?"

"The what?"

"You don't know? Oh, dear!"

"Wait a minute, Peewee. Let's get on the same frequency. I'm 'Junebug' all right and I homed you in-and if you think that's easy, to have a voice out of nowhere demand emergency landing instructions, you better think again, too. Anyhow, a ship landed and another ship landed right after it and a door opened in the first ship and a guy in a space suit jumped out—"

"That was I."

"-and something else jumped out—"

"The Mother Thing."

"Only she didn't get far. She gave a screech and flopped. I went to see what the trouble was and something hit me. The next thing I know you're saying, 'Hi, there.' " I wondered if I ought to tell her that the rest, including her, was likely a morphine dream because I was probably lying in a hospital with my spine in a cast.

Peewee nodded thoughtfully. "They must have blasted you at low power, or you wouldn't be here. Well, they caught you and they caught me, so they almost certainly caught her. Oh, dear! I do hope they didn't hurt her."

"She looked like she was dying."

"As if she were dying," Peewee corrected me. "Subjunctive. I rather doubt it; she's awfully hard to kill-and they wouldn't kill her except to keep her from escaping; they need her alive."

"Why? And why do you call her 'the Mother Thing'?"

"One at a time, Kip. She's the Mother Thing because... well, because she is, that's all. You'll know, when you meet her. As to why they wouldn't kill her, it's because she's worth more as a hostage than as a corpse-the same reason the kept me alive. Although she's worth incredibly more than I am-they'd write me off without a blink if I became inconvenient. Or you. But since she was alive when you saw her, then it's logical that she's a prisoner again. Maybe right next door. That makes me feel much better."

It didn't make me feel better. "Yes, but where's here?"

Peewee glanced at a Mickey Mouse watch, frowned and said, "Almost halfway to the Moon, I'd say."

"What?!"

"Of course I don't know. But it makes sense that they would go back to their nearest base; that's where the Mother Thing and I scrammed from."

"You're telling me we're in that ship?"

"Either the one I swiped or the other one. Where did you think you were, Kip? Where else could you be?"

"A mental hospital."

She looked big-eyed and then grinned. "Why, Kip, surely your grip on reality is not that weak?"

"I'm not sure about anything. Space pirates-Mother Things."

She frowned and bit her thumb. "I suppose it must be confusing. But trust your ears and eyes. My grip on reality is quite strong, I assure you-you see, I'm a genius." She made it a statement, not a boast, and somehow I was not inclined to doubt the claim, even though it came from a skinny-shanked kid with a rag doll in her arms.

But I didn't see how it was going to help.

Peewee went on: " 'Space pirates'… mmm. Call them what you wish. Their actions are piratical and they operate in space-you name them. As for the Mother Thing… wait until you meet her."

"What's she doing in this hullabaloo?"

"Well, it's complicated. She had better explain it. She's a cop and she was after them—"

"A cop?"

"I'm afraid that is another semantic inadequacy. The Mother Thing knows what we mean by cop and I think she finds the idea bewildering if not impossible. But what would you call a person who hunts down miscreants? A cop, no?"

"A cop, yes, I guess."

"So would I." She looked again at her watch. "But right now I think we had better hang on. We ought to be at halfway point in a few minutes-and a skew-flip is disconcerting even if you are strapped down."

I had read about skew-flip turnovers, but only as a theoretical maneuver; I had never heard of a ship that could do one. If this was a ship. The floor felt as solid as concrete and as motionless. "I don't see anything to hang on to."

"Not much, I'm afraid. But if we sit down in the narrowest part and push against each other, I think we can brace enough not to slide around. But let's hurry; my watch might be slow."

We sat on the floor in the narrow part where the angled walls were about five feet apart. We faced each other and pushed our shoes against each other, each of us bracing like an Alpinist inching his way up a rock chimney-my socks against her tennis shoes, rather, for my shoes were still on my workbench, so far as I knew. I wondered if they had simply dumped Oscar in the pasture and if Dad would find him.

"Push hard, Kip, and brace your hands against the deck."

I did so. "How do you know when they'll turn over, Peewee?"

"I haven't been unconscious-they just tripped me and carried me inside-so I know when we took off. If we assume that the Moon is their destination, as it probably is, and if we assume one gravity the whole jump -which can't be far off; my weight feels normal. Doesn't yours?"

I considered it. "I think so."

"Then it probably is, even though my own sense of weight may be distorted from being on the Moon. If those assumptions are correct, then it is almost exactly a three-and-a-half-hour trip and-" Peewee looked at her watch. "-E.T.A. should be nine-thirty in the morning and turnover at seven-forty-five. Any moment now."

"Is it that late?" I looked at my watch. "Why, I've got a quarter of two."

"You're on your zone time. I'm on Moon time-Greenwich time, that is. Oh, oh! Here we go!"

The floor tilted, swerved, and swooped like a roller coaster, and my semicircular canals did a samba. Things steadied down as I pulled out of acute dizziness.

"You all right?" asked Peewee.

I managed to focus my eyes. "Uh, I think so. It felt like a one-and-a-half gainer into a dry pool."

"This pilot does it faster than I dared to. It doesn't really hurt, after your eyes uncross. But that settles it. We're headed for the Moon. We'll be there in an hour and three quarters."

I still couldn't believe it. "Peewee? What kind of a ship can gun at one gee all the way to the Moon? They been keeping it secret? And what were you doing on the Moon anyhow? And why were you stealing a ship?"

She sighed and spoke to her doll. "He's a quiz kid, Madame Pompadour. Kip, how can I answer three questions at once? This is a flying saucer, and—"

"Flying saucer! Now I've heard everything."

"It's rude to interrupt. Call it anything you like; there's nothing official about the term. Actually it's shaped more like a loaf of pumpernickel, an oblate spheroid. That's a shape defined—"

"I know what an oblate spheroid is," I snapped. I was tired and upset from too many things, from a cranky air conditioner that had ruined a good pair of pants to being knocked out while on an errand of mercy. Not to mention Ace Quiggle. I was beginning to think that little girls who were geniuses ought to have the grace not to show it.

"No need to be brisk," she said reprovingly. "I am aware that people have called everything from weather balloons to street lights 'flying saucers.' But it is my considered opinion-by Occam's Razor-that —"

"Whose razor?"

"Occam's. Least hypothesis. Don't you know anything about logic?"

"Not much."

"Well ... I suspected that about every five-hundredth 'saucer sighting' was a ship like this. It adds up. As for what I was doing on the Moon-" She stopped and grinned. "I'm a pest."

I didn't argue it.

"A long time ago when my Daddy was a boy, the Hayden Planetarium took reservations for trips to the Moon. It was just a publicity gag, like that silly soap contest recently, but Daddy got his name on the list. Now, years and years later, they are letting people go to the Moon-and sure enough, the Hayden people turned the list over to American Express-and American Express notified the applicants they could locate that theywould be given preference."

"So your father took you to the Moon?"

"Oh, heavens, no! Daddy filled out that form when he was only a boy. Now he is just about the biggest man at the Institute for Advanced Study and hasn't time for such pleasures. And Mama wouldn't go if you paid her. So I said I would. Daddy said 'No!' and Mama said Good gracious, no!'… and so I went. I can be an awful nuisance when I put my mind on it," she said proudly. "I have talent for it. Daddy says I'm an amoral little wretch."

"Uh, do you suppose he might be right?"

"Oh, I'm sure he is. He understands me, whereas Mama throws up her hands and says she can't cope. I was perfectly beastly and unbearable for two whole weeks and at last Daddy said 'For Blank's sake let her go! -maybe we'll collect her insurance!' So I did."

"Mmmmm… that still doesn't explain why you are here."

"Oh, that. I was poking around where I shouldn't, doing things they told us not to. I always get around; it's very educational. So they grabbed me. They would rather have Daddy but they hope to swap me for him. I couldn't let that happen, so I had to escape."

I muttered, " The butler did it.' "

"What?"

"Your story has as many holes as the last chapter of most whodunits."

"Oh. But I assure you it is the simple-oh, oh! here we go again!"

All that happened was that the lighting changed from white to blue. There weren't any light fixtures; the whole ceiling glowed. We were still sprawled on the floor. I started to get up-and found I couldn't.

I felt as if I had just finished a cross-country race, too weak to do anything but breathe. Blue light can't do that; it's merely wavelengths 4300 to 5100 angstroms and sunlight is loaded with it. But whatever they used with the blue light made us as limp as wet string.

Peewee was struggling to tell me something. "If… they're coming for us ... don't resist… and… above all—"

The blue light changed to white. The narrow wall started to slide aside.

Peewee looked scared and made a great effort. "-above all ... don't antagonize… him."

Two men came in, shoved Peewee aside, strapped my wrists and ankles and ran another strap around my middle, binding my arms. I started to come out of it-not like flipping a switch, as I still didn't have energy enough to lick a stamp. I wanted to bash their heads but I stood as much chance as a butterfly has of hefting a bar bell.

They carried me out. I started to protest. "Say, where are you guys taking me? What do you think you're doing? I'll have you arrested. I'll-—"

"Shaddap," said one. He was a skinny runt, fifty or older, and looked as if he never smiled. The other was fat and younger, with a petulant babyish mouth and a dimple in his chin; he looked as if he could laugh if he weren't worried. He was worrying now.

"Tim, this can get us in trouble. We ought to space him-we ought to space both of 'em-and tell him it was an accident. We can say they got out and tried to escape through the lock. He won't know the dif—"

"Shaddap," answered Tim with no inflection. He added, "You want trouble with him? You want to chew space?"

"But—"

"Shaddap."

They carried me around a curved corridor, into an inner room and dumped me on the floor.

I was face up but it took time to realize this must be the control room. It didn't look like anything any human would design as a control room, which wasn't surprising as no human had. Then I saw him.

Peewee needn't have warned me; I didn't want to antagonize him.

The little guy was tough and dangerous, the fat guy was mean and murderous; they were cherubs compared with him. If I had had my strength I would have fought those two any way they liked; I don't think I'm too afraid of any human as long as the odds aren't impossible.

But not him.

He wasn't human but that wasn't what hurt. Elephants aren't human but they are very nice people. He was built more like a human than an elephant is but that was no help-I mean he stood erect and had feet at one end and a head at the other. He was no more than five feet tall but that didn't help either; he dominated us the way a man dominates a horse. The torso part was as long as mine; his shortness came from very squat legs, with feet (I guess you would call them feet) which bulged out, almost disc-like. They made squashy, sucking sounds when he moved. When he stood still a tail, or third leg, extruded and turned him into a tripod-he didn't need to sit down and I doubt if he could.

Short legs did not make him slow. His movements were blurringly fast, like a striking snake. Does this mean a better nervous system and more efficient muscles? Or a native planet with higher gravity?

His arms looked like snakes-they had more joints than ours. He had two sets, one pair where his waist should have been and another set under his head. No shoulders. I couldn't count his fingers, or digit tendrils; they never held still. He wasn't dressed except for a belt below and above the middle arms which carried whatever such a thing carries in place of money and keys. His skin was purplish brown and looked oily.

Whatever he was, he was not the same race as the Mother Thing.

He had a faint sweetish musky odor. Any crowded room smells worse on a hot day, but if I ever whiff that odor again, my skin will crawl and I'll be tongue-tied with fright.

I didn't take in these details instantly; at first all I could see was his face. A "face" is all I can call it. I haven't described it yet because I'm afraid I'll get the shakes. But I will, so that if you ever see one, you'll shoot first, before your bones turn to jelly.

No nose. He was an oxygen breather but where the air went in and out I couldn't say-some of it through the mouth, for he could talk. The mouth was the second worst part of him; in place of jawbone and chin he had mandibles that opened sideways as well as down, gaping in three irregular sides. There were rows of tiny teeth but no tongue that I could see; instead the mouth was rimmed with cilia as long as angleworms. They never stopped squirming.

I said the mouth was "second worst"; he had eyes. They were big and bulging and protected by horny ridges, two on the front of his head, set wide apart.

They scanned. They scanned like radar, swinging up and down and back and forth. He never looked at you and yet was always looking at you.

When he turned around, I saw a third eye in back. I think he scanned his whole surroundings at all times, like a radar warning system.

What kind of brain can put together everything in all directions at once? I doubt if a human brain could, even if there were any way to feed in the data. He didn't seem to have room in his head to stack much of a brain, but maybe he didn't keep it there. Come to think of it, humans wear their brains in an exposed position; there may be better ways.

But he certainly had a brain. He pinned me down like a beetle and squeezed out what he wanted. He didn't have to stop to brainwash me; he questioned and I gave, for an endless time-it seemed more like days than hours. He spoke English badly but understandably. His labials were all alike-"buy" and "pie" and "vie" sounded the same. His gutturals were harsh and his dentals had a clucking quality. But I could usually understand and when I didn't, he didn't threaten or punish; he just tried again. He had no expression in his speech.

He kept at it until he had found out who I was and what I did and as much of what I knew as interested him. He asked questions about how I happened to be where I was and dressed the way I was when I was picked up. I couldn't tell whether he liked the answers or not.

He had trouble understanding what a "soda jerk" was and, while he learned about the Skyway Soap contest, he never seemed to understand why it took place. But I found that there were a lot of things I didn't know either-such as how many people there are on Earth and how many tons of protein we produce each year.

After endless time he had all he wanted and said, "Take it out." The stooges had been waiting. The fat boy gulped and said, "Space him?"

He acted as if killing me or not were like saving a piece of string. "No. It is ignorant and untrained, but I may have use for it later. Put it back in the pen."

"Yes, boss."

They dragged me out. In the corridor Fatty said, "Let's untie his feet and make him walk."

Skinny said, "Shaddap."

Peewee was just inside the entrance panel but didn't move, so I guess she had had another dose of that blue-light effect. They stepped over her and dumped me. Skinny chopped me on the side of the neck to stun me. When I came to, they were gone, I was unstrapped, and Peewee was sitting by me. She said anxiously, "Pretty bad?"

"Uh, yeah," I agreed, and shivered. "I feel ninety years old."

"It helps if you don't look at him-especially his eyes. Rest a while and you'll feel better." She glanced at her watch. "It's only fortyfive minutes till we land. You probably won't be disturbed before then."

"Huh?" I sat up. "I was in there only an hour?"

"A little less. But it seems forever. I know."

"I feel like a squeezed orange." I frowned, remembering something. "Peewee, I wasn't too scared when they came for me. I was going to demand to be turned loose and insist on explanations. But I never asked him a question, not one."

"You never will. I tried. But your will just drains out. Like a rabbit in front of a snake."

"Yes."

"Kip, do you see why I had to take just any chance to get away? You didn't seem to believe my story-do you believe it now?"

"Uh, yes. I believe it."

"Thanks. I always say I'm too proud to care what people think, but I'm not, really. I had to get back to Daddy and tell him… because he's the only one in the entire world who would simply believe me, no matter how crazy it sounded."

"I see. I guess I see. But how did you happen to wind up in Centerville?"

"Centerville?"

"Where I live. Where 'Junebug' called 'Peewee.' "

"Oh. I never meant to go there. I meant to land in New Jersey, in Princeton if possible, because I had to find Daddy."

"Well, you sure missed your aim."

"Can you do better? I would have done all right but I had my elbow joggled. Those things aren't hard to fly; you just aim and push for where you want to go, not like the complicated things they do about rocket ships. And I had the Mother Thing to coach me. But I had to slow down going into the atmosphere and compensate for Earth's spin and I didn't know quite how. I found myself too far west and they were chasing me and I didn't know what to do ... and then I heard you on the space-operations band and thought everything was all right-and there I was." She spread her hands. "I'm sorry, Kip."

"Well, you landed it. They say any landing you walk away from is a good one."

"But I'm sorry I got you mixed up in it."

"Uh… don't worry about that. It looks like somebody has to get mixed up in it. Peewee… what's he up to?"

"They, you mean."

"Huh? I don't think the other two amount to anything. He is the one."

"I didn't mean Tim and Jock-they're just people gone bad. I meant them-him and others like him."

I wasn't at my sharpest-I had been knocked out three times and was shy a night's sleep and more confusing things had happened than in all my life. but until Peewee pointed it out I hadn't considered that there could be more than one like him-one seemed more than enough.

But if there was one, then there were thousands-maybe millions or billions. I felt my stomach twist and wanted to hide. "You've seen others?"

"No. Just him. But the Mother Thing told me."

"Ugh! Peewee… what are they up to?"

"Haven't you guessed? They're moving in on us."

My collar felt tight, even though it was open. "How?"

"I don't know."

"You mean they're going to kill us off and take over Earth?"

She hesitated. "It might not be anything that nice."

"Uh… make slaves of us?"

"You're getting warmer. Kip-I think they eat meat."

I swallowed. "You have the jolliest ideas, for a little girl."

"You think I like it? That's why I had to tell Daddy."

There didn't seem to be anything to say. It was an old, old fear for human beings. Dad had told me about an invasion-from-Mars radio broadcast when he was a kid-pure fiction but it had scared people silly. But people didn't believe in it now; ever since we got to the Moon and circled Mars and Venus everybody seemed to agree that we weren't going to find life anywhere.

Now here it was, in our laps. "Peewee? Are these things Martians? Or from Venus?"

She shook her head. "They're not from anywhere close. The Mother Thing tried to tell me, but we ran into a difficulty of understanding."

"Inside the Solar System?"

"That was part of the difficulty. Both yes and no."

"It can't be both."

"You ask her."

"I'd like to." I hesitated, then blurted, "I don't care where they're from -we can shoot them down ... if we don't have to look at them!"

"Oh, I hope so!"

"It figures. You say these are flying saucers… real saucer sightings, I mean; not weather balloons. If so, they have been scouting us for years. Therefore they aren't sure of themselves, even if they do look horrible enough to curdle milk. Otherwise they would have moved in at once the way we would on a bunch of animals. But they haven't. That means we can kill them-if we go about it right."

She nodded eagerly. "I hope so. I hoped Daddy would see a way. But-" She frowned. "-we don't know much about them… and Daddy always warned me not to be cocksure when data was incomplete. 'Don't make so much stew from one oyster, Peewee,' he always says."

"But I'll bet we're right. Say, who is your Daddy? And what's your full name?"

"Why, Daddy is Professor Reisfeld. And my name is Patricia

Wynant Reisfeld. Isn't that awful? Better call me Peewee."

"Professor Reisfeld-What does he teach?"

"Huh? You don't know? You don't know about Daddy's Nobel Prize? Or anything?"

"I'm just a country boy, Peewee. Sorry."

"You must be. Daddy doesn't teach anything. He thinks. He thinks better than anybody… except me, possibly. He's the synthesist. Everybody else specializes. Daddy knows everything and puts the pieces together."

Maybe so, but I hadn't heard of him. It sounded like a good idea… but it would take an awfully smart man-if I had found out anything, it was that they could print it faster than I could study it. Professor Reisfeld must have three heads. Five.

"Wait till you meet him," she added, glancing at her watch. "Kip, I think we had better get braced. We'll be landing in a few minutes… and he won't care how he shakes up passengers."

So we crowded into the narrow end and braced each other. We waited. After a bit the ship shook itself and the floor tilted. There was a slight bump and things got steady and suddenly I felt very light. Peewee pulled her feet under her and stood up. "Well, we're on the Moon."

Chapter 5

When I was a kid, we used to pretend we were making the first landing on the Moon. Then I gave up romantic notions and realized that I would have to go about it another way. But I never thought I would get there penned up, unable to see out, like a mouse in a shoe box.

The only thing that proved I was on the Moon was my weight. High gravity can be managed anywhere, with centrifuges. Low gravity is another matter; on Earth the most you can squeeze out is a few seconds going off a high board, or by parachute delay, or stunts in a plane.

If low gravity goes on and on, then wherever you are, you are not on Earth. Well, I wasn't on Mars; it had to be the Moon.

On the Moon I should weigh a little over twenty-five pounds. It felt about so-I felt light enough to walk on a lawn and not bend the grass.

For a few minutes I simply exulted in it, forgetting him and the trouble we were in, just heel-and-toe around the room, getting the wonderful feel of it, bouncing a little and bumping my head against the ceiling and feeling how slowly, slowly, slowly I settled back to the floor. Peewee sat down, shrugged her shoulders and gave a little smile, an annoyingly patronizing one. The "Old Moon-Hand"-all of two weeks more of it than I had had.

Low gravity has its disconcerting tricks. Your feet have hardly any traction and they fly out from under you. I had to learn with muscles and reflexes what I had known only intellectually: that when weight goes down, mass and inertia do not. To change direction, even in walking, you have to lean the way you would to round a turn on a board track-and even then if you don't have traction (which I didn't in socks on a smooth floor) your feet go out from under you.

A fall doesn't hurt much in one-sixth gravity but Peewee giggled. I sat up and said, "Go and laugh, smartie. You can afford to-you've got tennis shoes."

"I'm sorry. But you looked silly, hanging there like a slow-motion picture and grabbing air."

"No doubt. Very funny."

"I said I was sorry. Look, you can borrow my shoes."

I looked at her feet, then at mine, and snorted. "Gee, thanks!"

"Well… you could cut the heels out, or something. It wouldn't bother me. Nothing ever does. Where are your shoes. Kip?"

"Uh, about a quarter-million miles away-unless we got off at the wrong stop."

"Oh. Well, you won't need them much, here."

"Yeah." I chewed my lip, thinking about "here" and no longer interested in games with gravity. "Peewee? What do we do now?"

"About what?"

"About him."

"Nothing. What can we do?"

"Then what do we do?"

"Sleep."

"Huh?"

"Sleep. 'Sleep, that knits up the ravell'd sleave of care.' 'Tired Nature's sweet restorer, balmy sleep.' 'Blessings on him who invented sleep, the mantle that covers all human thoughts.' "

"Quit showing off and talk sense!"

"I am talking sense. At the moment we're as helpless as goldfish. We're simply trying to survive-and the first principle of survival is not to worry about the impossible and concentrate on what's possible. I'm hungry and thirsty and uncomfortable and very, very tired… and all I can do about it is sleep. So if you will kindly keep quiet, that's what I'll do."

"I can take a hint. No need to snap at me."

"I'm sorry. But I get cross as two sticks when I'm tired and Daddy says I'm simply frightful before breakfast." She curled up in a little ball and tucked that filthy rag doll under her chin. "G'night, Kip."

"Good night, Peewee."

I thought of something and started to speak… and saw that she was asleep. She was breathing softly and her face had smoothed out and no longer looked alert and smart-alecky. Her upper lip pooched out in a baby pout and she looked like a dirty-faced cherub. There were streaks where she had apparently cried and not wiped it away. But she had never let me see her crying.

Kip, I said to myself, you get yourself into the darndest things; this is much worse than bringing home a stray pup or a kitten.

But I had to take care of her ... or die trying.

Well, maybe I would. Die trying, I mean. It didn't look as if I were any great shakes even taking care of myself.

I yawned, then yawned again. Maybe the shrimp had more sense than I had, at that. I was more tired than I had ever been, and hungry and thirsty and not comfortable other ways. I thought about banging on the door panel and trying to attract the fat one or his skinny partner. But that would wake Peewee-and it might antagonize him.

So I sprawled on my back the way I nap on the livingroom rug at home. I found that a hard floor does not require any one sleeping position on the Moon; one-sixth gravity is a better mattress than all the foam rubber ever made-that fussy princess in Hans Christian Andersen's story would have had no complaints.

I want to sleep at once.

It was the wildest space opera I had ever seen, loaded with dragons and Arcturian maidens and knights in shining space armor and shuttling between King Arthur's Court and the Dead Sea Bottoms of Barsoom. I didn't mind that but I did mind the announcer. He had the voice of Ace Quiggle and the face of him. He leaned out of the screen and leered, those wormy cilia writhing. "Will Beowulf conquer the Dragon? Will Tristan return to Iseult? Will Peewee find her dolly? Tune in this channel tomorrow night and in the meantime, wake up and hurry to your neighborhood druggist for a cake of Skyway's Kwikbrite Armor Polish, the better polish used by the better knights sans peur et sans reproche. Wake up!" He shoved a snaky arm out of the screen and grabbed my shoulder.

I woke up.

"Wake up," Peewee was saying, shaking my shoulder. "Please wake up, Kip."

"Lea' me alone!"

"You were having a nightmare."

The Arcturian princess had been in a bad spot. "Now I'll never know how it came out. Wha' did y' want to wake me for? I thought the idea was to sleep?"

"You've slept for hours-and now perhaps there is something we can do."

"Breakfast, maybe?"

She ignored that. "I think we should try to escape."

I sat up suddenly, bounced off the floor, settled back. "Wups! How?"

"I don't know exactly. But I think they have gone away and left us. If so, we'll never have a better chance."

"They have? What makes you think so?"

"Listen. Listen hard."

I listened. I could hear my heart beat, I could hear Peewee breathing, and presently I could hear her heart beating. I've never heard deeper silence in a cave.

I took my knife, held it in my teeth for bone conduction and pushed it against a wall. Nothing. I tried the floor and the other walls. Still nothing. The ship ached with silence-no throb, no thump, not even those vibrations you can sense but not hear. "You're right, Peewee."

"I noticed it when the air circulation stopped."

I sniffed. "Are we running out of air?"

"Not right away. But the air stopped-it comes out of those tiny holes up there. You don't notice it but I missed something when it stopped."

I thought hard. "I don't see where this gets us. We're still locked up."

"I'm not sure."

I tried the blade of my knife on a wall. It wasn't metal or anything I knew as plastic, but it didn't mind a knife. Maybe the Comte de Monte Cristo could have dug a hole in it-but he had more time. "How do you figure?"

"Every time they've opened or closed that door panel, I've heard a click. So after they took you out I stuck a wad of bubble gum where the panel meets the wall, high up where they might not notice."

"You've got some gum?"

"Yes. It helps, when you can't get a drink of water. I—"

"Got any more?" I asked eagerly. I wasn't fresh in any way but thirst was the worst-I'd never been so thirsty.

Peewee looked upset. "Oh, poor Kip! I haven't any more… just an old wad I kept parked on my belt buckle and chewed when I felt driest." She frowned. "But you can have it. You're welcome."

"Uh, thanks, Peewee. Thanks a lot. But I guess not."

She looked insulted. "I assure you, Mr. Russell, that I do not have anything contagious. I was merely trying to—"

"Yes, yes," I said hastily. "I'm sure you were. But—"

"I assumed that these were emergency conditions. It is surely no more unsanitary than kissing a girl-but then I don't suppose you've ever kissed a girl!"

"Not lately," I evaded. "But what I want is a drink of clear cold water-or murky warm water. Besides, you used up your gum on the door panel. What did you expect to accomplish?"

"Oh. I told you about that click. Daddy says that, in a dilemma, it is helpful to change any variable, then reexamine the problem. I tried to introduce a change with my bubble gum."

"Well?"

"When they brought you back, then closed the door, I didn't hear a click."

"What? Then you thought you had bamboozled their lock hours and hour ago-and you didn't tell me?"

"That is correct."

"Why, I ought to spank you!"

"I don't advise it," she said frostily. "I bite."

I believed her. And scratch. And other things. None of them pleasant. I changed the subject. "Why didn't you tell me, Peewee?"

"I was afraid you might try to get out."

"Huh? I certainly would have!"

"Precisely. But I wanted that panel closed ... as long as he was out there."

Maybe she was a genius. Compared with me. "I see your point. All right, let's see if we can get it open." I examined the panel. The wad of gum was there, up high as she could reach, and from the way it was mashed it did seem possible that it had fouled the groove the panel slid into, but I couldn't see any crack down the edge.

I tried the point of my big blade on it. The panel seemed to creep to the right an eighth of an inch-then the blade broke.

I closed the stub and put the knife away. "Any ideas?"

"Maybe if we put our hands flat against it and tried to drag it?"

"Okay." I wiped sweat from my hands on my shirt. "Now… easy does it. Just enough pressure for friction."

The panel slid to the right almost an inch-and stopped firmly.

But there was a hairline crack from floor to ceiling.

I broke off the stub of the big blade this time. The crack was no wider. Peewee said, "Oh, dear!"

"We aren't licked." I backed off and ran toward the door.

"Toward," not "to"-my feet skidded, I leveled off and did a leisurely bellywhopper. Peewee didn't laugh.

I picked myself up, got against the far wall, braced one foot against it and tried a swimming racing start.

I got as far as the door panel before losing my footing. I didn't hit it very hard, but I felt it spring. It bulged a little, then sprang back.

"Wait a sec, Kip," said Peewee. "Take your socks off. I'll get behind you and push-my tennis shoes don't slip."

She was right. On the Moon, if you can't get rubber-soled shoes, you're better off barefooted. We backed against the far wall, Peewee behind me with her hands on my hips. "One… two… three… Go!" We advanced with the grace of a hippopotamus.

I hurt my shoulder. But the panel sprung out of its track, leaving a space four inches wide at the bottom and tapering to the top.

I left skin on the door frame and tore my shirt and was hampered in language by the presence of a girl. But the opening widened. When it was wide enough for my head, I got down flat and peered out. There was nobody in sight-a foregone conclusion, with the noise I had made, unless they were playing cat-and-mouse. Which I wouldn't put past them. Especially him.

Peewee started to wiggle through; I dragged her back. "Naughty, naughty! I go first." Two more heaves and it was wide enough for me. I opened the small blade of my knife and handed it to Peewee. "With your shield or on it, soldier."

"You take it."

"I won't need it. 'Two-Fisted Death,' they call me around dark alleys." This was propaganda, but why worry her? Sans pew et sans reproche-maiden-rescuing done cheaply, special rates for parties.

I eased out on elbows and knees, stood up and looked around. "Come on out," I said quietly.

She started to, then backed up suddenly. She reappeared clutching that bedraggled dolly. "I almost forgot Madame Pompadour," she said breathlessly.

I didn't even smile.

"Well," she said defensively, "I have to have her to get to sleep at night. It's my one neurotic quirk-but Daddy says I'll outgrow it."

"Sure, sure."

"Well, don't look so smug! It's not fetishism, not even primitive animism; it's merely a conditioned reflex. I'm aware that it's just a doll-I've understood the pathetic fallacy for ... oh, years and years!"

"Look, Peewee," I said earnestly, "I don't care how you get to sleep. Personally I hit myself over the head with a hammer. But quit yakking. Do you know the layout of these ships?"

She looked around. "I think this is the ship that chased me. But it looks the same as the one I piloted."

"All right. Should we head for the control room?"

"Huh?"

"You flew the other heap. Can you fly this one?"

"Unh ... I guess so. Yes, I can."

"Then let's go." I started in the direction they had lugged me.

"But the other time I had the Mother Thing to tell me what to do! Let's find her."

I stopped. "Can you get it off the ground?"

"Well… yes."

"We'll look for her after we're in the air-'in space,' I mean. If she's aboard we'll find her. If she's not, there's not a thing we can do."

"Well ... all right. I see your logic; I don't have to like it." She tagged along. "Kip? How many gravities can you stand?"

"Huh? I haven't the slightest idea. Why?"

"Because these things can go lots faster than I dared try when I escaped before. That was my mistake."

"Your mistake was in heading for New Jersey."

"But I had to find Daddy!"

"Sure, sure, eventually. But you should have ducked over to Lunar Base and yelled for the Federation Space Corps. This is no job for a popgun; we need help. Any idea where we are?"

"Mmm… I think so. If he took us back to their base. I'll know when I look at the sky."

"All right. If you can figure out where Lunar Base is from here, that's where we'll go. If not-Well, we'll head for New Jersey at all the push it has."

The control-room door latched and I could not figure out how to open it. Peewee did what she said should work-which was to tuck her little finger into a hole mine would not enter-and told me it must be locked. So I looked around.

I found a metal bar racked in the corridor, a thing about five feet long, pointed on one end and with four handles like brass knucks on the other. I didn't know what it was-the hobgoblin equivalent of a fire ax, possibly -but it was a fine wrecking bar.

I made a shambles of that door in three minutes. We went in.

My first feeling was gooseflesh because here was where I had been grilled by him. I tried not to show it. If he turned up, I was going to let him have his wrecking bar right between his grisly eyes. I looked around, really seeing the place for the first time. There was sort of a nest in the middle surrounded by what could have been a very fancy coffee maker or a velocipede for an octopus; I was glad Peewee knew which button to push. "How do you see out?"

"Like this." Peewee squeezed past and put a finger into a hole I hadn't noticed.

The ceiling was hemispherical like a planetarium. Which was what it was, for it lighted up. I gasped.

It was suddenly not a floor we were on, but a platform, apparently out in the open and maybe thirty feet in the air. Over me were star images, thousands of them, in a black "sky"-and facing toward me, big as a dozen full moons and green and lovely and beautiful, was Earth!

Peewee touched my elbow. "Snap out of it, Kip."

I said in a choked voice, "Peewee, don't you have any poetry in your soul?"

"Surely I have. Oodles. But we haven't time. I know where we are, Kip -back where I started from. Their base. See those rocks with long jagged shadows? Some of them are ships, camouflaged. And over to the left-that high peak, with the saddle?-a little farther left, almost due west, is Tombaugh Station, forty miles away. About two hundred miles farther is Lunar Base and beyond is Luna City."

"How long will it take?"

"Two hundred, nearly two hundred and fifty miles? Uh, I've never tried a point-to-point on the Moon-but it shouldn't take more than a few minutes."

"Let's go! They might come back any minute."

"Yes, Kip." She crawled into that jackdaw's nest and bent over a sector.

Presently she looked up. Her face was white and thin and very little-girlish. "Kip ... we aren't going anywhere. I'm sorry."

I let out a yelp. "What! What's the matter? Have you forgotten how to run it?"

"No. The 'brain' is gone."

"The which?"

"The 'brain.' Little black dingus about the size of a walnut that fits in this cavity." She showed me. "We got away before because the Mother Thing managed to steal one. We were locked in an empty ship, just as you and I are now. But she had one and we got away." Peewee looked bleak and very lost. "I should have known that he wouldn't leave one in the control room-I guess I did and didn't want to admit it. I'm sorry."

"Uh… look, Peewee, we won't give up that easily. Maybe I can make something to fit that socket."

"Like jumping wires in a car?" She shook her head. "It's not that simple. Kip. If you put a wooden model in place of the generator in a car, would it run? I don't know quite what it does, but I called it the 'brain' because it's very complex."

"But-" I shut up. If a Borneo savage had a brand-new car, complete except for spark plugs, would he get it running? Echo answers mournfully. "Peewee, what's the next best thing? Any ideas? Because if you haven't, I want you to show me the air lock. I'll take this-" I shook my wrecking bar "-and bash anything that comes through."

"I'm stumped," she admitted. "I want to look for the Mother Thing. If she's shut up in this ship, she may know what to do."

"All right. But first show me the air lock. You can look for her while I stand guard." I felt the reckless anger of desperation. I didn't see how we were ever going to get out and I was beginning to believe that we weren't -but there was still a reckoning due. He was going to learn that it wasn't safe to push people around. I was sure-I was fairly sure-that I could sock him before my spine turned to jelly. Splash that repulsive head.

If I didn't look at his eyes.

Peewee said slowly, "There's one other thing—"

"What?"

"I hate to suggest it. You might think I was running out on you."

"Don't be silly. If you've got an idea, spill it."

"Well… there's Tombaugh Station, over that way about forty miles. If my space suit is in the ship—"

I suddenly quit feeling like Bowie at the Alamo. Maybe the game would go an extra period- "We can walk it!"

She shook her head. "No, Kip. That's why I hesitated to mention it. I can walk it ... if we find my suit. But you couldn't wear my suit even if you squatted."

"I don't need your suit," I said impatiently.

"Kip, Kip! This is the Moon, remember? No air."

"Yes, yes, sure! Think I'm an idiot? But if they locked up your suit, they probably put mine right beside it and—"

"You've got a space suit?" she said incredulously.

Our next remarks were too confused to repeat but finally Peewee was convinced that I really did own a space suit, that in fact the only reason I was sending on the space-operations band twelve hours and a quarter of a million miles back was that I was wearing it when they grabbed me.

"Let's tear the joint apart!" I said. "No-show me that air lock, then you take it apart."

"All right."

She showed me the lock, a room much like the one we had been cooped in, but smaller and with an inner door built to take a pressure load. It was not locked. We opened it cautiously. It was empty, and its outer door was closed or we would never been able to open the inner. I said, "If Wormface had been a suspenders-and-belt man, he would have left the outer door open, even though he had us locked up. Then-Wait a second! Is there a way to latch the inner door open?"

"I don't know."

"We'll see." There was, a simple hook. But to make sure that it couldn't be unlatched by button-pushing from outside I wedged it with my knife. "You're sure this is the only air lock?"

"The other ship had only one and I'm pretty certain they are alike."

"We'll keep our eyes open. Nobody can get at us through this one. Even old Wormface has to use an air lock."

"But suppose he opens the outer door anyhow?" Peewee said nervously. "We'd pop like balloons."

I looked at her and grinned. "Who is a genius? Sure we would ... if he did. But he won't. Not with twenty, twenty-five tons of pressure holding it closed. As you reminded me, this is the Moon. No air outside, remember?"

"Oh." Peewee looked sheepish.

So we searched. I enjoyed wrecking doors; Wormface wasn't going to like me. One of the first things we found was a smelly little hole that Fatty and Skinny lived in. The door was not locked, which was a shame. That room told me a lot about that pair. It showed that they were pigs, with habits as unattractive as their morals. The room also told me that they were not casual prisoners; it had been refitted for humans. Their relationship with Wormface, whatever it was, had gone on for some time and was continuing. There were two empty racks for space suits, several dozen canned rations of the sort sold in military-surplus stores, and best of all, there was drinking water and a washroom of sorts-and something more precious than fine gold or frankincense if we found our suits: two charged bottles of oxy-helium.

I took a drink, opened a can of food for Peewee-it opened with a key; we weren't in the predicament of the Three Men in a Boat with their tin of pineapple-told her to grab a bite, then search that room. I went on with my giant toad sticker; those charged air bottles had given me an unbearable itch to find our suits-and get out!-before Wormface returned.

I smashed a dozen doors as fast as the Walrus and the Carpenter opened oysters and found all sorts of things, including what must have been living quarters for wormfaces. But I didn't stop to look-the Space Corps could do that, if and when-I simply made sure that there was not a space suit in any of them.

And found them!-in a compartment next to the one we had been prisoners in.

I was so glad to see Oscar that I could have kissed him. I shouted, "Hi, Pal! Mirabile visu!" and ran to get Peewee. My feet went out from under me again but I didn't care.

Peewee looked up as I rushed in. "I was just going to look for you."

"Got it! Got it!"

"You found the Mother Thing?" she said eagerly.

"Huh? No, no! The space suits-yours and mine! Let's go!"

"Oh." She looked disappointed and I felt hurt. "That's good ... but we have to find the Mother Thing first."

I felt tried beyond endurance. Here we had a chance, slim but real, to escape a fate-worse-than-death (I'm not using a figure of speech) and she wanted to hang around to search for a bug-eyed monster. For any human being, even a stranger with halitosis, I would have done it. For a dog or cat I would, although reluctantly.

But what was a bug-eyed monster to me? All this one had done was to get me into the worst jam I had ever been in.

I considered socking Peewee and stuffing her into her suit. But I said, "Are you crazy? We're leaving-right now!"

"We can't go till we find her."

"Now I know you're crazy. We don't even know she's here… and if we do find her, we can't take her with us."

"Oh, but we will!"

"How? This is the Moon, remember? No air. Got a space suit for her?"

"But-" That stonkered her. But not for long. She had been sitting on the floor, holding the ration can between her knees. She stood up suddenly, bouncing a little, and said, "Do as you like; I'm going to find her. Here." She shoved the can at me.

I should have used force. But I am handicapped by training from early childhood never to strike a female, no matter how richly she deserves it. So the opportunity and Peewee both slid past while I was torn between common sense and upbringing. I simply groaned helplessly.

Then I became aware of an unbearably attractive odor. I was holding that can. It contained boiled shoe leather and gray gravy and smelled ambrosial.

Peewee had eaten half; I ate the rest while looking at what she had found. There was a coil of nylon rope which I happily put with the air bottles; Oscar had fifty feet of clothesline clipped to his belt but that had been a penny-saving expedient. There was a prospector's hammer which I salvaged, and two batteries which would do for headlamps and things.

The only other items of interest were a Government Printing Office publication titled Preliminary Report on Selenology, a pamphlet on uranium prospecting, and an expired Utah driver's license for "Timothy Johnson"-I recognized the older man's mean face. The pamphlets interested me but this was no time for excess baggage.

The main furniture was two beds, curved like contour chairs and deeply padded; they told me that Skinny and Fatty had ridden this ship at high acceleration.

When I had mopped the last of the gravy with a finger, I took a big drink, washed my hands-using water lavishly because I didn't care if that pair died of thirst-grabbed my plunder and headed for the room where the space suits were.

As I got there I ran into Peewee. She was carrying the crowbar and looking overjoyed. "I found her!"

"Where?"

"Come on! I can't get it open, I'm not strong enough."

I put the stuff with our suits and followed her. She stopped at a door panel farther along the corridor than my vandalism had taken me. "In there!"

I looked and I listened. "What makes you think so?"

"I know! Open it!"

I shrugged and got to work with the nutpick. The panel went sprung! and that was that.

Curled up in the middle of the floor was a creature.

So far as I could tell, it might or might not have been the one I had seen in the pasture the night before. The light had been poor, the conditions very different, and my examination had ended abruptly. But Peewee was in no doubt. She launched herself through the air with a squeal of joy and the two rolled over and over like kittens play-fighting.

Peewee was making sounds of joy, more or less in English. So was the Mother Thing, but not in English. I would not have been surprised if she had spoken English, since Wormface did and since Peewee had mentioned things the Mother Thing had told her. But she didn't.

Did you ever listen to a mockingbird? Sometimes singing melodies, sometimes just sending up a joyous noise unto the Lord? The endlessly varied songs of a mockingbird are nearest to the speech of the Mother Thing.

At last they held still, more or less, and Peewee said, "Oh, Mother Thing, I'm so happy!"

The creature sang to her. Peewee answered, "Oh. I'm forgetting my manners. Mother Thing, this is my dear friend Kip."

The Mother Thing sang to me-and I understood.

What she said was: "I am very happy to know you, Kip." It didn't come out in words. But it might as well have been English. Nor was this half-kidding self-deception, such as my conversations with Oscar or Peewee's with Madame Pompadour-when I talk with Oscar I am both sides of the conversation; it's just my conscious talking to my subconscious, or some such. This was not that.

The Mother Thing sang to me and I understood.

I was startled but not unbelieving. When you see a rainbow you don't stop to argue the laws of optics. There it is, in the sky.

I would have been an idiot not to know that the Mother Thing was speaking to me because I did understand and understood her every time. If she directed a remark at Peewee alone, it was usually just birdsongs to me-but if it was meant for me, I got it.

Call it telepathy if you like, although it doesn't seem to be what they do at Duke University. I never read her mind and I don't think she read mine. We just talked.

But while I was startled, I minded my manners. I felt the way I do when Mother introduces me to one of her older grande-dame friends. So I bowed and said, "We're very happy that we've found you, Mother Thing."

It was simple, humble truth. I knew, without explanation, what it was that had made Peewee stubbornly determined to risk recapture rather than give up looking for her-the quality that made her "the Mother Thing."

Peewee has this habit of slapping names on things and her choices aren't always apt, for my taste. But I'll never question this one. The Mother Thing was the Mother Thing because she was. Around her you felt happy and safe and warm. You knew that if you skinned your knee and came bawling into the house, she would kiss it well and paint it with merthiolate and everything would be all right. Some nurses have it and some teachers… and, sadly, some mothers don't.

But the Mother Thing had it so strongly that I wasn't even worried by Wormface. We had her with us so everything was going to be all right. I logically I knew that she was as vulnerable as we were-I had seen them strike her down. She didn't have my size and strength, she couldn't pilot the ship as Peewee had been able to. It didn't matter.

I wanted to crawl into her lap. Since she was too small and didn't have a lap, I would gratefully hold her in mine, anytime.

I have talked more about my father but that doesn't mean that Mother is less important-just different. Dad is active, Mother is passive; Dad talks, Mother doesn't. But if she died, Dad would wither like an uprooted tree. She makes our world.

The Mother Thing had the effect on me that Mother has, only I'm used to it from Mother. Now I was getting it unexpectedly, far from home, when I needed it.

Peewee said excitedly, "Now we can go. Kip. Let's hurry!"

The Mother Thing sang ("Where are we going, children?")

"To Tombaugh Station, Mother Thing. They'll help us."

The Mother Thing blinked her eyes and looked serenely sad. She had great, soft, compassionate eyes-she looked more like a lemur than anything else but she was not a primate-she wasn't even in our sequence, unearthly. But she had these wonderful eyes and a soft, defenseless mouth out of which music poured. She wasn't as big as Peewee and her hands were tinier still-six fingers, any one of which could oppose the others the way our thumbs can. Her body-well, it never stayed the same shape so it's hard to describe, but it was right for her.

She didn't wear clothes but she wasn't naked; she had soft, creamy fur, sleek and fine as chinchilla. I thought at first she didn't wear anything, but presently I noticed a piece of jewelry, a shiny triangle with a double spiral in each corner. I don't know what made it stick on.

I didn't take all this in at once. At that instant the expression in the Mother Thing's eyes brought a crash of sorrow into the happiness I had been feeling.

Her answer made me realize that she didn't have a miracle ready ("How are we to fly the ship? They have guarded me most carefully this time.")

Peewee explained eagerly about the space suits and I stood there like a fool, with a lump of ice in my stomach. What had been just a question of using my greater strength to force Peewee to behave was now an unsolvable dilemma. I could no more abandon the Mother Thing than I could have abandoned Peewee… and there were only two space suits.

Even if she could wear our sort, which looked as practical as roller skates on a snake.

The Mother Thing gently pointed out that her own vacuum gear had been destroyed. (I'm going to quit writing down all her songs; I don't remember them exactly anyhow.)

And so the fight began. It was an odd fight, with the Mother Thing gentle and loving and sensible and utterly firm, and Peewee throwing a tearful, bad-little-girl tantrum-and me standing miserably by, not even refereeing.

When the Mother Thing understood the situation, she analyzed it at once to the inevitable answer. Since she had no way to go (and probably couldn't have walked that far anyhow, even if she had had her sort of space suit) the only answer was for us two to leave at once. If we reached safety, then we would, if possible, convince our people of the danger from Wormface & Co.-in which case she might be saved as well… which would be nice but was not indispensable.

Peewee utterly, flatly, and absolutely refused to listen to any plan which called for leaving the Mother Thing behind. If the Mother Thing couldn't go, she wouldn't budge. "Kip! You go get help! Hurry! I'll stay here."

I stared at her. "Peewee, you know I can't do that."

"You must. You will so! You've got to. If you don't, I'll… I'll never speak to you again!"

"If I did, I'd never speak to myself again. Look, Peewee, it won't wash. You'll have to go—"

"No!"

"Oh, shut up for a change. You go and I stay and guard the door with the shillelagh. I'll hold 'em off while you round up the troops. But tell them to hurry!"

"I-" She stopped and looked very sober and utterly baffled. Then she threw herself on the Mother Thing, sobbing: "Oh, you don't love me any more!"

Which shows how far her logic had gone to pot. The Mother Thing sang softly to her while I worried the thought that our last chance was t trickling away while we argued. Wormface might come back any second-and while I hoped to slug him a final one if he got in, more likely he had resources to outmaneuver me. Either way, we would not escape.

At last I said, "Look we'll all go."

Peewee stopped sobbing and looked startled. "You know we can't."

The Mother Thing sang ("How, Kip?")

"Uh, I'll have to show you. Up on your feet, Peewee." We went where the suits were, while Peewee carried Madame Pompadour and half carried the Mother Thing. Lars Eklund, the rigger who had first worn Oscar according to his log, must have weighed about two hundred pounds; in order to wear Oscar I had to strap him tight to keep from bulging. I hadn't considered retailoring him to my size as I was afraid I would never get him gastight again. Arm and leg lengths were okay; it was girth that was too big.

There was room inside for both the Mother Thing and me.

I explained, while Peewee looked big-eyed and the Mother Thing sang queries and approvals. Yes, she could hang on piggyback-and she couldn't fall off, once we were sealed up and the straps cinched.

"All right. Peewee, get into your suit." I went to get my socks while she started to suit up. When I came back I checked her helmet gauges, reading them backwards through her lens. "We had better give you some air. You're only about half full."

I ran into a snag. The spare bottles I had filched from those ghouls had screw-thread fittings like mine-but Peewee's bottles had bayonet-and-snap joints. Okay, I guess, for tourists, chaperoned and nursed and who might get panicky while bottles were changed unless it was done fast-but not so good for serious work. In my workshop I would have rigged an adapter in twenty minutes. Here, with no real tools-well, that spare air might as well be on Earth for all the good it did Peewee.

For the first time, I thought seriously of leaving them behind while I made a fast forced march for help. But I didn't mention it. I thought that Peewee would rather die on the way than fall back into his hands-and I was inclined to agree.

"Kid," I said slowly, "that isn't much air. Not for forty miles." Her gauge was scaled in time as well as pressure; it read just under five hours. Could Peewee move as fast as a trotting horse? Even at lunar gravity? Not likely.

She looked at me soberly. "That's calibrated for full-size people. I'm little-I don't use much air."

"Uh… don't use it faster than you have to."

"I won't. Let's go."

I started to close her gaskets. "Hey!" she objected.

"What's the matter?"

"Madame Pompadour! Hand her to me-please. On the floor by my feet."

I picked up that ridiculous dolly and gave it to her. "How much air does she take?"

Peewee suddenly dimpled. "I'll caution her not to inhale." She stuffed it inside her shirt, I sealed her up. I sat down in my open suit, the Mother Thing crept up my back, singing reassuringly, and cuddled close. She felt good and I felt that I could hike a hundred miles, to get them both safe.

Getting me sealed in was cumbersome, as the straps had to be let out and then tightened to allow for the Mother Thing, and neither Peewee nor I had bare hands. We managed.

I made a sling from my clothesline for the spare bottles. With them around my neck, with Oscar's weight and the Mother Thing as well, I scaled perhaps fifty pounds at the Moon's one-sixth gee. It just made me fairly surefooted for the first time.

I retrieved my knife from the airlock latch and snapped it to Oscar's belt beside the nylon rope and the prospector's hammer. Then we went inside the air lock and closed its inner door. I didn't know how to waste its air to the outside but Peewee did. It started to hiss out.

"You all right, Mother Thing?"

("Yes, Kip.") She hugged me reassuringly.

"Peewee to Junebug," I heard in my phones: "radio check. Alfa, Bravo, Coca, Delta, Echo, Foxtrot—"

"Junebug to Peewee: I read you. Golf, Hotel, India, Juliette, Kilo—"

"I read you, Kip."

"Roger."

"Mind your pressure. Kip. You're swelling up too fast." I kicked the chin valve while watching the gauge-and kicking myself for letting a little girl catch me in a greenhorn trick. But she had used a space suit before, while I had merely pretended to.

I decided this was no time to be proud. "Peewee? Give me all the tips you can. I'm new to his."

"I will, Kip."

The outer door popped silently and swung inward-and I looked out over the bleak bright surface of a lunar plain. For a homesick moment I remembered the trip-to-theMoon games I had played as a kid and wished I were back in Centerville. Then Peewee touched her helmet to mine. "See anyone?"

"No."

"We're lucky, the door faces away from the other ships. Listen carefully. We won't use radio until we are over the horizon-unless it's a desperate emergency. They listen on our frequencies. I know that for sure. Now see that mountain with the saddle in it? Kip, pay attention!"

"Yes." I had been staring at Earth. She was beautiful even in that shadow show in the control room-but I just hadn't realized. There she was, so close I could almost touch her… and so far away that we might never get home. You can't believe what a lovely planet we have, until you see her from outside… with clouds girdling her waist and polar cap set jauntily, like a spring hat. "Yes. I see the saddle."

"We head left of there, where you see a pass. Tim and Jock brought me through it in a crawler. Once we pick up its tracks it will be easy. But first we head for those near hills just left of that-that ought to keep this ship between us and the other ships while we get out of sight. I hope."

It was twelve feet or so to the ground and I was prepared to jump, since it would be nothing much in that gravity. Peewee insisted on lowering me by rope. "You'll fall over your feet. Look, Kip, listen to old Aunt Peewee. You don't have Moon legs yet. It's going to be like your first time on a bicycle."

So I let her lower me and the Mother Thing while she snubbed the nylon rope around the side of the lock. Then she jumped with no trouble. I started to loop up the line but she stopped me and snapped the other end to her belt, then touched helmets. "I'll lead. If I go too fast or you need me, tug on the rope. I won't be able to see you."

"Aye aye, Cap'n!"

"Don't make fun of me, Kip. This is serious."

"I wasn't making fun, Peewee. You're boss."

"Let's go. Don't look back, it won't do any good and you might fall. I'm heading for those hills."

Chapter 6

I should have relished the weird, romantic experience, but I was as busy as Eliza crossing the ice and the things snapping at my heels were worse than bloodhounds. I wanted to look back but I was too busy trying to stay on my feet. I couldn't see my feet; I had to watch ahead and try to pick my footing-it kept me as busy as a lumberjack in a logrolling contest. I didn't skid as the ground was rough-dust or fine sand over raw rock-and fifty pounds weight was enough for footing. But I had three hundred pounds mass not a whit reduced by lowered weight; this does things to lifelong reflex habits. I had to lean heavily for the slightest turn, lean back and dig in to slow down, lean far forward to speed up.

I could have drawn a force diagram, but doing it is another matter. How long does it take a baby to learn to walk? This newborn Moon-baby was having to learn while making a forced march, half blind, at the greatest speed he could manage.

So I didn't have time to dwell on the wonder of it all.

Peewee moved into a brisk pace and kept stepping it up. Every little while my leash tightened and I tried still harder to speed up and not fall down.

The Mother Thing warbled at my spine: ("Are you all right. Kip? You seem worried.")

"I'm ... all right! How… about… you?"

("I'm very comfortable. Don't wear yourself out, dear.")

"Okay!"

Oscar was doing his job. I began to sweat from exertion and naked Sun, but I didn't kick the chin valve until I saw from my blood-color gauge that I was short on air. The system worked perfectly and the joints, under a four-pound pressure, gave no trouble; hours of practice in the pasturewas paying off. Presently my one worry was to keep a sharp eye for rocks and ruts. We were into those low hills maybe twenty minutes after H-hour. Peewee's first swerve as we reached rougher ground took me by surprise; I almost fell.

She slowed down and crept forward into a gulch. A few moments later she stopped; I joined her and she touched helmets with me. "How are you doing?"

"Okay."

"Mother Thing, can you hear me?"

("Yes, dear.")

"Are you comfortable? Can you breathe all right?"

("Yes, indeed. Our Kip is taking good care of me.")

"Good. You behave yourself, Mother Thing. Hear me?"

("I will, dear.") Somehow she put an indulgent chuckle into a birdsong.

"Speaking of breathing," I said to Peewee, "let's check your air." I tried to look into her helmet.

She pulled away, then touched again. "I'm all right!"

"So you say." I held her helmet with both hands, found I couldn't see the dials-with sunlight around us, trying to see in was like peering into a well. "What does it read-and don't fib."

"Don't be nosy!"

I turned her around and read her bottle gauges. One read zero; the other was almost full.

I touched helmets. "Peewee," I said slowly, "how many miles have we come?"

"About three, I think. Why?"

"Then we've got more than thirty to go?"

"At least thirty-five. Kip, quit fretting. I know I've got one empty bottle; I shifted to the full one before we stopped."

"One bottle won't take you thirty-five miles."

"Yes, it will... because it's got to."

"Look, we've got plenty of air. I'll figure a way to get it to you." My mind was trotting in circles, thinking what tools were on my belt, what else I had.

"Kip, you know you can't hook those spare bottles to my suit-so shut up!"

("What's the trouble, darlings? Why are you quarreling?")

"We aren't fighting, Mother Thing. Kip is a worry wart."

("Now, children-")

I said, "Peewee, I admit I can't hook the spares into your suit... but I'll jigger a way to recharge your bottle."

"But How, Kip?"

"Leave it to me. I'll touch only the empty; if it doesn't work, we're no worse off. If it does, we've got it made."

"How long will it take?"

"Ten minutes with luck. Thirty without."

"No," she decided.

"Now, Peewee, don't be sil—"

"I'm not being silly! We aren't safe until we get into the mountains. I can get that far. Then, when we no longer show up like a bug on a plate, we can rest and recharge my empty bottle."

It made sense. "All right."

"Can you go faster? If we reach the mountains before they miss us, I don't think they'll ever find us. If we don't—"

"I can go faster. Except for these pesky bottles."

"Oh." She hesitated. "Do you want to throw one away?"

"Huh? Oh, no, no! But they throw me off balance. I've just missed a tumble a dozen times. Peewee, can you retie them so they don't swing?"

"Oh. Sure."

I had them hung around my neck and down my front-not smart but I had been hurried. Now Peewee lashed them firmly, still in front as my own bottles and the Mother Thing were on my back-no doubt she was finding it as crowded as Dollar Day. Peewee passed clothesline under my belt and around the yoke. She touched helmets. "I hope that's okay."

"Did you tie a square knot?"

She pulled her helmet away. A minute later she touched helmets again. "It was a granny," she admitted in a small voice, "but it's a square knot now."

"Good. Tuck the ends in my belt so that I can't trip, then we'll mush. Are you all right?"

"Yes," she said slowly. "I just wish I had salvaged my gum, old and tired as it was. My throat's awful dry."

"Drink some water. Not too much."

"Kip! It's not a nice joke."

I stared. "Peewee-your suit hasn't any water?"

"What? Don't be silly."

My jaw dropped. "But, baby," I said helplessly, "why didn't you fill your tank before we left?"

"What are you talking about? Does your suit have a water tank?"

I couldn't answer. Peewee's suit was for tourists-for those "scenic walks amidst incomparable grandeur on the ancient face of the Moon" that the ads promised. Guided walks, of course, not over a half-hour at a time-they wouldn't put in a water tank; some tourist might choke, or bite the nipple off and half drown in his helmet, or some silly thing. Besides, it was cheaper.

I began to worry about other shortcomings that cheap-jack equipment might have-with Peewee's life depending on it. "I'm sorry," I said humbly. "Look, I'll try to figure out some way to get water to you."

"I doubt if you can. I can't die of thirst in the time it'll take us to get there, so quit worrying. I'm all right. I just wish I had my bubble gum. Ready?"

"Uh… ready."

The hills were hardly more than giant folds in lava; we were soon through them, even though we had to take it cautiously over the very rough ground. Beyond them the ground looked natter than western Kansas, stretching out to a close horizon, with mountains sticking up beyond, glaring in the Sun and silhouetted against a black sky like cardboard cutouts. I tried to figure how far the horizon was, on a thousand-mile radius and a height of eye of six feet-and couldn't do it in my head and wished for my slipstick. But it was awfully close, less than a mile.

Peewee let me overtake her, touched helmets. "Okay, Kip? All right, Mother Thing?"

"Sure."

("All right, dear.")

"Kip, the course from the pass when they fetched me here was east eight degrees north. I heard them arguing and sneaked a peek at their map. So we go back west eight degrees south-that doesn't count the jog to these hills but it's close enough to find the pass. Okay?"

"Sounds swell." I was impressed. "Peewee, were you an Indian scout once? Or Davy Crockett?"

"Pooh! Anybody can read a map"-she sounded pleased. "I want to check compasses. What bearing do you have on Earth?"

I said silently: Oscar, you've let me down. I've been cussing her suit for not having water-and you don't have a compass.

(Oscar protested: "Hey, pal, that's unfair! Why would I need a compass at Space Station Two? Nobody told me I was going to the Moon.") I said, "Peewee, this suit is for space station work. What use is a compass in space? Nobody told me I was going to the Moon."

"But-Well, don't stop to cry about it. You can get your directions by Earth."

"Why can't I use your compass?"

"Don't be silly; it's built into my helmet. Now just a moment-" She faced Earth, moved her helmet back and forth. Then she touched helmets again. "Earth is smacko on northwest… that makes the course fifty three degrees left of there. Try to pick it out. Earth is two degrees wide, you know."

"I knew that before you were born."

"No doubt. Some people require a head start."

"Smart aleck!"

"You were rude first!"

"But-Sorry, Peewee. Let's save the fights for later. I'll spot you the first two bites."

"I won't need them! You don't know how nasty I can—"

"I have some idea."

("Children! Children!")

"I'm sorry, Peewee."

"So am I. I'm edgy. I wish we were there."

"So do I. Let me figure the course." I counted degrees using Earth as a yardstick. I marked a place by eye, then tried again judging fifty-three degrees as a proportion of ninety. The results didn't agree, so I tried to spot some stars to help me. They say you can see stars from the Moon even when the Sun is in the sky. Well, you can-but not easily. I had the Sun over my shoulder but was facing Earth, almost three-quarters full, and had the dazzling ground glare as well. The polarizer cut down the glare-and cut out the stars, too.

So I split my guesses and marked the spot. "Peewee? See that sharp peak with sort of a chin on its left profile? That ought to be the course, pretty near."

"Let me check." She tried it by compass, then touched helmets. "Nice going, Kip. Three degrees to the right and you've got it."

I felt smug. "Shall we get moving?"

"Right. We go through the pass, then Tombaugh Station is due west."

It was about ten miles to the mountains; we made short work of it. You can make time on the Moon-if it is flat and if you can keep your balance. Peewee kept stepping it up until we were almost flying, long low strides that covered ground like an ostrich-and, do you know, it's easier fast than slow. The only hazard, after I got the hang of it, was landing on a rock or hole or something and tripping. But that was hazard enough because I couldn't pick my footing at that speed. I wasn't afraid of falling; I felt certain that Oscar could take the punishment. But suppose I landed on my back? Probably smash the Mother Thing to jelly.

I was worried about Peewee, too. That cut-rate tourist suit wasn't as rugged as Oscar. I've read about explosive decompression-I never want to see it. Especially not a little girl. But I didn't dare use radio to warn her even though we were probably shielded from Wormface-and if I tugged on my leash I might make her fall.

The plain started to rise and Peewee let it slow us down. Presently we were walking, then we were climbing a scree slope. I stumbled but landed on my hands and got up-one-sixth gravity has advantages as well as hazards. We reached the top and Peewee led us into a pocket in the rocks. She stopped and touched helmets. "Anybody home? You two all right?"

("All right, dear.")

"Sure," I agreed. "A little winded, maybe." That was an understatement but if Peewee could take it, I could.

"We can rest," she answered, "and take it easy from here on. I wanted to get us out of the open as fast as possible. They'll never find us here."

I thought she was right. A wormface ship flying over might spot us, if they could see down as well as up-probably just a matter of touching a control. But our chances were better now. "This is the time to recharge your empty bottle."

"Okay."

None too soon-the bottle which had been almost full had dropped by a third, more like half. She couldn't make it to Tombaugh Station on that -simple arithmetic. So I crossed my fingers and got to work. "Partner, will you untie this cat's cradle?"

While Peewee fumbled at knots, I started to take a drink-then stopped, ashamed of myself. Peewee must be chewing her tongue to work up saliva by now-and I hadn't been able to think of any way to get water to her. The tank was inside my helmet and there was no way to reach it without making me-and Mother Thing-dead in the process.

If I ever lived to be an engineer I'd correct that!

I decided that it was idiotic not to drink because she couldn't; the lives of all of us might depend on my staying in the best condition I could manage. So I drank and ate three malted milk tablets and a salt tablet, then had another drink. It helped a lot but I hoped Peewee hadn't noticed. She was busy unwinding clothesline-anyhow it was hard to see into a helmet.

I took Peewee's empty bottle off her back, making darn sure to close her outside stop valve first-there's supposed to be a one-way valve where an air hose enters a helmet but I no longer trusted her suit; it might have more cost-saving shortcomings. I laid the empty on the ground by a full one, looked at it, straightened up and touched helmets. "Peewee, disconnect the bottle on the left side of my back."

"Why, Kip?"

"Who's doing this job?" I had a reason but was afraid she might argue. My lefthand bottle held pure oxygen; the others were oxy-helium. It was full, except for a few minutes of fiddling last night in Centerville. Since I couldn't possibly give her bottle a full charge, the next best thing was to give her a half-charge of straight oxygen.

She shut up and removed it.

I set about trying to transfer pressure between bottles whose connections didn't match. There was no way to do it properly, short of tools a quarter of a million miles away-or over in Tombaugh Station which was just as bad. But I did have adhesive tape.

Oscar's manual called for two first-aid kits. I didn't know what was supposed to be in them; the manual had simply given USAF stock numbers. I hadn't been able to guess what would be useful in an outside kit-a hypodermic needle, maybe, sharp enough to stab through and give a man morphine when he needed it terribly. But since I didn't know, I had stocked inside and outside with bandage, dressings, and a spool of surgical tape.

I was betting on the tape.

I butted the mismatched hose connections together, tore off a scrap of bandage and wrapped it around the junction-I didn't want sticky stuff on the joint; it could foul the operation on a suit. Then I taped the junction, wrapping tightly, working very painstakingly and taping three inches on each side as well as around the joint-if tape could restrain that pressure a few moments, there would still be one deuce of a force trying to drag that joint apart. I didn't want it to pull apart at the first jolt. I used the entire roll.

I motioned Peewee to touch helmets. "I'm about to open the full bottle. The valve on the empty is already open. When you see me start to close the valve on the full one, you close the other one-fast! Got it?"

"Close the valve when you do, quickly. Roger."

"Stand by. Get your hand on the valve." I grabbed that lump of bandaged joint in one fist, squeezed as hard as I could, and put my other hand on the valve. If that joint let go, maybe my hand would go with it-but if the stunt failed, little Peewee didn't have long to live. So I really gripped.

Watching both gauges, I barely cracked the valve. The hose quivered; the needle gauge that read "empty" twitched. I opened the valve wide.

One needle swung left, the other right. Quickly they approached half-charge. "Now!" I yelled uselessly and started closing the valve.

And felt that patchwork joint start to give.

The hoses squeezed out of my fist but we lost only a fraction of gas. I found that I was trying to close a valve that was closed tight. Peewee had hers closed. The gauges each showed just short of half full-there was air for Peewee.

I sighed and found I had been holding my breath.

Peewee put her helmet against mine and said very soberly, "Thanks, Kip."

"Charton Drugs service, ma'am-no tip necessary. Let me tidy this mess, you can tie me and we'll go."

"You won't have to carry but one extra bottle now."

"Wrong, Peewee. We may do this stunt five or six times until there's only a whisper left"-or until the tape wears out, I added to myself. The first thing I did was to rewrap the tape on its spool-and if you think that is easy, wearing gloves and with the adhesive drying out as fast as you wind it, try it.

In spite of the bandage, sticky stuff had smeared the connections when the hoses parted. But it dried so hard that it chipped off the bayonet-and-snap joint easily. I didn't worry about the screw-thread joint; I didn't expect to use it on a suit. We mounted Peewee's recharged bottle and I warned her that it was straight oxygen. "Cut your pressure and feed from both bottles. What's your blood color reading?"

"I've been carrying it low on purpose."

"Idiot! You want to keel over? Kick your chin valve! Get into normal range!"

We mounted one bottle I had swiped on my back, tied the other and the oxy bottle on my front, and were on our way.

Earth mountains are predictable; lunar mountains aren't, they've never been shaped by water. We came to a hole too steep to go down other than by rope and a wall beyond I wasn't sure we could climb. With pitons and snap rings and no space suits it wouldn't have been hard in the Rockies-but not the way we were. Peewee reluctantly led us back. The scree slope was worse going down-I backed down on hands and knees, with Peewee belaying the line above me. I wanted to be a hero and belay for her-we had a brisk argument. "Oh, quit being big and male and gallantly stupid, Kip! You've got four big bottles and the Mother Thing and you're top heavy and I climb like a goat."

I shut up.

At the bottom she touched helmets. "Kip," she said worriedly, "I don't know what to do."

"What's the trouble?"

"I kept a little south of where the crawler came through. I wanted to avoid crossing right where the crawler crossed. But I'm beginning to think there isn't any other way."

"I wish you had told me before."

"But I didn't want them to find us! The way the crawler came is the first place they'll look."

"Mmm… yes." I looked up at the range that blocked us. In pictures, the mountains of the Moon look high and sharp and rugged; framed by the lens of a space suit they look simply impossible.

I touched helmets again. "We might find another way-if we had time and air and the resources of a major expedition. We've got to take the route the crawler did. Which way?"

"A little way north ... I think."

We tried to work north along the foothills but it was slow and difficult. Finally we backed off to the edge of the plain. It made us jumpy but it was a chance we had to take. We walked, briskly but not running, for we didn't dare miss the crawler's tracks. I counted paces and when I reached a thousand I tugged the line; Peewee stopped and we touched helmets. "We've come half a mile. How much farther do you think it is? Or could it possibly be behind us?"

Peewee looked up at the mountains. "I don't know," she admitted. "Everything looks different."

"We're lost?"

"Uh ... it ought to be ahead somewhere. But we've come pretty far. Do you want to turn around?"

"Peewee, I don't even know the way to the post office."

"But what should we do?"

"I think we ought to keep going until you are absolutely certain the pass can't be any farther. You watch for the pass and I'll watch for crawler tracks. Then, when you're certain that we've come too far, we'll turn back. We can't afford to make short casts like a dog trying to pick up a rabbit's scent."

"All right."

I had counted two thousand more paces, another mile, when Peewee stopped. "Kip? It can't be ahead of us. The mountains are higher and solider than ever."

"You're sure? Think hard. Better to go another five miles than to stop too short."

She hesitated. She had her face pushed up close to her lens while we touched helmets and I could see her frown. Finally she said, "It's not up ahead. Kip."

"That settles it. To the rear, march! 'Lay on, Macduff, and curs'd be him who first cries, "Hold, enough!" ' "

"King Lear."

"Macbeth. Want to bet?"

Those tracks were only half a mile behind us-I had missed them. They were on bare rock with only the lightest covering of dust; the Sun had been over my shoulder when we first crossed them, and the caterpillar tread marks hardly showed-I almost missed them going back. They led off the plain and straight up into the mountains.

We couldn't possibly have crossed those mountains without following the crawler's trail; Peewee had had the optimism of a child. It wasn't a road; it was just something a crawler on caterpillar treads could travel. We saw places that even a crawler hadn't been able to go until whoever pioneered it set a whopping big blast, backed off and waited for a chunk of mountain to get out of the way. I doubt if Skinny and Fatty carved that goat's path; they didn't look fond of hard work. Probably one of the exploration parties. If Peewee and I had attempted to break a new trail, we'd be there yet, relics for tourists of future generations.

But where a tread vehicle can go, a man can climb. It was no picnic; it was trudge, trudge, trudge, up and up and up-watch for loose rock and mind where you put your feet. Sometimes we belayed with the line. Nevertheless it was mostly just tedious.

When Peewee had used that half-charge of oxygen, we stopped and I equalized pressure again, this time being able to give her only a quarter charge-like Achilles and the tortoise. I could go on indefinitely giving her half of what was left-if the tape held out. It was in bad shape but the pressure was only half as great and I managed to keep the hoses together until we closed valves.

I should say that I had it fairly easy. I had water, food, pills, dexedrine. The last was enormous help; any time I felt fagged I borrowed energy with a pep-pill. Poor Peewee had nothing but air and courage.

She didn't even have the cooling I had. Since she was on a richer mix, one bottle being pure oxygen, it did not take as much flow to keep up her blood-color index-and I warned her not to use a bit more than necessary; she could not afford air for cooling, she had to save it to breathe.

"I know, Kip," she answered pettishly. "I've got the needle jiggling the red light right now. Think I'm a fool?"

"I just want to keep you alive."

"All right, but quit treating me as a child. You put one foot in front of the other. I'll make it."

"Sure you will!"

As for the Mother Thing she always said she was all right and she was breathing the air I had (a trifle used), but I didn't know what was hardship to her. Hanging by his heels all day would kill a man; to a bat it is a nice rest-yet bats are our cousins.

I talked with her as we climbed. It didn't matter what; her songs had the effect on me that it has to have your own gang cheering. Poor Peewee didn't even have that comfort, except when we stopped and touched helmets-we still weren't using radio; even in the mountains we were fearful of attracting attention.

We stopped again and I gave Peewee one-eighth of a charge. The tape was in very poor shape afterwards; I doubted if it would serve again. I said, "Peewee, why don't you run your oxy-helium bottle dry while I carry this one? It'll save your strength."

"I'm all right."

"Well, you won't use air so fast with a lighter load."

"You have to have your arms free. Suppose you slip?"

"Peewee, I won't carry it in my arms, My righthand backpack bottle is empty; I'll chuck it. Help me make the change and I'll still be carrying only four-just balanced evenly."

"Sure, I'll help. But I'll carry two bottles. Honest, Kip, the weight isn't anything. But if I run the oxy-helium bottle dry, what would I breathe while you're giving me my next charge?"

I didn't want to tell her that I had doubts about another charge, even in those ever smaller amounts. "Okay, Peewee."

She changed bottles for me; we threw the dead one down a black hole and went on. I don't know how far we climbed nor how long; I know that it seemed like days-though it couldn't have been, not on that much air. During mile after mile of trail we climbed at least eight thousand feet. Heights are hard to guess-but I've seen mountains I knew the heights of. Look it up yourself-the first range east of Tombaugh Station.

There's a lot of climbing, even at one-sixth gee.

It seemed endless because I didn't know how far it was nor how long it had been. We both had watches-under our suits. A helmet ought to have a builtin watch. I should have read Greenwich time from the face of Earth. But I had no experience and most of the time I couldn't see Earth because we were deep in mountains-anyhow I didn't know what time it had been when we left the ship.

Another thing space suits should have is rearview mirrors. While you are at it, add a window at the chin so that you can see where you step. But of the two, I would take a rearview mirror. You can't glance behind you; you have to turn your entire body. Every few seconds I wanted to see if they were following us-and I couldn't spare the effort. All that nightmare trek I kept imagining them on my heels, expecting a wormy hand on my shoulder. I listened for footsteps which couldn't be heard in vacuum anyhow.

When you buy a space suit, make them equip it with a rearview mirror. You won't have Wormface on your trail but it's upsetting to have even your best friend sneak up behind you. Yes, and if you are coming to the Moon, bring a sunshade. Oscar was doing his best and York had done an honest job on the air conditioning-but the untempered Sun is hotter than you would believe and I didn't dare use air just for cooling, any more than Peewee could.

It got hot and stayed hot and sweat ran down and I itched all over and couldn't scratch and sweat got into my eyes and burned. Peewee must have been parboiled. Even when the trail wound through deep gorges lighted only by reflection off the far wall, so dark that we turned on headlamps, I still was hot-and when we curved back into naked sunshine, it was almost unbearable. The temptation to kick the chin valve, let air pour in and cool me, was almost too much. The desire to be cool seemed more important than the need to breathe an hour hence.

If I had been alone, I might have done it and died. But Peewee was worse off than I was. If she could stand it, I had to.

I had wondered how we could be so lost so close to human habitation -and how crawly monsters could hide a base only forty miles from Tombaugh Station. Well, I had time to think and could figure it out because I could see the Moon around me.

Compared with the Moon the Arctic is swarming with people. The Moon's area is about equal to Asia-with fewer people than Centerville. It might be a century before anyone explored that plain where Wormface was based. A rocket ship passing over wouldn't notice anything even if camouflage hadn't been used; a man in a space suit would never go there; a man in a crawler would find their base only by accident even if he took the pass we were in and ranged around that plain. The lunar mapping satellite could photograph it and rephotograph, then a technician in London might note a tiny difference on two films. Maybe. Years later somebody might check up-if there wasn't something more urgent to do in a pioneer outpost where everything is new and urgent.

As for radar sightings-there were unexplained radar sightings before I was born.

Wormface could sit there, as close to Tombaugh Station as Dallas is to Fort Worth, and not fret, snug as a snake under house. Too many square miles, not enough people.

Too incredibly many square miles.... Our whole world was harsh bright cliffs and dark shadows and black sky, and endless putting one foot in front of the other.

But eventually we were going downhill oftener than up and at weary last we came to a turn where we could see out over a hot bright plain.

I There were mountains awfully far away; even from our height, up a thousand feet or so, they were beyond the horizon. I looked out over that plain, too dead beat to feel triumphant, then glanced at Earth and tried to estimate due west.

Peewee touched her helmet to mine. "There it is, Kip."

"Where?" She pointed and I caught a glint on a silvery dome.

The Mother Thing trilled at my spine ("What is it, children?")

"Tombaugh Station, Mother Thing."

Her answer was wordless assurance that we were good children and that she had known that we could do it.

The station may have been ten miles away. Distances were hard to judge, what with that funny horizon and never anything for comparison-I didn't even know how big the dome was. "Peewee, do we dare use radio?"

She turned and looked back. I did also; we were about as alone as could be. "Let's risk it."

"What frequency?"

"Same as before. Space operations. I think."

So I tried. "Tombaugh Station. Come in, Tombaugh Station. Do you read me?" Then Peewee tried. I listened up and down the band I was equipped for. No luck.

I shifted to horn antenna, aiming at the glint of light. No answer.

"We're wasting time, Peewee. Let's start slogging."

She turned slowly away. I could feel her disappointment-I had trembled with eagerness myself. I caught up with her and touched helmets. Don't let it throw you, Peewee. They can't listen all day for us to call. We see it, now we'll walk it."

"I know," she said dully.

As we started down we lost sight of Tombaugh Station, not only from twists and turns but because we dropped it below the horizon. I kept calling as long as there seemed any hope, then shut it off to save breath and battery.

We were about halfway down the outer slope when Peewee slowed and stopped-sank to the ground and sat still.

I hurried to her. "Peewee!"

"Kip," she said faintly, "could you go get somebody? Please? You know the way now. I'll wait here. Please, Kip?"

"Peewee!" I said sharply. "Get up! You've got to keep moving."

"I c-c- can't!" She began to cry. "I'm so thirsty… and my legs-" She passed out.

"Peewee!" I shook her shoulder. "You can't quit now! Mother Thing! -you tell her!"

Her eyelids fluttered. "Keep telling her, Mother Thing!" I flopped Peewee over and got to work. Hypoxia hits as fast as a jab on the button. I didn't need to see her blood-color index to know it read DANGER; the gauges on her bottles told me. The oxygen bottles showed empty, the oxy-helium tank was practically so. I closed her exhaust valves, overrode her chin valve with the outside valve and let what was left in the oxy-helium bottle flow into her suit. When it started to swell I cut back the flow and barely cracked one exhaust valve. Not until then did I close stop valves and remove the empty bottle.

I found myself balked by a ridiculous thing.

Peewee had tied me too well; I couldn't reach the knot! I could feel it with my left hand but couldn't get my right hand around; the bottle on my front was in the way-and I couldn't work the knot loose with one hand.

I made myself stop panicking. My knife-of course, my knife! It was an old scout knife with a loop to hang it from a belt, which was where it was. But the map hooks on Oscar's belt were large for it and I had had to force it on. I twisted it until the loop broke.

Then I couldn't get the little blade open. Spacesuit gauntlets don't have thumb nails.

I said to myself: Kip, quit running in circles. This is easy. All you have to do is open a knife-and you've got to… because Peewee is suffocating. I looked around for a sliver of rock, anything that could pinch-hit for a thumb nail. Then I checked my belt.

The prospector's hammer did it, the chisel end of the head was sharp enough to open the blade. I cut the clothesline away.

I was still blocked. I wanted very badly to get at a bottle on my back. When I had thrown away that empty and put the last fresh one on my back, I had started feeding from it and saved the almost-half-charge in the other one. I meant to save it for a rainy day and split it with Peewee. Now was the time-she was out of air, I was practically so in one bottle but still had that half-charge in the other-plus an eighth of a charge or less in the bottle that contained straight oxygen (the best I could hope for in equalizing pressures), I had planned to surprise her with a one-quarter charge of oxy-helium, which would last longer and give more cooling. A real knight-errant plan, I thought. I didn't waste two seconds discarding it.

I couldn't get that bottle off my back!

Maybe if I hadn't modified the backpack for nonregulation bottles I could have done it. The manual says: "Reach over your shoulder with the opposite arm, close stop valves at bottle and helmet, disconnect the shackle-" My pack didn't have shackles; I had substituted straps. But I still don't think you can reach over your shoulder in a pressurized suit and do anything effective. I think that was written by a man at a desk. Maybe he had seen it done under favorable conditions. Maybe he had done it, but was one of those freaks who can dislocate both shoulders. But I'll bet a full charge of oxygen that the riggers around Space Station Two did it for each other as Peewee and I had, or went inside and deflated.

If I ever get a chance, I'll change that. Everything you have to do in a space suit should be arranged to do in front-valves, shackles, everything, even if it is to affect something in back. We aren't like Wormface, with eyes all around and arms that bend in a dozen places; we're built to work in front of us-that goes triple in a space suit.

You need a chin window to let you see what you're doing, too! A thing can look fine on paper and be utterly crumby in the field.

But I didn't waste time moaning; I had a one-eighth charge of oxygen I could reach. I grabbed it.

That poor, overworked adhesive tape was a sorry mess. I didn't bother with bandage; if I could get the tape to stick at all I'd be happy. I handled it as carefully as gold leaf, trying to get it tight, and stopped in the middle to close Peewee's exhaust entirely when it looked as if her suit was collapsing. I finished with trembling fingers.

I didn't have Peewee to close a valve. I simply gripped that haywired joint in one hand, opened Peewee's empty bottle with the other, swung over fast and opened the oxygen bottle wide-jerked my hand across and grabbed the valve of Peewee's bottle and watched those gauges.

The two needles moved toward each other. When they slowed down I started closing her bottle-and the taped joint blew out.

I got that valve closed in a hurry; I didn't lose much gas from Peewee's bottle. But what was left on the supply side leaked away. I didn't stop to worry; I peeled away a scrap of adhesive, made sure the bayonet-and-snap joint was clean, got that slightly recharged bottle back on Peewee's suit, opened stop valves.

Her suit started to distend. I opened one exhaust valve a crack and touched helmets. "Peewee! Peewee! Can you hear me? Wake up, baby! Mother Thing!-make her wake up!"

"Peewee!"

"Yes, Kip?"

"Wake up! On your feet, Champ! Get up! Honey, please get up."

"Huh? Help me get my helmet off ... I can't breathe."

"Yes, you can. Kick your chin valve-feel it, taste it. Fresh air!"

She tried, feebly; I gave her a quick strong shot, overriding her chin valve from outside. "Oh!"

"See? You've got air. You've got lots of air. Now get up."

"Oh, please, just let me lie here."

"No, you don't! You're a nasty, mean, spoiled little brat-and if you don't get up, nobody will love you. The Mother Thing won't love you. Mother Thing!-tell her!"

("Stand up, daughter!")

Peewee tried. I helped her, once she was trying. She trembled and clung to me and I kept her from falling. "Mother Thing?" she said faintly. "I did it. You ... still love me?"

("Yes, darling!")

"I'm dizzy… and I don't think I ... can walk."

"You don't have to, honey," I said gently and picked her up in my arms.

"You don't have to walk any farther." She didn't weigh anything.

The trail disappeared when we were down out of the foothills but the crawler's tracks were sharp in the dust and led due west. I had my air trimmed down until the needle of the blood-color indicator hung at the edge of the danger sector. I held it there, kicking my chin valve only when it swung past into DANGER. I figured that the designer must have left some leeway, the way they do with gasoline gauges. I had long since warned Peewee never to take her eyes off her own indicator and hold it at the danger limit. She promised and I kept reminding her. I pressed her helmet against the yoke of mine, so that we could talk.

I counted paces and every half-mile I told Peewee to call Tombaugh Station. It was over the horizon but they might have a high mast that could "see" a long way.

The Mother Thing talked to her, too-anything to keep her from slipping away again. It saved my strength to have the Mother Thing talk and was good for all of us.

After a while I noticed that my needle had drifted into the red again. I kicked the valve and waited. Nothing happened. I kicked it again and the needle drifted slowly toward the white. "How you fixed for air, Peewee?"

"Just fine. Kip, just fine."

Oscar was yelling at me. I blinked and noticed that my shadow had disappeared. It had been stretched out ahead at an angle to the tracks, the tracks were there but my shadow was not. That made me sore, so I turned around and looked for it. It was behind me.

The darn thing had been hiding. Games!

("That better!" said Oscar.)

"It's hot in here, Oscar."

("You think it's cool out here? Keep your eye on that shadow, bud-and on those tracks.")

"All right, all right! Quit pestering me." I made up my mind that I wouldn't let that shadow get away again. Games it wanted to play, huh?

"There's darn little air in here, Oscar."

("Breathe shallow, chum. We can make it.")

"I'm breathing my socks, now."

("So breathe your shirt.")

"Did I see a ship pass over?"

("How should I know? You're the one with the blinkers.")

"Don't get smart. I'm in no mood to joke."

I was sitting on the ground with Peewee across my knees and Oscar was really shouting-and so was the Mother Thing. ("Get up, you big ape! Get up and try.") ("Get up, Kip dear! Only a little way now.")

"I just want to get my wind."

("All right, you've got it. Call Tombaugh Station.")

I said, "Peewee, call Tombaugh Station."

She didn't answer. That scared me and I snapped out of it. "Tombaugh Station,, come in! Come in!" I got to my knees and then to my feet. Tombaugh Station, do you read me? Help! Help!"

A voice answered, "I read you."

"Help! M'aidez! I've got a little girl dying! Help!"

Suddenly it sprang up in front of my eyes-great shiny domes, tall towers, radio telescopes, a giant Schmidt camera. I staggered toward it. "May Day!"

An enormous lock opened and a crawler came toward me. A voice in my phones said, "We're coming. Stay where you are. Over and out."

A crawler stopped near me. A man got out, came over and touched helmets. I gasped: "Help me get her inside."

I got back: "You've given me trouble, bub. I don't like people who give me trouble." A bigger, fatter man got out behind him.

The smaller man raised a thing like a camera and aimed it at me. That was the last I knew.

Chapter 7

I don't know if they took us all that weary way back in the crawler, or if Wormface sent a ship. I woke up being slapped and was inside, lying down. The skinny one was slapping me-the man the fat one called "Tim." I tried to fight back and found that I couldn't. I was in a straitjacket thing that held me as snugly as a wrapped mummy. I let out a yelp.

Skinny grabbed my hair, jerked my head up, tried to put a big capsule into my mouth.

I tried to bite him.

He slapped me harder and offered me the capsule again. His expression didn't change-it stayed mean.

I heard: "Take it, boy," and turned my eyes. The fat one was on the other side. "Better swallow it," he said. "You got five bad days ahead."

I took it. Not because of the advice but because a hand held my nose and another popped the pill into my mouth when I gasped. Fatty held a cup of water for me to wash it down; I didn't resist that, I needed it.

Skinny stuck a hypodermic needle big enough for a horse into my shoulder. I told him what I thought of him, using words I hardly ever use. The skinny one could have been deaf; the fat one chuckled. I rolled my eyes at him. "You, too," I added weakly. "Squared."

Fatty clucked reprovingly. "You ought to be glad we saved your life." He added, "Though it wasn't my idea, you strike me as a sorry team. He wanted you alive."

"Shaddap," Skinny said. "Strap his head."

"Let him break his neck. We better fix our ownselves. He won't wait." But he started to obey.

Skinny glanced at his watch. "Four minutes."

The fat one hastily tightened a strap across my forehead, then both moved very fast, swallowing capsules, giving each other hypos. I watched as best I could.

I was back in the ship. The ceiling glowed the same way, the walls looked the same. It was the room the two men used; their beds were on each side and I was strapped to a soft couch between them.

Each hurriedly got on his bed, began zipping up a tight wrapping like a sleeping bag. Each strapped his head in place before completing the process. I was not interested in them. "Hey! What did you do with Peewee?"

The fat man chuckled. "Hear that, Tim? That's a good one."

"Shaddap."

"You-" I was about to sum up Fatty's character but my thoughts got fuzzy and my tongue was thick. Besides, I wanted to ask about the Mother Thing, too.

I did not get out another word. Suddenly I was incredibly heavy and the couch was rock hard.

For a long, long time I wasn't awake or truly asleep. At first I couldn't feel anything but that terrible weight, then I hurt all over and wanted to scream. I didn't have the strength for it.

Slowly the pain went away and I stopped feeling anything. I wasn't a body-just me, no attachments. I dreamed a lot and none of it made sense; I seemed to be stuck in a comic book, the sort P.T.A. meetings pass resolutions against, and the baddies were way ahead no matter what I did.

Once the couch gave a twisting lurch and suddenly I had a body, one that was dizzy. After a few ages I realized vaguely that I had gone through a skew-flip turnover. I had known, during lucid moments, that I was going somewhere, very fast, at terribly high acceleration. I decided solemnly that we must be halfway and tried to figure out how long two times eternity was. It kept coming out eighty-five cents plus sales tax; the cash register rang "NO SALE" and I would start over.

Fats was undoing my head strap. It stuck and skin came away. "Rise and shine, bub. Time's awastin'."

A croak was all I managed. The skinny one was unwrapping me. My legs sagged apart and hurt. "Get up!"

I tried and didn't make it. Skinny grabbed one of my legs and started to knead it.

I screamed.

"Here, lemme do that," said Fatty. "I used to be a trainer."

Fats did know something about it. I gasped when his thumbs dug into my calves and he stopped. "Too rough?" I couldn't answer. He went on massaging me and said almost jovially, "Five days at eight gravities ain't no joy ride. But you'll be okay. Got the needle, Tim?"

The skinny one jabbed me in my left thigh. I hardly felt it. Fats pulled me to a sitting position and handed me a cup. I thought it was water; it wasn't and I choked and sprayed. Fats waited, then gave it to me again. "Drink some, this time." I did.

"Okay, up on your feet. Vacation is over."

The floor swayed and I had to grab him until it stopped. "Where are we?" I said hoarsely.

Fats grinned, as if he knew an enormously funny joke. "Pluto, of course. Lovely place, Pluto. A summer resort."

"Shaddap. Get him moving."

"Shake it up, kid. You don't want to keep him waiting."

Pluto! It couldn't be; nobody could get that far. Why, they hadn't even attempted Jupiter's moons yet. Pluto was so much farther that.

My brain wasn't working. The experience just past had shaken me so badly that I couldn't accept the fact that the experience itself proved that I was wrong.

But Pluto!

I wasn't given time to wonder; we got into space suits. Although I hadn't known, Oscar was there, and I was so glad to see him that I forgot everything else. He hadn't been racked, just tossed on the floor. I bent down (discovering charley horses in every muscle) and checked him. He didn't seem hurt.

"Get in it," Fats ordered. "Quit fiddlin'."

"All right," I answered almost cheerfully. Then I hesitated. "Say-I haven't any air."

"Take another look," said Fats. I looked. Charged oxy-helium bottles were on the backpack. "Although," he continued, "if we didn't have orders from him, I wouldn't give you a whiff of Limburger. You made us for two bottles-and a rock hammer-and a line that cost four ninety-five, earthside. Sometime," he stated without rancor, "I'm gonna take it out of your hide."

"Shaddap," said Skinny. "Get going."

I spread Oscar open, wriggled in, clipped on the blood-color reader, and zipped the gaskets. Then I stood up, clamped my helmet, and felt better just to be inside. "Tight?"

("Tight!" Oscar agreed.)

"We're a long way from home."

("But we got air! Chin up, pal.")

Which reminded me to check the chin valve. Everything was working. My knife was gone and so were the hammer and line, but those were incidentals. We were tight.

I followed Skinny out with Fats behind me. We passed Wormface in the corridor-or a wormface-but while I shuddered, I had Oscar around me and felt that he couldn't get at me. Another creature joined us in the air lock and I had to look twice to realize that it was a wormface in a space suit. The material was smooth and did not bulge the way ours did. It looked like a dead tree trunk with bare branches and heavy roots, but the supreme improvement was its "helmet"-a glassy smooth dome. One-way glass, I suppose; I couldn't see in. Cased that way, a wormface was grotesquely ridiculous rather than terrifying. But I stood no closer than I had to.

Pressure was dropping and I was busy wasting air to keep from swelling up. It reminded me of what I wanted most to know: what had happened to Peewee and the Mother Thing. So I keyed my radio and announced: "Radio check. Alfa, Bravo, Coca—"

"Shaddap that nonsense. We want you, we'll tell you."

The outer door opened and I had my first view of Pluto.

I don't know what I expected. Pluto is so far out that they can't get decent photographs even at Luna Observatory. I had read articles in the Scientific American and seen pictures in LIFE, bonestelled to look like photographs, and remembered that it was approaching its summer-if "summer" is the word for warm enough to melt air. I recalled that because they had announced that Pluto was showing an atmosphere as it got closer to the Sun.

But I had never been much interested in Pluto-too few facts and too much speculation, too far away and not desirable real estate. By comparison the Moon was a choice residential suburb. Professor Tombaugh (the one the station was named for) was working on a giant electronic telescope to photograph it, under a Guggenheim grant, but he had a special interest; he discovered Pluto years before I was born.

The first thing I noticed as the door was opening was click… click… click-and a fourth click, in my helmet, as Oscar's heating units all cut in.

The Sun was in front of me-I didn't realize what it was at first; it looked no bigger than Venus or Jupiter does from Earth (although much brighter). With no disc you could be sure of, it looked like an electric arc.

Fats jabbed me in the ribs. "Snap out of your hop."

A drawbridge joined the door to an elevated roadway that led into the side of a mountain about two hundred yards away. The road was supported on spidery legs two or three feet high up to ten or twelve, depending on the lay of the land. The ground was covered with snow, glaringly white even under that pinpoint Sun. Where the stilts were longest, about halfway, the viaduct crossed a brook.

What sort of "water" was that? Methane? What was the "snow"? Solid ammonia? I didn't have tables to tell me what was solid, what was liquid, and what was gas at whatever hellish cold Pluto enjoyed in the "summer." All I knew was that it got so cold in its winter that it didn't have any gas or liquid-just vacuum, like the Moon.

I was glad to hurry. A wind blew from our left and was not only freezing that side of me in spite of Oscar's best efforts, it made the footing hazardous-I decided it would be far safer to do that forced march on the Moon again than to fall into that "snow." Would a man struggle before he shattered himself and his suit, or would he die as he hit?

Adding to hazard of wind and no guard rail was traffic, spacesuited wormfaces. They moved at twice our speed and shared the road the way a dog does a bone. Even Skinny resorted to fancy footwork and I had three narrow squeaks.

The way continued into a tunnel; ten feet inside a panel snapped out of the way as we got near it. Twenty feet beyond was another; it did the same and closed behind us. There were about two dozen panels, each behaving like fast-acting gate valves, and the pressure was a little higher after each. I couldn't see what operated them although it was light in the tunnel from glowing ceilings. Finally we passed through a heavy-duty air lock, but the pressure was already taken care of and its doors stood open. It led into a large room.

Wormface was inside. The Wormface, I think, because he spoke in English: "Come!" I heard it through my helmet. But I couldn't be sure it was he as there were others around and I would have less trouble telling wart hogs apart.

Wormface hurried away. He was not wearing a space suit and I was relieved when he turned because I could no longer see his squirming mouth; but it was only a slight improvement as it brought into sight his rearview eye.

We were hard put to keep up. He led us down a corridor, to the right through another open double set of doors, and finally stopped suddenly just short of a hole in the floor about like a sewer manhole. "Undress it!" he commanded.

Fats and Skinny had their helmets open, so I knew it was safe, in one way. But in every other way I wanted to stay inside Oscar-as long as Wormface was around.

Fats undamped my helmet. "Out of that skin, bub. Snap it up!" Skinny loosened my belt and they quickly had the suit off even though I hindered.

Wormface waited. As soon as I was out of Oscar he pointed at the hole. "Down!"

I gulped. That hole looked as deep as a well and less inviting.

"Down," he repeated. "Now."

"Do it, bub," Fats advised. "Jump or be pushed. Get down that hole before he gets annoyed."

I tried to run.

Wormface was around me and chivvying me back before I was well started. I slammed on the brakes and backed up-glanced behind just in time to turn a fall into a clumsy jump.

It was a long way to the bottom. Landing did not hurt the way it would have on Earth, but I turned an ankle. That didn't matter; I wasn't going anywhere; the hole in the ceiling was the only exit.

My cell was about twenty feet square. It was, I suppose, carved out of solid rock, although there was no way to tell as the walls and floor and ceiling were the same elephant hide used in the ship. A lighting panel covered half the ceiling and I could have read if I'd had anything to read. The only other detail was a jet of water that splashed out of a hole in the wall, landed in a depression the size of a washtub, and departed for parts unknown.

The place was warm, which was well as there was nothing resembling bed or bedclothes. I had already concluded that I might be here quite a while and was wondering about eating and sleeping.

I decided I was tired of this nonsense. I had been minding my own business, out back of my own house. Everything else was Wormface's fault! I sat down on the floor and thought about slow ways to kill him.

I finally gave up that foolishness and wondered about Peewee and the Mother Thing. Were they here? Or were they dead somewhere between the mountains and Tombaugh Station? Thinking it over glumly, I decided that poor little Peewee was best off if she had never wakened from that second coma. I wasn't sure about the Mother Thing because I didn't know enough about her-but in Peewee's case I was sure.

Well, there was a certain appropriateness to the fix I was in; a knight-errant usually lands in a dungeon at some point. But by rights, the maiden fair ought to be imprisoned in a tower in the same castle. Sorry, Peewee; as a knight-errant, I'm a good soda jerk. Or jerk. "His strength is as the strength of ten because his heart is pure."

It wasn't funny.

I got tired of punishing myself and looked to see what time it was-not that it mattered. But a prisoner is traditionally expected to scratch marks on the wall, tallying the days he's been in, so I thought I might as well start. My watch was on my wrist but not running and I couldn't start it. Maybe eight gees was too much for it, even though it was supposed to be shockproof, waterproof, magnetism-proof, and immune to unAmerican influences.

After a while I lay down and went to sleep.

I was awakened by a clatter.

It was a ration can hitting the floor and the fall hadn't helped it, but the key was on it and I got it open-corned beef hash and very good, too. I used the empty can to drink fromthe water might be poisoned, but did I have a choice?-and then washed the can so that it wouldn't smell.

The water was warm. I took a bath.

I doubt if many American citizens during the past twenty years have ever needed a bath as much as I did. Then I washed my clothes. My shirt, shorts, and socks were wash-and-wear synthetics; my slacks were denim and took longer to dry, but I didn't mind; I just wished that I had one of the two hundred bars of Skyway Soap that were home on the floor of my closet. If I had known I was coming to Pluto, I would have brought one.

Washing clothes caused me to take inventory. I had a handkerchief, sixty-seven cents in change, a dollar bill so sweat-soaked and worn that it was hard to make out Washington's picture, a mechanical pencil stamped "Jay's Drive-In-the thickest malts in town!"-A canard; I make the thickest-and a grocery list I should have taken care of for Mother but hadn't because of that silly air conditioner in Charton's Drugstore. It wasn't as bedraggled as the dollar bill because it had been in my shirt pocket.

I lined up my assets and looked at them. They did not look like a collection that could be reworked into a miracle weapon with which I would blast my way out, steal a ship, teach myself to pilot it, and return triumphantly to warn the President and save the country. I rearranged them and they still didn't.

I was correct. They weren't.

I woke up from a terrible nightmare, remembered where I was, and wished I were back in the nightmare. I lay there feeling sorry for myself and presently tears started welling out of my eyes while my chin trembled. I had never been badgered "not to be a crybaby"; Dad says there is nothing wrong with tears; it's just that they are socially not acceptable-he says that in some cultures weeping is a social grace. But in Horace Mann Grammar School being a crybaby was no asset; I gave it up years ago. Besides, it's exhausting and gets you nowhere. I shut off the rain and took stock.

My action list ran like this:

1. Escape from this cell.

2. Find Oscar, suit up.

3. Go outdoors, steal a ship, head home-if I could figure out how to gun it.

4. Figure out a weapon or stratagem to fight off the wormfaces or keep them busy while I sneaked out and grabbed a ship. Nothing to it. Any superman capable of teleportation and other assorted psionic tricks could do it. Just be sure the plan is foolproof and that your insurance is paid up.

5. Crash priority: make sure, before bidding farewell to the romantic shores of exotic Pluto and its friendly colorful natives, that neither Peewee nor the Mother Thing is here-if they are, take them along-because, contrary to some opinions, it is better to be a dead hero than a live louse. Dying is messy and inconvenient but even a louse dies someday no matter what he will do to stay alive and he is forever having to explain his choice. The gummed-up spell that I had had at the hero business had shown that it was undesirable work but the alternative was still less attractive.

The fact that Peewee knew how to gun those ships, or that the Mother Thing could coach me, did not figure. I can't prove that, but I know.

Footnote: after I learned to run one of their ships, could I do so at eight gravities? That may simply call for arch supports for a wormface but I knew what eight gees did to me. Automatic pilot? If so, would it have directions on it, in English? (Don't be silly, Clifford!)

Subordinate footnote: how long would it take to get home at one gravity? The rest of the century? Or just long enough to starve to death?

6. Occupational therapy for the lulls when I went stale on the problems. This was important in order to avoid coming apart at the seams. 0. Henry wrote stories in prison, St. Paul turned out his strongest epistles incarcerated in Rome, Hitler wrote Mein Kampf in jail-next time I would bring a typewriter and paper. This time I could work out magic squares and invent chess problems. Anything was better than feeling sorry for myself. Lions put up with zoos and wasn't I smarter than a lion? Some, anyhow?

And so to work-One: how to get out of this hole? I came up with a straightforward answer: there wasn't any way. The cell was twenty feet on a side with a ceiling twelve feet high; the walls were as smooth as a baby's cheek and as impervious as a bill collector. The other features were the hole in the ceiling, which ran about six feet still higher, the stream of water and its catch basin, and a glowing area in the ceiling. For tools I had the stuff previously listed (a few ounces of nothing much, nothing sharp, nor explosive, nor corrosive), my clothes, and an empty tin can.

I tested how high I could jump. Even a substitute guard needs springs in his legs-I touched the ceiling. That meant a gravity around one-half gee-I hadn't been able to guess, as I had spent an endless time under one-sixth gravity followed by a few eons at eight gees; my reflexes had been mistreated.

But, although I could touch the ceiling, I could neither walk on it nor levitate. I could get that high, but there was nothing a mouse could cling to.

Well, I could rip my clothes and braid a rope. Was there anything near the hole on which to catch it? All I could recall was smooth floor. But suppose it did catch? What next? Paddle around in my skin until Wormface spotted me and herded me back down, this time with no clothes? I decided to postpone the rope trick until I worked out that next step which would confound Wormface and his tribe.

I sighed and looked around. All that was left was that jet of water and the floor basin that caught it.

There is a story about two frogs trapped in a crock of cream. One sees how hopeless it is, gives up and drowns. The other is too stupid to know he's licked; he keeps on paddling. In a few hours he has churned so much butter that it forms an island, on which he floats, cool and comfortable, until the milkmaid comes and chucks him out.

That water spilled in and ran out. Suppose it didn't run out?

I explored the bottom of the catch basin. The drain was large by our standards, but I thought I could plug it. Could I stay afloat while the room filled up, filled the hole above, and pushed me out the spout? Well, I could find out, I had a can.

The can looked like a pint and a "pint's a pound the world 'round" and a cubic foot of water weighs (on Earth) a little over sixty pounds. But I had to be sure. My feet are eleven inches long; they've been that size since I was ten-I took a lot of ribbing until I grew up to them. I marked eleven inches on the floor with two pennies. It turns out that a dollar bill is two and a half inches wide and quarter is a smidgeon under an inch. Shortly I knew the dimensions of room and can pretty accurately.

I held the can under the stream, letting it fill and dumping it fast, while I ticked off cans of water on my left hand and counted seconds. Eventually I calculated how long it would take to fill the room. I didn't like the answer, so I did it over.

It would take fourteen hours to fill the room and the hole above, plus an hour to allow for crude methods. Could I stay afloat that long?

You're darn tootin' I could!-if I had to. And I had to. There isn't any limit to how long a man can float if he doesn't panic.

I balled my slacks and stuffed them in the drain. I almost lost them, so I wrapped them around the can and used the bundle as a cork. It stayed put and I used the rest of my clothes to caulk it. Then I waited, feeling cocky. Maybe the flood would create the diversion I needed for the rest of the caper. Slowly the basin filled.

The water got about an inch below floor level and stopped.

A pressure switch, I suppose. I should have known that creatures who could build eight-gee, constant-boost ships would design plumbing to "fail-safe." I wish we could.

I recovered my clothes, all but one sock, and spread them to dry. I hoped the sock would foul a pump or something but I doubted it; they were good engineers.

I never really believed that story about the frogs.

Another can was tossed down-roast beef and soggy potatoes. It was filling but I began to long for peaches. The can was stenciled "Available for subsidized resale on Luna" which made it possible that Skinny and Fatty had come by this food honestly. I wondered how they liked sharing their supplies? No doubt they did so only because Wormface had twisted their arms. Which made me wonder why Wormface wanted me alive? I was in favor of it but couldn't see why he was. I decided to call each can a "day" and let the empties be my calendar.

Which reminded me that I had not worked out how long it would take to get home on a one-gee boost, if it turned out that I could not arrange automatic piloting at eight gees. I was stymied on getting out of the cell, I hadn't even nibbled at what I would do if I did get out (correction: when I got out), but I could work ballistics.

I didn't need books. I've met people, even in this day and age, who can't tell a star from a planet and who think of astronomical distances simply as "big." They remind me of those primitives who have just four numbers: one, two, three, and "many." But any tenderfoot Scout knows the basic facts and a fellow bitten by the space bug (such as myself) usually knows a number of figures.

"Mother very thoughtfully made a jelly sandwich under no protest." Could you forget that after saying it a few times? Okay, lay it out so: Mother MERCURY $.39 Very VENUS $.72 Thoughtfully TERRA $1.00 Made MARS $1.50 A ASTEROIDS (assorted prices, unimportant) Jelly JUPITER $5.20 Sandwich SATURN $9.50 Under URANUS $19.00 No NEPTUNE $30.00 Protest PLUTO $39.50

The "prices" are distances from the Sun in astronomical units. An A.U. is the mean distance of Earth from Sun, 93,000,000 miles. It is easier to remember one figure that everybody knows and some little figures than it is to remember figures in millions and billions. I use dollar signs because a figure has more flavor if I think of it as money-which Dad considers deplorable. Some way you must remember them, or you don't know your own neighborhood.

Now we come to a joker. The list says that Pluto's distance is thirty-nine and a half times Earth's distance. But Pluto and Mercury have very eccentric orbits and Pluto's is a dilly; its distance varies almost two billion miles, more than the distance from the Sun to Uranus. Pluto creeps to the orbit of Neptune and a hair inside, then swings way out and stays there a couple of centuries-it makes only four round trips in a thousand years.

But I had seen that article about how Pluto was coming into its "summer." So I knew it was close to the orbit of Neptune now, and would be for the rest of my life-my life expectancy in Centerville; I didn't look like a preferred risk here. That gave an easy figure-30 astronomical units.

Acceleration problems are simple s=1/2 at2; distance equals half the acceleration times the square of elapsed time. If astrogation were that simple any sophomore could pilot a rocket ship-the complications come from gravitational fields and the fact that everything moves fourteen directions at once. But I could disregard gravitational fields and planetary motions; at the speeds a wormface ship makes neither factor matters until you are very close. I wanted a rough answer.

I missed my slipstick. Dad says that anyone who can't use a slide rule is a cultural illiterate and should not be allowed to vote. Mine is a beauty-a K&E 20" Log-log Duplex Decitrig. Dad surprised me with it after I mastered a ten-inch polyphase. We ate potato soup that week-but Dad says you should always budget luxuries first. I knew where it was. Home on my desk.

No matter. I had figures, formula, pencil and paper.

First a check problem. Fats had said "Pluto," "five days," and "eight gravities."

It's a two-piece problem; accelerate for half time (and half distance); do a skew-flip and decelerate the other half time (and distance). You can't use the whole distance in the equation, as "time" appears as a square-it's a parabolic. Was Pluto in opposition? Or quadrature? Or conjunction? Nobody looks at Pluto-so why remember where it is on the ecliptic? Oh, well, the average distance was 30 A.U.s-that would give a close-enough answer. Half that distance, in feet, is: 1/2 x 30 x 93,000,000 x 5280. Eight gravities is: 8 x 32.2 ft./sec./sec.-speed increases by 258 feet per second every second up to skew-flip and decreases just as fast thereafter.

So-1/2 x 30 x 93,000,000 x 5280 = 1/2 x 8 x 32.2 x t2 -and you wind up with the time for half the trip, in seconds. Double that for full trip. Divide by 3600 to get hours; divide by 24 and you have days. On a slide rule such a problem takes forty seconds, most of it to get your decimal point correct. It's as easy as computing sales tax.

It took me at least an hour and almost as long to prove it, using a different sequence-and a third time, because the answers didn't match (I had forgotten to multiply by 5280, and had "miles" on one side and "feet" on the other-a no-good way to do arithmetic)-then a fourth time because my confidence was shaken. I tell you, the slide rule is the greatest invention since girls.

But I got a proved answer. Five and a half days. I was on Pluto.

Or maybe Neptune—

No, on Neptune I would not be able to jump to a twelve-foot ceiling; Pluto alone matched all facts. So I erased and computed the trip at one gravity, with turnover.

Fifteen days.

It seemed to me that it ought to take at least eight times as long at one gee as at eight-more likely sixty-four. Then I was glad I had bulled my way through analytical geometry, for I made a rough plot and saw the trouble. Squared time cut down the advantage-because the more boost, the shorter the trip, and the shorter the trip the less time in which to use the built-up speed. To cut time in half, you need four times as much boost; to cut it to a quarter, you need sixteen times the boost, and so on. This way lies bankruptcy.

To learn that I could get home in about two weeks at one gravity cheered me. I couldn't starve in two weeks. If I could steal a ship. If I could run it. If I could climb out of this hole. If-Not "if," but "when!" I was too late for college this year; fifteen more days wouldn't matter. I had noticed, in the first problem, the speed we had been making at skew-flip. More than eleven thousand miles per second. That's a nice speed, even in space. It made me think. Consider the nearest star, Proxima Centauri, four and threetenths lightyears away, the distance you hear so often on quiz shows. How long at eight gees?

The problem was the same sort but I had to be careful about decimal points; the figures mount up. A lightyear is-I had forgotten. So multiply 186,000 miles per second (the speed of light) by the seconds in a year (365.25 x 24 x 3600) and get-5,880,000,000,000 miles - multiply that by 4.3 and get-25,284,000,000,000 Call it twenty-five trillion miles. Whew!

It works out to a year and five months-not as long as a trip around the Horn only last century.

Why, these monsters had star travel!

I don't know why I was surprised; it had been staring me in the face. I had assumed that Wormface had taken me to his home planet, that he was a Plutonian, or Plutocrat, or whatever the word is. But he couldn't be.

He breathed air. He kept his ship warm enough for me. When he wasn't in a hurry, he cruised at one gee, near enough. He used lighting that suited my eyes. Therefore he came from the sort of planet I came from.

Proxima Centauri is a double star, as you know if you do crossword puzzles, and one is a twin for our own Sun-size, temperature, special pattern. Is it a fair guess that it has a planet like Earth? I had a dirty hunch that I knew Wormface's home address.

I knew where he didn't come from. Not from a planet that runs a couple of centuries in utter airlessness with temperatures pushing absolute zero, followed by a "summer" in which some gases melt but water is solid rock and even Wormface has to wear a space suit. Nor from anywhere in our system, for I was sure as taxes that Wormface felt at home only on a planet like ours. Never mind the way he looked; spiders don't look like us but they like the things we like-there must be a thousand spiders in our houses for every one of us.

Wormface and his kin would like Earth. My fear was that they liked it too much.

I looked at that Proxima Centauri problem and saw something else. The turnover speed read 1,110,000 miles per second, six times the speed of light. Relativity theory says that's impossible.

I wanted to talk to Dad about it. Dad reads everything from The Anatomy of Melancholy to Acta Mathematica and Paris-Match and will sit on a curbstone separating damp newspapers wrapped around garbage in order to see continued-on-page-eight. Dad would haul down a book and we'd look it up. Then he would try four or five more with other opinions. Dad doesn't hold with the idea that it-must-be-true-or-they-wouldn't-have-printed-it; he doesn't consider any opinion sacred-it shocked me the first time he took out a pen and changed something in one of my math books.

Still, even if speed-of-light was a limit, four or five years wasn't impossible, or even impractical. We've been told for so long that star trips, even to the nearest stars, would take generations that we may have a wrong slant. A mile of lunar mountains is a long way but a trillion miles in empty space may not be.

But what was Wormface doing on Pluto?

If you were invading another solar system, how would you start? I'm not joking; a dungeon on Pluto is no joke and I never laughed at Wormface. Would you just barge in, or toss your hat in first? They seemed far ahead of us in engineering but they couldn't have known that ahead of time. Wouldn't it be smart to build a supply base in that system in some spot nobody ever visited?

Then you could set up advance bases, say on an airless satellite of a likely-looking planet, from which you could scout the surface of the target planet. If you lost your scouting base, you would pull back to main base and work out a new attack.

Remember that while Pluto is a long way off to us, it was only five days from Luna for Wormface. Think about World War II, back when speeds were slow. Main Base is safely out of reach (U.S.A./Pluto) but only about five days from advance base (England/The Moon) which is three hours from theater-of-operations (France-Germany/Earth). That's a slow way to operate but it worked for the Allies in World War II.

I just hoped it would not work for Wormface's gang.

Though I didn't see anything to prevent it.

Somebody chucked down another can-spaghetti and meat balls. If it had been canned peaches, I might not have had the fortitude to do what I did next, which was to use it for a hammer before I opened it. I beat an empty can into a flat narrow shape and beat a point on it, which I sharpened on the edge of the catch basin. When I was through, I had a dagger -not a good one, but it made me feel less helpless.

Then I ate. I felt sleepy and went to sleep in a warm glow. I was still a prisoner but I had a weapon of sorts and I believed that I had figured out what I was up against. Getting a problem analyzed is two-thirds of solving it. I didn't have nightmares.

The next thing tossed down the hole was Fats.

Skinny landed on him seconds later. I backed off and held my dagger ready. Skinny ignored me, picked himself up, looked around, went to the water spout and got a drink. Fats was in no shape to do anything; his breath was knocked out.

I looked at him and thought what a nasty parcel he was. Then I thought, oh, what the deuce!-he had massaged me when I needed it. I heaved him onto his stomach and began artificial respiration. In four or five pushes his motor caught and he was able to breathe. He gasped, "That's enough!"

I backed off, got my knife out. Skinny was sitting against a wall, ignoring us. Fats looked at my feeble weapon and said, "Put that away, kid. We're bosom buddies now."

"We are?"

"Yeah. Us human types had better stick together." He sighed wretchedly. "After all we done for him! That's gratitude."

"What do you mean?" I demanded.

"Huh?" said Fats. "Just what I said. He decided he could do without us. So Annie doesn't live here any more."

"Shaddap," the skinny one said flatly.

Fats screwed his face into a pout. "You shaddap," he said peevishly. "I'm tired of that. It's shaddap here, shaddap there, all day long-and look where we are."

"Shaddap, I said."

Fats shut up. I never did find out what had happened, because Fats seldom gave the same explanation twice. The older man never spoke except for that tiresome order to shut up, or in monosyllables even less helpful. But one thing was clear: they had lost their jobs as assistant gangsters, or fifth columnists, or whatever you call a human being who would stooge against his own race. Once Fats said, "Matter of fact, it's your fault."

"Mine?" I dropped my hand to my tin-can knife.

"Yours. If you hadn't butted in, he wouldn't have got sore."

"I didn't do anything."

"Says you. You swiped his two best prizes, that's all, and held him up when he planned to hightail it back here." "Oh. But that wasn't your fault."

"So I told him. You try telling him. Take your hand away from that silly nail file." Fats shrugged. "Like I always say, let bygones be bygones."

I finally learned the thing I wanted most to know. About the fifth time I brought up the matter of Peewee, Fats said, "What d'you want to know about the brat for?"

"I just want to know whether she's alive or dead."

"Oh, she's alive. Leastwise she was last time I seen her."

"When was that?"

"You ask too many questions. Right here."

"She's here?" I said eagerly.

"That's what I said, wasn't it? Around everywhere and always underfoot. Living like a princess, if you ask me." Fats picked his teeth and frowned. "Why he should make a pet out of her and treat us the way he did, beats me. It ain't right."

I didn't think so, either, but for another reason. The idea that gallant little Peewee was the spoiled darling of Wormface I found impossible to believe. There was some explanation-or Fats was lying. "You mean he doesn't have her locked up?"

"What's it get him? Where's she gonna go?"

I pondered that myself. Where could you go?-when to step outdoors was suicide. Even if Peewee had her space suit (and that, at least, was probably locked up), even if a ship was at hand and empty when she got outside, even if she could get into it, she still wouldn't have a "ship's brain," the little gadget that served as a lock. "What happened to the Mother Thing?"

"The what?"

"The-" I hesitated. "Uh, the nonhuman who was in my space suit with me. You must know, you were there. Is she alive? Is she here?"

But Fats was brooding. "Them bugs don't interest me none," he said sourly and I could get no more out of him.

But Peewee was alive (and a hard lump in me was suddenly gone). She was here! Her chances, even as a prisoner, had been enormously better on the Moon; nevertheless I felt almost ecstatic to know that she was near. I began thinking about ways to get a message to her.

As for Fats' insinuation that she was playing footy with Wormface, it bothered me not at all. Peewee was unpredictable and sometimes a brat and often exasperating, as well as conceited, supercilious, and downright childish. But she would be burned alive rather than turn traitor. Joan of Arc had not been made of sterner stuff.

We three kept uneasy truce. I avoided them, slept with one eye open, and tried not to sleep unless they were asleep first, and I always kept my dagger at hand. I did not bathe after they joined me; it would have put me at a disadvantage. The older one ignored me, Fats was almost friendly. I pretended not to be afraid of my puny weapon, but I think he was. The reason I think so comes from the first time we were fed. Three cans dropped from the ceiling; Skinny picked up one, Fats got one, but when I circled around to take the third, Fats snatched it.

I said, "Give me that, please."

Fats grinned. "What makes you think this is for you, sonny boy?"

"Uh, three cans, three people."

"So what? I'm feeling a mite hungry. I don't hardly think I can spare it."

"I'm hungry, too. Be reasonable."

"Mmmm-" He seemed to consider it. "Tell you what. I'll sell it to you."

I hesitated. It had a shifty logic; Wormface couldn't walk into Lunar Base commissary and buy these rations; probably Fats or his partner had bought them. I wouldn't mind signing I.O.U.s-a hundred dollars a meal, a thousand, or a million; money no longer meant anything. Why not humor him?

No! If I gave in, if I admitted I had to dicker with him for my prison rations, he would own me. I'd wait on him hand and foot, do anything he told me, just to eat.

I let him see my tin dagger. "I'll fight you for it."

Fats glanced at my hand and grinned broadly. "Can't you take a joke?"

He tossed me the can. There was no trouble at feeding times after that, We lived like that "Happy Family" you sometimes see in traveling zoos: a lion caged with a lamb. It is a startling exhibit but the lamb has to be replaced frequently. Fats liked to talk and I learned things from him, when I could sort out truth from lies. His name-so he said-was Jacques de Barre de Vigny ("Call me 'Jock.' ") and the older man was Timothy Johnson-but I had a hunch that their real names could be learned only by inspecting post office bulletin boards. Despite Jock's pretense of knowing everything, I soon decided that he knew nothing about Wormface's origin and little about his plans and purposes. Wormface did not seem the sort to discuss things with "lower animals"; he would simply make use of them, as we use horses.

Jock admitted one thing readily. "Yeah, we put the snatch on the brat. There's no uranium on the Moon; those stories are just to get suckers. We were wasting our time-and a man's got to eat, don't he?"

I didn't make the obvious retort; I wanted information. Tim said, "Shaddap!"

"Aw, what of it, Tim? You worried about the F.B.I.? You think the Man can put the arm on you-here?"

"Shaddap, I said."

"Happens I feel like talking. So blow it." Jock went on, "It was easy. The brat's got more curiosity than seven cats. He knew she was coming and when." Jock looked thoughtful. "He always knows-he's got lots of people working for him, some high up. All I had to do was be in Luna City and get acquainted-I made the contact because Tim here ain't the fatherly type, the way I am. I get to talking with her, I buy her a coke, I tell her about the romance of hunting uranium on the Moon and similar hogwash. Then I sigh and say it's too bad I can't show her the mine of my partner and I. That's all it took. When the tourist party visited Tombaugh Station, she got away and sneaked out the lock-she worked that part out her ownself. She's sly, that one. All we had to do was wait where I told her -didn't even have to be rough with her until she got worried about taking longer for the crawler to get to our mine than I told her." Jock grinned. "She fights pretty well for her weight. Scratched me some."

Poor little Peewee! Too bad she hadn't drawn and quartered him! But the story sounded true, for it was the way Peewee would behave-sure of herself, afraid of no one, unable to resist any "educational" experience.

Jock went on, "It wasn't the brat he wanted. He wanted her old man. Had some swindle to get him to the Moon, didn't work." Jock grinned sourly. "That was a bad time, things ain't good when he don't have his own way. But he had to settle for the brat. Tim here pointed out to him he could trade."

Tim chucked in one word which I took as a general denial. Jock raised his eyebrows. "Listen to vinegar puss. Nice manners, ain't he?"

Maybe I should have kept quiet since I was digging for facts, not philosophy. But I've got Peewee's failing myself; when I don't understand, I have an unbearable itch to know why. I didn't (and don't) understand what made Jock tick. "Jock? Why did you do it?"

"Huh?"

"Look, you're a human being." (At least he looked like one.) "As you pointed out, we humans had better stick together. How could you bring yourself to kidnap a little girl-and turn her over to him?"

"Are you crazy, boy?"

"I don't think so."

"You talk crazy. Have you ever tried not doing something he wanted? Try it some time."

I saw his point. Refusing Wormface would be like a rabbit spitting in a snake's eye-as I knew too well. Jock went on, "You got to understand the other man's viewpoint. Live and let live, I always say. We got grabbed while we were messin' around, lookin' for carnotite-and after that, we never stood no chance. You can't fight City Hall, that gets you nowhere. So we made a dicker-we run his errands, he pays us in uranium."

My faint sympathy vanished. I wanted to throw up. "And you got paid?"

"Well… you might say we got time on the books."

I looked around our cell. "You made a bad deal."

Jock grimaced, looking like a sulky baby. "Maybe so. But be reasonable, kid. You got to cooperate with the inevitable. These boys are moving in-they got what it takes. You seen that yourself. Well, a man's got to look out for number one, don't he? It's a cinch nobody else will. Now I seen a case like this when I was no older than you and it taught me a lesson. Our town had run quietly for years, but the Big

Fellow was getting old and losing his grip… whereupon some boys from St. Louis moved in. Things were confused for a while. A man had to know which way to jump-else he woke up wearing a wooden overcoat, like as not. Those that seen the handwriting made out; those that didn't… well, it don't do no good to buck the current, I always say. That makes sense, don't it?"

I could follow his "logic"-provided you accepted his "live louse" standard. But he had left out a key point. "Even so. Jock, I don't see how you could do that to a little girl."

"Huh? I just explained how we couldn't help it."

"But you could. Even allowing how hard it is to face up to him and refuse orders, you had a perfect chance to duck out."

"Wha' d'you mean?"

"He sent you to Luna City to find her, you said so. You've got a return-fare benefitI know you have, I know the rules. All you had to do was sit tight, where he couldn't reach you-and take the next ship back to Earth. You didn't have to do his dirty work."

"But—"

I cut him off. "Maybe you couldn't help yourself, out in a lunar desert. Maybe you wouldn't feel safe even inside Tombaugh Station. But when he sent you into Luna City, you had your chance. You didn't have to steal a little girl and turn her over to a-a bug-eyed monster!"

He looked baffled, then answered quickly. "Kip, I like you. You're a good boy. But you ain't smart. You don't understand."

"I think I do!"

"No, you don't." He leaned toward me, started to put a hand on my knee; I drew back. He went on, "There's something I didn't tell you… for fear you'd think I was a-well, a zombie, or something. They operated on us."

"Huh?"

"They operated on us," he went on glibly. "They planted bombs in our heads. Remote control, like a missile. A man gets out of line… he punches a button-blooie! Brains all over the ceiling." He fumbled at the nape of his neck. "See the scar? My hair's getting kind o' long… but if you look close I'm sure you'll see it; it can't 'ave disappeared entirely. See it?"

I started to look. I might even have been sold on it-I had been forced to believe less probable things lately. Tim cut short my suspended judgment with one explosive word.

Jock flinched, then braced himself and said, "Don't pay any attention to him!"

I shrugged and moved away. Jock didn't talk the rest of that "day." That suited me.

The next "morning" I was roused by Jock's hand on my shoulder.

"Wake up, Kip! Wake up!"

I groped for my toy weapon. "It's over there by the wall," Jock said, "but it ain't ever goin' to do you any good now."

I grabbed it. "What do you mean? Where's Tim?"

"You didn't wake up?"

"Huh?"

"This is what I've been scared of. Cripes, boy! I just had to talk to somebody. You slept through it?"

"Through what? And where's Tim?"

Jock was shivering and sweating. "They blue-lighted us, that's what. They took Tim." He shuddered. "I'm glad it was him. I thought-well, maybe you've noticed I'm a little stout… they like fat."

"What do you mean? What have they done with him?"

"Poor old Tim. He had his faults, like anybody, but-He's soup, by now… that's what." He shuddered again. "They like soup-bones and all."

"I don't believe it. You're trying to scare me."

"So?" He looked me up and down. "They'll probably take you next. Son, if you're smart, you'll take that letter opener of yours over to that horse trough and open your veins. It's better that way."

I said, "Why don't you? Here, I'll lend it to you."

He shook his head and shivered. "I ain't smart."

I don't know what became of Tim. I don't know whether the wormfaces ate people, or not. (You can't say "cannibal." We may be mutton, to them.) I wasn't especially scared because I had long since blown all fuses in my "scare" circuits.

What happens to my body after I'm through with it doesn't matter to me. But it did to Jock; he had a phobia about it. I don't think Jock was a coward; cowards don't even try to become prospectors on the Moon. He believed his theory and it shook him. He halfway admitted that he had more reason to believe it than I had known. He had been to Pluto once before, so he said, and other men who had come along, or been dragged, on that trip hadn't come back.

When feeding time came-two cans-he said he wasn't hungry and offered me his rations. That "night" he sat up and kept himself awake. Finally I just had to go to sleep before he did.

I awoke from one of those dreams where you can't move. The dream was correct; sometime not long before, I had surely been blue-lighted.

Jock was gone.

I never saw either of them again.

Somehow I missed them… Jock at least. It was a relief not to have to watch all the time, it was luxurious to bathe. But it gets mighty boring, pacing your cage alone.

I have no illusions about them. There must be well over three billion people I would rather be locked up with. But they were people.

Tim didn't have anything else to recommend him; he was as coldly vicious as a guillotine. But Jock had some slight awareness of right and wrong, or he wouldn't have tried to justify himself. You might say he was just weak.

But I don't hold with the idea that to understand all is to forgive all; you follow that and first thing you know you're sentimental over murderers and rapists and kidnappers and forgetting their victims. That's wrong. I'll weep over the likes of Peewee, not over criminals whose victims they are. I missed Jock's talk but if there were some way to drown such creatures at birth, I'd take my turn as executioner. That goes double for Tim.

If they ended up as soup for hobgoblins, I couldn't honestly be sorry-even though it might be my turn tomorrow.

As soup, they probably had their finest hour.

Chapter 8

I was jarred out of useless brain-cudgeling by an explosion, a sharp crack -a bass rumble-then a whoosh! of reduced pressure. I bounced to my feet-anyone who has ever depended on a space suit is never again indifferent to a drop in pressure.

I gasped, "What the deuce!"

Then I added, "Whoever is on watch had better get on the ball-or we'll all be breathing thin cold stuff." No oxygen outside, I was sure-or rather the astronomers were and I didn't want to test it.

Then I said, "Somebody bombing us? I hope.

"Or was it an earthquake?"

This was not an idle remark. That Scientific American article concerning "summer" on Pluto had predicted "sharp isostatic readjustments" as the temperature rose-which is a polite way of saying, "Hold your hats! Here comes the chimney!"

I was in an earthquake once, in Santa Barbara; I didn't need a booster shot to remember what every Californian knows and others learn in one lesson: when the ground does a jig, get outdoors!

Only I couldn't.

I spent two minutes checking whether adrenalin had given me the strength to jump eighteen feet instead of twelve. It hadn't. That was all I did for a half-hour, if you don't count nail biting.

Then I heard my name! "Kip! Oh, Kip!"

"Peewee!" I screamed. "Here! Peewee!"

Silence for an eternity of three heartbeats- "Kip?"

"Down HERE!"

"Kip? Are you down this hole?"

"Yes! Can't you see me?" I saw her head against the light above.

"Uh, I can now. Oh, Kip, I'm so glad!"

"Then why are you crying? So am I!"

"I'm not crying," she blubbered. "Oh Kip ... Kip."

"Can you get me out?"

"Uh-" She surveyed that drop. "Stay where you are."

"Don't go 'way!" She already had.

She wasn't gone two minutes; it merely seemed like a week. Then she was back and the darling had a nylon rope!

"Grab on!" she shrilled.

"Wait a sec. How is it fastened?"

"I'll pull you up."

"No, you won't-or we'll both be down here. Find somewhere to belay it."

"I can lift you."

"Belay it! Hurry!"

She left again, leaving an end in my hands. Shortly I heard very faintly:

"On belay!"

I shouted, "Testing!" and took up the slack. I put my weight on it-it held. "Climbing!" I yelled, and followed the final "g" up the hole and caught it.

She flung herself on me, an arm around my neck, one around Madame Pompadour, and both of mine around her. She was even smaller and skinnier than I remembered. "Oh, Kip, it's been just awful."

I patted her bony shoulder blades. "Yeah, I know. What do we do now? Where's W—"

I started to say, "Where's Wormface?" but she burst into tears.

"Kip-I think she's dead!"

My mind skidded-I was a bit stir-crazy anyhow. "Huh? Who?"

She looked as amazed as I was confused. "Why, the Mother Thing."

"Oh." I felt a flood of sorrow. "But, honey, are you sure? She was talking to me all right up to the last-and I didn't die."

"What in the world are you talk-Oh. I don't mean then. Kip; I mean now."

"Huh? She was here?"

"Of course. Where else?"

Now that's a silly question, it's a big universe. I had decided long ago that the Mother Thing couldn't be here-because Jock had brushed off the subject. I reasoned that Jock would either have said that she was here or have invented an elaborate lie, for the pleasure of lying. Therefore she wasn't on his list-perhaps he had never seen her save as a bulge under my suit.

I was so sure of my "logic" that it took a long moment to throw off prejudice and accept fact. "Peewee," I said, gulping, "I feel like I'd lost my own mother. Are you sure?"

" 'Feel as if,' " she said automatically. "I'm not sure sure ... but she's outside-so she must be dead."

"Wait a minute. If she's outside, she's wearing a space suit? Isn't she?"

"No, no! She hasn't had one-not since they destroyed her ship."

I was getting more confused. "How did they bring her in here?"

"They just sacked her and sealed her and carried her in. Kip-what do we do now?"

I knew several answers, all of them wrong-I had already considered them during my stretch in jail. "Where is Wormface? Where are all the wormfaces?"

"Oh. All dead. I think."

"I hope you're right." I looked around for a weapon and never saw a hallway so bare. My toy dagger was only eighteen feet away but I didn't feel like going back down for it. "What makes you think so?"

Peewee had reason to think so. The Mother Thing didn't look strong enough to tear paper but what she lacked in beef she made up in brains. She had done what I had tried to do: reasoned out a way to take them all on. She had not been able to hurry because her plan had many factors all of which had to mesh at once and many of them she could not influence; she had to wait for the breaks.

First, she needed a time when there were few wormfaces around. The base was indeed a large supply dump and space port and transfer point, but it did not need a large staff. It had been unusually crowded the few moments I had seen it, because our ship was in.

Second, it also had to be when no ships were in because she couldn't cope with a ship-she couldn't get at it.

Third, H-Hour had to be while the wormfaces were feeding. They all ate together when there were few enough not to have to use their mess hall in relays-crowded around one big tub and sopping it up, I gathered -a scene out of Dante. That would place all her enemies on one target, except possibly one or two on engineering or communication watches.

"Wait a minute!" I interrupted. "You said they were all dead?"

"Well ... I don't know. I haven't seen any."

"Hold everything until I find something to fight with."

"But—"

"First things first, Peewee."

Saying that I was going to find a weapon wasn't finding one. That corridor had nothing but more holes like the one I had been down-which was why Peewee had looked for me there; it was one of the few places where she had not been allowed to wander at will. Jock had been correct on one point: Peewee-and the Mother Thing-had been star prisoners, allowed all privileges except freedom… whereas Jock and Tim and myself had been third-class prisoners and/or soup bones. It fitted the theory that Peewee and the Mother Thing were hostages rather than ordinary P.W.s.

I didn't explore those holes after I looked down one and saw a human skeleton-maybe they got tired of tossing food to him. When I straightened up Peewee said, "What are you shaking about?"

"Nothing. Come on."

"I want to see."

"Peewee, every second counts and we've done nothing but yak. Come on. Stay behind me."

I kept her from seeing the skeleton, a major triumph over that little curiosity box-although it probably would not have affected her much;

Peewee was sentimental only when it suited her.

"Stay behind me" had the correct gallant sound but it was not based on reason. I forgot that attack could come from the rear-I should have said:

"Follow me and watch behind us."

She did anyway. I heard a squeal and whirled around to see a wormface with one of those camera-like things aimed at me. Even though Tim had used one on me I didn't realize what it was; for a moment I froze.

But not Peewee. She launched herself through the air, attacking with both hands and both feet in the gallant audacity and utter recklessness of a kitten.

That saved me. Her attack would not have hurt anything but another kitten but it mixed him up so that he didn't finish what he was doing, namely paralyzing or killing me; he tripped over her and went down.

And I stomped him. With my bare feet I stomped him, landing on that lobster-horror head with both feet.

His head crunched. It felt awful.

It was like jumping on a strawberry box. It splintered and crunched and went to pieces. I cringed at the feel, even though I was in an agony to fight, to kill. I trampled worms and hopped away, feeling sick. I scooped up Peewee and pulled her back, as anxious to get clear as I had been to Join battle seconds before.

I hadn't killed it. For an awful moment I thought I was going to have to wade back in. Then I saw that while it was alive, it did not seem aware of us. It flopped like a chicken freshly chopped, then quieted and began to move purposefully.

But it couldn't see. I had smashed its eyes and maybe its ears-but certainly those terrible eyes.

It felt around the floor carefully, then got to its feet, still undamaged except that its head was a crushed ruin. It stood still, braced tripod-style by that third appendage, and felt the air. I pulled us back farther.

It began to walk. Not toward us or I would have screamed. It moved away, ricocheted off a wall, straightened out, and went back the way we had come. t reached one of those holes they used for prisoners, walked into it and dropped. I sighed, and realized that I had been holding Peewee too tightly to breathe. I put her down.

"There's your weapon," she said.

"Huh?"

"On the floor. Just beyond where I dropped Madame Pompadour. The gadget." She went over, picked up her dolly, brushed away bits of ruined wormface, then took the camera-like thing and handed it to me. "Be careful. Don't point it toward you. Or me."

"Peewee," I said faintly, "don't you ever have an attack of nerves?"

"Sure I do. When I have leisure for it. Which isn't now. Do you know how to work it?"

"No. Do you?"

"I think so. I've seen them and the Mother Thing told me about them." She took it, handling it casually but not pointing it at either of us. "These holes on top-uncover one of them, it stuns. If you uncover them all, it kills. To make it work you push it here." She did and a bright blue light shot out, splashed against the wall. "The light doesn't do anything," she added. "It's for aiming. I hope there wasn't anybody on the other side of that wall. No, I hope there was. You know what I mean."

It looked like a cockeyed 35 mm. camera, with a lead lens-one built from an oral description. I took it, being very cautious where I pointed it, and looked at it. Then I tried it-full power, by mistake.

The blue light was a shaft in the air and the wall where it hit glowed and began to smoke. I shut it off.

"You wasted power," Peewee chided. "You may need it later."

"Well, I had to try it. Come on, let's go."

Peewee glanced at her Mickey Mouse watch-and I felt irked that it had apparently stood up when my fancy one had not. "There's very little time. Kip. Can't we assume that only this one escaped?"

"What? We certainly cannot! Until we're sure that all of them are dead, we can't do anything else. Come on."

"But-Well, I'll lead. I know my way around, you don't."

"No."

"Yes!"

So we did it her way; she led and carried the blue-light projector while I covered the rear and wished for a third eye, like a wormface. I couldn't argue that my reflexes were faster when they weren't, and she knew more than I did about our weapon.

But it's graveling, just the same.

The base was huge; half that mountain must have been honeycombed. We did it at a fast trot, ignoring things as complicated as museum exhibits and twice as interesting, simply making sure that no wormface was anywhere. Peewee ran with the weapon at the ready, talking twenty to the dozen and urging me on.

Besides an almost empty base, no ships in, and the wormfaces feeding, the Mother Thing's plan required that all this happen shortly before a particular hour of the Plutonian night.

"Why?" I panted.

"So she could signal her people, of course."

"But-" I shut up. I had wondered about the Mother Thing's people but didn't even know as much about her as I did about Wormface-except that she was everything that made her the Mother Thing. Now she was dead-Peewee said that she was outside without a space suit, so she was surely dead; that little soft warm thing wouldn't last two seconds in that ultra-arctic weather. Not to mention suffocation and lung hemorrhage. I choked up.

Of course, Peewee might be wrong. I had to admit that she rarely was-but this might be one of the times ... in which case we would find her. But if we didn't find her, she was outside and- "Peewee, do you know where my space suit is?"

"Huh? Of course. Right next to where I got this." She patted the nylon rope, which she had coiled around her waist and tied with a bow.

"Then the second we are sure that we've cleaned out the wormfaces I'm going outside and look for her!"

"Yes, yes! But we've got to find my suit, too. I'm going with you."

No doubt she would. Maybe I could persuade her to wait in the tunnel out of that bone-freezing wind. "Peewee, why did she have to send her message at night? To a ship in a rotation-period orbit? Or is there—"

My words were chopped off by a rumble. The floor shook in that loose-bearing vibration that frightens people and animals alike. We stopped dead. "What was that?" Peewee whispered.

I swallowed. "Unless it's part of this rumpus the Mother Thing planned—"

"It isn't. I think."

"It's a quake."

"An earthquake?"

"A Pluto quake. Peewee, we've got to get out of here!"

I wasn't thinking about where-you don't in a quake. Peewee gulped. "We can't bother with earthquakes; we haven't time. Hurry, Kip, hurry!" She started to run and I followed, gritting my teeth. If Peewee could ignore a quake, so could Ithough it's like ignoring a rattlesnake in bed.

"Peewee… Mother Thing's people ... is their ship in orbit around Pluto?"

"What? Oh, no, no! They're not in a ship."

"Then why at night? Something about the Heaviside layers here? How far away is their base?" I was wondering how far a man could walk here. We had done almost forty miles on the Moon. Could we do forty blocks here? Or even forty yards? You could insulate your feet, probably. But that wind- "Peewee, they don't live here, do they?"

"What? Don't be silly! They have a nice planet of their own. Kip, if you keep asking foolish questions, we'll be too late. Shut up and listen."

I shut up. What follows I got in snatches as we ran, and some of it later. When the Mother Thing had been captured, she had lost ship, space clothing, communicator, everything; Wormface had destroyed it all. There had been treachery, capture through violation of truce while parleying. "He grabbed her when they were supposed to be under a King's 'X' " was Peewee's indignant description, "and that's not fair! He had promised."

Treachery would be as natural in Wormface as venom in a Gila monster; I was surprised that the Mother Thing had risked a palaver with him. It left her a prisoner of ruthless monsters equipped with ships that made ours look like horseless carriages, weapons which started with a "death ray" and ended heaven knows where, plus bases, organization, supplies.

She had only her brain and her tiny soft hands.

Before she could use the rare combination of circumstances necessary to have any chance at all she had to replace her communicator (I think of it as her "radio" but it was more than that) and she had to have weapons. The only way she could get them was to build them.

She had nothing, not a bobby pin-only that triangular ornament with spirals engraved on it. To build anything she had to gain access to a series of rooms which I would describe as electronics labs-not that they looked like the bench where I jiggered with electronics, but electron-pushing has its builtin logic. If electrons are to do what you want them to, components have to look pretty much a certain way, whether built by humans, wormfaces, or the Mother Thing. A wave guide gets its shape from the laws of nature, an inductance has its necessary geometry, no matter who the technician is.

So it looked like an electronics lab-a very good one. It had gear I did not recognize, but which I felt I could understand if I had time. I got only a glimpse.

The Mother Thing spent many, many hours there. She would not have been permitted there, even though she was a prisoner-at-large with freedom in most ways and anything she wanted, including private quarters with Peewee. I think that Wormface was afraid of her, even though she was a prisoner-he did not want to offend her unnecessarily.

She got the run of their shops by baiting their cupidity. Her people had many things that wormfaces had not-gadgets, inventions, conveniences. She began by inquiring why they did a thing this way rather than another way which was so much more efficient? A tradition? Or religious reasons?

When asked what she meant she looked helpless and protested that she couldn't explain-which was a shame because it was simple and so easy to build, too.

Under close chaperonage she built something. The gadget worked. Then something else. Presently she was in the labs daily, making things for her captors, things that delighted them. She always delivered; the privilege depended on it.

But each gadget involved parts she needed herself.

"She sneaked bits and pieces into her pouch," Peewee told me. "They never knew exactly what she was doing. She would use five of a thing and the sixth would go into her pouch."

"Her pouch?"

"Of course. That's where she hid the 'brain' the time she and I swiped the ship. Didn't you know?"

"I didn't know she had a pouch."

"Well, neither did they. They watched to see she didn't carry anything out of the shop-and she never did. Not where it showed."

"Uh, Peewee, is the Mother Thing a marsupial?"

"Huh? Like possums? You don't have to be a marsupial to have a pouch. Look at squrrels, they have pouches in their cheeks."

"Mmm, yes."

"She sneaked a bit now and a bit then, and I swiped things, too. During rest time she worked on them in our room."

The Mother Thing had not slept all the time we had been on Pluto. She worked long hours publicly, making things for wormfaces-a stereo-telephone no bigger than a pack of cigarettes, a tiny beetle-like arrangement that crawled all over anything it was placed on and integrated the volume, many other things. But during hours set apart for rest she worked for herself, usually in darkness, those tiny fingers busy as a blind watchmaker's.

She made two bombs and a long-distance communicator-and-beacon.

I didn't get all this tossed over Peewee's shoulder while we raced through the base; she simply told me that the Mother Thing had managed to build a radio-beacon and had been responsible for the explosion I had felt. And that we must hurry, hurry, hurry!

"Peewee," I said, panting. "What's the rush? If the Mother Thing is outside, I want to bring her in-her body, I mean. But you act as if we had a deadline."

"We do!"

The communicator-beacon had to be placed outside at a particular local time (the Plutonian day is about a week-the astronomers were right again) so that the planet itself would not blanket the beam. But the Mother Thing had no space suit. They had discussed having Peewee suit up, go outside, and set the beacon-it had been so designed that Peewee need only trigger it. But that depended on locating Peewee's space suit, then breaking in and getting it after the wormfaces were disposed of.

They had never located it. The Mother Thing had said serenely, singing confident notes that I could almost hear ringing in my head: ("Never mind, dear. I can go out and set it myself.")

"Mother Thing! You can't!" Peewee had protested. "It's cold out there."

("I shan't be long.")

"You won't be able to breathe."

("It won't be necessary, for so short a time.")

That settled it. In her own way, the Mother Thing was as hard to argue with as Wormface.

The bombs were built, the beacon was built, a time approached when all factors would match-no ship expected, few wormfaces, Pluto faced the right way, feeding time for the staff-and they still did not know where Peewee's suit was-if it had not been destroyed. The Mother Thing resolved to go ahead.

"But she told me, just a few hours ago when she let me know that today was the day, that if she did not come back in ten minutes or so, that she hoped I could find my suit and trigger the beacon-if she hadn't been able to." Peewee started to cry. "That was the f-f- first time she admitted that she wasn't sure she could do it!"

"Peewee! Stop it! Then what?"

"I waited for the explosions-they came, right together-and I started to search, places I hadn't been allowed to go. But I couldn't find my suit!

Then I found you and-oh, Kip, she's been out there almost an hour!" She looked at her watch. "There's only about twenty minutes left. If the beacon isn't triggered by then, she's had all her trouble and died for n-n- nothing! She wouldn't like that." "Where's my suit!"

We found no more wormfaces-apparently there was only one on duty while the others fed. Peewee showed me a door, airlock type, behind which was the feeding chamber-the bomb may have cracked that section for gastight doors had closed themselves when the owners were blown to bits. We hurried past.

Logical as usual, Peewee ended our search at my space suit. It was one of more than a dozen human-type suits-I wondered how much soup those ghouls ate. Well, they wouldn't eat again! I wasted no time; I simply shouted, "Hi, Oscar!" and started to suit up.

("Where you been, chum?")

Oscar seemed in perfect shape. Fats' suit was next to mine and Tim's next to it; I glanced at them as I stretched Oscar out, wondering whether they had equipment I could use. Peewee was looking at Tim's suit. "Maybe I can wear this."

It was much smaller than Oscar, which made it only nine sizes too big for Peewee. "Don't be silly! It'd fit you like socks on a rooster. Help me. Take off that rope, coil it and clip it to my belt."

"You won't need it. The Mother Thing planned to take the beacon out the walkway about a hundred yards and sit it down. If she didn't manage it, that's all you do. Then twist the stud on top."

"Don't argue! How much time?"

"Yes, Kip. Eighteen minutes."

"Those winds are strong," I added. "I may need the line." The Mother Thing didn't weigh much. If she had been swept off, I might need a rope to recover her body. "Hand me that hammer off Fats' suit."

"Right away!"

I stood up. It felt good to have Oscar around me. Then I remembered how cold my feet got, walking in from the ship. "I wish I had asbestos boots."

Peewee looked startled. "Wait right here!" She was gone before I could stop her. I went on sealing up while I worried-she hadn't even stopped to pick up the projector weapon. Shortly I said, "Tight, Oscar?"

("Tight, boy!")

Chin valve okay, blood-color okay, radio-I wouldn't need itwater-The tank was dry. No matter, I wouldn't have time to grow thirsty. I worked the chin valve, making the pressure low because I knew that pressure outdoors was quite low.

Peewee returned with what looked like ballet slippers for a baby elephant. She leaned close to my face plate and shouted, "They wear these. Can you get them on?" It seemed unlikely, but I forced them over my feet like badly fitting socks. I stood up and found that they improved traction; they were clumsy but not hard to walk in.

A minute later we were standing at the exit of the big room I had first seen. Its airlock doors were closed now as a result of the Mother Thing's other bomb, which she had placed to blow out the gate-valve panels in the tunnel beyond. The bomb in the feeding chamber had been planted by Peewee who had then ducked back to their room. I don't know whether the Mother Thing timed the two bombs to go off together, or triggered them by remote-control-nor did it matter; they had made a shambles of Wormface's fancy base.

Peewee knew how to waste air through the air lock. When the inner door opened I shouted, "Time?"

"Fourteen minutes." She held up her watch.

"Remember what I said, just stay here. If anything moves, blue-light it first and ask questions afterwards."

"I remember."

I stepped in and closed the inner door, found the valve in the outer door, waited for pressure to equalize.

The two or three minutes it took that big lock to bleed off I spent in glum thought. I didn't like leaving Peewee alone. I thought all wormfaces were dead, but I wasn't sure. We had searched hastily; one could have zigged when we zagged-they were so fast.

Besides that, Peewee had said, "I remember," when she should have said, "Okay, Kip, I will." A slip of the tongue? That flea-hopping mind made "slips" only when it wanted to. There is a world of difference between "Roger" and "Wilco."

Besides I was doing this for foolish motives. Mostly I was going out to recover the Mother Thing's body-folly, because after I brought her in, she would spoil. It would be kinder to leave her in natural deep-freeze.

But I couldn't bear that-it was cold out there and I couldn't leave her out in the cold. She had been so little and warm ... so alive. I had to bring her in where she could get warm.

You're in bad shape when your emotions force you into acts which you know are foolish.

Worse still, I was doing this in a reckless rush because the Mother Thing had wanted that beacon set before a certain second, now only twelve minutes away, maybe ten. Well, I'd do it, but what sense was it? Say her home star is close by-oh, say it's Proxima Centauri and the wormfaces came from somewhere farther. Even if her beacon works-it still takes over four years for her S.O.S. to reach her friends!

This might have been okay for the Mother Thing. I had an impression that she lived a very long time; waiting a few years for rescue might not bother her. But Peewee and I were not creatures of her sort. We'd be dead before that speed-of-light message crawled to Proxima Centauri. I was glad that I had seen Peewee again, but I knew what was in store for us. Death, in days, weeks, or months at most, from running out of air, or water, or food-or a wormface ship might land before we died-which meant one unholy sabbat of a fight in which, if we were lucky, we would die quickly.

No matter how you figured, planting that beacon was merely "carrying out the deceased's last wishes"-words you hear at funerals. Sentimental folly.

The outer door started to open. Ave, Mother Thing! Nos morituri.

It was cold out there, biting cold, even though I was not yet in the wind. The glow panels were still working and I could see that the tunnel was a mess; the two dozen fractional-pressure stops had ruptured like eardrums. I wondered what sort of bomb could be haywired from stolen parts, kept small enough to conceal two in a body pouch along with some sort of radio rig, and nevertheless have force enough to blow out those panels. The blast had rattled my teeth, several hundred feet away in solid rock.

The first dozen panels were blown inwards. Had she set it off in the middle of the tunnel? A blast that big would fling her away like a feather! She must have planted it there, then come inside and triggered it-then gone back through the lock just as I had. That was the only way I could see it.

It got colder every step. My feet weren't too cold yet, those clumsy mukluks were okay; the wormfaces understood insulation. "Oscar, you got the fires burning?"

("Roaring, chum. It's a cold night.")

"You're telling me!"

Just beyond the outermost burst panel, I found her.

She had sunk forward, as if too tired to go on. Her arms stretched in front of her and, on the floor of the tunnel not quite touched by her tiny fingers, was a small round box about the size ladies keep powder in on dressing tables.

Her face was composed and her eyes were open except that nictitating membranes were drawn across as they had been when I had first seen her in the pasture back of our house, a few days or weeks or a thousand years ago. But she had been hurt then and looked it; now I half expected her to draw back those inner lids and sing a welcome.

I touched her.

She was hard as ice and much colder.

I blinked back tears and wasted not a moment. She wanted that little box placed a hundred yards out on the causeway and the bump on top twisted-and she wanted it done in the next six or seven minutes. I scooped it up. "Righto, Mother Thing! On my way!"

("Get cracking, chum!")

("Thank you, dear Kip....")

I don't believe in ghosts. I had heard her sing thankyou so many times that the notes echoed in my head.

A few feet away at the mouth of the tunnel, I stopped. The wind hit me and was so cold that the deathly chill in the tunnel seemed summery. I closed my eyes and counted thirty seconds to give time to adjust to starlight while I fumbled on the windward side of the tunnel at a slanting strut that anchored the causeway to the mountain, tied my safety line by passing it around the strut and snapping it back on itself. I had known that it was night outside and I expected the causeway to stand out as a black ribbon against the white "snow" glittering under a skyful of stars. I thought I would be safer on that windswept way if I could see its edges-which I couldn't by headlamp unless I kept swinging my shoulders back and forth-clumsy and likely to throw me off balance or slow me down.

I had figured this carefully; I didn't regard this as a stroll in the garden -not at night, not on Pluto! So I counted thirty seconds and tied my line while waiting for eyes to adjust to starlight. I opened them.

And I couldn't see a darned thing!

Not a star. Not even the difference between sky and ground. My back was to the tunnel and the helmet shaded my face like a sunbonnet; I should have been able to see the walkway. Nothing.

I turned the helmet and saw something that accounted both for black sky and the quake we had felt-an active volcano. It may have been five miles away or fifty, but I could not doubt what it was-a jagged, angry red scar low in the sky.

But I didn't stop to stare. I switched on the headlamp, splashed it on the righthand windward edge, and started a clumsy trot, keeping close to that side, so that if I stumbled I would have the entire road to recover in before the wind could sweep me off. That wind scared me. I kept the line coiled in my left hand and paid it out as I went, keeping it fairly taut. The coil felt stiff in my fingers.

The wind not only frightened me, it hurt. It was a cold so intense that it felt like flame. It burned and blasted, then numbed. My right side, getting the brunt of it, began to go and then my left side hurt more than the right.

I could no longer feel the line. I stopped, leaned forward and got the coil in the light from the headlamp-that's another thing that needs fixing! the headlamp should swivel.

The coil was half gone, I had come a good fifty yards. I was depending on the rope to tell me; it was a hundred-meter climbing line, so when I neared its end I would be as far out as the Mother Thing had wanted. Hurry, Kip!

("Get cracking, boy! It's cold out here.")

I stopped again. Did I have the box?

I couldn't feel it. But the headlamp showed my right hand clutched around it. Stay there, fingers! I hurried on, counting steps. One! Two! Three! Four! ...

When I reached forty I stopped and glanced over the edge, saw that I was at the highest part where the road crossed the brook and remembered that it was about midway. That brook-methane, was it?-was frozen solid, and I knew that the night was cold.

There were a few loops of line on my left arm-close enough. I dropped the line, moved cautiously to the middle of the way, eased to my knees and left hand, and started to put the box down.

My fingers wouldn't unbend.

I forced them with my left hand, got the box out of my fist. That diabolical wind caught it and I barely saved it from rolling away. With both hands I set it carefully upright.

("Work your fingers, bud. Pound your hands together!")

I did so. I could tighten the muscles of my forearms, though it was tearing agony to flex fingers. Clumsily steadying the box with my left hand, I groped for the little knob on top.

I couldn't feel it but it turned easily once I managed to close my fingers on it; I could see it turn.

It seemed to come to life, to purr. Perhaps I heard vibration, through gloves and up my suit; I certainly couldn't have felt it, not the shape my fingers were in. I hastily let go, got awkwardly to my feet and backed up, so that I could splash the headlamp on it without leaning over.

I was through, the Mother Thing's job was done, and (I hoped) before deadline. If I had had as much sense as the ordinary doorknob, I would have turned and hurried into the tunnel faster than I had come out. But I was fascinated by what it was doing.

It seemed to shake itself and three spidery little legs grew out the bottom. It raised up until it was standing on its own little tripod, about a foot high. It shook itself again and I thought the wind would blow it over. But the spidery legs splayed out, seemed to bite into the road surface and it was rock firm.

Something lifted and unfolded out the top.

It opened like a flower, until it was about eight inches across. A finger lifted (an antenna?), swung as if hunting, steadied and pointed at the sky.

Then the beacon switched on. I'm sure that is what happened although all I saw was a flash of light-parasitic it must have been, for light alone would not have served even without that volcanic overcast. It was probably some harmless side effect of switching on an enormous pulse of power, something the Mother Thing hadn't had time, or perhaps equipment or materials, to eliminate or shield. It was about as bright as a peanut photoflash.

But I was looking at it. Polarizers can't work that fast. It blinded me.

I thought my headlamp had gone out, then I realized that I simply couldn't see through a big greenish-purple disc of dazzle.

("Take it easy, boy. It's just an after-image. Wait and it'll go away.")

"I can't wait! I'm freezing to death!"

("Hook the line with your forearm, where it's clipped to your belt. Pull on it.")

I did as Oscar told me, found the line, turned around, started to wind it on both forearms.

It shattered.

It did not break as you expect rope to break; it shattered like glass. I suppose that is what it was by then-glass, I mean. Nylon and glass are super-cooled liquids.

Now I know what "super-cooled" means.

But all I knew then was that my last link with life had gone. I couldn't see, I couldn't hear, I was all alone on a bare platform, billions of miles from home, and a wind out of the depths of a frozen hell was bleeding the last life out of a body I could barely feel-and where I could feel, it hurt like fire.

"Oscar!"

("I'm here, bud. You can make it. Now-can you see anything?")

"No!"

("Look for the mouth of the tunnel. It's got light in it. Switch off your headlamp. Sure, you can-it's just a toggle switch. Drag your hand back across the right side of our helmet.")

I did.

("See anything?")

"Not yet."

("Move your head. Try to catch it in the corner of your eye-the dazzle stays in front, you know. Well?")

"I caught something that time!"

("Reddish, wasn't it? Jagged, too. The volcano. Now we know which way we're facing. Turn slowly and catch the mouth of the tunnel as it goes by.")

Slowly was the only way I could turn. "There it is!"

("Okay, you're headed home. Get down on your hands and knees and crab slowly to your left. Don't turn-because you want to hang onto that edge and crawl. Crawl toward the tunnel.")

I got down. I couldn't feel the surface with my hands but I felt pressure on my limbs, as if all four were artificial. I found the edge when my left hand slipped over it and I almost fell off. But I recovered. "Am I headed right?"

("Sure you are. You haven't turned. You've just moved sideways. Can you lift your head to see the tunnel?")

"Uh, not without standing up."

("Don't do that! Try the headlamp again. Maybe your eyes are okay now.")

I dragged my hand forward against the right side of the helmet. I must have hit the switch, for suddenly I saw a circle of light, blurred and cloudy in the middle. The edge of the walkway sliced it on the left.

("Good boy! No, don't get up; you're weak and dizzy and likely to fall. Start crawling. Count 'em. Three hundred ought to do it.")

I started crawling, counting.

"It's a long way, Oscar. You think we can make it?"

("Of course we can! You think I want to be left out here?")

"I'd be with you."

("Knock off the chatter. You'll make me lose count. Thirty-six… thirty-seven… thirty-eight-")

We crawled.

("That's a hundred. Now we double it. Hundred one… hundred two… hundred three-")

"I'm feeling better, Oscar. I think it's getting warmer."

("WHAT!")

"I said I'm feeling a little warmer."

("You're not warmer, you blistering idiot! That's freeze-to-death you're feeling! Crawl faster! Work your chin valve. Get more air. Le' me hear that chin valve click!")

I was too tired to argue; I chinned the valve three or four times, felt a blast blistering my face.

("I'm stepping up the stroke. Warmer indeed! Hund'd nine… hund'd ten… hun'leven… hun'twelve-pick it up!")

At two hundred I said I would just have to rest.

("No, you don't!")

"But I've got to. Just a little while."

("Like that, uh? You know what happens. What's Peewee goin' to do? She's in there, waiting. She's already scared because you're late. What's she goin' to do? Answer me!")

"Uh… she's going to try to wear Tim's suit."

("Right! In case of duplicate answers the prize goes to the one postmarked first. How far will she get? You tell me.")

"Uh ... to the mouth of the tunnel, I guess. Then the wind will get her."

("My opinion exactly. Then we'll have the whole family together. You, me, the Mother Thing, Peewee. Cozy. A family of stiffs.")

"But—"

("So start slugging, brother. Slug… slug… slug… slug… tw'und'd five… two'und'd six… tw'und'd sev'n'-")

I don't remember falling off. I don't even know what the "snow" felt like. I just remember being glad that the dreadful counting was over and I could rest.

But Oscar wouldn't let me. ("Kip! Kip! Get up! Climb back on the straight and narrow.")

"Go 'way."

("I can't go away. I wish I could. Right in front of you. Grab the edge and scramble up. It's only a little farther now.")

I managed to raise my head, saw the edge of the walkway in the light of my headlamp about two feet above my head. I sank back. "It's too high," I said listlessly. "Oscar, I think we've had it."

He snorted. ("So? Who was it, just the other day, cussed out a little bitty girl who was too tired to get up? 'Commander Comet,' wasn't it? Did I get the name right? The 'Scourge of the Spaceways' ... the no-good lazy sky tramp. 'Have Space Suit-Will Travel.' Before you go to sleep, Commander, can I have your autograph! I've never met a real live space pirate before… one that goes around hijacking ships and kidnapping little girls.")

"That's not fair!"

("Okay, okay, I know when I'm not wanted. But just one thing before I leave: she's got more guts in her little finger than you have in your whole body-you lying, fat, lazy swine! Goodbye. Don't wait up.")

"Oscar! Don't leave me!"

("Eh? You want help?")

"Yes!"

("Well, if it's too high to reach, grab your hammer and hook it over the edge. Pull yourself up.")

I blinked. Maybe it would work. I reached down, decided I had the hammer even though I couldn't feel it, got it loose. Using both hands I hooked it over the edge above me. I pulled.

That silly hammer broke just like the line. Tool steel-and it went to pieces as if it had been cast out of type slugs.

That made me mad. I heaved myself to a sitting position, got both elbows on the edge, and struggled and groaned and burst into fiery sweat -and rolled over onto the road surface.

("That's my boy! Never mind counting, just crawl toward the light!")

The tunnel wavered in front of me. I couldn't get my breath, so I kicked the chin valve.

Nothing happened.

"Oscar! The chin valve is stuck!" I tried again.

Oscar was very slow in answering. ("No, pal, the valve isn't stuck. Your air hoses have frozen up. I guess that last batch wasn't as dry as it could have been.")

"I haven't any air!"

Again he was slow. But he answered firmly, ("Yes, you have. You've got a whole suit full. Plenty for the few feet left.")

"I'll never make it."

("A few feet, only. There's the Mother Thing, right ahead of you. Keep moving.")

I raised my head and, sure enough, there she was. I kept crawling, while she got bigger and bigger. Finally I said, "Oscar… this is as far as I go."

("I'm afraid it is. I've let you down… but thanks for not leaving me outside there.")

"You didn't let me down… you were swell. I just didn't quite make it."

("I guess we both didn't quite make it ... but we sure let 'em know that we tried! So long, partner.")

"So long. 'Hasta la vista, amigo!" I managed to crawl two short steps and collapsed with my head near the Mother Thing's head.

She was smiling. ("Hello, Kip my son.")

"I didn't… quite make it, Mother Thing. I'm sorry."

("Oh, but you did make it!")

"Huh?"

("Between us, we've both made it.")

I thought about that for a long time. "And Oscar."

("And Oscar, of course.")

"And Peewee."

("And always Peewee. We've all made it. Now we can rest, dear.")

"G'night… Mother Thing."

It was a darn short rest. I was just closing my eyes, feeling warm and happy that the Mother Thing thought that I had done all right-when Peewee started shaking my shoulder. She touched helmets. "Kip! Kip! Get up. Please get up."

"Huh? Why?"

"Because I can't carry you! I tried, but I can't do it. You're just too big!"

I considered it. Of course she couldn't carry mewhere did she get the silly notion that she could? I was twice her size. I'd carry her… just as soon as I caught my breath.

"Kip! Please get up." She was crying now, blubbering.

"Why, sure, honey," I said gently, "if that's what you want." I tried and had a clumsy bad time of it. She almost picked me up, she helped a lot. Once up, she steadied me.

"Turn around. Walk."

She almost did carry me. She got her shoulders under my right arm and kept pushing. Every time we came to one of those blown-out panels she either helped me step over, or simply pushed me through and helped me up again.

At last we were in the lock and she was bleeding air from inside to fill it. She had to let go of me and I sank down. She turned when the inner door opened, started to say something-then got my helmet off in a hurry.

I took a deep breath and got very dizzy and the lights dimmed.

She was looking at me. "You all right now?"

"Me? Sure! Why shouldn't I be?"

"Let me help you inside."

I couldn't see why, but she did help and I needed it. She sat me on the floor near the door with my back to the wall-I didn't want to lie down. "Kip, I was so scared!"

"Why?" I couldn't see what she was worried about. Hadn't the Mother Thing said that we had all done all right?

"Well, I was. I shouldn't have let you go out."

"But the beacon had to be set."

"Oh, but-You set it?"

"Of course. The Mother Thing was pleased."

"I'm sure she would have been," she said gravely.

"She was."

"Can I do anything? Can I help you out of your suit?"

"Uh… no, not yet. Could you find me a drink of water?"

"Right away!"

She came back and held it for me-I wasn't as thirsty as I had thought; it made me a bit ill. She watched me for some time, then said, "Do you mind if I'm gone a little while? Will you be all right?"

"Me? Certainly." I didn't feel well, I was beginning to hurt, but there wasn't anything she could do.

"I won't be long." She began clamping her helmet and I noticed with detached interest that she was wearing her own suit-somehow I had had the impression that she had been wearing Tim's.

I saw her head for the lock and realized where she was going and why. I wanted to tell her that the Mother Thing would rather not be inside here, where she might… where she might-I didn't want to say "spoil" even to myself.

But Peewee was gone.

I don't think she was away more than five minutes. I had closed my eyes and I am not sure. I noticed the inner door open. Through it stepped Peewee, carrying the Mother Thing in her arms like a long piece of firewood. She didn't bend at all.

Peewee put the Mother Thing on the floor in the same position I had last seen her, then undamped her helmet and bawled.

I couldn't get up. My legs hurt too much. And my arms. "Peewee… please, honey. It doesn't do any good."

She raised her head. "I'm all through. I won't cry any more."

And she didn't.

We sat there a long time. Peewee again offered to help me out of my suit, but when we tried it, I hurt so terribly, especially my hands and my feet, that I had to ask her to stop. She looked worried. "Kip ... I'm afraid you froze them."

"Maybe. But there's nothing to do about it now." I winced and changed the subject. "Where did you find your suit?"

"Oh!" She looked indignant, then almost gay. "You'd never guess.

Inside Jock's suit."

"No, I guess I wouldn't. The Purloined Letter.' "

"The what?"

"Nothing. I hadn't realized that old Wormface had a sense of humor."

Shortly after that we had another quake, a bad one. Chandeliers would have jounced if the place had had any and the floor heaved. Peewee squealed. "Oh! That was almost as bad as the last one."

"A lot worse, I'd say. That first little one wasn't anything."

"No, I mean the one while you were outside."

"Was there one then?"

"Didn't you feel it?"

"No." I tried to remember. "Maybe that was when I fell off in the snow."

"You fell off? Kip!"

"It was all right. Oscar helped me."

There was another ground shock. I wouldn't have minded, only it shook me up and made me hurt worse. I finally came out of the fog enough to realize that I didn't have to hurt.

Let's see, medicine pills were on the right and the codeine dispenser was farthest back- "Peewee? Could I trouble you for some water again?"

"Of course!"

"I'm going to take codeine. It may make me sleep. Do you mind?"

"You ought to sleep if you can. You need it."

"I suppose so. What time is it?"

She told me and I couldn't believe it. "You mean it's been more than twelve hours?"

"Huh? Since what?"

"Since this started."

"I don't understand, Kip." She stared at her watch. "It has been exactly an hour and a half since I found you-not quite two hours since the Mother Thing set off the bombs."

I couldn't believe that, either. But Peewee insisted that she was right.

The codeine made me feel much better and I was beginning to be drowsy, when Peewee said, "Kip, do you smell anything?"

I sniffed. "Something like kitchen matches?"

"That's what I mean. I think the pressure is dropping, too. Kip ... I think I had better close your helmet-if you're going to sleep."

"All right. You close yours, too?"

"Yes. Uh, I don't think this place is tight any longer."

"You may be right." Between explosions and quakes, I didn't see how it could be. But, while I knew what that meant, I was too weary and sick-and getting too dreamy from the drug-to worry. Now, or a month from now-what did it matter? The Mother Thing had said everything was okay.

Peewee clamped us in, we checked radios, and she sat down facing me and the Mother Thing. She didn't say anything for a long time. Then I heard: "Peewee to Junebug—"

"I read you, Peewee."

"Kip? It's been fun, mostly. Hasn't it?"

"Huh?" I glanced up, saw that the dial said I had about four hours of air left. I had had to reduce pressure twice, since we closed up, to match falling pressure in the room. "Yes, Peewee, it's been swell. I wouldn't have missed it for the world."

She sighed. "I just wanted to be sure you weren't blaming me. Now go to sleep."

I did almost go to sleep, when I saw Peewee jump up and my phones came to life. "Kip! Something's coming in the door!"

I came wide awake, realized what it meant. Why couldn't they have let us be? A few hours, anyhow? "Peewee. Don't panic. Move to the far side of the door. You've got your blue-light gadget?"

"Yes."

"Pick them off as they come in."

"You've got to move, Kip. You're right where they will come!"

"I can't get up." I hadn't been able to move, not even my arms, for quite a while. "Use low power, then if you brush me, it won't matter. Do what I say! Fast!"

"Yes, Kip." She got where she could snipe at them sideways, raised her projector and waited.

The inner door opened, a figure came in. I saw Peewee start to nail it-and I called into my radio: "Don't shoot!"

But she was dropping the projector and running forward even as I shouted.

They were "mother thing" people.

It took six of them to carry me, only two to carry the Mother Thing. They sang to me soothingly all the time they were rigging a litter. I swallowed another codeine tablet before they lifted me, as even with their gentleness any movement hurt. It didn't take long to get me into their ship, for they had landed almost at the tunnel mouth, no doubt crushing the walkway-I hoped so.

Once I was safely inside Peewee opened my helmet and unzipped the front of my suit. "Kip! Aren't they wonderful?"

"Yes." I was getting dizzier from the drug but was feeling better. "When do we raise ship?"

"We've already started."

"They're taking us home?" I'd have to tell Mr. Charton what a big help the codeine was.

"Huh? Oh, my, no! We're headed for Vega."

I fainted.

Chapter 9

I had been dreaming that I was home; this awoke me with a jerk. "Mother Thing!"

("Good morning, my son. I am happy to see that you are feeling better.")

"Oh, I feel fine. I've had a good night's rest-" I stared, then blurted: "-you're dead!" I couldn't stop it.

Her answer sounded warmly, gently humorous, the way you correct a child who has made a natural mistake. ("No, dear, I was merely frozen. I am not as frail as you seem to think me.")

I blinked and looked again. "Then it wasn't a dream?"

("No, it was not a dream.")

"I thought I was home and-" I tried to sit up, managed only to raise my head. "I am home!" My room! Clothes closet on the left-hall door behind the Mother Thing-my desk on the right, piled with books and with a Centerville High pennant over it-window beyond it, with the old elm almost filling it-sun-speckled leaves stirring in a breeze.

My slipstick was where I had left it.

Things started to wobble, then I figured it out. I had dreamed only the silly part at the end. Vega-I had been groggy with codeine. "You brought me home."

("We brought you home ... to your other home. My home.")

The bed started to sway. I clutched at it but my arms didn't move. The Mother Thing was still singing. ("You needed your own nest. So we prepared it.")

"Mother Thing, I'm confused."

("We know that a bird grows well faster in its own nest. So we built yours.") "Bird" and "nest" weren't what she sang, but an Unabridged won't give anything closer.

I took a deep breath to steady down. I understood her-that's what she was best at, making you understand. This wasn't my room and I wasn't home; it simply looked like it. But I was still terribly confused.

I looked around and wondered how I could have been mistaken.

The light slanted in the window from a wrong direction. The ceiling didn't have the patch in it from the time I built a hideout in the attic and knocked plaster down by hammering. It wasn't the right shade, either.

The books were too neat and clean; they had that candy-box look. I couldn't recognize the bindings. The overall effect was mighty close, but details were not right.

("I like this room,") the Mother Thing was singing. ("It looks like you, Kip.")

"Mother Thing," I said weakly, "how did you do it?"

("We asked you. And Peewee helped.")

I thought, "But Peewee has never seen my room either," then decided that Peewee had seen enough American homes to be a consulting expert. "Peewee is here?"

("She'll be in shortly.")

With Peewee and the Mother Thing around things couldn't be too bad. Except- "Mother Thing, I can't move my arms and legs."

She put a tiny, warm hand on my forehead and leaned over me until her enormous, lemur-like eyes blanked out everything else. ("You have been damaged. Now you are growing well. Do not worry.")

When the Mother Thing tells you not to worry, you don't. I didn't want to do handstands anyhow; I was satisfied to look into her eyes. You could sink into them, you could have dived in and swum around. "All right, Mother Thing." I remembered something else. "Say… you were frozen? Weren't you?"

("Yes.")

"But-Look, when water freezes it ruptures living cells. Or so they say."

She answered primly, ("My body would never permit that!").

"Well-" I thought about it. "Just don't dunk me in liquid air! I'm not built for it."

Again her song held roguish, indulgent humor. ("We shall endeavor not to hurt you.") She straightened up and grew a little, swaying like a willow. ("I sense Peewee.")

There was a knock-another discrepancy; it didn't sound like a knock on a lightweight interior door-and Peewee called out, "May I come in?" She didn't wait (I wondered if she ever did) but came on in. The bit I could see past her looked like our upper hall; they'd done a thorough job.

("Come in, dear.")

"Sure, Peewee. You are in."

"Don't be captious."

"Look who's talking. Hi, kid!"

"Hi yourself."

The Mother Thing glided away. ("Don't stay long, Peewee. You are not to tire him.")

"I won't, Mother Thing."

(" 'Bye, dears.")

I said, "What are the visiting hours in this ward?"

"When she says, of course." Peewee stood facing me, fists on hips. She was really clean for the first time in our acquaintance-cheeks pink with scrubbing, hair fluffy-maybe she would be pretty, in about ten years. She was dressed as always but her clothes were fresh, all buttons present, and tears invisibly mended.

"Well," she said, letting out her breath, "I guess you're going to be worth keeping, after all."

"Me? I'm in the pink. How about yourself?"

She wrinkled her nose. "A little frost nip. Nothing. But you were a mess."

"I was?"

"I can't use adequate language without being what Mama calls 'unladylike.' "

"Oh, we wouldn't want you to be that."

"Don't be sarcastic. You don't do it well."

"You won't let me practice on you?"

She started to make a Peewee retort, stopped suddenly, smiled and came close. For a nervous second I thought she was going to kiss me. But she just patted the bedclothes and said solemnly, "You bet you can, Kip. You can be sarcastic, or nasty, or mean, or scold me, or anything, and I won't let out a peep. Why, I'll bet you could even talk back to the Mother Thing."

I couldn't imagine wanting to. I said, "Take it easy, Peewee. Your halo is showing."

"I'd have one if it weren't for you. Or flunked my test for it, more likely."

"So? I seem to remember somebody about your size lugging me indoors almost piggyback. How about that?"

She wriggled. "That wasn't anything. You set the beacon. That was everything."

"Uh, each to his own opinion. It was cold out there." I changed the subject; it was embarrassing us. Mention of the beacon reminded me of something else. "Peewee? Where are we?"

"Huh? In the Mother Thing's home, of course." She looked around and said, "Oh, I forgot. Kip, this isn't really your—"

"I know," I said impatiently. "It's a fake. Anybody can see that."

"They can?" She looked crestfallen. "I thought we had done a perfect job."

"It's an incredibly good job. I don't see how you did it."

"Oh, your memory is most detailed. You must have a camera eye."

-and I must have spilled my guts, too! I added to myself. I wondered what else I had said-with Peewee listening. I was afraid to ask; a fellow ought to have privacy.

"But it's still a fake," I went on. "I know we're in the Mother Thing's home. But where's that?"

"Oh." She looked round-eyed. "I told you. Maybe you don't remember -you were sleepy."

"I remember," I said slowly, "something. But it didn't make sense. I thought you said we were going to Vega."

"Well, I suppose the catalogs will list it as Vega Five. But they call it-" She threw back her head and vocalized; it recalled to me the cockcrow theme in Le Coq d'Or. "-but I couldn't say that. So I told you Vega, which is close enough."

I tried again to sit up, failed. "You mean to stand there and tell me we're on Vega? I mean, a 'Vegan planet'?"

"Well, you haven't asked me to sit down."

I ignored the Peeweeism. I looked at "sunlight" pouring through the window. "That light is from Vega?"

"That stuff? That's artificial sunlight. If they had used real, bright, Vega light, it would look ghastly. Like a bare arc light. Vega is 'way up the Russell diagram, you know."

"It is?" I didn't know the spectrum of Vega; I had never expected to need to know it.

"Oh, yes! You be careful, Kip-when you're up, I mean. In ten seconds you can get more burn than all winter in Key West-and ten minutes would kill you."

I seemed to have a gift for winding up in difficult climates. What star class was Vega? "A," maybe? Probably "B." All I knew was that it was big and bright, bigger than the Sun, and looked pretty set in Lyra.

But where was it? How in the name of Einstein did we get here? "Peewee? How far is Vega? No, I mean, 'How far is the Sun?' You wouldn't happen to know?"

"Of course," she said scornfully. "Twenty-seven lightyears."

Great Galloping Gorillas! "Peewee-get that slide rule. You know how to push one? I don't seem to have the use of my hands."

She looked uneasy. "Uh, what do you want it for?"

"I want to see what that comes to in miles."

"Oh. I'll figure it. No need for a slide rule."

"A slipstick is faster and more accurate. Look, if you don't know how to use one, don't be ashamed-I didn't, at your age. I'll show you."

"Of course I can use one!" she said indignantly. "You think I'm a stupe? But I'll work it out." Her lips moved silently. "One point five nine times ten to the fourteenth miles."

I had done that Proxima Centauri problem recently; I remembered the miles in a lightyear and did a rough check in my head-uh, call it six times twenty-five makes a hundred and fifty-and where was the decimal point? "Your answer sounds about right."
159,000,000,000,000 weary miles! Too many zeroes for comfort.

"Of course I'm right!" she retorted. "I'm always right."

"Goodness me! The handy-dandy pocket encyclopedia."

She blushed. "I can't help being a genius."

Which left her wide open and I was about to rub her nose in it-when I saw how unhappy she looked.

I remembered hearing Dad say: "Some people insist that 'mediocre' is better than 'best.' They delight in clipping wings because they themselves can't fly. They despise brains because they have none. Pfah!"

"I'm sorry, Peewee," I said humbly. "I know you can't. And I can't help not being one… any more than you can help being little, or I can help being big."

She relaxed and looked solemn. "I guess I was being a show-off again." She twisted a button. "Or maybe I assumed that you understand me-like Daddy."

"I feel complimented. I doubt if I do-but from now on I'll try." She went on worrying the button. "You're pretty smart yourself, Kip. You know that, don't you?"

I grinned. "If I were smart, would I be here? All thumbs and my ears rub together. Look, honey, would you mind if we checked you on the slide rule? I'm really interested." Twenty-seven lightyears-why, you wouldn't be able to see the Sun, It isn't any great shakes as a star.

But I had made her uneasy again. "Uh, Kip, that isn't much of a slide rule."

"What? Why, that's the best that money can-"

"Kip, please! It's part of the desk. It's not a slide rule."

"Huh?" I looked sheepish. "I forgot. Uh, I suppose that hall out there doesn't go very far?"

"Just what you can see. Kip, the slide rule would have been real-if we had had time enough. They understand logarithms. Oh, indeed they do!"

That was bothering me-"time enough" I mean. "Peewee, how long did it take us to get here?" Twenty-seven lightyears! Even at speed-of-light-well, maybe the Einstein business would make it seem like a quick trip to me-but not to Centerville. Dad could be dead! Dad was older than Mother, old enough to be my grandfather, really. Another twenty-seven years back-Why, that would make him well over a hundred. Even Mother might be dead.

"Time to get here? Why, it didn't take any."

"No, no. I know it feels that way. You're not any older, I'm still laid up by frostbite. But it took at least twenty-seven years. Didn't it?"

"What are you talking about, Kip?"

"The relativity equations, of course. You've heard of them?"

"Oh, those! Certainly. But they don't apply. It didn't take time. Oh, fifteen minutes to get out of Pluto's atmosphere, about the same to cope with the atmosphere here. But otherwise, pht! Zero."

"At the speed of light you would think so."

"No, Kip." She frowned, then her face lighted up. "How long was it from the time you set the beacon till they rescued us?"

"Huh?" It hit me. Dad wasn't dead! Mother wouldn't even have gray hair. "Maybe an hour."

"A little over. It would have been less if they had had a ship ready… then they might have found you in the tunnel instead of me. No time for the message to reach here. Half an hour frittered away getting a ship ready-the Mother Thing was vexed. I hadn't known she could be. You see, a ship is supposed to be ready."

"Any time she wants one?"

"Any and all the time-the Mother Thing is important. Another half-hour in atmosphere maneuvering-and that's all. Real time. None of those funny contractions."

I tried to soak it up. They take an hour to go twenty-seven lightyears and get bawled out for dallying. Dr. Einstein must be known as "Whirligig Albert" among his cemetery neighbors. "But how?"

"Kip, do you know any geometry? I don't mean Euclid-I mean geometry."

"Mmm… I've fiddled with open and closed curved spaces-and I've read Dr. Bell's popular books. But you couldn't say I know any geometry."

"At least you won't boggle at the idea that a straight line is not necessarily the shortest distance between two points." She made motions as if squeezing a grapefruit in both hands. "Because it's not. Kip-it all touches. You could put it in a bucket. In a thimble if you folded it so that spins matched."

I had a dizzying picture of a universe compressed into a teacup, nucleons and electrons packed solidly-really solid and not the thin mathematical ghost that even the uranium nucleus is said to be. Something like the "primal atom" that some cosmogonists use to explain the expanding universe. Well, maybe it's both packed and expanding. Like the "wavicle" paradox. A particle isn't a wave and a wave can't be a particle-yet everything is both. If you believe in wavicles, you can believe in anything-and if you don't, then don't bother to believe at all. Not even in yourself, because that's what you are-wavicles. "How many dimensions?" I said weakly.

"How many would you like?"

"Me? Uh, twenty, maybe. Four more for each of the first four, to give some looseness on the corners."

"Twenty isn't a starter. I don't know, Kip; I don't know geometry, either-I just thought I did. So I've pestered them."

"The Mother Thing?"

"Her? Oh, heavens, no! She doesn't know geometry. Just enough to pilot a ship in and out of the folds."

"Only that much?" I should have stuck to advanced finger-painting and never let Dad lure me into trying for an education. There isn't any end-the more you learn, the more you need to learn. "Peewee, you knew what that beacon was for, didn't you?"

"Me?" She looked innocent. "Well… yes."

"You knew we were going to Vega."

"Well ... if the beacon worked. If it was set in time."

"Now the prize question. Why didn't you tell me?"

"Well-" Peewee was going to twist that button off. "I wasn't sure how much math you knew and-you might have gone all masculine and common-sensical and father-knows-best. Would you have believed me?"

("I told Orville and I told Wilbur and now I'm telling you-that contraption will never work!") "Maybe not, Peewee. But next time you're tempted not to tell me something 'for my own good,' will you take a chance that I'm not wedded to my own ignorance? I know I'm not a genius but I'll try to keep my mind open-and I might be able to help, if I knew what you were up to. Quit twisting that button."

She let go hastily. "Yes, Kip. I'll remember."

"Thanks. Another thing is fretting me. I was pretty sick?"

"Huh? You certainly were!"

"All right. They've got these, uh, 'fold ships' that go anywhere in no time. Why didn't you ask them to bounce me home and pop me into a hospital?"

She hesitated. "How do you feel?"

"Huh? I feel fine. Except that I seem to be under spinal anesthesia, or something."

"Or something," she agreed. "But you feel as if you are getting well?"

"Shucks, I feel well."

"You aren't. But you're going to be." She looked at me closely. "Shall I put it bluntly, Kip?"

"Go ahead."

"If they had taken you to Earth to the best hospital we have, you'd be a 'basket case.' Understand me? No arms, no legs. As it is, you are getting completely well. No amputations, not even a toe."

I think the Mother Thing had prepared me. I simply said, "You're sure?"

"Sure. Sure both. You're going to be all right." Suddenly her face screwed up. "Oh, you were a mess! I saw."

"Pretty bad?"

"Awful. I have nightmares."

"They shouldn't have let you look."

"They couldn't stop me. I was next of kin."

"Huh? You told them you were my sister or something?"

"What? I am your next of kin."

I was about to say she was cockeyed when I tripped over my tongue. We were the only humans for a hundred and sixty trillion miles. As usual, Peewee was right.

"So I had to grant permission," she went on.

"For what? What did they do to me?"

"Uh, first they popped you into liquid helium. They left you there and the past month they have been using me as a guinea pig. Then, three days ago-three of ours-they thawed you out and got to work. You've been getting well ever since."

"What shape am I in now?"

"Uh... well, you're growing back. Kip, this isn't a bed. It just looks like it."

"What is it, then?"

"We don't have a name for it and the tune is pitched too high for me. But everything from here on down-" She patted the spread. "-on into the room below, does things for you. You're wired like a hi-fi nut's basement."

"I'd like to see it."

"I'm afraid you can't. You don't know, Kip. They had to cut your space suit off."

I felt more emotion at that than I had at hearing what a mess I had been. "Huh? Where is Oscar? Did they ruin him? My space suit, I mean."

"I know what you mean. Every time you're delirious you talk to 'Oscar' -and you answer back, too. Sometimes I think you're schizoid, Kip."

"You've mixed your terms, runt-that'ud make me a split personality. All right, but you're a paranoid yourself."

"Oh, I've known that for a long time. But I'm a very well adjusted one. You want to see Oscar? The Mother Thing said that you would want him near when you woke up." She opened the closet.

"Hey! You said he was all cut up!"

"Oh, they repaired him. Good as new. A little better than new."

("Time, dear! Remember what I said.")

"Coming, Mother Thing! 'Bye, Kip. I'll be back soon, and real often."

"Okay. Leave the closet open so I can see Oscar."

Peewee did come back, but not "real often." I wasn't offended, not much. She had a thousand interesting and "educational" things to poke her ubiquitous nose into, all new and fascinating-she was as busy as a pup chewing slippers. She ran our hosts ragged. But I wasn't bored. I was getting well, a full-time job and not boring if you are happy-which I was.

I didn't see the Mother Thing often. I began to realize that she had work of her own to do-even though she came to see me if I asked for her, with never more than an hour's delay, and never seemed in a hurry to leave.

She wasn't my doctor, nor my nurse. Instead I had a staff of veterinarians who were alert to supervise every heartbeat. They didn't come in unless I asked them to (a whisper was as good as a shout) but I soon realized that "my" room was bugged and telemetered like a ship in flight test-and my "bed" was a mass of machinery, gear that bore the relation to our own "mechanical hearts" and "mechanical lungs" and "mechanical kidneys" that a Lockheed ultrasonic courier does to a baby buggy.

I never saw that gear (they never lifted the spread, unless it was while I slept), but I know what they were doing. They were encouraging my body to repair itself-not scar tissue but the way it had been. Any lobster can do this and starfish do it so well that you can chop them to bits and wind up with a thousand brand-new starfish.

This is a trick any animal should do, since its gene pattern is in every cell. But a few million years ago we lost it. Everybody knows that science is trying to recapture it; you see articles-optimistic ones in Reader's Digest, discouraged ones in The Scientific Monthly, wildly wrong ones in magazines whose "science editors" seem to have received their training writing horror movies. But we're working on it. Someday, if anybody dies an accidental death, it will be because he bled to death on the way to the hospital.

Here I was with a perfect chance to find out about it-and I didn't.

I tried. Although I was unworried by what they were doing (the Mother Thing had told me not to worry and every time she visited me she looked in my eyes and repeated the injunction), nevertheless like Peewee, I like to know.

Pick a savage so far back in the jungle that they don't even have installment-plan buying. Say he has an I.Q. of 190 and Peewee's yen to understand. Dump him into Brookhaven Atomic Laboratories. How much will he learn? With all possible help?

He'll learn which corridors lead to what rooms and he'll learn that a purple trefoil means: "Danger!"

That's all. Not because he can't; remember he's a supergenius-but he needs twenty years schooling before he can ask the right questions and understand the answers.

I asked questions and always got answers and formed notions. But I'm not going to record them; they are as confused and contradictory as the notions a savage would form about design and operation of atomic equipment. As they say in radio, when noise level reaches a certain value, no information is transmitted. All I got was "noise."

Some of it was literally "noise." I'd ask a question and one of the therapists would answer. I would understand part, then as it reached the key point, I would hear nothing but birdsongs. Even with the Mother Thing as an interpreter, the parts I had no background for would turn out to be a canary's cheerful prattle.

Hold onto your seats; I'm going to explain something I don't understand: how Peewee and I could talk with the Mother Thing even though her mouth could not shape English and we couldn't sing the way she did and had not studied her language. The Vegans-(I'll call them "Vegans" the way we might be called "Solarians"; their real name sounds like a wind chime in a breeze. The Mother Thing had a real name, too, but I'm not a coloratura soprano. Peewee used it when she wanted to wheedle her -fat lot of good it did her.) The Vegans have a supreme talent to understand, to put themselves in the other person's shoes. I don't think it was telepathy, or I wouldn't have gotten so many wrong numbers. Call it empathy.

But they have it in various degrees, just as all of us drive cars but only a few are fit to be racing drivers. The Mother Thing had it the way Novaes understands a piano. I once read about an actress who could use Italian so effectively to a person who did not understand Italian that she always made herself understood. Her name was "Duce." No, a "duce" is a dictator. Something like that. She must have had what the Mother Thing had.

The first words I had with the Mother Thing were things like "hello" and "goodbye" and "thank you" and "where are we going?" She could project her meaning with those-shucks, you can talk to a strange dog that much. Later I began to understand her speech as speech. She picked up meanings of English words even faster; she had this great talent, and she and Peewee had talked for days while they were prisoners.

But while this is easy for "you're welcome" and "I'm hungry" and "let's hurry," it gets harder for ideas like "heterodyning" and "amino acid" even when both are familiar with the concept. When one party doesn't even have the concept, it breaks down. That's the trouble I had understanding those veterinarians. If we had all spoken English I still would not have understood.

An oscillating circuit sending out a radio signal produces dead silence unless there is another circuit capable of oscillating in the same way to receive it. I wasn't on the right frequency.

Nevertheless I understood them when the talk was not highbrow. They were nice people; they talked and laughed a lot and seemed to like each other. I had trouble telling them apart, except the Mother Thing. (I learned that the only marked difference to them between

Peewee and myself was that I was ill and she wasn't.) They had no trouble telling each other apart; their conversations were interlarded with musical names, until you felt that you were caught in Peter and the Wolf or a Wagnerian opera. They even had a leitmotif for me. Their talk was cheerful and gay, like the sounds of a bright summer dawn.

The next time I meet a canary I'll know what he is saying even if he doesn't.

I picked up some of this from Peewee-a hospital bed is not a good place from which to study a planet. Vega Five has Earth-surface gravity, near enough, with an oxygen, carbon dioxide, and water life cycle. The planet would not suit humans, not only because the noonday "sun" would strike you dead with its jolt of ultraviolet but also the air has poisonous amounts of ozone-a trace of ozone is stimulating but a trifle more-well, you might as well sniff prussic acid. There was something else, too, nitrous oxide I think, which was ungood for humans if breathed too long. My quarters were airconditioned; the Vegans could breathe what I used but they considered it tasteless.

I learned a bit as a byproduct of something else; the Mother Thing asked me to dictate how I got mixed up in these things. When I finished, she asked me to dictate everything I knew about Earth, its history, and how we work and live together. This is a tall order-I'm not still dictating because I found out I don't know much. Take ancient Babylonia-how is it related to early Egyptian civilizations? I had only vague notions.

Maybe Peewee did better, since she remembers everything she has heard or read or seen the way Dad does. But they probably didn't get her to hold still long, whereas I had to. The Mother Thing wanted this for the reasons we study Australian aborigines and also as a record of our language. There was another reason, too.

The job wasn't easy but there was a Vegan to help me whenever I felt like it, willing to stop if I tired. Call him Professor Josephus Egghead; "Professor" is close enough and his name can't be spelled. I called him Joe and he called me the leitmotif that meant "Clifford Russell, the monster with the frostbite." Joe had almost as much gift for understanding as the Mother Thing. But how do you put over ideas like "tariffs" and "kings" to a person whose people have never had either? The English words were just noise.

But Joe knew histories of many peoples and planets and could call up scenes, in moving stereo and color, until we agreed on what I meant. We jogged along, with me dictating to a silvery ball floating near my mouth and with Joe curled up like a cat on a platform raised to my level, while he dictated to another microphone, making running notes on what I said. His mike had a gimmick that made it a hushphone; I did not hear him unless he spoke to me.

Then we would stumble. Joe would stop and throw me a sample scene, his best guess of what I meant. The pictures appeared in the air, positioned for my comfort-if I turned my head, the picture moved to accommodate me. The pix were color-stereo-television with perfect life and sharpness-well, give us another twenty years and we'll have them as realistic. It was a good trick to have the projector concealed and to force images to appear as if they were hanging in air, but those are just gimmicks of stereo optics; we can do them anytime we really want to-after all, you can pack a lifelike view of the Grand Canyon into a viewer you hold in your hand.

The thing that did impress me was the organization behind it. I asked Joe about it. He sang to his microphone and we went on a galloping tour of their "Congressional Library."

Dad claims that library science is the foundation of all sciences just as math is the key-and that we will survive or founder, depending on how well the librarians do their jobs. Librarians didn't look glamorous to me but maybe Dad had hit on a not very obvious truth.

This "library" had hundreds, maybe thousands, of Vegans viewing pictures and listening to sound tracks, each with a silvery sphere in front of him. Joe said they were "telling the memory." This was equivalent to typing a card for a library's catalog, except that the result was more like a memory path in brain cells-nine-tenths of that building was an electronic brain.

I spotted a triangular sign like the costume jewelry worn by the Mother Thing, but the picture jumped quickly to something else. Joe also wore one (and others did not) but I did not get around to asking about it, as the sight of that incredible "library" brought up the word "cybernetics" and we went on a detour. I decided later that it might be a lodge pin, or like a Phi Beta Kappa key-the Mother Thing was smart even for a Vegan and Joe was not far behind.

Whenever Joe was sure that he understood some English word, he would wriggle with delight like a puppy being tickled. He was very dignified, but this is not undignified for a Vegan. Their bodies are so fluid and mobile that they smile and frown with the whole works. A Vegan holding perfectly still is either displeased or extremely worried.

The sessions with Joe let me tour places from my bed. The difference between "primary school" and "university" caused me to be shown examples. A "kindergarten" looked like an adult Vegan being overwhelmed by babies; it had the innocent rowdiness of a collie pup stepping on his brother's face to reach the milk dish. But the "university" was a place of quiet beauty, strange-looking trees and plants and flowers among buildings of surrealistic charm unlike any architecture I have ever seen-I suppose I would have been flabbergasted if they had looked familiar. Parabolas were used a lot and I think all the "straight" lines had that swelling the Greeks called "entasis"-delicate grace with strength.

Joe showed up one day simply undulating with pleasure. He had another silvery ball, larger than the other two. He placed it in front of me, then sang to his own. ("I want you to hear this, Kip!")

As soon as he ceased the larger sphere spoke in English: "I want you to hear this. Kip!"

Squirming with delight, Joe swapped spheres and told me to say something.

"What do you want me to say?" I asked.

("What do you want me to say?") the larger sphere sang in Vegan.

That was my last session with Prof Joe.

Despite unstinting help, despite the Mother Thing's ability to make herself understood, I was like the Army mule at West Point: an honorary member of the student body but not prepared for the curriculum. I never did understand their government. Oh, they had government, but it wasn't any system I've heard of. Joe knew about democracies and representation and voting and courts of law; he could fish up examples from many planets. He felt that democracy was "a very good system, for beginners." It would have sounded patronizing, except that is not one of their faults.

I never met one of their young. Joe explained that children should not see "strange creatures" until they had learned to feel understanding sympathy. That would have offended me if I hadn't been learning some "understanding sympathy" myself. Matter of fact, if a human ten-year-old saw a Vegan, he would either run, or poke it with a stick.

I tried to learn about their government from the Mother Thing, in particular how they kept the peace-laws, crimes, punishments, traffic regulations, *etc.*

It was as near to flat failure as I ever had with her. She pondered a long time, then answered: ("How could one possibly act against one's own nature?")

I guess their worst vice was that they didn't have any. This can be tiresome.

The medical staff were interested in the drugs in Oscar's helmet-like our interest in a witch doctor's herbs, but that is not idle interest; remember digitalis and curare.

I told them what each drug did and in most cases I knew the Geneva name as well as the commercial one. I knew that codeine was derived from opium, and opium from poppies. I knew that dexedrine was a sulphate but that was all. Organic chemistry and biochemistry are not easy even with no language trouble. We got together on what a benzene ring was, Peewee drawing it and sticking in her two dollars' worth, and we managed to agree on "element," "isotope," "half life," and the periodic table. I should have drawn structural formulas, using Peewee's hands-but neither of us had the slightest idea of the structural formula for codeine and couldn't do it even when supplied with kindergarten toys which stuck together only in the valences of the elements they represented.

Peewee had fun, though. They may not have learned much from her; she learned a lot from them.

I don't know when I became aware that the Mother Thing was not, or wasn't quite, a female. But it didn't matter; being a mother is an attitude, not a biological relation.

If Noah launched his ark on Vega Five, the animals would come in by twelves. That makes things complicated. But a "mother thing" is one who takes care of others. I am not sure that all mother things were the same gender; it may have been a matter of temperament.

I met one "father thing." You might call him "governor" or "mayor," but "parish priest" or "scoutmaster" is closer, except that his prestige dominated a continent. He breezed in during a session with Joe, stayed five minutes, urged Joe to do a good job, told me to be a good boy and get well, and left, all without hurrying. He filled me with the warm self-reliance that Dad does-I didn't need to be told that he was a "father thing." His visit had a flavor of "royalty visiting the wounded" without being condescending-no doubt it was hard to work me into a busy schedule.

Joe neither mothered nor fathered me; he taught me and studied me- "a professor thing."

Peewee showed up one day full of bubbles. She posed like a mannequin. "Do you like my new spring outfit?"

She was wearing silvery tights, plus a little hump like a knapsack. She looked cute but not glamorous, for she was built like two sticks and this get-up emphasized it.

"Very fancy," I said. "Are you learning to be an acrobat?"

"Don't be silly, Kip; it's my new space suit-a real one."

I glanced at Oscar, big and bulky and filling the closet and said privately, "Hear that, chum?"

("It takes all kinds to make a world.")

"Your helmet won't fit it, will it?"

She giggled. "I'm wearing it."

"You are? 'The Emperor's New Clothes'?"

"Pretty close. Kip, disconnect your prejudices and listen. This is like the Mother Thing's suit except that it's tailored for me. My old suit wasn't much good-and that cold cold about finished it. But you'll be amazed at this one. Take the helmet. It's there, only you can't see it. It's a field. Gas can't go in or out." She came close. "Slap me."

"With what?"

"Oh. I forgot. Kip, you've got to get well and up off that bed. I want to take you for a walk."

"I'm in favor. They tell me it won't be long now."

"It had better not be. Here, I'll show you." She hauled off and slapped herself. Her hand smacked into something inches from her face.

"Now watch," she went on. She moved her hand very slowly; it sank through the barrier, she thumbed her nose at me and giggled.

This impressed me-a space suit you could reach into! Why, I would have been able to give Peewee water and dexedrine and sugar pills when she needed them. "I'll be darned! What does it?"

"A power pack on my back, under the air tank. The tank is good for a week, too, and hoses can't give trouble because there aren't any."

"Uh, suppose you blow a fuse. There you are, with a lungful of vacuum."

"The Mother Thing says that can't happen."

Hmm-I had never known the Mother Thing to be wrong when she made a flat statement.

"That's not all," Peewee went on. "It feels like skin, the joints aren't clumsy, and you're never hot or cold. It's like street clothes."

"Uh, you risk a bad sunburn, don't you? Unhealthy, you tell me. Unhealthy even on the Moon."

"Oh, no! The field polarizes. That's what the field is, sort of. Kip, get them to make you one-we'll go places!"

I glanced at Oscar. ("Please yourself, pal," he said distantly. "I'm not the jealous type.")

"Uh, Peewee, I'll stick to one I understand. But I'd like to examine that monkey suit of yours."

"Monkey suit indeed!"

I woke up one morning, turned over, and realized that I was hungry.

Then I sat up with a jerk. I had turned over in bed.

I had been warned to expect it. The "bed" was a bed and my body was back under my control. Furthermore, I was hungry and I hadn't been hungry the whole time I had been on Vega Five. Whatever that machinery was, it included a way to nourish me without eating.

But I didn't stop to enjoy the luxury of hunger; it was too wonderful to be a body again, not just a head. I got out of bed, was suddenly dizzy, recovered and grinned. Hands! Feet!

I examined those wonderful things. They were unchanged and unhurt.

Then I looked more closely. No, not quite unchanged.

I had had a scar on my left shin where I had been spiked in a close play at second; it was gone. I once had "Mother" tattooed on my left forearm at a carnival. Mother had been distressed and Dad disgusted, but he had said to leave it as a reminder not to be a witling. It was gone. There was not a callus on hand or foot.

I used to bite my nails. My nails were a bit long but perfect. I had lost the nail from my right little toe years ago through a slip with a hatchet. It was back.

I looked hastily for my appendectomy scar-found it and felt relieved. If it had been missing, I would have wondered if I was me.

There was a mirror over the chest of drawers. It showed me with enough hair to warrant a guitar (I wear a crew cut) but somebody had shaved me.

On the chest was a dollar and sixty-seven cents, a mechanical pencil, a sheet of paper, my watch, and a handkerchief. The watch was running. The dollar bill, the paper, and the handkerchief had been laundered.

My clothes, spandy clean and invisibly repaired, were on the desk. The socks weren't mine; the material was more like felt, if you will imagine felted material no thicker than Kleenex which stretches instead of tearing. On the floor were tennis shoes, like Peewee's even to a "U.S. Rubber" trademark, but in my size. The uppers were heavier felted material. I got dressed.

I was wearing the result when Peewee kicked the door. "Anybody home?" She came in, bearing a tray. "Want breakfast?"

"Peewee! Look at me!"

She did. "Not bad," she admitted, "for an ape. You need a haircut."

"Yes, but isn't it wonderful! I'm all together again!"

"You never were apart," she answered, "except in spots-I've had daily reports. Where do you want this?" She put the tray on the desk.

"Peewee," I asked, rather hurt, "don't you care that I'm well?"

"Of course I do. Why do you think I made 'em let me carry in your breakfast? But I knew last night that they were going to uncork you. Who do you think cut your nails and shaved you? That'll be a dollar, please. Shaves have gone up." I got that tired dollar and handed it to her. She didn't take it. "Aw, can't you take a joke?" "'Neither a borrower nor a lender be.'"

"Polonius. He was a stupid old bore. Honest, Kip, I wouldn't take your last dollar."

"Now who can't take a joke?"

"Oh, eat your breakfast. That purple juice," she said, "tastes like orange juice-it's very nice. The stuff that looks like scrambled eggs is a fair substitute and I had 'em color it yellow-the eggs here are dreadful, which wouldn't surprise you if you knew where they get them. The buttery stuff is vegetable fat and I had them color it, too. The bread is bread, I toasted it myself. The salt is salt and it surprises them that we eat it-they think it's poison. Go ahead; I've guinea-pigged everything. No coffee."

"I won't miss it."

"I never touch the stuff-I'm trying to grow. Eat. Your sugar count has been allowed to drop so that you will enjoy it."

The aroma was wonderful. "Where's your breakfast, Peewee?"

"I ate hours ago. I'll watch and swallow when you do."

The tastes were odd but it was just what the doctor ordered-literally, I suppose. I've never enjoyed a meal so much.

Presently I slowed down to say, "Knife and fork? Spoons?"

"The only ones on-" She vocalized the planet's name. "I got tired of fingers and I play hob using what they use. So I drew pictures. This set is mine but we'll order more."

There was even a napkin, more felted stuff. The water tasted distilled and not aerated. I didn't mind. "Peewee, how did you shave me? Not even a nick."

"Little gismo that beats a razor all hollow. I don't know what they use it for, but if you could patent it, you'd make a fortune. Aren't you going to finish that toast?"

"Uh-" I had thought that I could eat the tray. "No, I'm full."

"Then I will." She used it to mop up the "butter," then announced, "I'm off!"

"Where?"

"To suit up. I'm going to take you for a walk!" She was gone.

The hall outside did not imitate ours where it could not be seen from the bed, but a door to the left was a bathroom, just where it should have been. No attempt had been made to make it look like the one at home, and valving and lighting and such were typically Vegan. But everything worked.

Peewee returned while I was checking Oscar. If they had cut him off me, they had done a marvelous job of repairing; even the places I had patched no longer showed. He had been cleaned so thoroughly that there was no odor inside. He had three hours of air and seemed okay in every way. "You're in good shape, partner."

("In the pink! The service is excellent here.")

"So I've noticed." I looked up and saw Peewee; she was already in her "spring outfit."

"Peewee, do we need space suits just for a walk?"

"No. You could get by with a respirator, sun glasses, and a sun shade."

"You've convinced me. Say, where's Madame Pompadour? How do you get her inside that suit?"

"No trouble at all, she just bulges a little. But I left her in my room and told her to behave herself."

"Will she?"

"Probably not. She takes after me."

"Where is your room?"

"Next door. This is the only part of the house which is Earth-conditioned."

I started to suit up. "Say, has that fancy suit got a radio?"

"All that yours has and then some. Did you notice the change in Oscar?"

"Huh? What? I saw that he was repaired and cleaned up. What else have they done?"

"Just a little thing. One more click on the switch that changes antennas and you can talk to people around you who aren't wearing radios without shouting."

"I didn't see a speaker."

"They don't believe in making everything big and bulky."

As we passed Peewee's room I glanced in. It was not decorated Vegan style; I had seen Vegan interiors through stereo. Nor was it a copy of her own room-not if her parents were sensible. I don't know what to call it -"Moorish harem" style, perhaps, as conceived by Mad King Ludwig, with a dash of Disneyland.

I did not comment. I had a hunch that Peewee had been given a room "just like her own" because I had one; that fitted the Mother Thing's behavior-but Peewee had seen a golden chance to let her overfertile imagination run wild. I doubt if she fooled the Mother Thing one split second. She had probably let that indulgent overtone come into her song and had given Peewee what she wanted.

The Mother Thing's home was smaller than our state capitol but not much; her family seemed to run to dozens, or hundreds-"family" has a wide meaning under their complex interlinkage. We didn't see any young ones on our floor and I knew that they were being kept away from the "monsters." The adults all greeted me, inquired as to my health, and congratulated me on my recovery; I was kept busy saying "Fine, thank you! Couldn't be better."

They all knew Peewee and she could sing their names.

I thought I recognized one of my therapists, but the Mother Thing, Prof Joe and the boss veterinarian were the only Vegans I was sure of and we did not meet them.

We hurried on. The Mother Thing's home was typical-many soft round cushions about a foot thick and four in diameter, used as beds or chairs, floor bare, slick and springy, most furniture on the walls where it could be reached by climbing, convenient rods and poles and brackets a person could drape himself on while using the furniture, plants growing unexpectedly here and there as if the jungle were moving in-delightful, and as useful to me as a corset.

Through a series of parabolic arches we reached a balcony. It was not railed and the drop to a terrace below was about seventy-five feet; I stayed back and regretted again that Oscar had no chin window. Peewee went to the edge, put an arm around a slim pillar and leaned out. In the bright outdoor light her "helmet" became an opalescent sphere. "Come see!"

"And break my neck? Maybe you'd like to belay me?"

"Oh, pooh! Who's afraid of heights?"

"I am when I can't see what I'm doing."

"Well, for goodness' sakes, take my hand and grab a post."

I let her lead me to a pillar, then looked out.

It was a city in a jungle. Thick dark green, so tangled that I could not tell trees from vine and bush, spread out all around but was broken repeatedly by buildings as large and larger than the one we were in. There were no roads; their roads are underground in cities and sometimes outside the cities. But there was air traffic-individual fliers supported by contrivances even less substantial than our own one-man 'copter harnesses or flying carpets. Like birds they launched themselves from and landed in balconies such as the one we stood in.

There were real birds, too, long and slender and brilliantly colored, with two sets of wings in tandem-which looked aerodynamically unsound but seemed to suit them.

The sky was blue and fair but broken by three towering cumulous anvils, blinding white in the distance.

"Let's go on the roof," said Peewee.

"How?"

"Over here."

It was a scuttle hole reached by staggered slender brackets the Vegans use as stairs. "Isn't there a ramp?"

"Around on the far side, yes."

"I don't think those things will hold me. And that hole looks small for Oscar."

"Oh, don't be a sissy," Peewee went up like a monkey.

I followed like a tired bear. The brackets were sturdy despite their grace; the hole was a snug fit.

Vega was high in the sky. It appeared to be the angular size of our Sun, which fitted since we were much farther out than Terra is from the Sun, but it was too bright even with full polarization. I looked away and presently eyes and polarizers adjusted until I could see again. Peewee's head was concealed by what appeared to be a polished chrome basketball. I said, "Hey, are you still there?"

"Sure," she answered. "I can see out all right. It's a grand view. Doesn't it remind you of Paris from the top of the Arc de Triomphe?"

"I don't know, I've never done any traveling."

"Except no boulevards, of course. Somebody is about to land here."

I turned the way she was pointing-she could see in all directions while I was hampered by the builtin tunnel vision of my helmet. By the time I was turned around the Vegan was coming in beside us.

("Hello, children!")

"Hi, Mother Thing!" Peewee threw her arms around her, picking her up.

("Not so hasty, dear. Let me shed this.") The Mother Thing stepped out of her harness, shook herself in ripples, folded the flying gear like an umbrella and hung it over an arm. ("You're looking fit, Kip.")

"I feel fine, Mother Thing! Gee, it's nice to have you back."

("I wished to be back when you got out of bed. However, your therapists have kept me advised every minute.") She put a little hand against my chest, growing a bit to do so, and placed her eyes almost against my face plate. ("You are well?")

"I couldn't be better."

"He really is, Mother Thing!"

("Good. You agree that you are well, I sense that you are, Peewee is sure that you are and, most important, your leader therapist assures me that you are. We'll leave at once.")

"What?" I asked. "Where, Mother Thing?"

She turned to Peewee. ("Haven't you told him, dear?")

"Gee, Mother Thing, I haven't had a chance."

("Very well.") She turned to me. ("Dear Kip, we must now attend a gathering. Questions will be asked and answered, decisions will be made.") She spoke to us both. ("Are you ready to leave?")

"Now?" said Peewee. "Why, I guess so-except that I've got to get Madame Pompadour."

("Fetch her, then. And you, Kip?")

"Uh-" I couldn't remember whether I had put my watch back on after I washed and I couldn't tell because I can't feel it through Oscar's thick hide. I told her so.

("Very well. You children run to your rooms while I have a ship fetched. Meet me here and don't stop to admire flowers.")

We went down by ramp. I said, "Peewee, you've been holding out on me again."

"Why, I have not!"

"What do you call it?"

"Kip-please listen! I was told not to tell you while you were ill. The Mother Thing was very firm about it. You were not to be disturbed-that's what she said!-while you were growing well."

"Why should I feel disturbed? What is all this? What gathering? What questions?"

"Well ... the gathering is sort of a court. A criminal court, you might say."

"Huh?" I took a quick look at my conscience. But I hadn't had any chance to do anything wrong-I had been helpless as a baby up to two hours ago. That left Peewee. "Runt," I said sternly, "what have you done now?"

"Me? Nothing."

"Think hard."

"No, Kip. Oh, I'm sorry I didn't tell you at breakfast! But Daddy says never to break any news until after his second cup of coffee and I thought how nice it would be to take a little walk before we had any worries and I was going to tell you"

"Make it march."

"-as soon as we came down. I haven't done anything. But there's old Wormface."

"What? I thought he was dead."

"Maybe so, maybe not. But, as the Mother Thing says, there are still questions to be asked, decisions to be made. He's up for the limit, is my guess."

I thought about it as we wound our way through strange apartments toward the air lock that led to our Earth-conditioned rooms. High crimes and misdemeanors… skulduggery in the spaceways-yes, Wormface was probably in for it. If the Vegans could catch him. "Had caught him" apparently, since they were going to try him. "But where do we come in? As witnesses?"

"I suppose you could call it that."

What happened to Wormface was no skin off my nose-and it would be a chance to find out more about the Vegans. Especially if the court was some distance away, so that we would travel and see the country.

"But that isn't all," Peewee went on worriedly.

"What else?"

She sighed. "This is why I wanted us to have a nice sightsee first. Uh…"

"Don't chew on it. Spit it out."

"Well… we have to be tried, too."

"What?"

"Maybe 'examined' is the word. I don't know. But I know this: we can't go home until we've been judged."

"But what have we done?" I burst out.

"I don't know!"

My thoughts were boiling. "Are you sure they'll let us go home then?"

"The Mother Thing refuses to talk about it."

I stopped and took her arm. "What it amounts to," I said bitterly, "is that we are under arrest. Aren't we?"

"Yes-" She added almost in a sob, "But, Kip, I told you she was a cop!"

"Great stuff. We pull her chestnuts out of the fire-and now we're arrested-and going to be tried-and we don't even know why! Nice place, Vega Five. 'The natives are friendly.' " They had nursed me-as we nurse a gangster in order to hang him.

"But, Kip-" Peewee was crying openly now. "I'm sure it'll be all right. She may be a cop-but she's still the Mother Thing."

"Is she? I wonder." Peewee's manner contradicted her words. She was not one to worry over nothing. Quite the contrary.

My watch was on the washstand. I ungasketed to put it in an inside pocket. When I came out, Peewee was doing the same with Madame Pompadour. "Here," I said, "I'll take her with me. I've got more room."

"No, thank you," Peewee answered bleakly. "I need her with me. Especially now."

"Uh, Peewee, where is this court? This city? Or another one?"

"Didn't I tell you? No, I guess I didn't. It's not on this planet."

"I thought this was the only inhabited—"

"It's not a planet around Vega. Another star. Not even in the Galaxy."

"Say that again?"

"It's somewhere in the Lesser Magellanic Cloud."

Chapter 10

I didn't put up a fight-a hundred and sixty trillion miles from nowhere, I mean. But I didn't speak to the Mother Thing as I got into her ship.

It was shaped like an old-fashioned beehive and it looked barely big enough to jump us to the space port. Peewee and I crowded together on the floor, the Mother Thing curled up in front and twiddled a shiny rack like an abacus; we took off, straight up.

In a few minutes my anger grew from sullenness to a reckless need to settle it. "Mother Thing!"

("One moment, dear. Let me get us out of the atmosphere.") She pushed something, the ship quivered and steadied.

"Mother Thing," I repeated.

("Wait until I lower us, Kip.")

I had to wait. It's as silly to disturb a pilot as it is to snatch the wheel of a car. The little ship took a buffeting; the upper winds must have been dillies. But she could pilot.

Presently there was a gentle bump and I figured we must be at the space port. The Mother Thing turned her head. ("All right, Kip. I sense your fear and resentment. Will it help to say that you two are in no danger? That I would protect you with my body? As you protected mine?")

"Yes, but—"

("Then let be. It is easier to show than it is to explain. Don't clamp your helmet. This planet's air is like your own.")

"Huh? You mean we're there?"

"I told you," Peewee said at my elbow. "Just poof! and you're there."

I didn't answer. I was trying to guess how far we were from home.

("Come, children.")

It was midday when we left; it was night as we disembarked. The ship rested on a platform that stretched out of sight. Stars in front of me were in unfamiliar constellations; slaunchwise down the sky was a thin curdling which I spotted as the Milky Way. So Peewee had her wires crossed-we were far from home but still in the Galaxy-perhaps we had simply switched to the night side of Vega Five.

I heard Peewee gasp and turned around.

I didn't have strength to gasp.

Dominating that whole side of the sky was a great whirlpool of millions, maybe billions, of stars.

You've seen pictures of the Great Nebula in Andromeda?-a giant spiral of two curving arms, seen at an angle. Of all the lovely things in the sky it is the most beautiful. This was like that.

Only we weren't seeing a photograph nor even by telescope; we were so close (if "close" is the word) that it stretched across the sky twice as long as the Big Dipper as seen from home-so close that I saw the thickening at the center, two great branches coiling around and overtaking each other. We saw it from an angle so that it appeared elliptical, just as M31 in Andromeda does; you could feel its depth, you could see its shape.

Then I knew I was a long way from home. That was home, up there, lost in billions of crowded stars.

It was some time before I noticed another double spiral on my right, almost as wide-flung but rather lopsided and not nearly as brilliant-a pale ghost of our own gorgeous Galaxy. It slowly penetrated that this second one must be the Greater Magellanic Cloud-if we were in the Lesser and if that fiery whirlpool was our own Galaxy. What I had thought was "The Milky Way" was simply a milky way, the Lesser Cloud from inside.

I turned and looked at it again. It had the right shape, a roadway around the sky, but it was pale skim milk compared with our own, about as our Milky Way looks on a murky night. I don't know how it should look, since I'd never seen the Magellanic Clouds; I've never been south of the Rio Grande. But I did know that each cloud is a galaxy in its own right, but smaller than ours and grouped with us.

I looked again at our blazing spiral and was homesick in a way I hadn't been since I was six.

Peewee was huddling to the Mother Thing for comfort. She made herself taller and put an arm around Peewee. ("There, there, dear! I felt the same way when I was very young and saw it for the first time.")

"Mother Thing?" Peewee said timidly. "Where is home?"

("See the right half of it, dear, where the outer arm trails into nothingness? We came from a point two-thirds the way out from the center."

"No, no! Not Vega. I want to know where the Sun is!"

("Oh, your star. But, dear, at this distance it is the same.")

We learned how far it is from the Sun to the planet Lanador 167,000 lightyears. The Mother Thing couldn't tell us directly as she did not know how much time we meant by a "year"-how long it takes Terra to go around the Sun (a figure she might have used once or not at all and as worth remembering as the price of peanuts in Perth). But she did know the distance from Vega to the Sun and told us the distance from Lanador to Vega with that as a yardstick-six thousand one hundred and ninety times as great. 6190 times 27 lightyears gives 167,000 lightyears. She courteously gave it in powers of ten the way we figure, instead of using factorial five (1x2x3x4x5 equals 120) which is how Vegans figure. 167,000 lightyears is 9.82 x 1017 miles. Round off 9.82 and call it ten. Then -1,000,000,000,000,000,000 miles -is the distance from Vega to Lanador (or from the Sun to Lanador; Vega and the Sun are backfence neighbors on this scale.)

A thousand million billion miles.

I refuse to have anything to do with such a preposterous figure. It may be "short" as cosmic distances go, but there comes a time when the circuit breakers in your skull trip out from overload.

The platform we were on was the roof of an enormous triangular building, miles on a side. We saw that triangle repeated in many places and always with a two-armed spiral in each corner. It was the design the Mother Thing wore as jewelry.

It is the symbol for "Three Galaxies, One Law."

I'll lump here things I learned in driblets: The Three Galaxies are like our Federated Free Nations, or the United Nations before that, or the League of Nations still earlier; Lanador houses their offices and courts and files-the League's capital, the way the FFN is in New York and the League of Nations used to be in Switzerland. The cause is historical; the people of Lanador are the Old Race; that's where civilization began.

The Three Galaxies are an island group, like Hawaii State, they haven't any other close neighbors. Civilization spread through the Lesser Cloud, then through the Greater Cloud and is seeping slowly through our own Galaxy-that is taking longer; there are fifteen or twenty times as many stars in our Galaxy as in the other two.

When I began to get these things straight I wasn't quite as sore. The Mother Thing was a very important person at home but here she was a minor official-all she could do was bring us in. Still, I wasn't more than coolly polite for a while-she might have looked the other way while we beat it for home.

They housed us in that enormous building in a part you could call a "transients" hotel," although "detention barracks" or "jail" is closer. I can't complain about accommodations but I was getting confoundedly tired of being locked up every time I arrived in a new place. A robot met us and took us down inside-there are robots wherever you turn on Lanador. I don't mean things looking like the Tin Woodman; I mean machines that do things for you, such as this one which led us to our rooms, then hung around like a bellhop expecting a tip. It was a three-wheeled cart with a big basket on top, for luggage if we had any. It met us, whistled to the Mother Thing in Vegan and led us away, down a lift and through a wide and endlessly long corridor.

I was given "my" room again-a fake of a fake, with all errors left in and new ones added. The sight of it was not reassuring; it shrieked that they planned to keep us there as long as-well, as long as they chose.

But the room was complete even to a rack for Oscar and a bathroom outside. Just beyond "my" room was a fake of another kind-a copy of that Arabian Nights horror Peewee had occupied on Vega Five. Peewee seemed delighted, so I didn't point out the implications.

The Mother Thing hovered around while we got out of space suits. ("Do you think you will be comfortable?")

"Oh, sure," I agreed unenthusiastically.

("If you want food or anything, just say so. It will come.")

"So? Is there a telephone somewhere?"

("Simply speak your wishes. You will be heard.")

I didn't doubt her-but I was almost as tired of rooms that were bugged as of being locked up; a person ought to have privacy.

"I'm hungry now," Peewee commented. "I had an early breakfast."

We were in her room. A purple drapery drew back, a light glowed in the wall. In about two minutes a section of wall disappeared; a slab at table height stuck out like a tongue. On it were dishes and silverware, cold cuts, fruit, bread, butter,, and a mug of steaming cocoa. Peewee clapped and squealed. I looked at it with less enthusiasm.

("You see?") the Mother Thing went on with a smile in her voice. ("Ask for what you need. If you need me, I'll come. But I must go now.")

"Oh, please don't go, Mother Thing."

("I must, Peewee dear. But I will see you soon. By the bye, there are two more of your people here.")

"Huh?" I put in. "Who? Where?"

("Next door.") She was gone with gliding swiftness; the bellhop speeded up to stay ahead of her.

I spun around. "Did you hear that?"

"I certainly did!"

"Well-you eat if you want to; I'm going to look for those other humans."

"Hey! Wait for me!"

"I thought you wanted to eat."

"Well…" Peewee looked at the food. "Just a sec." She hastily buttered two slices of bread and handed one to me. I was not in that much of a hurry; I ate it. Peewee gobbled hers, took a gulp from the mug and offered it to me. "Want some?"

It wasn't quite cocoa; there was a meaty flavor, too. But it was good. I handed it back and she finished it. "Now I can fight wildcats. Let's go, Kip."

"Next door" was through the foyer of our three-room suite and fifteen yards down the corridor, where we came to a door arch. I kept Peewee back and glanced in cautiously.

It was a diorama, a fake scene.

This one was better than you see in museums. I was looking through a bush at a small clearing in wild country. It ended in a limestone bank. I could see overcast sky and a cave mouth in the rocks. The ground was wet, as if from rain.

A cave man hunkered down close to the cave. He was gnawing the carcass of a small animal, possibly a squirrel.

Peewee tried to shove past me; I stopped her. The cave man did not appear to notice us which struck me as a good idea. His legs looked short but I think he weighed twice what I do and he was muscled like a weight lifter, with short, hairy forearms and knotty biceps and calves. His head was huge, bigger than mine and longer, but his forehead and chin weren't much. His teeth were large and yellow and a front one was broken. I heard bones crunching.

In a museum I would have expected a card reading "Neanderthal Man -circa Last Ice Age." But wax dummies of extinct breeds don't crack bones.

Peewee protested, "Hey, let me look."

He heard. Peewee stared at him, he stared toward us. Peewee squealed; he whirled and ran into the cave, waddling but making time.

I grabbed Peewee. "Let's get out of here!"

"Wait a minute," she said calmly. "He won't come out in a hurry." She tried to push the bush aside.

"Peewee!"

"Try this," she suggested. Her hand was shoving air. "They've got him penned."

I tried it. Something transparent blocked the arch. I could push it a little but not more than an inch. "Plastic?" I suggested. "Like Lucite but springier?"

"Mmm…" said Peewee. "More like the helmet of my suit. Tougher, though-and I'll bet light passes only one way. I don't think he saw us."

"Okay, let's get back to our rooms. Maybe we can lock them."

She went on feeling that barrier. "Peewee!" I said sharply. "You're not listening."

"What were you doing talking," she answered reasonably, "when I wasn't listening?"

"Peewee! This is no time to be difficult."

"You sound like Daddy. He dropped that rat he was eating-he might come back."

"If he does, you won't be here, because I'm about to drag you-and if you bite, I'll bite back. I warn you."

She looked around with a trace of animosity. "I wouldn't bite you. Kip, no matter what you did. But if you're going to be stuffy-oh, well, I doubt if he'll come out for an hour or so. We'll come back."

"Okay." I pulled her away.

But we did not leave. I heard a loud whistle and a shout: "Hey, buster! Over here!"

The words were not English, but I understood-well enough. The yell came from an archway across the corridor and a little farther on. I hesitated, then moved toward it because Peewee did so.

A man about fortyfive was loafing in this doorway. He was no Neanderthal; he was civilized-or somewhat so. He wore a long heavy woolen tunic, belted in at the waist, forming a sort of kilt. His legs below that were wrapped in wool and he was shod in heavy short boots, much worn. At the belt and supported by a shoulder sling was a short, heavy sword; there was a dagger on the other side of the belt. His hair was short and he was clean-shaven save for a few days' gray stubble. His expression was neither friendly nor unfriendly; it was sharply watchful.

"Thanks," he said gruffly. "Are you the jailer?"

Peewee gasped. "Why, that's Latin!"

What do you do when you meet a Legionary? Right after a cave man? I answered: "No, I am a prisoner myself." I said it in Spanish and repeated it in pretty fair classical Latin. I used Spanish because Peewee hadn't been quite correct. It was not Latin he spoke, not the Latin of Ovid and Gaius Julius Caesar. Nor was it Spanish. It was in between, with an atrocious accent and other differences. But I could worry out the meaning.

He sucked his lip and answered, "That's bad. I've been trying for three days to attract attention and all I get is another prisoner. But that's how the die rolls. Say, that's a funny accent you have."

"Sorry, amigo, but I have trouble understanding you, too." I repeated it in Latin, then split the difference. I added, in improvised lingua franca, "Speak slowly, will you?"

"I'll speak as I please. And don't call me 'amico'; I'm a Roman citizen -so don't get gay."

That's a free translation. His advice was more vulgarI think. It was close to a Spanish phrase which certainly is vulgar.

"What's he saying?" demanded Peewee. "It is Latin, isn't it? Translate!"

I was glad she hadn't caught it. "Why, Peewee, don't you know 'the language of poetry and science'?"

"Oh, don't be a smartie! Tell me."

"Don't crowd me, hon. I'll tell you later. I'm having trouble following it."

"What is that barbarian grunting?" the Roman said pleasantly. "Talk language, boy. Or will you have ten with the flat of the sword?"

He seemed to be leaning on nothing-so I felt the air. It was solid; I decided not to worry about his threat. "I'm talking as best I can. We spoke to each other in our own language."

"Pig grunts. Talk Latin. If you can." He looked at Peewee as if just noticing her. "Your daughter? Want to sell her? If she had meat on her bones, she might be worth a half denario."

Peewee clouded up. "I understood that!" she said fiercely. "Come out here and fight!"

"Try it in Latin," I advised her. "If he understands you, he'll probably spank you."

She looked uneasy. "You wouldn't let him?"

"You know I wouldn't."

"Let's go back."

"That's what I said earlier." I escorted her past the cave man's lair to our suite. "Peewee, I'm going back and see what our noble Roman has to say. Do you mind?"

"I certainly do!"

"Be reasonable, hon. If we could be hurt by them, the Mother Thing would know it. After all, she told us they were here."

"I'll go with you."

"What for? I'll tell you everything I learn. This may be a chance to find out what this silliness means. What's he doing here? Have they kept him in deep-freeze a couple of thousand years? How long has he been awake? What does he know that we don't? We're in a bad spot; all the data I can dig up we need. You can help by keeping out. If you're scared, send for the Mother Thing."

She pouted. "I'm not scared. All right-if that's the way you want it."

"I do. Eat your dinner."

Jo-Jo the dogface boy was not in sight; I gave his door a wide berth. If a ship can go anywhere in no time, could it skip a dimension and go anywhere to any time? How would the math work out? The soldier was still lounging at his door. He looked up. "Didn't you hear me say to stick around?"

"I heard you," I admitted, "but we're not going to get anywhere if you take that attitude. I'm not one of your privates."

"Lucky for you!"

"Do we talk peacefully? Or do I leave?"

He looked me over. "Peace. But don't get smart with me, barbarian."

He called himself "Iunio." He had served in Spain and Gaul, then transferred to the VIth Legion, the "Victrix"-which he felt that even a barbarian should know of. His legion's garrison was Eboracum, north of Londinium in Britain, but he had been on advance duty as a brevet centurion (he pronounced it "centurio")-his permanent rank was about like top sergeant. He was smaller than I am but I would not want to meet him in an alley. Nor at the palisades of a castra.

He had a low opinion of Britons and all barbarians including me ("nothing personal-some of my best friends are barbarians"), women, the British climate, high brass, and priests; he thought well of Caesar, Rome, the gods, and his own professional ability. The army wasn't what it used to be and the slump came from treating auxiliaries like Roman citizens.

He had been guarding the building of a wall to hold back barbarians-a nasty lot who would sneak up and slit your throat and eat you-which no doubt had happened to him, since he was now in the nether regions.

I thought he was talking about Hadrian's Wall, but it was three days' march north of there, where the seas were closest together. The climate there was terrible and the natives were bloodthirsty beasts who dyed their bodies and didn't appreciate civilization-you'd think the Eagles were trying to steal their dinky island. Provincial… like me. No offense meant.

Nevertheless he had bought a little barbarian to wife and had been looking forward to garrison duty at Eboracum-when this happened. Iunio shrugged. "Perhaps if I had been careful with lustrations and sacrifices, my luck wouldn't have run out. But I figure that if a man does his duty and keeps himself and his weapons clean, the rest is the C.O.'s worry. Careful of that doorway; it's witched."

The longer he talked the easier it was to understand him. The "-us" endings turned to "-o" and his vocabulary was not that of De Bello Gallico -"horse" wasn't "equus"; it was "caballo." His idioms bothered me, plus the fact that his Latin was diluted by a dozen barbarian tongues. But you can blank out every third word in a newspaper and still catch the gist.

I learned a lot about the daily life and petty politics of the Victrix and nothing that I wanted to know. Iunio did not know how he had gotten where he was nor why-except that he was dead and awaiting disposition in a receiving barracks somewhere in the nether world-a theory which I was not yet prepared to accept.

He knew the year of his "death"-Year Eight of the Emperor and Eight Hundred and NinetyNine of Rome. I wrote out the dates in Roman numerals to make sure. But I did not remember when Rome was founded nor could I identify the "Caesar" even by his full name-there have been so many Caesars. But Hadrian's Wall had been built and Britain was still occupied; that placed Iunio close to the third century.

He wasn't interested in the cave man across the way-it embodied to him the worst vice of a barbarian: cowardice. I didn't argue but I would be timid, too, if I had sabertoothed tigers yowling at my door. (Did they have sabertooths then? Make it "cave bears.")

Iunio went back and returned with hard dark bread, cheese, and a cup. He did not offer me any and I don't think it was the barrier. He poured a little of his drink on the floor and started to chomp. It was a mud floor; the walls were rough stone and the ceiling was supported by wooden beams. It may have been a copy of dwellings during the occupation of Britain, but I'm no expert.

I didn't stay much longer. Not only did bread and cheese remind me that I was hungry, but I offended Iunio. I don't know what set him off, but he discussed me with cold thoroughness, my eating habits, ancestry, appearance, conduct, and method of earning a living. Iunio was pleasantas long as you agreed with him, ignored insults, and deferred to him. Many older people demand this, even in buying a thirty-nine-cent can of talcum; you learn to give it without thinking-otherwise you get a reputation as a fresh kid and potential juvenile delinquent. The less respect an older person deserves the more certain he is to demand it from anyone younger. So I left, as Iunio didn't know anything helpful anyhow. As I went back I saw the cave man peering out his cave. I said, "Take it easy, Jo-Jo," and went on.

I bumped into another invisible barrier blocking our archway. I felt it, then said quietly, "I want to go in." The barrier melted away and I walked in-then found that it was back in place.

My rubber soles made no noise and I didn't call out because Peewee might be asleep. Her door was open and I peeped in. She was sitting tailor-fashion on that incredible Oriental divan, rocking Madame Pompadour and crying.

I backed away, then returned whistling, making a racket, and calling to her. She popped out of her door, with smiling face and no trace of tears. "Hi, Kip! It took you long enough."

"That guy talks too much. What's new?"

"Nothing. I ate and you didn't come back, so I took a nap. You woke me. What did you find out?"

"Let me order dinner and I'll tell you while I eat."

I was chasing the last bit of gravy when a bellhop robot came for us. It was like the other one except that it had in glowing gold on its front that triangle with three spirals. "Follow me," it said in English.

I looked at Peewee. "Didn't the Mother Thing say she was coming back?"

"Why, I thought so."

The machine repeated, "Follow me. Your presence is required."

I laid my ears back. I have taken lots of orders, some of which I shouldn't have, but I had never yet taken orders from a piece of machinery. "Go climb a rope!" I said. "You'll have to drag me."

This is not what to say to a robot. It did.

Peewee yelled, "Mother Thing! Where are you? Help us!"

Her birdsong came out of the machine. ("It's all right, dears. The servant will lead you to me.")

I quit struggling and started to walk. That refugee from an appliance dealer took us into another lift, then into a corridor whose walls whizzed past as soon as we entered. It nudged us through an enormous archway topped by the triangle and spirals and herded us into a pen near one wall. The pen was not apparent until we moved-more of that annoying solid air.

It was the biggest room I have ever been in, triangular, unbroken by post or pillar, with ceiling so high and walls so distant that I half expected local thunderstorms. An enormous room makes me feel like an ant; I was glad to be near a wall. The room was not empty-hundreds in it-but it looked empty because they were all near the walls; the giant floor was bare.

But there were three wormfaces out in the center-Wormface's trial was in progress.

I don't know if our own Wormface was there. I would not have known even if they had not been a long way off as the difference between two wormfaces is the difference between having your throat cut and being beheaded. But, as we learned, the presence or absence of the individual offender was the least important part of a trial. Wormface was being tried, present or notalive or dead.

The Mother Thing was speaking. I could see her tiny figure, also far out on the floor but apart from the wormfaces. Her birdsong voice reached me faintly but I heard her words clearly-in English; from somewhere near us her translated words were piped to us. The feel of her was in the English translation just as it was in her bird tones.

She was telling what she knew of wormface conduct, as dispassionately as if describing something under a microscope, like a traffic officer testifying: "At 9:17 on the fifth, while on duty at-" *etc.* The facts. The Mother Thing was finishing her account of events on Pluto. She chopped it off at the point of explosion.

Another voice spoke, in English. It was flat with a nasal twang and reminded me of a Vermont grocer we had dealt with one summer when I was a kid. He was a man who never smiled nor frowned and what little he said was all in the same tone, whether it was, "She is a good woman," or, "That man would cheat his own son," or, "Eggs are fifty-nine cents," cold as a cash register. This voice was that sort.

It said to the Mother Thing: "Have you finished?"

"I have finished."

"The other witnesses will be heard. Clifford Russell—"

I jumped, as if that grocer had caught me in the candy jar.

The voice went on: "-listen carefully." Another voice started.

My own-it was the account I had dictated, flat on my back on Vega Five.

But it wasn't all of it; it was just that which concerned wormfaces. Adjectives and whole sentences had been cut-as if someone had taken scissors to a tape recording. The facts were there; what I thought about them was missing.

It started with ships landing in the pasture back of our house; it ended with that last wormface stumbling blindly down a hole. It wasn't long, as so much had been left out-our hike across the Moon, for example. My description of Wormface was left in but had been trimmed so much that I could have been talking about Venus de Milo instead of the ugliest thing in creation.

My recorded voice ended and the Yankee-grocer voice said, "Were those your words?"

"Huh? Yes."

"Is the account correct?"

"Yes, but—"

"Is it correct?"

"Yes."

"Is it complete?"

I wanted to say that it certainly was not-but I was beginning to understand the system. "Yes."

"Patricia Wynant Reisfeld—"

Peewee's story started earlier and covered all those days when she had been in contact with wormfaces while I was not. But it was not much longer, for, while Peewee has a sharp eye and a sharper memory, she is loaded with opinions. Opinions were left out.

When Peewee had agreed that her evidence was correct and complete the Yankee voice stated, "All witnesses have been heard, all known facts have been integrated. The three individuals may speak for themselves."

I think the wormfaces picked a spokesman, perhaps the Wormface, if he was alive and there. Their answer, as translated into English, did not have the guttural accent with which Wormface spoke English; nevertheless it was a wormface speaking. That bone-chilling yet highly intelligent viciousness, as unmistakable as a punch in the teeth, was in every syllable.

Their spokesman was so far away that I was not upset by his looks and after the first stomach-twisting shock of that voice I was able to listen more or less judicially. He started by denying that this court had jurisdiction over his sort. He was responsible only to his mother-queen and she only to their queen-groups-that's how the English came out.

That defense, he claimed, was sufficient. However, if the "Three Galaxies" confederation existed-which he had no reason to believe other than that he was now being detained unlawfully before this hiveful of creatures met as a kangaroo court-if it existed, it still had no jurisdiction over the Only People, first, because the organization did not extend to his part of space; second, because even if it were there, the Only People had never joined and therefore its rules (if it had rules) could not apply; and third, it was inconceivable that their queen-group would associate itself with this improbable "Three Galaxies" because people do not contract with animals.

This defense was also sufficient.

But disregarding for the sake of argument these complete and sufficient defenses, this trial was a mockery because no offense existed even under the so-called rules of the alleged "Three Galaxies." They (the wormfaces) had been operating in their own part of space engaged in occupying a useful but empty planet, Earth. No possible crime could lie in colonizing land inhabited merely by animals. As for the agent of Three Galaxies, she had butted in; she had not been harmed; she had merely been kept from interfering and had been detained only for the purpose of returning her where she belonged.

He should have stopped. Any of these defenses might have stood up, especially the last one. I used to think of the human race as "lords of creation"-but things had happened to me since. I was not sure that this assemblage would think that humans had rights compared with wormfaces. Certainly the wormfaces were ahead of us in many ways. When we clear jungle to make farms, do we worry if baboons are there first?

But he discarded these defenses, explained that they were intellectual exercises to show how foolish the whole thing was under any rules, from any point of view. He would now make his defense.

It was an attack.

The viciousness in his voice rose to a crescendo of hatred that made every word slam like a blow. How dared they do this? They were mice voting to bell the cat! (I know-but that's how it came out in translation.) They were animals to be eaten, or merely vermin to be exterminated. Their mercy would be rejected if offered, no negotiation was possible, their crimes would never be forgotten, the Only People would destroy them!

I looked around to see how the jury was taking it. This almost-empty hall had hundreds of creatures around the three sides and many were close to us. I had been too busy with the trial to do more than glance at them. Now I looked, for the wormface's blast was so disturbing that I welcomed a distraction.

They were all sorts and I'm not sure that any two were alike. There was one twenty feet from me who was as horrible as Wormface and amazingly like him-except that this creature's grisly appearance did not inspire disgust. There were others almost human in appearance, although they were greatly in the minority. There was one really likely-looking chick as human as I am-except for iridescent skin and odd and skimpy notions of dress. She was so pretty that I would have sworn that the iridescence was just make-up-but I probably would have been wrong. I wondered in what language the diatribe was reaching her? Certainly not English.

Perhaps she felt my stare, for she looked around and unsmilingly examined me, as I might a chimpanzee in a cage. I guess the attraction wasn't mutual.

There was every gradation from pseudo-wormface to the iridescent girl -not only the range between, but also way out in left field; some had their own private aquaria.

I could not tell how the invective affected them. The girl creature was taking it quietly, but what can you say about a walrus thing with octopus arms? If he twitches, is he angry? Or laughing? Or itches where the twitch is?

The Yankee-voiced spokesman let the wormface rave on.

Peewee was holding my hand. Now she grabbed my ear, tilted her face and whispered, "He talks nasty." She sounded awed.

The wormface ended with a blast of hate that must have overtaxed the translator for instead of English we heard a wordless scream.

The Yankee voice said flatly, "But do you have anything to say in your defense?"

The scream was repeated, then the wormface became coherent. "I have made my defense-that no defense is necessary."

The emotionless voice went on, to the Mother Thing. "Do you speak for them?"

She answered reluctantly, "My lord peers ... I am forced to say… that I found them to be quite naughty." She sounded grieved.

"You find against them?"

"I do."

"Then you may not be heard. Such is the Law."

" 'Three Galaxies, One Law.' I may not speak."

The flat voice went on, "Will any witness speak favorably?"

There was silence.

That was my chance to be noble. We humans were their victims; we were in a position to speak up, point out that from their standpoint they hadn't done anything wrong, and ask mercy-if they would promise to behave in the future.

Well, I didn't. I've heard all the usual Sweetness and Light that kids get pushed at them-how they should always forgive, how there's some good in the worst of us, *etc.* But when I see a black widow, I step on it; I don't plead with it to be a good little spider and please stop poisoning people. A black widow spider can't help it-but that's the point.

The voice said to the wormfaces: "Is there any race anywhere which might speak for you? If so, it will be summoned."

The spokesman wormface spat at the idea. That another race might be character witnesses for them disgusted him.

"So be it," answered the Yankee voice. "Are the facts sufficient to permit a decision?"

Almost immediately the voice answered itself: "Yes."

"What is the decision?"

Again it answered itself: "Their planet shall be rotated."

It didn't sound like much-shucks, all planets rotate-and the flat voice held no expression. But the verdict scared me. The whole room seemed to shudder.

The Mother Thing turned and came toward us. It was a long way but she reached us quickly. Peewee flung herself on her; the solid air that penned us solidified still more until we three were in a private room, a silvery hemisphere.

Peewee was trembling and gasping and the Mother Thing comforted her. When Peewee had control of herself, I said nervously, "Mother Thing? What did he mean? 'Their planet shall be rotated.' "

She looked at me without letting go of Peewee and her great soft eyes were sternly sad. ("It means that their planet is tilted ninety degrees out of the spacetime of your senses and mine.")

Her voice sounded like a funeral dirge played softly on a flute. Yet the verdict did not seem tragic to me. I knew what she meant; her meaning was even clearer in Vegan than in English. If you rotate a plane figure about an axis in its plane-it disappears. It is no longer in a plane and Mr. A. Square of Flatland is permanently out of touch with it.

But it doesn't cease to exist; it just is no longer where it was. It struck me that the wormfaces were getting off easy. I had halfway expected their planet to be blown up (and I didn't doubt that Three Galaxies could do so), or something equally drastic. As it was, the wormfaces were to be run out of town and would never find their way back-there are so many, many dimensions-but they wouldn't be hurt; they were just being placed in Coventry.

But the Mother Thing sounded as if she had taken unwilling part in a hanging.

So I asked her.

("You do not understand, dear gentle Kip-they do not take their star with them.")

"Oh-" was all I could say.

Peewee turned white.

Stars are the source of life-planets are merely life's containers. Chop off the star… and the planet gets colder… and colder… and colder-then still colder.

How long until the very air freezes? How many hours or days to absolute zero? I shivered and got goose pimples. Worse than Pluto-

"Mother Thing? How long before they do this?" I had a queasy misgiving that I should have spoken, that even wormfaces did not deserve this. Blow them up, shoot them down-but don't freeze them.

("It is done,") she sang in that same dirgelike way.

"What?"

("The agent charged with executing the decision waits for the word ... the message goes out the instant we hear it. They were rotated out of our world even before I turned to join you. It is better so.")

I gulped and heard an echo in my mind: "-'twere well it were done quickly."

But the Mother Thing was saying rapidly, ("Think no more on 't, for now you must be brave!")

"Huh? What, Mother Thing? What happens now?"

("You'll be summoned any moment-for your own trial.")

I simply stared, I could not speak-I had thought it was all over. Peewee looked still thinner and whiter but did not cry. She wet her lips and said quietly, "You'll come with us, Mother Thing?"

("Oh, my children! I cannot. You must face this alone.")

I found my voice. "But what are we being tried for? We haven't hurt anybody. We haven't done a thing."

("Not you personally. Your race is on trial. Through you.")

Peewee turned away from her and looked at me-and I felt a thrill of tragic pride that in our moment of extremity she had turned, not to the Mother Thing, but to me, another human being.

I knew that she was thinking of the same thing I was: a ship, a ship hanging close to Earth, only an instant away and yet perhaps uncounted trillion miles in some pocket of folded space, where no DEW line gives warning, where no radar can reach.

The Earth, green and gold and lovely, turning lazily in the warm light of the SunA flat voice-No more Sun.

No stars.

The orphaned Moon would bobble once, then continue around the Sun, a gravestone to the hopes of men. The few at Lunar Base and Luna City and Tombaugh Station would last weeks or even months, the only human beings left alive. Then they would go-if not of suffocation, then of grief and loneliness.

Peewee said shrilly, "Kip, she's not serious! Tell me she's not!"

I said hoarsely, "Mother Thing-are the executioners already waiting?"

She did not answer. She said to Peewee, ("It is very serious, my daughter. But do not be afraid. I exacted a promise before I surrendered you. If things go against your race, you two will return with me and be suffered to live out your little lives in my home. So stand up and tell the truth… and do not be afraid.")

The flat voice entered the closed space: "The human beings are summoned."

Chapter 11

We walked out onto that vast floor. The farther we went the more I felt like a fly on a plate. Having Peewee with me was a help; nevertheless it was that nightmare where you find yourself not decently dressed in a public place. Peewee clutched my hand and held Madame Pompadour pressed tightly to her. I wished that I had suited-up in Oscar-I wouldn't have felt quite so under a microscope with Oscar around me.

Just before we left, the Mother Thing placed her hand against my forehead and started to hold me with her eyes. I pushed her hand aside and looked away. "No," I told her. "No treatments! I'm not going to-oh, I know you mean well but I won't take an anesthetic. Thanks."

She did not insist; she simply turned to Peewee. Peewee looked uncertain, then shook her head. "We're ready," she piped.

The farther out we got on that great bare floor the more I regretted that I had not let the Mother Thing do whatever it was that kept one from worrying. At least I should have insisted that Peewee take it.

Coming at us from the other walls were two other flies; as they got closer I recognized them: the Neanderthal and the Legionary. The cave man was being dragged invisibly; the Roman covered ground in a long, slow, easy lope. We all arrived at the center at the same time and were stopped about twenty feet apart, Peewee and I at one point of a triangle, the Roman and the cave man each at another.

I called out, "Hail, Iunio!"

"Silence, barbarian." He looked around him, his eyes estimating the crowd at the walls.

He was no longer in casual dress. The untidy leggings were gone; strapped to his right shin was armor. Over the tunic he wore full cuirass and his head was brave with plumed helmet. All metal was burnished, all leather was clean.

He had approached with his shield on his back, route-march style. But even as we were stopped he unslung it and raised it on his left arm. He did not draw his sword as his right hand held his javelin at the ready carried easily while his wary eyes assessed the foe.

To his left the cave man hunkered himself small, as an animal crouches who has no place to hide.

"Iunio!" I called out. "Listen!" The sight of those two had me still more worried. The cave man I could not talk to but perhaps I could reason with the Roman. "Do you know why we are here?"

"I know," he tossed over his shoulder. "Today the Gods try us in their arena. This is work for a soldier and a Roman citizen. You're no help so keep out. No-watch behind me and shout. Caesar will reward you."

I started to try to talk sense but was cut off by a giant voice from everywhere: "YOU ARE NOW BEING JUDGED!"

Peewee shivered and got closer. I twisted my left hand out of her clutch, substituted my right, and put my left arm around her shoulders. "Head up, partner," I said softly. "Don't let them scare you."

"I'm not scared," she whispered as she trembled. "Kip? You do the talking."

"Is that the way you want it?"

"Yes. You don't get mad as fast as I do-and if I lost my temper… well, that'd be awful."

"Okay."

We were interrupted by that flat, nasal twang. As before, it seemed close by. "This case derives from the one preceding it. The three temporal samples are from a small Lanador-type planet around a star in an out-center part of the Third Galaxy. It is a very primitive area having no civilized races. This race, as you see from the samples, is barbaric. It has been examined twice before and would not yet be up for routine examination had not new facts about it come out in the case which preceded it."

The voice asked itself: "When was the last examination made?"

It answered itself: "Approximately one half-death of Thorium-230 ago." It added, apparently to us only: "About eighty thousand of your years."

Iunio jerked his head and looked around, as if trying to locate the voice. I concluded that he had heard the same figure in his corrupt Latin. Well, I was startled too-but I was numb to that sort of shock.

"Is it necessary again so soon?"

"It is. There has been a discontinuity. They are developing with unexpected speed." The flat voice went on, speaking to us: "I am your judge. Many of the civilized beings you see around you are part of me. Others are spectators, some are students, and a few are here because they hope to catch me in a mistake." The voice added, "This they have not managed to do in more than a million of your years."

I blurted out, "You are more than a million years old?" I did not add that I didn't believe it.

The voice answered, "I am older than that, but no part of me is that old. I am partly machine, which part can be repaired, replaced, recopied; I am partly alive, these parts die and are replaced. My living parts are more than a dozen dozens of dozens of civilized beings from throughout Three Galaxies, any dozen dozens of which may join with my non-living part to act. Today I am two hundred and nine qualified beings, who have at their instant disposal all knowledge accumulated in my non-living part and all its ability to analyze and integrate."

I said sharply, "Are your decisions made unanimously?" I thought I saw a loophole-I never had much luck mixing up Dad and Mother but there had been times as a kid when I had managed to confuse issues by getting one to answer one way and the other to answer another.

The voice added evenly, "Decisions are always unanimous. It may help you to think of me as one person." It addressed everyone: "Standard sampling has been followed. The contemporary sample is the double one; the intermediate sample for curve check is the clothed single sample and was taken by standard random at a spacing of approximately one half-death of Radium-226-" The voice supplemented: "-call it sixteen hundred of your years. The remote curve-check sample, by standard procedure, was taken at two dozen times that distance."

The voice asked itself: "Why is curve-check spacing so short? Why not at least a dozen times that?"

"Because this organism's generations are very short. It mutates rapidly."

The explanation appeared to satisfy for it went on, "The youngest sample will witness first."

I thought he meant Peewee and so did she; she cringed. But the voice barked and the cave man jerked. He did not answer; he simply crouched more deeply into himself.

The voice barked again.

It then said to itself, "I observe something."

"Speak."

"This creature is not ancestor to those others."

The voice of the machine almost seemed to betray emotion, as if my dour grocer had found salt in his sugar bin. "The sample was properly taken."

"Nevertheless," it answered, "it is not a correct sample. You must review all pertinent data."

For a long five seconds was silence. Then the voice spoke: "This poor creature is not ancestor to these others; he is cousin only. He has no future of his own. Let him be returned at once to the spacetime whence he came."

The Neanderthal was dragged rapidly away. I watched him out of sight with a feeling of loss. I had been afraid of him at first. Then I had despised him and was ashamed of him. He was a coward, be was filthy, he stank. A dog was more civilized. But in the past five minutes I had decided that I had better love him, see his good points-for, unsavory as he was, he was human. Maybe he wasn't my remote grandfather, but I was in no mood to disown even my sorriest relation.

The voice argued with itself, deciding whether the trial could proceed. Finally it stated: "Examination will continue. If enough facts are not developed, another remote sample of correct lineage will be summoned. Iunio."

The Roman raised his javelin higher. "Who calls Iunio?"

"Stand forth and bear witness."

Just as I feared, Iunio told the voice where to go and what to do. There was no protecting Peewee from his language; it echoed back in English-not that it mattered now whether Peewee was protected from "unladylike" influences.

The flat voice went on imperturbably: "Is this your voice? Is this your witnessing?" Immediately another voice started up which I recognized as that of the Roman, answering questions, giving accounts of battle, speaking of treatment of prisoners. This we got only in English but the translation held the arrogant timbre of Iunio's voice.

Iunio shouted "Witchcraft!" and made horns at them.

The recording cut off. "The voice matches," the machine said dryly. "The recording will be integrated."

But it continued to peck at Iunio, asking him details about who he was, why he was in Britain, what he had done there, and why it was necessary to serve Caesar. Iunio gave short answers, then blew his top and gave none. He let out a rebel yell that bounced around that mammoth room, drew back and let fly his javelin.

It fell short. But I think he broke the Olympic record.

I found myself cheering.

Iunio drew his sword while the javelin was still rising. He flung it up in a gladiatorial challenge, shouting, "Hail, Caesar!" and dropped into guard.

He reviled them. He told them what he thought of vermin who were not citizens, not even barbarians!

I said to myself, "Oh, oh! There goes the game. Human race, you've had it."

Iunio went on and on, calling on his gods to help him, each way worse than the last, threatening them with Caesar's vengeance in gruesome detail. I hoped that, even though it was translated, Peewee would not understand much of it. But she probably did; she understood entirely too much.

I began to grow proud of him. That wormface, in diatribe, was evil; Iunio was not. Under bad grammar, worse language, and rough manner, that tough old sergeant had courage, human dignity, and a basic gallantry. He might be an old scoundrel-but he was my kind of scoundrel.

He finished by demanding that they come at him, one at a time-or let them form a turtle and he would take them all on at once. "I'll make a funeral pyre of you! I'll temper my blade in your guts! I, who am about to die, will show you a Roman's grave-piled high with

Caesar's enemies!"

He had to catch his breath. I cheered again and Peewee joined in. He looked over his shoulder and grinned. "Slit their throats as I bring them down, boy! There's work to do!"

The cold voice said: "Let him now be returned to the spacetime whence he came."

Iunio looked startled as invisible hands pulled him along. He called on Mars and Jove and laid about him. The sword clattered to the floor-picked itself up and returned itself to his scabbard. Iunio was moving rapidly away; I cupped my hands and yelled, "Goodbye, Iunio!"

"Farewell, boy! They're cowards!" He shook himself. "Nothing but filthy witchcraft!" Then he was gone.

"Clifford Russell—"

"Huh? I'm here." Peewee squeezed my hand.

"Is this your voice?"

I said, "Wait a minute—"

"Yes? Speak."

I took a breath. Peewee pushed closer and whispered, "Make it good, Kip. They mean it."

"I'll try, kid," I whispered, then went on, "What is this? I was told you intend to judge the human race."

"That is correct."

"But you can't. You haven't enough to go on. No better than witchcraft, just as Iunio said. You brought in a cave man-then decided he was a mistake. That isn't your only mistake. You had Iunio here. Whatever he was-and I'm not ashamed of him; I'm proud of him-he's got nothing to do with now. He's been dead two thousand years, pretty near-if you've sent him back, I mean-and all that he was is dead with him. Good or bad, he's not what the human race is now."

"I know that. You two are the test sample of your race now."

"Yes-but you can't judge from us. Peewee and I are about as far from average as any specimens can be. We don't claim to be angels, either one of us. If you condemn our race on what we have done, you do a great injustice. Judge us-or judge me, at least—"

"Me, too!"

"-on whatever I've done. But don't hold my people responsible. That's not scientific. That's not valid mathematics."

"It is valid."

"It is not. Human beings aren't molecules; they're all different." I decided not to argue about jurisdiction; the wormfaces had ruined that approach.

"Agreed, human beings are not molecules. But they are not individuals, either."

"Yes, they are!"

"They are not independent individuals; they are parts of a single organism. Each cell in your body contains your whole pattern. From three samples of the organism you call the human race I can predict the future potentialities and limits of that race."

"We have no limits! There's no telling what our future will be."

"It may be that you have no limits," the voice agreed. "That is to be determined. But, if true, it is not a point in your favor. For we have limits."

"Huh?"

"You have misunderstood the purpose of this examination. You speak of 'justice.' I know what you think you mean. But no two races have ever agreed on the meaning of that term, no matter how they say it. It is not a concept I deal with here. This is not a court of justice."

"Then what is it?"

"You would call it a 'Security Council.' Or you might call it a committee of vigilantes. It does not matter what you call it; my sole purpose is to examine your race and see if you threaten our survival. If you do, I will now dispose of you. The only certain way to avert a grave danger is to remove it while it is small. Things that I have learned about you suggest a possibility that you may someday threaten the security of Three Galaxies. I will now determine the facts."

"But you said that you have to have at least three samples. The cave man was no good."

"We have three samples, you two and the Roman. But the facts could be determined from one sample. The use of three is a custom from earlier times, a cautious habit of checking and rechecking. I cannot dispense 'justice'; I can make sure not to produce error."

I was about to say that he was wrong, even if he was a million years old. But the voice went on, "I continue the examination. Clifford Russell, is this your voice?"

My voice sounded then-and again it was my own dictated account, but this time everything was left in-purple adjectives, personal opinions, comments about other matters, every word and stutter.

I listened to enough of it, held up my hand. "All right, all right, I said it."

The recording stopped. "Do you now confirm it?"

"Eh? Yes."

"Do you wish to add, subtract, or change?"

I thought hard. Aside from a few wisecracks that I had tucked in later it was a straightforward account. "No. I stand on it."

"And is this also your voice?"

This one fooled me. It was that endless recording I had made for

Prof Joe about-well, everything on Earth… history, customs, peoples, the works. Suddenly I knew why Prof Joe had worn the same badge the Mother Thing wore. What did they call that?-"Planting a stool pigeon." Good Old Prof Joe, the no-good, had been a stoolie.

I felt sick.

"Let me hear more of it."

They accommodated me. I didn't really listen; I was trying to remember, not what I was hearing, but what else I might have said-what I had admitted that could be used against the human race. The Crusades? Slavery? The gas chambers at Dachau? How much had I said?

The recording droned on. Why, that thing had taken weeks to record; we could stand here until our feet went flat.

"It's my voice."

"Do you stand on this, too? Or do you wish to correct, revise, or extend?"

I said cautiously, "Can I do the whole thing over?"

"If you so choose."

I started to say that I would, that they should wipe the tape and start over. But would they? Or would they keep both and compare them? I had no compunction about lying-"tell the truth and shame the devil" is no virtue when your family and friends and your whole race are at stake.

But could they tell if I lied?

"The Mother Thing said to tell the truth and not to be afraid."

"But she's not on our side!"

"Oh, yes, she is."

I had to answer. I was so confused that I couldn't think. I had tried to tell the truth to Prof Joe ... oh, maybe I had shaded things, not included every horrid thing that makes a headline. But it was essentially true.

Could I do better under pressure? Would they let me start fresh and accept any propaganda I cooked up? Or would the fact that I changed stories be used to condemn our race?

"I stand on it!"

"Let it be integrated. Patricia Wynant Reisfeld—"

Peewee took only moments to identify and allow to be integrated her recordings; she simply followed my example.

The machine voice said: "The facts have been integrated. By their own testimony, these are a savage and brutal people, given to all manner of atrocities. They eat each other, they starve each other, they kill each other. They have no art and only the most primitive of science, yet such is their violent nature that even with so little knowledge they are now energetically using it to exterminate each other, tribe against tribe. Their driving will is such that they may succeed. But if by some unlucky chance they fail, they will inevitably, in time, reach other stars. It is this possibility which must be calculated: how soon they will reach us, if they live, and what their potentialities will be then."

The voice continued to us: "This is the indictment against you-your own savagery, combined with superior intelligence. What have you to say in your defense?"

I took a breath and tried to steady down. I knew that we had lost-yet I had to try.

I remembered how the Mother Thing had spoken. "My lord peers —"

"Correction. We are not your 'lords,' nor has it been established that you are our equals. If you wish to address someone, you may call me the 'Moderator.'"

"Yes, Mr. Moderator-" I tried to remember what Socrates had said to his judges. He knew ahead of time that he was condemned just as we knew-but somehow, though he had been forced to drink hemlock, he had won and they had lost.

No! I couldn't use his Apologia-all he had lost was his own life. This was everybody.

"-you say we have no art. Have you seen the Parthenon?"

"Blown up in one of your wars."

"Better see it before you rotate us-or you'll be missing something. Have you read our poetry? 'Our revels now are ended: these our actors, as I foretold you, were all spirits, and are melted into air, into thin air: And, like the baseless fabric of this vision, the cloud-capped towers, the gorgeous palaces, the solemn temples, the great globe itself… itself-yea-all which it ... inherit-shall dissolve—"

I broke down. I heard Peewee sobbing beside me. I don't know why I picked that one-but they say the subconscious mind never does things "accidentally." I guess it had to be that one.

"As it well may," commented the merciless voice.

"I don't think it's any of your business what we do-as long as we leave you alone-" My stammer was back and I was almost sobbing.

"We have made it our business."

"We aren't under your government and—"

"Correction. Three Galaxies is not a government; conditions for government cannot obtain in so vast a space, such varied cultures. We have simply formed police districts for mutual protection."

"But-even so, we haven't troubled your cops. We were in our own backyards-I was in my own backyard!-when these wormface things came along and started troubling us. We haven't hurt you."

I stopped, wondering where to turn. I couldn't guarantee good behavior, not for the whole human race-the machine knew it and I knew it.

"Inquiry." It was talking to itself again. "These creatures appear to be identical with the Old Race, allowing for mutation. What part of the Third Galaxy are they from?"

It answered itself, naming coordinates that meant nothing to me. "But they are not of the Old Race; they are ephemerals. That is the danger; they change too fast."

"Didn't the Old Race lose a ship out that way a few half-deaths of Thorium-230 ago? Could that account for the fact that the youngest sample failed to match?"

It answered firmly, "It is immaterial whether or not they may be descended from the Old Race. An examination is in progress; a decision must be made."

"The decision must be sure."

"It will be." The bodyless voice went on, to us: "Have either of you anything to add in your defense?"

I had been thinking of what had been said about the miserable state of our science. I wanted to point out that we had gone from muscle power to atomic power in only two centuries-but I was afraid that fact would be used against us. "Peewee, can you think of anything?"

She suddenly stepped forward and shrilled to the air, "Doesn't it count that Kip saved the Mother Thing?"

"No," the cold voice answered. "It is irrelevant."

"Well, it ought to count!" She was crying again. "You ought to be ashamed of yourselves! Bullies! Cowards! Oh, you're worse than wormfaces!"

I pulled her back. She hid her head against my shoulder and shook. Then she whispered, "I'm sorry, Kip. I didn't mean to. I guess I've ruined it."

"It was ruined anyhow, honey."

"Have you anything more to say?" old no-face went on relentlessly.

I looked around at the hall. -the cloud-capped towers… the great globe itself- "Just this!" I said savagely. "It's not a defense, you don't want a defense. All right, take away our star-You will if you can and I guess you can. Go ahead! We'll make a star! Then, someday, we'll come back and hunt you down-all of you!"

"That's telling 'em. Kip! That's telling them!"

Nobody bawled me out. I suddenly felt like a kid who has made a horrible mistake at a party and doesn't know how to cover it up.

But I meant it. Oh, I didn't think we could do it. Not yet. But we'd try. "Die trying" is the proudest human thing.

"It is possible that you will," that infuriating voice went on. "Are you through?"

"I'm through." We all were through… every one of us.

"Does anyone speak for them? Humans, will any race speak for you?"

We didn't know any other races. Dogs-Maybe dogs would.

"I speak for them!"

Peewee raised her head with a jerk. "Mother Thing!"

Suddenly she was in front of us. Peewee tried to run to her, bounced off that invisible barrier. I grabbed her. "Easy, hon. She isn't there-it's some sort of television."

"My lord peers… you have the advantage of many minds and much knowledge-" It was odd to see her singing, hear her in English; the translation still held that singing quality.

"-but I know them. It is true that they are violent-especially the smaller one-but they are not more violent than is appropriate to their ages. Can we expect mature restraint in a race whose members all must die in early childhood? And are not we ourselves violent? Have we not this day killed our billions? Can any race survive without a willingness to fight? It is true that these creatures are often more violent than is necessary or wise. But, my peers, they all are so very young. Give them time to learn."

"That is exactly what there is to fear, that they may learn. Your race is overly sentimental; it distorts your judgment."

"Not true! We are compassionate, we are not foolish. I myself have been the proximate cause of how many, many adverse decisions? You know; it is in your records-I prefer not to remember. And I shall be again. When a branch is diseased beyond healing, it must be pruned. We are not sentimental; we are the best watchers you have ever found, for we do it without anger. Toward evil we have no mercy. But the mistakes of a child we treat with loving forbearance."

"Have you finished?"

"I say that this branch need not be pruned! I have finished."

The Mother Thing's image vanished. The voice went on, "Does any other race speak for them?"

"I do." Where she had been now stood a large green monkey. He stared at us and shook his head, then suddenly did a somersault and finished looking at us between his legs. "I'm no friend of theirs but I am a lover of 'justice'-in which I differ from my colleagues in this Council." He twirled rapidly several times. "As our sister has said, this race is young. The infants of my own noble race bite and scratch each othersome even die from it. Even I behaved so, at one time." He jumped into the air, landed on his hands, did a flip from that position. "Yet does anyone here deny that I am civilized?" He stopped, looked at us thoughtfully while scratching. "These are brutal savages and I don't see how anyone could ever like them-but I say: give them their chance!"

His image disappeared.

The voice said, "Have you anything to add before a decision is reached?"

I started to say: No, get it over with-when Peewee grabbed my ear and whispered. I listened, nodded, and spoke. "Mr. Moderator-if the verdict is against us-can you hold off your hangmen long enough to let us go home? We know that you can send us home in only a few minutes."

The voice did not answer quickly. "Why do you wish this? As I have explained, you are not personally on trial. It has been arranged to let you live."

"We know. We'd rather be home, that's all-with our people."

Again a tiny hesitation. "It shall be done."

"Are the facts sufficient to permit a decision?"

"Yes."

"What is the decision?"

"This race will be reexamined in a dozen half-deaths of radium. Meanwhile there is danger to it from itself. Against this mischance it will be given assistance. During the probationary period it will be watched closely by Guardian Mother-" the machine trilled the true Vegan name of the Mother Thing "-the cop on that beat, who will report at once any ominous change. In the meantime we wish this race good progress in its long journey upward.

"Let them now be returned forthwith to the spacetime whence they came."

Chapter 12

I didn't think it was safe to make our atmosphere descent in New Jersey without filing a flight plan. Princeton is near important targets; we might be homed-on by everything up to A-missiles. The Mother Thing got that indulgent chuckle in her song: ("I fancy we can avoid that.")

She did. She put us down in a side street, sang goodbye and was gone. It's not illegal to be out at night in space suits, even carrying a rag dolly. But it's unusual-cops hauled us in. They phoned Peewee's father and in twenty minutes we were in his study, drinking cocoa and talking and eating shredded wheat.

Peewee's mother almost had a fit. While we told our story she kept gasping, "I can't believe it!" until Professor Reisfeld said, "Stop it, Janice. Or go to bed." I don't blame her. Her daughter disappears on the Moon and is given up for dead-then miraculously reappears on Earth. But Professor Reisfeld believed us. The way the Mother Thing had "understanding" he had "acceptance." When a fact came along, he junked theories that failed to match.

He examined Peewee's suit, had her switch on the helmet, shined a light to turn it opaque, all with a little smile. Then he reached for the phone. "Dario must see this."

"At midnight. Curt?"

"Please, Janice. Armageddon won't wait for office hours."

"Professor Reisfeld?"

"Yes, Kip?"

"Uh, you may want to see other things first."

"That's possible."

I took things from Oscar's pockets-two beacons, one for each of us, some metal "paper" covered with equations, two "happy things," and two silvery spheres. We had stopped on Vega Five, spending most of the time under what I suppose was hypnosis while Prof Joe and another professor thing pumped us for what we knew of human mathematics. They hadn't been learning math from us-oh, no! They wanted the language we use in mathematics, from radicals and vectors to those weird symbols in higher physics, so that they could teach us; the results were on the metal paper. First I showed Professor Reisfeld the beacons. "The Mother Thing's beat now includes us. She says to use these if we need her. She'll usually be close by-a thousand lightyears at most. But even if she is far away, she'll come."

"Oh." He looked at mine. It was neater and smaller than the one she haywired on Pluto. "Do we dare take it apart?"

"Well, it's got a lot of power tucked in it. It might explode."

"Yes, it might." He handed it back, looking wistful.

A "happy thing" can't be explained. They look like those little abstract sculptures you feel as well as look at. Mine was like obsidian but warm and not hard; Peewee's was more like jade. The surprise comes when you touch one to your head. I had Professor Reisfeld do so and he looked awed-the Mother Thing is all around you and you feel warm and safe and understood.

He said, "She loves you. The message wasn't for me. Excuse me."

"Oh, she loves you, too."

"Eh?"

"She loves everything small and young and fuzzy and helpless. That's why she's a 'mother thing.' "

I didn't realize how it sounded. But he didn't mind. "You say she is a police officer?"

"Well, she's more of a juvenile welfare officer-this is a slum neighborhood we're in, backward and pretty tough. Sometimes she has to do things she doesn't like. But she's a good cop and somebody has to do nasty jobs. She doesn't shirk them."

"I'm sure she wouldn't."

"Would you like to try it again?"

"Do you mind?"

"Oh, no, it doesn't wear out."

He did and got that warm happy look. He glanced at Peewee, asleep with her face in her cereal. "I need not have worried about my daughter, between the Mother Thing-and you."

"It was a team," I explained. "We couldn't have made it without Peewee. The kid's got guts."

"Too much, sometimes."

"Other times you need that extra. These spheres are recorders. Do you have a tape recorder, Professor?"

"Certainly, sir." We set it up and let a sphere talk to it. I wanted a tape because the spheres are one-shot-the molecules go random again. Then I showed him the metal paper. I had tried to read it, got maybe two inches into it, then just recognized a sign here and there. Professor Reisfeld got halfway down the first page, stopped. "I had better make those phone calls."

At dawn a sliver of old Moon came up and I tried to judge where Tombaugh Station was. Peewee was asleep on her Daddy's couch, wrapped in his bathrobe and clutching Madame Pompadour. He had tried to carry her to bed but she had wakened and become very, very difficult, so he put her down. Professor Reisfeld chewed an empty pipe and listened to my sphere whispering softly to his recorder. Occasionally he darted a question at me and I'd snap out of it.

Professor Giomi and Dr. Bruck were at the other end of the study, filling a blackboard, erasing and filling it again, while they argued over that metal paper. Geniuses are common at the Institute for Advanced Study but these two wouldn't be noticed anywhere; Bruck looked like a truckdriver and Giomi like an excited Iunio. They both had that Okay-I-get-you that Professor Reisfeld had. They were excited but Dr. Bruck showed it only by a tic in his face-which Peewee's Daddy told me was a guarantee of nervous breakdowns-not for Bruck, for other physicists.

Two mornings later we were still there. Professor Reisfeld had shaved; the others hadn't. I napped and once I took a shower. Peewee's Daddy listened to recordings-he was now replaying Peewee's tape. Now and then Bruck and Giomi called him over, Giomi almost hysterical and Bruck stolid. Professor Reisfeld always asked a question or two, nodded and came back to his chair. I don't think he could work that math-but he could soak up results and fit them with other pieces.

I wanted to go home once they were through with me but Professor Reisfeld said please stay; the Secretary General of the Federated Free Nations was coming.

I stayed. I didn't call home because what was the use in upsetting them? I would rather have gone to New York City to meet the Secretary General, but Professor Reisfeld had invited him here-I began to realize that anybody really important would come if Professor Reisfeld asked him.

Mr. van Duivendijk was slender and tall. He shook hands and said, "I understand that you are Dr. Samuel C. Russell's son."

"You know my father, sir?"

"I met him years ago, at the Hague."

Dr. Bruck turned-he had barely nodded at the Secretary General. "You're Sam Russell's boy?"

"Uh, you know him, too?"

"Of course. On the Statistical Interpretation of Imperfect Data. Brilliant." He turned back and got more chalk on his sleeve. I hadn't known that Dad had written such a thing, nor suspected that he knew the top man in the Federation. Sometimes I think Dad is eccentric.

Mr. van D. waited until the double domes came up for air, then said, "You have something, gentlemen?"

"Yeah," said Bruck.

"Superb!" agreed Giomi.

"Such as?"

"Well-" Dr. Bruck pointed at a line of chalk. "That says you can damp out a nuclear reaction at a distance."

"What distance?"

"How about ten thousand miles? Or must you do it from the

Moon?"

"Oh, ten thousand miles is sufficient, I imagine."

"You could do it from the Moon," Giomi interrupted, "if you had enough power. Magnificent!"

"It is," agreed van Duivendijk. "Anything else?"

"What do you want?" demanded Bruck. "Egg in your suds?"

"Well?"

"See that seventeenth line? It may mean antigravity, I ain't promising. Or, if you rotate ninety degrees, this unstable Latin thinks it's time travel."

"It is!"

"If he's right, the power needed is a fair-sized star-so forget it." Bruck stared at hen's tracks. "A new approach to matter conversion-possibly. How about a power pack for your vest pocket that turns out more ergs than the Brisbane reactors?"

"This can be done?"

"Ask your grandson. It won't be soon." Bruck scowled.

"Dr. Bruck, why are you unhappy?" asked Mr. van D.

Bruck scowled harder. "Are you goin' to make this Top Secret'? I don't like classifying mathematics. It's shameful."

I batted my ears. I had explained to the Mother Thing about "classified" and I think I shocked her. I said that the FFN had to have secrets for survival, just like Three Galaxies. She couldn't see it. Finally she had said that it wouldn't make any difference in the long run. But I had worried because while I don't like science being "secret," I don't want to be reckless, either.

Mr. van D. answered, "I don't like secrecy. But I have to put up with it."

"I knew you would say that!"

"Please. Is this a U.S. government project?"

"Eh? Of course not."

"Nor a Federation one. Very well, you've shown me some equations. I can't tell you not to publish them. They're yours."

Bruck shook his head. "Not ours." He pointed at me. "His."

"I see." The Secretary General looked at me. "I am a lawyer, young man. If you wish to publish, I see no way to stop you."

"Me? It's not mine-I was just-well, a messenger."

"You seem to have the only claim. Do you wish this published? Perhaps with all your names?" I got the impression that he wanted it published.

"Well, sure. But the third name shouldn't be mine; it should be-" I hesitated. You can't put a birdsong down as author. "-uh, make it 'Dr. M. Thing.'"

"Who is he?"

"She's a Vegan. But we could pretend it's a Chinese name."

The Secretary General stayed on, asking questions, listening to tapes. Then he made a phone call-to the Moon. I knew it could be done, I never expected to see it. "Van Duivendijk here… yes, the Secretary General. Get the Commanding General… Jim?… This connection is terrible… Jim, you sometimes order practice maneuvers… My call is unofficial but you might check a valley-" He turned to me; I answered quickly. "-a valley just past the mountains east of Tombaugh Station. I haven't consulted the Security Council; this is between friends. But if you go into that valley I very strongly suggest that it be done in force, with all weapons. It may have snakes in it. The snakes will be camouflaged. Call it a hunch. Yes, the kids are fine and so is Beatrix. I'll phone Mary and tell her I talked with you."

The Secretary General wanted my address. I couldn't say when I would be home because I didn't know how I would get there-I meant to hitchhike but didn't say so. Mr. van D.'s eyebrows went up. "I think we owe you a ride home. Eh, Professor?"

"That would not be overdoing it."

"Russell, I heard on your tape that you plan to study engineering-with a view to space."

"Yes, sir. I mean, 'Yes, Mr. Secretary.' "

"Have you considered studying law? Many young engineers want to space-not many lawyers. But the Law goes everywhere. A man skilled in space law and meta-law would be in a strong position."

"Why not both?" suggested Peewee's Daddy. "I deplore this modern overspecialization."

"That's an idea," agreed Mr. van Duivendijk. "He could then write his own terms."

I was about to say I should stick to electronics-when suddenly I knew what I wanted to do. "Uh, I don't think I could handle both."

"Nonsense!" Professor Reisfeld said severely.

"Yes, sir. But I want to make space suits that work better. I've got some ideas."

"Mmm, that's mechanical engineering. And many other things, I imagine. But you'll need an M.E. degree." Professor Reisfeld frowned. "As I recall your tape, you passed College Boards but hadn't been accepted by a good school." He drummed his desk. "Isn't that silly, Mr. Secretary? The lad goes to the Magellanic Clouds but can't go to the school he wants."

"Well, Professor? You pull while I push?"

"Yes. But wait." Professor Reisfeld picked up his phone. "Susie, get me the President of M.I.T. I know it's a holiday; I don't care if he's in Bombay or in bed; get him. Good girl." He put down the phone. "She's been with the Institute five years and on the University switchboard before that. She'll get him."

I felt embarrassed and excited. M.I.T.-anybody would jump at the chance. But tuition alone would stun you. I tried to explain that I didn't have the money. "I'll work the rest of this school and next summer-I'll save it."

The phone rang. "Reisfeld here. Hi, Oppie. At the class reunion you made me promise to tell you if Bruck's tic started bothering him. Hold onto your chair; I timed it at twenty-one to the minute. That's a record.... Slow down; you won't send anybody, unless I get my pound of flesh. If you start your lecture on academic freedom and 'the right to know,' I'll hang up and call Berkeley. I can do business there-and I know I can here, over on the campus.... Not much, just a four-year scholarship, tuition and fees.... Don't scream at me; use your discretionary fund-or make it a wash deal in bookkeeping. You're over twenty-one; you can do arithmetic.... Nope, no hints. Buy a pig in a poke or your radiation lab won't be in on it. Did I say 'radiation lab'? I meant the entire physical science department. You can flee to South America, don't let me sway you.... What? I'm an embezzler, too. Hold it." Professor Reisfeld said to me, "You applied for M.I.T.?"

"Yes, sir, but—"

"He's in your application files, 'Clifford C. Russell.' Send the letter to his home and have the head of your team fetch my copy.... Oh, a broad team, headed by a mathematical physicist-Farley, probably; he's got imagination. This is the biggest thing since the apple konked Sir Isaac.... Sure, I'm a blackmailer, and you are a chair warmer and a luncheon speaker. When are you returning to the academic life?... Best to Beulah. 'Bye."

He hung up. "That's settled. Kip, the one thing that confuses me is why those wormfaced monsters wanted me."

I didn't know how to say it. He had told me only the day before that he had been correlating odd data-unidentified sightings, unexpected opposition to space travel, many things that did not fit. Such a man is likely to get answers-and be listened to. If he had a weakness, it was modesty-which he hadn't passed on to Peewee. If I told him that invaders from outer space had grown nervous over his intellectual curiosity, he would have pooh-poohed it. So I said, "They never told us, sir. But they thought you were important enough to grab."

Mr. van Duivendijk stood up. "Curt, I won't waste time listening to nonsense. Russell, I'm glad your schooling is arranged. If you need me, call me."

When he was gone, I tried to thank Professor Reisfeld. "I meant to pay my way, sir. I would have earned the money before school opens again."

"In less than three weeks? Come now. Kip."

"I mean the rest of this year and—"

"Waste a year? No."

"But I already-" I looked past his head at green leaves in their garden. "Professor... what date is it?"

"Why, Labor Day, of course."

("-forthwith to the spacetime whence they came.")

Professor Reisfeld flipped water in my face. "Feeling better?"

"I-I guess so. We were gone for weeks."

"Kip, you've been through too much to let this shake you. You can talk it over with the stratosphere twins-" He gestured at Giomi and Bruck. "-but you won't understand it. At least I didn't. Why not assume that a hundred and sixty-seven thousand lightyears leaves room for Tennessee windage amounting to only a hair's breadth of a fraction of one per cent? Especially when the method doesn't properly use spacetime at all?"

When I left, Mrs. Reisfeld kissed me and Peewee blubbered and had Madame Pompadour say goodbye to Oscar, who was in the back seat because the Professor was driving me to the airport.

On the way he remarked, "Peewee is fond of you."

"Uh, I hope so."

"And you? Or am I impertinent?"

"Am I fond of Peewee? I certainly am! She saved my life four or five times." Peewee could drive you nuts. But she was gallant and loyal and smart-and had guts.

"You won a lifesaving medal or two yourself."

I thought about it. "Seems to me I fumbled everything I tried. But I had help and an awful lot of luck." I shivered at how luck alone had kept me out of the soup-real soup.

" 'Luck' is a question-begging word," he answered. "You spoke of the 'amazing luck' that you were listening when my daughter called for help. That wasn't luck."

"Huh? I mean, 'Sir'?"

"Why were you on that frequency? Because you were wearing a space suit. Why were you wearing it? Because you were determined to space. When a space ship called, you answered. If that is luck, then it is luck every time a batter hits a ball. Kip, 'good luck' follows careful preparation; 'bad luck' comes from sloppiness. You convinced a court older than Man himself that you and your kind were worth saving. Was that mere chance?"

"Uh... fact is, I got mad and almost ruined things. I was tired of being shoved around."

"The best things in history are accomplished by people who get 'tired of being shoved around.' " He frowned. "I'm glad you like

Peewee. She is about twenty years old intellectually and six emotionally; she usually antagonizes people. So I'm glad she has gained a friend who is smarter than she is."

My jaw dropped. "But, Professor, Peewee is much smarter than I am. She runs me ragged."

He glanced at me. "She's run me ragged for years-and I'm not stupid. Don't downgrade yourself, Kip."

"It's the truth."

"So? The greatest mathematical psychologist of our time, a man who always wrote his own ticket even to retiring when it suited him-very difficult, when a man is in demand-this man married his star pupil. I doubt if their offspring is less bright than my own child."

I had to untangle this to realize that he meant me. Then I didn't know what to Say. How many kids really know their parents? Apparently I didn't.

He went on, "Peewee is a handful, even for me. Here's the airport. When you return for school, please plan on visiting us. Thanksgiving, too, if you will-no doubt you'll go home Christmas."

"Uh, thank you, sir. I'll be back."

"Good."

"Uh, about Peewee-if she gets too difficult, well, you've got the beacon. The Mother Thing can handle her."

"Mmm, that's a thought."

"Peewee tries to get around her but she never does. Oh-I almost forgot. Whom may I tell? Not about Peewee. About the whole thing."

"Isn't that obvious?"

"Sir?"

"Tell anybody anything. You won't very often. Almost no one will believe you."

I rode home in a courier jet-those things go fast. Professor Reisfeld had insisted on lending me ten dollars when he found out that I had only a dollar sixty-seven, so I got a haircut at the bus station and bought two tickets to Centerville to keep Oscar out of the luggage compartment; he might have been damaged. The best thing about that scholarship was that now I needn't ever sell him-not that I would.

Centerville looked mighty good, from elms overhead to the chuckholes under foot. The driver stopped near our house because of Oscar; he's clumsy to carry. I went to the barn and racked Oscar, told him I'd see him later, and went in the back door.

Mother wasn't around. Dad was in his study. He looked up from reading. "Hi, Kip."

"Hi, Dad."

"Nice trip?"

"Uh, I didn't go to the lake."

"I know. Dr. Reisfeld phoned-he briefed me thoroughly."

"Oh. It was a nice trip-on the whole." I saw that he was holding a volume of the Britannica, open to "Magellanic Clouds."

He followed my glance. "I've never seen them," he said regretfully. "I had a chance once, but I was busy except one cloudy night."

"When was that. Dad?"

"In South America, before you were born."

"I didn't know you had been there."

"It was a cloak-and-daggerish government job-not one to talk about. Are they beautiful?"

"Uh, not exactly." I got another volume, turned to "Nebulae" and found the Great Nebula of Andromeda. "Here is beauty. That's the way we look."

Dad sighed. "It must be lovely."

"It is. I'll tell you all about it. I've got a tape, too."

"No hurry. You've had quite a trip. Three hundred and thirty-three thousand lightyears-is that right?"

"Oh, no, just half that."

"I meant the round trip."

"Oh. But we didn't come back the same way."

"Eh?"

"I don't know how to put it, but in these ships, if you make a jump, any jump, the short way back is the long way 'round. You go straight ahead until you're back where you started. Well, not 'straight' since space is curved-but straight as can be. That returns everything to zero."

"A cosmic great-circle?"

"That's the idea. All the way around in a straight line."

"Mmm-" He frowned thoughtfully. "Kip, how far is it, around the Universe? The red-shift limit?"

I hesitated. "Dad, I asked-but the answer didn't mean anything." (The Mother Thing had said, "How can there be 'distance' where there is nothing?") "It's not a distance; it's more of a condition. I didn't travel it; I just went. You don't go through, you slide past."

Dad looked pensive. "I should know not to ask a mathematical question in words."

I was about to suggest that Dr. Bruck could help when Mother sang out: "Hello, my darlings!"

For a split second I thought I was hearing the Mother Thing.

She kissed Dad, she kissed me. "I'm glad you're home, dear."

"Uh-" I turned to Dad.

"She knows."

"Yes," Mother agreed in a warm indulgent tone, "and I don't mind where my big boy goes as long as he comes home safely. I know you'll go as far as you want to." She patted my cheek. "And I'll always be proud of you. Myself, I've just been down to the corner for another chop."

Next morning was Tuesday, I went to work early. As I expected, the fountain was a mess. I put on my white jacket and got cracking. Mr. Charton was on the phone; he hung up and came over. "Nice trip. Kip?"

"Very nice, Mr. Charton."

"Kip, there's something I've been meaning to say. Are you still anxious to go to the Moon?"

I was startled. Then I decided that he couldn't know.

Well, I hadn't seen the Moon, hardly, I was still eager-though not as much in a hurry. "Yes, sir. But I'm going to college first."

"That's what I mean. I-Well, I have no children. If you need money, say so."

He had hinted at pharmacy school-but never this. And only last night Dad had told me that he had bought an education policy for me the day I was born-he had been waiting to see what I would do on my own. "Gee, Mr. Charton, that's mighty nice of you!"

"I approve of your wanting an education."

"Uh, I've got things lined up, sir. But I might need a loan someday."

"Or not a loan. Let me know." He bustled away, plainly fussed.

I worked in a warm glow, sometimes touching the happy thing, tucked away in a pocket. Last night I had let Mother and Dad put it to their foreheads. Mother had cried; Dad said solemnly, "I begin to understand, Kip." I decided to let Mr. Charton try it when I could work around to it. I got the fountain shining and checked the air conditioner. It was okay.

About midafternoon Ace Quiggle came in, plunked himself down. "Hi, Space Pirate! What do you hear from the Galactic Overlords? Yuk yuk yukkity yuk!"

What would he have said to a straight answer? I touched the happy thing and said, "What'll it be. Ace?"

"My usual, of course, and snap it up!"

"A choc malt?"

"You know that. Look alive. Junior! Wake up and get hep to the world around you."

"Sure thing, Ace." There was no use fretting about Ace; his world was as narrow as the hole between his ears, no deeper than his own hog wallow. Two girls came in; I served them cokes while Ace's malt was in the mixer. He leered at them. "Ladies, do you know Commander Comet here?" One of them tittered; Ace smirked and went on: "I'm his manager. You want hero-ing done, see me. Commander, I've been thinking about that ad you're goin' to run."

"Huh?"

"Keep your ears open. 'Have Space Suit-Will Travel,' that doesn't say enough. To make money out of that silly clown suit, we got to have oomph. So we add: "Bug-Eyed Monsters Exterminated-World Saving a Specialty-Rates on Request.' Right?"

I shook my head. "No, Ace."

"S'matter with you? No head for business?"

"Let's stick to the facts. I don't charge for world saving and don't do it to order; it just happens. I'm not sure I'd do it on purpose-with you in it."

Both girls tittered. Ace scowled. "Smart guy, eh? Don't you know that the customer is always right?"

"Always?"

"He certainly is. See that you remember it. Hurry up that malt!"

"Yes, Ace." I reached for it; he shoved thirty-five cents at me; I pushed it back. "This is on the house." I threw it in his face.

Starship Troopers

Chapter 1

Come on, you apes! You wanta live forever?
—Unknown platoon sergeant, 1918

I always get the shakes before a drop. I've had the injections, of course, and hypnotic preparation, and it stands to reason that I can't really be afraid. The ship's psychiatrist has checked my brain waves and asked me silly questions while I was asleep and he tells me that it isn't fear, it isn't anything important—it's just like the trembling of an eager race horse in the starting gate.

I couldn't say about that; I've never been a race horse. But the fact is: I'm scared silly, every time.

At D-minus-thirty, after we had mustered in the drop room of the *Rodger Young*, our platoon leader inspected us. He wasn't our regular platoon leader, because Lieutenant Rasczak had bought it on our last drop; he was really the platoon sergeant, Career Ship's Sergeant Jelal. Jelly was a Finno-Turk from Iskander around Proxima—a swarthy little man who looked like a clerk, but I've seen him tackle two berserk privates so big he had to reach up to grab them, crack their heads together like coconuts, step back out of the way while they fell.

Off duty he wasn't bad—for a sergeant. You could even call him "Jelly" to his face. Not recruits, of course, but anybody who had made at least one combat drop.

But right now he was on duty. We had all each inspected our combat equipment (look, it's your own neck—see?), the acting platoon sergeant had gone over us carefully after he mustered us, and now Jelly went over us again, his face mean, his eyes missing nothing. He stopped by the man in front of me, pressed the button on his belt that gave readings on his physicals. "Fall out!"

"But, Sarge, it's just a cold. The Surgeon said—"

Jelly interrupted. " 'But Sarge!' " he snapped. "The Surgeon ain't making no drop—and neither are you, with a degree and a half of fever. You think I got time to chat with you, just before a drop? *Fall out*!"

Jenkins left us, looking sad and mad—and I felt bad, too. Because of the Lieutenant buying it, last drop, and people moving up, I was assistant section leader, second section, this drop, and now I was going to have a hole in my section and no way to fill it. That's not good; it means a man can run into something sticky, call for help and have nobody to help him.

Jelly didn't downcheck anybody else. Presently he stepped out in front of us, looked us over and shook his head sadly. “What a gang of apes!” he growled. “Maybe if you’d all buy it this drop, they could start over and build the kind of outfit the Lieutenant expected you to be. But probably not—with the sort of recruits we get these days.” He suddenly straightened up, shouted, “I just want to remind you apes that each and every one of you has cost the gov’ment, counting weapons, armor, ammo, instrumentation, and training, everything, including the way you overeat—has cost, on the hoof, better’n half a million. Add in the thirty cents you are actually worth and that runs to quite a sum.” He glared at us. “So bring it back! We can spare you, but we can’t spare that fancy suit you’re wearing. I don’t want any heroes in this outfit; the Lieutenant wouldn’t like it. You got a job to do, you go down, you do it, you keep your ears open for recall, you show up for retrieval on the bounce and by the numbers. Get me?”

He glared again. “You’re supposed to know the plan. But some of you ain’t got any minds to hypnotize so I’ll sketch it out. You’ll be dropped in two skirmish lines, calculated two-thousand-yard intervals. Get your bearing on me as soon as you hit, get your bearing and distance on your squad mates, both sides, while you take cover. You’ve wasted ten seconds already, so you smash-and-destroy whatever’s at hand until the flankers hit dirt.” (He was talking about me—as assistant section leader I was going to be left flanker, with nobody at my elbow. I began to tremble.)

“Once they hit—straighten out those lines!—equalize those intervals! Drop what you’re doing and do it! Twelve seconds. Then advance by leapfrog, odd and even, assistant section leaders minding the count and guiding the envelopment.” He looked at me. “If you’ve done this properly—which I doubt—the flanks will make contact as recall sounds … at which time, home you go. Any questions?”

There weren’t any; there never were. He went on, “One more word—This is just a raid, not a battle. It’s a demonstration of firepower and frightfulness. Our mission is to let the enemy know that we could have destroyed their city—but didn’t—but that they aren’t safe even though we refrain from total bombing. You’ll take no prisoners. You’ll kill only when you can’t help it. But the entire area we hit is to be smashed. I don’t want to see any of you loafers back aboard here with unexpended bombs. Get me?” He glanced at the time. “Rasczak’s Roughnecks have got a reputation to uphold. The Lieutenant told me before he bought it to tell you that he will always have his eye on you every minute … and that he expects your names to *shine*!”

Jelly glanced over at Sergeant Migliaccio, first section leader. “Five minutes for the Padre,” he stated. Some of the boys dropped out of ranks, went over and knelt in front of Migliaccio, and not necessarily those of his creed, either—Moslems, Christians, Gnostics, Jews, whoever wanted a word with him before a drop, he was there. I've heard tell that there used to be military outfits whose chaplains did not fight alongside the others, but I've never been able to see how that could work. I mean, how can a chaplain bless anything he's not willing to do himself? In any case, in the Mobile Infantry, *everybody* drops and *everybody* fights, chaplain and cook and the Old Man's writer. Once we went down the tube there wouldn't be a Roughneck left aboard—except Jenkins, of course, and that not his fault.

I didn't go over. I was always afraid somebody would see me shake if I did, and, anyhow, the Padre could bless me just as handily from where he was. But he came over to me as the last stragglers stood up and pressed his helmet against mine to speak privately. "Johnnie," he said quietly, "this is your first drop as a non-com."

"Yeah." I wasn't really a non-com, any more than Jelly was really an officer.

"Just this, Johnnie. Don't buy a farm. You know your job; do it. Just do it. Don't try to win a medal."

"Uh, thanks, Padre. I shan't."

He added something gently in a language I don't know, patted me on the shoulder, and hurried back to his section. Jelly called out, "Tenn … *shut*!" and we all snapped to.

"Pla*toon*!"

"Sec*tion*!" Migliaccio and Johnson echoed.

"By sections-port and starboard-prepare for drop!"

"Sec*tion*! Man your capsules! *Move*!"

"Squad!"—I had to wait while squads four and five manned their capsules and moved on down the firing tube before my capsule showed up on the port track and I could climb into it. I wondered if those oldtimers got the shakes as they climbed into the Trojan Horse? Or was it just me? Jelly checked each man as he was sealed in and he sealed me in himself. As he did so, he leaned toward me and said, "Don't goof off, Johnnie. This is just like a drill."

The top closed on me and I was alone. "Just like a drill," he says! I began to shake uncontrollably.

Then, in my earphones, I heard Jelly from the centerline tube: "Bridge! Rasczak's Roughnecks … ready for drop!"

"Seventeen seconds, Lieutenant!" I heard the ship captain's cheerful contralto replying—and resented her calling Jelly "Lieutenant." To be sure, our lieutenant was dead and maybe Jelly would get his commission … but we were still "Rasczak's Roughnecks."

She added, "Good luck, boys!"

"Thanks, Captain."

"Brace yourselves! Five seconds."

I was strapped all over-belly, forehead, shins. But I shook worse than ever.

It's better after you unload. Until you do, you sit there in total darkness, wrapped like a mummy against the accelerations, barely able to breathe—and knowing that there is just nitrogen around you in the capsule even if you could get your helmet open, which you can't—and knowing that the capsule is surrounded by the firing tube anyhow and if the ship gets hit before they fire you, you haven't got a prayer, you'll just die there, unable to move, helpless. It's that endless wait in the dark that causes the shakes—thinking that they've forgotten you … the ship has been hulled and stayed in orbit, dead, and soon you'll buy it, too, unable to move, choking. Or it's a crash orbit and you'll buy it that way, if you don't roast on the way down.

Then the ship's braking program hit us and I stopped shaking. Eight gees, I would say, or maybe ten. When a female pilot handles a ship there is nothing comfortable about it; you're going to have bruises every place you're strapped. Yes, yes, I know they make better pilots than men do; their reactions are faster and they can tolerate more gee. They can get in faster, get out faster, and thereby improve everybody's chances, yours as well as theirs. But that still doesn't make it fun to be slammed against your spine at ten times your proper weight.

But I must admit that Captain Deladrier knows her trade. There was no fiddling around once the *Rodger Young* stopped braking. At once I heard her snap, "Centerline tube … *fire*!" and there were two recoil bumps as Jelly and his acting platoon sergeant unloaded—and immediately: "Port and starboard tubes—*automatic fire*!" and the rest of us started to unload.

Bump! and your capsule jerks ahead one place—*bump*! and it jerks again, precisely like cartridges feeding into the chamber of an oldstyle automatic weapon. Well, that's just what we were … only the barrels of the gun were twin launching tubes built into a spaceship troop carrier and each cartridge was a capsule big enough (just barely) to hold an infantryman with all field equipment.

Bump!—I was used to number three spot, out early; now I was TailEnd Charlie, last out after three squads. It makes a tedious wait, even with a capsule being fired every second; I tried to count the bumps—*bump*! (twelve) *bump*! (thirteen) *bump*! (fourteen—with an odd sound to it, the empty one Jenkins should have been in) *bump*!—

And *clang*!—it's my turn as my capsule slams into the firing chamber—then WHAMBO! the explosion hits with a force that makes the Captain's braking maneuver feel like a love tap.

Then suddenly nothing.

Nothing at all. No sound, no pressure, no weight. Floating in darkness … free fall, maybe thirty miles up, above the effective atmosphere, falling weightlessly toward the surface of a planet you've never seen. But I'm not shaking now; it's the wait beforehand that wears. Once you unload, you can't get hurt—because if anything goes wrong it will happen so fast that you'll buy it without noticing that you're dead, hardly.

Almost at once I felt the capsule twist and sway, then steady down so that my weight was on my back … weight that built up quickly until I was at my full weight (0.87 gee, we had been told) for that planet as the capsule reached terminal velocity for the thin upper atmosphere. A pilot who is a real artist (and the Captain was) will approach and brake so that your launching speed as you shoot out of the tube places you just dead in space relative to the rotational speed of the planet at that latitude. The loaded capsules are heavy; they punch through the high, thin winds of the upper atmosphere without being blown too far out of position—but just the same a platoon is bound to disperse on the way down, lose some of the perfect formation in which it unloads. A sloppy pilot can make this still worse, scatter a strike group over so much terrain that it can't make rendezvous for retrieval, much less carry out its mission. An infantryman can fight only if somebody else delivers him to his zone; in a way I suppose pilots are just as essential as we are.

I could tell from the gentle way my capsule entered the atmosphere that the Captain had laid us down with as near zero lateral vector as you could ask for. I felt happy—not only a tight formation when we hit and no time wasted, but also a pilot who puts you down properly is a pilot who is smart and precise on retrieval.

The outer shell burned away and sloughed off—unevenly, for I tumbled. Then the rest of it went and I straightened out. The turbulence brakes of the second shell bit in and the ride got rough … and still rougher as they burned off one at a time and the second shell began to go to pieces. One of the things that helps a capsule trooper to live long enough to draw a pension is that the skins peeling off his capsule not only slow him down, they also fill the sky over the target area with so much junk that radar picks up reflections from dozens of targets for each man in the drop, any one of which could be a man, or a bomb, or anything. It's enough to give a ballistic computer nervous breakdowns—and does.

To add to the fun your ship lays a series of dummy eggs in the seconds immediately following your drop, dummies that will fall faster because they don't slough. They get under you, explode, throw out "window," even operate as transponders, rocket sideways, and do other things to add to the confusion of your reception committee on the ground.

In the meantime your ship is locked firmly on the directional beacon of your platoon leader, ignoring the radar "noise" it has created and following you in, computing your impact for future use.

When the second shell was gone, the third shell automatically opened my first ribbon chute. It didn't last long but it wasn't expected to; one good, hard jerk at several gee and it went its way and I went mine. The second chute lasted a little bit longer and the third chute lasted quite a while; it began to be rather too warm inside the capsule and I started thinking about landing.

The third shell peeled off when its last chute was gone and now I had nothing around me but my suit armor and a plastic egg. I was still strapped inside it, unable to move; it was time to decide how and where I was going to ground. Without moving my arms (I couldn't) I thumbed the switch for a proximity reading and read it when it flashed on in the instrument reflector inside my helmet in front of my forehead.

A mile and eight-tenths—A little closer than I liked, especially without company. The inner egg had reached steady speed, no more help to be gained by staying inside it, and its skin temperature indicated that it would not open automatically for a while yet—so I flipped a switch with my other thumb and got rid of it.

The first charge cut all the straps; the second charge exploded the plastic egg away from me in eight separate pieces—and I was outdoors, sitting on air, and could see! Better still, the eight discarded pieces were metal-coated (except for the small bit I had taken proximity reading through) and would give back the same reflection as an armored man. Any radar viewer, alive or cybernetic, would now have a sad time sorting me out from the junk nearest me, not to mention the thousands of other bits and pieces for miles on each side, above, and below me. Part of a mobile infantryman's training is to let him see, from the ground and both by eye and by radar, just how confusing a drop is to the forces on the ground—because you feel awful naked up there. It is easy to panic and either open a chute too soon and become a sitting duck (do ducks really sit?—if so, why?) or fail to open it and break your ankles, likewise backbone and skull.

So I stretched, getting the kinks out, and looked around … then doubled up again and straightened out in a swan dive face down and took a good look. It was night down there, as planned, but infrared snoopers let you size up terrain quite well after you are used to them. The river that cut diagonally through the city was almost below me and coming up fast, shining out clearly with a higher temperature than the land. I didn't care which side of it I landed on but I didn't want to land in it; it would slow me down.

I noticed a dash off to the right at about my altitude; some unfriendly native down below had burned what was probably a piece of my egg. So I fired my first chute at once, intending if possible to jerk myself right off his screen as he followed the targets down in closing range. I braced for the shock, rode it, then floated down for about twenty seconds before unloading the chute—not wishing to call attention to myself in still another way by not falling at the speed of the other stuff around me. It must have worked; I wasn't burned.

About six hundred feet up I shot the second chute … saw very quickly that I was being carried over into the river, found that I was going to pass about a hundred feet up over a flat-roofed warehouse or some such by the river … blew the chute free and came in for a good enough if rather bouncy landing on the roof by means of the suit's jump jets. I was scanning for Sergeant Jelal's beacon as I hit.

And found that I was on the wrong side of the river; Jelly's star showed up on the compass ring inside my helmet far south of where it should have been—I was too far north. I trotted toward the river side of the roof as I took a range and bearing on the squad leader next to me, found that he was over a mile out of position, called, "Ace! dress your line," tossed a bomb behind me as I stepped off the building and across the river. Ace answered as I could have expected—Ace should have had my spot but he didn't want to give up his squad; nevertheless he didn't fancy taking orders from me.

The warehouse went up behind me and the blast hit me while I was still over the river, instead of being shielded by the buildings on the far side as I should have been. It darn near tumbled my gyros and I came close to tumbling myself. I had set that bomb for fifteen seconds … or had I? I suddenly realized that I had let myself get excited, the worst thing you can do once you're on the ground. "Just like a drill," that was the way, just as Jelly had warned me. Take your time and do it right, even if it takes another half second.

As I hit I took another reading on Ace and told him again to realign his squad. He didn't answer but he was already doing it. I let it ride. As long as Ace did his job, I could afford to swallow his surliness—for now. But back aboard ship (if Jelly kept me on as assistant section leader) we would eventually have to pick a quiet spot and find out who was boss. He was a career corporal and I was just a term lance acting as corporal, but he was under me and you can't afford to take any lip under those circumstances. Not permanently.

But I didn't have time then to think about it; while I was jumping the river I had spotted a juicy target and I wanted to get it before somebody else noticed it—a lovely big group of what looked like public buildings on a hill. Temples, maybe … or a palace. They were miles outside the area we were sweeping, but one rule of a smash & run is to expend at least half your ammo outside your sweep area; that way the enemy is kept confused as to where you actually are—that and keep moving, do everything fast. You're always heavily outnumbered; surprise and speed are what saves you.

I was already loading my rocket launcher while I was checking on Ace and telling him for the second time to straighten up. Jelly's voice reached me right on top of that on the allhands circuit: "Pla*toon*! By leapfrog! *Forward*!"

My boss, Sergeant Johnson, echoed, "By leapfrog! Odd numbers! *Advance*!"

That left me with nothing to worry about for twenty seconds, so I jumped up on the building nearest me, raised the launcher to my shoulder, found the target and pulled the first trigger to let the rocket have a look at its target—pulled the second trigger and kissed it on its way, jumped back to the ground. "Second section, even numbers!" I called out … waited for the count in my mind and ordered, "*Advance*!"

And did so myself, hopping over the next row of buildings, and, while I was in the air, fanning the first row by the river front with a hand flamer. They seemed to be wood construction and it looked like time to start a good fire—with luck, some of those warehouses would house oil products, or even explosives. As I hit, the Y-rack on my shoulders launched two small H. E. bombs a couple of hundred yards each way to my right and left flanks but I never saw what they did as just then my first rocket hit—that unmistakable (if you've ever seen one) brilliance of an atomic explosion. It was just a peewee, of course, less than two kilotons nominal yield, with tamper and implosion squeeze to produce results from a less-than-critical mass—but then who wants to be bunk mates with a cosmic catastrophe? It was enough to clean off that hilltop and make everybody in the city take shelter against fallout. Better still, any of the local yokels who happened to be outdoors and looking that way wouldn't be seeing anything else for a couple of hours—meaning *me*. The dash hadn't dazzled me, nor would it dazzle any of us; our face bowls are heavily leaded, we wear snoopers over our eyes—and we're trained to duck and take it on the armor if we do happen to be looking the wrong way.

So I merely blinked hard—opened my eyes and stared straight at a local citizen just coming out of an opening in the building ahead of me. He looked at me, I looked at him, and he started to raise something—a weapon, I suppose—as Jelly called out, "Odd numbers! *Advance*!"

I didn't have time to fool with him; I was a good five hundred yards short of where I should have been by then. I still had the hand flamer in my left hand; I toasted him and jumped over the building he had been coming out of, as I started to count. A hand flamer is primarily for incendiary work but it is a good defensive anti-personnel weapon in tight quarters; you don't have to aim it much.

Between excitement and anxiety to catch up I jumped too high and too wide. It's always a temptation to get the most out of your jump gear—but *don't do it*! It leaves you hanging in the air for seconds, a big fat target. The way to advance is to skim over each building as you come to it, barely clearing it, and taking full advantage of cover while you're down—and never stay in one place more than a second or two, never give them time to target in on you. Be somewhere else, anywhere. Keep moving.

This one I goofed—too much for one row of buildings, too little for the row beyond it; I found myself coming down on a roof. But not a nice flat one where I might have tarried three seconds to launch another peewee A-rocket; this roof was a jungle of pipes and stanchions and assorted ironmongery—a factory maybe, or some sort of chemical works. No place to land. Worse still, half a dozen natives were up there. These geezers are humanoid, eight or nine feet tall, much skinnier than we are and with a higher body temperature; they don't wear any clothes and they stand out in a set of snoopers like a neon sign. They look still funnier in daylight with your bare eyes but I would rather fight them than the arachnids—those Bugs make me queezy.

If these laddies were up there thirty seconds earlier when my rocket hit, then they couldn't see me, or anything. But I couldn't be certain and didn't want to tangle with them in any case; it wasn't that kind of a raid. So I jumped again while I was still in the air, scattering a handful of ten-second fire pills to keep them busy, grounded, jumped again at once, and called out, "Second section! Even numbers! … Advance!" and kept right on going to close the gap, while trying to spot, every time I jumped, something worth expending a rocket on. I had three more of the little A-rockets and I certainly didn't intend to take any back with me. But I had had pounded into me that you *must* get your money's worth with atomic weapons—it was only the second time that I had been allowed to carry them.

Right now I was trying to spot their waterworks; a direct hit on it could make the whole city uninhabitable, force them to evacuate it without directly killing anyone—just the sort of nuisance we had been sent down to commit. It should—according to the map we had studied under hypnosis—be about three miles upstream from where I was.

But I couldn't see it; my jumps didn't take me high enough, maybe. I was tempted to go higher but I remembered what Migliaccio had said about not trying for a medal, and stuck to doctrine. I set the Y-rack launcher on automatic and let it lob a couple of little bombs every time I hit. I set fire to things more or less at random in between, and tried to find the waterworks, or some other worthwhile target.

Well, there was *something* up there at the proper range—waterworks or whatever, it was big. So I hopped on top of the tallest building near me, took a bead on it, and let fly. As I bounced down I heard Jelly: “Johnnie! Red! Start bending in the flanks.”

I acknowledged and heard Red acknowledge and switched my beacon to blinker so that Red could pick me out for certain, took a range and bearing on his blinker while I called out, “Second Section! Curve in and envelop! Squad leaders acknowledge!”

Fourth and Fifth squads answered, “Wilco”; Ace said, “We’re already doin’ it—pick up your feet.”

Red’s beacon showed the right flank to be almost ahead of me and a good fifteen miles away. Golly! Ace was right; I would have to pick up my feet or I would never close the gap in time—and me with a couple of hundredweight of ammo and sundry nastiness still on me that I just had to find time to use up. We had landed in a V formation, with Jelly at the bottom of the V and Red and myself at the ends of the two arms; now we had to close it into a circle around the retrieval rendezvous … which meant that Red and I each had to cover more ground than the others and still do our full share of damage.

At least the leapfrog advance was over with once we started to encircle; I could quit counting and concentrate on speed. It was getting to be less healthy to be anywhere, even moving fast. We had started with the enormous advantage of surprise, reached the ground without being hit (at least I hoped nobody had been hit coming in), and had been rampaging in among them in a fashion that let us fire at will without fear of hitting each other while they stood a big chance of hitting their own people in shooting at us—if they could find us to shoot at, at all. (I’m no games-theory expert but I doubt if any computer could have analyzed what we were doing in time to predict where we would be next.)

Nevertheless the home defenses were beginning to fight back, coordinated or not. I took a couple of near misses with explosives, close enough to rattle my teeth even inside armor and once I was brushed by some sort of beam that made my hair stand on end and half paralyzed me for a moment—as if I had hit my funny bone, but all over. If the suit hadn’t already been told to jump, I guess I wouldn’t have got out of there.

Things like that make you pause to wonder why you ever took up soldiering—only I was too busy to pause for anything. Twice, jumping blind over buildings, I landed right in the middle of a group of them—jumped at once while fanning wildly around me with the hand flamer.

Spurred on this way, I closed about half of my share of the gap, maybe four miles, in minimum time but without doing much more than casual damage. My Y-rack had gone empty two jumps back; finding myself alone in sort of a courtyard I stopped to put my reserve H.E. bombs into it while I took a bearing on Ace—found that I was far enough out in front of the flank squad to think about expending my last two A-rockets. I jumped to the top of the tallest building in the neighborhood.

It was getting light enough to see; I flipped the snoopers up onto my forehead and made a fast scan with bare eyes, looking for anything behind us worth shooting at, anything at all; I had no time to be choosy.

There was something on the horizon in the direction of their spaceport—administration & control, maybe, or possibly even a starship. Almost in line and about half as far away was an enormous structure which I couldn't identify even that loosely. The range to the spaceport was extreme but I let the rocket see it, said, "Go find it, baby!" and twisted its tail—slapped the last one in, sent it toward the nearer target, and jumped.

That building took a direct hit just as I left it. Either a skinny had judged (correctly) that it was worth one of their buildings to try for one of us, or one of my own mates was getting mighty careless with fireworks. Either way, I didn't want to jump from that spot, even a skimmer; I decided to go through the next couple of buildings instead of over. So I grabbed the heavy flamer off my back as I hit and dipped the snoopers down over my eyes, tackled a wall in front of me with a knife beam at full power. A section of wall fell away and I charged in. And backed out even faster.

I didn't know what it was I had cracked open. A congregation in church—a skinny flophouse—maybe even their defense headquarters. All I knew was that it was a very big room filled with more skinnies than I wanted to see in my whole life.

Probably not a church, for somebody took a shot at me as I popped back out just a slug that bounced off my armor, made my ears ring, and staggered me without hurting me. But it reminded me that I wasn't supposed to leave without giving them a souvenir of my visit. I grabbed the first thing on my belt and lobbed it in—and heard it start to squawk. As they keep telling you in Basic, doing something constructive at once is better than figuring out the best thing to do hours later.

By sheer chance I had done the right thing. This was a special bomb, one each issued to us for this mission with instructions to use them if we found ways to make them effective. The squawking I heard as I threw it was the bomb shouting in skinny talk (free translation): "I'm a thirty-second bomb! I'm a thirty-second bomb! Twenty-nine! … twentyeight! … twenty-seven!—"

It was supposed to frazzle their nerves. Maybe it did; it certainly frazzled mine. Kinder to shoot a man. I didn't wait for the countdown; I jumped, while I wondered whether they would find enough doors and windows to swarm out in time.

I got a bearing on Red's blinker at the top of the jump and one on Ace as I grounded. I was falling behind again—time to hurry.

But three minutes later we had closed the gap; I had Red on my left flank a half mile away. He reported it to Jelly. We heard Jelly's relaxed growl to the entire platoon: "Circle is closed, but the beacon is not down yet. Move forward slowly and mill around, make a little more trouble—but mind the lad on each side of you; don't make trouble for *him*. Good job, so far—don't spoil it. Pla*toon*! By sections … *Muster*!"

It looked like a good job to me, too; much of the city was burning and, although it was almost full light now, it was hard to tell whether bare eyes were better than snoopers, the smoke was so thick.

Johnson, our section leader, sounded off: "Second section, call off!"

I echoed, "Squads four, five, and six—call off and report!" The assortment of safe circuits we had available in the new model comm units certainly speeded things up; Jelly could talk to anybody or to his section leaders; a section leader could call his whole section, or his noncoms; and the platoon could muster twice as fast, when seconds matter. I listened to the fourth squad call off while I inventoried my remaining firepower and lobbed one bomb toward a skinny who poked his head around a corner. He left and so did I—"Mill around," the boss man had said.

The fourth squad bumbled the call off until the squad leader remembered to fill in with Jenkins' number; the fifth squad clicked off like an abacus and I began to feel good … when the call off stopped after number four in Ace's squad. I called out, "Ace, where's Dizzy?"

"Shut up," he said. "Number six! Call off!"

"Six!" Smith answered.

"Seven !"

"Sixth squad, Flores missing," Ace completed it. "Squad leader out for pickup."

"One man absent," I reported to Johnson. "Flores, squad six."

"Missing or dead?"

"I don't know. Squad leader and assistant section leader dropping out for pickup."

"Johnnie, you let Ace take it."

But I didn't hear him, so I didn't answer. I heard him report to Jelly and I heard Jelly cuss. Now look, I wasn't bucking for a medal—it's the assistant section leader's *business* to make pickup; he's the chaser, the last man in, expendable. The squad leaders have other work to do. As you've no doubt gathered by now the assistant section leader isn't necessary as long as the section leader is alive.

Right that moment I was feeling unusually expendable, almost expended, because I was hearing the sweetest sound in the universe, the beacon the retrieval boat would land on, sounding our recall. The beacon is a robot rocket, fired ahead of the retrieval boat, just a spike that buries itself in the ground and starts broadcasting that welcome, welcome music. The retrieval boat homes in on it automatically three minutes later and you had better be on hand, because the bus can't wait and there won't be another one along.

But you don't walk away on another cap trooper, not while there's a chance he's still alive—not in Rasczak's Roughnecks. Not in any outfit of the Mobile Infantry. You try to make pickup.

I heard Jelly order: "Heads up, lads! Close to retrieval circle and interdict! On the bounce!"

And I heard the beacon's sweet voice: "*—to the everlasting glory of the infantry, shines the name, shines the name of Rodger Young*!" and I wanted to head for it so bad I could taste it.

Instead I was headed the other way, closing on Ace's beacon and expending what I had left of bombs and fire pills and anything else that would weigh me down. "Ace! You got his beacon?"

"Yes. Go back, Useless!"

"I've got you by eye now. Where is he?"

"Right ahead of me, maybe quarter mile. Scram! He's *my* man ."

I didn't answer; I simply cut left oblique to reach Ace about where he said Dizzy was.

And found Ace standing over him, a couple of skinnies flamed down and more running away. I lit beside him. "Let's get him out of his armor—the boat'll be down any second!"

"He's too bad hurt!"

I looked and saw that it was true—there was actually a *hole* in his armor and blood coming out. And I was stumped. To make a wounded pickup you get him out of his armor … then you simply pick him up in your arms—no trouble in a powered suit—and bounce away from there. A bare man weighs less than the ammo and stuff you've expended. "What'll we *do*?"

"We carry him," Ace said grimly. "Grab ahold the left side of his belt." He grabbed the right side, we manhandled Flores to his feet. "Lock on! Now … by the numbers, stand by to jump—one—*two*!"

We jumped. Not far, not well. One man alone couldn't have gotten him off the ground; an armored suit is too heavy. But split it between two men and it can be done.

We jumped—and we jumped—and again, and again, with Ace calling it and both of us steadying and catching Dizzy on each grounding. His gyros seemed to be out.

We heard the beacon cut off as the retrieval boat landed on it—I saw it land … and it was too far away. We heard the acting platoon sergeant call out: “In succession, prepare to embark!”

And Jelly called out, “Belay that order!”

We broke at last into the open and saw the boat standing on its tail, heard the ululation of its takeoff warning—saw the platoon still on the ground around it, in interdiction circle, crouching behind the shield they had formed.

Heard Jelly shout, “In succession, man the boat—*move*!”

And we were *still* too far away! I could see them peel off from the first squad, swarm into the boat as the interdiction circle tightened.

And a single figure broke out of the circle, came toward us at a speed possible only to a command suit.

Jelly caught us while we were in the air, grabbed Flores by his Y-rack and helped us lift.

Three jumps got us to the boat. Everybody else was inside but the door was still open. We got him in and closed it while the boat pilot screamed that we had made her miss rendezvous and now we had *all* bought it! Jelly paid no attention to her; we laid Flores down and lay down beside him. As the blast hit us Jelly was saying to himself, “All present, Lieutenant. Three men hurt—but all present!”

I’ll say this for Captain Deladrier: they don’t make any better pilots. A rendezvous, boat to ship in orbit, is precisely calculated. I don’t know how, but it is, and you don’t change it. You *can’t.*

Only she did. She saw in her scope that the boat had failed to blast on time; she braked back, picked up speed again—and matched and took us in, just by eye and touch, no time to compute it. If the Almighty ever needs an assistant to keep the stars in their courses, I know where he can look.

Flores died on the way up.

Chapter 2

It scared me so, I hooked it off,
Nor stopped as I remember,
Nor turned about till I got home,
Locked up in mother's chamber.
Yankee Doodle, keep it up,
Yankee Doodle dandy,
Mind the music and the step,
And with the girls be handy.

I never really intended to join up.

And certainly not the infantry! Why, I would rather have taken ten lashes in the public square and have my father tell me that I was a disgrace to a proud name.

Oh, I had mentioned to my father, late in my senior year in high school, that I was thinking over the idea of volunteering for Federal Service. I suppose every kid does, when his

eighteenth birthday heaves into sight—and mine was due the week I graduated. Of course most of them just think about it, toy with the idea a little, then go do something else—go to college, or get a job, or something. I suppose it would have been that way with me … if my best chum had not, with dead seriousness, planned to join up.

Carl and I had done everything together in high school—eyed the girls together, doubledated together, been on the debate team together, pushed electrons together in his home lab. I wasn't much on electronic theory myself, but I'm a neat hand with a soldering gun; Carl supplied the skull sweat and I carried out his instructions. It was fun; anything we did together was fun. Carl's folks didn't have anything like the money that my father had, but it didn't matter between us. When my father bought me a Rolls copter for my fourteenth birthday, it was Carl's as much as it was mine; contrariwise, his basement lab was mine.

So when Carl told me that he was not going straight on with school, but serve a term first, it gave me to pause. He really meant it; he seemed to think that it was natural and right and obvious.

So I told him I was joining up, too.

He gave me an odd look. "Your old man won't let you."

"Huh? How can he stop me?" And of course he couldn't, not legally. It's the first completely free choice anybody gets (and maybe his last); when a boy, or a girl, reaches his or her eighteenth birthday, he or she can volunteer and nobody else has any say in the matter.

“You’ll find out.” Carl changed the subject.

So I took it up with my father, tentatively, edging into it sideways.

He put down his newspaper and cigar and stared at me. “Son, are you out of your mind?”

I muttered that I didn’t think so.

“Well, it certainly sounds like it.” He sighed. “Still … I should have been expecting it; it’s a predictable stage in a boy’s growing up. I remember when you learned to walk and weren’t a baby any longer—frankly you were a little hellion for quite a while. You broke one of your mother’s Ming vases—on purpose, I’m quite sure … but you were too young to know that it was valuable, so all you got was having your hand spatted. I recall the day you swiped one of my cigars, and how sick it made you. Your mother and I carefully avoided noticing that you couldn’t eat dinner that night and I’ve never mentioned it to you until now—boys have to try such things and discover for themselves that men’s vices are not for them. We watched when you turned the corner on adolescence and started noticing that girls were different—and wonderful.”

He sighed again. “All normal stages. And the last one, right at the end of adolescence, is when a boy decides to join up and wear a pretty uniform. Or decides that he is in love, love such as no man ever experienced before, and that he just has to get married right away. Or both.” He smiled grimly. “With me it was both. But I got over each of them in time not to make a fool of myself and ruin my life.”

“But, Father, I wouldn’t ruin my life. Just a term of service—not career.”

“Let’s table that, shall we? Listen, and let *me* tell *you* what you are going to do—because you *want* to. In the first place this family has stayed out of politics and cultivated its own garden for over a hundred years—I see no reason for you to break that fine record. I suppose it’s the influence of that fellow at your high school—what’s his name? You know the one I mean.”

He meant our instructor in History and Moral Philosophy—a veteran, naturally. “Mr. Dubois.”

“Hmmph, a silly name—it suits him. Foreigner, no doubt. It ought to be against the law to use the schools as undercover recruiting stations. I think I’m going to write a pretty sharp letter about it—a taxpayer has *some* rights!”

“But, Father, he doesn’t do that at all! He—” I stopped, not knowing how to describe it. Mr. Dubois had a snotty, superior manner; he acted as if none of us was really good enough to volunteer for service. I didn’t like him. “Uh, if anything, he discourages it.”

“Hmmph! Do you know how to lead a pig? Never mind. When you graduate, you’re going to study business at Harvard; you know that.

After that, you will go on to the Sorbonne and you'll travel a bit along with it, meet some of our distributors, find out how business is done elsewhere. Then you'll come home and go to work. You'll start with the usual menial job, stock clerk or something, just for form's sake—but you'll be an executive before you can catch your breath, because I'm not getting any younger and the quicker you can pick up the load, the better. As soon as you're able and willing, you'll be boss. There! How does that strike you as a program? As compared with wasting two years of your life?"

I didn't say anything. None of it was news to me; I'd thought about it. Father stood up and put a hand on my shoulder. "Son, don't think I don't sympathize with you; I do. But look at the real facts. If there were a war, I'll be the first to cheer you on—and to put the business on a war footing. But there isn't, and praise God there never will be again. We've outgrown wars. This planet is now peaceful and happy and we enjoy good enough relations with other planets. So what is this so called 'Federal Service'? Parasitism, pure and simple. A functionless organ, utterly obsolete, living on the taxpayers. A decidedly expensive way for inferior people who otherwise would be unemployed to live at public expense for a term of years, then give themselves airs for the rest of their lives. Is that what you want to do?"

"Carl isn't inferior!"

"Sorry. No, he's a fine boy … but misguided." He frowned, and then smiled. "Son, I had intended to keep something as a surprise for you—a graduation present. But I'm going to tell you now so that you can put this nonsense out of your mind more easily. Not that I am afraid of what you might do; I have confidence in your basic good sense, even at your tender years. But you are troubled. I know—and this will clear it away. Can you guess what it is?"

"Uh, no."

He grinned. "A vacation trip to Mars."

I must have looked stunned. "Golly, Father, I had no idea—"

"I meant to surprise you and I see I did. I know how you kids feel about travel, though it beats me what anyone sees in it after the first time out. But this is a good time for you to do it—by yourself; did I mention that?—and get it out of your system … because you'll be hard-pressed to get in even a week on Luna once you take up your responsibilities." He picked up his paper. "No, don't thank me. Just run along and let me finish my paper—I've got some gentlemen coming in this evening, shortly. Business."

I ran along. I guess he thought that settled it … and I suppose I did, too. Mars! And on my own! But I didn't tell Carl about it; I had a sneaking suspicion that he would regard it as a bribe. Well, maybe it was. Instead I simply told him that my father and I seemed to have different ideas about it.

“Yeah,” he answered, “so does mine. But it’s *my* life.”

I thought about it during the last session of our class in History and Moral Philosophy. H. & M. P. was different from other courses in that everybody had to take it but nobody had to pass it—and Mr. Dubois never seemed to care whether he got through to us or not. He would just point at you with the stump of his left arm (he never bothered with names) and snap a question. Then the argument would start.

But on the last day he seemed to be trying to find out what we had learned. One girl told him bluntly: “My mother says that violence never settles anything.”

“So?” Mr. Dubois looked at her bleakly. “I’m sure the city fathers of Carthage would be glad to know that. Why doesn’t your mother tell them so? Or why don’t *you*?”

They had tangled before—since you couldn’t flunk the course, it wasn’t necessary to keep Mr. Dubois buttered up. She said shrilly, “You’re making fun of me! Everybody knows that Carthage was destroyed!”

“You seemed to be unaware of it,” he said grimly. “Since you do know it, wouldn’t you say that violence had settled their destinies rather thoroughly? However, I was not making fun of you personally; I was heaping scorn on an inexcusably silly idea—a practice I shall always follow. Anyone who clings to the historically untrue—and thoroughly immoral—doctrine that ‘violence never settles anything’ I would advise to conjure up the ghosts of Napoleon Bonaparte and of the Duke of Wellington and let them debate it. The ghost of Hitler could referee, and the jury might well be the Dodo, the Great Auk, and the Passenger Pigeon. Violence, naked force, has settled more issues in history than has any other factor, and the contrary opinion is wishful thinking at its worst. Breeds that forget this basic truth have always paid for it with their lives and freedoms.”

He sighed. “Another year, another class—and, for me, another failure. One can lead a child to knowledge but one cannot make him think.” Suddenly he pointed his stump at me. “You. What is the moral difference, if any, between the soldier and the civilian?”

“The difference,” I answered carefully, “lies in the field of civic virtue. A soldier accepts personal responsibility for the safety of the body politic of which he is a member, defending it, if need be, with his life. The civilian does not.”

“The exact words of the book,” he said scornfully. “But do you understand it? Do you *believe* it?”

“Uh, I don’t know, sir.”

“Of course you don’t! I doubt if any of you here would recognize 'civic virtue' if it came up and barked in your face!" He glanced at his watch. "And that is all, a final all. Perhaps we shall meet again under happier circumstances. Dismissed."

Graduation right after that and three days later my birthday, followed in less than a week by Carl's birthday—and I still hadn't told Carl that I wasn't joining up. I'm sure he assumed that I would not, but we didn't discuss it out loud—embarrassing. I simply arranged to meet him the day after his birthday and we went down to the recruiting office together.

On the steps of the Federal Building we ran into Carmencita Ibañez, a classmate of ours and one of the nice things about being a member of a race with two sexes. Carmen wasn't my girl—she wasn't anybody's girl; she never made two dates in a row with the same boy and treated all of us with equal sweetness and rather impersonally. But I knew her pretty well, as she often came over and used our swimming pool, because it was Olympic length—sometimes with one boy, sometimes with another. Or alone, as Mother urged her to—Mother considered her "a good influence." For once she was right.

She saw us and waited, dimpling. "Hi, fellows!"

"Hello, *Ochee Chyornya*," I answered. "What brings you here?"

"Can't you guess? Today is my birthday."

"Huh? Happy returns!"

"So I'm joining up."

"Oh…" I think Carl was as surprised as I was. But Carmencita was like that. She never gossiped and she kept her own affairs to herself. "No foolin'?" I added, brilliantly.

"Why should I be fooling? I'm going to be a spaceship pilot—at least I'm going to try for it."

"No reason why you shouldn't make it," Carl said quickly. He was right—I know now just how right he was. Carmen was small and neat, perfect health and perfect reflexes—she could make a competitive diving routine look easy—and she was quick at mathematics. Me, I tapered off with a "C" in algebra and a "B" in business arithmetic; she took all the math our school offered and a tutored advance course on the side. But it had never occurred to me to wonder why. Fact was, little Carmen was so ornamental that you just never thought about her being useful.

"We—Uh, I," said Carl, "am here to join up, too."

"And me," I agreed. "Both of us." No, I hadn't made any decision; my mouth was leading its own life.

"Oh, wonderful!"

"And I'm going to buck for space pilot, too," I added firmly.

She didn't laugh. She answered very seriously, "Oh, how grand! Perhaps in training we'll run into each other. I hope."

"Collision courses?" asked Carl. "That's a no-good way to pilot."

"Don't be silly, Carl. On the ground, of course. Are you going to be a pilot, too?"

"Me?" Carl answered. "I'm no truck driver. You know me—Starside R & D, if they'll have me. Electronics."

" 'Truck driver' indeed! I hope they stick you out on Pluto and let you freeze. No, I don't—good luck! Let's go in, shall we?"

The recruiting station was inside a railing in the rotunda. A fleet sergeant sat at a desk there, in dress uniform, gaudy as a circus. His chest was loaded with ribbons I couldn't read. But his right arm was off so short that his tunic had been tailored without any sleeve at all … and, when you came up to the rail, you could see that he had no legs.

It didn't seem to bother him. Carl said, "Good morning. I want to join up."

"Me, too," I added.

He ignored us. He managed to bow while sitting down and said, "Good morning, young lady. What can I do for you?"

"I want to join up, too."

He smiled. "Good girl! If you'll just scoot up to room 201 and ask for Major Rojas, she'll take care of you." He looked her up and down. "Pilot?"

"If possible."

"You look like one. Well, see Miss Rojas."

She left, with thanks to him and a see-you-later to us; he turned his attention to us, sized us up with a total absence of the pleasure he had shown in little Carmen. "So?" he said. "For what? Labor battalions?"

"Oh, no!" I said. "I'm going to be a pilot."

He stared at me and simply turned his eyes away. "You?"

"I'm interested in the Research and Development Corps," Carl said soberly, "especially electronics. I understand the chances are pretty good."

"They are if you can cut it," the Fleet Sergeant said grimly, "and not if you don't have what it takes, both in preparation and ability. Look, boys, have you any idea why they have me out here in front?"

I didn't understand him. Carl said, "Why?"

"Because the government doesn't care one bucket of swill whether you join or not! Because it has become stylish, with some people—too many people—to serve a term and earn a franchise and be able to wear a ribbon in your lapel which says that you're a vet'ran … whether you've ever seen combat or not. But if you *want* to serve and I can't talk you out of it, then we have to take you, because that's your constitutional right. It says that everybody, male or female, shall have his born right to pay his service and assume full citizenship but the facts are that we are getting hard pushed to find things for all the volunteers to do that aren't just glorified K. P. You can't all be real military men; we don't need that many and most of the volunteers aren't number-one soldier material anyhow. Got any idea what it takes to make a soldier?"

"No," I admitted.

"Most people think that all it takes is two hands and two feet and a stupid mind. Maybe so, for cannon fodder. Possibly that was all that Julius Caesar required. But a private soldier today is a specialist so highly skilled that he would rate 'master' in any other trade; we can't afford stupid ones. So for those who insist on serving their term—but haven't got what we want and must have—we've had to think up a whole list of dirty, nasty, dangerous jobs that will either run 'em home with their tails between their legs and their terms uncompleted … or at the very least make them remember for the rest of their lives that their citizenship is valuable to them because they've paid a high price for it. Take that young lady who was here—wants to be a pilot. I hope she makes it; we always need good pilots, not enough of 'em. Maybe she will.

But if she misses, she may wind up in Antarctica, her pretty eyes red from never seeing anything but artificial light and her knuckles callused from hard, dirty work."

I wanted to tell him that the least Carmencita could get was computer programmer for the sky watch; she really was a whiz at math. But he was talking.

"So they put me out here to discourage you boys. Look at this." He shoved his chair around to make sure that we could see that he was legless. "Let's assume that you don't wind up digging tunnels on Luna or playing human guinea pig for new diseases through sheer lack of talent; suppose we do make a fighting man out of you. Take a look at *me*—this is what you may buy … if you don't buy the whole farm and cause your folks to receive a 'deeply regret' telegram. Which is more likely, because these days, in training or in combat, there aren't many wounded. If you buy it at all, they likely throw in a coffin—I'm the rare exception; I was lucky … though maybe you wouldn't call it luck."

He paused, then added, "So why don't you boys go home, go to college, and then go be chemists or insurance brokers or whatever? A term of service isn't a kiddie camp; it's either real military service, rough and dangerous even in peacetime … or a most unreasonable facsimile thereof. Not a vacation. Not a romantic adventure. Well?"

Carl said, "I'm here to join up."

"Me, too."

"You realize that you aren't allowed to pick your service?"

Carl said, “I thought we could state our preferences?”

“Certainly. And that’s the last choice you’ll make until the end of your term. The placement officer pays attention to your choice, too. First thing he does is to check whether there’s any demand for lefthanded glass blowers this week—that being what you think would make you happy. Having reluctantly conceded that there is a need for your choice—probably at the bottom of the Pacific—he then tests you for innate ability and preparation. About once in twenty times he is forced to admit that everything matches and you get the job … until some practical joker gives you dispatch orders to do something very different. But the other nineteen times he turns you down and decides that you are just what they have been needing to field-test survival equipment on Titan.” He added meditatively, “It’s chilly on Titan. And it’s amazing how often experimental equipment fails to work. Have to have real field tests, though—laboratories just never get all the answers.”

“I can qualify for electronics,” Carl said firmly, “if there are jobs open in it.”

“So? And how about you, bub?”

I hesitated—and suddenly realized that, if I didn’t take a swing at it, I would wonder all my life whether I was anything but the boss’s son. “I’m going to chance it.”

“Well, you can’t say I didn’t try. Got your birth certificates with you? And let’s see your I. D.‘s.”

Ten minutes later, still not sworn in, we were on the top floor being prodded and poked and fluoroscoped. I decided that the idea of a physical examination is that, if you *aren’t* ill, then they do their darnedest to make you ill. If the attempt fails, you’re in.

I asked one of the doctors what percentage of the victims flunked the physical. He looked startled. “Why, we *never* fail anyone. The law doesn’t permit us to.”

“Huh? I mean, Excuse me, Doctor? Then what’s the point of this gooseflesh parade?”

“Why, the purpose is,” he answered, hauling off and hitting me in the knee with a hammer (I kicked him, but not hard), “to find out what duties you are physically able to perform. But if you came in here in a wheel chair and blind in both eyes and were silly enough to insist on enrolling, they would find something silly enough to match. Counting the fuzz on a caterpillar by touch, maybe. The only way you can fail is by having the psychiatrists decide that you are not able to understand the oath.”

“Oh. Uh … Doctor, were you already a doctor when you joined up? Or did they decide you ought to be a doctor and send you to school?”

"*Me*?" He seemed shocked. "Youngster, do I look that silly? I'm a civilian employee."

"Oh. Sorry, sir."

"No offense. But military service is for ants. Believe me. I see 'em go, I see 'em come back—when they do come back. I see what it's done to them. And for what? A purely nominal political privilege that pays not one centavo and that most of them aren't competent to use wisely anyhow. Now if they would let medical men run things—but never mind that; you might think I was talking treason, free speech or not. But, youngster, if you've got savvy enough to count ten, you'll back out while you still can. Here, take these papers back to the recruiting sergeant—and remember what I said."

I went back to the rotunda. Carl was already there. The Fleet Sergeant looked over my papers and said glumly, "Apparently you both are almost insufferably healthy-except for holes in the head. One moment, while I get some witnesses." He punched a button and two female clerks came out, one old battleax, one kind of cute.

He pointed to our physical examination forms, our birth certificates, and our I. D.'s said formally: "I invite and require you, each and severally, to examine these exhibits, determine what they are and to determine, each independently, what relation, if any, each document bears to these two men standing here in your presence."

They treated it as a dull routine, which I'm sure it was; nevertheless they scrutinized every document, they took our fingerprints—again!—and the cute one put a jeweler's loupe in her eye and compared prints from birth to now. She did the same with signatures. I began to doubt if I was myself.

The Fleet Sergeant added, "Did you find exhibits relating to their present competence to take the oath of enrollment? If so, what?"

"We found," the older one said, "appended to each record off physical examination a duly certified conclusion by an authorized and delegated board of psychiatrists stating that each of them is mentally competent to take the oath and that neither one is under the influence of alcohol, narcotics, other disabling drugs, nor of hypnosis."

"Very good." He turned to us, "Repeat after me—"

"I, being of legal age, of my own free will—"

" 'I,' " we each echoed, " 'being of legal age, of my own free will—' "

"—without coercion, promise, or inducement of any sort, after having been duly advised and warned of the meaning and consequences of this oath—"

"—do now enroll in the Federal Service of the Terran Federation for a term of not less than two years and as much longer as may be required by the needs of the Service—"

(I gulped a little over that part. I had always thought of a "term" as two years, even though I knew better, because that's the way people talk about it. Why, we were signing up for *life*.)

"I swear to uphold and defend the Constitution of the Federation against all its enemies on or off Terra, to protect and defend the Constitutional liberties and privileges of all citizens and lawful residents of the Federation, its associated states and territories, to perform, on or off Terra, such duties of any lawful nature as may be assigned to me by lawful direct or delegated authority—"

"—and to obey all lawful orders of the Commander-in-Chief of the Terran Service and of all officers or delegated persons placed over me —"

"—and to require such obedience from all members of the Service or other persons or nonhuman beings lawfully placed under my orders —"

"—and, on being honorably discharged at the completion of my full term of active service or upon being placed on inactive retired status after having completed such full term, to carry out all duties and obligations and to enjoy all privileges of Federation citizenship including but not limited to the duty, obligation and privilege of exercising sovereign franchise for the rest of my natural life unless stripped of honor by verdict, finally sustained, of court of my sovereign peers."

(*Whew*!) Mr. Dubois had analyzed the Service oath for us in History and Moral Philosophy and had made us study it phrase by phrase—but you don't really feel the *size* of the thing until it comes rolling over you, all in one ungainly piece, as heavy and unstoppable as Juggernaut's carriage.

At least it made me realize that I was no longer a civilian, with my shirttail out and nothing on my mind. I didn't know yet what I was, but I knew what I wasn't.

"So help me God!" we both ended and Carl crossed himself and so did the cute one.

After that there were more signatures and fingerprints, all five of us, and flat colorgraphs of Carl and me were snapped then and there and embossed into our papers. The Fleet Sergeant finally looked up. "Why, it's 'way past the break for lunch. Time for chow, lads."

I swallowed hard. Uh…Sergeant?"

"Eh? Speak up."

"Could I flash my folks from here? Tell them what I—Tell them how it came out?"

"We can do better than that."

"Sir?"

"You go on fortyeight hours leave now." He grinned coldly. "Do you know what happens if you don't come back?"

"Uh … courtmartial?"

"Not a thing. Not a blessed thing. Except that your papers get marked, *Term not completed satisfactorily*, and you never, never, never get a second chance. This is our cooling-off period, during which we shake out the overgrown babies who didn't really mean it and should never have taken the oath. It saves the government money and it saves a power of grief for such kids and their parents—the neighbors needn't guess. You don't even have to tell your parents." He shoved his chair away from his desk. "So I'll see you at noon day after tomorrow. If I see you. Fetch your personal effects."

It was a crumby leave. Father stormed at me, then quit speaking to me; Mother took to her bed. When I finally left, an hour earlier than I had to, nobody saw me off but the morning cook and the houseboys.

I stopped in front of the recruiting sergeant's desk, thought about saluting and decided I didn't know how. He looked up. "Oh. Here are your papers. Take them up to room 201; they'll start you through the mill. Knock and walk in."

Two days later I knew I was not going to be a pilot. Some of the things the examiners wrote about me were: insufficient intuitive grasp of spatial relationships … insufficient mathematical talent … deficient mathematical preparation … reaction time adequate … eyesight good. I'm glad they put in those last two; I was beginning to feel that counting on my fingers was my speed.

The placement officer let me list my lesser preferences, in order, and I caught four more days of the wildest aptitude tests I've ever heard of. I mean to say, what do they find out when a stenographer jumps on her chair and screams, "Snakes!" There was no snake, just a harmless piece of plastic hose.

The written and oral tests were mostly just as silly, but they seemed happy with them, so I took them. The thing I did most carefully was to list my preferences. Naturally I listed all of the Space Navy jobs (other than pilot) at the top; whether I went as power-room technician or as cook, I knew

that I preferred any Navy job to any Army job—I wanted to travel.

Next I listed Intelligence—a spy gets around, too, and I figured that it couldn't possibly be dull. (I was wrong, but never mind.) After that came a long list: psychological warfare, chemical warfare, biological warfare, combat ecology (I didn't know what it was, but it sounded interesting), logistics corps (a simple mistake; I had studied logic for the debate team and "logistics" turns out to have two entirely separate meanings), and a dozen others. Clear at the bottom, with some hesitation, I put K-9 Corps, and Infantry.

I didn't bother to list the various noncombatant auxiliary corps because, if I wasn't picked for a combat corps, I didn't care whether they used me as an experimental animal or sent me as a laborer in the Terranizing of Venus—either one was a booby prize.

Mr. Weiss, the placement officer, sent for me a week after I was sworn in. He was actually a retired psychological-warfare major, on active duty for procurement, but he wore mufti and insisted on being called just "Mister" and you could relax and take it easy with him. He had my list of preferences and the reports on all my tests and I saw that he was holding my high school transcript—which pleased me, for I had done all right in school; I had stood high enough without standing so high as to be marked as a greasy grind, having never flunked any courses and dropped only one, and I had been rather a big man around school otherwise: swimming team, debate team, track squad, class treasurer, silver medal in the annual literary contest, chairman of the homecoming committee, stuff like that. A well-rounded record and it's all down in the transcript.

He looked up as I came in, said, "Sit down, Johnnie," and looked back at the transcript, then put it down. "You like dogs?"

"Huh? Yes, sir"

"How well do you like them? Did your dog sleep on your bed? By the way, where is your dog now?"

"Why, I don't happen to have a dog just at present. But when I did—well, no, he didn't sleep on my bed. You see, Mother didn't allow dogs in the house."

"But didn't you sneak him in?"

"Uh—" I thought of trying to explain Mother's not-angry-but-terribly-terribly-hurt routine when you tried to buck her on something she had her mind made up about. But I gave up. "No, sir."

"Mmm … have you ever seen a neodog?"

"Uh, once, sir. They exhibited one at the Macarthur Theater two years ago. But the S. P. C. A. made trouble for them."

"Let me tell you how it is with a K-9 team. A neodog is not just a dog that talks."

"I couldn't understand that neo at the Macarthur. Do they really talk?"

"They talk. You simply have to train your ear to their accent. Their mouths can't shape 'b,' 'm,' 'p,' or 'v' and you have to get used to their equivalents—something like the handicap of a split palate but with different letters. No matter, their speech is as clear as any human speech. But a neodog is not a talking dog; he is not a dog at all, he is an artificially mutated symbiote derived from dog stock. A neo, a trained Caleb, is about six times as bright as a dog, say about as intelligent as a human moron—except that the comparison is not fair to the neo; a moron is a defective, whereas a neo is a stable genius in his own line of work."

Mr. Weiss scowled. "Provided, that is, that he has his symbiote. That's the rub. Mmm … you're too young ever to have been married but you've seen marriage, your own parents at least. Can you imagine being married to a Caleb?"

"Huh? No. No, I can't."

"The emotional relationship between the dog-man and the man-dog in a K-9 team is a great deal closer and much more important than is the emotional relationship in most marriages. If the master is killed, we kill the neodog—at once! It is all that we can do for the poor thing. A mercy killing. If the neodog is killed … well, we can't kill the man even though it would be the simplest solution. Instead we restrain him and hospitalize him and slowly put him back together." He picked up a pen, made a mark. "I don't think we can risk assigning a boy to K-9 who didn't outwit his mother to have his dog sleep with him. So let's consider something else."

It was not until then that I realized that I must have already flunked every choice on my list above K-9 Corps—and now I had just flunked it, too. I was so startled that I almost missed his next remark. Major Weiss said meditatively, with no expression and as if he were talking about someone else, long dead and far away: "I was once half of a K-9 team. When my Caleb became a casualty, they kept me under sedation for six weeks, then rehabilitated me for other work. Johnnie, these courses you've taken—why didn't you study something useful?"

"Sir?"

"Too late now. Forget it. Mmm … your instructor in History and Moral Philosophy seems to think well of you."

"He does?" I was surprised. "What did he say?"

Weiss smiled. "He says that you are not stupid, merely ignorant and prejudiced by your environment. From him that is high praise—I know him."

It didn't sound like praise to me! That stuckup stiff-necked old—

"And," Weiss went on, "a boy who gets a 'C-minus' in Appreciation of Television can't be all bad. I think we'll accept Mr. Dubois' recommendation. How would you like to be an infantryman?"

I came out of the Federal Building feeling subdued yet not really unhappy. At least I was a soldier; I had papers in my pocket to prove it. I hadn't been classed as too dumb and useless for anything but makework.

It was a few minutes after the end of the working day and the building was empty save for a skeleton night staff and a few stragglers. I ran into a man in the rotunda who was just leaving; his face looked familiar but I couldn't place him.

But he caught my eye and recognized me. "Evening!" he said briskly. “You haven’t shipped out yet?”

And then I recognized him—the Fleet Sergeant who had sworn us in. I guess my chin dropped; this man was in civilian clothes, was walking around on two legs and had two arms. “Uh, good evening, Sergeant,” I mumbled.

He understood my expression perfectly, glanced down at himself and smiled easily. “Relax, lad. I don’t have to put on my horror show after working hours—and I don’t. You haven’t been placed yet?”

“I just got my orders.”

“For what?”

“Mobile Infantry.”

His face broke in a big grin of delight and he shoved out his hand. “My outfit! Shake, son! We’ll make a man of you—or kill you trying. Maybe both.”

“It’s a good choice?” I said doubtfully.

“ ‘A good choice’? Son, it’s the *only* choice. The Mobile Infantry is the Army. All the others are either button pushers or professors, along merely to hand us the saw; *we* do the work.” He shook hands again and added, “Drop me a card—‘Fleet Sergeant Ho, Federal Building,’ that’ll reach me. Good luck! And he was off, shoulders back, heels clicking, head up.

I looked at my hand. The hand he had offered me was the one that wasn’t there—his right hand. Yet it had felt like flesh and had shaken mine firmly. I had read about these powered prosthetics, but it is startling when you first run across them.

I went back to the hotel where recruits were temporarily billeted during placement—we didn’t even have uniforms yet, just plain coveralls we wore during the day and our own clothes after hours. I went to my room and started packing, as I was shipping out early in the morning—packing to send stuff home, I mean; Weiss had cautioned me not to take along anything but family photographs and possibly a musical instrument if I played one (which I didn’t). Carl had shipped out three days earlier, having gotten the R & D assignment he wanted. I was just as glad, as he would have been just too confounded understanding about the billet I had drawn. Little Carmen had shipped out, too, with the rank of cadet midshipman (probationary)—she was going to be a pilot, all right, if she could cut it … and I suspected that she could.

My temporary roomie came in while I was packing. “Got your orders?” he asked.

“Yup.”

“What?”

“Mobile Infantry.”

“The *Infantry*? Oh, you poor stupid clown! I feel sorry for you, I really do."

I straightened up and said angrily, "Shut up! The Mobile Infantry is the best outfit in the Army—it is the Army! The rest of you jerks are just along to hand us the saw—*we* do the work."

He laughed. "You'll find out!"

"You want a mouthful of knuckles?"

Chapter 3

He shall rule them with a rod of iron.
—Revelations II:25

I did Basic at Camp Arthur Currie on the northern prairies, along with a couple of thousand other victims—and I do mean “Camp,” as the only permanent buildings there were to shelter equipment. We slept and ate in tents; we lived outdoors—if you call that “living,” which I didn’t, at the time. I was used to a warm climate; it seemed to me that the North Pole was just five miles north of camp and getting closer. Ice Age returning, no doubt.

But exercise will keep you warm and they saw to it that we got plenty of that.

The first morning we were there they woke us up before daybreak. I had had trouble adjusting to the change in time zones and it seemed to me that I had just got to sleep; I couldn’t believe that anyone seriously intended that I should get up in the middle of the night.

But they did mean it. A speaker somewhere was blaring out a military march, fit to wake the dead, and a hairy nuisance who had come charging down the company street yelling, “*Everybody out*! *Show a leg*! *On the bounce*!” came

marauding back again just as I had pulled the covers over my head, tipped over my cot and dumped me on the cold hard ground.

It was an impersonal attention; he didn’t even wait to see if I hit.

Ten minutes later, dressed in trousers, undershirt, and shoes, I was lined up with the others in ragged ranks for setting-up exercises just as the Sun looked over the eastern horizon. Facing us was a big broadshouldered, mean-looking man, dressed just as we were—except that while I looked and felt like a poor job of embalming, his chin was shaved blue, his trousers were sharply creased, you could have used his shoes for mirrors, and his manner was alert, wide-awake, relaxed, and rested. You got the impression that he never needed to sleep—just ten-thousand-mile checkups and dust him off occasionally.

He bellowed, “*C’pnee*! *Atten … shut*! I am Career Ship’s Sergeant Zim, your company commander. When you speak to me, you will salute and say, ‘Sir’—you will salute and ‘sir’ anyone who carries an instructor’s baton—” He was carrying a swagger cane and now made a quick reverse moulinet with it to show what he meant by an instructor’s baton; I had noticed men carrying them when we had arrived the night before and had intended to get one myself—they looked smart. Now I changed my mind. “—because we don’t have enough officers around here for you to practice on. You'll practice on us. Who sneezed?"

No answer—

"WHO SNEEZED?"

"I did," a voice answered.

" 'I did' *what*?"

"I sneezed."

" 'I sneezed,' SIR!"

"I sneezed, sir. I'm cold, sir."

"Oho!" Zim strode up to the man who had sneezed, shoved the ferrule of the swagger cane an inch under his nose and demanded, "Name?"

"Jenkins … sir."

"Jenkins…" Zim repeated as if the word were somehow distasteful, even shameful. "I suppose some night on patrol you're going to sneeze just because you've got a runny nose. Eh?"

"I hope not, sir."

"So do I. But you're cold. Hmm … we'll fix that." He pointed with his stick. "See that armory over there?" I looked and could see nothing but prairie except for one building that seemed to be almost on the skyline.

"Fall out. Run around it. *Run*, I said. Fast! Bronski! Pace him."

"Right, Sarge." One of the five or six other baton carriers took out after Jenkins, caught up with him easily, cracked him across the tight of his pants with the baton. Zim turned back to the rest of us, still shivering at attention. He walked up and down, looked us over, and seemed awfully unhappy. At last he stepped out in front of us, shook his head, and said, apparently to himself but he had a voice that carried: "To think that this had to happen to *me*!"

He looked at us. "You apes—No, not 'apes'; you don't rate that much. You pitiful mob of sickly monkeys … you sunken-chested, slack-bellied, drooling refugees from apron strings. In my whole life I never saw such a disgraceful huddle of momma's spoiled little darlings in—you, there! Suck up the gut! Eyes front! I'm talking to *you*!"

I pulled in my belly, even though I was not sure he had addressed me. He went on and on and I began to forget my goose flesh in hearing him storm. He never once repeated himself and he never used either profanity or obscenity. (I

learned later that he saved those for *very* special occasions, which this wasn't.) But he described our shortcomings, physical, mental, moral, and genetic, in great and insulting detail.

But somehow I was not insulted; I became greatly interested in studying his command of language. I wished that we had had him on our debate team.

At last he stopped and seemed about to cry. “I can’t *stand* it,” he said bitterly. “I’ve just got to work some of it off—I had a better set of wooden soldiers when I was six ALL RIGHT! Is there any one of you jungle lice who thinks he can whip me? Is there a *man* in the crowd? Speak up !”

There was a short silence to which I contributed. I didn’t have any doubt at all that he could whip me; I was convinced.

I heard a voice far down the line, the tall end. “Ah reckon ah can … suh.”

Zim looked happy. “Good! Step out here where I can see you.” The recruit did so and he was impressive, at least three inches taller than Sergeant Zim and broader across the shoulders. “What’s your name, soldier?”

“Breckinridge, suh—and ah weigh two hundred and ten pounds an’ theah ain’t *any* of it ‘slack-bellied.’ ”

“Any particular way you’d like to fight?”

“Suh, you jus’ pick youah own method of dyin’. Ah’m not fussy.”

“Okay, no rules. Start whenever you like.” Zim tossed his baton aside.

It started—and it was over. The big recruit was sitting on the ground, holding his left wrist in his right hand. He didn’t say anything.

Zim bent over him. “Broken?”

“Reckon it might he … suh.”

“I’m sorry. You hurried me a little. Do you know where the dispensary is? Never mind—Jones! Take Breckinridge over to the dispensary.” As they left Zim slapped him on the right shoulder and said quietly, “Let’s try it again in a month or so. I’ll show you what happened.” I think it was meant to be a private remark but they were standing about six feet in front of where I was slowly freezing solid.

Zim stepped back and called out, “Okay, we’ve got one man in this company, at least. I feel better. Do we have another one? Do we have two more? Any two of you scrofulous toads think you can stand up to me?” He looked back and forth along our ranks. “Chicken-livered, spineless—oh, oh! Yes? Step out.”

Two men who had been side by side in ranks stepped out together; I suppose they had arranged it in whispers right there, but they also were far down the tall end, so I didn’t hear. Zim smiled at them. “Names, for your next of kin, please.”

“Heinrich.”

“Heinrich *what*?”

“Heinrich, sir. Bitte.” He spoke rapidly to the other recruit and added politely, “He doesn’t speak much Standard English yet, sir.”

“Meyer, mein Herr,” the second man supplied.

"That's okay, lots of 'em don't speak much of it when they get here—I didn't myself. Tell Meyer not to worry, he'll pick it up. But he understands what we are going to do?"

"Jawohl," agreed Meyer.

"Certainly, sir. He understands Standard, he just can't speak it fluently."

"All right. Where did you two pick up those face scars? Heidelberg?"

"Nein—no, sir. Königsberg."

"Same thing." Zim had picked up his baton after fighting Breekinridge; he twirled it and asked, "Perhaps you would each like to borrow one of these?"

"It would not be fair to you, sir," Heinrich answered carefully. "Bare hands, if you please."

"Suit yourself. Though I might fool you. Königsberg, eh? Rules?"

"How can there be rules, sir, with three?"

"An interesting point. Well, let's agree that if eyes are gouged out they must be handed back when it's over. And tell your Korpsbruder that I'm ready now. Start when you like." Zim tossed his baton away; someone caught it.

"You joke, sir. We will not gouge eyes."

"No eye gouging, agreed. 'Fire when ready, Gridley.' "

"Please?"

"Come on and fight! Or get back into ranks!"

Now I am not sure that I saw it happen this way; I may have learned part of it later, in training. But here is what I think happened: The two moved out on each side of our company commander until they had him completely flanked but well out of contact. From this position there is a choice of four basic moves for the man working alone, moves that take advantage of his own mobility and of the superior coordination of one man as compared with two—Sergeant Zim says (correctly) that any group is weaker than a man alone unless they are perfectly trained to work together. For example, Zim could have feinted at one of them, bounced fast to the other with a disabler, such as a broken kneecap then finished off the first at his leisure.

Instead he let them attack. Meyer came at him fast, intending to body check and knock him to the ground, I think, while Heinrich would follow through from above, maybe with his boots. That's the way it appeared to start.

And here's what I think I saw. Meyer never reached him with that body check. Sergeant Zim whirled to face him,

while kicking out and getting Heinrich in the belly—and then Meyer was sailing through the air, his lunge helped along with a hearty assist from Zim.

But all I am sure of is that the fight started and then there were two German boys sleeping peacefully, almost end to end, one face down and one face up, and Zim was standing over them, not even breathing hard. “Jones,” he said. “No, Jones left, didn’t he? Mahmud! Let’s have the water bucket, then stick them back into their sockets. Who’s got my toothpick?”

A few moments later the two were conscious, wet, and back in ranks. Zim looked at us and inquired gently, “Anybody else? Or shall we get on with setting-up exercises?”

I didn’t expect anybody else and I doubt if he did. But from down on the left flank, where the shorties hung out, a boy stepped out of ranks, came front and center. Zim looked down at him. “Just you? Or do you want to pick a partner?”

“Just myself, sir.”

“As you say. Name?”

“Shujumi, sir.”

Zim’s eyes widened. “Any relation to Colonel Shujumi?”

“I have the honor to be his son, sir.”

“Ah so! Well! Black Belt?”

“No, sir. Not yet.”

“I’m glad you qualified that. Well, Shujumi, are we going to use contest rules, or shall I send for the ambulance?”

“As you wish, sir. But I think, if I may be permitted an opinion, that contest rules would be more prudent.”

“I don’t know just how you mean that, but I agree.” Zim tossed his badge of authority aside, then, so help me, they backed off, faced each other, and bowed.

After that they circled around each other in a half crouch, making tentative passes with their hands, and looking like a couple of roosters.

Suddenly they touched—and the little chap was down on the ground and Sergeant Zim was flying through the air over his head. But he didn’t land with the dull, breath-paralyzing thud that Meyer had; he lit rolling and was on his feet as fast as Shujumi was and facing him. “Banzai!” Zim yelled and grinned.

"Arigato," Shujumi answered and grinned back.

They touched again almost without a pause and I thought the Sergeant was going to fly again. He didn't; he slithered straight in, there was a confusion of arms and legs and when the motion slowed down you could see that Zim was tucking Shujumi's left foot in his right ear—a poor fit.

Shujumi slapped the ground with a free hand; Zim let him up at once. They again bowed to each other.

"Another fall, sir?"

"Sorry. We've got work to do. Some other time, eh? For fun … and honor. Perhaps I should have told you; your honorable father trained me."

"So I had already surmised, sir. Another time it is."

Zim slapped him hard on the shoulder. "Back in ranks, soldier. *C'pnee*!"

Then, for twenty minutes, we went through calisthenics that left me as dripping hot as I had been shivering cold. Zim led it himself, doing it all with us and shouting the count. He hadn't been mussed that I could see; he wasn't breathing hard as we finished. He never led the exercises after that morning (we never saw him again before breakfast; rank hath its privileges), but he did that morning, and when it was over and we were all bushed, he led us at a trot to the mess tent, shouting at us the whole way to "Step it up! On the bounce! You're dragging your tails!"

We *always* trotted *everywhere* at Camp Arthur Currie. I never did find out who Currie was, but he must have been a trackman.

Breckinridge was already in the mess tent, with a cast on his wrist but thumb and fingers showing. I heard him say, "Naw, just a greenstick fractchuh—ah've played a whole quahtuh with wuss. But you wait—ah'll fix him."

I had my doubts. Shujumi, maybe—but not that big ape. He simply didn't know when he was outclassed. I disliked Zim from the first moment I laid eyes on him. But he had style.

Breakfast was all right—all the meals were all right; there was none of that nonsense some boarding schools have of making your life miserable at the table. If you wanted to slump down and shovel it in with both hands, nobody bothered you—which was good, as meals were practically the only time somebody wasn't riding you. The menu for breakfast wasn't anything like what I had been used to at home and the civilians that waited on us slapped the food around in a fashion that would have made Mother grow pale and leave for her room—but it was hot and it was plentiful and the cooking was okay if plain. I ate about four times what I normally do and washed it down with mug after mug of coffee with cream and lots of sugar—I would have eaten a shark without stopping to skin him.

Jenkins showed up with Corporal Bronski behind him as I was starting on seconds. They stopped for a moment at a table where Zim was eating alone, then Jenkins slumped onto a vacant stool by mine. He looked mighty seedy-pale, exhausted, and his breath rasping. I said, “Here, let me pour you some coffee.”

He shook his head.

“You better eat,” I insisted. “Some scrambled eggs—they’ll go down easily.”

“Can’t eat. Oh, that dirty, dirty so-and-so.” He began cussing out Zim in a low, almost expressionless monotone. “All I asked him was to let me go lie down and skip breakfast. Bronski wouldn’t let me—said I had to see the company commander. So I did and I *told* him I was sick, I *told* him. He just felt my cheek and counted my pulse and told me sick call was nine o’clock. Wouldn’t let me go back to my tent. Oh, that rat! I’ll catch him on a dark night, I will.”

I spooned out some eggs for him anyway and poured coffee. Presently he began to eat. Sergeant Zim got up to leave while most of us were still eating, and stopped by our table. “Jenkins.”

“Uh? Yes, sir.”

“At oh-nine-hundred muster for sick call and see the doctor.”

Jenkins’ jaw muscles twitched. He answered slowly, “I don’t need any pills—sir. I’ll get by.”

“Oh-nine-hundred. That’s an order.” He left.

Jenkins started his monotonous chant again. Finally he slowed down, took a bite of eggs and said somewhat more loudly, “I can’t help wondering what kind of a mother produced *that.* I’d just like to have a look at her, that’s all. Did he ever have a mother?”

It was a rhetorical question but it got answered. At the head of our table, several stools away, was one of the instructor-corporals. He had finished eating and was smoking and picking his teeth, simultaneously; he had evidently been listening. “Jenkins—”

“Uh—sir?”

“Don’t you know about sergeants?”

“Well … I’m learning.”

“They don’t have mothers. Just ask any trained private.” He blew smoke toward us. “They reproduce by fission … like all bacteria.”

Chapter 4

And the LORD said unto Gideon, The people that are with thee are too many … Now therefore go to, proclaim in the ears of the people, saying, Whosoever is fearful and afraid, let him return … And there returned of the people twenty and two thousand; and there remained ten thousand. And the LORD said unto Gideon, The people are yet too many; bring them down unto the water, and I will try them for thee there … so he brought down the people unto the water: and the LORD said unto Gideon, Every one that lappeth of the water with his tongue, as a dog lappeth, him shalt thou set by himself; likewise everyone that boweth down upon his knees to drink. And the number of them that drank, putting their hand to their mouth, were three hundred men …

And the LORD said unto Gideon, By the three hundred … will I save you … let all the other people go …

—Judges VII:2-7

Two weeks after we got there they took our cots away from us. That is to say that we had the dubious pleasure of folding them, carrying them four miles, and stowing them in a warehouse. By then it didn’t matter; the ground seemed much warmer and quite soft—especially when the alert sounded in the middle of the night and we had to scramble out and play soldier. Which it did about three times a week. But I could get back to sleep after one of those mock exercises at once; I had learned to sleep any place, any time—sitting up, standing up, even marching in ranks. Why, I could even sleep through evening parade standing at attention, enjoy the music without being waked by it—and wake instantly at the command to pass in review. I made a very important discovery at Camp Currie. Happiness consists in getting enough sleep. Just that, nothing more. All the wealthy, unhappy people you’ve ever met take sleeping pills; Mobile Infantrymen don’t need them. Give a cap trooper a bunk and time to sack out in it and he’s as happy as a worm in an apple—asleep.

Theoretically you were given eight full hours of sack time every night and about an hour and a half after evening chow for your own use. But in fact your night sack time was subject to alerts, to night duty, to field marches, and to acts of God and the whims of those over you, and your evenings, if not ruined by awkward squad or extra duty for minor offenses, were likely to be taken up by shining shoes, doing laundry, swapping haircuts (some of us got to be pretty fair barbers but a clean sweep like a billiard ball was acceptable and anybody can do that)—not to mention a thousand other chores having to do with equipment, person, and the demands of sergeants. For example we learned to answer morning roll call with: “Bathed!” meaning you had taken at least one bath since last reveille. A man might lie about it and get away with it (I did, a couple of times) but at least one in our company who pulled that dodge in the face of convincing evidence that he was not recently bathed got scrubbed with stiff brushes and floor soap by his squad mates while a corporal-instructor chaperoned and made helpful suggestions.

But if you didn’t have more urgent things to do after supper, you could write a letter, loaf, gossip, discuss the myriad mental and moral shortcomings of sergeants and, dearest of all, talk about the female of the species (we became convinced that there were no such creatures, just mythology created by inflamed imaginations one boy in our company claimed to have seen a girl, over at regimental headquarters; he was unanimously judged a liar and a braggart). Or you could play cards. I learned, the hard way, not to draw to an inside straight and I’ve never done it since. In fact I haven’t played cards since.

Or, if you actually did have twenty minutes of your very own, you could sleep. This was a choice very highly thought of; we were always several weeks minus on sleep.

I may have given the impression that boot camp was made harder than necessary. This is not correct.

It was made *as hard as possible* and on purpose.

It was the firm opinion of every recruit that this was sheer meanness, calculated sadism, fiendish delight of witless morons in making other people suffer.

It was not. It was too scheduled, too intellectual, too efficiently and impersonally organized to be cruelty for the sick pleasure of cruelty; it was planned like surgery for purposes as unimpassioned as those of a surgeon. Oh, I admit that some of the instructors may have enjoyed it but I don’t *know* that they did—and I *do* know (now) that the psych officers tried to weed out any bullies in selecting instructors. They looked for skilled and dedicated craftsmen to follow the art of making things as tough as possible for a recruit; a bully is too stupid, himself too emotionally involved, and too likely to grow tired of his fun and slack off, to be efficient.

Still, there may have been bullies among them. But I’ve heard that some surgeons (and not necessarily bad ones) enjoy the cutting and the blood which accompanies the humane art of surgery.

That’s what it was: surgery. Its immediate purpose was to get rid of, run right out of the outfit, those recruits who were too soft or too babyish ever to make Mobile Infantrymen. It accomplished that, in droves. (They darn near ran me out.) Our company shrank to platoon size in the first six weeks. Some of them were dropped without prejudice and allowed, if they wished, to sweat out their terms in the noncombatant services; others got Bad Conduct Discharges, or Unsatisfactory Performance Discharges, or Medical Discharges.

Usually you didn't know why a man left unless you saw him leave and he volunteered the information. But some of them got fed up, said so loudly, and resigned, forfeiting forever their chances of franchise. Some, especially the older men, simply couldn't stand the pace physically no matter how hard they tried. I remember one, a nice old geezer named Carruthers, must have been thirty-five; they carried him away in a stretcher while he was still shouting feebly that it wasn't fair!—and that he would be back.

It was sort of sad, because we liked Carruthers and he *did* try—so we looked the other way and figured we would never see him again, that he was a cinch for a medical discharge and civilian clothes. Only I *did* see him again, long after. He had refused discharge (you don't have to accept a medical) and wound up as third cook in a troop transport. He remembered me and wanted to talk old times, as proud of being an alumnus of Camp Currie as Father is of his Harvard accent —he felt that he was a little bit better than the ordinary Navy man. Well, maybe he was.

But, much more important than the purpose of carving away the fat quickly and saving the government the training costs of those who would never cut it, was the prime purpose of making as sure as was humanly possible that no cap trooper ever climbed into a capsule for a combat drop unless he was prepared for it—fit, resolute, disciplined, and skilled. If he is not, it's not fair to the Federation, it's certainly not fair to his teammates, and worst of all it's not fair to *him*.

But was boot camp more cruelly hard than was necessary?

All I can say to that is this: The next time I have to make a combat drop, I want the men on my flanks to be graduates of Camp Currie or its Siberian equivalent. Otherwise I'll refuse to enter the capsule.

But I certainly thought it was a bunch of crumby, vicious nonsense at the time. Little things—When we were there a week, we were issued undress maroons for parade to supplement the fatigues we had been wearing. (Dress and full-dress uniforms came much later.) I took my tunic back to the issue shed and complained to the supply sergeant. Since he was only a supply sergeant and rather fatherly in manner I thought of him as a semicivilian—I didn't know how, as of then, to read the ribbons on his chest or I wouldn't have dared speak to him. "Sergeant, this tunic is too large. My company commander says it fits like a tent."

He looked at the garment, didn't touch it. "Really?"

"Yeah. I want one that fits."

He still didn't stir. "Let me wise you up, sonny boy. There are just two sizes in this army—too large and too small."

"But my company commander—"

"No doubt."

"But what am I going to *do*?"

"Oh, it's a choice you want! Well, I've got that in stock—new issue, just today. Mmm … tell you what I'll do. Here's a needle and I'll even give you a spool of thread. You won't need a pair of scissors; a razor blade is better. Now you tight 'em plenty across the hips but leave cloth to loose 'em again across the shoulders; you'll need it later."

Sergeant Zim's only comment on my tailoring was: "You can do better than that. Two hours extra duty."

So I did better than that by next parade.

Those first six weeks were all hardening up and hazing, with lots of parade drill and lots of route march. Eventually, as files dropped out and went home or elsewhere, we reached the point where we could do fifty miles in ten hours on the level—which is good mileage for a good horse in case you've never used your legs. We rested, not by stopping, but by changing pace, slow march, quick march, and trot. Sometimes we went out the full distance, bivouacked and ate field rations, slept in sleeping bags and marched back the next day.

One day we started out on an ordinary day's march, no bed bags on our shoulders, no rations. When we didn't stop for lunch, I wasn't surprised, as I had already learned to sneak sugar and hard bread and such out of the mess tent and conceal it about my person, but when we kept on marching away from camp in the afternoon I began to wonder. But I had learned not to ask silly questions.

We halted shortly before dark, three companies, now somewhat abbreviated. We formed a battalion parade and marched through it, without music, guards were mounted, and we were dismissed. I immediately looked up Corporal-Instructor Bronski because he was a little easier to deal with than the others … and because I felt a certain amount of responsibility; I happened to be, at the time, a recruit-corporal myself. These boot chevrons didn't mean much—mostly the privilege of being chewed out for whatever your squad did as well as for what you did yourself—and they could vanish as quickly as they appeared. Zim had tried out all of the older men as temporary noncoms first and I had inherited a brassard with chevrons on it a couple of days before when our squad leader had folded up and gone to hospital.

I said, "Corporal Bronski, what's the straight word? When is chow call?"

He grinned at me. "I've got a couple of crackers on me. Want me to split 'em with you?"

"Huh? Oh, no, sir. Thank you." (I had considerably more than a couple of crackers; I was learning.) “No chow call?”

“They didn’t tell me either, sonny. But I don’t see any copters approaching. Now if I was you, I’d round up my squad and figure things out. Maybe one of you can hit a jack rabbit with a rock.”

“Yes, sir. But—Well, are we staying here all night? We don’t have our bedrolls.”

His eye brows shot up. “No bedrolls? Well, I do declare!” He seemed to think it over. “Mmm … ever see sheep huddle together in a snowstorm?”

“Uh, no, sir.”

“Try it. They don’t freeze, maybe you won’t. Or, if you don’t care for company, you might walk around all night. Nobody’ll bother you, as long as you stay inside the posted guards. You won’t freeze if you keep moving. Of course you may be a little tired tomorrow.” He grinned again.

I saluted and went back to my squad. We divvied up, share and share alike—and I came out with less food than I had started; some of those idiots either hadn’t sneaked out anything to eat, or had eaten all they had while we marched. But a few crackers and a couple of prunes will do a lot to quiet your stomach’s sounding alert.

The sheep trick works, too; our whole section, three squads, did it together. I don’t recommend it as a way to sleep; you are either in the outer layer, frozen on one side and trying to worm your way inside, or you are inside, fairly warm but with everybody else trying to shove his elbows, feet, and halitosis on you. You migrate from one condition to the other all night long in sort of a Brownian movement, never quite waking up and never really sound asleep. All this makes a night about a hundred years long.

We turned out at dawn to the familiar shout of: “Up you come! On the bounce!” encouraged by instructors’ batons applied smartly on fundaments sticking out of the piles … and then we did setting-up exercises. I felt like a corpse and didn’t see how I could touch my toes. But I did, though it hurt, and twenty minutes later when we hit the trail I merely felt elderly. Sergeant Zim wasn’t even mussed and somehow the scoundrel had managed to shave.

The Sun warmed our backs as we marched and Zim started us singing, oldies at first, like “*Le Regiment de Sambre et Meuse*” and “*Caissons*” and “*Halls of Montezuma*” and then our own “*Cap Trooper’s Polka*” which moves you into quickstep and pulls you on into a trot. Sergeant Zim couldn’t carry a tune in a sack; all he had was a loud voice. But Breckinridge had a sure, strong lead and could hold the rest of us in the teeth of Zim’s terrible false notes. We all felt cocky and covered with spines.

But we didn’t feel cocky fifty miles later. It had been a long night;

it was an endless day—and Zim chewed us out for the way we looked on parade and several boots got gigged for failing to shave in the nine whole minutes between the time we fell out after the march and fell back in again for parade. Several recruits resigned that evening and I thought about it but didn't because I had those silly boot chevrons and hadn't been busted yet.

That night there was a two-hour alert.

But eventually I learned to appreciate the homey luxury of two or three dozen warm bodies to snuggle up to, because twelve weeks later they dumped me down raw naked in a primitive area of the Canadian Rockies and I had to make my way forty miles through mountains. I made it—and hated the Army every inch of the way.

I wasn't in too bad shape when I checked in, though. A couple of rabbits had failed to stay as alert as I was, so I didn't go entirely hungry … nor entirely naked; I had a nice warm thick coat of rabbit fat and dirt on my body and moccasins on my feet—the rabbits having no further use for their skins. It's amazing what you can do with a flake of rock if you have to—I guess our cave-man ancestors weren't such dummies as we usually think.

The others made it, too, those who were still around to try and didn't resign rather than take the test—all except two boys who died trying. Then we all went back into the mountains and spent thirteen days finding them, working with copters overhead to direct us and all the best communication gear to help us and our instructors in powered command suits to supervise and to check rumors—because the Mobile Infantry doesn't abandon its own while there is any thin shred of hope.

Then we buried them with full honors to the strains of "This Land Is Ours" and with the posthumous rank of PFC, the first of our boot regiment to go that high—because a cap trooper isn't necessarily expected to stay alive (dying is part of his trade) … but they care a lot about how you die. It has to be heads up, on the bounce, and still trying.

Breckinridge was one of them; the other was an Aussie boy I didn't know. They weren't the first to die in training; they weren't the last.

Chapter 5

He's bound to be guilty 'r he
wouldn't be here!
Starboard gun … FIRE!

Shooting's too good for 'im, kick
the louse out!
Port gun … FIRE!

—Ancient chanty used to time saluting guns

But that was after we had left Camp Currie and a lot had happened in between. Combat training, mostly—combat drill and combat exercises and combat maneuvers, using everything from bare hands to simulated nuclear weapons. I hadn't known there were so many different ways to fight. Hands and feet to start with—and if you think those aren't weapons you haven't seen Sergeant Zim and Captain Frankel, our battalion commander, demonstrate *la savate*, or had little Shujumi work you over with just his hands and a toothy grin—Zim made Shujumi an instructor for that purpose at once and required us to take his orders, although we didn't have to salute him and say "sir."

As our ranks thinned down Zim quit bothering with formations himself, except parade, and spent more and more time in personal instruction, supplementing the corporal-instructors. He was sudden death with anything but he loved knives, and made and balanced his own, instead of using the perfectly good general-issue ones. He mellowed quite a bit as a personal teacher, too, becoming merely unbearable instead of downright disgusting—he could be quite patient with silly questions.

Once, during one of the two-minute rest periods that were scattered sparsely through each day's work, one of the boys—a kid named Ted Hendrick—asked, "Sergeant? I guess this knife throwing is fun … but why do we have to learn it? What possible use is it?"

"Well," answered Zim, "suppose all you have is a knife? Or maybe not even a knife? What do you do? Just say your prayers and die? Or wade in and make him buy it anyhow? Son, this is real—it's not a checker game you can concede if you find yourself too far behind."

"But that's just what I mean, sir. Suppose you aren't armed at all? Or just one of these toadstickers, say? And the man you're up against has all sorts of dangerous weapons? There's nothing you can do about it; he's got you licked on showdown."

Zim said almost gently, “You’ve got it all wrong, son. There’s no such thing as a ‘dangerous weapon.’ ”

“Huh? Sir?”

“There are no dangerous weapons; there are only dangerous men. We’re trying to teach you to be dangerous—to the enemy. Dangerous even without a knife. Deadly as long as you still have one hand or one foot and are still alive. If you don’t know what I mean, go read ‘Horatius at the Bridge’ or ‘The Death of the Bon Homme Richard’; they’re both in the Camp library. But take the case you first mentioned; I’m you and all you have is a knife. That target behind me —the one you’ve been missing, number three—is a sentry, armed with everything but an H-bomb. You’ve got to get him … quietly, at once, and without letting him call for help.” Zim turned slightly—*thunk*!—a knife he hadn’t even had in his hand was quivering in the center of target number three. “You see? Best to carry two knives—but get him you must, even barehanded.”

“Uh—”

“Something still troubling you? Speak up. That’s what I’m here for, to answer your questions.”

“Uh, yes, sir. You said the sentry didn’t have any H-bomb. But he does have an H-bomb; that’s just the point. Well, at least we have, if we’re the sentry … and any sentry we’re up against is likely to have them, too. I don’t mean the sentry, I mean the side he’s on.”

“I understood you.”

“Well … you see, sir? If we can use an H-bomb—and, as you said, it’s no checker game; it’s real, it’s war and nobody is fooling around—isn’t it sort of ridiculous to go crawling around in the weeds, throwing knives and maybe getting yourself killed … and even losing the war … when you’ve got a real weapon you can use to win? What’s the point in a whole lot of men risking their lives with obsolete weapons when one professor type can do so much more just by pushing a button?”

Zim didn’t answer at once, which wasn’t like him at all. Then he said softly, “Are you happy in the Infantry, Hendrick? You can resign, you know.” Hendrick muttered something; Zim said, “Speak up!”

“I’m not itching to resign, sir. I’m going to sweat out my term.”

“I see. Well, the question you asked is one that a sergeant isn’t really qualified to answer … and one that you shouldn’t ask me. You’re supposed to know the answer before you join up. Or you should. Did your school have a course in History and Moral Philosophy?”

“What? Sure—yes, sir.”

“Then you’ve heard the answer. But I’ll give you my own—unofficial—views on it. If you wanted to teach a baby a lesson, would you cut its head off?”

“Why … no, sir!”

“Of course not. You’d paddle it. There can be circumstances when it’s just as foolish to hit an enemy city with an H-bomb as it would be to spank a baby with an ax. War is not violence and killing, pure and simple; war is controlled violence, for a purpose. The purpose of war is to support your government’s decisions by force. The purpose is never to kill the enemy just to be killing him … but to make him do what you want him to do. Not killing … but controlled and purposeful violence. But it’s not your business or mine to decide the purpose or the control. It’s never a soldier’s business to decide when or where or how—or why—he fights; that belongs to the statesmen and the generals. The statesmen decide why and how much; the generals take it from there and tell us where and when and how. We supply the violence; other people—‘older and wiser heads,’ as they say—supply the control. Which is as it should be. That’s the best answer I can give you. If it doesn’t satisfy you, I’ll get you a chit to go talk to the regimental commander. If he can’t convince you—then go home and be a civilian! Because in that case you will certainly never make a soldier.”

Zim bounced to his feet. “I think you’ve kept me talking just to goldbrick. Up you come, soldiers! On the bounce! Man stations, on target—Hendrick, you first. This time I want you to throw that knife south of you. South, get it? Not north. That target is due south of you and I want that knife to go in a general southerly direction, at least. I know you won’t hit the target but see if you can’t scare it a little. Don’t slice your ear off, don’t let go of it and cut somebody behind you—just keep what tiny mind you have fixed on the idea of ‘south’! Ready on target! *Let fly*!”

Hendrick missed it again.

We trained with sticks and we trained with wire (lots of nasty things you can improvise with a piece of wire) and we learned what can be done with really modern weapons and how to do it and how to service and maintain the equipment—simulated nuclear weapons and infantry rockets and various sorts of gas and poison and incendiary and demolition. As well as other things maybe best not discussed. But we learned a lot of “obsolete” weapons, too. Bayonets on dummy guns for example, and guns that weren’t dummies, too, but were almost identical with the infantry rifle of the XXth century—much like the sporting rifles used in hunting game, except that we fired nothing but solid slugs, alloyjacketed lead bullets, both at targets on measured ranges and at surprise targets on booby-trapped skirmish runs. This was supposed to prepare us to learn to use any aimed weapon and to train us to be on the bounce, alert, ready for anything. Well. I suppose it did. I'm pretty sure it did.

We used these rifles in field exercises to simulate a lot of deadlier and nastier aimed weapons, too. We used a lot of simulation; we had to. An "explosive" bomb or grenade, against matériel or personnel, would explode just enough to put out a lot of black smoke; another sort of gave off a gas that would make you sneeze and weep that told you that you were dead or paralyzed … and was nasty enough to make you careful about antigas precautions, to say nothing of the chewing out you got if you were caught by it.

We got still less sleep; more than half the exercises were held at night, with snoopers and radar and audio gear and such.

The rifles used to simulate aimed weapons were loaded with blanks except one in five hundred rounds at random, which was a real bullet. Dangerous? Yes and no. It's dangerous just to be alive … and a nonexplosive bullet probably won't kill you unless it hits you in the head or the heart and maybe not then. What that one-in-five-hundred "for real" did was to give us a deep interest in taking cover, especially as we knew that some of the rifles were being fired by instructors who were crack shots and actually trying their best to hit you—if the round happened not to be a blank. They assured us that they would not intentionally shoot a man in the head … but accidents do happen.

This friendly assurance wasn't very reassuring. That 500th bullet turned tedious exercises into large-scale Russian roulette; you stop being bored the very first time you hear a slug go *wheet*! past your ear before you hear the crack of the rifle.

But we did slack down anyhow and word came down from the top that if we didn't get on the bounce, the incidence of real ones would be changed to one in a hundred … and if that didn't work, to one in fifty. I don't know whether a change was made or not—no way to tell—but I do know we tightened up again, because a boy in the next company got creased across his buttocks with a live one, producing an amazing scar and a lot of half-witty comments and a renewed interest by all hands in taking cover. We laughed at this kid for getting shot where he did … but we all knew it could have been his head or our *own* heads.

The instructors who were not firing rifles did not take cover. They put on white shirts and walked around upright with their silly canes, apparently calmly certain that even a recruit would not intentionally shoot an instructor—which may have been overconfidence on the part of some of them. Still, the chances were five hundred to one that even a shot aimed with murderous intent would not be live and the safety factor increased still higher because the recruit probably couldn't shoot that well anyhow. A rifle is not an easy weapon; it's got no target-seeking qualities at all—I understand that even back in the days when wars were fought and decided with just such rifles it used to take several thousand fired shots to average killing one man. This seems impossible but the military histories agree that it is true—apparently most shots weren't really aimed but simply acted to force the enemy to keep his head down and interfere with his shooting.

In any case we had no instructors wounded or killed by rifle fire. No trainees were killed, either, by rifle bullets; the deaths were all from other weapons or things—some of which could turn around and bite you if you didn't do things by the book. Well, one boy did manage to break his neck taking cover too enthusiastically when they first started shooting at him—but no bullet touched him.

However, by a chain reaction, this matter of rifle bullets and taking cover brought me to my lowest ebb at Camp Currie. In the first place I had been busted out of my boot chevrons, not over what I did but over something one of my squad did when I wasn't even around … which I pointed out. Bronski told me to button my lip. So I went to see Zim about it. He told me coldly that I was responsible for what my men did, regardless … and tacked on six hours of extra duty besides busting me for having spoken to him about it without Bronski's permission. Then I got a letter that upset me a lot; my mother finally wrote to me. Then I sprained a shoulder in my first drill with powered armor (they've got those practice suits rigged so that the instructor can cause casualties in the suit at will, by radio control; I got dumped and hurt my shoulder) and this put me on light duty with too much time to think at a time when I had many reasons, it seemed to me, to feel sorry for myself.

Because of "light duty" I was orderly that day in the battalion commander's office. I was eager at first, for I had never been there before and wanted to make a good impression. I discovered that Captain Frankel didn't want zeal; he wanted me to sit still, say nothing, and not bother him. This left me time to sympathize with myself, for I didn't dare go to sleep.

Then suddenly, shortly after lunch, I wasn't a bit sleepy; Sergeant Zim came in, followed by three men. Zim was smart and neat as usual but the expression on his face made him look like Death on a pale horse and he had a mark on his right eye that looked as if it might be shaping up into a shiner—which was impossible, of course. Of the other three, the one in the middle was Ted Hendrick. He was dirty—well, the company had been on a field exercise; they don't scrub those prairies and you spend a lot of your time snuggling up to the dirt. But his lip was split and there was blood on his chin and on his shirt and his cap was missing. He looked wild-eyed.

The men on each side of him were boots. They each had rifles; Hendrick did not. One of them was from my squad, a kid named

Leivy. He seemed excited and pleased, and slipped me a wink when nobody was looking.

Captain Frankel looked surprised. “What is this, Sergeant?”

Zim stood frozen straight and spoke as if he were reciting something by rote. “Sir, H Company Commander reports to the Battalion Commander. Discipline. Article nine-one-ohseven. Disregard of tactical command and doctrine, the team being in simulated combat. Article nine-one-two-oh. Disobedience of orders, same conditions.”

Captain Frankel looked puzzled. “You are bringing this to me, Sergeant? Officially?”

I don’t see how a man can manage to look as embarrassed as Zim looked and still have no expression of any sort in his face or voice. “Sir. If the Captain pleases. The man refused administrative discipline. He insisted on seeing the Battalion Commander.”

“I see. A bedroll lawyer. Well, I still don’t understand it, Sergeant, but technically that’s his privilege. What was the tactical command and doctrine?”

“A ‘freeze,’ sir.” I glanced at Hendrick, thinking: Oh, oh, he’s going to catch it. In a “freeze” you hit dirt, taking any cover you can, fast, and then freeze don’t move at all, not even twitch an eyebrow, until released. Or you can freeze when you’re already in cover. They tell stories about men who had been hit while in freeze … and had died slowly but without ever making a sound or a move.

Frankel’s brows shot up. “Second part?”

“Same thing, sir. After breaking freeze, failing to return to it on being so ordered.”

Captain Frankel looked grim. “Name?”

Zim answered. “Hendrick, T. C., sir. Recruit Private R-P-seven-nine-six-oh-nine-two-four.”

“Very well. Hendrick, you are deprived of all privileges for thirty days and restricted to your tent when not on duty or at meals, subject only to sanitary necessities. You will serve three hours extra duty each day under the Corporal of the Guard, one hour to be served just before taps, one hour just before reveille, one hour at the time of the noonday meal and in place of it. Your evening meal will be bread and water—as much bread as you can eat. You will serve ten hours extra duty each Sunday, the time to be adjusted to permit you to attend divine services if you so elect.”

(I thought: Oh my! He threw the book.)

Captain Frankel went on: “Hendrick, the only reason you are getting off so lightly is that I am not permitted to give you any more than that without convening a courtmartial … and I don’t want to spoil your company’s record. Dismissed.” He dropped his eyes back to the papers on his desk, the incident already forgotten—

—and Hendrick yelled, "You didn't hear my side of it!"

The Captain looked up. "Oh. Sorry. You have a side?"

"You darn right I do! Sergeant Zim's got it in for me! He's been riding me, riding me, riding me, all day long from the time I got here! He—"

"That's his job," the Captain said coldly. "Do you deny the two charges against you?"

"No, but—*He didn't tell you I was lying on an anthill*!"

Frankel looked disgusted. "Oh. So you would get yourself killed and perhaps your teammates as well because of a few little ants?"

"Not 'just a few'—there were hundreds of 'em. Stingers."

"So? Young man, let me put you straight. Had it been a nest of rattlesnakes you would still have been expected—and required—to freeze." Frankel paused. "Have you anything at all to say in your own defense?"

Hendrick's mouth was open. "I certainly do! He hit me! *He laid hands on me*! The whole bunch of 'em are always strutting around with those silly batons, whackin' you across the fanny, punchin' you between the shoulders and tellin' you to brace up and I put up with it. But he hit me with his hands—he knocked me down to the ground and yelled, '*Freeze*! you stupid jackass!' How about *that*?"

Captain Frankel looked down at his hands, looked up again at Hendrick. "Young man, you are under a misapprehension very common among civilians. You think that your superior officers are not permitted to 'lay hands on you,' as you put it. Under purely social conditions, that is true—say if we happened to run across each other in a theater or a shop, I would have no more right, as long as you treated me with the respect due my rank, to slap your face than you have to slap mine. But in line of duty the rule is entirely different—"

The Captain swung around in his chair and pointed at some looseleaf books. "There are the laws under which you live. You can search every article in those books, every courtmartial case which has arisen under them, and you will not find *one word* which says, or implies, that your superior officer may not 'lay hands on you' or strike you in any other manner in line of duty. Hendrick, I could break your jaw … and I simply would be responsible to my own superior officers as to the appropriate necessity of the act. But I would not be responsible to *you*. I could do more than that. There are circumstances under which a superior officer, commissioned or not, is not only permitted but *required* to kill an officer or a man under him, without delay and perhaps without warning—and, far from being punished, be commended. To put a stop to pusillanimous conduct in the face of the enemy, for example."

The Captain tapped on his desk. “Now about those batons—They have two uses. First, they mark the men in authority. Second, we expect them to be used on you, to touch you up and keep you on the bounce. You can’t possibly be hurt with one, not the way they are used; at most they sting a little. But they save thousands of words. Say you don’t turn out on the bounce at reveille. No doubt the duty corporal could wheedle you, say ‘pretty please with sugar on it,’ inquire if you’d like breakfast in bed this morning—if we could spare one career corporal just to nursemaid you. We can’t, so he gives your bedroll a whack and trots on down the line, applying the spur where needed. Of course he could simply kick you, which would be just as legal and nearly as effective. But the general in charge of training and discipline thinks that it is more dignified, both for the duty corporal and for you, to snap a late sleeper out of his fog with the impersonal rod of authority. And so do I. Not that it matters what you or I think about it; this is the way we do it.”

Captain Frankel sighed. “Hendrick, I have explained these matters to you because it is useless to punish a man unless he knows why he is being punished. You’ve been a bad boy—I say ‘boy’ because you quite evidently aren’t a man yet, although we’ll keep trying—a surprisingly bad boy in view of the stage of your training. Nothing you have said is any defense, nor even any mitigation; you don’t seem to know the score nor have any idea of your duty as a soldier. So tell me in your own words why you feel mistreated; I want to get you straightened out. There might even be something in your favor, though I confess that I cannot imagine what it could be.”

I had sneaked a look or two at Hendrick’s face while the Captain was chewing him out—somehow his quiet, mild words were a worse chewing-out than any Zim had ever given us. Hendrick’s expression had gone from indignation to blank astonishment to sullenness.

“Speak up!” Frankel added sharply.

“Uh … well, we were ordered to freeze and I hit the dirt and I found I was on this anthill. So I got to my knees, to move over a couple of feet, and I was hit from behind and knocked flat and he yelled at me—and I bounced up and popped him one and he—”

“STOP!” Captain Frankel was out of his chair and stand—ten feet tall, though he’s hardly taller than I am. He stared at Hendrick.

“You … *struck* … your … company commander?”

“Huh? I said so. But he hit me first. From behind, I didn’t even see him. I don’t take that off of anybody. I popped him and then he hit me again and then—”

“Silence!”

Hendrick stopped. Then he added, “I just want out of this lousy outfit.”

"I think we can accommodate you," Frankel said icily. "And quickly, too."

"Just gimme a piece of paper, I'm resigning."

"One moment. Sergeant Zim."

"Yes, sir." Zim hadn't said a word for a long time. He just stood, eyes front and rigid as a statue, nothing moving but his twitching jaw muscles. I looked at him now and saw that it certainly was a shiner—a beaut. Hendrick must have caught him just right. But he hadn't said anything about it and Captain Frankel hadn't asked—maybe he had just assumed Zim had run into a door and would explain it if he felt like it, later.

"Have the pertinent articles been published to your company, as required?"

"Yes, sir. Published and logged, every Sunday morning"

"I know they have. I asked simply for the record."

Just before church call every Sunday they lined us up and read aloud the disciplinary articles out of the Laws and Regulations of the Military Forces. They were posted on the bulletin board, too, outside the orderly tent. Nobody paid them much mind—it was just another drill; you could stand still and sleep through it. About the only thing we noticed, if we noticed anything, was what we called "the thirtyone ways to crash land." After all, the instructors see to it that you soak up all the regulations you need to know, through your skin. The "crash landings" were a wornout joke, like "reveille oil" and "tent jacks" … they were the thirtyone capital offenses. Now and then somebody boasted, or accused somebody else, of having found a thirty-second way—always something preposterous and usually obscene.

"*Striking a Superior Officer*—!"

It suddenly wasn't amusing any longer. Popping Zim? *Hang* a man for that? Why, almost everybody in the company had taken a swing at Sergeant Zim and some of us had even landed … when he was instructing us in hand-to-hand combat. He would take us on after the other instructors had worked us over and we were beginning to feel cocky and pretty good at it—then he would put the polish on. Why, shucks, I once saw Shujumi knock him unconscious. Bronski threw water on him and Zim got up and grinned and shook hands—and threw Shujumi right over the horizon.

Captain Frankel looked around, motioned at me. "You. Flash regimental headquarters."

I did it, all thumbs, stepped back when an officer's face came on and let the Captain take the call. "Adjutant," the face said.

Frankel said crisply, "Second Battalion Commander's respects to the Regimental Commander. I request and require an officer to sit as a court."

The face said, “When do you need him, Ian?”

“As quickly as you can get him here.”

“Right away. I’m pretty sure Jake is in his HQ. Article and name?”

Captain Frankel identified Hendrick and quoted an article number. The face in the screen whistled and looked grim. “On the bounce, Ian. If I can’t get Jake, I’ll be over myself—just as soon as I tell the Old Man.”

Captain Frankel turned to Zim. “This escort—are they witnesses?”

“Yes, sir.”

“Did his section leader see it?”

Zim barely hesitated. “I think so, sir.”

“Get him. Anybody out that way in a powered suit?”

“Yes, sir.”

Zim used the phone while Frankel said to Hendrick, “What witnesses do you wish to call in your defense?”

“Huh? I don’t need any witnesses, he knows what he did! Just hand me a piece of paper—I’m getting out of here.”

“All in good time.”

In very fast time, it seemed to me. Less than five minutes later Corporal Jones came bouncing up in a command suit, carrying Corporal Mahmud in his arms. He dropped Mahmud and bounced away just as Lieutenant Spieksma came in. He said, “Afternoon, Cap’n. Accused and witnesses here?”

“All set. Take it, Jake.”

“Recorder on?”

“It is now.”

“Very well. Hendrick, step forward.” Hendrick did so, looking puzzled and as if his nerve was beginning to crack. Lieutenant Spieksma said briskly: “Field CourtMartial, convened by order of Major F. X. Malloy, commanding Third Training Regiment, Camp Arthur Currie, under General Order Number Four, issued by the Commanding General, Training and Discipline Command, pursuant to the Laws and Regulations of the Military Forces, Terran Federation. Remanding officer: Captain Ian Frankel, M.I., assigned to and commanding Second Battalion, Third Regiment. The Court: Lieutenant Jacques Spieksma, M.I., assigned to and commanding First Battalion, Third Regiment. Accused: Hendrick, Theodore C., Recruit Private RP7960924. Article 9080. Charge: Striking his superior officer, the Terran Federation then being in a state of emergency.”

The thing that got me was how *fast* it went. I found myself suddenly appointed an “officer of the court” and directed to “remove” the witnesses and have them ready. I didn’t know how I would “remove” Sergeant Zim if he didn’t feel like it, but he gathered Mahmud and the two boots up by eye and they all went outside, out of earshot. Zim separated himself from the others and simply waited; Mahmud sat down on the ground and rolled a cigarette—which he had to put out; he was the first one called. In less than twenty minutes all three of them had testified, all telling much the same story Hendrick had. Zim wasn't called at all.

Lieutenant Spieksma said to Hendrick, "Do you wish to cross-examine the witnesses? The Court will assist you, if you so wish."

"No."

"Stand at attention and say 'sir' when you address the Court."

"No, sir." He added, "I want a lawyer."

"The Law does not permit counsel in field courts-martial. Do you wish to testify in your own defense? You are not required to do so and, in view of the evidence thus far, the Court will take no judicial notice if you choose not to do so. But you are warned that any testimony that you give may be used against you and that you will be subject to cross-examination."

Hendrick shrugged. "I haven't anything to say. What good would it do me?"

"The Court repeats: Will you testify in your own defense?"

"Uh, no, sir."

"The Court must demand of you one technical question. Was the article under which you are charged published to you *before* the time of the alleged offense of which you stand accused? You may answer yes, or no, or stand mute—but you are responsible for your answer under Article 9167 which relates to perjury."

The accused stood mute.

"Very well, the Court will reread the article of the charge aloud to you and again ask you that question. 'Article 9080: Any person in the Military Forces who strikes or assaults, or attempts to strike or assault —"

"Oh, I suppose they did. They read a lot of that stuff, every Sunday morning—a whole long list of things you couldn't do."

"Was or was not that particular article read to you?"

"Uh … yes, sir. It was."

"Very well. Having declined to testify, do you have any statement to make in mitigation or extenuation?"

"Sir?"

"Do you want to tell the Court anything about it? Any circumstance which you think might possibly affect the evidence already given? Or anything which might lessen the alleged offense? Such things as being ill, or under drugs or medication. You are not under oath at this point; you may say anything at all which you think may help you. What the Court is trying to find out is this: Does anything about this matter strike you as being unfair? If so, why?"

"Huh? Of course it is! Everything about it is unfair! He hit me first! You heard 'em!—he hit me first!"

"Anything more?"

"Huh? No, sir. Isn't that enough?"

"The trial is completed. Recruit Private Theodore C. Hendrick, stand forth!" Lieutenant Spieksma had been standing at attention the whole time; now Captain Frankel stood up. The place suddenly felt chilly.

"Private Hendrick, you are found guilty as charged."

My stomach did a flipflop. They were going to do it to him … they were going to do the "Danny Deever" to Ted Hendrick. And I had eaten breakfast beside him just this morning.

"The Court sentences you," he went on, while I felt sick, "to ten lashes and Bad Conduct Discharge."

Hendrick gulped. "I want to resign!"

"The Court will not permit you to resign. The Court wishes to add that your punishment is light simply because this Court possesses no jurisdiction to assign greater punishment. The authority which remanded you specified a field courtmartial—why it so chose, this Court will not speculate. But had you been remanded for general courtmartial, it seems certain that the evidence before this Court would have caused a general court to sentence you to hang by the neck until dead. You are very lucky—and the remanding authority has been most merciful." Lieutenant Spieksma paused, then went on, "The sentence will be carried out at the earliest hour after the convening authority has reviewed and approved the record, if it does so approve. Court is adjourned. Remove and confine him."

The last was addressed to me, but I didn't actually have to do anything about it, other than phone the guard tent and then get a receipt for him when they took him away.

At afternoon sick call Captain Frankel took me off orderly and sent me to see the doctor, who sent me back to duty. I got back to my company just in time to dress and fall in for parade—and to get gigged by Zim for "spots on uniform." Well, he had a bigger spot over one eye but I didn't mention it.

Somebody had set up a big post in the parade ground just back of where the adjutant stood. When it came time to publish the orders, instead of "routine order of the day" or other trivia, they published Hendrick's courtmartial.

Then they marched him out, between two armed guards, with his hands cuffed together in front of him.

I had never seen a flogging. Back home, while they do it in public of course, they do it back of the Federal Building—and Father had given me strict orders to stay away from there. I tried disobeying him on it once… but it was postponed and I never tried to see one again.

Once is too many.

The guards lifted his arms and hooked the manacles over a big hook high up on the post. Then they took his shirt off and it turned out that it was fixed so that it could come off and he didn't have an undershirt. The adjutant said crisply, "Carry out the sentence of the Court."

A corporal-instructor from some other battalion stepped forward with the whip. The Sergeant of the Guard made the count.

It's a slow count, five seconds between each one and it seems much longer. Ted didn't let out a peep until the third, then he sobbed.

The next thing I knew I was staring up at Corporal Bronski. He was slapping me and looking intently at me. He stopped and asked, "Okay now? All right, back in ranks. On the bounce; we're about to pass in review." We did so and marched back to our company areas. I didn't eat much dinner but neither did a lot of them.

Nobody said a word to me about fainting. I found out later that I wasn't the only one—a couple of dozen of us had passed out.

Chapter 6

What we obtain too cheap, we esteem too lightly … it would be strange indeed if so celestial an article as FREEDOM should not be highly rated.
—Thomas Paine

It was the night after Hendrick was kicked out that I reached my lowest slump at Camp Currie. I couldn't sleep—and you have to have been through boot camp to understand just how far down a recruit has to sink before that can happen. But I hadn't had any real exercise all day so I wasn't physically tired, and my shoulder still hurt even though I had been marked "duty," and I had that letter from my mother preying on my mind, and every time I closed my eyes I would hear that crack! and see Ted slump against the whipping post.

I wasn't fretted about losing my boot chevrons. That no longer mattered at all because I was ready to resign, determined to. If it hadn't been the middle of the night and no pen and paper handy, I would have done so right then.

Ted had made a bad mistake, one that lasted all of half a second. And it really had been just a mistake, too, because, while he hated the outfit (who liked it?), he had been trying to sweat it out and win his franchise; he meant to go into politics—he talked a lot about how, when he got his citizenship, "There will be some changes made—you wait and see."

Well, he would never be in public office now; he had taken his finger off his number for a single instant and he was through.

If it could happen to him, it could happen to me. Suppose I slipped? Next day or next week? Not even allowed to resign … but drummed out with my back striped.

Time to admit that I was wrong and Father was right, time to put in that little piece of paper and slink home and tell Father that I was ready to go to Harvard and then go to work in the business—if he would still let me. Time to see Sergeant Zim, first thing in the morning, and tell him that I had had it. But not until morning, because you don't wake Sergeant Zim except for something you're certain that *he* will class as an emergency—believe me, you don't! Not Sergeant Zim.

Sergeant Zim—

He worried me as much as Ted's case did. After the courtmartial was over and Ted had been taken away, he stayed behind and said to Captain Frankel, "May I speak with the Battalion Commander, sir?"

"Certainly. I was intending to ask you to stay behind for a word. Sit down."

Zim flicked his eyes my way and the Captain looked at me and I didn't have to be told to get out; I faded. There was nobody in the outer office, just a couple of civilian clerks. I didn't dare go outside because the Captain might want me; I found a chair back of a row of files and sat down.

I could hear them talking, through the partition I had my head against. BHQ was a building rather than a tent, since it housed permanent communication and recording equipment, but it was a "minimum field building," a shack; the inner partitions weren't much. I doubt if the civilians could hear as they each were wearing transcriber phones and were bent over typers—besides, they didn't matter. I didn't mean to eavesdrop. Uh, well, maybe I did.

Zim said: "Sir, I request transfer to a combat team."

Frankel answered: "I can't hear you, Charlie. My tin ear is bothering me again."

Zim: "I'm quite serious, sir. This isn't my sort of duty."

Frankel said testily, "Quit bellyaching your troubles to me, Sergeant. At least wait until we've disposed of duty matters. What in the world happened?"

Zim said stiffly, "Captain, that boy doesn't rate ten lashes."

Frankel answered, "Of course he doesn't. You know who goofed—and so do I."

"Yes, sir. I know."

"Well? You know even better than I do that these kids are wild animals at this stage. You know when it's safe to turn your back on them and when it isn't. You know the doctrine and the standing orders about article nine-oh-eight-oh—you must *never* give them a chance to violate it. Of course some of them are going to try it—if they weren't aggressive they wouldn't be material for the M.I. They're docile in ranks; it's safe enough to turn your back when they're eating, or sleeping, or sitting on their tails and being lectured. But get them out in the field in a combat exercise, or anything that gets them keyed up and full of adrenaline, and they're as explosive as a hatful of mercury fulminate. You know that, all you instructors know that; you're trained—trained to watch for it, trained to snuff it out before it happens. Explain to me how it was possible for an untrained recruit to hang a mouse on your eye? He should never have laid a hand on you; you should have knocked him cold when you saw what he was up to. So why weren't you on the bounce? Are you slowing down?"

"I don't know," Zim answered slowly. "I guess I must be."

"Hmm! If true, a combat team is the last place for you. But it's not true. Or wasn't true the last time you and I worked out together, three days ago. So what slipped?"

Zim was slow in answering. "I think I had him tagged in my mind as one of the safe ones."

"There are no such."

"Yes, sir. But he was so earnest, so doggedly determined to sweat it out—he didn't have any aptitude but he kept on trying—that I must have done that, subconsciously." Zim was silent, then added, "I guess it was because I liked him."

Frankel snorted. "An instructor can't afford to like a man."

"I know it, sir. But I do. They're a nice bunch of kids. We've dumped all the real twerps by now—Hendrick's only shortcoming, aside from being clumsy, was that he thought he knew all the answers. I didn't mind that; I knew it all at that age myself. The twerps have gone home and those that are left are eager, anxious to please, and on the bounce—as cute as a litter of collie pups. A lot of them will make soldiers."

"So *that* was the soft spot. You liked him … so you failed to clip him in time. So he winds up with a court and the whip and a B. C. D. Sweet."

Zim said earnestly, "I wish to heaven there were some way for me to take that flogging myself, sir."

"You'd have to take your turn, I outrank you. What do you think I've been wishing the past hour? What do you think I was afraid of from the moment I saw you come in here sporting a shiner? I did my best to brush it off with administrative punishment and the young fool wouldn't let well enough alone. But I never thought he would be crazy enough to blurt out that he had hung one on you—he's *stupid*; you should have eased him out of the outfit weeks ago … instead of nursing him along until he got into trouble. But blurt it out he did, to me, in front of witnesses, forcing me to take of official notice of it—and that licked us. No way to get it off the record, no way to avoid a court … just go through the whole dreary mess and take our medicine, and wind up with one more civilian who'll be against us the rest of his days. Because he has to be flogged; neither you nor I can take it for him, even though the fault was ours. Because the regiment has to see what happens when nine-oh-eight-oh is violated. Our fault … but his lumps."

"My fault, Captain. That's why I want to be transferred. Uh, sir, I think it's best for the outfit."

"You do, eh? But I decide what's best for my battalion, not you, Sergeant. Charlie, who do you think pulled your name out of the hat? And why? Think back twelve years. You were a corporal, remember?

Where were you?"

"Here, as you know quite well, Captain. Right here on this same godforsaken prairie—and I wish I had never come back to it!"

"Don't we all. But it happens to be the most important and the most delicate work in the Army—turning unspanked young cubs into soldiers. Who was the worst unspanked young cub in your section?"

"Mmm…" Zim answered slowly. "I wouldn't go so far as to say you were the worst, Captain."

"You wouldn't, eh? But you'd have to think hard to name another candidate. I hated your guts, 'Corporal' Zim."

Zim sounded surprised, and a little hurt. "You did, Captain? I didn't hate you—I rather liked you."

"So? Well, 'hate' is the other luxury an instructor can never afford. We must not hate them, we must not like them; we must teach them. But if you liked me then—mmm, it seemed to me that you had very strange ways of showing it. Do you still like me? Don't answer that; I don't care whether you do or not—or, rather, I don't want to know, whichever it is. Never mind; I despised you then and I used to dream about ways to get you. But you were always on the bounce and never gave me a chance to buy a nine-oh-eight-oh court of my own. So here I am, thanks to you. Now to handle your request: You used to have one order that you gave to me over and over again when I was a boot. I got so that I loathed it almost more than anything else you did or said. Do you remember it? I do and now I'll give it back to you: 'Soldier, shut up and soldier!' "

"Yes, sir."

"Don't go yet. This weary mess isn't all loss; any regiment of boots needs a stern lesson in the meaning of nine-oh-eight-oh, as we both know. They haven't yet learned to think, they won't read, and they rarely listen—but they can see … and young Hendrick's misfortune may save one of his mates, some day, from swinging by the neck until he's dead, dead, dead. But I'm sorry the object lesson had to come from my battalion and I certainly don't intend to let this battalion supply another one. You get your instructors together and warn them. For about twenty-four hours those kids will be in a state of shock. Then they'll turn sullen and the tension will build. Along about Thursday or Friday some boy who is about to flunk out anyhow will start thinking over the fact that Hendrick didn't get so very much, not even the number of lashes for drunken driving … and he's going to start brooding that it might be worth it, to take a swing at the instructor he hates worst. Sergeant—*that blow must never land*! Understand me?"

"Yes, sir."

"I want them to be eight times as cautious as they have been. I want them to keep their distance, I want them to have eyes in the backs of their heads. I want them to be as alert as a mouse at a cat show. Bronski—you have a special word with Bronski; he has a tendency to fraternize."

"I'll straighten Bronski out, sir."

"See that you do. Because when the next kid starts swinging, it's got to be stop-punched—not muffed, like today. The boy has got to be knocked cold and the instructor must do so without ever being touched himself or I'll damned well break him for incompetence. Let them know that. They've got to teach those kids that it's not merely expensive but *impossible* to violate nine-oh-eight-oh … that even trying it wins a short nap, a bucket of water in the face, and a very sore jaw —and nothing else."

"Yes, sir. It'll be done."

"It had better be done. I will not only break the instructor who slips, I will personally take him 'way out on the prairie and give him lumps … because *I will not have another one of my boys strung up to that whipping post* through sloppiness on the part of his teachers. Dismissed."

"Yes, sir. Good afternoon, Captain."

"What's good about it? Charlie—"

"Yes, sir?"

"If you're not too busy this evening, why don't you bring your soft shoes and your pads over to officers' row and we'll go waltzing Matilda? Say about eight o'clock."

"Yes, sir."

"That's not an order, that's an invitation. If you really are slowing down, maybe I'll be able to kick your shoulder blades off."

"Uh, would the Captain care to put a small bet on it?"

"Huh? With me sitting here at this desk getting swivel-chair spread? I will not! Not unless you agree to fight with one foot in a bucket of cement. Seriously, Charlie, we've had a miserable day and it's going to be worse before it gets better. If you and I work up a good sweat and swap a few lumps, maybe we'll be able to sleep tonight despite all of mother's little darlings."

"I'll be there, Captain. Don't eat too much dinner—I need to work off a couple of matters myself."

"I'm not going to dinner; I'm going to sit right here and sweat out this quarterly report … which the Regimental Commander is graciously pleased to see right after his dinner … and which somebody whose name I won't mention has put me two hours behind on. So I may be a few minutes late for our waltz. Go 'way now, Charlie, and don't bother me. See you later."

Sergeant Zim left so abruptly that I barely had time to lean over and tie my shoe and thereby be out of sight behind the file cases as he passed through the outer office. Captain Frankel was already shouting, "Orderly! *Orderly*! ORDERLY!—do I have to call you three times? What's your name? Put yourself down for an hour's extra duty, full kit. Find the company commanders of E, F, and G, my compliments and I'll be pleased to see them before parade. Then bounce over to my tent and fetch me a clean dress uniform, cap, side arms, shoes, ribbons—no medals. Lay it out for me here. Then make afternoon sick call—if you can scratch with that arm, as I've seen you doing, your shoulder can't be too sore. You've got thirteen minutes until sick call on the bounce, soldier!"

I made it … by catching two of them in the senior instructors—showers (an orderly can go anywhere) and the third at his desk; the orders you get aren't impossible, they merely seem so because they nearly are. I was laying out Captain Frankel's uniform for parade as sick call sounded. Without looking up he growled, "Belay that extra duty. Dismissed." So I got home just in time to catch extra duty for "Uniform, Untidy in, Two Particulars" and see the sickening end of Ted Hendrick's time in the M.I.

So I had plenty to think about as I lay awake that night. I had known that Sergeant Zim worked hard, but it had never occurred to me that he could possibly be other than completely and smugly self-satisfied with what he did. He looked so smug, so self-assured, so at peace with the world and with himself.

The idea that this invincible robot could feel that he had failed, could feel so deeply and personally disgraced that he wanted to run away, hide his face among strangers, and offer the excuse that his leaving would be "best for the outfit," shook me up as much, and in a way even more, than seeing Ted flogged.

To have Captain Frankel agree with him—as to the seriousness of the failure, I mean—and then rub his nose in it, chew him out. Well! I mean really. Sergeants don't get chewed out; sergeants do the chewing. A law of nature.

But I had to admit that what Sergeant Zim had taken, and swallowed, was so completely humiliating and withering as to make the worst I had ever heard or overhead from a sergeant sound like a love song. And yet the Captain hadn't even raised his voice.

The whole incident was so preposterously unlikely that I was never even tempted to mention it to anyone else.

And Captain Frankel himself—Officers we didn't see very often. They showed up for evening parade, sauntering over at the last moment and doing nothing that would work up a sweat; they inspected once a week, making private comments to sergeants, comments that invariably meant grief for somebody else, not them;

and they decided each week what company had won the honor of guarding the regimental colors. Aside from that, they popped up occasionally on surprise inspections, creased, immaculate, remote, and smelling faintly of cologne—and went away again.

Oh, one or more of them did always accompany us on route marches and twice Captain Frankel had demonstrated his virtuosity at *la savate*. But officers didn't work, not real work, and they had no worries because sergeants were *under* them, not *over* them.

But it appeared that Captain Frankel worked so hard that he skipped meals, was kept so busy with something or other that he complained of lack of exercise and would waste his own free time just to work up a sweat.

As for worries, he had honestly seemed to be even more upset at what had happened to Hendrick than Zim had been. And yet he hadn't even known Hendrick by sight; he had been forced to ask his name.

I had an unsettling feeling that I had been completely mistaken as to the very nature of the world I was in, as if every part of it was something wildly different from what it appeared to be—like discovering that your own mother isn't anyone you've ever seen before, but a stranger in a rubber mask.

But I was sure of one thing: I didn't even want to find out what the M.I. really was. If it was so tough that even the gods-that-be—sergeants and officers—were made unhappy by it, it was certainly too tough for Johnnie! How could you keep from making mistakes in an outfit you didn't understand? I didn't want to swing by my neck till I was dead, dead, dead! I didn't even want to risk being flogged … even though the doctor stands by to make certain that it doesn't do you any permanent injury. Nobody in our family had ever been flogged (except paddlings in school, of course, which isn't at all the same thing). There were no criminals in our family on either side, none who had even been accused of crime. We were a proud family; the only thing we lacked was citizenship and Father regarded that as no real honor, a vain and useless thing. But if I were flogged—Well, he'd probably have a stroke.

And yet Hendrick hadn't done anything that I hadn't thought about doing a thousand times. Why hadn't I? Timid, I guess. I *knew* that those instructors, any one of them, could beat the tar out of me, so I had buttoned my lip and hadn't tried it. No guts, Johnnie. At least Ted Hendrick had had guts. I didn't have … and a man with no guts has no business in the Army in the first place.

Besides that, Captain Frankel hadn't even considered it to be Ted's fault. Even if I didn't buy a 9080, through lack of guts, what day would I do something other than a 9080 something not my fault—and wind up slumped against the whipping post anyhow? Time to get out, Johnnie, while you're still ahead.

My mother's letter simply confirmed my decision. I had been able to harden my heart to my parents as long as they were refusing me—but when they softened, I couldn't stand it. Or when Mother softened, at least. She had written:

—but I am afraid I must tell you that your father will still not permit your name to be mentioned. But, dearest, that is his way of grieving, since he cannot cry. You must understand, my darling baby, that he loves you more than life itself—more than he does me—and that you have hurt him very deeply. He tells the world that you are a grown man, capable of making your own decisions, and that he is proud of you. But that is his own pride speaking, the bitter hurt of a proud man who has been wounded deep in his heart by the one he loves best. You must understand, Juanito, that he does not speak of you and has not written to you because he cannot—not yet, not till his grief becomes bearable. When it has, I will know it, and then I will intercede for you—and we will all be together again.

Myself? How could anything her baby boy does anger his mother? You can hurt me, but you cannot make me love you the less. Wherever you are, whatever you choose to do, you are always my little boy who bangs his knee and comes running to my lap for comfort. My lap has shrunk, or perhaps you have grown (though I have never believed it), but nonetheless it will always be waiting, when you need it. Little boys never get over needing their mother's laps—do they, darling? I hope not. I hope that you will write and tell me so.

But I must add that, in view of the terribly long time that you have not written, it is probably best (until I let you know otherwise) for you to write to me care of your Aunt Eleanora. She will pass it on to me at once—and without causing any more upset. You understand?

A thousand kisses to my baby,

YOUR MOTHER

I understood, all right—and if Father could not cry, I could. I did.

And at last I got to sleep … and was awakened at once by an alert. We bounced out to the bombing range, the whole regiment, and ran through a simulated exercise, without ammo. We were wearing full unarmored kit otherwise, including earplug receivers, and we had no more than extended when the word came to freeze.

We held that freeze for at least an hour—and I mean we held it, barely breathing. A mouse tiptoeing past would have sounded noisy. Something did go past and ran right over me, a coyote I think. I never twitched. We got awfully cold holding that freeze, but I didn't care; I knew it was my last.

I didn’t even hear reveille the next morning; for the first time in weeks I had to be whacked out of my sack and barely made formation for morning jerks. There was no point in trying to resign before breakfast anyhow, since I had to see Zim as the first step. But he wasn’t at breakfast. I did ask Bronski’s permission to see the C. C. and he said, “Sure. Help yourself,” and didn’t ask me why.

But you can’t see a man who isn’t there. We started a route march after breakfast and I still hadn’t laid eyes on him. It was an out-and-back, with lunch fetched out to us by copter—an unexpected luxury, since failure to issue field rations before marching usually meant practice starvation except for whatever you had cached … and I hadn’t; too much on my mind.

Sergeant Zim came out with the rations and he held mail call in the field—which was not an unexpected luxury. I’ll say this for the M.I.; they might chop off your food, water, sleep, or anything else, without warning, but they never held up a person’s mail a minute longer than circumstances required. That was yours, and they got it to you by the first transportation available and you could read it at your earliest break, even on maneuvers. This hadn’t been too important for me, as (aside from a couple of letters from Carl) I hadn’t had anything but junk mail until Mother wrote to me.

I didn’t even gather around when Zim handed it out; I figured now on not speaking to him until we got in—no point in giving him reason to notice me until we were actually in reach of headquarters. So I was surprised when he called my name and held up a letter. I bounced over and took it.

And was surprised again—it was from Mr. Dubois, my high school instructor in History and Moral Philosophy. I would sooner have expected a letter from Santa Claus

Then, when I read it, it still seemed like a mistake. I had to check the address and the return address to convince myself that he had written it and had meant it for me.

MY DEAR BOY,

I would have written to you much sooner to express my delight and my pride in learning that you had not only volunteered to serve but also had chosen my own service. But not to express surprise it is what I expected of you except, possibly, the additional and very personal bonus that you chose the M.I. This is the sort of consummation, which does not happen too often, that nevertheless makes all of a teacher’s efforts worth while. We necessarily sift a great many pebbles, much sand, for each nugget—but the nuggets are the reward.

By now the reason I did not write at once is obvious to you. Many young men, not necessarily through any reprehensible fault, are dropped during recruit training. I have waited (I have kept in touch through my own connections) until you had ‘sweated it out’ past the hump (how well we all know that hump!) and were certain, barring accidents or illness, of completing your training and your term.

You are now going through the hardest part of your service—not the hardest physically (though physical hardship will never trouble you again; you now have its measure), but the hardest spiritually … the deep, soul-turning readjustments and re-evaluations necessary to metamorphize a potential citizen into one in being. Or, rather I should say: you have already gone through the hardest part, despite all the tribulations you still have ahead of you and all the hurdles, each higher than the last, which you still must clear. But it is that “hump” that counts—and, knowing you, lad, I know that I have waited long enough to be sure that you are past your “hump” or you would be home now.

When you reached that spiritual mountaintop you felt something, a new something. Perhaps you haven’t words for it (I know I didn’t, when I was a boot). So perhaps you will permit an older comrade to lend you the words, since it often helps to have discrete words. Simply this: The noblest fate that a man can endure is to place his own mortal body between his loved home and the war’s desolation. The words are not mine, of course, as you will recognize. Basic truths cannot change and once a man of insight expresses one of them it is never necessary, no matter how much the world changes, to reformulate them. This is an immutable, true everywhere, throughout all time, for all men and all nations.

Let me hear from you, please, if you can spare an old man some of your precious sack time to write an occasional letter. And if you should happen to run across any of my former mates, give them my warmest greetings.

Good luck, trooper! You’ve made me proud.

JEAN V. DUBOIS

Lt.-Col., M.I., rtd.

The signature was as amazing as the letter itself. Old Sour Mouth a short colonel? Why, our regimental commander was only a major. Mr. Dubois had never used any sort of rank around school. We had supposed (if we thought about it at all) that he must have been a corporal or some such who had been let out when he lost his hand and had been fixed up with a soft job teaching a course that didn’t have to be passed, or even taught—just audited. Of course we had known that he was a veteran since History and Moral Philosophy must be taught by a citizen. But an M.I.? He didn’t look it. Prissy, faintly scornful, a dancing-master type—not one of us apes.

But that was the way he had signed himself.

I spent the whole long hike back to camp thinking about that amazing letter. It didn't sound in the least like anything he had ever said in class. Oh, I don't mean it contradicted anything he had told us in class; it was just entirely different in tone. Since when does a short colonel call a recruit private "comrade"?

When he was plain "Mr. Dubois" and I was one of the kids who had to take his course he hardly seemed to see me—except once when he got me sore by implying that I had too much money and not enough sense. (So my old man could have bought the school and given it to me for Christmas—is that a crime? It was none of his business.)

He had been droning along about "value," comparing the Marxist theory with the orthodox "use" theory. Mr. Dubois had said, "Of course, the Marxian definition of value is ridiculous. All the work one cares to add will not turn a mud pie into an apple tart; it remains a mud pie, value zero. By corollary, unskillful work can easily subtract value; an untalented cook can turn wholesome dough and fresh green apples, valuable already, into an inedible mess, value zero. Conversely, a great chef can fashion of those same materials a confection of greater value than a commonplace apple tart, with no more effort than an ordinary cook uses to prepare an ordinary sweet.

"These kitchen illustrations demolish the Marxian theory of value —the fallacy from which the entire magnificent fraud of communism derives—and to illustrate the truth of the commonsense definition as measured in terms of use."

Dubois had waved his stump at us. "Nevertheless—wake up, back there!—nevertheless the disheveled old mystic of *Das Kapital*, turgid, tortured, confused, and neurotic, unscientific, illogical, this pompous fraud Karl Marx, *nevertheless* had a glimmering of a very important truth. If he had possessed an analytical mind, he might have formulated the first adequate definition of value … and this planet might have been saved endless grief.

"Or might not," he added. "You!"

I had sat up with a jerk.

"If you can't listen, perhaps you can tell the class whether 'value' is a relative, or an absolute?"

I had been listening; I just didn't see any reason not to listen with eyes closed and spine relaxed. But his question caught me out; I hadn't read that day's assignment. "An absolute," I answered, guessing.

"Wrong," he said coldly. " 'Value' has no meaning other than in relation to living beings. The value of a thing is always relative to a particular person, is completely personal and different in quantity for each living human—'market value' is a fiction, merely a rough guess at the average of personal values, all of which must be quantitatively different or trade would be impossible." (I had wondered what Father would have said if he had heard "market value" called a "fiction"—snort in disgust, probably.)

"This very personal relationship, 'value,' has two factors for a human being: first, what he can do with a thing, its use to him … and second, what he must do to get it, its cost to him. There is an old song which asserts that 'the best things in life are free.' Not true! Utterly false! This was the tragic fallacy which brought on the decadence and collapse of the democracies of the twentieth century; those noble experiments failed because the people had been led to believe that they could simply vote for whatever they wanted … and get it, without toil, without sweat, without tears.

"Nothing of value is free. Even the breath of life is purchased at birth only through gasping effort and pain." He had been still looking at me and added, "If you boys and girls had to sweat for your toys the way a newly born baby has to struggle to live you would be happier … and much richer. As it is, with some of you, I pity the poverty of your wealth. You! I've just awarded you the prize for the hundred-meter dash. Does it make you happy?"

"Uh, I suppose it would."

"No dodging, please. You have the prize—here, I'll write it out: 'Grand prize for the championship, one hundred-meter sprint.' " He had actually come back to my seat and pinned it on my chest. "There! Are you happy? You value it—or don't you?"

I was sore. First that dirty crack about rich kids—a typical sneer of those who haven't got it—and now this farce. I ripped it off and chucked it at him.

Mr. Dubois had looked surprised. "It doesn't make you happy?"

"You know darn well I placed fourth!"

"*Exactly*! The prize for first place is worthless to you … because you haven't earned it. But you enjoy a modest satisfaction in placing fourth; you earned it. I trust that some of the somnambulists here understood this little morality play. I fancy that the poet who wrote that song meant to imply that the best things in life must be purchased other than with money—which is *true*—just as the literal meaning of his words is false. The best things in life are beyond money; their price is agony and sweat and devotion … and the price demanded for the most precious of all things in life is life itself—ultimate cost for perfect value."

I mulled over things I had heard Mr. Dubois—*Colonel* Dubois—say, as well as his extraordinary letter, while we went swinging back toward camp. Then I stopped thinking because the band dropped back near our position in column and we sang for a while, a French group —"*Marseillaise*," of course, and "*Madelon*" and "Sons of Toil and

Danger," and then "*Legion Étrangère*" and "Mademoiselle from Armentières."

It's nice to have the band play; it picks you right up when your tail is dragging the prairie. We hadn't had anything but canned music at first and that only for parade and calls. But the powers-that-be had found out early who could play and who couldn't; instruments were provided and a regimental band was organized, all our own—even the director and the drum major were boots.

It didn't mean they got out of anything. Oh no! It just meant they were allowed and encouraged to do it on their own time, practicing evenings and Sundays and such—and that they got to strut and countermarch and show off at parade instead of being in ranks with their platoons. A lot of things that we did were run that way. Our chaplain, for example, was a boot. He was older than most of us and had been ordained in some obscure little sect I had never heard of. But he put a lot of passion into his preaching whether his theology was orthodox or not (don't ask me) and he was certainly in a position to understand the problems of a recruit. And the singing was fun. Besides, there was nowhere else to go on Sunday morning between morning police and lunch.

The band suffered a lot of attrition but somehow they always kept it going. The camp owned four sets of pipes and some Scottish uniforms, donated by Lochiel of Cameron whose son had been killed there in training—and one of us boots turned out to be a piper; he had learned it in the Scottish Boy Scouts. Pretty soon we had four pipers, maybe not good but loud. Pipes seem very odd when you first hear them, and a tyro practicing can set your teeth on edge—it sounds and looks as if he had a cat under his arm, its tail in his mouth, and biting it.

But they grow on you. The first time our pipers kicked their heels out in front of the band, skirling away at "Alamein Dead," my hair stood up so straight it lifted my cap. It gets you—makes tears.

We couldn't take a parade band out on route march, of course, because no special allowances were made for the band. Tubas and bass drums had to stay behind because a boy in the band had to carry full kit, same as everybody, and could only manage an instrument small enough to add to his load. But the M.I. has band instruments which I don't believe anybody else has, such as a little box hardly bigger than a harmonica, an electronic gadget which does an amazing job of faking a big horn and is played the same way. Comes band call when you are headed for the horizon, each bandsman sheds his kit without stopping, his squadmates split it up, and he trots to the column position of the color company and starts blasting.

It helps.

The band drifted aft, almost out of earshot, and we stopped singing because your own singing drowns out the beat when it's too far away.

I suddenly realized I felt good.

I tried to think why I did. Because we would be in after a couple of hours and I could resign?

No. When I had decided to resign, it had indeed given me a measure of peace, quieted down my awful jitters and let me go to sleep. But this was something else—and no reason for it, that I could see.

Then I knew. *I had passed my hump*!

I was over the "hump" that Colonel Dubois had written about. I actually walked over it and started down, swinging easily. The prairie through there was flat as a griddle cake, but just the same I had been plodding wearily uphill all the way out and about halfway back. Then, at some point—I think it was while we were singing—I had passed the hump and it was all downhill. My kit felt lighter and I was no longer worried.

When we got in, I didn't speak to Sergeant Zim; I no longer needed to. Instead he spoke to me, motioned me to him as we fell out.

"Yes, sir?"

"This is a personal question … so don't answer it unless you feel like it!" He stopped, and I wondered if he suspected that I had overheard his chewing-out, and shivered.

"At mail call today," he said, "you got a letter. I noticed—purely by accident, none of my business—the name on the return address. It's a fairly common name, some places, but—this is the personal question you need not answer—by any chance does the person who wrote that letter have his left hand off at the wrist?"

I guess my chin dropped. "How did you know? Sir?"

"I was nearby when it happened. It *is* Colonel Dubois? Right?"

"Yes, sir." I added, "He was my high school instructor in History and Moral Philosophy."

I think that was the only time I ever impressed Sergeant Zim, even faintly. His eyebrows went up an eighth of an inch and his eyes widened slightly. "So? You were extraordinarily fortunate." He added, "When you answer his letter—if you don't mind—you might say that Ship's Sergeant Zim sends his respects."

"Yes, sir. Oh … I think maybe he sent you a message, sir."

"*What*?"

"Uh, I'm not certain." I took out the letter, read just: " '—if you should happen to run across any of my former mates, give them my warmest greetings.' Is that for you, sir?"

Zim pondered it, his eyes looking through me, somewhere else. "Eh? Yes, it is. For me among others. Thanks very much." Then suddenly it was over and he said briskly, “Nine minutes to parade. And you still have to shower and change. On the bounce, soldier.”

Chapter 7

The young recruit is silly—'e
thinks o' suicide.
'E's lost 'is gutter-devil; 'e 'asin't
got 'is pride;
But day by day they kicks 'im,
which 'elps 'im on a bit,
Till 'e finds 'isself one mornin'
with a full an' proper kit.
Gettin' clear o' dirtiness, gettin'
done with mess,
Gettin' shut o' doin' things
rather-more-or-less.
—Rudyard Kipling

I'm not going to talk much more about my boot training. Mostly it was simply work, but I was squared away—enough said.

But I do want to mention a little about powered suits, partly because I was fascinated by them and also because that was what led me into trouble. No complaints—I rated what I got.

An M.I. lives by his suit the way a K-9 man lives by and with and on his doggie partner. Powered armor is one-half the reason we call ourselves "mobile infantry" instead of just "infantry." (The other half are the spaceships that drop us and the capsules we drop in.) Our suits give us better eyes, better ears, stronger backs (to carry heavier weapons and more ammo), better legs, more intelligence ("intelligence" in the military meaning; a man in a suit can be just as stupid as anybody else only he had better not be), more firepower, greater endurance, less vulnerability.

A suit isn't a space suit—although it can serve as one. It is not primarily armor—although the Knights of the Round Table were not armored as well as we are. It isn't a tank—but a single M.I. private could take on a squadron of those things and knock them off unassisted if anybody was silly enough to put tanks against M.I. A suit is not a ship but it can fly, a little on the other hand neither spaceships nor atmosphere craft can fight against a man in a suit except by saturation bombing of the area he is in (like burning down a house to get one flea!). Contrariwise we can do many things that no ship—air, submersible, or space—can do.

There are a dozen different ways of delivering destruction in impersonal wholesale, via ships and missiles of one sort or another, catastrophes so widespread, so unselective, that the war is over because that nation or planet has ceased to exist. What we do is entirely different. We make war as personal as a punch in the nose. We can be selective, applying precisely the required amount of pressure at the specified point at a designated time—we've never been told to go down and kill or capture all lefthanded redheads in a particular area, but if they tell us to, we can. We will.

We are the boys who go to a particular place, at H-hour, occupy a designated terrain, stand on it, dig the enemy out of their holes, force them then and there to surrender or die. We're the bloody infantry, the doughboy, the duckfoot, the foot soldier who goes where the enemy is and takes him on in person. We've been doing it, with changes in weapons but very little change in our trade, at least since the time five thousand years ago when the foot sloggers of Sargon the Great forced the Sumerians to cry "Uncle!"

Maybe they'll be able to do without us someday. Maybe some mad genius with myopia, a bulging forehead, and a cybernetic mind will devise a weapon that can go down a hole, pick out the opposition, and force it to surrender or die—without killing that gang of your own people they've got imprisoned down there. I wouldn't know; I'm not a genius, I'm an M.I. In the meantime, until they build a machine to replace us, my mates can handle that job and I might be some help on it, too.

Maybe someday they'll get everything nice and tidy and we'll have that thing we sing about, when "we ain't a-gonna study war no more." Maybe. Maybe the same day the leopard will take off his spots and get a job as a Jersey cow, too. But again, I wouldn't know; I am not a professor of cosmo-politics; I'm an M.I. When the government sends me, I go. In between, I catch a lot of sack time.

But, while they have not yet built a machine to replace us, they've surely thought up some honeys to help us. The suit, in particular.

No need to describe what it looks like, since it has been pictured so often. Suited up, you look like a big steel gorilla, armed with gorilla-sized weapons. (This may be why a sergeant generally opens his remarks with "You apes—" However, it seems more likely that Caesar's sergeants used the same honorific.)

But the suits are considerably stronger than a gorilla. If an M.I. in a suit swapped hugs with a gorilla, the gorilla would be dead, crushed; the M.I. and the suit wouldn't be mussed.

The "muscles," the pseudo-musculature, get all the publicity but it's the control of all that power which merits it. The real genius in the design is that you don't have to control the suit; you just wear it, like your clothes, like skin. Any sort of ship you have to learn to pilot; it takes a long time, a new full set of reflexes, a different and artificial way of thinking. Even riding a bicycle demands an acquired skill, very different from walking, whereas a spaceship oh, brother! I won't live that long. Spaceships are for acrobats who are also mathematicians.

But a suit you just wear.

Two thousand pounds of it, maybe, in full kit—yet the very first time you are fitted into one you can immediately walk, run, jump, lie down, pick up an egg without breaking it (that takes a trifle of practice, but anything improves with practice), dance a jig (if you can dance a jig, that is, without a suit)—and jump right over the house next door and come down to a feather landing.

The secret lies in negative feedback and amplification.

Don't ask me to sketch the circuitry of a suit; I can't. But I understand that some very good concert violinists can't build a violin, either. I can do field maintenance and field repairs and check off the three hundred and forty-seven items from "cold" to ready to wear, and that's all a dumb M.I. is expected to do. But if my suit gets really sick, I call the doctor—a doctor of science (electromechanical engineering) who is a staff Naval officer, usually a lieutenant (read "captain" for our ranks), and is part of the ship's company of the troop transport—or who is reluctantly assigned to a regimental headquarters at Camp Currie, a fate-worse-than-death to a Navy man.

But if you really are interested in the prints and stereos and schematics of a suit's physiology, you can find most of it, the unclassified part, in any fairly large public library. For the small amount that is classified you must look up a reliable enemy agent —"reliable" I say, because spies are a tricky lot; he's likely to sell you the parts you could get free from the public library.

But here is how it works, minus the diagrams. The inside of the suit is a mass of pressure receptors, hundreds of them. You push with the heel of your hand; the suit feels it, amplifies it, pushes with you to take the pressure off the receptors that gave the order to push. That's confusing, but negative feedback is always a confusing idea the first time, even though your body has been doing it ever since you quit kicking helplessly as a baby. Young children are still learning it; that's why they are clumsy. Adolescents and adults do it without knowing they ever learned it—and a man with Parkinson's disease has damaged his circuits for it.

The suit has feedback which causes it to match *any* motion you make, exactly—but with great force.

Controlled force … force controlled without your having to think about it. You jump, that heavy suit jumps, but higher than you can jump in your skin. Jump really hard and the suit's jets cut in, amplifying what the suit's leg "muscles" did, giving you a three-jet shove, the axis of pressure of which passes through your center of mass. So you jump over that house next door. Which makes you come down as fast as you went up … which the suit notes through your proximity & closing gear (a sort of simple-minded radar resembling a proximity fuse) and therefore cuts in the jets again just the right amount to cushion your landing without your having to think about it.

And *that* is the beauty of a powered suit: you don't have to think about it. You don't have to drive it, fly it, conn it, operate it; you just wear it and it takes its orders directly from your muscles and does for you what your muscles are trying to do. This leaves you with your whole mind free to handle your weapons and notice what is going on around you … which is *supremely* important to an infantryman who wants to die in bed. If you load a mud foot down with a lot of gadgets that he has to watch, somebody a lot more simply equipped—say with a stone ax—will sneak up and bash his head in while he is trying to read a vernier.

Your "eyes" and your "ears" are rigged to help you without cluttering up your attention, too. Say you have three audio circuits, common in a marauder suit. The frequency control to maintain tactical security is very complex, at least two frequencies for each circuit both of which are necessary for any signal at all and each of which wobbles under the control of a cesium clock timed to a micromicrosecond with the other end—but all this is no problem of yours. You want circuit A to your squad leader, you bite down once—for circuit B, bite down twice—and so on. The mike is taped to your throat, the plugs are in your ears and can't be jarred out; just talk. Besides that, outside mikes on each side of your helmet give you binaural hearing for your immediate surroundings just as if your head were bare—or you can suppress any noisy neighbors and not miss what your platoon leader is saying simply by turning your head.

Since your head is the one part of your body not involved in the pressure receptors controlling the suit's muscles, you use your head—your jaw muscles, your chin, your neck—to switch things for you and thereby leave your hands free to fight. A chin plate handles all visual displays the way the jaw switch handles the audios. All displays are thrown on a mirror in front of your forehead from where the work is actually going on above and back of your head. All this helmet gear makes you look like a hydrocephalic gorilla but, with luck, the enemy won't live long enough to be offended by your appearance, and it is a very convenient arrangement; you can flip through your several types of radar displays quicker than you can change channels to avoid a commercial—catch a range & bearing, locate your boss, check your flank men, whatever.

If you toss your head like a horse bothered by a fly, your infrared snoopers go up on your forehead—toss it again, they come down. If you let go of your rocket launcher, the suit snaps it back until you need it again. No point in discussing water nipples, air supply, gyros, etc.—the point to all the arrangements is the same: to leave you free to follow your trade, slaughter.

Of course these things do require practice and you do practice until picking the right circuit is as automatic as brushing your teeth, and so on. But simply wearing the suit, moving in it, requires almost no practice. You practice jumping because, while you do it with a completely natural motion, you jump higher, faster, farther, and stay up longer. The last alone calls for a new orientation; those seconds in the air can be used—seconds are jewels beyond price in combat. While off the ground in a jump, you can get a range & bearing, pick a target, talk & receive, fire a weapon, reload, decide to jump again without landing and override your automatics to cut in the jets again. You can do all of these things in one bounce, with practice.

But, in general, powered armor doesn't require practice; it simply does it for you, just the way you were doing it, only better. All but one thing—you can't scratch where it itches. If I ever find a suit that will let me scratch between my shoulder blades, I'll marry it.

There are three main types of M.I. armor: marauder, command, and scout. Scout suits are very fast and very long-range, but lightly armed. Command suits are heavy on go juice and jump juice, are fast and can jump high; they have three times as much comm & radar gear as other suits, and a deadreckoning tracker, inertial. Marauders are for those guys in ranks with the sleepy look—the executioners.

As I may have said, I fell in love with powered armor, even though my first crack at it gave me a strained shoulder. Any day thereafter that my section was allowed to practice in suits was a big day for me. The day I goofed I had simulated sergeant's chevrons as a simulated section leader and was armed with simulated A-bomb rockets to use in simulated darkness against a simulated enemy. That was the trouble everything was simulated—but you are required to behave as if it is all real.

We were retreating—"advancing toward the rear," I mean—and one of the instructors cut the power on one of my men by radio control, making him a helpless casualty. Per M.I. doctrine, I ordered the pickup, felt rather cocky that I had managed to get the order out before my number two cut out to do it anyhow, turned to do the next thing I had to do, which was to lay down a simulated atomic ruckus to discourage the simulated enemy overtaking us.

Our flank was swinging; I was supposed to fire it sort of diagonally but with the required spacing to protect my own men from blast while still putting it in close enough to trouble the bandits. On the bounce, of course. The movement over the terrain and the problem itself had been discussed ahead of time; we were still green—the only variations supposed to be left in were casualties.

Doctrine required me to locate *exactly*, by radar beacon, my own men who could be affected by the blast. But this all had to be done fast and I wasn't too sharp at reading those little radar displays anyhow. I cheated just a touch—flipped my snoopers up and looked, bare eyes in broad daylight. I left plenty of room. Shucks, I could *see* the only man affected, half a mile away, and all I had was just a little bitty H. E. rocket, intended to make a lot of smoke and not much else. So I picked a spot by eye, took the rocket launcher and let fly.

Then I bounced away, feeling smug—no seconds lost.

And had my power cut in the air. This doesn't hurt you; it's a delayed action, executed by your landing. I grounded and there I stuck, squatting, held upright by gyros but unable to move. You do not repeat *not* move when surrounded by a ton of metal with your power dead.

Instead I cussed to myself—I hadn't thought that they would make me a casualty when I was supposed to be leading the problem. Shucks and other comments.

I should have known that Sergeant Zim would be monitoring the section leader.

He bounced over to me, spoke to me privately on the face to face. He suggested that I might be able to get a job sweeping floors since I was too stupid, clumsy, and careless to handle dirty dishes. He discussed my past and probable future and several other things that I did not want to hear about. He ended by saying tonelessly, "How would you like to have Colonel Dubois see what you've done?"

Then he left me. I waited there, crouched over, for two hours until the drill was over. The suit, which had been featherlight, real seven-league boots, felt like an Iron Maiden. At last he returned for me, restored power, and we bounced together at top speed to BHQ.

Captain Frankel said less but it cut more.

Then he paused and added in that flat voice officers use when quoting regulations: "You may demand trial by courtmartial if such be your choice. How say you?"

I gulped and said, "No, sir!" Until that moment I hadn't fully realized just how *much* trouble I was in.

Captain Frankel seemed to relax slightly. "Then we'll see what the Regimental Commander has to say. Sergeant, escort the prisoner." We walked rapidly over to RHQ and for the first time I met the Regimental Commander face to face—and by then I was sure that I was going to catch a court no matter what. But I remembered sharply how Ted Hendrick had talked himself into one; I said nothing.

Major Malloy said a total of five words to me. After hearing

Sergeant Zim, he said three of them: “Is that correct?”

I said, “Yes, sir,” which ended my part of it.

Major Malloy said, to Captain Frankel: “Is there any possibility of salvaging this man?”

Captain Frankel answered, “I believe so, sir.”

Major Malloy said, “Then we’ll try administrative punishment,” turned to me and said:

“Five lashes.”

Well, they certainly didn’t keep me dangling. Fifteen minutes later the doctor had completed checking my heart and the Sergeant of the Guard was outfitting me with that special shirt which comes off without having to be pulled over the hands—zippered from the neck down the arms. Assembly for parade had just sounded. I was feeling detached, unreal … which I have learned is one way of being scared right out of your senses. The nightmare hallucination—

Zim came into the guard tent just as the call ended. He glanced at the Sergeant of the Guard—Corporal Jones—and Jones went out. Zim stepped up to me, slipped something into my hand. “Bite on that,” he said quietly. “It helps. I know.”

It was a rubber mouthpiece such as we used to avoid broken teeth in hand-to-hand combat drill. Zim left. I put it in my mouth. Then they handcuffed me and marched me out.

The order read: “—in simulated combat, gross negligence which would in action have caused the death of a teammate.” Then they peeled off my shirt and strung me up.

Now here is a very odd thing: A flogging isn’t as hard to take as it is to watch. I don’t mean it’s a picnic. It hurts worse than anything else I’ve ever had happen to me, and the waits between strokes are worse than the strokes themselves. But the mouthpiece did help and the only yelp I let out never got past it.

Here’s the second odd thing: Nobody ever mentioned it to me, not even other boots. So far as I could see, Zim and the instructors treated me exactly the same afterwards as they had before. From the instant the doctor painted the marks and told me to go back to duty it was all done with, completely. I even managed to eat a little at dinner that night and pretend to take part in the jawing at the table.

Another thing about administrative punishment: There is no permanent black mark. Those records are destroyed at the end of boot training and you start clean. The only record is one where it counts most.

You don’t forget it.

Chapter 8

Train up a child in the way he should go; and when he is old he will not depart from it.
—Proverbs XXII:6

There were other floggings but darn few. Hendrick was the only man in our regiment to be flogged by sentence of courtmartial; the others were administrative punishment, like mine, and for lashes it was necessary to go all the way up to the Regimental Commander—which a subordinate commander finds distasteful, to put it faintly. Even then, Major Malloy was much more likely to kick the man out, "Undesirable Discharge," than to have the whipping post erected. In a way, an administrative flogging is the mildest sort of a compliment; it means that your superiors think that there is a faint possibility that you just might have the character eventually to make a soldier and a citizen, unlikely as it seems at the moment.

I was the only one to get the maximum administrative punishment; none of the others got more than three lashes. Nobody else came as close as I did to putting on civilian clothes but still squeaked by. This is a social distinction of sorts. I don't recommend it.

But we had another case, much worse than mine or Ted Hendrick's—a really sick-making one. Once they erected gallows.

Now, look, get this straight. This case didn't really have anything to do with the Army. The crime didn't take place at Camp Currie and the placement officer who accepted this boy for M.I. should turn in his suit.

He deserted, only two days after we arrived at Currie. Ridiculous, of course, but nothing about the case made sense—why didn't he resign? Desertion, naturally, is one of the "thirtyone crash landings" but the Army doesn't invoke the death penalty for it unless there are special circumstances, such as "in the face of the enemy" or something else that turns it from a highly informal way of resigning into something that can't be ignored.

The Army makes no effort to find deserters and bring them back. This makes the hardest kind of sense. We're all volunteers; we're M.I. because we want to be, we're proud to be M.I. and the M.I. is proud of us. If a man doesn't feel that way about it, from his callused feet to his hairy ears, I don't want him on my flank when trouble starts. If I buy a piece of it, I want men around me who will pick me up because they're M.I. and I'm M.I. and my skin means as much to them as their own. I don't want any ersatz soldiers, dragging their tails and ducking out when the party gets rough. It's a whole lot safer to have a blank file on your flank than to have an alleged soldier who is nursing the "conscript" syndrome. So if they run, let 'em run; it's a waste of time and money to fetch them back.

Of course most of them do come back, though it may take them years—in which case the Army tiredly lets them have their fifty lashes instead of hanging them, and turns them loose. I suppose it must wear on a man's nerves to be a fugitive when everybody else is either a citizen or a legal resident, even when the police aren't trying to find him. "The wicked flee when no man pursueth." The temptation to turn yourself in, take your lumps, and breathe easily again must get to be overpowering.

But this boy didn't turn himself in. He was gone four months and I doubt if his own company remembered him, since he had been with them only a couple of days; he was probably just a name without a face, the "Dillinger, N. L." who had to be reported, day after day, as absent without leave on the morning muster.

Then he killed a baby girl.

He was tried and convicted by a local tribunal but identity check showed that he was an undischarged soldier; the Department had to be notified and our commanding general at once intervened. He was returned to us, since military law and jurisdiction take precedence over civil code.

Why did the general bother? Why didn't he let the local sheriff do the job?

In order to "teach us a lesson"?

Not at all. I'm quite sure that our general did not think that any of his boys needed to be nauseated in order not to kill any baby girls. By now I believe that he would have spared us the sight—had it been possible.

We did learn a lesson, though nobody mentioned it at the time and it is one that takes a long time to sink in until it becomes second nature:

The M.I. take care of their own—no matter what.

Dillinger belonged to us, he was still on our rolls. Even though we didn't want him, even though we should never have had him, even though we would have been happy to disclaim him, he was a member of our regiment. We couldn't brush him off and let a sheriff a thousand miles away handle it. If it has to be done, a man—a real man—shoots his own dog himself; he doesn't hire a proxy who may bungle it.

The regimental records said that Dillinger was ours, so taking care of him was our duty.

That evening we marched to the parade grounds at slow march, sixty beats to the minute (hard to keep step, when you're used to a hundred and forty), while the band played "Dirge for the Unmourned." Then Dillinger was marched out, dressed in M.I. full dress just as we were, and the band played "Danny Deever" while they stripped off every trace of insignia, even buttons and cap, leaving him in a maroon and light blue suit that was no longer a uniform. The drums held a sustained roll and it was all over.

We passed in review and on home at a fast trot I don't think anybody fainted and I don't think anybody quite got sick, even though most of us didn't eat much dinner that night and I've never heard the mess tent so quiet. But, grisly as it was (it was the first time I had seen death, first time for most of us), it was not the shock that Ted Hendrick's flogging was—I mean, you couldn't put yourself in Dillinger's place; you didn't have any feeling of: "It could have been me." Not counting the technical matter of desertion, Dillinger had committed at least four capital crimes; if his victim had lived, he still would have danced Danny Deever for any one of the other three—kidnapping, demand of ransom, criminal neglect, *etc.*

I had no sympathy for him and still haven't. That old saw about "To understand all is to forgive all" is a lot of tripe. Some things, the more you understand the more you loathe them. My sympathy is reserved for Barbara Anne Enthwaite whom I had never seen, and for her parents, who would never again see their little girl.

As the band put away their instruments that night we started thirty days of mourning for Barbara and of disgrace for us, with our colors draped in black, no music at parade, no singing on route march. Only once did I hear anybody complain and another boot promptly asked him how he would like a full set of lumps? Certainly, it hadn't been our fault—but our business was to guard little girls, not kill them. Our regiment had been dishonored; we had to clean it. We were disgraced and we *felt* disgraced.

That night I tried to figure out how such things could be kept from happening. Of course, they hardly ever do nowadays—but even once is 'way too many. I never did reach an answer that satisfied me. This Dillinger—he looked like anybody else, and his behavior and record couldn't have been too odd or he would never have reached Camp Currie in the first place. I suppose he was one of those pathological personalities you read about—no way to spot them.

Well, if there was no way to keep it from happening once, there was only one sure way to keep it from happening twice. Which we had used.

If Dillinger had understood what he was doing (which seemed incredible) then he got what was coming to him … except that it seemed a shame that he hadn't suffered as much as had little Barbara Anne—he practically hadn't suffered at all.

But suppose, as seemed more likely, that he was so crazy that he had never been aware that he was doing anything wrong? What then?

Well, we shoot mad dogs, don't we?

Yes, but being crazy that way is a sickness—

I couldn't see but two possibilities. Either he couldn't be made well—in which case he was better dead for his own sake and for the safety of others—or he could be treated and made sane. In which case (it seemed to me) if he ever became sane enough for civilized society … and thought over what he had done while he was "sick"—what could be left for him but suicide? How could he live with himself?

And suppose he escaped *before* he was cured and did the same thing again? And maybe *again*? How do you explain *that* to bereaved parents? In view of his record?

I couldn't see but one answer.

I found myself mulling over a discussion in our class in History and Moral Philosophy. Mr. Dubois was talking about the disorders that preceded the breakup of the North American republic, back in the XXth century. According to him, there was a time just before they went down the drain when such crimes as Dillinger's were as common as dogfights. The Terror had not been just in North America—Russia and the British Isles had it, too, as well as other places. But it reached its peak in North America shortly before things went to pieces.

"Law-abiding people," Dubois had told us, "hardly dared go into a public park at night. To do so was to risk attack by wolf packs of children, armed with chains, knives, homemade guns, bludgeons … to be hurt at least, robbed most certainly, injured for life probably—or even killed. This went on for years, right up to the war between the Russo-Anglo-American Alliance and the Chinese Hegemony. Murder, drug addiction, larceny, assault, and vandalism were commonplace. Nor were parks the only places—these things happened also on the streets in daylight, on school grounds, even inside school buildings. But parks were so notoriously unsafe that honest people stayed clear of them after dark."

I had tried to imagine such things happening in our schools. I simply couldn't. Nor in our parks. A park was a place for fun, not for getting hurt. As for getting killed in one—"Mr. Dubois, didn't they have police? Or courts?"

"They had many more police than we have. And more courts. All overworked."

"I guess I don't get it." If a boy in our city had done anything half that bad … well, he and his father would have been flogged side by side. But such things just didn't happen.

Mr. Dubois then demanded of me, "Define a 'juvenile delinquent.' "

"Uh, one of those kids—the ones who used to beat up people."

"Wrong."

"Huh? But the book said—"

"My apologies. Your textbook does so state. But calling a tail a leg does not make the name fit. 'Juvenile delinquent' is a contradiction in terms, one which gives a clue to their problem and their failure to solve it. Have you ever raised a puppy?"

"Yes, sir."

"Did you housebreak him?"

"Err … yes, sir. Eventually." It was my slowness in this that caused my mother to rule that dogs must stay out of the house.

"Ah, yes. When your puppy made mistakes, were you angry?"

"What? Why, he didn't know any better; he was just a puppy."

"What did you do?"

"Why, I scolded him and rubbed his nose in it and paddled him."

"Surely he could not understand your words?"

"No, but he could tell I was sore at him!"

"But you just said that you were not angry."

Mr. Dubois had an infuriating way of getting a person mixed up. "No, but I had to make him *think* I was. He had to learn, didn't he?"

"Conceded. But, having made it clear to him that you disapproved, how could you be so cruel as to spank him as well? You said the poor beastie didn't know that he was doing wrong. Yet you indicted pain. Justify yourself! Or are you a sadist?"

I didn't then know what a sadist was—but I knew pups. "Mr. Dubois, you *have to*! You scold him so that he knows he's in trouble, you rub his nose in it so that he will know what trouble you mean, you paddle him so that he darn well won't do it again—and you have to do it right away! It doesn't do a bit of good to punish him later; you'll just confuse him. Even so, he won't learn from one lesson, so you watch and catch him again and paddle him still harder. Pretty soon he learns. But it's a waste of breath just to scold him." Then I added, "I guess you've never raised pups."

"Many. I'm raising a dachshund now—by your methods. Let's get back to those juvenile criminals. The most vicious averaged somewhat younger than you here in this class … and they often started their lawless careers much younger. Let us never forget that puppy. These children were often caught; police arrested batches each day. Were they scolded? Yes, often scathingly. Were their noses rubbed in it? Rarely. News organs and officials usually kept their names secret—in many places the law so required for criminals under eighteen. Were they spanked? Indeed not! Many had never been spanked even as small children; there was a widespread belief that spanking, or any punishment involving pain, did a child permanent psychic damage."

(I had reflected that my father must never have heard of that theory.)

"Corporal punishment in schools was forbidden by law," he had gone on. "Flogging was lawful as sentence of court only in one small province, Delaware, and there only for a few crimes and was rarely invoked; it was regarded as 'cruel and unusual punishment.' " Dubois had mused aloud, "I do not understand objections to 'cruel and unusual' punishment. While a judge should be benevolent in purpose, his awards should cause the criminal to suffer, else there is no punishment—and pain is the basic mechanism built into us by millions of years of evolution which safeguards us by warning when something threatens our survival. Why should society refuse to use such a highly perfected survival mechanism? However, that period was loaded with prescientific pseudo-psychological nonsense.

"As for 'unusual,' punishment must be unusual or it serves no purpose." He then pointed his stump at another boy. "What would happen if a puppy were spanked every hour?"

"Uh … probably drive him crazy!"

"Probably. It certainly will not teach him anything. How long has it been since the principal of this school last had to switch a pupil?"

"Uh, I'm not sure. About two years. The kid that swiped—"

"Never mind. Long enough. It means that such punishment is so unusual as to be significant, to deter, to instruct. Back to these young criminals—They probably were not spanked as babies; they certainly were not flogged for their crimes. The usual sequence was: for a first offense, a warning—a scolding, often without trial. After several offenses a sentence of confinement but with sentence suspended and the youngster placed on probation. A boy might be arrested many times and convicted several times before he was punished—and then it would be merely confinement, with others like him from whom he learned still more criminal habits. If he kept out of major trouble while confined, he could usually evade most of even that mild punishment, be given probation—'paroled' in the jargon of the times.

"This incredible sequence could go on for years while his crimes increased in frequency and viciousness, with no punishment whatever save rare dull-but-comfortable confinements. Then suddenly, usually by law on his eighteenth birthday, this so-called 'juvenile delinquent' becomes an adult criminal—and sometimes wound up in only weeks or months in a death cell awaiting execution for murder. *You*—"

He had singled me out again. "Suppose you merely scolded your puppy, never punished him, let him go on making messes in the house … and occasionally locked him up in an outbuilding but soon let him back into the house with a warning not to do it again. Then one day you notice that he is now a grown dog and *still* not housebroken—whereupon you whip out a gun and shoot him dead. Comment, please?"

"Why … that's the craziest way to raise a dog I ever heard of!"

"I agree. Or a child. Whose fault would it be?"

"Uh … why, mine, I guess."

"Again I agree. But I'm not guessing."

"Mr. Dubois," a girl blurted out, "but why? Why didn't they spank little kids when they needed it and use a good dose of the strap on any older ones who deserved it—the sort of lesson they wouldn't forget! I mean ones who did things really *bad*. Why not?"

"I don't know," he had answered grimly, "except that the time-tested method of instilling social virtue and respect for law in the minds of the young did not appeal to a prescientific pseudo-professional class who called themselves 'social workers' or sometimes 'child psychologists.' It was too simple for them, apparently, since anybody could do it, using only the patience and firmness needed in training a puppy. I have sometimes wondered if they cherished a vested interest in disorder—but that is unlikely; adults almost always act from conscious 'highest motives' no matter what their behavior."

"But—good heavens!" the girl answered. "I didn't like being spanked any more than any kid does, but when I needed it, my mama delivered. The only time I ever got a switching in school I got another one when I got home and that was years and years ago. I don't ever expect to be hauled up in front of a judge and sentenced to a flogging; you behave yourself and such things don't happen. I don't see anything wrong with our system; it's a lot better than not being able to walk outdoors for fear of your life—why, that's *horrible*!"

"I agree. Young lady, the tragic wrongness of what those well-meaning people did, contrasted with what they *thought* they were doing, goes very deep. They had no scientific theory of morals. They did have a theory of morals and they tried to live by it (I should not have sneered at their motives) but their theory was *wrong*—half of it fuzzy-headed wishful thinking, half of it rationalized charlatanry. The more earnest they were, the farther it led them astray. You see, they assumed that Man has a moral instinct."

"Sir? But I thought—But he does! *I* have."

"No, my dear, you have a cultivated conscience, a most carefully trained one. Man has *no moral instinct*. He is not born with moral sense. You were not born with it, I was not—and a puppy has none. We *acquire* moral sense, when we do, through training, experience, and hard sweat of the mind. These unfortunate juvenile criminals were born with none, even as you and I, and they had no chance to acquire any; their experiences did not permit it. What is ‘moral sense’? It is an elaboration of the instinct to survive. The instinct to survive is human nature itself, and every aspect of our personalities derives from it. Anything that conflicts with the survival instinct acts sooner or later to eliminate the individual and thereby fails to show up in future generations. This truth is mathematically demonstrable, everywhere verifiable; it is the single eternal imperative controlling everything we do.”

“But the instinct to survive,” he had gone on, “can be cultivated into motivations more subtle and much more complex than the blind, brute urge of the individual to stay alive. Young lady, what you miscalled your ‘moral instinct’ was the instilling in you by your elders of the truth that survival can have stronger imperatives than that of your own personal survival. Survival of your family, for example. Of your children, when you have them. Of your nation, if you struggle that high up the scale. And so on up. A scientifically verifiable theory of morals must be rooted in the individual’s instinct to survive—*and nowhere else*!—and must correctly describe the hierarchy of survival, note the motivations at each level, and resolve all conflicts.”

“We have such a theory now; we can solve any moral problem, on any level. Self-interest, love of family, duty to country, responsibility toward the human race—we are even developing an exact ethic for extra-human relations. But all moral problems can be illustrated by one misquotation: ‘Greater love hath no man than a mother cat dying to defend her kittens.’ Once you understand the problem facing that cat and how she solved it, you will then be ready to examine yourself and learn how high up the moral ladder you are capable of climbing.

“These juvenile criminals hit a low level. Born with only the instinct for survival, the highest morality they achieved was a shaky loyalty to a peer group, a street gang. But the do-gooders attempted to ‘appeal to their better natures,’ to ‘reach them,’ to ‘spark their moral sense.’ *Tosh*! They *had* no ‘better natures’; experience taught them that what they were doing was the way to survive. The puppy never got his spanking; therefore what he did with pleasure and success must be ‘moral.’

“The basis of all morality is duty, a concept with the same relation to group that self-interest has to individual. Nobody preached duty to these kids in a way they could understand—that is, with a spanking. But the society they were in told them endlessly about their ‘rights.’ ”

“The results should have been predictable, since a human being has *no natural rights of any nature*.”

Mr. Dubois had paused. Somebody took the bait. “Sir? How about ‘life, liberty, and the pursuit of happiness’?”

“Ah, yes, the ‘unalienable rights.’ Each year someone quotes that magnificent poetry. Life? What 'right' to life has a man who is drowning in the Pacific? The ocean will not hearken to his cries. What 'right' to life has a man who must die if he is to save his children? If he chooses to save his own life, does he do so as a matter of 'right'? If two men are starving and cannibalism is the only alternative to death, which man's right is 'unalienable'? And is it 'right'? As to liberty, the heroes who signed that great document pledged themselves to *buy* liberty with their lives. Liberty is *never* unalienable; it must be redeemed regularly with the blood of patriots or it *always* vanishes. Of all the so-called 'natural human rights' that have ever been invented, liberty is least likely to be cheap and is *never* free of cost.

"The third 'right'?—the 'pursuit of happiness'? It is indeed unalienable but it is not a right; it is simply a universal condition which tyrants cannot take away nor patriots restore. Cast me into a dungeon, burn me at the stake, crown me king of kings, I can 'pursue happiness' as long as my brain lives—but neither gods nor saints, wise men nor subtle drugs, can insure that I will catch it."

Mr. Dubois then turned to me. "I told you that 'juvenile delinquent' is a contradiction in terms. 'Delinquent' means 'failing in duty.' But *duty* is an *adult* virtue—indeed a juvenile becomes an adult when, and only when, he acquires a knowledge of duty and embraces it as dearer than the self-love he was born with. There never was, there cannot be a 'juvenile delinquent.' But for every juvenile criminal there are always one or more adult delinquents—people of mature years who either do not know their duty, or who, knowing it, fail."

"And *that* was the soft spot which destroyed what was in many ways an admirable culture. The junior hoodlums who roamed their streets were symptoms of a greater sickness; their citizens (all of them counted as such) glorified their mythology of 'rights' … and lost track of their duties. No nation, so constituted, can endure."

I wondered how Colonel Dubois would have classed Dillinger. Was he a juvenile criminal who merited pity even though you had to get rid of him? Or was he an adult delinquent who deserved nothing but contempt?

I didn't know, I would never know. The one thing I was sure of was that he would never again kill any little girls.

That suited me. I went to sleep.

Chapter 9

We've got no place in this outfit
for good losers. We want tough
hombres who will go in there and
win!
—Admiral Jonas Ingram, 1926

When we had done all that a mud foot can do in flat country, we moved into some rough mountains to do still rougher things—the Canadian Rockies between Good Hope Mountain and Mount Waddington. Camp Sergeant Spooky Smith was much like Camp Currie (aside from its rugged setting) but it was much smaller. Well, the Third Regiment was much smaller now, too less than four hundred whereas we had started out with more than two thousand. H Company was now organized as a single platoon and the battalion paraded as if it were a company. But we were still called "H Company" and Zim was "Company Commander," not platoon leader.

What the sweat-down meant, really, was much more personal instruction; we had more corporal-instructors than we had squads and Sergeant Zim, with only fifty men on his mind instead of the two hundred and sixty he had started with, kept his Argus eyes on each one of us all the time—even when he wasn't there. At least, if you goofed, it turned out he was standing right behind you.

However, the chewing-out you got had almost a friendly quality, in a horrid sort of way, because we had changed, too, as well as the regiment—the one-in-five who was left was almost a soldier and Zim seemed to be trying to make him into one, instead of running him over the hill.

We saw a lot more of Captain Frankel, too; he now spent most of his time teaching us, instead of behind a desk, and he knew all of us by name and face and seemed to have a card file in his mind of exactly what progress each man had made on every weapon, every piece of equipment—not to mention your extra-duty status, medical record, and whether you had had a letter from home lately.

He wasn't as severe with us as Zim was; his words were milder and it took a really stupid stunt to take that friendly grin off his face—but don't let that fool you; there was beryl armor under the grin. I never did figure out which one was the better soldier, Zim or Captain Frankel—I mean, if you took away the insignia and thought of them as privates. Unquestionably they were both better soldiers than any of the other instructors—but which was best? Zim did everything with precision and style, as if he were on parade; Captain Frankel did the same thing with dash and gusto, as if it were a game. The results were about the same and it never turned out to be as easy as Captain Frankel made it look.

We needed the abundance of instructors. Jumping a suit (as I have said) was easy on flat ground. Well, the suit jumps just as high and just as easily in the mountains—but it makes a lot of difference when you have to jump up a vertical granite wall, between two close-set fir trees, and override your jet control at the last instant. We had three major casualties in suit practice in broken country, two dead and one medical retirement.

But that rock wall is even tougher without a suit, tackled with lines and pitons. I didn't really see what use alpine drill was to a cap trooper but I had learned to keep my mouth shut and try to learn what they shoved at us. I learned it and it wasn't too hard. If anybody had told me, a year earlier, that I could go up a solid chunk of rock, as flat and as perpendicular as a blank wall of a building, using only a hammer, some silly little steel pins, and a chunk of clothesline, I would have laughed in his face; I'm a sea-level type. Correction: I *was* a sea-level type. There had been some changes made.

Just how much I had changed I began to find out. At Camp Sergeant Spooky Smith we had liberty—to go to town, I mean. Oh, we had "liberty" after the first month at Camp Currie, too. This meant that, on a Sunday afternoon, if you weren't in the duty platoon, you could check out at the orderly tent and walk just as far away from camp as you wished, bearing in mind that you had to be back for evening muster. But there was nothing within walking distance, if you don't count jack rabbits—no girls, no theaters, no dance halls, et cetera.

Nevertheless, liberty, even at Camp Currie, was no mean privilege; sometimes it can be very important indeed to be able to go so far away that you can't see a tent, a sergeant, nor even the ugly faces of your best friends among the boots … not have to be on the bounce about anything, have time to take out your soul and look at it. You could lose that privilege in several degrees; you could be restricted to camp … or you could be restricted to your own company street, which meant that you couldn't go to the library nor to what was misleadingly called the "recreation" tent (mostly some Parcheesi sets and similar wild excitements) … or you could be under close restriction, required to stay in your tent when your presence was not required elsewhere.

This last sort didn't mean much in itself since it was usually added to extra duty so demanding that you didn't have any time in your tent other than for sleep anyhow; it was a decoration added like a cherry on top of a dish of ice cream to notify you and the world that you had pulled not some everyday goof-off but something unbecoming of a member of the M.I. and were thereby unfit to associate with other troopers until you had washed away the stain.

But at Camp Spooky we could go into town—duty status, conduct status, etc., permitting. Shuttles ran to Vancouver every Sunday morning, right after divine services (which were moved up to thirty minutes after breakfast) and came back again just before supper and again just before taps. The instructors could even spend Saturday night in town, or cop a three-day pass, duty permitting.

I had no more than stepped out of the shuttle, my first pass, than I realized in part that I had changed. Johnnie didn't fit in any longer. Civilian life, I mean. It all seemed amazingly complex and unbelievably untidy.

I'm not running down Vancouver. It's a beautiful city in a lovely setting; the people are charming and they are used to having the M.I. in town and they make a trooper welcome. There is a social center for us downtown, where they have dances for us every week and see to it that junior hostesses are on hand to dance with, and senior hostesses to make sure that a shy boy (*me,* to my amazement—but you try a few months with nothing female around but lady jack rabbits) gets introduced and has a partner's feet to step on.

But I didn't go to the social center that first pass. Mostly I stood around and gawked—at beautiful buildings, at display windows filled with all manner of unnecessary things (and not a weapon among them), at all those people running around, or even strolling, doing exactly as they pleased and no two of them dressed alike—and at girls.

Especially at girls. I hadn't realized just how wonderful they were. Look, I've approved of girls from the time I first noticed that the difference was more than just that they dress differently. So far as I remember I never did go through that period boys are supposed to go through when they know that girls are different but dislike them; I've always liked girls.

But that day I realized that I had long been taking them for granted.

Girls are simply wonderful. Just to stand on a corner and watch them going past is delightful. They don't walk. At least not what we do when we walk. I don't know how to describe it, but it's much more complex and utterly delightful. They don't move just their feet; everything moves and in different directions … and all of it graceful.

I might have been standing there yet if a policeman hadn't come by. He sized us up and said, "Howdy, boys. Enjoying yourselves?"

I quickly read the ribbons on his chest and was impressed. “Yes, *sir*!”

“You don’t have to say ‘sir’ to me. Not much to do here. Why don’t you go to the hospitality center?” He gave us the address, pointed the direction and we started that way—Pat Leivy, “Kitten” Smith, and myself. He called after us, “Have a good time, boys … and stay out of trouble.” Which was exactly what Sergeant Zim had said to us as we climbed into the shuttle.

But we didn’t go there. Pat Leivy had lived in Seattle when he was a small boy and wanted to take a look at his old home town. He had money and offered to pay our shuttle fares if we would go with him. I didn’t mind and it was all right; shuttles ran every twenty minutes and our passes were not restricted to Vancouver. Smith decided to go along, too.

Seattle wasn’t so very different from Vancouver and the girls were just as plentiful; I enjoyed it. But Seattle wasn’t quite as used to having M.I. around in droves and we picked a poor spot to eat dinner, one where we weren’t quite so welcome a bar-restaurant, down by the docks.

Now, look, we weren’t drinking. Well, Kitten Smith had had one repeat one beer with his dinner but he was never anything but friendly and nice. That is how he got his name; the first time we had hand-to-hand combat drill Corporal Jones had said to him disgustedly: “A kitten would have hit me harder than *that*!” The nickname stuck.

We were the only uniforms in the place; most of the other customers were merchant marine sailors—Seattle handles an awful lot of surface tonnage. I hadn’t known it at the time but merchant sailors don’t like us. Part of it has to do with the fact that their guilds have tried and tried to get their trade classed as equivalent to Federal Service, without success—but I understand that some of it goes way back in history, centuries.

There were some young fellows there, too, about our age the right age to serve a term, only they weren’t—longhaired and sloppy and kind of dirty looking. Well, say about the way I looked, I suppose, before I joined up.

Presently we started noticing that at the table behind us, two of these young twerps and two merchant sailors (to judge by clothes) were passing remarks that were intended for us to overhear. I won’t try to repeat them.

We didn’t say anything. Presently, when the remarks were even more personal and the laughs louder and everybody else in the place was keeping quiet and listening, Kitten whispered to me, “Let’s get out of here.”

I caught Pat Leivy’s eye; he nodded. We had no score to settle; it was one of those pay-as-you-get-it places. We got up and left.

They followed us out.

Pat whispered to me, “Watch it.” We kept on walking, didn’t look back.

They charged us.

I gave my man a side-neck chop as I pivoted and let him fall past me, swung to help my mates. But it was over. Four in, four down. Kitten had handled two of them and Pat had sort of wrapped the other one around a lamppost from throwing him a little too hard.

Somebody, the proprietor I guess, must have called the police as soon as we stood up to leave, since they arrived almost at once while we were still standing around wondering what to do with the meat—two policemen; it was that sort of a neighborhood.

The senior of them wanted us to prefer charges, but none of us was willing—Zim had told us to “stay out of trouble.” Kitten looked blank and about fifteen years old and said, “I guess they stumbled.”

“So I see,” agreed the police officer and toed a knife away from the outflung hand of my man, put it against the curb and broke the blade. “Well, you boys had better run along … farther uptown.”

We left. I was glad that neither Pat nor Kitten wanted to make anything of it. It’s a mighty serious thing, a civilian assaulting a member of the Armed Forces, but what the deuce?—the books balanced. They jumped us, they got their lumps. All even.

But it’s a good thing we never go on pass armed … and have been trained to disable without killing. Because every bit of it happened by reflex. I didn’t believe that they would jump us until they already had, and I didn’t do any thinking at all until it was over.

But that’s how I learned for the first time just how much I had changed.

We walked back to the station and caught a shuttle to Vancouver.

We started practice drops as soon as we moved to Camp Spooky—a platoon at a time, in rotation (a full platoon, that is—a company), would shuttle down to the field north of Walla Walla, go aboard, space, make a drop, go through an exercise, and home on a beacon. A day’s work. With eight companies that gave us not quite a drop each week, and then it gave us a little more than a drop each week as attrition continued, whereupon the drops got tougher—over mountains, into the arctic ice, into the Australian desert, and, before we graduated, onto the face of the Moon, where your capsule is placed only a hundred feet up and explodes as it ejects—and you have to look sharp and land with only your suit (no air, no parachute) and a bad landing can spill your air and kill you.

Some of the attrition was from casualties, deaths or injuries, and some of it was just from refusing to enter the capsule—which some did, and that was that; they weren't even chewed out; they were just motioned aside and that night they were paid off. Even a man who had made several drops might get the panic and refuse … and the instructors were just gentle with him, treated him the way you do a friend who is ill and won't get well.

I never quite refused to enter the capsule—but I certainly learned about the shakes. I always got them, I was scared silly every time. I still am.

But you're not a cap trooper unless you drop.

They tell a story, probably not true, about a cap trooper who was sightseeing in Paris. He visited Les Invalides, looked down at Napoleon's coffin and said to a French guard there: "Who's he?"

The Frenchman was properly scandalized. “Monsieur does not know? This is the tomb of *Napoleon*! Napoleon Bonaparte—the greatest soldier who ever lived!”

The cap trooper thought about it. Then he asked, “So? Where were his drops?”

It is almost certainly not true, because there is a big sign outside there that tells you exactly who Napoleon was. But that is how cap troopers feel about it.

Eventually we graduated.

I can see that I’ve left out almost everything. Not a word about most of our weapons, nothing about the time we dropped everything and fought a forest fire for three days, no mention of the practice alert that was a real one, only we didn’t know it until it was over, nor about the day the cook tent blew away—in fact not any mention of weather and, believe me, weather is important to a doughboy, rain and mud especially. But though weather is important while it happens it seems to me to be pretty dull to look back on. You can take descriptions of most any sort of weather out of an almanac and stick them in just anywhere; they’ll probably fit.

The regiment had started with 2009 men; we graduated 187—of the others, fourteen were dead (one executed and his name struck) and the rest resigned, dropped, transferred, medical discharge, *etc.* Major Malloy made a short speech, we each got a certificate, we passed in review for the last time, and the regiment was disbanded, its colors to be cased until they would be needed (three weeks later) to tell another couple of thousand civilians that they were an outfit, not a mob.

I was a “trained soldier,” entitled to put “TP” in front of my serial number instead of “RP.” Big day.

The biggest I ever had.

Chapter 10

The Tree of Liberty must be refreshed from time to time with the blood of patriots …

—Thomas Jefferson, 1787

That is, I thought I was a “trained soldier” until I reported to my ship. Any law against having a wrong opinion?

I see that I didn’t make any mention of how the Terran Federation moved from “peace” to a “state of emergency” and then on into “war.” I didn’t notice it too closely myself. When I enrolled, it was “peace,” the normal condition, at least so people think (who ever expects anything else?). Then, while I was at Currie, it became a “state of emergency” but I still didn’t notice it, as what Corporal Bronski thought about my haircut, uniform, combat drill, and kit was much more important—and what Sergeant Zim thought about such matters was overwhelmingly important. In any case, “emergency” is still “peace.”

“Peace” is a condition in which no civilian pays any attention to military casualties which do not achieve page-one, lead-story prominence-unless that civilian is a close relative of one of the casualties. But, if there ever was a time in history when “peace” meant that there was no fighting going on, I have been unable to find out about it. When I reported to my first outfit, “Willie’s Wildcats,” sometimes known as Company K, Third Regiment, First M.I. Division, and shipped with them in the *Valley Forge* (with that misleading certificate in my kit) the fighting had already been going on for several years.

The historians can’t seem to settle whether to call this one “The Third Space War” (or the “Fourth”), or whether “The First Interstellar War” fits it better. We just call it “The Bug War” if we call it anything, which we usually don’t, and in any case the historians date the beginning of “war” after the time I joined my first outfit and ship. Everything up to then and still later were “incidents,” “patrols,” or “police actions.” However, you are just as dead if you buy a farm in an “incident” as you are if you buy it in a declared war.

But, to tell the truth, a soldier doesn’t notice a war much more than a civilian does, except his own tiny piece of it and that just on the days it is happening. The rest of the time he is much more concerned with sack time, the vagaries of sergeants, and the chances of wheedling the cook between meals. However, when Kitten Smith and Al Jenkins and I joined them at Luna Base, each of Willie's Wildcats had made more than one combat drop; they were soldiers and we were not. We weren't hazed for it—at least I was not—and the sergeants and corporals were amazingly easy to deal with after the calculated frightfulness of instructors.

It took a little while to discover that this comparatively gentle treatment simply meant that we were nobody, hardly worth chewing out, until we had proved in a drop—a real drop—that we might possibly replace real Wildcats who had fought and bought it and whose bunks we now occupied.

Let me tell you how green I was. While the *Valley Forg* was still at Luna Base, I happened to come across my section leader just as he was about to hit dirt, all slicked up in dress uniform. He was wearing in his left ear lobe a rather small earring, a tiny gold skull beautifully made and under it, instead of the conventional crossed bones of the ancient Jolly Roger design, was a whole bundle of little gold bones, almost too small to see.

Back home, I had always worn earrings and other jewelry when I went out on a date—I had some beautiful ear clips, rubies as big as the end of my little finger which had belonged to my mother's grandfather. I like jewelry and had rather resented being required to leave it all behind when I went to Basic … but here was a type of jewelry which was apparently okay to wear with uniform. My ears weren't pierced—my mother didn't approve of it, for boys—but I could have the jeweler mount it on a clip … and I still had some money left from pay call at graduation and was anxious to spend it before it mildewed. "Unh, Sergeant? Where do you get earrings like that one? Pretty neat."

He didn't look scornful, he didn't even smile. He just said, "You like it?"

"I certainly do!" The plain raw gold pointed up the gold braid and piping of the uniform even better than gems would have done. I was thinking that a pair would be still handsomer, with just crossbones instead of all that confusion at the bottom. "Does the base PX carry them?"

"No, the PX here never sells them." He added, "At least I don't think you'll ever be able to buy one here—I hope. But I tell you what—when we reach a place where you can buy one of your own, I'll see to it you know about it. That's a promise."

"Uh, thanks!"

"Don't mention it."

I saw several of the tiny skulls thereafter, some with more "bones," some with fewer; my guess had been correct, this was jewelry permitted with uniform, when on pass at least. Then I got my own chance to "buy" one almost immediately thereafter and discovered that the prices were unreasonably high, for such plain ornaments.

It was Operation Bughouse, the First Battle of Klendathu in the history books, soon after Buenos Aires was smeared. It took the loss of B. A. to make the groundhogs realize that anything was going on, because people who haven't been out don't really believe in other planets, not down deep where it counts. I know I hadn't and I had been space-happy since I was a pup.

But B. A. really stirred up the civilians and inspired loud screams to bring all our forces home, from everywhere—orbit them around the planet practically shoulder to shoulder and interdict the space Terra occupies. This is silly, of course; you don't win a war by defense but by attack—no "Department of Defense" ever won a war; see the histories. But is seems to be a standard civilian reaction to scream for defensive tactics as soon as they do notice a war. They then want to run the war—like a passenger trying to grab the controls away from the pilot in an emergency.

However, nobody asked my opinion at the time; I was told. Quite aside from the impossibility of dragging the troops home in view of our treaty obligations and what it would do to the colony planets in the Federation and to our allies, we were awfully busy doing something else, to wit: carrying the war to the Bugs. I suppose I noticed the destruction of B. A. much less than most civilians did. We were already a couple of parsecs away under Cherenkov drive and the news didn't reach us until we got it from another ship after we came out of drive.

I remember thinking, "Gosh, that's terrible!" and feeling sorry for the one Porteño in the ship. But B. A. wasn't my home and Terra was a long way off and I was very busy, as the attack on Klendathu, the Bugs' home planet, was mounted immediately after that and we spent the time to rendezvous strapped in our bunks, doped and unconscious, with the internal-gravity field of the *Valley Forge* off, to save power and give greater speed.

The loss of Buenos Aires did mean a great deal to me; it changed my life enormously, but this I did not know until many months later.

When it came time to drop onto Klendathu, I was assigned to PFC Dutch Bamburger as a supernumerary. He managed to conceal his pleasure at the news and as soon as the platoon sergeant was out of earshot, he said, "Listen, boot, you stick close behind me and stay out of my way. You go slowing me down, I break your silly neck."

I just nodded. I was beginning to realize that this was not a practice drop.

Then I had the shakes for a while and then we were down—

Operation Bughouse should have been called "Operation

Madhouse.” Everything went wrong. It had been planned as an all-out move to bring the enemy to their knees, occupy their capital and the key points of their home planet, and end the war. Instead it darn near lost the war.

I am not criticizing General Diennes. I don’t know whether it’s true that he demanded more troops and more support and allowed himself to be overruled by the Sky Marshal-in-Chief—or not. Nor was it any of my business. Furthermore I doubt if some of the smart second-guessers know all the facts.

What I do know is that the General dropped with us and commanded us on the ground and, when the situation became impossible, he personally led the diversionary attack that allowed quite a few of us (including me) to be retrieved—and, in so doing, bought his farm. He’s radioactive debris on Klendathu and it’s much too late to courtmartial him, so why talk about it?

I do have one comment to make to any armchair strategist who has never made a drop. Yes, I agree that the Bugs’ planet possibly could have been plastered with H-bombs until it was surfaced with radioactive glass. But would that have won the war? The Bugs are not like us. The Pseudo-Arachnids aren’t even like spiders. They are arthropods who happen to look like a madman’s conception of a giant, intelligent spider, but their organization, psychological and economic, is more like that of ants or termites; they are communal entities, the ultimate dictatorship of the hive. Blasting the surface of their planet would have killed soldiers and workers; it would not have killed the brain caste and the queens—I doubt if anybody can be certain that even a direct hit with a burrowing H-rocket would kill a queen; we don’t know how far down they are. Nor am I anxious to find out; none of the boys who went down those holes came up again.

So suppose we did ruin the productive surface of Klendathu? They still would have ships and colonies and other planets, same as we have, and their HQ is still intact—so unless they surrender, the war isn’t over. We didn’t have nova bombs at that time; we couldn’t crack Klendathu open. If they absorbed the punishment and didn’t surrender, the war was still on.

If they *can* surrender—

Their soldiers can’t. Their workers can’t fight (and you can waste a lot of time and ammo shooting up workers who wouldn’t say *boo*!) and their soldier caste can’t surrender. But don’t make the mistake of thinking that the Bugs are just stupid insects because they look the way they do and don’t know how to surrender. Their warriors are smart, skilled, and aggressive—smarter than you are, by the only universal rule, if the Bug shoots first. You can burn off one leg, two legs, three legs, and he just keeps on coming; burn off four on one side and he topples over—but keeps on shooting. You have to spot the nerve case and get it … whereupon he will trot right on past you, shooting at nothing, until he crashes into a wall or something.

The drop was a shambles from the start. Fifty ships were in our piece of it and they were supposed to come out of Cherenkov drive and into reaction drive so perfectly coordinated that they could hit orbit and drop us, in formation and where we were supposed to hit, without even making one planet circuit to dress up their own formation. I suppose this is difficult. Shucks, I know it is. But when it slips, it leaves the M.I. holding the sack.

We were lucky at that, because the *Valley Forge* and every Navy file in her bought it before we ever hit the ground. In that tight, fast formation (4.7 miles/sec. orbital speed is not a stroll) she collided with the *Ypres* and both ships were destroyed. We were lucky to get out of her tubes—those of us who did get out, for she was still firing capsules as she was rammed. But I wasn't aware of it; I was inside my cocoon, headed for the ground. I suppose our company commander knew that the ship had been lost (and half his Wildcats with it) since he was out first and would know when he suddenly lost touch, over the command circuit, with the ship's captain.

But there is no way to ask him, because he wasn't retrieved. All I ever had was a gradually dawning realization that things were in a mess.

The next eighteen hours were nightmare. I shan't tell much about it because I don't remember much, just snatches, stop-motion scenes of horror. I have never liked spiders, poisonous or otherwise; a common house spider in my bed can give me the creeps. Tarantulas are simply unthinkable, and I can't eat lobster, crab, or anything of that sort. When I got my first sight of a Bug, my mind jumped right out of my skull and started to yammer. It was seconds later that I realized that I had killed it and could stop shooting. I suppose it was a worker; I doubt if I was in any shape to tackle a warrior and win.

But, at that, I was in better shape than was the K-9 Corps. They were to be dropped (if the drop had gone perfectly) on the periphery of our entire target and the neodogs were supposed to range outward and provide tactical intelligence to interdiction squads whose business it was to secure the periphery. Those Calebs aren't armed, of course, other than their teeth. A neodog is supposed to hear, see, and smell and tell his partner what he finds by radio; all he carries is a radio and a destruction bomb with which he (or his partner) can blow the dog up in case of bad wounds or capture.

Those poor dogs didn't wait to be captured; apparently most of them suicided as soon as they made contact. They felt the way I do about the Bugs, only worse. They have neodogs now that are indoctrinated from puppyhood to observe and evade without blowing their tops at the mere sight or smell of a Bug. But these weren't.

But that wasn't all that went wrong. Just name it, it was fouled up. I didn't know what was going on, of course; just stuck close behind Dutch, trying to shoot or flame anything that moved, dropping a grenade down a hole when ever I saw one. Presently I got so that I could kill a Bug without wasting ammo or juice, although I did not learn to distinguish between those that were harmless and those that were not. Only about one in fifty is a warrior but he makes up for the other forty-nine. Their personal weapons aren't as heavy as ours but they are lethal just the same—they've got a beam that will penetrate armor and slice flesh like cutting a hard-boiled egg, and they cooperate even better than we do … because the brain that is doing the heavy thinking for a "squad" isn't where you can reach it; it's down one of the holes.

Dutch and I stayed lucky for quite a long time, milling around over an area about a mile square, corking up holes with bombs, killing what we found above surface, saving our jets as much as possible for emergencies. The idea was to secure the entire target and allow the reinforcements and the heavy stuff to come down without important opposition; this was not a raid, this was a battle to establish a beachhead, stand on it, hold it, and enable fresh troops and heavies to capture or pacify the entire planet.

Only we didn't.

Our own section was doing all right. It was in the wrong pew and out of touch with the other section—the platoon leader and sergeant were dead and we never reformed. But we had staked out a claim, our special-weapons squad had set up a strong point, and we were ready to turn our real estate over to fresh troops as soon as they showed up.

Only they didn't. They dropped in where we should have dropped, found unfriendly natives and had their own troubles. We never saw them. So we stayed where we were, soaking up casualties from time to time and passing them out ourselves as opportunity offered—while we ran low on ammo and jump juice and even power to keep the suits moving. This seemed to go on for a couple of thousand years.

Dutch and I were zipping along close to a wall, headed for our special-weapons squad in answer to a yell for help, when the ground suddenly opened in front of Dutch, a Bug popped out, and Dutch went down.

I flamed the Bug and tossed a grenade and the hole closed up, then turned to see what had happened to Dutch. He was down but he didn't look hurt. A platoon sergeant can monitor the physicals on every man in his platoon, sort out the dead from those who merely can't make it unassisted and must be picked up. But you can do the same thing manually from switches right on the belt of a man's suit.

Dutch didn't answer when I called to him. His body temperature read ninetynine degrees, his respiration, heartbeat, and brain wave read zero—which looked bad but maybe his suit was dead rather than he himself. Or so I told myself, forgetting that the temperature indicator would give no reading if it were the suit rather than the man. Anyhow, I grabbed the can-opener wrench from my own belt and started to take him out of his suit while trying to watch all around me.

Then I heard an allhands call in my helmet that I never want to hear again. "*Sauve qui peut*! Home! Home! Pickup and *home*! Any beacon you can hear. Six minutes! All hands, save yourselves, pick up your mates. Home on any beacon! Sauve qui—"

I hurried.

His head came off as I tried to drag him out of his suit, so I dropped him and got out of there. On a later drop I would have had sense enough to salvage his ammo, but I was far too sluggy to think; I simply bounced away from there and tried to rendezvous with the strong point we had been heading for.

It was already evacuated and I felt lost … lost and deserted. Then I heard recall, not the recall it should have been "Yankee Doodle" (if it had been a boat from the *Valley Forge*)—but "Sugar Bush," a tune I didn't know. No matter, it was a beacon; I headed for it, using the last of my jump juice lavishly—got aboard just as they were about to button up and shortly thereafter was in the *Voortrek*, in such a state of shock that I couldn't remember my serial number.

I've heard it called a "strategic victory"—but I was there and I claim we took a terrible licking.

Six weeks later (and feeling about sixty years older) at Fleet Base on Sanctuary I boarded another ground boat and reported for duty to Ship's Sergeant Jelal in the *Rodger Young*. I was wearing, in my pierced left ear lobe, a broken skull with one bone. Al Jenkins was with me and was wearing one exactly like it (Kitten never made it out of the tube). The few surviving Wildcats were distributed elsewhere around the Fleet; we had lost half our strength, about, in the collision between the *Valley Forge* and the *Ypres*; that disastrous mess on the ground had run our casualties up over 80 per cent and the powers-that-be decided that it was impossible to put the outfit back together with the survivors—close it out, put the records in the archives, and wait until the scars had healed before reactivating Company K (Wildcats) with new faces but old traditions.

Besides, there were a lot of empty files to fill in other outfits. Sergeant Jelal welcomed us warmly, told us that we were joining a smart outfit, “best in the Fleet,” in a taut ship, and didn’t seem to notice our ear skulls. Later that day he took us forward to meet the Lieutenant, who smiled rather shyly and gave us a fatherly little talk. I noticed that Al Jenkins wasn’t wearing his gold skull. Neither was I—because I had already noticed that nobody in Rasczak’s Roughnecks wore the skulls.

They didn’t wear them because, in Rasczak’s Roughnecks, it didn’t matter in the least how many combat drops you had made, nor which ones; you were either a Roughneck or you weren’t—and if you were not, they didn’t care who you were. Since we had come to them not as recruits but as combat veterans, they gave us all possible benefit of doubt and made us welcome with no more than that unavoidable trace of formality anybody necessarily shows to a house guest who is not a member of the family.

But, less than a week later when we had made one combat drop with them, we were full fledged Roughnecks, members of the family, called by our first names, chewed out on occasion without any feeling on either side that we were less than blood brothers thereby, borrowed from and lent to, included in bull sessions and privileged to express our own silly opinions with complete freedom—and have them slapped down just as freely. We even called noncoms by their first names on any but strictly duty occasions. Sergeant Jelal was always on duty, of course, unless you ran across him dirtside, in which case he was “Jelly” and went out of his way to behave as if his lordly rank meant nothing between Roughnecks.

But the Lieutenant was always “The Lieutenant”—never “Mr. Rasczak,” nor even “Lieutenant Rasczak.” Simply “The Lieutenant,” spoken to and of in the third person. There was no god but the Lieutenant and Sergeant Jelal was his prophet. Jelly could say “No” in his own person and it might be subject to further argument, at least from junior sergeants, but if he said, “The Lieutenant wouldn’t like it,” he was speaking *ex cathedra* and the matter was dropped permanently. Nobody ever tried to check up on whether or not the Lieutenant would or would not like it; the Word had been spoken.

The Lieutenant was father to us and loved us and spoiled us and was nevertheless rather remote from us aboard ship—and even dirtside … unless we reached dirt via a drop. But in a drop, well, you wouldn’t think that an officer could worry about every man of a platoon spread over a hundred square miles of terrain. But he can. He can worry himself sick over each one of them. How he could keep track of us all I can’t describe, but in the midst of a ruckus his voice would sing out over the command circuit: “Johnson! Check squad six! Smitty’s in trouble,” and it was better than even money that the Lieutenant had noticed it before Smith’s squad leader.

Besides that, you knew with utter and absolute certainty that, as long as you were still alive, the Lieutenant would not get into the retrieval boat without you. There have been prisoners taken in the Bug War, but none from Rasczak's Roughnecks.

Jelly was mother to us and was close to us and took care of us and didn't spoil us at all. But he didn't report us to the Lieutenant—there was never a courtmartial among the Roughnecks and no man was ever flogged. Jelly didn't even pass out extra duty very often; he had other ways of paddling us. He could look you up and down at daily inspection and simply say, "In the Navy you might look good. Why don't you transfer?"—and get results, it being an article of faith among us that the Navy crew members slept in their uniforms and never washed below their collar lines.

But Jelly didn't have to maintain discipline among privates because he maintained discipline among his noncoms and expected them to do likewise. My squad leader, when I first joined, was "Red" Greene. After a couple of drops, when I knew how good it was to be a Roughneck, I got to feeling gay and a bit too big for my clothes—and talked back to Red. He didn't report me to Jelly; he just took me back to the washroom and gave me a medium set of lumps, and we got to be pretty good friends. In fact, he recommended me for lance, later on.

Actually we didn't know whether the crew members slept in their clothes or not; we kept to our part of the ship and the Navy men kept to theirs, because they were made to feel unwelcome if they showed up in our country other than on duty—after all, one has social standards one must maintain, mustn't one? The Lieutenant had his stateroom in male officers' country, a Navy part of the ship, but we never went there, either, except on duty and rarely. We did go forward for guard duty, because the *Rodger Young* was a mixed ship, female captain and pilot officers, some female Navy ratings; forward of bulkhead thirty was ladies' country—and two armed M.I. day and night stood guard at the one door cutting it. (At battle stations that door, like all other gastight doors, was secured; nobody missed a drop.)

Officers were privileged to go forward of bulkhead thirty on duty and all officers, including the Lieutenant, ate in a mixed mess just beyond it. But they didn't tarry there; they ate and got out. Maybe other corvette transports were run differently, but that was the way the *Rodger Young* was run—both the Lieutenant and Captain Deladrier wanted a taut ship and got it.

Nevertheless guard duty was a privilege. It was a rest to stand beside that door, arms folded, feet spread, doping off and thinking about nothing … but always warmly aware that any moment you might see a feminine creature even though you were not privileged to speak to her other than on duty. Once I was called all the way into the Skipper's office and she spoke to me—she looked right at me and said, "Take this to the Chief Engineer, please."

My daily shipside job, aside from cleaning, was servicing electronic equipment under the close supervision of "Padre" Migliaccio, the section leader of the first section, exactly as I used to work under Carl's eye. Drops didn't happen too often and everybody worked every day. If a man didn't have any other talent he could always scrub bulkheads; nothing was ever quite clean enough to suit Sergeant Jelal. We followed the M.I. rule; everybody fights, everybody works. Our first cook was Johnson, the second section's sergeant, a big friendly boy from Georgia (the one in the western hemisphere, not the other one) and a very talented chef. He wheedled pretty well, too; he liked to eat between meals himself and saw no reason why other people shouldn't.

With the Padre leading one section and the cook leading the other, we were well taken care of, body and soul—but suppose one of them bought it? Which one would you pick? A nice point that we never tried to settle but could always discuss.

The *Rodger Young* kept busy and we made a number of drops, all different. Every drop has to be different so that they never can figure out a pattern on you. But no more pitched battles; we operated alone, patrolling, harrying, and raiding. The truth was that the Terran Federation was not then able to mount a large battle; the foul-up with Operation Bughouse had cost too many ships, 'way too many trained men. It was necessary to take time to heal up, train more men.

In the meantime, small fast ships, among them the Rodger Young and other corvette transports, tried to be everywhere at once, keeping the enemy off balance, hurting him and running. We suffered casualties and filled our holes when we returned to Sanctuary for more capsules. I still got the shakes every drop, but actual drops didn't happen too often nor were we ever down long—and between times there were days and days of shipboard life among the Roughnecks.

It was the happiest period of my life although I was never quite consciously aware of it—I did my full share of beefing just as everybody else did, and enjoyed that, too.

We weren't *really* hurt until the Lieutenant bought it.

I guess that was the worst time in all my life. I was already in bad shape for a personal reason: My mother had been in Buenos Aires when the Bugs smeared it.

I found out about it one time when we put in at Sanctuary for more capsules and some mail caught up with us a note from my Aunt

Eleanora, one that had not been coded and sent fast because she had failed to mark for that; the letter itself came. It was about three bitter lines. Somehow she seemed to blame me for my mother's death. Whether it was my fault because I was in the Armed Services and should have therefore prevented the raid, or whether she felt that my mother had made a trip to Buenos Aires because I wasn't home where I should have been, was not quite clear; she managed to imply both in the same sentence.

I tore it up and tried to walk away from it. I thought that both my parents were dead—since Father would never send Mother on a trip that long by herself. Aunt Eleanora had not said so, but she wouldn't have mentioned Father in any case; her devotion was entirely to her sister. I was almost correct—eventually I learned that Father had planned to go with her but something had come up and he stayed over to settle it, intending to come along the next day. But Aunt Eleanora did not tell me this.

A couple of hours later the Lieutenant sent for me and asked me very gently if I would like to take leave at Sanctuary while the ship went out on her next patrol—he pointed out that I had plenty of accumulated R&R and might as well use some of it. I don't know how he knew that I had lost a member of my family, but he obviously did. I said no, thank you, sir; I preferred to wait until the outfit all took R&R together.

I'm glad I did it that way, because if I hadn't, I wouldn't have been along when the Lieutenant bought it … and that would have been just too much to be borne. It happened very fast and just before retrieval. A man in the third squad was wounded, not badly but he was down; the assistant section leader moved in to pick up—and bought a small piece of it himself. The Lieutenant, as usual, was watching everything at once—no doubt he had checked physicals on each of them by remote, but we'll never know. What he did was to make sure that the assistant section leader was still alive; then made pickup on both of them himself, one in each arm of his suit.

He threw them the last twenty feet and they were passed into the retrieval boat—and with everybody else in, the shield gone and no interdiction, was hit and died instantly.

I haven't mentioned the names of the private and of the assistant section leader on purpose. The Lieutenant was making pickup on all of us, with his last breath. Maybe I was the private. It doesn't matter who he was. What did matter was that our family had had its head chopped off. The head of the family from which we took our name, the father who made us what we were.

After the Lieutenant had to leave us Captain Deladrier invited Sergeant Jelal to eat forward, with the other heads of departments.

But he begged to be excused. Have you ever seen a widow with stern character keep her family together by behaving as if the head of the family had simply stepped out and would return at any moment? That's what Jelly did. He was just a touch more strict with us than ever and if he ever had to say: "The Lieutenant wouldn't like that," it was almost more than a man could take. Jelly didn't say it very often.

He left our combat team organization almost unchanged; instead of shifting everybody around, he moved the assistant section leader of the second section over into the (nominal) platoon sergeant spot, leaving his section leaders where they were needed—with their sections—and he moved me from lance and assistant squad leader into acting corporal as a largely ornamental assistant section leader. Then he himself behaved as if the Lieutenant were merely out of sight and that he was just passing on the Lieutenant's orders, as usual.

It saved us.

Chapter 11

I have nothing to offer but
blood, toil, tears, and sweat.
—W. Churchill, XXth century soldier-statesman

As we came back into the ship after the raid on the Skinnies—the raid in which Dizzy Flores bought it, Sergeant Jelal's first drop as platoon leader—a ship's gunner who was tending the boat lock spoke to me: "How'd it go?"

"Routine," I answered briefly. I suppose his remark was friendly but I was feeling very mixed up and in no mood to talk—sad over Dizzy, glad that we had made pickup anyhow, mad that the pickup had been useless, and all of it tangled up with that washed-out but happy feeling of being back in the ship again, able to muster arms and legs and note that they are all present. Besides, how can you talk about a drop to a man who has never made one?

"So?" he answered. "You guys have got it soft. Loaf thirty days, work thirty minutes. Me, I stand a watch in three *and* turn to."

"Yeah, I guess so," I agreed and turned away. "Some of us are born lucky."

"Soldier, you ain't peddlin' vacuum," he said to my back.

And yet there was much truth in what the Navy gunner had said. We cap troopers are like aviators of the earlier mechanized wars; a long and busy military career could contain only a few hours of actual combat facing the enemy, the rest being: train, get ready, go out—then come back, clean up the mess, get ready for another one, and practice, practice, practice, in between. We didn't make another drop for almost three weeks and that on a different planet around another star—a Bug colony. Even with Cherenkov drive, stars are far apart.

In the meantime I got my corporal's stripes, nominated by Jelly and confirmed by Captain Deladrier in the absence of a commissioned officer of our own. Theoretically the rank would not be permanent until approved against vacancy by the Fleet M.I. repple-depple, but that meant nothing, as the casualty rate was such that there were always more vacancies in the T. O. than there were warm bodies to fill them. I was a corporal when Jelly said I was a corporal; the rest was red tape.

But the gunner was not quite correct about "loafing"; there were fifty-three suits of powered armor to check, service, and repair between each drop, not to mention weapons and special equipment. Sometimes Migliaccio would downcheck a suit, Jelly would confirm it, and the ship's weapons engineer, Lieutenant Farley, would decide that he couldn't cure it short of base facilities—whereupon a new suit would have to be broken out of stores and brought from "cold" to "hot," an exacting process requiring twenty-six man-hours not counting the time of the man to whom it was being fitted.

We kept busy.

But we had fun, too. There were always several competitions going on, from acey-deucy to Honor Squad, and we had the best jazz band in several cubic lightyears (well, the only one, maybe), with Sergeant Johnson on the trumpet leading them mellow and sweet for hymns or tearing the steel right off the bulkheads, as the occasion required. After that masterful (or should it be "mistressful"?) retrieval rendezvous without a programmed ballistic, the platoon's metalsmith, PFC Archie Campbell, made a model of the *Rodger Young* for the Skipper and we all signed and Archie engraved our signatures on a base plate: *To Hot Pilot Yvette Deladrier, with thanks from Rasczak's Roughnecks*, and we invited her aft to eat with us and the Roughneck Downbeat Combo played during dinner and then the junior private presented it to her. She got tears and kissed him—and kissed Jelly as well and he blushed purple.

After I got my chevrons I simply had to get things straight with Ace, because Jelly kept me on as assistant section leader. This is not good. A man ought to fill each spot on his way up; I should have had a turn as squad leader instead of being bumped from lance and assistant squad leader to corporal and assistant section leader. Jelly knew this, of course, but I know perfectly well that he was trying to keep the outfit as much as possible the way it had been when the Lieutenant was alive—which meant that he left his squad leaders and section leaders unchanged.

But it left me with a ticklish problem; all three of the corporals under me as squad leaders were actually senior to me—but if Sergeant Johnson bought it on the next drop, it would not only lose us a mighty fine cook, it would leave me leading the section. There mustn't be any shadow of doubt when you give an order, not in combat; I had to clear up any possible shadow before we dropped again.

Ace was the problem. He was not only senior of the three, he was a career corporal as well and older than I was. If Ace accepted me, I wouldn't have any trouble with the other two squads.

I hadn't really had any trouble with him aboard. After we made pickup on Flores together he had been civil enough. On the other hand we hadn't had anything to have trouble over; our shipside jobs didn't put us together, except at daily muster and guard mount, which is all cut and dried. But you can feel it. He was not treating me as somebody he took orders from.

So I looked him up during off hours. He was lying in his bunk, reading a book, *Space Rangers against the Galaxy*—a pretty good yarn, except that I doubt if a military outfit ever had so many adventures and so few goof-offs. The ship had a good library.

"Ace. Got to see you."

He glanced up. "So? I just left the ship, I'm off duty."

"I've got to see you now. Put your book down."

"What's so aching urgent? I've got to finish this chapter."

"Oh, come off it, Ace. If you can't wait, I'll tell you how it comes out."

"You do and I'll clobber you." But he put the book down, sat up, and listened.

I said, "Ace, about this matter of the section organization—you're senior to me, you ought to be assistant section leader."

"Oh, so it's that again!"

"Yep. I think you and I ought to go see Johnson and get him to fix it up with Jelly."

"You do, eh?"

"Yes, I do. That's how it's got to be."

"So? Look, Shortie, let me put you straight. I got nothing against you at all. Matter of fact, you were on the bounce that day we had to pick up Dizzy; I'll hand you that. But if you want a squad, you go dig up one of your own. Don't go eying mine. Why, my boys wouldn't even peel potatoes for you."

"That's your final word?"

"That's my first, last, and only word."

I sighed. "I thought it would be. But I had to make sure. Well, that settles that. But I've got one other thing on my mind. I happened to notice that the washroom needs cleaning … and I think maybe you and I ought to attend to it. So put your book aside … as Jelly says, noncoms are always on duty."

He didn't stir at once. He said quietly, "You really think it's necessary, Shortie? As I said, I got nothing against you."

"Looks like."

"Think you can do it?"

"I can sure try."

"Okay. Let's take care of it."

We went aft to the washroom, chased out a private who was about to take a shower he didn't really need, and locked the door. Ace said, "You got any restrictions in mind, Shortie?"

"Well … I hadn't planned to kill you."

"Check. And no broken bones, nothing that would keep either one of us out of the next drop—except maybe by accident, of course. That suit you?"

"Suits," I agreed. "Uh, I think maybe I'll take my shirt off."

"Wouldn't want to get blood on your shirt." He relaxed. I started to peel it off and he let go a kick for my kneecap. No wind up. Flatfooted and not tense.

Only my kneecap wasn't there—I had learned.

A real fight ordinarily can last only a second or two, because that is all the time it takes to kill a man, or knock him out, or disable him to the point where he can't fight. But we had agreed to avoid inflicting permanent damage; this changes things. We were both young, in top condition, highly trained, and used to absorbing punishment. Ace was bigger, I was maybe a touch faster. Under such conditions the miserable business simply has to go on until one or the other is too beaten down to continue—unless a fluke settles it sooner. But neither one of us was allowing any flukes; we were professionals and wary.

So it did go on, for a long, tedious, painful time. Details would be trivial and pointless; besides, I had no time to take notes.

A long time later I was lying on my back and Ace was flipping water in my face. He looked at me, then hauled me to my feet, shoved me against a bulkhead, steadied me. "Hit me!"

"Huh?" I was dazed and seeing double.

"Johnnie … hit me."

His face was floating in the air in front of me; I zeroed in on it and slugged it with all the force in my body, hard enough to mash any mosquito in poor health. His eyes closed and he slumped to the deck and I had to grab at a stanchion to keep from following him.

He got slowly up. "Okay, Johnnie," he said, shaking his head, "I've had my lesson. You won't have any more lip out of me … nor out of anybody in the section. Okay?"

I nodded and my head hurt.

"Shake?" he asked.

We shook on it, and that hurt, too.

Almost anybody else knew more about how the war was going than we did, even though we were in it. This was the period, of course, after the Bugs had located our home planet, through the Skinnies, and had raided it, destroying Buenos Aires and turning "contact troubles" into all-out war, but *before* we had built up our forces and before the Skinnies had changed sides and become our co-belligerents and de facto allies. Partly effective interdiction for Terra had been set up from Luna (we didn't know it), but speaking broadly, the Terran Federation was losing the war.

We didn't know that, either. Nor did we know that strenuous efforts were being made to subvert the alliance against us and bring the Skinnies over to our side; the nearest we came to being told about that was when we got instructions, before the raid in which Flores was killed, to go easy on the Skinnies, destroy as much property as possible but to kill inhabitants only when unavoidable.

What a man doesn't know he can't spill if he is captured; neither drugs, nor torture, nor brainwash, nor endless lack of sleep can squeeze out a secret he doesn't possess. So we were told only what we had to know for tactical purposes. In the past, armies have been known to fold up and quit because the men didn't know what they were fighting for, or why, and therefore lacked the will to fight. But the M.I. does not have that weakness. Each one of us was a volunteer to begin with, each for some reason or other—some good, some bad. But now we fought because we were M.I. We were professionals, with *esprit de corps*. We were Rasczak's Roughnecks, the best unprintable outfit in the whole expurgated M.I.; we climbed into our capsules because Jelly told us it was time to do so and we fought when we got down there because that is what Rasczak's Roughnecks do.

We certainly didn't know that we were losing.

Those Bugs lay eggs. They not only lay them, they hold them in reserve, hatch them as needed. If we killed a warrior—or a thousand, or ten thousand—his or their replacements were hatched and on duty almost before we could get back to base. You can imagine, if you like, some Bug supervisor of population flashing a phone to somewhere down inside and saying, "Joe, warm up ten thousand warriors and have 'em ready by Wednesday … and tell engineering to activate reserve incubators N, O, P, Q, and R; the demand is picking up."

I don't say they did exactly that, but those were the results. But don't make the mistake of thinking that they acted purely from instinct, like termites or ants; their actions were as intelligent as ours (stupid races don't build spaceships!) and were much better coordinated. It takes a minimum of a year to train a private to fight and to mesh his fighting in with his mates; a Bug warrior is hatched able to do this.

Every time we killed a thousand Bugs at a cost of one M.I. it was a net victory for the Bugs. We were learning, expensively, just how efficient a total communism can be when used by a people actually adapted to it by evolution; the Bug commissars didn't care any more about expending soldiers than we cared about expending ammo. Perhaps we could have figured this out about the Bugs by noting the grief the Chinese Hegemony gave the Russo-Anglo-American Alliance; however the trouble with "lessons from history" is that we usually read them best after falling flat on our chins.

But we were learning. Technical instructions and tactical doctrine orders resulted from every brush with them, spread through the Fleet. We learned to tell the workers from the warriors—if you had time, you could tell from the shape of the carapace, but the quick rule of thumb was: If he comes at you, he's a warrior; if he runs, you can turn your back on him. We learned not to waste ammo even on warriors except in self-protection; instead we went after their lairs. Find a hole, drop down it first a gas bomb which explodes gently a few seconds later, releasing an oily liquid which evaporates as a nerve gas tailored to Bugs (it is harmless to us) and which is heavier than air and keeps on going down—then you use a second grenade of H. E. to seal the hole.

We still didn't know whether we were getting deep enough to kill the queens—but we did know that the Bugs didn't like these tactics; our intelligence through the Skinnies and on back into the Bugs themselves was definite on this point. Besides, we cleaned their colony off Sheol completely this way. Maybe they managed to evacuate the queens and the brains … but at least we were learning to hurt them.

But so far as the Roughnecks were concerned, these gas bombings were simply another drill, to be done according to orders, by the numbers, and on the bounce.

Eventually we had to go back to Sanctuary for more capsules. Capsules are expendable (well, so were we) and when they are gone, you must return to base, even if the Cherenkov generators could still take you twice around the Galaxy. Shortly before this a dispatch came through brevetting Jelly to lieutenant, vice Rasczak. Jelly tried to keep it quiet but Captain Deladrier published it and then required him to eat forward with the other officers. He still spent all the rest of his time aft.

But we had taken several drops by then with him as platoon leader and the outfit had gotten used to getting along without the Lieutenant —it still hurt but it was routine now. After Jelal was commissioned the word was slowly passed around among us and chewed over that it was time for us to name ourselves for our boss, as with other outfits.

Johnson was senior and took the word to Jelly; he picked me to go along with him as moral support. "Yeah?" growled Jelly.

"Uh, Sarge—I mean Lieutenant, we've been thinking—"

"With what?"

"Well, the boys have sort of been talking it over and they think—well, they say the outfit ought to call itself: 'Jelly's Jaguars.' "

"They do, eh? How many of 'em favor that name?"

"It's unanimous," Johnson said simply.

"So? Fiftytwo ayes … and one no. The noes have it." Nobody ever brought up the subject again.

Shortly after that we orbited at Sanctuary. I was glad to be there, as the ship's internal pseudogravity field had been off for most of two days before that, while the Chief Engineer tinkered with it, leaving us in free fall—which I hate. I'll never be a real spaceman. Dirt underfoot felt good. The entire platoon went on ten days' rest & recreation and transferred to accommodation barracks at the Base.

I never have learned the coordinates of Sanctuary, nor the name or catalogue number of the star it orbits—because what you don't know, you can't spill; the location is ultra-top-secret, known only to ships' captains, piloting officers, and such … and, I understand, with each of them under orders and hypnotic compulsion to suicide if necessary to avoid capture. So I don't want to know. With the possibility that Luna Base might be taken and Terra herself occupied, the Federation kept as much of its beef as possible at Sanctuary, so that a disaster back home would not necessarily mean capitulation.

But I can tell you what sort of a planet it is. Like Earth, but retarded.

Literally retarded, like a kid who takes ten years to learn to wave bye-bye and never does manage to master pattycake. It is a planet as near like Earth as two planets can be, same age according to the planetologists and its star is the same age as the Sun and the same type, so say the astrophysicists. It has plenty of flora and fauna, the same atmosphere as Earth, near enough, and much the same weather; it even has a good-sized moon and Earth's exceptional tides.

With all these advantages it barely got away from the starting gate. You see, it's short on mutations; it does not enjoy Earth's high level of natural radiation.

Its typical and most highly developed plant life is a very primitive giant fern; its top animal life is a proto-insect which hasn't even developed colonies. I am not speaking of transplanted Terran flora and fauna—*our* stuff moves in and brushes the native stuff aside.

With its evolutionary progress held down almost to zero by lack of radiation and a consequent most unhealthily low mutation rate, native life forms on Sanctuary just haven't had a decent chance to evolve and aren't fit to compete. Their gene patterns remain fixed for a relatively long time; they aren't adaptable—like being forced to play the same bridge hand over and over again, for eons, with no hope of getting a better one.

As long as they just competed with each other, this didn't matter too much—morons among morons, so to speak. But when types that had evolved on a planet enjoying high radiation and fierce competition were introduced, the native stuff was outclassed.

Now all the above is perfectly obvious from high school biology … but the high forehead from the research station there who was telling me about this brought up a point I would never have thought of.

What about the human beings who have colonized Sanctuary?

Not transients like me, but the colonists who live there, many of whom were born there, and whose descendants will live there, even into the umpteenth generation—what about those descendants? It doesn't do a person any harm not to be radiated; in fact it's a bit safer —leukemia and some types of cancer are almost unknown there. Besides that, the economic situation is at present all in their favor; when they plant a field of (Terran) wheat, they don't even have to clear out the weeds. Terran wheat displaces anything native.

But the descendants of those colonists won't evolve. Not much, anyhow. This chap told me that they could improve a little through mutation from other causes, from new blood added by immigration, and from natural selection among the gene patterns they already own —but that is all very minor compared with the evolutionary rate on Terra and on any usual planet. So what happens? Do they stay frozen at their present level while the rest of the human race moves on past them, until they are living fossils, as out of place as a pithecanthropus in a spaceship?

Or will they worry about the fate of their descendants and dose themselves regularly with X-rays or maybe set off lots of dirty-type nuclear explosions each year to build up a fallout reservoir in their atmosphere? (Accepting, of course, the immediate dangers of radiation to themselves in order to provide a proper genetic heritage of mutation for the benefit of their descendants.)

This bloke predicted that they would not do anything. He claims that the human race is too individualistic, too self-centered, to worry that much about future generations. He says that the genetic impoverishment of distant generations through lack of radiation is something most people are simply incapable of worrying about. And of course it is a far-distant threat; evolution works so slowly, even on Terra, that the development of a new species is a matter of many, many thousands of years.

I don't know. Shucks, I don't know what I myself will do more than half the time; how can I predict what a colony of strangers will do? But I'm sure of this: Sanctuary is going to be fully settled, either by us or by the Bugs. Or by somebody. It is a potential utopia, and, with desirable real estate so scarce in this end of the Galaxy, it will not be left in the possession of primitive life forms that failed to make the grade.

Already it is a delightful place, better in many ways for a few days R & R than is most of Terra. In the second place, while it has an awful lot of civilians, more than a million, as civilians go they aren't bad. They know there is a war on. Fully half of them are employed either at the Base or in war industry; the rest raise food and sell it to the Fleet. You might say they have a vested interest in war, but, whatever their reasons, they respect the uniform and don't resent the wearers thereof. Quite the contrary. If an M.I. walks into a shop there, the proprietor calls him "Sir," and really seems to mean it, even while he's trying to sell something worthless at too high a price.

But in the *first* place, half of those civilians are female.

You have to have been out on a long patrol to appreciate this properly. You need to have looked forward to your day of guard duty, for the privilege of standing two hours out of each six with your spine against bulkhead thirty and your ears cocked for just the *sound* of a female voice. I suppose it's actually easier in the all-stag ships … but I'll take the *Rodger Young*. It's good to know that the ultimate reason you are fighting actually exists and that they are not just a figment of the imagination.

Besides the civilian wonderful 50 per cent, about 40 per cent of the Federal Service people on Sanctuary are female. Add it all up and you've got the most beautiful scenery in the explored universe.

Besides these unsurpassed natural advantages, a great deal has been done artificially to keep R & R from being wasted. Most of the civilians seem to hold two jobs; they've got circles under their eyes from staying up all night to make a service man's leave pleasant. Churchill Road from the Base to the city is lined both sides with enterprises intended to separate painlessly a man from money he really hasn't any use for anyhow, to the pleasant accompaniment of refreshment, entertainment, and music.

If you are able to get past these traps, through having already been bled of all valuta, there are still other places in the city almost as satisfactory (I mean there are girls there, too) which are provided free by a grateful populace—much like the social center in Vancouver, these are, but even more welcome.

Sanctuary, and especially Espiritu Santo, the city, struck me as such an ideal place that I toyed with the notion of asking for my discharge there when my term was up after all, I didn't really care whether my descendants (if any) twenty-five thousand years hence had long green tendrils like everybody else, or just the equipment I had been forced to get by with. That professor type from the Research Station couldn't frighten me with that no radiation scare talk; it seemed to me (from what I could see around me) that the human race had reached its ultimate peak anyhow.

No doubt a gentleman wart hog feels the same way about a lady wart hog—but, if so, both of us are very sincere.

There are other opportunities for recreation there, too. I remember with particular pleasure one evening when a table of Roughnecks got into a friendly discussion with a group of Navy men (not from the

Rodger Young) seated at the next table. The debate was spirited, a bit noisy, and some Base police came in and broke it up with stun guns just as we were warming to our rebuttal. Nothing came of it, except that we had to pay for the furniture—the Base Commandant takes the position that a man on R & R should be allowed a little freedom as long as he doesn't pick one of the "thirtyone crash landings."

The accommodation barracks are all right, too—not fancy, but comfortable and the chow line works twenty-five hours a day with civilians doing all the work. No reveille, no taps, you're actually on leave and you don't have to go to the barracks at all. I did, however, as it seemed downright preposterous to spend money on hotels when there was a clean, soft sack free and so many better ways to spend accumulated pay. That extra hour in each day was nice, too, as it meant nine hours solid and the day still untouched—I caught up sack time clear back to Operation Bughouse.

It might as well have been a hotel; Ace and I had a room all to ourselves in visiting non-com quarters. One morning, when R & R was regrettably drawing to a close, I was just turning over about local noon when Ace shook my bed. "On the bounce, soldier! The Bugs are attacking."

I told him what to do with the Bugs.

"Let's hit dirt," he persisted.

"No dinero." I had had a date the night before with a chemist (female, of course, and charmingly so) from the Research Station. She had known Carl on Pluto and Carl had written to me to look her up if I ever got to Sanctuary. She was a slender redhead, with expensive tastes. Apparently Carl had intimated to her that I had more money than was good for me, for she decided that the night before was just the time for her to get acquainted with the local champagne. I didn't let Carl down by admitting that all I had was a trooper's honorarium; I bought it for her while I drank what they said was (but wasn't) fresh pineapple squash. The result was that I had to walk home, afterwards—the cabs aren't free. Still, it had been worth it. After all, what is money?—I'm speaking of Bug money, of course.

"No ache," Ace answered. "I can juice you—I got lucky last night. Ran into a Navy file who didn't know percentages."

So I got up and shaved and showered and we hit the chow line for half a dozen shell eggs and sundries such as potatoes and ham and hot cakes and so forth and then we hit dirt to get something to eat. The walk up Churchill Road was hot and Ace decided to stop in a cantina. I went along to see if their pineapple squash was real. It wasn't, but it was cold. You can't have everything.

We talked about this and that and Ace ordered another round. I tried their strawberry squash—same deal. Ace stared into his glass, then said, “Ever thought about greasing for officer?”

I said, “*Huh*? Are you crazy?”

“Nope. Look, Johnnie, this war may run on quite a piece. No matter what propaganda they put out for the folks at home, you and I know that the Bugs aren’t ready to quit. So why don’t you plan ahead? As the man says, if you’ve got to play in the band, it’s better to wave the stick than to carry the big drum.”

I was startled by the turn the talk had taken, especially from Ace. “How about you? Are you planning to buck for a commission?”

“Me?” he answered. “Check your circuits, son—you’re getting wrong answers. I’ve got no education and I’m ten years older than you are. But you’ve got enough education to hit the selection exams for O.C.S. *and* you’ve got the I. Q. they like. I guarantee that if you go career, you’ll make sergeant before I do … and get picked for O.C.S. the day after.”

“Now I know you’re crazy!”

“You listen to your pop. I hate to tell you this, but you are just stupid and eager and sincere enough to make the kind of officer that men love to follow into some silly predicament. But me—well, I’m a natural non-com, with the proper pessimistic attitude to offset the enthusiasm of the likes of you. Someday I’ll make sergeant … and presently I’ll have my twenty years in and retire and get one of the reserved jobs—cop, maybe—and marry a nice fat wife with the same low tastes I have, and I’ll follow the sports and fish and go pleasantly to pieces.”

Ace stopped to wet his whistle. “But you,” he went on. “You’ll stay in and probably make high rank and die gloriously and I’ll read about it and say proudly, ‘I knew him when. Why, I used to lend him money—we were corporals together.’ Well?”

“I’ve never thought about it,” I said slowly. “I just meant to serve my term.”

He grinned sourly. “Do you see any term enrollees being paid off today? You expect to make it on two years?”

He had a point. As long as the war continued, a “term” didn’t end—at least not for cap troopers. It was mostly a difference in attitude, at least for the present. Those of us on “term” could at least feel like short-timers; we could talk about: “When this flea-bitten war is over.” A career man didn’t say that; he wasn’t going anywhere, short of retirement or buying it.

On the other hand, neither were we. But if you went “career” and then didn’t finish twenty … well, they could be pretty sticky about your franchise even though they wouldn’t keep a man who didn’t want to stay.

“Maybe not a two-year term,” I admitted. “But the war won’t last forever."

"It won't?"

"How can it?"

"Blessed if I know. They don't tell me these things. But I know that's not what is troubling you, Johnnie. You got a girl waiting?"

"No. Well, I had," I answered slowly, "but she 'Dear-Johned' me." As a lie, this was no more than a mild decoration, which I tucked in because Ace seemed to expect it. Carmen wasn't my girl and she never waited for anybody—but she did address letters with "Dear Johnnie" on the infrequent occasions when she wrote to me.

Ace nodded wisely. "They'll do it every time. They'd rather marry civilians and have somebody around to chew out when they feel like it. Never you mind, son—you'll find plenty of them more than willing to marry when you're retired … and you'll be better able to handle one at that age. Marriage is a young man's disaster and an old man's comfort." He looked at my glass. "It nauseates me to see you drinking that slop."

"I feel the same way about the stuff you drink," I told him.

He shrugged. "As I say, it takes all kinds. You think it over."

"I will."

Ace got into a card game shortly after, and lent me some money and I went for a walk; I needed to think.

Go career? Quite aside from that noise about a commission, did I want to go career? Why, I had gone through all this to get my franchise, hadn't I?—and if I went career, I was just as far away from the privilege of voting as if I had never enrolled … because as long as you were still in uniform you weren't entitled to vote. Which was the way it should be, of course why, if they let the Roughnecks vote, the idiots might vote not to make a drop. Can't have that.

Nevertheless I had signed up in order to win a vote.

Or had I?

Had I ever cared about voting? No, it was the prestige, the pride, the status … of being a citizen.

Or was it?

I couldn't to save my life remember why I had signed up. Anyhow, it wasn't the process of voting that made a citizen—the Lieutenant had been a citizen in the truest sense of the word, even though he had not lived long enough ever to cast a ballot. He had "voted" every time he made a drop.

And so had I!

I could hear Colonel Dubois in my mind: "Citizenship is an attitude, a state of mind, an emotional conviction that the whole is greater than the part … and that the part should be humbly proud to sacrifice itself that the whole may live."

I still didn't know whether I yearned to place my one-and-only body "between my loved home and the war's desolation"—I still got the shakes every drop and that "desolation" could be pretty desolate. But nevertheless I knew at last what Colonel Dubois had been talking about. The M.I. was mine and I was theirs. If that was what the M.I. did to break the monotony, then that was what I did. Patriotism was a bit esoteric for me, too large-scale to see. But the M.I. was my gang, I belonged. They were all the family I had left; they were the brothers I had never had, closer than Carl had ever been. If I left them, I'd be lost.

So why shouldn't I go career?

All right, all right—but how about this nonsense of greasing for a commission? That was something else again. I could see myself putting in twenty years and then taking it easy, the way Ace had described, with ribbons on my chest and carpet slippers on my feet … or evenings down at the Veterans Hall, rehashing old times with others who belonged. But O.C.S.? I could hear Al Jenkins, in one of the bull sessions we had about such things: "I'm a private! I'm going to stay a private! When you're a private they don't expect anything of you. Who wants to be an officer? Or even a sergeant? You're breathing the same air, aren't you? Eating the same food. Going the same places, making the same drops. But no worries."

Al had a point. What had chevrons ever gotten me?—aside from lumps.

Nevertheless I knew I would take sergeant if it was ever offered to me. You don't refuse, a cap trooper doesn't refuse anything; he steps up and takes a swing at it. Commission, too, I supposed.

Not that it would happen. Who was I to think that I could ever be what Lieutenant Rasczak had been?

My walk had taken me close to the candidates' school, though I don't believe I intended to come that way. A company of cadets were out on their parade ground, drilling at trot, looking for all the world like boots in Basic. The sun was hot and it looked not nearly as comfortable as a bull session in the drop room of the *Rodger Young*—why, I hadn't marched farther than bulkhead thirty since I had finished Basic; that breaking-in nonsense was past.

I watched them a bit, sweating through their uniforms; I heard them being chewed out—by sergeants, too. Old Home Week. I shook my head and walked away from there—went back to the accommodation barracks, over to the B. O. Q. wing, found Jelly's room.

He was in it, his feet up on a table and reading a magazine. I knocked on the frame of the door. He looked up and growled, "Yeah?"

"Sarge—I mean, Lieutenant—"

“Spit it out!”

“Sir, I want to go career.”

He dropped his feet to the desk. “Put up your right hand.”

He swore me, reached unto the drawer of the table and pulled out papers.

He had my papers already made out, waiting for me, ready to sign. And I hadn’t even told Ace. How about that?

Chapter 12

It is by no means enough that an officer should be capable … He should be as well a gentleman of liberal education, refined manners, punctilious courtesy, and the nicest sense of personal honor … No meritorious act of a subordinate should escape his attention, even if the reward be only one word of approval. Conversely, he should not be blind to a single fault in any subordinate.

True as may be the political principles for which we are now contending … the ships themselves must be ruled under a system of absolute despotism.

I trust that I have now made clear to you the tremendous responsibilities … We must do the best we can with what we have.

—John Paul Jones, September 14, 1775; excerpts from a letter to the naval committee of the N. A. insurrectionists.

The *Rodger Young* was again returning to Base for replacements, both capsules and men. Al Jenkins had bought his farm, covering a pickup and that one had cost us the Padre, too. And besides that, I had to be replaced. I was wearing brand-new sergeant's chevrons (vice Migliaccio) but I had a hunch that Ace would be wearing them as soon as I was out of the ship—they were mostly honorary, I knew; the promotion was Jelly's way of giving me a good sendoff as I was detached for O.C.S.

But it didn't keep me from being proud of them. At the Fleet landing field I went through the exit gate with my nose in the air and strode up to the quarantine desk to have my orders stamped. As this was being done I heard a polite, respectful voice behind me: "Excuse me, Sergeant, but that boat that just came down—is it from the *Rodger* —"

I turned to see the speaker, flicked my eyes over his sleeves, saw that it was a small, slightly stoop-shouldered corporal, no doubt one of our—

"*Father*!"

Then the corporal had his arms around me. "Juan! Juan! Oh, my little Johnnie!"

I kissed him and hugged him and started to cry. Maybe that civilian clerk at the quarantine desk had never seen two noncoms kiss each other before. Well, if I had noticed him so much as lifting an eyebrow, I would have pasted him. But I didn't notice him; I was busy. He had to remind me to take my orders with me.

By then we had blown our noses and quit making an open spectacle of ourselves. I said, "Father, let's find a corner somewhere and sit down and talk. I want to know … well, everything!" I took a deep breath. "I thought you were dead."

"No. Came close to buying it once or twice, maybe. But, Son … Sergeant—I really do have to find out about that landing boat. You see —"

"Oh, that. It's from the *Rodger Young*. I just—

He looked terribly disappointed. "Then I've got to bounce, right now. I've got to report in." Then he added eagerly, "But you'll be back aboard soon, won't you, Juanito? Or are you going on R & R?"

"Uh, no." I thought fast. Of all the ways to have things roll! "Look, Father, I know the boat schedule. You can't go aboard for at least an hour and a bit. That boat is not on a fast retrieve; she'll make a minimum-fuel rendezvous when the *Rog* completes this pass—if the pilot doesn't have to wait over for the next pass after that; they've got to load first."

He said dubiously, "My orders read to report at once to the pilot of the first available ship's boat."

"Father, Father! Do you have to be so confounded regulation? The girl who's pushing that heap won't care whether you board the boat now, or just as they button up. Anyhow they'll play the ship's recall over the speakers in here ten minutes before boost and announce it. You can't miss it."

He let me lead him over to an empty corner. As we sat down he added, "Will you be going up in the same boat, Juan? Or later?"

"Uh—" I showed him my orders; it seemed the simplest way to break the news. Ships that pass in the night, like the Evangeline story —cripes, what a way for things to break!

He read them and got tears in his eyes and I said hastily, "Look, Father, I'm going to try to come back—I wouldn't want any other outfit than the Roughnecks. And with you in them … oh, I know it's disappointing but—"

"It's not disappointment, Juan."

"Huh?"

"It's pride. My boy is going to be an officer. My little Johnnie—Oh, it's disappointment, too; I had waited for this day. But I can wait a while longer." He smiled through his tears. "You've grown, lad. And filled out, too."

"Uh, I guess so. But, Father, I'm not an officer yet and I might only be out of the *Rog* a few days. I mean, they sometimes bust 'em out pretty fast and—"

"Enough of that, young man!"

"Huh?"

"You'll make it. Let's have no more talk of 'busting out.' " Suddenly he smiled. "That's the first time I've been able to tell a sergeant to shut up."

"Well … I'll certainly try, Father. And if I do make it, I'll certainly put in for the old *Rog*. But—" I trailed off.

"Yes, I know. Your request won't mean anything unless there's a billet for you. Never mind. If this hour is all we have, we'll make the most of it—and I'm so proud of you I'm splitting my seams. How have you been, Johnnie?"

"Oh, fine, just fine." I was thinking that it wasn't all bad. He would be better off in the Roughnecks than in any other outfit. All my friends … they'd take care of him, keep him alive. I'd have to send a gram to Ace—Father like as not wouldn't even let them know he was related. "Father, how long have you been in?"

"A little over a year."

"And corporal already!"

Father smiled grimly. "They're making them fast these days."

I didn't have to ask what he meant. Casualties. There were always vacancies in the T. O.; you couldn't get enough trained soldiers to fill them. Instead I said, "Uh … but, Father, you're—Well, I mean, aren't you sort of old to be soldiering? I mean the Navy, or Logistics, or—"

"I wanted the M.I. and I got it!" he said emphatically. "And I'm no older than many sergeants—not as old, in fact. Son, the mere fact that I am twentytwo years older than you are doesn't put me in a wheel chair. And age has its advantages, too."

Well, there was something in that. I recalled how Sergeant Zim had always tried the older men first, when he was dealing out boot chevrons. And Father would never have goofed in Basic the way I had —no lashes for him. He was probably spotted as non-com material before he ever finished Basic. The Army needs a lot of really grownup men in the middle grades; it's a paternalistic organization.

I didn't have to ask him why he had wanted M.I., nor why or how he had wound up in my ship—I just felt warm about it, more 'flattered by it than any praise he had ever given me in words. And I didn't want to ask him why he had joined up; I felt that I knew. Mother. Neither of us had mentioned her—too painful.

So I changed the subject abruptly. "Bring me up to date. Tell me where you've been and what you've done."

"Well, I trained at Camp San Martin—"

"Huh? Not Currie?"

"New one. But the same old lumps, I understand. Only they rush you through two months faster, you don't get Sundays off. Then I requested the *Rodger Young*—and didn't get it—and wound up in McSlattery's Volunteers. A good outfit."

"Yes, I know." They had had a reputation for being rough, tough, and nasty—almost as good as the Roughnecks.

"I should say that it was a good outfit. I made several drops with them and some of the boys bought it and after a while I got these." He glanced at his chevrons. "I was a corporal when we dropped on Sheol—"

"You were *there*? So was I!" With a sudden warm flood of emotion I felt closer to my father than I ever had before in my life.

"I know. At least I knew your outfit was there. I was around fifty miles north of you, near as I can guess. We soaked up that counterattack when they came boiling up out of the ground like bats out of a cave." Father shrugged. "So when it was over I was a corporal without an outfit, not enough of us left to make a healthy cadre. So they sent me here. I could have gone with King's Kodiak Bears, but I had a word with the placement sergeant—and, sure as sunrise, the *Rodger Young* came back with a billet for a corporal. So here I am."

"And when did you join up?" I realized that it was the wrong remark as soon as I had made it—but I had to get the subject away from McSlattery's Volunteers; an orphan from a dead outfit wants to forget it.

Father said quietly, "Shortly after Buenos Aires."

"Oh. I see."

Father didn't say anything for several moments. Then he said softly, "I'm not sure that you do see, Son."

"Sir?"

"Mmm … it will not be easy to explain. Certainly, losing your mother had a great deal to do with it. But I didn't enroll to avenge her—even though I had that in mind, too. You had more to do with it—"

"*Me*?"

"Yes, you. Son, I always understood what you were doing better than your mother did—don't blame her; she never had a chance to know, any more than a bird can understand swimming. And perhaps I knew why you did it, even though I beg to doubt that you knew yourself, at the time. At least half of my anger at you was sheer resentment … that you had actually done something that I knew, buried deep in my heart, I should have done. But you weren't the cause of my joining up, either … you merely helped trigger it and you did control the service I chose."

He paused. "I wasn't in good shape at the time you enrolled. I was seeing my hypnotherapist pretty regularly—you never suspected that, did you?—but we had gotten no farther than a clear recognition that I was enormously dissatisfied. After you left, I took it out on you—but it was not you, and I knew it and my therapist knew it. I suppose I knew that there was real trouble brewing earlier than most; we were invited to bid on military components fully a month before the state of emergency was announced. We had converted almost entirely to war production while you were still in training.

“I felt better during that period, worked to death and too busy to see my therapist. Then I became more troubled than ever.” He smiled. “Son, do you know about civilians?”

“Well … we don’t talk the same language. I know that.”

“Clearly enough put. Do you remember Madame Ruitman? I was on a few days leave after I finished Basic and I went home. I saw some of our friends, said good-by—she among them. She chattered away and said, ‘So you’re really going out? Well, if you reach Faraway, you really must look up my dear friends the Regatos.’ ”

“I told her, as gently as I could, that it seemed unlikely, since the Arachnids had occupied Faraway.

“It didn’t faze her in the least. She said, ‘Oh, that’s all right—they’re civilians!’ ” Father smiled cynically.

“Yes, I know.”

“But I’m getting ahead of my story. I told you that I was getting still more upset. Your mother’s death released me for what I had to do … even though she and I were closer than most, nevertheless it set me free to do it. I turned the business over to Morales—”

“Old man Morales? Can *he* handle it?”

“Yes. Because he has to. A lot of us are doing things we didn’t know we could. I gave him a nice chunk of stock—you know the old saying about the king that tread the grain—and the rest I split two ways, in a trust: half to the Daughters of Charity, half to you whenever you want to go back and take it. If you do. Never mind. I had at last found out what was wrong with me.” He stopped, then said very softly, “I had to perform an act of faith. I had to prove to myself that I was a man. Not just a producing-consuming economic animal … but a *man*.”

At that moment, before I could answer anything, the wall speakers around us sang: “*—shines the name, shines the name of Rodger Young*!” and a girl’s voice added, “Personnel for F. C. T. *Rodger Young*, stand to boat. Berth H. Nine minutes.”

Father bounced to his feet, grabbed his kit roll. “That’s mine! Take care of yourself, Son—and hit those exams. Or you’ll find you’re still not too big to paddle.”

“I will, Father.”

He embraced me hastily. “See you when we get back!” And he was gone, on the bounce.

In the Commandant’s outer office I reported to a fleet sergeant who looked remarkably like Sergeant Ho, even to lacking an arm. However, he lacked Sergeant Ho’s smile as well. I said, “Career Sergeant Juan Rico, to report to the Commandant pursuant to orders.”

He glanced at the clock. “Your boat was down seventy-three minutes ago. Well?”

So I told him. He pulled his lip and looked at me meditatively. “I’ve heard every excuse in the book. But you’ve just added a new page. Your father, your own father, really was reporting to your old ship just as you were detached?”

“The bare truth, Sergeant. You can check it—Corporal Emilio Rico.”

“We don’t check the statements of the ‘young gentlemen’ around here. We simply cashier them if it ever turns out that they have not told the truth. Okay, a boy who wouldn’t be late in order to see his old man off wouldn’t be worth much in any case. Forget it.”

“Thanks, Sergeant. Do I report to the Commandant now?”

“You’ve reported to him.” He made a check mark on a list. “Maybe a month from now he’ll send for you along with a couple of dozen others. Here’s your room assignment, here’s a checkoff list you start with—and you can start by cutting off those chevrons. But save them; you may need them later. But as of this moment you are ‘Mister,’ not ‘Sergeant.’ ”

“Yes, sir.”

“Don’t call me ‘sir.’ I call you ‘sir.’ But you won’t like it.”

I am not going to describe Officer Candidates School. It’s like Basic, but squared and cubed with books added. In the mornings we behaved like privates, doing the same old things we had done in Basic and in combat and being chewed out for the way we did them—by sergeants. In the afternoons we were cadets and “gentlemen,” and recited on and were lectured concerning an endless list of subjects: math, science, galactography, xenology, hypnopedia, logistics, strategy and tactics, communications, military law, terrain reading, special weapons, psychology of leadership, anything from the care and feeding of privates to why Xerxes lost the big one. Most especially how to be a one-man catastrophe yourself while keeping track of fifty other men, nursing them, loving them, leading them, saving them—but *never* babying them. We had beds, which we used all too little; we had rooms and showers and inside plumbing; and each four candidates had a civilian servant, to make our beds and clean our rooms and shine our shoes and lay out our uniforms and run errands. This service was not intended as a luxury and was not; its purpose was to give the student more time to accomplish the plainly impossible by relieving him of things any graduate of Basic can already do perfectly.

Six days shalt thou work and do all thou art able,
The seventh the same and pound on the cable.

Or the Army version ends:—*and clean out the stable*, which shows you how many centuries this sort of thing has been going on. I wish I could catch just one of those civilians who think we loaf and put them through one month of O.C.S.

In the evenings and all day Sundays we studied until our eyes burned and our ears ached—then slept (if we slept) with a hypnopedic speaker droning away under the pillow.

Our marching songs were appropriately downbeat: “No Army for mine, no Army for mine! I’d rather be behind the plow any old time!” and “Don’t wanta study war no more,” and “Don’t make my boy a soldier, the weeping mother cried,” and—favorite of all—the old classic “Gentlemen Rankers” with its chorus about the Little Lost Sheep: “—God ha’ pity on such as we. Baa! Yah! Bah!”

Yet somehow I don’t remember being unhappy. Too busy, I guess. There was never that psychological “hump” to get over, the one everybody hits in Basic; there was simply the everpresent fear of flunking out. My poor preparation in math bothered me especially. My roommate, a colonial from Hesperus with the oddly appropriate name of “Angel,” sat up night after night, tutoring me.

Most of the instructors, especially the officers, were disabled. The only ones I can remember who had a full complement of arms, legs, eyesight, hearing, etc., were some of the noncommissioned combat instructors—and not all of those. Our coach in dirty fighting sat in a powered chair, wearing a plastic collar, and was completely paralyzed from the neck down. But his tongue wasn’t paralyzed, his eye was photographic, and the savage way in which he could analyze and criticize what he had seen made up for his minor impediment.

At first I wondered why these obvious candidates for physical retirement and full-pay pension didn’t take it and go home. Then I quit wondering.

I guess the high point in my whole cadet course was a visit from Ensign Ibañez, she of the dark eyes, junior watch officer and pilot-under-instruction of the Corvette Transport Mannerheim. Carmencita showed up, looking incredibly pert in Navy dress whites and about the size of a paperweight, while my class was lined up for evening meal muster—walked down the line and you could hear eyeballs click as she passed—walked straight up to the duty officer and asked for me by name in a clear, penetrating voice.

The duty officer, Captain Chandar, was widely believed never to have smiled at his own mother, but he smiled down at little Carmen, straining his face out of shape, and admitted my existence … whereupon she waved her long black lashes at him, explained that her ship was about to boost and could she please take me out to dinner?

And I found myself in possession of a highly irregular and totally unprecedented three-hour pass. It may be that the Navy has developed hypnosis techniques that they have not yet gotten around to passing on to the Army. Or her secret weapon may be older than that and not usable by M.I. In any case I not only had a wonderful time but my prestige with my classmates, none too high until then, climbed to amazing heights.

It was a glorious evening and well worth flunking two classes the next day. It was somewhat dimmed by the fact that we had each heard about Carl—killed when the Bugs smashed our research station on Pluto—but only somewhat, as we had each learned to live with such things.

One thing did startle me. Carmen relaxed and took off her hat while we were eating, and her blue-black hair was all gone. I knew that a lot of the Navy girls shaved their heads—after all, it's not practical to take care of long hair in a war ship and, most especially, a pilot can't risk having her hair floating around, getting in the way, in any free-fall maneuvers. Shucks, I shaved my own scalp, just for convenience and cleanliness. But my mental picture of little Carmen included this mane of thick, wavy hair.

But, do you know, once you get used to it, it's rather cute. I mean, if a girl looks all right to start with, she still looks all right with her head smooth. And it does serve to set a Navy girl apart from civilian chicks—sort of a lodge pin, like the gold skulls for combat drops. It made Carmen look distinguished, gave her dignity, and for the first time I fully realized that she really was an officer and a fighting man—as well as a very pretty girl.

I got back to barracks with stars in my eyes and whiffing slightly of perfume. Carmen had kissed me good-by.

The only O.C.S. classroom course the content of which I'm even going to mention was: History and Moral Philosophy.

I was surprised to find it in the curriculum. H. & M. P. has nothing to do with combat and how to lead a platoon; its connection with war (where it is connected) is in why to fight—a matter already settled for any candidate long before he reaches O.C.S. An M.I. fights because he is M.I.

I decided that the course must be a repeat for the benefit of those of us (maybe a third) who had never had it in school. Over 20 per cent of my cadet class were not from Terra (a much higher percentage of colonials sign up to serve than do people born on Earth—sometimes it makes you wonder) and of the three quarters or so from Terra, some were from associated territories and other places where H. & M. P. might not be taught. So I figured it for a cinch course which would give me a little rest from tough courses, the ones with decimal points.

Wrong again. Unlike my high school course, you had to pass it. Not by examination, however. The course included examinations and prepared papers and quizzes and such—but no marks. What you had to have was the instructor's opinion that you were worthy of commission.

If he gave you a downcheck, a board sat on you, questioning not merely whether you could be an officer but whether you belonged in the Army at *any* rank, no matter how fast you might be with weapons —deciding whether to give you extra instruction … or just kick you out and let you be a civilian.

History and Moral Philosophy works like a delayed-action bomb. You wake up in the middle of the night and think: Now what did he mean by *that*? That had been true even with my high school course; I simply hadn't known what Colonel Dubois was talking about. When I was a kid I thought it was silly for the course to be in the science department. It was nothing like physics or chemistry; why wasn't it over in the fuzzy studies where it belonged? The only reason I paid attention was because there were such lovely arguments.

I had no idea that "Mr." Dubois was trying to teach me *why* to fight until long after I had decided to fight anyhow.

Well, why *should* I fight? Wasn't it preposterous to expose my tender skin to the violence of unfriendly strangers? Especially as the pay at any rank was barely spending money, the hours terrible, and the working conditions worse? When I could be sitting at home while such matters were handled by thick-skulled characters who *enjoyed* such games? Particularly when the strangers against whom I fought never had done anything to me personally until I showed up and started kicking over their tea wagon—what sort of nonsense is this?

Fight because I'm an M.I.? Brother, you're drooling like Dr. Pavlov's dogs. Cut it out and start thinking.

Major Reid, our instructor, was a blind man with a disconcerting habit of looking straight at you and calling you by name. We were reviewing events after the war between the Russo-Anglo-American Alliance and the Chinese Hegemony, 1987 and following. But this was the day that we heard the news of the destruction of San Francisco and the San Joaquin Valley; I thought he would give us a pep talk. After all, even a civilian ought to be able to figure it out now—the Bugs or us. Fight or die.

Major Reid didn't mention San Francisco. He had one of us apes summarize the negotiated treaty of New Delhi, discuss how it ignored prisoners of war … and, by implication, dropped the subject forever; the armistice became a stalemate and prisoners stayed where they were—on one side; on the other side they were turned loose and, during the Disorders, made their way home—or not if they didn't want to.

Major Reid's victim summed up the unreleased prisoners: survivors of two divisions of British paratroopers, some thousands of civilians, captured mostly in Japan, the Philippines, and Russia and sentenced for "political" crimes.

"Besides that, there were many other military prisoners," Major Reid's victim went on, "captured during and before the war—there were rumors that some had been captured in an earlier war and never released. The total of unreleased prisoners was never known. The best estimates place the number around sixtyfive thousand."

"Why the 'best'?"

"Uh, that's the estimate in the textbook, sir."

"Please be precise in your language. Was the number greater or less than one hundred thousand?"

"Uh, I don't know, sir."

"And nobody else knows. Was it greater than one thousand?"

"Probably, sir. Almost certainly."

"Utterly certain—because more than that eventually escaped, found their ways home, were tallied by name. I see you did not read your lesson carefully. Mr. Rico!"

Now I was the victim. "Yes, sir."

"Are a thousand unreleased prisoners sufficient reason to start or resume a war? Bear in mind that millions of innocent people may die, almost certainly will die, if war is started or resumed."

I didn't hesitate. "Yes, *sir*! More than enough reason."

" 'More than enough.' Very well, is one prisoner, unreleased by the enemy, enough reason to start or resume a war?"

I hesitated. I knew the M.I. answer—but I didn't think that was the one he wanted. He said sharply, "Come, come, Mister! We have an upper limit of one thousand; I invited you to consider a lower limit of one. But you can't pay a promissory note which reads 'somewhere between one and one thousand pounds'—and starting a war is much more serious than paying a trifle of money. Wouldn't it be criminal to endanger a country—two countries in fact—to save one man? Especially as he may not deserve it? Or may die in the meantime? Thousands of people get killed every day in accidents … so why hesitate over one man? Answer! Answer yes, or answer no—you're holding up the class."

He got my goat. I gave him the cap trooper's answer. "Yes, sir!"

" 'Yes' what?"

"It doesn't matter whether it's a thousand—or just one, sir. You fight."

"Aha! The number of prisoners is irrelevant. Good. Now prove your answer."

I was stuck. I *knew* it was the right answer. But I didn't know why. He kept hounding me. "Speak up, Mr. Rico. This is an exact science. You have made a mathematical statement; you must give proof. Someone may claim that you have asserted, by analogy, that one potato is worth the same price, no more, no less, as one thousand potatoes. No?"

"No, sir!"

"Why not? Prove it."

"Men are not potatoes."

"Good, good, Mr. Rico! I think we have strained your tired brain enough for one day. Bring to class tomorrow a written proof, in symbolic logic, of your answer to my original question. I'll give you a hint. See reference seven in today's chapter. Mr. Salomon! How did the present political organization evolve out of the Disorders? And what is its moral justification?"

Sally stumbled through the first part. However, nobody can describe accurately how the Federation came about; it just grew. With national governments in collapse at the end of the XXth century, something had to fill the vacuum, and in many cases it was returned veterans. They had lost a war, most of them had no jobs, many were sore as could be over the terms of the Treaty of New Delhi, especially the P.O.W. foul-up—and they knew how to fight. But it wasn't revolution; it was more like what happened in Russia in 1917—the system collapsed; somebody else moved in.

The first known case, in Aberdeen, Scotland, was typical. Some veterans got together as vigilantes to stop rioting and looting, hanged a few people (including two veterans) and decided not to let anyone but veterans on their committee. Just arbitrary at first—they trusted each other a bit, they didn't trust anyone else. What started as an emergency measure became constitutional practice … in a generation or two.

Probably those Scottish veterans, since they were finding it necessary to hang some veterans, decided that, if they had to do this, they weren't going to let any "bleedin', profiteering, black-market, double-time-for-overtime, army-dodging, unprintable" civilians have any say about it. They'd do what they were told, see?—while us apes straightened things out! That's my guess, because I might feel the same way … and historians agree that antagonism between civilians and returned soldiers was more intense than we can imagine today.

Sally didn't tell it by the book. Finally Major Reid cut him off. "Bring a summary to class tomorrow, three thousand words. Mr. Salomon, can you give me a reason—not historical nor theoretical but practical—why the franchise is today limited to discharged veterans?"

"Uh, because they are picked men, sir. Smarter."

“Preposterous!”

“Sir?”

“Is the word too long for you? I said it was a silly notion. Service men are not brighter than civilians. In many cases civilians are much more intelligent. That was the sliver of justification underlying the attempted *coup d’etat* just before the Treaty of New Delhi, the so-called ‘Revolt of the Scientists’: let the intelligent elite run things and you’ll have utopia. It fell flat on its foolish face of course. Because the pursuit of science, despite its social benefits, is itself not a social virtue; its practitioners can be men so self-centered as to be lacking in social responsibility. I’ve given you a hint, Mister; can you pick it up?”

Sally answered, “Uh, service men are disciplined, sir.”

Major Reid was gentle with him. “Sorry. An appealing theory not backed up by facts. You and I are not permitted to vote as long as we remain in the Service, nor is it verifiable that military discipline makes a man self-disciplined once he is out; the crime rate of veterans is much like that of civilians. And you have forgotten that in peacetime most veterans come from noncombatant auxiliary services and have not been subjected to the full rigors of military discipline; they have merely been harried, overworked, and endangered—yet their votes count.”

Major Reid smiled. “Mr. Salomon, I handed you a trick question. The practical reason for continuing our system is the same as the practical reason for continuing anything: It works satisfactorily.

“Nevertheless, it is instructive to observe the details. Throughout history men have labored to place the sovereign franchise in hands that would guard it well and use it wisely, for the benefit of all. An early attempt was absolute monarchy, passionately defended as the ‘divine right of kings.’

“Sometimes attempts were made to select a wise monarch, rather man leave it up to God, as when the Swedes picked a Frenchman, General Bernadotte, to rule them. The objection to this is that the supply of Bernadottes is limited.

“Historic examples range from absolute monarch to utter anarch; mankind has tried thousands of ways and many more have been proposed, some weird in the extreme such as the antlike communism urged by Plato under the misleading title *The Republic*. But the intent has always been moralistic: to provide stable and benevolent government.

“All systems seek to achieve this by limiting franchise to those who are *believed* to have the wisdom to use it justly. I repeat ‘*all* systems’; even the so-called ‘unlimited democracies’ excluded from franchise not less than one quarter of their populations by age, birth, poll tax, criminal record, or other.”

Major Reid smiled cynically. "I have never been able to see how a thirty-year old moron can vote more wisely than a fifteen-year-old genius … but that was the age of the 'divine right of the common man.' Never mind, they paid for their folly.

"The sovereign franchise has been bestowed by all sorts of rules—place of birth, family of birth, race, sex, property, education, age, religion, et cetera. All these systems worked and none of them well. All were regarded as tyrannical by many, all eventually collapsed or were overthrown.

"Now here are we with still another system … and our system works quite well. Many complain but none rebel; personal freedom for all is greatest in history, laws are few, taxes are low, living standards are as high as productivity permits, crime is at its lowest ebb. Why? Not because our voters are smarter than other people; we've disposed of that argument. Mr. Tammany can you tell us why our system works better than any used by our ancestors?"

I don't know where Clyde Tammany got his name; I'd take him for a Hindu. He answered, "Uh, I'd venture to guess that it's because the electors are a small group who know that the decisions are up to them … so they study the issues."

"No guessing, please; this is exact science. And your guess is wrong. The ruling nobles of many another system were a small group fully aware of their grave power. Furthermore, our franchised citizens are not everywhere a small fraction; you know or should know that the percentage of citizens among adults ranges from over eighty per cent on Iskander to less than three per cent in some Terran nations yet government is much the same everywhere. Nor are the voters picked men; they bring no special wisdom, talent, or training to their sovereign tasks. So what difference is there between our voters and wielders of franchise in the past? We have had enough guesses; I'll state the obvious: Under our system every voter and officeholder is a man who has demonstrated through voluntary and difficult service that he places the welfare of the group ahead of personal advantage.

"And that is the one practical difference."

"He may fail in wisdom, he may lapse in civic virtue. But his average performance is enormously better than that of any other class of rulers in history."

Major Reid paused to touch the face of an old-fashioned watch, "reading" its hands. "The period is almost over and we have yet to determine the moral reason for our success in governing ourselves. Now continued success is *never* a matter of chance. Bear in mind that this is science, not wishful thinking; the universe is what it *is*, not what we want it to be. To vote is to wield authority; it is the supreme authority from which all other authority derives—such as mine to make your lives miserable once a day. *Force*, if you will!—the franchise is force, naked and raw, the Power of the Rods and the Ax. Whether it is exerted by ten men or by ten billion, political authority is *force*."

"But this universe consists of paired dualities. What is the converse of authority? Mr. Rico."

He had picked one I could answer. "Responsibility, sir."

"Applause. Both for practical reasons and for mathematically verifiable moral reasons, authority and responsibility must be equal—else a balancing takes place as surely as current 'flows between points of unequal potential. To permit irresponsible authority is to sow disaster; to hold a man responsible for anything he does not control is to behave with blind idiocy. The unlimited democracies were unstable because their citizens were not responsible for the fashion in which they exerted their sovereign authority … other than through the tragic logic of history. The unique 'poll tax' that we must pay was unheard of. No attempt was made to determine whether a voter was socially responsible to the extent of his literally unlimited authority. If he voted the impossible, the disastrous possible happened instead—and responsibility was then forced on him willy-nilly and destroyed both him and his foundationless temple."

"Superficially, our system is only slightly different; we have democracy unlimited by race, color, creed, birth, wealth, sex, or conviction, and anyone may win sovereign power by a usually short and not too arduous term of service—nothing more than a light workout to our cave-man ancestors. But that slight difference is one between a system that works, since it is constructed to match the facts, and one that is inherently unstable. Since sovereign franchise is the ultimate in human authority, we insure that all who wield it accept the ultimate in social responsibility—we require each person who wishes to exert control over the state to wager his own life—and lose it, if need be—to save the life of the state. The maximum responsibility a human can accept is thus equated to the ultimate authority a human can exert. Yin and yang, perfect and equal."

The Major added, "Can anyone define why there has never been revolution against our system? Despite the fact that every government in history has had such? Despite the notorious fact that complaints are loud and unceasing?"

One of the older cadets took a crack at it. "Sir, revolution is impossible."

"Yes. But why?"

"Because revolution—armed uprising—requires not only dissatisfaction but aggressiveness. A revolutionist has to be willing to fight and die—or he's just a parlor pink. If you separate out the aggressive ones and make them the sheep dogs, the sheep will never give you trouble."

"Nicely put! Analogy is always suspect, but that one is close to the facts. Bring me a mathematical proof tomorrow. Time for one more question—you ask it and I'll answer. Anyone?"

"Uh, sir, why not go—well, go the limit? Require everyone to serve and let everybody vote?"

"Young man, can you restore my eyesight?"

"Sir? Why, no, sir!"

"You would find it much easier than to instill moral virtue—social responsibility—into a person who doesn't have it, doesn't want it, and resents having the burden thrust on him. This is why we make it so hard to enroll, so easy to resign. Social responsibility above the level of family, or at most of tribe, requires imagination—devotion, loyalty, all the higher virtues—which a man must develop himself; if he has them forced down him, he will vomit them out. Conscript armies have been tried in the past. Look up in the library the psychiatric report on brainwashed prisoners in the so called 'Korean War,' circa 1950—the Mayer Report. Bring an analysis to class." He touched his watch. "Dismissed."

Major Reid gave us a busy time.

But it was interesting. I caught one of those master's thesis assignments he chucked around so casually; I had suggested that the Crusades were different from most wars. I got sawed off and handed this: *Required*: to prove that war and moral perfection derive from the same genetic inheritance.

Briefly, thus: All wars arise from population pressure. (Yes, even the Crusades, though you have to dig into trade routes and birth rate and several other things to prove it.) Morals—*all* correct moral rules derive from the instinct to survive; moral behavior is survival behavior above the individual level—as in a father who dies to save his children. But since population pressure results from the process of surviving through others, then war, because it results from population pressure, derives from the same inherited instinct which produces all moral rules suitable for human beings.

Check of proof: Is it possible to abolish war by relieving population pressure (and thus do away with the all-too evident evils of war) through constructing a moral code under which population is limited to resources?

Without debating the usefulness or morality of planned parenthood, it may be verified by observation that any breed which stops its own increase gets crowded out by breeds which expand. Some human populations did so, in Terran history, and other breeds moved in and engulfed them.

Nevertheless, let's assume that the human race manages to balance birth and death, just right to fit its own planets, and thereby becomes peaceful. What happens?

Soon (about next Wednesday) the Bugs move in, kill off this breed which "ain'ta gonna study war no more" and the universe forgets us. Which still may happen. Either we spread and wipe out the Bugs, or they spread and wipe us out—because both races are tough and smart and want the same real estate.

Do you know how fast population pressure could cause us to fill the entire universe shoulder to shoulder? The answer will astound you, just the flicker of an eye in terms of the age of our race.

Try it—it's a compound-interest expansion.

But does Man have any "right" to spread through the universe?

Man is what he is, a wild animal with the will to survive, and (so far) the ability, against all competition. Unless one accepts that, anything one says about morals, war, politics—you name it—is nonsense. Correct morals arise from knowing what Man is—not what do-gooders and well-meaning old Aunt Nellies would like him to be.

The universe will let us know—later—whether or not Man has any "right" to expand through it.

In the meantime the M.I. will be in there, on the bounce and swinging, on the side of our own race.

Toward the end each of us was shipped out to serve under an experienced combat commander. This was a semifinal examination, your 'board-ship instructor could decide that you didn't have what it takes. You could demand a board but I never heard of anybody who did; they either came back with an upcheck or we never saw them again.

Some hadn't failed; it was just that they were killed—because assignments were to ships about to go into action. We were required to keep kit bags packed—once at lunch, all the cadet officers of my company were tapped; they left without eating and I found myself cadet company commander.

Like boot chevrons, this is an uncomfortable honor, but in less than two days my own call came.

I bounced down to the Commandant's office, kit bag over my shoulder and feeling grand. I was sick of late hours and burning eyes and never catching up, of looking stupid in class; a few weeks in the cheerful company of a combat team was just what Johnnie needed!

I passed some new cadets, trotting to class in close formation, each with the grim look that every O.C.S. candidate gets when he realizes that possibly he made a mistake in bucking for officer, and I found myself singing. I shut up when I was within earshot of the office.

Two others were there, Cadets Hassan and Byrd. Hassan the Assassin was the oldest man in our class and looked like something a fisherman had let out of a bottle, while Birdie wasn't much bigger than a sparrow and about as intimidating.

We were ushered into the Holy of Holies. The Commandant was in his wheel chair—we never saw him out of it except Saturday inspection and parade, I guess walking hurt. But that didn't mean you didn't see him—you could be working a prob at the board, turn around and find that wheel chair behind you, and Colonel Nielssen reading your mistakes.

He never interrupted—there was a standing order not to shout "Attention!" But it's disconcerting. There seemed to be about six of him.

The Commandant had a permanent rank of fleet general (yes, *that* Nielssen); his rank as colonel was temporary, pending second retirement, to permit him to be Commandant. I once questioned a paymaster about this and confirmed what the regulations seemed to say: The Commandant got only the pay of a colonel—but would revert to the pay of a fleet general on the day he decided to retire again.

Well, as Ace says, it takes all sorts—I can't imagine choosing half pay for the privilege of riding herd on cadets.

Colonel Nielssen looked up and said, "Morning, gentlemen. Make yourselves comfortable." I sat down but wasn't comfortable. He glided over to a coffee machine, drew four cups, and Hassan helped him deal them out. I didn't want coffee but a cadet doesn't refuse the Commandant's hospitality.

He took a sip. "I have your orders, gentlemen," he announced, "and your temporary commissions." He went on, "But I want to be sure you understand your status."

We had already been lectured about this. We were going to be officers just enough for instruction and testing—"supernumerary, probationary, and temporary." Very junior, quite superfluous, on good behavior, and extremely temporary; we would revert to cadet when we got back and could be busted at any time by the officers examining us.

We would be "temporary third lieutenants"—a rank as necessary as feet on a fish, wedged into the hairline between fleet sergeants and real officers. It is as low as you can get and still be called an "officer." If anybody ever saluted a third lieutenant, the light must have been bad.

"Your commission reads 'third lieutenant,' " he went on, "but your pay stays the same, you continue to be addressed as 'Mister,' the only change in uniform is a shoulder pip even smaller than cadet insignia. You continue under instruction since it has not yet been settled that you are fit to be officers." The Colonel smiled. "So why call you a 'third lieutenant'?"

I had wondered about that. Why this whoopty-do of "commissions" that weren't real commissions?

Of course I knew the textbook answer.

"Mr. Byrd?" the Commandant said.

"Uh … to place us in the line of command, sir."

"Exactly!" Colonel glided to a T. O. on one wall. It was the usual pyramid, with chain of command defined all the way down. "Look at this—" He pointed to a box connected to his own by a horizontal line; it read: ASSISTANT TO COMMANDANT (Miss Kendrick).

"Gentlemen," he went on, "I would have trouble running this place without Miss Kendrick. Her head is a rapid-access file to everything that happens around here." He touched a control on his chair and spoke to the air. "Miss Kendrick, what mark did Cadet Byrd receive in military law last term?"

Her answer came back at once: "Ninety-three per cent, Commandant."

"Thank you." He continued, "You see? I sign anything if Miss Kendrick has initialed it. I would hate to have an investigating committee find out how often she signs my name and I don't even see it. Tell me, Mr. Byrd … if I drop dead, does Miss Kendrick carry on to keep things moving?"

"Why, uh—" Birdie looked puzzled. "I suppose, with routine matters, she would do what was necess—"

"She wouldn't do a blessed thing!" the Colonel thundered. "Until Colonel Chauncey *told* her what to do—his way. She is a very smart woman and understands what you apparently do not, namely, that she is not in the line of command and has no authority."

He went on, " 'Line of command' isn't just a phrase; it's as real as a slap in the face. If I ordered you to combat *as a cadet* the most you could do would be to pass along somebody else's orders. If your platoon leader bought it and you then gave an order to a private—a good order, sensible and wise—you would be wrong and he would be just as wrong if he obeyed it. Because a cadet cannot be in the line of command. A cadet has no military existence, no rank, and is not a soldier. He is a student who will become a soldier—either an officer, or at his formal rank. While he is under Army discipline, he is not in the Army. That is why—"

A zero. A nought with no rim. If a cadet wasn't even in the Army —"Colonel!"

"Eh? Speak up, young man. Mr. Rico."

I had startled myself but I had to say it. "But … if we aren't in the Army … then we aren't M.I. Sir?"

He blinked at me. “This worries you?”

“I, uh, don’t believe I like it much, sir.” I didn’t like it at all. I felt naked.

“I see.” He didn’t seem displeased. “You let me worry about the space-lawyer aspects of it, son.”

“But—”

“That’s an order. You are technically not an M.I. But the M.I. hasn’t forgotten you; the M.I. *never* forgets its own no matter where they are. If you are struck dead this instant, you will be cremated as Second Lieutenant Juan Rico, Mobile Infantry, of—” Colonel Nielssen stopped. “Miss Kendrick, what was Mr. Rico’s ship?”

“The *Rodger Young*.”

“Thank you.” He added, “—in and of TFCT *Rodger Young*, assigned to mobile combat team Second Platoon of George Company, Third Regiment, First Division, M.I.—the ‘Roughnecks,’ ” he recited with relish, not consulting anything once he had been reminded of my ship. “A good outfit, Mr. Rico—proud and nasty. Your Final Orders go back to them for Taps and that’s the way your name would read in Memorial Hall. That’s why we always commission a dead cadet, son—so we can send him home to his mates.”

I felt a surge of relief and homesickness and missed a few words. “…lip buttoned while I talk, we’ll have you back in the M.I. where you belong. You must be temporary officers for your ‘prentice cruise because there is no room for deadheads in a combat drop. You’ll fight—and take orders—and give orders. *Legal* orders, because you will hold rank and be ordered to serve in that team; that makes any order you give in carrying out your assigned duties as binding as one signed by the C-in-C.

“Even more, ” the Commandant went on, “once you are in line of command, you must be ready instantly to assume higher command. If you are in a one-platoon team—quite likely in the present state of the war—and you are assistant platoon leader when your platoon leader buys it … then … you … are … *It*!”

He shook his head. “Not ‘acting platoon leader.’ Not a cadet leading a drill. Not a ‘junior officer under instruction.’ Suddenly you are the Old Man, the Boss, Commanding Officer Present—and you discover with a sickening shock that fellow human beings are depending on *you alone* to tell them what to do, how to fight, how to complete the mission and get out alive. They wait for the sure voice of command—while seconds trickle away—and it’s up to you to be that voice, make decisions, give the right orders … and not only the right ones but in a calm, unworried tone. Because it’s a cinch, gentlemen, that your team is in trouble—*bad* trouble!—and a strange voice with panic in it can turn the best combat team in the Galaxy into a leaderless, lawless, fear-crazed mob.

“The whole merciless load will land without warning. You must act at once and you’ll have only God over you. Don’t expect Him to fill in tactical details; that’s *your* job. He’ll be doing all that a soldier has a right to expect if He helps you keep the panic you are sure to feel out of your voice.”

The Colonel paused. I was sobered and Birdie was looking terribly serious and awfully young and Hassan was scowling. I wished that I were back in the drop room of the *Rog*, with not too many chevrons and an after-chow bull session in full swing. There was a lot to be said for the job of assistant section leader—when you come right to it, it’s a lot easier to *die* than it is to use your head.

The Commandant continued: “That’s the Moment of Truth, gentlemen. Regrettably there is no method known to military science to tell a real officer from a glib imitation with pips on his shoulders, other than through ordeal by fire. Real ones come through—or die gallantly; imitations crack up.

“Sometimes, in cracking up, the misfits die. But the tragedy lies in the loss of others … good men, sergeants and corporals and privates, whose only lack is fatal bad fortune in finding themselves under the command of an incompetent.

“We try to avoid this. First is our unbreakable rule that every candidate must be a trained trooper, blooded under fire, a veteran of combat drops. No other army in history has stuck to this rule, although some came close. Most great military schools of the past—Saint Cyr, West Point, Sandhurst, Colorado Springs didn’t even pretend to follow it; they accepted civilian boys, trained them, commissioned them, sent them out with no battle experience to command men … and sometimes discovered too late that this smart young ‘officer’ was a fool, a poltroon, or a hysteric.

“At least we have no misfits of those sorts. We know you are good soldiers—brave and skilled, proved in battle else you would not be here. We know that your intelligence and education meet acceptable minimums. With this to start on, we eliminate as many as possible of the not-quite-competent—get them quickly back in ranks before we spoil good cap troopers by forcing them beyond their abilities. The course is very hard—because what will be expected of you later is still harder.

“In time we have a small group whose chances look fairly good. The major criterion left untested is one we cannot test here; that undefinable something which is the difference between a leader in battle … and one who merely has the earmarks but not the vocation. So we field-test for it.

“Gentlemen!—you have reached that point. Are you ready to take the oath?"

There was an instant of silence, then Hassan the Assassin answered firmly, "Yes, Colonel," and Birdie and I echoed.

The Colonel frowned. "I have been telling you how wonderful you are—physically perfect, mentally alert, trained, disciplined, blooded. The very model of the smart young officer—" He snorted. "Nonsense! You *may* become officers someday. I hope so … we not only hate to waste money and time and effort, but also, and *much* more important, I shiver in my boots every time I send one of you half-baked not-quite-officers up to the Fleet, knowing what a Frankensteinian monster I may be turning loose on a good combat team. If you understood what you are up against, you wouldn't be so all-fired ready to take the oath the second the question is put to you. You may turn it down and force me to let you go back to your permanent ranks. But you *don't* know.

"So I'll try once more. Mr. Rico! Have you ever thought how it would feel to be courtmartialed for losing a regiment?"

I was startled silly. "Why—No, sir, I never have." To be courtmartialed—for any reason—is eight times as bad for an officer as for an enlisted man. Offenses which will get privates kicked out (maybe with lashes, possibly without) rate death in an officer. Better never to have been born!

"Think about it," he said grimly. "When I suggested that your platoon leader might be killed, I was by no means citing the ultimate in military disaster. Mr. Hassan! What is the largest number of command levels ever knocked out in a single battle?"

The Assassin scowled harder than ever. "I'm not sure, sir. Wasn't there a while during Operation Bughouse when a major commanded a brigade, before the Sove-ki-poo?"

"There was and his name was Fredericks. He got a decoration and a promotion. If you go back to the Second Global War, you can find a case in which a naval junior officer took command of a major ship and not only fought it but sent signals as if he were admiral. He was vindicated even though there were officers senior to him in line of command who were not even wounded. Special circumstances—a breakdown in communications. But I am thinking of a case in which four levels were wiped out in six minutes—as if a platoon leader were to blink his eyes and find himself commanding a brigade. Any of you heard of it?"

Dead silence.

"Very well. It was one of those bush wars that hared up on the edges of the Napoleonic wars. This young officer was the most junior in a naval vessel—wet navy, of course—windpowered, in fact. This youngster was about the age of most of your class and was not commissioned. He carried the title of temporary third lieutenant'—

note that this is the title you are about to carry. He had no combat experience; there were four officers in the chain of command above him. When the battle started his commanding officer was wounded. The kid picked him up and carried him out of the line of fire. That's all—make pickup on a comrade. But he did it without being ordered to leave his post. The other officers all bought it while he was doing this and he was tried for 'deserting his post of duty as *commanding officer* in the presence of the enemy.' Convicted. Cashiered."

I gasped. "For *that*? Sir."

"Why not? True, we make pickup. But we do it under different circumstances from a wet-navy battle, and by orders to the man making pickup. But pickup is never an excuse for breaking off battle in the presence of the enemy. This boy's family tried for a century and a half to get his conviction reversed. No luck, of course. There was doubt about some circumstances but no doubt that he had left his post during battle without orders. True, he was green as grass—but he was lucky not to be hanged." Colonel Nielssen fixed me with a cold eye. "Mr. Rico—could this happen to *you*?"

I gulped. "I hope not, sir."

"Let me tell you how it could on this very 'prentice cruise. Suppose you are in a multiple-ship operation, with a full regiment in the drop. Officers drop first, of course. There are advantages to this and disadvantages, but we do it for reasons of morale; no trooper ever hits the ground on a hostile planet without an officer. Assume the Bugs know this—and they may. Suppose they work up some trick to wipe out those who hit the ground first … but not good enough to wipe out the whole drop. Now suppose, since you are a supernumerary, you have to take any vacant capsule instead of being fired with the first wave. Where does that leave you?"

"Uh, I'm not sure, sir."

"You have just inherited command of a regiment. *What are you going to do*? *With your command, Mister*? Talk fast—the Bugs won't wait!"

"Uh…" I caught an answer right out of the book and parroted it. "I'll take command and act as circumstances permit, sir, according to the tactical situation as I see it."

"You will, eh?" The Colonel grunted. "And you'll buy a farm too that's all anybody can do with a foul-up like that. But I hope you'll go down swinging—and shouting orders to somebody, whether they make sense or not. We don't expect kittens to fight wildcats and win—we merely expect them to try. All right, stand up. Put up your right hands."

He struggled to his feet. Thirty seconds later we were officers —"temporary, probationary, and supernumerary."

I thought he would give us our shoulder pips and let us go. We aren't supposed to buy them—they're a loan, like the temporary commission they represent. Instead he lounged back and looked almost human.

"See here, lads—I gave you a talk on how rough it's going to be. I want you to worry about it, doing it in advance, planning what steps you might take against any combination of bad news that can come your way, keenly aware that your life belongs to your men and is not yours to throw away in a suicidal reach for glory … and that your life isn't yours to save, either, if the situation requires that you expend it. I want you to worry yourself sick *before* a drop, so that you can be unruffled when the trouble starts.

"Impossible, of course. Except for one thing. What is the *only* factor that can save you when the load is too heavy? Anyone?"

Nobody answered.

"Oh, come now!" Colonel Nielssen said scornfully. "You aren't recruits. Mr. Hassan!"

"Your leading sergeant, sir," the Assassin said slowly.

"Obviously. He's probably older than you are, more drops under his belt, and he certainly knows his team better than you do. Since he isn't carrying that dreadful, numbing load of top command, he may be thinking more clearly than you are. Ask his advice. You've got one circuit just for that.

"It won't decrease his confidence in you; he's used to being consulted. If you don't, he'll decide you are a fool, a cocksure know-it-all—and he'll be right.

"But you don't have to *take* his advice. Whether you use his ideas, or whether they spark some different plan—make your decision and snap out orders. The one thing—the *only* thing!—that can strike terror in the heart of a good platoon sergeant is to find that he's working for a boss who can't make up his mind.

"There never has been an outfit in which officers and men were more dependent on each other than they are in the M.I., and sergeants are the glue that holds us together. Never forget it."

The Commandant whipped his chair around to a cabinet near his desk. It contained row on row of pigeonholes, each with a little box. He pulled out one and opened it. "Mr. Hassan—"

"Sir?"

"These pips were worn by Captain Terence O'Kelly on his 'prentice cruise. Does it suit you to wear them?"

"Sir?" The Assassin's voice squeaked and I thought the big lunk was going to break into tears. "Yes, sir!"

"Come here." Colonel Nielssen pinned them on, then said, "Wear them as gallantly as he did … but *bring them back*. Understand me?"

"Yes, sir. I'll do my best."

"I'm sure you will. There's an air car waiting on the roof and your boat boosts in twentyeight minutes. Carry out your orders, sir!"

The Assassin saluted and left; the Commandant turned and picked out another box. "Mr. Byrd, are you superstitious?"

"No, sir."

"Really? I am, quite. I take it you would not object to wearing pips which have been worn by five officers, all of whom were killed in action?"

Birdie barely hesitated. "No, sir."

"Good. Because these five officers accumulated seventeen citations, from the Terran Medal to the Wounded Lion. Come here. The pip with the brown discoloration must always be worn on your left shoulder—and don't try to buff it off! Just try not to get the other one marked in the same fashion. Unless necessary, and you'll know when it is necessary. Here is a list of former wearers. You have thirty minutes until your transportation leaves. Bounce up to Memorial Hall and look up the record of each."

"Yes, sir."

"Carry out your orders, sir!"

He turned to me, looked at my face and said sharply, "Something on your mind, son? Speak up!"

"Uh—" I blurted it out. "Sir, that temporary third lieutenant—the one that got cashiered. How could I find out what happened?"

"Oh. Young man, I didn't mean to scare the daylights out of you; I simply intended to wake you up. The battle was on one June 1813 old style between USF *Chesapeake* and HMF *Shannon*. Try the *Naval Encyclopedia*; your ship will have it." He turned back to the case of pips and frowned.

Then he said, "Mr. Rico, I have a letter from one of your high school teachers, a retired officer, requesting that you be issued the pips he wore as a third lieutenant. I am sorry to say that I must tell him 'No.' "

"Sir?" I was delighted to hear that Colonel Dubois was still keeping track of me—and very disappointed, too.

"Because I can't! I issued those pips two years ago—and they never came back. Real estate deal. Hmm—" He took a box, looked at me. "You could start a new pair. The metal isn't important; the importance of the request lies in the fact that your teacher wanted you to have them."

"Whatever you say, sir."

"Or"—he cradled the box in his hand—"you could wear these. They have been worn five times … and the last four candidates to wear them have all failed of commission—nothing dishonorable but pesky bad luck. Are you willing to take a swing at breaking the hoodoo? Turn them into goodluck pips instead?"

I would rather have petted a shark. But I answered, "All right, sir. I'll take a swing at it."

"Good." He pinned them on me. "Thank you, Mr. Rico. You see, these were mine, I wore them first … and it would please me mightily to have them brought back to me with that streak of bad luck broken, have you go on and graduate."

I felt ten feet tall. "I'll try, sir!"

"I know you will. You may now carry out your orders, sir. The same air car will take both you and Byrd. Just a moment—Are your mathematics textbooks in your bag?"

"Sir? No, sir."

"Get them. The Weightmaster of your ship has been advised of your extra baggage allowance."

I saluted and left, on the bounce. He had me shrunk down to size as soon as he mentioned math.

My math books were on my study desk, tied into a package with a daily assignment sheet tucked under the cord. I gathered the impression that Colonel Nielssen never left anything unplanned—but everybody knew that.

Birdie was waiting on the roof by the air car. He glanced at my books and grinned. "Too bad. Well, if we're in the same ship, I'll coach you. What ship?"

"*Tours*."

"Sorry, I'm for the *Moskva*." We got in, I checked the pilot, saw that it had been pre-set for the field, closed the door and the car took off. Birdie added, "You could be worse off. The Assassin took not only his math books but two other subjects."

Birdie undoubtedly knew and he had not been showing off when he offered to coach me; he was a professor type except that his ribbons proved that he was a soldier too.

Instead of studying math Birdie taught it. One period each day he was a faculty member, the way little Shujumi taught judo at Camp Currie. The M.I. doesn't waste anything; we can't afford to. Birdie had a B. S. in math on his eighteenth birthday, so naturally he was assigned extra duty as instructor—which didn't keep him from being chewed out at other hours.

Not that he got chewed out much. Birdie had that rare combo of brilliant intellect, solid education, common sense, and guts, which gets a cadet marked as a potential general. We figured he was a cinch to command a brigade by the time he was thirty, what with the war.

But my ambitions didn't soar that high. "It would be a dirty, rotten shame," I said, "if the Assassin flunked out," while thinking that it would be a dirty, rotten shame if I flunked out.

“He won’t,” Birdie answered cheerfully. “They’ll sweat him through the rest if they have to put him in a hypno booth and feed him through a tube. Anyhow,” he added, “Hassan could flunk out and get promoted for it.”

“Huh?”

“Didn’t you know? The Assassin’s permanent rank is first lieutenant—field commission, naturally. He reverts to it if he flunks out. See the regs.”

I knew the regs. If I flunked math, I’d revert to buck sergeant, which is better than being slapped in the face with a wet fish any way you think about it … and I’d thought about it, lying awake nights after busting a quiz.

But this was different. “Hold it,” I protested. “He gave up *first* lieutenant, permanent grade … and has just made temporary *third* lieutenant … in order to become a *second* lieutenant? Are you crazy? Or is he?”

Birdie grinned. “Just enough to make us both M.I.”

“But—I don’t get it.”

“Sure you do. The Assassin has no education that he didn’t pick up in the M.I. So how high can he go? I’m sure he could command a regiment in battle and do a real swingin’ job provided somebody else planned the operation. But commanding in battle is only a fraction of what an officer does, especially a senior officer. To direct a war, or even to plan a single battle and mount the operation, you have to have theory of games, operational analysis, symbolic logic, pessimistic synthesis, and a dozen other skull subjects. You can sweat them out on your own if you’ve got the grounding. But have them you must, or you’ll never get past captain, or possibly major. The Assassin knows what he is doing.”

“I suppose so,” I said slowly. “Birdie, Colonel Nielssen must know that Hassan was an officer—is an officer, really.”

“Huh? Of course.”

“He didn’t talk as if he knew. We all got the same lecture.”

“Not quite. Did you notice that when the Commandant wanted a question answered a particular way he always asked the Assassin?”

I decided it was true. “Birdie, what is your permanent rank?”

The car was just landing; he paused with a hand on the latch and grinned. “PFC—I don’t dare flunk out!”

I snorted. “You won’t. You can’t!” I was surprised that he wasn’t even a corporal, but a kid as smart and well educated as Birdie would go to O.C.S. just as quickly as he proved himself in combat … which with the war on, could be only months after his eighteenth birthday.

Birdie grinned still wider. “We’ll see.”

"You'll graduate. Hassan and I have to worry, but not you."

"So? Suppose Miss Kendrick takes a dislike to me." He opened the door and looked startled. "Hey! They're sounding my call. So long!"

"See you, Birdie."

But I did not see him and he did not graduate. He was commissioned two weeks later and his pips came back with their eighteenth decoration—the Wounded Lion, posthumous.

Chapter 13

Youse guys think this deleted
outfit is a blankety-blank nursery.
Well, it ain't! See?
—Remark attributed to a Hellenic corporal before the walls of Troy, 1194 B. C.

The *Rodger Young* carries one platoon and is crowded; the *Tours* carries six—and is roomy. She has the tubes to drop them all at once and enough spare room to carry twice that number and make a second drop. This would make her very crowded, with eating in shifts, hammocks in passageways and drop rooms, rationed water, inhale when your mate exhales, and get your elbow out of my eye! I'm glad they didn't double up while I was in her.

But she has the speed and lift to deliver such crowded troops still in fighting condition to any point in Federation space and much of Bug space; under Cherenkov drive she cranks Mike 400 or better—say Sol to Capella, forty-six lightyears, in under six weeks.

Of course, a six-platoon transport is not big compared with a battle wagon or passenger liner; these things are compromises. The M.I. prefers speedy little one-platoon corvettes which give flexibility for any operation, while if it was left up to the Navy we would have nothing but regimental transports. It takes almost as many Navy files to run a corvette as it does to run a monster big enough for a regiment—more maintenance and housekeeping, of course, but soldiers can do that. After all, those lazy troopers do nothing but sleep and eat and polish buttons—do 'em good to have a little regular work. So says the Navy.

The real Navy opinion is even more extreme: The Army is obsolete and should be abolished.

The Navy doesn't say this officially—but talk to a Naval officer who is on R & R and feeling his oats; you'll get an earful. They think they can fight any war, win it, send a few of their own people down to hold the conquered planet until the Diplomatic Corps takes charge.

I admit that their newest toys can blow any planet right out of the sky—I've never seen it but I believe it. Maybe I'm as obsolete as *Tyrannosaurus Rex*. I don't feel obsolete and us apes can do things that the fanciest ship cannot. If the government doesn't want those things done, no doubt they'll tell us.

Maybe it's just as well that neither the Navy nor the M.I. has the final word. A man can't buck for Sky Marshal unless he has commanded both a regiment and a capital ship—go through M.I. and take his lumps and then become a Naval officer (I think little Birdie had that in mind), or first become an astrogator-pilot and follow it with Camp Currie, *etc.*

I'll listen respectfully to any man who has done both.

Like most transports, the *Tours* is a mixed ship; the most amazing change for me was to be allowed "North of Thirty." The bulkhead that separates ladies' country from the rough characters who shave is not necessarily No. 30 but, by tradition, it is called "bulkhead thirty" in any mixed ship. The wardroom is just beyond it and the rest of ladies' country is farther forward. In the *Tours* the wardroom also served as messroom for enlisted women, who ate just before we did, and it was partitioned between meals into a recreation room for them and a lounge for their officers. Male officers had a lounge called the cardroom just abaft thirty.

Besides the obvious fact that drop & retrieval require the best pilots (i.e., female), there is very strong reason why female Naval officers are assigned to transports: It is good for trooper morale.

Let's skip M.I. traditions for a moment. Can you think of anything sillier than letting yourself be fired out of a spaceship with nothing but mayhem and sudden death at the other end? However, if someone must do this idiotic stunt, do you know of a surer way to keep a man keyed up to the point where he is willing than by keeping him constantly reminded that the only good reason why men fight is a living breathing reality?

In a mixed ship, the last thing a trooper hears before a drop (maybe the last word he ever hears) is a woman's voice, wishing him luck. If you don't think this is important, you've probably resigned from the human race.

The *Tours* had fifteen Naval officers, eight ladies and seven men; there were eight M.I. officers including (I am happy to say) myself. I won't say "bulkhead thirty" caused me to buck for O.C.S. but the privilege of eating with the ladies is more incentive than any increase in pay. The Skipper was president of the mess, my boss Captain Blackstone was vice-president—not because of rank; three Naval officers ranked him but as C. O. of the strike force he was de facto senior to everybody but the Skipper.

Every meal was formal. We would wait in the cardroom until the hour struck, follow Captain Blackstone in and stand behind our chairs; the Skipper would come in followed by her ladies and, as she reached the head of the table, Captain Blackstone would bow and say, “Madam President … ladies,” and she would answer, “Mr. Vice … gentlemen,” and the man on each lady’s right would seat her.

This ritual established that it was a social event, not an officers’ conference; thereafter ranks or titles were used, except that junior Naval officers and myself alone among the M. l. were called “Mister” or “Miss”—with one exception which fooled me.

My first meal aboard I heard Captain Blackstone called “Major,” although his shoulder pips plainly read “captain.” I got straightened out later. There can’t be two captains in a Naval vessel so an Army captain is bumped one rank socially rather than commit the unthinkable of calling him by the title reserved for the one and only monarch. If a Naval captain is aboard as anything but skipper, he or she is called “Commodore” even if the skipper is a lowly lieutenant.

The M.I. observes this by avoiding the necessity in the wardroom and paying no attention to the silly custom in our own part of the ship.

Seniority ran downhill from each end of the table, with the Skipper at the head and the strike force C. O. at the foot, the junior midshipman at his right and myself at the Skipper’s right. I would most happily have sat by the junior midshipman; she was awfully pretty but the arrangement is planned chaperonage; I never even learned her first name.

I knew that I, as the lowliest male, sat on the Skipper’s right—but I didn’t know that I was supposed to seat her. At my first meal she waited and nobody sat down—until the third assistant engineer jogged my elbow. I haven’t been so embarrassed since a very unfortunate incident in kindergarten, even though Captain Jorgenson acted as if nothing had happened.

When the Skipper stands up the meal is over. She was pretty good about this but once she stayed seated only a few minutes and Captain Blackstone got annoyed. He stood up but called out, “Captain—”

She stopped. “Yes, Major?”

“Will the Captain please give orders that my officers and myself be served in the cardroom?”

She answered coldly, “Certainly, sir.” And we were. But no Naval officer joined us.

The following Saturday she exercised her privilege of inspecting the M.I. aboard—which transport skippers almost never do. However, she simply walked down the ranks without commenting. She was not really a martinet and she had a nice smile when she wasn't being stern. Captain Blackstone assigned Second Lieutenant "Rusty" Graham to crack the whip over me about math; she found out about it, somehow, and told Captain Blackstone to have me report to her office for one hour after lunch each day, whereupon she tutored me in math and bawled me out when my "homework" wasn't perfect.

Our six platoons were two companies as a rump battalion; Captain Blackstone commanded Company D, Blackie's Blackguards, and also commanded the rump battalion. Our battalion commander by the T. O., Major Xera, was with A and B companies in the *Tours*' sister ship *Normandy Beach*—maybe half a sky away; he commanded us only when the full battalion dropped together—except that Cap'n Blackie routed certain reports and letters through him. Other matters went directly to Fleet, Division, or Base, and Blackie had a truly wizard fleet sergeant to keep such things straight and to help him handle both a company and a rump battalion in combat.

Administrative details are not simple in an army spread through many lightyears in hundreds of ships. In the old *Valley Forge*, in the *Rodger Young*, and now in the *Tours* I was in the same regiment, the Third ("Pampered Pets") Regiment of the First ("Polaris") M.I. Division. Two battalions formed from available units had been called the "Third Regiment" in Operation Bughouse but I did not see "my" regiment; all I saw was PFC Bamburger and a lot of Bugs.

I might be commissioned in the Pampered Pets, grow old and retire in it—and never even see my regimental commander. The Roughnecks had a company commander but he also commanded the first platoon ("Hornets") in another corvette; I didn't know his name until I saw it on my orders to O.C.S. There is a legend about a "lost platoon" that went on R & R as its corvette was decommissioned. Its company commander had just been promoted and the other platoons had been attached tactically elsewhere. I've forgotten what happened to the platoon's lieutenant but R & R is a routine time to detach an officer—theoretically after a relief has been sent to understudy him, but reliefs are always scarce.

They say this platoon enjoyed a local year of the fleshpots along Churchill Road before anybody missed them.

I don't believe it. But it could happen.

The chronic scarcity of officers strongly affected my duties in Blackie's Blackguards. The M.I. has the lowest percentage of officers in any army of record and this factor is just part of the M.I.'s unique "divisional wedge." "D.W." is military jargon but the idea is simple: If you have 10,000 soldiers, how many fight? And how many just peel potatoes, drive lorries, count graves, and shuffle papers?

In the M.I., 10,000 men fight.

In the mass wars of the XXth century it sometimes took 70,000 men (fact!) to enable 10,000 to fight.

I admit it takes the Navy to place us where we fight; however, an M.I. strike force, even in a corvette, is at least three times as large as the transport's Navy crew. It also takes civilians to supply and service us; about 10 per cent of us are on R & R at any time; and a few of the very best of us are rotated to instruct at boot camps.

While a few M.I. are on desk jobs you will always find that they are shy an arm or leg, or some such. These are the ones—the Sergeant Hos and the Colonel Nielssens—who refuse to retire, and they really ought to count twice since they release able-bodied M.I. by filling jobs which require fighting spirit but not physical perfection. They do work that civilians can't do or we would hire civilians. Civilians are like beans; you buy 'em as needed for any job which merely requires skill and savvy.

But you can't buy fighting spirit.

It's scarce. We use all of it, waste none. The M.I. is the smallest army in history for the size of the population it guards. You can't buy an M.I., you can't conscript him, you can't coerce him—you can't even keep him if he wants to leave. He can quit thirty seconds before a drop, lose his nerve and not get into his capsule, and all that happens is that he is paid off and can never vote.

At O.C.S. we studied armies in history that were driven like galley slaves. But the M.I. is a free man; all that drives him comes from inside—that self-respect and need for the respect of his mates and his pride in being one of them called morale, or *esprit de corps*.

The root of our morale is: "Everybody works, everybody fights." An M.I. doesn't pull strings to get a soft, safe job; there aren't any. Oh, a trooper will get away with what he can; any private with enough savvy to mark time to music can think up reasons why he should not clean compartments or break out stores; this is a soldier's ancient right.

But all "soft, safe" jobs are filled by civilians; that goldbricking private climbs into his capsule certain that *everybody*, from general to private, is doing it with him. Lightyears away and on a different day, or maybe an hour or so later—no matter. What does matter is that *everybody* drops. This is why he enters the capsule, even though he may not be conscious of it.

If we ever deviate from this, the M.I. will go to pieces. All that holds us together is an idea-one that binds more strongly than steel but its magic power depends on keeping it intact.

It is this "everybody fights" rule that lets the M.I. get by with so few officers.

I know more about this than I want to, because I asked a foolish question in Military History and got stuck with an assignment which forced me to dig up stuff ranging from *De Bello Gallico* to Tsing's classic *Collapse of The Golden Hegemony*. Consider an ideal M.I. division—on paper, because you won't find one elsewhere. How many officers does it require? Never mind units attached from other corps; they may not be present during a ruckus and they are not like M.I.—the special talents attached to Logistics & Communications are all ranked as officers. If it will make a memory man, a telepath, a senser, or a lucky man happy to have me salute him, I'm glad to oblige; he is more valuable than I am and I could not replace him if I lived to be two hundred. Or take the K-9 Corps, which is 50 per cent "officers" but whose other 50 per cent are neodogs.

None of these is in the line of command, so let's consider only us apes and what it takes to lead us.

This imaginary division has 10,800 men in 216 platoons, each with a lieutenant. Three platoons to a company calls for 72 captains; four companies to a battalion calls for 18 majors or lieutenant colonels. Six regiments with six colonels can form two or three brigades, each with a short general, plus a medium-tall general as top boss.

You wind up with 317 officers out of a total, all ranks, of 11,117.

There are no blank files and every officer commands a team. Officers total 3 per cent—which is what the M.I. does have, but arranged somewhat differently. In fact a good many platoons are commanded by sergeants and many officers "wear more than one hat" in order to fill some utterly necessary staff jobs.

Even a platoon leader should have "staff"—his platoon sergeant.

But he can get by without one and his sergeant can get by without him. But a general must have staff; the job is too big to carry in his hat. He needs a big planning staff and a small combat staff. Since there are never enough officers, the team commanders in his flag transport double as his planning staff and are picked from the M.I.'s best mathematical logicians then they drop with their own teams. The general drops with a small combat staff, plus a small team of the roughest, on-the-bounce troopers in the M.I. Their job is to keep the general from being bothered by rude strangers while he is managing the battle. Sometimes they succeed.

Besides necessary staff billets, any team larger than a platoon ought to have a deputy commander. But there are never enough officers so we make do with what we've got. To fill each necessary combat billet, one job to one officer, would call for a 5 per cent ratio of officers—but 3 per cent is all we've got.

In place of that optimax of 5 per cent that the M.I. never can reach, many armies in the past commissioned 10 per cent of their number, or even 15 per cent—and sometimes a preposterous 20 per cent! This sounds like a fairy tale but it was a fact, especially during the XXth century. What kind of an army has more “officers” than corporals? (And more noncoms than privates!)

An army organized to lose wars—if history means anything. An army that is mostly organization, red tape, and overhead, most of whose “soldiers” never fight.

But what do “officers” *do* who do not command fighting men?

Fiddlework, apparently—officers’ club officer, morale officer, athletics officer, public information officer, recreation officer, PX officer, transportation officer, legal officer, chaplain, assistant chaplain, junior assistant chaplain, officer-in-charge of anything anybody can think of, even—nursery officer!

In the M.I., such things are extra duty for combat officers or, if they are *real* jobs, they are done better and cheaper and without demoralizing a fighting outfit by hiring civilians. But the situation got so smelly in one of the XXth century major powers that *real* officers, ones who commanded fighting men, were given special insignia to distinguish them from the swarms of swivel-chair hussars.

The scarcity of officers got steadily worse as the war wore on, because the casualty rate is always highest among officers … and the M.I. *never* commissions a man simply to fill vacancy. In the long run, each boot regiment must supply its own share of officers and the percentage can’t be raised without lowering the standards. The strike force in the *Tours* needed thirteen officers—six platoon leaders, two company commanders and two deputies, and a strike force commander staffed by a deputy and an adjutant.

What it had was six … and me.

Table of Organization
“Rump Battalion” Strike Force—
Cpt. Blackstone
(“first hat”)
Fleet Sergeant

I would have been under Lieutenant Silva, but he left for hospital the day I reported, ill with some sort of twitching awfuls. But this did not necessarily mean that I would get his platoon. A temporary third lieutenant is not considered an asset; Captain Blackstone could place me under Lieutenant Bayonne and put a sergeant in charge of his own first platoon, or even “put on a third hat” and take the platoon himself.

In fact, he did both and nevertheless assigned me as platoon leader of the first platoon of the Blackguards. He did this by borrowing the Wolverine’s best buck sergeant to act as his battalion staffer, then he placed his fleet sergeant as platoon sergeant of his first platoon—a job two grades below his chevrons. Then Captain Blackstone spelled it out for me in a headshrinking lecture: I would appear on the T. O. as platoon leader, but Blackie himself and the fleet sergeant would run the platoon.

As long as I behaved myself, I could go through the motions. I would even be allowed to drop as platoon leader—but one word from my platoon sergeant to my company commander and the jaws of the nutcracker would close.

It suited me. It was my platoon as long as I could swing it—and if I couldn't, the sooner I was shoved aside the better for everybody. Besides, it was a lot less nerve-racking to get a platoon that way than by sudden catastrophe in battle.

I took my job very seriously, for it was my platoon—the T. O. said so. But I had not yet learned to delegate authority and, for about a week, I was around troopers' country much more than is good for a team. Blackie called me into his stateroom. "Son, what in Ned do you think you are doing?"

I answered stiffly that I was trying to get my platoon ready for action.

"So? Well, that's not what you are accomplishing. You are stirring them like a nest of wild bees. Why the deuce do you think I turned over to you the best sergeant in the Fleet? If you will go to your stateroom, hang yourself on a hook, and stay there! … until 'Prepare for Action' is sounded, he'll hand that platoon over to you tuned like a violin."

"As the Captain pleases, sir," I agreed glumly.

"And that's another thing—I can't stand an officer who acts like a confounded *kaydet.* Forget that silly third-person talk around me—save it for generals and the Skipper. Quit bracing your shoulders and clicking your heels. Officers are supposed to look *relaxed,* son."

"Yes, sir."

"And let that be the last time you say 'sir' to me for one solid week. Same for saluting. Get that grim *kaydet* look off your face and hang a smile on it."

"Yes, s—Okay."

"That's better. Lean against the bulkhead. Scratch yourself. Yawn. Anything but that tin-soldier act."

I tried … and grinned sheepishly as I discovered that breaking a habit is not easy. Leaning was harder work than standing at attention. Captain Blackstone studied me. "Practice it," he said. "An officer can't look scared or tense; it's contagious. Now tell me, Johnnie, what your platoon needs. Never mind the piddlin' stuff; I'm not interested in whether a man has the regulation number of socks in his locker."

I thought rapidly. "Uh … do you happen to know if Lieutenant Silva intended to put Brumby up for sergeant?"

"I do happen to know. What's *your* opinion?"

"Well … the record shows that he has been acting section leader the past two months. His efficiency marks are good."

"I asked for your recommendation, Mister."

"Well, s—Sorry. I've never seen him work on the ground, so I can't have a real opinion; anybody can soldier in the drop room. But the way I see it, he's been acting sergeant too long to bust him back to chaser and promote a squad leader over him. He ought to get that third chevron before we drop or he ought to be transferred when we get back. Sooner, if there's a chance for a spaceside transfer."

Blackie grunted. "You're pretty generous in giving away my Blackguards—for a third lieutenant."

I turned red. "Just the same, it's a soft spot in my platoon. Brumby ought to be promoted, or transferred. I don't want him back in his old job with somebody promoted over his head; he'd likely turn sour and I'd have an even worse soft spot. If he can't have another chevron, he ought to go to repple-depple for cadre. Then he won't be humiliated and he gets a fair shake to make sergeant in another team—instead of a dead end here."

"Really?" Blackie did not quite sneer. "After that masterly analysis, apply your powers of deduction and tell me why Lieutenant Silva failed to transfer him three weeks ago when we arrived around Sanctuary."

I had wondered about that. The time to transfer a man is the earliest possible instant after you decide to let him go—and without warning; it's better for the man and the team—so says the book. I said slowly, "Was Lieutenant Silva already ill at that time, Captain?"

"No."

The pieces matched. "Captain, I recommended Brumby for immediate promotion."

His eyebrows shot up. "A minute ago you were about to dump him as useless."

"Uh, not quite. I said it had to be one or the other—but I didn't know which. Now I know."

"Continue."

"Uh, this assumes that Lieutenant Silva is an efficient officer—"

"Hummmph! Mister, for your information, 'Quick' Silva has an unbroken string of 'Excellent—Recommended for Promotion' on his Form ThirtyOne."

"But I knew that he was good," I plowed on, "because I inherited a good platoon. A good officer might not promote a man for oh, for many reasons—and still not put his misgivings in writing. But in this case, if he could not recommend him for sergeant, then he wouldn't keep him with the team—so he would get him out of the ship at the first opportunity. But he didn't. Therefore I know he intended to promote Brumby." I added, "But I can't see why he didn't push it through three weeks ago, so that Brumby could have worn his third chevron on R & R."

Captain Blackstone grinned. "That's because you don't credit *me* with being efficient."

"S—I beg pardon?"

"Never mind. You've proved who killed Cock Robin and I don't expect a still-moist *kaydet* to know all the tricks. But listen and learn, son. As long as this war goes on, don't *ever* promote a man just before you return to Base."

"Uh … why not, Captain?"

"You mentioned sending Brumby to Replacement Depot if he was not to be promoted. But that's just where he would have gone if we had promoted him three weeks ago. You don't know how hungry that non-com desk at repple-depple is. Paw through the dispatch file and you'll find a demand that we supply two sergeants for cadre. With a platoon sergeant being detached for O.C.S. and a buck sergeant spot vacant, I was under complement and able to refuse." He grinned savagely. "It's a rough war, son, and your own people will steal your best men if you don't watch 'em." He took two sheets of paper out of a drawer. "There—"

One was a letter from Silva to Cap'n Blackie, recommending Brumby for sergeant; it was dated over a month ago.

The other was Brumby's warrant for sergeant dated the day after we left Sanctuary.

"That suit you?" he asked.

"Huh? Oh, yes indeed!"

"I've been waiting for you to spot the weak place in your team, and tell me what had to be done. I'm pleased that you figured it out—but only middlin' pleased because an experienced officer would have analyzed it at once from the T. O. and the service records. Never mind, that's how you gain experience. Now here's what you do. Write me a letter like Silva's; date it yesterday. Tell your platoon sergeant to tell Brumby that you have put him up for a third stripe—and don't mention that Silva did so. You didn't know that when you made the recommendation, so we'll keep it that way. When I swear Brumby in, I'll let him know that both his officers recommended him independently—which will make him feel good. Okay, anything more?"

"Uh … not in organization—unless Lieutenant Silva planned to promote Naidi, vice Brumby. In which case we could promote one PFC to lance … and that would allow us to promote four privates to PFC, including three vacancies now existing. I don't know whether it's your policy to keep the T. O. filled up tight or not?"

"Might as well," Blackie said gently, "as you and I know that some of those lads aren't going to have many days in which to enjoy it. Just remember that we don't make a man a PFC until after he has been in combat—not in Blackie's Blackguards we don't. Figure it out with your platoon sergeant and let me know. No hurry … any time before bedtime tonight. Now … anything else?"

"Well—Captain, I'm worried about the suits."

"So am I. All platoons."

"I don't know about the other platoons, but with five recruits to fit, plus four suits damaged and exchanged, and two more downchecked this past week and replaced from stores—well, I don't see how Cunha and Navarre can warm up that many and run routine tests on forty-one others and get it all done by our calculated date. Even if no trouble develops—"

"Trouble always develops."

"Yes, Captain. But that's two hundred and eighty-six man-hours just for warm & fit, plus a hundred and twentythree hours of routine checks. And it always takes longer."

"Well, what do you think can be done? The other platoons will lend you help if they finish their own suits ahead of time. Which I doubt. Don't ask to borrow help from the Wolverines; we're more likely to lend them help."

"Uh … Captain, I don't know what you'll think of this, since you told me to stay out of troopers' country. But when I was a corporal, I was assistant to the Ordnance & Armor sergeant."

"Keep talking."

"Well, right at the last I was the O & A sergeant. But I was just standing in another man's shoes—I'm not a finished O & A mechanic. But I'm a pretty darn good assistant and if I was allowed to, well, I can either warm new suits, or run routine checks—and give Cunha and Navarre that much more time for trouble."

Blackie leaned back and grinned. "Mister, I have searched the regs carefully … and I can't find the one that says an officer mustn't get his hands dirty." He added, "I mention that because some 'young gentlemen' who have been assigned to me apparently had read such a regulation. All right, draw some dungarees—no need to get your uniform dirty along with your hands. Go aft and find your platoon sergeant, tell him about Brumby and order him to prepare recommendations to close the gaps in the T. O. in case I should decide to confirm your recommendation for Brumby. Then tell him that you are going to put in all your time on ordnance and armor—and that you want him to handle everything else. Tell him that if he has any problems to look you up in the armory. Don't tell him you consulted me—just give him orders. Follow me?"

"Yes, s—Yes, I do."

"Okay, get on it. As you pass through the cardroom, please give my compliments to Rusty and tell him to drag his lazy carcass in here."

For the next two weeks I was never so busy—not even in boot camp. Working as an ordnance & armor mech about ten hours a day was not all that I did. Math, of course—and no way to duck it with the Skipper tutoring me. Meals—say an hour and a half a day. Plus the mechanics of staying alive—shaving, showering, putting buttons in uniforms and trying to chase down the Navy master-at-arms, get him to unlock the laundry to locate clean uniforms ten minutes before inspection. (It is an unwritten law of the Navy that facilities must *always* be locked when they are most needed.)

Guard mount, parade, inspections, a minimum of platoon routine, took another hour a day. But besides, I was "George." Every outfit has a "George." He's the most junior officer and has the extra jobs—athletics officer, mail censor, referee for competitions, school officer, correspondence courses officer, prosecutor courts-martial, treasurer of the welfare mutual loan fund, custodian of registered publications, stores officer, troopers' mess officer, *et cetera* ad endless nauseam.

Rusty Graham had been "George" until he happily turned it over to me. He wasn't so happy when I insisted on a sight inventory on everything for which I had to sign. He suggested that if I didn't have sense enough to accept a commissioned officer's signed inventory then perhaps a direct order would change my tune. So I got sullen and told him to put his orders in writing—with a certified copy so that I could keep the original and endorse the copy over to the team commander.

Rusty angrily backed down—even a second lieutenant isn't stupid enough to put such orders in writing. I wasn't happy either as Rusty was my roommate and was then still my tutor in math, but we held the sight inventory. I got chewed out by Lieutenant Warren for being stupidly officious but he opened his safe and let me check his registered publications. Captain Blackstone opened his with no comment and I couldn't tell whether he approved of my sight inventory or not.

Publications were okay but accountable property was not. Poor Rusty! He had accepted his predecessor's count and now the count was short—and the other officer was not merely gone, he was dead. Rusty spent a restless night (and so did I!), then went to Blackie and told him the truth.

Blackie chewed him out, then went over the missing items, found ways to expend most of them as “lost in combat.” It reduced Rusty’s shortages to a few days’ pay—but Blackie had him keep the job, thereby postponing the cash reckoning indefinitely.

Not all “George” jobs caused that much headache. There were no courts-martial; good combat teams don’t have them. There was no mail to censor as the ship was in Cherenkov drive. Same for welfare loans for similar reasons. Athletics I delegated to Brumby; referee was “if and when.” The troopers’ mess was excellent; I initialed menus and sometimes inspected the galley, i.e., I scrounged a sandwich without getting out of dungarees when working late in the armory. Correspondence courses meant a lot of paperwork since quite a few were continuing their educations, war or no war—but I delegated my platoon sergeant and the records were kept by the PFC who was his clerk.

Nevertheless “George” jobs soaked up about two hours every day—there were so many.

You see where this left me—ten hours O & A, three hours math, meals an hour and a half, personal one hour, military fiddlework one hour, “George” two hours, sleep eight hours total, twenty-six and a half hours. The ship wasn’t even on the twenty-five-hour Sanctuary day; once we left we went on Greenwich standard and the universal calendar.

The only slack was in my sleeping time.

I was sitting in the cardroom about one o’clock one morning, plugging away at math, when Captain Blackstone came in. I said, “Good evening, Captain.”

“Morning, you mean. What the deuce ails you, son? Insomnia?”

“Uh, not exactly.”

He picked up a stack of sheets, remarking, “Can’t your sergeant handle your paperwork? Oh, I see. Go to bed.”

“But, Captain—”

“Sit back down. Johnnie, I’ve been meaning to talk to you. I never see you here in the cardroom, evenings. I walk past your room, you’re at your desk. When your bunkie goes to bed, you move out here. What’s the trouble?”

“Well … I just never seem to get caught up.”

“Nobody ever does. How’s the work going in the armory?”

“Pretty well. I think we’ll make it.”

“I think so, too. Look, son, you’ve got to keep a sense of proportion. You have two prime duties. First is to see that your platoon’s equipment is ready—you’re doing that. You don’t have to worry about the platoon itself, I told you that. The second—and just as important—you’ve got to be ready to fight. You’re muffing that.”

“I’ll be ready, Captain.”

"Nonsense and other comments. You're getting no exercise and losing sleep. Is that how to train for a drop? When you lead a platoon, son, you've got to be on the bounce. From here on you will exercise from sixteen-thirty to eighteen hundred each day. You will be in your sack with lights out at twentythree hundred—and if you lie awake fifteen minutes two nights in a row, you will report to the Surgeon for treatment. Orders."

"Yes, sir." I felt the bulkheads closing in on me and added desperately, "Captain, I don't see *how* I can get to bed by twentythree —and still get everything done."

"Then you won't. As I said, son, you must have a sense of proportion. Tell me how you spend your time."

So I did. He nodded. "Just as I thought." He picked up my math "homework," tossed it in front of me. "Take this. Sure, you want to work on it. But why work so hard before we go into action?"

"Well, I thought—"

" 'Think' is what you didn't do. There are four possibilities, and only one calls for finishing these assignments. First, you might buy a farm. Second, you might buy a small piece and be retired with an honorary commission. Third, you might come through all right … but get a downcheck on your Form ThirtyOne from your examiner, namely me. Which is just what you're aching for at the present time—why, son, I won't even let you drop if you show up with eyes red from no sleep and muscles flabby from too much chair parade. The fourth possibility is that you take a grip on yourself … in which case I might let you take a swing at leading a platoon. So let's assume that you do and put on the finest show since Achilles slew Hector and I pass you. In that case only—you'll need to finish these math assignments. So do them on the trip back.

"That takes care of that—I'll tell the Skipper. The rest of those jobs you are relieved of, right now. On our way home you can spend your time on math. If we get home. But you'll never get anywhere if you don't learn to keep first things first. Go to bed!"

A week later we made rendezvous, coming out of drive and coasting short of the speed of light while the fleet exchanged signals. We were sent Briefing, Battle Plan, our Mission & Orders—a stack of words as long as a novel—and were told not to drop.

Oh, we were to be in the operation but we would ride down like gentlemen, cushioned in retrieval boats. This we could do because the Federation already held the surface; Second, Third, and Fifth M.I. Divisions had taken it—and paid cash.

The described real estate didn't seem worth the price. Planet P is smaller than Terra, with a surface gravity of 0.7, is mostly arctic-cold ocean and rock, with lichenous flora and no fauna of interest. Its air is not breathable for long, being contaminated with nitrous oxide and too much ozone. Its one continent is about half the size of Australia, plus many worthless islands; it would probably require as much terraforming as Venus before we could use it.

However we were not buying real estate to live on; we went there because Bugs were there—and they were there on our account, so Staff thought. Staff told us that Planet P was an uncompleted advance base (prob. 87 ± 6 per cent) to be used against us.

Since the planet was no prize, the routine way to get rid of this Bug base would be for the Navy to stand off at a safe distance and render this ugly spheroid uninhabitable by Man or Bug. But the C-in-C had other ideas.

The operation was a raid. It sounds incredible to call a battle involving hundreds of ships and thousands of casualties a "raid," especially as, in the meantime, the Navy and a lot of other cap troopers were keeping things stirred up many lightyears into Bug space in order to divert them from reinforcing Planet P.

But the C-in-C was not wasting men; this giant raid could determine who won the war, whether next year or thirty years hence. We needed to learn more about Bug psychology. Must we wipe out every Bug in the Galaxy? Or was it possible to trounce them and impose a peace? We did not know; we understood them as little as we understand termites. To learn their psychology we had to communicate with them, learn their motivations, find out why they fought and under what conditions they would stop; for these, the Psychological Warfare Corps needed prisoners.

Workers are easy to capture. But a Bug worker is hardly more than animate machinery. Warriors can be captured by burning off enough limbs to make them helpless—but they are almost as stupid without a director as workers. From such prisoners our own professor types had learned important matters—the development of that oily gas that killed them but not us came from analyzing the biochemistries of workers and warriors, and we had had other new weapons from such research even in the short time I had been a cap trooper. But to discover why Bugs fight we needed to study members of their brain caste. Also, we hoped to exchange prisoners.

So far, we had never taken a brain Bug alive. We had either cleaned out colonies from the surface, as on Sheol, or (as had too often been the case) raiders had gone down their holes and not come back. A lot of brave men had been lost this way.

Still more had been lost through retrieval failure. Sometimes a team on the ground had its ship or ships knocked out of the sky. What happens to such a team? Possibly it dies to the last man. More probably it fights until power and ammo are gone, then survivors are captured as easily as so many beetles on their backs.

From our co belligerents the Skinnies we knew that many missing troopers were alive as prisoners—thousands we hoped, hundreds we were sure. Intelligence believed that prisoners were always taken to Klendathu; the Bugs are as curious about us as we are about them—a race of individuals able to build cities, starships, armies, may be even more mysterious to a hive entity than a hive entity is to us.

As may be, we wanted those prisoners back!

In the grim logic of the universe this may be a weakness. Perhaps some race that never bothers to rescue an individual may exploit this human trait to wipe us out. The Skinnies have such a trait only slightly and the Bugs don't seem to have it at all—nobody ever saw a Bug come to the aid of another because he was wounded; they cooperate perfectly in fighting but units are abandoned the instant they are no longer useful.

Our behavior is different. How often have you seen a headline like this?—TWO DIE ATTEMPTING RESCUE OF DROWNING CHILD. If a man gets lost in the mountains, hundreds will search and often two or three searchers are killed. But the next time somebody gets lost just as many volunteers turn out.

Poor arithmetic … but very human. It runs through all our folklore, all human religions, all our literature a racial conviction that when one human needs rescue, others should not count the price.

Weakness? It might be the unique strength that wins us a Galaxy.

Weakness or strength, Bugs don't have it; there was no prospect of trading fighters for fighters.

But in a hive polyarchy, some castes are valuable or so our Psych Warfare people hoped. If we could capture brain Bugs, alive and undamaged, we might be able to trade on good terms.

And suppose we captured a queen!

What is a queen's trading value? A regiment of troopers? Nobody knew, but Battle Plan ordered us to capture Bug "royalty," brains and queens, at any cost, on the gamble that we could trade them for human beings.

The third purpose of Operation Royalty was to develop methods: how to go down, how to dig them out, how to win with less than total weapons. Trooper for warrior, we could now defeat them above ground; ship for ship, our Navy was better; but, so far, we had had no luck when we tried to go down their holes.

If we failed to exchange prisoners on any terms, then we still had to: (a) win the war, (b) do so in a way that gave us a fighting chance to rescue our own people, or (c)—might as well admit it—die trying and lose. Planet P was a field test to determine whether we could learn how to root them out.

Briefing was read to every trooper and he heard it again in his sleep during hypno preparation. So, while we all knew that Operation Royalty was laying the groundwork toward eventual rescue of our mates, we also knew that Planet P held no human prisoners—it had never been raided. So there was no reason to buck for medals in a wild hope of being personally in on a rescue; it was just another Bug hunt, but conducted with massive force and new techniques. We were going to peel that planet like an onion, until we knew that every Bug had been dug out.

The Navy had plastered the islands and that unoccupied part of the continent until they were radioactive glaze; we could tackle Bugs with no worries about our rear. The Navy also maintained a ball-of-yarn patrol in tight orbits around the planet, guarding us, escorting transports, keeping a spy watch on the surface to make sure that Bugs did not break out behind us despite that plastering.

Under the Battle Plan, the orders for Blackie's Blackguards charged us with supporting the prime Mission when ordered or as opportunity presented, relieving another company in a captured area, protecting units of other corps in that area, maintaining contact with M.I. units around us—and smacking down any Bugs that showed their ugly heads.

So we rode down in comfort to an unopposed landing. I took my platoon out at a powered-armor trot. Blackie went ahead to meet the company commander he was relieving, get the situation and size up the terrain. He headed for the horizon like a scared jack rabbit.

I had Cunha send his first section's scouts out to locate the forward corners of my patrol area and I sent my platoon sergeant off to my left to make contact with a patrol from the Fifth Regiment. We, the Third Regiment, had a grid three hundred miles wide and eighty miles deep to hold; my piece was a rectangle forty miles deep and seventeen wide in the extreme left flank forward corner. The Wolverines were behind us, Lieutenant Khoroshen's platoon on the right and Rusty beyond him.

Our First Regiment had already relieved a Vth Div. regiment ahead of us, with a "brick wall" overlap which placed them on my corner as well as ahead. "Ahead" and "rear," "right flank" and "left," referred to orientation set up in deadreckoning tracers in each command suit to match the grid of the Battle Plan. We had no true front, simply an area, and the only fighting at the moment was going on several hundred miles away, to our arbitrary right and rear.

Somewhere off that way, probably two hundred miles, should be 2nd platoon, G Co, 2nd Batt, 3rd Reg—commonly known as "The

Roughnecks.”

Or the Roughnecks might be forty lightyears away. Tactical organization never matches the Table of Organization; all I knew from Plan was that something called the “2nd Batt” was on our right flank beyond the boys from the *Normandy Beach*. But that battalion could have been borrowed from another division. The Sky Marshal plays his chess without consulting the pieces.

Anyhow, I should not be thinking about the Roughnecks; I had all I could do as a Blackguard. My platoon was okay for the moment—safe as you can be on a hostile planet—but I had plenty to do before Cunha’s first squad reached the far corner. I needed to:

1. Locate the platoon leader who had been holding my area.

2. Establish corners and identify them to section and squad leaders.

3. Make contact liaison with eight platoon leaders on my sides and corners, five of whom should already be in position (those from Fifth and First Regiments) and three (Khoroshen of the Blackguards and Bayonne and Sukarno of the Wolverines) who were now moving into position.

4. Get my own boys spread out to their initial points as fast as possible by shortest routes.

The last had to be set up first, as the open column in which we disembarked would not do it. Brumby’s last squad needed to deploy to the left flank; Cunha’s leading squad needed to spread from dead ahead to left oblique; the other four squads must fan out in between.

This is a standard square deployment and we had simulated how to reach it quickly in the drop room; I called out: “Cunha! Brumby! Time to spread ‘em out,” using the non-com circuit.

“Roger sec one!”—“Roger sec two!”

“Section leaders take charge … and caution each recruit. You’ll be passing a lot of Cherubs. I don’t want ‘em shot at by mistake!” I bit down for my private circuit and said, “Sarge, you got contact on the left?”

“Yes, sir. They see me, they see you.”

“Good. I don’t see a beacon on our anchor corner—”

“Missing.”

“—so you coach Cunha by D. R. Same for the lead scout—that’s Hughes—and have Hughes set a new beacon.” I wondered why the Third or Fifth hadn’t replaced that anchor beacon—my forward left corner where three regiments came together.

No use talking. I went on: “D. R. check. You bear two seven five, miles twelve.”

“Sir, reverse is nine six, miles twelve scant.”

“Close enough. I haven’t found my opposite number yet, so I’m cutting out forward at max. Mind the shop.”

“Got ‘em, Mr. Rico.”

I advanced at max speed while clicking over to officers’ circuit: “Square Black One, answer. Black One, Chang’s Cherubs—do you read me? Answer.” I wanted to talk with the leader of the platoon we were relieving—and not for any perfunctory I-relieve-you-sir: I wanted the ungarnished word.

I didn’t like what I had seen.

Either the top brass had been optimistic in believing that we had mounted overwhelming force against a small, not fully developed Bug base—or the Blackguards had been awarded the spot where the roof fell in. In the few moments I had been out of the boat I had spotted half a dozen armored suits on the ground—empty I hoped, dead men possibly, but ‘way too many any way you looked at it.

Besides that, my tactical radar display showed a full platoon (my own) moving into position but only a scattering moving back toward retrieval or still on station. Nor could I see any system to their movements.

I was responsible for 680 square miles of hostile terrain and I wanted very badly to find out all I could before my own squads were deep into it. Battle Plan had ordered a new tactical doctrine which I found dismaying: Do not close the Bugs tunnels. Blackie had explained this as if it had been his own happy thought, but I doubt if he liked it.

The strategy was simple, and, I guess, logical … if we could afford the losses. Let the Bugs come up. Meet them and kill them on the surface. Let them keep on coming up. Don’t bomb their holes, don’t gas their holes—let them out. After a while—a day, two days, a week if we really did have overwhelming force, they would stop coming up. Planning Staff estimated (don’t ask me how!) that the Bugs would expend 70 per cent to 90 per cent of their warriors before they stopped trying to drive us off the surface.

Then we would start the unpeeling, killing surviving warriors as we went down and trying to capture “royalty” alive. We knew what the brain caste looked like; we had seen them dead (in photographs) and we knew they could not run—barely functional legs, bloated bodies that were mostly nervous system. Queens no human had ever seen, but Bio War Corps had prepared sketches of what they should look like—obscene monsters larger than a horse and utterly immobile.

Besides brains and queens there might be other “royalty” castes. As might be—encourage their warriors to come out and die, then capture alive anything but warriors and workers.

A necessary plan and very pretty, on paper. What it meant to me was that I had an area 17 x 40 miles which might be riddled with unstopped Bug holes. I wanted coordinates on each one.

If there were too many … well, I might accidentally plug a few and let my boys concentrate on watching the rest. A private in a marauder suit can cover a lot of terrain, but he can look at only one thing at a time; he is not superhuman.

I bounced several miles ahead of the first squad, still calling the Cherub platoon leader, varying it by calling any Cherub officer and describing the pattern of my transponder beacon (dah-di-dah-dah).

No answer—

At last I got a reply from my boss: "Johnnie! Knock off the noise. Answer me on conference circuit."

So I did, and Blackie told me crisply to quit trying to find the Cherub leader for Square Black One; there wasn't one. Oh, there might be a non-com alive somewhere but the chain of command had broken.

By the book, somebody always moves up. But it does happen if too many links are knocked out. As Colonel Nielssen had once warned me, in the dim past … almost a month ago.

Captain Chang had gone into action with three officers besides himself; there was one left now (my classmate, Abe Moise) and Blackie was trying to find out from him the situation. Abe wasn't much help. When I joined the conference and identified myself, Abe thought I was his battalion commander and made a report almost heartbreakingly precise, especially as it made no sense at all.

Blackie interrupted and told me to carry on. "Forget about a relief briefing. The situation is whatever you see that it is—so stir around and see."

"Right, Boss!" I slashed across my own area toward the far corner, the anchor corner, as fast as I could move, switching circuits on my first bounce. "Sarge! How about that beacon?"

"No place on that corner to put it, sir. A fresh crater there, about scale six."

I whistled to myself. You could drop the *Tours* into a size six crater. One of the dodges the Bugs used on us when we were sparring, ourselves on the surface, Bugs underground, was land mines. (They never seemed to use missiles, except from ships in space.) If you were near the spot, the ground shock got you; if you were in the air when one went off, the concussion wave could tumble your gyros and throw your suit out of control.

I had never seen larger than a scale-four crater. The theory was that they didn't dare use too big an explosion because of damage to their troglodyte habitats, even if they cofferdammed around it.

"Place an offset beacon," I told him. "Tell section and squad leaders."

"I have, sir. Angle one one oh, miles one point three. Da-di-dit. You should be able to read it, bearing about three three·five from where you are." He sounded as calm as a sergeant-instructor at drill and I wondered if I were letting my voice get shrill.

I found it in my display, above my left eyebrow—long and two shorts. “Okay. I see Cunha’s first squad is nearly in position. Break off that squad, have it patrol the crater. Equalize the areas—Brumby will have to take four more miles of depth.” I thought with annoyance that each man already had to patrol fourteen square miles; spreading the butter so thin meant seventeen square miles per man—and a Bug can come out of a hole less that five feet wide.

I added, “How ‘hot’ is that crater?”

“Amber-red at the edge. I haven’t been in it, sir.”

“Stay out of it. I’ll check it later.” Amber-red would kill an unprotected human but a trooper in armor can take it for quite a time. If there was that much radiation at the edge, the bottom would no doubt fry your eyeballs. “Tell Naidi to pull Malan and Bjork back to amber zone, and have them set up ground listeners.” Two of my five recruits were in that first squad—and recruits are like puppies; they stick their noses into things.

“Tell Naidi that I am interested in two things: movement inside the crater … and noises in the ground around it.” We wouldn’t send troopers out through a hole so radioactive that mere exit would kill them. But Bugs would, if they could reach us that way. “Have Naidi report to me. To you and me, I mean.”

“Yes, sir.” My platoon sergeant added, “May I make a suggestion?”

“Of course. And don’t stop to ask permission next time.”

“Navarre can handle the rest of the first section. Sergeant Cunha could take the squad at the crater and leave Naidi free to supervise the ground-listening watch.”

I know what he was thinking. Naidi, so newly a corporal that he had never before had a squad on the ground, was hardly the man to cover what looked like the worst danger point in Square Black One; he wanted to pull Naidi back for the same reasons I had pulled the recruits back.

I wonder if he knew what I was thinking? That “nutcracker”—he was using the suit he had worn as Blackie’s battalion staffer, he had one more circuit than I had, a private one to Captain Blackstone.

Blackie was probably patched in and listening via that extra circuit. Obviously my platoon sergeant did not agree with my disposition of the platoon. If I didn’t take his advice, the next thing I heard might be Blackie’s voice cutting in: “Sergeant, take charge. Mr. Rico, you’re relieved.”

But—Confound it, a corporal who wasn’t allowed to boss his squad wasn’t a corporal … and a platoon leader who was just a ventriloquist’s dummy for his platoon sergeant was an empty suit!

I didn’t mull this. It flashed through my head and I answered at once. “I can’t spare a corporal to babysit with two recruits. Nor a sergeant to boss four privates and a lance.”

“But—”

“Hold it. I want the crater watch relieved every hour. I want our first patrol sweep made rapidly. Squad leaders will check any hole reported and get beacon bearings so that section leaders, platoon sergeant and platoon leader can check them as they reach them. If there aren’t too many, we’ll put a watch on each—I’ll decide later.”

“Yes, sir.”

“Second time around, I want a slow patrol, as tight as possible, to catch holes we miss on the first sweep. Assistant squad leaders will use snoopers on that pass. Squad leaders will get bearings on any troopers—or suits—on the ground; the Cherubs may have left some live wounded. But no one is to stop even to check physicals until I order it. We’ve got to know the Bug situation first.”

“Yes, sir.”

“Suggestions?”

“Just one,” he answered. “I think the squad chasers should use their snoopers on that first fast pass.”

“Very well, do it that way.” His suggestion made sense as the surface air temperature was much lower than the Bugs use in their tunnels; a camouflaged vent hole should show a plume like a geyser by infrared vision. I glanced at my display. “Cunha’s boys are almost at limit. Start your parade.‘

“Very well, sir!”

“Off.” I clicked over to the wide circuit and continued to make tracks for the crater while I listened to everybody at once as my platoon sergeant revised the pre-plan—cutting out one squad, heading it for the crater, starting the rest of the first section in a two-squad countermarch while keeping the second section in a rotational sweep as pre-planned but with four miles increased depth; got the sections moving, dropped them and caught the first squad as it converged on the anchor corner crater, gave it its instructions; cut back to the section leaders in plenty of time to give them new beacon bearings at which to make their turns.

He did it with the smart precision of a drum major on parade and he did it faster and in fewer words than I could have done it. Extended-order powered-suit drill, with a platoon spread over many miles of countryside, is much more difficult than the strutting precision of parade—but it has to be exact, or you’ll blow the head off your mate in action … or, as in this case, you sweep part of the terrain twice and miss another part.

But the drillmaster has only a radar display of his formation; he can see with his eyes only those near him. While I listened, I watched it in my own display—glowworms crawling past my face in precise lines, "crawling" because even forty miles an hour is a slow crawl when you compress a formation twenty miles across into a display a man can see.

I listened to everybody at once because I wanted to hear the chatter inside the squads.

There wasn't any. Cunha and Brumby gave their secondary commands—and shut up. The corporals sang out only as squad changes were necessary; section and squad chasers called out occasional corrections of interval or alignment—and privates said nothing at all.

I heard the breathing of fifty men like muted sibilance of surf, broken only by necessary orders in the fewest possible words. Blackie had been right; the platoon had been handed over to me "tuned like a violin."

They didn't need *me*! I could go home and my platoon would get along just as well.

Maybe better—

I wasn't sure I had been right in refusing to cut Cunha out to guard the crater; if trouble broke there and those boys couldn't be reached in time, the excuse that I had done it "by the book" was worthless. If you get killed, or let somebody else get killed, "by the book" it's just as permanent as any other way.

I wondered if the Roughnecks had a spot open for a buck sergeant.

Most of Square Black One was as flat as the prairie around Camp Currie and much more barren. For this I was thankful; it gave us our only chance of spotting a Bug coming up from below and getting him first. We were spread so widely that four-mile intervals between men and about six minutes between waves of a fast sweep was as tight a patrol as we could manage. This isn't tight enough; any one spot would remain free of observation for at least three or four minutes between patrol waves—and a lot of Bugs can come out of a very small hole in three to four minutes.

Radar can see farther than eye, of course, but it cannot see as accurately.

In addition we did not dare use anything but short-range selective weapons—our own mates were spread around us in all directions. If a Bug popped up and you let fly with something lethal, it was certain that not too far beyond that Bug was a cap trooper; this sharply limits the range and force of the frightfulness you dare use. On this operation only officers and platoon sergeants were armed with rockets and, even so, we did not expect to use them. If a rocket fails to find its target, it has a nasty habit of continuing to search until it finds one …

and it cannot tell friend from foe; a brain that can be stuffed into a small rocket is fairly stupid.

I would happily have swapped that area patrol, with thousands of M.I. around us, for a simple one-platoon strike in which you know where your own people are and anything else is an enemy target.

I didn't waste time moaning; I never stopped bouncing toward that anchor-corner crater while watching the ground and trying to watch the radar picture as well. I didn't find any Bug holes but I did jump over a dry wash, almost a canyon, which could conceal quite a few. I didn't stop to see; I simply gave its co ordinates to my platoon sergeant and told him to have somebody check it.

That crater was even bigger than I had visualized; the *Tours* would have been lost in it. I shifted my radiation counter to directional cascade, took readings on floor and sides—red to multiple red right off the scale, very unhealthy for long exposure even to a man in armor; I estimated its width and depth by helmet range finder, then prowled around and tried to spot openings leading underground.

I did not find any but I did run into crater watches set out by adjacent platoons of the Fifth and First Regiments, so I arranged to split up the watch by sectors such that the combined watch could yell for help from all three platoons, the patchin to do this being made through First Lieutenant Do Campo of the "Head Hunters" on our left. Then I pulled out Naidi's lance and half his squad (including the recruits) and sent them back to platoon, reporting all this to my boss, and to my platoon sergeant.

"Captain," I told Blackie, "we aren't getting any ground vibrations, I'm going down inside and check for holes. The readings show that I won't get too much dosage if I—"

"Youngster, stay out of that crater."

"But Captain, I just meant to—"

"Shut up. You can't learn anything useful. Stay out."

"Yes, sir."

The next nine hours were tedious. We had been preconditioned for forty hours of duty (two revolutions of Planet P) through forced sleep, elevated blood sugar count, and hypno indoctrination, and of course the suits are self-contained for personal needs. The suits can't last that long, but each man was carrying extra power units and super H. P. air cartridges for recharging. But a patrol with no action is dull, it is easy to goof off.

I did what I could think of, having Cunha and Brumby take turns as drill sergeant (thus leaving platoon sergeant and leader free to rove around): I gave orders that no sweeps were to repeat in pattern so that each man would always check terrain that was new to him. There are endless patterns to cover a given area, by combining the combinations. Besides that, I consulted my platoon sergeant and announced bonus points toward honor squad for first verified hole, first Bug destroyed, etc.—boot camp tricks, but staying alert means staying alive, so anything to avoid boredom.

Finally we had a visit from a special unit, three combat engineers in a utility air car, escorting a talent—a spatial senser. Blackie warned me to expect them. "Protect them and give them what they want."

"Yes, sir. What will they need?"

"How should I know? If Major Landry wants you to take off your skin and dance in your bones, do it!"

"Yes, sir. Major Landry."

I relayed the word and set up a bodyguard by sub-areas. Then I met them as they arrived because I was curious; I had never seen a special talent at work. They landed inside my right flank rear and got out. Major Landry and two officers were wearing armor and hand flamers but the talent had no armor and no weapons—just an oxygen mask. He was dressed in a fatigue uniform without insignia and he seemed terribly bored by everything. I was not introduced to him. He looked like a sixteen-year old boy ... until I got close and saw a network of wrinkles around his weary eyes.

As he got out he took off his breathing mask. I was horrified, so I spoke to Major Landry, helmet to helmet without radio. "Major—the air around here is 'hot.' Besides that, we've been warned that—"

"Pipe down," said the Major. "He knows it."

I shut up. The talent strolled a short distance, turned and pulled his lower lip. His eyes were closed and he seemed lost in thought.

He opened them and said fretfully, "How can one be expected to work with all those silly people jumping around?"

Major Landry said crisply, "Ground your platoon."

I gulped and started to argue—then cut in the allhands circuit: "First Platoon Blackguards—*ground and freeze*!"

It speaks well for Lieutenant Silva that all I heard was a double echo of my order, as it was repeated down to squad. I said, "Major, can I let them move around on the ground?"

"No. And shut up."

Presently the senser got back in the car, put his mask on. There wasn't room for me, but I was allowed—ordered, really—to grab on and be towed; we shifted a couple of miles. Again the senser took off his mask and walked around. This time he spoke to one of the other combat engineers, who kept nodding and sketching on a pad.

The special-mission unit landed about a dozen times in my area, each time going through the same apparently pointless routine; then they moved on into the Fifth Regiment's grid. Just before they left, the officer who had been sketching pulled a sheet out of the bottom of his sketch box and handed it to me. “Here’s your sub map. The wide red band is the only Bug boulevard in your area. It is nearly a thousand feet down where it enters but it climbs steadily toward your left rear and leaves at about minus four hundred fifty. The light blue network joining it is a big Bug colony; the only places where it comes within a hundred feet of the surface I have marked. You might put some listeners there until we can get over here and handle it.”

I stared at it. “Is this map reliable?”

The engineer officer glanced at the senser, then said very quietly to me, “Of course it is, you idiot! What are you trying to do? Upset him?”

They left while I was studying it. The artist-engineer had done double sketching and the box had combined them into a stereo picture of the first thousand feet under the surface. I was so bemused by it that I had to be reminded to take the platoon out of “freeze”—then I withdrew the ground listeners from the crater, pulled two men from each squad and gave them bearings from that infernal map to have them listen along the Bug highway and over the town.

I reported it to Blackie. He cut me off as I started to describe the Bug tunnels by coordinates. “Major Landry relayed a facsimile to me. Just give me coordinates of your listening posts.”

I did so. He said, “Not bad, Johnnie. But not quite what I want, either. You’ve placed more listeners than you need over their mapped tunnels. String four of them along that Bug race track, place four more in a diamond around their town. That leaves you four. Place one in the triangle formed by your right rear corner and the main tunnel; the other three go in the larger area on the other side of the tunnel.”

“Yes, sir.” I added, “Captain, can we depend on this map?”

“What’s troubling you?”

“Well … it seems like magic. Uh, black magic.”

“Oh. Look, son, I’ve got a special message from the Sky Marshal to you. He says to tell you that map is official … and that he will worry about everything else so that you can give full time to your platoon. Follow me?”

“Uh, yes, Captain.”

“But the Bugs can burrow mighty fast, so you give special attention to the listening posts *outside* the area of the tunnels. Any noise from those four outside posts louder than a butterfly’s roar is to be reported at once, regardless of its nature.”

“Yes, sir.”

“When they burrow, it makes a noise like frying bacon—in case you’ve never heard it. Stop your patrol sweeps. Leave one man on visual observation of the crater. Let half your platoon sleep for two hours, while the other half pairs off to take turns listening.”

"Yes, sir."

"You may see some more combat engineers. Here's the revised plan. A sapper company will blast down and cork that main tunnel where it comes nearest the surface, either at your left flank, or beyond in 'Head Hunter' territory. At the same time another engineer company will do the same where that tunnel branches about thirty miles off to your right in the First Regiment's bailiwick. When the corks are in, a long chunk of their main street and a biggish settlement will be cut off. Meanwhile, the same sort of thing will be going on a lot of other places. Thereafter—we'll see. Either the Bugs break through to the surface and we have a pitched battle, or they sit tight and we go down after them, a sector at a time."

"I see." I wasn't sure that I did, but I understood my part: rearrange my listening posts; let half my platoon sleep. Then a Bug hunt—on the surface if we were lucky, underground if we had to.

"Have your flank make contact with that sapper company when it arrives. Help 'em if they want help."

"Right, Cap'n," I agreed heartily. Combat engineers are almost as good an outfit as the infantry; it's a pleasure to work with them. In a pinch they fight, maybe not expertly but bravely. Or they go ahead with their work, not even lifting their heads, while a battle rages around them. They have an unofficial, very cynical and very ancient motto: "First we dig 'em, then we die in 'em," to supplement their official motto: "Can do!" Both mottoes are literal truth.

"Get on it, son."

Twelve listening posts meant that I could put a half squad at each post, either a corporal or his lance, plus three privates, then allow two of each group of four to sleep while the other two took turns listening. Navarre and the other section chaser could watch the crater and sleep, turn about, while section sergeants could take turns in charge of the platoon. The redisposition took no more than ten minutes once I had detailed the plan and given out bearings to the sergeants; nobody had to move very far. I warned everybody to keep eyes open for a company of engineers. As soon as each section reported its listening posts in operation I clicked to the wide circuit: "Odd numbers! Lie down, prepare to sleep … one … two … three … four … five—sleep!"

A suit is not a bed, but it will do. One good thing about hypno preparation for combat is that, in the unlikely event of a chance to rest, a man can be put to sleep instantly by post hypnotic command triggered by someone who is not a hypnotist—and awakened just as instantly, alert and ready to fight. It is a lifesaver, because a man can get so exhausted in battle that he shoots at things that aren't there and can't see what he should be fighting.

But I had no intention of sleeping. I had not been told to and I had not asked. The very thought of sleeping when I knew that perhaps many thousands of Bugs were only a few hundred feet away made my stomach jump. Maybe that senser was infallible, perhaps the Bugs could not reach us without alerting our listening posts.

Maybe—But I didn't want to chance it.

I clicked to my private circuit. "Sarge—"

"Yes, sir?"

"You might as well get a nap. I'll be on watch. Lie down and prepare to sleep … one … two—"

"Excuse me, sir. I have a suggestion."

"Yes?"

"If I understand the revised plan, no action is expected for the next four hours. You could take a nap now, and then—"

"Forget it, Sarge! I am not going to sleep; I am going to make the rounds of the listening posts and watch for that sapper company."

"Very well, sir."

"I'll check number three while I'm here. You stay there with Brumby and catch some rest while I—"

"*Johnnie*!"

I broke off. "Yes, Captain?" Had the Old Man been listening?

"Are your posts all set?"

"Yes, Captain, and my odd numbers are sleeping. I am about to inspect each post. Then—"

"Let your sergeant do it. I want you to rest."

"But, Captain—"

"Lie down. That's a direct order. Prepare to sleep … one … two … three—*Johnnie*!"

"Captain, with your permission, I would like to inspect my posts first. Then I'll rest, if you say so, but I would rather remain awake. I —"

Blackie guffawed in my ear. "Look, son, you've slept for an hour and ten minutes."

"Sir?"

"Check the time." I did so and felt foolish. "You wide awake, son?"

"Yes, sir. I think so."

"Things have speeded up. Call your odd numbers and put your even numbers to sleep. With luck, they may get an hour. So swap 'em around, inspect your posts, and call me back."

I did so and started my rounds without a word to my platoon sergeant. I was annoyed at both him and Blackie—at my company commander because I resented being put to sleep against my wishes; and as for my platoon sergeant, I had a dirty hunch that it wouldn't have been done if he weren't the real boss and myself just a figurehead.

But after I had checked posts number three and one (no sounds of any sort, both were forward of the Bug area), I cooled down. After all, blaming a sergeant, even a fleet sergeant, for something a captain did was silly. "Sarge—"

"Yes, Mr. Rico?"

"Do you want to catch a nap with the even numbers? I'll wake you a minute or two before I wake them."

He hesitated slightly. "Sir, I'd like to inspect the listening posts myself."

"Haven't you already?"

"No, sir. I've been asleep the past hour."

"*Huh*?"

He sounded embarrassed. "The Captain required me to do so. He placed Brumby temporarily in charge and put me to sleep immediately after he relieved you."

I started to answer, then laughed helplessly. "Sarge? Let's you and I go off somewhere and go back to sleep. We're wasting our time; Cap'n Blackie is running this platoon."

"I have found, sir," he answered stiffly, "that Captain Blackstone invariably has a reason for anything he does."

I nodded thoughtfully, forgetting that I was ten miles from my listener. "Yes. You're right, he always has a reason. Mmm … since he had us both sleep, he must want us both awake and alert now."

"I think that must be true."

"Mmm … any idea why?"

He was rather long in answering. "Mr. Rico," he said slowly, "if the Captain knew he would tell us; I've never known him to hold back information. But sometimes he does things a certain way without being able to explain why. The Captain's hunches—well, I've learned to respect them."

"So? Squad leaders are all even numbers; they're asleep."

"Yes, sir."

"Alert the lance of each squad. We won't wake anybody … but when we do, seconds may be important."

"Right away."

I checked the remaining forward post, then covered the four posts bracketing the Bug village, jacking my phones in parallel with each listener. I had to force myself to listen, because you could hear them, down there below, chittering to each other. I wanted to run and it was all I could do not to let it show.

I wondered if that "special talent" was simply a man with incredibly acute hearing.

Well, no matter how he did it, the Bugs were where he said they were. Back at O.C.S. we had received demonstrations of recorded Bug noises; these four posts were picking up typical nest noises of a large Bug town—that chittering which may be their speech (though why should they need to talk if they are all remotely controlled by the brain caste?), a rustling like sticks and dry leaves, a high background whine which is always heard at a settlement and which had to be machinery—their air conditioning perhaps.

I did not hear the hissing, crackling noise they make in cutting through rock.

The sounds along the Bug boulevard were unlike the settlement sounds—a low background rumble which increased to a roar every few moments, as if heavy traffic were passing. I listened at post number five, then got an idea—checked it by having the standby man at each of the four posts along the tunnel call out "Mark!" to me each time the roaring got loudest.

Presently I reported. "Captain—"

"Yeah, Johnnie?"

"The traffic along this Bug race is all moving one way, from me toward you. Speed is approximately a hundred and ten miles per hour, a load goes past about once a minute."

"Close enough," he agreed. "I make it one-oh-eight with a headway of fifty-eight seconds."

"Oh." I felt dashed, and changed the subject. "I haven't seen that sapper company."

"You won't. They picked a spot in the middle rear of 'Head Hunter' area. Sorry, I should have told you. Anything more?"

"No, sir." We clicked off and I felt better. Even Blackie could forget … and there hadn't been anything *wrong* with my idea. I left the tunnel zone to inspect the listening post to right and rear of the Bug area, post twelve.

As with the others, there were two men asleep, one listening, one standby. I said to the standby, "Getting anythin?"

"No, sir."

The man listening, one of my five recruits, looked up and said, "Mr. Rico, I think this pickup has just gone sour."

"I'll check it," I said. He moved to let me jack in with him.

"Frying bacon" so loud you could smell it!

I hit the allhands circuit. "First platoon up! Wake up, call off, and report!"

—And clicked over to officers' circuit. "Captain! Captain Blackstone! *Urgent*!"

"Slow down, Johnnie. Report."

" 'Frying bacon' sounds, sir," I answered, trying desperately to keep my voice steady. "Post twelve at coordinates Easter Nine, Square Black One."

“Easter Nine,” he agreed. “Decibels?”

I looked hastily at the meter on the pickup. “I don’t know, Captain. Off the scale at the max end. It sounds like they’re right under my feet!”

“Good!” he applauded—and I wondered how he could feel that way. “Best news we’ve had today! Now listen, son. Get your lads awake—”

“They are, sir!”

“Very well. Pull back two listeners, have them spot-check around post twelve. Try to figure where the Bugs are going to break out. *And stay away from that spot*! Understand me?”

“I hear you, sir,” I said carefully. “But I do not understand.”

He sighed. “Johnnie, you’ll turn my hair gray yet. Look, son, we *want* them to come out, the more the better. You don’t have the firepower to handle them other than by blowing up their tunnel as they reach the surface—and that is the one thing *you must not do*! If they come out in force, a regiment can’t handle them. But that’s just what the General wants, and he’s got a brigade of heavy weapons in orbit, waiting for it. So you spot that breakthrough, fall back, and keep it under observation. If you are lucky enough to have a major breakthrough in your area, your reconnaissance will be patched through all the way to the top. So stay lucky and stay alive! Got it?”

“Yes, sir. Spot the breakthrough. Fall back and avoid contact. Observe and report.”

“Get on it!”

I pulled back listeners nine and ten from the middle stretch of “Bug Boulevard” and had them close in on coordinates Easter Nine from right and left, stopping every half mile to listen for “frying bacon.” At the same time I lifted post twelve and moved it toward our rear, while checking for a dying away of the sound.

In the meantime my platoon sergeant was regrouping the platoon in the forward area between the Bug settlement and the crater—all but twelve men who were ground-listening. Since we were under orders not to attack, we both worried over the prospect of having the platoon spread too widely for mutual support. So he rearranged them in a compact line five miles long, with Brumby’s section on the left, nearer the Bug settlement. This placed the men less than three hundred yards apart (almost shoulder to shoulder for cap troopers), and put nine of the men still on listening stations within support distance of one flank or the other. Only the three listeners working with me were out of reach of ready help.

I told Bayonne of the Wolverines and Do Campo of the Head Hunters that I was no longer patrolling and why, and I reported our regrouping to Captain Blackstone.

He grunted. “Suit yourself. Got a prediction on that breakthrough?”

“It seems to center about Easter Ten, Captain, but it is hard to pin down. The sounds are very loud in an area about three miles across and it seems to get wider. I’m trying to circle it at an intensity level just barely on scale.” I added, “Could they be driving a new horizontal tunnel just under the surface?”

He seemed surprised. “That’s possible. I hope not—we want them to come up.” He added, “Let me know if the center of noise moves. Check on it.”

“Yes, sir. Captain—”

“Huh? Speak up.”

“You told us not to attack when they break out. If they break out. What are we to do? Are we just spectators?”

There was a longish delay, fifteen or twenty seconds, and he may have consulted “upstairs.” At last he said, “Mr. Rico, you are not to attack at or near Easter Ten. Anywhere else—the idea is to hunt Bugs.”

“Yes, sir.” I agreed happily. “We hunt Bugs.”

“Johnnie!” he said sharply. “If you go hunting medals instead of Bugs—and I find out—you’re going to have a mighty sad-looking Form ThirtyOne!”

“Captain,” I said earnestly, “I don’t *ever* want to win a medal. The idea is to hunt Bugs.”

“Right. Now quit bothering me.”

I called my platoon sergeant, explained the new limits under which we would work, told him to pass the word along and to make sure that each man’s suit was freshly charged, air and power.

“We’ve just finished that, sir. I suggest that we relieve the men with you.” He named three reliefs.

This was reasonable, as my ground listeners had had no time to recharge. But the reliefs he named were all scouts.

Silently I cussed myself for utter stupidity. A scout’s suit is as fast as a command suit, twice the speed of a marauder. I had been having a nagging feeling of something left undone, and had checked it off to the nervousness I always feel around Bugs.

Now I knew. Here I was, ten miles away from my platoon with a party of three men each in a marauder suit. When the Bugs broke through, I was going to be faced with an impossible decision … unless the men with me could rejoin as fast as I could. “That’s good,” I agreed, “but I no longer need three men. Send Hughes, right away. Have him relieve Nyberg. Use the other three scouts to relieve the listening posts farthest forward.”

“Just Hughes?” he said doubtfully.

"Hughes is enough. I'm going to man one listener myself. Two of us can straddle the area; we know where they are now." I added, "Get Hughes down here on the bounce."

For the next thirty-seven minutes nothing happened. Hughes and I swung back and forth along the forward and rear arcs of the area around Easter Ten, listening five seconds at a time, then moving on. It was no longer necessary to seat the microphone in rock; it was enough to touch it to the ground to get the sound of "frying bacon" strong and clear. The noise area expanded but its center did not change. Once I called Captain Blackstone to tell him that the sound had abruptly stopped, and again three minutes later to tell him it had resumed; otherwise I used the scouts' circuit and let my platoon sergeant take care of the platoon and the listening posts near the platoon.

At the end of this time everything happened at once.

A voice called out on the scouts' circuit, " 'Bacon Fry'! Albert Two!"

I clicked over and called out, "Captain! 'Bacon Fry' at Albert Two, Black One!"—clicked over to liaison with the platoons surrounding me: "Liaison flash! 'Bacon frying' at Albert Two, Square Black One"—and immediately heard Do Campo reporting: " 'Frying Bacon' sounds at Adolf Three, Green Twelve."

I relayed that to Blackie and cut back to my own scouts' circuit, heard: "Bugs! *Bugs*! HELP!"

"Where?"

No answer. I clicked over. "Sarge! Who reported Bugs?"

He rapped back, "Coming up out of their town—about Bangkok Six."

"*Hit 'em*!" I clicked over to Blackie. "Bugs at Bangkok Six, Black One—I am attacking!"

"I heard you order it," he answered calmly. "How about Easter Ten?"

"Easter Ten is—" The ground fell away under me and I was engulfed in Bugs.

I didn't know what had happened to me. I wasn't hurt; it was a bit like falling into the branches of a tree—but these branches were alive and kept jostling me while my gyros complained and tried to keep me upright. I fell ten or fifteen feet, deep enough to be out of the daylight.

Then a surge of living monsters carried me back up into the light—and training paid off; I landed on my feet, talking and fighting: "Breakthrough at Easter Ten—no, Easter Eleven, where I am now. Big hole and they're pouring up. Hundreds. More than that." I had a hand flamer in each hand and was burning them down as I reported.

"Get out of there, Johnnie!"

"Wilco!"—and I started to jump.

And stopped. Checked the jump in time, stopped flaming, and really looked—for I suddenly realized that I ought to be dead. "Correction," I said, looking and hardly believing. "Breakthrough at Easter Eleven is a feint. No warriors."

"Repeat."

"Easter Eleven, Black One. Breakthrough here is entirely by workers so far. No warriors. I am surrounded by Bugs and they are still pouring out, but not a one of them is armed and those nearest me all have typical worker features. I have not been attacked." I added, "Captain, do you think this could be just a diversion? With their real breakthrough to come somewhere else?"

"Could be," he admitted. "Your report is patched through right to Division, so let them do the thinking. Stir around and check what you've reported. Don't assume that they are all workers—you may find out the hard way."

"Right, Captain." I jumped high and wide, intending to get outside that mass of harmless but loathsome monsters.

That rocky plain was covered with crawly black shapes in all directions. I overrode my jet controls and increased the jump, calling out, "Hughes! Report!"

"Bugs, Mr. Rico! Zillions of 'em! I'm a-burnin' 'em down!"

"Hughes, take a close look at those Bugs. Any of them fighting back? Aren't they all workers?"

"Uh—" I hit the ground and bounced again. He went on, "Hey! You're right, sir! How did you know?"

"Rejoin your squad, Hughes." I clicked over. "Captain, several thousand Bugs have exited near here from an unestimated number of holes. I have not been attacked. Repeat, I have not been attacked at all. If there are any warriors among them, they must be holding their fire and using workers as camouflage."

He did not answer.

There was an extremely brilliant flash far off to my left, followed at once by one just like it but farther away to my right front; automatically I noted time and bearings. "Captain Blackstone answer!" At the top of my jump I tried to pick out his beacon, but that horizon was cluttered by low hills in Square Black Two.

I clicked over and called out, "Sarge! Can you relay to the Captain for me?"

At that very instant my platoon sergeant's beacon blinked out.

I headed on that bearing as fast as I could push my suit. I had not been watching my display closely; my platoon sergeant had the platoon and I had been busy, first with ground-listening and, most lately, with a few hundred Bugs. I had suppressed all but the non-com's beacons to allow me to see better.

I studied the skeleton display, picked out Brumby and Cunha, their squad leaders and section chasers. "Cunha! Where's the platoon sergeant?"

"He's reconnoitering a hole, sir."

"Tell him I'm on my way, rejoining." I shifted circuits without waiting. "First platoon Blackguards to second platoon—answer!"

"What do you want?" Lieutenant Khoroshen growled.

"I can't raise the Captain."

"You won't, he's out."

"Dead?"

"No. But he's lost power—so he's out."

"Oh. Then you're company commander?"

"All right, all right, so what? Do you want help?"

"Uh … no. No, sir."

"Then shut up," Khoroshen told me, "until you do need help. We've got more than we can handle here."

"Okay." I suddenly found that I had more than I could handle. While reporting to Khoroshen, I shifted to full display and short range, as I was almost closed with my platoon—and now I saw my first section disappear one by one, Brumby's beacon disappearing first.

"Cunha! What's happening to the first section?"

His voice sounded strained. "They are following the platoon sergeant down."

If there's anything in the book that covers this, I don't know what it is. Had Brumby acted without orders? Or had he been given orders I hadn't heard? Look, the man was already down a Bug hole, out of sight and hearing—is this a time to go legal? We would sort such things out tomorrow. If any of us had a tomorrow—

"Very well," I said. "I'm back now. Report." My last jump brought me among them; I saw a Bug off to my right and I got him before I hit. No worker, this—it had been firing as it moved.

"I've lost three men," Cunha answered, gasping. "I don't know what Brumby lost. They broke out three places at once—that's when we took the casualties. But we're mopping them—"

A tremendous shock wave slammed me just as I bounced again, slapped me sideways. Three minutes thirty-seven seconds—call it thirty miles. Was that our sappers "putting down their corks"? "First section! Brace yourselves for another shock wave!" I landed sloppily, almost on top of a group of three or four Bugs. They weren't dead but they weren't fighting; they just twitched. I donated them a grenade and bounced again. "Hit 'em *now*!" I called out. "They're groggy. And mind that next—"

The second blast hit as I was saying it. It wasn't as violent. "Cunha!

Call off your section. And everybody stay on the bounce and mop up."

The call-off was ragged and slow—too many missing files as I could see from my physicals display. But the mop-up was precise and fast. I ranged around the edge and got half a dozen Bugs myself—the last of them suddenly became active just before I flamed it. Why did concussion daze them more than it did us? Because they were unarmored? Or was it their brain Bug, somewhere down below, that was dazed?

The call-off showed nineteen effectives, plus two dead, two hurt, and three out of action through suit failure—and two of these latter Navarre was repairing by vandalizing power units from suits of dead and wounded. The third suit failure was in radio & radar and could not be repaired, so Navarre assigned the man to guard the wounded, the nearest thing to pickup we could manage until we were relieved.

In the meantime I was inspecting, with Sergeant Cunha, the three places where the Bugs had broken through from their nest below. Comparison with the sub map showed, as one could have guessed, that they had cut exits at the places where their tunnels were closest to the surface.

One hole had closed; it was a heap of loose rock. The second one did not show Bug activity; I told Cunha to post a lance and a private there with orders to kill single Bugs, close the hole with a bomb if they started to pour out it's all very well for the Sky Marshal to sit up there and decide that holes must not be closed, but I had a situation, not a theory.

Then I looked at the third hole, the one that had swallowed up my platoon sergeant and half my platoon.

Here a Bug corridor came within twenty feet of the surface and they had simply removed the roof for about fifty feet. Where the rock went, what caused that "frying bacon" noise while they did it, I could not say. The rocky roof was gone and the sides of the hole were sloped and grooved. The map showed what must have happened; the other two holes came up from small side tunnels, this tunnel was part of their main labyrinth—so the other two had been diversions and their main attack had come from here.

Can those Bugs see through solid rock?

Nothing was in sight down that hole, neither Bug nor human. Cunha pointed out the direction the second section had gone. It had been seven minutes and forty seconds since the platoon sergeant had gone down, slightly over seven since Brumby had gone after him. I peered into the darkness, gulped and swallowed my stomach. "Sergeant, take charge of your section," I said, trying to make it sound cheerful. "If you need help, call Lieutenant Khoroshen."

"Orders, sir?"

"None. Unless some come down from above. I'm going down and find the second section—so I may be out of touch for a while." Then I jumped down into the hole at once, because my nerve was slipping.

Behind me I heard: "*Section*!"

"First squad!"—"Second squad!"—"Third squad!"

"By squads! *Follow me*!"—and Cunha jumped down, too.

It's not nearly so lonely that way.

I had Cunha leave two men at the hole to cover our rear, one on the floor of the tunnel, one at surface level. Then I led them down the tunnel the second section had followed, moving as fast as possible—which wasn't fast as the roof of the tunnel was right over our heads. A man can move in sort of a skating motion in a powered suit without lifting his feet, but it is neither easy nor natural; we could have trotted without armor faster.

Snoopers were needed at once—whereupon we confirmed something that had been theorized: Bugs see by infrared. That dark tunnel was well lighted when seen by snoopers. So far it had no special features, simply glazed rock walls arching over a smooth, level door.

We came to a tunnel crossing the one we were in and I stopped short of it. There are doctrines for how you should dispose a strike force underground—but what good are they? The only certainty was that the man who had written the doctrines had never himself tried them ... because, before Operation Royalty, nobody had come back up to tell what had worked and what had not.

One doctrine called for guarding every intersection such as this one. But I had already used two men to guard our escape hole; if I left 10 per cent of my force at each intersection, mighty soon I would be ten-percented to death.

I decided to keep us together ... and decided, too, that none of us would be captured. Not by Bugs. Far better a nice, clean real estate deal ... and with that decision a load was lifted from my mind and I was no longer worried.

I peered cautiously into the intersection, looked both ways. No Bugs. So I called out over the noncoms' circuit: "Brumby!"

The result was startling. You hardly hear your own voice when using suit radio, as you are shielded from your output. But here, underground in a network of smooth corridors, my output came back to me as if the whole complex were one enormous wave guide:

"BRRRRUMMBY!"

My ears rang with it.

And then rang again: "MR. RRRICCCO!"

"Not so loud," I said, trying to talk very softly myself. "Where are you?"

Brumby answered, not quite so deafeningly, "Sir, I don't know. We're lost."

"Well, take it easy. We're coming to get you. You can't be far away. Is the platoon sergeant with you?"

"No, sir. We never—"

"Hold it." I clicked in my private circuit. "Sarge—"

"I read you, sir." His voice sounded calm and he was holding the volume down. "Brumby and I are in radio contact but we have not been able to make rendezvous."

"Where are you?"

He hesitated slightly. "Sir, my advice is to make rendezvous with Brumby's section—then return to the surface."

"Answer my question."

"Mr. Rico, you could spend a week down here and not find me … and I am not able to move. You must—"

"Cut it, Sarge! Are you wounded?"

"No, sir, but—"

"Then why can't you move? Bug trouble?"

"Lots of it. They can't reach me now … but I can't come out. So I think you had better—"

"Sarge, you're wasting time! I am certain you know exactly what turns you took. Now tell me, while I look at the map. And give me a vernier reading on your D. R. tracer. That's a direct order. Report."

He did so, precisely and concisely. I switched on my head lamp, flipped up the snoopers, and followed it on the map. "All right," I said presently. "You're almost directly under us and two levels down—and I know what turns to take. We'll be there as soon as we pick up the second section. Hang on." I clicked over. "Brumby—"

"Here, sir."

"When you came to the first tunnel intersection, did you go right, left, or straight ahead?"

"Straight ahead, sir."

"Okay. Cunha, bring 'em along. Brumby, have you got Bug trouble?"

"Not now, sir. But that's how we got lost. We tangled with a bunch of them … and when it was over, we were turned around."

I started to ask about casualties, then decided that bad news could wait; I wanted to get my platoon together and get out of there. A Bug town with no Bugs in sight was somehow more upsetting than the Bugs we had expected to encounter. Brumby coached us through the next two choices and I tossed tanglefoot bombs down each corridor we did not use. "Tanglefoot" is a derivative of the nerve gas we had been using on Bugs in the past—instead of killing, it gives any Bug that trots through it a sort of shaking palsy. We had been equipped with it for this one operation, and I would have swapped a ton of it for a few pounds of the real stuff. Still, it might protect our flanks.

In one long stretch of tunnel I lost touch with Brumby—some oddity in reflection of radio waves, I guess, for I picked him up at the next intersection.

But there he could not tell me which way to turn. This was the place, or near the place, where the Bugs had hit them.

And here the Bugs hit us.

I don't know where they came from. One instant everything was quiet. Then I heard the cry of "Bugs! *Bugs*!" from back of me in the column, I turned—and suddenly Bugs were everywhere. I suspect that those smooth walls are not as solid as they look; that's the only way I can account for the way they were suddenly all around us and among us.

We couldn't use flamers, we couldn't use bombs; we were too likely to hit each other. But the Bugs didn't have any such compunctions among themselves if they could get one of us. But we had hands and we had feet—

It couldn't have lasted more than a minute, then there were no more Bugs, just broken pieces of them on the door … and four cap troopers down.

One was Sergeant Brumby, dead. During the ruckus the second section had rejoined. They had been not far away, sticking together to keep from getting further lost in that maze, and had heard the fight. Hearing it, they had been able to trace it by sound, where they had not been able to locate us by radio.

Cunha and I made certain that our casualties were actually dead, then consolidated the two sections into one of four squads and down we went—and found the Bugs that had our platoon sergeant besieged.

That fight didn't last any time at all, because he had warned me what to expect. He had captured a brain Bug and was using its bloated body as a shield. He could not get out, but they could not attack him without (quite literally) committing suicide by hitting their own brain.

We were under no such handicap; we hit them from behind.

Then I was looking at the horrid thing he was holding and I was feeling exultant despite our losses, when suddenly I heard close up that "frying bacon" noise. A big piece of roof fell on me and Operation Royalty was over as far as I was concerned.

I woke up in bed and thought that I was back at O.C.S. and had just had a particularly long and complicated Bug nightmare. But I was not at O.C.S.; I was in a temporary sickbay of the transport *Argonne*, and I really had had a platoon of my own for nearly twelve hours.

But now I was just one more patient, suffering from nitrous oxide poisoning and overexposure to radiation through being out of armor for over an hour before being retrieved, plus broken ribs and a knock in the head which had put me out of action.

It was a long time before I got everything straight about Operation Royalty and some of it I'll never know. Why Brumby took his section underground, for example. Brumby is dead and Naidi bought the farm next to his and I'm simply glad that they both got their chevrons and were wearing them that day on Planet P when nothing went according to plan.

I did learn, eventually, why my platoon sergeant decided to go down into that Bug town. He had heard my report to Captain Blackstone that the "major breakthrough" was actually a feint, made with workers sent up to be slaughtered. When real warrior Bugs broke out where he was, he had concluded (correctly and minutes sooner than Staff reached the same conclusion) that the Bugs were making a desperation push, or they would not expend their workers simply to draw our fire.

He saw that their counterattack made from Bug town was not in sufficient force, and concluded that the enemy did not have many reserves—and decided that, at this one golden moment, one man acting alone might have a chance of raiding, finding "royalty" and capturing it. Remember, that was the whole purpose of the operation; we had plenty of force simply to sterilize Planet P, but our object was to capture royalty castes and to learn how to go down in. So he tried it, snatched that one moment—and succeeded on both counts.

It made it "mission accomplished" for the First Platoon of the Blackguards. Not very many other platoons, out of many, many hundreds, could say that; no queens were captured (the Bugs killed them first) and only six brains. None of the six were ever exchanged, they didn't live long enough. But the Psych Warfare boys did get live specimens, so I suppose Operation Royalty was a success.

My platoon sergeant got a field commission. I was not offered one (and would not have accepted)—but I was not surprised when I learned that he had been commissioned. Cap'n Blackie had told me that I was getting "the best sergeant in the fleet" and I had never had any doubt that Blackie's opinion was correct. I had met my platoon sergeant before. I don't think any other Blackguard knew this—not from me and certainly not from him. I doubt if Blackie himself knew it. But I had known my platoon sergeant since my first day as a boot.

His name is Zim.

My part in Operation Royalty did not seem a success to me. I was in the *Argonne* more than a month, first as a patient, then as an unattached casual, before they got around to delivering me and a few dozen others to Sanctuary; it gave me too much time to think—mostly about casualties, and what a generally messed-up job I had made of my one short time on the ground as platoon leader. I knew I hadn't kept everything juggled the way the Lieutenant used to, why, I hadn't even managed to get wounded still swinging; I had let a chunk of rock fall on me.

And casualties—I didn't know how many there were; I just knew that when I closed ranks there were only four squads where I had started with six. I didn't know how many more there might have been before Zim got them to the surface, before the Blackguards were relieved and retrieved.

I didn't even know whether Captain Blackstone was still alive (he was—in fact he was back in command about the time I went underground) and I had no idea what the procedure was if a candidate was alive and his examiner was dead. But I felt that my Form ThirtyOne was sure to make me a buck sergeant again. It really didn't seem important that my math books were in another ship.

Nevertheless, when I was let out of bed the first week I was in the *Argonne*, after loafing and brooding a day I borrowed some books from one of the junior officers and got to work. Math is hard work and it occupies your mind—and it doesn't hurt to learn all you can of it, no matter what rank you are; everything of any importance is founded on mathematics.

When I finally checked in at O.C.S. and turned in my pips, I learned that I was a cadet again instead of a sergeant. I guess Blackie gave me the benefit of the doubt.

My roommate, Angel, was in our room with his feet on the desk—and in front of his feet was a package, my math books. He looked up and looked surprised. "Hi, Juan! We thought you had bought it!"

"Me? The Bugs don't like me that well. When do you go out?"

"Why, I've been out," Angel protested. "Left the day after you did, made three drops and been back a week. What took you so long?"

"Took the long way home. Spent a month as a passenger."

"Some people are lucky. What drops did you make?"

"Didn't make any," I admitted.

He stared. "Some people have all the luck!"

Perhaps Angel was right; eventually I graduated. But he supplied some of the luck himself, in patient tutoring. I guess my "luck" has usually been people—Angel and Jelly and the Lieutenant and Carl and Lieutenant Colonel Dubois, yes and my father, and Blackie … and Brumby … and Ace—and always Sergeant Zim. Brevet Captain Zim, now, with permanent rank of First Lieutenant. It wouldn't have been *right* for me to have wound up senior to him.

Bennie Montez, a classmate of mine, and I were at the Fleet landing field the day after graduation, waiting to go up to our ships. We were still such brand-new second lieutenants that being saluted made us nervous and I was covering it by reading the list of ships in orbit around Sanctuary—a list so long that it was clear that something big was stirring, even though they hadn't seen fit to mention it to me. I felt excited. I had my two dearest wishes, in one package—posted to my old outfit and while my father was still there, too. And now this, whatever it was, meant that I was about to have the polish put on me by "makeelearnee" under Lieutenant Jelal, with some important drop coming up.

I was so full of it all that I couldn't talk about it, so I studied the lists. Whew, what a lot of ships! They were posted by types, too many to locate otherwise. I started reading off the troop carriers, the only ones that matter to an M.I.

There was the *Mennerheim*! Any chance of seeing Carmen? Probably not, but I could send a dispatch and find out.

Big ships—the new *Valley Forge* and the new *Ypres, Merathon, El Alamein, Iwo, Gallipoli, Leyte, Marne, Tours, Gettysburg, Hastings, Alamo, Waterloo*—all places where mud feet had made their names to shine.

Little ships, the ones named for foot sloggers: *Horatius, Alvin York, Swamp Fox*, the *Rog* herself, bless her heart, *Colonel Bowie, Devereux, Vercingetorix, Sandino, Aubrey Cousens, Kamehameha, Audie Murphy, Xenophon, Aguinaldo*—

I said, "There ought to be one named Magsaysay."

Bennie said, "What?"

"Ramón Magsaysay," I explained. "Great man, great soldier—probably be chief of psychological warfare if he were alive today. Didn't you ever study any history?"

"Well," admitted Bennie, "I learned that Simón Bolívar built the Pyramids, licked the Armada, and made the first trip to the Moon."

"You left out marrying Cleopatra."

"Oh, that. Yup. Well, I guess every country has its own version of history."

"I'm sure of it." I added something to myself and Bennie said, "What did you say?"

"Sorry, Bernardo. Just an old saying in my own language. I suppose you could translate it, more or less, as: 'Home is where the heart is.' "

"But what language was it?"

"Tagalog. My native language."

"Don't they talk Standard English where you come from?"

“Oh, certainly. For business and school and so forth. We just talk the old speech around home a little. Traditions. You know.”

“Yeah, I know. My folks chatter in Español the same way. But where do you—” The speaker started playing “Meadowland”; Bennie broke into a grin. “Got a date with a ship! Watch yourself, fellow! See you.”

“Mind the Bugs.” I turned back and went on reading ships’ names: *Pal Maleter, Montgomery, Tchaka, Geronimo—*

Then came the sweetest sound in the world: “*—shines the name, shines the name of Rodger Young*!”

I grabbed my kit and hurried. “Home is where the heart is”—I was going home.

Chapter 14

Am I my brother's keeper?
—Genesis IV:9

How think ye? If a man have
an hundred sheep, and one of
them be gone astray, doth he not
leave the ninety and nine, and goeth
into the mountains, and seeketh
that which is gone astray?
—Matthew XII:12

How much then is a man better than a sheep?
—Matthew XII:12

In the Name of God, the Beneficent,
the Merciful … whoso saveth
the life of one, it shall be as if
he had saved the life of all mankind.
—The Koran, Sûrah V, 32

Each year we gain a little. You have to keep a sense of proportion.

"Time, sir." My j.o. under instruction, Candidate or "Third Lieutenant" Bearpaw, stood just outside my door. He looked and sounded awfully young, and was about as harmless as one of his scalp-hunting ancestors.

"Right, Jimmie." I was already in armor. We walked aft to the drop room. I said, as we went, "One word, Jimmie. Stick with me and keep out of my way. Have fun and use up your ammo. If by any chance I buy it, you're the boss—but if you're smart, you'll let your platoon sergeant call the signals."

"Yes, sir."

As we came in, the platoon sergeant called them to attention and saluted. I returned it, said, "At ease," and started down the first section while Jimmie looked over the second. Then I inspected the second section, too, checking everything on every man. My platoon sergeant is much more careful than I am, so I didn't find anything, I never do. But it makes the men feel better if their Old Man scrutinizes everything—besides, it's my job.

Then I stepped out in the middle. "Another Bug hunt, boys. This one is a little different, as you know. Since they still hold prisoners of ours, we can't use a nova bomb on Klendathu—so this time we go down, stand on it, hold it, take it away from them. The boat won't be down to retrieve us; instead it'll fetch more ammo and rations. If you're taken prisoner, keep your chin up and follow the rules—because you've got the whole outfit behind you, you've got the whole Federation behind you; we'll come and get you. That's what the boys from the *Swamp Fox* and the *Montgomery* have been depending on. Those who are still alive are waiting, knowing that we will show up. And here we are. Now we go get 'em.

"Don't forget that we'll have help all around us, lots of help above us. All we have to worry about is our one little piece, just the way we rehearsed it.

"One last thing. I had a letter from Captain Jelal just before we left. He says that his new legs work fine. But he also told me to tell *you* that he's got you in mind … and he expects your names to *shine*!

"And so do I. Five minutes for the Padre."

I felt myself beginning to shake. It was a relief when I could call them to attention again and add: "By sections … port and starboard … prepare for drop!"

I was all right then while I inspected each man into his cocoon down one side, with Jimmie and the platoon sergeant taking the other. Then we buttoned Jimmie into the No. 3 centerline capsule. Once his face was covered up, the shakes really hit me.

My platoon sergeant put his arm around my armored shoulders. "Just like a drill, Son."

"I know it, Father." I stopped shaking at once. "It's the waiting, that's all."

"I know. Four minutes. Shall we get buttoned up, sir?"

"Right away, Father." I gave him a quick hug, let the Navy drop crew seal us in. The shakes didn't start up again. Shortly I was able to report: "Bridge! Rico's Roughnecks … ready for drop!"

"Thirtyone seconds, Lieutenant." She added, "Good luck, boys! This time we take 'em!"

"Right, Captain."

"Check. Now some music while you wait?" She switched it on:

"To the everlasting glory of the Infantry—"

HISTORICAL NOTE

YOUNG, RODGER W., Private, 148th Infantry, 37th Infantry Division (the Ohio Buckeyes); born Tiffin, Ohio, 28 April 1918; died 31 July 1943, on the island New Georgia, Solomons, South Pacific, while singlehandedly attacking and destroying an enemy machinegun pillbox. His platoon had been pinned down by intense fire from this pillbox; Private Young was wounded in the first burst. He crawled toward the pillbox, was wounded a second time but continued to advance, firing his rifle as he did so. He closed on the pillbox, attacked and destroyed it with hand grenades, but in so doing he was wounded a third time and killed.

His bold and gallant action in the face of overwhelming odds enabled his teammates to escape without loss; he was awarded posthumously the Medal of Honor.

Glory Road

BRITANNUS (shocked):
Caesar, this is not proper.
THEODOTUS (outraged):
How?
CAESAR (recovering his self-possession):
Pardon him Theodotus: he is a barbarian, and thinks that the customs of his tribe and island are the laws of nature.

Caesar and Cleopatra, Act II
—George Bernard Shaw

Chapter 1

I know a place where there is no smog and no parking problem and no population explosion . . . no Cold War and no H-bombs and no television commercials . . . no Summit Conferences, no Foreign Aid, no hidden taxes—no income tax. The climate is the sort that Florida and California claim (and neither has), the land is lovely, the people are friendly and hospitable to strangers, the women are beautiful and amazingly anxious to please—

I could go back. I could—

It was an election year with the customary theme of anything you can do I can do better, to a background of beeping sputniks. I was twenty-one but couldn't figure out which party to vote against.Instead I phoned my draft board and told them to send me that notice. I object to conscription the way a lobster objects to boiling water: it may be his finest hour but it's not his choice.

Nevertheless I love my country. Yes, I do, despite propaganda all through school about how patriotism is obsolete. One of my greatgrandfathers died at Gettysburg and my father made that long walk back from Chosen Reservoir, so I didn't buy this new idea. I argued against it in class—until it got me a "D," in Social Studies, then I shut up and passed the course. But I didn't change my opinions to match those of a teacher who didn't know Little Round Top from Seminary Ridge.

Are you of my generation? If not, do you know why we turned out so wrongheaded? Or did you just write us off as "juvenile delinquents?"

I could write a book. Brother! But I'll note one key fact: After you've spent years and years trying to knock the patriotism out of a boy, don't expect him to cheer when he gets a notice reading: GREETINGS: You are hereby ordered for induction into the Armed Forces of the United States—

Talk about a "Lost Generation!" I've read that post-World-War-One jazz —Fitzgerald and Hemingway and so on—and it strikes me that all they had to worry about was wood alcohol in bootleg liquor. They had the world by the tail—so why were they crying? Sure, they had Hitler and the Depression ahead of them. But they didn't know that. We had Khrushchev and the H-bomb and we certainly did know. But we were not a "Lost Generation." We were worse; we were the "Safe Generation." Not beatniks. The Beats were never more than a few hundred out of millions. Oh, we talked beatnik jive and dug cool sounds in stereo and disagreed with Playboy's poll of jazz musicians just as earnestly as if it mattered. We read Salinger and Kerouac and used language that shocked our parents and dressed (sometimes) in beatnik fashion. But we didn't think that bongo drums and a beard compared with money in the bank. We weren't rebels. We were as conformist as army worms. "Security" was our unspoken watchword. Most of our watchwords were unspoken but we followed them as compulsively as a baby duck takes to water. "Don't fight City Hall." "Get it while the getting is good." "Don't get caught." High goals, these, great moral values, and they all mean "Security." "Going steady" (my generation's contribution to the American Dream) was based on security; it insured that Saturday night could never be the loneliest night for the weak. If you went steady, competition was eliminated. But we had ambitions. Yes, sir! Stall off your draft board and get through college. Get married and get her pregnant, with both families helping you to stay on as a draft-immune student. Line up a job well thought of by draft boards, say with some missile firm. Better yet, take postgraduate work if your folks (or hers) could afford it and have another kid and get safely beyond the draft—besides, a doctor's degree was a union card, for promotion and pay and retirement.

Short of a pregnant wife with well-to-do parents the greatest security lay in being 4-F. Punctured eardrums were good but an allergy was best. One of my neighbors had a terrible asthma that lasted till his twenty-sixth birthday. No fake—he was allergic to draft boards. Another escape was to convince an army psychiatrist that your interests were more suited to the State Department than to the Army. More than half of my generation were "unfit for military service."

I don't find this surprising. There is an old picture of a people traveling by sleigh through deep woods—pursued by wolves. Every now and then they grab one of their number and toss him to the wolves. That's conscription even if you call it "selective service" and pretty it up with USOs and "veterans' benefits"—it's tossing a minority to the wolves while the rest go on with that single-minded pursuit of the three-car garage, the swimming pool, and the safe & secure retirement benefits.

I am not being holier-than-thou; I was after that same three-car garage myself.

However, my folks could not put me through college. My stepfather was an Air Force warrant officer with all he could handle to buy shoes for his own lads. When he was transferred to Germany just before my high school senior year and I was invited to move in with my father's sister and her husband, both of us were relieved.

I was no better off financially as my uncle-in-law was supporting a first wife—under California law much like being an Alabama field hand before the Civil War. But I had $35 a month as a "surviving dependent of a deceased veteran." (Not "war orphan," which is another deal that pays more.) My mother was certain that Dad's death had resulted from wounds but the Veterans Administration thought differently, so I was just a "surviving dependent." $35 a month did not fill the hole I put in their groceries and it was understood that when I graduated I would root for myself. By doing my military time, no doubt—But I had my own plan; I played football and finished senior year season with the California Central Valley secondary school record for yards gained and a broken nose—and started in at the local State College the next fall with a job "sweeping the gym" at $10 more a month than that pension, plus fees.

I couldn't see the end but my plan was clear: Hang on, teeth and toenails, and get an engineering degree. Avoid the draft and marriage. On graduation get a deferred-status job. Save money and pick up a law degree, too—because, back in Homestead, Florida, a teacher had pointed out that, while engineers made money, the big money and boss jobs went to lawyers. So I was going to beat the game, yes, sir! Be a Horatio Alger hero. I would have headed straight for that law degree but for the fact that the college did not offer law.

At the end of the season my sophomore year they deemphasized football.

We had had a perfect season—no wins. "Flash" Gordon (that's me—in the sports write-ups) stood one in yardage and points; nevertheless Coach and I were out of jobs. Oh, I "swept the gym" the rest of that year on basketball, fencing, and track, but the alumnus who picked up the tab wasn't interested in a basketball player who was only six feet one. I spent that summer pushing an idiot stick and trying to line up a deal elsewhere. I turned twenty-one that summer, which chopped that $35/month, too. Shortly after Labor Day I fell back on a previously prepared position, i.e., I made that phone call to my draft board.

I had in mind a year in the Air Force, then win a competitive appointment to the Air Force Academy—be an astronaut and famous, instead of rich.

Well, we can't all be astronauts. The Air Force had its quota or something. I was in the Army so fast I hardly had time to pack.

So I set out to be the best chaplain's clerk in the Army; I made sure that "typing" was listed as one of my skills. If I had anything to say about it, I was going to do my time at Fort Carson, typing neat copies while going to night school on the side.

I didn't have anything to say about it. Ever been in Southeast Asia? It makes Florida look like a desert. Wherever you step it squishes. Instead of tractors they use water buffaloes. The bushes are filled with insects and natives who shoot at you. It wasn't a war—not even a "Police Action." We were "Military Advisers." But a Military Adviser who has been dead four days in that heat smells the same way a corpse does in a real war.

I was promoted to corporal. I was promoted seven times. To corporal. I didn't have the right attitude. So my company commander said. My daddy had been a Marine and my stepfather was Air Force; my only Army ambition had been to be a chaplain's clerk Stateside. I didn't like the Army. My company commander didn't like the Army either; he was a first lieutenant who hadn't made captain and every time he got to brooding Corporal Gordon lost his stripes.

I lost them the last time for telling him that I was writing to my Congressman to find out why I was the only man in Southeast Asia who was going to be retired for old age instead of going home when his time was up—and that made him so mad he not only busted me but went out and was a hero, and then he was dead. And that's how I got this scar across my broken nose because I was a hero, too, and should have received the Medal of Honor, only nobody was looking. While I was recovering, they decided to send me home.

Major Ian Hay, back in the "War to End War," described the structure of military organizations: Regardless of T.O., all military bureaucracies consist of a Surprise Party Department, a Practical Joke Department, and a Fairy Godmother Department. The first two process most matters as the third is very small; the Fairy Godmother Department is one elderly female GS-5 clerk usually out on sick leave. But when she is at her desk, she sometimes puts down her knitting and picks a name passing across her desk and does something nice. You have seen how I was whipsawed by the Surprise Party and Practical Joke Departments; this time the Fairy Godmother Department picked Pfc. Gordon.

Like this—When I knew that I was going home as soon as my face healed (little brown brother hadn't sterilized his bolo), I put in a request to be discharged in Wiesbaden, where my family was, rather than California, home of record. I am not criticizing little brown brother; he hadn't intended me to heal at all—and he would have managed it if he hadn't been killing my company commander and too hurried to do a good job on me. I hadn't sterilized my bayonet but he didn't complain, he just sighed and came apart, like a doll with its sawdust cut. I felt grateful to him; he not only had rigged the dice so that I got out of the Army, he also gave me a great idea.

He and the Ward surgeon—The Surgeon had said, "You're going to get well, son. But you'll be scarred like a Heidelberg student."

Which got me thinking—You couldn't get a decent job without a degree, any more than you could be a plasterer without being a son or nephew of somebody in the plasterers' union. But there are degrees and degrees. Sir Isaac Newton, with a degree from a cow college such as mine, would wash bottles for Joe Thumbfingers—if Joe had a degree from a European university.

Why not Heidelberg? I intended to milk my G.I. benefits; I had that in mind when I put in that too hasty call to my draft board.

According to my mother everything was cheaper in Germany. Maybe I could stretch those benefits into a doctor's degree. *Herr Doktor* Gordon, mit scars on der face from Heidelberg yet!—that would rate an extra $3,000 a year from any missile firm.

Hell, I would fight a couple of student duels and add real Heidelberg scars to back up the dandy I had. Fencing was a sport I really enjoyed (though the one that counted least toward "sweeping the gym"). Some people cannot stand knives, swords, bayonets, anything sharp; psychiatrists have a word for it: aichmophobia. Idiots who drive cars a hundred miles an hour on fifty-mile-an-hour roads will nevertheless panic at the sight of a bare blade.

I've never been bothered that way and that's why I'm alive and one reason why I kept being bucked back to corporal. A "Military Adviser" can't afford to be afraid of knives, bayonets, and such; he must cope with them. I've never been afraid of them because I'm always sure I can do unto another what he is planning to do unto me.

I've always been right, except that time I made the mistake of being a hero, and that wasn't too bad a mistake. If I had tried to bug out instead of staying to disembowel him, he would have chopped my spine in two. As it was, he never got a proper swing at me; his jungle cutter just slashed my face as he came apart—leaving me with a nasty wound that was infected long before the helicopters came. But I never felt it. Presently I got dizzy and sat down in the mud and when I woke up, a medic was giving me plasma.

I rather looked forward to trying a Heidelberg duel. They pad your body and arm and neck and put a steel guard on your eyes and nose and across your ears—this is not like encountering a pragmatic Marxist in the jungle. I once handled one of those swords they use in Heidelberg; it was a light, straight saber, sharp on the edge, sharp a few inches on the back—but a blunt point! A toy, suited only to make pretty scars for girls to admire.

I got a map and whaddayuh know!—Heidelberg is just down the road from Wiesbaden. So I requested my discharge in Wiesbaden.

The ward surgeon said, "You're an optimist, son," but initialed it. The medical sergeant in charge of paperwork said, "Out of the question, Soldier." I won't say money changed hands but the endorsement the hospital's C.O. signed read FORWARDED. The ward agreed that I was bucking for a psycho; Uncle Sugar does not give free trips around the world to Pfcs.

I was already so far around that I was as close to Hoboken as to San Francisco—and closer to Wiesbaden. However, policy called for shipping returnees back via the Pacific. Military policy is like cancer:

Nobody knows where it comes from but it can't be ignored.

The Fairy Godmother Department woke up and touched me with its wand.

I was about to climb aboard a bucket called the General Jones bound for Manila, Taipei, Yokohama, Pearl, and Seattle when a dispatch came granting my USAREUR, Heidelberg, Germany, by available military transportation, for discharge, at own request see reference foxtrot. Accumulated leave could be taken or paid, see reference bravo. Subject man was authorized to return to Zone Interior (the States) any time within twelve months of separation, via available military transportation at no further expense to the government. Unquote.

The paperwork sergeant called me in and showed me this, his face glowing with innocent glee. "Only there ain't no 'available transportation,' Soldier—so haul ass aboard the General Jones. You're going to Seattle, like I said."

I knew what he meant: The only transport going west in a long, long time had sailed for Singapore thirty-six hours earlier. I stared at that dispatch, thinking about boiling oil and wondering if he had held it back just long enough to keep me from sailing under it.

I shook my head. "I'm going to catch the General Smith in Singapore. Be a real human type, Sarge, and cut me a set of orders for it."

"Your orders are cut. For the Jones. For Seattle."

"Gosh," I said thoughtfully. "I guess I had better go cry on the chaplain." I faded out fast but I didn't see the chaplain; I went to the airfield. It took five minutes to find that no commercial nor U.S. military flight was headed for Singapore in time to do me any good. But there was an Australian military transport headed for Singapore that night. Aussies weren't even "military advisers"but often were around, as "military observers." I found the planes skipper, a flight leftenant, and put the situation to him. He grinned and said, "Always room for one more bloke. Wheels up shortly after tea, likely. If the old girl will fly."

I knew it would fly; it was a Gooney Bird, a C-47, mostly patches and God knows how many millions of miles. It would get to Singapore on one engine if asked. I knew my luck was in as soon as I saw that grand old collection of masking tape and glue sitting on the field.

Four hours later I was in her and wheels up.

I checked in aboard USMTS General Smith the next morning, rather wet—the Pride of Tasmania had flown through storms the night before and a Gooney Birds one weakness is that they leak. But who minds clean rain after jungle mud? The ship was sailing that evening which was grand news.

Singapore is like Hong Kong only flat; one afternoon was enough. I had a drink in the old Raffles, another in the Adelphi, got rained on in the Great World amusement peak walked through Change Alley with a hand on my money and the other on my orders—and bought an Irish Sweepstakes ticket.

I don't gamble, if you will concede that poker is a game of skill. However this was a tribute to the goddess of fortune, thanks for a long run of luck. If she chose to answer with $140,000 US, I wouldn't throw it in her face. If she didn't . . . well, the tickets face value was one pound, $2.80 US; I paid $9.00 Singapore, or $3.00 US—a small gesture from a man who had just won a free trip around the world—not to mention coming out of the jungle still breathing.

But I got my three dollars' worth at once, as I fled out of Change Alley to avoid two dozen other walking banks anxious to sell me more tickets, Singapore dollars, any sort of money—or my hat if I let go of it—reached the street, hailed a cab, and told the driver to take me to the boat landing. This was a victory of spirit over flesh because I had been debating whether to snatch the chance to ease enormous biological back pressure. Good old Scarface Gordon had been an Eagle Scout awfully long and Singapore is one of the Seven Sinful Cities where anything may be had.

I am not implying that I had remained faithful to the Girl Next Door. The young lady back home who had taught me most about the World, the Flesh, and the Devil, with an amazing sendoff the night before I was inducted, had "Dear-Johnned" me in basic training; I felt gratitude but no loyalty. She got married soon after, now has two children, neither of them mine.

The real cause of my biological unease was geographical. Those little brown brothers I had been fitting, with and against, all had little brown sisters, many of whom could be had for a price, or even pour *l'amour ou pour le sport*.

But that had been all the local talent for a long time. Nurses? Nurses are officers—and the rare USO entertainer who got that far from Stateside was even more thoroughly blocked off than were nurses.

I did not object to little brown sisters because they were brown. I was as brown as they were, in my face, except for a long pink scar. I drew the line because they were little.

I was a hundred and ninety pounds of muscle and no fat, and I could never convince myself that a female four feet ten inches tall and weighing less than ninety pounds and looking twelve years old is in fact a freely consenting adult. To me it felt like a grim sort of statutory rape and produced psychic impotence.

Singapore looked like the place to find a big girl. But when I escaped from Change Alley, I suddenly didn't like people, big or little, male or female, and headed for the ship—and probably saved myself from pox, Cupid's catarrh, soft chancre, Chinese rot, saltwater itch, and athletes foot—the wisest decision I had made since, at fourteen, I had declined to wrestle a medium-sized alligator.

I told the driver in English what landing I wanted, repeated it in memorized Cantonese (not too well; its a nine-toned language, and French and German are all I had in school), and showed him a map with the landing marked and its name printed in English and drawn in Chinese.

Everybody who left the ship was given one of these maps. In Asia every cab driver speaks enough English to take you to the Red Light district and to shops where you buy "bargains." But be is never able to find your dock or boat landing.

My cabbie listened, glanced at the map, and said, "Okay, Mac. I dig it," and took off and rounded a corner with tires squealing while shouting at peddle cabs, coolies, children, dogs. I relaxed, happy at having found this cabbie among thousands.

Suddenly I sat up and shouted for him to stop.

I must explain something; I can't get lost.

Call it a "psi" talent, like that study they study at Duke. Mother used to say that sonny had a "bump of direction." Call it what you will, I was six or seven before I realized that other people could get lost. I always know which way is north, the direction of the point where I started and how far away it is. I can head straight back or retrace my steps, even in dark and jungle. This was the main reason why I was always promoted back to corporal and usually shoved into a sergeant's job. Patrols I headed always came back—the survivors, I mean. This was comforting to city boys who didn't want to be in that jungle anyhow.

I had shouted because the driver had swung right when he should have swung left and was about to cut back across his own trade

He speeded up.

I yelled again. He no longer dug English.

It was another mile and several turns later when he had to stop because of a traffic jam. I got out and he jumped out and started screaming in Cantonese and pointing at the meter in his cab. We were surrounded by Chinese adding to the din and smaller ones plucking at my clothes. I kept my hand on my money and was happy indeed to spot a cop. I yelled and caught his eye.

He came through the crowd brandishing a long staff. He was a Hindu; I said to him, "Do you speak English?"

"Certainly. And I understand American." I explained my trouble, showed him the map, and said that the driver had picked me up at Chaise Alley and been driving in aides.

The cop nodded and talked with the driver in a third language—Malayan, I suppose. At last the cop said, "He doesn't understand

English. He thought you said to drive to Johore."

The bridge to Johore is as far as you can get from the anchorage and still be on the Island of Singapore. I said angrily, "The hell he doesn't understand English!"

The cap shrugged. "You hired him, you must pay what is on the taximeter. Then I will explain to him where you wish to go and arrange a fixed fee."

"I'll see him in hell first!"

"That is possible. The distance is quite short—in this neighborhood. I suggest that you pay. The waiting time is mounting up."

There comes a time when a man must stand up for his rights, or he can't bear to look at himself in a mirror to shave. I had already shaved, so I paid—$18.50 Sing., for wasting an hour and ending up farther from the landing. The driver wanted a tip but the cop shut him up and then let me walk with him.

Using both hands I hung onto my orders and money, and the Sweepstakes ticket folded in with the money. But my pen disappeared and cigarettes and handkerchief and a Ronson lighter. When I felt ghost fingers at the strap of my watch, I agreed to the cops suggestion that he had a cousin, an honest man, who would drive me to my landing for a fixed—and moderate—fee.

The "cousin" turned out to be just coming down the street; half an hour later I was aboard ship. I shall never forget Singapore, a most educational city.

Chapter 2

Two months later on the French Riviera. The Fairy Godmother Department watched over me across the Indian Ocean, up the Red Sea, and clear to Napoli. I lived a healthy life, exercising and getting tan every morning, sleeping afternoons, playing poker at night. There are many people who do not. Know the odds (poor, but computable) for improving a poker hand in the draw, but are anxious to learn. When we got to Italy I had a beautiful tan and a sizable nest egg. Early in the voyage someone went broke and wanted to put a Sweepstakes ticket into the game. After some argument Sweepstakes tickets were made valuta at a discount, $2.00 USA per ticket. I finished the trip with fifty-three tickets.

Hitching a flight from Napoli to Frankfurt took only hours. Then the Fairy Godmother Department handed me back to the Surprise Party and Practical Joke Departments.

Before going to Heidelberg I ducked over to Wiesbaden to see my mother, my stepfather and the kids—and found that they had just left for the States, on their way to Elmendorf AFB in Alaska.

So I went to Heidelberg to be processed, and looked the town over while the led tape unwound.

Lovely town—Handsome castle, good beer, and big girls with rosy cheeks and shapes like Coca-Cola bottles—Yes, this looked like a nice place to get a degree. I started inquiring into rooms and such, and met a young kraut wearing a *studenten* cap and some face scars as ugly as mine—things were looking up.

I discussed my plans with the first sergeant of the transient company. He shook his head. "Oh, you poor boy!"

Why? No G.I. benefits for Gordon—I wasn't a veteran.

Never mind that scar. Never mind that I had killed more men in combat than you could crowd into a—well, never mind. That thing was not a "war" and Congress had not passed a bill providing educational benefits for us "Military Advisers."

I suppose this was my own fault. All my life there had been "G.I. benefits"—why, I had shared a bench in chem lab with a veteran who was going to school on the G.I. Bill.

This fatherly sergeant said, "Don't take it hard, son. Go home, get a job, wait a year. They'll pass it and date it bade, almost certainly. You're young."

So here I was on the Riviera, a civilian, enjoying a taste of Europe before using that transportation home. Heidelberg was out of the question. Oh, the pay I hadn't been able to spend in the jungle, plus accumulated leave, plus my winnings at poker, added up to a sum which would have kept me a year in Heidelberg. But it would never stretch enough for a degree. I had been counting on that mythical "G.I. Bill" for eating money and on my cash as a cushion.

My (revised) plan was obvious. Grab that top home before my year was up—grab it before school opened. Use the cash I had to pay board to Aunt and Uncle, work next summer and see what turned up. With the draft no longer hanging over me I could find some way to sweat out that last year even if I couldn't be "Heir Doktor Gordon."

However, school didn't open until fall and here it was spring. I was damn well going to see a little of Europe before I applied nose to grindstone; another such chance might never come.

There was another reason for waiting; those Sweepstakes tickets. The drawing for horses was coming up.

The Irish Sweepstakes starts as a lottery. First they sell enough tickets to paper Grand Central Station. The Irish hospitals get 25 percent and are the only sure winners. Shortly before the race they draw for horses. Let's say twenty horses are entered. If your ticket fails to draw a horse, its wastepaper. (Oh, there are minor consolation prizes.)

But if you do draw a horse, you still haven't won. Some horses won't start. Of those that do, most of them chase the other horses. However, any ticket that draws any horse at all, even a goat that can barely walk to the paddock, that ticket suddenly acquires a value of thousands of dollars between the drawing and the race. Just how much depends on how good the horse is. But prizes are high and the worst horse in the field has been known to win.

I had fifty-three tickets. If one of them drew a horse, I could sell that ticket for enough to put me through Heidelberg.

So I stayed and waited for the drawings.

Europe needn't be expensive. A youth hostel is luxury to a man who has come out of the boondocks of Southeast Asia and even the French Riviera isn't expensive if you approach it from underneath. I didn't stay on *La Promenade des Anglais*; I had a tiny room four floors up and two kilometers back, and the shared use of some plumbing. There are wonderful night clubs in Nice but you need not patronize them as the floor show at the beaches is as good . . . and free. I never appreciated what a high art the fan dance can be until the first time I watched a French girl get out of her clothes and into her bikini in plain sight of citizens, tourists, gendarmes, dogs—and me—all without quite violating the lenient French mores concerning "indecent exposure." Or only momentarily.

Yes, sir, there are things to see and do on the French Riviera without spending money.

The beaches are terrible. Rocks. But rocks are better than jungle mud and I put on trunks and enjoyed the floor show and added to my tan. It was spring, before the tourist season and not crowded, but it was warm and summery and dry. I lay in the sun and was happy and my only luxury was a deposit box with American Egress and the Paris edition of the N.Y. Herald Tribune and The Star's & Stripes. These I would glance over to see how the Powers-that-be were mismanaging the world, then look for what was new in the unWar I had just been let out of (usually no mention, although we had been told that we were "saving civilization"), then get down to important matters, i.e., news of the Irish Sweepstakes, plus the possibility that The Stars & Stripes might announce that it had all been a hideous dream and I was entitled to educational benefits after all.

Then came crossword puzzles and "Personal" ads. I always read "Personals"; they are a naked look into private lives. Things like: 'M.L. phone R.S. before noon. Money.' Makes you wonder who did what to whom, and who got paid?

Presently I found a still cheaper way to live with an even better floor show. Have you heard of *I'Ile du Levant?* It is an island off the Riviera between Marseilles and Nice, and is much like Catalina. It has a village at one end and the French Navy has blocked off the other for guided missiles; the rest of it is hills and beaches and grottoes. There are no automobiles, nor even bicycles. The people who go there don't want to be reminded of the outside world.

For ten dollars a day you can enjoy luxury equal to forty dollars a day in Nice. Or you can pay five cents a dry for camping and live on a dollar a day—which I did—and there are good cheap restaurants anytime you get tired of cooking.

It is a place that seems to have no rules of any sort. Wait a minute; there is one. Outside the village, Heliopolis, is a sign: LE NU INTEGRAL EST FORMELLEMENT INTERDIT. ("*Complete nakedness is strictly forbidden.*")

This means that everyone, man or woman, must put on a little triangle of cloth, a *cache-sexe*, a Gstring, before going inside the village. Elsewhere, on beaches and in camping grounds and around the island, you don't have to wear a damned thing and nobody does.

Save for the absence of automobiles and clothes, the Isle of the Levant is like any other bit of back-country France. There is a shortage of fresh water, but the French don't drink water and you bathe in the Mediterranean and for a franc you can buy enough fresh water for half a dozen sponge baths to rinse cm the salt. Take the train from Nice or Marseilles, get off at Toulon and take a bus to Lavandou, then by boat (an hour and a few minutes) to *I'Ile du Levant*—then chuck away your cares with your clothes.

I found I could buy the Herald-Trib, a day old, in the village, at the same place ("*Au Minimum," Mme. Alexandre*) where I rented a tent and camping gear. I bought groceries at *La Brise Marine* and camped above *La Plage des Grottes*, close to the village, and settled down and let my nerves relax while I enjoyed the floor show.

Some people disparage the female form divine. Sex is too good for them; they should have been oysters. All gals are good to look at (including little brown sisters even though they scared me); the only difference is that some look better than others. Some were fat and some were skinny and some were old and some were young. Some looked as if they had stepped straight out of *Les Folies Bergeres*. I got acquainted with one of those and I wasn't far off; she was a Swedish girl who was a "*nue*" in another Paris revue. She practiced English on me and I practiced French on her, and she promised to cook me a Swedish dinner if I was ever in Stockholm and I cooked her a dinner over an alcohol lamp and we got giggly on *vin ordinaire*, and she wanted to know how I had acquired my scar and I told some lies. Marjatta was good for an old soldiers nerves and I was sad when she had to leave.

But the floor show went on. Three days later I was sitting on Grotto Beach, leaning against a rock and working the crossword puzzle, when suddenly I got crosseyed trying not to stare at the most stare-able woman I have ever seen in my life.

Woman, girl—I couldn't be sure. At first glance I thought she was eighteen, maybe twenty; later when I was able to look her square in her face she still looked eighteen but could have been forty. Or a hundred and forty. She had the agelessness of perfect beauty. Like Helen or Troy, or Cleopatra. It seemed possible that she was Helen of Troy but I knew she wasn't Cleopatra because she was not a redhead; she was a natural blonde. She was a tawny toast color allover without a hint of bikini marks and her hair was the same shade two tones litter. It flowed, unconfined, in graceful waves down her back and seemed never to have been cut.

She was tall, not much shorter than I am, and not too much litter in weight. Not fat, not fat at all save for that graceful padding that smoothes the feminine form, shading the muscles underneath—I was sure there were muscles underneath; she carried herself with the relaxed power of a lioness.

Her shoulders were broad for a woman, as broad as her very female hips; her waist might have seemed thick on a lesser woman, on her it was deliciously slender. Her belly did not sag at all but carried the lovely double-domed curve of perfect muscle tone. Her breasts—only her big rib cage could carry such large ones without appearing too much of a good thing, they jutted firmly out and moved only a trifle when she moved, and they were crowned with rosy brown confections that were frankly nipples, womanly and not virginal.

Her navel was that jewel the Persian poets praised.

Her legs were long for her height; her hands and feet were not small but were slender, graceful. She was graceful in all ways; it was impossible to think of her in a pose ungraceful. Yet she was so lithe and limber that, like a cat, she could have twisted herself into any position.

Her face—How do you describe perfect beauty except to say that when you see it you can't mistake it? Her lips were full and her mouth rather wide. It was faintly curved in the ghost of a smile even when her features were at rest. Her lips were red but if she was wearing makeup of any sort it had been applied so skillfully that I could not detect it—and that alone would have made her stand out, for that was a year all other females were wearing "Continental" makeup, as artificial as a corset and as bold as a doxy's smile.

Her nose was straight and large enough for her face, no button. Her eyes—

She caught me staring at her. Certainly women expect to be locked at and expect it unclothed quite as much as when dressed for the ball. But it is rude to stare openly. I had given up the fight in the first ten seconds and was trying to memorize her, every line, every curve.

Her eyes locked with mine and she stared back and I began to blush but couldn't look away. Her eyes were so deep a blue that they were dark, darker than my own brown eyes.

I said huskily, "*Pardonnez-moi, ma'm'selle,*" and managed to tear my eyes away.

She answered, in English, "Oh, I don't mind. Look all you please," and looked me up and down as carefully as I had inspected her. Her voice was a warm, fall contralto, surprisingly deep in its lowest register.

She took two steps toward me and almost stood over me. I started to get up and she motioned me to stay seated, with a gesture mat assumed obedience as if she were very used to giving orders. "Rest where you are," she said. The breeze carried her fragrance to me and I got goose flesh all over. "You are American."

"Yes." I was certain she was not, yet I was equally certain she was not French. Not only did she have no trace of French accent but also—well, French women are at least slightly provocative at all times; they can't help it, it's ingrained in the French culture. There was nothing provocative about this woman—except that she was an incitement to riot just by existing.

But, without being provocative, she had that rare gift for immediate intimacy; she spoke to me as a very old friend might speak, friends who knew each other's smallest foibles and were utterly easy tete-a-tete. She asked me questions about myself, some of them quite personal, and I answered all of them, honestly, and it never occurred to me that she had no right to quiz me. She never asked my name, nor I hers—nor any question of her.

At last she stopped and looked me over again, carefully and soberly. Then she said thoughtfully, "You are very beautiful," and added, "*Au 'voir*"—turned and walked down the beach into the water and swam away.

I was too stunned to move. Nobody had ever called me "handsome" even before I broke my nose. As for "beautiful!"

But I don't think it would have done me any good to have chased her, even if I had thought of it in time. That gal could swim.

Chapter 3

I stayed at the plager until sundown, waiting for her to come back. Then I made a hurried supper of bread and cheese and wine, got dressed in my Gstring and walked into town. There I prowled bars and restaurants and did not find her, meanwhile window-peeping into cottages wherever shades were not drawn. When the bistros started shutting down, I gave up, went back to my tent, cursed myself for eight kinds of fool— (why couldn't I have said, "What's your name and where do you live and where are you staying here?")—sacked in and went to sleep.

I was up at dawn and checked the plage, ate breakfast, checked the plage again, got "dressed" and went into the village, checked the shops and post office, and bought my Herald-Trib.

Then I was faced with one of the most difficult decisions of my life: I had drawn a horse.

I wasn't certain at first, as I did not have those fifty-three serial numbers memorized. I had to run back to my tent, dig out a memorandum and check—and I had! It was a number that had stuck in mind because of its pattern: #XDY 34555. I had a horse!

Which meant several thousand dollars, just how much I didn't know. But enough to put me through Heidelberg . . . if I cashed in on it at once. The Herald-Trib was always a day late there, which meant the drawing had taken place at least two days earlier—and in the meantime that dog could break a leg or be scratched nine other ways. My ticket was important money only as long as "Lucky Star" was listed as a starter.

I had to get to Nice in a hurry and find out where and how you got the best price for a lucky ticket. Dig the ticket out of my deposit box and sell it!

But how about "Helen of Troy"?

Shylock with his soul-torn cry of "Oh, my daughter! Oh, my ducats!" was no more split than I.

I compromised. I wrote a painful note, identifying myself, telling her that I had been suddenly called away and pleading with her either to wait until I returned tomorrow, or at the very least, to leave a note telling me how to find her. I left it with the postmistress along with a description—blond, so tall, hair this long, magnificent *poitrine*—and twenty francs with a promise of twice that much if she delivered it and got an answer. The postmistress said that she had never seen her but if *cette grande blonde* ever set foot in the village the note would be delivered. That left me just time to rush back, dress in off-island clothes, dump my gear with *Mme. Alexandre*, and catch the boat. Then I had three hours of travel time to worry through.

The trouble was that Lucky Star wasn't really a dog. My horse rated no farther down than fifth or sixth, no matter who was figuring form. So? Stop while I was ahead and take my profit?

Or go for broke?

It wasn't easy. Let's suppose I could sell the ticket for $10,000. Even if I didn't try any fancy footwork on taxes, I would still keep most of it and get through school.

But I was going to get through school anyway—and did I really want to go to Heidelberg? That student with the dueling scars had been a slob, with his phony pride in scars from fake danger.

Suppose I hung on and grabbed the big one, £50,000, or $140,000—

Do you know how much tax a bachelor pays on $140,000 in the Land of the Brave and the Home of the Free?

$103,000, that's what he pays. That leaves him $37,000.

Did I want to bet about $10,000 against the chance of winning $37,000—with the odds at least 15 to 1 against me?

Brother, that is drawing to an inside straight. The principle is the same whether it's 37 grand, or jacks-or-better with a two-bit limit.

But suppose I wangled some way to beat the tax, thus betting $10,000 to win $140,000? That made the potential profit match the odds—and $140,000 was not just eating money for college but a fortune that could bring in four or five thousand a year forever.

I wouldn't be "cheating" Uncle Sugar; the USA had no more moral claim on that money (if I won) than I had on the Holy Roman Empire. What had Uncle Sugar done for me? He had clobbered my father's life with two wars, one of which we weren't allowed to win—and thereby made it tough for me to get through college quite aside from what a father may be worth in spiritual intangibles to his son (I didn't know, I never would know!)—then he had grabbed me out of college and had sent me to fight another unWar and damned near killed me and lost me my sweet girlish laughter.

So how is Uncle Sugar entitled to clip $103,000 and leave me the short end? So he can "lend" it to Poland? Or give it to Brazil? Oh, my back!

There was a way to keep it all (if I won) legal as marriage. Go live in little old tax-free Monaco for a year. Then take it anywhere.

New Zealand, maybe. The Herald-Trib had had the usual headlines, only more so. It looked as if the boys (just big playful boys!) who run this planet were about to hold that major war, the one with ICBMs and H-bombs, any time now.

If a man went as far south as New Zealand there might be something left after the fallout fell out.

New Zealand is supposed to be very pretty and they say that a fisherman there regards a five-pound trout as too small to take home. I had caught a two-pound trout once.

About then I made a horrible discovery. I didn't want to go back to school, win, lose, or draw. I no longer gave a damn about three-car garages and swimming pools, nor any other status symbol or "security." There was no security in this world and only damn fools and mice thought there could be.

Somewhere back in the jungle I had shucked off all ambition of that sort. I had been shot at too many times and had lost interest in supermarkets and exurban subdivisions and tonight is the PTA supper don't forget dear you promised.

Oh, I wasn't about to hole up in a monastery. I still wanted—

What did I want?

I wanted a Roc's egg. I wanted a harem loaded with lovely odalisques less than the dust beneath my chariot wheels, the rust that never stained my sword. I wanted raw red gold in nuggets the size of your fist and feed that lousy claim jumper to the huskies! I wanted to get up feeling brisk and go out and break some lances, Then pick a likely wench for my droit du seigneur—I wanted to stand up to the Baron and dare him to touch my wench! I wanted to hear the purple water chuckling against the skin of the Nancy Lee in the cool of the morning watch and not another sound, nor any movement save the slow tilling of the wings of the albatross that had been pacing us the last thousand miles.

I wanted the hurtling moons of Barsoom. I wanted Storisende and Poictesme, and Holmes shaking me awake to tell me, "The game's afoot!" I wanted to float down the Mississippi on a raft and elude a mob in company with the Duke of Bilgewater and the Lost Dauphin.

I wanted Prester John, and Excalibur held by a moon-white arm out of a silent lake. I wanted to sail with Ulysses and with Tros of Samothrace and eat the lotus in a land that seemed always afternoon. I wanted the feeling of romance and the sense of wonder I had known as a kid. I wanted the world to be what they had promised me it was going to be—instead of the tawdry, lousy, fouled-up mess it is.

I had had one chance—for ten minutes yesterday afternoon. Helen of Troy, whatever your true name may be—And I had known it . . . aha I had let it slip away.

Maybe one chance is all you ever get.

The train pulled into Nice.

In the American Express office I went to the banking department and to my deposit box, found the ticket and checked the number against the Herald-Trib—XDY 34555, yes! To stop my trembling, I checked the other tickets and they were wastepaper, just as I thought. I shoved them back into the box and asked to see the manager.

I had a money problem and American Express is a bank, not just a travel bureau. I was ushered into the manager's office and we exchanged names. "I need advice," I said. "You see, I hold one of the winning Sweepstakes tickets."

He broke into a grin. "Congratulations! You're the first person in a long time who has come in here with good news rather than a complaint."

"Thanks. Uh, my problem is this. I know that a ticket that draws a horse is worth quite a bit up until the race. Depending on the horse, of course."

"Of course," he agreed. "What horse did you draw?"

"A fairly good one. Lucky Star—and that's what makes it tough. If I had drawn H-Bomb, or any of the three favorites—Well, you see how it is. I don't know whether to sell or hang on, because I don't know how to figure the odds. Do you know what is being offered for Lucky Star?"

He fitted his finger tips together. "Mr. Gordon, American Express does not give tips on horse races, nor broker the resale of Sweepstakes tickets. However—Do you have the ticket with you?"

I got it out and handed it to him. It had been through poker games and was sweat-marked and crumpled. But that lucky number was unmistakable.

He looked at it. "Do you have your receipt?"

"Not with me." I started to explain that I had given my stepfathers address—and that my mail had been forwarded to Alaska. He cut me off. "That's all right." He touched a switch. "Alice, will you ask M'sieur Renault to step in?"

I was wondering if it really was all right. I had had the savvy to get names and new billets from the original ticket holders and each had promised to send his receipt to me when he got it—but no receipts had reached me. Maybe in Alaska—I had checked on this ticket while at the lockbox; it had been bought by a sergeant now in Stuttgart. Maybe I would have to pay him something or maybe I would have to break his arms.

M. Renault looked like a tired schoolteacher. "M'sieur Renault is our expert on this sort of thing," the manager explained. "Will you let him examine your ticket, please?"

The Frenchman looked at it, then his eyes lit up and be reached into a pocket, produced a jeweler's loupe, screwed it into his eye. "Excellent!" he said approvingly. "One of the best. Hong Kong, perhaps?

"I bought it in Singapore."

He nodded and smiled. "That follows."

The manager was not smiling. He reached into his desk and brought out another Sweepstakes ticket and handed it to me. "Mr. Gordon, this one I bought at Monte Carlo. Will you compare it?"

They looked alike to me, except for serial numbers and the fact that his was crisp and clean. "What am I supposed to look for?"

"Perhaps this will help." He offered me a large reading glass.

A Sweepstakes ticket is printed on special paper and has an engraved portrait on it and is done in several colors. It is a better job of engraving and printing than many countries use for paper money.

I learned long ago that you can't change a deuce into an ace by staring at it. I handed back his ticket. "Mine is counterfeit."

"I didn't say so, Mr. Gordon. I suggest you get an outside opinion. Say at the office of the Bank of France."

"I can see it. The engraving lines aren't sharp and even on mine. They're broken, some places. Under the glass the print job looks smeared." I turned. "Right, M'sieur Renault?"

The expert gave a shrug of commiseration. "It is beautiful work, of its sort."

I thanked them and got out. I checked with the Bank of France, not because I doubted the verdict but because you don't have a. leg cut off, nor chuck away $140,000, without a second opinion. Their expert didn't bother with a loupe. "*Contrefait*" he announced. "Worthless."

It was impossible to get back to *l'Ile du Levant* that night. I had dinner and then looked up my former landlady. My broom closet was empty and she let me have it overnight. I didn't lie awake long.

I was not as depressed as I thought I should be. I felt relaxed, almost relieved. For a while I had had the wonderful sensation of being rich —and I had had its complement, the worries of being rich—and both sensations were interesting and I didn't care to repeat them, not right away.

Now I had no worries. The only thing to settle was when to go home, and with living so cheap on the island there was no hurry. The only thing that fretted me was that rushing off to Nice might have caused me to miss "Helen of Troy," *cette grande blonde! Si grande . . . si belle . . . si majestueuse!* I fell asleep thinking of her.

I had intended to catch the early train, then the first boat. But the day before had used up most of the money on me and I had goofed by failing to get cash while at American Express. Besides, I had not asked for mail. I didn't expect any, other than from my mother and possibly my aunt—the only close friend I had had in the Army had been killed six months back. Still, I might as well pick up mail as long as I had to wait for money.

So I treated myself to a luxury breakfast. The French think that a man can face the day with chicory and milk, and a croissant, which probably accounts for their unstable politics. I picked a sidewalk cafe by a big kiosk, the only one in Nice that stocked The Stars & Stripes and where the Herald-Trib would be on sale as soon as it was in; ordered a melon, cafe *complet* for TWO, and an *omelette aux herbes fines*; and sat back to enjoy life.

When the Herald-Trib arrived, it detracted from my sybaritic pleasure. The headlines were worse than ever and reminded me that I was still going to have to cope with the world; I couldn't stay on *l'Ile du Levant* forever.

But why not stay there as long as possible? I still did not want to go to school, and that three-car-garage ambition was as dead as that Sweepstakes ticket. If World War III was about to shift to a rolling boil, there was no point in being an engineer at six or eight thousand a year in Santa Monica only to be caught in the fire storm.

It would be better to live it up, gather ye rosebuds, carpe that old diem, with dollars and days at hand, then—Well, join the Marine Corps maybe, like my dad.

I refolded the paper to the "Personals" column.

They were pretty good. Besides the usual offers of psychic readings and how to learn yoga and the veiled messages from one set of initials to another there were several that were novel. Such as—

> **REWARD!! Are you contemplating suicide? Assign to me the lease on your apartment and I will make your last clays lavish. Box 323, H-T**

Or:

> **Hindu gentleman, non-vegetarian, wishes to meet cultured European, African, or Asian lady owning sports car. Object: improving international relations. Box 107**

How do you do that in a sports car?

One was ominous—

> **Hermaphrodites of the World, Arise! You have nothing to lose but your chains. Tel. Opera 59-09**

The next one started: **ARE YOU A COWARD?**

Well, yes, certainly. If possible. If allowed a free choice. I read on:

> **ARE YOU A COWARD? This is not for you. We badly need a brave man. He must be 23 to 25 years old, in perfect health, at least six feet tall, weigh about 190 pounds, fluent English with some French, proficient with all weapons, some knowledge of engineering and mathematics essential, willing to travel, no family or emotional ties, indomitably courageous and handsome of face and figure. Permanent employment, very high pay,**

glorious adventure, great danger. You must apply in person, 17, rue Dante, Nice, 2me etage, appt. D.

I read that requirement about face and figure with strong relief. For a giddy moment it had seemed as if someone with a skewed sense of humor had aimed a shaggy joke right at me. Somebody who knew my habit of reading the "Personals."

That address was only a hundred yards from where I was sitting. I read the ad again.

Then I paid the addition, left a careful tip, went to the kiosk and bought The Stars & Stripes, walked to American Express, got money and picked up my mail, and on to the railroad station. It was over an hour until the next train to Toulon, so I went into the bar, ordered a beer and sat down to read.

Mother was sorry I had missed them in Wiesbaden. Her letter itemized the children's illnesses, the high prices in Alaska, and expressed regret that they had ever had to leave Germany. I shoved it into my pocket and picked up The Stars & Stripes.

Presently I was reading: ***ARE YOU A COWARD?***—same ad, right to the end.

I threw the paper down with a growl.

There were three other letters. One invited me to contribute to the athletic association of my ex-college; the second offered to advise me in the selection of my investments at a special rate of only $48 a year; the last was a plain envelope without a stamp, evidently handed in at American Express.

It contained only a newspaper clipping, starting: ***ARE You A COWARD?***

It was the same as the other two ads except that in the last sentence one word had been underlined: You must apply in person—

I splurged on a cab to *rue Dante*. If I hurried, there was time to untangle this hopscotch and still catch the Toulon train. No. 17 was a walk-up; I ran up and, as I approached suite D, I met a young man coming out. He was six feet tall, handsome of face and figure, and looked as if he might be a hermaphrodite.

The lettering on the door read: DR. BALSAMO—HOURS BY APPOINTMENT, in both French and English. The name sounded familiar and vaguely phony but I did not stop to figure it out; I pushed on in.

The office inside was cluttered in a fashion known only to old French lawyers and pack rats. Behind the desk was a gnome-like character with a merry smile, hard eyes, the pinkest face and scalp I've ever seen, and a fringe of untidy white hair. He looked at me and giggled. "Welcome! So you are a hero?" Suddenly he whipped out a revolver half as long as he was and just as heavy and pointed it at me. You could have driven a Volkswagen down its snout.

"I'm not a hero," I said nastily. "I'm a coward. I just came here to find out what the joke is." I moved sideways while slapping that monstrous piece of ordnance the other way, chopped his wrist, and caught it. Then I handed it back to him. "Don't play with that thing, or I'll shove it up your deposition. I'm in a hurry. You're Doctor Balsamo? You ran that ad?"

"Tut, tut," he said, not at all annoyed. "Impetuous youth. No, Doctor Balsamo is in there." He pointed his eyebrows at two doors on the left waft, then pushed a bell button on his desk—the only thing in the room later than Napoleon. "Go in. She's expecting you."

" 'She'? Which door?"

"Ah, the Lady or the Tiger? Does it matter? In the long run? A hero will know. A coward will choose the wrong one, being sure that I lie. Allez-y! Vite, vite! Schnell! Get the lead out, Mac."

I snorted and jerked open the righthand door.

The doctor was standing with her back to me at some apparatus against the far wall and she was wearing one of those white, high-collared jackets favored by medical men. On my left was a surgeon's examining table, on my right a Swedish-modern couch; there were stainless-steel and glass cabinets, and some framed certificates; the whole place was as up-to-date at the outer room was not.

As I closed the door she turned and looked at me and said quietly, "I am very glad that you have come." Then she smiled and said softly, "You are beautiful," and came into my arms.

Chapter 4

About a minute and forty seconds and several centuries later "Dr. Balsamo-Helen of Troy" pulled her mouth an inch back from mine and said, "Let me go, please, then undress and lie on the examining table." I felt as if I had had nine hours of sleep, a needle shower, and three slugs of ice-cold akvavit on an empty stomach. Anything she wanted to do, I wanted to do. But the situation seemed to call for witty repartee. "Huh?" I said.

"Please. You are the one, but nevertheless I must examine you."

"Well . . . all right," I agreed. "You're the doctor," I added and started to unbutton my shirt. "You are a doctor? Of medicine, I mean." "Yes. Among other things."

I kicked out of my shoes. "But why do you want to examine me?"

"For witches' marks, perhaps. Oh, I shan't find any, I know. But I must search for other things, too. To protect you."

That table was cold against my skin. Why don't they pad those things? "Your name is Balsamo?"

"One of my names," she said absently while gentle fingers touched me here and there. "A family name, that is."

"Wait a minute. Count Cagliostro!"

"One of my uncles. Yes, he used that name. Though it isn't truly his, no more than Balsamo. Uncle Joseph is a very naughty man and quite untruthful." She touched an old, small scar. "Your appendix has been removed."

"Yes."

"Good. Let me see your teeth."

I opened wide. My face may not be much but I could rent my teeth to advertise Pepsodent. Presently she nodded. "Fluoride marks. Good. Now I must have your blood."

She could have bitten me in the neck for it and I wouldn't have minded. Nor been much surprised. But she did it the ordinary way, taking ten cc. from the vein inside my left elbow. She took the sample and put it in that apparatus against the wall. It chirred and whirred and she came back to me. "Listen, Princess," I said.

"I am not a princess."

"Well . . . I don't know your first name, and you inferred that your last name isn't really 'Balsamo'—and I don't want to call you 'Doc.' " I certainly did not want to call her "Doc"—not the most beautiful girl I had ever seen or hoped to see . . . not after a kiss that had wiped out of memory every other kiss I had ever received. No.

She considered it. "I have many names. What would you like to call me?"

"Is one of them 'Helen'?"

She smiled like sunshine and I learned that she had dimples. She looked sixteen and in her first party dress. "You are very gracious. No, she's not even a relative. That was many, many years ago." Her face turned thoughtful. "Would you like to call me 'Ettarre'?"

"Is that one of your names?"

"It is much like one of them, allowing for different spelling and accent. Or it could be 'Esther' just as closely. Or 'Aster.' Or even 'Estrellita.' "

" 'Aster,' " I repeated. "Star. Lucky Star!"

"I hope that I will be your lucky star," she said earnestly. "As you will. But what shall I call you?"

I thought about it. I certainly was not going to dig up "Flash—I am not a comic strip. The Army nickname I had held longest was entirely unfit to hand to a lady. At that I preferred it to my given name. My daddy had been proud of a couple of his ancestors—but is that any excuse for hanging "Evelyn Cyril" on a male child? It had forced me to Team to fight before I learned to read.

The name I had picked up in the hospital ward would do. I shrugged. "Oh, Scar is a good enough name."

" 'Oscar,' " she repeated, broadening the "O" into "Aw," and stressing both syllables. "A noble name. A hero's name. Oscar." She caressed it with her voice.

"No, no! Not 'Oscar'—'Scar.' 'Scarface.' For this."

"Oscar is your name," she said firmly. "Oscar and Aster. Scar and Star." She barely touched the scar. "Do you dislike your hero's mark? Shall I remove it?"

"En? Oh, no. I'm used to it now. It lets me know who it is when I see myself in a mirror."

"Good. I like it, you wore it when I first saw you. But if you change your mind, let me know." The gear against the wall went whush, chunk! She turned and took a long strip from it, then whistled softly while she studied it.

"This won't take long," she said cheerfully and wheeled the apparatus over to the table. "Hold still while the protector is connected with you, quite still and breathe shallowly." She made half a dozen connections of tubes to me; they stuck where she placed them. She put over her head what I thought was a fancy stethoscope but after she got it on, it covered her eyes.

She chuckled. "You're pretty inside, too, Oscar. No, don't talk." She kept one hand on my forearm and I waited.

Five minutes later she lifted her hand and stripped off the connections. "That's all," she said cheerfully. "No more colds for you, my hero, and you won't be bothered again by that flux you picked up in the jungle. Now we move to the other room."

I got off the table and grabbed at my clothes. Star said, "You won't need them where we are going. Full kit and weapons will be provided."

I stopped with shoes in one hand and drawers in the other. "Star—"

"Yes, Oscar?"

"What is this all about? Did you run that ad? Was it meant for me? Did you really want to hire me for something?"

She took a deep breath and said soberly, "I advertised. It was meant for you and you only. Yes, there is a job to do . . . as my champion. There will be great adventure . . . and greater treasure . . . and even greater danger—and I fear very much that neither one of us will live through it." She looked me in the eyes. "Well, sir?"

I wondered how long they had had me in the locked ward. But I didn't tell her so, because, if that was where I was, she wasn't there at all. And I wanted her to be there, more than I had ever wanted anything. I said, "Princess . . . you've hired yourself a boy."

She caught her breath. "Come quickly. Time is short." She led me through a door beyond the Swedish modern couch, unbuttoning her jacket, unzipping her skirt, as she went, and letting garments fall anywhere. Almost at once she was as I had first seen her at the plage.

This room had dark walls and no windows and a soft light from nowhere. There were two tow couches side by side, black they were and looking like biers, and no other furniture. As soon as the door was dosed behind us I was suddenly aware that the room was aching, painfully anechoic; the bare walls gave back no sound.

The couches were in the center of a circle which was part of a large design, in chalk, or white paint, on bare floor. We entered the pattern; she turned and squatted down and completed one line, closing it—and it was true; she was unable to be awkward, even hunkered down, even with her breasts drooping as she leaned over.

"What is it?" I asked.

"A map to take us where we are going."

"It looks more like a pentagram."

She shrugged. "All right, it is a pentacle of power. A schematic circuit diagram would be a better tag. But, my hero, I can't stop to explain it. Lie down, please, at once."

I took the righthand couch as she signed me, but I couldn't let it be. "Star, are you a witch?"

"If you like. Please, no talking now." She lay down, stretched out her hand. "And join hands with me, my lord; it is necessary."

Her hand was soft and warm and very strong. Presently the light faded to red, then died away. I slept.

Chapter 5

I woke to singing birds.

Her hand was still in mine. I turned my head and she smiled at me.

"Good morning, my lord."

"Good morning. Princess." I glanced around. We were still lying on those black couches but they were outdoors, in a grassy dell, a clearing in trees beside a softly chuckling stream—a place so casually beautiful that it looked as if it had been put together leaf by leaf by old and unhurried Japanese gardeners.

Warm sunshine splashed through leaves and dappled her golden body. I glanced up at the sun and back at her. "Is it morning?" It had been noonish or later and that sun ought to DC—seemed to be—setting, not rising—

"It is again morning, here."

Suddenly my bump of direction spun like a top and I felt dizzy. Disoriented—a feeling new to me and very unpleasant. I couldn't find north.

Then things steadied down. North was that way, upstream—and the sun was rising, maybe nine in the morning, and would pass across the north sky. Southern Hemisphere. No sweat.

No trick at all—Just give the kook a shot of dope while examining him, lug him aboard a 707 and jet him to New Zealand, replenishing the Mickey Finn as needed. Wake him up when you want him.

Only I didn't say this and never did think it. And it wasn't true.

She sat up. "Are you hungry?"

I suddenly realized that an omelet some hours ago—how many? —was not enough for a growing boy. I sat up and swung my feet to the grass. "I could eat a horse."

She grinned. *"The shop of La Societe Anonyme de Hippopnage* is closed I'm afraid. Will you settle for trout? We must wait a bit, so we might as well eat. And don't worry, this place is defended."

" 'Defended'?"

"Safe."

"All right. Uh, how about a rod and hooks?"

"I'll show you." What she showed me was not fishing tackle but how to tickle fish. But I knew how. We waded into that lovely stream, just pleasantly cool, moving as quietly as possible, and picked a place under a bulging rock, a place where trout like to gather and think—the fishy equivalent of a gentlemen's club.

You tickle trout by gaining their confidence and then abusing it. In about two minutes I got one, between two and three pounds, and tossed it onto the bank, and Star had one almost as large. "How much can you eat?" she asked.

"Climb out and get dry," I said. "I'll get another one."

"Make it two or three," she amended. "Rufo will be along." She waded quietly out.

"Who?"

"Your groom."

I didn't argue. I was ready to believe seven impossible things before breakfast, so I went on catching breakfast. I let it go with two more as the last was the biggest trout I've ever seen. Those beggars fairly queued up to be grabbed.

By then Star had a fire going and was cleaning fish with a sharp rock. Shucks, any Girl Scout or witch can make fire without matches. I could myself, given several hours and plenty of luck, just by rubbing two dry cliches together. But I noticed that the two short biers were gone. Well, I hadn't ordered them. I squatted down and took over cleaning the trout.

Star came back shortly with fruits that were apple-like but deep purple in color and with quantities of button mushrooms. She was carrying the plunder on a broad leaf, like canna or ti, only bigger. More like banana leaves.

My mouth started to water. "If only we had salt!"

"I'll fetch it. It will be rather gritty. I'm afraid."

Star broiled the fish two ways, over the fire on a forked green stick, and on hot flat limestone where the fire had been—she kept brushing the fire along as she fed it and placed fish and mushrooms sizing where it had been. That way was best, I thought. Little fine grasses turned out to be chives, local style, and tiny clover tasted and looked like sheep sorrel. That, with the salt (which was gritty and coarse and may have been licked by animals before we got it—not that I cared) made the trout the best I've ever tasted. Well, weather and scenery and company had much to do with it, too, especially the company.

I was trying to think of a really poetic way of saying, "How about you and me shacking up right here for the next ten thousand years? Either legal or informal—are you married?" when we were interrupted. Which was a shame, for I had thought up some pretty language, all new, for the oldest and most practical suggestion in the world.

Old baldy, the gnome with the oversized six-shooter, was standing behind me and cursing.

I was sure it was cursing although the language was new to me. Star turned her head, spoke in quiet reproval in the same language, made room for him and offered him a trout. He took it and ate quite a bit of it before he said, in English, "Next time I won't pay him anything. You'll see."

"You shouldn't try to cheat him, Rufo. Have some mushrooms. Where's the baggage? I want to get dressed."

"Over there." He went back to wolfing fish. Rufo was proof that some people should wear clothes. He was pink all over and somewhat potbellied. However, he was amazingly well muscled, which I had never suspected, else I would have been more cautious about taking that cannon away from him. I decided that if he wanted to Indian-wrestle, I would cheat.

He glanced at me past a pound and a half of trout and said, "Is it your wish to be outfitted now, my lord?"

"Huh? Finish your breakfast. And what's this 'my lord' routine? Last time I saw you you were waving a gun in my face."

"I'm sorry, my lord. But She said to do it . . . and what She says must be done. You understand."

"That suits me perfectly. Somebody has to drive. But call me 'Oscar.' "

Rufo glanced at Star, she nodded. He grinned. "Okay, Oscar. No hard feelings?"

"Not a bit."

He put down the fish, wiped his hand on his thigh, and stuck it out. "Swell! You knock em down, I'll stomp on 'em."

We shook hands and each of us tried for the knuckle-cracking grip. I think I got a little the better of it, but I decided he might have been a blacksmith at some time.

Star looked very pleased and showed dimples again She had been lounging by the fire; looking line a hamadryad on her coffee break; now she suddenly reached out and placed her strong, slender hand over our clasped fists. "My stout friends," she said earnestly. "My good boys. Rufo, it will be well."

"You have a Sight?" he said eagerly.

"No, just a feeling. But I am no longer worried."

"We can't do a thing," Rufo said moodily, "until we deal with Igli."

"Oscar will dicker with Igli." Then she was on her feet in one smooth motion. "Stuff that fish in your face and unpack. I need clothes." She suddenly looked very eager.

Star was more different women than a platoon of WACs—which is only mildly a figure of speech. Right then she was every woman from Eve deciding between two fig leaves to a modern woman whose ambition is to be turned loose in Nieman-Marcus, naked with a checkbook. When I first met her, she had seemed rather a sobersides and no more interested in clothes than I was. I'd never had a chance to be interested in clothes. Being a member of the sloppy generation was a boon to my budget at college, where blue jeans were au fait and a dirty sweat shirt was stylish.

The second time I saw her she had been dressed, but in that lab smock and tailored skirt she had been both a professional woman and a warm friend. But today—this morning whenever that was—she was increasingly full of Bubbles. She had delighted so in catching fish that she had had to smother squeals of glee. And she had then been the perfect Girl Scout, with soot smudged on her cheek and her hair pushed back out of hazard of the fire while she cooked.

Now she was the woman of all ages who just has to get her hands on new clothes. I felt that dressing Star was like putting a paint job on the crown jewels—but I was forced to admit that, if we were not to do the "Me Tarzan, you Jane" bit right in that dell from then on till death do us part, then clothes of some sort, if only to keep her perfect skin from getting scratched by brambles, were needed.

Rufo's baggage turned out to be a little black box about the size and shape of a portable typewriter. He opened it.

And opened it again.

And Kept on opening it—And kept right on unfolding its sides and letting them down until the durn thing was the size of a small moving van and even more packed. Since I was nicknamed "Truthful James" as soon as I learned to talk and am widely known to have won the hatchet every February 22nd all through school, you must now conclude that I was the victim of an illusion caused by hypnosis and/ or drugs.

Me, I'm not sure. Anyone who has studied math knows that the inside does not have to be smaller than the outside, in theory, and anyone who has had the doubtful privilege of seeing a fat woman get in or out of a tight girdle knows that this is true in practice, too. Rufo's baggage just carried the principle further.

The first thing he dragged out was a big teakwood chest. Star opened it and started pulling out filmy lovelies.

"Oscar, what do you think of this one?" She was holding a long, green dress against her with the skirt draped over one hip to display it. "Like it?"

Of course I liked it. If it was an original—and somehow I knew that Star never wore copies—I didn't want to think about what it must have cost. "It's a mighty pretty gown," I told her. "But—Look, are we going to be traveling?"

"Right away."

"I don't see any taxicabs. Aren't you likely to get that torn?"

"It doesn't tear. However, I didn't mean to wear it; I just meant to show it to you. Isn't it lovely? Shall I model it for you? Rufo, I want those high-heeled sandals with the emeralds."

Rufo answered in that language he had been cursing in when he arrived. Star shrugged and said, "Don't be impatient, Rufo; Igli will wait. Anyhow, we can't talk to Igli earlier than tomorrow morning;

milord Oscar must learn the language first." But she put the green gorgeousness back in the chest.

"Now here is a little number," she went on, holding it up, "which is just plain naughty: it has no other purpose."

I could see why. It was mostly skirt, with a little bodice that supported without concealing—a style favored in ancient Crete, I hear, and still popular in the Overseas Weekly, Playboy, and many night clubs. A style that turns droopers into bulgers. Not that Star needed it.

Rufo tapped me on the shoulder. "Boss? Want to look over the ordnance and pick out what you need?"

Star said reprovingly, "Rufo, life is to be savored, not hurried."

"We'll have a lot more life to savor if Oscar picks out what he can use best."

"He won't need weapons until after we reach a settlement with Igli." But she didn't insist on showing more clothes and, while I enjoyed looking at Star, I like to check over weapons, too, especially when I might have to use them, as apparently the job called for.

While I had been watching Star's style show, Rufo had laid out a collection that looked like a cross between an army-surplus store and a museum—swords, pistols, a lance that must have been twenty feet long, a flamethrower, two bazookas flanking a Tommy gun, brass knucks, a machete, grenades, bows and arrows, a misericorde—

"You didn't bring a slingshot," I said accusingly.

He looked smug. "Which kind do you like, Oscar? The forked sort? Or a real sling?"

"Sorry I mentioned it. I can't hit the floor with either sort." I picked up the Tommy chopper, checked that it was empty, started stripping it. It seemed almost new, just fired enough to let the moving parts work in. A Tommy isn't much more accurate than a pitched baseball and hasn't much greater effective range. But it does have virtues—you hit a man with it, he goes down and stays down. It is short and not too heavy and has a lot of firepower for a short time. It is a bush weapon, or for any other sort of close-quarters work.

But I like something with a bayonet on the end, in case the party gets intimate—and I like that something to be accurate at long range in case the neighbors get unfriendly from a distance. I put it down and picked up a Springfield—Rock Island Arsenal, as I saw by its serial number, but still a Springfield. I feel the way about a Springfield that I do about a Gooney Bird; some pieces of machinery are ultimate perfection of their sort, the only possible improvement is a radical change in design.

I opened the bolt, stuck my thumbnail in the chamber, looked down the muzzle. The barrel was bright and the lands were unworn—and the muzzle had that tiny star on it; it was a match weapon!

"Rufo, what sort of country will we be going through? Like this around us?"

"Today, yes. But—" He apologetically took the rifle out of my hands. "It is forbidden to use firearms here. Swords, Knives, arrows—anything that cuts or stabs or mauls by your own muscle power. No guns."

"Who says so?"

He shivered. "Better ask Her."

"If we can't use them, why bring them? And I don't see any ammunition around anyhow."

"Plenty of ammunition. Later on we will be at—another place—where guns may be used. If we live that long. I was just showing you what we have. What do you like of the lawful weapons? Are you a bowman?"

"I don't know. Show me how." He started to say something, then shrugged and selected a bow, slipped a leather guard over his left forearm, picked out an arrow. "That tree," he said, "the one with the white rock at the foot of it. I'll try for about as high off the ground as a man's heart."

He nocked the shaft, raised and bent and let fly, all in one smooth motion.

The arrow quivered in the tree trunk about four feet off the ground. Rufo grinned. "Care to match that?"

I didn't answer. I knew I could not, except by accident. I had once owned a bow, a birthday present. I hadn't hit much with it and soon the arrows were lost. Nevertheless I made a production out of selecting a bow, and picked the longest and heaviest.

Rufo cleared his throat apologetically. "If I may make a suggestion, that one will pull quite hard—for a beginner."

I strung it. "Find me a leather."

The leather slipped on as if it had been made for me and perhaps it had. I picked an arrow to match, barely looked at it as they all seemed straight and true. I didn't have any hope of hitting that bloody tree; it was fifty yards away and not over a foot thick. I simply intended to sight a bit high up on the trunk and hope that so heavy a bow would give me a flattish trajectory. Mostly I wanted to nock, bend, and loose all in one motion as Rufo had done—to look like Robin Hood even though I was not.

But as I raised and bent that bow and felt the power of it, I felt a surge of exultance—this tool was right for me! We fitted.

I let fly without thinking.

My shaft thudded a hand's breadth from his.

"Well shot!" Star called out.

Rufo looked at the tree and blinked, then looked reproachfully at Star.

She looked haughtily back. "I did not," she stated. "You know I would not do that. It was a fair trial . . . and a credit to you both."

Rufo looked thoughtfully at me. "Hmm—Would you care to make a small bet—you name the odds—that you can do that again?"

"I won't bet," I said. "I'm chicken." But I picked up another arrow and nocked it. I liked that bow, I even liked the way the string whanged at the guard on my forearm; I wanted to try it, feel married to it, again. I loosed it.

The third arrow grew out of a spot between the first two, but closer to his. "Nice bow," I said. "I'll keep it. Fetch the shafts."

Rufo trotted away without speaking. I unstrung the bow, then started looking over the cutlery. I hoped that I would never again have to shoot an arrow; a gambler can't expect to draw a pat hand every deal—my next shot would likely turn around like a boomerang.

There was too much wealth of edges and points, from a twohanded broadsword suitable for chopping down trees to a little dagger meant for a lady's stocking. But I picked up and balanced them all . . . and found there the blade that suited me the way Excalibur suited Arthur. I've never seen one quite like it so I don't know what to call it. A saber, I suppose, as the blade was faintly curved and razor sharp on the edge and sharp rather far back on the back. But it had a point as deadly as a rapier and the curve was not enough to keep it from being used for thrust and counter quite as well as chopping away meat-axe style. The guard was a bell curved back around the knuckles into a semi-basket but cut away enough to permit full moulinet from any guard.

It balanced in the forte less than two inches from the guard, yet the blade was heavy enough to chop bone. It was the sort of sword that feels as if it were an extension of your body.

The grip was honest sharkskin, molded to my hand. There was a motto chased onto the blade but it was so buried in curlicues that I did not take time to study it out. This girl was mine, we fitted! I returned it and buckled belt and scabbard to my bare waist, wanting the touch of it and feeling like Captain John Carter, Jeddak of Jeddaks, and the Gascon and his three friends all in one.

"Will you not dress, milord Oscar?" Star asked.

"Eh? Oh, certainly—I was just trying it on for size. But—Did Rufo fetch my clothes?"

"Did you, Rufo?"

"His clothes? He wouldn't want those things he was wearing in Nice!"

"What's wrong with wearing Lederhosen with an aloha shirt?" I demanded.

"What? Oh, nothing at all, milord Oscar," Rufo answered hastily. "Live and let live I always say. I knew a man once who wore—never mind.

Let me show you what I fetched for you."

I had my choice of everything from a plastic raincoat to full armor. I found the latter depressing because its presence implied that it might be needed. Except for an Army helmet I had never worn armor, didn't want to, didn't know how—and didn't care to mix with rude company that made such protection desirable.

Besides, I didn't see a horse around, say a Percheron or a Clydesdale, and I couldn't see myself hiking in one of those tin suits. I'd be slow as crutches, noisy as a subway, and hot as a phone booth. Sweat off ten pounds in five miles. The quilted longjohns that go under that ironmongery would have been too much alone for such beautiful weather; steel on top would turn me into a walking oven and leave me too weak and clumsy to fight my way out of a traffic ticket.

"Star, you said that—" I stopped. She had finished dressing and hadn't overdone it. Soft leather hiking shoes—buskins really—brown tights, and a short green upper garment halfway between a jacket and a skating dress. This was topped by a perky little hat and the whole costume made her look like a musical corner version of an airline hostess, smart, cute, wholesome, and sexy.

Or maybe Maid Marian, as she had added a double-curve bow about half the size of mine, a quiver, and a dagger. "You," I said, "look like why the riot started."

She dimpled and curtsied. (Star never pretended. She knew she was female, she knew she looked good, she liked it that way.) "You said something earlier," I continued, "about my not needing weapons just yet. Is there any reason why I should wear one of these space suits? They don't look comfortable."

"I don't expect any great danger today," she said slowly. "But this is not a place where one can call the police. You must decide what you need."

"But—Damn it. Princess, you know this place and I don't. I need advice."

She didn't answer. I turned to Rufo. He was carefully studying a treetop. I said, "Rufo, get dressed."

He raised his eyebrows. "Milord Oscar?"

"Schnell! Vite, vite! Get the lead out."

"Okay." He dressed quickly, in an outfit that was a man's version of what Star had selected, with shorts instead of tights.

"Arm yourself," I said, and started to dress the same way, except that I intended to wear field boots. However, there was a pair of those buskins that appeared to be my size, so I tried them on. They snuggled to my feet like gloves and, anyway, my soles were so hardened by a month barefooted on l'Ile du Levant that I didn't need heavy boots. They were not as medieval as they looked; they zipped up the front and were marked inside *Fabrique en France*.

Pops Rufo had taken the bow he had used before, selected a sword, and had added a dagger. Instead of a dagger I picked out a Solingen hunting knife. I looked longingly at a service .45, but didn't touch it. If "they," whoever they were, had a local Sullivan Act, I would go along with the gag.

Star told Rufo to pack, then squatted down with me at a sandy place by the stream and drew a sketch map—route south, dropping downgrade and following the stream except for short cuts, until we reached the Singing Waters. There we would camp for the night.

I got it in my head. "Okay. Anything to warn me about? Do we shoot first? Or wait for them to bomb us?"

"Nothing that I expect, today. Oh, there's a carnivore about three times the size of a lion. But it is a great coward; it won't attack a moving man."

"A fellow after my own heart. All right, we'll keep moving."

"If we do see human beings—I don't expect it—it might be well to nock a shaft . . . but not raise your bow until you feel it is necessary. But I'm not telling you what to do, Oscar; you must decide. Nor will Rufo let fly unless he sees you about to do so."

Rufo had finished packing. "Okay, let's go," I said. We set out. Rufo's little black box was now rigged as a knapsack and I did not stop to wonder how he could carry a couple of tons on his shoulders. An antigrav device like Buck Rogers, maybe. Chinese coolie blood. Black magic. Hell, that teakwood chest alone could not have fitted into that backpack by a factor of 30 to 1, not to mention the arsenal and assorted oddments.

There is no reason to wonder why I didn't quiz Star as to where we were, why we were there, how we had got there, what we were going to do, and the details of these dangers I was expected to face. Look, Mac, when you are having the most gorgeous dream of your life and just getting to the point, do you stop to tell yourself that it is logically impossible for that particular babe to be in the hay with you—and thereby wake yourself up? I knew, logically, that everything that had happened since I read that silly ad had been impossible.

So I chucked logic.

Logic is a feeble reed, friend. "Logic" proved that airplanes can't fly and that H-bombs wont work and that stones don't fall out of the sky. Logic is a way of saying that anything which didn't happen yesterday won't happen tomorrow.

I liked the situation. I didn't want to wake up, whether in bed, or in a headshrinker ward. Most especially I did not want to wake up still back in that jungle, maybe with that face wound still fresh and no helicopter. Maybe little brown brother had done a full job on me and sent me to Valhalla. Okay, I liked Valhalla.

I was swinging along with a sweet sword knocking against my thigh and a much sweeter girl matching my strides and a slave-serf-groom-something sweating along behind us, doing the carrying and being our "eyes-behind." Birds were singing and the landscape had been planned by master landscape architects and the air smelled sweet and good. If I never dodged a taxi nor read a headline again, that suited me.

That longbow was a nuisance—but so is an M-l. Star had her little bow slung, shoulder to hip. I tried that, but it tended to catch on things. Also, it made me nervous not to have it ready since she had admitted a chance of needing it. So I unslung it and carried it in my left hand, strung and ready.

We had one alarum on the morning hike. I heard Rufo's bowstring go thwung! —and I whirled and had my own bow ready, arrow nocked, before I saw what was up.

Or down, rather. A bird like a dusky grouse but larger. Rufo had picked it off a branch, right through the neck. I made note not to compete with him again in archery, and to get him to coach me in the fine points.

He smacked his lips and grinned. "Supper!" For the next mile he plucked it as we walked, then hung it from his belt.

We stopped for lunch one o'clockish at a picnic spot that Star assured me was defended, and Rufo opened his box to suitcase size, and served us lunch: cola cuts, crumbly Provencal cheese, crusty French bread, pears, and two bottles of Chablis. After lunch Star suggested a siesta. The idea was appealing; I had eaten heartily and shared only crumbs with the birds, but I was surprised. "Shouldn't we push on?"

"You must have a language lesson, Oscar."

I must tell them at Ponce de Leon High School the better way to study languages. You lie down on soft grass near a chuckling stream on a perfect day, and the most beautiful woman in any world bends over you and looks you in the eyes. She starts speaking softly in a language you do not understand.

After a bit her big eyes get bigger and bigger . . . and bigger . . . and you sink into them.

Then, a long time later, Rufo says, "*Erbas, Oscar, 't knila voorsht.*"

"Okay," I answered, "I am getting up. Don't rush me."

That is the last word I am going to set down in a language that doesn't fit our alphabet. I had several more lessons, and won't mention them either, and from then on we spoke this lingo, except when I was forced to span gaps by asking in English. It is a language rich in profanity and in words for making love, and richer than English in some technical subjects—but with surprising holes in it. There is no word for "lawyer" for example.

About an hour before sundown we came to the Singing Waters.

We had been traveling over a high, wooded plateau. The brook where we had caught the trout had been joined by other streams and was now a big creek. Below us, at a place we hadn't reached yet, it would plunge over high cliffs in a super-Yosemite fall. But here, where we stopped to camp, the water had cut a notch into the plateau, forming cascades, before it took that dive.

"Cascades" is a weak word. Upstream, downstream, everywhere you looked, you saw waterfalls—big ones thirty or fifty feet high, little ones a mouse could have jumped up, every size in between. Terraces and staircases of them there were, smooth water green from rich foliage overhead and water white as whipped cream as it splashed into dense foam.

And you heard them. Tiny falls tinkled in silvery soprano, big falls rumbled in basso profundo. On the grassy alp where we camped it was an everpresent chorale; in the middle of the falls you had to snout to make yourself heard.

Coleridge was there in one of his dope dreams:

And here were forests ancient as the hills,
Enfolding sunny spots of greenery.
But oh! that deep romantic chasm which slanted
Down the green hill athwart a cedarn cover
A savage place! as holy and enchanted
As e'er beneath a waning moon was haunted
By woman wailing for her demon-lover!
And from this chasm, with ceaseless turmoil
seething—

Coleridge must have followed that route and reached the Singing Waters. No wonder he felt like killing that "person from Porlock" who broke in on his best dream. When I am dying, lay me beside the Singing Waters and let them be the last I hear and see.

We stopped on a lawn terrace, flat as a promise and soft as a Kiss, and I helped Rufo unpack. I wanted to learn how he did that trick with the box. I didn't find out. Each side opened as naturally and reasonably as opening up an ironing board—and then when it opened again that was natural and reasonable, too.

First we pitched a tent for Star—no army-surplus job, this; it was a dainty pavilion of embroidered silk and the rug we spread as a floor must have used up three generations of Bukhara artists. Rufo said to me, "Do you want a tent, Oscar?"

I looked up at the sky and over at the not-yet-setting sun. The air was milk warm and I couldn't believe that it would rain. I don't like to be in a tent if there is the least chance of surprise attack. "Are you going to use a tent?"

"Me? Oh, no! But She has to have a tent, always. Then, more likely than not. She'll decade to sleep out on the grass."

"I won't need a tent." (Let's see, does a "champion" sleep across the door of his lady's chamber, weapons at hand? I wasn't sure about the etiquette of such things; they were never mentioned in "Social Studies.")

She returned then and said to Rufo, "Defended. The wards were all in place."

"Recharged?" he fretted.

She tweaked his ear. "I am not senile." She added, "Soap, Rufo. And come along, Oscar; that's Rufo's work."

Rufo dug a cake of Lux out of that caravan load and gave it to her, then looked at me thoughtfully and handed me a bar of Life Buoy.

The Singing Waters are the best bath ever, in endless variety. Still pools from footbath size to plunges you could swim in, sitz baths that tingled your skin, shower baths from just a trickle up to free-springing jets that would beat your brains in if you stood under them too long. And you could pick your temperature. Above the cascade we used, a hot spring added itself to the main stream and at the base of this cascade a hidden spring welled out icy cold. No need to fool with taps, just move one way or the other for the temperature you like—or move downstream where it evened out to temperature as gently warm as a mother's kiss.

We played for a while, with Star squealing and giggling when I splashed her, and answering it by ducking me. We both acted like kids; I felt like one, she looked like one, and she played rough, with muscles of steel under velvet.

Presently I fetched the soap and we scrubbed. When she started shampooing her hair, I came up behind her and helped. She let me, she needed help with the lavish mop, six times as much as most gals bother with these days.

That would have been a wonderful time (with Rufo busy and out of the way) to grab her and hug her, then proceed ruggedly to other matters. Nor am I sure that she would nave made even a token protest; she might have cooperated heartily.

Hell, I know she would not have made a "token" protest. She would either have put me in my place with a cold word or a clout in the ear —or cooperated.

I couldn't do it. I couldn't even start.

I don't know why. My intentions toward Star had oscillated from dishonorable to honorable and back again, but had always been practical from the moment I laid eyes on her. No, let me put it this way: My intentions were strictly dishonorable always, but with utter willingness to convert them to honorable, later, as soon as we could dig up a justice of the peace.

Yet I found I couldn't lay a finger on her other than to help her scrub the soap out of her hair.

While I was puzzling over this, both hands buried in heavy blond hair and wondering what was stopping me from putting my arms around that slender-strong waist only inches away from me, I heard a piercing whistle and my name—my new name. I looked around.

Rufo, dressed in his unlovely skin and with towels over his shoulder, was standing on the bank ten feet away and trying to cut through the roar of water to get my attention.

I moved a few feet toward him. "How's that again?" I didn't quite snarl.

"I said, 'Do you want a shave?' Or are you growing a beard?"

I had been uneasily aware of my face cactus while I was debating whether or not to attempt criminal assault, and that unease had helped to stop me—Gillette, Aqua Velva, Burma Shave, et al., have made the browbeaten American male, namely me, timid about attempting seduction and/or rape unless freshly planed off. And I had a two-day growth.

"I don't have a razor," I called back.

He answered by holding up a straight razor.

Star moved up beside me. She reached up and tried my chin between thumb and forefinger. "You would be majestic in a beard," she said. "Perhaps a Van Dyke, with sneering mustachios."

I thought so too, if she thought so. Besides, it would cover most of that scar. "Whatever you say. Princess."

"But I would rather that you stayed as I first saw you. Rufo is a good barber." She turned toward him. "A hand, Rufo. And my towel."

Star walked back toward the camp, toweling herself dry—I would have been glad to help, if asked. Rufo said tiredly, "Why didn't you assert yourself? But She says to shave you, so now I've got to—and rush through my own bath, too, so She won't be kept waiting."

"If you've got a mirror, I'll do it myself."

"Ever used a straight razor?"

"No, but I can learn."

"You'd cut your throat, and She wouldn't like that. Over here on the bank where I can stand in the warm water. No, no! Don't sit on it, lie down with your head at the edge. I can't shave a man who's sitting up." He started working lather into my chin.

"You know why? I learned how on corpses, that's why, making them pretty so that their loved ones would be proud of them. Hold still! You almost lost an ear. I like to shave corpses; they can't complain, they don't make suggestions, they don't talk back—and they always hold still. Best job I ever had. But now you take this job—" He stopped with the blade against my Adam's apple and started counting his troubles. "Do I get Saturday off? Hell, I don't' t even get Sunday off! And look at the hours! Why, I read just the other day that some outfit in New York —You've been in New York?"

"I've been in New York. And get that guillotine away from my neck while you're waving your hands like that."

"You keep talking, you're bound to get a little nick now and then. This outfit signed a contract for a twenty-five hour week. Week! I'd like to settle for a twenty-five hour day. You know how long I've been on the go, right this minute?"

I said I didn't.

"There, you talked again. More than seventy hours or I'm a liar! And for what? Glory? Is there glory in a little heap of whitened bones? Wealth? Oscar, I'm telling you the truth; I've laid out more corpses than a sultan has concubines and never a one of them cared a soggy pretzel whether they were bedecked in rubies the size of your nose and twice as red . . . or rags. What use is wealth to a dead man? Tell me, Oscar, man to man while She can't hear: Why did you ever let Her talk you into this?"

"I'm enjoying it, so far."

He sniffed. "That's what the man said as be passed the fiftieth floor of the Empire State Building. But the sidewalk was waiting for him, just the same. However," he added darkly, "until you settle with Igli, it's not a problem. If I had my kit, I could cover that scar so perfectly that everybody would say, 'Doesn't he look natural?' "

"Never mind. She likes that scar." (Damn it, he had me doing it!)

"She would. What I'm trying to get over is, if you walk the Glory Road, you are certain to find mostly rocks. But I never chose to walk it. My idea of a nice way to live would be a quiet little parlor, the only one in town, with a selection of caskets, all prices, and a markup that allowed a little leeway to show generosity to the bereaved. Installment plans for those with the foresight to do their planning in advance—for we all have to die, Oscar, we all have to die, and a sensible man might as well sit down over a friendly glass of beer and make his plans with a well-established firm he can trust."

He leaned confidentially over me. "Look, milord Oscar . . . if by any miracle we get through this alive, you could put in a good word for me with Her. Make Her see that I'm too old for the Glory Road. I can do a lot to make your remaining days comfortable and pleasant . . . if your intentions toward me are comradely."

"Didn't we shake on it?"

"Ah, yes, so we did." He sighed. "One for all and all for one, and Pikes Peak or Bust. You're done."

It was still light and Star was in her tent when we got back—and my clothes were laid out. I started to object when I saw them but Rufo said firmly, "She said 'informal' and that means black tie."

I managed everything, even the studs (which were amazing big black pearls), and that tuxedo either had been tailored for me or it had been bought off the rack by someone who knew my height, weight, shoulders, and waist. The label inside the jacket read The English House, Copenhagen.

But the tie whipped me. Rufo showed up while I was struggling with it, had me lie down (I didn't ask why) and tied it in a jiffy. "Do you want your watch, Oscar?"

"My watch?" So far as I knew it was in a doctors examining room in Nice. "You have it?"

"Yes, sir. I fetched everything of yours but your"—he shuddered —"clothes."

He was not exaggerating. Everything was there, not only the contents of my pockets but the contents of my American Express deposit box: cash, passport, I.D., et cetera, even those Change Alley Sweepstakes tickets.

I started to ask how he had gotten into my lockbox but decided not to. He had had the key and it might have been something as simple as a fake letter of authority. Or as complex as his magical black box. I thanked him and he went back to his cooking.

I started to throw that stuff away, all but cash and passport. But one can't be a litterbug in a place as beautiful as the Singing Waters. My sword belt had a leather pouch on it; I stuffed it in there, even the watch, which had stopped.

Rufo had set up a table in front of Star's dainty tent and rigged a light from a tree over it and set candles on the table. It was dark before she came out . . . and waited. I finally realized that she was waiting for my arm. I led her to her place and seated her and Rufo seated me. He was dressed in a plum-colored footman's uniform.

The wait for Star had been worth it; she was dressed in the green gown she had offered to model for me earlier. I still don't know that she used cosmetics but she looked not at all like the lusty Undine who had been ducking me an hour earlier. She looked as if she should be kept under glass. She looked like Liza Doolittle at the Ball.

"Dinner in Rio" started to play, blending with the Singing Waters. White wine with fish, rose wine with fowl, red wine with roast—Star chatted and smiled and was witty. Once Rufo, while bending over to me to serve, whispered, "The condemned ate heartily." I told him to go to hell out of the corner of my mouth.

Champagne with the sweet and Rufo solemnly presented the bottle for my approval. I nodded. What would he have done if I had turned it down? Offered another vintage? Napolean with coffee. And cigarettes. I had been thinking about cigarettes all day. These were Benson & Hedges No. 5 . . . and I had been smoking those black French things to save money.

While we were smoking, Star congratulated Rufo on the dinner and he accepted her compliments gravely and I seconded them. I still don't know who cooked that hedonistic meal. Rufo did much of it but Star may have done the hard parts while I was being shaved.

After an unhurried happy time, sitting over coffee and brandy with the overhead light doused and only a single candle gleamed on her jewels and lighting her face. Star made a slight movement back from the table and I got up quickly and showed her to her tent. She stopped at its entrance. "Milord Oscar—"

So I kissed her and followed her in—

Like hell I did! I was so damned hypnotized that I bowed over her hand and kissed it. And that was that.

That left me with nothing to do but get out of that borrowed monkey suit, hand it back to Rufo, and get a blanket from him. He had picked a spot to sleep at one side of her tent, so I picked one on the other and stretched out. It was still so pleasantly warm that even one blanket wasn't needed.

But I didn't go to sleep. The truth is, I've got a monkey on my back, a habit worse than marijuana though not as expensive as heroin. I can stiff it out and get to sleep anyway—but it wasn't helping that I could see light in Stars tent and a silhouette that was no longer troubled by a dress.

The fact is I am a compulsive reader. Thirty-five cents' worth of Gold Medal Original will put me right to sleep. Or Perry Mason. But I'll read the ads in an old Paris-Match that has been used to wrap herring before I'll do without.

I got up and went around the tent. "Psst! Rufo."

"Yes, milord." He was up fast, a dagger in his hand.

"Look, is there anything to read around this dump?"

"What sort of thing?"

"Anything, just anything. Words in a row."

"Just a moment." He was gone a while, using a flashlight around that beachhead dump of plunder. He came back and offered me a book and a small camp lamp. I thanked him, went back, and lay down.

It was an interesting book, written by Albertus Magnus and apparently stolen from the British Museum. Albert offered a long list of recipes for doing unlikely things: how to pacify storms and fly over clouds, how to overcome enemies, how to make a woman be true to you—

Here's that last one: "I*f thou wilt that a woman bee not visions nor desire men, take the private members of a Woolfe, and the haires which doe grow* *on the cheekes, or the eyebrows of him, and the hairs which bee under his beard, and burne it all, and give it to her to drinke, when she knowethe not, and she shal desire no other man*."

This should annoy the "*Woolfe*." And if I were the gal, it would annoy me, too; it sounds like a nauseous mixture. But that's the exact formula, spelling and all, so if you are having trouble keeping her in line and have a "*Woolfe*" handy, try it. Let me know the results. By mail, not in person.

There were several recipes for making a woman love you who does not but a "Woolfe" was by far the simplest ingredient. Presently I put the book down and the light out and watched the moving silhouette on that translucent silk. Star was brushing her hair.

Then I quit tormenting myself and watched the stars, I've never learned the stars of the Southern Hemisphere; you seldom see stars in a place as wet as Southeast Asia and a man with a bump of direction doesn't need them.

But that southern sky was gorgeous.

I was staring at one very bright star or planet (it seemed to have a disk) when suddenly I realized it was moving.

I sat up. "Hey! Star!"

She called back, "Yes, Oscar?"

"Come see! A sputnik. A big one!"

"Coming." The light in her tent went out, she joined me quickly, and so did good old Pops Rufo, yawning and scratching his ribs. "Where, milord?" Star asked.

I pointed. "Right there! On second thought it may not be a sputnik; it might be one of our Echo series. It's awfully big and bright."

She glanced at me and looked away. Rufo said nothing. I stared at it a while longer, glanced at her. She was watching me, not it. I looked again, watched it move against the backdrop of stars.

"Star," I said, "that's not a sputnik. Nor an Echo balloon. That's a moon. A real moon."

"Yes, milord Oscar."

"Then this is not Earth."

"That is true."

"Hmm—" I looked back at the little moon, moving so fast among the stars, west to east.

Star said quietly, "You are not afraid, my hero?"

"Of what?"

"Of being in a strange world."

"Seems to be a pretty nice world."

"It is," she agreed, "in many ways."

"I like it," I agreed. "But maybe it's time I knew more about it. Where are we? How many lightyears, or whatever it is, in what direction?"

She sighed. "I will try, milord. But it will not be easy; you have not studied metaphysical geometry—nor many other things. Think of the pages of a book—" I still had that cookbook of Albert the Great under my arm; she took it. "One page may resemble another very much. Or be very different. One page can be so close to another that it touches, at all points—yet have nothing to do with the page against it. We are as close to Earth—right now—as two pages in sequence in a book. And yet we are so far away that lightyears cannot express it."

"Look," I said, "no need to get fancy about it. I used to watch 'Twilight Zone.' You mean another dimension. I dig it."

She looked troubled "That's somewhat the idea but—"

Rufo interrupted. "There's still Igli in the morning."

"Yes," I agreed. "If we have to talk to Igli in the morning, maybe we need some sleep. I'm sorry. By the way, who is Igli?"

"You'll find out," said Rufo.

I looked up at that hurtling moon. "No doubt. Well, I'm sorry I disturbed you all with a silly mistake. Good night, folks."

So I crawled back into my sleeping sills, like a proper hero (all muscles and no gonads, usually), and they sacked in too. She didn't put the light back on, so I had nothing to look at but the hurtling moons of Barsoom. I had fallen into a book.

Well, I hoped it was a success and that the writer would keep me alive for lots of sequels. It was a pretty nice deal for the hero, up to this chapter at least. There was Dejah Thoris, curled up in her sleeping silks not twenty feet away.

I thought seriously of creeping up to the flap of her tent and whispering to her that I wanted to ask a few questions about metaphysical geometry and like matters. Love spells, maybe. Or maybe just tell her that it was cold outside and could I come in?

But I didn't. Good old faithful Rufo was curled up just the other side of that tent and he had a disconcerting habit of coming awake fast with a dagger in his hand. And he liked to shave corpses. As I've said, given a choice. I'm chicken.

I watched the hurtling moons of Barsoom and fell asleep.

Chapter 6

Singing birds are better than alarm clocks and Barsoom was never like this. I stretched happily and smelled coffee and wondered if there was time for a dip before breakfast. It was another perfect day, blue and clear and the sun just up, and I felt like killing dragons before lunch. Small ones, that is.

I smothered a yawn and rolled to my feet. The lovely pavilion was gone and the black box mostly repacked; it was no bigger than a piano box. Star was kneeling before a fire, encouraging the coffee. She was a cavewoman this morning, dressed in a hide that was fancy but not as fancy as her own. From an ocelot, maybe. Or from du Pont.

"Howdy, Princess," I said. "What's for breakfast? And where's your chef?"

"Breakfast later," she said. "Just a cup of coffee for you now, too hot and too black—best you be bad tempered. Rufo is starting the talk with Igli." She served it to me in a paper cup.

I drank half a cup, burned my mouth and spat out grounds. Coffee comes in five descending stages: Coffee, Java, Jamoke, Joe, and Carbon Remover. This stuff was no better than grade four.

I stopped then, having caught sight of Rufo. And company, lots of company. Along the edge of our terrace somebody had unloaded Noah's Ark. There was everything there from aardvarks to zebus, most of them with long yellow teeth.

Rufo was facing this picket line, ten feet this side and opposite a particularly large and uncouth citizen. About then that paper cup came apart and scalded my fingers.

"Want some more?" Star asked.

I blew on my fingers. "No, thanks. This is Igli?"

"Just the one in the middle that Rufo is baiting. The rest have come to see the fun, you can ignore them."

"Some of them look hungry."

"Most of the big ones are like Cuvier's devil, herbivorous. Those outsized lions would eat us—if Igli wins the argument. But only then. Igli is the problem."

I looked Igli over more carefully. He resembled that scion of the man from Dundee, all chin and no forehead, and he combined the less appetizing features of giants and ogres in 'The Red Fairy Book'. I never liked that book much.

He was vaguely human, using the term loosely. He was a couple of feet taller than I am and outweighed me three or four hundred pounds but I am much prettier. Hair grew on him in clumps, like a discouraged lawn; and you just knew, without being told, that he had never used a man's deodorant for manly men. The knots of his muscles had knots on them and his toenails weren't trimmed.

"Star," I said, "what's the nature of the argument we have with him?"

"You must kill him, milord."

I looked back at him. "Can't we negotiate a peaceful coexistence? Mutual inspection, cultural exchange, and so forth?"

She shook her head. "He's not bright enough for that. He's here to stop us from going down into the valley—and either he dies, or we die."

I took a deep breath. "Princess, I've reached a decision. A man who always obeys the law is even stupider than one who breaks it every chance. This is no time to worry about that local Sullivan Act. I want the flamethrower, a bazooka, a few grenades, and the heaviest gun in that armory. Can you show me how to dig them out?"

She poked at the fire. "My hero," she said slowly, "I'm truly sorry—but it isn't that simple. Did you notice, last night when we were smoking, that Rufo lighted our cigarettes from candles? Not using even so much as a pocket lighter?"

"Well . . . no. I didn't give it any thought."

"This rule against firearms and explosives is not a law such as you have back on Earth. It is more than that; it is impossible to use such things here. Else such things would be used against us."

"You mean they won t work?"

"They will not work. Perhaps 'hexed' is the word."

"Star. Look at me. Maybe you believe in hexes. I don't. And I'll give you seven to two that Tommy guns don't, either. I intend to find out. Will you give me a hand in unpacking?"

For the first time she looked really upset. "Oh, milord, I beg of you not to!"

"Why not?"

"Even the attempt would be disastrous. Do you believe that I know more about the hazards and dangers—and laws—of this world than you do? Will you believe me when I say that I would not have you die, that in solemn truth my own life and safety depend on yours? Please!"

It is impossible not to believe Star when she lays it on the line. I said thoughtfully, "Maybe you're right—or that character over there would be carrying a six-inch mortar as a side arm. Uh, Star, I've got a still better idea. Why don't we high tail it back the way we came and homestead that spot where we caught the fish? In five years well have a nice little farm. In ten years, after the word gets around, we'll have a nice little motel, too, with a free-form swimming pool and a putting green."

She barely smiled. "Milord Oscar, there is no turning back."

"Why not? I could find it with my eyes closed."

"But they would find us. Not Igli but more like him would be sent to harry and kill us."

I sighed again. "As you say. They claim motels off the main highway are a poor risk anyhow. There's a battleaxe in that duffel. Maybe I can chop his feet off before he notices me."

She shook her head again. I said, "What's the matter now? Do I have to fight him with one foot in a bucket? I thought anything that cut or stabbed—anything I did with my own muscles—was okay?"

"It is okay, milord. But it won't work."

"Why not?"

"Igli can't be killed. You see, he is not really alive. He is a construct, made invulnerable for this one purpose. Swords or knives or even axes will not cut him; they bounce off. I have seen it."

"You mean he is a robot?"

"Not if you are thinking of gears and wheels and printed circuits. 'Golem' would be closer. The Igli is an imitation of life." Star added, "Better than life in some ways, since there is no way—none that I know of—to kill him. But worse, too, as Igli isn't very bright nor well balanced. He has conceit without judgment. Rufo is working on that now, warming him up for you, getting him so mad he can't think straight."

"He is? Gosh! I must be sure to thank Rufo for that. Thank him too much. I think. Well, Princess, what am I supposed to do now?"

She spread her hands as if it were all self-evident. "When you are ready, I will loose the wards—and then you will kill him."

"But you just said—" I stopped. When they abolished the French Foreign Legion very few cushy billets were left for us romantic types. Umbopa could have handled this. Conan, certainly. Or Hawk Carse. Or even Don Quixote, for that thing was about the size of a windmill. "All right. Princess, let's get on with it. Is it okay for me to spit on my hands? Or is that cheating?"

She smiled without dimpling and said gravely, "Milord Oscar, we will all spit on our hands; Rufo and I will be fighting right beside you. Either we win . . . or we all die."

We walked over and joined Rufo. He was making donkeys ears at Igli and shouting, "Who's your father, Igli? Your mother was a garbage can but who's your father? Look at him! No belly button! Yaaa!"

Igli retorted, "Your mother barks! Your sister gives green stamps!"—but rather feebly, I thought. It was plain that that remark about belly buttons had cut him to the quick—he didn't have one. Only reasonable, I suppose.

The above is not quite what either of them said, except the remark about the belly button. I wish I could put it in the original because, in the Nevian language, the insult is a high art at least equal to poetry. In fact the epitome of literary grace is to address your enemy (publicly) in some difficult verse form, say the sestina, with every word dripping vitriol.

Rufo cackled gleefully. "Make one, Igli! Push your finger in and make one. They left you out in the rain and you ran. They forgot to finish you. Call that thing a nose?" He said in an aside to me, in English, "How do you want him. Boss? Rare? Or well done?"

"Keep him busy while I study the matter. He doesn't understand English?"

"Not a bit."

"Good. How close can I go to him without getting grabbed?"

"Close as you like as long as the wards are up. But, Boss—look. I'm not supposed to advise you—but when we get down to work, don't let him get you by the plums."

"I'll try not to."

"You be careful." Rufo turned his head and shouted, "Yaaa! Igli picks his nose and eats it!" He added, "She is a good doctor, the best, but just the same, you be careful."

"I will." I stepped closer to the invisible barrier, looked up at this creature. He glared down at me and made growling noises, so I thumbed my nose at him and gave him a wet, fruity Bronx cheer. I was downwind and it seemed likely that he hadn't had a bath in thirty or forty years; he smelled worse than a locker room at the half.

It gave me a seed of an idea. "Star, can this cherub swim?"

She looked surprised. "I really don't know."

"Maybe they forgot to program him for it. How about you, Rufo?"

Rufo looked smug. "Try me, just try me. I could teach fish. Igli! Tell us why the sow wouldn't kiss you!"

Star could swim like a seal. My style is more like a ferryboat but I get there. "Star, maybe that thing can't be killed but it breathes. It's got some sort of oxygen metabolism, even if it burns kerosene. If we held his head underwater for a while—as long as necessary—I'll bet the fire would go out."

She looked wide-eyed. "Milord Oscar . . . my champion . . . I was not mistaken in you."

"It's going to take some doing. Ever play water polo, Rufo?"

"I invented it."

I hoped he had. I had played it—once. Like being ridden on a rail, it is an interesting experience—once. "Rufo, can you lure our chum down toward the bank? I take it that the barrier follows this line of furry and feathery friends? If it does, we can get him almost to that high piece of bank with the deep pool under it—you know, Star, where you dunked me the first time."

"Nothing to it," said Rufo. "We move, he'll come along."

"I d like to get him running. Star, how long does it take you to unswitch your fence?"

"I can loose the wards in an instant, milord."

"Okay, here's the plan. Rufo, I want you to get Igli to chasing you, as fast as possible—and you cut out and head for that high bank just before you reach the stream. Star, when Rufo does that, you chop off the barrier—loose the wards—instantly. Don't wait for me to say so. Rufo, you dive in and swim like hell; don't let him grab you. With any luck, if Igli is moving fast, as big and clumsy as he is he'll go in, too, whether he means to or not. But I'll be pacing you, flanking you and a bit behind you. If Igli manages to put on the brakes, I'll hit him with a low tackle and knock him in. Then we all play water polo."

"Water polo I nave never seen," Star said doubtfully.

"There won't be any referee. All it means this time is that all three of us jump him, in the water, and shove his head under and keep it there—and help each other to keep him from shoving our heads under. Big as he is, unless he can outswim us he'll be at a terrible disadvantage. We go on doing this until he is limp and stays limp, never let him get a breath. Then, to make sure, well weigh him down with stones—it won't matter whether he's really dead or not. Any questions?"

Rufo grinned like a gargoyle. "This is going to be fun!"

Both those pessimists seemed to think that it would work, so we got started. Rufo shouted an allegation about Igli's personal habits that even Olympia Press would censor, then dared Igli to race him, offering an obscene improbability as a wager.

It took Igli a lumbering long time to get that carcass moving but when he did get rolling, he was faster than Rufo and left a wake of panicked animals and birds behind him. I'm pretty fast but I was hard pushed to hold position on the giant, flanking and a few paces back, and I hoped that Star would not loose the wards if it appeared that Igli might catch Rufo on dry land.

However, Star did loose the wards just as Rufo cut away from the barrier, and Rufo reached the bank and made a perfect racing dive without slowing down, all to plan.

But nothing else was.

I think Igli was too stupid to twig at once that the barrier was down. He kept on a few paces after Rufo had gone left oblique, then did cut left rather sharply. But he had lost speed and he didn't have any trouble stopping on dry land.

I hit him a diving tackle, illegal and low, and down he went—but not over into the water. And suddenly I had a double armful of struggling and very smelly Golem.

But I had a wildcat helping me at once, and quickly thereafter Rufo, dripping wet, added his vote.

But it was a stalemate and one that we were bound to lose in time. Igli outweighed all of us put together and seemed to be nothing but muscle and stink and nails and teeth. We were suffering bruises, contusions, and flesh wounds—and we weren't doing Igli any damage, Oh, he screamed like a TV grunt & groaner every time one of us twisted an ear or bent back a finger, but we weren't really hurting him and he was decidedly hurting us. There wasn't a chance of dragging that hulk into the water.

I had started with my arms around his knees and I stayed that way, of necessity, as long as I could, while Star tried to weigh down one of his arms and Rufo the other. But the situation was fluid; Igli thrashed like a rattler with its back broken and was forever getting one limb or another free and trying to gouge and bite. It got us into odd positions and I found myself hanging onto one callused foot, trying to twist it off, while I stared into his open mouth, wide as a bear trap and less appetizing. His teeth needed cleaning.

So I shoved the toe of his foot into his mouth.

Igli screamed, so I kept on shoving, and pretty soon he didn't have room to scream. I kept on pushing.

When he had swallowed his own left leg up to the knee, he managed to wrench his right arm loose from Star and grabbed at his disappearing leg—and I grabbed his wrist. "Help me!" I yelped to Star. "Push!"

She got the idea and shoved with me. That arm went into his mouth to the elbow and the leg went farther in, quite a bit of the thigh. By, then Rufo was working with us and forced Igli's left hand in past his cheek and into the jaws. Igli wasn't struggling so hard by then, short on air probably, so getting the toe of his right foot started into his mouth simply required determination, with Rufo hauling back on his hairy nostrils while I bore down with a Knee on his chin and Star pushed.

We kept on feeding him into his mouth, gaining an inch at a time and never letting up. He was still quivering and trying to get loose when we had him rolled up clear to his hips, and his rank armpits about to disappear.

It was like rolling a snowball in reverse; the more we pushed, the smaller he got and the more his mouth stretched—ugliest sight I ever have seen. Soon he was down to the size of a medicine ball . . . and then a soccer ball . . . then a baseball and I rolled him between my palms and kept pushing, hard.

—a golf ball, a marble, a pea . . . and finally there was nothing but some dirty grease on my hands.

Rufo took a deep breath. "I guess that'll teach him not to put his foot in his mouth with his betters. Who's ready for breakfast?"

"I want to wash my hands first," I said.

We all bathed, using plenty of soap, then Star took care of our wounds and had Rufo treat hers, under her instructions. Rufo is right; Star is the best medic. The stuff she used on us did not sting, the cuts closed up, the flexible dressings she put over them did not have to be changed, and fell off in time with no infection and no scars. Rufo had one very bad bite, about forty cents' worth of hamburger out of his left buttock, but when Star was through with him, he could sit down and it didn't seem to bother him.

Rufo fed us little golden pancakes and big German sausages, popping with fat, and gallons of good coffee. It was almost noon before Star loosed the wards again and we set out for our descent down the cliff.

Chapter 7

The descent beside the great waterfall into Nevia valley is a thousand feet and more than sheer; the cliff overhangs and you go down on a line, spinning slowly like a spider. I don't advise this; it is dizzy-making and I almost lost those wonderful pancakes.

The view is stupendous. You see the waterfall from the side, free-springing, not wetting the cliff, and falling so far that it shrouds itself in mist before it hits bottom. Then as you turn you face frowning cliff, then a long look out over a valley too lush and green and beautiful to be believed—marsh and forest at the foot of the cliff, cultivated fields in middle distance a few miles away, then far beyond and hazy at the base but sharp at the peaks a mighty wall of snow-covered mountains.

Star had sketched the valley for me. "First we fight our way through the marsh. After that it is easy going—we simply have to look sharp for blood kites. Because we come to a brick road, very nice."

"A yellow brick road?" I asked.

"Yes. That's the clay they have. Does it matter?"

"I guess not. Just don't make a hobbit of it. Then what?"

"After that we'll stop overnight with a family, the squire of the countryside there. Good people, you'll enjoy them."

"And then the going gets tough," Rufo added.

"Rufo, don't borrow trouble!" Star scolded. "You will please refrain from comments and allow Oscar to cope with his problems as he comes to them, rested, clear-eyed, and unworried. Do you know anyone else who could have handled Igli?"

"Well, since you put it that way . . . no."

"I do put it that way. We all sleep in comfort tonight. Isn't that enough? You'll enjoy it as much as anyone."

"So will you."

"When did I ever fail to enjoy anything? Hold your tongue. Now, Oscar, at the root of the cliff are the Horned Ghosts—no way to avoid them, they'll see us coming down. With luck we won't see any of the Cold Water Gang; they stay back in the mists. But if we have the bad luck to encounter both, we may have the good luck that they will fight each other and let us slip away. The path through the marsh is tricky; you had best study, this sketch until you know it. Solid footing is only where little yellow flowers grow no matter how solid and dry a piece looks. But, as you can see, even if you stay carefully on the safe bits, there are so many side trails and dead ends that we could wander all day and be trapped by darkness—and never get out."

So here I was, coming down first, because the Horned Ghosts would be waiting at the bottom. My privilege. Wasn't I a "Hero"? Hadn't I made Igli swallow himself?

But I wished that the Horned Ghosts really were ghosts. They were two-legged animals, omnivorous. They ate anything, including each other, and especially travelers. From the belly up they were described to me as much like the Minotaur; from there down they were splayfooted satyrs. Their upper limbs were short arms but without real hands—no thumbs.

But oh those horns! They had horns like Texas longhorns, but sticking up and forward.

However, there is one way of converting a Horned Ghost into a real ghost. It has a soft place on its skull, like a baby's soft spot, between those horns. Since the brute charges head down, attempting to impale you, this is the only vulnerable spot that can be reached. All it takes is to stand your ground, don't flinch, aim for that one little spot—and hit it.

So my task was simple. Go down first, kill as many as necessary to insure that Star would have a safe spot to land, then stand fast and protect her until Rufo was down. After that we were free to carve our way through the marsh to safety. If the Cold Water Gang didn't join the party—

I tried to ease my position in the sling I was riding—my left leg had gone to sleep—and looked down. A hundred feet below the reception committee had gathered.

It looked like an asparagus patch. Of bayonets.

I signaled to stop lowering. Far above me, Rufo checked the line; I hung there, swaying, and tried to think. If I had them lower me straight into that mob, I might stick one or two before I myself was impaled. Or maybe none—The only certainty was that I would be dead long before my friends could join me.

On the other hand, besides that soft spot between the horns, each of these geeks had a soft underbelly, just made for arrows. If Rufo would lower me a bit-

I signaled to him. I started slowly down, a bit jerkily, and he almost missed my signal to stop again. I had to pull up my feet; some of those babies were a-snorting and a-ramping around and shoving each other for a chance to gore me. One Nijinsky among them did manage to scrape the sole of my left buskin, giving me goose flesh clear to my chin.

Under that strong inducement I pulled myself hand over hand up the line far enough to let me get my feet into the sling instead of my fanny. I stood in it hanging onto the line and standing on one foot and then on the other to work pins and needles out. Then I unslung my bow and strung it. This feat would have been worthy of a trained acrobat—but have you ever tried to bend a bow and let fly while standing in a bight at one end of a thousand-foot line and clinging to the line with one hand?

You lose arrows that way. I lost three and almost lost me.

I tried buckling my belt around the line. That caused me to hang upside down and lost me my Robin Hood hat and more arrows. My audience liked that one; they applauded—I think it was applause—so, for an encore, I tried to shift the belt up around my chest to enable me to hang more or less straight down—and maybe get off an arrow or two.

I didn't quite lose my sword.

So far, my only results had been to attract customers ("Mama, see the funny man!") and to make myself swing back and forth like a pendulum.

Bad as the latter was, it did give me an idea. I started increasing that swing, pumping it up like a playground swing. This was slow wore and it took a while to get the hang of it, as the period of that pendulum of which I was the weight was over a minute—and it does no good to try to hurry a pendulum; you have to work with it, not against it. I hoped my friends could see well enough to guess what I was doing and not foul it up.

After an unreasonably long time I was swinging back and forth in a flattish arc about a hundred feet lang, passing very fast over the heads of my audience at the bottom of each swing, slowing to a stop at the end of each swing. At first those spike heads tried to move with me, but they tired of that and squatted near the midpoint and watched, their heads moving as I swung, like spectators of a slow-motion tennis match.

But there is always some confounded innovator. My notion was to drop off at one end of this arc where it just missed the cuff and make a stand there with my back to the wall. The ground was higher there, I would not have so far to drop. But one of those horned horrors figured it out and trotted over to that end of the swing. He was followed by two or three more.

That settled it; I would nave to drop off at the other end. But young Archimedes figured that out, too. He left his buddies at the cliff face and trotted after me. I pulled ahead of him at the low point of the swing—but slowed down and he caught up with me long before I reached the dead point at the end. He had only a hundred feet to do in about thirty seconds—a slow walk. He was under me when I got there.

The odds wouldn't improve; I kicked my feet clear, hung by one hand and drew sword during that too-slow traverse, and dropped off anyway. My notion was to spit that tender spot on his head before my feet touched the ground.

Instead, I missed and he missed and I knocked him sprawling and sprawled right after him and rolled to my feet and ran for the cuff face nearest me, poking that genius in his belly with my sword without stopping.

That foul blow saved me. His friends and relatives stopped to quarrel over who got the prime ribs before a clot of them moved in my direction. This gave me time to set my feet on a pile of scree at the base of the cliff, where I could play "King of the Castle," and return my sword and nock an arrow.

I didn't wait for them to rush me. I simply waited until they were close enough that I could not miss, took a bead on the wishbone of the old bull who was leading them, if he had a wishbone, and let that shaft go with every pound of that heavy bow.

It passed through him and stuck into one behind him.

This led to another quarrel over the price of chops. They ate them, teeth and toenails. That was their weakness: all appetite and too little brain. If they had cooperated, they could have had me in one rush when I first hit the ground. Instead they stopped for lunch.

I glanced up. High above me, Star was a tiny spider on a thread; she grew rapidly larger. I moved crabwise along the wall until I was opposite the point, forty feet from the cliff, where she would touch ground.

When she was about fifty feet up, she signaled Rufo to stop lowering, drew her sword and saluted me. "Magnificent, my Hero!" We were all wearing swords; Star had chosen a dueling sword with a 34" blade—a big sword for a woman but Star is a big woman. She had also packed her belt pouch with medic's supplies, an ominous touch had I noticed, but did not, at the time.

I drew and returned her salute. They were not bothering me yet, although some, having finished lunch or having been crowded out, were milling around and looking me over. Then I sheathed again, and nocked an arrow. "Start pumping it up. Star, right toward me. Have Rufo lower you a bit more."

She returned sword and signaled Rufo. He let her down slowly until she was about nine feet off the ground, where she signaled a stop.

"Now pump it up!" I called out. Those bloodthirsty natives had forgotten me; they were watching Star, those not still busy eating Cousin Abbie or Great-Uncle John.

"All right," she answered. "But I have a throwing line. Can you catch it?"

"Oh!" The smart darling had watched my maneuvers and had figured out what would be needed. "Hold it a moment! Ill make a diversion." I reached over my shoulder, counted arrows by touch—seven. I had started with twenty and made use of one; the rest were scattered, lost.

I used three in a hurry, right, left, and ahead, picking targets as far away as I dared risk, aiming at midpoint and depending on that wonderful bow to take those shafts straight and flat. Sure enough, the crowd went for fresh meat like a government handout. "Now!"

Ten seconds later I caught her in my arms and collected a splitsecond kiss for toll.

Ten minutes later Rufo was down by the same tactics, at a cost of three of my arrows and two of Star's smaller ones. He had to lower himself, sitting in the bight and checking the free end of the line under both armpits; he would have been a sitting duck without help. As soon as he was untangled from the line, he started jerking it down off the cliff, and faking it into a coil.

"Leave that!" Star said sharply. "We haven't time and it's too heavy to carry."

"I'll put it in the pack."

"No."

"It's a good line," Rufo persisted. "We'll need it."

"You'll need a shroud if we're not through the marsh by nightfall." Star turned to me. "How shall we march, milord?"

I looked around. In front of us and to the left a few jokers still milled around, apparently hesitant about getting closer. To our right and above us the great cloud at the base of the Tails made iridescent lace in the sky. About three hundred yards in front of us was where we would enter the trees and just beyond the marsh started.

We went downhill in a tight wedge, myself on point, Rufo and Star following on flank, all of us with arrows nocked. I had told them to draw swords if any Homed Ghost got within fifty feet.

None did. One idiot came straight toward us, alone, and Rufo knocked him over with an arrow at twice that distance. As we came up on the corpse Rufo drew his dagger. "Let it be!" said Star. She seemed edgy.

"I'm just going to get the nuggets and give them to Oscar."

"And get us all killed. If Oscar wants nuggets, he shall have them."

"What sort of nuggets?" I asked, without stopping.

"Gold, Boss. Those blighters have gizzards like a chicken. But gold is all they swallow for it. Old ones yield maybe twenty, thirty pounds."

I whistled.

"Gold is common here," Star explained. "There is a great heap of it at the base of the falls, inside the cloud, washed down over eons. It causes fights between the Ghosts and the Cold Water Gang, because the Ghosts have this odd appetite and sometimes risk entering the cloud to satisfy it."

"I haven't seen any of the Cold Water Gang yet," I commented.

"Pray God you don't," Rufo answered.

"All the more reason to get deep into the marsh," Star added. "The

Gang doesn't go into it and even the Ghosts don't go far in. Despite their splay feet, they can be sucked under."

"Anything dangerous in the swamp itself?"

"Plenty," Rufo told me. "So be sure you step on the yellow flowers."

"Watch where you put your own feet. If that map was right, I won't lose us. What does a Cold Water Gangster look like?"

Rufo said thoughtfully, "Ever seen a man who had been drowned for a week?" I let the matter drop.

Before we got to the trees I had us sling bows and draw swords. Just inside the cover of trees, they jumped us. Horned Ghosts, I mean, not the Cold Water Gang. An ambush from all sides, I don't know how many. Rufo killed four or five and Star at least two and I danced around, looking active and trying to survive.

We had to climb up and over bodies to move on, too many to count. We kept on into the swamp, following the little golden pathfinder flowers and the twists and turns of the map in my head. In about half an hour we came to a clearing big as a double garage. Star said faintly, "This is far enough." She had been holding one hand pressed to her side but bad not been willing to stop until then, although blood stained her tunic and all down the left leg of her tights.

She let Rufo attend her first, while I guarded the bottleneck into the clearing. I was relieved not to be asked to help, as, after we gently removed her tunic, I felt sick at seeing how badly she had been gored—and never a peep out of her. That golden body—hurt!

As a knight errant, I felt like a slob.

But she was chipper again, once Rufo had followed her instructions. She treated Rufo, then treated me—half a dozen wounds each but scratches compared with the rough one she had taken.

Once she had me patched up she said, "Milord Oscar, how long will it be until we are out of the marsh?"

I ran through it in my head. "Does the going get any worse?"

"Slightly better."

"Not over an hour."

"Good. Don't put those filthy clothes back on. Rufo, unpack a bit and well have clean clothes and more arrows. Oscar, well need them for the blood kites, once we are out of the trees."

The little black box filled most of the clearing before it was unfolded enough to let Rufo get out clothes and reach the arsenal. But clean clothes and lull quiver made me feel like a new man, especially after Rufo dug out a half liter of brandy and we split it three ways, gurglegurgle! Star replenished her medic's pouch, then I helped Rufo fold up the luggage.

Maybe Rufo was giddy from brandy and no lunch. Or perhaps from loss of blood. It could have been just the bad luck of an unnoticed patch of slippery mud. He had the box in his arms, about to make the last closure that would fold it to knapsack size, when he slipped, recovered violently, and the box sailed out of his arms into a chocolate-brown pool.

It was far out of reach. I yelled, "Rufo, off with your belt!" I was reaching for the buckle of mine.

"No, no!" screamed Rufo. "Stand back! Get clear!"

A corner of the box was still in sight. With a safety line on me I knew I could get it, even if there was no bottom to the pool. I said so, angrily.

"No, Oscar!" Star said urgently. "He's right. We march. Quickly."

So we marched—me leading. Star breathing on my neck, Rufo crowding her heels.

We had gone a hundred yards when there was a mud volcano behind us. Not much noise, just a bass rumble and a slight earthquake, then some very dirty rain. Star quit hurrying and said pleasantly, "Well, that's that."

Rufo said, "And all the liquor was in it!"

"I don't mind that," Star answered. "Liquor is everywhere. But I had new clothes in there, pretty ones, Oscar. I wanted you to see them; I bought them with you in mind."

I didn't answer. I was thinking about a flamethrower and an M-1 and a couple of cases of ammo. And the liquor, of course.

"Did you hear me, milord?" she persisted. "I wanted to wear them for you."

"Princess," I answered, "you have your prettiest clothes right with you, always."

I heard the happy chuckle that goes with her dimples. "I'm sure that you have often said that before. And no doubt with great success."

We were out of the swamp long before dark and hit the brick road soon after. Blood kites are no problem. They are such murderous things that if you shoot an arrow in the direction of one of their dives, a kite will swerve and pluck it out of the air, getting the shaft right down its gullet. We usually recovered the arrows.

We were among plowed fields soon after we reached the road and soon the blood kites thinned out. Just at sundown we could see outbuildings and the lights in the manor where Star said that we would spend the night.

Chapter 8

Milord Doral 't Giuk Dorali should have been a Texan. I don't mean that the Doral could have been mistaken for a Texan but he had that you-paid-for-the-lunch-I'll-pay-for-the-Cadillacs expansiveness. His farmhouse was the size of a circus tent and as lavish as a Thanksgiving dinner—rich, sumptuous, fine carvings and inlaid jewels. Nevertheless it had a sloppy, lived-in look and if you didn't watch where you put your feet, you would step on a child's toy on a broad, sweeping staircase and wind up with a broken collarbone. There were children and dogs underfoot everywhere and the youngest of each weren't housebroken. It didn't worry the Doral. Nothing worried the Doral, he enjoyed life.

We had been passing through his fields for miles (rich as the best Iowa farmland and no winters; Star told me they produced four crops a year)—but it was late in the day and an occasional field hand was all we saw save for one wagon we met on the road. I thought that it was pulled by a team of two pairs of horses. I was mistaken; the team was but one pair and the animals were not horses, they had eight legs each.

All of Nevia valley is like that, the commonplace mixed with the wildly different. Humans were humans, dogs were dogs—but horses weren't horses. Like Alice trying to cope with the Flamingo, every time I thought I had it licked, it would wiggle loose.

The man driving those equine centipedes stared but not because we were dressed oddly; he was dressed as I was. He was staring at Star, as who wouldn't? The people working in fields had mostly been dressed in sort of a lava-lava. This garment, a simple wraparound tied off at the waist, is the equivalent in Nevia of overalls or blue jeans for both men and women; what we were wearing was equal to the Gray Flannel Suit or to a woman s basic black. Party or formal clothes—well, that's another matter.

As we turned into the grounds of the manor we picked up a wake of children and dogs. One kid ran ahead and, when we reached the broad terrace in front of the main house, milord Doral himself came out the great front door. I didn't pick him for lord of the manor; he was wearing one of those short sarongs, was barefooted and bareheaded. He had thick hair, shot with gray, an imposing beard, and looked like General U. S. Grant.

Star waved and called out, "Jock! Oh, Jocko!" (The name was "Giuk," but I caught it as "Jock" and Jock he is.)

The Doral stared at us, then lumbered forward like a tank, "Ettyboo!

Bless your beautiful blue eyes! Bless your bouncy little bottom! Why didn't you let me know?" (I have to launder this because Nevian idioms don't parallel ours. Try translating certain French idioms literally into English and you'll see what I mean. The Doral was not being vulgar; he was being formally and gallantly polite to an old and highly respected friend.)

He grabbed Star in a hug, lifted her off her feet, kissed her on both cheeks and on the mouth, gnawed one ear, then set her down with an arm around her. "Games and celebrations! Three months of holiday! Races and rassling every day, orgies every night! Prizes for the strongest, the fairest, the wittiest—"

Star stopped him. "Milord Doral—"

"Eh? And a prize of all prizes for the first baby born—"

"Jocko darling! I love you dearly, but tomorrow we must ride. All we ask is a bone to gnaw and a corner to sleep in."

"Nonsense! You can't do this to me."

"You know that I must."

"Politics be damned! I'll die at your feet, Sugar Pie. Poor old Jocko's heart will stop. I feel an attack coming right now." He felt around his chest. "Someplace here—"

She poked him in the belly. "You old fraud. You'll die as you've lived, and not of heartbreak. Milord Doral—"

"Yes, milady?"

"I bring you a Hero."

He blinked. "You're not talking about Rufo? Hi, Rufe, you old polecat! Heard any good ones lately? Get back to the kitchen and pick yourself a lively one."

"Thank you, milord Doral." Rufo "made a leg," bowing deeply, and left us.

Star said firmly, "If the Doral please."

"I hear."

Star untangled his arm, stood straight and tall and started to chant:

"By the Singing Laughing Waters
"Came a Hero Fair and Fearless.
"Oscar hight this noble warrior,
"Wise and Strong and never daunted,
"Trapped the Igli with a question,
"Caught him out with paradoxes,
"Shut the Igli's mouth with Igli.
"Fed him to him, feet and fingers!
"Nevermore the Singing Waters . . .

It went on and on, none of it lies yet none of it quite true—colored like a press agent's handout. For example, Star told him that I had killed twenty-seven Horned Ghosts, one with my bare hands. I don't remember that many and as for "bare hands," that was an accident. I had just stabbed one of those vermin as another one tumbled at my feet, shoved from behind. I didn't have time to get my sword clear, so I set a foot on one horn and pulled hard on the other with my left hand and his head came apart like snapping a wishbone. But I had done it from desperation, not choice.

Star even ad-libbed a long excursus about my father's heroism and alleged that my grandaddy had led the chaise at San Juan Hill and then started in on my greatgrandfathers. But when she told him how I had picked up that scar that runs from left eye to right jaw, she pulled out all the stops.

Now look, Star had quizzed me the first time I met her and she had encouraged me to tell her more during that long hike the day before. But I did not give her most of the guff she was handing the Doral. She must have had the Suretè, the FBI, the Archie Goodwin on me for months. She even named the team we had played against when I busted my nose and I never told her that.

I stood there blushing while the Doral looked me up and down with whistles and snorts of appreciation. When Star ended, with a simple: "Thus it happened," he let out a long sigh and said, "Could we have that part about Igli over again?"

Star complied, chanting different words and more detail. The Doral listened, frowning and nodding approval. "A heroic solution," he said. "So he's a mathematician, too. Where did he study?"

"A natural genius, Jock."

"It figures." He stepped up to me, looked me in the eye and put his hands on my shoulders. "The Hero who confounds Igli may choose any house. But he will honor my home by accepting hospitality of roof . . . and table . . . and bed?"

He spoke with great earnestness, holding my eye; I had no chance to look at Star for a hint. And I wanted a hint. The person who says smugly that good manners are the same everywhere and people are just people hasn't been farther out of Podunk than the next whistle stop. I'm no sophisticate but I had been around enough to learn that. It was a formal speech, stuffed with protocol, and called for a formal answer.

I did the best I could. I put my hands on his shoulders and answered solemnly, "I am honored far beyond any merit of mine, sir."

"But you accept?" he said anxiously.

"I accept with all my heart." ("Heart" is close enough. I was having trouble with language.)

He seemed to sigh with relief. "Glorious!" He grabbed me in a bear hug, kissed me on both cheeks, and only some fast dodging kept me from being kissed on the mouth.

Then he straightened up and shouted, "Wine! Beer! Schnapps! Who the dadratted tomfoolery is supposed to be chasing? I'll skin somebody alive with a rusty file! Chairs! Service for a Hero! Where is everybody?"

That last was uncalled for; while Star was reciting what a great guy I am, some eighteen or fifty people had gathered on the terrace, pushing and shoving and trying to get a better look. Among them must have been the personnel with the day's duty because a mug of ale was shoved into my hand and a four-ounce glass of 110-proof firewater into the other before the boss stopped yelling. Jocko drank boilermaker style, so I followed suit, then was happy to sit down on a chair that was already behind me, with my teeth loosened, my scalp lifted, and the beer just starting to put out the fire.

Other people plied me with bits of cheese, cold meats, pickled this and that, and unidentified drinking food all tasty, not waiting for me to accept it but shoving it into my mouth if I opened it even to say "Gesundheit!" I ate as offered and soon it blotted up the hydrofluoric acid.

In the meantime the Doral was presenting his household to me. It would have been better had they worn chevrons because I never did get them straightened out as to rank. Clothes didn't help because, just as the squire was dressed like a field hand, the second scullery maid might (and sometimes did) duck back in and load herself with golden ornaments and her best party dress. Nor were they presented in order of rank.

I barely twigged as to which was the lady of the manor, Jocko's wife—his senior wife. She was a very comely older woman, a brunette carrying a few pounds extra but with that dividend most fetchingly distributed. She was dressed as casually as Jocko but, fortunately, I noticed her because she went at once to greet Star and they embraced warmly, two old friends. So I had my ears spread when she was presented to me a moment later—as (and I caught it) the Doral (just as Jocko was the Doral) but with the feminine ending.

I jumped to my feet, grabbed her hand, bowed over it and pressed it to my lips. This isn't even faintly a Nevian custom but it brought cheers and Mrs. Doral blushed and looked pleased and Jocko grinned proudly.

She was the only one I stood up for. Each of the men and boys made a leg to me, with a bow; all the gals from six to sixty curtsied—not as we know it, but Nevian style. It looked more like a step of the Twist. Balance on one foot and lean back as far as possible, then balance on the other while leaning forward, all the while undulating slowly. This doesn't sound graceful but it is, and it proved that there was not a case of arthritis nor a slipped disk anywhere on the Doral spread.

Jocko hardly ever bothered with names. The females were "Sweetheart" and "Honeylamb" and "Pretty Puss" and he called all the males, even those who seemed to be older than he was, "Son." Possibly most of them were his sons. The setup in Nevia I don't fully understand. This looked like a feudalism out of our own history—and maybe it was—but whether this mob was the Doral's slaves, his serfs, his hired hands, or all members of one big family I never got straight. A mixture, I think. Titles didn't mean anything. The only title Jocko held was that he was singled out by a grammatical inflection as being *THE* Doral instead of just any of a couple of hundred Dorals. I've scattered the tag "milord" here and there in this memoir because Star and Rufo used it, but it was simply a courteous form of address paralleling one in Nevian. "*Freiherr*" does not mean "free man, and "*monsieur*" does not mean "my lord"—these things don't translate well. Star sprinkled her speech with "milords" because she was much too polite to say "Hey, Mac!" even with her intimates.

(The very politest endearments in Nevian would win you a clout in the teeth in the USA.)

Once all hands had been presented to the Gordon, Hero First Class, we adjourned to get ready for the banquet that Jocko, cheated of his three months of revelry, had swapped for his first intention. It split me off from Star as well as from Rufo; I was escorted to my chambers by my two valettes.

That's what I said. Female. Plural. It is a good thing that I had become relaxed to female attendants in men's washrooms, European style, and still more relaxed by Southeast Asia and l'Ile du Levant; they don't teach you how to cope with valettes in American public schools. Especially when they are young and cute and terribly anxious to please . . . and I had had a long, dangerous day. I learned, first time out on patrol, that nothing hikes up that old biological urge like being shot at and living through it.

It there had been only one, I might have been late to dinner. As it was, they chaperoned each other, though not intentionally, I believe. I patted the redhead on her fanny when the other one wasn't looking and reached, I thought, an understanding for a later time.

Well, having your back scrubbed is fun, too. Shorn, shampooed, shined, shaved, showered, smelling like a belligerent rose, decked out in the fanciest finely since Cecil B. deMille rewrote the Bible, I was delivered by them to the banquet hall on time.

But the proconsul's dress uniform I wore was a suit of fatigues compared with Star's getup. She had lost all her pretty clothes earlier in the day but our hostess had been able to dig up something.

First a dress that covered Star from chin to ankle—like plate glass. It seemed to be blue smoke, it clung to her and billowed out behind.

Underneath was "underwear." She appeared to be wrapped in twining ivy—but this ivy was gold, picked out in sapphires. It curved across her beautiful belly, divided into strands and cupped her breasts, the coverage being about like a bikini minimum but more startling and much more effective.

Her shoes were sandals in an S-curve of something transparent and springy. Nothing appeared to hold them on, no straps, no clips; her lovely feet, bare, rested on them. It made her appear as if she were on tiptoe about four inches off the floor.

Her great mane of blond hair was built up into a structure as complex as a full-rigged ship, and studded with sapphires. She was wearing a fortune or two of sapphires here and there on her body, too; I won't itemize.

She spotted me just as I caught sight of her. Her face lit up and she called out, in English, "My Hero, you are beautiful!"

I said "Uh—"

Then I added, "You haven't been wasting your time, either. Do I sit with you? I'll need coaching."

"No, no! You sit with the gentlemen, I sit with the ladies. You won't have any trouble."

This is not a bad way to arrange a banquet. We each had separate low tables, the men in a row facing the ladies, with about fifteen feet between them. It wasn't necessary to make chitchat with the ladies and they all were worth looking at. The Lady Doral was opposite me and was giving Star a run for the Golden Apple. Her costume was opaque some places but not the usual places. Most of it was diamonds. I believe they were diamonds; I don't think they make rhinestones that big.

About twenty were seated; two or three times that many were serving, entertaining, or milling around. Three girls did nothing but see to it that I did not starve nor die of thirst—I didn't have to learn how to use their table tools; I never touched them. The girls knelt by me; I sat on a big cushion. Later in the evening Jocko lay flat on his back with his head in a lap so that his maids could pop food into his mouth or hold a cup to his lips.

Jocko had three maids as I did; Star and Mrs. Jocko had two each; the rest struggled along with one apiece. These serving maids illustrate why I had trouble telling the players without a program. My hostess and my Princess were dressed fit to kill, sure—but one of my flunkies, a sixteen-year-old strong contender for Miss Nevia, was dressed only in jewelry but so much of it that she was more "modestly" dressed than Star or Doral Letva, the Lady Doral.

Nor did they act like servants except for their impassioned determination to see that I got drunk and stuffed. They chattered among themselves in teenage argot and made wisecracks about how big my muscles were, etc., as if I had not been present. Apparently heroes are not expected to talk, for every time I opened my mouth something went into it.

There was always something doing—dancers, jugglers, recitations of poetry—in the space between the tables. Kids wandered around and grabbed tidbits from platters before they reached the tables. One little doll about three years old squatted down in front of me, all big eyes and open mouth, and stared, letting dancers avoid her as best they could. I tried to get her to come to me, but she just stared and played with her toes.

A damsel with a dulcimer strolled among the tables, singing and playing. It could have been a dulcimer, she might have been a damsel.

About two hours along in the feast, Jocko stood up, roared for silence, belched loudly, shook off maids who were trying to steady him, and started to recite.

Same verse, different tune—he was reciting my exploits. I would have thought that he was too drunk to recite a limerick but he sounded off endlessly, in perfect scansion with complex inner rhymes and rippling alliterations, an astounding feat of virtuosity in rhetoric.

He stuck to Star's story line but embroidered it. I listened with growing admiration, both for him as a poet and for good old Scar Gordon, the one-man army. I decided that I must be a purty goddamn hot hero, so when he sat down, I stood up.

The girls had been more successful in getting me drunk than in getting me fed. Most of the food was strange and it was usually tasty. But a cold dish had been fetched in, little frog-like creatures in ice, served whole. You dipped them in a sauce and took them in two bites.

The gal in the jewels grabbed one, dipped it and put it up for me to bite. And it woke up.

This little fellow—call him "Elmer"—Elmer rolled his eyes and looked at me, just as I was about to bite him.

I suddenly wasn't hungry and jerked my head back.

Miss jewelry Shop laughed heartily, dipped him again, and showed me how to do it. No more Elmer—

I didn't eat for quite a while and drank more than too much. Every time a bite was offered me I would see Elmers feet disappearing, and gulp, and have another drink.

That's why I stood up.

Once up, there was dead silence. The music stopped because the musicians were waiting to see what to improvise as background to my poem.

I suddenly realized that I didn't have anything to say.

Not anything. There wasn't a prayer that I could adlib a poem of thanks, a graceful compliment to my host—m Nevian. Hell, I couldn't have done it in English.

Star's eyes were on me. She looked gravely confident.

That did it. I didn't risk Nevian; I couldn't even remember how to ask my way to the men's room. So I gave it to 'em, both barrels, in English. Vachel Lindsay's "*Congo*."

As much of it as I could remember, say about four pages. What I did give them was that compelling rhythm and rhyme scheme doubletalking and faking on any fluffs and really slamming it on "beating on a table with the handle of a broom! Boom! Boom! Boomlay boom!" and the orchestra caught the spirit and we rattled the dishes.

The applause was wonderful and Miss Tiffany grabbed my ankle and kissed it.

So I gave them Mr. E. A. Poe's "*Bells*" for dessert. Jocko kissed me on my left eye and slobbered on my shoulder.

Then Star stood up and explained, in scansion and rhyme, that in my own land, in my own language, among my own people, warriors and artists all, I was as famous a poet as I was a hero (Which was true. Zero equals zero), and that I had done them the honor of composing my greatest work, in the jewels of my native tongue, a fitting thanks to the Doral and house Doral for Hospitality of roof, of table, of bed—and that she would, in time, do her poor best to render my music into their language.

Between us we got the Oscar.

Then they brought in the piece de resistance, a carcass roasted whole and carried by four men. From the size and shape it might have been roast peasant under glass. But it was dead and it smelled wonderful and I ate a lot of it and sobered up. After the roast there were only eight or nine other things, soups and sherbets and similar shilly-shallying. The party got looser and people didn't stay at their own tables. One of my girls fell asleep and spilled my wine cup and about then I realized that most of the crowd had gone.

Doral Letva, flanked by two girls, led me to my chambers and put me to bed. They dimmed the lights and withdrew while I was still trying to phrase a gallant good night in their language.

They came back, having shucked all jewelry and other encumbrances and posed at my bedside, the Three Graces. I had decided that the younger ones were mama's daughters. The older girl was maybe eighteen, full ripe, and a picture of what mama must have been at that age; the younger one seemed five years younger, barely nubile, as pretty for her own age and quite selfconscious. She blushed and dropped her eyes when I looked at her. But her sister stared back with sultry eyes, boldly provocative.

Their mother, an arm around each waist, explained simply but in rhyme that I had honored their roof and their table—and now their bed. What was a Hero's pleasure? One? Or two? Or all three?

I'm chicken. We know that. If it hadn't been that little sister was about the size of the little brown sisters who had scared me in the past, maybe I could have shown aplomb.

But, hell, those doors didn't close. Just arches. And Jocko me bucko might wake up anytime; I didn't know where he was. I won't say I've never bedded a married woman nor a man's daughter in his own house—but I've followed American coverup conventions in such matters. This flatfooted proposition scared me worse than the Horned Goats. I mean "Ghosts."

I struggled to put my decision in poetic language.

I didn't manage it but I put over the idea of negative,

The little girl started to bawl and fled. Her sister looked daggers, snorted. "Hero!" and went after her. Mama just looked at me and left.

She came back in about two minutes. She spoke very formally, obviously exercising great control, and prayed to know if any woman in this house had met with the Hero's favor? Her name, please? Or could I describe her? Or would I have them paraded so that I might point her out?

I did my best to explain that, were a choice to be made, she herself would be my choice—but that I was tired and wished to sleep alone.

Letva blinked back tears, wished me a hero's rest, and left a second time, even faster. For an instant I thought she was going to slap me.

Five seconds later I got up and tried to catch her. But she was gone, the gallery was dark.

I fell asleep and dreamt about the Cold Water Gang. They were even uglier than Rufo had suggested and they were trying to make me eat big gold nuggets all with the eyes of Elmer.

Chapter 9

Rufo shook me awake. "Boss! Get up! Right now!"

I buried my head in the covers. "Go way!" My mouth tasted of spoiled cabbage, my head buzzed, and my ears were on crooked.

"Right now! She says to."

I got up. Rufo was dressed in our Merry Men clothes and wearing sword, so I dressed the same way and buckled on mine. My valettes were not in sight, nor my borrowed finery. I stumbled after Rufo into the great dining hall. There was Star, dressed to travel, and looking grim. The fancy furnishings of the night before were gone; it was as bleak as an abandoned barn. A bare table was all, and on it a joint of meat, cold in congealed grease and a knife beside it.

I looked at it without relish. "What's that?"

"Your breakfast, if you want it. But I shall not stay under this roof and eat cold shoulder." It was a tone, a manner, I had never heard from her.

Rufo touched my sleeve. "Boss. Let's get out of here. Now."

So we did. Not a soul was in sight, indoors or out, not even children or dogs. But three dashing steeds were waiting. Those eight-legged tandem ponies, I mean, the horse version of a dachshund, saddled and ready to go. The saddle rigs were complex; each pair of legs had a leather yoke over it and the load was distributed by poles flexing laterally, one on each side, and mounted on this was a chair with a back, a padded seat, and arm rests. A tiller rope ran to each armrest. A lever on the left was both brake and accelerator and I hate to say how suggestions were conveyed to the beast. However, the "horses" didn't seem to mind.

They weren't horses. Their heads were slightly equine but they had pads rather than hoofs and were omnivores, not hayburners. But you grow to like these beasties. Mine was black with white points—beautiful. I named her "Ars Longa." She had soulful eyes.

Rufo lashed my bow and quiver to a baggage rack behind my chair and showed me how to get aboard, adjust my seat belt, and get comfortable with feet on foot rests rather than stirrups and my back supported—as comfy as first-class seats in an airliner. We took off fast and hit a steady pace of ten miles an hour, single-footing (the only gait longhorses have) but smoothed by that eight-point suspension so that it was like a car on a gravel road.

Star rode ahead, she hadn't spoken another word. I tried to speak to her but Rufo touched my arm. "Boss, don't," he said quietly. "When She is like this, all you can do is wait."

Once we were underway, Rufo and I knee to knee and Star out of earshot ahead, I said "Rufo, what in the world happened?"

He frowned. "We'll never know. She and the Doral had a row, that's clear. But best we pretend it never happened."

He shut up and so did I. Had Jocko been obnoxious to Star? Drunk he certainly was and amorous he might have been. But I couldn't visualize Star not being able to handle a man so as to avoid rape without hurting his feelings.

That led to further grim thoughts. If the older sister had come in alone —If Miss Tiffany hadn't passed out—If my valette with the fiery hair had showed up to undress me as I had understood she would—Oh hell!

Presently Rufo eased his seat belt, lowered his back rest and raised his foot rests to reclining position, covered his face with a kerchief and started to snore. After a while I did the same; it had been a short night, no breakfast, and I had a kingsize hangover. My "horse" didn't need any help; the two held position on Star's mount.

When I woke I felt better, aside from hunger and thirst. Rufo was still sleeping; Star's steed was still fifty paces ahead. The countryside was still lush, and ahead perhaps a half-mile was a house—not a lordly manor but a farmhouse. I could see a well sweep and thought of moss-covered buckets, cool and wet and reeking of typhoid—well, I had had my booster shots in Heidelberg; I wanted a drink. Water, I mean. Better yet, beer—they made fine beer hereabouts.

Rufo yawned, put away his kerchief, and raised his seat. "Must have dozed off," he said with a silly grin.

"Rufo, you see that house?"

"Yes. What about it?"

"Lunch, that's what. I've gone far enough on an empty stomach. And I'm so thirsty that I could squeeze a stone and drink the whey from it."

"Then best you do so."

"Huh?"

"Milord, I'm sorry—I'm thirsty, too—but we aren't stopping there. She wouldn't like it."

"She wouldn't, eh? Rufo, let me set you straight. Just because milady Star is in a snit is no reason for me to ride all day with no food or water. You do as you see fit; I'm stopping for lunch. Uh, do you have any money on you? Local money?"

He shook his head. "You don't do it that way, not here. Boss. Wait another hour. Please."

"Why?"

"Because we are still on the Doral's land, that's why. I don't know that he has sent word ahead to have us shot on sight; Jock is a goodhearted old blackguard. But I would rather be wearing full armor;

a flight of arrows wouldn't surprise me. Or a drop net just as we turned in among those trees."

"You really think so?"

"Depends on how angry he is. I mind once, when a man really offended him, the Doral had this poor rube stripped down and tied by his family jewels and placed—no, I can't tell that one." Rufo gulped and looked sick. "Big night last night. I'm not myself. Better we speak of pleasant things. You mentioned squeezing whey from a rock. No doubt you were thinking of the Strong Muldoon?"

"Damn it, don't change the subject!" My head was throbbing. "I won't ride under those trees and the man who lets fly a shaft at me had better check his own skin for punctures. I'm thirsty."

"Boss, Rufo pleaded. "She will neither eat nor drink on the Doral's land—even if they begged her to. And She's right. You don't know the customs. Here one accepts what is freely given . . . but even a child is too proud to touch anything begrudged. Five miles more. Can't the hero who killed Igli before breakfast hold out another five miles?"

"Well . . . all right, all right! But this is a crazy sort of country, you must admit. Utterly insane."

"Mmmm . . ." he answered. "Have you ever been in Washington, D.C.?"

"Well—" I grinned wryly. "Touche! And I forgot that this is your native land. No offense intended."

"Oh, but it's not. What made you think so?"

"Why—" I tried to think. Neither Rufo nor Star had said so, but—"You know the customs, you speak the language like a native."

"Milord Oscar, I've forgotten how many languages I speak. When I hear one of them, I speak it."

"Well, you're not an American. Nor a Frenchman, I think."

He grinned merrily. "I could show you birth certificates from both countries—or could until we lost our baggage. But, no, I'm not from Earth."

"Then where are you from?"

Rufo hesitated. "Best you get your facts from Her."

"Tripe! I've got both feet hobbled and a sack over my head. This is ridiculous."

"Boss," he said earnestly, "She will answer any question you ask. But you must ask them."

"I certainly shall!"

"So let's speak of other matters. You mentioned the Strong Muldoon—"

"You mentioned him."

"Well, perhaps I did. I never met Muldoon myself, though I've been in that part of Ireland. A fine country and the only really logical people on Earth. Facts won't sway them in the face of higher truth. An admirable people. I heard of Muldoon from one of my uncles, a truthful man who for many years was a ghostwriter of political speeches. But at this time, due to a mischance while writing speeches for rival candidates, he was enjoying a vacation as a freelance correspondent for an American syndicate specializing in Sunday feature stories. He heard of the Strong Muldoon and tracked him down, taking train from Dublin, then a local bus, and at last Shank's Mares. He encountered a man plowing a field with a one-horse plow . . . but this man was shoving the plow ahead of himself without benefit of horse, turning a neat eight-inch furrow. 'Aha!' said my uncle and called out, 'Mr. Muldoon!'

"The farmer stopped and called back, 'Bless you for the mistake, friend!'—picked up the plow in one hand, pointed with it and said, 'You'll be finding Muldoon that way. Strong, he is.'

"So my uncle thanked him and went on until he found another man setting out fence posts by shoving them into the ground with his bare hand . . . and in stony soil, it's true. So again my uncle hailed him as Muldoon.

"The man was so startled he dropped the ten or dozen six-inch posts he had tucked under the other arm. 'Get along with your blarney, now!' he called back. You must know that Muldoon lives farther on down this very same road. He's strong.'

"The next local my uncle saw was building a stone fence. Dry-stone work it was and very neat. This man was trimming the rock without hammer or trowel, splitting them with the edge of his hand and doing the fine trim by pinching off bits with his fingers. So again my uncle addressed a man by that glorious name.

"The man started to speak but his throat was dry from all that stone dust; his voice failed him. So he grabbed up a large rock, squeezed it the way you squeezed Igli—forced water out of it as if it had been a goatskin, drank. Then he said, 'Not me, my friend. He's strong, as everyone knows. Why, many is the time that I have seen him insert his little finger—' "

My mind was distracted from this string of lies by a wench pitching hay just across the ditch from the road. She had remarkable pectoral muscles and a lava-lava just suited her. She saw me eyeing her and gave me the eye right back, with a wiggle tossed in.

"You were saying?" I asked.

"Eh? '—just to the first joint . . . and hold himself at arm's length for hours!"

"Rufo," I said, "I don't believe it could have been more than a few minutes. Strain on the tissues, and so forth."

"Boss," he answered in a hurt tone, "I could take you to the very spot where the Mighty Dugan used to perform this stunt."

"You said his name was Muldoon."

"He was a Dugan on his mother's side, very proud of her he was. You'll be pleased to know, milord, that the boundary of the Doral's land is now in sight. Lunch in minutes only."

"I can use it. With a gallon of anything, even water."

"Passed by acclamation. Truthfully, milord, I'm not at my best today. I need food and drink and a long siesta before the fighting starts, or I'll yawn when I should parry. Too large a night."

"I didn't see you at the banquet."

"I was there in spirit. In the kitchen the food is hotter, the choice is better, and the company less formal. But I had no intention of making a night of it. Early to bed is my motto. Moderation in all things. Epictetus. But the pastry cook—Well, she reminds me of another girl I once knew, my partner in a legitimate business, smuggling. But her motto was that anything worth doing at all is worth overdoing—and she did. She smuggled on top of smuggling, a sideline of her own unmentioned to me and not taken into account—for I was listing every item with the customs officers, a copy with the bribe, so that they would know I was honest.

"But a girl can't walk through the gates fat as a stuffed goose and walk back through them twenty minutes later skinny as the figure one—not that she was, just a manner of speaking—without causing thoughtful glances. If it hadn't been for the strange thing the dog did in the night, the busies would have nabbed us."

"What was the strange thing the dog did in the night?"

"Just what I was doing last night. The noise woke us and we were out over the roof and free, but with nothing to show for six months' hard work but skinned knees. But that pastry cook—You saw her, milord. Brown hair, blue eyes, a widow's peak and the rest remarkably like Sophia Loren."

"I have a vague memory of someone like that."

"Then you didn't see her, there is nothing vague about Nalia. As may be, I had intended to lead the life sanitary last night, knowing that there would be bloodshed today. You know:

'Once at night and outen the light;
'Once in the morning, a new day a-borning'

"—as the Scholar advised. But I hadn't reckoned with Nalia. So here I am with no sleep and no breakfast and if I'm dead before nightfall in a pool of my own blood, it'll be partly Nalia's doing."

"I'll shave your corpse, Rufo; that's a promise." We had passed the marker into the next county but Star didn't slow down. "Bye the bye, where did you learn the undertakers trade?"

"The what? Oh! That was a far place indeed. The top of that rise, behind those trees, is a house and that's where we'll be having lunch. Nice people."

"Good!" The thought of lunch was a bright spot as I was again regretting my Boy Scout behavior of the night before. "Rufo, you had it all wrong about the strange thing the dog did in the night."

"Milord?"

"The dog did nothing in the night, that was the strange thing."

"Well, it certainly didn't sound that way," Rufo said doubtfully.

"Another dog, another far place. Sorry. What I started to say was: A funny thing happened to me on the way to bed last night—and I did lead the life sanitary."

"Indeed, milord?"

"In deed, if not in thought." I needed to tell somebody and Rufo was the sort of scoundrel I could trust. I told him the Story of the Three Bares.

"I should have risked it," I concluded. "And, swelp me, I would have, if that lad had been put to bed—alone—when she should have been. Or I think I would have, regardless of White Shotgun or jumping out windows. Rufo, why do the prettiest gals always have fathers or husbands? But I tell you the truth, there they were—the Big Bare, the MiddleSized Bare, and the Littlest Bare, close enough to touch and all of them anxious to keep my bed warm—and I didn't do a damn thing! Go ahead and laugh. I deserve it."

He didn't laugh. I turned to look at him and his expression was piteous. "Milord! Oscar my comrade! Tell me it isn't true!"

"It is true," I said huffily. "And I regretted it at once. Too late. And you complained about your night!"

"Oh, my God!" He threw his mount into high gear and took off. Ars Longa looked back inquiringly over her shoulder, then continued on. Rufo caught up with Star; they stopped, short of the house where lunch was to be expected. They waited and I joined them. Star was wearing no expression; Rufo looked unbearably embarrassed.

Star said, "Rufo, go beg lunch for us. Fetch it here. I would speak with milord alone."

"Yes, milady!" He got out fast.

Star said to me, still with no expression, "Milord Hero, is this true? What your groom reports to me?"

"I don't know what he reported."

"It concerned your failure—your alleged failure—last night."

"I don't know what you mean by 'failure.' If you want to know what I did after the banquet . . . I slept alone. Period."

She sighed but her expression did not change. "I wanted to hear it from your lips. To be just." Then her expression did change and I have never seen such anger. In a low almost passionless voice she began chewing me out:

"You hero. You incredible butterbrained dolt. Clumsy, bumbling, loutish, pimple-peeked, underdone, over-muscled, idiotic—"

"Stop it!"

"Quiet, I am not finished with you. Insulting three innocent ladies offending a staunch—"

"SHUT UP!!!"

The blast blew her hair back. I started in before she could rev up again. "Don't ever again speak to me that way. Star. Never."

"But—"

"Hold your tongue, you bad-tempered brat! You have not earned the right to speak to me that way. Nor will any girl ever earn the right. You will always—always!—address me politely and with respect. One more word of your nasty rudeness and I'll spank you until the tears fly."

"You wouldn't dare!"

"Get your hand away from that sword or I'll take it away from you, down your pants right here on the road, and spank you with it. Till your arse is red and you beg for mercy. Star, I do not fight females—but I do punish naughty children. Ladies I treat as ladies. Spoiled brats I treat as spoiled brats. Star, you could be the Queen of England and the Galactic Overlord all rolled into one—but ONE MORE WORD out of line from you, and down come your tights and you won't be able to sit for a week. Understand me?"

At last she said in a small voice, "I understand, milord."

"And besides that. I'm resigning from the hero business. I won't listen to such talk twice, I won't work for a person who treats me that way even once." I sighed, realizing that I had just lost my corporal's stripes again. But I always felt easier and freer without them.

"Yes, milord." I could barely hear her. It occurred to me that it was a long way back to Nice. But it didn't worry me.

"All right, let's forget it."

"Yes, milord." She added quietly, "But may I explain why I spoke as I did?"

"No."

"Yes, milord."

A long silent time later Rufo returned. He stopped out of earshot, I motioned him to join us.

We ate silently and I didn't eat much but the beer was good. Rufo tried once to make chitchat with an impossibility about another of his uncles. It couldn't have fallen flatter in Boston.

After lunch Star turned her mount—those "horses" have a small turning circle for their wheelbase but it's easier to bring them full circle in a tight place by leading them. Rufo said, "Milady?"

She said impassively, "I am returning to the Doral."

"Milady! Please not!"

"Dear Rufo," she said warmly but sadly. "You can wait up at that house—and if I'm not back in three days, you are free." She looked at me, looked away. "I hope that milord Oscar will see fit to escort me. But I do not ask it. I have not the right." She started off.

I was slow in getting Ars Longa turned; I didn't have the hang of it. Star was a good many bricks down the road; I started after her.

Rufo waited until I was turned, biting his nails, then suddenly climbed aboard and caught up with me. We rode knee to knee, a careful fifty paces behind Star, Finally he said, "This is suicide. You know that, don't you?"

"No, I didn't know it."

"Well, it is."

I said, "Is that why you are not bothering to say 'sir'?"

"Milord?" He laughed shortly and said, "I guess it is. No point in that nonsense when you are going to die soon."

"You're mistaken."

"Huh?"

" 'Huh, milord,' if you please. Just for practice. But from now on, even if we last only thirty minutes. Because I am running the show now—and not just as her stooge. I don't want any doubt in your mind as to who is boss once the fighting starts. Otherwise turn around and I'll give your mount a slap on the rump to get you moving. Hear me?"

"Yes, milord Oscar." He added thoughtfully, "I knew you were boss as soon as I got back. But I don't see how you did it. Milord, I have never seen Her meek before. May one ask?"

"One may not. But you have my permission to ask her. If you think it is safe. Now tell me about this 'suicide' matter—and don't say she doesn't want you to give me advice. From here on you'll give advice any time I ask—and keep your lip buttoned if I don't."

"Yes, milord. All right, the suicide prospects. No way to figure the odds. It depends on how angry the Doral is. But it won't be a fight, can't be. Either we get clobbered the instant we poke our noses in . . . or we are safe until we leave his land again, even if he tells us to turn around and ride away." Rufo looked very thoughtful. "Milord, if you want a blind guess—Well, I figure you've insulted the Doral the worst he has ever been hurt in the course of a long and touchy life. So it's about ninety to ten that, two shakes after we turn off the road, we are all going to be sprouting more arrows than Saint Sebastian."

"Star, too? She hasn't done anything. Nor have you." (Nor I, either, I added to myself. What a country!)

Rufo sighed. "Milord, each world has its own ways. Jock won't want to hurt Her. He likes Her. He's terribly fond of Her. You could say that he loves Her. But if he kills you, he has got to kill Her. Anything else would be inhumane by his standards—and he's a very moral bloke;

he's noted for it. And kill me, too, of course, but I don't count. He must kill Her even though it will start a chain of events that will wipe him out just as dead once the news gets out. The question is: Does he have to kill you? I figure be has to, knowing these people. Sorry . . . milord."

I mulled it over. "Then why are you here, Rufo?"

"Milord?"

"You can cut the 'sirs' down to one an hour. Why are you here? If your estimate is correct, your one sword and one bow can't affect the outcome. She gave you a fair chance to chicken out. So what is it? Pride? Or are you in love with her?"

"Oh, my God, no!"

Again I saw Rufo really shocked. "Excuse me," he went on. "You caught me with my guard down." He thought about it. "Two reasons, I suppose. The first is that if Jock allows us to parley—well. She is quite a talker. In the second place"—he glanced at me—"I'm superstitious, I admit it. You're a man with luck. I've seen it. So I want to be close to you even when reason tells me to run. You could fall in a cesspool and —"

"Nonsense. You should hear my hard-luck story."

"Maybe in the past. But I'm betting the dice as they roll." He shut up.

A bit later I said, "You stay here." I speeded up and joined Star. "Here are the plans," I told her. "When we get there, you stay out on the road with Rufo. I'm going in alone."

She gasped. "Oh, milord! No!"

"Yes."

"But—"

"Star, do you want me back? As your champion?"

"With all my heart!"

"All right. Then do it my way."

She waited before answering. "Oscar—"

"Yes, Star."

"I will do as you say. But will you let me explain before you decide what you will say?"

"Go on."

"In this world, the place for a lady to ride is by her champion. And that is where I would want to be, my Hero, when in peril. Especially when in peril. But I'm not pleading for sentiment, nor for empty form. Knowing what I now know I can prophesy with certainty that, if you go in first, you will die at once, and I will die—and Rufo—as soon as they can chase us down. That will be quickly, our mounts are tired. On the other hand, if I go in alone—"

"No."

"Please, milord. I was not proposing, it. If I were to go in alone, I would be almost as likely to die at once as you would be. Or perhaps, instead of feeding me to the pigs, be would simply have me feed the pigs and be a plaything of the pig boys—a fate merciful rather than cold justice in view of my utter degradation in returning without you. But the Doral is fond of me and I think he might let me live . . . as a pig girl and no better than pigs. This I would risk if necessary and wait my chance to escape, for I cannot afford pride; I have no pride, only necessity." Her voice was husky with tears.

"Star, Star!"

"My darling!"

"Huh? You said—"

"May I say it? We may not have much time. My Hero . . . my darling." She reached out blindly, I took her hand; she leaned toward me and pressed it to her breast.

Then she straightened up but kept my hand. "I'm all right now. I am a woman when I least expect it. No, my darling Hero, there is only one way for us to go in and that is side by side, proudly. It is not only safest, it is the only way I would wish it—could I afford pride. I can afford anything else. I could buy you the Eiffel Tower for a trinket, and replace it when you broke it. But not pride."

"Why is it safest?"

"Because he may—I say 'may'—let us parley. If I can get in ten words, he'll grant a hundred. Then a thousand. I may be able to heal his hurt."

"All right. But—Star, what did I do to hurt him? I didn't! I went to a lot of trouble not to hurt him."

She was silent a while, then—"You are an American."

"What's that got to do with it? Jock doesn't know it."

"It has, perhaps, everything to do with it. No, America is at most a name to the Doral for, although he has studied the Universes, he has never traveled. But—You will not be angry with me again?"

"Uh . . . let's call a King's-X on that. Say anything you need to say but explain things. Just don't chew me out. Oh, hell, chew me out if you like—this once. Just don't let it be a habit . . . my darling."

She squeezed my hand. "Never will I again! The error lay in my not realizing that you are American. I don't know America, not the way Rufo does. If Rufo had been present—But he wasn't; he was wenching in the kitchen. I suppose I assumed, when you were offered table and root and bed, that you would behave as a Frenchman would. I never dreamed that you would refuse it. Had I known, I could have spun a thousand excuses for you. An oath taken. A holy day in your religion. Jock would have been disappointed but not hurt; he is a man of honor."

"But—Damn it, I still don't see why he wants to shoot me for not doing something I would expect, back home, that he might snoot me for doing. In this country, is a plan forced to accept any proposition a gal makes? And why did she run and complain? Why didn't she keep it secret? Hell, she didn't even try. She dragged in her daughters."

"But, darling, it was never a secret. He asked you publicly and publicly you accepted. How would you feel if your bride, on your wedding night, kicked you out of the bedroom? 'Table, and roof, and bed.' You accepted."

" 'Bed.' Star, in America beds are multiple-purpose furniture. Sometimes we sleep in them. Just sleep. I didn't dig it."

"I know now. You didn't know the idiom. My fault. But do you now see why he was completely—and publicly—humiliated?"

"Well, yes, but he brought it on himself. He asked me in public. It would have been worse if I had said No then."

"Not at all. You didn't have to accept. You could have refused graciously. Perhaps the most graceful way, even though it be a white lie, is for the hero to protest his tragic inability—temporary or permanent—from wounds received in the very battle that proved him a hero."

"I'll remember that. But I still don't see why he was so astoundingly generous in the first place."

She turned and looked at me. "My darling, is it all right for me to say that you have astounded me every time I have talked with you? And I had thought I had passed beyond all surprises, years ago."

"It's mutual. You always astound me. However, I like it—except one time."

"My lord Hero, how often do you think a simple country squire has a chance to gain for his family a Hero's son, and raise it as his own? Can you not feel his gall-bitter disappointment at what you snatched from him after he thought you had promised this boon? His shame? His wrath?"

I considered it. "Well, I'll be dogged. It happens in America, too. But they don't boast about it."

"Other countries, other customs. At the very least, he had thought that he had the honor of a hero treating him as a brother. And with luck he expected the get of a hero for house Doral."

"Wait a minute! Is that why he sent me three? To improve the odds?"

"Oscar, he would eagerly have sent you thirty . . . if you had hinted that you felt heroic enough to attempt it. As it was, he sent his chief wife and his two favorite daughters." She hesitated. "What I still don't understand—" She stopped and asked me a blunt question.

"Hell, no!" I protested, blushing. "Not since I was fifteen. But one thing that put me off was that mere child. She's one. I think."

Star shrugged. "She may be. But she is not a child; in Nevia she is a woman. And even if she is unbroached as yet, I'll wager she's a mother in another twelvemonth. But if you were loath to tap her, why didn't you shoo her out and take her older sister? That quaint hasn't been virgin since she's had breasts, to my certain knowledge—and I hear that Muri is 'some dish,' if that is the American idiom."

I muttered. I had been thinking the same thing. But I didn't want to discuss it with Star.

She said, "*Pardonne-moi, mon cher? Tu as dit?*"

"I said I had given up sex crimes for Lent!"

She looked puzzled. "But Lent is over, even on Earth. And it is not, here, at all."

"Sorry."

"Still I'm pleased that you didn't pick Muri over Letva; Muri would have been unbearably stuckup with her mother after such a thing. But I do understand that you will repair this, if I can straighten it out?" She added, "It makes great difference in how I handle the diplomacies."

(Star, Star—you are the one I want to bed!) "This is what you wish . . . my darling?"

"Oh, how much it would help!"

"Okay. You're the doctor. One . . . three . . . thirty—I'll die trying. But no little kids!" "No problem. Let me think. If the Doral lets me get in just five words—" She fell silent. Her hand was pleasantly warm.

I did some thinking, too. These strange customs had ramifications, some of which I had still shied away from. How was it, if Letva had immediately told her husband what a slob I was—

"Star? Where did you sleep last night?"

She looked around sharply. "Milord . . . is it permitted to ask you, please, to mind your own business?"

"I suppose so. But everybody seems to be minding mine."

"I am sorry. But I am very much worried and my heaviest worries you do not know as yet. It was a fair question and deserves a fair answer. Hospitality balances, always, and honors flow both ways. I slept in the Doral's bed. However, if it matters—and it may to you; I still do not understand Americans—I was wounded yesterday, it still bothered me. Jock is a sweet and gentle soul. We slept. Just slept."

I tried to make it nonchalant. "Sorry about the wound. Does it hurt now?"

"Not at all. The dressing will fall off by tomorrow. However—Last night was not the first time I enjoyed table and roof and bed at house Doral. Jock and I are old friends, beloved friends—which is why I think I can risk that he may grant me a few seconds before killing me."

"Well, I had figured out most of that."

"Oscar, by your standards—the way you have been raised—I am a bitch."

"Oh, never! A princess."

"A bitch. But I am not of your country and I was reared by another code. By my standards, and they seem good to me, I am a moral woman. Now . . . am I still your darling'?"

"My darling!"

"My darling Hero. My champion. Lean close and kiss me. If we die, I would my mouth be warm with your lips. The entrance is just around this bend."

"I know."

A few moments later we rode, swords sheathed and bows unstrung, proudly into the target area.

Chapter 10

Three days later we rode out again.

This time breakfast was sumptuous. This time musicians lined our exit. This time the Doral rode with us.

This time Rufo reeled to his mount, each arm around a wench, a bottle in each hand, then, after busses from a dozen more, was lifted into his seat and belted in the reclining position. He fell asleep, snoring before we set out.

I was kissed goodbye more times than I could count and by some who had no reason to do it so thoroughly—for I was only an apprentice hero, still learning the trade.

It's not a bad trade, despite long hours, occupational hazards, and utter lack of security; it has fringe benefits, with many openings and rapid advancement for a man with push and willingness to learn. The Doral seemed well pleased with me.

At breakfast he had sung my prowess up to date in a thousand intricate lines. But I was sober and did not let his praises impress me with my own greatness; I knew better. Obviously a little bird had reported to him regularly—but that bird was a liar. John Henry the Steel-Drivin' Man couldn't have done what Jocko's ode said I did.

But I took it with my heroic features noble and impassive, then I stood up and gave them "*Casey at the Bat*," putting heart and soul into "Mighty Casey has struck OUT!"

Star gave it a free interpretation. I had (so she sang) praised the ladies of Doral, the ideas being ones associated with Madame Pompadour, Nell Gwyn, Theodora, Ninon de l'Enclos, and Rangy Lil. She didn't name those famous ladies; instead she was specific, in Nevian eulogy that would have startled Francois Villon.

So I had to come up with an encore. I gave them "*Reily's Daughter*," then "*Jabberwocky*," with gestures.

Star had interpreted me in spirit; she had said what I would have said had I been capable of extemporizing poetry. Late on the second day I had chanced on Star in the steam room of the manor's baths. For an hour we lay wrapped in sheets on adjacent slabs, sweating it out and restoring the tissues. Presently I blurted out to her how surprised—and delighted—I was. I did it sheepishly but Star was one to whom I dared bare my soul.

She had listened gravely. When I ran down, she said quietly, "My Hero, as you know, I do not know America. But from what Rufo tells me your culture is unique, among all the Universes."

"Well, I realize that the USA is not sophisticated in such things, not the way France is."

" 'France!' " She shrugged, beautifully. " 'Latins are lousy lovers.' I heard that somewhere, I testify that it is true. Oscar, so far as I know, your culture is the only semicivilized one in which love is not recognized as the highest art and given the serious study it deserves."

"You mean the way they treat it here. Whew! 'Much too good for the common people!' "

"No, I do not mean the way it is treated here." She spoke in English. "Much as I love our friends here, this is a barbarous culture and their arts are barbaric. Oh, good art of its sort, very good; their approach is honest. But—if we live through this, after our troubles are over—I want you to travel among the Universes. You'll see what I mean." She got up, folding her sheet into a toga. I'm glad you are pleased, my Hero. I'm proud of you."

I lay there a while longer, thinking about what she had said. The "highest art"—and back home we didn't even study it, much less make any attempt to teach it. Ballet takes years and years. Nor do they hire you to sing at the Met just because you have a loud voice.

Why should "love" be classed as an "instinct"?

Certainly the appetite for sex is an instinct—but did another appetite make every glutton a gourmet, every fry cook a Cordon Bleu? Hell, you had to learn even to be a fry cook.

I walked out of the steam room whistling "The Best Things in Life Are Free"—then chopped it off in sudden sorrow for all my poor, unhappy compatriots cheated of their birthright by the most mammoth hoax in history.

A mile out the Doral bade us goodbye, embracing me, kissing Star and mussing her hair; then he and his escort drew swords and remained at salute until we passed over the next rise. Star and I rode knee to knee while Rufo snored behind us.

I looked at her and her mouth twitched. She caught my eye and said demurely, "Good morning, milord."

"Good morning, milady. You slept well?"

"Very well, thank you, milord. And you?"

"The same, thank you."

"So? 'What was the strange thing the dog did in the night?' "

" 'The dog did nothing in the night, that was the strange thing,' " I answered with a straight face.

"Really? So gay a dog? Then who was that knight I last saw with a lady?"

" 'Twasn't night, 'twas brillig."

"And your vorpal blade went snicker-snack! My beamish boy!"

"Don't try to pin your jabberwocking on me, you frolicsome wench," I said severely. "I've got friends, I have—I can prove an alibi. Besides, 'my strength is as the strength of ten because my heart is pure.' "

"And the line before that one. Yes, I know; your friends told me about it, milord." Suddenly she grinned and slapped me on the thigh and started bellowing the chorus of "Reilly's Daughter." Vita Brevis snorted; Ars Longa pricked up her ears and looked around reprovingly.

"Stop it," I said. "You're shocking the horses."

"They aren't horses and you can't shock them. Have you seen how they do it, milord? In spite of all those legs? First—"

"Hold your tongue! Ars Longa is a lady, even if you aren't."

"I warned you I was a bitch. First she sidles up—"

"I've seen it. Muri thought it would amuse me. Instead it gave me an inferiority complex that lasted all afternoon."

"I venture to disbelieve that it was all afternoon, milord Hero. Let's sing about Reilly then. You lead, I'll harmonize."

"Well—Not too loud, we'll wake Rufo."

"Not him, he's embalmed."

"Then you'll wake me, which is worse. Star darling, when and where was Rufo an undertaker? And how did he get from that into this business? Did they run him out of town?"

She looked puzzled. "Undertaker? Rufo? Not Rufo."

"He was most circumstantial."

"So? Milord, Rufo has many faults. But telling the truth is not one of them. Moreover, our people do not have undertakers."

"You don't? Then what do you do with leftover carcasses? Can't leave them cluttering the parlor. Untidy."

"I think so, too, but our people do just that: keep them in the parlor. For a few years at least. An overly sentimental custom but we are a sentimental people. Even so, it can be overdone. One of my great aunts kept all her former husbands in her bedchamber—a dreadful clutter and boring, too, because she talked about them, repeating herself and exaggerating. I quit going to see her."

"Well. Did she dust them?"

"Oh, yes. She was a fussy housekeeper."

"Uh—How many were there?"

"Seven or eight, I never counted."

"I see. Star? Is there black-widow blood in your family?"

"What? Oh! But, darling, there is black-widow blood in every woman." She dimpled, reached over and patted my knee. "But Auntie didn't kill them. Believe me, my Hero, the women in my family are much too fond of men to waste them. No, Auntie just hated to let them go. I think that is foolish. Look forward, not back."

" 'And let the dead past bury its dead.' Look, if your people keep dead homes around the house, you must have undertakers. Embalmers at least. Or doesn't the air get thick?"

"Embalming? Oh, no! Just place a stasis on them once you're sure they are dead. Or dying. Any schoolboy can do that." She added, "Perhaps I wronged Rufo. He has spent much time on your Earth—he likes the place, it fascinates him—and he may have tried undertaking. But it seems to me an occupation too honest and straightforward to attract him."

"You never did tell me what your people eventually do with a cadaver."

"Not bury it. That would shock them silly." Star shivered. "Even myself and I've traveled the Universes, learned to be indifferent to almost any custom."

"But what?"

"Much what you did to Igli. Apply a geometrical option and get rid of it."

"Oh. Star, where did Igli go?"

"I couldn't guess, milord. I had no chance to calculate it. Perhaps the ones who made him know. But I think they were even more taken by surprise than I was."

"I guess I'm dense. Star. You call it geometry; Jocko referred to me as a 'mathematician.' But I did what was forced on me by circumstances; I didn't understand it."

"Forced on Igli, you should say, milord Hero. What happens when you place an insupportable strain on a mass, such that it cannot remain where it is? While leaving it nowhere to go? This is a schoolboy problem in metaphysical geometry and the eldest proto-paradox, the one about the irresistible force and the immovable body. The mass implodes. It is squeezed out of its own world into some other. This is often the way the people of a universe discover the Universes—but usually as disastrously as you forced it on Igli; it may take millennia before they control it. It may hover around the fringes as 'magic' for a long time, sometimes working, sometimes failing, sometimes backfiring on the magician."

"And you call this 'mathematics'?"

"How else?"

"I'd call it magic."

"Yes, surely. As I told Jocko, you have a natural genius. You could be a great warlock."

I shrugged uncomfortably. "I don't believe in magic."

"Nor do I," she answered, "the way you put it. I believe in what is."

"That's what I mean, Star. I don't believe in hocus-pocus. What happened to Igli—I mean, 'what appeared to happen to Igli'—could not have happened because it would violate the law of conservation of mass-energy. There must be some other explanation."

She was politely silent.

So I brought to bear the sturdy common sense of ignorance and prejudice. "Look, Star, I'm not going to believe the impossible simply because I was there. A natural law is a natural law. You have to admit that."

We rode a few rods before she answered, "May it please milord Hero, the world is not what we wish it to be. It is what it is. No, I have over-assumed. Perhaps it is indeed what we wish it to be. Either way, it is what it is. Le voila! Behold it, self-demonstrating. Das Ding an sich. Bite it. It is. Ai-je raison? Do I speak truly?"

"That's what I was saying! The universe is what it is and can't be changed by jiggery-pokery. It works by exact rules, like a machine." (I hesitated, remembering a car we had had that was a hypochondriac. It would "fall sick," then "get well" as soon as a mechanic tried to touch it.) I went on firmly, "Natural law never takes a holiday. The invariability of natural law is the cornerstone of science."

"So it is."

"Well?" I demanded.

"So much the worse for science."

"But—" I shut up and rode in huffy silence.

Presently a slender hand touched my forearm, caressed it. "Such a strong sword arm," she said softly. "Milord Hero, may I explain?"

"Talk ahead," I said. "If you can sell me, you can convert the Pope to Mormonism. I'm stubborn."

"Would I have picked you out of hundreds of billions to be my champion were you not?"

" 'Hundreds of billions?' You mean millions, don't you?"

"Hear me, milord. Indulge me. Let us be Socratic. I'll frame the trick questions and you make the stupid answers—and we'll learn who shaved the barber. Then it will be your turn and I'll be the silly stooge. Okay?"

"All right, put a nickel in."

"Very well. Question: Are the customs at house Doral the customs you used at home?"

"What? You know they aren't. I've never been so flabbergasted since the time the preacher's daughter took me up into the steeple to show me the Holy Ghost." I chuckled sheepishly. "I'd be blushing yet but I've burned out my fuses."

"Yet the basic difference between Nevian customs and yours lies in only one postulate. Milord, there are worlds in which males kill females as soon as eggs are laid—and others in which females eat males even as they are being fructified—like that black widow you made cousin to me."

"I didn't mean that, Star."

"I was not offended, my love. An insult is like a drink; it affects one only if accepted. And pride is too heavy baggage for my journey; I have none. Oscar, would you find such worlds stranger than this one?"

"You're talking about spiders or some such. Not people."

"I speak of people, the dominant race of each its world. Highly civilized."

"Ugh!"

"You will not say 'ugh' when you see them. They are so different from us that their home life cannot matter to us. Contrariwise, this planet is very like your Earth—yet your customs would shock old Jocko out of song. Darling, your world has a custom unique in the Universes. That is, the Twenty Universes known to me, out of thousands or millions or googols of universes. In the known Twenty Universes only Earth has this astounding custom."

"Do you mean "War"?"

"Oh, no! Most worlds have warfare. This planet Nevia is one of the few where lolling is retail, rather than wholesale. Here there be Heroes, killing is done with passion. This is a world of love and slaughter, both with gay abandon. No, I mean something much more shocking. Can you guess?"

"Uh . . . television commercials?"

"Close in spirit, but wide of the mark. You have an expression 'the oldest profession.' Here—and in all other known worlds—it isn't even the youngest. Nobody has heard of it and wouldn't believe it if he did. We few who visit Earth don't talk about it. Not that it would matter; most people don't believe travelers' tales."

"Star, are you telling me that there is no prostitution elsewhere in the Universe?"

"The Universes, my darling. None."

"You know," I said thoughtfully, "that's going to be a shock to my first sergeant. None at all?"

"I mean," she said bluntly, "that whoring seems to have been invented by Earth people and no others—and the idea would shock old Jocko into impotence. He's a straitlaced moralist."

"I'll be damned! We must be a bunch of slobs."

"I did not mean to offend, Oscar; I was reciting facts. But this oddity of Earth is not odd in its own context. Any commodity is certain to be sold—bought, sold, leased, rented, bartered, traded, discounted, price-stabilized, inflated, bootlegged, and legislated—and a woman's 'commodity' as it was called on Earth in franker days is no exception. The only wonder is the wild notion of thinking of it as a commodity. Why, it so surprised me that once I even—Never mind. Anything can be made a commodity. Someday I will show you cultures living in spaces, not on planets—nor on fundaments of any sort; not all universes have planets—cultures where the breath of life is sold like a kilo of butter in Provence. Other places so crowded that the privilege of staying alive is subject to tax—and delinquents are killed out of hand by the Department of Eternal Revenue and neighbors not only do not interfere, they are pleased."

"Good God! Why?"

"They solved death, milord, and most of them won't emigrate despite endless roomier planets. But we were speaking of Earth. Not only is whoring unknown elsewhere, but its permutations are unknown—dower, bridal price, alimony, separate maintenance, all the variations that color all Earth's institutions—every custom related even remotely to the incredible notion that what all women have an endless supply of is nevertheless merchandise, to be hoarded and auctioned."

Ars Longa gave a snort of disgust. No, I don't think she understood. She understands some Nevian but Star spoke English; Nevian lacks the vocabulary.

"Even your secondary customs," she went on, "are shaped by this unique institution. Clothing—you've noticed that there is no real difference here in how the two sexes dress. I'm in tights this morning and you are in shorts but had it been the other way around no one would have noticed."

"The hell they wouldn't! Your tights wouldn't fit me."

"They stretch. And body shyness, which is an aspect of sex-specialized clothing. Here nakedness is as unnoteworthy as on that pretty little island where I found you. All hairless peoples sometimes wear clothing and all peoples no matter how hirsute wear ornaments—but nakedness taboo is found only where flesh is merchandise to be packaged or displayed . . . that is to say, on Earth. It parallels 'Don't pinch the grapefruit' and putting false bottoms in berry boxes. If something is never haggled over, there is no need to make a mystery of it."

"So if we get rid of clothes we get rid of prostitution?"

"Heavens, no! You've got it backwards." She frowned. "I don't see how Earth could ever get rid of whoring; it's too much a part of everything you do."

"Star, you've got your facts wrong. There is almost no prostitution in America."

She looked startled. "Really? But—Isn't 'alimony' an American word? And 'gold digger'? And 'coming-out party'?"

"Yes, but prostitution has almost died out. Hell, I wouldn't know how to go about finding a whorehouse even in an Army town. I'm not saying that you don't wind up in the nay. But it's not commercialized. Star, even with an American girl who is well-known to be an easy make-out, if you offered her five bucks—or twenty—it's ten to one she would slap your face."

"Then how is it done?"

"You're nice to her instead. Take her to dinner, maybe to a show. Buy her flowers, girls are suckers for flowers. Then approach the subject politely."

"Oscar, doesn't this dinner and show, and possibly flowers, cost more than five dollars? Or even twenty? I understood that American prices were as high as French prices."

"Well, yes, but you can't just tip your hat and expect a girl to throw herself on her back. A tightwad—"

"I rest the case. All I was trying to show was that customs can be wildly different in different worlds."

"That's true, even on Earth. But—"

"Please, milord. I won't argue the virtue of American women, nor was I criticizing. Had I been reared in America I think I would want at least an emerald bracelet rather than dinner and a show. But I was leading up to the subject of 'natural law.' Is not the invariability of natural" law an unproved assumption? Even on Earth?"

"Well—You haven't stated it fairly. It's an assumption, I suppose. But there has never been a case in which it failed to stand up."

"No black swans? Could it not be that an observer who saw an exception preferred not to believe his eyes? Just as you do not want to believe that Igli ate himself even though you, my Hero, forced him to? Never mind. Let's leave Socrates to his Xanthippe. Natural law may be invariable throughout a universe—seems to be, in rigid universes. But it is certain that natural laws vary from universe to universe—and believe this you must, milord, else neither of us will live long!"

I considered it. Damn it, where had Igli gone? "Most unsettling."

"No more unsettling, once you get used to it, than shifting languages and customs as you shift countries. How many chemical elements are there on Earth?"

"Uh, ninety-two and a bunch of Johnny-Come-Latelies. A hundred and six or seven."

"Much the same here. Nevertheless a chemist from Earth would suffer some shocks. The elements aren't quite the same, nor do they behave quite the same way. H-bombs won't work here and dynamite won't explode."

I said sharply, "Now wait! Are you telling me that electrons and protons aren't the same here, to get down to basics?"

She shrugged. "Perhaps, perhaps not. What is an electron but a mathematical concept? Have you tasted one lately? Or put salt on the tail of a wavicle? Does it matter?"

"It damn well would matter. A man can starve as dead from lack of trace elements as from lack of bread."

"True. In some universes we humans must carry food if we visit them—which we sometimes must, if only to change trains. But here, and in each of the universes and countless planets where we humans live, you need not worry; local food will nourish you. Of course, if you lived here many years, then went back to Earth and died soon after and an autopsy were done with fussiest microanalysis, the analyst might not believe his results. But your stomach wouldn't care."

I thought about this, my belly stuffed with wonderful food and the air around me sweet and good—certainly my body did not care if there were indeed the differences Star spoke of.

Then I recalled one aspect of life in which little differences cause big differences. I asked Star about it.

She looked blandly innocent. "Do you care, milord? You will be long gone before it matters to Doral. I thought your purpose these three days was simply to help me in my problem? With pleasure in your work, I realize—you threw yourself into the spirit of the occasion."

"Damn it, quit pulling my leg! I did it to help you. But a man can't help wondering."

She slapped my thigh and laughed. "Oh, my very darling! Stop wondering; human races throughout the Universes can crossbreed. Some crosses fruit but seldom and some mule out. But this is not one of them. You will live on here, even if you never return. You're not sterile; that was one of many things I checked when I examined your beautiful body in Nice. One is never sure how the dice will roll, but—I think the Doral will not be disappointed."

She leaned toward me. "Would you give your physician data more accurate than that which Jocko sang? I might offer a statistical probability. Or even a Sight."

"No, I would not! Nosy."

"It is a long nose, isn't it? As you wish, milord. In a less personal vein the fact of crossbreeding among humans of different universes—and some animals such as dogs and cats—is a most interesting question. The only certainty is that human beings flourish only in those universes having chemistries so similar that elements that make up deoxyribonucleic acids are so alike as not to matter. As for the rest, every scholar has his theory. Some hold to a teleologic explanation, asserting that Man evolves alike in all essential particulars in every universe that can support him because of Divine Plan—or through blind necessity, depending on whether the scholar takes his religion straight or chases it with soda.

"Some think that we evolved just once—or were created, as may be—and leaked across into other universes. Then they fight over which universe was the home of the race."

"How can there be any argument?" I objected. "Earth has fossil evidence covering the evolution of man. Other planets either have it or not, and that should settle it."

"Are you sure, milord? I thought that, on Earth, man's family tree has as many dotted lines as there are bastards in European royal lines."

I shut up. I had simply read some popular books. Perhaps she was right; a race that could not agree as to who did what to whom in a war only twenty years back probably didn't know what Alley Oop did to the upstairs maid a million years ago, when the evidence was only scattered bones. Hadn't there been hoaxes? The Piltdown Man, or some such?

Star went on, "Whatever the truth, there are leakages between worlds. On your own planet disappearances run to hundreds of thousands and not all are absconders or wife-deserters; see any police department's files. One usual place is the battlefield. The strain becomes too great and a man slides through a hole he didn't know was there and winds up 'missing in action.' Sometimes—not often—a man is seen to disappear. One of your American writers, Bierce or Pierce, got interested and collected such cases. He collected so many that he was collected, too. And your Earth experiences reverse leakage, the 'Kaspar Hausers,' persons from nowhere, speaking no known language and never able to account for themselves."

"Wait a minute? Why just people?"

"I didn't say 'just people.' Have you never heard of rains of frogs? Of stones? Of blood? Who questions a stray cat's origin? Are all flying saucers optical illusions? I promise you they are not; some are poor lost astronauts trying to find their way home. My people use space travel very little, as faster-than-light is the readiest way to lose yourself among the Universes. We prefer the safer method of metaphysical geometries—or 'magic' in the vulgar speech."

Star looked thoughtful. "Milord, your Earth may be the home of mankind. Some scholars think so."

"Why?"

"It touches so many other worlds. It's the top of the list as a transfer point. If its people render it unfit for life—unlikely, but possible—it will disrupt traffic of a dozen universes. Earth has had its fairy rings, and Gates, and Bifrost Bridges for ages; that one we used in Nice was there before the Romans came."

"Star, how can you talk about points on Earth 'touching' other planets —for centuries on end? The Earth moves around the Sun at twenty miles a second or such, and spins on its axis, not to mention other motions that add up to an involved curve at unthinkable speed. So how can it 'touch' other worlds?"

Again we rode in silence. At last Star said, "My Hero, how long did it take you to learn calculus?"

"Why, I haven't learned it. I've studied it a couple of years."

"Can you tell me how a particle can be a wave?"

"What? Star, that's quantum mechanics, not calculus. I could give an explanation but it wouldn't mean anything; I don't have the math. An engineer doesn't need it."

"It would be simplest," she said diffidently, "to answer your question by saying 'magic' just as you answered mine with 'quantum mechanics.' But you don't like that word, so all I can say is that after you study higher geometries, metaphysical and conjectural as well as topological and judicial—if you care to make such study—I will gladly answer. But you won't need to ask."

(Ever been told: "Wait till you grow up, dear; then you will understand"? As a kid I didn't like it from grownups; I liked it still less from a girl I was in love with when I was fully grown.)

Star didn't let me sulk; she shifted the talk. "Some crossbreedings are from neither accidental slippages nor planned travel. You've heard of incubi and succubi?"

"Oh, sure. But I never bother my head with myths."

"Not myths, darling, no matter how often the legend has been used to explain embarrassing situations. Witches and warlocks are not always saints and some acquire a taste for rape. A person who has learned to open Gates can indulge such vice; he—or she—can sneak up on a sleeping person—maid, chaste wife, virgin boy—work his will and be long gone before cockcrow." She shuddered. "Sin at its nastiest. If we catch them, we kill them. I've caught a few, I killed them. Sin at its worst, even if the victim learns to like it." She shuddered again.

"Star, what is your definition of 'sin'?"

"Can there be more than one? Sin is cruelty and injustice, all else is peccadillo. Oh, a sense of sin comes from violating the customs of your tribe. But breaking custom is not sin even when it feels so; sin is wronging another person."

"How about 'sinning against God'?" I persisted.

She looked at me sharply. "So again we shave the barber? First, milord, tell me what you mean by 'God.' "

"I just wanted to see if you would walk into it."

"I haven't walked into that one in a mort of years. I'd as lief thrust with a bent wrist, or walk a pentacle in clothes. Speaking of pentacles, my Hero, our destination is not what it was three days ago. Now we go to a Gate I had not expected to use. More dangerous but it can't be helped."

"My fault! I'm sorry, Star."

"My fault, milord. But not all loss. When we lost our luggage I was more worried than I dared show—even though I was never easy about carrying firearms through a world where they may not be used. But our foldbox carried much more than firearms, things we are vulnerable without. The time you spent in soothing the hurt to the Doral's ladies I spent—in part—in wheedling the Doral for a new kit, almost everything heart could wish but firearms. Not all loss."

"We are going to another world now?"

"Not later than tomorrow dawn, if we live."

"Damn it, Star, both you and Rufo talk as if each breath might be our last."

"As it might be."

"You're not expecting an ambush now; we're still on Doral land. But Rufo is as full of dire forebodings as a cheap melodrama. And you are almost as bad."

"I'm sorry. Rufo does fret—but he is a good man at your back when trouble starts. As for me, I have been trying to be fair, milord, to let you know what to expect."

"Instead you confuse me. Don't you think it's time you put your cards face up?"

She looked troubled. "And if the Hanging Man is the first card turned?"

"I don't give a hoot! I can face trouble without fainting—"

"I know you can, my champion."

"Thanks. But not knowing makes me edgy. So talk."

"I will answer any question, milord Oscar. I have always been willing to." "But you know that I don't know what questions to ask. Maybe a carrier pigeon doesn't need to know what the war is about—but I feel like a sparrow in a badminton game. So start from the beginning."

"As you say, milord. About seven thousand years ago—" Star stopped. "Oscar, do you want to know—now all the interplay of politics of a myriad worlds and twenty universes over millennia in arriving at the present crisis? I'll try if you say, but just to outline it would take more time than remains until we must pass through that Gate. You are my true champion; my life hangs on your courage and skill. Do you want the politics behind my present helpless, almost hopeless predicament —save for you! Or shall I concentrate on the tactical situation?"

(Damn it! I did want the whole story.) "Let's stick to the tactical situation. For now."

"I promise," she said solemnly, "that if we live through it, you shall have every detail. The situation is this: I had intended us to cross Nevia by barge, then through the mountains to reach a Gate beyond the Eternal Peaks. That route is less risky but long.

"But now we must hurry. We will turn off the road late this afternoon and pass through some wild country, and country still worse after dark. The Gate there we must reach before dawn; with luck we may sleep. I hope so, because this Gate takes us to another world at a much more dangerous exit.

"Once there, in that world—Hokesh it is called, or Karth—in Karth-Hokesh we shall be close, too close, to a tall tower, mile high, and, if we win to it, our troubles start. In it is the Never-Born, the Eater of Souls."

"Star, are you trying to scare me?"

"I would rather you were frightened now, if such is possible, than have you surprised later. My thought, milord, had been to advise you of each danger as we reached it, so that you could concentrate on one at a time. But you overruled me."

"Maybe you were right. Suppose you give me details on each as we come to it, just the outline now. So I'm to fight the Eater of Souls, am I? The name doesn't scare me; if he tries to eat my soul, he'll throw up. What do I fight him with? Spit?"

"That is one way," she said seriously, "but, with luck, we won't fight him—it—at all. We want what it guards."

"And what is that?"

"The Egg of the Phoenix."

"The Phoenix doesn't lay eggs."

"I know, milord. That makes it uniquely valuable."

"But—"

She hurried on. "That is its name. It is a small object, somewhat larger than an ostrich egg and black. If I do not capture it, many bad things will happen. Among them is a small one: I will die. I mention that because it may not seem small to you—my darling! —and it is easier to tell you that one truth than it is to explain the issues."

"Okay. We steal the Egg. Then what?"

"Then we go home. To my home. After which you may return to yours. Or remain in mine. Or go where you list, through Twenty Universes and myriad worlds. Under any choice, whatever treasure you fancy is yours; you will have earned it and more . . . as well as my heartfelt thanks, milord Hero, and anything you ask of me."

(The biggest blank check ever written—If I could cash it.) "Star, you don't seem to think we will live through it."

She took a deep breath. "Not likely, milord. I tell you truth. My blunder has forced on us a most desperate alternative."

"I see. Star, will you marry me? Today?"

Then I said, "Easy there! Don't fall!" She hadn't been in danger of falling; the seat belt held her. But she sagged against it. I leaned over and put my arm around her shoulders. "Nothing to cry about. Just give me a yes or a no—and I fight for you anyway. On, I forgot. I love you. Anyhow I think it's love. A funny, fluttery feeling whenever I look at you or think about you—which is mostly."

"I love you, milord," she said huskily. "I have loved you since I first saw you. Yes, a 'funny, fluttery feeling' as if everything inside me were about to melt down."

"Well, not quite that," I admitted. "But it's probably opposite polarity for the same thing. Fluttery, anyhow. Chills and lightnings. How do we get married around here?"

"But, milord—my love—you always astound me. I knew you loved me. I hoped that you would tell me before—well, in time. Let me hear it once. I did not expect you to offer to marry me!"

"Why not? I'm a man, you're a woman. It's customary?"

"But—Oh, my love, I told you! It isn't necessary to marry me. By your rules . . . I'm a bitch."

"Bitch, witch, Sing Along with Mitch! What the hell, honey? That was your word, not mine. You have about convinced me that the rules I was taught are barbarous and yours are the straight goods. Better blow your nose—here, want my hanky?

Star wiped her eyes and blew her nose but instead of the yes-darling I wanted to hear she sat up straight and did not smile. She said formally, "Milord Hero, had you not best sample the wine before you buy the barrel?"

I pretended not to understand.

"Please, milord love," she insisted. "I mean it. There's a grassy bit on your side of the road, just ahead. You can lead me to it this moment and willingly I will go."

I sat high and pretended to peer. "Looks like crab grass. Scratchy."

"Then p-p-pick your own grass! Milord . . . I am willing, and eager, and not uncomely—but you will learn that I am a Sunday painter compared with artists you will someday meet. I am a working woman. I haven't been free to give the matter the dedicated study it deserves. Believe me! No, try me. You can't know that you want to marry me."

"So you're a cold and clumsy wench, eh?"

"Well . . . I didn't say that. I'm only entirely unskilled—and I do have enthusiasm."

"Yes, like your auntie with the cluttered bedroom—it runs in your family, so you said. Let it stand that I want to marry you in spite of your obvious faults."

"But—"

"Star, you talk too much."

"Yes, milord," she said meekly.

"We're getting married. How do we do it? Is the local lord also justice of the peace? If he is, there will be no droit du seigneur; we haven't time for frivolities." "Each squire is the local justice," Star agreed thoughtfully, "and does perform marriages, although most Nevians don't bother. But—Well, yes, he would expect droit du seigneur and, as you pointed out, we haven't time to waste."

"Nor is that my idea of a honeymoon. Star—look at me. I don't expect to keep you in a cage; I know you weren't raised that way. But we won't look up the squire. What's the local brand of preacher? A celibate brand, by choice."

"But the squire is the priest, too. Not that religion is an engrossing matter in Nevia; fertility rites are all they bother with. Milord love, the simplest way is to jump over your sword."

"Is that a marriage ceremony where you come from, Star?"

"No, it's from your world:

'Leap rogue, and jump whore,
'And married be forevermore—'

"—it's very old."

"Mmm—I don't care for the marriage lines. I may be a rogue but I know what you think of whores. What other chances are there?"

"Let me see. There's a rumormonger in a village we pass through soon after lunch. They sometimes marry townies who want it known far and wide; the service includes spreading the news."

"What sort of service?"

"I don't know. And I don't care, milord love. Married we will be!"

"That's the spirit! We won't stop for lunch."

"No, milord," she said firmly, "if wife I am to be, I shall be a good wife and not permit you to skip meals."

"Henpecking already. I think I'll beat you."

"As you will, milord. But you must eat, you are going to need your strength—"

"I certainly will!'

"—for fighting. For now I am ten times as anxious that we both live through it. Here is a place for lunch." She turned Vita Brevis off the road; Ars Longa followed. Star looked back over her shoulder and dimpled. "Have I told you today that you are beautiful . . . my love!"

Chapter 11

Rufo's longhorse followed us onto the grassy verge Star picked for picnicking. He was still limp as a wet sock and snoring. I would have let him sleep but Star was shaking him.

He came awake fast, reaching for his sword and shouting, "*A moi! M'aidez! Les vaches!*" Fortunately some friend had stored his sword and belt out of reach on the baggage rack aft, along with bow, quiver, and our new foldbox.

Then he shook his head and said, "How many were there?"

"Down from there, old friend," Star said cheerfully. "We've stopped to eat."

"Eat!" Rufo gulped and shuddered. "Please, milady. No obscenity." He fumbled at his seat belt and fell out of his saddle; I steadied him.

Star was searching through her pouch; she pulled out a vial and offered it to Rufo. He shied back. "Milady!"

"Shall I hold your nose?" she said sweetly.

"I'll be all right. Just give me a moment . . . and the hair of the dog."

"Certainly you'll be all right. Shall I ask milord Oscar to pin your arms?"

Rufo glanced at me appealingly; Star opened the little bottle. It fizzed and fumes rolled out and down. "Now!"

Rufo shuddered, held his nose, tossed it down.

I won't say smoke shot out of his ears. But he flapped like torn canvas in a gale and horrible noises came out.

Then he came into focus as suddenly as a TV picture. He appeared heavier and inches taller and had filled out. His skin was a rosy glow instead of death pallor. "Thank you, milady," he said cheerfully, his voice resonant and virile. "Someday I hope to return the favor."

"When the Greeks reckon time by the kalends," she agreed.

Rufo led the longhorses aside and fed them, opening the foldbox and digging out haunches of bloody meat. Ars Longa ate a hundredweight and Vita Brevis and Mors Profunda even more; on the road these beasts need a high-protein diet. That done, he whistled as he set up table and chairs for Star and myself.

"Sugar pie," I said to Star, "what's in that pick-me-up?"

"An old family recipe:

'Eye of newt and toe of frog,
'Wool of bat and tongue of dog,
'Adders fork and blindworm's sting,
'Lizard's leg and howlet's wing—' "

"Shakespeare!" I said. "Macbeth."

" '*Cool it with a baboon's blood*—' No, Will got it from me, milord love. That's the way with writers; they'll steal anything, file off the serial numbers, and claim it for their own. I got it from my aunt—another aunt—who was a professor of internal medicine. The rhyme is a mnemonic for the real ingredients which are much more complicated—never can tell when you'll need a hangover cure. I compounded it last night, knowing that Rufo, for the sake of our skins, would need to be at his sharpest today—two doses, in fact, in case you needed one. But you surprised me, my love; you break out with nobility at the oddest times."

"A family weakness. I can't help it."

"Luncheon is served, milady."

I offered Star my arm. Hot foods were hot, cold ones chilled; this new foldbox, in Lincoln green embossed with the Doral chop, had equipment that the lost box lacked. Everything was delicious and the wines were superb.

Rufo ate heartily from his serving board while keeping an eye on our needs. He had come over to pour the wine for the salad when I broke the news. "Rufo old comrade, milady Star and I are getting married today. I want you to be my best man and help prop me up."

He dropped the bottle.

Then he was busy wiping me and mopping the table. When at last he spoke, it was to Star. "Milady," he said tightly, "I have put up with much, uncomplaining, for reasons I need not state. But this is going too far. I won't let—"

"Hold your tongue!"

"Yes," I agreed, "hold it while I cut it out. Will you have it fried? Or boiled?"

Rufo looked at me and breathed heavily. Then he left abruptly, withdrawing beyond the serving board. Star said softly, "Milord love, I am sorry."

"What twisted his tail?" I said wonderingly. Then I thought of the obvious. "Star! Is Rufo jealous?"

She looked astounded, started to laugh and chopped it off. "No, no, darling! It's not that at all. Rufo—Well, Rufo has his foibles but he is utterly dependable where it counts. And we need him. Ignore it. Please, milord."

"As you say. It would take more than that to make me unhappy today."

Rufo came back, face impassive, and finished serving. He repacked without speaking and we hit the road.

The road skirted the village green; we left Rufo there and sought out the rumormonger. His shop, a crooked lane away, was easy to spot; an apprentice was beating a drum in front of it and shouting teasers of gossip to a crowd of locals. We pushed through and went inside.

The master rumormonger was reading something in each hand with a third scroll propped against his feet on a desk. He looked, dropped feet to floor, jumped up and made a leg while waving us to seats.

"Come in, come in, my gentles!" be sang out. "You do me great honor, my day is made! And yet if I may say so you have come to the right place whatever your problem whatever your need you have only to speak good news bad news every sort but sad news reputations restored events embellished history rewritten great deeds sung and all work guaranteed by the oldest established news agency in all Nevia news from all worlds all universes propaganda planted or uprooted offset or rechanneled satisfaction guaranteed honesty is the best policy but the client is always right don't tell me I know I know I have spies in every kitchen ears in every bedroom the Hero Gordon without a doubt and your fame needs no heralds milord but honored am I that you should seek me out a biography perhaps to match your matchless deeds complete with old nurse who recalls in her thin and ancient and oh so persuasive voice the signs and portents at your birth—"

Star chopped him off. "We want to get married."

His mouth shut, he looked sharply at Star's waistline and almost bought a punch in the nose. "It is a pleasure. And I must add that I heartily endorse such a public-spirited project. All this modern bundling and canoodling and scuttling without even three cheers or a by-your-leave sends taxes up and profits down that's logic. I only wish I had time to get married myself as I've told my wife many's the time. Now as to plans, if I may make a modest suggestion—"

"We want to be married by the customs of Earth."

"Ah, yes, certainly." He turned to a cabinet near his desk, spun dials. After a bit he said, "Your pardon, gentles, but my head is crammed with a billion facts, large and small, and—that name? Does it start with one 'R' or two?"

Star moved around, inspected the dials, made a setting.

The rumormonger blinked. "That universe? We seldom have a call for it. I've often wished I had time to travel but business business business —LIBRARY!"

"Yes, Master?" a voice answered.

"The planet Earth, Marriage Customs of—that's a capital 'Urr' and a soft theta." He added a five-group serial number. "Snap it up!"

In very short time an apprentice came running with a thin scroll. "Librarian says careful how you handle it, Master. Very brittle, he says. He says—"

"Shut up. Your pardon, gentles." He inserted the scroll in a reader and began to scan.

His eyes bugged out and he sat forward. "Unbeliev—" Then he muttered, "Amazing! Whatever made them think of that!" For several minutes he appeared to forget we were there, simply giving vent to: "Astounding! Fantastic!" and like expressions.

I tapped his elbow. "We're in a hurry."

"Eh? Yes, yes, milord Hero Gordon—milady." Reluctantly he left the scanner, fitted his palms together, and said, "You've come to the right place. Not another rumormonger in all Nevia could handle a project this size. Now my thought is—just a rough idea, talking off the top of my head—for the procession we'll need to call in the surrounding countryside although for the charivari we could make do with just townspeople if you want to keep it modest in accordance with your reputation for dignified simplicity—say one day for the procession and a nominal two nights of charivari with guaranteed noise levels of—"

"Hold it."

"Milord? I'm not going to make a profit on this; it will be a work of art, a labor of love—just expenses plus a little something for my overhead. It's my professional judgment, too, that a Samoan pre-ceremony would be more sincere, more touching really, than the optional Zulu rite. For a touch of comedy relief—at no extra charge; one of my file clerks just happens to be seven months along, she'd be glad to run down the aisle and interrupt the ceremony—and of course there is the matter of witnesses to the consummation, how many for each of you, but that needn't be settled this week; we have the street decorations to think of first, and—"

I took her arm. "We're leaving."

"Yes, milord," Star agreed.

He chased after us, shouting about broken contracts. I put hand to sword and showed six inches of blade; his squawks shut off.

Rufo seemed to be all over his mad; he greeted us civilly, even cheerfully. We mounted and left. We had been riding south a mile or so when I said, "Star darling—"

"Milord love?"

"That 'jumping over the sword'—that really is a marriage ceremony?"

"A very old one, my darling. I think it dates back to the Crusades."

"I've thought of an updated wording:

'Jump rogue, and princess leap,
'My wife art thou and mine to keep!'

"—would that suit you?"

"Yes, yes!"

"But for the second line you say:

'—thy wife I vow and thine to keep.'

"Got it?"

Star gave a quick gasp. "Yes, my love!"

We left Rufo with the longhorses, giving no explanation, and climbed a little wooded hill. All of Nevia is beautiful, with never a beer can nor a dirty Kleenex to mar its Eden loveliness, but here we found an outdoor temple, a smooth grassy place surrounded by arching trees, an enchanted sanctuary.

I drew my sword and glanced along it, feeling its exquisite balance while noting again the faint ripples left by feather-soft hammer blows of some master swordsmith. I tossed it and caught it by the forte.

"Read the motto. Star."

She traced it out. " 'Dum vivimus, vivamus!'—'While we live, let us live!' Yes, my love, yes!" She kissed it and handed it back; I placed it on the ground.

"Know your lines?" I asked.

"Graved in my heart."

I took her hand in mine. "Jump high. One . . . two . . . three!"

Chapter 12

When I led my bride back down that blessed hill, arm around her waist, Rufo helped us mount without comment. But he could hardly miss that Star now addressed me as: "Milord husband." He mounted and tailed in, a respectful distance out of earshot.

We rode hand in hand for at least an hour. Whenever I glanced at her, she was smiling; whenever she caught my eye, the smile grew dimples. Once I asked, "How soon must we keep lockout?"

"Not until we leave the road, milord husband."

That held us another mile. At last she said timidly, "Milord husband?"

"Yes, wife?"

"Do you still think that I am 'a cold and clumsy wench'?"

"Mmm . . ." I answered thoughtfully, " 'cold'—no, I couldn't honestly say you were cold. But 'clumsy'—Well, compared with an artist like Muri, let us say—"

"Milord husband!"

"Yes? I was saying

"Are you honing for a kick in the belly?" She added, "American!"

"Wife . . . would you kick me in the belly?"

She was slow in answering and her voice was very low. "No, milord husband. Never."

"I'm pleased to hear it. But if you did, what would happen?"

"You—you would spank me. With my own sword. But not with your sword. Please, never with your sword . . . my husband."

"Not with your sword, either. With my hand. Hard. First I would spank you. And then—"

"And then what?"

I told her. "But don't give me cause. According to plans I have to fight later. And don't interrupt me in the future."

"Yes, milord husband."

"Very well. Now let's assign Muri an arbitrary score of ten. On that scale you would rate—Let me think."

"Three or four, perhaps? Or even five?"

"Quiet. I make it about a thousand. Yes, a thousand, give or take a point. I haven't a slide rule."

"Oh, what a beast you are, my darling! Lean close and loss me—and just wait till I tell Muri."

"You'll say nothing to Muri, my bride, or you will be paddled. Quit fishing for compliments. You know what you are, you sword-jumping wench."

"And what am I?"

"My princess."

"Oh."

"And a mink with its tail on fire—and you know it."

"Is that good? I've studied American idiom most carefully but sometimes I am not sure."

"It's supposed to be tops. A figure of speech, I've never known a mink that well. Now get your mind on other matters, or you may be a widow on your bridal day. Dragons, you say?"

"Not until after nightfall, milord husband—and they aren't really dragons."

"As you described them, the difference could matter only to another dragon. Eight feet high at the shoulders, a few tons each, and teeth as long as any forearm—all they need is to breathe flame."

"Oh, but they do! Didn't I say?"

I sighed. "No, you did not."

"They don't exactly breathe fire. That would kill them. They hold their breaths while flaming. It's swamp gas—methane—from the digestive tract. It's a controlled belch, with a hypergolic effect from an enzyme secreted between the first and second rows of teeth. The gas bursts into flame on the way out."

"I don't care how they do it; they're flamethrowers. Well? How do you expect me to handle them?"

"I had hoped that you would have ideas. You see," she added apologetically, "I hadn't planned on it, I didn't expect us to come this way."

"Well—Wife, let's go back to that village. Set up in competition with our friend the rumormonger—I'll bet we could outgabble him."

"Milord husband!"

"Never mind. If you want me to kill dragons every Wednesday and Saturday, I'll be on call. This flaming methane—Do they spout it from both ends?"

"Oh, just the front end. How could it be both?"

"Easy. See next year's model. Now quiet; I'm thinking over a tactic. Ill need Rufo. I suppose he has killed dragons before?"

"I don't know that a man has ever killed one, milord husband."

"So? My princess, I'm flattered by the confidence you place in me. Or is it desperation? Don't answer, I don't want to know. Keep quiet and let me think."

At the next farmhouse Rufo was sent in to arrange returning the longhorses. They were ours, gifts from the Doral, but we had to send them home, as they could not live where we were going—Muri had promised me that she would keep an eye on Ars Longa and exercise her. Rufo came back with a bumpkin mounted on a heavy draft animal bareback—he Kept shifting numbly between second and third pairs of legs to spare the animal's back and controlled it by voice. When we dismounted, retrieved our bows and quivers, and prepared to hoof it, Rufo came up. "Boss, Manure Foot craves to meet the hero and touch his sword. Brush him off?"

Rank hath its duties as well as its privileges. "Fetch him."

The lad, overgrown and fuzz on his chin, approached eagerly, stumbling over his feet, then made a leg so long he almost fell.

"Straighten up, son," I said. "What's your name?"

"Pug, milord Hero," he answered shrilly. ("Pug" will do. The Nevian meaning was as rugged as Jocko's jokes.) "A stout name. What do you want to be when you grow up?"

"A hero, milord! Like yourself."

I thought of telling him about those rocks on the Glory Road. But he would find them soon enough if ever he tramped it—and either not mind, or turn back and forget the silly business. I nodded approvingly and assured him that there was always room at the top in the Hero business for a lad with spirit—and that the lower the start, the greater the glory . . . so work hard and study hard and wait his opportunity. Keep his guard up but always speak to strange ladies; adventure would come his way. Then I let him touch my sword—but not take it in hand. The Lady Vivamus is mine and I'd rather share my toothbrush.

Once, when I was young, I was presented to a Congressman. He had handed me the same fatherly guff I was now plagiarizing. Like prayer, it can't do any harm and might do some good, and I found that I was sincere when I said it and no doubt the Congressman was, too. Oh, possibly some harm, as the youngster might get himself killed on the first mile of that road. But that is better than sitting over the fire in your old age, sucking your gums and thinking about the chances you missed and the gals you didn't tumble. Isn't it?

I decided that the occasion seemed so important to Pug that it should be marked, so I groped in my pouch and found a U.S. quarter. "What's the rest of your name. Pug?"

"Just 'Pug,' milord. Of house Lerdki, of course."

"Now you will have three names because I am giving you one of mine." I had one I didn't need, Oscar Gordon suited me fine. Not "Flash" as that name was never acknowledged by me. Not my Army nickname; I wouldn't write that one on the wall of a latrine. "Easy" was the name I could spare. I had always used "E. C. Gordon" rather than "Evelyn Cyril Gordon" and in school my name had shifted from "E. C." to "Easy" because of my style of broken-field running—I never ran harder nor dodged more than the occasion demanded.

"By authority vested in me by Headquarters, United States Army Southeast Asia Command, I, the Hero Oscar, ordain that you shall be known henceforth as Lerdki't Pug Easy. Wear it proudly."

I gave him the quarter and showed him George Washington on the obverse. "This is the father of my house, a greater hero than I will ever be. He stood tall and proud, spoke the truth, and fought for the right as he saw it, against fearful odds. Try to be like him. And here"—I turned it over—"is the chop of my house, the house he founded. The bird stands for courage, freedom, and ideals soaring high." (I didn't tell him that the American Eagle eats carrion, never tackles anything its own size, and will soon be extinct—it does stand for those ideals. A symbol means what you put into it.)

Pug Easy nodded violently and tears started to flow. I had not presented him to my bride; I didn't know that she would wish to meet him. But she stepped forward and said gently, "Pug Easy, remember the words of milord Hero. Treasure them and they will last you all your life."

The lad dropped to his knees. Star touched his hair and said, "Stand, Lerdki't Pug Easy. Stand tall."

I said goodbye to Ars Longa, told her to be a good girl and I would be back someday. Pug Easy headed back with longhorses tailed up and we set out into the woods, arrows nocked and Rufo eyes-behind.

There was a sign where we left the yellow brick road; freely translated it read: ALL HOPE ABANDON, YE WHO ENTER HERE.

(A literal translation is reminiscent of Yellowstone Park: "Warning—the varmints in these woods are not tame. Travelers are warned to stay on the road, as their remains will not be returned to their kin. The Lerdki, His Chop.")

Presently Star said, "Milord husband—"

"Yes, pretty foots?" I didn't look at her; I was watching my side and a bit of hers, and keeping an eye overhead as well, as we could be bombed here—something like blood kites but smaller and goes for the eyes.

"My Hero, you are truly noble and you have made your wife most proud."

"Huh? How?" I had my mind on targets—two kinds on the ground here: a rat big enough to eat cats and willing to eat people, and a wild hog about the same size and not a ham sandwich on him anyplace, all rawhide and bad temper. The hogs were easier targets, I had been told, because they charge straight at you. But don't miss. And have your sword loosened, you won't nock a second shaft.

"That lad, Pug Easy. What you did for him."

"Him? I fed him the old malarkey. Cost nothing."

"It was a kingly deed, milord husband."

"Oh, nonsense, diddycums. He expected big talk from a hero, so I did."

"Oscar my beloved, may a loyal wife point it out to her husband when he speaks nonsense of himself? I have known many heroes and some were such oafs that one would feed them at the back door if their deeds did not claim a place at the table. I have known few men who were noble, for nobility is scarcer far than heroism. But true nobility can always be recognized . . . even in one as belligerently shy about showing it as you are. The lad expected it, so you gave it to him—but *noblesse oblige* is an emotion felt only by those who are noble."

"Well, maybe. Star, you are talking too much again. Don't you think these varmints have ears?"

"Your pardon, milord. They have such good ears that they hear footsteps through the ground long before they hear voices. Let me have the last word, today being my bridal day. If you are—no, when you are gallant to some beauty, let us say Letva—or Muri, damn her lovely eyes! —I do not count it as nobility; it must be assumed to spring from a much commoner emotion than noblesse oblige. But when you speak to a country lout with pigsty on his feet, garlic on his breath, the stink of sweat all over him, and pimples on his face—speak gently and make him feel for the time as noble as you are and let him hope one day to be your equal—I know it is not because you hope to tumble him."

"Oh, I don't know. Boys that age are considered a treat in some circles. Give him a bath, perfume him, curl his hair—"

"Milord husband, is it permitted for me to *think* about kicking you in the belly?"

"Can't be courtmartialed for thinking, that's the one thing they can't take away from you. Okay, I prefer girls; I'm a square and can't help it. What's this about Muri's eyes? Longlegs, are you jealous?"

I could hear dimples even though I couldn't stop to see them. "Only on my wedding day, milord husband; the other days are yours. If I catch you in sportiveness, I shall either not see it, or congratulate you, as may be."

"I don't expect you'll catch me."

"And I trust you'll not catch me, milord rogue," she answered serenely. She did get the last word, for just then Rufo's bowstring went Fwung! He called out, "Got 'im!" and then we were very busy. Hogs so ugly they made razorbacks look like Poland-Chinas—I got one by arrow, down his slobbering throat then fed steel to his brother a frozen second later. Star got a fair hit at hers but it deflected on bone and kept coming and I kicked it in the shoulder as I was still trying to free my blade from its cousin. Steel between its ribs quieted it and Star coolly nocked another shaft and let fly while I was killing it. She got one more with her sword, leaning the point in like a matador at the moment of truth, dancing aside as it came on, dead and unwilling to admit it.

The fight was over. Old Rufo had got three unassisted and a nasty goring; I had a scratch and my bride was unhurt, which I made sure of as soon as things were quiet. Then I mounted guard while our surgeon took care of Rufo, after which she dressed my lesser cut.

"How about it, Rufo?" I asked. "Can you walk?"

"Boss, I won't stay in this forest if I have to crawl, Let's mush. Anyhow," he added, nodding at the worthless pork around us, "we won't be bothered by rats right away."

I rotated the formation, placing Rufo and Star ahead with his good leg on the outside and myself taking rear guard, where I should have been all along. Rear guard is slightly safer than point under most conditions but these weren't most conditions. I had let my blind need to protect my bride personally affect my judgment.

Having taken the hot spot I then went almost crosseyed trying not only to see behind but ahead as well, so that I could close fast if Star—yes, and Rufo—got into trouble. Luckily we had a breathing spell in which I sobered down and took to heart the oldest lesson on patrol: You can't do the other man's job. Then I gave all my attention to our rear. Rufo, old as he was and wounded, would not die without slaughtering an honor guard to escort him to hell in style—and Star was no fainting heroine. I would bet long odds on her against anyone her own weight, name your weapon or barehanded, and I pity the man who ever tried to rape her; he's probably still searching for his cojones.

Hogs didn't bother us again but as evening approached we began to see and oftener to hear those giant rats; they paced us, usually out of sight; they never attacked berserk the way the hogs had; they looked for the best of it, as rats always do.

Rats give me the horrors. Once when I was a kid, my dad dead and Mother not yet remarried, we were flat broke and living in an attic in a condemned building. You could hear rats in the walls and twice rats ran over me in my sleep.

I still wake up screaming.

It doesn't improve a rat to blow it up to the size of a coyote. These were real rats, even to the whiskers, and shaped like rats save that their legs and pads were too large—perhaps the cube-square law on animal proportions works anywhere.

We didn't waste an arrow on one unless it was a fair shot and we zigzagged to take advantage of such openness as the forest had—which increased the hazard from above. However, the forest was so dense that attacks from the sky weren't our first worry.

I got one rat that tailed too closely and just missed another. We had to spend an arrow whenever they got bold; it caused the others to be more cautious. And once, while Rufo was drawing a bow on one and

Star was ready with her sword to back him up, one of those vicious little hawks dived on Rufo.

Star cut him out of the air at the bottom of his stoop. Rufo hadn't even seen it; he was busy nailing brother rat.

We didn't have to worry about underbrush; this forest was parklike, trees and grass, no dense undergrowth. Not too bad, that stretch, except that we began to run out of arrows. I was fretting about that when I noticed something. "Hey, up ahead! You're off course. Cut to the right." Star had set course for me when we left the road but it was up to me to hold it; her bump of direction was erratic and Rufo's no better.

"Sorry, milord leader," Star called back. "The going was a trifle steep."

I closed in. "Rufo, how's the leg?" There was sweat on his forehead. Instead of answering me, he said, "Milady, it will be dark soon."

"I know," she answered calmly, "so time for a bite of supper. Milord husband, that great flat rock up ahead seems a nice place."

I thought she had slipped her gears and so did Rufo, but for another reason. "But, milady, we are far behind schedule."

"And much later we shall be unless I attend to your leg again."

"Better you leave me behind," he muttered.

"Better you keep quiet until your advice is asked," I told him. "I wouldn't leave a Horned Ghost to be eaten by rats. Star, how do we do this?"

The great flat rock sticking up like a skull in the trees ahead was the upper surface of a limestone boulder with its base buried. I stood guard in its center with Rufo seated beside me while Star set out wards at cardinal and semi-cardinal points. I didn't get to see what she did because my eyes had to be peeled for anything beyond her, shaft nocked and ready to knock it down or scare it off, while Rufo watched the other side. However, Star told me later that the wards weren't even faintly "magic" but were within reach of Earth technology once some bright boy got the idea—an "electrified fence" without the fence, as radio is a telephone without wires, an analogy that won't hold up. But it was well that I kept honest lockout instead of trying to puzzle out how she sat up that charmed circle, as she was attacked by the only rat we met that had no sense. He came straight at her, my arrow past her ear warned her, and she finished him off by sword. It was a very old male, missing teeth and white whiskers and likely weak in his mind. He was as large as a wolf, and with two death wounds still a red-eyed, mangy fury.

Once the last ward was placed Star told me that I could stop worrying about the sky; the wards roofed as well as fenced the circle. As Rufo says, if She says it, that settles it. Rufo had partly unfolded the foldbox while he watched; I got out her surgical case, more arrows for all of us, and food. No nonsense about manservant and gentlefolk, we ate together, sitting or sprawling and with Rufo lying flat to give his leg a chance while Star served him, sometimes popping food into his mouth in Nevian hospitality. She had worked a long time on his leg while I held a light and handed her things. She packed the wound with a pale jelly before sealing a dressing over it. If it hurt, Rufo didn't mention it. While we ate it grew dark and the invisible fence began to be lined with eyes, glowing back at us with the light we ate by, and almost as numerous as the crowd the morning Igli ate himself. Most of them I judged to be rats. One group kept to themselves with a break in the circle on each side; I decided these must be hogs; the eyes were higher off the ground.

"Milady love," I said, "will those wards hold all night?"

"Yes, milord husband."

"They had better. It is too dark for arrows and I can't see us hacking our way through that mob. I'm afraid you must revise your schedule again."

"I can't, milord Hero. But forget those beasts. Now we fly."

Rufo groaned. "I was afraid so. You know it makes me seasick."

"Poor Rufo," Star said softly. "Never fear, old friend I have a surprise for you. Again such chance as this, I bought Dramamine in Cannes—you know, the drug that saved the Normandy invasion back on Earth. Or perhaps you don't know."

Rufo answered, " 'Know'? I was in that invasion, milady—and I'm allergic to Dramamine; I fed fish all the way to Omaha Beach. Worst night I've ever had—why, I'd rather be here!"

"Rufo," I asked, "were you really at Omaha Beach?"

"Hell, yes, Boss. I did all of Eisenhower's thinking."

"But why? It wasn't your fight."

"You might ask yourself why you're in this fight, Boss. In my case it was French babes. Earthy and uninhibited and always cheerful about it and willing to learn. I remember one little mademoiselle from Armentieres"—he pronounced it correctly—"who hadn't been—"

Star interrupted. "While you two pursue your bachelor reminiscences, I'll get the flight gear ready." She got up and went to the foldbox.

"Go ahead, Rufo," I said, wondering how far he would stretch this one.

"No," he said sullenly. "She wouldn't like it. I can tell. Boss, you've had the damnedest effect on Her. More ladylike by the minute and that isn't like Her at all. First thing you know She will subscribe to Vogue and then there's no telling how far it will go. I don't understand it, it can't be your looks. No offense meant."

"And none taken. Well, tell me another time. If you can remember it."

"I'll never forget her. But, Boss, seasickness isn't the half of it. You think these woods are infested. Well, the ones we are coming to—

wobbly in the knees, at least I will be—those woods have dragons."

"I know."

"So She told you? But you have to see it to believe it. The woods are full of 'em. More than there are Doyles in Boston. Big ones, little ones, and the two-ton teenage size, hungry all the time. You may fancy being eaten by a dragon; I don't. It's humiliating. And final. They ought to spray the place with dragonbane, that's what they ought to do. There ought to be a law."

Star had returned. "No, there should not be a law," she said firmly. "Rufo, don't sound off about things you don't understand. Disturbing the ecological balance is the worst mistake any government can make."

Rufo shut up, muttering. I said, "My true love, what use is a dragon? Riddle me that."

"I've never cast a balance sheet on Nevia, it's not my responsibility. But I can suggest the imbalances that might follow any attempt to get rid of dragons—which the Nevians could do; you've seen that their technology is not to be sneered at. These rats and hogs destroy crops. Rats help to keep the hogs down by eating piglets. But rats are even worse than hogs, on food crops. The dragons graze through these very woods in the daytime—dragons are diurnal, rats are nocturnal and go into their holes in the heat of the day. The dragons and hogs keep the underbrush cropped back and the dragons keep the lower limbs trimmed off. But dragons also enjoy a tasty rat, so whenever one locates a rat hole, it gives it a shot of flame, not always killing adults as they dig two holes for each nest, but certainly killing any babies—and then the dragon digs in and has his favorite snack. There is a longstanding agreement, amounting to a treaty, that as long as the dragons stay in their own territory and keep the rats in check, humans will not bother them."

"But why not kill the rats, and then clean up the dragons?"

"And let the hogs run wild? Please, milord husband, I don't know all the answers in this case; I simply know that disturbing a natural balance is a matter to be approached with fear and trembling—and a very versatile computer. The Nevians seem content not to bother the dragons."

"Apparently we're going to bother them. Will that break the treaty?"

"It's not really a treaty, it's folk wisdom with the Nevians, and a conditioned reflex—or possibly instinct—with the dragons. And we aren't going to bother dragons if we can help it. Have you discussed tactics with Rufo? There won't be time when we get there."

So I discussed how to loll dragons with Rufo, while Star listened and finished her preparations. "All right," Rufo said glumly, "it beats sitting tight, like an oyster on the half shell waiting to be eaten. More dignified. I'm a better archer than you are—or at least as good—so I'll take the hind end, as I'm not as agile tonight as I should be."

"Be ready to switch jobs fast if he swings around."

"You be ready, Boss. I'll be ready for the best of reasons—my favorite skin."

Star was ready and Rufo had packed and reslung the foldbox while we conferred. She placed round garters above each knee of each of us, then had us sit on the rock facing our destination. "That oak arrow, Rufo."

"Star, isn't this out of the Albertus Magnus book?"

"Similar," she said. "My formula is more reliable and the ingredients I use on the garters don't spoil. If you please, milord husband, I must concentrate on my witchery. Place the arrow so that it points at the cave."

I did so. "Is that precise?" she asked.

"If the map you showed me is correct, it is. That's aimed just the way I've been aiming since we left the road."

"How far away is the Forest of Dragons?"

"Uh, look, my love, as long as we're going by air why don't we go straight to the cave and skip the dragons?"

She said patiently, "I wish we could. But that forest is so dense at the top that we can't drop straight down at the cave, no elbow room. And the things that live in those trees, high up, are worse than dragons. They grow—"

"Please!" said Rufo. "I'm airsick already and we're not off the ground."

"Later, Oscar, if you still want to know. In any case we daren't risk encountering them—and won't; they stay up higher than the dragons can reach, they must. How tar to the forest?"

"Mmm, eight and a half miles, by that map and how far we've come—and not more than two beyond that to the Cave of the Gate."

"All right. Arms tight around my waist, both of you, and as much body contact as possible; it's got to work on all of us equally." Rufo and I settled each an arm in a hug about her and clasped hands across her tummy. That's good. Hang on tight." Star wrote figures on the rock beside the arrow.

It sailed away into the night with us after it.

I don't see how to avoid calling this magic, as I can't see any way to build Buck Rogers belts into elastic garters. Oh, if you like, Star hypnotized us, then used psi powers to teleport us eight and a half miles. "Psi" is a better word than "magic"; monosyllables are stronger than polysyllables—see Winston Churchill's speeches. I don't understand either word, any more than I can explain why I never get lost. I just think it's preposterous that other people can.

When I fly in dreams, I use two styles: one is a swan dive and I swoop and swirl and cut didos; the other is sitting Turk fashion like the Little Lame Prince and sailing along by sheer force of personality.

The latter is how we did it, like sailing in a glider with no glider. It was a fine night for flying (all nights in Nevia are fine; it rains just before dawn in the rainy season, they tell me) and the greater moon silvered the ground below us. The woods opened up and became clumps of trees; the forest we were heading for showed black against the distance, much higher and enormously more imposing than the pretty woods behind us. Far off to the left I could glimpse fields of house Lerdki.

We had been in the air about two minutes when Rufo said, "Pa'don me!" and turned his head away. He doesn't have a weak stomach; he didn't get a drop on us. It arched like a fountain. That was the only incident of a perfect flight.

Just before we reached the tall trees Star said crisply, "Amech!" We checked like a heli and settled straight down to a three-fanny landing. The arrow rested on the ground in front of us, again dead. Rufo returned it to his quiver. "How do you feel?" I asked. "And how's your leg?"

He gulped. "Leg's all right. Ground's going up and down."

"Hush!" Star whispered. "He'll be all right. But hush, for your lives!"

We set out moments later, myself leading with drawn sword, Star behind me, and Rufo dogging her, an arrow nocked and ready.

The change from moonlight to deep shadow was blinding and I crept along, feeling for tree trunks and praying that no dragon would be in the path my bump of direction led. Certainly I knew that the dragons slept at night, but I place no faith in dragons. Maybe the bachelors stood watches, the way bachelor baboons do. I wanted to surrender that place of honor to St. George and take a spot farther back.

Once my nose stopped me, a whiff of ancient musk. I waited and slowly became aware of a shape the size of a real estate office—a dragon, sleeping with its head on its tail. I led them around it, making no noise and hoping that my heart wasn't as loud as it sounded.

My eyes were doing better now, reaching out for every stray moonbeam that trickled down—and something else developed. The ground was mossy and barely phosphorescent the way a rotten log sometimes is. Not much. Oh, very little. But it was the way a darkroom light, almost nothing when you go inside, later is plenty of light. I could see trees now and the ground—and dragons.

I had thought earlier, Oh, what's a dozen or so dragons in a big forest? Chances are we won't see one, any more than you catch sight of deer most days in deer country.

The man who gets the all-night parking concession in that forest will make a fortune if he figures out a way to make dragons pay up. We never were out of sight of one after we could see.

Of course these aren't dragons. No, they are uglier. They are saurians, more like tyrannosaurus rex than anything else—big hindquarters and heavy hind legs, heavy tail, and smaller front legs that they use either in walking or to grasp their prey. The head is mostly teeth. They are omnivores whereas I understand that T. rex ate only meat. This is no help; the dragons eat meat when they can get it, they prefer it. Furthermore, these not-so-fake dragons have evolved that charming trick of burning their own sewer gas. But no evolutionary quirk can be considered odd if you use the way octopi make love as a comparison.

Once, far off to the left, an enormous jet lighted up, with a grunting bellow like a very old alligator. The light stayed on several seconds, then died away. Don't ask me—two males arguing over a female, maybe. We kept going, but I slowed after the light went out, as even that much was enough to affect our eyes until our night sight recovered.

I'm allergic to dragons—literally, not just scared silly. Allergic the way poor old Rufo is to Dramamine but more the way cat fur affects some people.

My eyes were watering as soon as we were in that forest, then my sinuses started to clog up and before we had gone half a mile I was using my left fist to rub my upper lip as hard as I could, trying to kill a sneeze with pain. At last I couldn't make it and jammed fingers up my nostrils and bit my lips and the contained explosion almost burst my eardrums. It happened as we were skirting the south end of a truck-and-trailer-size job; I stopped dead and they stopped and we waited. It didn't wake up.

When I started up, my beloved closed on me, grasped my arm; I stopped again. She reached into her pouch, silently found something, rubbed it on my nose and up my nostrils, then with a gentle push signed that we could move on.

First my nose burned cold, as with Vick's salve, then it felt numb, and presently it began to clear.

After more than an hour of this agelong spooky sneak through tall trees and giant shapes, I thought we were going to win "home free." The Cave of the Gate should be not more than a hundred yards ahead and I could see the rise in ground where the entrance would be—and only one dragon in our way and that not in direct line.

I hurried.

There was this little fellow, no bigger than a wallaby and about the same shape, aside from baby teeth four inches long. Maybe he was so young he had to wake to potty in the night, I don't know. All I know is that I passed close to a tree he was behind and stepped on his tail, and he squealed!

He had every right to. But that's when it hit the fan. The adult dragon between us and the cave woke up at once. Not a big one—say about forty feet, including the tail.

Good old Rufo went into action as if he had had endless time to rehearse, dashing around to the brute's south end, arrow nocked and bow bent, ready to loose in a hurry. "Get its tail up!" he called out.

I ran to the front end and tried to antagonize the beast by shouting and waving my sword while wondering how far that flamethrower could throw. There are only four places to put an arrow into a Nevian dragon; the rest is armored like a rhino only heavier. Those four are his mouth (when open), his eyes (a difficult shot; they are little and piggish), and that spot right under his tail where almost any animal is vulnerable. I had figured that an arrow placed in that tender area should add mightily to that "itching, burning" sensation featured in small ads in the backs of newspapers, the ones that say AVOID SURGERY!

My notion was that, if the dragon, not too bright, was unbearably annoyed at both ends at once, his coordination should go all to hell and we could peck away at him until he was useless, or until he got sick of it and ran. But I had to get his tail up, to let Rufo get in a shot. These creatures, satchel-heavy like old T. rex, charge head up and front legs up and balance this by lifting the tail.

The dragon was weaving its head back and forth and I was trying to weave the other way, so as not to be lined up if it turned on the flame—when suddenly I got my first blast of methane, whiffing it before it lighted, and retreated so fast that I backed into that baby I had stepped on before, went clear over it, landed on my shoulders and rolled, and that saved me. Those flames shoot out about twenty feet. The grownup dragon had reared up and still could have fried me, but the baby was in the way. It chopped off the flame—but Rufo yelled, "Bull's-eye!"

The reason that I backed away in time was halitosis. It says here that "pure methane is a colorless, odorless gas." The GI tract methane wasn't pure; it was so loaded with homemade ketones and aldehydes that it made an unlimed outhouse smell like Shalimar.

I figure that Stars giving me that salve to open up my nose saved my life. When my nose clamps down I can't even smell my upper lip.

The action didn't stop while I figured this out; I did all my thinking either before or after, not during. Shortly after Rufo shot it in the bull's-eye, the beast got a look of utter indignation, opened its mouth again without flaming and tried to reach its fanny with both hands. It couldn't—forelegs too short—but it tried. I had returned sword in a hurry once I saw the length of that flame jet and had grabbed my bow. I had time to get one arrow into its mouth, left tonsil maybe.

This message got through faster. With a scream of rage that shook the ground it started for me, belching flame—and Rufo yelled, "A wart seven!"

I was too busy to congratulate him; those critters are fast for their size. But I'm fast, too, and had more incentive. A thing that big can't change course very fast, but it can swing its head and with it the flame. I got my pants scorched and moved still faster, trying to cut around it.

Star carefully put an arrow into the other tonsil, right where the flame came out, while I was dodging. Then the poor thing tried so hard to turn both ways at both of us that it got tangled in its feet and fell over, a small earthquake. Rufo sank another arrow in its tender behind, and Star loosed one that passed through its tongue and stuck on the fletching, not damaging it but annoying it dreadfully.

It pulled itself into a ball, got to its feet, reared up and tried to flame me again. I could tell it didn't like me.

And the flame went out.

This was something I had hoped for. A proper dragon, with castles and captive princesses, has as much fire as it needs, like six-shooters in TV oaters. But these creatures fermented their own methane and couldn't have too big a reserve tank nor under too high pressure—I hoped. If we could nag one into using all its ammo fast, there was bound to be a lag before it recharged.

Meanwhile Rufo and Star were giving it no peace with the pincushion routine. It made a real effort to light up again while I was traversing rapidly, trying to keep that squealing baby dragon between me and the big one, and it behaved like an almost dry Ronson; the flame flickered and caught, shot out a pitiful six feet and went out. But it tried so hard to get me with that last flicker that it fell over again.

I took a chance that it would be sluggy for a second or two like a man who's been tackled nard, ran in and stuck my sword in its right eye.

It gave one mighty convulsion and quit.

(A lucky poke. They say dinosaurs that big have brains the size of chestnuts. Let's credit this beast with one the size of a cantaloupe—but it's still luck if you thrust through an eye socket and get the brain right off. Nothing we had done up to then was more than mosquito bites. But it died from that one poke. St. Michael and St. George guided my blade.)

And Rufo yelled, "Boss! Git fer home!"

A drag race of dragons was closing on us. It felt like that drill in basic where you have to dig a foxhole, then let a tank pass over you.

"This way!" I yelled. "Rufo! This way, not that! Star!" Rufo skidded to a stop, we got headed the same way and I saw the mouth of the cave, black as sin and inviting as a mother's arms. Star hung back; I shoved her in and Rufo stumbled after her and I turned to face more dragons for my lady love.

But she was yelling, "Milord! Oscar! Inside, you idiot! I must set the wards!"

So I got inside fast and she did, and I never did chew her out for calling her husband an idiot.

Chapter 13

The littlest dragon followed us to the cave, not belligerently (although I don't trust anything with teeth that size) out more, I think, the way a baby duck follows anyone who leads. It tried to come in after us, drew back suddenly as its snout touched the invisible curtain, like a kitten hit by a static spark. Then it hung around outside, making wheepling noises.

I began to wonder whether or not Stars wards could stop flame. I found out as an old dragon arrived right after that, shoved his head into the opening, jerked it back indignantly just as the kid had, then eyed us and switched on his flamethrower.

No, the wards don't stop flame.

We were far enough inside that we didn't get singed but the smoke and stink and heat were ghastly and just as deadly if it went on long. An arrow whoofed past my ear and that dragon gave up interest in us. He was replaced by another who wasn't convinced. Rufo, or possibly Star, convinced him before he had time to light his blowtorch. The air cleared; from somewhere inside there was an outward draft.

Meanwhile Star had made a light and the dragons were holding an indignation meeting. I glanced behind me—a narrow, low passage that dropped and turned. I stopped paying attention to Star and Rufo and the inside of the cave; another committee was calling.

I got the chairman in his soft palate before he could belch. The vice-chairman took over and got in a brief remark about fifteen feet long before he, too, changed his mind. The committee backed off and bellowed bad advice at each other.

The baby dragon hung around all during this. When the adults withdrew he again came to the door, just short of where he had burned his nose. "Koo-werp?" he said plaintively. "Koo-werp? Keet!" Plainly he wanted to come in.

Star touched my arm. "If milord husband pleases, we are ready."

"Keet!"

"Right away," I agreed, then yelled, "Beat it, kid! Back to your mama."

Rufo stuck his head alongside mine. "Probably can't," he commented. "Likely that was its mama we ruined."

I didn't answer as it made sense; the adult dragon we had finished off had come awake instantly when I stepped on the kid's tail. This sounds like mother love, if dragons go in for mother love—I wouldn't know.

But it's a hell of a note when you can't even kill a dragon and feel lighthearted afterwards.

We meandered back into that hill, ducking stalactites and stepping around stalagmites while Rufo led with a torch. We arrived in a domed chamber with a floor glazed smooth by unknown years of calcified deposit. It had stalactites in soft pastel shades near the walls and a lovely, almost symmetrical chandelier from the center but no stalagmite under it. Star and Rufo had stuck lumps of the luminescent putty, which is the common night light in Nevia at a dozen points around the room; it bathed the room in a soft light and pointed up the stalactites.

Among them Rufo showed me webs. "Those spinners are harmless," he said. "Just big and ugly. They don't even bite like a spider. But—mind your step!" He pulled me back. "These things are poisonous even to touch. Blindworms. That's what took us so long. Had to be sure the place was clean before warding it. But now that She is setting wards at the entrances I'll give it one more check."

The so-called blindworms were translucent, iridescent things the size of large rattlesnakes and slimy-soft like angleworms; I was glad they were dead. Rufo speared them on his sword, a grisly shishkebab, and carried them out through the entrance we had come in.

He was back quickly and Star finished warding. "That's better," he said with a sigh as he started cleaning his blade. "Don't want their perfume around the house. They rot pretty fast and puts me in mind of green hides. Or copra. Did I ever tell you about the time I shipped as a cook out of Sydney? We had a second mate aboard who never bathed and kept a penguin in his stateroom. Female, of course. This bird was no more cleanly than he was and it used to—"

"Rufo," said Star, "will you help with the baggage?"

"Coming, milady."

We got out food, sleeping mats, more arrows, things that Star needed for her witching or whatever, and canteens to fill with water, also from the foldbox. Star had warned me earlier that Karth-Hokesh was a place where the local chemistry was not compatible with human life; everything we ate or drank we must fetch with us.

I eyed those one-liter canteens with disfavor. "Baby girl, I think we are cutting rations and water too fine."

She shook her head. "We won't need more, truly."

"Lindbergh flew the Atlantic on just a peanut butter sandwich," Rufo put in. "But I urged him to take more."

"How do you know we won't need more?" I persisted. "Water especially."

"I'm filling mine with brandy," Rufo said. "You divvy with me, I'U divvy with you."

"Milord love, water is heavy. If we try to hang everything on us against any emergency, like the White Knight, we'll be too weighted down to fight. I'm going to have to strain to usher through three people, weapons, and a minimum of clothing. Living bodies are easiest; I can borrow power from you both. Once-living materials are next; you've noticed, I think, that our clothing is wool, our bows of wood, and strings are of gut. Things never living are hardest, steel especially, yet we must have swords and, if we still had firearms, I would strain to the limit to get them through, for now we need them. However, milord Hero, I am simply informing you. You must decide—and I feel sure I can handle, oh, even half a hundredweight more of dead things if necessary. If you will select what your genius tells you."

"My genius has gone fishing. But, Star my love, there is a simple answer. Take everything."

"Milord?"

"Jocko set us out with half a ton of food, looks like, and enough wine to float a loan, and a little water. Plus a wide variety of Nevia's best tools for killing, stabbing, and mayhem. Even armor. And more things. In that foldbox is enough to survive a siege, without eating or drinking anything from Karth-Hokesh. The beauty of it is that it weighs only about fifteen pounds, packed—not the fifty pounds you said you could swing by straining. I'll strap it on my own back and won't notice it. It won't slow me down; it may armor me against a swing at my back. Suits?"

Star's expression would have fitted a mother whose child has just caught onto the Stork hoax and is wondering how to tackle an awkward subject. "Milord husband, the mass is much too great. I doubt if any witch or warlock could move it unassisted."

"But folded up?"

"It does not change it, milord; the mass is still there—still more dangerously there. Think of a powerful spring, wound very tight and small, thus storing much energy. It takes enormous power to put a foldbox through a transition in its compacted form, or it explodes.

I recalled a mud volcano that had drenched us and quit arguing. "All right. I'm wrong. But one question—If the mass is there always, why does it weigh so little when folded?"

Star got the same troubled expression. "Your pardon, milord, but we do not share the language—the mathematical language—that would permit me to answer. As yet, I mean; I promise you chance to study if you wish. As a tag, think of it as a tame spacewarp. Or think of the mass being so extremely far away—in a new direction—from the sides of the foldbox that local gravitation hardly matters."

(I remembered a time when my grandmother had asked me to explain television to her—the guts, not the funny pictures. There are things which cannot be taught in ten easy lessons, nor popularized for the masses; they take years of skull sweat. This be treason in an age when ignorance has come into its own and one man's opinion is as good as another's. But there it is. As Star says, the world is what it is—and doesn't forgive ignorance.)

But I was still curious. "Star, is there any way to tell me why some things go through easier than others? Wood easier than iron, for example?"

She looked rueful. "No, because I don't know myself. Magic is not science, it is a collection of ways to do things—ways that work but often we don't know why."

"Much like engineering. Design by theory, then beef it up anyhow."

"Yes, milord husband. A magician is a rule-of-thumb engineer."

"And," put in Rufo, "a philosopher is a scientist with no thumbs. I'm a philosopher. Best of all professions."

Star ignored him and got out a sketch block, showed me what she knew of the great tower from which we must steal the Egg of Phoenix. This block appeared to be a big cube of Plexiglas; it looked like it, felt like it, and took thumbprints like it.

But she had a long pointer which sank into it as if the block were air. With its tip she could sketch in three dimensions; it left a thin glowing line whenever she wanted it—a 3-dimensional blackboard.

This wasn't magic; it was advanced technology—and it will beat the hell out of our methods of engineering drawing when we learn how, especially for complex assemblies such as aviation engines and UHF circuitry—even better than exploded isometric with transparent overlays. The block was about thirty inches on a side and the sketch inside could be looked at from any angle—even turned over and studied from underneath.

The Mile-High Tower was not a spire but a massy block, somewhat like those stepped-back buildings in New York, but enormously larger. Its interior was a maze.

"Milord champion," Star said apologetically, "when we left Nice there was in our baggage a finished sketch of the Tower. Now I must work from memory. However, I had studied the sketch so very long that I believe I can get relations right even if proportions suffer. I feel sure of the true paths, the paths that lead to the Egg. It is possible that false paths and dead ends will not be as complete; I did not study them as hard."

"Can't see that it matters," I assured her. "If I know the true paths, any I don't know are false ones. Which we won't use. Except to hide in, in a pinch."

She drew the true paths in glowing red, false ones in green—and there was a lot more green than red. The critter who designed that tower had a twisty mind. What appeared to be the main entrance went in, up, branched and converged, passed close to the Chamber of the Egg

—then went back down by a devious route and dumped you out, like P. T. Barnum's "This Way to the Egress."

Other routes went inside and lost you in mazes that could not be solved by follow-the-left-wall. If you did, you'd starve. Even routes marked in red were very complex. Unless you knew where the Egg was guarded, you could enter correctly and still spend this year and next January in fruitless search.

"Star, have you been in the Tower?"

"No, milord. I have been in Karth-Hokesh. But far back in the Grotto Hills. I've seen the Tower only from great distance."

"Somebody must have been in it. Surely your—opponents—didn't send you a map."

She said soberly, "Milord, sixty-three brave men have died getting the information I now offer you."

(So now we try for sixty-four!) I said, "Is there any way to study just the red paths?"

"Certainly, milord." She touched a control, green lines faded. The red paths started each from one of the three openings, one "door" and two "windows."

I pointed to the lowest level. "This is the only one of thirty or forty doors that leads to the Egg?"

"That is true."

"Then just inside that door they'll be waiting to clobber us."

"That would seem likely, milord."

"Hmmm . . ." I turned to Rufo. "Rufe, got any long, strong, lightweight line in that plunder?"

"I've got some Jocko uses for hoisting. About like heavy fishing line, breaking strength around fifteen hundred pounds."

"Good boy!" "Figured you might want it. A thousand yards enough?"

"Yes. Anything lighter than that?"

"Some silk trout line."

In an hour we had made all preparations I could think of and that maze was as firmly in my head as the alphabet. "Star hon, we're ready to roll. Want to whomp up your spell?"

"No, milord."

"Why not? 'Twere best done quickly."

"Because I can't, my darling. These Gates are not true gates; there is always a matter of timing. This one will be ready to open, for a few minutes, about seven hours from now, then cannot be opened again for several weeks."

I had a sour thought. "If the buckos we are after know this, they'll hit us as we come out."

"I hope not, milord champion. They should be watching for us to appear from the Grotto Hills, as they know we have a Gate somewhere in those hills—and indeed that is the Gate I planned to use. But this Gate, even if they know of it, is so badly located—for us—that I do not think they would expect us to dare it."

"You cheer me up more all the time. Have you thought of anything to tell me about what to expect? Tanks? Cavalry? Big green giants with hairy ears?"

She looked troubled. "Anything I say would mislead you, milord. We can assume that their troops will be constructs rather than truly living creatures . . . which means they can be anything. Also, anything may be illusion. I told you about the gravity?"

"I don't think so."

"Forgive me. I'm tired and my mind isn't sharp. The gravity varies, sometimes erratically. A level stretch will seem to be downhill, then quickly uphill. Other things . . . any of which may be illusion."

Rufo said, "Boss, if it moves, shoot it. If it speaks, cut its throat. That spoils most illusions. You don't need a program; there'll be just us—and all the others. So when in doubt, kill it. No sweat."

I grinned at him. "No sweat. Okay, well worry when we get there. So let's quit talking."

"Yes, milord husband," Star seconded. "We had best get several hours' sleep."

Something in her voice had changed. I looked at her and she was subtly different, too. She seemed smaller, softer, more feminine and compliant than the Amazon who had fired arrows into a beast a hundred times her weight less than two hours before.

"A good idea," I said slowly and looked around. While Star had been sketching the mazes of the Tower, Rufo had repacked what we couldn't take and—I now noticed—put one sleeping pad on one side of the cave and the other two side by side as far from the first as possible.

I silently questioned her by glancing at Rufo and shrugging an implied, "What now?"

Her answering glance said neither yes nor no. Instead she called out, "Rufo, go to bed and give that leg a chance. Don't lie on it. Either belly down or face the wall."

For the first time Rufo showed his disapproval of what we had done. He answered abruptly, not what Star said but what she may have implied: "You couldn't hire me to look!"

Star said to me in a voice so low I barely heard it, "Forgive him, milord husband. He is an old man, he has his quirks. Once he is in bed I will take down the lights."

I whispered, "Star my beloved, it still isn't my idea of how to run a honeymoon."

She searched my eyes. "This is your will, milord love?"

"Yes. The recipe calls for a jug of wine and a loaf of bread. Not a word about a chaperon. I'm sorry."

She put a slender hand against my chest, looked up at me. "I am glad, milord."

"You are?" I didn't see why she had to say so.

"Yes. We both need sleep. Against the morrow. That your strong sword arm may grant us many morrows."

I felt better and smiled down at her. "Okay, my princess. But I doubt if I'll sleep."

"Ah, but you will!"

"Want to bet?"

"Hear me out, milord darling. Tomorrow . . . after you have won . . . we go quickly to my home. No more waitings, no more troubles. I would that you knew the language of my home, so that you will not feel a stranger. I want it to be your home, at once. So? Will milord husband dispose himself for bed? Lie back and let me give him a language lesson? You will sleep, you know that you will."

"Well . . . it's a fine idea. But you need sleep even more than I do."

"Your pardon, milord, but not so. Four hours' sleep puts spring in my step and a song on my lips."

"Well . . . "

Five minutes later I was stretched out, staring into the most beautiful eyes in any world and listening to her beloved voice speak softly in a language strange to me . . .

Chapter 14

Rufo was shaking my shoulder. "Breakfast, Boss!" He shoved a sandwich into my hand and a pot of beer into the other. "That's enough to fight on and lunch is packed. I've laid out fresh clothes and your weapons and I'll dress you as soon as you finish. But snap it up. We're on in a few minutes." He was already dressed and belted.

I yawned and took a bite of sandwich (anchovies, ham and mayonnaise, with something that wasn't quite tomato and lettuce)—and looked around. The place beside me was empty but Star seemed to have just gotten up; she was not dressed. She was on her knees in the center of the room, drawing some large design on the floor.

"Morning, chatterbox," I said. "Pentacle?"

"Mmm—" she answered, not looking up.

I went over and watched her work. Whatever it was, it was not based on a five-cornered star. It had three major centers, was very intricate, had notations here and there—I recognized neither language nor script—and the only sense I could abstract from it was what appeared to be a hypercube seen face on. "Had breakfast, hon?"

"I fast this morning."

"You're skinny now. Is that a tesseract?"

"Stop it!"

Then she pushed back her hair, looked up, and smiled ruefully. "I'm sorry, darling. The witch is a bitch, that's certain. But please don't look over my shoulder. I'm having to do this by memory; I lost my books in the marsh—and it's difficult. And no questions now, please, please. You might shake my confidence—and I must be utterly confident."

I made a leg. "Your pardon, milady."

"Don't be formal with me, darling. Love me anyhow and give me a quick kiss—then let me be."

So I leaned over and gave her a high-caloric kiss, with mayonnaise, and let her be. I dressed while I finished the sandwich and beer, then sought out a natural alcove just short of the wards in the passage, one which had been designated the men's room. When I came back Rufo was waiting with my sword belt "Boss, you'd be late for your own hanging."

"I hope so."

A few minutes later we were standing on that diagram, Star on pitcher's mound with Rufo and myself at first and third bases. He and I were much hung about, myself with two canteens and Star's sword belt (on its last notch) as well as my own, Rufo with Star's bow slung and with two quivers, plus her medic's kit and lunch. We each had longbow strung and tucked under left arm; we each had drawn sword. Star's tights were under my belt behind in an untidy tail, her jacket was crumpled under Rufo's belt, while her buskins and hat were crammed into pockets—etc. We looked like a rummage sale.

But this did leave Rufo's left hand and mine free. We faced outward with swords at ready, reached behind us and Star clasped us each firmly by hand. She stood in the exact center, feet apart and planted solidly and was wearing that required professionally of witches when engaged in heavy work, i.e., not even a bobby pin. She looked magnificent, hair shaggy, eyes shining, and face flushed, and I was sorry to turn my back.

"Ready, my gallants?" she demanded, excitement in her voice.

"Ready," I confirmed.

"*Ave, Imperatrix, nos morituri te—*"

"Stop that, Rufo! Silence!" She began to chant in a language unknown to me. The back of my neck prickled.

She stopped, squeezed our hands much harder, and shouted, "Now!"

Sudden as a slammed door, I find I'm a Booth Tarkington hero in a Mickey Spillane situation.

I don't have time to moan. Here is this thing in front of me, about to chop me down, so I run my blade through his guts and yank it free while he makes up his mind which way to fall; then I dose his buddy the same way. Another one is squatting and trying to get a shot at my legs past the legs of his squad mates. I'm as busy as a one-armed beaver with paperhangers and hardly notice a yank at my belt as Star recovers her sword.

Then I do notice as she kills the hostile who wants to shoot me. Star is everywhere at once, naked as a frog and twice as lively. There was a dropped-elevator sensation at transition, and suddenly reduced gravitation could have been bothersome had we time to indulge it. Star makes use of it. After stabbing the laddie who tries to shoot me, she sails over my head and the head of a new nuisance, poking him in the neck as she passes and he isn't a nuisance any longer.

I think she helps Rufo, but I can't stop to look. I hear his grunts behind me and that tells me that he is still handing out more than he's catching.

Suddenly he yells, "Down!" and something hits the back of my knees and I go down—land properly limp and am about to roll to my feet when I realize Rufo is the cause. He is belly down by me and shooting what has to be a gun at a moving target out across the plain, himself behind the dead body of one of our playmates.

Star is down, too, but not fighting. Something has poked a hole through her right arm between elbow and shoulder.

Nothing else seemed to be alive around me, but there were targets four to five hundred feet away and opening rapidly. I saw one fall, heard Zzzzt, smelled burning flesh near me. One of those guns was lying across a body to my left; I grabbed it and tried to figure it out. There was a shoulder brace and a tube which should be a barrel; nothing else looked familiar.

"Like this, my Hero." Star squirmed to me, dragging her wounded arm and leaving a trail of blood. "Race it like a rifle and sight it so. There is a stud under your left thumb. Press it. That's all—no windage, no elevation."

And no recoil, as I found when I tracked one of the running figures with the sights and pressed the stud. There was a spurt of smoke and down he went. "Death ray," or Laser beam, or whatever—line it up, press the stud, and anyone on the far end quit the party with a hole burned in him.

I got a couple more, working right to left, and by then Rufo had done me out of targets. Nothing moved, so far as I could see, anywhere.

Rufo looked around. "Better stay down, Boss." He rolled to Star, opened her medic's kit at his own belt, and put a rough and hasty compress on her arm.

Then he turned to me. "How bad are you hurt, Boss?"

"Me? Not a scratch."

"What's that on your tunic? Ketchup? Someday somebody is going to offer you a pinch of snuff. Let's see it."

I let him open my jacket. Somebody, using a saw-tooth edge, had opened a hole in me on my left side below the ribs. I had not noticed it and hadn't felt it—until I saw it and then it hurt and I felt queasy. I strongly disapprove of violence done to me. While Rufo dressed it, I looked around to avoid looking at it.

We had killed about a dozen of them right around us, plus maybe half that many who had fled—and had shot all who fled, I think. How? How can a 60-lb. dog armed only with teeth take on, knock down, and hold prisoner an armed man? Ans: By all-out attack.

I think we arrived as they were changing the guard at that spot known to be a Gate—and had we arrived even with swords sheathed we would have been cut down. As it was, we killed a slew before most of them knew a fight was on. They were routed, demoralized, and we slaughtered the rest, including those who tried to bug out. Karate and many serious forms of combat (boxing isn't serious, nor anything with rules)—all these work that same way: go-for-broke, all-out attack with no wind up. These are not so much skills as an attitude.

I had time to examine our late foes; one was faced toward me with his belly open. "Iglis" I would call them, but of the economy model. No beauty and no belly buttons and not much brain—presumably constructed to do one thing: fight, and try to stay alive. Which describes us, too—but we did it faster.

Looking at them upset my stomach, so I looked at the sky. No improvement—it wasn't decent sky and wouldn't come into focus. It crawled and the colors were wrong, as jarring as some abstract paintings. I looked back at our victims, who seemed almost wholesome compared with that "sky."

While Rufo was doctoring me, Star squirmed into her tights and put on her buskins. "Is it all right for me to sit up to get into my jacket?" she asked.

"No," I said. "Maybe they'll think we're dead." Rufo and I helped her finish dressing without any of us rising up above the barricade of flesh. I'm sure we hurt her arm but all she said was, "Sling my sword lefthanded. What now, Oscar?"

"Where are the garters?"

"Got em. But I'm not sure they will work. This is a very odd place."

"Confidence," I told her. "That's what you told me a few minutes ago. Put your little mind to work believing you can do it." We ranged ourselves and our plunder, now enhanced by three "rifles" plus side arms of the same sort, then laid out the oaken arrow for the top of the Mile-High Tower. It dominated one whole side of the scene, more a mountain than a building, black and monstrous.

"Ready?" asked Star. "Now you two believe, tool" She scrawled with her finger in the sand. "Go!"

We went. Once in the air, I realized what a naked target we were—but we were a target on the ground, too, for anyone up on that tower, and worse if we had hoofed it. "Faster!" I yelled in Stars ear. "Make us go faster!"

We did. Air shrilled past our ears and we bucked and dipped and sideslipped as we passed over those gravitational changes Star had warned me about—and perhaps that saved us; we made an evasive target. However, if we got all of that guard party, it was possible that no one in the Tower knew we had arrived.

The ground below was gray-black desert surrounded by a mountain ringwall like a lunar crater and the Tower filled the place of a central peak. I risked another look at the sky and tried to figure it out. No sun. No stars. No black sky nor blue—light came from all over and the "sky" was ribbons and boiling shapes and shadow holes of all colors.

"What in God's name land of planet is this?" I demanded.

"It's not a planet," she yelled back. "It's a place, in a different sort of universe. It's not fit to live in."

"Somebody lives here." I indicated the Tower.

"No, no, nobody lives here. That was built just to guard the Egg."

The monstrousness of that idea didn't soak in right then. I suddenly recalled that we didn't dare eat or drink here—and started wondering how we could breathe the air if the chemistry was that poisonous. My chest felt tight and started to burn. So I asked Star and Rufo moaned. (He rated a moan or two; he hadn't thrown up. I don't think he had.)

"Oh, at least twelve hours," she said. "Forget it. No importance."

Whereupon my chest really hurt and I moaned, too.

We were dumped on top of the Tower right after that; Star barely got out "Amech!" in time to keep us from zooming past.

The top was flat, seemed to be black glass, was about two hundred yards square—and there wasn't a fiddlewinking thing to fasten a line to. I had counted on at least a ventilator stack.

The Egg of the Phoenix was about a hundred yards straight down. I had had two plans in mind if we ever reached the Tower. There were three openings (out of hundreds) which led to true paths to the Egg—and to the Never-Born, the Eater of Souls, the M.P. guarding it. One was at ground level and I never considered it. A second was a couple of hundred feet off the ground and I had given that serious thought: loose an arrow with a messenger line so that the line passed over any projection above that hole; use that to get the strong line up, then go up the line—no trick for any crack Alpinist, which I wasn't but Rufo was.

But the great Tower turned out to have no projections, real modern simplicity of design—carried too far.

The third plan was, if we could reach the top, to let ourselves down by a line to the third non-fake entrance, almost on level with the Egg. So here we were, all set—and no place to hitch.

Second thoughts are wonderful thoughts—why hadn't I had Star drive us straight into that hole in the wall?

Well, it would take very fine sighting of that silly arrow; we might hit the wrong pigeonhole. But the important reason was that I hadn't thought of it.

Star was sitting and nursing her wounded arm. I said, "Honey, can you fly us, slow and easy, down a couple of setbacks and into that hole we want?"

She looked up with drawn face. "No."

"Well. Too bad."

"I hate to tell you—but I burned out the garters on that speed run. They won't be any good until I can recharge them. Not things I can get here. Green mug-wort, blood of a hare—things like that."

"Boss," said Rufo, "how about using the whole top of the Tower as a hitching post?"

"How do you mean?"

"We've got lots of line."

It was a workable notion—walk the line around the top while somebody else held the bitter end, then tie it and go down what hung over. We did it—and finished up with only a hundred feet too little of line out of a thousand yards.

Star watched us. When I was forced to admit that a hundred feet short was as bad as no line at all, she said thoughtfully, "I wonder if Aaron's Rod would help?"

"Sure, if it was stuck in the top of this overgrown ping-pong table. What's Aaron's Rod?"

"It makes stiff things limp and limp things stiff. No, no, not that. Well, that, too, but what I mean is to lay this line across the roof with about ten feet hanging over the far side. Then make that end and the crossing part of the line steel hard—sort of a hook."

"Can you do it?"

"I don't know. It's from The Key of Solomon and it's an incantation. It depends on whether I can remember it—and on whether such things work in this universe."

"Confidence, confidence! Of course you can."

"I can't even think how it starts. Darling, can you hypnotize? Rufo can't—or at least not me."

"I don't know a thing about it."

"Do just the way I do with you for a language lesson. Look me in the eye, talk softly, and tell me to remember the words. Perhaps you had better lay out the line first."

We did so and I used a hundred feet instead of ten for the bill of the hook, on the more-is-better principle. Star lay back and I started talking to her, softly (and without conviction) but over and over again.

Star closed her eyes and appeared to sleep. Suddenly she started to mumble in tongues.

"Hey, Boss! Damn thing is hard as rock and stiff as a life sentence!"

I told Star to wake up and we slid down to the setback below as fast as we could, praying that it wouldn't go limp on us. We didn't shift the line; I simply had Star cause more of it to starch up, then I went on down, made certain that I had the right opening, three rows down and fourteen over, then Star slid down and I caught her in my arms; Rufo lowered the baggage, weapons mostly, and followed. We were in the Tower and had been on the planet—correction: the "place"—we had been in the place called Karth-Hokesh not more than forty minutes.

I stopped, got the building matched in my mind with the sketch block map, fixed the direction and location of the Egg, and the "red line" route to it, the true path.

Okay, go on in a few hundred yards, snag the Egg of the Phoenix and go! My chest stopped hurting.

Chapter 15

"Boss," said Rufo, "Look out over the plain."

"At what?"

"At nothing," he answered. "Those bodies are gone. You sure as hell ought to be able to see them, against black sand and not even a bush to break the view."

I didn't look. "That's the moose's problem, damn it! We've got work to do. Star, can you shoot lefthanded? One of these pistol things?"

"Certainly, milord."

"You stay ten feet behind me and shoot anything that moves. Rufo, you follow Star, bow ready and an arrow nocked. Try for anything you see. Sling one of those guns—make a sling out of a bit of line." I frowned. "We'll have to abandon most of this. Star, you can't bend a bow, so leave it behind, pretty as it is, and your quiver. Rufo can sling my quiver with his; we use the same arrows. I hate to abandon my bow, it suits me so. But I must. Damn."

"I'll carry it, my Hero."

"No, any clutter we can't use must be junked." I unhooked my canteen, drank deeply, passed it over. "You two finish it and throw it away."

While Rufo drank, Star slung my bow. "Milord husband? It weighs nothing this way and doesn't hamper my shooting arm. So?"

"Well—If it gets in your way, cut the string and forget it. Now drink your fill and we go." I peered down the corridor we were in—fifteen feet wide and the same high, lighted from nowhere and curving away to the right, which matched the picture in my mind. "Ready? Stay closed up. If we can't slice it, shoot it, or shaft it, we'll salute it." I drew sword and we set out, quick march.

Why my sword, rather than one of those "death ray" guns? Star was carrying one of those and knew more about one than I did. I didn't even know how to tell if one was charged, nor had I judgment in how long to press the button. She could shoot, her bowmanship proved that, and she was at least as cool in a fight as Rufo or myself.

I had disposed weapons and troops as well as I knew how. Rufo, behind with a stock of arrows, could use them if needed and his position gave him time to shift to either sword or Buck Rogers "rifle" if his judgment said to—and I didn't need to advise him; he would.

So I was backed up by long-range weapons ancient and ultramodern in the hands of people who knew how to use them and temperament to match—the latter being the more important. (Do you know how many men in a platoon actually shoot in combat? Maybe six. More likely three. The rest freeze up.)

Still, why didn't I sheathe my sword and carry one of those wonder weapons?

A properly balanced sword is the most versatile weapon for close quarters ever devised. Pistols and guns are all offense, no defense; close on him fast and a man with a gun can't shoot, he has to stop you before you reach him. Close on a man carrying a blade and you'll be spitted like a roast pigeon—unless you have a blade and can use it better than he can.

A sword never jams, never has to be reloaded, is always ready. Its worst shortcoming is that it takes great skill and patient, loving practice to gain that skill; it can't be taught to raw recruits in weeks, nor even months.

But most of all (and this was the real reason) to grasp the Lady Vivamus and feel her eagerness to bite gave me courage in a spot where I was scared spitless.

They (whoever "they" were) could shoot us from ambush, gas us, boobytrap us, many things. But they could do those things even if I carried one of those strange guns. Sword in hand, I was relaxed and unafraid—and that made my tiny "command" more nearly safe. If a C.O. needs to carry a rabbit's foot, he should—and the grip of that sweet sword was bigger medicine than all the rabbits' feet in Kansas.

The corridor stretched ahead, no break, no sound, no threat. Soon the opening to the outside could no longer be seen. The great Tower felt empty but not dead; it was alive the way a museum is alive at night, with crowding presence and ancient evil. I gripped my sword tightly, then consciously relaxed and flexed my fingers.

We came to a sharp left turn. I stopped short. "Star, this wasn't on your sketch."

She didn't answer. I persisted, "Well, it wasn't. Was it?"

"I am not sure, milord."

"Well, I am. Hmm—"

"Boss," said Rufo, "are you dead sure we entered by the right pigeonhole?"

"I'm certain. I may be wrong but I'm not uncertain—and if I'm wrong, we're dead pigeons anyhow. Mmm—Rufo, take your bow, put your hat on it, stick it out where a man would look around that corner if he were standing—and time it as I do look out, but lower down." I got on my belly.

"Ready . . . now!" I sneaked a look six inches above the floor while Rufo tried to draw fire higher up.

Nothing in sight, just bare corridor, straight now.

"Okay, follow me! We hurried around the corner.

I stopped after a few paces. "What the hell?"

"Something wrong Boss?"

"Plenty." I turned and sniffed. "Wrong as can be. The Egg is up that way," I said, pointing, "maybe two hundred yards—by the sketch block map."

"Is that bad?"

"I'm not sure. Because it was that same direction and angle, off on the left, before we turned that corner. So now it ought to be on the right."

Rufo said, "Look, Boss, why don't we just follow the passageways you memorized? You may not remember every little—"

"Shut up. Watch ahead, down the corridor. Star, stand there in the corner and watch me. I'm going to try something."

They placed themselves, Rufo "eyes ahead" and Star where she could see both ways, at the right-angle bend. I went back into the first reach of corridor, then returned. Just short of the bend I closed my eyes and kept on.

I stopped after another dozen steps and opened my eyes. "That proves it," I said to Rufo.

"Proves what?"

"There isn't any bend in the corridor." I pointed to the bend.

Rufo looked worried. "Boss, how do you feel?" He tried to touch my cheek.

I pulled back. "I'm not feverish. Come with me, both of you." I led them back around that right angle some fifty feet and stopped. "Rufo, loose an arrow at that wall ahead of us at the bend. Lob it so that it hits the wall about ten feet up."

Rufo sighed but did so. The arrow rose true, disappeared in the wall. Rufo shrugged. "Must be pretty soft up there. You've lost us an arrow. Boss."

"Maybe. Places and follow me." We took that corner again and here was the spent arrow on the floor somewhat farther along than the distance from loosing to bend. I let Rufo pick it up; he looked closely at the Doral chop by the fletching, returned it to quiver. He said nothing. We kept going.

We came to a place where steps led downward—but where the sketch in my head called for steps leading up. "Mind the first step," I called back. "Feel for it and don't fall."

The steps felt normal, for steps leading downward—with the exception that my bump of direction told me that we were climbing, and our destination changed angle and distance accordingly. I closed my eyes for a quick test and found that I was indeed climbing, only my eyes were deceived. It was like one of those "crooked houses" in amusement parks, in which a "level" floor is anything but level—like that but cubed.

I quit questioning the accuracy of Star's sketch and tracked its trace in my head regardless of what my eyes told me. When the passageway branched four ways while my memory showed only a simple branching, one being a dead end, I unhesitatingly closed my eyes and followed my nose—and the Egg stayed where it should stay, in my mind.

But the Egg did not necessarily get closer with each twist and turn save in the sense that a straight line is not the shortest distance between two points—is it ever? The path was as twisted as guts in a belly; the architect had used a pretzel for a straight edge. Worse yet, another time when we were climbing "up" stairs—at a piece level by the sketch—a gravitational anomaly caught us with a lull turn and we were suddenly sliding down the ceiling.

No harm done save that it twisted again as we hit bottom and dumped us from ceiling to floor. With both eyes peeled I helped Rufo gather up arrows and off we set again. We were getting close to the lair of the Never-Born—and the Egg.

Passageways began to be narrow and rocky, the false twists tight and hard to negotiate—and the light began to fail.

That wasn't the worst. I'm not afraid of dark nor of tight places; it takes a department store elevator on Dollar Day to give me claustrophobia. But I began to hear rats.

Rats, lots of rats, running and squeaking in the walls around us, under us, over us. I started to sweat and was sorry I had taken that big drink of water. Darkness and closeness got worse, until we were crawling through a rough tunnel in rock, then inching along on our bellies in total darkness as if tunneling out of Chateau d'If . . . and rats brushed past us now, squeaking and chittering.

No, I didn't scream. Star was behind me and she didn't scream and she didn't complain about her wounded arm—so I couldn't scream. She patted me on the foot each time she inched forward, to tell me that she was all right and to report that Rufo was okay, too. We didn't waste strength on talk.

I saw a faint something, two ghosts of light ahead, and stopped and stared and blinked and stared again. Then I whispered to Star, "I see something. Stay put, while I move up and see what it is. Hear me?"

"Yes, milord Hero."

"Tell Rufo."

Then I did the only really brave thing I have ever done in my life: I inched forward. Bravery is going on anyhow when you are so terrified your sphincters won't hold and you can't breathe and your heart threatens to stop, and that is an exact description for that moment of E. C. Gordon, ex-Pfc. and hero by trade. I was fairly certain what those two faint lights were and the closer I got the more certain I was—I could smell the damned thing and place its outlines.

A rat. Not the common rat that lives in city dumps and sometimes gnaws babies, but a giant rat, big enough to block that rat hole but enough smaller than I am to have room to maneuver in attacking me —room I didn't have at all. The best I could do was to wriggle forward with my sword in front of me and try to Keep the point aimed so that I would catch him with it, make mm eat steel—because if he dodged past that point I would have nothing but bare hands and no room to use them. He would be at my face.

I gulped sour vomit and inched forward. His eyes seemed to drop a little as if he were crouching to charge.

But no rush came. The lights got more definite and wider apart, and when I had squeezed a foot or two farther I realized with shaking relief that they were not rat's eyes but something else—anything, I didn't care what.

I continued to inch forward. Not only was the Egg in that direction but I still didn't know what it was and I had best see before telling Star to move up.

The "eyes" were twin pinholes in a tapestry that covered the end of that rat hole. I could see its embroidered texture and I found I could look through one of its imperfections when I got up to it.

There was a large room beyond, the floor a couple of feet lower than where I was. At the far end, fifty feet away, a man was standing by a bench, reading a book. Even as I watched he raised his eyes and glanced my way. He seemed to hesitate.

I didn't. The hole had eased enough so that I managed one foot under and lunged forward, brushing the arras aside with my sword. I stumbled and bounced to my feet, on guard.

He was at least as fast. He had slapped the book down on the bench and drawn sword himself, advanced toward me, while I was popping out of that hole. He stopped, knees bent, wrist straight, left arm back, and point for me, perfect as a fencing master, and looked me over, not yet engaged by three or four feet between our steels.

I did not rush him. There is a go-for-broke tactic, "the target," taught by the best swordmasters, which consists in headlong advance with arm, wrist, and blade in full extension—all attack and no attempt to parry. But it works only by perfect timing when you see your opponent slacken up momentarily. Otherwise it is suicide.

This time it would have been suicide; he was as ready as a tomcat with his back up. So I sized him up while he looked me over. He was a smallish neat man with arms long for his height—I might or might not have reach on him, especially as his rapier was an old style, longer than Lady Vivamus (but slower thereby, unless he had a much stronger wrist)—and he was dressed more for the Paris of Richelieu than for Karth-Hokesh. No, that's not fair; the great black Tower had no styles, else I would have been as out of style in my fake Robin Hood getup. The Iglis we had killed had worn no clothes.

He was an ugly cocky little man with a merry grin and the biggest nose west of Durante—made me think of my first sergeant's nose, very sensitive he was about being called "Schnozzola." But the resemblance stopped there; my first sergeant never smiled and had mean, piggish eyes; this man's eyes were merry and proud.

"Are you Christian?" he demanded.

"What's it to you?"

"Nothing. Blood's blood, either way. If Christian you be, confess. If pagan, call your false gods. I'll allow you no more than three stanzas. But I'm sentimental, I like to know what I'm killing."

"I'm American."

"Is that a country? Or a disease? And what are you doing in Hoax?"

" 'Hoax'? Hokesh?"

He shrugged only with his eyes, his point never moved. "Hoax, Hokesh—a matter of geography and accent; this chateau was once in the Carpathians, so 'Hokesh' it is, if 'twill make your death merrier. Come now, let us sing."

He advanced so fast and smoothly that he seemed to apport and our blades rang as I parried his attack in sixte and riposted, was countered—remise, reprise, beat-and-attack—the phrase ran so smoothly, so long, and in such variation that a spectator might have thought that we were running through Grand Salute.

But I knew! That first lunge was meant to kill me, and so was his every move throughout the phrase. At the same time he was feeling me out, trying my wrist, looking for weaknesses, whether I was afraid of low line and always returned to high or perhaps was a sucker for a disarm. I never lunged, never had a chance to; every part of the phrase was forced on me, I simply replied, tried to stay alive.

I knew in three seconds that I was up against a better swordsman than myself, with a wrist like steel yet supple as a striking snake. He was the only swordsman I have ever met who used prime and octave—used them, I mean, as readily as sixte and carte. Everyone learns them and my own master made me practice them as much as the other six—but most fencers don't use them; they simply may be forced into them, awkwardly and just before losing a point.

I would lose, not a point, but my life—and I knew, long before the end of that first long phrase, that my life was what I was about to lose, by all odds.

Yet at first clash the idiot began to sing!

"Lunge and counter and thrust,
"Sing me the logic of steel!
"Tell me, sir, how do you feel?

"Riposte and remise if you must
"In logic long known to be just.

"Shall we argue, rebut and refute
"In enthymeme clear as your eye?
"Tell me, sir, why do you sigh?
"Tu es fatigue, sans doute?
"Then sleep while I'm counting the loot."

The above was long enough for at least thirty almost successful attempts on my life, and on the last word he disengaged as smoothly and unexpectedly as he had engaged.

"Come, come, lad!" he said. "Pick it up! Would let me sing alone? Would die as a clown with ladies watching? Sing! —and say goodbye gracefully, with your last rhyme racing your death rattle." He banged his right boot in a flamenco stomp. "Try! The price is the same either way."

I didn't drop my eyes at the sound of his boot; it's an old gambit, some fencers stomp on every advance, every feint, on the chance that the noise will startle opponent out of timing, or into rocking back, and thus gain a point. I had last fallen for it before I could shave.

But his words gave me an idea. His lunges were short—full extension is fancy play for foils, too dangerous for real work. But I had been retreating, slowly, with the wall behind me. Shortly, when he re-engaged, I would either be a butterfly pinned to that wall, or stumble over something unseen, go arsy-versy, then spiked like wastepaper in the park. I didn't dare leave that wall behind me.

Worst, Star would be coming out of that rat hole behind me any moment now and might be killed as she emerged even if I managed to kill him at the same time. But if I could turn him around—My beloved was a practical woman; no "sportsmanship" would keep her steel stinger out of his back.

But the happy counter-thought was that if I went along with his madness, tried to rhyme and sing, he might play me along, amused to hear what I could do, before he killed me.

But I couldn't afford to stretch it out. Unfelt, he had pinked me in the forearm. Just a bloody scratch that Star could make good as new in minutes—but it would weaken my wrist before long and it disadvantaged me for low line: Blood makes a slippery grip.

"First stanza," I announced, advancing and barely engaging, foible-a-foible. He respected it, not attacking, playing with the end of my blade, tiny counters and leather-touch parries.

That was what I wanted. I started circling right as I began to recite—and he let me:

"Tweedledum and Tweedledee

"Agreed to rustle cattle.
"Said Tweedledum to Tweedledee
"I'll use my nice new saddle."

"Come, come, my old!" he said chidingly. "No stealing. Honor among beeves, always. And rhyme and scansion limp. Let your Carroll fall trippingly off the tongue."

"I'll try," I agreed, still moving right. "Second stanza—

"I sing of two lasses in Birmingham,
"Shall we weep at the scandal concerning them?"—

—and I rushed him.

It didn't quite work. He had, as I hoped, relaxed the tiniest bit, evidently expecting that I would go on with mock play, tips of Hades alone, while I was reciting.

It caught him barely off guard but he failed to fall back, parrying strongly instead and suddenly we were in an untenable position, corps-a-corps, forte-a-forte, almost tete-a-tete.

He laughed in my face and sprang back as I did, landing us back en garde. But I added something. We had been fencing point only. The point is mightier than the edge but my weapon had both and a man used to the point is sometimes a sucker for a cut. As we separated I flipped my blade at his head.

I meant to split it open. No time for that, no force behind it, but it sliced his right forehead almost to eyebrow.

"Touche" he shouted. "Well struck. And well sung. Let's have the rest of it."

"All right," I agreed, fencing cautiously and waiting for blood to run into his eyes. A scalp wound is the bloodiest of flesh wounds and I had great hopes for this one. And swordplay is an odd thing; you don't really use your mind, it is much too fast for that. Your wrist thinks and tells your feet and body what to do, bypassing your brain—any thinking you do is for later, stored instructions, like a programmed computer.

I went on:

"They're now in the dock
"For lifting the—"

I got him in the forearm, the way he got me, but worse. I thought I had him and pressed home. But he did something I had heard of, never seen: He retreated very fast, flipped his blade and changed hands.

No help to me—A righthanded fencer hates to take on a southpaw; it throws everything out of balance, whereas a southpaw is used to the foibles of the righthanded majority—and this son of a witch was just as strong, just as skilled, with his left hand. Worse, he now had toward me the eye undimmed by blood.

He pinked me again, in the kneecap, hurting like fire and slowing me. Despite his wounds, much worse than mine, I knew I couldn't go on much longer. We settled down to grim work.

There is a riposte in seconde, desperately dangerous but brilliant—if you bring it off. It had won me several matches in 6pee with nothing at stake but a score. It starts from sixte; first your opponent counters. Instead of parrying to carte, you press and bind, sliding all the way down and around his blade and corkscrewing in till your point finds flesh. Or you can beat, counter, and bind, starting from sixte, thus setting it off yourself.

Its shortcoming is that, unless it is done perfectly, it is too late for parry and riposte; you run your own chest against his point.

I didn't try to initiate it, not against this swordsman; I just thought about it.

We continued to fence, perfectly each of us. Then he stepped back slightly while countering and barely skidded in his own blood.

My wrist took charge; I corkscrewed in with a perfect bind to seconde —and my blade went through his body.

He looked surprised, brought his bell up in salute, and crumpled at the knees as the grip fell from his hand. I had to move forward with my blade as he fell, then started to pull it out of him.

He grasped it. "No, no, my friend, please leave it there. It corks the wine, for a time. Your logic is sharp and touches my heart. Your name, sir?"

"Oscar of Gordon."

"A good name. One should never be killed by a stranger. Tell me, Oscar of Gordon, have you seen Carcassonne?"

"No."

"See it. Love a lass, kill a man, write a book, fly to the Moon—I have done all these." He gasped and foam came out of his mouth, pink. "I've even had a house fall on me. What devastating wit! What price honor when timber taps thy top? 'Top?' tap? taupe, tape—tonsor! —when timber taps thy tonsor. You shaved mine."

He choked and went on: "It grows dark. Let us exchange gifts and part friends, if you will. My gift first, in two parts: Item: You are lucky, you shall not die in bed."

"I guess not."

"Please. Item: Friar Guillaume's razor ne'er shaved the barber, it is much too dull. And now your gift, my old—and be quick, I need it. But first—now did that limerick end?"

I told him. He said, very weakly, almost in rattle, "Very good. Keep trying. Now grant me your gift, I am more than ready." He tried to Sign himself.

So I granted him grace, stood wearily up, went to the bench and collapsed on it, then cleaned both blades, first wiping the little Solingen, then most carefully grooming the Lady Vivamus. I managed to stand and salute him with a clean sword. It had been an honor to know him.

I was sorry I hadn't asked him his name. He seemed to think I knew it. I sat heavily down and looked at the arras covering the rat hole at the end of the room and wondered why Star and Rufo hadn't come out. All that clashing steel and talk—I thought about walking over and shouting for them. But I was too weary to move just yet. I sighed and closed my eyes—

Through sheer boyish high spirits (and carelessness I had been chided for, time and again) I had broken a dozen eggs. My mother looked down at the mess and I could see that she was about to cry. So I clouded up too. She stopped her tears, took me gently by the shoulder, and said, "It's all right, son. Eggs aren't that important." But I was ashamed, so I twisted away and ran.

Downhill I ran, heedless and almost flying—then was shockingly aware that I was at the wheel and the car was out of control. I groped for the brake pedal, couldn't find it and felt panic . . . then did find it —and felt it sink with that mushiness that means you've lost brake-fluid pressure. Something ahead in the road and I couldn't see. Couldn't even turn my head and my eyes were clouded with something running down into them. I twisted the wheel and nothing happened—radius rod gone.

Screams in my car as we hit! —and I woke up in bed with a jerk and the screams were my own. I was going to be late to school, disgrace not to be borne. Never born, agony shameful, for the schoolyard was empty; the other kids, scrubbed and virtuous, were in their seats and I couldn't find my classroom. Hadn't even had time to go to the bathroom and here I was at my desk with my pants down about to do what I had been too hurried to do before I left home and all the other kids had their hands up but teacher was calling on me. I couldn't stand up to recite; my pants were not only down I didn't have any on at all if I stood up they would see it the boys would laugh at me the girls would giggle and look away and tilt their noses. But the unbearable disgrace was that I didn't know the answer!

"Come, come!" my teacher said sharply. "Don't waste the class's time, E.G. You Haven't Studied Your Lesson."

Well, no, I hadn't. Yes, I had, but she had written "Problems 1-6" on the blackboard and I had taken that as "1 and 6"—and this was number 4. But She would never believe me; the excuse was too thin. We pay off on touchdowns, not excuses.

"That's how it is, Easy," my Coach went on, his voice more in sorrow than in anger. "Yardage is all very well but you don't make a nickel unless you cross that old goal line with the egg tucked underneath your arm." He pointed at the football on his desk. "There it is. I had it gilded and lettered clear back at the beginning of the season, you looked so good and I had so much confidence in you—it was meant to be yours at the end of the season, at a victory banquet." His brow wrinkled and he spoke as if trying to be fair. "I won't say you could have saved things all by yourself. But you do take things too easy. Easy—maybe you need another name. When the road gets rough, you could try harder." He sighed. "My fault, I should have cracked down. Instead, I tried to be a father to you. But I want you to know you aren't the only one who loses by this—at my age it's not easy to find a new job."

I pulled the covers up over my head; I couldn't stand to look at him. But they wouldn't let me alone; somebody started shaking my shoulder. "Gordon!"

"Le'me 'lone!"

"Wake up, Gordon, and get your ass inside. You're in trouble."

I certainly was, I could tell that as soon as I stepped into the office. There was a sour taste of vomit in my mouth and I felt awful—as if a herd of buffaloes had walked over me, stepping on me here and there. Dirty ones.

The First Sergeant didn't look at me when I came in; he let me stand and sweat first. When he did look up, he examined me up and down before speaking.

Then he spoke slowly, letting me taste each word. "Absent Over Leave, terrorizing and insulting native women, unauthorized use of government property . . . scandalous conduct . . . insubordinate and obscene language . . . resisting arrest . . . striking an M.P.—Gordon, why didn't you steal a horse? We hang horse thieves in these parts. It would make it all so much simpler."

He smiled at his own wit. The old bastard always had thought he was a wit. He was half right.

But I didn't give a damn what he said. I realized dully that it had all been a dream, just another of those dreams I had had too often lately, wanting to get out of this aching jungle. Even She hadn't been real. My—what was her name? —even her name I had made up. Star. My Lucky Star—Oh, Star, my darling, you aren't!

He went on: "I see you took off your chevrons. Well, that saves time but that's the only thing good about it. Out of uniform. No shave. And your clothes are filthy! Gordon, you are a disgrace to the Army of the United States. You know that, don't you? And you can't sing your way out of this one. No I.D. on you, no pass, using a name not your own. Well, Evelyn Cyril my fine lad, we'll use your right name now.

Officially."

He swung around in his swivel chair—he hadn't had his fat ass out of it since they sent him to Asia, no patrols for him. "Just one thing I'm curious about. Where did you get that? And whatever possessed you to try to steal it?" He nodded at a file case behind his desk.

I recognized what was sitting on it, even though it had been painted with gold gilt the last time I recalled seeing it whereas now it was covered with the special black gluey mud they grow in Southeast Asia. I started toward it. "That's mine!"

"No, no!" he said sharply. "Burny, burny, boy." He moved the football farther back. "Stealing it doesn't make it yours. I've taken charge of it as evidence. For your information, you phony hero, the docs think he's going to die."

"Who?"

"Why should you care who? Two bits to a Bangkok tickul you didn't know his name when you clobbered him. You can't go around clobbering natives just because you're feeling brisk—they've got rights, maybe you hadn't heard. You're supposed to clobber them only when and where you are told to."

Suddenly he smiled. It didn't improve him. With his long, sharp nose and his little bloodshot eyes I suddenly realized how much he looked like a rat.

But he went on smiling and said, "Evelyn my boy, maybe you took off those chevrons too soon."

"Huh?"

"Yes. There may be a way out of this mess. Sit down." He repeated sharply, " 'Sit down,' I said. If I had my way we'd simply Section-Eight you and forget you—anything to get rid of you. But the Company Commander has other ideas—a really brilliant idea that could close your whole file. There's a raid planned for tonight. So"—he leaned over, got a bottle of Four Roses and two cups out of his desk, poured two drinks—"have a drink."

Everybody knew about that bottle—everybody but the Company Commander, maybe. But the top sergeant had never been known to offer anyone a drink—save one time when he had followed it by telling his victim that he was being recommended for a general courtmartial.

"No, thanks."

"Come on, take it. Hair of the dog. You're going to need it. Then go take a shower and get yourself looking decent even if you aren't, before you see the Company Commander."

I stood up. I wanted that drink, I needed it. I would have settled for the worst rotgut—and Four Roses is pretty smooth—but I would have settled for the firewater old—what was his name? —had used to burst my eardrums.

But I didn't want to drink with him. I should not drink anything at all here. Nor eat any—

I spat in his face.

He looked utterly shocked and started to melt. I drew my sword and had at him.

It got dark but I kept on laying about me, sometimes connecting, sometimes not.

Chapter 16

Someone was shaking my shoulder. "Wake up!"

"Le'me lone!"

"You've got to wake up. Boss, please wake up."

"Yes, my Hero—please!"

I opened my eyes, smiled at her, then tried to look around. Kee-ripes, what a shambles! In the middle of it, close to me, was a black glass pillar, thick and about five feet high. On top was the Egg. "Is that it?"

"Yep!" agreed Rufo. "That's it! He looked battered but gay.

"Yes, my Hero champion," Star confirmed, "that is the true Egg of the Phoenix. I have tested."

"Uh—" I looked around. "Then where's old Soul-Eater?"

"You killed it. Before we got here. You still had sword in hand and the Egg tucked tightly under your left arm. We had much trouble getting them loose so that I could work on you."

I looked down my front, saw what she meant, and looked away. Red just isn't my color. To take my mind off surgery I said to Rufo, "What took you so long?"

Star answered, "I thought we would never find you!"

"How did you find me?"

Rufo said, "Boss, we couldn't exactly lose you. We simply followed your trail of blood—even when it dead-ended into blank walls. She is stubborn."

"Uh . . . see any dead men?"

"Three or four. Strangers, no business of ours. Constructs, most likely. We didn't dally." He added, "And we won't dally getting out, either, once you're patched up enough to walk. Time is short."

I flexed my right knee, cautiously. It still hurt where I had been pinked on the kneecap, but what Star had done was taking the soreness out. "My legs are all right. I'll be able to walk as soon as Star is through. But"—I frowned—"I don't relish going through that rat tunnel again. Rats give me the willies."

"What rats, Boss? In which tunnel?"

So I told him.

Star made no comment. Just went on plastering me and sticking on dressings. Rufo said, "Boss, you did get down on your knees and crawl—in a passage just like all the others. I couldn't see any sense to it but you had proved that you knew what you were doing, so we didn't argue, we did it. When you told us to wait while you scouted, we did that, too—until we had waited a long time and She decided that we had better try to find you."

I let it drop.

We left almost at once, going out the "front" way and had no trouble, no illusions, no traps, nothing but the fact that the "true path" was long and tedious. Rufo and I stayed alert, same formation, with Star in the middle carrying the Egg.

Neither Star nor Rufo knew whether we were still likely to be attacked, nor could we have held off anything stronger than a Cub Scout pack. Only Rufo could bend a bow and I could no longer wield a sword. However, the single necessity was to give Star time to destroy the Egg rather than let it be captured. "But that's nothing to worry about," Rufo assured me. "About like being at ground-zero with an A-weapon. You'll never notice it."

Once we were outside it was a longish hike to the Grotto Hills and the other Gate. We lunched as we hiked—I was terribly hungry—and shared Rufo's brandy and Stars water without too much water. I felt pretty good by the time we reached the cave of this Gate; I didn't even mind sky that wasn't sky but some sort of roof, nor the odd shifts in gravitation.

A diagram or "pentacle" was already in this cave. Star had only to freshen it, then we waited a bit—that had been the rush, to get there before that "Gate" could be opened; it wouldn't be available for weeks or perhaps months thereafter—much too long for any human to live in Karth-Hokesh.

We were in position a few minutes early. I was dressed like the Warlord of Mars—just me and sword belt and sword. We all lightened ship to the limit as Star was tired and pulling live things through would be strain enough. Star wanted to save my pet longbow but I vetoed it. She did insist that I keep the Lady Vivamus and I didn't argue very hard; I didn't want ever to be separated from my sword again. She touched it and told me that it was not dead metal, but now part of me.

Rufo wore only his unpretty pink skin, plus dressings; his attitude was that a sword was a sword and he had better ones at home. Star was, for professional reasons, wearing no more.

"How long?" asked Rufo, as we joined hands.

"Count down is minus two minutes," she answered. The clock in Star's head is as accurate as my bump of direction. She never used a watch.

"You've told him?" said Rufo.

"No."

Rufo said, "Haven't you any shame? Don't you think you've conned him long enough?" He spoke with surprising roughness and I was about to tell him that he must not speak to her that way. But Star cut him off.

"QUIET!" She began to chant. Then—"Now!"

Suddenly it was a different cave. "Where are we?" I asked. I felt heavier.

"On Nevia's planet," Rufo answered. "Other side of the Eternal Peaks—and I've got a good mind to get off and see Jocko."

"Do it," Star said angrily. "You talk too much."

"Only if my pal Oscar comes along. Want to, old comrade? I can get us there, take about a week. No dragons. They'll be glad to see you—especially Muri."

"You leave Muri out of this!" Star was actually shrill.

"Can't take it, huh?" he said sourly. "Younger woman and all that."

"You know that's not it!"

"Oh, how very much it is!" he retorted. "And how long do you think you can get away with it? It's not fair, it never was fair. It—"

"Silence! Count down right now!" We joined hands again and whambo! we were in another place. This was still another cave with one side partly open to the outdoors; the air was very thin and bitterly cold and snow had sifted in. The diagram was let into rock in raw gold. "Where is this?" I wanted to know.

"On your planet," Star answered. "A place called Tibet."

"And you could change trains here," Rufo added, "if She weren't so stubborn. Or you could walk out—although it's a long, tough walk; I did it once."

I wasn't tempted. The last I had heard, Tibet was in the hands of unfriendly peace-lovers. "Will we be here long?" I asked. "This place needs central heating." I wanted to hear anything but more argument. Star was my beloved and I couldn't stand by and hear anyone be rude to her—but Rufo was my blood brother by much lost blood; I owed my life to him several times over.

"Not long," answered Star. She looked drawn and tired.

"But time enough to get this straightened out," added Rufo, "so that you can make up your own mind and not be carried around like a cat in a sack. She should have told you long since. She—"

"Positions!" snapped Star. "Count down coming up. Rufo, if you don't shut up, I'll leave you here and let you walk out again—in deep snow barefooted to your chin."

"Go ahead," he said. "Threats make me as stubborn as you are. Which is surprising. Oscar, She is—"

"SILENCE!"

"—Empress of the Twenty Universes—"

Chapter 17

We were in a large octagonal room, with lavishly beautiful silvery walls.

"—and my grandmother," Rufo finished.

"Not 'Empress,' " Star protested. "That's a silly word for it."

"Near enough."

"And as for the other, that's my misfortune, not my fault." Star jumped to her feet, no longer looking tired, and put one arm around my waist as I got up, while she held the Egg of the Phoenix with the other. "Oh, darling I'm so happy! We made it! Welcome home, my Hero!"

"Where?" I was sluggy—too many time zones, too many ideas, too fast.

"Home. My home. Your home now—if you'll have it. Our home."

"Uh, I see . . . my Empress." She stomped her foot. "Don't call me that!"

"The proper form of address," said Rufo, "is 'Your Wisdom.' Isn't it, Your Wisdom?"

"Oh, Rufo, shut up. Go fetch clothes for us."

He shook his head. "War's over and I just got paid off. Fetch 'em yourself. Granny."

"Rufo, you're impossible."

"Sore at me, Granny?"

"I will be if you don't stop calling me 'Granny.' " Suddenly she handed the Egg to me, put her arms around Rufo and kissed him. "No, Granny's not sore at you," she said softly. "You always were a naughty child and I'll never quite forget the time you put oysters in my bed. But I guess you came by it honestly—from your grandmother." She kissed him again and mussed his fringe of white hair. "Granny loves you. Granny always will. Next to Oscar, I think you are about perfect —aside from being an unbearable, untruthful, spoiled, disobedient, disrespectful brat."

"That's better," he said. "Come to think of it, I feel the same way about you. What do you want to wear?"

"Mmm . . . get out a lot of things. It's been so long since I had a decent wardrobe." She turned back to me. "What would you like to wear, my Hero?"

"I don't know. I don't know anything. Whatever you think is appropriate—Your Wisdom."

"Oh, darling, please don't call me that. Not ever." She seemed suddenly about to cry.

"All right. What shall I call you?"

"Star is the name you gave me. If you must call me something else, you could call me your 'princess.' I'm not a princess—and I'm not an 'empress' either; that's a poor translation. But I like being 'your princess'—the way you say it. Or it can be 'lively wench' or any of lots of things you've been calling me." She looked up at me very soberly. "Just like before. Forever."

"I'll try . . . my princess."

"My Hero."

"But there seems to be a lot I don't know."

She shifted from English to Nevian. "Milord husband, I wished to tell all. I sighed to tell you. And milord will be told everything. But I held mortal fear that milord, if told too soon, would refuse to come with me. Not to the Black Tower, but to here. Our home."

"Perhaps you chanced wisely," I answered in the same language. "But I am here, milady wife—my princess. So tell me. I wish it."

She shifted back to English. "I'll talk, I'll talk. But it will take time. Darling, will you hold your horses just a bit longer? Having been patient with me—so very patient, my love! —for so long?"

"Okay," I agreed. "I'll string along. But, look, I don't know the streets in this neighborhood, I'll need some hints. Remember the mistake I made with old Jocko just from not knowing local customs."

"Yes, dear, I will. But don't worry, customs are simple here. Primitive societies are always more complex than civilized ones—and this one isn't primitive." Rufo dumped then a great heap of clothing at her feet. She turned away, a hand still on my arm, put a finger to her mouth with a very intent, almost worried look. "Now let me see. What shall I wear?"

"Complex" is a relative matter; I'll sketch only the outlines.

Center is the capital planet of the Twenty Universes. But Star was not "Empress" and it is not an empire.

I'll go on calling her "Star" as hundreds of names were hers and I'll call it an "empire" because no other word is close, and I'll refer to "emperors" and "empresses"—and to the Empress, my wife.

Nobody knows how many universes there are. Theory places no limit: any and all possibilities in unlimited number of combinations of "natural" laws, each sheaf appropriate to its own universe. But this is just theory and Occam's Razor is much too dull. All that is known in Twenty Universes is that twenty have been discovered, that each has its own laws, and that most of them have planets, or sometimes "places," where human beings live. I won't try to say what lives elsewhere.

The Twenty Universes include many real empires. Our Galaxy in our universe has its stellar empires—yet so huge is our Galaxy that our human race may never meet another, save through the Gates that link the universes. Some planets have no known Gates. Earth has many and that is its single importance; otherwise it rates as a backward slum.

Seven thousand years ago a notion was born for coping with political problems too big to handle. It was modest at first: How could a planet be run without ruining it? This planet's people included expert cyberneticists but otherwise were hardly farther along than we are; they were still burning the barn to get the rats and catching their thumbs in machinery. These experimenters picked an outstanding ruler and tried to help him.

Nobody knew why this bloke was so successful but he was and that was enough; they weren't hipped on theory. They gave him cybernetic help, taping for him all crises in their history, all known details, what was done, and the outcomes of each, all organized so that he could consult it almost as you consult your memory.

It worked. In time he was supervising the whole planet—Center it was, with another name then. He didn't rule it, he just untangled hard cases.

They taped also everything this first "Emperor" did, good and bad, for guidance of his successor.

The Egg of the Phoenix is a cybernetic record of the experiences of two hundred and three "emperors" and "empresses," most of whom "ruled" all the known universes. Like a foldbox, it is bigger inside than out. In use, it is more the size of the Great Pyramid.

Phoenix legends abound throughout the Universes: the creature that dies but is immortal, rising ever young from its own ashes. The Egg is such a wonder, for it is far more than a taped library now; it is a print, right down to their unique personalities, of all experience of all that line from His Wisdom IX through Her Wisdom CCIV, Mrs. Oscar Gordon.

The office is not hereditary. Star's ancestors include His Wisdom I and most of the other wisdoms—but millions of others have as much "royal" blood. Her grandson Rufo was not picked although he shares all her ancestors. Or perhaps he turned it down. I never asked, it would have reminded him of a time one of his uncles did something obscene and improbable. Nor is it a question one asks.

Once tapped, a candidate's education includes everything from how to cook tripe to highest mathematics—including all forms of personal combat for it was realized millennia ago that, no matter how well he was guarded, the victim would wear better if he himself could fight like an angry buzz saw. I stumbled on this through asking my beloved an awkward question.

I was still trying to get used to the fact that I had married, a grandmother, whose grandson looked older than I did and was even older than he looked. The people of Center live longer than we do anyway and both Star and Rufo had received "Long-Life" treatment. This takes getting used to. I asked Star, "How long do you 'wisdoms' live?"

"Not too long," she answered almost harshly. "Usually we are assassinated."

(My big mouth—)

A candidate's training includes travel in many worlds—not all planets-places inhabited by human beings; nobody lives that long. But many. After a candidate completes all this and if selected as heir, postgraduate work begins: the Egg itself. The heir has imprinted in him (her) the memories, the very personalities, of past emperors. He (She) becomes an integration of them. Star-Plus. A supernova. Her Wisdom.

The living personality is dominant but all that mob is there, too. Without using the Egg, Star could recall experiences that happened to people dead many centuries. With the Egg—herself hooked into the cybernet—she had seven thousand years of sharp, just-yesterday memories.

Star admitted to me that she had hesitated ten years before accepting the nomination. She hadn't wanted to be all those people; she had wanted to go on being herself, living as she pleased. But the methods used to pick candidates (I don't know them, they are lodged in the Egg) seem almost infallible; only three have ever refused.

When Star became Empress she had barely started the second half of her training, having had imprinted in her only seven of her predecessors. Imprinting does not take long but the victim needs recovery time between prints—for she gets every damned thing that ever happened to him, bad and good: the time he was cruel to a pet as a child and his recalled shame of it in his mature years, the loss of his virginity, the unbearably tragic time that he goofed a really serious one—all of it.

"I must experience their mistakes," Star told me. "Mistakes are the only certain way to learn."

So the whole weary structure is based on subjecting one person to all the miserable errors of seven thousand years.

Mercifully the Egg doesn't have to be used often. Most of the time Star could be herself, no more bothered by imprinted memories than you are over that nasty remark in second grade. Most problems Star could solve shooting from the hip—no recourse to the Black Room and a full hookup.

For the one thing that stood out as this empirical way of running an empire grew up was that the answer to most problems was: Don't do anything.

Always King Log, never King Stork—"Live and let live." "Let well enough alone." "Time is the best physician." "Let sleeping dogs lie." "Leave them alone and they'll come home, wagging their tails behind them."

Even positive edicts of the Imperium were usually negative in form: Thou Shalt Not Blow Up Thy Neighbors' Planet. (Blow your own if you wish.) Hands off the guardians of the Gates. Don't demand justice, you too will be judged.

Above all, don't put serious problems to a popular vote. Oh, there is no rule against local democracy, just in imperial matters. Old Rufo—excuse me; Doctor Rufo, a most distinguished comparative culturologist (with a low taste for slumming)—Rufo told me that every human race tries every political form and that democracy is used in. many primitive societies . . . but he didn't know of any civilized planet using it, as *Vox Populi, Vox Dei* translates as: "My God! How did we get in this mess!"

But Rufo claimed to enjoy democracy—any time he felt depressed he sampled Washington, and the antics of the French Parliament were second only to the antics of French women.

I asked him how advanced societies ran things.

His brow wrinkled. "Mostly they don't."

That described the Empress of Twenty Universes: Mostly she didn't. But sometimes she did. She might say: "This mess will clear up if you will take that troublemaker there—What's your name? You with the goatee—out and shoot him. Do it now." (I was present. They did it now. He was head of the delegation which had brought the problem to her—some fuss between intergalactic trading empires in the VIIth Universe—and his chief deputy pinned his arms and his own delegates dragged him outside and killed him. Star went on drinking coffee. It's better coffee than we get back home and I was so upset that I poured myself a cup.)

An Emperor has no power. Yet, if Star decided that a certain planet should be removed, people would get busy and there would be a nova in that sky. Star has never done this but it has been done in the past. Not often—His Wisdom will search his soul (and the Egg) a long time before decreeing anything so final even when his hypertrophied horse sense tells him that there is no other solution.

The Emperor is sole source of Imperial law, sole judge, sole executive—and does very little and has no way to enforce his rulings. What he or she does have is enormous prestige from a system that has worked for seven millennia. This non-system holds together by having no togetherness, no uniformity, never seeking perfection, no Utopias—just answers good enough to get by, with lots of looseness and room for many ways and attitudes.

Local affairs are local. Infanticide? —they're your babies, your planet. PTAs, movie censorship, disaster relief—the Empire is ponderously unhelpful.

The Crisis of the Egg started long before I was born. His Wisdom CCIII was assassinated and the Egg stolen at the same time. Some baddies wanted power—and the Egg, by its unique resources, has latent in it key to such power as Genghis Khan never dreamed.

Why should anybody want power? I can't understand it. But some do, and they did.

So Star came to office hall-trained, faced by the greatest crisis the Empire had ever suffered, and cut off from her storehouse of Wisdom. But not helpless. Imprinted in her was the experience of seven hypersensible men and she had all the cyber-computer system save that unique part known as the Egg. First she had to find out what had been done with the Egg. It wasn't safe to mount an attack on the planet of the baddies; it might destroy the Egg.

Available were ways to make a man talk if one didn't mind using him up. Star didn't mind. I don't mean anything so crude as rack and tongs. This was more like peeling an onion, and they peeled several.

Karth-Hokesh is so deadly that it was named for the only explorers to visit it and come back alive. (We were in a "garden subdivision," the rest is much worse.) The baddies made no attempt to stay there; they just cached the Egg and set guards and booby traps around it and on the routes to it.

I asked Rufo, "What use was the Egg there?"

"None," he agreed. "But they soon learned that it was no use anywhere —without Her. They needed either its staff of cyberneticists . . . or they needed Her Wisdom. They couldn't open the Egg. She is the only one who can do that unassisted. So they baited a trap for Her. Capture Her Wisdom, or kill Her—capture by preference, kill Her if need be and then try for key people here at Center. But they didn't dare risk the second while She was alive."

Star started a search to determine the best chance of recovering the Egg. Invade Karth-Hokesh? The machines said, "Hell, no!" I would say no, too. How do you mount an invasion into a place where a man not only can't eat or drink anything local but can't breathe the air more than a few hours? When a massive assault will destroy what you are after? When your beachheads are two limited Gates?

The computers kept coming up with a silly answer, no matter how the question was framed.

Me.

A "Hero," that is—a man with a strong back, a weak mind, and a high regard for his own skin. Plus other traits. A raid by a thus-and-so man, if aided by Star herself, might succeed. Rufo was added by a hunch Star had (hunches of Their Wisdoms being equal to strokes of genius) and the machines confirmed this. "I was drafted," said Rufo. "So I refused. But I never have had any sense where She is concerned, damn it; She spoiled me when I was a kid."

There followed years of search for the specified man. (Me, again—I'll never know why.) Meanwhile brave men were feeling out the situation and, eventually, mapping the Tower. Star herself reconnoitered, and got acquainted in Nevia, too.

(Is Nevia part of the "Empire?" It is and it isn't. Nevia's planet has the only Gates to Karth-Hokesh other than one from the planet of the baddies; that is its importance to the Empire—and the Empire isn't important to Nevia at all.)

This "Hero" was most likely to be found on a barbaric planet such as Earth. Star checked, and turned down, endless candidates winnowed from many rough peoples before her nose told her that I might do.

I asked Rufo what chance the machines gave us.

"What makes you say that?" he demanded.

"Well, I know a little of cybernetics."

"You think you do. Still—There was a prediction. Thirteen percent success, seventeen percent no game—and seventy percent death for us all."

I whistled. "You should whistle!" he said indignantly. "You didn't know any more than a cavalry horse knows. You had nothing to be scared of."

"I was scared."

"You didn't have time to be. It was planned so. Our one chance lay in reckless speed and utter surprise. But I knew. Son, when you told us to wait, there in the Tower, and disappeared and didn't come back, why, I was so scared I caught up on my regretting."

Once set up, the raid happened as I told it. Or pretty much so, although I may have seen what my mind could accept rather than exactly what happened. I mean "magic." How many times have savages concluded "magic" when a "civilized" man came along with something the savage couldn't understand? How often is some tag, such as "television," accepted by cultural savages (who nevertheless twist dials) when "magic" would be the honest word?

Still, Star never insisted on that word. She accepted it when I insisted on it.

But I would be disappointed if everything I saw turned out to be something Western Electric will build once Bell Labs works the bugs out. There ought to be some magic, somewhere, just for flavor.

Oh, yes, putting me to sleep for the first transition was to keep from scaring a savage silly. Nor did the "black biers" cross over—that was posthypnotic suggestion, by an expert: my wife.

Did I say what happened to the baddies? Nothing. Their Gates were destroyed; they are isolated until they develop star travel. Good enough, by the sloppy standards of the Empire. Their Wisdoms never carry grudges.

Chapter 18

Center is a lovely planet, Earthlike but lacking Earth's faults. It has been retailored over millennia to make it a NeverNever Land. Desert and snow and jungle were saved enough for pleasure; floods and other disasters were engineered out of existence.

It is uncrowded but has a large population for its size—that of Mars but with oceans. Surface gravity is almost that of Earth. (A higher constant, I understand.) About half the population is transient, as its great beauty and unique cultural assets—focus of twenty universes—make it a tourist's paradise. Everything is done for the comfort of visitors with an all-out thoroughness like that of the Swiss but with technology not known on Earth.

Star and I had residences a dozen places around the planet (and endless others in other universes); they ranged from palaces to a tiny fishing lodge where Star did her own cooking. Mostly we lived in apartments to an artificial mountain that housed the Egg and its staff; adjacent were halls, conference rooms, secretariat, *etc.* If Star felt like working she wanted such things at hand. But a system ambassador or visiting emperor of a hundred systems had as much chance of being invited into our private home as a hobo at the back door of a Beverly Hills mansion has of being invited into the drawing room.

But if Star happened to like him, she might fetch him home for a midnight snack. She did that once—a funny little leprechaun with four arms and a habit of tap-dancing his gestures. But she did no official entertaining and felt no obligation to attend social affairs. She did not hold press conferences, make speeches, receive delegations of Girl Scouts, lay cornerstones, proclaim special "Days," make ceremonial appearances, sign papers, deny rumors, nor any of the time-gnawing things that sovereigns and VIPs do on Earth.

She consulted individuals, often summoning them from other universes, and she had at her disposal all the news from everywhere, organized in a system that had been developed over centuries. It was through this system that she decided what problems to consider. One chronic complaint was that the Imperium ignored "vital questions"—and so it did. Her Wisdom passed judgment only on problems she selected; the bedrock of the system was that most problems solved themselves.

We often went to social events; we both enjoyed parties and, for Her Wisdom and Consort, there was endless choice. There was one negative protocol: Star neither accepted nor regretted invitations, showed up when she pleased and refused to be fussed over. This was a drastic change for capital society as her predecessor had imposed protocol more formal than that of the Vatican.

One hostess complained to me about how dull society had become under the new rules—maybe I could do something?

I did. I looked up Star and told her the remark whereupon we left and joined a drunken artists' ball—a luau!

Center is such a hash of cultures, races, customs, and styles that it has few rules. The one invariant custom was: Don't impose your customs on me. People wore what they did at home, or experimented with other styles; any social affair looked like a free-choice costume ball. A guest could show up at a swank party stark naked without causing talk—and some did, a small minority. I don't mean nonhumans or hirsute humans; clothes are not for them. I mean humans who would look at home in New York in American clothes—and others who would attract notice even in *I'Ile du Levant* because they have no hair at all, not even eyebrows. This is a source of pride to them; it shows their "superiority" to us hairy apes, they are as proud as a Georgia cracker is of his deficiency in melanin. So they go naked oftener than other human races. I found their appearance startling but one gets used to it.

Star wore clothes outside our home, so I did. Star would never miss a chance to dress up, an endearing weakness that made it possible to forget, at times, her Imperial status. She never dressed twice alike and was ever trying something new—and disappointed if I didn't notice. Some of her choices would cause heart failure even on a Riviera beach. She believed that a woman's costume was a failure unless it made men want to tear it off.

One of Star's most effective outfits was the simplest. Rufo happened to be with us and she got a sudden notion to dress as we had on the Quest of the Egg—and biff, bang, costumes were available, or manufactured to order, as may be; Nevian clothes are most uncommon in Center.

Bows, arrows, and quivers were produced with the same speed and Merry Men were we. It made me feel good to buckle on the Lady Vivamus; she had been hanging untouched on a wall of my study ever since the great black Tower.

Star stood, feet planted wide, fists on hips, head thrown back, eyes bright, and cheeks flushed. "Oh, this is fun! I feel good, I feel young! Darling, promise me, promise me truly, that someday we will again go on an adventure! I get so damn sick of being sensible."

She spoke English, as the language of Center is ill suited to such ideas. It's a pidgin language with thousands of years of imports and changes and is uninflected, positional, and flat.

"Suits," I agreed. "How about it, Rufo? Want to walk that Glory Road?"

"After they pave it."

"Guff. You'll come, I know you. Where and when, Star? Never mind 'where'—just 'when.' Skip the party and start right now!"

Suddenly she was not merry. "Darling, you know I can't. I'm less than a third of the way through my training."

"I should have busted that Egg when I found it."

"Don't be cross, darling. Let's go to the party and have fun."

We did. Travel on Center is by apports, artificial "Gates" that require no "magic" (or perhaps still more); one sets destination like punching buttons in an elevator, so there is no traffic problem in cities—nor a thousand other unpleasant things; they don't let the bones show in their cities. Tonight Star chose to get off short of destination, swagger through a park, and make an entrance. She knows how well tights suit her long legs and solid buttocks; she rolled her hips like a Hindu woman.

Folks, we were a sensation! Swords aren't worn in Center, save possibly by visitors. Bows and arrows are hen's teeth, too. We were as conspicuous as a knight in armor on Fifth Avenue.

Star was as happy as a kid playing trick-or-treat. So was I. I felt two axe handles across the shoulders and wanted to hunt dragons.

It was a ball not unlike one on Earth. (According to Rufo, all our races everywhere have the same basic entertainment: get together in mobs to dance, drink, and gossip. He claimed that the stag affair and the hen party are symptoms of a sick culture. I won't argue.) We swaggered down a grand staircase, music stopped, people stared and gasped—and Star enjoyed being noticed. Musicians got raggedly back to work and guests went back to the negative politeness the Empress usually demanded. But we still got attention. I had thought that the story of the Quest of the Egg was a state secret as I had never heard it mentioned. But, even if known, I still would have expected the details to be known only to us three.

Not so. Everyone knew what those costumes meant, and more. I was at the buffet, sopping up brandy and a Dagwood of my own invention, when I was cornered by Schherazade's sister, the pretty one. She was of one of the human-but-not-like-us races. She was dressed in rubies the size of your thumb and reasonably opaque cloth. She stood about fivefive, barefooted, weighed maybe one twenty and her waist couldn't have been over fifteen inches, which exaggerated two other measurements that did not need it. She was brunette, with the slantiest eyes I've ever seen. She looked like a beautiful cat and looked at me the way a cat looks at a bird.

"Self," she announced.

"Speak."

"Sverlani. World—" (Name and code—I had never heard of it.)

"Student food designer, mathematicosybaritic."

"Oscar Gordon. Earth. Soldier." I omitted the I.D. for Earth; she knew who I was.

"Questions?"

"Ask."

"Is sword?"

"Is."

She looked at it and her pupils dilated, "Is-was sword destroy construct guard Egg?" ("Is this sword now present the direct successor in spacetime sequential change, aside from theoretical anomalies involved in between-universe transitions, of the sword used to loll the Never-Born?" The double tense of the verb, present-past, stipulates and brushes aside the concept that identity is a meaningless abstraction—is this the sword you actually used, in the everyday meaning, and don't kid me, soldier. I'm no child.)

"Was-is," I agreed. ("I was there and I guarantee that I followed it all the way here, so it still is.")

She gave a little gasp and her nipples stood up. Around each was painted, or perhaps tattooed, the multi-universal design we call "Wall of Troy"—and so strong was her reaction that Ileum's ramparts crumbled again.

"Touch?" she said pleadingly.

"Touch."

"Touch twice?" ("Please, may I handle it enough to get the feel of it? Pretty please, with sugar on it! I ask too much and it is your right to refuse, but I guarantee not to hurt it"—they get mileage out of words, but the flavor is in the manner.)

I didn't want to, not the Lady Vivamus. But I'm a sucker for pretty girls. "Touch . . . twice," I grudged. I drew it and handed it to her guard foremost, alert to grab it before she put somebody's eye out or stabbed herself in the foot.

She accepted it gingerly, eyes and mouth big, grasping it by the guard instead of the grip. I had to show her. Her hand was far too small for it; her hands and feet, like her waist, were ultra slender.

She spotted the inscription. "Means?"

Dum vivimus, vivamus doesn't translate well, not because they can't understand the idea but because it's water to a fish. How else would one live? But I tried. "Touch-twice life. Eat. Drink. Laugh."

She nodded thoughtfully, then poked the air, wrist bent and elbow out. I couldn't stand it, so I took it from her, dropped slowly into a foil guard, lunged in high line, recovered—a move so graceful that big hairy men look good in it. It's why ballerinas study fencing.

I saluted and gave it back to her, then adjusted her right elbow and wrist and left arm—this is why ballerinas get half rates, it's fun for the swordmaster. She lunged, almost pinking a guest in his starboard ham. I took it back, wiped the blade, sheathed it. We had gathered a solid gallery. I picked up my Dagwood from the buffet, but she wasn't done with me. "Self jump sword?"

I choked. If she understood the meaning—or if I did—I was being propositioned the most gently I had ever been, in Center. Usually it's blunt. But surely Star hadn't spread the details of our wedding ceremony? Rufo? I hadn't told him but Star might have.

When I didn't answer, she made herself clear and did not keep her voice down. "Self unvirgin unmother unpregnant fertile."

I explained as politely as the language permits, which isn't very, that I was dated up. She dropped the subject, looked at the Dagwood. "Bite touch taste?"

That was another matter; I passed it over. She took a hearty bite, chewed thoughtfully, looked pleased. "Xenic. Primitive. Robust. Strong dissonance. Good art." Then she drifted away, leaving me wondering.

Inside of ten minutes the question was put to me again. I received more propositions than at any other party in Center and I'm sure the sword accounted for the bull market. To be sure, propositions came my way at every social event; I was Her Wisdom's consort. I could have been an orangutan and offers still would have been made. Some hirsutes looked like orangutans and were socially acceptable but I could have smelled like one. And behaved worse. The truth was that many ladies were curious about what the Empress took to bed, and the fact that I was a savage, or at best a barbarian, made them more curious. There wasn't any taboo against laying it on the line and quite a few did.

But I was still on my honeymoon. Anyhow, if I had accepted all those offers, I would have gone up with the window shade. But I enjoyed hearing them once I quit cringing at the "Soda? —or ginger ale?" bluntness; it's good for anybody's morale to be asked.

As we were undressing that night I said, "Have fun, pretty things?"

Star yawned and grinned. "I certainly did. And so did you, old Eagle Scout. Why didn't you bring that kitten home?"

"What kitten?"

"You know what kitten. The one you were teaching to fence."

"Meeow!"

"No, no, dear. You should send for her. I heard her state her profession, and there is a strong connection between good cooking and good—"

"Woman, you talk too much!"

She switched from English to Nevian. "Yes, milord husband. No sound I shall utter that does not break unbidden from love-anguished lips."

"Milady wife beloved . . . sprite elemental of the Singing Waters—"

Nevian is more useful than the jargon they talk on Center.

Center is a fun place and a Wisdom's consort has a cushy time. After our first visit to Star's fishing lodge, I mentioned how nice it would be to go back someday and tickle a few trout at that lovely place, the Gate where we had entered Nevia. "I wish it were on Center."

"It shall be."

"Star. You would move it? I know that some Gates, commercial ones, can handle real mass, but, even so—"

"No, no. But just as good. Let me see. It will take a day or so to have it stereoed and measured and air-typed and so forth. Water flow, those things. But meanwhile—There's nothing much beyond this wall, just a power plant and such. Say a door here and the place where we broiled the fish a hundred yards beyond. Be finished in a week, or we'll have a new architect. Suits?"

"Star, you'll do no such thing."

"Why not, darling?"

"Tear up the whole house to give me a trout stream? Fantastic!"

"I don't think so."

"Well, it is. Anyhow, sweet, the idea is not to move that stream here, but to go there. A vacation."

She sighed. "How I would love a vacation."

"You took an imprint today. Your voice is different."

"It wears off, Oscar."

"Star, you're taking them too fast. You're wearing yourself out."

"Perhaps. But I must be the judge of that, as you know."

"As I don't know! You can judge the whole goddamn creation—as you do and I know it—but I, your husband, must judge whether you are overworking—and stop it."

"Darling, darling!"

There were too many incidents like that.

I was not jealous of her. That ghost of my savage past had been laid in Nevia, I was not haunted by it again.

Nor is Center a place such ghost is likely to walk. Center has as many marriage customs as it has cultures—thousands. They cancel out. Some humans there are monogamous by instinct, as swans are said to be. So it can't be classed as "virtue." As courage is bravery in the face of fear, virtue is right conduct in the face of temptation. If there is no temptation, there can be no virtue. But these inflexible monogamists were no hazard. If someone, through ignorance, propositioned one of these chaste ladies, he risked neither a slap nor a knife; she would turn him down and go right on talking. Nor would it matter if her husband overheard; jealousy is never learned in a race automatically monogamous. Not that I ever tested it; to me they looked—and smelled—like spoiled bread dough. Where there is no temptation there is no virtue.

But I had chances to show "virtue." That kitten with the wasp waist tempted me—and I learned that she was of a culture in which females may not marry until they prove themselves pregnable, as in parts of the South Seas and certain places in Europe; she was breaking no taboos of her tribe. I was tempted more by another gal, a sweetie with a lovely figure, a delightful sense of humor, and one of the best dancers in any universe. She didn't write it on the sidewalk; she just let me know that she was neither too busy nor uninterested, using that argot with skillful indirection.

This was refreshing. Downright "American." I did inquire (elsewhere) into the customs of her tribe and found that, while they were rigid as to marriage, they were permissive otherwise. I would never do as a son-in-law but the window was open even though the door was locked.

So I chickened. I gave myself a soul-searching and admitted curiosity as morbid as that of any female who propositioned me simply because I was Star's consort. Sweet little Zhai-ee-van was one of those who didn't wear clothes. She grew them on the spot; from tip of her nose to her tiny toes she was covered in soft, sleek, gray fur, remarkably like chinchilla. Gorgeous!

I didn't have the heart, she was too nice a kid.

But this temptation I admitted to Star—and Star implied gently that I must have muscles between my ears; Zhai-ee-van was an outstanding artiste even among her own people, who were esteemed as most talented devotees of Eros.

I stayed chicken. A romp with a kid that sweet should involve love, some at least, and it wasn't love, just that beautiful fur—along with a fear that a romp with Zhai-ee-van could turn into love and she couldn't marry me even if Star turned me loose.

Or didn't turn me loose—Center has no rule against polygamy. Some religions there have rules for and against this and that out this mixture of cultures has endless religions and they cancel each other the way conflicting customs do. Culturologists state a "law" of religious freedom which they say is invariant: Religious freedom in a cultural complex is inversely proportional to the strength of the strongest religion. This is supposed to be one case of a general invariant, that all freedoms arise from cultural conflicts because a custom which is not opposed by its negative is mandatory and always regarded as a "law of nature."

Rufo didn't agree; he said his colleagues stated as equations things which are not mensurate and not definable—holes in their heads! —and that freedom was never more than a happy accident because the common jerk, all human races, hates and fears all freedom, not only for his neighbors but for himself, and stamps it out whenever possible.

Back to Topic "A"—Centrists use every sort of marriage contract. Or none. They practice domestic partnership, coition, propagation, friendship, and love—but not necessarily all at once nor with the same person. Contracts could be as complex as a corporate merger, specifying duration, purposes, duties, responsibilities, number and sex of children, genetic selection methods, whether host mothers were to be hired, conditions for canceling and options for extension—anything but "marital fidelity." It is axiomatic there that this is unenforceable and therefore not contractual.

But marital fidelity is commoner there than it is on Earth; it simply is not legislated. They have an ancient proverb reading Women and Cats. It means: "Women and Cats do as they please, and men and dogs might as well relax to it." It has its opposite: Men and Weather which is blunter and at least as old, since the weather has long been under control.

The usual contract is no contract; he moves his clothes into her home and stays—until she dumps them outside the door. This form is highly thought of because of its stability: A woman who "tosses his shoes" has a tough time finding another man brave enough to risk her temper.

My "contract" with Star was no more than that if contracts, laws, and customs applied to the Empress, which they did not and could not. But that was not the source of my increasing unease.

Believe me, I was not jealous.

But I was increasingly fretted by those dead men crowding her mind.

One evening as we were dressing for some whingding she snapped at me. I had been prattling about how I had spent my day, being tutored in mathematics, and no doubt had been as entertaining as a child reporting a day in kindergarten. But I was enthusiastic, a new world was opening to me—and Star was always patient.

But she snapped at me in a baritone voice.

I stopped cold. "You were imprinted today!"

I could feel her shift gears. "Oh, forgive me, darling! No, I'm not myself, I'm His Wisdom CLXXXII."

I did a fast sum. "That's fourteen you've taken since the Quest—and you took only seven in all the years before that. What the hell are you trying to do? Burn yourself out? Become an idiot?"

She started to scorch me. Then she answered gently, "No, I am not risking anything of the sort."

"That isn't what I near."

"What you may have heard has no weight, Oscar, as no one else can judge—either my capacity, or what it means to accept an imprint. Unless you have been talking to my heir?"

"No." I knew she had selected him and I assumed that he had taken a print or two—a standard precaution against assassination. But I hadn't met him, didn't want to, and didn't know who he was.

"Then forget what you've been told. It is meaningless." She sighed. "But, darling, if you don't mind, I won't go tonight; best I go to bed and sleep. Old Stinky CLXXXII is the nastiest person I've ever been—a brilliant success in a critical age, you must read about him. But inside he was a bad-tempered beast who hated the very people he helped. He's fresh in me now, I must keep him chained."

"Okay, let's go to bed."

Star shook her head. " 'Sleep,' I said. I'll use autosuggestion and by morning you won't know he's been here. You go to the party. Find an adventure and forget that you have a difficult wife."

I went but I was too bad-tempered even to consider "adventures."

Old Nasty wasn't the worst. I can hold my own in a row—and Star, Amazon though she is, is not big enough to handle me. If she got rough, she would at last get that spanking. Nor would I fear interference from guards; that had been settled from scratch: When we two were alone together, we were private. Any third person changed that, nor did Star have privacy alone, even in her bath. Whether her guards were male or female I don't know, nor would she have cared. Guards were never in sight. So our spats were private and perhaps did us both good, as temporary relief.

But "the Saint" was harder to take than Old Nasty. He was His Wisdom CXLI and was so goddam noble and spiritual and holier-than-thou that I went fishing for three days. Star herself was robust and full of ginger and joy in life; this bloke didn't drink, smoke, chew gum, nor utter an unkind word. You could almost see Star's halo while she was under his influence.

Worse, he had renounced sex when he consecrated himself to the Universes and this had a shocking effect on Star; sweet submissiveness wasn't her style. So I went fishing.

I've one good thing to say for the Saint. Star says that he was the most unsuccessful emperor in all that long line, with genius for doing the wrong thing from pious motives, so she learned more from him than any other; he made every mistake in the book. He was assassinated by disgusted customers after only fifteen years, which isn't long enough to louse up anything as ponderous as a multi-universe empire.

His Wisdom CXXXVII was a Her—and Star was absent two days. When she came home she explained. "Had to, dear. I've always thought I was a rowdy bitch—but she shocked even me."

"How?"

"I ain't talkin', Guv'nor. I gave myself intensive treatment to bury her where you'll never meet her."

"I'm curious."

"I know you are and that's why I drove a stake through her heart—rough job, she's my direct ancestor. But I was afraid you might like her better than you do me. That unspeakable trull!"

I'm still curious.

Most of them weren't bad Joes. But our marriage would have been smoother if I had never known they were there. It's easier to have a wife who is a touch batty than one who is several platoons—most of them men. To be aware of their ghostly presence even when Star's own personality was in charge did my libido no good. But I must concede that Star knew the male viewpoint better than any other woman in any history. She didn't have to guess what would please a man; she knew more about it than I did, from "experience"—and was explosively uninhibited about sharing her unique knowledge.

I shouldn't complain.

But I did, I blamed her for being those other people. She endured my unjust complaints better than I endured what I felt to be the injustice in my situation vis-a-vis all that mob of ghosts.

Those ghosts weren't the worst fly in the soup.

I did not have a job. I don't mean nine-to-five and cut the grass on Saturdays and get drunk at the country club that night; I mean I didn't have any purpose. Ever look at a male lion in a zoo? Fresh meat on time, females supplied, no hunters to worry about—He's got it made, hasn't he?

Then why does he look bored!

I didn't know I had a problem, at first. I had a beautiful and loving wife; I was so wealthy that there was no way to count it; I lived in a most luxurious home in a city more lovely than any on Earth; everybody I met was nice to me; and best second only to my wonderful wife, I had endless chance to "go to college" in a marvelous and unEarthly sense, with no need to chase a pigskin. Nor a sheepskin. I need never stop and had any conceivable help. I mean, suppose Albert Einstein drops everything to help with your algebra, pal, or Rand Corporation and General Electric team up to devise visual aids to make something easier for you.

This is luxury greater than riches.

I soon found that I could not drink the ocean even held to my lips. Knowledge on Earth alone has grown so out of hand that no man can grasp it—so guess what the bulk is in Twenty Universes, each with its laws, its histories, and Star alone knows how many civilizations.

In a candy factory, employees are urged to eat all they want. They soon stop.

I never stopped entirely; knowledge has more variety. But my studies lacked purpose. The Secret Name of God is no more to be found in twenty universes than in one—and all other subjects are the same size unless you have a natural bent.

I had no bent, I was a dilettante—and I realized it when I saw that my tutors were bored with me. So I let most of them go, stuck with math and multi-universe history, quit trying to know it all.

I thought about going into business. But to enjoy business you must be a businessman at heart (I'm not), or you have to need dough. I had dough; all I could do was lose it—or, if I won, I would never know whether word had gone out (from any government anywhere): Don't buck the Empress's consort, we will make good your losses.

Same with poker. I introduced the game and it caught on fast—and I found that I could no longer play it. Poker must be serious or it's nothing—out when you own an ocean of money, adding or losing a few drops mean nothing.

I should explain—Her Wisdom's "civil list" may not have been as large as the expenditures of many big spenders in Center; the place is rich. But it was as big as Star wanted it to be, a bottomless well of wealth. I don't know how many worlds split the tab, but call it twenty thousand with three billion people each—it was more than that.

A penny each from 60,000,000,000,000 people is six hundred billion dollars. The figures mean nothing except to show that spreading it so thin that nobody could feel it still meant more money than I could dent. Star's non-government of her un-Empire was an expense, I suppose—but her personal expenses, and mine, no matter how lavish, were irrelevant.

King Midas lost interest in his piggy bank. So did I.

Oh, I spent money. (I never touched any—unnecessary.) Our "flat" (I won't call it a palace)—our home had a gymnasium more imaginative than any university gym; I had a salle d'armes added and did a lot of fencing, almost every day with all sorts of weapons. I ordered foils made to match the Lady Vivamus and the best swordmasters in several worlds took turns helping me. I had a range added, too, and had my bow picked up from that Gate cave in Karth-Hokesh, and trained in archery and in other aimed weapons. Oh, I spent money as I pleased.

But it wasn't much fun.

I was sitting in my study one day, doing not a damn thing but brood, while I played with a bowlful of jewels.

I had fiddled with jewelry design a while. It had interested me in high school; I had worked for a jeweler one summer. I can sketch and was fascinated by lovely stones. He lent me books, I got others from the library—and once he made up one of my designs.

I had a Calling.

But jewelers are not draft-deferred so I dropped it—until Center.

You see, there was no way for me to give Star a present unless I made it. So I did. I made costume jewelry of real stones, studying it (expert help, as usual), sending for a lavish selection of stones, drawing designs, sending stones and drawings out to be made up.

I knew that Star enjoyed jeweled costumes; I knew she liked them naughty—not in the sense of crowding the taboos, there weren't any—but provocative, gilding the lily, accentuating what hardly needs it. The things I designed would have seemed at home in a French revue—but of real gems. Sapphires and gold suited Star's blond beauty and I used them. But she could wear any color and I used other gems, too.

Star was delighted with my first try and wore it that evening. I was proud of it; I had swiped the design from memory of a costume worn by a showgirl in a Frankfurt night club my first night out of the Army—a Gstring deal, transparent long skirt open from the hip on one side and with sequins on it (I used sapphires), a thing that wasn't a bra but an emphasizer, completely jeweled, and a doohickey in her hair to match. High golden sandals with sapphire heels.

Star was warmly grateful for others that followed.

But I learned something. I'm not a jewelry designer. I saw no hope of matching the professionals who catered to the wealthy in Center. I soon realized that Star wore my designs because they were my gift, just as mama pins up the kindergarten drawings that sonny brings home. So I quit.

This bowl of gems had been kicking around my study for weeks—fire opals, sardonyx, carnelians, diamonds and turquoise and rubies, moonstones and sapphires and garnets, peridot, emeralds, chrysolite—many with no English names. I ran them through my fingers, watching the many-colored fire falls, and felt sorry for myself. I wondered how much these pretty marbles would cost on Earth? I couldn't guess within a million dollars.

I didn't bother to lock them up at night. And I was the bloke who had quit college for lack of tuition and hamburgers.

I pushed them aside and went to my window—there because I had told Star that I didn't like not having a window in my study. That was on arrival and I didn't find out for months how much had been torn down to please me; I had thought they had just cut through a wall.

It was a beautiful view, more a park than a city, studded but not cluttered with lovely buildings. It was hard to realize that it was a city bigger than Tokyo; its "bones" didn't show and its people worked even half a planet away.

There was a murmur soft as bees, like the muted roar one can never escape in New York—but softer, just enough to make me realize that I was surrounded by people, each with his job, his purpose, his function.

My function? Consort.

Gigolo!

Star, without realizing it, had introduced prostitution into a world that had never known it. An innocent world, where man and woman bedded together only for the reason that they both wanted to.

A prince consort is not a prostitute. He has his work and it is often tedious, representing his sovereign mate, laying cornerstones, making speeches. Besides that, he has his duty as royal stud to ensure that the line does not die.

I had none of these. Not even the duty of entertaining Star—hell, within ten miles of me were millions of men who would jump at the chance.

The night before had been bad. It started badly and went on into one of those weary pillow conferences which married couples sometimes have, and aren't as healthy as a bang-up row. We had had one, as domestic as any working stiff worried over bills and the boss.

Star had done something she had never done before: brought work home. Five men, concerned with some intergalactic hassle—I never knew what as the discussion had been going on for hours and they sometimes spoke a language not known to me.

They ignored me, I was furniture. On Center introductions are rare; if you want to talk to someone, you say "Self," and wait. If he doesn't answer, walk off. If he does, exchange identities.

None of them did, and I was damned if I would start it. As strangers in my home it was up to them. But they didn't act as if it was my home. I sat there, the Invisible Man, getting madder and madder.

They went on arguing, while Star listened. Presently she summoned maids and they started undressing her, brushing her hair. Center is not America, I had no reason to feel shocked. What she was doing was being rude to them, treating them as furniture (she hadn't missed how they treated me).

One said pettishly, "Your Wisdom, I do wish you would listen as you agreed to." (I've expanded the argot.)

Star said coldly, "I am judge of my conduct. No one else is capable."

True. She could judge her conduct, they could not. Nor, I realized bitterly, could I. I had been feeling angry at her (even though I knew it didn't matter) for calling in her maids and starting to ready for bed with these lunks present—and I had intended to tell her not to let it happen again. I resolved not to raise that issue.

Shortly Star chopped them off. "He's right. You're wrong. Settle it that way. Get out."

But I did intend to sneak it in by objecting to her bringing "tradespeople" home.

Star beat me to the punch. The instant we were alone she said, "My love, forgive me. I agreed to hear this silly mix-up and it dragged on and on, then I thought I could finish it quickly if I got them out of chairs, made them stand up here, and made clear that I was bored. I never thought they would wrangle another hour before I could squeeze out the real issue. And I knew that, if I put it over till tomorrow, they would stretch it into hours. But the problem was important, I couldn't drop it." She sighed. "That ridiculous man—Yet such people scramble to high places. I considered having him fool-killed. Instead I must let him correct his error, or the situation will break out anew."

I couldn't even hint that she had ruled the way she had out of annoyance; the man she had chewed out was the one in whose favor she had ruled. So I said, "Let's go to bed, you're tired"—and then didn't have sense enough to refrain from judging her myself.

Chapter 19

We went to bed.

Presently she said, "Oscar, you are displeased."

"I didn't say so."

"I feel it. Nor is it Just tonight and those tedious clowns. You have been withdrawing yourself, unhappy." She waited.

"It's nothing."

"Oscar, anything which troubles you can never be 'nothing' to me. Although I may not realize it until I know what it is."

"Well—I feel so damn useless!"

She put her soft, strong hand on my chest. "To me you are not useless. Why do you feel useless to yourself?"

"Well—look at this bed!" It was a bed the like of which Americans never dream; it could do everything but kiss you good night—and, like the city, it was beautiful, its bones did not show. "This sack, at home, would cost more—if they could build it—than the best house my mother ever lived in."

She thought about that. "Would you like to send money to your mother?" She beckoned the bedside communicator. "Is Elmendorf Air Force Base of America address enough?"

(I don't recall ever telling her where Mother lived.) "No, no!" I gestured at the talker, shutting it off. "I do not want to send her money. Her husband supports her. He won't take money from me. That's not the point."

"Then I don't see the point as yet. Beds do not matter, it is who is in a bed that counts. My darling, if you don't like this bed, we can get another. Or sleep on the floor. Beds do not matter."

"This bed is okay. The only thing wrong is that I didn't pay for it. You did. This house. My clothes. The food I eat. My—my toys! Every damned thing I have you gave me. Know what I am. Star? A gigolo! Do you Know what a gigolo is? A somewhat-male prostitute."

One of my wife's most exasperating habits was, sometimes, to refuse to snap back at me when she knew I was spoiling for a row. She looked at me thoughtfully. "America is a busy place, isn't it? People work all the time, especially men."

"Well . . . yes."

"It isn't the custom everywhere, even on Earth. A Frenchman isn't unhappy if he has free time; he orders another cafe au lait and lets the saucers pile up. Nor am I fond of work. Oscar, I ruined our evening from laziness, too anxious to avoid having to redo a weary task tomorrow. I will not make that mistake twice."

"Star, that doesn't matter. That's over with."

"I know. The first issue is rarely the key. Nor the second. Nor, sometimes, the twenty-second. Oscar, you are not a gigolo."

"What do you call it? When it looks like a duck and quacks like a duck and acts like a duck, I call it a duck. Call it a bunch of roses. It still quacks."

"No. All this around us—" She waved. "Bed. This beautiful chamber. The food we eat. My clothes and yours. Our lovely pools. The night majordomo on watch against the chance that you or I might demand a singing bird or a ripe melon. Our captive gardens. All we see or touch or use or fancy—and a thousand times as much in distant places, all these you earned with your own strong hands; they are yours, by right."

I snorted. "They are," she insisted. "That was our contract. I promised you great adventure, and greater treasure, and even greater danger. You agreed. You said, 'Princess, you've hired yourself a boy.' " She smiled. "Such a big boy. Darling, I think the dangers were greater than you guessed . . . so it has pleased me, until now, that the treasure is greater than you were likely to have guessed. Please don't be shy about accepting it. You have earned it and more—as much as you are ever willing to accept"

"Uh—Even if you are right, it's too much. I'm drowning in marshmallows!"

"But, Oscar, you don't have to take one bit you don't want. We can live simply. In one room with bed folded into wall if it pleases you."

"That's no solution."

"Perhaps you would like bachelor digs, out in town?"

" 'Tossing my shoes,' eh?"

She said levelly, "My husband, if your shoes are ever tossed, you must toss them. I jumped over your sword. I shall not jump back."

"Take it easy!" I said. "It was your suggestion. If I took it wrong, I'm sorry. I know you don t go back on your word. But you might be regretting it."

"I am not regretting it. Are you?"

"No, Star, no! But—"

"That's a long pause for so short a word," she said gravely. "Will you tell me?"

"Uh . . . that's just it. Why didn't you tell me?"

"Tell what, Oscar? There are so many things to tell."

"Well, a lot of things. What I was getting into. About you being the Empress of the whole works, in particular . . . before you let me jump over the sword with you."

Her face did not change but tears rolled down her cheeks. "I could answer that you did not ask me—"

"I didn't know what to ask!"

"That is true. I could assert, truthfully, that had you asked I would have answered. I could protest that I did not 'let you' jump over the sword, that you overruled my protests that it was not necessary to offer me the honor of marriage by the laws of your people . . . that I was a wench you could tumble at will. I could point out that I am not an empress, not royal, but a working woman whose job does not permit her even the luxury of being noble. All these are true. But I will not hide behind them; I will meet your question." She slipped into Nevian. "Milord Hero, I feared sorely that if I did not bend to your will, you would leave me!"

"Milady wife, truly did you think that your champion would desert you in your peril?" I went on in English, "Well, that nails it to the barn. You married me because the Egg damned well had to be recovered and Your Wisdom told you that I was necessary to the job—and might bug out if you didn't. Well, Your Wisdom wasn't sharp on that point; I don't bug out. Stupid of me but I'm stubborn." I started to get out of bed.

"Milord love!" She was dying openly.

"Excuse me. Got to find a pair of shoes. See how far I can throw them." I was being nasty as only a man can be who has had his pride wounded.

"Please, Oscar, please! Hear me first."

I heaved a sigh. "Talk ahead."

She grabbed my hand so hard I would have lost fingers had I tried to pull loose. "Hear me out. My beloved, it was not that at all. I knew that you would not give up our quest until it was finished or we were dead. I knew! Not only had I reports reaching back years before I ever saw you but also we had shared joy and danger and hardship; I knew your mettle. But, had it been needed, I could have bound you with a net of words, persuaded you to agree to betrothal only—until the quest was over. You are a romantic, you would have agreed. But, darling, darling! I wanted to many you . . . bind you to me by your rules, so that"—she stopped to sniff back tears—"so that, when you saw all this, and this, and this, and the things you call 'your toys,' you still would stay with me. It was not politics, it was low—love romantic and unreasoned, love for your own sweet self."

She dropped her face into her hands and I could barely hear her. "But I know so little of love. Love is a butterfly that lights when it listeth, leaves as it chooses; it is never bound with chains. I sinned. I tried to bind you. Unjust I knew it was, cruel to you I now see it to be." Star looked up with crooked smile. "Even Her Wisdom has no wisdom when it comes to being a woman. But, though silly wench I be, I am not too stubborn to know that I have wronged my beloved when my face is rubbed in it. Go, go, get your sword; I will jump back over it and my champion will be free of his silken cage. Go, milord Hero, while my heart is firm."

"Go fetch your own sword, wench. That paddling is long overdue."

Suddenly she grinned, all hoyden. "But, darling, my sword is in Karth-Hokesh. Don't you remember?"

"You can't avoid it this time!" I grabbed her. Star is a handful and slippery, with amazing muscles. But I'm bigger and she didn't fight as hard as she could have. Still I lost skin and picked up bruises before I got her legs pinned and one arm twisted behind her. I gave her a couple of hearty spanks, hard enough to print each finger in pink, then lost interest.

Now tell me, were those words straight from her heart—or was it acting by the smartest woman in twenty universes?

Later, Star said, "I'm glad your chest is not a scratchy rug, like some men, my beautiful."

"I was a pretty baby, too. How many chests have you checked?"

"A random sample. Darling, have you decided to keep me?"

"A while. On good behavior, you understand."

"I'd rather be kept on bad behavior. But—while you're feeling mellow—if you are—I had best tell you another thing—and take my spanking if I must."

"You're too anxious. One a day is maximum, hear me?"

"As you will, sir. Yassuh, Boss man. I'll have my sword fetched in the morning and you can spank me with it at your leisure. If you think you can catch me. But I must tell this and get it off my chest."

"There's nothing on your chest. Unless you count—"

"Please! You've been going to our therapists."

"Once a week." The first thing Star had ordered was an examination for me so complete as to make an Army physical seem perfunctory. "The Head Sawbones insists that my wounds aren't healed but I don't believe him; I've never felt better."

"He, is stalling, Oscar—by my order. You're healed, I am not unskilled, I was most careful. But—darling, I did this for selfish reasons and now you must tell me if I have been cruel and unjust to you again. I admit I was sneaky. But my intentions were good. However, I know, as the prime lesson of my profession, that good intentions are the source of more folly than all other causes put together."

"Star, what are you prattling about? Women are the source of all folly."

"Yes, dearest. Because they always have good intentions—and can prove it. Men sometimes act from rational self-interest, which is safer. But not often."

"That's because half their ancestors are female. Why have I been keeping doctor's appointments if I don t need them?"

"I didn't say you don't need them. But you may not think so. Oscar, you are far advanced with Long-Life treatments." She eyed me as if ready to parry or retreat.

"Well, I'll be damned!"

"You object? At this stage it can be reversed."

"I hadn't thought about it." I knew that Long-Life was available on Center but knew also that it was rigidly restricted. Anybody could have it—just before emigrating to a sparsely settled planet. Permanent residents must grow old and die. This was one matter in which one of Star's predecessors had interfered in local government. Center, with disease practically conquered, great prosperity, and lodestone of a myriad peoples, had grown too crowded, especially when Long-Life sent skyward the average age of death.

This stern rule had thinned the crowds. Some people took Long-Life early, went through a Gate and took their chances in wilderness. More waited until that first twinge that brings awareness of death, then decided that they weren't too old for a change. And some sat tight and died when their time came.

I knew that twinge; it had been handed to me by a bolo in a jungle. "I guess I have no objection."

She sighed with relief. "I didn't know and should not have slipped it into your coffee. Do I rate a spanking?"

"We'll add it to the list you already rate and give them to you all at once. Probably cripple you. Star, how long is 'Long-Life'?"

"That's hard to answer. Very few who have had it have died in bed. If you live as active a life as I know you will—from your temperament—you are most unlikely to die of old age. Nor of disease."

"And I never grow old?" It takes getting used to.

"Oh, yes, you can grow old. Worse yet, senility stretches in proportion. If you let it. If those around you allow it. However—Darling, how old do I look? Don't tell me with your heart, tell me with your eyes. By Earth standards. Be truthful, I know the answer."

It was ever a joy to look at Star but I tried to look at her freshly, for hints of autumn—outer corners of eyes, her hands, for tiny changes in skin—hell, not even a stretch mark, yet I knew she had a grandchild. "Star, when I first saw you, I guessed eighteen. You turned around and I upped the ante a little. Now, looking closely and not giving you any breaks—not over twenty-five. And that is because your features seem mature. When you laugh, you're a teenager; when you wheedle, or look awestruck, or suddenly delighted with a puppy or kitten or something, you're about twelve. From the chin up, I mean; from the chin down you can't pass for less than eighteen."

"A buxom eighteen," she added. "Twenty-five Earth years—by rates of growth on Earth—is right on the mark I was shooting at. The age when a woman stops growing and starts aging. Oscar, your apparent age under Long-Life is a matter of choice. Take my Uncle Joseph—the one who sometimes calls himself 'Count Cagliostro.' He set himself at thirty-five, because he says that anything younger is a boy. Rufo prefers to look older. He says it gets him respectful treatment, keeps him out of brawls with lounger men—and still lets him give a younger man a shock if one does pick a fight because, as you know, Rufo's older age is mostly from chin up."

"Or the shock he can give younger women," I suggested.

"With Rufo one never knows. Dearest, I didn't finish telling you. Part of it is teaching the body to repair itself. Your language lessons here—there hasn't been a one but what a hypnotherapist was waiting to give your body a lesson through your sleeping mind, after your language lesson. Part of apparent age is cosmetic therapy—Rufo need not be bald—but more is controlled by the mind. When you decide what age you like, they can start imprinting it."

"I'll think about it. I don't want to look too much older than you."

Star looked delighted. "Thank you, dear! You see how selfish I've been."

"How? I missed that point."

She put a hand over mine. "I didn't want you to grow old—and die! —while I stayed young."

I blinked at her. "Gosh, lady, that was selfish of you, wasn't it? But you could varnish me and keep me in the bedroom. Like your aunt."

She made a face. "You're a nasty man. She didn't varnish them."

"Star, I haven't seen any of those keepsake corpses around here."

She looked surprised. "But that's on the planet where I was born. This universe, another star. Very pretty place. Didn't I ever say?"

"Star, my darling, mostly you've never said."

"I'm sorry. Oscar, I don't want to hand you surprises. Ask me. Tonight. Anything."

I considered it. One thing I had wondered about, a certain lack. Or perhaps the women of her part of the race had another rhythm. But I had been stopped by the fact that I had married a grandmother—how old? "Star, are you pregnant?"

"Why, no, dear. Oh! Do you want me to be? You want us to have children?"

I stumbled, trying to explain that I hadn't been sure it was possible—or maybe she was. Star looked troubled. "I'm going to upset you again. I had best tell it all. Oscar, I was no more brought up to luxury than you were. A pleasant childhood, my people were ranchers. I married young and was a simple mathematics teacher, with a hobby research in conjectural and optional geometries. Magic, I mean. Three children.

My husband and I got along well . . . until I was nominated. Not selected, just named for examination and possible training. He knew I was a genetic candidate when he married me—but so many millions are. It didn't seem important.

"He wanted me to refuse. I almost did. But when I accepted, he—well, he 'tossed my shoes.' We do it formally there; he published a notice that I was no longer his wife."

"He did, eh? Mind if I look him up and break his arms?"

"Dear, dear! That was many years ago and far away; he is long dead. It doesn't matter."

"In any case he's dead. Your three kids—one of them is Rufo's father? Or mother?"

"Oh, no! That was later."

"Well?"

Star took a deep breath. "Oscar, I have about fifty children."

That did it. Too many shocks and I guess I showed it, for Star's face reflected deep concern. She rushed through the explanation.

When she was named heir, changes were made in her, surgical, biochemical, and endocrinal. Nothing as drastic as spaying and to different ends and by techniques more subtle than ours. But the result was that about two hundred tiny bits of Star—ova alive and latent—were stored near absolute zero.

Some fifty had been quickened, mostly by emperors long dead but "alive" in their stored seed—genetic gambles on getting one or more future emperors. Star had not borne them; an heir's time is too precious. She had never seen most of them; Rufo's father was an exception. She didn't say, but I think Star liked to have a child around to play with and love—until the strenuous first years of her reign and the Quest for the Egg left her no time.

This change had a double purpose: to get some hundreds of starline children from a single mother, and to leave the mother free. By endocrine control of some sort, Star was left free of Eve's rhythm but in all ways young—not pills nor hormone injections; this was permanent. She was simply a healthy woman who never had "bad days." This was not for her convenience but to insure that her judgment as the Great Judge would never be whipsawed by her glands. "This is sensible," she said seriously. "I can remember there used to be days when I would bite the head off my dearest friend for no reason, then burst into tears. One can't be judicial in that sort of storm."

"Uh, did it affect your interest? I mean your desire for—"

She gave me a hearty grin. "What do you think?" She added seriously, "The only thing that affects my libido—changes it for the worse, I mean—are . . . is? —English has the oddest structure—is-are those pesky imprintings. Sometimes up, sometimes down—and you'll remember one woman whose name we won't mention who affected me so carnivorously that I didn't dare come near you until I had exorcised her black soul! A fresh imprint affects my judgment as well, so I never hear a case until I have digested the latest one. I'll be glad when they're over!"

"So will I."

"Not as glad as I will be. But, aside from that, darling, I don t vary much as a female and you know it. Just my usual bawdy self who eats young boys for breakfast and seduces them into jumping over swords."

"How many swords?"

She looked at me sharply. "Since my first husband kicked me out I have not been married until I married you, Mr. Gordon. If that is not what you meant, I don't think you should hold against me things that happened before you were born. If you want details since then, I'll satisfy your curiosity. Your morbid curiosity, if I may say so."

"You want to boast. Wench, I won't pamper it."

"I do not want to boast! I've little to boast about. The Crisis of the Egg left me almost no time in which to be a woman, damn it! Until Oscar the Rooster came along. Thank you, sir."

"And keep a civil tongue in your head."

"Yes, sir. Nice Rooster! But you've led us far from our muttons, dear. If you want children—yes, darling! There are about two hundred and thirty eggs left and they belong to me. Not to posterity. Not to the dear people, bless their greedy little hearts. Not to those God-playing genetic manipulators. Me! It's all I own. All else is ex offico. But these are mine . . . and if you want them, they are yours, my only dear."

I should have said, "Yes!" and kissed her. What I did say was, "Uh, let's not rush it."

Her face fell. "As milord Hero husband pleases."

"Look, don't get Nevian and formal. I mean, well, it takes getting used to. Syringes and things, I suppose, and monkeying by technicians. And, while I realize you don't have time to have a baby yourself—"

I was trying to say that, ever since I got straightened out about the Stork, I had taken for granted the usual setup, and artificial insemination was a dirty trick to play even on a cow—and that this job, subcontracted on both sides, made me think of slots in a Horn & Hardart, or a mail-order suit. But give me time and I would adjust. Just as she had adjusted to those damned imprints—

She gripped my hands. "Darling, you needn't!"

"Needn't what?"

"Be monkeyed with by technicians. And I will take time to have your baby. If you don't mind seeing my body get gross and huge—it does, it does, I remember—then happily I will do it. All will be as with other people so far as you are concerned. No syringes. No technicians. Nothing to offend your pride. Oh, I'll have to be worked on. But I'm used to being handled like a prize cow; it means no more than having my hair shampooed."

"Star, you would go through nine months of inconvenience—and maybe die in childbirth—to save me a few moments' annoyance?"

"I shall not die, Three children, remember? Normal deliveries, no trouble."

"But, as you pointed out, that was 'many years ago.' "

"No matter."

"Uh, how many years?" ("How old are you, woman?" The question I never dared ask.)

She looked upset. "Does it matter, Oscar?"

"Uh, I suppose not. You know more about medicine than I do—"

She said slowly, "You were asking how old I am, were you not?"

I didn't say anything. She waited, then went on, "An old saw from your world says that a woman is as young as she feels. And I feel young and I am young and I have zest for life and I can bear a baby—or many babies—m my own belly. But I know—oh, I know! —that your worry is not just that I am too rich and occupy a position not easy for a husband. Yes, I know that part too well; my first husband rejected me for that. But be was my age. The most cruel and unjust thing I have done is that I knew that my age could matter to you—and I kept still. That was why Rufo was so outraged. After you were asleep that night in the cave of the Forest of Dragons he told me so, in biting words. He said he knew I was not above enticing young boys but he never thought that I would sink so low as to trap one into marriage without first telling him. He's never had a high opinion of his old granny, he said, but this time—"

"Shut up, Star!"

"Yes, milord."

"It doesn't make a damn bit of difference!"—and I said it so flatly that I believed it—and do now. "Rufo doesn't know what I think. You are younger than tomorrow's dawn—you always will be. That's the last I want to hear about it!"

"Yes, milord."

"And knock that off, too. Just say, 'Okay, Oscar.' "

"Yes, Oscar! Okay!"

"Better. Unless you're honing for another spanking. And I'm too tired."

I changed the subject. "About this other matter—There's no reason to stretch your pretty tummy if other ways are at hand. I'm a country jake, that's all; I'm not used to big city ways. When you suggested that you do it yourself, did you mean that they could put you back together the way you were?"

"No. I would simply be hostmother as well as genetic mother." She smiled and I knew I was making progress. "But saving a tidy sum of that money you don't want to spend. Those healthy, sturdy women who have other people's babies charge high. Four babies, they can retire—ten makes them wealthy."

"I should think they would charge high! Star, I don't object to spending money. I'll concede, if you say so, that I've earned more than I spend, by my work as a professional hero. That's a tough racket, too."

"You've earned it."

"This citified way of having babies—Can you pick it? Boy, or girl?"

"Of course. Male-giving wigglers swim faster, they can be sorted out. That's why Wisdoms are usually men—I was an unplanned candidate. You shall have a son, Oscar."

"Might prefer a girl. I've a weakness for little girls."

"A boy, a girl—or both. Or as many as you want."

"Star, let me study it. Lots of angles—and I don't think as well as you do."

"Pooh!"

"If you don't think better than I do, the cash customers are getting rooked. Mmm, male seed can be stored as easily as eggs?"

"Much easier."

"That's all the answer we need now. I'm not too jumpy about syringes; I've stood in enough Army queues. I'll go to the clinic or whatever it is, then we can settle it slowly. When we decide"—I shrugged—"mail the postcard and when it goes clunk! —we're parents. Or some such. From there on the technicians and those husky gals can handle it."

"Yes, milo—Okay, darling!"

All better. Almost her little girl face. Certainly her sixteen-year-old face, with new party dress and boys a shivery, delightful danger. "Star, you said earlier that it was often not the second issue or even the twenty-second that matters."

"Yes."

"I know what's wrong with me. I can tell you—and maybe Her Wisdom knows the answer."

She blinked. "If you can tell me, sweetheart—Her Wisdom will solve it, even if I have to tear the place down and put it back up differently —from here to the next galaxy—or I'll go out of the Wisdom business!"

"That sounds more like my Lucky Star. All right, it's not that I'm a gigolo. I've earned my coffee and cakes, at least; the Soul-Eater did damn near eat my soul, he knew its exact shape—he . . . it—it knew things I had long forgotten. It was rough and the pay ought to be high. It's not your age, dearest. Who cares how old Helen of Troy is? You're the right age forever—can a man be luckier? I'm not jealous of your position; I wouldn't want it with chocolate icing. I'm not jealous of the men in your life—the lucky stiffs! Not even now, as long as I don't stumble over them getting to the bathroom."

"There are no other men in my life now, milord husband."

"I had no reason to think so. But there is always next week, and even you can't have a Sight about that, my beloved. You've taught me that marriage is not a form of death—and you obviously aren't dead, you lively wench."

"Perhaps not a Sight," she admitted. "But a feeling."

"I won't bet on it. I've read the Kinsey Report."

"What report?"

"He disproved the Mermaid theory. About married women. Forget it. Hypothetical question: If Jocko visited Center, would you still have the same feeling? We should have to invite him to sleep here."

"The Doral will never leave Nevia."

"Don't blame him, Nevia is wonderful. I said If—If he does, will you offer him 'roof, table, and bed'?"

"That," she said firmly, "is your decision, milord."

"Rephrase it: Will you expect me to humiliate Jocko by not returning his hospitality? Gallant old Jocko, who let us live when he was entitled to kill us? Whose bounty—arrows and many things, including a new medic's kit—kept us alive and let us win back the Egg?"

"By Nevian customs of roof and table and bed," she insisted, "the husband decides, milord husband."

"We aren't in Nevia and here a wife has a mind of her own. You're dodging, wench."

She grinned naughtily. "Does that 'if' of yours include Muri? And Letva? They're his favorites, he wouldn't travel without them. And how about little what's-her-name? —the nymphet?"

"I give up. I was just trying to prove that jumping over a sword does not turn a lively wench into a nun."

"I am aware of it, my Hero," she said levelly. "All I can say is that I intend that this wench shall never give her Hero a moment's unease—and my intentions are usually carried out. I am not 'Her Wisdom' for nothing."

"Fair enough. I never thought you would cause me that sort of unease. I was trying to show that the task may not be too difficult. Damn it, we've wandered off. Here's my real problem. I'm not good for anything. I'm worthless."

"Why, my dearest! You're good for me."

"But not for myself. Star, gigolo or not, I can't be a pet poodle. Not even yours. Look, you've got a job. It keeps you busy and it's important. But me? There is nothing for me to do, nothing at all! —nothing better than designing bad jewelry. You know what I am? A hero by trade, so you told me; you recruited me. Now I'm retired. Do you know anything in all twenty universes more useless than a retired hero?"

She mentioned a couple. I said, "You're stalling. Anyhow they break up the blankness of the male chest. I'm serious, Star. This is the issue that has made me unfit to live with. Darling, I'm asking you to put your whole mind on it—and all those ghostly helpers. Treat it the way you treat an Imperial problem. Forget I'm your husband. Consider my total situation, all you know about me—and tell me what I can do with hands and head and time that is worth doing. Me, being what I am."

She held still for long minutes, her face in that professional calm she had worn the times I had audited her work. "You are right," she said at last. "There is nothing worth your powers on this planet."

"Then what do I do?"

She said tonelessly, "You must leave."

"Huh?"

"You think I like the answer, my husband? Do you think I like most answers I must give? But you asked me to consider it professionally. I obeyed. That is the answer. You must leave this planet—and me."

"So my shoes get tossed anyhow?"

"Be not bitter, milord. That is the answer. I can evade and be womanish only in my private life; I cannot refuse to think if I agree to do so as 'Her Wisdom.' You must leave me. But, no, no, no, your shoes are not tossed! You will leave, because you must. Not because I wish it." Her face stayed calm but tears streamed again. "One cannot ride a cat . . . nor hurry a snail . . . nor teach a snake to fly. Nor make a poodle of a Hero. I knew it, I refused to look at it. You will do what you must do. But your shoes will remain ever by my bed, I am not sending you away!" She blinked back tears. "I cannot lie to you, even by silence. I will not say that no other shoes will rest here . . . if you are gone a long time. I have been lonely. There are no words to say how lonely this job is. When you go . . . I shall be lonelier than ever. But you will find your shoes here when you return."

"When I return? You have a Sight?"

"No, milord Hero. I have only a feeling . . . that if you live . . . you will return. Perhaps many times. But Heroes do not die in bed. Not even this one." She blinked and tears stopped and her voice was steady. "Now, milord husband, if it please you, shall we dim the lights and rest?"

We did and she put her head on my shoulder and did not cry. But we did not sleep. After an aching time I said, "Star, do you hear what I hear?"

She raised her head. "I hear nothing."

"The City. Can't you hear it? People. Machines. Even thoughts so thick your bones feel it and your ear almost catches it."

"Yes. I know that sound."

"Star, do you like it here?"

"No. It was never necessary that I like it."

"Look, damn it! You said that I would leave. Come with me!"

"Oh, Oscar!"

"What do you owe them? Isn't recovering the Egg enough? Let them take a new victim. Come walk the Glory Road with me again! There must be work in my line somewhere."

"There is always work for Heroes."

"Okay, we set up in business, you and I. Heroing isn't a bad job. The meals are irregular and the pay uncertain—out it's never dull. We'll run ads: 'Gordon & Gordon, Heroing Done Reasonable. No job too large, no job too small. Dragons exterminated by contract, satisfaction guaranteed or no pay. Free estimates on other work. Questing, maiden-rescuing, golden fleece located night or day?' "

I was trying to jolly her but Star doesn't jolly. She answered in sober earnest. "Oscar, if I am to retire, I should train my heir first. True, no one can order me to do anything—but I have a duty to train my replacement."

"How long will that take?"

"Not long. Thirty years, about."

"Thirty years!"

"I could force it to twenty-five, I think."

I sighed. "Star, do you know how old I am?"

"Yes. Not yet twenty-five. But you will get no older!"

"But right now I'm still that age. That's all the time there has ever been for me. Twenty-five years as a pet poodle and I won't be a hero, nor anything. I'll be out of my silly mind."

She thought about it. "Yes. That is true."

She turned over, we made a spoon and pretended to sleep.

Later I felt her shoulders shaking and knew that she was sobbing.

"Star?"

She didn't turn her head. All I heard was a choking voice, "Oh, my dear, my very dear! If I were even a hundred years younger!"

Chapter 20

I let the precious, useless gems dribble through my fingers, listlessly pushed them aside. If I were only a hundred years older—But Star was right. She could not leave her post without relief. Her notion of proper relief, not mine nor anyone else's. And I couldn't stay in this upholstered jail much longer without beating my head on the bars.

Yet both of us wanted to stay together.

The real nasty hell of it was that I knew—just as she knew—that each of us would forget. Some, anyhow. Enough so that there would be other shoes, other men, and she would laugh again.

And so would I—She had seen that and had gravely, gently, with subtle consideration for another's feelings, told me indirectly that I need not feel guilty when next I courted some other girl, in some other land, somewhere.

Then why did I feel like a heel?

How did I get trapped with no way to turn without being forced to choose between hurting my beloved and going clean off my rocker?

I read somewhere about a man who lived on a high mountain, because of asthma, the choking, killing land, while his wife lived on the coast below him, because of heart trouble that could not stand altitude. Sometimes they looked at each other through telescopes.

In the morning there had been no talk of Stars retiring. The unstated quid-pro-quo was that, if she planned to retire, I would hang around (thirty years!) until she did. Her Wisdom had concluded that I could not, and did not speak of it. We had a luxurious breakfast and were cheerful, each with his secret thoughts.

Nor were children mentioned. Oh, I would find that clinic, do what was needed. If she wanted to mix her star line with my common blood, she could, tomorrow or a hundred years hence. Or smile tenderly and have it cleaned out with the rest of the trash. None of my people had even been mayor of Podunk and a plow horse isn't groomed for the Irish Sweepstakes. If Star put a child together from our genes, it would be sentiment, a living valentine—a younger poodle she could pet before she let it run free. But sentiment only, as sticky if not as morbid as that of her aunt with the dead husbands, for the Imperium could not use my bend sinister.

I looked up at my sword, hanging opposite me. I hadn't touched it since the party, long past, when Star chose to dress for the Glory Road. I took it down, buckled it on and drew it—felt that surge of liveness and had a sudden vision of a long road and a castle on a hill.

What does a champion owe his lady when the quest is done?

Quit dodging, Gordon! What does a husband owe his wife? This very sword—"Jump Rogue and Princess leap. My wife art thou and mine to keep." "—for richer, for poorer, for better, for worse . . . to love and to cherish, till death do us part." That was what I meant by that doggerel and Star had known it and I had known it and knew it now.

When we vowed, it had seemed likely that we would be parted by death that same day. But that didn't reduce the vow nor the deepness with which I had meant it. I hadn't jumped the sword to catch a tumble on the grass before I died; I could have had that free. No, I had wanted "—to have and to hold, to love and to cherish, till death do us part"!

Star had kept her vow to the letter. Why did I have itchy feet?

Scratch a hero and find a bum.

And a retired hero was as silly as those out-of-work kings that clutter Europe.

I slammed out of our "flat," wearing sword and not giving a damn about stares, apported to our therapists, found where I should go, went there, did what was necessary, told the boss biotechnician that Her Wisdom must be told, and jumped down his throat when he asked questions.

Then back to the nearest apport booth and hesitated—I needed companionship the way an Alcoholics-Anonymous needs his hand held. But I had no intimates, just hundreds of acquaintances. It isn't easy for the Empress's consort to have friends.

Rufo it had to be. But in all the months I had been on Center I had never been in Rufo's home. Center does not practice the barbarous custom of dropping in on people and I had seen Rufo only at the Residence, or on parties; Rufo had never invited me to his home. No, no coldness there; we saw him often, but always he had come to us.

I looked for him in apport listings—no luck. Then as little with see-speak lists. I called the Residence, got the communication officer. He said that "Rufo" was not a surname and tried to brush me off. I said, "Hold it, you overpaid clerk! Switch me off and you'll be in charge of smoke signals in Timbuktu an hour from now. Now listen. This bloke is elderly, baldheaded, one of his names is 'Rufo' I think, and he is a distinguished comparative culturologist. And he is a grandson of Her Wisdom. I think you know who he is and have been dragging your feet from bureaucratic arrogance. You have five minutes. Then I talk to Her Wisdom and ask her, while you pack!"

("Stop! Danger you! Other old bald Rufo (?) top compculturist. Wisdom egg-sperm-egg. Five-minutes. Liar and/or fool. Wisdom? Catastrophe!")

In less than five minutes Rufo's image filled the tank. "Well!" he said.

"I wondered who had enough weight to crash my shutoff."

"Rufo, may I come see you?"

His scalp wrinkled. "Mice in the pantry, son? Your face reminds me of the time my uncle—"

"Please, Rufo!"

"Yes, son," he said gently. "I'll send the dancing girls home. Or shall I keep them?"

"I don't care. How do I find you?"

He told me, I punched his code, added my charge number, and I was there, a thousand miles around the horizon. Rufo's place was a mansion as lavish as Jocko's and thousands of years more sophisticated. I gathered an impression that Rufo had the biggest household on Center, all female. I was wrong. But all female servants, visitors, cousins, daughters, made themselves a reception committee—to look at Her Wisdom's bedmate. Rufo shooed them away and took me to his study. A dancing girl (evidently a secretary) was fussing over papers and tapes. Rufo slapped her fanny out, gave me a comfortable chair, a drink, put cigarettes near me, sat down and said nothing.

Smoking isn't popular on Center, what they use as tobacco is the reason. I picked up a cigarette. "Chesterfields! Good God!"

"Have 'em smuggled," he said. "But they don't make anything like Sweet Caps anymore. Bridge sweepings and chopped hay."

I hadn't smoked in months. But Star had told me that cancer and such I could now forget. So I lit it—and coughed like a Nevian dragon. Vice requires constant practice.

" 'What news on the Rialto?' " Rufo inquired. He glanced at my sword.

"Oh, nothing." Having interrupted Rufo's work, I now shied at baring my domestic troubles.

Rufo sat and smoked and waited. I needed to say something and the American cigarette reminded me of an incident, one that had added to my unstable condition. At a party a week earlier, I had met a man thirty-five in appearance, smooth, polite, but with that supercilious air that says: "Your fly is unzipped, old man, but I'm too urbane to mention it."

But I had been delighted to meet him, he had spoken English!

I had thought that Star, Rufo, and myself were the only ones on Center who spoke English. We often spoke it. Star on my account, Rufo because he liked to practice. He spoke Cockney like a costermonger, Bostonese like Beacon Hill, Aussie like a kangaroo; Rufo knew all English languages.

This chap spoke good General American. "Nebbi is the name, he said, shaking hands where no one shakes hands, "and you're Gordon, I know. Delighted to meet you."

"Me, too," I agreed. "It's a surprise and a pleasure to hear my own language."

"Professional knowledge, my dear chap. Comparative culturologist, linguisto-historo-political. You're American, I know. Let me place it—Deep-South, not born there. Possibly New England. Overlaid with displaced Middle Western, California perhaps. Basic speech, lower-middle class, mixed."

The smooth oaf was good. Mother and I lived in Boston while my father was away, 1942-45. I'll never forget those winters; I wore overshoes from November to April. I had lived Deep South, Georgia and Florida, and in California at La Jolla during the Korean unWar and, later, in college. "Lower-middle class"? Mother had not thought so.

"Near enough," I agreed. "I know one of your colleagues."

"I know whom you mean, 'the Mad Scientist.' Wonderful wacky theories. But tell me: How were things when you left? Especially, how is the United States getting along with its Noble Experiment?"

" 'Noble Experiment'?" I had to think; Prohibition was gone before I was born. "Oh, that was repealed."

"Really? I must go back for a field trip. What have you now? A king? I could see that your country was headed that way but I did not expect it so soon."

"Oh, no," I said. "I was talking about Prohibition."

"Oh, that. Symptomatic but not basic. I was speaking of the amusing notion of chatter rule. 'Democracy.' A curious delusion—as if adding zeros could produce a sum. But it was tried in your tribal land on a mammoth scale. Before you were born, no doubt. I thought you meant that even the corpse had been swept away." He smiled. "Then they still have elections and all that?"

"The last time I looked, yes."

"Oh, wonderful. Fantastic, simply fantastic. Well, we must get together, I want to quiz you. I've been studying your planet a long time—the most amazing pathologies in tile explored complex. So long. Don't take any wooden nickels, as your tribesmen say."

I told Rufo about it. "Rufe, I know I came from a barbarous planet. But does that excuse his rudeness? Or was it rudeness? I haven't really got the hang of good manners here."

Rufo frowned. "It is bad manners anywhere to sneer at a person's birthplace, tribe, or customs. A man does it at his own risk. If you kill him, nothing will happen to you. It might embarrass Her Wisdom a little. If She can be embarrassed."

"I won't kill him, it's not that important."

"Then forget it. Nebbi is a snob. He knows a little, understands nothing, and thinks the universes would be better if he had designed them. Ignore him."

"I will. It was just—look, Rufo, my country isn't perfect. But I don t enjoy hearing it from a stranger."

"Who does? I like your country, it has flavor. But—I'm not a stranger and this is not a sneer. Nebbi was right."

"Huh?"

"Except that he sees only the surface. Democracy can't work. Mathematicians, peasants, and animals, that's all there is—so democracy, a theory based on the assumption that mathematicians and peasants are equal, can never work. Wisdom is not additive; its maximum is that of the wisest man in a given group.

"But a democratic form of government is okay, as long as it doesn't work. Any social organization does well enough if it isn't rigid. The framework doesn't matter as long as there is enough looseness to permit that one man in a multitude to display his genius. Most so-called social scientists seem to think that organization is everything. It is almost nothing—except when it is a straitjacket. It is the incidence of heroes that counts, not the pattern of zeros."

He added, "Your country has a system free enough to let its heroes work at their trade. It should last a long time—unless its looseness is destroyed from inside."

"I hope you're right."

"I am right. This subject I know and I'm not stupid, as Nebbi thinks. He's right about the futility of 'adding zeros'—but he doesn't realize that he is a zero."

I grinned. "No point in letting a zero get my goat."

"None. Especially as you are not. Wherever you go, you will make yourself felt, you won't be one of the nerd. I respect you, and I don't respect many. Never people as a whole, I could never be a democrat at heart. To claim to 'respect' and even to 'love' the great mass with their yaps at one end and smelly feet at the other requires the fatuous, uncritical, saccharine, blind, sentimental slobbishness found in some nursery supervisors, most spaniel dogs, and all missionaries. It isn't a political system, it's a disease. But be of good cheer; your American politicians are immune to this disease . . . and your customs allow the non-zero elbow room."

Rufo glanced at my sword again. "Old friend, you didn't come here to bitch about Nebbi." "No." I looked down at that keen blade. "I fetched this to shave you, Rufo."

"Eh?"

"I promised I would shave your corpse. I owe it to you for the slick job you did on me. So here I am, to shave the barber."

He said slowly, "But I'm not yet a corpse." He did not move. But his eyes did, estimating distance between us. Rufo wasn't counting on my being "chivalrous"; he had lived too long.

"Oh, that can be arranged," I said cheerfully, "unless I get straight answers from you."

He relaxed a touch. "I'll try, Oscar."

"More than try, please. You're my last chance. Rufo, this must be private. Even from Star."

"Under the Rose. My word on it."

"With your fingers crossed, no doubt. But don't risk it, I'm serious. And straight answers, I need them. I want advice about my marriage."

He looked glum. "And I meant to go out today. Instead I worked. Oscar, I would rather criticize a woman's firstborn, or even her taste in hats. Much safer to teach a shark to bite. What if I refuse?"

"Then I shave you!"

"You would, you heavy-handed headsman!" He frowned. " 'Straight answers—' You don't want them, you want a shoulder to cry on."

"Maybe that, too. But I do want straight answers, not the lies you can tell in your sleep."

"So I lose either way. Telling a man the truth about his marriage is suicide. I think I'll sit tight and see if you have the heart to cut me down in cold blood."

"Oh, Rufo, I'll put my sword under your lock and key if you like. You know I would never draw against you."

"I know no such thing," he said querulously. "There's always that first time. Scoundrels are predictable, but you're a man of honor and that frightens me. Can't we handle this over the see-speak?"

"Come off it, Rufo. I've nobody else to turn to. I want you to speak frankly. I know that a marriage counselor has to lay it on the line, pull no punches. For the sake of blood we've lost together I ask you to advise me. And frankly, of course!"

" 'Of course,' is it? The last time I risked it you were for cutting the tongue out of me." He looked at me moodily. "But I was ever a fool where friendship speaks. Hear, I'll dicker ye a fair dicker. You talk, I'll listen . . . and if it should come about that you're taking so long that my tired old kidneys complain and I'm forced to leave your welcome company for a moment . . . why, then you'll misunderstand and go away in a huff and we'll say no more about it. Eh?"

"Okay."

"The Chair recognizes you. Proceed."

So I talked. I talked out my dilemma and frustration, sparing neither self nor Star (it was for her sake, too, and it wasn't necessary to speak of our most private matters; those, at least, were dandy). But I told our quarrels and many matters best kept in the family, I had to.

Rufo listened. Presently he stood up and paced, looking troubled. Once he tut-tutted over the men Star had brought home. "She shouldn't have called her maids in. But do forget it, lad. She never remembers that men are shy, whereas females merely have customs. Allow Her this."

Later he said, "No need to be jealous of Jocko, son. He drives a tack with a sledgehammer."

"I'm not jealous."

"That's what Menelaus said. But leave room for give and take. Every marriage needs it."

Finally I ran down, having told him Star's prediction that I would leave. "I'm not blaming her for anything and talking about it has straightened me out. I can sweat it out now, behave myself, and be a good husband. She does make terrible sacrifices to do her job—and the least I can do is make it easier. She's so sweet and gentle and good."

Rufo stopped, some distance away with his back to his desk. "You think so?"

"I know so."

"*She's an old bag!*"

I was out of my chair and at him at once. I didn't draw. Didn't think of it, wouldn't have anyhow. I wanted to get my hands on him and punish him for talking that way about my beloved.

He bounced over the desk like a ball and by the time I covered the length of the room, Rufo was behind it, one hand in a drawer.

"Naughty, naughty," he said. "Oscar, I don't want to shave you."

"Come out and fight like a man!"

"Never, old friend. One step closer and you're dog meat. All your fine promises, your pleadings. 'Pull no punches' you said. 'Lay it on the line' you said. 'Speak frankly' you said. Sit down in that chair."

" 'Speaking frankly' doesn't mean being insulting!"

"Who's to judge? Can I submit my remains for approval before I make them? Don't compound your broken promises with childish illogic. And would you force me to buy a new rug? I never keep one I've killed a friend on; the stains make me gloomy. Sit down in that chair."

I sat down.

"Now," said Rufo, staying where he was, "you will listen while I talk. Or perhaps you will get up and walk out. In which case I might be so pleased to see the last of your ugly face that that might be that. Or I might be so annoyed at being interrupted that you would drop dead in the doorway, for I've much pent up and ready to spill over. Suit yourself.

"I said," he went on, "that my grandmother is an old bag. I said it brutally, to discharge your tension—and now you're not likely to take too much offense at many offensive things I still must say. She's old, you know that, though no doubt you find it easy to forget, mostly. I forget it myself, mostly, even though She was old when I was a babe making messes on the floor and crowing at the dear sight of Her. Bag, She is, and you know it. I could have said 'experienced woman' but I had to rap your teeth with it; you've been dodging it even while you've been telling me how well you know it—and how you don't care. Granny is an old bag, we start from there.

"And why should She be anything else? Tell yourself the answer. You're not a fool, you're merely young. Ordinarily She has but two possible pleasures and the other She can't indulge."

"What's the other one?"

"Handing down bad decisions through sadistic spite, that's the one She dare not indulge. So let us be thankful that Her body has built into it this harmless safety valve, else we would all suffer grievously before somebody managed to kill Her. Lad, dear lad, can you dream how mortal tired She must be of most things? Your own zest soured in only months. Think what it must be to hear the same old weary mistakes year after year with nothing to hope for but a clever assassin. Then be thankful that She still pleasures in one innocent pleasure. So She's an old bag and I mean no disrespect; I salute a beneficent balance between two things She must be to do her job.

"Nor did She stop being what She is by reciting a silly rhyme with you one bright day on a hilltop. You think She has taken a vacation from it since, sticking to you only. Possibly She has, if you have quoted Her exactly and I read the words rightly; She always tells the truth.

"But never all the truth—who can? —and She is the most skillful liar by telling the truth you'll ever meet. I misdoubt your memory missed some innocent-sounding word that gave an escape yet saved your feelings.

"If so, why should She do more than save your feelings? She's fond of you, that's dear—but must She be fanatic about it? All Her training, Her special bent, is to avoid fanaticism always, find practical answers. Even though She may not have mixed up the shoes, as yet, if you stay on a week or a year or twenty and time comes when She wants to. She can find ways, not lie to you in words—and hurt Her conscience not at all because She hasn't any. Just Wisdom, utterly pragmatic."

Rufo cleared his throat. "Now refutation and counterpoint and contrariwise. I like my grandmother and love Her as much as my meager nature permits and respect Her right down to Her sneaky soul —and I'll kill you or anyone who gets in Her way or causes Her unhappiness—and only part of this is that She has handed on to me a shadow of Her own self so that I understand Her. If She is spared assassins knife or blast or poison long enough, She'll go down in history as 'The Great.' But you spoke of Her 'terrible sacrifices.' Ridiculous! She likes being 'Her Wisdom,' the Hub around which all worlds turn. Nor do I believe that She would give it up for you or fifty better. Again, She didn't lie, as you've told it—She said 'if' . . . knowing that much can happen in thirty year's, or twenty-five, among which is the near certainty that you wouldn't stay that long. A swindle.

"But that's the least of swindles She's put over on you. She conned you from the moment you first saw Her and long before. She cheated both ways from the ace, forced you to pick the shell with the pea, sent you like any mark anxious for the best of it, cooled you off when you started to suspect, herded you back into line and to your planned fate —and made you like it. She's never fussy about method and would con the Virgin Mary and make a pact with the Old One all in one breath, did it suit Her purpose. Oh, you got paid, yes, and good measure to boot; there's nothing small about Her. But its time you knew you were conned. Mind you, I'm not criticizing Her, I'm applauding—and I helped . . . save for one queasy moment when I felt sorry for the victim. But you were so conned you wouldn't listen, thank any saints who did. I lost my nerve for a bit, thinking that you were going to a sticky death with your innocent eyes wide. But She was smarter than I am. She always has been.

"Now! I like Her. I respect Her. I admire Her. I even love Her a bit. All of Her, not just Her pretty aspects but also all the impurities that make Her steel as hard as it must be. How about you, sir? What's your feeling about Her now . . . knowing She conned you, knowing what She is?"

I was still sitting. My drink was by me, untouched all this long harangue.

I took it and stood up. "Here's to the grandest old bag in twenty universes!"

Rufo bounced over the desk again, grabbed his glass. "Say that loud and often! And to Her, She'd love it! May She be blessed by God, Whoever He is, and kept safe. We'll never see another like Her, mores the pity! —for we need them by the gross!"

We tossed it down and smashed our grasses. Rufo fetched fresh ones, poured, settled in his chair, and said, "Now for serious drinking. Did I ever tell you about the time my—"

"You did. Rufo, I want to know about this swindle."

"Such as?"

"Well, I can see much of it. Take that first time we flew—"

He shuddered. "Lets not."

"I never wondered then. But, since Star can do this, we could have skipped Igli, the Horned Ghosts, the marsh, the time wasted with Jocko—"

"Wasted?"

"For her purpose. And the rats and hogs and possibly the dragons.

Flown directly from that first Gate to the second. Right?"

He shook his head. "Wrong."

"I don't see it."

"Assuming that She could fly us that far, a question I hope never to settle, She could have flown us to the Gate She preferred. What would you have done then? If popped almost directly from Nice to Karth-Hokesh? Charged out and fought like a wolverine, as you did? Or said 'Miss, you've made a mistake. Show me the exit from this Fun House—I'm not laughing.' "

"Well—I wouldn't have bugged out"

"But would you have won? Would you have been at that keen edge of readiness it took?"

"I see. Those first rounds were live ammo exercises in my training. Or was it live ammo? Was all that first part swindle? Maybe with hypnotism, to make it feel right? God knows she's expert. No danger till we reached the Black Tower?"

He shuddered again. "No, no! Oscar, any of that could have killed us. I never fought harder in my life, nor was ever more frightened. None of it could be skipped. I don't understand all Her reasons. I'm not Her Wisdom. But She would never risk Herself unless necessary. She would sacrifice ten million brave men, were it needed, as the cheaper price. She knows what She's worth. But She fought beside us with all She has—you saw! Because it had to be."

"I still don't understand all of it."

"Nor will you. Nor will I. She would have sent you in alone, had it been possible. And at that last supreme danger, that thing called 'Eater of Souls' because it had done just that to many braves before you . . . had you lost to it, She and I would have tried to fight our way out—I was ready, any moment; I couldn't tell you—and if we had escaped—unlikely—She would have shed no tears for you. Or not many. Then worked another twenty or thirty or a hundred years to find and con and train anther champion—and fought just as hard by his side. She has courage, that cabbage. She knew how thin our chances were; you didn't. Did She flinch?"

"No."

"But you were the key, first to be found, then ground to fit. You yourself act, you're never a puppet, or you could never have won. She was the only one who could nudge and wheedle such a man and place him where he would act; no lesser person than She could handle the scale of hero She needed. So She searched until She found him . . . and honed him fine. Tell me, why did you take up the sword? It's not common in America."

"What?" I had to think. Reading 'King Arthur' and 'The Three Musketeers', and Burroughs wonderful Mars stories—But every kid does that. "When we moved to Florida, I was a Scout. The Scoutmaster was a Frenchman, taught high school. He started some of us lads. I liked it, it was something I did well. Then in college—"

"Ever wonder why that immigrant got that job in that town? And volunteered for Scout work? Or why your college had a fencing team when many don't? No matter, if you had gone elsewhere, there would have been fencing in a YMCA or something. Didn't you have more combat than most of your category?"

"Hell, yes!"

"Could have been killed anytime, too—and She would have turned to another candidate already being honed. Son, I don't know how you were selected, nor now you were converted from a young punk into the hero you potentially were. Not my job. Mine was simpler—just more dangerous—your groom and your 'eyes-behind.' Look around. Fancy quarters for a servant, eh?"

"Well, yes. I had almost forgotten that you were supposed to be my groom."

" 'Supposed,' hell! I was. I went three times to Nevia as Her servant, training for it. Jocko doesn't know to this day. If I went back, I would be welcome, I think. But only in the kitchen."

"But why? That part seems silly."

"Was it? When we snared you, your ego was in feeble shape, it had to be built up—and calling you 'Boss' and serving your meals while I stood and you sat, with Her, was part of it." He gnawed a knuckle and looked annoyed. "I still think She witched your first two arrows. Someday I'd like a return match—with Her not around."

"I may fool you. I've been practicing."

"Well, forget it. We got the Egg, that's the important thing. And here's this bottle and that's important, too." He poured again. "Will that be all, 'Boss'?"

"Damn you, Rufo! Yes, you sweet old scoundrel. You've straightened me out. Or conned me again, I don't know which."

"No con, Oscar, by the blood we've shed. I've told the truth as straight as I know it, though it hurt me. I didn't want to, you're my friend. Walking that rocky road with you I shall treasure all the days of my life."

"Uh . . . yes. Me, too. All of it."

"Then why are you frowning?"

"Rufo, I understand her now—as well as an ordinary person can—and respect her utterly . . . and love her more than ever. But I can't be anybody's fancy man. Not even here."

"I'm glad I didn't have to say that. Yes. She's right She's always right, damn Her! You must leave. For both of you. Oh, She wouldn't be hurt too much but staying would ruin you, in time. Destroy you, if you're stubborn.

"I had better get back—and toss my shoes." I felt better, as if I had told the surgeon: Go ahead. Amputate.

"Don't do that!"

"What?"

"Why should you? No need for anything final. If a marriage is to last a long time—and yours might, even a very long time—then holidays should be long, too. And off the leash, son, with no date to report back and no promises. She knows that knights errant spend their nights erring, She expects it. It has always been so, un droit de la vocation—and necessary. They just don't mention it in kiddies' stories where you come from. So go see what's stirring in your line of work elsewhere and don't worry. Come back in four or forty years or something, you'll be welcome. Heroes always sit at the first table, it s their right. And they come and go as they please, and that's their right, too. On a smaller scale, you re something like Her."

"High compliment!"

"On a 'smaller scale,' I said. Mmm, Oscar, part of your trouble is a need to go home. Your birthing land. To regain your perspective and find out who you are. All travelers feel this, I feel it myself from time to time. When the feeling comes, I pamper it."

"I hadn't realized I was homesick. Maybe I am."

"Maybe She realized it. Maybe She nudged you. Myself, I make it a rule to give any wife of mine a vacation from me whenever her face looks too familiar—for mine must be even more so to her, looking as I do. Why not, lad? Going back to Earth isn't the same as dying. I'm going there soon, that's why I'm clearing up this paper work. Happens we might be there the same time . . . and get together for a drink or ten and some laughs and stories. And pinch the waitress and see what she says. Why not?"

Chapter 21

Okay, here I am.

I didn't leave that week but soon. Star and I spent a tearful, glorious night before I left and she cried as she kissed me "*Au 'voir*" (not "Goodbye"). But I knew her tears would dry once I was out of sight; she knew that I knew and I knew she preferred it so, and so did I. Even though I cried, too.

Pan American isn't as slick as the commercial Gates; I was bunged through in three fast changes and no hocus-pocus. A girl said, "Places, please"—then whambo!

I came out on Earth, dressed in a London suit, passport and papers in pocket, the Lady Vivamus in a kit that did not look like a sword case, and in other pockets drafts exchangeable for much gold, for I found that I didn't mind accepting a hero's fee. I arrived near Zurich, I don't know the address; the Gate service sees to that. Instead, I had ways to send messages.

Shortly those drafts became, numbered accounts in three Swiss banks, handled by a lawyer I had been told to see. I bought travelers checks several places and some I mailed ahead and some I carried, for I had no intention of paying Uncle Sugar 91 percent.

You lose track of time on a different day and calendar; there was a week or two left on that free ride home my orders called for. It seemed smart to take it—less conspicuous. So I did—an old four-engine transport, Prestwick to Gander to New York.

Streets looked dirtier, buildings not as tall—and headlines worse than ever. I quit reading newspapers, didn't stay long; California I thought of as "home." I phoned Mother; she was reproachful about my not having written and I promised to visit Alaska as soon as I could. How were they all? (I had in mind that my half brothers and sisters might need college help someday.)

They weren't hurting. My stepfather was on flight orders and had made permanent grade. I asked her to forward any mail to my aunt.

California looked better than New York. But it wasn't Nevia. Not even Center. It was more crowded than I remembered. All you can say for California towns is that they aren't as bad as other places. I visited my aunt and uncle because they had been good to me and I was thinking of using some of that gold in Switzerland to buy him free from his first wife. But she had died and they were talking about a swimming pool. So I kept quiet. I had been almost ruined by too much money, it had grown me up a bit. I followed the rule of Their Wisdoms: Leave well enough alone.

The campus felt smaller and the students looked so young. Reciprocal, I guess. I was coming out of the malt shop across from Administration when two Letter sweaters came in, shoving me aside. The second said, "Watch it, Dad!"

I let him live.

Football had been re-emphasized, new coach, new dressing rooms, stands painted, talk about a stadium. The coach knew who I was; he knew the records and was out to make a name. "You're coming back, aren't you?" I told him I didn't think so.

"Nonsense!" he said. "Gotta get that old sheepskin! Silliest thing on earth to let your hitch in the Army stop you. Now look—" His voice dropped.

No nonsense about "sweeping the gym," stuff the Conference didn't like. But a boy could live with a family—and one could be found. If he paid his fees in cash, who cared? Quiet as an undertaker—"That leaves your GI benefits for pocket money."

"I don't have any."

"Man, don't you read the papers?" He had it on file: While I was gone, that unWar had been made eligible for GI benefits.

I promised to think it over.

But I had no such intention. I had indeed decided to finish my engineering degree, I like to finish things. But not there.

That evening I heard from Joan, the girl who had given me such a fine sendoff, then "Dear-Johnned" me. I intended to look her up, call on her and her husband; I just hadn't found out her married name yet. But she ran across my aunt, shopping, and phoned me. "Easy!" she said and sounded delighted.

"Who—Wait a minute, Joan!"

I must come to dinner that very night. I told her "Fine," and that I was looking forward to meeting the lucky galoot she had married.

Joan looked sweet as ever and gave me a hearty arms-around-my-neck smack, a welcome-home kiss, sisterly but good. Then I met the kids, one crib size and the other toddling.

Her husband was in L.A.

I should have reached for my hat. But it was all right think nothing of it Jim had phoned after she talked to me to say that he had to stay over one more night and of course it was all right for me to take her out to dinner he had seen me play football and maybe I would like to bowl tomorrow night she hadn't been able to get a baby sitter but her sister and brother-in-law were stopping in for drinks couldn't stay for dinner they were tied up after all dear it isn't like we hadn't known each other a long time oh you do too remember my sister there they are stopping out in front and I don't have the children in bed.

Her sister and brother-in-law stayed for one drink; Joan and her sister put the kids to bed while the brother-in-law sat with me and asked how things were in Europe he understood I was just back and then he told me how things were in Europe and what should be done about them. "You know, Mr. Jordan," he told me, tapping my knee, "a man in the real estate business like I am gets to be a pretty shrewd judge of human nature has to be and while I haven't actually been in Europe the way you have haven't had time somebody has to stay home and pay taxes and keep an eye on things while you lucky young fellows are seeing the world but human nature is the same anywhere and if we dropped just one little bomb on Minsk or Pinsk or one of those places they would see the light right quick and we could stop all this diddling around that's making it tough on the businessman. Don't you agree?"

I said he had a point. They left and he said that he would ring me tomorrow and show me some choice lots that could be handled on almost nothing down and were certain to go way up what with a new missile plant coming in here soon. "Nice listening to your experiences, Mr. Jordan, real pleasant. Sometime I must tell you about something that happened to me in Tijuana but not with the wife around ha ha!"

Joan said to me, "I can't see why she married him. Pour me another drink, hon, a double, I need it. I'm going to turn the oven down, dinner will keep."

We both had a double and then another, and had dinner about eleven. Joan got tearful when I insisted on going home around three. She told me I was chicken and I agreed; she told me things could have been so different if I hadn't insisted on going into the Army and I agreed again; she told me to go out the back way and not turn on any lights and she never wanted to see me again and Jim was going to Sausalito the seventeenth.

I caught a plane for Los Angeles next day.

Now look—I am not blaming Joan. I like Joan. I respect her and will always be grateful to her. She is a fine person. With superior early advantages—say in Nevia—she'd be a wow! She's quite a gal, even so. Her house was clean, her babies were clean and healthy and well cared for. She's generous and thoughtful and good-tempered.

Nor do I feel guilty. If a man has any regard for a girl's feelings, there is one thing he cannot refuse: a return bout if she wants one. Nor will I pretend that I didn't want it, too.

But I felt upset all the way to Los Angeles. Not over her husband, he wasn't hurt. Not over Joanie, she was neither swept off her feet nor likely to suffer remorse. Joanie is a good kid and had made a good adjustment between her nature and an impossible society.

Still, I was upset.

A man must not criticize a woman's most womanly quality. I must make it clear that little Joanie was just as sweet and just as generous as the younger Joanie who had sent me off to the Army feeling grand. The fault lay with me; I had changed.

My complaints are against the whole culture with no individual sharing more than a speck of blame. Let me quote that widely traveled culturologist and rake, Dr. Rufo:

"Oscar, when you get home, don't expect too much of your feminine compatriots. You're sure to be disappointed and the poor dears aren't to blame. American women, having been conditioned out of their sex instincts, compensate by compulsive interest in rituals over the dead husk of sex . . . and each one is sure she knows 'intuitively' the right ritual for conjuring the corpse. She knows and nobody can tell her any different . . . especially a man unlucky enough to be in bed with her. So don't try. You will either make her furious or crush her spirit. You'll be attacking that most Sacred of Cows: the myth that women know all about sex, just from being women."

Rufo had frowned. "The typical American female is sure that she has genius as a couturiere as an interior decorator, as a gourmet cook, and, always, as a courtesan. Usually she is wrong on four counts. But don't try to tell her so."

He had added, "Unless you can catch one not over twelve and segregate her, especially from her mother—and even that may be too late. But don't misunderstand me; it evens out. The American male is convinced that he is a great warrior, a great statesman, and a great lover. Spot checks prove that he is as deluded as she is. Or worse. Historo-culturally speaking, there is strong evidence that the American male, rattier than the female, murdered sex in your country."

"What can I do about it?"

"Slip over to France now and then. French women are almost as ignorant but not nearly as conceited and often are teachable."

When my plane landed, I put the subject out of mind as I planned to be an anchorite a while. I learned in the Army that no sex is easier than a starvation allowance—and I had serious plans.

I had decided to be the square I naturally am, with hard work and a purpose in life. I could have used those Swiss bank accounts to be a playboy. But I had been a playboy, it wasn't my style.

I had been on the biggest binge in history—one I wouldn't believe if I didn't have so much loot. Now was time to settle down and join Heroes Anonymous. Being a hero is okay. But a retired hero—first he's a bore, then he's a bum.

My first stop was Caltech. I could now afford the best and Caltech's only rival is where they tried to outlaw sex entirely. I had seen enough of the dreary graveyard in 1942-45.

The Dean of Admissions was not encouraging. "Mr. Gordon, you know that we turn down more than we accept? Nor could we give you full credit on this transcript. No slur on your former school—and we do like to give ex-servicemen a break—but this school has higher standards. Another thing, you won't find Pasadena a cheap place to live."

I said I would be happy to take whatever standing I merited, and showed him my bank balance (one of them) and offered a check for a years fees. He wouldn't take it but loosened up. I left with the impression that a place might be found for E. C. "Oscar" Gordon.

I went downtown and started the process to make me legally "Oscar" instead of "Evelyn Cyril." Then I started job hunting.

I found one out in the Valley, as a junior draftsman in a division of a subsidiary of a corporation that made tires, food machinery, and other things—missiles in this case. This was part of the Gordon Rehabilitation Plan. A few months over the drafting board would get me into the swing again and I planned to study evenings and behave myself. I found a furnished apartment in Sawtelle and bought a used Ford for commuting.

I felt relaxed then; "Milord Hero" was buried. All that was left was the Lady Vivamus, hanging over the television. But I balanced her in hand first and got a thrill out of it. I decided to find a salle d'armes and join its club. I had seen an archery range in the Valley, too, and there ought to be someplace where American Rifle Association members fired on Sundays. No need to get flabby—

Meanwhile I would forget the loot in Switzerland. It was payable in gold, not funny money, and if I let it sit. It might be worth more—maybe much more—from inflation than from investing it. Someday it would be capital, when I opened my own firm.

That's what I had my sights on: Boss. A wage slave, even in brackets where Uncle Sugar takes more than half, is still a slave. But I had learned from Her Wisdom that a boss must train; I could not buy "Boss" with gold.

So I settled down. My name change came through; Caltech conceded that I could look forward to moving to Pasadena—and mail caught up with me.

Mother sent it to my aunt, she forwarded it to the hotel address I had first given, eventually it reached my flat. Some were letters mailed in the States over a year ago, sent on to Southeast Asia, then Germany, then Alaska, then more changes before I read them in Sawtelle.

One offered that bargain on investment service again; this time I could Knock off 10 percent more. Another was from the coach at college—on plain stationery and signed in a scrawl. He said certain parties were determined to see the season start off with a bang. Would $250 per month change my mind? Phone his home number, collect. I tore it up.

The next was from the Veterans Administration, dated just after my discharge, telling me that as a result of Barton vs. United States, et al., it had been found that I was legally a "war orphan" and entitled to $110/month for schooling until age twentythree.

I laughed so hard I hurt.

After some junk was one from a Congressman. He had the honor to inform me that, in cooperation with the Veterans of Foreign Wars, he had submitted a group of special bills to correct injustices resulting from failure to classic correctly persons who were "war orphans," that the bills had passed under consent, and that he was happy to say that one affecting me allowed me to my twenty-seventh birthday to complete my education inasmuch as my twenty-third birthday had passed before the error was rectified. I am, sir, sincerely, *etc.*

I couldn't laugh. I thought how much dirt I would have eaten, or—you name it—the summer I was conscripted if I had been sure of $110 a month. I wrote that Congressman a thankyou letter, the best I knew how.

The next item looked like junk. It was from Hospitals' Trust, Ltd., therefore a pitch for a donation or a hospital insurance ad—but I couldn't see why anyone in Dublin would have me on their list.

Hospitals' Trust asked if I had Irish Hospitals' Sweepstakes ticket number such-and-such, and its official receipt? This ticket had been sold to J. L. Weatherby, Esq. Its number had been drawn in the second unit drawing, and had been a ticket of the winning horse. J. L. Weatherby had been informed and had notified Hospitals' Trust, Ltd., that he had disposed of ticket to E. C. Gordon, and, on receiving receipt, had mailed it to such party.

Was I the "E. C. Gordon," did I have the ticket, did I have the receipt? H. T. Ltd. would appreciate an early reply.

The last item in the stack had an A.P.O. return address. In it was an Irish Sweepstakes receipt—and a note; 'This should teach me not to play poker. Hope it wins you something—J. L. WEATHERBY.' The cancellation was over a year old.

I stared at it, then got the papers I had carried through the Universes. I found the matching ticket. It was bloodstained but the number was clear.

I looked at the letter. Second unit drawing—

I started examining tickets under bright light. The others were counterfeit. But the engraving of this ticket and this receipt was sharp as paper money. I don't know where Weatherby bought that ticket, but he did not buy it from the thief who sold me mine.

Second drawing—I hadn't known there was more than one. But drawings depend on the number of tickets sold, in units of £120,000. I had seen the results of only the first.

Weatherby had mailed the receipt care of Mother, to Wiesbaden, and it must have been in Elmendorf when I was in Nice—then had gone to Nice, and back to Elmendorf because Rufo had left a forwarding address with American Express; Rufo had known all about me of course and had taken steps to cover my disappearance.

On that morning over a year earlier while I sat in a cafe in Nice, I held a winning ticket with the receipt in the mail. If I had looked farther in that Herald-Tribune than the "Personal" ads I would have found the results of the Second Unit drawing and never answered that ad.

I would have collected $140,000, never have seen Star a second time —

Or would Her Wisdom have been balked?

Would I have refused to follow my "Helen of Troy" simply because my pockets were lined with money?

I gave myself the benefit of doubt. I would have walked the Glory Road anyhow!

At least, I hoped so.

Next morning I phoned the plant, then went to a bank and through a routine I had gone through twice in Nice.

Yes, it was a good ticket. Could the bank be of service in collecting it? I thanked them and left.

A little man from Internal Revenue was on my doorstep—

Almost—He buzzed from below while I was writing to Hospitals' Trust, Ltd.

Presently I was telling him that I was damned if I would! I'd leave the money in Europe and they could whistle! He said mildly not to take that attitude, as I was just blowing off steam because the IRS didn't like paying informers' fees but would if my actions showed that I was trying to evade the tax.

They had me boxed. I collected $140,000 and paid $103,000 to Uncle Sugar. The mild little man pointed out that it was better that way; so often people put off paying and got into trouble.

Had I been in Europe, it would have been $140,000 in gold—but now it was $37,000 in paper—because free and sovereign Americans can't have gold. They might start a war, or turn Communist, or something. No, I couldn't leave the $37,000 in Europe as gold; that was illegal, too. They were very polite.

I mailed 10 percent, $3,700, to Sgt. Weatherby and told him the story. I took $33,000 and set up a college trust for my siblings, handled so that my folks wouldn't know until it was needed. I crossed my fingers and hoped that news about this ticket would not reach Alaska. The L.A. papers never had it, but word got around somehow; I found myself on endless sucker lists, got letters offering golden opportunities begging loans, or demanding gifts.

It was a month before I realized I had forgotten the California State Income Tax. I never did sort out the red ink.

Chapter 22

I got back to the old drawing board, slugged away at books in the evening, watched a little television, weekends some fencing.

But I kept having this dream—

I had it first right after I took that job and now I was having it every night—

I'm heading along this long, long road and I round a curve and there's a castle up ahead. It's beautiful, pennants flying from turrets and a winding climb to its drawbridge. But I know, I just know, that there is a princess captive in its dungeon.

That part is always the same. Details vary. Lately the mild little man from Internal Revenue steps into the road and tells me that toll is paid here—10 percent more than whatever I've got.

Other times it's a cop and he leans against my horse (sometimes it has four legs, sometimes eight) and writes a ticket for obstructing traffic, riding with out-of-date license, failing to observe stop sign, and gross insubordination. He wants to know if I have a permit to carry that lance? —and tells me that game laws require me to tag any dragons killed.

Other times I round that turn and a solid wave of freeway traffic, five lanes wide, is coming at me. That one is worst.

I started writing this after the dreams started. I couldn't see going to a headshrinker and saying, "Look, Doc, I'm a hero by trade and my wife is Empress in another universe—" I had even less desire to lie on his couch and tell how my parents mistreated me as a child (they didn't) and how I found out about little girls (that s my business).

I decided to talk it out to a typewriter.

It made me feel better but didn't stop the dreams. But I learned a new word: "acculturated." It's what happens when a member of one culture shifts to another, with a sad period when he doesn't fit. Those Indians you see in Arizona towns, not doing anything, looking in shop windows or just standing. Acculturation. They don't fit.

I was taking a bus down to see my ear, nose, and throat doctor—Star promised me that her therapy plus that at Center would free me of the common cold—and it has; I don't catch anything. But even therapists that administer Long-Life can't protect human tissues against poison gas; L.A. smog was getting me. Eyes burning, nose stopped up—twice a week I went down to get horrid things done to my nose. I used to park my car and go down Wilshire by bus, as parking was impossible close in.

In the bus I overheard two ladies: "—much as I despise them, you can't give a cocktail party without inviting the Sylvesters."

It sounded like a foreign language. Then I played it back and understood the words.

But why did she have to invite the Sylvesters?

If she despised them, why didn't she either ignore them, or drop a rock on their heads?

In God's name, why give a "cocktail party"? People who don't like each other particularly, standing around (never enough chairs), talking about things they aren't interested in, drinking drinks they don't want (why set a time to take a drink?) and getting high so that they won't notice they aren't having fun. Why?

I realized that acculturation had set in. I didn't fit.

I avoided buses thereafter and picked up five traffic tickets and a smashed fender. I quit studying, too. Books didn't seem to make sense. It warn't the way I larned it back in dear old Center.

But I stuck to my job as a draftsman. I always have been able to draw and soon I was promoted to major work.

One day the Chief Draftsman called me over. "Here, Gordon, this assembly you did—"

I was proud of that job. I had remembered something I had seen on Center and had designed it in, reducing moving parts and improving a clumsy design into one that made me feel good. It was tricky and I had added an extra view. "Well?"

He handed it back. "Do it over. Do it right."

I explained the improvement and that I had done the drawing a better way to—

He cut me off. "We don't want it done a better way, we want it done our way."

"Your privilege," I agreed and resigned by walking out.

My flat seemed strange at that time on a working day. I started to study 'Strength of Materials'—and chucked the book aside. Then I stood and looked at the Lady Vivamus.

"*Dum Vivimus, Vivamus*!" Whistling, I buckled her on, drew blade, felt that thrill run up my arm.

I returned sword, got a few things, traveler's checks and cash mostly, walked out. I wasn't going anywhere, just thataway!

I had been striding along maybe twenty minutes when a prowl car pulled up and took me to the station.

Why was I wearing that thing? I explained that gentlemen wore swords.

If I would tell them what movie company I was with, a phone call could clear it up. Or was it television? The Department cooperated but liked to be notified.

Did I have a license for concealed weapons? I said it wasn't concealed.

They told me it was—by that scabbard. I mentioned the Constitution; I was told that the Constitution sure as hell didn't mean walking around city streets with a toad sticker like that. A cop whispered to the sergeant, "Here's what we got him on, Sarge. The blade is longer than —" I think it was three inches. There was trouble when they tried to take the Lady Vivamus away from me. Finally I was locked up, sword and all.

Two hours later my lawyer got it changed to "disorderly conduct" and I was released, with talk of a sanity hearing.

I paid him and thanked him and took a cab to the airport and a plane to San Francisco. At the port I bought a large bag, one that would take the Lady Vivamus cater-cornered.

That night in San Francisco I went to a party. I met this chap in a bar and bought him a drink and he bought me one and I stood him to dinner and we picked up a gallon of wine and went to this party. I had been explaining to him that what sense was there in going to school to learn one way when there was already a better way? As silly as an Indian studying buffalo calling! Buffalos are in zoos! Acculturated, that's what it was!

Charlie said he agreed perfectly and his friends would like to hear it. So we went and I paid the driver to wait but took my suitcase inside. Charlie's friends didn't want to hear my theories but the wine was welcome and I sat on the floor and listened to folk singing. The men wore beards and didn't comb their hair. The beards helped, it made it easy to tell which were girls. One beard stood up and recited a poem. Old Jocko could do better blind drunk but I didn't say so.

It wasn't like a party in Nevia and certainly not in Center, except this: I got propositioned. I might have considered it if this girl hadn't been wearing sandals. Her toes were dirty. I thought of Zhai-ee-van and her dainty, clean fur, and told her thanks, I was under a vow.

The beard who had recited the poem came over and stood in front of me. "Man, like what rumble you picked up that scar?"

I said it had been in Southeast Asia. He looked at me scornfully. "Mercenary!"

"Well, not always," I told him. "Sometimes I fight for free. Like right now."

I tossed him against a wall and took my suitcase outside and went to the airport—and then Seattle and Anchorage, Alaska, and wound up at Elmendorf AFB, clean, sober, and with the Lady Vivamus disguised as fishing tackle.

Mother was glad to see me and the kids seemed pleased—I had bought presents between planes in Seattle—and my stepdaddy and I swapped yarns.

I did one important thing in Alaska; I flew to Point Barrow. There I found part of what I was looking for: no pressure, no sweat, not many people. You look out across the ice and know that only the North Pole is over that way, and a few Eskimos and fewer white people here. Eskimos are every bit as nice as they have been pictured. Their babies never cry, the adults never seem cross—only the dogs staked-out between the huts are bad-tempered.

But Eskimos are "civilized" now; the old ways are going. You can buy a choc malt at Barrow and airplanes fly daily in a sky that may hold missiles tomorrow.

But they still seal amongst the ice floes, the village is rich when they take a whale, half starved if they don't. They don't count time and they don't seem to worry about anything—ask a man how old he is, he answers: "Oh, I'm quite of an age." That's how old Rufo is. Instead of goodbye, they say, "Sometime again!" No particular time and again well see you.

They let me dance with them. You must wear gloves (in their way they are as formal as the Doral) and you stomp and sing with the drums—and I found myself weeping. I don't know why. It was a dance about a little old man who doesn't have a wife and now he sees a seal—

I said, "Sometime again!"—went back to Anchorage and to Copenhagen. From 30,000 feet the North Pole looks like prairie covered with snow, except black lines that are water. I never expected to see the North Pole.

From Copenhagen I went to Stockholm. Majatta was not with her parents but was only a square away. She cooked me that Swedish dinner, and her husband is a good Joe. From Stockholm I phoned a "Personal" ad to the Paris edition of the Herald-Tribune, then went to Paris.

I kept the ad in daily and sat across from the Two Maggots and stacked saucers and tried not to fret. I watched the ma'm'selles and thought about what I might do.

If a man wanted to settle down for forty years or so, wouldn't Nevia be a nice place? Okay, It has dragons. It doesn't have flies, nor mosquitoes, nor smog. Nor parking problems, nor freeway complexes that look like diagrams for abdominal surgery. Not a traffic light anywhere.

Muri would be glad to see me. I might marry her. And maybe little whatever-her-name was, her kid sister, too. Why not? Marriage customs aren't everywhere those they use in Paducah. Star would be pleased; she would like being related to Jocko by marriage.

But I would go see Star first, or soon anyhow, and kick that pile of strange shoes aside. But I wouldn't stay; it would be "sometime again" which would suit Star. It is a phrase, one of the few, that translates

exactly into Centrist jargon—and means exactly the same.
"Sometime again," because there are other maidens, or pleasing facsimiles, elsewhere, in need of rescuing. Somewhere. And a man must work at his trade, which wise wives know.
"I cannot rest from travel; I will drink life to the lees." A long road, a trail, a "*Tramp Royal,*" with no certainty of what you'll eat or where or if, nor where you'll sleep, nor with whom. But somewhere is Helen of Troy and all her many sisters and there is still noble work to be done.
A man can stack a lot of saucers in a month and I began to fume instead of dream. Why the hell didn't Rufo show up? I brought this account up to date from sheer nerves. Has Rufo gone back? Or is he dead?
Or was he "never born"? Am I a psycho discharge and what is in this case I carry with me wherever I go? A sword? I'm afraid to look, so I do—and now I'm afraid to ask. I met an old sergeant once, a thirty-year man, who was convinced that he owned all the diamond mines in Africa; he spent his evenings keeping books on them. Am I just as happily deluded? Are these francs what is left of my monthly disability check?
Does anyone ever get two chances? Is the Door in the Wall always gone when next you look? Where do you catch the boat for Brigadoon? Brother, it's like the post office in Brooklyn: You can't get there from here!
I'm going to give Rufo two more weeks—

I've heard from Rufo! A clipping of my ad was for warded to him but he had a little trouble. He wouldn't say much by phone but I gather he was mixed up with a carnivorous Fraulein and got over the border almost sans calottes. But he'll be here tonight. He is quite agreeable to a change in planets and universes and says he has something interesting in mind. A little risky perhaps, but not dull. I'm sure he's right both ways. Rufo might steal your cigarettes and certainly your wench but things aren't dull around him—and he would die defending your rear.
So tomorrow we are heading up that Glory Road, rocks and all!
Got any dragons you need killed?

PODKAYNE OF MARS

FOR GALE AND ASTRID

I

All my life I've wanted to go to Earth. Not to live, of course—just to see it. As everybody knows, Terra is a wonderful place to visit but not to live. Not truly suited to human habitation.

Personally, I'm not convinced that the human race originated on Earth. I mean to say, how much reliance should you place on the evidence of a few pounds of old bones plus the opinions of anthropologists who usually contradict each other anyhow when what you are being asked to swallow so obviously flies in the face of all common sense?

Think it through— The surface acceleration of Terra is clearly too great for the human structure; it is known to result in flat feet and hernias and heart trouble. The incident solar radiation on Terra will knock down dead an unprotected human in an amazingly short time—and do you know of any other organism which has to be artificially protected from what is alleged to be its own natural environment in order to stay alive? As to Terran ecology—

Never mind. We humans just *couldn't* have originated on Earth. Nor (I admit) on Mars, for that matter—although Mars is certainly as near ideal as you can find in this planetary system today. Possibly the Missing Planet was our first home—even though I think of Mars as "home" and will always want to return to it no matter how far I travel in later years . . . and I intend to travel a long, *long* way.

But I do want to visit Earth as a starter, not only to see how in the world eight billion people manage to live almost sitting in each other's laps (less than half of the land area of Terra is even marginally habitable) but mostly to see oceans . . . from a safe distance. Oceans are not only fantastically unlikely but to me the very thought of them is terrifying. All that unimaginable amount of water, unconfined. And so deep that if you fell into it, it would be over your head. Incredible!

But now we are going there!

Perhaps I should introduce us. The Fries Family, I mean. Myself: Podkayne Fries—"Poddy" to my friends and we might as well start off being friendly. Adolescent female: I'm eight plus a few months, at a point in my development described by my Uncle Tom as "frying size and just short of husband high"—a fair-enough description since a female citizen of Mars may contract plenary marriage without guardian's waiver on her ninth birthday, and I stand 157 centimeters tall in my bare feet and mass 49 kilograms. "Five feet two and eyes of blue" my daddy calls me, but he is a historian and romantic. But I am not romantic and would not consider even a limited marriage on my ninth birthday; I have other plans.

Not that I am opposed to marriage in due time, nor do I expect to have any trouble snagging the male of my choice. In these memoirs I shall be frank rather than modest because they will not be published until I am old and famous, and I will certainly revise them before then. In the meantime I am taking the precaution of writing English in Martian Oldscript—a combination which I'm sure Daddy could puzzle out, only he wouldn't do such a thing unless I invited him to. Daddy is a dear and does not snoopervise me. My brother Clark would pry, but he regards English as a dead language and would never bother his head with Oldscript anyhow.

Perhaps you have seen a book titled: *Eleven Years Old: The Pre-Adolescent Adjustment Crisis in the Male.* I read it, hoping that it would help me to cope with my brother. Clark is just six, but the "Eleven Years" referred to in that title are Terran years because it was written on Earth. If you will apply the conversion factor of 1.8808 to attain real years, you will see that my brother is exactly eleven of those undersized Earth years old.

That book did not help me much. It talks about "cushioning the transition into the social group"—but there is no present indication that Clark ever intends to join the human race. He is more likely to devise a way to blow up the universe just to hear the bang. Since I am responsible for him much of the time and since he has an I.Q. of 160 while mine is only 145, you can readily see that I need all the advantage that greater age and maturity can give me. At present my standing rule with him is: Keep your guard up and *never* offer hostages.

Back to me—I'm colonial mongrel in ancestry, but the Swedish part is dominant in my looks, with Polynesian and Asiatic fractions adding no more than a not-unpleasing exotic flavor. My legs are long for my height, my waist is 48 centimers and my chest is 90—not all of which is rib cage, I assure you, even though we old colonial families all run to hypertrophied lung development; some of it is burgeoning secondary sex characteristic. Besides that, my hair is pale blond and wavy and I'm pretty. Not beautiful—Praxiteles would not have given me a second look—but real beauty is likely to scare a man off, or else make him quite unmanageable, whereas prettiness, properly handled, is an asset.

Up till a couple of years ago I used to regret not being male (in view of my ambitions), but I at last realized how silly I was being; one might as well wish for wings. As Mother says: "One works with available materials" . . . and I found that the materials available were adequate. In fact I found that I *like* being female; my hormone balance is okay and I'm quite well adjusted to the world and vice versa. I'm smart enough not unnecessarily to show that I am smart; I've got a long upper lip and a short nose, and when I wrinkle my nose and look baffled, a man is usually only too glad to help me, especially if he is about twice my age. There are more ways of computing a ballistic than by counting it on your fingers.

That's me: Poddy Fries, free citizen of Mars, female. Future pilot and someday commander of deepspace exploration parties. Watch for me in the news.

Mother is twice as good-looking as I am and much taller than I ever will be; she looks like a Valkyrie about to gallop off into the sky. She holds a systemwide license as a Master Engineer, Heavy Construction, Surface or Free Fall, and is entitled to wear both the Hoover Medal with cluster and the Christiana Order, Knight Commander, for bossing the rebuilding of Deimos and Phobos. But she's more than just the traditional hairy engineer; she has a social presence which she can switch from warmly charming to frostily intimidating at will, she holds honorary degrees galore, and she publishes popular little gems such as "Design Criteria with Respect to the Effects of Radiation on the Bonding of Pressure-Loaded Sandwich Structures."

It is because Mother is often away from home for professional reasons that I am, from time to time, the reluctant custodian of my younger brother. Still, I suppose it is good practice, for how can I ever expect to command my own ship if I can't tame a six-year-old savage? Mother says that a boss who is forced to part a man's hair with a wrench has failed at some point, so I try to control our junior nihilist without resorting to force. Besides, using force on Clark is very chancy; he masses as much as I do and he fights dirty.

It was the job Mother did on Deimos that accounts for Clark and myself. Mother was determined to meet her construction dates; and Daddy, on leave from Ares U. with a Guggenheim grant, was even more frantically determined to save every scrap of the ancient Martian artifacts no matter how much it delayed construction; this threw them into such intimate and bitter conflict that they got married and for a while Mother had babies.

Daddy and Mother are Jack Spratt and his wife; he is interested in everything that has already happened, she is interested only in what is going to happen, especially if she herself is making it happen. Daddy's title is Van Loon Professor of Terrestrial History but his real love is Martian history, especially if it happened fifty million years-ago. But do not think that Daddy is a cloistered don given only to contemplation and study. When he was even younger than I am now, he lost an arm one chilly night in the attack on the Company Offices during the Revolution —and he can still shoot straight and fast with the hand he has left.

The rest of our family is Great-Uncle Tom, Daddy's father's brother. Uncle Tom is a parasite. So he says. It is true that you don't see him work much, but he was an old man before I was born. He is a Revolutionary veteran, same as Daddy, and is a Past Grand Commander of the Martian Legion and a Senator-at-Large of the Republic, but he doesn't seem to spend much time on either sort of politics, Legion or public; instead he hangs out at the Elks Club and plays pinochle with other relics of the past. Uncle Tom is really my closest relative, for he isn't as intense as my parents, nor as busy, and will always take time to talk with me. Furthermore he has a streak of Original Sin which makes him sympathetic to my problems. He says that I have such a streak, too, much wider than his. Concerning this, I reserve my opinion.

That's our family and we are all going to Earth. Wups! I left out three—the infants. But they hardly count now and it is easy to forget them. When Daddy and Mother got married, the PEG Board—Population, Ecology, & Genetics—pegged them at five and would have allowed them seven had they requested it, for, as you may have gathered, my parents are rather high-grade citizens even among planetary colonials all of whom are descended from, or are themselves, highly selected and drastically screened stock.

But Mother told the Board that five was all that she had time for and then had us as fast as possible, while fidgeting at a desk job in the Bureau of Planetary Engineering. Then she popped her babies into deep-freeze as fast as she had them, all but me, since I was the first. Clark spent two years at constant entropy, else he would be almost as old as I am—deep-freeze time doesn't count, of course, and his official birthday is the day he was decanted. I remember how jealous I was—Mother was just back from conditioning Juno and it didn't seem fair to me that she would immediately start raising a baby.

Uncle Tom talked me out of that, with a lot of lap sitting, and I am no longer jealous of Clark—merely wary.

So we've got Gamma, Delta, and Epsilon in the sub-basement of the crèche at Marsopolis, and we'll uncork and name at least one of them as soon as we get back from Earth. Mother is thinking of revivifying Gamma and Epsilon together and raising them as twins (they're girls) and then launching Delta, who is a boy, as soon as the girls are housebroken. Daddy says that is not fair, because Delta is entitled to be older than Epsilon by natural priority of birth date. Mother says that is mere worship of precedent and that she does wish Daddy would learn to leave his reverence for the past on the campus when he comes home in the evening.

Daddy says that Mother has no sentimental feelings— and Mother says she certainly hopes not, at least with any problem requiring rational analysis—and Daddy says let's be rational, then . . . twin older sisters would either break a boy's spirit or else spoil him rotten.

Mother says that is unscientific and unfounded. Daddy says that Mother merely wants to get two chores out of the way at once—whereupon Mother heartily agrees and demands to know why proved production engineering principles should not be applied to domestic economy?

Daddy doesn't answer this. Instead he remarks thoughtfully that he must admit that two little girls dressed just alike would be kind of cute . . . name them "Margret" and "Marguerite" and call them "Peg" and "Meg"—

Clark muttered to me, "Why uncork them at all? Why not just sneak down some night and open the valves and call it an accident?"

I told him to go wash out his mouth with prussic acid and not let Daddy hear him talk that way. Daddy would have walloped him properly. Daddy, although a historian, is devoted to the latest, most progressive theories of child psychology and applies them by canalizing the cortex through pain association whenever he really wants to ensure that a lesson will not be forgotten. As he puts it so neatly: "Spare the rod and spoil the child."

I canalize most readily and learned very early indeed how to predict and avoid incidents which would result in Daddy's applying his theories and his hand. But in Clark's case it is almost necessary to use a club simply to gain his divided attention.

So it is now clearly evident that we are going to have twin baby sisters. But it is no headache of mine, I am happy to say, for Clark is quite enough maturing trauma for one girl's adolescence. By the time the twins are a current problem I expect to be long gone and far away.

Interlude

Hi, Pod.

So you think I can't read your worm tracks.

A lot you know about me! Poddy—oh, excuse me, "Captain" Podkayne Fries, I mean, the famous Space Explorer and Master of Men—Captain Poddy dear, you probably will never read this because it wouldn't occur to you that I not only would break your "code" but also write comments in the big, wide margins you leave.

Just for the record, Sister dear, I read Old Anglish just as readily as I do System Ortho. Anglish isn't all that hard and I learned it as soon as I found out that a lot of books I wanted to read had never been translated. But it doesn't pay to tell everything you know, or somebody comes along and tells you to stop doing whatever it is you are doing. Probably your older sister.

But imagine calling a straight substitution a "code"! Poddy, if you had actually been able to write Old Martian, it would have taken me quite a lot longer. "But you can't. Shucks, even Dad can't write it without stewing over it and he probably knows more about Old Martian than anyone else in the System.

But you won't crack my code—because I haven't any.

Try looking at this page under ultraviolet light—a sun lamp, for example.

II

Oh, *Unspeakables!*

Dirty ears! Hangnails! Snel-frockey! *Spit!*

WE AREN'T *GOING!*

At first I thought that my brother Clark had managed one of his more charlatanous machinations of malevolent legerdemain. But fortunately (the only fortunate thing about the whole miserable mess) I soon perceived that it was impossible for him to be in fact guilty no matter what devious subversions roil his id. Unless he has managed to invent and build in secret a time machine, which I misdoubt he *would* do if he could . . . nor am I prepared to offer odds that he can't. Not since the time he rewired the delivery robot so that it would serve him midnight snacks and charge them to my code number without (so far as anyone could ever prove) disturbing the company's seal on the control box.

We'll never know how he did that one, because, despite the fact that the company offered to Forgive All and pay a cash bonus to boot if only he would *please* tell them how he managed to beat their unbeatable seal—despite this, Clark just looked blank and would not talk. That left only circumstantial evidence, i.e., it was clearly evident *to* anyone who knew us both (Daddy and Mother, namely) that *I* would never order candy-stripe ice cream smothered in hollandaise sauce, or—no, I can't go on; I feel ill. Whereas Clark is widely known to eat anything which does not eat him first.

Even this clinching psychological evidence would never have convinced the company's adjuster had not their own records proved that two of these obscene feasts had taken place while I was a house guest of friends in Syrtis Major, a thousand kilometers away. Never mind, I simply want to warn all girls not to have a Mad Genius for a baby brother. Pick instead a stupid, stolid, slightly subnormal one who will sit quietly in front of the solly box, mouth agape at cowboy classics, and never wonder what makes the pretty images.

But I have wandered far from my tragic tale.

We aren't going to have twins.

We already have triplets.

Gamma, Delta, and Epsilon, throughout all my former life mere topics of conversation, are now Grace, Duncan, and Elspeth in all too solid flesh—unless Daddy again changes his mind before final registration; they've had three sets of names already. But what's in a name?—they are here, already in our home with a nursery room sealed on to shelter them . . . three helpless unfinished humans about canal-worm pink in color and no features worthy of the name. Their limbs squirm aimlessly, their eyes don't track, and a faint, queasy odor of sour milk permeates every room even when they are freshly bathed. Appalling sounds come from one end of each—in which they heterodyne each other—and even more appalling conditions prevail at the other ends. (I've yet to find all three of them dry at the same time.)

And yet there is something decidedly engaging about the little things; were it not that they are the proximate cause of my tragedy I could easily grow quite fond of them. I'm sure Duncan is beginning to recognize me already.

But, if I am beginning to be reconciled to their presence, Mother's state can only be described as atavistically maternal. Her professional journals pile up unread, she has that soft Madonna look in her eyes, and she seems somehow both shorter and wider than she did a week ago.

First consequence: she won't even discuss going to Earth, with or without the triplets.

Second consequence: Daddy won't go if she won't go—he spoke quite sharply to Clark for even suggesting it.

Third consequence: since they won't go, we *can't* go. Clark and me, I mean. It is conceivably possible that I might have been permitted to travel alone (since Daddy agrees that I am now a "young adult" in maturity and judgment even though my ninth birthday lies still some months in the future), but the question is formal and without content since I am not considered quite old enough to accept full responsible control of my brother with both my parents some millions of kilometers away (nor am I sure that I would wish to, unless armed with something at least as convincing as a morning star) and Daddy is so dismayingly fair with us that he would not even discuss permitting one of us to go and not the other when both of us had been promised the trip.

Fairness is a priceless virtue in a parent—but just at the moment I could stand being spoiled and favored instead.

But the above is why I am sure that Clark does not have a time machine concealed in his wardrobe. This incredible contretemps, this idiot's dream of interlocking mishaps, is as much to his disadvantage as it is to mine.

How did it happen? Gather ye round— Little did we dream that, when the question of a family trip to Earth was being planned in our household more than a month ago, this disaster was already complete and simply waiting the most hideous moment to unveil itself. The facts are these: the crèche at Marsopolis has thousands of newborn babies marbleized at just short of absolute zero, waiting in perfect safety until their respective parents are ready for them. It is said, and I believe it, that a direct hit with a nuclear bomb would not hurt the consigned infants; a thousand years later a rescue squad could burrow down and find that automatic, self-maintaining machinery had not permitted the tank temperatures to vary a hundredth of a degree.

In consequence, we Marsmen (not "Martians," please!— Martians are a nonhuman race, now almost extinct)— Marsmen tend to marry early, have a full quota of babies quickly, then rear them later, as money and time permit. It reconciles that discrepancy, so increasingly and glaringly evident ever since the Terran Industrial Revolution, between the best biological age for having children and the best social age for supporting and rearing them.

A couple named Breeze did just that, some ten years ago—married on her ninth birthday and just past his tenth, while he was still a pilot cadet and she was attending Ares U. They applied for three babies, were pegged accordingly, and got them all out of the way while they were both finishing school. Very sensible.

The years roll past, he as a pilot and later as master, she as a finance clerk in his ship and later as purser—a happy life. The spacelines like such an arrangement; married couples spacing together mean a taut, happy ship.

Captain and Mrs. Breeze serve their ten-and-a-half (twenty Terran) years and put in for half-pay retirement, have it confirmed—and immediately radio the crèche to uncork their babies, all three of them.

The radio order is received, relayed back for confirmation; the crèche accepts it. Five weeks later the happy couple pick up three babies, sign for them, and start the second half of a perfect life.

So they thought—

But what they had deposited was two boys and a girl; what they got was two girls and a boy. Ours.

Believe this you must—it took them the better part of a week to notice it. I will readily concede that the difference between a brand-new boy baby and a brand-new girl baby is, at the time, almost irrelevant. Nevertheless there is a slight difference. Apparently it was a case of too much help—between a mother, a motherin-law, a temporary nurse, and a helpful neighbor, and much running in and out, it seems unlikely that any one person bathed all three babies as one continuous operation that first week. Certainly Mrs. Breeze had not done so—until the day she did . . . and noticed . . . and fainted—and dropped one of our babies in the bath water, where it would have drowned had not her scream fetched both her husband and the neighbor lady.

So we suddenly had month-old triplets.

The lawyer man from the crèche was very vague about how it happened; he obviously did not want to discuss how their "foolproof" identification system could result hi such a mixup. So I don't know myself—but it seems logically certain that, for all their serial numbers, babies' footprints, record machines, et cetera, there is some point in the system where one clerk read aloud "Breeze" from the radioed order and another clerk checked a file, then punched "Fries" into a machine that did the rest.

But the fixer man did not say. He was simply achingly anxious to get Mother and Daddy to settle out of court— accept a check and sign a release under which they agreed not to publicize the error.

They settled for three years of Mother's established professional earning power while the little fixer man gulped and looked relieved.

But nobody offered to pay *me* for the mayhem that had been committed on my life, my hopes, and my ambitions.

Clark did offer a suggestion that was almost a sensible one, for him. He proposed that we swap even with the Breezes, let them keep the warm ones, we would keep the cold ones. Everybody happy—and we all go to Earth.

My brother is far too self-centered *to* realize it, but the Angel of Death brushed him with its wings at that point. Daddy is a truly noble soul . . . but he had had almost more than he could stand.

And so have I. I had expected today to be actually on my way to Earth, my first space trip farther than Phobos— which was merely a school field trip, our "Class Honeymoon." A nothing thing.

Instead, guess what I'm doing.

Do you have any idea how many times a day *three* babies have to be changed?

III

Hold it! Stop the machines! Wipe the tapes! Cancel all bulletins—

WE ARE GOING TO EARTH *AFTER ALL!!!!*

Well, not *all* of us. Daddy and Mother aren't going, and of course, the triplets are not. But— Never mind; I had better tell it in order.

Yesterday things just got to be Too Much. I had changed them in rotation, only to find as I got the third one dry and fresh that number one again needed service. I had been thinking sadly that just about that moment I should have been entering the dining saloon of S.S. *Wanderlust* to the strains of soft music. Perhaps on the arm of one of the officers . . . perhaps even on the arm of the Captain himself had I the chance to arrange an accidental Happy Encounter, then make judicious use of my "puzzled kitten" expression.

And, as I reached that point in my melancholy daydream, it was then that I discovered that my chores had started all over again. I thought of the Augean Stables and suddenly it was just Too Much and my eyes got blurry with tears.

Mother came in at that point and I asked if I could *please* have a couple of hours of recess?

She answered, "Why, certainly, dear," and didn't even glance at me. I'm sure that she didn't notice that I was crying; she was already doing over, quite unnecessarily, the one that I had just done. She had been tied up on the phone., telling someone firmly that, while it was true as reported that she was not leaving Mars, nevertheless she would not now accept another commission even as a consultant—and no doubt being away from the infants for all of ten minutes had made her uneasy, so she just had to get her hands on one of them.

Mother's behavior had been utterly unbelievable. Her cortex has tripped out of circuit and her primitive instincts are in full charge. She reminds me of a cat we had when I was a little girl—Miss Polka Dot Ma'am and her first litter of kittens. Miss Pokie loved and trusted all of us—except about kittens. If we touched one of them, she was uneasy about it. If a kitten was taken out of her box and placed on the floor to be admired, she herself would hop out, grab the kitten in her teeth and immediately return it to the box, with an indignant waggle to her seat that showed all too plainly what she thought of irresponsible people who didn't know how to handle babies.

Mother is just like that now. She accepts my help simply because there is too much for her to do alone. But she doesn't really believe that I can even pick up a baby without close supervision.

So I left and followed my own blind instincts, which told me to go look up Uncle Tom.

I found him at the Elks Club, which was reasonably certain at that time of day, but I had to wait in the ladies' lounge until he came out of the card room. Which he did in about ten minutes, counting a wad of money as he came. "Sorry to make you wait," he said, "but I was teaching a fellow citizen about the uncertainties in the laws of chance and I had to stay long enough to collect the tuition. How marches it, Podkayne mavourneen?"

I tried to tell him and got all choked up, so he walked me to the park under the city hall and sat me on a bench and bought us both packages of Choklatpops and I ate mine and most of his and watched the stars on the ceiling and told him all about it and felt better.

He patted my hand. "Cheer up, Flicka. Always remember that, when things seem darkest, they usually get considerably worse." He took his phone out of a pocket and made a call. Presently he said, "Never mind the protocol routine, miss. This is Senator Fries. I want the Director." Then he added in a moment, "Hymie? Tom Fries here. How's Judith? Good, good . . . Hymie, I just called to tell you that I'm coming over to stuff you into one of your own liquid helium tanks. Oh, say about fourteen or a few minutes after. That'll give you time to get out of town. Clearing." He pocketed his phone. "Let's get some lunch. Never commit suicide on an empty stomach, my dear; it's bad for the digestion."

Uncle Tom took me to the Pioneers Club where I have been only once before and which is even more impressive than I had recalled—It has *real waiters* . . . men so old that they might have been pioneers themselves, unless they met the first ship. Everybody fussed over Uncle Tom and he called them all by their first names and they all called him "Tom" but made it sound like "Your Majesty" and the master of the hostel came over and prepared my sweet himself with about six other people standing around to hand him things, like a famous surgeon operating against the swift onrush of death.

Presently Uncle Tom belched behind his napkin and I thanked everybody as we left while wishing that I had had the forethought to wear my unsuitable gown that Mother won't let me wear until I'm nine and almost made me take back—one doesn't get to the Pioneers Club every day.

We took the James Joyce Fogarty Express Tunnel and Uncle Tom sat down the whole way, so I had to sit, too, although it makes me restless; I prefer to walk in the direction a tunnel is moving and get there a bit sooner. But Uncle Tom says that he gets plenty of exercise watching other people work themselves to death.

I didn't really realize that we were going to the Marsopolis Crèche until we were there, so bemused had I been earlier with my own tumultuous emotions. But when we were there and facing a sign reading: OFFICE OF THE DIRECTOR—PLEASE USE OTHER DOOR, Uncle Tom said, "Hang around somewhere; I'll need you later," and went on in.

The waiting room was crowded and the only magazines not in use were *Kiddie Kapers* and *Modern Homemaker,* so I wandered around a bit and presently found a corridor that led to the Nursery.

The sign on the door said that visiting hours were from 16 to 18.30. Furthermore it was locked, so I moved on and found another door which seemed much more promising. It was marked: positively no admittance—but it didn't say "This Means *You"* and it wasn't locked, so I went in.

You never saw so many babies in your whole life!

Row upon row upon row, each in its own little transparent cubicle. I could really see only the row nearest me, all of which seemed to be about the same age—and much more finished than the three we had at home. Little brown dumplings they were, cute as puppies. Most of them were asleep, some were awake and kicking and cooing and grabbing at dangle toys that were just in reach. If there had not been a sheet of glass between me and them I would have grabbed me a double armful of babies.

There were a lot of girls in the room, too—well, young women, really. Each of them seemed to be busy with a baby and they didn't notice me. But shortly one of the babies nearest me started to cry whereupon a light came on over its cubicle, and one of the nurse girls hurried over, slid back the cover, picked it up and started patting its bottom. It stopped crying.

"Wet?" I inquired.

She looked up, saw me. "Oh, no, the machines take care of that. Just lonely, so I'm loving it." Her voice came through clearly in spite of the glass—a hear and speak circuit, no doubt, although the pickups were not in evidence. She made soft noises to the baby, then added, "Are you a new employee? You seem to be lost."

"Oh, no," I said hastily, "I'm not an employee. I just—"

"Then you don't belong here, not at this hour. Unless"—she looked at me rather skeptically—"just possibly you are looking for the instruction class for young mothers?"

"Oh, no, no!" I said hastily. "Not yet." Then I added still more hastily, "I'm a guest of the Director."

Well, it wasn't a fib. Not quite. I was a guest of a guest of the Director, one who was with him by appointment. The relationship was certainly concatenative, if not equivalent.

It seemed to reassure her. She asked," "Just what did you want? Can I help you?"

"Uh, just information. I'm making a sort of a survey. What goes on in this room?"

"These are age six-month withdrawal contracts," she told me. "All these babies will be going home in a few days." She put the baby, quiet now, back into its private room, adjusted a nursing nipple for it, made some other sort of adjustments on the outside of the cubicle so that the padding inside sort of humped up and held the baby steady against the milk supply, then closed the top, moved on a few meters and picked up another baby. "Personally," she added, "I think the age six-month contract is the best one. A child twelve months old is old enough to notice the transition. But these aren't. They don't care who comes along and pets them when they cry ... but nevertheless six months is long enough to get a baby well started and take the worst of the load off the mother. We know how, we're used to it, we stand our watches in rotation so that we are never exhausted from being 'up with the baby all night' . . . and in consequence we aren't short-tempered and we never yell at them—and don't think for a minute that a baby doesn't understand a cross tone of voice simply because he can't talk yet. He knows! And it can start him off so twisted that he may take it out on somebody else, years and years later. There, there, honey," she went on but not to me, "feel better now? Feeling sleepy, huh? Now you just hold still and Martha will keep her hand on you until you are fast asleep."

She watched the baby for a moment longer, then withdrew her hand, closed the box and hurried on to where another light was burning. "A baby has no sense of time," she added as she removed a squalling lump of fury from its crib. "When it needs love, it needs it right now. It can't know that—" An older woman had come up behind her. "Yes, Nurse?'

"Who is this you're chatting with? You know the rules."

"But . . . she's a guest of the Director."

The older woman looked at me with a stern no-nonsense look. "The Director sent you in here?"

I was making a splitsecond choice among three nonresponsive answers when I was saved by Fate. A soft voice coming from everywhere at once announced: "Miss Podkayne Fries is requested to come to the office of the Director. Miss Podkayne Fries, please come to the office of the Director."

I tilted my nose in the air and said with dignity, "That is I. Nurse, will you be so kind as to phone the Director and tell him that Miss Fries is on her way?" I exited with deliberate haste.

The Director's office was four times as big and sixteen times as impressive as the principal's office at school. The Director was short and had a dark brown skin and a gray goatee and a harried expression. In addition to him and to Uncle Tom, of course, there was present the little lawyer man who had had a bad time with Daddy a week earlier— and my brother Clark. I couldn't figure out how he got there . . . except that Clark has an infallible homing instinct for trouble.

Clark looked at me with no expression; I nodded. The Director and his legal beagle stood up. Uncle Tom didn't but he said, "Dr. Hyman Schoenstein, Mr. Poon Kwai Yau—my niece Podkayne Fries. Sit down, honey; nobody is going to bite you. The Director has a proposition to offer you."

The lawyer man interrupted. "I don't think—" "Correct," agreed Uncle Tom. "You don't think. Or it would have occurred to you that ripples spread out from a splash."

"But— Dr. Schoenstein, the release I obtained from Professor Fries explicitly binds him to silence, for separate good and sufficient consideration, over and above damages conceded by us and made good. This is tantamount to blackmail. I—"

Then Uncle Tom did stand up. He seemed twice as tall as usual and was grinning like a fright mask. "What was that last word you used?"

"I?" The lawyer looked startled. "Perhaps I spoke hastily. I simply meant—"

"I heard you," Uncle Tom growled. "And so did three witnesses. Happens to be one of the words a man can be challenged for on this still free planet. But, since I'm getting old and fat, I may just sue you for your shirt instead. Come along, kids."

The Director spoke quickly. "Tom . . . sit down, please. Mr. Poon . . . please keep quiet unless I ask for your advice. Now, Tom, you know quite well that you can't challenge nor sue over a privileged communication, counsel to client."

"I can do both or either. Question is: will a court sustain me? But I can always find out."

"And thereby drag out into the open the very point you know quite well I can't afford to have dragged out. Simply because my lawyer spoke in an excess of zeal. Mr. Poon?"

"I tried to withdraw it. I do withdraw it."

"Senator?"

Uncle Tom bowed stiffly to Mr. Poon, who returned it. "Accepted, sir. No offense meant and none taken." Then Uncle Tom grinned merrily, let his potbelly slide back down out of his chest, and said in his normal voice. "Okay, Hymie, let's get on with the crime. Your move."

Dr. Schoenstein said carefully, "Young lady, I have just learned that the recent disruption of family planning in your home—which we all deeply regret—caused an additional sharp disappointment to you and your brother."

"It certainly did!" I answered, rather shrilly I'm afraid.

"Yes. As your uncle put it, the ripples spread out. Another of those ripples could wreck this establishment, make it insolvent as a private business. This is an odd sort of business we are in here, Miss Fries. Superficially we perform a routine engineering function, plus some not unusual boarding nursery services. But in fact what we do touches the most primitive of human emotions. If confidence in our integrity, or in the perfection with which we carry out the service entrusted to us, were to be shaken—" He spread his hands helplessly. "We couldn't last out the year. Now I can show you exactly how the mishap occurred which affected your family, show you how wildly unlikely it was to have it happen even under the methods we did use . . . prove to you how utterly impossible it now is and always will be in the future for such a mistake to take place again, under our new procedures. Nevertheless"—he looked helpless again—"if you were to talk, merely tell the simple truth about what did indeed happen once . . . you could ruin us."

I felt so sorry for him that I was about to blurt out that I wouldn't even *dream* of talking!—even though they had ruined my life—when Clark cut in. "Watch it, Pod! It's loaded."

So I just gave the Director my Sphinx expression and said nothing. Clark's instinctive self-interest is absolutely reliable.

Dr. Schoenstein motioned Mr. Poon to keep quiet. "But, my dear lady, I am not asking you not to talk. As your uncle the Senator says, you are not here to blackmail and I have nothing with which to bargain. The Marsopolis Crèche Foundation, Limited, always carries out its obligations even when they do not result from formal contract. I asked you to come in here in order to suggest a measure of relief for the damage we have unquestionably—though unwittingly—done you and your brother. Your uncle tells me that he had intended to travel with you and your family . . . but that now he intends to go via the next Triangle Line departure. The *Tricorn,* I believe it is, about ten days from now. Would you feel less mistreated if we were to pay first-class fares for your brother and you—round trip, of course—in the Triangle Line?"

Would I! The *Wanderlust* has, as her sole virtue, the fact that she is indeed a spaceship and she was shaping for Earth. But she is an old, slow freighter. Whereas the Triangle Liners, as everyone knows, are utter palaces! I could but nod.

"Good. It is our privilege and we hope you have a wonderful trip. But, uh, young lady . . . do you think it possible that you could give us some assurance, for no consideration and simply out of kindness, that you wouldn't talk about a certain regrettable mishap?"

"Oh? I thought that was part of the deal?"

"There is no deal. As your uncle pointed out to me, we owe you this trip, no matter what."

"Why—why, Doctor, I'm going to be so busy, so utterly rushed, just to get ready in time, that I won't have *time* to talk to anyone about any mishaps that probably weren't your fault anyhow!"

"Thank you." He turned to Clark. "And you, son?"

Clark doesn't like to be called "son" at best. But I don't think it affected his answer. He ignored the vocative and said coldly, "What about our expenses?"

Dr. Schoenstein flinched. Uncle Tom guffawed and said, "That's my boy! Doc, I told you he had the simple rapacity of a sand gator. He'll go far—if somebody doesn't poison him."

"Any suggestions?"

"No trouble. Clark. Look me in the eye. Either you stay behind and we weld you into a barrel and feed you through the bunghole so that you *can't* talk—while your sister goes anyhow—or you accept these terms. Say a thousand each—no, fifteen hundred—for travel expenses, and you keep your snapper shut forever about the baby mix-up . . . or I personally, with the aid of four stout, blackhearted accomplices, will cut your tongue out and feed it to the cat. A deal?"

"I ought to get ten percent commission on Sis's fifteen hundred. She didn't have sense enough to ask for it."

"No cumshaw. I ought to be charging *you* a commission on the whole transaction. A deal?"

"A deal," Clark agreed.

Uncle Tom stood up. "That does it, Doc. In his own unappetizing way he is as utterly reliable as she is. So relax. You, too, Kwai Yau, you can breathe again. Doc, you can send a check around to me in the morning. Come on, kids."

"Thanks, Tom. If that is the word. I'll have the check over before you get there. Uh . . . just one thing . . ."

"What, Doc?"

"Senator, you were here long before I was born, so I don't know too much about your early life. Just the traditional stories and what it says about you in *Who's Who on Mars.* Just what were you transported for? You *were* transported? Weren't you?"

Mr. Poon looked horror-stricken, and I was. But Uncle Tom didn't seem offended. He laughed heartily and answered, "I was accused of freezing babies for profit. But it was a frameup—I never did no such thing nohow. Come on, kids. Let's get out of this ghouls' nest before they smuggle us down into the sub-basement."

Later that night in bed I was dreamily thinking over the trip. There hadn't even been the least argument with Mother and Daddy; Uncle Tom had settled it all by phone before we got home. I heard a sound from the nursery, got up and paddled in. It was Duncan, the little darling, not even wet but lonely. So I picked him up and cuddled him and he cooed and then he was wet, so I changed him.

I decided that he was just as pretty or prettier than all those other babies, even though he was five months younger and his eyes didn't track. When I put him down again, he was sound asleep; I started back to bed.

And stopped— The Triangle Line gets its name from serving the three leading planets, of course, but which direction a ship makes the Mars-Venus-Earth route depends on just where we all are in our orbits.

But just where were we?

I hurried into the living room and searched for the *Daily War Whoop*—found it, thank goodness, and fed it into the viewer, flipped to the shipping news, found the predicted arrivals and departures.

Yes, yes, *yes!* I am going not only to Earth—but to Venus as well!

Venus! Do you suppose Mother would let me— No, best just say nothing now. Uncle Tom will be more tractable, after we get there.

I'm going to miss Duncan—he's such a little doll.

IV

I haven't had time to write in this journal for *days.* Just getting ready to leave was almost impossible—and would have been truly impossible had it not been that most preparations—all the special Terran inoculations and photographs and passports and such—were mostly done before Everything Came Unstuck. But Mother came out of her atavistic daze and was very helpful. She would even let one of the triplets cry for a few moments rather than leave me half pinned up.

I don't know how Clark got ready or whether he had any preparations to make. He continued to creep around silently, answering in grunts if he answered at all. Nor did Uncle Tom seem to find it difficult. I saw him only twice during those frantic ten days (once to borrow baggage mass from his allowance, which he let me have, the dear!) and both times I had to dig him out of the card room at the Elks Club. I asked him how he managed to get ready for so important a trip and still have time to play cards?

"Nothing to it," he answered. "I bought a new toothbrush. Is there something else I should have done?"

So I hugged him and told him he was an utterly utter beast and he chuckled and mussed my hair. Query: Will I ever become that blasé about space travel? I suppose I must if I am to be an astronaut. But Daddy says that getting ready for a trip is half the fun ... so perhaps I don't want to become that sophisticated.

Somehow Mother delivered me, complete with baggage and all the myriad pieces of paper—tickets and medical records and passport and universal identification complex and guardians' assignment-and-guarantee and three kinds of money and travelers' cheques and birth record and police certification and security clearance and I don't remember—all checked off, to the city shuttle port. I was juggling one package of things that simply *wouldn't* go into my luggage, and I had one hat on my head and one in my hand; otherwise everything came out even.

(I don't know where that second hat went. Somehow it never got aboard with me. But I haven't missed it.)

Goodbye at the shuttle port was most teary and exciting. Not just with Mother and Daddy, which was to be expected (when Daddy put his arm around me tight, I threw both mine around him and for a dreadful second I didn't want to leave at all), but also because about thirty of my classmates showed up (which I hadn't in the least expected), complete with a banner that two of them were carrying reading:

BON VOYAGE—PODKAYNE

I got kissed enough times to start a fair-sized epidemic if any one of them had had anything, which apparently they didn't. I got kissed by boys who had never even *tried to,* in the past—and I assure you that it is not utterly impossible to kiss me, if the project is approached with confidence and finesse, as I believe that one's instincts should be allowed to develop as well as one's overt cortical behavior.

The corsage Daddy had given me for going away got crushed and I didn't even notice it until we were aboard the shuttle. I suppose it was somewhere about then that I lost that hat, but I'll never know—I would have lost the last-minute package, too, if Uncle Tom had not rescued it. There were photographers, too, but not for me—for Uncle Tom. Then suddenly we had to scoot aboard the shuttle *right now* because a shuttle can't wait; it has to boost on the split second even though Deimos moves so much more slowly than Phobos. A reporter from the *War Whoop* was still trying to get a statement out of Uncle Tom about the forthcoming Three-Planets conference but he just pointed at his throat and whispered, "Laryngitis"— then we were aboard just before they sealed the airlock.

It must have been the shortest case of laryngitis on record; Uncle Tom's voice had been all right until we got to the shuttle port and it was okay again once we were in the shuttle.

One shuttle trip is exactly like another, whether to Phobos or Deimos. Still, that first tremendous *whoosh!* of acceleration is exciting as it pins you down into your couch with so much weight that you can't breathe, much less move—and free fall is always strange and eerie and rather stomach fluttering even if one doesn't tend to be nauseated by it, which, thank you, I don't.

Being on Deimos is just like being in free fall, since neither Deimos nor Phobos has enough surface gravitation for one to feel it. They put suction sandals on us before they unstrapped us so that we could walk, just as they do on Phobos. Nevertheless Deimos is different from Phobos for reasons having nothing to do with natural phenomena. Phobos is, of course, legally a part of Mars; there are no formalities or any sort about visiting it. All that is required is the fare, a free day, and a yen for a picnic in space.

But Deimos is a free port, leased in perpetuity to Three-Planets Treaty Authority. A known criminal, with a price on his head in Marsopolis, could change ships there right under the eyes of our own police—and we couldn't touch him. Instead, we would have to start most complicated legal doings at the Interplanetary High Court on Luna, practically win the case ahead of time, and, besides that, prove that the crime was a crime under Three-Planet rules and not just under our own laws . . . and then all that we could do would be to ask the Authority's proctors to arrest the man if he was still around—which doesn't seem likely.

I knew about this, theoretically, because there had been about a half page on it in our school course *Essentials of Martian Government* in the section on "Extraterritoriality." But now I had plenty of time to think about it because, as soon as we left the shuttle, we found ourselves locked up in a room misleadingly called the "Hospitality Room" while we waited until they were ready to "process" us. One wall of the room was glass and I could see lots and lots of people hurrying around in the concourse beyond, doing all manner of interesting and mysterious things. But all we had to do was to wait beside our baggage and grow bored.

I found that I was growing furious by the minute, not at all like my normally sweet and lovable nature. Why, this place had been built by my own mother!—and here I was, caged up in it like white mice in a bio lab.

(Well, I admit that Mother didn't exactly build Deimos; the Martians did that, starting with a spare asteroid that they happened to have handy. But some millions of years back they grew tired of space travel and devoted all their time to the whichness of what and how to unscrew the inscrutable—so when Mother took over the job, Deimos was pretty run down; she had to start in from the ground up and rebuild it completely.)

In any case, it was certain that everything that I could see through that transparent wall was a product of Mother's creative, imaginative and hardheaded engineering ability. I began to fume. Clark was off in a corner, talking privately to some stranger—"stranger" to me, at least; Clark, for all his antisocial disposition, always seems to know somebody, or to know somebody who knows somebody, anywhere we go. I sometimes wonder if he is a member of some vast underground secret society; he has such unsavory acquaintances and never brings any of them home.

Clark is, however, a very satisfactory person to fume with, because, if he isn't busy, he is always willing to help a person hate anything that needs hating; he can even dig up reasons why a situation is even more vilely unfair than you thought it was. But he was busy, so that left Uncle Tom. So I explained to him bitterly how outrageous I thought it was that we should be penned up like animals—free Mars citizens on one of Mars' own moons!—simply because a sign read: *Passengers must wait until called— by order of Three-Planets Treaty Authority.*

"Politics!" I said bitterly. "I could run it better myself."

"I'm sure you could," he agreed gravely, "but, Flicka, you don't understand."

"I understand all too well!"

"No, honey bun. You understand that there is no good reason why you should not walk straight through that door and enjoy yourself by shopping until it is time to go inboard the *Tricorn.* And you are right about that, for there is no need at all for you to be locked up in here when you could be out there making some freeport shopkeeper happy by paying him a high price which seems to you a low price. So you say 'Politics!' as if it were a nasty word— and you think that settles it."

He sighed. "But you *don't* understand. Politics is not evil; politics is the human race's most magnificent achievement. When politics is good, it's wonderful . . . and when politics is bad—well, it's still pretty good."

"I guess I don't understand," I said slowly.

"Think about it. Politics is just a name for the way we get things done . . . without fighting. We dicker and compromise and everybody thinks he has received a raw deal, but somehow after a tedious amount of talk we come up with some jury-rigged way to do it without getting anybody's head bashed in. That's politics. The only other way to settle a dispute is by bashing a few heads in . . . and that is what happens when one or both sides is no longer willing to dicker. That's why I say politics is good even when it is bad . . . because the only alternative is force—and somebody gets hurt."

"Uh ... it seems to me that's a funny way for a revolutionary veteran to talk. From what I've heard, Uncle Tom, you were one of the bloodthirsty ones who started the shooting. Or so Daddy says."

He grinned. "Mostly I ducked. If dickering won't work, then you have to fight. But I think maybe it takes a man who has been shot at to appreciate how much better it is to fumble your way through a political compromise rather than have the top of your head blown off." He frowned and suddenly looked very old. "When to talk and when to fight— That is the most difficult decision to make wisely of all the decisions in life." Then suddenly he smiled and the years dropped away. "Mankind didn't invent fighting; it was here long before we were. But we invented politics. Just think of it, hon— Homo sapiens is the most cruel, the most vicious, the most predatory, and certainly the most deadly of all the animals in this solar system. Yet he invented politics! He figured out a way to let most of us, most of the time, get along well enough so that we usually don't kill each other. So don't let me hear you using 'politics' as a swear word again."

"I'm sorry, Uncle Tom," I said humbly.

"Like fun you are. But if you let that idea soak for twenty or thirty years, you may— Oh, oh! There's your villain, baby girl—the politically appointed bureaucrat who has most unjustly held you in durance vile. So scratch his eyes out. Show him how little you think of his silly rules."

I answered this with dignified silence. It is hard to tell when Uncle Tom is serious because he loves to pull my leg, always hoping that it will come off in his hand. The Three-Planets proctor of whom he was speaking had opened the door to our bullpen and was looking around exactly like a zookeeper inspecting a cage for cleanliness. "Passports!" he called out. "Diplomatic passports first." He looked us over, spotted Uncle Tom. "Senator?"

Uncle Tom shook his head. "I'm a tourist, thanks."

"As you say, sir. Line up, please—reverse alphabetical order"—which put us near the tail of the line instead of near the head. There followed maddening delays for fully two hours—passports, health clearance, outgoing baggage inspection—Mars Republic does not levy duties on exports but just the same there is a whole long list of things you can't export without a license, such as ancient Martian artifacts (the first explorers did their best to gut the place and some of the most priceless are in the British Museum or the Kremlin; I've heard Daddy fume about it), some things you can't export under *any* circumstances, such as certain narcotics, and some things you can take aboard ship only by surrendering them for safekeeping by the purser, such as guns and other weapons.

Clark picked outgoing inspection for some typical abnormal behavior. They had passed down the line copies of a long list of things we must not have in our baggage— a fascinating list; I hadn't known that there were so many things either illegal, immoral, or deadly.

When the Fries contingent wearily reached the inspection counter, the inspector said, all in one word: " 'Nything-t'-d'clare?" He was a Marsman and as he looked up he recognized Uncle Tom. "Oh. Howdy, Senator. Honored to have you with us. Well, I guess we needn't waste time on your baggage. These two young people with you?"

"Better search my kit," Uncle Tom advised. "I'm smuggling guns to an out-planet branch of the Legion. As for the kids, they're my niece and nephew. But I don't vouch for them; they're both subversive characters. Especially the girl. She was soapboxing revolution just now while we waited."

The inspector smiled and said, "I guess we can allow you a few guns, Senator—you know how to use them. Well, how about it, kids? Anything to declare?"

I said, "Nothing to declare," with icy dignity—when suddenly Clark spoke up.

"Sure!" he piped, his voice cracking. 'Two kilos of happy dust! And whose business is it? I paid for it. I'm not going to let it be stolen by a bunch of clerks." His voice was surly as only he can manage and the expression on his face simply ached for a slap.

That did it. The inspector had been just about to glance into one of my bags, a purely formal inspection, I think— when my brattish brother deliberately stirred things up. At the very word "happy dust" four other inspectors closed in. Two were Venusmen, to judge by their accents, and the other two might have been from Earth.

Of course, happy dust doesn't matter to us Marsmen. The Martians use it, have always used it, and it is about as important to them as tobacco is to humans, but apparently without any ill effects. What they get out of it I don't know. Some of the old sand rats among us have picked up the habit from the Martians—but my entire botany class experimented with it under our teacher's supervision and nobody got any thrill out of it and all I got was blocked sinuses that wore off before the day was out. Strictly zero squared.

But with the native Venerians it is another matter—when they can get it. It turns them into murderous maniacs and they'll do anything to get it. The (black market) price on it there is very high indeed . . . and possession of it by a human on Venus is at least an automatic life sentence to Saturn's moons.

They buzzed around Clark like angry jetta wasps.

But they did not find what they were looking for. Shortly Uncle Tom spoke up and said, "Inspector? May I make a suggestion?"

"Eh? Certainly, Senator."

"My nephew, I am sorry to say, has caused a disturbance. Why don't you put him aside—chain him up, I would—and let all these other good people go through?"

The inspector blinked. "I think that is an excellent idea."

"And I would appreciate it if you would inspect myself and my niece now. Then we won't hold up the others."

"Oh, that's not necessary." The inspector slapped seals on all of Uncle's bags, closed the one of mine he had started to open, and said, "I don't need to paw through the young lady's pretties. But I think we'll take this smart boy and search him to the skin and X-ray him."

"Do that."

So Uncle and I went on and checked at four or five other desks—fiscal control and migration and reservations and other nonsense—and finally wound up with our baggage at the centrifuge for weighing in. I never did get a chance to shop.

To my chagrin, when I stepped off the merry-go-round the record showed that my baggage and myself were nearly three kilos over my allowance, which didn't seem possible. I hadn't eaten more breakfast than usual—less actually—and I hadn't drunk any water because, while I do not become ill in free fall, drinking in free fall is very tricky; you are likely to get water up your nose or something and set off an embarrassing chain reaction.

So I was about to protest bitterly that the weightmaster had spun the centrifuge too fast and produced a false mass reading. But it occurred to me that I did not know for surely certain that the scales Mother and I had used were perfectly accurate. So I kept quiet.

Uncle Tom just reached for his purse and said, "How much?"

The weightmaster said, "Mmm . . . let's spin you first, Senator."

Uncle Tom was almost two kilos under his allowance. The weightmaster shrugged and said, "Forget it, Senator. I'm minus on a couple of other things; I think I can swallow it. If not, I'll leave a memo with the purser. But I'm fairly sure I can."

"Thank you. What did you say your name was?"

"Milo. Miles M. Milo—Aasvogel Lodge number seventy-four. Maybe you saw our crack drill team at the Legion convention two years ago—I was left pivot."

"I certainly did, I certainly did!" They exchanged that secret grip that they think other people don't know and Uncle Tom said, "Well, thanks, Miles. Be seeing you."

"Not at all—Tom. No, don't bother with your baggage." Mr. Milo touched a button and called out, "In the *Tricorn!* Get somebody out here fast for the Senator's baggage."

It occurred to me, as we stopped at the passenger tube sealed to the transfer station to swap our suction sandals for little magnet pads that clipped to our shoes, that we need not have waited for anything at anytime—if only Uncle Tom had been willing to use the special favors he so plainly could demand.

But, even so, it pays to travel with an important person—even though it's just your Uncle Tom whose stomach you used to jump up and down on when you were small enough for such things. Our tickets simply read first class—I'm sure, for I saw all three of them—but where we were placed was in what they call the "Owner's Cabin," which is actually a suite with three bedrooms and a living room. I was dazzled !

But I didn't have time to admire it just then. First they strapped our baggage down, then they strapped us down—to seat couches which were against one wall of the living room. That wall plainly should have been the floor, but it slanted up almost vertically with respect to the tiny, not-quite-nothing weight that we had. The warning sirens were already sounding when someone dragged Clark in and strapped him to one of the couches. He was looking mussed up but cocky.

"Hi, smuggler," Uncle Tom greeted him amiably. "They find it on you?" "Nothing to find."

"That's what I thought. I trust they gave you a rough time."

"Naah!"

I wasn't sure I believed Clark's answer; I've heard that a skin and person search can be made quite annoying indeed, without doing anything the least bit illegal, if the proctors are feeling unfriendly. A "rough time" would be good for Clark's soul, I am sure—but he certainly did not act as if the experience had caused him any discomfort. I said, "Clark, that was a very foolish remark you made to the inspector. And it was a lie, as well—a silly, useless lie."

"Sign off," he said curtly. "If I'm smuggling anything, it's up to them to find it; that's what they're paid for. 'Anything-t'-d'clare?'" he added in a mimicking voice. "What nonsense! As if anybody would declare something he was trying to smuggle."

"Just the same," I went on, "if Daddy had heard you say—"

"Podkayne." "Yes, Uncle Tom?"

"Table it. We're about to start. Let's enjoy it." "But— Yes, Uncle."

There was a slight drop in pressure, then a sudden surge that would have slid us out of our couches if we had not been strapped—but not a strong one, not at all like that giant *whoosh!* with which we had left the surface. It did not last long, then we were truly in free fall for a few moments . . . then there started a soft, gentle push in the same direction, which kept up.

Then the room started very slowly to turn around. . .almost unnoticeable except for a slight dizziness it gave one.

Gradually, gradually (it took almost twenty minutes) our weight increased, until at last we were back to our proper weight . . . at which time the floor, which had been all wrong when we came in, was where it belonged, under us, and almost level. But not quite—

Here is what had happened. The first short boost was made by the rocket tugs of Deimos Port picking up the *Tricorn* and hurling her out into a free orbit of her own. This doesn't take much, because the attraction between even a big ship like the *Tricorn* and a tiny, tiny satellite such as Deimos isn't enough to matter; all that matters is getting the very considerable mass of the ship shoved free.

The second gentle shove, the one that kept up and never went away, was the ship's own main drive—one-tenth of a standard gee. The *Tricorn* is a constant-boost ship; she doesn't dillydally around with economical orbits and weeks and months in free fall. She goes very fast indeed . . . because even 0.1 gee adds up awfully fast.

But one-tenth gee is not enough to make comfortable passengers who have been used to more. As soon as the Captain had set her on her course, he started to spin her and kept it up until the centrifugal force and the boost added up (in vector addition, of course) to exactly the surface gravitation of Mars (or 37 percent of a standard gee) at the locus of the first-class staterooms.

But the floors will not be quite level until we approach Earth, because the inside of the ship had been constructed so that the floors would feel perfectly level when the spin and the boost added up to exactly one standard gravity—or Earth-Normal.

Maybe this isn't too clear. Well, it wasn't too clear to me, in school; I didn't see exactly how it worked out until (later) I had a chance to see the controls used to put spin on the ship and how the centrifugal force was calculated. Just remember that the *Tricorn*—and her sisters, the *Trice* and the *Triad* and the *Triangulum* and the *Tricolor* are enormous cylinders. The thrust is straight-along the main axis; it has to be. Centrifugal force pushes away from the main axis—how else? The two forces add up to make the ship's "artificial gravity" in passenger country —but, since one force (the boost) is kept constant and the other (the spin) can be varied, there can be only one rate of spin which will add in with the boost to make those floors perfectly level.

For the *Tricorn* the spin that will produce level floors and exactly one Earth gravity in passenger country is 5.42 revolutions per minute —I know because the Captain told me so . . . and I checked his arithmetic and he was right. The floor of our cabin is just over thirty meters from the main axis of the ship, so it all comes out even.

As soon as they had the floor back under us and had announced the "all clear" I unstrapped me and hurried out. I wanted a quick look at the ship; I didn't even wait to unpack.

There's a fortune awaiting the man who invents a really good deodorizer for a spaceship. That's the one thing you can't fail to notice.

Oh, they try, I grant them that. The air goes through precipitators each time it is cycled; it is washed, it is perfumed, a precise fraction of ozone is added, and the new oxygen that is put in after the carbon dioxide is distilled out is as pure as a baby's mind; it has to be, for it is newly released as a byproduct of the photosynthesis of living plants. That air is so pure that it really ought to be voted a medal by the Society for the Suppression of Evil Thoughts.

Besides that, a simply amazing amount of the crew's time is put into cleaning, polishing, washing, sterilizing— oh, they *try!*

But nevertheless, even a new, extra-fare luxury liner like the *Tricorn* simply reeks of human sweat and ancient sin, with undefinable overtones of organic decay and unfortunate accidents and matters best forgotten. Once I was with Daddy when a Martian tomb was being unsealed—and I found out why xenoarchaeologists always have gas masks handy. But a spaceship smells even worse than that tomb.

It does no good to complain to the purser. He'll listen with professional sympathy and send a crewman around to spray your stateroom with something which (I suspect) merely deadens your nose for a while. But his sympathy is not real, because the poof man simply cannot smell anything wrong himself. He has lived in ships for years; it is literally impossible for him to smell the unmistakable reek of a ship that has been lived in—and, besides, he *knows* that the air is pure; the ship's instruments show it. None of the professional spacers can smell it.

But the purser and all of them are quite used to having passengers complain about the "unbearable stench"—so they pretend sympathy and go through the motions of correcting the matter;

Not that *I* complained. I was looking forward to having this ship eating out of my hand, and you don't accomplish that sort of coup by becoming known first thing as a complainer. But other first-timers did, and I certainly understood why—in fact I began to have a glimmer of a doubt about my ambitions to become skipper of an explorer ship.

But— Well, in about two days it seemed to me that they had managed to clean up the ship quite a bit, and shortly thereafter I stopped thinking about it. I began to understand why the ship's crew can't smell the things the passengers complain about. Their nervous systems simply cancel out the old familiar stinks—like a cybernetic skywatch canceling out and ignoring any object whose predicted orbit has previously been programmed into the machine.

But the odor is still there. I suspect that it sinks right into polished metal and can never be removed, short of scrapping the ship and melting it down. Thank goodness the human nervous system is endlessly adaptable.

But my own nervous system didn't seem too adaptable during that first hasty tour of the *Tricorn;* it is a good thing that I had not eaten much breakfast and had refrained from drinking anything. My stomach did give me a couple of bad moments, but I told it sternly that I was busy—I was very anxious to look over the ship; I simply didn't have time to cater to the weaknesses to which flesh is heir.

Well, the *Tricorn* is lovely all right—every bit as nice as the travel folders say that she is . . . except for that dreadful ship's odor. Her ballroom is gorgeous and so big that you can see that the floor curves to match the ship . . . only it is not curved when you walk across it. It is level, too—it is the only room in the ship where they jack up the floor to match perfectly with whatever spin is on the ship. There is a lounge with a simulated sky of outer space, or it can be switched to blue sky and fleecy clouds. Some old biddies were already in there, gabbling.

The dining saloon is every bit as fancy, but it seemed hardly big enough—which reminded me of the warning in the travel brochure about first and second tables, so I rushed back to our cabin to urge Uncle Tom to make reservations for us quickly before all the best tables were filled.

He wasn't there. I took a quick look in all the rooms and didn't find him—but I found Clark in *my* room, just closing one of my bags!

"What are you doing?" I demanded.

He jumped and then looked perfectly blank. "I was just looking to see if you had any nausea pills," he said woodenly.

"Well, don't dig into my things! You know better." I came up and felt his cheek; he wasn't feverish. "I don't have any. But I noticed where the surgeon's office is. If you are feeling ill, I'll take you straight there and let him dose you."

He pulled away. "Aw, I'm all right—now."

"Clark Fries, you listen to me. If you—" But he wasn't listening; he slid past me, ducked into his own room and closed the door; I heard the lock click.

I closed the bag he had opened—and noticed something. It was the bag the inspector had been just about to search when Clark had pulled that silly stunt about "happy dust."

My younger brother never does anything without a reason. Never.

His reasons may be, and often are, inscrutable to others. But if you just dig deeply enough, you will always find that his mind is never a random-choice machine, doing things pointlessly. It is as logical as a calculator—and about as cold.

I now knew why he had made what seemed to be entirely unnecessary trouble for himself at outgoing inspection.

I knew why I had been unexpectedly three kilos over my allowance on the centrifuge.

The only thing I didn't know was: *What* had he smuggled aboard in my baggage?

And *why?*

Interlude

Well, Pod, I'm glad to see that you've resumed keeping your diary. Not only do I find your girlish viewpoints entertaining but also you sometimes (not often) provide me with useful bits of information.

If I can do anything for you in return, do let me know. Perhaps you would like help in straightening out your grammar? Those incomplete sentences you are so fond of indicate incomplete thinking. You know that, don't you?

For example, let us consider a purely hypothetical case: a delivery robot with an unbeatable seal. Since the seal is in fact unbeatable, thinking about the seal simply leads to frustration. But a complete analysis of the situation leads one to the obvious fact that any cubical or quasi-cubical object has six sides, and that the seal applies to only one of these six sides.

Pursuing this line of thought one may note that, while the quasi cube may not be moved without cutting its connections, the floor under it may be lowered as much as fortyeight centimeters—if one has all afternoon in which to work.

Were this not a hypothetical case I would now suggest the use of a mirror and light on an extension handle and some around-the-corner tools, plus plenty of patience.

That's what you lack, Pod—patience.

I hope this may shed some light on the matter of the hypothetical happy dust—and do feel free to come to me with your little problems.

V

Clark kept his stateroom door locked all the time the first three days we were in the *Tricorn*—I know, because I tried it every time he left the suite.

Then on the fourth day he failed to lock it at a time when it was predictable that he would be gone at least an hour, as he had signed up for a tour of the ship—the parts passengers ordinarily are not allowed in, I mean. I didn't mind missing it myself, for by then I had worked out my own private "Poddy special" escort service. Nor did I have to worry about Uncle Tom; he wasn't making the tour, it would have violated his no-exercise rule, but he had acquired new pinochle cronies and he was safely in the smoking room.

Those stateroom door locks are not impossible to pick—not for a girl equipped with a nail file, some bits of this and that, and free run of the purser's office—me, I mean.

But I found I did not have to pick the lock; the catch had not quite caught. I breathed the conventional sigh of relief, as I figured that the happy accident put me at least twenty minutes ahead of schedule.

I shan't detail the search, but I flatter myself that the Criminal Investigation Bureau could not have done it more logically nor more quickly if limited, as I was, to bare hands and no equipment. It had to be something forbidden by that list they had given us on Deimos—and I had carefully kept and studied my copy. It had to mass slightly over three kilos. It had to bulk so large and be sufficiently fixed in its shape and dimensions that Clark was forced to hide it in baggage—otherwise I am sure he would have concealed it on his person and coldly depended on his youth and "innocence," plus the chaperonage of Uncle Tom, to breeze him through the outgoing inspection. Otherwise he would never have taken the calculated risk of hiding it in my baggage, since he couldn't be sure of recovering it without my knowing.

Could he had predicted that I would at once go sightseeing without waiting to unpack? Well, perhaps he could, even though I had done so on the spur of the moment. I must reluctantly admit that Clark can outguess me with maddening regularity. As an opponent, he is never to be underrated. But still it was for him a "calculated risk," albeit a small one.

Very well. Largish, rather massy, forbidden—but I didn't know what it looked like and I had to assume that *anything* which met the first two requirements might be disguised to appear innocent.

And so to work—

Ten minutes later I knew that it had to be in one of his three bags, which I had left to the last on purpose as the least likely spots. A stateroom aboard ship has many cover plates, access holes, removable fixtures, and the like, but I had done a careful practice run in my own room; I knew which ones were worth opening, which ones could not be opened without power tools, which ones could not be opened without leaving unmistakable signs of tampering. I checked these all in great haste, then congratulated Clark on having the good sense not to use such obvious hiding places.

Then I checked everything readily accessible—out in the open, in his wardrobe, etc.—using the classic "Purloined Letter" technique, i.e., I never assumed that a book was a book simply because it looked like a book, nor that a jacket on a hanger was simply that and nothing more.

Null, negative, nothing— Reluctantly, I tackled his three pieces of luggage, first noting carefully exactly how they were stacked and in what order.

The first was empty. Oh, the linings could have been tampered with, but the bag was no heavier than it should have been and any false pocket in the linings could not have held anything large enough to meet the specifications.

The second bag was the same—and the bag on the bottom seemed to be the same . . . until I found an envelope in a pocket of it. Oh, nothing nearly massy enough, nor gross enough; just an ordinary envelope for a letter—but nevertheless I glanced at it.

And was immediately indignant!

It had printed on it:

MISS PODKAYNE FRIES
PASSENGER, S.S. *Tricorn*
For delivery in ship

Why, the little wretch! He had been intercepting my mail! With fingers trembling with rage so badly that I could hardly do so I opened it—and discovered that it had already been opened and was angrier than ever. But, at least, the note was still inside. Shaking, I pulled it out and read it.

Just six words—

Hi, Pod. Snooping again, I see.

—in Clark's handwriting.

I stood there, frozen, for a long moment, while I blushed scarlet and chewed the bitter realization that I had been hoaxed to perfection —*again.*

There are only three people in the world who can make me feel stupid—and Clark is two of them.

I head a throat-clearing sound behind me and whirled around. Lounging in the open doorway (I had left it closed) was my brother. He smiled at me and said, "Hello, Sis. Looking for something? Need any help?"

I didn't waste time pretending that I didn't have jam all over my face; I simply said, "Clark Fries, what did you smuggle into this ship in my baggage?"

He looked blank—a look of malignant idiocy which has been known to drive well-balanced teachers to their therapists. "What in the world are you talking about, Pod?"

"You know what I'm talking about! Smuggling!"

"Oh!" His face lit up in a sunny smile. "You mean those two kilograms of happy dust. Goodness, Sis, is that still worrying you? There never were any two kilos of happy dust; I was just having my little joke with that stuffy inspector. I thought you knew that."

"I do not mean any 'two kilos of happy dust'! I am talking about at least three kilos of something else that you hid in my baggage!"

He looked worried. "Pod, do you feel well?"

"Ooooooh!—*dandruff!* Clark Fries, you stop that! You know what I mean! When I was centrifuged, my bags and I weighed three kilos over my allowance. Well?"

He looked at me thoughtfully, sympathetically. "It *has* seemed to me that you were getting a bit fat—but I didn't want to mention it. I thought it was all this rich food you've been tucking away here in the ship. You really ought to watch that sort of thing, Pod. After all, if a girl lets her figure go to pieces— Well, she doesn't have much else. So I hear."

Had that envelope been a blunt instrument I would have blunted him. I heard a low growling sound, and realized that I was making it. So I stopped. "Where's the letter that was in this envelope?"

Clark looked surprised. "Why, it's right there, in your other hand."

"This? This is all there was? No letter from somebody else?"

"Why, just that note from me, Sis. Didn't you like it? I thought that it just suited the occasion . . . I knew you would find it your very first chance." He smiled. "Next time you want to paw through my things, let me know and I'll help. Sometimes I have experiments running—and you might get hurt. That can happen to people who aren't very bright and don't look before they leap. I wouldn't want that to happen to *you,* Sis."

I didn't bandy any more words; I brushed past him and went to my own room and locked the door and bawled.

Then I got up and did very careful things to my face. I know when I'm licked; I don't have to have a full set of working drawings. I resolved never to mention the matter to Clark again.

But what was I to do? Go to the Captain? I already knew the Captain pretty well; his imagination extended as far as the next ballistic prediction and no further. Tell him that my brother had been smuggling something, I didn't know what—and that he had better search the entire ship most carefully, because, whatever it was, it was not in my brother's room? Don't be triple silly, Poddy. In the first place, he would laugh at you; in the second place, you don't *want*

Clark to be caught—Mother and Daddy wouldn't like it.

Tell Uncle Tom about it? He might be just as unbelieving . . . or, if he did believe me, he might go to the Captain himself—with just as disastrous results.

I decided not to go to Uncle Tom—at least not yet. Instead I would keep my eyes and ears open and try to find an answer myself.

In any case I did not waste much time on Clark's sins (if any, I had to admit in bare honesty); I was in my first real spaceship—halfway to my ambition thereby— and there was much to learn and do.

Those travel brochures are honest enough, I guess—but they do not give you the full picture.

For example, take this phrase right out of the text of the Triangle Line's fancy folder: . . . *romantic days in ancient Marsopolis, the city older than time; exotic nights under the hurtling moons of Mars* . . .

Let's rephrase it into everyday language, shall we? Marsopolis is my hometown and I love it—but it is as romantic as bread and butter with no jam. The parts people live in are new and were designed for function, not romance. As for the ruins outside town (which the Martians *never* called "Marsopolis"), a lot of high foreheads including Daddy have seen to it that the best parts are locked off so that tourists will not carve their initials in something that was old when stone axes were the latest thing in superweapons. Furthermore, Martian ruins are neither beautiful, nor picturesque, nor impressive, to human eyes. The way to appreciate them is to read a really good book with illustrations, diagrams, and simple explanations—such as Daddy's *Other Paths Than Ours.* (Adv.)

As for those exotic nights, anybody who is outdoors after sundown on Mars other than through sheer necessity needs to have his head examined. It's *chilly* out there. I've seen Deimos and Phobos at night exactly twice, each time through no fault of my own—and I was so busy keeping from freezing to death that I wasted no thought on "hurtling moons."

That advertising brochure is just as meticulously accurate and just as deceptive in effect—concerning the ships themselves. Oh, the *Tricorn* is a palace; I'll vouch for that. It really is a miracle of engineering that anything so huge, so luxurious, so fantastically adapted to the health and comfort of human beings, should be able to "hurtle" (pardon the word) through space.

But take those pictures—

You know the ones I mean: full color and depth, showing groups of handsome young people of both sexes chatting or playing games in the lounge, dancing gaily in the ballroom—or views of a "typical stateroom."

That "typical stateroom" is not a fake. No, it has simply been photographed from an angle and with a lens that makes it look at least twice as big as it is. As for those handsome, gay, young people—well, they aren't along on the trip I'm making. It's my guess that they are professional models.

In the *Tricorn* this trip the young and handsome passengers like those in the pictures can be counted on the thumbs of one hand. The typical passenger we have with us is a great-grandmother, Terran citizenship, widowed, wealthy, making her first trip into space—and probably her last, for she is not sure she likes it.

Honest, I'm not exaggerating; our passengers look like refugees from a geriatrics clinic. I am not scoffing at old age. I understand that it is a condition I will one day attain myself, if I go on breathing in and out enough times—say about 900,000,000 more times, not counting heavy exercise. Old age can be a charming condition, as witness Uncle Tom. But old age is not an accomplishment; it is just something that happens to you despite yourself, like falling downstairs.

And I must say that I am getting a wee bit tired of having youth treated as a punishable offense.

Our typical male passenger is the same sort, only not nearly so numerous. He differs from his wife primarily in that, instead of looking down his nose at me, he is sometimes inclined to pat me in a "fatherly" way that I do not find fatherly, don't like, avoid if humanly possible—and which nevertheless gets me talked about.

I suppose I should not have been surprised to find the *Tricorn* a super-deluxe old folks' home, but (I may as well admit it) my experience is still limited and I was not aware of some of the economic facts of life.

The *Tricorn* is expensive. It is *very* expensive. Clark and I would not be in it at all if Uncle Tom had not twisted Dr. Schoenstein's arm in our behalf. Oh, I suppose Uncle Tom can afford it, but, by age group though not by temperament, he fits the defined category. But Daddy and Mother had intended to take us in the *Wanderlust,* a low-fare, economy-orbit freighter. Daddy and Mother are not poor, but they are not rich—and after they finish raising and educating five children it is unlikely that they will ever be rich.

Who can afford to travel in luxury liners? Ans.: Rich old widows, wealthy retired couples, highpriced executives whose time is so valuable that their corporations gladly send them by the fastest ships —and an occasional rare exception of some other sort.

Clark and I are such exceptions. We have one other exception in the ship, Miss—well, I'll call her Miss Girdle FitzSnugglie, because if I used her right name and perchance anybody ever sees this, it would be all too easily recognizable. *I* think Girdie is a good sort, I don't care what the gossips in this ship say. She doesn't act jealous of me even though it appears that the younger officers in the ship were all her personal property until I boarded—all the trip out from Earth, I mean. I've cut into her monopoly quite a bit, but she isn't catty to me; she treats me warmly woman-to-woman, and I've learned quite a lot about Life and Men from her . . . more than Mother ever taught me.

(It is just possible that Mother is slightly naive on subjects that Girdie knows best. A woman who tackles engineering and undertakes to beat men at their own game might have had a fairly limited social life, wouldn't you think? I must study this seriously . . . because it seems possible that much the same might happen to a female space pilot and it is no part of my Master Plan to become a soured old maid.)

Girdie is about twice my age, which makes her awfully young in this company; nevertheless it may be that I cause her to look just a bit wrinkled around the eyes. Contrariwise, my somewhat unfinished look may make her more mature contours appear even more Helen-of-Troyish. As may be, it is certain that my presence has relieved the pressure on her by giving the gossips two targets instead of one.

And gossip they do. I heard one of them say about her: "She's been in more laps than a napkin!"

If so, I hope she had fun.

Those gay ship's dances in the mammoth ballroom! Like this: they happen every Tuesday and Saturday night, when the ship is spacing. The music starts at 20.30 and the Ladies' Society for Moral Rectitude is seated around the edge of the floor, as if for a wake. Uncle Tom is there, as a concession to me, and very proudsome and distinguished he looks in evening formal. I am there in a party dress which is not quite as girlish as it was when Mother helped me pick it out, in consequence of some *very* careful retailoring I have done with my door locked. Even Clark attends because there is nothing else going on and he's afraid he might miss something—and looking so nice I'm proud of him, because he has to climb into his own monkey suit or he can't come to the ball.

Over by the punch bowl are half a dozen of the ship's junior officers, dressed in mess jacket uniforms and looking faintly uncomfortable.

The Captain, by some process known only to him, selects one of the widows and asks her to dance. Two husbands dance with their wives. Uncle Tom offers me his arm and leads me to the floor. Two or three of the junior officers follow the Captain's example. Clark takes advantage of the breathless excitement to raid the punch bowl.

But *nobody* asks Girdie to dance.

This is no accident. The Captain has given the Word (I have this intelligence with utter certainty through My Spies) that no ship's officer shall dance with Miss FitzSnugglie until he has danced at least two dances with other partners—and I am not an "other partner," because the proscription, since leaving Mars, has been extended to me.

This should be proof to anyone that a captain of a ship is, in sober fact, the Last of the Absolute Monarchs.

There are now six or seven couples on the floor and the fun is at its riotous height. The floor will never again be so crowded. Nevertheless nine-tenths of the chairs are still occupied and you could ride a bicycle around the floor without endangering the dancers. The spectators look as if they were knitting at the tumbrels. The proper finishing touch would be a guillotine in the empty space in the middle of the floor.

The music stops; Uncle Tom takes me back to my chair, then asks Girdie to dance—since he is a Cash Customer, the Captain has not attempted to make him toe the mark. But I am still out of bounds, so I walk over to the punch bowl, take a cup out of Clark's hands, finish it, and say, "Come on, Clark. I'll let you practice on me."

"Aw, it's a waltz!" (Or a "flea hop," or a "chassé," or "five step"—but whatever it is, it is just too utterly impossible.)

"Do it—or I'll tell Madame Grew that you want to dance with her, only you're too shy to ask her."

"You do and I'll trip her! I'll stumble and trip her."

However, Clark is weakening, so I moved in fast. "Look, Bub, you either take me out there and walk on my feet for a while—or I'll see to it that Girdie doesn't dance with you at all."

That does it. Clark is in the throes of his first case of puppy love, and Girdie is such a gent that she treats him as an equal and accepts his attentions with warm courtesy. So Clark dances with me. Actually he is quite a good dancer and I have to lead him only a tiny bit. He likes to dance—but he wouldn't want anyone, especially me, to think that he likes to dance with his sister. We don't look too badly matched, since I am short. In the meantime Girdie is looking very good indeed with Uncle Tom, which is quite an accomplishment, as Uncle Tom dances with great enthusiasm and no rhythm. But Girdie can follow anyone—if her partner broke his leg, she would follow, fracturing her own at the same spot. But the crowd is thinning out now; husbands that danced the first dance are too tired for the second and no one has replaced them.

Oh, we have gay times in the luxury liner *Tricorn!*

Truthfully we *do* have gay times. Starting with the third dance Girdie and I have our pick of the ship's officers, most of whom are good dancers, or at least have had plenty of practice. About twentytwo o'clock the Captain goes to bed and shortly after that the chaperones start putting away their whetstones and fading, one by one. By midnight there is just Girdie and myself and half a dozen of the younger officers—and the Purser, who has dutifully danced with every woman and now feels that he owes himself the rest of the night. He is quite a good dancer, for an old man.

Oh, and there is usually Mrs. Grew, too—but she isn't one of the chaperones and she is always nice to Girdie. She is a fat old woman, full of sin and chuckles. She doesn't expect anyone to dance with her but she likes to watch—and the officers who aren't dancing at the moment like to sit with her; she's fun.

About one o'clock Uncle Tom sends Clark to tell me to come to bed or he'll lock me out. He wouldn't but I do—my feet are tired.

Good old *Tricorn!*

VI

The Captain is slowly increasing the spin of the ship to make the fake gravity match the surface gravitation of Venus, which is 84 percent of one standard gravity or more than twice as much as I have been used to all my life. So, when I am not busy studying astrogation or ship handling, I spend much of my time in the ship's gymnasium, hardening myself for what is coming, for I have no intention of being at a disadvantage on Venus in either strength or agility.

If I can adjust to an acceleration of 0.84 gee, the later transition to the full Earth-normal of one gee should be sugar pie with chocolate frosting. So I think.

I usually have the gymnasium all to myself. Most of the passengers are Earthmen or Venusmen who feel no need to prepare for the heavy gravitation of Venus. Of the dozen-odd Marsmen I am the only one who seems to take seriously the coming burden—and the handful of aliens in the ship we never see; each remains in his specially conditioned stateroom. The ships' officers do use the gym; some of them are quite fanatic about keeping fit. But they use it mostly at hours when passengers are not likely to use it.

So, on this day (Ceres thirteenth actually but the *Tricorn* uses Earth dates and time, which made it March ninth—I don't mind the strange dates but the short Earth day is costing me a half-hour's sleep each night)—on Ceres thirteenth I went charging into the gym, so angry I could spit venom and intending to derive a double benefit by working off my mad (at least to the point where I would not be clapped in irons for assault), and by strengthening my muscles, too.

And found Clark inside, dressed in shorts and with a massy barbell.

I stopped short and blurted out, "What are *you* doing here?"

He grunted, "Weakening my mind."

Well, I had asked for it; there is no ship's regulation forbidding Clark to use the gym. His answer made sense to one schooled in his devious logic, which I certainly should be. I changed the subject, tossed aside my robe, and started limbering exercises to warm up. "How massy?" I asked.

"Sixty kilos."

I glanced at a weight meter on the wall, a loaded spring scale marked to read in fractions of standard gee; it read 52%. I did a fast rough in my mind—fiftytwo thirty-sevenths of sixty—or unit sum, plus nine hundred over thirty-seven, so add about a ninth, top and bottom for a thousand over forty, to yield twenty-five—or call it the same as lifting eighty-five kilos back home on Mars. "Then why are you sweating?"

"I am not sweating!" He put the barbell down. "Let's see *you* lift it."

"All right." As he moved I squatted down to raise the barbell—and changed my mind.

Now, believe me, I work out regularly with ninety kilos at home and I had been checking that weight meter on the wall each day and loading that same barbell to match the weight I use at home, plus a bit extra each day. My objective (hopeless, it is beginning to seem) is eventually to lift as much mass under Venus conditions as I had been accustomed to lifting at home.

So I was certain I could lift sixty kilos at 52 percent of standard gee.

But it is a mistake for a girl to beat a male at any test of physical strength . . . even when it's your brother. Most especially when it's your brother and he has a fiendish disposition and you've suddenly had a glimmering of a way to put his fiendish proclivities to work. As I have said, if you're in a mood to hate something or somebody, Clark is the perfect partner.

So I grunted and strained, making a good show, got it up to my chest, started it on up—and squeaked "Help me!"

Clark gave a one-handed push at the center of the bar and we got it all the way up. Then I said, "Catch for me," through clenched teeth, and he eased it down. I sighed. "Gee, Clark, you must be getting awful strong."

"Doing all right."

It works; Clark was now as mellow as his nature permits. I suggested companion tumbling—if he didn't mind being the bottom half of the team?—because I wasn't sure I could hold him, not at point-five-two gee . . . did he mind?

He didn't mind at all; it gave him another chance to be muscular and masculine—and I was certain he could lift me; I massed eleven kilos less than the barbell he had just been lifting. When he was smaller, we used to do quite a bit of it, with me lifting him—it was a way to keep him quiet when I was in charge of him. Now that he is as big as I am (and stronger, I fear), we still tumble a little, but taking turns at the ground-and-air parts—back home, I mean.

But with my weight almost half again what it ought to be I didn't risk any fancy capers. Presently, when he had me in a simple handstand over his head, I broached the subject on my mind. "Clark, is Mrs. Royer any special friend of yours?"

"Her?" He snorted and added a rude noise. "Why?"

"I just wondered. She—Mmm, perhaps I shouldn't repeat it."

He said, "Look, Pod, you want me to leave you standing on the ceiling?"

"Don't you dare!"

"Then don't start to say something and not finish it."

"All right. But steady while I swing my feet down to your shoulders." He let me do so, then I hopped down to the floor. The worst part about high acceleration is not how much you weigh, though that is bad enough, but how *fast* you fall—and I suspected that Clark was quite capable of leaving me head downwards high in the air if I annoyed him.

"What's this about Mrs. Royer?" he asked.

"Oh, nothing much. She thinks Marsmen are trash, that's all."

"She does, huh? That makes it mutual."

"Yes. She thinks it's disgraceful that the Line allows us to travel first class—and the Captain certainly ought not to allow us to eat in the same mess with decent people."

"Tell me more."

"Nothing to tell. We're riffraff, that's all. Convicts. You know."

"Interesting. Very, very interesting." "And her friend Mrs. Garcia agrees with her. But I suppose I shouldn't have repeated it. After all, they are entitled to their own opinions. Aren't they?"

Clark didn't answer, which is a very bad sign. Shortly thereafter he left without a word. In a sudden panic that I might have started more than I intended to, I called after him but he just kept going. Clark is not hard of hearing but he can be very hard of listening.

Well, it was too late now. So I put on a weight harness, then loaded myself down all over until I weighed as much as I would on Venus and started trotting on the treadmill until I was covered with sweat and ready for a bath and a change.

Actually I did not really care what bad luck overtook those two harpies; I simply hoped that Clark's sleight-of-hand would be up to its usual high standards so that it could not possibly be traced back to him. Nor even guessed at. For I had not told Clark half of what was said.

Believe you me, I had never guessed, until we were in the *Tricorn,* that anyone could despise other persons simply over their ancestry or where they lived. Oh, I had encountered tourists from Earth whose manners left something to be desired—but Daddy had told me that all tourists, everywhere, seem obnoxious simply because tourists are strangers who do not know local customs . . . and I believed it, because Daddy is never wrong. Certainly the occasional visiting professor that Daddy brought home for dinner was always charming, which proves that Earthmen do not have to have bad manners.

I had noticed that the passengers in the *Tricorn* seemed a little bit standoffish when we first boarded, but I did not think anything of it. After all, strangers do not run up and kiss you, even on Mars—and we Marsmen are fairly informal, I suppose; we're still a frontier society. Besides that, most passengers had been in the ship at least from Earth; they had already formed their friendships and cliques. We were like new kids in a strange school.

But I said "Good morning!" to anyone I met in the passageway and if I was not answered I just checked it off to hard-of-hearing—so many of them obviously *could* be hard of hearing. Anyhow, I wasn't terribly interested in getting chummy with passengers; I wanted to get acquainted with the ship's officers, pilot officers especially, so that I could get some practical experience to chink in what I already knew from reading. It's not easy for a girl to get accepted for pilot training; she has to be about four times as good as a male candidate—and every little bit helps.

I got a wonderful break right away. We were seated at the Captain's table!

Uncle Tom, of course. I am not conceited enough to think that "Miss Podkayne Fries, Marsopolis" means anything on a ship's passenger list (but wait ten years!)—whereas Uncle Tom, even though he is just my pinochle-playing, easygoing oldest relative, is nevertheless senior Senator-at-Large of the Republic, and it is certain that the Marsopolis General Agent for the Triangle Line knows this and no doubt the agent would see to it that the Purser of the *Tricorn* would know it if he didn't already.

As may be—I am not one to scorn gifts from heaven, no matter how they arrive. At our very first meal I started working on Captain Darling. That really is his name, Barrington Babcock Darling—and does his wife call him "Baby Darling"?

But of course a captain does not have a name aboard ship; he is "the Captain," "the Master," "the Skipper," or even "the Old Man" if it is a member of the ship's company speaking not in his august presence. But never a name—simply a majestic figure of impersonal authority.

(I wonder if I will someday be called "the Old Woman" when I am not in earshot? Somehow it doesn't sound quite the same.)

But Captain Darling is not too majestic or impersonal with *me.* I set out to impress him with the idea that I was awfully sweet, even younger than I am, terribly impressed by him and overawed . . . and not too bright. It does not do to let a male of any age know that one has brains, not on first acquaintance; intelligence in a woman is likely to make a man suspicious and uneasy, much like Caesar's fear of Cassius' "lean and hungry look." Get a man solidly on your side first; after that it is fairly safe to let him become gradually aware of your intellect. He may even feel unconsciously that it rubbed off from his own.

So I set out to make him feel that it was a shame that I was not his daughter. (Fortunately he only has sons.) Before that first meal was over I confided in him my great yearning to take pilot training . . . suppressing, of course, any higher ambition.

Both Uncle Tom and Clark could see what I was up to. But Uncle Tom would never give me away and Clark just looked bored and contemptuous and said nothing, because Clark would not bother to interfere with Armageddon unless there was ten percent in it for him.

But I do not mind what my relatives think of my tactics; they work. Captain Darling was obviously amused at my grandiose and "impossible" ambition . . . but he offered to show me the control room.

Round one to Poddy, on points.

I am now the unofficial ship's mascot, with free run of the control room—and I am almost as privileged in the engineering department. Of course the Captain does not really want to spend hours teaching me the practical side of astrogation. He did show me through the control room and gave me a kindergarten explanation of the work—which I followed with wide-eyed awe—but his interest in me is purely social. He wants to not-quite hold me in his lap (he is much too practical and too discreet to do anything of the sort!), so I not-quite let him and make it a point to keep up my social relations with him, listening with my best astonished-kitten look to his anecdotes while he feeds me liters of tea. I really am a good listener because you never can tell when you will pick up something useful—and all in the world any woman has to do to be considered "charming" by men is to listen while they talk.

But Captain Darling is not the only astrogator in the ship.

He gave me the run of the control room; I did the rest. The second officer, Mr. Savvonavong, thinks it is simply amazing how fast I pick up mathematics. You see, he thinks he taught me differential equations. Well, he did, when it comes to those awfully complicated ones used in correcting the vector of a constant-boost ship, but if I hadn't worked hard in the supplementary course I was allowed to take last semester, I wouldn't know what he was talking about. Now he is showing me how to program a ballistic computer.

The junior third, Mr. Clancy, is still studying for his unlimited license, so he has all the study tapes and reference books I need and is just as helpful. He is near enough my age to develop groping hands . . . but only a very stupid male will make even an indirect pass unless a girl manages to let him know that it won't be resented, and Mr. Clancy is not stupid and I am very careful to offer neither invitation nor opportunity.

I may kiss him—two minutes before I leave the ship for the last time. Not sooner.

They are all very helpful and they think it is cute of me to be so dead serious about it. But, in truth, practical astrogation is *much* harder than I had ever dreamed.

I had guessed that part of the resentment I sensed— resentment that I could not fail to notice despite my cheery "Good mornings!"—lay in the fact that we were at the Captain's table. To be sure, the *Welcome in the Tricorn!* booklet in each stateroom states plainly that new seating arrangements are made at each port and that it is the ship's custom to change the guests at the Captain's table each time, making the selections from the new passengers.

But I don't suppose that warning makes it any pleasanter to be bumped, because I don't expect to like it when I'm bumped off the Captain's table at Venus.

But that is only part—

Only three of the passengers were really friendly to me: Mrs. Grew, Girdie, and Mrs. Royer. Mrs. Royer I met first and at first I thought that I was going to like her, in a bored sort of way, as she was awfully friendly and I have great capacity for enduring boredom if it suits my purpose. I met her in the lounge the first day and she immediately caught my eye, smiled, invited me to sit by her, and quizzed me about myself.

I answered her questions, mostly. I told her that Daddy was a teacher and that Mother was raising babies and that my brother and I were traveling with our uncle. I didn't boast about our family; boasting is not polite and it often is not believed—far better to let people find out nice things on their own and hope they won't notice any unnice things. Not that there is anything unnice about Daddy and Mother.

I told her that my name was Poddy Fries.

" 'Poddy'?" she said. "I thought I saw something else on the passenger list."

"Oh. It's really 'Podkayne,' " I explained. "For the Martian saint, you know."

But she didn't know. She answered, "It seems very odd to give a girl a man's name."

Well, my name *is* odd, even among Marsmen. But not for that reason. "Possibly," I agreed. "But with Martians gender is rather a matter of opinion, wouldn't you say?"

She blinked. "You're jesting."

I started to explain—how a Martian doesn't select which of three sexes to be until just before it matures . . . and how, even so, the decision is operative only during a relatively short period of its life.

But I gave up, as I could see that I was talking to a blank wall. Mrs. Royer simply could not imagine any pattern other than her own. So I shifted quickly. "Saint Podkayne lived a very *long* time ago. Nobody actually knows whether the saint was male or female. There are just traditions."

Of course the traditions are pretty explicit and many living Martians claim descent from Saint Podkayne. Daddy says that we know Martian history of millions of years ago much more accurately than we know human history a mere two thousand years ago. In any case, most Martians include "Podkayne" in their long lists of names (practically genealogies in synopsis) because of the tradition that anyone named for Saint Podkayne can call on him (or "her"—or "it") in time of trouble.

As I have said, Daddy is romantic and he thought it would be nice to give a baby the luck, if any, that is attached to the saint's name. I am neither romantic nor superstitious, but it suits me just fine to have a name that belongs to me and to no other human. I like being Podkayne "Poddy" Fries— It's better than being one of a multitude of Elizabeths, or Dorothys, or such.

But I could see that it simply puzzled Mrs. Royor, so we passed to other matters. Speaking from her seniority as an "old space hand," based on her one just-completed trip out from Earth, she told me a great many things about ships and space travel, most of which weren't so, but I indulged her. She introduced me to a number of people and handed me a large quantity of gossip about passengers, ship's officers, et cetera. Between times she filled me in on her aches, pains, and symptoms, what an important executive her son was, what a very important person her late husband had been, and how, when I reached Earth, she really must see to it that I met the Right People. "Perhaps such things don't matter in an outpost like Mars, my dear child, but it is Terribly Important to get Started Right in New York."

I tabbed her as garrulous, stupid, and well intentioned.

But I soon found that I couldn't get rid of her. If I passed through the lounge—which I had to do in order to reach the control room—she would snag me and I couldn't get away short of abrupt rudeness or flat lies.

She quickly started using me for chores. "Podkayne darling, would you mind just slipping around to my stateroom and fetching my mauve wrap? I feel a tiny chill. It's on the bed, I think—or perhaps in the wardrobe—that's a dear." Or, "Poddy child, I've rung and I've rung and the stewardess simply *won't* answer. Would you get my book and my knitting? Oh, and while you're at it, you might bring me a nice cup of tea from the pantry."

Those things aren't too bad; she is probably creaky in the knees and I'm not. But it went on endlessly . . . and shortly, in addition to being her personal stewardess, I was her private nurse. First she asked me to read her to sleep. "Such a blinding headache and your voice is so soothing, my sweet."

I read to her for an hour and then found myself rubbing her head and temples for almost as long. Oh well, a person ought to manage a little kindness now and then, just for practice—and Mother sometimes has dreadful headaches when she has been working too hard; I know that a rub does help.

That time she tried to tip me. I refused it. She insisted. "Now, now, child, don't argue with your Aunt Flossie."

I said, "No, really, Mrs. Royer. If you want to give it to the fund for disabled spacemen as a thankyou, that's all right. But I can't take it."

She said pish and tosh and tried to shove it into my pocket. So I slid out and went to bed.

I didn't see her at breakfast; she always has a tray in her room. But about midmorning a stewardess told me that Mrs. Royer wanted to see me in her room. I was hardly gruntled at the summons, as Mr. Savvonavong had told me that if I showed up just before ten during his watch, I could watch the whole process of a ballistic correction and he would explain the steps to me. If she wasted more than five minutes of my time, I would be late.

But I called on her. She was as cheery as ever. "Oh, there you are, darling! I've been waiting ever so long! That stupid stewardess—Poddy dear, you did such wonders for my head last night . . . and this morning I find that I'm positively *crippled* with my back. You can't imagine, dear; it's *ghastly!* Now if you'll just be an angel and give me a few minutes massage—oh, say a half hour—I'm sure it'll do wonders for me. You'll find the cream for it over there on the dressing table, I think . . . And now, if you'll just help me slide out of this robe . . ."

"Mrs. Royer—"

"Yes, dear? The cream is in that big pink tube. Use just—"

"Mrs. Royer, I can't do it. I have an appointment."

"What, dear? Oh, tosh, let them wait. No one is ever on time aboard ship. Perhaps you had better warm your hands before—"

"Mrs. Royer, I am not going to do it. If something is wrong with your back, I shouldn't touch it; I might injure you. But I'll take a message to the Surgeon if you like and ask him to come see you."

Suddenly she wasn't at all cheery. "You mean you *won't* do it!"

"Have it your way. Shall I tell the Surgeon?"

"Why, you impertinent— *Get out of here!"*

I got.

I met her in a passageway on my way to lunch. She stared straight through me, so I didn't speak either. She was walking as nimbly as I was; I guess her back had taken a turn for the better. I saw her twice more that day and twice more she simply couldn't see me.

The following morning I was using the viewer in the lounge to scan one of Mr. Clancy's study tapes, one on radar approach and contact. The viewer is off in a corner, behind a screen of fake potted palms, and perhaps they didn't notice me. Or perhaps they didn't care.

I stopped the scan to give my eyes and ears a rest, and heard Mrs. Garcia talking to Mrs. Royer:

". . . that I simply can't stand about Mars is that it is so *commercialized.* Why couldn't they have left it primitive and beautiful?"

MRS. ROYER: "What can you expect? Those *dreadful* people!"

The ship's official language is Ortho but many passengers talk English among themselves—and often act as if no one else could possibly understand it. These two weren't keeping their voices down. I went on listening.

MRS. GARCIA: "Just what I was saying to Mrs. Rimski. After all, they're all *criminals."*

MRS. ROYERS "Or worse. Have you noticed that little Martian girl? The niece—or so they claim—of that big black savage?"

I counted ten backwards in Old Martian and reminded myself of the penalty for murder. I didn't mind being called a "Martian." They didn't know any better, and anyhow, it's no insult; the Martians were civilized before humans learned to walk, but "big black savage"!—Uncle Tom is as dark as I am blond; his Maori blood and desert tan make him the color of beautiful old leather . . . and I love the way he looks. As for the rest—he is learned and civilized and gentle . . . and highly honored wherever he goes.

MRS. GARCIA: "I've seen her. Common, I would say. Flashy but cheap. A type that attracts a certain sort of man."

MRS. ROYER: "My dear, you don't know the half of it. I've tried to help her—I really felt sorry for her, and I always believe in being gracious, especially to one's social inferiors."

MRS. GARCIA: "Of course, dear."

MRS. ROYER: "I tried to give her a few hints as to proper conduct among gentle people. Why, I was even *paying* her for little trifles, so that she wouldn't be uneasy among her betters. But she's an utterly ungrateful little snip—she thought she could squeeze more money out of me. She was rude about it, so rude that I feared for my safety. I had to order her out of my room, actually."

MRS. GARCIA: "You were wise to drop her. Blood will tell—bad blood or good blood—blood will always tell. And mixed blood is the Very Worst Sort. Criminals to start with . . . and then that Shameless Mixing of Races. You can see it right in that family. The boy doesn't look a bit like his sister, and as for the uncle—*hmmm*— My dear, you halfway hinted at something. Do you suppose that she is *not* his niece but something, shall we say, a bit *closer?"*

MRS. ROYER: "I wouldn't put it past either one of them!"

MRS. GARCIA: "Oh, come, 'fess up, Flossie. Tell me what you found out."

MRS. ROYER: "I didn't say a word. But I have eyes—and so have you."

MRS. GARCIA: "Right in front of everyone!"

MRS. ROYER: "What I *can't* understand is why the Line permits *them* to mix with *us.* Perhaps they have to sell them passage—treaties or some such nonsense—but we shouldn't be forced to associate with them . . . and certainly not to *eat* with them!"

MRS. GARCIA: "I know. I'm going to write a very strong letter about it as soon as I get home. There are limits. You know, I had thought that Captain Darling was a gentleman . . . but when I saw those *creatures* actually seated at the Captain's table . . . well, I didn't believe my eyes. I thought I would faint."

MRS. ROYER: "I know. But after all, the Captain does come from Venus."

MRS. GARCIA: "Yes, but Venus was never a *prison* colony. That boy . . . he sits in the very chair I used to sit in, right across from the Captain."

(I made a mental note to ask the Chief Steward for a different chair for Clark; I didn't want him contaminated.)

After that they dropped us "Martians" and started dissecting Girdie and complaining about the food and the service, and even stuck pins in some of their shipboard coven who weren't present. But I didn't listen; I simply kept quiet and prayed for strength to go on doing so, because if I had made my presence known I feel sure that I would have stabbed them both with their own knitting needles.

Eventually they left—to rest a while to fortify themselves for lunch—and I rushed out and changed into my gym suit and hurried to the gymnasium to work up a good sweat instead of engaging in violent crime.

It was there that I found Clark and told him just enough—or maybe too much.

VII

Mr. Savvonavong tells me that we are likely to have a radiation storm almost any time now and that we'll have an emergency drill today to practice for it. The solar weather station on Mercury reports that "flare" weather is shaping up and has warned all ships in space and all manned satellites to be ready for it. The flares are expected to continue for about—

Wups! The emergency alarm caught me in the middle of a sentence. We've had our drill and I think the Captain has all the passengers properly scared now. Some ignored the alarm, or tried to, whereupon crewmen in heavy armor fetched them. Clark got fetched. He was the very last they tracked down, and Captain Darling gave him a public scolding that was a work of art and finished by warning Clark that if he failed to be the first passenger to reach shelter the next time the alarm sounded, Clark could expect to spend the rest of the trip *in* the shelter, twenty-four hours of the day, instead of having free run of passenger country.

Clark took it with his usual wooden face, but I think it hit home, especially the threat to confine him. I'm sure the speech impressed the other passengers; it was the sort that raises blisters at twenty paces. Perhaps the Captain intended it mostly for their benefit.

Then the Captain changed his tone to that of a patient teacher and explained in simple words what we could expect, why it was necessary to reach shelter *at once* even if one were taking a bath, why we would be perfectly safe if we did.

The solar flares trigger radiation, he told us, quite ordinary radiation, much like X-rays ("and other sorts," I mentally added), the sort of radiation which is found in space at all times. But the intensity reaches levels from a thousand to ten thousand times as high as "normal" space radiation—and, since we are already inside the orbit of Earth, this is bad medicine indeed; it would kill an unprotected man about as quickly as shooting him through the head.

Then he explained why we would not require a thousand to ten thousand times as much shielding in order to be safe. It's the cascade principle. The outer hull stops over 90 percent of any radiation; then comes the "cofferdam" (cargo holds and water tanks) which absorbs some more; then comes the inner hull which is actually the floor of the cylinder which is first-class passenger country.

This much shielding is plenty for all normal conditions; the radiation level in our staterooms is lower than it is at home, quite a lot lower than it is most places on Earth, especially in the mountains. (I'm looking forward to seeing real mountains. Scary!)

Then one day comes a really *bad* storm on the Sun and the radiation level jumps suddenly to 10,000 times normal—and you could get a killing dose right in your own bed and wake up dying.

No trouble. The emergency shelter is at the center of the ship, four shells farther in, each of which stops more than 90 percent of what hits it. Like this:

10,000
1,000 (after the first inner shell, the ceiling of passenger country.)
100 (after the second inner shell)
10 (third)
1 (fourth—and you're inside the shelter)

But actually the shielding is better than that and it is safer to be in the ship's shelter during a bad solar storm than it is to be in Marsopolis.

The only trouble is—and no small matter—the shelter space is the geometrical core of the ship, just abaft the control room and not a whole lot bigger; passengers and crew are stacked into it about as intimately as puppies in a basket. My billet is a shelf space half a meter wide, half a meter deep, and just a trifle longer than I am—with other females brushing my elbows on each side of me. I am not a claustrophobe, but a coffin would be roomier.

Rations are canned ones, kept there against emergencies; sanitary facilities can only be described as "dreadful." I hope this storm is only a solar squall and is followed by good weather on the Sun. To finish the trip to Venus in the shelter would turn a wonderful experience into a nightmare.

The Captain finished by saying, "We will probably have five to ten minutes' warning from Hermes Station. But don't take five minutes getting here. The instant the alarm sounds *head for the shelter at once* as fast as possible. If you are not dressed, be sure you have clothes ready to grab—and dress when you get here. If you stop to worry about *anything,* it may kill you.

"Crewmen will search all passenger spaces the moment the alarm sounds—and each one is *ordered* to use force to send to shelter any passenger who fails to move fast. He won't argue with you—he'll hit you, kick you, drag you—and I'll back him up.

"One last word. Some of you have not been wearing your personal radiation meters. The law permits me to levy a stiff fine for such failure. Ordinarily I overlook such technical offenses—it's your health, not mine. But during this emergency, this regulation will be enforced. Fresh personal meters are now being passed out to each of you; old ones will be turned over to the Surgeon, examined, and exposures entered in your records for future guidance."

He gave the "all clear" order then and we all went back down to passenger country, sweaty and mussed—at least I was. I was just washing my face when the alarm sounded *again,* and I swarmed up those four decks like a frightened cat.

But I was only a close second. Clark passed me on the way.

It was just another drill. This time all passengers were in the shelter within four minutes. The Captain seemed pleased.

I've been sleeping raw but I'm going to wear pajamas tonight and all nights until this is over, and leave a robe where I can grab it. Captain Darling is a darling but I think he means exactly what he says—and I won't play Lady Godiva; there isn't a horse in the whole ship.

Neither Mrs. Royer nor Mrs. Garcia were at dinner this evening, although they were both amazingly agile both times the alarm sounded. They weren't in the lounge after dinner; their doors are closed, and I saw the Surgeon coming out of Mrs. Garcia's room.

I wonder. Surely Clark wouldn't poison them? Or would he? I don't dare ask him because of the remote possibility that he might tell me.

I don't want to ask the Surgeon, either, because it might attract attention to the Fries family. But I surely would like to have ESP sight (if there truly is such a thing) long enough to find out what is behind those two closed doors.

I hope Clark hasn't let his talents run away with him. Oh, I'm as angry at those two as ever . . . because there is just enough truth in the nasty things they said to make it hurt. I *am* of mixed races and I know that some people think that is bad, even though there is no bias against it on Mars. I *do* have "convicts" among my ancestors—but I've never been ashamed of it. Or not much, although I suppose I'm inclined to dwell more on the highly selected ones. But a "convict" is not always a criminal. Admittedly there was that period in the early history of Mars when the commissars were running things on Earth, and Mars was used as a penal colony; everybody knows that and we don't try to hide it.

But the vast majority of the transportees were political prisoners—"counterrevolutionists," "enemies of the people." Is this bad?

In any case there was the much longer period, involving fifty times as many colonists, when every new Marsman was selected as carefully as a bride selects her wedding gown—and much more scientifically. And finally, there is the current period, since our Revolution and Independence, when we dropped all bars to immigration and welcome anyone who is healthy and has normal intelligence.

No, I'm not ashamed of my ancestors or my people, whatever their skin shades or backgrounds; I'm proud of them. It makes me boiling mad to hear anyone sneer at them. Why, I'll bet those two couldn't qualify for permanent visa even under our present "open door" policy! Feebleminded—

But I do hope Clark hasn't done anything too drastic. I wouldn't want Clark to have to spend the rest of his life on Titan; I love the little wretch. Sort of.

VIII

We've had that radiation storm. I prefer hives. I don't mean the storm itself; it wasn't too bad. Radiation jumped to about 1500 times normal for where we are now—about eight-tenths of an astronomical unit from the Sun, say 120,000,000 kilometers in units you can get your teeth in. Mr. Savvonavong says that we would have been all right if the first-class passengers had simply gone up one deck to second-class passenger country—which certainly would have been more comfortable than stuffing all the passengers and crew into that maximum-safety mausoleum at the center of the ship. Second-class accommodations are cramped and cheerless, and as for third class, I would rather be shipped as freight. But either one would be a picnic compared with spending eighteen hours in the radiation shelter.

For the first time I envied the half-dozen aliens aboard. They don't take shelter; they simply remain locked in their specially conditioned staterooms as usual. No, they aren't allowed to fry; those X-numbered rooms are almost at the center of the ship anyhow, in officers' and crew's country, and they have their own extra layer of shielding, because you can't expect a Martian, for example, to leave the pressure and humidity he requires and join us humans in the shelter; it would be equivalent to dunking him in a bathtub and holding his head under. If he had a head, I mean.

Still, I suppose eighteen hours of discomfort is better than being sealed into one small room for the whole trip. A Martian can simply contemplate the subtle difference between zero and nothing for that long or longer and a Venerian just estivates. But not me. I need unrest oftener than I need rest—or my circuits get tangled and smoke pours out of my ears.

But Captain Darling couldn't know ahead of time that the storm would be short and relatively mild; he had to assume the worst and protect his passengers and crew. Eleven minutes would have been long enough for us to be in the shelter, as shown later by instrument records. But that is hindsight . . . and a captain doesn't save his ship and the lives depending on him by hindsight.

I am beginning to realize that being a captain isn't all glorious adventure and being saluted and wearing four gold stripes on your shoulders. Captain Darling is younger than Daddy and yet he has worry lines that make him look years older.

QUERY: Poddy, are you *sure* you have what it takes to captain an explorer ship?

ANSWERS: What did Columbus have that you don't? Aside from Isabella, I *mean. Semper toujours,* girl!

I spent a lot of time before the storm in the control room. Hermes Solar Weather Station doesn't actually warn us when the storm is coming; what they do is *fail* to warn us that the storm is *not* coming. That sounds silly but here is how it works:

The weathermen at Hermes are perfectly safe, as they are underground on the dark side of Mercury. Their instruments peek cautiously over the horizon in the twilight zone, gather data about Solar weather including running telephotos at several wave lengths.

But the Sun takes about twenty-five days to turn around, so Hermes Station can't watch all of it all the time. Worse yet, Mercury is going around the Sun in the same direction that the Sun rotates, taking eighty-eight days for one lap, so when the Sun again faces where Mercury was, Mercury has moved on. What this adds up to is that Hermes Station faces exactly the same face of the Sun about every seven weeks.

Which is obviously not good enough for weather-predicting storms that can gather in a day or two, peak in a few minutes, and kill you dead in seconds or less.

So the Solar weather is watched from Earth's Luna and from Venus' satellite station as well, plus some help from Deimos. But there is speed-of-light lag in getting information from these more distant stations back to the main station on Mercury. Maybe fifteen minutes for Luna and as high as a thousand seconds for Deimos . . . not good when seconds count.

But the season of bad storms is only a small part of the Sun's cycle as a variable star—say about a year out of each six. (Real years, I mean—Martian years. The Sun's cycle is about eleven of those Earth years that astronomers still insist on using.)

That makes things a lot easier; five years out of six a ship stands very little chance of being hit by a radiation storm.

But during the stormy season a careful skipper (the only sort who lives to draw a pension) will plan his orbit so that he is in the worst danger zone, say inside the orbit of Earth, only during such time as Mercury lies between him and the Sun, so that Hermes Station can always warn him of coming trouble. That is exactly what Captain Darling had done; the *Tricorn* waited at Deimos nearly three weeks longer than the guaranteed sightseeing time on Mars called for by the Triangle Line's advertising, in order to place his approach to Venus so that Hermes Station could observe and warn—because we are right in the middle of the stormy season.

I suppose the Line's business office hates these expensive delays. Maybe they lose money during the stormy season. But three weeks' delay is better than losing a whole shipload of passengers.

But when the storm does start, radio communication goes all to pieces at once—Hermes Station can't warn the ships in the sky.

Stalemate? Not quite. Hermes Station can see a storm shaping up; they can spot the conditions on the Sun which are almost certainly going to produce a radiation storm very shortly. So they send out a storm warning—and the *Tricorn* and other ships hold radiation-shelter drills. Then we wait. One day, two days, or a whole week, and the storm either fails to develop, or it builds up and starts shooting nasty stuff in great quantities.

All during this time the space guard radio station on the dark side of Mercury sends a continuous storm warning, never an instant's break, giving a running account of how the weather looks on the Sun.

. . . and suddenly it stops.

Maybe it's a power failure and the standby transmitter will cut in. Maybe it's just a "fade" and the storm hasn't broken yet and transmission will resume with reassuring words.

But it may be that the first blast of the storm has hit Mercury with the speed of light, no last-minute warning at all, and the station's eyes are knocked out and its voice is swallowed up in enormously more powerful radiation.

The officer-of-thewatch in the control room can't be sure and he dare not take a chance. The instant he loses Hermes Station he slaps a switch that starts a big clock with just a second hand. When that clock has ticked off a certain number of seconds—and Hermes Station is *still* silent—the general alarm sounds. The exact number of seconds depends on where the ship is, how far from the Sun, how much longer it will take the first blast to reach the ship after it has already hit

Hermes Station.

Now here is where a captain bites his nails and gets gray hair and earns his high pay . . . because *he* has to decide how many seconds to set that clock for. Actually, if the first and worst blast is at the speed of light, he hasn't any warning time at *all* because the break in the radio signal from Hermes and that first wave front from the Sun will reach him at the same instant. Or, if the angle is unfavorable, perhaps it is his own radio reception that has been clobbered, and Hermes Station is still trying to reach him with a last-moment warning. He doesn't know.

But he does know that if he sounds the alarm and chases everybody to shelter every time the radio fades for a few seconds, he will get people so worn out and disgusted from his crying "Wolf!" that when the trouble really comes they may not move fast enough.

He knows, too, that the outer hull of his ship will stop almost anything in the electromagnetic spectrum. Among photons (and nothing else travels at speed-of-light) only the hardest X-radiation will get through to passenger country and not much of that. But traveling along behind, falling just a little behind each second, is the really dangerous stuff—big particles, little particles, middlesized particles, all the debris of nuclear explosion. This stuff is moving very fast but not quite at speed-of-light. He has to get his people safe before it hits.

Captain Darling picked a delay of twenty-five seconds, for where we were and what he expected from the weather reports. I asked him how he picked it and he just grinned without looking happy and said, "I asked my grandfather's ghost."

Five times while I was in the control room the officer of the watch started that clock . . . and five times contact with Hermes Station was picked up again before time ran out and the switch was opened.

The sixth time the seconds trickled away while all of us held our breaths . . . and contact with Hermes wasn't picked up again and the alarm sounded like the wakeful trump of doom.

The Captain looked stony-faced and turned to duck down the hatch into the radiation shelter. I didn't move, because I expected to be allowed to remain in the control room. Strictly speaking, the control room is part of the radiation shelter, since it is just above it and is enclosed by the same layers of cascade shielding.

(It's amazing how many people think that a captain controls his ship by peering out a port as if he were driving a sand wagon. But he doesn't, of course. The control room is inside, where he can watch things much more accurately and conveniently by displays and instruments. The only viewport in the *Tricorn* is one at the top end of the main axis, to allow passengers to look out at the stars. But we have never been headed so that the mass of the ship would protect that sightseeing room from solar radiation, so it has been locked off this whole trip.)

I knew I was safe where I was, so I hung back, intending to take advantage of being "teacher's pet"—for I certainly didn't want to spend hours or days stretched out on a shelf with gabbling and maybe hysterical women crowding me on both sides.

I should have known. The Captain hesitated a split second as he started down the hatch and snapped, "Come along, Miss Fries."

I came. He *always* calls me "Poddy"—and his voice had spank in it.

Third-class passengers were already pouring in, since they have the shortest distance to go, and crew members were mustering them into their billets. The crew has been on emergency routine ever since we first were warned by Hermes Station, with their usual one watch in three replaced by four hours on and four hours off. Part of the crew had been staying dressed in radiation armor (which must be *very* uncomfortable) and simply hanging around passenger country. They can't take that heavy armor off for any reason at all until their rel+iefs show up, dressed also in armor. These crewmen are the "chasers" who bet their lives that they can check every passenger space, root out stragglers, and still reach the shelter fast enough not to accumulate radiation poisoning. They are all volunteers and the chasers on duty when the alarm sounds get a big bonus and the other half of them who were lucky enough not to be on duty get a little bonus.

The Chief Officer is in charge of the first section of chasers and the Purser is in charge of the second—but they don't get any bonus even though the one on duty when the alarm sounds is by tradition and law the last man to enter the safety of the shelter. This hardly seems fair . . . but it is considered their honor as well as their duty.

Other crewmen take turns in the radiation shelter and are equipped with mustering lists and billeting diagrams.

Naturally, service has been pretty skimpy of late, with so many of the crew pulled off their regular duties in order to do just one thing and do it *fast* at the first jangle of the alarm. Most of these emergency-duty assignments have to be made from the stewards and clerks; engineers and communicators and such usually can't be spared. So staterooms may not be made up until late afternoon—unless you make your own bed and tidy your room yourself, as I have been doing—and serving meals takes about twice as long as usual, and lounge service is almost nonexistent.

But of course the passengers realize the necessity for this temporary mild austerity and are grateful because it is all done for safety.

You think so? My dear, if you believe that, you will believe anything. You haven't Seen Life until you've seen a rich, elderly

Earthman deprived of something he feels is his rightful due, because he figures he paid for it in the price of his ticket. I saw one man, perhaps as old as Uncle Tom and certainly old enough to know better, almost have a stroke. He turned purple, really purple, and gibbered—all because the bar steward didn't show up on the bounce to fetch him a new deck of playing cards.

The bar steward was in armor at the time and couldn't leave his assigned area, and the lounge steward was trying to be three places at once and answer stateroom rings as well. This didn't mean anything to our jolly shipmate; he was threatening to sue the Line and all its directors, when his speech became incoherent.

Not everybody is that way, of course. Mrs. Grew, fat as she is, has been making her own bed and she is never impatient. Some others who are ordinarily inclined to demand lots of service have lately been making a cheerful best of things.

But some of them act like children with tantrums—which isn't pretty in children and is even uglier in grandparents.

The instant I followed the Captain into the radiation shelter I discovered just how efficient *Tricorn* service can be when it really matters. I was snatched—snatched like a ball, right out of the air—and passed from hand to hand. Of course I don't weigh much at one-tenth gravity, all there is at the main axis; but it is rather breathtaking. Some more hands shoved me into my billet, already stretched out, as casually and impersonally as a housewife stows clean laundry, and a voice called out, "Fries, Podkayne!" and another voice answered, "Check."

The spaces around me, and above and below and across from me, filled up awfully fast, with the crewmen working with the unhurried efficiency of automatic machinery sorting mail capsules. Somewhere a baby was crying and through it I heard the Captain saying, "Is that the last?"

"Last one, Captain," I heard the Purser answer. "How's the time?"

"Two minutes thirty-seven seconds—and your boys can start figuring their payoff, because this one is no drill."

"I didn't think it was, Skipper—and I've won a small bet from the Mate myself." Then the Purser walked past my billet carrying someone, and I tried to sit up and bumped my head and my eyes bugged out.

The passenger he was carrying had fainted; her head lolled loosely over the crook of his arm. At first I couldn't tell who it was, as the face was a bright, bright red. And then I recognized her and *I* almost fainted. Mrs. Royer—

Of course the first symptom of any bad radiation exposure is erythema. Even with a sunburn, or just carelessness with an ultraviolet lamp, the first thing you see is the skin turning pink or bright red.

But was it possible that Mrs. Royer had been hit with such extremely sharp radiation in so very little time that her skin had *already* turned red in the worst "sunburn" imaginable? Just from being last man in?

In that case she hadn't fainted; she was dead.

And if that was true, then it was equally true that the passengers who were last to reach the shelter must all have received several times the lethal dosage. They might not feel ill for hours yet; they might not die for days. But they were just as dead as if they were already stretched out stiff and cold.

How many? I had no way of guessing. Possibly—*probably* I corrected myself—all the first-class passengers; they had the farthest to go and were most exposed to start with.

Uncle Tom and Clark—

I felt sudden sick sorrow and wished that I had not been in the control room. If my brother and Uncle Tom were dying, I didn't want to be alive myself.

I don't think I wasted any sympathy on Mrs. Royer. I did feel a shock of horror when I saw that flaming red face, but truthfully, I didn't like her, I thought she was a parasite with contemptible opinions, and if she had died of heart failure instead, I can't honestly say that it would have affected my appetite. None of us goes around sobbing over the millions and billions of people who have died in the past . . . nor over those still living and yet to be born whose single certain heritage is death (including Podkayne Fries herself). So why should you cry foolish tears simply because you happen to be in the neighborhood when someone you don't like—despise, in fact—comes to the end of her string?

In any case, I did not have time to feel sorrow for Mrs. Royer; my heart was filled with grief over my brother and my uncle. I was sorry that I hadn't been sweeter to Uncle Tom, instead of imposing on him and expecting him always to drop whatever he was doing to help me with my silly problems. I regretted all the many times I had fought with my brother. After all, he was a child and I am a woman; I should have made allowances.

Tears were welling out of my eyes and I almost missed the Captain's first words:

"Shipmates," he said, in a voice firm and very soothing, "my crew and our guests aboard . . . this is not a drill; this is indeed a radiation storm.

"Do not be alarmed; we are all, each and every one of us, perfectly safe. The Surgeon has examined the personal radiation exposure meter of the very last one to reach the shelter. It is well within safe limits. Even if it were added to the accumulated exposure of the most exposed person aboard—who is not a passenger, by the way, but one of the ship's company—the total would still be inside the conservative maximum for personal health and genetic hygiene.

"Let me say it again. No one has been hurt, no one is going to be hurt. We are simply going to suffer a mild inconvenience. I wish I could tell you how long we will have to remain here in the safety of the shelter. But I do not know. It might be a few hours, it might be several days. The longest radiation storm of record lasted less than a week. We hope that Old Sol is not that bad-tempered this time. But until we receive word from Hermes Station that the storm is over, we will all have to stay inside here. Once we know a storm is over it usually does not take too long to check the ship and make sure that your usual comfortable quarters are safe. Until then, be patient and be patient with each other."

I started to feel better as soon as the Captain started to talk. His voice was almost hypnotic; it had the soothing all-better-now effect of a mother reassuring a child. I relaxed and was simply weak with the aftereffects of my fears.

But presently I began to wonder. Would Captain Darling tell us that everything was all right when really everything was All Wrong simply because it was too late and nothing could be done about it?

I thought over everything I had ever learned about radiation poisoning, from the simple hygiene they teach in kindergarten to a tape belonging to Mr. Clancy that I had scanned only that week.

And I decided that the Captain had been telling the truth.

Why? Because, even if my very worst fears had been correct, and we had been hit as hard and unexpectedly as if a nuclear weapon had exploded by us, nevertheless something can *always* be done about it. There would be three groups of us—those who hadn't been hurt at all and were not going to die (certainly everybody who was in the control room or in the shelter when it happened, plus all or almost all the third-class passengers if they had moved fast), a second group so terribly exposed that they were certain to die, no matter what (let's say everybody in first-class country), and a third group, no telling how large, which had been dangerously exposed but could be saved by quick and drastic treatment.

In which case that quick and drastic action would be going on.

They would be checking our exposure meters and reshuffling us—sorting out the ones in danger who required rapid treatment, giving morphine shots to the ones who were going to die anyhow and moving them off by themselves, stacking those of us who were safe by ourselves to keep us from getting in the way, or drafting us to help nurse the ones who could be helped.

That was certain. But there was nothing going on, nothing at all—just some babies crying and a murmur of voices. Why, they hadn't even looked at the exposure meters of most of us; it seemed likely that the Surgeon had checked only the last few stragglers to reach the shelter.

Therefore the Captain had told us the simple, heartwarming truth.

I felt so good that I forgot to wonder why Mrs. Royer had looked like a ripe tomato. I relaxed and soaked in the warm and happy fact that darling Uncle Tom wasn't going to die and that my kid brother would live to cause me lots more homey grief. I almost went to sleep . . .

. . . and was yanked out of it by the woman on my right starting to scream: "Let me out of here! *Let me out of here!"*

Then I did see some fast and drastic emergency action.

Two crewmen swarmed up to our shelf and grabbed her; a stewardess was right behind them. She slapped a gag over the woman's mouth and gave her a shot in the arm, all in one motion. Then they held her until she stopped struggling. When she was quiet, one of the crewmen picked her up and took her somewhere.

Shortly thereafter a stewardess showed up who was collecting exposure meters and passing out sleeping pills. Most people took them but I resisted—I don't like pills at best and I certainly won't take one to knock me out so that I won't know what is going on. The stewardess was insistent but I can be awfully stubborn, so she shrugged and went away. After that there were three or four more cases of galloping claustrophobia or maybe just plain screaming funk; I wouldn't know. Each was taken care of promptly with no fuss and shortly the shelter was quiet except for snores, a few voices, and fairly continuous sounds of babies crying.

There aren't any babies in first class and not many children of any age. Second class has quite a few kids, but third class is swarming with them and every family seems to have at least one young baby. It's why they are there, of course; almost all of third class are Earth people emigrating to Venus. With Earth so crowded, a man with a big family can easily reach the point where emigration to Venus looks like the best way out of an impossible situation, so he signs a labor contract and Venus Corporation pays for their tickets as an advance against his wages.

I suppose it's all right. They need to get away and Venus needs all the people they can get. But I'm glad Mars Republic doesn't subsidize immigration, or we would be swamped. We take immigrants but they have to pay their own way and have to deposit return tickets with the PEG board, tickets they can't cash in for two of our years.

A good thing, too. At least a third of the immigrants who come to Mars just can't adjust. They get homesick and despondent and use those return tickets to go back to Earth. I can't understand anyone's not *liking* Mars, but if they don't, then it's better if they dont' stay.

I lay there, thinking about such things, a little bit excited and a little bit bored, and mostly wondering why somebody didn't do something about those poor babies.

The lights had been dimmed and when somebody came up to my shelf I didn't see who it was at first. "Poddy?" came Girdie's voice, softly but clearly. "Are you in there?"

"I think so. What's up, Girdie?" I tried to keep my voice down too.

"Do you know how to change a baby?"

"I certainly do!" Suddenly I wondered how Duncan was doing . . . and realized that I hadn't really thought about him in *days.* Had he forgotten me? Would he know Grandmaw Poddy the next time he saw her?

"Then come along, chum. There's work to be done."

There certainly was! The lowest part of the shelter, four catwalks below my billet and just over the engineering spaces, was cut like a pie into four quarters—sanitary units, two sick bays, for men and for women and both crowded—and jammed into a little corner between the infirmaries was a sorry pretense for a nursery, not more than two meters in any dimension. On three walls of it babies were stacked high in canvas crib baskets snap-hooked to the walls, and more overflowed into the women's sick bay. A sweeping majority of those babies were crying.

In the crowded middle of this pandemonium two harassed stewardesses were changing babies, working on a barely big enough shelf let down out of one wall. Girdie tapped one of them on the shoulder. "All right, girls, reinforcements have landed. So get some rest and a bite to eat."

The older one protested feebly, but they were awfully glad to take a break; they backed out and Girdie and I moved in and took over. I don't know how long we worked, as we never had time to think about it—there was always more than we could do and we never quite got caught up. But it was better than lying on a shelf and staring at another shelf just centimeters above your nose. The worst of it was that there simply wasn't enough room. I worked with both elbows held in close, to keep from bumping Girdie on one side and a basket crib that was nudging me on the other side.

But I'm not complaining about that. The engineer who designed that shelter into the *Tricorn* had been forced to plan as many people as possible into the smallest possible space; there wasn't any other way to do it and still give us all enough levels of shielding during a storm. I doubt if he worried much about getting babies changed and dry; he had enough to do just worrying about how to keep them alive.

But you can't tell that to a baby.

Girdie worked with an easy, no-lost-motions efficiency that surprised me; I would never have guessed that she had ever had her hands on a baby. But she knew what she was doing and was faster than I was. "Where are their mothers?" I asked, meaning: "Why aren't those lazy slobs down here helping instead of leaving it to the stewardesses and some volunteers?"

Girdie understood me. "Most of them—all of them, maybe—have other small children to keep quiet; they have their hands full. A couple of them went to pieces themselves; they're in there sleeping it off." She jerked her head toward the sick bay.

I shut up, as it made sense. You couldn't possibly take care of an infant properly in one of those shallow niches the passengers were stacked in, and if each mother tried to bring her own baby down here each time, the traffic jam would be indescribable. No, this assembly-line system was necessary. I said, "We're running out of Disposies."

"Stacked in a cupboard behind you. Did you see what happened to Mrs. Garcia's face?"

"Huh?" I squatted and got out more supplies. "You mean Mrs. Royer, don't you?"

"I mean both of them. But I saw milady Garcia first and got a better look at her, while they were quieting her down. You didn't see her?"

"No."

"Sneak a look into the women's ward first chance you get. Her face is the brightest, most amazing chrome yellow I've ever seen in a paint pot, much less on a human face."

I gasped. "Gracious! I did see Mrs. Royer—bright red instead of yellow. Girdie—what in the world happened to them?"

"I'm fairly sure I know what happened," Girdie answered slowly, "but no one can figure out *how* it happened."

"I don't follow you."

"The colors tell the story. Those are the exact shades of two of the water-activated dyes used in photography. Know anything about photography, hon?"

"Not much," I answered. I wasn't going to admit what little I did know, because Clark is a very accomplished amateur photographer. And I wasn't going to mention *that,* either!

"Well, surely you've seen someone taking snapshots. You pull out the tab and there is your picture—only there's no picture as yet. Clear as glass. So you dip it in water and slosh it around for about thirty seconds. Still no picture. Then you lay it anywhere in the light and the picture starts to show . . . and when the colors are bright enough to suit you, you cover it up and let it finish drying in darkness, so that the colors won't get too garish." Girdie suppressed a chuckle. "From the results, I would say that they didn't cover their faces in time to stop the process. They probably tried to scrub it off and made it worse."

I said, in a puzzled tone—and I *was* puzzled, about part of it—"I still don't see how it could happen."

"Neither does anybody else. But the Surgeon has a theory. Somebody booby-trapped their washcloths."

"Huh?"

"Somebody in the ship must have a supply of the pure dyes. That somebody soaked two washcloths in the inactive dyes—colorless, I mean—and dried them carefully, all in total darkness. Then that same somebody sneaked those two prepared washcloths into those two staterooms and substituted them for washcloths they found there on the stateroom wash trays. That last part wouldn't be hard for anyone with cool nerves—service in the staterooms has been pretty haphazard the last day or two, what with this flap over the radiation storm. Maybe a fresh washcloth appears in your room, maybe it doesn't—and all the ship's washcloths and towels are the same pattern. You just wouldn't know."

I certainly hope not! I said to myself—and added aloud, "I suppose not."

"Certainly not. It could be one of the stewardesses—or any of the passengers. But the real mystery is: where did the dyes come from? The ship's shop doesn't carry them . . . just the rolls of prepared film . . . and the Surgeon says that he knows enough about chemistry to be willing to stake his life that no one but a master chemist, using a special laboratory, could possibly separate out pure dyes from a roll of film. He thinks, too, that since the dyes aren't even manufactured on Mars, this somebody must be somebody who came aboard at Earth." Girdie glanced at me and smiled. "So you're not a suspect, Poddy. But I am."

"Why are you a suspect?" (And if I'm not a suspect, then my brother isn't a suspect!) "Why, that's silly!"

"Yes, it is . . . because I wouldn't have known how even if I'd had the dyes. But it isn't, inasmuch as I could have bought them before I left Earth, and I don't have reason to like either of those women."

"I've never heard you say a word against them."

"No, but they've said a few thousand words about me—and other people have ears. So I'm a hot suspect, Poddy. But don't fret about it. I didn't do it, so there is no possible way to show that I did." She chuckled. "And I hope they never catch the somebody who did!"

I didn't even answer, "Me, too!" I could think of one person who might figure out a way to get pure dyes out of a roll of film without a complete chemistry laboratory, and I was checking quickly through my mind every item I had seen when I searched Clark's room.

There hadn't been *anything* in Clark's room which could have been photographic dyes. No, not even film.

Which proves precisely nothing where Clark is concerned. I just hope that he was careful about fingerprints.

Two other stewardesses came in presently and we fed all the babies, and then Girdie and I managed a sort of a washup and had a snack standing up, and then I went back up to my assigned shelf and surprised myself by falling asleep.

I must have slept three or four hours, because I missed the happenings when Mrs. Dirkson had her baby. She is one of the Terran emigrants to Venus and she shouldn't have had her baby until long after we reach Venus—I suppose the excitement stirred things up. Anyhow, when she started to groan they carried her down to that dinky infirmary, and Dr. Torland took one look at her and ordered her carried up into the control room because the control room was the only place inside the radiation-safe space roomy enough to let him do what needed to be done.

So that's where the baby was born, on the deck of the control room, right between the chart tank and the computer. Dr. Torland and Captain Darling are godfathers and the senior stewardess is godmother and the baby's name is "Radiant," which is a poor pun but rather pretty.

They jury-rigged an incubator for Radiant right there in the control room before they moved Mrs. Dirkson back to the infirmary and gave her something to make her sleep. The baby was still there when I woke up and heard about it.

I decided to take a chance that the Captain was feeling more mellow now, and sneaked up to the control room and stuck my head in. "Could I please see the baby?"

The Captain looked annoyed, then he barely smiled and said, "All right, Poddy. Take a quick look and get out."

So I did. Radiant masses about a kilo and, frankly, she looks like cat meat, not worth saving. But Dr. Torland says that she is doing well and that she will grow up to be a fine, healthy girl—prettier than I am. I suppose he knows what he is talking about, but if she is ever going to be prettier than I am, she has lots of kilometers to go. She is almost the color of Mrs. Royer and she's mostly wrinkles.

But no doubt she'll outgrow it, because she looks like one of the pictures toward the end of the series in a rather goody-goody schoolbook called *The Miracle of Life* —and the earlier pictures in that series were even less appetizing. It is probably just as well that we can't possibly see babies until they are ready to make their debut, or the human race would lose interest and die out.

It would probably be still better to lay eggs. Human engineering isn't all that it might be, especially for us female types.

I went back down where the more mature babies were to see if they needed me. They didn't, not right then, as the babies had been fed again and a stewardess and a young woman I had never met were on duty and claimed that they had been working only a few minutes. I hung around anyhow, rather than go back up to my shelf. Soon I was pretending to be useful by reaching past the two who really were working and checking the babies, then handing down the ones who needed servicing as quickly as shelf space was cleared.

It speeded things up a little. Presently I pulled a little wiggler out of his basket and was cuddling him; the stewardess looked up and said, "I'm ready for him."

"Oh, he's not wet," I answered. "Or 'she' as the case may be. Just lonely and needs loving."

"We haven't time for that."

"I wonder." The worst thing about that midget nursery was the high noise level. The babies woke each other and egged each other on and the decibels were something fierce. No doubt they were all lonely and probably frightened—I'm sure I would be. "Most of these babies need loving more than they need anything else."

"They've all had their bottles."

"A bottle can't cuddle."

She didn't answer, just started checking the other infants. But I didn't think what I had said was silly. A baby can't understand your words and he doesn't know where he is if you put him in a strange place, nor what has happened. So he cries. Then he needs to be soothed.

Girdie showed up just then. "Can I help?"

"You certainly can. Here . . . hold this one."

In a few minutes I rounded up three girls about my age and I ran across Clark prowling around the catwalks instead of staying quietly in his assigned billet so I drafted him, too. He wasn't exactly eager to volunteer, but doing anything was slightly better than doing nothing; he came along.

I couldn't use any more help as standing room was almost nonexistent. We worked it only by having two baby-cuddlers sort of back into each of the infirmaries with the mistress of ceremonies (me) standing in the little space at the bottom of the ladder, ready to scrunch in any direction to let people get in and out of the washrooms and up and down the ladder—and with Girdie, because she was tallest, standing back of the two at the changing shelf and dealing out babies, the loudest back to me for further assignment and the wet ones down for service—and vice versa: dry ones back to their baskets unless they started to yell; ones that had fallen asleep from being held and cuddled.

At least seven babies could receive personal attention at once, and sometimes as high as ten or eleven, because at one-tenth gee your feet never get tired and a baby doesn't weigh anything at all worth mentioning; it was possible to hold one in each arm and sometimes we did.

In ten minutes we had that racket quieted down to an occasional whimper, quickly soothed. I didn't think Clark would stick it out, but he did—probably because Girdie was part of the team. With a look of grim nobility on his face, the like of which I have never before seen there, he cuddled babies and presently was saying "Kitchy-koo kitchy-koo!" and "There, there, honey bun," as if he had been doing it all his life. Furthermore, the babies seemed to like him; he could soothe one down and put it to sleep quickest of any of us. Hypnotism, maybe?

This went on for several hours, with volunteers moving in and tired ones moving out and positions rotating. I was relieved once and had another snatched meal and then stretched out on my shelf for about an hour before going back on duty.

I was back at the changing shelf when the Captain called us all by speaker: "Attention, please. In five minutes power will be cut and the ship will be in free fall while a repair is made outside the ship. All passengers strap down. All crew members observe precautions for free fall."

I went right on changing the baby under my hands; you can't walk off on a baby. In the meantime, babies that had been being cuddled were handed back and stowed, and the cuddling team was chased back to their shelves to strap down—and spin was being taken off the ship. One rotation every twelve seconds you simply don't notice at the center of the ship, but you do notice when the *un*spinning starts. The stewardess with me on the changing bench said, "Poddy, go up and strap down. Hurry."

I said, "Don't be silly, Bergitta, there's work to be done," and popped the baby I had just dried into its basket and fastened the zipper.

"You're a passenger. That's an order—*please!"*

"Who's going to check all these babies? You? And how about those four in on the floor of the women's sick bay?"

Bergitta looked startled and hurried to fetch them. All the other stewardesses were busy checking on strap-down; she didn't bother me any more with That's-an-order; she was too busy hooking up the changing shelf and fastening baby baskets to the space. I was checking all the others and almost all of them had been left unzipped—logical enough while we were working with them, but zipping the cover on a baby basket is the same as strapping down for a grownup. It holds them firmly but comfortably with just their heads free.

I still hadn't finished when the siren sounded and the Captain cut the power.

Oh, brother! Pandemonium. The siren woke the babies who were asleep and scared any who were awake, and every single one of those squirmy little worms started to cry at the top of its lungs—and one I hadn't zipped yet popped right out of its basket and floated out into the middle of the space and I snagged it by one leg and was loose myself, and the baby and I bumped gently against the baskets on one wall—only it wasn't a wall any longer, it was just an obstacle to further progress. Free fall can be very confusing when you are not used to it, which I admit I am not. Or wasn't.

The stewardess grabbed us both and shoved the elusive little darling back into her straitjacket and zipped it while I hung onto a handhold. And by then two more were loose.

I did better this time—snagged one without letting go and just kept it captive while Bergitta took care of the other one. Bergitta really knew how to handle herself in zero gravity, with unabrupt graceful movements like a dancer in a slow-motion solly. I made a mental note that this was a skill I must acquire.

I thought the emergency was over; I was wrong. Babies don't like free fall; it frightens them. It also makes their sphincters most erratic. Most of the latter we could ignore—but Disposies don't catch everything; regrettably some six or seven of them had been fed in the last hour.

I know now why stewardesses are all graduate nurses; we kept five babies from choking to death in the next few minutes. That is, Bergitta cleared the throat of the first one that upchucked its milk and, seeing what she had done, I worked on the second one in trouble while she grabbed the third. And so on.

Then we were very busy trying to clear the air with clean Disposies because— Listen, dear, if you think you've had it tough because your baby brother threw up all over your new party dress, then you should try somewhat-used baby formula in free fall, where it doesn't settle anywhere in particular but just floats around like smoke until you either get it or it gets you.

From Six babies. In a small compartment.

By the time we had that mess cleaned up, or 95 percent so anyway, we were both mostly sour milk from hair part to ankle and the Captain was warning us to stand by for acceleration, which came almost at once to my great relief. The Chief Stewardess showed up and was horrified that I had not strapped down and I told her in a ladylike way to go to hell, using a more polite idiom suitable to my age and sex—and asked her what Captain Darling would think about a baby passenger choking to death simply because I had strapped down all regulation-like and according to orders? And Bergitta backed me up and told her that I had cleared choke from at least two and maybe more—she had been too busy to count.

Mrs. Peal, the C.S., changed her tune in a hurry and was sorry and thanked me, and sighed and wiped her forehead and trembled and you could see that she was dead on her feet. But nevertheless, she checked all the babies herself and hurried out. Pretty quickly we were relieved and Bergitta and I crowded into the women's washroom and tried to clean up some. Not much good, as we didn't have any clean clothes to change into.

The "All Clear" felt like a reprieve from purgatory, and a hot bath was heaven itself with the Angels singing. "A" deck had already been checked for radiation level and pronounced safe while the repair outside the ship was being made. The repair itself, I learned, was routine. Some of the antennas and receptors and things outside the ship can't take a flare storm; they burn out—so immediately after a storm, men go outside in armored space suits and replace them. This is normal and unavoidable, like replacing lighting tubes at home. But the men who do it get the same radiation bonus that the passenger chasers get, because old Sol could burn them down with one tiny little afterthought.

I soaked in warm, clean water and thought how miserable an eighteen hours it had been. Then I decided that it hadn't been so bad after all.

It's lots better to be miserable than to be bored.

IX

I am now twenty-seven years old. Venus years, of course, but it sounds so much better. All is relative.

Not that I would stay here on Venus even if guaranteed the Perfect Age for a thousand years. Venusberg is sort of an organized nervous breakdown and the country outside the city is even worse. What little

I've seen of it. And I don't want to see much of it. Why they ever named this dreary, smog-ridden place for the Goddess of Love and Beauty I'll never know. This planet appears to have been put together from the scrap left over after the rest of the Solar System was finished.

I don't think I would go outside Venusberg at all except that I've just got to see fairies in flight. The only one I've seen so far is in the lobby of the hilton we are staying in and is stuffed.

Actually I'm just marking time until we shape for Earth, because Venus is a Grave Disappointment—and now I'm keeping my fingers crossed that Earth will not be a G.D., too. But I don't see how it can be; there is something deliciously *primitive* about the very thought of a planet where one can go outdoors without any special preparations. Why, Uncle Tom tells me that there are places along the Mediterranean (that's an ocean in La Belle France) where the natives bathe in the ocean itself without any clothing of any sort, much less insulasuits or masks.

I wouldn't like that. Not that I'm body proud; I enjoy a good sauna sweat-out as well as the next Marsman. But it would scare me crosseyed to bathe in an ocean; I don't ever intend to get wet all over in anything larger than a bathtub. I saw a man fished out of the Grand Canal once, in early spring. They had to thaw him before they could cremate him.

But it is alleged that, along the Mediterranean shore, the air in the summertime is often blood temperature and the water not much cooler. As may be. Podkayne is not going to take any silly chances.

Nevertheless I am terribly eager to see Earth, in all its fantastic unlikeliness. It occurs to me that my most vivid conceptions of Earth come from the Oz stories—and when you come right down to it, I suppose that isn't too reliable a source. I mean, Dorothy's conversations with the Wizard are instructive—but about *what?* When I was a child I believed every word of my Oz tapes; but now I am no longer a child and I do not truly suppose that a whirlwind is a reliable means of transportation, nor that one is likely to encounter a Tin Woodman on a road of yellow brick.

Tik-Tok, yes—because we have Tik-Toks in Marsopolis for the simpler and more tedious work. Not precisely like Tik-Tok of Oz, of course, and not called "Tik-Toks" by anyone but children, but near enough, near enough, quite sufficient to show that the Oz stories are founded on fact if *not* precisely historical.

And I believe in the Hungry Tiger, too, in the most practical way possible, because there was one in the municipal zoo when I was a child, a gift from the Calcutta Kiwanis Klub to Marsopolis Kiwanians. It always looked at me as if it were sizing me up as an appetizer. It died when I was about five and I didn't know whether to be sorry or glad. It was beautiful . . . and so *very* Hungry.

But Earth is still many weeks away and, in the meantime, Venus does have some points of interest for the newcomer, such as I.

In traveling I strongly recommend traveling with my Uncle Tom. On arriving here, there were no silly waits in "Hospitality" (!) rooms; we were given the "courtesy of the port" at once—to the *extreme* chagrin of Mrs. Royer. "Courtesy of the port" means that your baggage isn't examined and that nobody bothers to look at that bulky mass of documents—passport and health record and security clearance and solvency proof and birth certificate and I.D.s, and nineteen other silly forms. Instead we were whisked from satellite station to spaceport in the private yacht of the Chairman of the Board and were met there by the Chairman himself!—and popped into his Rolls and wafted royally to Hilton Tannhäuser.

We were invited to stay at his official residence (his "cottage," that being the Venus word for a palace) but I don't think he really expected us to accept, because Uncle Tom just cocked his left or satirical eyebrow and, "Mr. Chairman, I don't think you would want me to appear to be bribed even if you manage it."

And the Chairman didn't seem offended at all; he just chuckled till his belly shook like Saint Nicholas' (whom he strongly resembles even to the beard and the red cheeks, although his eyes are cold even when he laughs, which is frequently).

"Senator," he said, "you know me better than that. My attempt to bribe you will be much more subtle. Perhaps through this young lady. Miss Podkayne, are you fond of jewelry?"

I told him honestly that I wasn't, very, because I always lose it. So he blinked and said to Clark, "How about you, son?"

Clark said, "I prefer cash."

The Chairman blinked again and said nothing. Nor had he said anything to his driver when Uncle Tom declined the offer of his roof; nevertheless we flew straight to our hilton—which is why I don't think he ever expected us to stay with him.

But I am beginning to realize that this is not entirely a pleasure trip for Uncle Tom . . . and to grasp emotionally a fact known only intellectually in the past, i.e., Uncle Tom is not merely the best pinochle player in Marsopolis, he sometimes plays other games for higher stakes. I must confess that the what or why lies outside my admittedly youthful horizon—save that everyone knows that the Three-Planets conference is coming up.

Query: Could U.T. conceivably be involved in this? As a consultant or something? I hope not, as it might keep him tied up for weeks on Luna and I have no wish to waste time on a dreary ball of slag while the Wonders of Terra await me—and Uncle Tom just *might* be difficult about letting me go down to Earth without him.

But I wish still more strongly that Clark had not answered the Chairman truthfully.

Still, Clark would not sell out his own uncle for mere money.

On the other' hand, Clark does not regard money as "mere." I must think about this—

But it is some comfort to realize that anyone who handed Clarke a bribe would find that Clark had not only taken the bribe but the hand as well.

Possibly our suite at the Tannhäuser is intended as a bribe, too. Are we paying for it? I'm almost afraid to ask Uncle Tom, but I do know this: the servants that come with it won't accept tips. Not any. Although I very carefully studied up on the subject of tipping, both for Venus and Earth, so that I would know what to do when the time came—and it had been my understanding that *anyone* on Venus *always* accepts tips, even ushers in churches and bank tellers.

But not the servants assigned to us. I have two tiny little amber dolls, identical twins, who shadow me and would bathe me if I let them. They speak Portuguese but not Ortho—and at present my Portuguese is limited to "gobble-gobble" (which means "Thank you") and I have trouble explaining to them that I can dress and undress myself and I'm not too sure about their names—they both answer to "Maria."

Or at least I don't *think* they speak Ortho. I must think about this, too.

Venus is officially bilingual, Ortho and Portuguese, but I'll bet I heard at least twenty other languages the first hour we were down. German sounds like a man being choked to death, French sounds like a cat fight, while Spanish sounds like molasses gurgling gently out of a jug. Cantonese— Well, think of a man trying to vocalize Bach who doesn't like Bach very much to start with.

Fortunately almost everybody understands Ortho as well. Except Maria and Maria. If true.

I could live a long time without the luxury of personal maids but I must admit that this hilton suite is quite a treat to a plain-living, wholesome Mars girl, namely me. Especially as I am in it quite a lot of the time and will be for a while yet. The ship's Surgeon, Dr. Torland, gave me many of the special inoculations needed for Venus on the trip here—an unpleasant subject I chose not to mention—but there still remain many more before it will be safe for me to go outside the city, or even very much into the city. As soon as we reached our suite a physician appeared and played chess on my back with scratches, red to move and mate in five moves—and three hours later I had several tens of welts, with something horrid that must be done about each of them.

Clark ducked out and didn't get his scratch tests until the next morning and I misdoubt he will die of Purple Itch or some such, were it not that his karma is so clearly reserving him for hanging. Uncle Tom refused the tests. He was through all this routine more than twenty years ago, and anyhow he claims that the too, too mortal flesh is merely a figment of the imagination.

So I am more or less limited for a few days to lavish living here in the Tannhäuser. If I go out, I must wear gloves and a mask even in the city. But one whole wall of the suite's salon becomes a stereo stage simply by voice request, either taped or piped live from any theater or club in Venusberg—and some of the "entertainment" has widened my sophistication unbelievably, especially when Uncle Tom is not around. I am beginning to realize that Mars is an essentially puritanical culture. Of course Venus doesn't actually have laws, just company regulations, none of which seems to be concerned with personal conduct. But I had been brought up to believe that Mars Republic is a free society—and I suppose it is. However, there is "freedom" and "freedom."

Here the Venus Corporation owns everything worth owning and runs everything that shows a profit, all in a fashion that would make Marsmen swoon. But I guess Venusmen would swoon at how straitlaced *we* are. I know this Mars girl blushed for the first time in I don't know when and switched off a show that I didn't really believe.

But the solly screen is far from being the only astonishing feature of this suite. It is so big that one should carry food and water when exploring it, and the salon is so huge that local storms appear distinctly possible. My private bath is a suite in itself, with so many gadgets in it that I ought to have an advanced degree in engineering before risking washing my hands. But I've learned how to use them all and purely love them! I had never dreamed that I had been limping along all my life without Utter Necessities.

Up to now my top ambition along these lines has been not to have to share a washstand with Clark, because it has never been safe to reach for my own Christmas-present cologne without checking to see that it is not nitric acid or worse! Clark regards a bathroom as an auxiliary chemistry lab; he's not much interested in staying clean.

But the most astonishing thing in our suite is the piano. No, no, dear, I don't mean a keyboard hooked into the sound system; I mean a *real* piano. Three legs. Made out of wood. Enormous. That odd awkward-graceful curved shape that doesn't fit anything else and can't be put in a corner. A top that opens up and lets you see that it really does have a harp inside and very complex machinery for making it work.

I think that there are just four real pianos on all of Mars, the one in the Museum that nobody plays and probably doesn't work, the one in Lowell Academy that no longer has a harp inside it, just wiring connections that make it really the same as any other piano, the one in the Rose House (as if any President ever had time to play a piano!), and the one in the Beaux Arts Hall that actually is played sometimes by visiting artists although I've never heard it. I don't think there can be another one, or it would have been banner-lined in the news, wouldn't you think?

This one was made by a man named Steinway and it must have taken him a lifetime. I played Chopsticks on it (that being the best opus in my limited repertoire) until Uncle asked me to stop. Then I closed it up, keyboard and top, because I had seen Clark eying the machinery inside, and warned him sweetly but firmly that if he touched one finger to it I would break all his fingers while he was asleep. He wasn't listening but he knows I mean it. That piano is Sacred to the Muses and is not to be taken apart by our Young Archimedes.

I don't care what the electronics engineers say; there is a vast difference between a "piano" and a *real* piano. No matter if their silly oscilloscopes "prove" that the sound is identical. It is like the difference between being warmly clothed—or climbing up in your Daddy's lap and getting *really* warm.

I haven't been under house arrest all the time; I've been to the casinos, with Girdie and with Dexter Cunha, Dexter being the son of Mr. Chairman of the Board Kurt Cunha. Girdie is leaving us here, going to stay on Venus, and it makes me sad.

I asked her, "Why?"

We were sitting alone in our palatial salon. Girdie is staying in this same hilton, in a room not very different nor much larger than her cabin in the *Tricorn,* and I guess I'm just mean enough that I wanted her to see the swank, we were enjoying. But my excuse was to have her help me dress. For now I am wearing (Shudder!) *support* garments. Arch supports in my shoes and tight things here and there intended to keep me from spreading out like an amoeba—and I won't say what Clark calls them because Clark is rude, crude, unrefined, and barbaric.

I hate them. But at 84 percent of one standard gee, I need them despite all that exercise I took aboard ship. This alone is reason enough not to live on Venus, or on Earth, even if they were as delightful as Mars.

Girdie did help me—she had bought them for me in the first place—but she also made me change my makeup, one which I had most carefully copied out of the latest issue of *Aphrodite.* She looked at me and said, "Go wash your face, Poddy. Then we'll start over."

I pouted out my lip and said, "Won't!" The one thing I had noticed most and quickest was that *every* female on Venus wears paint like a Red Indian shooting at the Good Guys in the sollies—even Maria and Maria wear three times as much makeup just to work in as Mother wears to a formal reception—and Mother doesn't wear any when working.

"Poddy, Poddy! Be a good girl."

"I *am* being a good girl. It's polite to do things the way the local people do them, I learned that when I was just a child. And look at yourself in the mirror!" Girdie was wearing as high-styled a Venusberg face-do as any in that magazine.

"I know what I look like. But I am more than twice your age and no one even suspects me of being young and sweet and innocent. Always be what you are, Poddy. Never pretend. Look at Mrs. Grew. She's a comfortable fat old woman. She isn't kittenish, she's just nice to be around."

"You want me to look like a hick tourist!"

"I want you to look like Poddy. Come, dear, we'll find a happy medium. I grant you that even the girls your age here wear more makeup than grownup women do on Mars—so we'll compromise. Instead of painting you like a Venusberg trollop, we'll make you a young lady of good family and gentle breeding, one who is widely traveled and used to all sorts of customs and manners, and so calmly sure of herself that she knows what is best for her— totally uninfluenced by local fads."

Girdie is an artist, I must admit. She started with a blank canvas and worked on me for more than an hour— and when she got through, you couldn't see that I was wearing any makeup at all.

But here is what you could see: I was at least two years older (real years, Mars years, or about six Venus years); my face was thinner and my nose not pug at all and I looked ever so slightly world-weary in a sweet and tolerant way. My eyes were enormous.

"Satisfied?" she asked.

"I'm *beautiful!"*

"Yes, you are. Because you are still Poddy. All I've done is make a picture of Poddy the way she is going to be. Before long."

My eyes filled with tears and we had to blot them up very hastily and she repaired the damage. "Now," she said briskly, "all we need is a club. And your mask."

"What's the club for? And I won't wear a mask, not on top of this."

"The club is to beat off wealthy stockholders who will throw themselves at your feet. And you will wear your mask, or else we won't go."

We compromised. I wore the mask until we got there and Girdie promised to repair any damage to my face— and promised that she would coach me as many times as necessary until I could put on that lovely, lying face myself. The casinos are safe, or supposed to be—the air not merely filtered and conditioned but freshly regenerated, free of any trace of pollen, virus, colloidal suspension or whatever. This is because lots of tourists don't like to take all the long list of immunizations necessary actually to *live* on Venus; but the Corporation wouldn't think of letting a tourist get away unbled. So the hiltons are safe and the casinos are safe and a tourist can buy a health insurance policy from the Corporation for a very modest premium. Then he finds that he can cash his policy back in for gambling chips any time he wants to. I understand that the Corporation hasn't had to pay off on one of these policies very often.

Venusberg assaults the eye and ear even from inside a taxi. I believe in free enterprise; all Marsmen do, it's an article of faith and the main reason we *won't* federate with Earth (and be outvoted five hundred to one). But free enterprise is not enough excuse to blare in your ears and glare in your eyes every time you leave your own roof. The shops never close (I don't think anything ever closes in Venusberg) and full color and stereo ads climb right inside your taxi and sit in your lap and shout in your ear.

Don't ask me how this horrid illusion is produced. The engineer who invented it probably flew off on his own broom. This red devil about a meter high appeared between us and the partition separating us from the driver (there wasn't a sign of a solly receiver) and started jabbing at us with a pitchfork. "Get the Hi-Ho Habit!" it shrieked. "Everybody drinks Hi-Ho! Soothing, Habit-Forming, Dee-*lishus!* Get High with Hi-Ho!"

I shrank back against the cushions.

Girdie phoned the driver. "Please shut that thing off."

It faded down to just a pink ghost and the commercial dropped to a whisper while the driver answered, "Can't, madam. They rent the concession." Devil and noise came back on full blast.

And I learned something about tipping. Girdie took money from her purse, displayed one note. Nothing happened and she added a second; noise and image faded down again. She passed them through a slot to the driver and we weren't bothered any more. Oh, the transparent ghost of the red devil remained and a nagging whisper of his voice, until both were replaced by another ad just as faint—but we could talk. The giant ads in the street outside were noisier and more dazzling; I didn't see how the driver could see or hear to drive, especially as traffic was unbelievably thick and heartstoppingly fast and frantic and he kept cutting in and out of lanes and up and down in levels as if he were trying utmostly to beat Death to a hospital.

By the time we slammed to a stop on the roof of Dom Pedro Casino I figure Death wasn't more than half a lap behind.

I learned later why they drive like that. The hackie is an employee of the Corporation, like most everybody—but he is an "enterprise-employee," not on wages. Each day he has to take in a certain amount in fares to "make his nut"—the Corporation gets all of this. After he has rolled up that fixed number of paid kilometers, he splits the take with the Corporation on all other fares the rest of the day. So he drives like mad to pay off the nut as fast as possible and start making some money himself—then keeps on driving fast because he's got to get his while the getting is good.

Uncle Tom says that most people on Earth have much the same deal, except it's done by the year and they call it income tax.

In Xanadu did Kubla Khan
A stately pleasure dome decree—

Dom Pedro Casino is like that. Lavish. Beautiful. Exotic. The arch over the entrance proclaims every diversion in the known universe, and from what I hear this may well be true. However, all Girdie and I visited were the gaming rooms.

I never saw so much money in my whole life!

A sign outside the gambling sector read:

Hello, Sucker!
All Games Are Honest
All Games Have a House Percentage
you CAN'T win! So Come On In and Have Fun—
(While We Prove It)
Checks Accepted. All Credit
Cards Honored. Free Breakfast
and a Ride to Your Hilton When
You Go Broke. Your Host,
DOM PEDRO

I said, "Girdie, there really is somebody named Dom Pedro?"

She shrugged. "He's an employee and that's not his real name. But he does look like an emperor. I'll point him out. You can meet him if you like and he'll kiss your hand. If you like that sort of thing. Come on."

She headed for the roulette tables while I tried to see everything at once. It was like being on the inside of a kaleidoscope. People beautifully dressed (employees mostly), people dressed every sort of way, from formal evening wear to sports shorts (tourists mostly), bright lights, staccato music, click and tinkle and snuffle and snap, rich hangings, armed guards in comic-opera uniforms, trays of drinks and food, nervous excitement, and money everywhere—

I stopped suddenly, so Girdie stopped. My brother Clark. Seated at a crescent-shaped table at which a beautiful lady was dealing cards. In front of him several tall stacks of chips and an imposing pile of paper money.

I should not have been startled. If you think that a six-year-old boy (or eighteen-year-old boy if you use their years) wouldn't be allowed to gamble in Venusberg, then you haven't been to Venus. Never mind what we do in Marsopolis, here there are just two requirements to gamble: a) you have to be alive; b) you have to have money. You don't have to be able to talk Portuguese or Ortho, nor any known language; as long as you can nod, wink, grunt, or flip a tendril, they'll take your bet. And your shirt.

No, I shouldn't have been surprised. Clark heads straight for money the way ions head for an electrode. Now I knew where he had ducked out to the first night and where he had been most of the time since.

I went up and tapped him on the shoulder. He didn't look around at once but a man popped up out of the rug like a genie from a lamp and had me by the arm. Clark said to the dealer, "Hit me," and looked around. "Hi, Sis. It's all right, Joe, she's my sister."

"Okay?" the man said doubtfully, still holding my arm.

"Sure, sure. She's harmless Sis, this is Josie Mendoza, company cop, on lease to me for tonight. Hi, Girdie!" Clark's voice was suddenly enthusiastic. But he remembered to say, "Joe, slip into my seat and watch the stuff. Girdie, this is swell! You gonna play black jack? You can have my seat."

(It must be love, dears. Or a high fever.)

She explained that she was about to play roulette. "Want me to come help?" he said eagerly. "I'm pretty good on the wheel, too."

She explained to him gently that she did not want help because she was working on a system, and promised to see him later in the evening. Girdie is unbelievably patient with Clark. I would have—

Come to think of it, she's unbelievably patient with me.

If Girdie has a system for roulette, it didn't show. We found two stools together and she tried to give me a few chips. I didn't want to gamble and told her so, and she explained that I would have to stand up if I didn't. Considering what 84 percent gee does to my poor feet I bought a few chips of my own and did just what she did, which was to place minimum bets on the colors, or on odd or even. This way you don't win, you don't lose—except that once in a long while the little ball lands on zero and you lose a chip permanently (that "house percentage" the sign warned against).

The croupier could see what we were doing but we actually were gambling and inside the rules; he didn't object. I discovered almost at once that the trays of food circulating and the drinks were absolutely free—to anyone who was gambling. Girdie had a glass of wine. I don't touch alcoholic drinks even on birthdays—and I certainly wasn't going to drink Hi-Ho, after that obnoxious ad!—but I ate two or three sandwiches and asked for, and got—they had to go get it—a glass of milk. I tipped the amount I saw Girdie tip.

We had been there over an hour and I was maybe three or four chips ahead when I happened to sit up straight—and knocked a glass out of the hand of a man standing behind me, all over him, some over me.

"Oh, dear!" I said, jumping down from my stool and trying to dab off the wet spots on him with my kerchief. "I'm terribly sorry!"

He bowed. "No harm done to me. Merely soda water. But I fear my clumsiness has ruined milady's gown."

Out of one corner of her mouth Girdie said, "Watch it, kid!" but I answered, "This dress? Huh uh! If that was just water, there won't be a wrinkle or a spot in ten minutes. Travel clothes."

"You are a visitor to our city? Then permit me to introduce myself less informally than by soaking you to the skin." He whipped out a card. Girdie was looking grim but I rather liked his looks. Actually not impossibly older than I am (I guessed at twelve Mars years, or say thirty-six of his own—and it turned out he was only thirty-two). He was dressed in the very elegant Venus evening wear, with cape and stick and formal ruff . . . and the cutest little waxed mustaches.

The card read:

DEXTER KURT CUNHA, STK.

I read it, then reread it, then said, "Dexter *Kurt* Cunha— Are you any relation to—"

"My father."

"Why, I know your father!"—and put out my hand.

Ever had your hand kissed? It makes chill bumps that race up your arm, across your shoulders, and down the other arm—and of course nobody would ever do it on Mars. This is a distinct shortcoming in our planet and one I intend to correct, even if I have to bribe Clark to institute the custom.

By the time we had names straight, Dexter was urging us to share a bite of supper and some dancing with him in the roof garden. But Girdie was balky. "Mr. Cunha," she said, "that is a very handsome calling card. But I am responsible for Podkayne to her uncle—and I would rather see your I.D."

For a split second he looked chilly. Then he smiled warmly at her and said, "I can do better," and held up one hand.

The most imposing old gentleman I have ever seen hurried over. From the medals on his chest I would say that he had won every spelling contest from first grade on. His bearing was kingly and his costume unbelievable. "Yes, Stockholder?"

"Dom Pedro, will you please identify me to these ladies?"

"With pleasure, sir." So Dexter was really Dexter and I got my hand kissed again. Dom Pedro does it with great flourish but it didn't have quite the same effect—I don't think he puts his heart into it the way Dexter does.

Girdie insisted on stopping to collect Clark—and Clark suffered an awful moment of spontaneous schizophrenia, for he was still winning. But love won out and Girdie went up on Clark's arm, with Josie trailing us with the loot. I must say I admire my brother in some ways; spending cash money to protect his winnings must have caused even deeper conflict in his soul, if any, than leaving the game while he was winning.

The roof garden is the Brasilia Room and is even more magnificent than the casino proper, with a night-sky roof to match its name, stars and the Milky Way and the Southern Cross such as nobody ever in history actually saw from anywhere on Venus. Tourists were lined up behind a velvet rope waiting to get in—but not us. It was, "This way, if you please, Stockholder," to an elevated table right by the floor and across from the orchestra and a perfect view of the floor show.

We danced and we ate foods I've never heard of and I let a glass of champagne be poured for me but didn't try to drink it because the bubbles go up my nose—and wished for a glass of milk or at least a glass of water because some of the food was quite spicy, but didn't ask for it.

But Dexter leaned over me and said, "Poddy, my spies tell me that you like milk."

"I do!"

"So do I. But I'm too shy to order it unless I have somebody to back me up." He raised a finger and two glasses of milk appeared instantly.

But I noticed that he hardly touched his.

However, I did not realize I had been hoaxed until later. A singer, part of the floor show, a tall handsome dark girl dressed as a gypsy—if gypsies did ever dress that way, which I doubt, but she was billed as "Romany Rose"—toured the ringside tables singing topical verses to a popular song.

She stopped in front of us, looked right at me and smiled, struck a couple of chords and sang:

"Poddy Fries-uh came to town,
Pretty, winsome Poddy—
Silver shoes and sky blue gown,
Lovely darling Podkayne—

"She has sailed the starry sea,
Pour another toddy!
Lucky Dexter, lucky we!
Drink a toast to Poddy!"

And everybody clapped and Clark pounded on the table and Romany Rose curtsied to me and I started to cry and covered my face with my hands and suddenly remembered that I mustn't cry because of my makeup and dabbed at my eyes with my napkin and hoped I hadn't ruined it, and suddenly silver buckets with champagne appeared all over that big room and everybody *did* drink a toast to me, standing up when Dexter stood up in a sudden silence brought on by a roll of drums and a crashing chord from the orchestra.

I was speechless and just barely knew enough to stay steated myself and nod and try to smile when he looked at me—

—and he broke his glass, just like story tapes, and everybody imitated him and for a while there was crash and tinkle all over the room, and I felt like Ozma just after she stops being Tip and is Ozma again and I had to remember my makeup very hard indeed!

Later on, after I had gulped my stomach back into place and could stand up without trembling, I danced with Dexter again. He is a dreamy dancer—a firm, sure lead without ever turning it into a wrestling match. During a slow waltz I said, "Dexter? *You* spilled that glass of soda water. On purpose."

"Yes. How did you know?"

"Because it *is* a sky-blue dress—or the color that is called 'sky-blue,' for Earth, although I've never seen a sky this color. And my shoes *are* silvered. So it couldn't have been an accident. Any of it."

He just grinned, not a bit ashamed. "Only a little of it. I went first to your hilton—and it took almost half an hour to find out who had taken you where and I was furious, because Papa would have been most vexed. But I found you."

I chewed that over and didn't like the taste. "Then you did it because your daddy told you to. Told you to entertain me because I'm Uncle Tom's niece."

"No, Poddy."

"Huh? Better check through the circuits again. That's how the numbers read."

"No, Poddy. Papa would never order me to entertain a lady—other than formally, at our cottage—lady on my arm at dinner, that sort of thing. What he did do was show me a picture of you and ask me if I wanted to. And I decided I did want to. But it wasn't a very good picture of you, didn't do you justice—just one snapped by one of the servants of the Tannhäuser when you didn't know it."

(I decided I had to find some way to get rid of Maria and Maria, a girl needs privacy. Although this hadn't turned out too dry.)

But he was still talking. ". . . and when I did find you I almost didn't recognize you, you were so much more dazzling than the photograph. I almost shied off from introducing myself. Then I got the wonderful idea of turning it into an accident. I stood behind you with that glass of soda water almost against your elbow for so long the bubbles all went out of it—and when you did move, you bumped me so gently I had to slop it over myself to make it enough of an accident to let me be properly apologetic." He grinned most disarmingly.

"I see," I said. "But look, Dexter, the photograph was probably a very good one. This isn't my own face." I explained what Girdie had done.

He shrugged. "Then someday wash it for me and let me look at the real Poddy. I'll bet I'll recognize her. Look, dear, the accident was only half fake, too. We're even."

"What do you mean?"

"They named me 'Dexter' for my maternal grandfather, before they found out I was lefthanded. Then it was a case of either renaming me 'Sinister,' which doesn't sound too well—or changing me over to righthanded. But that didn't work out either; it just made me the clumsiest man on three planets." (This while twirling me through a figure eight!)

"I'm always spilling things, knocking things over. You can follow me by the sound of fractured frangibles. The problem was not to cause an accident, but to keep from spilling that water until the right instant." He grinned that impish grin. "I feel very triumphant about it. But forcing me out of lefthandedness did something else to me too. It's made me a rebel—and I think you are one, too."

"Uh . . . maybe."

"I certainly am. I am expected to be Chairman of the Board someday, like my papa and my grandpapa. But I shan't. I'm going to space!"

"Oh! So am I!" We stopped dancing and chattered about spacing. Dexter intends to be an explorer captain, just like me—only I didn't quite admit that my plans for spacing included pilot and master; it is never well in dealing with a male to let him know that you think *you* can do whatever it is he can do best or wants to do most. But Dexter intends to go to Cambridge and study paramagnetics and Davis mechanics and be ready when the first true starships are ready. Goodness!

"Poddy, maybe we'll even do it together. Lots of billets for women in starships."

I agreed that that was so.

"But let's talk about you. Poddy, it wasn't that you looked so much better than your picture."

"No?" (I felt vaguely disappointed.)

"No. Look. I know your background, I know you've lived all your life in Marsopolis. Me, I've been everywhere. Sent to Earth for school, took the Grand Tour while I was there, been to Luna, of course, and all over Venus—and to Mars. When you were a little girl and I wish I had met you then."

"Thank you." (I was beginning to feel like a poor relation.)

"So I know exactly what a honky-tonk town Venusberg is . . . and what a shock it is to people the first time. Especially anyone reared in a gentle and civilized place like Marsopolis. Oh, I love my hometown but I know what it is— I've been other places. Poddy? Look at me, Poddy. The thing that impressed me about you was your aplomb."

"Me?"

"Your amazing and perfect savoir-faire . . . under conditions I *knew* were strange to you. Your uncle has been everywhere—and Girdie, I take it, has been, too. But lots of strangers here, older women, become quite giddy when first exposed to the fleshpots of Venusberg and behave frightfully. But you carry yourself like a queen. Savoir-faire."

(This man I liked! Definitely. After years and years of "Beat it, runt!" it does something to a woman to be told she has savoir-faire. I didn't even stop to wonder if he told all the girls that—I didn't want to!)

We didn't stay much longer; Girdie made it plain that I had to get my "beauty sleep." So Clark went back to his game (Josie appeared out of nowhere at the right time— and I thought of telling Clark he had better git fer home too, but I decided that wasn't "savoir-faire" and anyhow he wouldn't have listened) and Dexter took us to the Tannhäuser in his papa's Rolls (or maybe his own, I don't know) and bowed over our hands and kissed them as he left us.

I was wondering if he would try to kiss me good night and had made up my mind to be cooperative about it. But he didn't try. Maybe it's not a Venusberg custom, I don't know.

Girdie went up with me because I wanted to chatter. I bounced myself on a couch and said, "Oh, Girdie, it's been the most wonderful night of my life!"

"It hasn't been a bad night for me," she said quietly. "It certainly can't hurt me to have met the son of the Chairman of the Board." It was then that she told me that she was staying on Venus.

"But, Girdie—*why?"*

"Because I'm broke, dear. I need a job."

"You? But you're *rich.* Everybody knows that."

She smiled. "I *was* rich, dear. But my last husband went through it all. He was an optimistic man and excellent company. But not nearly the businessman he thought he was. So now Girdie must gird her loins and get to work. Venusberg is better than Earth for that. Back home I could either be a parasite on my old friends until they got sick of me—the chronic house guest—or get one of them to give me a job that would really be charity, since I don't know anything. Or disappear into the lower depths and change my name. Here, nobody cares and there is always work for anyone who wants to work. I don't drink and I don't gamble— Venusberg is made to order for me."

"But what will you *do?"* It was hard to imagine her as anything but the rich society girl whose parties and pranks were known even on Mars.

"Croupier, I hope. They make the highest wages . . . and I've been studying it. But I've been practicing dealing, too—for black jack, or faro, or chemin de fer. But I'll probably have to start as a change girl."

"Change girl? Girdie—would you dress that way?"

She shrugged. "My figure is still good . . . and I'm quite quick at counting money. It's honest work, Poddy—it has to be. Those change girls often have as much as ten thousand on their trays."

I decided I had fubbed and shut up. I guess you can take the girl out of Marsopolis but you can't quite take Marsopolis out of the girl. Those change girls practically don't wear anything but the trays they carry money on—but it certainly was honest work and Girdie has a figure that had all the junior officers in the *Tricorn* running in circles and dropping one wing. I'm sure she could have married any of the bachelors and insured her old age thereby with no effort.

Isn't it more honest to work? And, if so, why shouldn't she capitalize her assets?

She kissed me good night soon after and ordered me to go right to bed and to sleep. Which I did—all but the sleep. Well, she wouldn't be a change girl long; she'd be a croupier in a beautiful evening gown . . . and saving her wages and her tips . . . and someday she would be a stockholder, one share anyway, which is all anybody needs for old age in the Venus Corporation. And I would come back and visit her when I was famous.

I wondered if I could ask Dexter to put in a word for her to Dom Pedro?

Then I thought about Dexter—

I know this can't be love; I was in love once and it feels entirely different. It hurts.

This just feels grand.

X

I hear that Clark has been negotiating to sell me (black market, of course) to one of the concessionaires who ship wives out to contract colonists in the bush. Or so they say. I do not know the truth. But There Are Rumors.

What infuriates me is that he is said to be offering me at a ridiculously low price!

But in truth it is this very fact that convinces me that it is just a rumor, carefully planted by Clark himself, to annoy me—because, while I would not put it past Clark to sell me into what is tantamount to chattel slavery and a Life of Shame if he could get away with it, nevertheless he would wring out of the sordid transaction every penny the traffic would bear. This is certain.

It is much more likely that he is suffering a severe emotional reaction from having opened up and become almost human with me the other night—and therefore found it necessary to counteract it with this rumor in order to restore our relations to their normal, healthy, cold-war status.

Actually I don't think he could get away with it, even on the black market, because I don't have any contract with the Corporation and even if he forged one, I could always manage to get a message to Dexter, and Clark knows this. Girdie tells me that the black market in wives lies mostly in change girls or clerks or hilton chambermaids who haven't managed to snag husbands in Venusberg (where men are in short supply) and are willing to cooperate in being sold out back (where women are scarce) in order to jump their contracts. They don't squawk and the Corporation overlooks the matter.

Most of the bartered brides, of course, are single women among the immigrants, right off a ship. The concessionaires pay their fare and squeeze whatever cumshaw they can out of the women themselves and the miners or ranchers to whom their contracts are assigned. All Kosher.

Not that I understand it—I don't understand *anything* about how this planet really works. No laws, just Corporate regulations. Want to get married? Find somebody who claims to be a priest or a preacher and have any ceremony you like—but it hasn't any legal standing because it is not a contract with the Corporation. Want a divorce?

Pack your clothes and get out, leaving a note or not as you see fit. Illegitimacy? They've never heard of it. A baby is a baby and the Corporation won't let one want, because that baby will grow up and be an employee and Venus has a chronic labor shortage. Polygamy? Polyandry? Who cares? The Corporation doesn't.

Bodily assault? Don't try it in Venusberg; it is the most thoroughly policed city in the system—violent crime is bad for business. I don't wander around alone in some parts of Marsopolis, couth as my hometown is, because some of the old sand rats are a bit sunstruck and not really responsible. But I'm perfectly safe alone anywhere in Venusberg; the only assault I risk is from super salesmanship.

(The bush is another matter. Not the people so much, but Venus itself is lethal—and there is always a chance of encountering a Venerian who has gotten hold of a grain of happy dust. Even the little wingety fairies are bloodthirsty if they sniff happy dust.)

Murder? This is a *very* serious violation of regulations. You'll have your pay checked for years and years and years to offset both that employee's earning power for what would have been his working life . . . and his putative value to the Corporation, all calculated by the company's actuaries who are widely known to have no hearts at all, just liquid helium pumps.

So if you are thinking of killing anybody on Venus, *don't do it!* Lure him to a planet where murder is a social matter and all they do is hang you or something. No future in it on Venus.

There are three classes of people on Venus: stockholders, employees, and a large middle ground. Stockholder-employees (Girdie's ambition), enterprise employees (taxi drivers, ranchers, prospectors, some retailers, etc.), and of course future employees, children still being educated. And there are tourists but tourists aren't people; they have more the status of steers in a cattle pen—valuable assets to be treated with great consideration but no pity.

A person from out-planet can be a tourist for an hour or a lifetime—just as long as his money holds out. No visa, no rules of any sort, everybody welcome. But you must have a return ticket and you can't cash it in until *after* you sign a contract with the Corporation. If you do. I wouldn't.

I still don't understand how the system works even though Uncle Tom has been very patient in explaining. But he says he doesn't understand it either. He calls it "corporate fascism"—which explains nothing—and says that he can't make up his mind whether it is the grimmest tyranny the human race has ever known . . . or the most perfect democracy in history.

He says that nothing here is as bad in many ways as the conditions over 90 percent of the people on Earth endure, and that it isn't even as bad in creature comforts and standard of living as lots of people on Mars, especially the sand rats, even though we never knowingly let anyone starve or lack medical attention.

I Just Don't Know. I can see now that all my life I have simply taken for granted the way we do things on Mars. Oh, sure, I learned about other systems in school— but it didn't soak in. Now I am beginning to grasp emotionally that There Are Other Ways Than Ours . . . and that people can be happy under them. Take Girdie. I can see why she didn't want to stay on Earth, not the way things had changed for her. But she could have stayed on Mars; she's just the sort of high-class immigrant we want. But Mars didn't tempt her at all.

This bothered me because (as you may have gathered) I think Mars is just about perfect. And I think Girdie is just about perfect.

Yet a horrible place like Venusberg is what she picked. She says it is a Challenge.

Furthermore Uncle Tom says that she is Dead Right; Girdie will have Venusberg eating out of her hand in two shakes and be a stockholder before you can say Extra Dividend.

I guess he's right. I felt awfully sorry for Girdie when I found out she was broke. "I wept that I had no shoes—till I met a man who had no feet." Like that, I mean. I've never been broke, never missed any meals, never worried about the future—yet I used to feel sorry for Poddy when money was a little tight around home and I couldn't have a new party dress. Then I found out that the rich and glamorous Miss FitzSnugglie (I still won't use her right name, it wouldn't be fair) had only her ticket back to Earth and had borrowed the money for that. I was so sorry I hurt.

But now I'm beginning to realize that Girdie has "feet" no matter what—and will always land on them.

She has indeed been a change girl, for two whole nights —and asked me please to see to it that Clark did not go to Dom Pedro Casino those nights. I don't think she cared at all whether or not I saw her . . . but she knows what a horrible case of puppy love Clark has on her and she's just so sweet and good all through that she did not want to risk making it worse and/or shocking him.

But she's a dealer now and taking lessons for croupier—and Clark goes there every night. But she won't let him play at her table. She told him point-blank that he could know her socially or professionally, but not both—and Clark never argues with the inevitable; he plays at some other table and tags her around whenever possible.

Do you suppose that my kid brother actually does possess psionic powers? I know he's not a telepath, else he would have cut my throat long since. But he is still winning.

Dexter assures me that a) the games are absolutely honest, and b) no one can possibly beat them, not in the long run, because the house collects its percentage no matter what. "Certainly you can win, Poddy," he assured me. "One tourist came here last year and took home over half a million. We paid it happily—and advertised it all over Earth—and still made money the very week he struck it rich. Don't you even suspect that we are giving your brother a break. If he keeps it up long enough, we will not only win it all back but take every buck he started with. If he's as smart as you say he is, he'll quit while he's ahead. But most people aren't that smart—and Venus Corporation never gambles on anything but a sure thing."

Again, I don't know. But it was both Girdie and winning that caused Clark to become almost human with me. For a while.

It was last week, the night I met Dexter—and Girdie told me to go to bed and I did but I couldn't sleep and I left my door open so that I could hear Clark come in—or if I didn't, phone somebody and have him chased home because, while Uncle Tom is responsible for both of us, I'm responsible for Clark and always have been. I wanted Clark to be home and in bed before Uncle Tom got up. Habit, I guess.

He did come sneaking in about two hours after I did and I *psst'd* to him and he came into my room.

You never saw a six-year-old boy with so much money!

Josie had seen him to our door, so he said. Don't ask me why he didn't put it in the Tannhäuser's vault—or do ask me: I think he wanted to fondle it.

He certainly wanted to boast. He laid it out in stacks on my bed, counting it and making sure that I knew how much it was. He even shoved a pile toward me. "Need some, Poddy? I won't even charge you interest—plenty more where this came from."

I was breathless. Not the money, I didn't need any money. But the offer. There have been times in the past when Clark has lent me money against my allowance—and charged me exactly 100 percent interest come allowance day. Till Daddy caught on and spanked us both.

So I thanked him most sincerely and hugged him. Then he said, "Sis, how old would you say Girdie is?"

I began to understand his off-the-curve behavior. "I really couldn't guess," I answered carefully. (Didn't need to guess, I knew.) "Why don't you ask her?"

"I did. She just smiled at me and said that women don't have birthdays."

"Probably an Earth custom," I told him and let it go at that. "Clark, how in the world did you win so much money?"

"Nothing to it," he said. "All those games, somebody wins, somebody loses. I just make sure I'm one who wins."

"But how?"

He just grinned his worst grin.

"How much money did you start with?"

He suddenly looked guarded. But he was still amazingly mellow, for Clark, so I pushed ahead. I said, "Look, if I know you, you can't get all your fun out of it unless *somebody* knows, and you're safer telling me than anyone else. Because I've never told on you yet. Now have I?"

He admitted that this was true by not answering—and it is true. When he was small enough, I used to clip him one occasionally. But I never tattled on him. Lately clipping him has become entirely too dangerous; he can give me a fat lip quicker than I can give him one. But I've never tattled on him. "Loosen up," I urged him. "I'm the only one you dare boast to. How much were you paid to sneak those three kilos into the *Tricorn* in my baggage?"

He looked very smug. "Enough."

"Okay, I won't pry any further about that. But what was it you smuggled? You've had me utterly baffled."

"You would have found it if you hadn't been so silly anxious to explore the ship. Poddy, you're stupid. You know that, don't you? You're as predictable as the law of gravity. I can *always* outguess you."

I didn't get mad. If Clark gets you sore, he's got you.

"Guess maybe," I admitted. "Are you going to tell me what it was? Not happy dust, I hope?"

"Oh, no!" he said and looked shocked. "You know what they do to you for happy dust around here? They turn you over to natives who are hopped up with it, that's what they do—and then they don't even have to bother to cremate you."

I shuddered and returned to the subject. "Going to tell me?"

"Mmm ..."

"I swear by Saint Podkayne Not to Tell." This is my own private oath, nobody else would or could use it.

"Better not," he warned me. "You won't like it."

"By Saint Podkayne!" (And I should have kept my lip zipped.)

"Okay," he said. "But you swore it. A bomb."

"A *what?"*

"Oh, not much of a bomb. Just a little squeezer job. Total destruction not more than a kilometer. Nothing much."

I reswallowed my heart. "Why a bomb? And what did you do with it?"

He shrugged. "They were stupid. They paid me this silly amount, see? Just to sneak this little package aboard. Gave me a lot of north wind about how it was meant to be a surprise for the Captain—and that I should give it to him at the Captain's party, last night out. Gift wrapped and everything. 'Sonny,' this silly zero says to me, 'just keep it out of sight and let him be surprised—because last night out is not only the Captain's party, it's his birthday.'

"Now, Sis, you know I wouldn't swallow anything like that. If it had really been a birthday present they would just have given it to the Purser to hold—no need to bribe me. So I just played stupid and kept jacking up the price. And the idiots paid me. They got real jumpy when time came to shove us through passport clearance and paid all I asked. So I shoved it into your bag while you were yakking to Uncle Tom—then saw to it you didn't get inspected.

"Then the minute we were aboard I went to get it—and got held up by a stewardess spraying your cabin and had to do a fast job and go back to relock your bag because Uncle Tom came back in looking for his pipe. That first night I opened the thing in the dark—and opened it from the bottom; I already had a hunch what it might be."

"Why?"

"Sis, use your brain. Don't just sit there and let it rust out. First they offer me what they probably figured was big money to a kid. When I turn it down, they start to sweat and up the ante. I kept crowding it and the money got important. And more important. They don't even give me a tale about how a man with a flower in his lapel will come aboard at Venus and give me a password. It *has* to be that they don't care what happens to it as long as it gets into the ship. What does that add up to? Logic."

He added, "So I opened it and took it apart. Time bomb. Set for three days after we space. *Blooey!"*

I shivered, thinking about it.

"What a horrible thing to do!"

"It could have turned out pretty dry," he admitted, "if I had been as stupid as they thought I was."

"But why would anybody want to do such a thing?"

"Didn't want the ship to get to Venus."

"But *why?"*

"You figure it out. I have."

"Uh . . . what did you do with it?"

"Oh, I saved it. The essential pieces. Never know when you might need a bomb."

And that's all I got out of him—and here I am stuck with a Saint Podkayne oath. And nineteen questions left unanswered. Was there *really* a bomb? Or was I swindled by my brother's talent for improvising explanations that throw one off the obvious track? If there was, *where is it?* Still in the *Tricorn?* Right here in this suite? In an innocent-looking package in the safe of the Tannhäuser? Or parked with his private bodyguard, Josie? Or a thousand other places in this big city? Or is it still more likely that I simply made a mistake of three kilograms in my excitement and that Clark was snooping just to be snooping? (Which he will always do if not busy otherwise.)

No way to tell. So I decided to squeeze what else I could from this Moment of Truth—if it was one. "I'm awful glad you found it," I said. "But the slickest thing you ever did was that dye job on Mrs. Garcia and Mrs. Royer. Girdie admires it, too."

"She does?" he said eagerly.

"She certainly does. But I never let on you did it. So you can still tell her yourself, if you want to."

"Mmm . . ." He looked quite happy. "I gave Old Lady Royer a little extra, just for luck. Put a mouse in her bed."

"Clark! Oh, wonderful! But where did you get a mouse?"

"Made a deal with the ship's cat."

I wish I had a nice, normal, slightly stupid family. It would be a lot more comfortable. Still, Clark has his points.

But I haven't had too much time to worry about my brother's High Crimes and Misdemeanors; Venusberg offers too much to divert the adolescent female with a hitherto unsuspected taste for high living. Especially Dexter—

I am no longer a leper; I can now go anywhere, even out side the city, without wearing a filter snout that makes me look like a blue-eyed pig—and dashing, darling Dexter has been most flatteringly eager to escort me everywhere. Even shopping. Using both hands a girl could spend a national debt there on clothes alone. But I am being (almost) sensible and spending only that portion of my cash assets earmarked for Venus. If I were not firm with him, Dexter would buy me anything I admire, just by lifting his finger. (He never carries any money, not even a credit card, and even his tipping is done by some unobvious credit system.) But I haven't let him buy me anything more important than a fancy ice cream sundae; I have no intention of jeopardizing my amateur status for some pretty clothes. But I don't feel too compromised over ice cream and fortunately I do not as yet have to worry about my waistline—I'm hollow clear to my ankles.

So, after a hard day of sweating over the latest Rio styles Dexter takes me to an ice cream parlor—one that bears the same relation to our Plaza Sweet Shoppe that the *Tricorn* does to a sand car—and he sits and toys with café au lait and watches in amazement while I eat. First some little trifle like an everlasting strawberry soda, then more serious work on a sundae composed by a master architect from creams and syrups and imported fruits and nuts of course, and perhaps a couple of tens of scoops of ice cream in various flavors and named "The Taj Mahal" or "The Big Rock Candy Mountain" or such.

(Poor Girdie! She diets like a Stylite every day of the year. Query: Will I ever make that sacrifice to remain svelte and glamorous? Or will I get comfortably fat like Mrs. Grew? Echo Answereth Not and I'm not afraid to listen.)

I've had to be firm with him in other ways, too, but much less obviously. Dexter turns out to be a master of seductive logic and is ever anxious to tell me a bedtime story. But I have no intention of being a Maid Betrayed, not at my age. The tragedy about Romeo and Juliet is not that they died so young but that the boy-meets-girl reflex should be so overpowering as to defeat all common sense.

My own reflexes are fine, thank you, and my hormonal balance is just dandy. Dexter's fruitless overtures give me a nice warm feeling at the pit of my stomach and hike up my metabolism. Perhaps I should feel insulted at his dastardly intentions toward me—and possibly I would, at home, but this is Venusberg, where the distinction between a shameful proposition and a formal proposal of honorable marriage lies only in the mind and would strain a semantician to define. For all I know, Dexter already has seven wives at home, numbered for the days of the week. I haven't asked him, as I have no intention of becoming number eight, on any basis.

I talked this over with Girdie and asked why I didn't feel "insulted." Had they left the moral circuits out of my cybernet, as they so obviously did with my brother Clark?

Girdie smiled her sweet and secret smile that always means she is thinking about something she doesn't intend to be fully frank about. Then she said, "Poddy, girls are taught to be 'insulted' at such offers for their own protection—and it is a good idea, quite as good an idea as keeping a fire extinguisher handy even though you don't expect a fire. But you are right; it is not an insult, it is never an insult—it is the one utterly honest tribute to a woman's charm and femininity that a man can offer her. The rest of what they tell us is mostly polite lies . . . but on this one subject a man is nakedly honest. I don't see any reason ever to be insulted if a man is polite and gallant about it."

I thought about it. "Maybe you're right, Girdie. I guess it is a compliment, in a way. But why is it that that is all a boy is ever after? Nine times out of ten anyhow."

"You've got it just backwards, Poddy. Why should he *ever* be after anything else? Millions of years of evolution is the logic behind every proposition. Just be glad that the dears have learned to approach the matter with handkissing instead of a club. Some of them, anyhow. It gives us more choice in the matter than we've ever had before in all history. It's a woman's world today, dear—enjoy it and be grateful."

I had never thought of it that way. When I've thought of it at all, I've mostly been groused because it is so hard for a girl to break into a "male" profession, such as piloting.

I've been doing some hard thinking about piloting—and have concluded that there are more ways of skinning a cat than buttering it with parsnips. Do I *really* want to be a "famous explorer captain"? Or would I be just as happy to be some member of his crew?

Oh, I want to space, let there be no doubt about that! My one little trip from Mars to Venus makes me certain that travel is for me. I'd rather be a junior stewardess in the *Tricorn* than President of the Republic. Shipboard life is fun; you take your home and your friends along with you while you go romantic new places—and with Davis-drive starships being built those places are going to be newer and more romantic every year. And Poddy is going to go, somehow. I was born to roam—

But let's not kid ourselves, shall we? Is anybody going to let Poddy captain one of those multimegabuck ships?

Dexter's chances are a hundred times as good as mine. He's as smart as I am, or almost; he'll have the best education for it that money can buy (while I'm loyal to Ares U., I know it is a hick college compared with where he plans to go); and also it is quite possible that his daddy could *buy* him a Star Rover ship. But the clincher is that Dexter is twice as big as I am and male. Even if you leave his father's wealth out of the equation, which one of us gets picked?

But all is not lost. Consider Theodora, consider Catherine the Great. Let a man boss the job . . . then boss that man. I am not opposed to marriage. (But if Dexter wants to marry me—or anything —he'll have to follow me to Marsopolis where we are pretty old-fashioned about such things. None of this lighthearted Venusberg stuff!) Marriage should be every woman's end—but not her finish. I do not regard marriage as a sort of death.

Girdie says always to "be what you are." All right, let's look at ourselves in a mirror, dear, and forget "Captain Podkayne Fries, the Famous Explorer" for the nonce. What do we see?

Getting just a touch broadshouldered in the hips, aren't we, dear? No longer any chance of being mistaken for a boy in a dim light. One might say that we were designed for having babies. And that doesn't seem too bad an idea, now does it? Especially if we could have one as nice as Duncan. Fact is, all babies are pretty nice even when they're not.

Those eighteen miserable hours during the storm in the *Tricorn*—weren't they just about the most fun you ever had in your life? A baby is lots more fun than differential equations.

Every starship has a crèche. So which is better? To study crèche engineering and pediatrics—and be a department head in a starship? Or buck for pilot training and make it . . . and wind up as a female pilot nobody wants to hire?

Well, we don't have to decide now—

I'm getting pretty anxious for us to shape for Earth. Truth is, Venusberg's fleshpots can grow monotonous to one of my wholesome (or should I say "limited") tastes. I haven't any more money for shopping, not if I am to have any to shop in Paris; I don't think I could ever get addicted to gambling (and don't want to; I'm one of those who lose and thereby offset in part Clark's winning); and the incessant noise and lights are going to put wrinkles where I now have dimples. And I think Dexter is beginning to be just a bit bored with my naïve inability to understand what he is driving at.

If there is any one thing I have learned about males in my eight and a half years, it is that one should sign off before he gets bored. I look forward to just one last encounter with Dexter now: a tearful farewell just before I *must* enter the *Tricorn's* loading tube, with a kiss so grownup, so utterly passionate and all-out giving, that he will believe the rest of his life that Things Could Have Been Different if Only He Had Played His Cards Right.

I've been outside the city just once, in a sealed tourist bus. Once is more than enough; this ball of smog and swamp should be given back to the natives, only they wouldn't take it. Once a fairy in flight was pointed out, so they said, but I didn't see anything. Just smog.

I'll settle now for just one fairy, in flight or even perched. Dexter says that he knows of a whole colony, a thousand or more, less than two hundred kilometers away, and wants to show it to me in his Rolls. But I'm not warm to that idea; he intends to drive it himself—and that dratted thing has automatic controls. If I can sneak Girdie, or even Clark, into the picnic—well, maybe.

But I have learned a lot on Venus and would not have missed it for anything. The Art of Tipping, especially, and now I feel like an Experienced Traveler. Tipping can be a nuisance but it is not quite the vice Marsmen think it is; it is a necessary lubricant for perfect service.

Let's admit it; service in Marsopolis varies from indifferent to terrible—and I simply had not realized it. A clerk waits on you when he feels like it and goes on gossiping with another clerk, not even able to see you until he does feel like it.

Not like that in Venusberg! However, it is not just the money—and here follows the Great Secret of Happy Travel. I haven't soaked up much Portuguese and not everybody speaks Ortho. But it isn't necessary to be a linguist if you will learn just one word—in as many languages as possible. Just "thank you."

I caught onto this first with Maria and Maria—I say "gobble-gobble" to them a hundred times a day, only the word is actually "obrigado" which sounds like "gobble-gobble" if you say it quickly. A *small* tip is much more savoir-fairish—and gets better, more willing service—when accompanied by "thank you" than a big tip while saying nothing.

So I've learned to say "thank you" in as many languages as possible and I always try to say it in the home language of the person I'm dealing with, if I can guess it, which I usually can. Doesn't matter much if you miss, though; porters and clerks and taxi drivers and such usually know that one word in several languages and can spot it even if you can't talk with them at all in any other way. I've written a lot of them down and memorized them:

Obrigado
Donkey shane
Mare-see
Key toss
M'goy
Graht-see-eh
Arigato
Spawseebaw
Grathee-oss
Tock

Or "money tock" and Clark says this one means "money talks." But Clark is wrong; he has to tip too high because he won't bother to say "thank you." Oh, yes, Clark tips. It hurts him, but he soon discovered that he couldn't get a taxi and that even automatic vending machines were rude to him if he tried to buck the local system. But it infuriates him so much that he won't be pleasant about it and that costs him.

If you say "tock" instead of "key toss" to a Finn, he still understands it. If you mistake a Japanese for a Cantonese and say "m'goy" instead of "arigato"—well, that is the one word of Cantonese he knows. And "obrigado" everybody understands.

However, if you do guess right and pick their home language, they roll out the red carpet and genuflect, all smiles. I've even had tips refused—and this in a city where Clark's greediness about money is considered only natural.

All those other long, long lists of hints on How to Get Along While Traveling that I studied so carefully before I left turn out not to be necessary; this one rule does it all.

Uncle Tom is dreadfully worried about something. He's absentminded and, while he will smile at me if I manage to get his attention (not easy), the smile soon fades and the worry lines show again. Maybe it's something here and things will be all right once we leave. I wish we were back in the happy Three-Cornered Hat with next stop Luna City.

XI

Things are really grim. Clark hasn't been home for two nights and Uncle Tom is almost out of his mind. Besides that, I've had a quarrel with Dexter—which isn't important compared with Brother being missing but I could surely use a shoulder to cry on.

And Uncle Tom has had a real quarrel with Mr. Chairman—which was what led to my quarrel with Dexter because I was on Uncle Tom's side even though I didn't know what was going on and I discovered that Dexter was just as blind in his loyalty to his father as I am to Uncle Tom. I saw only a bit of the quarrel with Mr. Chairman and it was one of those frightening, cold, bitter, formally polite, grown-men quarrels of the sort that used to lead inevitably to pistols at dawn.

I think it almost did. Mr. Chairman arrived at our suite, looking not at all like Santa Claus, and I heard Uncle say coldly, "I would rather your friends had called on me, sir."

But Mr. Chairman ignored that and about then Uncle noticed that I was there—back of the piano, keeping quiet and trying to look small —and he told me to go to my room. Which I did.

But I know what part of it is. I had thought that both Clark and I had been allowed to run around loose in Venusberg—although I have usually had either Girdie or Dexter with me. Not so. Both of us have been guarded night and day, every instant we have been out of the Tannhäuser, by Corporation police. I never suspected this and I'm sure Clark didn't or he would never have hired Josie to watch his boodle. But Uncle did know it and had accepted it as a courtesy from Mr. Chairman, one that left him free to do whatever these things are that have kept him so busy here, without riding herd on two kids, one of them nutty as Christmas cake. (And I don't mean me.)

As near as I can reconstruct it Uncle blames Mr. Chairman for Clark's absence—although this is hardly fair as Clark, if he knew he was being watched, could evade eighteen private eyes, the entire Space Corps, and a pack of slavering bloodhounds. Or is it "wolfhounds"?

But, on top of this, Dexter says that they disagree completely on how to locate Clark. Myself, I think that Clark is missing because Clark wants to be missing because he intends to miss the ship and stay here on Venus where a) Girdie is, and b) where all that lovely money is. Although perhaps I have put them in the wrong order.

I keep telling myself this, but Mr. Chairman says that it is a kidnapping, that it has to be a kidnapping, and that there is only one way to handle a kidnapping on Venus if one ever expects to see the kidnappee alive again.

On Venus, kidnapping is just about the only thing a stockholder is afraid of. In fact they are so afraid of it that they have brought the thing down almost to a ritual. If the kidnapper plays by the rules and doesn't hurt his victim, he not only won't be punished but he has the Corporation's assurance that he can keep any ransom agreed on.

But if he doesn't play by the rules and they do catch him, well, it's pretty grisly. Some of the things Dexter just hinted at. But I understand that the mildest punishment is something called a "four-hour death." He wouldn't give me any details on this, either—except that there is some drug that is just the opposite of anesthesia; it makes pain hurt worse.

Dexter says that Clark is absolutely safe as long as Uncle Tom doesn't insist on meddling with things he doesn't understand. "Old fool" is one term that he used and that was when I slapped him.

Long sigh and a wish for my happy girlhood in Marsopolis, where I understood how things worked. I don't here. All I really know is that I can no longer leave the suite save with Uncle Tom—and must leave it and stay with him when he does and wherever he goes.

Which is how I at last saw the Cunha "cottage"—and would have been much interested if Clark hadn't been missing. A modest little place only slightly smaller than the Tannhäuser but much more lavish. Our President's Rose House would fit into its ballroom. That is where I quarreled with Dexter while Uncle and Mr. Chairman were continuing their worse quarrel elsewhere in that "cottage."

Presently Uncle Tom took me back to the Tannhäuser and I've never seen him look so old—fifty at least, or call it a hundred and fifty of the years they use here. We had dinner in the suite and neither of us ate anything and after dinner I went over and sat by the living window. The view was from Earth, I guess. The Grand Canyon of El Dorado, or El Colorado, or whatever it is. Grand, certainly. But all I got was acrophobia and tears.

Uncle was just sitting, looking like Prometheus enduring the eagles. I put my hand in his and said, "Uncle Tom? I wish you would spank me."

"Eh?" He shook his head and seemed to see me. "Flicka! Why?"

"Because it's my fault."

"What do you mean, dear?"

"Because I'm responsibu—bul for Clark. I always have been. He hasn't any sense. Why, when he was a baby I must have kept him from falling in the Canal at least a thousand times."

He shook his head, negatively this time. "No, Poddy. It is my responsibility and not yours at all. I am in loco parentis to both of you —which means that your parents were loco ever to trust me with it."

"But I *feel* responsible. He's my Chinese obligation."

He shook his head still again. "No. In sober truth no person can ever be truly responsible for another human being. Each one of us faces up to the universe alone, and the universe is what it is and it doesn't soften the rules for any of us—and eventually, in the long run, the universe always wins and takes all. But that doesn't make it any easier when we *try* to be responsible for another—as you have, as I have—and then look back and see how we could have done it better." He sighed. "I should not have blamed Mr. Cunha. He tried to take care of Clark, too. Of both of you. I knew it."

He paused and added, "It was just that I had a foul suspicion, an unworthy one, that he was using Clark to bring pressure on me. I was wrong. In his way and by his rules, Mr. Cunha is an honorable man— and his rules do not include using a boy for political purposes."

"Political purposes?"

Uncle looked around at me, as if surprised that I was still in the room. "Poddy, I should have told you more than I have. I keep forgetting that you are now a woman. I always think of you as the baby who used to climb on my knee and ask me to tell her 'The Poddy Story.'" He took a deep breath. "I still won't burden you with all of it. But I owe Mr. Cunha an abject apology—because *I* was using Clark for political purposes. And you, too."

"Huh?"

"As a coverup, dear. Doddering great-uncle escorts beloved niece and nephew on pleasure tour. I'm sorry, Poddy, but it isn't that way at all. The truth is I am Ambassador Extraordinary and Minister Plenipotentiary for the Republic. To the Three Planets Summit. But it seemed desirable to keep it a secret until I present my credentials."

I didn't answer because I was having a little trouble soaking this in. I mean, I *know* Uncle Tom is pretty special and has done some important things, but all my life he has been somebody who always had time to hold a skein of yarn for me while I wound it and would take serious interest in helping me name paper dolls.

But he was talking. "So I used you, Flicka. You and your brother. Because— Poddy, do you really want to know all the ins and outs and snarls of the politics behind this?"

I did, very much. But I tried to be grown up. "Just whatever you think best to tell me, Uncle Tom."

"All right. Because some of it is sordid and all of it is complex and would take hours to explain—and some of it really isn't mine to tell; some of it involves commitments Bozo—sorry, the President— Some of it has to do with promises he made. Do you know who our Ambassador is now, at Luna City?"

I tried to remember. "Mr. Suslov?"

"No, that was last administration. Artie Finnegan. Artie isn't too bad a boy . . . but he thinks he should have been President and he's certain he knows more about interplanetary affairs and what is good for Mars than the President does. Means well, no doubt."

I didn't comment because the name "Arthur Finnegan" I recognized at once—I had once heard Uncle Tom sound off about him to Daddy when I was supposed to be in bed and asleep. Some of the milder expressions were "a head like a sack of mud," "larceny in his heart," and a "size twelve ego in a size nine soul."

"But even though he means well," Uncle Tom went on, "he doesn't see eye to eye with the President—and myself—on matters that will come before this conference. But unless the President sends a special envoy—me, in this case—the Ambassador in residence automatically speaks for Mars. Poddy, what do you know about Switzerland?"

"Huh? William Tell. The apple."

"That's enough, I guess, although there probably never was an apple. Poddy, Mars is the Switzerland of the solar System—or it isn't anything at all. So the President thinks, and so I think. A small man (and a small country, like Mars or Switzerland) can stand up to bigger, powerful neighbors only by being willing to fight. We've never had a war and I pray we never do, because we would probably lose it. But if we are willing enough, we may never have to fight."

He sighed. "That's the way I see it. But Mr. Finnegan thinks that, because Mars is small and weak, Mars should join up with the Terran Federation. Perhaps he's right and this really is the wave of the future. But I don't think so; I think it would be the end of Mars as an independent country and a free society. Furthermore, I think it is logical that if Mars gives up its independence, it is only a matter of time until Venus goes the same way. I've been spending the time since we got here trying to convince Mr. Cunha of this, cause him to have his Resident Commissioner make a common cause with us against Terra. This could persuade Luna to come in with us too, since both Venus and Mars can sell to Luna cheaper than Terra can. But it wasn't at all easy; the Corporation has such a longstanding policy of never meddling in politics at all. 'Put not your faith in princes'—which means to. them that they buy and they sell and they ask no questions.

"But I have been trying to make Mr. Cunha see that if Luna and Mars and Terra (the Jovian moons hardly count), if those three were all under the same rules, in short order Venus Corporation would be no more free than is General Motors or I.G. Farbenindustrie. He got the picture too, I'm sure—until I jumped to conclusions about Clark's disappearance and blew my top at him." He shook his head. "Poddy, I'm a poor excuse for a diplomat."

"You aren't the only one who got sore," I said, and told him about slapping Dexter.

He smiled for the first time. "Oh, Poddy, Poddy, we'll never make a lady out of you. You're as bad as I am."

So I grinned back at him and started picking my teeth with a fingernail. This is an even ruder gesture than you might think—and utterly private between Uncle Tom and myself. We Maori have a very bloodthirsty history and I won't even hint at what it is we are supposed to be picking out of our teeth. Uncle Tom used to use this vulgar pantomime on me when I was a little girl, to tell me I wasn't being ladylike.

Whereupon he really smiled and mussed my hair. "You're the blondest blue-eyed savage I ever saw. But you're a savage, all right. And me, too. Better tell him you're sorry, hon, because, much as I appreciate your gallant defense of me, Dexter was perfectly right. I was an 'old fool.' I'll apologize to his father, doing the last hundred meters on my belly if he wants it that way; a man should admit it in full when he's wrong, and make amends. And you kiss and make up with Dexter—Dexter is a fine boy."

"I'll say I'm sorry and make up—but I don't think I'll kiss him. I haven't yet."

He looked surprised. "So? Don't you like him? Or have we brought too much Norse blood into the family?"

"I like Dexter just fine and you're crazy with the smog if you think Svenska blood is any colder than Polynesian. I could go for Dexter in a big way—and that's why I haven't kissed him."

He considered this. "I think you're wise, hon. Better do your practice kisses on boys who don't tend to cause your gauges to swing over into the red. Anyhow, although he's a good lad, he's not nearly good enough for my savage niece."

"Maybe so, maybe not. Uncle . . . what *are* you going to do about Clark?"

His halfway happy mood vanished. "Nothing. Nothing at all."

"But we've got to do something!"

"But what, Podkayne?"

There he had me. I had already chased it through all the upper and lower segments of my brain. Tell the police? Mr. Chairman *is* the police—they all work for him. Hire a private detective? If Venus has any (I don't know), then they all are under contract to Mr. Cunha, or rather, the Venus Corporation.

Run ads in newspapers? Question all the taxi drivers? Put Clark's picture in the sollies and offer rewards? It didn't matter what you thought of, *everything* on Venus belongs to Mr. Chairman. Or, rather, to the corporation he heads. Same thing, really, although Uncle Tom tells me that the Cunhas' actually own only a fraction of the stock.

"Poddy, I've been over everything I could think of with Mr. Cunha —and he is either already doing it, or he has convinced me that here, under conditions he knows much better than I do, it should not be done."

"Then what do we *do?"*

"We wait. But if you think of anything—*anything*— that you think might help, tell me and if it isn't already being done, we'll call Mr. Cunha and find out if it should be done. If I'm asleep, wake me."

"I will." I doubted if he would be asleep. Or me. But something else had been bothering me. "If time comes for the *Tricorn* to shape for Earth—and Clark isn't back—what do you do then?"

He didn't answer; the lines in his face just got deeper. I knew what the Awful Decision was—and I knew how he had decided it.

But I had a little Awful Decision of my own to make . . . and I had talked to Saint Podkayne about it for quite a while and had decided that Poddy had to break a Saint-Podkayne oath. Maybe this sounds silly but it isn't silly to me. Never in my life had I broken one . . . and never in my life will I be utterly sure about Poddy again.

So I told Uncle all about the smuggled bomb.

Somewhat to my surprise he took it seriously—when I had about persuaded myself that Clark had been pulling my leg just for exercise. Smuggling—oh, sure, I understand that every ship in space has smuggling. But not a bomb. Just something valuable enough that it was worthwhile to bribe a boy to get it aboard . . . and probably Clark had been paid off again when he passed it along to a steward, or a cargo hand, or somebody. If I know Clark—

But Uncle wanted me to describe exactly the person I had seen talking to Clark at Deimos Station.

"Uncle, I can't! I barely glanced at him. A man. Not short, not tall, not especially fat or skinny, not dressed in any way that made me remember—and I'm not sure I looked at his face at all. Uh, yes, I did but I can't call up any picture of it."

"Could it have been one of the passengers?"

I thought hard about that. "No. Or I would have noticed his face later when it was still fresh in my mind. *Mmm* . . . I'm almost certain he didn't queue up with us. I think he headed for the exit, the one that takes you back to the shuttle ship."

"That is likely," he agreed. "Certain—*if* it was a bomb. And not just a product of Clark's remarkable imagination."

"But, Uncle Tom, *why* would it be a bomb?'

And he didn't answer and I already knew why. Why would anybody blow up the *Tricorn* and kill everybody in her, babies and all? Not for insurance like you sometimes find in adventure stories; Lloyd's won't insure a ship for enough to show a profit on that sort of crazy stunt—or at least that's the way it was explained to me in my high school economics class.

Why, then?

To keep the ship from getting to Venus.

But the *Tricorn* had been to Venus tens and tens of times—

To keep somebody in the ship from getting to Venus (or perhaps to Luna) *that trip.*

Who? Not Podkayne Fries. I wasn't important to anybody but me.

For the next couple of hours Uncle Tom and I searched that hilton suite. We didn't find anything, nor did I expect us to. If there was a bomb (which I still didn't fully believe) and if Clark had indeed brought it off the ship and hidden it there (which seemed unlikely, with all of the *Tricorn* at one end and all of the city at the other end to choose from), nevertheless he had had days and days in which to make it look like anything from a vase of flowers to a—a *anything.*

We searched Clark's room last on the theory that it was the least likely place. Or rather, we started to search it together and Uncle had to finish it. Pawing through Clark's things got to be too much for me and Uncle sent me back into the salon to lie down.

I was all cried out by the time he gave up; I even had a suggestion to make. "Maybe if we sent for a Geiger counter?"

Uncle shook his head and sat down. "We aren't looking for a bomb, honey."

"We aren't?"

"No. If we found it, it would simply confirm that Clark had told you the truth, and I'm already using that as least hypothesis. Because . . . well, because I know more about this than the short outline I gave to you . . . and I know just how deadly serious this is to some people, how far they might go. Politics is neither a game nor a bad joke the way some people think it is. War itself is merely an extension of politics . . . so I don't find anything surprising about a bomb in politics; bombs have been used in politics hundreds and even thousands of times in the past. No, we aren't looking for a bomb, we are looking for a man—a man you saw for a few seconds once. And probably not even for that man but for somebody that man might lead us back to. Probably somebody inside the President's office, somebody he trusts."

"Oh, gosh, I wish I had really looked at him!"

"Don't fret about it, hon. You didn't know and there was no reason to look. But you can bet that Clark knows what he looks like. If Clark—I mean, *when* Clark comes back, in time we will have him search the

I.D. files at Marsopolis. And all the visa photographs for the past ten years, if necessary. The man will be found. And through him the person the President has been trusting who should not to be trusted." Uncle Tom suddenly looked all Maori and very savage. "And when we do, I may take care of the matter personally. We'll see."

Then he smiled and added, "But right now Poddy is going to bed. You're up way past your bedtime, even with all the dancing and late-sleeping you've been doing lately."

"Uh . . . what time is it in Marsopolis?"

He looked at his other watch. "Twenty-seventeen. You weren't thinking of phoning your parents? I hope not."

"Oh, no! I won't say a word to them unless—until Clark is back. And maybe not then. But if it's only twenty-seventeen, it's not late at all, real time, and I don't want to go to bed. Not until you do."

"I may not go to bed."

"I don't care. I want to sit with you."

He blinked at me, then said very gently, "All right, Poddy. Nobody ever grows up without spending at least one night of years."

We just sat then for quite a while, with nothing to say that had not already been said and would just hurt to say over again.

At last I said, "UnkaTom? Tell me the Poddy story—"

"At your age?"

"Please." I crawled up on his knees. "I want to sit in your lap once more and hear it. I need to."

"All right," he said, and put his arm around me. "Once upon a time, long, long ago when the world was young, in a specially favored city there lived a little girl named Poddy. All day long she was busy like a ticking clock. *Tick tick tick* went her heels, *tick tick tic* went her knitting needles, and, most especially, *tick tick tick* went her busy little mind. Her hair was the color of butter blossoms in the spring when the ice leaves the canals, her eyes were the changing blue of sunshine playing down through the spring floods, her nose had not yet made up its mind what it would be, and her mouth was shaped like a question mark. She greeted the world as an unopened present and there was no badness in her anywhere.

"One day Poddy—"

I stopped him. "But I'm *not* young any longer . . . and I don't think the world was ever young!"

"Here's my handky," he said. "Blow your nose. I never did tell you the end of it, Poddy; you always fell asleep. It ends with a miracle."

"A truly miracle?"

"Yes. This is the end. Poddy grew up and had another Poddy. And then the world was young again."

"Is that all?"

"That's all there ever is. But it's enough."

XII

I guess Uncle Tom put me to bed, for I woke up with just my shoes off and very rumpled. He was gone but he had left a note saying that I could reach him, if I needed to, on Mr. Chairman's private code. I didn't have any excuse to bother him and didn't want to face anyone, so I chased Maria and Maria out and ate breakfast in bed. Ate quite a lot, too, I must admit— the body goes on ticking anyhow.

Then I dug out my journal for the first time since landing. I don't mean I haven't been keeping it; I mean I've been talking it instead of writing it. The library in our suite has a recorder built into its desk and I discovered how easy it was to keep a diary that way. Well, I had really found out before that, because Mr. Clancy let me use the recorder they use to keep the log on.

The only shortcoming of the recorder in the library was that Clark might drop in most any time. But the first day I went shopping I found the most darling little minirecorder at Venus Macy—only ten-fifty and it just fits in the palm of your hand and you can talk into it without even being noticed if you want to and I just couldn't resist it. I've been carrying it in my purse ever since.

But now I wanted to look way back in my journal, the early written part, and see if I had said *anything* that might remind me of what That Man had looked like or anything about him.

I hadn't. No clues. But I FOUND A NOTE FROM CLARK.

It read:

Pod,

If you find this at all, it's time you read it. Because I'm using 24-hr, ink and I expect to lift this out of here and you'll never see it.

Girdie is in trouble and I'm going to rescue her. I haven't told anybody because this is one job that is all mine and I don't want you or anybody horning in on it.

However, a smart gambler hedges his bets, if he can. If I'm gone long enough for you to read this, it's time to get hold of Uncle Tom arid have him get hold of Chairman Cunha. All I can tell you is that there is a newsstand right at South Gate. You buy a copy of the *Daily Merchandiser* and ask if they carry Everlites. Then say, "Better give me two—it's quite dark where I'm going."

But don't *you* do this, I don't want it muffed up.

If this turns out dry, you can have my rock collection.

Count your change. Better use your fingers.
CLARK

I got all blurry. That last line—I know a holographic last will and testament when I see one, even though I had never seen one before. Then I straightened up and counted ten seconds backwards including the rude word at the end that discharges nervous tension, for I knew this was no time to be blurry and weak; there was work to be done.

So I called Uncle Tom right away, as I agreed perfectly with Clark on one point: I wasn't going to try to emulate Space Ranger Stalwart, Man of Steel, the way Clark evidently had; I was going to get all the help I could get! With both Clark and Girdie in some sort of pinch I would have welcomed two regiments of Patrol Marines and the entire Martian Legion.

So I called Mr. Chairman's private code—and it didn't answer; it simply referred me to another code. This one answered all right . . . but with a recording. Uncle Tom. And this time all he said was to repeat something he had said in the note, that he expected to be busy all day and that I was not to leave the suite under any circumstances whatever until he got back—only this time he added that I was not to let anyone into the suite, either, not even a repairman, not even a servant except those who were already there, like Maria and Maria.

When the recording started to play back for the third time, I switched off. Then I called Mr. Chairman the public way, through the Corporation offices. A dry deal that was! By pointing out that I was Miss Fries, niece of Senator Fries, Mars Republic, I did get as far as his secretary, or maybe his secretary's secretary.

"Mr. Cunha cannot be reached. I am veree sorree, Miss Fries."

So I demanded that she locate Uncle Tom. "I do not have that information. I am veree sorree, Miss Fries."

Then I demanded to be patched in to Dexter. "Mr. Dexter is on an inspection trip for Mr. Cunha. I am veree sorree."

She either couldn't, or wouldn't, tell me when Dexter was expected back—and wouldn't, or couldn't, find some way for me to call him. Which I just plain didn't believe, because if I owned a planetwide corporation there would be some way to phone every mine, every ranch, every factory, every air boat the company owned. All the time. And I don't even suspect that Mr. Chairman is less smart about how to run such a lash-up than I am. I told her so, using the colorful rhetoric of sand rats and canal men. I mean I really got mad and used idioms I hadn't known I even remembered. I guess Uncle is right; scratch my Nordic skin and a savage is just underneath. I wanted to pick my teeth at her, only she wouldn't have understood it.

But would you believe it? I might as well have been cussing out a sand gator; it had no effect on her at all. She just repeated, "I'm-veree-sorree-Miss-Fries," and I growled and switched off.

Do you suppose Mr. Chairman uses an androidal Tik-Tok as his phone monitor? I wouldn't put it past him—and any live woman should have shown *some* reaction at some of the implausibilities I showered on her, even if she didn't understand most of the words (Well, I don't understand some of them myself. But they are not compliments.)

I thought about phoning Daddy; I knew he would accept the charges, even if he had to mortgage his salary. But Mars was eleven minutes away; it said so, right on a dial of the phone. And the relays via Hermes Station and Luna City were even worse. With twentytwo minutes between each remark it would take me most of the day just to tell him what was wrong, even though they don't charge you for the waiting time.

But I still might have called except—well, what could Daddy *do,* three hundred million kilometers away? All it would do would be to turn his last six hairs white.

It wasn't until then that I steadied down enough to realize that there had been something else amiss about that note written into my journal—besides Clark's childish swashbuckling. Girdie—

It was true that I had not seen Girdie for a couple of days; she was on a shift that caused her to zig while I zagged, newly hired dealers don't get the best shifts. But I had indeed talked to her at a time when Clark was probably already gone even though at the time I had simply assumed that he had gotten up early for some inscrutable reason of his own, rather than not coming home at all that night.

But Uncle Tom had talked to her just before we had gone to the Cunha cottage the day before, asked her specifically if she had seen Clark—and she hadn't. Not as recently as we had.

I didn't have any trouble reaching Dom Pedro—not the Dom Pedro I met the night I met Dexter but the Dom Pedro of that shift. However, by now all the Dom Pedros know who Poddy Fries is; she's the girl that is seen with Mr. Dexter. He told me at once that Girdie had gone off shift half an hour earlier and I should try her hilton. Unless—he stopped and made some inquiries; somebody seemed to think that Girdie had gone shopping.

As may be. I already knew that she was not at the little hilton she had moved to from the stylish (and expensive) Tannhäuser; a message I had already recorded there was guaranteed to fetch a call back in seconds, if and when.

That ended it. There was no one left for me to turn to, nothing at all left for me to do, save wait in the suite until Uncle returned, as he had ordered me to do.

So I grabbed my purse and a coat and left.

And got all of three meters outside the door of the suite. A tall, wide, muscular character got in my way. When I tried to duck around him, he said, "Now, now, Miss Fries. Your uncle left orders."

I scurried the other way and found that he was awfully quick on his feet, for such a big man. So there I was, arrested! Shoved back into our own suite and held in durance vile. You know, I don't think Uncle entirely trusts me.

I went back to my room and closed the door and thought about it. The room was still not made up and still cluttered with dirty dishes because, despite the language barrier, I have made clear to Maria and Maria that Miss Fries becomes quite vexed if *anybody* disturbs my room until I signal that I no longer want privacy by leaving the door open.

The clumsy, two-decker, roll-around table that had fetched my breakfast was still by my bed, looking like a plundered city.

I took everything off the lower shelf, stowed it here and there in my bath, covered the stuff on top of the table with the extra cloth used to shield the tender eyes of cash customers from the sight of dirty dishes.

Then I grabbed the house phone and told them I wanted my breakfast dishes cleared away immediately.

I'm not very big. I mean you can fit forty-nine mass kilos only one hundred fifty-seven centimeters long into a fairly small space if you scrunch a little. That lower shelf was hard but not too cramped. It had some ketchup on it I hadn't noticed.

Uncle's orders (or perhaps Mr. Cunha's) were being followed meticulously, however. Ordinarily a pantry boy comes to remove the food wagon; this time the two Marias took it out the service entrance and as far as the service lift—and in the course of it I learned something interesting but not really surprising. Maria said something in Portuguese; the other Maria answered her in Ortho as glib as mine: "She's probably soaking in the tub, the lazy brat."

I made a note not to remember her on birthdays and at Christmas.

Somebody wheeled me off the lift many levels down and shoved me into a corner. I waited a few moments, then crawled out. A man in a well-spotted apron was looking astonished. I said, "Obrigado!" handed him a deuce note and walked out the service entrance with my nose in the air. Two minutes later I was in a taxi.

I've been catching up on this account while the taxi scoots to South Gate in order not to chew my nails back to the elbows. I must admit that I feel good even though nervous. Action is better than waiting. No amount of bad can stonker me, but not knowing drives me nuts.

This spool is almost finished, so I think I'll change spools and mail this one back to Uncle at South Gate. I should have left a note, I know —but this is better than a note. I hope.

XIII

Well, I can't complain about not having seen fairies. They are every bit as cute as they are supposed to be—but I don't care greatly if I never see another one.

Throwing myself bravely into the fray against fearful odds, by sheer audacity I overcame—

It wasn't that way at all. I fubbed. Completely. So here I am, some nowhere place out in the bush, in a room with no windows, and only one door. That door isn't much use to me as there is a fairy perched over it. She's a cute little thing and the green part of her fur looks exactly like a ballet tutu. She doesn't look quite like a miniature human with wings—but they do say that the longer you stay here the more human they look. Her eyes slant up, like a cat's, and she has a very pretty builtin smile.

I call her "Titania" because I can't pronounce her real name. She speaks a few words of Ortho, not much because those little skulls are only about twice the brain capacity of a cat's skull—actually, she's an idiot studying to be a moron and not studying very hard.

Most of the time she just stays perched and nurses her baby—the size of a kitten and twice as cute. I call it "Ariel" although I'm not sure of its sex. I'm not dead sure of Titania's sex; they say that both males and females do this nursing thing, which is not quite nursing but serves the same purpose; they are not mammalians. Ariel hasn't learned to fly yet, but Titania is teaching it—tosses it into the air and it sort of flops and glides to the floor and then stays there, mewing piteously until she comes to get it and flies back to her perch,

I'm spending most of my time a) thinking, b) bringing this journal up to date, c) trying to persuade Titania to let me hold Ariel (making some progress; she now lets me pick it up and hand it to her—the baby isn't a bit afraid of me), and d) thinking, which seems to be a futile occupation.

Because I can go anywhere in the room and do anything as long as I stay a couple of meters away from that door. Guess why? Give up? Because fairies have very sharp teeth and claws; they're carnivorous. I have a nasty bite and two deep scratches on my left arm to prove it—red and tender and don't seem to want to heal. If I get close to that door, she dives on me.

Completely friendly otherwise— Nor do I have anything physically to complain about. Often enough a native comes in with a tray of really quite good food. But I never watch him come in and I never watch him take it away—because Venerians look entirely too human to start with and the more you look at them the worse it is for your stomach. No doubt you have seen pictures but pictures don't give you the smell and that drooling loose mouth, nor the impression that this *thing* has been dead a long time and is now animated by obscene arts.

I call him "Pinhead" and to him that is a compliment. No doubt as to its being a "him" either. It's enough to make a girl enter a nunnery.

I eat the food because I feel sure Pinhead didn't cook it. I think I know who does. She would be a good cook.

Let me back up a little. I told the news vendor: "Better give me two —it's quite dark where I'm going." He hesitated and looked at me and I repeated it.

So pretty soon I am in another air car and headed out over the bush. Ever make a wide, sweeping turn in smog? That did it. I haven't the slightest idea where I am, save that it is somewhere within two hours' flight of Venusberg and that there is a small colony of fairies nearby. I saw them flying shortly before we landed and was so terribly interested that I didn't really get a good look at the spot before the car stopped and the door opened. Not that it would have done any good—

I got out and the car lifted at once, mussing me up with its fans . . . and here was an open door to a house and a familiar voice was saying, "Poddy! Come in, dear, come in!"

And I was suddenly so relieved that I threw myself into her arms and hugged her and she hugged me back. It was Mrs. Grew, fat and friendly as ever.

And looked around and here was Clark, just sitting—and he looked at me and said, "Stupid," and looked away. And then I saw Uncle— sitting in another chair and was about to throw myself at him with wild shouts of glee— when Mrs. Grew's arms were suddenly awfully strong and she said soothingly, "No, no, dear, not quite so fast" and held me until somebody (Pinhead, it was) did something to the back of my neck.

Then I had a big comfortable chair all to myself and didn't want it because I couldn't move from my neck down. I felt all right, aside from some odd tingles, but I couldn't stir.

Uncle looked like Mr. Lincoln grieving over the deaths at Waterloo. He didn't say anything.

Mrs. Grew said cheerfully, "Well, now we've got the whole family together. Feel a bit more like discussing things rationally, Senator?"

Uncle shook his head half a centimer.

She said, "Oh, come now! We do want you to attend the conference. We simply want you to attend it in the right frame of mind. If we can't agree—well, it's hardly possible to let any of you be found again. Isn't that obvious? And that would be such a shame . . . especially for the children."

Uncle said, "Pass the hemlock."

"Oh, I'm sure you don't mean that."

"He certainly does mean it!" Clark said shrilly. "You illegal obscenity! I delete all over your censored!" And I knew he was really worked up, because Clark is contemptuous of vulgar idioms; he says they denote an inferior mind.

Mrs. Grew looked at Clark placidly, even tenderly. Then she called in Pinhead again. "Take him out and keep him awake till he dies." Pinhead picked Clark up and carried him out. But Clark had the last word. "And besides that," he yelled, *"you cheat at solitaire!* I've watched you!"

For a split moment Mrs. Grew looked really annoyed. Then she put her face back into its usual kindly expression and said to Uncle, "Now that I have both of the kids I think I can afford to expend one of them. Especially as you are quite fond of Poddy. Too fond of her, some people would say. Psychiatrists, I mean."

I mulled that over . . . and decided that if I ever got out of this mess, I would make a rug out of her hide and give it to Uncle.

Uncle ignored it. Presently there was a most dreadful racket, metal on resounding metal. Mrs. Grew smiled. "It's crude but it works. It is what used to be a water heater when this was a ranch. Unfortunately it isn't quite big enough either to sit down or stand up in—but a boy that rude really shouldn't expect comfort. The noise comes from pounding on the outside of it with a piece of pipe." She blinked and looked thoughtful. "I don't see how we can talk things over with such a racket going on. I think I should have the tank moved farther away—or perhaps our talk would march even more quickly if I had it brought nearer, so that you could hear the sounds he make inside the tank, too. What do you think, Senator?"

I cut in. "Mrs. Grew!"

"Yes, dear? Poddy, I'm sorry but I'm really quite busy. Later we'll have a nice cup of tea together. Now, Senator—"

"Mrs. Grew, you don't understand my Uncle Tom at all! You'll never get anything out of him this way."

She considered it. "I think you exaggerate, dear. Wishful thinking."

"No, no, no! There isn't *any* way you could possibly get my Uncle Tom to do anything against Mars. But if you hurt Clark—or me—you'll just make him more adamant. Oh, he loves me and he loves Clark, too. But if you try to budge him by hurting either one of us, you're just wasting your time!" I was talking rapidly and just as sincerely as I know how. I seemed to hear Clark's screams. Not likely, I guess, not over that infernal clanging. But once when he was a baby he fell into a wastebasket . . . and screamed something dreadful before I rescued him. I guess I was hearing that in my mind.

Mrs. Grew smiled pleasantly. "Poddy dear, you are only a girl and your head has been filled with nonsense. The Senator is going to do just what I want him to do."

"Not if you kill Clark, he won't!"

"You keep quiet, dear. Do keep quiet and let me explain—or I shall have to slap you a few times to keep you quiet. Poddy, I am not going to kill your brother—"

"But you said—"

"Quiet! That native who took your brother away didn't understand what I said; he knows only trade Ortho, a few words, never a full sentence. I said what I did for the benefit of your brother . . . so that, when I *do* have him fetched back in, he'll be groveling, begging your uncle to do anything I want him to do."

She smiled warmly. "One piece of nonsense you've apparently been taught is that patriotism, of something silly like that, will overpower a man's own self-interest. Believe me, I have no slightest fear that an old political hack like your uncle will give any real weight to such a silly abstraction. What *does* worry him is his own political ruin if he does what I want him to do. What he is going to do. Eh, Senator?"

"Madam," Uncle Tom answered tightly, "I see no point in bandying words with you."

"Nor do I. Nor shall we. But you can listen while I explain it to Poddy. Dear, your uncle is a stubborn man and he won't accomplish his own political downfall lightly. I need a string to make him dance—and in *you* I have that string, I'm sure."

"I'm not!"

"Want a slap? Or would you rather be gagged? I like you, dear; don't force me to be forceful. In *you,* I said. Not your brother. Oh, no doubt your uncle goes through the solemn farce of treating his niece and his nephew just alike—Christmas presents and birthday presents and such like pretenses. But it is obvious that no one could love your brother . . . not even his own mother, I venture to say. But the Senator *does* love you—rather more than he wants anyone to suspect. So now I am hurting your brother a little—oh, just a smidgen, at worst he'll be deaf—to let your uncle see what will happen to *you.* Unless he is a good boy and speaks his piece just the way I tell him to."

She looked thoughtfully at Uncle. "Senator, I can't decide which of two methods might work the better on you. You see, I want to keep you reminded—after you agree to cooperate—that you *did* agree. Sometimes a politician doesn't stay bought. After I turn you loose, would it be better for me to send your nephew along with you, to keep you reminded? Or would it be better to keep him here and work on him just a little each day—with his sister watching? So that she would have a clear idea of what happens to her . . . if you try any tricks at Luna City. What's your opinion, sir?"

"Madam, the question does not arise."

"Really, Senator?"

"Because I will not be at Luna City unless both children are with me. Unhurt."

Mrs. Grew chuckled. "Campaign promises, Senator. I'll reason with you later. But now"—she glanced at an antique watch pinned to her gross bosom—"I think I had better put a stop to that dreadful racket, it's giving me a headache. And I doubt if your nephew can hear it any longer, save possibly through his bones." She got up and left, moving with surprising agility and grace for a woman her age and mass.

Suddenly the noise stopped.

It was such a surprise that I would have jumped if anything below my neck could jump. Which it couldn't.

Uncle was looking at me. "Poddy, Poddy—" he said softly.

I said, "Uncle, don't you give in a millimeter to that dreadful woman!"

He said, "Poddy, I *can't* give in to her. Not at all. You understand that? Don't you?"

"I certainly do! But look—you could fake it. Tell her anything. Get loose yourself and take Clark along, as she suggested. Then you can rescue me. I'll hold out. You'll see!"

He looked terribly old. "Poddy . . . Poddy darling . . . I'm very much afraid . . . that this is the end. Be brave, dear."

"Uh, I haven't had very much practice at that. But I'll try to be." I pinched myself, mentally, to see if I was scared—and I wasn't, not really. Somehow I couldn't be scared with Uncle there, even though he was helpless just then. "Uncle, what is it she wants? Is she some kind of a fanatic?"

He didn't answer because we both heard Mrs. Grew's jolly, belly-deep laugh. " 'Fanatic'!" she repeated, came over and tweaked my cheek. "Poddy dear, I'm not any sort of fanatic and I don't really care any more about politics than your uncle does. But I learned many years ago when I was just a girl—and quite attractive, too, dear, much more so than you will ever be—that a girl's best friend is cash. No, dear, I'm a paid professional and a good one."

She went on briskly, "Senator, I think the boy is deaf but I can't be sure; he's passed out now. We'll discuss it later, it's time for my nap. Perhaps we had all better rest a little."

And she called in Pinhead and I was carried into the room I am in now. When he picked me up, I really was truly aghast!—and found that I could move my arms and legs just a little bit—pins and needles you wouldn't believe!—and I struggled feebly. Did me no good, I was dumped in here anyhow.

After a while the drug wore off and I felt almost normal, though shaky. Shortly thereafter I discovered that Titania is a very good watchdog indeed and I haven't tried to reach that door since; my arm and shoulder are quite sore and getting stiff.

Instead I inspected the room. Not much in it. A bed with a mattress but no bedclothes, not that you need any in this climate. A sort of a table suspended from one wall and a chair fastened to the floor by it. Glow tubes around the upper corners of the room. I checked all these things at once after learning the hard way that Titania was not just a cutie with gauzy wings. It was quite clear that Mrs. Grew, or whoever had outfitted that room, had no intention of leaving anything in it that could be used as a weapon, against Titania or anybody. And I no longer had even my coat and purse.

I particularly regretted losing my purse, because I always carry a number of useful things in it. A nail file for example—if I had had even my nail file I might have considered taking on that bloodthirsty little fairy. But I didn't waste time thinking about it; my purse was where I had dropped it when I was drugged.

I did find one thing very interesting: this room had been used to prison Clark before I landed in it. One of his two bags was there—and I suppose I should have missed it from his room the night before, only I got upset and left Uncle to finish the search. The bag held a very odd collection for a knight errant venturing forth to rescue a damsel in distress: some clothing—three Tshirts and two pairs of shorts, a spare pair of shoes—a slide rule, and three comic books.

If I had found a flame gun or supplies of mysterious chemicals, I would not have been surprised—more Clarkish. I suppose, when you get right down to it, for all his brilliance Clark is just a little boy..

I worried a bit then about the possibility—or probability—that he was deaf. Then I quit thinking about it. If true, I couldn't help it—and he would miss his ears less than anything, since he hardly ever listens anyhow.

So I lay down on the bed and read his comic books. I am not a comic-book addict but these were quite entertaining, especially as the heroes were always getting out of predicaments much worse than the one I was in.

After a while I fell asleep and had heroic dreams.

I was awakened by "breakfast" (more like dinner but quite good). Pinhead took the tray away, and light plastic dishes and a plastic spoon offered little in the way of lethal weapons. However, I was delighted to find that he had fetched my purse!

Delighted for all of ten seconds, that is— No nail file. No penknife. Not a darn thing in it more deadly than lipstick and handky. Mrs. Grew hadn't disturbed my money or my tiny minirecorder but she had taken everything that could conceivably do any good (harm). So I gritted my teeth and ate and then brought this useless journal up to date. That's about all I've done since—just sleep and eat and make friends with Ariel. She reminds me of Duncan. Oh, not alike really—but all babies are sort of alike, don't you think?

I had dozed off from lack of anything better to do when I was awakened. "Poddy, dear—"

"Oh! Hello, Mrs. Grew."

"Now, now, no quick moves," she said chidingly. I wasn't about to make any quick moves; she had a gun pointed at my belly button. I'm very fond of it, it's the only one I have.

"Now be a good girl and turn over and cross your wrists behind you." I did so and in a moment she had them tied, quite firmly. Then she looped the line around my neck and had me on a leash—and if I struggled, all I accomplished was choking myself. So I didn't struggle.

Oh, I'm sure there was at least a moment when she didn't have that gun pointed at me and my wrists were not yet tied. One of those comic-book heroes would have snatched that golden instant, rendered her helpless, tied her with her own rope.

Regrettably, none of those heroes was named "Poddy Fries." My education has encompassed cooking, sewing, quite a lot of math and history and science, and such useful tidbits as freehand drawing and how to dip candles and make soap. But hand-to-hand combat I have learned sketchily if at all from occasional border clashes with Clark. I know that Mother feels that this is a lack (she is skilled in both karate and kill-quick, and can shoot as well as Daddy does) but Daddy has put off sending me to classes—I've gathered the impression that he doesn't really want his "baby girl" to know such things.

I vote with Mother, it's a lack. There must have been a split second when I could have lashed out with a heel, caught Mrs. Grew in her solar plexus, then broken her neck while she was still helpless—and run down the Jolly Roger and run up the Union Jack, just like in *Treasure Island.*

Oppernockity tunes but once—and I wasn't in tune with it.

Instead I was led away like a puppy on a string. Titania eyed us as we went through the door but Mrs. Grew clucked at her and she settled back on her perch and cuddled Ariel to her.

She had me walk in front of her down a hallway, through that living room where I had last seen Uncle Tom and Clark, out another door and a passage and into a large room—

—and I gasped and suppressed a scream!

Mrs. Grew said cheerfully, "Take a good look, dear. He's your new roommate."

Half the room was closed off with heavy steel bars, like a cage in a zoo. Inside was—well, it was Pinhead, that's what it was, though it took me a long moment of fright to realize it. You may have gathered that I do not consider Pinhead handsome. Well, dear, he was Apollo Belvedere before compared with the red-eyed maniacal horror he had become.

Then I was lying on the floor and Mrs. Grew was giving me smelling salts. Yes, sir, Captain Podykayne Fries the Famous Explorer had keeled over like a silly girl. All right, go ahead and laugh; I don't mind. *You* haven't ever been shoved into a room with a thing like that and had it introduced to you as "your new roommate."

Mrs. Grew was chuckling. "Feel better, dear?"

"You're not going to put me in there with him!"

"What? Oh, no, no, that was just my little joke. I'm sure your uncle will never make it necessary actually to do it." She looked at Pinhead thoughtfully—and he was straining one arm through the bars, trying again and again to reach us. "He's had only five milligrams, and for a longtime happy dust addict that's barely enough to make him tempery. If I ever do have to put you—or your brother—in with him, I've promised him at least fifteen. I need your advice, dear. You see, I'm about to send your uncle back to Venusberg so that he can catch his ship. Now which do you think would work best with your uncle? To put your brother in there right now, while your uncle watches? He's watching this, you know; he saw you faint—and that couldn't have been better if you had practiced. Or to wait and—"

"My uncle is watching us?"

"Yes, of course. Or to—"

"Uncle Tom!"

"Oh, do keep quiet, Poddy. He can see you but he can't hear you and he can't possibly help you. *Hmm*— You're such a silly billy that I don't think I want your advice. On your feet, now!"

She walked me back to my cell.

That was only hours ago; it merely seems like years.

But it is long enough. Long enough for Poddy to lose her nerve. Look, I don't have to tell this, nobody knows but me. But I've been truthful all through these memoirs and I'll be truthful now: I have made up my mind that as soon as I get a chance to talk with Uncle I will beg him, plead with him, to do *anything* to keep me from being locked up with a happy-dusted native.

I'm not proud of it. I'm not sure I'll ever be proud of Poddy again. But there it is and you can rub my nose in it. I've come up against something that frightens me so much I've cracked.

I feel a little better about it to have admitted it baldly. I sort of hope that, when the time comes, I won't whimper and I won't plead. But I . . . just . . . don't . . . know.

And then somebody was shoved in with me and it was Clark!

I jumped up off the bed and threw my arms around him and lifted him right off his feet and was blubbering over him. "Oh, Clarkie! Brother, brother, are you hurt? What did they do to you? Speak to me! Are you deaf?"

Right in my ear he said, "Cut out the sloppy stuff, Pod."

So I knew he wasn't too badly hurt, he sounded just like Clark. I repeated, more quietly, "Are you deaf?"

He barely whispered in my ear, "No, but she thinks I am, so we'll go on letting her think so." He untangled himself from me, took a quick look in his bag, then rapidly and very thoroughly went over every bit of the room—giving Titania just wide enough berth to keep her from diving on him.

Then he came back, shoved his face close to mine and said, "Poddy, can you read lips?"

"No. Why?"

"The hell you can't, you just did."

Well, it wasn't quite true; Clark had barely whispered—and I did find that I was "hearing" him as much from watching his mouth as I was from truly hearing him. This is a very funny thing but Clark says that almost everybody reads lips more than they think they do, and he had noticed it and practiced it and can really read lips—only he never told anybody because sometimes it is most useful.

He had me talk so low that I couldn't hear it myself and he didn't talk much louder. He told me, "Look, Pod, I don't know that Old Lady Grew"—he didn't say "Lady"—"has this room wired. I can't find any changes in it since she had me in it before. But there are at least four places and maybe more where a mike could be. So we keep quiet—because it stands to reason she put us together to hear what we have to say to each other. So talk out loud all you want to . . . but just static. How scared you are and how dreadful it is that I can't hear anything and suchlike noise."

So we did and I moaned and groaned and wept over my poor baby brother and he complained that he couldn't hear a word I was saying and kept asking me to find a pencil and write what I was saying—and in between we really did talk, important talk that Clark didn't want her to hear.

I wanted to know why he wasn't deaf—had he actually been in that tank? "Oh, sure," he told me, "but I wasn't nearly as limp by then as she thought I was, either. I had some paper in my pocket and I chewed it up into pulp and corked my ears." He looked pained. "A twenty-spot note. Most expensive earplugs anybody ever had, I'll bet. Then I wrapped my shirt around my head and ignored it. But stow that and listen."

He was even more vague about how he had managed to get himself trapped. "Okay, okay, so I got hoaxed. You and Uncle don't look so smart, either—and anyhow, you're responsible."

"I am not either responsible!" I whispered indignantly.

"If you're not responsible, then you're irresponsible, which is worse. Logic. But forget it, we've got important things to do now. Look, Pod, we're going to crush out of here."

"How?" I glanced up at Titania. She was nursing Ariel but she never took her eyes off us.

Clark followed my glance. "I'll take care of that insect when the time comes, forget it. It has to be soon and it has to be at night."

"Why at night?" I was thinking that this smoggy paradise was bad enough when you could see a little, but in pitch-darkness—

"Pod, let that cut in your face heal; you're making a draft. It's got to be while Jojo is locked up."

"Jojo?"

"That set of muscles she has working for her. The native."

"Oh, you mean Pinhead."

"Pinhead, Jojo, Albert Einstein. The happy-duster. He serves supper, then he washes the dishes, then she locks him up and gives him his night's ration of dust. Then he stays locked up until he sleeps it off, because she's as scared of him when he's high as anybody else is. So we make our try for it while he is caged—and maybe she'll be asleep, too. With luck the bloke who drives her sky wagon will be away, too; be doesn't always sleep here. But we can't count on it and it has got to be before the *Tricorn* shapes for Luna. When is that?"

"Twelve-seventeen on the eighth, ship Greenwich."

"Which is?"

"Local? Nine-sixteen Venusberg, Wednesday the twentieth."

"Check," he answered. "On both."

"But why?"

"Shut up." He had taken his slide rule from his bag and was setting it. For the conversion, I assumed, so I asked, "Do you want to know the Venus second for this Terran year?" I was rather proud to have it on the tip of my tongue, like a proper pilot; Mr. Clancy's time hadn't been entirely wasted even though I had never let him get cuddly.

"Nope. I know it." Clark reset the rule, read it and announced, "We both remember both figures the same way and the conversion checks. So check timepieces." We both looked at our wrists. "Mark!"

We agreed, within a few seconds, but that wasn't what I noticed; I was looking at the date hand. "Clark! Today's the nineteenth!"

"Maybe you thought it was Christmas," he said sourly. "And don't yip like that again. I can read you if you don't make a sound."

"But that's tomorrow!" (I did make it soundless.)

"Worse. It's less than seventeen hours from now . . . and we can't make a move until that brute is locked up. We get just once chance, no more."

"Our Uncle Tom doesn't get to the conference."

Clark shrugged. "Maybe so, maybe not. Whether he decides to go—or sticks around and tries to find us—I couldn't care less."

Clark was being very talkative, for Clark. But at best he grudges words and I didn't understand him. "What do you mean—*if he sticks around?"*

Apparently Clark thought he had told me, or that I already knew—but he hadn't and I didn't. Uncle Tom was already gone. I felt suddenly lost and forlorn. "Clark, are you sure?"

"Sure, I'm sure. She darn well saw to it that I saw him go. Jojo loaded him in like a sack of meal and I saw the wagon take off into the smog. Uncle Tom is in Venusberg by now."

I suddenly felt much better. "Then he'll rescue us!"

Clark looked bored. "Pod, don't be stupid squared."

"But he will! Uncle Tom . . . and Mr. Chairman . . . and Dexter—"

He cut me off. "Oh, for Pete's sake, Poddy! Analyze it. You're Uncle Tom, you're in Venusberg, you've got all the help possible. *How do you find this place?"*

"Uh . . ." I stopped. "Uh . . ." I said again. Then I closed my mouth and left it closed.

"Uh," he agreed. "Exactly *Uh.* You don't find it. Oh, in eight or ten years with a few thousand people doing nothing but searching, you could find it by elimination. Fat lot of good that would do. Get this through your little head, Sis: nobody is going to rescue us, nobody can possibly help us. We either break out of here tonight—or we've had it."

"Why tonight? Oh, tonight's all right with me. But if we don't get a chance tonight—"

"Then at nine-sixteen tomorrow," he interrupted, "we're dead."

"Huh? Why?"

"Figure it out yourself, Pod. Put yourself in old Gruesome's place. Tomorrow the *Tricorn* leaves. Figure it both ways: Uncle Tom leaves in it, or Uncle Tom won't leave. Okay, you've got his niece and nephew. What do you do with them? Be logical about it. *Her* sort of logic."

I tried, I really tried. But maybe I've been brought up wrong for that sort of logic; I can't seem to visualize killing somebody just because he or she had become a nuisance to me.

But I could see that Clark was right that far: after ship's departure tomorrow we will simply be nuisances to Mrs. Grew. If Uncle Tom *doesn't* leave, we are most special nuisances—and if he *does* leave and she is counting on his worry about us to keep him in line at Luna City (it wouldn't, of course, but that is what she is counting on anyway), in that case every day she risks the possibility that we might escape and get word to Uncle.

All right, maybe I can't imagine just plain murder; it's outside my experience. But suppose both Clark and I came down with green pox and died— That would certainly be convenient for Mrs. Grew—now, wouldn't it?

"I scan it," I agreed.

"Good," he said. "I'll teach you a thing or four yet, Pod. Either we make it tonight . . . or just past nine tomorrow she chills us both . . . and she chills Jojo, too, and sets fire to the place."

"Why Jojo? I mean Pinhead."

"That's the real tipoff, Pod. The happy-duster. This is Venus . . . and yet she let us see that she was supplying dust to a duster. She won't leave any witnesses."

"Uncle Tom is a witness, too."

"What if he is? She's counting on his keeping his lip zipped until the conference is over . . . and by then she's back on Earth and has lost herself among eight billion people. Hang around here and risk being caught? Pod, she's going to wait here only long enough to find out whether or not Uncle Tom catches the *Tricorn.* Then she'll carry out either Plan A, or Plan B—but both plans cancel us out. Get that through your fuzzy head."

I shivered. "All right. I've got it."

He grinned. "But *we* don't wait. We execute our own plan—my plan —first." He looked unbearably smug and added, "You fubbed utterly and came out here without doing any of the things I told you to . . . and Uncle Tom fubbed just about as badly, thinking he could make a straight payoff . . . but I came out here prepared!"

"You did? With what? Your slide rule? Or maybe those comic books?"

Clark said, "Pod, you know I never read comic books; they were just protective coloration."

(And this is true, so far as I know—I thought I had uncovered his Secret Vice.)

"Then what?" I demanded.

"Just compose your soul in patience, Sister dear. All in good time."

He moved his bag back of the bed, then added, "Move around here where you can watch down the hallway. If Lady Macbeth shows up, I'm reading comic books."

I did as he told me to but asked him one more question—on another subject, as quizzing Clark when he doesn't want to answer is as futile as slicing water. "Clark? You figure Mrs. Grew is part of the gang that smuggled the bomb?"

He blinked and looked stupid. "What bomb?"

"The one they paid you to sneak aboard the *Tricorn,* of course! *What bomb* indeed!"

"Oh, that. Golly, Poddy, you believe everything you're told. When you get to Terra, don't let anybody sell you the Pyramids—they're not for sale." He went on working and I smothered my annoyance.

Presently he said, "She couldn't possibly know anything about any bombs in the *Tricorn,* or she wouldn't have been a passenger in it herself."

Clark can always make me feel stupid. This was so obvious (after he pointed it out) that I refrained from comment. "How do you figure it, then?"

"Well, she could have been hired by the same people and not have known that they were just using her as a reserve."

My mind raced and another answer came up. "In which case there could be still a third plot to get Uncle Tom between here and Luna!"

"Could be. Certainly a lot of people are taking an interest in him. But I figure it for two groups. One group—almost certainly from Mars—doesn't want Uncle Tom to there at all. Another group—from Earth probably, at least old Gruesome actually did come from Earth—wants him to be there but wants him to sing their song. Otherwise when she had Uncle Tom, she would never have turned him loose; she would just have had Jojo shove him into a soft spot and wait for the bubbles to stop coming up." Clark dug out something and looked at it. "Pod, repeat this back and don't make a sound. You are exactly twentythree kilometers from South Gate and almost due south of it—south seven degrees west."

I repeated it. "How do you know?"

He held up a small black object about as big as two packs of cigarettes. "Inertial tracker, infantry model. You can buy them anywhere here, anybody who ever goes out into the bush carries one." He handed it to me.

I looked at it with interest; I had never seen one that small. Sand rats use them, of course, but they use bigger, more accurate ones mounted in their sand buggies—and anyhow, on Mars you can always see either the stars or the Sun. Not like this gloomy place! I even knew how it worked, more or less, because inertial astrogation is a commonplace for spaceships and guided missiles—vector integration of accelerations and times. But whereas the *Tricorn's* inertial tracker is supposed to be good for one part in a million, this little gadget probably couldn't be read closer than one in a thousand.

But it improved our chances at least a thousand to one!

"Clark! Did Uncle Tom have one of these? 'Cause if he did—"

He shook his head. "If he did, he never got a chance to read it. I figure they gassed him at once; he was limp when they lifted him out of the air wagon. And I never had a chance to tell him where this dump is because this has been my first chance to look at mine. Now put it in your purse; you're going to use it to get back to Venusberg."

"Uh . . . it'll be bulky in my purse, it'll show. You better hide it wherever you had it. You won't lose me, I'm going to hang onto your hand every step of the way."

"No."

"Why not?"

"In the first place I'm not going to drag this bag with me and that's where it was hidden, I built a false bottom into it. In the second place we aren't going back together—"

"What? Why not? We certainly are! Clark, I'm responsible for you."

"That's a matter of opinion. Your opinion. Look, Poddy, I'm going to get you out of this silly mess. But don't try to use your head, it leaks. Just your memory. Listen to what I say and then do it exactly the way I tell you to—and you'll be all right."

"But—"

"Do *you* have a plan to get us out?"

"No."

"Then shut up. You start pulling your Big Sister act now and you'll get us both killed."

I shut up. And I must confess that his plan made considerable sense. According to Clark there is nobody in this house but us, Mrs. Grew, Titania and Ariel, Pinhead—and sometimes her driver. I certainly haven't seen or heard any evidences of anybody else and I suppose that Mrs. Grew has been doing it with an absolute minimum of witnesses—I know I would if I were (God forbid!) ever engaged in anything so outrageously criminal.

I've never seen the driver's face and neither has Clark—on purpose, I'm sure. But Clark says that the driver sometimes stays overnight, so we must be prepared to cope with him.

Okay, assume that we cope. As soon as we are out of the house we split up; I go east, he goes west, for a couple of kilometers, in straight lines as near as bogs and swamps permit, which may be not very.

Then we both turn north—and Clark says that the ring road around the city is just three kilometers north of us; he drew me a sketch from memory of a map he had studied before he set out to "rescue Girdie."

At the ring road I go right, he goes left—and we each make use of the first hitchhike transportation, ranch house phone, or whatever, to reach Uncle Tom and/or Chairman Cunha and get lots of reinforcements in a hurry!

The idea of splitting up is the most elementary of tactics, to make sure that at least one of us gets through and gets help. Mrs. Grew is so fat she couldn't chase anybody on a race track, much less a swamp. We plan to do it when she doesn't dare unlock Pinhead for fear of her own life. If we are chased, it will probably be the driver—and he can't chase two directions at once. Maybe there are other natives she can call on for help, but even so, splitting up doubles our chances.

So I get the inertial tracker because Clark doesn't think I can maneuver in the bush without one, even if I wait for it to get light. He's probably right. But he claims that he can steer well enough to find that road using just his watch, a wet finger for the breeze, and polarized spectacles—which, so help me, he has with him.

I shouldn't have sneered at his comic books; he actually did come prepared, quite a lot of ways. If they hadn't gassed him while he was still locked in the passenger compartment of Mrs. Grew's air buggy, I think he could have given them a very busy, bad time. A flame gun in his bag, a Remington pistol hidden on his person, knives, stun bombs—even a *second* inertial tracker, openly in the bag along with his clothes and comic books and slide rule. I asked him why, and he put on his best superior look. "If anything went wrong and they grabbed me, they would expect me to have one. So I had one—and it hadn't even been started . . . poor little tenderfoot who doesn't even know enough to switch the thing on when he leaves his base position. Old Gruesome got a fine chuckle out of that." He sneered. "She thinks I'm half-witted and I've done my best to help the idea along."

So they did the same thing with his bag that they did with my purse—cleaned everything out of it that looked even faintly useful for mayhem and murder, let him keep what was left.

And most of what was left was concealed by a false bottom so beautifully faked that the manufacturer wouldn't have noticed it.

Except, possibly, for the weight—I asked Clark about that. He shrugged. "Calculated risk," he said. "If you don't bet, you can't win. Jojo carried it in here still packed and she searched it in here—and didn't pick it up afterwards; she had both arms full of junk I didn't mind her confiscating."

(And suppose she had picked it up and noticed? Well, Brother would still have had his brain and his hands—and I think he could take a sewing machine apart and put it back together as a piece of artillery. Clark is a trial to me—but I have great confidence in him.)

I'm going to get some sleep now—or try to—as Pinhead has just fetched in our supper and we have a busy time ahead of us, later. But first I'm going to backtrack this tape and copy it; I have one fresh spool left in my purse. I'm going to give the copy to Clark to give to Uncle, just in case. Just in case Poddy turns out to be bubbles in a swamp, I mean. But I'm not worried about that; it's a much nicer prospect than being Pinhead's roommate. In fact I'm not worried about anything; Clark has the situation well in hand.

But he warned me very strongly about one thing: "Tell them to get here well before nine-sixteen . . . or don't bother to come at all."

"Why?" I wanted to know.

"Just do it."

"Clark, you know perfectly well that two grown men won't pay any attention unless I can give them a sound reason for it."

He blinked. "All right. There is a very sound reason. A half-a-kiloton bomb isn't very much . . . but it still isn't healthy to be around when it goes off. Unless they can get in here and disarm it before that time—up she goes!"

He has it. I've *seen* it. Snugly fitted into that false bottom. That same three kilograms of excess mass I couldn't account for at Deimos. Clark showed me the timing mechanism and how the shaped charges were nestled around it to produce the implosion squeeze.

But he did not show me how to disarm it. I ran into his blankest, most stubborn wall. He expects to escape, yes—and he expects to come back here with plenty of help and in plenty of time and disarm the thing. But he is utterly convinced that Mrs. Grew intends to kill us, and if anything goes wrong and we don't break out of here, or die trying, or anything . . . well, he intends to take her with us.

I told him it was wrong, I said that he mustn't take the law in his own hands. "What law?" he said. "There isn't any law here. And you aren't being logical, Pod. Anything that is right for a group to do is right for one person to do."

That one was too slippery for me to answer so I tried simply pleading with him and he got sore. "Maybe you would rather be in the cage with Jojo?"

"Well . . . no."

"Then shut up about it. Look, Pod, I planned all this out when she had me in that tank, trying to beat my ears in, make me deaf. I kept my sanity by ignoring what was being done to me and concentrating on when and how I would blow her to bits."

I wondered if he had indeed kept his sanity but I kept my doubts to myself and shut up. Besides I'm not sure that he's wrong; it may be that I'm just squeamish about bloodshed. "Anything that is moral for a group to do is moral for one person to do." There must be a flaw in that, since I've always been taught that it is wrong to take the law in your own hands. But I can't find the flaw and it sounds axiomatic, self-evident. Switch it around. If something is wrong for one person to do, can it possibly be made *right* by having a lot of people (a government) agree to do it together? Even unanimously?

If a thing is wrong, it is wrong—and vox populi can't change it.

Just the same, I'm not sure I can nap with an atom bomb under my bed.

Postlude

I guess I had better finish this. My sister got right to sleep after I rehearsed her in what we were going to do. I stretched out on the floor but didn't go right to sleep. I'm a worrier, she isn't. I reviewed my plans, trying to make them tighter. Then I slept.

I've got one of those builtin alarm clocks and I woke just when I planned to, an hour before dawn. Any later and there would be too much chance that Jojo might be loose, any earlier and there would be too much time in the dark. The Venus bush is chancy even when you see well; I didn't want Poddy to step into something sticky, or step on something that would turn and bite her leg off. Nor me, either.

But we had to risk the bush, or stay and let old Gruesome kill us at her convenience. The first was a sporting chance; the latter was a dead certainty, even though I had a terrible time convincing Poddy that Mrs. Grew would kill us. Poddy's greatest weakness—the really soft place in her head, she's not too stupid otherwise—is her almost total inability to grasp that some people are as bad as they are. Evil. Poddy never has understood evil. Naughtiness is about as far as her imagination reaches.

But I understand evil, I can get right inside the skull of a person like Mrs. Grew and understand how she thinks.

Perhaps you infer from this that I am evil, or partly so. All right, want to make something of it? Whatever *I* am, I knew Mrs. Grew was evil before we ever left the *Tricorn* . . . when Poddy (and even Girdie!) thought the slob was just too darling for words.

I don't trust a person who laughs when there is nothing to laugh about. Or is good-natured no matter what happens. If it's that perfect, it's an act, a phony. So I watched her . . . and cheating at solitaire wasn't the only giveaway.

So between the bush and Mrs. Grew, I chose the bush, both for me and my sister.

Unless the air car was there and we could swipe it. This would be a mixed blessing, as it would mean two of them to cope with, them armed and us not. (I don't count a bomb as an arm, you can't point it at a person's head.)

Before I woke Poddy I took care of that alate pseudo-simian, that "fairy." Vicious little beast. I didn't have a gun. But I didn't really want one at that point; they understand about guns and are hard to hit, they'll dive on you at once.

Instead I had shoe trees in my spare shoes, elastic bands around my spare clothes, and more elastic bands in my pockets, and several two-centimeter steel ball bearings.

Shift two wing nuts, and the long parts of the shoe trees become a steel fork. Add elastic bands and you have a slingshot. And don't laugh at a slingshot; many a sand rat has kept himself fed with only a slingshot. They are silent and you usually get your ammo back.

I aimed almost three times as high as I would at home, to allow for the local gravity, and got it right on the sternum, knocked it off its perch—crushed the skull with my heel and gave it an extra twist for the nasty bite on Poddy's arm. The young one started to whine, so I pushed the carcass over in the corner, somewhat out of sight, and put the cub on it. It shut up. I took care of all this before I woke Poddy because I knew she had sentimental fancies about these "fairies" and I didn't want her jittering and maybe grabbing my elbow. As it was—clean and fast.

She was still snoring, so I slipped off my shoes and made a fast reconnoiter.

Not so good— Our local witch was already up and reaching for her broom; in a few minutes she would be unlocking Jojo if she hadn't already. I didn't have a chance to see if the sky car was outside; I did well not to get caught. I hurried back and woke Poddy.

"Pod!" I whispered. "You awake?"

"Yes."

"Wide awake? You've got to do your act, right now. Make it loud and make it good."

"Check."

"Help me up on the perch. Can your sore arm take it?"

She nodded, slid quickly off the bed and took position at the door, hands ready. I grabbed her hands, bounced to her shoulders, steadied, and she grabbed my calves as I let go her hands—and then I was up on the perch, over the door. I waved her on.

Poddy went running out the door, screaming, "Mrs. Grew! *Mrs. Grew!* Help, help! My brother!" She did make it good.

And came running back in almost at once with Mrs. Grew puffing after her.

I landed on Gruesome's shoulders, knocking her to the floor and knocking her gun out of her hand. I twisted and snapped her neck before she could catch her breath.

Pod was right on the ball, I have to give her credit. She had that gun before it stopped sliding. Then she held it, looking dazed.

I took it carefully from her. "Grab your purse. We go, right now! Stick close behind me."

Jojo *was* loose, I had cut it too fine. He was in the living room, looking, I guess, to see what the noise was about. I shot him.

Then I looked for the air car while keeping the gun ready for the driver. No sign of either one—and I didn't know whether to groan or cheer. I was all keyed up to shoot him but maybe he would have shot me first. But a car would have been mighty welcome compared with heading into the bush.

I almost changed my plan at that point and maybe I should have. Kept together, I mean, and headed straight north for the ring road.

It was the gun that decided me. Poddy could protect herself with it —and I would just be darn careful what I stepped on or in. I handed it to her and told her to move slowly and carefully until there was more light—but get going!

She was wobbling the gun around. "But, Brother, I've never shot anybody!"

"Well, you can if you have to."

"I guess so."

"Nothing to it. Just point it at 'em and press the button. Better use both hands. And don't shoot unless you really need to."

"All right."

I smacked her behind. "Now get going. See you later."

And I got going. I looked behind once, but she was already vanished in the smog. I put a little distance between me and the house, just in case, then concentrated on approximating course west.

And I got lost. That's all. I needed that tracker but I had figured I could get along without it and Pod had to have it. I got hopelessly lost. There wasn't breeze enough for me to tell anything by wetting my finger and that polarized light trick for finding the Sun is harder than you would think. Hours after I should have reached the ring road I was still skirting boggy places and open water and trying to keep from being somebody's lunch.

And suddenly there was the most dazzling light possible and I went down flat and stayed there with my eyes buried in my arm and started to count.

I wasn't hurt at all. The blast wave covered me with mud and the noise was pretty rough, but I was well outside the real trouble. Maybe half an hour later I was picked up by a cop car.

Certainly, I should have disarmed that bomb. I had intended to, if everything went well; it was just meant to be a "Samson in the Temple" stunt if things turned out dry. A last resort.

Maybe I should have stopped to disarm it as soon as I broke old gruesome's neck—and maybe Jojo would have caught both of us if I had and him still with a happy-dust hangover. Anyhow I didn't and then I was very busy shooting Jojo and deciding what to do and telling Poddy how to use that gun and getting her started. I didn't think about the bomb until I was several hundred meters from the house—and I certainly didn't want to go back then, even if I could have found it again in the smog, which is doubtful.

But apparently Poddy did just that. Went back to the house, I mean. She was found later that day, about a kilometer from the house, outside the circle of total destruction—but caught by the blast.

With a live baby fairy in her arms—her body had protected it; it doesn't appear to have been hurt at all.

That's why I think she went back to the house. I don't *know* that this baby fairy is the one she called "Ariel." It could have been one that she picked up in the bush. But that doesn't seem at all likely; a wild one would have clawed her and its parents would have torn her to pieces.

I think she intended to save that baby fairy all along and decided not to mention it to me. It is just the kind of sentimental stunt that Poddy would pull. She knew I was going to have to kill the adult—and she never said a word against that; Pod could always be sensible when absolutely necessary.

Then in the excitement of breaking out she forgot to grab it, just as I forgot to disarm the bomb after we no longer needed it. So she went back for it.

And lost the inertial tracker, somehow. At least it wasn't found on her or near her. Between the gun and her purse and the baby fairy and the tracker she must have dropped it in the bog. Must be, because she had plenty of time to go back and still get far away from the house. She should have been ten kilometers away by then, so she must have lost the tracker fairly soon and walked in a circle.

I told Uncle Tom all about it and was ready to tell the Corporation people, Mr. Cunha and so forth, and take my medicine. But Uncle told me to keep my mouth shut. He agreed that I had fubbed it, mighty dry indeed—but so had he—and so had everybody. He was gentle with me. I wish he had hit me.

I'm sorry about Poddy. She gave me some trouble from time to time, with her bossy ways and her illogical ideas—but just the same, I'm sorry.

I wish I knew how to cry.

Her little recorder was still in her purse and part of the tape could be read. Doesn't mean much, though; she doesn't tell what she did, she was babbling, sort of:

". . . very dark where I'm going. No man is an island, complete in himself. Remember that, Clarkie. Oh, I'm sorry I fubbed it but remember that; it's important. They all have to be cuddled sometimes. My shoulder—Saint Podkayne! Saint Podkayne, are you listening? UnkaTom, Mother, Daddy—is anybody listening? Do listen, please, because this is important. I love—"

It cuts off there. So we don't know whom she loved.

Everybody, maybe.

I'm alone here, now. Mr. Cunha made them hold the *Tricorn* until it was certain whether Poddy would die or get well, then Uncle Tom left and left me behind—alone, that is, except for doctors, and nurses, and Dexter Cunha hanging around all the time, and a whole platoon of guards. I can't go anywhere without one. I can't go to the casinos at all any more—not that I want to, much.

I heard part of what Uncle Tom told Dad about it. Not all of it, as a phone conversation with a bounce time of over twenty minutes is episodic. I heard none of what Dad said and only one monologue of Uncle's:

"Nonsense, sir! I am not dodging my own load of guilt; it will be with me always. Nor can I wait here until you arrive and you know it and you know why—and both children will be safer in Mr. Cunha's hands and *not* close to me . . . and you know *that,* too! But I have a message for you, sir, one that you should pass on to your wife. Just this: people who will not take the trouble to raise children should not have them. You with your nose always in a book, your wife gallivanting off God knows where—between you, your daughter was almost killed. No credit to either of you that she wasn't. Just blind luck. You should tell your wife, sir, that building bridges and space stations and such gadgets is all very well . . . but that a woman has more important work to do. I tried to suggest this to you years ago . . . and was told to mind my own business. Now I am saying it. Your daughter will get well, no thanks to either of you. But I have my doubts about Clark. With him it may be too late. God may give you a second chance if you hurry. Ending transmission!"

I faded into the woodwork then and didn't get caught. But what did Uncle Tom mean by that—trying to scare Dad about *me?* I wasn't hurt at all and he knows it. I just got a load of mud on me, not even a burn . . . whereas Poddy still looks like a corpse and they've got her piped and wired like a crèche.

I don't see what he was driving at.

I'm taking care of that baby fairy because Poddy will want to see it when she gets well enough to notice things again; she's always been a sentimentalist. It needs a lot of attention because it gets lonely and has to be held and cuddled, or it cries.

So I'm up a lot in the night—I guess it thinks I'm its mother. I don't mind, I don't have much else to do.

It seems to like me.

Orphans of the Sky

The Proxima Centauri Expedition, sponsored by the Jordan Foundation in 2119, was the first recorded attempt to reach the nearer stars of this galaxy. Whatever its unhappy fate we can only conjecture.

—Quoted from The Romance of Modern Astrography, by Franklin Buck, published by Lux Transcriptions, Ltd., 3.50 cr.

"THERE'S A MUTIE! Look out!"

At the shouted warning, Hugh Hoyland ducked, with nothing to spare. An egg-sized iron missile clanged against the bulkhead just above his scalp with force that promised a fractured skull. The speed with which he crouched had lifted his feet from the floor plates. Before his body could settle slowly to the deck, he planted his feet against the bulkhead behind him and shoved. He went shooting down the passageway in a long, flat dive, his knife drawn and ready.

He twisted in the air, checked himself with his feet against the opposite bulkhead at the turn in the passage from which the mutie had attacked him, and floated lightly to his feet. The other branch of the passage was empty. His two companions joined him, sliding awkwardly across the floor plates.

"Is it gone?" demanded Alan Mahoney.

"Yes," agreed Hoyland. "I caught a glimpse of it as it ducked down that hatch. A female, I think. Looked like it had four legs."

"Two legs or four, we'll never catch it now," commented the third man.

"Who the Huff wants to catch it?" protested Mahoney.

"I don't."

"Well, I do, for one," said Hoyland. "By Jordan, if its aim had been two inches better, I'd be ready for the Converter."

"Can't either one of you two speak three words without swearing?" the third man disapproved. "What if the Captain could hear you?" He touched his forehead reverently as he mentioned the Captain.

"Oh, for Jordan's sake," snapped Hoyland, "don't be so stuffy, Mort Tyler. You're not a scientist yet. I reckon I'm as devout as you are; there's no grave sin in occasionally giving vent to your feelings. Even the scientists do it. I've heard 'em."

Tyler opened his mouth as if to expostulate, then apparently thought better of it. Mahoney touched Hoyland on the arm. "Look, Hugh," he pleaded, "let's get out of here. We've never been this high before. I'm jumpy; I want to get back down to where I can feel some weight on my feet."

Hoyland looked longingly toward the hatch through which his assailant had disappeared while his hand rested on the grip of his knife, then be turned to Mahoney. "OK, kid," he agreed, "It's along trip down anyhow."

He turned and slithered back toward the hatch, whereby they had reached the level where they now were, the other two following him. Disregarding the ladder by which they had mounted, he stepped off into the opening and floated slowly down to the deck fifteen feet below, Tyler and Mahoney close behind him. Another hatch, staggered a few feet from the first, gave access to a still lower deck. Down, down, down, and still farther down they dropped, tens and dozens of decks, each silent, dimly lighted, mysterious. Each time they fell a little faster, landed a little harder. Mahoney protested at last, "Let's walk the rest of the way, Hugh. That last jump hurt my feet."

"All right. But it will take longer. How far have we got to go? Anybody keep count?"

"We've got about seventy decks to go to reach farm country," answered Tyler.

"How d'you know?" demanded Mahoney suspiciously.

"I counted them, stupid. And as we came down I took one away for each deck."

"You did not. Nobody but a scientist can do numbering like that. Just because you're learning to read and write you think you know everything."

Hoyland cut in before it could develop into a quarrel. "Shut up, Alan. Maybe he can do it. He's clever about such things. Anyhow, it feels like about seventy decks—I'm heavy enough."

"Maybe he'd like to count the blades on my knife."

"Stow it, I said. Dueling is forbidden outside the village. That is the Rule." They proceeded in silence, running lightly down the stairways until increasing weight on each succeeding level forced them to a more pedestrian pace. Presently they broke through into a level that was quite brilliantly lighted and more than twice as deep between decks as the ones above it. The air was moist and warm; vegetation obscured the view.

"Well, down at last," said Hugh. "I don't recognize this farm; we must have come down by a different line than we went up."

"There's a farmer," said Tyler. He put his little fingers to his lips and whistled, then called, "Hey! Shipmate! Where are we?"

The peasant looked them over slowly, then directed them in reluctant monosyllables to the main passageway which would lead them back to their own village.

A brisk walk of a mile and a half down a wide tunnel moderately crowded with traffic: travelers, porters, an occasional pushcart, a dignified scientist swinging in a litter borne by four husky orderlies and preceded by his master-at-arms to clear the common crew out of the way. A mile and a half of this brought them to the common of their own village, a spacious compartment three decks high and perhaps ten times as wide. They split up and went their own ways, Hugh to his quarters in the barracks of the cadets, young bachelors who do not live with their parents. He washed himself and went thence to the compartments of his uncle, for whom he worked for his meals. His aunt glanced up as he came in, but said nothing, as became a woman.

His uncle said, "Hello, Hugh. Been exploring again?"

"Good eating, Uncle. Yes."

His uncle, a stolid, sensible man, looked tolerantly amused. "Where did you go and what did you find?"

Hugh's aunt had slipped silently out of the compartment, and now returned with his supper which she placed before him. He fell to; it did not occur to him to thank her. He munched a bite before replying.

"Up. We climbed almost to the level-of-no-weight. A mutie tried to crack my skull."

His uncle chuckled. "You'll find your death In those passageways, lad. Better you should pay more attention to my business against the day when I die and get out of your way."

Hugh looked stubborn. "Don't you have any curiosity, Uncle?"

"Me? Oh, I was prying enough when I was a lad. I followed the main passage all the way around and back to the village. Right through the Dark Sector I went, with muties tagging my heels. See that scar?"

Hugh glanced at it perfunctorily. He had seen it many times before and heard the story repeated to boredom. Once around the Ship, pfft! He wanted to go everywhere, see everything, and find out the why of things. Those upper levels now: if men were not intended to climb that high, why had Jordan created them?

But he kept his own counsel and went on with his meal. His uncle changed the subject. "I've occasion to visit the Witness. John Black claims I owe him three swine. Want to come along?"

"Why, no, I guess not—Wait! I believe I will."

"Hurry up, then."

They stopped at the cadets' barracks, Hugh claiming an errand. The Witness lived in a small, smelly compartment directly across the Common from the barracks, where he would be readily accessible to any who had need of his talents. They found him leaning in his doorway, picking his teeth with a fingernail. His apprentice, a pimply-faced adolescent with an intent nearsighted expression, squatted behind him.

"Good eating." said Hugh's uncle.

"Good eating to you, Edard Hoyland. D'you come on business, or to keep an old man company?"

"Both," Hugh's uncle returned diplomatically, then explained his errand.

"So," said the Witness. "Well, the contract's clear enough. Black John delivered ten bushels of oats, Expecting his pay in a pair of shoats; Ed brought his sow to breed for pig; John gets his pay when the pigs grow big.

"How big are the pigs now, Edard Hoyland?"

"Big enough," acknowledged Hugh's uncle, "but Black John claims three instead of two."

"Tell him to go soak his head. The Witness has spoken."

He laughed in a thin, high cackle.

The two gossiped for a few minutes, Edard Hoyland digging into his recent experiences to satisfy the old man's insatiable liking for details. Hugh kept decently silent while the older men talked. But when his uncle turned to go he spoke up. "I'll stay awhile, Uncle."

"Eh? Suit yourself. Good eating, Witness."

"Good eating, Edard Hoyland."

"I've brought you a present, Witness," said Hugh, when his uncle had passed out of hearing.

"Let me see it."

Hugh produced a package of tobacco which he had picked up from his locker at the barracks. The Witness accepted it without acknowledgment, then tossed it to his apprentice, who took charge of it.

"Come inside," invited the Witness, then directed his speech to his apprentice. "Here, you, fetch the cadet a chair."

"Now, lad," he added as they sat themselves down, "tell me what you have been doing with yourself."

Hugh told him, and was required to repeat In detail all the incidents of his more recent explorations, the Witness complaining the meanwhile over his inability to remember exactly everything he saw.

"You youngsters have no capacity," he pronounced. "No capacity. Even that lout--" he jerked his head toward the apprentice, "he has none, though he's a dozen times better than you. Would you believe it, he can't soak up a thousand lines a day, yet he expects to sit in my seat when I am gone. Why, when I was apprenticed, I used to sing myself to sleep on a mere thousand lines. Leaky vessels—that's what you are."

Hugh did not dispute the charge, but waited for the old man to go on, which he did in his own time.

"You had a question to put to me, lad?"

"In a way, Witness."

"Well? Out with it. Don't chew your tongue."

"Did you ever climb all the way up to no-weight?"

"Me? Of course not. I was a Witness, learning my calling. I had the lines of all the Witnesses before me to learn, and no time for boyish amusements."

"I had hoped you could tell me what I would find there."

"Well, now, that's another matter. I've never climbed, but I hold the memories of more climbers than you will ever see. I'm an old man. I knew your father's father, and his grandsire before that. What is it you want to know?"

"Well..." What was it be wanted to know? How could he ask a question that was no more than a gnawing ache in his breast? Still... "What is it all for, Witness? Why are there all those levels above us?"

"Eh? How's that? Jordan's name, son, I'm a Witness, not a scientist."

"Well ... I thought you must know. I'm sorry."

"But I do know. What you want is the Lines from the Beginning."

"I've heard them."

"Hear them again. All your answers are in there, if you've the wisdom to see them. Attend me. No, this is a chance for my apprentice to show off his learning. Here, you! The Lines from the Beginning—and mind your rhythm."

The apprentice wet his lips with his tongue and began:

"In the Beginning there was Jordan, thinking His lonely thoughts alone. In the Beginning there was darkness, formless, dead, and Man unknown. Out of the loneness came a longing, out of the longing came a vision, Out of the dream there came a planning, out of the plan there came decision: Jordan's hand was lifted and the Ship was born.

Mile after mile of snug compartments, tank by tank for the golden corn, Ladder and passage, door and locker, fit for the needs of the yet unborn. He looked on His work and found it pleasing, meet for a race that was yet to be. He thought of Man; Man came into being; checked his thought and searched for the key. Man untamed would shame his Maker, Man unruled would spoil the Plan; So Jordan made the Regulations, orders to each single man, Each to a task and each to a station, serving a purpose beyond their ken, Some to speak and some to listen; order came to the ranks of men. Crew He created to work at their stations, scientists to guide the Plan. Over them all He created the Captain, made him judge of the race of Man. Thus it was in the Golden Age!

Jordan is perfect, all below him lack perfection in their deeds. Envy, Greed, and Pride of Spirit sought for minds to lodge their seeds.

One there was who gave them lodging: accursed Huff, the first to sin! His evil counsel stirred rebellion, planted doubt where it had not been; Blood of martyrs stained the floor plates, Jordan's Captain made the Trip. Darkness swallowed up--"

The old man gave the boy the back of his hand, sharp across the mouth. "Try again!"

"From the beginning?"

"No! From where you missed."

The boy hesitated, then caught his stride: "Darkness swallowed ways of virtue, Sin prevailed through out the Ship . ."

The boy's voice droned on, stanza after stanza, reciting at great length but with little sharpness of detail the dim, old story of sin, rebellion, and the time of darkness. How wisdom prevailed at last and the bodies of the rebel leaders were fed to the Converter. How some of the rebels escaped making the Trip and lived to father the muties. How a new Captain was chosen, after prayer and sacrifice. Hugh stirred uneasily, shuffling his feet. No doubt the answers to his questions were there, since these were the Sacred Lines, but he had not the wit to understand them. Why? What was it all about? Was there really nothing more to life than eating and sleeping and finally the long Trip? Didn't Jordan intend for him to understand? Then why this ache in his breast? This hunger that persisted in spite of good eating?

While he was breaking his fast after sleep an orderly came to the door of his uncle's compartments. "The scientist requires the presence of Hugh Hoyland," be recited glibly.

Hugh knew that the scientist referred to was lieutenant Nelson, in charge of the spiritual and physical welfare of the Ship's sector which included Hugh's flative vilage. He bolted the last of his breakfast and hurried after the messenger.

"Cadet Hoyland!" he was announced. The scientist locked up from his own meal and said:

"Oh, yes. Come in, my boy. Sit down. Have you eaten?"

Hugh acknowjedged that he had, but his eyes rested with interest on the fancy fruit In front of his superior. Nelson followed his glance. "Try some of these figs. They're a new mutation; I had them brought all the way from the far side. Go ahead—a man your age always has somewhere to stow a few more bites."

Hugh accepted with much selfconsciousness. Never before had he eaten in the presence of a scientist. The elder leaned back in his chair, wiped his fingers on his shirt, arranged his beard, and started in.

"I haven't seen you lately, son. Tell me what you have been doing with yourself." Before Hugh could reply he went on: "No, don't tell me; I will tell you. For one thing you have been exploring, climbing, without too much respect for the forbidden areas. Is it not so?" He held the young man's eye. Hugh fumbled for a reply.

But he was let off again. "Never mind. I know, and you know that I know. I am not too displeased. But it has brought it forcibly to my attention that it is time that you decided what you are to do with your life. Have you any plans?"

"Well, no definite ones, sir."

"How about that girl, Edris Baxter? D'you intend to marry her?"

"Why, uh—I don't know, sir. I guess I want to, and her father is willing, I think. Only..."

"Only what?"

"Well, he wants me to apprentice to his farm. I suppose it's a good idea. His farm together with my uncle's business would make a good property."

"But you're not sure?"

"Well, I don't know."

"Correct. You're not for that. I have other plans. Tell me, have you ever wondered why I taught you to read and write? Of course, you have. But you've kept your own counsel. That is good.

"Now attend me. I've watched you since you were a small child. You have more imagination than the common run, more curiosity, more go. And you are a born leader. You were different even as a baby. Your head was too large, for one thing, and there were some who voted at your birth inspection to put you at once into the Converter. But I held them off. I wanted to see how you would turn out.

"A peasant life is not for the likes of you. You are to be a scientist."

The old man paused and studied his face. Hugh was confused, speechless. Nelson went on, "Oh, yes. Yes, indeed. For a man of your temperament, there are only two things to do with him: Make him one of the custodians, or send him to the Converter."

"Do you mean, sir, that I have nothing to say about it?"

"If you want to put it that bluntly, yes. To leave the bright ones among the ranks of the Crew is to breed heresy. We can't have that. We had it once and it almost destroyed tbe human race. You have marked yourself out by your exceptional ability; you must now be instructed in right thinking, be initiated into the mysteries, in order that you may be a conserving force rather than a focus of infection and a source of trouble." The orderly reappeared loaded down with bundles which he dumped on the deck. Hugh glanced at them, then burst out, "Why, those are my things!"

"Certainly," acknowledged Nelson. "I sent for them. You're to sleep here henceforth. I'll see you later and start you on your studies, unless you have something more on your mind?"

"Why, no, sir. I guess not. I must admit I am a little confused. I suppose ... I suppose this means you don't want me to marry?"

"Oh, that," Nelson answered indifferently. "Take her if you like; her father can't protest now. But let me warn you, you'll grow tired of her."

Hugh Hoyland devoured the ancient books that his mentor permitted him to read, and felt no desire for many, many sleeps to go climbing, or even to stir out of Nelson's cabin. More than once he felt that he was on the track of the secret—a secret as yet undefined, even as a question—but again he would find himself more confused than ever. It was evidently harder to reach the wisdom of scientisthood than he had thought.

Once, while he was worrying away at the curious twisted characters of the ancients and trying to puzzle out their odd rhetoric and unfamiliar terms, Nelson came into the little compartment that had been set aside for him, and, laying a fatherly hand on his shoulder, asked, "How goes it, boy?"

"Why, well enough, sir, I suppose," he answered, laying the book aside. "Some of it is not quite clear to me—not clear at all, to tell the truth."

"That is to be expected," the old man said equably. "I've let you struggle along by yourself at first in order that you may see the traps that native wit alone will fall into. Many of these things are not to be understood without instruction. What have you there?" He picked up the book and glanced at it. It was inscribed Basic Modern Physics. "So? This is one of the most valuable of the sacred writings, yet the uninitiate could not possibly make good use of it without help. The first thing that you must understand, my boy, is that our forefathers, for all their spiritual perfection, did not look at things in the fashion in which we do.

"They were incurable romantics, rather than rationalists, as we are, and the truths which they handed down to us, though strictly true, were frequently clothed in allegorical language. For example, have you come to the Law of Gravitation?"

"I read about it."

"Did you understand it? No, I can see that you didn't."

"Well," said Hugh defensively, "it didn't seem to mean anything. It just sounded silly, if you will pardon me, sir."

"That illustrates my point. You were thinking of it in literal terms, like the laws governing electrical devices found elsewhere in this same book. 'Two bodies attract each other directly as the product of their masses and inversely as the square of their distance.' It sounds like a rule for simple physical facts, does it not? Yet it is nothing of the sort; it was the poetical way the old ones bad of expressing the rule of propinquity which governs the emotion of love. The bodies referred to are human bodies, mass is their capacity for love. Young people have a greater capacity for love than the elderly; when they are thrown together, they fall in love, yet when they are separated they soon get over it. 'Out of sight, out of mind.' It's as simple as that. But you were seeking some deep meaning for it."

Hugh grinned. "I never thought of looking at it that way. I can see that I am going to need a lot of help."

"Is there anything else bothering you just now?"

"Well, yes, lots of things, though I probably can't remember them offhand. I mind one thing: Tell me, Father, can muties be considered as being people?"

"I can see you have been listening to idle talk. The answer to that is both yes and no. It is true that the niuties originally descended from people but they are no longer part of the Crew; they cannot now be considered as members of the human race, for they have flouted Jordan's Law.

"This is a broad subject," he went on, settling down to it. "There is even some question as to the original meaning of the word 'mutie.' Certainly they number among their ancestors the mutineers who escaped death at the time of the rebellion. But they also have in their blood the blood of many of the mutants who were born during the dark age. You understand, of course, that during that period our present wise rule of inspecting each infant for the mark of sin and returning to the Converter any who are found to be mutations was not in force. There are strange and horrible things crawling through the dark passageways and lurking in the deserted levels."

Hugh thought about it for a while, then asked, "Why is it that mutations still show up among us, the people?"

"That is simple. The seed of sin is still in us. From time to time it still shows up, incarnate. In destroying those monsters we help to cleanse the stock and thereby bring closer the culmination of Jordan's Plan, the end of the Trip at our heavenly home, Far Centaurus."

Hoyland's brow wrinkled again. "That is another thing that I don't understand. Many of these ancient writings speak of the Trip as if it were an actual moving, a going somewhere, as if the Ship itself were no more than a pushcart. How can that be?"

Nelson chuckled. "How can it, indeed? How can that move which is the background against which all else moves? The answer, of course, is plain. You have again mistaken allegorical language for the ordinary usage of everyday speech. Of course, the Ship is solid, immovable, in a physical sense. How can the whole universe move? Yet, it does move, in a spiritual sense. With every righteous act we move closer to the sublime destination of Jordan's Plan."

Hugh nodded. "I think I see."

"Of course, it is conceivable that Jordan could have fashioned the world in some other shape than the Ship, had it suited His purpose. When man was younger and more poetical, holy men vied with one another in inventing fanciful worlds which Jordan might have created. One school invented an entire mythology of a topsy-turvy world of endless reaches of space, empty save for pinpoints of light and bodiless mythological monsters. They called it the heavenly world, or heaven, as if to contrast it with the solid reality of the Ship. They seemed never to tire of speculating about it, inventing details for it, and of outlining pictures of what they conceived it to be like. I suppose they did it to the greater glory of Jordan, and who is to say that He found their dreams unacceptable? But in this modern age we have more serious work to do."

Hugh was not interested In astronomy. Even his untutored mind had been able to see in its wild extravagance an intention not literal. He turned to problems nearer at hand.

"Since the muties are the seed of sin, why do we make no effort to wipe them out? Would not that be an act that would speed the Plan?"

The old man considered a while before replying. "That is a fair question and deserves a straight answer. Since you are to be a scientist you will need to know the answer. Look at it this way. There is a definite limit to the number of Crew the Ship can support. If our numbers increase without limit, there comes a time when there will not be good eating for all of us. Is it not better that some should die in brushes with the muties than that we should grow in numbers until we killed each other for food?.

"The ways of Jordan are inscrutable. Even the muties have a part in His Plan."

It seemed reasonable, but Hugh was not sure.

But when Hugh was transferred to active work as a junior scientist in the operation of the Ship's functions, he found there were other opinions. As was customary, he put in a period serving the Converter. The work was not onerous; he had principally to check in the waste materials brought in by porters from each of the villages, keep books of their contributions, and make sure that no redemable metal was introduced into the first-stage hopper. But it brought him into contact with Bill Ertz, the Assistant Chief Engineer, a man not much older than himself.

He discussed with him the things he had learned from Nelson, and was shocked at Ertz's attitude.

"Get this through your head, kid," Ertz told him. "This is a practical job for practical men. Forget all that romantic nonsense. Jordan's Plan! That stuff is all right to keep the peasants quiet and in their place, but don't fall for it yourself. There is no Plan, other than our own plans for looking out for ourselves. The Ship has to have light and heat and power for cooking and irrigation. The Crew can't get along without those things and that makes us boss of the Crew.

"As for this softheaded tolerance toward the muties, you're going to see some changes made! Keep your mouth shut and string along with us."

It impressed on him that he was expected to maintain a primary loyalty to the bloc of younger men among the scientists. They were a well-knit organization within an organization and were made up of practical, hardheaded men who were working toward improvement of conditions throughout the Ship, as they saw them. They were well knit because an apprentice who failed to see things their way did not last long. Either he failed to measure up and soon found himself back in the ranks of the peasants, or, as was more likely, suffered some mishap and wound up in the Converter.

And Hoyland began to see that they were right.

They were realists. The Ship was the Ship. It was a fact, requiring no explanation. As for Jordan, who had ever seen Him, spoken to Him? What was this nebulous Plan of His? The object of life was living. A man was born, lived his life, and then went to the Converter. It was as simple as that, no mystery to it, no sublime Trip and no Centaurus. These romantic stories were simply hangovers from the childhood of the race before men gained the understanding and the courage to look facts in the face.

He ceased bothering his head about astronomy and mystical physics and all the other mass of mythology he bad been taught to revere. He was still amused, more or less, by the Lines from the Beginning and by all the old stories about Earth (what the Huff was 'Earth,' anyhow?) but now realized that such things could be taken seriously only by children and dullards.

Besides, there was work to do. The younger men, while still maintaining the nominal authority of their elders, had plans of their own, the first of which was a systematic extermination of the muties. Beyond that, their intentions were still fluid, but they contemplated making full use of the resources of the Ship, including the upper levels. The young men were able to move ahead with their plans without an open breach with their elders because the older scientists simply did not bother to any great extent with the routine of the Ship. The present Captain had grown so fat that he rarely stirred from his cabin; his aide, one of the young men's bloc, attended to affairs for

him.

Hoyland never laid eyes on the Chief Engineer save once, when he showed up for the purely religious ceremony of manning landing stations.

The project of cleaning out the muties required reconnaissance of the upper levels to be done systematically. It was in carrying out such scouting that Hugh Hoyland was again ambushed by a mutie.

This mutie was more accurate with his slingshot. Hoyland's companions, forced to retreat by superior numbers, left him for dead.

Joe-Jim Gregory was playing himself a game of checkers. Time was when they had played cards together, but Joe, the head on the right, had suspected Jim, the lefthand member of the team, of cheating. They had quarreled about it, then given it up, for they both learned early in their joint career that two heads on one pair of shoulders must necessarily find ways of getting along together.

Checkers was better. They could both see the board, and disagreement was impossible.

A loud metallic knocking at the door of the oompartment interrupted the game. Joe-Jim unsheathed his throwing knife and cradled it, ready for quick use. "Come in!" roared Jim.

The door opened, the one who had knocked backed into the room —the only safe way, as everyone knew, to enter Joe-Jim's presence. The newcomer was squat and rugged and powerful, not over four feet in height. The relaxed body of a man hung across one shoulder and was steadied by a hand.

Joe-Jim returned the knife to its sheath. "Put it down, Bobo," Jim ordered.

"And close the door," added Joe. "Now what have we got here?"

It was a young man, apparently dead, though no wound appeared on him. Bobo patted a thigh. "Eat 'im?" he said hopefully. Saliva spilled out of his still-opened lips.

"Maybe," temporized Jim. "Did you kill him?"

Bobo shook his undersized head.

"Good Bobo," Joe approved. "Where did you hit him?"

"Bobo hit him there." The microcephalic shoved a broad thumb against the supine figure in the area between the umbilicus and the breasthone.

"Good shot," Joe approved. "We couldn't have done better with a knife."

"Bobo good shot," the dwarf agreed blandly. "Want see?" He twitched his slingshot invitingly.

"Shut up," answered Joe, not unkindly. "No, we don't want to see; we want to make him talk."

"Bobo fix," the short one agreed, and started with simple brutality to carry out his purpose.

Joe-Jim slapped him away, and applied other methods, painful but considerably less drastic than those of the dwarf. The younger man jerked and opened his eyes.

"Eat 'im?" repeated Bobo.

"No," said Joe. "When did you eat last?" inquired Jim.

Bobo shook his head and rubbed his stomach, indicating with graphic pantomime that it had been a long time, too long. Joe-Jim went over to a locker, opened it, and withdrew a haunch of meat. He held it up. Jim smelled it and Joe drew his head away in nose-wrinkling disgust Joe-Jim threw, it to Bobo, who snatched it happily out of the air. "Now, get out," ordered Jim.

Bobo trotted away, closing the door behind him. JoeJim turned to the captive and prodded him with his foot. "Speak up," said Jim. "Who the Huff are you?"

The young man shivered, put a hand to his head, then seemed suddenly to bring his surroundings into focus, for be scrambled to his feet, moving awkwardly. against the low weight conditions of this level, and reached for his knife.

It was not at his belt.

Joe-Jim had his own out and brandished it. "Be good and you won't get hurt. What do they call you?" The young man wet his lips, and his eyes hurried about the room. "Speak up," said Joe.

"Why bother with him?" inquired Jim. "I'd say he was only good for meat. Better call Bobo back."

"No hurry about that," Joe answered. "I want to talk to him. What's your name?"

The prisoner looked again at the kife and muttered, "Hugh Hoyland."

"That doesn't tell us much," Jim commented. "What d'you do? What village do you come from? And what were you doing in mutie country?" But this time Hoyland was sullen. Even the prick of the knife against his ribs caused him only to bite his lips. "Shucks," said Joe, "he's only a stupid peasant. Let's drop it."

"Shall we finish him off?"

"No. Not now. Shut him up."

Joe-Jim opened the door of a small side compartment, and urged Hugh in with the knife. He then closed and fastened the door and went back to his game. "Your move, Jim."

The compartment in which Hugh was locked was dark. He soon satisfied himself by touch that the smooth steel walls were entirely featureless save for the solid, securely fastened door. Presently he lay down on the deck and gave himself up to fruitless thinking.

He had plenty of time to think, time to fall asleep and awaken more than once. And time to grow very hungry and very, very thirsty.

When Joe-Jim next took sufficient interest in his prisoner to open the door of the cell, Hoyland was not immediately in evidence. He had planned many times what he would do when the door opened and his chance came, but when the event arrived, he was too weak, semi-comatose. Joe-Jim dragged him out. , The disturbance roused him to partial comprehension. He sat up and stared around him. "Ready to talk?" asked Jim. Hoyland opened his mouth but no words came out.

"Can't you see he's too dry to talk?" Joe told his twin. Then to Hugh: "Will you talk if we give you some water?"

Hoyland looked puzzled, then nodded vigorously.

Joe-Jim returned in a moment with a mug of water. Hugh drank greedily, paused, and seemed about to faint.

Joe-Jim took the mug from him. "That's enough for now," said Joe. "Tell us about yourself."

Hugh did so. In detail, being prompted from time to time by questions from one of the twins, or a kick against his shin.

Hugh accepted a de facto condition of slavery with no particular resistance and no great disturbance of soul. The word 'slave' was not in his vocabulary, but the condition was a commonplace in everything he had ever known. There had always been those who gave orders and those who carried them out; he could imagine no other condition, no other type of social organization. It was a fact of life.

Though naturally he thought of escape.

Thinking about it was as far as he got. Joe-Jim guessed his thoughts and brought the matter out into the open. Joe told him, "Don't go getting ideas, youngster. Without a knife you wouldn't get three levels away in this part of the Ship. If you managed to steal a knife from me, you still wouldn't make it down to high-weight. Besides, there's Bobo."

Hugh waited a moment, as was fitting, then said, "Bobo?"

Jim grinned and replied, "We told Bobo that you were his to butcher, if he liked, if you ever stuck your head out of our compartments without us. Now he sleeps outside the door and spends a lot of his time there."

"It was only fair," put in Joe. "He was disappointed when we decided to keep you."

"Say," suggested Jim, turning his bead toward his brother's, "how about some fun?" He turned back to Hugh. "Can you throw a knife?"

"Of course," Hugh answered.

"Let's see you. Here." Joe-Jim handed him their own knife. Hugh accepted it, jiggling it in his band to try its balance. "Try my mark."

Joe-Jim had a plastic target. set up at the far end of the room from his favorite chair, on which he was wont to practice his own skill. Hugh eyed it, and, with an arm motion too fast to follow, let fly. He used the economical underhand stroke, thumb on the blade, fingers together. The blade shivered in the target, well centered in the chewed-up area which marked Joe-Jim's best efforts. "Good boy!" Joe approved. "What do you have in mind, Jim?"

"Let's give him the knife and see how far he gets."

"No," said Joe, "I don't agree."

"Why not?"

"If Bobo wins, we're out one servant. If Hugh wins, we lose both Bobo and him. It's wasteful."

"Oh, well, if you insist."

"I do. Hugh, fetch the knife."

Hugh did so. It had not occurred to him to turn the knife against Joe-Jim. The master was the master. For servant to attack master was not simply repugnant to good morals, it was an idea so wild that it did not occur to him at all.

Hugh had expected that Joe-Jim would be impressed by his learning as a scientist. It did not work out that way. Joe-Jim, especially Jim, loved to argue. They sucked Hugh dry in short order and figuratively cast him aside. Hoyland felt humiliated. After all, was he not a scientist? Could he not read and write?

"Shut up," Jim told Hugh. "Reading is simple. I could do it before your father was born. D'you think you're the first scientist that has served me? Scientists--bah! A pack of ignoramuses!" In an attempt to reestablish his own intellectual conceit, Hugh expounded the theories of the younger scientists, the strictly matter-of-fact, hard-boiled realism which rejected all religious interpretation and took the Ship as it was. He confidently expected Joe-Jim to approve such a point of view; it seemed to fit their temperaments. They laughed in his face.

"Honest," Jim insisted, when be bad ceased snorting, "are you young punks so stupid as all that? Why you're worse than your elders."

"But you just got through saying," Hugh protested in hurt tones, "that all our accepted religious notions are so much bunk. That is just what my friends think. They want to junk all that old nonsense."

Joe started to speak; Jim cut in ahead of him. "Why bother with him, Joe? He's hopeless."

"No, he's not. I'm enjoying this. He's the first one I've talked with in I don't know how long who stood any chance at all of seeing the truth. Let us be—I want to see whether that's a head he has on his shoulders, or just a place to hang his ears."

"O.K.," Jim agreed, "but keep it quiet. I'm going to take a nap." The lefthand head closed its eyes, soon it was snoring. Joe and Hugh continued their discussion in whispers.

"The trouble with you youngsters," Joe said, "is that if you can't understand a thing right off, you think it can't be true. The trouble with your elders is, anything they didn't understand they reinterpreted to mean something else and then thought they understood it. None of you has tried believing clear words the way they were written and then tried to understand them on that basis. Oh, no, you're all too bloody smart for that! If you can't see it right off, it ain't so; it must mean something different."

"What do you mean?" Hugh asked suspiciously.

"Well, take the Trip, for instance. What does it mean to you?

"Well, to my mind, it doesn't mean anything. It's just a piece of nonsense to impress the peasants."

"And what is the accepted meaning?"

"Well, it's where you go when you die, or rather what you do. You make the Trip to Centaurus."

"And what is Centaurus?"

"It's—mind you, I'm just telling you the orthodox answers; I don't really believe this stuff—it's where you arrive when you've made the Trip, a place where everybody's happy and there's always good eating." Joe snorted. Jim broke the rhythm of his snoring, opened one eye, and settled back again with a grunt.

"That's just what I mean," Joe went on in a lower whisper. "You don't use your head. Did it over occur to you that the Trip was just what the old books said It was: the Ship and all the Crew actually going somewhere, moving?" Hoyland thought about it. "You don't mean for me to take you seriously. Physically, it's an impossibility. The Ship can't go anywhere. It already is everywhere. We can make a trip through it, but the Trip, that has to have a spiritual meaning, if it has any."

Joe called on Jordan to support him. "Now, listen," he said, "get this through that thick head of yours. Imagine a place a lot bigger than the Ship, a lot bigger, with the Ship inside it, moving. D'you get it?"

Hugh tried. He tried very hard. He shook his bead. "It doesn't make sense," he said. "There can't be anything bigger than the Ship. There wouldn't be any place for it to be."

"Oh, for Huff's sake! Listen. Outside the Ship, get that? Straight down beyond the level in every direction. Emptiness out there. Understand me?"

"But there isn't anything below the lowest level. That's why it's the lowest level."

"Look. If you took a knife and started digging a hole in the floor of the lowest level, where would it get you?"

"But you can't. It's too hard."

"But suppose you did and it made a hole. Where would that hole go? Imagine it."

Hugh shut his eyes and tried to imagine digging a hole in the lowest level. Digging as if it were soft, soft as cheese. He began to get some glimmering of a possibility, a possibility that was unsettling, soul-shaking. He was falling, falling into a hole that he had dug which had no levels under it. He opened his eyes very quickly. "That's awful!" he ejaculated. "I won't believe it."

Joe-Jim got up. "I'll make you believe it," he said grimly, "if I have to break your neck to do it." He strode over to the outer door and opened it. "Bobo!" he shouted.

"Bobo!"

Jim's head snapped erect. "Wassa matter? Wha's going on?"

"We're going to take Hugh to no-weight."

"What for?"

"To pound some sense into his silly head."

"Some other time."

"No, I want to do it now."

"All right, all right. No need to shake. I'm awake now anyhow."

Joe-Jim Gregory was almost as nearly unique in his—or their—mental ability as he was in his bodily construction. Under any circumstances he would have been a dominant personality; among the muties it was inevitable that he should bully them, order them about, and live on their services. Had he had the will-to-power, it is conceivable that he could have organized the muties to fight and overcome the Crew proper.

But he lacked that drive. He was by native temperament an intellectual, a bystander, an observer. He was interested in the 'how' and the 'why,' but his will to action was satisfied with comfort and convenience alone.

Had he been born two normal twins and among the Crew, it is likely that he would have drifted into scientisthood as the easiest and most satisfactory answer to the problem of living and as such would have entertained himself mildly with conversation and administration. As it was, he lacked mental companionship and had whiled away three generations reading and rereading books stolen for him by his stooges.

The two halves of his dual person had argued and discussed what they had read, and had almost inevitably arrived at a reasonably coherent theory of history and the physical world, except in one respect. The concept of fiction was entirely foreign to them; they treated the novels that had been provided for the Jordan expedition in exactly the same fashion that they did text and reference books.

This led to their one major difference of opinion. Jim regarded Allan Quartermain as the greatest man who had ever lived; Joe held out for John Henry.

They were both inordinately fond of poetry; they could recite page after page of Kipling, and were nearly as fond of Rhysling, the blind singer of the spaceways. Bobo backed in. Joe-Jim hooked a thumb toward Hugh. "Look," said Joe, "he's going out."

"Now?" said Bobo happily, and grinned, slavering.

"You and your stomach!" Joe answered, rapping Bobo's pate with his knuckles. "No, you don't eat him. You and him, blood brothers. Get it?"

"Not eat 'im?"

"No. Fight for him. He fights for you."

"O.K." The pinhead shrugged his shoulders at the inevitable. "Blood brothers. Bobo know."

"All right. Now we go up to the place-where-everybody-flies. You go ahead and make lookout."

They climbed in single file, the dwarf running ahead to spot the lie of the land, Hoyland behind him, Joe-Jim bringing up the rear, Joe with eyes to the front, Jim watching their rear, head turned over his shoulder.

Higher and higher they went, weight slipping imperceptibly from them with each successive deck. They emerged finally into a level beyond which there was no further progress, no opening above them. The deck curved gently, suggesting that the true shape of the space was a giant cylinder, but overhead a metallic expanse which exhibited a similar curvature obstructed the view and prevented one from seeing whether or not the deck in truth curved back on itself.

There were no proper bulkheads; great stanchions, so huge and squat as to give an impression of excessive, unnecessary strength, grew thickly about them, spacing deck and overhead evenly apart.

Weight was imperceptible. If one remained quietly in one place, the undetectable residuum of weight would bring the body in a gentle drift down to the 'floor,' but 'up' and 'down' were terms largely lacking in meaning. Hugh did not like it; it made him gulp, but Bobo seemed delighted by it and not unused to it. He moved through the air like an uncouth fish, banking off stanchion, floor plate, and overhead as suited his convenience.

Joe-Jim set a course parallel to the common axis of the inner and outer cylinders, following a passageway formed by the orderly spacing of the stanchions. There were handrails set along the passage, one of which he followed like a spider on its thread. He made remarkable speed, which Hugh floundered to maintain. In time, be caught the trick of the easy, effortless, overhand pull, the long coast against nothing but air resistance, and the occasional flick of the toes or the hand against the floor. But he was much too busy to tell how far they went before they stopped. Miles, he guessed it to be, but he did not know.

When they did stop, it was because the passage, had terminated. A solid bulkhead, stretching away to right and left, barred their way. Joe-Jim moved along it to the right, searching.

He found what he sought, a man-sized door, closed, its presence distinguishable only by a faint crack which marked its outline and a cursive geometrical design on its surface. Joe-Jim studied this and scratched his righthand head. The two heads whispered to each other. Joe-Jim raised his hand in an awkward gesture.

"No, no!" said Jim. Joe-Jim checked himself. "How's that?" Joe answered. They whispered together again, Joe nodded, and Joe-Jim again raised his hand.

He traced the design on the door without touching It, moving his forefinger through the air perhaps four inches from the surface of the door. The order of succession in which his finger moved over the lines of the design appeared simple but certainly not obvious.

Finished, he shoved a palm against the adjacent bulkhead, drifted back from the door, and waited.

A moment later there was a soft, almost inaudible insufflation; the door stirred and moved outward perhaps six inches, then stopped. Joe-Jim appeared puzzled. He ran his hands cautiously into the open crack and pulled. Nothing happened. He called to Bobo, "Open it."

Bobo looked the situation over, with a scowl on his forehead which wrinkled almost to his crown. He then placed his feet against the bulkhead, steadying himself by grasping the door with one hand. He took hold of the edge of the door with both hands, settled his feet firmly, bowed his body, and strained.

He held his breath, chest rigid, back bent, sweat breaking out from the effort. The great cords in his neck stood out, making of his head a misshapen pyramid. Hugh could hear the dwarf's joints crack. It was easy to believe that he would kill himself with the attempt, too stupid to give up.

But the door gave suddenly, with a plaint of binding metal. As the door, in swinging out, slipped from Bobo's fingers, the unexpectedly released tension in his legs shoved him heavily away from the bulkhead; he plunged down the passageway, floundering for a handhold. But he was back in a moment, drifting awkwardly through the air as he massaged a cramped calf.

Joe-Jim led the way inside, Hugh close behind him. "What is this place?" demanded Hugh, his curiosity overcoming his servant manners.

"The Main Control Room," said Joe.

Main Control Room! The most sacred and taboo place in the Ship, its very location a forgotten mystery. In the credo of the young men it was nonexistent. The older scientists varied in their attitude between fundamentalist acceptance and mystical belief. As enlightened as Hugh believed himself to be, the very words frightened him. The Control Room! Why, the very spirit of Jordan was said to reside there. He stopped.

Joe-Jim stopped and Joe looked around. "Come on," he said. "What's the matter?"

"Why, uh ... uh ..."

"Speak up."

"But ... but this place is haunted ... this is Jordan's..."

"Oh, for Jordan's sake!" protested Joe, with slow exasperation. "I thought you told me you young punks didn't take any stock in Jordan."

"Yes, but ... but this is..."

"Stow it. Come along, or I'll have Bobo drag you." He turned away. Hugh followed, reluctantly, as a man climbs a scaffold. They threaded through a passageway just wide enough for two to use the handrails abreast. The passage curved in a wide sweeping arc of full ninety degrees, then opened into the control room proper. Hugh peered past Joe-Jim's broad shoulders, fearful but curious.

He stared into a well-lighted room, huge, quite two hundred feet across. It was spherical, the interior of a great globe. The surface of the globe was featureless, frosted silver. In the geometrical center of the sphere, Hugh saw a group of apparatus about fifteen feet across. To his inexperienced eye, it was completely unintelligible; he could not have described it, but he saw that it floated steadily, with no apparent support.

Running from the end of the passage to the mass at the center of the globe was a tube of metal latticework, wide as the passage itself. It offered the only exit from the passage. Joe-Jim turned to Bobo, and ordered him to remain in the passageway, then entered the tube.

He pulled himself along it, hand over hand, the bars of the latticework making a ladder. Hugh followed him; they emerged into the mass of apparatus occupying the center of the sphere. Seen close up, the gear of the control station resolved itself into its individual details, but it still made no sense to him. He glanced away from it to the inner surface of the globe which surrounded them.

That was a mistake. The surface of the globe, being featureless silvery white, had nothing to lend it perspective. It might have been a hundred feet away, or a thousand, or, many miles. He had never experienced an unbroken height greater than that between two decks, nor an open space larger than the village common. He was panic-stricken, scared out of his wits, the more so in that he did not know what it was he feared. But the ghost of long-forgotten jungle ancestors possessed him and chilled his stomach with the basic primitive fear of falling.

He clutched at the control gear, clutched at Joe-Jim.

Joe-Jim let him have one, hard across the mouth with the flat of his hand. "What's the matter with you?" growled Jim.

"I don't know," Hugh presently managed to get out. "I don't know, but I don't like this place. Let's get out of here!"

Jim lifted his eyebrows to Joe, looked disgusted, and said, "We might as well. That weak-bellied baby will never understand anything you tell him."

"Oh, he'll be all right," Joe replied, dismissing the matter. "Hugh, climb into one of the chairs; there, that one."

In the meantime, Hugh's eyes had fallen on the tube whereby they had reached the control center and had followed it back by eye to the passage door. The sphere suddenly shrank to its proper focus and the worst of his panic was over. He complied with the order, still trembling, but able to obey. The control center consisted of a rigid framework, made up of chairs, or frames, to receive the bodies of the operators, and consolidated instrument and report panels, mounted in such a fashion as to be almost in the laps of the operators, where they were readily visible but did not obstruct the view. The chairs had high supporting sides, or arms, and mounted in these aims were the controls appropriate to each officer on watch, but Hugh was not yet aware of that. He slid under the instrument panel into his seat and settled back, glad of its enfolding stability. It fitted him in a semi-reclining position, footrest to head support.

But something was happening on the panel in front of Joe-Jim; he caught it out of the corner of his eye and turned to look. Bright red letters glowed near the top of the board: 2ND ASTROGATOR POSTED. What was a second astrogator? He didn't know; then he noticed that the extreme top of his own board was labeled 2ND ASTROGATOR and concluded it must be himself, or rather, the man who should be sitting there. He felt momentarily uncomfortable that the proper second astrogator might come in and find him usurping his post, but he put it out of his mind; it seemed unlikely.

But what was a second astrogator, anyhow?

The letters faded from Joe-Jim's board, a red dot appeared on the lefthand edge and remained. Joe-Jim did something with his right hand; his board reported: ACCELERATION: ZERO, then MAIN DRIVE.

The last two words blinked several times, then were replaced with NO REPORT. These words faded out, and a bright green dot appeared near the righthand edge.

"Get ready," said Joe, looking toward Hugh; "the light is going out."

"You're not going to turn out the light?" protested Hugh.

"No, you are. Take a look by your left hand. See those little white lights?"

Hugh did so, and found, shining up through the surface the chair arm, little beads of light arrayed to form two squares, one above the other. "Each one controls the light of one quadrant," explained Joe. "Cover them with your hand to turn Out the light. Go ahead, do it."

Reluctantly, but fascinated, Hugh did as he was directed. He placed a palm over the tiny lights, and waited. The silvery sphere turned to dull lead, faded still more, leaving them in darkness complete save for the silent glow from the instrument panels. Hugh felt nervous but exhilarated. He withdrew his palm; the sphere remained dark, the eight little lights had turned blue.

"Now," said Joe, "I'm going to show you the Stars!"

In the darkness, Joe-Jim's right hand slid over another pattern of eight lights.

Creation.

Faithfully reproduced, shining as steady and serene from the walls of the stellarium as did their originals from the black deeps of space, the mirrored stars looked down on him. Light after jeweled light, scattered in careless bountiful splendor across the simulacrum sky, the countless suns lay before him; before him, over him, under him, behind him, in every direction from him. He hung alone in the center of the stellar universe.

"Oooooh!" It was an involuntary sound, caused by his indrawn breath. He clutched the chair arms hard enough to break fingernails, but he was not aware of it. Nor was he afraid at the moment; there was room in his being for but one emotion. Life within the Ship, alternately harsh and workaday, had placed no strain on his innate capacity to experience beauty; for the first time in his life he knew the intolerable ecstasy of beauty unalloyed. It shook him and hurt him, like the first trembling intensity of sex.

It was some time before Hugh sufficiently recovered from the shock and the ensuing intense preoccupation to be able to notice Jim's sardonic laugh, Joe's dry chuckle. "Had enough?" inquired Joe. Without waiting for a reply, Joe-Jim turned the lights back on, using the duplicate controls mounted in the left arm of his chair.

Hugh sighed. His chest ached and his heart pounded. He realized suddenly that he had been holding his breath the entire time that the lights had been turned out. "Well, smart boy," asked Jim, "are you convinced?"

Hugh sighed again, not knowing why. With the lights back on, he felt safe and snug again, but was possessed of a deep sense of personal loss. He knew, subconsciously, that, having seen the stars, he would never be happy again. The dull ache in his breast, the vague inchoate yearning for his lost heritage of open sky and stars, was never to be silenced, even though he was yet too ignorant to be aware of it at the top of his mind. "What was it?" he asked in a hushed voice.

"That's," answered Joe. "That's the world. That's the universe. That's what we've been trying to tell you about."

Hugh tried furiously to force his inexperienced mind to comprehend. "That's what you mean by Outside?" he asked. "All those beautiful little lights?"

"Sure," said Joe, "only they aren't little. They're a long way off, you see; maybe thousands of miles."

"What?"

"Sure, sure," Joe persisted. "There's lots of room out there. Space. It's big. Why, some of those stars may be as big as the Ship, maybe bigger."

Hugh's face was a pitiful study in overstrained imagination. "Bigger than the Ship?" he repeated. "But ... but ..."

Jim tossed his head impatiently and said to Joe, "Wha'd' I tell you? You're wasting our time on this lunk. He hasn't got the capacity."

"Easy, Jim," Joe answered mildly; "don't expect him to run before he can crawl. It took us a long time. I seem to remember that you were a little slow to believe your own eyes." "That's a lie," said Jim nastily. "You were the one that had to be convinced."

"O.K., O.K.," Joe conceded, "let it ride. But it was a long time before we both had it all straight."

Hoyland paid little attention to the exchange between the two brothers. It was a usual thing; his attention was centered on matters decidedly not usual. "Joe," he asked, "what became of the Ship while we were looking at the Stars? Did we stare right through it?"

"Not exactly," Joe told him. "You weren't looking directly at the stars at all, but at a kind of picture of them. It's like... Well, they do it with mirrors, sort of. I've got a book that tells about it."

"But you can see 'em directly," volunteered Jim, his momentary pique forgotten. "There's a compartment forward of here..."

"Oh, yes," put in Joe, "it slipped my mind. The Captain's veranda. He's got one all of glass; you can look right out."

"The Captain's veranda? But--"

"Not this Captain. He's never been near the place. That's the name over the door of the compartment."

"What's a 'veranda'?"

"Blessed if I know. It's just the name of the place."

"Will you take me up there?"

Joe appeared to be about to agree, but Jim cut in. "Some other time. I want to get back; I'm hungry."

They passed back through the tube, woke up Bobo, and made the long trip back down.

It was long before Hugh could persuade Joe-Jim to take him exploring again, but the time intervening was well spent. Joe-Jim turned him loose on the largest collection of books that Hugh had ever seen. Some of them were copies of books Hugh had seen before, but even these he read with new meanings. He read incessantly, his mind soaking up new ideas, stumbling over them, struggling, striving to grasp them. He begrudged sleep, he forgot to eat until his breath grew sour and compelling pain in his midriff forced him to pay attention to his body. Hunger satisfied, he would be back at it until his head ached and his eyes refused to focus.

Joe-Jim's demands for service were few. Although Hugh was never off duty, Joe-Jim did not mind his reading as long as he was within earshot and ready to jump when called. Playing checkers with one of the pair when the other did not care to play was the service which used up the most time, and even this was not a total loss, for, if the player were Joe, he could almost always be diverted into a discussion of the Ship, its history, its machinery as equpment, the sort of people who had built it and then manned it and their history, back on Earth, Earth the incredible, that strange place where people had lived on the outside instead of the inside.

Hugh wondered why they did not fall off.

He took the matter up with Joe and at last gained some notion of gravitation. He never really understood it emotionally; it was too wildly improbable; but as an intellectual concept he was able to accept it and use it, much later, in his first vague glimmerings of the science of ballistics: and the art of astrogation and ship maneuvering. And it led in time to his wondering about weight in the Ship, a matter that had never bothered him before. The lower the level the greater the weight had been to his mind simply the order of nature, and nothing to wonder at. He was familiar with centrifugal force as it applied to slingshots. To apply it also to the whole Ship, to think of the Ship as spinning like a slingshot and thereby causing weight, was too much of a hurdle; he never really believed it.

Joe-Jim took him back once more to the Control Room and showed him what little Joe-Jim knew about the manipulation of the controls and the reading of the astrogation instruments.

The long-forgotten engineer-designers employed by the Jordan Foundation had been instructed to design a ship that would not—could not—wear out, even though the Trip were protracted beyond the expected sixty years. They builded better than they knew. In planning the main drive engines and the auxiliary machinery, largely automatic, which would make the Ship habitable, and in designing the controls necessary to handle all machinery not entirely automatic, the very idea of moving parts had been rejected. The engines and auxiliary equipment worked on a level below mechanical motion, on a level of pure force, as electrical transformers do. Instead of push buttons, levers, cams, and shafts, the controls and the machinery they served were planned in terms of balance between static fields, bias of electronic flow, circuits broken or closed by a hand placed over a light.

On this level of action, friction lost its meaning, wear and erosion took no toll. Had all hands been killed in the mutiny, the Ship would still have plunged on through space, still lighted, its air still fresh and moist, its engines ready and waiting. As it was, though elevators and conveyor belts fell into disrepair, disuse, and finally into the oblivion of forgotten function, the essential machinery of the Ship continued its automatic service to its ignorant human freight, or waited, quiet and ready, for someone bright enough to puzzle out its key.

Genius had gone into the building of the Ship. Far too huge to be assembled on Earth, it had been put together piece by piece in its own orbit out beyond the Moon. There it had swung for fifteen silent years while the problems presented by the decision to make its machinery foolproof and enduring had been formulated and solved. A whole new field of submolar action had been conceived in the process, struggled with, and conquered.

So, when Hugh placed an untutored, questing hand over the first of a row of lights marked ACCELERATION, POSITIVE, he got an immediate response, though not in terms of acceleration. A red light at the top of the chief pilot's board blinked rapidly and the annunciator panel glowed with a message: MAIN ENGINES: NOT MANNED.

"What does that mean?" he asked Joe-Jim.

"There's no telling," said Jim. "We've done the same thing in the main engine room," added Joe. "There, when you try it, it says 'Control Room Not Manned.'"

Hugh thought a moment. "What would happen," he persisted, "if all the control stations had somebody at 'em at once, and then I did that?"

"Can't say," said Joe. "Never been able to try it."

Hugh said nothing. A resolve which had been growing, formless, in his mind was now crystalizing into decision. He was busy with it for some time, weighing it, refining it, and looking for the right moment to bring it into the open.

He waited until he found Joe-Jim in a mellow mood, both of him, before broaching his idea. They were in the Captain's veranda at the time Hugh decided the moment was due. Joe-Jim rested gently in the Captain's easy chair, his belly full of food, and gazed out through the heavy glass of the view port at the serene stars. Hugh floated beside him. The spinning of the Ship caused the stars to cross the circle of the port in barely perceptible arcs.

Presently he said, "Joe-Jim ..."

"Eh? What's that, youngster?" It was Joe who had replied.

"It's pretty swell, isn't it?"

"What is?"

"All that. The stars." Hugh indicated the view through the port with a sweep of his arm, then caught at the chair to stop his own backspin.

"Yeah, it sure is. Makes you feel good." Surprisingly, it was Jim who offered this.

Hugh knew the time was right. He waited a moment, then said, "Why don't we finish the job?"

Two heads turned simultaneously, Joe leaning out a little to see past Jim. "What job?"

"The Trip. Why don't we start up the main drive and go on with it? Somewhere out there," be said hurriedly to finish before he was interrupted, "there are planets like Earth, or so the First Crew thought. Let's go find them."

Jim looked at him, then laughed. Joe shook his head.

"Kid," he said, "you don't know what you are talking about. You're as balmy as Bobo. "No," he went on, "that's all over and done with. Forget it."

"Why is it over and done with, Joe?"

"Well, because. It's too big a job. It takes a crew that understands what it's all about, trained to operate the Ship."

"Does it take so many? You have shown me only about a dozen places, all told, for men actually to be at the controls. Couldn't a dozen men run the Ship ... if they knew what you know," he added slyly.

Jim chuckled. "He's got you, Joe. He's right"

Joe brushed it aside. "You overrate our knowledge. Maybe we could operate the Ship, but we wouldn't get anywhere. We don't know where we are. The Ship has been drifting for I don't know how many generations. We don't know where we're headed, or how fast we're going."

"But look," Hugh pleaded, "there are instruments. You showed them to me. Couldn't we learn how to use them? Couldn't you figure them out, Joe, if you really wanted to?"

"Oh, I suppose so," Jim agreed.

"Don't boast, Jim," said Joe.

"I'm not boasting," snapped Jim. "If a thing'll work, I can figure it out."

"Humph!" said Joe. The matter rested in delicate balance. Hugh had got them disagreeing among themselves—which was what he wanted—with the less tractable of the pair on his side. Now, to consolidate his gain, "I had an idea," he said quickly, "to get you men to work with, Jim, if you were able to train them."

"What's your idea?" demanded Jim suspiciously. "Well, you remember what I told you about a bunch of the younger scientists?"

"Those fools!"

"Yes, yes, sure; but they didn't know what you know. In their way they were trying to be reasonable. Now, if I could go back down and tell them what you've taught me, I could get you enough men to work with."

Joe cut in. "Take a good look at us, Hugh. What do you see?"

"Why ... why, I see you. Joe-Jim."

"You see a mutie," corrected Joe, his voice edged with sarcasm. "We're a mutie. Get that? Your scientists won't work with us."

"No, no," protested Hugh, "that's not true. I'm not talking about peasants. Peasants wouldn't understand, but these are scientists, and the smartest of the lot. They'll understand. All you need to do is to arrange safe conduct for them through mutie country. You can do that, can't you?" he added, instinctively shifting the point of the argument to firmer ground.

"Why, sure," said Jim.

"Forget it," said Joe.

"Well, O.K.," Hugh agreed, sensing that Joe really was annoyed at his persistence, "but it would be fun." He withdrew some distance from the brothers.

He could hear Joe-Jim continuing the discussion with himself in low tones. He pretended to ignore it. Joe-Jim had this essential defect in his joint nature: being a committee, rather than a single individual, he was hardly fitted to be a man of action, since all decisions were necessarily the result of discussion and compromise. Several moments later Hugh heard Joe's voice raised. "All right, all right, have it your own way!" He then called out, "Hugh! Come here!" Hugh kicked himself away from an adjacent bulkhead and shot over to the immediate vicinity of Joe-Jim, arresting his flight with both hands against the framework of the Captain's chair.

"We've decided," said Joe without preliminaries, "to let you go back down to the high-weight and try to peddle your goods. But you're a fool," he added sourly.

Bobo escorted Hugh down through the dangers of the levels frequented by muties and left him in the uninhabited zone above high-weight "Thanks, Bobo," Hugh said in parting. "Good eating." The dwarf grinned, ducked his head, and sped away, swarming up the ladder they had just descended. Hugh turned and started down, touching his knife as he did so. It was good to feel it against him again.

Not that it was his original knife. That had been Bobo's prize when he was captured, and Bobo had been unable to return it, having inadvertently left it sticking in a big one that got away. But the replacement Joe-Jim had given him was well balanced and quite satisfactory.

Bobo had conducted him, at Hugh's request and by Joe-Jim's order, down to the area directly over the auxiliary Converter used by the scientists. He wanted to find Bill Ertz, Assistant Chief Engineer and leader of the bloc of younger scientists, and he did not want to have to answer too many questions before he found him. Hugh dropped quickly down the remaining levels and found himself in a main passageway which he recognized. Good! A turn to the left, a couple of hundred yards walk and he found himself at the door of the compartment which housed the Converter. A guard lounged in front of it. Hugh started to push on past, was stopped. "Where do you think you're going?"

"I want to find Bill Ertz."

"You mean the Chief Engineer? Well, he's not here."

"Chief? What's happened to the old one?" Hoyland regretted the remark at once, but it was already out.

"Huh? The old Chief? Why, he's made the Trip long since." The guard looked at him suspiciously. "What's wrong with you?"

"Nothing," denied Hugh. "Just a slip."

"Funny sort of a slip. Well, you'll find Chief Ertz around his office probably."

"Thanks. Good eating."

"Good eating."

Hugh was admitted to see Ertz after a short wait Ertz looked up from his desk as Hugh came in. "Well," he said, "so you're back, and not dead after all. This is a surprise. We had written you off, you know, as making the Trip."

"Yes, I suppose so."

"Well, sit down and tell me about it; I've a little time to spare at the moment. Do you know, though, I wouldn't have recognized you.

You've changed a lot, all that gray hair. I imagine you had some pretty tough times."

Gray hair? Was his hair gray? And Ertz had changed a lot, too, Hugh now noticed. He was paunchy and the lines in his face had set. Good Jordan! How long had he been gone? Ertz drummed on his desk top, and pursed his lips. "It makes a problem, your coming back like this. I'm afraid I can't just assign you to your old job; Mort Tyler has that. But we'll find a place for you, suitable to your rank."

Hugh recalled Mort Tyler and not too favorably. A precious sort of a chap, always concerned with what was proper and according to regulations. So Tyler had actually made scientisthood, and was on Hugh's old job at the Converter. Well, it didn't matter. "That's all right, he began. "I wanted to talk to you about--"

"Of course, there's the matter of seniority," Ertz went on, "Perhaps the Council had better consider the matter. I don't know of a precedent. We've lost a number of scientists to the muties in the past, but you are the first to escape with his life in my memory."

"That doesn't matter," Hugh broke in. "I've something much more pressing to talk about. While I was away I found out some amazing things, Bill, things that it is of paramount importance for you to know about. That's why I came straight to you. Listen. I--"

Ertz was suddenly alert. "Of course you have! I must be slowing down. You must have had a marvelous opportunity to study the muties and scout out their territory. Come on, man, spill it! Give me your report."

Hugh wet his lips. "It's not what you think," he said. "It's much more important than just a report on the muties, though it concerns them, too. In fact, we may have to change our whole policy with respect to the mu--"

"Well, go ahead, go ahead! I'm listening."

"All right." Hugh told him of his tremendous discovery as to the actual nature of the Ship, choosing his words carefully and trying very hard to be convincing. He dwelt lightly on the difficulties presented by an attempt to reorganize the Ship in accordance with the new concept and bore down heavily on the prestige and honor that would accrue to the man who led the effort.

He watched Ertz's face as he talked. After the first start of complete surprise when Hugh launched his key idea, the fact that the Ship was actually a moving body in a great outside space, his face became impassive and Hugh could read nothing in it, except that he seemed to detect a keener interest when Hugh spoke of how Ertz was just the man for the job because of his leadership of the younger, more progressive scientists.

When Hugh concluded, he waited for Ertz's response. Ertz said nothing at first, simply continued with his annoying habit of drumming on the top of his desk. Finally he said, "These are important matters, Hoyland, much too important to be dealt with casually. I must have time to chew it over."

"Yes, certainly," Hugh agreed. "I wanted to add that I've made arrangements for safe passage up to no-weight. I can take you up and let you see for yourself."

"No doubt that is best," Ertz replied. "Well, are you hungry?"

"No."

"Then we'll both sleep on it. You can use the compartment at the back of my office. I don't want you discussing this with anyone else until I've had time to think about it; it might cause unrest if it got out without proper prepartion."

"Yes, you're right"

"Very well, then." Ertz ushered him into a compartment behind his office which he very evidently used for a lounge. "Have a good rest," he said, "and we'll talk later."

"Thanks," Hugh acknowledged. "Good eating."

"Good eating."

Once he was alone, Hugh's excitement gradually dropped away from him, and he realized that he was fagged out and very sleepy. He stretched out on a builtin couch and fell asleep.

When he awoke he discovered that the only door to the compartment was barred from the other side. Worse than that, his knife was gone.

He had waited an indefinitely long time when he heard activity at the door. It opened; two husky, unsmiling men entered. "Come along," said one of them. He sized them up, noting that neither of them carried a knife. No chance to snatch one from their belts, then. On the other hand he might be able to break away from them.

But beyond them, a wary distance away in the outer room, were two other equally formidable men, each armed with a knife. One balanced his for throwing; the other held his by the grip, ready to stab at close quarters. He was boxed in and be knew it. They had anticipated his possible moves.

He had long since learned to relax before the inevitable. He composed his face and marched quietly out. Once through the door he saw Ertz, waiting and quite evidently in charge of the party of men. He spoke to him, being careful to keep his voice calm. "Hello, Bill. Pretty extensive preparations you've made. Some trouble, maybe?"

Ertz seemed momentarily uncertain of his answer, then said, "You're going before the Captain."

"Good!" Hugh answered. "Thanks, Bill. But do you think it's wise to try to sell the idea to him without laying a little preliminary foundation with the others?"

Ertz was annoyed at his apparent thickheadedness and showed it. "You don't get the idea," he growled. "You're going before the Captain to stand trial for heresy!"

Hugh considered this as if the idea had not before occurred to him. He answered mildly, "You're off down the wrong passage, Bill. Perhaps a charge and trial is the best way to get at the matter, but I'm not a peasant, simply to be hustled before the Captain. I must be tried by the Council. I am a scientist."

"Are you now?" Ertz said softly. "I've had advice about that. You were written off the lists. Just what you are is a matter for the Captain to determine."

Hugh held his peace. It was against him, he could see, and there was no point in antagonizing Ertz. Ertz made a signal; the two unarmed men each grasped one of Hugh's arms. He went with them quietly.

Hugh looked at the Captain with new interest. The old man had not changed much, a little fatter, perhaps. The Captain settled himself slowly down in his chair, and picked up the memorandum before him. "What's this all about?" he began irritably. "I don't understand it."

Mort Tyler was there to present the case against Hugh, a circumstance which Hugh had had no way of anticipating and which added to his misgivings. He searched his boyhood recollections for some handle by which to reach the man's sympathy, found none. Tyler cleared his throat and commenced: "This is the case of one Hugh Hoyland, Captain, formerly one of your junior scientists--"

"Scientist, eh? Why doesn't the Council deal with him?"

"Because he is no longer a scientist, Captain. He went over to the muties. He now returns among us, preaching heresy and seeking to undermine your authority."

The Captain looked at Hugh with the ready belligerency of a man jealous of his prerogatives. "Is that so?" he bellowed. "What have you to say for yourself?"

"It is not true, Captain," Hugh answered. "All that I have said to anyone has been an affirmation of the absolute truth of our ancient knowledge. I have not disputed the truths under which we live; I have simply affirmed them more forcibly than is the ordinary custom. I--"

"I still don't understand this," the Captain interrupted, shaking his head. "You're charged with heresy, yet you say you believe the Teachings. If you aren't guilty, why are you here?"

"Perhaps I can clear the matter up," put in Ertz. "Hoyland--"

"Well, I hope you can," the Captain went on. "Come, let's hear it."

Ertz proceeded to give a reasonably correct, but slanted, version of

Hoyland's return and his strange story. The Captain listened, with an expression that varied between puzzlement and annoyance. When Ertz had concluded, the Captain turned to Hugh. "Humph!" he said.

Hugh spoke immediately. "The gist of my contention, Captain, is that there is a place up at no-weight where you can actually see the truth of our faith that the Ship is moving, where you can actually see Jordan's Plan in operation. That is not a denial of faith; that affirms it. There is no need to take my word for it. Jordan Himself will prove it."

Seeing that the Captain appeared to be in a state of indecision, Tyler broke in: "Captain, there is a possible explanation of this incredible situation which I feel duty bound that you should hear. Offhand, there are two obvious interpretations of Hoyland's ridiculous story He may simply be guilty of extreme heresy, or he may be a mutie at heart and engaged in a scheme to lure you into their hands. But there is a third, more charitable explanation and one which I feel within me is probably the true one.

"There is record that Hoyland was seriously considered for the Converter at his birth inspection, but that his deviation from normal was slight, being simply an overlarge head, and he was passed. It seems to me that the terrible experiences he has undergone at the hands of the muties have finally unhinged an unstable mind. The poor chap is simply not responsible for his own actions."

Hugh looked at Tyler with new respect. To absolve him of guilt and at the same time to make absolutely certain that Hugh would wind up making the Trip: how neat!

The Captain shook a palm at them. "This has gone on long enough." Then, turning to Ertz, "Is there recommendation?"

"Yes, Captain. The Converter."

"Very well, then. I really don't see, Ertz," he continued testily, "why I should be bothered with these details. It seems to me that you should be able to handle discipline in your department without my help."

"Yes, Captain."

The Captain shoved back from his desk, started to get up. "Recommendation confirmed. Dismissed."

Anger flooded through Hugh at the unreasonable injustice of it. They had not even considered looking at the only real evidence he had in his defense. He heard a shout: "Wait!"—then discovered it was his own voice. The Captain paused, looking at him.

"Wait a moment," Hugh went on, his words spilling out of their own accord. "This won't make any difference, for you're all so damn sure you know all the answers that you won't consider a fair offer to come see with your own eyes. Nevertheless ... Nevertheless, it still moves!"

Hugh had plenty of time to think, lying in the compartment where they confined him to await the power needs of the Converter, time to think, and to second-guess his mistakes. Telling his tale to Ertz immediately, that had been mistake number one. He should have waited, become reacquainted with the man and felt him out, instead of depending on a friendship which had never been very close.

Second mistake, Mort Tyler. When he heard his name he should have investigated and found out just how much influence the man had with Ertz. He had known him of old, he should have known better.

Well, here he was, condemned as a mutant, or maybe as a heretic. It came to the same thing. He considered whether or not he should have tried to explain why mutants happened. He had learned about it himself in some of the old records in Joe-Jim's possession. No, it wouldn't wash. How could you explain about radiations from the Outside causing the birth of mutants when the listeners did not believe there was such a place as Outside? No, he had messed it up before he was ever taken before the Captain.

His self-recriminations were disturbed at last by the sound of his door being unfastened. It was too soon for another of the infrequent meals; he thought that they had come at last to take him away, and renewed his resolve to take someone with him.

But he was mistaken. He heard a voice of gentle dignity: "Son, son, how does this happen?" It was Lieutenant Nelson, his first teacher, looking older than ever and frail.

The interview was distressing for both of them. The old man, childless himself, had cherished great hopes for his protegé, even the ambition that he might eventually aspire to the captaincy, though he had kept his vicarious ambition to himself, believing it not good for the young to praise them too highly. It had hurt his heart when the youth was lost.

Now he had returned, a man, but under disgraceful conditions and under sentence of death. The meeting was no less unhappy for Hugh. He had loved the old man, in his way, wanted to please him and needed his approval. But he could see, as he told his story, that Nelson was not capable of treating the the story as anything but an aberration of Hugh's mind, and he suspected that Nelson would rather see him meet a quick death in the Converter, his atoms smashed to hydrogen and giving up clean useful power, than have him live to make a mock of the ancient teachings.

In that.he did the old man an injustice; he underrated Nelson's mercy, but not his devotion to 'science.' But let it be said for Hugh that, had there been no more at issue than his own personal welfare, he might have preferred death to breaking the heart of his benefactor, being a romantic and more than a bit foolish. Presently the old man got up to leave, the visit having grown unendurable to each of them. "Is there anything I can do for you, son? Do they feed you well enough?"

"Quite well, thanks," Hugh lied.

"Is there anything else?"

"No ... yes, you might send me some tobacco. I haven't had a chew in a long time."

"I'll take care of it. Is there anyone you would like to see?"

"Why, I was under the impression that I was not permitted visitors ... ordinary visitors."

"You are right, but I think perhaps I may be able to get the rule relaxed. But you will have to give me your promise not to speak of your heresy," he added anxiously. Hugh thought quickly. This was a new aspect, a new possibility. His uncle? No, while they had always got along well, their minds did not meet; they would greet each other as strangers. He had never made friends easily; Ertz had been his obvious next friend and now look at the damned thing! Then he recalled his village chum, Alan Mahoney, with whom he had played as a boy. True, he had seen practically nothing of him since the time he was apprenticed to Nelson. Still... "Does Alan Mahoney still live in our village?"

"Why, yes."

"I'd like to see him, if he'll come."

Alan arrived, nervous, ill at ease, but plainly glad to see Hugh and very much upset to find him under sentence to make the Trip. Hugh pounded him on the back. "Good boy," he said. "I knew you would come."

"Of course, I would," protested Alan, "once I knew. But nobody in the village knew it. I don't think even the Witnesses knew it."

"Well, you're here, that's what matters. Tell me about yourself. Have you married?"

"Huh, uh, no. Let's not waste time talking about me. Nothing ever happens to me anyhow. How in Jordan's name did you get in this jam, Hugh?"

"I can't talk about that, Alan. I promised Lieutenant Nelson that I wouldn't."

"Well, what's a promise, that kind of a promise? You're in a jam, fellow."

"Don't I know it!"

"Somebody have it in for you?"

"Well, our old pal Mort Tyler didn't help any; I think I can say that much."

Alan whistled and nodded his head slowly. "That explains a lot."

"How come? You know something?"

"Maybe,—maybe not. After you went away he married Edris Baxter."

"So? Hmm-m-m ... yes, that clears up a lot." He remained silent for a time.

Presently Alan spoke up: "Look, Hugh. You're not going to sit here and take it, are you? Particularly with Tyler mixed in it. We gotta get you outa here."

"How?"

"I don't know. Pull a raid, maybe. I guess I could get a few knives to rally round and help us; all good boys, spoiling for a fight."

"Then, when it's over, we'd all be for the Converter. You, me, and your pals. No, it won't wash."

"But we've got to do something. We can't just sit here and wait for them to burn you."

"I know that." Hugh studied Alan's face. Was it a fair thing to ask? He went on, reassured by what he had seen. "Listen. You would do anything you could to get me out of this, wouldn't you?"

"You know that." Alan's tone showed hurt.

"Very well, then. There is a dwarf named Bobo. I'll tell you how to find him..."

Alan climbed, up and up, higher than he had ever been since Hugh had led him, as a boy, into foolhardy peril. He was older now, more conservative; he had no stomach for it. To the very real danger of leaving the well-traveled lower levels was added his superstitious ignorance. But still he climbed.

This should be about the place, unless he had lost count. But he saw nothing of the dwarf Bobo saw him first. A slingshot load caught Alan in the pit of the stomach, even as he was shouting, "Bobo!"

Bobo backed into Joe-Jim's compartment and dumped his load at the feet of the twins. "Fresh meat," he said proudly.

"So it is," agreed Jim indifferently. "Well, it's yours; take it away."

The dwarf dug a thumb into a twisted ear, "Funny," he said, "he knows Bobo's name."

Joe looked up from the book he was reading: *Browning's Collected Poems*, L-Press, New York, London, Luna City, cr. 35. "That's interesting. Hold on a moment."

Hugh had prepared Alan for the shock of Joe-Jim's appearance. In reasonably short order he collected his wits sufficiently to be able to tell his tale. Joe-Jim listened to it without much comment, Bobo with interest but little comprehension.

When Alan concluded, Jim remarked, "Well, you win, Joe. He didn't make it." Then, turning to Alan, he added, "You can take Hoyland's place. Can you play checkers?"

Alan looked from one head to the other. "But you don't understand," he said. "Aren't you going to do anything about it?"

Joe looked puzzled. "Us? Why should we?"

"But you've got to. Don't you see? He's depending on you. There's nobody else he can look to. That's why I came. Don't you see?"

"Wait a moment," drawled Jim, "wait a moment. Keep your belt on. Supposing we did want to help him, which we don't, how in Jordan's Ship could we? Answer me that."

"Why, why," Alan stumbled in the face of such stupidity. "Why, get up a rescue party, of course, and go down and get him out!"

"Why should we get ourselves killed in a fight to rescue your friend?" Bobo pricked his ears. "Fight?" he inquired eagerly. "No, Bobo," Joe denied. "No fight. Just talk." "Oh," said Bobo and returned to passivity.

Alan looked at the dwarf. "If you'd even let Bobo and me--"

"No," Joe said shortly. "It's out of the question. Shut up about it."

Alan sat in a corner, hugging his knees in despair. If only he could get out of there. He could still try to stir up some help down below. The dwarf seemed to be asleep, though it was difficult to be sure with him. If only Joe-Jim would sleep, too.

Joe-Jim showed no indication of sleepiness. Joe tried to continue reading, but Jim interrupted him from time to time. Alan could not hear what they were saying.

Presently Joe raised his voice. "Is that your idea of fun?" he demanded.

"Well," said Jim, "it beats checkers."

"It does, does it? Suppose you get a knife in your eye; where would I be then?"

"You're getting old, Joe. No juice in you any more."

"You're as old as I am."

"Yeah, but I got young ideas."

"Oh, you make me sick. Have it your own way, but don't blame me. Bobo!"

The dwarf sprang up at once, alert. "Yeah, Boss."

"Go out and dig up Squatty and Long Arm and Pig."

Joe-Jim-got up, went to a locker, and started pulling knives out of their racks.

Hugh heard the commotion in the passageway outside his prison. It could be the guards coming to take him to the Converter, though they probably wouldn't be so noisy. Or it could be just some excitement unrelated to him. On the other hand it might be ...

It was. The door burst open, and Alan was inside, shouting at him and thrusting a brace of knives into his hands. He was hurried out of the door, while stuffing the knives in his belt and accepting two more.

Outside he saw Joe-Jim, who did not see him at once, as he was methodically letting fly, as calmly as if he had been engaging in target practice in his own study. And Bobo, who ducked his head and grinned with a mouth widened by a bleeding cut, but continued the easy flow of the motion whereby he loaded and let fly. There were three others, two of whom Hugh recognized as belonging to Joe-Jim's privately owned gang of bullies, muties by definition and birthplace; they were not deformed.

The count does not include still forms on the floor plates.

"Come on!" yelled Alan. "There'll be more in no time." He hurried down the passage to the right

Joe-Jim desisted and followed him. Hugh let one blade go for luck at a figure running away to the left. The target was poor, and he had no time to see if he had thrown 01000. They scrambled along the passage, Bobo bringing up the rear, as if reluctant to leave the fun, and came to a point where a side passage crossed the main one.

Alan led them to the right again. "Stairs ahead," he shouted.

They did not reach them. An airtight door, rarely used, clanged in their faces ten yards short of the stairs. Joe-Jim's bravoes checked their flight and they looked doubtfully at their master. Bobo broke his thickened nails trying to get a purchase on the door.

The sounds of pursuit were clear behind them.

"Boxed in," said Joe softly. "I hope you like it, Jim."

Hugh saw a head appear around the corner of the passage they had quitted. He threw overhand but the distance was too great; the knife clanged harmlessly against steel. The head disappeared. Long Arm kept his eye on the spot, his sling loaded and ready.

Hugh grabbed Bobo's shoulder. "Listen! Do you see that light?"

The dwarf blinked stupidly. Hugh pointed to the intersection of the glowtubes where they crossed in the overhead directly above the junction of the passages. "That light. Can you hit them where they cross?"

Bobo measured the distance with his eye. It would be a hard shot under any conditions at that range. Here, constricted as he was by the low passageway, it called for a fast, flat trajectory, and allowance for higher weight then he was used to.

He did not answer. Hugh felt the wind of his swing but did not see the shot. There was a tinkling crash; the passage became dark.

"Now!" yelled Hugh, and led them away at a run. As they neared the intersection he shouted, "Hold your breaths! Mind the gas!" The radioactive vapor poured lazily out from the broken tube above and filled the crossing with a greenish mist.

Hugh ran to the right, thankful for his knowledge as an engineer of the lighting circuits. He had picked the right direction; the passage ahead was black, being serviced from beyond the break. He could hear footsteps around him; whether they were friend or enemy he did not know.

They burst into light. No one was in sight but a scared and harmless peasant who scurried away at an unlikely pace. They took a quick muster. All were present, but Bobo was making heavy going of it.

Joe looked at him. "He sniffed the gas, I think. Pound his back."

Pig did so with a will. Bobo belched deeply, was suddenly sick, then grinned.

"He'll do," decided Joe.

The slight delay had enabled one at least to catch up with them. He came plunging out of the dark, unaware of, or careless of, the strength against him. Alan knocked Pig's arm down, as he raised it to throw. "Let me at him!" he demanded. "He's mine!" It was Tyler.

"Man-fight?" Alan challenged, thumb on his blade.

Tyler's eyes darted from adversary to adversary and accepted the invitation to individual duel by lunging at Alan. The quarters were too cramped for throwing; they closed, each achieving his grab in parry, fist to wrist.

Alan was stockier, probably stronger; Tyler was slippery. He attempted to give Alan a knee to the crotch. Alan evaded it, stamped on Tyler's planted foot. They went clown. There was a crunching crack.

A moment later, Alan was wiping his knife against his thigh. "Let's get goin'," he complained. "I'm scared."

They reached a stairway, and raced up it, Long Arm and Pig ahead to fan out on each level and cover their flanks, and the third of the three choppers (Hugh heard him called Squatty) covering the rear. The others bunched in between.

Hugh thought they had won free, when he heard shouts and the clatter of a thrown knife just above him.

He reached the level above in time to be cut not deeply but jaggedly by a ricocheted blade.

Three men were down. Long Arm bad a blade sticking in the fleshy part of his upper arm, but it did not seem to bother him. His slingshot was still spinning. Pig was scrambling after a thrown knife, his own armament exhausted. But there were signs of his work; one man was down on one knee some twenty feet away. He was bleeding from a knife wound in the thigh.

As the figure steadied himself with one hand against the bulkhead and reached towards an empty belt with the other, Hugh recognized him.

Bill Ertz.

He had led a party up another way, and flanked them, to his own ruin. Bobo crowded behind Hugh and got his mighty arm free for the cast. Hugh caught at it. "Easy, Bobo," he directed. "In the stomach, and easy."

The dwarf looked puzzled, but did as he was told.

Ertz folded over at the middle and slid to the deck. "Well placed," said Jim. "Bring him along, Bobo," directed Hugh, "and stay in the middle." He ran his eye over their party, now huddled at the top of that flight of stairs. "All right, gang; up we go again! Watch it."

Long Arm and Pig swarmed up the next flight, the others disposing themselves as usual. Joe looked annoyed. In some fashion, a fashion by no means clear at the moment, he had been eased out as leader of this gang, his gang, and Hugh was giving orders. He reflected as there was no time now to make a fuss. It might get them all killed.

Jim did not appear to mind. In fact, he seemed to be enjoying himself.

They put ten more levels behind them with no organized opposition. Hugh directed them not to kill peasants unnecessarily. The three bravoes obeyed; Bobo was too loaded down with Ertz to constitute a problem in discipline. Hugh saw to it that they put thirty-odd more decks below them and were well into no man's land before he let vigilance relax at all. Then he called a halt and they examined wounds.

The only deep ones were to Long Arm's arm and Bobo's face. Joe-Jim examined them and applied presses with which he had outfitted himself before starting. Hugh refused treatment for his flesh wound. "It's stopped bleeding," he insisted, "and I've got a lot to do."

"You've got nothing to do but to get up home," said Joe, "and that will be an end to this foolishness." "Not quite," denied Hugh. "You may be going home, but Alan and I and Bobo are going up to no-weight; to the Captain's veranda."

"Nonsense," said Joe. "What for?"

"Come along if you like, and see. All right, gang. Let's go."

Joe started to speak, stopped when Jim kept still. Joe-Jim followed along. They floated gently through the door of the veranda, Hugh, Alan, Bobo with his still-passive burden, and Joe-Jim. "That's it," said Hugh to Alan, waving his hand at the splendid stars, "that's what I've been telling you about."

Alan looked and clutched at Hugh's arm. "Jordan!" he moaned. "We'll fall out!" He closed his eyes tightly.

Hugh shook him. "It's all right," he said. "It's grand. Open your eyes."

Joe-Jim touched Hugh's arm. "What's it all about?" he demanded. "Why did you bring him up here?" He pointed to Ertz.

"Oh, him. Well, when he wakes up I'm going to show him the stars, prove to him that the Ship moves."

"Well? What for?"

"Then I'll send him back down to convince some others."

"Hm-m-m, suppose he doesn't have any better luck than you had?"

"Why, then," Hugh shrugged his shoulders "why, then we shall just have to do it all over, I suppose, till we do convince them.

"We've got to do it, you know."

COMMON SENSE

JOE, THE RIGHT HAND head of Joe-Jim, addressed his words to Hugh Hoyland. "All right, smart boy, you've convinced the Chief Engineer." He gestured toward Bill Ertz with the blade of his knife, then resumed picking Jim's teeth with it. "So what? Where does it get you?"

"I've explained that," Hugh Hoyland answered irritably. "We keep on, until every scientist in the Ship, from the Captain to the greenest probationer, knows that the Ship moves and believes that we can make it move. Then we'll finish the Trip, as Jordan willed. How many knives can you muster?" he added.

"Well, for the love of Jordan! Listen, have you got some fool idea that we are going to help you with this crazy scheme?"

"Naturally. You're necessary to it."

"Then you had better think up another think. That's out. Bobo! Get out the checkerboard."

"O.K., Boss." The microcephalic dwarf hunched himself up off the floor plates and trotted across Joe-Jim's apartment.

"Hold it, Bobo." Jim, the lefthand head, had spoken. The dwarf stopped dead, his narrow forehead wrinkled. The fact that his two-headed master occasionally failed to agree as to what Bobo should do was the only note of insecurity in his tranquil bloodthirsty existence.

"Let's hear what he has to say," Jim continued. "There may be some fun in this."

"Fun! The fun of getting a knife in your ribs. Let me point out that they are my ribs, too. I don't agree to it."

"I didn't ask you to agree; I asked you to listen. Leaving fun out of it, it may be the only way to keep a knife out of our ribs."

"What do you mean?" Joe demanded suspiciously. "You heard what Ertz had to say." Jim flicked a thumb toward the prisoner. "The Ship's officers are planning to clean out the upper levels. How would you like to go into the Converter, Joe? You can't play checkers after we're broken down into hydrogen."

"Bunk! The Crew can't exterminate the muties; they've tried before."

Jim turned to Etrz. "How about it?"

Ertz answered somewhat diffidently, being acutely aware of his own changed status from a senior Ship's officer to prisoner of war. He felt befuddled anyhow; too much had happened and too fast. He had been kidnaped, hauled up to the Captain's veranda, and had there gazed out at the stars. The stars.

His hard-boiled rationalism included no such concept. If an Earth astronomer had had it physically demonstrated to him that the globe spun on its axis because someone turned a crank, the upset in evaluations could have been no greater.

Besides that, he was acutely aware that his own continued existence hung in fine balance. Joe-Jim was the first upper-level mutie he had ever met other than in combat, knife to knife. A word from him to that great ugly dwarf sprawled on the deck-- He chose his words. "I think the Crew would be successful, this time. We . . . they have organized for it. Unless there are more of you than we think there are and better organized, I think it could be done. You see . . . well, uh, I organized it."

"You?"

"Yes. A good many of the Council don't like the policy of letting the muties alone. Maybe it's sound religious doctrine and maybe it isn't, but we lose a child here and a couple of pigs there. It's annoying."

"What do you expect muties to eat?" demanded Jim belligerently. "Thin air?"

"No, not exactly. Anyhow, the new policy was not entirely destructive. Any muties that surrendered and could be civilized we planned to give to masters and put them to work as part of the Crew. That is, any that weren't, uh . . . that were--" He broke off in embarrassment, and shifted his eyes from the two-headed monstrosity before him.

"You mean any that weren't physical mutations, like me," Joe filled in nastily. "Don't you?" he persisted. "For the likes of me it's the Converter, isn't it?" He slapped the blade of his knife nervously on the palm of his hand.

Ertz edged away, his own hand shifting to his belt. But no knife was slung there; he felt naked and helpless without it. "Just a minute," he said defensively, "you asked me; that's the situation. It's out of my hands. I'm just telling you."

"Let him alone, Joe. He's just handing you the straight dope. It's like I was telling you: either go along with Hugh's plan, or wait to be hunted down. And don't get any ideas about killing him; we're going to need him." As Jim spoke he attempted to return the knife to its sheath. There was a brief and silent struggle between the twins for control of the motor nerves to their right arm, a clash of will below the level of physical activity. Joe gave in.

"All right," he agreed surlily, "but if I go to the Converter, I want to take this one with me for company."

"Stow it," said Jim. "You'll have me for company."

"Why do you believe him?"

"He has nothing to gain by lying. Ask Alan."

Alan Mahoney, Hugh's friend and boyhood chum, had listened to the argument round-eyed, without joining it. He, too, had suffered the nerve-shaking experience of viewing the outer stars, but his ignorant peasant mind had not the sharply formulated opinions of Ertz, the Chief Engineer. Ertz had been able to see almost at once that the very existence of a world outside the Ship changed all his plans and everything he had believed in; Alan was capable only of wonder.

"What about this plan to fight the muties, Alan?"

"Huh? Why, I don't know anything about it. Shucks, I'm not a scientist. Say, wait a minute; there was a junior officer sent in to help our village scientist, Lieutenant Nelson." He stopped and looked puzzled.

"What about it? Go ahead."

"Well, he has been organizing the cadets in our village, and the married men, too, but not so much. Making 'em practice with their blades and slings. Never told us what for, though."

Ertz spread his hands. "You see?"

Joe nodded. "I see," he admitted grimly.

Hugh Hoyland looked at him eagerly. "Then you're with me?"

"I suppose so," Joe admitted. "Right!" added Jim.

Hoyland looked back to Ertz. "How about you, Bill Ertz?"

"What choice have I got?"

"Plenty. I want you with me wholeheartedly. Here's the layout: The Crew doesn't count; it's the officers we have to convince. Any that aren't too addlepated and stiff-necked to understand after they've seen the stars and the Control Room, we keep. The others--" he drew a thumb across his throat while making a harsh sibilance in his cheek, "the Converter."

Bobo grinned happily and imitated the gesture and the sound.

Ertz nodded. "Then what?"

"Muties and Crew together, under a new Captain, we move the Ship to Far Centaurus! Jordan's Will be done!"

Ertz stood up and faced Hoyland. It was a heady notion, too big to be grasped at once, but, by Jordan! he liked it. He spread his hands on the table and leaned across it. "I'm with you, Hugh Hoyland!"

A knife clattered on the table before him, one from the brace at Joe-Jim's belt. Joe looked startled, seemed about to speak to his brother, then appeared to think better of it. Ertz looked his thanks and stuck the knife in his belt.

The twins whispered to each other for a moment, then Joe spoke up. "Might as well make it stick," he said. He drew his remaining knife and, grasping the blade between thumb and forefinger so that only the point was exposed, he jabbed himself in the fleshly upper part of his left arm. "Blade for blade!"

Ertz's eyebrows shot up. He whipped out his newly acquired blade and cut himself in the same location. The blood spurted and ran down to the crook of his arm. "Back to back!" He shoved the table aside and pressed his gory shoulder against the wound on Joe-Jim.

Alan Mahoney, Hugh Hoyland, Bobo: all had their blades out, all nicked their arms till the skin ran red and wet. They crowded in, bleeding shoulders pushed together so that the blood dripped united to the death.

"Blade for blade!"

"Back to back!"

"Blood to blood!"

"Blood brothers, to the end of the Trip!"

An apostate scientist, a kidnaped scientist, a dull peasant, a two-headed monster, a apple-brained moron; five knives, counting Joe-Jim as one; five brains, counting Joe-Jim as two and Bobo as none; five brains and five knives to overthrow an entire culture.

"But I don't want to go back, Hugh." Alan shuffled his feet and looked dogged. "Why can't I stay here with you? I'm a good blade."

"Sure you are, old fellow. But right now you'll be more useful as a spy."

"But you've got Bill Ertz for that."

"So we have, but we need you too. Bill is a public figure; he can't duck out and climb to the upper levels without it being noticed and causing talk. That's where you come in; you're his go-between."

"I'll have a Huff of a time explaining where I've been."

"Don't explain any more than you have to. But stay away from the Witness." Hugh had a sudden picture of Alan trying to deceive the old village historian, with his searching tongue and lust for details. "Keep clear of the Witness. The old boy would trip you up."

"Him? You mean the old one; he's dead. Made the Trip long since. The new one don't amount to nothing."

"Good. If you're careful, you'll be safe." Hugh raised his voice. "Bill!

Are you ready to go down?"

"I suppose so." Ertz picked himself up and reluctantly put aside the book he had been reading *The Three Musketeers*, illustrated, one of Joe-Jim's carefully stolen library. "Say, that's a wonderful book. Hugh, is Earth really like that?"

"Of course. Doesn't it say so in the book?"

Ertz chewed his lip and thought about it. "What is a house?"

"A house? A house is a sort of a. . . a sort of a compartment."

"That's what I thought at first, but how can you ride on a compartment?"

"Huh? What do you mean?"

"Why, all through the book they keep climbing on their houses and riding away."

"Let me see that book," Joe ordered. Ertz handed it to him. Joe-Jim thumbed through it rapidly. "I see what you mean. Idiot! They ride horses, not houses."

"Well, what's a horse?"

"A horse is an animal, like a big hog, or maybe like a cow. You squat up on top of it and let it carry you along."

Ertz considered this. "It doesn't seem practical. Look, when you ride in a litter, you tell the chief porter where you want to go. How can you tell a cow where you want to go?"

"That's easy. You have a porter lead it."

Ertz conceded the point. "Anyhow, you might fall off. It isn't practical. I'd rather walk."

"It's quite a trick," Joe explained. "Takes practice."

"Can you do it?"

Jim sniggered. Joe looked annoyed. "There are no horses in the Ship."

"OK, O.K. But look. These guys Athos, Porthos, and Aramis, they had something--"

"We can discuss that later," Hugh interrupted. "Bobo is back. Are you ready to go, Bill?"

"Don't get in a hurry, Hugh. This is important. These chaps had knives."

"Sure. Why not?"

"But they were better than our knives. They had knives as long as your arm, maybe longer. If we are going to fight the whole Crew, think what an advantage that would be."

"Hm-m-m." Hugh drew his knife and looked at it, cradling it in his palm. "Maybe. You couldn't throw it as well."

"We could have throwing knives, too."

"Yes, I suppose we could."

The twins had listened Without comment. "He's right," put in Joe. "Hugh, you take care of placing the knives. Jim and I have some reading to do." Both of Joe-Jim's heads were busy thinking of other books they owned, books. that discussed in saguinary detail the infinitely varied methods used by mankind to shorten the lives of enemies. He was about to institute a War College Department of Historical Research, although he called his project by no such fancy term.

"O.K.," Hugh agreed, "but you will have to say the word to them."

"Right away." Joe-Jim stepped out of his apartment into the passageway where Bobo had assembled a couple of dozen of Joe-Jim's henchmen among the muties. Save for Long Arm, Pig, and Squatty, who had taken part in the rescue of Hugh, they were all strangers to Hugh, Alan, and Bill, and they were all sudden death to strangers.

Joe-Jim motioned for the three from the lower decks to join him. He pointed them out to the muties, and ordered them to look closely and not to forget: these three were to have safe passage and protection wherever they went. Furthermore, in Joe-Jim's absence his men were to take orders from any of them.

They stirred and looked at each other. Orders they were used to, but from Joe-Jim only.

A big-nosed individual rose up from his squat and addressed them. He looked at Joe-Jim, but his words were intended for all. "I am Jack-of-the-Nose. My blade is sharp and my eye is keen. Joe-Jim with the two wise heads is my Boss and my knife fights for him. But Joe is my Boss, not strangers from heavy decks. What do say, knives? Is that not the Rule?"

He paused. The others had listened to him stealing glances at Joe-Jim. Joe muttered something of the corner of his mouth to Bobo. Jack O'Nose opened his mouth to continue. There was a smash of splintering teeth, a crack from a broken neck; his mouth stopped with a missile.

Bobo reloaded his slingshot. The body, not yet still, settled slowly to the deck. Joe-Jim waved a hand it. "Good eating!" Joe announced. "He's yours." The muties converged on the body as if they had suddenly been unleashed. They concealed it completely in a busy grunting pile-up. Knives out, they cuffed and crowded each other for a piece of the prize.

Joe-Jim waited patiently for the undoing to be over, then, when the place where Jack O'Nose had been was no more than a stain on the deck and the several polite arguments over the sharing had died down, he started again; Joe spoke. "Long Arm, you and Forty-one and the Ax go down with Bobo, Alan and Bill. The rest here."

Bobo trotted away in the long loping strides, sped on by the low pseudogravity near the axis of rotation of Ship. Three of the muties detached themselves from pack and followed. Ertz and Alan Mahoney hurried catch up.

When he reached the nearest staircase trunk, he skipped out into space without breaking his stride letting centrifugal force carry him down to the next. Alan and the muties followed; but Ertz paused on the edge and looked back. "Jordan keep you, brother!" he sang out.

Joe-Jim waved to him. "And you," acknowledged Joe.

"Good eating!" Jim added.

"Good eating!"

Bobo led them down forty-odd decks, well into no man's land inhabited neither by mutie nor crew, stopped. He pointed in succession to Long Arm, Forty-one, and the Ax. "Two Wise Heads say for you to watch here. You first," he added, pointing again to Forty-one. "It's like this," Ertz amplified. "Alan and I are going down to heavyweight level. You three are to keep a guard here, one at a time, so that I will be able to send messages back up to Joe-Jim. Get it?"

"Sure. Why not?" Long Arm answered.

"Joe-Jim says it," Forty-one commented with a note of finality in his voice. The Ax grunted agreeably.

"O.K.," said Bobo. Forty-one sat down at the stairwell, letting his feet hang over, and turned his attention to food which he had been carrying tucked under his left arm.

Bobo slapped Ertz and Alan on their backs. "Good eating," he bade them, grinning. When he could get his breath, Ertz acknowledged the courteous thought, then dropped at once to the next lower deck, Alan close after him. They had still many decks to go to 'civilization.'

Commander Phineas Narby, Executive Assistant to Jordan's Captain, in rummaging through the desk of the Chief Engineer was amused to find that Bill Ertz had secreted therein a couple of Unnecessary books. There were the usual Sacred books, of course, including the priceless *Care and Maintenance of the Auxiliary Fourstage Converter* and the *Handbook of Power, Light, and Conditioning, Starship Vanguard*. These were Sacred books of the first order, bearing the imprint of Jordan himself, and could lawfully be held only by the Chief Engineer.

Narby considered himself a skeptic and rationalist. Belief in Jordan was a good thing—for the Crew. Nevertheless the sight of a title page with the words 'Jordan Foundation' on it stirred up within him a trace of religious awe such as he had not felt since before he was admitted to scientisthood.

He knew that the feeling was irrational; probably there had been at some time in the past some person or persons called Jordan. Jordan might have been an early engineer or captain who codified the common sense and almost instinctive rules for running the Ship. Or, as seemed more likely, the Jordan myth went back much farther than this book in his hand, and its author had simply availed himself of the ignorant superstitions of the Crew to give his writings authority. Narby knew how such things were done; he planned to give the new policy with respect to the muties the same blessing of Jordan when the time was ripe for it to be put into execution. Yes, order and discipline and belief in authority were good things, for the Crew. It was equally evident that a rational, coolheaded common sense was a proper attribute for the scientists who were custodians of the Ship's welfare, common sense and a belief in nothing but facts.

He admired the exact lettering on the pages of the book he held. They certainly had excellent clerks in those ancient times; not the sloppy draftsmen he was forced to put up with, who could hardly print two letters alike.

He made a mental note to study these two indispensable handbooks of the engineering department before turning them over to Ertz's successor. It would be well, he thought, not to be too dependent on the statements of the Chief Engineer when he himself succeeded to the captaincy. Narby had no particular respect for engineers, largely because he had no particular talent for engineering. When he had first reached scientisthood and had been charged to defend the spiritual and material welfare of the Crew, had sworn to uphold the Teachings of Jordan, he soon discovered that administration and personnel management were more in his lines than tending the converter or servicing the power lines. He had served as clerk, village administrator, recorder to the Council, personnel officer, and was now chief executive for Jordan's Captain himself, ever since an unfortunate and rather mysterious accident had shortened the life of Narby's predecessor in that post.

His decision to study up on engineering before a new Chief Engineer was selected brought to mind the problem of choosing a new chief. Normally the Senior Watch Officer for the Converter would become Chief Engineer when a chief made the Trip, but in this case, Mort Tyler, the Senior Watch, had made the Trip at the same time; his body had been found, stiff and cold, after the mutie raid which had rescued that heretic, Hugh Hoyland. That left the choice wide open and Narby was a bit undecided as to whom he should suggest to the Captain.

One thing was certain; the new chief must not be a man with as much aggressive initiative as Ertz. Narby admitted that Ertz had done a good job in organizing the Crew for the proposed extermination of the muties, but his very efficiency had made him too strong a candidate for succession to the captaincy, if and when. Had he thought about it overtly Narby might have admitted to himself that the present Captain's life span had extended unduly because Narby was not absolutely certain that Ertz would not be selected. What he did think was that this might be a good time for the old Captain to surrender his spirit to Jordan. The fat old fool had long outlived his usefulness; Narby was tired of having to wheedle him into giving the proper orders. If the Council were faced with the necessity of selecting a new Captain at this time, there was but one candidate available. Narby put the book down, his mind made up.

The simple decision to eliminate the old Captain carried with it in Narby's mind no feeling of shame, nor sin, nor disloyalty. He felt contempt but not dislike for the Captain, and no mean spirit colored his decision to kill him. Narby's plans were made on the noble level of statesmanship. He honestly believed that his objective was the welfare of the entire Crew; commonsense administration, order and discipline, good eating for everyone. He selected himself because it was obvious to him that he was best fitted to accomplish those worthy ends. That some must make the Trip in order that these larger interests be served he did not find even mildly regrettable, but he bore them no malice.

"What in the Huff are you doing at my desk?"

Narby looked up to see the late Bill Ertz standing over him, not looking pleased. He looked again, then as an afterthought closed his mouth. He had been so certain, when Ertz failed to reappear after the raid, that he had made the Trip and was in all probability butchered and eaten; so certain that it was now a sharp wrench to his mind to see Ertz standing before him, aggressively alive. But he pulled himself together.

"Bill! Jordan bless you, man, we thought you had made the Trip! Sit down, sit down, and tell me what happened to you."

"I will if you will get out of my chair," Ertz answered bitingly.

"Oh, sorry!" Narby hastily vacated the chair at Ertz's desk and found another.

"And now," Ertz continued, taking the seat Narby had left, "you might explain why you were going through my writings."

Narby managed to look hurt. "Isn't that obvious? We assumed you were dead. Someone had to take over and attend to your department until a new chief was designated. I was acting on behalf of the Captain."

Ertz looked him in the eyes. "Don't give me that guff, Narby. You know and I know who puts words in the Captain's mouth; we've planned it often enough. Even if you did think I was dead, it seems to me you could wait longer than the time between two sleeps to pry through my desk."

"Now really, old man, when a person is missing after a mutie raid, it's a commonsense assumption that he has made the Trip."

"O.K., O.K., skip it. Why didn't Mort Tyler take over in the meantime?"

"He's in the Converter."

"Killed, eh? But who ordered him put in the Converter? That much mass will make a terrific peak in the load."

"I did, in place of Hugh Hoyland. Their masses were nearly the same, and your requisition for the mass of Hugh Hoyland was unfilled."

"Nearly the same isn't good enough in handling the Converter. I'll have to check on it." He started to rise.

"Don't get excited," said Narby. "I'm not an utter fool in engineering, you know. I ordered his mass to be trimmed according to the same schedule you had laid out for Hoyland."

"Well, all right. That will do for now. But I will have to check it.

We can't afford to waste mass."

"Speaking of waste mass," Narby said sweetly, "I found a couple of Unnecessary books in your desk."

"Well?"

"They are classed as mass available for power, you know."

"So? And who is the custodian of mass allocated for power?"

"You are certainly. But what were they doing in your desk?"

"Let me point out to you, my dear Captain's Best Boy, that it lies entirely within my discretion where I choose to store mass available for power."

"Hm-m-m. I suppose you are right. By the way, if you don't need them for the power schedule at once, would you mind letting me read them?"

"Not at all, if you want to be reasonable about it. I'll check them out to you: have to do that; they've already been centrifuged. Just be discreet about it."

"Thanks. Some of those ancients had vivid imaginations. Utterly crazy, of course, but amusing for relaxation."

Ertz got out the two volumes and prepared a receipt for Narby to sign. He did this absentmindedly, being preoccupied with the problem of how and when to tackle Narby. Phineas Narby he knew to be a key man in the task he and his blood brothers had undertaken, perhaps the key man. If he could be won over... "Fine," he said, when Narby had signed, "I wonder if we followed the wisest policy in Hoyland's case." Narby looked surprised, but said nothing.

"Oh, I don't mean that I put any stock in his story," Ertz added hastily, "but I feel that we missed an opportunity. We should have kidded him along. He was a contact with the muties. The worst handicap we work under in trying to bring mutie country under the rule of the Council is the fact that we know very little about theni. We don't know how many of them there are, nor how strong they are, or how well organized. Besides that, we will have to carry the fight to them and that's a big disadvantage. We don't really know our way around the upper decks. If we had played along with him and pretended to believe his story, we might have learned a lot of things."

"But we couldn't rely on what he told us," Narby pointed out

"We didn't need to. He offered us an opportunity to go all the way to no-weight, and look around."

Narby looked astounded. "You surely aren't serious? A member of the Crew that trusted the muties' promise not to harm him wouldn't get up to no-weight; he'd make the Trip—fast!"

"I'm not so certain about that," Ertz objected. "Hoyland believed his own story, I'm sure of that. And--"

"What! All that utter nonsense about the Ship being capable of moving. The solid Ship." He pounded the bulkhead. "No one could believe that."

"But I tell you he did. He's a religious fanatic, granted. But he saw something up there, and that was how he interpreted it. We could have gone up to see whatever it was he was raving about and used the chance to scout out the muties."

"Utterly foolhardy!"

"I don't think so. He must have a great deal of influence among the muties; look at the trouble they went to just to rescue him. If he says he can give us safe passage up to no-weight, I think he can."

"Why this sudden change of opinion?"

"It was the raid that changed my mind. If anyone had told me that a gang of muties would come clear down to high-weight and risk their necks to save the life of one man I would not have believed him. But it happened. I'm forced to revise my opinions. Quite aside from his story, it's evident that the muties will fight for him and probably take orders from him. If that is true, it would be worth while to pander to his religious convictions if it would enable us to gain control over the muties without having to fight for it."

Narby shrugged it off. "Theoretically you may have something there. But why waste time over might-have-beens? If there was such an opportunity, we missed it."

"Maybe not. Hoyland is still alive and back with the muties. If I could figure out some way of getting a message to him, we might still be able to arrange it."

"But how could you?"

"I don't know exactly. I might take a couple of the boys and do some climbing. If we could capture a mutie without killing him, it might work out."

"A slim chance."

"I'm willing to risk it"

Narby turned the matter over in his mind. The whole plan seemed to him to be filled with long chances and foolish assumptions. Nevertheless if Ertz were willing to take the risk and it did work, Narby's dearest ambition would be much nearer realization. Subduing the unities by force would be a long and bloody job, perhaps an impossible job. He was clearly aware of its difficulty.

If it did not work, nothing was lost, but Ertz. Now that he thought it over, Ertz would be no loss at this point in the game. Hm-m-m.

"Go ahead," he said. "You are a brave man, but its a worthwhile venture."

"O.K.," Ertz agreed. "Good eating."

Narby took the hint. "Good eating," he answered, gathered up the books, and left. It did not occur to him until later that Ertz had not told him where he had been for so long.

And Ertz was aware that Narby had not been entirely frank with him, but, knowing Narby, he was not surprised. He was pleased enough that his extemporaneous groundwork for future action had been so well received. It never did occur to him that it might have been simpler and more effective to tell the truth.

Ertz busied himseif for a short time in making a routine inspection of the Converter and appointed an acting Senior Watch Officer. Satisfied that his department could then take care of itself during a further absence, he sent for his chief porter and told the servant to fetch Alan Mahoney from his village. He had considered ordering his litter and meeting Mahoney halfway, but he decided against it as being too conspicuous.

Alan greeted him with enthusiasm. To him, still an unmarried cadet and working for more provident men when his contemporaries were all heads of families and solid men of property, the knowledge that he was blood brother to a senior scientist was quite the most important thing that had ever happened to him, even overshadowing his recent adventures, the meaning of which he was hardly qualified to understand anyway.

Ertz cut him short, and hastily closed the door to the outer engineering office. "Walls have ears," he said quietly, "and certainly clerks have ears, and tongues as well. Do you want us both to make the Trip?"

"Aw, gosh, Bill . . . I didn't mean to--"

"Never mind. I'll meet you on the same stair trunk we came down by, ten decks above this one. Can you count?"

"Sure, I can count that much. I can count twice that much. One and one makes two, and one more makes three, and one more makes four, and one makes five, and--"

"That's enough. I see you can. But I'm relying more on your loyalty and your knife than I am on your mathematical ability. Meet me there as soon as you can. Go up somewhere where you won't be noticed."

Forty-one was still on watch when they reached the rendezvous. Ertz called him by name while standing out of range of slingshot or thrown knife, a reasonable precaution in dealing with a creature who had grown to man size by being fast with his weapons. Once identification had been established, he directed the guard to find Hugh Hoyland. He and Alan sat down to wait.

Forty-one failed to find Hugh Hoyland at Joe-Jim's apartment. Nor was Joe-Jim there. He did find Bobo, but the pinhead was not very helpful. Hugh, Bobo told him, had gone up where-everybody-flies. That meant very little to Forty-one; he had been up to no-weight only once in his life. Since the level of weightlessness extended the entire length of the Ship, being in fact the last concentric cylinder around the Ship's axis, not that Forty-one could conceive it in those terms, the information that Hugh. had headed for no-weight was not helpful.

Forty-one was puzzled. An order from Joe-Jim was not to be ignored and he had got it through his not overbright mind that an order from Ertz carried the same weight. He woke Bobo up again. "Where is the Two Wise Heads?"

"Gone to see knifemaker." Bobo closed his eyes again.

That was better. Forty-one knew where the knifemaker lived. Every mutie had dealings with her; she was the indispensable artisan and tradesman of mutie country. Her person was necessarily taboo; her workshop and the adjacent neighborhood were neutral territory for all. He scurried up two decks and hurried thence.

A door reading THERMODYNAMIC LABORATORY: KEEP OUT was standing open. Forty-one could not read; neither the name nor the injunction mattered to him. But he could hear voices, one of which be identified as coming from the twins, the other from the knifemaker. He walked in. "Boss," be began.

"Shut up," said Joe. Jim did not look around but continued his argument with the Mother of Blades. "You'll make knives," he said, "and none of your lip."

She faced him, her four calloused hands set firmly on her broad hips. Her eyes were reddened from staring into the furnace in which she heated her metal; sweat ran down her wrinkled face into the sparse gray mustache which disfigured her upper lip, and dripped onto her bare chest. "Sure I make knives," she snapped. "Honest knives. Not pig-stickers like you want me to make. Knives as long as your arm, ptui!" She spat at the cherry-red lip of the furnace.

"Listen, you old Crew bait," Jim replied evenly, "you'll make knives the way I tell you to, or I'll toast your feet in your own furnace. Hear me?"

Forty-one was struck speechless. No one ever talked back to the Mother of Blades; the Boss was certainly a man of power!

The knifemaker suddenly cracked. "But that's not the right way to make knives," she complained shrilly. "They wouldn't balance right. I'll show you." She snatched up two braces of knives from her workbench and let fly at a cross-shaped target across the room—not in succession, but all four arms swinging together, all four blades in the air at once. They spwiged into the target, a blade at the extreme end of each arm of the cross. "See? You couldn't do that with a long knife. It would fight with itself and not go straight."

"Boss--" Forty-one tried again. Joe-Jim handed him a mouthful of knuckles without looking around.

"I see your point," Jim told the knifemaker, "but we don't want these knives for throwing. We want them for cutting and stabbing up close. Get on with it; I want to see the first one before you eat again."

The old woman bit her lip. "Do I get my usuals?" she said sharply.

"Certainly you get your usuals," he assured her. "A tithe on every kill till the blades are paid for, and good eating all the time you work."

She shrugged her misshapen shoulders. "O.K." She turned, tonged up a long flat fragment of steel with her two left hands and clanged the stock into the furnace. Joe-Jim turned to Forty-one.

"What is it?" Joe asked.

"Boss, Ertz sent me to get Hugh."

"Well, why didn't you do it?"

"I don't find him. Bobo says he's gone up to no-weight."

"Well, go get him. No, that won't do; you wouldn't know where to find him. I'll have to do it myself. Go back to Ertz and tell him to wait."

Forty-one hurried off. The Boss was all right, but it was not good to tarry in his presence.

"Now you've got us running errands," Jim commented sourly. "How do you like being a blood brother, Joe?"

"You got us into this."

"So? The blood-swearing was your idea."

"Damn it, you know why I did that. They took it seriously. And we are going to need all the help we can get, if we are to get out of this with a skin that will hold water."

"Oh? So you didn't take it seriously?"

"Did you?"

Jim smiled cynically. "Just about as seriously as you do, my dear, deceitful brother. As matters stand now, it is much, much healthier for you and me to keep to the bargain right up to the hilt. 'All for one and one for all!'"

"You've been reading Dumas again."

"And why not?"

"That's O.K. But don't be a damn fool about it."

"I won't be. I know which side of the blade is edged."

Joe-Jim found Squatty and Pig sleeping outside the door which led to the Control Room. He knew then that Hugh must be inside, for he had assigned the two as personal bodyguards to Hugh. It was a foregone conclusion anyhow; if Hugh had gone up to no-weight, he would be heading either for Main Drive, or the Control Room, more probably the Control Room. The place held a tremendous fascination for Hugh. Ever since the earlier time when Joe-Jim had almost literally dragged him into the Control Room and had forced him to see with his own eyes that the Ship was not the whole world but simply a vessel adrift in a much larger world—a vessel that could be driven and moved—ever since that time and throughout the period that followed while he was still a captured slave of Joe-Jim's, he had been obsessed with the idea of moving the Ship, of sitting at the controls and making it go!

It meant more to him than it could possibly have meant to a space pilot from Earth. From the time that the first rocket made the little jump from Terra to the Moon, the spaceship pilot has been the standard romantic hero whom every boy wished to emulate. But Hugh's ambition was of no such picayune caliber; he wished to move his world. In Earth standards and concepts it would be less ambitious to dream of equipping the Sun with jets and go gunning it around the Galaxy.

Young Archimedes had his lever; he sought a fulcrum.

Joe-Jim paused at the door of the great silver stellarium globe which constituted the Control Room and peered in. He could not see Hugh, but he knew that he must be at the controls in the chair of the chief astrogator, for the lights were being manipulated. The images of the stars were scattered over the inner surface of the sphere producing a simulacrum of the heavens outside the Ship. The illusion was not fully convincing from the door where Joe-Jim rested; from the center of the sphere it would be complete.

Sector by sector the stars snuffed out, as Hugh manipulated the controls from the center of the sphere. A sector was left shining on the far side forward. It was marked by a large and brilliant orb, many times as bright as its companions. Joe-Jim ceased watching and pulled himself hand over hand up to the control chairs. "Hugh!" Jim called out.

"Who's there?" demanded Hugh and leaned his head out of the deep chair. "Oh, it's you. Hello."

"Ertz wants to see you. Come on out of there."

"O.K. But come here first. I want to show you something."

"Nuts to him," Joe said to his brother. But Jim answered, "Oh, come on and see what it is. Won't take long."

The twins climbed into the control station and settled down in the chair next to Hugh's. "What's up?"

"That star out there," said Hugh, pointing at the brilliant one. "It's grown bigger since the last time I was here."

"Huh? Sure it has. It's been getting brighter for a long time. Couldn't see it at all first time I was ever in here."

"Then we're closer to it."

"Of course," agreed Joe. "I knew that. It just goes to prove that the Ship is moving."

"But why didn't you tell me about this?"

"About what?"

"About that star. About the way it's been growing bigger."

"What difference does it make?"

"What difference does it make! Why, good Jordan, man, that's it. That's where we're going. That's the End of the Trip!"

Joe-Jim, both of him, was momentarily startled. Not being himself concerned with any objective other than his own safety and comfort, it was hard for him to realize that Hugh, and perhaps Bill Ertz as well, held as their first objective the recapturing of the lost accomplishments of their ancestors' high order to complete the long-forgotten, half-mythical Trip to Far Centaurus.

Jim recovered himself. "Hm-m-m. Maybe. What makes you think that star is Far Centaurus?"

"Maybe it isn't. I don't care. But it's the star we are closest to and we are moving toward it. When we don't know which star is which, one is as good as another. Joe-Jim, the ancients must have had some way of telling the stars apart."

"Sure they did," Joe confirmed, "but what of it? You've picked the one you want to go to. Come on. I want to get back down."

"All right," Hugh agreed reluctantly. They began the long trip down.

Ertz sketched out to Joe-Jim and Hugh his interview with Narby. "Now my idea in coming up," he continued, "is this: I'll send Alan back down to heavyweight with a message to Narby, telling him that I've been able to get in contact with you, Hugh, and urging him to meet us somewhere above Crew country to hear what I've found out."

"Why don't you simply go back and fetch him yourself?" objected Hugh.

Ertz looked slightly sheepish. "Because you tried that method on me, and it didn't work. You returned from mutie country and told me the wonders you had seen. I didn't believe you and had you tried for heresy. If Joe-Jim hadn't rescued you, you would have gone to the Converter. If you had not hauled me up to no-weight and forced me to see with my own eyes, I never would have believed you. I assure you Narby won't be any easier a lock to force than I was. I want to get him up here, then show him the stars and make him see, peacefully if we can; by force if we must."

"I don't get it," said Joe. "Why wouldn't it be simpler to cut his throat?"

"It would be a pleasure. But it wouldn't be smart. Narby can be a tremendous amount of help to us. Jim, if you knew the Ship's organization the way I do, you would see why. Narby carries more weight in the Council than any other Ship's officer and he speaks for the Captain. If we win him over, we may never have to fight at all. if we don't ... well, I'm not sure of the outcome, not if we have to fight."

"I don't think he'll come up. He'll suspect a trap."

"Which is another reason why Alan must go rather than myself. He would ask me a lot of embarrassing questions and be dubious about the answers. Alan he won't expect so much of." Ertz turned to Alan and continued, "Alan, you don't know anything when he asks you but just what I'm about to tell you. Savvy?"

"Sure. I don't know nothing, I ain't seen nothing, I ain't heard nothing." With frank simplicity he added, "I never did know much."

"Good. You've never laid eyes on Joe-Jim, you've never heard of the stars. You're just my messenger, a knife I took along to help me. Now here's what you are to tell him." He gave Alan the message for Narby, couched in simple but provocative terms, then made sure that Alan had it all straight. "All right, on your way! Good eating."

Alan slapped the grip of his knife, answered, "Good eating!" and sped away.

It is not possible for a peasant to burst precipitously into the presence of the Captain's Executive; Alan found that out. He was halted by the master-at-arms on watch outside Narby's suite, cuffed around a bit for his insistence on entering, referred to a boredly unsympathetic clerk who took his name and told him to return to his village and wait to be summoned. He held his ground and insisted that he had a message of immediate importance from the Chief Engineer to Commander Narby. The clerk looked up again. "Give me the writing."

"There is no writing."

"What? That's ridiculous. There is always a writing. Regulations."

"He had no time to make a writing. He gave me a word message."

"What is it?"

Alan shook his head. "It is private, for Commander Narby only. I have orders."

The clerk looked his exasperation.

But, being only a probationer, he forewent the satisfaction of direct and immediate disciplining of the recalcitrant churl in favor of the safer course of passing the buck higher up.

The chief clerk was brief. "Give me the message."

Alan braced himself and spoke to a scientist in a fashion be had never used in his life, even to one as junior, as this passed clerk. "Sir, all I ask is for you to tell Commrnder Narby that I have a message for him from Chief Engineer Ertz. If the message is not delivered, I won't be the one to go to the Converter! But I don't dare give the message to anyone else."

The under official pulled at his lip, and decided to take a chance on disturbing his superior.

Alan delivered his message to Narby in a low voice in order that the orderly standing just outside the door might not overhear. Narby stared at him. "Ertz wants me to come along with you up to mutie country?"

"Not all the way up to mutie country, sir. To a point in between, where Hugh Hoyland can meet you."

Narby exhaled noisily. "It's preposterous. I'll send a squad of knives up to fetch him down to me."

Alan delivered the balance of his message. This time he carefully raised his voice to ensure that the orderly, and, if possible, others might hear his words. "Ertz said to tell you that if you were afraid to go, just to forget the whole matter. He will take it up with the Council himself."

Alan owed his continued existence thereafter to the fact that Narby was the sort of man who lived by shrewdness rather than by direct force. Narby's knife was at his belt; Alan was painfully aware that he had been required to deposit his own with the master-at-arms.

Narby controlled his expression. He was too intelligent to attribute the insult to the oaf before him, though he promised himself to give said oaf a little special attention at a more convenient time. Pique, curiosity, and potential loss of face all entered into his decision. "I'm coming with you," he said savagely. "I want to ask him if you got his message straight."

Narby considered having a major guard called out to accompany him, but he discarded the idea. Not only would it make the affair extremely public before he had an opportunity to judge its political aspects, but also it would cost him almost as much face as simply refusing to go. But he inquired nervously of Alan as Alan retrieved his weapon from the master-at-arms, "You're a good knife?"

"None better," Alan agreed cheerfully.

Narby hoped that the man was not simply boasting. Muties! Narby wished that he himself had found more time lately for practice in the manly arts.

Narby gradually regained his composure as he followed Alan up toward low-weight. In the first place nothing happened, no alarms; in the second place Alan was obviously a cautious and competent scout, one who moved alert and noiselessly and never entered a deck without pausing to peer cautiously around before letting his body follow his eye. Narby might have been more nervous had be hearing what Alan did hear: little noises from the depths of the great dim passageways, rustlings which told him that their progress was flanked on all sides. This worried Alan subconsciously, although he had expected something of the sort; he knew that both Hugh and Joe-Jim were careful captains who would not neglect to cover an approach. He would have worried more if he had not been able detect a reconnaissance which should have been present.

When he approached the rendezvous some twenty decks above the highest civilized level, he stopped and whistled. A whistle answered him. "It's Alan," he called out.

"Come up and show yourself?" Alan did so, without neglecting his usual caution. When be saw no one but his friends: Ertz, Hugh, Joe-Jim, and Bobo, be motioned for Narby to foflow him.

The sight of Joe-Jim and Bobo broke Narby's unsteady calm with a sudden feeling that he had been trapped. He snatched at his knife and backed clumsily down the stair then turned. Bobo's knife was out even faster. For a split moment the outcome hung balanced, ready to fall either way. But Joe-Jim slapped Bobo across the face, took his knife from him and let it clatter to the deck, then relieved him of his slingshot.

Narby was in full flight, with Hugh and Ertz calling vainly after him. "Fetch him, Bobo!" Jim commanded, "and do not hurt him." Bobo lumbered away.

He was back in fairly short order. "Run fast," be commented. He dropped Narby to the deck where the officer lay almost quiet while he fought to catch his breath. Bobo took Narby's knife from his own belt and tried it by shaving coarse black hairs from his left forearm. "Good blade," he approved.

"Give it back to him," Jim ordered. Bobo looked extremely startled but complied wistfully. Joe-Jim returned Bobo's own weapons to him.

Narby matched Bobo's surprise at regaining his sidearm, but he concealed it better. He even managed to accept it with dignity.

"Look," Ertz began in worried tones, "I'm sorry you got your wind up, Fin. Bobo's not a bad sort. It was the only way to get you back."

Narby fought with himself to regain the cool self-discipline with which he habitually met the world. Damn! he told himself, this situation is preposterous. Well... "Forget it," he said shortly. "I was expecting to meet you; I didn't expect a bunch of armed muties. You have an odd taste in playmates, Ertz."

"Sorry," Bill Ertz replied, "I guess I should have warned you." a piece of mendacious diplomacy. "But they're all right. Bobo you've met. This is Joe-Jim. He's a. . . a sort of a Ship's officer among the muties."

"Good eating," Joe acknowledged politely.

"Good eating," Narby replied mechanically.

"Hugh you know, I think." Narby agreed that he did.

An embarrassed pause followed. Narby broke it.

"Well," he said, "you must have had some reason to send word for me to come up here. Or was it just to play games?"

"I did," Ertz agreed. "I—Shucks, I hardly know where to start. See here, Narby, you won't believe this, but I've seen. Everything Hugh told us was true. I've been in the Control Room. I've seen the stars. I know?"

Narby stared at him. "Ertz," he said slowly, "you've gone out of your mind."

Hugh Hoyland spoke up excitedly. "That's because you haven't seen. It moves, look you. The Ship moves like a--"

"Fit handle this," Ertz cut in. "listen to me, Narby. What it all means you will soon decide for yourself, but I can tell you what I saw. They took me up to no-weight and into the Captain's veranda. That's a compartment with a glass wall. You can stare right out through into a great black empty space: big, bigger than anything could be. Bigger than the Ship. And there were lights out there, stars, just like the ancient myths said."

Narby looked both amazed and disgusted. "Where's your logic, man? I thought you were a scientist. What do you mean, 'bigger than the Ship'? That's an absurdity, a contradiction in terms. By definition, the Ship is the Ship. All else is a part of it."

Ertz shrugged helplessly. "I know it sounds that way. I can't explain it; it defies all logic. It's—Oh, Huff! You'll know what I mean when you see it."

"Control yourself," Narby advised him. "Don't talk nonsense. A thing is logical or it isn't. For a thing to be it must occupy space. You've seen, or thought you saw, something remarkable, but whatever it was, it can be no larger than the compartment it was in. You can't show me anything that contradicts an obvious fact of nature."

"I told you I couldn't explain it."

"Of course you can't."

The twins had been whispering disgustedly, one head to the other. "Stop the chatter," Joe said in louder tones. "We're ready to go. Come on."

"Sure," Ertz agreed eagerly, "let's drop it, Narby, until you have seen it. Come on now; it's a long climb."

"What?" Narby demanded. "Say, what is this? Go where?"

"Up to the Captain's veranda, and the Control Room."

"Me? Don't be ridiculous. I'm going down at once."

"No, Narby," Ertz denied. "That's why I sent for you. You've got to see."

"Don't be silly. I don't need to see; common sense gives sufficient answer. However," he went on, "I do want to congratulate you on making a friendly contact with the muties. We should be able to work out some means of cooperation. I think--"

Joe-Jim took one step forward. "You're wasting time," he said evenly. "We're going up; you, too. I really do insist."

Narby shook his head. "It's out of the question. Some other time, perhaps, after we have worked out a method of cooperation."

Hugh stepped in closer to him from the other side. "You don't seem to understand. You're going now."

Narby glanced the other way at Ertz. Ertz nodded. "That's how it is, Narby."

Narby cursed himself silently. Great Jordan! What in the Ship was he thinking of to let himself get into such a position? He had a distinct feeling that the two-headed man would rather that he showed fight. Impossible, preposterous situation. He cursed again to himself, but gave way as gracefully as he could. "Oh, well! Rather than cause an argument I'll go now. Let's get on with it. Which way?"

"Just stick with me," advised Ertz. Joe-Jim whistled loudly in a set pattern. Muties seemed to grow out of the floor plates, the bulkheads, the overhead, until six or eight more had been added to the party. Narby was suddenly sick with the full realization of just how far he had strayed from the way of caution. The party moved up.

It took them a long time to get up to no-weight, as Narby was not used to climbing. The steady reduction in weight as they rose from deck to deck relieved him somewhat but the help afforded was more than offset by the stomach qualms he felt as weight dropped away from him. He did not have a true attack of spacesickness; like all born in the Ship, muties and Crew, he was more or less acclimated to lessened weight, but he had done practically no climbing since reckless adolescence. By the time they reached the innermost deck of the Ship he was acutely uncomfortable and hardly able to proceed.

Joe-Jim sent the added members of the party back below and told Bobo to carry Narby. Narby waved him away. "I can make it," he protested, and by sheer stubborn will forced his body to behave. Joe-Jim looked him over and countermanded the order. By the time a long series of gliding dives had carried them as far forward as the transverse bulkhead beyond which lay the Control Room, he was reasonably comfortable again.

They did not stop first at the Control Room, but, in accordance with a plan of Hugh's, continued on to. the Captain's veranda. Narby was braced for what he saw there, not only by Ertz's confused explanation, but because Hugh had chattered buoyantly to him about it all the latter part of the trip. Hugh was feeling warmly friendly to Narby by the time they arrived; it was wonderful to have somebody to listen!

Hugh floated in through the door ahead of the others, executed a neat turn in mid-air, and steadied himself with one hand on the back of the Captain's easy chair. With the other he waved at the great view port and the starry firmament beyond it. "There it is!" he exulted. "There it is. Look at it, isn't it wonderful?"

Narby's face, showed no expression, but he looked long and intently at the brilliant display. "Remarkable," he conceded at last, "remarkable. I've never seen anything like it."

"Remarkable ain't half," protested Hugh. "Wonderful is the word."

"O.K., 'wonderful,'" Narby assented. "Those bright little lights ... you say those are the stars that the ancients talked about?"

"Why, yes," agreed Hugh, feeling slightly disconcerted without knowing why, "only they're not little. They're big, enormous things, like the Ship. They just look little because they are so far away. See that very bright one, that big one, down to the left? It looks big because it's closer. I think that is Far Centaurus, but I'm not sure," he admitted in a burst of frankness.

Narby glanced quickly at him, then back to the big star. "How far away is it?"

"I don't know. But we'll find out. There are instruments to measure such things in the Control Room, but I haven't got the hang of them entirely. It doesn't matter, though. We'll get there yet!"

"Huh?"

"Sure. Finish the Trip."

Narby looked blank, but said nothing. His was a careful and orderly mind, logical to a high degree. He was a capable executive and could make rapid decisions when necessary, but he was by nature inclined to reserve his opinions when possible, until he had had time to chew over the data and assess it.

He was even more taciturn, in the Control Room. He listened and looked, but asked very few questions. Hugh did not care. This was his toy, his gadget, his baby. To show it off to someone who had never seen it and who would listen was all he asked.

At Ertz's suggestion the party stopped at Joe-Jim's apartment on the way back down. Narby must be committed to the same course of action as the blood brotherhood and plans must be made to carry out such action, if the stratagem which brought Narby to them was to be fruitful. Narby agreed to stop unreluctantly, having become convinced of the reality of the truce under which he made this unprecedented sortie into mutie country. He listened quietly while Ertz outlined what they had in mind. He was still quiet when Ertz had finished.

"Well?" said Ertz at last, when the silence had dragged on long enough to get on his nerves.

"You expect some comment from me?"

"Yes, of course. You figure into it." Narby knew that he did and knew that an answer was expected from him; he was stalling for time.

"Well..." Narby pursed his lips and fitted his fingertips together. "It seems to me that this problem divides itself into two parts. Hugh Hoyland, as I understand it, your purpose of carrying out the ancient Plan of Jordan cannot be realized until the Ship as a whole is pacified and brought under one rule; you need order and discipline for your purpose from Crew country clear to the Control Room. Is that right?"

"Certainly. We have to man the Main Drive and that means--"

"Please. Frankly, I am not qualified to understand things that I have seen so recently and have had no opportunity to study. As to your chances of success in that project, I would prefer to rely on the opinion of the Chief Engineer. Your problem is the second phase; it appears that you are necessarily interested in the first phase."

"Of course."

"Then let's talk about the first phase only. It involves matters of public policy and administration. I feel more at home there; perhaps my advice will be useful. Joe-Jim, I understand that you ate looking for an opportunity to effect a peace between the muties and the members of the Crew; peace and good eating? Right?"

"That's correct," Jim agreed.

"Good. It has been my purpose for a long time and that of many of the Ship's officers. Frankly it never occurred to me that it could be achieved other than by sheer force. We had steeled ourselves to the prospect of a long and difficult and bloody war. The records of the oldest Witness, handed down to him by his predecessors clear back to the time of the mythical Mutiny, make no mention of anything but war between muties and the Crew. But this is a better way; I am delighted."

"Then you're with us!" exclaimed Ertz.

"Steady, there are many other things to be considered. Ertz, you and I know, and Hoyland as well I should think, that not all of the Ship's officers will agree with us. What of that?"

"That's easy," put in Hugh Hoyland. "Bring them up to no-weight one at a time, let them see the stars and learn the truth."

Narby shook his head. "You have the litter carrying the porters. I told you this problem is in two phases. There is no point in trying to convince a man of something he won't believe when you need him to agree to something he can understand. After the Ship is consolidated it will be simple enough then to let the officers experience the Control Room and the stars."

"But--"

"He's right," Ertz stopped him. "No use getting cluttered up with a lot of religious issues when the immediate problem is a practical one.

There are numerous officers whom we could get on our side for the purpose of pacifying the Ship who would raise all kinds of fuss if we tackled them first on the idea that the Ship moves."

"But--"

"No 'buts' about it. Narby is right. It's common sense. Now, Narby, about this matter of those officers who may not be convinced, here's how we see it: In the first place it's your business and mine to win over as many as we can. Any who hold out against us—well, the Converter is always hungry."

Narby nodded, completely undismayed by the idea of assassination as a policy. "That seems the safest plan. Mightn't it be a little bit difficult?"

"That is where Joe-Jim comes in. We'll have the best knives in the Ship to back us up."

"I see. Joe-Jim is, I take it, Boss of all the muties?"

"What gave you that idea?" growled Joe, vexed without knowing why.

"Why, I supposed . . . I was given to understand--" Narby stopped. No one had told him that Joe-Jim was king of the upper decks; he had assumed it from appearances. He felt suddenly very uneasy. Had he been negotiating uselessly? What was the point in a pact with this two-headed monstrosity if he did not speak for the muties?

"I should have made that clear," Ertz said hastily. "Joe-Jim helps us to establish a new administration, then we will be able to back him up with knives to pacify the rest of the muties. Joe-Jim isn't Boss of all the muties, but he has the largest, strongest gang. With our help he soon will be Boss of all of them."

Narby quickly adjusted his mind to the new data. Muties against muties, with only a little help from the cadets of the Crew, seemed to him a good way to fight. On second thoughts, it was better than an outright truce at once, for there would be fewer muties to administer when it was all over, less chance of another mutiny. "I see," he agreed. "So ... Have you considered what the situation will be afterwards?"

"What do you mean?" inquired Hoyland.

"Can you picture the present Captain carrying out these plans?"

Ertz saw what he was driving at, and so did Hoyland vaguely.

"Go on," said Ertz.

"Who is to be the new Captain?" Narby looked squarely at Ertz.

Ertz had not thought the matter through; he realized now that the question was very pertinent, if the coup d'etat was not to be followed by a bloody scramble for power. He had permitted himself to dream of being selected as Captain, sometime. But he knew that Narby was pointed that way, too.

Ertz had been as honestly struck by the romantic notion of moving the Ship as Hoyland. He realized that his old ambition stood in the way of the plan; he renounced the old with only a touch of wistfulness.

"You will have to be Captain, Fin. Are you willing to be?"

Phineas Narby accepted gracefully. "I suppose so, if that's the way you want it. You would make a fine Captain, yourself, Ertz."

Ertz shook his head, understanding perfectly that Narby's full cooperation turned on this point. "I'll continue Chief Engineer. I want to handle the Main Drive of the Trip."

"Slow down!" Joe interrupted. "I don't agree to this. Why should he be Captain?"

Narby faced him. "Do you want to be Captain?" He kept his voice carefully free of sarcasm. A mutie for Captain!

"Huff's name, no! But why should you be? Why not Ertz or Hugh?"

"Not me," Hugh disclaimed. "I'll have no time for administration. I'm the astrogator."

"Seriously, Joe-Jim," Ertz explained, "Narby is the one of the group who can get the necessary cooperation out of the Ship's officers."

"Damn it, if they won't cooperate we can slit their throats."

"With Narby as Captain we won't have to slit throats."

"I don't like it," groused Joe. His brother shushed, "Why get excited about it, Joe? Jordan knows we don't want the responsibility."

"I quite understand your misgivings," Narby suggested suavely, "but I don't think you need worry. I would forced to depend on you, of course, to administer the muties. I would administer the lower decks, a job I am used to and you would be Vice-Captain, if you are willing serve, for the muties. It would be folly for me to attempt to administer directly a part of the Ship I'm not familiar with and people whose customs I don't know. I really can't accept the captaincy unless you are willing to help me in that fashion. Will you do it?"

"I don't want any part of it," protested Joe.

"I'm sorry. Then I must refuse to be Captain. I really can't undertake it if you won't help me that much."

"Oh, go ahead, Joe," Jim insisted. "Let's take it, for the time being at least. The job has to be done."

"All right," Joe capitulated, "but I don't like it."

Narby ignored the fact that Joe-Jim had not specifically agreed to Narby's elevation to the captaincy; no further mention was made of it.

The discussion of ways and means was tedious and need not be repeated. It was agreed that Ertz, Alan, and Narby should all return to their usual haunts and occupations while preparations were made to strike.

Hugh detailed a guard to see them safely down to high-weight. "You'll send Alan up when you are ready?" he said to Narby as they were about to leave.

"Yes," Narby agreed, "but don't expect him soon. Ertz and I will have to have time to feel out friends, and there's the matter of the old Captain. I'll have to persuade him to call a meeting of all the Ship's officers; he's never too easy to handle."

"Well, that's your job. Good eating!"

"Good eating."

On the few occasions when the scientist priests who ruled the Ship under Jordan's Captain met in full assembly they gathered in a great hall directly above the Ship's offices on the last civilized deck. Forgotten generations past, before the time of the mutiny led by Ship's Metalsmith Roy Huff, the hall had been a gymnasium, a place for fun and healthy exercise, as planned by the designers of the great starship; but the present users knew nothing of that.

Narby watched the roster clerk check off the Ship's Officers as they arrived, worried under a bland countenance. There were only a few more to arrive; he would soon have no excuse not to notify the Captain that the meeting was ready, but he had received no word from Joe-Jim and Hoyland. Had that fool Alan managed to get himself killed on the way up to deliver the word? Had he fallen and broken his worthless neck? Was he dead with a mutie's knife in his belly?

Ertz came in, and before seeking his seat among the department heads, went up to where Narby sat in front of the Captain's chair. "How about it?" he inquired softly.

"All right," Narby told him, "but no word yet."

"Hm-m-m." Ertz turned around and assayed his support in the crowd. Narby did likewise. Not a majority, not a certain majority, for anything as drastic as this. Still, the issue would not depend on voting.

The roster clerk touched his arm. "All present, sir, except those excused for sickness, and one on watch at the Converter."

Narby directed that the Captain be notified, with a sick feeling that something had gone wrong. The Captain, as usual, with complete disregard for the comfort and convenience of others, took his time about appearing. Narby was glad of the delay, but miserable in enduring it. When the old man finally waddled in, flanked by his orderlies, and settled heavily into his chair, he was, again as usual, impatient to get the meeting over. He waved for the others to be seated and started in on Narby.

"Very well, Commander Narby, let's have the agenda. You have an agenda, I hope?"

"Yes, Captain, there is an agenda."

"Then have it read, man, have it read! Why are you delaying?"

"Yes, sir." Narby turned to the reading clerk and handed him a sheaf of writings. The clerk glanced at them, looked puzzled, but, receiving no encouragement from Narby, commenced to read: "Petition, to Council and Captain: Lieutenant Braune, administrator of the village of Sector 9, being of frail health and advanced age, prays that he be relieved of all duty and retired." The clerk continued, setting forth the recommendations of the officers and departments concerned.

The Captain twisted impatiently in his chair, finally interrupted the reading. "What is this, Narby? Can't you handle routine matters without all this fuss?"

"I understood that the Captain was displeased with the fashion in which a similar matter was lately handled. I have no wish to trespass on the Captain's prerogatives."

"Nonsense, man! Don't read Regulations to me. Let the Council act, then bring their decision to me for review."

"Yes, sir." Narby took the writing from the clerk and gave him another. The clerk read.

It was an equally fiddling matter. Sector 3 village, because of an unexplained blight which had infected their hydroponic farms, prayed for relief and a suspension of taxes. The Captain put up with still less of this item before interrupting. Narby would have been sorely pressed for any excuse to continue the meeting had not the word he awaited arrived at that moment. It was a mere scrap of parchment, brought in from outside the hall by one of his own men. It contained the single word, "Ready." Narby looked at it, nodded to Ertz, and addressed the Captain:

"Sir, since you have no wish to listen to the petitions of your Crew, I will continue at once with the main business of this meeting." The veiled insolence of the statement caused the Captain to stare at him suspiciously, but Narby went on. "For many generations, through the lives of a succession of Witnesses, the Crew has suffered from the depredations of the muties. Our livestock, our children, even our own persons, have been in constant jeopardy. Jordan's Regulations are not honored above the levels where we live. Jordan's Captain himself is not free to travel in the upper levels of the Ship.

"It has been an article of faith that Jordan so ordained it, that the children pay with blood for the sins of their ancestors. It was the will of Jordan, we were told.

"I, for one, have never been reconciled to this constant drain on the Ship's mass." He paused.

The old Captain had been having some difficulty in believing his ears. But he found his voice. Pointing, he squealed, "Do you dispute the Teachings?"

"I do not. I maintain that the Teachings do not command us to leave the muties outside the Regulations, and never did. I demand that they be brought under the Regulations!"

"You . . . you! You are relieved of duty, sir!"

"Not," answered Narby, his insolence now overt, "until I have had my say."

"Arrest that man!" But the Captain's orderlies stood fast, though they shuffled and looked unhappy. Narby himself had selected them.

Narby turned back to the amazed Council, and caught the eye of Ertz. "All right," he said. "Now!" Ertz got up and trotted toward the door. Narby continued, "Many of you think as I do, but we always supposed that we would have to fight for it. With the help of Jordan, I have been able to achieve contact with the muties and propose terms of a truce. Their leaders are coming here to negotiate with us. There!" He pointed dramatically at the door.

Ertz reappeared; following him came Hugh Hoyland, Joe-Jim, and Bobo. Hoyland turned to the right along the wall and circled the company. He was followed single file by a string of muties: Joe-Jim's best butcher boys. Another such column trailed after Joe-Jim and Bobo to the left.

Joe-Jim, Hugh, and half a dozen more in each wing were covered with crude armor which extended below their waists. The armor was topped off with clumsy helms, latticeworks of steel, which protected their heads without greatly interfering with vision. Each of the armored ones, a few of the others, carried unheard-of knives, long as a man's arm!

The startled officers might have stopped the invasion at the bottleneck through which it entered had they been warned and led. But they were disorganized, helpless, and their strongest leaders had invited the invaders in. They shifted in their chairs, reached for their knives, and glanced anxiously from one to another. But no one made the first move which would start a general bloodletting.

Narby turned to the Captain. "What about it? Do you receive this delegation in peace?"

It seemed likely that age and fat living would keep the Captain from answering, from ever answering anything again. But he managed to croak, "Get 'em out of here! Get 'em out! You--You'll make the Trip for this!"

Narby turned back to Joe-Jim and jerked his thumb upward. Jim spoke to Bobo and a knife was buried to the grip in the Captain's fat belly. He squawked, rather than screamed, and a look of utter bewilderment spread over his features. He plucked awkwardly at the hilt as if to assure himself that it was really there. "Mutiny." he stated. "Mutiny--" The word trailed off as he collapsed into his chair, and fell heavily forward to the deck on his face.

Narby shoved it with his foot and spoke to the two orderlies. "Carry it outside," he commanded. They obeyed, seeming relieved at having something to do and someone to tell them to do it. Narby turned back to the silent watching mass. "Does anyone else object to a peace with the muties?"

An elderly officer, one who had dreamed away his life as judge and spiritual adviser to a remote village, stood up and pointed a bony finger at Narby, while his white beard jutted indignantly. "Jordan will punish you for this! Mutiny and sin, the spirit of Huff!"

Narby nodded to Joe-Jim; the old man's words gurgled in his throat, the point of a blade sticking out under one ear. Bobo looked pleased with himself.

"There has been enough talk," Narby announced. "It is better to have a little blood now than much blood later. Let those who stand with me in this matter get up and come forward."

Ertz set the precedent by striding forward and urging his surest personal supporters to come with him. Reaching the front of the room, he pulled out his knife and raised the point. "I salute Phineas Narby, Jordan's Captain!"

His own supporters were left with no choice. "Phineas Narby, Jordan's Captain!"

The hard young men in Narby's clique, the backbone of the dissident rationalist bloc among the scientist priests, joined the swing forward en masse, points raised high and shouting for the new Captain. The undecided and the opportunists hastened to join, as they saw which side of the blade was edged. When the division was complete, there remained a handful only of Ship's officers still hanging back, almost all of whom were either elderly or hyperreligious.

Ertz watched Captain Narby look them over, then pick up Joe-Jim with his eyes. Ertz put a hand on his arm. "There are few of them and practically helpless," he pointed out. "Why not disarm them and let them retire?"

Narby Eave him an unfriendly look. "Let them stay alive and breed mutiny. I am quite capable of making my own decisions, Ertz."

Ertz bit his lip. "Very well, Captain."

"That's better." He signaled to Joe-Jim.

The long knives made short work of it.

Hugh hung back horn the slaughter. His old teacher, Lieutenant Nelson, the village scientist who had seen his ability and selected him for scientisthood, was one of the group. It was a factor be had not anticipated.

World conquest and consolidation. Faith, or the Sword. Joe-Jim's bullies, amplified by hot-blooded young cadets supplied by Captain

Narby, combed the middle decks and the upper decks. The muties, individualists by the very nature of their existence and owing no allegiance higher than that to the leaders of their gangs, were no match for the planned generalship of Joe-Jim, nor did their weapons match the strange, long knives that bit before a man was ready.

The rumor spread through mutie country that it was better to surrender quietly to the gang of the Two Wise Heads; good eating for those who surrendered, death inescapable for those who did not.

But it was nevertheless a long slow process. There were so many, many decks, so many miles of gloomy corridors, so many countless compartments in which unsubdued muties might lurk. Furthermore, the process grew slower as it advanced, as Joe-Jim attempted to establish a police patrol, an interior guard, over each sector, deck, and stair way trunk, as fast as his striking groups mopped them up.

To Narby's disappointment, the two-headed man was not killed in his campaigns. Joe-Jim had learned from his own books that a general need not necessarily expose himself to direct combat.

Hugh buried himself in the Control Room. Not only was he more interested in the subtle problems of mastering the how and why of the complex controls and the parallel complexity of starship ballistics, but also the whole matter of the blood purge was distasteful to him because of Lieutenant Nelson. Violence and death he was used to; they were commonplace even on the lower levels, but that incident made him vaguely unhappy, even though his own evaluations were not sufficiently clean-cut for him to feel personal responsibility for the old man's death.

He just wished it had not happened.

But the controls: ahh. There was something a man could put his heart into. He was attempting a task that an Earthman would have rejected as impossible; an Earthmaa would have known that the piloting and operation of an interstellar ship was a task so difficult that the best possible technical education combined with extensive experience in the handling of lesser spacecraft would constitute a barely adequate grounding for the additional intensive highly specialized training necessary for the task.

Hugh Hoyland did not know that. So he went ahead and did it anyhow.

In which attempt he was aided by the genius of the designers. The controls of most machinery may be considered under the head of simple pairs, stop-and-go, push-and-pull, up-and-down, in-and-out, on-and-off, right-and-left, their permutations and combinations. The real difficulties have to do with upkeep and repair, adjustment and replacements.

But the controls and main drive machinery of the starship

Vanguard required no upkeep and no repair; their complexities were below the molar level, they contained no moving parts, friction took no toil and they did not fall out of adjustment. Had it been necessary for him to understand and repair the machines he dealt with, it would have been impossible. A fourteen-year-old child may safely be entrusted with a family skycar and be allowed to make thousand-mile jaunts overnight unaccompanied; it is much more probable that he will injure himself on the trip by overeating than by finding some way to mismanage or damage the vehicle. But if the skycar should fall out of adjustment, ground itself, and signal for a repair crew, the repair crew is essential; the child cannot fix it himself.

The Vanguard needed no repair crew, save for nonessential ancilliary machinery such as transbelts, elevators, automassagers, dining services, and the like. Such machinery which necessarily used moving parts had worn out before the time of the first Witness; the useless mass involved had gone into the auxiliary Converter, or had been adapted to other simpler purposes. Hugh was not even aware that there ever had been such machinery; the stripped condition of most compartments was a simple fact of nature to him, no cause for wonder.

Hugh was aided in his quest for understanding by two other facts:

First, spaceship ballistics is a very simple subject, being hardly more than the application of the second law of motion to an inverse-square field. That statement runs contrary to our usual credos; It happens to be true. Baking a cake calls for much greater, though subconscious, knowledge of engineering; knitting a sweater requires a subconscious understanding of much more complex mathematical relationships: topology of a knitted garment, but try it yourself sometime!

For a complex subject, consider neurology, or catalysts, but don't mention ballistics.

Second, the designers had clearly in mind that the Vanguard would reach her destination not sooner than generations after her departure; they wished to make it easy for the then-not-yet-born pilots who would command her on arrival. Although they anticipated no such hiatus in technical culture as took place, they did their best to make the controls simple and self-explanatory. The sophisticated fourteen-year-old mentioned, oriented as he would be to the concept of space, would doubtless have figured them out in a few minutes. Hugh, reared in a culture which believed that the Ship was the whole world, made no such quick job of it.

He was hampered by two foreign concepts, distance and metrical time. He had to learn to operate the finder, a delayed-action, long-base, parallax type designed for the Vanguard, and had taken measurements on a couple of dozen stellar bodies before it occurred him that the results he was getting could possibly stand for anything. The readings were in parsecs and without meaning emotionally. The attempt with the aid of the Sacred to translate his readings into linear units he could stand resulted in figures which he felt sure were were obviously preposterous. Check and recheck, followed long periods of brooding forced him unwillingly into some dim comprehension of astronomical magnitudes.

The concepts frightened him and bewildered him. For a period of several sleeps he stayed away from the Control Room, and gave way to a feeling of futility and depression. He occupied the time in sorting over the women captives, it being the first time since his capture by Joe-Jim long ago that he had had both the opportunity and the mood to consider the subject. The candidates were numerous, for, in addition to the usual crop of village maidens, Joe-Jim's military operations had produced a number of prime widows. Hugh availed himself of his leading position in the Ship's new setup to select two women. The first was a widow, a strong competent woman, adept at providing a man with domestic comforts. He set her up in his new apartment high up in low-weight, gave her a free hand, and allowed her to retain her former name of Chloe.

The other was a maiden, untrained and wild as a mutie. Hugh could not have told himself why he picked her. Certainly she had no virtues, but she made him feel funny. She had bitten him while he was inspecting her; he had slapped her, naturally, and that should have been an end to the matter. But he sent word back later for her father to send her along.

He had not got around to naming her.

Metrical time caused him as much mental confusion as astronomical distances, but no emotional upset The trouble was again the lack of the concept in the Ship. The Crew had the notion of topological time; they understood "now," "before," "after," "has been," "will be," even such notions as long time and short time, but the notion of measured time had dropped out of the culture. The lowest of earthbound cultures has some idea of measured time, even if limited to days and seasons, but every earthly concept of measured time originates in astronomical phenomena; the Crew had been insulated from all astronomical phenomena for uncounted generations.

Hugh had before him, on the control consoles, the only working timepieces in the Ship, but it was a long, long time before he grasped what they were for and what bearing they had on other instruments. But until did, he could not control the Ship. Speed, and its derivatives, acceleration and flexure, are based on measured time.

But when these two new concepts were finally grasped, chewed over, and ancient books reread in the light of these concepts, he was, in a greatly restricted and theoretical sense, an astrogator.

Hugh sought out Joe-Jim to ask him a question. Joe-Jim's minds were brilliantly penetrating when he cared to exert himself; he remained a superficial dilettante because he rarely cared.

Hugh found Narby just leaving. In order to conduct the campaign of pacification of the muties it had been necessary for Narby and Joe-Jim to confer frequently; to their mutual surprise they got along well together. Narby was a capable administrator, able to delegate authority and not given to useless elbow jogging; Joe-Jim surprised and pleased Narby by being more able than any subordinate he had ever dealt with before. There was no love wasted. between them, but each recognized in the other both intelligence and a hard self-interest which matched his own. There was respect and grudging contemptuous liking.

"Good eating, Captain," Hugh greeted Narby formally.

"Oh, hello, Hugh," Narby answered, then turned back to Joe-Jim. "I'll expect a report, then."

"You'll get it," Joe agreed. "There can't be more than a few dozen stragglers. We'll hunt them out, or starve them."

"Am I butting in?" Hugh asked.

"No, I'm just leaving. How goes the great work, my dear fellow?" He smiled irritatingly.

"Well enough, but slowly. Do you wish a report?"

"No hurry. Oh, by the bye, I've made the Control Room and Main Drive, in fact the entire level of no-weight, taboo for everyone, muties and Crew alike."

"So? I see your point, I guess. There is no need for any but officers to go up there."

"You don't understand me. It is a general taboo, applying to officers as well. Not to ourselves, of course."

"But . .. but, that won't work. The only effective way to convince the officers of the truth is to take them up and show them the stars!"

"That's exactly my point. I can't have any officers upset by disturbing ideas while I am consolidating my administration. It will, create religious differences and impair discipline."

Hugh was too upset and astounded to answer at once. "But," he said at last, "but that's the point. That's why you were made Captain."

"And as Captain I will have to be the final judge of policy. The matter is closed. You are not to take anyone to the Control Room, nor any part of no-weight, until I deem it advisable. You'll have to wait."

"It's a good idea, Hugh," Jim commented. "We shouldn't stir things up while we've got a war to attend to."

"Let me get this straight," Hugh persisted. "You mean this is a temporary policy?"

"You could put it that way."

"Well, all right," Hugh conceded. "But wait—Ertz and I need to train assistants at once."

"Very well. Nominate them to me and I'll pass on them. Whom do you have in mind?"

Hugh thought. He did not actually need assistance himself; although the Control Room contained acceleration chairs for half a dozen, one man, seated in the chief astrogator's chair, could pilot the Ship. The same applied to Ertz in the Main Drive station, save in one respect. "How about Ertz? He needs porters to move mass to the Main Drive."

"Let him. I'll sign the writing. See that he uses porters from the former muties; but no one goes to the Control Room save those who have been there before." Narby turned and left with an air of dismissal.

Hugh watched him leave, then said, "I don't like this, Joe-Jim."

"Why not?" Jim asked. "It's reasonable."

"Perhaps it is. But ... well, damn it! It seems to me, somehow, that truth ought to be free to anyone, any time!" He threw up his hands in a gesture of baffled exasperation.

Joe-Jim looked at him oddly. "What a curious idea," said Joe.

"Yeah, I know. It's not common sense, but it seems like it ought to be. Oh, well, forget it! That's not what I came to see you about."

"What's on your mind, Bud?"

"How do we ... Look, we finish the Trip, see? We've got the Ship touching a planet, like this--" He brought his two fists together.

"Yes. Go on."

"Well, when that's done, how do we get out of the Ship?"

The twins looked confused, started to argue between themselves. Finally Joe interrupted his brother. "Wait a bit, Jim. Let's be logical about this. It was intended for us to get out; that implies a door, doesn't it?"

"Yeah. Sure."

"There's no door up here. It must be down in high weight."

"But it isn't," objected Hugh. "All that country is known. There isn't any door. It has to be up in mutie country."

"In that case," Joe continued, "it should be either all the way forward, or all the way aft, otherwise it would not go anywhere. It isn't aft. There's nothing back of Main Drive but solid bulkheads. It would need to be forward."

"That's silly," Jim commented. "There's the Control Room and the

Captain's veranda. That's all."

"Oh, yeah? How about the locked compartments?"

"Those aren't doors, not to the Outside anyway. Just bulkheads abaft the Control Room."

"No, stupid, but they might lead to doors."

"Stupid, eh? Even so, how are you going to open them; answer me that, bright boy?"

"What," demanded Hugh, "are the 'locked compartments'?"

"Don't you know? There are seven doors, spaced on the main shaft in the same bulkhead as the door to Main Control Room. We've never been able to open them."

"Well, maybe that's what we're looking for. Let's see!"

"It's a waste of time," Jim insisted. But they went.

Bobo was taken along to try his monstrous strength on the doors. But even his knotted swollen muscles couldn't budge the levers which appeared to be intended to actuate the doors. "Well?" Jim sneered to his brother. "You see?"

Joe shrugged. "O.K., you win. Let's go down."

"Wait a little," Hugh pleaded. "The second door back the handle seemed to turn a little. Let's try it again."

"I'm afraid it's useless," Jim commented. But Joe said, "Oh, all right, as long as we're here."

Bobo tried again, wedging his shoulder under the lever and pushing from his knees. The lever gave suddenly, but the door did not open. "He's broken it," Joe announced.

"Yeah," Hugh acknowledged. "I guess that's that." He placed his hand against the door. It swung open easily.

The door did not lead to outer space, which was well for the three, for nothing in their experience warned them against the peril of the outer vacuum. Instead a very short and narrow vestibule led them to another door which was just barely ajar. The door stuck on its hinges, but the fact that it was slightly ajar prevented it from binding anywhere else. Perhaps the last man to use it left it so as a precaution against the metal surfaces freezing together, but no one would ever know.

Bobo's uncouth strength opened it easily. Another door lay six feet beyond. "I don't understand this," complained Jim as Bobo strained at the third door. "What's the sense in an endless series of doors?"

"Wait and find out," advised his brother.

Beyond the third door lay, not another door, but an apartment, a group of compartments, odd ones, small, crowded together and of unusual shapes. Bobo shot on. ahead and explored the place, knife in teeth, his ugly body almost graceful in flight. Hugh and Joe-Jim proceeded more slowly, their eyes caught by the strangeness Of the place.

Bobo returned, killed his momentum skillfully against a bulkhead, took his blade from his teeth, and reported, "No door. No more door any place. Bobo look."

"There has to be," Hugh insisted, irritated at the dwarf for demolishing his hopes.

The moron shrugged. "Bobo look."

"We'll look." Hugh and the twins moved off in different directions, splitting the reconnaissance between them.

Hugh found no door, but what he did find interested him even more: an impossibility. He was about to shout for Joe-Jim, when he heard his own name called. "Hugh! Come here!"

Reluctantly he left his discovery, and sought out the twins. "Come see what I've found," he began.

"Nevermind," Joe cut him short. "Look at that."

Hugh looked. "That" was a Converter. Quite impossibly but indubitably a Converter. "It doesn't make sense," Jim protested. "An apartment this size doesn't need a Converter. That thing would supply power and light for half the Ship. What do you make of it, Hugh?"

Hugh examined it. "I don't know," he admitted, "but if you think this is strange, come see what I've found."

"What have you found?"

"Come see."

The twins followed him, and saw a small compartment, one wall of which appeared to be of glass, black as if the far side were obscured. Facing the wall were two acceleratlon chairs, side by side. The arms and the lap desks of the chairs were covered with patterns of little white lights of the same sort as the control lights on the chairs in the Main Control Room.

Joe-Jim made no comment at first, save for a low whistle from Jim. He sat down in one of the chairs and started experimenting cautiously with the controls. Hugh sat down beside him. Joe-Jim covered a group of white lights on the righthand arm of his chair; the lights in the compartment went out. When he lifted his hand the tiny control lights were blue instead of white. Neither Joe-Jim nor Hugh was startled. When the lights went out; they had expected it, for the control involved corresponded to similar controls in the Control Room.

Joe-Jim fumbled around, trying to find controls which would produce a simulacrum of the heavens on the blank glass before him. There were no such controls and he had no way of knowing that the glass was an actual view port, obscured by the hull of the Ship proper, rather than a view screen.

But he did manage to actuate the controls that occupied the corresponding position. These controls were labeled LAUNCHING; Joe-Jim had disregarded the label because he did not understand it. Actuating them produced no very remarkable results, except that a red light blinked rapidly and a transparency below the label came into life. It read: AIRLOCK OPEN.

Which was very lucky for Joe-Jim, Hugh, and Bobo. Had they closed the doors behind them and had the little Converter contained even a few grams of mass available for power, they would have found themselves launched suddenly into space, in a Ship's boat unequipped for a trip and whose controls they understood only by analogy with those in the Control Room. Perhaps they could have maneuvered the boat back into its cradle; more likely they would have crashed attempting it.

But Hugh and Joe-Jim were not yet aware that the "apartment" they had entered was a spacecraft; the idea of a Ship's boat was still foreign to them.

"Turn on the lights," Hugh requested. Joe-Jim did so.

"Well?" Hugh went on. "What do you make of it?"

"It seems pretty obvious," answered Jim. "This is another Control Room. We didn't guess it was here because we couldn't open the door."

"That doesn't make sense," Joe objected. "Why should there be two Control Rooms for one Ship?"

"Why should a man have two heads?" his brother reasoned. "From my point of view, you are obviously a supernumerary."

"It's not the same thing; we were born that way. But this didn't just happen; the Ship was built."

"So what?" Jim argued. "We carry two knives, don't we? And we weren't born with 'em. It's a good idea to have a spare."

"But you can't control the Ship from here," Joe protested. "You can't see anything from here. If you wanted a second set of controls, the place to put them would be the Captain's veranda, where you can see the stars."

"How about that?" Jim asked, indicating the wall of glass.

"Use your head," his brother advised. "It faces the wrong direction. It looks into the Ship, not out. And it's not an arrangement like the Control Room; there isn't any way to mirror the stars on it."

"Maybe we haven't located the controls for it."

"Even so, you've forgotten something. How about that little Converter?"

"What about it?"

"It must have some significance. It's not here by accident. I'll bet you that these controls have something to do with that Converter."

"Why?"

"Why not? Why are they here together if there isn't some connection?"

Hugh broke his puzzled silence. Everythmg the twins had said seemed to make sense, even the contradictions. It was all very confusing. But the Converter, the little Conver-- "Say, look," he burst out.

"Look at what?"

"Do you suppose—Do you think that maybe this part of the Ship could move?"

"Naturally. The whole Ship moves."

"No," said Hugh, "no, no. I don't mean that at all. Suppose it moved by itself. These controls and the little Converter, suppose it could move right away from the Ship."

"That's pretty fantastic."

"Maybe so ... but if it's true, this is the way out."

"Huh?" said Joe. "Nonsense. No door to the Outside here either."

"But there would be if this apartment were moved away from the Ship: the way we came in!"

The two heads snapped simultaneously toward him as if jerked by the same string. Then they looked at each other and fell to arguing. Joe-Jim repeated his experiment witit the controls. "See?" Joe pointed out "'Launching.' It means to start something, to push something away."

"Then why doesn't it?"

"'Air Lock Open.' The doors we came through; it has to be that. Everything else is closed."

"Let's try it."

"We would have to start the Converter first."

"O.K."

"Not so fast. Get out, and maybe you can't come back. We'd starve."

"Hm-m-m, we'll wait a while."

Hugh listened to the discussion while snooping around the control panels, trying to figure them out. There was a stowage space under the lap desk of his chair; he fished into it, encountered something, and hauled it out. "See what I've found!"

"What Is it?" asked Joe. "Oh, a book. Lot of them back in the room next to the Converter." "Let's see it," said Jim.

But Hugh had opened it himself. "Log, Starship Vanguard," he spelled out, "2 June, 2172. Cruising as before--"

"What!" yelled Joe. "Let me see that!"

"3 June. Cruising as before. 4 June. Cruising as before. Captain's mast for rewards and punishments held at 1300. See Administration

Log. 5 June. Cruising as before."

"Gimme that!"

"Wait!" said Hugh. "6 June. Mutiny broke out at 0431. The watch became aware of it by visiplate. Hull, Metalsmith Ordinary, screened the control station and called on the watch to surrender, designating himself as 'Captain.' The officer of the watch ordered him to consider himself under arrest and signaled the Captain's cabin. No answer.

"0435. Communications failed. The officer of the watch dispatched a party of three to notify the Captain, turn out the chief proctor, and assist in the arrest of Huff.

"0441. Converter power off; free flight

"0502. Lacy, Crewman Ordinary, messenger-of-thewatch, one of the party of three sent below, returned to the control station alone. He reported verbally that the other two, Malcolm Young and Arthur Sears, were dead and that he had been permitted to return in order to notify the watch to surrender. The mutineers gave 0515 as a--"

The next entry was in a different hand: "0545. I have made every attempt to get into communication with other stations and officers in the Ship, without success. I conceive it as my duty, under the circumstances, to leave the control station without being properly relieved, and attempt to restore order down below. My decision may be faulty, since we are unarmed, but I see no other course open to me.

"Jean Baldwin, Pilot Officer Third Class, Officer of the Watch."

"Is that all?" demanded Joe.

"No," said Hugh. "1 October (approximately), 2172. I, Theodor Mawson, formerly Storekeeper Ordinary, have been selected this date as Captain of the Vanguard. Since the last entry in this log there have been enormous changes. The mutiny has been suppressed, or more properly, has died out, but with tragic cost. Every pilot officer, every navigation officer is dead, or believed to be dead. I would not have been chosen Captain had there been a qualified man left.

"Approximately ninety per cent of the personnel are dead. Not all of that number died in the original outbreak; no crops have been planted since the mutiny; our food stocks are low. There seems to be clear evidence of cannibalism among the mutineers who have not surrendered.

"My immediate task must be to restore some semblance of order and discipline among the Crew. Crops must be planted. A regular watch must be instituted at the auxiliary Converter on which we are dependent for heat and light and power."

The next entry was undated. "I have been far too busy to keep this log up properly. Truthfully, I do not know the date even approximately. The Ship's clocks no longer run. That may be attributable to the erratic operation of the auxiliary Converter, or it may possibly be an effect of radiations from outer space. We no longer have an antiradiation shield around the Ship, since the Main Converter is not in operation. My Chief Engineer assures me that the Main Converter could be started, but we have no one fitted to astrogate. I have tried to teach myself astrogation from the books at hand, but the mathematics involved are very difficult.

"About one newborn child out of twenty is deformed. I have instituted a Spartan code: such children are not permitted to live. It is harsh, but necessary.

"I am growing very old and feeble and must consider the selection of my successor. I am the last member of the crew to be born on Earth, and even I have little recollection of it. I was five when my parents embarked. I do not know my own age, but certain unmistakable signs tell me that the time is not far away when I, too, must make the Trip to the Converter.

"There has been a curious change in orientation in my people. Never having lived on a planet, it becomes more difficult as time passes for them to comprehend anything not connected with the Ship. I have ceased trying to talk to them about it; it is hardly a kindness anyhow, as I have no hope of leading them out of the darkness. Theirs is a hard life at best: they strive for a crop only to have it raided by the outlaws who still flourish on the upper levels. Why speak to them of better things?

"Rather than pass this on to my successor I have decided to attempt to hide it, if possible, in the single Ship's boat left by the mutineers who escaped. It will be safe there a long time, otherwise some witless fool may decide to use it for fuel for the Converter. I caught the man on watch feeding it with the last of a set of Encyclopaedia Terresriana: priceless books. The idiot had never been taught to read! Some rule must be instituted concerning books.

"This is my last entry. I have put off making the attempt to place this log in safekeeping, because it is very perilous to ascend above the lower decks. But my life is no longer valuable; I wish to die knowing that a true record is left.

"Theodor Mawson, Captain."

Even the twins were silent for a long time after Hugh stopped reading. At last Joe heaved a long sigh and said, "So that's how it happened."

"The poor guy," Hugh said softly.

"Who? Captain Mawson? Why so?"

"No, not Captain Mawson. That other guy, Pilot Officer Baldwin. Think of him going out through that door, with Huff on the other side." Hugh shivered. In spite of his enlightenment, he subconsciously envisioned Huff, 'Huff the Accursed, first to sin,' as about twice as high as Joe-Jim, twice as strong as Bobo, and having fangs rather than teeth.

Hugh borrowed a couple of porters from Ertz, porters whom Ertz was using to fetch the pickled bodies of the war casualties to the Main Converter for fuel, and used them to provision the Ship's boat: water, breadstuffs, preserved meats, mass for the Converter. He did not report the matter to Narby, nor did he report the discovery of the boat itself. He had no conscious reason; Narby irritated him.

The star of their destination grew and grew, swelled until it showed a visible disc and was too bright to be stared at long. Its bearing changed rapidly, for a star; it pulled across the backdrop of the stellariwn dome. Left uncontrolled, the Ship would have swung part way around it in a wide hyperbolic arc, accelerated as it flipped around the star, then sped off again into the darkness. It took Hugh the equivalent of many weeks to calculate the elements of the trajectory; it took still longer for Ertz and Joe-Jim to check his figures and satisfy themselves that the preposterous answers were right. It took even longer to convince Ertz that the way to rendezvous in space was to apply a force that pushed one away from where one wished to go, that is to say, dig in the heels, put on the brakes, kill the momentum.

In fact it took a series of experiments in free flight on the level of weightlessness to sell him the idea, otherwise he would have favored finishing the Trip by the simple expedient of crashing headlong into the star at top Speed. Thereafter Hugh and Joe-Jim calculated how to apply acceleration to kill the speed of the Vanguard and warp her into an eccentric ellipse around the star. After that, they would search for planets.

Ertz bad a little trouble understanding the difference between a planet and a star. Alan never did get it.

"If my numbering is correct," Hugh informed Ertz, "we should start accelerating any time now."

"O.K.," Ertz told him. "Main Drive is ready: over two hundred bodies and a lot of waste mass. What are waiting for?"

"Let's see Narby and get permission to start."

"Why ask him?"

Hugh shrugged. "He's Captain. He'll want to know."

"All right. Let's pick up Joe-Jim and get on with it." They left Hugh's apartment and went to Joe-Jim's. Joe-Jim was not there, but they found Alan looking for him, too.

"Squatty says he's gone down to the Captain's office," Alan informed him.

"So? It's just as well. We'll see him there. Alan, old boy, you know what?"

"What?"

"The time has arrived. We're going to do it! Start moving the Ship!" Alan looked round-eyed. "Gee! Right now?"

"Just as soon as we can notify the Captain. Come along, if you like."

"You bet! Wait while I tell my woman." He darted away to his own quarters nearby.

"He pampers that wench," remarked Ertz.

"Sometimes you can't help it," said Hugh with a faraway look.

Alan returned promptly, although it was evident that he had taken time to change to a fresh breechcloth. "O.K.," he bubbled. "Let's go!"

Alan approached the Captain's office with a proud step. He was an important guy now, he exulted to himself. He'd march on through with his friends while the guards saluted; no more of this business of being pushed around.

But the doorkeeper did not stand aside, although he did salute, while placing himself so that he filled the door. "Gangway, man!" Ertz said gruffly.

"Yes, sir," acknowledged the guard, without moving. "Your weapons, please."

"What! Don't you know me, you idiot? I'm the Chief Engineer."

"Yes, sir. Leave your weapons with me, please. Regulations."

Ertz put a hand on the man's shoulder and shoved. The guard stood firm. "I'm sorry, sir. No one approaches the Captain wearing weapons. No one."

"Well, I'll be damned!"

"He remembers what happened to the old Captain," Hugh observed sotto voce. "He's smart." He drew his own knife and tossed it to the guard, who caught it neatly by the hilt. Ertz looked; shrugged, and handed over his own. Alan, considerably crestfallen, passed his own pair over with a look that should have shortened the guard's life.

Narby was talking; Joe-Jim was scowling on both his faces; Bobo looked puzzled, and naked, unfinished, without his ubiquitous knives and slingshot. "The matter is closed, Joe-Jim. That is my decision. I've granted you the faver of explaining my reasons, but it does not matter whether you like them or not."

"What's the trouble?" inquired Hugh.

Narby looked up. "Oh. I'm glad you came in. Your mutie friend seems to be in doubt as to who is Captain."

"What's up?"

"He," growled Jim, hooking a thumb toward Narby, "seems to think he's going to disarm all the muties."

"Well, the war's over, isn't it?"

"It wasn't agreed on. The muties were to become part of the Crew. Take the knives away from the muties and the Crew will kill them off in no time. It's not fair. The Crew have knives."

"The time will come when they won't," Narby predicted, "but I'll do it at my own time in my own way. This is the first step. What did you want to see me about, Ertz?"

"Ask Hugh." Narby turned to Hugh.

"I've come to notify you, Captain Narby," Hugh stated formally, "that we are about to start the Main Converter and move the Ship."

Narby looked surprised but not disconcerted. "I'm afraid you will have to postpone that. I am not yet ready to permit officers to go up to no-weight."

"It won't be necessary," Hugh explained. "Ertz and I can handle the first maneuvers alone. But we can't wait. If the Ship is not moved at once, the Trip won't be in your lifetime nor mine."

"Then it must," Narby replied evenly, "wait."

"What?" cried Hugh. "Narby, don't you want to the Trip?"

"I'm in no hurry."

"What sort of damn foolishness is this?" Ertz demanded. "What's got into you, Fin? Of course we move the Ship."

Narby drummed on his desk top before replying. Then: he said, "Since there seems to be some slight misunderstanding as to who gives orders around here, I might as well let you have it straight. Hoyland, as long as your pastimes did not interfere with the administration of tbe Ship, I was willing for you to amuse yourself. I granted that willingly, for you have been very useful in your own way. But when your crazy beliefs become a possible source of corruption to good morals and a danger to the peace and security of the Ship, I have to crack down."

Hugh had opened and closed his mouth several times during this speech. Finally he managed to get out: "Crazy? Did you say crazy?"

"Yes, I did. For a man to believe that the solid Ship can move means that he is either crazy, or an ignorant religious fanatic. Since both of you have the advantage of a scientist's training, I assume that you have lost your minds."

"Good Jordan!" said Hugh. "The man has seen with his own eyes, he's seen the immortal stars, yet he sits there and calls us crazy!"

"What's the meaning of this, Narby?" Ertz inquired coldly. "Why the razzle-dazzle? You aren't kidding anyone; you've been to the Control Room, you've been to the Captain's veranda, you know the Ship moves."

"You interest me, Ertz," commented Narby, looking him over. "I've wondered whether you were playing up to Hoyland's delusions, or were deluded yourself. Now I see that you are crazy too."

Ertz kept his temper. "Explain yourself. You've seen the Control Room; how can you contend that the Ship does not move?"

Narby smiled. "I thought you were a better engineer than you appear to be, Ertz. The Control Room is an enormous hoax. You know yourself that those lights are turned on and off by switches—a very clever piece of engineering. My theory is that it was used to strike awe in the minds of the superstitious and make them believe in the ancient myths. But we don't need it any more, the Crew believe without it. It's a source of distraction now I'm going to have it destroyed and the door sealed up."

Hugh went all to pieces at this, sputtered incoherently, and would have grappled with Narby had not Ertz restrained him. "Easy, Hugh," he admonished. Joe-Jim took Hugh by the arm, his own faces stony masks.

Ertz went on quietly, "Suppose what you say is true. Suppose that the Main Converter and the Main Drive itself are nothing but dummies and that we can never start them, what about the Captain's veranda? You've seen the stars there, not just an engineered shadow show."

Narby laughed. "Ertz, you are stupider than I've guessed. I admit that the display in the veranda had me mystified at first, not that I ever believed in it! Then the Control Room gave the clue: it's an Illusion, a piece of skillful engineering. Behind that glass is another compartment, about the same size and unlighted. Against its darkness those tiny moving lights give the effect of a bottomless hole. It's essentially the same trick as they used in the Control Room.

"It's obvious," he went on. "I'm surprised that you did not see it. When an apparent fact runs contrary to logic and common sense, it's obvious that you have failed to interpret the fact correctly. The most obvious fact of nature is the reality of the Ship itself, solid, immutable, complete. Any so-called fact which appears to disprove that is bound to be an illusion. Knowing that, I looked for the trick behind the illusion and found it."

"Wait," said Ertz. "Do you mean that you have been on the other side of the glass in the Captain's veranda and seen these trick lights you talk about?"

"No," admitted Narby, "it wasn't necessary. Not that it wouldn't be easy enough to do so, but it isn't necessary. I don't have to cut myself to know that knives are sharp."

"So..." Ertz paused and thought a moment. "I'll strike a deal with you. If Hugh and I are crazy in our beliefs, no harm is done as long as we keep our mouths shut. We try to move the Ship. If we fail, we're wrong and you're right."

"The Captain does not bargain," Narby pointed out. "However, I'll consider it. That's all. You may go." Ertz turned to go, unsatisfied but checked for moment. He caught sight of Joe-Jim's faces, and turned back. "One more thing," he said. "What's this about the muties? Why are you shoving Joe-Jim around? He and his boys made you Captain; you've got to fair about this."

Narby's smiling superiority cracked for amoment.

"Don't interfere, Ertz! Groups of armed savages are not going to threaten this Ship!"

"You can do what you like with the prisoners," Jim stated, "but my own gang keep their knives. They were promised good eating forever if they fought for you. They keep their knives. And that's flnal!"

Narby looked him up and down. "Joe-Jim," he remarked, "I have long believed that the only good mutie was a dead mutie. You do much to confirm my opinion. It will interest you to know that, by this time, your gang is already disarmed, and dead in the bargain. That's why I sent for you!"

The guards piled in, whether by signal or previous arrangement it was impossible to say. Caught flatfooted, naked, weaponless, the five found themselves each with an armed man at his back before they could rally. "Take them away," ordered Narby.

Bobo whined and looked to Joe-Jim for guidance. Joe caught his eye. "Up, Bobo!"

The dwarf jumped straight for Joe-Jim's captor, careless of the knife at his back. Forced to split his attention, the man lost a vital half second. Joe-Jim kicked him in the stomach, and appropriated his blade.

Hugh was on the deck, deadlocked with his man, his fist clutched around the knife wrist. Joe-Jim thrust and the struggle ceased. The two-headed man looked around, saw a mixed pile-up of four bodies, Ertz, Alan, two others. Joe-Jim used his knife judiciously, being careful to match the faces with the bodies. Presently his men emerged. "Get their knives," he ordered superfluously.

His words were drowned by a high, agonized scream. Bobo, still without a knife, had resorted to his primal weapons. His late captor's face was a bloody mess, half bitten away.

"Get his knife," said Joe.

"Can't reach it," Bobo admitted guiltily. The reason was evident: the hilt protruded from Bobo's ribs, just below his right shoulder blade.

Joe-Jim examined it, touched it gently. It was stuck. "Can you walk?"

"Sure," grunted Bobo, and grimaced.

"Let it stay where it is. Alan! With me. Hugh and Bill, cover rear. Bobo In the middle."

"Where's Narby?" demanded Ertz, dabbing at a round on his cheekbone.

But Narby was gone, ducked out through the rear door behind his desk. And it was locked.

Clerks scattered before them in the outer office; Joe-Jim knifed the guard at the outer door while he was still raising his whistle. Hastily they retrieved their own weapons and added them to those they had seized. They fled upward.

Two decks above inhabited levels Bobo stumbled and fell. Joe-Jim picked him up. "Can you make it?" The dwarf nodded dumbly, blood on his lips. They climbed. Twenty decks or so higher it became evident that Bobo could no longer climb, though they had taken turns in boosting him from the rear. But weight was lessened appreciably at that level; Alan braced himself and picked up the solid form as if it were a child. They climbed. Joe-Jim relieved Alan. They climbed.

Ertz relieved Joe-Jim. Hugh relieved Ertz.

They reached the level on which they lived forward of their group apartments. Hugh turned in that direction. "Put him down," commanded Joe. "Where do you think you are going?"

Hugh settled the wounded man to the deck. "Homes. Where else?"

"Fool! That's where they will look for us first."

"Where do we go?"

"Nowhere, in the Ship. We go out of the Ship!"

"Huh?"

"The Ship's boat."

"He's right," agreed Ertz. "The whole Ship's against us, now."

"But . . . but--" Hugh surrendered. "It's a long chance—but we'll try it." He started again in the direction of their homes.

"Hey!" shouted Jim. "Not that way."

"We have to get our women."

"To Huff with the women! You'll get caught. There's no time." But Ertz and Alan started off without question. "Oh, all right!" Jim snorted. "But hurry! I'll stay with Bobo" Joe-Jim turned his attention to the dwarf, gently rolled him to his side and made a careful examination. His skin was gray and damp; a long red stain ran down from his right shoulder. Bobo sighed bubblingly and rubbed his head against Joe-Jim's thigh. "Bobo tired, Boss."

Joe-Jim patted his head. "Easy," said Jim, "this is going to hurt." Lifting the wounded man slightly, he cautiously worked the blade loose and withdrew it from the wound. Blood poured out freely.

Joe-Jim examined the knife, noted the deadly length of steel, and measured it against the wound. "He'll never make it," whispered Joe.

Jim caught his eye. "Well?"

Joe nodded slowly. Joe-Jim tried the blade he had just extracted from the wound against his own thigh, and discarded it in favor of one of his own razor-edged tools. He took the dwarf's chin in his left hand and Joe commanded, "Look at me, Bobo!"

Bobo looked up, answered inaudibly. Joe held his eye. "Good Bobo! Strong Bobo!" The dwarf grinned as if he heard and understood, but made no attempt to reply. His master pulled his head a little to one side; the blade bit deep, snicking the jugular vein without touching the windpipe. "Good Bobo!" Joe repeated. Bobo grinned again.

When the eyes were glassy and breathing had unquestionably stopped, Joe-Jim stood up, letting the head and shoulders roll from him. He shoved the body with his foot to the side of the passage, and stared down the direction in which the others had gone. They should be back by now.

He stuck the salvaged blade in his belt and made sure that all his weapons were loose and ready.

They arrived on a dead run. "A little trouble," Hugh explained breathlessly. "Squatty's dead. No more of your men around. Dead maybe. Narby probably meant it. Here." He handed him a long knife and the body armor that had been built for Joe-Jim, with its great wide cage of steel, fit to cover two heads.

Ertz and Alan wore armor, as did Hugh. The women did not; none had been built for them. Joe-Jim noted that Hugh's younger wife bore a fresh swelling on her lip, as if someone had persuaded her with a heavy hand. Her eyes were stormy though her manner was docile. The older wife, Chloe, seemed to take the events in her stride. Ertz's was crying softly; Alan's wench reflected the bewilderment of her master.

"How's Bobo?" Hugh inquired, as he settled Joe-Jim's armor in place.

"Made the Trip," Joe informed him.

"So? Well, that's that; let's go."

They stopped short of the level of no-weight and worked forward, because the women were not adept at weightless flying. When they reached the bulkhead which separated the Control Room and boat pockets from the body of the Ship, they went up. There was neither alarm nor ambush, although Joe thought that he saw a head show as they reached one deck. He mentioned it to his brother but not to the others.

The door to the boat pocket stuck and Bobo was not there to free it. The men tried it in succession, sweating big with the strain. Joe-Jim tried it a second time, Joe relaxing and letting Jim control their muscles, that they might not fight each other. The door gave. "Get them inside!" snapped Jim.

"And fast!" Joe confirmed. "They're on us." He had kept lookout while his brother strove. A shout from down the line reinforced his warning.

The twins faced around to meet the threat while the men shoved the women in. Alan's fuzzy-headed mate chose that moment to go to pieces, squalled, and tried to run but weightlessness defeated her. Hugh nabbed her, shoved her inside and booted her heartily with his foot.

Joe-Jim let a blade go at long throwing range to slow down the advance. It accomplished its purpose; their opponents, half a dozen of them, checked their advance. Then, apparently on signal, six knives cut the air simultaneonsly.

Jim felt something strike him, felt no pain, and concluded that the armor had saved him. "Missed us, Joe," he exulted.

There was no answer. Jim turned his bead, tried to look at his brother. A few inches from his eye a knife stuck through the bars of the helmet, its point was buried deep inside his left eye.

His brother was dead.

Hugh stuck his head back out of the door. "Come on, Joe-Jim," he shouted. "We're all in."

"Get inside," ordered Jim. "Close the door."

"But--"

"Get inside!" Jim turned, and shoved him in the face, closing the door as he did so. Hugh had one startled glimpse of the knife and the sagging, lifeless face it pinned. Then the door closed against him, and he heard the lever turn.

Jim turned back at the attackers. Shoving himself away from the bulkhead with legs which were curiously heavy, he plunged toward them, his great arm-long knife, more a bob than a sword, grasped with both hands. Knives sang toward him, clattered against his breastplate, bit into his legs. He swung a wide awkward twohanded stroke which gutted an opponent, nearly cutting him in two. "That's for Joe!"

The blow stopped him. He turned in the air, steadied himself, and swung again. "That's for Bobo!"

They closed on him; he swung widely caring not where he hit as long as his blade met resistance. "And that's for me!" A knife planted itself in his thigh. It did not even slow him up; legs were dispensable in no-weight. "'One for all!'"

A man was on his back now he could feel him. No matter; here was one before him, too, one who could feel steel. As be swung, he shouted, "All for o--" The words trailed off, but the stroke was finished.

Hugh tried to open the door which had been slammed in his face. He was unable to do so; if there were means provided to do so, he was unable to figure them out. He pressed an ear against the steel and listened, but the airtight door gave back no clue.

Ertz touched him on the shoulder. "Come on," be said. "Where's Joe-Jim?"

"He stayed behind."

"Open up the door! Get him."

"I can't, it won't open. He meant to stay, he closed it himself."

"But we've got to get him; we're blood-sworn."

"I think," said Hugh, with a sudden flash of insight, "that's why he stayed behind." He told Ertz what he had seen.

"Anyhow," he concluded, "it's the End of the Trip to him. Get on back and feed mass to that Converter. I want power." They entered the Ship's boat proper. Hugh closed the airlock doors behind them. "Alan!" he called out. "We're going to start. Keep those damned women out of the way."

He settled himself in the pilot's chair, and cut the lights.

In the darkness he covered a pattern of green lights. A transparency flashed on the lap desk: DRIVE READY. Ertz was on the job. Here goes! he thought, and actuated the launching combination. There was a short pause, a short and sickening lurch, a twist. It frightened him, since he had no way of knowing that the launching tracks were pitched to offset the normal spinning of the Ship.

The glass of the view port before him was speckled with stars; they were free—moving!

But the spread of jeweled lights was not unbroken, as it invariably had been when seen from the veranda, or seen mirrored on the Control Room walls; a great, gross, ungainly shape gleamed softly under the light of the star whose system they had entered. At first he could not account for it. Then with a rush of superstitious awe he realized that he was looking at the Ship itself, the true Ship, seen from the Outside. In spite of his long intellectual awareness of the true nature of the Ship; he had never visualized looking at it. The stars, yes; the surface of a planet, he had struggled with that concept; but the outer surface of the Ship, no.

When he did see it, it shocked him.

Alan touched him. "Hugh, what is it?"

Hoyland tried to explain to him. Alan shook his head, and blinked his eyes. "I don't get it."

"Never mind. Bring Ertz up here. Fetch the women, too; we'll let them see it."

"All right. But," he added, with sound intuition, "it's a mistake to show the women. You'll scare 'em silly; they ain't even seen the stars."

Luck, sound engineering design, and a little knowledge. Good design, ten times that much luck, and a precious little knowledge. It was luck that had placed the Ship near a star with a planetary system, luck that the Ship arrived there with a speed low enough for Hugh to counteract it in a ship's auxiliary craft, luck that he learned to handle it after a fashion before they starved or lost themselves in deep space.

It was good design that provided the little craft with a great reserve of power and speed. The designers had anticipated that the pioneers might need to explore the far-flung planets of a solar system; they had provided for it in the planning of the Ship's boats, with a large factor of safety. Hugh strained that factor to the limit.

It was luck that placed them near the plane of planetary motion, luck that, when Hugh did manage to gun the tiny projectile into a closed orbit, the orbit agreed in direction with the rotation of the planets.

Luck that the eccentric ellipse he achieved should cause them to crawl up on a giant planet so that he was eventually able to identify it as such by sight.

For otherwise they might have spun around that star until they all died of old age, ignoring for the moment the readier hazards of hunger and thirst, without ever coming close enough to a planet to pick it out from the stars.

There is a misconception, geocentric and anthropomorphic, common to the large majority of the earthbound, which causes them to visualize a planetary system stereoscopically. The mind's eye sees a sun, remote from a backdrop of stars, and surrounded by spinning apples: the planets. Step out on your balcony and look. Can you tell the planets from the stars? Venus you may pick out with ease, but could you tell it from Canopus, if you had not previously been introduced? That little red speck: is it Mars, or is it Antares? How would you know, if you were as ignorant as Hugh Hoyland? Blast for Antares, believing it to be a planet, and you will never live to have grandchildren.

The great planet that they crawled up on, till it showed a visible naked-eye disc, was larger than Jupiter, a companion to the star, somewhat younger and larger the the Sun, around which it swung at a lordly distance. Hugh blasted back, killing his speed over many sleeps, to bring the Ship into a path around the planet. The maneuver brought him close enough to see its moons.

Luck helped him again. He had planned to ground the great planet, knowing no better. Had he been able do so they would have lived just long enough to open the airlock.

But he was short of mass, after the titanic task of pulling them out of the headlong hyperbolic plunge around an arc past the star and warping them into a closed orbit about the star, then into a subordinate orbit around the giant planet. He pored over the ancient books, substituted endlessly in the equations the ancients had set down as the laws for moving bodies, figured and refigured, and tested even the calm patience of Chloe. The other wife, the unnamed one, kept out of his way after losing a tooth, quite suddenly.

But he got no answer that did not require him to sacrifice some, at least, of the precious, irreplaceable ancient books for fuel. Yes, even though they stripped themselves naked and chucked in their knives, the mass of the books would still be needed.

He would have preferred to dispense with one of his wives. He decided to ground on one of the moons.

Luck again. Coincidence of such a colossal proportion that one need not be expected to believe it, for the moon of that planet was suitable for human terrestrial life. Never mind, skip over it, rapidly; the combination of circumstances is of the same order needed to produce such a planet in the first place. Our own planet, under our own sun is of the "There ain't no such animal" variety. It is a ridiculous improbability.

Hugh's luck was a ridiculous improbability.

Good design handled the next phase. Although he learned to maneuver the little Ship out in space where there is elbow room, landing is another and a ticklish matter. He would have crashed any spacecraft designed before the designing of the Vanguard. But the designers of the Vanguard had known that the Ship's auxiliary craft would be piloted and grounded by at least the second generation of explorers; green pilots must make those landings unassisted. They planned for it.

Hugh got the vessel down into the stratosphere and straightened it triumphantly into a course that would with certainty kill them all.

The autopilots took over.

Hugh stormed and swore, producing some words which diverted Alan's attention and admiration from the view out of the port. But nothing he could do would cause the craft to respond. It settled in its own way and leveled off at a thousand feet, an altitude which it maintained regardless of changing contour.

"Hugh, the stars are gone!"

"I know it."

"But Jordan! Hugh, what happened to them?"

Hugh glared at Alan. "I don't know and I don't care! You get aft with the women and stop asking silly questions."

Alan departed reluctantly with a backward look at the surface of the planet and the bright sky; It interested him, but he did not marvel much at it; his ability to marvel had been overstrained.

It was some hours before Hugh discovered that a hitherto ignored group of control lights set in motion a chain of events whereby the autopilot would ground the Ship. Since he found this out experimentally he did not exactly choose the place of landing. But the unwinking stereo-eyes of the autopilot fed its data to the 'brain'; the submolar mechanism selected and rejected; the Ship grounded gently on a rolling high prairie near a clump of vegetation.

Ertz came forward. "What's happened, Hugh?"

Hugh waved at the view port. "We're there." He was too tired to make much of it, too tired and too emotionally exhausted. His weeks of fighting a fight he understood but poorly, hunger, and lately thirst, years of feeding on a consuming ambition, these left him with little ability to enjoy his goal when it arrived.

But they had landed, they had finished Jordan's Trip. He was not unhappy, at peace rather, and very tired. Ertz stared out. "Jordan!" he muttered. Then, "Let's go out."

"All right."

Alan came forward, as they were opening the airlock, and the women pressed after him. "Are we there, Captain?"

"Shut up," said Hugh.

The women crowded up to the deserted view port; Alan explained to them, importantly and incorrectly, the scene outside. Ertz got the last door open.

They sniffed at the air. "It's cold," said Ertz. In fact the temperature was perhaps five degrees less than the steady monotony of the Ship's temperature, but Ertz was experiencing weather for the first time.

"Nonsense," said Hugh, faintly annoyed that any fault should be found with *his* planet. "It's just your imagination."

"Maybe," Ertz conceded. He paused uneasily. "Going out?" he added.

"Of course." Mastering his own reluctance, Hugh pushed him aside and dropped five feet to the ground "Come on; it's fine."

Ertz joined him, and stood close to him. Both of them remained close to the Ship. "It's big, isn't it?" Ertz said in a hushed voice.

"Well, we knew it would be," Hugh snapped, annoyed with himself for having the same lost feeling.

"Hi!" Alan peered cautiously out of the door. "Can I comedown? Is it alright?"

"Come ahead."

Alan eased himself gingerly over the edge and joined them. He looked around and whistled. "Gosh!"

Their first sortie took them all of fifty feet from the Ship. They huddled close together for silent comfort, and watched their feet to keep from stumbling on this strange uneven deck. They made it without incident until Alan looked up from the ground and found himself for the first time in his life with nothing close to him. He was hit by vertigo and acute agoraphobia; he moaned, closed his eyes and fell.

"What in the Ship?" demanded Ertz, looking around. Then it hit him.

Hugh fought against it. It pulled him to his knees, but be fought it, steadying himself with one hand on the ground. However, he had the advantage of having stared out through the view port for endless time; neither Alan nor Ertz were cowards.

"Alan!" his wife shrilled from the open door. "Alan! Come back here!" Alan opened one eye, managed to get it focused on the Ship, and started inching back on his belly.

"Man!" commanded Hugh. "Stop that! Situp."

Alan did so, with the air of a man pushed too far. "Open your eyes!" Alan obeyed cautiously, reclosed them hastily.

"Just sit still and you'll be all right," Hugh added. "I'm all right already." To prove it he stood up. He was still dizzy, but he made it. Ertz sat up.

The sun had crossed a sizable piece of the sky, enough time had passed for a well-fed man to become hungry, and they were not well fed. Even the women were outside; that had been accomplished by the simple expedient of going back in and pushing them out. They had not ventured away from the side of the Ship, but sat huddled against it. But their menfolk had even learned to walk singly, even in open spaces. Alan thought nothing of strutting a full fifty yards away from the shadow of the Ship, and did so more than once, in full sight of the women.

It was on one such journey that a small animal native to the planet let his curiosity exceed his caution. Alan's knife knocked him over and left him kicking. Alan scurried to the spot, grabbed his fat prize by one leg, and bore it proudly back to Hugh. "Look, Hugh, look! Good eating!"

Hugh looked with approval. His first strange fright of the place had passed and had been replaced with a deep warm feeling, a feeling that he had come at last to his long home. This seemed a good omen.

"Yes," he agreed. "Good eating. From now on, Alan, always Good Eating."

Stranger in a Strange Land

(uncut)

NOTICE:

All men, gods; and planets in this story are imaginary.
Any coincidence of names is regretted.

Preface

In a long conversation between that editor, John W. Campbell, Jr., and Robert, it was decided that there would be sufficient lead time to allow all the stories that the fan had titled to be written, and the magazine to come out in time for the November 1949 date. Robert promised to deliver a short story to go with the title. Most of the other authors also went along with the gag. This issue came to be known as the "Time Travel" issue.

Robert's problem, then, was to find a story to fit the title assigned to him.

So we held a "brainstorming" session. Among other unsuitable notions, I suggested a story about a human infant, raised by an alien race. The idea was just too big for a short story, Robert said, but he made a note about it. That night he went into his study, and wrote some lengthy notes, and set them aside.

For the title "Gulf" he wrote quite a different story.

The notes sat in a file for several years, at which time Robert began to write what was to be Stranger in a Strange Land. Somehow, the story didn't quite jell, and he set it aside. He returned to the manuscript a few times, but it was not finished until 1960: this was the version you now hold in your hands.

In the context of 1960, Stranger in a Strange Land was a book that his publishers feared-it was too far off the beaten path. So, in order to minimize possible losses, Robert was asked to cut the manuscript down to 150,000 words-a loss of about 70,000 words. Other changes were also requested, before the editor was willing to take a chance on publication.

To take out about a quarter of a long, complicated book was close to an impossible task. But, over the course of some months, Robert accomplished it. The final word count came out at 160,087 words. Robert was convinced that it was impossible to cut out any more, and the book was accepted at that length.

For 28 years it remained in print in that form.

In 1976, Congress passed a new Copyright Law, which said, in part, that in the event an author died, and the widow or widower renewed the copyright, all old contracts were cancelled Robert died in 1988, and the following year the copyright for Stranger in a Strange Land came up for renewal.

Unlike many other authors, Robert had kept a copy of the original typescript, as submitted for publication, on file at the library of the University of California at Santa Cruz, his archivists. I asked for a copy of that manuscript, and read that and the published versions side by side. And I came to the conclusion that it had been a mistake to cut the book.

So I sent a copy of the typescript to Eleanor Wood, Robert's agent. Eleanor also read the two versions together, and agreed with my verdict. So, after the notification to the publisher, she presented them with a copy of the new/old version.

No one remembered the fact that such drastic cutting had been done on this book; over the course of years all the editors and senior officers at the publishing house had changed. So this version was a complete surprise to them.

They decided to publish the original version, agreeing that it was better than the cut one.

You now have in your hands the original version of Stranger in a Strange Land, as written by Robert Anson Heinlein.

The given names of the chief characters have great importance to the plot. They were carefully selected: Jubal means "the father of all," Michael stands for "Who is like God?" I leave it for the reader to find out what the other names mean.

-Virginia Heinlein Carmel, California

part one

HIS MACULATE ORIGIN

Chapter 1

ONCE UPON A TIME when the world was young there was a Martian named Smith.

Valentine Michael Smith was as real as taxes but he was a race of one.

The first human expedition from Terra to Mars was selected on the theory that the greatest danger to man in space was man himself. At that time, only eight Terran years after the founding of the first human colony on Luna, any interplanetary trip made by humans necessarily had to be made in weary free-fall orbits, doubly tangent semi-ellipses from Terra to Mars, two hundred fifty-eight days, the same for the return journey, plus four hundred fifty-five days waiting at Mars while the two planets crawled slowly back into relative positions which would permit shaping the doubly-tangent orbit-a total of almost three Earth years.

Besides its wearing length, the trip was very chancy. Only by refueling at a space station, then tacking back almost into Earth's atmosphere, could this primitive flying coffin, the Envoy, make the trip at all. Once at Mars she might be able to return - if she did not crash in landing, if water could be found on Man to fill her reaction-mass tanks, if some sort of food could be found on Mars, if a thousand other things did not go wrong.

But the physical danger was judged to be less important than the psychological stresses. Eight humans, crowded together like monkeys for almost three Terran years, had better get along much better than humans usually did. An all-male crew had been vetoed as unhealthy and socially unstable from lessons learned earlier. A ship's company of four married couples had been decided on as optimum, if the necessary specialties could be found in such a combination.

The University of Edinburgh, prime contractor, subcontracted crew selection to the Institute for Social Studies. After discarding the chaff of volunteers useless through age, health, mentality, training, or temperament, the Institute still had over nine thousand candidates to work from, each sound in mind and body and having at least one of the necessary special skills. It was expected that the Institute would report several acceptable four-couple crews.

No such crew was found. The major skills needed were astrogator, medical doctor, cook, machinist, ship's commander, semantician, chemical engineer, electronics engineer, physicist, geologist, biochemist, biologist, atomics engineer, photographer, hydroponicist, rocket engineer. Each crew member would have to possess more than one skill, or be able to acquire extra skills in time. There were hundreds of possible combinations of eight people possessing these skills; there turned up three combinations of four married couples possessing them, plus health and intelligence, but in all three cases the group-dynamicists who evaluated the temperament factors for compatibility threw up their hands in horror.

The prime contractor suggested lowering the compatibility figure of merit; the Institute stiffly offered to return its one dollar fee. In the meantime a computer programmer whose name was not recorded had the machines hunt for three-couple rump crews. She found several dozen compatible combinations, each of which defined by its own characteristics the couple needed to complete it. In the meantime the machines continued to review the data changing through deaths, withdrawals, new volunteers, *etc.*

Captain Michael Brunt, M.S., Cmdr. D. F. Reserve, pilot (unlimited license), and veteran at thirty of the Moon run, seems to have had an inside track at the Institute, someone who was willing to look up for him the names of single female volunteers who might (with him) complete a crew, and then pair his name with these to run trial problems through the machines to determine whether or not a possible combination would be acceptable. This would account for his action in jetting to Australia and proposing marriage to Doctor Winifred Coburn, a horsefaced spinster semantician nine years his senior. The Carlsbad Archives pictured her with an expression of quiet good humor but otherwise lacking in attractiveness.

Or Brant may have acted without inside information, solely through that trait of intuitive audacity necessary to command an exploration. In any case lights blinked, punched cards popped out, and a crew for the Envoy had been found:

Captain Michael Brant, commanding-pilot, astrogator, relief cook, relief photographer, rocketry engineer;

Dr. Winifred Coburn Brant, forty-one, semantician, practical nurse, stores officer, historian;

Mr. Francis X. Seeney, twentyeight, executive officer, second pilot, astrogator, astrophysicist, photographer;

Dr. Olga Kovalic Seeney, twenty-nine, cook, biochemist, hydroponicist;

Dr. Ward Smith, fortyfive, physician and surgeon, biologist;

Dr. Mary Jane Lyle Smith, twenty-six, atomics engineer, electronics and power technician;

Mr. Sergei Rimsky, thirty-five, electronics engineer, chemical engineer, practical machinist & instrumentation man, cryologist;

Mrs. Eleanora Alvarez Rimsky, thirty-two, geologist and selenologist, hydroponicist.

The crew had a well-rounded group of skills, although in some cases their secondary skills had been acquired by intensive coaching during the last weeks before blastoff. More important, they were mutually compatible in their temperaments.

Too compatible, perhaps.

The Envoy departed on schedule with no mishaps. During the early part of the voyage her daily reports were picked up with ease by private listeners. As she drew away and signals became fainter, they were picked up and rebroadcast by Earth's radio satellites. The crew seemed to be both healthy and happy. An epidemic of ringworm was the worst that Dr. Smith had to cope with-the crew adapted to free fall quickly and no antinausea drugs were used after the first week. If Captain Brant had any disciplinary problems, he did not choose to report them to Earth.

The Envoy achieved a parking orbit just inside the orbit of Phobos and spent two weeks in photographic survey. Then Captain Brant radioed:

"We will attempt a landing at 1200 tomorrow GST just south of Lacus Soli." No further message was ever received.

Chapter 2

IT WAS A QUARTER of an Earth century before Mars was again visited by humans. Six years after the Envoy was silent, the drone probe Zombie, sponsored jointly by the Geographic Society and La Soci,t, Astronautique Internationale, bridged the void and took up an orbit for the waiting period, then returned. The photographs taken by the robot vehicle showed a land unattractive by human standards; her recording instruments confirmed the thinness and unsuitability of the Arean atmosphere to human life.

But the Zombie's pictures showed clearly that the "canals" were engineering works of some sort and there were other details which could only be interpreted as ruins of cities. A manned expedition on a major scale and without delay surely would have been mounted had not World War III intervened.

But the war and the delay resulted eventually in a much stronger, safer expedition than that of the lost Envoy. The Federation Ship Champion, manned by an all-male crew of eighteen experienced spacemen and carrying more than that number of male pioneers, made the crossing under Lyle Drive in only nineteen days. The Champion landed just south of Lacus Soli, as Captain van Tromp intended to search for the Envoy. The second expedition reported to Earth by radio daily, but three despatches were of more than scientific interest. The first was:

"Rocket Ship Envoy located. No survivors."

The second worldshaker was: "Mars is inhabited."

The third was: "Correction to dispatch 23-105: One survivor of Envoy located."

Chapter 3

CAPTAIN WILLEM VAN TROMP was a man of humanity and good sense. He radioed ahead: "My passenger must not, repeat, must not be subjected to the strain of a public reception. Provide low-gee shuttle, stretcher and ambulance service, and manned guard."

He sent his ship's surgeon Dr. Nelson along to make sure that Valentine Michael Smith was installed in a suite in Bethesda Medical Center, transferred gently into a hydraulic bed, and protected from outside contact by marine guards. Van Tromp himself went to an extraordinary session of the Federation High Council.

At the moment when Valentine Michael Smith was being lifted into bed, the High Minister for Science was saying testily, "Granted, Captain, that your authority as military commander of what was nevertheless primarily a scientific expedition gives you the right to order unusual medical service to protect a person temporarily in your charge, I do not see why you now presume to interfere with the proper functions of my department. Why, Smith is a veritable treasure trove of scientific information!"

"Yes. I suppose he is, sir."

"Then why-" The science minister broke off and turned to the High Minister for Peace and Military Security. "David? This matter is obviously now in my jurisdiction. Will you issue the necessary instructions to your people? After all, one can't keep persons of the caliber of Professor Kennedy and Doctor Okajima, to mention just two, cooling their heels indefinitely. They won't stand for it."

The peace minister did not answer but glanced inquiringly at Captain van Tromp. The captain shook his head. "No, sir."

"Why not?" demanded the science minister. "You have admitted that he isn't sick."

"Give the captain a chance to explain, Pierre," the peace minister advised. "Well, Captain?"

"Smith isn't sick, sir," Captain van Tromp said to the peace minister, "but he isn't well, either. He has never before been in a one-gravity field. He now weighs more than two and one half times what he is used to and his muscles aren't up to it. He's not used to Earth-normal air pressure. He's not used to anything and the strain is likely to be too much for him. Hell's bells, gentlemen, I'm dog tired myself just from being at one-gee again-and I was born on this planet."

The science minister looked contemptuous. "If acceleration fatigue is all that is worrying you, let me assure you, my dear Captain, that we had anticipated that. His respiration and heart action will be watched carefully. We are not entirely without imagination and forethought. After all, I've been out myself. I know how it feels. This man Smith must-"

Captain van Tromp decided that it was time to throw a tantrum. He could excuse it by his own fatigue-very real fatigue, he felt as if he had just landed on Jupiter-and he was smugly aware that even a high councilor could not afford to take too stiff a line with the commander of the first successful Martian expedition.

So he interrupted with a snort of disgust. "Think! 'This man Smith-' This 'man!' Can't you see that that is just what he is not?"

"Eh?"

"Smith ... is ... not ... a ... man."

"Huh? Explain yourself, Captain."

"Smith is not a man. He is an intelligent creature with the genes and ancestry of a man, but he is not a man. He's more a Martian than a man. Until we came along he had never laid eyes on a human being. He thinks like a Martian, he feels like a Martian. He's been brought up by a race which has nothing in common with us. Why, they don't even have sex. Smith has never laid eyes on a woman-still hasn't if my orders have been carried out. He's a man by ancestry, a Martian by environment. Now, if you want to drive him crazy and waste that 'treasure trove of scientific information,' call in your fatheaded professors and let them badger him. Don't give him a chance to get well and strong and used to this madhouse planet. Just go ahead and squeeze him like an orange. It's no skin off me; I've done my job!"

The ensuing silence was broken smoothly by Secretary General Douglas himself. "And a good job, too, Captain. Your advice will be weighed, and be assured that we will not do anything hastily. If this man, or manMartian, Smith, needs a few days to get adjusted, I'm sure that science can wait-so take it easy, Pete. Let's table this part of the discussion, gentlemen, and get on to other matters. Captain van Tromp is tired."

"One thing won't wait," said the Minister for Public Information.

"Eh, Jock?"

"If we don't show the Man from Mars in the stereo tanks pretty shortly, you'll have riots on your hands, Mr. Secretary."

"Hmm-You exaggerate, Jock. Mars stuff in the news, of course. Me decorating the captain and his brave crew-tomorrow, that had better be. Captain van Tromp telling of his experiences-after a night's rest of course, Captain."

The minister shook his head.

"No good, Jock?"

"The public expected the expedition to bring back at least one real live Martian for them to gawk at. Since they didn't, we need Smith and need him badly."

"'Live Martians?'" Secretary General Douglas turned to Captain van Tromp. "You have movies of Martians, haven't you?"

"Thousands of feet."

"There's your answer, Jock. When the live stuff gets thin, trot on the movies of Martians. The people will love it. Now, Captain, about this possibility of extraterritoriality: you say the Martians were not opposed to it?"

"Well, no, sir-but they were not for it, either."

"I don't follow you?"

Captain van Tromp chewed his lip. "Sir, I don't know just how to explain it. Talking with a Martian is something like talking with an echo. You don't get any argument but you don't get results either."

"Semantic difficulty? Perhaps you should have brought what's-his-name, your semantician, with you today. Or is he waiting outside?"

"Mahmoud, sir. No, Doctor Mahmoud is not well. A-a slight nervous breakdown, sir." Van Tromp reflected that being dead drunk was the moral equivalent thereof.

"Space happy?"

"A little, perhaps." These damned groundhogs!

"Well, fetch him around when he's feeling himself. young man Smith should be of help as an interpreter."

"Perhaps," van Tromp said doubtfully.

This young man Smith was busy at that moment just staying alive. His body, unbearably compressed and weakened by the strange shape of space in this unbelievable place, was at last somewhat relieved by the softness of the nest in which these others had placed him. He dropped the effort of sustaining it, and turned his third level to his respiration and heart beat.

He saw at once that he was about to consume himself. His lungs were beating almost as hard as they did at home, his heart was racing to distribute the influx, all in an attempt to cope with the squeezing of space-and this in a situation in which he was smothered by a poisonously rich and dangerously hot atmosphere. He took immediate steps.

When his heart rate was down to twenty per minute and his respiration almost imperceptible, he set them at that and watched himself long enough to assure himself that he would not inadvertently discorporate while his attention was elsewhere. When he was satisfied that they were running properly, he set a tiny portion of his second level on guard and withdrew the rest of himself. It was necessary to review the configurations of these many new events in order to fit them to himself, then cherish and praise them - lest they swallow him up.

Where should he start? When he had left home, enfolding these others who were now his own nestlings? Or simply at his arrival in this crushed space? He was suddenly assaulted by the lights and sounds of that arrival, feeling it again with mind-shaking pain. No, he was not yet ready to cherish and embrace that configuration-back! back! back beyond his first sight of these others who were now his own. Back even before the healing which had followed his first grokking of the fact that he was not as his nestling brothers ... back to the nest itself.

None of his thinkings had been in Earth symbols. Simple English he had freshly learned to speak, but much less easily than a Hindu uses it to trade with a Turk. Smith used English as one might use a code book, with tedious and imperfect translation for each symbol. Now his thoughts, pure Martian abstractions from half a million years of wildly alien culture, traveled so far from any human experience as to be utterly untranslatable.

In the adjoining room an interne, Dr. "Tad" Thaddeus, was playing cribbage with Tom Meechum, Smith's special nurse. Thaddeus had one eye on his dials and meters and both eyes on his cards; nevertheless he noted every heart beat of his patient. When a flickering light changed from ninety-two pulsations per minute to less than twenty, he pushed the cards aside, jumped to his feet, and hurried into Smith's room with Meechum at his heels.

The patient floated in the flexible skin of the hydraulic bed. He appeared to be dead. Thaddeus swore briefly and snapped, "Get Doctor Nelson!"

Meechum said, "Yessir!" and added, "How about the shock gear, Doe? He's far gone."

"Gel Doctor Nelson!"

The nurse rushed out. The interne examined the patient as closely as possible but refrained from touching him. He was still doing so when an older doctor came in, walking with the labored awkwardness of a man long in space and not yet adjusted to high gravity. "Well, Doctor?"

"Patient's respiration, temperature, and pulse dropped suddenly, uh, about two minutes ago, sir."

"What have you done for him, or to him?"

"Nothing, sir. Your instructions-"

"Good." Nelson looked Smith over briefly, then studied the instruments back of the bed, twins of those in the watch room. "Let me know if there is any change." He started to leave.

Thaddeus looked startled. "But, Doctor-" He broke off.

Nelson said grimly, "Go ahead, Doctor. What is your diagnosis?"

"Uh, I don't wish to sound off about your patient, sir."

"Never mind. I asked for your diagnosis."

"Very well, sir. Shock-atypical, perhaps," he hedged, "but shock, leading to termination."

Nelson nodded. "Reasonable enough. But this isn't a reasonable case. Relax, son. I've seen this patient in this condition half a dozen times during the trip back. It doesn't mean a thing. Watch." Nelson lifted the patient's right arm, let it go. It stayed where he had left it.

"Catalepsy?" asked Thaddeus.

"Call it that if you like. Calling a tail a leg doesn't make it one. Don't worry about it, Doctor. There is nothing typical about this case. Just keep him from being bothered and call me if there is any change." He replaced Smith's arm.

When Nelson had left, Thaddeus took one more look at the patient, shook his head and joined Meechum in the watch room. Meechum picked up his cards and said, "Crib?"

"No."

Meechum waited, then added, "Doc, if you ask me, that one in there is a case for the basket before morning."

"No one asked you."

"My mistake."

"Go out and have a cigarette with the guards. I want to think."

Meechum shrugged and left. Thaddeus opened a bottom drawer, took out a bottle and poured himself a dose intended to help his thinking. Meechum joined the guards in the corridor; they straightened up, then saw who it was and relaxed. The taller marine said, "Howdy, pal. What was the excitement just now?"

"Nothing much. The patient just had quintuplets and we were arguing about what to name them. Which one of you monkeys has got a butt? And a light?"

The other marine dug a pack of cigarettes out of a pocket. "How're you fixed for Suction?" he asked bleakly.

"Just middlin'. Thanks." Meechum stuck the cigarette in his face and talked around it. "Honest to God, gentlemen, I don't know anything about this patient. I wish I did."

"What's the idea of these orders about 'Absolutely No Women'? Is he some kind of a sex maniac?"

"Not that I know of. All that I know is that they brought him in from the Champion and said that he was to have absolute quiet."

"'The Champion!' "the first marine said. "Of course! That accounts for it."

"Accounts for what?"

"It stands to reason. He ain't had any, he ain't seen any, he ain't touched any-for months. And he's sick, see? If he was to lay hands on any, they're afraid he'd kill hisself." He blinked and blew out a deep breath. "I'll bet I would, under similar circumstances. No wonder they don't want no bims around him."

Smith had been aware of the visit by the doctors but he had grokked at once that their intentions were benign; it was not necessary for the major part of him to be jerked back from where he was.

At the hour in the morning when human nurses slap patient's faces with cold, wet cloths under the pretense of washing them, Smith returned from his journey. He speeded up his heart, increased his respiration, and again took note of his surroundings, viewing them with serenity. He looked the room over, noting without discrimination and with praise all its details, both important and unimportant. He was, in fact, seeing it for the first time, as he had been incapable of enfolding it when he had been brought there the day before. This commonplace room was not commonplace to him; there was nothing remotely like it on all Mars, nor did it resemble the wedge-shaped, metal-walled compartments of the Champion. But, having relived the events linking his nest to this place, he was now prepared to accept it, commend it, and in some degree to cherish it.

He became aware that there was another living creature in the room with him. A granddaddy longlegs was making a futile journey down from the ceiling, spinning as it went. Smith watched it with delight and wondered if it were a nestling form of man.

Doctor Archer Frame, the interne who had relieved Thaddeus, walked in at that moment. "Good morning," he said. "How do you feel?"

Smith turned the question over in his mind. The first phrase he recognized as a formal sound, requiring no answer but which could be repeated-or might not be. The second phrase was listed in his mind with several possible translations. If Doctor Nelson used it, it meant one thing; if Captain van Tromp used it, it was a formal sound, needing no reply.

He felt that dismay which so often overtook him in trying to communicate with these creatures-a frightening sensation unknown to him before he met men. But he forced his body to remain calm and risked an answer. "Feel good."

"Good!" the creature echoed. "Doctor Nelson will be along in a minute. Feel like some breakfast?"

All four symbols in the query were in Smith's vocabulary but he had trouble believing that he had heard them rightly. He knew that he was food, but he did not "feel like" food. Nor had he had any warning that he might be selected for such an honor. He had not known that the food supply was such that it was necessary to reduce the corporate group. He was filled with mild regret, since there was still so much to grok of these new events, but no reluctance.

But he was excused from the effort of translating an answer by the entrance of Dr. Nelson. The ship's doctor had had little rest and less sleep; he wasted no time on speech but inspected Smith and the array of dials in silence.

Then he turned to Smith. "Bowels move?" he asked.

Smith understood this; Nelson always asked about it. "No, not yet."

"We'll take care of that. But first you eat. Orderly, fetch in that tray."

Nelson fed him two or three bites, then required him to hold the spoon and feed himself. It was tiring but gave him a feeling of gay triumph, for it was the first unassisted action he had taken since reaching this oddly distorted space. He cleaned out the bowl and remembered to ask, "Who is this?" so that he could praise his benefactor.

"What is this, you mean," Nelson answered. "It's a synthetic food jelly, based on amino acids-and now you know as much as you did before. Finished? All right, climb out of that bed."

"Beg pardon?" It was an attention symbol which he had learned was useful when communication failed.

"I said get out of there. Sit up. Stand up. Walk around. You can do it. Sure, you're weak as a kitten but you'll never put on muscle floating in that bed." Nelson opened a valve at the head of the bed; water drained out. Smith restrained a feeling of insecurity, knowing that Nelson cherished him. Shortly he lay on the floor of the bed with the watertight cover wrinkled around him. Nelson added, "Doctor Frame, take his other elbow. We'll have to help him and steady him."

With Dr. Nelson to encourage him and both of them to help him, Smith stood up and stumbled over the rim of the bed. "Steady. Now stand up on your own," Nelson directed. "Don't be afraid. We'll catch you if necessary."

He made the effort and stood alone-a slender young man with underdeveloped muscles and overdeveloped chest. His hair had been cut in the Champion and his whiskers removed and inhibited. His most marked feature was his bland, expressionless, almost babyish face-set with eyes which would have seemed more at home in a man of ninety.

He stood alone for a moment, trembling slightly, then tried to walk. He managed three shuffling steps and broke into a sunny, childlike smile. "Good boy!" Nelson applauded.

He tried another step, began to tremble violently and suddenly collapsed. They barely managed to break his fall. "Damn!" Nelson fumed. "He's gone into another one. Here, help me lift him into the bed. No-fill it first."

Frame did so, cutting off the flow when the cover skin floated six inches from the top. They lugged him into it, awkwardly because he had frozen into the fetal position. "Get a collar pillow under his neck," instructed Nelson, "and call me when he comes out of it. No-let me sleep, I need it. Unless something worries you. We'll walk him again this afternoon and tomorrow we'll start systematic exercise. In three months I'll have him swinging through the trees like a monkey. There's nothing really wrong with him."

"Yes, Doctor," Frame answered doubtfully.

"Oh, yes, when he comes out of it, teach him how to use the bathroom. Have the nurse help you; I don't want him to fall."

"Yes, sir. Uh, any particular methodI mean, how-"

"Eh? Show him, of course! Demonstrate. He probably won't understand much that you say to him, but he's bright as a whip. He'll be bathing himself by the end of the week."

Smith ate lunch without help. Presently a male orderly came in to remove his tray. The man glanced around, then came to the bed and leaned over him. "Listen," he said in a low voice, "I've got a fat proposition for you."

"Beg pardon?"

"A deal, a bargain, a way for you to make a lot of money fast and easy."

'Money?' What is 'money'?"

"Never mind the philosophy; everybody needs money. Now listen I'll have to talk fast because I can't stay in here long-and it's taken a lot of fixing to get me in here at all. I represent Peerless Features. We'll pay you sixty thousand for your exclusive story and it won't be a bit of trouble to you-we've got the best ghost writers in the business. You just talk and answer questions; they put it together." He whipped out a piece of paper. "Just read this and sign it. I've got the down payment with me."

Smith accepted the paper, stared thoughtfully at it, holding it upside down. The man looked at him and muffled an exclamation. "Lordyl Don't you read English?"

Smith understood this well enough to answer. "No."

"Well-Here, I'll read it to you, then you just put your thumb print in the square and I'll witness it. 'I, the undersigned, Valentine Michael Smith, sometimes known as the Man from Mars, do grant and assign to Peerless Features, Limited, all and exclusive rights in my true-fact story to be titled I Was a Prisoner on Mars in exchange for-"

"Orderly!"

Dr. Frame was standing in the door of the watch room; the paper disappeared into the man's clothes. "Coming, sir. I was just getting this tray."

"What were you reading?"

"Nothing."

"I saw you. Never mind, come out of there quickly. This patient is not to be disturbed." The man obeyed; Dr. Frame closed the door behind them. Smith lay motionless for the next half hour, but try as he might he could not grok it at all.

Chapter 4

GILLIAN BOARDMAN WAS CONSIDERED professionally competent as a nurse; she was judged competent in wider fields by the bachelor interns and she was judged harshly by some other women. There was no harm in her and her hobby was men. When the grapevine carried the word that there was a patient in special suite K-12 who had never laid eyes on a woman in his life, she did not believe it. When detailed explanation convinced her, she resolved to remedy it. She went on duty that day as floor supervisor in the wing where Smith was housed. As soon as possible she went to pay a call on the strange patient.

She knew of the "No Female Visitors" rule and, while she did not Consider herself to be a visitor of any sort, she sailed on past the marine guards without attempting to use the door they guarded-marines, she had found, had a stuffy habit of construing their orders literally. Instead she went into the adjacent watch room. Dr. "Tad" Thaddeus was on duty there alone.

He looked up. "Well, if it ain't 'Dimples!' Hi, honey, what brings you here?"

She sat on the corner of his desk and reached for his cigarettes. "'Miss Dimples,' to you, chum; I'm on duty. This call is part of my rounds. What about your patient?"

"Don't worry your fuzzy head about him, honey chile; he's not your responsibility. See your order book."

"I read it. I want to have a look at him."

"In one word-no."

"Oh, Tad, don't go regulation on me. I know you."

He gazed thoughtfully at his nails. "Ever worked for Doctor Nelson?"

"No. Why?"

"If I let you put your little foot inside that door, I'd find myself in Antarctica early tomorrow, prescribing for penguins' chilblains. So switch your fanny out of here and go bother your own patients. I wouldn't want him even to catch you in this watch room."

She stood up. "Is Doctor Nelson likely to come popping in?"

"Not likely, unless I send for him. He's still sleeping off low-gee fatigue."

"So? Then what's the idea of being so duty struck?"

"That's all, Nurse."

"Very well, Doctor!" She added, "Stinker."

"Jill!"

"And a stuffed shirt, too."

He sighed. "Still okay for Saturday night?"

She shrugged. "I suppose so. A girl can't be fussy these days." She went back to her duty station, found that her services were not in immediate demand, picked up the pass key. She was balked but not beaten, as she recalled that suite K-12 had a door joining it to the room beyond it, a room sometimes used as a sitting room when the suite was occupied by a Very Important Person. The room was not then in use, either as part of the suite or separately. She let herself into it. The guards at the door beyond paid no attention, unaware that they had been flanked.

She hesitated at the inner door between the two rooms, feeling some of the sharp excitement she used to feel when sneaking out of student nurses' quarters. But, she told herself, Dr. Nelson was asleep and Tad wouldn't tell on her even if he caught her. She didn't blame him for keeping his finger on his number-but he wouldn't report her. She unlocked the door and looked in.

The patient was in bed, he looked at her as the door opened. Her first impression was that here was a patient too far gone to care. His lack of expression seemed to show the complete apathy of the desperately ill. Then she saw that his eyes were alive with interest; she wondered if his face were paralyzed? No, she decided; the typical sags were lacking.

She assumed her professional manner. "Well, how are we today? Feeling better?"

Smith translated and examined the questions. The inclusion of herself in the first query was confusing, but he decided that it might symbolize a wish to cherish and grow close. The second part matched Nelson's speech forms. "Yes," he answered.

"Good!" Aside from his odd lack of expression she saw nothing strange about him-and if women were unknown to him, he was certainly managing to conceal it. "Is there anything I can do for you?" She glanced around, noted that there was no glass on the bedside shelf. "May I get you water?"

Smith had spotted at once that this creature was different from the others who had come to see him. Almost as quickly he compared what he was seeing with pictures Nelson had shown him on the trip from home to this place-pictures intended to explain a particularly difficult and puzzling configuration of this people group. This, then, was a "woman."

He felt both oddly excited and disappointed. He suppressed both in order that he might grok deeply, with such success that Dr. Thaddeus noticed no change in the dial readings in the next room.

But when he translated the last query he felt such a surge of emotion that he almost let his heartbeat increase. He caught it in time and chided himself for an undisciplined nestling. Then he checked his translation.

No, he was not mistaken. This woman creature had offered him the water ritual. It wished to grow closer.

With great effort, scrambling for adequate meanings in his pitifully poor list of human words, he attempted to answer with due ceremoniousness. "I thank you for water. May you always drink deep."

Nurse Boardman looked startled. "Why, how sweet!" She found a glass, filled it, and handed it to him.

He said, "You drink."

Wonder if he thinks I'm trying to poison him? she asked herself-but there was a compelling quality to his request. She took a sip, whereupon he took the glass from her and took one also, after which he seemed content to sink back into the bed, as if he had accomplished something important.

Jill told herself that, as an adventure, this was a fizzle. She said, "Well, if you don't need anything else, I must get on with my work."

She started for the door. He called out, "Not"

She stopped. "Eh? What do you want?"

"Don't go away."

"Well I?ll have to go, pretty quickly." But she came back to the bedside, "Is there anything you want?"

He looked her up and down. "You are ... 'woman'?"

The question startled Jill Boardman. Her sex had not been in doubt to the most casual observer for many years. Her first impulse was to answer flippantly.

But Smith's grave face and oddly disturbing eyes checked her. She became aware emotionally that the impossible fact about this patient was true: he did not know what a woman was. She answered carefully, "Yes, I am a woman."

Smith continued to stare at her without expression. Jill began to be embarrassed by it. To be looked at appreciatively by a male she expected and sometimes enjoyed, but this was more like being examined under a microscope. She stirred restively. "Well? I look like a woman, don't I?"

"I do not know," Smith answered slowly. "How does woman look? What makes you woman?"

"Well, for pity's sake! Jill realized confusedly that this conversation was further out of hand than any she had had with a male since about her twelfth birthday. "You don't expect me to take off my clothes and show you!"

Smith took time to examine these verbal symbols and try to translate them. The first group he could not grok at all. It might be one of those formal sound groups these people so often used . . . yet it had been spoken with surprising force, as if it might be a last communication before withdrawal. Perhaps he had so deeply mistaken right conduct in dealing with a woman creature that the creature might be ready to discorporate at once.

He knew vaguely that he did not want the nurse to die at that moment, even though it was certainly its right and possibly its obligation to do so. The abrupt change from the rapport of the water ritual to a situation in which a newly won water brother might possibly be considering withdrawal or discorporation would have thrown him into panic had he not been consciously suppressing such disturbance. But he decided that if Jill died now he must die at once also-he could not grok it in any other wise, not after the giving of water.

The second half of the communication contained only symbols that he had encountered before. He grokked imperfectly the intention but there seemed to be an implied way out for him to avoid this crisis-by acceding to the suggested wish. Perhaps if the woman took its clothes off neither of them need discorporate. He smiled happily. "Please."

Jill opened her mouth, closed it hastily. She opened it again. "Huh? Well, I'll be darned!"

Smith could grok emotional violence and knew that somehow he had offered the wrong reply. He began to compose his mind for discorporation, savoring and cherishing all that he had been and seen, with especial attention to this woman creature. Then he became aware that the woman was bending over him and he knew somehow that it was not about to die. It looked into his face. "Correct me if I am wrong," it said, "but were you asking me to take my clothes off?"

The inversions and abstractions required careful translation but Smith managed it. "Yes," he answered, while hoping that it would not stir up a new crisis.

"That's what I thought you said. Brother, you aren't ill."

The word "brother" he considered first-the woman was reminding him that they had been joined in the water ritual. He asked the help of his nestlings that he might measure up to whatever this new brother wanted. "I am not ill," he agreed.

"Though I'm darned if I know how to cope with whatever is wrong with you. But I won't peel down. And I've got to get out of here." It straightened up and turned again toward the side door-then stopped and looked back with a quizzical smile. "You might ask me again, real prettily, under other circumstances. I'm curious to see what I might do."

The woman was gone. Smith relaxed into the water bed and let the room fade away from him. He felt sober triumph that he had somehow comforted himself so that it was not necessary for them to die . . . but there was much new to grok. The woman's last speech had contained many symbols new to him and those which were not new had been arranged in fashions not easily understood. But he was happy that the emotional flavor of them had been suitable for communication between water brothers-although touched with something else both disturbing and terrifyingly pleasant. He thought about his new brother, the woman creature, and felt odd tingles run through him. The feeling reminded him of the first time he had been allowed to be present at a discorporation and he felt happy without knowing why.

He wished that his brother Doctor Mahmoud were here. There was so much to grok, so little to grok from.

Jill Boardman spent the rest of her watch in a mild daze. She managed to avoid any mistakes in medication and she answered from reflex the usual verbal overtures made to her. But the face of the Man from Mars stayed in her mind and she mulled over the crazy things he had said. No, not "crazy," she corrected-she had done her stint in psychiatric wards and she felt certain that his remarks had not been psychotic.

She decided that "innocent" was the proper term-then she decided that the word was not adequate. His expression was innocent, but his eyes were not. What sort of creature had a face like that?

She had once worked in a Catholic hospital; she suddenly saw the face of the Man from Mars surrounded by the head dress of a nursing Sister, a nun. The idea disturbed her, for there was nothing female about Smith's face.

She was changing into street clothes when another nurse stuck her head into the locker room. "Phone, Jill. For you." Jill accepted the call, sound without vision, while she continued to dress.

"Is this Florence Nightingale?" a baritone voice asked.

"Speaking. That you, Ben?"

"The stalwart upholder of the freedom of the press in person. Little one, are you busy?"

"What do you have in mind?"

"I have in mind taking you out, buying you a bloody steak, plying you with liquor, and asking you a question."

"The answer is still 'No.'

"Not that question. Another one."

"Oh, do you know another one? If so, tell me."

"Later. I want you softened up by food and liquor first."

"Real steak? Not syntho?"

"Guaranteed. When you stick a fork into it, it will turn imploring eyes on you."

"You must be on an expense account, Ben."

"That's irrelevant and ignoble. How about it?"

"You've talked me into it."

"The roof of the medical center. Ten minutes."

She put the street suit she had changed into back into her locker and put on a dinner dress kept there for emergencies. It was a demure little number, barely translucent and with bustle and bust pads so subdued that they merely recreated the effect she would have produced had she been wearing nothing. The dress had cost her a month's pay and did not look it, its subtle power being concealed like knockout drops in a drink. Jill looked at herself with satisfaction and took the bounce tube up to the roof.

There she pulled her cape around her against the wind and was looking for Ben Caxton when the roof orderly touched her arm. "There is a car over there paging you, Miss Boardman-that Talbot saloon."

"Thanks, Jack." She saw the taxi spotted for takeoff, with its door open. She went to it, climbed in, and was about to hand Ben a backhanded compliment on gallantry when she saw that he was not inside. The taxi was on automatic; its door closed and it took to the air, swung out of the circle, and sliced across the Potomac. Jill sat back and waited.

The taxi stopped on a public landing flat over Alexandria and Ben Caxton got in; it took off again. Jill looked him over grimly. "My, aren't we getting important! Since when has your time become so valuable that you send a robot to pick up your women?"

He reached over, patted her knee, and said gently, "Reasons, little one, reasons-I can't afford to be seen picking you up-"

"Well!"

"-and you can't afford to be seen being picked up by me. So simmer down. I apologize. I bow in the dust. I kiss your little foot. But it was necessary."

"Hmm ... which one of us has leprosy?"

"Both of us, in different ways. Jill, I'm a newspaperman."

"I was beginning to think you were something else."

"And you are a nurse at the hospital where they are holding the Man from Mars." He spread his hands and shrugged.

"Keep talking. Does that make me unfit to meet your mother?"

"Do you need a map, Jill? There are more than a thousand reporters in this area, not counting press agents, ax grinders, winchells, lippmanns, and the stampede that headed this way when the Champion landed. Every one of them has been trying to interview the Man from Mars, including me. So far as I know, none has succeeded. Do you think it would be smart for us to be seen leaving the hospital together?"

"Umm, maybe not. But I don't really see that it matters. I'm not the Man from Mars.

He looked her over. "You certainly aren't. But maybe you are going to help me see him-which is why I didn't want to be seen picking you up."

"Huh? Ben, you've been out in the sun without your hat. They've got a marine guard around him." She thought about the fact that she herself had not found the guard too hard to circumvent, decided not to mention it.

"So they have. So we talk it over."

"I don't see what there is to talk about."

"Later. I didn't intend to let the subject come up until I had softened you with animal proteins and ethanol. Let's eat first."

"Now you sound rational. Where? Would your expense account run to the New Mayflower? You are on an expense account, aren't you?"

Caxton frowned. "Jill, if we eat in a restaurant, I wouldn't want to risk one closer than Louisville. It would take this hack more than two hours to get us that far. How about dinner in my apartment?"

"'-said the Spider to the Fly.' Ben, I remember the last time. I'm too tired to wrestle."

"Nobody asked you to. Strictly business. King's X, cross my heart and hope to die."

"I don't know as I like that much better. If I'm safe alone with you, I must be slipping. Well, all right, King's X."

Caxton leaned forward and punched buttons; the taxi, which had been circling under a "hold" instruction, woke up, looked around, and headed for the apartment hotel where Ben lived. He then dialed a phone number and said to Jill, "How much time do you want to get liquored up, sugar foot? I'll tell the kitchen when to have the steaks ready."

Jill considered it. "Ben, your mousetrap has a private kitchen."

"Of sorts. I can grill a steak, if that is what you mean."

"I'll grill the steak. Hand me the phone." She gave orders, stopping to make sure that Ben liked endive.

The taxi dropped them on the roof and they went down to his flat. It was unstylish and old-fashioned; its one luxury was a live grass lawn in the living room. Jill stopped in the entrance hail, slipped off her shoes, then stepped barefooted into the living room and wiggled her toes among the cool green blades. She sighed. "My, that feels good. My feet have hurt ever since I entered training."

"Sit down."

"No, I want my feet to remember this tomorrow, when I'm on duty."

"Suit yourself." He went into his pantry and mixed drinks.

Presently she pattered after him and became domestic. The steak was waiting in the package lift; with it were pre-baked potatoes ready to be popped into shortwave. She tossed the salad, handed it to the refrigerator, then set up a combination on the stove to grill the steak and have the potatoes hot simultaneously, but did not start the cycle. "Ben, doesn't this stove have a remote control?"

"Of course."

"Well, I can't find it."

He studied the setup on the control panel, then flipped an unmarked switch. "Jill, what would you do if you had to cook over an open fire?"

"I'd do darn well. I was a Girl Scout and a good one. How about you, smarty?"

He ignored it, picked up a tray and went back to the living room; she followed and sat down at his feet, spreading her skirt to avoid grass stains. They applied themselves seriously to martinis. Opposite his chair was a stereovision tank disguised as an aquarium; he switched it on from his chair, guppies and tetras faded out and gave way to the face of a commentator, the well-known winchell Augustus Greaves.

"-it can be stated authoritatively," the stereo image was saying, "that the Man from Mars is being kept constantly under hypnotic drugs to keep him from disclosing these facts. The administration would find it extremely embarrassing if-"

Canon flipped it off. "Gus old boy," he said pleasantly, "you don't know a durn thing more about it than I do." He frowned. "Though you might be right about the government keeping him under drugs."

"No, they aren't," Jill said suddenly.

"Eh? How's that, little one?"

"The Man from Mars isn't being kept under hypnotics." Having blurted more than she had meant to, she added carefully, "He's got a nurse and a doctor all to himself on continuous watch, but there aren't any orders for sedation."

"Are you sure? You aren't one of his nurses-or are you?"

"No. They're male nurses. Uh ... matter of fact, there's an order to keep women away from him entirely and a couple of tough marines to make sure of it."

Caxton nodded. "I heard about that. Fact is, you don't know whether they are drugging him or not. Do you?"

Jill stared into her empty glass. She felt annoyed to have her word doubted but realized she would have to tell on herself to back up what she had said. "Ben? You wouldn't give me away? Would you?"

"Give you away? How?"

"Any way at all."

"Hmm ... that covers a lot of ground, but I'll go along."

"All right. Pour me another one first." He did so, Jill went on. "I know they don't have the Man from Mars hopped up-because I talked with him."

Caxton gave a slow whistle. "I knew it. When I got up this morning I said to myself, 'Go see Jill. She's the ace up my sleeve.' Honey lamb, have another drink. Have six. Here, take the pitcher."

"Not so fast, thanks."

"Whatever you like. May I rub your poor tired feet? Lady, you are about to be interviewed. Your public waits with quivering impatience. Now let's begin at the beginning. How-"

"No, Ben! You promised-remember? You quote me just one little quote and I'll lose my job."

"Mmm ... probably. How about 'from a usually reliable source'?"

"I'd be scared."

"Well? Are you going to tell Uncle Ben? Or are you going to let him die of frustration and then eat that steak by yourself?"

"Oh, I'll talk-now that I've talked this much. But you can't use it." Ben kept quiet and did not press his luck; Jill described how she had outflanked the guards.

He interrupted. "Say! Could you do that again?"

"Huh? I suppose so, but I won't. It's risky."

"Well, could you slip me in that way? Of course you could! Look, I'll dress up like an electrician-greasy coveralls, union badge, tool kit. You just slip me the pass key and-"

"No!"

"Huh? Look, baby girl, be reasonable. I'll bet you four to one that half the hospital staffers around him are ringers, stuck in there by one news service or another. This is the greatest human-interest story since Colombo conned Isabella into hocking her jewels. The only thing that worries me is that I may find another phony electrician-"

"The only thing that worries me is me," Jill interrupted. "To you it's just a story; to me it's my career. They'd take away my cap, my pin, and ride me out of town on a rail. I'd be finished as a nurse."

"Mmm ... there's that."

"There sure is that."

"Lady, you are about to be offered a bribe."

"How big a bribe? It'll take quite a chunk to keep me in style the rest of my life in Rio."

"Well ... the story is worth money, of course, but you can't expect me to outbid Associated Press, or Reuters. How about a hundred?"

"What do you think I am?"

"We settled that, we're dickering over the price. A hundred and fifty?

"Pour me another drink and look up the phone number of Associated Press for me, that's a lamb."

"It's Capitol 10-9000. Jill, will you marry me? That's as high as I can go."

She looked up at him, startled. "What did you say?"

"Will you marry me? Then, when they ride you out of town on a rail, I'll be waiting at the city line and take you away from your sordid existence. You'll come back here and cool your toes in my grass-our grass-and forget your ignominy. But you've durn well got to sneak me into that hospital room first."

"Ben, you almost sound serious. If I phone for a Fair Witness, will you repeat the offer?"

Caxton sighed. "Jill, you're a hard woman. Send for a Witness."

She stood up. "Ben," she said softly, "I won't hold you to it." She rumpled his hair and kissed him. "But don't ever joke about marriage to a spinster."

"I wasn't joking."

"I wonder. Wipe off the lipstick and I'll tell you everything I know, then we'll consider how you can use it without getting me ridden on that rail. Fair enough?"

"Fair enough."

She gave him a detailed account. "I'm sure he wasn't drugged. I'm equally sure that he was rational-although why I'm sure I don't know, for he talked in the oddest fashion and asked the darnedest questions. But I'm sure. He isn't psychotic."

"It would be odder still if he hadn't talked in an odd fashion."

"Huh?"

"Use your head, Jill. We don't know much about Mars but we do know that Mars is very unlike Earth and that Martians, whatever they are, certainly are not human. Suppose you were suddenly popped into a tribe so far back in the jungle that they had never laid eyes on a white woman. Would you know all the sophisticated small talk that comes from a lifetime in a culture? Or would your conversation sound odd? That's a very mild analogy; the truth in this case is at least forty million miles stranger."

Jill nodded. "I figured that out ... and that is why I discounted his odd remarks. I'm not dumb."

"No, you're real bright, for a female."

"Would you like this martini poured in your thinning hair?"

"I apologize. Women are lots smarter than men; that is proved by our whole cultural setup. Gimme, I'll fill it."

She accepted the peace offerings and went on, "Ben, that order about not letting him see women, it's silly. He's no sex fiend."

"No doubt they don't want to hand him too many shocks at once."

"He wasn't shocked. He was just ... interested. It wasn't like having a man look at me at all."

"If you had humored him on that request for a private viewing, you might have had your hands full. He probably has all the instincts and no inhibitions."

"Huh? I don't think so. I suppose they've told him about male and female; he just wanted to see how women are different."

"'Vive Ia difference!'" Caxton answered enthusiastically.

"Don't be more vulgar than you have to be."

"Me? I wasn't being vulgar, I was being reverent. I was giving thanks to all the gods that I was born human and not Martian."

"Be serious,"

"I was never more serious."

"Then be quiet. He wouldn't have given me any trouble. He would probably have thanked me gravely. You didn't see his face-I did."

"What about his face?"

Jill looked puzzled. "I don't know how to express it. Yes, I do!-Ben, have you ever seen an angel?"

"You, cherub. Otherwise not."

"Well, neither have I-but that is what he looked like. He had old, wise eyes in a completely placid face, a face of unearthly innocence." She shivered.

"'Unearthly' is surely the right word," Ben answered slowly. "I'd like to see him."

"I wish you had. Ben, why are they making such a thing out of keeping him shut up? He wouldn't hurt a fly. I'm sure of it."

Caxton fitted his fingertips together. "Well, in the first place they want to protect him. He grew up in Mars gravity; he's probably weak as a cat."

"Yes, of course. You could see it, just looking at him. But muscular weakness isn't dangerous; myasthenia gravis is much worse and we manage all right with such cases."

"They would want to keep him from catching things, too. He's like those experimental animals at Notre Dame; he's never been exposed."

"Sure, sure-no antibodies. But from what I hear around the mess hall, Doctor Nelson-the surgeon in the Champion, I mean-Doctor Nelson took care of that on the trip back. Repeated mutual transfusion until he had replaced about half of his blood tissue."

"Really? Can I use that, Jill? That's news."

"All right, just don't quote me. They gave him shots for everything but housemaid's knee, too. But, Ben, even if they want to protect him from infection, that doesn't take armed guards outside his door."

"Mmmm ... Jill, I've picked up a few tidbits you may not know. I haven't been able to use them because I've got to protect my sources, just as with you. But I'll tell you; you've earned it-just don't talk."

"Oh, I won't,"

"It's a long story. Want a refill?"

"No, let's start the steak. Where's the button?"

"Right here."

"Well, push it."

"Me? You offered to cook dinner. Where's that Girl Scout spirit you were boasting about?"

"Ben Caxton, I will lie right here in the grass and starve before I will get up to push a button that is six inches from your right forefinger."

"As you wish." He pressed the button to tell the stove to carry out its pre-set orders. "But don't forget who cooked dinner. Now about Valentine Michael Smith. In the first place there is grave doubt as to his right to the name 'Smith.'"

"Repeat, please?"

"Honey, your pal appears to be the first interplanetary bastard of record. I mean 'love child.'"

"The hell you say!"

"Please be more ladylike in your speech. Do you remember anything about the crew of the Envoy? Never mind, I'll hit the high points. Eight people, four married couples. Two couples were Captain and Mrs. Brant, Doctor and Mrs. Smith. Your friend with the face of an angel appears to be the son of Mrs. Smith by Captain Brant."

"How do they know? And, anyhow, who cares?" Jill sat up and said indignantly, "It's a pretty snivelin' thing to dig up a scandal after all this time. They're all dead-let 'em alone, I say!"

"As to how they know, you can figure that out. Blood typing, Rh factor, hair and eye color, all those genetic things-you probably know more about them than I do. Anyhow it is a mathematical certainty that Mary Jane Lyle Smith was his mother and Captain Michael Brant was his father. All the factors are matters of record for the entire crew of the Envoy; there probably never were eight people more thoroughly measured and typed. Also it gives Valentine Michael Smith a wonderfully fine heredity; his father had an I.Q. of 163, his mother 170, and both were tops in their fields.

"As to who cares," Ben went on, "a lot of people care very much-and a lot more will care, once this picture shapes up. Ever heard of the Lyle Drive?"

"Of course. That's what the Champion used."

"And every other space ship, these days. Who invented it?"

"I don't-Wait a minute! You mean she-"

"Hand the little lady a cigar! Dr. Mary Jane Lyle Smith. She knew she had something important, even though development work remained to be done on it. So before she left on the expedition, she applied for a dozen odd basic patents and placed it all in a corporate trust-not a nonprofit corporation, mind youthen assigned control and interim income to the Science Foundation. So eventually the government got control of it-but your friend with the face of an angel owns it. No possible doubt. It's worth millions, maybe hundreds of millions; I couldn't guess."

They brought in dinner. Caston used ceiling tables to protect his lawn; he lowered one down in front of his chair and another to Japanese height so that Jill could sit on the grass. "Tender?" he asked.

"Ongerful!" she answered with her mouth full.

"Thanks. Remember, I cooked it."

"Ben," she said after swallowing, "how about Smith being a-I mean, being illegitimate? Can he inherit?"

"He's not illegitimate. Doctor Mary Jane was at Berkeley, and California laws deny the concept of bastardy. Same for Captain Brant, as New Zealand also has civilized laws on the subject. While under the laws of the home State of Doctor Ward Smith, Mary Jane's husband, a child born in wedlock is legitimate, come hell or high water. We have here, Jill, a man who is the Simon-pure legitimate child of three different parents.

"Huh? Now wait a minute, Ben; he can't be it both ways. One or the other but not both. I'm not a lawyer but-"

"You sure ain't. Such legal fictions bother a lawyer not at all. Smith is legitimate different ways in different jurisdictions, all kosher and all breaking his way-even though he is probably a bastard in his physical ancestry. So he inherits. Besides that, while his mother was wealthy, both his fathers were at least well to do. Brant was a bachelor until just before the expedition; he had ploughed most of his scandalous salary as a pilot on the Moon run back into Lunar Enterprises, Limited. You know how that stuff has boomed-they just declared another three-way stock dividend. Brant had one vice, gambling-but the bloke won regularly and invested that, too. Ward Smith had family money; he was a medical man and scientist by choice. Smith is heir to both of them."

"Whew!"

"That ain't half, honey. Smith is heir to the entire crew."

"Huh?"

"All eight signed a 'Gentlemen Adventurers' contract, making them all mutually heirs to each other-all of them and their issue. They did it with great care, using as models similar contracts in the sixteenth and seventeenth centuries that had stood up against every effort to break them. Now these were all high-powered people; among them they had quite a lot. Happened to include considerable Lunar Enterprises stock, too, besides what Brant held. Smith might turn out to own a controlling interest, or at least a key bloc in a proxy fight."

Jill thought about the childlike creature who had made such a touching ceremony out of just a drink of water and felt sorry for him. But Caxton went on: "I wish I could sneak a look at the Envoy's log. I know they recovered it-but I doubt if they'll ever release it."

"Why not, Ben?"

"Because it's a nasty story. I got just enough to be sure before my informant sobered up and clammed up. Dr. Ward Smith delivered his wife of child by Caesarian section-and she died on the table. He seems to have worn his horns complacently until then. But what he did next shows that he knew the score; with the same scalpel he cut Captain Brant's throat-then cut his own. Sorry, hon."

Jill shivered. "I'm a nurse. I'm immune to such things."

"You're a liar and I love you for it. I was on police beat for three years, Jill; I never got hardened to it."

"What happened to the others?"

"I wish I knew. If we don't break the bureaucrats and high brass loose from that log, we'll never know-and I am enough of a starry-eyed newsboy to think we should know. Secrecy begets tyranny."

"Ben, he might be better off if they gypped him out of his inheritance. He's very . . . uh, unworldly."

"The exact word, I'm sure. Nor does he need all that money; the Man from Mars will never miss a meal. Any of the governments and any of a thousand-odd universities and scientific institutions would be delighted to have him as a permanent, privileged guest."

"He'd better sign it over and forget it."

"It's not that easy. Jill, you know about the famous case of General Atomics versus Larkin, et al?"

"Uh, not really. You mean the Larkin Decision. I had to study it in school, same as everybody. But what's it got to do with Smith?"

"Think back. The Russians sent the first rocket to the Moon, it crashed. The United States and Canada combine to send another one; it gets back but leaves nobody on the Moon. So when the United States and the Commonwealth are getting set to send a colonizing one jointly under the nominal sponsorship of the Federation and Russia is mounting the same deal on their own, General Atomics steals a march by sending one of their own from an island leased from Ecuador-and their men are still there, sitting pretty and looking smug when the Federation vessel shows up . . . followed by the Russian one.

"You know what happened. General Atomics, a Swiss corporation American controlled, claimed the Moon. The Federation couldn't just brush them off; that would have been too raw and anyhow the Russians wouldn't have held still. So the High Court ruled that a corporate person, a mere legal fiction, could not own a planet; therefore the real owners were the flesh-and-blood men who had maintained the occupation-Larkin and associates. So they recognized them as a sovereign nation and took them into the Federation-with some melon slicing for those on the inside and fat concessions to General Atomics and its daughter corporation, Lunar Enterprises. This did not entirely suit anybody and the Federation High Court was not all powerful in those days-but it was a compromise everybody could swallow. It resulted in some tight rules for colonizing planets, all based on the Larkin Decision and intended to avoid bloodshed. Worked, too-it's a matter of history that World War Three did not result from conflict over space travel and such. So now the Larkin Decision is solidly a part of our planetary law and applies to Smith."

Jill shook her head. "I don't see the connection. Martinis-"

"Think, Jill. By our laws, Smith is a sovereign nation in himself-and sole owner of the planet Mars."

Chapter 5

JILL LOOKED ROUND-EYED. "I've certainly had too many martinis Ben. I would swear that you said that that patient owns the planet Mars."

"He does. He maintained occupation of it, unassisted, for the required length of time. Smith is the planet Mars-King, President, sole civic body, what you will. If the skipper of the Champion had not left colonists behind, Smith's tenure might have failed. But he did, and that continues occupation even though Smith came to Earth. But Smith doesn't have to split with them; they are mere immigrants until he grants them Martian citizenship."

"Fantastic!"

"It surely is. Also it's legal. Honey, do you now see why so many people are interested in who Smith is and where he came from? And why the administration is so damned anxious to keep him under a rug? What they are doing isn't even vaguely legal. Smith is also a citizen of the United States and of the Federation, by derivation-dual citizenship with no conflict. It's illegal to hold a citizen, even a convicted criminal, incommunicado anywhere in the Federation; that's one of the things we settled in World War Three. But I doubt if Smith knows his rights. Also, it has been considered an unfriendly act all through history to lock up a visiting friendly monarch-which is what he is-and not to let him see people, especially the press, meaning me. You still won't sneak me in as a thumb-fingered electrician?"

"Huh? You've got me worse scared than ever. Ben, if they had caught me this morning, what do you think they would have done to me?"

"Mmm ... nothing rough. Just locked you in a padded cell, with a certificate signed by three doctors, and allowed you mail on alternate leap years. They aren't mad at you. I'm wondering what they are going to do to him."

"What can they do?"

"Well, he might just happen to die-from gee-fatigue, say. That would be a fine out for the administration."

"You mean murder him?"

"Tut, tut! Don't use nasty words. I don't think they will. In the first place he is a mine of information; even the public has some dim notion of that. He might be worth more than Newton and Edison and Einstein and six more like them all rolled into one. Or he may not be. I don't think they would dare touch him until they were sure. In the second place, at the very least, he is a bridge, an ambassador, a unique interpreter, between the human race and the only other civilized race we have as yet encountered. That is certainly important but there is no way to guess just how important. How are you on the classics? Ever read H. G. Wells' The War of the Worlds?"

"A long time ago, in school."

"Consider the idea that the Martians might decide to make war on us-and win. They might, you know, and we have no way of guessing how big a club they can swing. Our boy Smith might be the go-between, the peacemaker, who could make the First Interplanetary War unnecessary. Even if this possibility is remote, the administration can't afford to ignore it until they know. The discovery of intelligent life on Mars is something that, politically, they haven't figured out yet."

"Then you think he is safe?"

"Probably, for the time being. The Secretary General has to guess and guess right. As you know, his administration is shaky."

"I don't pay any attention to politics."

"You should. It's only barely less important than your own heartbeat."

"I don't pay any attention to that, either."

"Don't talk when I'm orating. The majority headed by the United States could slip apart overnight-Pakistan would bolt at a nervous cough. In which case there would be a vote of no confidence, a general election, and Mr. Secretary General Douglas would be out and back to being a cheap lawyer again. The Man from Mars can make or break him. Are you going to sneak me in?"

"I am not. I'm going to enter a nunnery. Is there more coffee?"

"I'll see."

They both stood up. Jill stretched and said, "Oh, my ancient bones! And, Lordy, look at the time! Never mind the coffee, Ben; I've got a hard day tomorrow, being polite to nasty patients and standing clear of interns. Run me home, will you? Or send me home, I guess that's safer. Call a cab, that's a lamb."

"Okay, though the evening is young." He went into his bedroom, came out carrying an object about the size and shape of a small cigarette lighter. "Sure you won't sneak me in?"

"Gee, Ben, I want to, but-"

"Never mind. I wouldn't let you. It really is dangerous-and not just to your career. I was just softening you up for this." He showed her the little object. "Will you put a bug on him?"

"Huh? What is it?"

"The greatest boon to divorce lawyers and spies since the Mickey Finn. A microminiaturized wire recorder. The wire is spring driven so that it can't be spotted by a snooper circuit. The insides are transistors and resistors and capacitors and stuff, all packed in plastic-you could drop it out of a cab and not hurt it. The power is about as much radioactivity as you would find in a watch dial, but shielded, The wire is good for twenty-four hours. Then you slide out a spool and stick in another one-the spring is part of the spool, already wound."

"Will it explode?" she asked nervously.

"You could bake it in a cake."

"But, Ben, you've got me scared to go back into his room now."

"Unnecessary. You can go into the room next door, can't you?"

"I suppose so."

"This thing has donkey's ears. Fasten the concave side flat against a wall-surgical tape will do nicely-and it picks up every word spoken in the room beyond. Is there a closet or something?"

She thought about it. "I'm bound to be noticed if I duck in and out of that adjoining room too much; it's really part of the suite he's in. Or they may start using it. Look, Ben, his room has a third wall in common with a room on another corridor. Will that do?"

"Perfect. Then you'll do it?"

"Umm ... give it to me. I'll think it over and see how the land lies."

Caxton stopped to polish it with his handkerchief. "Put on your gloves."

"Why?"

"Possession of it is slightly illegal, good for a short vacation behind bars. Always use gloves on it and the spare spools-and don't get caught with it."

"You think of the nicest things!"

"Want to back out?"

Jill let out a long breath. "No. I've always wanted a life of crime. Will you teach me gangster lingo? I want to be a credit to you."

"Good girl!" A light blinked over the door, he glanced up. "That must be your cab. I rang for it when I went to get this."

"Oh. Find my shoes, will you? No, don't come up to the roof. The less I'm seen with you from here on the better."

"As you wish."

As he straightened up from putting her shoes on, she took his head in both hands and kissed him. "Dear Ben! No good can come of this and I hadn't realized you were a criminal type-but you're a good cook, as long as I set up the combination . . . and I just might marry you if I can trap you into proposing again."

"The offer remains open."

"Do gangsters marry their molls? Or is it 'frails'? We'll see" She left hurriedly.

Jill Boardman placed the bug without difficulty. The patient in the adjacent room in the next corridor was bedfast; Jill often stopped to gossip. She stuck it against the wall over a closet shelf while chattering about how the maids just never dusted high in the closets.

Removing the spool the next day and inserting a fresh one was just as easy; the patient was asleep. She woke while Jill was still perched on a chair and seemed surprised; Jill diverted her with a spicy and imaginary ward rumor.

Jill sent the exposed wire by mail, using the hospital's post office as the impersonal blindness of the postal System seemed safer than a cloak & dagger ruse. But her attempt to insert a third fresh spool she muffed. She had waited for a time when the patient was asleep but had just mounted the chair when the patient woke up. "Oh! Hello, Miss Boardman."

Jill froze with one hand on the wire recorder. "Hello, Mrs. Fritschlie," she managed to answer. "Have a nice nap?"

"Fair," the woman answered peevishly. "My back aches."

"I'll rub it."

"Doesn't help much. Why are you always fiddling around in my closet? Is something wrong?"

Jill tried to reswallow her stomach. The woman wasn't really suspicious, she told herself. "Mice," she said vaguely.

"'Mice?' Oh, I can't abide mice! I'll have to have another room, right away!"

Jill tore the little instrument off the closet wall and stuffed it into her pocket, jumped down from the chair and spoke to the patient. "Now, now, Mrs. Fritschlie - I was just looking to see if there were any mouse holes in that closet. There aren't."

"You're sure?"

"Quite sure. Now let's rub the back, shall we? Easy over."

Jill decided she could not plant the bug in that room again and concluded that she would risk attempting to place it in the empty room which was part of K-12, the Suite of the Man from Mars. But it was almost time for her relief before she was free again. She got the pass key.

Only to find that she did not need it; the door was unlocked and held two more marines; the guard had been doubled. One of them glanced up as she opened the door. "Looking for someone?"

"No. Don't sit on the bed, boys," she said crisply. "If you need more chairs, we'll send for them." She kept her eye on the guard while he got reluctantly up; then she left, trying to conceal her trembling.

The bug was still burning a hole in her pocket when she went off duty; she decided to return it to Caxton at once. She changed clothes, shifted it to her bag, and went to the roof. Once in the air and headed toward Ben's apartment she began to breathe easier. She phoned him in flight.

"Caxton speaking."

"Jill, Ben. I want to see you. Are you alone?"

He answered slowly, "I don't think it's smart, kid. Not now."

"Ben, I've got to see you. I'm on my way over."

"Well, okay, if that's how it's got to be."

"Such enthusiasm!"

"Now look, hon, it isn't that I-"

"'Bye!" She switched off calmed down and decided not to take it out on poor Benfact was they both were playing out of their league. At least she was-she should have stuck to nursing and left politics alone.

She felt better when she saw Ben and better yet when she kissed him and snuggled into his arms. Ben was such a dear-maybe she really should marry him. But when she tried to speak he put a hand over her mouth, then whispered close against her ear, "Don't talk. No names and nothing but trivialities. I may be wired by now."

She nodded and he led her into the living room. Without speaking she got out the wire recorder and handed it to him. His eyebrows went up when he saw that she was returning not just a spool but the whole works but he made no comment. Instead he handed her a copy of the afternoon Post.

"Seen the paper?" he said in a natural voice. "You might like to glance at it while I wash up."

"Thanks." As she took it he pointed to a column; he then left, taking with him the recorder. Jill saw that the column was Ben's own syndicated outlet.

THE CROW'S NEST

by Ben Caxton

Everyone knows that jails and hospitals have one thing in common: they both can be very hard to get out of. In some ways a prisoner is less cut off than a patient; a prisoner can send for his lawyer, can demand a Fair Witness, he can invoke habeas corpus and require the jailor to show cause in open court.

But it takes only a simple NO VISITORS sign, ordered by one of the medicine men of our peculiar tribe, to consign a hospital patient to oblivion more thoroughly than ever was the Man in the Iron Mask.

To be sure, the patient's next of kin cannot be kept out by this device, but the Man from Mars seems to have no next of kin. The crew of the illfated Envoy had few ties on Earth; if the Man in the Iron Mask-pardon me I mean the "Man from Mars"- has any relative who is guarding his interests, a few thousand inquisitive reporters (such as your present scrivener) have been unable to verify it.

Who speaks for the Man from Mars? Who ordered an armed guard placed around him? What is his dread disease that no one may catch a glimpse of him, nor ask him a question? I address you, Mr. Secretary General; the explanation about "physical weakness" and "gee-fatigue" won't wash; if that were the answer, a ninety-pound nurse would do as well as an armed guard.

Could this disease be financial in nature? Or (let's say it softly) is it political?

There was more, all in the same vein; Jill could see that Ben was deliberately baiting the administration, trying to force them to bring Smith out into the open. What that would accomplish she did not know, her own horizon not encompassing high politics and high finance. She felt, rather than knew, that Caxton was taking serious risk in challenging the established authorities, but she had no notion of the size of the danger, nor of what form it might take.

She thumbed through the rest of the paper. It was well loaded with follow-up stories on the return of the Champion, with pictures of Secretary General Douglas pinning medals on the crew, interviews with Captain van Tromp and other members of his brave company, pictures of Martians and Martian cities. There was very little about Smith, merely a medical bulletin that he was improving slowly but satisfactorily from the effects of his trip.

Ben came out and dropped some sheets of onion skin in her lap. "Here's another newspaper you might like to see," he remarked and left again.

Jill soon saw that the other "newspaper" was a transcription of what her first wire had picked up. As typed out, it was marked "First Voice," "Second Voice," and so on, but Ben had gone back and written in names wherever he had been able to make attributions later. He had written across the top: "All voices, identified or not, are masculine."

Most of the items were of no interest. They simply showed that Smith had been fed, or washed, or massaged, and that each morning and afternoon he had been required to get up and exercise under the supervision of a voice identified as "Doctor Nelson" and a second voice marked "second doctor." Jill decided that this must be Dr. Thaddeus.

But one longish passage had nothing to do with the physical care of the patient. Jill read it and reread it:

Doctor Nelson: How are you feeling, boy? Are you strong enough to talk for a while?

Smith: Yes.

Doctor Nelson: A man wants to talk to you.

Smith: (pause) Who? (Caxton had written in: All of Smith's speeches are preceded by long pauses, some longer than others.)

Nelson: This man is our great (untranscribable guttural word-Martian?). He is our oldest Old One. Will you talk with him?

Smith: (very long pause) I am great happy. The Old One will talk and I will listen and grow.

Nelson: No, no! He wants to ask you questions.

Smith: I cannot teach an Old One.

Nelson: The Old One wishes it. Will you let him ask you questions?

Smith: Yes.

(Background noises, short delay.)

Nelson: This way, sir. Uh, I have Doctor Mahmoud standing by, ready to translate for you.

Jill read "New Voice." Caxton had scratched this out and had written in: "Secretary General Douglas !!!"

Secretary General: I won't need him. You say Smith understands English.

Nelson: Well, yes and no, Your Excellency. He knows quite a number of words, but, as Mahmoud says, he doesn't have any cultural context to hang the words on. It can be rather confusing.

Secretary General: Oh, we'll get along all right, I'm sure. When I was a youngster I hitchhiked all through Brazil, without knowing a word of Portuguese when I started. Now, if you will just introduce us-then leave us alone.

Nelson: Sir? I think I had better stay with my patient.

Secretary General: Really, Doctor? I'm afraid I must insist. Sorry.

Nelson: And I am afraid that I must insist. Sorry, sir. Medical ethics —

Secretary General: (interrupting) As a lawyer, I know a little something of medical jurisprudence-so don't give me that "medical ethics" mumbo-jumbo, really. Did this patient select you?

Nelson: Not exactly, but—

Secretary General: Just as I thought. Has he had any opportunity to make a choice of physicians? I doubt it. His present status is that of ward of the state. I am acting as his next of kin, defacto-and, you will find, de jure as well. I wish to interview him alone.

Nelson: (long pause, then very stiffly) If you put it that way, Your Excellency, I withdraw from the case.

Secretary General: Don't take it that way, Doctor; I didn't mean to get your back hair up. I'm not questioning your treatment. But you wouldn't try to keep a mother from seeing her son alone, now would you? Are you afraid that I might hurt him?

Nelson: No, but-Secretary General: Then what is your objection? Come now, introduce us and let's get on with it. This fussing may be upsetting your patient.

Nelson: Your Excellency, I will introduce you. Then you must select another doctor for your . . . ward.

Secretary General: I'm sorry, Doctor, I really am. I can't take that as final-we'll discuss it later. Now, if you please?

Nelson: Step over here, sir. Son, this is the man who wants to see you. Our great Old One.

Smith: (untranscribable)

Secretary General: What did he say?

Nelson: Sort of a respectful greeting. Mahmoud says it translates: "I am only an egg." More or less that, anyway. He used to use it on me. It's friendly. Son, talk man-talk.

Smith: Yes.

Nelson: And you had better use simple one-syllable words, if I may offer a last advice.

Secretary General: Oh, I will.

Nelson: Good-by, Your Excellency. Good-by, son.

Secretary General: Thanks, Doctor. See you later.

Secretary General: (continued) How do you feel?

Smith: Feel fine.

Secretary General: Good. Anything you want, just ask for it. We want you to be happy. Now I have something I want you to do for me. Can you write?

Smith: 'Write?' What is 'write?'

Secretary General: Well, your thumb print will do. I want to read a paper to you. This paper has a lot of lawyer talk, but stated simply it says that you agree that in leaving Mars you have abandoned-I mean, given up-any claims that you may have there. Understand me? You assign them in trust to the government.

Smith: (no answer)

Secretary General: Well, let's put it this way. You don't own Mars, do you?

Smith: (longish pause) I do not understand.

Secretary General: Mmm . . . let's try it this way. You want to stay here, don't you?

Smith: I do not know. I was sent by the Old Ones. (Long untranscribable speech, sounds like a bullfrog fighting a cat.)

Secretary General: Damn it, they should have taught him more English by now. See here, son, you don't have to worry about these things. Just let me have your thumb print here at the bottom of this page. Let me have your right hand. No, don't twist around that way. Hold still! I'm not going to hurt you . . . Doctor! Doctor Nelson!

Second Doctor: Yes, sir?

Secretary General: Get Doctor Nelson.

Second Doctor: Doctor Nelson? But he has left, sir. He said you took him off the case.

Secretary General: Nelson said that? Damn him! Well, do something. Give him artificial respiration. Give him a shot. Don't just stand there-can't you see the man is dying?

Second Doctor: I don't believe there is anything to be done, sir. Just let him alone until he comes out of it. That's what Doctor Nelson always did.

Secretary General: Blast Doctor Nelson!

The Secretary General's voice did not appear again, nor that of Doctor Nelson. Jill could guess, from gossip she had picked up around the hospital, that Smith had gone into one of his cataleptic withdrawals. There were only two more entries, neither of them attributed. One read: No need to whisper. He can't hear you. The other read: Take that tray away. We'll feed him when he comes out of it.

Jill was giving the transcription a third reading when Ben reappeared. He was carrying more onionskin sheets but he did not offer them to her; instead he said, "Hungry?"

She glanced inquiringly at the papers in his hand but answered, "Starved."

"Let's get out of here and shoot a cow."

He said nothing more while they went to the roof and took a taxi, and he still kept quiet during a flight to the Alexandria platform, where they switched to another cab. Ben selected one with a Baltimore serial number. Once in the air he set it for Hagerstown, Maryland, then settled back and relaxed. "Now we can talk."

"Ben, why all the mystery?"

"Sorry, pretty foots. Probably just nerves and my bad conscience. I don't know that there is a bug in my apartment-but if I can do it to them, they can do it to me . . . and I've been showing an unhealthy interest in things the administration wants kept doggo. Likewise, while it isn't likely that a cab signaled from my flat would have a recorder hidden in the cushions, still it might have; the Special Service squads are thorough. But this cab-" He patted its seat cushions. "They can't gimmick thousands of cabs. One picked at random should be safe."

Jill shivered. "Ben, you don't really think they would..." She let it trail off.

"Don't I, now! You saw my column. I filed that copy nine hours ago. Do you think the administration will let me kick it in the stomach without doing something about it?"

"But you have always opposed this administration."

"That's okay. The duty of His Majesty's Loyal Opposition is to oppose. They expect that. But this is different; I have practically accused them of holding a political prisoner . . . one the public is very much interested in. Jill, a government is a living organism. Like every living thing its prime characteristic is a blind, unreasoned instinct to survive. You hit it, it will fight back. This time I've really hit it." He gave her a sidelong look. "I shouldn't have involved you in this."

"Me? I'm not afraid. At least not since I turned that gadget back over to you."

"You're associated with me. If things get rough, that could be enough."

Jill shut up. She had never in her life experienced the giant ruthlessness of giant power. Outside of her knowledge of nursing and of the joyous guerilla warfare between the sexes, Jill was almost as innocent as the Man from Mars. The notion that she, Jill Boardman, who had never experienced anything worse than a spanking as a child and an occasional harsh word as an adult, could be in physical danger was almost impossible for her to believe. As a nurse, she had seen the consequences of ruthlessness, violence, brutality-but it could not happen to her.

Their cab was circling for a landing in Hagerstown before she broke the moody silence. "Ben? Suppose this patient does die. What happens?"

"Huh?" He frowned. "That's a good question, a very good question. I'm glad you asked it; it shows you are taking an interest in the work. Now if there are no other questions, the class is dismissed."

"Don't try to be funny."

"Hmm ... Jill, I've been awake nights when I should have been dreaming about you, trying to answer that one. It's a two-part question, political and financial-and here are the best answers I have now: If Smith dies, his odd legal claim to the planet Mars vanishes. Probably the pioneer group the Champion left behind on Mars starts a new claim-and almost certainly the administration worked out a deal with them before they left Earth. The Champion is a Federation ship but it is more than possible that the deal, if there was one, leaves all the strings in the hands of that redoubtable defender of human rights, Mr. Secretary General Douglas. Such a deal could keep him in power for a long time. On the other hand, it might mean nothing at all."

"Huh? Why?"

"The Larkin Decision might not apply. Luna was uninhabited, but Mars is inhabited-by Martians. At the moment, Martians are a legal zero. But the High Court might take a look at the political situation, stare at its collective navel, and decide that human occupancy meant nothing on a planet already inhabited by nonhuman natives. Then rights on Mars, if any, would have to be secured from the Martians themselves."

"But, Ben, that would logically be the case anyhow. This notion of a single man owning a planet ...it's fantastic!"

"Don't use that word to a lawyer; he won't understand you. Straining at gnats and swallowing camels is a required course in all law schools. Besides, there is a case in point. In the fifteenth century the Pope deeded the entire western hemisphere to Spain and Portugal and nobody paid the slightest attention to the fact that the real estate was already occupied by several million Indians with their own laws, customs, and notions of property rights. His grant deed was pretty effective, too. Take a look at a western hemisphere map sometime and notice where Spanish is spoken and where Portuguese is spoken-and see how much land the Indians have left."

"Yes, but-Ben, this isn't the fifteenth century."

"It is to a lawyer. They still cite Blackwell, Code Napoleon, or even the laws of Justinian. Mark it down, Jill; if the High Court rules that the Larkin Decision applies, Smith is in a position to grant or withhold concessions on Mars which may be worth millions, or more likely billions. If he assigns his claim to the present administration, then Secretary Douglas is the man who will hand out the plums. Which is just what Douglas is trying to rig. You saw that bug transcript."

"Ben, why should anybody want that sort of power?"

"Why does a moth fly toward a light? The drive for power is even less logical than the sex urge . . . and stronger. But I said this was a two-part question. Smith's financial holdings are almost as important as his special position as nominal king-emperor of Mars. Possibly more important, for a High Court decision could knock out his squatter's rights on Mars but I doubt if anything could shake his ownership of the Lyle Drive and a major chunk of Lunar Enterprises; the eight wills are a matter of public record-and in the three most important cases he inherits with or without a will. What happens if he dies? I don't know. A thousand alleged cousins would pop up, of course, but the Science Foundation has fought off a lot of such money-hungry vermin in the past twenty years. It seems possible that, if Smith dies without making a will, his enormous fortune will revert to the state."

"'The state?' Do you mean the Federation or the United States?"

"Another very good question to which I do not know the answer. His natural parents come from two different member countries of the Federation and he was born outside all of them . . . and it is going to make a crucial difference to some people who votes those blocks of stock and who licenses those patents. It won't be Smith; he won't know a stock proxy from a traffic ticket. It is likely to be whoever can grab him and hang onto him. In the meantime I doubt if Lloyd's would write a policy on his life; he strikes me as a very poor risk."

"The poor baby! The poor, poor infant!"

Chapter 6

THE RESTAURANT IN HAGERSTOWN had "atmosphere" as well as good food, which meant that it had tables scattered not only over a lawn leading down to the edge of a little lake but also had tables in the boughs of three enormous old trees. Over all was a force field roof which kept the outdoors dining area perpetually summer even in rain and snow.

Jill wanted to eat up in the trees, but Ben ignored her and bribed the maŒtre d'h“tel to set up a table near the water in a spot of his choice, then ordered a portable stereo tank placed by their table.

Jill was miffed. "Ben, why bother to come here and pay these prices if we can't eat in the trees and have to endure that horrible jitterbox?"

"Patience, little one. The tables up in the trees all have microphone circuits; they have to have them for service. This table is not gimmicked-I hope-as I saw the waiter take it from a stack of unused ones. As for the tank, not only is it unAmerican and probably subversive to eat without watching stereo but also the racket from it would interfere even with a directional mike aimed at us from a distance ... assuming that Mr. Douglas's investigators are beginning to take an interest in us, which I misdoubt they are."

"Do you really think they might be shadowing us, Ben?" Jill shivered. "I don't think I'm cut out for a life of crime."

"Pish and likewise tush! When I was working on the General Synthetics bribery scandals I never slept twice in the same place and ate nothing but packaged food I had bought myself. After a while you get to like it-stimulates the metabolism."

"My metabolism doesn't need it, thank you. All I require is one elderly, wealthy private patient."

"Not going to marry me, Jill?"

"After my future husband kicks off, yes. Or maybe I'll be so rich I can afford to keep you as a pet."

"Best offer I've had in months. How about starting tonight?"

"After he kicks off."

During their cocktails the musical show plus lavish commercials which had been banging their eardrums from the stereo tank suddenly stopped. An announcer's head and shoulders filled the tank; he smiled sincerely and said, "NWNW, New World Networks and its sponsor of the hour, Wise Girl Malthusian Lozenges, is honored and privileged to surrender the next few minutes to a special, history-making broadcast by the Federation Government. Remember, friends, every wise girl uses Wise Girls. Easy to carry, pleasant to take, guaranteed no-fail, and approved for sale without prescription under Public Law 1312. Why take a chance on old-fashioned, unesthetic, harmful, unsure methods? Why risk losing his love and respect? Remember -" The lovely, lupine announcer glanced aside and hurried through the rest of his commercial: I give you the Wise Girl, who in turn brings you the Secretary General-and the Man from Mars!"

The 3-D picture dissolved into that of a young woman, so sensuous, so unbelievably mammalian, so seductive, as to make every male who saw her unsatisfied with local talent. She stretched and wiggled and said in a bedroom voice, "I always use Wise Girl."

The picture dissolved and a full orchestra played the opening bars of Hail to Sovereign Peace. Ben said, "Do you use Wise Girl?"

"None o' your business!" She looked ruffled and added, "It's a quack nostrum. Anyhow, what makes you think I need it?"

Caxton did not answer; the tank had filled with the fatherly features of Mr. Secretary General Douglas. "Friends," he began, "fellow citizens of the Federation, I have tonight a unique honor and privilege. Since the triumphant return of our trail-blazing ship Champion-" He continued in a few thousand well-chosen words to congratulate the citizens of Earth on their successful contact with another planet, another civilized race. He managed to imply that the exploit of the Champion was the personal accomplishment of every citizen of the Federation, that any one of them could have led the expedition had he not been busy with other serious work-and that he, Secretary Douglas, had been chosen by them as their humble instrument to work their will. The flattering notions were never stated baldly, but implied; the underlying assumption being that the common man was the equal of anyone and better than most-and that good old Joe Douglas embodied the common man. Even his mussed cravat and cowlicked hair had a "just folks" quality.

Bert Caxton wondered who had written the speech. Jim Sanforth, probably-Jim had the most subtle touch of any member of Douglas' staff in selecting the proper loaded adjective to tickle and soothe an audience; he had written advertising commercials before he went into politics and had absolutely no compunctions. Yes, that bit about "the hand that rocks the cradle" was clearly Jim's work-Jim was the sort of jerk who would entice a young girl with candy and consider it a smart operation.

"Turn it off!" Jill said urgently.

"Huh? Shut up, pretty foots. I've got to hear this."

"-and so, friends, I have the honor to bring you now our fellow citizen Valentine Michael Smith, the Man from Mars! Mike, we all know you are tired and have not been well-but will you say a few words to your friends? They all want to see you."

The stereo scene in the tank dissolved to a semi-close-up of a man in a wheel chair. Hovering over him like a favorite uncle was Douglas and on the other side of the chair was a nurse, stiff, starched, and photogenic.

Jill gasped. Ben whispered fiercely, "Keep quiet! I don't want to miss a word of this."

The interview was not long. The smooth babyface of the man in the chair broke into a shy smile; he looked at the cameras and said, "Hello, folks. Excuse me for sitting down. I'm still weak." He seemed to speak with difficulty and once the nurse interrupted to take his pulse.

In answer to questions from Douglas he paid compliments to Captain van Tromp and the crew of the Champion, thanked everyone for his rescue, and said that everyone on Mars was terribly excited over contact with Earth and that he hoped to help in welding strong and friendly relations between the two planets. The nurse interrupted again, but Douglas said gently. "Mike, do you feel strong enough for just one more question?"

"Sure, Mr. Douglas-if I can answer it."

"Mike? What do you think of the girls here on Earth?"

"Gee!"

The baby face looked awestruck and ecstatic and turned pink. The scene dissolved again to the head and shoulders of the Secretary General. "Mike asked me to tell you," he went on in fatherly tones, "that he will be back to see you as soon as he can. He has to build up his muscles, you know. The gravity of Earth is as rough on him as the gravity of Jupiter would be to us. Possibly next week, if the doctors say he is strong enough." The scene shifted back to the exponents of Wise Girl lozenges and a quick one-act playlet made clear that a girl who did not use them was not only out of her mind but undoubtedly a syntho in the hay as well; men would cross the street to avoid her. Ben switched to another channel, then turned to Jill and said moodily, "Well, I can tear up tomorrow's column and look around for a new subject to plug. They not only made my today's squawk look silly but it appears that Douglas has him safely under his thumb."

"Ben!"

"Huh?"

"That's not the Man from Mars!"

"What? Baby, are you sure?"

"Sure I'm sure! Oh, it looked like him, it looked a great deal like him. Even the voice was similar. But it was not the patient I saw in that guarded room."

Ben tried to shake her conviction. He pointed out that several dozen other persons were known to have seen Smith-guards, interns, male nurses, the captain and crew members of the Champion, probably others. Quite a few of that list must have seen this newscast-or at least the administration would have to assume that some of them would see it and spot the substitution ... if there had been a substitution. It did not make sense-too great a risk.

Jill did not offer logical rebuttal; she simply stuck out her lower lip and insisted that the person on Stereo was not the patient she had met. Finally she said angrily, "All right, all right, have it your own way! I can't prove I'm right-so I must be wrong. Men!"

"Now, Jill-"

"Please take me home.

Ben silently went for a cab. He did not accept one from outside the restaurant even though he no longer thought that anyone would be taking interest in his movements; he selected one from the landing flat of a hotel across the way. Jill remained chilly on the flight back. Presently Ben got out the transcripts of the sounds picked up from Smith's hospital room and reread them. He read them still again, thought for a while, and said, "Jill?"

"Yes, Mr. Caxton?"

"I'll 'mister' you! Look, Jill, I'm sorry, I apologize. I was wrong."

"And what leads you to this momentous conclusion?"

He slapped the folded papers against his palm. "This. Smith could not possibly have been showing this behavior yesterday and the day before and then have given that interview tonight. He would have flipped his controls gone into one of those trance things."

"I am gratified that you have finally seen the obvious."

"Jill, will you kindly kick me in the face a couple of times, then let up? This is serious. Do you know what this means?"

"It means they used an actor to fake an interview. I told you that an hour ago."

"Sure. An actor and a good one, carefully typed and coached. But it implies much more than that. As I see it, there are two possibilities. The first is that Smith is dead and-"

"Dead!" Jill suddenly was back in that curious water-drinking ceremony and felt the strange, warm, unworldly flavor of Smith's personality, felt it with unbearable sorrow.

"Maybe. In which case this ringer will be allowed to stay 'alive' for a week or ten days, until they have time to draw up whatever papers they want him to sign. Then the ringer will 'die' and they will ship him out of town, probably with a hypnotic injunction not to talk so strong that he would choke up with asthma if he tried to spill it-or maybe even a transorbital lobotomy if the boys are playing for keeps. But if Smith is dead, we can just forget it; we'll never be able to prove the truth. So let's assume that he is still alive."

"Oh, I do hope so!"

"What is Hecuba to you, or you to Hecuba?" Caxton misquoted. "If he is still alive, it could be that there is nothing especially sinister about it. After all, a lot of public figures use doubles for some of their appearances; it does not even annoy the public because every time a yokel thinks that he has spotted a double it makes him feel smart and in the know, So it may be that the administration has just yielded to public demand and given them that look at the Man from Mars we have all been yapping for. It could be that in two or three weeks our friend Smith will be in shape to stand the strain of public appearances, at which time they will trot him out. But I doubt it like hell!"

"Why?"

"Use your pretty curly head. The Honorable Joe Douglas has already made one attempt to squeeze out of Smith what he wants ... and failed miserably. But Douglas can't afford to fail. So I think he will bury Smith deeper than ever ... and that is the last we will ever see of the true Man from Mars."

"Kill him?" Jill said slowly.

"Why be rough about it? Lock him in a private nursing home and never let him learn anything. He may already have been removed from Bethesda Center."

"Oh, dear! Ben, what are we going to do?"

Caxton scowled and thought. "I don't have a good plan. They own both the bat and the ball and are making the rules. But what I am going to do is this-I'm going to walk into that hospital with a Fair Witness on one side and a tough lawyer on the other and demand to see Smith. Maybe I can force them to drag it out into the open."

"I'll be right behind you!"

"Like mischief you will. You stay out of this. As you pointed out, it would ruin you professionally."

"But you need me to identify him."

"Not so. I flatter myself that I can tell a man who was raised by nonhumans from an actor pretending to be such a man in the course of a very short interview. But if anything goes wrong, you are my ace in the hole-a person who knows that they are pulling hankypanky concerning the Man from Mars and who has access to the inside of Bethesda Center. Honey, if you don't hear from me, you are on your own."

"Ben, they wouldn't hurt you?"

"I'm fighting out of my weight, youngster. There is no telling."

"Uh ... oh, Ben, I don't like this. Look, if you do get in to see him, what are you going to do?"

"I'm going to ask him if he wants to leave the hospital. If he says he does, I'm going to invite him to come along with me. In the presence of a Fair Witness they won't dare stop him. A hospital isn't a prison;

they don't have any legal right to hold him."

"Uh ... then what? He really does need medical attention, Ben; he's not able to take care of himself. I know."

Caxton scowled again. "I've been thinking of that. I can't nurse him. You could, of course, if you had the facilities. We could put him in my flat-"

"-and I could nurse him. We'll do it, Ben!"

"Slow down. I thought of that. Douglas would pull some legal rabbit out of his hat, a deputation in force would call, and Smith would go right back to pokey. And so would both of us, maybe." He wrinkled his brow. "But I know one man who could give him shelter and possibly get away with it. Ever heard of Jubal Harshaw?"

"Huh? Who hasn't?"

"That's one of his advantages; everybody knows who he is. It makes him hard to shove around. Being both a doctor of medicine and a lawyer he is three times as hard to shove around. But most important he is so rugged an individualist that he would fight the whole Federation Department of Security with just a potato knife if it suited his fancy-and that makes him eight times as hard to shove around. But the point is that I got well acquainted with him during the disaffection trials; he is a friend I can count on in a pinch. If I can get Smith out of Bethesda, I'll take him to Harshaw's place over in the Poconos - and then just let those jerks try to hide him under a rug again! Between my column and Harshaw's love for a fight we'll give 'em a bad time."

Chapter 7

DESPITE A LATE EVENING Jill was ready to relieve the night floor nurse ten minutes early the next morning. She intended to obey Ben's order to stay out of his proposed attempt to see the Man from Mars but she was determined to be close by when it happened . . . just in case. Ben might need reinforcements.

There were no longer marine guards in the corridor. Trays, medications, and two patients to be prepared for surgery kept her busy the first two hours; she had only time to check the knob of the door to suite K-12. It was locked, as was the door to the adjoining sitting room. The door to the watch room on its other side was closed. She considered sneaking in again to see Smith through the connecting sitting room, now that the guards were gone, but decided to postpone it; she was too busy. Nevertheless she managed to keep a close check on everyone who came onto her floor.

Ben did not show up and discreet questions asked of her assistant on the switchboard reassured her that neither Ben nor anyone else had gone in to see the Man from Mars while Jill was busy elsewhere. It puzzled her; while Ben had not set a time, she had had the impression that he had intended to storm the citadel as early in the day as possible.

Presently she felt that she just had to snoop a bit. During a lull she knocked at the door of the Suite's watch room, then stuck her head in and pretended surprise. "Oh! Good morning, Doctor. I thought Doctor Frame was in here."

The physician at the watch desk was strange to Jill. He turned away from the displayed physio data, looked at her, then smiled as he looked her up and down. "I haven't seen Dr. Frame, Nurse. I'm Dr. Brush. Can I help?"

At the typical male reaction Jill relaxed. "Nothing special. To tell the truth I was curious. How is the Man from Mars?"

She smiled and winked. "It's no secret to the staff, Doctor. Your patient-" She gestured at the inner door.

"Huh?" He looked startled. "Did they have him in this suite?"

"What? Isn't he here now?"

"Not by six decimal places. Mrs. Rose Bankerson-Dr. Garner's patient. We brought her in early this morning."

"Really? But what happened to the Man from Mars? Where did they put him?"

"I haven't the faintest. Say, did I really just miss seeing Valentine Smith?"

"He was here yesterday. That's all I know."

"And Dr. Frame was on his case? Some people have all the luck. Look what I'm stuck with." He switched on the Peeping Tom above his desk; Jill saw framed in it, as if she were looking down, a water bed; floating in it was a tiny old woman. She seemed to be asleep.

"What's her trouble?"

"Mmm ... Nurse, if she didn't have more money than any person ought to have, you might be tempted to call it senile dementia. As it is, she is in for a rest and a checkup."

Jill made small talk for a few moments more, then pretended to see a call light. She went back to her desk, dug out the night log-yes, there it was: V M. Smith, K-12-transfer. Below that entry was another: Rose Bankerson (Mrs.)-red K-12 (diet kitchen instrd by Dr. Garner-no orders-flr nt respnbl).

Having noted that the rich old gal was no responsibility of hers, Jill turned her mind back to Valentine Smith. Something about Mrs. Bankerson's case struck her as odd but she could not put her finger on it, so she put it out of her mind and thought about the matter that did interest her. Why had they moved Smith in the middle of the night? To avoid any possible contact with outsiders, probably. But where had they taken him? Ordinarily she would simply have called "Reception" and asked, but Ben's opinions plus the phony broadcast of the night before had made her jumpy about showing curiosity; she decided to wait until lunch and see what she could pick up on the gossip grapevine.

But first Jill went to the floor's public booth and called Ben. His office informed her that Mr. Caxton had just left town, to be gone a few days. She was startled almost speechless by this-then pulled herself together and left word for Ben to call her.

She then called his home. He was not there; she recorded the same message.

Ben Caxton had wasted no time in preparing his attempt to force his way into the presence of Valentine Michael Smith. He was lucky in being able to retain James Oliver Cavendish as his Fair Witness. While any Fair Witness would do, the prestige of Cavendish was such that a lawyer was hardly necessary-the old gentleman had testified many times before the High Court of the Federation and it was said that the wills locked up in his head represented not billions but trillions. Cavendish had received his training in total recall from the great Dr. Samuel Renshaw himself and his professional hypnotic instruction had been undergone as a fellow of the Rhine Foundation. His fee for a day or fraction thereof was more than Ben made in a week, but Ben expected to charge it off to the Post syndicate-in any case, the best was none too good for this job.

Caxton picked up the junior Frisby of Biddle, Frisby, Frisby, Biddle, & Reed as that law firm represented the Post syndicate, then the two younger men called for Witness Cavendish. The long, spare form of Mr. Cavendish, wrapped chin to ankle in the white cloak of his profession, reminded Ben of the Statue of Liberty . . . and was almost as conspicuous. Ben had already explained to Mark Frisby what he intended to try (and Frisby had already pointed out to him that he had no status and no rights) before they called for Cavendish; once in the Fair Witness's presence they conformed to protocol and did not discuss what he might be expected to see and hear.

The cab dropped them on top of Bethesda Center; they went down to the Director's office. Ben handed in his card and said that he wanted to see the Director.

An imperious female with a richly cultivated accent asked if he had an appointment. Ben admitted that he had none.

"Then I am afraid that your chance of seeing Dr. Broemer is very slight. Will you state your business?"

"Just tell him," Caxton said loudly, so that others waiting would hear, "that Caxton of the Crow's Nest is here with a lawyer and a Fair Witness to interview Valentine Michael Smith, the Man from Mars."

She was startled almost out of her professional hauteur. But she recovered and said frostily, "I shall inform him. Will you be seated, please?"

"Thanks, I'll wait right here."

They waited. Frisby broke out a cigar, Cavendish waited with the calm patience of one who has seen all manner of good and evil and now counts them both the same, Caxton uttered and tried to keep from biting his nails. At last the snow queen behind the desk announced, "Mr. Berquist will see you."

"Berquist? Gil Berquist?"

"I believe his name is Mr. Gilbert Berquist."

Caxton thought about it-Gil Berquist was one of Secretary Douglas's large squad of stooges, or "executive assistants." He specialized in chaperoning official visitors. "I don't want to see Berquist; I want the Director."

But Berquist was already coming out, hand shoved out before him, greeter's grin plastered on his face. "Benny Caxton! How are you, chum? Long time and so forth. Still peddling the same old line of hoke?" He glanced at the Fair Witness, but his expression admitted nothing.

Ben shook hands briefly. "Same old hoke, sure. What are you doing here, Gil?"

"If I ever manage to get out of public service I'm going to get me a column, too-nothing to do but phone in a thousand words of rumors each day and spend the rest of the day in debauchery. I envy you, Ben."

"I said, 'What are you doing here, Gil?' I want to see the Director, then get five minutes with the Man from Mars. I didn't come here for your high-level brush off."

"Now, Ben, don't take that attitude. I'm here because Dr. Broemer has been driven almost crazy by the press-so the Secretary General sent me over to take some of the load off his shoulders."

"Okay. I want to see Smith."

"Ben, old boy, don't you realize that every reporter, special correspondent, feature writer, commentator, freelance, and sob sister wants the same thing? You winchells are just one squad in an army; if we let you all have your way, you would kill off the poor jerk in twenty-four hours. Polly Peepers was here not twenty minutes ago. She wanted to interview him on love life among the Martians." Berquist threw up both hands and looked helpless.

"I want to see Smith, Do I see him, or don't I?"

"Ben, let's find a quiet place where we can talk over a long, tall glass. You can ask me anything you want to."

"I don't want to ask you anything; I want to see Smith. By the way, this is my attorney, Mark Frisby-Biddle & Frisby." As was customary, Ben did not introduce the Fair Witness; they all pretended that he was not present.

"I've met Frisby," Berquist acknowledged. "How's your father, Mark? Sinuses still giving him fits?"

"About the same."

"This foul Washington climate. Well, come along, Ben. You, too,Mark."

"Hold it," said Caxton. "I don't want to interview you, Gil. I want to see Valentine Michael Smith. I'm here as a member of the press, directly representing the Post syndicate and indirectly representing over two hundred million readers. Do I see him? If I don't, say so out loud and state your legal authority for refusing me."

Berquist sighed. "Mark, will you tell this keyhole historian that he can't go busting into a sick man's bedroom just because he has a syndicated column? Valentine Smith made one public appearance just last night-against his physician's advice I might add. The man is entitled to peace and quiet and a chance to build up his strength and get oriented. That appearance last night was enough, more than enough."

"There are rumors," Caxton said carefully, "that the appearance last night was a fake."

Berquist stopped smiling. "Frisby," he said coldly, "do you want to advise your client on the law concerning slander?"

"Take it easy, Ben."

"I know the law on slander, Gil. In my business I have to. But whom am I slandering? The Man from Mars? Or somebody else? Name a name. I repeat," he went on, raising his voice, "that I have heard that the man interviewed on TV last night was not the Man from Mars. I want to see him myself and ask him."

The crowded reception hail was very quiet as everyone present bent an ear to the argument. Berquist glanced quickly at the Fair Witness, then got his expression under control and said smilingly to Caxton, "Ben, it's just possible that you talked yourself into the interview you wanted-as well as a lawsuit. Wait a moment."

He disappeared into the inner office, came back fairly soon. "I arranged it," he said wearily, "though God knows why. You don't deserve it, Ben. Come along. Just you-Mark, I'm sorry but we can't have a crowd of people; after all, Smith is a sick man."

"No," said Caxton.

"Huh?"

"All three of us, or none of us. Take your choice."

"Ben, don't be silly; you're receiving a very special privilege. Tell you what-Mark can come along and wait outside the door But you certainly don't need him." Berquist glanced toward Cavendish; the Witness seemed not to hear.

"Maybe not. But I've paid his fee to have him along. My column will state tonight that the administration refused to permit a Fair Witness to see the Man from Mars."

Berquist shrugged. "Come along, then. Ben, I hope that slander suit really clobbers you."

They took the patients' elevator rather than the bounce tube out of deference to Cavendish's age, then rode a slide-away for a long distance past laboratories, therapy rooms, solaria, and ward after ward. They were stopped once by a guard who phoned ahead, then let them through; they were at last ushered into a physio-data display room used for watching critically ill patients. "This is Dr. Tanner," Berquist announced. "Doctor, this is Mr. Caxton and Mr. Frisby." He did not, of course, introduce Cavendish.

Tanner looked worried. "Gentlemen, I am doing this against my better judgment because the Director insists. I must warn you of one thing. Don't do or say anything that might excite my patient. He is in an extremely neurotic condition and falls very easily into a state of pathological withdrawal-a trance, if you choose to call it that."

"Epilepsy?" asked Ben.

"A layman might easily mistake it for that. It is more like catalepsy. But don't quote me; there is no clinical precedent for this case."

"Are you a specialist, Doctor? Psychiatry, maybe?"

Tanner glanced at Berquist. "Yes," he admitted.

"Where did you do your advanced work?"

Berquist said, "Look, Ben, let's see the patient and get it over with. You can quiz Dr. Tanner afterwards."

"Okay."

Tanner glanced over his dials and graphs, then flipped a switch and stared into a Peeping Tom, He left the desk, unlocked a door and led them into an adjoining bedroom, putting a finger to his lips as he did so. The other four followed him in. Caxton felt as if he were being taken to "view the remains" and suppressed a nervous need to laugh.

The room was quite gloomy. "We keep it semi-darkened because his eyes are not accustomed to our light levels," Tanner explained in a hushed voice. He turned to a hydraulic bed which filled the center of the room. "Mike, I've brought some friends to see you."

Caxton pressed closer, Floating therein, half concealed by the way his body sank into the plastic skin covering the liquid in the tank and farther concealed by a sheet up to his armpits, was a young man. He looked back at them but said nothing; his smooth, round face was expressionless.

So far as Ben could tell this was the man who had been on stereo the night before. He had a sudden sick feeling that little Jill, with the best of intentions, had tossed him a live grenade-a slander suit that might very well bankrupt him. "You are Valentine Michael Smith?"

"Yes"

"The Man from Mars?"

"Yes"

"You were on stereo last night?"

The man in the tank bed did not answer. Tanner said, "I don't think he knows the word. Let me try. Mike, you remember what you did with Mr. Douglas last night?"

The face looked petulant. "Bright lights. Hurt."

"Yes, the lights hurt your eyes. Mr. Douglas had you say hello to people."

The patient smiled slightly. "Long ride in chair."

"Okay," agreed Caxton. "I catch on. Mike, are they treating you all right here?"

"Yes."

"You don't have to stay here, you know. Can you walk?"

Tanner said hastily, "Now see here, Mr. Caxton-" Berquist put a hand on his arm and he shut up.

"I can walk ... a little. Tired."

"I'll see that you have a wheel chair. Mike, if you don't want to stay here, I'll help you get out of bed and take you anywhere you want to go."

Tanner shook off Berquist's hand and said, "I can't have you interfering with my patient!"

"He's a free man, isn't he?" Caxton persisted. "Or is he a prisoner here?"

Berquist answered, "Of course he is a free man! Keep quiet, Doctor. Let the fool dig his own grave."

"Thanks, Gil. Thanks all to pieces. So he is free to leave if he wants to. You heard what he said, Mike. You don't have to stay here. You can go anywhere you like. I'll help you."

The patient glanced fearfully at Tanner. "No! No, no, no!"

"Okay, okay."

Tanner snapped, "Mr. Berquist, this has gone quite far enough! My patient will be upset the rest of the day."

"All right, Doctor. Ben, let's get the show on the road. You've had enough, surely."

"Um ... just one more question." Caxton thought hard, trying to think what he could squeeze out of it. Apparently Jill had been wrong-yet she had not been wrong!-or so it had seemed last night. But something did not quite fit although he could not tell what it was.

"One more question," Berquist begrudged.

"Thanks. Uh ... Mike, last night Mr. Douglas asked you some questions." The patient watched him but made no comment. "Let's see, he asked you what you thought of the girls here on Earth, didn't he?"

The patient's face broke into a big smile. "Gee!"

"Yes. Mike ... when and where did you see these girls?"

The smile vanished. The patient glanced at Tanner, then he stiffened, his eyes rolled up, and he drew himself into the fetal position, knees drawn up, head bent, and arms folded across his chest.

Tanner snapped, "Get them out of here!" He moved quickly to the tank bed and felt the patient's wrist.

Berquist said savagely, "That tears it! Caxton, will you get out? Or shall I call the guards and have you thrown out?"

"Oh, we're getting out all right," Caxton agreed. All but Tanner left the room and Berquist closed the door.

"Just one point, Gil," Caxton insisted. "You've got him boxed up in there . . . so just where did he see those girls?"

"Eh? Don't be silly. He's seen lots of girls. Nurses ... laboratory technicians. You know."

"But I don't know. I understood he had nothing but male nurses and that female visitors had been rigidly excluded."

"Eh? Don't be any more preposterous than you have to be." Berquist looked annoyed, then suddenly grinned. "You saw a nurse with him on stereo just last night."

"Oh. So I did." Caxton shut up and let himself be led out.

They did not discuss it further until the three were in the air, headed for Cavendish's home. Then Frisby remarked, "Ben, I don't suppose the Secretary General will demean himself to sue you, since you did not print it. Still, if you really do have a source for that rumor you mentioned, we had better perpetuate the evidence. You don't have much of a leg to stand on, you know."

"Forget it Mark. He won't sue." Ben glowered at the floor of the cab. "How do we know that was the Man from Mars?"

"Eh? Come off it, Ben."

"How do we know? We saw a man about the right age in a hospital bed. We have Berquist's word for it-and Berquist got his start in politics issuing denials; his word means nothing. We saw a total stranger, supposed to be a psychiatrist . . . and when I tried to find out where he had studied psychiatry I got euchred out. How do we know? Mr. Cavendish, did you see or hear anything that convinced you that this bloke was the Man from Mars?"

Cavendish answered carefully, "It is not my function to form opinions. I see, I hear-that is all."

"Sorry."

"By the way, are you through with me in my professional capacity?"

"Huh? Oh, sure. Thanks, Mr. Cavendish."

"Thank you, sir. It was an interesting assignment." The old gentleman took off the cloak that set him apart from ordinary mortals, folded it carefully and laid it on the seat. He sighed, relaxed, and his features lost professional detachment, warmed and mellowed. He took out cigars, offered them to the others; Frisby took one and they shared a light. "I do not smoke," Cavendish remarked through a thick cloud, "while on duty. It interferes with optimum functioning of the senses."

"If I had been able to bring along a crew member of the Champion," Caxton persisted, "I could have tied it down. But I thought surely I could tell."

"I must admit," remarked Cavendish, "that I was a little surprised at one thing you did not do."

"Huh? What did I miss?"

"Calluses."

"Calluses?"

"Surely. A man's life history can be told from his calluses. I once did a monograph on them, published in The Witness Quarterly-like Sherlock Holmes' famous monograph on tobacco ash. This young man from Mars since he has never worn our sort of shoes and has lived in gravity about one third of ours, should display foot calluses consonant with his former environment. Even the time he recently spent in space should have left their traces. Very interesting."

"Damn-Good Lord, Mr. Cavendish, why didn't you suggest it to me?"

"Sir?" The old man drew himself up and his nostrils dilated. "It would not have been ethical. I am a Fair Witness, not a participant. My professional association would suspend me for much less. Surely you know that."

"Sorry. I forgot myself." Caxton frowned. "Let's wheel this buggy around and go back. We'll take a look at his feet-or I'll bust the place down with Berquist's fat head!"

"I'm afraid you will have to find another Witness ... in view of my indiscretion in discussing it, even after the fact."

"Uh, yes, there's that." Caxton frowned.

"Better just calm down, Ben," advised Frisby. "You're in deep enough now. Personally, I'm convinced it was the Man from Mars. Occam's razor, least hypothesis, just plain horse sense."

Caxton dropped them, then set the cab to cruise while he thought. Presently he punched the combination to take him back to Bethesda Medical Center.

He was less than half way back to the Center when he realized that his trip was useless. What would happen? He would get as far as Berquist, no farther. He had been allowed in once-with a lawyer, with a Fair Witness. To demand to be allowed to see the Man from Mars a second time, all in one morning, was unreasonable and would be refused. Nor, since it was unreasonable, could he make anything effective out of it in his column.

But he had not acquired a widely syndicated column through being balked. He intended to get in.

How? Well, at least he now knew where the putative "Man from Mars" was being kept. Get in as an electrician? Or as a janitor? Too obvious; he would never get past the guard, not even as far as "Dr. Tanner."

Was "Tanner" actually a doctor? It seemed unlikely. Medical men, even the worst of them, tended to shy away from hankypanky contrary to their professional code. Take that ship's surgeon, Nelson-he had quit, washed his hands of the case simply because-Wait a minute! Dr. Nelson was one man who could tell offhand whether that young fellow was the Man from Mars, without checking calluses, using trick questions, or anything. Caxton reached for buttons, ordered his cab to ascend to parking level and hover, and immediately tried to phone Dr. Nelson, relaying through his office for the purpose since he neither knew where Dr. Nelson was, nor had with him the means to find out. Nor did his assistant Osbert Kilgallen know where he was, either, but he did have at hand resources to find out; it was not even necessary to draw on Caxton's large account of uncollected favors in the Enclave, as the Post syndicate's file on Important Persons placed him at once in the New Mayflower. A few minutes later Caxton was talking with him.

To no purpose-Dr. Nelson had not seen the broadcast. Yes, he had heard about it; no, he had no reason to think the broadcast had been faked. Did Dr. Nelson know that an attempt had been made to coerce Valentine Smith into surrendering his rights to Mars under the Larkin Decision? No, he did not know it, had no reason to believe so ... and would not be interested if it were true; it was preposterous to talk about anyone "owning" Mars; Mars belonged to the Martians. So? Let's propose a hypothetical question, Doctor; if someone were trying to-But Dr. Nelson had switched off. When Caxton tried to reconnect, a recorded voice stated sweetly: "The subscriber has voluntarily suspended service temporarily. If you care to record-" Caxton switched off.

Caxton made a foolish statement concerning Dr. Nelson's parentage. But what he did next was much more foolish; he phoned the Executive Palace, demanded to speak to the Secretary General.

His action was more a reflex than a plan. In his years as a snooper, first as a reporter, then as a lippmann, he had learned that close-held secrets could often be cracked by going all the way to the top and there making himself unbearably unpleasant. He knew that such twisting of the tiger's tail was dangerous, for he understood the psychopathology of great power as thoroughly as Jill Boardman lacked knowledge of it-but he had habitually relied on his relative safety as a dealer in still another sort of power almost universally feared and appeased by the powerful.

What he forgot was, that in phoning the Palace from a taxicab, he was not doing so publicly.

Caxton was not put through to the Secretary General, nor had he expected to be. Instead he spoke with half a dozen underlings and became more aggressive with each one. He was so busy that he did not notice it when his cab ceased to hover and left the parking level.

When he did notice it, it was too late; the cab refused to obey the orders he at once punched into it. Caxton realized bitterly that he had let himself be trapped by a means no professional hoodlum would fall for: his call had been traced, his cab identified, its idiot robot pilot placed under orders of an overriding police frequency-and the cab itself was being used to arrest him and fetch him in, all most privately and with no fuss,

He wished keenly that he had kept Fair Witness Cavendish with him. But he wasted no time on this futility but cleared the useless call from the radio and tried at once to call his lawyer, Mark Frisby.

He was still trying when the taxicab landed inside a courtyard landing fiat and his signal was cut off by its walls. He then tried to leave the cab, found that the door would not open-and was hardly surprised to discover that he was becoming very lightheaded and was fast losing consciousness-

Chapter 8

JILL TRIED TO TELL HERSELF that Ben had gone charging off on another scent and simply had forgotten (or had not taken time) to let her know. But she did not believe it. Ben, incredibly busy as he was, owed much of his success, both professional and social, to meticulous attention to human details. He remembered birthdays and would rather have welched on a poker debt than have forgotten to write a bread-and-butter note. No matter where he had gone, nor how urgent the errand, he could have-and would have!-at least taken two minutes while in the air to record a reassuring message to her at her home or at the Center. It was an unvarying characteristic of Ben, she reminded herself, the thing that made him a lovable beast in spite of his many faults.

He must have left word for her! She called his office again at her lunch break and spoke with Ben's researcher and office chief, Osbert Kilgallen. He assured her solemnly that Ben had left no message for her, nor had any come in since she had called earlier.

She could see past his head in the screen that there were other people in the office; she decided it was a poor time to mention the Man from Mars. "Did he say where he was going? Or when he would be back?"

"No. But that is not unusual. We always have a few spare columns on the hook to fill in when one of these things comes up."

"Well ... where did he call you from? Or am I being too snoopy?"

"Not at all, Miss Boardman. He did not call; it was a statprint message, filed from Paoli Flat in Philadelphia as I recall."

Jill had to be satisfied with that. She lunched in the nurses' dining room and tried to interest herself in food. It wasn't, she told herself, as if anything were really wrong . . . or as if she were in love with the lunk or anything silly like that.

"Hey! Boardman! Snap out of the fog-I asked you a question."

Jill looked up to find Molly Wheelwright, the wing's dietician, looking at her. "Sorry. I was thinking about something else."

"I said, 'Since when does your floor put charity patients in luxury suites?'

"Isn't K-12 on your floor? Or have they moved you?"

"K-12? Certainly. But that's not a charity case; it's a rich old woman, wealthy that she can pay to have a doctor watch every breath she draws."

"Humph! If she's wealthy, she must have come into money awfully suddenly. She's been in the N.P. ward of the geriatrics sanctuary for the past seventeen months."

"Must be some mistake."

"Not mine-I don't let mistakes happen in my diet kitchen. That tray is a tricky one and I check it myself-fat-free diet (she's had her gall bladder out) and a long list of sensitivities, plus concealed medication. Believe me, dear, a diet order can be as individual as a fingerprint." Miss Wheelwright stood up. "Gotta run, chicks. I wish they would let me run this kitchen for a while. Hogwallow Cafeteria!"

"What was Molly sounding off about?" one of the nurses asked.

"Nothing. She's just mixed up." But Jill continued to think about it. It occurred to her that she might locate the Man from Mars by making inquiries around the diet kitchens. She put the idea out of her mind; it would take a full day to visit all the diet kitchens in the acres of ground covered by the sprawling buildings. Bethesda Center had been founded as a naval hospital back in the days when wars were fought on oceans; it had been enormous even then. It had been transferred later to Health, Education, & Welfare and had expanded; now it belonged to the Federation and was still larger, a small city.

But there was something odd about Mrs. Bankerson's case. The hospital accepted all classes of patients, private, charity, and government; the floor Jill was working on usually had only government patients and its luxury suites were occupied by Federation Senators or other official guests able to command flossy service. It was unusual for a paying private patient to have a suite on her floor, or to be on her floor in any status.

Of course Mrs. Bankerson could be overflow, if the part of the Center open to the fee-paying public had no such suite available. Yes, probably that was it.

She was too rushed for a while after lunch to think about it, being busy with incoming patients. Shortly a situation came up in which she needed a powered bed. The routine action would be to phone for one to be sent up-but the storage room was in the basement a quarter of a mile away and Jill wanted the bed at once. She recalled that she had seen the powered bed which was normally in the bedroom of suite K-12 parked in the sitting room of that suite; she remembered telling one of those marine guards not to sit on it. Apparently it had simply been shoved in there to get it out of the way when the flotation bed had been installed for Smith.

Possibly it was still sitting there, gathering dust and still charged out to the floor. Powered beds were always in short supply and cost six times as much as an ordinary bed. While, strictly speaking, it was the wing superintendent's worry, Jill saw no reason to let overhead charges for her floor run up unnecessarily-and besides, if it was still there, she could get it at once. She decided to find out.

The sitting room door was still locked. She was startled to find that her pass key would not open it. Making a mental note to tell maintenance to repair the lock, she went on down the corridor to the watch room of the suite, intending to find out about the bed from the doctor watching over Mrs. Bankerson.

The physician on watch was the same one she had met before, Dr. Brush. He was not an intern, nor a resident, but had been brought in for this patient, Jill had learned from him, by Dr. Garner. Brush looked up as she put her head in. "Miss Boardman! Just the person I want to see!"

"Why didn't you ring? How's your patient?"

"She's all right," he answered, glancing up at the Peeping Tom, "But I definitely am not."

"Trouble?"

"Some trouble. About five minutes' worth. And my relief is not in the building. Nurse, could you spare me about that many minutes of your valuable time? And then keep your mouth shut afterwards?"

"I suppose so. I told my assistant floor supervisor I would be away for a few minutes. Let me use your phone and I'll tell her where to find me."

"No!" he said urgently. "Just lock that door after I leave and don't let anybody in until you hear me rap 'Shave and a Haircut' on it, that's a good girl."

"All right, sir," Jill said dubiously. "Am I to do anything for your patient?"

"No, no, just sit there at the desk and watch her in the screen. You won't have to do anything. Don't disturb her."

"Well, if anything does happen, where will you be? In the doctors' lounge?"

"I'm not going that far-just to the men's washroom down the corridor. Now shut up, please, and let me go-this is urgent."

He left and Jill obeyed his order to lock the door after him. Then she looked at the patient through the viewer and ran her eye over the dials. The elderly woman was again asleep and the displays showed her pulse strong and her breathing even and normal; Jill wondered why Dr. Garner considered a "death watch" necessary?

Then she remembered why she had come in there in the first place and decided that she might as well find out if the bed was in the far room without bothering Dr. Brush about it. While it was not quite according to Dr. Brush's instructions, she would not be disturbing his patient-certainly she knew how to walk through a room without waking a sleeping patient!-and she had decided years ago that what doctors did not know rarely hurt them. She opened the door quietly and went in.

A quick glance assured her that Mrs. Bankerson was in the typical sleep of the senile. Walking noiselessly she went past her to the door to the sitting room. It was locked but her pass key let her in.

She was pleased to see that the powered bed was there. Then she saw that the room was occupied-sitting in an arm chair with a picture book in his lap was the Man from Mars.

Smith looked up and gave her the beaming smile of a delighted baby.

Jill felt dizzy, as if she had been jerked out of sleep. Jumbled ideas raced through her mind. Valentine Smith here? But he couldn't be; he had been transferred somewhere else; the log showed it. But he was here.

Then all the ugly implications and possibilities seemed to line themselves up ? the fake "Man from Mars" on stereo ... the old woman out there, ready to die, but in the meantime covering the fact that there was another patient in here . . . the door that would not open to her pass-key-and, lastly, a horrid vision of the "meat wagon" wheeling out of here some night, with a sheet concealing the fact that it carried not one cadaver, but two.

When this last nightmare rushed through her mind, it carried in its train a cold wind of fear, the realization that she herself was in peril through having stumbled onto this top-secret fact.

Smith got clumsily up from his chair, held out both hands while still smiling and said, "Water brother!"

"Hello. Uh ... how are you?"

"I am well. I am happy." He added something in a strange, choking speech, then corrected himself and said carefully, "You are here, my brother. You were away. Now you are here. I drink deep of you."

Jill felt herself helplessly split between two emotions, one that crushed and melted her heart-and an icy fear of being caught here. Smith did not seem to notice. Instead he said, "See? I walk! I grow strong." He demonstrated by taking a few steps back and forth, then stopped, triumphant, breathless, and smiling in front of her.

She forced herself to smile. "We are making progress, aren't we? You keep growing stronger, that's the spirit! But I must go now-I just stopped in to say hello."

His expression changed instantly to distress. "Do not go!"

"Oh, but I must!"

He continued to look woebegone, then added with tragic certainty, "I have hurted you. I did not know."

"Hurt me? Oh, no, not at all! But I must go-and quickly!"

His face was without expression. He stated rather than asked, "Take me with you, my brother."

"What? Oh, I can't. And I must go, at once. Look, don't tell anyone that I was in here, please!"

"Not tell that my water brother was here?"

"Yes. Don't tell anyone. Uh, I'll try to come back, I really will. You be a good boy and wait and don't tell anyone."

Smith digested this, looked serene. "I will wait. I will not tell."

"Good!" Jill wondered how the devil she possibly could get back in to see him-she certainly couldn't depend on Dr. Brush having another convenient case of trots. She realized now that the "broken" lock had not been broken and her eye swept around to the corridor door-and she saw why she had not been able to get in. A hand bolt had been screwed to the surface of the door, making a pass key useless. As was always the case with hospitals, bathroom doors and other doors that could be bolted were so arranged as to open also by pass key, so that patients irresponsible or unruly could not lock themselves away from the nurses. But here the locked door kept Smith in, and the addition of a simple hand bolt of the sort not permitted in hospitals served to keep out even those with pass keys.

Jill walked over and opened the bolt. "You wait. I'll come back."

"I shall waiting."

When she got back to the watch room she heard already knocking the Tock! Tock! Ti-tock tock! ... Tock, tock! signal that Brush had said he would use; she hurried to let him in.

He burst in, saying savagely, "Where the hell were you, nurse? I knocked three times." He glanced suspiciously at the inner door.

"I saw your patient turn over in her sleep," she lied quickly. "I was in arranging her collar pillow."

"Damn it, I told you simply to sit at my desk!"

Jill knew suddenly that the man was even more frightened than she was-and with more reason. She counterattacked. "Doctor, I did you a favor," she said coldly. "Your patient is not properly the responsibility of the floor supervisor in the first place. But since you entrusted her to me, I had to do what seemed necessary in your absence. Since you have questioned what I have done, let's get the wing superintendent and settle the matter."

"Huh? No, no-forget it."

"No, sir. I don't like to have my professional actions questioned without cause. As you know very well, a patient that old can smother in a water bed; I did what was necessary. Some nurses will take any blame from a doctor, but I am not one of them. So let's call the superintendent."

"What? Look, Miss Boardman, I'm sorry I said anything. I was upset and I popped off without thinking. I apologize."

"Very well, Doctor," Jill answered stiffly. "Is there anything more I can do for you?"

"Uh? No, thank you. Thanks for standing by for me. Just ... well, be sure not to mention it, will you?"

"I won't mention it." You can bet your sweet life I won't mention it, Jill added silently. But what do I do now? Oh, I wish Ben were in town! She got back to her duty desk, nodded to her assistant, and pretended to look over some papers. Finally she remembered to phone for the powered bed she had been after in the first place. Then she sent her assistant to look at the patient who needed the bed (now temporarily resting in the ordinary type) and tried to think.

Where was Ben? If he were only in touch, she would take ten minutes relief, call him, and shift the worry onto his broad shoulders. But Ben, damn him, was off skyoodling somewhere and letting her carry the ball.

Or was he? A fretful suspicion that had been burrowing around in her subconscious all day finally surfaced and looked her in the eye, and this time she returned the stare: Ben Caxton would not have left town without letting her know the outcome of his attempt to see the Man from Mars. As a fellow conspirator it was her right to receive a report and Ben always played fair . . . always.

She could hear sounding in her head something he had said on the ride back from Hagerstown: "-if anything goes wrong, you are my ace in the hole . . . honey. If you don't hear from me, you are on your own,"

She had not thought seriously about it at the time, as she had not really believed that anything could happen to Ben. Now she thought about it for a long time, while trying to continue her duties. There comes a time in the life of every human when he or she must decide to risk "his life, his fortune, and his sacred honor" on an outcome dubious. Those who fail the challenge are merely overgrown children, can never be anything else. Jill Boardman encountered her personal challenge-and accepted it-at 3:47 that afternoon while convincing a ward visitor that he simply could not bring a dog onto the floor even though he had managed to slip it past the receptionist and even if the sight of this dog was just what the patient needed.

The Man from Mars sat down again when Jill left. He did not pick up the picture book they had given him but simply waited in a fashion which may be described as "patient" only because human language does not embrace Martian emotions nor attitudes. He merely held still with quiet happiness because his brother had said that he would return. He was prepared to wait, without doing anything, without moving, for several years if necessary.

He had no clear idea how long it had been since he had first shared water with this brother; not only was this place curiously distorted in time and shape, with sequences of sights and sounds and experiences new to him and not yet grokked, but also the culture of his nest took a different grasp of time from that which is human. The difference lay not in their much longer lifetimes as counted in Earth years, but in a basically different attitude. The sentence, "It is later than you think," could not have been expressed in Martian-nor could "Haste makes waste," though for a different reason: the first notion was inconceivable while the latter was an unexpressed Martian basic, as unnecessary as telling a fish to bathe. But the quotation, "As it was in the Beginning, is now and ever shall be," was so Martian in mood that it could be translated more easily than "two plus two makes four"-which was not a truism on Mars.

Smith waited.

Brush came in and looked at him; Smith did not move and Brush went away.

When Smith heard a key in the outer door, he recalled that this sound had been one that he had heard somewhat before the last visit of his water brother, so he shifted his metabolism in preparation, in case the sequence occurred again. He was astonished when the door opened and Jill slipped in, as he had not been aware that the outer door was a door. But he grokked it at once and gave himself over to the joyful fullness which comes only in the presence of one's own nestlings, one's chosen water brothers, and (under certain circumstances) in the presence of the Old Ones.

His joy was somewhat sullied by immediate awareness that his brother did not fully share it ? in truth, he seemed more distressed than was possible save in one about to discorporate because of some shameful lack or failure.

But Smith had already learned that these creatures, so much like himself in some ways, could endure emotions dreadful to contemplate and still not die. His Brother Mahmoud underwent a spiritual agony five times daily and not only did not die but had urged the agony on him as a needful thing. His Brother Captain van Tromp suffered terrifying spasms unpredictably, any one of which should have, by Smith's standards, produced immediate discorporation to end the conflict-yet that brother was still corporate so far as he knew.

So he ignored Jill's agitation.

Jill handed him a bundle. "Here, put these on. Hurry!"

Smith accepted the bundle and stood waiting. Jill looked at him and said, "Oh, dear! All right, get your clothes off. I'll help you."

She was forced to do more than help; she had to undress and dress him. He had been wearing a hospital gown, a bathrobe, and slippers, not because he wanted them but because he had been told to wear them. He could handle them himself by now, but not fast enough to Suit Jill; she skinned him quickly. She being a nurse and he never having heard of the modesty taboo-nor would he have grasped an explanation-they were not slowed up by irrelevancies; the difficulties were purely mechanical. He was delighted and surprised by the long false skins Jill drew over his legs, but she gave him no time to cherish them, but taped the women's stockings to his thighs in lieu of a garter belt. The nurse's uniform she dressed him in was not her own, but one that she had borrowed from a larger woman on the excuse that a cousin of hers needed one for a masquerade party. Jill hooked a nurse's cape around his neck and reflected that its all-enclosing straight drape covered most of the primary and secondary sex characteristics-at least she hoped that it would. The shoes were more difficult, as they did not fit well and Smith still found standing and walking in this gravity field an effort even barefooted.

But at last she got him covered and pinned a nurse's cap on his head. "Your hair isn't very long," she said anxiously, "but it is practically as long as a lot of the girls wear it and it will have to do." Smith did not answer as he had not understood much of the remark. He tried to think his hair longer but realized that it would take time.

"Now," said Jill. "Listen carefully. No matter what happens, don't say a word. I'll do all the talking. Do you understand me?"

"Don't talk. I will not talk."

"Just come with me-I'll hold your hand. And don't say a word. But if you know any prayers, pray!"

"Pray?"

"Never mind. You just come along and don't talk." She opened the quick glance outside, then took his hand and led him out into the corridor.

No one seemed especially interested. Smith found the many strange configurations upsetting in the extreme; he was assaulted by images he could not bring into focus. He stumbled blindly along beside Jill, with his eyes and senses almost disconnected to protect himself against chaos.

She led him to the end of the corridor and stepped on a slide-away leading crosswise. He almost fell down and would have done so if Jill had not caught him. A chambermaid looked curiously at them and Jill cursed under her breath-then was very careful in helping him off. They took an elevator to the roof, Jill being quite sure that she could never pilot him up a bounce tube.

On the roof they encountered a major crisis, though Smith was not aware of it. He was undergoing the keen delight of seeing sky; he had not seen sky since the sky of Mars. This sky was bright and colorful and joyful-it being a typical overcast Washington grey day. In the meantime Jill was looking around helplessly for a taxi. The roof was almost deserted, something she had counted on, since most of the nurses who came off duty when she did were already headed home fifteen minutes ago and the afternoon visitors were gone. But the taxis were, of course, gone too. She did not dare risk an air bus, even though one which went her way would be along in a few minutes.

She was about to call a taxi when one headed in for a landing. She called to the roof attendant. "Jack! Is that cab taken? I need one."

"It's probably the one I called for Dr. Phipps."

"Oh, dear! Jack, see how quick you can get me another one, will you? This is my cousin Madge-she works over in South Wing-and she has a terrible laryngitis and I want to get her out of this wind."

The attendant looked dubiously toward the phone in his booth and scratched his head. "Well ... seeing it's you, Miss Boardman, I'll let you take this one and call another one for Dr. Phipps. How's that?"

"Oh, Jack, you're a lamb! No, Madge, don't try to talk; I'll thank him. Her voice is gone completely; I'm going to take her home and bake it out with hot rum."

"That ought to do it. Old-fashioned remedies are always best, my mother used to say." He reached into the cab and punched the combination for Jill's home from memory, then helped them in. Jill managed to get in the way and thereby cover up Smith's unfamiliarity with this common ceremonial. "Thanks, Jack. Thanks loads.

The cab took off and Jill took her first deep breath. "You can talk now."

"What should I say?"

"Huh? Nothing. Anything. Whatever you like."

Smith thought this over. The scope of the invitation obviously called for a worthy answer, suitable to brothers. He thought of several, discarded them because he did not know how to translate them, then settled on one which he thought he could translate fairly well but which nevertheless conveyed even in this strange, flat speech some of the warm growing-closer brothers should enjoy. "Let our eggs share the same nest."

Jill looked startled. "Huh? What did you say?"

Smith felt distressed at the failure to respond in kind and interpreted it as failure on his own part. He realized miserably that, time after time, he had managed to bring agitation to these other creatures when his purpose had been to create oneness. He tried again, rearranging his sparse vocabulary to enfold the thought somewhat differently. "My nest is yours and your nest is mine."

This time Jill managed to smile. "Why, how sweet! My dear, I am not sure that I understand you, but if I do, that is the nicest offer I have had in a long time." She added, "But right now we are up to our ears in troubleso let's wait a while, shall we?"

Smith had understood Jill hardly more than Jill had understood him, but he caught his water brother's pleased mood and understood the suggestion to wait. Waiting was something he did without effort, so he sat back, satisfied that all was well between himself and his brother, and enjoyed the scenery. It was the first time he had seen this place from the air and on every side there was a richness of new things to try to grok. It occurred to him that the apportation used at home did not permit this delightful viewing of what lay between. This thought almost led him to a comparison of Martian and human methods not favorable to the Old Ones, but his mind automatically shied away from heresy.

Jill kept quiet, too, and tried to get her thoughts straight. Suddenly she realized that the cab was heading down the final traffic leg toward the apartment house where she lived-and she realized just as quickly that home was the last place for her to go, it being the first place they would look once they figured out how Smith had escaped and who had helped him. She did not kid herself that she had covered her tracks. While she knew nothing of police methods, she supposed that she must have left fingerprints in Smith's room, not to mention the people who had seen them walk out. It was even possible (so she had heard) for a technician to read the tape in this cab's pilot and tell exactly what trips it had made that day and where and when.

She reached forward, slapped the order keys, and cleared the instruction to go to her apartment house. She did not know whether that would wipe the tape or not-but she was not going to head for a place where the police might already be waiting.

The cab checked its forward motion, rose out of the traffic lane and hovered. Where could she go? Where in all this swarming city could she hide a grown man who was half idiot and could not even dress himself?-a man who was the most sought-after person on the globe? Oh, if Ben were only here! Ben ? where are you?

She reached forward again, picked up the phone and rather hopelessly punched Ben's number, expecting to hear the detached voice of an automation inviting her to record a message. Her spirits jumped when a man's voice answered . - . then slumped again when she realized that it was not Ben but his majordomo, Osbert Kilgallen. "Oh. Sorry, Mr. Kilgallen. This is Jill Boardman. I thought I had called Mr. Caxton's home."

"You did. But I always have his home calls relayed to the office when he is away more than twenty-four hours."

"Then he is still away?"

"I'm afraid so. Is there anything I can do for you?"

"Uh, no. Look, Mr. Kilgallen, isn't it strange that Ben should just drop out of sight? Aren't you worried about him?"

"Eh? Why should I be? His message said that he did not know how long he would be away."

"Isn't that rather odd in itself?"

"Not in Mr. Caxton's work, Miss Boardman."

"Well ... I think there is something very odd about his being away this time! I think you ought to report it. You ought to spread it over every news service in the country-in the world!"

Even though the cab's phone had no vision circuit Jill felt Osbert Kilgallen draw himself up. "I'm afraid, Miss Boardman, that I will have to interpret my employer's instructions myself. Uh ... if you don't mind my saying so, there is always some ? 'good friend' phoning Mr. Caxton frantically every time he leaves town."

Some babe trying to get a hammer lock on him, Jill interpreted angrily-and this Osbert character thinks I'm the current one. It put out of her mind the half-formed thought of asking Kilgallen for help; she switched off as quickly as possible.

But where could she go? The obvious solution popped into her mind. If Ben was missing-and the authorities had a hand in it-the last place they would be likely to look for Valentine Smith would be Ben's apartment. Unless, she corrected, they connected her with Ben, which she did not think that they did.

They could dig a bite to eat out of Ben's buttery-she wouldn't risk ordering anything from the basement; they might know he was away. And she could borrow some of Ben's clothes for her idiot child. The last point settled it; she set the combination for Ben's apartment house. The cab picked out the new lane and dropped into it.

Once outside the door to Ben's fiat Jill put her face to the hush box by the door and said emphatically, "Karthago delenda est!"

Nothing happened. Oh damn him! she said frantically to herself; he's changed the combo. She stood there for a moment, knees weak, and kept her face away from Smith. Then she again spoke into the hush box. It was a Raytheon lock, the same voice circuit actuated the door or announced callers. She announced herself on the forlorn chance that Ben might have returned. "Ben, this is Jill."

The door slid open.

They went inside and the door closed. Jill thought for an instant that Ben had let them in, then she realized that she had accidentally hit on his new door combination . . . intended, she guessed, as a gracious compliment combined with a wolf tactic. She felt that she could have dispensed with the compliment to have avoided the awful panic she had felt when the door had refused to open.

Smith stood quietly at the edge of the thick green lawn and looked at the room. It again was a place so new to him as not to be grokked at once, but he felt immediately pleased with it. It was less exciting than the moving place they had just been in, but in many ways more suited for enfolding together the self. He looked with interest at the view window at one end but did not recognize it as a window, mistaking it for a living picture like those he had been used to at home-the suite he had been in at Bethesda contained no windows, it being in one of the newer wings, and thus far he had never acquired the idea of "window."

He noticed with approval that the simulation of depth and movement in the "picture" was perfect-some very great artist among these people must have created it. Up until this time he had seen nothing to cause him to think that these people possessed art; his grokking of them was increased by this new experience and he felt warmed.

A movement caught his eye; he turned to find his brother removing the false skins as well as the slippers from its legs.

Jill sighed and wiggled her toes in the grass. "Gosh, how my feet do hurt!" She glanced up and saw Smith watching her with that curiously disturbing babyfaced stare. "Do it yourself if you want to. You'll love it."

He blinked. "How do?"

"I keep forgetting. Come here, I'll help you." She got his shoes off, untaped the stockings and peeled them off. "There, doesn't that feel good?"

Smith wiggled his toes in the cool grass, then said timidly, "But these live?"

"Sure, they're alive. It's real live grass. Ben paid a lot to have it that way. Why, the special lighting circuits alone cost more than I make in a month. So walk around and let your feet enjoy it."

Smith missed much of the speech but he did understand that the grass was made up of living beings and that he was being invited to walk on them. "Walk on living things?" he asked with incredulous horror.

"Huh? Why not? It doesn't hurt this grass; it was specially developed for house rugs."

Smith was forced to remind himself that a water brother could not lead him into wrongful action. Apprehensively he let himself be encouraged to walk around-and found that he did enjoy it and that the living creatures did not protest. He set his sensitivity for such things as high as possible; his brother was right, this was their proper being-to be walked on. He resolved to enfold it and praise it; the effort was much like that of a human trying to appreciate the merits of cannibalism-a custom which Smith found perfectly proper.

Jill let out a sigh. "Well, I had better stop playing. I don't know how long we will be safe here."

"Safe?"

"We can't stay here, not very long. They may be checking on every conveyance that left the Center this very minute." She frowned and thought. Her place would not do, this place would not do-and Ben had intended to take him to Jubal Harshaw. But she did not know Harshaw; she was not even sure where he lived-somewhere in the Poconos, Ben had said. Well, she would just have to try to find out where he lived and call him. It was Hobson's choice; she had nowhere else to turn.

"Why are you not happy, my brother?"

Jill snapped out of her mood and looked at Smith. Why, the poor infant didn't even know anything was wrong! She made a real effort to look at it from his point of view. She failed, but she did grasp that he had no notion that they were running away from ? from what? The cops? The hospital authorities? She was not sure quite what she had done, or what laws she had broken; she simply knew that she had pitted her own puny self against the combined will of the Big People, the Bosses, the ones who made decisions.

But how could she tell the Man from Mars what they were up against when she did not understand it herself? Did they have policemen on Mars? Half the time she found talking to him like shouting down a rain barrel.

Heavens, did they even have rain barrels on Mars? Or rain?

"Never you mind," she said soberly. "You just do what I tell you to do."

"Yes."

It was an unmodified, unlimited acceptance, an eternal yea. Jill suddenly had the feeling that Smith would unhesitatingly jump out the window if she told him to-in which belief she was correct; he would have jumped, enjoyed every scant second of the twenty-story drop, and accepted without surprise or resentment the discorporation on impact. Nor would he have been unaware that such a fall would kill him; fear of death was an idea utterly beyond him. If a water brother selected for him such a strange discorporation, he would cherish it and try to grok.

"Well, we can't stand here pampering our feet. I've got to feed us, I've got to get you into different clothes, and we've got to leave. Take those off." She left to check Ben's wardrobe.

She selected for him an inconspicuous travel suit, a beret, shirt, underclothes, and shoes, then returned. Smith was as snarled as a kitten in knitting; he had tried to obey but now had one arm prisoned by the nurse's uniform and his face wrapped in the skirt. He had not even removed the cape before trying to take off the dress.

Jill said, "Oh, dear!" and ran to help him.

She got him loose from the clothes, looked at them, then decided to stuff them down the oubliette . . . she could pay Etta Schere for the loss of them later and she did not want cops finding them here-just in case. "But you are going to have to have a bath, my good man, before I dress you in Ben's clean clothes. They've been neglecting you. Come along." Being a nurse, she was inured to bad odors, but (being a nurse) she was fanatic about soap and water . . and it seemed to her that no one had bothered to bathe this patient recently. While Smith did not exactly stink, he did remind her of a horse on a hot day. Soap suds were indicated.

He watched her fill the tub with delight. There had been a tub in the bathroom of the suite he had been in but Smith had not known it was used to hold water; bed baths were all that he had had and not many of those; his trancelike withdrawals had interfered.

Jill tested the water's temperature. "All right, climb in."

Smith did not move. Instead he looked puzzled.

"Hurry!" Jill said sharply. "Get in the water."

The words she used were firmly parts of his human vocabulary and Smith did as she ordered, emotion shaking him. This brother wanted him to place his whole body in the water of life. No such honor had ever come to him; to the best of his knowledge and belief no one had ever before been offered such a holy privilege. Yet he had begun to understand that these others did have greater acquaintance with the stuff of life . . . a fact not yet grokked but which he had to accept.

He placed one trembling foot in the water, then the other . . . and slipped slowly down into the tub until the water covered him completely.

"Hey!" yelled Jill, and reached in and dragged his head and shoulders above water-then was shocked to find that she seemed to be handling a corpse. Good Lord! he couldn't drown, not in that time. But it frightened her and she shook him. "Smith! Wake up! Snap out of it."

Smith heard his brother call from far away and returned. His eyes ceased to be glazed, his heart speeded up and he resumed breathing. "Are you all right?" Jill demanded.

"I am all right. I am very happy ... my brother."

"You sure scared me. Look, don't get under the water again. Just sit up, the way you are now."

"Yes, my brother." Smith added several words in a curious croaking meaningless to Jill, cupped a handful of water as if it were precious jewels and raised it to his lips. His mouth touched it, then he offered the handful to Jill.

"Hey, don't drink your bath water! No, I don't want it, either."

"Not drink?"

His look of defenseless hurt was such that Jill again did not know what to do. She hesitated, then bent her head and barely touched her lips to the offering. "Thank you."

"May you never thirst!"

"I hope you are never thirsty, too. But that's enough. If you want a drink of water, I'll get you one. But don't drink any more of this water."

Smith seemed satisfied and sat quietly. By now Jill was convinced that he had never taken a tub bath before and did not know what was expected of him. She considered the problem. No doubt she could coach him but they were already losing precious time. Maybe she should have let him go dirty.

Oh, well! It was not as bad as tending a disturbed patient in an N.P. ward. She had already got her blouse wet almost to the shoulders in dragging Smith off the bottom; she took it off and hung it up. She had been dressed for the street when she had rushed Smith out of the Center and was wearing a little, pleated pediskirt that floated around her knees. Her jacket she had dropped in the living room. She glanced down at the skirt. Although the pleats were guaranteed permanized, it was silly to get it wet. She shrugged and zipped it off; it left her in brassiere and panties.

Jill looked at Smith. He was staring at her with the innocent, interested eyes of a baby. She found herself blushing, which surprised her, as she had not known that she could. She believed herself to be free of morbid modesty and had no objection to nudity at proper times and places-she recalled suddenly that she had gone on her first bareskin swimming party at fifteen. But this childlike stare from a grown man bothered her; she decided to put up with clammily wet underwear rather than do the obvious, logical thing.

She covered her discomposure with heartiness. "Let's get busy now and scrub the hide." She dropped to her knees beside the tub, sprayed soap on him, and started working it into a lather.

Presently Smith reached out and touched her right mammary gland. Jill drew back hastily, almost dropping the sprayer. "Hey! None of that stuff!"

He looked as if she had slapped him. "Not?" he said tragically.

"'Not,'" she agreed firmly. She looked at his face and added softly. "It's all right. Just don't distract me with things like that when I'm busy."

He took no more inadvertent liberties and Jill cut the bath short, letting the water drain and having him stand up while she showered the soap off him. Then she dressed with a feeling of relief while the blast dried him. The warm air startled him at first and he began to tremble, but she told him not to be afraid and had him hold onto the grab rail back of the tub while he dried and she dressed.

She helped him out of the tub. "There, you smell a lot better and

I'll bet you feel better."

"Feel fine."

"Good. Let's get some clothes on you." She led him into Ben's bedroom where she had left the clothes she had selected. But before she could even explain, demonstrate, or assist in getting shorts on him, she was shocked almost out of the shoes she had not yet put back on.

"OPEN UP IN THERE!"

Jill dropped the shorts. She was frightened nearly out of her senses, feeling the same panic she felt when a patient's respiration stopped and blood pressure dropped in the middle of surgery. But the discipline she had learned in operating theater came to her aid. Did they actually know anyone was inside? Yes, they must know-else they would never have come here. That damned robocab must have given her away.

Well, should she answer? Or play 'possum?

The shout over the announcing circuit was repeated. She whispered to Smith, "Stay here!" then went into the living room. "Who is it?" she called out, striving to keep her voice normal.

"Open in the name of the law!"

"Open in the name of what law? Don't be silly. Tell me who you are and what you want before I call the police."

"We are the police. Are you Gillian Boardman?"

"Me? Of course not. I'm Phyllis O'Toole and I'm waiting for Mr. Caxton to come home. Now you had better go away, because I'm going to call the police and report an invasion of privacy."

"Miss Boardman, we have a warrant for your arrest. Open up at once or it will go hard with you."

"I'm not your 'Miss Boardman' and I'm calling the police!"

The voice did not answer. Jill waited, swallowing. Shortly she felt radiant heat against her face. A small area around the door's lock began to glow red, then white; something crunched and the door slid open. Two men were there; one of them stepped in, grinned at Jill and said, "That's the babe, all right. Johnson, look around and find him."

"Okay, Mr. Berquist."

Jill tried to make a road block of herself. The man called Johnson, twice her mass, put a hand on her shoulder, brushed her aside and went on back toward the bedroom. Jill said shrilly, "Where's your warrant? Let's see your credentials-this is an outrage!"

Berquist said soothingly, "Don't be difficult, sweetheart. We don't really want you; we just want him. Behave yourself and they might go easy on you."

She kicked at his shin. He stepped back nimbly, which was just as well, as Jill was still barefooted. "Naughty, naughty," he chided. "Johnson! You find him?"

"He's here, Mr. Berquist. And naked as an oyster. Three guesses what they were up to."

"Never mind that. Bring him here."

Johnson reappeared, shoving Smith ahead of him, controlling him by twisting one arm behind his back. "He didn't want to come."

"He'll come, he'll come!"

Jill ducked past Berquist, threw herself at Johnson. With his free hand he slapped her aside. "None of that, you little slut!"

Johnson should not have slapped her. He had not hit her hard, not even as hard as he used to hit his wife before she went home to her parents, and not nearly as hard as he had often hit prisoners who were reluctant to talk. Up to this time Smith had shown no expression at all and had said nothing; he had simply let himself be forced into the room with the passive, futile resistance of a puppy who does not want to be walked on a leash. But he had understood nothing of what was happening and had tried to do nothing at all.

When he saw his water brother struck by this other, he twisted and ducked, got free-and reached in an odd fashion for Johnson.

Johnson was not there any longer.

He was not anywhere. The room did not contain him. Only blades of grass, straightening up where his big feet had been, showed that he had ever been there. Jill stared through the space he had occupied and felt that she might faint.

Berquist closed his mouth, opened it again, said hoarsely, "What did you do with him?" He looked at Jill rather than Smith.

"Me? I didn't do anything."

"Don't give me that. What's the trick? You got a trap door or something?"

"Where did he go?"

Berquist licked his lips. "I don't know." He took a gun from under his coat. 'But don't try any of your tricks with me. You stay here-I'm taking him along."

Smith had relapsed into his attitude of passive waiting. Not understanding what it was all about, he had done only the minimum he had to do. But guns he had seen before, in the hands of men on Mars, and the expression on Jill's face at having one aimed at her he did not like. He grokked that this was one of the critical cusps in the growth of a being wherein contemplation must bring forth right action in order to permit further growth. He acted.

The Old Ones taught him well. He stepped toward Berquist; the gun swung to cover him. Nevertheless he reached out-and Berquist was no longer there. Smith turned to look at his brother.

Jill put a hand to her mouth and screamed.

Smith's face had been completely blank. Now it became tragically forlorn as he realized that he must have chosen wrong action at the cusp. He looked imploringly at Jill and began to tremble. His eyes rolled up; he slipped slowly down to the grass, pulled himself tightly into a fetal ball and was motionless.

Jill's own hysteria cut off as if she had thrown a switch. The change was an indoctrinated reflex: here was a patient who needed her; she had no time for her own emotions, no time even to worry or wonder about the two men who had disappeared. She dropped to her knees and examined Smith.

She could not detect respiration, nor could she find a pulse; she pressed an ear against his ribs. She thought at first that heart action had stopped completely, but, after a long time, she heard a lazy tub-dub, followed in four or five seconds by another.

The condition reminded her of schizoid withdrawal, but she had never seen a trance so deep, not even in class demonstrations of hypnoanesthesia. She had heard of such deathlike states among East Indian fakirs but she had never really believed the reports.

Ordinarily she would not have tried to rouse a patient in such a state but would have sent for a doctor at once. But these were not ordinary circumstances. Far from shaking her resolve, the events of the past few minutes had made her more determined than ever not to let Smith fall back into the hands of the authorities. But ten minutes of trying everything she knew convinced her that she could not rouse this patient with means at hand without injuring him-and perhaps not even then. Even the sensitive, exposed nerve in the elbow gave no response.

In Ben's bedroom she found a battered flight case, almost too big to be considered hand luggage, too small to be a trunk. She opened it, found it packed with voicewriter, toilet kit, a complete outfit of male clothing, and everything else that a busy reporter might need if called out of town suddenly-even to a licensed audio link to permit him to patch into phone service wherever he might be. Jill reflected that the presence of this packed bag alone tended strongly to prove that Ben's absence was not what Kilgallen thought it was, but she wasted no time thinking about it; she simply emptied the bag and dragged it into the living room.

Smith outweighed her, but muscles acquired handling patients twice her size enabled her to dump him into the big bag. Then she had to refold him somewhat to allow her to close it. His muscles resisted force, but under gentle pressure steadily applied he could be repositioned like putty. She padded the corners with some of Ben's clothes before she closed him up. She tried to punch some air holes but the bag was a glass laminate, tough as an absentee landlord's heart. She decided that he could not suffocate quickly with his respiration so minimal and his metabolic rate down as low as it must be.

She could barely lift the packed bag, straining as hard as she could with both hands, and she could not possibly carry it any distance. But the bag was equipped with "Red Cap" casters. They cut two ugly scars in Ben's grass rug before she got it to the smooth parquet of the little entrance way.

She did not go to the lobby on the roof, since another air cab was the last thing she wanted to risk, but went out instead by the service door in the basement. There was no one there but a young man who was checking an incoming kitchen delivery. He moved slowly aside and let her roll the bag out onto the pavement. "Hi, sister. What you got in the kiester?"

"A body," she snapped.

He shrugged. "Ask a jerky question, get a jerky answer. I should learn."

part two

HIS PREPOSTEROUS HERITAGE

Chapter 9

THE THIRD PLANET OUT from Sol was in its normal condition. It had on it 230,000 more human souls today than yesterday, but, among the five billion terrestrials such a minute increase was not noticeable. The Kingdom of South Africa, Federation associate member, had again been cited before the High Court for persecution of its white minority. The lords of women's fashions, gathered in solemn conclave in Rio, had decreed that hem lines would go down and that navels would again be covered. The three Federation defense stations swung silently in the sky, promising instant death to any who disturbed the planet's peace. Commercial space stations swung not so silently, disturbing the planet's peace with endless clamor of the virtues of endless trademarked trade goods. Half a million more mobile homes had set down on the shores of Hudson Bay than had migrated by the same date last year, the Chinese rice belt had been declared an emergency malnutrition area by the Federation Assembly, and Cynthia Duchess, known as the Richest Girl in the World, had dismissed and paid off her sixth husband. All was normal.

The Reverend Doctor Daniel Digby, Supreme Bishop of the Church of the New Revelation (Fosterite) had announced that he had nominated the Angel Azreel to guide Federation Senator Thomas Boone and that he expected Heavenly confirmation of his choice some time today; all the news services carried the announcement as straight news, the Fosterites having wrecked too many newspaper offices in the past. Mr. and Mrs. Harrison Campbell VI had a son and heir by hostmother at Cincinnati Children's Hospital while the happy parents were vacationing in Peru. Dr. Horace Quackenbush, Professor of Leisure Arts at Yale Divinity School, issued a stirring call for a return to faith and a cultivation of spiritual values; there was a betting scandal involving half the permanent professionals of the West Point football squad and its line coach; three bacterial warfare chemists were suspended at Toronto for presumption of emotional instability-all three announced that they would carry their cases, if necessary, to the Federation High Court. The High Court upset a ruling of the Supreme Court of the United States in re eligibility to vote in primaries involving Federation Assemblymen in the case of Reinsberg vs. the State of Missouri.

His Excellency, the Most Honorable Joseph E. Douglas, Secretary General of the World Federation of Free States, picked at his breakfast omelet and wondered peevishly why a man could not get a decent cup of coffee these days. In front of him his morning newspaper, prepared by the night shift of his information staff, moved past his eyes at his optimum reading speed in a feedback executive scanner, custom-built by Sperry. The words would flow on as long as he looked in that direction; if he turned his head, the machine would note it and stop instantly.

He was looking that way now and the projected print moved along the screen, but he was not really reading but simply avoiding the eyes of his boss across the table. Mrs. Douglas did not read newspapers; she had other ways of finding out what she needed to know.

"Joseph-"

He looked up and the machine stopped. "Yes, my dear?"

"You have something on your mind"

"Eh? What makes you say that, my dear?"

"Joseph-I haven't watched you and coddled you and darned your socks and kept you out of trouble for thirty-five years for nothing. I know when there is something on your mind."

The hell of it is, he admitted to himself, she does know. He looked at her and wondered why he had ever let her bully him into no-termination contract. Originally she had been only his secretary, back in the days (he thought of them as "The Good Old Days") when he had been a state legislator, beating the bushes for individual votes. Their first contract had been a simple ninety-day cohabitation agreement, supposedly to economize scarce campaign funds by saving on hotel bills; both of them had agreed that it was merely a convenience, with "cohabitation" to be construed simply as living under one roof . . . and she hadn't darned his socks even then!

He tried to remember how and when the situation had changed. Mrs. Douglas's official biography Shadow of Greatness: One Woman?s Story stated that he had proposed to her during the counting of ballots in his first election to office-and that such was his romantic need that nothing would do but old-fashioned, death-do-us-part marriage.

Well, he didn't remember it that way-but there was no use arguing with the official version.

"Joseph! Answer me!"

"Eh? Nothing at all, my dear. I spent a restless night."

"I know you did. When they wake you up in the middle of the night, don't you think I know it?"

He reflected that her suite was a good fifty yards across the palace from his. "How do you know it, my dear?"

"Hunh? Woman's intuition, of course. What was the message Bradley brought you?"

"Please, my dear-I've got to finish the morning news before the Council meeting."

"Joseph Edgerton Douglas, don't try to evade me."

He sighed. "The fact is, we've lost sight of that beggar Smith."

"Smith? Do you mean the Man from Mars? What do you mean: '-lost sight of-?' That's ridiculous."

"Be that as it may, my dear, he's gone. He disappeared from his hospital room sometime late yesterday."

"Preposterous! How could he do that?"

"Disguised as a nurse, apparently. We aren't sure."

"But-Never mind. He's gone, that's the main thing. What muddleheaded scheme are you using to get him back?"

"Well, we have some of our own people searching for him. Trusted ones, of course. Berquist-"

"Berquist! That garbage head! When you should have every police officer from the FDS down to precinct truant officers searching for him you send Berquist!"

"But, my dear, you don't see the situation. We can 't. Officially he isn't lost at all. You see there's--well, the other chap. The, uh, 'official' Man from Mars,"

"Oh." She drummed the table. "I told you that substitution scheme would get us in trouble."

"But, my dear, you suggested it yourself."

"I did not. And don't contradict me, Mmm ... send for Berquist. I must talk to him at once."

"Uh, Berquist is out on his trail. He hasn't reported back yet."

"Uh? Berquist is probably half way to Zanzibar by now. He's sold us out, I never did trust that man. I told you when you hired him that-"

"When I hired him?"

"Don't interrupt. -that any man who would take money two ways would take it three ways just as quickly." She frowned. "Joseph, the Eastern Coalition Is behind this. It's a logical certainty. You can expect a vote-of-confidence move in the Assembly before the day is out."

"Eli? I don't see why. Nobody knows about it."

"Oh, for Heaven's sake! Everyone will know about it; the Eastern Coalition will see to that. Now keep quiet and let me think." Douglas shut up and went back to his newspaper. He read that the Los Angeles City-County Council had voted to petition the Federation for aid in their smog problems on the grounds the Ministry of Health had failed to provide something or other, it did not matter what -but a sop must be thrown to them as Charlie was going to have a difficult time being reelected with the Fosterites running their own candidate-he needed Charlie. Lunar Enterprises was off two points at closing, probably, he decided, because of- "Joseph."

"Yes, my dear?"

"Our own 'Man from Mars' is the one and only; the one the Eastern Coalition will pop up with is a fake. That is how it must be."

"But, my dear, we can't make it stick."

"What do you mean, we can't? We're stuck with it, so we've got to make it stick."

"But we can 't. Scientists would spot the substitution at once. I've had the devil's own time keeping them away from him this long."

"Scientists!"

"But they can, you know."

"I don't know anything of the sort. Scientists indeed! Half guess work and half sheer superstition. They ought to be locked up; they ought to be prohibited by law. Joseph, I've told you repeatedly the only true science is astrology."

"Well, I don't know, my dear. Mind you, I'm not running down astrology-"

"You'd better not! After all it's done for you."

"-but I am saying that some of these science professors are pretty sharp. One of them was telling me the other day that there is a star that weighs six thousand times as much as lead. Or was it sixty thousand? Let me see-"

"Bosh! How could they possibly know a thing like that? Keep quiet, Joseph, while I finish this. We admit nothing. Their man is a fake. But in the meantime we make full use of our Special Service squads and grab him back, if possible, before the Eastern Coalition makes its disclosure. If it is necessary to use strong measures and this Smith person gets shot resisting arrest, or something like that, well, it's too bad, but I for one won't mourn very long. He's been a nuisance all along."

"Agnes! Do you know what you are suggesting?"

"I'm not suggesting anything. People get hurt every day. This matter must be cleared up, Joseph, for everybody. The greatest good of the greatest number, as you are so fond of quoting."

"But I don't want to see the lad hurt."

"Who said anything about hurting him? But you must take firm steps, Joseph; it's your duty. History will justify you. Which is more important? -to keep things running on an even keel for five billion people, or to go soft and sentimental about one man who isn't even properly a citizen?"

Douglas didn't answer. Mrs. Douglas stood up. "Well, I can't waste the rest of the morning arguing intangibles with you, Joseph; I've got to get hold of Madame Vesant at once and have a new horoscope cast for this emergency. But I can tell you this: I didn't give the best years of my life putting you where you are today just to have you throw it away through lack of backbone. Wipe the egg off your chin." She turned and left.

The chief executive of the planet remained at the table through two more cups of coffee before he felt up to going to the Council Chamber. Poor old Agnes! So ambitious. He guessed he had been quite a disappointment to her . . . and no doubt the change of life wasn't making things any easier for her. Well, at least she was loyal, right to her toes . . . and we all have our shortcomings; she was probably as sick of him as he-no point in that!

He straightened up. One damn sure thing! He wasn't going to let them be rough with that Smith lad. He was a nuisance, granted, but he was a nice lad and rather appealing in a helpless, half-witted way. Agnes should have seen how easily he was frightened, then she wouldn't talk that way. Smith would appeal to the maternal in her.

But as a matter of strict fact, did Agnes have any "maternal" in her? When she set her mouth that way, it was hard to see it. Oh shucks, all women had maternal instincts; science had proved that. Well, hadn't they?

Anyhow, damn her guts, he wasn't going to let her push him around. She kept reminding him that she had put him into the top spot, but he knew better, and the responsibility was his and his alone. He got up, squared his shoulders, pulled in part of his middle, and went to the Council Chamber.

All during the long session he kept expecting someone to drop the other shoe. But no one did and no aide came in with any message for him. He was forced to conclude that the fact that Smith was missing actually was close held in his own personal staff unlikely as that seemed.

The Secretary General wanted very badly to close his eyes and hope that the whole horrid mess would go away, but events would not let him. Nor would his wife let him.

Agnes Douglas' personal saint, by choice, was Evita Peron, whom she fancied she resembled. Her own persona, the mask that she held out to the world, was that of helper and satellite to the great man she was privileged to call husband. She even held this mask up to herself, for she had the Red Queen's convenient ability to believe anything she wished to believe. Nevertheless, her own political philosophy could have been stated baldly (which it never was) as a belief that men should rule the world and women should rule men.

That all of her beliefs and actions derived from a blind anger at a fate that had made her female never crossed her mind ... still less could she have believed that there was any connection between her behavior and her father's wish for a son . . or her own jealousy of her mother. Such evil thoughts never entered her head. She loved her parents and had fresh flowers put on their graves on all appropriate occasions; she loved her husband and often said so publicly; she was proud of her womanhood and said so publicly almost as often - she frequently joined the two assertions.

Agnes Douglas did not wait for her husband to act in the case of the missing Man from Mars. All of her husband's personal staff took orders as readily from her as from him ... in some cases, even more readily. She sent for the chief executive assistant for civil information, as Mr. Douglas's press agent was called, then turned her attention to the most urgent emergency measure, that of getting a fresh horoscope cast. There was a private, scrambled link from her suite in the Palace to Madame Vesant's studio; the astrologer's plump, bland features and shrewd eyes came on the screen almost at once. "Agnes? What is it, dear? I have a client with me."

"Your circuit is hushed?"

"Of course."

"Get rid of the client at once. This is an emergency."

Madame Alexandra Vesant bit her lip, but her expression did not change otherwise and her voice showed no annoyance. "Certainly. Just a moment." Her features, faded out of the screen, were replaced by the "Hold" signal. A man entered the room, stood waiting by the side of Mrs. Douglas' desk; she turned and saw that it was James Sanforth, the press agent she had sent for.

"Have you heard from Berquist?" she demanded without preamble.

"Eh? I wasn't handling that; that's McCrary's pidgin."

She brushed the irrelevancy aside. "You've got to discredit him before he talks."

"Huh? You think Berquist has sold us out?"

"Don't be naive. You should have checked with me before you used him."

"But I didn't. It was McCrary's job."

"You are supposed to know what is going on. I-" Madame Vesant's face came back on the screen. "Sit down over there," Mrs. Douglas said to Sanforth. "Wait." She turned back to the screen. "Allie dear, I want fresh horoscopes for Joseph and myself, just as quickly as you possibly can cast them."

"Very well." The astrologer hesitated. "I can be of much greater assistance to you, dear, if you will tell me something of the nature of the emergency."

Mrs. Douglas drummed on the desk. "You don't actually have to know, do you?"

"Of course not. Anyone possessing the necessary rigorous training, mathematical skill, and knowledge of the stars could calculate a horoscope, knowing nothing more than the exact hour and place of birth of the subject. You know that, dear. You could learn to do it yourself ... if you weren't so terribly busy. But remember: the stars incline but they do not compel. You enjoy free will. If I am to make the extremely detailed and difficult analysis necessary to advise you in a crisis, I must know in what sector to look. Are we most concerned with the influence of Venus? Or possibly with Mars? Or will the-"

Mrs. Douglas decided. "With Mars," she interrupted. "Allie, I want you to cast a third horoscope."

"Very well. Whose?"

"Uh ... Allie, can I trust you?"

Madame Vesant looked hurt. "Agnes, if you do not trust me, it would be far better for you not to consult me. There are others who can give you scientific readings. I am not the only student of the ancient knowledge. I understand that Professor von Krausemeyer is well thought of, even though he is sometimes inclined to..." She let her voice trail off.

"Please, please! Of course I trust you! I wouldn't think of letting anyone else perform a calculation for me. Now listen carefully. No one can hear from your side?"

"Of course not, dear."

"I want you to cast a horoscope for Valentine Michael Smith."

"'Valentine Mich-' The Man from Mars?"

"Yes, yes. Allie, he's been kidnapped. We've got to find him."

Some two hours later Madame Alexandra Vesant pushed herself back from her work table and sighed. She had had her secretary cancel all appointments and she really had tried; several sheets of paper, covered with diagrams and figures, and a dog-eared nautical almanac were in front of her and testified to her efforts. Alexandra Vesant differed from some other practicing astrologers in that she really did attempt to calculate the "influences" of the heavenly bodies, using a paperbacked book titled The Arcane Science of Judicial Astrology and Key to Solomon's Stone which had been given to her by her late husband, Professor Simon Magus, the well known mentalist, stage hypnotist and illusionist, and student of the secret arts.

She trusted the book as she had trusted him; there was no one who could cast a horoscope like Simon, when he was sober-half the time he had not even needed to refer to the book, he knew it so well. She knew that she would never have that degree of skill, so she always referred to the almanac and to the manual. Her calculations were sometimes a little fuzzy, for the same reason that her checkbook sometimes did not balance; Becky Vesey (as she had been known as a child) had never really mastered the multiplication tables and she was inclined to confuse sevens with nines.

Nevertheless her horoscopes were eminently satisfactory; Mrs. Douglas was not her only distinguished client.

But this time she had been a touch panicky when the wife of the Secretary General demanded that she cast a horoscope for the Man from Mars. She had felt the way she used to feel when some officious idiot from the audience committee had insisted on retying her blindfold just before the Professor was to ask her questions. But she had discovered 'way back then, as a mere child, that she had natural stage presence and inner talent for the right answer; she had suppressed her panic and gone on with the show.

Now she had demanded of Agnes the exact hour, date, and place of birth of the Man from Mars, being fairly sure that the data could not be supplied.

But the information had been supplied, and most precisely, after a short delay, from the log of the Envoy. By then she was no longer panicky, had simply accepted the information and promised to call back as soon as the horoscopes were ready.

But now, after two hours of painful arithmetic, although she had completed new findings for Mr. and Mrs. Douglas, she was no farther ahead with Smith than when she had started. The trouble was very simple-and insuperable. Smith had not been born on Earth.

Her astrological bible did not include the idea of human beings born anywhere else; its anonymous author had lived and died before even the first rocket to the Moon. She had tried very hard to find a logical way out of the dilemma, on the assumption that all the principles were included in her manual and that what she must do was to find a way to correct for the lateral displacement. But she found herself lost in a mass of unfamiliar relationships; when it came right down to it she was not even sure whether or not the signs of the Zodiac were the same when seen from Mars and what could one possibly do without the signs of the Zodiac?

She could just as easily have tried to extract a cube root, that being the hurdle that had caused her to quit school.

She got out from a bottom desk drawer a tonic she kept at hand for such difficult occasions. She took one dose quickly, measured out a second, and thought about what Simon would have done. After a while she could hear his even, steady tones: "Confidence, kiddo, confidence! Have confidence in yourself and the yokels will have confidence in you. You owe it to them."

She felt much better now and started writing out the results of the two horoscopes for the Douglases. That done, it turned out to be easy to write one for Smith, and she found, as she always did, that the words on paper proved themselves-they were all so beautifully true! She was just finishing as Agnes Douglas called again. "Allie? Haven't you finished yet?"

"Just completed," Madame Vesant answered with brisk self-confidence. "You realize, of course, that young Smith's horoscope presented an unusual and very difficult problem in the Science. Born, as he was, on another planet, every aspect and attitude had to be recalculated. The influence of the Sun is lessened; the influence of Diana is missing almost completely. Jupiter is thrown into a novel, perhaps I should say 'unique,' aspect, as I am sure you will see. This required computation of-"

"Allie! Never mind that. Do you know the answers?"

"Naturally."

"Oh, thank goodness! I thought perhaps you were trying to tell me that it was too much for you."

Madame Vesant showed and sincerely felt injured dignity. "My dear, the Science never alters; only the configurations alter. The means that predicted the exact instant and place of the birth of Christ, that told Julius Caesar the moment and method of his death . . . how could it fail now? Truth is Truth, unchanging."

"Yes, of course."

"Are you ready for the readings?"

"Let me switch on 'recording'-go ahead."

"Very well. Agnes, this is a most critical period in your life; only twice before have the heavens gathered in such strong configuration. Above all, you must be calm, not hasty, and think things through. On the whole the portents are in your favor . . . provided you do not fight them and avoid ill-considered action. Do not let your mind be distressed by surface appearances-" She went on at length, giving good advice. Becky Vesey always gave good advice and she gave it with great conviction because she always believed it. She had learned from Simon that, even when the stars seemed darkest, there was always some way to soften the blow, some aspect which the client could use toward greater happiness . . . if she would only find it and point it out.

The tense face opposite her in the screen calmed and began nodding agreement as she made her points. "So you see," she concluded, "the mere temporary absence of young Smith at this time is not a bad thing, but a necessity, resulting from the joint influences of your three horoscopes. Do not worry and do not be afraid; he will be back-or you will hear from him-very shortly. The important thing is to take no drastic or irrevocable action until that time. Be calm."

"Yes, I see that."

"Just one more point. The aspect of Venus is most favorable and potentially dominant over that of Mars. In this case, Venus symbolizes yourself, of course, but Mars is both your husband and young Smithas a result of the unique circumstance of his birth. This throws a double burden on you and you must rise to the challenge; you must demonstrate those qualities of calm wisdom and restraint which are peculiarly those of woman. You must sustain your husband, guide him through this crisis, and soothe him. You must supply the earth-mother's calm wells of wisdom. That is your special genius ... and now is the time you must use it."

Mrs. Douglas sighed. "Allie, you are simply wonderful! I don't know how to thank you."

"Don't thank me. Thank the Ancient Masters whose humble student I am."

"I can't thank them so I'll thank you. This isn't covered by your retainer, Allie. There will be a present."

"Not necessary at all, Agnes. It is my privilege to serve."

"And it is my privilege to appreciate service. No, Allie, not another word!"

Madame Vesant let herself be coaxed, then switched off, feeling warmly content from having given a reading that she just knew was right. Poor Agnes! Such a good woman inside ... and so twisted up with conflicting desires. It was a privilege to smooth her path a little, make her heavy burdens a little easier to carry. It made her feel good to help Agnes.

It made Madame Vesant feel good to be treated as an almost-equal by the wife of the Secretary General, too, although she did not think of it that way, not being snobbish at heart. But young Becky Vesey had been so insignificant that the precinct committeeman could never remember her name even though he noticed her bust measurement. Becky Vesey had not resented it; Becky liked people. She liked Agnes Douglas now.

Becky Vesey liked everybody.

She sat a while longer, enjoying the warm glow and the respite from pressure and just a nip more of the tonic, while her shrewd and able brain shuffled the bits and pieces she had picked up. Presently, without consciously making a decision, she called her stockbroker and instructed him to sell Lunar Enterprises short.

He snorted. "Allie, you're crazy. That reducing diet is weakening your mind."

"You listen to me, Ed. When it is down ten points, cover me, even if it is still slipping. Wait for it to turn. When it rallies three points, buy into it again . . . then sell when it gets back to today's closing."

There was a long silence while he looked at her. "Allie, you know something. Tell Uncle Ed."

"The stars tell me, Ed."

Ed made a suggestion astronomically impossible and added, "All right, if you won't, you won't. Mmm ... I never did have sense enough to stay out of a crooked game, Mind if I ride along with you on it, Allie?"

"Not at all, Ed, as long as you don't go heavy enough to let it show. This is a delicate special situation, with Saturn just balanced between

Virgo and Leo."

"As you say, Allie."

Mrs. Douglas got busy at once, happy that Allie had confirmed all her judgments. She gave orders about the campaign to destroy the reputation of the missing Berquist, after sending for his dossier and looking it over; she closeted herself with Commandant Twitchell of the Special Service squads for twenty minutes-he left her looking thoughtfully unhappy and immediately made life unbearable for his executive officer. She instructed Sanforth to release another of the "Man from Mars" stereocasts and to include with it a rumor "from a source close to the administration" that Smith was about to be transferred, or possibly had already been transferred, to a sanitarium high in the Andes, in order to provide him with a climate for convalescence as much like that of Mars as possible. Then she sat back and thought about how to nail down the Pakistan votes for Joseph.

Presently she got hold of him and urged him to support Pakistan's claim to the lion's share of the Kashmir thorium. Since he had been wanting to do so all along but had not, up to now, convinced her of the necessity, he was not hard to persuade, although a little nettled by her assumption that he had been opposing it. With that settled, she left to address the Daughters of the Second Revolution on Motherhood in the New World.

Chapter 10

WHILE MRS. DOUGLAS WAS SPEAKING too freely on a subject she knew too little about, Jubal E. Harshaw, LL.B., M.D., Sc.D., bon vivant, gourmet, sybarite, popular author extraordinary, and neopessimist philosopher, was sitting by his swimming pool at his home in the Poconos, scratching the thick grey thatch on his chest, and watching his three secretaries splash in the pool. They were all three amazingly beautiful; they were also amazingly good secretaries. In Harshaw's opinion the principle of least action required that utility and beauty be combined.

Anne was blonde, Miriam was redheaded, and Dorcas was dark; in each case the coloration was authentic. They ranged, respectively, from pleasantly plump to deliciously slender. Their ages spread over fifteen years but it was hard to tell off hand which was the eldest. They undoubtedly had last names but Harshaw's household did not bother much with last names, One of them was rumored to be Harshaw's own granddaughter but opinions varied as to which one it was.

Harshaw was working as hard as he ever worked. Most of his mind was occupied with watching pretty girls do pretty things with sun and water-one small, shuttered, soundproofed compartment was composing. He claimed that his method of literary composition was to hook his gonads in parallel with his thalamus and disconnect his cerebrum entirely; his habits lent some credibility to the theory.

A microphone on a table at his right hand was hooked to a voicewriter in his study but he used the voicewriter only for notes. When he was ready to wnte he used a human stenographer and watched her reactions. He was ready now. "Front!" he shouted.

"Anne is 'front,' "answered Dorcas. "But I'll take it. That splash was Anne."

"Dive in and get her. I can wait." The little brunette cut the water; a few moments later Anne climbed out, put on a towel robe, dried her hands on it, and sat down on the other side of the table. She said nothing, nor did she make any preparations; Anne had total recall, never bothered with recording devices.

Harshaw picked up a bucket of ice cubes over which brandy had been poured, took a deep swig. "Anne, I've got a really sick-making one. It's about a little kitten that wanders into a church on Christmas Eve to get warm. Besides being starved and frozen and lost, the kitten has-God knows why-an injured paw. All right; start: 'Snow had been falling since-'

"What pen name?"

"Mmm ... better use 'Molly Wadsworth' again. This one is pretty icky. And title it The Other Manger. Start again." He went on talking while watching her closely. When tears started to leak out of her closed eyes he smiled slightly and closed his own eyes. By the time he finished, tears were running down his cheeks as well as hers, both bathed in a catharsis of schmaltz.

"Thirty," he announced. "You can blow your nose. Send it off and for God's sake don't let me see it or I'll tear it up."

"Jubal, aren't you ever ashamed?"

"No."

"Someday I'm going to kick you right in your fat stomach for one of these."

"I know. But I can't pimp for my sisters; they'd be too old and I never had any. Get your fanny indoors and take care of it before I change my mind."

"Yes, boss."

She kissed his bald spot as she passed behind his chair. Harshaw yelled, "Front!" again and Miriam started toward him. But a loudspeaker mounted on the house behind him came to life:

"Boss!"

Harshaw uttered one word and Miriam clucked at him reprovingly. He added, "Yes, Larry?"

The speaker answered, "There's a dame down here at the gate who wants to see you-and she's got a corpse with her."

Harshaw considered this for a moment. "Is she pretty?" he said to the microphone.

"Uh ... yes."

"Then why are you sucking your thumb? Let her in." Harshaw sat back. "Start," he said. "City montage dissolving into a medium two-shot, interior. A cop is seated in a straight chair, no cap, collar open, face covered with sweat. We see only the back of the other figure, which is depthed between us and the cop. The figure raises a hand, bringing it back and almost out of the tank. He slaps the cop with a heavy, meaty sound, dubbed." Harshaw glanced up and said, "We'll pick up from there." A ground car was rolling up the hill toward the house.

Jill was driving the car; a young man was seated beside her. As the car stopped near Harshaw the man jumped out at once, as if happy to divorce himself from car and contents. "There she is, Jubal."

"So I see. Good morning, little girl. Larry, where is this corpse?"

"In the back seat, Boss. Under a blanket."

"But it's not a corpse," Jill protested. "It's ... Ben said that you... I mean-" She put her head down on the controls and started to cry.

"There, my dear," Harshaw said gently. "Very few corpses are worth it. Dorcas-Miriam-take care of her. Give her a drink . . . and wash her face."

He turned his attention to the back seat, started to lift the blanket. Jill shrugged off Miriam's proffered arm and said shrilly, "You've got to listen! He's not dead. At least I hope not. He's . . . oh dear!" She started to cry again. "I'm so dirty ... and so scared!"

"Seems to be a corpse," Harshaw said meditatively. "Body temperature is down to air temperature, I should judge. The rigor is not typical. How long has he been dead?"

"But he's not dead! Can't we get him out of there? I had an awful time getting him in."

"Surely. Larry, give me a hand. And quit looking so green, Larry. If you puke, you'll clean it up." Between them they got Valentine Michael Smith out of the back seat and laid him on the grass by the pool; his body remained stiff, still huddled together. Without being told Dorcas had gone in and fetched Dr. Harshaw's stethoscope; she set it on the ground by Smith, switched it on and stepped up the gain.

Harshaw stuck the headpiece in his ears, started sounding for heart beat. "I'm afraid you're mistaken," he said gently to Jill. "This one is beyond my help. Who was he?"

Jill sighed. Her face was drained of expression and she answered in a fiat voice, "He was the Man from Mars. I tried so hard."

"I'm sure you did-the Man from Mars?"

"Yes. Ben ... Ben Caxton said you were the one to come to."

"Ben Caxton, eh? I appreciate the confid-hush!" Harshaw emphasized the demand for silence with a hand upheld while he continued to frown and listen. He looked puzzled, then surprise burst over his face. "Heart action! I'll be a babbling baboon. Dorcas-upstairs, the clinic-third drawer down in the locked part of the cooler; the code is 'sweet dreams.' Bring the whole drawer and pick up a 1 cc. hypo from the sterilizer."

"Right away!"

"Doctor, no stimulants!"

Harshaw turned to Jill. "Eh?"

"I'm sorry, sir. I'm just a nurse ... but this case is different. I know."

"Mmm ... he's my patient now, nurse. But about forty years ago I found out I wasn't God, and about ten years thereafter I discovered I wasn't even Aesculapius. What do you want to try?"

"I just want to try to wake him up. If you do anything to him, he just goes deeper into it."

"Hmm ... go ahead. Just as long as you don't use an ax. Then we'll try my methods."

"Yes, sir." Jill knelt beside him, Started gently trying to straighten out his limbs. Harshaw's eyebrows went up when he saw that she had succeeded. Jill took Smith's head in her lap and cradled it gently in her hands. "Please wake up," she said softly. "This is Jill ... your water brother."

The body stirred. Very slowly the chest lifted. Then Smith let out a long bubbling sigh and his eyes opened. He looked up at Jill and smiled his baby smile. Jill smiled back. Then he looked around and the smile left him.

"It's all right," Jill said quickly. "These are all friends."

"All friends?"

"That's right. All of them are your friends. Don't worry-and don't go away again. Everything is all right."

He did not answer but lay still with his eyes open, staring at everything and everyone around him. He seemed as content as a cat in a lap.

Twenty-five minutes later Harshaw had both of his patients in bed. Jill had managed to tell him, before the pill he gave her took hold, enough of the situation to let him know that he had a bear by the tail. Ben Caxton was missing-he'd have to try to figure out something to do about that-and young Smith was as hot as a dry bearing . . . although he had been able to guess that when he heard who he was. Oh, well, life might be amusing for a while; it would keep back that grey boredom that lay always just around the corner.

He looked at the little utility car that Jill had arrived in. Lettered across its sides was: READING RENTALS-Permapowered Ground Equipment of All Sorts-"Deal with the Dutchman!"

"Larry, is the fence hot?"

"No. "

"Switch it on. Then before it gets dark I want you to polish every possible fingerprint off that heap. As soon as it is dark, drive it over the other side of Reading-better go almost to Lancaster-and leave it in a ditch. Then go to Philadelphia, catch the shuttle for Scranton, come home from Scranton."

"Sure thing, Jubal. Say-is he really the Man from Mars?"

"You had better hope that he isn't, because if he is and they catch you before you dump that wagon and they associate you with him, they'll probably interrogate you with a blow torch. But I think he is."

"I scan it. Should I rob a few banks on the way back?"

"Probably the safest thing you can do."

"Okay, Boss." Larry hesitated. "Do you mind if I stay over night in Philly?"

"What in God's name can a man find to do at night in Philadelphia?"

"Plenty, if you know where to look."

"Suit yourself." Harshaw turned away. "Front!"

Jill slept until shortly before dinner, which in that household was a comfortable eight o'clock. She awoke refreshed and feeling alert, so much so that she sniffed the air incoming from the grille over her head and surmised correctly that the doctor had offset the hypnotic she had been given with a stimulant. While she was asleep someone had removed the dirty and torn street clothes she had been wearing and had left a simple, off-white dinner dress and sandals. The clothes fit her fairly well; Jill concluded that they must belong to the one the doctor had called Miriam. She bathed and painted her face and combed her hair and went down to the big living room feeling like a new woman.

Dorcas was curled in a big chair, doing needle point; she looked up, nodded in a friendly manner as if Jill were always part of the household, turned her attention back to her fancy work. Harshaw was standing and stirring gently a mixture in a tall and frosty pitcher. "Drink?" he said.

"Uh, yes, thank you."

He poured two large cocktail glasses to their brims, handed her one. "What is it?" she asked.

"My own recipe, a comet cocktail. One third vodka, one third muriatic acid, one third battery water-two pinches of salt and add a pickled beetle."

"Better have a highball," Dorcas advised. Jill noticed that the other girl had a tall glass at her elbow.

"Mind your own business," Harshaw advised without rancor. "The hydrochloric acid is good for the digestion; the beetle adds vitamins and protein." He raised his glass to Jill and said solemnly, "Here's to our noble selves! There are damned few of us left." He almost emptied his glass, replenished it before he set it down.

Jill took a cautious sip, then a much bigger one. Whatever the true ingredients, the drink seemed to be exactly what she needed; a warm feeling of wellbeing spread gently from her center of gravity toward her extremities. She drank about half of it, let Harshaw add a dividend. "Look in on our patient?" he asked.

"No, sir. I didn't know where he was."

"I checked him a few minutes ago. Sleeping like a baby-I think I'll rename him Lazarus. Do you think he would like to come down to dinner?"

Jill looked thoughtful. "Doctor, I really don't know."

"Well, if he wakes I'll know it. Then he can join us, or have a tray, as he wishes. This is Freedom Hall, my dear. Everyone does absolutely as he pleases . . . then if he does something I don't like, I just kick him the hell out. Which reminds me: I don't like to be called 'Doctor.'"

"Sir?"

"Oh, I'm not offended. But when they began handing out doctorates for comparative folk dancing and advanced fly-fishing, I became too stink in' proud to use the title. I won't touch watered whiskey and I take no pride in watered-down degrees. Call me Jubal."

"Oh. But the degree in medicine hasn't been watered down, as you call it."

"No. But it is time they called it something else, so as not to have it mixed up with playground supervisors. Never mind. Little girl, just what is your interest in this patient?"

"Eh? I told you. Doct-Jubal."

"You told me what happened; you didn't tell me why. Jill, I saw the way you looked at him and spoke to him. Do you think you are in love with him?"

Jill was startled. She glanced at Dorcas; the other girl appeared not to be hearing the conversation. "Why, that's preposterous!"

"I don't see anything preposterous about it. You're a girl; he's a boy-that's usually a nice setup."

"But-No, Jubal, it's not that at all. I .. well, I thought he was being held a prisoner and I thought-or Ben thought-that he might be in danger. I wanted to see him get his rights."

"Mmmm ... my dear, I'm always suspicious of a disinterested interest. You look as if you had a normal glandular balance, so it is my guess that it is either Ben, or this poor boy from Mars, or both. You had better take your motives out in private and have a look at them. Then you will be better able to judge which way you are going. In the meantime, what do you want me to do?"

The unqualified scope of the question made it difficult for Jill to answer. What did she want? What did she expect? From the time she had crossed her Rubicon she had thought of nothing but escape-and getting to Harshaw's home. She had no plans. "I don't know."

"I thought not. You had told me enough to let me know that you were A.W.O.L. from your hospital, so, on the assumption that you might wish to protect your license, I took the liberty, while you were asleep, of having a message Sent from Montreal to your Chief of Nursing. You asked for two weeks emergency leave because of sudden illness in your family. Okay? You can back it up with details later."

Jill felt sudden and shaking relief. By temperament she had buried all worry about her own welfare once she had made her decision; nevertheless down inside her was a heavy lump caused by what she had done to an on the whole excellent professional standing. "Oh, Jubal, thank you!" She added, "I'm not really delinquent in watch standing yet; today was my day off."

"Good. Then you are covered like a tent. What do you want to do?"

"I haven't had time to think. Uh, I suppose I should get in touch with my bank and get some money-" She paused, trying to recall what her bank balance was. It was never large and sometimes she forgot to-Jubal cut in on her thoughts. "If you get in touch with your bank, you will have cops pouring out of your ears. Hadn't you better stay here until things level off?"

"Uh, Jubal, I wouldn't want to impose on you."

"You already have imposed on me. Don't worry about it, child. There are always freeloaders around here, coming and going . . . one family stayed seventeen months. But nobody imposes on me against my will, so relax about it. If you turn out to be useful as well as ornamental, you can stay forever. Now about our patient: you said you wanted him to get his 'rights.' I suppose you expected my help in that?"

"Well, I ... Ben said-Ben seemed to think that you would help."

"I like Ben but he does not speak for me. I am not in the slightest interested in whether or not this lad gets his so-called rights. I don't go for the 'True Prince' nonsense. His claim to Mars is lawyers' hogwash; as a lawyer myself I need not respect it. As for the wealth that is supposed to be coming to him, the situation results from other people's inflamed passions and our odd tribal customs; he has earned none of it. In my opinion he would be lucky if they bilked him out of it-but I would not bother to scan a newspaper to find out which outcome eventuated. If Ben expected me to fight for Smith's 'rights,' you have come to the wrong house."

"Oh." Jill felt suddenly forlorn. "I guess I had better make arrangements to move him."

"Oh, no! Not unless you wish, that is."

"But I thought you said-"

"I said I was not interested in a web of legal fictions. But a patient and guest under my roof is another matter. He can stay, if he likes. I just wanted to make it clear that I had no intention of meddling with politics to suit any romantic notions you or Ben Caxton may have. My dear, I used to think I was serving humanity ... and I pleasured in the thought. Then I discovered that humanity does not want to be served; on the contrary it resents any attempt to serve it. So now I do what pleases Jubal Harshaw." He turned to Dorcas as if the subject were closed. "Time for dinner, isn't it, Dorcas? Is anyone doing anything about it?"

"Miriam." She put down her needlepoint and stood up.

"I've never been able to figure out just how these girls divide up the work."

"Boss, how would you know?-since you never do any." Dorcas patted him on the stomach. "But you never miss any meals."

A gong sounded and they went in to eat. If the redheaded Miriam had cooked dinner, she had apparently done so with all modern shortcuts; she was already seated at the foot of the table and looked cool and beautiful. In addition to the three secretaries, there was a young man slightly older than Larry who was addressed as "Duke" and who included Jill in the conversation as if she had always lived there. There was also a middle-aged couple who were not introduced at all, who ate as if they were in a restaurant and left the table as soon as they were finished without ever having spoken to the others.

But the table talk among the others was lively and irreverent. Service was by non-android serving machines, directed by controls at Miriam's end of the table. The food was excellent and, so far as Jill could tell, none of it was syntho.

But it did not seem to suit Harshaw. He complained that his knife was dull, or the meat was tough, or both; he accused Miriam of serving leftovers. No one seemed to hear him but Jill was becoming embarrassed on Miriam's account when Anne put down her knife and fork. "He mentioned his mother's cooking," she stated bleakly.

"He is beginning to think he is boss again," agreed Dorcas.

"How long has it been?"

"About ten days."

"Too long." Anne gathered up Dorcas and Miriam with her eyes; they all stood up. Duke went on eating.

Harshaw said hastily, "Now see here, girls, not at meals. Wait until-" They paid no attention to his protest but moved toward him; a serving machine scurried out of the way. Anne took his feet, each of the other two an arm; French doors slid out of the way and they carried him out, squawking.

A few seconds later the squawks were cut short by a splash.

The three women returned at once, not noticeably mussed. Miriam sat down and turned to Jill. "More salad, Jill?"

Harshaw returned a few minutes later, dressed in pajamas and robe instead of the evening jacket he had been wearing. One of the machines had covered his plate as soon as he was dragged away from the table; it now uncovered it for him and he went on eating. "As I was saying," he remarked, "a woman who can't cook is a waste of skin. If I don't start having some service around here I'm going to swap all of you for a dog and shoot the dog. What's the dessert, Miriam?"

"Strawberry shortcake."

"That's more like it. You are all reprieved till Wednesday."

Gillian found that it was not necessary to understand how Jubal Harshaw's household worked; she could do as she pleased and nobody cared. After dinner she went into the living room with the intention of viewing a stereocast of the evening news, being anxious to find out if she herself played a part in it. But she could find no stereo receiver, nor was there anything which could have concealed a tank. Thinking about it, she could not recall having seen one anywhere in the house. Nor were there any newspapers, although there were plenty of books and magazines.

No one joined her. After a while she began to wonder what time it was. She had left her watch upstairs with her purse, so she looked around for a clock. She failed to find one, then searched her excellent memory and could not remember having seen either clock or calendar in any of the rooms she had been in.

But she decided that she might as well go to bed no matter what time it was. One whole wall was filled with books, both shelves and spindle racks. She found a spool of Kipling's Just So Stories and took it happily upstairs with her.

Here she found another small surprise. The bed in the room she had been given was as modern as next week, complete with automassage, coffee dispenser, weather control, reading machine, etc.-but the alarm circuit was missing, there being only a plain cover plate to show where it had been. Jill shrugged and decided that she would probably not oversleep anyway, crawled into bed, slid the spool into the reading machine, lay back and scanned the words streaming across the ceiling. Presently the speed control slipped out of her relaxed fingers, the lights went out, and she slept.

Jubal Harshaw did not get to sleep as easily; he was vexed with himself. His initial interest in the situation had cooled off and reaction had set in. Well over a half century earlier he had sworn a mighty oath, full of fireworks, never again to pick up a stray cat-and now, so help him, by the multiple paps of Venus Genetrix, he had managed to pick up two at once no, three, if he counted Ben Caxton.

The fact that he had broken his oath more times than there were years intervening did not trouble him; his was not a small mind bothered by logic and consistency. Nor did the mere presence of two more pensioners sleeping under his roof and eating at his table bother him. Pinching pennies was not in him. In the course of nearly a century of gusty living he had been broke many times, had several times been wealthier than he now was; he regarded both conditions as he did shifts in the weather, and never counted his change.

But the silly foofooraw that he knew was bound to ensue when the busies caught up with these children disgruntled him in prospect. He considered it certain that catch up they would; a naive child like that Gillian infant would leave a trail behind her like a club-footed cow! Nothing else could be expected.

Whereupon people would come barging into his sanctuary, asking stupid questions and making stupid demands ? and he, Jubal Harshaw, would have to make decisions and take action. Since he was philosophically convinced that all action was futile, the prospect irritated him.

He did not expect reasonable conduct from human beings; he considered most people fit candidates for protective restraint and wet packs. He simply wished heartily that they would leave him alone! - all but the few he chose for playmates. He was firmly convinced that, left to himself, he would have long since achieved nirvana ... dived into his own belly button and disappeared from view, like those Hindu jokers. Why couldn't they leave a man alone?

Around midnight he wearily put out his twenty-seventh cigarette and sat up; the lights came on. "Front!" he shouted at the microphone beside his bed.

Shortly Dorcas came in, dressed in robe and slippers. She yawned widely and said, "Yes, Boss?"

"Dorcas, for the last twenty or thirty years I've been a worthless, useless, no-good parasite."

She nodded and yawned again. "Everybody knows that."

"Never mind the flattery. There comes a time in every man's life when he has to stop being sensible-a time to stand up and be counted-strike a blow for liberty-smite the wicked."

"Ummm..

"So quit yawning, the time has come."

She glanced down at herself. "Maybe I had better get dressed."

"Yes. Get the other girls up, too; we're going to be busy. Throw a bucket of cold water over the Duke and tell him I said to dust off the babble machine and hook it up in my study. I want the news, all of it."

Dorcas looked startled and all over being sleepy. "You want Duke to hook up stereovision?"

"You heard me. Tell him I said that if it's out of order, he should pick a direction and start walking. Now get along with you; we've got a busy night ahead."

"All right," Dorcas agreed doubtfully, "but I think I ought to take your temperature first."

"Peace, woman!"

Duke had Jubal Harshaw's stereo receiver hooked up in time to let Jubal see a late rebroadcast of the second phony interview with the "Man from Mars." The commentary included the rumor about moving Smith to the Andes. Jubal put two and two together and got twentytwo, after which he was busy calling people until morning. At dawn Dorcas brought him his breakfast, six raw eggs beaten into brandy. He slurped them down while reflecting that one of the advantages of a long and busy life was that eventually a man got to know pretty near everybody of real importance-and could call on them in a pinch.

Harshaw had prepared a time bomb but did not propose to trigger it until the powers-that-be forced him to do so. He had realized at once that the government could haul Smith back into captivity on the grounds that he was incompetent to look out for himself … an opinion with which Harshaw agreed. His snap opinion was that Smith was both legally insane and medically psychopathic by all normal standards, the victim of a double-barreled situational psychosis of unique and monumental extent, first from being raised by nonhumans and second from having been translated suddenly into a society which was completely alien to him.

Nevertheless he regarded both the legal notion of sanity and the medical notion of psychosis as being irrelevant to this case. Here was a human animal who had made a profound and apparently successful adjustment to an alien society … but as a malleable infant. Could the same subject, as an adult with formed habits and canalized thinking, make another adjustment just as radical, and much more difficult for an adult to make than for an infant? Dr. Harshaw intended to find out; it was the first time in decades he had taken real interest in the practice of medicine.

Besides that, he was tickled at the notion of balking the powers-that-be. He had more than his share of that streak of anarchy which was the political birthright of every American; pitting himself against the planetary government fined him with sharper zest for living than he had felt in a generation.

Chapter 11

AROUND A MINOR G-TYPE STAR fairly far out toward one edge of a medium-sized galaxy the planets of that star swung as usual, just as they had for billions of years, under the influence of a slightly modified inverse square law that shaped the space around them. Three of them were big enough, as planets go, to be noticeable; the rest were mere pebbles, concealed in the fiery skirts of the primary or lost in the black outer reaches of space. All of them, as is always the case, were infected with that oddity of distorted entropy called life-, in the cases of the third and fourth planets their surface temperatures cycled around the freezing point of hydrogen monoxide-in consequence they had developed life forms similar enough to permit a degree of social contact.

On the fourth pebble out the ancient Martians were not in any important sense disturbed by the contact with Earth. The nymphs of the race still bounced joyously around the surface of Mars, learning to live, and eight out of nine of them dying in the process. The adult Martians, enormously different in body and mind from the nymphs, still huddled in or under the faerie, graceful cities, and were as quiet in their behavior as the nymphs were boisterous-yet were even busier than the nymphs, busy with a complex and rich life of the mind.

The lives of the adults were not entirely free of work in the human sense; they had still a planet to take care of and supervise, plants must be told when and where to grow, nymphs who had passed their 'prenticeships by surviving must be gathered in, cherished, fertilized, the resultant eggs must be cherished and contemplated to encourage them to ripen properly, the fullfilled nymphs must be persuaded to give up childish things and then metamorphosed into adults. All these things must be done-but they were no more the "life" of Mars than is walking the dog twice a day the "life" of a man who controls a planetwide corporation in the hours between those pleasant walks ... even though to a being from Arcturus III those daily walks might seem to be the tycoon's most significant activity - no doubt as a slave to the dog.

Martians and humans were both self-aware life forms but they had gone in vastly different directions. All human behavior, all human motivations, all man's hopes and fears, were heavily colored and largely controlled by mankind's tragic and oddly beautiful pattern of reproduction. The same was true of Mars, but in mirror corollary. Mars had the efficient bipolar pattern so common in that galaxy, but the Martians had it in a form so different from the Terran form that it would have been termed "sex" only by a biologist, and it emphatically would not have been "sex" to a human psychiatrist. Martian nymphs were female, all the adults were male.

But in each case in function only, not in psychology. The man-woman polarity which controlled all human lives could not exist on Mars. There was no possibility of "marriage." The adults were huge, reminding the first humans to see them of ice boats under sail; they were physically passive, mentally active. The nymphs were fat, furry spheres, full of bounce and mindless energy. There was no possible parallel between human and Martian psychological foundations. Human bipolarity was both the binding force and the driving energy for all human behavior, from sonnets to nuclear equations. If any being thinks that human psychologists exaggerate on this point, let it search Terran patent offices, libraries, and art galleries for creations of eunuchs.

Mars, being geared unlike Earth, paid little attention to the Envoy and the Champion. The two events had happened too recently to be of significance-if Martians had used newspapers, one edition a Terran century would have been ample. Contact with other races was nothing new to Martians; it had happened before, would happen again. When the new other race had been thoroughly grokked, then (in a Terran millennium or so) would be time for action, if needed.

On Mars the currently important event was of a different sort. The discorporate Old Ones had decided almost absentmindedly to send the nestling human to grok what he could of the third planet, then turned attention back to serious matters. Shortly before, around the time of the Terran Caesar Augustus, a Martian artist had been engaged in composing a work of art. It could have been called with equal truth a poem, a musical opus, or a philosophical treatise; it was a series of emotions arranged in tragic, logical necessity. Since it could have been experienced by a human only in the sense in which a man blind from birth could have a sunset explained to him, it does not matter much to which category of human creativity it might be assigned. The important point was that the artist had accidentally discorporated before he finished his masterpiece.

Unexpected discorporation was always rare on Mars; Martian taste in such matters called for life to be a rounded whole, with physical death taking place at the appropriate and selected instant. This artist, however, had become so preoccupied with his work that he had forgotten to come in out of the cold; by the time his absence was noticed his body was hardly fit to eat. He himself had not noticed his own discorporation and had gone right on composing his sequence.

Martian art was divided sharply into two categories, that sort created by living adults, which was vigorous, often quite radical, and primitive, and that of the Old Ones, which was usually conservative, extremely complex, and was expected to show much higher standards of technique; the two sorts were judged separately.

By what standards should this opus be judged? It bridged from the corporate to the discorporate; its final form had been set throughout by an Old One-yet on the other hand the artist, with the detachment of all artists everywhere, had not even noticed the change in his status and had continued to work as if he were corporate. Was it possibly a new sort of art? Could more such pieces be produced by surprise discorporation of artists while they were working? The Old Ones had been discussing the exciting possibilities in ruminative rapport for centuries and all corporate Martians were eagerly awaiting their verdict.

The question was of greater interest because it had not been abstract art, but religious (in the Terran sense) and strongly emotional-it described the contact between the Martian Race and the people of the fifth planet, an event that had happened long ago but which was alive and important to Martians in the sense in which one death by crucifixion remained alive and important to humans after two Terran millennia. The Martian Race had encountered the people of the fifth planet, grokked them completely, and in due course had taken action; the asteroid ruins were all that remained, save that the Martians continued to cherish and praise the people they had destroyed. This new work of art was one of many attempts to grok all parts of the whole beautiful experience in all its complexity in one opus. But before it could be judged it was necessary to grok how to judge it.

It was a very pretty problem.

On the third planet Valentine Michael Smith was not concerned with the burning issue on Mars; he had never heard of it. His Martian keeper and his keeper's water brothers had not mocked him with things he could not grasp. Smith knew of the destruction of the fifth planet and its emotional importance-just as any human school boy learns of Troy and Plymouth Rock, but he had not been exposed to art that he could not grok. His education had been unique, enormously greater than that of his nestlings, enormously less than that of an adult; his keeper and his keeper's advisers among the Old Ones had taken a large passing interest in seeing just how much and of what sort this nestling alien could learn. The results had taught them more about the potentialities of the human race than that race had yet learned about itself, for Smith had grokked very readily things that no other human being had ever learned.

But just at present Smith was simply enjoying himself with a lightheartedness he had not experienced in many years. He had won a new water brother in Jubal he had acquired many new friends, he was enjoying delightful new experiences in such kaleidoscopic quantity that he had no time to grok them; he could only file them away to be relived at leisure.

His brother Jubal had assured him that be would grok this strange and beautiful place more quickly if he would learn to read, so he had taken a full day off to learn to read really well and quickly, with Jill pointing to words and pronouncing them for him. It had meant staying out of the swimming pool all that day, which had been a great sacrifice, as swimming (once he got it through his head that it was actually permitted) was not merely an exuberant, sensuous delight but almost unbearable religious ecstasy. If Jill and Jubal had not told him to do otherwise, he would never have come out of the pool at all.

Since he was not permitted to swim at night he read all night long. He was zipping through the Encyclopedia Britannica and was sampling Jubal's medicine and law libraries as dessert. His brother Jubal had seen him leafing rapidly through one of the books, had stopped him and questioned him about what he had read. Smith had answered carefully, as it reminded him of the tests the Old Ones had occasionally given him. His brother had seemed a bit upset at his answers and Smith had found it necessary to go into an hour's contemplation on that account, for he bad been quite sure that he had answered with the words written in the book even though he did not grok them all.

But he preferred the pool to the books, especially when Jill and Miriam and Larry and Anne and the rest were all splashing each other. He had not learned at once to swim as they did, but had discovered the first time that he could do something they could not. He had simply gone down to the bottom and lain there, immersed in quiet bliss, whereupon they had hauled him out with such excitement that he had almost been forced to withdraw himself, had it not been evident that they were concerned for his welfare.

Later that day he had demonstrated the matter to Jubal, remaining on the bottom for a delicious time, and he had tried to teach it to his brother Jill ... but she had become disturbed and he had desisted. It was his first clear realization that there were things that he could do that these new friends could not. He thought about it a long time, trying to grok its fullness.

Smith was happy; Harshaw was not. He continued his usual routine of aimless loafing, varied only by casual and unplanned observation of his laboratory animal, the Man from Mars. He arranged no schedule for Smith, no programme of study, no regular physical examinations, but simply allowed Smith to do as he pleased, run wild, like a puppy growing up on a ranch. What supervision Smith received came from Jill: more than enough, in Jubal's grumpy opinions as he took a dim view of males being reared by females.

However, Gillian Boardman did little more than coach Valentine Smith in the rudiments of human social behavior-and he needed very little coaching. He ate at the table with the others now, dressed himself (at least Jubal thought he did; he made a mental note to ask Jill if she still had to assist him); he conformed acceptably to the household's very informal customs and appeared able to cope with most new experiences on a "monkey-see-monkey-do" basis. Smith started his first meal at the table using only a spoon and Jill had cut up his meat for him. By the end of the meal he was attempting to eat as the others ate. At the next meal his table manners were a precise imitation of Jill's, including superfluous mannerisms.

Even the twin discovery that Smith had taught himself to read with the speed of electronic scanning and appeared to have total recall of all that he read did not tempt Jubal Harshaw to make a "project" of Smith, one with controls, measurements, and curves of progress. Harshaw had the arrogant humility of the man who has learned so much that he is aware of his own ignorance and he saw no point in "measurements" when he did not know what he was measuring. Instead he limited himself to notes made privately, without even any intention of publishing his observations.

But, while Harshaw enjoyed watching this unique animal develop into a mimicry copy of a human being, his pleasure afforded him no happiness.

Like Secretary General Douglas, Harshaw was waiting for the other shoe to drop.

Waiting with increasing tenseness. Having found himself coerced into action by the expectation of action against him on the part of the government, it annoyed and exasperated him that nothing as yet had happened. Damn it, were the Federation cops so stupid that they couldn't track an unsophisticated girl dragging an unconscious man all across the countryside? Or (as seemed more likely) had they been on her heels the whole way?-and even now were keeping a stakeout on his place? The latter thought was infuriating; to Harshaw the notion that the government might be spying on his home, his castle, with anything from binoculars to radar, was as repulsive as the idea of having his mail opened.

And they might be doing that too, he reminded himself morosely. Government! Three fourths parasitic and the other fourth stupid fumbling-oh, he conceded that man, a social animal, could not avoid having government, any more than an individual man could escape his lifelong bondage to his bowels. But Harshaw did not have to like it. Simply because an evil was inescapable was no reason to term it a "good." He wished that government would wander off and get lost!

But it was certainly possible, or even probable, that the administration knew exactly where the Man from Mars was hiding ... and for reasons of their own preferred to leave it that way, while they prepared-what?

If so, how long would it go on? And how long could he keep his defensive "time bomb" armed and ready?

And where the devil was that reckless young idiot Ben Caxton?

Jill Boardman forced him out of his spiritual thumb-twiddling. "Jubal?"

"Eh? Oh, it's you, bright eyes. Sorry, I was preoccupied. Sit down. Have a drink?"

"Uh, no, thank you. Jubal, I'm worried."

"Normal. Who isn't? That was a mighty pretty swan dive you did. Let's see another one just like it."

Jill bit her lip and looked about twelve years old. "Jubal? Please listen! I'm terribly worried."

He sighed. "In that case, dry yourself off. The breeze is getting chilly."

"I'm warm enough. Uh, Jubal? Would it be all right if I left Mike here? Would you take care of him?"

Harshaw blinked. "Of course he can stay here. You know that. The girls will look out for him-and I'll keep an eye on him from time to time. He's no trouble. I take it you're leaving?"

She didn't meet his eye. "Yes."

"Mmmm ... you're welcome here. But you're welcome to leave, too, if that's what you want."

"Huh? But, Jubal-I don't want to leave!"

"Then don't."

"But I must!"

"Better play that back. I didn't scan it."

"Don't you see, Jubal? I like it here-you've been wonderful to us! But I can't stay any longer. Not with Ben missing. I've got to go look for him."

Harshaw said one word, emotive, earthy, and vulgar, then added, "How do you propose to look for him?"

She frowned. "I don't know. But I can't just lie around here any longer, loafing and swimming-with Ben missing."

"Gillian, as I pointed out to you before, Ben is a big boy now. You're not his mother-and you're not his wife. And I'm not his keeper. Neither of us is responsible for him ... and you haven't any call to go looking for him. Have you?"

Jill looked down and twisted one toe in the grass. "No," she admitted. "I haven't any claim on Ben. I just know ... that if I turned up missing Ben would look for me-until he found me. So I've got to look for him!"

Jubal breathed a silent malediction against all elder gods in any way involved in contriving the follies of the human race, then said aloud, "All right, all right, if you must, then let's try to get some logic into it. Do you plan to hire professionals? Say a private detective firm that specializes in missing persons?"

She looked unhappy. "I suppose that's the way to go about it. Uh, I've never hired a detective. Are they expensive?"

"Quite."

Jill gulped. "Do you suppose they would let me arrange to pay, uh, in monthly installments? Or something?"

"Cash at the stairs is their usual way. Quit looking so grim, child; I brought that up to dispose of it. I've already hired the best in the business to try to find Ben - so there is no need for you to hock your future to hire the second best."

"You didn't tell me!"

"No need to tell you."

"But-Jubal, what did they find out?"

"Nothing," he said shortly. "Nothing worth reporting, so there was no need to put you any further down in the dumps by telling you." Jubal scowled. "When you showed up here, I thought you were unnecessarily nervy about Ben - I figured the same as his assistant, that fellow Kilgallen, that Ben had gone yipping off on some new trail ... and would check in when he had the story wrapped up. Ben does that sort of stunt - it's his profession." He sighed. "But now I don't think so. That knothead Kilgallen - he really does have a statprint message on file, apparently from Ben, telling Kilgallen that Ben would be away a few days; my man not only saw it but sneaked a photograph and checked. No fake - the message was sent."

Jill looked puzzled. "I wonder why Ben didn't send me a statprint at the same time? It isn't like him - Ben's very thoughtful."

Jubal repressed a groan. "Use your head, Gillian. Just because a package says 'Cigarettes' on the outside does not prove that the package contains cigarettes. You got here last Friday; the code groups on that statprint message show that it was filed from Philadelphia - Paoli Station Landing Flat, to be exact - just after ten thirty the morning before ? 10:34 AM. Thursday. It was transmitted a couple of minutes after it was filed and was received at once, because Ben's office has its own statprinter. All right, now you tell me why Ben sent a printed message to his own office - during working hours - instead of telephoning?"

"Why, I don't think he would, ordinarily. At least I wouldn't. The telephone is the normal-"

"But you aren't Ben. I can think of half a dozen reasons, for a man in Ben's business. To avoid garbles. To insure a printed record in the files of I.T.&T. for legal purposes. To send a delayed message. All sorts of reasons. Kilgallen saw nothing odd about it - and the simple fact that Ben, or the syndicate he sells to, goes to the expense of maintaining a private statprinter in his office shows that Ben uses it regularly.

"However," Jubal went on, "the snoops I hired are a suspicious lot; that message placed Ben at Paoli flat at ten thirty-four on Thursday - so one of them went there. Jill, that message was not sent from there."

"But-"

"One moment. The message was filed from there but did not originate there. Messages are either handed over the counter or telephoned. If one is handed over the counter, the customer can have it typed or he can ask for facsimile transmission of his handwriting and signature ... but if it is filed by telephone, it has to be typed by the filing office before it can be photographed."

"Yes, of course."

"Doesn't that suggest anything, Jill?"

"Uh ... Jubal, I'm so worried that I'm not thinking straight. What should it suggest?"

"Quit the breast-beating; it wouldn't have suggested anything to me, either. But the pro who was working for me is a very sneaky character; he arrived at Paoli with a convincing statprint made from the photograph that was taken under Kilgallen's nose - and with business cards and credentials that made it appear that he himself was 'Osbert Kilgallen,' the addressee. Then, with his fatherly manner and sincere face, he hornswoggled a young lady employee of I.T.&T. into telling him things which, under the privacy amendment to the Constitution, she should have divulged only under court order - very sad. Anyhow, she did remember receiving that message for file and processing. Ordinarily she wouldn't remember one message out of hundreds - they go in her ears and out her fingertips and are gone, save for the filed microprint. But, luckily, this young lady is one of Ben's faithful fans; she reads his 'Crow's Nest' column every night - a hideous vice." Jubal blinked his eyes thoughtfully at the horizon. "Front!"

Anne appeared, dripping. "Remind me," Jubal said to her, "to write a popular article on the compulsive reading of news. The theme will be that most neuroses and some psychoses can be traced to the unnecessary and unhealthy habit of daily wallowing in the troubles and sins of five billion strangers. The title is 'Gossip Unlimited'-no, make that 'Gossip Gone Wild.'"

"Boss, you're getting morbid."

"Not me. But everybody else is. See that I write it some time next week. Now vanish; I'm busy." He turned back to Gillian. "She noticed Ben's name, so she remembered the message - quite thrilled about it, because it let her speak to one of her heroes . . . and was irked, I gather, because Ben hadn't paid for vision as well as voice. Oh, she remembers it and she remembers, too, that the service was paid for by cash from a public booth - in Washington."

"'In Washington'?" repeated Jill. "But why would Ben call from-"

"Of course, of course!" Jubal agreed pettishly. "If he's at a public phone booth anywhere in Washington, he can have both voice and vision direct to his office, face to face with his assistant, cheaper, easier, and quicker than he could phone a stat message to be sent back to Washington from a point nearly two hundred miles away. It doesn't make sense. Or, rather, it makes just one kind of sense. Hankypanky. Ben is as used to hankypanky as a bride is to kisses. He didn't get to be one of the best winchells in the business through playing his cards face up."

"Ben is not a winchell! He's a Lippmann!"

"Sorry, I'm colorblind in that range. Keep quiet. He might have believed that his phone was tapped but his statprinter was not. Or he might have suspected that both were tapped-and I've no doubt they are, by now, if not then - and that he could use this roundabout relay to convince whoever was tapping him that he really was away from Washington and would not be back for several days." Jubal frowned. "In the latter case we would be doing him no favor by finding him. We might be endangering his life."

"Jubal! No!"

"Jubal, yes," he answered wearily. "That boy skates close to the edge, he always has. He's utterly fearless and that's how he's made his reputation. But the rabbit is never more than two jumps ahead of the coyote and this time maybe one jump. Or none, Jill, Ben has never tackled a more dangerous assignment than this. If he has disappeared voluntarily - and he may have - do you want to risk stirring things up by bumbling around in your amateur way, calling attention to the fact that he has dropped out of sight? Kilgallen still has him covered, as Ben's column has appeared every day. I don't ordinarily read it - but I've made it my business to know, this time."

"Canned columns! Mr. Kilgallen told me so."

"Of course. Some of Ben's perennial series on corrupt campaign funds. That's a subject as safe as being in favor of Christmas. Maybe they're kept on file for such emergencies - or perhaps Kilgallen is writing them. In any case, Ben Caxton, the ever-ready Advocate of the Peepul, is still officially on his usual soap box. Perhaps he planned it that way, my dear - because he found himself in such danger that he did not dare get in touch even with you. Well?"

Gillian glanced fearfully around her - at a scene almost unbearably peaceful, bucolic, and beautiful - then covered her face with her hands. "Jubal ... I don't know what to do!"

"Snap out of it," he said gruffly. "Don't bawl over Ben - not in my presence. The worst that can possibly have happened to him is death and that we are all in for - if not this morning, then in days, or weeks, or years at most. Talk to your prot,g, Mike about it. He regards 'discorporation' as less to be feared than a scolding - and he may be right. Why, if I told Mike we were going to roast him and serve him for dinner tonight, he would thank me for the honor with his voice choked with gratitude."

"I know he would," Jill agreed in a small voice, "but I don't have his philosophical attitude about such things."

"Nor do I," Harshaw agreed cheerfully, "but I'm beginning to grasp it - and I must say that it is a consoling one to a man of my age. A capacity for enjoying the inevitable - why, I've been cultivating that all my life ... but this infant from Mars, barely old enough to vote and too unsophisticated to stand clear of the horse cars, has me convinced that I've just reached the kindergarten class in this all-important subject. Jill, you asked if Mike was welcome to stay on. Child, he's the most welcome guest I've ever had. I want to keep that boy around until I've found out what it is that he knows and I don't! This 'discorporation' thing in particular it's not the Freudian 'death-wish' clich,, I'm sure of that. It has nothing to do with life being unbearable. None of that 'Even the weariest river' stuff - it's more like Stevenson's 'Glad did I live and gladly die and I lay me down with a will!' Only I've always suspected that Stevenson was either whistling in the dark, or, more likely, enjoying the compensating euphoria of consumption. But Mike has me halfway convinced that he really knows what he is talking about."

"I don't know," Jill answered dully. "I'm just worried about Ben."

"So am I," agreed Jubal. "So let's discuss Mike another time. Jill, I don't think that Ben is simply hiding any more than you do."

"But you said-"

"Sorry. I didn't finish. My hired men didn't limit themselves to Ben's office and Paoli Flat. On Thursday morning Ben called at Bethesda Medical Center in company with the lawyer he uses and a Fair Witness - the famous James Oliver Cavendish, in case you follow such things."

"I don't, I'm afraid."

"No matter. The fact that Ben retained Cavendish shows how seriously he took the matter; you don't hunt rabbits with an elephant gun. The three were taken to see the 'Man from Mars'-"

Gillian gaped, then said explosively, "That's impossible! They couldn't have come on that floor without my knowing it!"

"Take it easy, Jill. You're disputing a report by a Fair Witness and not just any Fair Witness. Cavendish himself. If he says it, it's gospel."

"I don't care if he's the Twelve Apostles! He wasn't on my floor last Thursday morning!"

"You didn't listen closely. I didn't say that they were taken to see our friend Mike-I said they were taken to see 'The Man from Mars.' The phony one, obviously - that actor fellow they stereovised."

"Oh. Of course, And Ben caught them out!"

Jubal looked pained. "Little girl, count to ten thousand by twos while I finish this. Ben did not catch them out. In fact, even the Honorable Mr. Cavendish did not catch them out - at least he won't say so. You know how Fair Witnesses behave."

"Well ... no, I don't. I've never had any dealings with Fair Witnesses."

"So? Perhaps you weren't aware of it. Anne!"

Anne was seated on the springboard; she turned her head. Jubal called out, "That new house on the far hilltop-can you see what color they've painted it?"

Anne looked in the direction in which Jubal was pointing and answered, "It's white on this side." She did not inquire why Jubal had asked, nor make any comment.

Jubal went on to Jill in normal tones, "You see? Anne is so thoroughly indoctrinated that it doesn't even occur to her to infer that the other side is probably white, too. All the King's horses and all the King's men couldn't force her to commit herself as to the far side ... unless she herself went around to the other side and looked-and even then she wouldn't assume that it stayed whatever color it might be after she left because they might repaint it as soon as she turned her back,"

"Anne is a Fair Witness?"

"Graduate, unlimited license, and admitted to testify before the High Court. Sometime ask her why she decided to give up public practice. But don't plan on anything else that day - the wench will recite the truth, the whole truth, and nothing but the truth, and that takes time. Back to Mr. Cavendish - Ben retained him for open witnessing, full disclosure, without enjoining him to privacy. So when Cavendish was questioned, he answered, in full and boring detail. I've got a tape of it upstairs. But the interesting part of his report is what he does not say. He never states that the man they were taken to see was not the Man from Mars ... but not one word can be construed as indicating that Cavendish accepted the exhibit he was called to view as being in fact the Man from Mars. If you knew Cavendish - and I do - this would be conclusive. If Cavendish had seen Mike, even for a few minutes, he would have reported what he had seen with such exactness that you and I, who know Mike, would know that he had seen him. For example, Cavendish reports in precise professional jargon the shape of this exhibit's ears ... and it does not match Mike's ear shape at all. Q.E.D.; he didn't see Mike. Nor did Ben. They were shown a phony. Furthermore Cavendish knows it, even though he is professionally restrained from giving opinions or conclusions."

"But I told you so. They never came near my floor."

"Yes. But it tells us something more. This occurred hours before you pulled your jail break for Mike - about eight hours earlier, as Cavendish sets their arrival in the presence of the phony 'Man from Mars' at 9:14 Thursday morning. That is to say, the government still had Mike under their thumb at that moment. In the same building. They could have exhibited him. Yet they took the really grave risk of offering a phony for inspection by the most noted Fair Witness in Washington - in the country. Why?"

He waited. Jill answered slowly, "You're asking me? I don't know. Ben told me that he intended to ask Mike if he wanted to leave the hospital-and help him to do so if he said, 'Yes.'"

"Which Ben did try, with the phony."

"So? Out, Jubal, they couldn't have known that Ben intended to do that . . . and, anyhow, Mike wouldn't have left with Ben."

"Why not? Later that day he left with you."

"Yes - but I was already his 'water brother,' just as you are now. He has this crazy Martian idea that he can trust utterly anyone with whom he has shared a drink of water. With a 'water brother' he is completely docile and with anybody else he is stubborn as a mule. Ben couldn't have budged him." She added, "At least that is the way he was last week - he's changing awfully fast."

"So he is. Too fast, maybe. I've never seen muscle tissue develop so rapidly - I'm sorry I didn't weigh him the day you arrived. Never mind, back to Ben - Cavendish reports that lien dropped him and the lawyer, a chap named Frisby, at nine thirtyone, and Ben kept the cab. We don't know where Ben went then. But an hour later he - or let's say somebody who said he was Ben - phoned that message to Paoli Flat."

"You don't think it was Ben?"

"I do not. Cavendish reported the license number of the cab and my scouts tried to get a look at the daily trip tape for that cab. If Ben used his credit card, rather than feeding coins into the cab's meter, his charge number should be printed on the tape - but even if he paid cash the tape should show where the cab had been and when."

"Well?"

Harshaw shrugged. "The records show that that cab was in for repairs and was never in use Thursday morning. That gives us two choices: either a Fair Witness misread or misremembered a cab's serial number or somebody tampered with the record." He added grimly, "Maybe a jury would decide that even a Fair Witness could glance at a cab's serial number and misread it, especially if he had not been asked to remember it - but I don't believe it ... not when the Witness is James Oliver Cavendish. Cavendish would either be certain of that serial number, or his report would never mention it."

Harshaw scowled and went on, "Jill, you're forcing me to rub my own nose in it - and I don't like it, I don't like it at all! Granted that Ben could have sent that message, it is most unlikely that he could have tampered with the daily record of that cab ... and still less believable that he had any reason to. No, let's face it. Ben went somewhere in that cab - and somebody who could get at the records of a public carrier went to a lot of trouble to conceal where he went ... and sent a phony message to keep anyone from realizing that he had disappeared."

"'Disappeared!' Kidnapped, you mean!"

"Softly, Jill. 'Kidnapped' is a dirty word."

"It's the only word for it! Jubal, how can you sit there and do nothing when you ought to be shouting it from the-"

"Stop it, Jill! There's another word. Instead of kidnapped, he might be dead."

Gillian slumped. "Yes," she agreed dully. "That's what I'm really afraid of."

"So am I. But we'll assume he is not, until we have seen his bones. But it's one or the other - so we assume that he is kidnapped. Jill, what's the greatest danger about kidnapping? No, don't bother your pretty head; I'll tell you. The greatest danger to the victim is a hue-and-cry - because if a kidnapper is frightened, he will almost always kill his victim. Had you thought of that?"

Gillian looked woeful and did not answer. Harshaw went on gently, "I am forced to say that I think it is extremely likely that Ben is dead. He has been gone too long. But we've agreed to assume that he is alive - until we know otherwise. Now you intend to look for him. Gillian, can you tell me how you will go about this? Without increasing the risk that lien will be done away with by the unknown party or parties who kidnapped him?"

"Uh-But we know who they are!"

"Do we?"

"Of course we do! The same people who were keeping Mike a prisoner - the government!"

Harshaw shook his head. "We don't know it. That's an assumption based on what Ben was doing when last seen. But it's not a certainty. Ben has made lots of enemies with his column and by no means all of them are in the government. I can think of several who would willingly kill him if they could get away with it. However-" Harshaw frowned. "Your assumption is all we have to go on. But not 'the government'-that's too sweeping a term. 'The government' is several million people, nearly a million in Washington alone. We have to ask ourselves: Whose toes were being stepped on? What person or persons? Not 'the government' - but what individuals?"

"Why, that's plain enough, Jubal. I told you, just as Ben told it to me. It's the Secretary General himself."

"No," Harshaw denied. "While that may be true, it's not useful to us. No matter who did what, if it is anything rough or illegal, it won't be the Secretary General who did it, even if he benefits by it. Nobody would ever be able to prove that he even knew about it. It is likely that he would not know about it - not the rough stuff. No, Jill, we need to find out which lieutenant in the Secretary General's large staff of stooges handled this operation. But that isn't as hopeless as it sounds -I think. When Ben was taken in to see that phony 'Man from Mars,' one of Mr. Douglas's executive assistants was with him - tried to talk him out of it, then went with him. It now appears that this same top-level stooge also dropped out of sight last Thursday ... and I don't think it is a coincidence, not when he appears to have been in charge of the phony 'Man from Mars.' If we find him, we may find Ben, Gilbert Berquist is his name and I have reason-"

"Berquist?"

"That's the name. And I have reason to suspect that-Jill, what's the trouble? Stop it! Don't faint, or so help me, I'll dunk you in the pool!"

"Jubal. This 'Berquist.' Is there more than one Berquist?"

"Eh? I suppose so ... though from all I can find out he does seem to be a bit of a bastard; there might be only one. But I mean the one on the Executive staff. Why? Do you know him?"

"I don't know. But if it is the same one ... I don't think there's any use looking for him."

"Mmm ... talk, girl."

"Jubal, I'm sorry - I'm terribly sorry - but I didn't tell you quite everything."

"People rarely do. All right, out with it."

Stumbling, stuttering, and stammering, Gillian managed to tell about the two men who suddenly were not there. Jubal Simply listened. "And that's all," she concluded sadly. "I screamed and scared Mike ... and he went into that trance you saw him in - and then I had a simply terrible time getting here. But I told you about that."

"Mmm ... yes, so you did. I wish that you had told me about this, too."

She turned red. "I didn't think anybody would believe me. And I was scared. Jubal, can they do anything to us?"

"Eh?" Jubal seemed surprised. "Do what?"

"Send us to jail, or something?"

"Oh. My dear, it has not yet been declared a crime to be present at a miracle. Nor to work one. But this matter has more aspects than a cat has hair. Keep quiet and let me think."

Jill kept quiet. Jubal held still about ten minutes. At last he opened his eyes and said, "I don't see your problem child. He's probably lying on the bottom of the pool again-"

"He is."

"-so dive in and get him. Dry him off and bring him up to my study. I want to find out if he can repeat this stunt at will ... and I don't think we need an audience. No, we do need an audience. Tell Anne to put on her Witness robe and come along - tell her I want her in her official capacity. I want Duke, too."

"Yes, Boss."

"You're not privileged to call me 'Boss'; you're not tax deductible."

"Yes, Jubal."

"That's better. Mmm... I wish we had somebody here who never would be missed. Regrettably we are all friends. Do you suppose Mike can do this stunt with inanimate objects?"

"I don't know."

"We'll find out. Well, what are you standing there for? Haul that boy out of the water and wake him up." Jubal blinked thoughtfully. "What a way to dispose of-no, I mustn't be tempted. See you upstairs, girl."

Chapter 12

A FEW MINUTES LATER Jill reported to Jubal's study. Anne was there, seated and enveloped in the long white robe of her guild; she glanced at Jill, said nothing. Jill found a chair and kept quiet, as Jubal was at his desk and dictating to Dorcas; he did not appear to notice Jill's arrival and went on dictating:

"-from under the sprawled body, soaking one corner of the rug and seeping out beyond it in a spreading dark red pool on the tiled hearth, where it was attracting the attention of two unemployed flies. Miss Simpson clutched at her mouth. 'Dear me!' she said in a distressed small voice, 'Daddy's favorite rug! ... and Daddy, too, I do believe.' End of chapter, Dorcas, and end of first installment. Mail it off. Git."

Dorcas stood up and left, taking along her shorthand machine, and nodding and smiling to Jill as she did so. Jubal said, "Where's Mike?"

"In his room," answered Gillian, "dressing. He'll be along soon."

"'Dressing'?" Jubal repeated peevishly. "I didn't say the party was formal."

"But he has to get dressed."

"Why? It makes no never-mind to me whether you kids wear skin or fleece-lined overcoats - and it's a warm day. Chase him in here."

"Please, Jubal. He's got to learn how to behave. I'm trying so hard to train him."

"Hmmph! You're trying to force on him your own narrow-minded, middle class, Bible Belt morality. Don't think I haven't been watching."

"I have not! I haven't concerned myself with his morals; I've simply been teaching him necessary customs."

"Customs, morals-is there a difference? Woman, do you realize what you are doing? Here, by the grace of God and an inside straight, we have a personality untouched by the psychotic taboos of our tribe, and you want to turn him into a carbon copy of every fourth-rate conformist in this frightened land! Why don't you go whole hog? Get him a brief case and make him carry it wherever he goes - make him feel shame if he doesn't have it."

"I'm not doing anything of the sort! I'm just trying to keep him out of trouble. It's for his own good."

Jubal snorted. "That's the excuse they gave the tomcat just before his operation."

"Oh!" Jill stopped and appeared to be counting ten. Then she said formally and bleakly, "This is your house, Doctor Harshaw, and we are in your debt. If you will excuse me, I will fetch Michael at once." She got up to leave.

"Hold it, Jill."

"Sir?"

"Sit back down-and for God's sake quit trying to be as nasty as I am; you don't have my years of practice. Now let me get something straight: you are not in my debt. You can't be. Impossible - because I never do anything I don't want to do. Nor does anyone, but in my case I am always aware of it. So please don't invent a debt that does not exist, or before you know it you will be trying to feel gratitude - and that is the treacherous first step downward to complete moral degradation. You grok that? Or don't you?"

Jill bit her lip, then grinned. "I'm not sure I know what 'grok' means."

"Nor do I. But I intend to go on taking lessons from Mike until I do. But I was speaking dead seriously. Gratitude is a euphemism for resentment. Resentment from most people I do not mind - but from pretty little girls it is distasteful to me."

"Why, Jubal, I don't resent you - that's silly."

"I hope you don't... but you certainly will if you don't root out of your mind this delusion that you are indebted to me. The Japanese have five different ways to say 'thank you' - and every one of them translates literally as resentment, in various degrees. Would that English had the same built - in honesty on this point! Instead, English is capable of defining sentiments that the human nervous system is quite incapable of experiencing. 'Gratitude,' for example."

"Jubal, you're a cynical old man. I do feel grateful to you and I shall go on feeling grateful."

"And you are a sentimental young girl. That makes us a perfect complementary pair. Hmm - let's run over to Atlantic City for a weekend of illicit debauchery, just us two."

"Why, Jubal!"

"You see how deep your gratitude goes when I attempt to draw on it?"

"Oh. I'm ready. How soon do we leave?"

"Hummph! We should have left forty years ago. Shut up. The second point I want to make is that you are right; the boy does indeed have to learn human customs. He must be taught to take off his shoes in a mosque and to wear his hat in a synagogue and to cover his nakedness when taboo requires it, or our tribal shamans will burn him for deviationism. But, child, by the myriad deceptive aspects of Ahriman, don't brainwash him in the process. Make sure he is cynical about each part of it."

"Uh, I'm not sure how to go about that, Jubal. Well, Mike just doesn't seem to have any cynicism in him."

"So? Yes. Well, I'll take a hand in it. What's keeping him? Shouldn't he be dressed by now?"

"I'll go see."

"In a moment. Jill, I explained to you why I had not been anxious to accuse anyone of kidnapping Ben ... and the reports I have had since serve to support the probability that that was a tactically correct decision. If Ben is being unlawfully detained (to put it at its sweetest), at least we have not crowded the opposition into getting rid of the evidence by getting rid of Ben. If he is alive he stands a chance of staying alive. But I took other steps the first night you were here. Do you know your Bible?"

"Uh, not very well."

"It merits study, it contains very practical advice for most emergencies. '-every one that doeth evil hateth the light-' John something or other, Jesus speaking to Nicodeus. I have been expecting at any moment an attempt to get Mike away from us, for it didn't seem likely that you had managed to cover your tracks perfectly. And if they do try? Well, this is a lonely place and we haven't any heavy artillery. But there is one weapon that might balk them. Light. The glaring spotlight of publicity. So I made some phone calls and arranged for any ruckus here to have publicity. Not just a little publicity that the administration might be able to hush up, but great gobs of publicity worldwide and all at once. The details do not matter - where and how the cameras are mounted and what line of sight linkages have been rigged, I mean. But if a fight breaks out here, it will be picked up by three networks and, at the same time, a number of hold for release messages will be delivered to a wide spread of V.I.P.s, all of whom would like very much to catch our Honorable Secretary General with his pants down."

Harshaw frowned. "The weakness in this defense is that I can't maintain it indefinitely. Truthfully, when I set it up, my worry was to set up fast enough - I expected whatever popped to pop inside of twenty four hours. Now my worry is reversed and I think we are going to have to force some action quickly while I can still keep a spotlight on us."

"What sort of action, Jubal?"

"I don't know. I've been fretting about it the past three days, to the point where I can't enjoy my food. But you gave me a glimmering of a new approach when you told me that remarkable story about what happened when they tried to grab you two in Ben's apartment."

"I'm sorry I didn't tell you sooner, Jubal. But I didn't think anybody would believe me and I must say that it makes me feel good that you do believe me."

"I didn't say I believed you."

"What? But you-"

"I think you were telling the truth, Jill. But a dream is a true experience of a sort and so is a hypnotic delusion. But what happens in this room during the next half hour will be seen by a Fair Witness and by cameras which are" he leaned forward and pressed a button. "rolling right now. I don't think Anne can be hypnotized when she's on duty and I'll lay long odds that cameras can't be. We should be able to find out what kind of truth we're dealing with-after which we should be able to decide how to go about forcing the powers-that-be to drop the other shoe ... and maybe figure a way that will help Ben at the same time. Go get Mike."

Mike's delay was not mysterious, merely worrisome to him. He had managed to tie his left shoestring to his right-then had stood up, tripped himself, fallen flat, and, in so doing, jerked the knots almost hopelessly tight. He had spent the rest of the time analysing his predicament, concluding correctly why he had failed, and slowly, slowly, slowly getting the snarl untied and the strings correctly tied, one bow to each shoe, unlinked. He had not been aware that his dressing had taken long; he had simply been troubled that he had failed to repeat correctly something which Jill had already taught him. He confessed his failure abjectly to her even though he had repaired it by the time she came to fetch him.

She soothed and reassured him, combed his hair, and herded him in to see Jubal. Harshaw looked up. "Hi, son. Sit down."

"Hi, Jubal," Valentine Michael Smith answered gravely, sat down-waited. Jill had to rid herself of the impression that Smith had bowed deeply, when in fact he had not even nodded.

Harshaw put aside a hush-mike and said, "Well, boy what have you learned today?"

Smith smiled happily, then answered-as always with a slight pause. "I have today learned to do a one-and-a-half gainer. That is a jumping, a dive, for entering our water by-"

"I know, I saw you doing it. But you splashed. Keep your toes pointed, your knees straight, and your feet together."

Smith looked unhappy. "I rightly did not it do?"

"You did it very rightly, for a first time. Watch how Dorcas does it. Hardly a ripple in the water."

Smith considered this slowly. "The water groks Dorcas. It cherishes him."

"'Her.' Dorcas is a 'her,' not a 'him.'"

"'Her,' " Smith corrected. "Then my speaking was false? I have read in Webster's New International Dictionary of the English Language, Third Edition, published in Springfield, Massachusetts, that the masculine gender includes the feminine gender in speaking. In Hagworth's Law of Contracts, Fifth Edition, Chicago, Illinois, 1978, on page 1012, it says-"

"Hold it," Harshaw said hastily. "The trouble is with the English language, not with you. Masculine speech forms do include the feminine, when you are speaking in general-but not when you are talking about a particular person. Dorcas is always 'she' or 'her'-never 'he' or 'him.' Remember it."

"I will remember it."

"You had better remember it or you may provoke Dorcas into proving just how female she is." Harshaw blinked thoughtfully. "Jill, is the lad sleeping with you? Or with one of you?"

She barely hesitated, then answered flatly, "So far as I know, Mike doesn't sleep."

"You evaded my question."

"Then perhaps you had better assume that I intended to evade it. However, he is not sleeping with me."

"Mmm .. damn it, my interest is scientific. However, we'll pursue another line of inquiry. Mike, what else have you learned today?"

"I have learned two ways to tie my shoes. One way is only good for lying down. The other way is good for walking. And I have learned conjugations. 'I am, thou art, he is, we are, you are, they are, I was, thou wast-"

"Okay, that's enough. What else?"

Mike smiled delightedly. "To yesterday I am learning to drive the tractor, brightly, brightly, and with beauty."

"Eh?" Jubal turned to Jill. 'When did this happen?"

"Yesterday afternoon while you were napping, Jubal. It's all right - Duke was very careful not to let him get hurt."

"Umm ... well, obviously he did not get hurt. Mike, have you been reading?"

"Yes, Jubal."

"What?"

"I have read," Mike recited carefully, "three more volumes of the Encyclopedia, Maryb to Mushe, Mushr to Ozon, P to Planti. You have told me not to read too much of the Encyclopedia at one reading, so I then stopped. I then read the Tragedy of Romeo and Juliet by Master William Shakespeare of London. I then read the Memoirs of Jacques Casanova de Sein gait as translated into English by Arthur Machen. I then read The Art of Cross-Examination by Francis Weilman. I then tried to grok what I had read until Jill told me that I must come to breakfast."

"And did you grok it?"

Smith looked troubled. "Jubal, I do not know."

"Is anything bothering you, Mike?"

"I do not grok all fullness of what I read. In the history written by

Master William Shakespeare I found myself full of happiness at the death of Romeo. Then I read on and learned that he had discorporated too soon - or so I thought I grokked. Why?"

"He was a blithering young idiot."

"Beg pardon?"

"I don't know, Mike."

Smith considered this. Then he muttered something in Martian and added, "I am only an egg."

"Eh? You usually say that when you want to ask a favor, Mike. What is it this time? Speak up."

Smith hesitated. Then he blurted out, "Jubal my brother, would please you ask Romeo why he discorporated? I cannot ask him; I am only an egg. But you can - and then you could teach me the grokking of it."

For the next several minutes the conversation became very tangled. Jubal saw at once that Mike believed that Romeo of Montague had been a living, breathing person, and Jubal managed with no special shock to his own concepts to realize that Mike expected him to be able, somehow, to conjure up Romeo's ghost and demand of him explanations for his conduct when in the flesh.

But to get over to Mike the idea that none of the Capulets and Montagues had ever had any sort of corporate existence was another matter. The concept of fiction was nowhere in Mike's experience; there was nothing on which it could rest, and Jubal's attempts to explain the idea were so emotionally upsetting to Mike that Jill was afraid that he was about to roll up into a ball and withdraw himself.

But Mike himself saw how perilously close he was coming to that necessity and he had already learned that he must not resort to this refuge in the presence of his friends, because (with the exception of his brother Doctor Nelson) it always caused them emotional disturbance. So he made a mighty effort, slowed down his heart, calmed his emotions, and smiled. "I will waiting till a grokking comes of itself."

"That's better," agreed Jubal. "But hereafter, before you read anything, ask me or ask Jill, or somebody, whether or not it is fiction. I don't want you to get mixed up."

"I will ask, Jubal." Mike decided that, when he did grok this strange idea, that he must report the fullness to the Old Ones ... and suddenly found himself wondering if the Old Ones knew about "fiction." The completely incredible idea that there might be something which was as strange to the Old Ones as it was to himself was so much more revolutionary (indeed heretically so) than the sufficiently weird concept of fiction that he hastily put it aside to cool, saved it for future deep contemplation.

"-but I didn't," his brother Jubal was saying, "call you in here to discuss literary forms. Mike, you remember the day that Jill took you away from the hospital?"

"'Hospital'?" Mike repeated.

"I'm not sure, Jubal," Jill interrupted, "that Mike ever knew that it was a hospital - at least I never told him it was one. Let me try it."

"Go ahead."

"Mike, you remember the place where you were, where you lived alone in a room, before I dressed you and took you away."

"Yes, Jill."

"Then we went to another place and I undressed you and gave you a bath."

Smith smiled in pleased recollection. "Yes. It was a great happiness."

"Then I dried you off-and then two men came."

Smith's smile wiped away. He relived that critical cusp of decision and the horror of his discovery that, somehow, he had chosen wrong action and hurt his water brother. He began to tremble and huddle into himself.

Jill said loudly, "Mike! Stop it! Stop it at once! Don't you dare go away!"

Mike took control of his being and did what his water brother required of him. "Yes, Jill," he agreed.

"Listen to me, Mike. I want you to think about that time - but you mustn't get upset or go away. Just remember it. There were two men there. One of them pulled you out into the living room."

"The room with the joyful grasses on the floor," he agreed.

"That's right. He pulled you out into the room with the grass on the floor and I tried to stop him. He hit me. Then he was gone. You remember?"

"You are not angry?"

"What? No, no, not at all. But I was frightened. One man disappeared, then the other one pointed a gun at me - and then he was gone, too. I was very frightened - but I was not angry."

"You are not angry with me now?"

"Mike, dear - I have never been angry with you. But sometimes I have been frightened. I was frightened that time-but I am not afraid now. Jubal and I want to know what happened. Those two men were there, in that room with us. And then you did something ... and they were gone. You did it twice. What was it you did? Can you tell us?"

"Yes, I will tell you. The man - the big man - hit you ... and I was frightened, too. So I-" He croaked a phrase in Martian, then looked puzzled. "I do not know words."

Jubal said, "Mike, can you use a lot of words and explain it a little at a time?"

"I will try, Jubal. Something is there, in front of me. It is a wrong thing and it must not be there. It must go. So I reach out and-" He stopped again and looked perplexed. "It is such a simple thing, such an easy thing. Anyone can do it. Tying shoe laces is much more hard. But the words not are. I am very sorry. I will learn more words." He considered it. "Perhaps the words are in Plants to Raym, or Rayn to Sarr, or Sars to Sorc. I will read them tonight and tell you at breakfast."

"Maybe," Jubal admitted. "Just a minute, Mike." He got up from his desk, went to a corner and returned with a large carton which had lately contained twelve fifths of brandy. "Can you make this go away?"

"This is a wrong thing and it must not be here?"

"Well, assume that it is."

"But - Jubal, I must know that it is a wrong thing. This is a box. I do not grok that it exists wrongly."

"Mmm-I see. I think I see. Suppose I picked up this box and threw it at Jill's head? Threw it hard, so that it would hurt her?"

Smith said with gentle sadness, "Jubal, you would not do that to Jill."

"Uh ... damn it. I guess I wouldn't. Jill, will you throw the box at me? Good and hard - a scalp wound at least, if Mike can't protect me."

"Jubal, I don't like the idea much better than you do."

"Oh, come on! In the interest of science ... and Ben Caxton."

"But-" Jill jumped up suddenly, grabbed the box, threw it right at Jubal's head. Jubal intended to stand and take it - but instinct and habit won out; he ducked.

"Missed me," he said. "But where is it?" He looked around. "Confound it, I wasn't watching. I meant to keep my eyes right on it." He looked at Smith. "Mike, is that the way-what's the matter, boy?"

The Man from Mars was trembling and looking unhappy. Jill hurried to him and put her arms around his shoulders. "There, there, it's all right, dear! You did it beautifully - whatever it is. It never touched Jubal. It simply vanished."

"I guess it did," Jubal admitted, looking all around the room and chewing his thumb. "Anne, were you watching?"

"Yes."

"What did you see?"

"The box did not simply vanish. The process was not quite instantaneous but lasted some measurable fraction of a second. From where I am sitting it appeared to shrink very, very rapidly, as if it were disappearing into the far distance. But it did not go outside the room, for I could see it right up to the instant it disappeared."

"But where did it go?"

"That is all I can report."

"Mmm ... we'll run off the films later-but I'm convinced. Mike-"

"Yes, Jubal?"

"Where is that box now?"

"The box is-" Smith paused. "Again I have not words. I am sorry."

"I'm not sorry, but I'm certainly confused. Look, son, can you reach in again and haul it out? Bring the box back here?"

"Beg pardon?"

"You made it go away; now make it come back."

"How can I do that? The box is not."

Jubal looked very thoughtful. "If this method ever becomes popular, we'll have to revise the rules concerning corpus delecti. 'I've got a little list they never will be missed.' Jill, let's find something else that will make a not-quite-lethal weapon; this time I'm going to keep my eyes open. Mike, how close do you have to be to do this trick?"

"Beg pardon?"

"What's your range? If you had been standing out there in the hallway and I had been clear back by the window - oh, say thirty feet - could you have stopped that box from hitting me?"

Smith appeared mildly surprised. "Yes."

"Hmm ... come over here by the window. Now look down there at the swimming poo1. Suppose that Jill and I had been over on the far side of the pool and you had been standing right where you are. Could you have stopped the box from here?"

"Yes, Jubal."

"Well ... suppose Jill and I were clear down the road there at the gate, a quarter of a mile away. Suppose we were standing just this side of those bushes that shield the gate, where you could see us clearly. Is that too far?"

Smith hesitated a long time, then spoke slowly. "Jubal, it is not the distance. It is not the seeing. It is the knowing."

"Hmm ... let's see if I grok it. Or grok part of it. It doesn't matter how far or how close a thing is. You don't even have to see it happening. But if you know that a bad thing is happening, you can reach out and stop it. Right?"

Smith looked slightly troubled. "Almost it is right. But I am not long out of the nest. For knowing I must see. But an Old One does not need eyes to know. He knows. He groks. He acts. I am sorry."

"I don't know what you are sorry about, son," Jubal said gruffly. "The High Minister for Peace would have declared you Top Secret ten minutes ago."

"Beg pardon?"

"Never mind. What you do is quite good enough in this vicinity." Jubal returned to his desk, looked around thoughtfully and picked up a ponderous metal ash tray. "Jill, don't aim at my face this time; this thing has sharp corners. Okay, Mike, you stand clear out in the hallway."

"Jubal ... my brother . . . please not!"

"What's the trouble, son? You did it beautifully a few minutes ago. I want one more demonstration - and this time I won't take my eyes off it."

"Jubal-"

"Yes, Jill?"

"I think I grok what is bothering Mike."

"Well, tell me then, for I don't."

"We set up an experiment where I was about to hurt you by hitting you with that box. But both of us are his water brothers - so it upset Mike that I even tried to hurt you. I think there is something very unMartian about such a situation. It puts Mike in a dilemma. Divided loyalty."

Harshaw frowned. "Maybe it should be investigated by the Committee on unMartian Activities."

"I'm not joking, Jubal."

"Nor was I - for we may need such a committee all too soon. I wonder how Mrs. O'Leary's cow felt as she kicked the lantern? All right, Jill, you sit down and I'll re-rig the experiment." Harshaw handed the ash tray to Mike. "Feel how heavy it is, son, and see those sharp corners."

Smith examined it somewhat gingerly. Harshaw went on, "I'm going to throw it straight up in the air, clear to the ceiling-and let it hit me in the head as it comes down."

Mike stared at him. "My brother ... you will now discorporate?"

"Eh? No, no! It won't kill me and I don't want to die. But it will cut me and hurt me - unless you stop it. Here we go!" Harshaw tossed it straight up within inches of the high ceiling, tracking it with his eyes like a soccer player waiting to pass the ball with his head. He concentrated on watching it, while one part of his mind was considering jerking his head aside at the last instant rather than take the nasty scalp wound the heavy, ugly thing was otherwise sure to give him-and another small piece of his mind reckoned cynically that he would never miss this chattel; he had never liked it - but it had been a gift.

The ash tray topped its trajectory, and stayed there.

Harshaw looked at it, with a feeling that he was stuck in one frame of a motion picture. Presently he remembered to breathe and found that he needed to, badly. Without taking his eyes off it he croaked, "Anne. What do you see?"

She answered in a flat voice, "That ash tray is five inches from the ceiling. I do not see anything holding it up." Then she added in tones less certain, "Jubal, I think that's what I'm seeing ... but if the cameras don't show the same thing, I'm going to turn in my robe and tear up my license."

"Um. Jill?"

"It floats. It just floats."

Jubal sighed, Went to his chair and sat down heavily, all without taking his eyes off the unruly ash tray. "Mike," he said, "what went wrong? Why didn't it disappear like the box?"

"But, Jubal," Mike said apologetically, "you said to stop it; you did not say to make it go away. When I made the box go away, you wanted it to be again. Have I done wrongly?"

"Oh. No, you have done exactly right. I keep forgetting that you always take things literally." Harshaw recalled certain colloquial insults common in his early years - and reminded himself forcefully never, never to use any of such to Michael Valentine Smith - for, if he told the boy to drop dead or to get lost, Harshaw now felt certain that the literal meaning of his words would at once ensue.

"I am glad," Smith answered soberly. "I am sorry I could not make the box be again. I am sorry twice that I wasted so much food. But I did not know how to help it. Then a necessity was. Or so I grokked."

"Eh? What food?"

Jill said hastily, "He's talking about those two men, Jubal. Berquist and the cop with him - if he was a cop. Johnson."

"Oh, yes." Harshaw reflected that he himself still retained unMartian notions of food, subconsciously at least. "Mike, I wouldn't worry about wasting that 'food.' They probably would have been tough and poor flavor. I doubt if a meat inspector would have passed them. In fact," he added, recalling the Federation convention about "long pig," "I am certain that they would have been condemned as unfit for food. So don't worry about it. Besides, as you say, it was a necessity. You grokked the fullness and acted rightly."

"I am much comforted," Mike answered with great relief in his voice. Only an Old One can always be sure of right action at a cusp ... and I have much learning to learn and much growing to grow before I may join the Old Ones. Jubal? May I move it? I am tiring."

"You want to make it go away now? Go ahead."

"But now I cannot."

"Eh? Why not?"

"Your head is no longer under it. I do not grok wrongness in its being, where it is."

"Oh. All right. Move it." Harshaw continued to watch it, expecting that it would float to the spot now over his head and thus regain a wrongness. Instead the ash tray moved downward at a slow, steady speed, moved sideways until it was close above his desk top, hovered for a moment, then slid to an empty spot and came in to an almost noiseless landing.

"Thank you, Jubal," said Smith.

"Eh? Thank YOU, Son!" Jubal picked up the ash tray, examined it curiously. It was neither hot nor cold nor did it make his fingers tingle-it was as ugly, overdecorated, commonplace, and dirty as it had been five minutes earlier. "Yes, thank you. For the most amazing experience I've had since the day the hired girl took me up into the attic." He looked up. "Anne, you trained at Rhine."

"Yes."

"Have you seen levitation before?"

She hesitated slightly. "I've seen what was called telekinesis with dice - but I'm no mathematician and I could not testify that what I saw was telekinesis."

"Hell's bells, you wouldn't testify that the sun had risen if the day was cloudy."

"How could I? Somebody might be supplying artificial light from above the cloud layer. One of my classmates could apparently levitate objects about the mass of a paper clip - but he had to be just three drinks drunk and sometimes he couldn't do it at all. I was never able to examine the phenomenon closely enough to be competent to testify about it partly because I usually had three drinks in me by then, too."

"Then you've never seen anything like this?"

"No."

"Mmm... I'm through with you professionally; I'm convinced. But if you want to stay and see what else happens, hang up your robe and drag up a chair."

"Thanks, I will-both. But, in view of the lecture you gave Jill about mosques and synagogues, I'll go to my room first. I wouldn't want to cause a hiatus in the indoctrination."

"Suit yourself. While you're out, wake up Duke and tell him I want the cameras serviced again."

"Yes, Boss. Don't let anything startling happen until I get back." Anne headed for the door.

"No promises. Mike, sit down here at my desk. You, too, Jill - gather 'round. Now, Mike, can you pick up that ash tray? Show me."

"Yes, Jubal." Smith reached out and took it in his hand.

"No, no!"

"I did wrongly?"

"No, it was my mistake. Mike, put it back down. I want to know if you can lift that ash tray without touching it?"

"Yes, Jubal."

"Well? Are you too tired?"

"No, Jubal. I am not too tired."

"Then what's the matter? Does it have to have a 'wrongness' about it?"

"No, Jubal."

"Jubal," Jill interrupted, "you haven't told him to do it - you've just asked him if he could."

"Oh." Jubal looked as sheepish as he was capable of looking, which was not much. "I should learn. Mike, will you please, without touching it with your hands, lift that ash tray a foot above the desk?"

"Yes, Jubal." The ash tray raised, floated steadily above the desk. "Will you measure, Jubal?" Mike said anxiously. "If I did wrongly, I will move it up or down."

"That's just fine! Can you hold it there? If you get tired, tell me."

"I can. I will tell."

"Can you lift something else at the same time? Say this pencil? If you can, then do it."

"Yes, Jubal," The pencil ranged itself neatly by the ash tray.

By request, Mike added other small articles from the desk to the layer of floating objects. Anne returned, pulled up a chair and watched the performance without speaking. Duke came in, carrying a step ladder, glanced at the group, then looked a second time, but said nothing and set the ladder in one corner. At last Mike said uncertainly, "I am not sure, Jubal. I-" He stopped and seemed to search for a word. "I am idiot in these things."

"Don't wear yourself out."

"I can think one more. I hope." A paper weight across the desk from Mike stirred, lifted-and all the dozen-odd floating objects fell down at once. Mike seemed about to weep although no tears formed. "Jubal, I am sorry. I am utmostly sorry."

Harshaw patted his shoulder. "You should be proud, not sorry. Son, you don't seem to realize it, but what you just did is-" Jubal searched for a comparison, rapidly discarded the many that sprang to his mind because he realized that they touched nothing in Mike's experience. "What you did is much harder than tying shoestrings, much more wonderful to us than doing a one-and-a-half gainer perfectly. You did it, uh, 'brightly, brightly, and with beauty.' You grok?"

Mike looked surprised. "I am not sure, Jubal. I should not feel shame?"

"You must not feel shame. You should feel proud."

"Yes, Jubal," he answered contentedly. "I feel proud."

"Good. Mike, I cannot lift even one ash tray without touching it."

Smith looked startled. "You cannot?"

"No. Can you teach me?"

"Yes, Jubal. You-" Smith stopped speaking, looked embarrassed. "I again have not words. I am sorry. But I will read and I will read and I will read, until I find the words. Then I will teach my brother."

"Don't set your heart on it."

"Beg pardon?"

"Mike, don't be disappointed if you do not find the right words. You may not find them in the English language."

Smith considered this quite a long time. "Then I will teach my brother the language of my nest."

"Maybe. I would like to try - but you may have arrived about fifty years too late."

"I have acted wrongly?"

"Not at all. I'm proud of you. You might start by trying to teach Jill your language."

"It hurts my throat," put in Jill.

"Try gargling with aspirin." Jubal looked at her. "That's a silly excuse, nurse - but it occurs to me that this gives me an excuse to put you on the payroll ... for I doubt if they will ever take you back at Bethesda. All right, you're my staff research assistant for Martian linguistics which includes such extra duties as may be necessary. Take that up with the girls. Anne, put her on the payroll - and be sure it gets entered in the tax records."

"She's been doing her share in the kitchen since the day after she got here. Shall I date it back?"

Jubal shrugged. "Don't bother me with details."

"But, Jubal," Jill protested shrilly, "I don't think I can learn Martian!"

"You can try, can't you? That's all Columbus did."

"But-"

"What was that idle chatter you were giving me about 'gratitude'? Do you take the job? Or don't you?"

Jill bit her lip. "I'll take it. Yes ... Boss."

Smith timidly reached out and touched her hand. "Jill ... I will teach."

Jill patted his. "Thanks, Mike." She looked at Harshaw. "And I'm going to learn it just to spite you!"

He grinned warmly at her. "That's a motive I grok perfectly - you'll learn it all right. Now back to business-Mike, what else can you do that we can't do? Besides making things go away - when they have a 'wrongness' - and lifting things without touching them."

Smith looked puzzled. "I do not know."

"How could he know," protested Jill, "when he doesn't really know what we can and can't do?"

"Mmm... yes. Anne, change that job title to 'staff research assistant for Martian linguistics, culture, and techniques.' Jill, in learning their language you are bound to stumble onto Martian things that are different, really different - and when you do, tell me. Everything and anything about a culture can be inferred from the shape of its language - and you're probably young enough to learn to think like a Martian ... which I misdoubt I am not. And you, Mike, if you notice anything which you can do but we don't do, tell me."

"I will tell, Jubal. What things will be these?"

"I don't know. Things like you just did ... and being able to stay on the bottom of the pool much longer than we can. Hmm... Duke!"

"Yes, Boss? I've got both hands full of flim. Don't bother me."

"You can talk, can't you? I noticed the pool is pretty murky."

"Yeah. I'm going to add precipitant tonight and vacuum it in the morning."

"How's the count?"

"The count is okay, the water is safe enough to serve at the table. It just looks messy."

"Let it stay murky for the time being. Test it as usual. I'll let you know when I want it cleaned up."

"Hell, Boss, nobody likes to swim in a pool that looks like dishwater. I would have tidied it up long before this if there hadn't been so much hooraw around here this week."

"Anybody too fussy to swim in it can stay dry. Quit jawing about it, Duke; I'll explain later. Films ready?"

"Five minutes."

"Good. Mike, do you know what a gun is?"

"A gun," Smith answered carefully, "is a piece of ordnance for throwing projectiles by the force of some explosive, as gunpowder, consisting of a tube or barrel closed at one end, where the-"

"Okay, okay. Do you grok it?"

"I am not sure."

"Have you ever seen a gun?"

"I do not know."

"Why, certainly you have," Jill interrupted. "Mike, think back to that time we were talking about, in the room with the grass on the floor-but don't get upset now! The big man hit me, you remember."

"Yes."

"The other man pointed something at me. In his hand."

"Yes. He pointed a bad thing at you."

"That was a gun."

"I had thinked that the word for that bad thing might be 'gun.' The Webster's New International Dictionary of the English Language, Third Edition, published in-"

"That's fine, son," Harshaw said hastily. "That was certainly a gun. Now listen to me carefully. If someone points a gun at Jill again, what will you do?"

Smith paused rather longer than usual. "You will not be angry if I waste food?"

"No, I would not be angry. Under those circumstances no one would be angry at you. But I am trying to find out something else. Could you make just the gun go away, without making the man who is pointing it go away?"

Smith considered it. "Save the food?"

"Uh, that isn't quite what I mean. Could you cause the gun to go away without hurting the man?"

"Jubal, he would not hurt at all. I would make the gun go away, but the man I would just stop. He would feel no pain. He would simply be discorporate. The food he leaves after him would not damage at all."

Harshaw sighed. "Yes, I'm sure that's the way it would be. But could you cause to go away just the gun? Not do anything else? Not 'stop' the man, not kill him, just let him go on living?"

Smith considered it. "That would be much easier than doing both at once. But, Jubal, if I left him still corporate, he might still hurt Jill. Or so I grok it."

Harshaw stopped long enough to remind himself that this baby innocent was neither babyish nor innocent - was in fact sophisticated in a culture which he was beginning to realize, however dimly, was far in advance of human culture in some very mysterious ways ... and that these naive remarks came from a superman - or what would do in place of a "superman" for the time being. Then he answered Smith, choosing his words most carefully as he had in mind a dangerous experiment and did not want disaster to follow from semantic mishap.

"Mike ... if you reach a-'cusp' ? where you must do something in order to protect Jill, you do it."

"Yes, Jubal. I will."

"Don't worry about wasting food. Don't worry about anything else. Protect Jill."

"Always I will protect Jill."

"Good. But suppose a man pointed a gun at someone - or simply had it in his hand. Suppose you did not want or need to kill him ? but you needed to make the gun go away. Could you do it?"

Mike paused only briefly. "I think I grok it. A gun is a wrong thing. But it might be needful for the man to remain corporate." He thought. "I can do it."

"Good. Mike, I am going to show you a gun. A gun is a wrong thing."

"A gun is a very wrong thing. I will make it go away."

"Don't make it go away as soon as you see it."

"Not?"

"Not. I will lift the gun and start to point it at you. Like this. Before I can get it pointed at you, make it go away. But don't stop me, don't hurt me, don't kill me, don't do anything to me. Just the gun. Don't waste me as food, either."

"Oh, I never would," Mike said earnestly. "When you discorporate, my brother Jubal, I hope to be allowed to eat of you myself, praising and cherishing you with every bite . . . until I grok you in fullness."

Harshaw controlled a seasick reflex he had not felt in decades and answered gravely, "Thank you, Mike."

"It is I who must thank you, my brother - and if it should come to be that I am selected before you, I hope that you will find me worthy of grokking. Sharing me with Jill. You would share me with Jill? Please?"

Harshaw glanced at Jill, saw that she had kept her face serene - reflected that she probably was a rock-steady scrub nurse. "I will share you with Jill," he said solemnly. "But, Mike, no one of us will be food today, nor any time soon. Right now I am going to show you this gun-and you wait until I say ... and then you be very careful, because I have, many things to do before I am ready to discorporate."

"I will be careful, my brother."

"All right." Harshaw leaned over, grunting slightly, and opened a lower drawer of his desk. "Look in here, Mike. See the gun? I'm going to pick it up. But don't do anything until I tell you to. Girls - get up and move away to the left; I don't want it pointed at you. Okay. Mike, not yet." Harshaw reached for the gun, a very elderly police special, took it out of the drawer. "Get ready, Mike. Now!"-and Harshaw did his very best to get the weapon aimed at the Man from Mars.

His hand was suddenly empty. No shock, no jar, no twisting-the gun was gone and that was all.

Jubal found that he was shaking, so he stopped it. "Perfect," he said to Mike. "You got it before I had it aimed at you. That's utterly perfect."

"I am happy."

"So am I. Duke, did that get in the camera?"

"Yup. I put in fresh film cartridges. You didn't say."

"Good." Harshaw sighed and found that he was very tired. "That's all today, kids. Run along. Go swimming. You, too, Anne."

Anne said, "Boss? You'll tell me what the films show?"

"Want to stay and see them?"

"Oh, no! I couldn't, not the parts I Witnessed. But I would like to know - later - whether or not they show that I've slipped my clutches."

"All right."

Chapter 13

WHEN THEY HAD GONE, Harshaw started to give instructions to Duke - then instead said grumpily, "What are you looking sour about?"

"Boss, when are we going to get rid of that ghoul?"

"'Ghoul'? Why, you provincial lout!"

"Okay, so I come from Kansas. You won't find any cases of cannibalism in Kansas - they were all farther west. I've got my own opinions about who is a lout and who isn't ... but I'm eating in the kitchen until we get rid of him."

Harshaw said icily, "So? Don't put yourself out. Anne can have your closing check ready in five minutes ... and it ought not to take you more than ten minutes to pack up your comic books and your other shirt."

Duke had been setting up a projector. He stopped and straightened up. "Oh, I didn't mean that I was quitting."

"It means exactly that to me, son."

"But-I mean, what the hell? I've eaten in the kitchen lots of times."

"So you have. For your own convenience, or to keep from making extra work for the girls. Or some such. You can have breakfast in bed, for all of me, if you can bribe the girls to serve it to you. But nobody who sleeps under my roof refuses to eat at my table because he doesn't want to eat with others who eat there. I happen to be of an almost extinct breed, an old-fashioned gentleman - which means I can be a real revolving son of bitch when it suits me. And it suits me right now ... which is to say that no ignorant, superstitious, prejudiced bumpkin is permitted to tell me who is, or is not, fit to eat at my table. If I choose to dine with publicans and sinners, that is my business. But I do not choose to break bread with Pharisees."

Duke turned red and said slowly, "I ought to pop you one - and I would, if you were my age."

"Don't let that stop you, Duke. I may be tougher than you think and if I'm not, the commotion will probably bring the others in. Do you think you can handle the Man from Mars?"

"Him? I could break him in two with one hand!"

"Probably ... if you could lay a hand on him."

"Huh?"

"You saw me try to point a pistol at him. Duke - where's that pistol? Before you go flexing your biceps, stop and think - or whatever it is you do in place of thinking. Find that pistol. Then tell me whether or not you still think you can break Mike in two. But find the pistol first."

Duke wrinkled his forehead, then went ahead setting up the projector. "Some sort of sleight-of-hand. The films will show it."

Harshaw said, "Duke. Stop fiddling with that projector. Sit down. I'll take care of it after you've left and run off the films myself. But I want to talk to you a few moments first."

"Huh? Jubal, I don't want you touching this projector. Every time you do, you get it out of whack. It's a delicate piece of machinery."

"Sit down, I said."

"But-"

"It's my projector, Duke. I'll bust the damned thing if it suits me. Or I'll get Larry to run it for me. But I do not accept service from a man after he has resigned from my employ."

"Hell, I didn't resign! You got nasty and sounded off and fired me - for no reason."

"Sit down, Duke," Harshaw said quietly. "Either sit down ... and let me try to save your life -or get off this place as fast as you can and let me send your clothes and wages after you. Don't stop to pack; it's too risky. You might not live that long."

"What the hell do you mean?"

"Exactly what I say. Duke, it's irrelevant whether you resigned or were fired; you terminated your employment here when you announced that you would no longer eat at my table. Nevertheless I would find it distasteful for you to be killed on my premises. So sit down and I will do my best to avoid it."

Duke looked startled, opened his mouth-closed it and sat down. Harshaw went on, "Are you Mike's water brother?"

"Huh? Of course not. Oh, I've heard such chatter - but it's nonsense, if you ask me."

"It is not nonsense and nobody asked you; you aren't competent to have an opinion about it." Harshaw frowned. "That's too bad. I can see that I am not only going to have to let you go -and, Duke, I don't want to fire you; you do a good job of keeping the gadgetry around here working properly and thereby save me from being annoyed by mechanical buffoonery I am totally uninterested in. But I must not only get you safely off the place but I must also find out at once who else around here is not a water brother to Mike ... and either see to it that they become such - or get them off the place before anything happens to them." Jubal chewed his lip and stared at the ceiling. "Maybe it would be sufficient to exact a solemn promise from Mike not to hurt anyone without my specific permission. Mmmm ... no, I can't risk it. Too much horse play around here - and there is always the chance that Mike might misinterpret something that was meant in fun. Say if you - or Larry, rather, since you won't be here - picked up Jill and tossed her into the pool, Larry might wind up where that pistol went, before I could explain to Mike that it was all in fun and

Jill was not in danger. I wouldn't want Larry to die through my oversight. Larry is entitled to work out his own damn foolishness without having it cut short through my carelessness. Duke, I believe in everyone's working out his own damnation his own way ... but nevertheless that is no excuse for an adult to give a dynamite cap to a baby as a toy."

Duke said slowly, "Boss, you sound like you've come unzipped. Mike wouldn't hurt anybody - shucks, this cannibalism talk makes me want to throw up but don't get me wrong; I know he's just a savage, he doesn't know any better. Hell, Boss, he's gentle as a lamb. He would never hurt anybody."

"You think so?"

"I'm sure of it."

"So. You've got two or three guns in your room. I say he's dangerous. It's open season on Martians, so pick a gun you trust, go down to the swimming pool, and kill him. Don't worry about the law; I'll be your attorney and I guarantee that you'll never be indicted. Go ahead, do it!"

"Jubal ... you don't mean that."

"No. No, I don't really mean it. Because you can't. If you tried it, your gun would go where my pistol went - and if you hurried him you'd probably go with it. Duke, you don't know what you are fiddling with - and I don't either except that I know it's dangerous and you don't. Mike is not 'gentle as a lamb' and he is not a savage. I suspect we are the savages. Ever raise snakes?"

"Uh ... no."

"I did, when I was a kid. Thought I was going to be a zoologist then. One winter, down in Florida, I caught what I thought was a scarlet snake. Know what they look like?"

"I don't like snakes."

"Prejudice again, rank prejudice. Most snakes are harmless, useful, and fun to raise. The scarlet snake is a beauty - red, and black and yellow - docile and makes a fine pet. I think this little fellow was fond of me, in its dim reptilian fashion. Of course I knew how to handle snakes, how not to alarm them and not give them a chance to bite, because the bite of even a non-poisonous snake is a nuisance. But I was fond of this baby; he was the prize of my collection. I used to take him out and show him to people, holding him back of his head and letting him wrap himself around my wrist.

"One day I got a chance to show my collection to the herpetologist of the Tampa zoo - and I showed him my prize first. He almost had hysterics. My pet was not a scarlet snake - it was a young coral snake. The American cobra ... the most deadly snake in North America. Duke, do You see my point?"

"I see that raising snakes is dangerous. I could have told you."

"Oh, for Pete's sake! I already had rattlesnakes and water moccasins In my collection. A poisonous snake is not dangerous, not any more than a loaded gun is dangerous - in each case, if you handle it properly. The thing that made that coral snake dangerous was that I hadn't known what it was, what it could do. If, in my ignorance, I had handled it carelessly, it would have killed me as casually and as innocently as a kitten scratches. And that's what I'm trying to tell you about Mike. He seems as gentle as a lamb - and I'm convinced that he really is gentle and unreservedly friendly with anyone he trusts. But if he doesn't trust you - well, he's not what he seems to be. He seems like an ordinary young male human, rather underdeveloped, decidedly clumsy, and abysmally ignorant... but bright and very docile and eager to learn. All of which is true and not surprising, in view of his ancestry and his strange background. But, like my pet snake, Mike is more than he appears to be. If Mike does not trust you, blindly and all out, he can be instantly aggressive and much more deadly than that coral snake. Especially if he thinks you are harming one of his water brothers, such as Jill-or me."

Harshaw shook his head sadly. "Duke, if you had given way to your natural impulse to take a poke at me, a few minutes ago when I told you some homely truths about yourself, and if Mike had been standing in that doorway behind you ... well, I'm convinced that you would have stood no chance at all. None. You would have been dead before you knew it, much too quickly for me to stop him. Mike would then have been sorrowfully apologetic over having 'wasted food' - namely your big, beefy carcass. Oh, he would feel guilty about that; you heard him a while ago. But he wouldn't feel guilty about killing you; that would just be a necessity you had forced on him ... and not a matter of any great importance anyhow, even to you. You see, Mike believes that your soul is immortal."

"Huh? Well, hell, so do I. But-"

"Do you?" Jubal said bleakly. "I wonder."

"Why, certainly I do! Oh, I admit I don't go to church much, but I was brought up right. I'm no infidel. I've got faith."

"Good. Though I've never been able to understand 'faith' myself, nor to see how a just God could expect his creatures to pick the one true religion out of an infinitude of false ones - by faith alone. It strikes me as a sloppy way to run an organization, whether a universe or a smaller one. However, since you do have faith and it includes belief in your own immortality, we need not trouble further over the probability that your prejudices will result in your early demise. Do you want to be cremated or buried?"

"Huh? Oh, for cripe's sake, Jubal, quit trying to get my goat."

"Not at all. I can't guarantee to get you off my place safely as long as you persist in thinking that a coral snake is a harmless scarlet snake-any blunder you make may be your last. But I promise you I won't let Mike eat you."

Duke's mouth dropped open. At last he managed to answer, explosively, profanely, and quite incoherently. Harshaw listened, then said testily, "All right, all right, but pipe down. You can make any arrangements with Mike you like. I thought I was doing you a favor." Harshaw turned and bent over the projector. "I want to see these pictures. Stick around, if you want to, until I'm through. Prob'ly safer. Damn!" he added. "The pesky thing savaged me."

"You tried to force it. Here-" Duke completed the adjustment Harshaw had muffed, then went ahead and inserted the first film cartridge. Neither of them reopened the question of whether Duke was, or was not, still working for Jubal. The cameras were Mitchell servos; the projector was a Yashinon tabletop tank, with an adapter to permit it to receive Land Solid-Sight-Sound 4mm film. Shortly they were listening to and watching the events leading up to the disappearance of the empty brandy case.

Jubal watched the box being thrown at his head, saw it wink out in midair. "That's enough," he said. "Anne will be pleased to know that the cameras back her up. Duke, let's repeat that last bit in slow motion."

"Okay." Duke spooled back, then announced, "This is ten-to-one."

The scene was the same but the slowed-down sound was useless; Duke switched it off. The box floated slowly from Jill's hands toward Jubal's head, then quite suddenly ceased to be. But it did not simply wink out; under slow-motion projection it could be seen shrinking, smaller and smaller until it was no longer there.

Jubal nodded thoughtfully. "Duke, can you slow it down still more?"

"Just a sec. Something is fouled up with the stereo."

"What?"

"Darned if I can figure it out. It looked all right on the fast run. But when I slowed it down, the depth effect was reversed. You saw it. That box went away from us fast, mighty fast-but it always looked closer than the wall. Swapped parallax, of course. But I never took that cartridge off the spindle. Gremlins."

"Oh. Hold it, Duke. Run the film from the other camera."

"Unh ... oh, I see, That'll give us a ninety-degree cross on it and we'll see properly even if I did jimmy this film somehow." Duke changed cartridges. "Zip through the first part, okay? Then undercranked ten-to-one on the part that counts."

"Go ahead."

The scene was the same save for angle. When the image of Jill grabbed the box, Duke slowed down the show and again they watched the box go away.

Duke cursed. "Something was fouled up with the second camera too."

"So?"

"Of course. It was looking at it around from the side so the box - should have gone out of the frame to one side or the other. Instead it went - straight away from us again. Well, didn't it? You saw it. Straight away from us."

"Yes," agreed Jubal. "'Straight away from us.'"

"But it can't - not from both angles."

"What do you mean, it can't? It already did." Harshaw added, "If we I had used doppler-radar in place of each of those cameras, I wonder what they would have shown?"

"How should I know? I'm going to take both these cameras apart."

"Don't bother."

"But-"

"Don't waste your time, Duke; the cameras are all right. What is exactly ninety degrees from everything else?"

"I'm no good at riddles."

"It's not a riddle and I meant it seriously. I could refer you to Mr. A. Square from Flatland, but I'll answer it myself. What is exactly at right angles to everything else? Answer: two dead bodies, one old pistol, and an empty liquor case."

"What the deuce do you mean, Boss?"

"I never spoke more plainly in my life. Try believing what the cameras see instead of insisting that the cameras must be at fault because what they saw was not what you expected. Let's see the other films."

Harshaw made no comment as they were shown; they added nothing to what he already knew but did confirm and substantiate. The ash tray when floating near the ceiling had been out of camera angle, but its leisurely descent and landing had been recorded. The pistol's image in the stereo tank was quite small but, so far as could be seen, the pistol had done just what the box appeared to have done: shrunk away into the far distance without moving. Since Harshaw had been gripping it tightly when it had shrunk out of his hand, he was satisfied - if "satisfied" was the right word, he added grumpily to himself. "Convinced" at least.

"Duke, when you get time, I want duplicate prints of all of those."

Duke hesitated. "You mean I'm still working here?"

"What? Oh, damn it! You can't eat in the kitchen, and Duke, try to cut your local prejudices out of the circuit and just while. Try really hard."

"I'll listen."

"When Mike asked for the privilege of eating my stringy old carcass, he was doing me the greatest honor that he knew of - by the only rules he knows. What he had 'learned at his mother's knee,' so to speak. Do you savvy that? You heard his tone of voice, you saw his manner. He was paying me his highest compliment - and asking of me a boon. You see? Never mind what they think of such things in Kansas; Mike uses the values taught him on Mars."

"I think I'll take Kansas."

"Well," admitted Jubal, "so do I. But it is not a matter of free choice for me, nor for you-nor for Mike. All three of us are prisoners of our early indoctrinations, for it is hard, very nearly impossible, to shake off one's earliest training. Duke, can you get it through your skull that if you had been born on Mars and brought up by Martians, you yourself would have exactly the same attitude toward eating and being eaten that Mike has?"

Duke considered it, then shook his head. "I won't buy it, Jubal. Sure, about most things it's just Mike's hard luck that he wasn't brought up in civilization - and my good luck that I was. I'm willing to make allowances for him. But this is different, this is an instinct."

"'Instinct, dreck!"

"But it is. I didn't get any 'training at my mother's knee' not to be a cannibal. Hell, I didn't need it; I've always known it was a sin - a nasty one. Why, the mere thought of it makes my stomach do a flip - flop. It's a basic instinct."

Jubal groaned. "Duke, how could you learn so much about machinery and never learn anything about how you yourself tick? That nausea you feel - that's not an instinct; that's a conditioned reflex. Your mother didn't have to say to you, 'Mustn't eat your playmates, dear; that's not nice,' because you soaked it up from our whole culture - and so did I. Jokes about cannibals and missionaries, cartoons, fairy tales, horror stories, endless little things. But it has nothing to do with instinct. Shucks, son, it couldn't possibly be instinct ... because cannibalism is historically one of the most widespread of human customs, extending through every branch of the human race. Your ancestors, my ancestors, everybody."

"Your ancestors, maybe. Don't bring mine into it."

"Um. Duke, didn't you tell me you had some Indian blood?"

"Huh? Yeah, an eighth. In the Army they used to call me 'Chief.' What of it? I'm not ashamed of it. I'm proud of it,"

"No reason to be ashamed - nor proud, either, for that matter, But, while both of us certainly have cannibals in our family trees, chances are that you are a good many generations closer to cannibals than I am, because-"

"Why, you baldheaded old-"

"Simmer down! You were going to listen; remember? Ritual cannibalism was a widespread custom among aboriginal American cultures. But don't take my word for it; look it up. Besides that, both of us, simply as North Americans, stand a better than even chance of having a touch of the Congo in us without knowing it ... and there you are again. But even if both of us were Simon-pure North European stock, certified by the American Kennel Club, (a silly notion, since the amount of casual bastardy among humans is far in excess of that ever admitted) - but even if we were, such ancestry would merely tell us which cannibals we are descended from, because every branch of the human race, without any exception, has practiced cannibalism in the course of its history. Duke, it's silly to talk about a practice being 'against instinct' when hundreds of millions of human beings have followed that practice."

"But-All right, all right, I should know better than to argue with you, Jubal; you can always twist things around your way. But suppose we all did come from savages who didn't know any better - I'm not admitting it but just supposing. Suppose we did. What of it? We're civilized now. Or at least I am."

Jubal grinned cheerfully. "Implying that I am not. Son, quite aside from my own conditioned reflex against munching a roast haunch of - well, you, for example - quite aside from that trained-in emotional prejudice, for coldly practical reasons I regard our taboo against cannibalism as an excellent idea ... because we are not civilized."

"Huh?"

"Obvious. If we didn't have a tribal taboo about the matter so strong that you honestly believed it was an instinct, I can think of a long list of people I wouldn't trust with my back turned, not with the price of beef what it is today. Eh?"

Duke grudged a grin. "Maybe you've got something there. I wouldn't want to take a chance on my ex-mother-in-law. She hates my guts."

"You see? Or how about our charming neighbour on the south, who is so casual about other people's fences and live stock during the hunting season? I wouldn't want to bet that you and I wouldn't wind up in his freezer if we didn't have that taboo. But Mike I would trust utterly-because Mike is civilized."

"Huh?"

"Mike is utterly civilized, Martian style. Duke, I don't understand the Martian viewpoint and probably never shall. But I've talked enough with Mike on this subject to know that the Martian practice isn't at all dog-eat-dog ... or Martian-eat-Martian. Surely they eat their dead, instead of burying them, or burning them, or exposing them to vultures. But the custom is highly formalized and deeply religious. A Martian is never grabbed and butchered against his will. In fact, so far as I have been able to find out, the idea of murder isn't even a Martian concept. Instead, a Martian dies when he decides to die, having discussed it with and been advised by his friends and having received the consent of his ancestors' ghosts to join them. Having decided to die, he does so, as easily as you close your eyes - no violence, no lingering illness, not even an overdose of sleeping pills. One second he is alive and well, the next second he's a ghost, with a dead body left over. Then, or maybe later (Mike is always vague about time factors) his closest friends eat what he no longer has any use for, 'grokking' him, as Mike would say, and praising his virtues as they spread the mustard. The new ghost attends the feast himself, as it is sort of a bar mitzvah or confirmation service by which the ghost attains the status of 'Old One' - becomes an elder statesman, if I understand it."

Duke made a face of disgust. "God, what superstitious junk! Turns my stomach."

"Does it? To Mike it's a most solemn - but joyful - religious ceremony."

Duke snorted, "Jubal, you don't believe that stuff about ghosts, do you? Oh, I know you don't. It's just cannibalism combined with the rankest sort of superstition."

"Well, now, I wouldn't go that far. I admit that I find these Martian 'Old Ones' a little hard to swallow - but Mike speaks of them as matter-of-factly as we talk about last Wednesday. As for the rest - Duke, what church were you brought up in?" Duke told him; Jubal nodded and went on: "I thought it might be; in Kansas most belong to yours or to one enough like it that you would have to look at the sign out in front to tell the difference. Tell me . . . how did you feel when you took part in the symbolic cannibalism that plays so paramount a part in your church's rituals?"

Duke stared at him. "What the devil do you mean?"

Jubal blinked solemnly back. "Were you actually a church member? Or were you simply sent to Sunday School as a kid?"

"Huh? Why, certainly I was a church member. My whole family was. I still am . . . even though I don't go much."

"I thought perhaps you weren't entitled to receive it, But apparently you are, so you know what I'm talking about, if you stop to think." Jubal stood up suddenly. "But I don't belong to your church nor to Mike's, so I shan't attempt to argue the subtle differences between one form of ritual cannibalism and another. Duke, I've got urgent work to do; I can't spend any more time trying to shake you loose from your prejudices. Are you leaving? If you are, I think I had better chaperone you off the place, make sure you're safe. Or do you want to stay? Stay and behave yourself, I mean - eat at the table with the rest of us cannibals." Duke frowned. "Reckon I'll stay."

"Suit yourself. Because from this moment forward I wash my hands of any responsibility for your safety. You saw those movies; if you're bright enough to hit the floor with your hat, you've figured out that this manMartian we've got staying with us can be unpredictably dangerous."

Duke nodded. "I got the point. I'm not as stupid as you think I am, Jubal. But I'm not letting Mike run me off the place, either." He added, "You say he's dangerous ... and I see how he could be, if he got stirred up. But I'm not going to stir him up. Shucks, Jubal, I like the little dope, most ways."

"Mmm ... damn it, I still think you underestimate him, Duke. See here, if you really do feel friendly toward him, the best thing you can do is to offer him a glass of water. Share it with him. Understand me? Become his 'Water brother.'"

"Um. I'll think about it."

"But if you do, Duke, don't fake it. If Mike accepts your offer of water-brotherhood, he'll be dead serious about it. He'll trust you utterly, no matter what - so don't do it unless you are equally willing to trust him and stand by him, no matter how rough things get. Either all out - or don't do it."

"I understood that. That's why I said, 'I'll think about it.'"

"Okay. But don't take too long making up your mind ... because I expect things to get very rough before long."

Chapter 14

IN THE VOLANT LAND OF LAPUTA, according to the journal of Lemuel Gulliver recounting his Travels into Several Remote Nations of the World, no person of importance ever listened or spoke without the help of a servant, known as a "climenole" in Laputian - or "flapper" in rough English translation, as such a servant's only duty was to flap the mouth and ears of his master with a dried bladder whenever, in the opinion of the servant, it was desirable for his master to speak or listen.

Without the consent of his flapper it was impossible to gain the attention of any Laputian of the master class.

Gulliver's journal is usually regarded by Terrans as a pack of lies composed by a sour churchman. As may be, there can be no doubt that, at this time, the "flapper" system was widely used on the planet Earth and had been extended, refined, and multiplied until a Laputian would not have recognized it other than in spirit.

In an earlier, simpler day one prime duty of any Terran sovereign was to make himself publicly available on frequent occasions so that even the lowliest might come before him without any intermediary of any sort and demand judgment. Traces of this aspect of primitive sovereignty persisted on Earth long after kings became scarce and impotent. It continued to be the right of an Englishman to "Cry Harold!" although few knew it and none did it. Successful city political bosses held open court all through the twentieth century, leaving wide their office doors and listening to any gandy dancer or bindlestiff who came in.

The principle itself was never abolished, being embalmed in Articles I & IX of the Amendments to the Constitution of the United States of America-and therefore nominal law for many humans-even though the basic document had been almost superseded in actual practice by the Articles of World Federation.

But at the time the Federation Ship Champion returned to Terra from Mars, the "flapper system" had been expanding for more than a century and had reached a stage of great intricacy, with many persons employed solely in carrying out its rituals. The importance of a public personage could be estimated by the number of layers of flappers cutting him off from ready congress with the plebian mob. They were not called "flappers," but were known as executive assistants, private secretaries, secretaries to private secretaries, press secretaries, receptionists, appointment clerks, et cetera. In fact the titles could be anything-or (with some of the most puissant) no title at all, but they could all be identified as "flappers" by function: each one held arbitrary and concatenative veto over any attempted communication from the outside world to the Great Man who was the nominal superior of the flapper.

This web of intermediary officials surrounding every V.I.P. naturally caused to grow up a class of unofficials whose function it was to flap the ear of the Great Man without permission from the official flappers, doing so (usually) on social or pseudo-social occasions or (with the most successful) via backdoor privileged access or unlisted telephone number. These unofficials usually had no formal titles but were called a variety of names: "golfing companion," "kitchen cabinet," "lobbyist," "elder statesman," "five-percenter," and so forth. They existed in benign symbiosis with the official barricade of flappers, since it was recognized almost universally that the tighter the system the more need for a safety valve.

The most successful of the unofficials often grew webs of flappers of their own, until they were almost as hard to reach as the Great Man whose unofficial contacts they were . . . in which case secondary unofficials sprang up to circumvent the flappers of the primary unofficial. With a personage of foremost importance, such as the Secretary General of the World Federation of Free States, the maze of bypasses through unofficials would be as formidable as were the official phalanges of flappers surrounding a person merely very important.

Some Terran students have suggested that the Laputians must have been, in fact, visiting Martians, citing not only their very unworldly obsession with the contemplative life but also two concrete matters: the Laputians were alleged to have known about Mars' two moons at least a century and half before they were observed by Terran astronomers, and, secondly, Laputa itself was described in size and shape and propulsion such that the only English term that fits is "flying saucer." But that theory will not wash, as the flapper system, basic to Laputian society, was unknown on Mars. The Martian Old Ones, not hampered by bodies subject to spacetime, would have had as little use for flappers as a snake has for shoes. Martians still corporate conceivably could use flappers but did not; the very concept ran contrary to their way of living.

A Martian having need of a few minutes or years of contemplation simply took it. If another Martian wished to speak with him, this friend would simply wait, as long as necessary. With all eternity to draw on there could be no reason for hurrying-in fact "hurry" was not a concept that could be symbolized in the Martian language and therefore must be presumed to be unthinkable. Speed, velocity, simultaneity, acceleration, and other mathematical abstractions having to do with the pattern of eternity were part of Martian mathematics, but not of Martian emotion, Contrariwise, the unceasing rush and turmoil of human existence came not from mathematical necessities of time but from the frantic urgency implicit in human sexual bipolarity.

Dr. Jubal Harshaw, professional clown, amateur subversive, and parasite by choice, had long attempted to eliminate "hurry" and all related emotions from his pattern. Being aware that he had but a short time left to live and having neither Martian nor Kansan faith in his own immortality, it was his purpose to live each golden moment as if it were eternity - without fear, without hope, but with sybaritic gusto. To this end he found that he required something larger than Diogenes' tub but smaller than Kubla's pleasure dome and its twice five miles of fertile ground with walls and towers girdled round; his was a simple little place, a few acres kept private with an electrified fence, a house of fourteen rooms or so, with running secretaries laid on and all other modern conveniences. To support his austerely upholstered nest and its rabble staff he put forth minimum effort for maximum return simply because it was easier to be rich than to be poor-Harshaw merely wished to live exactly as he liked, doing whatever he thought was best for him.

In consequence he felt honestly aggrieved that circumstances had forced on him a necessity for hurry and would not admit that he was enjoying himself more than he had in years.

This morning he found it needful to speak to the third planet's chief executive. He was fully aware of the flapper system that made such contact with the head of government all but impossible for the ordinary citizen, even though Harshaw himself disdained to surround himself with buffers suitable to his own rank. Harshaw answered his telephone himself if he happened to be at hand when it signaled because each call offered good odds that he would be justified in being gratifyingly rude to some stranger for daring to invade his privacy without cause - "cause" by Harshaw's definition, not by the stranger's.

Jubal knew that he could not hope to find the same conditions obtaining at the Executive Palace; Mr. Secretary General would not answer his own phone. But Harshaw had many years of practice in the art of outwitting human customs; he tackled the matter cheerfully, right after breakfast.

Much later he was tired and very frustrated. His name alone had carried him past three layers of the official flapper defense, and he was sufficiently a narrow-gauge V.I.P. that he was never quite switched off. Instead he was referred from secretary to secretary and wound up speaking voice-&-vision to a personable, urbane young man who seemed willing to discuss the matter endlessly and without visible irritation no matter what Harshaw said, but would not agree to connect him with the Honorable Mr. Douglas.

Harshaw knew that he would get action if he mentioned the Man from Mars and that he certainly would get very quick action if he claimed to have the Man from Mars with him, but he was far from certain that the resultant action would be a face-to-face hookup with Douglas. On the contrary, he calculated that any mention of Smith would kill any chance of reaching Douglas but would at once produce violent reaction from subordinates - which was not what he wanted. He knew from a lifetime of experience that it was always easier to dicker with the top man. With Ben Caxton's life very possibly at stake Harshaw could not risk failure through a subordinate's lack of authority or excess of ambition.

But this soft brushoff was trying his patience. Finally he snarled, "Young man, if you have no authority yourself, let me speak to someone who has! Put me through to Mr. Berquist."

The face of the staff stooge suddenly lost its smile and Jubal thought gleefully that he had at last pinked him in the quick. So he pushed his advantage. "Well? Don't just sit there! Get Gil on your inside line and tell him you've been keeping Jubal Harshaw waiting. Tell him how long you've kept me waiting." Jubal reviewed in his own excellent memory all that Witness Cavendish had reported concerning the missing Berquist, plus the report on him from the detective service. Yup, he thought happily, this lad is at least three rungs down the ladder from where Berquist was, so let's shake him up a little ... and climb a couple of rungs in the process.

The face said woodenly, "We have no Mr. Berquist here."

"I don't care where he is. Get him! If you don't know Gil Berquist personally, ask your boss. Mr. Gilbert Berquist, personal assistant to Mr. Douglas. If you've been around the Palace more than two weeks you've at least seen Mr. Berquist at a distance-thirty-five years old, about six feet and a hundred and eighty pounds, sandy hair a little thin on top, smiles a lot and has perfect teeth. You've seen him. If you don't dare disturb him yourself, dump it in your boss's lap. But quit biting your nails and do something. I'm getting annoyed."

Without expression the young man said, "Please hold on. I will enquire."

"I certainly will hold on. Get me Gil." The image in the phone was replaced by a moving abstract pattern; a pleasant female voice recorded, said, "Please wait while your call is completed. This delay is not being charged to your account. Please relax while-" Soothing music came up and covered the voice; Jubal sat back and looked around. Anne was waiting, reading, and safely out of the telephone's vision angle. On his other side the Man from Mars was also out of the telephone's sight pickup and was watching images in stereovision and listening via ear plugs.

Jubal reflected that he must remember to have that obscene babble box placed in the basement where it belonged, once this emergency was over. "What you got, son?" he asked, leaned over and turned on the speaker to low gain.

Mike answered, "I don't know, Jubal."

The sound confirmed what Jubal had suspected from his glance at the image: Smith was listening to a broadcast of a Fosterite service. The imaged Shepherd was not preaching but seemed to be reading church notices: "-junior Spiritin-Action team will give a practice demonstration before the supper, so come early and see the fur fly! Our team coach, Brother Hornsby, has asked me to tell you boys on the team to fetch only your helmets, gloves, and sticks-we aren't going after sinners this time. However, the Little Cherubim will be on hand with their first-aid kits in case of excessive zeal." The Shepherd paused and smiled broadly, "And now wonderful news, My Children! A message from the Angel Ramzai for Brother Arthur Renwick and his good wife Dorothy. Your prayer has been approved and you will go to heaven at dawn Thursday morning! Stand up, Art! Stand up, Dottie! Take a bow!"

The camera angle made a reverse cut, showing the congregation and centering on Brother and Sister Renwick. To wild applause and shouts of "Hallelujah!" Brother Renwick was responding with a boxer's handshake over his head, while his wife blushed and smiled and dabbed at her eyes beside him.

The camera cut back as the Shepherd held up his hand for silence. He went on briskly, "The Bon Voyage party for the Renwicks will start promptly at midnight and the doors will be locked at that time - so get here early and let's make this the happiest revelry our flock has ever seen, for we're all proud of Art and Dottie. Funeral services will be held thirty minutes after dawn, with breakfast immediately following for the benefit of those who have to get to work early." The Shepherd suddenly looked very stern and the camera panned in until his head filled the tank. "After our last Bon Voyage, the Sexton found an empty pint bottle in one of the Happiness rooms ... of a brand distilled by sinners. That's past and done, as the brother who slipped has confessed and paid penance sevenfold, even refusing the usual cash discount - I'm sure he won't backslide. But stop and think, My Children. Is it worth risking eternal happiness to save a few pennies on an article of worldly merchandise? Always look for that happy, holy seal-of-approval with Bishop Digby's smiling face on it. Don't let a sinner palm off on you something 'just as good.' Our sponsors support us; they deserve your support. Brother Art, I'm sorry to have to bring up such a subject-"

"That's okay, Shepherd! Pour it on!"

"-at a time of such great happiness. But we must never forget that-" Jubal reached over and switched off the speaker circuit.

"Mike, that's not anything you need to see."

"Not?"

"Uh-" Jubal thought about it. Shucks, the boy was going to have to learn about such things sooner or later. "All right, go ahead. But come talk to me about it later."

"Yes, Jubal."

Harshaw was about to add some advice intended to offset Mike's tendency to take literally anything he saw or heard. But the telephone's soothing "hold" music suddenly went down and out, and the screen filled with an image - a man in his forties whom Jubal at once labeled in his mind as "cop."

Jubal said aggressively, "You aren't Gil Berquist."

The man said, "What is your interest in Gilbert Berquist?"

Jubal answered with pained patience, "I wish to speak to him. See here, my good man, are you a public employee?"

The man barely hesitated. "Yes. You must-"

"I 'must' nothing! I am a citizen in good standing and my taxes go to pay your wages. All morning I have been trying to make a simple phone call, and I have been passed from one butterfly-brained bovine to another, and every one of them feeding out of the public trough. I am sick of it and I do not intend to put up with it any longer. And now you. Give me your name, your job title, and your pay number. Then I'll speak to Mr. Berquist."

"You didn't answer my question."

"Come, come! I don't have to answer your questions; I am a private citizen. But you are not ... and the question I asked you any citizen may demand of any public servant. O'Kelly versus State of California 1972. I demand that you identify yourself: name, job, number."

The man answered tonelessly, "You are Doctor Jubal Harshaw. You are calling from-"

"So that's what took so long? Stopping to have this call traced. That was stupid. I am at home and my address can be obtained from any public library, post office, or telephone information service. As to who I am, everyone knows who I am. Everyone who can read, that is. Can you read?"

The man went on, "Dr. Harshaw, I am a police officer and I require your cooperation. What is your reason-"

"Pooh to you, sir! I am a lawyer. A private citizen is required to cooperate with the police under certain specified conditions only. For example, during hot pursuit - in which case the police officer may still be required to show his credentials. Is this 'hot pursuit,' sir? Are you about to dive through this blasted instrument? Second, a private citizen may be required to cooperate within reasonable and lawful limits in the course of police investigation-"

"This is an investigation."

"Of what, sir? Before you may require my cooperation in an investigation, you must identify yourself, satisfy me as to your bona-fides, state your purpose, and - if I so require - cite the code and show that a 'reasonable necessity' exists. You have done none of these. I wish to speak to Mr. Berquist."

The man's jaw muscles were jumping but he answered quietly, "Dr. Harshaw, I am Captain Heinrich of the Federation S.S. Bureau. The fact that you reached me by calling the Executive Palace should be ample proof that I am who I say I am. However-" He took out a wallet, flipped it open, and held it close to his own vision pickup. The picture blurred, then quickly refocused. Harshaw glanced at the I. D. thus displayed; it looked authentic enough, he decided - especially as he did not care whether it was authentic or not.

"Very well, Captain," he growled. "Will you now explain to me why you are keeping me from speaking with Mr. Berquist?"

"Mr. Berquist is not available."

"Then why didn't you say so? In that case, transfer my call to someone of Berquist's rank. I mean one of the half-dozen people who work directly with the Secretary General, as Gil does. I don't propose again to be fobbed off on some junior assistant flunky with no authority to blow his own nose! If Gil isn't there and can't handle it, then for God's sake get me someone of equal rank who can!"

"You have been trying to telephone the Secretary General."

"Precisely."

"Very well, you may explain to me what business you have with the Secretary General."

"And I may not. Are you a confidential assistant to the Secretary General? Are you privy to his secrets?"

"That's beside the point."

"That's exactly the point. As a police officer, you should know better. I shall explain, to some person known to me to be cleared for sensitive material and in Mr. Douglas' confidence, just enough to make sure that the Secretary General speaks to me. Are you sure Mr. Berquist can't be reached?"

"Quite sure."

"That's too bad, he could have handled it quickly. Then it will have to be someone else of his rank."

"If it's that secret, you shouldn't be calling over a public phone."

"My good Captain! I was not born yesterday, and neither were you.

Since you had this call traced, I am sure you are aware that my personal I phone is equipped to receive a maximum-security return call."

The Special Service officer made no direct reply. Instead he answered, "Doctor, I'll be blunt and save time. Until you explain your business, you aren't going to get anywhere. If you switch off and call the Palace again, your call will be routed to this office. Call a hundred times ... or a month from now. Same thing. Until you decide to cooperate."

Jubal smiled happily. "It won't be necessary now, as you have let slip - unwittingly, or was it intentional? - the one datum needed before we act. If we do. I can hold them off the rest of the day ... but the code word is no longer 'Berquist.'"

"What the devil do you mean?"

"My dear Captain, please! Not over an unscrambled circuit surely? But you know, or should know, that I am a senior philosophunculist on active duty."

"Repeat?"

"Haven't you studied amphigory? Gad, what they teach in schools these days! Go back to your pinochle game; I don't need you." Jubal switched off at once, set the phone for ten minutes refusal, said, "Come along, kids," and returned to his favorite loafing spot near the pool. There he cautioned Anne to keep her Witness robe at hand day and night until further notice, told Mike to stay in earshot, and gave Miriam instructions concerning the telephone. Then he relaxed.

He was not displeased with his efforts. He had not expected to be able to reach the Secretary General at once, through official channels. He felt that his morning's reconnaissance had developed at least one weak spot in the wall surrounding the Secretary and he expected - or hoped - that his stormy session with Captain Heinrich would bring a return call ... from a higher level.

Or something.

If not, the exchange of compliments with the S.S. cop had been rewarding in itself and had left him in a warm glow of artistic post-fructification. Harshaw held that certain feet were made for stepping on, in order to improve the breed, promote the general welfare, and minimize the ancient insolence of office; he had seen at once that Heinrich had such feet.

But, if no action developed, Harshaw wondered how long he could afford to wait? In addition to the pending collapse of his "time bomb" and the fact that he had, in effect, promised Jill that he would take steps on behalf of Ben Caxton (why couldn't the child see that Ben probably could not be helped - indeed, was almost certainly beyond help - and that any direct or hasty action minimized Mike's chance of keeping his freedom?) - in addition to these two factors, something new was crowding him: Duke was gone.

Gone for the day, gone for good (or gone for bad), Jubal did not know. Duke had been present at dinner the night before, had not shown up for breakfast. Neither event was noteworthy in Harshaw's loosely coupled household and no one else appeared to have missed Duke. Jubal himself would not ordinarily have noticed unless he had had occasion to yell for Duke. But this morning Jubal had, of course, noticed ... and he had refrained from shouting for Duke at least twice on occasions when he normally would have done so.

Jubal looked glumly across the pool, watched Mike attempt to perform a dive exactly as Dorcas had just performed it, and admitted to himself that he had not shouted for Duke when he needed him, on purpose. The truth was that he simply did not want to ask the Bear what had happened to Algy. The Bear might answer.

Well, there was only one way to cope with that sort of weakness. "Mike! Come here."

"Yes, Jubal." The Man from Mars got out of the pool and trotted over like an eager puppy, waited. Harshaw looked him over, decided that he must weigh at least twenty pounds more than he had on arrival . . . and all of it appeared to be muscle. "Mike, do you know where Duke is?"

"No, Jubal."

Well, that settled it; the boy didn't know how to lie - wait, hold it! Jubal reminded himself of Mike's computer-like habit of answering exactly the question asked ... and Mike had not known, or had not appeared to know, where that pesky box was, once it was gone. "Mike, when did you see him last?"

"I saw Duke go upstairs when Jill and I came downstairs, this morning when time to cook breakfast." Mike added proudly, "I helped cooking."

"That was the last time you saw Duke?"

"I am not see Duke since, Jubal. I proudly burned toast."

"I'll bet you did. You'll make some woman a fine husband yet, if you aren't careful."

"Oh, I burned it most carefully."

"Jubal-"

"Huh? Yes, Anne?"

"Duke grabbed an early breakfast and lit out for town. I thought you knew."

"Well," Jubal temporized, "he did say something about it. I thought he intended to leave after lunch today. No matter, it'll keep." Jubal realized suddenly that a great load had been lifted from his mind. Not that Duke meant anything to him, other than as an efficient handyman

- no, of course not! For many years he had avoided letting any human being be important to him - but, just the same, he had to admit that it would have troubled him. A little, anyhow.

What statute was violated, if any, in turning a man exactly ninety degrees from everything else?

Not murder, not as long as the lad used it only in self-defense or in the proper defense of another, such as Jill. Possibly the supposedly obsolete Pennsylvania laws against witchcraft would apply ... but it would be interesting to see how a prosecutor would manage to word an indictment.

A civil action might lie. Could harboring the Man from Mars be construed as "maintaining an attractive nuisance?" Possibly. But it was more likely that radically new rules of law must evolve. Mike had already kicked the bottom out of both medicine and physics, even though the practitioners of such were still innocently unaware of the chaos facing them. Harshaw dug far back into his memory and recalled the personal tragedy that relativistic mechanics had proved to be for many distinguished scientists. Unable to digest it through long habit of mind, they had taken refuge in blind anger at Einstein himself and any who dared to take him seriously. But their refuge had been a dead end; all that inflexible old guard could do was to die and let younger minds, still limber, take over.

Harshaw recalled that his grandfather had told him of much the same thing happening in the field of medicine when the germ theory came along; many older physicians had gone to their graves calling Pasteur a liar, a fool, or worse - and without examining evidence which their "common sense" told them was impossible.

Well, he could see that Mike was going to cause more hooraw than Pasteur and Einstein combined - squared and cubed. Which reminded him- "Larry! Where's Larry?"

"Here, Boss," the loudspeaker mounted under the eaves behind him announced. "Down in the shop."

"Got the panic button?"

"Sure thing. You said to sleep with it on me. I do. I did."

"Bounce up here to the house and let me have it. No, give it to Anne. Anne, you keep it with your robe."

She nodded. Larry's voice answered, "Right away, Boss. Count down coming up?"

"Just do it." Jubal looked up and was startled to find that the Man from Mars was still standing in front of him, quiet as a sculptured figure. Sculpture? Yes, he did remind one of sculpture ... uh-Jubal searched his memory. Michelangelo's "David," that was it! Yes, even to the puppyish hands and feet, the serenely sensual face, the tousled, too-long hair. "That was all I wanted, Mike."

"Yes, Jubal."

But Mike continued to stand there. Jubal said, "Something on your mind?"

"About what I was seeing in that goddam-noisy-box. You said, 'All right, go ahead. But come talk to me about it later.'"

"Oh." Harshaw recalled the broadcast services of the Church of the New Revelation and winced. "Yes, we will talk. But first - don't call that thing a goddam noisy box. It is a stereovision receiver. Call it that."

Mike looked puzzled. "It is not a goddam-noisy-box? I heard you not rightly?"

"You heard me rightly and it is indeed a goddam noisy box. You'll hear me call it that again. And other things. But you must call it a stereovision receiver."

"I will call it a 'stereovision receiver.' Why, Jubal? I do not grok."

Harshaw sighed, with a tired feeling that he had climbed these same stairs too many times. Any conversation with Smith turned up at least one bit of human behavior which could not be justified logically, at least in terms that Smith could understand, and attempts to do so were endlessly time-consuming. "I do not grok it myself, Mike," he admitted, "but Jill wants you to say it that way."

"I will do it, Jubal. Jill wants it."

"Now tell me what you saw and heard in that stereovision receiver, and what you grok of it."

The conversation that followed was even more lengthy, confused, and rambling than a usual talk with Smith. Mike recalled accurately every word and action he had heard and seen in the babble tank, including all commercials. Since he had almost completed reading the encyclopedia, he had read its article on "Religion," as well as ones on "Christianity," "Islam," "Judaism," "Confucianism," "Buddhism," and many others concerning religion and related subjects. But he had grokked none of this.

Jubal at last got certain ideas clear in his own mind: (a) Mike did not know that the Fosterite service was a religious one; (b) Mike remembered what he had read about religions but had filed such data for future contemplation, having recognized that he did not understand them; (c) in fact, Mike had only the most confused notion of what the word "religion" meant, even though he could quote all nine definitions for same as given in the unabridged dictionary; (d) the Martian language contained no word (and no concept) which Mike was able to equate with any of these nine definitions; (e) the customs which Jubal had described to Duke as Martian "religious ceremonies" were nothing of the sort to Mike; to Mike such matters were as matter-of-fact as grocery markets were to Jubal; (f) it was not possible to express as separate ideas in the Martian tongue the human concepts: "religion," "philosophy," and "science"-and, since Mike still thought in Martian even though he now spoke English fluently, it was not yet possible for him to distinguish any one such concept from the other two. All such matters were simply "learnings" which came from the "Old Ones." Doubt he had never heard of and research was unnecessary (no Martian word for either); the answer to any question should be obtained from the Old Ones, who were omniscient (at least within Mike's scope) and infallible, whether the subject be tomorrow's weather or cosmic teleology. (Mike had seen a weather forecast in the babble box and had assumed without question that this was a message from human "Old Ones" being passed around for the benefit of those still corporate. Further inquiry disclosed that he held a similar assumption concerning the authors of the Encyclopedia Britannica.)

But last, and worst to Jubal, causing him baffled consternation, Mike had grokked the Fosterite service as including (among things he had not grokked) an announcement of an impending discorporation of two humans who were about to join the human "Old Ones" - and Mike was tremendously excited at this news. Had he grokked it rightly? Mike knew that his comprehension of English was less than perfect; he continued to make mistakes through his ignorance, being "only an egg." But had he grokked this correctly? He had been waiting to meet the human "Old Ones," for he had many questions to ask. Was this an opportunity? Or did he require more learnings from his water brothers before he was ready?

Jubal was saved by the bell. Dorcas arrived with sandwiches and coffee, the household's usual fair-weather picnic lunch. Jubal ate silently, which suited Smith as his rearing had taught him that eating was a time for contemplation - he had found rather upsetting the chatter that usually took place at the table.

Jubal stretched out his meal while he pondered what to tell Mike - and cursed himself for the folly of having permitted Mike to watch stereo in the first place. Oh, he supposed the boy had to come up against human religions at some point - couldn't be helped if he was going to spend the rest of his life on this dizzy planet. But, damn it, it would have been better to wait until Mike was more used to the overall cockeyed pattern of human behavior ... and, in any case, certainly not Fosterites as his first experience!

As a devout agnostic, Jubal consciously evalued all religions, from the animism of the Kalahari Bushmen to the most sober and intellectualized of the major western faiths, as being equal. But emotionally he disliked some more than others ... and the Church of the New Revelation set his teeth on edge. The Fosterites' fiat-footed claim to utter gnosis through a direct pipeline to Heaven, their arrogant intolerance implemented in open persecution of all other religions wherever they were strong enough to get away with it, the sweaty football-rally & sales-convention flavor of their services - all these ancillary aspects depressed him. If people must go to church, why the devil couldn't they be dignified about it, like Catholics, Christian Scientists, or Quakers?

If God existed (a question concerning which Jubal maintained a meticulous intellectual neutrality) and if He desired to be worshipped (a proposition which Jubal found inherently improbable but conceivably possible in the dim light of his own ignorance), then (stipulating affirmatively both the above) it nevertheless seemed wildly unlikely to Jubal to the point of reductio ad absurdum that a God potent to shape galaxies would be titillated and swayed by the whoop-te-do nonsense the Fosterites offered Him as "worship."

But with bleak honesty Jubal admitted to himself that the Universe (correction: that piece of the Universe he himself had seen) might very well be in toto an example of reduction to absurdity. In which case the Fosterites might be possessed of the Truth, the exact Truth, and nothing but the Truth. The Universe was a damned silly place at best ... but the least likely explanation for its existence was the no-explanation of random chance, the conceit that some abstract somethings "just happened" to be some atoms that "just happened" to get together in configurations which "just happened" to look like consistent laws and then some of these configurations "just happened" to possess self-awareness and that two such "just happened" to be the Man from Mars and the other a baldheaded old coot with Jubal himself inside.

No, Jubal would not buy the "just happened" theory, popular as it was with men who called themselves scientists. Random chance was not a sufficient explanation of the Universe - in fact, random chance was not sufficient to explain random chance; the pot could not hold itself.

What then? "Least hypothesis" held no place of preference; Occam's razor could not slice the prime problem, the Nature of the Mind of God (might as well call it that to yourself, you old scoundrel; it's a short, simple, Anglo-Saxon monosyllable, not banned by having four letters - and as good a tag for what you don't understand as any).

Was there any basis for preferring any one sufficient hypothesis over another? When you simply did not understand a thing: No! And Jubal readily admitted to himself that a long lifetime had left him completely and totally not understanding the basic problems of the universe.

So the Fosterites might be right. Jubal could not even show that they were probably wrong.

But, he reminded himself savagely, two things remained to him his own taste and his own pride. If indeed the Fosterites held a monopoly on Truth (as they claimed), if Heaven were open only to Fosterites, then he, Jubal Harshaw, gentleman and free citizen, preferred that eternity of pain. filled damnation promised to all "sinners" who refused the New Revelation. He might not be able to see the naked Face of God, but his eyesight was good enough to pick out his social equals - and those Fosterites, by damn, did not measure up!

But he could see how Mike had been misled; the Fosterite "going to Heaven" at a preselected time and place did sound like the voluntary and planned "discorporation" which, Jubal did not doubt, was the accepted practice on Mars. Jubal himself held a dark suspicion that a better term for the Fosterite practice was "murder" - but such had never been proved and had rarely been publicly hinted, much less charged, even when the cult was young and relatively small. Foster himself had been the first to "go to Heaven" on schedule, dying publicly at a self-prophesied instant. Since that first example, it had been a Fosterite mark of special grace ... and it had been years since any coroner or district attorney had had the temerity to pry into such deaths.

Not that Jubal cared whether they were spontaneous or induced. In his opinion a good Fosterite was a dead Fosterite. Let them be!

But it was going to be hard to explain to Mike.

No use stalling, another cup of coffee wouldn't make it any easier. "Mike, who made the world?"

"Beg pardon?"

"Look around you. All this. Mars, too. The stars. Everything. You and me and everybody. Did the Old Ones tell you who made it?"

Mike looked puzzled. "No, Jubal."

"Well, you have wondered about it, haven't you? Where did the sun come from? Who put the stars in the sky? Who started it all? All of it, everything, the whole world, the universe ... so that you and I are I talking." Jubal paused, surprised at himself. He had intended to make the usual agnostic approach ... and found himself compulsively following his legal training, being an honest advocate in spite of himself, attempting to support a religious belief he did not hold but which was believed most human beings. He found that, willy-nilly, he was attorney for the orthodoxies of his own race against - he wasn't sure what. An unhuman viewpoint. "How do your Old Ones answer such questions?"

"Jubal, I do not grok ... that these are questions. I am sorry."

"Eh? I don't grok your answer."

Mike hesitated a long time. "I will try. But words are ... are not rightly. Not 'putting.' Not 'mading.' A knowing. World is. World was.

World shall be. Now."

"'As it was in the beginning, so it now and ever shall be, World without end-'"

Mike smiled happily. "You grok it!"

"I don't grok it," Jubal answered gruffly, "I was quoting something, uh, an 'Old One' said." He decided to back off and try a new approach; apparently God the Creator was not the easiest aspect of Deity to try to explain to Mike as an opening ... since Mike did not seem to grasp the idea of Creation itself. Well, Jubal wasn't sure that he did, either - he had long ago made a pact with himself to postulate a created universe on even-numbered days, a tail-swallowing eternal-and-uncreated universe on odd-numbered days - since each hypothesis, while equally paradoxical, neatly avoided the paradoxes of the other - with, of course, a day off each leap year for sheer solipsist debauchery. Having thus tabled an unanswerable question he had given no thought to it for more than a generation.

Jubal decided to try to explain the whole idea of religion in its broadest sense and then tackle the notion of Deity and Its aspects later.

Mike readily agreed that learnings came in various sizes, from little learnings that even a nestling could grok on up to great learnings which only an Old One could grok in perfect fullness. But Jubal's attempt to draw a line between small learnings and great learnings so that "great learnings" would have the human meaning of "religious questions" was not successful, as some religious questions did not seem to Mike to be questions with any meaning to them (such as "Creation") and others seemed to him to be "little" questions, with obvious answers known even to nestlings-such as life after death.

Jubal was forced to let it go at that and passed on to the multiplicity of human religions. He explained (or tried to explain) that humans had hundreds of different ways by which these "great learnings" were taught, each with its own answers and each claiming to be the truth.

"What is 'truth'?" Mike asked.

("What is Truth?" asked a Roman judge, and washed his hands of a troublesome question. Jubal wished that he could do likewise.) "An answer is truth when you speak rightly, Mike. How many hands do I have?"

"Two hands. I see two hands," Mike amended.

Anne glanced up from her knitting. "In six weeks I could make a Witness of him."

"You keep out of this, Anne. Things are tough enough without your help. Mike, you spoke rightly; I have two hands. Your answer was truth. Suppose you said that I had seven hands?"

Mike looked troubled. "I do not grok that I could say that."

"No, I don't think you could. You would not speak rightly if you did; your answer would not be truth. But, Mike - now listen carefully - each religion claims to be truth, claims to speak rightly. Yet their answers to the same question are as different as two hands and seven hands. The Fosterites say one thing, the Buddhists say another, the Moslems say still another - many answers, all different."

Mike seemed to be making a great effort to understand. "All speak rightly? Jubal, I do not grok it."

"Nor do I."

The Man from Mars looked greatly troubled, then suddenly he smiled. "I will ask the Fosterites to ask your Old Ones and then we will know, my brother. How will I do this?"

A few minutes later Jubal found, to his great disgust, that he had promised Mike an interview with some Fosterite bigmouth -or Mike seemed to think that he had, which came to the same thing. Nor had he been able to do more than dent Mike's assumption that the Fosterites were in close touch with human "Old Ones." It appeared that Mike's difficulty in understanding the nature of truth was that he didn't know what a lie was—the dictionary definitions of "lie" and "falsehood" had been filed in his mind with no trace of grokking. One could "speak wrongly" only by accident or misunderstanding. So he necessarily had taken what he had heard of the Fosterite service at its bald, face value.

Jubal tried to explain that all human religions claimed to be in touch with "Old Ones" in one way or another; nevertheless their answers were all different.

Mike looked patiently troubled. "Jubal my brother, I try ... but I do not grok how this can be right speaking. With my people, the Old Ones speak always rightly. Your people-"

"Hold it, Mike."

"Beg pardon?"

"When you said, 'my people' you were talking about Martians. Mike, you are not a Martian; you are a man."

"What is 'Man'?"

Jubal groaned inwardly. Mike could, he was sure, quote the full list of dictionary definitions. Yet the lad never asked a question simply to be annoying; he asked always for information - and he expected his water brother Jubal to be able to tell him. "I am a man, you are a man, Larry is a man."

"But Anne is not a man?"

"Uh ... Anne is a man, a female man. A woman."

("Thanks, Jubal." - "Shut up, Anne.")

"A baby is a man? I have not seen babies, but I have seen pictures-

and in the goddam-noi-in stereovision. A baby is not shaped like Anne and Anne is not shaped like you . . . and you are not shaped like I. But a baby is a nestling man?"

"Uh ... yes, a baby is a man."

"Jubal ... I think I grok that my people - 'Martians' - are man. Not shape, Shape is not man. Man is grokking. I speak rightly?"

Jubal made a fierce resolve to resign from the Philosophical Society and take up tatting. What was "grokking"? He had been using the word himself for a week now and he still didn't grok it. But what was "Man"? A featherless biped? God's image? Or simply a fortuitous result of the "survival of the fittest" in a completely circular and tautological definition? The heir of death and taxes? The Martians seemed to have defeated death, and he had already learned that they seemed to have neither money, property, nor government in any human sense-so how could they have taxes?

And yet the boy was right; shape was an irrelevancy in defining "Man," as unimportant as the bottle containing the wine. You could even take a man out of his bottle, like the poor fellow whose life those Russians had persisted in "saving" by placing his living brain in a vitreous envelope and wiring him like a telephone exchange. Gad, what a horrible joke! He wondered if the poor devil appreciated the grisly humor of what had been done.

But how, in essence, from the unprejudiced viewpoint of a Martian, did Man differ from other earthly animals? Would a race that could levitate (and God knows what else) be impressed by engineering? And, if so, would the Aswan Dam, or a thousand miles of coral reef, win first prize? Man's self-awareness? Sheer local conceit; the upstate counties had not reported, for there was no way to prove that sperm whales or giant sequoias were not philosophers and poets far exceeding any human merit.

There was one field in which man was unsurpassed; he showed unlimited ingenuity in devising bigger and more efficient ways to kill off, enslave, harass, and in all ways make an unbearable nuisance of himself to himself. Man was his own grimmest joke on himself. The very bedrock of humor was-

"Man is the animal who laughs," Jubal answered.

Mike considered this seriously. "Then I am not a man."

"Huh?"

"I do not laugh. I have heard laughing and it frighted me. Then I grokked that it did not hurt. I have tried to learn-" Mike threw his head back and gave out a raucous cackle, more nerve-racking than the idiot call of a kookaburra.

Jubal covered his ears. "Stop! Stop!"

"You heard," Mike agreed sadly. "I cannot rightly do it. So I am not man."

"Wait a minute, son. Don't give up so quickly. You simply haven't learned to laugh yet ... and you'll never learn just by trying. But you will learn, I promise you. If you live among us long enough, one day you will see how funny we are - and you will laugh."

"I will?"

"You will. Don't worry about it and don't try to grok it; just let it come. Why, son, even a Martian would laugh once he grokked us."

"I will wait," Smith agreed placidly.

"And while you are waiting, don't ever doubt that you are a man. You are. Man born of woman and born to trouble ... and some day you will grok its fullness and you will laugh - because man is the animal that laughs at himself. About your Martian friends, I do not know. I have never met them, I do not grok them. But I grok that they may be 'man.'"

"Yes, Jubal."

Harshaw thought that the interview was over and felt relieved. He decided that he had not been so embarrassed since a day long gone when his father had undertaken to explain to him the birds and the bees and the flowers - much too late.

But the Man from Mars was not quite done. "Jubal my brother, you were ask me, 'Who made the world?' and I did not have words to say why I did not rightly grok it to be a question. I have been thinking words."

"So?"

"You told me, 'God made the world.'"

"No, no!" Harshaw said hastily. "I told you that, while all these many religions said many things, most of them said, 'God made the World.' I told you that I did not grok the fullness, but that 'God' was the word that was used."

"Yes, Jubal," Mike agreed. "Word is 'God'" He added. "You grok."

"No, I must admit I don't grok."

"You grok," Smith repeated firmly. "I am explain. I did not have the word. You grok. Anne groks. I grok. The grass under my feet groks in happy beauty. But I needed the word. The word is God."

Jubal shook his head to clear it. "Go ahead."

Mike pointed triumphantly at Jubal. "Thou art God!"

Jubal slapped a hand to his face. "Oh, Jesus H.- What have I done? Look, Mike, take it easy! Simmer down! You didn't understand me. I'm sorry. I'm very sorry! Just forget what I've been saying and we'll start over again on another day. But-"

"Thou art God," Mike repeated serenely. "That which groks. Anne is God. I am God. The happy grass are God, Jill groks in beauty always. Jill is God. All shaping and making and creating together-." He croaked something in Martian and smiled.

"All right, Mike. But let it wait. Anne, have you been getting all this?"

"You bet I have, Boss!"

"Make me a tape. I'll have to work on it. I can't let it stand. I must-" Jubal glanced up, said, "Oh, my God! General Quarters, everybody! Anne! Set the panic button on 'deadman' setting-and for God's sake keep your thumb on it; they may not be coming here." He glanced up again, at two large air cars approaching from the south. "But I'm afraid they are. Mike! Hide in the pool! Remember what I told you - down in the deepest part, stay there, hold still - and don't come up until I send Jill to get you."

"Yes, Jubal."

"Right now! Move!"

"Yes, Jubal." Mike ran the few steps, cut the water and disappeared. He remembered to keep his knees straight, his toes pointed and his feet together.

"Jill!" Jubal called out. "Dive in and climb out. You too, Larry. If anybody saw that, I want 'em confused as to how many are using the pool. Dorcas! Climb out fast, child, and dive in again. Anne-No, you've got the panic button; you can't."

"I can take my cloak and go to the edge of the pool. Boss, do you want some delay on this 'deadman' setting?"

"Uh, yes, thirty seconds. If they land here, put on your Witness cloak at once and get your thumb back on the button. Then wait - and if I call you over to me, let the balloon go up. But I don't dare shout 'Wolf!' on this unless-" He shielded his eyes. "One of them is certainly going to land and it's got that Paddy-wagon look to it, all right. Oh, damn, I had thought they would parley first."

The first car hovered, then dropped vertically for a landing in the garden area around the pool; the second started slowly circling the house at low altitude. The cars were black, squad carriers in size, and showed only a small, inconspicuous insignia: the stylized globe of the Federation.

Anne put down the radio relay link that would let "the balloon go up," got quickly into her professional garb, picked the link up again and put her thumb back on the button. The door of the first car started to open as it touched and Jubal charged toward it with the cocky belligerence of a Pekingese. As a man stepped out, Jubal roared, "Get that God damned heap off my rose bushes!"

The man said, "Jubal Harshaw?"

"You heard me! Tell that oaf you've got driving for you to raise that bucket and move it back! Off the garden entirely and onto the grass! Anne!"

"Coming, Boss."

"Jubal Harshaw, I have a warrant here for-"

"I don't care if you've got a warrant for the King of England; first you'll move that junk heap off my flowers! Then, so help me, I'll sue you for-" Jubal glanced at the man who had landed, appeared to see him for the first time. "Oh, so it's you," he said with bitter contempt. "Were you born stupid, Heinrich, or did you have to study for it? And when did that uniformed jackass working for you learn to fly? Earlier today? Since I talked to you?"

"Please examine this warrant," Captain Heinrich said with careful patience. "Then-"

"Get your go-cart out of my flower beds at once or I'll make a civil rights case out of this that will cost you your pension!"

Heinrich hesitated. 'Now!" Jubal screamed. "And tell those other yokels getting out to pick up their big feet! That idiot with the buck teeth is standing on a prize Elizabeth M. Hewitt!"

Heinrich turned his head. "You men - careful of those flowers. Paskin, you're standing on one. Rogers! Raise the car and move it back about fifty feet, clear of the garden." He turned his attention back to Harshaw. "Does that satisfy you?"

"Once he actually moves it - but you'll still pay damages. Let's see your credentials ... and show them to the Fair Witness and state loud and clearly to her your name, rank, organization, and pay number."

"You know who I am. Now I have a warrant to-"

"I have a common-law warrant to part your hair with a shotgun unless you do things legally and in order! I don't know who you are. You look remarkably like a stuffed shirt I saw over the telephone earlier today - but that's not evidence and I don't identify you. You must identify yourself, in the specified legal fashion, World Code paragraph 1602, part II, before you can serve a warrant. And that goes for all those other apes, too, and that pithecan parasite piloting for you."

"They are police officers, acting under my orders."

"I don't know that they are anything of the sort. They might have hired those ill-fitting clown suits at a costumer's. The letter of the law, sir! You've come barging into my castle. You say you are a police officer - and you allege that you have a warrant for this intrusion. But I say you are trespassers until you prove otherwise ... which invokes my sovereign right to use all necessary force to eject you - which I shall start to do in about three seconds."

"I wouldn't advise it."

"Who are you to advise? If I am hurt in attempting to enforce this my right, your action becomes constructive assault with deadly weapons, if those things those mules are toting are guns, as they appear to be. Civil and criminal, both - why, my man, I'll wind up with your hide for a door mat!" Jubal drew back a skinny arm and clenched a bony fist. "Off my property!"

"Hold it, Doctor. We'll do it your way." Heinrich had turned bright red, but he kept his voice under tight control. He offered his identification, which Jubal glanced at, then turned back to him for him to show to Anne. Heinrich then stated his full name, said that he was a captain of police, Federation Special Service Bureau, and recited his pay number. One by one, the other six men who had left the car, and at last the driver, went through the same rigamarole at Heinrich's frozen-faced orders.

When they were done, Jubal said sweetly, "And now, Captain Heinrich, how may I help you?"

"I have a search warrant here for Gilbert Berquist, which warrant names this property, its buildings and grounds."

"Show it to me, then show it to the Witness."

"I will do so. But I have another search warrant, similar to the first, for Gillian Boardman."

"Who?"

"Gillian Boardman. The charge is kidnapping."

"My goodness!"

"And another for Hector C. Johnson ... and one for Valentine Michael Smith ... and one for you, Jubal Harshaw."

"Me? Taxes again?"

"No. Look at it. Accessory to this and that ... and material witness on some other things ... and I'd take you in on my own for obstructing justice if the warrant didn't make it unnecessary."

"Oh, come now, Captain! I've been most cooperative since you identified yourself and started behaving in a legal manner. And I shall continue to be. Of course, I shall still sue all of you - and your immediate superior and the government - for your illegal acts before that time ... and I am not waiving any rights or recourses with respect to anything any of you may do hereafter. Mmm ... quite a list of victims. I see why you brought an extra wagon. But-dear me! something odd here. This, uh, Mrs. Borkmann? - I see that she is charged with kidnapping this Smith fellow ... but in this other warrant he seems to be charged with fleeing custody. I'm confused."

"It's both. He escaped - and she kidnapped him."

"Isn't that rather difficult to manage? Both, I mean? And on what charge was he being held? The warrant does not seem to state?"

"How the devil do I know? He escaped, that's all. He's a fugitive."

"Gracious me! I rather think I shall have to offer my services as counsel to each of them. Interesting case. If a mistake has been made - or mistakes - it could lead to other matters."

Heinrich grinned coldly. "You won't find it easy. You'll be in the pokey, too."

"Oh, not for long, I trust." Jubal raised his voice more than necessary and turned his head toward the house. "I do know another lawyer. I rather think, if Judge Holland were listening to this, habeas corpus proceedings - for all of us - might be rather prompt. And if the Associated Press just happened to have a courier car nearby, there would be no time lost in knowing where to serve such writs."

"Always the shyster, eh, Harshaw?"

"Slander, my dear sir. I take notice."

"A fat lot of good it will do you. We're alone."

"Are we?"

Chapter 15

VALENTINE MICHAEL SMITH SWAM through the murky water to the deepest part of the pool, under the diving board, and settled himself on the bottom. He did not know why his water brother Jubal had told him to hide there; indeed he did not know that he was hiding. His water brother Jubal had told him to do this and to remain there until his water brother Jill came for him; that was sufficient.

As soon as he was sure that he was at the deepest part, he curled himself into the fetal position, let most of the air out of his lungs, swallowed his tongue, rolled his eyes up, slowed his heart down to almost nothing, and became effectively "dead" save that he was not actually discorporate and could start his engines again at will. He also elected to stretch his time sense until seconds flowed past like hours, as he had much to contemplate and did not know how quickly Jill would come to get him.

He knew that he had failed again in an attempt to achieve the perfect understanding, the mutually merging rapport - the grokking-that should exist between water brothers. He knew that the failure was his, caused by his using wrongly the oddly variable human language, because Jubal had become upset as soon as he had spoken to him.

He now knew that his human brothers could suffer intense emotion without any permanent damage, nevertheless Smith was wistfully sorry that he had been the cause of such upset in Jubal. At the time, it had seemed to him that he had at last grokked perfectly a most difficult human word. He should have known better because, early in his learnings under his brother Mahmoud, he had discovered that long human words (the longer the better) were easy, unmistakable, and rarely changed their meanings ... but short words were slippery, unpredictable, changing their meanings without any pattern. Or so he seemed to grok. Short human words were never like a short Martian word - such as "grok" which forever meant exactly the same thing. Short human words were like trying to lift water with a knife.

And this had been a very short word.

Smith still felt that he had grokked rightly the human word "God" - the confusion had come from his own failure in selecting other human words. The concept was truly so simple, so basic, so necessary that any nestling could have explained it perfectly - in Martian. The problem, then, was to find human words that would let him speak rightly, make sure that he patterned them rightly to match in fullness how it would be said in his own people's language.

He puzzled briefly over the curious fact that there should be any difficulty in saying it, even in English, since it was a thing everyone knew else they could not grok alive. Possibly he should ask the human Old Ones how to say it, rather than struggle with the shifting meanings of human words. If so, he must wait until Jubal arranged it, for here he was only an egg and could not arrange it himself.

He felt brief regret that he would not be privileged to be present at the coming discorporation of brother Art and brother Dottie.

Then he settled down to reread in his mind Webster's New International Dictionary of the English Language, Third Edition, published in Springfield, Massachusetts.

From a long way off Smith was interrupted by an uneasy awareness that his water brothers were in trouble. He paused between "sherbacha" and "sherbet" to ponder this knowledge. Should he start himself up, leave the enfolding water of life, and join them to grok and share their trouble? At home there could have been no question about it; trouble is shared, in joyful closeness.

But this place was strange in every way . . and Jubal had told him to wait until Jill came.

He reviewed Jubal's words, trying them out in long contemplation against other human words, making sure that he grokked. No, Jubal had spoken rightly and he had grokked rightly; he must wait until Jill came.

Nevertheless he was made so uneasy by the certain knowledge of his brothers' trouble that he could not go back to his word hunt. At last an idea came to him that was filled with such gay daring that he would have trembled had his body not been unready for trembling.

Jubal had told him to place his body under water and leave it there until Jill came ... but had Jubal said that he himself must wait with the body?

Smith took a careful long time to consider this, knowing that the slippery English words that Jubal had used could easily lead him (and often had led him) into mistakes. He concluded that Jubal had not specifically ordered him to stay with his body ... and that left a way out of the wrongness of not sharing his brothers' trouble.

So Smith decided to take a walk.

He was a bit dazed at his own audacity, for, while he had done it before, twice, he had never "soloed." Each time an Old One had been with him, watching over him, making sure that his body was safe, keeping him from becoming disoriented at the new experience, staying with him until he returned to his body and started it up again.

There was no Old One to help him now. But Smith had always been quick to learn; he knew how to do it and was confident that he could do it alone in a fashion that would fill his teacher with pride. So first he checked over every part of his body, made certain that it would not be damaged while he was gone, then got cautiously out of it, leaving behind only that trifle of himself needed as watchman and caretaker.

Then he rose up and stood on the edge of the pool, remembering to behave as if his body were still with him, as a guard against disorienting - against losing track of the pool, the body, everything, and wandering off into unknown places where he could not find his way back.

Smith looked around.

An air car was just landing in the garden by the pool and beings under it were complaining of injuries and indignities done them. Perhaps this was the trouble he could feel? Grasses were for walking on, flowers and bushes were not - this was a wrongness.

No, there was more wrongness. A man was just stepping out of the air car, one foot about to touch the ground, and Jubal was running toward him. Smith could see the blast of icy anger that Jubal was hurling toward the man, a blast so furious that, had one Martian hurled it toward another, both would have discorporated at once.

Smith noted it down as something he must ponder and, if it was a cusp of necessity as it seemed to be, decide what he must do to help his brother. Then he looked over the others.

Dorcas was climbing out of the pool; she was puzzled and rather troubled but not too much so; Smith could feel her confidence in Jubal. Larry was at the edge of the pool and had just gotten out; drops of water falling from him were in the air. Larry was not troubled but excited and pleased; his confidence in Jubal was absolute. Miriam was near him and her mood was midway between those of Dorcas and Larry. Anne was standing where she had been seated and was dressed in the long white garment she had had with her all day. Smith could not fully grok her mood; he felt in her some of the cold unyielding discipline of mind of an Old One. It startled him, as Anne was always soft and gentle and warmly friendly.

He saw that she was watching Jubal closely and was ready to help him. And so was Larry! ... and Dorcas! ... and Miriam! With a sudden burst of empathic catharsis Smith learned that all these friends were water brothers of Jubal - and therefore of him. This unexpected release from blindness shook him so that he almost lost anchorage on this place. Calming himself as he had been taught, he stopped to praise and cherish them all, one by one and together.

Jill had one arm over the edge of the pool and Smith knew that she had been down under, checking on his safety. He had been aware of her when she had done it ... but now he knew that she had not alone been worried about his safety; Jill felt other and greater trouble, trouble that was not relieved by knowing that her charge was safe under the water of life. This troubled him very much and he considered going to her, making her know that he was with her and sharing her trouble.

He would have done so had it not been for a faint, uneasy feeling of guilt; he was not absolutely certain that Jubal had intended to permit him to walk around while his body was hidden in the pool. He compromised by telling himself that he would share their trouble - and let them know that he was present if it became needful.

Smith then looked over the man who was stepping out of the air car, felt his emotions and recoiled from them, forced himself nevertheless to examine him carefully, inside and out.

In a shaped pocket strapped around his waist by a belt the man was carrying a gun.

Smith was almost certain it was a gun. He examined it in great detail, comparing it with two guns that he had seen briefly, checking what it appeared to be against the definition in Webster's New International Dictionary of the English Language, Third Edition, published in Springfield, Massachusetts.

Yes, it was a gun - not alone in shape but also in wrongness that surrounded and penetrated it. Smith looked down the barrel, saw how it must function, and wrongness stared back at him.

Should he turn it and let it go elsewhere, taking its wrongness with it? Do it at once before the man was fully out of the car? Smith felt that he should ... and yet Jubal had told him, at another time, not to do this to a gun until Jubal told him that it was time to do it.

He knew now that this was indeed a cusp of necessity ... but he resolved to balance on the point of the cusp until he grokked all of it, since it was possible that Jubal, knowing that a cusp was approaching, had sent him under water to keep him from acting wrongly at the cusp.

He would wait ... but in the meantime he would hold this gun and its wrongness carefully under his eye. Not at the moment being limited to two eyes facing always one way, being able to see all around him if needful, he continued to watch the gun and the man stepping out of the car while he went inside the car.

More wrongness than he would have believed possible! Other men were in there, all but one of them crowding toward the door. Their minds smelled like a pack of Khaugha who had scented an unwary nymph and each one held in his hands a something having wrongness.

As he had told Jubal, Smith knew that shape alone was never a prime determinant; it was necessary to go beyond shape to essence in order to grok. His own people passed through five major shapes: egg, nymph, nestling, adult, and Old One which had no shape. Yet the essence of an Old One was already patterned in the egg.

These somethings that these men carried seemed like guns. But Smith did not assume that they were guns; he examined one most carefully first. It was much larger than any gun he had ever seen, its shape was very different, and its details were quite different.

It was a gun.

He examined each of the others, separately and just as carefully. They were guns.

The one man who was still seated had strapped to him a small gun.

The car itself had built into it two enormous guns-plus other things which Smith could not grok but which he felt had wrongness also.

He stopped and seriously considered twisting the car, its contents, and all - letting it topple away. But, in addition to his lifelong inhibition against wasting food, he knew that he did not fully grok what was happening. Better to move slowly, watch carefully, and help and share at the cusp by following Jubal's lead ... and if right action for him was to remain passive, then go back to his body when the cusp had passed and discuss it all with Jubal later.

He went back outside the car and watched and listened and waited.

The first man to get out talked with Jubal concerning many things which Smith could only file without grokking; they were beyond his experience. The other men got out and spread out; Smith spread his attention to watch all of them. The car raised, moved backwards, stopped again, which relieved the beings it had sat on; Smith grokked with them to the extent that he could spare attention, trying to soothe their hurtings.

The first man handed papers to Jubal; in turn they were passed to Anne. Smith read them along with her. He recognized their word shapings as being concerned with certain human rituals of healing and balance, but, since he had encountered these rituals only in Jubal's law library, he did not try to grok the papers then, especially as Jubal seemed quite untroubled by them - the wrongness was elsewhere. He was delighted to recognize his own human name on two of the papers; he always got an odd thrill out of reading it, as if he were two places at once-impossible as that was for any but an Old One.

Jubal and the first man turned and walked toward the pool, with Anne close behind them. Smith relaxed his time sense a little to let them move faster, keeping it stretched just enough so that he could comfortably watch all the men at once. Two of the men closed in and flanked the little group.

The first man stopped near the group of his friends by the pool, looked at them, then took a picture from his pocket, looked at it, and looked at Jill. Smith felt her fear and trouble mount and he became very alert. Jubal had told him, "Protect Jill. Don't worry about wasting food. Don't worry about anything else. Protect Jill."

Of course, he would protect Jill in any case, even at the risk of acting wrongly in some other fashion. But it was good to have Jubal's blanket reassurance; it left his mind undivided and untroubled.

When the first man pointed at Jill and the two men flanking him hurried toward her with their guns of great wrongness. Smith reached out through his Doppelganger and gave them each that tiny twist which causes to topple away.

The first man stared at where they had been and reached for his gun - and he was gone, too.

The other four started to close in. Smith did not want to twist them. He felt that Jubal would be more pleased with him if he simply stopped them. But stopping a thing, even an ash tray, is work - and Smith did not have his body at hand. An Old One could have managed it, all four together, but Smith did what he could do, what he had to do.

Four feather touches-they were gone.

He felt more intense wrongness from the direction of the car on the ground and went at once to it - grokked to a quick decision, and car and pilot were gone.

He almost overlooked the car riding cover patrol in the air. Smith started to relax when he had disposed of the car on the ground - when suddenly he felt wrongness and trouble increase, and he looked up.

The second car was coming in for a landing right where he was.

Smith stretched his time sense to his personal limit and went to the car in the air, inspected it carefully, grokked that it was as choked with utter wrongness as the first had been ... tilted it into neverness. Then he returned to the group by the pool.

All his friends seemed quite excited; Dorcas was sobbing and Jill was holding her and soothing her. Anne alone seemed untouched by the emotions Smith felt seething around him. But wrongness was gone, all of it, and with it the trouble that had disturbed his meditations earlier. Dorcas, he knew, would be healed faster and better by Jill than by anyone - Jill always grokked a hurting fully and at once. Disturbed by emotions around him, slightly apprehensive that he might not have acted in all ways rightly at the point of cusp - or that Jubal might to grok him - Smith decided that he was now free to leave. He slipped back into the pool, found his body, grokked that it was still as he had left it, unharmed - slipped it back on.

He considered contemplating the events at the cusp, But they were too new, too recent; he was not ready to enfold them, not ready to praise and cherish the men he had been forced to move. Instead he returned happily to the task he had been on. "Sherbet" - "Sherbetlee" - "Sherbetzide" - He had reached "Tinwork" and was about to consider "Tiny" when he felt Jill's touch approaching him. He unswallowed his tongue and made himself ready, knowing that his brother Jill could not remain very long under water without distress.

As she touched him, he reached out, took her face in his hands and kissed her. It was a thing he had learned to do quite lately and he did not feel that he grokked it perfectly. It had the growing-closer of the water ceremony. But it had something else, too ... something he wanted very much to grok in perfect fullness.

Chapter 16

JUBAL HARSHAW DID NOT WAIT for Gillian to dig her problem child out of the pool; he left instructions for Dorcas to be given a sedative and hurried to his study, leaving Anne to explain (or not explain) the events of the last ten minutes. "Front!" he called out over his shoulder.

Miriam turned and caught up with him. "I guess I must be 'front,'" she said breathlessly. "But, Boss, what in the-"

"Girl, not one word."

"But, Boss-"

"Zip it, I said. Miriam, about a week from now we'll all sit down and get Anne to tell us what we really did see. But right now everybody and his cousins will be phoning here and reporters will be crawling out of the trees - and I've got to make a couple of calls first. I need help. Are you the sort of useless female who comes unstuck when she's needed? That reminds me. Make a note to dock Dorcas's pay for the time she spent having hysterics."

Miriam gasped. "Boss! You just dare do that and every single one of us will quit cold!"

"Nonsense."

"I mean it. Quit picking on Dorcas. Why, I would have had hysterics myself if she hadn't beaten me to it." She added, "I think I'll have hysterics now."

Harshaw grinned. "You do and I'll spank you. All right, put Dorcas down for a bonus for 'extra hazardous duty.' Put all of you down for a bonus. Me, especially. I earned it."

"All right. But who pays your bonus?"

"The taxpayers, of course. We'll find a way to clip-Damn!" They had reached his study door; the telephone was already demanding attention. He slid into the seat in front of it and keyed in. "Harshaw speaking. Who the devil are you?"

"Skip the routine, Doc," a face answered cheerfully. "You haven't frightened me in years. How's everything going?"

Harshaw recognized the face as belonging to Thomas Mackenzie, production manager-in-chief for New World Networks; he mellowed slightly. "Well enough, Tom. But I'm rushed as can be, so-"

"You're rushed? Come try my fortyeight-hour day. I'll make it brief. Do you still think you are going to have something for us? I don't mind the expensive equipment you've got tied up; I can overhead that. But business is business, and I have to pay three full crews just to stand by for your signal. Union rules - you know how it is. I want to do you any favor I can. We've used lots of your script in the past and we expect to use still more in the future, but I'm beginning to wonder what I'm going to tell our comptroller."

Harshaw stared at him. "Don't you think the spot coverage you just got was enough to pay the freight?"

"What spot coverage?"

A few minutes later Harshaw said good-by and switched off, having been convinced that New World Networks had seen nothing of recent events at his home. He stalled off Mackenzie's questions about it, because he was dismally certain that a factual recital would simply convince Mackenzie that poor old Harshaw had at last gone to pieces. Nor could Harshaw have blamed him.

Instead they agreed that, if nothing worth picking up happened in the next twenty-four hours, New World could break the linkage and remove their cameras and other equipment.

As the screen cleared Harshaw ordered, "Get Larry. Have him fetch that panic button - Anne probably has it." He then started making another call, followed it with a third. By the time Larry arrived, Harshaw was convinced that no network had been watching when the Special Service squads attempted to raid his home. It was not necessary to check on whether or not the two dozen "hold" messages that he had recorded had been sent; their delivery depended on the same signal that had failed to reach the news channels.

As he turned away from the phone Larry offered him the "panic button" portable radio link. "You wanted this, Boss?"

"I just wanted to sneer at it and see if it sneered back. Larry, let this be a lesson to us: never trust any machinery more complicated than a knife and fork."

"Okay. Anything else?"

"Larry, is there a way to check that dingus and see if it's working properly? Without actually hauling three networks out of their beds, I mean?"

"Sure. The techs set up the transceiver down in the shop and it's got a switch on it for that very purpose. Throw the switch, push the button; a light comes on. To test on through, you simply call 'em, right from the transceiver and tell 'em you want a hot test clear through to the cameras and back to the monitor stations."

"And suppose the test shows that we aren't getting through? If the trouble is here, can you spot what's wrong?"

"Well, I might," Larry said doubtfully, "if it wasn't anything more than a loose connection. But Duke is the electron pusher around here- I'm more the intellectual type."

"I know, son - I'm not too bright about practical matters, either. Well, do the best you can. Let me know."

"Anything else, Jubal?"

"Yes, if you see the man who invented the wheel, send him up; I want to give him a piece of my mind. Meddler!"

Jubal spent the next few minutes in umbilical contemplation. He considered the possibility that Duke had sabotaged the "panic button" but rejected the thought as time wasting, if not unworthy. He allowed himself to wonder for a moment just what had really happened down in his garden and how the lad had done it-from ten feet under water. For he had no doubt that the Man from Mars had been behind those impossible shenanigans.

Admittedly, what he had seen only the day before in this very room was just as intellectually stupefying as these later events-but the emotional impact was something else. A mouse was as much a miracle of biology as was an elephant; nevertheless there was an important difference - an elephant was bigger.

To see an empty carton, just rubbish, disappear in midair logically implied the possibility that a squad car full of men could vanish in the same fashion. But one event kicked your teeth in - the other didn't.

Well, he wasn't going to waste tears on those Cossacks. Jubal conceded that cops qua cops were all right; he had met a number of honest cops in his life ... and even a fee-splitting village constable did not deserve to be snuffed out like a candle. The Coast Guard was a fine example of what cops ought to be and frequently were.

But to be a member of the S.S. squads a man had to have larceny in his heart and sadism in his soul. Gestapo. Storm troopers in the service of whatever politico was in power. Jubal longed for the good old days when a lawyer could cite the Bill of Rights and not have some overriding Federation trickery defeat him.

Never mind. What would logically happen now? Heinrich's task force certainly had had radio contact with its base; ergo, its loss would be noted, if only by silence. Shortly more S.S. troops would come looking for them - were already headed this way if that second car had been chopped off in the middle of an action report. "Miriam-"

"Yes, Boss."

"I want Mike, Jill, and Anne here at once. Then find Larry - in the shop, probably - and both of you come to the house, lock all doors, and all ground floor windows."

"More trouble?"

"Get movin', gal."

If the S.S. apes showed up again - no, when they showed up - they probably would not have duplicate warrants. If their leader was silly enough to break into a locked house without a warrant, well, he might have to turn Mike loose on them. But this blind warfare of attrition had to be stopped-which meant that Jubal simply had to get through to the Secretary General. How?

Call the Executive Palace again? Heinrich had probably been telling the simple truth when he said that a renewed attempt would simply be referred to Heinrich - or to whatever S.S. boss was now warming that chair that Heinrich would never need again. Well? It would surely surprise them to have a man they had sent a squad to arrest blandly phoning in, face to face - he might be able to bull his way all the way up to the top. Commandant what's-his-name, chap with a face like a well-fed ferret, Twitchell. And certainly the commanding officer of the S.S. buckos would have direct access to the boss.

No good. You had to have a feeling for what makes the frog jump. It would be a waste of breath to tell a man who believes in guns that you've got something better than guns and that he can't arrest you and might as well give up trying. Twitchell would keep on throwing men and guns at them till he ran out of both-but he would never admit he couldn't bring in a man whose location was known.

Well, when you couldn't use the front door you got yourself slipped in through the back door-elementary politics. Jubal regretted mildly that he had ignored politics the last quarter century or so. Damn it, he needed Ben Caxton - Ben would know who had keys to the back door, and Jubal would know somebody who knew one of them.

But Ben's absence was the whole reason for this silly donkey derby. Since he couldn't ask Ben, whom did he know who would know?

Hell's halfwit, he had just been talking to one! Jubal turned back to the phone and tried to raise Tom Mackenzie again, running into only three layers of interference on the way, all of whom knew him and passed him along quickly. While he was doing this, his staff and the Man from Mars came in; Jubal ignored them and they sat down, Miriam first stopping to write on a scratch pad: "Doors and windows locked."

Jubal nodded to her and wrote below it: "Larry - panic button?" then said to the screen, "Tom, sorry to bother you again."

"A pleasure, Jubal."

"Tom, if you wanted to talk to Secretary General Douglas, how would you go about it?"

"Eh? I'd phone his press secretary, Jim Sanforth. Or possibly Jock Dumont, depending on what I wanted. But I wouldn't talk to the Secretary General at all Jim would handle it."

"But suppose you wanted to talk to Douglas himself."

"Why, I'd tell Jim and let him arrange it. Be quicker just to tell Jim my problem, though; it might be a day or two before he could squeeze me in ... and even then I might be bumped for something more urgent. Look, Jubal, the network is useful to the administration - and we know it and they know it. But we don't presume on it unnecessarily."

"Tom ... assume that it is necessary. Suppose you just had to speak to Douglas. Right now. Not next week. In the next ten minutes."

Mackenzie's eyebrows went up. "Well, if I just had to, I would explain to Jim why it was so urgent-"

"No."

"Be reasonable."

"No. That's just what I can't be. Assume that you had caught Jim Sanforth stealing the spoons, so you couldn't tell him what the emergency was. But you had to speak to Douglas immediately."

Mackenzie sighed. "I suppose I would tell Jim that I simply had to talk to the boss, and that if I wasn't put through to him right away, the administration would never get another trace of support from the network. Politely, of course. But make him understand that I meant it. Sanforth is nobody's fool; he would never serve his own head up on a platter."

"Okay, Tom, do it."

"Huh?"

"Leave this call on. Call the Palace on another instrument - and have your boys ready to cut me in instantly. I've got to talk to the Secretary General right now!"

Mackenzie looked pained. "Jubal, old friend-"

"Meaning you won't."

"Meaning I can't. You've dreamed up a hypothetical situation in which a - pardon me - major executive of an intercontinental network could speak to the Secretary General under conditions of dire necessity. But I can't hand this entr,e over to somebody else. Look, Jubal, I respect you. Besides that, you are probably four of the six most popular writers alive today. The network would hate to lose you and we are painfully aware that you won't let us tie you down to a contract. But I can't do it, even to please you. You must realize that one does not telephone the World chief of government unless he wants to speak to you."

"Suppose I do sign an exclusive seven-year contract?"

Mackenzie looked as if his teeth hurt, "I still couldn't do it. I'd lose my job-and you would still have to carry out your contract."

Jubal considered calling Mike over into the instrument's visual pickup and naming him. He discarded the idea at once. Mackenzie's own programs had run the fake 'Man from Mars' interviews, and Mackenzie was either crooked and in on the hoax ... or he was honest, as Jubal thought he was, and simply would not believe that he himself had been hoaxed. "All right, Tom, I won't twist your arm. But you know your way around in the government better than I do. Who calls Douglas whenever he likes - and gets him? I don't mean Sanforth"

"No one."

"Damn it, no man lives in a vacuum! There must be at least a dozen people who can phone him and not get brushed off by a secretary."

"Some of his cabinet, I suppose. And not all of them."

"I don't know any of them, either; I've been out of touch. But I don't mean professional politicos. Who knows him so well that they can call him on a private line and invite him to play poker?"

"Urn ... you don't want much, do you? Well, there's Jake Allenby. Not the actor, the other Jake Allenby. Oil."

"I've met him. He doesn't like me. I don't like him. He knows it."

"Douglas doesn't have very many intimate friends. His wife rather discourages-- Say, Jubal, ... how do you feel about astrology?"

"Never touch the stuff. Prefer brandy."

'Well, that's a matter of taste. But - see here, Jubal, if you ever let on to anyone that I told you this, I'll cut your lying throat with one of your own manuscripts."

"Noted. Agreed. Proceed."

"Well, Agnes Douglas does touch the stuff? and I know where she gets it. Her astrologer can call Mrs. Douglas at any time - and, believe you me, Mrs. Douglas has the ear of the Secretary General whenever she chooses. You can call her astrologer, and the rest is up to you."

"I don't seem to recall any astrologers on my Christmas card list," Jubal answered dubiously. "What's his name?"

"Her. And you might try crossing her palm with silver in convincing denominations. Her name is Madame Alexandra Vesant. Washington Exchange. That's V, E, S, A, N, T."

"I've got it," Jubal said happily. "And, Tom, you've done me a world of good!"

"Hope so. Anything for the network soon?"

"Hold it." Jubal glanced at a note Miriam had placed at his elbow some moments ago. It read: "Larry says the transceiver won't trans - and he doesn't know why." Jubal went on, "That spot coverage failed earlier through a transceiver failure here - and I don't have anyone who can repair it."

"I'll send somebody."

"Thanks. Thanks twice."

Jubal switched off, placed the call by name and instructed the operator to use hush & scramble if the number was equipped to take it. It was, not to his surprise. Very quickly Madame Vesant's dignified features appeared in his screen. He grinned at her and called, "Hey, Rube!"

She looked startled, then looked more closely. "Why, Doc Harshaw, you old scoundrel! Lord love you, it's good to see you. Where have you been hiding?"

"Just that, Becky - hiding. The clowns are after me."

Becky Vesey didn't ask why; she answered instantly, "What can I do to help? Do you need money?"

"I've got plenty of money, Becky, but thanks a lot. Money won't help; I'm in much more serious trouble than that - and I don't think anyone can help me but the Secretary General himself, Mr. Douglas. I need to talk to him - and right away. Now, or even sooner."

She looked blank. "That's tall order, Doc."

"Becky, I know it is - because I've been trying for a week to get through to him . . and I can't. But don't you get mixed up in it yourself, Becky ... because, girl, I'm hotter than a smoky bearing. I just took a chance that you might be able to advise me - a phone number, maybe, where I could reach him. But I don't want you to mix into it personally. You'd get hurt - and I'd never be able to look the Professor in the eye if I ever meet him again ... God rest his soul."

"I know what the Professor would want me to do!" she said sharply. "So let's knock off the nonsense, Doc. The Professor always swore that you were the only sawbones fit to carve people; the rest were butchers. He never forgot that time in Elkton."

"Now, Becky, we won't bring that up. I was paid."

"You saved his life."

"I did no such thing. It was his rugged constitution and his will to fight back - and your nursing."

"Uh ... Doc, we're wasting time. Just how hot are you?"

"They're throwing the book at me ... and anybody near me is going to get splashed. There's a warrant out for me - a Federation warrant - and they know where I am and I can't run. It will be served any minute now ... and Mr. Douglas is the only person who can stop it."

"You'll be sprung. I guarantee that."

"Becky, I?m sure you would. But it might take a few hours. It's that 'back room' I'm afraid of, Becky. I'm too old for a session in the back room."

"But-Oh, goodness! Doc, can't you give me some details? I really ought to cast a horoscope on you, then I'd know what to do. You're Mercury, of course, since you're a doctor. But if I knew what house to look in to find your trouble, I could do better."

"Girl, there isn't time for that. But thanks." Jubal thought rapidly. Whom to trust? And when? "Becky, just knowing could put you in as much trouble as I am in ... unless I convince Mr. Douglas."

"Tell me, Doc. I've never taken a powder at a clem yet-and you know it."

"All right. So I'm 'Mercury.' But the trouble lies in Mars."

She looked at him sharply. "How?"

"You've seen the news. You know that the Man from Mars is supposed to be making a retreat some place high up in the Andes. Well, he's not. That's just to hoax the yokels."

Becky seemed startled but not quite as Jubal had expected her to be. "Just where do you figure in this, Doc?"

"Becky, there are people all over this sorry planet who want to lay hands on that boy. They want to use him, they want to make him geek for them, their way. But he's my client and I don't propose to hold still for it. If I can help it. But my only chance is to talk with Mr. Douglas himself, face to face."

"The Man from Mars is your client? You can turn him up?"

"Yes. But only to Mr. Douglas. You know how it is Becky - the mayor can be a good Joe, kind to children and dogs. But he doesn't necessarily know everything his town clowns are up to - especially if they haul a man in and take him into that back room."

She nodded. "I've had my troubles with cops. Cops!"

"So I need to dicker with Mr. Douglas before they haul me in."

"All you want is to talk to him on the telephone?"

"Yes. If you can swing it. Here, let me give you my number - and I'll be sitting right here, hoping for a call ... until they pick me up. If you can't swing it ... thanks anyway, Becky, thanks a lot. I'll know you tried."

"Don't switch off!" she said sharply.

"Eh?"

"Keep the circuit, Doc, while I see what I can do. If I have any luck, they can patch right through this phone and save time. So hold on." Madame Vesant left the screen without saying good-by, then called Agnes Douglas. She spoke with calm confidence, pointing out to Agnes that this was precisely the development foretold by the stars - and exactly on schedule. Now had come the critical instant when Agnes must guide and sustain her husband, using all her womanly wit and wisdom to see that he acted wisely and without delay. "Agnes dear, this configuration will not be repeated in a thousand years - Mars, Venus and Mercury in perfect trine, just as Venus reaches the meridian, making Venus dominant. Thus you see-"

"Allie, what do the Stars tell me to do? You know I don't understand the scientific part."

This was hardly surprising, since the described relationship did not obtain at the moment. Madame Vesant had not had time to compute a new horoscope and was improvising. But she was untroubled by it; she was speaking a "higher truth," giving good advice and helping her friends. To be able to help two friends at once made Becky Vesey especially happy. "Dear, you really do understand it, you have born talent for it. You are Venus, as always, and Mars is reinforced, being both your husband and that young man Smith for the duration of this crisis. Mercury is Dr. Harshaw. To offset the imbalance caused by the reinforcement of Mars, Venus must sustain Mercury until the crisis is past. But you have very little time for it; Venus waxes in influence until reaching meridian, only seven minutes from now - after that your influence will decline. You must act quickly."

"You should have warned me sooner."

"My dear, I have been waiting here by my phone all day, ready to act instantly. The stars tell us the nature of each crisis; they never tell us the details. But there is still time. I have Dr. Harshaw waiting on the telephone here; all that is necessary is to bring them face to face - if possible before Venus reaches meridian."

"Well.. All right, Allie. I've got to dig Joseph out of some silly conference but I'll get him. Keep this line open. Give me the number of the phone you have this Doctor Rackshaw on - or can you transfer the call there?"

"I can switch it over here. Just get Mr. Douglas. Hurry, dear."

"I will."

When Agnes Douglas' face left the screen, Becky went to still another phone. Her profession required ample phone service; it was her largest single business expense. Humming happily she called her broker.

Chapter 17

As MADAME VESANT LEFT THE SCREEN Jubal Harshaw leaned back from his phone. "Front," he said.

"Okay, Boss," Miriam acknowledged.

"This is one for the 'Real-Experiences' group. Specify on the cover sheet that I want the narrator to have a sexy contralto voice-"

"Maybe I should try out for it."

"Not that sexy. Shut up. Dig out that list of null surnames we got from the Census Bureau, pick one and put an innocent, mammalian first name with it, for the pen name. A girl's name ending in 'a' - that always suggests a 'C' cup."

"Huh! And not one of us with a name ending in 'a.' Why, you louse!"

"Flat-chestS bunch, aren't you? 'Angela.' Her name is 'Angela.' Title: 'I Married a Martian.' Start: All my life I had longed to become an astronaut. Paragraph. When I was just a tiny thing, with freckles on my nose and stars in my eyes, I saved box tops just as my brothers did - and cried when Mummy wouldn't let me wear my Space Cadet helmet to bed. Paragraph. In those carefree childhood days I did not dream to what strange, bittersweet fate my tomboy ambition would-"

"Boss!"

"Yes, Dorcas?"

"Here come two more loads."

Jubal got up from the telephone chair. "Hold for continuation. Miriam, sit down at the phone." He went to the window, saw the two air cars Dorcas had spotted, decided that they could be squad cars, and might be about to land on his property. "Larry, bolt the door to this room. Anne, put on your robe. Watch them but stand back from the window; I want them to think the house is empty. Jill, you stick close to Mike and don't let him make any hasty moves. Mike, you do what Jill tells you to."

"Yes, Jubal. I will do."

"Jill, don't turn him loose unless you have to. To keep one of us from being shot, I mean. If they bust down doors, let them - I rather hope they do. Jill, if it comes to scratch, I'd much rather he snatched just the guns and not the men."

"Yes, Jubal."

"Make sure he understands. This indiscriminate elimination of cops has got to stop."

"Telephone, Boss!"

"Coming." Jubal went unhurriedly back to the phone. "All of you stay out of pickup. Dorcas, you can take a nap. Miriam, note down another title for later: 'I Married a Human.' " He slid into the seat as Miriam vacated it and said, "Yes?"

A blandly handsome man looked back at him. "Doctor Harshaw?"

"Yes."

"Please hold on. The Secretary General will speak with you." The tone implied that a genuflection was in order.

"Okay."

The screen flickered, then rebuilt in the tousled image of His Excellency the Honorable Joseph Edgerton Douglas, Secretary General of the World Federation of Free Nations. "Dr. Harshaw? Understand you need to speak with me. Shoot."

"No, sir."

"Eh? But I understood-"

"Let me rephrase it precisely, Mr. Secretary. You need to speak with me."

Douglas looked surprised, then grinned. "Pretty sure of yourself, aren't you? Well, Doctor, you have just ten seconds to prove that. I have other things to do."

"Very well, sir. I am attorney for the Man from Mars."

Douglas suddenly stopped looking tousled. "Repeat that."

"I am attorney for Valentine Michael Smith, known as the Man from Mars. Attorney with full power. In fact, it may help to think of me as defacto Ambassador from Mars ... in the spirit of the Larkin Decision, that is to say."

Douglas stared at him. "Man, you must be out of your mind!"

"I've often thought so, lately. Nevertheless I am acting for the Man from Mars. And he is prepared to negotiate."

"The Man from Mars is in Ecuador."

"Please, Mr. Secretary. This is a private conversation. He is not in Ecuador, as both of us know. Smith - the real Valentine Michael Smith, not the one who has appeared in the newscasts - escaped from confinement - and, I should add, illegal confinement - at Bethesda Medical Center on Thursday last, in company with Nurse Gillian Boardman. He kept his freedom and is now free - and he will continue to keep it. If any of your large staff of assistants has told you anything else, then someone has been lying to you ... which is why I am speaking to you yourself. So that you can straighten it out."

Douglas looked very thoughtful. Someone apparently spoke to him from off screen, but no words came over the telephone. At last he said, "Even if what you said were true, Doctor, you can't be in a position to speak for young Smith. He's a ward of the State."

Jubal shook his head. "Impossible. The Larkin Decision."

"Now see here, as a lawyer myself, I assure you-"

"As a lawyer myself, I must follow my own opinion - and protect my client."

"You are a lawyer? I thought that you meant that you claimed to be attorney-in-fact, rather than counselor."

"Both. You'll find that I am an attorney at law, in good standing, and admitted to practice before the High Court. I don't hang my shingle these days, but I am." Jubal heard a dull boom from below and glanced aside. Larry whispered, "The front door, I think. Boss - shall I go look?"

Jubal shook his head in negation and spoke to the screen. "Mr. Secretary, while we quibble, time is running out. Even now your men - your S.S. hooligans -are breaking into my house. It is most distasteful to be under siege in my own home. Now, for the first and last time, will you abate this nuisance? So that we can negotiate peaceably and equitably? Or shall we fight it out in the High Court with all the stink and scandal that would ensue?"

Again the Secretary appeared to speak with someone off screen. He turned back, looking troubled. "Doctor, if the Special Service police are trying to arrest you, it is news to me. I do not see-"

"If you'll listen closely, you'll hear them tromping up my staircase, sir! Mike! Anne! Come here." Jubal shoved his chair back to allow the camera angle to include three people. "Mr. Secretary General Douglas - the Man from Mars!" He did not, of course, introduce Anne, but she and her white cloak of probity were fully in view.

Douglas stared at Smith; Smith looked back at him and seemed uneasy. "Jubal-"

"Just a moment, Mike. Well, Mr. Secretary? Your men have broken into my house - I hear them pounding on my study door this moment." Jubal turned his head. "Larry, unbolt the door. Let them in." He put a hand on Mike. "Don't get excited, lad, and don't do anything unless I tell you to."

"Yes, Jubal. That man. I have know him."

"And he knows you." Over his shoulder Jubal called out to the now open door, "Come in, Sergeant. Right over here."

The S.S. sergeant standing in the doorway, mob gun at the ready, did not come in. Instead he called out, "Major! Here they are!"

Douglas said, "Let me speak to the officer in charge of them, Doctor." Again he spoke off screen.

Jubal was relieved to see that the major for whom the sergeant had shouted showed up with his sidearm still in its holster; Mike's shoulder had been trembling under Jubal's hand ever since the sergeant's gun had come into view - and, while Jubal lavished no fraternal love on these troopers, he did not want Smith to display his powers ... and cause awkward questions.

The major glanced around the room. "You're Jubal Harshaw?"

"Yes. Come over here. Your boss wants you."

"None of that. You come along. I'm also looking for-"

"Come here! The Secretary General himself wants a word with you - on this phone."

The S.S. major looked startled, then came on into the study, around Jubal's desk, and in sight of the screen - looked at it, suddenly came smartly to attention and saluted. Douglas nodded. "Name, rank, and duty."

"Sir, Major C. D. Bloch, Special Service Squadron Cheerio, Maryland Enclave Barracks."

"Now tell me what you are doing where you are, and why."

"Sir, that's rather complicated. I-"

"Then unravel it for me. Speak up, Major."

"Yes, sir. I came here pursuant to orders. You see-"

"I don't see."

"Well, sir, about an hour and a half ago a flying squad was sent here to make several arrests. They didn't report in when they should have and when we couldn't raise them by radio, I was sent with the reserve squad to find them and render assistance as needed."

"Whose orders?"

"Uh, the Commandant's, sir."

"And did you find them?"

"No, sir. Not a trace of them."

Douglas looked at Harshaw. "Counsellor, did you see anything of another squad, earlier?"

"It's no part of my duties to keep track of your servants, Mr. Secretary. Perhaps they got the wrong address. Or simply got lost."

"That is hardly an answer to my question."

"You are correct, sir. I am not being interrogated. Nor will I be, other than by due process. I am acting for my client; I am not nursemaid to these uniformed, uh, persons. But I suggest, from what I have seen of them, that they might not be able to find a pig in a bath tub."

"Mmm ... possibly. Major, round up your men and return. I'll confirm that via channels."

"Yes, sir!" The major saluted.

"Just a moment!" Harshaw said sharply. "These men broke into my house. I demand to see their warrant."

"Oh. Major, show him your search warrant."

Major Bloch turned brick red. "Sir, the officer ahead of me had the warrants. Captain Heinrich. The one who's missing."

Douglas stared at him. "Young man ... do you mean to stand there and tell me that you broke into a citizen's home without a warrant?"

"But-Sir, you don't understand! There was a warrant - there are warrants. I saw them. But, of course, Captain Heinrich took them with him. Sir."

Douglas just looked at him. "Get on back. Place yourself under arrest when you get there. I'll see you later."

"Yes, sir."

"Hold it," Harshaw demanded. "Under the circumstances I shan't let him leave. I exercise my right to make a citizen's arrest. I shall take him down and charge him in this township and have him placed in our local lockup. 'Armed breaking and entering.'"

Douglas blinked thoughtfully. "Is this necessary, sir?"

"I think it is. These fellows seem to be awfully hard to find when you want them - so I don't want to let this one leave our local jurisdiction. Why, aside from the serious criminal charges, I haven't even had opportunity to assess the damage to my property."

"You have my assurance, sir, that you will be fully compensated."

"Thank you, sir. But what is to prevent another uniformed joker from coming along twenty minutes from now, perhaps this time with a warrant? Why, he wouldn't even need to break down the door! My castle stands violated, open to any intruder. Mr. Secretary, only the few precious moments of delay afforded by my once-stout door kept this scoundrel from dragging me away before I could reach you by telephone ... and you heard him say that there was still another like him at large - with, so he says, warrants."

"Doctor, I assure you that I know nothing of any such warrant."

"Warrants, sir. He said 'warrants for several arrests.' Though perhaps a better term would be 'lettres de cachet.'"

"That's a serious imputation."

"This is a serious matter. You see what has already been done to me."

"Doctor, I know nothing of these warrants, if they exist. But I give you my personal assurance that I will look into it at once, find out why they were issued, and act as the merits of the matter may appear. Can I say more?"

"You can say a great deal more, sir. I can reconstruct exactly why those warrants were issued. Some one in your service, in an excess of zeal, caused a pliant judge to issue them ... for the purpose of seizing the persons of myself and my guests in order to question us, safely out of your sight. Out of anyone's sight, sir! We will discuss all issues with you but we will not be questioned by such as this creature-" Jubal hooked a thumb at the S.S. major "-in some windowless back room! Sir, I hope for, and expect, justice at your hands ... but if those warrants are not canceled at once, if I am not assured by you personally beyond any possibility of quibble that the Man from Mars, Nurse Boardman, and myself will be left undisturbed in our persons, free to come and go, then-" Jubal stopped and shrugged helplessly. "-I must seek a champion elsewhere. There are, as you know, persons and powers outside the administration who hold deep interest in the affairs of the Man from Mars."

"You threaten me."

"No, sir. I plead with you. I have come to you first. We wish to negotiate. But we cannot speak easily while we are being hounded. I beg of you, sir - call off your dogs!"

Douglas glanced down, looked up again. "Those warrants, if any, will not be served. As soon as I can track them down they will be canceled."

"Thank you, sir."

Douglas glanced at Major Bloch. "You still insist on booking him locally?"

Jubal looked at him contemptuously. "Him? Oh, let him go, he's merely a fool in uniform. And let's forget the damages, too. You and I have more serious matters to discuss."

"You may go, Major." The S.S. officer saluted and left very abruptly. Douglas continued, "Counsellor, it is my thought that we now need conversations face to face. The matters you raise can hardly be settled over the telephone."

"I agree."

"You and your, uh, client will be my guests at the Palace. I'll send my yacht to pick you up. Can you be ready in an hour?"

Harshaw shook his head. "Thank you, Mr. Secretary. But that won't be necessary. We'll sleep here ... and when it comes time to meet I'll dig up a dog sled, or something. No need to send your yacht."

Mr. Douglas frowned. "Come, Doctor! As you yourself pointed out, these conversations will be quasi-diplomatic in nature. In proffering proper protocol I have, in effect, conceded this. Therefore I must be allowed to provide official hospitality."

"Well, sir, I might point out that my client has had entirely too much official hospitality already - he had the Devil's own time getting shut of it."

Douglas' face became rigid. "Sir, are you implying-"

"I'm not implying anything. I'm simply saying that Smith has been through quite a lot and is not used to high-level ceremony. He'll sleep sounder here, where he feels at home. And so shall I. I am a crochety old man, sir, and I prefer my own bed. Or I might point out that our talks may break down and my client and I would be forced to look elsewhere - in which case I would find it embarrassing to be a guest under your roof."

The Secretary General looked very grim. "Threats again. I thought you trusted me, sir? And I distinctly heard you say that you were 'ready to negotiate.'"

"I do trust you, sir." (-about as far as I could throw a fit!) "And we are indeed ready to negotiate. But I use 'negotiate' in its original sense, not in this newfangled meaning of 'appeasement.' However, we intend to be reasonable. But we can't start talks at once in any case; we're shy one factor and we must wait. How long, I don't know."

"What do you mean?"

"We expect the administration to be represented at these talks by whatever delegation you choose - and we have the same privilege."

"Surely. But let's keep it small. I shall handle this myself, with only an assistant or two. The Solicitor General, I think ... and our experts in space law. But to transact business you require a small group - the smaller the better."

"Most certainly. Our group will be small Smith himself ? myself - I'll bring a Fair Witness-"

"Oh, come now!"

"A Witness does not slow things up. I suggest you retain one also. We'll have one or two others perhaps - but we lack one key man. I have firm instructions from my client that a fellow named Ben Caxton must be present . . . and I can't find the beggar."

Jubal, having spent hours of most complex maneuvering in order to toss in this one remark, now waited with his best poker face to see what would happen. Douglas stared at him. "'Ben Caxton?' Surely you don't mean that cheap winchell?"

"The Ben Caxton I refer to is a newspaperman. He has a column with one of the syndicates."

"Absolutely out of the question!"

Harshaw shook his head. "Then that's all, Mr. Secretary. My instructions are firm and give me no leeway. I'm sorry to have wasted your time. I beg to be excused now." He reached out as if to switch off the phone.

"Hold it."

"Sir?"

"Don't cut that circuit; I'm not through speaking to you!"

"I most humbly beg the Secretary General's pardon. We will, of course, wait until he excuses us."

"Yes, yes, but never mind the formality. Doctor, do you read the tripe that comes out of this Capitol labeled as news?"

"Good Heavens, not"

"I wish I didn't have to. It's preposterous to talk about having a journalist present at these talks in any case. We'll let them in later, after everything is settled. But even if we were to have any of them present, Caxton would not be one of them. The man is utterly poisonous . . . a keyhole sniffer of the worst sort."

"Mr. Secretary, we have no objection to the full glare of publicity throughout. In fact, we shall insist on it."

"Ridiculous!"

"Possibly. But I serve my client as I think best. If we reach agreement affecting the Man from Mars and the planet which is his home, I want every person on this planet to have opportunity to know exactly how it was done and what was agreed. Contrariwise, if we fail to agree, people must hear how and where the talks broke down. There will be no star chamber proceedings, Mr. Secretary."

"Damn it, man, I wasn't speaking of a star chamber and you know it! I simply meant quiet, orderly talks without our elbows being jostled!"

"Then let the press in, sir, through their cameras and microphones but with their feet and elbows outside. Which reminds me - we will be interviewed, my client and I, over one of the networks later today - and I shall announce that we want full publicity on these coming talks."

"What? You mustn't give out interviews now - why, that's contrary to the whole spirit of this discussion."

"I can't see that it is. We won't discuss this private conversation, of course - but are you suggesting that a private citizen must have your permission to speak to the press?"

"No, of course not, but-"

"I'm afraid it's too late, in any case. The arrangements have all been made and the only way you could stop it now would be by sending more carloads of your thugs - with or without warrants. But I'm afraid they would be too late, even so. My only reason for mentioning it is that it occurs to me that you might wish to give out a news release - in advance of this coming interview - telling the public that the Man from Mars has returned from his retreat in the Andes ... and is now vacationing in the Poconos. So as to avoid any possible appearance that the government was taken by surprise. You follow me?"

"I follow you - quite well." The Secretary General stared silently at Harshaw for several moments, then said, "Please wait." He left the screen entirely.

Harshaw motioned Larry to him while he reached up with his other hand and covered the telephone's sound pickup. "Look, son," he whispered, "with that transceiver out I'm bluffing on a busted flush. I don't know whether he's left to issue that news release I suggested ... or has gone to set the dogs on us again while he keeps me tied up on the phone. And I won't know, either way. You high tail it out of here, get Tom Mackenzie on the phone, and tell him that if he doesn't get the setup here working at once, he's going to miss the biggest story since the Fall of Troy. Then be careful coming home - there may be cops crawling out of the cracks."

"Got it. But how do I call Mackenzie?"

"Uh-" Douglas was just sitting back down on screen. "Speak to Miriam. Git."

"Dr. Harshaw, I took your suggestion. A news release much as you worded it ... plus a few substantiating details." Douglas smiled warmly in a good simulation of his homespun public persona. "And there is no use in half measures. I can see that, if you insist on publicity, there is no way to stop you, foolish as it is to hold exploratory talks in public. So I added to the release that the administration had arranged to discuss future interplanetary relations with the Man from Mars - as soon as he had rested from his trip - and would do so publicly ... quite publicly." His smile became chilly and he stopped looking like good old Joe Douglas.

Harshaw grinned jovially, in honest admiration - why, the old thief had managed to roll with the punch and turn a defeat into a coup for the administration. "That's just perfect, Mr. Secretary! Much better if such matters come officially from the government. We'll back you right down the line!"

"Thank you. Now about this Caxton person. Letting the press in does not apply to him. He can sit at home, watch it over stereovision, and make up his lies from that - and no doubt he will. But he will not be present at the talks. I'm sorry. No."

"Then there will be no talks. Mr. Secretary, no matter what you have told the press."

"I don't believe you understand me, Counsellor. This man is offensive to me. Personal privilege."

"You are correct, sir. It is a matter of personal privilege."

"Then we'll say no more about it."

"You misunderstand me. It is indeed personal privilege. But not yours. Smith's. You are privileged to select your advisers to be present at these talks - and you can fetch the Devil himself and we shall not complain. Smith is privileged to select his advisers and have them present. If Caxton is not present, we will not be there. In fact, you will find us across the street, at some quite different conference. One where you won't be welcome. Even if you speak fluent Hindi. Now do you understand me?"

There was a long silence, during which Harshaw thought clinically that a man of Douglas' age really should not indulge in such evident rage. Douglas did not leave the screen but he consulted offscreen and silently. At last he spoke - to the Man from Mars.

Mike had stayed on screen the whole time, as silently and at least as patiently as the Witness. Douglas said to him, "Smith, why do you insist on this ridiculous condition?"

Harshaw put a hand on Mike and said instantly, "Don't answer, Mike!" -then to Douglas: "Tut, tut, Mr. Secretary! The Canons, please! You may not inquire why my client has instructed me. And let me add that the Canons are violated with exceptional grievance in that my client has but lately learned English and cannot be expected to hold his own against you. If you will first take the trouble to learn Martian, I may permit you to put the question again ... in his language. Or I may not. But certainly not today."

Douglas sighed. "Very well. It might be pertinent to inquire into what Canons you have played fast and loose with, too - but I haven't time; I have a government to run. I yield. But don't expect me to shake hands with this Caxton!"

"As you wish, sir. Now back to the first point. We are held up. I haven't been able to find Caxton. His office says that he is out of town."

Douglas laughed. "That's hardly my problem. You insisted on a privilege - one I find personally offensive. Bring whom you like. But round them up yourself."

"Reasonable, sir, very reasonable. But would you be willing to do the Man from Mars a favor?"

"Eh? What favor?"

"The talks will not begin until Caxton is located - that is flat and is not subject to argument. But I have not been able to find him ... and my client is getting restive. I am merely a private citizen ... but you have resources."

"What do you mean?"

"Some minutes ago I spoke rather disparagingly of the Special Service squadrons - check it off to the not unnatural irk of a man who has just had his front door broken down. But in truth I know that they can be amazingly efficient ... and they have the ready cooperation of police forces everywhere, local, state, national, and all Federation departments and bureaus. Mr. Secretary, if you were to call in your S.S. Commandant and tell him that you were anxious to locate a certain man as quickly as was humanly possible - well, sir, it would produce more meaningful activity in the next hour than I myself could hope to produce in a century."

"Why on Earth should I alert all police forces everywhere to find one scandal - mongering reporter?"

"Not 'on Earth,' my dear sir-on Mars. I asked you to regard this as a favor to the Man from Mars."

"Well ... it's a preposterous request but I'll go along." Douglas looked directly at Mike. "As a favor to Smith, only. But I shall expect similar cooperation when we get down to cases."

"You have my assurance that it will ease the situation enormously."

"Well, I can't promise anything. You say the man is missing. If he is, he may have fallen in front of a truck; he may be dead - and I, for one, would not mourn."

Harshaw looked very grave. "Let us hope not, for all of our sakes."

"What do you mean?"

"I've tried to point out that sad possibility to my client - but it is like shouting into the wind. He simply won't listen to the idea." Harshaw sighed. "A shambles, sir. If we can't find this Caxton, that is what we will both have on our bands: a shambles."

"Well I'll try. But don't expect miracles, Doctor."

"Not I, sir. My client. He has the Martian viewpoint ... and he does expect miracles. So let's pray for one."

"You'll hear from me. That's all I can say."

Harshaw bowed without getting up. "Your servant, sir."

As the Secretary General's image cleared from the screen Jubal sighed and stood up, and at once found Gillian's arms around his neck. "Oh, Jubal, you were wonderful!"

"We aren't out of the woods yet, child."

"I know. But if anything can save Ben, you've just done it." She kissed him.

"Hey, none of that stuff! I swore off smooching before you were born. So kindly show respect for my years." He kissed her carefully and thoroughly. "That's just to take the taste of Douglas out of my mouth - between kicking him and kissing him I was getting nauseated. Now go smooch Mike instead. He deserves it - for holding still to my damned lies."

"Oh, I shall!" Jill let go of Harshaw, put her arms around the Man from Mars. "Such wonderful lies, Jubal!" She kissed Mike.

Jubal watched with deep interest as Mike initiated a second section of the kiss himself, performing it very solemnly but not quite as a novice - clumsy, Harshaw decided, but he did not bump noses nor hang back. Harshaw awarded him a B-minus, with an A for effort.

"Son," he said, "you continue to amaze me. I would have expected that to cause you to curl up in one of your faints."

"I so did," Mike answered seriously, without letting go of Jill, "on the first kissing time."

"Well! Congratulations, Jill. A.C., or D.C.?"

She looked at Harshaw. "Jubal, you're a tease but I love you anyhow and refuse to let you get my goat. Mike got a little upset once - but no longer, as you can see."

"Yes," Mike agreed, "it is a goodness. For water brothers it is a growing - closer. I will show you. Yes?" He let go of Jill.

Jubal hastily put up a palm. "No."

"No?"

"Don't be hurt. But you would be disappointed, son. It's a growing closer for water brothers only if they are young girls and pretty - such as Jill."

"My brother Jubal, you speak rightly?"

"I speak very rightly. Kiss girls all you want to - it beats the hell out of card games."

"Beg pardon?"

"It's a fine way to grow closer ... but just with girls. Hmmm ... Jubal looked around the room. "I wonder if that first - time phenomenon would repeat? Dorcas, I want your help in a scientific experiment."

"Boss, I am not a guinea pig! You go to hell."

"In due course, I shall. Don't be difficult, girl; Mike has no communicable diseases, or I wouldn't let him use the pool - which reminds me: Miriam, when Larry gets back, tell him I want the pool drained and refilled tonight - we're through with murkiness, Well, Dorcas?"

"How do you know it would be our first time?"

"Mmm, there's that. Mike, have you ever kissed Dorcas?"

"No, Jubal. Only today did I learn that Dorcas is my water brother."

"She is?"

"Yes. Dorcas and Anne and Miriam and Larry. They are your water brothers, my brother Jubal."

"Mmm, yes. Correct in essence."

"Yes. It is essence, the grokking-not sharing of water. I speak rightly?"

"Very rightly, Mike."

"They are your water brothers." Mike paused to think words. "In catenative assemblage, they are my brothers." Mike looked at Dorcas. "For brothers, growing - closer is good. But I did not know."

Jubal said, "Well, Dorcas?"

"Huh? Oh, Heavens! Boss, you're the world's worst tease. But Mike isn't teasing. He's sweet." She walked up to him, stood on tiptoes, and held up her arms. "Kiss me, Mike."

Mike did. For some seconds they "grew closer."

Dorcas fainted.

Jubal spotted it and kept her from falling, Mike being far too inexperienced to cope with it. Then Jill had to speak sharply to Mike to keep him from trembling into withdrawal when he saw what had happened to Dorcas. Luckily Dorcas came out of it shortly and was able to reassure Mike that she was all right, that she had indeed "grown closer" and would happily grow closer again - but she needed to catch her breath. "Whew!"

Miriam had watched round-eyed. "I wonder if I dare risk it?"

Anne said, "By seniority, please. Boss, are you through with me as a Witness?"

"For the time being, at least."

"Then hold my cloak." She slipped out of it. "Want to bet on it?"

"Which way?"

"I'll give you seven-to-two I don't faint - but I wouldn't mind losing."

"Done."

"Dollars, not hundreds. Mike dear ... let's grow lots closer."

In time Anne was forced to give up through simple hypoxia, although Mike, with his Martian training, could have gone without oxygen much longer. She gasped for air and said, "I don't think I was set just right. Boss, I'm going to give you another chance for your money."

She started to offer her face again but Miriam tapped her on the shoulder. "Out."

"Don't be so eager."

"'Out,' I said. The foot of the line for you, wench," Miriam insisted.

"Oh, well!" Anne pecked Mike hastily and gave way. Miriam moved in, smiled at him, and said nothing. It was not necessary; they grew close and continued to grow closer.

"Front!"

Miriam looked around. "Boss, can't you see I'm busy?"

"All right, all right! But get out of the pickup angle - I'll answer the phone myself."

"Honest, I didn't even hear it."

"Obviously. But for a while we've got to pretend to a modicum of dignity around here - it might be the Secretary General. So get out of range."

But it was Mr. Mackenzie. "Jubal, what in the devil is going on?"

"Trouble?"

"A short while ago I got a wild phone call from a young man claiming to speak for you who urged me to drop everything and get cracking, because you've finally got something for me. Since I had already ordered a mobile unit to your place-"

"Never got here."

"I know. They called in, after wandering around somewhere north of you. Our dispatcher straightened them out and they should be there any moment now. I tried twice to call you and your circuit was busy. What have I missed?"

"Nothing yet." Jubal considered it. Damnation, he should have had someone monitor the babble box. Had Douglas actually made that news release? Was Douglas committed? Or would a new passel of cops show up? While the kids played post office! Jubal, you're getting senile. "I'm not sure that there's going to be, just yet. Has there been anything special in the way of a news flash this past hour?"

"Why, no-oh, one item: the Palace announced that the Man from Mars had returned north and was vacationing in the - Jubal! Are you mixed up in that?"

"Just a moment. Mike, come to the phone. Anne, grab your robe."

"Got it, Boss."

"Mr. Mackenzie - meet the Man from Mars."

Mackenzie's jaw dropped, then his professional reflexes came to his aid. "Hold it. Just hold it right there and let me get a camera on this! We'll pick it up in flat, right off the phone - and we'll repeat in stereo just as quick as those jokers of mine get there. Jubal, I'm safe on this? You wouldn't-You wouldn't-"

"Would I swindle you with a Fair Witness at my elbow? Yes, I would, if necessary. But I'm not forcing this interview on you. Matter of fact, we should wait and tie in Argus and Trans-Planet."

"Jubal! You can't do this to me."

"And I won't. The agreement with all of you was to monitor what the cameras saw ... when I signalled. And use it if it was newsworthy. But I didn't promise not to give out interviews in addition to that - and New World can have this interview, oh, say thirty minutes ahead of Argus and Trans-P ... if you want it." Jubal added, "Not only did you loan us all the equipment for the tie-in, but you've been very helpful personally, Tom. I can't express how helpful you've been."

"You mean, uh, that telephone number?"

"Correct!"

"And it got results?"

"It did. But no questions about that, Tom. Not on the air. Ask me privately - next year."

"Oh, I wouldn't think of it. You keep your lip buttoned and I'll keep mine. Now don't go away-"

"One more thing. That spool of messages you're holding for me against the same signal. Make damn sure they don't go out. Send them back to me."

"Eh? All right, all right - I've been keeping them in my desk, you were so fussy about it. Jubal, I've got a camera on this phone screen right now. Can we start?"

"Shoot."

"And I'm going to do this one myself!" Mackenzie turned his face away and apparently looked at the camera. "flash news! This is your NWNW reporter on the spot while it's hot! The Man from Mars has just phoned you right here in your local station and wants to talk to you! Cut. Monitor, insert flash-news plug and acknowledgment to sponsor. Jubal, anything special I should ask him?"

"Don't ask him questions about South America - he's not a tourist. Swimming is your safest subject. You can ask me about his future plans."

"Okay. End of cut. Friends, you are now face to face and voice to voice with Valentine Michael Smith, the Man from Mars! As NWNW, always first with the burst, told you earlier, Mr. Smith has just returned from his solitary retreat high in the Andes - and we welcome him back! Wave to your friends, Mr. Smith-"

("Wave at the telephone, son. Smile and wave at it.")

"Thank you, Valentine Michael Smith. We're all happy to see you looking so healthy and tan. I understand that you have been gathering strength by learning to swim?"

"Boss! Visitors. Or something."

"Cut before interruption - after the word 'swim.' What the hell, Jubal?"

"I'll have to see. Jill, ride herd on Mike again - it might be General Quarters."

But it was not. It was the NWNW mobile stereovision unit landing - and again rose bushes were damaged - Larry returning from phoning Mackenzie from the village, and Duke, returning. Mackenzie decided to finish the flat black & white interview quickly, since he was now assured of depth and color through his mobile unit, and in the meantime its technical crew could check the trouble with the equipment on loan to Jubal. Larry and Duke went with them.

The interview was finished with inanities, Jubal fielding any questions Mike failed to understand; Mackenzie signed off with a promise to the public that a color & depth special interview with the Man from Mars would follow in thirty minutes. "Stay synched with this station!" He stayed on the phone and waited for his technicians to report.

Which the crew boss did, almost at once: "Nothing wrong with that transceiver, Mr. Mackenzie, nor with any part of this field setup."

"Then what was wrong with it before?"

The technician glanced at Larry and Duke, then grinned. "Nothing. But it helps quite a bit to put power through it. The breaker was open at the board."

Harshaw intervened to stop a wrangle between Larry and Duke, one which seemed concerned with the relative merits of various sorts of idiocy more than with the question of whether Duke had, or had not, told Larry that a certain tripped circuit breaker must be reset if it was anticipated that the borrowed equipment was going to be used. The showman's aspect of Jubal's personality regretted that the "finest unrehearsed spectacular since Elijah bested the Priests of Baal" had been missed by the cameras. But the political finagler in him was relieved that mischance had kept Mike's curious talents still a close secret - Jubal anticipated that he still might need them, as a secret weapon ... not to mention the undesirability of trying to explain to skeptical strangers the present whereabouts of certain policemen plus two squad cars.

As for the rest, it merely confirmed his own conviction that science and invention had reached its peak with the Model-T Ford and had been growing steadily more decadent ever since. And besides, Mackenzie wanted to get on with the depth & color interview. They got through that with a minimum of rehearsing, Jubal simply making sure that no question would be asked which could upset the public fiction that the Man from Mars had just returned from South America. Mike sent greetings to his friends and brothers of the Champion, including one to Dr. Mahmoud delivered in croaking, throat rasping Martian Jubal decided that Mackenzie had his money's worth.

At last the household could quiet down. Jubal set the telephone for two hours refusal, stood up, stretched, sighed, and felt a great weariness, wondered if he were getting old. "Where's dinner? Which one of you wenches was supposed to get dinner tonight? And why didn't you? Gad, this household is falling to wrack and ruin!"

"It was my turn to get dinner tonight," Jill answered, "but-"

"Excuses, always excuses."

"Boss," Anne interrupted sharply, "how do you expect anyone to cook when you've kept every single one of us penned up here in your study all afternoon?"

"That's the moose's problem," Jubal said dourly. "I want it clearly understood that, even if Armageddon is held on these premises I expect meals to be hot and on time right up to the ultimate trump. Furthermore-"

"Furthermore," Anne completed, "it is now only seven-forty and plenty of time to have dinner by eight. So quit yelping, Boss, until you have something to yelp about. Crybaby."

"Is it really only twenty minutes of eight? Seems like a week since lunch. Anyhow you haven't left me a civilized amount of time to have a pre-dinner drink."

"Poor you?'

"Somebody get me a drink. Get everybody a drink. On second thought let's skip a formal dinner tonight and drink our dinners; I feel like getting as tight as a tent rope on a rainy day. Anne, how are we fixed for smorgasbord?"

"Plenty."

"Then why not thaw out eighteen or nineteen kinds and spread 'em around and let anybody eat what he feels like when he feels like it? What's all the argument about?"

"Right away," agreed Jill.

Anne stopped to kiss him on his bald spot. "Boss, you've done nobly. We'll feed you and get you drunk and put you to bed. Wait, Jill, I'm going to help."

"I may to help, too?" Smith said eagerly.

"Sure, Mike. You can carry trays. Boss, dinner will be by the pool. It's a hot night."

"How else?" When they had left, Jubal said to Duke, "Where the hell have you been all day?"

"Thinking"

"Doesn't pay to. Just makes you discontented with what you see around you. Any results?"

"Yes," said Duke, "I've decided that what Mike eats, or doesn't eat, is no business of mine."

"Congratulations. A desire not to butt into other people's business is at least eighty percent of all human wisdom ... and the other twenty percent isn't very important."

"You butt into other people's business. All the time."

"Who said I was wise? I'm a professional bad example. You can learn a lot by watching me. Or listening to me. Either one."

"Jubal, if I walked up to Mike and offered him a glass of water, do you suppose he would go through that lodge routine?"

"I feel certain that he would. Duke, almost the only human characteristic Mike seems to possess is an overwhelming desire to be liked. But I want to make sure that you know how serious it is to him. Much more serious than getting married. I myself accepted water brotherhood with Mike before I understood it - and I've become more and more deeply entangled with its responsibilities the more I've grokked it. You'll be committing yourself never to lie to him, never to mislead or deceive him in any way, to stick by him come what may - because that is just what he will do with you. Better think about it."

"I have been thinking about it, all day. Jubal, there's something about Mike that makes you want to take care of him."

"I know. You've probably never encountered complete honesty before - I know I hadn't. Innocence. Mike has never tasted the fruit of the Tree of Knowledge of Good and Evil ... so we, who have, don't understand what makes him tick. Well, on your own head be it. I hope you never regret it." Jubal looked up. "Oh, there you are! I thought you had stopped to distill the stuff."

Larry answered, "Couldn't find a cork screw, at first."

"Machinery again. Why didn't you bite the neck off? Duke, you'll find some glasses stashed behind The Anatomy of Melancholy up there-"

"I know where you hide them."

"-and we'll all have a quick one, neat, before we get down to serious drinking." Duke got the glasses; Jubal poured and held up his own. "The golden sunshine of Italy congealed into tears. Here's to alcoholic brotherhood ... much more suited to the frail human soul, if any, than any other sort."

"Health."

"Cheers."

Jubal poured his slowly down his throat. "Ah-" he said happily, and belched. "Offer some of that to Mike, afterwards, Duke, and let him learn how good it is to be human. Makes me feel creative. Front! Why are those girls never around when I need them? Front!!"

"I'm still 'Front,' " Miriam answered, at the door, "but-"

"I know. And I was saying: '-to what strange, bittersweet fate my tomboy ambition-'"

"But I finished that story while you were chatting on the telephone with the Secretary General."

"Then you are no longer 'Front.' Send it off."

"Don't you want to read it first? Anyhow, I've got to revise it - kissing Mike gave me a new insight on it."

Jubal shuddered. "Read it?' Good God, no! It's bad enough to write such a thing. And don't even consider revising it, certainly not to fit the facts. My child, a true-confession story should never be tarnished by any taint of truth."

"Okay, Boss. And Anne says if you want to come down to the pool and have a bite before you eat, come on."

"I can't think of a better time. Shall we adjourn to the terrace, gentlemen?"

At the pool the party progressed liquidly with bits of fish and other Scandinavian high-caloric comestibles added to taste. At Jubal's invitation Mike tried brandy, somewhat cut with water. Mike found the resulting sensation extremely disquieting, so he analyzed his trouble, added oxygen to the ethanol in an inner process of reversed fermentation and converted it to glucose and water, which gave him no trouble.

Jubal had been observing with interest the effect of his first drink of liquor on the Man from Mars - saw him become drunk almost at once, saw him sober up even more quickly. In an attempt to understand what had happened, Jubal urged more brandy on Mike - which he readily accepted since his water brother offered it. Mike sopped up an extravagant quantity of fine imported liquor before Jubal was willing to concede that it was impossible to get him drunk.

Such was not the case with Jubal, despite his years of pickling;

staying sociable with Mike during the experiment dulled the edge of his wits. So, when he attempted to ask Mike what he had done, Mike thought that he was inquiring about the events during the raid by the S.S. - concerning which Mike still felt latent guilt. He tried to explain and, if needed, receive Jubal's pardon.

Jubal interrupted when at last he figured out what the boy was talking about. "Son, I don't want to know what you did, nor how you did it. What you did was just what was needed - perfect, just perfect. But-" He blinked owlishly. "-don't tell me about it. Don't ever tell anybody about it."

"Not?"

"'Not.' It was the damnedest thing I've seen since my uncle with the two heads debated free silver and triumphantly refuted himself. An explanation would spoil it."

"I do not grok rightly?"

"Nor do I. So let's not worry and have another drink."

Reporters and other newsmen started arriving while the party was still climbing. Jubal received each of them with courteous dignity, invited them to eat, drink, and relax - but to refrain from badgering himself or the Man from Mars.

Those who failed to heed his injunction were tossed into the pool.

At first Jubal kept Larry and Duke at flank to administer the baptism as necessary. But, while some of the unfortunate importunates became angry and threatened various things which did not interest Jubal (other than to caution Mike not to take any steps), others relaxed to the inevitable and added themselves to the dousing squad on a volunteer basis, with the fanatic enthusiasm of proselytes - Jubal had to stop them from ducking the doyen lippmann of the New York Times for a third time.

During the evening Dorcas came out of the house, sought out Jubal and whispered in his ear: "Telephone, Boss. For you."

"Take a message."

"You must answer it, Boss."

"I'll answer it with an ax! Duke, get me an ax. I've been intending to get rid of that Iron Maiden for some time - and tonight I'm in the mood for it."

"Boss ... you want to answer this one. It's the man you spoke to for quite a long time this afternoon."

"Oh. Why didn't you say so?" Jubal lumbered upstairs, made sure his study door was bolted behind him, went to the phone. Another of Douglas' sleek acolytes was on the screen but was replaced quickly by Douglas. "It took you long enough to answer your phone."

"It's my phone, Mr. Secretary. Sometimes I don't answer it at all."

"So it would seem. Why didn't you tell me that this Caxton fellow is an alcoholic?"

"Is he?"

"He certainly is! He isn't missing-not in the usual sense. He's been off on one of his periodic benders. He was located, sleeping it off, in a fleabag in Sonora."

"I'm glad to hear that he has been found. Thank you, sir."

"He's been picked up on a technical charge of 'vagrancy.' The charge won't be pressed-instead we are releasing him to you."

"I am very much in your debt, sir."

"Oh, it's not entirely a favor! I'm having him delivered to you in the state in which he was found-filthy, unshaven, and, I understand, smelling like a brewery. I want you to see for yourself what sort of a tramp he is."

"Very well, sir. When may I expect him?"

"Almost at once, I fancy. A courier arrow left Nogales some time ago. At Mach three or better it should be overhead soon. The pilot has instructions to deliver him to you and get a receipt."

"He shall have it."

"Now, Counselor ... having delivered him, I wash my hands of it. I shall expect you, and your client, to appear for talks whether you fetch along that drunken libeller or not."

"Agreed. When?"

"Shall we say tomorrow at ten? Here."

"'Twere best done quickly.' Agreed."

Jubal went back downstairs and paused at his broken door. "Jill! Come here, child."

"Yes, Jubal." She trotted toward him, a reporter in close formation with her.

Jubal waved the man back. "Private," he said firmly. "Family matter. Go have a drink."

"Whose family?"

"A death in yours, if you insist. Scat!" The newsman grinned and accepted it. Jubal leaned over Gillian and said softly, "It worked. He's safe."

"Ben?"

"Yes. He'll be here soon."

"Oh, Jubal!" She started to bawl.

He took her shoulders. "Stop it," he said firmly. "Go inside and lock your door until you get control of yourself. This is not for the press."

"Yes, Jubal. Yes, Boss."

"That's better. Go cry in your pillow, then wash your face." He went on out to the pool. "Quiet everybody! Quiet! I have an announcement to make. We've enjoyed having you - but the party is over."

"Boo!"

"Toss him in the pool, somebody. I've got work to do early tomorrow morning, I'm an old man and I need my rest, and so does my family. Please leave quietly and as quickly as possible. Black coffee for any who need it - but that's all. Duke, cork those bottles. Girls, clear the food away."

There was minor grumbling, but the more responsible quieted their colleagues. In ten minutes they were alone.

In twenty minutes Ben Caxton arrived. The S.S. officer commanding the courier car silently accepted Harshaw's signature and thumb print on a prepared receipt, then left at once while Jill continued to sob on Ben's shoulder.

Jubal looked him over in the light from the pool. "Ben, you're a mess. I hear you've been drunk for a week - and you look it."

Ben cursed, fluently and well, while continuing to pat Jill's back. "'M drunk, awri'-but haven' had a drink."

"What happened?"

"I don't know. I don't know!"

An hour later Ben's stomach had been pumped out (alcohol and gastric juices, no food); Jubal had given him shots to offset alcohol and barbiturates; he was bathed, shaved, dressed in clean clothes that did not fit him, had met the Man from Mars, and was sketchily brought up to date, while ingesting milk and bland food.

But he was unable to bring them up to date. For Ben, the past week had not happened - he had become unconscious in a taxicab in Washington; he had been shaken into drunken wakefulness two hours earlier. "Of course I know what happened. They kept me doped and in a completely dark room ... and wrung rue out. I vaguely remember some of it. But I can't prove anything. And there's the village Jefe and the madam of this dive they took me to - plus, I'm sure, plenty of other witnesses to swear just how this gringo spent his time. And there's nothing I can do about it."

"Then don't fight it," Jubal advised. "Relax and be happy."

"The hell I will! I'll get that-"

"Tut, tut! You've won, Ben. And you're alive ... which I would have given long odds against, earlier today. Douglas is going to do exactly what we want him to - and smile and like it."

"I want to talk about that. I think-"

"I think you're going to bed. Now. With a glass of warm milk to conceal Old Doc Harshaw's Secret Ingredient for secret drinkers."

Shortly thereafter Caxton was in bed and beginning to snore. Jubal was puttering around, heading for bed himself, and encountered Anne in the upper hall. He shook his head tiredly. "Quite a day, lass."

"Yes, quite. I wouldn't have missed it ... and I don't want to repeat it. You go to bed, Boss."

"In a moment. Anne, tell me something. What's so special about the way that lad kisses?"

Anne looked dreamy and then dimpled. "You should have tried it when he invited you to."

"I'm too old to change my ways. But I'm interested in everything about the boy. Is this actually something different, too?"

Anne pondered it. "Yes."

"How?"

"Mike gives a kiss his whole attention."

"Oh, rats! I do myself. Or did."

Anne shook her head. "No. Some men try to. I've been kissed by men who did a very good job of it indeed. But they don't really give kissing a woman their whole attention. They can't. No matter how hard they try, some parts of their minds are on something else. Missing the last bus, maybe - or how their chances are for making the gal - or their own techniques in kissing - or maybe worry about their jobs, or money, or will husband or papa or the neighbors catch on. Or something. Now Mike doesn't have any technique ... but when Mike kisses you he isn't doing anything else. Not anything. You're his whole universe for that moment and the moment is eternal because he doesn't have any plans and he isn't going anywhere. Just kissing you." She shivered. "A woman notices. It's overwhelming."

"Hmm-"

"Don't 'Hmm' at me, you old lecher! You don't understand."

"No. And I'm sorry to say I probably never will. Well, goodnight- and, oh, by the way ... I told Mike to bolt his door tonight."

She made a face at him. "Spoilsport!"

"He's learning quite fast enough. Mustn't rush him."

Chapter 18

THE CONFERENCE WAS POSTPONED to the afternoon, then quickly re-postponed to the following morning, which gave Caxton an extra twenty-four hours of badly needed recuperation, a chance to hear in detail about his missing week, a chance to "grow closer" with the Man from Mars - for Mike grokked at once that Jill and Ben were "water brothers," consulted Jill about it, and solemnly offered water to Ben.

Ben had been adequately briefed by Jill. He accepted it just as solemnly and without mental reservations ... after soul searching in which he decided that his own destiny was, in truth, interwoven with that of the Man from Mars - through his own initiative before he ever met Mike.

Ben had had to chase down, in the crannies of his soul, one uneasy feeling before he was able to do this. He at last decided that it was simple jealousy, and, being such, had to be cauterized. He had discovered that he felt irked at the closeness between Mike and Jill. His own bachelor persona, he learned, had been changed by a week of undead oblivion; he found that he wanted to be married, and to Jill. He proposed to her again, without a trace of joking about it, as soon as he got her alone.

Jill had looked away. "Please, Ben."

"Why not? I'm solvent, I've got a fairly good job, I'm in good health - or I will be, as soon as I get their condemned 'truth' drugs washed out of my system ... and since I haven't, quite, I feel an overpowering compulsion to tell the truth right now. I love you. I want you to marry me and let me rub your poor tired feet. So why not? I don't have any vices that you don't share with me and we get along together better than most married couples. Am I too old for you? I'm not that old! Or are you planning to marry somebody else?"

"No, neither one! Dear Ben ... Ben, I love you. But don't ask me to marry you now. I have ... responsibilities."

He could not shake her firmness. Admittedly, Mike was more nearly Jill's age - almost exactly her age, in fact, which made Ben slightly more than ten years older than they were. But he believed Jill when she denied that age was a factor; the age difference wasn't too great and it helped, all things considered, for a husband to be older than his wife.

But he finally realized that the Man from Mars couldn't be a rival - he was simply Jill's patient. And at that point Ben accepted that a man who marries a nurse must live with the fact that nurses feel maternal toward their charges - live with it and like it, he added, for if Gillian had not had the character that made her a nurse, he would not love her. It was not the delightful figure-eight in which her pert fanny waggled when she walked, nor even the still pleasanter and very mammalian view from the other direction - he was not, thank God, the permanently infantile type, interested solely in the size of the mammary glands! No, it was Jill herself he loved.

Since what she was would make it necessary for him to take second place from time to time to patients who needed her (unless she retired, of course, and he could not be sure it would stop completely even then, Jill being Jill), then he was bloody-be-damned not going to start by being jealous of the patient she had now! Mike was a nice kid - just as innocent and guileless as Jill had described him to be.

And besides, he wasn't offering Jill any bed of roses; the wife of a working newspaperman had things to put up with, too. He might be - he would be - gone for weeks at times and his hours were always irregular. He wouldn't like it if Jill bitched about it. But Jill wouldn't. Not Jill.

Having reached this summing up, Ben accepted the water ceremony from Mike wholeheartedly.

Jubal needed the extra day to plan tactics. "Ben, when you dumped this hot potato in my lap I told Gillian that I would not lift a finger to get this boy his so-called 'rights.' But I've changed my mind. We're not going to let the government have the swag."

"Certainly not this administration!"

"Nor any other administration, as the next one will probably be worse. Ben, you undervalue Joe Douglas."

"He's a cheap, courthouse politician, with morals to match!"

"Yes. And besides that, he's ignorant to six decimal places. But he is also a fairly able and usually conscientious world chief executive - better than we could expect and probably better than we deserve. I would enjoy a session of poker with him ... for he wouldn't cheat and he wouldn't welch and he would pay up with a smile. Oh, he's an S.O.B. - but you can read that as 'Swell Old Boy,' too. He's middlin' decent."

"Jubal, I'm damned if I understand you. You told me yesterday that you had been fairly certain that Douglas had had me killed ... and, believe me, it wasn't far from it! ... and that you had juggled eggs to get me out alive if by any chance I still was alive ... and you did get me out and God knows I'm grateful to you! But do you expect me to forget that Douglas was behind it all? It's none of his doing that I'm alive - he would rather see me dead."

"I suppose he would. But, yup, just that - forget it."

"I'm damned if I will!"

"You'll be silly if you don't. In the first place, you can't prove anything. In the second place, there's no call for you to be grateful to me and I won't let you lay this burden on me. I didn't do it for you."

"Huh?"

"I did it for a little girl who was about to go charging out and maybe get herself killed much the same way - if I didn't do something. I did it because she was my guest and I temporarily stood in loco parentis to her. I did it because she was all guts and gallantry but too ignorant to be allowed to monkey with such a buzz saw; she'd get hurt. But you, my cynical and sin-stained chum, know all about those buzz saws. If your own asinine carelessness caused you to back into one, who am I to tamper with your karma? You picked it."

"Mmm ... I see your point. Okay, Jubal, you can go to hell - for monkeying with my karma. If I have one."

"A moot point. The predestinationers and the free-willers were still tied in the fourth quarter, last I heard. Either way, I have no wish to disturb a man sleeping in a gutter; I assume until proved otherwise that he belongs there. Most do-gooding reminds me of treating hemophilia - the only real cure for hemophilia is to let hemophiliacs bleed to death before they breed more hemophiliacs."

"You could sterilize them."

"You would have me play God? But we're veering off the subject. Douglas didn't try to have you assassinated."

"Says who?"

"Says the infallible Jubal Harshaw, speaking ex cathedra from his belly button. See here, son, if a deputy sheriff beats a prisoner to death, it's sweepstakes odds that the county commissioners didn't order it, didn't know it, and wouldn't have permitted it had they known. At worst they shut their eyes to it ? afterwards - rather than upset their own applecarts. But assassination has never been an accepted policy in this country."

"I'd like to show you the backgrounds of quite a number of deaths I've looked into."

Jubal waved it aside. "I said it wasn't a policy. We've always had political assassination - from prominent ones like Huey Long to men beaten to death on their own front steps with hardly a page-eight story in passing. But it's never been a policy here and the reason you are sitting in the sunshine right now is that it is not Joe Douglas' policy. Consider. They snatched you clean, no fuss, no inquiries. They squeezed you dry - then they had no more use for you ... and they could have disposed of you as quietly as flushing a dead mouse down a toilet. But they didn't. Why not? Because they knew their boss didn't really like for them to play that rough and if he became convinced that they had (whether in court or out), it would cost their jobs if not their necks."

Jubal paused for a swig. "But consider. Those S.S. thugs are just a tool; they aren't yet a Praetorian Guard that picks the new Caesar. Such being, whom do you really want for Caesar? Courthouse Joe whose basic indoctrination goes back to the days when this country was a nation and not just a satrapy in a polyglot empire of many traditions ... Douglas, who really can't stomach assassination? Or do you want to toss him out of office? We can, you know, tomorrow - just by double-crossing him on the deal I've led him to expect - toss him out and thereby put in a Secretary General from a land where life has always been cheap and political assassination a venerable tradition? If you do this, Ben - tell me what happens to the next snoopy newsman who is careless enough to walk down a dark alley?"

Caxton didn't answer.

"As I said, the S.S. is just a tool. Men are always for hire who like dirty work. How dirty will that work become if you nudge Douglas out of his majority?"

"Jubal, are you telling me that I ought not to criticize the administration? When they're wrong? When I know they're wrong?"

"Nope. Gadflies such as yourself are utterly necessary. Nor am I opposed to 'turning the rascals out' - it's usually the soundest rule of politics. But it's well to take a look at what new rascals you are going to get before you jump at any chance to turn your present rascals out. Democracy is a poor system of government at best; the only thing that can honestly be said in its favor is that it is about eight times as good as any other method the human race has ever tried. Democracy's worst faults is that its leaders are likely to reflect the faults and virtues of their constituents - a depressingly low level, but what else can you expect? So take a look at Douglas and ponder that, in his ignorance, stupidity, and self-seeking, he much resembles his fellow Americans, including you and me ... and that in fact he is a notch or two above the average. Then take a look at the man who will replace him if his government topples."

"There's precious little choice."

"There's always a choice! This one is a choice between 'bad' and 'worse' - which is a difference much more poignant than that between 'good' and 'better.'"

"Well, Jubal? What do you expect me to do?"

"Nothing," Harshaw answered. "Because I intend to run this show myself. Or almost nothing. I expect you to refrain from chewing out Joe Douglas over this coming settlement in that daily poop you write - maybe even praise him a little for 'statesmanlike restraint-'"

"You're making me vomit!"

"Not in the grass, please. Use your hat, because I'm going to tell you ahead of time what I'm going to do, and why, and why Joe

Douglas is going to agree to it. The first principle in riding a tiger is to hang on tight to its ears."

"Quit being pompous. What's the deal?"

"Quit being obtuse and listen. If this boy were a penniless nobody, there would be no problem. But he has the misfortune to be indisputably the heir to more wealth than Croesus ever dreamed of ... plus a highly disputable claim to political power even greater through a politico-judicial precedent unparalleled in pure jugheadedness since the time Secretary Fall was convicted of receiving a bribe that Doheny was acquitted of having given him."

"Yes, but-"

"I have the floor. As I told Jill, I have no slightest interest in 'True Prince' nonsense. Nor do I regard all that wealth as 'his'; he didn't produce a shilling of it. Even if he had earned it himself - impossible at his age - 'property' is not the natural and obvious and inevitable concept that most people think it is."

"Come again?"

"Ownership, of anything, is an extremely sophisticated abstraction, a mystical relationship, truly. God knows our legal theorists make this mystery complicated enough - but I didn't begin to see how subtle it was until I got the Martian slant on it. Martians don't have property. They don't own anything ... not even their own bodies."

"Wait a minute, Jubal. Even animals have property. And the Martians aren't animals; they're a highly developed civilization, with great cities and all sorts of things."

"Yes. 'Foxes have holes and the birds of the air have nests.' And nobody understands a property line and the 'meus-et-tuus' involved better than a watch dog. But not Martians. Unless you regard an undistributed joint ownership of everything by a few millions or billions of senior citizens - 'ghosts' to you, my friend - as being 'property.'"

"Say, Jubal, how about these 'Old Ones' Mike talks about?"

"Do you want the official version? Or my private opinion?"

"Huh? Your private opinion. What you really think."

"Then keep it to yourself. I think it is a lot of pious poppycock, suitable for enriching lawns. I think it is a superstition burned into the boy's brain at so early an age that he stands no chance of ever breaking loose from it."

"Jill talks as if she believed it."

"At all other times you will hear me talk as if I believed it, too. Ordinary politeness. One of my most valued friends believes in astrology; I would never offend her by telling her what I think of it. The capacity of a human mind to believe devoutly in what seems to me to be the highly improbable - from table tapping to the superiority of their own children - has never been plumbed. Faith strikes me as intellectual laziness, but I don't argue with it - especially as I am rarely in a position to prove that it is mistaken. Negative proof is usually impossible. Mike's faith in his 'Old Ones' is surely no more irrational than a conviction that the dynamics of the universe can be set aside through prayers for rain. Furthermore, he has the weight of evidence on his side; he has been there. I haven't."

"Mmm, Jubal, I'll confess to a sneaking suspicion that immortality is a fact - but I'm glad that my grandfather's ghost doesn't continue to exercise any control over me. He was a cranky old devil."

"And so was mine. And so am I. But is there any really good reason why a citizen's franchise should be voided simply because he happens to be dead? Come to think of it, the precinct I was raised in had a very large graveyard vote - almost Martian. Yet the town was a pleasant one to live in. As may be, our lad Mike can't own anything because the 'Old Ones' already own everything. So you see why I have had trouble explaining to him that he owns over a million shares of Lunar Enterprises, plus the Lyle Drive, plus assorted chattels and securities? It doesn't help that the original owners are dead; that makes it worse, they are 'Old Ones' - and Mike wouldn't dream of sticking his nose into the business of 'Old Ones.'"

"Uh ... damn it, he's obviously legally incompetent."

"Of course he is. He can't manage property because he doesn't believe in its mystique - any more than I believe in his ghosts. Ben, all that Mike owns at the present time is a toothbrush I gave him - and he doesn't know he owns that. If you took it away from him, he wouldn't object, he wouldn't even mention it to me - he would simply assume conclusively that the 'Old Ones' had authorized the change."

Jubal sighed. "So he is incompetent ... even though he can recite the law of property verbatim. Such being the case I shan't allow his competency to be tried ... nor even mentioned - for what guardian would be appointed?"

"Huh-Douglas. Or, rather, one of his stooges."

"Are you certain, Ben? Consider the present makeup of the High Court. Might not the appointed guardian be named Savvonavong? Or Nadi? Or Kee?"

"Uh ... you could be right."

"In which case the lad might not live very long. Or he might live to a ripe old age in some pleasantly gardened prison-for-one a great deal more difficult to escape from than Bethesda Hospital."

"What do you plan to do?"

"The power the boy nominally owns is far too dangerous and cumbersome for him to handle. So we throw it away."

"How the hell do you go about giving away that much money?"

"You don't. You can't. It's impossible. The very act of giving it away would be an exercise of its latent power, it would change the balance of power - and any attempt to do so would cause the boy to be examined on his competence to manage in jig time. So, instead, we let the tiger run like hell while hanging onto its ears for dear life. Ben, let me outline the fait accompli I intend to hand to Douglas ... then you do your damnedest to pick holes in it. Not the legality of it, as Douglas' legal staff will write the doubletalk and I'll check it for boobytraps - don't worry about that; the idea is to give Douglas a plan he won't want to boobytrap because he'll like it. I want you to sniff it for its political feasibility, whether or not we can put it over. Now here's what we are going to do-"

Chapter 19

THE MARTIAN DIPLOMATIC DELEGATION & Inside Straight Sodality, Unlimited, as organized by Jubal Harshaw, landed on the flat of the Executive Palace shortly before ten o'clock the next morning. The unpretentious pretender to the Martian throne, Mike Smith, had not worried about the purpose of the trip; he had simply enjoyed every minute of the short flight south, with utter and innocent delight.

The trip was made in a chartered Flying Greyhound, and Mike sat up in the astrodome above the driver, with Jill on one side and Dorcas on his other, and stared and stared in awed wonderment as the girls pointed out sights to him and chattered in his ears. The seat, being intended for two people, was very crowded, but Mike did not mind, as a warming degree of growing closer necessarily resulted. He sat with an arm around each, and looked and listened and tried to grok and could not have been happier if he had been ten feet under water.

It was, in fact, his first view of Terran civilization. He had seen nothing at all in being removed from the Champion to suite K-12 at Bethesda Center; he had indeed spent a few minutes in a taxi ten days earlier going from the hospital to Ben's apartment but at the time he had grokked none of it. Since that time his world had been bounded by a house and a swimming pool, plus surrounding garden and grass and trees - he had not been as far as Jubal's gate.

But now he was enormously more sophisticated than he had been ten days ago. He understood windows, realized that the bubble surrounding him was a window and meant for looking out of and that the changing sights he saw were indeed the cities of these people. He understood maps and could pick out, with the help of the girls, where they were and what they were seeing on the map flowing across the lap board in front of them. But of course he had always known about maps; he simply had not known until recently that humans knew about maps. It had given him a twinge of happy homesickness the first time he had grokked a human map. Sure, it was static and dead compared with the maps used by his people - but it was a map. Mike was not disposed by nature and certainly not by training to invidious comparisons even human maps were very Martian in essence - he liked them.

Now he saw almost two hundred miles of countryside, much of it sprawling world metropolis, and savored every inch of it, tried to grok it. He was startled by the enormous size of human cities and by their bustling activity visible even from the air, so very different from the slow motion, monastery-garden pace of cities of his own people. It seemed to him that a human city must wear out almost at once, becoming so choked with living experience that only the strongest of the Old Ones could bear to visit its deserted streets and grok in contemplation the events and emotions piled layer on endless layer in it. He himself had visited abandoned cities at home only on a few wonderful and dreadful occasions, and then his teachers had stopped having him do so, grokking that he was not strong enough for such experience.

Careful questions to Jill and Dorcas, the answers of which he then related to what he had read, enabled him to grok in part enough to relieve his mind somewhat the city was very young; it had been founded only a little over two Earth centuries ago. Since Earth time units had no real flavor for him, he converted to Martian years and Martian numbers years (3ˆ4 + 3ˆ3 = 108 Martian years).

Terrifying and beautiful! Why, these people must even now be preparing to abandon the city to its thoughts before it shattered under the strain and became not. And yet, by mere time, the city was only an egg.

Mike looked forward to returning to Washington in a century or two to walk its empty streets and try to grow close to its endless pain and beauty, grokking thirstily until he was Washington and the city was himself - if he were strong enough by then. Then he firmly filed the thought away as he knew that he must grow and grow and grow before he would be able to praise and cherish the city's mighty anguish.

The Greyhound driver swung far east at one point in response to a temporary rerouting of unscheduled traffic (caused, unknown to Mike, by Mike's own presence), and Mike, for the first time, saw the sea.

Jill had to point it out to him and tell him that it was water, and Dorcas added that it was the Atlantic Ocean and traced the shore line on the map. Mike was not ignorant: he had known since he was a nestling that the planet next nearer the Sun was almost covered with the water of life and lately he had learned that these people accepted this lavish richness casually. He had even taken, unassisted, the much more difficult hurdle of grokking at last the Martian orthodoxy that the water ceremony did not require water, that water was merely symbol for the essence beautiful but not indispensable.

But, like many a human still virgin toward some major human experience, Mike discovered that knowing a fact in the abstract was not at all the same thing as experiencing its physical reality; the sight of the Atlantic Ocean filled him with such awe that Jill squeezed him and said sharply, "Stop it, Mike! Don't you dare!"

Mike chopped off his emotion and stored it away for later use. Then he stared at the ocean, stretching out to an unimaginably distant horizon, and tried to measure its size in his mind until his head was buzzing with threes and powers of threes and superpowers of powers.

As they landed Jubal called out, "Now remember, girls, form a square around him and don't be at all backward about planting a heel in an instep or jabbing an elbow into some oaf's solar plexus. Anne, I realize you'll be wearing your cloak but that's no reason not to step on a foot if you're crowded. Or is it?"

"Quit fretting, Boss; nobody crowds a Witness - but I'm wearing spike heels and I weigh more than you do."

"Okay. Duke, you know what to do - but get Larry back here with the bus as soon as possible. I don't know when I'll need it."

"I grok it, Boss. Quit jittering."

"I'll jitter as I please. Let's go." Harshaw, the four girls with Mike, and Caxton got out; the bus took off at once. To Harshaw's mixed relief and apprehension the landing flat was not crowded with newsmen.

But it was far from empty. A man picked him out at once, stepped briskly forward and said heartily, "Dr. Harshaw? I'm Tom Bradley, senior executive assistant to the Secretary General. You are to go directly to Mr. Douglas' private office. He will see you for a few moments before the conference starts."

"No."

Bradley blinked. "I don't think you understood me. These are instructions from the Secretary General. Oh, he said that it was all right for Mr. Smith to come with you - the Man from Mars, I mean-"

"No. This party stays together, even to go to the washroom. Right now we're going to that conference room. Have somebody lead the way. And have all these people stand back; they're crowding us. In the meantime, I have an errand for you. Miriam, that letter."

"But, Dr. Harshaw-"

"I said, 'No!' Can't you understand plain English? But you are to deliver this letter to Mr. Douglas at once and to him personally and fetch back his receipt to me." Harshaw paused to write his signature across the flap of the envelope Miriam had handed to him, pressed his thumb print over the signature, and handed it to Bradley. "Tell him that it is most urgent that he read this at once - before the meeting."

"But the Secretary General specifically desires-"

"The Secretary desires to see that letter. Young man, I am endowed with second sight ... and I predict that you won't be working here later today if you waste any time getting it to him."

Bradley locked eyes with Jubal, then said, "Jim, take over," and left, with the letter. Jubal sighed inwardly. He had sweated over that letter; Anne and he had been up most of the night preparing draft after draft. Jubal had every intention of arriving at an open settlement, in full view of the world's news cameras and microphones

- but he bad no intention of letting Douglas be taken by surprise by any proposal.

Another man stepped forward in answer to Bradley's order; Jubal sized him up as a prime specimen of the clever, conscienceless young-men-on-the-way-up who gravitate to those in power and do their dirty work; he disliked him on sight. The man smiled heartily and said smoothly, "The name's Jim Sanforth, Doctor - I'm the Chief's press secretary. I'll be buffering for you from now on - arranging your press interviews and so forth. I'm sorry to say that the conference room is not quite ready; there have been last minute changes and we've had to move to a larger room. Now it's my thought that-"

"It's my thought that we'll go to that conference room right now. We'll stand up until chairs are fetched for us."

"Doctor, I'm sure you don't understand the situation. They are still stringing wires and things, and that room is swarming with reporters and commentators-"

"Very well. We'll chat with 'em till you're ready."

"No, Doctor. I have instructions"

"Youngster, you can take your instructions, fold them until they are all corners and shove them in your oubliette. We are not at your beck and call. You will not arrange press interviews for us. We are here for just one purpose: a public conference. If the conference is not ready to meet, we'll see the press now - in the conference room."

"But-"

"And that's not all. You're keeping the Man from Mars standing on a windy roof," Harshaw raised his voice. "Is there anyone here smart enough to lead us straight to this conference room without getting lost?"

Sanforth swallowed and said, "Follow me, Doctor."

The conference room was indeed crowded with newsmen and technicians but there was a big oval table, plenty of chairs, and several smaller tables. Mike was spotted at once and Sanforth's protests did not keep them from crowding in on him. But Mike's flying wedge of amateur Amazons got him as far as the big table; Jubal sat him against it with Dorcas and Jill in chairs flanking him and the Fair Witness and Miriam seated behind him. Once this was done, Jubal made no attempt to fend off questions or pictures. Mike had been warned that he would meet lots of people and that many of them would do strange things and Jubal had most particularly warned him to take no sudden actions (such as causing persons or things to go away, or to stop) unless Jill told him to.

Mike took the confusion gravely, without apparent upset; Jill was holding his hand and her touch reassured him.

Jubal wanted news pictures taken, the more the better; as for questions put directly to Mike, Jubal did not fear them and made no attempt to field them. A week of trying to talk with Mike had convinced him that no reporter could possibly get anything of importance out of Mike in only a few minutes - without expert help. Mike's habit of answering a question as asked, answering it literally and stopping, would be enough to nullify most attempts to pump him.

And so it proved. Most questions Mike answered with a polite: "I do not know," or an even less committal; "Beg pardon?"

But one question backfired on the questioner. A Reuters correspondent, anticipating a monumental fight over Mike's status as an heir, tried to sneak in his own test of Mike's competence: "Mr. Smith? What do you know about the laws of inheritance here?"

Mike was aware that he was having trouble grokking in fullness the human concept of property and, in particular, the ideas of bequest and inheritance. So he most carefully avoided inserting his own ideas and stuck to the book - a book which Jubal recognized shortly as Ely on Inheritance and Bequest, chapter one.

Mike related what he had read, with precision and careful lack of expression, like a boring but exact law professor, for page after tedious page, while the room gradually settled into stunned silence and his interrogator gulped.

Jubal let it go on until every newsman there knew more than he wanted to know about dower and curtesy, consanguinean and uterine, per stirpes and per capita, and related mysteries. At last Jubal touched his shoulder, "That's enough, Mike."

Mike looked puzzled. "There is much more."

"Yes, but later. Does someone have a question on some other subject?"

A reporter for a London Sunday paper of enormous circulation jumped in with a question closer to his employer's pocketbook: "Mr. Smith, we understand you like the girls here on Earth. But have you ever kissed a girl?"

"Yes."

"Did you like it?"

"Yes."

"How did you like it?"

Mike barely hesitated over his answer. "Kissing girls is a goodness," he explained very seriously. "It is a growing - closer. It beats the hell out of card games."

Their applause frightened him. But he could feel that Jill and Dorcas were not frightened, that indeed they were both trying to restrain that incomprehensible noisy expression of pleasure which he himself could not learn. So he calmed his fright and waited gravely for whatever might happen next.

By what did happen next he was saved from further questions, answerable or not, and was granted a great joy; he saw a familiar face and figure just entering by a side door, "My brother Dr. Mahmoud!" Mike went on talking in overpowering excitement - but in Martian.

The Champion's staff semanticist waved and smiled and answered in the same jarring language while hurrying to Mike's side. The two continued talking in unhuman symbols, Mike in an eager torrent, Mahmoud not quite as rapidly, with sound effects like a rhinoceros ramming an ironmonger's lorry.

The newsmen stood it for some time, those who operated by sound recording it and the writers noting it as local color. But at last one interrupted. "Dr. Mahmoud! What are you saying? Clue us!"

Mahmoud turned, smiled briefly and said in clipped Oxonian speech, "For the most part, I've been saying, 'Slow down, my dear boy - do, please.'

"And what does he say?"

"The rest of our conversation is personal, private, of no possible interest to others, I assure you. Greetings, y'know. Old friends." He turned back to Mike and continued to chat - in Martian.

In fact, Mike was telling his brother Mahmoud all that had happened to him in the fortnight since he had last seen him, so that they might grok closer - but Mike's abstraction of what to tell was purely Martian in concept, it being concerned primarily with new water brothers and the unique flavor of each ... the gentle water that was Jill ... the depth of Anne the strange not-yet-fully-grokked fact that Jubal tasted now like an egg, then like an Old One, but was neither - the ungrokkable vastness of ocean—

Mahmoud had less to tell Mike since less had happened in the interim to him, by Martian standards - one Dionysian excess quite unMartian and of which he was not proud, one long day spent lying face down in Washington's Suleiman Mosque, the results of which he had not yet grokked and was not ready to discuss. No new water brothers.

He stopped Mike presently and offered his hand to Jubal. "You're Dr. Harshaw, I know. Valentine Michael thinks he has introduced me to all of you - and he has, by his rules."

Harshaw looked him over as he shook hands with him. Chap looked and sounded like a huntin', shootin', sportin' Britisher, from his tweedy, expensively casual clothes to a clipped grey moustache ... but his skin was naturally swarthy rather than ruddy tan and the genes for that nose came from somewhere close to the Levant. Harshaw did not like fake anything and would choose to eat cold cornpone over the most perfect syntho "sirloin."

But Mike treated him as a friend, so "friend" he was, until proved otherwise.

To Mahmoud, Harshaw looked like a museum exhibit of what he thought of as a "Yank"-vulgar, dressed too informally for the occasion, loud, probably ignorant and almost certainly provincial. A professional man, too, which made it worse, as in Dr. Mahmoud's experience most American professional men were under-educated and narrow, mere technicians. He held a vast but carefully concealed distaste for all things American. Their incredible polytheistic babel of religions, of course, although they were hardly to be blamed for that ... their cooking (cooking!!), their manners, their bastard architecture and sickly arts ... and their blind, pathetic, arrogant belief in their superiority long after their sun had set. Their women. Their women most of all, their immodest, assertive women, with their gaunt, starved bodies which nevertheless reminded him disturbingly of houris. Four of them here, crowded around Valentine Michael - at a meeting which certainly should be all male - But Valentine Michael had offered him all these people-including these ubiquitous female creatures - offered them proudly and eagerly as his water brothers, thereby laying on Mahmoud a family obligation closer and more binding than that owed to the sons of one's father's brother - since Mahmoud understood the Martian term for such accretive relationships from direct observation of what it meant to Martians and did not need to translate it clumsily and inadequately as "catenative assemblage," nor even as "things equal to the same thing are equal to each other." He had seen Martians at home; he knew their extreme poverty (by Earth standards); he had dipped into - and had guessed at far more - of their cultural extreme wealth; and had grokked quite accurately the supreme value that Martians place on interpersonal relationships.

Well, there was nothing else for it - he had shared water with Valentine Michael and now he must justify his friend's faith in him ... he simply hoped that these Yanks were not complete bounders.

So he smiled warmly and shook hands firmly. "Yes. Valentine Michael has explained to me - most proudly - that you are all in-" (Mahmoud used one word of Martian.) "-to him."

"Eh?"

"Water brotherhood. You understand?"

"I grok it."

Mahmoud strongly doubted if Harshaw did, but he went on smoothly, "Since I myself am already in that relationship to him, I must ask to be considered a member of the family. I know your name, and I have guessed that this must be Mr. Caxton - in fact I have seen your face pictured at the head of your column, Mr. Caxton; I read it when I have opportunity - but let me see if I have the young ladies straight. This must be Anne."

"Yes. But she's cloaked at the moment."

"Yes, of course. I'll pay my respects to her when she is not busy professionally."

Harshaw introduced him to the other three ... and Jill startled him by addressing him with the correct honorific for a water brother, pronouncing it about three octaves higher than any adult Martian would talk but with sore-throat purity of accent. It was one of the scant dozen Martian words she could speak out of the hundred - odd that she was beginning to understand - but this one she had down pat because it was used to her and by her many times each day.

Dr. Mahmoud's eyes widened slightly - perhaps these people would turn out not to be mere uncircumcised barbarians after all ... and his young friend did have strong intuitions. Instantly he offered Jill the correct honorific in response and bowed over her hand.

Jill saw that Mike was obviously delighted; she managed, slurringly but passably, to croak the shortest of the nine forms by which a water brother may return the response - although she did not grok it fully and would not have considered suggesting (in English) the nearest human biological equivalent ... certainly not to a man she had just met!

However, Mahmoud, who did understand it, took it in its symbolic meaning rather than its (humanly impossible) literal meaning, and spoke rightly in response. But Jill had passed the limit of her linguistic ability; she did not understand his answer at all and could not reply, even in pedestrian English.

But she got a sudden inspiration. At intervals around the huge table were placed the age - old furniture of human palavers - water pitchers each with its clump of glasses. She stretched and got a pitcher and a tumbler, filled the latter.

She looked Mahmoud in the eye, said earnestly, "Water. Our nest is yours." She touched it to her lips and handed it to Mahmoud.

He answered her in Martian, saw that she did not understand him and translated, "Who shares water shares all." He took a sip and started to hand the glass back to Jill - checked himself, looked at Harshaw and offered him the glass.

Jubal said, "I can't speak Martian, son - but thanks for water. May you never be thirsty." He took a sip, then drank about a third of it. "Ak!" He passed the glass to Ben.

Caxton looked at Mahmoud and said very soberly, "Grow closer. With the water of life we grow closer." He wet his lips with it and passed it to Dorcas.

In spite of the precedents already set, Dorcas hesitated. "Dr. Mahmoud? You do know how serious this is to Mike?"

"I do, Miss."

"Well ... it's just as serious to us. You understand? You grok?"

"I grok its fullness ... or I would have refused to drink."

"All right. May you always drink deep. May our eggs share a nest." Tears started down her cheeks: she drank and passed the glass hastily to Miriam.

Miriam whispered, "Pull yourself together, kid," then spoke to Mike, "With water we welcome our brother," - then added to Mahmoud, "Nest, water, life." She drank. "Our brother." She offered him the glass.

Mahmoud finished what was left in it and spoke, neither in Martian nor English, but Arabic: "'And if ye mingle your affairs with theirs, then they are your brothers.'"

"Amen," Jubal agreed.

Dr. Mahmoud looked quickly at him, decided not to enquire just then whether Harshaw had understood him, or was simply being polite; this was neither the time nor the place to say anything which might lead to unbottling his own troubles, his own doubts. Nevertheless he felt warmed in his soul - as always - by water ritual ... even though it smelled of heresy.

His thoughts were cut short by the assistant chief of protocol bustling up to them. "You're Dr. Mahmoud. You belong over on the far side of the table, Doctor. Follow me."

Mahmoud looked at him, then looked at Mike and smiled. "No, I belong here, with my friends. Dorcas, may I pull a chair in here and sit between you and Valentine Michael?"

"Certainly, Doctor. Here, I'll scrunch over."

The a.c. of p. was almost tapping his foot in impatience. "Dr. Mahmoud, please! The chart places you over on the other side of the room! The Secretary General will be here any moment-and the place is still simply swarming with reporters and goodness knows who else who doesn't belong here . . . and I don't know what I'm going to do!"

"Then go do it someplace else, hub," Jubal suggested.

"What? Who are you? Are you on the list?" He worriedly consulted the seating chart he carried.

"Who are you?" Jubal answered. "The head waiter? I'm Jubal Harshaw. If my name is not on that list, you can tear it up and start over. And look, buster, if the Man from Mars wants his friend Dr. Mahmoud to sit by him, that settles it."

"But he can't sit here! Seats at the main conference table are reserved for High Ministers, Chiefs of Delegations, High Court Justices, and equal ranks-and I don't know how I can squeeze them all in if any more show up - and the Man from Mars, of course."

"'Of course,'" Jubal agreed dryly.

"And of course Dr. Mahmoud has to be near the Secretary General - just back of him, so that he'll be ready to interpret as needed. I must say you're not being helpful."

"I'll help." Jubal plucked the paper out of the official's hand, sat down at the table and studied it. "Mmm ... lemme see now. The Man from Mars will sit directly opposite the Secretary General, just about where he happens to be sitting. Then-" Jubal got out a heavy soft pencil and attacked the seating chart. "-this entire half of the main table, from here clear over to here, belongs to the Man from Mars." Jubal scratched two big black cross marks to show the limits and joined them with a thick black arc, then began scratching out names assigned to seats on that side of the table. "That takes care of half of your work ... because I'll seat anybody who sits on our side of the table."

The protocol officer was too shocked to talk. His mouth worked but no meaningful noises came out. Jubal looked at him mildly. "Something the matter? Oh-I forgot to make it official." He scrawled under his amendments: "J. Harshaw for V. M. Smith." "Now trot back to your top sergeant, son, and show him that. Tell him to check his rule book on official visits from heads of friendly planets."

The man looked at it, opened his mouth - then left very rapidly without stopping to close it. But he was back very quickly on the heels of another, older man. The newcomer said in a firm, no-nonsense manner, "Dr. Harshaw, I'm LaRue, Chief of Protocol. Do you actually need half the main table? I understood that your delegation was quite small."

"That's beside the point."

LaRue smiled briefly. "I'm afraid it's not beside the point to me, sir. I'm at my wit's end for space. Almost every official of first rank in the Federation has elected to be present today. If you are expecting more people - though I do wish you had notified me - I'll have a table placed behind these two seats reserved for Mr. Smith and yourself."

"No."

"I'm afraid that's the way it must be. I'm sorry."

"So am I - for you. Because if half the main table is not reserved for the Mars delegation, we are leaving right now. Just tell the Secretary General that you busted up his conference by being rude to the Man from Mars."

"Surely you don't mean that?"

"Didn't you get my message?"

"Uh ... well, I took it as a jest. A rather clever one, I admit."

"Son, I can't afford to joke at these prices. Smith is either top man from another planet paying an official visit to the top man of this planet - in which case he is entitled to all the side boys and dancing girls you can dig up - or he is just a simple tourist and gets no official courtesies of any sort. You can't have it both ways. But I suggest that you look around you, count the 'officials of first rank' as you called them, and make a quick guess as to whether they would have bothered to show up if, in their minds, Smith is just a tourist."

LaRue said slowly, "There's no precedent."

Jubal snorted. "I saw the Chief of Delegation from the Lunar Republic come in a moment ago - go tell him there's no precedent. Then duck! I hear he's got a quick temper." He sighed. "But, son, I'm an old man and I had a short night and it's none of my business to teach you your job. Just tell Mr. Douglas that we'll see him another day ... when he's ready to receive us properly. Come on, Mike." He started to roust himself painfully out of his chair.

LaRue said hastily, "No, no, Dr. Harshaw! We'll clear this side of the table. I'll-Well, I'll do something. It's yours."

"That's better." But Harshaw remained poised to get up. "But where's the Flag of Mars? And how about honors?"

"I'm afraid I don't understand you."

"Never seen a day when I had so much trouble with plain English. LookSee that Federation Banner back of where the Secretary is going to sit? Where's the one like it over here, for Mars?"

LaRue blinked. "I must admit you've taken me by surprise. I didn't know the Martians used flags."

"They don't. But you couldn't possibly whop up what they use for high state occasions." (And neither could I, boy, but that's beside the point.) "So we'll let you off easy and take an attempt for the deed. Piece of paper, Miriam - now, like this." Harshaw drew a rectangle, sketched in it the traditional human symbol for Mars, a circle with an arrow leading out from it to the upper right. "Make the field in white and the sigil of Mars in red-should be sewed in bunting of course, but with a clean sheet and a bucket of paint any Boy Scout could improvise one in ten minutes. Were you a Scout?"

"Uh, some time ago."

"Good. Then you know the Scout's motto. Now about honors - maybe you're caught unprepared there, too, eh? You expect to play 'Hail to Sovereign Peace' as the Secretary comes in?"

"Oh, we must. It's obligatory."

"Then you'll want to follow it with the anthem for Mars."

"I don't see how I can. Even if there were one ... we don't have it. Dr. Harshaw, be reasonable!"

"Look, son, I am being reasonable. We came here for a quiet, small, informal meeting-strictly business. We find you've turned it into a circus. Well, if you're going to have a circus, you've got to have elephants and there's no two ways about it. Now we realize you can't play Martian music, any more than a boy with a tin whistle can play a symphony. But you can play a symphony - 'The Ten Planets Symphony.' Grok it? I mean, 'Do you catch on?' Have the tape cut in at the beginning of the Mars movement; play that ... or enough bars to let the theme be recognized."

LaRue looked thoughtful. "Yes, I suppose we could - but, Dr. Harshaw, I promised you half the table ... but I don't see how I can promise sovereign honors - the flag and the music - even on this improvised, merely symbolic scale. I-I don't think I have the authority."

"Nor the guts," Harshaw said bitterly. "Well, we didn't want a circus - so tell Mr. Douglas that we'll be back when he's not so busy ... and not so many visitors. Been nice chatting with you, son. Be sure to stop by the Secretary's office and say hello when we come back - if you're still here." He again went through the slow, apparently painful act of being a man too old and feeble to get out of a chair easily.

LaRue said, "Dr. Harshaw, please don't leave! Uh ... the Secretary won't come in until I send word that we are ready for him - so let me see what I can do. Yes?"

Harshaw relaxed with a grunt. "Suit yourself. But one more thing, while you're here. I heard a ruckus at the main door a moment ago - what I could catch, one of the crew members of the Champion wanted to come in. They're all friends of Smith, so let 'em in. We'll accommodate 'em. Help to fill up this side of the table." Harshaw sighed and rubbed a kidney.

"Very well, sir," LaRue agreed stiffly and left.

Miriam said out of the corner of her mouth: "Boss-did you sprain your back doing hand stands night before last?"

"Quiet, girl, or I'll paddle you." With grim satisfaction Jubal surveyed the room, which was continuing to fill with high officials. He had told Douglas that he wanted a "small, informal" talk - no formality while knowing with utter certainty that the mere announcement of such talks would fetch all the powerful and power-hungry as surely as light attracts moths. And now (he felt sure) Mike was about to be treated as a sovereign by each and every one of those nabobs - with the whole world watching. Just let 'em try to roust the boy around after this!

Sanforth was still trying mightily to shoo out the remaining newsmen, and the unfortunate assistant chief of protocol, deserted by his boss, was jittering like a nervous babysitter in his attempt to play musical chairs with too few chairs and too many notables, They continued to come in and Jubal concluded that Douglas had never intended to convene this public meeting earlier than eleven o'clock, and that everyone else had been so informed - the earlier hour given

Jubal was to permit the private pre-conference that Douglas had demanded and that Jubal had refused. Well, the delay suited Jubal's plans.

The leader of the Eastern Coalition came in. Since Mr. King was not, by his own choice, the nominal Chief of Delegation for his nation, his status under strict protocol was merely that of Assemblyman - but Jubal was not even mildly surprised to see the harried assistant chief of protocol drop what he was doing and rush to seat Douglas' chief political enemy at the main table and near the seat reserved for the Secretary General; it simply reinforced Jubal's opinion that Douglas was no fool.

Dr. Nelson, surgeon of the Champion, and Captain van Tromp, her skipper, came in together, and were greeted with delight by Mike. Jubal was pleased, too, as it gave the boy something to do, under the cameras, instead of just sitting still like a dummy. Jubal made use of the disturbance to rearrange the seating since there was now no longer any need to surround the Man from Mars with a bodyguard. He placed Mike precisely opposite the Secretary General's chair and himself took the chair on Mike's left - not only to be close to him as his counsel but to be where he could actually touch Mike inconspicuously. Since Mike had only the foggiest notions of human customary manners, Jubal had arranged with him signals as imperceptible as those used by a rider in putting a highschooled horse through dressage maneuvers - "stand up," "sit down," "bow," "shake hands" - with the difference that Mike was not a horse and his training had required only five minutes to achieve utterly dependable perfection.

Mahmoud broke away from the reunion of shipmates, came around, and spoke to Jubal privately. "Doctor, I must explain that the Skipper and the Surgeon are also water brothers of our brother-and Michael Valentine wanted to confirm it at once by again using the ritual, all of us. I told him to wait. Do you approve?"

"Eh? Yes. Yes, certainly. Not in this mob." Jubal worried it for a moment. Damn it, how many water brothers did Mike have? How long was this daisy chain? "Maybe you three can come with us when we leave? And have a bite and a talk in private."

"I shall be honored. And I feel sure the other two will come also, if possible."

"Good. Dr. Mahmoud, do you know of any other brothers of our young brother who are likely to show up?"

"No. Not from the company of the Champion, at least; there are no more." Mahmoud hesitated, then decided not to ask the obvious complementary question, as it would hint at how disconcerted he had been - at first - to discover the extent of his own conjugational commitments. "I'll tell Sven and the Old Man." He went back to them.

Harshaw saw the Papal Nuncio come in, saw him seated at the main table, and smiled inwardly - if that long-eared debit, LaRue, had any lingering doubts about the official nature of this meeting, he would do well to forget them!

A man came up behind Harshaw, tapped him on the shoulder. "Is this where the Man from Mars hangs out?"

"Yes," agreed Jubal.

"Which one is he? I'm Tom Boone - Senator Boone, that is - and I've got a message for him from Supreme Bishop Digby."

Jubal suppressed his personal feelings and let his cortex go into emergency high speed. "I'm Jubal Harshaw, Senator-" He signalled Mike to stand up and offer to shake hands. "-and this is Mr. Smith. Mike, this is Senator Boone."

"How do you do, Senator Boone," Mike said in perfect dancing school form. He looked at Boone with interest. He had already had it straightened out for him that "Senator" did not mean "Old One" as the words seemed to shape; nevertheless he was interested in seeing just what a "Senator" was. He decided that he did not yet grok it.

"Pretty well, thank you, Mr. Smith. But I won't take up your time; they seem to be about to get this shindig started. Mr. Smith, Supreme Bishop Digby sent me to give you a personal invite to attend services at the Archangel Foster Tabernacle of the New Revelation."

"Beg pardon?"

Jubal moved in on it. "Senator, as you know, many things here ? everything - is new to the Man from Mars. But it so happens that Mr. Smith has already seen one of your church services by stereovision-"

"Not the same thing."

"I know. But he expressed great interest in it and asked many questions about it - many of which I could not answer."

Boone looked keenly at him. "You're not one of the faithful?"

"I must admit that I am not."

"Come along yourself. Always hope for a sinner."

"Thank you, I will." (You're right, I will, friend! - for I certainly won't let Mike go into your trap alone!)

"Next Sunday then - I'll tell Bishop Digby."

"Next Sunday if possible," Jubal corrected. "We might be in jail by then."

Boone grinned. "There's always that, ain't th'r? But send word around to me or the Supreme Bishop and you won't stay in long." He looked around the crowded room. "Seem to be kind o' short on chairs in here. Not much chance for a plain senator with all those muckamucks elbowing each other."

"Perhaps you would honor us by joining us, Senator," Jubal answered smoothly, "at this table?"

"Eh? Why, thank you, sir! Don't mind if I do - ringside seat."

"That is," Harshaw added, "if you don't mind the political implications of being seen seated with the official Mars delegation. We aren't trying to crowd you into an embarrassing situation."

Boone barely hesitated. "Not at all! Who cares what people think? Matter of fact, between you and I, the Bishop is very, very interested in this young man."

"Fine. There's a vacant chair there by Captain van Tromp - that man there ... but probably you know him."

"Van Tromp? Sure, sure, old friends, know him well - met him at the reception." Senator Boone nodded at Smith, swaggered down and seated himself.

Most of those present were seated now and fewer were getting past the guards at the doors. Jubal watched one argument over seating and the longer he watched it the more it made him fidget. At last he felt that he simply could not stand it; he could not sit still and watch this indecency go on. So he leaned over and spoke very privately with Mike, made sure that, if Mike did not understand why, at least he understood what Jubal wanted him to do.

Mike listened. "Jubal, I will do."

"Thanks, son." Jubal got up and approached a group of three: the assistant chief of protocol, the Chief of the Uruguayan Delegation, and a third man who seemed angry but baffled. The Uruguayan was saying forcefully: "-seat him, then you must find seats for any and all other local chiefs of state - eighty or more. You've admitted that you can't do that. This is Federation soil we stand on ... and no chief of state has precedence over any other chief of state. If any exceptions are made-"

Jubal interrupted by addressing the third man, "Sir-" He waited just long enough to gain his attention, plunged on. "-the Man from Mars has instructed me to ask you to do him the great honor of sitting with him if your presence is not required elsewhere."

The man looked startled, then smiled broadly. "Why, yes, that would be satisfactory."

The other two, both the palace official and the Uruguayan dignitary, started to object. Jubal turned his back on them. "Let's hurry, sir - I think we have very little time." He had seen two men coming in with what appeared to be a stand for a Christmas tree and a bloody sheet-but what was almost certainly the "Martian Flag." As they hurried to where he was, Mike got up and was standing, waiting for them.

Jubal said, "Sir, permit me to present Valentine Michael Smith. Michael - the President of the United States!"

Mike bowed very low.

There was barely time to seat him on Mike's right, as the improvised flag was even then being set up behind them. Music started to play, everyone stood, and a voice proclaimed:

"The Secretary General!"

Chapter 20

JUBAL HAD CONSIDERED HAVING Mike remain seated while Douglas came in, but had rejected the idea; he was not trying to place Mike a notch higher than Douglas but merely to establish that the meeting was between equals. So, when he stood up, he signaled Mike to do so likewise. The great double doors at the back of the conference hall had opened at the first strains of "Hail to Sovereign Peace" and Douglas came in. He went straight to his chair and started to sit down.

Instantly Jubal signaled Mike to sit down, the result being that Mike and the Secretary General sat down simultaneously - with a long, respectful pause of some seconds before anyone else resumed his seat.

Jubal held his breath. Had LaRue done it? Or not? He hadn't quite promised-Then the first fortissimo tocsin of the "Mars" movement filled the room - the "War God" theme that startles even an audience expecting it. With his eyes on Douglas and with Douglas looking back at him, Jubal was at once up out of his chair again, like a scared recruit snapping to attention.

Douglas stood up, too, not as quickly but promptly.

But Mike did not get up; Jubal had not signalled him to do so. He sat quietly, impassively, quite unembarrassed by the fact that everyone else without any exception got quickly back on his feet when the Secretary General stood up. Mike did not understand any of it and was quite content to do what his water brother told him to do.

Jubal had puzzled over this bit, after he had demanded the "Martian Anthem." If the demand was met, what should Mike do while it was played? It was a nice point, and the answer depended on just what role Mike was playing in this comedy. The music stopped. On Jubal's signals Mike then stood up, bowed quickly, and sat down, seating himself about as the Secretary General and the rest were seated. They were all back in their seats much more quickly this time, as no one could have missed the glaring point that Mike had remained seated through the "anthem."

Jubal sighed with relief. He had gotten away with it. A great many years earlier he had seen one of that vanishing tribe of royalty (a reigning queen) receive a parade - and he had noticed that the royal lady had bowed after her anthem was played, i.e., she had acknowledged a salute offered to her own sovereign self.

But the political head of a democracy stands and uncovers for his nation's anthem like any other citizen - for he is not a sovereign.

But, as Jubal had pointed out to LaRue, one couldn't have it two ways. Either Mike was merely a private citizen (in which case this silly gymkhana should never have been held; Douglas should have had the guts to tell all these overdressed parasites to stay home!) - or, by the preposterous legal theory inherent in the Larkin Decision, the kid was a sovereign all by his little lonesome.

Jubal felt tempted to offer LaRue a pinch of snuff. Well, the point had not been missed by at least one - the Papal Nuncio was keeping his face straight but his eyes were twinkling.

Douglas started to speak: "Mr. Smith, we are honored and happy to have you here as our guest today. We hope that you will consider the planet Earth your home quite as much as the planet of your birth, our neighbor - our good neighbor - Mars-" He went on at some length, in careful, rounded, pleasant periods, which did not quite say anything. Mike was welcome - but whether he was welcome as a sovereign, as a tourist from abroad, or as a citizen returning home, was quite impossible to determine (Jubal decided) from Douglas' words.

Jubal watched Douglas, hoping to catch his eye, looking for some nod or expression that would show how Douglas had taken the letter Jubal had sent to him by hand immediately on arrival. But Douglas never looked at him. Presently Douglas concluded, still having said nothing and said it very well.

Jubal said quietly, "Now, Mike."

Smith addressed the Secretary General - in Martian.

But he cut it off before consternation could build up and said gravely:

"Mr. Secretary General of the Federation of Free Nations of the Planet Earth-" then went on again in Martian.

Then in English: "-we thank you for our welcome here today. We bring greetings to the peoples of Earth from the Ancient Ones of Mars-" and shifted again into Martian.

Jubal felt that "Ancient Ones" was a good touch; it carried more bulge than "Old Ones" and Mike had not objected to the change in terminology. In fact, while Mike had insisted on "speaking rightly," Jubal's draft had not required much editing. It had been Jill's idea to alternate, sentence by sentence, a Martian version and an English version - and Jubal admitted with warm pleasure that her gimmick puffed up a formal little speech as devoid of real content as a campaign promise into something as rollingly impressive as Wagnerian opera. (And about as hard to figure out, Jubal added.)

It didn't matter to Mike. He could insert the Martian translation as easily as he could memorize and recite the edited English version, i.e., without effort for either. If it would please his water brothers to say these sayings, it made Mike happy.

Someone touched Jubal on the shoulder, shoved an envelope in his hand, and whispered, "From the Secretary General." Jubal looked up, saw that it was Bradley, hurrying silently away. Jubal opened the envelope in his lap, glanced at the single sheet inside.

The note was one word: "Yes," and had been signed with initials "J.E.D." - all in the famous green ink.

Jubal looked up, found that Douglas' eyes were now on him; Jubal nodded ever so slightly and Douglas looked away. The conference was now over; all that remained was to let the world know it.

Mike concluded the sonorous nullities he had been given; Jubal heard his own words: "-growing closer, with mutual benefit to both worlds-" and "-each race according to its own nature-" but did not listen. Douglas then thanked the Man from Mars, briefly but warmly. There was a pause.

Jubal stood up. "Mr. Secretary General-"

"Yes, Dr. Harshaw?"

"As you know, Mr. Smith is here today in a dual role. Like some visiting prince in the past history of our own great race, traveling by caravan and sailing across uncharted vastnesses to a distant realm, he brings to Earth the good wishes of the Ancient Powers of Mars. But he is also a human being, a citizen of the Federation and of the United States of America. As such, he has rights and properties and obligations." Jubal shook his head. "Pesky ones, I'm sorry to say. As attorney for him in his capacity as a citizen and a human being, I have been puzzling over his business affairs and I have not even managed a complete list of what he owns - much less decide what to tell tax collectors-"

Jubal stopped to wheeze. "I'm an old man, I might not live to complete the task. Now you know that my client has had no business experience in the human sense - Martians do these things differently. But he is a young man of great intelligence - the whole world knows that his parents were geniuses - and blood will tell. There's no doubt that in a few years, he could, if he wished, do very nicely on his own without the aid of one old, broken-down lawyer. But his affairs need attention today; business won't wait.

"But, in fact, he is more eager to learn the history and the arts and the ways of the people of this, his second home, than he is to bury himself in debentures and stock issues and royalties - and I think in this he is wise. Although without business experience, Mr. Smith possesses a direct and simple wisdom that continues to astonish me ... and to astonish all who meet him. When I explained to him the trouble I was having, he simply looked at me with a clear, calm gaze and said, 'Why, that's no problem, Jubal - we'll ask Mr. Douglas.'" Jubal paused and said anxiously, "The rest of this is just personal business, Mr. Secretary. Should I see you about it privately? And let the rest of these ladies and gentlemen go home?"

"Go right ahead, Dr. Harshaw." Douglas added, "Protocol is dispensed with as of now. Anyone who wishes to leave please feel free to do so."

No one left. "All right," Jubal went on. "I can wrap it up in one sentence. Mr. Smith wants to appoint you his attorney-in-fact, with full power to handle all his business affairs. Just that."

Douglas looked convincingly astonished. "That's a tall order, Doctor."

"I know it is, sir. I pointed out to him that it was an imposition, that you are the busiest man on this planet and didn't have time for his affairs." Jubal shook his head and smiled. "I'm afraid it didn't impress him - seems on Mars the busier a person is the more is expected of him. Mr. Smith simply said, 'We can ask him.' So I'm asking you. Of course we don't expect an answer off hand - that's another Martian trait: Martians are never in a hurry. Nor are they inclined to make things complicated. No bond, no auditing, none of that claptrap - a written power of attorney if you want it. But it does not matter to him; he would do it just as readily, orally and right now - Chinese style. That's another Martian trait; if a Martian trusts you, he trusts you all the way. He doesn't come prying around to see if you're keeping your word. Oh, I should add: Mr. Smith is not making this request of the Secretary General; he's asking a favor of Joseph Edgerton Douglas, you personally. If you should retire from public life, it would not affect this in the slightest. Your successor in office, whoever he might be, doesn't figure in it. It's you he trusts ... not just whoever happens to occupy the Octagon Office in this Palace."

Douglas nodded. "Regardless of my answer, I feel honored .. and humble."

"Because if you decline to serve, or can't serve, or do take on this chore and want to drop it later, or anything, Mr. Smith has his own second choice for the job - Ben Caxton, it is. Stand up for a second, Ben; let people see you. And if both you and Caxton can't or won't, his next choice is - well, I'll guess we'll reserve that name for the moment; just let it rest that there are successive choices. Uh, let me see now-" Jubal looked fuddled- "I'm out of the habit of talking on my feet. Miriam, where is that piece of paper we listed things on?"

Jubal accepted a sheet from her, and added, "Better give me the other copies, too-" She passed over to him a thick stack of sheets. "This is a little memo we prepared for you, sir - or for Caxton, if it turns out that way. Mmm, lemme see - oh yes, steward to pay himself what he thinks the job is worth but not less than - well, a considerable sum, nobody else's business, really. Steward to deposit monies in a drawing account for living expenses of party of the first part - uh, oh yes, I thought maybe you would want to use the Bank of Shanghai, say, as your depository, and, say, Lloyd's as your business agent - or maybe the other way around - just to protect your own name and fame. But Mr. Smith won't hear of any fixed instructions - just an unlimited assignment of power, revocable by either side at choice. But I won't read all this; that's why we wrote it out-"

Jubal turned and looked vacantly around. "Uh, Miriam - trot around and give this to the Secretary General, that's a good girl. Um, these other copies, I'll leave them here. You may want to pass 'em out to people ... or you may need them yourself. Oh, I'd better give one to Mr. Caxton though - here, Ben-"

Jubal looked anxiously around. "Uh, I guess that's all I have to say, Mr. Secretary. Did you have anything more to say to us?'

"Just a moment. Mr. Smith?"

"Yes, Mr. Douglas?"

"Is this what you want? Do you want me to do what it says on this paper?"

Jubal held his breath, avoided even glancing at his client - Mike had been carefully coached to expect such a question ? but there had been no telling what form it would take, nor any way to tell in advance how Mike's literal interpretations could trip them.

"Yes, Mr. Douglas." Mike's voice rang out clearly in the big room - and in a billion rooms around a planet.

"You want me to handle your business affairs?"

"Please, Mr. Douglas. It would be a goodness. I thank you-"

Douglas blinked. "Well, that's clear enough. Doctor, I'll reserve my answer - but you shall have it promptly."

"Thank you, sir. For myself as well as for my client."

Douglas started to stand up. Assemblyman Kung's voice sharply interrupted. "One moment! How about the Larkin Decision?"

Jubal grabbed it before Douglas could speak. "Ah, yes, the Larkin Decision. I've heard quite a lot of nonsense talked about the Larkin Decision - but mostly from irresponsible persons. Mr. Kung, what about the Larkin Decision?"

"I'm asking you. Or your .. client. Or the Secretary General."

Jubal said gently, "Shall I speak, Mr. Secretary?"

"Please do."

"Very well." Jubal paused, slowly took out a big handkerchief and blew his nose in a prolonged blast, producing a minor chord three octaves below middle C. He then fixed Kung with his eye and said solemnly, "Mr. Assemblyman, I'll address this to you - because I know it is unnecessary to address it to the government in the person of the Secretary. Once a long, long time ago, when I was a little boy, another little boy, equally young and foolish, and I formed a club. Just the two of us. Since we had a club, we had to have rules ... and the first rule we passed, unanimously, I should add - was that henceforth we would always call our mothers, 'crosspatch.' Silly, of course ... but we were very young. Mr. Kung, can you deduce the outcome of that 'rule'?"

"I won't guess, Dr. Harshaw."

"I tried to implement our 'Crosspatch' decision once. Once was enough and it saved my chum from making the same mistake. All it got me was my young bottom well warmed with a peach switch. And that was the end of the 'crosspatch' decision."

Jubal cleared his throat. "Just a moment Mr. Kung. Knowing that someone was certain to raise this nonexistent issue I tried to explain the Larkin Decision to my client. At first be had trouble realizing that anyone could think that this legal fiction would apply to Mars. After all, Mars is inhabited, by an old and wise race - much older than yours, sir, and possibly wiser. But when he did understand it, he was amused. Just that, sir - tolerantly amused. Once - just once - I underrated my mother's power to punish a small boy's impudence. That lesson was cheap, a bargain. But this planet cannot afford such a lesson on a planetary scale. Before we attempt to parcel out lands which do not belong to us, it behooves us to be very sure what peach switches are hanging in the Martian kitchen."

Kung looked blandly unconvinced- "Dr. Harshaw, if the Larkin Decision is no more than a small boy's folly ... why were national honors rendered to Mr. Smith?"

Jubal shrugged- "That question should be put to the government, not me. But I can tell you how I interpreted them - as elementary politeness to the Ancient Ones of Mars."

"Please?"

"Mr. Kung, those honors were no hollow echo of the Larkin Decision. In a fashion quite beyond human experience, Mr. Smith is the Planet Mars."

Kung did not even blink. "Continue."

"Or, rather, the entire Martian race. In Smith's person, the Ancient Ones of Mars are visiting us. Honors rendered to him are honors rendered to them - and harm done to him is harm done to them. This is true in a very literal but utterly unhuman sense. It was wise and prudent for us to render honors to our neighbors today - but the wisdom in it has nothing to do with the Larkin Decision. No responsible person has argued that the Larkin precedent applies to an inhabited planet - I venture to say that no one ever will." Jubal paused and looked up, as if asking Heaven for help. "But, Mr. Kung, be assured that the ancient rulers of Mars do not fail to notice how we treat their ambassador. The honors rendered to them through him were a gracious symbol. I am certain that the government of this planet showed wisdom thereby. In time, you will learn that it was a most prudent act as well."

Kung answered blandly, "Doctor, if you are trying to frighten me, you have not succeeded."

"I did not expect to. But, fortunately for the welfare of this planet, your opinion did not control." Jubal turned back to Douglas. "Mr. Secretary, this is the longest public appearance I have made in years ... and I find that I am fatigued. Could we recess these talks? While we await your decision?"

Chapter 21

THE MEETING ADJOURNED. Jubal found his intention of getting his flock out of the Palace balked by the presence of the American President and of Senator Boone; both wanted to chat with Mike, both were practical politicians who realized fully the freshly enhanced value of being seen on intimate terms with the Man from Mars - and both were well aware that the eyes of the world, via stereovision, were still on them.

And other hungry politicos were closing in.

Jubal said quickly, "Mr. President, Senator - we're leaving at once to have lunch. Can you join us?" He reflected that two in private would be easier to handle than two dozen in public - and he had to get Mike out of there before anything came unstuck.

To his relief both had other duties elsewhere. Jubal found himself promising not only to fetch Mike to that obscene Fosterite service but also to bring him to the White House - oh, well, the boy could always get sick, if necessary. "Places, girls."

With his escort again around him Mike was convoyed to the roof, Anne leading the way since she would remember it - and creating quite a bow wave with her height, her Valkyrie blonde beauty, and her impressive cloak of a Fair Witness. Jubal, Ben, and the three officers from the Champion covered the rear. Larry and the Greyhound bus were waiting on the roof; a few minutes later the driver left them on the roof of the New Mayflower. Newsmen caught up with them there, of course, but the girls guarded Mike on down to the suite Duke had taken earlier. They were becoming quite good at it and were enjoying it; Miriam and Dorcas in particular displayed ferocity that reminded Jubal of a mother cat defending her young - only they made a game of it, keeping score against each other. A reporter that closed within three feet of either of them courted a spiked instep.

They found their corridor patrolled by S.S. troopers and an officer outside the door of their suite.

Jubal's back hair rose, but he realized (or "hoped," he corrected himself) that their presence meant that Douglas was carrying out his half of the bargain in full measure. The letter Jubal had sent to Douglas before the conference, explaining what he was going to do and say, and why, had included a plea to Douglas to use his power and influence to protect Mike's privacy from here on - so that the unfortunate lad could begin to lead a normal life. (If a "normal" life was possible for Mike, Jubal again corrected himself.)

So Jubal merely called out, "Jill! Keep Mike under control. It's okay."

"Right, Boss."

And so it was. The officer at the door simply saluted. Jubal glanced at him, "Well! Howdy, Major. Busted down any doors lately?"

Major Bloch turned red but kept his eyes forward and did not answer. Jubal wondered if the assignment was punishment? No, likely just coincidence; there probably wouldn't be more than a handful of S.S. officers of appropriate rank available for the chore in this area. Jubal considered rubbing it in by saying that a skunk had wandered in that door and ruined his living room furniture - and what was the major going to do about that? But he decided against it; it would not only be ungracious but untrue - Duke had rigged a temporary closure out of plywood before the party got too wet for such tasks.

Duke was waiting inside. Jubal said, "Sit down, gentlemen. How about it, Duke?"

Duke shrugged. "Who knows? Nobody has bugged this suite since I took it; I guarantee that. I turned down the first suite they offered me, just as you said to, and I picked this one because it's got a heavy ceiling - the ballroom is above us. And I've spent the time since searching the place. But, Boss, I've pushed enough electrons to know that any dump can be bugged, so that you can't find it without tearing the building down."

"Fine, fine - but I didn't mean that. They can't keep a hotel this big bugged throughout just on the chance that we might take a room in it - at least, I don't think they can. I mean, 'How about the supplies?' I'm hungry, boy, and very thirsty - and we've three more for lunch."

"Oh, that. That stuff was unloaded under my eyes, carried down the same way, placed just inside the door; I put it all in the pantry. You've got a suspicious nature, Boss."

"I sure have - and you'd better acquire one if you want to live as long as I have." Jubal had just trusted Douglas with a fortune equivalent to a medium-sized national debt - but he had not assumed that Douglas' overeager lieutenants would not tamper with food and drink. So to avoid the services of a food taster he had fetched all the way from the Poconos plenty of food, more than a plenty of liquor - and a little water. And, of course, ice cubes. He wondered how Caesar had licked the Gauls without ice cubes.

"I don't hanker to," Duke answered.

"Matter of taste. I've had a pretty good time, on the whole. Get crackin', girls. Anne, douse your cloak and get useful. First girl back in here with a drink for me skips her next turn at 'Front.' After our guests, I mean. Do please sit down, gentlemen. Sven, what's your favorite poison? Akvavit, I suppose - Larry, tear down, find a liquor store and fetch back a couple of bottles of akvavit. Fetch Bols gin for the captain, too."

"Hold it, Jubal," Nelson said firmly. "I won't touch akvavit unless it's chilled overnight - and I'd rather have Scotch."

"Me, too," agreed van Tromp.

"All right. Got enough of that to drown a horse. Dr. Mahmoud? If you prefer soft drinks, I'm pretty sure the girls tucked some in."

Mahmoud looked wistful. "I should not allow myself to be tempted by strong drink."

"No need to be. Let me prescribe for you, as a physician." Jubal looked him over. "Son, you look as if you had been under considerable nervous strain. Now we could alleviate that with meprobamate but since we don't have that at hand, I'm forced to substitute two ounces of ninety proof ethanol, repeat as needed. Any particular flavor you prefer to kill the medicinal taste? And with or without bubbles?"

Mahmoud smiled and suddenly did not look at all English. "Thank you, Doctor - but I'll sin my own sins, with my eyes open. Gin, please, with water on the side. Or vodka. Or whatever is available."

"Or medicinal alcohol," Nelson added. "Don't let him pull your leg, Jubal. Stinky drinks anything - and always regrets it."

"I do regret it," Mahmoud said earnestly, "because I know it is sinful."

"Then don't needle him about it, Sven," Jubal said brusquely. "If Stinky gets more mileage out of his sins by regretting them, that's his business. My own regretter burned out from overload during the market crash in '29 and I've never replaced it - and that's my business. To each his own. How about victuals, Stinky? Anne probably stuffed a ham into one of those hampers - and there might be other unclean items not as clearly recognizable. Shall I check?"

Mahmoud shook his head. "I'm not a traditionalist, Jubal. That legislation was given a long time ago, according to the needs of the time. The times are different now."

Jubal suddenly looked sad. "Yes. But for the better? Never mind, this too shall pass and leave not a rack of mutton behind. Eat what you will, my brother - God forgives necessity."

"Thank you. But, truthfully, I often do not eat in the middle of the day."

"Better eat, or the prescribed ethanol will do more than relax you. Besides, these kids who work for me may sometimes misspell words but they are all superb cooks."

Miriam had come up behind Jubal with a tray bearing four drinks, orders having been filled at once while Jubal ranted. "Boss," she broke in, "I heard that. Will you put it in writing?"

"What?" He whirled around and glared at her. "Snooping! You stay in after school and write one thousand times, 'I will not flap my ears at private conversations.' Stay until you finish it."

"Yes, Boss. This is for you, Captain ... and for you, Dr. Nelson and this is yours, Dr. Mahmoud. Water on the side, you said?"

"Yes, Miriam. Thank you."

"Usual Harshaw service - sloppy but fast. Here's yours, Boss." "You put water in it!"

"Anne's orders. She says you're too tired to have it on the rocks."

Jubal looked long-suffering. "You see what I have to put up with, gentlemen? We should never have put shoes on 'em. Miriam, make that 'one thousand times' in Sanskrit."

"Yes, Boss. Just as soon as I find time to learn it." She patted him on the head. "You go right ahead and have your tizzy, dear; you've earned it. We're all proud of you."

"Back to the kitchen, woman. Hold it - has everybody else got a drink? Where's Ben's drink? Where's Ben?"

"They have by now. Ben is phoning in his column; his drink is at his elbow."

"Very well. You may back out quietly, without formality - and send Mike in. Gentlemen! Me ke aloha pau ole! - for there are fewer of us every year." He drank, they joined him.

"Mike's helping. He loves to help - I think he's going to be a butler when he grows up."

"I thought you had left. Send him in anyhow; Dr. Nelson wants to give him a physical examination."

"No hurry," put in the ship's surgeon. "Jubal, this is excellent Scotch - but what was the toast?"

"Sorry. Polynesian. 'May our friendship be everlasting.' Call it a footnote to the water ceremony this morning. By the way, gentlemen, both Larry and Duke are water brothers to Mike, too, but don't let it fret you. They can't cook ... but they're the sort to have at your back in a dark alley."

"If you vouch for them, Jubal," van Tromp assured him, "admit them and tyle the door. But let's drink to the girls while we're alone. Sven, what's that toast of yours to the flickas?"

"You mean the one to all pretty girls everywhere? Let's drink just to the four who are here. Skim!!" They drank to their female water brothers and Nelson continued, "Jubal, where do you find them?"

"Raise 'em in my own cellar. Then just when I've got 'em trained and some use to me, some city slicker always comes along and marries them. It's a losing game."

"I can see how you suffer," Nelson said sympathetically.

"I do. I trust all of you gentlemen are married?"

Two were. Mahmoud was not. Jubal looked at him bleakly. "Would you have the grace to discorporate yourself? After lunch, of course - I wouldn't want you to do it on an empty stomach."

"I'm no threat, I'm a permanent bachelor."

"Come, come, sir! I saw Dorcas making eyes at you ... and you were purring."

"I'm safe, I assure you." Mahmoud thought of telling Jubal that he would never marry out of his faith, decided that a gentile would take it amiss - even a rare exception like Jubal. He changed the subject. "But, Jubal, don't make a suggestion like that to Mike. He wouldn't grok that you were joking - and you might have a corpse on your hands. I don't know ... I don't know that Mike can actually think himself dead. But he would try ... and if he were truly a Martian, it would work."

"I'm sure he can," Nelson said firmly. "Doctor - 'Jubal,' I mean - have you noticed anything odd about Mike's metabolism?"

"Uh, let me put it this way. There isn't anything about his metabolism which I have noticed that is not odd. Very."

"Exactly."

Jubal turned to Mahmoud. "But don't worry that I might invite Mike to suicide. I've learned not to joke with him, not ever. I grok that he doesn't grok joking." Jubal blinked thoughtfully. "But I don't grok 'grok' - not really. Stinky, you speak Martian."

"A little."

"You speak it fluently, I heard you. Do you grok 'grok'?"

Mahmoud looked very thoughtful. "No. Not really. 'Grok' is the most important word in the Martian language - and I expect to spend the next forty years trying to understand it and perhaps use some millions of printed words trying to explain it. But I don't expect to be successful. You need to think in Martian to grok the word 'grok.' Which Mike does and I don't. Perhaps you have noticed that Mike takes a rather veering approach to some of the simplest human ideas?"

"Have I! My throbbing head!"

"Mine, too."

"Food," announced Jubal. "Lunch, and about time, too. Girls, put it down where we can reach it and maintain a respectful silence. Go on talking, Doctor, if you will. Or does Mike's presence make it better to postpone it?"

"Not at all." Mahmoud spoke briefly in Martian to Mike. Mike answered him, smiled sunnily; his expression became blank again and he applied himself to food, quite content to be allowed to eat in silence. "I told him what I was trying to do and he told me that I would speak rightly; this was not his opinion but a simple statement of fact, a necessity. I hope that if I fail to, he will notice and tell me. But I doubt if he will. You see, Mike thinks in Martian - and this gives him an entirely different 'map' of the universe from that which you and I use. You follow me?"

"I grok it," agreed Jubal. "Language itself shapes a man's basic ideas."

"Yes, but - Doctor, you speak Arabic, do you not?"

"Eh? I used to, badly, many years ago," admitted Jubal. "Put in a while as a surgeon with the American Field Service, in Palestine. But I don't now. I still read it a little ... because I prefer to read the words of the Prophet in the original."

"Proper. Since the Koran cannot be translated - the 'map' changes on translation no matter how carefully one tries. You will understand, then, how difficult I found English. It was not alone that my native language has much simpler inflections and more limited tenses; the whole 'map' changed. English is the largest of the human tongues, with several times the vocabulary of the second largest language - this alone made it inevitable that English would eventually become, as it did, the lingua franca of this planet, for it is thereby the richest and the most flexible - despite its barbaric accretions ... or, I should say, because of its barbaric accretions. English swallows up anything that comes its way, makes English out of it. Nobody tried to stop this process, the way some languages are policed and have official limits ... probably because there never has been, truly, such a thing as 'the King's English' - for 'the King's English' was French. English was in truth a bastard tongue and nobody cared how it grew - and it did! ? enormously, until no one could hope to be an educated man unless he did his best to embrace this monster.

"Its very variety, subtlety, and utterly irrational, idiomatic complexity makes it possible to say things in English which simply cannot be said in any other language. It almost drove me crazy ... until I learned to think in it - and that put a new 'map' of the world on top of the one I grew up with. A better one, in many ways - certainly a more detailed one.

"But nevertheless there are things which can be said in the simple Arabic tongue that cannot be said in English."

Jubal nodded agreement. "Quite true. That's why I've kept up my reading of it, a little."

"Yes. But the Martian language is so much more complex than is English - and so wildly different in the fashion in which it abstracts its picture of the universe - that English and Arabic might as well be considered one and the same language, by comparison. An Englishman and an Arab can learn to think each other's thoughts, in the other's language. But I'm not certain that it will ever be possible for us to think in Martian (other than by the unique fashion Mike learned it) - oh, we can learn a sort of a 'pidgin' Martian, yes - that is what I speak.

"Now take this one word: 'grok.' Its literal meaning, one which I suspect goes back to the origin of the Martian race as thinking, speaking creatures - and which throws light on their whole 'map' - is quite easy. 'Grok' means 'to drink.'"

"Huh?" said Jubal. "But Mike never says 'grok' when he's just talking about drinking. He-"

"Just a moment." Mahmoud spoke to Mike in Martian.

Mike looked faintly surprised and said, "'Grok' is drink," and dropped the matter.

"But Mike would also have agreed," Mahmoud went on, "if I had named a hundred other English words, words which represent what we think of as different concepts, even pairs of antithetical concepts. And 'grok' means all of these, depending on how you use it. It means 'fear,' it means 'love,' it means 'hate' - proper hate, for by the Martian 'map' you cannot possibly hate anything unless you grok it completely, understand it so thoroughly that you merge with it and it merges with you - then and only then can you hate it. By hating yourself. But this also implies, by necessity, that you love it, too, and cherish it and would not have it otherwise. Then you can hate - and (I think) that Martian hate is an emotion so black that the nearest human equivalent could only be called a mild distaste."

Mahmoud screwed up his face. "It means 'identically equal' in the mathematical sense. The human clich,, 'This hurts me worse than it does you' has a Martian flavor to it, if only a trace. The Martians seem to know instinctively what we learned painfully from modern physics, that the observer interacts with the observed simply through the process of observation. 'Grok' means to understand so thoroughly that the observer becomes a part of the process being observed - to merge, to blend, to intermarry, to lose personal identity in group experience. It means almost everything that we mean by religion, philosophy, and science - and it means as little to us as color means to a blind man." Mahmoud paused. "Jubal, if I chopped you up and made a stew of you, you and the stew, whatever else was in it, would grok - and when I ate you, we would grok together and nothing would be lost and it would not matter which one of us did the chopping up and eating."

"It would to me!" Jubal said firmly.

"You aren't a Martian." Mahmoud stopped again to talk to Mike in Martian.

Mike nodded. "You spoke rightly, my brother Dr. Mahmoud. I am been saying so. Thou art God."

Mahmoud shrugged helplessly. "You see how hopeless it is? All I got was a blasphemy. We don't think in Martian. We can't"

"Thou art God," Mike said agreeably. "God groks."

"Hell, let's change the subject! Jubal, could I impose on my fraternal status for some more gin?"

"I'll get it," said Dorcas, and jumped up.

It was a pleasant family picnic, made easy by Jubal's gift for warm informality, a gift shared by his staff, plus the fact that the three newcomers were themselves the same easy sort of people - each learned, acclaimed, and with no need to strive. And all four men shared a foster-father interest in Mike. Even Dr. Mahmoud, rarely truly off guard with those who did not share with him the one true faith in submission to the will of God, always beneficent, merciful, found himself relaxed and happy. It had pleased him very much to learn that Jubal read the words of the Prophet and, now that he stopped to notice it, the women of Jubal's household were really much plumper than he had thought at first glance. That dark one-But he put the thought out of his mind; he was a guest.

But it pleased him very much that these women did not chatter, did not intrude themselves into the sober talk of men, but were very quick with food and drink in warm hospitality. He had been shocked at Miriam's casual disrespect toward her master - then recognized it for what it was: liberty permitted cats and favorite children in the privacy of the home.

Jubal explained early that they were doing nothing but waiting on word from the Secretary General. "If he means business - and I think he's ready to deal - we may hear from him yet today. If not, we'll go home this evening ... and come back if we have to. But if we had stayed in the Palace, he might have been tempted to dicker. Here, dug into our own hole, we can refuse to dicker."

"Dicker for what?" asked Captain van Tromp. "You gave him what he wanted."

"Not all that he wanted. Douglas would rather have that power of attorney be utterly irrevocable ... instead of on his good behavior, with the power reverting to a man he despises and is afraid of - namely that scoundrel there with the innocent smile, our brother Ben. But there are others besides Douglas who are certain to want to dicker, too. That bland buddha Kung hates my guts, I've just snatched the rug out from under him. But if he could figure a deal that might tempt us - before Douglas nails this down - he would offer it. So we stay out of his way, too. Kung is one reason why we are eating and drinking nothing that we did not fetch with us."

"You really feel that's something to worry about?" asked Nelson. "Truthfully, Jubal, I had assumed that you were a gourmet who insisted on his own cuisine even away from home. I can't imagine being poisoned, in a major hotel such as this."

Jubal shook his head sorrowfully. "Sven, you're the sort of honest man who thinks everybody else is honest - and you are usually right.

No, nobody is going to try to poison you ... but your wife might collect your insurance simply because you shared a dish with Mike."

"You really think that?"

"Sven, I'll order anything you want. But I won't touch it and I won't let Mike touch it. For I'll lay heavy odds that any waiter who comes to this suite will be on Kung's payroll ... and maybe on two or three others! I'm not seeing boogie men behind bushes; they know where we are - and they've had a couple of hours in which to act. Sven, in cold seriousness, my principal worry has been to keep this lad alive long enough to figure out a way to sterilize and stabilize the power he represents ... so that it would be to no one's advantage to have him dead."

Jubal sighed. "Consider the black widow spider. It's a timid little beastie, useful and, for my taste, the prettiest of the arachnids, with its shiny, patent-leather finish and its red hourglass trademark. But the poor thing has the fatal misfortune of possessing enormously too much power for its size. So everybody kills it on sight.

"The black widow can't help it, it has no way to avoid its venomous power.

"Mike is in the same dilemma. He isn't as pretty as a black widow spider-"

"Why, Jubal!" Dorcas said indignantly. "What a mean thing to say! And how utterly untrue!"

"Sorry, child. I don't have your glandular bias in the matter. Pretty or not, Mike can't get rid of that money, nor is it safe for him to have it. And not just Kung. The High Court is not as 'nonpolitical' as it might be although their methods would probably make a prisoner out of him rather than kill him - a fate which, for my taste, is worse. Not to mention a dozen other interested parties, in and out of public office ... persons who might or might not kill him, but who have certainly turned over in their minds just how it would affect their fortunes if Mike were guest of honor at a funeral. I-"

"Telephone, Boss."

"Anne, you have just interrupted a profound thought. You hail from Porlock."

"No, Dallas."

"And I will not answer the phone for anyone."

"She said to tell you it was Becky."

"Why didn't you say so?" Jubal hurried out of the living room, found Madame Vesant's friendly face in the screen. "Becky! I'm glad to see you, girl!" He did not bother to ask how she had known where to call him.

"Hi, Doe. I caught your act - and I just had to call and tell you so."

"How'd it look?"

"The Professor would have been proud of you. I've never seen a tip turned more expertly. Then you spilled 'em before the marks knew what had hit 'em. Doc, the profession lost a great talker when you weren't born twins."

"That's high praise, coming from you, Becky." Jubal thought rapidly. "But you set up the act; I just cashed in on it - and there's plenty of cash. So name your fee, Becky, and don't be shy." He decided that, whatever figure she picked, he would double it. That drawing account he had demanded for Mike would never feel it ... and it was better, far better, to pay Becky off lavishly than to let the obligation stay open.

Madame Vesant frowned. "Now you've hurt my feelings."

"Becky, Becky! You're a big girl now, dear. Anybody can clap and cheer - but applause worthwhile will be found in a pile of soft, green, folding money. Not my money. The Man from Mars picks up this tab and, believe me, he can afford it." He grinned. "But all you'll get from me is thanks, and a hug and a kiss that will crack your ribs the first time I see you."

She relaxed and smiled. "I'll hold you to it. I remember how you used to pat my fanny while you assured me that the Professor was sure to get well - you always could make a body feel better."

"I can't believe that I ever did anything so unprofessional."

"You did, you know you did. And you weren't very fatherly about it, either."

"Maybe so. Maybe I thought it was the treatment you needed. I've given up fanny-patting for Lent - but I'll make an exception in your case."

"You'd better."

"And you'd better figure out that fee. Don't forget the zeroes."

"Uh, I'll think about it. But, truthfully, Doc, there are more ways of collecting a fee than by making a fast count on the change. Have you been watching the market today?"

"No, and don't tell me about it. Come over and have a drink instead."

"Uh, I'd better not. I promised, well, a rather important client that I would be available for instant consultation."

"I see. Mmm ... Becky do you suppose that the stars would show that this whole matter would turn out best for everybody if it were all wrapped up, signed, sealed, and notarized today? Maybe just after the stock market closes?"

She looked thoughtful. "I could look into it."

"You do that. And come stay with us when you aren't so busy. Stay as long as you like and never wear your hurtin' shoes the whole time. You'll like the boy. He's as weird as snake's suspenders but sweet as a stolen kiss, too."

"Uh... I will. As soon as I can. Thanks, Doc."

They said good-by and Jubal returned to find that Dr. Nelson had taken Mike into one of the bedrooms and was checking him over. He joined them to offer Nelson the use of his kit since Nelson had not had with him his professional bag.

Jubal found Mike stripped down and the ship's surgeon looking baffled. "Doctor," Nelson said, almost angrily, "I saw this patient only ten days ago. Tell me where he got those muscles?"

"Why, he sent in a coupon from the back cover of Rut: The Magazine for He-Men. You know, the ad that tells how a ninety-pound weakling can-"

"Doctor, please!"

"Why don't you ask him?" Jubal suggested.

Nelson did so. "I thinked them," Mike answered.

"That's right," Jubal agreed. "He 'thinked' 'em. When I got him, just over a week ago, he was a mess, slight, flabby, and pale. Looked as if he had been raised in a cave - which I gather he was, more or less. So I told him he had to grow strong. So he did."

"Exercises?" Nelson said doubtfully.

"Nothing systematic. Swimming, when and as he wished."

"A week of swimming won't make a man look as if he had been sweating over bar bells for years!" Nelson frowned. "I am aware that Mike has voluntary control over the so-called 'involuntary' muscles, But that is not entirely without precedent. This, on the other hand, requires one to assume that-"

"Doctor," Jubal said gently, "why don't you just admit that you don't grok it and save the wear and tear?"

Nelson sighed. "I might as well. Put your clothes on, Michael."

Somewhat later, Jubal, under the mellowing influence of congenial company and the grape, was unburdening to the three from the Champion his misgivings about his morning's work. "The financial end was simple enough: just tie up Mike's money so that a struggle over it couldn't take place. Not even if he dies, because I've let Douglas know privately that Mike's death ends his stewardship whereas a rumour from a usually reliable source - me, in this case - has reached Kung and several others to the effect that Mike's death will give Douglas permanent control. Of course, if I had had magical powers, I would have stripped the boy not only of all political significance but also of every penny of his inheritance. That-"

"Why would you have done that, Jubal?" the captain interrupted.

Harshaw looked surprised. "Are you wealthy, Skipper? I don't mean: 'Are your bills paid and enough in the sock to buy any follies your taste runs to?' I mean rich ... so loaded that the floor sags when you walk around to take your place at the head of a boardroom table."

"Me?" Van Tromp snorted. "I've got my monthly check, a pension eventually, a house with a mortgage and two girls in college. I'd like to try being wealthy for a while, I don't mind telling you!"

"You wouldn't like it."

"Huh! You wouldn't say that ... if you had two daughters in school."

"For the record, I put four daughters through college, and I went in debt to my armpits to do it. One of them justified the investment; she's a leading light in her profession which she practices under her husband's name because I'm a disreputable old bum who makes money writing popular trash instead of having the grace to be only a revered memory in her paragraph in Who's Who. The other three are nice people who always remember my birthday and don't bother me otherwise I can't say that an education hurt them. But my offspring are not relevant save to show that I understand that a man often needs more than he's got. But you can fix that easily; you can resign from the service and take a job with some engineering firm that will pay you several times what you're getting just to put your name on their letterhead General Atomics. Several others, You've had offers, haven't you?"

"That's beside the point," Captain van Tromp answered stiffly. "I'm a professional man."

"Meaning there isn't enough money on this planet to tempt you into giving up on flying space ships. I understand that."

"But I wouldn't mind having money, too."

"A little more money won't do you any good, because daughters can use up ten percent more than a man can make in any normal occupation regardless of the amount. That's a widely experienced but previously unformulated law of nature, to be known henceforth as 'Harshaw's Law.' But, Captain, real wealth, on the scale that causes its owner to hire a battery of finaglers to hold down his taxes, would ground you just as certainly as resigning would."

"Why should it? I would put it all in bonds and just clip coupons."

"Would you? Not if you were the sort of person who acquires great wealth in the first place. Big money isn't hard to come by. All it costs is a lifetime of single-minded devotion to acquiring it and making it grow into more money, to the utter exclusion of all other interests. They say that the age of opportunity has passed. Nonsense! Seven out of ten of the wealthiest men on this planet started life without a shilling - and there are plenty more such strivers on the way up. Such people are not stopped by high taxation nor even by socialism; they simply adapt themselves to new rules and presently they change the rules. But no premiere ballerina ever works harder, nor more narrowly, than a man who acquires riches. Captain, that's not your style; you don't want to make money, you simply want to have money - in order to spend it."

"Correct, sir! Which is why I can't see why you should want to take Mike's wealth away from him."

"Because Mike doesn't need it and it would cripple him worse than any physical handicap. Wealth - great wealth - is a curse ... unless you are devoted to the money making game for its own sake. And even then it has serious drawbacks."

"Oh, nonsense, Jubal, you talk like a harem guard trying to convince a whole man of the advantages of being a eunuch. Pardon me."

"Very possibly." agreed Jubal, "and perhaps for the same reason; the human mind's ability to rationalize its own shortcomings into virtues is unlimited, and I am no exception. Since I, like yourself, sir, have no interest in money other than to spend it, there has never been the slightest chance that I would acquire any significant degree of wealth, just enough for my vices. Nor any real danger that I would fail to scrounge that modest amount, since anyone with the savvy not to draw to a small pair can always manage to feed his vices, whether they be tithing or chewing betel nut. But great wealth? You saw that performance this morning. Now answer me truthfully. Do you think I could have revised it slightly so that I myself acquired all that plunder - become its sole manager and defacto owner while milking off for my own use any income I cared to name - and still have rigged the other issues so that Douglas would have supported the outcome? Could I have done that, sir? Mike trusts me; I am his water brother. Could I have stolen his fortune and so arranged it that the government in the person of Mr. Douglas would have condoned it?"

"Uh ... damn you, Jubal, I suppose you could have."

"Most certainly I could have. Because our sometimes estimable Secretary General is no more a money-seeker than you are. His drive is political power - a drum whose beat I do not hear. Had I guaranteed to Douglas (oh, gracefully, of course - there is decorum even among thieves) that the Smith estate would continue to bulwark his administration, then I would have been left undisturbed to do as I liked with the income and had my acting guardianship made legal."

Jubal shuddered. "I thought that I was going to have to do exactly that, simply to protect Mike from the vultures gathered around him - and I was panic-stricken. Captain, you obviously don't know what an Old Man of the Sea great wealth is. It is not a fat purse and time to spend it. Its owner finds himself beset on every side, at every hour, wherever he goes, by persistent pleaders, like beggars in Bombay, each demanding that he invest or give away part of his wealth. He becomes suspicious of honest friendship - indeed honest friendship is rarely offered him; those who could have been his friends are too fastidious to be jostled by beggars, too proud to risk being mistaken for one.

"Worse yet, his life and the lives of his family are always in danger. Captain, have your daughters ever been threatened with kidnapping?"

"What? Good Lord, I should hope not!"

"If you possessed the wealth Mike had thrust on him, you would have those girls guarded night and day - and even then you would not rest, because you would never be sure that those very guards were not tempted. Look at the records of the last hundred or so kidnappings in this country and note how many of them involved a trusted employee - and note, too, how few victims escaped alive. Then ask yourself: is there any luxury wealth can buy which is worth having your daughters' pretty necks always in a noose?"

Van Tromp looked thoughtful. "No. I guess I'll keep my mortgaged house - it's more my speed. Those girls are all I've got, Jubal."

"Amen. I was appalled at the prospect. Wealth holds no charm for me. All I want is to live my own lazy, useless life, sleep in my own bed - and not be bothered! Yet I thought I was going to be forced to spend my last few years sitting in an office, barricaded by buffers, and working long hours as Mike's man of business.

"Then I had an inspiration. Douglas already lived behind such barricades, already had such a staff. Since I was forced to surrender the power of that money to Douglas merely to ensure Mike's continued health and freedom, why not make the beggar pay for it by assuming all the headaches, too? I was not afraid that Douglas would steal from Mike; only pipsqueak, second-rate politicians are money hungry - and Douglas, whatever his faults, is no pipsqueak. Quit scowling, Ben, and hope that he never dumps the load on you.

"So I dumped the whole load on Douglas - and now I can go back to my garden. But, as I have said, the money was relatively simple, once I figured it out. It was the Larkin Decision that fretted me."

Caxton said, "I thought you had lost your wits on that one, Jubal. That silly business of letting them give Mike sovereign 'honors.' Honors indeed! For God's sake, Jubal, you should simply have had Mike sign over all right, title, and interest, if any, under that ridiculous Larkin theory. You knew Douglas wanted him to - Jill told you."

"Ben m'boy," Jubal said gently, "as a reporter you are hardworking and sometimes readable."

"Gee, thanks! My fan."

"But your concepts of strategy are Neanderthal."

Caxton sighed. "I feel better, Jubal. For a moment there I thought you had become softly sentimental in your old age."

"When I do, please shoot me. Captain, how many men did you leave on Mars?"

"Twentythree."

"And what is their status, under the Larkin Decision?"

Van Tromp looked troubled. "I'm not supposed to talk."

"Then don't," Jubal reassured him. "I can deduce it, and so can Ben."

Dr. Nelson said, "Skipper, both Stinky and I are civilians again. I shall talk where and how I please-"

"And shall I," agreed Mahmoud.

"-and if they want to make trouble for me, they know what they can do with my reserve commission. What business has the government, telling us we can't talk? Those chairwarmers didn't go to Mars. We did."

"Stow it, Sven. I intended to talk - these are our water brothers. But, Ben, I would rather not see this in your column. I would like to command a space ship again."

"Captain, I know the meaning of 'off the record.' But if you'll feel easier, I'll join Mike and the girls for a while - I want to see Jill anyhow."

"Please don't leave. But ... this is among water brothers. The government is in a stew about that nominal colony we left behind. Every man in it joined in signing away his so-called Larkin rights - assigned them to the government - before we left Earth. Mike's presence when we got to Mars confused things enormously. I'm no lawyer, but I understood that, if Mike did waive his rights, whatever they might be, that would put the administration in the driver's seat when it came to parceling out things of value."

"What things of value?" demanded Caxton. "Other than pure science, I mean. Look, Skipper, I'm not running down your achievement, but from all I've seen and heard, Mars isn't exactly valuable real estate for human beings. Or are there assets that are still classified 'drop dead before reading'?"

Van Tromp shook his head. "No, the scientific and technical reports are all declassified, I believe. But, Ben, the Moon was a worthless hunk of rock when we first got it. Now look at it."

"Touch,," Caxton admitted. "I wish my grandpappy had bought Lunar Enterprises instead of Canadian uranium. I don't have Jubal's objections to being rich." He added, "But, in any case, Mars is already inhabited."

Van Tromp looked unhappy. "Yes. But-Stinky, you tell him."

Mahmoud said, "Ben, there is plenty of room on Mars for human colonization ... and, so far as I was ever able to find out, the Martians would not interfere. They did not object when we told them we intended to leave a colony behind. Nor did they seem pleased. Not even interested. We're flying our flag and claiming extraterritoriality right now. But our status may be more like that of one of those ant cities under glass one sometimes sees in school rooms. I was never able to grok it."

Jubal nodded. "Precisely. Myself, too. This morning I did not have the slightest idea of the true situation ... except that I knew that the government was anxious to get those so-called Larkin rights from Mike. Beyond that I was ignorant. So I assumed that the government was equally ignorant and went boldly ahead. 'Audacity, always audacity' - soundest principle of strategy. In practicing medicine I learned that when you are most at loss is the time when you must appear confident. In law I had learned that, when your case seems hopeless, you must impress the jury with your relaxed certainty."

Jubal grinned. "Once, when I was a kid in high school, I won a debate on shipping subsidies by quoting an overwhelming argument from the files of the British Colonial Shipping Board. The opposition was totally unable to refute me - because there never was a 'British Colonial Shipping Board.' I had made it up, whole cloth.

"I was equally shameless this morning. The administration wanted Mike's 'Larkin rights' and was scared silly that we might make a deal with Kung or somebody. So I used their greed and worry to wring out of them that ultimate logical absurdity of their fantastic legal theory, a public acknowledgment in unmistakable diplomatic protocol that Mike was a sovereign equal of the Federation itself - and must be treated accordingly!" Jubal looked smug.

"Thereby," Ben said dryly, "putting yourself up the well-known creek without a paddle."

"Ben, Ben," Jubal said chidingly. "Wrong metaphor. Not a canoe, but a tiger. Or a throne. By their own logic they had publicly crowned Mike. Need I point out that, despite the old saw about uneasy heads and crowns, it is nevertheless safer to be publicly a king than it is to be a pretender in hiding? A king can usually abdicate to save his neck; a pretender may renounce his pretensions but it makes his neck no safer - less so, in fact; it leaves him naked to his enemies. No, Ben, Kung saw that Mike's position had been enormously strengthened by a few bars of music and an old sheet, even if you did not - and Kung did not like it a bit.

"But I acted through necessity, not choice, and, while Mike's position was improved, it was still not an easy one. Mike was, for the nonce, the acknowledged sovereign of Mars under the legalistic malarky of the Larkin precedent ... and, as such, was empowered to hand out concessions, trading rights, enclaves, ad nauseam. He must either do these things himself ... and thus be subjected to pressures even worse than those attendant on great wealth and for which he is even less fitted - or he must abdicate his titular position and allow his Larkin rights to devolve on those twentythree men now on Mars, i.e., to Douglas."

Jubal looked pained. "I disliked these alternatives almost equally, since each was based on the detestable doctrine that the Larkin Decision could apply to inhabited planets. Gentlemen, I have never met any Martians, I have no vocation to be their champion - but I could not permit a client of mine to be trapped into such a farce. The Larkin Decision itself had to be rendered void, and all 'rights' under it, with respect to the planet Mars - while the matter was still in our hands and without giving the High Court a chance to rule."

Jubal grinned boyishly. "So I appealed to a higher court for a decision that would nullify the Larkin precedent - I cited a mythical 'British Colonial Shipping Board.' I lied myself blue in the face to create a new legal theory. Sovereign honors had been rendered Mike; that was fact, the world had seen it. But sovereign honors may be rendered to a sovereign ... or to a sovereign's alter ego, his viceroy or ambassador. So I asserted that Mike was no cardboard sovereign under a silly human precedent not in point - but in awful fact the ambassador of the great Martian nation!"

Jubal sighed. "Sheer bluff ... and I was scared silly that I would be required to prove my claims. But I was staking my bluff on my hope and strong belief that others - Douglas, and in particular, Kung - would be no more certain of the facts than was I." Jubal looked around him. "But I ventured to risk that bluff because you three were sitting with us, were Mike's water brethren. If you three sat by and did not challenge my lies, then Mike must be accepted as the Martian equivalent of ambassador - and the Larkin Decision was a dead issue."

"I hope it is," Captain van Tromp said soberly, "but I did not take your statements as lies, Jubal; I took them as simple truth."

"Eh? But I assure you they were not. I was spinning fancy words, extemporizing."

"No matter. Inspiration or deduction - I think you told the truth." The skipper of the Champion hesitated. "Except that I would not call Mike an ambassador - I think he's an expeditionary force."

Caxton's jaw dropped. Harshaw did not dispute him but answered with equal soberness. "In what way, sir?"

Van Tromp said, "I'll amend that. It would be better to say that I think he's a scout for an expeditionary force, reconnoitering us for his Martian masters. It is even possible that they are in telepathic contact with him at all times, that he doesn't even need to report back. I don't know - but I do know that, after visiting Mars, I find such ideas much easier to swallow ... and I know this: everybody seems to take it for granted that, finding a human being on Mars, we would of course bring him home and that he would be anxious to come home. Nothing could be further from the truth. Eh, Sven?"

"Mike hated the idea," agreed Nelson. "We couldn't even get close to him at first; he was afraid of us. Then he was ordered to go back with us and from then on he did exactly what we told him to do. He behaved like a soldier carrying out with perfect discipline orders that scared him silly."

"Just a moment," Caxton protested. "Captain, even so - Mars attack us? Mars? You know more about these things than I do, but wouldn't that be about like us attacking Jupiter? I mean to say, we have about two and a half times the surface gravity that Mars has, just as Jupiter has about two and a half times our surface gravity. Somewhat analogous differences, each way, on pressure, temperature, atmosphere, and so forth. We couldn't stay alive on Jupiter ... and I don't see how Martians could stand our conditions. Isn't that true?"

"Close enough," admitted van Tromp.

"Then tell me why we should attack Jupiter? Or Mars attack us?"

"Mmm ... Ben, have you seen any of the proposals to attempt a beach head on Jupiter?"

"Yes, but-Well, nothing has ever gotten beyond the dream stage. It isn't practical."

"Space flight wasn't practical less than a century ago. Go back in the files and see what your own colleagues said about it - oh, say about 1940. These Jupiter proposals are, at best, no farther than drawing board - but the engineers working on them are quite serious. They think that, by using all that we've learned from deep ocean exploration, plus equipping men with powered suits in which to float, it should be possible to put human beings on Jupiter. And don't think for a moment that the Martians are any less clever than we are. You should see their cities."

"Uh-" said Caxton. "Okay, I'll shut up. I still don't see why they would bother."

"Captain?"

"Yes, Jubal?"

"I see another objection - a cultural one. You know the rough division of cultures into 'Apollonian' and 'Dionysian.'"

"I know in general what you mean."

"Well, it seems to me that even the Zuni culture would be called 'Dionysian' on Mars. Of course, you've been there and I haven't - but I've been talking steadily with Mike. That boy was raised in an extremely Apollonian culture - and such cultures are not aggressive."

"Mmm ... I see your point - but I wouldn't count on it."

Mahmoud said suddenly, "Skipper, there's strong evidence to support Jubal's conclusion. You can analyse a culture from its language, every time - and there isn't any Martian word for 'war.'" He stopped and looked puzzled. "At least, I don't think there is. Nor any word for 'weapon'

nor for 'fighting.' If a word for a concept isn't in a language, then its culture simply doesn't have the referent the missing word would symbolize."

"Oh, twaddle, Stinky! Animals fight - and ants even conduct wars. Are you trying to tell me they have to have words for it before they can do it?"

"I mean exactly that," Mahmoud insisted, "when it applies to any verbalizing race. Such as ourselves. Such as the Martians - even more highly verbalized than we are. A verbalizing race has words for every old concept ... and creates new words or new definitions for old words whenever a new concept comes along. Always! A nervous system that is able to verbalize cannot avoid verbalizing; it's automatic. If the Martians know what 'war' is, then they have a word for it."

"There is a quick way to settle it," Jubal suggested. "Call in Mike."

"Just a moment, Jubal," van Tromp objected. "I learned years ago never to argue with a specialist; you can't win. But I also learned that the history of progress is a long, long list of specialists who were dead wrong when they were most certain - sorry, Stinky."

"You're quite right, Captain - only I'm not wrong this time."

"As may be, all Mike can settle is whether or not he knows a certain word ... which might be like asking a two-year-old to define 'calculus.' Proves nothing. I'd like to stick to facts for a moment. Sven? About Agnew?"

Nelson answered, "It's up to you, Captain"

"Well ... this is still private conversation among water brothers, gentlemen. Lieutenant Agnew was our junior medical officer. Quite brilliant in his line, Sven tells me, and I had no complaints about him otherwise; he was well-enough liked. But he had an unsuspected latent xenophobia. Not against humans. But he couldn't stand Martians. Now I had given orders against going armed outside the ship once it appeared that the Martians were peaceful - too much chance of an incident.

"Apparently young Agnew disobeyed me - at least we were never able to find his personal side arm later and the two men who last saw him alive say that he was wearing it. But all my log shows is: 'Missing and presumed dead.'

"Here is why. Two crewmen saw Agnew go into a sort of passage between two large rocks - rather scarce on Mars; mostly it's monotonous. Then they saw a Martian enter the same way ... whereupon they hurried, as Dr. Agnew's peculiarity was well known.

"Both say that they heard a shot. One says that he reached this opening in time to glimpse Agnew past the Martian, who pretty well filled the space between the rocks; they're so big. And then he didn't see him. The second man says that when he got there the Martian was just exiting, simply sailed on past them and went his way - which is characteristically Martian; if he has no business with you, he simply ignores you. With the Martian out of the way they could both see the space between the two rocks ... and it was a dead end, empty.

"That's all, gentlemen ... except to say that Agnew might have jumped that rock wall, under Mars' low surface gravity and the impetus of fear - but I could not and I tried - and to mention that these two crewmen were wearing breathing gear - have to, on Mars - and hypoxia can make a man's senses quite unreliable. I don't know that the first crewman was drunk through oxygen shortage; I just mention it because it is an explanation easier to believe than what he reported ... which is that Agnew simply disappeared, in the blink of an eye. In fact I suggested as much to him and ordered him to check the demand valve and the rest of his breather gear before he went outside again.

"You see, I thought Agnew would show up presently ... and I was looking forward to chewing him out and slapping him under hack for going armed (if he was) and for going alone (which seemed certain), both being flagrant breaches of discipline.

"But he never returned, we never found him nor his body. I do not know what happened. But my own misgivings about Martians date to that incident. They never again seemed to me to be just big, gentle, harmless, rather comical creatures, even though we never had any trouble with them and they always gave us anything we wanted, once Stinky figured out how to ask for it. I played down the incident - can't let men panic when you're a hundred million miles from home. Oh, I couldn't play down the fact that Dr. Agnew was missing and the whole ship's company searched for him. But I squelched any suggestion that there had been anything mysterious about it - Agnew had gotten lost among those rocks, had eventually died, no doubt, when his oxygen ran out ... and was buried under sand drift or something. You do get quite a breeze both at sunrise and sundown on Mars; it does cause the sand to drift. So I used it as a reason to clamp down ever harder on always traveling in company, always staying in radio contact with the ship, always checking breather gear ... with Agnew as a horrible example. I did not tell that crewman to keep his mouth shut; I simply hinted that his story was unbelievable, especially as his mate was not able to back it up. I think the official version prevailed."

Mahmond said slowly, "It did with me, Captain - this is the first time I've heard that there was any mystery about Agnew. And truthfully, I prefer your 'official' version - I'm not inclined to be superstitious."

Van Tromp nodded. "That's what I had hoped for. Only Sven and myself heard that crewman's wild tale - and we kept it to ourselves. But, just the same-" The space ship captain suddenly looked old. "-I still wake up in the night and ask myself: 'What became of Agnew?'"

Jubal listened to the story without comment. He was still wondering what he should add to it when it ended. He wondered, too, if Jill had told Ben about Berquist and that other fellow ? Johnson. He knew that he had not. There hadn't been time the night Ben had been rescued ... and in the sober light of the following dawn it had seemed better to let such things ride.

Had the kids told Ben about the battle of the swimming pool? And the two carloads of cops who were missing afterwards? Again, it seemed most unlikely; the kids knew that the "official" version was that the first task force had never showed up, they had all heard his phone call with Douglas. All Jubal's family were discreet; whether guests or employees, gossipy persons were quickly ousted - Jubal regarded gossip as his own prerogative, solely.

But Jill might have told Ben - Well, if she had, she must have bound him to silence; Ben had not mentioned disappearances to Jubal ... and he wasn't trying to catch Jubal's eye now.

Damn it, the only thing to do was to keep quiet and go on trying to impress on the boy that he simply must not go around making unpleasant strangers disappear!

Jubal was saved from further soul-searching (and the stag conversation was broken up) by Anne's arrival. "Boss, that Mr. Bradley is at the door. The one who called himself 'senior executive assistant to the Secretary General.'

"You didn't let him in?"

"No. I looked at him through the one-way and talked to him through the speakie. He says he has papers to deliver to you, personally, and that he will wait for an answer."

"Have him pass them through the flap. And you tell him that you are my 'senior executive assistant' and that you will fetch my receipt acknowledging personal delivery if that is what he wants. This is still the Martian Embassy - until I check what's in those papers."

"Just let him stand in the corridor?"

"I've no doubt that Major Bloch can find him a chair. Anne, I am aware that you were gently reared - but this is a situation in which rudeness pays off. We don't give an inch, nor a kind word, until we get exactly what we want."

"Yes, Boss."

The package was bulky because there were many copies; there was one document only. Jubal called in everyone and passed them around.

"Girls, I am offering one lollipop for each loophole, boobytrap, or ambiguity - prizes of similar value to males. Now everybody keep quiet."

Presently Jubal broke the silence. "He's an honest politician - he stays bought."

"Looks that way," admitted Caxton.

"Anybody?" No one claimed a prize; Douglas had kept it simple and straightforward, merely implementing the agreement reached earlier. "Okay," said Jubal, "everybody is to witness every copy, after Mike signs it - especially you, Skipper, and Sven and Stinky. Get your seal, Miriam. Hell, let Bradley in now and have him witness, too - then give the poor guy a drink. Duke, call the desk and tell 'em to send up the bill; we're checking out. Then call Greyhound and tell 'em we want our go-buggy. Sven, Skipper, Stinky - we're getting out of here the way Lot left Sodom ... why don't you three come up in the country with us, take off your shoes, and relax? Plenty of beds, home cooking, and no worries."

The two married men asked for, and received, rain checks; Dr. Mahmoud accepted. The signing took rather long, mostly because Mike enjoyed signing his name, drawing each letter with great care and artistic satisfaction. The salvageable remains of the picnic (mostly unopened bottles) had been sent up and loaded by the time all copies were signed and sealed, and the hotel bill had arrived.

Jubal glanced at the fat total and did not bother to add it. Instead he wrote on it: "Approved for payment - J. Harshaw for V. M. Smith," and handed it to Bradley.

"This is your boss's worry now," he told Bradley.

Bradley blinked. "Sir?"

"Oh, just to keep it 'via channels.' Mr. Douglas will doubtless turn it over to the Chief of Protocol. Isn't that the usual procedure? I'm rather green about these things."

Bradley accepted the bill. "Yes," he said slowly. "Yes, that's right. LaRue will voucher it - I'll give it to him."

"Thank you, Mr. Bradley. Thanks for everything!"

part three

HIS ECCENTRIC EDUCATION

Chapter 22

IN ONE LIMB OF A SPIRAL GALAXY, close to a star known as "Sol" to some of its dependents, another star of the same type underwent catastrophic readjustment and became nova. Its glory would be seen on Mars in another three-replenished (729) years, or 1370 Terran years. The Old Ones noted the coming event as being useful, shortly, for instruction of the young, while never ceasing the exciting and crucial discussion of esthetic problems concerning the new epic woven around the death of the Fifth Planet.

The departure of the spaceship Champion for its home planet was noted without comment and a watch was kept on the strange nestling sent back in it, but nothing more, since it would be some time yet before it would be fruitful to grok the outcome. The twentythree humans left behind on Mars coped, successfully in most ways, with an environment lethal to naked humans but less difficult, on the whole, than that in the Free State of Antarctica. One of them discorporated through an undiagnosed illness sometimes called "heartbreak" and at other times "homesickness." The Old Ones cherished the wounded spirit and sent it back where it belonged for further healing; aside from that the Martians left the Terrans alone.

On Earth the exploding neighbor star was not noticed at all, human astronomers still being limited by speed of light. The Man from Mars, having been briefly back in the news, had dropped out of the news again. The minority leader in the Federation Senate called for "a bold, new approach" to the twin problems of population and malnutrition in southeast Asia, starting with increased emergency grants-in-aid to families with more than five children. Mrs. Percy B. S. Souchek sued the supervisors of Los Angeles City-County over the death of her pet poodle Piddle which had taken place during a five-day period of stationary inversion layer. Cynthia Duchess announced that she was going to have the Perfect Baby by a scientifically selected anonymous donor and an equally perfect host mother just as soon as a battery of experts completed calculating the exact instant for conception to insure that the wonder child would be equally a genius in music, art, and statesmanship - and that she would (with the aid of hormonal treatments) nurse her child herself. She gave out a statement to the press on the psychological benefits of natural feeding and permitted, or insisted, that the press take pictures of her to prove that she was physically endowed for this happy duty - a fact that her usual publicity pictures had never really left undecided—

Supreme Bishop Digby denounced her as the Harlot of Babylon and forbade any Fosterite to accept the commission, either as donor or hostmother. Alice Douglas was quoted as saying: "While I do not know Miss Duchess personally, one cannot help but admire her. Her brave example should be an inspiration to mothers everywhere."

By accident, Jubal Harshaw saw one of the pictures and the accompanying story in a magazine some visitor had left in his house. He chuckled over it and posted it on the bulletin board in the kitchen ... then noted (as he had expected) that it did not stay up long, which made him chuckle again.

He did not have too many chuckles that week; the world had been too much with him. The working press soon ceased bothering Mike and the Harshaw household when it was clear that the story was over and that Harshaw did not intend to let any fresh news happen - but a great many thousands of other people, not in the news business, did not forget Mike. Douglas honestly tried to insure Mike's privacy; S.S. troopers now patrolled Harshaw's fence and an S.S. car circled over the grounds and challenged any car that tried to land. But Harshaw resented the necessity of having guards.

Guards kept people out; the mail and the telephone came through. The telephone Jubal coped with by changing his call number and having all calls routed through an answering service to which was given a very limited list of persons from whom Harshaw would accept calls - and, at that, he kept the instrument in the house set on "refuse & record" most of the time.

But the mail always comes through.

At first, Harshaw told Jill that the problem was Mike's. The boy had to grow up someday; he could start by handling his own mail and she could help and advise him. "But don't bother me with it; I have enough trouble with screwball mail of my own!"

Jubal could not make his decision stick; there was too much of it and Jill simply did not know how.

Just sorting the mail into categories was a headache. Jubal solved that by first making a phone call to the local postmaster (which got no results), then by a phone call to Bradley, which did get results after a "suggestion" from on high trickled back down to local level; thereafter mail for Mike arrived sacked as first class, second class, third class, and fourth class, with mail for everyone else in the household in still another sack.

Second and third class mail was used to insulate a new root cellar north of the house, the old root cellar having been dug by the former owner as a fallout shelter and never having been satisfactory as root cellar. Once the new root cellar was heavily over-insulated and could use no more, Jubal told Duke to dump such mail as fill to check erosion in gullies; combined with a small amount of brush such mail compacted very nicely.

Fourth class mail was a problem, especially as one package exploded prematurely in the village post office, blowing several years of "Wanted" announcements off the notice board and ruining one "Use Next Window" sign - by great good luck the postmaster was out for coffee and his assistant, an elderly lady with weak kidneys, was safe in the washroom. Jubal considered having all fourth class mail addressed to Mike processed by the bomb-disposal specialists of the S.S. who performed the same service for the Secretary General.

This turned out not to be necessary; Mike could spot a "wrongness" about a package without opening it. Thereafter all fourth class mail was unsacked in a heap just inside the gate; then, after the postman had left, Mike would pry through the pile from a distance, cause to disappear any harmful parcel; then Larry would truck the remainder to the house. Jubal felt that this method was far better than soaking suspect packages, opening them in darkness, X-raying them, or any other conventional method.

Mike loved opening the harmless packages; it made every day Christmas for him. He particularly enjoyed reading his own name on address labels. The plunder inside might or might not interest him; usually he gave it to one of the others - and, in the process, at last learned what "property" was in discovering that he could make gifts to his friends. Anything that nobody wanted wound up in a gully; this included, by definition, all gifts of food, as Jubal was not certain that Mike's nose for "wrongness" extended to poisons - especially after Mike had drunk, through error, a beaker of a poisonous solution Duke had left in the refrigerator he used for his photographic work. Mike had simply said mildly that the "Iced tea" had a flavor he was not sure that he liked.

Jubal told Jill that it was otherwise all right to keep anything that came to Mike by parcel post provided that none of it was (a) ever paid for, (b) ever acknowledged, (c) nor ever returned no matter how marked. Some of the items were legitimately gifts; more of it was unordered merchandise. Either way, Jubal assumed conclusively that unsolicited chattels from strangers always represented efforts to make use of the Man from Mars and therefore merited no thanks.

An exception was made for live stock, from baby chicks to baby alligators which Jubal advised her to return unless she was willing to guarantee the care and feeding thereof, and the responsibility of keeping same from falling into the pool.

First class mail was a separate headache. After looking over a bushel or so of Mike's first class mail Jubal set up a list of categories:

A. Begging letters, personal and institutional - erosion fill.

B. Threatening letters-file unanswered. Second and later letters from any one source to be turned over to S.S.

C. Offers of business deals of any nature forward to Douglas unanswered.

D. Crackpot letters not containing threat - Pass around any real dillies; the rest to go in a gully.

E. Friendly letters - answer only if accompanied by stamped, self addressed envelope, in which case use one of several form letters to be signed by Jill (Jubal pointed out that letters signed by the Man from Mars were valuable per se, and an open invitation to more useless mail.)

F. Scatological letters - Pass to Jubal (who had a bet with himself that no such letter would ever show the faintest sign of literary novelty) for further disposition - i.e., gully.

G. Proposals of marriage and propositions not quite so formal - ignore and file. Use procedure under "B" on third offense.

H. Letters from scientific and educational institutions - handle as under "E"; if answered at all, use form letter explaining that the Man from Mars was not available for anything; if Jill felt that a form brushoff would not do, pass along to Jubal.

I. Letters from persons who actually had met Mike, such as all the crew of the Champion, the President of the United States, and a few others - let Mike answer them exactly as he pleased; the exercise in penmanship would be good for him and the exercise in human personal relations he needed even more (and if he wanted advice, let him ask for it).

This guide cut the number of letters that had to be answered down to manageable size - a few each day for Jill, seldom even one for Mike. Just opening the mail took a major effort, but Jill found that she could skim and classify in about one hour each day, after she got used to it. The first four categories remained large at all times; category "G" was very large during the fortnight following the world stereocast from the Palace, then dwindled and the curve flattened to a steady trickle.

Jubal cautioned Jill that, while Mike should himself answer letters only from acquaintances and friends, mail addressed to him was his to read if he wished.

The third morning after the category system had gone into effect Jill brought a letter, category "G," to Jubal. More than half of the ladies and other females (plus a few misguided males) who supplied this category included pictures alleged to be of themselves; some of these pictures left little to the imagination, as did the letters themselves in many cases.

This letter enclosed a picture which managed not only to leave nothing to the imagination, but started over by stimulating fresh imaginings. Jill said, "Look at this, Boss! I ask you!"

Jubal read the letter, then looked at the picture. "She seems to know what she wants. What does Mike think of it?"

"He hasn't seen it. That's why I brought it to you."

Jubal glanced again at the picture. "A type which, in my youth, we referred to as 'stacked.' Well, her sex is not in doubt, nor her agility. But why are you showing it to me? I've seen better, I assure you."

"But what should I do with it? The letter is bad enough ... but that disgusting picture - should I tear it up? Before Mike sees it?"

"Oh-Siddown, Nurse. What does it say on the envelope?"

"Nothing. Just the address and the return address."

"How does the address read?"

"Huh? 'Mr. Valentine Michael Smith, the Man from-"

"Oh. Then it's not addressed to you."

"Why, no, of course-"

"That's all I wanted to be sure of. Now let's get something straight. I am not Mike's guardian. You are neither his mother nor his chaperon. I've simply co-opted you as his secretary. If Mike wants to read everything that comes in here addressed to him, including third class junk mail, he is free to do so."

"Well, he does read almost all of those ads. But surely you don't want him to see filth? Jubal, Mike doesn't know what the world is like. He's innocent.

"So? How many men has he killed so far, Jill?"

Jill did not answer; she looked unhappy. Jubal went on: "If you want to help him, you will concentrate on teaching him that casual killing is frowned on in this society. Otherwise he is bound to be unpleasantly conspicuous when he goes out into the world."

"Uh, I don't think he wants to 'go out into the world.'"

"Well, I'm damned well going to push him out of the nest as soon as I think he can fly. He can come back later, if he wishes, but I shan't make it possible for him to live out his life here, as an arrested infant. For one thing, I can't even if I wanted to ... because Mike will probably outlive me by sixty or seventy years and this nest will be gone. But you are correct; Mike is innocent by our standards. Nurse, have you ever seen that sterile laboratory at Notre Dame?"

"No. I've read about it."

"Healthiest animals in the world, but they can't ever leave the laboratory. Child, I'm not running a sterile laboratory. Mike has got to get acquainted with 'filth,' as you call it - and get immunized to it. One day he's going to meet the gal who wrote this letter, or her spiritual twin sister - in fact he's going to meet her by the dozens and hundreds. Shucks, with his notoriety and his looks he can spend his life skipping from one warm bed to another, if he likes. You can't stop it, I can't stop it; it's up to Mike. Furthermore, I wouldn't want to stop it, although for my taste it's a silly way to spend one's life - doing the same monotonous exercises over and over again, I mean-What do you think?"

"I-" Jill stopped and blushed.

"I withdraw the question. Maybe you don't find them monotonous but none of my business, either way. But if you don't want Mike's feet kicked out from under him by the first five hundred women that get him alone - and I don't regard it as a good idea, either; he should have other interests as well - then don't try to intercept his mail. Letters like that may vaccinate him a little - or at least tend to put him on guard. Don't make a thing out of it; just pass it along in the stack, cum 'filthy' picture. Answer his questions if he asks them ... and try not to blush."

"Uh, all right. Boss, you're infuriating when you're logical."

"Yes, a most uncouth way to argue. Now run along."

"All right. But I'm going to tear up that picture after Mike has seen it."

"Oh, don't do that!"

"What? Do you want it, Boss?"

"Heaven forbid! I told you I had seen much better. But Duke is not as jaundiced as I am; he collects such pictures-If Mike doesn't want it - and five-to-one he doesn't - give it to Duke-He'll be delighted."

"Duke collects such trash? But he seems such a nice person."

"He is. A very nice person indeed. Or I'd kick him out."

"But-I don't understand it.."

Jubal sighed. "And I could sit here all day explaining it and you still wouldn't understand it. My dear, there are aspects of sex on which it is impossible to communicate between the two sexes of our race. They are sometimes grokked by intuition across the gulf that separates us, by a few exceptionally gifted individuals. But words are useless, so I won't try. Just take my word for it: Duke is a perfect knight, sans peur et sans reproche - and he would like to have that picture."

"All right, he can have it if Mike doesn't keep it. But I'll just pass it along to you. I won't give it to Duke myself - he might get ideas."

"Sissy. You might enjoy his ideas. Anything startling in the mail otherwise?"

"No. The usual crop of people who want Mike to endorse this and that, or peddle 'Official Man-from-Mars this's and that's - one character had the nerve to ask for a fiveyear monopoly royalty free, on the name, but wants Mike to finance it as well."

"I admire that sort of wholehearted thief. Encourage him. Tell him that Mike is so rich that he makes crepes suzettes with Napoleon brandy and needs some tax losses - so how much guarantee would he like?"

"Are you serious, Boss? I'll have to dig it out of the group already sacked for Mr. Douglas."

"Of course I'm not serious. The gonif would show up here tomorrow, with his family. But you've given me a fine idea for a story, so run along. Front!"

Mike was not uninterested in the "disgusting" picture. He grokked correctly (if only theoretically) what the letter and the picture symbolized - and studied the picture with the clear-eyed delight with which he studied each passing butterfly. He found both butterflies and women tremendously interesting - in fact, all the grokking world around him was enchanting and he wanted to drink so deep of it all that his own grokking would be perfect.

He understood, intellectually, the mechanical and biological processes being offered to him in these letters but he wondered why these strangers wanted his help in quickening their eggs? Mike understood (without grokking it) that these people made ritual of this simple necessity, a "growing closer" possibly almost as important and precious as the water ceremony. He was eager to grok it.

But he was not in a hurry, "hurry" being one human concept he had failed to grok at all. He was sensitively aware of the key importance of correct timing in all acts - but with the Martian approach: correct timing was accomplished by waiting. He had noticed, of course, that his human brothers lacked his own fine discrimination of time and often were forced to wait a little faster than a Martian would - but he did not hold their innocent awkwardness against them; he simply learned to wait faster himself to cover their lack.

In fact, he sometimes waited faster so efficiently that a human would have concluded that he was hurrying at breakneck speed. But the human would have been mistaken. Mike was simply adjusting his own waiting in warm consideration for the needs of others.

So he accepted Jill's edict that he was not to reply to any of these brotherly offers from female humans, but he accepted it not as a final veto but as a waiting - possibly a century hence would be better; in any case now was not the correct time since his water brother Jill spoke rightly.

Mike readily assented when Jill suggested, quite firmly, that he give this picture to Duke. He went at once to do so and would have done so anyhow; Mike knew about Duke's collection, he had seen it, looked through it with deep interest, trying to grok why Duke said, "That one ain't much in the face, but look at those legs - brother!" It always made Mike feel good to be called "brother" by one of his water brothers but legs were just legs, save that his own people had three each while humans each had only two - without being crippled thereby, he reminded himself; two legs were proper for humans, he must always grok that this was correct.

As for faces, Jubal had the most beautiful face Mike had ever seen, clearly and distinctly his own. It seemed to Mike that these human females in Duke's picture collection could hardly be said to have grown faces as yet, so much did one look like the other in the face. All young human females had much the same face - how could it be otherwise? Of course he had never had any trouble recognizing Jill's face; she was not only the first woman he had ever seen but, most important, his first female water brother - Mike knew every pore on her nose, every incipient wrinkle in her face and had praised each one in happy meditation.

But, while he now knew Anne from Dorcas and Dorcas from Miriam by their faces alone, it had not been so when first he came here. For several days Mike had distinguished between them by size and coloration-and, of course, by voice, since no two voices were ever alike. But, as sometimes did happen, all three females would be quiet at once and then it was well that Anne was so much bigger, Dorcas so small, and that Miriam, who was bigger than Dorcas but smaller than Anne, nevertheless need not be mistaken for the missing one if either Anne or Dorcas was absent because Miriam had unmistakable hair called "red," even though it was not the color called "red" when speaking of anything but hair.

This special meaning for "red" did not trouble Mike; he knew before he reached Earth that every English word held more than one meaning. It was a fact one could get used to, without grokking, just as the sameness of all girl faces could be gotten used to ... and, after waiting, they were no longer quite the same. Mike now could call up Anne's face in his mind and count the pores in her nose as readily as with Jill's. In essence, even an egg was uniquely itself, different from all other eggs any where and when - Mike had always known that. So each girl had her own face, no matter how small those differences might be.

Mike gave the "disgusting" picture to Duke and was warmed by Duke's pleasure. Mike did not feel that he was depriving himself in parting with the picture; he had seen it once, he could see it in his mind whenever he wished-even the face in that picture, as it had glowed with a most unusual expression of beautiful pain.

He accepted Duke's thanks gravely and went happily back to read the rest of his mail.

Mike did not share Jubal's annoyance at the avalanche of mail; he reveled in it, the insurance ads quite as much as the marriage proposals. His trip to the Palace had opened his eyes to the enormous variety in this world and he was resolved to grok it all. He could see that it would take him several centuries and that he must grow and grow and grow, but he was undaunted and in no hurry - he grokked that eternity and the ever-beautifully-changing now were identical.

He had decided not to reread the Encyclopedia Britannica; the flood of mail gave him brighter glimpses of the world. He read it, grokked what he could, remembered the rest for contemplation at night while the household slept.

From these nights of meditation he was beginning, he thought, to grok "business," and "money," and "buying," and "selling," and related unMartian activities - the articles in the Encyclopedia had always left him feeling unfilled, as (he now grokked) each one had assumed that he knew many things that he did not know. But there arrived in the mail, from Mr. Secretary General Joseph Edgerton Douglas, a check book and other papers, and his brother Jubal had taken great pains to explain to him what money was and how it was used.

Mike had failed utterly to understand it at first, even though Jubal showed him how to make out his first check, gave him "money" in exchange for it, taught him how to count it.

Then suddenly, with a grokking so blinding that he trembled and forced himself not to withdraw, he understood the abstract symbolic nature of money. These pretty pictures and bright medallions were not "money"; they were concrete symbols for an abstract idea which spread all through these people, all through their world. But these things were not money, any more than water shared in water ceremony was the growing closer. Water was not necessary to the ceremony ... and these pretty things were not necessary to money. Money was an idea, as abstract as an Old One's thoughts - money was a great structured symbol for balancing and healing and growing closer.

Mike was dazzled with the magnificent beauty of money.

The flow and change and countermarching of the symbols was another matter, beautiful in small, but reminding him of games taught to nestlings to encourage them to learn to reason correctly and grow. It was the total structure that dazzled him, the idea that an entire world could be reflected in one dynamic, completely interconnected, symbol structure. Mike grokked then that the Old Ones of this race were very old indeed to have composed such beauty, and he wished humbly that he might soon be allowed to meet one of them.

Jubal encouraged him to spend some of his money and Mike did so, with the timid, uncertain eagerness of a bride being brought to bed. Jubal suggested that he "buy presents for his friends" and Jill helped him with it, starting by placing arbitrary limits: only one present for each friend and a total cost that was not even a reciprocal filled-three of the sum that had been placed to his account - Mike's original intention had been to spend all of that pretty balance on his friends.

He quickly learned how difficult it is to spend money. There were so many things from which to choose, all of them wonderful and most of them incomprehensible. Surrounded by thick catalogs from Marshall Field's to the Ginza, and back by way of Bombay and Copenhagen, he felt smothered in a plethora of riches. Even the Sears & Montgomery catalog was too much for him.

But Jill helped. "No, Mike, Duke would not want a tractor."

"Duke likes tractors."

"Um, maybe-but he's got one, or Jubal has, which is the same thing. He might like one of those cute little Belgian unicycles - he could take it apart and put it together and shine it all day long. But even that is too expensive, what with the taxes. Mike dear, a present ought not to be very expensive - unless you are trying to get a girl to marry you, or something. Especially 'something.' But a present should show that you thought about it and considered that person's tastes. Something he would enjoy but probably would not buy for himself."

"How?"

"That's always the problem. Wait a minute. I just remembered something in this morning's mail. I hope Larry hasn't carted it off yet." She was back quickly. "Found it! Listen to this: 'Living Aphrodite: A de-luxe Album of Feminine Beauty in Gorgeous StereoColor by the World's Greatest Artists of the Camera. Notice: this item will not be sent by mail. It will be forwarded at purchaser's risk by prepaid express only. Orders cannot be accepted from addresses in the following states - Um, Pennsylvania is on the verboten list - but don't let that worry you; if it is addressed to you, it will be delivered - and if I know Duke's vulgar tastes, this is just what he would like."

Duke did like it. It was delivered, not by express, but via the S.S. patrol car capping the house - and the next ad for the same item to arrive in the house boasted: "-exactly as supplied to the Man from Mars, by special appointment," which pleased Mike and annoyed Jill.

Other presents were just as difficult, but picking a present for Jubal was supremely difficult. Jill was stumped. What does one buy for a man who has everything ? everything, that is to say, that he wants which money can buy? The Sphinx? Three Wishes? The fountain that Ponce de Leon failed to find? Oil for his ancient bones, or one golden day of youth? Jubal had long ago even foresworn pets, because he outlived them, or (worse yet) it was now possible that a pet would outlive him, be orphaned.

Privately they consulted the others. "Shucks," Duke told them, "didn't you know? The boss likes statues."

"Really?" Jill answered. "I don't see any sculpture around."

"That's because most of the stuff he likes isn't for sale. He says that the crud they're making nowdays looks like disaster in a junk yard and any idiot with a blow torch and astigmatism can set himself up as a sculptor."

Anne nodded thoughtfully. "I think Duke is right. You can tell what Jubal's tastes in sculpture are by looking at the books in his study. But I doubt if it will help much."

Nevertheless they looked, Anne and Jill and Mike, and Anne picked out three books as bearing evidence (to her eyes) of having been looked at most often. 'Hmm .." she said. "It's clear that the Boss would like anything by Rodin. Mike, if you could buy one of these for Jubal, which one would you pick? Oh, here's a pretty one - 'Eternal Springtime.'"

Mike barely glanced at it and turned the page. "This one."

"What?" Jill looked at it and shuddered. "Mike, that one is perfectly dreadful! I hope I die long before I look like that."

"That is beauty," Mike said firmly.

"Mike!" Jill protested. "You've got a depraved taste - you're worse than Duke. Or else you just don't know any better."

Ordinarily such a rebuke from a water brother, most especially from Jill, would have shut Mike up, forced him to spend the following night in trying to understand his fault. But this was art in which he was sure of himself. The portrayed statue was the first thing he had seen on Earth which felt like a breath of home to him. Although it was clearly a picture of a human woman it gave him a feeling that a Martian Old One should be somewhere around, responsible for its creation. "It is beauty," he insisted stubbornly. "She has her own face. I grok."

"Jill," Anne said slowly, "Mike is right."

"Huh? Anne! Surely you don't like that?"

"It frightens me. But Mike knows what Jubal likes. Look at the book itself. It falls open naturally to any one of three places. Now look at the pages - this page has been handled more than the other two. Mike has picked the Boss's favorite. This other one - 'The Caryatid Who has Fallen under the Weight of Her Stone' - he likes almost as well. But Mike's choice is Jubal's pet."

"I buy it," Mike said decisively.

But it was not for sale. Anne telephoned the Rodin Museum in Paris on Mike's behalf and only Gallic gallantry and her beauty kept them from laughing in her face. Sell one of the Master's works? My dear lady, they are not only not for sale but they may not be reproduced. Non, non, non! Quelle id,t!

But for the Man from Mars some things are possible which are not possible for others. Anne called Bradley; a couple of days later he called her back. As a compliment from the French government - no fee, but a strongly couched request that the present never be publicly exhibited - Mike would receive, not the original, but a full-size, microscopically-exact replica, a bronze photopantogram of "She Who Used to Be the Beautiful Heaulmiˆre."

Jill helped Mike select presents for the girls, here she knew her ground. But when he asked her what he should buy for her; she not only did not help but insisted that he must not buy her anything.

Mike was beginning to realize that, while a water brother always spoke rightly, sometimes they spoke more rightly than others, i.e., that the English language had depths to it and it was sometimes necessary to probe to reach the right depth. So he consulted Anne.

"Go ahead and buy her a present, dear. She has to tell you that but you give her a present anyhow. Hmm... Anne vetoed clothes and jewelry, finally selected for him a present which puzzled him - Jill already smelled exactly the way Jill should smell.

The small size and apparent unimportance of the present, when it arrived, added to his misgivings - and when Anne let him whiff it before having him give it to Jill, Mike was more in doubt than ever; the odor was very strong and smelled not at all like Jill.

Nevertheless, Anne was right; Jill was delighted with the perfume and insisted on kissing him at once. In kissing her he grokked fully that this gift was what she wanted and that it made them grow closer.

When she wore it at dinner that night, he discovered that the fragrance truly did not differ from that of Jill herself; in some unclear fashion it simply made Jill smell more deliciously like Jill than ever. Still stranger, it caused Dorcas to kiss him and whisper, "Mike hon ... the negligee is lovely and just what I wanted - but perhaps someday you'll give me perfume?"

Mike could not grok why Dorcas would want it, since Dorcas did not smell at all like Jill and therefore perfume would not be proper for her nor, he realized, would he want Dorcas to smell like Jill; he wanted Dorcas to smell like Dorcas.

Jubal interrupted with: "Quit nuzzling the lad and let him eat his dinner Dorcas, you already reek like a Marseilles cat house; don't wheedle Mike for more stinkum."

"Boss, you mind your own business."

It was all very puzzling-both that Jill could smell still more like Jill and that Dorcas should wish to smell like Jill when she already smelled like herself ... and that Jubal would say that Dorcas smelled like a cat when she did not. There was a cat who lived on the place (not as a pet, but as co-owner); on rare occasion it came to the house and deigned to accept a handout. The cat and Mike had grokked each other at once, and Mike had found its carnivorous thoughts most pleasing and quite Martian. He had discovered, too, that the cat's name (Friedrich Wilhelm Nietzsche) was not the cat's name at all, but he had not told anyone this because he could not pronounce the cat's real name; he could only hear it in his head.

The cat did not smell like Dorcas.

Giving presents was a great goodness and the buying thereof taught Mike much about the true value of money. But he had not forgotten even momentarily that there were other things he was eager to grok. Jubal had put off Senator Boone's invitation to Mike twice without mentioning it to Mike and Mike had not noticed, since his quite different grasp of time made "next Sunday" no particular date.

But the next repetition of the invitation came by mall and was addressed to Mike; Senator Boone was under pressure from Supreme Bishop Digby to produce the Man from Mars and Boone had sensed that Harshaw was stalling him and might stall indefinitely.

Mike took it to Jubal, stood waiting. "Well?" Jubal growled. "Do you want to go, or don't you? You don't have to attend a Fosterite service. We can tell 'em to go to hell."

So a Checker Cab with a human driver (Harshaw refused to trust his life to an autocab) picked them up the next Sunday morning and delivered Mike, Jill, and Jubal to a public landing fiat just outside the sacred grounds of Archangel Foster Tabernacle of the Church of the New Revelation.

Chapter 23

JUBAL HAD BEEN TRYING to warn Mike all the way to church; of what, Mike was not certain. He had listened, he always listened, but the landscape below them tugged for attention, too; he had compromised by storing what Jubal said. "Now look, boy," Jubal had admonished, "these Fosterites are after your money. That's all right, most everybody is after your money; you just have to be firm. Your money and the prestige of having the Man from Mars join their church. They're going to work on you - and you have to be firm about that, too."

"Beg pardon?"

"Damn it, I don't believe you've been listening."

"I am sorry, Jubal."

"Well ... look at it this way. Religion is a solace to many people and it is even conceivable that some religion, somewhere, really is Ultimate Truth. But in many cases, being religious is merely a form of conceit. The Bible Belt faith in which I was brought up encouraged me to think that I was better than the rest of the world; I was 'saved' and they were 'damned' - we were in a state of grace and the rest of the world were 'heathens' and by 'heathen' they meant such people as our brother Mahmoud. It meant that an ignorant, stupid lout who seldom bathed and planted his corn by the phase of the Moon could claim to know the final answers of the Universe. That entitled him to look down his nose at everybody else. Our hymn book was loaded with such arrogance - mindless, conceited, self-congratulation on how cozy we were with the Almighty and what a high opinion he had of us and us alone, and what hell everybody else was going to catch come Judgment Day. We peddled the only authentic brand of Lydia Pinkham's-"

"Jubal!" Jill said sharply. "He doesn't grok it."

"Uh? Sorry. I got carried away. My folks tried to make a preacher out of me and missed by a narrow margin; I guess it still shows."

"It does."

"Don't rub it in, girl. I would have made a good one if I hadn't fallen into the fatal folly of reading anything I could lay hands on. With just a touch more self confidence and a liberal helping of ignorance I could have been a famous evangelist. Shucks, this place we're headed for today would have been known as the 'Archangel Jubal Tabernacle.'"

Jill made a face. "Jubal, please! Not so soon after breakfast."

"I mean it. A confidence man knows that he's lying; that limits his scope. But a successful shaman ropes himself first; he believes what he says - and such belief is contagious; there is no limit to his scope. But I lacked the necessary confidence in my own infallibility; I could never become a prophet ... just a critic - which is a poor thing at best, a sort of fourth-rate prophet suffering from delusions of gender." Jubal frowned. "That's what worries me about Fosterites, Jill. I think that they are utterly sincere and you and I know that Mike is a sucker for sincerity."

"What do you think they'll try to do to him?"

"Convert him, of course. Then get their hands on his fortune."

"I thought you had things fixed so that nobody could do that?"

"No, I just fixed it so that nobody could take it away from him against his will. Ordinarily he couldn't even give it away without the government stepping in. But giving it to a church, especially a politically powerful church like the Fosterites, is another matter."

"I don't see why."

Jubal sighed. "My dear, religion is practically a null area under the law. A church can do anything any other human organization can do - and has no restrictions. It pays no taxes, need not publish records, is effectively immune to search, inspection, or control - and a church is anything that calls itself a church. Attempts have been made to distinguish between 'real' religions entitled to these immunities and 'cults.' This can't be done, short of establishing a state religion ... which is a cure worse than the disease. In any case, we haven't done it, and both under what's left of the old United States Constitution and under the Treaty of Federation, all churches are equal and equally immune - especially if they swing a big bloc of votes. If Mike is converted to Fosterism ... and makes a will in favor of his church ... and then 'goes to heaven' some sunrise, it will all be, to put it in the correct tautology, 'as legal as church on Sunday.'"

"Oh, dear! I thought we had him safe at last."

"There is no safety this side of the grave."

"Well ... what are you going to do about it, Jubal?"

"Nothing. Just fret, that's all."

Mike stored their conversation without any effort to grok it. He recognized the subject as one of utter simplicity in his own language but amazingly slippery in English. Since his failure to achieve mutual grokking on this subject, even with his brother Mahmoud, with his admittedly imperfect translation of the all-embracing Martian concept as: "Thou art God," be had simply waited until grokking was possible. He knew that the waiting would fructify at its time; his brother Jill was learning his language and he would be able to explain it to her. They would grok together.

In the meantime the scenery flowing beneath him was a never-ending delight, and he was filled with eagerness for experience to come. He expected, or hoped, to meet a human Old One.

Senator Tom Boone was waiting to meet them at the landing flat. "Howdy, folks! And may the Good Lord bless you on this beautiful Sabbath. Mr. Smith, I'm happy to see you again. And you, too, Doctor." He took his cigar out of his mouth and looked at Jill. "And this little lady - didn't I see you at the Palace?"

"Yes, Senator. I'm Gillian Boardman."

"Thought so, m'dear. Are you saved?"

"Uh, I guess not, Senator."

"Well, it's never too late. We'll be very happy to have you attend the seekers' service in the Outer Tabernacle - I'll find a Guardian to guide you. Mr. Smith and the Doc will be going into the Sanctuary, of course." The Senator looked around.

"Senator-"

"Uh, what, Doc?"

"If Miss Boardman can't go into the Sanctuary, I think we had all better attend the seekers' service. She's his nurse and translator."

Boone looked slightly perturbed. "Is he ill? He doesn't look it. And why does he need a translator? He speaks English - I heard him."

Jubal shrugged. "As his physician, I prefer to have a nurse to assist me, if necessary. Mr. Smith is not entirely adjusted to the conditions of this planet. An interpreter may not be necessary. But why don't you ask him? Mike, do you want Jill to come with you?"

"Yes, Jubal."

"But-Very well, Mr. Smith." Boone again removed his cigar, put two fingers between his lips and whistled. "Cherub here!"

A youngster in his early teens came dashing up. He was dressed in a short robe, tights, and slippers, and had what appeared to be pigeon's wings (because they were) fastened, spread, on his shoulders. He was bareheaded, had a crop of tight golden curls, and a sunny smile. Jill thought that he was as cute as a ginger ale ad.

Boone ordered, "Fly up to the Sanctum office and tell the Warden on duty that I want another pilgrim's badge sent to the Sanctuary gate right away. The word is Mars."

"'Mars,'" the kid repeated, threw Boone a Boy Scout salute, turned and made a mighty sixty-foot leap over the heads of the crowd. Jill realized why the short robe had looked so bulky; it concealed a personal jump harness.

"Have to be careful of those badges," Boone remarked. "You'd be surprised how many sinners would like to sneak in and sample a little of God's Joy without having their sins washed away first. Now we'll just mosey along and sightsee a little while we wait for the third badge. I'm glad you folks got here early."

They pushed through the crowd and entered the huge building, found themselves in a long high hallway. Boone stopped. "I want you to notice something. There is economics in everything, even in the Lord's work. Any tourist coming here, whether he attends seekers' service or not - and services run twenty-four hours a day - has to come in through here. What does he see? These happy chances." Boone waved at slot machines lining both walls of the hall. "The bar and quick lunch is at the far end, he can't even get a drink of water without running this gauntlet. And let me tell you, it's a remarkable sinner who can get that far without shedding his loose change.

"But we don't take his money and give him nothing. Take a look-" Boone shouldered his way to a machine, tapped the woman playing it on the shoulder; she was wearing around her neck a Fosterite rosary. "Please, Daughter."

She looked up, her annoyance changed to a smile. "Certainly, Bishop."

"Bless you. You'll note," Boone went on, as he fed a quarter into the machine, "that no matter whether it pays off in worldly goods or not, a sinner playing this machine is always rewarded with a blessing and an appropriate souvenir text."

The machine stopped whirring and, lined up in the windows, was:

GOD-WATCHES-YOU.

"That pays three for one," Boone said briskly and fished the pay-off out of the receptacle, "and here's your souvenir text." He tore a paper tab off that had extruded from a slot, and handed it to Jill. "Keep it, little lady, and ponder it."

Jill sneaked a glance at it before putting it into her purse: "But the Sinner's belly is filled with filth-N.R. XXII 17"

"You'll note," Boone went on, "that the pay-off is in tokens, not in coin-and the bursar's cage is clear back past the bar ... and there is plenty of opportunity there to make love offerings for charity and other good works. So the sinner probably feeds them back in ... with a blessing each time and another text to take home. The cumulative effect is tremendous, really tremendous! Why, some of our most diligent and pious sheep got their start right here in this room."

"I don't doubt it," agreed Jubal.

"Especially if they hit a jackpot. You understand, every combination is a complete sentence, a blessing. All but the jackpot. That's the three Holy Eyes. I tell you, when they see those eyes all lined up and starin' at 'em and all that manna from Heaven coming down, it really makes 'em think. Sometimes they faint. Here, Mr. Smith-" Boone offered Mike one of the slugs the machine had just paid. "Give it a whirl."

Mike hesitated. Jubal quickly took the proffered token himself-damn it, he didn't want the boy getting hooked by a one-armed bandit! "I'll try it, Senator." He fed the machine.

Mike really hadn't intended to do anything. He had extended his time sense a little and was gently feeling around inside the machine trying to discover what it did and why they were stopping to look at it. But he had been too timid to play it himself.

But when Jubal did so, Mike watched the cylinders spin around, noted the single eye pictured on each, and wondered what this "jackpot" was when all three were lined up. The word had only three meanings, so far as he knew, and none of them seemed to apply. Without really thinking about it, certainly without intending to cause any excitement, he slowed and stopped each wheel so that the eyes looked out through the window.

A bell tolled, a choir sang hosannas, the machine lighted up and started spewing slugs into the receptacle and on into a catch basin below it, in a flood. Boone looked delighted. "Well, bless you! Doc, this is your day! Here, I'll help you - and put one back in to take the jackpot off." He did not wait for Jubal but picked up one of the flood and fed it back in.

Mike was wondering why all this was happening, so he lined up the three eyes again. The same events repeated, save that the flood was a mere trickle. Boone stared at the machine. "Well, I'll be blessedl It's not supposed to hit twice in a row. But never mind; it did - and I'll see that you're paid on both of them." Quickly he put a slug back in.

Mike still wanted to see why this was a "jackpot." The eyes lined up again.

Boone stared at them. Jill suddenly squeezed Mike's hand and whispered, "Mike ... stop it!"

"But, Jill, I was seeing-"

"Don't talk about it. Just stop. Oh, you just wait till I get you home!"

Boone said slowly, "I'd hesitate to call this a miracle. Machine probably needs a repairman." He shouted, "Cherub here!" and added, "We'd better take the last one off, anyhow," and fed in another slug.

Without Mike's intercession, the wheels slowed down on their own and announced: "FOSTER-LOVES-YOU," and the mechanism tried, but failed, to deliver ten more slugs. A Cherub, older and with sleek black hair, came up and said, "Happy day. You need help?"

"Three jackpots," Boone told him.

"'Three'?"

"Didn't you hear the music? Are you deef? We'll be at the bar; fetch the money there. And have somebody check this machine."

"Yes, Bishop."

They left the Cherub scratching his head while Boone hurried them on through the Happiness Room to the bar at the far end. "Got to get you out of here," Boone said jovially, "before you bankrupt the Church. Doc, are you always that lucky?"

"Always," Harshaw said solemnly. He had not looked at Mike and did not intend to - he told himself that he did not know that the boy had anything to do with it ... but he wished mightily that this ordeal were over and all of them home again.

Boone took them to a stretch of the bar counter marked "Reserved" and said, "This'll do - or would the little lady like to sit down?"

"This is fine." (-and if you call me "little lady" just once more I'll turn Mike loose on you!)

A bartender hurried up. "Happy day. Your usual, Bishop?"

"Double. What'll it be, Doc? And Mr. Smith? Don't be bashful; you're the Supreme Bishop's guests."

"Brandy, thank you. Water on the side."

"Brandy, thank you," Mike repeated ... thought about it, and added, "No water for me, please." While it was true that the water of life was not the essence in the water ceremony, nevertheless he did not wish to drink water here.

"That's the spirits" Boone said heartily. "That's the proper spirit with spirits! No water. Get it? It's a joke." He dug Jubal in the ribs. "Now what'll it be for the little lady? Cola? Milk for your rosy cheeks? Or do you want a real Happy Day drink with the big folks?"

"Senator," Jill said carefully, "Would your hospitality extend to a martini?"

"Would it! Best martinis in the whole world right here - we don't use any vermouth at all. We bless 'em instead. Double martini for the little lady. Bless you, son, and make it fast." He turned to the others. "We've just about time for a quick one, then pay our respects to Archangel Foster and on into the Sanctuary in time to hear the Supreme Bishop."

The drinks arrived and the jackpots' payoff. They drank with Boone's blessing, then he wrangled in a friendly fashion with Jubal over the three hundred dollars just delivered, insisting that all three prizes belonged to Jubal even though Boone had inserted the slugs on the second and third. Jubal settled it by scooping up all the money and depositing it in a love offering bowl near them on the bar.

Boone nodded approvingly. "That's a mark of grace, Doc. We'll save you yet. Another round, folks?"

Jill hoped that someone would say yes. The gin was watered, she decided, and the flavor was poor; nevertheless it was starting a small flame of tolerance in her middle. But nobody spoke up, so she trailed along as Boone led them away, up a flight of stairs, past a sign reading: POSITIVELY NO SEEKERS NOR SINNERS ALLOWED ON THIS LEVEL - THIS MEANS YOU!

Beyond the sign was a heavy grilled gate. Boone said to it: "Bishop Boone and three pilgrims, guests of the Supreme Bishop."

The gate swung open. He led them around a curved passage and into a room.

It was a moderately large room, luxuriously appointed in a style that reminded Jill of undertakers' parlors, but it was filled with cheerful music. The basic theme seemed to be "Jingle Bells" but a Congo beat had been added and the arrangement so embroidered that its ancestry was not certain. Jill found that she liked it and that it made her want to dance.

The far wall of the room was clear glass and appeared to be not even that. Boone said briskly, "Here we are, folks - in the Presence." He knelt quickly, facing the empty wall. "You don't have to kneel, you're pilgrims - but do so if it makes you feel better. Most pilgrims do. And there he is just as he was when he was called up to Heaven."

Boone gestured with his cigar. "Don't he look natural? Preserved by a miracle, his flesh incorruptible. That's the very chair he used to sit in when he wrote his Messages ... and that's just the pose he was in when he went to Heaven. He never moved and he's never been moved - we just built the Tabernacle right around him . . . removing the old church, naturally, and preserving its sacred stones."

Opposite them about twenty feet away, facing them, seated in a big arm chair remarkably like a throne, was an old man. He looked as if he were alive - and he reminded Jill strongly of an old goat that had been on the farm where she had spent her childhood summers - yes, even to the out-thrust lower lip, the cut of the whiskers, and the fierce, brooding eyes. Jill felt her skin prickle; the Archangel Foster made her uneasy.

Mike said to her in Martian, "My brother, this is an Old One?"

"I don't know, Mike. They say he is."

He answered in Martian, "I do not grok an Old One here."

"I don't know, I tell you."

"I grok wrongness."

"Mike! Remember!"

"Yes, Jill."

Boone said, "What was he saying, little lady? What was your question, Mr. Smith?"

Jill said quickly, "It wasn't anything. Senator, can I get out of here? I feel faint." She glanced back at the corpse. There were billowing clouds above it and one shaft of light always cut through and sought out the face. The light changed enough so that the face seemed to change and the eyes seemed bright and alive.

Boone said soothingly, "It sometimes has that effect, the first time. But you ought to look at him from the seekers' gallery below us - looking up at him and with entirely different music. Entirely. Heavy music, with subsonics in it, I believe it is - reminds 'em of their sins. Now this room is a Happy Thoughts meditation chamber for high officials of the Church - I often come here and sit and smoke a cigar for an hour if I'm feeling the least bit low."

"Please, Senator!"

"Oh, certainly. You just wait outside, m'dear. Mr. Smith, you stay as long as you like."

Jubal said, "Senator, hadn't we best get on into the services?"

They all left. Jill was shaking and squeezed Mike's hand - she had been scared silly that Mike might do something to that grisly exhibit - and get them all lynched, or worse.

Two guards, dressed in uniforms much like the Cherubim but more ornate, thrust crossed spears in their path when they reached the portal of the Sanctuary. Boone said reprovingly, "Come, come! These pilgrims are the Supreme Bishop's personal guests. Where are their badges?"

The confusion was straightened out, the badges produced, and with them their door prize numbers. A respectful usher said, "This way, Bishop," and led them up wide stairs and to a center box directly facing the stage.

Boone stood back for them to go in. "You first, little lady." There followed a tussle of wills; Boone wanted to sit next to Mike in order to answer his questions. Harshaw won and Mike sat between Jill and Jubal, with Boone on the aisle.

The box was roomy and luxurious, with very comfortable, self-adjusting seats, ash trays for each seat and drop tables for refreshments folded against the rail in front of them. Their balcony position placed them about fifteen feet over the heads of the congregation and not more than a hundred feet from the altar. In front of it a young priest was warming up the crowd, shuffling to the music and shoving his heavily muscled arms back and forth, fists clenched, like pistons. His strong bass voice joined the choir from time to time, then he would lift it in exhortation:

"Up off your behinds! What are you waiting for? Gonna let the Devil catch you napping'?"

The aisles were very wide and a snake dance was moving down the right aisle, across in front of the altar, and weaving back up the center aisle, feet stomping in time with the priest's piston-like jabs and with the syncopated chant of the choir. Clumps clump, moan! ... clump, clump, moan! Jill felt the beat of it and realized sheepishly that it would be fun to get into that snake dance - as more and more people were doing under the brawny young priest's taunts.

"That boy's a comer," Boone said approvingly. "I've team-preached with him a few times and I can testify that he turns the crowd over to you already sizzlin'. The Reverend 'Jug' Jackerman - used to play left tackle for the Rams. You've seen him play."

"I'm afraid not," Jubal admitted. "I don't follow football."

"Really? You don't know what you're missing. Why, during the season most of the faithful stay after services, eat their lunches in their pews, and watch the game. The whole back wall behind the altar slides away and you're looking right into the biggest stereo tank ever built. Puts the plays right in your lap. Better reception than you get at home - and it's more of a thrill to watch with a crowd around you." He stopped and whistled. "Hey, Cherub! Over here!"

An usher hurried over. "Yes, Bishop?"

"Son, you ran away so fast when you seated us, I didn't have time to put in my order."

"I'm sorry, Bishop."

"Being sorry won't get you into Heaven. Get happy, son. Get that old spring into your step and stay on your toes. Same thing all around, folks? Fine!" He gave the order and added, "and bring me back a handful of my cigars - just ask the chief barkeep."

"Right away, Bishop."

"Bless you, son. Hold it-" The head of the snake dance was just about to pass under them; Boone leaned over the rail, made a megaphone of his hands and cut through the high noise level. "Dawn! Hey, Dawn!" A woman looked up; he caught her eye, motioned her to come up. She smiled. "Add a whiskey sour to that order. Fly."

The woman showed up quickly, as did the drinks. Boone swung a seat out of the box's back row and put it cornerwise in front of him so that she could visit more easily. "Folks, meet Miss Dawn Ardent. M'dear, that's Miss Boardman, the little lady down in the corner - and this is the famous Doctor Jubal Harshaw here by me-"

"Really? Doctor, I think your stories are simply divine."

"Thank you."

"Oh, I really do. I put one of your tapes on my player and let it lull me to sleep almost every night."

"Higher praise a writer cannot expect," Jubal said with a straight face.

"That's enough, Dawn," put in Boone. "The young man sitting between them is ... Mr. Valentine Smith the Man from Mars."

Her eyes came open wider as her mouth opened. "Oh, my goodness!"

Boone roared. "Bless you, child! I guess I really snuck up on you that time."

She said, "Are you really the Man from Mars?"

"Yes, Miss Dawn Ardent."

"Just call me 'Dawn.' Oh, goodness!"

Boone patted her hand. "Don't you know it's a sin to doubt the word of a Bishop? M'dear, how would you like to help lead the Man from Mars to the light?"

"Oh, I'd love it!"

(You certainly would, you sleek bitch!) Jill said to herself. She had been growing increasingly angry ever since Miss Ardent had joined them. The dress the woman was wearing was long sleeved, high necked, and opaque - and covered nothing. It was a knit fabric almost exactly the shade of her tanned skin and Jill was certain that skin was all there was under it - other than Miss Ardent, which was really quite a lot, in all departments. The dress was ostentatiously modest compared with the extreme styles worn by many of the female half of the congregation, some of whom, in the snake dance, seemed about to jounce out of their clothes.

Jill thought that, despite being dressed, Miss Ardent looked as if she had just wiggled out of bed and was anxious to crawl back in. With Mike. Quit squirming your carcass at him, you cheap hussy!

Boone said, "I'll speak to the Supreme Bishop about it, m'dear. Now you'd better get back downstairs and lead that parade. Jug needs your help."

She stood up obediently. "Yes, Bishop. Pleased to meet you, Doctor, and Miss Broad. I hope I'll see you again, Mr. Smith. I'll pray for you." She undulated away.

"A fine girl, that," Boone said happily. "Ever catch her act, Doctor?"

"I think not. What does she do?"

Boone seemed unable to believe his ears. "You don't know?"

"Didn't you hear her name? That's Dawn Ardent - she's simply the highest paid peeler in all Baja California, that's who she is. Men have committed suicide over her - very sad. Works under an irised spotlight and by the time she's down to her shoes, the light is just on her face and you really can't see anything else. Very effective. Highly spiritual. Would you believe it, looking at that sweet face now, that she used to be a most immoral woman?"

"I can't believe it."

"Well, she was. Ask her. She'll tell you. Better yet, come to a cleansing for seekers - I'll let you know when she's going to be on. When she confesses, it gives other women courage to stand up and tell about their sins. She doesn't hold anything back - and, of course, it does her good, too, to know that she's helping other people. Very dedicated woman now - flies her own car up here every Saturday night right after her last show, so as to be here in time to teach

Sunday School. She teaches the Young Men's Happiness Class and attendance has more than tripled since she took over."

"I can believe that," Jubal agreed. "How old are these lucky 'Young Men'?"

Boone looked at him and laughed. "You're not fooling me, you old devil - somebody told you the motto of Dawn's class: 'Never too old to be young.'"

"No, truly."

"In any case you can't attend her class until you've seen the light and gone through cleansing and been accepted. Sorry. This is the One True Church, Pilgrim, nothing at all like those traps of Satan, those foul pits of iniquity that call themselves 'churches' in order to lead the unwary into idolatry and other abominations. You can't just walk in here because you want to kill a couple hours out of the rain - you gotta be saved first. In fact-Oh, oh, camera warning." Red lights were blinking in each corner of the great hall. "And Jug's got 'em done to a turn. Now you'll see some action."

The snake dance picked up more volunteers and the few left seated were clapping the cadence and bouncing up and down. Pairs of ushers were hurrying to pick up the fallen, some of whom were quiet but others, mostly women, were writhing and foaming at the mouth. These were dumped hastily in front of the altar and left to flop like freshly caught fish. Boone pointed his cigar at a gaunt redhead, a woman apparently about forty whose dress was badly torn by her exertions. "See that woman? It has been at least a year since she has gone all through a service without being possessed by the Spirit. Sometimes Archangel Foster uses her mouth to talk to us ... and when that happens it takes four husky acolytes to hold her down. She could go to heaven any time, she's ready. But she's needed here. Anybody need a refill? Bar service is likely to be a little slow once the cameras are switched on and things get lively."

Almost absently Mike let his glass be replenished. He shared none of Jill's disgust with the scene. He had been deeply troubled when he had discovered that the "Old One" had been no Old One at all but mere spoiled food, with no Old One anywhere near. But he had tabled that matter and was drinking deep of the events around him.

The frenzy going on below him was so Martian in its flavor that he felt both homesick and warmly at home. No detail of the scene was Martian, all was wildly different, yet he grokked correctly that this was a growing-closer as real as water ceremony, and in numbers and intensity that he had never met before outside his own nest. He wished forlornly that someone would invite him to join that jumping up and down. His feet tingled with an urge to merge himself with them.

He spotted Miss Dawn Ardent again in its van and tried to catch her eye - perhaps she would invite him. He did not have to recognize her - by size and proportions even though he had noted when he had first seen her that she was exactly as tall as his brother Jill with very nearly the same shapings and masses throughout. But Miss Dawn Ardent had her own face, with her pains and sorrows and growings graved on it under her warm smile. He wondered if Miss Dawn Ardent might some day be willing to share water with him and grow closer. Senator Bishop Boone had made him feel wary and he was glad that Jubal had not permitted them to sit side by side. But Mike was sorry when Miss Dawn Ardent had been sent away.

Miss Dawn Ardent did not feel him looking at her. The snake dance carried her away.

The man on the platform had both his arms raised; the great cave became quieter. Suddenly he brought them down. "Who's happy?"

"WE'RE HAPPY!"

"Why?"

"GOD... LOVES US!"

"How d'you know?"

"FOSTER TOLD US!"

He dropped to his knees, raised one clenched fist. "Let's hear that Lion ROAR!"

The congregation roared and shrieked and screamed while he controlled the din using his fist as a baton, raising the volume, lowering it, squeezing it down to a subvocal growl, then suddenly driving it to crescendo that shook the balcony. Mike felt it beat on him and he wallowed in it, with ecstasy so painful that he feared that he would be forced to withdraw. But Jill had told him that he must not ever do so again, except in the privacy of his own room; he controlled it and let the waves wash over him.

The man stood up. "Our first hymn," he said briskly, "is sponsored by Manna Bakeries, makers of Angel Bread, the loaf of love with our Supreme Bishop's smiling face on every wrapper and containing a valuable premium coupon redeemable at your nearest neighborhood Church of the New Revelation, Brothers and Sisters, tomorrow Manna Bakeries with branches throughout the land start a giant, price-slashing sale of pre-equinox goodies. Send your child to school tomorrow with a bulging box of Archangel Foster cookies, each one blessed and wrapped in an appropriate text - and pray that each goodie he gives away may lead a child of sinners nearer to the light.

"And now let's really live it up with the holy words of that old favorite: 'Forward, Foster's Children!' All together-"

"Forward, Foster's Children! Smash apart your foes

Faith our Shield and Ar-mar! Strike them down by rows-!" "Second verse!"

"Make no peace with sin-nen! God is on our side!"

Mike was so joyed by it all that he did not stop then to translate and weigh and try to grok the words. He grokked that the words were not of essence; it was a growing-closer. The snake dance started moving again, the marchers chanting the potent sounds along with the choir and those too feeble to march.

After the hymn they caught their breaths while there were announcements, Heavenly messages, another commercial, and the awarding of door prizes. Then a second hymn, "Happy Faces Uplifted," was sponsored by Dattelbaum's Department Stores where the Saved Shop in Safety since no merchandise is offered which competes with a sponsored brand - a children's Happy Room in each branch supervised by a Saved sister.

The young priest moved out to the very front of the platform and cupped his ear, listening - "We ... want . . . .Digby!"

"Who?"

"We-Want--DIG-BY!"

"Louder! Make him hear you!"

"WE-WANT-DIG-BY!" Clap, clap, stomp, stomp. "WE-WANT-DIG-BY!" Clap, clap, stomp, stomp-It went on and on, getting louder as the building rocked with it. Jubal leaned to Boone and said, "Much of that and you'll do what Samson did." "Never fear," Boone told him, around his cigar. "Reinforced, fireproof, and sustained by faith. Besides, it's built to shake; it was designed that way. Helps."

The lights went down, curtains behind the altar parted, and a blinding radiance from no visible source picked out the Supreme Bishop, waving his clasped hands over his head and smiling at them.

They answered with the lion's roar and he threw them kisses. On his way to the pulpit he stopped, half raised one of the possessed women still writhing slowly near the altar, kissed her on the forehead, lowered her gently, started on - stopped again and knelt by the bony redhead. The Supreme Bishop reached behind him and a portable microphone was instantly placed in his hand.

He put his other arm around the woman's shoulders, placed the pickup near her lips.

Mike could not understand her words. Whatever they were, he was reasonably sure that they were not English.

But the Supreme Bishop was translating, interjecting his words quickly at each pause in the foaming spate.

"Archangel Foster is with us today- "He is especially pleased with you. Kiss the sister on your right- "Archangel Foster loves you all. Kiss the sister on your left-

"He has a special message for one of us here today."

The woman spoke again; Digby seemed to hesitate. "What was that? Louder, I pray you." She muttered and screamed at length.

Digby looked up and smiled. "His message is for a pilgrim from another planet - Valentine Michael Smith the Man from Mars! Where are you, Valentine Michael! Stand up, stand up!"

Jill tried to stop him but Jubal growled, "Easier to do it than to fight it. Let him stand up, Jill. Wave, Mike. Now you can sit down." Mike did so, amazed to find that they were now chanting: "Man from Mars! Man from Mars!"

The sermon that followed seemed to be directed at him, too, but try as he would, he could not understand it. The words were English, or most of them were, but they seemed to be put together wrongly and there was so much noise, so much clapping, and so many shouts of "Hallelujah!" and "Happy Day!" that he grew quite confused. He was glad when it was over.

As soon as the sermon was finished, Digby turned the service back to the young priest and left; Boone stood up. "Come on, folks. We pull a sneak now - ahead of the crowd."

Mike followed along, Jill's hand in his. Presently they were going through an elaborately arched tunnel with the noise of the crowd left behind them. Jubal said, "Does this way lead to the parking lot? I told my driver to wait."

"Eh?" Boone answered. "It does if you go straight ahead. But we're going to see the Supreme Bishop first."

"What?" Jubal replied. "No, I don't think we can. It's time for us to get on home."

Boone stared. "Doctor, you don't mean that. The Supreme Bishop is waiting for us right now. You can't just walk out on him - you must pay your respects. You're his guests."

Jubal hesitated, then gave in. "Well-There won't be a lot of other people? This boy has had enough excitement for one day."

"Just the Supreme Bishop. He wants to see you privately." Boone ushered them into a small elevator concealed in the decorations of the tunnel; moments later they were waiting in a parlor of Digby's private apartments.

A door opened, Digby hurried in. He had removed his vestments and was dressed in flowing robes. He smiled at them. "Sorry to keep you waiting, folks - I just have to have a shower as soon as I come off. You've no notion how it makes you sweat to punch Satan and keep on slugging. So this is the Man from Mars? God bless you, son. Welcome to the Lord's House. Archangel Foster wants you to feel at home here. He's watching over you."

Mike did not answer. Jubal was surprised to see how short the Supreme Bishop was. Lifts in his shoes when he was on stage? Or the way the lighting was arranged? Aside from the goatee he wore in evident imitation of the departed Foster, the man reminded him of a used-car salesman - the same ready smile and warm sincere manner. But he reminded Jubal of some one else, too ... somebody-Got it! "Professor" Simon Magus, Becky Vesey's long-dead husband. Jubal relaxed a little and felt friendlier toward the clergyman. Simon had been as likable a scoundrel as he had ever known-Digby had turned his charm on Jill, "Don't kneel, daughter; we're just friends in private here." He spoke a few words to her, startling Jill with a surprising knowledge of her background and adding earnestly, "I have deep respect for your calling, daughter. In the blessed words of Archangel Foster, God commands us first to minister to the body in order that the soul may seek the light untroubled by ills of the flesh. I know that you are not yet one of us ... but your service is blessed by the Lord. We are fellow travelers on the road to Heaven."

He turned to Jubal. "You, too, Doctor. Archangel Foster has told us that the Lord commands us to be happy ? and many is the time I have put down my crook, weary unto death with the cares and woes of my flock, and enjoyed an innocent, happy hour over one of your stories - and have stood up refreshed, ready to fight again."

"Uh, thank you, Bishop."

"I mean it deeply. I've had your record searched in Heaven - now, now, never mind; I know that you are an unbeliever but let me speak. Even Satan has a purpose in God's Great Plan. It is not yet time for you to believe. Out of your sorrow and heartache and pain you spin happiness for other people. This is all credited on your page of the Great Ledger. Now please! I did not bring you here to argue technology. We never argue with anyone, we wait until they see the light and then we welcome them. But today we shall just enjoy a happy hour together."

Digby then proceeded to act as if he meant it. Jubal was forced to admit that the glib fraud was a charming host, and his coffee and liquor and food were all excellent. Jubal noticed that Mike seemed decidedly jumpy, especially when Digby deftly cut him out of the herd and spoke with him alone - but, confound it, the boy was simply going to have to get used to meeting people and talking to them on his own, without Jubal or Jill or somebody to feed him his lines.

Boone was showing Jill some relics of Foster in a glass case on the other side of the room; Jubal covertly watched her evident reluctance with mild amusement while he spread pate de fois gras on toast. He heard a door click and looked around; Digby and Mike were missing. "Where did they go, Senator?"

"Eh? What was that, Doctor?"

"Bishop Digby and Mr. Smith. Where are they?"

Boone looked around, seemed to notice the closed door. "Oh, they've just stepped in there for a moment. That's a little retiring room used for private audiences. You were in it, weren't you? When the Supreme Bishop was showing you around."

"Um, yes." It was a small room with nothing in it but a chair on a dais-a "throne," Jubal corrected himself with a private grin - and a kneeler with an arm rest. Jubal wondered which one would use the throne and which one would be left with the kneeler - if this tinsel bishop tried to argue religion with Mike he was in for some shocks. "I hope they don't stay in there too long. We really do have to be getting back."

"I doubt if they'll stay long. Probably Mr. Smith wanted a word in private. People often do - and the Supreme Bishop is very generous that way. Look, I'll call the parking lot and have your cab waiting right at the end of that passageway where we took the elevator - that's the Supreme Bishop's private entrance. Save you a good ten minutes."

"That's very kind of you."

"So if Mr. Smith has something on his soul he wants to confess, we won't have to hurry him. I'll step outside and phone." Boone left.

Jill came over and said worriedly, "Jubal, I don't like this. I think we were deliberately maneuvered so that Digby could get Mike alone and work on him."

"I'm sure of it."

"Well? They haven't any business doing that. I'm going to bust right in on them and tell Mike it's time to leave."

"Suit yourself," Jubal answered, "but I think you're acting like a broody hen. This isn't like having the S.S. on our tails, Jill; this swindle is much smoother. There won't be any strong-arm stuff." He smiled. "It's my opinion that if Digby tries to convert Mike, they'll wind up with Mike converting him. Mike's ideas are pretty hard to shake."

"I still don't like it."

"Relax. Help yourself to the free chow."

"I'm not hungry."

"Well, I am ... and if I ever tuned down a free feed, they'd toss me out of the Authors' Guild." He piled paper-thin Virginia ham on buttered bread, added to it other items, none of them syntho, until he had an unsteady ziggurat, munched it and licked mayonnaise from his fingers.

Ten minutes later Boone had not returned. Jill said sharply, "Jubal, I'm not going to remain polite any longer. I'm going to get Mike out of there."

"Go right ahead."

She strode to the door. "Jubal, it's locked."

"Thought it might be."

"Well? What do we do? Break it down?"

"Only as a last resort." Jubal went to the inner door, looked it over carefully. "Mmm, with a battering ram and twenty stout men I might try it. But I wouldn't count on it. Jill, that door would do credit to a bank vault - it's just been prettied up to match the room. I've got one much like it for the fireproof off my study."

"What do we do?"

"Beat on it, if you want to. You'll just bruise your hands. I'm going to see what's keeping friend Boone-"

But when Jubal looked out into the hallway he saw Boone just returning. "Sorry," Boone said. "Had to have the Cherubim hunt up your driver. He was in the Happiness Room, having a bite of lunch. But your cab is waiting for you, just where I said."

"Senator," Jubal said, "we've got to leave now. Will you be so kind as to tell Bishop Digby?"

Boone looked perturbed. "I could phone him, if you insist. But I hesitate to do so - and I simply cannot walk in on a private audience."

"Then phone him. We do insist."

But Boone was saved the embarrassment as, just then, the inner door opened and Mike walked out. Jill took one look at his face and shrilled, "Mike! Are you all right?"

"Yes, Jill."

"I'll tell the Supreme Bishop you're leaving," said Boone and went past Mike into the smaller room. He reappeared at once. "He's left," he announced. "There's a back way into his study." Boone smiled. "Like cats and cooks, the Supreme Bishop goes without saying. That's a joke. He says that 'good-by's' add nothing to happiness in this world, so he never says good-by. Don't be offended."

"We aren't. But we'll say good-by now - and thank you for a most interesting experience. No, don't bother to come down; I'm sure we can find our way out."

Chapter 24

ONCE THEY WERE IN THE AIR Jubal said, "Well, Mike, what did you think of it?"

Mike frowned. "I do not grok."

"You aren't alone, son. What did the Bishop have to say?"

Mike hesitated a long time, finally said, "My brother Jubal, I need to ponder until grokking is."

"Ponder right ahead, son. Take a nap. That's what I'm going to do."

Jill said suddenly, "Jubal? How do they get away with it?"

"Get away with what?"

"Everything. That's not a church - it's a madhouse."

It was Jubal's turn to ponder before answering. "No, Jill, you're mistaken. It is a church - and the logical eclecticism of our times."

"Huh?"

"The New Revelation and all doctrines and practices under it are all old stuff, very old. All you can say about it is that neither Foster nor Digby ever had an original thought in his life. But they knew what would sell, in this day and age. So they pieced together a hundred timeworn tricks, gave them a new paint job, and they were in business. A booming business, too. The only thing that scares me is that I might live to see it sell too well - until it was compulsory for everybody."

"Oh, no!"

"Oh, yes. Hitler started with less and all he had to peddle was hate. Hate always sells well, but for repeat trade and the long pull happiness is sounder merchandise. Believe me, I know; I'm in the same grift myself. As Digby reminded me." Jubal grimaced. "I should have punched him. Instead, he made me like it. That's why I'm afraid of him. He's good at it, he's clever. He knows what people want. Happiness. The world has suffered a long, bleak century of guilt and fear - now Digby tells them that they have nothing to fear, in this life or hereafter, and that God commands them to love and be happy. Day in, day out, he keeps pushing it: Don't be afraid, be happy"

"Well, that part's all right," Jill admitted, "and I concede that he works hard at it. But-"

"Piffle! He plays hard."

"No, he gave me the impression that he really is devoted to his work, that he had sacrificed everything else to-"

"'Piffle!' I said. For Digby it's play. Jill, of all the nonsense that twists the world, the concept of 'altruism' is the worst. People do what they want to do, every time. If it sometimes pains them to make a choice - if the choice turns out to look like a 'noble sacrifice' - you can be sure that it is in no wise nobler than the discomfort caused by greediness ... the unpleasant necessity of having to decide between two things both of which you would like to do when you can't do both. The ordinary bloke suffers that discomfort every day, every time he makes a choice between spending a buck on beer or tucking it away for his kids, between getting up when he's tired or spending the day in his warm bed and losing his job. No matter which he does he always chooses what seems to hurt least or pleasures most. The average chump spends his life harried by these small decisions. But the utter scoundrel and the perfect saint merely make the same choices on a larger scale. They still pick what pleases them. As Digby has done. Saint or scoundrel, he's not one of the harried little chumps."

"Which do you think he is, Jubal?"

"You mean there's a difference?"

"Oh, Jubal, your cynicism is just a pose and you know it! Of course there's a difference."

"Mmm, yes, you're right, there is. I hope he's just a scoundrel - because a saint can stir up ten times as much mischief as a scoundrel. Strike that from the record; you would just tag it as 'cynicism' - as if tagging it proved it wrong. Jill, what troubled you about those church services?"

"Well ... everything. You can't tell me that that is worship."

"Meaning they didn't do things that way in the Little Brown Church in the Vale you attended as a kid? Brace yourself, Jill - they don't do it your way in St. Peter's either. Nor in Mecca."

"Yes, but-Well, none of them do it that way! Snake dances, slot machines ? even a bar right in church! That's not reverence, it's not even dignified! Just disgusting."

"I don't suppose that temple prostitution was very dignified, either."

"Huh?"

"I rather imagine that the two-backed beast is just as sweaty and comical when the act is performed in the service of a god as it is under any other circumstances. As for those snake dances, have you ever seen a Shaker service? No, of course not and neither have I; any church that is agin sexual intercourse (as they were) doesn't last long. But dancing to the glory of God has a long and respected history. It doesn't have to be good dancing - according to eyewitness reports the Shakers could never have made the Bolshoi Ballet - it merely has to be enthusiastic. Do you consider the Rain Dances of our Southwest Indians irreverent?"

"No. But that's different."

"Everything always is - and the more it changes, the more it is the same. Now about those slot machines-Ever see a Bingo game in church?"

"Well ... yes. Our parish used to hold them when we were trying to raise the mortgage. But we held them on Friday nights; we certainly didn't do such things during church services."

"So? Minds me of a married woman who was very proud of her virtue. She slept with other men only when her husband was away."

"Why, Jubal, the two cases aren't even slightly alike!"

"Probably not. Analogy is even slipperier than logic. But, 'little lady'-"

"Smile when you call me that!"

"'It's a joke.' Why didn't you spit in his face? He had to stay on his good behavior no matter what we did; Digby wanted him to. But, Jill, if a thing is sinful on Sunday, it is sinful on Friday - at least it groks that way to an outsider, myself ... or perhaps to a man from Mars. The only difference I can see is that the Fosterites give away, absolutely free, a scriptural text even if you lose. Could your Bingo games make the same claim?"

"Fake scripture, you mean. A text from the New Revelation. Boss, have you read the thing?"

"I've read it."

"Then you know. It's just dressed up in Biblical language. Part of it is just icky-sweet with no substance, like a saccharine tablet, more of it is sheer nonsense ... and some of it is just hateful. None of it makes sense, it isn't even good morals."

Jubal was silent so long that Jill thought he had gone to sleep. At last he said, "Jill, are you familiar with Hindu sacred writings?"

"Mmm, I'm afraid not."

"The Koran? Or any other major scripture? I could illustrate my point from the Bible but I would not wish to hurt your feelings."

"Uh, I'm afraid I'm not much of a scholar, Jubal. Go ahead, you won't hurt my feelings."

"Well, I'll stick to the Old Testament, picking it to pieces usually doesn't upset people quite so much. You know the story of Sodom and Gomorrah? And how Lot was saved from these wicked cities when Yahweh smote 'em with a couple of heavenly A-bombs?"

"Oh, yes, of course. His wife was turned into a pillar of salt."

"Caught by the fallout, perhaps. She tarried and looked back. Always seemed to me to be too stiff a punishment for the peccadillo of female curiosity. But we were speaking of Lot. Saint Peter describes him as a just, Godly, and righteous man, vexed by the filthy conversation of the wicked. I think we must stipulate Saint Peter to be an authority on virtue, since to him was given the keys to the Kingdom of Heaven. But if you search the only records concerning

Lot, in the Old Testament, it becomes hard to determine exactly what Lot did or did not do that established him as such a paragon. He divided up a cattle range at his brother's suggestion. He got captured in a battle. When he was tipped off, he lammed out of town in time to save his skin. He fed and sheltered two strangers overnight but his conduct shows that he knew them to be V.I.P.s whether or not he knew they were angels - and by the Koran and by my own lights, his hospitality would have counted for more if he had thought they were just a couple of unworthy poor in need of a pad and a handout. Aside from these insignificant items and Saint Peter's character reference, there is just one thing that Lot did mentioned anywhere in the Bible on which we can judge his virtue - virtue so great, mind you, that heavenly intercession saved his life. See chapter nineteen of Genesis, verse eight."

"And what does it say?"

"Look it up when we get home. I don't expect you to believe me."

"Jubal! You're the most infuriating man I've ever met."

"And you're a very pretty girl and a fair cook, so I don't mind your ignorance. All right, I'll tell youthen you look it up anyhow. Some of Lot's neighbors came and beat on his door and wanted to meet these two blokes from out of town. Lot didn't fight with them; he offered 'em a deal instead. He had two young daughters, virgins - at least, such was his opinion - and he told this crowd of men that he would give them these two little girls and they could use them any way they liked - a gang shagging, a midnight revue, he pleaded with them to do any damn thing they pleased to his daughters ? only please go 'way and quit beating on his door."

"Jubal ... does it really say that?"

"Look it up yourself. I've modernized the language but the meaning is as unmistakable as a whore's wink. Lot offered to let a gang of men - 'young and old,' the Bible says - abuse two young virgins under his protection if only they wouldn't break down his door. Say!" Jubal leaned forward and beamed. "Maybe I should have tried that when the S.S. was breaking my door down! Maybe it would have got me into heaven - and Saint Peter knows my chances aren't too good otherwise." Then he frowned and looked worried. "No, it wouldn't have worked. The recipe plainly calls for 'virgins intactae' - and I wouldn't have known which two of you gals to offer those troopers."

"Hmmph! You won't find out from me."

"Possibly I couldn't find out from any of you. Even Lot might have been mistaken. But that's what he promised 'em - his virgin daughters, young and tender and scared - urged this street gang to rape them as much as they wished in any way they liked ... if only they would leave him in peace?" Jubal snorted in disgust. "And the Bible cites this sort of scum as being a righteous man."

Jill said slowly, "I don't think that's quite the way we were taught it in Sunday School."

"Damn it, look it up! They probably gave you a Bowdlerized version. That's not the only shock in store for anybody who actually reads the Bible. Consider Elisha. It says here that Elisha was so all-fired holy that merely touching his bones restored a dead man to life. But he was a baldheaded old coot, like myself. So one day some children made fun of his baldness, just as you girls do. So God personally interceded and sent two bears to tear forty-two small children into bloody bits. That's what it says - second chapter of Second Kings."

"Boss, I never make fun of your bald head."

"Who was it sent my name to those hair-restorer quacks? Dorcas, maybe? Whoever it was, God knows - and she had better keep a sharp eye out for bears. I might turn pious in my dotage and start enjoying divine protection. But I shan't give you any more samples. The Bible is loaded with such stuff; read it and find out. Crimes that would turn your stomach are asserted to be either divinely ordered or divinely condoned ... along with, I must add, a lot of hard common sense and some pretty workable rules for social behavior. I am not running down the Bible; it stacks up pretty well as sacred writings go. It isn't a patch on the sadistic, pornographic trash that goes by the name of sacred writings among the Hindus. Or a dozen other religions. But I'm not singling out any of them for condemnation, either; it is entirely conceivable that some one of these mutually contradictory mythologies is the literal word of God ... that God is in truth the sort of bloodthirsty paranoid who would rend to bits forty-two children for the crime of sassing one of his priests. Don't ask me about the Front Office's policies; I just work here. My point is that Foster's New Revelation that you're so contemptuous of is pure sweetness-and-light as scripture goes. Bishop Digby's Patron is a pretty good Joe; He wants people to be happy - happy here on Earth plus guaranteed eternal bliss in Heaven. He doesn't expect you to chastise the flesh here and now in order to reap rewards after you're dead. Oh no! This is the modern giant economy package. If you like to drink and gamble and dance and wench - and most people do - come to church and do it under holy auspices. Do it with your conscience free of any trace of guilt. Really have fun at it. Live it up! Get happy!"

Jubal failed to look happy himself. He went on, "Of course there's a slight charge; Digby's God expects to be acknowledged as such - but that has been a foible of gods always. Anyone who is stupid enough to refuse to get happy on His terms is a sinner ... and a sinner deserves anything that happens to him. But this is one rule common to all gods and goddesses throughout history; don't blame Foster and Digby, they didn't invent it. Their brand of snake oil is utterly orthodox in all respects."

"Boss, you sound as if you were halfway converted."

"Not me! I don't enjoy snake dances, I despise crowds, and I do not propose to let my social and mental inferiors tell me where I have to go on Sundays - and I wouldn't enjoy Heaven if that crowd is going to be there. I simply object to your criticizing them for the wrong things. As literature, the New Revelation stacks up about average - it should; it was composed by plagiarizing other scriptures. As for logic and internal consistency, these mundane rules do not apply to sacred writings and never have - but even on these grounds the New Revelation must be rated superior; it hardly ever bites its own tail. Try reconciling the Old Testament with the New Testament sometime, or Buddhist doctrine with Buddhist apocrypha. As morals, Fosterism is merely the Freudian ethic sugar-coated for people who can't take their psychology straight, although I doubt if the old lecher who wrote it - pardon me, 'was inspired to write it' - was aware of this. He was no scholar. But he was in tune with his times, he tapped the Zeitgeist. Fear and guilt and a loss of faith. How could he miss? Now pipe down, I'm going to nap."

"Who's been talking?"

"'The woman tempted me.'" Jubal closed his eyes.

On reaching home they found that Caxton and Mahmoud had flown in together for the day. Ben had been disappointed to find Jill not at home on his arrival but he had managed to bear up without tears through the company of Anne, Miriam, and Dorcas. Mahmoud always visited for the avowed purpose of seeing his prot,g,, Mike, and Dr. Harshaw; however, he too had shown fortitude at having only Jubal's food, liquor, garden - and odalisques - to entertain him during his host's absence. He was lying face down with Miriam rubbing his back while Dorcas rubbed his head.

Jubal looked at him. "Don't get up."

"I can't, she's sitting on me. A little higher up, Miriam. Hi, Mike."

"Hi, my brother Stinky Dr. Mahmoud." Mike then gravely greeted Ben, and asked to be excused.

"Run along, son," Jubal told him.

Anne said, "Wait a minute, Mike. Have you had lunch?"

He said solemnly, "Anne, I am not hungry. Thank you," turned and went into the house.

Mahinoud twisted, almost unseating Miriam. "Jubal? What's troubling our son?"

"Yeah," said Ben. "He looks seasick."

"Let him alone and he'll get well. An overdose of religion. Digby has been working on him." Jubal sketched the morning's events.

Mahmoud frowned. "But was it necessary to leave him alone with Digby? This seems to me - pardon me, my brother! - unwise."

"He's not hurt. Stinky, he's got to learn to take such things in his stride. You've preached your brand of theology to him - I know you have; he's told me about it. Can you name me one good reason 'why Digby shouldn't have his innings? Answer me as a scientist, not as a Muslim."

"I am unable to answer anything other than as a Muslim," Dr. Mahmoud said quietly.

"Sorry. I recognize the correctness of your answer, even though I don't agree with it."

"But, Jubal, I used the word 'Muslim' in its exact, technical sense, not as a sectarian which Maryam incorrectly terms 'Mohammedan.'"

"And which I'm going to go right on calling you until you learn to pronounce 'Miriam' correctly! Quit squirming. I'm not hurting you."

"Yes, Maryam. Ouch! Women should not be so muscular. Jubal, as a scientist, I find Michael the greatest prize of my career. As a Muslim, I find in him a willingness to submit to the will of God ... and this makes me happy for his sake, although I readily admit that there are great semantic difficulties and as yet he does not seem to grok what the English word 'God' means." He shrugged. "Nor the Arabic word 'Allah' But as a man - and always a slave of God - I love this young man, our foster son and water brother, and I would not have him come under bad influences. Quite aside from his creed, this Digby strikes me as a bad influence. What do you think?"

"Ok!" Ben applauded. "He's a slimy bastard - and the only reason I haven't been taking his racket apart in my column is that the Syndicate is afraid to print it. Stinky, keep talking that well and you'll have me studying Arabic and buying a rug."

"I hope so. But the rug is not necessary."

Jubal sighed. "I agree with both of you. I'd rather see Mike smoking marijuana than be converted by Digby. But I don't think there is the slightest chance of Mike's being taken in by that syncretic hodgepodge Digby peddles ... and he's got to learn to stand up to bad influences. I consider you a good influence - but I don't really think you stand much more chance than Digby has - the boy has an amazingly strong mind of his own. Muhammad may have to make way for a new prophet."

"If God so wills it," Mahmoud answered calmly.

"That leaves no room for argument," Jubal agreed.

"We were discussing religion before you got home," Dorcas said softly "Boss, did you know that women have souls?"

"They do?"

"So Stinky says."

"Maryam," Mahmoud explained, "wanted to know why we 'Moharnmedans' thought only men had souls. So I cited the writings."

"Miriam, I'm surprised at you. That's as vulgar a misconception as the notion that Jews sacrifice Christian babies in secret, obscene rites. The Koran is explicit in half a dozen places that entire families enter into Paradise, men and women together. For example, see 'Ornaments of Gold' - verse seventy, isn't it, Stinky?"

"'Enter the Garden, ye and your wives, to be made glad.' That's as well as it can be put, in English," agreed Mahmoud.

"Well," said Miriam, "I had heard about the beautiful houris that Mohammedan men have for playthings when they go to heaven and that didn't seem to leave much room for wives."

"Houris aren't women," said Jubal. "They are separate creations, like djinni and angels. They don't need human souls, they are spirits to start with, eternal and unchanging and beautiful. There are male houris, too, or the male equivalent of houris. Houris don't have to earn their way into Paradise; they're on the staff. They serve endless delicious foods and pass around drinks that never give hangovers and entertain in other ways as requested. But the souls of human wives don't have to do any housework, any more than the men. Correct, Stinky?"

"Close enough, aside from your flippant choice of words. The houris-" He stopped and sat up so suddenly that he dumped Miriam. "Say! It's just possible that you girls don't have souls!"

Miriam sat up and said bitterly, "Why, you ungrateful dog of an infidel! Take that back!"

"Peace, Maryam. If you don't have a soul, then you're immortal anyhow and won't miss it. Jubal ... is it possible for a man to die and not notice it?"

"Can't say. Never tried it."

"Could I have died on Mars and just dreamed that I came home? Look around you! A garden the Prophet himself would be pleased with. Four beautiful houris, passing around lovely food and delicious drinks at all hours. Even their male counterparts, if you want to be fussy. Is this Paradise?"

"I can guarantee that it isn't," Jubal assured him. "My taxes are due this week."

"Still, that doesn't affect me."

"And take these houris. Even if we stipulate for the sake of argument that they are of beauty adequate to meet the specifications - after all, beauty is in the eye of the beholder-"

"They pass."

"And you'll pay for that, Boss," Miriam added.

"-there still remains," Jubal pointed out, "one more requisite attribute of houris."

"Mmmm-" said Mahmoud, "I don't think we need go into that. In Paradise, rather than a temporary physical condition, it would be a permanent spiritual attribute - more a state of mind. Yes?"

"In that case," Jubal said emphatically, "I am certain that these are not houris."

Mahmoud sighed. "In that case I'll just have to convert one."

"Why only one? There are still places left in the world where you can have the full quota."

"No, my friend. In the wise words of the Prophet, while the Legislations permit four, it is impossible for a man to deal justly with more than one."

"That's some relief. Which one?"

"We'll have to see. Maryam, are you feeling spiritual?"

"You go to hell! 'Houris' indeed!"

"Jill?"

"Give me a break," Ben protested. "I'm still working on Jill."

"Later, Jill. Anne?"

"Sorry. I've got a date."

"Dorcas? You're my last chance."

"Stinky," she said softly, "just how spiritual do you want me to feel?"

When Mike got inside the house, he went straight upstairs to his room, closed the door, got on the bed, assumed the foetal position, rolled up his eyes, swallowed his tongue, and slowed his heart almost to nothing. He knew that Jill did not like him to do this in the daytime, but she did not object as long as he did not do it publicly. There were so many things that he must not do publicly, but only this one really aroused her ire. He had been waiting to do this ever since he had left that room of terrible wrongness; he needed very badly to withdraw and try to grok all that had happened. For he had done something else that Jill had told him not to. He felt a very human urge to tell himself that it had been forced on him, that it was not his fault; but his Martian training did not permit him this easy escape. He had arrived at a cusp, right action had been required, the choice had been his. He grokked that he had chosen correctly. But his water brother Jill had forbidden this choice. But that would have left him no choice. This was contradiction; at a cusp, choice is. By choice, spirit grows.

He considered whether or not Jill would have approved had he taken other action, not wasting food?

No, he grokked that Jill's injunction had covered that variant of action, too.

At this point the being sprung from human genes shaped by Martian thought, and who could never be either one, completed one stage of his growth, burst out and ceased to be a nestling. The solitary loneliness of predestined free will was then his and with it the Martian serenity to embrace it, cherish it, savour its bitterness, and accept its consequences. With tragic joy he knew that this cusp was his, not Jill's. His water brother could teach, admonish, guide, but choice at a cusp was not shared. Here was "ownership" beyond any possible sale, gift, hypothecation; owner and owned grokked fully, inseparable. He eternally was the action he had taken at cusp.

Now that he knew himself to be self he was free to grok ever closer to his brothers, merge without let. Self's integrity was and is and ever had been. Mike stopped to cherish all his brother selves, the many threesfulfilled on Mars, both corporate and discorporate, the precious few on Earth - the as-yet-unknown powers of three on Earth that would be his to merge with and cherish now that at last long waiting he grokked and cherished himself.

Mike remained in his trance; there was still much to grok, loose ends and bits and pieces to be puzzled over and fitted into his growing pattern - all that he had seen and heard and been at the Archangel Foster Tabernacle (not just the cusp he had encountered when he and Digby had come face to face alone), why Bishop Senator Boone had made him warily uneasy without frightening him, why Miss Dawn Ardent had tasted like a water brother when she was not, the texture and smell of the goodness he had incompletely grokked in the jumping up and down and the wailing - Jubal's stored conversation both coming and going - Jubal's words troubled him more than other details; he studied them with great care, compared them with what he bad been taught as a nestling, making great effort to bridge between his two languages, the one he thought with and the one he now spoke and was gradually learning to think in, for some purposes. The human word "church" which turned up over and over again among Jubal's words gave him most knotty difficulty; there was no Martian concept of any sort to match it - unless one took "church" and "worship" and "God" and "congregation" and many other words and equated them all to the totality of the only world he had known during most of his growing-waiting ... then forced the concept back awkwardly into English in that phrase which had been rejected out by each differently) by Jubal, by Mahmoud, by Digby.

"Thou art God" He came closer to understanding it in English himself now, although it could never have the crystal inevitability of the Martian concept it stood for. In his mind he spoke simultaneously the English sentence and the Martian word and felt closer grokking. Repeating it like a student telling himself that the jewel is in the lotus he sank into nirvana untroubled.

Shortly before midnight he speeded up his heart, resumed normal breathing, ran down his engineering check list, found that all was in order, uncurled and sat up. He had been spiritually weary; now he felt light and gay and clearheaded, eager to get on with the many actions he saw spreading out before him.

He felt a puppyish need for company almost as strong as his earlier necessity for quiet. He stepped out into the upper hail, was delighted to encounter a water brother. "Jill"

"Oh. Hello, Mike. My, you look chipper."

"I feel fine! Where is everybody?"

"Everybody's asleep but you and me - so keep your voice down. Ben and Stinky went home an hour ago and people started going to bed."

"Oh." Mike felt mildly disappointed that Mahmoud had left; he wanted to explain to him his new grokking. But he would do so, when next he saw him.

"I ought to be asleep, too, but I felt like a snack. Are you hungry?"

"Me? Sure, I'm hungry!"

"Good. You ought to be, you missed dinner. Come on, I know there's some cold chicken and we'll see what else." They went downstairs, loaded a tray lavishly. "Let's take it outside. It's still plenty warm."

"That's a fine idea," Mike agreed.

"Warm enough to swim if we wanted to - this is a real Indian summer. Just a second, I'll switch on the floods."

"Don't bother," Mike answered. "I'll carry the tray, I can see." He could see, as they all knew, in almost total darkness. Jubal said that his exceptional night-sight probably came from the conditions in which he had grown up, and Mike grokked that that was true but he grokked also that there was more to it than that; his foster parents had taught him to see. As for the night being warm enough, he would have been comfortable naked on Mount Everest, but he knew that his water brothers had very little tolerance for changes in temperature and pressure; he was always considerate of their weakness, once he had learned of it. But he was eagerly looking forward to snow - seeing for himself that each tiny crystal of the water of life was a unique individual, as he had read - walking barefoot in it, rolling in it.

In the rnean time he was equally pleased with the unseasonably warm autumn night and the still more pleasing company of his water brother.

"Okay, you carry the tray. I'll switch on just the underwater lights. That'll be plenty to eat by."

"Fine." Mike liked having light coming up through the ripples; it was a goodness, a beauty, even though he did not need it. They picnicked by the pool, then lay back on the grass and looked at the stars.

"Mike, there's Mars. It is Mars, isn't it? Or is it Antares?"

"It is Mars."

"Mike? What are they doing on Mars?"

He hesitated a long time; the question was too wide in scope to pin down to the sparse English language. "On the side toward the horizon - the southern hemisphere - it is spring; the plants are being taught to grow."

"'Taught to grow?'"

He hesitated only slightly. "Larry teaches plants to grow every day. I have helped him. But my people - the Martians, I mean; I grok now that you are my people - teach the plants another way. In the other hemisphere it is growing colder and the nymphs, those who have stayed alive through the summer, are being brought into the nests for quickening and more growing." He thought. "Of the humans we left at the equator when I came here, one has discorporated and the others are sad."

"Yes, I heard about it in the news."

Mike had not heard about it in the news; he had not known it until he was asked. "They should not be sad. Mr. Booker T. W. Jones Food Technician First Class is not sad; the Old Ones have cherished him."

"You knew him?"

"Yes. He had his own face, dark and beautiful. But he was homesick."

"Oh, dear! Mike ... do you ever get homesick? For Mars?"

"At first I was very homesick," he answered truthfully. "I was lonely always." He rolled toward her and took her in his arms. "But now I am not lonely. I grok I shall never be lonely again."

"Mike darling-" They kissed, and went on kissing.

Presently his water brother said breathlessly. "Oh, my! That was almost worse than the first time."

"You are all right, my brother?"

"Yes. Yes indeed. Kiss me again."

Quite a long time later, by cosmic clock, she said, "Mike? Is that - I mean, 'Do you know-'"

"I know. It is for growing-closer. Now we grow closer."

"Well I?ve been ready a long time - goodness, we all have, but never mind, dear; turn just a little. I'll help."

As they merged, grokking together, Mike said softly and triumphantly: "Thou art God."

Her answer was not in words. Then, as their grokking made them ever closer and Mike felt himself almost ready to discorporate, her voice called him back: "Oh? ... Oh! Thou art God!"

"We grok God."

Chapter 25

ON MARS THE LITTLE HUMAN ADVANCE GUARD were building half-buried pressure domes for the larger male & female party that would arrive by next ship. This work went much faster than originally scheduled as the Martians were uncritically helpful. Part of the time saved was spent in preparing a preliminary estimate on a very long-distance plan to free the bound oxygen in the sands of Mars to make the planet more friendly to future human generations.

The Old Ones neither helped nor hindered these long-distance human plans; time was not yet. Their own meditations were approaching a violent cusp that would control the shape of Martian art for many millennia. On Earth elections continued as usual and a very advanced poet published a limited edition of verse consisting entirely of punctuation marks and spaces; Time magazine reviewed it and suggested that the Federation Assembly Daily Record could profitably be translated into the same medium. The poet was invited to lecture at the University of Chicago, which he did, clad in full formal evening dress lacking only trousers and shoes.

A colossal advertising campaign opened to sell more sexual organs of plants for human use and Mrs. Joseph ("Shadow of Greatness") Douglas was quoted as saying: "I would no more think of sitting down to eat without flowers on my table than without serviettes." A Tibetan swami from Palermo, Sicily, announced in Beverly Hills a newly discovered, ancient yoga discipline for ripple breathing which greatly increased both pranha and the cosmic attraction between the sexes. His chelas were required to assume the matsyendra posture dressed in hand-woven diapers while he read aloud from the Rig-Veda and an assistant guru checked through their purses in another room - nothing was ever stolen from the purses; the purpose was less immediate.

The President of the United States, by proclamation, named the first Sunday in November as "National Grandmothers' Day" and urged the grandchildren of America to say it with flowers. A funeral parlor chain was indicted for price-cutting. The Fosterite bishops, after secret conclave, announced the Church's second Major Miracle: Supreme Bishop Digby had been translated bodily to Heaven and spot-promoted to Archangel, ranking with-but-after Archangel Foster. The glorious news had been held up pending Heavenly confirmation of the elevation of a new Supreme Bishop, Huey Short - a compromise candidate accepted by the Boone faction after the lots had been cast repeatedly.

L 'Unita and Holy published identical doctrinaire denunciations of Short's elevation, L 'Osservatore Romano and the Christian Science

Monitor ignored it, Times of India snickered at it editorially, and the Manchester Guardian reported it without comment - the Fosterite congregation in England was small but extremely militant.

Digby was not pleased with his promotion. The Man from Mars had interrupted him with his work half finished, and that stupid jackass Short was certain to louse it up. Foster listened to him with angelic patience until Digby ran down, then said, "Listen, junior, you're an angel now, so forget it. Eternity is no time for recriminations. You too were a stupid jackass until you poisoned me. Afterwards you did well enough. Now that Short is Supreme Bishop he'll do all right, too; he can't help it. Same as with the Popes. Some of them were warts until they got promoted. Check with one of them, go ahead - there's no professional jealousy here."

Digby calmed down a little, but made one request.

Foster shook his halo in negation. "You can't touch him. You shouldn't have tried to touch him in the first place. Oh, you can submit a requisition for a miracle if you want to make a bloody fool of yourself. But, I'm telling you, it'll be turned down - you simply don't understand the System yet. The Martians have their own setup, different from ours, and as long as they need him, we can't touch him. They run their own show their own way - the Universe has variety, something for everybody - a fact you field workers often miss."

"You mean this punk can brush me aside and I've got to hold still for it?"

"I held still for the same thing, didn't I? I'm helping you now, am I not? Now look, there's work to be done and lots of it before you can expect to be promoted again. The Boss wants performance, not gripes. If you need a Day off to get your nerve back, duck over to the Muslim Paradise and take it. Otherwise, straighten your halo, square your wings, and dig in. The sooner you start acting like an angel the quicker you'll start feeling angelic. Get Happy, junior!"

Digby heaved a deep ethereal sigh. "Okay, I'm Happy. Where do I start?"

Jubal was not disturbed by Digby's disappearance because he did not hear of it even as soon as it was announced, and, when he did hear, while he had a fleeting suspicion as to who had performed the miracle, he dismissed it from his mind; if Mike had had a finger in it, he had gotten away with it - and what happened to supreme bishops worried Jubal not at all as long as he didn't have to be bothered with it.

More important, his own household had gone through a considerable upset. In this case Jubal knew what had happened but did not care to inquire. That is to say, Jubal guessed what had happened but did not know with whom - and didn't want to know. A slight case of rape. Was "rape" the word? Well, "statutory rape." No, not that, either; Mike was of legal age and presumed to be able to defend himself in the clinches. Anyhow, it was high time the boy was salted, no matter how it had happened.

Jubal couldn't even reconstruct the crime from the way the girls behaved because their patterns kept shifting - sometimes ABC vs D, then BCD vs A ... or AB vs CD, or AD vs CB, through all possible ways that four women can gang up on each other.

This continued for most of the week following that ill-starred trip to church, during which period Mike stayed in his room in a withdrawal trance so deep that Jubal would have pronounced him dead had he not seen it before. Jubal would not have minded it if the service around the place had not gone to hell in a bucket. The girls seemed to spend half their time tiptoeing in "to see if Mike was all right" and they were too preoccupied to cook properly, much less to be decent secretaries. Even rock-steady Anne - Hell, Anne was the worst of the lot! Absentminded and subject to unexplained tears ... and Jubal would have bet his life that if Anne were to witness the Second Coming, she would simply have memorized date, time, personae, events, and barometric pressure without batting her calm blue eyes.

Then late Thursday afternoon Mike woke himself up and suddenly it was ABCD in the service of Mike, "less than the dust beneath his chariot wheels." Inasmuch as the girls now found time to give Jubal perfect service too, Jubal counted his blessings and let it lie - except for a wry and very private thought that, if he had demanded a showdown, Mike could easily quintuple their salaries simply by dropping a post card to Douglas - but that the girls would just as readily have supported Mike.

Once domestic tranquility was restored Jubal did not mind that his kingdom was now ruled by a mayor of the palace. Meals were on time and (if possible) better than ever; when he shouted "Front!" the girl who appeared was bright-eyed, happy, and efficient - such being the case, Jubal did not give a hoot who rated the most side boys. Or girls.

Besides, the change in Mike was as interesting to Jubal as the restoration of peace was pleasant. Before that week Mike had been docile in a fashion that Jubal classed as pathological; now he was so self-confident that Jubal would have described it as cocky had it not been that Mike continued to be unfailingly polite and considerate.

But he accepted homage from the girls as if a natural right, he seemed older than his calendar age rather than younger, his voice had deepened, he spoke with disciplined forcefulness rather than timidly. Jubal decided that Mike had joined the human race; he could, in his mind, discharge this patient as cured.

Except (Jubal reminded himself) on one point: Mike still did not laugh. He could smile at a joke and sometimes did not ask to have them explained to him. Mike was cheerful, even merry - but he never laughed.

Jubal decided that it was not important. This patient was sane, healthy ... and human. Short weeks earlier Jubal would have given odds against the cure taking place. He was honest and humble enough as a physician not to claim credit; the girls had had more to do with it. Or should he say "girl?"

From the first week of his stay Jubal had told Mike almost daily that he was welcome to stay ... but that he should stir out and see the world as soon as he felt able. In view of this Jubal should not have been surprised when Mike announced one breakfast that he was leaving. But he was both surprised and, to his greater surprise, hurt.

He covered it by using his napkin unnecessarily before answering, "So? When?"

"We're leaving today."

"Um-Plural." Jubal looked around the table. "Are Larry and Duke and I going to have to put up with our own cooking until I can dig up more help?"

"We've talked that over," Mike answered. "Jill is going with me - nobody else. I do need somebody with me, Jubal; I know quite well that I don't know, as yet, how people do things out in the world. I still make mistakes; I need a guide, for a time. I think it ought to be Jill, because she wants to go on learning Martian-and the others think so, too. But if you want Jill to stay, then it could be someone else. Duke and Larry are each willing to help me, if you can't spare one of the girls."

"You mean I get a vote?"

'What? Jubal, it has to be your decision. We all know that."

(Son, you're a gent - and you've probably just told your first lie - I doubt if I could hold even Duke if you set your mind against it.) "I guess it ought to be Jill. But look, kids-This is still your home. The latch string is out."

"We know that - and we'll be back. Again we will share water."

"We will, son."

"Yes, Father."

"Huh?"

"Jubal, there is no Martian word for 'father.' But lately I have grokked that you are my father. And Jill's father."

Jubal glanced at Jill. "Mmm, I grok. Take care of yourselves."

"Yes. Come, Jill." They were gone before he left the table.

Chapter 26

IT WAS THE USUAL SORT OF CARNIVAL in the usual sort of town. The rides were the same, the cotton candy tasted the same, the flat joints practiced a degree of moderation acceptable to the local law in separating the marks from their half dollars, whether with baseballs thrown at targets, with wheels of fortune, or what - but the separation took place just the same. The sex lecture was trimmed to suit local opinions concerning Charles Darwin's opinions, the girls in the posing show wore that amount of gauze that local mores required, and the Fearless Fentons did their Death-Defying (in sober truth) Double Dive just before the last bally each night.

The ten-in-one show was equally standard. It did not have a mentalist, it did have a magician; it did not have a bearded lady, it did have a half-man half-woman; it did not have a sword swallower, it did have a fire eater. In place of a tattooed man the show had a tattooed lady who was also a snake charmer - and for the blowoff (at another half dollar per mark) she appeared "absolutely nude! .. clothed only in bare living flesh in exotic designs!" - and any mark who could find one square inch below her neckline untattooed would be awarded a twenty dollar bill.

That twenty dollars had gone unclaimed all season, because the blowoff was honestly ballyhooed. Mrs. Paiwonski stood perfectly still and completely unclothed - other than in "bare, living flesh" ... in this case a fourteen-foot boa constrictor known as "Honey Bun." Honey Bun was looped around Mrs. P. so strategically that even the local ministerial alliance could find no real excuse to complain, especially as some of their own daughters wore not nearly as much and covered still less while attending the carnival. To keep the placid, docile Honey Bun from being disturbed, Mrs. P. took the precaution of standing on a small platform in the middle of a canvas tank - on the floor of which were more than a dozen cobras.

The occasional drunk who was certain that all snake charmer's snakes were defanged and so tried to climb into the tank in pursuit of that undecorated square inch invariably changed his opinion as soon as a cobra noticed him, lifted and spread its hood.

Besides, the lighting wasn't very good.

However, the drunk could not have won the twenty dollars in any case. Mrs. P's claim was much sounder than the dollar. She and her late husband had had for many years a tattooing studio in San Pedro; when trade was slack they had decorated each other-and, eventually, at some minor inconvenience to herself, the art work on her was so definitively complete from her neck down that there was no possible room for an encore. She took great pride both in the fact that she was the most completely decorated woman in the world (and by the world's greatest artist, for such was her humbly grateful opinion of her late husband) and also in the certainty that every dollar she earned was honest.

She associated with grifters and sinners and did not hold herself aloof from them. But her own integrity was untouched. She and her husband had been converted by Foster himself, she kept her membership in San Pedro and attended services at the nearest branch of the Church of the New Revelation no matter where she was.

Patricia Paiwoush would gladly have dispensed with the protection of Honey Bun in the blowoff not merely to prove that she was honest (that needed no proof, since she knew it was true) but because she was serene in her conviction that she was the canvas for religious art greater than any on the walls or ceilings of the Vatican. When she and George had seen the light. there was still about three square feet of Patricia untouched before he died she carried a complete pictorial life of Foster, from his crib with the angels hovering around to the day of glory when he had taken his appointed place among the archangels.

Regrettably (since it might have turned many sinners into seekers of the light) much of this sacred history had to be covered up, the amount depending on the local lawmen. But she could show it in closed Happiness meetings of the local churches she attended, if the shepherd wanted her to, which he almost always did. But, while it was always good to add to Happiness, the saved did not need it; Patricia would rather have saved sinners. She couldn't preach. She couldn't sing, and she had never been called to speak in tongues, but she was a living witness to the light.

In the ten-in-one, her act came next to last, just before the magician; this gave her time to put away unsold photographs of herself (a quarter for black & white, half a dollar in color, a set of special photographs for five dollars in a sealed envelope sold only to marks who signed a printed form alleging that they were doctors of medicine, psychology, sociology, or other such entitled to professional material not available to the general public - and such was Patricia's integrity that she would not sell these even for ten dollars if the mark did not look the part; she would then ask to see his business card - no dirty dollars were going to put her kids through school - and also gave her time to slip behind the rear canvas and get herself and her snakes ready for the blowoff.

The magician, Dr. Apollo, performed on the last platform nearest to the canvas fly leading to the blowoff. He started by passing out to his audience a dozen shiny steel rings, each as wide as a plate; he invited them to convince themselves that each ring was solid and smooth. Then he had them hold the rings so that they overlapped. Dr. Apollo walked along the platform, reached out with his wand and tapped each overlap - the solid steel links formed a chain.

Casually he laid his wand in the air, rolled up his sleeves, accepted a bowl of eggs from his assistant, and started to juggle half a dozen of them. His juggling did not attract too many eyes; his assistant was more worthy of stares. She was a fine example of modern functional design and, while she wore a great deal more than did the young ladies in the posing show, nevertheless there seemed to be a strong probability that she was not tattooed anywhere.

The marks hardly noticed it when the six eggs became five, then four three, two, until at last Dr. Apollo was tossing one egg in the air, with his sleeves still rolled up and a puzzled look on his face. At last he said, "Eggs are getting scarcer every year," and tossed the remaining egg over the heads of those nearest the platform to a man in the back of the crowd. "Catch-"

He turned away and did not seem to notice that the egg never reached its destination.

Dr. Apollo performed several other tricks, while wearing always the same slightly puzzled expression and with the same indifferent patter. Once he called a young boy close to the platform. "Son, I can tell you what you are thinking. You think I'm not a real magician. And you're right. For that you win a dollar." He handed the kid a dollar bill. It disappeared.

The magician looked unhappy. "Dropped it? Well, hang on to this one." A second bill disappeared.

"Oh, dear. Well, we'll have to give you one more chance. Use both hands. Got it? All right, better get out of here fast with it - you should be home in bed anyhow." The kid dashed away with the money and the magician turned back and again looked puzzled "Madame Merlin, what should we do now?"

His pretty assistant came up to him, pulled his head down by one ear, whispered in it. He shook his head. "No, not in front of all these people."

She whispered again; he looked distressed. "I'm sorry, friends, but Madame Merlin insists that she wants to go to bed. Will any of you gentlemen help her?"

He blinked at the rush of volunteers- "Oh, just two of you. Were any of you gentlemen in the Army?"

There were still more than enough volunteers. Dr. Apollo picked two and said, "There's an army cot under the end of the platforms just lift up the canvas. Now, will you set it up for her here on the platform? Madame Merlin, face this way, please."

While the two men set up the cot, Dr. Apollo made passes in the air at his assistant. "Sleep ... sleep ... you are now asleep. Friends, she is in a deep trance. Will you two gentlemen who so kindly prepared her bed now place her on it? One take her head, one take her feet. Careful, now-" In corpselike rigidity the girl was transferred to the cot.

"Thank you, gentlemen. But we ought not to leave her uncovered, should we? There was a sheet here, somewhere. Oh, there it is." The magician reached out, recovered his wand from where he had parked it, pointed to a table laden with props at the far end of his platform; a sheet detached itself from the pile and came to him. "Just spread this over her. Cover her head, too; a lady should not be exposed to public gaze while sleeping. Thank you. Now if you will just step down off the platform. Fine! Madame Merlin ... can you hear me?"

"Yes, Doctor Apollo."

"You were heavy with sleep. Now you are resting. You feel lighter, much lighter. You are sleeping on a bed of clouds. You are floating away on clouds-" The sheet-covered form raised slowly up about a foot. "Wups! Don't get too light. We don't want to lose you."

In the crowd, a boy in his late teens explained in a loud whisper, "She's not under the sheet now. When they put the sheet over her, she went down through a trap door. That's just a light framework, doesn't weigh as much as the sheet. And in a minute he'll flip the sheet away and while he does, the framework will collapse and disappear. It's just a gimmick-anybody could do it."

Dr. Apollo ignored him and went on talking. "A little higher, Madame Merlin. Higher. There-" The draped form floated about six feet above the platform.

The smart youngster whispered to his friends, "There's a slender steel rod but you can't see it too easily. It's probably where one corner of the sheet hangs down there and touches the cot."

Dr. Apollo turned and requested his volunteers to remove the cot and put it back under the platform. "She doesn't need it now. She sleeps on clouds." He faced the floating form and appeared to be listening. "What? Louder, please. Oh? She says that she doesn't want the sheet - it's too heavy."

("Here's where the framework disappears.")

The magician tugged one corner of the sheet, snatched it away; the audience hardly noticed that the sheet disappeared without his bothering to gather it in; they were looking at Madame Merlin, still floating, still sleeping, six feet above the platform. The platform stood in the middle rear of the tent and the audience surrounded it on all sides. A companion of the boy who knew all about stage magic said, "Okay, Speedy, where's the steel rod?"

The kid said uncertainly, "You have to look where he doesn't want you to look, it's the way they've got those lights fixed to shine right into your eyes."

Dr. Apollo said, "That's enough sleep, fairy princess. Give me your hand. Wake up, wake up!" He took her hand, pulled her erect and helped her step down to the platform.

("You see? You saw how stiff she got down, you saw where she put her foot? That's where the steel rod went." The kid added with satisfaction, "Just a gimmick.")

The magician went on talking, "And now friends, if you will kindly give your attention to our learned lecturer, Professor Timoshenko-"

The talker cut in at once. "Don't go 'way! For this one performance only by arrangement with the Council of Colleges and Universities and with the permission of the Department of Safety and Welfare of this wonderful city, we are offering this twenty dollar bill absolutely free to any one of you-"

Most of the tip was turned into the blowoff. A few wandered around, then started to leave as most of the lights in the main tent were turned off. The freaks and other carnies started packing their props and slum preparatory to tear-down. There was a train jump coming in the morning and living tops would remain up for a few hours sleep, but canvas boys were already loosening stakes on the sideshow top.

Shortly the talker-owner-manager of the ten-in-one came back into the semi-darkened tent, having rushed the blowoff and spilled the last marks out the rear exit. "Smitty, don't go 'way. Got something for you." He handed the magician an envelope, which Dr. Apollo tucked away without looking at it. The manager added, "Kid, I hate to tell you this - but you and your wife ain't going with us to Paducah."

"I know."

"Well ... look, don't take it hard, there's nothing personal about it - but I got to think of the show. We're replacing you with a mentalist team. They do a top reading act, then she runs a phrenology and mitt camp while he makes with the mad ball. We need 'em ... and you know as well as I do you didn't have no season's guarantee. You were just on trial."

"I know," agreed the magician. "I knew it was time to leave. No hard feelings, Tim."

"Well, I'm glad you feel that way about it." The talker hesitated. "Smitty, do you want some advice? Just say no if you don't."

"I would like very much to have your advice," the magician said simply.

"Okay, you asked for it. Smitty, your tricks are good. Hell, some of 'em even got me baffled. But clever tricks don't make a magician. The trouble is you're not really with it. You behave like a carney - you mind your own business and you never crab anybody else's act and you're helpful if anybody needs it. But you're not a carney. You know why? You don't have any feeling for what makes a chump a chump; you don't get inside his mind. A real magician can make the marks open their mouths and catch flies just by picking a quarter out of the air. That Thurston's levitation you do - I've never seen it done any more perfectly but the marks don't warm to it. No psychology. Now take me, for example. I can't even pick a quarter out of the air - hell, I can barely use a knife and fork without cutting my mouth. I got no act ... except I got the one act that counts. I know marks. I know where that streak of larceny is in his heart, I know just how wide it is. I know what he hungers for, whether he knows it or not. That's showmanship, son, whether you're a politician running for office, a preacher pounding a pulpit ... or a magician. You find out what the chumps want and you can leave half your props in your trunk."

"I'm sure you're right."

"I know I am. He wants sex and blood and money. We don't give him any real blood - unless a fire eater or a knife thrower makes a terrible mistake. We don't give him money, either; we just encourage him to hope for it while we take away a little. We don't give him any real sex. But why do seven out of ten of a tip buy the blowoff? To see a nekkid broad, that's why - and a chance to be paid a double sawbuck for lookin' - when maybe they got one just as good or better at home, nekkid anytime they like. So he don't see one and he don't get paid - and still we send him out happy.

"What else does a chump want? Mystery! He wants to think that the world is a romantic place when he knows damn well it ain't. That's your job ... only you ain't learned how. Shucks, son, even the marks know that your tricks are fake ... only they'd like to believe they're real, and it's up to you to help 'em believe, as long as they're inside the show. That's what you lack."

"How do I get it, Tim? How do I learn what makes a chump tick?"

"Hell, I can't tell you that; that's the piece you have to learn for yourself. Get out and stir around and be a chump yourself a while, maybe. But-Well, take this notion you had of billing yourself as 'The Man from Mars.' You mustn't offer the chump what he won't swallow. They've all seen the Man from Mars, in pictures and on stereovision. Hell, I've seen him myself. Sure, you look a bit like him, same general type, a casual resemblance - but even if you were his twin brother, the marks know they won't find the Man from Mars in a ten-in-one in the sticks. It's as silly as it would be to bill a sword swallower as 'the President of the United States.' Get me? A chump wants to believe - but he won't thank you to insult what trace of intelligence he has. And even a chump has brains of a sort. You have to remember that."

"I will remember."

"Okay. I talk too much - but a talker gets in the habit. Are you kids going to be all right? How's the grouch bag? Hell, I oughtn't to do it - but do you need a loan?"

"Thanks, Tim. We're not hurtin' any."

"Well, take care of yourself. Bye, Jill." He hurried out.

Patricia Paiwonski came in through the rear fly, wearing a robe. "Kids? Tim sloughed your act."

"We were leaving anyhow, Pat."

"I knew he was going to. He makes me so mad I'm tempted to jump the show myself."

"Now, Pat-"

"I mean it. I could take my act anywhere and he knows it. Leave him without a blowoff. He can get other acts ... but a good blowoff that the clowns won't clobber is hard to find."

"Pat, Tim is right, and Jill and I know it. I don't have showmanship."

"Well ... maybe so. But I'm going to miss you. You've been just like my own kids to me. Oh, dear! Look, the show doesn't roll until morning - come back to my living top and set awhile and visit."

Jill said, "Better yet, Patty, come into town with us and have a couple of drinks. How would you like to soak yourself in a big, hot tub, with bath salts?"

"Uh, I'll bring a bottle."

"No," Mike objected, "I know what you drink and we've got it. Come along."

"Well, I'll come - you're at the Imperial, aren't you? - but I can't come with you. I've got to be sure my babies are all right first and tell Honey Bun I'll be gone a bit and fix her hot water bottles. I'll catch a cab. Half an hour, maybe."

They drove into town with Mike at the controls. It was a fairly small town, without automatic traffic control even downtown. Mike drove with careful precision, exactly at zone maximum and sliding the little ground car into holes Jill could not see until they were through them. He did it without effort in the same fashion in which he juggled. Jill knew how it was done, had even learned to do it a bit herself; Mike stretched his time sense until the problem of juggling eggs or speeding through traffic was an easy one with everything in slow motion. Nevertheless she reflected that it was an odd accomplishment for a man who, only months earlier, had been baffled by tying shoelaces.

She did not talk. Mike could talk while on extended time, if necessary, but it was awkward to converse while they were running on different time rates. Instead she thought with mild nostalgia of the life they were leaving, calling it up in her mind and cherishing it, some of it in Martian concepts, more of it in English. She had enjoyed it very much. All her life, until she had met Mike, she had been under the tyranny of the clock, first as a little girl in school, then as a bigger girl in a much harder school, then under the unforgiving pressures of hospital routine.

The carnival had been nothing like that. Aside from the easy and rather pleasant chore of standing around and looking pretty several times a day from midafternoon to the last bally of the night, she never had anything she actually had to do at any set time. Mike did not care whether they ate once a day or six times, and whatever housekeeping she chose to do suited him. They had their own living top and camping equipment; in many towns they had never left the lot from arrival to tear-down. The carnival was a closed little world, an enclave, where the headlines and troubles of the outside world did not reach. She had been happy in it.

To be sure, in every town the lot was crawling with marks - but she had acquired the carney viewpoint; marks did not count - they might as well have been behind glass. Jill quite understood why the girls in the posing show could and did exhibit themselves in very little (and, in some towns, nothing, if the fix was solid) without feeling immodest ... and without being immodest in their conduct outside the posing show. Marks weren't people to them; they were blobs of nothing, hardly seen, whose sole function was to cough up half dollars for the take.

Yes, the carnie had been a happy, utterly safe home, even though their act had flopped. It had not always been that way when first they left the safety of Jubal's home to go out into the world and increase Mike's education. They had been spotted more than once and several times they had had trouble getting away, not only from the press, but from the endless people who seemed to feel that they had a right to demand things of Mike, simply because he had the misfortune to be the Man from Mars.

Presently Mike had thought his features into more mature lines and had made other slight changes in his appearance. That, plus the fact that they frequented places where the Man from Mars would certainly not be expected (by the public) to go, got them privacy. About that time, when Jill was phoning home to give a new mailing address, Jubal had suggested a coverup story - and a couple of days later Jill had read that the Man from Mars had again gone into retreat, this time in a Tibetan monastery.

The retreat had actually been "Hank's Grill" in a "nowhere" town, with Jill as a waitress and Mike as dishwasher. It was no worse than being a nurse and much less demanding - and her feet no longer hurt. Mike had a remarkably quick way of cleaning dishes, although he had to be careful not to use it when the boss was watching. They kept that job a week, then moved on, sometimes working, sometimes not. They visited public libraries almost daily, once Mike found out about them - Jill had discovered that Mike had taken for granted that Jubal's library contained a copy of every book on Earth. When he learned the marvelous truth, they had remained in Akron nearly a month. Jill did quite a lot of shopping that month, as Mike with a book was almost no company at all.

But Baxter's Combined Shows and Riot of Fun for All the Family had been the nicest part of their meandering trip. Jill recalled with an inner giggle the time in - what town? - no matter - when the entire posing show had been pinched. It wasn't fair, even by chumps' standards, since that concession always worked under precise prearrangement: bras or no bras; blue lights or bright lights; whatever the top town clown ordained. Nevertheless the sheriff had hauled them in and the local justice of the peace had seemed disposed not only to fine but to jail the girls as "vagrants."

The lot had closed down and most of the carnies had gone to the hearing, along with innumerable chumps slavering to catch sight of "shameless women" getting their comeuppance. Mike and Jill had managed to crowd against the back wall of the courtroom.

Jill had long since impressed on Mike that he must never do anything that an ordinary human could not do where it might be noticed. But Mike had grokked a cusp and had not discussed it with Jill.

The sheriff was testifying as to what he had seen, the details of this "public lewdness" - and he was enjoying it.

Mike had restrained himself, Jill admitted. In the midst of testimony both sheriff and judge became suddenly and completely without clothes of any sort.

She and Mike slipped quietly away during the excitement, and later she learned that the accused, all of them, had left, too, and nobody seemed disposed to object. Of course no one had connected the miracle with Mike, and he himself had never mentioned it to Jill - nor she to him; it was not necessary. The show had torn down at once and moved on two days early, to a more honest town where the rule was net bra and briefies and no beefs afterwards.

But Jill would treasure forever the expression on the sheriff's face, and his appearance, too, when it was plain to be seen that his sudden sag in front meant that the sheriff had been wearing a tight corset for his pride.

Yes, carnie days had been nice days. She started to speak to Mike in her mind, intending to remind him of how funny that hick sheriff had looked with creases from his girdle on his hairy pot belly. But she stopped. Martian had no concept for "funny" so of course she could not say it. They shared a growing telepathic bond, but in Martian only.

("Yes Jill?") his mind answered hers.

("Later.")

Shortly they approached the Imperial Hotel and she felt his mind slow down as he parked the car. Jill much preferred camping on the carnival grounds ... except for one thing: bathtubs. Showers were all right, but nothing could beat a big tub of hot, hot water, climb into it up to your chin and soak! Sometimes they checked into a hotel for a few days and rented a ground car. Mike did not, by early training, share her fanatic enthusiasm for scrubbing; he was now as fastidiously clean as she was - but only because she had trained him to be; dirt did not annoy him. Moreover, he could keep himself immaculate without wasting time on washing or bathing, just as he never had to see a barber once he knew precisely how Jill wanted his hair to grow. But Mike, too, liked the time spent in hotels for the sake of baptism alone; be enjoyed immersing himself in the water of life as much as ever, irrespective of a nonexistent need to clean and no longer with any superstitious feeling about water.

The Imperial was a very old hotel and had not been much even when new, but the tub in what was proudly called the "Bridal Suite" was satisfactorily large. Jill went straight to it as they came in, started to fill it - and was hardly surprised to find herself suddenly ready for her bath, even to pretty bare feet, except that her purse was still clutched under her arm. Dear Mike! He knew how she liked to shop. How pleased she was with new clothes; he gently forced her to indulge her childish weakness by sending to never-never any outfit which he sensed no longer delighted her. He would have done so daily had she not cautioned him that too many new clothes would make them conspicuous around the carnival.

"Thanks, dear!" she called out. "Let's climb in."

He had either undressed or caused his own clothes to go away - probably the former she decided; Mike found buying clothes for himself without interest. He still could see no possible reason for clothes other than for simple protection against the elements, a weakness he did not share. They got into the tub facing each other; she scooped up a handful of water, touched it to her lips, offered it to him. lt was not necessary to speak, nor was the ritual necessary; it simply pleased Jill to remind them both of something for which no reminder could ever be necessary, through all eternity.

When he raised his head, she said, "The thing I was thinking of while you were driving was how funny that horrid sheriff looked in his skin."

"Did be look funny?"

"Oh, very funny indeed! It was all I could do to keep from laughing out loud. But I did not want us noticed."

"Explain to me why he was funny. I do not see the joke."

"Uh ... dear, I don't think I can explain it. It was not a joke - not like puns and things like that which can be explained."

"I did not grok that he was funny," Mike said seriously. "In both those men - the judge and the lawman - I grokked wrongness. Had I not known that it would displease you, I would have sent them both away."

"Dear Mike." She touched his cheek. "Good Mike. Believe me, dearest, it was better far to do only what you did do. Neither one of them will ever live it down - and I'll bet that there won't be another attempt to arrest anyone for indecent exposure in that township for another fifty years. Let's talk about something else. I have been wanting to say that I am sorry, truly sorry, that your act didn't go over. I did my best in writing the patter for it, dear - but I guess I'm no showman, either."

"It was my lack, Jill. Tim speaks rightly - I don't grok the chumps. Nevertheless it has been good to be with Baxter's Combined Shows ... I have grokked closer to the chumps each day."

"Only we must not call them chumps any longer, nor marks, now that we are no longer with it. Just people - not 'chumps.'"

"I grok that they are chumps."

"Yes, dear. But it isn't polite to say so."

"I will remember."

"Have you decided where we are going now?"

"No. When the time comes, I will know."

"Yes, dear." Jill reflected that Mike always did know. From his first change from docility to dominance he had grown steadily in strength and sureness - all ways. The boy (he had seemed like a boy then) who had found it tiring to hold an ash tray in the air, could now not only hold her in the air (and it did feel like "floating on clouds"; that was why she had written it into the patter that way) while doing several other things and continuing to talk, but also could exert any other strength he needed - he recalled one very rainy lot where one of the trucks had bogged down. Twenty men were crowded around it, trying to get it free - Mike had added his shoulder ... and the truck moved.

She had seen how it had happened; the sunken bind wheel had simply lifted itself out of the mud. But Mike, much more sophisticated now, had not allowed anyone to guess.

She recalled, too, when be had at last grokked that the injunction about "wrongness" being necessary before he could make things go away applied only to living, grokking things - her dress did not have to have "wrongness" for him to toss it away. The injunction was merely a precaution in the training of nestlings; an adult was free to do as he grokked.

She wondered what his next major change would be? But she did not worry about it; Mike was good and wise. All she could teach him were little details of how to live among humans - while learning much more from him, in perfect happiness, greater happiness than she had known since her father died. "Mike, wouldn't it be nice to have Dorcas and Anne and Miriam all here in the tub, too? And Father Jubal and the boys and-oh, our whole family!"

"It would take a bigger tub."

"Who minds a little crowding? But Jubal's pool would do nicely. When are we making another visit home, Mike? Jubal asks me every time I talk to him."

"I grok it will be soon."

"Martian 'soon'? Or Earth 'soon'? Never mind, darling, I know it will be when the waiting is filled. But that reminds me that Aunt Patty will be here soon and I do mean Earth 'soon.' Wash me off?"

She stood up, he stayed where he was. The soap lifted out of the soap dish, traveled all over her, replaced itself, and the soapy layer slathered into bubbles of lather. "Ooohl That's enough. You tickle."

"Rinse?"

"I'll just dunk." Quickly she squatted down, sloshed suds off her, stood up. "Just in time, too."

Someone was knocking at the outer door. "Dearie? Are you decent?"

"Coming, Pat!" Jill shouted and added as she stepped out of the tub, "Dry me, please?"

At once she was dry, leaving not even wet footprints on the bath mat. "Dear? You'll remember to put on some clothes before you come out? Patty's a lady-not like me."

"I will remember."

Chapter 27

JILL STOPPED TO GRAB a negligee from a well-stocked wardrobe, hurried out into the living room and let in Mrs. Paiwonski. "Come in, dear. We were grabbing baths in a hurry; he'll be right out. I'll get you a drink - then you can have your second drink in the tub if you like. Loads of hot water."

"I had a shower after I put Honey Bun to bed, but - yes, I'd love a tub bath. But, Jill baby, I didn't come here to borrow your bath tub; I came because I'm just heartsick that you kids are leaving the show."

"We won't lose track of you." Jill was busy with glasses. The hotel was so old that not even the "Bridal Suite" had its own ice dispenser but the night bellman, indoctrinated and subsidized, had left a carton of ice cubes. "Tim was right and you know he was. Mike and I have got to slick up our act a lot before we can hold up our end."

"Your act is okay. Needs a few laughs in it, maybe, but-Hi, Smitty." As Mike came in, she offered him a gloved hand. Mrs. Paiwonski always wore gloves away from the lot, and a high-necked dress and stockings. Dressed so, she looked like a middle-aged, most respectable widow, who had kept her figure trim in spite of her years - looked so, because she was precisely that.

"I was just telling Jill," she went on, "that you've got a good act, you two."

Mike smiled gently. "Now, Pat, you don't have to kid us. It stinks. We know it."

"No, it doesn't, dearie. Oh, maybe it needs a little something to give it some zing. A few jokes. Or, well, you could even cut down on Jill's costume a little. You've got an awful cute figure, hon."

Jill shook her head. "That wouldn't do it."

"Well, I saw a magician once that used to bring his assistant out dressed for the Gay 'Nineties - the eighteen-nineties, that is - not even her legs showing. Then he would disappear one garment after another. The marks loved it. But don't misunderstand me, dear-nothing unrefined. She finished ... oh, in almost as much as you wear now."

"Patty," Jill said frankly, "I'd do our act stark naked if the clowns wouldn't close the show." As she said it, she realized that she meant it - and wondered how Graduate Nurse Boardman, floor supervisor, had reached the point where she could mean it?

Mike, of course-And she was quite happy about it.

Mrs. Paiwonski shook her head. "You couldn't, honey. The marks would riot. Just a touch more ginger ale, dear. But if you've got a good figure, why not use it? How far do you think I would get as a tattooed lady if I didn't peel off all they'll let me?"

"Speaking of that," Mike said, "you don't look comfortable in all those clothes, Pat. I think the aircooling in this dump has gone sour again - it must be at least eighty." He himself was dressed in a light robe, his concession to the easygoing conventions of carney good manners. Extreme heat, he had learned, affected him slightly, enough so that he sometimes had to adjust consciously his metabolism - extreme cold affected him not at all. But he knew that their friend was used to the real comfort of almost nothing and affected the clothes she now wore to cover her tattoos when out among the marks; Jill had explained it to him. "Why don't you get comfortable? 'Ain't nobody here but just us chickens.'" The latter, he knew, was a joke, an appropriate one for emphasizing that friends were in private. Jubal had tried to explain it to him, but failed. But Mike had carefully noted when and how the idiom could be used.

"Sure, Patty," Jill agreed. "If you're raw under that dress, I can get you something light and comfortable. Or we'll just make Mike close his eyes."

"Uh ... well, I did slip back into one of my costumes."

"Then don't be stiff with friends. I'll get your zippers."

"Le'me get these stockings and shoes." She went on talking while trying to think how she could get the conversation around to religion, where she wanted it. Bless them, these kids were ready to be seekers, she was certain - and she had counted on the whole season to bring them around to the light ... not just one hurried visit before they left. "The point about show business, Smitty, is that first you have to know what the marks want ... and you have to know what it is you're giving them and how to make 'em like it. Now if you were a real magician - oh, I don't mean that you aren't skillful, dear, because you are." She tucked her carefully rolled hose in her shoes, loosened her garter belt and got out of it modestly, let Jill get her dress zippers. "I mean if your magic was real like you had made a pact with the Devil. That'd be one thing. But the marks know that it's clever sleight-of-hand. So you give 'em a lighthearted show to match. But did you ever see a fire eater with a pretty assistant? Heavens, a pretty girl would just clutter his act; the marks are standing around hoping he'll set fire to hisself, or blow up."

She snaked the dress over her head; Jill took it and kissed her. "You look more natural, Aunt Patty. Sit back and enjoy your drink."

"Just a second, dearie." Mrs. Paiwonski prayed mightily for guidance - wished that she were a preacher ... or had even the gift of gab of a talker. Well, her pictures would just have to speak for themselves - and they would; that was why George had put them there. "Now this is what I've got to show the marks ... this and my snakes, but this is more important. Have either one of you ever looked, really looked, at my pictures?"

"No," Jill admitted, "I guess not. We didn't want to stare at you, like a couple of marks."

"Then stare at me now, dears - because that's why George, bless his sweet soul safe in heaven, put them on me. To be stared at ... and studied. Now right up here under my chin is the birth scene of our prophet, the holy Archangel Foster - just an innocent babe and maybe not knowing what Heaven had in store for him. But the angels knew - see 'em there around him? The next scene is his first miracle, when a young sinner in the country school he attended shot down a poor little birdie ? and he picked it up and stroked it and it flew away unharmed. See the school house behind? Now it kind o' jumps a little and I'll have to turn my back. But all of 'em are dated for each holy event in his life." She explained how George had not had a bare canvas to work with when first the great opus was started - since they had both been sinners and young Patricia already rather much tattooed ... how with great effort and inspired genius George had been able to turn "The Attack on Pearl Harbor" into "Armageddon," and "Skyline of New York" into "The Holy City."

"But," she admitted candidly, "even though every single one of them is a sacred picture now, it did kind of force him to skip around to find enough bare skin to record in living flesh a witness to each milestone in the earthly life of our prophet. Here you see him preaching on the steps of the ungodly theological seminary that turned him down - that was the first time he was arrested, the beginning of the Persecution. And on around, right on my spine, you see him smashing idolatrous images ... and next you see him in jail, with the holy light streaming down on it. Then the Faithful Few bust into the jail-"

The Reverend Foster had realized early that, when it came to upholding religious freedom, brass knucks, clubs, and a willingness to tangle with cops was worth far more than passive resistance. His had been a church militant from scratch. But he had been a tactician, too; pitched battles were fought only where the heavy artillery was on the side of the Lord.

"-and they rescue him and tar & feather the idolatrous judge who put him there. Around in front here. Uh, you can't see it very well; my bra covers most of it. A shame."

("Michael, what does she want?")

("Thou knowest. Tell her. ")

"Aunt Patty," Jill said gently, "you want us to look at all your pictures. Don't you?"

"Well ...it's just as Tim says in the bally, George used up all the skin I have in making the story complete."

"If George went to all that work, I'm sure he meant for them to be seen. Take off your costume. I told you that I wouldn't mind working our own act stark naked if they'd let me - and ours is just entertainment. Yours has a purpose ? a holy purpose."

"Well ... all right. If you really want me to." She sang a silent hallelujah and decided that Foster himself was sustaining her - with blessed luck and George's pictures she would yet have these dear kids seeking the light.

"I'll unhook you-"

("Jill-")

("No, Michael?")

("Wait")

To her utter surprise and some fear Mrs. Paiwonski found that her spangled briefies and bra were gone! But Jill was surprised to find that her almost-new negligee followed the little costume into wherever and nowhere. Jill was only mildly surprised when Mike's robe disappeared, too; she chalked it up, correctly but not completely, to his catlike good manners.

Mrs. Paiwonski clutched at her mouth and gasped. Jill at once put her arms around her. "There, there, dear! It's all right, nobody's hurt." She turned her head and said, "Mike, you did it, you'll simply have to tell her."

"Yes, Jill. Pat-"

"Yes, Smitty?'

"You said a while ago that I wasn't a real magician, that my tricks were just sleight-of-hand. You were going to take off your costume anyhow - so I took it off for you."

"But how? And where is it?"

"Same place Jill's wrapper is - and my robe. Gone."

"But don't worry about it, Patty," put in Jill. "We'll replace it. Two more ? and twice as pretty. Mike, you shouldn't have done it."

"I'm sorry, Jill. I grokked it was all right."

"Well ... I suppose it is." Jill decided that Aunt Patty wasn't too upset - and certainly she would never tell; she was carney.

Mrs. Paiwonski was not worried by the loss of two scraps of costume, nor by her own nudity. Nor by the nakedness of the other two. But she was greatly troubled by a theological problem that she felt was out of her depth. "Smitty? That was real magic?"

"I guess you would call it that," he agreed, using the words most exactly.

"I'd rather call it a miracle," she said bluntly.

"You can call it that, too, if you want to. But it wasn't sleight-of-hand."

"I know that. You weren't even near me." She, who daily handled live cobras and who had more than once handled obnoxious drunks with her bare hands (to their sorrow), was not afraid. Patricia Paiwonski was not afraid of the Devil himself; she was sustained by her faith that she was saved and therefore invulnerable to the Devil. But she was uneasy for the safety of her friends. "Smitty ... look me in the eye. Have you made a pact with the Devil?"

"No, Pat, I have not."

She continued to look into his eyes, then said, "You aren't lying-"

"He doesn't know how to lie, Aunt Patty."

"-so it's a miracle. Smitty ... you are a holy man!"

"I don't know, Pat."

"Archangel Foster didn't know that he was a holy man until he reached his teens ... even though he performed many miracles before that time. But you are a holy man; I can feel it." She thought. "I think I felt it when I first met you."

"I don't know, Pat."

"I think he may be," admitted Jill. "But he really doesn't know, himself. Michael ... I think we've told her too much not to tell her more."

"'Michael!'" Patty repeated suddenly. "The Archangel Michael, send down to us in human form."

"Aunt Patty, please! If he is, he doesn't know it-"

"He wouldn't necessarily know it. God performs his wonders in his own way."

"Aunt Patty, will you please wait and let me talk, just for a bit?"

Some minutes later Mrs. Paiwonski had accepted that Mike was indeed the Man from Mars, she had agreed to accept him as a man and to treat him as a man ... while stating explicitly that she still held to her own opinion as to his true nature and why he was on Earth - explaining (somewhat fuzzily, it seemed to Jill) that Foster had been really and truly a man while he was on Earth, but had been also and always had been, an archangel, even though he had not known it himself. If Jill and Michael insisted that they were not saved, she would treat them as they asked to be treated - God moves in mysterious ways.

"I think you could properly call us 'seekers,'" Mike told her.

"Then that's enough, my dears! I'm sure you're saved - but Foster himself was a seeker in his early years. I'll help."

She had participated in another minor miracle. They had been seated in a circle on the rug. Jill lay back flat and suggested it to Mike in her mind. With no patter of any sort, with no sheet nor anything to conceal a nonexistent steel rod, Mike lifted her. Patricia watched it with serene happiness, convinced that she was vouchsafed sight of a miracle. "Pat," Mike then said. "Lie flat."

She did so without argument, as readily as if he had been Foster. Jill turned her head. "Hadn't you better put me down first, Mike?"

"No, I can do it."

Mrs. Paiwonski felt herself gently lifted. She was not frightened by it; she simply felt overpowering religious ecstasy like heat lightning in her loins, making tears come to her eyes, the power of which she had not felt since, as a young woman, Holy Foster himself had touched her. When Mike moved them closer together and Jill put her arms around her, her tears increased, but her cries were the gentle sobs of happiness.

Presently he lowered them gently to the floor and found, as he expected, that he was not tired - he could not recall when last he had been tired.

Jill said to him, "Mike ... we need a glass of water."

("???")

("Yes." her mind answered.)

("And?")

("Of elegant necessity. Why do you think she came here?")

("I knew. I was not sure that you knew ? or would approve. My brother. My self")

("My brother.")

Mike did not get up to fetch water. He sent a glass from the tray of drinks into the bathroom, had the tap fill it, returned it to Jill's hands. Mrs. Paiwonski watched this with almost absentminded interest; she was beyond being astonished. Jill held the glass, said to her, "Aunt Patty, this is like being baptized ... and like getting married. It's ... a Martian thing. It means that you trust us and we trust you ... and we can tell you anything and you can tell us anything ... and that we are always partners, now and forever. It's very serious ... and once done it can never be broken. If you broke it, we would have to die - at once. Saved or not. If we broke it-But we won't. But you don't have to share water with us if you don't want to - we'll still be friends. Now ? if this in any way interferes with your faith, don't do it. We don't belong to your church even though you guessed that we did. We don't. We may never belong. 'Seekers' is the most you can call us now. Mike?"

"We grok," he agreed. "Pat, Jill speaks rightly. I wish we could say it to you in Martian, it would be clearer. But this is everything that getting married is ? and a great deal more. We are free to offer water to you but if there is any reason at all, in your religion or in your heart, not to accept - don't drink it!"

Patricia Paiwonski took a deep breath. She had made such a decision once before - with her husband watching ... and had not funked it. And who was she to refuse a holy man? And his blessed bride? "I want it," she said firmly.

Jill took a sip. "We grow ever closer." She passed the glass to Mike.

He looked at Jill, then at Patricia. "I thank you for water, my brother." He took a sip. "Pat, I give you the water of life. May you always drink deep." He passed the glass to her.

Patricia took it. "Thank you. Thank you, oh my dears! The 'water of life' - oh, I love you both!" She drank thirstily.

Jill took the glass from her, finished it. "Now we grow closer, my brothers."

("Jill?")

("Now!!!")

Michael lifted his new water brother, wafted her in and placed her gently on the bed.

Valentine Michael Smith had grokked, when first he had known it fully, that physical human love - very human and very physical - was not simply a necessary quickening of eggs, nor was it mere ritual through which one grew closer; the act itself was a growing-closer, a very great goodness - and (so far as he knew) unknown even to the Old Ones of his former people. He was still grokking it, trying at every opportunity to grok its fullness. But he had long since broken through any fear that heresy lay in his suspicion that even the Old Ones did not know this ecstasy - he grokked already that these his new people held spiritual depths unique. Happily he tried to sound them, with no inhibitions from his childhood to cause him guilt or reluctance of any sort.

His human teachers had been unusually well qualified to instruct his innocence without bruising it. The result was as unique as he himself.

Jill was very pleased but not really surprised to find that "Aunt Patty" accepted as inevitable and necessary, and with forthright fullness, the fact that sharing water in a very ancient Martian ceremony with Mike led at once to sharing Mike himself in a human rite ancient itself. Jill was somewhat surprised (although still pleased) at Pat's continued calm acceptance when it certainly had been demonstrated to their new water brother that Mike was capable of more miracles than he had disclosed up to then. However, Jill did not then know that Patricia Paiwonski had met a holy man before - Patricia expected more of holy men. Jill herself was simply serenely happy that a cusp had been reached and passed with right action and was ecstatically happy herself to grow closer as the cusp was determined - all of which she thought in Martian and quite differently.

In time they rested and Jill had Mike treat Patty to a bath given by telekinesis, and herself sat on the edge of the tub and squealed and giggled when the older woman did. It was just play, very human and not at all Martian; Mike had done it for Jill on the initial occasion almost lazily rather than raise himself up out of the water - an accident, more or less. Now it had become a custom, one that Jill knew Patty would like. It tickled Jill to see Patty's face when she found herself being scrubbed all over by gentle, invisible hands ... and then, presently dried in a whisk with neither towel nor blast of air.

Patricia blinked. "After that I need a drink. A big one."

"Certainly, darling."

"And I still want to show you kids my pictures... all of them." Patricia followed Jill out into the living room, Mike in train, and stood in the middle of the rug. "But first look at me. Look at me, not at my pictures. What do you see?"

With mild regret Mike stripped her tattoos off in his mind and looked at his new brother without her decorations. He liked her tattoos very much; they were peculiarly her own, they set her apart and made her a self. They seemed to him to give her a slightly Martian flavor, in that she did not have the bland sameness of most humans. He had already memorized them all and had thought pleasantly of having himself tattooed all over, once be grokked what should be pictured. The life of his father, water brother Jubal? He would have to ponder it. He would discuss it with Jill - and Jill might wish to be tattooed, too. What designs would make Jill more beautifully Jill? In the way in which perfume multiplied Jill's odor without changing it?

What he saw when he looked at Pat without her tattoos pleased him but not as much; she looked as a woman necessarily must look to be woman. Mike still did not grok Duke's collection of pictures; the pictures were interesting and had taught Mike that there was more variety in the sizes, shapes, proportions and colors of women than he had known up to then and that there was some variety in the acrobatics involving physical love - but having learned these simple facts he seemed to grok that there was nothing more to be learned from Duke's prized pictures. Mike's early training had made of him a very exact observer, by eye (and other senses), but that same training bad left him unresponsive to the subtle pleasures of voyeurism, it was not that be did not find women (including, most emphatically Patricia Paiwonski) sexually stimulating, but it lay not in seeing them. Of his senses, smell and touch counted much higher - in which he was quasi-human, quasi-Martian; the parallel Martian reflex (as unsubtle as a sneeze) was triggered by those two, but could activate only in season - what must be termed "sex" in a Martian is as romantic as intravenous feeding.

But, having been invited to see her without her pictures. Mike did notice more sharply one thing about Patricia that he already knew: she had her own face, marked in beauty by her life. She had, he saw with gentle wonder, her own face even more than Jill had, and it made him feel toward har even more of an emotion he did not as yet call love but for which be used a Martian concept more discriminating.

She had her own odor, too, and her own voice, as all humans did. Her voice was husky and he liked to hear it even when he did not grok her meaning; her odor was mixed (he knew) with an unscrubbed trace of bitter muskiness from daily contact with snakes. It did not put him off; Pat's snakes were part of Pat as were her tattoos. Mike liked Pat's snakes and could handle the poisonous ones with perfect safety - and not alone by stretching time to anticipate and avoid their strikes. They grokked with him; he savored their innocent merciless thoughts - they reminded him of home. Other than Pat, Mike was the only person who could handle Honey Bun with pleasure to the boa constrictor. Her torpor was usually such that others could, if necessary, handle her - but Mike she accepted as a substitute for Pat.

Mike let the pictures reappear.

Jill looked at her and wondered why Aunt Patty had ever let herself be tattooed in the first place? She would really look rather nice - if she weren't a living comic strip. But she loved Aunt Patty for what she was, not the way she looked - and, of course, it did give her a steady living at least until she got so old and haggard that the marks wouldn't pay to look at her even if all those pictures had been signed by Rembrandt. She hoped that Patty was tucking away plenty in the grouch bag - then she remembered that Aunt Patty was now one of Mike's water brothers (and her own, of course) and Mike's endless fortune gave Patty certain old-age insurance; Jill felt warmed by it.

"Well?" repeated Mrs. Paiwonski. "What do you see? How old am I, Michael?"

"I don't know," he said simply.

"Guess."

"I can't guess, Pat."

"Oh, go ahead. You won't hurt my feelings."

"Patty," Jill put in, "he really does mean that he can't guess. He hasn't had much chance to learn to judge ages - you know how short a time he's been on Earth. And besides that, Mike thinks of things in Martian years and Martian arithmetic. If it's time or figures, I keep track of it for him."

"Well ... you guess, hon. Be truthful."

Jill looked Patty over again, noting her trim figure but also noting her hands and throat and the corners of her eyes - then discounted her guess by five years despite the Martian honesty she owed a water brother. "Mmm, thirtyish, give or take a year."

Mrs. Paiwonski laughed triumphantly. "That's just one bonus from the True Faith, my dears! Jill hon, I'm 'way into my forties. Just how far in we won't say; I've quit counting."

"You certainly don't look it."

"I know I don't. That's what Happiness does for you, dear. After my first kid, I let my figure go to pot. I got quite a can on me - they invented the word 'broad' just to fit me. My belly always looked like four months gone, or worse. My busts hung down-and I've never had 'em lifted. You don't have to believe me; sure, I know a good plastic surgeon doesn't leave a scar . . . but on me it would show, dear; it would chop chunks out of two of my pictures.

"Then I seen the light! I got converted. Nope, not exercise, not diet-I still eat like a pig and you know it. Happiness, dear. Perfect Happiness in the Lord through the help of Blessed Foster."

"It's amazing," said Jill, and meant it. She knew women who had kept their looks quite as well (as she firmly intended to keep hers) but in every case only through great effort. She knew that Aunt Patty was telling the truth about diet and exercise, at least during the time she had known her ... and as a surgical nurse Jill knew exactly what was excised and where in a breast-lifting job; those tattoos had certainly never known a knife.

But Mike was not amazed. He assumed conclusively that Pat had learned how to think her body as she wished it, whether she attributed it to Foster or not. He was still trying to teach this control to Jill, but knew that she would have to perfect her knowledge of Martian before it could be perfect. No hurry, waiting would accomplish it. Pat went on talking:

"I wanted you to see what the Faith has done for me. But that's just outside; the real change is inside. Happiness. I've got to try to tell you about it. The good Lord knows that I'm not ordained and I'm not gifted with tongues ... but I've got to try. And then I'll answer your questions if I can. The first thing that you've got to accept is that all the other so-called churches are traps of the Devil. Our dear Jesus preached the True Faith, so Foster said and I truly believe. But, in the Dark Ages his words were deliberately twisted and added to and changed until Jesus wouldn't recognize 'em. And that is why Foster was sent down to Earth, to proclaim a New Revelation and straighten it out and make it clear again."

Patricia Paiwonski pointed her finger and suddenly looked very impressive, a priestess clothed in holy dignity and mystic symbols. "God wants us to be Happy. He filled the world with things to make us Happy if only we see the light. Would God let grape juice turn into wine if He didn't want us to drink and be joyful? He could just as easily let is stay grape juice ... or turn it straight into vinegar that nobody could get a happy giggle out of. Ain't that true? Of course He don't mean you should get roaring drunk and beat your wife and neglect your kids ... but He gave us good things to use, not abuse ... and not to ignore. But if you feel like a drink or six, among friends who have seen the light, too, and it makes you want to jump up and dance and give thanks to the Lord on high for his goodness - why not? God made alcohol and he made feet - and he made 'em so you could put 'em together and be happy!"

She paused and said, "Fill 'er up again, honey; preaching is thirsty work - and not too strong on the ginger ale this time; that's good rye. And that ain't all. If God didn't want women to be looked at, he would have made 'em ugly - that's reasonable, isn't it? God isn't a cheat; He set up the game Himself - He wouldn't rig it so that the marks can't win, like a flat joint wheel in a town with the fix on. He wouldn't send anybody to Hell for losing in a crooked game.

"All right! God wants us to be Happy and he told us how: 'Love one another!' Love a snake if the poor thing needs love. Love thy neighbor if he's seen the light and has love in his heart ... and the back of your hand only to sinners and Satan's corruptors who want to lead you away from the appointed path and down into the pit. And by 'love' he didn't mean namby-pamby old-maid-aunt love that's scared to look up from a hymn book for fear of seeing a temptation of the flesh. If God hated flesh, why did he make so much of it? God is no sissy. He made the Grand Canyon and comets coursing through the sky and cyclones and stallions and earthquakes - can a God who can do all that turn around and practically wet his pants just because some little sheila leans over a mite and a man catches sight of a tit? You know better, hon - and so do I! When God told us to love, He wasn't holding out a card on us; He meant it. Love little babies that always need changing and love strong, smelly men so that there will be more little babies to love - and in between go on loving because it's so good to love!

"Of course that don't mean to peddle it any more than a bottle of rye whiskey means I gotta get fighting drunk and clobber a cop. You can't sell love and you can't buy Happiness, no price tags on either one and if you think there is, the way to Hell lies open to you. But if you give with an open heart and receive what God has an unlimited supply of, the Devil can't touch you. Money?" She looked at Jill. "Hon, would you do that water-sharing thing with somebody, say for a million dollars? Make it ten million, tax free."

"Of course not." ("Michael, do you grok this?")

("Almost in fullness, Jill. Waiting is. ")

"You see, dearie? I knew what it meant. I knew love was in that water. You're seekers, very near the light. But since you two, from the love that is in you, did 'share water and grow closer,' as Michael says, I can tell you things I couldn't ordinarily tell a seeker-"

The Reverend Foster, self-ordained - or directly ordained by God, depending on authority cited - had an intuitive instinct for the pulse of his culture and his times at least as strong as that of a skilled carney sizing up a mark. The country and culture commonly known as "America" had had a badly split personality all through its history. Its overt laws were almost always puritanical for a people whose covert behavior tended to be Rabelaisian; its major religions were all Apollonian in varying degree - its religious revivals were often hysterical in fashion almost Dionysian. In the twentieth century (Terran Christian Era) nowhere on Earth was sex so vigorously suppressed as in America - and nowhere else was there such a deep interest in it.

The Reverend Foster had in common with almost every great religious leader of that planet two traits: he had an extremely magnetic personality ("hypnotist" was a word widely used by his detractors, along with others less mild) and, sexually, he did not fall anywhere near the human norm. Great religious leaders on Earth were always either celibate, or the antithesis. (Great leaders, the innovators - not necessarily the major administrators and consolidators.) Foster was not celibate.

Nor were any of his wives and high priestesses - the clincher for complete conversion and rebirth under the New Revelation usually included a ritual which Valentine Michael Smith at a later time was to grok as especially suited for growing-closer.

This, of course, was nothing new; in Terran history sects, cults, and major religions too numerous to list had used essentially the same technique - but not on a major scale in America before Foster's times. Foster was run out of town more than once before he "perfected" a method and organization that permitted him to expand his capric cult. In organization he borrowed as liberally from freemasonry, from Catholicism, from the Communist Party, and from Madison Avenue as he had borrowed from any and all earlier scriptures in composing his New Revelation ... and he sugar-coated it all as a return to primitive Christianity to suit his customers. He set up an outer church which anybody could attend - and a person could remain a "seeker" with many benefits of the church for years. Then there was a middle church, which to all outward appearance was "The Church of the New Revelation," the happy saved, who paid their tithes, enjoyed all economic benefits of the church's ever-widening business tie-ins, and whooped it up in the endless carnival & revival atmosphere of Happiness, Happiness, Happiness! Their sins were forgiven - and henceforth very little was sinful as long as they supported their church, dealt honestly with their fellow Fosterites, condemned sinners, and stayed Happy. The New Revelation does not specifically encourage adultery; it simply gets rather mystical in discussing sexual conduct.

The saved of the middle church supplied the ranks of the shock troops when direct action was needed. Foster borrowed a trick from the early-twentieth-century Wobblies; if a community tried to suppress a budding Fosterite movement, Fosterites from elsewhere converged on that town until there were neither jails nor cops enough to cope with them - and the cops usually had had their ribs kicked in and the jails were smashed.

If some prosecutor were brave enough to push an indictment thereafter, it was almost impossible to make it stick. Foster (after learning his lesson under fire) saw to it that such prosecutions were indeed persecution under the letter of the law; not one conviction of a Fosterite qua Fosterite ever was upheld by the national Supreme Court - nor, later, by the High Court.

But, in addition to the overt church, there was the Inner Church, never named as such - a hard core of the utterly dedicated who made up the priesthood, all the church lay leaders, all keepers of keys and records and makers of policy. They were the "reborn," beyond sin, certain of their place in heaven, and sole participants of the inner mysteries - and the only candidates for direct admission to Heaven.

Foster selected these with great care, doing so personally until the operation got too big. He looked for men as much like himself as possible and for women like his priestess-wives - dynamic, utterly convinced (as he was himself convinced), stubborn, and free (or able to be freed, once their guilt and insecurity was purged) of jealousy in its simplest, most human meaning - and all of them potential satyrs and nymphs, as the secret inner church was that utterly Dionysian cult that America had never had and for which there was an enormous potential market.

But he was most cautious - if candidates were married, it had to be both spouses. An unmarried candidate had to be sexually attractive as well as sexually aggressive - and he impressed on his priests that the males must always equal or exceed in number the females. Nowhere is it admitted that Foster had studied the histories of earlier, somewhat parallel cults in America but he either knew (or sensed) that most of such had foundered because the possessive concupiscence of their priests led to male jealousy and violence. Foster never made this error; not once did he keep a woman entirely to himself, not even the women he married legally.

Nor did he try too eagerly to expand his core group; the middle church, the one known to the public, offered plenty to slake the milder needs of the great masses of guilt-ridden and unhappy. If a local revival produced even two couples who were capable of

"Heavenly Marriage" Foster was content - if it produced none, he let the other seeds grow and sent in a salted priest and priestess to nurture them.

But, so far as possible, he always tested candidate couples himself, in company with some devoted priestess. Since such a couple was already "saved" insofar as the middle church was concerned, he ran little risk - none, really, with the woman candidate and he always sized up the man himself before letting his priestess go ahead.

At the time she was saved, Patricia Paiwonski was still young, married, and "very happy, very happy." She had her first child, she looked up to and admired her much older husband. George Paiwonski was a generous, very affectionate man. He did have one weakness, which often left him too drunk to show his affection after a long day ... but his tattooing needle was still steady and his eye sharp. Patty counted herself a faithful wife and, on the whole, a lucky one - true, George occasionally got affectionate with a female client ... quite affectionate if it was early in the day ? and, of course, some tattooing required privacy, especially with ladies. Patty was tolerant ... besides, she sometimes herself made a date with a male client, especially after George got to hitting the bottle more and more.

Nevertheless there was a lack in her life, one which was not filled even when an especially grateful client made her the odd gift of a bull snake - shipping out on a freighter, he said, and couldn't keep it any longer. She had always liked pets and had none of the vulgar phobia about snakes; she made a home for it in their show window facing the street, and George made a beautiful four-color picture to back it up: "Don't Tread on Me!" His new design turned out to be very popular.

Presently she had more snakes and they were quite a comfort to her. But she was the daughter of an Ulster Protestant and a girl from Cork; the armed truce between her parents had left her with no religion.

She was already a "seeker" when Foster preached in San Pedro; she had managed to get George to go a few Sundays but he had not yet seen the light.

Foster brought them the light, they made their confessions the same day. When Foster returned six months later for a quick check on how his branch was doing, the Paiwonskis were so dedicated that he gave them personal attention.

"I never had a minute's trouble with George from the day he saw the holy light," she told Mike and Jill. "Of course, he still drank ... but he drank in church and never too much. When our holy leader returned, George had already started his Great Project. Naturally we wanted to show it to Foster, if he could find time-" Mrs. Paiwonski hesitated. "Kids, I really ought not to be telling you any of this."

"Then don't," sill said emphatically "Patty darling, neither of us want you ever to do or say anything you don't feel easy about. 'Sharing water' has to be easy and natural ... and waiting until it comes easy for you is easy for us."

"Uh ... but I do want to share it. Look, darlings, I trust you both utterly. But I just want you to remember that this is Church things I'm telling you, so you mustn't ever tell anyone ... just as I wouldn't tell anything about you."

Mike nodded. "Here on Earth we sometimes call it 'water brother' business. On Mars there's no problem ... but here I grok that there sometimes is. 'Water brother' business you don't repeat."

"I ... I 'Grok.' That's a funny word, but I'm learning it, All right, darlings, this is 'water brother' business. Did you know that all Fosterites are tattooed? Real Church members I mean, the ones who are eternally saved forever and ever and a day - like me? Oh, I don't mean tattooed all over, the way I am, but - look, see that? Right over my heart ... see? That's Foster's holy kiss. George worked it into the design so that it looks like part of the picture it's in ... so that nobody could guess unless I told 'em. But it's his kiss - and Foster put it there hisself!" She looked ecstatically proud.

They both examined it. "It is a kiss mark," Jill said wonderingly. "Just like somebody had kissed you there wearing lipstick. But, until you showed us, I thought it was part of that sunset."

"Yes, indeedy, that's why George did it. Because you don't go showing Foster's kiss to anyone who doesn't wear Foster's kiss - and I never have, up to now. But," she insisted, "I'm sure you're going to wear one, both of you, someday - and when you do, I want to be the one to tattoo 'em on."

Jill said, "I don't quite understand, Patty. I can see that it's wonderful for you to have been kissed by Foster - but how can he ever kiss us? After all, he?s up in Heaven."

"Yes, dearie, he is. But let me explain. Any ordained priest or priestess can give you Foster's kiss. It means God's in your heart. God is part of you ... forever."

Mike was suddenly intent. "Thou art God!"

"Huh, Michael? Well, that is a strange way to say it - I've never heard a priest put it quite that way. But that does sort of express it ... God is in you and of you and with you, and the Devil can't ever get at you."

"Yes," agreed Mike. "You grok God." He thought happily that this was nearer to putting the concept across than he had ever managed before except that Jill was learning it, in Martian. Which was inevitable.

"That's the idea, Michael. God ... groks you - and you are married in Holy Love and eternal Happiness to His Church. The priest, or maybe priestess - it can be either - kisses you and then the kiss mark is tattooed on to show that it's forever. Of course it doesn't have to be this big - mine is just exactly the size and shape of Foster's blessed lips - and the kiss can be placed anywhere to shield from sinful eyes. Lots of men have a patch of skull shaved and then wear a hat or a bandage until the hair grows out. Or any spot where it's blessed certain it won't be seen unless you want it to be. You mustn't sit or stand on it - but anywhere else is okay. Then you show it when you go into a closed Happiness gathering of the eternally saved."

"I've heard of Happiness meetings," Jill commented, "but I've never known quite what they are."

"Well," Mrs. Paiwonski said judicially, "there are Happiness meetings and Happiness meetings. The ones for ordinary members, who are saved but might backslide, are an awful lot of fun - grand parties with only the amount of praying that comes natural and happily, and plenty of whoop-it-up that makes a good party. Maybe, even, a little real lovin' - but that's frowned on there and you'd better be mighty careful who and how, because you mustn't be a seed of dissension among the brethren. The Church is way strict about keeping things in their proper place.

"But a Happiness meeting for the eternally saved - well, you don't have to be careful because there won't be anybody there who can sin - all past and done with, If you want to drink and pass out ... okay, it's God's will or you wouldn't want to. You want to kneel down and pray, or lift up your voice in song, or tear off your clothes and dance; it's God's will. Although," she added, "you might not have any clothes on at all, because there can't possibly be anybody there who would see anything wrong in it."

"It sounds like quite a party," said Jill.

"Oh, it is, it is-always! And you're filled with heavenly bliss the whole time. And if you wake up in the morning on a couch with one of the eternally saved brethren, you know he's there because God willed it to make you all blessedly Happy. And you are. They've all got Foster's kiss on - they're yours." She frowned slightly. "It feels a little like 'sharing water.' You understand me?"

"I grok," agreed Mike.

("Mike?!!?")

("Wait, Jill. Wait for fullness.")

"But don't think," Patricia said earnestly, "that a person can get into an Inner Temple Happiness meeting just with a little tattoo mark - after all, it's too easy to fake. A visiting brother or sister-Well, take me. As soon as I know where the carnie is going, I write to the local churches and send 'em my finger prints so they can check 'em against the master file of the eternally saved at Archangel Foster Tabernacle - unless they already know me. I give 'em my address care of Billboard. Then when I go to church - and I always go to church Sundays and I would never miss a Happiness meeting even if it means Tim has to slough the blowoff some nights - I go first time and get positively identified. Most places they're mighty glad to see me; I'm an added attraction, with my unique and unsurpassed sacred pictures - I often spend most of the evening just letting people examine me ... and every minute of it bliss. Sometimes the priest wants me to bring Honey Bun and I do Eve and the serpent - that takes body make-up, of course, or skin-colored tights if there isn't time. Some local brother plays Adam and we get scourged out of the Garden of Eden, and the local priest explains the real meaning, not all the twisted lies you hear - and we end by regaining our blessed innocence and happiness, and that's certain to get the party really rolling. Joy!"

She added, "But everybody is always interested in my Foster's kiss, Because, since he went back to Heaven almost twenty years ago now and the Church has increased and flourished, not too many of us have a Foster's kiss that wasn't laid on by proxy - I always have the Tabernacle testify to that, too. And I tell them about it. Uh-"

Mrs. Paiwonski hesitated, then told them about it, in explicit detail - and Jill wondered where her admittedly limited ability to blush had gone?

Then she grokked that Mike and Patty were two of a kind - God's innocents, unable to be anything else, no matter what they did. She wished, for Patty's sake, that this preposterous mishmash were really true, that Foster had really been a holy prophet who had saved her for eternal bliss.

But Foster! God's Wounds, what a travesty! Then suddenly, through her greatly improved recall, Jill was standing back in a room with a wall of glass and looking into Foster's dead eyes. But, in her mind, he seemed alive and she felt a shiver in her loins and wondered what she would have done if Foster himself had offered her his holy kiss - and his holy self?

She shut it out of her mind, but not before Mike had caught much of it. She felt him smile, with knowing innocence.

She stood up. "Pattycake darling, what time do you have to be back at the lot?"

"Oh dear! I should be back this blessed minutel"

"Why? The show doesn't roll until nine-thirty."

"Well ... Honey Bun misses me ... and she's jealous if I stay out late."

"Can't you tell her that it's a Happiness meeting night?"

"Uh..." The older woman gathered Jill in her arms. "It is! It certainly is!"

"Good. Then I'm going to get a certain amount of sleep - Jill is bushed, believe me. What time do you have to be up, then?"

"Uh, if I'm back on the lot by eight, I can get Sam to tear down my living top and have time to make sure that my babies are loaded safely."

"Breakfast?"

"I don't eat breakfast right away, I'll get it on the train. Just coffee when I wake up, usually."

"We can make that right here in the room. I'll see that you're up. Now you dears stay up and talk religion as long as you like; I won't let you oversleep - if you sleep. Mike doesn't sleep."

"Not at all?"

"Never. He sort of curls up and thinks a while, if he's got something to think about - but he doesn't sleep."

Mrs. Paiwonski nodded solemnly. "Another sign. I know it-and, Michael, some day you will know. Your call will come."

"Maybe," agreed Jill. "Mike, I'm falling asleep. Pop me into bed. Please?" She was lifted, wafted into the bedroom, the covers rolled back by invisible hands - she was asleep before he covered her.

Jill woke up, as she had planned, exactly at seven. Mike had a clock in his head, too, but his was quite erratic so far as Earth calendars and times were concerned; it vibrated to another need. She slipped out of bed, put her head into the other room. Lights were out and the shades were tight; it was quite dark. But they were not asleep. Jill heard Mike say with soft certainty:

"Thou art God."

"'Thou art God'-" Patricia whispered back in a voice as heavy as if drugged.

"Yes. Jill is God."

"Jill ... is God. Yes, Michael."

"And thou art God."

"Thou-are God. Now, Michael, now!"

Jill went very softly back in and quietly brushed her teeth. Presently she let Mike know in her mind that she was awake and found, as she expected, that he knew it. When she came back into the living room, shades were up and morning sun was streaming in. "Good morning, darlings!" She kissed them both.

"Thou art God," Patty said simply.

"Yes, Patty. And thou art God. God is in all of us." She looked at Patty in the harsh, bright morning light and noted that her new brother did not look tired. She looked as if she had had a full night of sleep and some extra ... and looked younger and sweeter than ever. Well, she knew that effect - if Mike wanted to stay up, instead of reading or thinking all night, Jill never found it any trouble ... and she suspected that her own sudden sleepiness the night before had been Mike's idea, too - and heard Mike agree in his mind that it was.

"Now coffee for both you darlings - and me, too. And I just happen to have stashed away a redipak of orange juice, too."

They breakfasted lightly, filled out with happiness. Jill saw Patty looking thoughtful. "What is it, dear?"

"Uh, I hate to mention this - but what are you kids going to eat on? Happens that Aunt Patty has a pretty well stuffed grouch bag and I thought-"

Jill laughed. "Oh, darling, I'm sorry; I didn't mean to laugh. But the Man from Mars is rich! Surely you know that? Or don't you ever read the news?"

Mrs. Paiwonski looked baffled. "Well, I guess I knew - that way. But you can't trust anything you hear over the news."

Jill sighed. "Patty, you're an utter darling. And believe me, now that we're water brothers, we wouldn't hesitate an instant to impose on you- 'sharing the nest' isn't just poetry. But it happens to be the other way around. If you ever need money - it doesn't matter how much; we can't use it up - just say so. Any amount. Any time. Write to me - or better yet, call me - because Mike doesn't have the foggiest idea about money. Why, dear, I've got a couple of hundred thousand dollars in a checking account in my name right this minute. Want some of it?"

Mrs. Paiwonski looked startled, something she had not looked since Mike had caused her costume to go away. "Bless me! No, I don't need money."

Jill shrugged. "If you ever do, just holler. We can't possibly spend it all and the government won't let Mike give it away. At least, not much of it. If you want a yacht - Mike would enjoy giving you a yacht."

"I certainly would, Pat. I've never seen a yacht."

Mrs. Paiwonski shook her head. "Don't take me up on a tall mountain, dearie - I've never wanted much ... and all I want from you two is your love-"

"You have that," Jill told her.

"I don't grok 'love'," Mike said seriously. "But Jill always speaks rightly. If we've got it, it's yours."

"-and to know that you're both saved. But I'm no longer worried about that. Mike has told me about waiting, and why waiting is. You understand me, Jill?"

"I grok. I'm no longer impatient about anything."

"But I do have something for you two." The tattooed lady got up and crossed to where she had left her purse, took a book out of it. She came back, stood close to them. "My dear ones ... this is the very copy of the New Revelation that Blessed Foster gave me ... the night he placed his kiss on me. I want you to have it."

Jill's eyes suddenly filled with tears and she felt herself choking. "But, Aunt Patty - Patty our brother! We can't take this one. Not this one. We'll buy one."

"No. It's ... it's 'water' I'm sharing with you. For growing-closer."

"Oh-" Jill jumped up. "We'll take it. But it's ours now - all of us." She kissed her.

Presently Mike tapped her on the shoulder. "Greedy little brother. My turn."

"I'll always be greedy, that way."

The Man from Mars kissed his new brother first on her mouth, then paused and gently kissed the spot where Foster had kissed her. Then he pondered, briefly by Earth time, picked a corresponding spot on the other side where he saw that George's design could be matched well enough for his purpose - kissed her there while he thought by stretched-out time and in great detail what he wanted to accomplish. It was necessary to grok the capillaries-To the other two, subject and spectator, he simply gently and briefly pressed his lips to the garishly decorated skin. But Jill caught a hint of the effort he had exerted and looked. "Patty! See!"

Mrs. Paiwonski looked down at herself. Marked on her skin, paired stigmata in blood red, were his lips. She started to faint - then showed the depth of her own staunch faith. "Yes. Yes! Michael-"

Most shortly thereafter the tattooed lady had disappeared, replaced by a rather mousy housewife in high neck, long sleeves and gloves. "I won't cry," she said soberly, "and it's not good-by; there are no goodbys in eternity. But I will be waiting." She kissed them both, briefly, left without looking back.

Chapter 28

"BLASPHEMY!"

Foster looked up. "Something bite you, Junior?" This temporary annex had been run up in a hurry and things did get in - swarms of almost invisible imps usually - harmless, of course, but a bite from one left an itch on the ego.

"Uh ... you'd have to see it to believe it - here, I'll run the omniscio back a touch."

"You'd be surprised at what I can believe, Junior." Nevertheless Digby's supervisor shifted a part of his attention. Three temporals - humans, he saw they were; a man and two women - speculating about the eternal. Nothing odd about that. "Yes?"

"You heard what she said! The 'Archangel Michael' indeed!"

"What about it?"

"'What about it?' Oh, for God's sake!"

"Very possibly."

Digby was so indignant that his halo quivered. "Foster, you must not have taken a good look. She meant that overage juvenile delinquent that sent me to the showers. Scan it again."

Foster let the gain increase, noted that the angelin-training had spoken rightly - and noticed something else and smiled his angelic smile. "How do you know he isn't, Junior?"

"Huh?"

"I haven't seen Mike around the Club lately and I recall that his name has been scratched on the Millennial Solipsist Tournament - that's a Sign that he's likely away on detached duty, as Mike is one of the most eager Solipsism players in this sector."

"But the notion's obscene!"

"You'd be surprised how many of the Boss's best ideas have been called 'obscene' in some quarters - or, rather, you should not be surprised, in view of your field work. But 'obscene' is a concept you don't need; it has no theological meaning. 'To the pure all things are pure.'"

"But-"

"I'm still Witnessing, Junior. You listen. In addition to the fact that our brother Michael seems to be away at this micro-instant - and I don't keep track of him; we're not on the same qatch list - that tattooed lady who made that oracular pronouncement is not likely to be mistaken; she's a very holy temporal herself."

"Who says?"

"I say. I know." Foster smiled again with angelic sweetness. Dear little Patricia! Getting a little long in the tooth now but still Earthily desirable - and shining with an inner light that made her look like a stained glass window. He noted without temporal pride that George had finished his great dedication since he had last looked at Patricia - and that picture of his being called up to Heaven wasn't bad, not bad at all, in the Higher sense. He must remember to look up George and compliment him on it, and tell him he had seen Patricia - hmm, where was George? A creative artist in the universe design section working right under the Architect, as he recalled - no matter, the master file would dig him out in a split millennium.

What a delicious little butterball Patricia had been and such holy frenzy! If she had had just a touch more assertiveness and a touch less humility he could have made her a priestess. But such was Patricia's need to accept God according to her own nature that she could have qualified only among the Lingayats ... where she wasn't needed. Foster considered scanning back and seeing her as she had been, decided against it with angelic restraint; there was work to be done.

"Forget the omniscio, Junior. I want a Word with you." Digby did so and waited. Foster twanged his halo, an annoying habit he had when he was meditating. "Junior, you aren't shaping up too angelically."

"I'm sorry."

"Sorrow is not for eternity. But the truth is you've been preoccupied with that young fellow who may or may not be our brother Michael. Now wait-In the first place it is not for you to judge the instrument used to call you from the pasture. In the second place it is not he who vexes you - you hardly knew him - what's bothering you is that little brunette secretary you had. She had earned my kiss quite some temporal period before you were called. Hadn't she?"

"I was still testing her."

"Then no doubt you have been angelically pleased to note that Supreme Bishop Short, after giving her a most thorough examination himself - oh, very thorough; I told you he would measure up - has passed her and she now enjoys the wider Happiness she deserves. Mmmm, a shepherd should take joy in his work ... but when he's promoted, he should take joy in that, too. Now it just happens I know there is a spot open for a Guardian-in-Training in a new sector being opened up - a job under your nominal rank, I concede, but good angelic experience. This planet - well, you can think of it as a planet; you'll see - is occupied by a race of tripolaxity instead of bipolarity and I have it on High Authority that Don Juan himself could not manage to take Earthly interest in any of their three polarities ... that's not an opinion; he was borrowed as a test. He screamed, and prayed to be returned to the solitary hell he has created for himself."

"Going to send me out to Flatbush, huh? So I won't interfere!"

"Tut, tut! You can't interfere - the one impossibility that permits all else to be possible; I tried to tell you that when you arrived. But don't let it fret you; you are eternally permitted to try. Your orders will include a loop so that you will check back at here-now without any loss of temporality. Now fly away and get cracking; I have work to do." Foster turned back to where he had been interrupted. Oh, yes, a poor soul temporally designated as "Alice Douglas" - to be a goad was a hard assignment at best and she had met it unflaggingly. But her job was complete and now she would need rest and rehabilitation from the inescapable battle fatigue ... she'd be kicking and screaming and foaming ectoplasm at all orifices.

Oh, she would need a thorough exorcism after a job that rough! But they were all rough; they couldn't be anything else. And "Alice Douglas" was an utterly reliable field operative; she could take any lefthand assignment as long as it was essentially virginal - burn her at the stake or put her in a nunnery; she always delivered.

Not that he cared much for virgins, other than with professional respect for any job well done. Foster sneaked a quick last look at Mrs. Paiwonski. There was a fellow worker he could appreciate. Darling little Patricia! What a blessed, lusty benison-

Chapter 29

AS THE DOOR OF THEIR SUITE closed itself behind Patricia Paiwonski, Jill said, "What now, Mike?"

"We're leaving. Jill, you've read some abnormal psychology."

"Yes, of course. In training. Not as much as you have, I know."

"Do you know the symbolism of tattooing? And snakes?"

"Of course. I knew that about Patty as soon as I met her. I had been hoping that you would find a way."

"I couldn't, until we were water brothers. Sex is necessary, sex is a helpful goodness - but only if it is sharing and growing closer. I grok that if I did it without growing closer - well, I'm not sure."

"I grok that you would learn that you couldn't, Mike. That is one of the reasons - one of the many reasons - I love you."

He looked worried. "I still don't grok 'love.' Jill, I don't grok 'people.' Not even you. But I didn't want to send Pat away."

"Stop her. Keep her with us."

("Waiting is, Jill. ")

("I know.")

He added aloud, "Besides, I doubt if I could give her all she needs. She wants to give herself all the time, to everybody. Even her Happiness meetings and her snakes and the marks aren't enough for Pat. She wants to offer herself on an altar to everybody in the world, always-and make them happy. This New Revelation ... I grok that it is a lot of other things to other people. But that is what it is to Pat."

"Yes, Mike. Dear Mike."

"Time to leave. Pick the dress you want to wear and get your purse. I'll dispose of the rest of the trash."

Jill thought somewhat sadly that she would like, sometimes, to take along just one or two things. But Mike always moved on with just the clothes on his back - and seemed to grok that she preferred it that way, too. "I'll wear that pretty blue one."

It floated out to her, poised itself over her, wriggled down onto her as she held up her hands; the zipper closed. Shoes to suit it walked toward her, waited while she stepped into them. "I'm ready, Mike."

Mike had caught the wistful flavor of her thought, but not the concept; it was too alien to Martian ideas. "Jill? Do you want to stop and get married?"

She thought about it. "We couldn't, today, Mike. It's Sunday. We couldn't get a license."

"Tomorrow, then. I will remember. I grok that you would like it."

She thought about it. "No, Mike."

"Why not, Jill?"

"Two reasons. One, we couldn't be any closer through it, because we already share water. That's logic, both in English and in Martian. Yes?"

"Yes."

"And two, a reason valid just in English. I wouldn't have Dorcas and Anne and Miriam - and Patty - think that I was trying to crowd them out and one of them might think so."

"No, Jill, none of them would think so."

"Well, I won't chance it, because I don't need it. Because you married me in a hospital room ages and ages ago. Just because you were the way you are. Before I even guessed it." She hesitated. "But there is something you might do for me."

"What, Jill?"

"Well, you might call me pet names occasionally! The way I do you."

"Yes, Jill. What pet names?"

"Oh!" She kissed him quickly. "Mike, you're the sweetest, most lovable man I've ever met - and the most infuriating creature on two planets! Don't bother with pet names. Just call me 'little brother' occasionally ... it makes me go all quivery inside."

"Yes, Little Brother."

"Oh, my! Now get decent fast and let's get out of here - before I take you back to bed. Come on. Meet me at the desk; I'll be paying the bill." She left very suddenly.

They went to the town's station flat and caught the first Greyhound going anywhere. A week or two later they stopped at home, shared water for a couple of days, left again without saying good-by - or, rather, Mike did not; saying good-by was one human custom Mike stubbornly resisted and never used with his own. He used it formally with strangers under circumstances in which Jill required him to.

Shortly they were in Las Vegas, stopping in an unfashionable hotel near but not on the Strip. Mike tried all the games in all the casinos while Jill filled in the time as a show girl - gambling bored her. Since she couldn't sing or dance and had no act, standing or parading slowly in a tall improbable hat, a smile, and a scrap of tinsel was the job best suited to her in the Babylon of the West. She preferred to work if Mike was busy and, somehow, Mike could always get her the job she picked out. Since the casinos never closed, Mike was busy almost all their time in Las Vegas.

Mike was careful not to win too much in any one casino, keeping to limits Jill set for him. After he had milked each one for a few thousand he carefully put it all back, never letting himself be the big-money player at any game, whether winning or losing. Then he took a job as a croupier, studying people, trying to grok why they gambled.

He grokked unclearly a drive in many of the gamblers that seemed to be intensely sexual in nature - but he seemed to grok wrongness in this. He kept the job quite a while, letting always the little ball roll without interference.

Jill was amused to discover that the customers in the palatial theater restaurant where she worked were just marks ... marks with more money but still marks. She discovered something about herself, too; she enjoyed displaying herself, as long as she was safe from hands that she did not want to grab her. With her steadily increasing Martian honesty she examined this newly uncovered facet in herself. In the past, while she had known that she enjoyed being admired, she had sincerely believed that she wanted it only from a select few and usually only from one - she had been irked at the discovery, now long past, that the sight of her physical being really didn't mean anything to Mike even though he had been and remained as aggressively and tenderly devoted to her physically as a woman could dream of - if he wasn't preoccupied.

And he was even generous about that, she reminded herself. If she wished, he would always let her call him out of his deepest withdrawal trances, shift gears without complaint and be smiling and eager and loving.

Nevertheless, there it was - one of his strangenesses, like his inability to laugh. Jill decided, after her initiation as a show girl, that she enjoyed being visually admired because that was the one thing Mike did not give her.

But her own perfecting self-honesty and steadily growing empathy did not allow that theory to stand. The male half of the audience always had that to-be-expected high percentage who were too old, too fat, too bald, and in general too far gone along the sad road of entropy to be likely to be attractive to a female of Jill's youth, beauty, and fastidiousness - she had always been scornful of "lecherous old wolves" - although not of old men per se, she reminded herself in her own defense; Jubal could look at her, even use crude language in deliberate indecencies, and not give her the slightest feeling that he was anxious to get her alone and grope her. She was so serenely sure of Jubal's love for her and its truly spiritual nature that she told herself that she could easily share a bed with him, go right to sleep, and be sure that be would also, with only the goodnight peck she always gave him.

But now she found that these unattractive males did not set her teeth on edge. When she felt their admiring stares or even their outright lust - and she found that she did feel it, could even identify the source - she did not resent it; it warmed her and made her feel smugly pleased.

"Exhibitionism" had been to her simply a word used in abnormal psychology - a neurotic weakness she had held in contempt. Now, in digging out her own and looking at it, she decided that either this form of narcissism was normal, or she was abnormal and had not known it. But she didn't feel abnormal; she felt healthy and happy - healthier than she had ever been. She had been always of better than average health - nurses need to be - but she hadn't had a sniffle nor even an upset stomach in she couldn't remember when ... why, she thought wonderingly, not even cramps.

Okay, she was healthy - and if a healthy woman liked to be looked at - and not as a side of beef! - then it follows as the night from day that healthy men should like to look at them, else there was just no darn sense to it! At which point she finally understood, intellectually, Duke and his pictures ... and begged his pardon in her mind.

She discussed it with Mike, tried to explain her changed viewpoint - not easy, since Mike could not understand why Jill had ever minded being looked at, at any time, by anyone. Not wishing to be touched he understood; Mike avoided shaking hands if he could do so without offense, he wanted to touch and be touched only by water brothers (Jill wasn't sure just how far this included male water brothers in Mike's mind; she had explained homosexuality to him, after he had read about it and failed to grok it - and had given him practical rules for avoiding even the appearance thereof and how to keep such passes from being made at him, since she assumed correctly that Mike, pretty as he was, would attract such passes. He had followed her advice and had set about making his face more masculine, instead of the androgynous beauty he had first had. Nevertheless Jill was not sure that Mike would refuse such an invitation from, say, Duke - but fortunately Mike's male water brothers were all decidedly masculine men, just as his others were very female women. Jill hoped that it would stay that way; she suspected that Mike would grok a "wrongness" in the poor in-betweeners anyhow - they would never be offered water.)

Nor could Mike understand why it now pleased her to be stared at. The only time when their two attitudes had been even roughly similar had been as they left the carnival, when Jill had discovered that she had become indifferent to stares - willing to do their act "stark naked," as she had told Patty, if it would help.

Jill saw that her present self-knowledge had been nascent at that point; she had never been truly indifferent to masculine stares. Under the unique necessities of adjusting to life with the Man from Mars she had been forced to shuck off part of her artificial, training-imposed persona, that degree of ladylike prissiness a nurse can retain despite the rigors of an unusually no-nonsense profession. But Jill hadn't known that she had any prissiness to lose until she lost it.

Of course, Jill was even more of a "lady" than ever - but she preferred to think of herself as a "gent." But she was no longer able to conceal from her conscious mind (nor had any wish to) that there was something inside her as happily shameless as a tabby in heat going into her belly dance for the enticement of the neighborhood toms.

She tried to explain all this to Mike, giving him her theory of the complementary and functional nature of narcissist display and voyeurism, with herself and Duke as clinical examples. "The truth is, Mike, that I find I get a real kick out of having all those men stare at me ... lots of men and almost any man. So now I grok why Duke likes to have lots of pictures of women, the sexier the better. Same thing, only in reverse. It doesn't mean that I want to go to bed with them, any more than Duke wants to go to bed with a photograph ? shucks, dearest, I don't even want to say hello to them. But when they look at me and tell me - think at me - that I'm desirable, it gives me a tingle, a warm pleasant feeling right in my middle." She frowned slightly. "You know, I think I ought to get a real naughty picture taken of me and send it to Duke. Just to tell him that I'm sorry I snooted him and failed to grok what I thought was a weakness in him. If it's a weakness, I've got it, too - but girl style. If it is a weakness. But I grok it isn't."

"All right. We'll find a photographer in the morning."

She shook her head. "I'll simply apologize to Duke the next time we go home, I wouldn't actually send such a picture to Duke. He has never made a pass at me - and I don't want him getting ideas."

"Jill, you would not want Duke?"

She heard an echo of "water brother" in his mind. "Hmm.. truthfully I've never really thought about it. I guess I've been 'being faithful' to you - not that it has been an effort. But I grok you speak rightly; I wouldn't turn Duke down - and I would enjoy it, too. What do you think of that darling?"

"I grok a goodness," Mike said seriously.

"Hmm ... my gallant Martian, there are times when we human females appreciate at least a semblance of jealousy - but I don't think there is the slightest chance that you will ever grok 'jealousy.' Darling, what would you grok if one of those marks - those men in the audience, not a water brother - made a pass at me?"

Mike barely smiled. "I grok he would be missing."

"Mmm ... I grok he might be, too. But, Mike - listen to me carefully, dear. You promised me that you wouldn't do anything of that sort except in utter emergency. So don't be hasty. If you hear me scream and shout, and reach into my mind and know that I'm in real trouble, that's another matter. But I was coping with wolves when you were still on Mars. Nine times out of ten, if a girl gets raped, it's at least partly her own fault. That tenth time - well, all right. Give him your best heave-ho to the bottomless pit. But you aren't going to find it necessary."

"All right, I will remember. I wish you were sending that naughty picture to Duke."

"What, dear? I will if you want me to. It's just that if I ever make a pass at Duke - and I might, now that you've put the idea into my little pointy head - I'd rather grab his shoulders and look him in the eye and say, 'Duke, how about it? - I'm willing.' I don't want to do it by sending him a naughty picture through the mail, like those nasty women used to send to you. But if you want me to, okay. Uh, I needn't make it too naughty - I could make it obviously a show girl's professional picture and tell him what I'm doing and ask him if he has room for it in his scrap book. He might not take it as a pass."

Mike frowned. "I spoke incompletely. If you wish to send Duke a naughty picture, do so. If you do not wish, then do not. But I had hoped to see the naughty picture taken. Jill, what is a 'naughty' picture?"

Mike was baffled by the whole idea. Jill's reversal from an attitude that he had never understood but had learned to accept into exactly the opposite attitude of pleasure - sexual pleasure, he understood - at being stared at ... plus a third and longstanding bafflement at Duke's "art" collection - it certainly was not art. But the pale, wan Martian thing which parallels tumultuous human sexuality gave him no foundation for grokking either narcissism or voyeurism, modesty or display.

He added, "'Naughty' means a wrongness, usually a small wrongness, but I grokked that you did not mean even a small wrongness, but a goodness."

"A naughty picture could be either one, I guess - depending on who it's for - now that I'm over some prejudice. But-Mike, I'll have to show you; I can't tell you. But first close those slats, will you?"

The Venetian blinds flipped themselves shut. "All right," she said. "Now this pose would be just a little bit naughty - any of the show girls would use it as a professional pic ... and this one is just a little bit more so, some of the girls would use it. But this one is unmistakably naughty and this one is quite naughty ... and this one is so extremely naughty that I wouldn't pose for it with my face wrapped in a towel - unless you wanted it."

"But if your face was covered, why would I want it?"

"Ask Duke. That's all I can say."

He continued to look puzzled. "I grok not wrongness, I grok not goodness. I grok-" He used a Martian word indicating a null state of all emotions.

But he was interested because he was so baffled; they went on discussing it, in Martian as much as possible because of its extremely fine discriminations for emotions and values - and in English, too, because Martian, rich as it is, simply couldn't cope with the concepts.

Mike showed up at a ringside table that night, Jill having coached him in how to bribe the maŒtre d'h“tel to give him such a spot; he was determined to pursue this mystery. Jill was not averse. She came strutting out in the first production number, her smile for everyone but a quick wink for Mike as she turned and her eyes passed across his. She discovered that, with Mike present, the warm, pleased sensation she had been enjoying nightly was greatly amplified - she suspected that, if the lights were out, she would glow in the dark.

When the parade stopped and the girls formed a tableau, Mike was no more than ten feet from her - she had been promoted her first week to a front position. The director had looked her over on her fourth day with the show and had said, "I don't know what it is, kid. We've got girls around town begging for just any job with twice the shape you've got - but when the lights hit you, you've got what the customers look at. Okay, I'm moving you up where they can see better. The standard raise ... and I still don't know why."

She posed and talked with Mike in her mind. ("Feel anything?")

("I grok but not in fullness.')

("Look where l am looking, my brother. The small one. He quivers. He thirsts for me.")

("I grok his thirst ")

("Can you see him?") Jill stared straight into the customer's eyes and gave him a warm smile ... not alone to increase his interest in her but also to let Mike use her eyes, if possible. As her grokking of Martian thought had increased and as they had grown steadily closer in other ways they had begun to be able to use this common Martian convenience. Not fully as yet, but with increasing ease - Jill had no control over it; Mike could see through her eyes simply by calling to her, she could see through his only if he gave it his attention.

("We grok him together,") Mike agreed. ("Great thirst for my little brother.")

("!!!!")

("Yes. Beautiful agony.")

A music cue told Jill to break her pose and resume her slow strut. She did so, moving with proud sensuousness and feeling lust boil up in herself in response to emotions she was getting both from Mike and from the stranger. The routine caused her to walk away from Mike and almost toward the rutty little stranger, approaching him during her first few steps. She continued to lock eyes with him.

At which point something happened which was totally unexpected to her because Mike had never explained that it was possible. She had been letting herself receive as much as possible of the stranger's emotions, intentionally teasing him with eyes and body, and relaying what she felt from him back to Mike-

-when suddenly the circuit was completed and she was looking at herself, seeing herself through strange eyes, much more lavish than she considered herself to be - and feeling the primitive need with which that stranger saw her.

Blindly she stumbled and would have fallen flat had not Mike instantly sensed her hazard, caught her, lifted her, straightened her up, and steadied her until she could walk unassisted, second-sight gone.

The parade of beauties continued on through exit. Once off stage the girl behind her said, "What the devil happened to you, Jill?"

"Caught my heel."

"Happens. But that was the wildest recovery I ever saw. For a second there you looked like a puppet on strings."

(-and so I was, dear, and so I was! But we won't go into that.) "I'm going to ask the stage manager to check that spot. I think there's a loose board. A gal could break her leg."

For the rest of the show whenever she was on stage Mike gave her quick glimpses of how she looked to various men while always making sure that she was not again taken by surprise. Jill was amazed to discover how varied were their images of her: one noticed only her legs, another seemed fascinated by the undulations of her torso, a third saw only her proud bosom. Then Mike, warning her first, let her look at other girls in the tableaux. She was relieved to find that Mike saw them as she saw them - but sharper.

But she was amazed to find that her own excitement did not diminish as she looked at, second hand, the girls around her; it increased.

Mike left promptly at the finale, ducking out ahead of the crowd as she had warned him to do, She did not expect to see him again that night since he had asked for relief from his job as croupier only long enough to see his wife in her show. But when she dressed and returned to their hotel room, she felt him inside before she reached the room.

The door opened for her, she stepped inside, it closed behind her. "Hello, darling!" she called out. "How nice you came home!"

He smiled gently. "I now grok naughty pictures." Her clothes vanished. "Make naughty pictures."

"Huh? Yes, dear, of course." She ran through much the same poses she had earlier in the day. With each one, as soon as she was in it, Mike let her use his eyes to see herself. She looked at herself and felt his emotions and felt her own swell in response in a closed and mutually amplified re-echoing. At last she placed herself in a pose as randily carefree as her imagination could devise.

"Naughty pictures are a great goodness," Mike said gravely.

"Yes! And now I grok them, too! What are you waiting for?"

They quit their jobs and for the next several days saw as many of the revues as possible, during which period Jill made still another discovery: she "grokked naughty pictures" only through a man's eyes. If Mike watched, she caught and shared his mood, from quiet sensuous pleasure in a beautiful woman to fully aroused excitement at times-but if Mike's attention was elsewhere, the model, dancer, or peeler was just another woman to Jill, possibly pleasant to look at but in no wise exciting. She was likely to get bored and wish mildly that Mike would take her home. But only mildly for she was now nearly as patient as he was.

She pondered this new fact from all sides and decided that she preferred not to be excited by women other than through his eyes. One man gave her all the problems she could handle and more-to have discovered in herself unsuspected latent lesbian tendencies would have been entirely too much.

But it certainly was a lot of fun - "a great goodness" - to see those girls through his eyes as he had now learned to see them - and a still greater, ecstatic goodness to know that, at last, he looked at her herself in the same way ... only more so.

They stopped in Palo Alto long enough for Mike to try (and fail to) swallow all the Hoover Library in mammoth gulps. The task was mechanically impossible; the scanners could not spin that fast, nor could Mike turn pages of bound books fast enough to read them all. He gave up and admitted that he was taking in raw data much faster than he could grok it, even by spending all hours the library was closed in solitary contemplation. With relief Jill moved them to San Francisco and he embarked on a more systematic search.

She came back to their flat one day to find him sitting, not in trance but doing nothing, and surrounded by books - many books: The Talmud, the Kama-Sutra, Bibles in various versions, the Book of the Dead, the Book of Mormon, Patty's precious copy of the New Revelation, Apocrypha of various sorts, the Koran, the unabridged Golden Bough, The Way, Science and Health with Key to the Scriptures, the sacred writings of a dozen other religions major and minor - even such deviant oddities as Crowley's Book of the Law.

"Trouble, dear?"

"Jill, I don't grok." He waved his hand at the books. ("Waiting, Michael waiting for fullness is- ")

"I don't think waiting will ever fill it. Oh, I know what's wrong; I'm not really a man, I'm a Martian - a Martian in a body of the wrong shape."

"You're plenty of man for me, dear - and I love the way your body is shaped."

"Oh, you grok what I'm talking about. I don't grok people. I don't understand this multiplicity of religions. Now among my people-"

"Your people, Mike?"

"Sorry. I should have said that, among the Martians, there is only one religion - and that one is not a faith, it's a certainty. You grok it. 'Thou art God!"

"Yes," she agreed. "I do grok ... in Martian. But you know, dearest, that it doesn't say the same thing in English ... or any other human speech. I don't know why."

"Mmmm ... on Mars, when we needed to know anything - anything at all - we could consult the Old Ones and the answer was never wrong. Jill, is it possible that we humans don't have any 'Old Ones?' No souls, that has to mean. When we discorporate - die! - do we die dead? die all over and nothing left? Do we live in ignorance because it doesn't matter? Because we are gone and not a rack behind in a time so short that a Martian would use it for one long contemplation? Tell me, Jill. You're human."

She smiled with sober serenity. "You yourself have told me. You have taught me to know eternity and you can't take it away from me, ever. You can't die, Mike - you can only discorporate." She gestured down at herself with both hands. "This body that you have taught me to see through your eyes ... and that you have loved so well, someday it will be gone. But I shall not be gone ... I am that I am! Thou art God and I am God and we are God, eternally. I am not sure where I will be, or whether I will remember that I was once Jill Boardman who was happy trotting bedpans and equally happy strutting her stuff in her buff under bright lights. I have liked this body-"

With a most uncustomary gesture of impatience Mike threw away her clothes.

"Thank you, dear," she said quietly, not stirring from where she was seated. "It has been a nice body to me - and to you - to both of us who thought of it. But I don't expect to miss it when I am through with it. I hope that you will eat it when I discorporate."

"Oh, I'll eat you, all right-unless I discorporate first."

"I don't suppose that you will. With your much greater control over your sweet body I suspect that you can live several centuries at least. If you wish it. Unless you choose to discorporate sooner."

"I might. But not now. Jill, I've tried and tried. How many churches have we attended?"

"All the sorts there are in San Francisco, I think - except, possibly, for little, secret ones that don't list their addresses. I don't recall how many times we have been to seekers' services."

"That's just to comfort Pat - I'd never go again if you weren't sure that she needs to know that we haven't given up."

"She does need to. And we can't lie about it - you don't know how and I can't, not to Patty. Nor any brother."

"Actually," he admitted, "the Fosterites do have quite a bit on the ball. All twisted, of course. They are clumsy, groping - the way I was as a carney. And they'll never correct their mistakes, because this thing-" He caused Patty's book to lift. "-is mostly crap!"

"Yes. But Patty doesn't see those parts of it. She is wrapped in her own innocence. She is God and behaves accordingly . . . only she doesn't know who she is."

"Uh huh," he agreed. "That's our Pat. She believes it only when I tell her - with proper emphasis. But, Jill, there are only three places to look. Science - and I was taught more about how the physical universe is put together while I was still in the nest than human scientists can yet handle. So much that I can't even talk to them ... even about as elementary a gimmick as levitation. I'm not disparaging human scientists ... what they do and how they go about it is just as it should be; I grok that fully. But what they are after is not what I am looking for - you don't grok a desert by counting its grains of sand. Then there's philosophy ? supposed to tackle everything. Does it? All any philosopher ever comes out with is exactly what he walked in with - except for those sell-deluders who prove their assumptions by their conclusions, in a circle. Like Kant. Like many other tail-chasers. So the answer, if it's anywhere, ought to be here." He waved at the pile of religious books. "Only it's not. Bits and pieces that grok true, but never a pattern - or if there is a pattern, every time, without fail, they ask you to take the hard part on faith. Faith! What a dirty Anglo-Saxon monosyllable. Jill, how does it happen that you didn't mention that one when you were teaching me the words that mustn't be used in polite company?"

She smiled. "Mike, you just made a joke."

"I didn't mean it as a joke ... and I can't see that it's funny. Jill, I haven't even been good for you - you used to laugh. You used to laugh and giggle until I worried about you. I haven't learned to laugh; instead you've forgotten how. Instead of my becoming human ... you're becoming Martian."

"I'm happy, dear. You probably just haven't noticed me laughing."

"If you laughed clear down on Market Street, I would hear it. I grok. Once I quit being frightened by it I always noticed it - you, especially. If I grokked it, then I would grok people, I think. Then I could help somebody like Pat ... either teach her what I know, or learn from her what she knows. Or both. We could talk and understand each other."

"Mike, all you need to do for Patty is to see her occasionally. 'Why don't we, dear? Let's get out of this dreary fog. She's home now; the carnie is closed for the season. Drop south and see her ... and I've always wanted to see Baja California; we could go on south into warmer weather - and take her with us, that would be fun!"

"All right."

She stood up. "Let me get a dress on. Do you want to save any of those books? Instead of one of your usual quick housecleanings I could ship them to Jubal."

He flipped his fingers at them and all were gone but Patricia's gift. "Just this one and we'll take it with us; Pat would notice. But, Jill, right now I need to go out to the zoo."

"All right."

"I want to spit back at a camel and ask him what he's so sour about. Maybe camels are the real 'Old Ones' on this planet ... and that's what is wrong with the place."

"Two jokes in one day, Mike."

"I ain't laughing. And neither are you. Nor is the camel. Maybe he groks why. Come on. Is this dress all right? Do you want underclothes? I noticed you were wearing some when I moved those other clothes."

"Please, dear. It's windy and chilly outdoors."

"Up easy." He levitated her a couple of feet. "Pants. Stockings. Garter belt. Shoes. Down you go and lift your arms. Bra? You don't need a bra. And now the dress - and you're decent again. And you're pretty, whatever that is. You look good. Maybe I can get a job as a lady's maid if I'm not good for anything else. Baths, shampoos, massages, hair styling, make-up, dressing for all occasions - I've even learned to do your nails in a fashion that suits you. Will that be all, Madam?"

"You're a perfect lady's maid, dear. But I'm going to keep you myself."

"Yes, I grok I am. You look so good I think I'll toss it all away again and give you a massage. The growing closer kind."

"Yes, Michael!"

"I thought you had learned waiting? First you have to take me to the zoo and buy me peanuts."

"Yes, Mike. Jill will buy you peanuts."

It was cold and windy out at Golden Gate Park but Mike did not notice it and Jill had learned that she didn't have to be cold or uncomfortable if she did not wish it. Nevertheless it was pleasant to relax her control by going into the warm monkey house. Aside from its heat Jill did not like the monkey house too well - monkeys and apes were too much like people, too depressingly human. She was, she thought, finished forever with any sort of prissiness; she had grown to cherish an ascetic, almost Martian joy in all things physical. The public copulations and evacuations of these simian prisoners did not trouble her as they once had; these poor penned people possessed no privacy, they were not at fault. She could now watch such without repugnance; her own impregnable fastidiousness untouched. No, it was that they were "Human, All Too Human", every action, every expression, every puzzled troubled look reminded her of what she liked least about her own race.

Jill preferred the Lion House - the great males arrogant and sure of themselves even in captivity - the placid motherliness of the big females, the lordly beauty of Bengal tigers with jungle staring out of their eyes, the little leopards, swift and deadly, the reek of musk that air conditioners could not purge. Mike usually shared her tastes for other exhibits, too; he would spend hours in the Aviary, or the Reptile House, or in watching seals - once he had told her that, if one had to be hatched on this planet to be a sea lion would be of greatest goodness.

When he had first seen a zoo, Mike had been much upset; Jill had been forced to order him to wait and grok, as be had been about to take immediate action to free all the animals. He had conceded presently, under her arguments - that most of these animals could not stay alive free in the climate and environment where he proposed to turn them loose, that a zoo was a nest ... of a sort. He had followed this first experience with many hours of withdrawal, after which he never again threatened to remove all the bars and glass and grills. He explained to Jill that the bars were to keep people out at least as much as to keep the animals in, which he had failed to grok at first. After that Mike never missed a zoo wherever they went.

But today even the unmitigated misanthropy of the camels could not shake Mike's moodiness; he looked at them without smiling. Nor did the monkeys and apes cheer him up. They stood for quite a while in front of a cage containing a large family of capuchins, watching them eat, sleep, court, nurse, groom and swarm aimlessly around the cage, while Jill surreptitiously tossed them peanuts despite "No Feeding" signs.

She tossed one to a medium sized monkey; before he could eat it a much larger male was on him and not only stole his peanut but gave him a beating, then left. The little fellow made no attempt to pursue his tormentor; be squatted at the scene of the crime, pounded his knuckles against the concrete floor, and chattered his helpless rage. Mike watched it solemnly. Suddenly the mistreated monkey rushed to the side of the cage, picked a monkey still smaller, bowled it over and gave it a drubbing worse than the one he had suffered - after which he seemed quite relaxed. The third monk crawled away, still whimpering, and found shelter in the arm of a female who had a still smaller one, a baby, on her back. The other monkeys paid no attention to any of it.

Mike threw back his head and laughed - went on laughing, loudly and uncontrollably. He gasped for breath, tears came from his eyes; he started to tremble and sink to the floor, still laughing.

"Stop it, Mike!"

He did cease folding himself up but his guffaws and tears went on. An attendant hurried over. "Lady, do you need help?"

"No. Yes, I do. Can you call us a cab? Ground car, air cab, anything. I've got to get him out of here." She added, "He's not well."

"Ambulance? Looks like he's having a fit."

"Anything!" A few minutes later she was leading Mike into a piloted air cab. She gave the address, then said urgently. "Mike, you've got to listen to me. Quiet down."

He became somewhat more quiet but continued to chuckle, laugh aloud, chuckle again, while she wiped his eyes, for all the few minutes it took to get back to their flat. She got him inside, got his clothes off, made him lie down on the bed. "All right, dear. Withdraw now if you need to."

"I'm all right. At last I'm all right."

"I hope so." She sighed. "You certainly scared me, Mike."

"I'm sorry, Little Brother. I know. I was scared, too, the first time I heard laughing."

"Mike, what happened?"

"Jill ... I grok people!"

"Huh?" ("!!??")

("I speak rightly, Little Brother. I grok.") "I grok people now, Jill, Little Brother ... precious darling, little imp with lively legs and lovely lewd lascivious lecherous licentious libido ... beautiful bumps and pert posterior ... with soft voice and gentle hands. My baby darling."

"Why, Michael!"

"Oh, I knew all the words; I simply didn't know when or why to say them ... nor why you wanted me to. I love you, sweetheart - I grok 'love' now, too."

"You always have. I knew. And I love you ... you smooth ape. My darling."

"'Ape,' yes. Come here, she ape, and put your bead on my shoulder and tell me a joke."

"Just tell you a joke?"

"Well, nothing more than snuggling. Tell me a joke I've never heard and see if I laugh at the right place. I will, I'm sure of it - and I'll be able to tell you why it's funny. Jill ... I grok people!"

"But how, darling? Can you tell me? Does it need Martian? Or mindtalk?"

"No, that's the point. I grok people. I am people ... so now I can say it in people talk. I've found out why people laugh. They laugh because it hurts so much ... because it's the only thing that'll make it stop hurting."

Jill looked puzzled. "Maybe I'm the one who isn't people. I don't understand."

"Ah, but you are people, little she ape. You grok it so automatically that you don't have to think about it. Because you grew up with people. But I didn't. I've been like a puppy raised apart from other dogs, who couldn't be like his masters and had never learned how to be a dog. So I had to be taught. Brother Mahmoud taught me, Jubal taught me, lots of people taught me ... and you taught me most of all. Today I got my diploma - and I laughed. That poor little monkey."

"Which one, dear? I thought that big one was just mean ... and the one I flipped the peanut to turned out to be just as mean. There certainly wasn't anything funny."

"Jill, Jill my darling! Too much Martian has rubbed off on you. Of course it wasn't funny - it was tragic. That's why I had to laugh. I looked at a cageful of monkeys and suddenly I saw all the mean and cruel and utterly unexplainable things I've seen and heard and read about in the time I've been with my own people, and suddenly it hurt so much I found myself laughing."

"But-Mike dear, laughing is something you do when something is nice, not when it's horrid."

"Is it? Think back to Las Vegas-When all you pretty girls came out on the stage, did people laugh?"

"Well ... no."

"But you girls were the nicest part of the show. I grok now, that if they had laughed, you would have been hurt. No, they laughed when a comic tripped over his feet and fell down ... or something else that is not a goodness."

"But that's not all people laugh at."

"Isn't it? Perhaps I don't grok all its fullness yet. But find me something that really makes you laugh, sweetheart ... a joke, or anything else - but something that gave you a real belly laugh, not a smile. Then we'll see if there isn't a wrongness in it somewhere and whether you would laugh if the wrongness wasn't there." He thought. "I grok when apes learn to laugh, they'll be people."

"Maybe." Doubtfully but earnestly Jill started digging into her memory for jokes that bad struck her as irresistibly funny, ones which had jerked a laugh out of her ... incidents she had seen or heard of which had made her helpless with laughter:

"-her entire bridge club." "Should I bow?" "Neither one, you idiot - instead!" "-the Chinainan objects." "-broke her leg." "-make trouble for me!" "-but it'll spoil the ride for me." "-and his motherin-law fainted." "Stop you? Why, I bet three to one you could do it!" "Something has happened to Ole." "-and so are you, you clumsy ox!"

She gave up on "funny" stories, pointing out to Mike that such were just fantasies, not real, and tried to recall real incidents. Practical jokes? All practical jokes supported Mike's thesis, even ones as mild as a dribble glass - and when it came to an interns notion of a practical joke - Well, interns and medical students should be kept in cages. What else? The time Elsa Mae had lost her monogrammed panties? It hadn't been funny to Elsa Mae. Or the-She said grimly, "Apparently the pratfall is the peak of all humor. It's not a pretty picture of the human race, Mike."

"Oh, but it is!"

"Huh?"

"I had thought - I had been told - that a 'funny' thing is a thing of a goodness. It isn't. Not ever is it funny to the person it happens to. Like that sheriff without his pants. The goodness is in the laughing itself. I grok it is a bravery ... and a sharing ... against pain and sorrow and defeat."

"But-Mike, it is not a goodness to laugh at people."

"No. But I was not laughing at the little monkey. I was laughing at us. People. And I suddenly knew that I was people and could not stop laughing." He paused. "This is hard to explain, because you have never lived as a Martian, for all that I've told you about it. On Mars there is never anything to laugh at. All the things that are funny to us humans either physically cannot happen on Mars or are not permitted to happen - sweetheart, what you call 'freedom' doesn't exist on Mars; everything is planned by the Old Ones - or the things that do happen on Mars which we laugh at here on Earth aren't funny because there is no wrongness about them. Death, for example."

"Death isn't funny."

"Then why are there so many jokes about death? Jill, with us - us humans - death is so sad that we must laugh at it. All those religions, they contradict each other on every other point but every one of them is filled with ways to help people be brave enough to laugh even though they know they are dying." He stopped and Jill could feel that he had almost gone into his trance state. "Jill? Is it possible that I was searching them the wrong way? Could it be that every one of all those religions is true?"

"Huh? How could that possibly be? Mike, if one of them is true, then the others are wrong. Logic."

"So? Point to the shortest direction around the universe. It doesn't matter which way you point, it's the shortest ... and you're pointing right back at yourself"

"Well, what does that prove? You taught me the true answer, Mike. 'Thou art God.'"

"And Thou art God, my lovely. I wasn't disputing that ... but that one prime fact which doesn't depend at all on faith may mean that all faiths are true."

"Well ... if they're all true, then right now I want to worship Siva." Jill changed the subject with emphatic direct action.

"Little pagan," he said softly. "They'll run you out of San Francisco."

"But we're going to Los Angeles ... where it won't be noticed. Oh! Thou art Siva!"

"Dance, Kali, dance!"

Some time during the night she woke and saw him standing at the window, looking out over the city. ("Trouble, my brother?")

He turned and spoke. "There's no need for them to be so unhappy."

"Darling, darling! I think I had better take you home. The city is not good for you."

"But I would still know it. Pain and sickness and hunger and fighting - there's no need for any of it. It's as foolish as those little monkeys."

"Yes, darling. But it's not your fault-"

"Ah, but it is!"

"Well ... that way - yes. But it's not just this one city; it's five billion people and more. You can't help five billion people."

"I wonder."

He came over and sat down by her. "I grok with them now, I can talk to them. Jill, I could set up our act again ... and make the marks laugh every minute. I am certain."

"Then why not do it? Patty would certainly be pleased ... and so would I. I liked being 'with it' - and now that we?ve shared water with Patty, it would be like being home."

He didn't answer. Jill felt his mind and knew that he was contemplating, trying to grok. She waited.

"Jill? What do I have to do to be ordained?"

part four

HIS SCANDALOUS CAREER

Chapter 30

THE FIRST MIXED LOAD Of permanent colonists arrived on Mars; six of the seventeen survivors of the twentythree originals returned to Earth. Prospective colonists trained in Peru at sixteen thousand feet. The president of Argentina moved one night to Montevideo, taking with him such portables as could be stuffed into two suitcases, and the new Presidente started an extradition process before the high court to yank him back, or at least the two suitcases. Last rites for Alice Douglas were held privately in the National Cathedral with less than two thousand attending, and editorialists and stereo commentators alike praised the dignified fortitude with which the Secretary General took his bereavement. A three-year-old named Inflation, carrying 126 pounds with Jinx Jenkins Up, won the Kentucky Derby, paying fifty-four for one, and two guests of the Colony Airotel, Louisville, Kentucky, discorporated, one voluntarily, the other by heart failure.

Another bootleg edition of the (unauthorized) biography The Devil and Reverend Foster appeared simultaneously on news stands throughout the United States; by nightfall every copy had been burned and the plates destroyed, along with incidental damage to other chattels and to real estate, plus a certain amount of mayhem, maiming, and simple assault. The British Museum was rumored to possess a copy of the first edition (untrue), and also the Vatican Library (true, but available only to certain church scholars).

In the Tennessee legislature a bill was again introduced to make the ratio pi exactly equal to three; it was reported out by the committee on public education and morals, passed with no objection by the lower house and died in committee in the upper house. An interchurch fundamentalist group opened offices in Van Buren, Arkansas, for the purpose of soliciting funds to send missionaries to the Martians; Dr. Jubal Harshaw happily sent them a lavish donation, but took the precaution of sending it in the name (and with the address) of the editor of the New Humanist, a rabid atheist and his close friend.

Other than that, Jubal had very little to feel amused about - there had been too much news about Mike lately, and all of it depressing. He had treasured the occasional visits home of Jill and Mike and had been most interested in Mike's progress, especially after Mike developed a sense of humor. But they came home less frequently now and Jubal did not relish the latest developments.

It had not troubled Jubal when Mike was run out of Union Theological Seminary, hotly pursued in spirit by a pack of enraged theologians, some of whom were angry because they believed in God and others because they did not - but all united in detesting the Man from Mars. Jubal honestly evalued anything that happened to a theologian short of breaking him on the wheel was no more than meet - and the experience was good for the boy; he'd know better next time.

Nor had he been troubled when Mike (with the help of Douglas) had enlisted under an assumed name in the Federation armed forces. He had been quite sure (through private knowledge) that no sergeant could cause Mike any permanent distress, and contrariwise, Jubal was not troubled by what might happen to sergeants or other ranks. An unreconciled old reactionary, Jubal had burned his own honorable discharge and all that went with it on the day that the United States had ceased having its own armed forces.

Actually, Jubal had been surprised at how little shambles Mike had created as "Private Jones" and how long be had lasted - almost three weeks. He had crowned his military career the day that be had seized on the question period following an orientation lecture to hold forth on the utter uselessness of force and violence under any circumstances (with some side comments on the desirability of reducing surplus population through cannibalism) and had offered himself as a test animal for any weapon of any nature to prove to them that force was not only unnecessary but literally impossible when attempted against a self-disciplined person.

They had not taken his offer; they had kicked him out.

But there had been a little more to it than that, Douglas had allowed Jubal to see a top-level super secret eyes-only numbered-one-of-three report after cautioning Jubal that no one, not even the Supreme Chief of staff, knew that "Private Jones" was the Man from Mars. Jubal had merely scanned the exhibits, which bad been mostly highly conflicting reports of eye witnesses as to what had happened at various times when "Jones" had been "trained" in the uses of various weapons; the only surprising thing to Jubal about them was that some witnesses bad the courage and self-confidence to state under oath that they bad seen weapons disappear. "Jones" had also been placed on the report three times for losing weapons, same being accountable property of the Federation.

The end of the report was all that Jubal had bothered to read carefully enough to remember: "Conclusion: Subject man is an extremely talented natural hypnotist and, as such, could conceivably be useful in intelligence work, although he is totally unfitted for any combat branch. However, his low intelligence quotient (moron), his extremely low general classification score, and his paranoid tendencies (delusions of grandeur) make it inadvisable to attempt to exploit his idiot-savant talent. Recommendation: Discharge, Inaptitude - no pension credit, no benefits."

Such little romps were good for the boy and Jubal had greatly enjoyed Mike's inglorious career as a soldier because Jill had spent the time at home. When Mike had come home for a few days after it was over, he hadn't seemed hurt by it - he had boasted to Jubal that he had obeyed Jill's wishes exactly and hadn't disappeared anybody merely a few dead things ... although, as Mike grokked it, there had been several times when Earth could have been made a better place if Jill didn't have this queasy weakness. Jubal didn't argue it; he had a lengthy - though inactive, "Better Dead" list himself.

But apparently Mike had managed to have fun, too. During parade on his last day as a soldier, the commanding General and his entire staff had suddenly lost their trousers as Mike's platoon was passing in review - and the top sergeant of Mike's company fell flat on his face when his shoes momentarily froze to the ground. Jubal decided that, in acquiring a sense of humor, Mike bad developed an atrocious taste in practical jokes - but what the hell? The kid was going through a delayed boyhood; he needed to dump over a few privies. Jubal recalled with pleasure an incident in medical school involving a cadaver and the Dean - Jubal had worn rubber gloves for that caper, and a good thing, too!

Mike's unique ways of growing up were all right; Mike was unique.

But this last thing - "The Reverend Dr. Valentine M. Smith, AS., D.D., Ph.D.," founder and pastor of the Church of All Worlds, inc. - gad! It was bad enough that the boy had decided to be a Holy Joe, instead of leaving other people's souls alone, as a gentleman should. But those diploma-mill degrees he had tacked onto his name - Jubal wanted to throw up.

The worst of it was that Mike had told him that he had gotten the whole idea from something he had heard Jubal say, about what a church was and what it could do. Jubal was forced to admit that it was something he could have said, although he did not recall it; it was little consolation that the boy knew so much law that he might have arrived at the same end on his own.

But Jubal did concede that Mike had been cagy about the operation - some actual months of residence at a very small, very poor (in all senses) sectarian college, a bachelor's degree awarded by examination, a "call" to their ministry followed by ordination in this recognized though flatheaded sect, a doctor's dissertation on comparative religion which was a marvel of scholarship while ducking any real conclusions (Mike had brought it to Jubal for literary criticism, Jubal had added some weasel words himself through conditioned reflex), the award of the "earned" doctorate coinciding with an endowment (anonymous) to this very hungry school, the second doctorate (honorary) right on top of it for "contributions to interplanetary knowledge" from a distinguished university that should have known better, when Mike let it be known that such was his price for showing up as the drawing card at a conference on solar system studies. The one and only Man from Mars had turned down everybody from CalTech to the Kaiser Wilhelm Institute in the past; Harvard University could hardly be blamed for swallowing the bait.

Well, they were probably as crimson as their banner now, Jubal thought cynically. Mike had then put in a few weeks as assistant chaplain at his church-mouse alma mater - then had broken with the sect in a schism and founded his own church. Completely kosher, legally airtight, as venerable in precedent as Martin Luther ... and as nauseating as last week's garbage.

Jubal was called out of his sour daydream by Miriam. "Boss! Company!"

Jubal looked up to see a car about to land and ruminated that he had not realized what a blessing that S.S. patrol cap had been until it was withdrawn.

"Larry, fetch my shotgun - I promised myself that I would shoot the next dolt who landed on the rose bushes."

"He's landing on the grass, Boss."

"Well, tell him to try again. We'll get him on the next pass."

"Looks like Ben Caxton."

"So it is. We'll let him live - this time. Hi, Ben! What'll you drink?"

"Nothing, this early in the day, you professional bad influence. Need to talk to you, Jubal."

"You're doing it. Dorcas, fetch Ben a glass of warm milk; he's sick."

"Without too much soda," amended Ben, "and milk the bottle with the three dimples in it. Private talk, Jubal."

"All right, up to my study - although if you think you can keep anything from the kids around here, let me in on your method." After Ben finished greeting properly (and somewhat unsanitarily, in three cases) the members of the family, they moseyed upstairs.

Ben said, "What the deuce? Am I lost?"

"Oh. You haven't seen the alterations, have you? A new wing on the north, which gives us two more bedrooms and another bath downstairs-and up here, my gallery."

"Enough statues to fill a graveyard!"

"Please, Ben. 'Statues' are dead politicians at boulevard intersections. What you see is 'sculpture.' And please speak in a low, reverent tone lest I become violent ... for here we have exact replicas of some of the greatest sculpture this naughty globe has produced."

"Well, that hideous thing I've seen before ... but when did you acquire the rest of this ballast?"

Jubal ignored him and spoke quietly to the replica of La Belle

HeaulmiŠre. "Do not listen to him, ma petite chere - he is a barbarian and knows no better." He put his hand to her beautiful ravaged cheek, then gently touched one empty, shrunken dug. "I know just how you feel but it can't be very much longer. Patience, my lovely."

He turned back to Caxton and said briskly, "Ben, I don't know what you have on your mind but it will have to wait while I give you a lesson in how to look at sculpture - though it's probably as useless as trying to teach a dog to appreciate the violin. But you've just been rude to a lady and I don't tolerate that."

"Huh? Don't be silly, Jubal; you're rude to ladies - live ones - a dozen times a day. And you know which ones I mean."

Jubal shouted, "Anne! Upstairs! Wear your cloak!"

"You know I wouldn't be rude to the old woman who posed for that. Never. What I can't understand is a so-called artist having the gall to pose somebody's great grandmother in her skin . . . and you having the bad taste to want it around."

Anne came in, cloaked, said nothing. Jubal said to her, "Anne have I ever been rude to you? Or to any of the girls?"

"That calls for an opinion."

"That's what I'm asking for. Your opinion. You're not in court-"

"You have never at any time been rude to any of us, Jubal."

"Have you ever known me to be rude to a lady?"

"I have seen you be intentionally rude to a woman. I have never seen you be rude to a lady."

"That's all. No, one more opinion. What do you think of this bronze?"

Anne looked carefully at Rodin's masterpiece, then said slowly, "When I first saw it, I thought it was horrible. But I have come to the conclusion that it may be the most beautiful thing I have ever seen."

"Thanks. That's all." She left. "Do you want to argue it, Ben?"

"Huh? When I argue with Anne, that's the day I turn in my suit." Ben looked at it. "But I don't get it."

"All right, Ben. Attend me. Anybody can look at a pretty girl and see a pretty girl. An artist can look at a pretty girl and see the old woman she will become. A better artist can look at an old woman and see the pretty girl that she used to be. But a great artist - a master - and that is what Auguste Rodin was - can look at an old woman, portray her exactly as she is ... and force the viewer to see the pretty girl she used to be ... and more than that, he can make anyone with the sensitivity of an armadillo, or even you, see that this lovely young girl is still alive, not old and ugly at all, but simply prisoned inside her ruined body. He can make you feel the quiet, endless tragedy that there was never a girl born who ever grew older than eighteen in her heart ... no matter what the merciless hours have done to her. Look at her, Ben. Growing old doesn't matter to you and me; we were never meant to be admired - but it does to them. Look at her!"

Ben looked at her. Presently Jubal said gruffly, "All right, blow your nose and wipe your eyes - she accepts your apology. Come on and sit down. That's enough for one lesson."

"No," Caxton answered, "I want to know about these others. How about this one? It doesn't bother me as much ... I can see it's a young girl, right off. But why tie her up like a pretzel?"

Jubal looked at the replica "Caryatid Who has Fallen under the Weight of her Stone" and smiled. "Call it a tour de force in empathy, Ben. I won't expect you to appreciate the shapes and masses which make that figure much more than a 'pretzel'-but you can appreciate what Rodin was saying. Ben, what do people get out of looking at a crucifix?"

"You know how much I go to church."

"'How little, you mean. Still, you must know that, as craftsmanship, paintings and sculpture of the Crucifixion are usually atrocious - and the painted, realistic ones often used in churches are the worst of all ... the blood looks like catsup and that ex-carpenter is usually portrayed as if he were a pansy ... which He certainly was not if there is any truth in the four Gospels at all. He was a hearty man, probably muscular and of rugged health. But despite the almost uniformly poor portrayal in representations of the Crucifixion, a poor one is about as effective as a good one for most people. They don't see the defects; what they see is a symbol which inspires their deepest emotions; it recalls to them the Agony and Sacrifice of God."

"Jubal, I thought you weren't a Christian?"

"What's that got to do with it? Does that make me blind and deaf to fundamental human emotion? I was saying that the crummiest painted plaster crucifix or the cheapest cardboard Christmas CrŠche can be sufficient symbol to evoke emotions in the human heart so strong that many have died for them and many more live for them. So the craftsmanship and artistic judgment with which such a symbol is wrought are largely irrelevant. Now here we have another emotional symbol - wrought with exquisite craftsmanship, but we won't go into that, yet. Ben, for almost three thousand years or longer, architects have designed buildings with columns shaped as female figures-it got to be such a habit that they did it as casually as a small boy steps on an ant. After all those centuries it took Rodin to see that this was work too heavy for a girl. But he didn't simply say, 'Look, you jerks, if you must design this way, make it a brawny male figure.' No, he showed it ... and generalized the symbol. Here is this poor little caryatid who has tried - and failed, fallen under the load. She's a good girl - look at her face. Serious, unhappy at her failure, but not blaming anyone else, not even the gods ... and still trying to shoulder her load, after she's crumpled under it.

"But she's more than good art denouncing some very bad art; she's a symbol for every woman who has ever tried to shoulder a load that was too heavy for her - over half the female population of this planet, living and dead, I would guess. But not alone women - this symbol is sexless. It means every man and every woman who ever lived who sweated out life in uncomplaining fortitude, whose courage wasn't even noticed until they crumpled under their loads. It's courage, Ben, and victory."

'Victory?'

"Victory in defeat, there is none higher. She didn't give up, Ben; she's still trying to lift that stone after it has crushed her. She's a father going down to a dull office job while cancer is painfully eating away his insides, so as to bring home one more pay check for the kids. She's a twelve-year old girl trying to mother her baby brothers and sisters because Mama had to go to Heaven. She's a switchboard operator sticking to her job while smoke is choking her and the fire is cutting off her escape. She's all the unsung heroes who couldn't quite cut it but never quit. Come. Just salute as you pass her and come see my Little Mermaid."

Ben took him precisely at his word; if Jubal was surprised, he made no comment. "Now this one," he said, "is the only one Mike didn't give to me. But there is no need to tell Mike why I got it ... aside from the self-evident fact that it's one of the most delightful compositions ever conceived and proudly executed by the eye and hand of man."

"She's that, all right. This one I don't have to have explained - it's just plain pretty!"

"Yes. And that is excuse in itself, just as with kittens and butterflies. But there is more to it than that ... and she reminded me of Mike. She's not quite a mermaid - see? - and she's not quite human. She sits on land, where she has chosen to stay ... and she stares eternally out to sea, homesick and forever lonely for what she left behind. You know the story?"

"Hans Christian Andersen."

"Yes. She sits by the harbor of K?benhavn - Copenhagen was his home town - and she's everybody who ever made a difficult choice. She doesn't regret her choice, but she must pay for it; every choice must be paid for. The cost to her is not only endless homesickness. She can never be quite human; when she uses her dearly bought feet, every step is on sharp knives. Ben, I think that Mike must always walk on knives - but there is no need to tell him I said so. I don't think he knows this story or, at least, I don't think he knows that I connect him with it."

"I won't tell him." Ben looked at the replica. "I'd rather just look at her and not think about the knives."

"She's a little darling, isn't she? How would you like to coax her into bed? She would probably be lively, like a seal, and about as slippery."

"Cripes! You're an evil old man, Jubal."

"And getting eviler and eviler by the year. Uh ... we won't look at any others; three pieces of sculpture in an hour is more than enough - usually I don't let myself look at more than one in a day."

"Suits. I feel as if I had had three quick drinks on an empty stomach. Jubal, why isn't there stuff like this around where a person can see it?"

"Because the world has gone nutty and contemporary art always paints the spirit of its times. Rodin did his major work in the tail end of the nineteenth century and Hans Christian Andersen antedated him by only a few years. Rodin died early in the twentieth century, about the time the world started flipping its lid ... and art along with it.

"Rodin's successors noted the amazing things he had done with light and shadow and mass and composition - whether you see it or not - and they copied that much. Oh, how they copied it! And extended it. What they failed to see was that every major work of the master told a story and laid bare the human heart. Instead, they got involved with 'design' and became contemptuous of any painting or sculpture that told a story - sneering, they dubbed such work 'literary' - a dirty word. They went all out for abstractions, not deigning to paint or carve anything that resembled the human world."

Jubal shrugged. "Abstract design is all right - for wall paper or linoleum. But art is the process of evoking pity and terror, which is not abstract at all but very human. What the self-styled modern artists are doing is a sort of unemotional pseudo-intellectual masturbation ... whereas creative art is more like intercourse, in which the artist must seduce - render emotional - his audience, each time. These laddies who won't deign to do that - and perhaps can't - of course lost the public. If they hadn't lobbied for endless subsidies, they would have starved or been forced to go to work long ago. Because the ordinary bloke will not voluntarily pay for 'art' that leaves him unmoved - if he does pay for it, the money has to be conned out of him, by taxes or such."

"You know, Jubal, I've always wondered why I didn't give a hoot for paintings or statues - but I thought it was something missing in me, like color blindness."

"Mmm, one does have to learn to look at art, just as you must know French to read a story printed in French. But in general it's up to the artist to use language that can be understood, not hide it in some private code like Pepys and his diary. Most of these jokers don't even want to use language you and I know or can learn ... they would rather sneer at us and be smug, because we 'fail' to see what they are driving at. If indeed they are driving at anything - obscurity is usually the refuge of incompetence. Ben, would you call me an artist?"

"Huh? Well, I've never thought about it. You write a pretty good stick."

"Thank you. 'Artist' is a word I avoid for the same reasons I hate to be called 'Doctor.' But I am an artist, albeit a minor one. Admittedly most of my stuff is fit to read only once ... and not even once for a busy person who already knows the little I have to say. But I am an honest artist, because what I write is consciously intended to reach the customer - reach him and affect him, if possible with pity and terror ... or, if not, at least to divert the tedium of his hours with a chuckle or an odd idea. But I am never trying to hide it from him in a private language, nor am I seeking the praise of other writers for 'technique' or other balderdash. I want the praise of the cash customer, given in cash because I've reached him - or I don't want anything. Support for the arts ? merde! A government-supported artist is an incompetent whore! Damn it, you punched one of my buttons. Let me fill your glass, and you tell me what is on your mind."

"Uh, Jubal, I'm unhappy."

"This is news?"

"No. But I've got a fresh set of troubles." Ben frowned. "I shouldn't have come here, I guess. No need to burden you with them. I'm not even sure I want to talk about them."

"Okay. But as long as you're here, you can listen to my troubles."

"You have troubles? Jubal, I've always thought of you as the one man who had managed to beat the game, six ways from zero."

"Hmm, sometime I must tell you about my married life. But, yes, I've got troubles now. Some of them are evident. Duke has left me, you know, or did you?"

"Yeah. I knew."

"Larry is a good gardener - but half the gadgets that keep this log cabin running are falling to pieces. I don't know how I can replace Duke. Good all-around mechanics are scarce ... and ones that will fit into this household, be a member of the family in all ways, are almost nonexistent. I'm limping along on repairmen called in from town - every visit a disturbance, all of them with larceny in their hearts, and most of them incompetent to use a screw driver without cutting themselves. Which I am incapable of doing, too, so I have to hire help. Or move back into town, God forbid."

"My heart aches for you, Jubal."

"Never mind the sarcasm, that's just the start. Mechanics and gardeners are convenient, but for me secretaries are essential. Two of mine are pregnant, one is getting married."

Caxton looked utterly astounded. Jubal growled, "Oh, I'm not telling tales out of school; they're smug as can be - nothing secret about any of it. They're undoubtedly sore at me right now because I took you up here without giving them time to boast. So be a gent and be surprised when they tell you."

"Uh, which one is getting married?"

"Isn't that obvious? The happy man is that smooth-talking refugee from a sand storm, our esteemed water brother Stinky Mahmoud. I've told him flatly that they have to live here whenever they're in this country. Bastard just laughed and said how else? - pointed out that I had invited him to live here, permanently, long ago." Jubal sniffed. "Wouldn't be so bad if he would just do it. I might even get some work out of her. Maybe."

"You probably would. She likes to work. And the other two are pregnant?"

"Higher 'n a kite. I'm refreshing myself in O.B. because they both say they're going to have 'em at home. And what a crimp that's going to put into my working habits! Worse than kittens. But why do you assume that neither of the two turgescent tummies belongs to the bride?"

"Oh-Why, I suppose I assumed that Stinky was more conventional than that ... or maybe more cautious."

"Stinky wouldn't be given a ballot. Ben, in the eighty or ninety years I have given to this subject, trying to trace out the meanderings of their twisty little minds, the only thing that I have learned for certain about women is that when a gal is gonna, she's gonna. All a man can do is cooperate with the inevitable."

Ben thought ruefully about times when he had resorted to fast footwork - and other times when he hadn't been fast enough. "Yeah, you're right. Well, which one isn't getting married or anything? Miriam? Or Anne?"

"Hold it, I didn't say the bride was pregnant ... and anyhow, you seem to be assuming that Dorcas is the prospective bride. You haven't kept your eyes open. It's Miriam who is studying Arabic like mad, so she can do it right."

"Huh? Well, I'll be a crosseyed baboon!"

"You obviously are."

"But Miriam was always snapping at Stinky-"

"And to think that they trust you with a newspaper column. Ever watch a bunch of sixth-graders?"

"Yes, but-Dorcas did everything but a nautch dance."

"That is just Dorcas's natural, normal behavior with all men. She used it toward you, too - although I suppose you were too preoccupied elsewhere to realize it. Never mind. Just be sure that when Miriam shows you her ring - the size of a roc's egg and about as scarce - be sure to be surprised. And I'm damned if I'll sort out which two are spawning, so that you'll be certain to be surprised. Just remember that they are pleased about it ... which is why I tipped you off ahead of time, so that you wouldn't make the mistake of thinking that they thought they were 'caught.' They don't. They weren't. They're smug." Jubal sighed. "But I'm not. I'm getting too old to enjoy the patter of little feet when I'm busy ... and contrariwise, I won?t lose perfect secretaries - and kids that I love, as you know - for any reason if I can possibly induce them to stay. But I must say that this household has become steadily more disorganized ever since the night Jill kicked Mike's feet out from under him. Not that I blame her and I don't think you do, either."

"No, I don't, but - Jubal, let me get this straight. Are you under the impression that Jill started Mike on his merry rounds?"

"Huh?" Jubal looked startled, then thought back - and admitted to himself that he had never known ... he had simply assumed it from the fact that when it came to a decision, Jill had been the one who had gone away with Mike. "Who was it?"

"'Don't be nosy, bub,' as you would put it. If she wants to tell you, she will. However, Jill told me - straightened me out when I made the same jumping-to-conclusions that you did. Mmm-" Ben thought. "As I understand it, which one of the four happened to score the first run was more or less chance."

"Mmm ... yes. I believe you're right."

"Jill thinks so. Except that she thinks Mike was exceedingly lucky in happening to seduce, or be seduced by (if I have the proper verb) - by the one best fitted to start him off right. Which may give you some hint if you know anything about how Jill's mind works."

"Hell, I don't even know how mine works ... and as for Jill, I would never have expected her to take up preaching no matter how love-struck she was - so I certainly don't know how her mind works."

"She doesn't do much preaching - we'll get to that. Jubal, what do you read from the calendar?"

"Huh?"

"You know what I mean. You think Mike did it - in both cases. Or you think so if his visits home match up in either or both cases."

Jubal said guardedly, "Why do you say that, Ben? I've said nothing to lead you to think so."

"The hell you haven't. You said that they were smug, both of them. I know all too well the effect that goddam superman has on women."

"Hold it, son - he's your water brother."

Ben said levelly, "I know it - and I love him, too. If I ever decided to go gay, Mike would be my only choice. But that's all the more reason why I understand why they are smug."

Jubal stared at his glass. "Maybe they just hope. Ben, seems to me your name could be on the list, even easier than Mike's. Yes?"

"Jubal, you're out of your mind!"

"Take it easy. Nobody is trying to make you get married, I promise you - why, I haven't even painted my shotgun white. While I am not snoopy and I never hold a bed check around here and I really do, so help me by all the Billion Names of God, believe in not poking my nose into other people's business, nevertheless while I may be out of my mind - a 'least hypothesis' more than once, the last couple of years - I do have normal eyesight and hearing ... and if a brass band parades through my home, fortissimo, I'll notice it eventually. Question: You've slept under this roof dozens of times. Did you, on at least one of those nights, sleep alone?"

"Why, you scoundrel! Uh, I slept alone the very first night I was ever here."

"Dorcas must have been off her feed. No, I remember, you were under sedative that night. You were my patient - doesn't count. Some other night? Just one?"

"Your question is irrelevant, immaterial, and beneath my notice."

"That's an adequate answer, I think. But please note that the added bedrooms are as far from my bedroom as possible. Soundproofing is never perfect."

"Jubal, it seems to me that your name is much higher up that list than mine can possibly be."

"What?"

"Not to mention Larry and Duke. But, Jubal, almost everybody who knows you assumes that you are keeping the fanciest harem since the Sultan went out of business. Oh, don't misunderstand me - they envy you. But they think you're a lecherous old goat, too."

Jubal drummed on the arm of his chair before replying. "Ben, I ordinarily do not mind being treated flippantly by my juniors. I encourage it, as you know. But in some matters I insist that my years be treated with respect. This is one of them."

"Sorry," Ben said stiffly. "I thought if it was all right for you to kick my sex life around, you would not mind my being equally frank."

"No, no, no, Ben! You misunderstand me. Your inquiry was in order and your side comments no more than I had invited. I mean that I require the girls to treat me with respect - on this one subject."

"Oh-"

"I am, as you pointed out, old - quite old. Privately, to you alone, I am happy to say that I am still lecherous. But my lechery does not command me and I am not a goat. I prefer dignity and self-respect to indulging in pastimes which, believe me, I have already enjoyed in full measure and do not need to repeat. Ben, a man my age, who looks like a slum clearance in its most depressing stages, can attract a young girl enough to bed her - and possibly big her and thanks for the compliment; it just possibly might not be amiss - through three means only: money ... or second, the equivalent of money in terms of wills and community property and the like and - pause for question: Can you imagine any of these three girls - these four, let me include Jill - bedding with a man, even a young and handsome one, for those reasons?"

"No. Categorical no - not any of them."

"Thank you, sir. I associate only with ladies; I see that you know it. The third incentive is a most female one. A sweet young girl can, and sometimes does, take an old wreck to bed because she is fond of him and sorry for him and wishes to make him happy. Would that reason apply here?"

"Uh ... yes, Jubal, I think it might. With all four of them."

"I think it might, too. Although I'd hate like hell to have any of them sorry for me. But this third reason which any of these four ladies might find sufficient motivation is not sufficient motivation for me. I wouldn't put up with it. I have my dignity, sir - and I hope that I retain my reason long enough to extinguish myself if it ever appears about to slip. So please take my name off the list."

Caxton grinned. "Okay, you stiff-necked old coot. I just hope that when I am your age I won't be so all-fired hard to tempt."

Jubal smiled. "Believe me, it's better to be tempted and resist, than not to resist and be disappointed. Now about Duke and Larry: I don't know nor care. Whenever anyone has come here, to work and live as a member of the family, I have made it bluntly plain that this was neither a sweat shop nor a whore house, but a home ... and, as such, it combined anarchy and tyranny without a trace of democracy, as in any well-run family, i.e., that they were utterly on their own except where I saw fit to give orders, which orders were not subject to vote or debate. My tyranny has never extended to their love life, if any. All the kids who live here have always chosen to keep their private matters reasonably private. At least-" Jubal smiled ruefully. "-until the Martian influence caused things to get a little out of hand ... which includes you, too, my water brother. But Duke and Larry have been more restrained, in one sense or the other. Perhaps they have been dragging the gals behind every bush. If so, I haven't seen it - and there have been no screams."

Ben thought of adding a little to Jubal's store of facts, decided against it. "Then you think it's Mike."

Jubal scowled. "Yep, I think it's Mike. That part's all right - I told you the girls were smugly happy ... and I'm not broke plus the fact that I could bleed Mike for any amount without telling the girls. Their babies won't lack. But, Ben, I'm troubled about Mike himself. Very."

"So am I, Jubal."

"And about Jill, too. I should have named Jill."

"Uh ... Jubal, Jill isn't the problem - other than for me, personally. And that's my hard luck, I hold no grudge. It's Mike."

"Damn it, why can't the boy come home and quit this obscene pulpit pounding?"

"Mmm ... Jubal, that's not quite what he's doing." Ben added, "I've just come from there."

"Huh? Why didn't you say so?"

Ben sighed. "First you wanted to talk art, then you wanted to sing the blues, then you wanted to gossip. What chance have I had?"

"Uh ... conceded. You have the floor."

"I was coming back from covering the Cape Town conference; I squeezed out a day and visited them. What I saw worried the hell out of me - so much so that I stopped just long enough in Washington to get a few columns ahead, then came straight here. Jubal, couldn't you rig it with Douglas to shut off the faucet and close down this operation?"

Jubal shook his head. "In the first place, I wouldn't. What Mike does with his life is his business."

"You would if you had seen what I saw."

"Not I! But in the second place I can't. Nor can Douglas."

"Jubal, you know quite well that Mike would accept any decision you made about his money. He probably wouldn't even understand it - and he certainly wouldn't question it."

"Ah, but he would understand it! Ben, recently Mike made his will, drew it up himself - no attorney - and sent it to me to criticize. Ben, it was one of the shrewdest legal documents I've ever seen. He recognized that he had more wealth than his heirs could possibly need - so he used half his money to guard the other half ... rigged it so that anyone who contests the will does so to his own great disadvantage. It is a very cynical document in that respect and is booby-trapped not only against possible heirs claimants of his legal parents and his natural parents - he knows he's a bastard, though I don't know how he found out - but also the same with respect to every member of the Envoy's company ... he provided a generous way to settle out of court with any possible unknown heir having a good prima-facie claim - and rigged it so that they would almost have to overthrow the government to go into court and break his will ... and the will also showed that he knew exactly each stock, bond, security, and asset he owned. I couldn't find anything to criticize in it." (-including, Jubal thought, his provision for you, my brother!) "Then he went to the trouble of depositing holographic originals in several places ... and Fair-Witness copies in half a dozen reliable brains. Don't tell me that I could rig his money without his understanding what I had done!"

Ben looked morose. "I wish you could."

"I don't. But that was just the starter. It wouldn't help if we could. Mike hasn't taken a dollar out of his drawing account for almost a year. I know, because Douglas called me to ask if I thought the major portion of the backlog should be reinvested? Mike hadn't bothered to answer his letters. I told him that was his headache ... but that if I were steward, I would follow my principal's last instructions."

"No withdrawals? Jubal, he's spending a lot."

"Maybe the church racket pays well."

"That's the odd part about it. The Church of All Worlds is not really church."

"Then what is it?"

"Uh, primarily it's a language school."

"Repeat?"

"To teach the Martian language."

"Well, no harm in that. But I wish, then, that he wouldn't call it a church."

"Well, I guess it is a church, within the legal definition."

"Look, Ben, a roller skating rink is a church - as long as some sect claims that roller skating is essential to their faith and a part of their worship. You wouldn't even have to go that far. Simply claim that roller skating served a desirable though not essential function parallel to that which religious music serves in most churches. If you can sing to the glory of God, you can skate to the same end. Believe me, this has all been threshed out. There are temples in Malaya which are nothing to an outsider but boarding houses for snakes ... but the same High Court rules them to be 'churches' as protects our own sects."

"Well, Mike raises snakes, too, as well as teaching Martian. But, Jubal, isn't anything ruled out?"

"Mmm ... that's a moot point. There are minor restrictions, adjudicated. A church usually can't charge a fee for fortune telling or calling up spirits of the dead, but it can accept offerings ... and then let custom make the 'offerings' become fees in fact. Human sacrifice is illegal everywhere - but I'm by no means sure that it is not still done in several spots around the globe - and probably right here in this former land of the free and home of the brave. The way to do anything under the guise of religion that would otherwise be suppressed is to do it in the inner sanctum and keep the gentiles out.

Why, Ben? Is Mike doing something that might get him jailed or hanged?"

"Uh, I don't know. Probably not."

"Well, if he's careful-The Fosterites have demonstrated how to get by with almost anything. Certainly much more than Joseph Smith was lynched for."

"Matter of fact, Mike has lifted quite a lot from the Fosterites. That's part of what worries me."

"But what does worry you? Specifically."

"Uh, Jubal, this has got to be a 'water brother' matter."

"Okay, I had assumed that. I'm prepared to face red hot pincers and the rack, if necessary. Shall I start carrying poison in a hollow tooth? Against the possibility of cracking?"

"Uh, the members of the inner circle are supposed to be able to discorporate voluntarily any second - no poison needed."

"I'm sorry, Ben. I never got that far. Never mind, I know other adequate ways to put up the only final defense against the third degree. Let's have it."

"You can discorporate at will, they tell me - if you learn Martian first. Never mind. Jubal, I said Mike raises snakes. I meant that both figuratively and literally - the whole setup is a snake pit. Unhealthy.

"But let me describe it. Mike's Temple is a big place, almost a labyrinth. A big auditorium for public meetings, some smaller ones for invitational meetings - many smaller rooms - and living quarters - quite a lot of living quarters. Jill sent me a radiogram telling me where to go, so I was dropped at the living quarters entrance on the street the temple backs onto. The living quarters are above the main auditorium, about as private as you can be and still live in a city."

Jubal nodded. "Makes sense. Be your acts legal or illegal, nosy neighbors are noxious."

"In this case a very good idea. A pair of outer doors let me in; I suppose I was scanned first, although I didn't spot the scanner. Through two more sets of automatic doors any one of which would slow down a raiding squad - then up a bounce tube. Jubal, it wasn't an ordinary bounce tube. It wasn't controlled by the passenger, but by someone out of sight. More evidence that they wanted privacy and meant to have it - a raiding squad would need special climbing gear to get up that way. No stairs anywhere. Didn't feel like the ordinary bounce tube, either-frankly, I avoid them when I can; they make me queasy."

"I have never used them and never shall," Jubal said firmly.

"You wouldn't have minded this. I floated up gently as a feather."

"Not me, Ben. I don't trust machinery. It bites." Jubal added, "However, I must concede that Mike's mother was one of the great engineers of all times and his father - his real father - was a number one pilot and a competent engineer, or better ... and both of genius level. If Mike has improved bounce tubes until they are fit for humans, I ought not to be surprised."

"As may be. I got to the top and was landed without having to grab for it, or depend on safety nets. I didn't see any, to tell the truth. Through more doors that unlocked for me and into an enormous living room. Enormous! Very oddly furnished and rather austere. Jubal, there are people who think you run an odd household here."

"I can't imagine why. Just plain and comfortable."

"Well, your m,nage is Aunt Jane's Finishing School for Refined Young Ladies compared with the weirdie Mike runs. I'm just barely inside the joint when the first thing I see I don't believe. A babe, tattooed from her chin to her toes - and not a goddam stitch otherwise. Hell, not even the homegrown fig leaf - she was tattooed everywhere. Fantastic!"

Jubal said quietly, "You're a big-city bumpkin, Ben. I knew a tattooed lady once. Very nice girl. Intense in some ways. But sweet."

"Well Ben conceded. "I was giving you a first impression. This gal is very nice, too, once you get adjusted to her pictorial supplement - and the fact that she usually has a snake with her. She's the one who raises them, rather than Mike."

Jubal shook his head. "I was wondering if by any chance it was the same woman. Fully tattooed women are rather scarce these days. But the lady I knew, some thirty years back - too old now to be this one, I suppose - had the usual vulgar fear of snakes, to excess. However, I'm fond of snakes myself ... I look forward to meeting your friend. I hope."

"You will when you visit Mike. She's sort of a majordomo for him - and a priestess, if you'll pardon the word. Patricia - but called 'Pat,' or 'Patty.'"

"Oh, yes! Jill has spoken of her ... and thinks very highly of her. Never mentioned her tattoos, however. Probably didn't think it was relevant. Or perhaps none of my business."

"But she's nearly the right age to be your friend. She says. When I said 'babe' I was again giving a first impression. She looks to be in her twenties; she claims her oldest child is that old. Anyhow, she trotted up to meet me, all big smile, put her arms around me and kissed me. 'You're Ben, I know. Welcome, brother! I give you water!'

"You know me, Jubal. I've been in the newspaper racket for years. I've been around. But I had never been kissed by a totally strange babe dressed only in tattoos ... who was determined to be as friendly and affectionate as a collie pup. I was embarrassed."

"Poor Ben. My heart bleeds."

"Damn it, you would have felt the same way."

"No. Remember, I've met one tattooed lady. They feel completely dressed in those tattoos - and rather resent having to put on clothes. Or at least this was true of my friend Sadako. Japanese, she was. But of course the Japanese are not body conscious the way we are."

"Well," Ben answered. "Pat isn't exactly body conscious, either - just about her tattoos. She wants to be stuffed and mounted, nude, when she dies, as a tribute to George."

"'George'?"

"Sorry. Her husband. Up in heaven, to my relief ... although she talked about him as if he had just slipped out for a short beer. While she was behaving as if she expected a trial mounting and stuffing any moment. But, essentially, Pat is a lady ... and she didn't let me stay embarrassed-"

Chapter 31

PATRICIA HAD HER ARMS around Ben Caxton and gave him the all-out kiss of brotherhood before he knew what hit him. She felt at once his unease and was herself surprised, because Michael had told her to expect him, given her Ben's face in her mind, had explained that Ben was a brother in all fullness, of the Inner Nest, and she knew that Jill was growncloser with Ben second only to that with Michael ... which was always necessarily first since Michael was the fountain and source of all their knowledge of the water of life.

But the foundation of Patricia's nature was an endless wish to make other people as happy as she was; she slowed down. She invited Ben to get rid of his clothes but did so casually and did not press the matter, except to ask him to remove his shoes, with the explanation that the Nest was everywhere kind to bare feet and the unstated corollary that street shoes would not be kind to it - it was soft and clean as only Michael's powers could keep things clean, which Ben could see for himself.

Aside from that she merely pointed out where to hang any clothes he found too warm for the Nest and hurried away to fetch him a drink. She didn't ask his preferences; she knew them from Jill. She merely decided that he would choose a double martini this time rather than scotch and soda, the poor dear looked tired. When she came back with a drink for each of them, Ben was barefooted and had removed his street jacket. "Brother, may you never thirst."

"We share water," he agreed and drank. "But there's mighty little water in that."

"Enough," she answered. "Michael says that the water could be completely in the thought; it is the sharing. I grok he speaks rightly."

"I grok. And it's just what I needed. Thanks, Patty."

"Ours is yours and you are ours. We're glad you're safely home. Just now the others are all at services or teaching. But there's no hurry; they will come when waiting is filled. Would you like to look around your Nest?"

Still puzzled but interested Ben let her lead him on a guided tour. Some parts of it were commonplace: a huge kitchen with a bar at one end - rather short on gadgets and having the same kind-to-the-feet floor covering as elsewhere, but not notable otherwise save for size - a library even more loaded than Jubal's, bathrooms ample and luxurious, bedrooms. Ben decided that they must be bedrooms although they contained no beds but simply floors that were even softer than elsewhere; Patty called them "little nests" and showed him one she said she usually slept in.

It contained her snakes.

It had been fitted on one side for the comfort of snakes. Ben suppressed his own slight queasiness about snakes until he came to the cobras. "It's all right," she assured him. "We did have glass in front of them. But Michael has taught them that they must not come past this line."

"I think I would rather trust glass."

"Okay, Ben." In remarkably short order she replaced the glass barrier, front and top. But he was relieved when they left, even though he managed to stroke Honey Bun when invited to. Before returning to the huge living room Pat showed him one other room. It was large, circular, had a floor which seemed almost as cushiony as that of the bedrooms, and no furniture. In its center was a round pool of water, almost a swimming pool. "This," she told him, "is the Innermost Temple, where we receive new brothers into the Nest." She went over and dabbled a foot in the water. "Just right," she said. "Want to share water and grow closer? Or maybe just swim?"

"Uh, not right now."

"Waiting is," she agreed. They returned to the living room and Patricia went to get him another drink. Ben settled himself on a big, very comfortable couch-then got up at once. The place was too warm for him, that first drink was making him sweat, and leaning back on a couch that adjusted itself too well to his contours made him just that much hotter. He decided it was damn silly to dress the way he would in Washington, warm as it was in here - and with Patty decked out in nothing but ink and a bull snake she had left around her shoulders during the latter part of the tour that reptile would keep him from temptation even if it wasn't already clearly evident that Patty was not trying to be provocative.

He compromised by leaving on jockey shorts and hung his other clothes in the foyer. As he did so, he noticed a sign printed on the inside of the door through which he had entered: "Did You Remember to Dress?"

He decided that, in this odd household, this gentle warning might be necessary if any were absentminded. Then he saw something else that he had missed on coming in, his attention earlier having been seized by the sight of Patty herself. On each side of the door was a large bowl, as gross as a bushel basket-and each was tilled with money.

More than filled. Federation notes of various denominations spilled out on the floor.

He was staring at this improbability when Patricia returned. "Here's your drink, Brother Ben. Grow close in Happiness."

"Uh, thanks." His eyes returned to the money.

She followed his glance. "You must think I'm a sloppy housekeeper, Ben-and I am. Michael makes it so easy, most of the cleaning and such, that I forget" She squatted down, retrieved the money, stuffed it into the less crowded bowl.

"Patty, why in the world?"

"Oh. We keep it here because this door leads out to the street. Just for convenience. If one of us is leaving the Nest - and I do, myself, almost every day for grocery shopping - we are likely to need money. So we keep it where you won't forget to take some with you."

"You mean ... just grab a handful and go?"

"Why, of course, dear. Oh, I see what you mean. But there is never anyone here but us. No visitors, ever. If any of us have friends outside - and, of course, all of us do - there are plenty of nice rooms lower down, the ordinary sort that outsiders are used to, where we can visit with them. This money isn't where it can tempt a weak person."

"Huh! I'm pretty weak, myself!"

She chuckled gently at his joke. "How can it tempt you when it's already yours? You're part of the Nest."

"Uh ... I suppose so. But don't you worry about burglars?" He was trying to guess how much money one of those bowls contained. Most of the notes seemed to be larger than singles - hell, he could see one with three zeroes on it still on the floor, where Patty had missed it in her tidying up.

"One did get in, just last week."

"So? How much did he steal?"

"Oh, he didn't. Michael sent him away."

"Called the cops?"

"Oh, no, no. Michael would never turn anybody over to the cops. I grok that would be a wrongness Michael just-" She shrugged. "-made him go away. Then Duke fixed the hole in the skylight in the garden room - did I show you that? It's lovely ... a grass floor. But I remember that you have a grass floor, Jill told me. That's where Michael first saw one. Is it grass all over? Every room?"

"Just my living room."

"If I ever get to Washington, can I walk on it? Lie down on it? Please?"

"Of course, Patty. Uh, ... it's yours."

"I know, dear. But it's not in the Nest, and Michael has taught us that it is good to ask, even when we know the answer is yes. I'll lie on it and feel the grass against me and be filled with Happiness to be in my brother's 'little nest.'

"You'll be most welcome, Patty." Ben reminded himself sharply that he didn't give a hoot in hell what his neighbors thought - but he hoped she would leave her snakes behind. "When will you be there?"

"I don't know. When waiting is filled. Maybe Michael knows."

"Well, warn me if you can, so I'll be in town. If not, Jill always knows the code for my door - I change it occasionally. Patty, doesn't anybody keep track of this money?"

"What for, Ben?"

"Uh, people usually do."

"Well, we don't. Just help yourself as you go out - then put back any you have left when you come home, if you remember to. Michael told rue to keep the grouch bag filled. If it runs low I get some more from him."

Ben dropped the matter, stonkered by the simplicity of the arrangement. He already had some idea, from Mike and secondhand from Jill and Jubal, of the moneyless communism of the Martian culture; he could see that Mike had set up an enclave of it here - and these bowls of cash marked the transition point whereby one passed from Martian to Terran economy. He wondered if Patty knew that it was a fake ? bolstered up by Mike's enormous fortune. He decided not to ask.

"Patty, how many are there in the Nest?" He felt a mild worry that he was acquiring too many sharing brothers without his consent, then shoved back the thought as unworthy after all, why would any of them want to sponge on him? Other than, possibly to lie on his grass rug - he didn't have any pots of gold just inside his door.

"Let me see ... there are almost twenty now, counting novitiate brothers who don't really think in Martian yet and aren't ordained."

"Are you ordained, Patty?"

"Oh, yes. But mostly I teach. Beginners' classes in Martian, and I help novitiate brothers and such. And Dawn and I - Dawn and Jill are each High Priestess - Dawn and I are pretty well-known Fosterites, especially Dawn, so we work together to show other Fosterites that the Church of All Worlds doesn't conflict with the Faith, any more than being a Baptist keeps a man from joining the Masons." She showed Ben Foster's kiss, explained what it meant, and showed him also its miraculous companion placed by Mike.

"They all know what Foster's kiss means and how hard it is to win it and by then they've seen some of Mike's miracles and they are just about ripe to buckle down and sweat to climb into a higher circle."

"It's an effort?"

"Of course it is, Ben - for them. In your case and mine, and Jill's, and a few others - you know them all - Michael called us straight into brotherhood. But to others Michael first teaches a discipline - not a faith but a way to realize faith in works. And that means they've got to start by learning Martian. That's not easy; I'm not perfect in it myself. But it is much Happiness to work and learn. You asked about the size of the Nest - let me see, Duke and Jim and Michael and myself - two Fosterites, Dawn and myself ... one circumcised Jew and his wife and four children-"

"Kids in the Nest?"

"Oh, more than a dozen. Not here, but in the nestlings' nest just off of here; nobody could meditate with kids hooting and hollering and raising Ned, Want to see it?"

"Uh, later."

"One Catholic couple with a baby boy-excommunicated I'm sorry to say; their priest found out about it. Michael had to give them very special help; it was a nasty shock to them - and so utterly unnecessary. They were getting up early every Sunday morning to go to mass just as usual - but kids will talk. One Mormon family of the new schism - that's three more, and their kids. The rest are the usual run of Protestants and one atheist ... that is, he thought he was an atheist, until Michael opened his eyes. He came here to scoff; he stayed to learn ... and he'll be a priest before long. Uh, nineteen grownups. I'm pretty sure that's right though it's hard to say, since we're hardly ever all in the Nest at once, except for our own services in the Innermost Temple. The Nest is built to hold eighty-one-that's 'three-filled,' or three times three multiplied by itself - but Michael says that there will be much waiting before we'd need a bigger nest and by then we will be building other nests. Ben? Wouldn't you like to see an outer service, see how Michael makes the pitch, instead of just listening to me ramble on? Michael will be preaching just about now."

"Why, yes, if it's not too much trouble."

"You could go by yourself. But I'd like to go with you ... and I'm not busy. Just a sec, dearie, while I get decent."

"Jubal, she was back in a couple of minutes in a robe not unlike Anne's Witness robe but cut differently, with angel-wing sleeves and a high neck and the trademark Mike uses for the Church of All Worlds - nine concentric circles and a conventionalized Sun - embroidered over her heart. This getup was a priestess robe, her vestments; Jill and the other priestesses wear the same sort, except that Patty's was opaque, a heavy synthetic silk, and came so high that it covered her cartoons, and was caught at both wrists for the same reason. She had put on stockings, too, or maybe bobby socks, and was carrying sandals.

"Changed the hell out of her, Jubal. It gave her great dignity. Her face is quite nice and I could see that she was considerably older than I had first guessed her although not within twenty years of what she claims to be. She has an exquisite complexion and I thought what a shame it was that anyone had ever touched a tattooing needle to such skin.

"I had dressed again. She asked me to take off just my shoes because we weren't going out the way I had come in. She led me back through the Nest and out into a corridor; we stopped to put on shoes and went down a ramp that wound down maybe a couple of floors until we reached a gallery. It was sort of a loge overlooking the main auditorium. Mike was holding forth on the platform. No pulpit, no altar, just a lecture hall, with a big All-Worlds symbol on the wall behind him. There was a robed priestess on the platform with him and, at that distance, I thought it was Jill, but it wasn't; it was another woman who looks a bit like her and is almost as beautiful. The other high priestess, Dawn - Dawn Ardent."

"What was that name?" Jubal interrupted.

"Dawn Ardent-n,e Higgins, if you want to be fussy."

"I've met her."

"I know you have, you allegedly retired goat. She's got a crush on you..."

Jubal shook his head. "Some mistake. The 'Dawn Ardent' I mean I just barely met, about two years ago. She wouldn't even remember me."

"She remembers you. She gets every one of your pieces of commercial crud, on tape, under every pseudonym she has been able to track down. She goes to sleep by them, usually, and they give her beautiful dreams. She says. Furthermore there is no doubt that she knows who you are. Jubal, that big living room, the Nest proper, has exactly one item of ornamentation, if you'll pardon the word - a lifesized color solly of your head. Looks as if you had been decapitated, with your face in a hideous grin. A candid shot that Duke sneaked of you, I understand."

"Why, that brat!"

"Jill asked him to, behind your back."

"Double brat."

"Sir, you are speaking of the woman I love - although I'm not alone in that distinction. But Mike put her up to it. Brace yourself, Jubal - you are the patron saint of the Church of All Worlds."

Jubal looked horrified. "They can't do this to me!"

"They already have. But don't worry; it's unofficial and not publicized. But Mike freely gives you credit, inside the Nest just among water brothers, for having instigated the whole show and explained things to him so well that he was finally able to figure out how to put over Martian theology to humans."

Jubal looked about to retch. Ben went on, "I'm afraid you can't duck it. But in addition, Dawn thinks you're beautiful. Aside from that quirk, she is an intelligent woman - and utterly charming. But I digress. Mike spotted us at once, waved and called out, 'Hi, Ben! Later'

- and went on with his spiel.

"Jubal, I'm not going to try to quote him, you'll just have to hear it. He didn't sound preachy and he didn't wear robes - just a smart, well-tailored, white syntholinen suit. He sounded like a damned good car salesman, except that there was no doubt he was talking about religion. He cracked jokes and told parables - none of them straitlaced but nothing really dirty, either. The essence of it was a sort of pantheism ... one of his parables was the oldy about the earthworm burrowing along through the soil who encounters another earthworm and at once says, 'Oh, you're beautiful! You're lovelyl Will you marry me?' and is answered: 'Don't be silly! I'm your other end.' You've heard it before?"

"'Heard it?' I wrote it!"

"I hadn't realized it was that old. Anyhow, Mike made good use of it. His idea is that whenever you encounter any other grokking thing - he didn't say 'grokking' at this stage - any other living thing, man, woman, or stray cat ... you are simply encountering your 'other end' ... and the universe is just a little thing we whipped up among us the other night for our entertainment and then agreed to forget the gag. He put it in a much more sugar-coated fashion, being extremely careful not to tread on competitors' toes."

Jubal nodded and looked sour. "Solipsism and Pantheism. Teamed together they can explain anything. Cancel out any inconvenient fact, reconcile all theories, and include any facts or delusions you care to name. Trouble is, it's just cotton candy, all taste and no substance - and as unsatisfactory as solving a story by saying: '-and then the little boy fell out of bed and woke up; it was just a dream.'"

"Don't crab at me about it; take it up with Mike. But believe me, he made it sound convincing. Once he stopped and said, 'You must be tired of so much talk-' and they yelled back, 'No!' - I tell you, he really had them. But he protested that his voice was tired and, anyhow, a church ought to have miracles and this was a church, even though it didn't have a mortgage. 'Dawn, fetch me my miracle box.' Then he did some really amazing sleight-of-hand - you know he had been a magician with a carnival?"

"I knew he had been with it. He never told me the exact nature of his shame."

"He's a crackerjack magician; he did stunts for them that had me fooled. But it wouldn't have mattered if it had been only the card tricks kids learn; it was his patter that had them rolling in the aisles. Finally he stopped and said apologetically, 'The Man from Mars is supposed to be able to do wonderful things ... so I have to pass a few miracles each meeting. I can't help being the Man from Mars; it's just something that happened to me. But miracles can happen for you, too, if you want them. However, to be allowed to see anything more than these narrow-gauge miracles, you must enter the Circle. Those of you who truly want to learn I will see later. Cards are being passed around.'

"Patty explained to me what Mike was really doing. 'This crowd is just marks, dear-people who come out of curiosity or maybe have been shined in by some of our own people who have reached one of the inner circles.' Jubal, Mike has the thing rigged in nine circles, like degrees in a lodge - and nobody is told that there actually is a circle farther in until they're ready to be inducted into it. 'This is just Michael's bally,' Pat told me, 'which he does as easy as he breathes - while all the time he's feeling them out, sizing them up, getting inside their heads and deciding which ones are even possible. Maybe one in ten. That's why he strings it out. Duke is up behind that grille and Michael tells him every mark who just might measure up, where he sits and everything. Michael's about to turn this tip ... and spill the ones he doesn't want. Dawn will handle that part, after she gets the seating diagram from Duke.'"

"How did they work that?" asked Harshaw.

"I didn't see it, Jubal. Does it matter? There are a dozen ways they could cut from the herd the ones they wanted as long as Mike knew which they were and had worked out some way to signal Duke. I don't know. Patty says he's clairvoyant and says it with a straight face - and, do you know, I won't discount the possibility. But right after that, they took the collection. Mike didn't do even this in church style - you know, soft music and dignified ushers. He said nobody would believe that this was a church service if be didn't take a collection ... so he would, but with a difference. Either take it or put it - suit yourself. Then, so help me, they passed collection baskets already loaded with money. Mike kept telling them that this was what the last crowd had left, so help themselves ... if they were broke or hungry and needed it. But if they felt like giving, give. Share with others. Just do one or the other - put something in, or take something out. When I saw it, I figured he had found one more way to get rid of too much money."

Jubal said thoughtfully, "I'm not sure he would lose by it. That pitch, properly given, should result in more people giving more ... while a few take just a little. And probably very few. I would say that it would be hard indeed to reach in and take out money when the people on each side of you are putting money in ... unless you need it awfully badly."

"I don't know, Jubal ... but I understand that they are just as casual about those collections as they are about that stack of dough upstairs. But Patty whisked me away when Mike turned the service over to his high priestess. I was taken to a much smaller auditorium where services were just opening for the seventh circle in - people who had belonged for several months at least and had made progress. If it is progress.

"Jubal, Mike had gone straight from one to the other, and I couldn't adjust to the change. That outer meeting was half popular lecture and half sheer entertainment - this one was more nearly a voodoo rite. Mike was in robes this time; he looked taller, ascetic, and intense. I swear his eyes gleamed. The place was dimly lighted, there was music that was creepy and yet made you want to dance. This time Patty and I took a double seat together, a couch that was darn near a bed. What the service was all about I couldn't say. Mike would sing out to them in Martian, they would answer in Martian - except for chants of 'Thou art GodI Thou art God!' which was always echoed by some Martian word that would make my throat sore to try to pronounce it."

Jubal made a croaking noise. "Was that it?"

"Huh? I believe it was - allowing for your horrible tall-corn accent. Jubal ... are you hooked? Have you just been stringing me along?"

"No. Stinky taught it to me - and he says that it's heresy of the blackest sort. By his lights I mean - I couldn't care less. It's the Martian word Mike translates as: 'Thou art God.' But our brother Mahmoud says that isn't even close to being a translation. It's the universe proclaiming its own self-awareness ? or it's 'peccavimus' with a total absence of contrition or a dozen other things, all of which don't translate it. Stinky says that not only it can't be translated but that he doesn't really understand it in Martian - except that it is a bad word, the worst possible in his opinion and much closer to Satan's defiance than it is to the blessing of a benevolent God. Go on. Was that all there was to it? Just a bunch of fanatics yelling Martian at each other?"

"Uh ... Jubal, they didn't yell and it wasn't fanatical. Sometimes they would barely whisper, the room almost dead quiet. Then it might climb in volume a little but not much. They did it in sort of a rhythm, a pattern, like a cantata, as if they had rehearsed it a long time ... and yet it didn't feel as if they had rehearsed it; it felt more as if they were all just one person, humming to himself whatever he felt at the moment. Jubal, you've seen how the Fosterites get themselves worked up-"

"Too much of it, I'm sorry to say."

"Well, this was not that sort of frenzy at all; this was quiet and easy, like dropping off to sleep. It was intense all right and got steadily more so, but-Jubal, ever sit in on a spiritualist s,ance?"

"I have. I've tried everything I could, Ben."

"Then you know how the tension can grow without anybody moving or saying a word. This was much more like that than it was like a shouting revival, or even the most sedate church service. But it wasn't mild; it packed terrific wallop."

"The technical word is 'Apollonian.'"

"Huh?"

"As opposed to 'Dionysian.' And both rather Procrustean I'm sorry to say. People tend to simplify 'Apollonian' into 'mild,' and 'calm,' and 'cool.' But 'Apollonian' and 'Dionysian' are two sides of the same coin - a nun on her knees in her cell, holding perfectly still and her facial muscles relaxed, can be in a religious ecstasy more frenzied than any priestess of Pan Priapus celebrating the vernal equinox. Ecstasy is in the skull, not in the setting-up exercises." Jubal frowned. "Another common error is to identify 'Apollonian' with 'good', merely because our most respectable sects are all rather Apollonian in ritual and precept. Mere local prejudice. Proceed."

"Well ... things weren't as quiet as a nun at her devotions anyhow. They didn't just stay seated and let Mike entertain them. They wandered about a bit, swapped seats, and there was no doubt that there was necking going on; no more than necking, I believe, but the lighting was very low key and it was hard to see from one pew to another. One gal wandered over our way, started to join us, but Patty gave her some sign to let us be, so she just kissed us and left." Ben grinned. "Kissed quite well, too, though she didn't dally about it. I was the only person not dressed in a robe; I was as conspicuous as a space suit in a salon. But she gave no sign of noticing.

"The whole thing was very casual ... and yet it seemed as coordinated as a ballerina's muscles. Mike kept busy, sometimes out in front, sometimes wandering among the others - once he squeezed my shoulder and kissed Patty, unhurriedly but quickly. He didn't speak to me. Back of the spot where he stood when he seemed to be leading them was some sort of a dingus like a magic mirror, or possibly a big stereo tank; he used it for 'miracles,' only at this stage he never used the word - at least not in English. Jubal, every church promises miracles. But it's always jam yesterday and jam tomorrow, never jam today."

"Exception," Jubal interrupted again. "Many of them deliver as a matter of routine, exempli gratia among many: Christian Scientists and Roman Catholics."

"Catholics? You mean Lourdes?"

"The example included Lourdes, for what it may be worth. But I referred to the Miracle of Transubstantiation, called forth by every Catholic priest at least daily."

"Hmm-Well, I can't judge that subtle a miracle. To a heathen outsider like myself that sort of miracle is impossible to test. As for

Christian Scientists, I won't argue - but if I break a leg, I want a sawbones."

"Then watch where you put your feet," Jubal growled. "Don't bother me with your fractures."

"Wouldn't think of it. I want one who wasn't a classmate of William Harvey."

"Harvey could reduce a fracture. Proceed."

"Yeah, but how about his classmates? Jubal, those things you cited as miracles may be such - but Mike offers splashy ones, ones the cash customers can see. He's either an expert illusionist, one who would make the fabled Houdini look clumsy ... or an amazing hypnotist-"

"He might be both."

"-or he's smoothed the bugs out of closed-circuit stereovision to the point where it simply cannot be told from reality, for his special effects. Or 'I've been 'ad fer a button, dearie.'"

"How can you rule out real miracles, Ben?"

"I included them with the button. It's not a theory I like to think about. Whatever he used, it was good theater. Once the lights came up behind him and here was a black-maned lion, lying as stately and sedately as if guarding library steps, while a couple of little lambs wobbled around him. The lion just blinked and yawned. Sure, Hollywood can tape that sort of special effect any day - but it looked real, so much so that I thought I smelled the lion ... and of course that can be faked, too."

"Why do you insist on fakery?"

"Damn it, I'm trying to be judicial!"

"Then don't lean over backwards so far you fall down. Try to emulate Anne."

"I'm not Anne. And I wasn't very judicial at the time. I just lounged back and enjoyed it, in a warm glow. It didn't even annoy me that I couldn't understand most of what was said; it felt as if I got the gist of it. Mike did a lot of gang-ho miracles - or illusions. Levitation and such. I wasn't being critical, I was willing to enjoy it as good showmanship. Patty slipped away toward the end after whispering to me to stay where I was and she would be back. 'Michael has just told them that any who do not feel ready for the next circle should now leave,' she told me.

"I said, 'I guess I had better leave, too.'

"And she said, 'Oh, no, dear. You're already Ninth Circle. You know that. Just stay seated, I'll be back.' And she left.

"I don't think anybody decided to chicken out. This group was not only Seventh Circle but Seventh-Circlers who were all supposed to be promoted. But I didn't really notice for the lights came up again ... and there was Jill!

"Jubal, this time it definitely did not feel like stereovision. Jill picked me out with her eyes and smiled at me. Oh, I know, if the person being photographed looks directly at the cameras, then the eyes meet yours no matter where you're seated But if Mike has it smoothed out this well, he had better patent it. Jill was dressed in an outlandish costume - priestess outfit, I suppose - but not like the others. Mike started intoning something to her and to us, partly in English ... stuff about the Mother of All, the unity of many, and started calling her by a series of names ... and with each name her costume changed-"

Ben Caxton came quickly alert when the lights came up behind the High Priest and he saw Jill Boardman posed, above and behind the priest. He blinked and made sure that he had not again been fooled by lighting and distance - this was Jill. She looked back at him and smiled. He half listened to the invocation while thinking that he had been convinced that the space behind the Man from Mars was surely a stereo tank, or some gimmick. But he could almost swear that he could walk up those steps and pinch her.

He was tempted to do so - then reminded himself that it would be a crummy trick to ruin Mike's show. Wait till it was over and Jill was free - "Cybele!" - and Jill's costume suddenly changed, again.

"Frigg!"

"Gel"

"Devil"

"Ishtar!"

"Maryam"

"Mother Eve! Mater Deum Magna - Loving and Beloved, Life Undying-"

Caxton stopped hearing the words ... for Jill suddenly was Mother Eve, clothed only in her own glory. The light spread and he saw that she was standing gently at rest in a Garden, beside a tree around and on which was twined a great serpent.

Jill smiled at them all, turned a little, reached up and smoothed the serpent's head turned back and opened her arms to all of them.

The first of the candidates moved forward to enter the Garden.

Patty returned and touched Caxton on the shoulder. "Ben, I'm back. Come with me, dear."

Caxton was reluctant, he wanted to stay and drink in the glorious vision of Jill ... he wanted to do more than that; he wanted to join that procession and go where she was. But he found himself getting up and leaving with Patricia. He looked back and saw Mike about to put his arms around and kiss the first woman in the line ... turned to follow Patricia outside and failed to see the candidates' robe vanish as Mike kissed her - and did not see what followed at once, when Jill kissed the first male candidate for elevation to the eighth circle ... and his robe vanished.

"We have to go long way 'round," Patty explained, "to give them time to get clear and on into the Temple of the Eighth Circle. Oh, it wouldn't actually hurt to barge in, but it would waste Michael's time, getting them back in the mood - and he does work so very hard."

"Where are we going now?"

"To pick up Honey Bun. Then back to the Nest. Unless you want to take part in the initiation to the Eighth Circle. You can, you know, since you're Ninth Circle. But you haven't learned Martian yet; you'd find it very confusing."

"Well-I'd like to see Jill. When will she be free?"

"Oh. She told me to tell you that she was going to duck upstairs and see you. Down this way, Ben."

A door opened and Ben found himself in the garden he had seen. The serpent was still festooned on the tree; she raised her head as they came in. "There, there, dears" Patricia said to her. "You were Mama's good girl, weren't you?" She gently unwrapped the boa and snaked it down into a basket, tail first. "Duke brought her down for me but I have to arrange her on the tree and tell her to stay there and not go wandering off. You were lucky, Ben; a transition service from Seventh to Eighth happens very seldom - Michael won't hold it until there are enough candidates ready to build and hold the mood ... although we used to supply people out of the Innermost Circle to help the first candidates from outside through."

Ben carried Honey Bun for Patty until they reached the top level and learned that a fourteen-foot snake is quite a load; the basket had steel braces and needed them. As soon as they were that high, Patricia stopped. "Put her down, Ben." She took off her robe and handed it to him, then got out the snake and draped it around her. "This is Honey Bun's reward for being a good girl; she expects to cuddle up to Mama. I've got a class starting almost at once, so I'll walk the rest of the way with her on me and let her stay on me until the last possible second. It's not a goodness to disappoint a snake; they're just like babies. They can't grok in fullness, except that Honey Bun groks Mama ... and Michael, of course."

They walked the fifty yards or so to the entrance to the Nest proper and at its door Patricia let Ben take off her sandals for her after he removed his shoes, He wondered how she could balance on one foot under such a load . . . and noticed, too, that she had gotten rid of her socks or stockings at some point - no doubt while she was out arranging Honey Bun's stage appearance.

They went inside and she went with him, still clothed in the big snake, while he shucked down to his jockey shorts - stalling as he did so, trying to make up his mind whether to discard the shorts, too. He had seen enough to be fairly certain that clothing, any clothing, inside the Nest was as unconventional by these conventions (and possibly as rude), as hobnailed boots on a dance floor. The gentle warning on the exit door, the fact that there were no windows anywhere in the Nest, the womblike comfort of the Nest itself, Patricia's lack of attire plus the fact that she had suggested (but not insisted) that he do likewise - all added up to an unmistakable pattern of habitual domestic nudity ... among people who were all at least nominally his own "water brothers," even though he had not met most of them.

He had seen further confirmation in addition to Patricia, whose behavior he had discounted somewhat from a vague feeling that a tattooed lady might very well have odd habits about clothing. On coming into the living room they had passed a man headed the other way, toward the baths and the "little," and he had worn less than Patricia by one snake and lots of pictures. He had greeted them with "Thou art God" and gone on, apparently as used to buff as Patricia was. But, Ben reminded himself, this "brother" hadn't seemed surprised that Ben was dressed, either.

There had been other such evidence in the living room: a body sprawled face down on a couch across the room - a woman, Ben thought, although he had not wanted to stare after a quick glance had shown him that this one was naked, too.

Ben Caxton had thought himself to be sophisticated about such things. Swimming without suits he considered only sensible. He knew that many families were casually naked in their own homes - and this was a family, of sorts - although he himself had not been brought up in the custom. He had even (once) let a girl invite him to a nudist resort, and it had not troubled him especially after the first five minutes or so - he had simply regarded it as a silly lot of trouble to go to for the dubious pleasures of poison ivy, scratches, and an allover sunburn that bad put him in bed for a day.

But now he found himself balanced in perfect indecision, unable to make up his mind between the probable urbanity of removing his symbolic fig leaf ... and the even stronger probability - certainty he decided - that if he did so and strangers came in who were dressed and stayed that way, he would feel all-fired silly. Hell, he might even blush!

"What would you have done, Jubal?" Ben demanded.

Harshaw lifted his eyebrows. "Are you expecting me to be shocked, Ben? I have seen the human body, professionally and otherwise, for most of a century. It is often pleasing to the eye, frequently most depressing and never significant per se. Only in the subjective value the viewer places on the sight. I grok Mike runs his household along nudist lines. Shall I cheer? Or must I cry? Neither. It leaves me unmoved."

"Damn it man! It's easy for you to sit there and be Olympian about it - you weren't faced with the choice. I've never seen you take off your pants in company-"

"Nor are you likely to. 'Other times, other customs.' But I grok you were not motivated by modesty. You were suffering from a morbid fear of appearing ridiculous - a well-known phobia with a long, pseudo-Greek name with which I shall not bore you."

"Nonsense! I simply wasn't certain what was polite."

"Nonsense to you, sir. You already knew what was polite ... but were afraid you might look silly, or possibly feared being trapped inadvertently in the gallant reflex. But I seem to grok that Mike had a reason for instituting this household custom. Mike always has reasons for everything he does, although some of them seem strange to me."

"Oh, yes. He has reasons. Jill told me about them."

Ben Caxton was standing in the foyer, his back to the living room and his hands on his shorts, having told himself, not very firmly, to take the plunge and get it over with, when two arms came snugly around his waist from behind. "Ben darling! How wonderful to have you here!"

He turned and had Jill in his arms and her mouth warm and greedy against his - and was very glad that he had not quite finished stripping. For she was no longer "Mother Eve"; she was wearing one of the long, all-enveloping priestess robes. Nevertheless he was happily aware that he had a double armful of live, warm, and gently squirming girl; her priestly vestment was no greater impediment than would have been a thin gown, and both kinesthetic and tactile senses told him that the rest was Jill.

"Golly!" she said, breaking from the kiss. "I've missed you, you old beast. Thou art God."

"Thou art God," he conceded. "Jill, you're prettier than ever."

"Yes," she agreed. "It does that for you. But I can't tell you what a thrill it gave me to catch your eye at the blowoff."

'Blowoff'?"

"Jill means," Patricia put in, "the end of the service where she is All Mother, Mater Deum Magna. Kids, I must rush."

"Never hurry, Pattycake."

"I gotta rush so I won't have to hurry. Ben, I must put Honey Bun to bed and go down and take my class - so kiss me goodnight now. Please?"

Ben found himself kissing goodnight a woman still wrapped most thoroughly by a giant snake - and decided that he could think of better ways ... say wearing full armor. But he tried to ignore Honey Bun and treat Patty as she deserved to be treated.

Jill kissed her and said, "Stop by and tell Mike to stall until I get there, pretty please."

"He will anyhow. 'Night, dears." She left unhurriedly.

"Ben, isn't she a lamb?"

"She certainly is. Although she had me baffled at first."

"I grok. But it's not because she's tattooed nor because of her snakes, I know. She baffled you - she baffles everybody - because Patty never has any doubts; she just automatically always does the right thing. She's very much like Mike. She's the most advanced of any of us - she ought to be high priestess. But she won't take it because her tattoos would make some of the duties difficult - be a distraction at least - and she doesn't want them taken off."

"How could you possibly take off that much tattooing? With a flensing knife? It would kill her."

"Not at all, dear. Mike could take them off completely, not leave a trace, and not even hurt her. Believe me, dear, he could. But he groks that she does not think of them as belonging to her; she's just their custodian, and he groks with her about it. Come sit down. Dawn will be in with supper for all three of us in a moment. I must eat while we visit or I won't have a chance until tomorrow. That's poor management with all eternity to draw from ... but I didn't know when you would get here and you happen to arrive on a very full day. But tell me what you think of what you've seen? Dawn tells me you saw an outsiders' service, too."

"Yes."

"Well?"

"Mike," Caxton said slowly, "has certainly blossomed out. I think he could sell shoes to snakes."

"I'm quite sure he could. But he never would because it would be wrong - snakes don't need them. What's the matter, Ben? I grok there's something bothering you."

"No," he answered. "Certainly not anything I can put my finger on. Oh, I'm not much for churches ... but I'm not against them exactly, certainly not against this one. I guess I just don't grok it."

"I'll ask you again in a week or two. There's no hurry."

"I won't be here even a week."

"You have some columns on the spike" - it was not a question.

"Three fresh ones. But I shouldn't stay even that long."

"I think you will ... then you'll phone in a few ... probably about the Church. By then I think you will grok to stay much longer."

"I don't think so."

"Waiting is, until fullness. You know it's not a church?"

"Well, Patty did say something of the sort."

"Let's say it's not a religion. It is a church, in every legal and moral senses - and I suppose our Nest is a monastery. But we're not trying to bring people to God; that's a contradiction in terms, you can't even say it in Martian. We're not trying to save souls, because souls can't be lost. We're not trying to get people to have faith, because what we offer is not faith but truth - truth they can check; we don't urge them to believe it. Truth for practical purposes, for here-and-now, truth as matter of fact as an ironing board and as useful as a loaf of bread ... so practical that it can make war and hunger and violence and hate as unnecessary as ... as - well, as clothes here in the Nest. But they have to learn Martian first. That's the only hitch, finding people who are honest enough to believe what they see, and then are willing to do the hard work - it is hard work - of learning the language it can be taught in. A composer couldn't possibly write down a symphony in English ... and this sort of symphony can't be stated in English any more than Beethoven's Fifth can be." She smiled. "But Mike never hurries. Day after day he screens hundreds of people finds a few dozen ... and out of those a very few trickle into the Nest and he trains them further. And someday Mike will have some of us so thoroughly trained that we can go out and start other nests, and then it can begin to snowball. But there's no hurry. None of us, even us in the Nest, are really trained. Are we, dear?"

Ben looked up, somewhat startled by Jill's last three words - then was really startled to find bending over him to offer him a plate a woman whom he belatedly recognized as the other high priestess - Dawn, yes, that was right. His surprise was not reduced by the fact that she was dressed in Patricia's fashion, minus tattoos.

But Dawn was not startled. She smiled and said, "Your supper, my brother Ben. Thou art God."

"Uh, thou art God. Thanks." He was beyond being surprised when she leaned down and kissed him, then got plates for herself and Jill, sat down on the other side of him and began to eat. He was willing to concede that, if not God, Dawn had the best attributes associated with goddesses; he was rather sorry she had not sat down across from him - he couldn't see her well without being obvious about it.

"No," Dawn agreed, between bites, "we aren't really trained yet, Jill. But waiting will fill."

"That's the size of it, Ben," Jill continued. "For example, I took a break to eat. But Mike hasn't had a bite for well over twenty-four hours and won't eat until he's not needed - you happened to hit a crowded day, because of that group making transition to Eighth Circle. Then when Mike is through, he'll eat like a pig and that will carry him as long as necessary. Besides that, Dawn and I get tired ... don't we, sweet?"

"We surely do. But I'm not too tired, Gillian. Let me take this service and you can visit with Ben. Give me that robe."

"You're crazy in your little pointy head, my love - and Mama spank. Ben, she's been on duty almost as long as Mike has. We both can take that long a stretch - but we eat when we're hungry and sometimes we need sleep. Speaking of robes, Dawn, this was the last vanishing robe in the Seventh Temple. I meant to tell Patty she'd better order a gross or two."

"She has."

"I should have known. This one seems a little tight." Jill wiggled in it in a fashion that disturbed Ben more than Dawn's perfect and unrobed skin. "Are we putting on weight, Dawn?"

"I think we are, a little. No matter."

"Helps, you mean. We were too skinny. Ben, you noticed, didn't you, that Dawn and I have the same figure? Height, bust, waist, hips, weight, everything - not to mention coloration. We were almost the same when we met ... and then, with Mike's help, we matched up exactly and are holding it that way. Even our faces are getting more alike - but we didn't plan that. That just comes from doing the same things and thinking about the same things. Stand up and let Ben look at us, dear."

Dawn put her plate aside and did so, in a pose that reminded Ben oddly of Jill, more so than the figure resemblance seemed to justify; then he realized it was the exact pose Jill had been in when she had first stood revealed as Mother Eve.

Invited to stare, he did. Jill said, with her mouth full, "See, Ben? That's me."

Dawn smiled at her. "A razor's edge of difference, Gillian."

"Pooh. You're getting that control, too. I'm almost sorry we'll never have the same face. It's very handy, Ben, for Dawn and myself to look so much alike. We have to have two high priestesses; it's all two of us can do to keep up with Mike. We can trade places right in the middle of a service - and sometimes do. And besides," she added, swallowing, "Dawn can buy a fitted dress and it fits me, too. Saves me the nuisance of shopping for clothes. When we wear clothes."

"I wasn't sure," Ben said slowly, "that you still wore clothes at all. Except these priestess things."

Jill looked surprised. "Do you think we would go out dancing in these? We wear evening dresses, same as everybody else. That's our favorite way of not getting our beauty sleep, isn't it, dear? Sit back down and finish your supper; Ben has stared at us long enough for the moment. Ben, there's a man in that transition group you were just with who's a perfectly dreamy dancer and this town is loaded with good night clubs - and Dawn and I have kept the poor fellow so busy, alternated keeping him up so many nights in a row, that we've had to help him stay awake in language classes. But he'll be all right; once you reach Eighth Circle you don't need nearly so much sleep. Whatever made you think we never dressed, dear?"

"Uh-" Ben finally blurted out the embarrassing predicament he had been in.

Jill looked wide-eyed, then barely giggled - and stopped it at once, at which Ben realized that he had heard none of these people laugh only the "marks" in the outer service. "I see. But, darling, I just never got around to taking this robe off. I am wearing it because I have to gobble and git. But had I grokked that that was troubling you, I certainly would have chucked it before I said hello even though I wasn't sure there was another one handy. We're so used to dressing or not dressing according to what we need to do that I just plain forgot that I might not be behaving politely. Sweetheart, take those shorts off - or leave them on, exactly as suits you."

"Uh-"

"Just don't fret about it, either way." Jill smiled and dimpled. "Reminds me of the first time Mike tried a public beach, but in reverse. 'Member, Dawn?"

"I'll never forget it!"

"Ben, you know how Mike is about clothes. He just doesn't understand them. Or didn't. I had to teach him everything. He couldn't see any point to them as protection, until he grokked - to his great surprise - that we aren't as invulnerable as he is. Modesty - that sort of 'modesty'; he's so modest in its true sense that it hurts - body-modesty isn't a Martian concept, it couldn't be. And only lately has Mike grokked clothes as ornaments, after we started experimenting with various ways to costume our acts.

"But, Ben, while Mike was always willing to do what I told him to, whether he grokked it or not, you can't imagine how many million little things there are to being a human being. We take twenty or thirty years to learn them; Mike had to learn them almost overnight. There are gaps, even now. He does things not knowing that isn't how a human does them. We all teach him - Dawn and I especially. All but Patty, who is sure that anything that Michael does must be perfect. But he's still grokking the nature of clothes. He's groks mostly that they're a wrongness that keeps people apart - and get in the way of letting love cause them to grow closer. Lately he's come to realize that part of the time you want and need, such a barrier - with outsiders.

But for a long time Mike wore clothes only because I told him to and when I told him he must.

"And I missed a gap."

"We were down in Baja California; it was just at the time we met - or re-met, actually - Dawn. Mike and I checked in at night at one of those big fancy beach hotels and he was so anxious to grok the ocean, get wet all over, that he let me sleep the next morning and went down by himself for his first encounter with the ocean. And I didn't realize that Mike didn't know about swim suits. Oh, he may have seen them ... but he didn't know what they were for, or had some mixed-up idea. He certainly didn't know that you were supposed to wear them in the water - the idea was almost sacrilege. And you know Jubal's rigid rules about keeping his pool clean - I'm sure it's never seen a suit. I do remember one night a lot of people got tossed in with all their clothes on, but it was when Jubal was going to have it drained right away anyhow.

"Poor Mike! He got down to the beach and threw off his robe and headed for the water ... looking like a Greek god and just as unaware of local conventions - and then the riot started and I came awake fast and grabbed some clothes myself and got down there just in time to keep him out of jail ... and fetched him back to the room and he spent the rest of the day in a trance."

Jill got a momentary faraway look. "And he needs me now, too, so I must run along. Kiss me goodnight, Ben; I'll see you in the morning."

"You'll be gone all night?"

"Probably. It's a fairly big transition class and, truthfully, Mike has just been keeping them busy the past half hour and more while we visited. But that's all right." She stood up, pulled him gently to his feet and went into his arms.

Presently she broke from the kiss but not from his arms and murmured, "Ben darling, you've been taking lessons. Whew!"

"Me? I've been utterly faithful to you - in my own way."

"In the same way I've been to you ... the nicest way. I wasn't complaining ... I just think Dorcas has been helping you to practice kissing."

"Some, maybe. Nosy."

"Uh huh, I'm always nosy. The class can wait while you kiss me once more. I'll try to be Dorcas."

"You be yourself."

"I would be, anyway. Self. But Mike says that Dorcas kisses more thoroughly - 'groks a kiss more' - than anyone."

"Quit chattering."

She did, for a while, then sighed. "Transition class, here I come - glowing like a lightning bug. Take good care of him, Dawn."

"I will."

"And better kiss him right away and see what I mean!"

"I intend to."

"'Bye, darlings! Ben, you be a good boy and do what Dawn tells you." She left, not hurrying - but running.

Dawn stood up, flowed up against him, put up her arms.

Jubal cocked an eyebrow. "And now I suppose you are going to tell me that at that point, you went chicken."

"Uh, not exactly. A near miss, call it. To tell the truth I didn't have too much to say about it. I, uh, 'cooperated with the inevitable.'"

Jubal nodded. "No other possible course. You were trapped and couldn't run. Whereupon the best a man can do is try for a negotiated peace." He added, "But I'm sorry that the civilized habits of my household caused the boy to fall afoul the law of the jungles of Baja California."

"I don't think he's a boy any longer, Jubal."

Chapter 32

BEN CAXTON HAD AWAKENED not knowing where he was nor what time it was. It was dark around him, perfectly quiet, he was lying on something soft. Not a bed - where was he?

The night came back in a rush. The last he clearly remembered he had been lying on the soft floor of the Innermost Temple, talking quietly and intimately with Dawn. She had taken him there, they had immersed, shared water, grown closer. Frantically he reached around him in the dark, found nothing.

"Dawn!"

Light swelled softly to a gentle dimness. "Here, Ben."

"Oh! I thought you had gone!"

"I didn't intend to wake you." She was wearing - to his sudden and intense disappointment - her robe of office. "I must go start the Sunrisers' Outer Service. Gillian isn't back yet. As you know, it was a fairly big class."

Her words brought back to him things she had told him last night things which, at the time, had upset him despite her gentle and quite logical explanations ... and she had soothed his upset until he found himself agreeing with her. He still was not quite straight in his mind he didn't grok it all - but, yes, Jill was probably still busy with her rites as high priestess - a task, or perhaps a happy duty, that Dawn had offered to take for her. Ben felt a twinge that he really should have been sorry that Jill had refused, had insisted that Dawn get much needed rest.

But he did not feel sorry. "Dawn ... do you have to leave?" He scrambled to his feet, put his arms around her.

"I must go, Ben dear ... dear Ben." She melted up against him.

"Right now? In such a rush?"

"There is never," she said softly, "that much hurry." Suddenly the robe no longer kept them apart. He was too bemused to wonder what had become of it.

He woke up a second time, found that the "little nest" he was in lighted softly when he stood up. He stretched, discovered that he felt wonderful, then looked around the room for his shorts. They were not in sight and no way for them to be out of sight. He tried to recall where he had left them ... and had no recollection of ever having taken them off. But he certainly had not worn them into the water. Probably beside the pool in the Innermost Temple. He made a mental note to stop back there and pick them up, then went out and found a bathroom.

Some minutes later, shaved, showered, and refreshed, he did remember to look into the Innermost Temple, failed to find his shorts and decided that somebody, Patty maybe, had noticed them and put them near the outer door where apparently everybody kept what they needed for street wear ... said to hell with it and grinned at himself for having made such a jittery old-maid issue last night out of wearing them or not. He needed them, here in the Nest, the way he needed a second head.

Come to think of it, he didn't have the slightest trace of a head - a hangover head - although he recalled that he had had more than several drinks with Dawn. Hadn't got drunk, as he recalled, but certainly more than he ordinarily allowed himself - he couldn't sop up the stuff the way Jubal did without paying for it.

Dawn didn't seem to be affected by liquor at all - which was probably why he had gone over his usual quota. Dawn ... what a gal, what a gal! She hadn't even seemed annoyed when, in a moment of emotional confusion, he had called her Jill - she had seemed pleased.

He found no one in the big room and wondered what time it was? Not that he gave a damn, except that his stomach told him that it was long past breakfast time. He went into the kitchen to see what he could scrounge.

A man in there looked up as he came in. "Ben!"

"Well! Hi, Duke!"

Duke gave him a bear hug and slapped him on the back. "Ben, you're a sight for sore eyes! Gosh, it's good to see you. Thou art God. How do you like your eggs?"

"Thou art God. Are you the cook?"

"Only when I can't find somebody else to do it for me-such as right now. Tony does most of it. We all do some. Even Mike unless Tony catches him and chases him out. Mike is the world's worst cook, bar none." Duke went on breaking eggs into a dish.

Ben moved in on the job. "You look after toast and coffee. Any Worcestershire sauce around here?"

"You name It, Pat's got it. Here." Duke added, "I looked in on you a half hour ago, but you were still sawing wood. I've been busy or you've been busy ever since you got here - until now."

"What do you do around here, Duke? Aside from cooking when you can't avoid it?"

"Well, I'm a deacon ... and I'll be a priest someday. But I'm slow - not that it matters. I study Martian ... everybody does that. And I'm the fix-it boy, same as I was for Jubal"

"Must take quite a gang to maintain a place this size."

"Ben, you'd be surprised how little it takes. Aside from keeping an eye on the plumbing-and sometime you must see Mike's unique way of dealing with a stopped toilet-I don't have to play plumber very much.

Aside from plumbing, ninety percent of the gadgetry in this building is right here in the kitchen . . . and it's not as gadgeted as Jubal's kitchen."

"I had the impression that you have some very complicated gadgets for some of the temple ceremonies."

"Uuh uh, nary a gadget. Some lighting controls, that's all, and simple ones. Actually," Duke grinned, "one of my most important jobs is no job at all. Fire warden"

"Huh?"

"I'm a licensed deputy fire warden, examined and everything, and same for sanitation and safety inspector-neither one takes any work. But it means that we never have to let an outsider go through the joint-and we don't. They attend outer services...but they never get any farther unless Mike gives an up check."

They transferred food to plates and sat down at a table. Duke said, "You're staying, aren't you, Ben?"

"I don't see how I can, Duke."

"Mmmm ... I had hoped that you would have more sense than I had. I came for just a short visit, too ... went back and moped around for nearly a month before I told Jubal I was leaving and wouldn't be back. But never mind; you'll be back. Don't make any final decisions before the water sharing tonight."

"Didn't Dawn tell you? Or Jill?"

"Uh ... I don't think so."

"Then they didn't. Hmm, maybe I should let Mike explain it. No, no need to; people will be mentioning it to you all day long. Sharing water you grok, of course; you're one of the First Called."

"'First Called?' Dawn used that expression."

"That handful of us who became Mike's water brothers without learning Martian. The others ordinarily do not share water and grow closer until they pass from the Seventh Circle to the Eighth ... and by that time they are beginning to think in Martian - shucks, some of them know more Martian by that stage than I do now, since I'm a 'First Called' myself and started my studies after I was already in the Nest. Oh, it's not actually forbidden ? nothing is forbidden - to share water with someone who isn't ready for Eighth Circle. Hell, if I wanted to, I could pick up a babe in a bar, share water with her, then take her to bed - and then take her to the Temple and start her on her apprenticeship. But I wouldn't want to. That's the point; I wouldn't even want to. At the very most I might decide that it was worth while to bring her around to an outer service and let Mike look her over and find out whether any of it clicked with her. Ben, I'll make a flatfooted prediction. You've been around a lot - I'm sure you've been in some fancy beds with some fancy babes."

"Uh.. some."

"I know damn well you have. But you will never again in your life crawl in with one who is not your water brother."

"Hmm ..."

"You'll see. Let's check it a year from now and you tell me. Now Mike may decide that someone is ready to share water before that person reaches even Seventh Circle. One couple we've got in the Nest Mike picked, and offered them water, when they had just entered Third Circle - and now he's a priest and she's a priestess ... Sam and Ruth."

"Haven't met 'em."

"You will. Tonight at the latest. But Mike is the only one who can be certain, that soon. Very occasionally Dawn, and sometimes Patty, will spot somebody for special promotion and special training ... but never as far down as Third Circle and I'm pretty sure that they always consult Mike before going ahead. Not that they are required to. Anyhow, into the Eighth Circle ... and sharing and growing-closer starts. Then, sooner or later, into Ninth Circle, and the Nest itself - and that's the service we mean when we say 'Sharing Water' even though we share water all day long. The whole Nest attends and the new brother - usually it's a couple - becomes forever part of the Nest. In your case you already are ? but we've never held the service for you, so everything else is being pushed aside tonight while we welcome you. They did the same for me." Duke got a faraway look. "Ben, it's the most wondrous feeling in the world."

"But I still don't know what it is, Duke."

"Uh ...it's a lot of things. Ever been on a real luau of a party, the kind the cops raid and usually ends up in a divorce or two?"

"Well ... yes."

"Up to now, brother, you've only been on Sunday School picnics. That's one aspect of it. Have you ever been married?"

"No."

"You are married. You just don't know it yet. After tonight there will never again be any doubt in your mind about it." Duke again looked faraway, happily pensive. "Ben, I was married before ... and for a short time it was pretty nice and then it was steady hell on wheels. This time I like it, all the time. Shucks, I love it! And look, Ben, I don't mean just that it's fun to be shacked up with a bunch of bouncy babes. I love them - all my brothers, both sexes. Take Patty - and you will! - Patty mothers all of us ... and I don't think anybody, man or woman, gets over needing that, even if they think they've outgrown it. Patty ... well, Patty is just swell! She reminds me of Jubal ... and that old bastard had better get down here and get the word! My point is that it is not just that Patty is female. Oh, I'm not running down tail-"

"Who is running down tail?" The voice, a rich contralto, came from behind them.

Duke swung around. "Not me, you limber Levantine whore! Come here, babe, and kiss your brother Ben."

"Never charged for it in my life," the woman denied as she glided toward them. "Started giving it away before anybody told me." She kissed Ben carefully and thoroughly. "Thou art God, brother."

"Thou art God. Share water."

"Never thirst. And don't ever pay any mind to what Duke says - from the way he behaves he must have been a bottle baby." She leaned over Duke and kissed him even more lingeringly while he patted her ample fundament. Ben noted that she was short, plump, brunette almost to swarthiness, and had a mane of heavy blue-black hair almost to her waist "Duke, did you see anything of a Ladies' Home Journal when you got up?" She reached past his shoulder, took his fork and started eating his scrambled eggs. "Mmm ... good. You didn't cook these, Duke."

"Ben did. What in the world would I want with a Ladies' Home Journal?"

"Ben, stir up a couple of dozen more exactly the same way and I'll scramble 'em in relays. There was an article in it I wanted to show Patty, dear."

"Okay," agreed Ben and got up to do it.

"Don't you two get any ideas about redecorating this dump or I'm moving out. And leave some of those eggs for me! You think us men can do our work on mush?"

"Tut, tut, Dukie darling. Water divided is water multiplied. As I was saying, Ben, Duke's complaints never mean anything - as long as he has enough women for two men and enough food for three, he's a perfect little lamb." She shoved one forkful into Duke's mouth, went on eating the rest herself. "So quit making faces, brother; I'm about to cook you a second breakfast. Or will this be your third?"

"Not even the first, yet. You ate it. Ruth, I was telling Ben how you and Sam pole-vaulted from Third to Ninth. I think he's uneasy about whether he belongs in the sharing-water tonight."

She pursued the last bite on Duke's plate, then moved over and started preparations to cook. "Duke, you run along and I'll send you out something other than mush. Take your coffee cup and skedaddle. Ben, I was worried, too, when my time came - but don't you be worried, dear, because Michael does not make mistakes. You belong here or you wouldn't be here. You're going to stay?"

"Uh, I can't. Ready for the first installment?"

"Pour them in. Then you'll be back. And someday you'll stay. Duke is correct - Sam and I pole-vaulted ... and it was almost too fast for a middle-aged, prim and proper housewife."

"Middle-aged?"

"Ben, one of the bonuses about the discipline is that as it straightens out your soul, your body straightens out, too. That's a matter in which the Christian Scientists are precisely right. Notice any medicine bottles in any of the bathrooms?"

"Uh, no."

"There aren't any. How many people have kissed you?"

"Several, at least."

"As a priestess I kiss a lot more than 'several,' believe me. But there's never so much as a sniffle in the Nest. I used to be the sort of whiny woman who is never quite well and given to 'female complaints.'" She smiled. "Now I'm more female than ever but I'm twenty pounds lighter and years younger and have nothing to complain about - I like being female. As Duke flattered me, 'a Levantine whore' and unquestionably much more limber than I was - I always sit in the lotus position when I'm teaching a class, whereas it used to be all I could do just to squat down and straighten up again ... hot flashes and dizziness.

"But it did happen fast," Ruth went on. "Sam was a professor of Oriental languages at the University here - the city U., that is. Sam started coming to the Temple because it was a way, the only way, to learn the Martian language. Strictly professional motivation, he wasn't interested in it as a church. And I went along to keep an eye on him ... I had heard rumors and I was a jealous wife, even more possessive than the average.

"So we worked up to the Third Circle, Sam learning the language rapidly, of course, and myself grimly hanging on and studying hard because I didn't want to let him out of my sight. Then boom! the miracle happened. We suddenly began to think in it, just a little ... and Michael felt it and had us stay after service, a Third Circle service, one night and Michael and Gillian gave us water. Afterwards, I knew that I was all the things I had despised in other women and I knew that I should despise my husband for letting me do it and hate him for what he had done himself. All this in English, with the worst parts in Hebrew. So I wept all day and moaned and made myself a stinking nuisance to Sam ... and couldn't wait to get back to share more water and grow closer again that night.

"After that things were steadily easier but not easy, as we were pushed through all the inner circles just as rapidly as we could take it; Michael knew that we needed help and wanted to get us into the safety and peace of the Nest. So when it came time for our sharing-water, I was still unable to discipline myself without constant help. I knew that I wanted to be received into the Nest - once you start, there's no turning back - but I wasn't sure I could merge myself with seven other people. I was scared silly; on the way over I almost begged Sam to turn around and go home."

She stopped talking and looked up, unsmiling but beatific, a plump angel with a big stirring spoon in one hand. "Then we walked into the Innermost Temple and a spotlight hit me and our robes were whisked away ... and they were all in the pool and calling out to us in Martian to come, come and share the water of life - and I stumbled into that pool and submerged and I haven't come up since!

"Nor ever want to. Don't fret, Ben, you'll learn the language and acquire the discipline and you'll have loving help from all of us every step of the way. You stop worrying and jump in that pool tonight; I'll have my arms out to catch you. All of us will have our arms out, welcoming you home. Now take this plate in to Duke and tell him I said he was a pig but a charming one. And take this one in for yourself - oh, of course you can eat that much! - give me a kiss and run along; Ruthie has work to do."

Ben delivered the kiss and the message and the plate, then found that he did have some appetite left ... but nevertheless did not concentrate on food as he found Jill stretched out, apparently asleep, on one of the wide, soft couches. He sat down opposite her, enjoying the sweet sight of her and thinking that Dawn and Jill were even more alike than he had realized the night before.

He looked up from a bite and saw that her eyes were open and she was smiling at him. "Thou art God, darling - and that smells good."

"And you look good. But I didn't mean to wake you." He got up and sat by her, put a bite in her mouth. "My own cooking, with Ruth's help."

"I know. And good, too. Duke told me to stay out of the kitchen because Ruthie was giving you a good-for-your-soul lecture. You didn't wake me; I was just lazing until you came out. I haven't been asleep all night."

"Not at all?"

"Not a wink. But I'm not tired, I feel grand. Just hungry. That's a hint." So he fed her. She let him do so, never stirring, not using her own hands. "But did you get any sleep?" she asked presently.

"Uh, some."

"Enough? No, you got enough. But how much sleep did Dawn get? As much as two hours?"

"Oh, more than that, I'm certain."

"Then she's all right. Two hours of sleep does us as much good as eight used to. I knew what a sweet night you were going to have - both of you - but I was a teeny bit worried that she might not rest."

"Well, it was a wonderful night," Ben admitted, "although I was, uh, surprised at the way you shoved her at me."

"Shocked, you mean. I know you, Ben, maybe better than you know yourself. You arrived here yesterday with jealousy sticking out in lumps. I think it's gone now. Yes?"

He looked back at her. "I think so."

"That's good. I had a wonderful and joyous night, too - made free from any worry by knowing you were in good hands. The best hands - better than mine."

"Oh, no!"

"Hmm. I grok a few lumps still - but tonight we'll wash them away in water." She sat up, reached toward the end of the couch - and it looked to Caxton as if a pack of cigarettes on the end table jumped the last few inches into her hand.

"You seemed to have picked up some sleight-of-hand tricks, too."

She seemed momentarily puzzled, then she smiled. "Some. Nothing much. Parlor tricks. 'I am only an egg,' to quote my teacher."

"How did you do that trick?"

"Why, I just whistled to it in Martian. First you grok a thing, then you grok what you want it to-Mike!" She waved. "We're over here, dear!"

"Coming." The Man from Mars came straight to Ben, took his hands, pulled him to his feet. "Let me look at you, Ben! Golly, it's good to see you!"

"It's good to see you. And to be here."

"And we're going to twist your arm to keep you here. What's this about three days? Three days indeed!"

"I'm a working man, Mike."

"We'll see. The girls are all excited, getting ready for your party tonight. Might just as well shut down services and classes for the rest of the day - they won't be worth a damn."

"Patty has already done any necessary rescheduling," Jill told Mike. "She just didn't bother you with it. Dawn and Ruth and Sam are going to take care of what's necessary. Patty decided to slough the Outer matinee, so you're through for the day."

"That's good news." Mike sat down, pulled Jill's head into his lap, pulled Ben down, put an arm around him, and sighed. He was dressed as Ben had seen him in the outer meeting, smart tropical business suit, lacking only shoes. "Ben, don't ever take up preaching. I spend my days and nights rushing from one job to another, telling people why they must never hurry. I owe you, along with Jill and Jubal, more than anyone else on this planet - yet you've been here since yesterday afternoon and this is the first time I've been able to say hello. How've you been? You're looking fit. In fact Dawn tells me you are fit."

Ben found himself blushing. "I'm okay."

"That's good. Because, believe me, the hill tribes will be restless tonight. But I'll grok close and sustain you. You'll be fresher at the end of the party than at the start - won't he, Little Brother?"

"Yes," agreed Jill. "Ben, you won't believe it until you've had it done for you, but Mike can lend you strength - physical strength, I mean, not just moral support. I can do it a little bit. Mike can really do it."

"Jill can do it quite a lot." Mike caressed her. "Little Brother is a tower of strength to everybody. Last night she certainly was." He smiled down at her, then sang:

"You'll never find a girl like Jill.
"No, not one in a billion.
"Of all the tarts who ever will,
"The willingest is our Gillian! - isn't that right, Little Brother?"

"Pooh," answered Jill, obviously pleased, covering his hand with her own and pressing it to her. "Dawn is exactly like me and you know it - and every bit as willing."

"Maybe. But you're here ... and Dawn is downstairs interviewing the possibles out of the tip. She's busy - you ain't. That's an important difference - isn't it, Ben?"

"Could be." Caxton was finding that their unselfconscious behavior was beginning to embarrass him, even in this uniquely relaxed atmosphere - he wished that they would either knock off necking ... or give him an excuse to leave.

Instead Mike went right on cuddling Jill with one hand while keeping his other arm snug around Ben's waist ... and Ben was forced to admit that Jill encouraged him, rather than otherwise. Mike said very seriously, "Ben, a night like last night - helping a group to make the big jump to Eighth Circle - gets me terribly keyed up. Let me tell you something out of the lessons for Sixth, Ben. We humans have something that my former people don't even dream of. They can't. And I can tell you how precious it is ... how especially precious I know it to be, because I have known what it is not to have it. The blessing of being male and female. Man and Woman created He them, the greatest treasure We-Who-Are-God ever invented. Right, Jill?"

"Beautifully right, Mike - and Ben knows it is Truth. But make a song for Dawn, too, darling."

"Okay - "Ardent is our lovely Dawn;
"Ben grokked that in her glance-
"She buys new dresses every morn.
"But never shops for pants!"

Jill giggled and squirmed. "Did you tune her in?"

"Yes, and she gave me a big Bronx cheer - with a kiss behind it for Ben. Say, isn't there anybody in the kitchen this morning? I just remembered I haven't eaten for a couple of days. Or years, maybe; I'm not sure."

"I think Ruth is," Ben said, untangling himself and standing up. "I'll go see."

"Duke can do it. Hey, Duke! See if you can find somebody who'll fix me a stack of wheat cakes as tall as you are and a gallon of maple syrup."

"Right, Mike!" Duke called back.

Ben Caxton hesitated, without an excuse to run an errand. He thought of a trumped - up excuse and glanced back over his shoulder.

"Jubal," Caxton said earnestly, "I wouldn't tell you this part at all if it weren't essential to explaining how I feel about the whole thing, why I'm worried about them - all of them, Duke and Mike as well as Jill and Mike's other victims, too. By that morning I was myself half conned into thinking everything was all right - weird as bell in spots - but jolly. Mike himself had me fascinated, too, his new personality is pretty powerful. Cocky and too much supersalesman, but very compelling. Then he - or both of them - got me rather embarassed, so I took that chance to get up from the couch.

"Then I glanced back - and couldn't believe my eyes. I hadn't been turned away five seconds ... and Mike bad managed to get rid of every stitch of clothes ... and so help me, they were going to it, with myself and three or four others in the room at the time - just as boldly as monkeys in a zoo!

"Jubal, I was so shocked I almost lost my breakfast."

Chapter 33

"WELL," SAID JUBAL, "what did you do? Cheer?"

"Like hell. I left, at once. I dashed for the outer door, grabbed my clothes and shoes - forgot my bag and didn't go back for it - ignored the sign on the door, went on through - jumped in that bounce tube with my clothes in my arms. Blooie! Gone without saying good-by."

"Rather abrupt"

"I felt abrupt. I had to leave. In fact I left so fast that I durn near killed myself. You know the ordinary bounce tube-"

"I do not."

"Well, unless you set it to take you up to a certain level, when you get into it you simply sink slowly, like cold molasses I didn't sink, I fell, and I was about six stories up. But just when I thought I had made my last mistake, something caught me. Not a safety net - a field of some sort I didn't quite splash. But Mike needs to smooth out that gadget. Or put in the regular sort of bounce tube."

Jubal said, "I'll stick to stairs and, when unavoidable, elevators"

"Well, I hadn't realized that this one was so risky. But the only safety inspector they've got is Duke ... and to Duke whatever Mike says is Gospel. Jubal, that whole place is riding for a fall. They're all hypnotized by one man ... who isn't right in his head. What can be done about it?"

Jubal jutted out his lips and then scowled, "Let's see first if you've got it analyzed correctly. Just what aspects of the situation did you find disquieting?"

"Why, the whole thing!"

"So? In fact, wasn't it just one thing? And that an essentially harmless act which we both know was nothing new ... but was, we can assume rather conclusively, initially performed in this house or on these grounds about two years ago? I did not then object - nor did you, when you learned of it, whenever that was, in fact, I have implied that you yourself have, on other occasions, joined in that same act with the same young lady - and she is a lady, despite your tale - and you neither denied my implication nor acted offended at my presumption. To put it bluntly, son - what are you bellyaching about?"

"Well, for cripe's sake, Jubal... would you put up with it, in your living room?"

"Decidedly not - unless perhaps I have, it having taken place so clandestinely, at night perhaps, that no one noticed. In which case it would be - or has been, if such be the case - no skin off'n my nose. But the point is that it was not my living room ... nor would I presume to lay down rules for another man's living room. It was Mike's house ...

and his wife - common law or otherwise, we need not inquire. So what business is it of mine? Or yours? You go into a man's house, you accept his household rules - that's a universal law of civilized behavior."

"You mean to say you don't find it shocking?"

'Ah, you've raised an entirely different issue. Public exhibition of lust I would find most distasteful, either as participant or spectator ... but I grok this reflects my early indoctrination, nothing more. A very large minority of mankind - possibly a majority - do not share my taste in this matter. Decidedly not - for the orgy has a long and very widespread history. Nonetheless it is not to my taste. But shocking? My dear sir, I can be shocked only by that which offends me ethically. Ethical questions are subject to logic - but this is a matter of taste and the old saw is in point - "de gusribus non est disputandu-"

"You think that a public shagging is merely 'a matter of taste?'"

"Precisely. In which respect I concede that my own taste, rooted in early training, reinforced by some three generations of habit, and now, I believe, calcified beyond possibility of change, is no more sacred than the very different taste of Nero. Less sacred - Nero was a god; I am not."

"Well, I'll be damned."

"In due course, possibly - if it is possible ... a point on which I am 'neutral-against.' But, Ben, this wasn't public."

"Huh?"

"You yourself have said it. You described this group as a plural marriage - a group theogamy, to be precise. Not public but utterly private. Aint nobody here but just us gods' - so how could anyone be offended?"

"I was offended!"

"That was because your own apotheosis was less complete than theirs - I'm afraid they overrated you ... and you misled them. You invited it."

"Me? Jubal, I did nothing of the sort"

"'Tommy busted my dolly ... I hitted him over the head with it.' The time to back out was the instant you got there, for you saw at once that their customs and manners were not yours. Instead you stayed, and enjoyed the favors of one goddess - and behaved yourself as a god toward her - in short, you learned the score, and they knew it. It seems to me that Mike's error lay only in accepting your hypocrisy as solid coin. But he does have the weakness - a godlike one - of never doubting his 'water brothers' - but even Jove nods - and his weakness - or is it a strength? - comes from his early training; he can't help it. No, Ben, Mike behaved with complete propriety; the offense against good manners lay in your behavior."

"Damn it, Jubal, you've twisted things again. I did what I had to do - I was about to throw up on their rug!"

"So you claim reflex. So stipulated; however, anyone over the emotional age of twelve could have clamped his jaws and made a slow march for the bathroom with at worst the hazard of clogged sinuses - instead of a panicked dash for the street door - then returned when the show was over with a euphemistic but acceptable excuse."

"That wouldn't have been enough. I tell you I had to leave!"

"I know. But not through reflex. Reflex will evacuate the stomach; it will not choose a course for the feet, recover chattels, take you through doors and cause you to jump down a hole without looking. Panic, Ben. Why did you panic?"

Caxton was long in replying. He sighed and said, "I guess when you come right down to it, Jubal - I'm a prude."

Jubal shook his head. "Your behavior was momentarily prudish, but not from prudish motivations. You are not a prude, Ben. A prude is a person who thinks that his own rules of propriety are natural laws. You are almost entirely free of this prevalent evil. You adjusted, at least with passable urbanity, to many things which did not fit your code of propriety whereas a true-blue, stiff-necked, incorrigible prude would promptly have affronted that delightful tattooed lady and stomped out. Dig deeper ... Do you wish a hint?"

"Uh, maybe you'd better. All I know is that I am mixed up and unhappy about the whole situation - on Mike's account, too, Jubal! - which is why I took a day off to see you."

"Very well. Hypothetical situation for you to evaluate: You mentioned a lady named Ruth whom you met in passing - a kiss of brotherhood and a few minutes conversation - nothing more."

"Yeah?"

"Suppose the actors had been Ruth and Mike? Gillian not even present? Would you have been shocked?"

"Huh? Hell, yes, I would have been shocked!"

"Just how shocked? Retching? Panic flight?"

Caxton looked thoughtful, then sheepish. "I suppose not. I still would have been startled silly. But I guess I would've just gone out to the kitchen or something ... then found an excuse to leave. I still feel like a fool for having made that mad dash to get out."

"Would you actually have sought an excuse to leave? Or were you looking forward to your own 'welcome home' party that night?"

"Well Caxton mused. "I hadn't made up my mind about that when this happened. I was curious, I admit - but I wasn't quite sold."

"Very well. You now have your motivation."

"Do I?"

"You name it, Ben. Haul it out and look at it - and find out how you want to deal with it."

Caxton chewed his lip and looked unhappy. "All right. I would have been startled if it had been Ruth - but I wouldn't really have been shocked. Hell, in the newspaper racket you get over being shocked by anything but - well, you expressed it: something that cuts deep about right and wrong. Shucks, if it had been Ruth, I might even have sneaked a look - even though I still think I would have left the room; such things ought to be - or at least I feel that they ought to be - private." He paused. "It was because it was Jill. I was hurt ... and jealous."

"Stout fellow, Ben."

"Jubal, I would have sworn that I wasn't jealous. I knew that I had lost out - I had accepted it. It was the circumstances, Jubal. Now don't get me wrong. I would still love Jill if she were a two-peso whore. Which she is not. This hands-around harem deal upsets the hell out of me. But by her lights Jill is moral."

Jubal nodded. "I know. I feel sure that Gillian is incapable of being corrupted. She has an invincible innocence which makes it impossible for her to be immoral." He frowned. "Ben we are close to the root of your trouble. I am afraid that you - and I, too, I admit - lack the angelic innocence to abide by the perfect morality those people live by."

Ben looked surprised. "Jubal, you think what they are doing is moral? Monkeys in the zoo stuff and all? All I meant was that Jill really didn't know that what she was doing was wrong - Mike's got her hornswoggled - and Mike doesn't know he's doing wrong either. He's the Man front Mars; he didn't get off to a fair start. Everything about us was strange to him - he'll probably never get straightened out."

Jubal looked troubled. "You've raised a hard question, Ben - but I'll give you a straight answer. Yes, I think what those people - the entire Nest, not just our own kids - are doing is moral. As you described it to me - yes. I haven't had a chance to examine details - but yes; all of it. Group orgies, and open and unashamed swapping off at other times ... their communal living and their anarchistic code, everything. And most especially their selfless dedication to giving their perfect morality to others."

"Jubal, you utterly astonish me." Caxton scratched his head and frowned. "Since you feel that way, why don't you join them? You're welcome, they want you, they're expecting you. They'll hold a jubilee - and Dawn is waiting to kiss your feet and serve you in any way you will permit; I wasn't exaggerating."

Jubal shook his head. "No. Had I been approached fifty years ago- But now? Ben my brother, the potential for such innocence is no longer in me - and I am not referring to sexual potency, so wipe that cynical smile off your face. I mean that I have been too long wedded to my own brand of evil and hopelessness to be cleansed in their water of life and become innocent again. If I ever was."

"Mike thinks you have this innocence - he doesn't call it that - in full measure now. Dawn told me, speaking ex officio."

"Then Mike does me great honor; I would not disillusion him. He sees his own reflection - I am, by profession a mirror."

"Jubal, you're chicken."

"Precisely, sir! The thing that troubles me most is whether those innocents can make their pattern fit into a naughty world. Oh, it's been tried before! - and every time the world etched them away like acid. Some of the early Christians, anarchy, communism, group marriage - why even that kiss of brotherhood has a strong primitive-Christian flavor to it. That might be where Mike picked it up, since all the forms he uses are openly syncretic - especially that Earth-Mother ritual." Jubal frowned. "If he picked that up from primitive Christianity - and not just from kissing girls, which he enjoys, I know - then I would expect men to kiss men, too."

Ben snorted. "I held out on you - they do. But it's not a pansy gesture. I got caught once; after that I managed to duck."

"So? It figures. The Oneida Colony was much like Mike's 'Nest'; it managed to last quite a while but in a low population density - not as an enclave in a resort city. There have been many others, all with the same sad story: a plan for perfect sharing and perfect love, glorious hopes and high idea - followed by persecution and eventual failure." Jubal sighed. "I was worried about Mike before - now I'm worried about all of them."

"You're worried? How do you think I feel? Jubal, I can't accept your sweetness and light theory. What they are doing is wrong."

"So? Ben, it's that last incident that sticks in your craw."

"Well ... maybe. Not entirely."

"Mostly. Ben, the ethics of sex is a thorny problem because each of us has to find a solution pragmatically compatible with a preposterous, utterly unworkable, and evil public code of so-called 'morals.' Most of us know, or suspect, that the public code is wrong, and we break it. Nevertheless we pay Danegeld by giving it lip service in public and feeling guilty about breaking it in private. Willy-nilly, that code rides us, dead and stinking, an albatross around the neck. You think of yourself as a free soul, I know, and you break that evil code yourself - but faced with a problem in sexual ethics new to you, you unconsciously tested it against that same Judeo-Christian code which you consciously refuse to obey. All so automatically that you retched ... and believed thereby - and continue to believe - that your reflex proved that you were 'right' and they were 'wrong.' Faugh! I'd as lief use trial by ordeal as use your stomach to test guilt. All your stomach can reflect are prejudices trained into you before you acquired reason."

"What about your stomach?"

"Mine is as stupid as yours - but I don't let it rule my brain. I can at least see the beauty of Mike's attempt to devise an ideal human ethic and applaud his recognition that such a code must be founded on ideal sexual behavior, even though it calls for changes in sexual mores so radical as to frighten most people, including you. For that I admire him - I should nominate him for the Philosophic Society. Most moral philosophes consciously or unconsciously assume the essential correctness of our cultural sexual code - family, monogamy, continence, the postulate of privacy that troubled you so, restriction of intercourse to the marriage bed, et cetera. Having stipulated our cultural code as a whole, they fiddle with details - even such piffle as solemnly discussing whether or not the female breast is an 'obscene' sight! But mostly they debate how the human animal can be induced or forced to obey this code, blandly ignoring the high probability that the heartaches and tragedies they see all around them originate in the code itself rather than failure to abide by the code.

"Now comes the Man from Mars, looks at this sacrosanct code - and rejects it in toto. I do not grasp exactly what Mike's sexual code is, but it is clear from what little you told me that it violates the laws of every major nation on Earth and would outrage 'right-thinking' people of every major faith - and most agnostics and atheists, too. And yet this poor boy-"

"Jubal, I repeat - he's not a boy, he's a man."

"Is he a 'man?' I wonder. This poor ersatz Martian is saying, by your own report, that sex is a way to be happy together. I go along with Mike this far: sex should be a means of happiness. The worst thing about sex is that we use it to hurt each other. It ought never to hurt; it should bring happiness, or, at the very least, pleasure. There is no good reason why it should ever be anything less.

"The code says, 'Thou shalt not covet thy neighbor's wife' - and the result? Reluctant chastity, adultery, jealousy, bitter family fights, blows and sometimes murder, broken homes and twisted children ... and furtive, dirty little passes at country club dances and the like, degrading to both man and woman whether consummated or not. Is this injunction ever obeyed? The Commandment not to 'covet' I mean; I'm not referring to any physical act. I wonder. If a man swore to me on a stack of his own Bibles that he had refrained from coveting another man's wife because the code forbade it, I would suspect either self-deception or subnormal sexuality. Any male virile enough to sire a child is almost certainly so virile that he has coveted many, many women - whether he takes action in the matter or not.

"Now comes Mike and says: 'There's no need for you to covet my wife ... love her! There's no limit to her love, we all have everything to gain - and nothing to lose but fear and guilt and hatred and jealousy.' The proposition is so naive that it's incredible. So far as I recall only precivilization Eskimos were ever this na‹ve - and they were so remote from the rest of us that they almost qualified as 'Men from Mars' themselves. However, we soon gave them our virtues and instead of happy sharing they now have chastity and adultery just like the rest of us - those who survived the transition. I wonder if they gained by it? What do you think.

"I wouldn't care to be an Eskimo, thank you."

"Neither would I. Spoiled raw fish makes me bilious."

"Well, yes - but, Jubal, I had in mind hot water and soap. I guess I'm effete."

"I'm decadent in that respect, too, Ben; I was born in a house with no more plumbing than an igloo - and I've no wish to repeat my childhood. But I assume that noses hardened to the stink of rotting blubber would not be upset by unwashed human bodies. But nevertheless, despite curious cuisine and pitiful possessions, the Eskimos were invariably reported to have been the happiest people on Earth. We can never be sure why they were happy, but we can be utterly certain that any unhappiness they did suffer was not caused by sexual jealousy. They borrowed and lent spouses, both ways, both for convenience and purely for fun - and it did not make them unhappy.

"One is tempted to ask: Who's looney? Mike and the Eskimos? Or the rest of us? We can't judge by the fact that you and I have no stomach for such group sports - our canalized tastes are irrelevant. But take a look at this glum world around you - then tell me this: Did Mike's disciples seem happier, or unhappier, than other people?"

"I talked to only about a third of them, Jubal ... but - yes, they're happy. So happy they seem slaphappy to me. I don't trust it. There's some catch in it."

"Mmm ... maybe you yourself were the catch in it."

"How?"

"I was thinking that it was regrettable that your tastes have grown canalized so young. There it was, raining soup - and you were caught without a spoon. Even three days of what you were offered - urged on you! - would have been something to treasure when you reach my age. And you, you young idiot, let jealousy chase you away! Believe me, at your age I would have gone Eskimo in a big way, thankful that I had been given a free pass instead of having to attend church and study Martian to qualify. I'm so vicariously vexed that my only consolation is the sour one that I know you will live to regret it. Age does not bring wisdom, Ben, but it does give perspective ... and the saddest perspective of all is to see far, far behind you, the temptations you've passed up. I have such regrets myself but all of them are as nothing to the whopper of a regret I am happily certain you will suffer."

"Oh, for Pete's sake, quit rubbing it in!"

"Heavens, man! - or are you a mouse? I'm not rubbing it in, I am trying to goad you into the obvious. Why are you sitting here moaning to an old man? - when you should be heading for the Nest like a homing pigeon? Before the cops raid the joint! Hell, if I were even twenty years younger, I'd join Mike's church myself."

"Let up on me, Jubal. What do you really think of Mike's church?"

"You told me it wasn't a church - just a discipline."

"Well ... yes and no, It is supposed to be based on the 'Truth' with a capital 'T' as Mike got it from the Martian 'Old Ones.'"

"The 'Old Ones,' eh? To me, they're still hogwash."

"Mike certainly believes in them."

"Ben, I once knew a manufacturer who believed that he consulted the ghost of Alexander Hamilton on all his business decisions. All that proves is that he believed it. However - Damn it, why must I always be the Devil's advocate?"

"What's biting you now?"

"Ben, the foulest sinner of all is the hypocrite who makes a racket of religion. But we must give the Devil his due. Mike does believe in those 'Old Ones' and he is not pulling a racket. He's teaching the truth as he sees it even though he has seen fit to borrow from other religions to illustrate his meaning. That 'All-Mother' rite - little as I like it, he seems merely to have been illustrating the versatility of the Female Principle, regardless of name and form. Fair enough. As for his 'Old Ones,' of course I don't know that they don't exist - I simply find hard to swallow the idea that any planet is ruled by a hierarchy of ghosts. As for his Thou-art-God creed, to me it is neither more nor less credible than any other. Come Judgment Day, if they hold it, we may find that Mumbo Jumbo the God of the Congo was the Big Boss all along.

"All the names are still in the hat, Ben. Self-aware man is so built that he cannot believe in his own extinction ... and this automatically leads to endless invention of religions. While this involuntary conviction of immortality by no means proves immortality to be a fact, the questions generated by this conviction are overwhelmingly important ... whether we can answer them or not, or prove what answers we suspect. The nature of life, how the ego hooks into the physical body, the problem of the ego itself and why each ego seems to be the center of the universe, the purpose of life, the purpose of the universe - these are paramount questions Ben; they can never be trivial. Science can't, or hasn't, coped with any of them - and who am I to sneer at religions for trying to answer them, no matter how unconvincingly to me? Old Mumbo Jumbo may eat me yet; I can't rule Him out because He owns no fancy cathedrals. Nor can I rule out one godstruck boy leading a sex cult in an upholstered attic; he might be the Messiah. The only religious opinion that I feel sure of is this: self-awareness is not just a bunch of amino acids bumping together!"

"Whew! Jubal, you should have been a preacher."

"Missed it by only a razor's edge, my boy - and I'll thank you to keep a civil tongue in your head. One more word in Mike's defense and I'll throw him on the mercy of the court. If he can show us a better way to run this fouled-up planet - his sex life is vindicated thereby, regardless of your taste or mine. Geniuses are notoriously indifferent to the sexual customs of the culture in which they find themselves, they make their own rules; this is not opinion, it was proved by Armattoe way back in 1945. And Mike is a genius; he's shown it more ways than one. He can therefore be expected to ignore Mrs. Grundy and diddle to suit himself. Geniuses are justifiably contemptuous of the opinions of their inferiors.

"And from a religious standpoint Mike's sexual behavior is as kosher as fish on Friday, as orthodox as Santa Claus. He preaches that all living creatures are collectively God ... which makes him and his disciples the only self-aware gods in his pantheon which rates him a union card by the rules for godding on this planet. Those rules always permit gods sexual freedom limited only by their own judgment; mortal rules never apply. Leda and the Swan? Europa and the Bull? Osiris, Isis, and Horus? The incredible incestuous games of the Norse gods? Of course ... but why stop there? Take a hard look at the family relations of the Trinity-in-One of the most widely respected western religion (I won't cite eastern religions; their gods do things a mink breeder wouldn't put up with!). The only way in which the odd interrelations of the various aspects of what purports to be a monotheos can be reconciled with the precepts of the religion thereto is by assuming that the rules in these matters for deity are not the rules for ordinary mortals. Of course most people don't think about it; they compartment it off in their minds and mark it: 'Holy - Do Not Disturb.'

"But an outside referee is forced to allow Mike the same dispensation granted all other gods. There are rules for this game: one god alone splits into at least two parts - male and female - and breeds. Not just Jehovah - they all do it. Look it up. Contrariwise, a group of gods will breed like rabbits, every time, and with as little regard for human formalities. Once Mike entered the godding business, those orgies of his group were as logically certain as Sunday follows Saturday. So quit using the standards of Podunk and judge them only by Olympian morals - I think you will then find that they are showing unusual restraint. Furthermore, Ben, this 'growing-closer' by sexual union, this unity-into-plurality and plurality-back-into-unity, cannot tolerate monogamy inside the god group. Any pairing that excluded the others would be immoral, obscene, under the postulated creed. And if such mutual, shared-by-all sexual congress is essential to their creed, as I grok it has to be, then why do you expect this holy union to be hidden behind a door? Your insistence that they should hide it would have turned a holy rite - which it was - into something obscene - which it was not. You just plain did not understand what you were looking at."

"Maybe I didn't," Ben said glumly.

"I'm going to offer you one box-top premium, as an inducement. You wondered how Mike got rid of his clothes so quickly. I'll tell you how."

"How?"

"It was a miracle."

"Oh, for God's sake!"

"Could be. But one thousand dollars says that it was a miracle by the usual rules for miracles - outcome to be decided by you. Go back and ask Mike how he did it. Get him to show you. Then send me the money."

"Hell, Jubal, I don't want to take your money."

"You won't. I've got inside information. Bet?"

"No, damn it. Jubal, you go down there and see what the score is. I can't go back - not now."

"They'll take you back with open arms and not even ask why you left so abruptly. One thousand on that prediction, too. Ben, you were there less than a day - fifteen hours, about - and you spent over half that time sleeping and playing hopscotch with Dawn. Did you give them a square shake? The sort of careful investigation you give something smelly in public life before you blast it in your column?"

"But-"

"Did you, or didn't you?"

"No, but-"

"Oh, for Pete's sake yourself, Ben! You claim to be in love with Jill yet you won't give her the consideration you give a crooked politician. Not a tenth the effort she made to help you when you were kidnapped. Where would you be today if she had given it so feeble a try? Pushing up daisies! Roasting in hell! You're bitching about those kids over some friendly fornication - but do you know what I'm worried about?"

"What?"

"Christ was crucified for preaching without a police permit. Think it over."

Caxton stood up. "I'm on my way."

"After lunch."

"Now."

Twenty-four hours later Den wired Jubal two thousand dollars.

When, after a week, Jubal had had no other message, he sent a stat care of Ben's office: "What the hell are you doing?" Ben's answer came back, somewhat delayed: "Studying Martian and the rules for hopscotch - fraternally yours - Ben."

part five

HIS HAPPY DESTINY

Chapter 34

FOSTER LOOKED UP from his current Work in Progress. "Junior!"

"Sir?"

"That youngster you wanted - he's available now. The Martians have released him."

Digby looked puzzled. "I'm sorry. There was some young creature toward whom I have a Duty?"

Foster smiled angelically. Miracles were never necessary - in Truth the pseudo-concept "miracle" was self-contradicting. But these young fellows always had to learn it for themselves. "Never mind," he said gently. "It's a minor job and I'll handle it myself - and Junior?"

"Sir?"

"Call me 'Fog,' please - ceremony is all right in the field but we don't need it in the studio. And remind me not to call you 'Junior' after this-you made a very nice record on that temporary duty assignment. Which name do you like to be called?"

His assistant blinked. "I have another name?"

"Thousands of them. Do you have a preference?"

"Why, I really don't recall at this eon."

"Well ... how would you like to be called 'Digby'?"

"Uh, yes. That's a very nice name. Thanks."

"Don't thank me. You earned it." Archangel Foster turned back to his work, not forgetting the minor item he had assumed. Briefly he considered how this cup might be taken from little Patricia - then chided himself for such unprofessional, almost human, thought. Mercy was not possible to an angel; angelic compassion left no room for it.

The Martian Old Ones had reached an elegant and awesome trial solution to their major esthetic problem and put it aside for a few filled-threes to let it generate new problems. At which time, unhurriedly but at once and almost absentmindedly, the alien nestling which they had returned to his proper world was tapped of what he had learned of his people and dropped, after cherishing, since he was of no further interest to their purposes.

They collectively took the data he had accumulated and, with a view to testing that trial solution, began to work toward considering an inquiry leading to an investigation of esthetic parameters involved in the possibility of the artistic necessity of destroying Earth. But necessarily much waiting would be, before fullness would grok decision.

The Daibutsu at Kamakura was again washed by a giant wave secondary to a seismic disturbance some 280 kilometers off Honshu.

The wave killed more than 13,000 people and lodged a small male infant high up in the Buddha image's interior, where it was eventually found and succored by surviving monks. This infant lived ninety-seven Terran years after the disaster that wiped out his family, and himself produced no progeny nor anything of any note aside from a reputation reaching to Yokohama for loud and sustained belching. Cynthia Duchess entered a nunnery with all benefits of modern publicity and left same without fanfare three days later. Ex-Secretary General Douglas suffered a slight stroke which impaired the use of his left hand but did not reduce his ability to conserve assets entrusted to his stewardship. Lunar Enterprises, Ltd., published a prospectus on a bond issue for the wholly owned subsidiary Ares Chandler Corporation. The Lyle-Drive Exploratory Vessel Mary Jane Smith landed on Pluto. Fraser, Colorado, reported the coldest average February of its recorded history.

Bishop Oxtongue, speaking at the New Grand Avenue Temple in Kansas City, preached on the text (Matt. XXIV:24): 'For there shall arise false Christs and false prophets, and shall shew great signs and wonders; insomuch that, if it were possible, they shall deceive the very elect." He was careful to make clear that his diatribe did not refer to Mormons, Christian Scientists, Roman Catholics, nor Fosterites - most especially not to the last - nor to any other fellow travelers whose good works counted for more than minute and, in the final analysis, inconsequential differences in creed or ritual ... but solely to recent upstart heretics who were seducing faithful contributors away from the faiths of their fathers. In a lush subtropical resort city in the southern part of the same nation three complainants swore an information charging public lewdness on the part of a pastor, three of his assistants, and Joe Doe, Mary Roe, et al., plus further charges of running a disorderly house and contributing to the delinquency of minors. The county attorney had at first only the mildest interest in prosecuting under the information as he had on file a dozen much like it - the complaining witnesses had always failed to appear at arraignment.

He pointed this out. Their spokesman said, "We know. But you'll have plenty of backing this time. Supreme Bishop Short is determined that this Antichrist shall flourish no longer."

The prosecutor was not interested in antichrists - but there was a primary coming up. "Well, just remember I can't do much without backing."

"You'll have it."

Farther north, Dr. Jubal Harshaw was not immediately aware of this incident and its consequences, but he did know of too many others for peace of mind. Against his own rules he had succumbed to that most insidious drug, the news. Thus far, he had contained his vice; he merely subscribed to a clipping service instructed for "Man from Mars," "V. M. Smith," "Church of All Worlds," and "Ben Caxton." But the monkey was crawling up his back - twice lately he had had to fight off an impulse to order Larry to set up the babble box in his study - Damn it, why couldn't those kids tape him an occasional letter? - instead of letting him wonder and worry. "Front!"

He heard Anne come in but he still continued to stare out a window at snow and an empty swimming pool. "Anne," he said without turning around, "rent us a small tropical atoll and put this mausoleum up for sale."

"Yes, Boss. Anything else?"

"But get that atoll tied down on a long-term lease before you hand this wilderness back to the Indians; I will not put up with hotels. How long has it been since I wrote any pay copy?"

"Forty-three days."

"You see? Let that be a lesson to you. Begin. 'Death Song of a Wood's Colt':

"The depths of winter longing are ice within my heart
The shards of broken covenants lie sharp against my soul
The wraiths of long-lost ecstasy still keep us two apart
The sullen winds of bitterness still keen from turn to pole.

"The scars and twisted tendons, the stumps of struck-off limbs,
The aching pit of hunger and the throb of unset bone,
My sanded burning eyeballs, as light within them dims,
Add nothing to the torment of lying here alone

"The shimmering flames of fever trace out your blessed face
My broken eardrums echo yet your voice inside my head
I do not fear the darkness that comes to me apace
I only dread the loss of you that comes when I am dead.

"There," he added briskly, "sign it 'Louisa M. Alcott' and have the agency send it to Togetherness magazine."

"Boss, is that your idea of 'pay copy'?"

"Huh? Of course it isn't. Not now. But it will be worth something later, so put it in file and my literary executor can use it to help settle the death duties. That's the catch in all artistic pursuits; the best work is always worth most after the workman can't be paid. The literary life.- dreck! It consists in scratching the cat till it purrs."

"Poor Jubal! Nobody ever feels sorry for him, so he has to feel sorry for himself."

"Sarcasm yet. No wonder I don't get any work done."

"Not sarcasm, Boss. Only the wearer knows where the shoe pinches."

"My apologies. All right, here's pay copy. Begin. Title: 'One for the Road,'

"There's amnesia in a hang knot,
And comfort in the ax,
But the simple way of poison will make your nerves relax.

"There's surcease in a gunshot,
And sleep that comes from racks,
But a handy draft of poison avoids the harshest tax.

"You find rest upon the hot squat,
Or gas can give you pax,
But the closest corner chemist has peace in packaged stacks.

"There's refuge in the church lot
When you tire of facing facts,
And the smoothest route is poison prescribed by kindly quacks.

"Chorus—
With an ugh! and a groan, and a kick of the heels,
Death comes quiet, or it comes with squeals—
But the pleasantest place to find your end
Is a cup of cheer from the hand of a friend."

"Jubal," Anne said worriedly, "is your stomach upset?"

"Always."

"That one's for file, too?"

"Huh? That's for the New Yorker. Their usual pen name."

"They'll bounce it."

"They'll buy it. It's morbid, they'll buy it."

And besides, there's something wrong with the scansion."

"Of course there is! You have to give an editor something to change, or he gets frustrated. After he pees in it himself, he likes the flavor much better, so he buys it. Look, my dear, I was successfully avoiding honest work long before you were born - so don't try to teach Granpaw how to suck eggs. Or would you rather I nursed Abby while you turn out copy? Hey! It's Abigail's feeding time, isn't it? And you weren't 'Front,' Dorcas is 'Front.' I remember."

"It won't hurt Abby to wait a few minutes. Dorcas is lying down. Morning sickness."

"Nonsense. If she's pregnant, why won't she let me run a test? Anne, I can spot pregnancy two weeks before a rabbit can - and you know it. I'm going to have to be firm with that girl."

"Jubal, you let her be! She's scared she didn't catch ... and she wants to think she did, as long as possible. Don't you know anything about women?"

"Mmm ... come to think about it - no. Not anything. All right, I won't heckle her. But why didn't you bring our baby angel in and nurse her here? You have both hands free when you take dictation."

"In the first place, I'm glad I didn't - she might have understood what you were saying-"

"So I'm a bad influence, am I?"

"She's too young to see the marshmallow syrup underneath, Boss. But the real reason is that you don't do any work at all if I bring her in with me; you just play with her."

"Can you think of any better way of enriching the empty hours?"

"Jubal, I appreciate the fact that you are dotty over my daughter; I think she's pretty nice myself. But you've been spending all your time either playing with Abby ... or moping. That's not good."

"How soon do we go on relief?"

"That's beside the point. If you don't crank out stories, you get spiritually constipated. It's reached the point where Dorcas and Larry and I are biting our nails - and when you do yell 'Front!' we jitter with relief. Only it's always a false alarm."

"If there's money in the bank to meet the bills, what are you worried about?"

"What are you worried about, Boss?"

Jubal considered it. Should he tell her? Any possible doubt as to the paternity of Abigail had been settled, in his mind, in her naming; Anne had wavered between "Abigail" and "Zenobia" - and had settled it by loading the infant with both names. Anne had never mentioned the meanings of those names; presumably she did not know that he knew them.

Anne went on firmly, "You're not fooling anyone but yourself; Jubal. Dorcas and Larry and I all know that Mike can take care of himself,. and you ought to know it. But because you've been so frenetic about it-"

"'Frenetic!' Me?"

"-Larry very quietly set up the stereo tank in his room and some one of us three had been catching the news, every broadcast. Not because we are worried, for we aren't - except about you. But when Mike gets into the news - and of course he does get into the news; he's still the Man from Mars - we know about it before those silly clippings ever reach you. I wish you would quit reading them."

"How do you know anything about any clippings? I went to a lot of trouble to see that you didn't. I thought."

"Boss," she said in a tired voice, "somebody has to dispose of the trash. Do you think Larry can't read?"

"So. That confounded oubliette hasn't worked right since Duke left. Damn it, nothing has!"

"All you have to do is to send word to Mike that you want Duke to come back - Duke will show up at once."

"You know I can't do that." It graveled him that what she said was almost certainly true - and the thought was followed by a sudden and bitter suspicion. "Anne! Are you still here because Mike told you to stay?"

She answered promptly, "I am here because I wish to be here."

"Mmm.. I'm not sure that's a responsive answer."

"Jubal, sometimes I wish you were small enough to spank. May I finish what I was saying?"

"You have the floor." Would any of them be here? Would Maryam have married Stinky and gone off to Beirut if Mike had not approved it? The name "Fatima Michele" might be an acknowledgment of her adopted faith plus her husband's wish to compliment his closest friend - or it might be code almost as explicit as baby Abby's double name, one which stated that Mike was somewhat more than godfather to the daughter of Dr. and Mrs. Mahmoud. If so, did Stinky wear his antlers unaware? Or with serene pride as Joseph was alleged to have done? Uh ... but it must be concluded with utter certainty that Stinky knew the minutes of his houri; water-brothership permitted not even diplomatic omission of any matter so important. If indeed it was important, which as a physician and agnostic Jubal doubted. But to them it would be-

"You aren't listening."

"Sorry. Woolgathering." -and stop it, you nasty old man ... reading meanings into names that mothers give their children indeed! Next thing you'll be taking up numerology ... then astrology ... then spiritualism - until your senility has progressed so far that all there is left is custodial treatment for a hulk too dim-witted to discorporate in dignity. Go to locked drawer nine in the clinic, code "Lethe" - and use at least two grains to be sure, although one is more than enough - "There's no need for you to read those clippings, because we know the public news about Mike before you do - and Ben has given us a water promise to let us know any private news we need to know at once - and Mike of course knows this. But, Jubal, Mike can't be hurt. If you would only visit the Nest, as we three have done, you would know this."

"I have never been invited."

"We didn't have specific invitations, either; we just went. Nobody has to have an invitation to go to his own home ... any more than they require invitations to come here. Like 'The Death of the Hired Man.' But you are just making excuses, Jubal, and poor ones ? for Ben urged you to, and both Dawn and Duke sent word to you."

"Mike hasn't invited me."

"Boss, that Nest belongs to me and to you quite as much as it does to Mike. Mike is first among equals ... as you are here. Is this Abby's home?"

"Happens," he answered evenly, "that title already vests in her with lifetime tenancy for me." Jubal had changed his own will, knowing that Mike's will now made it unnecessary to provide for any water brother of Mike. But not being sure of the exact 'water' status of this nestling - save that she was usually wet - he had made redispositions in her favor and in favor of descendants, if any, of certain others. "I hadn't intended to tell you, but there is no harm in your knowing."

"Jubal ... you've made me cry. And you've almost made me forget what I was saying. And I must say it. Mike would never hurry you, you know that. I grok he is waiting for fullness - and I grok that you are, too."

"Mmmm ... I grok you speak rightly."

"All right. I think you are especially glum today simply because Mike has been arrested again. But that's happened many-"

"'Arrested?' I hadn't heard about this! What goes on?" He added, "Damn it, girl-"

"Jubal, Jubal! Ben hasn't called; that's all we need to know. You know how many times Mike has been arrested - in the army, as a carney, other places - half a dozen times as a preacher. He never hurts anybody; he just lets them do it. They can never convict him and he gets out as soon as he wishes - at once, if he wants to."

"What is it this time?"

"Oh, the usual nonsense - public lewdness, statutory rape, conspiracy to defraud, keeping a disorderly house, contributing to the delinquency of minors, conspiracy to evade the state truancy laws-"

"Huh?"

"That involves their own nestlings' school. Their license to operate a parochial school was canceled; the kids still didn't go back to public school. No matter, Jubal - none of it matters. The one thing on which they are technically in violation of the law - and so are you, Boss darling - can't possibly be proved. Jubal, if you had ever seen the Temple and the Nest you would know that even the F.D.S. couldn't sneak a spy-eye into it. So relax. After a lot of publicity, charges will be dropped - and the crowds at the outer services will be bigger than ever."

"Hmm! Anne, does Mike rig these persecutions himself?"

She looked startled, an expression her face was unused to. "Why, I had never considered the possibility, Jubal. Mike can't lie, you know."

"Does it involve lying? Suppose he planted perfectly true rumors about himself? But ones that can't be proved in court?"

"Do you think Michael would do that?"

"I don't know. I do know that the slickest way in the world to lie is to tell the right amount of truth at the right time - and then shut up. And it wouldn't be the first time that persecution has been courted for its headline value. All right, I'll dismiss it from my mind unless it turns out he can't handle it. Are you still 'Front'?"

"If you can refrain from chucking Abby under the chin and saying cootchy-coo and similar uncommercial noises, I'll fetch her. Otherwise I had better tell Dorcas to get up and get to work."

"Bring in Abby. I'm going to make an honest effort to make some commercial noises - a brand-new plot, known as boy-meets-girl."

"Say, that's a good one, Boss! I wonder why nobody ever thought of it before? Half a sec-" She hurried out.

Jubal did restrain himself - less than one minute of uncommercial noises and demonstrations, just enough to invoke Abigail's heavenly smile, cum dimples, then Anne settled back and let the infant nurse. "Title:" he began. "'Girls Are Like Boys, Only More So.' Begin. Henry M. Haversham Fourth had been very carefully reared. He believed that there were only two kinds of girls: those in his presence and those who were not. He vastly preferred the latter sort, especially when they stayed that way. Paragraph. He had not been introduced to the young lady who fell into his lap, and he did not consider a common disaster as equivalent to a formal intro-' What the hell do you want? Can't you see I'm working?"

"Boss-" said Larry.

"Get out of that door, close it behind you, and-"

"Boss! Mike's church has burned down!"

They made a disorderly rout for Larry's room, Jubal a half length behind Larry at the turn, Anne with eleven pounds up closing rapidly despite her handicap. Dorcas trailed the field through being late out the starting gate; the racket wakened her.

"-midnight last night. What you are now viewing is what was the main entrance of the cult's temple, as it appeared immediately after the explosion. This is your Neighborly Newsman for New World Networks with your midmorning roundup. Stay switched to this pitch for dirt that's alert. And now a moment for your local sponsor-" The scene of destruction shimmered out and med-close shot of a lovely young housewife replaced, with dolly-in.

"Damit-Larry, unplug that contraption and wheel it into the study.

Anne-no, Dorcas. Phone Ben."

Anne protested, "You know the Temple never had a telephone - ever. How can she?"

"Then have somebody chase over and - no, of course not; the Temple wouldn't have anybody - uh, call the chief of police there. No, the district attorney. The last you heard Mike was still in jail?"

"That's right"

"I hope he still is - and all the others, too."

"So do I. Dorcas, take Abby. I'll do it."

But as they returned to the study the phone was signalling an incoming call and demanding hush & scramble. Jubal cursed and set the combo, intending to blast whoever it was off the frequency.

But it was Ben Caxton. "Hi, Jubal."

"Bent what the hell is the situation?"

"I see you've had some of the news. That's why I called, to put your mind at rest. Everything is under control. No sweat."

"What about the fire? Anybody hurt?"

"No damage at all. Mike says to tell you-"

"No damage? I just saw a shot of it; it looked like a total-"

"Oh, that-" Ben shrugged it off. "Look, Jubal, please listen and let me talk. I've got other things and other calls after this one. You aren't the only person who needs to be reassured. But Mike said to call you first."

"Uh ... very well, sir. I shall keep silent."

"Nobody hurt, nobody even scorched. Oh, a couple of million dollars in property damage, most of it uninsured. Nichevo. The place was already choked with experiences; Mike planned to abandon it soon in any case. Yes, it was fireproof - but anything will burn with enough gasoline and dynamite."

"Incendiary job, huh?"

"Please, Jubal. They had arrested eight of us - all they could catch of the Ninth Circle, John Doe warrants, mostly. Mike had all of us bailed out in a couple of hours, except himself. He's still in the hoosegow-"

"I'll be right there!"

"Take it easy. Mike says for you to come if you want to, but there is absolutely no need for it. His words. And I agree. It would just be a pleasure trip. The fire was set last night while the Temple was empty, everything canceled because of the arrests-empty, that is, except for the Nest. All of us in town, except Mike, were gathered in the Innermost Temple, holding a special Sharing-Water in his honor, when the explosion and fire were set off. So we adjourned to an emergency Nest."

"From the looks of it, you were lucky to get out at all."

"We were completely cut off, Jubal. We're all dead-"

"What?"

"We're all listed as dead or missing so far as the authorities know. You see, nobody left the building after that holocaust started ... by any known exit."

"Uh ... a 'priest's hole' arrangement?"

"Jubal, Mike has very special methods for dealing with such things - and I'm not going to discuss them over the phone, even scrambled."

"You said he was in jail?"

"So I did. He still is."

"But-"

"That's enough. If you do come here, don't go to the Temple. It's kaput. Our organization is busted up. We're through in this town. You could say that they've licked us, I suppose. I'm not going to tell you where we are ? and I'm not calling from there, anyhow. If you must come - and I see no point in it; there's nothing you can do - just come as you ordinarily would ... and we'll find you."

"That's all. Good-by. Anne, Dorcas, Larry - and you, too, Jubal, and the baby. Share water. Thou art God." The screen went blank.

Jubal swore. "I knew it! I knew it all along! That's what comes of mucking around with religion. Dorcas, get me a taxi. Anne - no, finish feeding your child. Larry, pack me a small bag. Anne, I'll want most of the iron money and Larry can go into town tomorrow and replenish the supply."

"But, Boss," protested Larry, "we're all going."

"Certainly we are," Anne agreed crisply.

"Pipe down, Anne. And close your mouth, Dorcas. This is not a time when women have the vote. That city is the front line at the moment and anything can happen. Larry, you are going to stay here and protect two women and a baby. Forget that about going to the bank; you won't need cash because none of you is to stir off the place until I'm back. Somebody is playing rough and there is enough hook-up between this house and that church that they might play rough here, too. Larry, flood lights all night long, heat up the fence, don't hesitate to shoot. And don't be slow about getting everybody into the vault if necessary - better put Abby's crib in there at once. Now get with it, all of you - I've got to change clothes."

Thirty minutes later Jubal was alone, by choice, in his suite; the rest were busy at assigned tasks. Larry called up, "Boss! Taxi about to land."

"Be right down," he called back, then turned to take a last look at the Fallen Caryatid. His eyes were filled with tears. He said softly, "You tried, didn't you, youngster? But that stone was always too heavy ... too heavy for anyone."

Gently he touched a hand of the crumpled figure, turned and left.

Chapter 35

JUBAL HAD A MISERABLE TRIP. The taxi was automatic and it did just what he expected of machinery, developed trouble in the air and homed for maintenance instead of carrying out its orders. Jubal wound up in New York, farther from where he wanted to be than when he started. There he found that he could make better time by commercial schedule than he could by any charter available. So he arrived hours later than he expected to, having spent the time cooped up with strangers (which he detested) and watching a stereo tank (which he detested only slightly less).

But it did inform him somewhat. He saw an insert of Supreme Bishop Short proclaiming a holy war against the Antichrist, *i.e.* Mike, and he saw too many shots of what was obviously an utterly ruined building - he failed to see how any of them had escaped alive. Augustus Greaves, in his most solemn lippmann tones, viewed with alarm everything about it but pointed out that, in every spitefence quarrel, one neighbor supplies the original incitement - and made it plain that, in his weasel-worded opinion, the so-called Man from Mars was at fault.

At last Jubal stood on a municipal landing flat sweltering in winter clothes unsuited to the blazing sun overhead, noted that palm trees still looked like a poor grade of feather duster, regarded bleakly the ocean beyond them, thinking that it was a dirty unstable mass of water, certainly contaminated with grape fruit shells and human excrement even though he couldn't see such at this distance - and wondered what to do next.

A man wearing a uniform cap approached him. "Taxi, sir?"

"Uh, yes, I think so." At worst he could go to a hotel, call in the press, and give out an interview that would publicize his whereabouts - there was occasionally some advantage to being newsworthy.

"Over this way, sir." The cabby led him out of the crowd and to a battered Yellow Cab. As he put his bag in after Jubal, the pilot said quietly, "I offer you Water."

"Eh? Never thirst."

"Thou art God." The hack driver sealed the door and got into his own compartment.

They wound up on a private landing flat on one wing of a big beach hotel - a four-car space, the hotel's own landing flat being on another wing. The pilot set the cab to home-in alone, took Jubal's bag and escorted him inside. "You couldn't have come in too easily via the lobby," he said conversationally, "as the foyer on this floor is filled with some very bad-tempered cobras. So if you decide you want to go down to the street, be sure to ask somebody first. Me, or anybody - I'm Tim."

"I'm Jubal Harshaw."

"I know, brother Jubal. In this way. Mind your step." They entered the hotel suite of the large, extreme luxury sort, and Jubal was led on into a bedroom with bath; Tim said, "This is yours," put Jubal's bag down and left. On the side table Jubal found water, glasses, ice cubes, and a bottle of brandy, opened but untouched. He was unsurprised to find that it was his preferred brand. He mixed himself a quick one, sipped it and sighed, then took off his heavy winter jacket.

A woman came in bearing a tray of sandwiches. She was wearing a plain dress which Jubal took to be the uniform of a hotel chambermaid since it was quite unlike the shorts, scarves, pediskirts, halters, sarongs and other bright-colored ways to display rather than conceal that characterized most females in this resort. But she smiled at him, said, "Drink deep and never thirst, our brother," put the tray down, went into his bath and started a tub for him, then checked around by eye in bath and in bedroom. "Is there anything you need, Jubal?"

"Me? Oh, no, everything is just fine. I'll make a quick cleanup and - is Ben Caxton around?"

"Yes. But he said you would want a bath and get comfortable first. If you want anything, just say so. Ask anyone. Or ask for me. I'm Patty."

"Oh! The Life of Archangel Foster."

She dimpled and suddenly was not plain but pretty, and much younger than the thirtyish Jubal had guessed her to be. "Yes."

"I'd like very much to see it some time. I'm interested in religious art."

"Now? No, I grok you want your bath. Unless you'd like help with your bath?"

Jubal recalled that his Japanese friend of the many tattoos had been a bath girl in her teens and would have made - had, many times - the same offer. But Patty was not Japanese and he simply wanted to wash away the sweat and stink and get into clothes suited to the climate. "No, thank you, Patty. But I do want to see them, at your convenience."

"Any time. There's no hurry." She left, unhurried but moving silently and very quickly.

Jubal soaped and dunked himself and refrained from lounging as the warm water invited his tired muscles to do; he wanted to see Ben and find out the score. Shortly he was checking through what Larry had packed for him and grunted with annoyance to find no summerweight slacks. He settled for sandals, shorts, and a bright sport shirt, which made him look like a paint-splashed emu and accented his hairy, thinning legs. But Jubal had ceased worrying about his appearance several decades earlier; it was comfortable and it would do, at least until he needed to go out on the Street ... or into court. Did the bar association here have reciprocity with Pennsylvania? He couldn't recall. Well, it was always possible to act with another attorney-of-record.

He found his way into a large living room, most comfortable but having that impersonal quality of all hotel accommodations. Several people were gathered near the largest stereovision tank Jubal had ever seen outside a theater. One of them glanced up, said, "Hi, Jubal," and came toward him.

"Hi, Ben. What's the situation? Is Mike still in jail?"

"Oh, no. He got out shortly after I talked to you."

"He's been arraigned then. Is the preliminary hearing set?"

Ben smiled. "That's not quite the way it is, Jubal. Mike is technically a fugitive from justice. He wasn't released on bail. He escaped."

Jubal looked disgusted. "What a silly thing to do. Now the case will be eight times as difficult."

"Jubal, I told you not to worry. All the rest of us are presumed dead - and Mike is simply missing. We're through with this city, so it doesn't matter in the least. We'll go someplace else."

"They'll extradite him."

"Never fear. They won't."

"Well ... where is he? I want to talk to him."

"Oh, he's right here, a couple of rooms down from you. But he's withdrawn in meditation. He left word to tell you, when you arrived, to take no action - none. You can talk to him right now if you insist; Jill will call him out of it. But I don't recommend it. There's no hurry."

Jubal thought about it, admitted that he was damnably eager to hear from Mike himself just what the score was - and chew him out for having gotten into such a mess - but admitted, too, that disturbing Mike while he was in a trance was almost certainly much worse than disturbing Jubal himself when he was dictating a story - the boy always came out of his self-hypnosis when he had "grokked the fullness," whatever that was - and if he hadn't, then he always needed to go back into it. As pointless as disturbing a hibernating bear.

"All right, I'll wait. But I want to talk to him when he wakes up."

"You will. Now relax and be happy. Let the trip get out of your system." Ben urged him toward the group around the stereo tank.

Anne looked up. "Hello, Boss." She moved over and made room. "Sit down."

Jubal joined her. "May I ask what the devil you are doing here?"

"The same thing you're doing - nothing. Watching stereo. Jubal, please don't get heavy-handed because we didn't do what you told us. We belong here as much as you do. You shouldn't have told us not to come ... but you were too upset for us to argue with you. So relax and watch what they're saying about us. The sheriff has just announced that he's going to run all us whores out of town." She smiled. "I've never been run out of town before. It should be interesting. Does a whore get ridden on a rail? Or will I have to walk?"

"I don't think there's protocol in the matter. You all came?"

"Yes, but don't fret. Jed McClintock is sleeping in the house. Larry and I made a standing arrangement with the McClintock boys for one of them to do so, more than a year ago - just in case. They know how the furnace works and where the switches are and things; it's all right."

"Hmm! I'm beginning to think I'm just a boarder there."

"Were you ever anything else, Boss? You expect us to run it without bothering you. We do. But it's a shame you didn't relax and let us all travel together. We got here more than two hours ago - you must have had some trouble."

"I did, A terrible trip. Anne, once I get home I don't intend ever to set foot off the place again in my life ? and I'm going to yank out the telephone and take a sledgehammer to the babble box."

"Yes, Boss."

"This time I mean it." He glanced at the giant babble box in front of him. "Do those commercials go on forever? Where's my goddaughter? Don't tell me you left her to the mercies of McClintock's idiot sons!"

"Oh, of course not. She's here. She even has her own nursemaid, thank God."

"I want to see her."

"Patty will show her to you. I'm bored with her - she was a perfect little beast all the way down. Patty dear! Jubal wants to see Abby."

The tattooed woman checked one of her unhurried dashes through the room - so far as Jubal could see, she was the only one of the several present who was doing any work, and she seemed to be everywhere at once. "Certainly, Jubal. I'm not busy. Down this way.

"I've got the kids in my room," she explained, while Jubal strove to keep up with her, "so that Honey Bun can watch them."

Jubal was mildly startled to see, a moment later, what Patricia meant by that. The boa was arranged on one of twin double beds in squared-off loops that formed a nest - a twin nest, as one bight of the snake had been pulled across to bisect the square, making two crib-sized pockets, each padded with a baby blanket and each containing a baby.

The ophidian nursemaid raised her head inquiringly as they came in. Patty stroked it and said, "It's all right, dear. Father Jubal wants to see them. Pet her a little, and let her grok you, so that she will know you next time."

First Jubal coochy-cooed at his favorite girl friend when she gurgled at him and kicked, then petted the snake. He decided that it was the handsomest specimen of Bojdae he had ever seen, as well as the biggest - longer, he estimated, than any other boa constrictor in captivity. Its cross bars were sharply marked and the brighter colors of the tail quite showy. He envied Patty her blue-ribbon pet and regretted that he would not have more time in which to get friendly with it.

The snake rubbed her head against his hand like a cat. Patty picked up Abby and said, "Just as I thought. Honey Bun, why didn't you tell me?" - then explained, as she started to change diaper - ,"She tells me at once if one of them gets tangled up, or needs help, or anything, since she can't do much for them herself - no hands - except nudge them back if they try to crawl out and might fall. But she just can't seem to grok that a wet baby ought to be changed - Honey Bun doesn't see anything wrong about that. And neither does Abby."

"I know. We call her 'Old Faithful.' Who's the other cutie pie?"

"Huh? That's Fatima Michele, I thought you knew."

"Are they here? I thought they were in Beirut!"

"Why, I believe they did come from some one of those foreign parts. I don't know just where. Maybe Maryam told me but it wouldn't mean anything to me; I've never been anywhere. Not that it matters; I grok all places are alike - just people. There, do you want to hold Abigail Zenobia while I check Fatima?"

Jubal did so and assured her that she was the most beautiful girl in the world, then shortly thereafter assured Fatima of the same thing. He was completely sincere each time and the girls believed him - Jubal had said the same thing on countless occasions starting in the Harding administration, had always meant it and had always been believed. It was a Higher Truth, not bound by mundane logic.

Regretfully he left them, after again petting Honey Bun and telling her the same thing, and just as sincerely.

They left and at once ran into Fatima's mother. "Boss honey!" She kissed him and patted his tummy. "I see they've kept you fed."

"Some. I've just been in smooching with your daughter, She's an angel doll, Miriam."

"Pretty good baby, huh? We're going to sell her down to Rio - get a fancy price for her."

"I thought the market was better in Yemen?"

"Stinky says not. Got to sell her to make room." She put his hand on her belly. "Feel the bulge? Stinky and I are making a boy now - got no time for daughters."

"Maryam," Patricia said chidingly, "that's no way to talk, even in fun."

"Sorry, Patty. I won't talk that way about your baby - Aunt Patty is a lady, and groks that I'm not."

"I grok that you aren't, too, you little hellion, But if Fatima is for sale, I'll give you twice your best commercial offer."

"You'll have to take it up with Aunt Patty; I'm merely allowed to see her occasionally."

"And you don't bulge, so you may want to keep her yourself. Let me see your eyes. Mmm... could be."

"Is. And Mike has grokked it most carefully and tells Stinky he's made a boy."

"How can Mike grok that? Impossible. I'm not even sure you're pregnant-"

"Oh, she is, Jubal," Patricia confirmed.

Miriam looked at him serenely. "Still the skeptic, Boss. Mike grokked it while Stinky and I were still in Beirut, before we were sure we had caught. So Mike phoned us. And the next day Stinky told the university that we were taking a sabbatical for field work - or his resignation, if they wished. So here we are."

"Doing what?"

"Working. Working harder than you ever made me work, Boss - my husband is a slave driver."

"Doing what?"

"They're writing a Martian dictionary," Patty told him.

"Martian to English? That must be difficult."

"Oh, no, no, no!" Miriam looked almost shocked. "That wouldn't be difficult, that would be impossible. A Martian dictionary in Martian. There's never been one before; the Martians don't need such things. Uh, my part of it is just clerical; I type what they do. Mike and Stinky - mostly Stinky - worked out a phonetic script for Martian, eighty-one characters. So we had an I.B.M. typer worked over for those characters, using both upper and lower case - Boss darling, I'm ruined as a secretary; I type touch system in Martian now. Will you love me anyhow? When you shout 'Front!' and I'm not good for anything? I can still cook ... and I'm told that I have other talents."

"I'll learn to dictate in Martian."

"You will, before Mike and Stinky get through with you. I grok. Eh, Patty?"

"You speak rightly, my brother."

They returned to the living room, Caxton joined them and suggested finding a quieter place, away from the giant babble box, led Jubal down a passage and into another livingroom.

"You seem to have most of this floor."

"All of it," agreed Ben. "Four suites - the Secretarial; the Presidential, the Royal, and Owner's Cabin, opened into one and not accessible other than by our own landing flat, except through a foyer that is not very healthy without help. You were warned about that?"

"Yes."

"We don't need so much room right now... but we may: people are checking in."

"Ben, bow can you hide from the cops as openly as this? The hotel staff alone will give you away."

"Oh, there are ways. The staff doesn't come up here. You see, Mike owns the hotel."

"So much the worse, I would think-"

"So much the better ... unless our doughty police chief has Mr. Douglas on his payroll, which I doubt. Mike bought it through about four links of dummies, and Douglas doesn't snoop into why Mike wants things done. Douglas doesn't despise me quite as much since Os Kilgallen took over my column, I think, but nevertheless he doesn't want to surrender control to me - he does what Mike wants. The hotel is a sound investment; it makes money, but the owner of record is one of our clandestine Ninth-Circlers So the owner decides he wants this floor for the season and the manager can't and doesn't and wouldn't want to inquire into why, or how many guests of his own the owner has coming or going - he likes his job; Mike is paying him more than he's worth. It's a pretty good hideout, for the time being. 'Till Mike groks where we will go next."

"Sounds like Mike had anticipated a need for a hideout."

"Oh, I'm sure he did. Almost two weeks ago Mike cleared out the nestlings' nest - except for Maryam and her baby; Maryam is needed for the job she's on. Mike sent the parents with children to other cities - places he means to open temples, I think - and when the time came, there were just about a dozen of us to move. No sweat."

"As it was, you barely got out with your lives, I take it." Jubal wondered how they had even managed to grab clothes in view of how they probably were not dressed. "You lost all the contents of the Nest? All your personal possessions?"

"Oh, no, not anything we really wanted. Stuff like Stinky's language tapes and a trick typer that Maryam uses; even that horrible Madame Tussaud picture of you. And Mike grabbed our clothes and some cash that was on hand."

Jubal objected, "You say Mike did this? But I thought Mike was in jail when the fire broke out."

"Uh, he was and he wasn't. His body was in jail ... curled up in withdrawal. But he was actually with us. You understand?"

"Uh, I don't grok."

"Rapport. He was inside Jill's bead, mostly, but we were all pretty closely tied in together. Jubal, I can't explain it; you have to do it. When the explosion hit, he moved us over here. Then he went back and saved the minor stuff worth saving."

Jubal frowned. Caxton said impatiently, "Teleportation, of course. What's so hard to grok about it, Jubal? You yourself told me to come down here and open my eyes and know a miracle when I saw one. So I did and they were. Only they aren't miracles, any more than radio is a miracle. Do you grok radio? Or stereovision? Or electronic computers?"

"Me? No."

"Nor do I, I've never studied electronics. But I'm sure I could if I took the time and the hard sweat to learn the language of electronics. I don't think it's miraculous - just complex. Teleportation is quite simple, once you learn the language - it's the language that is so difficult."

"Ben, you can teleport things?"

"Me? Oh, no, they don't teach that in kindergarten. Oh, I'm a deacon by courtesy, simply because I'm 'First Called' and Ninth Circle - but my actual progress is about Fourth Circle, bucking for Fifth. Why, I'm just beginning to get control of my own body - Patty is the only one of us who uses teleportation herself with any regularity ... and I'm not sure she ever does it without Mike's support. Oh, Mike says she's quite capable of it, but Patty is such a curiously naive and humble person for the genius she is that she is quite dependent on Mike. Which she needn't be. Jubal, I grok this: we don't actually need Mike - Oh, I'm not running him down; don't get me wrong. But you could have been the Man from Mars. Or even me.

It's like the first man to discover fire. Fire was there all along - and after he showed that it could be used, anybody could use it ... anybody with sense and savvy enough not to get burned with it. Follow me?"

"I grok, somewhat at least."

"Mike is our Prometheus - but remember, Prometheus was not God. Mike keeps emphasizing this. Thou art God, I am God, he is God - l that groks Mike is a man along with the rest of us . . . even though he knows more. A very superior man, admittedly - a lesser man, taught the things the Martians know, probably would have set himself up as a pipsqueak god. Mike is above that temptation. Prometheus ... but that's all."

Jubal said slowly, "As I recall, Prometheus paid a high price for bringing fire to mankind."

"And don't think that Mike doesn't! He pays with twenty-four hours of work every day, seven days a week, trying to teach a few of us how to play with matches without getting burned. Jill and Patty lowered the boom on him, started making him take one night a week off, long before I joined up." Caxton smiled. "But you can't stop Mike. This burg is loaded with gambling joints, no doubt you know, and most of them crooked since it's against the law here. Mike usually spends his night off bucking crooked games - and winning. Picks up ten, twenty, thirty thousand dollars a night. They tried to mug him, they tried to kill him, they tried knockout drops and muscle boys - nothing worked; he simply ran up a reputation as the luckiest man in town ... which brought more people into the Temple; they wanted to see this man who always won. So they tried to shut him out of the games - which was a mistake. Their cold decks froze solid, their wheels wouldn't spin, their dice would roll nothing but box cars. At last they started putting up with him ... and requesting him politely to please move along after he had won a few grand. Mike would always do so, if asked politely."

Caxton added, "Of course that's one more power bloc we've got against us. Not just the Fosterites and some of the other churches - but the gambling syndicate and the city political machine. I rather suppose that job done on the Temple was by professionals brought in from out of town - I doubt if the Fosterite goon squads touched it. Too professional."

While they talked, people came in, went out again, formed groups themselves or joined Jubal and Ben. Jubal found in them a most unusual feeling, an unhurried relaxation that at the same time was a dynamic tension. No one seemed excited, never in a hurry ... yet everything they did seemed purposeful, even gestures as apparently accidental and unpremeditated as encountering one another and marking it with a kiss or a greeting - or sometimes not. It felt to Jubal as if each move had been planned by a master choreographer ... yet obviously was not.

The quiet and the increasing tension - or rather "expectancy," he decided; these people were not tense in any morbid fashion - reminded Jubal of something he had known in the past. Surgery? With a master at work, no noise, no lost motions? A little.

Then he recalled it. Once, many years earlier when gigantic chemically powered rockets were used for the earliest probing of space from the third planet, he had watched a countdown in a block house ... and he recalled now the same low voices, the same relaxed, very diverse but coordinated actions, the same rising exultant expectancy as the count grew ever smaller. They were "waiting for fullness," that was certain. But for what? Why were they so happy? Their Temple and all they had built had just been destroyed ... yet they seemed like kids on the night before Christmas.

Jubal had noted in passing, when he arrived, that the nudity Ben had been so disturbed by on his abortive first visit to the Nest did not seem to be the practice in this surrogate Nest, although private enough in location. Then Jubal realized later that he had failed to notice such cases when they did appear; he had himself become so much in the unique close - family mood of the place that being dressed or not had become an unnoticeable irrelevancy.

When he did notice, it was not skin but the thickest, most beautiful cascade of black hair he had ever seen, gracing a young woman who came in, spoke to someone, threw Ben a kiss, glanced gravely at Jubal, and left. Jubal followed her with his eyes, appreciating that flowing mass of midnight plumage. Only after she left did he realize that she had not been dressed other than in her queenly crowning glory ... and then realized, too, that she was not the first of his brothers in that fashion.

Ben noticed his glance. "That's Ruth," he said. "New high priestess. She and her husband have been away, clear on the other coast - their mission was to prepare a branch temple, I think. I'm glad they're back. It's beginning to look as if the whole family will be home at once - like an old-fashioned Christmas dinner."

"Beautiful head of hair. I wish she had tarried."

"Then why didn't you call her over?"

"Eh?"

"Ruth almost certainly found an excuse to come in here just to catch a glimpse of you - I suppose they must have just arrived. But haven't you noticed that we have been left pretty much alone, except for a few who sat down with us, didn't say much, then left?"

"Well ... yes." Jubal had noticed and had been a touch disappointed, as he had been braced, by all that he had heard, to ward off undue intimacy - and had found that he had stepped on a top step that wasn't there. He had been treated with hospitality and politeness, but it was more like the politeness of a cat than that of an over-friendly dog.

"They are all terribly interested in the fact that you are here and are very anxious to see you ... but they are a little bit afraid of you, too."

"Me?"

"Oh, I told you this last summer. You're a venerable tradition of the church, not quite real and a bit more than life size. Mike has told them that you are the only human being he knows of who can 'grok in fullness' without needing to learn Martian first. Most of them suspect that you can read minds as perfectly as Mike does."

"Oh, what poppycock! I hope you disabused them?"

"Who am I to destroy a myth? Perhaps you do read minds - I'm sure you wouldn't tell me. They are just a touch afraid of you - you eat babies for breakfast and when you roar the ground trembles. Any of them would be delighted to have you call them over ... but they won't force themselves on you. They know that even Mike stands at attention and says 'sir' when you speak."

Jubal dismissed the whole idea with one short, explosive word.

"Certainly," Ben agreed. "Even Mike has his blind spots - I told you he was only human. But that's how it is. You're the patron saint of this church - and you're stuck with it."

"Well ... there's somebody I know, just came in. Jill! Jill! Turn around, dear!"

The woman turned rather hesitantly. "I'm Dawn. But thank you." She came over, however, and Jubal thought for an instant that she was going to kiss him ... and decided not to duck it. But she either had not that intention, or changed her mind. She dropped to one knee, took his hand and kissed it. "Father Jubal. We welcome you and drink deep of you."

Jubal snatched his hand away. "Oh, for heaven's sake, child! Get up from there and sit with us. Share water."

"Yes, Father Jubal."

"Uh ... and call me Jubal - and pass the word around that I don't appreciate being treated like a leper. I'm in the bosom of my family - I hope."

"You are ... Jubal."

"So I expect to be called Jubal and treated as a water brother - no more, no less. The first one who treats me with respect will be required to stay in after school. Grok?"

"Yes, Jubal," she answered demurely. "I've told them. They will."

"Huh?"

"Dawn means," explained Ben, "that she's told Patty, probably - since Mike is withdrawn at the moment ... and that Patty is telling everybody who can hear easily - with his inner ear - and they are passing the word to any who are still a bit deaf, like myself."

"Yes," agreed Dawn, "except that I told Jill - Patty has gone outside for something Michael wants. Jubal, have you been watching any of what is showing in the stereo tank? It's very exciting."

"Eh? No."

"You mean the jail break, Dawn?"

"Yes, Ben."

"We hadn't discussed that - and Jubal doesn't like stereo. Jubal, Mike didn't merely crush out and come home when he felt like it; he gave them a dilemma to sit on. Here he has just been arrested for everything but raping the Statue of Liberty, with Bigmouth Short denouncing him as the Antichrist on the same day. So he gave 'em miracles to chew on. He threw away every bar and door in the county jail as he left ... did the same at the state prison just out of town for good measure - and disarmed all the police forces, city, county, and state. Partly to keep 'em busy and interested ... and partly because Mike just purely despises locking a man up for any reason at all. He groks a great wrongness in it."

"That fits," Jubal agreed. "Mike is gentle, always. It would hurt him to have anybody locked up. I agree."

Ben shook his head. "Mike isn't gentle, Jubal. Killing a man wouldn't worry him. But he's the ultimate anarchist - locking a man up is a wrongness. Freedom of self - and utter personal responsibility for self. Thou art God."

"Wherein lies the conflict, sir? Killing a man might be necessary. But confining him is an offense against his integrity - and your own."

Ben looked at him. "I grok Mike was right. You do grok in fullness - his way. I don't quite - I'm still learning." He added, "How are they taking it, Dawn?"

She giggled slightly. "Like a stirred-up hornets' nest. The mayor has been on ... and he's frothing at the mouth. He's demanded help from the state and from the Federation - and he's getting it; we've seen lots of troop carriers landing. But as they pour out, Mike is stripping them - not just their weapons, even their shoes - and as soon as the troop carrier is empty, it goes, too."

Ben said, "I grok he'll stay withdrawn until they get tired and give up. Handling that many details he would almost have to stay in it and on eternal time."

Dawn looked thoughtful. "No, I don't think so, Ben. Of course I would have to, in order to handle even a tenth so much. But I grok Michael could do it riding a bicycle while standing on his head."

"Mmm ... I wouldn't know, I'm still making mud pies." Ben stood up. "Sometimes you miracle workers give me a slight pain, honey child. I'm going to go watch the tank for a while." He stopped to kiss her. "You entertain old Pappy Jubal; he likes little girls." Caxton left and a package of cigarettes he had left on a coffee table got up, followed him, and placed themselves in one of his pockets.

Jubal said, "Did you do that? Or Ben?"

"Ben did. I don't smoke, unless the man I'm with wants to smoke. But he's always forgetting his cigarettes; they chase him all over the Nest."

"Hmm! ... pretty fair-sized mud pies he makes these days."

"Ben is advancing much more rapidly than he will ever admit. He's a very holy person - but he hates to admit it. He's shy."

"Umph. Dawn, you are the Dawn Ardent I met at Foster Tabernacle about two and half years ago, aren't you?"

"Oh, you remember!!" She looked as if he had handed her a lollipop.

"Of course I remember. But I was slightly puzzled. You've changed some. All for the better. You seem much more beautiful."

"That's because I am more beautiful," she said simply. "You mistook me for Gillian. And she is more beautiful, too."

"Where is that child? I haven't seen her ... and I expected to see her at once."

"She's been working." Dawn paused. "But I told her and she says she's coming in." She paused again. "And I am to take her place. If you will excuse me."

"Oh, certainly. Run along, child."

"There's no hurry." But she did get up and leave almost at once as Dr. Mahmoud sat down.

Jubal looked at him sourly. "You might at least have had the common courtesy to let me know that you were in this country instead of letting me meet my goddaughter for the first time through the good offices of a snake."

"Oh, Jubal, you're always in such a bloody hurry,"

"Sir, when one is of-" Jubal was interrupted by two hands placed over his eyes from behind. A well-remembered voice demanded:

"Guess who?"

"Beelzebub?"

"Try again."

"Lady Macbeth?"

"Much closer. Third guess, or a forfeit."

"Gillian, stop that and come around here and sit beside me."

"Yes, Father." She obeyed.

"And knock off calling me 'Father' anywhere but home. Sir, I was saying that when one is of my age, one is necessarily in a hurry about some things. Each sunrise is a precious jewel ... for it may never be followed by its sunset. The world may end at any moment."

Mahmoud smiled at him. "Jubal, are you under the impression that if you stop cranking, the world stops going around?"

"Most certainly, sir - from my viewpoint." Miriam joined them silently, sat down on Jubal's free side; he put an arm around her. "While I might not be honing to see your ugly face again ... nor even to gaze on the somewhat more acceptable one of my former secretary-"

Miriam whispered, "Boss, are you honing for a kick in the stomach? I'm exquisitely beautiful; I have it on highest authority."

"Quiet. -new goddaughters are in another category. Through your failure to drop me so much as a postcard, I might have missed seeing Fatima Michele. In which case I would have returned to haunt you."

"In which case," Miriam pointed out, "you could take a took at Micky at the same time ... rubbing strained carrots in her hair. A disgusting sight."

"I was speaking metaphorically."

"I wasn't. She's a sloppy trencherman."

"Why," asked Jill quietly, "were you speaking metaphorically, Boss?"

"Eh? The concept 'ghost' is one I feel no need for, other than as a figure of speech."

"It's more than a figure of speech," insisted Jill.

"Uh ... as may be. I prefer to meet baby girls in the flesh, including my own."

Dr. Mahmoud said, "But that is what I was saying, Jubal. You aren't about to die; you aren't even close to it. Mike has grokked you to be certain. He says you have a long stretch of years ahead of you."

Jubal shook his head. "I set a top limit of three figures years ago. No more."

"Which three figures, Boss?" Miriam inquired innocently. "The three Methuselah used?"

He shook her shoulders. "Don't be obscene!"

"Stinky says women should be obscene but not heard."

"Your husband speaks rightly. So pipe down. The day my machine first shows three figures on its mileage meter is the day I discorporate, whether Martian style or by my own crude methods. You can't take that away from me. Going to the showers is the best part of the game."

"I grok you speak rightly, Jubal," Jill said slowly, "about its being the best part of the game. But I wouldn't count on it any time soon. Your fullness is not yet. Allie cast a horoscope on you just last week."

"A horoscope? Oh, my God! Who is 'Allie?' And how dare she cast a horoscope on me! Show her to me! Swelp me, I'll turn her in to the Better Business Bureau."

"I'm afraid you can't, Jubal," Mahmoud put in, "just now, as she is working on our dictionary. As to who she is, she's Madame Alexandra Vesant."

Jubal sat up and looked pleased. "Becky? Is she in this nut house, too? I should have known it. Where is she?"

"Yes, Becky. But we call her 'Allie' because we've got another Becky. But you'll have to wait. And don't scoff at her horoscopes, Jubal; she has the Sight."

"Oh, balderdash, Stinky. Astrology is nonsense and you know it."

"Oh, certainly. Even Allie knows it. And a percentage of astrologers are clumsy frauds. Nevertheless Allie practices it even more assiduously than she used to, when she did it for the public - using Martian arithmetic now and Martian astronomy - much fuller than ours. But it's her device for grokking, It could be gazing into a pool of water, or a crystal ball, or examining the entrails of a chicken. The means she uses to get into the mood do not matter and Mike has advised her to go on using the symbols she is used to. The point is: she has the Sight."

"What the hell do you mean by 'the Sight,' Stinky?"

"The ability to grok more of the universe than that little piece you happen to be sitting on at the moment. Mike has it from years of Martian discipline; Allie was an untrained semi-adept. The fact that she used as meaningless a symbol as astrology is beside the point. A rosary is meaningless, too - I speak of a Muslim rosary, of course; I'm not criticizing our competitors across the street." Mahmoud reached into his pocket, got out one, started fingering it. "If it helps to turn your hat around during a poker game - then it helps. It is irrelevant that the hat has no magic powers and cannot grok."

Jubal looked at the Islamic device for meditation and ventured a question he had hesitated to put before. "Then I take it you are still one of the Faithful? I had thought perhaps that you had joined Mike's church all the way."

Mahmoud put away the beads. "I have done both."

"Huh? Stinky, they're incompatible. Or else I don't grok either one."

Mahmoud shook his head. "Only on the surface. You could say, I suppose, that Maryam took my religion and I took hers; we consolidated. But, Jubal my beloved brother, I am still God's slave, submissive to His will ... and nevertheless can say: 'Thou art God, I am God, all that groks is God.' The Prophet never asserted that he was the last of all prophets nor did he claim to have said all there was to say - only fanatics after his lifetime insisted on those two very misleading fallacies. Submission to God's will is not to become a blind robot, incapable of free decision and thus of sin - and the Koran does not say that. Submission can include - and does include - utter responsibility for the fashion in which I, and each of us, shape the universe. It is ours to turn into a heavenly garden - or to rend and destroy." He smiled. "'With God all things are possible,' if I may borrow for a moment - except one thing ... the one Impossible. God cannot escape Himself. He cannot abdicate His own total responsibility - He forever must remain submissive to His own will. Islam remains - He cannot pass the buck. It is His - mine - yours - Mike's."

Jubal heaved a sigh. "Stinky, theology always gives me the pip. Where's Becky? Can't she knock off this dictionary work and say hello to an old friend? I've seen her only once in the last twenty-odd years; that's too long."

"You'll see her. But she can't stop now, she's dictating. Let me explain the technique, so that you won't insist. Up to now, I've been spending part of each day in rapport with Mike - just a few moments although it feels like an eight-hour day. Then I would immediately dictate all that he had poured into me onto tape. From those tapes several other people, trained in Martian phonetics but not necessarily advanced students, would make longhand phonetic transcriptions. Then Maryam would type them out, using a special typer - and this master copy Mike or I - Mike by choice, but his time is choked - would correct by hand.

"But our schedule has been disturbed now, and Mike groks that he is going to send Maryam and me away to some Shangri-la to finish the job - or, more correctly, he has grokked that we will grok such a necessity. So Mike is getting months and years of tape completed in order that I can take it away and unhurriedly break it into a phonetic script that humans can learn to read. Besides that, we have stacks of tapes of Mike's lectures - in Martian - that need to be transcribed into print when the dictionary is finished ... lectures that we understood at the time with his help but later will need to be printed, with the dictionary.

"Now I am forced to assume that Maryam and I will be leaving quite soon, because, busy as Mike is with a hundred other things, he's changed the method. There are eight bedrooms here equipped with tape recorders. Those of us who can do it best - Patty, Jill, myself, Maryam, your friend Allie, some others - take turns in those rooms. Mike puts us into a short trance, pours language - definitions, idioms, concepts - into us for a few moments that feel like hours ... then we dictate at once just what he has poured into us, exactly, while it's still fresh. But it can't be just anybody, even of the Innermost Temple. It requires a sharp accent and the ability to join the trance rapport and then spill out the results. Sam, for example, has everything but the clear accent - he manages, God knows how, to speak Martian with a Bronx accent. Can't use him, it would cause endless errata in the dictionary. And that is what Allie is doing now - dictating. She's still in the semitrance needed for total recall and, if you interrupt her, she'll lose what she still hasn't recorded."

"I grok," Jubal agreed, "although the picture of Becky Vesey as a Martian adept shakes me a little. Still, she was once one of the best mentalists in show business; she could give a cold reading that would scare any mark right out of his shoes - and loosen his pocketbook. Say, Stinky, if you are going to be sent away for peace and quiet while you unwind all this data, why don't you and Maryam come home? Plenty of room for a study & bedroom suite in the new wing."

"Perhaps we shall. Waiting still is."

"Sweetheart," Miriam said earnestly, "that's a solution I would just plain love if Mike pushes us out of the Nest."

"If we grok to leave the Nest, you mean."

"Same thing - you grok."

"You speak rightly, my dear. But when do we eat around here? I feel a most unMartian urgency inside. The service was better in the Nest."

"You can't expect Patty to work on your dratted old dictionary, see to it that everyone who arrives is comfortable, run errands for Mike, and still have food on the table the instant you get hungry, my love. Jubal, Stinky will never achieve priesthood - he's a slave to his stomach."

"Well, so am I."

"And you girls might give Patty a hand," her husband added.

"That sounds like a crude hint. You know we do, dear, all she will let us - and Tony will hardly allow anyone in his kitchen ... even this kitchen." She stood up. "Come on, Jubal, and let's see what's cooking. Tony will be very flattered if you visit his kitchen."

Jubal went with her, was a bit bemused to see telekinesis used in preparing food, met Tony, who scowled until he saw who was with her, then was beamingly proud to show off his workshop, accompanied by a spate of invective in mixed English and Italian at the scoundrels who had destroyed "his" kitchen in the Nest. In the meantime a spoon, unassisted, continued to keel a big pot of spaghetti sauce.

Shortly thereafter Jubal declined to be jockeyed into a seat at the head of a long table, grabbed one elsewhere. Patty sat at one end; the head chair remained vacant ... except for an eerie feeling which Jubal suppressed that the Man from Mars was sitting there and that everyone present but himself could see him - which was true only in some cases.

Across the table from him was Dr. Nelson.

Jubal discovered that he would have been surprised only if Dr. Nelson had not been present. He nodded and said, "Hi, Sven."

"Hi, Doc. Share water."

"Never thirst. What are you around here? Staff physician?" Nelson shook his bead. "Medical student."

"So. Learn anything?"

"I've learned that medicine isn't necessary."

"If youda ast me, I coulda told ya. Seen Van?"

"He ought to be in sometime late tonight or early tomorrow. His ship grounded today."

"Does he always come here?" inquired Jubal.

"Call him an extension student. He can't spend much time here."

"Well, it will be good to see him. I haven't laid eyes on him for a year and half, about." Jubal picked up a conversation with the man on his right while Nelson talked with Dorcas on his right. Jubal noticed the same tingling expectancy at the table which he had felt before, but reinforced. Yet there was still nothing he could put his finger on - just a quiet family dinner in relaxed intimacy. Once, a glass of water was passed all around the table, but, if there was ritual of words with it, they were spoken too low to carry. When it reached Jubal's placer he took a sip and passed it along to the girl on his left - round-eyed and too awed to make chitchat with him - and himself said in a low voice, "I offer you water."

She managed to answer, "I thank you for water, Fa-Jubal." That was almost the only word be got out of her. When the glass completed the circuit, reaching the vacant chair at the head of the table, there was perhaps a half inch of water in it. It raised itself, poured, and the water disappeared, then the tumbler placed itself on the cloth. Jubal decided, correctly, that he had taken part in a group Sharing Water of the Innermost Temple ... and probably in his honour - although it certainly was not even slightly like the Bacchallalhan revels he had thought accompanied such formal welcome of a brother. Was it because they were in strange surroundings? Or had he read into unexplicit reports what his own id wanted to find in those reports?

Or had they simply toned it down to an ascetic formality out of deference to his age and opinions?

The last seemed the most likely theory - and he found that it vexed him. Of course, he told himself, he was glad to be spared the need to refuse an invitation that he certainly did not want - and would not have relished at any age, his tastes being what they were.

But just the same, damn it - "Don't anybody mention ice skating because Grandmaw is too old and frail for ice skating and it wouldn't be polite. Hulda, you suggest that we play checkers and we'll all chime in - Grandmaw likes checkers. And we'll go ice skating some other time. Okay, kids?"

Jubal resented the respectful consideration, if that was what it was - he would almost have preferred to have gone ice skating anyhow, even at the cost of a broken hip.

But he decided to forget the matter, put it entirely out of mind, which he did with the help of the man on his right, who was as talkative as the girl on his left was not. His name, Jubal learned, was Sam, and presently he learned that Sam was a man of broad and deep scholarship, a trait Jubal valued in anyone when it was not mere parrot learning - and he grokked that in Sam it was not.

"This setback is only apparent," Sam assured him. "The egg was ready to hatch and now we'll spread out. Of course we've had trouble; we'll go on having trouble - because no society, no matter how liberal its law may appear to be, will allow its basic concepts to be challenged with impunity. Which is exactly what we are doing. We are challenging everything from the sanctity of property to the sanctity of marriage."

"Property, too?"

"Property the way it rules today. So far Michael has merely antagonized a few crooked gamblers. But what happens when there are thousands, tens of thousands, hundreds of thousands and more, of people who can't be stopped by bank vaults and who have only their self-discipline to restrain them from taking anything they want? To be sure, that discipline is stronger than any possible legal restraint - but no banker can grok that until he himself travels the thorny road to achieve that discipline ... and he'll wind up no longer a banker. What happens to the stock market when the illuminati know which way a stock will move - and the brokers don't?"

"Do you know?"

Sam shook his head. "Not interested. But Saul over there - that other big Hebe; he's my cousin - gives it grokking, along with Allie. Michael has them be very cautious about it, no big killings, and they use a dozen-odd dummy accounts - but the fact remains that any of the disciplined can make any amount of money at anything - real estate, stocks, horse races, gambling, you name it - when competing with the half awake. No, I don't think that money and property will disappear - Michael says that both concepts are useful - but I do say that they're going to be turned upside down and inside out to the point where people will have to learn new rules (and that means learn the hard way, just as we have) or be hopelessly outclassed. What happens to Lunar Enterprises when the common carrier between here and Luna City is teleportation?"

"Should I buy? Or sell?"

"Ask Saul. He might use the present corporation, or he might bankrupt it. Or it might be left untouched for a century or two. But besides bankers and brokers, consider any other occupation. How can a school teacher teach a child who knows more than she does and won't hold still for mistaken teaching? What becomes of physicians and dentists when people are truly healthy? What happens to the cloak & suit industry and to the I.L.G.W.U. when clothing isn't really needed at all and women aren't so endlessly interested in dressing up (they'll never lose interest entirely) - and nobody gives a damn if he's caught with his arse bare? What shape does 'the Farm Problem' take when weeds can be told not to grow and crops can be harvested without benefit of International Harvester or John Deere? Just name it; it changes beyond recognition when the discipline is applied. Take just one change that will shake both the sanctity of marriage - in its present form - and the sanctity of property. Jubal, do you have any idea how much is spent each year in this country on Malthusian drugs and devices?"

"I have a fairly exact idea, Sam. Almost a billion dollars on oral contraceptives alone this last fiscal year ... more than half of which was for patent nostrums about as useful as corn starch."

"Oh, yes, you're a medical man."

"Only in passing. A pack rat mind."

"Either way. What happens to that big industry - and to the shrill threats of moralists - when a female can conceive only when she elects to as an act of volition, when also she is immune to disease, cares only for the approval of her own sort ... and has her orientation so changed that she desires intercourse with a wholeheartedness that Cleopatra never dreamed of - but any male who tried to rape her would die so quickly, if she so grokked, that he wouldn't know what hit him? When women are free of guilt and fear - but invulnerable other than by decision of self? Hell, the pharmaceutical industry will be just a passing casualty - what other industries, laws, institutions, attitudes, prejudices, and nonsense must give way?"

"I don't grok its fullness," admitted Jubal. "It concerns a subject that has been of little direct interest to me in quite a while."

"One institution won't be damaged by it. Marriage."

"So?"

"Very much so. Instead it will be purged, strengthened, and made endurable. Endurable? Ecstatic! See that wench down there with the long black hair?"

"Yes. I was delighting in its beauty earlier."

"She knows it's beautiful and it's grown a foot and a half longer since we joined the church. That's my wife. Not much over a year ago we lived together about like bad-tempered dogs. She was jealous ... and I was inattentive. Bored. Hell, we were both bored and only our kids kept us together - that and her possessiveness; I knew she would never let me go without a fight and a scandal ... and I didn't have any stomach for trying to put together a new marriage at my age, anyhow. So I got a little on the side, when I could get away with it - a college professor has many temptations, few safe opportunities - and Ruth was quietly bitter. Or sometimes not so quiet. And then we joined up." Sam grinned happily. "And I fell in love with my own wife. Number-one gal friend-"

Sam's words had been very quiet, an intimate conversation walled by noise of eating and cheerful company. His wife was far down the table. She looked up and said clearly, "That's an exaggeration, Jubal. I think I'm about number six."

Her husband called out, "Stay out of my mind, beautiful! - we're talking men talk. Give Larry your undivided attention." He picked up a hard roll, threw it at her.

She stopped it in mid-trajectory, threw it back at him while continuing to talk; Sam caught it and buttered it. "I'm giving Larry all the attention he wants ... until later, maybe. Jubal, that brute didn't let me finish. Number-six place is wonderful! Because my name wasn't even on the list till we joined the church. I hadn't rated as high as six with Sam in the past twenty years." She did then turn her attention back to Larry.

"The real point," Sam said quietly, "is that we two are now partners, much more than we ever were even at the best period in our outside marriage - and we got that way through the training, culminating in sharing and growing closer with others who had the same training. We all wind up in twosome partnerships inside the larger group - usually, but not necessarily, with our own spouses-of-record. Sometimes not ... and if not, the readjustment takes place with no heartache and a warmer, closer, better relationship between the soidisant 'divorced' couple than ever, both in bed and out. No loss and all gain. Shucks, this pairing as partners needn't even be between man and woman. Dawn and Jill for example - they work together like an acrobatic team."

"Hmm ... I suppose," Jubal said thoughtfully, "that I had thought of those two as being Mike's wives."

"No more so than they are to any of us. Or than Mike is to all the rest. Mike is too busy, has been, I should say, until the Temple burned - to do more than make sure that he shared himself all the way around." Sam added, "If anybody is Mike's wife, it's Patty, although she keeps so busy herself that the relation is more spiritual than physical. Actually, you could say that both Mike and Patty are shortchanged when it comes to mauling the mattress."

Patty was not quite as far away as Ruth, but far enough. She looked up and said, "Sam dear, I don't feel shortchanged."

"Huh?" Sam then announced, loudly and bitterly, "The only thing wrong with this church is that a man has absolutely no privacy!"

This brought a barrage of food in his direction, all from distaff members. He handled it all and tossed it back without lifting a hand ... until the complexity of it apparently got to be too much and a plateful of spaghetti caught him full in the face - thrown, Jubal noticed, by Dorcas.

For a moment Sam looked like a particularly ghastly crash victim. Then suddenly his face was clean and even the sauce that had spattered on Jubal's shirt was gone. "Don't give her any more, Tony. She wasted it; let her go hungry."

"Plenty more in the kitchen," Tony answered. "Sam, you look good in spaghetti. Pretty good sauce, huh?" Dorcas's plate sailed out to the kitchen, returned, loaded. Jubal decided that Dorcas had not been concealing talents from him - the plate was much more heavily filled than she would have chosen herself; he knew her appetite.

"Very good sauce," agreed Sam. "I salvaged some that hit me in the mouth. What is it? Or shouldn't I ask?"

"Chopped policeman," Tony answered.

Nobody laughed. For a queasy instant Jubal wondered if the joke was a joke. Then he recalled that these his water brothers smiled a lot but rarely laughed - and besides, policeman should be good healthy food. But the sauce couldn't be "long pig" in any case, or it would taste like pork. This sauce had a distinct beef flavor to it.

He changed the subject. "The thing I like best about this religion-"

"Is it a religion?" Sam inquired.

"Well, church. Call it a church. You did."

"It is a church," agreed Sam. "It fills every function of a church, and its quasi-theology does, I admit, match up fairly well with some real religions. Faiths. I jumped in because I used to be a stalwart atheist - and now I'm a high priest and I don't know what I am."

"I understood you to say you were Jewish."

"I am. From a long line of rabbis. So I wound up atheist. Now look at me. But my cousin Saul and my wife Ruth are both Jews in the religious sense-and talk to Saul; you'll find it's no handicap to this discipline. A help, probably ... as Ruth, once she broke past the first barrier, progressed faster than I did; she was a priestess quite a while before I became a priest. But she's the spiritual sort; she thinks with her gonads. Me, I have to do it the hard way, between my ears."

"The discipline," repeated Jubal. "That's what I like best about it. The faith I was reared in didn't require anybody to know anything. Just confess your sins and be saved, and there you were, safe in the arms of Jesus. A man could be too stupid to hit the floor with his hat ... and yet he could be conclusively presumed to be one of God's elect, guaranteed an eternity of bliss, because he had been 'converted.' He might or might not become a Bible student; even that wasn't necessary ... and he certainly didn't have to know, or even try to know, anything else. This church doesn't accept 'conversion' as I grok it-"

"You grok correctly."

"A person must start with a willingness to learn and follow it with some long, hard study. I grok that is salutary, in itself."

"More than salutary," agreed Sam. "Indispensable. The concepts - can't be thought about without the language, and the discipline that results in this horn-of-plenty of benefits - from how to live without fighting to how to please your wife - all derive from the conceptual logic ... understanding who you are, why you're here, how you tick - and behaving accordingly. Happiness is a matter of functioning the way a human being is organized to function ... but the words in English are a mere tautology, empty. In Martian they are a complete set of working instructions. Did I mention that I had a cancer when I came here?"

"Eh? No, you didn't."

"Didn't know it myself. Michael grokked it, sent me out for the usual X rays and so forth so that I would be sure. Then we got to work on it together. 'Faith' healing. A miracle. The clinic called it 'spontaneous remission' which I grok means 'I got well.'"

Jubal nodded. "Professional doubletalk. Some cancers go away, we don't know why."

"I know why this one went away. By then I was beginning to control my own body. With Mike's help I repaired the damage. Now I can do it without his help. Want to feel a heart stop beating?"

"Thanks, I have observed it in Mike, many times. My esteemed colleague, Croaker Nelson, would not be sitting across from us if what you are talking about was 'faith healing.' It's voluntary control of the body. I grok."

"Sorry. We all know that you do. We know."

"Mmm ... I dislike to call Mike a liar because he isn't. But the lad happens to be prejudiced in my case."

Sam shook his head. "I've been talking with you all through dinner. I wanted to check it myself, despite what Mike said. You grok. I'm wondering what new things you could disclose to us if you troubled to learn the language?"

"Nothing. I'm an old man with little to contribute to anything."

"I insist on reserving my opinion. All the rest of the First Called have had to tackle the language to make any real progress. Even the three you've kept with you have had some powerful coaching, being kept in trance during most of the short days and the few occasions we've had them with us. All but you ... and you don't really need it. Unless you want to wipe spaghetti from your face without a towel, which I grok you aren't interested in anyhow."

"Only to observe it."

Most of the others had left the table, leaving quietly and without formality when they wished. Ruth came over and stood by them. "Are you two going to sit here all night? Or shall we move you out with the dishes?"

"I'm henpecked. Come on, Jubal." Sam stopped to kiss his wife.

They stopped only momentarily in the room with the stereo tank. "Anything new?" asked Sam.

"The county attorney," someone said, "has been orating in an attempt to prove that all of today's disasters are our doing ... without admitting that he doesn't have the slightest notion how any of it was done."

"Poor fellow. He's bitten a wooden leg and his teeth hurt." They went on through and found a quieter living room; Sam said, "I had been saying that these troubles can be expected - and they will get much worse before we can expect to control enough public opinion to be tolerated. But Mike is in no hurry. So we close down the Church of All Worlds - it is closed down. So we move and open the Congregation of the One Faith - and we get kicked out again. Then we reopen elsewhere as the Temple of the Great Pyramid - that one will bring flocking the foolish fat and fatuous females, and some of them will end up neither fat nor foolish - and when we have the Medical Association and the local bar and the newspapers and the boss politicos snapping at our heels there - why, we open the Brotherhood of Baptism somewhere else. Each one means solid progress, a hard core of disciplined who can't be hurt - Mike started here hardly over a year ago, uncertain himself, and with only the help of three untrained priestesses ? by courtesy. Now we've got a solid Nest ... plus a lot of fairly advanced pilgrims we can get in touch with later and let rejoin us. And someday, someday, we'll be too strong to persecute."

"Well," agreed Jubal, "it could work. Jesus made quite a splash with only twelve disciples. In due course."

Sam grinned happily. "A Jew boy. Thanks for mentioning Him. He's the outstanding success story of my tribe - and we all know it, even though many of us don't talk about Him. But He was a Jew boy that made good and I'm proud of Him, being a Jew boy myself. Please to note that Jesus didn't try to get it all done by next Wednesday. He was patient. He set up a sound organization and let it grow. Mike is patient, too. Patience is so much part of the discipline that it isn't even patience; it's automatic. No sweat. Never any sweat."

"A sound attitude at any time."

"Not an attitude. The functioning of the discipline. Jubal? I grok you are tired. Would you wish to become untired? Or would you rather go to bed? If you don't, our brothers will keep you up all night, talking. Most of us don't sleep much, you know."

Jubal yawned. "I think I'll choose a long, hot soak and about eight hours of sleep. I'll visit with our brothers tomorrow ... and other days."

"And many other days," agreed Sam.

Jubal found his own room, was immediately joined by Patty, who again insisted on drawing his tub, then turned back his bed, neatly, without touching it, placed his setup for drinks (fresh ice cubes) by his bed, and fixed one and placed it on the shelf of the tub. Jubal did not try to hurry her out; she had arrived displaying all her pictures. He knew enough about the syndrome which can lead to full tattooing to be quite sure that if he did not now remark on them and ask to be allowed to examine them, she would be very hurt even though she might conceal it.

Nor did he display or feel any of the fret that Ben had felt on an earlier, similar occasion; he went right ahead and undressed, making nothing of it - and discovered with wryly bitter pride that it did not matter to him in the least even though it had been many years since the last time he had allowed anyone, man or woman, to see him naked. It seemed to matter not at all to Patty and even less to him. She simply made sure that the tub was just right before allowing him to step into it.

Then she remained and told him what each picture was and in what sequence to view them.

Jubal was properly awed and appropriately complimentary, while completely the impersonal art critic. But it was, he admitted to himself, the goddamdest display of virtuosity with a needle he had ever seen - it made his fully decorated Japanese friend look like a cheap carpet as compared with the finest Princess Bokhara.

"They've been changing a little," she told him. "Take the holy birth scene here-that rear wall is beginning to look curved . . . and the bed looks almost like a hospital table. Of course I have been changing, too, quite a lot. I'm sure George doesn't mind. There hasn't been a needle touched to me since he went to Heaven ... and if some miraculous changes take place, I'm sure he knows about them and has a finger in it somehow."

Jubal decided that Patty was a little dotty but quite nice ... on the whole, he preferred people who were a little dotty; "the salt of the earth" citizen left him cold. Not too dotty, he amended; Patty had let him undress himself, then had whisked his clothes into his wardrobe without coming near them. She was probably a clear proof that one didn't have to be sane, whatever that was, to benefit by this remarkable Martian discipline that the boy apparently could teach to anyone.

Presently he sensed that she was ready to leave and suggested it by asking her to kiss his goddaughters goodnight - he had forgotten to. "I was tired, Patty."

She nodded. "And I am called for dictionary work." She leaned over and kissed him, warmly but quickly. "I'll take that one to our babies."

"And a pat for Honey Bun."

"Yes, of course. She groks you, Jubal. She knows you like snakes."

"Good. Share water, brother."

"Thou art God, Jubal." She was gone. Jubal settled back in the tub, was surprised to find that he did not seem tired now and his bones no longer ached. Patty was a tonic ... serene happiness on the hoof. He wished that he himself had no doubts - then admitted that he didn't want to be anybody but himself, old and cranky and self-indulgent.

Finally he soaped and showered and decided to shave so that he wouldn't have to before breakfast. After a leisurely time he bolted the door of his room, turned out the overhead light, and got into bed.

He had looked around for something to read, found nothing to his annoyance, being addicted to this vice above all else and not wishing to go out again and scare up something. He sipped part of a drink instead and turned out the bed light.

He did not go right to sleep. His pleasant chat with Patty seemed to have wakened and rested him. He was still awake when Dawn came in.

He called out, "Who's there?"

"It's Dawn, Jubal."

"It can't be dawn yet; it was only-Oh."

"Yes, Jubal. Me."

"Damn it, I thought I bolted that door. Child, march straight out of -Hey! Get out of this bed. Git!"

"Yes, Jubal. I will. But I want to tell you something first."

"Huh?"

"I have loved you a long time. Almost as long as Jill has."

"Why, the very-Quit talking nonsense and shake your little fanny out that door."

"I will, Jubal," she said very humbly. "But I want you to listen to something first. Something about women."

"I don't want to hear it now. Tell me in the morning."

"Now, Jubal."

He sighed. "Talk. Stay where you are."

"Jubal ... my beloved brother. Men care very much how we women look. So we try to be beautiful and that is a goodness. I used to be a peeler, as I know you know. It was a goodness, too, to let men enjoy the beauty I was for them. It was a goodness for me, to know that they needed what I had to give.

"But, Jubal, women are not men. We care about what a man is. It can be something as silly as: Is he wealthy? Or it can be: Will he take care of my children and be good to them? Or, sometimes, it can be: Is he good?- as you are good, Jubal. But the beauty we see in you is not the beauty you see in us. You are beautiful, Jubal."

"For God's sake!"

"I think you speak rightly. Thou art God and I am God - and I need you. I offer you water. Will you let me share and grow closer?"

"Uh, look, little girl, if I understood what you are offering-"

"You grokked, Jubal. To share together all that we have. Ourselves. Selves."

"I thought so. My dear, you have plenty to share - but ... myself -

well, you arrived some years too late. I am sincerely regretful, believe me. Thank you. Deeply. Now go away and let an old man get his sleep."

"You will sleep, when waiting is filled. Jubal ... I could lend you strength. But I grok clearly that it is not necessary."

(Goddamit - it wasn't necessary!) "No, Dawn. Thank you, dear."

She got to her knees and bent over him. "Just one more word, then. Jill told me, that if you argued, I was to cry. Shall I get my tears all over your chest? And share water with you that way?"

"I'm going to spank Jill!"

"Yes, Jubal. I'm starting to cry." She made no sound, but in only a second or two a warm, full tear splashed on his chest - was followed quickly by another ... and another - and still more. She sobbed almost silently.

Jubal cursed and reached for her ... and cooperated with the inevitable.

Chapter 36

JUBAL WOKE UP ALERT, rested, and happy, realized that he felt better before breakfast than he had in years. For a long, long time he had been getting through that black period between waking and the first cup of coffee by comforting himself with the thought that tomorrow might be a little easier.

This morning he found himself whistling, which he did very badly. He noticed it, stopped himself, forgot it and started up again.

He saw himself in the mirror, smiled wryly, then grinned openly. "You incorrigible old goat. They'll be sending the wagon for you any minute now." He noticed a white hair on his chest, plucked it out, didn't bother with many others just as white, went on making himself ready to face the world.

When he went outside his door Jill was there. Accidentally? No, he no longer trusted any "coincidence" in this m,nage; it was as organized as a computer. She came straight into his arms. "Jubal-Oh, we love you so! Thou art God."

He returned her kiss as warmly as it was given, grokking that it would be hypocritical not to - and discovering that kissing Jill differed from kissing Dawn only in some fashion unmistakable but utterly beyond instrument or description.

Presently he held her away from him without letting her go. "You baby Messalina ... you framed me."

"Jubal darling ... you were wonderful!"

"Uh ... how the hell did you know I was able?"

She gave him back a gaze of clear-eyed innocence. "Why, Jubal, I've been certain of that ever since Mike and I first lived at home. You see, even then, when Mike was asleep - in trance - he could see around him quite a distance and sometimes he would look in on you - a question to ask you or something - to see if you were asleep."

"But I slept alone! Always."

"Yes, dear. But that wasn't quite what I meant. And I always had to explain things to Mike that he didn't understand."

"Hrrrmph!" He decided not to pursue the inquiry. "Just the same, you shouldn't have framed me."

"I grok you don't mean that in your heart, Jubal ... and you grok that I speak rightly. We had to have you in the Nest. All the way in. We need you. Since you are shy and humble in your goodness, we did what was needful to welcome you without hurting you. And we did not hurt you, as you grok."

"What's this 'we' stuff?"

"It was a full Sharing-Water of all the Nest, as you grok - you were there. Mike stopped what he was doing and woke up for it ... and grokked with you and kept us all together."

Jubal hastily abandoned this line of inquiry, too. "So Mike is awake at last. That's why your eyes are shining so."

"Only partly. Of course, we are always delighted when Mike isn't withdrawn, it's jolly ... but he's never really away. Jubal, I grok that you have not grokked the fullness of our way of Sharing-Water. But waiting will fill. Nor did Mike grok it, at first - he thought it was only for quickening of eggs, as it is on Mars."

"Well ... that's the primary purpose, the obvious purpose. Babies. Which makes it rather silly behavior on the part of a person, namely me, who has no intention and no wish, at my age, to cause such increase."

She shook her head. "Babies are the obvious result ... but not the primary purpose at all. Babies give meaning to the future, and that is a great goodness. But only three or four or a dozen times in a woman's life is a baby quickened in her ... out of the thousands of times she can share herself - and that is the primary use for what we can do so often but would need to do so seldom if it were only for reproduction. It is sharing and growing closer, forever and always. Jubal, Mike grokked this because on Mars the two things - quickening of eggs, and sharing-closer - are entirely separate . . . and he grokked, too, that our way is best. What a happy thing it is not to have been hatched a Martian ... to be human and a woman!"

He looked at her closely. "Child, are you pregnant?"

"Yes, Jubal. I grokked at last that waiting had ended and I was free to be. Most of the Nest have not needed to wait - but Dawn and I have been quite busy. But when we grokked this cusp coming, I grokked that there would be a waiting after the cusp - and you can see that there will certainly be. Mike will not rebuild the Temple overnight - so this high priestess will be unhurried in building a baby. Waiting always fills."

From this high-flown mishmash Jubal abstracted the central fact or Jill's belief concerning such a possible fact. Well, she no doubt had had plenty of opportunity. He resolved to keep an eye on the matter and try to bring her home for it, if possible. Mike's superman methods were all very well, but it wouldn't hurt to have the best modern equipment and techniques at hand, too. Losing Jill to eclampsia or some other mishap was something he did not intend to let happen, even if he had to get tough with the kids.

He wondered about another such possibility, decided not to mention it. "Where's Dawn? And where's Mike? The place seems awfully quiet." No one had come through the hail they were in and he heard no voices and yet that odd feeling of happy expectancy was even stronger than it had been the night before. He would have expected a certain release from tension after the ceremony he had apparently joined in himself ? unbeknownst - but the place was more charged up than ever. It suddenly reminded him of how he had felt, as a very small boy, when waiting for his first circus parade ... and someone had called out: "There come the elephants!"

Jubal felt as if, were he just a little taller, he could see the elephants, past the excited crowd. Yet there was no crowd.

"Dawn told me to give you a kiss for her; she'll be busy for the next three hours, about. And Mike is busy, too - he went back into withdrawal."

"Oh."

"Don't sound so disappointed; he'll be free soon. He's making a special effort so that he will be free on your account ... and to let all of us be free, too. Duke spent all night scouring the city for the highspeed tape recorders we use for the dictionary and now we've got everybody who can possibly do it being jammed full of Martian phonic symbols and then Mike will be through and can visit. Dawn has just started dictating; I finished one session, ducked out to say good-morning to you ... and am about to go back and get poured full of my last part of the chore, so I'll be gone just a little longer than Dawn will be. And here's Dawn's kiss - the first one was just from me." She put her arms around his neck and again put her mouth greedily to his - at last said, "My goodness! Why did we wait so long? 'Bye for a little!"

Jubal found a sparse few in the big dining room. Duke looked up, smiled and waved, went back to hearty eating. He did not look as if he had been up all night - nor had he; he had been up two nights.

Becky Vesey looked around when Duke waved and said happily, "Hi, you old goat!"-grabbed his ear, pulled him down, and whispered into it: "I've known it all along - but why weren't you around to console me when the Professor died?" She added aloud, "Sit down here beside me and we'll get some food into you while you tell me what devilment you've been plotting lately."

"Just a moment, Becky." Jubal went around the table. "Hi, Skipper. Good trip?"

"No trouble. It's becoming a milk run. I don't believe you've ever met Mrs. van Tromp. My dear, the founder of this feast, the one and only Jubal Harshaw - two of him would be too many."

The Captain's wife was a tall, plain woman with the calm eyes of one who has watched from the Widow's Walk. She stood up, kissed Jubal. "Thou art God."

"Uh, thou art God." Jubal decided that he might as well relax to the ritual - hell, if he said it often enough, he might lose the rest of his buttons and believe it ... and it did have a friendly ring to it with the arms of the Skipper's vrouw firmly around him. He decided that she could even teach Jill something about kissing. She - how was it Anne had once described it? - she gave it her whole attention; she wasn't going anywhere.

"I suppose, Van," he said, "that I really shouldn't be surprised to find you here."

"Well," answered the spaceman, "a man who commutes to Mars ought to be able to palaver with the natives, don't you think?"

"Just for powwow, huh?"

"There are other aspects." Van Tromp reached for a piece of toast; the toast cooperated. "Good food, good company."

"Um, yes."

"Jubal," Madame Vesant called out, "soup's on!"

Jubal returned to his place, found eggs-on-horseback, orange juice, and other choice comestibles waiting for him. Becky patted his thigh. "A fine prayer meeting, me bucko."

"Woman, back to your horoscopes!"

"Which reminds me, dearie, I want to know the exact instant of your birth."

"Uh, I was born on three successive days, at various hours. I was too big a boy - they had to handle me in sections."

Becky made a rude answer. "I'll find out."

"The courthouse burned down when I was three. You can't."

"There are ways. Want to make a small bet?"

"You go on heckling me and you'll find you're not too big to spank. How've you been, girl?"

"What do you think? How do I look?"

"Healthy. A bit spread in the butt. You've touched up your hair."

"I have not. I quit using henna months ago. Get with it, pal, and we'll get rid of that white fringe you've got. Replace it with a real lawn."

"Becky, I refuse to grow any younger for any reason. I came by my decrepitude the hard way and I propose to enjoy it. Quit prattling and let a man eat."

"Yes, sir. You old goat."

Jubal was just leaving the table as the Man from Mars came in. "Father! Oh, Jubal!" Mike hugged and kissed him.

Jubal gently unwound himself from the embrace. "Be your age, son. Sit down and enjoy your breakfast. I'll sit with you."

"I didn't come here looking for breakfast, I came looking for you. We'll find a place and talk."

"All right."

They went to the living room of one of the suites, Mike pulling

Jubal by the hand like an excited small boy welcoming his favorite grandparent. Mike picked a big comfortable chair for Jubal and sprawled himself on a couch opposite and close to him. This room was on the side of the wing having the private landing flat; there were high French windows opening to it. Jubal got up and shifted his chair slightly so that he would not be facing so directly into the light in looking at his foster son; not to his surprise but mildly to his annoyance the heavy chair shifted as if it had been no more massive than a child's balloon, his hand merely guided it.

Two men and a woman were in the room when they arrived. These left shortly, leisurely, severally, and unostentatiously. After that they were alone, except that they were both served with Jubal's favorite brandy - by hand, to Jubal's pleasure; he was quite ready to agree that the remote control these people had over objects around them was a laborsaver and probably a money-saver (certainly on laundry! - his spaghetti-splashed shirt had been so fresh that he had put it on again today), and obviously a method much to be preferred for household convenience to the blind balkiness of mechanical gadgets. Nevertheless he was not used to telecontrol done without wires or waves; it startled Jubal the way horseless carriages had disturbed decent, respectable horses about the time Jubal was born.

Duke served the brandy. Mike said, "Hi, Cannibal. Thanks. Are you the new butler?"

"De nada, Monster. Somebody has to do it and you've got every brain in the place slaving away over a hot microphone."

"Well, they'll all be through in a couple of hours and you can revert to your useless, lecherous existence. The job is done, Cannibal. Pau. Thirty. Ended."

"The whole damn Martian language all in one lump? Monster, I had better check you for burned-out capacitors."

"Oh, no, no! Only the primer knowledge that I have of it - had of it, my brain's an empty sack. But highbrows like Stinky will be going back to Mars for a century to fill in what I never learned. But I did turn out quite a job - about six weeks of subjective time since around five this morning or whenever it was we adjourned the meeting - and now the stalwart steady types can finish it and I'm free to visit with Jubal with nothing on my mind." Mike stretched and yawned. "Feels good. Finishing a job always feels good."

"You'll be slaving away at something else before the day is out. Boss, this Martian monster can't take it or leave it alone. I know for a fact that this is the first time he has simply relaxed and done nothing for over two months. He ought to sign up with 'Workers Anonymous.' Or you ought to visit us more often. You're a good influence on him."

"God forbid that I should ever be a good influence on anybody."

"And you get out of here, Cannibal, and quit telling lies about me."

"Lies, hell. You turned me into a compulsive truth-teller ... and it's a great handicap in some of the joints where I hang out." Duke left them.

Mike lifted his glass. "Share water, my brother Father Jubal"

"Drink deep, son."

"Thou art God."

"Take it easy, Mike. I'll put up with that from the others and answer it politely. But don't you come godding at me. I knew you when you were 'only an egg.'"

"Okay, Jubal."

"That's better. When did you start drinking in the morning? Do that at your age and you'll ruin your stomach. You'll never live to be a happy old soak, like me."

Mike looked at his partly emptied glass. "I drink when it's a sharing to do so. It doesn't have any effect on me, nor on most of the others, unless we want it to. Once I let it have its effect without stopping it, until I passed out. It's an odd sensation. Not a goodness, I grok. Just a way to discorporate for a while without discorporating. I can get a similar effect, only much better and with no damage to be repaired afterwards, by withdrawing."

"Economical, at least."

"Uh huh, our liquor bill isn't anything. Matter of fact, running that whole Temple hasn't cost what it costs you to keep up our home. Except for the initial investment and replacing some of the props, coffee and cakes was about all - we made our own fun. We were happy. We needed so little that I used to wonder what to do with all the money that came in."

"Then why did you take collections?"

"Huh? Oh, you have to charge 'em, Jubal. The marks won't pay serious attention to anything that's free."

"I knew that, I just wondered if you did."

"Oh, yes, I grok marks, Jubal. At first I did try to preach free - just give it away. I had plenty of money, I thought it was all right. It didn't work. We humans have to make considerable progress before we can accept a free gift, and value it. Usually I never let them have anything free until about Sixth Circle. By then they can accept ... and accepting is much harder than giving."

"Hmm ... son, I think maybe you should write a book on human psychology."

"I have. But it's in Martian. Stinky has the tapes." Mike looked again at his glass, took a slow sybaritic sip. "We do use some liquor. A few of us - Saul, myself, Sven, some others - like it. And I've learned that I can let it have just a little effect, then hold it right at that point, and gain a euphoric growing-closer much like trance without having to withdraw. The minor damage is easy to repair." He sipped again. "That's what I'm doing this morning - letting myself get just the mildest glow and be happy with you."

Jubal studied him closely. "Son, you aren't drinking entirely to be sociable; you've got something on your mind."

"Yes, I have."

"Do you want to talk it out?"

"Yes. Father, it's always a great goodness to be with you, even if nothing is troubling me. But you are the only human I can always talk to and know that you will grok and that you yourself won't be overwhelmed by it, too. Jill ... Jill always groks - but if it hurts me, it hurts her still more. Dawn the same. Patty ... well, Patty can always take my hurt away, but she does it by keeping it herself. All three of them are too easily hurt for me to risk sharing in full with them anything I can't grok and cherish before I share it." Mike looked very thoughtful. "Confession is needful. The Catholics know that, they have it - and they have a corps of strong men to take it. The Fosterites have group confession and pass it around among themselves and thin it out. I need to introduce confession into this church, as part of the early purging - oh, we have it now, but spontaneously, after the pilgrim no longer really needs it. We need strong men for that - 'sin' is hardly ever concerned with a real wrongness but sin is what the sinner groks as sin - and when you grok it with him, it can be very disturbing. I know."

Mike went on earnestly, "Goodness is not enough, goodness is never enough. That was one of my first mistakes, because among Martians goodness and wisdom are the same thing, identical. But not with us. Take Jill. Her goodness was perfect when I met her. Nevertheless she was all mixed up inside - and I almost destroyed her, and myself too - for I was just as mixed up before we got squared away. Her endless patience (not very common on this planet) was all that saved us ... while I was learning to be a human and she was learning what I knew.

"But goodness alone is never enough. A hard, cold wisdom is required, too, for goodness to accomplish good. Goodness without wisdom invariably accomplishes evil." He smiled and his face lit up. "And that's why I need you, Father, as well as loving you. I need to make confession to you."

Jubal squirmed. "Oh, for Pete's sake, Mike, don't make a production out of it. Just tell me what's eating you. We'll find a way out."

"Yes, Father."

But Mike did not go on. Finally Jubal said, "Do you feel busted up by the destruction of your Temple? I wouldn't blame you. But you aren't broke, you can build again."

"Oh, no, that doesn't matter in the slightest!"

"Eh?"

"That temple was a diary with all its pages filled. Time for a new one, rather than write over and deface the filled pages. Fire can't destroy the experience in it ... and strictly from a standpoint of publicity and practical church politics, being run out of it in so spectacular a fashion will be helpful, in the long run. No, Jubal, the last couple of days have simply been an enjoyable break in a busy routine. No harm done." His expression changed. "Father ... lately I learned that I was a spy."

"What do you mean, son? Explain yourself."

"For the Old Ones. They sent me here to spy on our people."

Jubal thought about it. Finally he said, "Mike, I know that you are brilliant. You obviously possess powers that I don't have and that I have never seen before. But a man can be a genius and still fall ill with delusions."

"I know. Let me explain and you can decide whether or not I'm crazy. You know how the surveillance satellites used by the Security Forces operate."

"No."

"I don't mean the details that would interest Duke; I mean the general scheme. They orbit around the globe, picking up data and storing it. At a particular point, the Sky-Eye is keyed and it pours out in a spate all that it has seen. That is what was done with me. You know that we of the Nest use what is called telepathy."

"I've been forced to believe it."

"We do. By the way, this conversation is completely private - and besides that, no one of us would ever attempt to read you; I'm not sure we could. Even last night the link was through Dawn's mind, not yours."

"Well, that is some slight comfort."

"Uh, I want to get to that later. I am 'only an egg' in this art; the Old Ones are past masters. They stayed linked with me but left me on my own, ignored me - then they triggered me and all that I had seen and heard and done and felt and grokked poured out of me and became part of their permanent records. I don't mean that they wiped my mind of my experiences; they simply played the tape, so to speak, made a copy. But the triggering I was aware of - and it was over before I could possibly do anything to stop it. Then they dropped me, cut off the linkage; I couldn't even protest."

"Well ... it seems to me that they used you pretty shabbily-"

"Not by their standards. Nor would I have objected - I would have been happy to volunteer - had I known about it before I left Mars. But they didn't want me to know; they wanted me to see and grok without interference."

"I was going to add," Jubal said, "that if you are free of this damnable invasion of your privacy now, then what harm has been done? It seems to me that you could have had a Martian at your elbow all these past two and a half years, with no harm other than attracting stares."

Mike looked very sober. "Jubal, listen to a story. Listen all the way through." Mike told him of the destruction of the missing Fifth Planet of Sol, whose ruins are the asteroids. "Well, Jubal?"

"It reminds me a little of the myths about the Flood."

"No, Jubal. The Flood you aren't sure about. Are you sure about the destruction of Pompeii and Herculaneum?"

"Oh, yes. Those are established historical facts."

"Jubal, the destruction of the Fifth Planet by the Old Ones is as historically certain as that eruption of Vesuvius - and it is recorded in much greater detail. No myth. Fact."

"Uh, stipulate it as such. Do I understand that you fear that the Old Ones of Mars will decide to give this planet the same treatment? Will you forgive me if I say that is a bit hard for me to swallow?"

"Why, Jubal, it wouldn't take the Old Ones to do it. It merely takes a certain fundamental knowledge of physics, how matter is put together - and the same sort of control that you have seen me use time and again. Simply necessary first to grok what you want to manipulate. I can do it unassisted, right now. Say a piece near the core of the planet about a hundred miles in diameter - much bigger than necessary but we want to make this fast and painless, if only to please Jill. Feel out its size and place, then grok carefully how it is put together-" His face lost all expression as he talked and his eyeballs started to turn up.

"Hey!" broke in Harshaw. "Cut it out! I don't know whether you can or you can't but I'm certain I don't want you to try!"

The face of the Man from Mars became normal. "Why, I would never do it. For me, it would be a wrongness - I am human."

"But not for them?"

"Oh, no. The Old Ones might grok it as beauty. I don't know. Oh, I have the discipline to do it ... but not the volition. Jill could do it - that is, she could contemplate the exact method. But she could never will to do it; she is human too; this is her planet. The essence of the discipline is, first, self-awareness, and then, self-control. By the time a human is physically able to destroy this planet by this method - instead of by clumsy things like cobalt bombs - it is not possible, I grok fully, for him to entertain such a volition. He would discorporate.

And that would end any threat; our Old Ones don't hang around the way they do on Mars."

"Mmmm ... son, as long as we are checking you for bats in your belfry, clear up something else. You've always spoken of these 'Old Ones' as casually as I speak of the neighbor's dog - but I find ghosts hard to swallow. What does an 'Old One' look like?"

"Why, just like any other Martian ... except that there is more variety in the appearance of adult Martians than there is in us."

"Then how do you know it's not just an adult Martian? Doesn't he walk through walls, or some such?"

"Any Martian can do that. I did, just yesterday."

"Uh ... shimmers? Or anything?"

"No. You see, hear, feel them - everything. It's like an image in a stereo tank, only perfect and put right into your mind. But-Look, Jubal, the whole thing would be a silly question on Mars, but I realize it isn't, here. But if you had been present at the discorporation-death of a friend, then you helped eat his body ... and then you saw his ghost, talked with it, touched it, anything - would you then believe in ghosts?"

"Well, either ghosts, or I myself had slipped my leash."

"All right. Here it would be an hallucination ... if I grok correctly that we don't stay here when we discorporate. But in the case of Mars, there is either an entire planet with a very rich and complex civilization all run by mass hallucination - or the straightforward explanation is correct the one I was taught and the one all my experience led me to believe. Because on Mars the 'ghosts' are by far the most important and most powerful and much the most numerous part of the population. The ones still alive, the corporate ones, are the hewers of wood and drawers of water, servants to the Old Ones."

Jubal nodded. "Okay. I'll never boggle at slicing with Occam's razor. While it runs contrary to my own experience, my experience is limited to this planet - provincial. All right, son, you're scared that they might destroy us?"

Mike shook his head. "Not especially. I think - this is not a grokking but a mere guess - that they might do one of two things: either destroy us or attempt to conquer us culturally, make us over into their own image."

"But you're not fretted that they might blow us up? That's a pretty detached viewpoint, even for me."

"No. Oh, I think they might reach that decision. You see, by their standards, we are a diseased and crippled people - the things that we do to each other, the way we fail to understand each other, our almost complete failure to grok with one another, our wars and diseases and famines and cruelties - these will be complete idiocy to them. I know.

So I think they may very probably decide on a mercy killing. But that's a guess, I'm not an Old One. But, Jubal, if they decide to do this, it will be-" Mike stopped and thought for quite a long time. "-an utter minimum of five hundred years, more likely five thousand, before anything would be done."

"That's a long time for a jury to be out."

"Jubal, the most different thing about the two races is that Martians never hurry - and humans always do. They would much rather think about it an extra century or half a dozen, just to be sure that they have grokked all the fullness."

"In that case, son, I suggest that you not worry about it. If, in another five hundred or a thousand years, the human race can't handle its neighbors, you and I can't help it. However, I suspect that they will be able to."

"So I grok, but not in fullness. But I said I wasn't worried about that. The other possibility troubled me more, that they might move in and try to make us over. Jubal, they can't do it. An attempt to make us behave like Martians would kill us just as certainly but much less painlessly. It would all be a great wrongness."

Jubal took time to answer. "But, son, isn't that exactly what you have been trying to do?"

Mike looked unhappy. "Yes and no. It was what I started out to do. It is not what I am trying to do now. Father, I know that you were disappointed in me when I started this."

"Your business, son."

"Yes. Self. I must grok and decide at each cusp myself alone. And so must you ... and so must each self. Thou art God."

"I don't accept the nomination."

"You can't refuse it. Thou art God and I am God and all that groks is God, and I am all that I have ever been or seen or felt or experienced. I am all that I grok. Father, I saw the horrible shape this planet is in and I grokked, though not in fullness, that I could change it. What I had to teach couldn't be taught in schools or colleges; I was forced to smuggle it into town dressed up as a religion - which it is not - and con the marks into tasting it by appealing to their curiosity and their desire to be entertained. In part it worked exactly as I knew it would; the discipline and the knowledge was just as available to others as it was to me, who was raised in a Martian nest. Our brothers get along together - you've seen us, you've shared - live in peace and happiness with no bitterness, no jealousy.

"That last alone was a triumph that proved I was right. Male-femaleness is the greatest gift we have - romantic physical love may be unique to this planet. I don't know. If it is, the universe is a much poorer place than it could be ... and I grok dimly that we-who-are-God will save this precious invention and spread it. The actual joining and blending of two physical bodies with simultaneous merging of souls in shared ecstasy of love, giving and receiving and delighting in each other - well, there's nothing on Mars to touch it, and it's the source, I grok in fullness, of all that makes this planet so rich and wonderful. And, Jubal, until a person, man or woman, has enjoyed this treasure bathed in the mutual bliss of having minds linked as closely as bodies, that person is still as virginal and alone as if he had never copulated. But I grok that you have; your very reluctance to risk a lesser thing proves it ... and, anyhow, I know it directly. You grok. You always have. Without even needing the aid of the language of grokking. Dawn told us that you were as deep into her mind as you were into her body."

"Um ... the lady exaggerates."

"It is impossible for Dawn to speak other than rightly about this. And - forgive me - we were there. In her mind but not in yours ... and you were there with us, sharing."

Jubal refrained from saying that the only times he had ever felt even faintly that he could read minds was precisely in that situation ... and then not thoughts, but emotions. He simply regretted without bitterness that he was not half a century younger - in which case he knew that Dawn would have had that "Miss" taken off the front of her name and he would have boldly risked another marriage, in spite of his scars. Also that he would not trade the preceding night for all the years that might be left to him. In essence, Mike was dead right. "Go on, sir."

"That's what it should be. But that's what I slowly grokked it rarely was. Instead it was indifference and acts mechanically performed and rape and seduction as a game no better than roulette but with poorer odds and prostitution and celibacy by choice and by no choice and fear and guilt and hatred and violence and children brought up to think that sex was 'bad' and 'shameful' and 'animal' and something to be hidden and always distrusted. This lovely perfect thing, male-femaleness, turned upside down and inside out and made horrible.

"And every one of those wrong things is a corollary of 'jealousy.' Jubal, I couldn't believe it. I still don't grok 'jealousy' in fullness, it seems an insanity to me, a terrible wrongness. When I first learned what this ecstasy was, my first thought was that I wanted to share it, share it at once with all my water brothers - directly with those female, indirectly by inviting more sharing with those male. The notion of trying to keep this never failing fountain to myself would have horrified me, had I thought of it. But I was incapable of thinking of it. And in perfect corollary I had not the slightest wish to attempt this miracle with anyone I did not already love and trust - Jubal, I am physically unable even to attempt love with a female who has not already shared water with me. And this same thing runs all through the Nest. Psychic impotence unless our spirits blend as our flesh blends."

Jubal had been listening and thinking mournfully that it was a fine system - for angels - when a sky car landed on the private landing flat diagonally in front of him. He turned his head to see and, as its skids touched, it disappeared, vanished.

"Trouble?" he said.

"No trouble," Mike denied. "It's just that they are beginning to suspect that we are here - that I am here, rather. They think the rest are dead. The Innermost Temple, I mean. The other circles aren't being bothered especially ... and many of them have left town until it blows over." He grinned. "We could get a good price for these hotel rooms; the city is filling up 'way past capacity with Bishop Short's shock troops."

"Well? Isn't it about time to get the family elsewhere?"

"Jubal, don't worry about it. That car never had a chance to report, even by radio. I'm keeping a close watch. It's no trouble, now that Jill is over her misconceptions about 'wrongness' in discorporating persons who have wrongness in them. I used to have to go to all sorts of complicated expedients to protect us. But now Jill knows that I do it only as fullness is grokked." The Man from Mars grinned boyishly. "Last night she helped me with a hatchet job ... nor was it the first time she has done so."

"What sort of a job?"

"Oh, just a follow-up on the jail break. Some few of those in jail or prison I couldn't release; they were vicious. So I got rid of them before I got rid of the bars and doors. But I have been slowly grokking this whole city for many months now ... and quite a few of the worst were not in jail. Some of them were even in public office. I have been waiting, making a list, making sure of fullness in each case. So, now that we are leaving this city - they don't live here anymore. Missing. They needed to be discorporated and sent back to the foot of the line to try again. Incidentally, that was the grokking that changed Jill's attitude from squeamishness to hearty approval: when she finally grokked in fullness that it is utterly impossible to kill a man - that all we were doing was much like a referee removing a man from a game for 'unnecessary roughness.'"

"Aren't you afraid of playing God, lad?"

Mike grinned with unashamed cheerfulness. "I am God. Thou art God ... and any jerk I remove is God, too. Jubal, it is said that God notes each sparrow that falls. And so He does. But the proper closest statement of it that can be made in English is that God cannot avoid noting the sparrow because the sparrow is God. And when a cat stalks a sparrow both of them are God, carrying out God's thoughts."

Another sky car started to land and vanished just before touching; Jubal hardly thought it worth comment. "How many did you find worthy of being tossed out of the game last night?"

"Oh, quite a number. About a hundred and fifty. I guess - I didn't count. This is a large city, you know. But for a while it is going to be an unusually decent one. No cure, of course - there is no cure, short of acquiring a hard discipline." Mike looked unhappy. "And that is what I must ask you about, Father. I'm afraid I have misled the people who have followed me. All our brothers."

"How, Mike?"

"They're too optimistic. They have seen how well it has worked for us, they all know how happy they are, how strong and healthy and aware - how deeply they love each other. And now they think they grok that it is just a matter of time until the whole human race will reach the same beatitude. Oh, not tomorrow - some of them grok that two thousand years is but a moment for such an experiment. But eventually.

"And I thought so, too, at first. I led them to think so. But, Jubal, I had missed a key point: Humans are not Martians. I made this mistake again and again - corrected myself ... and still made it. What works perfectly for Martians does not necessarily work for humans. Oh, the conceptual logic which can be stated only in Martian does work for both races. The logic is invariant ... but the data are different. So the results are different."

"I couldn't see why, if people were hungry, some of them didn't volunteer to be butchered so that the rest could eat ... on Mars this is obvious - and an honor. I couldn't understand why babies were so prized. On Mars our two little girls in there would simply be dumped outdoors, to live or to die - and on Mars nine out of ten nymphs die their first season. My logic was right but I had misread the data: here babies do not compete, but adults do; on Mars adults don't compete at all, they've been weeded out as babies. But one way or another, competing and weeding has to take place ... or a race goes down hill.

"But whether or not I was wrong in trying to take the competition out at both ends, I have lately begun to grok that the human race won't let me, no matter what."

Duke stuck his head into the room. "Mike? Have you been watching outside? There is quite a crowd gathering around the hotel."

"I know," agreed Mike. "Tell the others that waiting has not filled." He went on to Jubal, "'Thou art God.' It's not a message of cheer and hope, Jubal. It's a defiance - and an unafraid unabashed assumption of personal responsibility." He looked sad. "But I rarely put it over. A very few, so far just these few here with us today, our brothers, understood me and accepted the bitter half along with the sweet, stood up and drank it - grokked it. The others, the hundreds and thousands of others, either insisted on treating it as a prize without a contest - a 'conversion' ... or ignored it entirely. No matter what I said they insisted on thinking of God as something outside themselves. Something that yearns to take every indolent moron to His breast and comfort him. The notion that the effort has to be their own ... and that all the trouble they are in is of their own doing ... is one that they can't or won't entertain."

The Man from Mars shook his head. "And my failures are so much more numerous than my successes that I am beginning to wonder if full grokking will show that I am on the wrong track entirely - that this race must be split up, hating each other, fighting each other, constantly unhappy and at war even with their own individual selves ... simply to have that weeding out that every race must have. Tell me, Father? You must tell me."

"Mike, what in hell ever led you to believe that I was infallible?"

"Perhaps you are not. But every time I have needed to know something, you have always been able to tell me - and fullness always showed that you spoke rightly."

"Damn it, I refuse this apotheosis! But I do see one thing, son. You are the one who has urged everyone else never to be in a hurry - 'waiting will fill,' you say."

"That is right."

"And now you are violating your own prime rule. You have waited only a little while - a very short while by Martian standards, I take it - and already you want to throw in the towel. You've proved that your system can work for a small group - and I'm glad to confirm it; I've never seen such happy, healthy, cheerful people. That ought to be enough to suit you for the short time you've put in. Come back when you have a thousand times this number, all working and happy and unjealous, and we'll talk it over again. Fair enough?"

"You speak rightly, Father."

"But I ain't through. You've been fretting that maybe the fact that you failed to hook more than ninetynine out of a hundred was because the race couldn't get along without its present evils, had to have them for weeding out. But damn it, lad, you've been doing the weeding out - or rather, the failures have been doing it to themselves by not listening to you. Had you planned to eliminate money and property?"

"Oh, no! Inside the Nest we don't need it, but-"

"Nor does any family that's working well. Yours is just bigger. But outside you need it in dealing with other people. Sam tells me that our brothers, instead of getting unworldly, are slicker with money than ever. Is that right?"

"Oh, yes. Making money is a simple trick, once you grok."

"You've just added a new beatitude: 'Blessed is the rich in spirit, for he shall make dough.' How do our people stack up in other fields? Better or worse than average?"

"Oh, better, of course - if it's anything worth grokking at all. You see, Jubal, it's not a faith; the discipline is simply a method of efficient functioning at any activity you try."

"That's your whole answer, son. If what you say is true - and I'm not judging; I'm asking, you're answering - then that's all the competition you need ... and a fairly onesided race, too. If one tenth of one percent of the population is capable of getting the news, then all you have to do is show them - and in a matter of some generations all the stupid ones will die out and those with your discipline will inherit the Earth. Whenever that is - a thousand years from now, or ten thousand - will be plenty soon enough to worry about whether some new hurdle is necessary to make them jump higher. But don't go getting fainthearted because only a handful have turned into angels overnight. Personally, I never expected any of them to manage it. I simply thought you were making a damn fool of yourself by pretending to be a preacher."

Mike sighed and smiled. "I was beginning to be afraid I was.. worrying that I had let my brothers down."

"I still wish you had called it 'Cosmic Halitosis' or some such. But the name doesn't matter. If you've got the truth, you can demonstrate it. Show people. Talking about it doesn't prove it."

The Man from Mars stood up. "You've got me all squared away, Father. I'm ready now. I grok the fullness." He looked toward the doorway. "Yes, Patty. I heard you. The waiting is ended."

"Yes, Michael."

Chapter 37

JUBAL AND THE MAN FROM MARS strolled slowly into the living room with the big stereo tank. Apparently the entire Nest was gathered, watching it. It showed a dense and turbulent crowd, somewhat restrained by policemen. Mike glanced at it and looked serenely happy. "They come. Now is the fullness." The sense of ecstatic expectancy Jubal had felt growing ever since his arrival swelled greatly, but no one moved.

"It's a mighty big tip, sweetheart," Jill agreed.

"And ready to turn," added Patty.

"I'd better dress for it," Mike commented. "Have I got any clothes around this dump? Patty?"

"Right away, Michael."

Jubal said, "Son, that mob looks pretty ugly to me. Are you sure this is any time to tackle them?"

"Oh, sure," said Mike. "They've come to see me ... so now I go down to meet them." He paused while some clothing got out of the way of his face; he was being dressed at breakneck speed with the unnecessary help of several women - unnecessary as each garment seemed to know where to go and how to drape itself. "This job has its obligations as well as its privileges - the star has to show up for the show ? grok me? The marks expect it."

Duke said, "Mike knows what he's doing, Boss."

"Well ... I don't trust mobs."

"That crowd is mostly curiosity seekers, they always are. Oh, there are some Fosterites and some others with grudges - but Mike can handle any crowd. You'll see. Right, Mike?"

"Keerect, Cannibal. Pull in a tip, then give 'em a show. Where's my hat? Can't walk in the noonday sun without a hat." An expensive Panama with a sporty colored band glided out and settled itself on his head; he cocked it jauntily. "There! Do I look all right?" He was dressed in his usual outer-services mufti, a smartly tailored, sharply creased, white business suit, shoes to match, snowy shirt, and luxurious dazzling scarf.

Ben said, "All you lack is a brief case."

"You grok I need one? Patty, do we have one?"

Jill stepped up to him. "Ben was kidding, dear. You look just perfect." She straightened his tie and kissed him-and Jubal felt kissed. "Go talk to them."

"Yup. Time to turn the tip. Anne? Duke?"

"Ready, Mike." Anne was wearing her floorlength Fair Witness, cloak, wrapping her in dignity; Duke was just the opposite, being sloppily dressed, with a lighted cigarette dangling from his face, an old hat on the back of his head with a card marked "PRESS" stuck in its band, and himself hung about with cameras and kit.

They headed for the door to the foyer common to the four penthouse suites. Only Jubal followed; all the others, thirty and more, stayed around the stereo tank. Mike paused at the door. There was a hall table there, with a pitcher of water and glasses, a dish of fruit and a fruit knife. "Better not come any farther," he advised Jubal, "or Patty would have to escort you back through her pets."

Mike poured himself a glass of water, drank part of it. "Preaching is thirsty work." He handed the glass to Anne, then took the fruit knife and sliced off a chunk of apple.

It seemed to Jubal that Mike sliced off one of his fingers . . . but his attention was distracted as Duke passed the glass to him. Mike's hand was not bleeding and Jubal had grown somewhat accustomed to legerdemain. He accepted the glass and took a sip, finding that his own throat was very dry.

Mike gripped his arm and smiled. "Quit fretting. This will take only a few minutes. See you later, Father." They went out through the guardian cobras and the door closed. Jubal went back to the room where the others were, still carrying the glass. Someone took it from him; he did not notice, as he was watching images in the big tank.

The mob seemed denser, surging about and held back by police armed only with night sticks. There were a few shouts but mostly just the unlocalized muttering of crowd.

Someone said, "Where are they now, Patty?"

"They've just dropped down the tube. Michael is a little ahead, Duke stopped to catch Anne. They're entering the lobby. Michael has been spotted, pictures are being taken."

The scene in the tank resolved into enormous head and shoulders of a brightly cheerful newscaster: "This is NWNW New World Networks' mobile newshound on the spot while it's hot-your newscaster, Happy Holliday. We have just learned that the fake messiah, sometimes known as the Man from Mars, has crawled out of his hideout in a hotel room here in beautiful St. Petersburg, the City that Has Everything to Make You Sing. Apparently Smith is about to surrender to the authorities. He crushed out of jail just yesterday, using high explosives smuggled in to him by his fanatic followers. But the tight cordon placed around this city seems to have been too much for him. We don't know yet - I repeat, we don't know yet - so stay with the chap who covers the map - and now a word from your local sponsor who has given you this keyhole peep at the latest leap-"

"Thank you, Happy Holliday and all you good people watching via NWNW! What Price Paradise? Amazingly Low! Come out and see for yourself at Elysian Fields, just opened as homesites for a restricted clientele. Land reclaimed from the warm waters of the glorious gulf and every lot guaranteed to be at least eighteen inches above mean high water and only a small down payment on a Happy - oh, oh, later, friends - phone Gulf nine-two eight two eight!"

"And thank you, Jick Morris and the developers of Elysian Fields! I think we've got something, folks! Yes, sir, I think we do-"

("They're coming out the front entrance," Patty said quietly. "The crowd hasn't spotted Michael yet.")

"Maybe not yet ... but soon. You are now looking at the main entrance of the magnificent Sans Souci Hotel, Gem of the Gulf, whose management is in no way responsible for this hunted fugitive and who have cooperated with the authorities throughout according to a statement just issued by Chief of Police Davis. And while we're waiting to see what will happen, a few high lights in the strange career of this half-human monster raised on Mars-"

The live scene was replaced by quick cuts of stock shots: The Envoy blasting off years earlier, the Champion floating upwards silently and effortlessly under Lyle Drive, Martians on Mars, the triumphant return of the Champion, a quick of the first faked interview with the "Man from Mars" - "What do you think of the girls here on Earth?" "Gee!" - a quicker shot of the conference in the Executive Palace and the much publicized awarding of a doctorate in philosophy, all with rapid-fire commentary.

"See anything, Patty?"

"Michael is at the top of the steps, the crowd is at least a hundred yards away, being kept off the hotel grounds. Duke has grabbed some pix and Mike is waiting to let him change lenses. No hurry."

Happy Holliday Went on, as the tank shifted to the crowd, semi-close and panning: "You understand, friends, that this wonderful community is in a unique condition today. Something strange has been going on and these people are in no mood to trifle. Their laws have been flouted, their security forces treated with contempt, they are angry, righteously so. The fanatic followers of this alleged antichrist have stopped at nothing to create turmoil in a futile effort to let their leader escape the closing net of justice. Anything can happen - anything!"

The announcer's voice climbed: "Yes, he's coming out now - he's walking toward the people!" The scene cut to reverse; Mike was walking directly toward another camera. Anne and Duke were behind him and dropping farther behind. "This is it! This is it! This is the blowoff!"

Mike continued to walk unhurriedly toward the crowd until he loomed up in the stereo tank in life size, as if he were in the room with his water brothers. He stopped on the grass verge in front of the hotel, a few feet from the crowd. "You called me?"

He was answered with a growl.

The sky held scattered clouds; at that instant the sun came out from behind one and a shaft of golden light hit him.

His clothes vanished. He stood before them, a golden youth, clothed only in his own beauty - beauty that made Jubal's heart ache, thinking that Michelangelo in his ancient years would have climbed down from his high scaffolding to record it for generations unborn. Mike said gently, "Look at me. I am a son of man."

The scene cut for a ten-second plug, a line of can-can dancers singing:

"Come on, ladies, do your duds!
In the smoothest, yummiest suds!
Lover Soap is kind to hands-But be sure you save the bands!"

The tank filled completely with foamy suds amid girlish laughter and the scene cut back to the newscast: "God damn you!" A half brick caught Mike in the ribs. He turned his face slightly toward his assailant. "But you yourself are God. You can damn only yourself ... and you can never escape yourself."

"Blasphemer!" A rock caught him just over his left eye and blood welled forth.

Mike said calmly, "In fighting me, you fight yourself... for Thou art God and I am God ... and all that groks is God - there is no other."

More rocks hit him, from various directions; he began to bleed in several places. "Hear the Truth. You need not hate, you need not fight, you need not fear. I offer you the water of life-" Suddenly his hand held a tumbler of water, sparkling in the sunlight. "-and you may share it whenever you so will ... and walk in peace and love and happiness together."

A rock caught the glass and shattered it. Another struck him in the mouth.

Through bruised and bleeding lips he smiled at them, looking straight into the camera with an expression of yearning tenderness on his face. Some trick of sunlight and stereo formed a golden halo back of his head. "Oh my brothers, I love you so! Drink deep. Share and grow closer without end. Thou art God."

Jubal whispered it back to him. The scene made a five-second cut:

"Cahuenga Cave! The night club with real Los Angeles smog, imported fresh every day. Six exotic dancers."

"Lynch him! Give the bastard a nigger necktie!" A heavy-gauge shotgun blasted at close range and Mike's right arm was struck off at the elbow and fell. It floated gently down, then came to rest on the cool grasses, its hand curved open in invitation.

"Give him the other barrel, Shortie - and aim closer!" The crowd laughed and applauded. A brick smashed Mike's nose and more rocks gave him a crown of blood.

"The Truth is simple but the Way of Man is hard. First you must learn to control yourself. The rest follows. Blessed is he who knows himself and commands himself, for the world is his and love and happiness and peace walk with him wherever he goes." Another shotgun blast was followed by two more shots. One shot, a fortyfive slug, hit Mike over the heart, shattering the sixth rib near the sternum and making a large wound; the buckshot and the other slug sheered through his left tibia five inches below the patella and left the fibula sticking out at an angle, broken and white against the yellow and red of the wound.

Mike staggered slightly and laughed, went on talking, his words clear and unhurried. "Thou art God. Know that and the Way is opened."

"God damn it - let's stop this taking the Name of the Lord in vain!" - "Come on, men! Let's finish him!" The mob surged forward, led by one bold with a club; they were on him with rocks and fists, and then with feet as he went down. He went on talking while they kicked his ribs in and smashed his golden body, broke his bones and tore an ear loose. At last someone called out, "Back away a little so we can get the gasoline on him!"

The mob opened up a little at that waning and the camera zoomed to pick up his face and shoulders. The Man from Mars smiled at his brothers, said once more, softly and clearly, "I love you." An incautious grasshopper came whirring to a landing on the grass a few inches from his face; Mike turned his head, looked at it as it stared back at him. "Thou art God," he said happily and discorporated.

Chapter 38

FLAME AND BILLOWING SMOKE came up and filled the tank. "Golly!" Patty said reverently. "That's the best blowoff ever used."

"Yes," agreed Becky judicially, "the Professor himself never dreamed up a better one."

Van Tromp said very quietly, apparently to himself: "In style. Smart and with style - the lad finished in style."

Jubal looked around at his brothers. Was he the only one who felt anything? Jill and Dawn were seated each with an arm around the other - but they did that whenever they were together; neither one seemed disturbed. Even Dorcas was dry-eyed and calm.

The inferno in the tank cut to smiling Happy Holiday who said, "And now, folks, a few moments for our friends at Elysian Fields who so graciously gave up their-" Patty cut him off.

"Anne and Duke are on their way back up," she said. "I'll let them through the foyer and then we'll have lunch." She started to leave.

Jubal stopped her. "Patty? Did you know what Mike was going to do?"

She seemed puzzled. "Huh? Why, of course not, Jubal. It was necessary to wait for fullness. None of us knew." She turned and left.

"Jubal-" Jill was looking at him. "Jubal our beloved father please stop and grok the fullness. Mike is not dead. How can he be dead when no one can be killed? Nor can he ever be away from us who have already grokked him. Thou art God."

"'Thou art God,'" he repeated dully.

"That's better. Come sit with Dawn and me - in the middle."

"No. No, just let me be." He went blindly to his own room, let himself in and bolted the door after him, leaned heavily with both hands gripping the foot of the bed. My son, oh my son! Would that I had died for thee! He had had so much to live for ... and an old fool that he respected too much had to shoot off his yap and goad him into a needless, useless martyrdom. If Mike had given them something big - like stereo, or bingo - but he gave them the Truth. Or a piece of the Truth. And who is interested in Truth? He laughed through his sobs.

After a while he shut them off, both heartbroken sobs and bitter laugh, and pawed through his traveling bag. He had what he wanted with him; he had kept a supply in his toilet kit ever since Joe Douglas's stroke had reminded him that all flesh is grass.

Well, now his own stroke had come and he couldn't take it. He prescribed three tablets for himself to make it fast and certain, washed them down with water, and lay quickly on the bed. Shortly the pain went away.

From a great distance the voice reached him. "Jubal-"

"'M resting, Don' bother me."

"Jubal! Please, Father!"

"Uh ... yes, Mike? What is it?"

"Wake up! Fullness is not yet. Here, let me help you."

Jubal sighed. "Okay, Mike" He let himself be helped and led into the bath, let his head be held while he threw up, accepted a glass of water and rinsed out his mouth.

"Okay now?"

"Okay, son. Thanks."

"Then I've got some things to attend to. I love you, Father. Thou art God."

"I love you, Mike. Thou art God." Jubal puttered around for a while longer, making himself presentable, changing his clothes, taking one short brandy to kill the slightly bitter taste still in his stomach, then went out to join the others.

Patty was alone in the room with the babble tank and it was switched off. She looked up. "Some lunch now, Jubal?"

"Yes, thanks."

She came up to him. "That's good. I'm afraid most of them simply ate and scooted. But each of them left a kiss for you. And here it is, all in one package." She managed to deliver in full all the love placed in her proxy cemented together with her own; Jubal found that it left him feeling strong, with her own serene acceptance shared, no bitterness left.

"Come out into the kitchen," she said. "Tony's gone so most of the rest are there - not that his growls ever really chased anybody out anyhow." She stopped and tried to stare down the back of her neck. "Isn't that final scene changing a little? Sort of smoky, maybe?"

Jubal solemnly agreed that he thought it was. He couldn't see any change himself ... but he was not going to argue with Patty's idiosyncrasy. She nodded. "I expected it. I can see around me all right - except myself. I still need a double mirror to see my back clearly. Mike says my Sight will include that presently. No matter."

In the kitchen perhaps a dozen were lounging at a table and elsewhere; Duke was standing at the range, stirring a small sauce pan. "Hi, Boss. I ordered a twenty-place bus. That's the biggest that can land on our little landing flat ... and we'll need one almost that big, what with the diaper set and Patty's pets. Okay?"

"Certainly. Are they all coming home now?" If they ran out of bedrooms, the girls could make up dosses that would do in the living room and here and there - and this crowd would probably double up mostly anyhow. Come to think of it, he might not be allowed to sleep solo himself and he made up his mind not to fight it. It was friendly to have a warm body on the other side of the bed, even if your intentions weren't active. By God, he had forgotten how friendly it was! Growing closer- "Not everybody. Tim will pilot us, then turn in the bus and go to Texas for a while. The Skipper and Beatrix and Sven we're simply going to drop off in New Jersey."

Sam looked up from the table. "Ruth and I have got to get back to our kids. And Saul is coming with us."

"Can't you stop by home for a day or two first?"

"Well, maybe. I'll talk it over with Ruth."

"Boss," put in Duke, "how soon can we fill the swimming pool?"

"Well, we never filled it earlier than the first of April before - but with the new heaters I suppose we could fill it anytime." Jubal added, "But we'll still have some nasty weather - snow still on the ground yesterday."

"Boss, lemme clue you. This gang can walk through snow hip deep on a tall giraffe and not notice it - and will, to swim. Besides that, there are cheaper ways of keeping that water from freezing than with those big oil heaters."

"Jubal!"

"Yes, Ruth?"

"We'll stop for a day or maybe more. The kids don't miss me - and I'm not aching to take over being motherly without Patty to discipline them anyhow. Jubal, you've never really seen me until you've seen me with my hair floating around me in the water - looking like Mrs. Do-As-You-Would-Be-Done-By."

"It's a date. Say, where is the Squarehead and the Dutchman? Beatrix has never been home - they can't be in such a hurry."

"I'll tell 'em, Boss."

"Patty, can your snakes stand a clean, warm basement for a while? Until we can do better? I don't mean Honey Bun, of course; she's people. But I don't think the cobras should have the run of the house."

"Of course, Jubal."

"Mmm-" Jubal looked around. "Dawn, can you take shorthand?"

"She doesn't need it," put in Anne, "anymore than I do."

"I see. I should have known. Use a typewriter?"

"I will learn, if you wish it," Dawn answered.

"Consider yourself hired - until there's a vacancy for a high priestess somewhere. Jill, have we forgotten anybody?"

"No, Boss. Except that all those who have left feel free to camp on you anytime, too. And they will."

"I assumed that. Nest number two, when and as needed." He went over to the range and joined Duke, glanced into the pan he was stirring. It held a small amount of broth. "Hmm ... Mike?"

"Yup." Duke dipped out a little in the spoon, tasted it. "Needs a little salt."

"Yes, Mike always did need a little seasoning." Jubal took the spoon and tasted the broth. Duke was correct; the flavor was sweet and could have used salt. "But let's grok him as he is. Who's left to share?"

"Just you. Tony left me here with strict instructions to stir by hand, add water as needed, and wait for you. Not to let it scorch."

"Then grab a couple of cups. We'll share it and grok together."

"Right, Boss." Two cups came sailing down and rested by the sauce pan. "This is a joke on Mike - he always swore that he would outlive me and serve me up for Thanksgiving. Or maybe the joke's on me - because we had a bet on it and now I can't collect."

"You won only by default. Split it evenly."

Duke did so. Jubal raised his cup. "Share!"

"Grow ever closer."

Slowly they drank the broth, stretching it out, savoring it, praising and cherishing and grokking their donor. Jubal found, to his surprise, that although he was overflowing with emotion, it was a calm happiness that did not bring tears. What a quaint and gawky puppy his son had been when first he saw him ... so eager to please, so naive in his little mistakes - and what a proud power he had become without ever losing his angelic innocence. I grok you at last, son - and would not change a line!

Patty had his lunch waiting for him; he sat down and dug in, hungry and feeling that it bad been days since breakfast. Sam was saying, "I was telling Saul that I grok no need to make any change in plans. We go on as before. If you've got the right merchandise, the business grows, even though the founder has passed on."

"I wasn't disagreeing," Saul objected. "You and Ruth will found another temple - and we'll found others. But we'll have to take time now to accumulate capital. This isn't a street corner revival, nor yet something to set up in a vacant shop; it requires staging and equipment. That means money - not to mention such things as paying for a year or two on Mars for Stinky and Maryam ... and that's just as essential."

"All right already! Who's arguing? We wait for fullness ... and go ahead."

Jubal said suddenly, "Money's no problem."

"How's that, Jubal?"

"As a lawyer I shouldn't tell this ... but as a water brother I do what I grok. Just a moment - Anne."

"Yes, Boss."

"Buy that spot. The one where they stoned Mike. Better get about a hundred-foot radius around it."

"Boss, the spot itself is public parkway. A hundred-foot radius will cut off some public road and a piece of the hotel grounds."

"Don't argue."

"I wasn't arguing, I was giving you facts."

"Sorry. They'll sell. They'll reroute that road. Hell, if their arms are twisted properly, they'll donate the land - twisting done through Joe Douglas, I think. And have Joe Douglas claim from the morgue whatever was left when those ghouls got through with him and we'll bury him right on that spot - say a year from now ... with the whole city mourning and the cops that didn't protect him today standing at attention." What to put over him? The Fallen Caryatid? No, Mike had been strong enough for his stone. The Little Mermaid would be better - but it wouldn't be understood. Maybe one of Mike himself, just as he was when he had said, "Look at me. I am a Son of Man." If Duke didn't catch a shot of it, New World did - and maybe there was a brother, or would be a brother, with the spark of Rodin in him to do it right and not fancy it up.

"We'll bury him there," Jubal went on, "unprotected, and let the worms and the gentle rain grok him. I grok Mike will like that. Anne, I want to talk to Joe Douglas as soon as we get home."

"Yes, Boss. We grok with you."

"Now about that other." He told them about Mike's will. "So you see, each one of you is at least a millionaire. Just how much more than that I haven't estimated lately ... but much more, even after taxes. No strings on it at all ... but I grok that you will spend as needed for temples and similar stuff. But there's nothing to stop you from buying yachts if you wish. Oh, yes! Joe Douglas stays on as manager for any who care to let the capital ride, same pay as before ... but I grok Joe won't last long, whereupon management devolves on Ben Caxton. Ben?"

Caxton shrugged. "It can be in my name. I grok I'll hire me a real business man, name of Saul."

"That wraps it then. Some waiting time but nobody will dare really fight this will; Mike rigged it. You'll see. How soon can we get out of here? Is the tab settled'?"

"Jubal," Ben said gently, "we own this hotel."

Not long thereafter they were in the air, with no trouble from police - the town had quieted down as fast as it had flared up. Jubal sat forward with Stinky Mabmoud and relaxed - discovered that he was not tired, not unhappy, not even fretting to get back to his sanctuary. He discussed with Mahmoud his plans to go to Mars to learn the language more deeply after, Jubal was pleased to learn, completing the work on the dictionary, which Mahinoud estimated at about a year more for his own part in checking the phonetic spellings.

Jubal said grumpily, "I suppose I shall be forced to learn the pesky stuff myself, just to understand the chatter going on around me."

"As you grok, brother."

"Well, damn it, I won't put up with assigned lessons and regular school hours! I'll work as suits me, just as I always have."

Mahmoud was silent a few moments. "Jubal, we used classes and schedules at the Temple because we were handling groups. But some got special attention."

"That's what I'm going to need."

"Anne, for example, is much, much farther along than she ever let you know. With her total-recall memory, she learned Martian in nothing flat, hooked in rapport with Mike."

"Well, I don't have that sort of memory - and Mike's not available."

"No, but Anne is. And, stubborn as you are, nevertheless Dawn can place you in rapport with Anne - if you'll let her. And you won't need Dawn for the second lesson; Anne will then be able to handle it all. You'll be thinking in Martian inside of days, by the calendar - much longer by subjective time, but who cares?" Mahmoud leered at him. "You'll enjoy the warming-up exercises."

Jubal bristled. "You're a low, evil, lecherous Arab - and besides that you stole one of my best secretaries."

"For which I am forever in your debt. But you haven't lost her entirely; she'll give you lessons, too. She'll insist on it."

"Now go 'way and find another seat. I want to think."

Somewhat later be shouted, "Front!"

Dorcas came forward and sat down beside him, steno gear ready.

He glanced at her before he started to work. "Child, you look even happier than usual. Glowing."

Dorcas said dreamily, "I've decided to name him 'Dennis.'" Jubal nodded. "Appropriate. Very appropriate." Appropriate meaning even if she were mixed up about the paternity, he thought to himself. "Do you feel like working?"

"Oh, yes! I feel grand."

"Begin. Stereoplay. Rough draft. Working title: 'A Martian Named Smith.' Opener: zoom in on Mars, using stock or bonestelled shots, unbroken sequence, then dissolving to miniature matched set of actual landing place of Envoy. Space ship in middle distance. Animated Martians, typical, with stock as available or rephotographed. Cut to close: Interior space ship. Female patient stretched on-"

Chapter 39

THE VERDICT TO BE PASSED on the third planet around Sol was never in doubt. The Old Ones of the fourth planet were not omniscient and in their way were as provincial as humans. Grokking by their own local values, even with the aid of vastly superior logic, they were certain in time to perceive an incurable "wrongness" in the busy, restless, quarrelsome beings of the third planet, a wrongness which would require weeding, once it had been grokked and cherished and hated.

But, by the time that they would slowly get around to it, it would be highly improbable approaching impossible that the Old Ones would be able to destroy this weirdly complex race. The hazard was slight that those concerned with the third planet did not waste a split eon on it.

Certainly Foster did not. "Digby!"

His assistant looked up. "Yes, Foster?"

"I'll be gone a few eons on a special assignment. Want you to meet your new supervisor." Foster turned and said, "Mike, this is Archangel Digby, your assistant. He knows where everything is around the studio and you'll find him a very steady straw boss for anything you conceive."

"Oh, we'll get along," Archangel Michael assured him, and said to Digby, "Haven't we met before?"

Digby answered, "Not that I remember. Of course, out of so many when-wheres" He shrugged.

"No matter. Thou art God."

"Thou art God," Digby responded.

Foster said, "Skip the formalities, please. I've left you a load of work and you don't have all eternity to fiddle with it. Certainly 'Thou art God' - but who isn't?"

He left, and Mike pushed back his halo and got to work. He could see a lot of changes he wanted to make.

The End

Farnham's Freehold

Chapter 1

"It's not a hearing aid," Hubert Farnham explained. "It's a radio, tuned to the emergency frequency."

Barbara Wells stopped with a bite halfway to her mouth. "Mr. Farnham! You think they are going to attack?"

Her host shrugged. "The Kremlin doesn't let me in on its secrets."

His son said, "Dad, quit scaring the ladies. Mrs. Wells—"

"Call me 'Barbara.' I'm going to ask the court to let me drop the 'Mrs.'

"You don't need permission."

"Watch it, Barb," his sister Karen said. "Free advice is expensive."

"Shaddap. Barbara, with all respect to my worthy father, he sees spooks. There is not going to be a war."

"I hope you're right," Barbara Wells said soberly. "Why do you think so?"

"Because the communists are realists. They never risk a war that would hurt them, even if they could win. So they won't risk one they can't win."

"Then I wish," his mother said, "that they would stop having these dreadful crises. Cuba. All that fuss about Berlin-as if anybody cared! And now this. It makes a person nervous. Joseph!"

"Yes, ma'am?"

"You fetch me coffee. And brandy. Café royale."

"Yes, ma'am." The houseboy, a young Negro, removed her plate, barely touched.

Young Farnham said, "Dad, it's not these phony crises that has Mother upset; it's the panicky way you behave. You must stop it."

"No."

"You must! Mother didn't eat her dinner...and all because of that silly button in your ear. You can't—"

"Drop it, Duke."

"Sir?"

"When you moved into your own apartment, we agreed to live as friends. As my friend your opinions are welcome. But that does not make you free to interfere between your mother-my wife-and myself."

His wife said, "Now, Hubert."

"Sorry, Grace."

"You're too harsh on the boy. It does make me nervous."

"Duke is not a boy. And I've done nothing to make you nervous.

Sorry."

"I'm sorry, too, Mother. But if Dad regards it as interference, well —" Duke forced a grin. "I'll have to find a wife of my own to annoy. Barbara, will you marry me?"

"No, Duke."

"I told you she was smart, Duke," his sister volunteered.

"Karen, pipe down. Why not, Barbara? I'm young, I'm healthy. Why, someday I might even have clients. In the meantime you can support us."

"No, Duke. I agree with your father."

"Huh?"

"I should say that my father agrees with your father. I don't know that my pops is carrying around a radio tonight but I'm certain that he is listening to one. Duke, every car in our family has a survival kit."

"No fooling!"

"My car out in your father's driveway, the one Karen and I drove down from school, has a kit in its trunk that Pops picked before I reentered college. Pops takes it seriously, so I do."

Duke Farnham opened his mouth, closed it. His father asked, "Barbara, what did your father select?"

"Oh, lots of things. Ten gallons of water. Food. A jeep can of gasoline. Medicines. A sleeping bag. A gun—"

"Can you use a gun?"

"Pops made me learn. A shovel. An ax. Clothes. Oh, yes, a radio. But the important thing was 'Where?'—so he kept saying. If I were at school, he would expect me to head for the basement of the gym. But here—Pops would expect me to head up into the mountains."

"You won't need to."

"Sir?"

"Dad means," explained Karen, "that you are welcome in our panic hole."

Barbara showed a questioning look. Her host said, "Our bomb shelter. 'Farnham's Folly' my son calls it. I think you would be safer there than you would be running for the hills-despite the fact that we are only ten miles from a MAMMA Base. If an alarm comes, we'll duck into it. Right, Joseph?"

"Yes, sir! That way I stay on your payroll."

"The hell you do. You're fired the instant the sirens sound-and I start charging you rent."

"Do I pay rent, too?" asked Barbara.

"You wash dishes. Everybody does. Even Duke."

"Count me out," Duke said grimly.

"Eh? Not that many dishes, Son."

"I'm not joking, Dad. Khrushchev said he would bury us—and you're making it come true. I'm not going to crawl into a hole in the ground!"

"As you wish, sir."

"Sonny boy!" His mother put down her cup. "If an attack comes, of course you're going into the shelter!" She blinked back tears. "Promise Mother."

Young Farnham looked stubborn, then sighed. "All right. If an attack comes—if an alarm sounds, I mean; there isn't going to be an attack—I'll go into your panic hole. But, Dad, this is just to soothe Mother's nerves."

"Nevertheless you are welcome."

"Okay. Let's go into the living room and break out the cards-with a firm understanding that we drop the subject. Suits?"

"Agreed." His father got up and offered his arm to his wife. "My dear?"

In the living room, Grace Farnham declined to play bridge. "No, dear, I'm too upset. You play with the young people, and—Joseph! Joseph, bring me just a teensy bit more coffee. Royale, I mean. Don't look that way, Hubert; it helps, you know it does."

"Would you like a Miltown, dear?"

"I don't need drugs. I'll just have a drop more coffee."

They cut for partners; Duke shook his head sadly. "Poor Barbara! Stuck with Dad—Did you warn her, Sis?"

"Keep your warnings to yourself," his father advised.

"She's entitled to know, Dad. Barbara, that juvenile delinquent across from you is as optimistic in contract as he is pessimistic in-well, in other matters. Watch out for psychic bids. If he has a Yarborough —"

"Drop dead, Duke. Barbara, what system do you prefer? Italian?"

Her eyes widened. "The only Italian I know is vermouth, Mr. Farnham. I play Goren. Nothing fancy, I just try to go by the book."

"'By the book,'" Hubert Farnham agreed.

"'By the book,'" his son echoed. "Which book? Dad likes to ring in the Farmers' Almanac, especially when you're vulnerable, doubled and redoubled. Then he'll point out how, if you had led diamonds—"

"Counselor," his father interrupted, "will you deal those cards? Or shall I stuff them down your throat?"

"I'll go quietly. Put a little blood in it? A cent a point?" Barbara said hastily, "That's steep for me."

Duke answered, "You gals aren't in it. Just Dad and myself. That's how I pay my office rent."

"Duke means," his father corrected, "that is how he gets deep into debt to his old man. I was beating him out of his allowance when he was still in junior high."

Barbara shut up and played cards. The stakes made her tense, even though it was not her money. Her nervousness was increased by suspicion that her partner was a match player.

Her nerves relaxed, though not her care, as it began to appear that Mr. Farnham found her bidding satisfactory. But she welcomed the rest that came from being dummy. She spent these vacations studying Hubert Farnham.

She decided that she liked him, for the way he handled his family and for the way he played bridge-quietly, thoughtfully, exact in bidding, precise and sometimes brilliant in play. She admired the way he squeezed out the last trick, of a contract in which she had forced them too high, by having the boldness to sluff an ace.

She knew that Karen expected her to pair off with Duke this weekend and admitted that it seemed reasonable. Duke was as handsome as Karen was pretty-and a catch...rising young lawyer, a year older than herself, with a fresh and disarming wolfishness.

She wondered if he expected to make out with her? Did Karen expect it and was she watching, secretly amused?

Well, it wasn't going to happen! She did not mind admitting that she was a one-time loser but she resented the assumption that any divorcee was available. Damn it, she hadn't been in bed with anybody since that dreadful night when she had packed and left. Why did people think—Duke was looking at her; she locked eyes with him, blushed, and looked away, looked at his father instead.

Mr. Farnham was fiftyish, she decided. And looked it. Hair thinning and already gray, himself thin, almost gaunt, but with a slight potbelly, tired eyes, lines around them, and deep lines down his cheeks. Not handsome—With sudden warmth she realized that if Duke Farnham had half the strong masculine charm his father had, a panty girdle wouldn't be much protection. She dismissed it by being quickly angry with Grace Farnham. What excuse did a woman have for being an incipient alcoholic, fretful and fat and self-indulgent, when she had this man?

The thought was chased away by realization that Mrs. Farnham was what Karen might become. Mother and daughter looked alike, save that Karen had not gone to pot. Barbara did not like this thought. She liked Karen better than any other sorority sister she had found when she went back to finish college. Karen was sweet and generous and gay—But perhaps Grace Farnham had been so, once. Did women have to become fretful and useless?

Hubert Farnham looked up from the last trick. "Three spades, game and rubber. Well bid, partner."

She flushed again. "Well played, you mean. I invited too much."

"Not at all. At worst we would have been down one. If you don't bet, you can't win. Karen, has Joseph gone to bed?"

"Studying. He's got a quiz."

"I thought we might invite him to cut in. Barbara, Joseph is the best player in this house-always audacity at the right time. Plus the fact that he is studying to be an accountant and never forgets a card. Karen, can you find us something without disturbing Joseph?"

"'Spect ah kin, Boss. Vodka and tonic for you?"

"And munching food."

"Come on, Barbara. Let's bottle."

Hubert Farnham watched them go, while thinking it was a shame that so nice a child as Mrs. Wells should have had a sour marriage. A sound game of bridge and a good disposition—Gangly and horse faced, perhaps—But a nice smile and a mind of her own. If Duke had any gumption --

But Duke didn't have any. He went to where his wife was nodding by the television receiver, and said, "Grace? Grace darling, ready for bed?"—then helped her into her bedroom.

When he came back, he found his son alone. He sat down and said, "Duke, I'm sorry about that difference of opinion at dinner."

"That? Oh, forget it."

"I would rather have your respect than your tolerance. I know that you disapprove of my 'panic hole.' But we have never discussed why I built it."

"What is there to discuss? You think the Soviet Union is going to attack. You think that hole in the ground will save your life. Both ideas are unhealthy. Sick. Especially unhealthy for Mother. You are driving her to drink. I don't like it. I liked it still less to have you remind me-me, a lawyer!—that I must not interfere between husband and wife." Duke started to get up. "I'll be going."

"Please, Son! Doesn't the defense get a chance?"

"Uh—All right, all right!" Duke sat down.

"I respect your opinions. I don't share them but many people do. Perhaps most people, since most Americans have made no effort to save themselves. But on the points you made, you are mistaken. I don't expect the USSR to attack—and I doubt if our shelter is enough to save our lives."

"Then why go around with that plug in your ear scaring Mother out of her wits?"

"I've never had an automobile accident. But I carry auto insurance. That shelter is my insurance policy."

"But you just said it wouldn't save your life!"

"No, I said I doubted that it would be enough. It could save our lives if we lived a hundred miles away. But Mountain Springs is a prime target...and no citizen can build anything strong enough to stop a direct hit."

"Then why bother?"

"I told you. The best insurance I can afford. Our shelter won't stop a direct hit. But it will stand up to a near miss-and Russians aren't supermen and rockets are temperamental. I've minimized the risk. That's the best I can do."

Duke hesitated. "Dad, I can't be diplomatic."

"Then don't try."

"So I'll be blunt. Do you have to ruin Mother's life, turn her into a lush, just on the chance that a hole in the ground will let you live a few years longer? Will it be worth while to be alive-afterwards-with the country devastated and all your friends dead?"

"Probably not."

"Then why?"

"Duke, you aren't married."

"Obviously."

"Son, I must be blunt myself. It has been years since I've had any real interest in staying alive. You are grown and on your own, and your sister is a grown woman, even though she is still in school. As for myself—" He shrugged. "The most satisfying thing left is the fiddling pleasure of a game of bridge. As you are aware, there isn't much companionship left in my marriage."

"I am aware, all right. But it's your fault. You're crowding Mother into a nervous breakdown."

"I wish it were that simple. In the first place—You were at law school when I built the shelter, during that Berlin crisis. Your mother perked up and stayed sober. She would take a martini and let it go at that-instead of four as she did tonight. Duke, Grace wants that shelter."

"Well-maybe so. But you aren't soothing her by trotting around with that plug in your ear."

"Perhaps not. But I have no choice."

"What do you mean?"

"Grace is my wife, Son. 'To love and to cherish' includes keeping her alive if I can. That shelter may keep her alive. But only if she is in it. How much warning today? Fifteen minutes, if we're lucky. But three minutes could be time enough to get her into the shelter. But if I don't hear the alert, I won't have three minutes. So I listen. During any crisis."

"Suppose it happens when you are asleep?"

His father smiled. "If the news is bad, I sleep with this button taped into my ear. When it's really bad-as it is tonight—Grace and I sleep in the shelter. The girls will be urged to sleep there. And you are invited."

"Not likely!"

"I didn't think so."

"Dad, stipulating that an attack is possible-merely stipulating, as the Russians aren't crazy-why build a shelter smack on a target? Why don't you pick a place far from any target, build there-again stipulating that Mother needs one for her nerves, which may be true-and get Mother off the sauce?"

Hubert Farnham sighed. "Son, she won't have it. This is her home."

"Make her!"

"Duke, have you ever tried to make a woman do anything she really didn't want to do? Besides that, a weakness for the sauce-hell, growing alcoholism-is not that simple. I must cope with it as best I can. However—Duke, I told you that I did not have much reason to stay alive. But I do have one reason."

"Such as?"

"If those lying, cheating bastards ever throw their murder weapons at the United States, I want to live long enough to go to hell in style-with eight Russian side boys!"

Farnham twisted in his chair. "I mean it, Duke. America is the best thing in history, I think, and if those scoundrels kill our country, I want to kill a few of them. Eight side boys. Not less. I felt relieved when Grace refused to consider moving."

"Why, Dad?"

"Because I don't want that pig-faced peasant with the manners of a pig to run me out of my home! I'm a free man. I intend to stay free. I've made every preparation I can. But I wouldn't relish running away. I—Here come the girls."

Karen came in carrying drinks, followed by Barbara. "Hi! Barb got a look at our kitchen and decided to make crêpes Suzettes. Why are you two looking grim? More bad news?"

"No, but if you will snap the television on, we might get part of the ten o'clock roundup. Barbara, those glorified pancakes smell wonderful. Want a job as a cook?"

"What about Joseph?"

"We'll keep Joseph as housekeeper."

"I accept."

Duke said, "Hey! You refused my offer of honorable matrimony and turn around and agree to live in sin with my old man. How come?"

"I didn't hear 'sin' mentioned."

"Don't you know? Barbara...Dad is a notorious sex criminal."

"Is this true, Mr. Farnham?"

"Well..."

"That's why I studied law, Barbara. It was breaking us to bring Jerry Giesler all the way from Los Angeles every time Dad got into a jam."

"Those were the good old days!" Duke's father agreed. "But, Barbara, that was years ago. Contract is my weakness now."

"In that case I would expect a higher salary—"

"Hush, children!" Karen said forcefully. She turned up the sound:

"—agreed in principal to three out of four of the President's major points and has agreed to meet again to discuss the fourth point, the presence of their nuclear submarines in our coastal waters. It may now be safely stated that the crisis, the most acute in post-World-War-Two years, does seem to be tapering oft to a mutual accommodation that both countries can live with. We pause to bring you exciting news from General Motors followed by an analysis in depth—"

Karen turned it down. Duke said, "Just as I said, Dad. You can take that cork out of your ear."

"Later. I'm busy with crêpes Suzettes. Barbara, I'll expect these for breakfast every morning."

"Dad, quit trying to seduce her and cut the cards. I want to win back what I've lost."

"That'll be a long night." Mr. Farnham~ finished eating, stood up to put his plate aside; the doorbell rang. "I'll answer it."

He went to the door, returned shortly. Karen said, "Who was it, Daddy? I cut for you. You and I are partners. Look pleased."

"I'm delighted. But remember that a count of eleven is not an opening bid. Somebody lost, I guess. Possibly a nut."

"My date. You scared him off."

"Possibly. A baldheaded old coot, very weather-beaten and ragged."

"My date," Karen confirmed. "President of the Dekes. Go get him, Daddy."

"Too late. He took one look at me and fled. Whose bid is it?"

Barbara continued to try to play like a machine. But it seemed to her that Duke was overbidding; she found herself thereby bidding timidly and had to force herself to overcome it. They went set several times in a long, dreary rubber which they "won" but lost on points.

It was a pleasure to lose the next rubber with Karen as her partner. They shifted and again she was Mr. Farnham's partner. He smiled at her. "This time we clobber them!"

"I'll try."

"Just play as you did. By the book. Duke will supply the mistakes."

"Put your money where your mouth is, Dad. Want a side bet of a hundred dollars on this rubber?"

"A hundred it is."

Barbara thought about seventeen lonely dollars in her purse and got nervous. She was still more nervous when the first hand ended at five clubs, bid and made-by Duke-and realized that he had overbid and would have been down one had she covered his finesse.

Duke said, "Care to double that bet, Governor?"

"Okay. Deal."

Her morale was bolstered by the second hand: her contract at four spades and made possible by voids; she was able to ruff before cleaning out trumps. Her partner's smile was reward enough. But it left her shaky.

Duke said, "Both teams vulnerable, no part score. How's your blood pressure, Daddy-o? Double again?"

"Planning on firing your secretary?"

"Speak up, or accept a white feather."

"Four hundred. You can sell your car."

Mr. Farnham dealt. Barbara picked up her hand and frowned. The count was not bad-two queens, a couple of jacks, an ace, a king-but no biddable suit and the king was unguarded. It was a strength and distribution which she had long tagged as "just good enough to go set on." She hoped that it would be one of those sigh-of-relief hands in which everyone passes.

Her partner picked up his hand and glanced at it. "Three no trump."

Barbara repressed a gasp, Karen did gasp. "Daddy, are you feverish?"

"Bid."

"Pass!"

Barbara said to herself, "'God oh god, what I do now?" Her partner's bid promised twenty-five points-and invited slam. She held thirteen points. Thirty-eight points in the two hands-grand slam.

That's what the book said! Barbara girl, "three no trump" is twenty-five, twenty-six, or twenty-seven points-add thirteen and it reads "Grand Slam."

But was Mr. Farnham playing by the book? Or was he bidding a shut-out to grab the rubber and nail down that preposterous bet?

If she passed, then game and rubber-and four hundred dollars-was certain. But grand slam (if they made it) was, uh, around fifteen dollars at the stakes Duke and his father were playing. Risk four hundred dollars of her partner's money against a chance of fifteen? Ridiculous!

Could she sneak up on it with the Blackwood Convention? No, no! —there hadn't been background bidding.

Was this one of those bids Duke had warned her about?

(But her partner had said, "Play by the book.")

"Seven no trump," she said firmly.

Duke whistled. "Thanks, Barbara. We're ganging up on you, Dad. Double."

"Pass."

"Pass," Karen echoed.

Barbara again counted her hand. That singleton king looked awfully naked. But...either the home team had thirty-eight points-or it didn't. "Redouble."

Duke grinned. "Thanks, sweetie pie. Your lead, Karen."

Mr. Farnham put down his hand and abruptly left the table. His son said, "Hey! Come back and take your medicine!"

Mr. Farnham snapped on the television, moved on and switched on the radio, changed its setting. "Red alert!" he snapped. "Somebody tell Joseph!" He ran out of the room.

"Come back! You can't duck this with that kind of stunt!"

"Shut up, Duke!" Karen snapped.

The television screen flickered into life: "—closing down. Tune at once to your emergency station. Good luck, goodbye, and God bless you all!"

As the screen went blank the radio cut in: "—not a drill. This is not a drill. Take shelter. Emergency personnel report to their stations. Do not go out on the street. If you have no shelter, stay in the best protected room of your home. This is not a drill. Unidentified ballistic objects have been radar sighted by our early-warning screens and it must be assumed that they are missiles. Take shelter. Emergency personnel report to their—"

"He means it," Karen said in an awed voice. "Duke, show Barb where to go. I'll wake Joseph." She ran out of the room.

Duke said, "I don't believe it."

"Duke, how do we get into the shelter?"

"I'll show you." He stood up unhurriedly, picked up the hands, put each in a separate pocket. "Mine and Sis's in my trousers, yours and Dad's in my coat. Come on. Want your suitcase?"

"No!"

Chapter 2

Duke led her through the kitchen to the basement stairs. Mr. Farnham was halfway down, his wife in his arms. She seemed asleep. Duke snapped out of his attitude. "Hold it, Dad! I'll take her."

"Get on down and open the door!"

The door was steel set into the wall of the basement. Seconds were lost because Duke did not know how to handle its latch. At last Mr. Farnham passed his wife over to his son, opened it himself. Beyond, stairs led farther down. They managed it by carrying Mrs. Farnham, hands and feet, a limp doll, and took her through a second door into a room beyond. Its floor was six feet lower than the basement and under, Barbara decided, their back garden. She hung back while Mrs. Farnham was carried inside.

Mr. Farnham reappeared. "Barbara! Get in here! Where's Joseph? Where's Karen?"

Those two came rushing down the basement stairs as he spoke. Karen was flushed and seemed excited and happy. Joseph was looking wild-eyed and was dressed in undershirt and trousers, his feet bare.

He stopped short. "Mr. Farnham! Are they going to hit us?"

"I'm afraid so. Get inside."

The young Negro turned and yelled, "Doctor Livingston I presume!"—dashed back up the stairs.

Mr. Farnham said, "Oh, God!" and pressed his fists against his temples. He added in his usual voice, "Get inside, girls. Karen, bolt the door but listen for me. I'll wait as long as I can." He glanced at his watch. "Five minutes."

The girls went in. Barbara whispered, "What happened to Joseph? Flipped?"

"Well, sort of. Dr.—Livingston-I-Presume is our cat. Loves Joseph, tolerates us." Karen started bolting the inner door, heavy steel, and secured with ten inch-thick bolts.

She stopped. "I'm damned if I'll bolt this all the way while Daddy is outside!"

"Don't bolt it at all."

Karen shook her head. "I'll use a couple, so he can hear me draw them. That cat may be a mile away."

Barbara looked around. It was an L-shaped room; they had entered the end of one arm. Two bunks were on the righthand wall; Grace Farnham was in the lower and still asleep. The left wall was solid with packed shelves; the passage was hardly wider than the door. The ceiling was low and arched and of corrugated steel. She could see the ends of two more bunks at the bend. Duke was not in sight but he quickly appeared from around the bend, started setting up a card table in the space there. She watched in amazement as he got out the cards he had picked up-how long ago? It seemed an hour. Probably less than five minutes.

Duke saw her, grinned, and placed folding chairs around the table.

There came a clanging at the door. Karen unbolted it; Joseph tumbled in, followed by Mr. Farnham. A lordly red Persian cat jumped out of Joseph's arms, started an inspection. Karen and her father bolted the door. He glanced at his wife, then said, "Joseph! Help me crank."

"Yes, sir!"

Duke came over. "Got her buttoned up, Skipper?"

"All but the sliding door. It has to be cranked."

"Then come take your licking." Duke waved at the table. His father stared. "Duke, are you seriously proposing to finish a card game while we're being attacked?"

"I'm four hundred dollars serious. And another hundred says we aren't being attacked. In a half hour they'll call it off and tomorrow's papers will say the northern lights fouled up the radar. Play the hand? Or default?"

"Mmm—My partner will play it; I'm busy."

"You stand behind the way she plays it?"

"Of course."

Barbara found herself sitting down at the table with a feeling that she had wandered into a dream. She picked up her partner's hand, studied it. "Lead, Karen."

Karen said, "Oh, hell!" and led the trey of clubs. Duke picked up the dummy, laid it out in suits. "What do you want on it?" he asked.

"Doesn't matter. I'll play both hands face up."

"Better not."

"It's solid." She exposed the cards.

Duke studied them. "I see," he admitted. "Leave the hands; Dad will want to see this." He did some figuring. "Call it twenty-four hundred points. Dad!"

"Yes, Son?"

"I'm writing a check for four hundred and ninety-two dollars-and let that be a lesson to me."

"You don't need to—"

All lights went out, the floor slammed against their feet. Barbara felt frightening pressure on her chest, tried to stand up and was knocked over. All around was a noise of giant subway trains, and the floor heaved like a ship in a cross sea.

"Dad!"

"Yes, Duke! Are you hurt?"

"I don't know. But make that five hundred and ninety-two dollars!"

The subterranean rumbling went on. Through this roar Barbara heard Mr. Farnham chuckle. "Forget it!" he called out. "The dollar just depreciated."

Mrs. Farnham started to scream. "Hubert! Hubert, where are you? Hubert! Make it stop!"

"Coming, dear!" A pencil of light cut the blackness, moved toward the bunks near the door. Barbara raised her head, made out that it was her host, on hands and knees with a flashlight in his teeth. He reached the bunk, succeeded in quieting Grace; her screams ceased. "Karen?"

"Yes, Daddy."

"Are you all right?"

"Yes, Just bruised. My chair went over."

"All right. Get the emergency lighting on in this bay. Don't stand up. Crawl. I'll light you from here. Then get the hypo kit and-ow! Joseph!"

"Yes, sir."

"You in one piece?"

"I'm okay, Boss."

"Persuade your furry-faced Falstaff to join you. He jumped on me."

"He's just friendly, Mr. Farnham."

"Yes, yes. But I don't want him doing that while I'm giving a hypo. Call him."

"Sure thing. Here, Doc! Doe, Doe, Doe! Fish, Doe!"

Some minutes later the rumbling had died out, the floor was steady, Mrs. Farnham had been knocked out by injected drug, two tiny lights were glowing in the first bay, and Mr. Farnham was inspecting.

Damage was slight. Despite guardrails, cans had popped off shelves; a fifth of rum was broken. But liquor was almost the only thing stored in glass, and liquor had been left in cases, the rest of it had come through. The worst casualty was the shelter's battery-driven radio, torn loose from the wall and smashed.

Mr. Farnham was on his knees, retrieving bits of it. His son looked down. "Don't bother, Dad. Sweep it up and throw it away."

"Some parts can be salvaged."

"What do you know about radios?"

"Nothing," his father admitted. "But I have books."

"A book won't fix that. You should have stocked a spare."

"I have a spare."

"Then for God's sake get it! I want to know what's happened."

His father got up slowly and looked at Duke. "I would like to know, too. I can't hear anything over this radio I'm wearing. Not surprising, it's short range. But the spare is packed in foam and probably wasn't hurt."

"Then get it hooked up."

"Later."

"Later, hell. Where is it?"

Mr. Farnham breathed hard. "I've had all the yap I'm going to take."

"Huh? Sorry. Just tell me where the spare is."

"I shan't. We might lose it, too. I'm going to wait until I'm sure the attack is over."

His son shrugged. "Okay, if you want to be difficult. But all of us want to hear the news. It's a shabby trick if you ask me."

"Nobody asked you. I told you I've had all the yap I'm going to take. If you're itching to know what's happening outside, you can leave. I'll unbolt this door, crank back the armor door, and you can open the upper door yourself."

"Eh? Don't be silly."

"But close it after you. I don't want it open-both for blast and radioactivity."

"That's another thing. Don't you have any way to measure radioactivity? We ought to take steps to—"

"SHUT UP!"

"What? Dad, don't pull the heavy-handed father on me."

"Duke, I ask you to keep quiet and listen. Will you?"

"Well...all right. But I don't appreciate being bawled out in the presence of others."

"Then keep your voice down." They were in the first bay near the door. Mrs. Farnham was snoring by them; the others had retreated around the bend, unwilling to witness. "Are you ready to listen?"

"Very well, sir," Duke said stiffly.

"Good. Son, I was not joking. Either leave...or do exactly as I tell you. That includes keeping your mouth shut when I tell you to. Which will it be? Absolute obedience, prompt and cheerful? Or will you leave?"

"Aren't you being rather highhanded?"

"I intend to be. This shelter is a lifeboat and I am boat officer. For the safety of all I shall maintain discipline. Even if it means tossing somebody overboard."

"That's a farfetched simile. Dad, it's a shame you were in the Navy. It gives you romantic ideas."

"I think it's a shame, Duke, that you never had service. You're not realistic. Well, which is it? Will you take orders? Or leave?"

"You know I'm not going to leave. And you're not serious in talking about it. It's death out there."

"Then you'll take orders?"

"Uh, I'll be cooperative. But this absolute dictatorship—Dad, tonight you made quite a point of the fact that you are a free man. Well, so am I. I'll cooperate. But I won't take unreasonable orders, and as for keeping my mouth shut, I'll try to be diplomatic. But when I think it's necessary, I'll voice my opinion. Free speech. Fair enough?"

His father sighed. "Not nearly good enough, Duke. Stand aside, I want to unbolt the door."

"Don't push a joke too far, Dad."

"I'm not joking. I'm putting you out."

"Dad...I hate to say this...but I don't think you are man enough. I'm bigger than you are and a lot younger."

"I know. I've no intention of fighting you."

"Then let's drop this silly talk."

"Duke, please! I built this shelter. Not two hours ago you were sneering at it, telling me that it was a 'sick' thing to do. Now you want to use it, since it turned out you were wrong. Can't you admit that?"

"Oh, certainly. You've made your point."

"Yet you are telling me how to run it. Telling me that I should have provided a spare radio. When you hadn't provided anything. Can't you be a man, give in, and do as I tell you? When your life depends on my hospitality?"

"Cripes! I told you I would cooperate."

"But you haven't been doing so. You've been making silly remarks, getting in my way, giving me lip, wasting my time when I have urgent things to do. Duke, I don't want your cooperation, on your terms, according to your judgment. While we are in this shelter I want your absolute obedience."

Duke shook his head. "Get it through your head that I'm no longer a child, Dad. My cooperation, yes. But I won't promise the other."

Mr. Farnham shook his head sorrowfully. "Maybe it would be better if you took charge and I obeyed you. But I've given these circumstances thought and you haven't. Son, I anticipated that your mother might be hysterical; I had everything ready to handle it. Don't you think I anticipated this situation?"

"How so? It's pure chance that I'm here at all."

"'This situation' I said. It could be anybody. Duke, if we had been entertaining friends tonight-or if strangers had popped up, say that old fellow who rang the doorbell-I would have taken them in; I planned on extras. Don't you think, with all the planning I have done, that I would realize that somebody might get out of hand? And plan how to force them into line?"

"How?"

"In a lifeboat, how do you tell the boat officer?"

"Is that a riddle?"

"No. The boat officer is the one with the gun."

"Oh. I suppose you do have guns down here. But you don't have one now, and"—Duke grinned—"Dad, I can't see you shooting me. Can you?"

His father stared, then dropped his eyes. "No. A stranger, maybe. But you're my son." He sighed. "Well, I hope you cooperate."

"I will. I promise you that much."

"Thank you. If you'll excuse me, I have work to do." Mr. Farnham turned away. "Joseph!"

"Yes, sir?"

"It's condition seven."

"Condition seven, sir?"

"Yes, and getting worse. Be careful with the instruments and don't waste time."

"Right away, sir!"

"Thank you." He turned to his son. "Duke, if you really want to cooperate, you could pick up the pieces of this radio. It's the same model as the one in reserve. There may be pieces we can use to repair the other one if it becomes necessary. Will you do that?"

"Sure, sure. I told you I would cooperate." Duke got on his knees, started to complete the task he had interrupted.

"Thank you." His father turned away, moved toward the junction of the bays.

"Mr. Duke! Get your hands up!"

Duke looked over his shoulder, saw Joseph by the card table, aiming a Thompson submachine gun at him. He jumped to his feet. "What the hell!"

"Stay there!" Joseph said. "I'll shoot."

"Yes," agreed Duke's father, "he doesn't have the compunctions you thought I had. Joseph, if he moves, shoot him."

"Daddy! What's going on?"

Mr. Farnham turned to face his daughter. "Get back!"

"But, Daddy—"

"Shut up. Both of you get into that lower bunk. Karen on the inside. Move!"

Karen moved. Barbara looked wide-eyed at the automatic her host now held in his hand and got quickly into the lower bunk of the other bay. "Arms around each other," he said briskly. "Don't either of you let the other one move." He went back to the first bay.

"Duke."

"Yes?"

"Lower your hands slowly and unfasten your trousers. Let them fall but don't step out of them. Then turn slowly and face the door. Unfasten the bolts."

"Dad—"

"Shut up. Joseph, if he does anything but exactly what I told him to, shoot. Try for his legs, but hit him."

Face white, expression dazed, Duke did as he was told: let his trousers fall until he was hobbled, turned and started unbolting the door. His father let him continue until half the bolts were drawn. "Duke. Stop. The next few seconds determine whether you go-or stay. You know the terms."

Duke barely hesitated. "I accept."

"I must elaborate. You will not only obey me, you will obey Joseph."

"Joseph?"

"My secondin-command. I have to have one, Duke; I can't stay awake all the time. I would gladly have had you as deputy-but you would have nothing to do with it. So I trained Joseph. He knows where everything is, how it works, how to repair it. So he's my deputy. Well? Will you obey him just as cheerfully? No back talk?"

Duke said slowly, "I promise."

"Good. But a promise made under duress isn't binding. There is another commitment always given under duress and nevertheless binding, a point which as a lawyer you will appreciate. I want your parole as a prisoner. Will you give me your parole to abide by the conditions until we leave the shelter? A straight quid-pro-quo: your parole in exchange for not being forced outside?"

"You have my parole."

"Thank you. Throw the bolts and fasten your trousers. Joseph, stow the Tommy gun."

"Okay, Boss."

Duke secured the door, secured his pants. As he turned around, his father offered him the automatic, butt first. "What's this for?" Duke asked.

"Suit yourself. If your parole isn't good, I would rather find it out now."

Duke took the gun, removed the clip, worked the slide and caught the cartridge from the chamber, put it back into the clip and reloaded the gun-handed it back. "My parole is good. Here."

"Keep it. You were always a headstrong boy, Duke, but you were never a liar."

"Okay...Boss." His son put the pistol in a pocket. "Hot in here."

"And going to get hotter."

"Eh? How much radiation do you think we're getting?"

"I don't mean radiation. Fire storm." He walked into the space where the bays joined, looked at a thermometer, then at his wrist. "Eighty-four and only twentythree minutes since we were hit. It'll get worse."

"How much worse?"

"How would I know, Duke? I don't know how far away the hit was, how many megatons, how widespread the fire. I don't even know whether the house is burning overhead, or was blasted away. Normal temperature in here is about fifty degrees. That doesn't look good. But there is nothing to do about it. Yes, there's one thing. Strip down to shorts. I shall."

He went into the other bay. The girls were still in the lower bunk, arms around each other, keeping quiet. Joseph was on the floor with his back to the wall, the cat in his lap. Karen looked round-eyed as her father approached but she said nothing.

"You kids can get up."

"Thanks," said Karen. "Pretty warm for snuggling." Barbara backed out and Karen sat up.

"So it is. Did you hear what just happened?"

"Some sort of argument," Karen said cautiously.

"Yes. And it's the last one. I'm boss and Joseph is my deputy. Understood?"

"Yes, Daddy."

"Mrs. Wells?"

"Me? Why, of course! It's your shelter. I'm grateful to be in it-I'm grateful to be alive! And please call me Barbara, Mr. Farnham."

"Sorry. 11mm—Call me 'Hugh,' I prefer it to "Hubert.' Duke, everybody-first names from now on. Don't call me 'Dad,' call me 'Hugh.' Joe, knock off the 'mister' and the 'miss.' Catch?"

"Okay, Boss, if you say so."

"Make that 'Okay, Hugh.' Now you girls peel down, panties and bra or such, then get Grace peeled to her skin and turn the light out there. It's hot, it's going to get hotter. Joe, strip to your shorts." Mr. Farnham took his jacket off, started unbuttoning his shirt.

Joseph said, "Uh, I'm comfortable."

"I wasn't asking, I was telling you."

"Uh...Boss, I'm not wearing shorts!"

"He's not," Karen confirmed. "I rushed him."

"So?" Hugh looked at his ex-houseboy and chuckled. "Joe, you're a sissy. I should have made Karen straw boss."

"Suits me."

"Get a pair out of stores and you can change in the toilet space. While you're about it, show Duke where it is. Karen, the same for Barbara. Then we'll gather for a powwow."

The powwow started five minutes later. Hugh Farnham was at the table, dealing out bridge hands, assessing them. When they were seated he said, "Anybody for bridge?"

"Daddy, you're joking."

"My name is 'Hugh.' I was not joking, a rubber of bridge might quiet your nerves. Put away that cigarette, Duke."

"Uh...sorry."

"You can smoke tomorrow, I think. Tonight I've got pure oxygen cracked pretty wide and we are taking in no air. You saw the bottles in the toilet space?" The space between the bays was filled by pressure bottles, a water tank, a camp toilet, stores, and a small area where a person might manage a standup bath. Air intakes and exhausts, capped off, were there, plus a hand-or-power blower, and scavengers for carbon dioxide and water vapor. This space was reached by an archway between the tiers of bunks.

"Oxygen in those? I thought it was air."

"Couldn't afford the space penalty. So we can't risk fire, even a cigarette. I opened one inlet for a check. Very hot—heat 'hot' as well as making a Geiger counter chatter. Folks, I don't know how long we'll be on bottled breathing. I figured thirty-six hours for four people, so it's nominally twenty-four hours for six, but that's not the pinch. I'm sweating-and so are you. We can take it to about a hundred and twenty. Above that, we'll have to use oxygen just to cool the place. It might end in a fine balance between heat and suffocation. Or worse."

"Daddy—'Hugh,' I mean. Are you breaking it gently that we are going to be baked alive?"

"You won't be, Karen. I won't let you be."

"Well...I prefer a bullet."

"Nor will you be shot. I have enough sleeping pills to let twenty people die painlessly. But we aren't here to die. We've had vast luck; with a little more we'll make it. So don't be morbid."

"How about radioactivity?" asked Duke.

"Can you read an integrating counter?"

"No."

"Take my word for it that we are in no danger yet. Now about sleeping—This side, where Grace is, is the girls' dorm; this other side is ours. Only four bunks but that's okay; one person has to monitor air and heat, and the other one without a bed can keep him awake. However, I'm taking the watch tonight and won't need company; I've taken Dexedrine."

"I'll stand watch."

"I'll stay up with you."

"I'm not sleepy."

"Slow down!" Hugh said. "Joe, you can't stand watch now because you have to relieve me when I'm tuckered out. You and I will alternate until the situation is safe."

Joe shrugged and kept quiet. Duke said, "Then it's my privilege."

"Can't either of you add? Two bunks for women, two for men. What's left over? We'll fold this table and the gal left over can sprawl on the floor here. Joe, break out the blankets and put a couple here and a couple in the tank space for me."

"Right away, Hugh!"

Both girls insisted on standing watch. Hugh shut them off. "Cut for it."

"But—"

"Pipe down, Barbara. Ace low, and low girl sleeps in a bunk, the other here on the floor. Duke, do you want a sleeping pill?"

"That's one habit I don't have."

"Don't be an iron man."

"Well...a rain check?"

"Surely. Joe? Seconal?"

"Well, I'm so relieved that I don't have to take that quiz tomorrow..."

"Glad somebody is happy. All right."

"I was going to add that I'm pretty keyed up. You're sure you won't need me?"

"I'm sure. Karen, get one for Joe. You know where?"

"Yes, and I'm going to get one for me, since I won the cut. I'm no iron man! And a Miltown on top of it."

"Do that. Sorry, Barbara, you can't have one; I might have to wake you and have you keep me awake. You can have Miltown. You'll probably sleep from it."

"I don't need it."

"As you wish. Bed, everybody. It's midnight and two of you are going on watch in eight hours."

In a few minutes all were in bed, with Barbara where the table had been; all lights out save one in the tank space. Hugh squatted on blankets there, playing solitaire-badly.

Again the floor heaved, again came that terrifying rumble. Karen screamed.

Hugh was up at once. This one was not as violent; he was able to stay on his feet. He hurried into the girls' dorm. "Baby! Where are you?" He fumbled, found the light switch.

"Up here, Daddy. Oh, I'm scared! I was just dropping off and it almost threw me out. Help me down."

He did so; she clung to him, sobbing. "There, there," he said, patting her. "You've been a brave girl, don't let it throw you."

"I'm not brave. I've been scared silly all along. I just didn't want it to show."

"Well...I'm scared too. So let's not show it, huh? Better have another pill. And a stiff drink."

"All right. Both. I'm not going to sleep in that bunk. It's too hot up there, as well as scary when it shakes."

"All right, I'll pull the mattress down. Where's your panties and bra, baby girl? Better put 'em on."

"Up there. I don't care, I just want people. Oh, I suppose I should. Shock Joseph if I didn't."

"Just a moment. Here are your pants. But where did you hide your brassiere?"

"Maybe it got pushed down behind."

Hugh dragged the mattress down. "I don't find it."

"The hell with it. Joe can look the other way. I want that drink."

"All right. Joe's a gentleman."

Duke and Barbara were sitting on the blanket she had been napping on; they were looking very solemn. Hugh said, "Where's Joe? He wasn't hurt, was he?"

Duke gave a short laugh. "Want to see 'Sleeping Innocence'? That bottom bunk."

Hugh found his secondin-command sprawled on his back, snoring, as deeply unconscious as Grace Farnham. Dr.—Livingstone-I-Presume was curled up on his chest. Hugh came back. "Well, that blast was farther away. I'm glad Joe could sleep."

"It was too damned close to suit me! When are they going to run out of those things?"

"Soon, I hope. Folks, Karen and I have just formed the 'I'm-scared-too' club and are about to celebrate with a drink. Any candidates?"

"I'm a charter member!"

"So am I," agreed Barbara. "God, yes!"

Hugh fetched paper cups, and bottles-Scotch, Seconal, and Miltown. "Water, anyone?"

Duke said, "I don't want anything interfering with the liquor."

"Water, please," Barbara answered. "It's so hot."

"How hot is it, Daddy?"

"Duke, I put the thermometer in the tank room. Go see, will you?"

"Sure. And may I use that rain check?"

"Certainly." Hugh gave Karen another Seconal capsule, another Miltown pill, and told Barbara that she must take a Miltown-then took one himself, having decided that Dexedrine had made him edgy. Duke returned.

"One hundred and four degrees," he announced. "I opened the valve another quarter turn. All right?"

"Have to open it still wider soon. Here are your pills, Duke-a double dose of Seconal and a Miltown."

"Thanks." Duke swallowed them, chased them with whisky. "I'm going to sleep on the floor, too. Coolest place in the house."

"Smart of you. All right, let's settle down. Give the pills a chance."

Hugh sat with Karen after she bedded down, then gently extracted his hand from hers and returned to the tank room. The temperature was up two degrees. He opened the valve on the working tank still wider, listened to it sigh to emptiness, shook his head, got a wrench and shifted the gauge to a full tank. Before he opened it, he attached a hose, led it out into the main room. Then he went back to pretending to play solitaire.

A few minutes later Barbara appeared in the doorway. "I'm not sleepy," she said. "Could you use some company?"

"You've been crying."

"Does it show? I'm sorry."

"Come sit down. Want to play cards?"

"If you want to. All I want is company."

"We'll talk. Would you like another drink?"

"Oh, would I! Can you spare it?"

"I stocked plenty. Barbara, can you think of a better night to have a drink? But both of us will have to see to it that the other one doesn't go to sleep."

"All right. I'll keep you awake."

They shared a cup, Scotch with water from the tank. It poured out as sweat faster than they drank it. Hugh increased the gas flow again and found that the ceiling was unpleasantly hot. "Barbara, the house must have burned over us. There is thirty inches of concrete above us and then two feet of dirt."

"How hot do you suppose it is outside?"

"Couldn't guess. We must have been close to the fireball." He felt the ceiling again. "I beefed this thing up-roof, walls, and floor are all one steel-reinforced box. It was none too much. We may have trouble getting the doors open. All this heat—And probably warped by concussion."

She said quietly, "Are we trapped?"

"No, no. Under these bottles is a hatch to a tunnel. Thirty inch culvert pipe with concrete around it. Leads to the gully back of the garden. We can break out-crowbars and a hydraulic jack-even if the end is crushed in and covered with crater glass. I'm not worried about that; I'm worried about how long we can stay inside...and whether it will be safe when we leave."

"How bad is the radioactivity?"

He hesitated. "Barbara, would it mean anything to you? Know anything about radiation?"

"Enough. I'm majoring-I was majoring-in botany; I've used isotopes in genetics experiments. I can stand bad news, Hugh, but not knowing-well, that's why I was crying."

"Mmm—The situation is worse than I told Duke." He jerked his thumb over his shoulder. "Integrating counter back of the bottles. Go look."

She went to it, stayed several minutes. When she came back, she sat down without speaking. "Well?" he asked.

"Could I have another drink?"

"Certainly." He mixed it.

She sipped it, then said quietly, "If the slope doesn't change, we'll hit the red line by morning." She frowned. "But that marks a conservative limit. III remember the figures, we probably won't start vomiting for at least another day."

"Yes. And the curve should level off soon. That's why heat worries me more than radiation." He looked at the thermometer, cracked the valve still wider. "I've been running the water-vapor getter on battery; I don't think we should crank the blower in this heat. I'm not going to worry about Cee-Oh-Two until we start to pant."

"Seems reasonable."

"Let's forget the hazards. Anything you'd like to talk about? Yourself?"

"Little to tell, Hugh. Female, white, twenty-five years old. Back in school, or was, after a bad marriage. A brother in the Air Force-so possibly he's all right. My parents were in Acapulco, so perhaps they are, too. No pets, thank God-and I was so pleased that Joe saved his cat. No regrets, Hugh, and not afraid...not really. Just...sad." She sniffed. "It was a pretty nice world, even if I did crumb up my marriage."

"Don't cry."

"I'm not crying! Those drops are sweat."

"Yes. Surely."

"They are. It's terribly hot." Suddenly she reached both hands behind her ribs. "Do you mind? If I take this off? Like Karen? It's smothering me."

"Go ahead. Child, if you can get comfortable-or less uncomfortable-do so. I've seen Karen all her life, Grace even longer. Skin doesn't shock me." He stood up, went behind the oxygen bottles, and looked at the record of radiation. Having done so, he checked the thermometer and increased the flow of oxygen.

As he sat down he remarked, "I might as well have stored air instead of oxygen, then we could smoke. But I did not expect to use it for cooling." He ignored the fact that she had accepted his invitation to be comfortable. He added, "I was worried about heating the place. I tried to design a stove to use contaminated air safely. Possible. But difficult."

"I think you did amazingly well. This is the only shelter I've ever heard of with stored air. You're a scientist. Aren't you?"

"Me? Heavens, no. High school only. What little I know I picked up here and there. Some in the Navy, metal work and correspondence courses. Then I worked for a public futility and learned something about construction and pipelines. Then I became a contractor." He smiled. "No, Barbara, I'm a 'general specialist.' 'The Elephant Child's 'satiable curiosity.' Like Dr.-- Livingston-I-Presume.

"How did a cat get a name like that?"

"Karen. Because he's a great explorer. That cat can get into anything. Do you like cats?"

"I don't know much about them. But Dr. Livingstone is a beauty."

"So he is but I like all cats. You don't own a cat, he is a free citizen. Take dogs; dogs are friendly and fun and loyal. But slaves. Not their fault, they've been bred for it. But slavery makes me queasy, even in animals."

He frowned. "Barbara, I'm not as sad over what has happened as you are. It might be good for us. I don't mean us six; I mean our country."

She looked startled. "How?"

"Well—It's hard to take the long view when you are crouching in a shelter and wondering how long you can hold out. But—Barbara, I've worried for years about our country. It seems to me that we have been breeding slaves-and I believe in freedom. This war may have turned the tide. This may be the first war in history which kills the stupid rather than the bright and able-where it makes any distinction."

"How do you figure that, Hugh?"

"Well, wars have always been hardest on the best young men. This time the boys in service are as safe or safer than civilians. And of civilians those who used their heads and made preparations stand a far better chance. Not every case, but on the average, and that will improve the breed. When it's over, things will be tough, and that will improve the breed still more. For years the surest way of surviving has been to be utterly worthless and breed a lot of worthless kids. All that will change."

She nodded thoughtfully. "That's standard genetics. But it seems cruel."

"It is cruel. But no government yet has been able to repeal natural laws, though they keep trying."

She shivered in spite of the heat. "I suppose you're right. No, I know you're right. But I could face it more cheerfully if I thought there was going to be any country left. Killing the poorest third is good genetics...but there is nothing good about killing them all."

"Mmm, yes. I hate to think about it. But I did think about it. Barbara, I didn't stockpile oxygen just against radiation and fire storm. I had in mind worse things."

"Worse? How?"

"All the taik about the horrors of World War Three has been about atomic weapons-fallout, hundred-megaton bombs, neutron bombs. The disarmament talks and the pacifist parades have all been about the Bomb, the Bomb, the Bomb-as if A-weapons were the only thing that could kill. This may not be just an A-weapons war; more likely it is an ABC war-atomic, biological, and chemical." He hooked a thumb at the tanks. "That's why I stocked that bottled breathing. Against nerve gas. Aerosols. Viruses. God knows what. The communists won't smash this country if they can kill us without destroying our wealth. I wouldn't be surprised to learn that bombs had been used only on military targets like the antimissile base here, but that New York and Detroit and such received nerve gas. Or a twenty-four plague with eighty percent mortality. The horrid possibilities are endless. The air outside could be loaded with death that a counter won't detect and a filter can't stop." He smiled grimly. "Sorry. You had better go back to bed."

"I'm miserable anyway and don't want to be alone. May I stay?"

"Certainly. I'm happier with you present no matter how gloomy I sound."

"What you've been saying isn't nearly as gloomy as the thoughts I have alone. I wish we knew what was going on outside!" She added, "I wish we had a periscope."

"We do have."

"Huh? Where?"

"Did have. Sorry. That pipe over there. I tried to raise it but it won't budge. However—Barbie, I tromped on Duke for demanding that I break out our spare radio before the attack was over. But maybe it's over. What do you think?"

"Me? How would I know?"

"You know as much as I do. That first missile was intended to take out the MAMMA base; they wouldn't bother with us otherwise. If they are spotting from orbiting spaceships, then that second one was another try at the same target. The timing fits, time of flight from Kamchatka is about half an hour and the second hit about fortyfive minutes after the first. That one was probably a bull's-eye-and they know it, because more than an hour has passed and no third missile. That means they are through with us. Logical?"

"Sounds logical to me."

"It's crumby logic, my dear. Not enough data. Perhaps both missiles failed to knock out MAMMA, and MAMMA is now knocking out anything they throw. Perhaps the Russkis have run out of missiles. Perhaps the third round will be delivered by bomber. We don't know. But I'm itching to find out. Twist my arm."

"I would certainly like to hear some news."

"We'll try. If it's good news, we'll wake the others." Hugh Farnham dug into a corner, came out with a box, unpacked a radio. "Doesn't have a scratch. Let's try it without an antenna.

"Nothing but static," he announced shortly. "Not surprised. Although it's mate could pull in local stations without an aerial. Now we'll hook to the fixed antenna. Wait here."

He returned shortly. "No soap. Stands to reason that there isn't anything left of the fixed antenna. So we'll try the emergency one."

Hugh took a wrench and removed a cap from an inch pipe that stuck down through the ceiling. He tested the opening with a radiation counter. "A little more count." He got two steel rods, each five feet long; with one he probed the pipe. "Doesn't go up as far as it should. The top of this pipe was buried just belowground. Trouble." He screwed the second rod into the first.

"Now comes the touchy part. Stand back, there may be debris-hot both ways-spilling down."

"It'll get on you."

"On my hands, maybe. I'll scrub afterwards. You can go over me with a Geiger counter." He tapped with a sledge on the bottom of the joined rods. Up they went about eighteen inches. "Something solid. I'll have to bang it."

Many blows later the rod was seated into the pipe. "It felt," he said, as he stopped to scrub his hands, "as if we passed into open air the last foot or so. But it should have stuck out five feet above ground. Rubble, I suppose. What's left of our home. Want to use the counter on me?"

"Hugh, you say that as casually as 'What's left of yesterday's milk."

He shrugged. "Barbie girl, I was broke when I joined the Navy, I've been flat busted since; I will not waste tears over a roof and some plumbing. Getting any count?"

"You're clean."

"Check the floor under the pipe."

There were hot spots on the floor; Hugh wiped them with damp Kleenex, disposed of it in a metal waste can. She checked his hands afterwards, and the spots on the floor.

"Well, that used up a gallon of water; this radio had better work." He clipped the antenna lead to the rod, switched it on.

Ten minutes later they admitted that they were getting nothing. Noise-static all over the dial-but no signal. He sighed. "I'm not surprised. I don't know what ionization does to radio waves, but that must be a sorcerer's brew of hot isotopes over our heads. I had hoped we could get Salt Lake City."

"Not Denver?"

"No. Denver had an ICBM base. I'll leave the gain up; maybe we'll hear something."

"Don't you want to save the battery?"

"Not really. Let's sit down and recite limericks." He looked at the integrating counter, whistled softly, then checked the thermometer. "I'll give our sleeping beauties a little more relief from the heat. How well are you standing it, Barbie?"

"Truthfully, I had forgotten it. The sweat pours off and that's that."

"Me, too."

"Well, don't use more oxygen on my account. How many bottles are left?"

"Not many."

"How many?"

"Less than half. Don't fret. I'll bet you five hundred thousand dollars-fifty cents in the new currency-that you can't recite a limerick I don't know."

"Clean, or dirty?"

"Are there clean ones?"

"Okay. 'A playful young fellow named Scott—'" The limerick session was a flop. Hugh accused her of having a clean mind. She answered, "Not really, Hugh. But my mind isn't working."

"I'm not at my sharpest. Another drink?"

"Yes. With water, please, I sweat so; I'm dry. Hugh?"

"Yes, Barbie?"

"We're going to die. Aren't we?"

"Yes."

"I thought so. Before morning?"

"Oh, no! I feel sure we can live till noon. If we want to."

"I see. Hugh, would you mind if I moved over by you? Would you put your arm around me? Or is it too hot?"

"Any time I'm too hot to put my arm around a girl I'll know I'm dead and in hell."

"Thanks."

"Room enough?"

"Plenty."

"You're a little girl."

"I weigh a hundred and thirty-two pounds and I'm five feet eight and that's not little."

"You're a little girl. Put the cup aside. Tilt your face up."

"Mmmm—Again. Please, again."

"A greedy little girl."

"Yes. Very greedy. Thank you, Hugh."

"Such pretty ones."

"They're my best feature. My face isn't much. But Karen's are prettier."

"A matter of opinion. Your opinion."

"Well—I won't argue. Scrunch over a little, dear. Dear Hugh—"

"All right?"

"Room enough. Wonderfully all right. And kiss me, too. Please?"

"Barbara, Barbara!"

"Hugh darling! I love you. Oh!"

"I love you, Barbara."

"Yes. Yes! Oh, please! Now!"

"Right now!"

"You all right, Barbie?"

"I've never been more all right. I've never been happier in my life."

"I wish that were true."

"It is true. Hugh darling, I'm utterly happy now and not at all afraid. I feel wonderful. Not even too warm."

"I'm dripping sweat on you."

"I don't mind. There are two drops on your chin and one on the end of your nose. And I'm so sweaty my hair is soaked. Doesn't matter. Hugh dearest, this is what I wanted. You. I don't mind dying-now."

"I do!"

"I'm sorry."

"No, no! Barbie hon, I didn't mind dying, before. Now suddenly life is worth living."

"Oh. I think it's the same feeling."

"Probably. But we aren't going to die, ii I can swing it. Want to move now?"

"If you want to. If you'll put your arm around me after we do."

"Try to stop me. But first I'm going to make us a long, tall drink. I'm thirsty again. And breathless."

"Me, too. Your heart is pounding."

"It has every excuse. Barbie girl, do you realize that I am more than twice your age? Old enough to be your father."

"Yes, Daddy."

"Why, you little squirt! Talk that way and I'll drink this all myself."

"Yes, Hugh. Hugh my beloved. But we are the same age
because we are going to die at the same time."

"Don't talk about dying. I'm going to find some way to outwit it."

"If anybody can, you will. Hugh, I'm not feeling morbid. I've looked it in the face and I'm no longer afraid-not afraid to die, not afraid to live. But—Hugh, I'd like one favor."

"Name it."

"When you give the pills to the others-the overdose-I don't want them."

"Uh...it might be needful."

"I didn't mean that I wouldn't; I will when you tell me to. But not when the others do. Not until you do."

"Mmm, Barbie, I don't plan on taking them."

"Then please don't make me take them."

"Well—I'll think about it. Now shut up. Kiss me."

"Yes, dear."

"Such long legs you have, Barbie. Strong, too."

"And such big feet."

"Quit fishing for compliments. I like your feet. You would look unfinished without them."

"Be inconvenient, too. Hugh, do you know what I would like to do?"

"Again?"

"No, no. Well, yes. But right now."

"Sleep? Go ahead, dear. I won't fall asleep."

"No, not sleep. I'm not ever going to sleep again. Never. I can't spare one minute we've got left. I was thinking that I would like to play contract again-as your partner."

"Well—We might be able to rouse Joe. Not the others; three grains of Seconal is pretty convincing. We could play three-handed."

"No, no. I don't want any company but you. But I so enjoyed playing, as your partner."

"You're a good partner, honey. The best. When you say 'by the book,' you mean it."

"Not 'the best.' I'm not in your class. But I wish that we had-oh, years and years !—so that I could get to be. And I wish the attack had held off ten minutes, so that you could have played that grand slam."

"Didn't need to. When you answered my bid I knew it was a lay-down." He squeezed her shoulders. "Three grand slams in one night."

"Three?"

"Didn't you consider that H-bomb a grand slam?"

"Oh. And then there was the second bomb, later."

"I was not counting the second bomb, it was too far away. If you don't know what I counted, I refuse to draw a diagram."

"Oh! In that case, there could easily be a fourth grand slam. I can't make another forcing bid; my bra is gone and—"

"Was that a forcing bid?"

"Of course it was. But you can make the next forcing bid. I'll spot it."

"Slow down! Three grand slams is maximum. A small slam, maybe-if I take another Dexedrine. But four grand slams? Impossible. You know how old I am."

"We'll see. I think we'll get a fourth."

At that moment the biggest slam of all hit them.

Chapter 3

The light went out, Grace Farnham screamed, Dr.—Livingstone—I-Presume wailed, Barbara was knocked silly and came to heaped over a steel bottle and disoriented by blackness and no floors or walls.

She groped around, found a leg, found Hugh attached to it. He was limp. She felt for his heartbeat, could not find it.

She shouted: "Hello! Hello! Anybody!" Duke answered, "Barbara?"

"Yes, yes!"

"Are you all right?"

"I'm all right. Hugh is hurt. I think he's dead."

"Take it easy. When I find my trousers, I'll light a match—if I can get off my shoulders. I'm standing on them."

"Hubert! Hubert!"

"Yes, Mother! Wait." Grace continued to scream; Duke alternated reassurances and cursing the darkness. Barbara felt around, slipped on loose oxygen bottles, hurt her shin, and found a flat surface. She could not tell what it was; it was canted steeply.

Duke called out, "Got 'em!" A match flared up, torch bright in oxygen-rich air.

Joe's voice said, "Better put that out. Fire hazard." A flashlight beam cut the gloom.

Barbara called out, "Joe! Help me with Hugh!"

"Got to see about lights."

"He may be dying."

"Can't do a thing without light." Barbara shut up, tried again to find heartbeat-found it and clutched Hugh's head, sobbing.

Lights came on in the men's bay; enough trickled in so that Barbara could make out her surroundings. The floor sloped about thirty degrees; she, Hugh, steel bottles, water tank, and other gear were jumbled in the lower corner. The tank had sprung a leak and was flooding the toilet space. She saw that, had the tilt been the other way, she and Hugh would have been buried under steel and water.

Minutes later Duke and Joe joined her, letting themselves down through the door. Joe carried a camp lamp. Duke said to Joe, "How are we going to move him?"

"We don't. It might be his spine."

"Still have to move him."

"We don't move him," Joe said firmly. "Barbara, have you moved him?"

"I took his head in my lap."

"Well, don't move him anymore." Joe looked his patient over, touching him gently. "I can't see any gross injuries," he decided. "Barbara, if you can stay put, we'll wait until he comes to. Then I can check his eyes for concussion, see if he can wiggle his toes, things like that."

"I'll hold still. Anybody else hurt?"

"Not to speak of," Duke assured her. "Joe thinks he's cracked some ribs and I wrenched a shoulder. Mother just got rolled into the corner of her bunk. Sis is soothing her. Sis is okay-a lump on her head where a can conked her. Are you all right?"

"Just bruises. Hugh and I were playing double solitaire and trying to keep cool when it hit." She wondered how long the lie would stand up. Duke had no more on than she did and didn't seem troubled by it; Joe was dressed in underwear shorts. She added, "The cat? Is he all right?"

"Dr.—Livingstone-I-Presume," Joe answered seriously, "escaped injury. But he is vexed that his sandbox was dumped over. He's cleaning himself and criticizing."

"I'm glad he wasn't hurt."

"Notice anything about this blast?"

"What, Joe? It was the hardest of the three. Much the hardest."

"Yes. But no rumbling. Just one great, big, grand slam, then...nothing."

"What does that indicate?"

"I don't know. Barbara, can you stay here and not move? I want to get more lights on, check the damage, and see what to do about it."

"I won't move." Hugh seemed to be breathing easily. In the silence she could hear his heart beat. She decided that she didn't have anything to be unhappy about.

Karen joined her, carrying a flashlight and moving carefully on the slant. "How's Daddy?"

"No change."

"Knocked cold, I guess. So was I. You okay?" She played the flashlight over Barbara.

"Not hurt."

"Well! I'm glad you're in uniform, too. I can't find my pants. Joe ignores it so carefully, it's painful. Is that boy square!"

"I don't know where my clothes are."

"Joe has the only pants among us. What happened to you? Were you asleep?"

"No. I was here. We were talking."

"Hmm—Further deponent sayeth not. I'll keep your grisly secret. Mother won't know; I gave her another hypo."

"Aren't you jumping at conclusions?"

"My favorite exercise. I hope my nasty suspicions are correct. I wish I had had something better to do than sleep last night. Since it's probably our last night." She leaned over and kissed Barbara. "I like you."

"Thanks, Karen. Me, too. You."

"Let's hold a funeral and preach about what nice guys we are. You made my daddy happy when you had the guts to bid that slam. If you made him happier still, I'm in favor of it." She straightened up. "'Bye. I'll go sort groceries. If Daddy wakes up, yell." She left.

"Barbara?"

"Yes, Hugh? Yes!"

"Keep your voice down. I heard what my daughter said."

"You did?"

"Yes. She's a gentleman. Barbara? I love you. I may not have another chance to say so."

"I love you."

"Darling."

"Shall I call the others?"

"Shortly. Are you comfortable?"

"Oh, very!"

"Then let me rest a bit. I feel woozy."

"As long as you like. Uh, can you wiggle your toes? Do you hurt anyplace?"

"I hurt lots of places, but not too much. Let me see—Yes, I can move everything. All right, call Joe."

"No hurry."

"Better call him. Work to do."

Shortly Mr. Farnham was back in charge. Joe required him to move himself-a mass of bruises but no break, sprain, nor concussion. It seemed to Barbara that Hugh had landed on the bottles and that she had landed on him. She did not discuss her theory.

Hugh's first act was to bind Joe's ribs with elastic bandage. Joe gasped as it tightened but seemed more comfortable with it. The lump on Karen's head was inspected; Hugh decided that there was nothing he could do for it.

"Will somebody fetch the thermometer?" he asked. "Duke?"

"It's busted."

"It's a bimetal job. Shockproof."

"I looked for it," Duke explained, "while you were doctoring. Seems cooler to me. While it may be shockproof, it couldn't stand being mashed between two tanks."

"Oh. Well, it's no big loss."

"Dad? Wouldn't this be a good time to try the spare radio? Just a suggestion."

"I suppose so, but—I hate to tell you, Duke, but you'll probably find it smashed, too. We tried it earlier. No results." He glanced at his wrist. "An hour and half ago. At two A.M. Has anyone else the time?"

Duke's watch agreed.

"We seem to be in fair shape," Hugh decided, "except for water. There are some plastic jugs of water but we need to salvage the tank water; we may have to drink it. With Halazone tablets. Joe, we need utensils of any sort, and everybody bail. Keep it as clean as you can." He added, "When Joe can spare you, Karen, scrounge some breakfast. We've got to eat, even if this is Armageddon."

"And Armageddon sick of it," Karen offered.

Her father winced. "Baby girl, you will write on the blackboard one thousand times: 'I will not make bad puns before breakfast.'"

"I thought it was pretty good, Hugh."

"Don't encourage her, Barbara. All right, get with it."

Karen returned shortly, carrying Dr. Livingstone. "I wasn't much help," she announced, "because somebody has to hang onto this damn cat. He wants to help."

"Kablerrrrt!"

"You did so! I'm going to entice him with sardines and get breakfast. What do you want, Daddy Hugh Boss? Crêpes Suzettes?"

"Yes."

"What you'll get is Spam and crackers."

"All right. How's the bailing going?"

"Daddy, I won't drink that water even with Halazone." She made a face. "You know where it wound up."

"We may have to drink it."

"Well...if you cut it with whisky—"

"Mmm—Every case of liquor is leaking. The two I've opened each has one fifth, unbroken."

"Daddy, you've ruined breakfast."

"The question is, do I ration it evenly? Or save it all for Grace?"

"Oh." Karen's features screwed up in painful decision. "She can have my share. But the others shouldn't be deprived just because Gracie has a yen."

"Karen, at this stage it's not a yen. In a way, for her it's medicine."

"Yeah, sure. And diamond bracelets and sable coats are medicine for me."

"Baby, there's no point in blaming her. It may be my fault. Duke thinks so. When you are my age, you will learn to take people as they are."

"Hush mah mouf. Maybe I'm harsh-but I get tired of bringing friends home and having Mom pass out about dinnertime. Or try to kiss my boy friends in the kitchen."

"She does that?"

"Haven't you seen? No, you probably haven't. Sorry."

"I'm sorry, too. But only on your account. It's a peccadillo, at most. As I was saying, when you get to be my age—"

"Daddy, I don't expect to get to be your age-and we both know it. If we've got even two fifths of liquor, it's probably enough. Why don't you just serve it to whoever needs it?"

The lines in his face got deeper. "Karen, I haven't given up. It's distinctly cooler. We may get out of this yet."

"Well—I guess that's the proper attitude. Speaking of medicine, didn't you squirrel away some Antabuse when we built this monster?"

"Karen, Antabuse doesn't stop the craving; it simply makes the patient deathly ill if he drinks. If your estimate of our chances is correct, can you see any reason why I should force Grace to spend her last hours miserably? I'm not her judge, I'm her husband."

Karen sighed. "Daddy, you have an annoying habit of being right. All right, she can have mine."

"I was merely asking your opinion. You've helped. I've decided."

"Decided how?"

"None of your business, half pint. Get breakfast."

"I'm going to put kerosene in yours. Give me a kiss, Daddy."

He did. "Now pipe down and get to work."

Five of them gathered for breakfast, sitting on the floor as chairs would not stand up. Mrs. Farnham was still lethargic from heavy sedation. The others shared canned meat, crackers, cold Nescafé, canned peaches, and warm comradeship. They were dressed, the men in shorts, Karen in shorts and halter, and Barbara in a muumuu belonging to Karen. Her underwear had been salvaged but was soaked and the air was too moist to dry it.

Hugh announced, "Time for a conference. Suggestions are welcome." He looked at his son.

"One item, Dad-Hugh," Duke answered. "The backhouse took a beating. I patched it and rigged a platform out of boards that had secured the air bottles. Just one thing—" He turned to his sister. "You setter types be careful. It's shaky."

"You be careful. You were the one hard to housebreak. Ask Daddy."

"Stow it, Karen. Good job, Duke. But with six of us I think we should rig a second one. Can we manage that, Joe?"

"Yes, we could. But..."

"But what?"

"Do you know how much oxy is left?"

"I do. We must shift to blower and filter soon. And there is not a working radiation counter left. So we won't know what we'll be letting in. However, we've got to breathe."

"But did you look at the blower?"

"It looked all right."

"It's not. I don't think I can repair it."

Mr. Farnham sighed. "I've had a spare on order for six months. Well, I'll look at it, too. And you, Duke; maybe one of us can fix it."

"Okay."

"Let's assume we can't repair it. Then we use the oxygen as sparingly as possible. After that we can get along, for a while, on the air inside. But there will come a time when we have to open the door."

Nobody said anything. "Smile, somebody!" Hugh went on. "We aren't licked. We'll rig dust filters out of sheets in the door-better than nothing. We still have one radio-the one you mistook for a hearing aid, Barbara. I wrapped it and put it away; it wasn't hurt. I'll go outside and put up an antenna and we can listen to it down here; it could save us. We'll rig a flagpole, from the sides of a bunk perhaps, and fly a flag. A hunting shirt. No, the American flag; I've got one. If we don't make it, we'll go down with our colors flying!"

Karen started clapping. "Don't scoff, Karen."

"I'm not scoffing, Daddy! I'm crying. 'The rockets' red glare-the bombs bursting in air-gave proof through the night—that our flag was still—'" Her voice broke and she buried her face in her hands.

Barbara put an arm around her. Hugh Farnham went on as if nothing had happened. "But we won't go down. Soon they will search this area for survivors. They'll see our flag and take us out-helicopter, probably.

"So our business is to be alive when they come." He stopped to think. "No unnecessary work, no exercise. Sleeping pills for everybody and try to sleep twelve hours a day and lie down all the time; it will make the air last as long as possible. The only work is to repair that blower and we'll knock that off if we can't fix it. Let's see—Water must be rationed. Duke, you are water marshal. See how much pure water there is; work out a schedule to stretch it. There is a one-ounce glass with the medicines; use it to dispense water. That's all, I guess: repair the blower, minimum exercise, maximum sleep, rationed water. Oh, yes! Sweat is wasteful. It's still hot and, Barbara, you've sweat right through that sack. Take it off."

"May I leave the room?"

"Certainly." She left, walking carefully on the steep floor, went into the tank room, and returned wearing her soaked underwear. "That's better," he approved. "Now—"

"Hubert! Hubert! Where are you? I'm thirsty." "Duke, give her one ounce. Charge it to her." "Yes, sir."

"Don't forget that the cat has to have water."

"The dirty water, maybe?"

"Hmm. We won't die through playing fair with our guest. Let's keep our pride."

"He's been drinking the dirty water."

"Well—You boss it. Suggestions, anyone? Joe, do the plans suit you?"

"Well—No, sir."

"So?"

"No exercise, least oxygen used, makes sense. But when it comes time to open the door, where are we?"

"We take our chances."

"I mean, can we? Short on air, panting, thirsty, maybe sick—I'd like to be certain that anyone, Karen say, with a broken arm, can get that door open."

"I see."

"I'd like to try all three doors. I'd like to leave the armor door open. A girl can't handle that crank. I volunteer to try the upper door."

"Sorry, it's my privilege. I go along with the rest. That's why I asked for suggestions. I'm tired, Joe; my mind is fuzzy."

"And if the doors are blocked? Probably rubble against the upper door—"

"We have the jack."

"Well, if we can't use the doors, we should make sure of the escape tunnel. Duke's shoulder isn't so good. My ribs are sore but I can work-today. Tomorrow Duke and I will be stiff and twice as sore. There are those steel bottles cluttering the hatch and plunder stored in the hole. Takes work. Boss, I say we've got to be sure of our escape-while we're still in pretty good shape."

"I hate to order heavy work. But you've convinced me." Hugh stood up, suppressing a groan. "Let's get busy."

"I've got one more suggestion."

"So?"

"You ought to sack in. You haven't been to bed at all and you got banged up pretty hard."

"I'm okay. Duke has a bad shoulder, you've got cracked ribs. And there's heavy work to be done."

"I plan to use block and tackle to skid those bottles aside. Barbara can help. She's husky, for a girl."

"Certainly I can," agreed Barbara. "I'm bigger than Joe is. Excuse me, Joe."

"No argument. Boss. Hugh. I don't like to emphasize it but I thought of this. You admit you're tired. Not surprising, you've been on the go twenty-four hours. Do you mind my saying that I would feel more confident you could get us through if you would rest?"

"He's right, Hugh."

"Barbara, you haven't had any sleep."

"I don't have to make decisions. But I'll lie down and Joe can call me when he needs me. Okay, Joe?"

"Fine, Barbara."

Hugh grinned. "Ganging up on me. All right, I'll take a nap."

A few minutes later he was in the bottom bunk in the men's dormitory, his feet braced against the footboard. He closed his eyes and was asleep before he could get his worries organized.

Duke and Joe found that five of the bolts of the inner door were stuck. "We'll let them be," Joe decided. "We can always drift them back with a sledgehammer. Let's crank back the armor door."

The armor door, beyond the bolted door, was intended to withstand as much blast as the walls. It was cranked into place, or out, by a rack and gear driven by a long crank.

Joe could not budge it. Duke, heavier by forty pounds, put his weight on it-no results. Then they leaned on it together.

"Frozen."

"Yeah."

"Joe, you mentioned a sledgehammer."

The young Negro frowned. "Duke, I would rather your father tried that. We could break the crank. O~ a tooth on the rack."

"The trouble is, we're trying to crank a ton or so of door uphill, when it was meant to move on the level."

"Yes. But this door always has been pesky."

"What do we do?"

"We get at the escape tunnel."

A block and tackle was fastened to a hook in the ceiling; the giant bottles were hauled out of the jumble and stacked, with Barbara and Karen heaving on the line and the men guiding them and then bracing them so that the stack could not roll. When the middle of the floor was clear they were able to get at the manhole cover to the tunnel. It was the massive, heavy-traffic sort and the hook in the ceiling was for lifting it.

It came up, creaking. It swung suddenly because of the 300 out-of-plumb of everything, taking a nick out of Duke's shin and an oath out of Duke.

The hole was packed with provisions. The girls dug them out, Karen, being smaller, going down inside as they got deeper and Barbara stacking the stuff.

Karen stuck her head up. "Hey! Water Boss! There's canned water here."

"Well, goody for me!"

Joe said, "I had forgotten that. This hatch hasn't been opened since the shelter was stocked."

"Joe, shall I knock out the braces?"

"I'll get 'em. You clear out the supplies. Duke, this isn't armored the way the door is. Those braces hold a piece of boiler plate against the opening, with the supplies behind it and the manhole cover holding it all down. Inside the tunnel, at ten foot intervals, are walls of sandbags, and the mouth has dirt over it. Your father said the idea was to cofferdam a blast. Let it in, slow it down, a piece at a time."

"We'll find those sandbags jammed against that boiler plate."

"If so, we'll dig 'em out."

"Why didn't he use real armor?"

"He thought this was safer. You saw what happened to the doors. I would hate to have to pry loose a steel barrier in that tunnel."

"I see. Joe, I'm sorry I ever called this place a 'hole in the ground.'"

"Well, it isn't. It's a machine-a survival machine."

"I'm through," Karen announced. "Some gentleman help me up. Or you, Duke."

"I'll put the lid on with you under it." Duke helped his sister to climb out.

Joe climbed down, flinching at the strain on his ribs. Dr. Livingstone had been superintending. Now he followed his friend into the hole, using Joe's shoulders as a landing.

"Duke, if you'll hand me that sledge—Stay out of the way, Doc. Get your tail down."

"Want me to take him?" asked Karen.

"No, he likes to be in on things. Somebody hold the light." The braces were removed and piled on the floor above.

"Duke, I need the tackle now. I don't want to hoist the plate. Just take its weight so I can swing it back. It's heavy."

"Here it comes."

"That's good. Doc! Darn you, Doc! Get out from under my feet! Just a steady strain, Duke. Somebody hand me the flashlight. I'll swing her back and have a look."

"And get a face full of isotopes."

"Have to chance it. A touch more—That's got her, she's swinging free."

Then Joe didn't say anything. At last Duke said, "What do you see?"

"I'm not sure. Let me swing it back, and hand me one brace."

"Right over your head. Joe, what do you see?"

The Negro was swinging the plate back when suddenly he grunted. "Doe! Doe, come back here! That little scamp! Between my legs and into the tunnel. Doc!"

"He can't get far."

"Well—Karen, will you go wake your father?"

"Damn it, Joe! What do you see?" "Duke, I don't know. That's why I need Hugh." "I'm coming down."

"There isn't room. I'm coming up, so Hugh can go down."

Hugh arrived as Joe scrambled out. "Joe, what do you have?"

"Hugh, I would rather you looked yourself."

"Well—I should have built a ladder for this. Give me a hand." Hugh went down, removed the brace, swung back the plate.

He stared even longer than Joe had, then called up. "Duke! Let's heave this plate out."

"What is it, Dad?"

"Get the plate out, then you can come down." It was hoisted out; father and son exchanged places. Duke stared down the tunnel. "That's enough, Duke. Here's a hand."

Duke rejoined them; his father said, "What do you think?"

"I don't believe it."

"Daddy," Karen said tensely, "somebody is going to talk, or I'm going to wrap this sledgehammer around somebody's skull."

"Yes, baby. Uh, there's room for you girls to go down together."

Barbara was handed down by Duke and Hugh, she helped Karen down over her. Both girls scrunched down and looked.

Karen said softly, "I'll be goldarned!" She started crawling into the tunnel.

Hugh called out, "Baby! Come back!" Karen did not answer. He added, "Barbara, tell me what you see."

"I see," Barbara said slowly, "a beautiful wooded hillside, green trees, bushes, and a lovely sunny day."

"That's what we saw."

"But it's impossible."

"Yes."

"Karen is outside. The tunnel isn't more than eight feet long. She's holding Dr. Livingstone. She says, 'Come on out!" "Tell her to get away from the mouth. It's probably radioactive."

"Karen! Get away from the tunnel! Hugh, what time is it?"

"Just past seven."

"Well, it's more like noon outside. I think."

"I've quit thinking." "Hugh, I want to go out."

"Uh—Oh, hell! Don't tarry at the mouth. And be careful."

"I will." She started to crawl.

Chapter 4

Hugh turned to his deputy. "Joe, I'm going out. Get me a fortyfive and a belt. I shouldn't have let those girls go out unarmed." He eased himself down the hole. "You two guard the place."

His son said, "Against what? There's nothing to guard in here."

His father hesitated. "I don't know. Just a spooky feeling. All right, come along. But arm yourself. Joe!"

"Coming!"

"Joe, arm Duke and yourself. Then wait until we get outside. If we don't come back right away, use your judgment. This situation I hadn't anticipated. It just can't be."

"But it is."

"So it is, Duke." Hugh buckled on the pistol, dropped to his knees. Framed in the tunnel's mouth was still the vision of lush greenness where there should have been blasted countryside and crater glass. He started to crawl.

He stood up and moved away from the mouth, then looked around.

"Daddy! Isn't this lovely!"

Karen was below him on a slope that ran down to a stream. Across it the land rose and was covered with trees. On this side was a semi-clearing. The sky was blue, sunlight warm and bright, and there was no sign of war's devastation, nor any sign of man-not a building, a road, a path, no contrails in the sky. It was wilderness, and there was nothing that he recognized.

"Daddy, I'm going down to the creek."

"Come here! Where's Barbara?"

"Up here, Hugh." He turned and saw her up the slope, above the shelter. "I'm trying to figure out what happened. What do you think?"

The shelter sat cocked on the slope, a huge square monolith. Dirt clung to it save where the tunnel had cracked off and a jagged place where the stairwell had been. The armor door was exposed just above him.

"I don't think," he admitted.

Duke emerged, dragging a rifle. He stood up, looked around, and said nothing.

Barbara and Karen joined them. Dr.—Livingstone-I-Presume came bounding up to tag Hugh on the ankle and dash away. Obviously the Persian gave the place full approval; it was just right for cats.

Duke said, "I give up. Tell me."

Hugh did not answer. Karen said, "Daddy, why can't I go down to the creek? I'm going to take a bath. I stink."

"It won't hurt you to stink. I'm confused. I don't want to be confused still more by worrying about your drowning—"

"It's shallow."

"—or eaten by a bear, or falling in quicksand. You girls go inside, arm yourselves, and then come out if you want to. But stick close and keep your eyes peeled. Tell Joe to come out."

"Yes, sir." The girls went.

"What do you think, Duke?"

"Well...I reserve my opinion."

"If you have one, it's more than I have. Duke, I'm stonkered. I planned for all sorts of things. This wasn't on the list. If you have opinions, for God's sake spill them."

"Well—This looks like mountain country in Central America. Of course that's impossible."

"No point in worrying about whether it's possible. Suppose it was Central America. What would you watch for?"

"Let me see. Might be cougars. Snakes certainly. Tarantulas and scorpions. Malaria mosquitoes. You mentioned bears."

"I meant bears as a symbol. We're going to have to watch everything, every minute, until we know what we're up against."

Joe came out, carrying a rifle. He kept quiet and looked around. Duke said, "We won't starve. Off to the left down by the stream."

Hugh looked. A dappled fawn, hardly waist high, was staring at them, apparently unafraid. Duke said, "Shall I drop it?" He raised his rifle.

"No. Unless you are dead set on fresh meat."

"All right. Pretty thing, isn't it?"

"Very. But it's no North American deer I ever saw. Duke? Where are we? And how did we get here?"

Duke gave a lopsided grin. "Dad, you appointed yourself Fuehrer. I'm not supposed to think."

"Oh, rats!"

"Anyhow, I don't know. Maybe the Russkis developed a hallucination bomb."

"But would we all see the same thing?"

"No opinion. But if I had shot that deer, Ill bet we could have eaten it."

"I think so, too. Joe? Ideas, opinions, suggestions?"

Joe scratched his head. "Mighty pretty country. But I'm a city boy."

"One thing you can do, Hugh."

"What, Duke?"

"Your little radio. Try it."

"Good idea." Hugh crawled inside, caught Karen about to climb down, sent her back for it. While he waited, he wondered what he had that was suitable for a ladder? Chinning themselves in a six-foot manhole was tedious.

The radio picked up static but nothing else. Hugh switched it off. "We'll try it tonight. I've gotten Mexico with it at night, even Canada." He frowned. "Something ought to be on the air. Unless they smeared us completely."

"Dad, you aren't thinking straight."

"How, Duke?"

"This area did not get smeared."

"That's why I can't understand a radio silence."

"Yet Mountain Springs really caught it. Ergo, we aren't in Mountain Springs."

"Who said we were?" Karen answered. "There's nothing like this in Mountain Springs. Nor the whole state."

Hugh frowned. "I guess that's obvious." He looked at the shelter-gross, huge, massive. "But where are we?"

"Don't you read comic books, Daddy? We're on another planet."

"Don't joke, baby girl. I'm worried."

"I wasn't joking. There is nothing like this within a thousand miles of home-yet here we are. Might as well be another planet. The one we had was getting used up."

"Hugh," Joe said, "it sounds silly. But I agree with Karen."

"Why, Joe?"

"Well, we're someplace. What happens when an H-bomb explodes dead on you?"

"You're vaporized."

"I don't feel vaporized. And I can't see that big hunk of concrete sailing a thousand miles or so, and crashing down with nothing to show for it but cracked ribs and a hurt shoulder. But Karen's idea—" He shrugged. "Call it the fourth dimension. That last big one nudged us through the fourth dimension."

"Just what I said, Daddy. We're on a strange planet! Let's explore!"

"Slow down, honey. As for another planet—Well, there isn't any rule saying we have to know where we are when we don't. The problem is to cope."

Barbara said, "Karen, I don't see how this can be anything but Earth."

"Why? Spoilsport."

"Well—" Barbara chucked a pebble at a tree. "That's a eucalyptus, and an acacia beyond it. Not at all like Mountain Springs but a normal grouping of tropical and subtropical flora. Unless your 'new planet' evolved plants just like Earth, this has to be Earth."

"Spoilsport," Karen repeated. "Why shouldn't plants evolve the same way on another planet?"

"Well, that would be as remarkable as finding the same—"

"Hubert! Hubert! Where are you? I can't find you!" Grace Farnham's voice echoed out the tunnel.

Hugh ducked into the tunnel. "Coming!"

They ate lunch under a tree a little distance from the shelter. Hugh decided that the tunnel had been buried so deeply that the chance of its mouth being more radioactive than the interior was negligible. As for the roof, he was not certain. So he placed a dosimeter (the only sort of radiation instrument that had come through the pummeling) on top of the shelter to compare it later with one inside. He was relieved to see that the dosimeters agreed that they had suffered less than lethal dosage-although large-and that they checked each other.

The only other precaution he took was for them to keep guns by them-all but his wife. Grace Farnham "couldn't stand guns," and resented having to eat with guns in sight.

But she ate with good appetite. Duke had built a fire and they were blessed with hot coffee, hot canned beef, hot peas, hot canned sweet potatoes, and canned fruit salad-and cigarettes with no worry about air or fire.

"That was lovely," Grace admitted. "Hubert dear? Do you know what it would take to make it just perfect? You don't approve of drinking in the middle of the day but these are special circumstances and my nerves are still a teensy bit on edge-so, Joseph, if you will just run back inside and fetch a bottle of that Spanish brandy—"

"Grace."

"What, dear?-- then all of us could celebrate our miraculous escape. You were saying?"

"I'm not sure there is any."

"What? Why, we stored two cases of it!"

"Most of the liquor was broken. That brings up something else. Duke, you are out of a job as water boss. I'd like you to take over as bartender. There are at least two unbroken fifths. Whatever you find, split it six ways and make it share and share alike, whether it's several bottles each, or just a part of a bottle."

Mrs. Farnham looked blank, Duke looked uneasy. Karen said hastily, "Daddy, you know what I said."

"Oh, yes. Duke, your sister is on the wagon. So hold her share as a medicinal reserve. Unless she changes her mind."

"I don't want the job," said Duke.

"We have to divide up the chores, Duke. Oh yes, do the same with cigarettes. When they are gone, they're gone, whereas I have hopes that we can distill liquor later." He turned to his wife. "Why not have a Miltown, dear?"

"Drugs! Hubert Farnham, are you telling me that I can't have a drink?"

"Not at all. At least two fifths came through. Your share would be about a half pint. If you want a drink, go ahead."

"Well! Joseph, run inside and fetch me a bottle of brandy."

"No!" her husband countermanded. "If you want it, Grace, fetch it yourself."

"Oh, shucks, Hugh, I don't mind."

"I do. Grace, Joe's ribs are cracked. It hurts him to climb. You can manage the climb with those boxes as steps-and you're the only one who wasn't hurt."

"That's not true!"

"Not a scratch. Everybody else was bruised or worse. Now about jobs—I want you to take over as cook. Karen will be your assistant. Okay, Karen?"

"Certainly, Daddy."

"It will keep you both busy. We'll build a grill and Dutch oven, but it will be cook over a campfire and wash dishes in the creek for a while."

"So? And will you please tell me, Mr. Farnham, what Joseph is going to do in the meantime? To earn his wages?"

"Will you please tell me how we'll pay wages? Dear, dear—can't you see that things have changed?"

"Don't be preposterous! Joseph will get every cent coming to him and he knows it-just as soon as this mess is straightened out. After all, we've saved his life. And we've always been good to him, he won't mind waiting. Will you, Joseph?"

"Grace! Quiet down and listen. Joe is no longer our servant. He is our partner in adversity. We'll never pay him wages again. Quit acting like a child and face the facts. We're broke. We're never going to have any money again. Our house is gone. My business is gone. The Mountain Exchange Bank is gone. We're wiped out...save for what we stored in the shelter. But we are lucky. We're alive and by some miracle have a chance of scratching a living out of the ground. Lucky. Do you understand?"

"I understand you are using it as an excuse to bully me!"

"You've merely been assigned a job to fit your talents."

"Kitchen drudge! I was your kitchen slave for twenty-five years! That's long enough. I won't do it! Do you understand me?"

"You are wrong on both points. You've had a maid most of our married life...and Karen washed dishes from the time she could see over the sink. Granted, we had lean years. Now we're going to have more lean years-and you're going to help. Grace, you are a fine cook when you want to be. You will cook...or you won't eat."

"Oh!" She burst into tears and fled into the shelter.

Her behind was disappearing when Duke got up to follow. His father stopped him. "Duke!"

"Yes."

"One word and you can join your mother. I'm going exploring, I want you to go with me."

Duke hesitated. "All right."

"We'll start shortly. I think your job should be 'hunter.' You're a better shot than I am and Joe has never hunted. What do you think?"

"Uh—All right."

"Good. Well, go soothe her down and, Duke, see if you can make her see the facts."

"Maybe. But I agree with Mother. You were bullying her."

"As may be. Go ahead."

Duke turned abruptly and left. Karen said quietly, "I think so too, Daddy. You were bullying."

"I intended to. I judged it called for bullying. Karen, if I hadn't tromped on it, she would do no work...and would order Joe around, treat him as a hired cook."

"Shucks, Hugh, I don't mind cooking. It was a pleasure to rustle lunch."

"She's a better cook than you are, Joe, and she's going to cook. Don't let me catch you fetching and carrying for her."

The younger man grinned. "You won't catch me."

"Better not. Or I'll skin you and nail it to the barn. Barbara, what do you know about farming?"

"Very little."

"You're a botanist."

"No, I simply might have been one, someday."

"Which makes you eight times as much of a farmer as the rest of us. I can barely tell a rose from a dandelion; Duke knows even less and Karen thinks you dig potatoes out of gravy. You heard Joe say he was a city boy. But we have seeds and a small supply of fertilizers. Also garden tools and books about farming. Look over what we've got and find a spot for a garden. Joe and I will do the spading and such. But you will have to boss."

"All right. Any flower seeds?"

"How did you know?"

"I just hoped."

"Annuals and perennials both. Don't look for a spot this afternoon; I don't want you girls away from the shelter until we know the hazards. Joe, today we should accomplish two things, a ladder and two privies. Barbara, how are you as a carpenter?"

"Just middlin'. I can drive a nail."

"Don't let Joe do what you can do; those ribs have to heal. But we need a ladder. Karen, my little flower, you have the privilege of digging privies."

"Gosh. Thanks!"

"Just straddle ditches, one as the powder room, the other for us coarser types. Joe and I will build proper Chic Sales jobs later. Then we'll tackle a log cabin. Or a stone-wall job."

"I was wondering if you planned to do any work, Daddy."

"Brainpower, darling. Management. Supervision. Can't you see me sweating?" He yawned. "Well, a pleasant afternoon, all. I'll stroll down to the club, have a Turkish bath, then enjoy a long, tall planter's punch."

"Daddy, go soak your head. Privies, indeed!"

"The Kappas would be proud of you, dear."

Hugh and his son left a half hour later. "Joe," Hugh cautioned, "we plan to be back before dark but if we get caught, we'll keep a fire going all night and come back tomorrow. If you do have to search for us, don't go alone; take one of the girls. No, take Karen; Barbara has no shoes, just some spike heeled sandals. Damn. Moccasins we'll have to make. Got it?"

"Sure."

"We'll head for that hill-that one. I want to get high enough to get the lay of the land-and maybe spot signs of civilization." They set out-rifles, canteens, hand ax, machete, matches, iron rations, compasses, binoculars, mountain boots, coveralls. Coveralls and boots fitted Duke as well as Hugh; Duke found that his father had stocked clothes for him.

They took turns, with the man following blazing trail and counting paces, the leader keeping lookout, compass direction, and record.

The high hill Hugh had picked was across the stream. They explored its bank and found a place to wade. Everywhere they flushed game. The miniature deer were abundant and apparently had never been hunted. By man, at least—Duke saw a mountain lion and twice they saw bears.

It seemed to be about three o'clock local time as they approached the summit. The climb was steep, cluttered with undergrowth, and neither man was in training. When they reached the flattish summit Hugh wanted to throw himself on the ground.

Instead he looked around. To the east the ground dropped off. He stared out over miles of prairie.

He could see no sign of human life. He adjusted his binoculars and started searching. He saw moving figures, decided that they were antelope-or cattle; he made mental note that these herds must be watched. Later, later --"Hugh?"

He lowered his binoculars. "Yes, Duke?"

"See that peak? It's fourteen thousand one hundred and ten feet high."

"I won't argue."

"That's Mount James. Dad, we're home!"

"What do you mean?"

"Look southwest. Those three gendarmes on that profile. The middle one is where I broke my leg when I was thirteen. That pointed mountain between there and Mount James—Hunter's Horn. Can't you see? The skyline is as distinctive as a fingerprint. This is Mountain Springs!"

Hugh stared. This skyline he knew. His bedroom window had been planned to let him see it at dawn; many sunsets he had watched it from his roof.

"Yes."

"Yes," Duke agreed. "Damned if I know how. But as I figure it"—he stomped the ground—"we're on the high reservoir. Where it ought to be. And—" His brow wrinkled. "As near as I can tell, our shelter is smack on our lot. Dad, we didn't go anywhere!"

Hugh took out the notebook in which were recorded paces and compasses courses, did some arithmetic. "Yes. Within the limits of error."

"Well? How do you figure it?"

Hugh looked at the skyline. "I don't. Duke, how much daylight do we have?"

"Well...three hours. The sun will be behind the mountains in two."

"It took two hours to get here; we should make it back in less. Do you have any cigarettes?"

"May I have one? Charged against me of course. I would like to rest about one cigarette, then start back." He looked around. "It's open up here. I don't think a bear would approach us." He placed his rifle and belt on the ground, settled down.

Duke offered a cigarette to his father, took one himself. "Dad, you're a cold fish. Nothing excites you."

"So? I'm so excitable that I had to learn never to give into it."

"Doesn't seem that way to other people." They smoked in silence, Duke seated, Hugh sprawled out. He was close to exhaustion and wished that he did not have to hike back.

Presently Duke added, "Besides that, you enjoy bullying." His father answered, "I suppose so, if you class what I do as bullying. No one ever does anything but what he wants to do—'enjoys'—within the possibilities open to him. If I change a tire, it's because I enjoy it more than being stranded."

"Don't get fancy. You enjoy bullying Mother. You enjoyed spanking me as a kid...until Mother put her foot down and made you stop."

His father said, "We had better start back." He reached for his belt and rifle.

"Just a second. I want to show you something. Never mind your gear, this won't take a moment."

Hugh stood up. "What is it?"

"Just this. Your Captain Bligh act is finished." He clouted his father. "That's for bullying Mother!" He clouted him from the other side and harder, knocking his father off his feet. "And that's for having that nigger pull a gun on me!"

Hugh Farnham lay where he had fallen. "Not 'nigger,' Duke. Negro."

"He's a Negro as long as he behaves himself. Pulling a gun on me makes him a goddam nigger. You can get up. I won't hit you again."

Hugh Farnham got to his feet. "Let's start back."

"Is that all you've got to say? Go ahead. Hit me. I won't hit back."

"I didn't break my parole. I waited until we left the shelter."

"Conceded. Shall I lead? Better, perhaps."

"Do you think I'm afraid you might shoot me in the back? Look, Dad, I had to do it!"

"Did you?"

"Hell, yes. For my own self-respect."

"Very well." Hugh buckled on his belt, picked up his gun, and headed for the last blaze.

They hiked in silence. At last Duke said, "Dad?"

"Yes, Duke?"

"I'm sorry."

"Forget it."

They went on, found where they had forded the stream, crossed it. Hugh hurried, as it was growing darker. Duke closed up again. "Just one thing, Dad. Why didn't you assign Barbara as cook? She's the freeloader. Why pick on Mother?"

Hugh took his time in answering. "Barbara is no more a freeloader than you are, Duke, and cooking is the only thing Grace knows. Or were you suggesting that she loaf while the rest of us work?"

"No. Oh, we all have to pitch in-granted. But no more bullying, no more bawling Mother out in public. Understand me?"

"Duke."

"Yeah?"

"I've been studying karate three afternoons a week the past year."

"So?"

"Don't try it again. Shooting me in the back is safer."

"I hear you."

"Until you decide to shoot me, it would be well to accept my leadership. Or do you wish to assume the responsibility?"

"Are you offering it?"

"I am not in a position to. Perhaps the group would accept you. Your mother would. Possibly your sister would prefer you. Concerning Barbara and Joe, I offer no opinion."

"How about you, Dad?"

"I won't answer that; I owe you nothing. But until you decide to make a bid for leadership, I expect the same willing discipline you showed under parole."

"'Willing discipline' indeed!"

"In the long run there is no other sort. I can't quell a mutiny every few hours-and I've had two from you plus an utter lack of discipline from your mother. No leader can function on those terms. So I will assume your willing discipline. That includes no interference should I decide again to use what you call 'bullying.'"

"Now see here, I told you I would not stand for—"

"Quiet! Unless you make up your mind to that, your safest choice is to shoot me in the back. Don't come at me with bare hands or risk giving me a chance to shoot first. At the next sign of trouble, Duke, I will kill you. If possible. One of us will surely be killed."

They trudged along in silence, Mr. Farnham never looking back. At last Duke said, "Dad, for Christ's sake, why can't you run things democratically? I don't want to boss things, I simply want you to be fair about it."

"Mmm, you don't want to boss. You want to be a backseat driver-with a veto over the driver."

"Nuts! I simply want things run democratically."

"You do? Shall we vote on whether Grace is to work like the rest of us? Whether she shall hog the liquor? Shall we use Robert's Rules of Order? Should she withdraw while we debate it? Or should she stay and defend herself against charges of indolence and drunkenness? Do you wish to submit your mother to such ignominy?"

"Don't be silly!"

"I am trying to find out what you mean by 'democratically.' If you mean putting every decision to a vote, I am willing-if you will bind yourself to abide by every majority decision. You're welcome to run for chairman. I'm sick of the responsibility and I know that Joe does not like being my deputy."

"That's another thing. Why should Joe have any voice in these matters?"

"I thought you wanted to do it 'democratically'?"

"Yes, but he is—"

"What, Duke? A 'nigger'? Or a servant?"

"You've got a nasty way of putting things."

"You've got nasty ideas. We'll try formal democracy-rules of order, debate, secret ballot, everything-any time you want to try such foolishness. Especially any time you want to move a vote of no confidence and take over the leadership...and I'm so bitter as to hope that you succeed. In the meantime we do have democracy."

"How do you figure?"

"I'm serving by consent of the majority-four to two, I think. But that doesn't suit me; I want it to be unanimous, I can't put up indefinitely with wrangling from the minority. You and your mother, I mean. I want it to be five to one before we get back, with your assurance that you will not interfere in my efforts to persuade, or cajole, or bully, your mother into accepting her share of the load-until you care to risk a vote of no confidence."

"You're asking me to agree to that?"

"No, I'm telling you. Willing discipline on your part...or at the next clash one of us will be killed. I won't give you the slightest warning. That's why your safest course is to shoot me in the back."

"Quit talking nonsense! You know I won't shoot you in the back."

"So? I will shoot you in the back or anywhere at the next hint of trouble. Duke, I can see only one alternative. If you find it impossible to give willing disciplined consent, if you don't think you can displace me, if you can't bring yourself to kill me, if you don't care to risk a clash in which one of us will be killed, then there is still a peaceful solution."

"What is it?"

"Any time you wish, you can leave. I'll give you a rifle, ammunition, salt, matches, a knife, whatever you find needful. You don't deserve them but I won't turn you out with nothing."

Duke gave a bitter laugh. "Sending me out to play Robinson Crusoe...and leaving all the women with you!"

"Oh, no! Any who wish are free to go. With a fair share of anything and some to boot. All three women if you can sell the idea."

"I'll think about it."

"Do. And do a little politicking and size up your chances of winning a vote against me 'democratically'—while being extraordinarily careful not to cross wills with me and thereby bring on a showdown sooner than you wish. I warn you, I'm feeling very short-tempered; you loosened one of my teeth."

"I didn't mean to."

"That wasn't the way it felt. There's the shelter; you can start that 'willing discipline' by pretending that we've had a lovely afternoon."

"Look, Dad, if you won't mention—"

"Shut up. I'm sick of you."

As they neared the shelter Karen saw them and yoohooed; Joe and Barbara came crawling out the tunnel. Karen waved her shovel. "Come see what I've done!"

She had dug privies on each side of the shelter. Saplings formed frameworks which had been screened by tacking cardboard from liquor cases. Seats had been built of lumber remnants from the tank room. "Well?" demanded Karen. "Aren't they gorgeous?"

"Yes," agreed Hugh. "Much more lavish than I had expected." He refrained from saying that they had cost most of the lumber.

"I didn't do it all. Barbara did the carpentry. You should hear her swear when she hits her thumb."

"You hurt your thumb, Barbara?"

"It'll get well. Come try the ladder."

"Sure thing." He started inside; Joe stopped him. "Hugh, while we've still got light, how about seeing something?"

"All right. What?"

"The shelter. You've been talking about building a cabin. Suppose we do: what do we have? A mud floor and a roof that leaks, no glass for windows and no doors. Seems to me the shelter is better."

"Well, perhaps," agreed Hugh. "I had thought we could use it while pioneering, if we had to."

"I don't think it's too radioactive, Hugh. That dosimeter should have gone skyhigh if the roof is really 'hot.' It hasn't."

"That's good news. But, Joe, look at it. A slant of thirty degrees is uncomfortable. We need a house with a level floor."

"That's what I mean. Hugh, that hydraulic jack-it's rated at thirty tons. How much does the shelter weigh?"

"Oh. Let me think how many yards of mix we used and how much steel." Hugh pondered it, got out his notebook. "Call it two hundred fifty tons."

"Well, it was an idea."

"Maybe it's a good idea." Hugh prowled around the shelter, a block twenty feet square and twelve high, sizing up angles, estimating yardages.

"It can be done," Hugh decided. "We dig under on the uphill side, to the center line, cutting out enough to let that side settle down level. Damn, I wish we had power tools."

"How long will it take?"

"Two men could do it in a week if they didn't run into boulders. With no dynamite a boulder can be a problem."

"Too much of a problem?"

"Always some way to cope. Let's pray we don't run into solid rock. As we get it dug out, we brace it with logs. At the end we snag the logs out with block and tackle. Then we put the jack under the downhill side and tilt it into place, shore it up and fill with what we've removed. Lots of sweat."

"I'll start bright and early tomorrow."

"You will like hell. Not until your ribs have healed. I will start tomorrow, with two husky girls. Plus Duke, if his shoulder isn't sore, after he shoots us a deer; we've got to conserve canned goods. Reminds me-what was done with the dirty cans?"

"Buried 'em."

"Dig them up and wash them. A tin can is more valuable than gold; we'll use them for all sorts of things. Let's go in. I've still to admire the ladder."

The ladder was two trimmed saplings, with treads cut from boards and notched and nailed. Hugh reflected again that lumber had been used too lavishly; treads should have been fashioned from limbs. Damn it, there were so many things that could no longer be ordered by picking up a telephone. Those rolls of Scottissue, one at each privy —They shouldn't be left outdoors; what if it rained? All too soon it would be either a handful of leaves, or do without.

So many, many things they had always taken for granted! Kotex—How long would their supply last? And what did primitive women use? Something, no doubt, but what?

He must warn them that anything manufactured, a scrap of paper, a dirty rag, a pin, all must be hoarded. Caution them, hound them, nag them endlessly.

"That's a beautiful ladder, Barbara!"

She looked very pleased. "Joe did the hard parts."

"I did not," Joe denied. "I just gave advice and touched up the chisel."

"Well, whoever did it, it's lovely. Now we'll see if it will take my weight."

"Oh, it will!" Barbara said proudly.

The shelter had all lights burning. Have to caution them about batteries, too. Must tell the girls to look up how to make candles. "Where's Grace, Karen?"

"Mother isn't well. She's lying down."

"So? You had better start dinner." Hugh went into the women's bay, saw what sort of not-well his wife suffered. She was sleeping heavily, mouth open, snoring, and was fully dressed. He reached down, peeled back an eyelid; she did not stir. "Duke."

"Yes?"

"Come here. Everybody else outside."

Duke joined him. Hugh said, "After lunch, did you give Grace a drink?"

"Huh? You didn't say not to."

"I wasn't criticizing. How much?"

"Just a highball. An ounce and a half of Scotch, with water."

"Does that look like one highball? Try to rouse her."

Duke tried, then straightened up. "Dad, I know you think I'm a fool. But I gave her just one drink. Damn it, I'm more opposed to her drinking than you are!"

"Take it easy, Duke. I assume that she got at the bottle after you left."

"Well, maybe." Duke frowned. "As soon as I found an unbroken bottle I gave Mother that drink. Then I took inventory. I think I found it all, unless you have some hidden away—"

"No, the cases were together. Six cases."

"Right. I found thirteen unbroken bottles, twelve fifths and a quart of bourbon. I remember thinking that was two fifths each and the quart I would keep in reserve. I had opened one bottle of King's Ransom. I made a pencil mark on it. We'll know if she found it."

"You hid the liquor?"

"I stashed it in the upper bunk on the other side; I figured it would be hard for her to climb up there—I'm not a complete fool, Dad. She couldn't see me, she was in her bunk. But maybe she guessed."

"Let's check."

Thirteen bottles were between springs and mattress; twelve were unopened, the thirteenth was nearly full. Duke held it up. "See? Right to the line. But there was another bottle we had a snort from, after that second bombing. What happened to it?"

"Barbara and I had some after you went to sleep, Duke. There was some left. I never saw it again. It was in the tank room."

"Oh! I did, while we were bailing. Busted. I give up-where did she get it?"

"She didn't, Duke."

"What do you mean?"

"It wasn't liquor." Hugh went to the medicines drawer, got a bottle with a broken seal. "Count these Seconal capsules. You had two last night."

"Yeah."

"Karen had one at bedtime, one later; Joe had one. Neither Barbara nor I had any, nor Grace. Five."

"Hold it, I'm counting."

His father began to count as Duke pushed them aside.

"Ninety-one," Duke announced.

"Check." Hugh put the capsules back. "So she took four."

"What do we do, Dad? Stomach pump? Emetic?"

"Nothing."

"Why, you heartless—She tried to kill herself!"

"Slow down, Duke. She did nothing of the sort. Four capsules, six grains, simply produces stupor in a healthy person—and she's healthy as a horse; she had a physical a month ago. No, she snitched those pills to get drunk on." Hugh scowled. "An alcohol drunk is bad enough. But people kill themselves without meaning to with sleeping pills."

"Dad, what do you mean, 'she took them to get drunk on'?"

"You don't use them?"

"I never had one in my life until those two last night."

"Do you remember how you felt just before you went to sleep? Warm and happy and woozy?"

"No. I just lay down and konked out. Next thing I knew I was against the wall on my shoulders."

"You haven't developed tolerance for them. Grace knows what they can do. Drunk, a very happy drunk. I've never known her to take more than one but she's never been chopped off from liquor before. When a person eats sleeping pills because he can't get liquor, he's in a bad way."

"Dad, you should have kept liquor away from her long ago!"

"How, Duke? Tell her she couldn't have a drink? Take them away from her at parties? Quarrel with her in public? Fight with her in front of Joe? Not let her have cash, close out her bank account, see that she had no credit? Would that have stopped her from pawning furs?"

"Mother would never have done that."

"It's typical behavior in such cases. Duke, it is impossible to keep liquor away from any adult who is determined to have it. The United States Government wasn't that powerful. I'll go further. It is impossible for anyone to be responsible for another person's behavior. I spoke of myself as 'responsible' for this group; that was verbal shorthand. The most I can door you, or any leader-is to encourage each one to be responsible for himself."

Hugh chewed his thumb and looked anguished. "Perhaps my mistake was in letting her loaf. But she considered me stingy because I let her have only a houseboy and a cleaning woman. Duke, do you see anything I could have done short of beating her?"

"Uh...that's beside the point. What do we do now?"

"So it is, counselor. Well, we keep these pills away from her."

"And I'm damned well going to chop off the liquor completely!"

"Oh, I wouldn't."

"You wouldn't, eh? Did I hear correctly when you said I was liquor boss?"

"The decision is up to you. I simply said that I wouldn't. I think it's a mistake."

"Well, I don't. Dad, I won't go into the matter of whether you could, or should, have stopped Mother from getting the way she is. But I intend to stop it."

"Very well, Duke. Mmm, she's going to be cut off anyhow in a matter of days. It might be easier to taper her off. If you decide to, I'll contribute a bottle from my share. Hell, you can have both of mine. I like a snort as well as the next man. But Grace needs it."

"That won't be necessary," his son said crisply. "I'm not going to let her have any. Get it over with, she'll be well that much sooner."

"Your decision. May I offer a suggestion?"

"What?"

"In the morning, be up before she is. Move the liquor out and bury it, someplace known only to you. Then have open one bottle at a time and dispense it by the ounce. Tell the others to drink where she can't see it. You had better ditch the open bottle outdoors, too."

"Sounds reasonable."

"But that makes it all the more urgent to keep sleeping pills away from her."

"Bury them?"

"No. We need them inside, and it's not just sleeping pills. Demerol. Hypodermic needles. Several drugs, some poisonous and some addictive and all irreplaceable. If she can't find Seconal-five bottles of a hundred each, it's bulky-there's no telling what she might get into. We'll use the vault."

"A little safe let into concrete back of that cupboard. Nothing in it but birth certificates and such, and some reserve ammo, and two thousand silver dollars. Toss the money in with the hardware, we'll use it as metal. The combo is 'July 4th, 1776'—'74-17-76.' Better change it, Grace may know it."

"At once!"

"No rush, she won't wake up. 'Reserve ammo—' Duke, you were liquor and cigarette boss and now you are drugs boss. I'm going whole hog, you are rationing officer. Responsible for everything that can't be replaced: liquor, tobacco, ammunition, nails, toilet tissue, matches, dry cells, Kleenex, needles—"

"Good God! Got any more dirty jobs?"

"Lots of them. Duke, I'm trying to make it each according to his talents. Joe is too diffident-and he missed obvious economies today. Karen doesn't think ahead. Barbara feels like a freeloader even though she's not, she wouldn't crack down. I would, but I'm swamped. You are a natural for it; you don't hesitate to assert yourself. And you have foresight when you take the trouble to use it."

"Thank you too much. All right."

"The hardest thing to drill into them will be saving every scrap of metal and paper and cloth and lumber, things Americans have wasted for years. Fishhooks. Groceries aren't as important; we'll replace them, you by hunting, Barbara by gardening. Nevertheless, better note what can't be replaced. Salt. You must ration salt especially."

"Salt?"

"Unless you run across a salt lick in hunting. Salt—Damn it, we're going to have to tan leather. All I used to do with a hide was rub it with salt and give it to the taxidermist. Is salt necessary?"

"I don't know."

"I'll look it up. Damnation, we're going to find that I failed to stock endless things we'll be miserable without."

"Dad," Duke admitted, "I think you've done mighty well."

"So? That's pleasant to hear. We'll manage to—"

"Daddy!"

"Yes?" Hugh went to the tank room. Karen's head stuck up out of the manhole.

"Daddy, can we please come in? It's dark and scary and something big chased Doc in. Joe won't let us until you say."

"Sorry, Baby. Everybody come in. And we'll put the lid on."

"Yes, sir. But Daddy, you ought to look outside. Stars. The Milky Way like a neon sign! And the Big Dipper-so maybe this isn't another planet? Or would we still see the Big Dipper?"

"I'm not certain." He recalled that the discovery that they were still in James County, Mountain Springs area, had not been shared. But Duke must tell it; it was his deduction. "Duke, want to take a look before we close up?"

"Thanks, I've seen a star."

"As you wish." Hugh went outside, waited while his eyes adjusted, saw that Karen was right: Never before had he seen the heavens on a clear mountain night with no other light, nor trace of smog, to dim its glory.

"Beautiful!"

Karen slipped her hand into his. "Yes," she agreed. "But I could use some streetlights. There are things out there. And we heard coyotes."

"There are bears and Duke saw a mountain lion. Joe, better keep the cat in at night, and try to keep him close in the daytime."

"He won't go far, he's timid. And something just taught him a lesson."

"And me, too!" announced Karen. "Bears! Come, Barbie, let's go in. Daddy, if the Moon comes up, this must be Earth—and I'll never trust a comic book again."

"Go ask your brother."

Duke's discovery was the main subject at dinner. Karen's disappointment was offset by her interest in how they had mislaid Mountain Springs. "Duke, are you sure you saw what you thought you saw?"

"No possible mistake," Hugh answered for him. "If it weren't for the trees, you could have spotted it. We had to climb Reservoir Hill to get a clear view."

"You were gone all that time just to Reservoir Hill? Why, that's only five minutes away!"

"Duke, explain to your sister about automobiles."

"I think the bomb did it," Barbara said suddenly.

"Why, certainly, Barb. The question is how?"

"I mean the enormous H-bomb the Russians claimed to have in orbit. The one they called the 'Cosmic Bomb.' I think it hit us."

"Go on, Barbara."

"Well, the first bomb was awful and the second one was bad; they almost burned us up. But the third one just hit us whammy! and then no noise, no heat, no rumbling, and the radioactivity got less instead of worse. Here's my notion:

You've heard of parallel worlds? A million worlds side by side, almost alike but not quite? Worlds where Elizabeth married Essex and Mark Anthony hated redheads? And Ben Franklin got electrocuted with his kite? Well, this is one."

"First automobiles and now Benjamin Franklin. I'll go watch Ben Casey."

"Like this, Karen. The Cosmic Bomb hits us, dead on—and kicks us into the next world. One exactly like the one we were in, except that it never had men in it."

"I'm not sure I like a world with no men. I'd rather have a strange planet, with warlords riding thoats. Or is it zitidars?"

"What do you think of my theory, Hugh?"

"I'm keeping an open mind. I'll go this far: We should not count on finding other human beings."

"I go for your theory, Barbara," Duke offered. "It accounts for the facts. Squeezed out like a melon seed. Pht!"

"And we landed here."

Duke shrugged. "Let it be known as the Barbara Wells Theory of Cosmic Transportation and stand adopted. Here we are; we're stuck with it-and I'm going to bed. Who sleeps where, Hugh?"

"Just a second. Folks, meet the Rationing Officer. Take a bow, Duke." Hugh explained the austerity program. "Duke will work it out but that's the idea. For example, I noticed a bent nail on the ground in the powder room. That calls for being spread-eagled and flogged. For a serious offense, such as wasting a match, it's keelhauling. Second offense-hang him at the yardarm!"

"Gee! Do we get to watch?"

"Shut up, Karen. No punishments, just the miserable knowledge that you have deprived the rest of something necessary to life, health, or comfort. So don't give Duke any back talk. I want to make another assignment. Baby, you know shorthand."

"That's putting it strongly. Mr. Gregg wouldn't think so."

"Hugh, I take shorthand. What do you want?"

"Okay, Barbara, you are historian. Today is Day One. Or start with the calendar we are used to, but we may adjust it; those were winter stars. Every night jot down the events and put it in longhand later. Your title is Keeper of the Flame. As soon as possible, you really will be Keeper of the Flame; we will have to light a fire, then bank it every night. Sorry to have held you up, Duke."

"I'll sleep in the tank room, Hugh. You take a bunk."

"Wait a minute. Buddy, would you stay up ten minutes longer? Daddy, could Barbara and I use the tank room for a spit bath? May we have that much water? A girl who digs privies needs a bath."

"Sure, Sis," Duke agreed.

"Water is no problem," Hugh told her. "But you can bathe in the stream in the morning. Just one thing: Whenever anyone is bathing, someone should stand guard. I wasn't fooling about bears."

Karen shivered. "I didn't think you were. But that reminds me, Daddy—Do we dash out to the powder room? Or hold it all night? I'm not sure I can. But I'll try-rather than play tag with bears!"

"I thought the toilet was still set up?"

"Well...I thought, with brand-new outside plumbing—"

"Of course not."

"I feel better. Okay, buddy boy, give Barb and me a crack at the john and you can go to bed."

"No bath?"

"If we bathe, we can bathe in the girls' dorm after the rest of you go to bed. Thereby sparing your blushes."

"I don't blush."

"You should."

"Hold it," interrupted Hugh. "We need a 'No Blushing' rule. Here we are crowded worse than a Moscow apartment. Do you know the Japanese saying about nakedness?"

"I know they bathe in company," said Karen, "and I would be happy to join them. Hot water! Oh, boy!"

"They say, 'Nakedness is often seen but never looked at.' I'm not urging you to parade around in skin. But we should quit being jumpy.

If you come in to change clothes and find that there is no privacy-why, just change. Or take bathing in the stream. The person available to guard might not be the sex of the person who wants the bath. So ignore it." He looked at Joseph. "I mean you. I suspect you're sissy about it."

Joe looked stubborn. "That's the way I was brought up, Hugh."

"So? I wasn't brought up this way either, but I'm trying to make the best of it. After a sweaty day's work it might be that Barbara is the one available to stand bear watch for you."

"I'll take my chances. I didn't see any bears."

"Joe, I don't want any nonsense. You're my deputy."

"I didn't ask to be."

"Nor will you be, if you don't change your tune. You'll bathe when you need it and you'll accept guard service from anybody."

Joe looked stubborn. "No, thank you."

Hugh Farnham sighed. "I didn't expect dam foolishness from you, Joe. Duke, will you back me? 'Condition seven,' I mean."

"Deelighted!" Duke grabbed the rifle he had carried earlier, started to load it. Joe's chin dropped but he did not move.

"Hold it, Duke. Guns won't be necessary. That's all, Joe. Just the clothes you were wearing last night. Not clothes we stored for you, I paid for those. Nothing else, not even matches. You can change in the tank room; it was your modesty you insisted on saving. But your life is your problem. Get moving."

Joseph said slowly, "Mr. Farnham, do you really mean that?"

"Were those real bullets in that gun you aimed at Duke? You helped me clamp down on him; you heard me clamp down on my wife. Can I pull on them anything that rough—and let you get away with it? Good God, I'd get it from the girls next. Then the group would fall apart and die. I'd rather it was just you. You have two minutes to say goodbye to Dr. Livingstone. But leave the cat here; I don't want it eaten."

Dr. Livingstone was in the Negro's lap. Joe got slowly to his feet, still holding it. He seemed dazed.

Hugh added, "Unless you prefer to stay."

"I can?"

"On the same terms as the rest."

Two tears rolled down Joe's cheeks. He looked down at the cat and stroked it, then answered in a low voice, "I would like to stay. I agree."

"Good. Confirm it by apologizing to Barbara."

Barbara looked startled. She appeared to be about to speak, then to think better of it.

"Uh...Barbara. I'm sorry."

"It's all right, Joe."

"I'd be...happy and proud to have you guard me. While I take a bath, I mean. If you will."

"Any time, Joe. Glad to."

"Thank you."

"And now," said Hugh, "who's for bridge? Karen?"

"Why not?"

"Duke?"

"Bed for me. Anybody wants the pot, step over me."

"Sleep on the floor by the bunks, Duke, and avoid the traffic. No, take the upper bunk."

"You take it."

"I'll be last to bed, I want to look up a subject. Joe? Contract?"

"I don't believe, sir, that I wish to play cards."

"Putting me in my place, eh?"

"I didn't say that, sir."

"You didn't have to. Joe, I was offering an olive branch. One rubber, only. We've had a hard day."

"Thank you. I'd rather not."

"Damn it, Joe, we can't afford to be sulky. Last night Duke had a much rougher time. He was about to be shoved out into a radioactive hell-not just to frolic with some fun-loving bears. Did he sulk?"

Joe dropped his eyes, scratched Dr. Livingstone's skull—suddenly looked up and grinned. "One rubber. And I'm going to beat you hollow!"

"In a pig's eye. Barbie? Make a fourth?"

"Delighted!"

The cut paired Joe with Karen and gave him the deal. He riffled the cards. "Now to stack a Mississippi Heart Hand!"

"Watch him, Barbie."

"Want a side bet, Daddy?"

"What have you to offer?"

"Well—My fair young body?"

"Flabby."

"Why, you utterly utter! I'm not flabby, I'm just deliciously padded. Well, how about my life, my fortune, and my sacred honor?"

"Against what?"

"A diamond bracelet?"

Barbara was surprised to see how badly Hugh played, miscounting and even revoking. She realized that he was groggy with fatigue-why, the poor darling! Somebody was going to have to clamp down on him, too. Or he would kill himself trying to carry the whole load.

Forty minutes later Hugh wrote an I.O.U. for one diamond bracelet, then they got ready for bed. Hugh was pleased to see that Joe undressed completely and got into the lower bunk, as he had been told to. Duke stretched out on the floor, bare. The room was hot; the mass cooled slowly and air no longer circulated with the manhole cover in place, despite the vents in the tank room. Hugh made a note that he must devise a bear proof-and cat proof-grille in place of the cover. Later, later—He took the camp lamp into the tank room.

Someone had put the books back on shelves but some were open to dry; he fluffed these, hoped for the best. The last books in the world—so it seemed.

He felt sudden grief that abstract knowledge of deaths of millions had not given him. Somehow, the burning of millions of books felt more brutally obscene than the killing of people. All men must die, it was their single common heritage. But a book need never die and should not be killed; books were the immortal part of man. Book burners-to rape a defenseless friendly book.

Books had always been his best friends. In a hundred public libraries they had taught him. From a thousand newsstands they had warmed his loneliness. He suddenly felt that if he had not been able to save some books, it would hardly be worthwhile to live.

Most of his collection was functional: The Encyclopaedia Britannica-Grace had thought the space should be used for a television receiver "because they might be hard to buy afterwards." He had grudged its bulkiness, too, but it was the most compact assemblage of knowledge on the market. "Che" Guevera's War of the Guerillas-thank God he wasn't going to need that! Nor those next to it: "Yank" Leivy's manual on resistance fighting, Griffith's Translation of Mao Tse-tung's On Guerilla Warfare, Tom Wintringham's New Ways of War, the new TR on special operations-forget 'em! Ain't a-gonna study war no more!

The Boy Scout Handbook, Eshbach's Mechanical Engineering, The Radio Repairman's Guide, Outdoor Life's Hunting and Fishing, Edible Fungi and How to Know Them, Home Life in the Colonial Days, Your Log Cabin, Chimneys and Fireplaces, The Hobo's Cook Book, Medicine Without a Doctor, Five Acres and Independence, Russian Self-Taught and English-Russian and Russian-English dictionaries, The Complete Herbalist, the survival manuals of the Navy Bureau of Weapons, The Air Force's Survival Techniques, The Practical Carpenter-all sound books, of the brown and useful sort. The Oxford Book of English Verse, A Treasury of American Poetry, Hoyle's Book of Games, Burton's Anatomy of Melancholy, a different Burton's Thousand Nights and a Night, the good old Odyssey with the Wyeth illustrations, Kipling's Collected Verse, and his Just So Stories, a one-volume Shakespeare, the Book of Common Prayer, the Bible, Mathematical Recreations and Essays, Thus Spake Zarathustra, T. S. Eliot's The Old Possum's Book of Practical Cats, Robert Frost's Verse, Men Against the Sea—He wished that he had found time to stock the list of fiction he had started. He wished that he had fetched down his works of Mark Twain regardless of space. He wished—Too late, too late. This was it. All that was left of a mighty civilization. "The cloud-capped towers—"

He jerked awake and found that he had fallen asleep standing up. Why had he come in here? Something important. Oh, yes! Tanning leather—Leather? Barbara was barefooted, Barbara must have moccasins. Better try the Britannica. Or that Colonial Days volume.

No, thank God, you didn't have to use salt! Find some oak trees. Better yet, have Barbara find them; it would make her feel useful. Find something that only Joe could do, too; make the poor little bastard feel appreciated. Loved. Remember to—He stumbled back into the main room, looked at the upper bunk and knew that he couldn't make it. He lay down on the blanket they had played cards on and fell instantly asleep.

Chapter 5

Grace did not get up for breakfast. The girls quietly fed them, then stayed in to clean up. Duke went hunting, carrying a fortyfive and a hunting bow. It was his choice; arrows could be recovered or replaced, bullets were gone forever. Duke tried a few flights and decided that his shoulder was okay.

He checked watches and set out, with an understanding that a smoky fire would be built to home on if he was not back by three.

Hugh told the girls to take outdoors any book not bone-dry, then broke out pick and shovel and started leveling their house. Joe tried to join him; Hugh vetoed it.

"Look, Joe, there are a thousand things to do. Do them. But no heavy work."

"Such as what, Hugh?"

"Uh, correct the inventories. Give Duke a hand by starring everything that can't be replaced. In the course of that you'll think of things; write them down. Look up how to make soap and candles. Check both dosimeters. Strap on a gun and keep your eyes open-and see that those girls don't go outside without guns. Hell, figure out a way to get plumbing and running water, with no pipe and no lead and no water closets and no Portland cement."

"How in the world could you do that?"

"Somebody did it the first time. And tell this bushy-tailed sidewalk superintendent that I need no help."

"Okay. Come here, Doc! Come, come, come!"

"And Joe. Speaking of bathrooms, you might offer to stand guard for the girls while they bathe. You don't have to look."

"All right, I'll offer. But I'll tell them you suggested it. I don't want them to think—"

"Look, Joe. They are a couple of clean, wholesome, evil-minded American girls. Say what you please, they will still believe you are sneaking a peek. It's part of their credo that they are so fatally irresistible that a man just has to. So don't be too convincing; you'll hurt their feelings."

"I get it. I guess." Joe went away, Hugh started digging, while reflecting that he had never missed a chance, given opportunity without loss of face-but that incorrigible Sunday school lad probably would not sneak a peek at Lady Godiva. A good lad-no imagination but utterly dependable. Shame to have been so rough on him last night—Very quickly Hugh knew what his worst oversight had been: no wheelbarrow.

He had dug only a little before reaching this new appreciation. Digging by muscle power was bad but carrying it away in buckets was an affront to good sense. So he carried and thought about how to build a wheel—with no metal, no heating tools, no machine shop, no foundry, no—Now wait! He had steel bottles. There was strap iron in the bunks and soft iron in the periscope housing. Charcoal he could make and a bellows was simply an animal skin and some branches. Whittle a nozzle. Any damfool who couldn't own a wheel with all that at his disposal deserved to lift and carry.

He had ten thousand trees, didn't he? Finland didn't have a damn thing but trees. Yet Finland was the finest little country in the world.

"Doc, get out from under my feet!" If Finland was still there—Wherever the world was—Maybe the girls would like a Finnish bath. Down where they could plunge in afterwards and squeal and feel good. Poor kids, they would never see a beauty parlor; maybe a sauna would be a "moral equivalent." Grace might like it. Sweat off that blubber, get her slender again. What a beauty she had been!

Barbara showed up, with a shovel. "Where did you get that? And what do you think you're going to do?"

"It's the one Duke was using. I'm going to dig."

"In bare feet? You're era—Hey, you're wearing shoes!"

"Joe's. The jeans are his, too. The shirt is Karen's. Where shall I dig?"

"Just beyond me, here. Any boulder over five hundred pounds, ask for help. Where's Karen?"

"Bathing. I decided to stink worse and bathe later."

"When you like. Don't try to stick on this job all day. You can't."

"I like working with you, Hugh. Almost as much as—" She let it hang.

"As playing bridge?"

"As playing bridge as your partner. Yes, you could mention that. Too."

"Barbie girl."

He found that just digging was fun. Gave the mind a rest and the muscles a workout. Happy making. Hadn't tried it for much too long.

Barbara had been digging an hour when Mrs. Farnham came around a corner. Barbara said, "Good morning," added a shovelful to a bucket, picked both up half filled, and disappeared around the other corner.

Grace Farnham said, "Well! I wondered where you were hiding. I was left quite alone. Do you realize that?" She was in the clothes she had slept in. Her features looked puffy.

"You were allowed to sleep, dear."

"It isn't pleasant to wake up in a strange place alone. I'm not accustomed to it."

"Grace, you weren't being slighted. You were being pampered."

"Is that what you call it? Then we'll say no more about it, do you mind?"

"Not at all."

"Really?" She seemed to brace herself, then said bleakly, "Perhaps you can stop long enough to tell me where you have hidden my liquor. My liquor. My share. I wouldn't think of touching yours-after the way you've treated me! In front of servants and strangers, may I add?"

"Grace, you must see Duke."

"What do you mean?"

"Duke is in charge of liquor. I don't know where he put it."

"You're lying!"

"Grace, I haven't lied to you in twenty-seven years."

"Oh! You brutal, brutal man!"

"Perhaps. But I'm not lying and the next time you say I am, it will go hard with you."

"Where's Duke? He won't let you talk to me that way! He told me so, he promised me!"

"Duke has gone hunting. He hopes to be back by three."

She stared, then rushed back around the corner. Barbara reappeared, picked up her shovel. They went on working.

Hugh said, "I'm sorry you were exposed to that."

"To what?"

"Unless you were at least a hundred yards away, you know what."

"Hugh, it's none of my business."

"Under these conditions, anything is everybody's business. You have formed a bad opinion of Grace."

"Hugh, I would not dream of being critical of your wife."

"You have opinions. But I want you to have one in depth. Visualize her as she was, oh, twenty-five years ago. Think of Karen."

"She would have looked like Karen."

"Yes. But Karen has never had responsibility. Grace had and took it well. I was an enlisted man; I wasn't commissioned until after Pearl Harbor. Her people were what is known as 'good family.' Not anxious to have their daughter marry a penniless enlisted man."

"I suppose not."

"Nevertheless, she did. Barbara, have you any notion what it was to be the wife of a junior enlisted man in those days? With no money? Grace's parents wanted her to come home—but would not send her a cent as long as she stuck with me. She stuck."

"Good for Grace."

"Yes. She had no preparation for living in one room and sharing a bath down the hail, nor for waiting in Navy outpatient clinics. For making a dollar go twice as far as it should. For staying alone while I was at sea. Young and pretty and in Norfolk, she could have found excitement. She found a job insteadin a laundry, sorting dirty clothes. And whenever I was home she was bright and cheerful and uncomplaining.

"Alexander was born the next year—"

"'Alexander'?"

"Duke. Named for his maternal grandpappy; I didn't get a vote. Her parents were anxious to make up once they had a grandson; they were even willing to accept me. Grace stayed cool and never accepted a cent-back to work with our landlady minding the baby in weeks.

"Those years were the roughest. I went up fast and money wasn't such a problem. The War came and I was bucked from chief to j.g. and ended as a lieutenant commander in Seabees. In 1946 I had to choose between going back to chief or becoming a civilian. With Grace's backing, I got out. So I was on the beach with no job, a wife, a son in grammar school, a three-year-old daughter, living in a trailer, prices high and going higher. We had some war bonds.

"That was the second rough period. I took a stab at contracting, lost our savings, went to work for a water company. We didn't starve, but scraped icebox and dishrag soup were on the menu. Barbara, she stood it like a trouper-a hardworking den mother, a pillar of the PTA, and always cheerful.

"I was a construction boss before long and presently I tried contracting again. This time it clicked. I built a house on spec and a shoestring, sold it before it was finished and built two more at once. We've never been broke since."

Hugh Farnham looked puzzled. "That was when she started to slip. When she started having help. When we kept liquor in the house. We didn't quarrel-we never did save over the fact that I tried to raise Duke fairly strictly and Grace couldn't bear to have the boy touched.

"But that was when it started, when I started making money. She isn't built to stand prosperity. Grace has always stood up to adversity magnificently. This is the first time she hasn't. I still think she will."

"Of course she will, Hugh."

"I hope so."

"I'm glad to know more about her, Hugh. I'll try to be considerate."

"Damn it, I'm not asking that. I just want you to know that fat and foolish and self-centered isn't all there is to Grace. Nor was her slipping entirely her fault. I'm not easy to live with, Barbara."

"So?"

"So! When we were able to slow down, I didn't. I let business keep me away evenings. When a woman is left alone, it's easy to slip out for another beer when the commercial comes on and to nibble all evening along with the beer. If I was home, I was more likely to read than to visit, anyhow. And I didn't just let business keep me away; I joined the local duplicate club. She joined but she dropped out. She plays a good social game-but I like to fight for every point. No criticism of her, there's no virtue in playing as if it were life or death. Grace's way is better—Had I been willing to take it easy, too, well, she wouldn't be the way she is."

"Nonsense!"

"Pardon me?"

"Hugh Farnham, what a person is can never be somebody else's fault, I think. I am what I am because Barbie herself did it. And so did Grace. And so did you." She added in a low voice, "I love you. And that's not your fault, nor is anything we did your fault. I won't listen to you beating your breast and sobbing 'Mea culpa!' You don't take credit for Grace's virtues. Why take blame for her faults?"

He blinked and smiled. "Seven no trump."

"That's better."

"I love you. Consider yourself kissed."

"Kiss back. Grand slam. But watch it," she said out of the corner of her mouth. "Here come the cops."

It was Karen, clean, shining, hair brushed, fresh lipstick, and smiling. "What an inspiring sight!" she said. "Would you poor slaves like a crust of bread and a pannikin of water?"

"Shortly," her father agreed. "In the meantime don't carry these buckets too heavily loaded."

Karen backed away. "I wasn't volunteering!"

"That's all right. We aren't formal."

"But Daddy, I'm clean!"

"Has the creek gone dry?"

"Daddy! I've got lunch ready. Out front. You're too filthy to come into my lovely clean house."

"Yes, baby. Come along, Barbara." He picked up the buckets.

Mrs. Farnham did not appear for lunch. Karen stated that Mother had decided to eat inside. Hugh let it go at that; there would be enough hell when Duke got back.

Joe said, "Hugh? About that notion of plumbing—"

"Got it figured out?"

"Maybe I see a way to have running water."

"If we get running water, I guarantee to provide plumbing fixtures."

"Really, Daddy? I know what I want. In colored tile. Lavender, I think. And with a dressing table built around—"

"Shut up, infant. Yes, Joe?"

"Well, you know those Roman aqueducts. This stream runs uphill that way. I mean it's higher up that way, so someplace it's higher than the shelter. As I understand it, Roman aqueducts weren't pipe, they were open."

"I see." Farnham considered it. There was a waterfall a hundred yards upstream. Perhaps above it was high enough.

"But that would mean a lot of masonry, whether dry-stone, or mud mortar. And each arch requires a frame while it's being built."

"Couldn't we just split logs and hollow them out? And support them on other logs?"

"We could." Hugh thought about it. "There's an easier way, and one that would kill two birds. Barbara, what sort of country is this?"

"I beg your pardon?"

"You said that this area is at least semitropical. Can you tell what season it is? And what the rest of the year is likely to bring? What I'm driving at is this: Are you going to need irrigation?"

"Good heavens, Hugh, I can't answer that!"

"You can try."

"Well—" She looked around. "I doubt if it ever freezes here. If we had water, we might have crops all year. This is not a tropical rain forest, or the undergrowth would be much more dense. It looks like a place with a rainy season and a dry season."

"Our creek doesn't go dry; it has lots of fish. Where were you thinking of having your garden?"

"How about this stretch downstream to the south? Several trees should come out, though, and a lot of bushes."

"Trees and bushes are no problem. Mmm—Joe, let's take a walk. I'll carry a rifle, you strap on your fortyfive. Girls, don't dig so much that it topples down on you. We would miss you."

"Daddy, I was thinking of taking a nap."

"Good. Think about it while you're digging."

Hugh and Joe worked their way upstream. "What are you figuring on, Hugh?"

"A contour-line ditch. We need to lead water to an air vent on the roof. If we can do that, we've got it made. A sanitary toilet. Running water for cooking and washing. And for gardening, coming in high enough to channel it wherever Barbara wants it. But the luxury that will mean most to our womenfolk is a bath and kitchen. We'll clear the tank room and install both."

"Hugh, I see how you might get water with a ditch. But what about fixtures? You can't just let water splash down through the roof."

"I don't know yet, but we'll build them. Not a flush toilet, it's too complex. But a constant-flow toilet, a sort that used to be common aboard warships. It's a trough with seats. Water runs in one end, out the other. We'll lead it down the manhole, out the tunnel, and away from the house. Have you seen any clay?"

"There is a clay bank at the stream below the house. Karen complained about how sticky it was. She went upstream to bathe, a sandy spot."

"I'll look at it. If we can bake clay, we can make all sorts of things. A toilet. A sink. Dishes. Tile pipe. Build a kiln out of unbaked clay, use the kiln to bake anything. But clay just makes it easier. Water is the real gold; all civilizations were built on water. Joe, we are about high enough."

"Maybe a little higher? It would be embarrassing to dig a ditch a couple of hundred yards long—"

"Longer."

"—or longer, and find that it's too low and no way to get it up to the roof."

"Oh, we'll survey it first."

"Survey it? Hugh, maybe you didn't notice but we don't even have a spirit level. That big smash broke its glasses. And there isn't even a tripod, much less a transit and all those things."

"The Egyptians invented surveying with less, Joe. Losing the spirit level doesn't matter. We'll build an unsplit level."

"Are you making fun of me, Hugh?"

"Not at all. Mechanics were building level and square centuries before you could buy instruments. We'll build a plumbbob level. That's an upside-down T, and a string with a weight to mark the vertical. You can build it about six feet long and six high to give us a long sighting arm-minimize the errors. Have to take apart one of the bunks for boards. It's light, fussy work you can do while your ribs heal. *While the girls do the heavy, unfussy excavating."*

"You draw it, I'll build it."

"When we get the building leveled we'll mount it on the roof and sight upstream. Have to cut a tree or two but we won't have any trouble running a base line. Intercepts we run with a smaller level. Duck soup, Joe."

"No sweat, huh?"

"Mostly sweat. But twenty feet a day of shallow ditch and we'll have irrigation water when the dry season hits. The bathroom can wait-the gals will be cheered just by the fact that there will be one, someday. Joe, it would suit me if our base line cuts the stream about here. See anything?"

"What should I see?"

"We fell those two trees and they dam the creek. Then chuck in branches, mud, and some brush and still more mud and rocks and the stream backs up in a pond." Hugh added, "Have to devise a gate, and that I do not see, with what we have to work with. Every problem leads straight to another. Damn."

"Hugh, you're counting your chickens before the cows come home."

"I suppose so. Well, let's go see how much the girls have dug while we loafed."

The girls had dug little; Duke had returned with a miniature four-point buck. Barbara and Karen had it strung up against a tree and were trying to butcher it. Karen seemed to have as much blood on her as there was on the ground.

They stopped as the men approached. Barbara wiped her forehead, leaving a red trail. "I hadn't realized they were so complicated inside."

"Or so messy!" sighed Karen.

"With that size it's easier on the ground."

"Now he tells us. Show us, Daddy. We'll watch."

"Me? I'm a gentleman sportsman; the guide did the dirty work. But —Joe, can you lay hands on that little hatchet?"

"Sure. It's sharp; I touched it up yesterday."

Hugh split the breastbone and pelvic girdle and spread the carcass, then peeled out viscera and lungs and spilled them, while silently congratulating the girls on not having pierced the intestines. "All yours, girls. Barbara, if you can get that hide off, you might be wearing it soon. Have you noticed any oaks?"

"There are scrub forms. And sumach, too. You're thinking of tannin?"

"Yes."

"I know how to extract it."

"Then you know more about tanning than I do. I'll bow out. There are books."

"I know, I was looking it up. Doe! Don't sniff at that, boy."

"He won't eat it," Joe assured her, "unless it's good for him. Cats are fussy."

While butchering was going on, Duke and his mother crawled out and joined them. Mrs. Farnham seemed cheerful but did not greet anyone; she simply looked at Duke's kill. "Oh, the poor little thing! Duke dear, how did you have the heart to kill it?"

"It sassed me and I got mad."

"It's a pretty piece of venison, Duke," Hugh said. "Good eating."

His wife glanced at him. "Perhaps you'll eat it; I couldn't bear to."

Karen said, "Have you turned vegetarian, Mother?"

"It's not the same thing. I'm going in, I don't want that on me.

Karen, don't you dare come inside until you've washed; I won't have you tracking blood in after I've slaved away getting the place spotless." She headed toward the shelter. "Come inside, Duke."

"In a moment, Mother."

Karen gave the carcass an unnecessarily vicious cut.

"Where did you nail it?" Hugh asked.

"Other side of the ridge. I should have been back sooner."

"Why?"

"Missed an easy shot and splintered an arrow on a boulder. Buck fever. It has been years since I used a—'bow season' license."

"One lost arrow, one carcass, is good hunting. You saved the arrowhead?"

"Of course. Do I look foolish?"

Karen answered, "No, but I do. Buddy, I cleaned house. If Mother did any cleaning, it was a mess she made herself."

"I realized that."

"And I'll bet when she smells these steaks, she won't want Spam!"

"Forget it."

Hugh moved away, signaling Duke to follow.

"I'm glad to see Grace looking cheerful. You must have soothed her."

Duke looked sheepish. "Well—As you pointed out, it's rough, chopping it off completely." He added, "But I rationed her. I gave her one drink and told her she could have one more before dinner."

"That's doing quite well."

"I had better go inside. The bottle is there."

"Perhaps you had."

"Oh, it's all right. I put her on her honor. You don't know how to handle her, Dad."

"That's true. I don't."

Chapter 6

From the Journal of Barbara Wells:

I am hobbled by a twisted ankle, so I am lying down and adding to this. I've taken notes every night-but in shorthand. I haven't transcribed very much.

The longhand version goes in the fly leaves of the Britannica. There are ten blank pages in each volume, twenty-four volumes, and I'll squeeze a thousand words to a page --240,000 words-enough to record our doings until we reclaim the art of making paper-especially as the longhand version will be censored.

Because I can't let my hair down to anyone-and sometimes a gal needs to! This shorthand record is a diary which no one can read but me, as Karen is as poor at Gregg as she claimed.

Or perhaps Joe knows Gregg. Isn't it required in business colleges? But Joe is a gentleman and would not read this without invitation. I am fond of Joseph; his goodness is not a sham. I am sure he is keeping his lip buttoned on many unhappy thoughts; his position is as anomalous as mine and more difficult.

Grace has quit ordering him around-save that she orders all of us. Hugh gives orders, but for the welfare of all. Nor does he give many; we are settled in a routine. I'm the farmer, and plan my own work; Duke keeps meat on the table and gives me a hand when he doesn't hunt; Hugh hasn't told either of us what to do for a long time, and Karen has a free hand with the house. Hugh has about two centuries of mechanical work planned out and Joe helps him.

But Grace's orders are for her own comfort. We usually carry them out; it's easier. She gets her own way and more than her share, simply by being difficult.

She got the lion's share of liquor. Liquor doesn't matter to me; I rarely "need" a drink. But I enjoy a glow in company and had to remind myself that it was not my liquor, it was Farnham liquor.

Grace finished her share in three days. Duke's was next to go. And so on. At last all was gone save one quart of bourbon earmarked "medicinal." Grace spotted where Duke had it and dug it up. When Duke came home, she was passed out and the bottle was dead.

The next three days were horrors. She screamed. She wept. She threatened suicide. Hugh and Duke teamed up and one of them was always with her. Hugh acquired a black eye, Duke got scratches down his handsome face. I understand they put a lot of B1 into her and forcefed her.

On the fourth day she stayed in her bunk; the next day she got up and seemed almost normal.

But during lunch she asserted, as something "everybody knows," that the Russians had attacked because Hugh insisted on building a shelter.

She didn't seem angry-more forgiving. She went on to the happy thought that the war would soon be over and we could all go home.

Nobody argued. What good? Her delusion seems harmless. She has assumed her job, at last, as chief cook-but if she is a better cook than Karen I have yet to see it. Mostly she talks about dishes she could prepare if only she had this, or that. Karen works as hard as ever and sometimes gets so mad that she comes out to cry on me and then hoes furiously.

Duke tells Karen that she must be patient.

I should not criticize Duke; he is probably going to be my husband. I mean, who else is there? I could stand Duke but I'm not sure I could stand Grace as a motherin-law. Duke is handsome and is considerate of both me and his sister. He did quarrel with his father at first (foolishly it seemed to me) but they get along perfectly now.

In this vicinity he is quite a catch.

Myself? I'm not soured on marriage even though I struck out once. Hugh assumes that the human race will go on. I'm willing.

(Polygamy? Of course I would! Even with Grace as senior wife. But I haven't been asked. Nor, I feel sure, would Grace permit it. Hugh and I don't discuss such things, we avoid touching the other, we avoid being alone together, and I do not make cow's eyes at him. Finished.)

The trouble is, while I like Duke, no spark jumps. So I am putting it off and avoiding circumstances where he might pat me on the fanny. It would be a hell of a note if I married him and there came a night when I was so irritated at his mother and so vexed with him for indulging her that I would tell him coldly that he is not half the man his father is.

No, that must not happen. Duke does not deserve it.

Joe? My admiration for him is unqualified-and he doesn't have a mother problem.

Joe is the first Negro I've had a chance to know well-and I think most well of him. He plays better contract than I do; I suppose he's smarter than I am. He is fastidious and never comes indoors without bathing. Oh, get downwind after he has spent a day digging and he's pretty whiff. But so is Duke, and Hugh is worse. I don't believe this story about a distinctive "nigger musk."

Have you ever been in a dirty powder room? Women stink worse than men.

The trouble with Joe is the same as with Duke: No spark jumps. Since he is so shy that he is most unlikely to court me—Well, it won't happen.

But I am fond of him-as a younger brother. He is never too busy to be accommodating. He is usually bear guard for Karen and me when we bathe and it's a comfort to know that Joe is alert—Duke has killed five bears and Joe killed one while he was actually guarding us. It took three shots and dropped dead almost in Joe's lap. He stood his ground.

We adjourned without worrying about modesty, which upset Joe more than bears do.

Or wolves, or coyotes, or mountain lions, or a cat which Duke says is a mutated leopard and especially dangerous because it attacks by dropping out of a tree. We don't bathe under trees and don't venture out of our clearing without an armed man. It is as dangerous as crossing Wilshire against the lights.

There are snakes, too. At least one sort is poisonous.

Joe and Hugh were starting one morning on the house leveling and Joe jumped down into the excavation. Dr.—Livingstone-I-Presume jumped down with him-and here was this snake.

Doc spotted it and hissed; Joe saw it just as it struck, getting him in the calf. Joe killed it with his shovel and dropped to the ground, grabbing at his leg.

Hugh had the wound slashed and was sucking it in split seconds. He had a tourniquet on quickly and permanganate crystals on the wound soon after as I heard the hooraw and came arunnin'. He followed that with rattlesnake anti-venom.

Moving Joe was a problem; he collapsed in the tunnel. Hugh crawled over him and pulled, I pushed, and it took three of us-Karen, too-to lift him up the ladder. We undressed him and put him to bed.

Around midnight, when his respiration was low and his pulse uncertain, Hugh moved the remaining bottle of oxygen into the room, put over Joe's head a plastic sack in which shirts had been stored and gave him oxygen.

By morning he was better.

In three days he was up and well. Duke says it was a pit viper, perhaps a bushmaster, and that a rattlesnake is a pit viper, too, so rattlesnake anti-venom probably saved Joe's life.

I am not trusting any snakes.

It took three weeks to excavate under the house. Boulders! This area is a wide, flat, saucer-shaped valley, with boulders most anywhere. Whenever we hit a big one, we dug around it and the men would worry it out with crowbar and block and tackle.

Mostly the men could get boulders out. But Karen found one that seemed to go down to China. Hugh looked it over and said, "Fine. Now dig a hole just north of it and deeper."

Karen just looked at him.

So we dug. And hit another big boulder. "Good," said Hugh. "Dig another hole north of that one."

We hit a third oversize boulder. But in three days the last one had been tumbled into a hole next to it, the middle one had been worried into a hole where the last one had been, and the one that started the trouble was buried where the middle one had been.

As fast as any spot had been cut deeply enough Hugh propped it up with pieces of log; he was worried lest the shelter shift and crush someone. So when we finished the shelter had a forest of posts under it.

Hugh then set two very heavy posts under the uphill corners and started removing the inner ones, using block and tackle. Sometimes they had to be dug under. Hugh was nervous during this and did all the rigging and digging himself.

At last the uphill half was supported on these two big chunks.

They would not budge.

There was so much weight on those timbers that they sneered at our efforts. I said, "What do we do now, Hugh?"

"Try the next-to-last resort."

"What's the last resort?"

"Burn them. But it would take roaring fires and we would have to clear grass and bushes and trees for quite a distance. Karen, you know where the ammonia is. And the iodine. I want both."

I had wondered why Hugh had stocked so much ammonia. But he had, in used plastic Chlorox bottles; the stuff had ridden through the shocks. I hadn't known that iodine was stocked in quantity, too; I don't handle the drugs.

Soon he had sort of a chemistry lab. "What are you making, Hugh?" I asked.

"Ersatz 'dynamite.' And I don't need company," he said. "The stuff is so touchy it explodes at a harsh look."

"Sorry," I said, backing away.

He looked up and smiled. "It's safe until it dries. I had it in mind in case I ever found myself in an underground. Occupying troops take a sour view of natives having explosives, but there is nothing suspicious about ammonia or iodine. The stuff is safe until you put it together and does not require a primer. But I never expected to use it for construction; it's too treacherous."

"Hugh, I just remembered I don't care whether a floor is level or not."

"If it makes you nervous, take a walk."

Making it was simple; he combined tincture of iodine and ordinary household ammonia; a precipitate settled out. This he filtered through Kleenex, the result was a paste.

Joe drilled holes into those stubborn posts; Hugh wrapped this mess in two batches, in paper, and packed a bundle into each hole, tamping with his finger. "Now we wait for it to dry."

Everything that he used he flushed down with water, then took a bath with his clothes on, removed them in the water and left them, weighted down with rocks. That was all that day.

Our armament includes two lovely ladies' guns...22 magnum rimfires with telescopic sights. Hugh had Duke and Joe sight them in. The sighting-in was done with sandbag rest—heaped-up dirt, that is. Hugh had them expend five bullets each, so I knew he was serious. "One bullet, one bear" is his motto.

When the explosive was dry, everything breakable was removed from the shelter. We women were chased far back, Karen was charged with hanging on to Dr. Livingstone, and I was armed with Duke's bear rifle, just in case.

Duke and Joe were on their bellies a measured hundred feet from the posts. Hugh stood between them. "Ready for count?"

"Ready, Hugh."—"Ready, Dad."

"Deep breath. Let part of it out. Hold it, steady on target, take up the slack. Five...four...three...two...one fire!"

A sound like a giant slammed door and the middle of each post disintegrated. The shelter stuck out like a shelf, then tilted ponderously down, touched, and was level.

Karen and I cheered; Grace started to clap; Dr. Livingstone jumped down to investigate. Hugh turned his head and grinned.

And the shelter tilted back the other way as the ridge crumbled; it started to slide. It pivoted on the tunnel protuberance, picked up speed and tobogganed down the slope. I thought it was going to end up in the creek.

But the slope leveled off; it ground to a stop, with the tunnel choked with dirt and the whole thing farther out of plumb than before!

Hugh picked up the shovel he had used to heap up shooting supports, walked down to the shelter, began to dig.

I ran down, tears bursting from my eyes. Joe was there first. Hugh looked up and said, "Joe, dig out the tunnel. I want to know if anything is damaged and the girls will want to get lunch."

"Boss—" Joe choked out. "Boss! Oh, gosh!"

Hugh said, in a tone you use to a child, "Why are you upset, Joe?

This has saved us work."

I thought he had flipped. Joe said, "Huh?"

"Certainly," Hugh assured him. "See how much lower the roof is? Every foot it dropped saves at least a hundred feet of aqueduct. And leveling will be simple here; the ground is loam and boulders are few. A week, with everybody pitching in. Then we bring water to the house and garden two weeks early."

He was correct. The shelter was level in a week, and this time he triggered the end posts with crosspieces; blasting was not needed. Best of all, the armor door cranked back without a murmur and we had air and sunlight inside—It had been stuffy and candles made it pretty rank. Joe and Hugh started the ditch the same day. In anticipation of the glorious day, Karen sketched on the walls of the tank room lifesize pictures of a washstand, a bathtub, a pot.

Truthfully, we are comfortable. Two mattress covers Karen filled with dried grass; sleeping on the floor is no worse than the bunks. We sit in chairs and play our evening rubber at the table. It is amazing what a difference level floors make and how much better it is to have a door than to climb down a ladder and crawl out a hole.

We had to cook over a campfire a while as our grill and Dutch oven were smashed. Karen and I have thrown together a make-do because, as soon as water is led to the house, Hugh intends to start on ceramics, not only for a toilet and a sink but also for a stove vented out through the periscope hole. Luxury!

My corn is coming up beautifully. I wonder what I can use to grind corn? The thought of hot corn bread buttered with deer grease makes me drool.

December 25th-Merry Christmas!

We think it is. Hugh says we are not more than a day off.

Shortly after we got here Hugh picked a small tree with a flat boulder due north of it and sawed it off so that it placed a sharp shadow on the boulder at noon. As "Keeper of the Flame" it has been my duty to sit by that boulder from before apparent noon and note the shortest shadow-follow it down, mark the shortest position and date it.

That shadow had been growing longer and the days shorter. A week ago it began to be hard to see any change and I told Hugh. So we watched together and three days ago was the turning point...so that day became December 22nd and we are celebrating Christmas instead of the Fourth of July. But we got our flag up, as Hugh had planned, to the top of the tallest tree in our clearing, with its branches lopped to make it a pole. As Keeper of the Flame I am charged with raising and lowering it but this was a special occasion; we drew lots and Joe won. We lined up and sang "The Star Spangled Banner" while he hauled it to the peak-and everyone was crying so hard he could hardly sing.

Then we pledged allegiance. Maybe it is sentimental nonsense by ragged castaways but I don't think so. We are still one nation, under God, free and indivisible, with liberty and justice for all.

Hugh held divine services and read the Christmas story from the Gospel According to Luke and called on Karen to pray, then we sang carols. Grace has a strong, sure lead; Joe is a bell-like tenor, and Karen, myself, Hugh, and Duke are soprano, contralto, baritone, and bass. I think we sound good. In any case we enjoyed it, even though Grace got taken by the weeps during "White Christmas" and it was contagious.

We would have had services anyhow as today would be Sunday by the old calendar; Hugh holds them every Sunday. Everybody attends, even Duke who is an avowed atheist. Hugh reads a Psalm or some other chapter; we sing hymns; he prays or invites someone to pray, and ends it with "Bless This House—" We are back to the days when the Old Man is priest.

But Hugh never uses the Apostles' Creed and his prayers are so nonsectarian that he does not even end them "In Jesus' Name, Amen."

On a rare occasion when he and I spoke in private-waiting out a noon sight last week-I asked him where he stood on matters of faith? (It is important to me to know where my man stands even though he is not my man and can't be.)

"You could call me an Existentialist."

"You are not a Christian?"

"I didn't say that. I can't express it in the negative because it's affirmative. I shan't define it; it would only add to the confusion. You are wondering why I hold church since I refuse to assert a creed?"

"Well...yes."

"It's my duty. Services should be available to those who need them. If there is no good and no God, this ritual is harmless. If God is, it is appropriate-and still harmless. We are bleeding no peasants, offering no bloody sacrifices, raising no vanities to the skies in the name of religion. Or so I see it, Barbara."

That had better hold me; it's all I'll get out of him. In my past life religion was a nice, warm, comfy thing I did on Sundays; I can't say it agonized me. But Hugh's God-less offering to God has become important.

Sundays are important other ways. Hugh discourages work other than barbering and primping or hobby work, and encourages games, or any fun thing. Chess, bridge, Scrabble, modeling in clay, group sings, such like—Or just yakking. Games are important; they mark that we are not just animals trying to stay alive but humans enjoying life and savoring it. That nightly rubber of bridge we never skip. It proclaims that our lives are not just hoeing and digging ditches and butchering.

We keep up our bodies, too. I've become pretty good at cutting hair. Duke grew a beard at first but Hugh shaved every day and presently Duke did, too. I don't know what they will do when blades are no more. I've noticed Joe honing a Gem blade on an oil stone.

It's still Christmas and I'll cut back in when the rubber in progress is finished. Dinner was lavish; Grace and Karen spent two days on it-brook trout savory aux herbes, steamed freshwater prawns, steaks and broiled mushrooms, smoked tongue, bouillon Ursine, crackers (quite a treat), radishes, lettuce, green onions, baby beets a la Grace, and best of all, a pan of fudge, as condensed milk, chocolate, and sugar are irreplaceable. Nescafé and cigarettes, two cups and two cigarettes each.

Presents for everybody—All I saved besides clothes I had on was my purse. I was wearing nylons, took them off soon and haven't worn stockings since; I gave them to Karen. I had a lipstick; Grace got that. I had been plaiting a belt; Joe got that. In my purse was a fancy hanky; I washed it, ironed it by pressing it against smooth concrete-Duke got that.

It was this morning before I figured out anything for Hugh. For years I've carried in my purse a little memo book. It has my maiden name in gold and still has half of a filler. Hugh can use it-but it was my name on it that decided me.

I must run; Grace and I are due to attempt to clobber Hugh and Joe.

I've never had a happier Christmas.

Chapter 7

Karen and Barbara were washing themselves, the day's dishes, and the week's laundry. Above them, Joe kept watch. Bushes and then trees had been cut away around the stretch they used for bathing; a predator could not approach without Joe having a clear shot at it. His eyes swung constantly, checking approaches. He wasted no seconds on the Elysian tableau he guarded.

Karen said, "Barbie, this sheet won't stand another laundering. It's rags."

"We need rags."

"But what will we use for sheets? It's this soap." Karen scooped a handful from a bowl on the bank. It was soft and gray and harsh and looked like oatmeal mush. "The stuff eats holes."

"I'm not fretted about sheets but I dread the day when we are down to our last towel."

"Which will belong to Mother," Karen stated. "Our rationing officer will have some excellent reason."

"Nasty, nasty. Karen, Duke has done a wonderful job."

"I wasn't bitching. Duke can't help it. It's his friend Eddie."

"'Eddie?'"

"Edipus Rex, dear."

Barbara turned away and began rinsing a pair of ragged blue jeans.

Karen said, "You dig me?"

"We all have faults."

"Sure, everybody but me. Even Daddy has a shortcoming. His neck pains him."

Barbara looked up. "Is Hugh having trouble with his neck? Perhaps it would help if we massaged it."

Karen giggled. "Your weakness, sister mine, is that you wouldn't know a joke if it bit you. Daddy is still-necked and nothing will cure it. He doesn't have weaknesses and that's his weakness. Don't frown. I love Daddy. I admire him. But I'm glad I'm not like him. I'll take this load up to the thorn bushes. Damn it, why didn't Daddy stock clothespins? Those thorns are as bad as the soap."

"Clothespins we can do without. Hugh did an incredible job. Everything from an eight-day clock—"

"Which got busted, right off."

"—to tools and seeds and books and I don't know what. Karen! Don't climb out naked!"

Karen stopped, one foot on the bank. "Nonsense. Old Stone Face won't look. Humiliating, that's what it is. I think I'll yoo-hoo at him."

"You'll do no such thing. Joe is being a gentleman under trying circumstances. Don't make it harder. Let that load wait and we'll take it all up at once."

"Okay, okay. I can't help wondering if he's human."

"He is. I can vouch for it."

"Hmm—Barbie, don't tell me Saint Joseph made a pass at you?"

"Heavens, no! But he blushes if I squeeze past him in the house."

"How can you tell?"

"Sort of purple. Karen, Joe is sweet. I wish you had heard him explain about Doc."

"Explain what?"

"Well, Doc is beginning to accept me. I was holding Doc yesterday and noticed something and said, 'Joe, Doe is getting terribly fat. Or was he always?'

"That was a time when he blushed. But he answered with sweet seriousness, 'Barbara, Dr. Livingstone isn't as much of a boy cat as he thinks he is. Old Doe is more a girl-type cat. That isn't fat. Uh, you see—Doe is going to have babies.' He blurted it out. Seemed to think it would upset me. Didn't of course, but I was astonished."

"Barbara, you mean you didn't know that Dr.—Livingstone-I-Presume is a female?"

"How would I know? Everybody calls him 'he' and he-she-has a male name."

"A doctor can be female. Can't you tell a tomcat?"

"I never thought about it. Doe is pretty fuzzy."

"Mmm, yes, with a Persian one might not be certain at first glance. But a tomcat's badges of authority are prominent."

"Had I noticed, I would have assumed that he had been altered."

Karen looked shocked. "Don't let Daddy hear that! He never allows a cat to be spayed or cut. Daddy thinks cats are citizens. However, you've surprised me. Kittens, huh?"

"So Joe says."

"And I didn't notice." Karen looked puzzled. "Come to think of it, I haven't picked him up lately. Just petted him and tried to keep him out of things. Lately it hasn't been safe to open a drawer; he's into it. Looking for a place to have kittens of course. I should have twigged."

"Karen, why do you keep saying 'he' and 'him'?"

"'Why?' Joe told you. Doe thinks he is a boy cat-and who am I to argue? He's always thought so, he was the feistiest kitten we ever had. 11mm—Kittens. Barbie, the first time Doe came into heat we arranged for Doe to meet a gentleman cat of exalted ancestry. But it wasn't Doe's métier and he beat the hell out of the tomcat. So we quit trying.

Mmm—Calendar girl, how long have we been here?"

"Sixty-two days. I've looked it up; it's sixty days with a normal range to seventy."

"So it's any time now. I'll bet you two back rubs that we are up all night tonight. Cats never have kittens at a convenient hour." Karen abruptly changed the subject. "Barbie, what do you miss most? Cigarettes?"

"I've quit thinking of them. Eggs, I guess. Eggs for breakfast."

"Daddy did plan for that. Fertilized eggs and a little incubator. But he hadn't built it and anyhow, eggs would have busted. Yes, I miss eggs. But I wish cows laid eggs and Daddy had figured out how to bring cow eggs along. Ice cream! Cold milk!"

"Butter," agreed Barbara. "Banana splits with whipped cream. Chocolate malts."

"Stop it! Barbie, I'm starving in front of your eyes."

Barbara pinched her. "You aren't fading way. Fact is, you've put on weight."

"Perhaps." Karen shut up and began on the dishes.

Presently she said in a low voice, "Barbie, Doe won't hand this household half the surprise I'm going to."

"How, hon?"

"I'm pregnant."

"Huh?"

"You heard me. Pregnant. Knocked up, if you insist on the technical term!"

"Are you sure, dear?"

"Of course I'm sure! I had a test, the froggie winked at me. Hell, I'm four months gone." Karen threw herself into the arms of the older girl. "And I'm scared!"

Barbara hugged her. "There, there, dear. It's going to be all right."

"The hell it is," Karen blubbered. "Mother's going to raise hell...and there aren't any hospitals...nor doctors. Oh, why didn't Duke study medicine? Barbie, I'm going to die. I know I am."

"Karen, that's silly. More babies have been born without doctors and hospitals than ever were wheeled into a delivery room. You're not scared of dying, you're scared of telling your parents."

"Well, that, too." Karen wiped at her eyes and sniffed. "Uh—Barbie, don't be mad...but that's why I invited you down that weekend."

"I figured Mother wouldn't raise quite so much hell if you were present. Most girls in our chapter are either squares or sluts, and silly heads besides. But you are neither and I knew you would stand up for me."

"Thank you, dear."

"Thank me, hell! I was using you."

"It's the finest compliment another woman ever paid me." Barbara wiped a tear from Karen's face and tweaked her cheek. "I'm glad I'm here. So you haven't told your parents?"

"Well, I was going to. But the attack hit...and then Mother went to pieces...and Daddy has been loaded down with worries and there's never been the right time."

"Karen, you aren't scared to tell your father, just your mother."

"Well...Mother mostly. But Daddy, too. Besides being shocked and hurt-he'll think it was silly of me to get caught."

"While he's certain to be surprised, I doubt the other." Barbara hesitated. "Karen, you needn't take this alone. I can share it."

"That's what I had hoped. That's why I asked you to come home with me. I told you."

"I mean really share it. I'm pregnant, too."

"What?"

"Yes. We can tell them together."

"Good Lord, Barbara! How did it happen?"

Barbara shrugged. "Careless. How did it happen to you?" Karen suddenly grinned. "How? A bee sprinkled pollen on me; how else? 'Who' you mean."

"'Who' I don't care about. Your business. Well, dear? Shall we go tell them? I'll do the talking."

"Wait a minute. You hadn't planned to tell anybody? Or had you?"

"Why, no," Barbara answered truthfully, "I was going to wait until it showed."

Karen looked at Barbara's waistline. "It doesn't show. Are you sure?"

"I've skipped two periods, I'm pregnant. Or I'm ill, which would be worse. Let's gather up the laundry and tell them.

"Uh, since you don't look it-and I do; I've been careful not to undress around Mother-since you don't, let's hold that back and use it as a whammy if things get sticky."

"If you like. Karen, why not tell Hugh first? Then let him tell your mother."

Karen looked relieved. "You think that's all right?"

"Hugh would rather hear it with your mother not around. Now go find him and tell him. I'll hang the clothes."

"All right, I will!"

"And quit worrying. We'll have our babies and won't have any trouble and we'll raise them together and it'll be fun. We'll be happy."

Karen's eyes lit up. "And you'll have a girl and I'll have a boy and we'll marry them and be grandmothers together!"

"That sounds more like Karen." Barbara kissed her. "Run tell Hugh."

Karen found Hugh bricking up the kiln; she told him that she would like a private talk.

"All right," he agreed. "Let me tell Joe to get this fired up. I should inspect the ditch. Come along and talk?"

He gave her a shovel, carried a rifle. "Now what's on your mind, baby girl?"

"Let's get farther away." They walked a meandering distance. Hugh stopped, exchanged rifle for shovel, and built up a stretch of wall.

"Daddy? Perhaps you've noticed a shortage of men?"

"No. Three men and three women. The usual division."

"Perhaps I should say 'eligible bachelors.'"

"Then say it."

"All right, I've said it. I need advice. Which is worse? Incest? Or miscegenation? Or should I be an old maid?"

He placed another shovelful, tamped it. "I would not urge you to be an old maid."

"That settles that, I feel the same way. How do you size up those other fates?"

"Incest," he answered, "is a bad idea, usually."

"Which leaves just one thing."

"Wait. I said, 'Usually.'" He stared at the shovel. "This is not a problem I ever expected-but we are facing many new problems. Brother-and-sister marriages are not uncommon in history. They are not necessarily bad." He frowned. "But there is Barbara. You might have to accept a polygamous household."

"Hold it, Daddy. 'Incest' isn't just brothers."

He stared at her. "You've managed to startle me, Karen."

"Shocked you, you mean."

"No. 'Startled.' Were you seriously suggesting what you implied?"

"Daddy," she said soberly, "it's one subject I can't joke about. If I had to choose between you and Duke-as a husband, I mean-I'd take you and no two ways about it."

Hugh mopped his forehead. "Karen, such a statement can be honored only by taking it seriously—"

"I'm serious!"

"And I so take it. Do I understand that you have eliminated Joseph? Or have you considered him?"

"Certainly I have."

"Well?"

"How could I avoid it, Daddy? Joe is nice. But he's just a boy, even though he's older than I am. If I said, 'Boo!' he would jump out of his skin. No."

"Does his skin have something to do with your choice?"

"Daddy, you tempt me to spit in your face. I'm not Mother!"

"I wanted to be sure. Karen, you know that color does not matter to me. I want to know other things about a man. Is his word good? Does he meet his obligations? Does he do honest work? Is he brave? Will he stand up and be counted? Joe is very much a man by all standards that interest me. I think you are being hasty."

He sighed. "If we were in Mountain Springs, I would not urge you to marry any Negro. The pressures are too great; such a marriage is almost always a tragedy. But those barbaric factors do not obtain here. I urge that you give Joe serious thought."

"Daddy, don't you think I have? I may marry Joe. But I wanted you to know that if I had my choice, out of you three I would pick you."

"Thank you."

"Thank me, hell! I'm a woman and you are the man I would most like to. And a fat lot of good it will do me-and you know why. Mother."

"I know." He suddenly looked weary. "We do not what we wish, but what we can. Karen, I am dreadfully sorry that you do not have a longer list to choose from."

"Daddy, if I've learned anything from you, it is that it's a waste of tears to cry over anything that can't be helped. That's Mother, not me. And Duke, though not as bad. I'm just like you on this point—You count your points and play accordingly. You don't moan about how the cards aren't fair. Dig me, Daddy?"

"Yes."

"I didn't come here to ask you to marry me. Nor even to seduce you though I might as well say, having said so much, that you can have me if you want me. I think you've known that for years. I didn't come here to say that, either. I simply had to get things out of the way before I told you something else. Something where I've counted the points and I'm going set and that's that. Can't be helped."

"What? Perhaps I can help."

"Hardly. I'm pregnant, Daddy."

He dropped the shovel, took her in both arms. "Oh, wonderful!"

Presently she said, "Daddy...I can't shoot a bear with you hugging me."

He put her down, grabbed the rifle. "Where?"

"Nowhere. But you're always warning us."

"Oh. All right, I'll take over guard duty. Who's the father, Karen? Duke? or Joe?"

"Neither. Earlier, at school."

"Oh. Still better!"

"How? Damn it, Daddy, this isn't going the way it's supposed to. A girl comes home ruined, her father is supposed to raise hell. All you say is, 'Just dandy!' You've got me confused."

"Sorry. Under other circumstances, I might feel that you had been careless—"

"Oh, I was! I took a chance, like the nigguh mammy who said, 'Oh, hunnuhds of times ain't nuffin happen at all.' You know."

"I'm afraid I do. Under these circumstances I am delighted. I had assumed that you were inexperienced. To learn that, instead, you have gone ahead and given us a child and one whose father is from outside our group—Don't you see, dear? You have almost doubled the chances of this colony surviving."

"I have?"

"Figure it out, you're not stupid. Your child's father—Good stock?"

"Would I have been doing what I most certainly did if I hadn't thought pretty well of him, Daddy?"

"Sorry, dear. It was a stupid question." He smiled. "I don't feel like working. Let's go spread the good news."

"All right. But, Daddy—What do we tell Mother?"

"The truth, and I'll do the telling. Don't worry, baby girl. You have that baby and I will take care of all else."

"Yes, sir. Daddy, I feel real good now."

"That's fine."

"I feel so good that I almost forgot something. Did you know that Dr.—Livingstone-I-Presume is going to have babies, too?"

"Yes."

"Why didn't you tell me?"

"You had the same chance to notice that I did."

"Well, yes. But it's pretty frowsy, your noticing that Doe is pregnant-and not noticing that I am."

"I thought you had simply been overeating again."

"You did, huh? Daddy, sometimes I like you better than other times. But this time I guess I'm going to have to like you anyhow."

Hugh decided to eat dinner before stirring up Grace.

The decision was justified. From her rantings, it appeared that Karen was an ungrateful daughter, a disgrace, a shameless little tramp, and that Hugh was an unnatural father, a failure, and somehow to blame for his daughter's pregnancy.

Hugh let her rant until she paused for breath. "Grace. Be quiet."

"What? Hubert Farnham, don't you dare tell me to shut up! How can you sit there, when your own daughter has flagrantly dis—"

"Shut up or I will shut you up."

Duke said, "Pipe down, Mother."

"You, too? Oh, that I should ever see the day when—"

"Mother, keep still for a while. Let's hear from Dad."

Grace simmered, then said, "Joseph! Leave the room."

"Joe, sit down," Hugh ordered.

"Yes, Joe," agreed Karen. "Please stay."

"Well! If neither of you has the common decency to—"

"Grace, I am nearer to striking you than I have ever been in all these years. Will you keep quiet and listen?"

She looked at her son; Duke was carefully looking elsewhere. "Very well, I will listen. Not that it can possibly do any good."

"I hope that it will because it is supremely important. Grace, there is no point in heckling Karen. Besides being cruel, it's ridiculous. Her pregnancy is the best thing that has happened to us."

"Hubert Farnham, are you out of your mind?"

"Please. You are reacting in terms of conventional morality, which is foolish."

"Oh? So morals are foolish, are they? You hymn-singing hypocrite!"

"Morals are not foolish; morals must be our bedrock, always. But whether it was moral for Karen to breed a baby at another time and place, in a society that is no more, is irrelevant; we will not discuss it. The fact is, she did-and it is a blessing to us. Please analyze it. Six of us, four from one family. Genetically that is too small a breeding stock. Yet somehow we must flourish-or saving our own lives is wasted. But now we have a seventh, not here in person. That's better than we had any reason to hope. I pray that the twins that run in my family will show up in her. It would strengthen the stock."

"How can you talk about your own daughter as if you were breeding a cow!"

"She is my daughter whom I love. But more important—her supreme importance-is that she is a woman and pregnant. I wish that you and Barbara were pregnant, too-by outsiders. We need variety for the next generation."

"I will not sit here and be insulted!"

"I simply said 'wish.' In Karen we do have this miracle; we must cherish it. Grace, Karen must be treated with every consideration during her pregnancy. You must take care of her."

"Are you insinuating that I wouldn't? You are the one who cares nothing about her welfare. Your own daughter."

"It doesn't matter that she is my daughter. It would apply if it were Barbara, or you, or another woman. No more heavy work for Karen. That laundry she did today-you'll do that; you've loafed long enough. You'll pamper her. But most urgent, there will be no more scoldings, no harsh words, no recriminations. You will be sweet and kind and gentle with her. Don't fail in this, Grace. Or I will punish you."

"You wouldn't dare!"

"I hope I won't be forced to." Hugh faced his son. "Duke. Do I have your backing? Speak up."

"What do you mean by 'punishment,' Dad?"

"Whatever we are forced to use. Words. Social sanctions. Physical punishment if we must. Even expulsion from our group if no other choice remained."

Duke drummed on the table. "That's putting it brutally, Dad."

"Yes. I want you to think about the extremes."

Duke glanced at his sister. "I'll back you. Mother, you've got to behave."

She started to whimper. "My own son has turned against me. Oh, I wish I had never been born!"

"Barbara?"

"My opinion? I agree with you, Hugh. Karen needs kindness. She mustn't be scolded."

"You keep out of this!"

Barbara looked at Grace without expression. "I'm sorry but Hugh asked me. Karen asked me to be in it, too. I think you have behaved abominably, Grace. A baby isn't a calamity."

"That's easy for you to say!"

"Perhaps. But you've been nagging Karen steadily-and really, you mustn't."

Karen said suddenly, "Tell them, Barbara. About yourself."

"You want me to?"

"You'd better. Or now she'll start on you."

"Very well." Barbara bit her lip. "I said that a baby is not a calamity. I'm pregnant, too-and I'm very happy about it."

The silence told Barbara that her purpose of taking the heat off Karen had been achieved. As for herself, she was tranquil for the first time since she had begun to suspect that she was pregnant. She had not shed a tear-oh, no!—but she found that a tension she had not been conscious of was gone.

"Why, you tramp! No wonder my daughter went wrong, exposed to influences like—"

"Stop it, Grace!"

"Yes, Mother," agreed Duke. "Better keep quiet."

"I was just going to say—"

"You're not going to say anything, Mother. I mean it."

Mrs. Farnham subsided. Hugh went on: "Barbara, I hope you are not fibbing. Trying to protect Karen."

Barbara looked at him and could read no expression. "I am not fibbing, Hugh. I am between two and three months pregnant."

"Well, the rejoicing is now doubled. We will have to relieve you of heavy work, too. Duke, can you take on some farming?"

"Certainly."

"Joe can do some, too. Mmm—I must push ahead with the kitchen and bathroom. You'll both need such comforts long before either baby is born. Joe, that bearproof extra room can't be put off now; nursery space will be essential and we men will have to move out. I think—"

"Hugh—"

"Yes, Barbara?"

"Don't worry tonight. I can garden, I'm not as far along as Karen and I've had no morning sickness. I'll let you know when I need help."

He looked thoughtful. "No."

"Oh, heaven! I like gardening. Pioneer mothers always worked when pregnant. They stopped when the pains came."

"And it killed them, too. Barbara, we can't spare either of you. We'll treat you as the precious jewels you are." He looked around. "Right?"

"Right, Dad."

"Sure thing, Hugh!"

Mrs Farnham stood up. "Really, this conversation is making me ill."

"Good night, Grace. No farming for you, Barbara."

"But I like my farm. I'll quit in time."

"You can supervise. Don't let me catch you using a spading fork. Nor weeding. You might shake something loose. You're a gentleman farmer now."

"Does it say in your books how much work a pregnant woman may do?"

"I'll read up on it. But we'll err on the conservative side. Some doctors keep patients in bed for months to avoid losing a baby."

"Daddy, you don't expect us to stay in bed!"

"Probably not, Karen. But we will be very careful." He added, "Barbara is right; it can't all be settled tonight. Bridge, anyone? Or has there been too much excitement?"

"Hell, no!" Karen answered. "I can use pampering but bridge is one thing that can't cause a miscarriage. I think."

"No," agreed her father. "But the way you bid might cause heart failure in someone else."

"Pooh. Who wants to bid like a computer? Live dangerously, I always say."

"You do, dear."

They got no further than dealing. Dr. Livingstone, who had been sleeping in the "bathroom," at that moment came into the main room, walking stiff-legged and almost dragging hindquarters. "Joseph," the cat announced, "I am going to have these babies right now1'

The cat's anguished wailing, its hobbled gait, made its meaning clear as words. Joe was out of his chair at once. "Doe! What's the matter, Doe?"

He started to pick the cat up. That was not what Dr. Livingstone needed; it wailed louder and struggled. Hugh said, "Joe. Let it be."

"But old Doe hurts."

"So let's take care of the matter. Duke, we'll use electric lights and the camp lamp. Snuff the candles. Karen, blankets on the table and a clean sheet."

"Right away."

Hugh knelt by the cat. "Easy, Doe. It hurts, doesn't it? Never mind, it won't be long. We're here, we're here." He smoothed the fur along the spine, then gently felt the abdomen. "Contraction. Hurry up, Karen."

"Ready, Daddy!"

"Lift with me, Joe."

They placed the cat on the table. Joe said, "What do we do now?"

"Give you a Miltown."

"But Doe hurts."

"Surely she does. We can't do anything about it. She's having a bad time. It's her first litter and she's frightened, and she's older than she should be, for a first. Not good."

"But we have to do something."

"You can help by quieting down; you're communicating your fear to her. Joe, if there were anything I could do, I would. But there isn't much we can do but stand by and let her know that she is not alone. Keep her from being frightened. Do you want that tranquilizer?"

"Uh, I guess so."

"Get it, Duke. Don't leave, Joe; Doe trusts you."

"Hubert, if you are going to stay up all night over a cat again, I'll need a sleeping pill. You can't expect a person to sleep with all this fuss."

"A Seconal for your mother, Duke. Can anybody think of anything we can use as a kitten bed?" Hugh Farnham searched his memory. Every box, every scrap of lumber, had been used and re-used and re-re-used in endless make-do building. Build a nest of bricks? Not sooner than daylight and this poor animal needed a safe and comforting spot tonight. Take apart some shelves?

"Daddy, how about the bottom wardrobe drawer?"

"Perfect! Pile everything on a bunk. Pad it. Use my hunting jacket. Duke, rig a frame to support a blanket; she'll want a little cave she'll feel safe in. You know."

"Of course we know," Karen chided. "Quit jittering, Daddy. This isn't our first litter."

"Sorry, baby. We are about to have a kitten. See that, Joe?" Fur rippled from the cat's middle down toward the tail, then did so again.

Karen hurriedly threw everything out of the lowest wardrobe drawer, placed it against the wall and put the hunting jacket in it, rushed back. "Did I miss it?"

"No," Hugh assured her. "But right now!"

Doe stopped panting to give one wail and was delivered of a kitten in two quick convulsions.

"Why, it's wrapped in cellophane," Barbara said wonderingly.

"Didn't you know?" asked Karen. "Daddy, it's gray! Doe, where have you been? Though maybe I shouldn't bring that up."

Neither Hugh nor Dr. Livingstone answered. The mother cat started vigorously licking her offspring, broke the covering, and tiny ratlike arms and legs waved helplessly. A squeak so thin and high as to be almost inaudible announced its opinion of the world. Doe bit the cord and went on licking, cleaning off blood and mucus and purring loudly at the same time. The baby didn't like it and again vented almost silent protest.

"Boss," demanded Joe, "what's wrong with it? It's so skinny and little."

"Its a fine kitten. It's a pretty baby, Doe. He's a bachelor, he doesn't know." Hugh spoke cooingly and rubbed the eat between her ears. He went on in normal tones, "And the worst ease of bar sinister I ever saw-smooth-haired, tiger-striped, and gray."

Doe looked up reprovingly, gave a shudder and delivered the afterbirth, began chewing the bloody mass. Barbara gulped and rushed to the door, fumbled at a bolt. Karen went after her, opened it and steadied her while she threw up.

"Duke!" Hugh snapped. "Bear guard!"

Duke followed them, stuck his head out. Karen said, "Go 'way! We're safe. Bright moonlight."

"Well...leave the door open." He withdrew.

Karen said, "I thought you weren't having morning sickness?"

"I'm not. Oh!" Retching again hit her. "It was what Doe did."

"Oh, that. Cats always do that. Let me wipe your mouth, dear."

"It's awful."

"It's normal. Good for them. Hormones, or something; you can ask Hugh. All right now?"

"I think so. Karen! We don't have to do that? Do we? I won't, I won't!"

"Huh? Oh! Never thought of it. Oh, I know we don't-or they would have told us in Smut One."

"Lots of things they don't mention in Smut One," Barbara said darkly. "When I had to take it, it was taught by an old maid. But I won't. I'll resign first, not have this baby."

"Comrade," Karen said grimly, "that's something we both should have thought of earlier. Stand aside, it's my turn to heave."

Presently they went inside, pale but steady. Dr. Livingstone had three more kittens and Barbara managed to watch without further rushes for the door. Of the other birthings only the third was notable: a tiny tomcat but large in its tininess. He was a breech presentation, the skull did not pass easily, and Doe in her pain clamped down.

Hugh was busy at once, pulling gently on the little body with his whole hand and sweating like a surgeon. Doe wailed and bit his thumb. He did not let it stop him nor hurry him.

Suddenly the kitten came free; he bent over and blew in its mouth, was rewarded with a thin, indignant squeak. He put the baby down, let Dr. Livingstone clean it. "That was close," he said shakily.

"Old Doe didn't mean to," Joe said softly.

"Of course not. Which of you girls feels like fixing this for me?"

Barbara dressed the wound, while telling herself that she must not, must not, bite when her own time came.

The kittens were, in order, smooth-haired gray, fluffy white, midnight black with white jabot and mittens, and calico. After much argument between Karen and Joe, they were named: Happy New Year, Snow Princess Magnificent, Dr. Ebony Midnight, and Patchwork Girl of Oz-Happy, Maggie, Midnight, and Patches.

By midnight mother and children were bedded in the drawer with food, water, and sandbox near, and everyone went to bed. Joe slept on the floor with his head by the kitten nest.

When everyone was quiet, he raised up, used the flash to look in. Dr. Livingstone had one kitten in her arms, three more at suck; she stopped cleaning Maggie and looked inquiringly at him.

"They're beautiful kittens, Doe," he told her. "The best babies."

She spread her royal whiskers and purred agreement.

Chapter 8

Hugh leaned on his shovel. "That does it, Joe."

"Let me tidy up around the gate." They were at the upper end of their ditch where the stream had been dammed against the dry season. It had been on them for weeks; the forest was sere, the heat oppressive. They were extremely careful about fire.

But no longer so careful about bears. It was still standard practice to be armed, but Duke had killed so many carnivores, ursine and feline, they seldom saw one.

The water spilling over the dam was only a trickle but there was water for irrigation and for household needs. Without the ditch they would have lost their garden.

It was necessary every day or so to adjust the flow. Hugh had not built a water gate; paucity of tools, scarcity of metal, and a total lack of lumber had baffled him. Instead he had devised an expedient. The point where water was taken from the pond had been faced with brick and a spillway set of half-round tile. To increase the flow this was taken out, the spill cut deeper, bricks adjusted, and tiles replaced. It was clumsy; it worked.

The bottom of the ditch was tiled all the way to house and garden; a minimum of water was lost. Their kiln had worked day and night; most of their capital gain had come out of the clay bank below the house and it was becoming difficult to dig good clay.

This did not worry Hugh; they had almost everything they needed.

Their bathroom was no longer a joke. Water flowed in a two-stall trough toilet partitioned with deerhide; tile drainpipe "leaded" with clay ran down the manhole, out the tunnel, and to a cesspool.

Forming drainpipe Hugh had found very difficult. After many failures he had whittled a male form in three parts-in parts, because it was necessary to shape the clay over it, let it dry enough to take out the form before it cracked from shrinking over the form.

With practice he cut his failures to about 25 percent in forming, 25 percent in firing.

The damaged water tank he had cut painfully, mallet and chisel, lengthwise into tubs, a bathtub indoors and a washtub outdoors. The seams he had calked with shaved hide; the tubs did not leak-much.

A brick fireplace-oven filled one corner of the bath-kitchen. It was not in use; days were long and hot; they cooked outdoors and ate under an awning of empty bears-but it was ready against the next rainy season.

Their house now had two stories. Hugh had concluded that an addition strong enough to stop bears and tight enough to discourage snakes would have to be of stone, and solidly roofed. That he could do-but how about windows and doors? Glass he would make someday if he solved the problems of soda and lime. But not soon. A stout door and tight shutters he could manage, but such a cabin would be stuffy.

So they had built a shed on the roof, a grass shack. With the ladder up, a bear faced a twelve-foot wall. Unsure that a wall would stop all their neighbors, Hugh had arranged trip lines around the edge so that disturbing them would cause an oxygen bottle to fall over. Their alarm was tripped the first week, scaring off the intruder. It had also, Hugh admitted, scared the bejasus out of him.

Anything that could not be hurt by weather had been moved out and the main room was rearranged into a women's dormitory and nursery. Hugh stared downstream while Joe finished fussing. He could make out the roof of his penthouse. Good enough, he mused. Everything was in fair shape and next year would be better. So much better that they might take time to explore. Even Duke had not been as much as twenty miles away. Nothing but feet for travel and too busy scratching to live—Next year would be soon enough.

"A man's reach should exceed his grasp, or what's a heaven for?" They had started with neither pot nor window. This year a pot—Next year a window? No hurry—Things were going well. Even Grace seemed contented. He felt certain that she would settle down and be a happy grandmother. Grace liked babies, Grace did well with babies—How well he remembered.

Not long now. Baby Karen was fuzzily vague but her guesses seemed to show that D-day was about two weeks off, and her condition matched her guess, as near as he could tell.

The sooner the better! Hugh had studied everything in his library on pregnancy and childbirth; he had made every preparation he could. His patients seemed to be in perfect health, both had satisfactory pelvic measurements, both seemed unafraid, and they helped each other with friendly nagging, not to gain too much weight. With Barbara to hold Karen's hand, with Karen to hold Barbara's hand, with Grace's motherly experience to bolster them, Hugh could see no trouble ahead.

It would be wonderful to have babies in the house.

With a warm wave of euphoria Hugh Farnham realized that he had never been so happy in his life.

"That's it, Hugh. Let's catch those tiles on the way back."

"Okay. Take the rifle, I'll carry the tools."

"I think," Joe said, "we ought to—"

His words chopped off at a gunshot; they froze. It was followed by two more. They ran.

Barbara was in the door. She held up a gun and waved, went inside. She came out before they reached the house, stepping carefully down off the stoop and moving slowly; she was very gravid. Her belly bulged huge in shorts made from wornout jeans that had belonged to Duke; she wore a man's shirt altered to support her breasts. She was barefooted and no longer carried the gun.

Joe outdistanced Hugh, met her near the house. "Karen?" he demanded.

"Yes. She's started."

Joe hurried inside. Hugh arrived, stood panting. "Well?"

"Her bag of waters burst. Then the pains started. That was when I fired."

"Why didn't you—Never mind. What else?"

"Grace is with her. But she wants you."

"Let me catch my breath." Hugh wiped his face, tried to control his trembling. He took a deep breath, held it, let it out slowly. He went inside, Barbara following.

The bunks near the door had been taken down. A bed stuck out into the doorway but space cleared by removing shelves left passage. One bunk was now a cot in the living corner. The bed was padded with a grass mattress and a bear rug; a calico cat was on it.

Hugh squeezed past, felt another eat brush his ankles. He went into the other bay. The bunks there had been rebuilt into a bed across the end; Karen was in bed, Grace was seated, fanning her, and Joe stood by with an air of grave concern.

Hugh smiled at his daughter. "Hi, Fatty!" He stooped and kissed her. "How are you? Hurting?"

"Not now. But I'm glad you're here."

"We hurried."

A cat jumped up, landing on Karen. "Unh! Damn you, Maggie!"

"Joe," said Hugh, "round up the cats and put them in Coventry." The tunnel mouth had been bricked up, but with air holes, and a cat door which could be filled with a large brick. The cats had a low opinion of this but it had been built after Happy New Year had become missing and presumed dead.

Karen said, "Daddy, I want Maggie with me!"

"Joe, make that all but Maggie. When we get busy, grab Maggie and shut her up, too."

"Can do, Hugh." Joe left, passing Barbara coming in.

Hugh felt Karen's cheeks, took her pulse. He said to his wife, "Is she shaved?"

"There hasn't been time."

"You and Barbara get her shaved and washed. Punkin', when did your bowels move?"

"Just did. I was on the pot when it happened. Just sitting there minding my own business-and all of a sudden I'm Niagara Falls!"

"But your bowels moved?"

"Oh, yes!"

"That's one less thing to worry about." He smiled. "Not that there's anything to worry about, you'll play bridge most of the night. Like kittens, babies show up in the wee, sma' hours."

"All night? I want to have this little bastard and get it over with."

"I want it over with, too, but babies have minds of their own." He added, "You'll be busy a while and so will I. I'm dirty." He started to leave.

"Daddy, wait a minute. Do I have to stay back here? It's hot."

"No. The light is better by the door. Especially if young Tarzan has the decency to arrive during daylight. Barbara, turn that used bear over; it'll be cooler. Put this sheet on it. Or a clean one if there is one."

"The sterilized one?"

"No. Don't unpack the boiled sheet until the riot starts." Hugh patted his patient's hand. "Try not to have a pain until I'm clean."

"Daddy, you should have been a doctor."

"I am a doctor. The best doctor in the world."

As he left the house he encountered Duke, soaked from a long run. "I heard three shots. Sis?"

"Yes. No hurry, labor just started. I'm about to take a bath. Want to join me?"

"I want to say hello to Sis first."

"Hurry up; they're about to bathe her. And grab Joe; he's incarcerating cats. They'll want us out of the way."

"Shouldn't we be boiling water?"

"Do so, if it will calm you. Duke, my O.B. kit, such as it is, has been ready for a month. There are six jars of boiled water, for this and that. Go kiss your sister and don't let her see that you're worried."

"You're a cold fish, Dad."

"Son, I'm scared silly. I can list thirteen major complications-and I'm not prepared to cope with any of them. Mostly I pat her hand and tell her that everything is dandy-and that's what she needs. I examine her, solemn as a judge, and don't know what to look for. It's just to reassure her...and I'll thank you to help out."

Duke said soberly, "I will, sir. I'll kid her along."

"Don't overdo it. Just let her see that you share her confidence in old Doe Farnham."

"I will."

"If Joe gets the jitters, get him out. He's the worst. Grace is doing fine. Hurry up or they won't let you in."

Later, bathed and calmed down, Hugh climbed out of the stream ahead of Joe and Duke, walked back carrying his clothes and letting the air dry him. He paused outside, put on clean shorts. "Knock, knock!"

"Stay out," Grace called. "We're busy."

"Then cover her. I want to scrub."

"Don't be silly, Mother. Come in, Daddy."

He went in, squeezing around Barbara and Grace, and on into the bathroom. He trimmed his nails very closely, scrubbed his hands with ditch water-then again with boiled water, and repeated it. He shook them dry and went into the main room, being careful not to touch anything.

Karen was on the bed at the door, a ragged half sheet over her. Her shoulders were swaddled in a grayish garment that had been the shirt Hugh had worn the night of the attack. Grace and Barbara were seated on the bed, Duke stood outside the door, and Joe sat mournfully on the bunk beyond the bed.

Hugh smiled at her. "How is it going? Any twinges?"

"Nary a twinge, damn it. I want to have him before dinner."

"You will. Because you don't get any dinner."

"Beast. My daddy is a beast."

"Doctor Beast, please. Skedaddle, friends, I want to examine my patient. Everyone but Grace. Barbara, go lie down."

"I'm not tired."

"You may be awake most of the night. Take a nap. I don't want to cope with a seven-month preemie."

He folded back the sheet, looked Karen over, and palpated her swollen belly. "Has he been kicking?"

"Has he! I'm going to sign him up with the Green Bay Packers. I think he's wearing shoes."

"Wouldn't be surprised. Did you have shoes on when you started him?"

"What? Daddy, you are a nasty man. Yes."

"Prenatal influence. Next time take them off." He tried to judge whether the child was in the head-down position, or whether it was-God forbid!—a breech presentation. He was unable to decide. So he smiled at Karen and lied. "Shoes won't bother us, as he is head down, just as he should be. It's going to be an easy birth."

"How can you tell, Daddy?"

"Put your hand where mine is. That's his little pointy head, all set to take the dive. Feel it?"

"I guess so."

"You could see, if you were where I am." He tried to see if she was dilated. There was a little blood and he decided against a tactile examination-he did not know how it should feel and handling the birth canal would increase danger of infection. He knew that a rectal exploration should tell him something but be did not know what-so there was no point in submitting Karen to that indignity.

He looked up, caught his wife's eye and thought of asking her opinion, decided not to. Despite having borne children, Grace knew no more about it than he did; the only result would be to shake Karen's confidence. --

Instead he got his "stethoscope" (three end papers from his encyclopaedia, rolled into a tube) and listened for fetal heartbeat. He had often heard it lately. But he got only a variety of noises which he lumped in his mind as "gut rumble."

"Ticking like a metronome," he 'announced, putting the tube down and covering her. "Your baby's in fine shape, baby girl, and so are you. Grace, did you start a log when the first pain showed?"

"Barbara did."

"Will you keep it, please? But first tell Duke to take the ropes off the other bed and rig them here."

"Hubert, are you sure she should pull on ropes? Neither of my doctors had me do anything of the sort."

"It's the latest thing," he reassured her. "All hospitals use them now." Hugh had read somewhere that midwives often had their patients pull on ropes while bearing down. He had looked for this in his books, could not find it. But it struck him as sound mechanics; a woman should be able to bear down better.

Grace looked doubtful but dropped the matter and left the shelter. Hugh started to get up. Karen grabbed his hand. "Don't go 'way, Daddy!"

"Pain?"

"No. Something to tell you. I asked Joe to marry me. Last week. And he accepted."

"I'm glad to hear it, dear. I think you are getting a prize."

"I do, too. Oh, it's Hobson's choice but I do love him, quite a lot. But we won't get married until I'm up and around and strong. I couldn't face the row with Mother, not now."

"I won't tell her."

"Better not tell Duke, either. Barbara knows., she thinks it's swell."

A contraction hit Karen while Duke war adjusting ropes. She yelped, chopped it off and gritted her teeth, reached for the ropes as Duke hastily handed them to her. Hugh put his hand on her belly, felt her womb harden as increasing pain showed in her face. "Bear down, baby," he told her. "And pant; it helps." .

She started to pant, it turned into a scream.

Endless seconds later she relaxed, forced a smile and said, "They went that a-way! Sorry about the sound effects, Daddy."

"Yell if you want to. But panting does more good. Now rest while you can. Let's get this organized. Joe, you're drafted as cook. I want Barbara to rest and Grace to nurse-so you cook dinner, please. Fix some cold supper, too. Grace, did you log it?"

"Yes."

"Did you time the contraction?"

"I did," Barbara answered. "Forty-four seconds."

Karen looked indignant. "Barb, you are out of your mind! It was over an hour."

"Call it fortyfive seconds," Hugh said. "I want the time of each pain and how long it lasts."

Seven minutes later the next one hit. Karen managed to pant, screamed only a little. But she did not feel like joking afterwards; she turned her face away. The contraction had been long and severe. Though shaken by his daughter's agony, Hugh felt encouraged; it seemed certain that labor was going to be short.

It was not. All that hot and weary day the woman brought to bed fought to void herself of her burden-white-faced and shrieking, belly hardening with each attempt, muscles in arms and neck standing out as she strained-then fell back limp as the contraction died away, tired and trembling, not speaking, uninterested in anything but the ordeal.

It got steadily worse. Contractions became only three minutes apart, each one longer and seeming to hurt more. Once Hugh told her not to use the ropes; he could not see that they helped. Quickly she asked for them and seemed not to have heard him. She did seem slightly less uncomfortable braced against them.

At nine that night there was bleeding. Grace became frantic; she had heard many stories of the dangers of hemorrhage. Hugh assured her that it was normal and showed that the baby would arrive soon. He believed it, as it was not massive and did not continue-and it did not seem possible that birth could be far away.

Grace looked angry and got up; Barbara slipped into the chair she vacated. Hugh hoped that Grace would rest-the women had been taking turns.

But Grace returned a few minutes later. "Hubert," she said in a high, brittle voice. "Hubert, I'm goi1~g to call a doctor."

"Do that," he agreed, his eyes on Karen.

"You listen to me, Hubert Farnham. You should have called a doctor at once. You're killing her, you hear me? I'm going to call a doctor-and you are not going to stop me."

"Yes, Grace. The telephone is in there." He pointed into the other wing. Grace looked puzzled, then turned suddenly and went away. "Duke!"

His son hurried in. "Yes, Dad?"

Hugh said forcefully, "Duke, your mother has decided to telephone for a doctor. You go help her. Do you understand?"

Duke's eyes widened. "Where are the needles?"

"In the smaller bundle on the table. Don't touch the large bundle; it's sterile."

"Got it. What dosage?"

"Two c.c. Don't let her see the needle, or she'll jerk." Hugh's head jerked; he realized that he was groggy. "Make that three c.c.; I want her to go out like a light and sleep until morning. She can tolerate it."

"Right away." Duke left.

Karen had been lying quiet between contractions, apparently in semi-coma. Now she whispered, "Poor Daddy. Your women give you a lot of grief."

"Rest, dear."

"I—Oh, God, here it comes again!"

Then she was saying between screams: "It hurts! Make it stop! Oh, Daddy, I do want a doctor! Please, Daddy! Get me a doctor!"

"Bear down, darling. Bear down."

It went on and on, far into the night, no respite and getting worse. It stopped being worth while to log contractions; they almost overlapped. Karen no longer could be said to talk; she screamed incoherent demands for relief when she strained, spoke unresponsively or did not answer in the brief periods between contractions.

Around dawn-it seemed to Hugh that the torture had been going on for weeks but his watch showed that Karen had been in labor eighteen hours-Barbara said urgently, "Hugh, she can't take any more."

"I know," he admitted, looking at his daughter. She was at the peak of a pain, face gray and contorted, mouth squared in agony, high sobbing moans coming out between her teeth.

"Well?"

"I suppose she should have had a Caesarean. But I'm no surgeon."

"I wonder."

"I don't. I'm not."

"You know more about it than the first man who ever did one! You know how to keep it sterile. We have sulfa drugs and you can load her up with Demerol." She did not try to keep Karen from hearing; their patient was beyond caring.

"Hugh, you must. She's dying."

"I know." He sighed. "But it's too late for a Caesarean, even ill knew how. To save Karen with one, I mean. We might save her baby." He blinked and swayed. "Only it would not. Who's to wet-nurse? You can't, not yet. And cows we don't have."

He took a deep breath, tried to get a grip on himself. "Only one thing left. Try to get it out Eskimo style."

"What's that?"

"Get her up and let gravity help. Maybe it'll work. Call the boys, we'll need them. I've got to scrub again; I might have to do an episiotomy. Oh, God."

Five minutes and two contractions later they were ready to try it. When Karen lay back exhausted after the second one, Hugh tried to explain what they were going to do. It was hard to get her attention. At last she nodded slightly and whispered, "I don't care."

Hugh went to the table where his equipment was now opened out, got his one scalpel, took the camp lamp in his other hand. "All right, boys. As soon as she starts, pick her up."

They had only seconds to wait. Hugh saw the contraction start, nodded to Duke. "Now!"

"With me, Joe." They started to lift her, each with an arm under her back, a hand under a thigh.

Karen screamed and fought them off. "No, no! Don't touch me-I can't stand it! Daddy, make them stop! Daddy!"

They stopped. Duke said, "Dad?"

"Lift her up! Now!"

They got her high in a squatting position, thighs pulled open. Barbara got behind Karen, arms around her, and pressed down on the girl's tortured belly. Karen screamed and struggled; they held her fast. Hugh got hurriedly to the floor, shined the light up. "Bear down, Karen, bear down!"

"Ooooooh!"

Suddenly he saw the baby's scalp, gray-blue. He started to lay the knife aside; the head retreated. "Try again, Karen!"

He readjusted the lamp. He wondered whether he was supposed to make the incision in front? Or in back? Or both? He saw the scalp show again and stop; with his hand suddenly rock steady and with no conscious decision he reached up and made one small cut.

He barely had time to drop the knife before he had both hands full of wet, slippery, bloody baby. He knew there was something else he should do now but all he could think of was to get it by both feet in his left hand, lift it and slap its tiny bottom.

It let out a choked wail.

"Get her on the bed, boys-but easy! It's still fastened by the cord."

They made it, Hugh on his knees and burdened with a feebly wiggling load. Once they had Karen down, Hugh started to put her baby in her arms-but saw that Karen was not up to it. She seemed to be awake-her eyes were open. But she was in total collapse.

Hugh was close to collapse. He looked dazedly around, handed the baby to Barbara. "Stay close," he told her, unnecessarily.

"Dad?" said Duke. "Aren't you supposed to cut the cord?"

"Not yet." Where was that knife? He found it, rubbed it quickly with iodine-hoped that it was sterile. Placed it by two boiled lengths of cotton string-turned and felt the cord to see if it was pulsing.

"He's beautiful," Joe said softly.

"She," Hugh corrected. "The baby is a girl. Now, Barbara, if you—"

He broke off. Suddenly everything happened too fast. The baby started to choke; Hugh grabbed it, turned it upside down, dug into its mouth, scooped out a plug of mucus, handed the baby back, started again to check the cord-saw that Karen was in trouble.

With a nightmare feeling that he needed to be twins he got one of the strings, tied a square knot around the cord near the baby's belly, trying to control his trembling so as not to tie it too hard-started to tie the second, saw that it was not needed; Karen suddenly delivered the placenta and was hemorrhaging. She moaned.

With one slash Hugh cut the cord, snapped at Barbara, "Get a bellyband on it!"—turned to take care of the mother.

She was flowing like a river; her face was gray and she seemed unconscious. Too late to attempt to take stitches in the cut he had made and the tears that followed; he could see that this flood was from inside, not from the damaged portal. He tried to stop it by packing her inside with their last roll of gauze while shouting to Joe and to Duke to get a bellyband and compress on Karen herself to put pressure on her uterus.

Some agonized time later the belly compress was in place and the gauze was backed by a dam of sanitary napkins-one irreplaceable, Hugh thought tiredly, they hadn't needed much. He raised his eyes and looked at Karen's face-then in sudden panic tried to find her pulse.

Karen had survived the birth of her daughter by less than seven minutes.

Chapter 9

Katherine Josephine survived her mother by a day. Hugh baptized her with that name and a drop of water an hour after Karen died; it was clear that the baby might not last long. She had trouble breathing.

Once when the baby choked, Barbara started her up again by mouth-to-mouth suction, getting a mouthful of something she spat out hastily. Little Jodie seemed better then for quite a while.

But Hugh knew that it was only a reprieve; he could see no chance of keeping the baby alive long enough-two months-to let Barbara feed it. Only two cans of Carnation milk were left in their stores.

Nevertheless they worked grimly around the clock.

Grace mixed a formula from memory-evaporated milk, boiled water, a hoarded can of white Karo. They had no food cells, not even a nipple. An orphaned baby was a crisis for which Hugh had not planned. In hindsight it seemed the most glaring of probable emergencies. He tried not to brood over his failure, dedicated himself to keeping Karen's daughter alive.

A plastic-barreled eyedropper was the nearest to a nipple they could find. They used it to pick up the formula, try to match the pressure with the infant's attempts to suck.

It did not work well. Little Jodie continued to have trouble breathing and tended to choke every time they tried to feed her; they spent as much time trying to clear her throat and get her cranked up again as they did in feeding her. She seemed reluctant to suck on the harsh substitute and if they squirted food into her mouth anyway, she always choked. Twice Grace was able to coax her into taking almost an ounce. Both times she threw it up. Barbara and Hugh had even less luck.

Before dawn following her birthday Hugh was awakened by Grace screaming. The child had choked to death.

During the long day in which three of them battled to save the baby, Duke and Joe dug a grave, high up the hill in a sunny spot. They dug deep and stocked a pile of boulders; both held concealed horror that a bear or coyotes might dig up the grave.

Grave dug, boulders waiting, Joe said in a strained voice, "How are we going to build a casket?"

Duke sighed and wiped sweat from his eyes. "Joe, we can't."

"We've got to."

"Oh, we could cut trees and split them and adz out some lumber-we've done that when we had to. That kitchen counter. But how long would it take? Joe, this is hot weather-Karen can't wait!"

"We've got to tear down something and build out of it. A bed, maybe. Bookcases."

"Taking the wardrobe apart would be easiest."

"Let's start."

"Joe. The 'only things we could use to build a coffin are in the house. Do you think Hugh will let us go in there now and start ripping and tearing and banging? If anybody woke that baby or startled it when they were trying to get it to feed, Dad would kill him. If Barbara or Mother didn't kill him first. No, Joe. No coffin."

They settled for a vault, using all their stock of bricks; these they used to build a box in the bottom of the grave, then cut down their dining canopy to line it, and cut timbers to cover it. Poor as it was, they felt comforted by it.

Next morning the grave received mother and daughter.

Joe and Duke placed them in it, Duke having insisted that his father stay behind and take care of Grace and Barbara. Duke had visualized how awkward it would be, getting the bodies into the grave and arranging them; he would not have had Joe along had not an assistant been necessary. He suggested that his mother not come 'to the grave at all.

Hugh shook his head. "I thought of that. You try to convince her. I can't budge her."

Nor could Duke. But when he sent Joe down for the others, his sister and her daughter were decently at rest with their winding sheet neatly arranged, and no trace remained of the struggle it had been to place 'them there, the rebuilding of part of the brick box that had been necessary, or-worst-the moment when the tiny corpse had fallen out of the sheet when they tried to get them both down as one. Karen's face looked peaceful and her daughter was cuddled in her arm as if sleeping.

Duke balanced with a foot on each brick wall, knelt over her. "Goodbye, Sis," he whispered. "I'm sorry." He covered her face and got carefully out of the grave. A little procession was coming up the hill, Hugh 'assisting his wife, Joe helping Barbara. Beyond the shelter 'their flag flew at half-mast.

They arranged themselves at the grave, Hugh at the head, his wife on his right, his son on his left, Barbara and Joe at the foot. To Duke's relief no one asked that faces be uncovered nor did his mother seem disturbed at the arrangements.

Hugh took a small black book from his pocket, opened it to a marked page:

"'I am the Resurrection and the Life...

"'We brought nothing into this world, and it is certain that we can take nothing out. The Lord gave, and the Lord hath taken—'"

Grace sobbed and her knees started to fail Hugh shoved the book into Duke's hands, moved to support his wife. "Take over, Son!"

"Take her back down, Dad!"

Grace said brokenly, "No, no! I must stay."

"Read it, Duke. I've marked the passages."

"'...he heapeth up riches, and cannot tell who shall gather them.

"'For I am a stranger with thee, and a sojourner, as all my fathers were.

"'0 spare me a little, that I may recover my strength.

"'Man, that is born of woman, hath but a short time to live, and is full of misery.

"'Unto Almighty God we commend the soul of our sister—of our sisters-and we commit their bodies to the ground; earth to earth, ashes to ashes, dust to dust—'"

Duke paused, dropped the tiniest of clods into the grave. He looked back at the book, closed it and said suddenly, "Let us pray."

They took Grace back and put her to bed; Joe and Duke returned to close the grave. Hugh, seeing that his wife appeared to be resting, started to snuff candles in the rear bay. She opened her eyes. "Hubert —"

"Yes, Grace?"

"I told you. I warned you. You wouldn't listen to me."

"About what, Grace?"

"I told you she had to have a doctor! You wouldn't call one. You were too proud. You sacrificed my daughter on the altar of your pride. My baby. You killed her."

"Grace, there are no doctors here. You know that."

"If you were even half a man, you wouldn't make excuses!"

"Grace, please. May I get you something? A Miltown? Or would you like a hypo?"

"No, no!" she said shrilly. "That's how you tricked me when I was going to get a doctor anyway. In spite of you. You'll never again trick me with your drugs. And you'll never touch me again, either. Murderer."

"Yes, Grace." He turned and left.

Barbara was on the stoop, sitting with her head in her hands. Hugh said, "Barbara, the flag must be two-blocked. Do you want me to do it?"

"So soon, Hugh?"

"Yes. We go on."

Chapter 10

They went on. Duke hunted, Duke and Joe farmed, Hugh worked harder than ever. Grace worked too, and her cooking improved-and her eating; she got fatter. She never mentioned her conviction that her husband had been responsible for the death of their daughter.

She did not speak to him at all. When a problem had to be discussed she spoke to Duke. She quit attending church services.

In the last month of Barbara's pregnancy, Duke sought out his father privately. "Dad, you told me that any time I wanted to leave-or any of us-we could."

Hugh was startled. "Yes."

"A pro-rata share, you said. Ammo, tools, and so forth."

"Better than that; we're a going concern. Duke, you are leaving?"

"Yes-but not just myself. Mother wants to. She's the one who's dead set on it. I've got reasons, but Mother's wishes are the deciding factor."

"Mmm—Let's talk about your reasons. Are you dissatisfied with the way I'm running things? I will gladly step aside. I feel sure that I can get Joe and Barbara to go along, so that you will have unanimous support." He sighed. "I am anxious to turn over the burden."

Duke shook his head. "That's not it, Dad. I don't want to be boss and you've done a good job. Oh, I won't say I liked the highhanded way you started in. But results count and you got results. I'd rather not discuss my reasons except to say that they don't have to do with you-and wouldn't be enough to make me leave if Mother weren't hipped on it. She wants to leave. She's going to leave. I can't let her leave alone."

"Can you tell me why Grace wants to leave?"

Duke hesitated. "Dad, I don't see that it matters; she's made up her mind. I pointed out that I couldn't make things as safe for her-nor as comfortable-as it is here. But she's adamant."

Hugh pondered it. "Duke, if that's how your mother feels, I won't try to persuade her; I've long since lost my influence over her. But I have two ideas. You may find one of them practical."

"I doubt it."

"Hear me. You know we have copper tubing; we used some in the kitchen. We have everything for a still; I stocked the items to build one if a war came along-not just for us but because liquor is money in any primitive society.

"I haven't built it for reasons we both know. But I could and I know how to make liquor." He smiled slightly. "Not book knowledge. While I was in the South Pacific, I bossed a still, with the shuteye connivance of my C.O. I learned how to turn corn or potatoes or most anything into vodka, or fruit into brandy. Duke, your mother might be happy if she had liquor.

"She would drink herself to death!"

"Duke, Duke! If she is happy doing it, who are we to stop her? What does she have to live for? She loved television, she enjoyed parties, she could spend a happy day at the hairdresser's, followed by a movie, then drinks with one of her friends. That was her life, Duke. Now where is it? Gone, gone! There is just this we can give her to make up for what she has lost. Who are you to decided that you mother must not drink herself to death?"

"Dad, that's not the situation!"

"So?"

"You know I don't-didn't-approve of Mother's excessive drinking. But I might go along with letting her drink all she wants now. If you build that still, we might be customers. But we would still leave. Because that won't solve Mother's problem."

"Well, Duke, that leaves only my other idea. I'll get out instead. Only—" Hugh frowned. "Duke, tell her that I will leave as soon as Barbara has her baby. I can't walk out on my patient. You can give Grace my assur—"

"Dad, that won't solve a thing!"

"I don't understand."

"Oh, Christ, I might as well spill it. It's Barbara. She's—Well, hell, Mother is nuts on the subject. Can't stand her. Ever since Karen died. She said to me, 'Duke, that woman is not going to have her child in my home! Her bastard. I won't have it. You tell your father that he has got to get her out of here.' That's what she said, Dad."

"Good Lord!"

"Yeah. I tried to reason with her. I told her that Barbara couldn't leave. I gave her both barrels, Dad; I said there wasn't a chance that you would ever force Barbara to leave. But as for making her leave now, or even letting her, you would no more do it than you would have driven Karen out. I told her that I wouldn't, either, and that Joe and I would fight you to stop it, stipulating that you were crazy enough to try. Which you aren't, of course."

"Thank you."

"That did it. She believes me when I lay it on the line. So she decided to leave. I can't stall her any longer. She's leaving. I'm going with her, to take care of her."

His father rubbed his temples. "I guess there is no situation so bad but what it can get worse. Duke, even with you, she hasn't 'anywhere to go."

"Not quite, Dad."

"Eh?"

"I can swing it, with your help. Do you remember that cave up Collins Canyon, the one they tried to make a tourist attraction? It's still there. Or its twin, I mean. I was hunting up that way that first week. The canyon looked so familiar that I climbed up and looked for the cave. Found it. And Dad, it's habitable and defensible."

"The door? The mouth?"

"No problem. If you can spare that steel plate that blocked off the tunnel."

"Certainly."

"The cave has a vent, higher up. No smoke problem. It has a spring that hasn't failed all this dry weather. Dad, it's as comfortable as the shelter; all it needs is outfitting."

"I capitulate. You can take almost anything now. Beds, of course. Utensils. Your pick of the canned goods. Matches, ammunition, guns. Make a list, I'll help you move."

Duke colored under his tan. "Dad, a few things are up there already."

"So? Did you think I would be pinchpenny?"

"Uh...I don't mean the past few days. I moved some things up the first days we were here. You see...well, you and I had that row-and then you made me rationing officer. That gave me the idea, and for a week or more I always left here loaded, leaving when no one was watching."

"Stealing."

"I didn't figure it so. I never took as much 'as one-sixth of anything...and just stuff I would have to have in a pinch. Matches. Ammo. That rifle you couldn't find. One blanket. A knife. A little food. Some candles. You see...well, look at it from my side. There was always the chance that I would get you sore and either have to fight-one of us killed is the way you put it-or run and not be able to stop for anything. I decided not to fight. So I made preparations. But I didn't steal it; you said I could have it. Say the word and I'll fetch it all back."

Hugh Farnham peeled a callus, then looked up. "One man's stealing is another man's survival, I suppose. Just one thing—Duke, in that food you took: Were there any cans of milk?"

"Not one. Dad, don't you think, if there had been, I would have beaten all records getting up there and back when Karen died?"

"Yes. I'm sorry I asked."

"I was sorry I hadn't snitched a few cans; then they wouldn't have been used up."

"The baby didn't last out the milk we had, Duke. All right, it calls for quick surgery-but don't forget that you can come back, any time. Duke, women sometimes get unreasonable at about your mother's age...then get over it and are nice old ladies. Maybe we'll have the family together again. I hope we'll see you occasionally. You're~ welcome to all the vegetables you can eat, of course."

"I was going to mention that. I can't farm up there. Suppose I still hunt for all of us...and when I bring in a load of meat I take away a load of green stuff?"

His father smiled. "We have reinstituted commerce. And we can supply you with pottery and there's no need to do your own tanning. Duke, I suggest you sort out what you want, and tomorrow you and I and Joe will start packing it to your cave. Be lavish. Just one thing—"

"What?"

"The books are mine! Anything you want to look up, you'll have to come here. This is not a circulating library."

"Fair enough."

"I mean it. You can have my razor, you can have my best knife. But snitch one book and I'll skin you alive and bind that book in human skin. There are limits. All right, I'll tell Joe, and get Barbara out of the house and we'll stay away until dark. Good luck, and tell Grace no hard feelings. There are, but tell her that. But I'm not too groused. It takes two to create a heaven...but hell can be accomplished by one. I can't say that I've been happy lately and Grace may be smarter than we think."

"That's a polite way of telling us to go to hell, Dad."

"Possibly."

"Whatever you mean, the same to you. It was no accident that I moved away from home as soon as I could."

"Touché! Well, get on with it." His father turned and walked away.

Joe made no comment. He simply said that he had better get on with the irrigating. Barbara said nothing until they were alone.

Hugh took a picnic lunch-chunks of corn pone, some strings of jerky, two tomatoes, plus a canteen of water. He fetched a rifle and a blanket. They went up the hill above the grave and picked the shade of a detached tree. Hugh noticed fresh flowers on the grave and wondered if Barbara had been trudging up there. The climb was difficult for her; they had taken it very slowly. Or had Grace been doing it? It seemed still less likely. Then he thought of the obvious: Joe.

Once Barbara had her heavy body comfortable, on her back with knees up, Hugh said, "Well?"

She was silent a long time. "Hugh, I'm dreadfully sorry. It's my fault. Isn't it?"

"Your fault? Because a woman sick in her mind fixes on you to hate? You told me once not to blame myself for another person's defect. You should take your own advice."

"That wasn't what I meant, Hugh. I mean: losing your son. Grace could not leave if Duke did not. Did he say anything? About me?"

"Nothing but this ridiculous set that Grace has taken. What should he have said?"

"I wonder if I am free to say? In any case I am going to. Hugh, after Karen died, Duke asked me to marry him. I refused. He was hurt. And surprised. You see—You knew about Karen and Joe?"

"Yes."

"I didn't know whether Karen had told you. When she decided to marry Joe, I made up my mind that I would have to marry Duke. Karen took it for granted and I admitted that I intended to. She may have told Duke. In any case, he expected me to say Yes. I said No. And he was hurt. I'm sorry, Hugh. If you want me to, I'll tell him I've changed my mind."

"Hold on! I think you made a mistake. But I won't have you correcting it to please me. What do you want to do? Do you plan to marry Joe, now?"

"Joe? I never planned to marry Joe. Although I would marry him as readily as Duke. Hugh, I want to do what I always want to do. Whatever you want." She turned on her side and faced him. "You know that. If you want me to marry Joe, I will. If you want me to marry Duke, I will. You say it, I'll do it."

"Barbara, Barbara!"

"I mean it, Hugh. Or anything more, or anything less. You're my boss. Not just some, but all. Haven't I done so, all the time we've been together? I play by the book."

"Stop talking nonsense."

"If it's nonsense, it's true nonsense."

"As may be. I want you to marry whom you want to marry."

"That's the one thing I can't do. You are already married."

"Huh?"

"Are you surprised? No, I've surprised you only by saying it-when we've kept silent so long. That's how it is and that's how it's always been. Since I can't marry you, I'll marry whom you say. Or never marry."

"Barbara, will you marry me?"

"What did you say?"

"Will you marry me?"

"Yes."

He leaned over and kissed her. She kissed him back, lips open, full surrender.

Presently he straightened up. "Would you like some corn pone?"

"Not yet."

"I thought we might have some to celebrate. It calls for champagne. But corn pone is what we have."

"Oh. Then I'll have a nibble. And a sip of water. Hugh, Hugh my beloved, what are you going to do about Grace?"

"Nothing. She's divorcing me. In fact she divorced me more than a month ago, the day-the day we buried Karen. That she is still here is just housing shortage. It doesn't take a judge to grant a divorce here, any more than it will take a license for me to marry you."

Barbara spread her hands over her swollen belly. "I have my marriage license, right here!" Her voice was light and happy.

"The child is mine?"

She looked at him. "Look over to the east."

"At what?"

"Do you see Three Wise Men approaching?"

"Oh. Idiot!"

"It is yours, my beloved. A thing a woman can never prove but can be utterly sure of."

He kissed her again. When he stopped she caressed his cheek. "I'd like corn pone now, lots of it. I'm hungry. I feel very full of life and anxious to live."

"Yes! Tomorrow our honeymoon starts."

"Today. It has started, Hugh. I'm going to enter it in our journal. Darling, may I sleep on the roof tonight? I can manage the ladder."

"You want to sleep with me? Lecherous little girl!"

"That wasn't what I meant. I'm not lecherous now, my hormones are all keyed against it. No passion, dear. Just love. I won't be any good for a honeymoon. Oh, I'll happily sleep with you; you could have slept with me all these months. No, dear, I meant that I don't want to sleep in the same room with Grace. I'm afraid of her-afraid for the baby at least. Perhaps that's silly."

"No, it's not. It may not be necessary but it's a precaution we'll take. Barbara, what do you think of Grace?"

"Must I say?"

"Tell me."

"I don't like her. That's apart from being afraid of her; I didn't like her long before I became uneasy about her. I don't like the way she treats me, I don't like the way she treats Joseph, I didn't like the way she treated Karen, I have always resented the way she treats you-and had to pretend not to see it-and I despise what she has done to Duke."

"I don't like her, either-not for years. I'm glad she's leaving. Barbara, I would be glad even if you were not here."

"Hugh, I'm relieved to hear that. You know I'm divorced."

"Yes."

"When my marriage broke up I swore a solemn oath that I would never break up anyone else's marriage. I've felt guilty ever since the night of the attack."

He shook his head. "Forget it. The marriage was already long dead. All that was left were duties and obligations. Mine, for she didn't feel any. Beloved, had my marriage been a reality, you could have come into my arms that night, and cuddle and comfort would have been 'all. As it was, we were dying-so we thought-and I was at least as hungry for love as you were. I was parched for love-you gave me yourself."

"Beloved, I will never let you be parched again."

About nine the next morning, 'they all were outside where chattels for the new household were piled.

Hugh looked over 'his ex-wife's selections with wry amusement. Grace had taken literally the invitation to "take almost anything"; she had gutted the place-the best blankets, almost all utensils including the teakettle and the one skillet, three of four foam-rubber mattresses, nearly all the remaining canned goods, all the sugar, the lion's share of other irreplaceables, all the plastic dishes.

Hugh made only one objection: salt. When he noted that Grace had grabbed all the salt he insisted on a division. Duke agreed and asked if there was anything else Hugh objected to?

Hugh shook his head. Barbara would not mind making-do. "Better is a dinner of herbs where love is—"

Duke had shown restraint, taking one shovel, one ax, a hammer, less than half the nails, and no tool not stocked in duplicate. Instead, Duke remarked that he might want to borrow tools someday. Hugh agreed and offered his services on any two-man job. Duke thanked him. Both men found the situation embarrassing, both covered it by being unusually polite.

A delay in starting was caused by the steel plate for the cave door. Its weight was not too great for a man as husky as Duke, but it was awkward. A pack had to be devised, rugged enough for the trek, comfortable in padding and straps, and so rigged that Duke could fire a rifle.

This resulted in sacrificing the one intact bear hide, the covering of the bed Karen had died in. Hugh minded only the loss of time. It would take six trips by three men to move the plunder Grace had picked; Duke thought that two trips a day would be maximum. If they did not start soon, only one trip could be made that day.

At last they got it on Duke's back with a fur pad protecting his spine. "Feels right," Duke decided. "Let's get packs on you two and get going."

"In a jiffy," Hugh agreed and bent over to pick up his load.

"My God!"

"Trouble, Duke?"

"Look!"

A shape had appeared over the eastern rise. It slanted through the air on a course that would have missed them, but, as it neared the point of closest approach, it stopped dead, turned and headed for them.

It passed majestically overhead. Hugh was unable to guess its size at first; there was nothing to which to relate it-a dark shape proportioned like a domino tile. But as it passed about five hundred feet up, it seemed to him that it was around a hundred feet wide and three times that in length. He could make out no features. It moved swiftly but made no noise.

It swept past, turned, circled-stopped, turned again and came toward them at lower altitude.

Hugh found that he had an arm around Barbara. When the object had appeared, she had been some distance away, putting clothes to soak in the outside tub. Now she was circled by his left arm and he could feel her trembling.

"Hugh, what is it?"

"People."

The thing hovered above their flag. Now they could see people; heads showed above its sides.

A corner detached itself, splitting off sharply. It dove, stopped by the peak of the flagpole. Hugh saw that it was a car about nine feet long and three wide, with one passenger. No details could he see, no clue to motive power; the car enclosed the man's lower body; his trunk projected above.

The man removed the flag, rejoined the main craft. His vehicle blended back in.

The rectangle disintegrated.

It broke into units like that which had filched their flag. Most cars remained in the air; some dozen landed, three in a triangle around the colonists. Duke yelled "Watch it!" and dived for his gun.

He never made it. He leaned forward at an extreme angle, pawed the air with a look of amazement, and was slowly pulled back to vertical.

Barbara gasped in Hugh's ear. "Hugh, what is it?"

"I don't know." He did not need to ask what she meant; he had felt, at the instant his son was stopped, that he seemed to be waist deep in quicksand. "Don't fight it."

"I wasn't going to."

Grace shrilled, "Hubert! Hubert, do some—" Her cries cut off. She seemed to faint but did not fall.

Four cars were about eight feet in the air, lined up abreast, and were cruising over Barbara's farm. Where they passed, everything underneath, cornstalks, tomato plants, beans, squash, lettuce, potato hills, everything including branching ditches was pressed flat into a macadam.

The raw end of the main ditch spilled water over this pavement. One car whipped around, ran a new ditch around the raped area in a wide sweep which allowed the water to circle the destroyed garden and reach the stream at a lower point.

Barbara buried her face against Hugh. He patted her.

That car then went upstream along the old ditch. Soon water ceased to flow.

As the garden was leveled, other cars landed on it. Hugh was 'unable to figure out what they did, but a large pavilion, glossy black, and ornate in red and gold, grew up in seconds in the clearing.

Duke called out, "Dad! For God's sake, can't you get at your gun?"

Hugh was wearing a fortyfive, the weapon he had picked for the hike. His hands were only slightly hampered by whatever held them. But he answered, "I shan't try."

"Are you going to just stand there and let—"

"Yes. Duke, use your head. If we hold still, we may live longer."

Out of the pavilion strode a man. He seemed seven feet tall but some of this was a helmet, plumed and burnished. He wore a flowing skirt of red embroidered in gold and was bare to the waist save that an end of the skirt thrown across one shoulder covered part of his broad chest. He was shod in black boots.

All others were dressed in black coveralls with a red and gold patch at the right shoulder. Hugh felt an impression that this man (there was no slightest doubt that he was master)—that the commander had taken time to change into formal clothes. Hugh felt encouraged. They were prisoners-but if the leader took the trouble to dress up before interviewing them, then they were prisoners of importance and a parley might be fruitful. Or did that follow?

But he was encouraged by the man's face, too. He had an air of good-natured arrogance and his eyes were bright and merry. His forehead was high, his skull massive; he looked intelligent and alert. Hugh could not place his race. His skin was dark brown and shiny. But his mouth was only slightly Negroid; his nose, though broad, was arched, and his black hair was wavy.

He carried a small crop.

He strode up to them, stopped abruptly when he reached Joseph. He gave a curt order to their nearest captor.

Joe stretched and bent his legs. "Thanks."

The man spoke to Joe. Joe answered, "Sorry, I don't understand."

The man spoke again. Joe shrugged helplessly. The man grinned and patted him on the shoulder, turned away, picked up Duke's rifle. He handled it clumsily, making Hugh flinch.

Nevertheless, he seemed to understand guns. He worked the bolt, ejecting one cartridge, then put it to his shoulder, aimed upstream and fired.

The blast was deafening, he had fired past Hugh's ear. He grinned broadly, tossed the rifle to a subordinate, walked up to Hugh and Barbara, reached out to touch Barbara's child swollen belly.

Hugh knocked his hand away.

With a gesture almost negligent, certainly without anger, the big man brushed Hugh's hand aside with the crop he carried. It was not a blow, it would not have swatted a fly.

Hugh gasped in agony. His hand burned like fire and his arm was numb to the armpit. "Oh, God!"

Barbara said urgently, "Don't, Hugh. He isn't hurting me."

Nor was he. With a manner of impersonal interest such as a veterinarian might take in feeling a pregnant mare or bitch, the big man felt out the shape of the child she carried, then lifted one of her breasts-while Hugh writhed in that special humiliation of a man unable to protect his woman.

The man finished his palpation, grinned at Barbara and patted her head. Hugh tried to ignore the pain in his hand and dug into his memory for a language imperfectly learned. "Vooi govoriti'yeh po-Russki, Gospodin?"

The man glanced at him, made no answer.

Barbara said, "Sprechen Sie deutsch, mein Herr?"

That got her a smile. Hugh called out, "Duke, try him in Spanish!"

"Okay. *Habla usted Español, Señor?" No response—Hugh sighed. "We've shot our wad."*

"M'sieur?" Joe said. "Est-ce que vous parlez la langue française?"

The man turned. "Tiens?"

"Parlez-vous francais, monsieur?"

"Mais oui! Vous êtes françaises?"

"Non, non! Je suis américain. Nous sommes tous amencams."

"Vraiment? Impossible!"

"C'est vrai, monsieur. Je vous en assure." Joe pointed to the empty flagpole. "Les Etats-Unis de l'Amérique."

The conversation became hard to follow as both sides stumbled along in broken French. At last they paused and Joe said, "Hugh, he asked me-ordered me-to come into his tent and talk. I've asked him to let you all loose first. He says No. 'Hell, no!' it amounts to."

"Ask him to let the women loose."

"I'll try." Joe spoke at length with the big man. "He says the enceinte femme-that's Barbara-can sit down where she is. The 'fat one'—Grace he means-is to come with us."

"Good work, Joe. Get us a deal."

"I'll try. I don't understand him very well."

The three went into the pavilion. Barbara found that she could sit down, even stretch out. But the invisible web held Hugh as clingingly as ever.

"Dad," Duke said urgently, "this is our chance, while nobody is around who understands English."

"Duke," Hugh answered wearily, "can't you see they hold trumps? It's my guess that we are alive as long as he isn't annoyed-not one minute longer."

"Aren't you even going to try to fight? Where's that crap you used to spout about how you were a free man and planned to stay free?"

Hugh rubbed his hurt hand. "Duke, I won't argue. You start anything and you'll get us killed. That's how I size it up."

"So it was just crap," Duke said scornfully. "Well, I'm not making any promises."

"All right. Drop it."

"I'm not making promises. Just tell me this, Dad. How does it feel to be shoved around? Instead of shoving?"

"I don't like it."

"Neither did I. I've never forgotten it. I hope you get your bellyful."

Barbara said, "Duke, for heaven's sake, stop talking like a fool!"

Duke looked at her. "I'll shut up. Just one thing. Where did you get that baby in you?"

Barbara did not answer. Hugh said quietly, "Duke, if we get out of this, I promise you a beating."

"Any time, old man."

They quit talking. Barbara reached out and patted Hugh's ankle. Five men gathered around the pile of household objects, looking them over. A man came up and gave them an order; they dispersed. He looked at the chattels himself, then peered into the shelter and went inside.

Hugh heard a sound of water, saw a brown wave rushing down the stream bed. Barbara raised her head. "What's that?"

"Our dam is gone. It doesn't matter."

After a long time, Joe came out of the pavilion alone. He came up to Hugh and said, "Well, here's the scoop, as nearly as I got it. Not too near, maybe; he speaks a patois and neither of us is fluent. But here it is. We're trespassers, this is private land. He figured we were escaped prisoners-the word is something else, not French, but that's the idea. I've convinced him-I think I have-that we are innocent people here through no fault of our own.

"Anyhow, he's not sore, even though we are technically criminals-trespass, and planting things where farms aren't supposed to be and building a dam and a house and things like that. I think everything is going to be all right-as long as we do as we're told. He finds us interesting-how we got here and so forth."

Joe looked at Barbara. "You remember your theory about parallel universes?"

"I guess I was right. No?"

"No. This part is as confused as can be. But one thing is certain. Barbara, Hugh-Duke-get this! This is our own world, right here."

Duke said, "Joe, that's preposterous."

"You argue with him. He knows what I mean by the United States, he knows where France is. And so forth. No question about it."

"Well..." Duke paused. "As may be. But what about this? Where's my mother? What's the idea of leaving her with that savage?"

"She's all right, she's having lunch with him. And enjoying it. Let it run easy, Duke, and we're going to be okay, I think. Soon as they finish lunch we'll be leaving."

Somewhat later Hugh helped Barbara into one of the odd flying machines, then mounted into one himself, behind the pilot. He found the seat comfortable and, in place of a safety belt, a field of that quicksand enclosed his lower body as he sat down. His pilot, a young Negro who looked remarkably like Joe, glanced back, then took off without noise or fuss and joined the reforming rectangle in the air. Hugh saw that perhaps half the cars had passengers; they were whites, the pilots were invariably colored, ranging from as light brown as a Javanese to as sooty black as a Fiji Islander.

The car Hugh was in was halfway back in the outside starboard file. He looked around for the others and was only mildly surprised to see Grace riding behind the boss, in the front rank, center position. Joe was behind them, rather buried in cats.

Off to his right, two cars had not joined up. One hovered over the pile of household goods, gathered them up in a nonexistent cargo net, moved away. The second car was over the shelter.

The massive block lifted straight up without disturbing the shack on its roof. The small car and its giant burden took position fifty feet off the starboard side. The formation moved forward and gathered speed but Hugh felt no wind of motion. The car flanking them seemed to have no trouble keeping up. Hugh could not see the other loaded car but assumed that it was on the port side.

The last he saw of their home was a scar where the shelter had rested, a larger scar where Barbara's farm had been, and a meandering track that used to mark an irrigation ditch.

He rubbed his sore hand, reflecting that the whole thing had been a gross abuse of coincidence. It offended him the way thirteen spades in a putatively honest deal would offend him. He pondered a remark Joe had made before they loaded: "We were incredibly lucky to have encountered a scholar. French is a dead language—'une langue perdue,' he called it."

Hugh craned his neck, caught Barbara's eye. She smiled.

Chapter 11

Memtok, Chief Palace Domestic to the Lord Protector of the Noonday Region, was busy and happy-happy because he was busy, although he was not aware that he was happy and was given to complaining about how hard he had to work, because, as he put it, although he commanded eighteen hundred servants there were not three who could be trusted to empty a slop jar without supervision.

He had just completed a pleasant interview chewing out the head chef; he had suggested that the chef himself, old and tough as he was, nevertheless would make a better roast than the meat the chef had sent in to Their Charity the evening before. One of the duties that Memtok assumed personally was always to sample what his lord ate, despite risk of poison and despite the fact that Their Charity's tastes in cuisine were not his own. It was one of the innumerable ways in which Memtok gave attention to details, diligence that had brought him, still in his prime, to his present supreme eminence.

The head chef had grumbled and Memtok had sent him away with a taste of the lesser whip to remind him that cooks were not that hard to find. Then he had turned happily to his paper work.

There were stacks of it, as he had just completed moving the household from the Palace to the Summer Palace-thirty-eight of the Chosen but only four hundred and sixty-three servants; the summer residence was run with a skeleton staff. The twice-yearly move involved a wash of paper work-purchase orders, musters, inventories, vouchers, shipping lists, revisions of duty rosters, dispatches-and he considered advising his patron to have some likely youngster muted and trained as his clerk. But he rejected the idea; Memtok did not trust servants who could read and write and add, it gave them ideas even if they could not talk.

The truth was, Memtok loved his paper work and did not want to share it. His hands flew over the papers, checking figures, signing his symbol, okaying payments. He held his pen in an odd fashion, nested between the first three fingers of his right hand-this because he had no thumbs.

He did not miss them, could barely remember what it had been like to have them. Nor did he need them. He could handle a spoon, a pen, and a whip without them, and he had no need ever to handle anything else.

Far from missing his thumbs, he was proud of their absence; they proved that he had served his lord in both major capacities, at stud when he was younger and now these many years as a tempered domestic. Every male servant over fourteen (with scarce special exceptions) showed one alteration or the other; very few could exhibit both, only a few hundred on the entire Earth. Those few spoke as equals only to each other, they were an elite.

Someone scratched at the door. "Come!" he called out, then growled, "What do you want?" The growl was automatic but he really did dislike this servant for the best of reasons; he was not subject to Memtok's discipline. He was of a different caste, huntsmen, wardens, keepers, and beaters, and was subject to the Majordomo of the Preserve. The Majordomo considered himself to be of the same rank as the Chief Domestic, and nominally was. However, he had thumb€.

Memtok's greatest objection to the Summer Palace was that it put him in contact with these servants who had the unpardonable fault of not being under his orders. While it would take only a word to Their Charity to crack down on one of them, he disliked to ask, and while he could touch one of them without real fear of reprimand, the louse would be sure to complain to his boss. Memtok did not believe in friction between executive servants. Bad for morale.

"Message from Boss. Rayed to tell you Their Charity on his way back. Says four savages with escort. Says you better tear up to the roof, take care of them. All."

"'All'? Damn you, what do you mean 'All'? Why four savages? And in the Name of Uncle when are they arriving?"

"All," the servant insisted. "Message came in twenty minutes ago. I been looking all over for you."

"Get out!" The important part of the message was that Their Charity was arriving home instead of staying away overnight. Chef, Receptionist, Musical Director, Housekeeper, Groundskeeper, all heads of departments-he was phoning orders even as he thought. Four savages? Who cared about savages?

But he was on the roof and accepted their custody. He would have been there anyway, with the Lord Protector arriving.

When they arrived, Hugh had no chance to see Barbara. When he was released from the restraint of the "seat belt," he was confronted by a little baldheaded white man with a waspish face, an abrupt manner, and a whip. He was dressed in a white robe which reminded Hugh of a nightshirt, save that it had on the right shoulder the red and gold patch which Hugh had tentatively identified as the insigne of the big man, the boss. The emblem was repeated in rubies and gold on the chest of the little man as a medallion supported by a heavy gold chain.

The man looked him over with obvious, distaste, then turned him and Duke over to another white man in a nightshirt. This man wore no medallion but did carry a small whip. Hugh rubbed his hand and resolved not to test whether this whip was as potent as the ornate one carried by the big boss.

Duke tested it. The angry little man gave instructions to his straw boss, and left. The straw boss gave an order; Hugh interpreted the tone and gesture as: "All right, you guys, get going"—and got going.

Duke didn't. The straw boss barely touched him on his calf; Duke yelped. He limped the rest of the way-down a ramp, into a very fast lift, then into a windowless, light, white-walled room which whiffed of hospitals.

Duke understood the order to strip without needing to be stimulated; he cursed but complied. Hugh merely complied. He was beginning to understand the system. The whips were used as spurs are used by a good rider, to exact prompt obedience but not to damage.

From there they were herded into a smaller room, where they were hit from all sides by streams of water. The operator was in a gallery above. He shouted at them, then indicated in pantomime that they were to scrub.

They scrubbed. The jets cut off, they were doused in liquid soap. They scrubbed again and were rinsed and were required to scrub still again, all to gestures that left no doubt as to how thorough a bath was expected. The jets got very hot and harsh, changed to cold and still harsher, were replaced by blasts of hot air.

It was too much like an automatic dishwasher, Hugh' felt, but they ended up cleaner than they had been in months. An assistant to the bath master then plastered strips over their eyebrows, rubbed an emulsion on their scalps, into their scratchy beards (neither had shaved that day), over their backs and chests and arms and legs, and finally into their pubic hair. Duke got another lesson in obedience before he submitted to this last. When, thereafter, they were subjected willy-nilly to enemas, he gritted his teeth and took it. The water closet was a whirlpool set in the floor. Their finger—and toenails were cut short.

After that they were bathed again. The eyebrow patches washed away. So did their hair. When they came out, they were both bald all over, save for eyebrows.

The bath master made them gargle, showing them what he wanted and spitting into the whirlpool. They gargled three times-a pleasant, pungent liquid-and when it was over, Hugh found that his teeth seemed cleaner than they had ever been in his life. He felt utterly clean, lively, glowing with well being-but humiliated.

They were taken to another room and examined.

Their examiner wore the conventional white nightshirt and a small insigne on a thin gold chain but he needed no diplomas on the wall to show his profession. His bedside manner would never make him rich, Hugh decided; he had the air of military surgeons Hugh had known-not unkind but impersonal.

He seemed surprised by and interested in a removable bridge he found in Hugh's mouth. He examined it, looked in Hugh's mouth at the gaps it had filled, gave it to one of his assistants with instructions. The assistant went away and Hugh wondered if his chewing was going to be permanently hampered.

The physician took an hour or more over each of them, using instruments Hugh did not recognize-weight, height, and blood pressure were the only familiar tests. Things were done to them, too, none of them really unpleasant-no hypodermic needles, no knives. During this, Hugh's bridge was returned and he was allowed to put it back in.

But the tests and/or treatments often seemed to be indignities even though not painful. Once, when Hugh was stretched out on a table from which Duke had just been released, the younger man said, "How do you like it, Dad?"

"Restful."

Duke snorted.

The fact that both men had appendicitis scars seemed to interest the physician as much as the removable bridge. By acting he indicated a bellyache, then jabbed a thumb into McBurney's point. Hugh conveyed agreement-with difficulty, as nodding the head seemed to be a negative.

An assistant came in and handed the physician a contrivance which turned out to be another dental bridge. Hugh was required to open his mouth; the old one was again taken and the new one seated. It felt to Hugh's tongue as if he again had natural teeth there. The physician probed cavities, cleaned them and filled them-without pain but without anesthesia so far as Hugh was aware.

After that Hugh was suddenly "strapped" (an invisible field) to a table, supine, and his legs were elevated. Another table was wheeled up and Hugh realized that he was being prepared for surgery-and with horror he was sure what sort. "Duke! Don't let them grab you! Get that whip!"

Duke hesitated too long. The therapist did not carry a whip; he merely kept one at hand. Duke lunged for it, the physician got it first. Moments later Duke was on his back, still gasping his agony at the punishment he had taken and having his knees elevated and spread. They both went on protesting.

The physician looked at them thoughtfully and the straw boss who had fetched them was called in. Presently the waspish little man with the big medallion strode in, looked the situation over, stormed out.

There was a long wait. The boss therapist filled in the time by having his assistants complete preparations for surgery and there was no longer the slightest doubt in Hugh's mind, or Duke's, as to what they were in for. Duke pointed out that it would have been better if they had fought-and died-earlier in the day, rather than wind up like this. As they would have fought, he reminded his father, if Hugh hadn't turned chicken.

Hugh didn't argue, he agreed. He tried to tell himself that his docility in being captured was on account of the women. It afforded him little comfort. True, he hadn't used his own much in recent years...and might never need them again. But, damn it, he was used to them. And it would be rough for Duke, young as he was.

After a long time the little man stormed back in, angrier than ever. He snapped an order; Hugh and Duke were released.

That ended it, save that they were rubbed all over with a fragrant cream. They were given a white nightshirt apiece, conducted through long bare passages and Hugh was shoved into a cell. The door was not locked but he could not open it.

In one corner was a tray, with dishes and a spoon. The food was excellent and some of it unidentifiable; Hugh ate with good appetite, scraping the dishes and drinking the thin beer with it. Then he slept on a soft part of the floor, having blanked his mind of worry.

He was prodded awake by a foot.

He was taken to another plain, windowless room, which turned out to be a schoolroom. Two short white men in nightshirts were there. They were equipped with props, the equivalent of a blackboard (it could be cleared instantly by some magic), patience-and a whip, for the lessons were "taught to the tune of a hickory stick." No error went unnoted.

They both could draw and both were imaginative pantomimists; Hugh was taught to speak.

Hugh discovered that his memory was sharpened by the stimuli of pain; he had little tendency to repeat a mistake. At first he was punished only for forgetting vocabulary, but as he learned, he grew to expect flicks of pain for errors in inflection, construction, idiom, and accent.

This Pavlovian treatment continued-if his mental records were correct-for seventeen days; he did nothing else and saw no one but his teachers. They worked in shifts; Hugh worked every possible minute, about sixteen hours a day. He was never allowed quite enough sleep although he never felt sleepyhe didn't dare-during lessons. Once a day he was bathed and given a clean nightshirt, twice a day he was fed, tasty food and plentiful, three times a day he was policed to the toilet.

All other minutes were spent learning to speak, with ever-sharp awareness that any bobble would be punished.

But he learned how to duck punishment. A question, quickly put, would sometimes do. "Teacher, this one understands that there are protocol modes for each status rising and falling, but what this one in its ignorance lacks is knowledge of what each status isbeing wholly without experience through the inscrutable ways of Uncle the Mighty-and also is sometimes not aware of the status assumed for teaching purposes by my charitable teacher and of the status this humble one is expected to assume in reply. More than that, this one does not know its own status in the great family. May it please its teacher."

The whip was put down and for the next hour he was lectured. The problem was more involved than Hugh's question showed. The lowest status was stud. No, there was one lower: servant children. But since children were expected to make mistakes, it did not matter. Next higher was slut, then tempered servant-a category with subtle and unlimited gradations of rank so involved that speech of equals was used if the gradient was not clearly evident. High above all servants were the Chosen, with unlimited and sometimes changing variations of rank, including those ritual circumstances in which a lady takes precedence over a lord. But that was not usually a worry; always use protocol rising mode. However --"If two of the Chosen speak to you at once, which one do you answer?"

"The junior," Hugh answered.

"Why?"

"Since the Chosen do not make mistakes, this one's ears were at fault. The senior did not actually speak, for his junior would never have interrupted."

"Correct. You are a tempered gardener and you encounter a Chosen of the same rank as your lord uncle. He speaks. 'Boy, what sort of a flower is that?'"

"As Their Charity knows much better than this one can ever know, if this one's eyes are not mistaken, that plant may be a hydrangea."

"Good. But drop your eyes when you say it. Now about your status —" The teacher looked pained. "You haven't any."

"Please, teacher?"

"Uncle! I've tried to find out. Nobody knows but our Lord Uncle and they have not ruled. You're not a child, you're not a stud, you're not a tempered, you don't belong anywhere. You're a savage and you don't fit."

"But what protocol mode must I use?"

"Always the rising. Oh, not to children. Nor to sluts, no need to overdo it."

Except for changes in inflection caused by status, Hugh found the language simple and logical. It had no irregular verbs and its syntax was orderly; it probably had been tidied up at some time. He suspected, from words that he recognized—"simba," "bwana," "wazir," "étage," "trek," "oncle"—that it had roots in several African languages. But that did not matter; this was "Speech" and, according to his teachers, the only language spoken anywhere.

In addition to protocol modes, quite a chunk of vocabulary was double, one word being used down, its synonym although different in root used up. He had to know both-be able to recognize one and to use the other.

The pronunciation gave him trouble at first, but by the end of the week he could lip smack, click, make the fast glottal stop, and hear and say vowel distinctions he had never suspected existed. By the sixteenth day he was chattering freely, beginning to think in it, and the whip was rarely used.

Late next day the Lord Protector sent for him.

Chapter 12

Although he had been bathed that day, Hugh was rushed through another bath, rubbed down with fragrant cream, and issued a fresh robe, before being whizzed to the lord's private apartments. There he was bounced past a series of receptionists close on Memtok's heels, and into a large and very sumptuous retiring room.

The lord was not there; Joseph and Dr.—Livingstone-I-Presume were. Joe called out, "Hugh! Wonderful!" and added to the Chief Domestic, "You may go."

Memtok hesitated, then backed away and left. Joe ignored him, slipped his arm in Hugh's, and led him to a divan. "Gosh, it's good to see you! Sit down, we'll talk until Ponse gets here. You look well." Doctor Livingstone checked Hugh's ankles, purred and stropped against them.

"I am well. 'Ponse'?" Hugh scratched the cat's ears.

"Don't you know his name? The Lord Protector, I mean. No, I guess you wouldn't. That's one of his names, one he uses en famille. Never mind, have they been treating you right?"

"I suppose so."

"They had better. Ponse gave orders for you to be pampered. Look, if you aren't treated okay, you tell me. I can fix it."

Hugh hesitated. "Joe, have you had one of those odd whips used on you?"

"Me?" Joe seemed astonished. "Of course not. Hugh, have they been abusing you? Peel off that Mother Hubbard and let me have a look."

Hugh shook his head. "There are no marks on me. I haven't been hurt. But I don't like it."

"But if you've been stroked for no reason—Hugh, that's one thing that Ponse does not tolerate. He's a very humane sort of guy. All he wants is discipline. If anybody-anybody at all, even Memtok-has been cruel to you, somebody is going to catch it."

Hugh thought about it. He rather liked his teachers. They had worked hard and patiently and had been sparing of him once it became possible to talk instead of using the whip. "I haven't been hurt. Just reminded."

"I'm glad to hear it. Actually, Hugh, I didn't see how you could be. That quirt Ponse carries-you could kill a man with it at a thousand feet; it takes skill to use it gently. But those toys the upper servants carry, all they do is tingle and that's all they are supposed to do."

Hugh decided not to argue over what constituted a tingle; he had urgent things on his mind. "Joe, how are the others? Have you seen them?"

"Oh, they're all right. You heard about Barbara?"

"I haven't heard a damn thing! What about Barbara?"

"Slow down. Having her babies, I mean."

"She had her baby?"

"'Babies.' Twin boys, identical. A week ago."

"How is she? How is she?"

"Easy, man! She's fine, couldn't be better. Of course. They are way ahead of us in medicine; losing a mother, or a baby, is unheard of." Joe suddenly looked sad. "It's a shame they didn't run across us months back." He brightened. "Barbara told me that she had intended to name it Karen, if it was a girl. When it turned out to be twin boys, she named one-the one five minutes the elder—'Hugh' and the other 'Karl Joseph.' Nice, eh?"

"I'm flattered. Then you've seen her. Joe, I've got to see her. Right away. How do I arrange it?"

Joe looked astonished. "But you can't, Hugh. Surely you know that."

"Why can't I?"

"Why, you're not tempered, that's why. Impossible."

"Oh."

"I'm sorry, but that's the way it is." Joseph suddenly grinned. "I understand that you were almost made eligible by accident. Ponse laughed his head off at how close you came and how you and Duke yelped."

"I don't see the humor of it."

"Oh, Hugh, he simply has a robust sense of humor. He laughed when he told me about it. I didn't laugh and he decided that I have no sense of humor. Different people laugh at different things. Karen used to use a fake Negro dialect that set my teeth on edge, the times I overheard it. But she didn't mean any harm. Karen—Well, they just don't come any better, and you and I know it and I'll shut up about it. Look, if the vet had gone ahead, without orders, it would have cost him his hands; Ponse sent that word to him. Might have suspended the sentence-good surgeons 'are valuable. But his assumption was only natural, Hugh; both you and Duke are too tall and too big for stud. However, Ponse doesn't tolerate sloppiness."

"All right, all right. I still don't see the harm in my calling on Barbara and seeing her babies. You saw her. And you're not tempered."

Joe looked patiently exasperated. "Hugh, it's not the same thing.

Surely you know it."

"Why isn't it?"

Joe sighed. "Hugh, I didn't make the rules. But I'm Chosen and you're not, and that's all there is to it. It's not my fault that you're white."

"All right. Forget it."

"Let's be glad that one of us is in a position to get us some favors. Do you realize that all of you would have been executed? If I hadn't been along?"

"The thought has crossed my mind. Lucky you knew French. And that he knows French."

Joe shook his head. "French didn't enter into it, it merely saved time. The point was that I was there...and the rest of you were excused of any responsibility on that account. What had to be settled then was the degree of my criminality, my neck was in a noose." Joe frowned. "I'm still not in the clear. I mean, Ponse is convinced but my case has to be re viewed by the Supreme Lord Proprietor; it's his preserve—Ponse is just custodian. I could be executed yet."

"Joe, what in the world is there about it to cause you to talk about being executed?"

"Plenty! Look, if you four ofays-whites-had been alone, Ponse would have tried you just by looking at you. Two capital crimes and both self-evident. Escapees. Servants who had run away from their lord. Destructive trespass in a personal domain of the Supreme Proprietor. Open-and-shut on both counts and death for each of them. Don't tell me that wasn't the way it was because I know it and it took me long enough to make Ponse see it, using a language neither one of us knows too well. And my neck is still in jeopardy. However—" He brightened. "Ponse tells me that the Supreme Proprietor is years behind in reviewing criminal cases and that it has been more years since he last set foot on this preserve or even cruised over it...and that long before my case can come up there won't be a trace of destruction. They are putting the trees back and there's never an accurate count of bears and deer and other game. He tells me not to worry."

"Well, that's good."

"But maybe you think I haven't done some sweating over it! Just letting your shadow fall across the Supreme Lord Proprietor means your neck and sneezing in his presence is even worse-so you can figure for yourself that trespassing on land that is his personally is nothing to take lightly. But I shan't worry as long as Ponse says not to. He's been treating me as a guest, not as a prisoner. But tell me about yourself. I hear you've been studying the language. So have I-a tutor every day I've had time for it."

Hugh answered, "May it meet with their approval, this one's time has, as they know, been devoted to nothing else."

"Whoo! You speak it better than I do."

"I was given incentive," Hugh said, relapsing into English. "Joe, have you seen Duke? Grace?"

"Duke, no. I haven't tried to. Ponse has been away most of the time and took me along; I've been terribly busy. Grace, yes. It's possible that you might see Grace. She's often in these apartments. That's the only way you could see her, of course. Right here. And in the presence of Ponse. Might happen. He's not a stickler for protocol. In private, I mean; he keeps up appearances in public."

"Hmm—Joe, in that case, couldn't you ask him to let me see Barbara and the twins? Here? In his presence?"

Joe looked exasperated. "Hugh, can't you understand that I'm just a guest? I'm here on sufferance. I don't have a single servant of my own, no money, no title. I said you might see Grace; I did not say you would. If you did, it would be because he had sent for you and it suited him not to send her out-not for your convenience. As for asking him to let you see Barbara, I can't. And that's that! I advise you not to, either. You might learn that his quirt doesn't just tingle."

"All I meant was—"

"Watch it! Here he comes."

Joe went to meet his host. Hugh stood with head bowed, eyes downcast, and waited to be noticed. Ponse came striding in, dressed much as Hugh had seen him before save that the helmet was replaced by a red skullcap. He greeted Joe, sat heavily down on a large divan, stuck out his legs. Doctor Livingstone jumped up into the lord's lap; he stroked it. Two female servants appeared from nowhere, pulled off his boots, wiped his feet with a hot towel, dried them, massaged them, placed slippers on them, and vanished.

While this was going on, the Lord Protector spoke to Joe of matters Hugh could not follow other than as words, but he noticed that the noble used the mode of equals to Joe and that Joe talked in the same fashion to him. Hugh decided that Joe must be in as solid as Doctor Livingstone. Well, Joe did have a pleasing personality.

At last the big man glanced at him. "Sit down, boy."

Hugh sat down, on the floor. The lord went on, "Have you learned Language? We're told that you have."

"May it please Their Charity, 'this one's time has been devoted singly to that purpose, with what inadequate resultsknown to them far better than their servant would dare venture to estimate."

"Not bad. Accent could be crisper. And you missed an infix. How do you like the weather we've been having?"

"Weather is as Uncle the Mighty ordains it. If it pleases His favorite nephew, it cannot fail to make joyful one so humble as this servant."

"Quite good. Accent blurry but understandable. Work on it. Tell your teachers we said it. Now drop that fancy speech, I haven't time to listen to it. Equals speech, always. In private, I mean."

"All right. I—" Hugh broke off; one of the female servants had returned, to kneel in front of her lord with a drink on a tray.

Ponse glanced sharply at Hugh, then looked at the girl. "It? Doesn't count, it's a deaf mute. You were saying?"

"I was about to say that I couldn't have an opinion about weather because I haven't seen any since I got here."

"I suppose not. I gave orders for you to learn Language as quickly as possible and servants are inclined to follow instructions literally. No imagination. All right, you will walk outdoors an hour each day. Tell whoever is in charge of you. Any petition? Are you getting enough to eat? Are you being treated well?"

"The food is good, I'm used to eating three times a day but—"

"You can eat four times a day if you wish. Again, tell the one in charge of you. All right, now to other matters. Hugh—That's your name, isn't it?"

"Yes, Their Charity."

"Can't you hear? I said, 'Use equals mode.' My private name is Ponse. Use it. Hugh, if I had not picked you people up myself, were I not a scholar, and had I not seen with my own eyes the artifacts in that curious structure, your house, I would not have believed it. As it is, I must. I'm not a superstitious man. Uncle works in mysterious ways, but He doesn't use miracles and I would not hesitate to repeat that in any temple on Earth, unorthodox as it sounds. But—How long does it come to, Joe?"

"Two thousand one hundred and three years."

"Call it two thousand. What's the matter, Hugh?"

"Uh, nothing, nothing."

"If you're going to throw up, go outside; I picked these rugs myself. As I was saying, you've given my scientists something to think about-and a good thing, too; they haven't turned out anything more important than a better mousetrap in years. Lazy scoundrels. I've told them to come up with a sensible answer, no miracles. How five people-or six-and a building of some mass could hurdle twenty centuries and never break an egg. Exaggeration. Joe tells me it broke some bones and other things. Speaking of bones, Joe tells me this won't please you-and it didn't please him-but I ordered my scientists to disturb some bones. Strontium sampling, that sort of thing; I suppose you've never heard of it. Clear proof that the cadaver had matured before the period of maximum radioactivity—Look, I warned you about these rugs. Don't do it!" Hugh gulped. ("Karen! Karen! Oh, my darling!")

"Better now? Perhaps I should have told you that a priest was present, proper propitiations were made-exactly as if it had been one of the Chosen. Special concession, my orders. And when the tests were completed every atom was returned and the grave closed with proper rites."

"That's true, Hugh," Joseph said gravely. "I was there. And I put on fresh flowers. Flowers that will stay fresh, I'm told."

"Certainly they will," Ponse confirmed, "until they wear out from sheer erosion. I don't know why you use flowers but if there are any other rites or sacrifices necessary to atone for what may seem to you a desecration, just name it. I'm a broadminded man; I'm aware that other times had other customs."

"No. No, best let it be."

"As you wish. It was done from scientific necessity. It seemed more reasonable than amputating one of your fingers. Other tests also kept my scientists from wiggling out of the obvious. Foods preserved by methods so ancient that I doubt if any modem food expert would know how to duplicate same—and yet the foods were edible. At least some servants were required to eat them; no harm resulted. A fascinating radioactivity gradient between upper and inner sides of the roof structure-I gave them a hint on that. Acting on information received from Joe, I ordered them to look for evidence that this event took place at the beginning of the East-West War that destroyed the Northern Hemisphere.

"So they found it. Calculations lead them to believe that the structure must have been near the origin of an atom-kernel explosion. Yet it was unhurt. That produced a theory so wild that I won't tire your ears with it; I've told them to go on working.

"But the best thing is the historical treasure. I am a man of history, Hugh; history, properly interpreted, tells everything. The treasure, of course, are those books that came along. I am not exaggerating when I say that they are my most precious possessions. There are only two other copies of the Encyclopaedia Britannica in the world today-and those are not this edition and are in such poor shape that they are curiosities rather than something a scholar can work with; they weren't cared for during the Turmoil Ages."

Ponse leaned back and looked happy. "But mine is in mint condition!"

He added, "I'm not discounting the other books. Treasures, all of them. Especially the Adventures of Odysseus, which is known only by reputation. I take it that the pictures date from the time of Odysseus too?"

"I'm afraid not. The artist was alive in my time."

"Too bad. They're interesting, nevertheless. Primitive art, stronger than we have now. But I exaggerated when I said that the books were my dearest possession."

"Yes?"

"You are! There! Doesn't that please you?"

Hugh barely hesitated. "Yes. If true." (If it's true that I am your chattel, you arrogant bastard, I prefer being a valuable one!)

"Oh, quite true. If you had been speaking in protocol mode, you wouldn't have been able to phrase a doubt. I never lie, Hugh; remember that. You and—That other one, Joe?"

"Duke."

"'Duke.' Although Joe speaks highly of your scholarship, not so highly of its. But let me explain. There are other scholars who read Ancient English. None in my household, true; since it is not a root language to any important degree, few study it. Nevertheless, scholars could be borrowed. But none such as yourself. You actually lived then; you'll be able to translate knowledgeably, without these maddening four and five interpretations of a single passage that disfigure most translations from ancient sources, all because the scholar doesn't really know what the ancient author was talking about. Lack of cultural context, I mean. And no doubt you will be able to supply explanations for things obscure to me and commonplace to you.

"Right? Right! So you see what I want. Start with the Encyclopaedia Britannica. Get busy today, translate it. Just scribble it out quickly, sloppy but fast. Someone else will pretty it up for my eyes. Understand? All right, go do it."

Hugh gulped. "But, Ponse, I can't write Language."

"What?"

"I was taught to speak; I haven't been taught to read and write."

Ponse blinked. "Memtok!"

The Chief Palace Domestic arrived with such speed that one might suspect that he was just outside the door. And so he had been-listening in on private conversation by means Memtok was certain were not known to the Lord Protector

inasmuch as Memtok was still breathing. Such measures were risky but he found them indispensable to efficient performance of his duties. At worst, it was safer than planting a slut in there who was not quite a deaf mute.

"Memtok, I told you it was to be taught to speak, read, and write Language."

Hugh listened, eyes downcast, while the Chief Domestic tried to protest that the order had never been given (it had not) but nevertheless had been carried out (obviously false), all without contradicting the Lord Protector (impossible to reconcile, inconceivable to attempt).

"Garbage," Ponse remarked. "I don't know why I don't put you up for adoption. You would look good in a coal mine. That pale skin would be improved by some healthy coal dust." He twitched his quirt and Memtok paled still more. "Very well, let it be corrected. It is to spend half of each day in learning to read and write, the other half in translating and in dictating same into a recorder. I should have thought of that; writing takes too long. Nevertheless, I want it to be able to read and write." He turned to Hugh. "Anything you can think of? That you need?"

Hugh started to phrase a request in the involved indirection which presumed nothing, as required by protocol mode, rising.

Ponse chopped him off. "Speak directly, Hugh. Memtok, close your ears. No ceremony needed in Memtok's presence, he is a member of my inner family, my nephew in spirit if not in the eyes of my senior sister. Spit it out."

Memtok relaxed and looked as beatific as his vinegar features permitted. "Well, Ponse, I need room to work. My cell is the size of that divan."

"Describe your needs."

"Well, I'd like a room with natural light, one with windows, say a third the size of this one. Working tables, bookshelves, writing materials, a comfortable chair-yes, and access to a toilet without having to wait; it interferes with my thinking otherwise."

"Don't you have that?"

"No. And I don't think it helps my thinking to be touched up with a whip."

"Memtok, have you been whipping it?"

"No, my uncle. I swear."

"You would swear if you were caught with cream on your lip. Who has been?"

Hugh dared to interrupt. "I'm not complaining, Ponse. But those whips make me nervous. And I never know who can give me orders. Anybody, apparently. I haven't been able to find out my status."

"Mmm—Memtok, where do you have it in the Family?" The head servant barely conceded that he had not been able to solve that problem.

"Let's solve it. We make it a department head. Mmm—Department of Ancient History. Title: Chief Researcher. Senior head of department, just below you. Pass the word around. I'm doing this to make clear how valuable this servant is to me...and anyone who slows up its work is likely to wind up in the stew. I suppose it will really be a one-servant department but you fill it out, make it look good, by transferring its teachers, and whoever looks out for its recorder and prepares the stuff for me, a cleaner or two, an assistant to boss them—

I don't want to take up its valuable time on routine. A messenger. You know. There must be dozens of idlers around this house, eating their silly heads off, who would look well in the Department of Ancient History. Now have fetched a lesser whip and a lesser badge. Move."

In moments Hugh was wearing a medallion not much smaller than Memtok's. Ponse took the whip and removed something from it. "Hugh, I'm not giving you a charged whip, you don't know how to use it. If one of your loafers need spurring, Memtok will be glad to help. Later, when you know how, we'll see. Now—Are you satisfied?"

Hugh decided that it was not the time to ask to see Barbara. Not with Memtok present. But he was beginning to hope.

He and Memtok were dismissed together. Memtok did not object when Hugh walked abreast of him.

Chapter 13

Memtok was silent while he led Hugh back down to servants' country; he was figuring out how to handle this startling development to his own advantage.

This savage's status had troubled the Chief Domestic from arrival. He didn't fit-and in Memtok's world everything had to fit. Well, now the savage had an assigned status; Their Charity had spoken and that was that. But the situation was not improved. The new status was so ridiculous as to make the whole belowstairs structure (the whole world, that is) a mockery.

But Memtok was shrewd and practical. The bedrock of his philosophy was: You can't fight City Hall, and his basic strategy in applying it was the pragmatic rule: When you can't beat 'em, you join 'em.

How could this savage's preposterous promotion be made to appear necessary and proper-and a credit to the Chief Domestic?

Uncle! The savage wasn't even tempered. Nor would he be. At least not yet. Later, possibly-it would make everything so much more tidy. Memtok had been amazed when Their Charity had postponed the obvious. Memtok hardly recalled his own tempering; his emotions and drives before that time were a thin memory-of someone else. There was no reason for the savage to have kicked up a fuss about it; tempering marked promotion into real living. Memtok looked forward to another half century of activity, power, gracious living—what stud could claim that?

But there it was. How to make it look good?

A Curiosity!—that's what the savage was. All great lords possessed Curiosities; there had been times when visiting in his own caste that he had been embarrassed by the fact that his own lord took no interest in Curiosities; there were not even Siamese twins nor a two-headed freak in the whole household. Not even a flipper-armed dwarf. Their Charity was-let's admit it-too simple in his tastes for his high rank; sometimes Memtok was a little ashamed of him. Spending his time on scrolls and such when he should be upholding the pride of the house.

That lord in Hind—What title? Prince something or other silly. Never mind, he had that big cage where studs and sluts lived and mated with great apes, talked the same jabber-it wasn't Language-and you couldn't tell which was which save that some were hairy and some were smooth. There was a Curiosity worthy of a great household! That lord's chief domestic had declared by the Uncle that there were live crossbreeds from the experiment, hidden away where the priests couldn't object. It might be true, since it was a fact that despite official denial crossbreeds between servants and Chosen were possible-and did happen, even though designated bedwarmers were always sterile. But these accidents were never allowed to see the light of day.

A Curiosity, that was the angle. An untempered who was nevertheless a servant executive. A Famous Scholar who had not even been able to speak Language when he was almost as old as Memtok. A man out of nowhere. From the stars. Everybody knew that there were men somewhere in the stars.

Probably a miracle...and the temples were investigating and any year now this household would be famous for its unique Curiosity. Yes. A word here, a word there, a veiled hint --"Hugh," Memtok said cordially. "May I call you 'Hugh'?" "What? Why, certainly!" "You must call me 'Memtok.' Let's stroll a bit and pick out space for your departmental headquarters. You would like a sunny place, I understand. Perhaps rooms facing the gardens? And do you want your personal quarters opening off your headquarters? Or would you rather have them elsewhere so that you can get away from it all?" The latter, Memtok decided. Roust out the head gardener and the studmaster and give the savage both their quarters-that would make everyone understand how important this Curiosity was...and get both of them sore at the savage, too. He'd soon realize who was his friend. Memtok, namely, and nobody else. Besides, the gardener had been getting uppity, implying that his work didn't come under the Chief Domestic. A touching up was what he needed.

Hugh said, "Oh, I don't need anything fancy."

"Come, come! We want you to have every facility. I wish 1 could get away from it all sometimes. But I can't-problems, problems, problems, every minute of the day; some people have to have all their thinking done for them. It will be a treat to have a man of the mind among us. We'll find you cozy quarters, plenty of room for you and your valet. But separate." Valet? Was there a tempered young buck around, well housebroken and biddable, who could be depended on to report everything and keep his mouth shut? Suppose he had his sister's eldest son tempered now, would the lad shape up in time? And would his sister see the wisdom in it? He had great hopes for the boy. Memtok was coldly aware that he would have to go someday-though not for many years-and he was determined that his heir should succeed to his high office. But it would take planning, and planning could never start too soon. If his sister could be made to see it— Memtok led Hugh through crowded passageways; servants scurried out of the way wherever they went-save one who stumbled and got tingled for his awkwardness.

"My!" said Hugh. "This is a big building."

"This? Wait till you see the Palace-though no doubt it is falling to rack and ruin, under my chief deputy. Hugh, we use only a quarter of the staff here. There is no formal entertaining, just garden parties. And only a handful of guests. In the city the Chosen are always coming and going. Many a time I am rooted out of bed in the night to open apartments for some lord and his ladies without a moment's warning. And that is where planning counts. To—be able to open the door of a guest-wing flat and know-know, mind you, without looking-that beds are freshly perfumed, refreshments waiting, everything spotless, music softly playing."

"That must take real staff work."

"Staff work!" Memtok snorted. "I wish I could agree. What it takes is for me to inspect every room, every night, no matter how tired I am, before I go to bed. Then stay up to see that mistakes are corrected, not depend on their lies. They're all liars, Hugh. Too much 'Happiness.' Their Charity is generous; he never cuts down on the ration."

"I've found the food ample. And good."

"I didn't say food, I said 'Happiness.' I control the food and I don't believe in starving them, not even as punishment. A tingle is better. They understand that. Always remember one thing, Hugh; most servants don't really have minds. They're as thoughtless as the Chosen-not referring to Their Charity of course; I would never criticize my own patron. I mean Chosen in general. You understand." He winked and gave Hugh a dig in the ribs.

"I don't know much about the Chosen," Hugh admitted. "I've hardly laid eyes on them."

"Well...you'll see. It takes more than a dark skin to make brains no matter what they teach in temple. Not that I expect you to quote me nor would I admit it if you did. But—Who do you think runs this household?"

"I haven't been here long enough to express opinions."

"Very shrewd. You could go far if you had ambition. Let me put it this way. If Their Charity goes away, the household goes on smoothly as ever. If I am away, or dare to fall sick—Well, I shudder to think of it." He gestured with his whip. "They know. You won't find them scurrying that fast to get out of his way."

Hugh changed the subject. "I did not understand your remark about a 'ration of Happiness.'"

"Haven't you been receiving yours?"

"I don't know what it is."

"Oho! One bullock gets you three that it has been issued but never got as far as you. Must look into that. As to what it is, I'll show you." Memtok led him up a ramp and out onto a balcony. Below was the servants' main dining hail, crowded with three queues. "This, is issue time-studs at a different hour, of course. They can have it as drink, in chewing form, or to smoke. The dosage is the same but some say that smoking it produces the keenest happiness."

Memtok used words not in Hugh's vocabulary; Hugh told him so. Memtok said, "Never mind. It improves the appetite, steadies the nerves, promotes good health, enhances all pleasures-and wrecks ambition. The trick is to be able to take it or leave it alone. I never took it regularly even when I was at stud; I had ambition. I take it now only on feast days or such-in moderation." Memtok smiled. "You'll find out tonight."

"I will?"

"Didn't I tell you? Banquet in your honor, just after evening prayer."

Hugh was hardly listening. He was searching the far queue, trying to spot Barbara.

Memtok sent the Chief Veterinarian and the Household Engineer as an escort of honor for Hugh. Hugh was mildly embarrassed at this attention from the physician and surgeon in view of the helpless posture he had been in the last time he had seen the man. But the veterinarian was most cordial.

Memtok headed the long table with Hugh on his right. Twenty department heads were seated; there was one lower servant standing behind each guest and endless streams coming in and out from kitchen and pantry. The banquet room was beautiful, its furnishings lavish, and the feast was sumptuous and endless; Hugh wondered what a meal of the Chosen must be like if their upper servants ate this way.

He soon found out, in part. Memtok was served twice, once from the tasty dishes everyone shared, again from another menu. These dishes he sampled, using separate plates, but rarely did more than taste. Of the regular menu he ate sparingly and sometimes passed up dishes.

He noticed Hugh's glance. "The Lord Protector's dinner. Try it. At your own risk, of course."

"What risk?"

"Poison, naturally. When a man is over a hundred years old his heir is certain to be impatient. To say nothing of business competitors, political rivals, and subverted friends. Go ahead; the taster tries it half an hour before Their Charity—or I-touches it, and we've lost only one taster this year."

Hugh decided that his nerve was being tested; he tried a spoonful.

"Like it?" asked the Chief Domestic.

"Seems greasy to me."

"Hear that, Gnou? Our new cousin is a man of taste. Greasy. Someday you'll be fried in your own grease, I fear. The truth is, Hugh, that we eat better than the Chosen do...although courses are served more elaborately in the Grand Hall, of course. But I am a gourmet who appreciates artistry; Their Charity doesn't care what it is as long as it doesn't squeal when he bites it. If the sauces are too elaborate, the spices too exotic, he'll send it back with a demand for a slice of roast, a hunk of bread, and a pitcher of milk. True, Gnou?"

"You have said it."

"And frustrating."

"Very," admitted the chef.

"So Cousin Gnou's best cooks work for us, and the Chosen struggle along with ones whose chief skill lies in getting a bird's skin back on without ruffling the feathers. Cousin Hugh, if you will excuse me, I must lift up to the Grand Hall and attempt by proper ceremony to make Cousin Gnou's pièce de résistance seem better than it is. Don't believe what they tell you about me while I'm gone-regrettably it's all true." He exposed his teeth in what must have been a smile and left.

No one spoke for a while. Finally someone-Hugh thought it was the transportation master but he had met too many—said, "Chief Researcher, what household were you with before you were adopted, may one ask?"

"One may. House of Farnham, Freeholder Extraordinary."

"So. I am forced to admit that the title of your Chosen is new to me. A new title, perhaps?"

"Very old," Hugh answered. "Extremely ancient and granted directly by Uncle the Mighty, blessed be His Name. The rank is roughly that of king, but senior to it."

"Really?"

Hugh decided to drop that shovel for a wider one. In earlier conversation he had learned that Memtok knew a great deal about many things-but almost nothing about such trivia as history, geography, and matters outside the household. And from his Language lessons he knew that a servant who could read and write was rare, even among executives, unless the skill was necessary to his duties. Memtok had told him proudly that he had petitioned the opportunity while he was still at stud and had labored at it to the amusement of the other studs. "I had my eyes on the future," he had told Hugh. "I could have had five more years, probably ten, at stud-but as soon as I could read, I petitioned to be tempered. So I had the last laugh-for where are they now?"

Hugh decided on the very widest shovel; a big lie was always easier to sell. "The title is unbroken for three thousand years in House Farnham. The line remained intact by direct intervention of the Uncle right through Turmoil and Change. Because of its Divine origin its holder speaks to the Proprietor as an equal, 'thee' and 'thou.'" Hugh drew himself up proudly. "And I was factotum-in-chief to Lord Farnham."

"A noble house indeed. But 'factotum-in-chief'? We don't use that designation here. A domestic?"

"Yes and no. The chief domestic works under the factotum."

The man almost gasped. "And so," Hugh went on, "do all servant executives, domestic or not-business, political, agrarian, everything. The responsibility is wearing."

"So I should imagine!"

"It is. I was growing old and my health was failing-I suffered a temporary paralysis of my lower limbs. Truthfully I never liked responsibility, I am a scholar. So I petitioned to be adopted and here I am-scholar to a Chosen of similar scholarly 'tastes...a fitting occupation for my later years." Hugh realized that he had stretched one item too far; the veterinarian looked up. "This paralysis, I noted no signs of it." (Damn it, doctors never cared about anything but their specialty!) "It came on me suddenly one morning," Hugh said smoothly, "and I haven't been troubled by it since. But to a man of my years it was a warning."

"And what are your years? Professional interest, of course. One may ask?"

Hugh tried to make the snub as direct as some he had heard Memtok pass out. "One may not. I'll let you know when I need your services. But," he added, to sooth the smart, "it would be fair to say that I was born some years earlier than Their Charity."

"Astonishing. From your physical condition-quite good, I thought-I would have judged you to be no more than sixty, at most."

"Blood will tell," Hugh said smugly. "I am not the only one of my bloodline to live a very long time."

He was saved from further evasions by the return of Memtok. Everyone stood up. Hugh didn't notice in time, so he remained seated and brazened it out. If Memtok resented it, he did not let it show. He clapped Hugh on the shoulder as he sat down. "No doubt they've told you how I eat my own young?"

"I was given the impression of a happy family presided over by a beloved uncle."

"Liars, all of them. Well, I'm through for the evening—until some emergency. Their Charity knows that we are welcoming you; he commanded me not to return to the Grand Hall. So now we can relax and be merry." The Chief Domestic tapped his goblet with a spoon. "Cousins and nephews, a toast to our newest cousin. Possibly you heard what I said-the Lord Protector is pleased at our modest effort to make Cousin Hugh feel at home in Their Family. But I am sure that you already guessed that...since one cannot miss that Cousin Hugh carries, not a least whip, but a lesser whip exactly like mine!" Memtok smiled archly. "Let us trust that he will never need to use it."

Loud applause greeted the boss's brilliant sally. He went on solemnly, "You all know that not even my chief deputy carries such authority, much less the ordinary department head

and from that I am sure you conclude that a hint from Cousin Hugh, Chief Researcher and Aide in Scholarship to Their Charity by direct appointment-a hint from him is an order from me-so don't let me have to make it a direct order.

"And now the toasts! All cousins together and let Happiness flow freely...so let the junior among us give the first toast. Who claims it, who claims it?"

The party got rowdy. Hugh noted that Memtok drank sparingly. He remembered the warning and tried to emulate him. It was impossible. The Chief Domestic could drop out of any toast, merely raise his glass, but Hugh as guest of honor felt compelled to drink them all.

Some unknown time later Memtok led him back to his newly acquired, luxurious quarters. Hugh felt drunk but not unsteady-it was just that the floor was so far away. He felt illuminated, possessed of the wisdom of the ages, floating on silvery clouds, and soaked through with angelic happiness. He still had no idea what was in Happiness drinks. Alcohol? Maybe. Betel nut? Mushrooms? Probably. Marijuana? It seemed certain. He must write down the formula while it was fresh in his mind. This was what Grace should have had! He must—But of course, she did have it now. How very nice! Poor old Grace—He had never understood her-all she needed was a little Happiness.

Memtok took him into his bedroom. Sleeping across the foot of his lovely new bed was a female creature, blond and cuddly.

Hugh looked down at her from about a hundred-foot elevation and blinked. "Who she?"

"Your bedwarmer. Didn't I say?"

"But—"

"It's quite all right. Yes, yes, I know you are technically a stud. But you can't harm her; this is what she is for. No danger. Not even altered. A natural freemartin."

Hugh turned around to discuss it, wheeling slowly because of his great width and high sail area. Memtok was gone. Hugh found that he could just make it to the bed. "Move over, Kitten," he muttered, and fell asleep.

He overslept but the kitten was still there; she had his breakfast waiting. He looked at her with unease-not because he had a hangover; he did not. Apparently Happiness did not exact such payments. He felt physically strong, mentally alert, and morally straight-and very hungry. But this teenager was an embarrassment.

"What's your name, kitten?"

"May it please them, this one's name is of such little importance that whatever they please to call it will be a boon."

"Cut it, cut it! Use equals speech."

"I don't really have a name, sir. Mostly they just say, 'Hey, you.'"

"All right, I'll call you 'Kitten.' Does that suit you? You look like a kitten."

She dimpled. "Yes, sir. It's ever so much nicer than 'Hey, you.'"

"All right, your name is 'Kitten.' Tell everybody and don't answer to 'Hey, you.' Tell them that is official because the Chief Researcher says so and if anybody doubts it, tell them to check with the Chief Domestic. If they dare."

"Yes, sir. Thank you, sir. Kitten, Kitten, Kitten," she repeated as if memorizing it, then giggled. "Pretty!"

"Good. Is that my breakfast?"

"Yes, sir."

He ate in bed, offering her bits, and discovered that she expected to be fed, or at least allowed to eat. There was enough for four; between them they ate enough for three. Then he learned that she expected to assist him in the bathroom; he put a stop to that.

Later, ready to go to his assigned duties, he said to her, "What do you do now?"

"I go back to sluts' quarters, sir, as soon as you release me. I come back at bedtime-whatever time you say."

He was about to tell her that she was charming and that he almost regretted passing .out the night before but that he did not require her services on future—He stopped. An idea had hit him. "Look. Do you know a tall slut named Barbara? Oh, this much taller than you are. She was adopted something over two weeks ago and she had babies, twin boys, about a week ago."

"Oh, yes, sir. The savage."

"That's the one. Do you know where' she is?"

"Oh, yes, sir. She's still in lying-in quarters. I like to go in there and look at the babies." She looked wistful. "It must be nice."

"Uh, yes. Can you take a message to her?"

Kitten looked doubtful. "She might not understand. She's a savage, she can't talk very well."

"Mmm—Damn. No, maybe it's a help. Wait a moment." His quarters were equipped with a desk; he went to it, got one of those extraordinary pens-they didn't stain and didn't wear out and appeared to be solid-found a piece of paper. Hastily he wrote a note, asking Barbara about herself and the twins, reporting his odd promotion, telling her that soon, somehow, he would see her-be patient, dear-and assuring her of his undying devotion.

He added a P.S. "The bearer of this note is 'Kitten'—if the bearer is short, blond, busty, and about fourteen. She is my bedwarmer-which means nothing and you've got an evil mind, wench! I'm going to hang onto her because she is a way-the only way, it would appear-for me to communicate with you. I'll try to write every day, I'll darn well expect a note from you every day. If you can. And if anybody does anything you don't like, tell me and I'll send you his head on a platter. I think. Things are looking up. Plenty of paper and a pen herewith. Love, love, love-H.

"PPS-go easy on 'Happiness.' It's habit-forming."

He gave the girl the note and writing materials. "You know the Chief Domestic by sight?"

"Oh, yes, sir. I've warmed his bed. Twice."

"Really? I'm amazed."

"Why, sir?"

"Well, I didn't think he would be interested."

"You mean because he's tempered? Oh, but several of the executives like to have a bedwarmer anyhow. I like it better than being sent upstairs; it's less trouble and you get lots more sleep. The 'Chief Domestic doesn't usually send for a bedwarmer, though-it's just that he checks us and teaches us manners before we are allowed to serve upstairs." She added, "You see, he knows all about it; he used to be a stud, you know." She looked at Hugh with innocent curiosity. "Is it true what they say about you? May one ask?"

"Uh...one may not."

"I'm sorry, sir." She looked crushed. "I didn't mean any harm." She glanced fearfully at his whip, dropped her eyes.

"Kitten."

"Yes, sir."

"See this whip?"

"Uh, yessir!"

"You will never, never, never feel my whip. That's a promise. Never. We're friends."

Her face lit up and she looked angelically beautiful instead of pretty. "Oh, thank you, sir!"

"Another thing. The only whip you need fear from now on is the Chief Domestic's-so stay out of his way. Anyone else-any 'least whip'—you tell him, or her, that this lesser whip is what he'll get if he touches you. Tell him to check with the Chief Domestic. Understand me?"

"Yes, sir." She looked smugly happy.

Too smug, Hugh decided. "But you stay out of trouble. Don't do anything to deserve a tingle-or I might turn you over to the Chief Domestic for a real tingling, the sort he is famous for. But as long as you work for me, don't allow anyone but him to tingle you. Now git and deliver that. I'll see you tonight, about two hours after evening prayer. Or come earlier if you are sleepy, and go to bed." Must remember to have a little bed put here for her, he reminded himself.

Kitten touched her forehead and left. Hugh went to his office and spent a happy day learning the alphabet and dictating three articles from the Britannica. He found his vocabulary inadequate, so he sent for one of his teachers and used the man as a dictionary. Even so, he found it necessary to explain almost endlessly; concepts had changed.

Kitten went straight to the Chief Domestic's office, made her report, turned over the note and writing materials. Memtok was much annoyed that he held in his hand what might be important evidence-and no way to read it. It did occur to him that that other one-Duke? Juke? Some such-might be able to read these hen scratches. But not likely, of course, and even under tingling there would be no certainty that Juke would translate honestly, and no way to check on him.

Asking Joe never crossed his mind. Nor did asking Their Charity's new bedwarmer. But the impasse had one intriguing aspect. Was it possible that this savage slut actually could read? And perhaps even essay to write a reply?

He stuck the note in his copier, gave it back to the girl. "All right, your name is Kitten. And do exactly as he tells you about not letting yourself be tingled-and be sure to gossip about it; I want it known all over. But get this—" He gave Kitten the gentlest of reminders; she jumped. "This whip is waiting for you, if you make any mistakes."

"This one hears and obeys!"

Hugh returned from the executives' dining room rather late; he had sat around and gossiped. He found Kitten asleep in his bed and remembered that he had forgotten to ask for another bed for her.

'Clutched in her hand was a folded paper. Gently he worked it out without waking her:

Darling!

How utterly wonderful to see your handwriting! I knew from Joe that you were safe, hadn't heard about your promotion, didn't know whether you knew about the twins. First about them—They are thriving, they both look like their papa, both have his angelic disposition. Six pounds each at birth is my guess, but, although they were weighed, weights here mean nothing to me. Me? I'm a prize cow, dearest, no trouble at all-and the care I received (and am receiving) is fantastically good. I started to labor, was given something to drink, never hurt again although I remember all details of having two babies-as if it had happened to somebody else. So trouble free and actually pleasant that I'd be willing to do it every day. And would, if the rewards were as nice as little Hugh and Karl Joseph.

As for the rest, boring except for our fine boys, but I'm learning the language as fast as I can. And somebody should tell the Borden Company about me-which is good, as our scamps are greedy eaters. I'm even able to help out the girl in the next bed, who is short on milk. Just call me Elsie.

I'll be patient. I'm not surprised at your new honors; I expect that you'll be bossing the place in a month. I have confidence in my man. My husband. Such a beautiful word—As for Kitten, I don't believe your Boy Scout assertions, my lecherous darling; your record shows that you take advantage of innocent young girls. And she's awfully cute.

Seriously, dearest, I know how noble you are and I didn't have an evil-minded thought. But I would not blame you if your nobility slipped-especially as I've picked up enough words to be aware of her odd category in this strange place. I mean, Kitten is not vulnerable and can't go set. If you did slip, I would not be jealous-not much, anyhow-but I would not want it to become a habit. Not to the exclusion of me, at least; my hormones are rearranging themselves very rapidly. But I don't want you to get rid of her when she is our only way of communicating. Be nice to her; she's a nice kid. But you're always nice to everyone.

I will write every day-and I will cry into my pillow and be worried to death any day I don't hear from you.

My love forever and forever,
B
P.S. The smear is little Hugh's right footprint.

Hugh kissed the letter, then got into bed, clutching it. Kitten did not wake.

Chapter 14

Hugh found learning to read and write Language not difficult. Spelling was phonetic, a sign for every sound. There were no silent letters and never any question about spelling or pronunciation. Accent was on the penultima unless marked; the system was as free from traps as Esperanto. He could sound out any word as soon as he had learned the 47-letter alphabet, and, with thought, he could spell any word he could pronounce.

Writing and printing were alike, cursive, and a printed page looked like one written by a skilled penman. He was not surprised to find that it looked like Arabic and a search in the Britannica confirmed that the alphabet must have derived from Arabic of his time. Half a dozen letters had not changed; some were similar although changed. There were many new letters to cover the expansion into a system of one sound, one sign-plus letters for sounds XXth century Arabic had never used. Search in the Britannica convinced him that Arabic, French, and Swahili were the main roots of Language, plus Uncle alone knew what else. He could not confirm this; a dictionary with derivations, such as he had been used to for English, apparently did not exist-and his teachers seemed convinced that Language had always been just as they knew it. The concept of change baffled them.

It was only of intellectual interest; Hugh knew neither Arabic, French, nor Swahili. He had learned a little Latin and less German in high school, and had struggled to learn Russian in his later years. He was not equipped to study the roots of Language, he was merely curious.

Nor did he dare spend time on it; he wanted to please Their Charity, butter him up so that he might, eventually, petition the boon of seeing Barbara-and that meant a flood of translated articles. Hugh worked very hard.

The second day after his elevation, Hugh asked for Duke, and Memtok sent for him. Duke was rather worn down-there were lines in his face-but he spoke Language. Duke spoke it not as well as his father and apparently had tangled more with his teachers; his mood seemed to oscillate between hopelessness and rebellion, and he limped badly.

Memtok made no objection to transferring Duke to the Department of Ancient History. "Glad to get rid of him. He's too monstrous big for stud, yet he doesn't seem to be good for anything else. Certainly, put him to work. I can't bear to see a servant lying around, eating his head off, doing nothing."

So Hugh took him. Duke looked over Hugh's private apartment and said, "Christ! You certainly managed to come up smelling like a rose. How come?"

Hugh explained the situation. "So I want you to translate legal articles and related subjects-whatever you can do best."

Duke shoved his fists together and looked stubborn. "You can stuff it."

"Duke, don't take that attitude. This is an opportunity."

"For you, maybe. What are you doing about Mother?"

"What can I do? I'm not allowed to see her, neither are you. You know that. But Joe assures me that she is not only comfortable and well treated, but happy."

"So he says. Or so you say he says. I want to see it myself. I damn well insist on it."

"Very well, insist on it. Go see Memtok about it. But I must warn you, I can't protect you from him."

"Rats. I know what that slimy little bastard would say-and what he would do." Duke scowled and rubbed his injured leg. "It's up to you to arrange it. You've got such an unholy drag around here, the least you can do is use it to protect Mother."

"Duke, I don't have that sort of drag. I'm being pampered for the reason a race horse is pampered...and I have just as little to say about it as a race horse has. But I can cut you in on pampering if you cooperate-decent quarters, immunity from mistreatment, a pleasant place to work. But I can no more get you into women's quarters, or have Grace sent here, than I can go to the Moon. They have harem rules here, as you know."

"And you are content to sit here and be a trained seal for that ape, and neglect Mother? Count me out!"

"Duke, I won't argue. I'll assign you a room and send you a volume of the Britannica each day. Then it's up to you. If you won't work, I'll try to keep Memtok from knowing it. But I think he has spies all over the place."

Hugh let it go at that. At first he got no help out of Duke. But boredom worked where argument failed; Duke could not stand to be shut up in a room with nothing to do. He was not locked up but he did not venture out much because there was always the chance that he might run into Memtok, or some other whip-carrying upper servant, who might want to know what he was doing, and why-servants were expected to look busy even if they weren't, from morning prayer to evening prayer.

Duke began to produce translations and, with them, a complaint that he was short on vocabulary. Hugh was able to have assigned to him a tempered clerk who had worked in Their Charity's legal affairs.

But he rarely saw Duke-it seemed to be the only way they could stay out of arguments. Duke's output speeded up after the first week but fell off in quality-Duke had discovered the sovereign power of "Happiness."

Hugh considered warning Duke about the drug, decided against it. If it kept Duke contented, who was he to deny him this anodyne? The quality of Duke's translations did not worry Hugh; Their Charity had no way to judge-unless Joe rendered an opinion, which seemed unlikely. He himself was not trying too hard to turn out good translations; "not good, but Wednesday" was the principle he used: Give the boss lucid copy in great quantity-and leave out the hard parts.

Besides, Hugh found that a couple of drinks of Happiness at dinner topped off the day. It allowed him to read Barbara's daily letter in a warm glow, write a cheerful answer for Kitten to carry back, then to bed and sound sleep.

But Hugh did not use much of it; he was afraid of the stuff. Alcohol, he reasoned, had the advantage of being a poison. It gave fair warning if one started drinking heavily. But this stuff exacted no such price; it merely turned anxiety, depression, worry, boredom, any unpleasant emotion, into an uncritical happy glow. Hugh wondered if it was principally methyl meprobamate? But he knew little chemistry and that little was two thousand years behind times.

As a member of the executive servants' mess Hugh could have all he wanted. But he noted that Memtok was not the only boss who used the stuff abstemiously; a man did not fight his way up in the servants' hierarchy by dulling himself with drugs-but sometimes a servant did get high up, then skidded to the bottom, unable to stand prosperity in the form of unrationed Happiness. Hugh never learned what became of them.

Hugh could even keep a bottle in his rooms-and that solved the problem of Kitten.

Hugh had decided not to ask for a bed for Kitten; he did not want to rub Memtok's nose in the fact that he was using the child only as a go-between to women's quarters. Instead he required the girl to make up a bed each night on the divan in his living room.

Kitten was very hurt by this. By now she was sure that Hugh could make better use of a bedwarmer and she regarded it as rebuke to her in her honorable capacity as comfort and solace-and it scared her. If her master did not like her, she might lose the best job she had ever had. (She did not dare report to Memtok that Hugh had no use for her as a bedwarmer; she gave reports on every point but that.)

She wept.

She could not have done better; Hugh Farnham had been a sucker for women's tears all his life. He took her on his knee and explained that he liked her very much (true), that it was a sad thing but he was too old to appreciate a female bedmate (a lie), and that he slept badly and was disturbed by having anyone in bed with him (a half-truth)—and that he was satisfied with her and wanted her to go on serving him. "Now wipe your eyes and have a drink of this."

He knew that she used the stuff; she chewed her ration like bubble gum-chewing gum it was in fact; the powder was added to chicle. Most servants preferred gum because they could go dreamily through the day, chewing it while they worked. Kitten passed her empty days chewing it and chewed the played-out cud in Hugh's quarters after she learned he did not mind. So he did not hesitate to give her a drink.

Kitten went happily to bed and right to sleep, no longer worried that her master might get rid of her. That set a precedent. Each evening, half an hour before Hugh wanted the lights out, he would give her a short drink of it.

For a while he kept track of the level in the bottle. Kitten was often in his quarters when he was not, he knew how much she enjoyed it, and there were no locks in his quarters-his rank entitled him to locks but Memtok had carefully not told him.

He quit bothering when he was convinced that Kitten was not snitching it. In fact, Kitten would have been terrified at the thought of stealing from her master. Her ego was barely big enough for a mouse; she was less than nothing and knew it and had never owned anything, not even a name, until Hugh gave her one. Under his kindness she was beginning to be a person, but it was still the faintest flicker, anything could blow it out. She would no more have risked stealing from him than she would have risked killing him.

Hugh, half by intent, encouraged her confidence. She was a trained bath girl; he gave in and let her scrub his back and handle the nozzles for his bath, dress him, and take care of his clothes. She was a masseuse, too; he sometimes found it pleasant to have his head and neck rubbed after a day spent poring over the fine print or following the lines in a scroll reader-and she was pathetically anxious to do anything to make herself necessary.

"Kitten, what do you do in the daytime?"

"Why, nothing mostly. Sluts of my subcaste mostly don't have to work if they have night duty. Since I'm having duty every night I'm allowed to stay in the sleep room until midday. So I do, even if I'm not sleepy, because the slutmaster is likely to put one to work if he catches one just wandering around. Afternoons—Well, mostly I try to stay out of sight. That's best. Safest."

"I see. You can hide out in here if you like. Or can you?"

Her face lit up. "If you give me a pass, I can."

"All right, I will. You can watch television—No, it's not on at that hour. Mmm, you don't know how to read. Or do you?"

"Oh, no, sir! I wouldn't dare petition."

"Hmm—" Hugh knew that permission to learn to read could not be granted even by Memtok; it required Their Charity's permission and was granted only after investigation of the necessity. Furthermore, anything he did that was out of line jeopardized his thin chances of reunion with Barbara.

But—Damn it, a man had to be a man! "There are scrolls in here and a reader. Do you want to learn?"

"Uncle protect us!"

"Don't swear. If you want to-and can keep your pretty little mouth shut-I'll teach you. Don't look so damned scared! You don't have to decide now. Tell me later. Just don't talk about it. To anyone."

Kitten did not. It scared her not to report it, but she had a reflex for self-preservation and felt without knowing why that to report this would endanger her happy setup.

Kitten became substitute family life for Hugh. She sent him to work cheerful, greeted him with a smile when he came back, talked if he wanted to talk and never spoke unless spoken to. Most evenings she curled up 'in front of the television-Hugh thought of it as "the television" and it was in fact closed-circuit television under principles not known to him, in color, in three dimensions, and without lines.

It played every evening in the servants' main hall, from evening prayer until lights-out, to a packed house, and there were outlets in the apartments of executive servants. Hugh had watched it several evenings, expecting to gain insight into this strange society he must learn to live in.

He decided that one might as well try to study the United States by watching Gunsmoke. It was blatant melodrama, with acting as stylized as Chinese theater, and the favorite plot seemed to be that of the faithful servant who dies gloriously that his lord may live.

But it was only second in importance to Happiness in the morale of life belowstairs. Kitten loved it.

She would watch it, snapping her gum, and suppressing squeals of excitement, while Hugh read-then sigh happily when the program ended, accept her little drink of Happiness with profuse thanks and a touch of her forehead, and go quietly to sleep. Hugh sometimes went on reading.

He read a great deal-every evening (unless Memtok stopped in to visit) and half of every day. He begrudged the time he spent translating for Their Charity but never neglected it; it was the hopeful key to better things. He had found it necessary to study modern culture if he was to translate matters of ancient history intelligibly. The Summer Palace had a fair library; he was given access when he claimed necessity for his work-Memtok arranged it.

But his true purpose was not translation but to try to understand what had happened to his world to produce this world.

So he usually had a scroll in the reader, in his office, or in his living room. The scroll system of printing he found admirable; it mechanized the oldest form of book into a system far more efficient than bound leaves-drop the double cylinder into the reader, flip it on, and hold still. The letters raced across in front of his eyes several hundred feet at a whack, to the end of the scroll. Then the scroll flipped over and chased back the following line, which was printed upside down to the one just scanned.

The eye wasted no time flipping back and forth at stacked lines. But a slight pressure speeded the gadget up to whatever the brain could accept. As Hugh got used to the phonetics, he acquired speed faster than he had ever managed in English. But he did not find what he was looking for.

Somewhere in 'the past the distinctions between fact, fiction, history, and religious writings seemed to have been rubbed out. Even when he got it clear that the East-West War that had bounced him out of his own century was now dated 703 B.C. (Before the Great Change), he still had trouble matching the world he had known with the "history" set forth in these scrolls.

The war itself he didn't find hard to believe. He had experienced only a worm's-eye view of the first hours but what the scrolls related matched the possibilities: a missile-and-bomb holocaust that had escalated in its first minutes into "brilliant first strike" and "massive retaliation" and smeared cities from Peiping to Chicago, Toronto to Smolensk; fire storms that had done ten times the damage the bombs did; nerve gas and other poisons that had picked up where fire left off; plagues that were incubating when the shocked survivors were picking themselves up and beginning to hope-plagues that were going strong when fallout was no longer deadly.

Yes, he could believe that. The bright boys had made it possible, and the dull boys they worked for had not only never managed to make the possibility unlikely but had never really believed it when the bright boys delivered what the dull boys ordered.

Not, he reminded himself, that he had believed in "Better red than dead"—or believe in it now. The aggression had been onesided as hell-and he did not regret a megaton of the "massive retaliation."

But there it was. The scrolls said that it had killed off the northern world.

But how about the rest of it? It says here that the United States, at the time of the war, held its black population as slaves. Somebody had chopped out a century. On purpose? Or was it honest confusion and almost no records? There had been, he knew, a great book burning for two centuries during the Turmoil, and even after the Change.

Was it lost history, like Crete? Or did the priests like it better this way?

And since when were the Chinese classed as "white" and the Hindus as "black"? Yes, purely on skin color Chinese and Japanese were as light as the average "white" of his time, and Hindus were certainly as dark as most Africans-but it was not the accepted anthropological ordering of his day.

Of course, if all they meant was skin shade-and apparently that was what they did mean-he couldn't argue. The story maintained that the whites, with their evil ways, destroyed each other almost to the last man...leaving the innocent, charitable, merciful dark race-beloved by Uncle the Mighty-to inherit the Earth.

The few white survivors, spared by Uncle's mercy, had been succored and cherished as children and now again were waxing numerous under the benevolent guidance of the Chosen. So it read.

Hugh could see that a war which smeared North America, Europe, all of Asia except India, could kill off most whites and almost all Chinese. But what had happened to the white minority in South America, the whites of the Union of South Africa, and the Australians and New Zealanders?

Search as he would, Hugh could not find out. All that seemed certain was that the 'Chosen were dark whereas servants were pale faces-and usually small. Hugh and his son towered over the other servants. Contrariwise, the few Chosen he had seen were big men.

If present-day whites were descended from Australians, mostly-No, couldn't be, Aussies had not been runts. And those "Expeditions of Mercy"—were they slave raids? Or pogroms? Or, as the scrolls said, rescue missions for survivors?

The book burnings might account for these discrepancies. It wasn't clear to Hugh whether all books had been put to the torch, or possibly technical books had been spared-for it was clear that the Chosen had technology superior to that of his time; it seemed unlikely that they had started from scratch.

Or was it unlikely? All the technology of his own time that had amounted to a damn had been less than five hundred years old, most of it less than a hundred, and the most amazing parts less than a generation. Could the world have gone back to a dark ages, then pulled out of it and more, in two thousand years? Of course it could!

Either way, the Koran had been the only book officially exempt from the torch-and Hugh harbored a suspicion that the Koran had not been spared either. He 'had owned a translation of the Koran, had read it several times.

He wished now that he had put it into the shelter, for the Koran as he now read it in "Language" did not match his memory. For one thing, he had thought that Mahomet was a redheaded Arab; this "Koran" mentioned his skin color repeatedly, as black. And he was sure that the Koran was free of racism. This "improved" version was rabid with it.

Furthermore, this Koran had a new testament with a martyred Messiah. He had taught and had been hanged for it—religious scrolls were all marked with a gallows. Hugh did not object to a new testament; there had been time for a new revelation and religions had them as naturally as a cat has kittens. What he objected to was some revisionist working over the words of the Prophet, apparently to make them fit this new book. That wasn't fair, that was cheating.

The social organization Hugh found almost as puzzling. He was beginning to get a picture of a complex culture, stable, even static-high technology, few innovations, smooth, efficient-and decadent. Church and State were one—"One Tongue, One King, One People, One God." The Lord Proprietor was sovereign and supreme pontiff and owned everything under Uncle's grant, and the Lords Protector such as Ponse were his bishops and held only fiefs. Yet there were plenty of private citizens (Chosen, of course-a white was not a person), shopkeepers, landowners, professional men, *etc.* A setup for an absolute totalitarian communism yet streaked through with what appeared to be private enterprise—Hell, there were even corporations if he understood what he was reading.

The most interesting point to Hugh (aside from the dismal fact that his own status was fixed by law and custom at zero) was the inheritance system. Family was everything, yet marriage was almost nothing-present but not important. Descent was through the female line-but power was exercised by males.

This confused Hugh until it suddenly fell into place. Ponse was Lord Protector because he was eldest son of an eldest daughter-whose oldest brother had been Lord Protector before Ponse. Ponse's heir therefore was his oldest sister's oldest son-title went down through mother and daughter endlessly, with power vested in the oldest brother of each female heir. It did not matter who Ponse's father was and it mattered even less what sons he had; none of them could inherit. Ponse inherited from his mother's brother; his heir was his sister's son.

Hugh could see that, under this system, marriage would never be important-bastardy might be a concept so abstract as to be unrecognized-but family would be more important than ever. Women (of the Chosen) could never be downgraded; they were more important than males even though they ruled through their brothers-and Religion recognized this; the One God, Uncle the Mighty, had an elder sister, the Eternal Mamaloi...so sacred that she was not prayed to and her name was never used in cursing. She was just there, the Eternal Female Principle that gave all life and being.

Hugh had a feeling that he had read about this sort of descent before, uncle to nephew through the female line, so he searched the Britannica. He was surprised to discover that the setup had prevailed at one time or another in every continent and many cultures.

The Great Change had been when Mamaioi had at last succeeded-working indirectly, as always-in uniting all Her children under one roof and placing their Uncle in charge. Then She could rest.

Hugh's comment was: "And God help the human race!"

Hugh kept expecting Their Charity to send for him. But two months passed and he did not, and Hugh was beginning to fret that he would never have a chance to ask to see Barbara-apparently Ponse had no interest in him as long as he kept on grinding out translations. Translating the Britannica looked like a job for several lifetimes; he resolved to stir things up, so he sent one day's batch with a letter to Their Charity.

A week later the Lord Protector sent for him. Memtok came for Hugh, dancing with impatience but insisting that Hugh wash his armpits, rub himself with deodorant, and put on a clean robe.

The Lord Protector did not seem to care how Hugh smelled; he let him wait while he did something else. Hugh stood in silence...although Grace was present. She was lounging on a divan, playing with cats and chewing gum. She glanced at Hugh, then ignored him, save that her face took on a secret smile that Hugh knew well—He called it "canary that ate the cat."

Dr.—Livingstone-I-Presume greeted Hugh, jumping down, coming over and rubbing against his ankles. Hugh knew that he should ignore it, wait for the lord to recognize his presence-but this cat had been his friend a long time; he could not snub it. He bent down and stroked the cat.

The skies did not split, Their Charity ignored the breach.

Presently the Lord Protector said, "Boy, come here. What's this about making money from your translations? What in Uncle gave you the notion I needed money?"

Hugh had got the notion from Memtok. The Chief Domestic had growled about how difficult it was to run things, with penny-pinching from on high getting worse every year.

"May it please Their Charity, this one's opinions are of no value, it is true, but—"

"Cut the flowery talk, damn you!"

"Ponse, back where-when-I came from there never was a man so rich but what he needed more money. Usually, the richer he was, the more he needed."

The lord grinned. "'Plus ça change, plus c'est la même chose.' Hugh, you aren't just sniffing Happiness. Things are the same now. Well? What's your idea? Spit it out."

"It seems to me that there are things in your encyclopaedia which might be turned to a profit. Processes and such that have been lost in the last two thousand years-but might be worth money now."

"All right, do it. The stuff you send up is satisfactory, what I've had time to read. But some of it is trivial. 'Smith, John, born and died-a politician who did nothing much and did that little poorly.' Know what I mean?"

"I think so, Ponse."

"All right, skip that garbage and dig me up four or five juicy ideas I can cash in on."

Hugh hesitated. Ponse said, "Well? Didn't you understand?"

"I think I need help. You see, I don't know anything really, except what goes on belowstairs. I thought Joe might help."

"How?"

"I understand that he has traveled with you, seen things. He is more likely to be able to pick out subjects that merit study. He could pick the articles, I will translate them, and you can judge whether there is anything to exploit. I can synopsize them, so that you needn't waste time wading through details if the subject doesn't merit it."

"Good idea. I'm sure Joe will be happy to help. All right, send up the encyclopaedia. All."

Hugh was dismissed so abruptly that he had no chance to mention Barbara. But, he reflected, he could not have risked it with Grace present.

He considered digging out Duke, telling him that his mother was fat and happy-both literally-but decided against it. He wasn't sure how pleased Duke would be with a truthful report. They didn't see eye to eye and that was that.

Chapter 15

Joe sent down a volume every day for many days, with pages marked; Hugh slaved to keep up and to make useful translations. After two weeks Hugh was again sent for.

He expected a conference over some business idea. What he found was Ponse, Joe, and a Chosen he had never seen. Hugh instantly prepared to speak protocol mode, rising.

The Lord Protector said, "Come here, Hugh. Cut the cards. And don't start any of that tiresome formality, this is family. Private."

Hugh hesitantly approached. The other Chosen, a big dark man with a permanent scowl, didn't seem pleased. He was carrying his quirt and twitched it. But Joe looked up and smiled. "I've been teaching them contract, Hugh, and our fourth had to be away. I've been telling Ponse that you are the best player any where or when. So don't let me down."

"I'll try not to." Hugh recognized one deck of cards, they had once been his. The other deck appeared to be hand painted and were beautiful. The card table was not from the shelter; fabulous hand craftsmanship had gone into it.

The cut made Hugh partner of the strange Chosen. Hugh tried not to show how nervous it made him, as his partner clearly did not like it. But the Chosen grunted and accepted it.

His partner's contract, at three spades-by a fluke distribution 'they made four. His partner growled, "Boy, you underbid, you wasted game. Don't let it happen again."

Hugh kept quiet and dealt.

On the next hand Joe and Ponse made five clubs. Hugh's partner was furious-at Hugh. "If you had led diamonds, we would have set them! And you washed out our leg. I warned you. Now I'm—"

"Mrika!" Ponse said sharply. "This is contract. Play it as such. And put that tickler down. The servant played correctly."

"It did not! And I'm damned if I care for letting it in the game anyhow. I can smell the rank, sharp stink of a buck servant no matter how much it's scrubbed. I don't think this one is scrubbed at all."

Hugh felt sweat breaking out in his armpits and flinched. But Ponse said evenly, "Very well, we excuse you. You may leave."

"That suits me!" The 'Chosen stood up. "Just one thing before I do —If you don't quit staffing, Their Mercy will let the North Star Protectorate—"

"Are you planning to put up the money?" Their Charity said sharply.

"Me? It's a Family matter. Not but what I wouldn't jump at the chance! Forty million hectares and most of it in prime timber? Of course I would! But I hardly have one bullock to jingle against another-and you know why."

"Certainly we know. You gamble."

"Oh, come now! A businessman has to take chances. You can't call it gambling when—"

"We do call it gambling. We do not object to gambling but we have a vast distaste for losing. If you must lose, you will do it with your own bullocks."

"But this isn't gambling, it's a sure thingas well as getting us in solid with Their Mercy. The Family—"

"We decide what is good for the Family. Your turn will come soon enough. In the meantime we are as anxious to please the Lord Proprietor as you are. But not with bullocks the Family doesn't have in the treasury."

"You could borrow it. The interest would only come to—.—"

"You wanted to leave, Mrika. We note that you have left." Ponse picked up cards and began to shuffle.

The younger Chosen snorted and left.

Ponse laid out a solitaire game, started to play. Presently he said to Joe, "Sometimes that young man gets me so annoyed that I would happily change my will."

Joe looked puzzled. "I thought you could not disinherit him?"

"Oh, no!" Their Charity looked shocked. "Not even a peasant can do that. Where would we be if there were no stability here on Earth? I wouldn't dream of it, even if the law permitted it; he's my heir. I was just thinking of the servants."

Joe said, "I don't follow you."

"Why, you know—No, perhaps you don't. I keep forgetting that you didn't grow up among us. My will disposes of things personally mine. Not much-jewelry, scrolls, such. Value probably less than a million. Trivia. Except household servants. Just the household, I'm not talking about servants in mines or on ranches, or in our shipping lines. It's customary to list all household servants in a will-otherwise they escort their uncle." He grinned. "It would be a good joke on Mrika if he found that he was going to have to raise the money to adopt fifteen hundred, two thousand servants-or shut the house and live in a tent. I can just see that. Why, the lad can't take a pee without four servants to shake it. I doubt if he knows how to put on his boots. Hugh, if you tell me to put the black lady on the red lord, I'll tingle you. I'm not in a good mood."

Hugh said hastily, "Did you miss a play? I hadn't noticed."

"Then why were you staring at the cards?" Hugh had indeed been staring at the game, trying to be invisibie. He had been made very nervous by witnessing a quarrel between Ponse and his nephew. But he had missed not a word, he found it extremely interesting.

Ponse went on, "Which would you prefer, Hugh? To escort me to Heaven? Or stay here and serve Mrika? Don't answer too quickly. If you stay here, I venture you may be eating your own toes to stay your hunger before I'm gone a year...whereas Heaven is a nice place, so the Good Scroll tells."

"It's a hard choice."

"Well, you don't have to make it, nor will you know. A servant should never know, it keeps him on his toes. That scoundrel Memtok keeps praying me for the honor of being in my escort. If I thought he was sincere, I would dismiss him for incompetence." Ponse swept the cards together. "Damn that lad! He's poor company but I had my liver set on a few good, hard rubbers. Joe, we've got to teach more people to play. Being left without a fourth is annoying."

"Certainly," agreed Joe. "Right now?"

"No, no. I want to play, damn it, not watch some beginner's bumbles. I'm growing addicted. Takes a man's worries off his mind."

Hugh was hit by inspiration. "Ponse, if you don't mind having another servant in the game..."

Joe brightened up. "Why, of course! He—"

"Barbara," Hugh cut in fast, before Joe could mention Duke.

Joe blinked. Then he smoothly picked it up. "He-Hugh, I mean-was about to mention a servant named Barbara. Good bridge player."

"Well! You've been teaching this game belowstairs, Hugh?" Ponse added, "'Barbara'? A name I don't recognize. Not one of the upper servants."

"You remember her," Joe said. "She was with us when you picked us up. The tall one."

"Oh, yes. Bigging, it was. Joe, are you telling me that a slut can play this game?"

"She's a top player," Joe assured him. "Plays better than I do. Heavens, Ponse, she can play rings around you. Isn't that right, Hugh?"

"Barbara is an excellent player."

"This I must see to believe."

A few minutes later Barbara, freshly bathed and scared, was fetched in. She glanced at Hugh, looked startled silly, opened her mouth, closed it, and stood mute.

Ponse came up to her. "So this is the slut who is supposed to be able to play contract. Stop trembling, little one; nobody's going to eat you." In bluff words he convinced her that she was there only to play bridge and that she was expected to relax and be informal-no fancy talk. "Just behave as if you were downstairs, having a good time with other servants. Hear me?"

"Yes, sir."

"Just one thing." He tapped her on her chest. "When you're my partner, I shan't be angry if you make mistakes-after all, you're only a slut and it's surprising that you can play an intellectual game at all. But"—he paused --"when you are playing against me, if you fail to fight for every trick, if I even suspect that you are trying to let me win, I guarantee you'll tingle when you leave. Understand?"

"That's right," agreed Joe. "Their Charity expects it. Just play by the book, and play your best."

"'By the book,' " Ponse repeated. "I've never seen this book but that's the way Joe says he has taught me to play. So do it. All right, let's cut the cards."

Hugh hardly listened, he was drinking in the sight of Barbara. She looked well and healthy although it was startling to see her slender again-or almost, he corrected; she was still largish in the fanny and certainly in the bust. She had lost most of her tan and was dressed in the shapeless short robe all female servants wore belowstairs, but 'he was delighted to see that she had not had her hair removed. It was cropped but could grow back.

He noticed that his own appearance seemed to startle her, realized why. He said, smiling, "I comb my hair with a washrag now, Barbie. No matter, I didn't have enough to matter. Now that I'm used to being hairless, I like it."

"You look distinguished, Hugh."

"He's ugly as sin," said Ponse. "But are we chatting? Or playing bridge? Your bid, Barba."

They played for hours. As it progressed, Barbara seemed to relax and enjoy it. She smiled a great deal, usually at Hugh, but also at Joe and even at Their Charity. She played by the book and Ponse never found fault. Hugh decided that their host was a good player, not yet perfect but he remembered what cards had been played and usually bid accurately. Hugh found him a satisfactory partner and an adequate opponent; it was a good game.

But once, with Barbara as Ponse's partner and contract in her hand, Hugh saw when Ponse laid down the dummy that Ponse had overbid in his answer. So he contrived to lose one sure trick, thereby letting Barbara make contract, game, and rubber.

It got him a glance with no expression from Barbara and Joe gave him a look that had a twinkle in it, but Joe kept his mouth shut. Ponse did not notice. He gave a bass roar, reached across and patted Barbara's head. "Wonderful, wonderful! Little one, you really can play contract. Why, I doubt if I could have made that myself."

Nor did Ponse complain when, on the next rubber, Barbara and Hugh gave him and Joe a trouncing. Hugh decided that Ponse had the inborn honesty called "sportsmanship"—plus a good head for cards.

One of the little deaf-mutes trotted in, knelt, and served Their Charity a tumbler of something cold, then another to Joe. Ponse took a swig, wiped his mouth and said, "Ah, that hits the spot!"

Joe made a whispered suggestion to him. Ponse looked startled and said, "Oh, certainly. Why not?"

So Hugh and Barbara were served. Hugh was pleased to discover 'that it was apple juice; he wasn't sure of his ability to play tight bridge had it been Happiness.

During this rubber Hugh noticed that Barbara was squirming a little and seemed to have trouble in concentrating. When the hand ended he said quietly, "Trouble, hon?"

She glanced at Ponse and whispered, "Some. I was about to feed the boys when I was sent for."

"Oh." Hugh turned to his host. "Ponse, Barbara needs to stop.,,

Ponse looked up from shuffling. "Plumbing call? One of the maids can show it, I suppose. They must go somewhere."

"Not that. Well, maybe that, too. What I meant was, Barbara has twins."

"Well? Sluts usually have twins, they have two breasts."

"That's the point, she's nursing them and she's hours past time. She has to leave."

Ponse looked annoyed, hesitated, then said, "Oh, garbage. Its milk won't cake from so short a delay. Here, cut the cards."

Hugh did not touch them. Ponse said, "Didn't you hear me?" Hugh stood up His heart was pounding and he felt a shudder of fear. "Ponse, Barbara hurts. She needs to nurse her twins right now. I can't force you to let her-but if you think I'll play cards while you don't let her, you're crazy."

For long moments the big man stared, without expression. Then suddenly he grinned. "Hugh, I like you. You did something like this once before, didn't you? The slut is your sister, I suppose."

"Then you are the one who is crazy. Do you know how close you came to being cold meat?"

"I can guess."

"I doubt it, you don't look worried. But I like spunk, even in a servant. Very well, I'll have its brats fetched. They can suck while we play."

The twins were fetched and Hugh saw at once that they were the handsomest, healthiest, and loveliest babies that had ever been born;

he told Barbara so. He did not immediately get a chance to touch them as Ponse took one in each arm, laughed at them, blew in their faces, and jiggled them. "Fine boys!" he roared. "Fine boys, Barba! Holy little terrors, I'll bet. Go on, swing that fist, kid! Sock Uncle in the nose again. What do you call them, Barba? Do they have names?"

"This one is Hugh—"

"Eh? Does Hugh have something to do with them? Or thinks he has, perhaps?"

"He's 'their father."

"Well, well! Hugh, you may be ugly, but you have other qualities. If Barba knows what she's talking about. What's this one's name?"

"That one is little Joe. Karl Joseph."

Ponse lifted an eyebrow at Joe. "So you have sluts naming brats for you, Joe? I'll have to watch you, you're a sly one. What did you give Barba?"

"Beg pardon?"

"Birthing present, you idiot. Give her that ring you're wearing. So many brats in this house named after me that I have to order trinkets by the basket load; they know it obliges me to make them a present. Hugh is lucky, he has nothing to give. Hey, Hughie has teeth!"

Hugh got to hold them while they settled down for combined bridge and nursing. Barbara took them one at a time and played cards with her free hand. The little maids fussed over the one not nursing and, in due time, took them away. In spite of the handicap Barbara played well, even brilliantly; the long session ended with Ponse top scorer, Barbara close behind, and Joe and Hugh tied for last. Hugh had cheated very little to make it come out that way; the cards had favored Ponse and Barbara when they were partners; they had made two small slams.

Ponse was feeling very jovial about it. "Barba, come here, little one. You tell the slutmaster I said to find a wet nurse for your brats and that I want the vet to dry you up as soon as possible. I want you available as my bridge partner. Or opponent-you give a man a tough fight."

"Yes, sir. May one speak?"

"One may."

"I would rather nurse them myself. They're all I have."

"Well—" He shrugged. "This seems to be my day for balky servants. I'm afraid you are both still savages. A tingling wouldn't do you any harm, slut. All right, but you'll have to play 'one-handed sometimes; I won't have brats stopping the game." He grinned. "Besides, I'd like to see the little rascals occasionally, especially that one that bites. You may go. All."

Barbara was dismissed so suddenly that Hugh barely had time to exchange smiles with her; he had hoped to walk down with her, steal a private visit. But His Charity did not dismiss him, so he stayed-with a warm glow in his heart; it had been the happiest time in a long time.

Ponse discussed the articles he had been translating, why none of them offered practical business ventures. "But don't fret, Hugh; keep plugging and we'll strike ore yet." He turned the talk to other matters, still kept Hugh there. Hugh found him a knowledgeable conversationalist, interested in everything, as willing to listen as he was to talk. He seemed to Hugh the epitome of the perfect decadent gentleman-urbane, cosmopolitan, disillusioned, and cynical, a dilettante in arts and sciences, neither merciful nor cruel, unimpressed by his own rank, not racist-he treated Hugh as an intellectual equal.

While they were talking, the little maids served dinner to Ponse and to Joe. Nothing was offered to Hugh, nor did he expect it-nor want it, as he could have meals served in his rooms if he was not on time in the executive servants' dining room and he had long since decided, from samplings, that Memtok was right: the upper servants ate better than the master.

But when Ponse had finished, he shoved his dishes toward Hugh. "Eat."

Hugh hesitated a split second; he did not need to be told that he was being honored-for a servant. There was plenty, at least three times as much left as Ponse had eaten. Hugh could not recall that he had ever eaten someone's leavings, and certainly not with a used spoon. He dug in.

As usual, Their Charity's menu did not especially please Hugh-somewhat greasy and he had no great liking for pork. Pork was hardly ever served belowstairs but was often part of the menus Memtok sampled, Hugh had noticed. It surprised him, as the revised Koran still contained the dietary laws and the Chosen did follow some of the original Muslim customs. They practiced circumcision, did not use alcohol other than a thin beer, and observed Ramadan at least nominally and called it that. Mahomet would have been shocked by the revisions to his straightforward monotheistic teachings but he would have recognized some of the details.

But the bread was good, the fruits were superb, and so were the ices and many other things; it wasn't necessary to dine solely on roast. Hugh kept intact his record for enjoying the inevitable.

Ponse was interested in what the climate had been in this region in Hugh's time. "Joe tells me you sometimes had freezing temperatures. Even snow."

"Oh, yes, every winter."

"Fantastic. How cold did it get?"

Hugh had to think. He had not had occasion to learn how these people marked temperatures. "If you consider the range from freezing of water to boiling, it was not unusual for it to get one third of that range lower than freezing."

Ponse looked surprised. "Are you sure? We call that range, freezing to boiling, one hundred. Are you telling me that it sometimes got as much as thirty-three degrees below freezing?"

Hugh noted with interest that the centigrade scale had survived two millennia-but no reason why not; they used the decimal system in arithmetic and in money. He had to do a conversion in his head. "Yes, that's what I mean. Nearly cold enough to freeze mercury, and cold enough for that, up in those mountains." Hugh pointed out a view window.

"Cold enough," Joe agreed, "to freeze your teeth! Only thing that ever made me long for Mississippi."

"Where," asked Ponse, "is Mississippi?"

"It's not," Joe told him. "It's under water now. And good riddance."

This led to discussion of why the climate had changed and Their Charity sent for the last volume of the Britannica, containing ancient maps, and for modern maps. They poured over them together. Where the Mississippi Valley had been, the Gulf now reached far north. Florida and Yucatan were missing and 'Cuba was a few small islands. California had a central sea and most of northern Canada was gone.

Similar shrinkages had taken place elsewhere. The Scandinavian Peninsula was an island, the British isles were several small islands, part of the Sahara was under water. What had been lowlands anywhere were missing-Holland, Belgium, Northern Germany could not be found. Nor Denmark-the 3altic was a gulf of the Atlantic.

Hugh looked at it with odd sorrow and had never felt so homesick. He had known it was so, from reading; this was the first map he had seen of it.

"The question," said Ponse, "is whether the melting of ice *vas triggered by the dust of the East-West War, or was it a natural change that was, at most, speeded up a little by artificial events? Some of my scientists say one thing, some the other."*

"What do you think?" asked Hugh.

The lord shrugged. "I'm not foolish enough to hold opinions when I have insufficient data; I'll leave that folly to scientists. I'm simply glad that Uncle saw fit 'to let me live in an age in which I can go outdoors without freezing my feet. I visited the South Pole once-I have some mines there. Frost on the ground. Dreadful. The place for ice is in a drink."

Ponse went to the window and stood looking out at the silhouette of mountains against darkening sky. "However, if it got that cold up there now, we would root them out in a hurry. Eh, Joe?"

"Back they would come with their tails between their legs," Joe agreed.

Hugh looked puzzled. "Ponse means," Joe explained, "the runners hiding up in the mountains. What they thought you were when we were found."

"Runners and a few aborigines," Ponse supplemented. "Savages. Poor creatures who have never been rescued by civilization. It's hard to save them, Hugh. They don't stand around waiting to be picked up the way you did. They're crafty as wolves. The merest shadow in the sky and they freeze and you can't see them-and they are very destructive of game. Of course we could smoke them out any number of ways. But that would kill the game, can't have that. Hugh, you've lived out there; you must have acquired some feel for it. How would you go about rescuing those critters? Without killing game."

Mr. Hugh Farnham hesitated only long enough to phrase his reply. "Their Charity knows that this one is a servant. This one's ears must be at fault in thinking that it heard its humble self called on to see the problem as it might appear to the Chosen."

"Why, damn your impudence! Come, come, Hugh, I want your opinion."

"You got my opinion, Ponse. I'm a servant. My sympathies are with the runaways. And the savages. I didn't come here willingly. I was dragged."

"Surely you aren't resenting that now? Of course you were captured, even Joe was. But there was language difficulty. Now you've seen the difference. You know."

"Yes, I know."

"Then you know how much your condition has improved. Don't you sleep in a better bed now? Aren't you eating better? Uncle! When we picked you up, you were half starved and infested with vermin. You were barely staying alive with the hardest sort of work, I could see. I'm not blind, I'm not stupid; there isn't a member of my Family down to 'the lowest cleaner that works half as 'hard as you had to, or sleeps in as poor a bed-and in a stinking little sty; I could hardly bear the stench before we fumigated it-and as for the food, if that is the word, any servant in this house would turn up his nose at what you ate. Isn't all that true?"

"Yes."

"Well?"

"I prefer freedom."

"'Freedom!'" Their Charity snorted. "A concept without a referent, like 'ghosts.' Meaningless. Hugh, you should study semantics. Modern semantics, I mean; I doubt if they really had such a science in your day. We are all free-to walk our appointed paths. Just as a stone is free to fall when you toss it into the air. No one is free in the abstract meaning you give the word. Do you think 1 am free? Free to change places with you, say? Would I if I could? You bet I would! You have no concept of the worries I have, the work I do. Sometimes I lie awake half the night, worrying which way to turn next-you won't find that in servants' hall. They're happy, they have no worries. But I have to carry my burden as best I can."

Hugh looked stubborn. Ponse came over and put his arm around Hugh's shoulders. "Come, let's talk this over judicially-two civilized beings. I'm not one of those superstitious persons who thinks a servant can't think because his skin is pale. Surely you know that. Haven't I respected your intellect?"

"Well...yes."

"That's better. Let me explain some things-Joe has seen them-and you can ask questions, and we'll arrive at a rational understanding. First-Joe, you've seen Chosen here and there who are what our friend Hugh would no doubt describe as 'free.' Tell him."

Joe snorted. "Hugh, you should see-and you would be glad to be privileged to live in Ponse's household. There is just one phrase I can think of to describe them. Po' black trash. Like the white trash there used to be in Mississippi. Poor black trash, not knowing where their next meal is."

"I follow you."

"I think I do, too," agreed Their Charity. "A pungent phrase. I look forward to the day when every man will have servants. It can't come overnight, they'll have to lift themselves up. But a day when all the Chosen will be served-and all servants as well cared for as they are in my own Family. That's my ideal. In the meantime I do the best I can. I look after their welfare from birth until they're called Home by Uncle. They have nothing to fear, utter security-which they wouldn't have out in those mountains as I'm sure you know better than I. They are happy, they are never overworked—which I am-and they have plenty of fun, which is more than I can say! This bridge game today-the first real fun I've had in a month. And they are never punished, only just enough to remind them when they err. Have to do that, you've seen how stupid most of them are. Not that I am inferring that you are—No, I tell you honestly that I think you are smart enough to take care of servants yourself, despite your skin. I'm speaking of the ordinary run. Honestly, Hugh, do you think they could take care of themselves as well as I look out for them?"

"Probably not." Hugh had heard all this before, only nights ago, and in almost the same words-from Memtok. With the difference that Ponse seemed to be honestly fond of his servants and earnest about their welfare-whereas the Chief Domestic had been openly contemptuous of them, even more strongly so than his veiled contempt for the Chosen. "No, they couldn't, most of them."

"Ah! You agree with me."

"No."

Ponse looked pained. "Hugh, how can we have a rational discussion if you say one thing and contradict it in the next breath?"

"I didn't contradict myself. I agreed that you took fine care of the welfare of your servants. But I did not agree that I prefer it to freedom."

"But why, Hugh? Give me a reason, not a philosophical abstraction. If you're not happy, I want to know why. So that I can correct it."

"I can give you one reason. I'm not allowed to live with my wife and children."

"Eh?"

"Barbara. And the twins."

"Oh. Is that important? You have a bedwarmer. Memtok told me, and I congratulated him on having used initiative in an odd situation. Not much gets past that sly old fox. You have one and she is sure to be more expert at her specialty than the ordinary run of breeding slut. As for the brats, no reason why you can't see them-just order them fetched to you whenever you like. But who wants to live with brats? Or with a wife? I don't live with my wife and children, you can bet on that. I see them on appropriate occasions. But who would want to live with them?"

"I would."

"Well—Uncle! I want you to be happy. It can be arranged."

"It can?"

"Certainly. If you hadn't put up such a fuss over being tempered, you could have had them with you all along—though I confess I don't see why. Do you want to see the vet?"

"Uh...no."

"Well, there's another choice. I'll have the slut spayed."

"No!"

Ponse sighed. "You're hard to please. Be practical, Hugh; can't change a scientific breeding system to pamper one servant. Do you know how many servants are in this family? Here and at the Palace? Around eighteen hundred, I believe. Do you know what would happen if I allowed unrestricted breeding? In ten years there would be twice that number. And what would happen next? They would starve! I can't support them n unlimited breeding. Would if I could, but it's wishing for the Moon. Worse, for we can go to the Moon any time it's worth while but nobody can cope with the way servants will breed if left to their own devices. So which is better? To control it? Or let them starve?"

Their Charity sighed. "I wish you were a head shorter, we would work something out. You've been in studs' quarters?"

"I visited it once, with Memtok."

"You noticed the door? You had to stoop; Memtok walked straight in-he used to be a stud. The doors are that height in very studs' barracks in the world-and no servant is chosen if he can't walk in without stooping. And the slut in this case is too tall, too. A wise law, Hugh. I didn't make it; it was handed down a long time ago by Their Mercy of that time. If they are allowed to breed too tall they start needing to be tingled too often and that's not good, for master or servant. No, Hugh. Anything within reason. But don't ask for the impossible." He moved from the divan where he had been sitting *tête —à—tête with Hugh and sat down at the card table, picked* a deck. "So we'll say no more about it. Do you know how o play double solitaire?"

"Yes."

"Then come see if you can beat me and let's be cheerful. A man gets upset when his efforts aren't appreciated."

Hugh shut up. He was thinking glumly that Ponse was not a villain. He was exactly like the members of every ruling class in history: honestly convinced of his benevolence and hurt if it was challenged.

They played a game; Hugh lost, his mind was not on it. They started to lay out another. Their Charity remarked, "I must have more cards painted. These are getting worn."

Hugh said, "Couldn't it be done more quickly, using a printer such as we use for scrolls?"

"Eh? Hadn't thought about it." The big man rubbed one of the XXth century cards. "This doesn't seem much like printing. Were they printed?"

"Oh, yes. Thousands at a time. Millions, I should say, figuring the enormous numbers that used to be sold."

"Really? I wouldn't have though! that bridge, with its demand on the intellect, would have attracted many people."

Hugh suddenly put down his cards. "Ponse? You wanted a way to make money."

"Certainly."

"You have it in your hand. Joe! Come here and let's talk about this. How many decks of cards were sold each year in the United States?"

"Gosh, Hugh, I don't know. Millions, maybe."

"So I would say. At a gross profit of about ninety percent. Mmm—Ponse, bridge and solitaire aren't the only games that can be played with these cards. The possibilities are unlimited. There are games simple as solitaire but played by two or three or more players. There are games a dozen people can play at once. There are hard games and easy games, there is even a form of bridge—'duplicate,' it's called-harder than contract. Ponse, every family-little family-kept one or two or even dozens of decks on hand; it was a rare home that didn't own a deck. I couldn't guess how many were sold. Probably a hundred million decks in use in the United States alone. And you've got a virgin market. All it needs is to get people interested."

"Ponse, Hugh is right," Joe said solemnly. "The possibilities are unlimited."

Ponse pursed up his lips. "If we sold them for a bullock a deck, let us say...mmm—"

"Too much," Joe 'objected. "You would kill your market before you got started."

Hugh said, "Joe, what's that formula for setting a price to maximize profits rather than sales?"

"Works only in a monopoly."

"Well? How is that done here? Patents and copyrights and such? I haven't seen anything about it in what I've read."

Joe looked troubled. "Hugh, the Chosen don't use such a system, they don't need to. Everything is pretty well worked out, things don't change much."

Hugh said, "That's bad. Two weeks after we start, the market will be flooded with imitations."

Ponse said, "What are you two jabbering about? Speak Language." Hugh's question had necessarily been in English; Joe had answered in English.

Joe said, "Sorry, Ponse," and explained the ideas behind patent rights, copyright, and monopoly.

Ponse relaxed. "Oh, that's simple. When a man gets an inspiration from Heaven, the Lord Proprietor forbids anyone else to use it without his let. Doesn't happen often, I recall only two cases in my lifetime. But Mighty Uncle has been known to smile."

Hugh was not surprised to learn how scarce invention was. It was a static culture, with most of what they called "science" in the hands of tempered slaves-and if patenting a new idea was that difficult, there would be little incentive to invent. "Would you say that this idea is an inspiration from Heaven?"

Ponse thought about it. "An inspiration is whatever Their Mercy, in Their wisdom, recognizes as an inspiration." Suddenly he grinned. "In my opinion, anything that will stack bullocks in the Family coffers is an inspiration. The problem is to make the Proprietor see it. But there are ways. Keep talking."

Joe said, "Hugh, the protection should extend not only over playing cards but over the games themselves."

"Of course. If they don't buy Their Charity's cards, they must not play his games. Hard to stop, since anybody can fake a deck of cards. But the monopoly should make it illegal."

"And not just cards like these, but any sort of playing cards. You could play bridge with cards just with numbers on them."

"Yes." Hugh pondered. "Joe, there was a Scrabble set in the shelter."

"It's still around. Ponse's scientists saved everything. Hugh, I see what you're driving at, but nobody here could learn Scrabble. You have to know English."

"What's to keep us from inventing Scrabble all over again—in Language? Let me set my staff to making a frequency count of the alphabet as it appears in Language and I'll have a set of Scrabble, board and tiles and rules, suited to Language, the following day."

"What in the name of Uncle is Scrabble?"

"It's a game, Ponse. Quite a good one. But the point is that it's a game that we can charge more for than we can for a deck of cards."

"That's not all," said Hugh. He began ticking on his fingers. "Parcheesi, Monopoly, backgammon, Old Maid for kids-call it something else-dominoes, anagrams, poker chips and racks, jigsaw puzzles-have you seen any?"

"No."

"Good for young and old, and all degrees of difficulty. Tinker Toy. Dice-lots of games with dice. Joe, are there casinos here?"

"Of sorts. There are places to gamble and lots of private gambling."

"Roulette wheels?"

"I don't believe so."

"It gets too big to think about. Ponse, you are going to have to sit up nights, counting your money."

"Servants for such chores. I wish I knew what you two are talking about. May one ask?"

"Sorry, sir. Joe and I were talking about ancient games.. and not just games but all sorts of recreations that we used to have and have now been lost. At least I think they have been. Joe?"

"The only one I've seen that looks familiar is chess."

"Chess would hold up if anything would. Ponse, the point is that every one of these things has money in it. Surely, you have games now. But these will be novelties. So old they are new again. Ping-Pong...bowling alleys! Joe, have you seen—"

"No."

"Billiards. Pocket pool. I'll stop, we've got a backlog. Ponse, the first problem is to get a protection from Their Mercy to cover it all-and I see a theory that makes it an inspiration from on high. It was a miracle."

"What? Garbage. I don't believe in miracles."

"You don't have to believe in it. Look, we were found on the Proprietor's personal land-and you found us. Doesn't that look as if Uncle intended for the Proprietor to know about this? And for you as Lord Protector to protect it?"

Ponse grinned. "An argument could be made for such a theory. Might be expensive. But you can't boil water without feeding the fire, as my aunt used to say." He stood up. "Hugh, let's see that Scrabble game. Soon. Joe, we'll find time for you to explain these other things. We excuse you both. All."

Kitten was asleep when Hugh returned but she was clutching a note:

Oh, darling, it was so wonderful to see you! ! ! I can't wait until Their Charity asks us to play bridge again! Isn't he an old dear? Even if he was thoughtless at one point. He corrected his mistake and that's the mark of a true gentleman.

I'm so excited at seeing you that I can hardly write, and Kitten is waiting to take this to you.

The twins send you kisses, slobbery ones. Love, love, love!

Your own B.

Hugh read Barbara's note with mixed feelings. He shared her joy in their reunion, limited as it had been, and eagerly looked forward to the next time Ponse's pleasure would permit them to be together. As for the rest—Better get her out of here before she acquired a slave mentality! Surely, Ponse was a gentleman within the accepted meaning of the term. He was conscientious about his responsibilities, generous and tolerant with his inferiors. A gentleman.

But he was a revolving son of a bitch, too! And Barbara ought not to be so ready to overlook the fact. Ignore it, yes—one had to. But not forget it.

He must get her free.

But how?

He went to bed.

An aching hour later he got up, went into his living room, stood at his window. He could make out against black sky the blacker blackness of the Rocky Mountains.

Somewhere out there, were free men.

He could break this window, go toward the mountains, be lost in them before daylight-find free companions. He need not even break the window-just slip past a nodding watchman, or use the authority symbolized by his whip to go out despite the watch. No real effort was made to keep house servants locked up. A watch was set more to keep intruders out. Most house servants would no more run away than a dog would.

Dogs—One of the studmaster's duties was keeper of the hounds.

If necessary, he could kill a dog with his hands. But how do you run when burdened with two small babies?

He went to a cupboard, poured himself a stiff drink of Happiness, gulped it down, and went back to bed.

Chapter 16

For the next many days Hugh was busy redesigning the game of Scrabble, translating Hoyle's Complete Book of Games, dictating rules and descriptions of games and recreations not in Hoyle (such as Ping-Pong, golf, water skiing), attending conferences with Ponse and Joe-playing bridge.

The last was by far the best. With Joe's help he taught several Chosen the game, but most sessions were play, with Joe, Ponse, and always Barbara. Ponse had the enthusiasm of a convert; when he was in residence he played bridge every minute he could spare, and always wanted the same four, the best players available.

It seemed to Hugh that Their Charity was honestly fond of Barbara, as fond as he was of the cat he called "Doklivstnipsoom"—never "Doc." Ponse extended to cats the courtesy due equals, and Doc, or any cat, was free to jump into his lap even when he was bidding a hand. He extended the same courtesy and affection to Barbara as he knew her better, always called her "Barba," or "Child," and never again referred to her as "it." Barbara called him "Ponse," or "Uncle," and clearly felt happy in his company.

Sometimes Ponse left Barbara and Hugh alone, once for twenty minutes. These were jewels beyond price; they did not risk losing such a privilege by doing more than hold hands.

If it was time to nurse the boys, Barbara said so and Ponse always ordered them fetched. Once he ordered them fetched when it wasn't necessary, said that he had not seen them for a week and wanted to see how much they had grown. So the game waited while their "Uncle" Ponse got down on the rug and made foolish noises at them.

Then he had them taken away, five minutes of babies was enough. But he said to Barbara, "Child, they're growing like sugar cane. I hope I live to see them grow up."

"You'll live a long time, Uncle.'!

"Maybe. I've outlived a dozen food tasters, but that salts no fish. Those brats of ours will make magnificent matched footmen. I can see them now, serving in the banquet hail of the Palace-the Residence, I mean, not this cottage. Whose deal is it?"

Hugh saw Grace a few times, but never for more than seconds. If he showed up when she was there, she left at once, displeasure large on her face. If Barbara arrived before Hugh did, Grace was always out of sight. It was clear that she was an habituée of the lord's informal apartments; it was equally clear that she resented Barbara as much as ever, with bile left over for Hugh. But she never said anything and it seemed likely that she had learned not to cross wills with Their Charity.

It was now official that Grace was bedwarmer to Their Charity. Hugh learned this from Kitten. The sluts knew when the lord was in residence (Hugh often did not) by whether Grace was downstairs or up. She was assigned no other duties and was immune to all whips, even Memtok's. She was also, the times Hugh glimpsed her, lavishly dressed and bejeweled.

She was also very fat, so fat that Hugh felt relieved that he no longer had even a nominal obligation to share a bed with her. True, all bedwarmers were fat by Hugh's standards. Even Kitten was plump enough that had she been a XXth century American girl, she would have been at least pretending to diet—Kitten fretted that she was unable to put on weight—and did Hugh like her anyhow?

Kitten was so young that her plumpness was somewhat pleasing, as with a baby. But Hugh found Grace's fatness another matter-somewhere in that jiggling mass was buried the beautiful girl he had married. He tried not to think about it and could not see why Ponse would like it-if he did. But in truth, Hugh admitted, he did not know that Grace was anything more than nominally Ponse's bedwarmer. After all, Ponse was alleged to be more than a century old. Would Ponse have any more use for one than Memtok had? Hugh did not know-nor care. Ponse looked to be perhaps sixtyfive and still strong and virile. But Hugh held a private opinion that Grace's role was odalisque, not houri.

While the question did not matter to him, it did to Duke. Hugh's first son came storming into Hugh's office one day and demanded a private interview; Hugh led him to his apartment. He bad not seen Duke for a month. Translations had been coming in from him; there had been no need to see him.

Hugh tried to make the meeting pleasant. "Sit down, Duke. May I offer you a drink of Happiness?"

"No, thanks! What's this I hear about Mother?"

"What do you hear, Duke?" (Oh, Lord! Here we go—)

"You know damned well what I mean!"

"I'm afraid I don't."

Hugh made him spell it out. Duke had his facts correct and, to Hugh's surprise, had learned them just that day. Since more than four hundred servants had known all along that one of the slut savages-the other one, not the tail skinny one-lived upstairs with Their Charity more than she lived in sluts' quarters, it seemed incredible that Duke had taken so long to find out. However, Duke had little to do with the other servants and was not popular-a "troublemaker," Memtok had called him.

Hugh neither confirmed nor denied Duke's story.

"Well?" Duke demanded. "What are you going to do about it?"

"About what, Duke? Are you suggesting that I put a stop to servants' hall gossip?"

"I don't mean that at all! Are you going to sit there like a turd on a rock while your wife is being raped?"

"Probably. You come in here with some story you've picked up from a second assistant dishwasher and expect me to do something. I would like to know, first, why do you think this gossip is true? Second, what has what you have told me got to do with rape? Third, what would you expect me to do about it? Fourth, what do you think I can do about it? Take them in 'order and be specific. Then we may talk about what I will do."

"Quit twisting things."

"I'm not twisting anything. Duke, you had an expensive education as a lawyer-I know, I picked up the tab. You used to lecture me about 'rules of evidence.' Now use that education. Take those questions in order. Why do you think this gossip is true?"

"Uh...I heard it and checked around. Everybody knows it."

"So? Everybody knew the Earth was flat, at one time. But what is the allegation? Be specific."

"Why, I told you. Mother is assigned as that bastard's bedwarmer."

"Who says so?"

"Why, everybody!"

"Did you ask the slutmaster?"

"Do you think I'm crazy?"

"I'll take that as rhetorical. To shorten this, what 'everybody knows,' as you put it, is that Grace is assigned duties upstairs. This could be verified, if true. Possibly in attendance on Their Charity, possibly waiting on the ladies of the household, or perhaps other duties. Do you want an appointment with the slutmaster, so that you can ask him what duties your mother has? I do not know her duties."

"Uh, you ask him."

"I shan't. I feel sure that Grace would regard it as snooping. Let's assume that you have asked him and that he has told you, as you now suspect only from gossip, that her assignment is as bedwarmer. To Their Charity. On this assumption, made solely for the sake of argument since you haven't proved it—on this assumption, where does rape come in?"

Duke looked astonished. "I would not have believed it, even of you. Do you mean to sit there and say baldly that you think Mother would do such a thing voluntarily?"

"I long ago gave up trying to guess what your mother would do. But I haven't said she is doing anything. You have. I don't know that her assignment is bedwarmer other than through gossip you have repeated without proof. If true, I still would not know if she had ever carried out the assignment by actually getting into his bed, voluntarily or otherwise-I've never seen his bed nor even heard gossip on this point...just your evil thoughts. But if those thoughts are correct, I still would have no opinion as to whether or not anything other than sleep had taken place. I have shared beds with females and done nothing but sleep; it can happen. But even stipulating sexual activity-your assumption, not mine-I doubt that Their Charity has ever raped any female in his life. I doubt it especially now."

"Crap. There never was a nigger bastard who wouldn't rape a white woman if he had the chance."

"Duke! That's poisonous, insane nonsense. You almost persuade me that you are crazy."

"I—,'

"Shut up! You know that Joseph, to give one example, had endless opportunity to rape any of three white women for nine long months. You also know that his behavior was above reproach."

"Well...he didn't have a chance to."

"I told you to shut up this poison. He had endless chance. While you were hunting, any day. He was alone with each of them, many times. Drop it! Slandering Joseph, I mean, even by innuendo. I'm ashamed of you."

"And I'm ashamed of you. Fat cat for a nigger king."

"Very well, the shame is mutual. Speaking of fat cats, I don't really need you. if you want to quit being a fat cat, you can wash dishes or whatever they assign you to."

"Doesn't matter to me."

"Let me know when you wish to be relieved. It will lose you your private cubicle but such luxury is a fat cat privilege. Never mind. I see only one way to get at the facts, if any, underlying these foul suspicions in your mind. Ask the Lord Protector."

"Go right ahead! First sensible thing you've said."

"Oh, not me, Duke. I don't suspect him of rape. But you can ask him. See the Chief Domestic. He'll see any Palace servant who wants to see him. At the servant's risk, but I doubt if he'll tingle anyone in my department without good cause; I do have some fat cat privileges. Tell him you want an audience with the Lord Protector. I think that is all it will take, although you may have to wait a week or two. If Memtok turns you down, tell me. I fancy I can get him to arrange it. Then, when you see the Lord Protector, simply ask him, point-blank."

"And be lied to. If I ever get that close to that black ape, I'm going to kill him!"

Mr. Farnham sighed. "Duke, I don't see how one man can be so wrongheaded so many different ways. If you are granted an audience, Memtok will be at your side. With his whip. The Lord Protector will be about fifty feet away. And the whip he carries doesn't just tingle; it's a deadly weapon. The old man has lived a long time, he's not easy to kill."

"I can try!"

"So you can. If a grasshopper tries to fight a lawnmower, one may admire his courage but not his judgment. But you are equally silly in thinking that Their Charity would lie about it. If he has done what you think he has-raped your mother, forced her to submit-he would feel not the slightest shame, not in any way reluctant to answer you honestly. Duke, he would no more bother to lie to you than it would occur to him to step aside if you were in his way. However-would you believe your mother?"

"Of course I would."

"Then tell him also that you would like to see her. I am almost certain that he would grant the request. For a few minutes and in his presence. The harem rules he can break if he chooses. If you have the guts to tell him that you want to hear her confirm whatever he tells you, I think he would be astonished. But I think he would then laugh and grant the petition. If you want to see your mother, assure yourself personally of her welfare and safety, that's all I can suggest. You can't see her otherwise. It's so irregular that your only chance is to spring it on him, face to face."

Duke looked baffled. "Look, why the devil don't you ask him? You see him almost every day, so I hear."

"Me? Yes, I see him fairly often. But ask him about rape? Is that what you mean?"

"Yes, if you choose to put it that way."

"'Rape' is what you claim to be worried about. But I don't suspect him of rape. I won't be a front for your evil suspicions. If it is to be done, you must have the guts to do it yourself." Hugh stood up. "We've wasted enough time. Either get back to work, or go see Memtok."

"I'm not through."

"Oh, yes, you are. That was an order, not a suggestion."

"If you think I'm scared of that whip—"

"Heavens, Duke, I wouldn't tingle you myself. If you force me to it, I'll ask Memtok to chastise you. He's reputed to be expert. Now get out. You've wasted half my morning."

Duke left. Hugh stayed, trying to compose himself. A row with Duke always left him shaking; it had been so when the lad was only twelve. But something else troubled him, too. He had used every sophistry he could think of to divert Duke from a hopeless course. That did not worry him, nor did he share Duke's basic worry. Whatever had happened to Grace, he felt sure that rape was not a factor.

But he was sourly aware of something 'that Duke, in his delusions, apparently did not realize-the oldest Law of the Conquered, that their women eventually submit-willingly.

Whether his ex-wife had or had not was a matter almost academic. He suspected that she had never been offered opportunity. Either way, she was obviously contented with her lot-smug about it. That troubled him little; he had tried to do his duty by her, she had long since withdrawn herself from him. But he did not want Barbara ever to feel the deadening load of hopelessness that could-and had, all through history-turned chaste women into willing concubines. Much as he loved her, he had no illusions that Barbara was either angel or saint; the Sabine women had stood no chance and neither would she. "Death before dishonor!" was a slogan that did not wear well. In time, it changed to happy cooperation.

He got out his bottle of Happiness, looked at it-put it back. He would never solve his problems that way.

Hugh made no effort to learn if Duke had gone to see Memtok. He got back to work at his endless task of buttering up Their Charity in every way available, whether by good bridge, moneymaking ideas, or simply translating. He no longer had any hope that the boss would eventually permit him to move Barbara and the twins into his apartment; old Ponse had seemed adamant on that. But favor at court could be useful, even indispensable, no matter what happened-and in the meantime it let him see Barbara occasionally.

He never gave up his purpose of escape. As the summer wore on he realized that the chances were slim of escaping—all four of them escaping, twins in arms-that year. Soon the household would move to the city, and so far as he knew the only possible time to escape was when they were near mountains. No matter. A year, two years, even longer, perhaps wait until the boys could walk. Hard enough even then, but nearly impossible with babies in arms. He must tell Barbara, with whispered urgency, the next time they were left alone even for a minute, what he had in mind-urge her to keep her chin up, and wait.

He didn't dare write it to her. Ponse could get it translated-other scholars somewhere understood English, even though Joe would never give him away. Would Grace? He hoped not, but couldn't guess. Probably Ponse knew all about those notes, had them translated every day, chuckled over them, and did not care.

Perhaps he could work out a code-something as simple as first word, first line, then second line, second word, and so on. Might risk

it.

He had figured out one thing in their favor, an advantage that might overcome their lack of sophistication in this society. Runaways rarely succeeded simply because of their appearance. A white skin might be disguised-but servants averaged many inches shorter and many pounds lighter than the Chosen.

Both Barbara and Hugh were tail; they were big enough to pass in that respect for Chosen. Features? The Chosen were not uniform in feature; Hindu influence mixed with Negroid and with other things. His baldness was a problem, he would have to steal a wig. Or make one. But with stolen clothes, squirreled food, weapons of some sort (his two hands!), and makeup-they might be able to pass for "poor black trash" and take to the road.

If it wasn't too far. If the hounds did not get them. If they did not make some ridiculous bumble through ignorance. But servants, marked by their complexion, were not allowed to go one step outside the household, farm, ranch, or whatever was their lawful cage-without a pass from their patron.

Perhaps he could learn what a pass looked like, forge one. No, Barbara and he could not travel as servants on a forged pass for the very reason that made it dimly possible for them to disguise as Chosen: Their size was distinctive, they would be picked up on sight.

The more Hugh thought about it the more it seemed that he would have to wait at least until next summer.

If they were among the servants picked for the Summer Palace next year—If they both were—If all four were—He had not thought of that. Christ! Their little family might never be all under this one roof again! Perhaps they would have to run for it now, in the short time left before the move-run and take a chance on hounds, on bears, on those nasty little leopards...with two nursing babies to protect. God! Was ever a man faced with poorer chances for saving his family?

Yes. He himself-when he built that shelter.

Prepare every way he could...and pray for a miracle. He started saving food from meals served in his rooms, such sorts as would keep a while. He kept his eyes open to steal a knife—or anything that could be made into a knife. He kept what he was doing from Kitten's eyes.

Much sooner than he had hoped he got a chance to acquire makeup. A feast day always meant an orgy of Happiness in servants' hall; one came that featured amateur theatricals. Hugh was urged to clown the part of Lord Protector in a comic skit. He did not hesitate to do so, Memtok himself had pointed out that his size made him perfect for the part. Hugh roared through it, brandishing a quirt three times as big as Their Charity ever carried.

He was a dramatic success. He saw Ponse watching from the balcony from which Hugh had first seen Happiness issued, watching and laughing. So Hugh ad-libbed, calling out, "Hey, less noise in the balcony! Memtok! Tingle that critter!"

Their Charity laughed harder than ever, the servants were almost hysterical and, at bridge the following day, Ponse patted him and told him that he was the best Lord of Nonsense the pageant had ever had.

Result: one stolen package of pigment which needed only to be mixed with the plentiful deodorant cream to make him the exact shade of the Lord Protector; one wig which covered his baldness with black wavy hair. It was not the wig he had worn in the skit; he had turned that one back to the chief housekeeper, picking a time under Memtok's eyes and urging Memtok to try it on. No, it was a wig he had tried on out of several saved from year to year-and which had fitted him just as well. He tried it on, dropped it, kicked it into a corner, recovered it in private-and kept it under his robe for several days until it seemed certain that it hadn't been missed. It wound up under a file case in his outer office one night when he chose to work later than his clerks.

He was still looking for something he could grind into a knife.

He did not see Duke during the three weeks following their row. Sometimes Duke's translations came in, sometimes he skipped a day or two; Hugh let him get away with it. But when Hugh could not recall having seen any scrolls come through of the sort Duke was concerned with for a full week, Hugh decided to check up.

Hugh walked to the cubicle that was Duke's privilege for being a "researcher in history." He scratched on the door—no answer.

He scratched again, decided that Duke was sleeping, or not in; he slid the door up and looked in.

Duke was not asleep but he was out of this world. He was sprawled naked on his bunk in the most all-out Happiness jag Hugh had ever seen. Duke looked up when the door opened, giggled foolishly, made a gesture, and said, "Hiyah, y'ole bas'ard! How's tricks?"

Hugh stepped closer for a better look at what he thought he saw, and felt sick at his stomach. "Son, son!"

"Still crepe-hanging, Hughie? Old hooey Hugh, the fake fart!"

Gulping, Hugh started to back out, and backed almost into the Chief Veterinarian. The surgeon smiled and said, "Visiting my patient? He hardly needs it." He moved past Hugh with a muttered apology, leaned over Duke, peeled an eyelid back, examined him in other ways, said to him jovially, "You're doing fine, cousin. Let's give you another little treatment, then I'll send you in another big meal. How does that sound?"

"Jus' fine, Doe. Jus' dandy! You're m' frien'. Bes' frien' never had!"

The vet set a dial on a little instrument, pressed it against Duke's thigh, waited a moment, and came out. He smiled at Hugh. "Practically recovered. He'll dream a few hours now, wake up hungry, and not know any time has passed. Then we'll feed him and give him another dose. A fine patient, he's raffled beautifully. Doesn't know what's happened-and by the time we're ready to taper him off, he won't be interested."

"Who ordered this?"

The surgeon looked surprised. "The Chief Domestic, of course. Why?"

"Why wasn't I told?"

"I don't know, better ask him. I got it as a routine order, we carried it out in the routine fashion. Sleeping powder in his evening meal, I mean, then surgery that night. Followed by post-surgical care and the usual massive dosage to keep him tranquil. It tends to make some of them a little nervous at first, we vary it to suit the patient. But, as you can see, this patient has taken it as easily as pulling a tooth. By the way, that bridge I installed in your mouth. Satisfactory?"

"What? Yes. Never mind that! I want to know—"

"May it please you, the Chief Domestic is the one to see. Now, if this one may be excused, I'm overdue to hold sick call. I merely stopped by to make sure my patient was happy."

Hugh went to his apartment and threw up. Then he went looking for Memtok.

Memtok received him into his office at once, invited him to sit down. Hugh had begun to value the Chief Domestic as a friend, or as the nearest thing he had to a friend. Memtok had formed a habit of dropping in on Hugh in the evenings occasionally and, despite the boss servant's vinegary approach to life and the vast difference in their backgrounds and values, Hugh found him shrewd and stimulating and well informed within his limits. Memtok seemed to have the loneliness that a ship's captain must endure; he seemed pleased to relax and enjoy friendship.

Since the other upper servants were correctly polite with the Chief Researcher rather than warm, Hugh, lonesome himself, had enjoyed Memtok's unbending and had thought of him as his friend. Until this—Hugh told Memtok bluntly, without protocol, what was on his mind. "Why did you do this?"

Memtok looked surprised. "Such a question! Such a very improper question. Because the Lord Protector ordered it."

"He did?"

"My dear cousin! Tempering is always by the lord's order. Oh, I recommend, to be sure. But orders for alterations must come from above. However, if it is any business of yours, in this case I made no recommendation. I was given the order, I had it carried out. All."

"Certainly it was my business! He works for me."

"Oh! But he had already been transferred before this was done. Else I would have made a point of telling you. Propriety, cousin, propriety in all things. I hold subordinates strictly accountable. So I never undercut them. Can't run a taut household if one does. Fair is fair."

"I wasn't told he was transferred. Don't you count that as undercutting?"

"Oh, but you were." The Chief Domestic glanced at the rack of pigeonholes backing his desk, searched briefly, pulled out a slip. "There it is." Hugh looked at it. DUTY ASSIGNMENT, CHANGE IN-ONE SERVANT, MALE (savage, rescued & adopted), known as Duke, description—Hugh skipped on down.-- relieved of all duties in the Department of Ancient History and assigned to the personal service of Their Charity, effective immediately. BILLETING & MESSING ASSIGNMENTS: Unchanged until further --"I never saw this!"

"It's my file copy. You got the original." Memtok pointed at the lower left corner. "Your deputy clerk's sign. It always pleases me when my executives can read and write, it makes things so much more orderly. With an ignoramus like the Chief Groundskeeper, one can tell him until one's throat is raw and later the stupid lout will claim that wasn't the way he heard it-yet a tingling improves his memory only for that day. Disheartening. One can't be forever tingling an upper servant, it doesn't work." Memtok sighed. "I'd recommend a change, if his assistant wasn't even stupider."

"Memtok, I never saw this."

"As may be. It was delivered, your deputy receipted for it. Look around your office. One bullock gets you three you'll find it. Perhaps you'd like me to tingle your deputy? Glad to."

"No, no." Memtok was almost certainly right, the order was probably on his own desk, unread. Hugh's department had grown to two or three dozen people; there seemed to be more every day. Most of them seemed to be button sorters, all of them wanted to take up his time. Hugh had long since told the earnest, fairly literate clerk who was his deputy that he was not to be bothered-otherwise Hugh would have accomplished no translating after the first week; Parkinson's Law had taken over. The clerk had obeyed and routine matters stacked up. Every week or so Hugh would go through the stack rapidly, shove it back at his deputy for file or burning or whatever they did with useless papers.

Probably the order transferring Hugh was in the current accumulation. If he had seen it in time—Too late, too late! He put his elbows on his knees and covered his face. Too late! Oh, my son!

Memtok touched his shoulder almost gently. "Cousin, take hold of yourself. Your prerogatives were not abridged. You see 'that, do you not?"

"Yes. Yes, I see it," Hugh mumbled through his hands.

"Then why are you overwrought?"

"He was-he is-my son."

"He is? Then why are you behaving as if he were your nephew?" Memtok used the specific form, meaning "your eldest sister's oldest son" and he was honestly puzzled by the savage's odd reaction. He could understand a mother being interested in her son-her oldest son, at least. But a father? Uncle! Memtok had sons, he was certain, throughout the household—"One-Shot Memtok" the former slutmaster used to call him. But he didn't know who they were and could not imagine wanting to know. Or caring.

"Because—" Hugh started. "Oh, forget it. You did your duty. Conceded."

"Well—You still seem upset. I'll send for a bottle of Happiness. I'll join you, this once."

"No. No, thank you."

"Oh, come, come! You need it. A tonic is excellent, it is excess that one must avoid."

"Thanks, Memtok, but I don't want it. Right now I must be sharp. I want to see Their Charity. Right away if possible. Will you arrange it for me?"

"I can't do that."

"Damn it, I know that you can. And I know he will see me if you ask him."

"Cousin, I didn't say that I would not; I said 'I can't.' Their Charity is not in residence."

"Oh." Then he asked to have word sent to Joe. But the Chief Domestic told him that the young Chosen had left with the Lord Protector. He promised to let Hugh know when either of them returned—Yes, at once, cousin.

Hugh skipped dinner, went to his rooms and brooded. He could not avoid tormenting himself with the thought that it was, in part at least, his own fault-no, no, not for failing to read every useless paper that came into his office the instant it arrived; no, that was sheer bad luck. Even if he checked his "junk mail" each morning, it probably would have been too late; the two orders had probably gone out at the same time.

What did anguish his soul was fear that he had pushed the first domino in that quarrel with Duke. He could have lied to the boy, told him that his mother was, to Hugh's certain knowledge, a maid-in-waiting or some such, to the Lord Protector's sister, safe inside the royal harem and never seen by a man. Pampered, living the life of

Riley, and happy in it—and that other tale was just gossip servants talk to fill their idle minds.

Duke would have believed it because Duke would have wanted to believe it.

As it was—Perhaps Duke had gone to see Their Charity. Perhaps Memtok had arranged it, or perhaps Duke had simply tried to bull his way in and the row had reached Ponse's ears. It was more than possible, he saw now, that his advice to Duke to see the head man might well have resulted in a scene that would have caused Ponse to order the tempering as casually as he would order his air coach. All too likely—He tried to tell himself that no one is ever responsible for another person's actions. He believed it, he tried to live by it. But he found that cold wisdom no comfort.

At last he quit brooding, got writing materials, and got to work on a letter to Barbara. He had had not even a moment's chance to tell her his plans for them to escape, no chance to work up a code. But she must be ready at no notice; he must tell her, somehow.

Barbara knew German, he had a smattering from one high school year of it. He knew enough Russian to stumble through a simple conversation, Barbara had picked up a few words from him during their time in the wilderness-a game that they could share without giving Grace cause for jealousy.

He wrote a draft, then painfully translated 'the letter into a mishmash of German, Russian, colloquial English, beatnik jive, literary allusions, pig Latin, and special idioms. In the end he had a message that he was sure Barbara could puzzle out, but he was certain that no student of ancient languages could translate it into Language, even in the unlikely event that the scholar knew English, German, and Russian.

He was not afraid that it might be translated by anyone else. If Grace saw it, she would pronounce it gibberish; she knew no Russian, no German. Duke was off in a drug-ridden dream world. Joe might guess at the meaning-but he trusted Joe not to give him away. Nevertheless, he tried to conceal the meaning even from Joe, hashing the syntax and using deliberate misspellings.

The draft read:

My darling,

I have been planning our escape for some time. I do not know how I will manage it but I want you to be ready, day or night, to grab the twins and simply follow 'me. Steal food ii you can, steal some stout shoes, steal a knife. We'll head for the mountains. I had intended to wait until next summer, let the boys grow some first. But something has happened to change my mind: Duke has been tempered. I don't know why and I'm too heartbroken to talk about it. But it could happen to me next. Worse than that—You remember Ponse's saying that he wanted to see our twins as matched footmen? Darling, studs do not serve in the Banquet Hall. Nor is there any other fate in store for them; they are both going to be tall. It must not happen!

And we can't wait. The capital city of the Protectorate is somewhere near where St. Louis used to be; we can't run all the way to the Rocky Mountains carrying our two boys-and we have no way of knowing (and no reason to expect) that all four of us will be sent to the Summer Palace next year.

Be brave. Don't touch any Happiness drug in any form from here on; our chance is likely to be a splitsecond one, with no warning.

I love you,
Hugh

Kitten came in; he told her to watch the show, not bother him. The child obeyed.

The final draft read:

Luba,

Ya bin smoking komplott seit Hector was weaned. The Count of Monte Cristo bit, dig? Kinder too klein machs nix-ya hawchoo! Goldiocks' troubles machs nix-as the fellow said, it's the only game in town. Good Girl Scouts always follow the Boy Scout motto. Speise, schuhen, messer-what Fagin taught Oliver, nicht? Da! Schnell is die herz von duh apparat; Berlin is too far from the Big Rock Candy and Eliza would never make the final curtain.

Em ander jahr, nyet. It takes two to tango and four to play bridge, all in em kainmer, or the trek is dreck. A house divided is for the vogelen, like doom. Mehr, ya haben schrecken. Mein Kronprinz now rules 'only the Duchy of Abelard. Page Christine Jorgenson, he answers-I kid you not. Spilt milk butters no parsnips after the barn is burned so weep no more, my lady-but falsetto is not the pitch for detski whose horoscope reads Gemini. Borjemoi! Old King Coal is a Merry Old Soul but he'll get no zwilhing keilneren from thee. Better a bonny bairn beards bären y begegn Karenis ratification unanimous? Igday eemay?

Verb. Sap.: I don't drink, smoke, nor chew, nor run around with twists who do. Cloud nine is endsvffle for this bit. Write soon, even if it's only five dollars utbay swing the jive; the dump is bugged and the Gay Pay Oo is eager.

Forever-H.

Kitten was long asleep before Hugh finished composing this jargon.

He tore the draft into bits and dropped it down the whirlpool, went to bed. After a long time haunted by Duke's giggling, foolish, happy, drug-blurred face he got up and broke his own injunction to Barbara, dosed his sorrows and his fears with bottled Happiness.

Chapter 17

Barbara's answer read:

Darling,
When you bid three no-trump, my answer is seven no-trump, without hesitation. Then it's a grand slam-or we go set and don't cry. Any time you can get four together we'll be ready to play.
- Love always-B.

Nothing else happened that day. Nor the next-or the next. Hugh doggedly dictated translations, his mind not on his work. He was very careful what he ate or drank, since he now knew the surgeon's humane way of sneaking up on a victim; he ate only from dishes Memtok had eaten from, tried to be crafty by never accepting a fruit or a roll that was closest to him when a servant offered him such, avoided drinking anything at the table-he drank only water which he himself had taken from the tap. He continued to have breakfast in his room, but he started passing up many foods in favor of unpeeled fruits and boiled eggs in the shell.

He knew that these precautions were futile-no Borgia would have found them difficult to outwit-and in any case, if orders came to temper him, they need only grab him after subduing him with a whip if it proved difficult to drug him. But he might have time to protest, to demand that he be taken before the Lord Protector.

As for whips—He resumed karate practice, alone in his rooms. A karate blow delivered fast enough would cause even a whip wielder to lose interest. There was no real hope behind any of it; he simply intended not to go peacefully. Duke had been right; it would have been better to have fought and died.

He made no attempt to see Duke.

He continued to hide food from his breakfast tray-sugar, salt, hard bread. He assumed that such food must be undrugged even though he ate none of it at the time, because it did not affect Kitten.

He had been going barefoot most of the time but wearing felt slippers for his daily exercise walks in the servants' garden. Now he complained to Memtok that the gravel hurt his feet through these silly slippers-didn't the household afford anything better?

He was given heavy leather sandals, wore them thereafter in the garden.

He cultivated the household's chief engineer, telling him that, in his youth, he had been in charge of construction for his former lord. The engineer was flattered, being not only one of the junior executive servants but also in the habit of hearing mostly complaints rather than friendly interest. Hugh sat with him after dinner and managed to appear knowledgeable largely by listening.

Hugh was invited to look around the plant, and spent a tiring morning crawling over pipes and looking at plans-the engineer could not write but could read a little and understood drawings. It would have been an interesting day in itself if Hugh had been free from worries; Hugh's background made engineering interesting to him. But he concentrated on trying to memorize every drawing he saw, match it in his mind with the passageways and rooms he was taken through. He had a deadly serious purpose: Despite having lived most of a summer in this big building, he knew only small pieces of it inside and only a walled garden outside. He needed to know all of it; he needed to know every possible exit from servants' quarters, what lay behind the guarded door to sluts' quarters, and most particularly, where in that area Barbara and the twins lived.

He got as far as the meander door that led into the distaff side. The engineer hesitated when the guard suddenly became alert. He said, "Cousin Hugh, I'm sure it's all right for you to go in here, with me-but maybe we had better go up to the Chief Domestic's office and have him write you out a pass."

"Whatever you say, cousin."

"Well, there really isn't anything of interest in here. Just the usual appointments of a barracks-water, lights, air service, plumbing, baths, such things. All the interesting stuff, power plant, incinerator, air control, and so forth, is elsewhere. And you know how the boss islikely to fret over any variation from routine. If it's all the same to you, I'll make my inspection in there later."

"However you want to arrange things," Hugh answered with a suggestion of affronted dignity.

"Well...everybody knows you're not one of those disgusting young studs." The engineer looked embarrassed. "Tell you what—You tell me flatly that you want to see everything

in my department that is-and I'll trot up to Memtok and tell him you said so. He knows-Uncle! we all know—that you enjoy the favor of Their Charity. You understand me? I don't mean to presume. Memtok will write out a pass and I'll be in the clear and so will the guard and the head guard. You wait here and be comfortable. I'll hurry."

"Don't bother. There's nothing in there I want to see," Hugh lied. "You've seen one bath, you've seen 'em all, I always say."

The engineer smiled in relief. "That's 'a good one, I'll remember that. 'You've seen one bath, you've seen 'em all!' Ha ha! Well, we've still got the carpentry shop and the metal shop."

Hugh went on with him, arm in arm and jovial, while fuming inside. So close! Yet letting Memtok suspect that he had any interest in sluts' quarters was the last thing he wanted.

But the morning was well spent. Not only did Hugh acquire a burglar's insight as to weak points of the building (that delivery door to 'the unloading dock; if it was merely locked at night, it should be possible to break out) but also he picked up two prizes.

The first was a piece of spring steel about eight inches long. Hugh palmed it from some scrap in the metal shop; it wound up taped to his arm, after an unneeded plumbing call, for he had gone prepared to steal.

The second was even more of a prize: a printed drawing of the lowest level, with engineering installations shown boldly—but with every door and passage marked-including sluts' quarters.

Hugh had admired it. "Uncle, but that's a beautiful drawing! Your own work?"

The engineer shyly admitted that it was. Based on architect's plans, you understand-but changes keep having to be added.

"Beautiful!" Hugh repeated. "It's a shame there isn't more than one copy."

"Oh, plenty of copies, they wear out. Would you like one?"

"I would treasure it. Especially if the artist would inscribe it." When 'the man hesitated, Hugh moved in fast and said, "May I suggest a wording? Here, I'll write it out and you copy it."

Hugh walked away with the print, inscribed: To my dear Cousin Hugh, a fellow craftsman who appreciates beautiful work.

That night he showed it to Kitten. The child was awestruck. She had no concept of maps and was fascinated by the idea that it was possible to put down, just on a piece of paper, the long passages and twisty turns of her world. Hugh showed her how one went from his quarters to the ramp leading up to the executive servants' dining room, where the servants' main hall was, how the passage outside led, by two turns, to the garden. She confirmed the routes slowly, frowning in unaccustomed mental effort.

"You must live somewhere over here, Kitten. That is sluts' quarters."

"It is?"

"Yes. See if you can find where you live. I won't show you, you know how. I'll just sit back."

"Oh. Uncle help me! Let me see. First, I have to come down this ramp—" She paused to think while Hugh kept his face impassive. She had confirmed what he had almost stopped suspecting; the child was a planted spy. "Then...this is the door?"

"That's right."

"Then I walk straight ahead past the slutmaster's office, clear to the end, and I turn, and...I must live right there!" She clapped her hands and giggled.

"Your billet is across from your mess hail?"

"Yes."

"Then you got it right, first time! That's wonderful! Now let's see what else you can figure out."

For the next quarter hour she took him on a tour of sluts' quarters-junior and senior common rooms, messes, virgins' dormitory, bedwarmers' sleep room, nursery, lying-in, children's hall, service stalls, baths, playground door, garden door, offices, senior matron's apartment, everything-and Hugh learned that Barbara was no longer billeted in lying-in. Kitten volunteered it.

"Barbra-you know, the savage slut you write to-she used to be there, and now she's right there."

"How can you tell? Those rooms all look alike."

"I can tell. It's the second one of the four-mother rooms on this side, when you walk away from the baths."

Hugh noted with deep interest that a maintenance tunnel ran under the baths, with an access manhole in the passage Barbara's room was on-and with even deeper interest that this seemed to connect with another that ran clear across the building. Could it be that here was a wide-open unguarded route between all three main areas of servants' land? Surely not, as the lines seemed to show that any stud with initiative need only crawl a hundred yards to let himself into sluts' quarters.

Yet it might be true-for how would any stud know where those tunnels led?

And why would a stud risk it if he guessed? With the ratio of intact males to breeding sluts about that of bulls to cows on a cattle ranch. And could thumbless hands handle the fastenings?

For that matter, could those trap doors be opened from below?

"You're a fast learner, Kitten. Now try a part you don't know as well. Figure out, on the drawing, how to get from our rooms here to my offices. And if you solve that one, here's a harder one. What turns you would take and what ramp you would use if I told you to take a message to the Chief Domestic?"

She solved the first one after puzzling, the second she traced without hesitation.

At lunch next day, with Memtok at his elbow, Hugh called down the table to the engineer. "Pipes, old cousin! That beautiful drawing you gave me yesterday—Do you suppose one of your woodworkers could frame it for me? I'd like to hang it over my desk where people can admire it."

The engineer flushed and grinned widely. "Certainly, Cousin Hugh! How about a nice piece of mahogany?"

"Perfect." Hugh turned to his left. "Cousin Memtok, our cousin is wasted on pipes and plumbing; he's an artist. As soon as I have it hung, you must stop by and see what I mean."

"Glad to, cousin. When I find time. If I find time."

More than a week passed with no word about Their Charity, nor about Joe-a week of no bridge, and no Barbara. At last, one day at lunch, Memtok said, "By the way, I had been meaning to tell you, the young Chosen Joseph has returned. Do you still want to see him?"

"Certainly. Is Their Charity also in residence?"

"No. Their Gracious sister believes that he may not return until after we go home. Ah, you must see that, cousin. Not a cottage like this. Great doings night and day-and this humble servant wifi be lucky to get three meals in peace all winter. Run, run, run, worry, worry, worry, problems popping right and left," he said with unctuous satisfaction. "Be glad you're a scholar."

Word came a couple of hours later that Joe expected Hugh. He knew his way, having been to Joe's guest rooms to help teach bridge to Chosen, so he went up alone.

Joe greeted him enthusiastically. "Come in, Hugh! Find a seat. No protocol, nobody here but us chickens. Wait till you hear what I've done. Boy, have I been busy! One shop ready to go as a pilot plant before Their Charity finished the wangling for the protection, all on the Q.T. But so organized that we were in production the day protection was granted. Not bad terms, either. Their Mercy takes half, Their Charity hangs onto half and floats the financing, and out of Their Charity's half I'm cut in for ten percent and manage the company. Of course as we branch out and into other lines-the whole thing is called 'Inspired Games' and the charter is written to cover almost any fun you can have out of bed-as we branch out, I'll need help and that's a problem; I'm scared old Ponse is going to want to put some of his dull-witted relatives in. Hope not, there's no place for nepotism when you're trying to hold down costs. Probably best to train servants for it-cheaper in the long run, with the right sort. How about you, Hugh? Do you think you could swing the management of a factory? It's a big job; I've got a hundred and seven people working already."

"I don't see why not. I've employed three times that many and never missed a payroll-and I once bossed two thousand skilled trades in the Seabees. But, Joe, I came up here with something on my mind."

"Uh, all right, spill it. Then I want to show you the plans."

"Joe, you know about Duke?"

"What about Duke?"

"Tempered. Didn't you know?"

"Oh. Yes, I knew. Happened just about as I left. He's not hurt, is he? Complications?"

"'Hurt?' Joe, he was tempered. You act as if he had merely had a tooth pulled. You knew? Didn't you try to stop it?"

"In the name of God, why not?"

"Let me finish, can't you? I don't recall that you tried to stop it, either."

"I never had the chance. I never knew."

"Neither did I. That's what I've been trying to tell you, but you keep jumping down my throat. I learned about it after it happened."

"Oh. Sorry. I thought you meant you just stood by and let it happen."

"Well, I didn't. Don't know what I could have done if I had known. Maybe asked Ponse to call you in first, I suppose. Wouldn't have done any good, so I guess we were both better off not having to fret about it. Maybe all for the best. Now about our plans—If you'll look at this schematic layout, you'll see—"

"Joe!"

"Huh?"

"Can't you see that I'm in no shape to talk about playingcard factories? Duke is my son."

Joe folded up his plans. "I'm sorry, Hugh. Let's talk, if it will make you feel better. Get it off your chest-I suppose you do feel bad about it. Looking at it from one angle."

Joe listened, Hugh talked. Presently Joe shook his head. "Hugh, I can set your mind at rest on one point. Duke never did see the Lord Protector. So your advice to Duke-good advice, I think-could not have had anything to do with his being tempered."

"I hope you're right. I'd feel like cutting my throat if I knew it was my fault."

"It's not, so quit fretting."

"I'll try. Joe, whatever possessed Ponse to do it? He knew how we felt about it, from that time it almost happened through a misunderstanding. So why would he? I thought he was my friend."

Joe looked embarrassed. "You really want to know?"

"I've got to know."

"Well...you're bound to find out. Grace did it."

"What? Joe, you must be mistaken. Sure, Grace has her faults. But she wouldn't have that done-to her own son."

"Well, no, not exactly. I doubt if she knew what it was until after it was done. But just the same, she set it off. She's been wheedling Ponse almost from the day we got here that she wanted her Dukie with her. She was lonesome. 'Ponsie, I'm lonesome. Ponsie, you're being mean to Gracie. Ponsie, I'm going to tickle you until you say Yes. Ponsie, why won't you?'—all in that baby whine she uses. Hugh, I guess you didn't see much of it—"

"None of it."

"I would have wrung her neck. Ponse just ignored her, except when she tickled him. Then he would laugh and they would roll on the floor and he would tell her to shut up, and make her sit quiet for a while. Treated her just like one of the cats. Honest, I don't think he ever—I mean, it doesn't seem likely, from what I saw, that he was interested in her as a—"

"And I'm not interested. Didn't anybody tell Grace what it would entail, for her to have her son with her?"

"Hugh, I don't think so. It would never occur to Ponse that explanation was required...and certainly I never discussed it with her. She doesn't like me, I take up too much of her Ponsie's time." Joe wrinkled his nose. "So I doubt if she knew. Of course she should have figured it out; anybody else would have. But, excuse me, since she's your wife, but I'm not sure she's bright enough."

"And hopped up on Happiness, too-every time I caught sight of her. No, she's not bright. But she's not my wife, either. Barbara is my wife."

"Well...legally speaking, a servant can't have a wife."

"I wasn't speaking legally, I was speaking the truth. But even though Grace is no longer my wife, I'm somewhat comforted to know that she probably didn't know what it would cost Duke."

Joe looked thoughtful. "Hugh, I don't think she did but I don't think she really cares, either...and I'm not sure that you can properly say that it cost Duke anything."

"You might explain. Perhaps I'm dense."

"Well, if Grace minds that Duke has been tempered, she doesn't show it. She's pleased as punch. And he doesn't seem to mind."

"You've seen them? Since?"

"Oh, yes. I had breakfast with Their Charity yesterday morning. They were there."

"I thought Ponse was away?"

"He was back and now he's gone out to the West Coast. Business. We're really tearing into it. He was here only a couple of days. But he had this birthday present for Grace. Duke, I mean. Yes, I know it wasn't her birthday, and anyhow birthdays aren't anything nowadays; it's nameday that counts. But she told Ponse she was about to have a birthday and kept wheedling hiin—.—and you know Ponse, indulgent with animals and kids. So he set it up as a surprise for her. The minute he was back, he made a present of Duke to her. Shucks, they've even got a room off Ponse's private quarters; neither of them sleeps belowstairs, they live up here."

"Okay, I don't care where they sleep. You were telling me how Grace felt about it. And Duke."

"Oh, yes. Can't say just when she found out what had been done to Duke, all I can say is that she is so happy about it all that she was even cordial with me-telling me what a dear Ponsie was to arrange it and doesn't Dukie look just grand? In his new clothes? Stuff like that. She's got him dressed in the fancy livery the servants wear up here, not a robe like that you're wearing. She's even put jewelry on him. Ponse doesn't mind. He's an outright gift, a servant's servant. I don't think he does a lick of work, he's just her pet. And she loves it that way."

"But how about Duke?"

"That's what I've been telling you, Hugh; Duke hasn't lost by it. He's snug as a bug in a rug and he knows it. He was almost patronizing to me. You might have thought that I was the one wearing livery. With Grace in solid with the big boss and with her wound around his finger, Duke thinks he's got it made. Well, he has, Hugh. And I didn't mind his manner; I could see he was hopped on this tranquilizer you servants use."

"You call it 'got it made' when a man is grabbed and drugged and tempered and then kept drugged so that he doesn't care? Joe, I'm shocked."

"Certainly I call it that! Hugh, put your prejudices aside and look at it rationally. Duke is happy. If you don't believe it, let me take you in there and you talk to him. Talk to both of them. See for yourself."

"No, I don't think I could stomach it. I'll concede that Duke is happy. I'm well aware that if you feed a man enough of that Happiness drug, he'll be happy as a lark even if you cut off his arms and legs and then start on his head. But you can be that sort of 'happy' on morphine. Or heroin. Or opium. That doesn't make it a good thing. It's a tragedy."

"Oh, don't be melodramatic, Hugh. These things are all relative. Duke was certain to be tempered eventually. It's not lawful for a servant as big as he is to be kept for stud, I'm sure you know that. So what difference does it make whether it's done last week, or next year, or when Ponse dies? The only difference is that he is happy in a life of luxury, instead of hard manual labor in a mine, or a rice swamp, or such. He doesn't know anything useful, he could never hope to rise very high. High for a servant, I mean."

"Joe, do you know what you sound like? Like some whitesupremacy apologist telling how well off the darkies used to be, a-sittin' outside their cabins, a-strummin' their banjoes, and singin' spirituals."

Joe blinked. "I could resent that."

Hugh Farnham was angry and feeling reckless. "Go ahead and resent it! I can't stop you. You're a Chosen, I'm a servant. Can I fetch your white sheet for you, Massah? What time does the Klan meet?"

"Shut up!"

Hugh Farnham shut up. Joe went on quietly, "I won't bandy words with you. I suppose it does look that way to you. If so, do you expect me to weep? The shoe is on the other foot, that's all-and high time. I used to be a servant, now I'm a respected businessman-with a good chance of becoming a nephew by marriage of some noble family. Do you think I would swap back, even if I could? For Duke? Not for anybody, I'm no hypocrite. I was a servant, now you are one. What are you beefing about?"

"Joe, you were a decently treated employee. You were not a slave."

The younger man's eyes suddenly became opaque and his features took on an ebony hardness Hugh had never seen in him before. "Hugh," he said softly, "have you ever made a bus trip through Alabama? As a 'nigger'?"

"Then shut up. You don't know what you are talking about." He went on, "The subject is closed and now we'll talk business. I want you to see what I've done and am planning to do. This games notion is the best idea I ever had."

Hugh did not argue whose idea it had been; he listened while the young man went on with eager enthusiasm. At last Joe put down his pen and sat back. "What do you think of it? Any suggestions? You made some useful suggestions when I proposed it to Ponse-keep on being useful and there will be a good place in it for you."

Hugh hesitated. It seemed to him that Joe's plans were too ambitious for a market that was only a potential and a demand that had yet to be created. But all he said was, "It might be worth while to package with each deck, no extra charge, a rule book."

"Oh, no, we'll sell those separately. Make money on them."

"I didn't mean a complete Hoyle. Just a pamphlet with some of the simpler games. Cribbage. A couple of solitaire games. One or two others. Do that and the customers start enjoying them at once. It should lead to more sales."

"Hmm—I'll think about it." Joe folded up his papers, set them aside. "Hugh, you got so shirty a while ago that I didn't tell you one thing I have in mind."

"Yes?"

"Ponse is a grand old man, but he isn't going to live forever. I plan to have my own affairs separate from his by then so that I'll be financially independent. Trade around interests somehow, untangle it. I don't need to tell you that I'm not anxious to have Mrika as my boss-and I didn't tell you, so don't repeat it. But I'll manage it, I'm looking out for number one." He grinned. "And when Mrika is Lord Protector I won't be here. I'll have a household of my own, a modest one-and I'll need servants. Guess whom I plan to adopt when I staff it."

"I couldn't."

"Not you-although you may very well be a business servant to me, if it turns out you really can manage a job. No, I had in mind adopting Grace and Duke."

"Huh?"

"Surprised? Mrika won't want them, that's certain. He despises Grace because of her influence over his uncle, and it's a sure thing he's not going to like Duke any better. Neither of them is trained and it shouldn't be expensive to adopt them if I don't appear too eager. But they would be useful to me. For one thing, since they speak English, I'd be able to talk to them in a language nobody else knows, and that could be an advantage, especially when other servants are around. But best of all—Well, the food here is good but sometimes I get a longing for some plain old American cooking, and Grace is a good cook when she wants to be. So I'll make her a cook. Duke can't cook but he can learn to wait on table and answer the door and such. Houseboy, in other words. How about that?"

Hugh said slowly, "Joe, you don't want them because Grace can cook."

Joe grinned unashamedly. "No, not entirely. I think Duke would look real good as my houseboy. And Grace as my cook. Tit for tat. Oh, I'll treat them decently, Hugh, don't you worry. They work hard and behave themselves and they won't get tingled. However, I don't doubt but what it will take a few tingles before they get the idea." He twitched his quirt. "And I won't say I won't enjoy teaching them. I owe them a little. Three years, Hugh. Three years of Grace's endless demands, never satisfied with anything-and three years of being treated with patronizing contempt by Duke whenever he was around."

Hugh said nothing. Joe said, "Well? What do you think of my plan?"

"I thought better of you, Joe. I thought you were a gentleman. It seems I was wrong."

"So?" Joe barely twitched his quirt. "Boy, we excuse you. All."

Chapter 18

Hugh came away from Joe's rooms feeling utterly discouraged. He knew that he had been foolish-no, criminally careless !—in letting Joe get his goat. He needed Joe. Until he had Barbara and the twins safely hidden in the mountains, he needed every possible source of favor. Joe, Memtok, Ponse, anyone he could find-and probably Joe most of all. Joe was a Chosen, Joe could go anywhere, tell him things he didn't know, give him things he could not steal. He had even considered, as a last resort, asking Joe to help them to escape.

Not now! Idiot! Utter fool! To risk Barbara and the boys just because you can't hold your bloody temper.

It seemed to him that things were as bad as they could get-and part of it his own folly.

He did not stand around moping; he looked up Memtok. It had become more urgent than ever to set up some way to communicate with Barbara secretly-and that meant that he had to talk to her-and that meant at least one bridge game in the Lord Protector's lounge and a snatch of talk even if he had to talk English in front of Ponse. He had to force matters.

Hugh found the Chief Domestic leaving his office. "Cousin Memtok, could you spare me a word?"

Memtok's habitual frown barely relaxed. "Certainly, cousin. But walk along with me, will you? Trouble, trouble, trouble—you would think that a department head could run his department without someone to wipe his nose, wouldn't you? You'd be wrong. The freezer flunky complains to the leading butcher and he complains to the chef, and it's a maintenance matter, and you would think that Gnou would take it up directly with engineering and between them they would settle it. Oh, no! They both come to me with their troubles. You know something about construction, don't you?"

"Yes," Hugh admitted, "but I'm not up-to-date in the subject. It has been some years." (About two thousand, my friend! But we won't speak of that.)

"Construction is construction. Come along, give me the benefit of your advice."

(And find out that I'm faking. Chum, I'll doubletalk you to death.) "Certainly. If this humble one's opinion is worth anything."

"Damned chill room. It's been a headache every summer. I'm glad we'll be back in the Palace soon."

"Has the date been set? May one ask?"

"One may. A week from tomorrow. So it's time to think about packing up your department and being ready to move."

Hugh tried to keep his face calm and his voice steady. "So soon?"

"Why are you looking worried? A few files, some office equipment. Have you any idea how many thousands of items 1 have on inventory? And how much gets stolen, or lost, or damaged simply because you can't trust any of these fools? Uncle!"

"It must be terribly wearing," agreed Hugh. "But that brings to mind something. I petitioned you to let me know when Their Charity was next in residence. I learned from the young Chosen, Joseph, that Their Charity returned a day or two ago and is now gone again."

"Are you criticizing?"

"Uncle forbid! I was just asking."

"It is true that Their Charity was physically present for a short time. But he was not officially in residence. Not in the best of health, it seemed to me-Uncle protect him."

"Uncle protect him well!" Hugh answered sincerely. "Under the circumstances naturally you did not ask him to grant me an audience. But could I ask of you the small favor, next time—"

"We'll talk later. Let's see what these two helpless ones have to offer." Head Chef Gnou and the Chief Engineer met them at the entrance to Gnou's domain, they went on through the kitchen, through the butcher shop, and into the cold room. But they lingered in the butcher shop, Memtok impatient, while parka-like garments were fetched, the Chief Domestic having refused the ones offered on the legitimate grounds that they were soiled.

The butcher shop was crowded with live helpers and dead carcasses-birds, beeves, fish, anything. Hugh reflected that thirty-eight Chosen and four hundred and fifty servants ate a lot of meat. He found the place mildly depressing even though he himself had cleaned and cut and trimmed many an animal.

But only his habitual tight control in the presence of Memtok and his "cousins" in service kept him from showing shock at something he saw on the floor, trimmed from a carcass almost cut up on one block.

It was a dainty, plump, very feminine hand.

Hugh felt dizzy, there was a roaring in his ears. He blinked. Itwas still there. A hand much like Kitten's—He breathed carefully, controlled the retching within him, kept his back turned until he had command over himself. There had suddenly flooded over him the truth behind certain incongruities, certain idioms, some pointless jokes.

Gnou was making nervous conversation while his boss waited. He moved to the chopping block, unintentionally kicking the dainty little hand underneath into a pile of scraps and said, "Here's one you won't have to bother to taste, Chief Domestic. Unless the old one returns unexpectedly."

"I always bother to taste," Memtok said coldly. "Their Charity expects his table to be perfect whether he is in residence or not."

"Oh, yes, surely," Gnou agreed. "That's what I always tell my cooks. But—Well, this very roast illustrates one of my problems. Too fat. You'll feel that it's greasy-and so it wifi be. But that's what comes of using sluts. Now, in my opinion, you can't find a nicer piece of meat, marbled but firm, than a buck tempered not older than six, then hung at twice that age."

"No one asked your opinion," Memtok answered. "Their Charity's opinion is the only one that counts. They think that sluts are more tender."

"Oh, I agree, I agree! No offense intended."

"And none taken. In fact I agree with your opinion. I was simply making clear that your opinion-and mine in this matteris irrelevant. I see they've fetched them. Did they stop to make them?"

The party put on heavy garments, went on inside. The engineer had said nothing up to then, effacing himself other than a nod and a grin to Hugh. Now he explained the problem, a cranky one of refrigeration. Hugh tried to keep his eyes on it, rather than on the contents of the meat storage room.

Most of the meat was beef and fowl. But one long row of hooks down the center held what he knew he would find—human carcasses, gutted and cleaned and frozen, hanging head down, save that the heads were missing. Young sluts and bucks, he could see, but whether the bucks were tempered or not was no longer evident. He gulped and thanked his unlucky stars that that pathetic little hand had given him warning, at least saved him from fainting.

"Well, Cousin Hugh, what do you think?"

"Why, I agree with Pipes."

"That the problem can't be solved?"

"No, no." Hugh had not listened. "His reasoning is correct and he implied the answer. As he says, the problem can't be solved-now. The thing to do is not to try to patch it up, now. Wait a week. Tear it out. Put in new equipment."

Memtok looked sour. "Expensive."

"But cheaper in the long run. Good engineering isn't accomplished by grudging a few bullocks. Isn't that right, Pipes?"

The engineer nodded vigorously. "Just what I always say, Cousin Hugh! You're absolutely right."

Memtok still frowned. "Well—Prepare an estimate. Show it to Cousin Hugh before you bring it to me."

"Yes, sir!"

Memtok paused on the way out and patted the loin of a stripling buck carcass. "That's what I would call a nice piece of meat. Eh, Hugh?"

"Beautiful," Hugh agreed with a straight face. "Your nephew, perhaps? Or just a son?"

There was frozen silence. Nobody moved except that Memtok seemed to grow taller. He raised his whip of authority most slightly, no more than tightening his thumbless grip.

Then he grimaced and gave a dry chuckle. "Cousin Hugh, your well-known wit will be the death of me yet. That's a good one. Gnou, remind me to tell that this evening."

The Chef agreed and chuckled, the engineer roared. Memtok gave his cold little laugh again. "I'm afraid I can't claim the honor, Hugh. All of these critters are ranch bred, not one of them is a cousin of ours. Yes, I know how it is in some households, but Their Charity considers it unspeakably vulgar to serve a house servant, even in cases of accidental death—.—And besides, it makes the servants restless."

"Commendable."

"Yes. It is gratifying to serve one who is a stickler for propriety. Enough, enough, time is wasting. Walk back with me, Hugh."

Once they were clear of the rest Memtok said, "You were saying?"

"Excuse me?"

"Come, come, you're absentminded today. Something about Their Charity not being in residence."

"Oh, yes. Memtok, could you, as a special favor to me, let me know the minute Their Charity returns? Whether officially in residence or not? Not petition anything for me. Just let me know." Damn it, with time pouring away like life through a severed artery his only course might be a belly-scraping apology to Joe, then get Joe to intercede.

"No," said Memtok. "No, I don't think I can."

"I beg your pardon? Has this one offended you?"

"You mean that witticism? Heaven, no! Some might find it vulgar and one bullock gets you three that if you had told it in sluts' quarters some of them would have fainted. But if there is one thing I pride myself on, Hugh, it's my sense of humor—and any day I can't see a joke simply because I am the butt of it, I'll petition to turn in my whip. No, it was simply my turn to have a little joke at your expense. I said, 'I don't think I can.' That is a statement of two meanings-a double-meaning joke, follow me? I don't think I can tell you when Their Charity returns because he has sent word to me that he is not returning. So you'll see him next at the Palace...and I promise I'll let you know when he's in residence." The Chief Domestic dug him in the ribs. "I wish you had seen your own face. My joke wasn't nearly as sharp as yours. But your jaw dropped. Very comical."

Hugh excused himself, went to his rooms, took an extra bath, a most thorough one, then simply thought until dinnertime. He braced himself for the ordeal of dinner with a carefully measured dose of Happiness-not enough to affect him later, strong enough to carry him through dinner, now that he knew why "pork" appeared so often on the menu of the Chosen. He suspected that the pork served to servants was really pork. But he intended to eat no more bacon nevertheless. Nor ham, nor pork chops, nor sausage. In fact he might turn vegetarian-at least until they were free in the mountains and it was eat game or starve.

But with a shot of Happiness inside him he was able to smile when Memtok tasted the roast for upstairs and to say, "Greasy?"

"Worse than usual. Taste it."

"No, thanks. I knew it would be. I would cook up better than that-though no doubt I would be terribly stringy. And tough. Though perhaps Cousin Gnou could tenderize me."

Memtok laughed until he choked. "Oh, Hugh, don't ever be that funny while I'm swallowing! You'll kill me yet."

"This one hopes not." Hugh toyed with the beef on his plate, pushed it aside and ate a few nuts.

He was very busy that evening, writing long after Kitten was asleep. It had become utterly necessary to reach Barbara secretly, yet his only means was the insecure route through Kitten. The problem was to write to Barbara in a code that only she could read, and which she would see as a code without having been warned and without the code being explained to her-and yet one which was safe from others. But the doubletalk mixture he had last sent her would not do; he was now going to have to give her detailed instructions, ones where it really mattered if she missed a word or failed to guess a concealed meaning.

His last draft was:

Darling,

If you were here, I would love a literary gabfest, a good
one. You know what I mean, I am sure. Let's consider Edgar Allan Poe, for example. Can you recall how I claimed that Poe was the best
writer both to read and to reread of all the mystery writers before or since, and that this was true because he never could be milked
dry on one reading? The answer or answers in The Gold Bug, or certainly that little gem The Murders in the Rue Morgue, or take The Case of
the Purloined Letter, or any of them; same rule will apply to

them all, when you consider the very subtle way he always had of

slanting his meaning so that one reaches a full period in his sentences only after much thought. Poe is grand fun and well worth study. Let's have our old literary talks by letter. How about Mark Twain next? Tired-must go to bed!

Love—Since Hugh had never discussed Edgar Allan Poe with Barbara at any time, he was certain that she would study the note for a hidden message. The only question was whether or not she would find it. He wanted her to read it as:

"If
you
can
read
this
answer
the
same
way
period"

Having done his best he put it aside, first disposing of all trial work, then prepared to do something else much more risky. At that point he would have given his chances of immortal bliss, plus 10 percent, for a flashlight, then settled for a candle. His rooms were lighted, brilliantly or softly as he wished, by glowing translucent spheres set in the upper corners. Hugh did not know what they were save that they were not any sort of light he had ever known. They gave off no heat, seemed not to require wiring, and were controlled by little cranks.

A similar light, the size of a golf ball, was mounted on his scroll reader. It was controlled by twisting it; he had decided tentatively that twisting these spheres polarized them in some way.

He tried to dismount the scroll reader light.

He finally got it loose by breaking the upper frame. It was now a featureless, brilliantly shining ball and nothing he could do would dim it-which was almost as embarrassing as no light at all.

He found that he could conceal it in an armpit under his robe. There was still a glow but not much.

He made sure that Kitten was asleep, turned out all lights, raised his corridor door, looked out. The passageway was lighted by a standing light at an intersection fifty yards away. Regrettably he had to go that way. He had expected no lights at this hour.

He felt his "knife" taped to his left arm-not much of a knife, but patient whetting with a rock picked up from a garden path had put an edge on it, and tape had made a firm grip. It needed hours more work and he could work on it only after Kitten was asleep or in time stolen from working hours. But it felt good to have it there and it was the only knife, chisel, screwdriver, or burglar's jimmy that he had.

The manhole to the engineering service tunnels lay in the passage to the right after he had to pass the lighted intersection. Any manhole would do but that one was on the route to the veterinary's quarters; if caught outside his rooms but otherwise without cream on his lip, he planned to plead a sudden stomachache.

The manhole cover swung back easily on a hinge, it was fastened by a clasp that needed only turning to free it. The floor of the tunnel, glimpsed with his shiny sphere, lay four feet below the corridor floor. He started to let himself down and ran into his first trouble.

These manholes and tunnels had been intended for men a foot shorter and fifty pounds lighter than Hugh Farnham, and proportionately smaller in shoulders, hips, hands-and-knees height, and so forth.

But he could make it. He had to.

He wondered how he would make it, crawling and carrying at least one baby. But that he had to do, too. So he would.

He almost trapped himself. Barely in time he found that the underside of the steel door was smooth, no handle, and that it latched automatically by a spring catch.

That settled why no one worried that the studs might gain unplanned access to sluts. But it also settled something else. Hugh had considered snatching this very chance, if he found things quiet at the other end: Wake Barbara, bring all four of them back via the tunnel-then outside and away, by any of a dozen weak points, away and off to the mountains on foot, reach them before light, find some stream and ford it endwise to throw off hounds. Go, go, go! With almost no food, with nothing but a makeshift knife, with no equipment, a "nightshirt" for clothing, and no hope of anything better. Go! And save his family, or die with them. But die free!

Perhaps someday his twin sons, wiser in the new ways than himself and toughened by a life fighting nature, could lead an uprising against this foul thing. But all he planned to do, all he could hope for, was get them free, keep them free, alive and free and ungelded, until they were grown and strong.

Or die.

Such was still his plan. He wasted not a moment sorrowing over that spring catch. It merely meant that he must communicate with Barbara, set a time with her, because she would have to open the hatch at the far end. Tonight he could only reconnoiter.

He found that tape from his knife handle would hold the spring catch back. He tested it from above; the lid could now be swung back without turning the clasp.

But his wild instincts warned him. The tape might not hold until he was back. He might be trapped inside.

He spent a sweating half hour working on that spring catch, using knife and fingers and holding the light ball in his teeth.

At last he managed to get at and break the spring. He removed the catch entirely. The manhole, closed, now looked normal, but it could be opened from underneath with just a push.

Only then did he let himself down inside and close it over him.

He started out on knees and elbows with the light in his mouth, and stopped almost at once. The damned skirt of his robe kept him from crawling! He tried bunching it around his waist. It slid down.

He inched back to the manhole shaft, took the pesky garment off entirely, left it under the manhole, crawled away without it, naked save for the knife strapped to his arm and the light in his teeth. He then made fair progress, although never able to get fully on hands and knees. His elbows had to be bent, his thighs he could not bring erect, and there were places where valves and fittings of the pipes he crawled past forced him almost to his belly.

Nor could he tell how far he was going. However, there were joints in the tunnel about every thirty feet; he counted them and tried to match them in his mind with the engineering drawing. Pass under two manholes...sharp left turn into another tunnel at next manhole...crawl about a hundred and fifty feet and under one manhole—Something more than an hour later he was under a manhole which had to be the one closest to Barbara.

If he had not lost himself in the bowels of the palace—If he had correctly remembered that complex drawing—If the drawing was up to date --(Had two thousand years made any difference in the lag between engineering changes and revisions of prints to match?) If Kitten knew what she was talking about in locating Barbara's billet by a method so novel to her—If it was still Barbara's billet—He crouched in the awkward space and tried to press his ear against the shaft's cover.

He heard a baby cry.

About ten minutes later he heard hushed female voices. They approached, passed over him, and someone stepped on the lid.

Hugh unkinked himself, prepared to return. The space was so tight that the obvious way was to back up the way he had come, so he found himself trying to crawl backward through the tunnel.

That worked so poorly that he came back to the shaft and, with contortions and loss of skin, got turned around.

What seemed hours later he was convinced that he was lost. He began to wonder which was the more likely: Would he starve or die of thirst? Or would some repairman get the shock of his life by finding him?

But he kept on crawling.

His hands found his robe before his eyes saw it. Five minutes later he was in it; seven minutes later (he stopped to listen) he was up and out and had the lid closed. He forced himself not to run back to his rooms.

Kitten was awake.

He wasn't aware of it until she followed him into the bath. Then she was saying with wide-eyed horror, "Oh, dear! Your poor knees! And your elbows, too."

"I stumbled and fell down."

She didn't argue it, she simply insisted on bathing him and salving and taping the raw places. When she started to pick up his dirty robe, he told her sharply to go to bed. He did not mind her touching his robe but his knife had been on top of it and only by maneuvering had he managed to keep himself between her and it long enough to flip a fold of cloth over the weapon.

Kitten went silently to bed. Hugh hid the knife in its usual place (much too high for Kitten), then went into his living room and found the child crying. He petted her, soothed her, said he had not meant to sound harsh, and fed her a bonus dose of Happiness-sat with her while she drank it, watched her go happily to sleep.

Then he did not even try to get along without it himself. Kitten had gone to sleep with one hand outside her cover. It looked to Hugh exactly like a forlorn little hand he had seen twelve hours earlier on the floor of a butcher shop.

He was exhausted and the drink let him go to sleep. But not to rest. He found himself at a dinner party, black tie and dressy. But he did not like the menu. Hungarians goulash...French fries...Chinese noodles...p0' boy sandwich...breast of peasant...baked Alaskans-but it was all pork. His host insisted that he taste every dish. "Come, come!" he chided with a wintry smile. "How do you know you don't like it? One bullock gets you three you'll learn to love it."

Hugh moaned and could not wake up.

Kitten did not chatter at breakfast, which suited him. Two hours of nightmare-ridden sleep was not enough, yet it was necessary to go to his office and pretend to work. Mostly he stared at the print framed over his desk while his scroll reader clicked unnoticed. After lunch he sneaked away and tried to nap. But the engineer scratched at his door and apologetically asked him to look over his estimates on refitting the meat cooler. Hugh poured his guest a dollop of Happiness, then pretended to study figures that meant nothing to him. After a decent time he complimented the man, then scrawled a note to Memtok, recommending that the contract be let.

Barbara's note that night applauded the idea of a literary discussion club by mail and discussed Mark Twain. Hugh was interested only in how it read diagonally:

"Did
I
read
it
correctly
darling
question
mark"

Chapter 19

"Darling we must escape next six days or sooner be ready night after letter has phrase Freedom is a lonely thing—"

For the next three days Hugh's letters to Barbara were long and chatty and discussed everything from Mark Twain's use of colloquial idiom to the influence of progressive education on the relaxation of grammar. Her answers were lengthy, equally "literary," and reported that she would be ready to open the hatch, confirmed that she understood, that she had a little stock of food, had no knife, no shoes-but that her feet were very calloused-and that her only worry was that the twins might cry or that her roommates might wake up, especially as two of them were stifi giving night feedings to their babies. But for Hugh not to worry, she would manage.

Hugh drew a fresh bottle of Happiness, taped it near the top of the shaft closest to her billet, instructed her to tell her roommates that she had stolen it, then use it to get them so hopped up on the drug that they would either sleep or be so slaphappy that if they did wake, they would do nothing but giggle-and, if possible, get enough of the drug into the twins that the infants would pass out and not cry no matter how they were handled.

Making an extra trip through the tunnels to plant the bottle was a risk Hugh hated to take. But he made it pay. He not only timed himself by the clock in his rooms and learned beyond any possibility of mistake the rat maze he must follow but also he carried a practice load, a package of scrolls taped together to form a mass bigger and heavier, he felt sure, than one of his infant sons would be. This he tied to his chest with a sling made of stolen cloth; it had been a dust cover for the scroll printer in his offices. He made two such slings, one for Barbara, and tore and tied them so they could be shifted to the back later to permit the babies to be carried papoose style.

He found that it was difficult but not impossible to carry a baby in this fashion through the tunnels, and he spotted the places where it was necessary to inch forward with extreme care not to place any pressure on his dummy "precious burden" and still not let the ties on his back catch on engineering fittings above him.

But it could be done and he got back to his rooms without waking Kitten-he had increased her evening bonus of Happiness. He replaced the scrolls, hid his knife and spherical lamp, washed his knees and elbows and anointed them, then sat down and wrote a long P.S. to the letter he had written earlier to tell Barbara how to find the bottle. This postscript added some afterthoughts about the philosophy of Hemingway and remarked that it seemed odd that a writer would in one story say that "freedom is a lonely thing" and in another story state that-and so on.

That night he gave Kitten her usual amplified nightcap, then said, "Not much left in this bottle. Finish it off and I'll get a fresh one tomorrow."

"Oh, I'd get terribly silly. You wouldn't like me."

"Go ahead, drink it. Have a good time, live it up. What else is life for?"

Half an hour later Kitten was more than willing to be helped to bed. Hugh stayed with her until she was snoring heavily. He covered her hands, stood looking down at her, suddenly knelt and kissed her goodbye.

A few minutes later he was down the first manhole.

He took off his robe, piled on it a bundle of what he had collected for survival-food, sandals, wig, two pots of deodorant cream into which he had blended brown pigment. He did not expect to use disguise and had little faith in it, but if they were overtaken by daylight before they were in the mountains, he intended to darken all four of them, tear their robes into something resembling the breechclout and wraparound which he had learned were the working clothes of free peasant farmers among the Chosen—"poor black trash" as Joe called them-and try to brazen it out, keeping away from people if possible, until it was dark again.

He tied one baby sling to him with the other inside it and started. He hurried, as time was everything. Even if Barbara managed to pass out her roommates promptly, even if he had no trouble breaking out at his preferred exit, even if the crawl back through the tunnels could be made in less than an hour—doubtful, with the kids-they could not be outdoors earlier than midnight, which allowed them five hours of darkness to reach wild country. Could he hope for three miles an hour? It seemed unlikely, Barbara barefooted and both carrying kids, the country unknown and dark-and those mountains seen from his window seemed to be at least fifteen miles away. It would be a narrow squeak even if everything broke his way.

He made fast time to sluts' quarters, punishing his knees and elbows.

The bottle was missing, he could feel the tacky places where he had fastened it. He settled himself as comfortably as possible and concentrated on quieting his pounding heart, slowing his breathing, and relaxing. He tried to make his mind blank.

He dozed off. But he was instantly alert when the lid over him was raised.

Barbara made no sound. She handed him one of their sons, he stuffed the limp little body as far down the tunnel as he could reach. She handed him the other, he placed it beside the first, then added a pitiful little bundle she had.

But he did not kiss her until they were down inside-only seconds after he had wakened-and the lid had clicked into place over them.

She clung to him, sobbing; he whispered to her fiercely not to make a sound, then added last-minute instructions into her ear. She quieted instantly; they got busy.

It was agonizingly difficult to get ready for the crawl in a space too small for one and nearly impossible for them both. They did it because they had to. First he helped her get out of the shorter garment sluts wore, then he had her lie down with her legs back in the other reach of the tunnel while he tied a baby sling to her, then a baby was stuffed into each sling and knots tightened to keep each child slung as high in its little hammock as possible. Hugh then knotted the skirt of her garment together, stuffed her hoarded food into the sack thus formed, tied the sleeves around his left leg, and let it drag behind. He had planned to tie it around his waist, but the sleeves were too short.

That done (it seemed to take hours), he had Barbara back up into the far reach of the tunnel, then managed painfully to turn himself and get headed the right way without banging little Hughie's skull. Or was it Karl Joseph? He had forgotten to ask. Either one, the baby's warm body against his, its lightly sensed breathing, gave him fresh courage. By God, they would make it! Whatever got in his way would die.

He set out, with the light in his teeth, moving very fast wherever clearance let him do so. He did not slow down for Barbara and had warned her that he would not unless she called out.

She did not, ever. Once her baggage worked loose from his leg. They stopped and he had her tie it to his ankle; that was their only rest. They made good time but it seemed forever before he reached the little pile of plunder he had cached when he set out.

They unslung the babies and caught their breaths.

He helped Barbara back into her shift, rearranged her sling to carry one baby papoose fashion, and made up their luggage into one bundle. All that he held out was his knife taped to his arm, his robe, and the light. He showed her how to hold the light in her mouth, then spread her lips and let the tiniest trickle leak out between her teeth. She tried it.

"You look ghastly," he whispered, "Like a jack-o'—lantern. Now listen carefully. I'm going up. You be ready to hand me my robe instantly. I may reconnoiter."

"I could help you get it on, right here."

"No. If I'm caught coming out, there will be a fight and it would slow me down. I won't want it, probably, until we reach a storeroom that is our next stop. If it's all clear above, I'll want you to hand out everything fast, including the baby not on your back. But you will have to carry him as well as the bundle and my robe; I've got to have my hands free. Darling, I don't want to kill anybody but if anyone gets in our way, I will. You understand that, don't you?"

She nodded. "So I carry everything. Can do, my husband."

"You follow me, fast. It's about two city blocks to that storeroom and we probably won't see anyone. I jiggered its lock this afternoon, stuffed a wad of Kitten's chewing gum into it. Once inside we'll rearrange things and see if you can wear my sandals."

"My feet are all right. Feel."

"Maybe we'll take turns wearing them. Then I have to break a lock on a delivery door but I spotted some steel bars a week ago which ought still to be there. Anyhow, I'll break out. Then away we go, fast. It should be breakfast before we are missed, sometime after that before they are sure we are gone, still longer before a chase is organized., We'll make it."

"Sure we will."

"Just one thing—If I reach for my robe and then close the lid on you, you stay here. Don't make a sound, don't try to peek out."

"I won't."

"I might be gone an hour. I might fake a bellyache and have to see the vet, then come back when I can."

"All right."

"Barbara, it might be twenty-four hours, if anything goes wrong. Can you stay here and keep the twins quiet that long? If you must?"

"Whatever it takes, Hugh."

He kissed her. "Now put the light back in your mouth and close your lips. I'm going to sneak a peek."

He raised the lid an inch, lowered it. "In luck," he whispered. "Even the standing light is out. Here I go. Be ready to hand things up. Joey first. And don't show a light."

He pushed the lid up and flat down without a sound, raised himself, got his feet to the corridor floor, stood up.

A light hit him. "That's far enough," a dry voice said, "Don't move."

He kicked the whip hand so fast that the whip flew aside as he closed. Then this-and that!—and sure enough! The man's neck was broken, just as the book said it would be.

Instantly he knelt down. "Everything out! Fast!"

Barbara shoved baby and baggage up to him, was out fast as he took her hand. "Some light," he whispered. "His went out and I've got to dispose of him." She gave him light. Memtok—Hugh quelled his surprise, stuffed the body down the hole, closed the lid. Barbara was ready, baby on back, baby in left arm, bundle in right. "We go on! Stay close on my heels!" He set out for the intersection, holding his course in the dark by fingertips on the wall.

He never saw the whip that got him. All he knew was the pain.

Chapter 20

For a long time Mr. Hugh Farnham was aware of nothing but pain. When it eased off, he found that he was in a confinement cell like the one in which he had lived his first days under the Protectorate.

He was there three days. He thought it was three days, as he was fed six times. He always knew when they were about to feed him-and to empty his slop jar, for he was not taken outside for any purpose. He would find himself restrained by invisible spider web, then someone would come inside, leave food, replace the slop jar, and go. It was impossible to get the servant who did this to answer him.

After what may have been three days he found himself unexpectedly caught up by that prisoning field (he had just been fed) and his old colleague and "cousin" the Chief Veterinary came in. Hugh had more than a suspicion as to why; his feeling amounted to a conviction, so he pleaded, demanded to be taken to the Lord Protector, and finally shouted.

The surgeon ignored it. He did something to Hugh's thigh, then left.

To Hugh's limited relief he did not become unconscious, but he found, when the tanglefoot field let up, that he could not move anyhow and felt lethargic. Shortly two servants came in, picked him up, placed him in a box like a coffin.

Hugh found that he was being shipped somewhere. His shipping case was given casual but not rough handling; once he felt a lift surge and then surge to a stop; his box was placed in something; and some minutes, hours, or days later it was moved again; and presently he was dumped into another confinement room. He knew it was a different one; the walls were light green instead of white. By the time they fed him he had recovered and was again "tangled" while food was placed inside.

This went on for one hundred and twentytwo meals. Hugh kept track by biting a chunk out of his fingernails and scratching the inside of his left arm. This took him less than five minutes each day; he spent the rest of his time worrying and sometimes sleeping. Sleeping was worse than worrying because he always reenacted his escape attempt in his sleep and it always ended in disaster-although not necessarily at the same point. He did not always kill his friend the Chief Domestic and at least twice they got all the way to the mountains before they were caught. But, long or short, it ended the same way and he would wake up sobbing and calling for Barbara.

He worried most about Barbara-and the twins, although the boys were not as real to him. He had never heard of a slut being severely punished for anything. However, he had never heard of a slut being involved in an attempted escape and a killing, either; he just did not know. But he did know that the Lord Protector preferred slut meat for his table.

He tried to tell himself that old Ponse would do nothing to a slut while she was still nursing babies-and that would be a long time yet; among servants, according to Kitten, mothers nursed babies for at least two years.

He worried about Kitten, too. Would the child be punished for something she had had nothing to do with? A completely innocent bystander? Again he did not know. There was "justice" here; it was a major branch of religious writings. But it resembled so little the concept "justice" of his own culture that he had found the stuff almost unreadable.

He spent most of his time on what he thought of as "constructive" worry, i.e., what he should have done rather than what he had done.

He saw now that his plans had been laughably inadequate. He should never have let himself be panicked into moving too soon. It would have been far better to have built up his connection with Joe, never disagreed with him, tickled his vanity, gone to work for him and, in time, prevailed on him to adopt Barbara and the kids. Joe was an accommodating person and old Ponse was so openhanded that he might simply have made Joe a present of these three useless servants instead of demanding cash. The boys would have been in no danger for years (and perhaps never in danger if Joe owned them), and, in time, Hugh could have expected to become a trusted business servant, with a broad pass allowing him to go anywhere on his master's business-and Hugh .would have acquired sophisticated knowledge of how this world worked that a house servant could never acquire.

Once he had learned exactly how it ticked, he could have planned an escape that would work.

Any society man has ever devised, he reminded himself, could be bribed-and a servant who handles money can find ways to steal some. Probably there was an "underground railroad" that ran to the mountains. Yes, he had been far too hasty.

He considered, too, the wider aspects-a slave uprising. He visualized those tunnels being used not for escape but as a secret meeting place-classes in reading and writing, taught in whispers; oaths as mighty as a Mau Mau initiation binding the conspirators as blood brothers with each Chosen having marked against his name a series of dedicated assassins, servants patiently grinding scraps of metal into knives.

This "constructive" dream he enjoyed most-and believed in least. Would these docile sheep ever rebel? It seemed unlikely. He had been classed with them by accident of complexion but they were not truly of his breed. Centuries of selective breeding had made them as little like himself as a lap dog is like a timber wolf.

And yet, and yet, how did he know? He knew only the tempered males, and the few studs he had seen had all been dulled by a liberal ration of Happiness-to~ say nothing of what it might do to a man's fighting spirit to lose his thumbs at an early age and be driven around with whips-that-weremore-than-whips.

This matter of racial differences-or the nonsense notion of "racial equality"—had never been examined scientifically; there was too much emotion on both sides. Nobody wanted honest data.

Hugh recalled an area of Pernambuco he had seen while in the Navy, a place where rich plantation owners, dignified, polished, educated in France, were black, while their servants and field hands-giggling, shuffling, shiftless knuckleheads "obviously" incapable of better things-were mostly white men. He had stopped telling this anecdote in the States; it was never really believed and it was almost always resented-even by whites who made a big thing of how anxious they were to "help the American Negro improve himself." Hugh had formed the opinion that almost all of those bleeding hearts wanted the Negro's lot improved until it was almost as high as their own—and no longer on their consciences-but the idea that the tables could ever be turned was one they rejected emotionally.

Hugh knew that the tables could indeed be turned. He had seen it once, now he was experiencing it.

But Hugh knew that the situation was still more confused. Many Roman citizens had been "black as the ace of spades" and many slaves of Romans had been as blond as Hitler wanted to be-so any "white man" of European ancestry was certain to have a dash of Negro blood. Sometimes more than a dash. That southern Senator, what was his name?—the one who had built his career on "white supremacy." Hugh had come across two sardonic facts: This old boy had died from cancer and had had many transfusions-and his blood type was such that the chances were two hundred to one that its owner had nnt inst a tnnch nf thn tarhriish hut nraetk~a1lv thp. whn1~ tar barrel. A navy surgeon had gleefully pointed this out to Hugh and had proved both points in medical literature.

Nevertheless, this confused matter of races would never be straightened out-because almost nobody wanted the truth.

Take this matter of singing—It had seemed to Hugh that Negroes of his time averaged better singers than had whites; most people seemed to think so. Yet the very persons, white or black, who insisted most loudly that "all races were equal" always seemed happy to agree that Negroes were superior, on the average, in this one way. It reminded Hugh of Orwell's Animal Farm, in which "AU Animals Are Equal But Some Are More Equal Than Others."

Well, he knew who wasn't equal here-despite his statistically certain drop of black blood. Hugh Farnham, namely. He found that he agreed with Joe: When things were unequal, it was much nicer to be on top!

On the sixtyfirst day in this new place, if it was the sixtyfirst, they came for him, bathed him, cut his nails, rubbed him with deodorant cream, and paraded him before the Lord Protector.

Hugh learned that he still could be humiliated by not being given even a nightshirt as clothing, but he conceded that it was a reasonable precaution in handling a prisoner who killed with his bare hands. His escort was two young Chosen, in uniforms which Hugh assumed to be military, and the whips they carried were definitely not "lesser whips."

The route they followed was very long; it was clearly a huge building. The room where he was delivered was very like in spirit to the informal lounge where Hugh had once played bridge. The big view window looked out over a wide tropical river.

Hugh hardly glanced at it; the Lord Protector was there. And so were Barbara and the twins!

The babies were crawling on the floor. But Barbara was breast deep in that invisible quicksand, a trap that claimed T4iwh as snnui as he was halted She smiled at him hut did not speak. He looked her over carefully. She seemed unhurt and healthy, but was thin and had deep circles under her eyes.

He started to speak; she gestured warningly with eyes and head. Hugh then looked at the Lord Protector-and noticed only then that Joe was lounging near him and that Grace and Duke were playing some card game over in a corner, both of them chewing gum and ostentatiously not seeing that Hugh was there. He looked back at Their Charity.

Hugh decided that Ponse had been ill. Despite the fact that Hugh felt comfortably warm in skin, Ponse was wearing a full robe with a shawl over his lap and he looked, for once, almost his reputed age.

But when he spoke, his voice was still resonant. "You may go, Captain. We excuse you."

The escort withdrew. Their Charity looked Hugh over soberly. At last he said, "Well, boy, you certainly made a mess of things, didn't you?" He looked down and played with something in his lap, caught it and pulled it back to the middle of the shawl. Hugh saw that it was a white mouse. He felt sudden sympathy for the mouse. It didn't seem to like where it was, but if it did manage to escape, the cats would get it. Maggie was watching with deep interest.

Hugh did not answer, the remark seemed rhetorical. But it had startled him very much. Ponse covered the mouse with his hand, looked up. "Well? Say something!"

"You speak English!"

"Don't look so silly. I'm a scholar, Hugh. Do you think I would let myself be surrounded by people who speak a language I don't understand? I speak it, and I read it, silly as the spelling is. I've been tutored daily by skilled scholars-plus conversation practice with a living dictionary." He jerked his head toward Grace. "Couldn't you guess that I would want to read those books of mine? Not be dependent on your hitor-miss translations? I've read the Just So Stories twice—charming !—and I've started on the Odyssey."

He shifted back to Language. "But we are not here to discuss literature." Their Charity barely gestured. Four slut servants came running in with a table, placed it in front of the big man, placed things on it. Hugh recognized them-a homemade knife, a wig, two pots for deodorant cream, a bundle, an empty Happiness bottle, a little white sphere now dull, a pair of sandals, two robes, one long, one short, mussed and dirty, and a surprisingly high stack of paper, creased and much written on.

Ponse put the white mouse on the table, stirred the display, said broodingly, "I'm no fool, Hugh. I've owned servants all my life. I had you figured out before you had yourself figured out. Doesn't do to let a man like you mingle with loyal servants, he corrupts them. Gives them ideas they are better off without. I had planned to let you escape as soon as I was through with you, you could have afforded to wait."

"Do you expect me to believe that?~'

"Doesn't matter whether you do or don't. I could not afford to keep you very long-one bad apple rots the rest, as my uncle was fond of saying. Nor could I put you up for adoption and let some unwitting buyer pay good money for a servant who would then corrupt others elsewhere in my realm. No, you had to escape."

"Even if that is so, I would never have escaped without Barbara and my boys."

"I said I am not a fool. Kindly remember it. Of course you would not. I was going to use Barba-and these darling brats-to force you to escape. At my selected time. Now you've ruined it. I must make an example of you. For the benefit of the other servants." He frowned and picked up the crude knife. "Poor balance. Hugh, did you really expect to make it with this pitiful tackle? Not even shoes for that child by you. If only you had waited, you would have been given opportunity to steal what you needed."

"Ponse, you are playing with me the way you've been playing with that mouse. You weren't planning to let us escape. Not really escape at least. I would have wound up on your table."

"Please!" The old man made a grimace of distaste. "Hugh, I'm not well, someone has again been trying to poison me—my nephew, I suppose-and this time almost succeeded. So don't talk nasty, it upsets my stomach." He looked Hugh up and down. "Tough. Inedible. An old stud savage is merely garbage. Much too gamy. Besides that, a gentleman doesn't eat members of his own family, no matter what. So let's not talk in bad taste. There's no cause for you to bristle so. I'm not angry with you, just very, very provoked." He glanced at the twins, said, "Hughie, stop pulling Maggie's tail." His voice was neither loud nor sharp; the baby stopped at once. "Admittedly those two would make tasty appetizers were they not of my household. But even had they not been, I would have planned better things for them; they are so cute and so much alike. Did plan better things at first. Until it became clear that they were necessary to forcing you to run."

Ponse sighed. "You still do not believe a word I'm saying. Hugh, you don't understand the system. Well, servants never do. Did you ever grow apples?"

"A good eating apple, firm and sweetly tart, is never a product of nature; it is the result of long development from something small and sour and hard and hardly fit for animal fodder. Then it has to be scientifically propagated and protected. On the other hand, too highly developed plants-or animals-can go bad, lose their firmness, their flavor, get mushy and soft and worthless. It's a two-horned problem. We have it constantly with servants. You must weed out the troublemakers, not let them breed. On the other hand these very troublemakers, the worst of them, are invaluable breeding stock that must not be lost. So we do both. The run-of-thecrop bad ones we temper and keep. The very worst ones—such as you-we encourage to run. If you live-and some of you do-we can rescue you, or your strong get, at a later time and add you in, judiciously, to a breeding line that has become so soft and docile and stupid that it is no longer worth its keep. Our poor friend Memtok was a result of such pepping up of hrppg~I fln~ niiartc~r *ν*,ap h~' w~z_he never knew it of course-and a good stud that added strength to a line. But far too dangerous and ambitious to be kept too long at stud; he had to be made to see the advantages of being tempered. Most of my upper servants have a recent strain of savage in them; some of them are Memtok's sons. My engineer, for example. No, Hugh, you would not have wound up on anybody's table. Nor tempered. I would like to have kept you as a pet, you're diverting-and a fair bridge hand in the bargain. But I could not let you stay in contact with loyal servants, even as insulated as you were by your fancy title. Presently you would have been put in touch with the underground."

Hugh opened his mouth and closed it.

"Surprised, eh? But there is always an underground wherever there is a ruling class and a serving class. Which is to say, always. If there were not one, it would be necessary to invent one. However, since there is one, we keep track of it, subsidize it-and use it. In the upper servants' mess its contact is the veterinary-trusted by everyone and quite shamelessly free of sentiment; I don't like him. If you had confided in him, you would have been guided, advised, and helped. I would have used you to cover about a hundred sluts, then sent you on your way. Don't look startled, even Their Mercy uses studs who have to stoop a bit to get through the studs' door when a freshening of the line is indicated-and there was always the danger that you might get yourself, and those dear boys, killed, and thereby have wasted a fine potential."

Their Charity picked up the pile of Kitten-delivered mail. "These things—All my Chief Domestic was expected to do was to thwart you from doing something silly; he never knew the veterinary's second function. Why, I even had to crack down on Memtok a bit to turn his copies of these over to me—when anyone could have guessed that a stud like you would find a way to get in touch with his slut. I deduced that it would happen that time that you stood up to me about her, our first bridge game. Remember? Perhaps you don't. But I sent for Memtok, and sure enough, you had already started. Although he was reluctant to admit it. since he had not reported it."

Hugh was hardly listening. He was turning over in his mind the glaring fact that he was hearing things told only to dead men. None of the four was going to leave this room alive. No, perhaps the twins would. Yes, Ponse wanted the breeding line. But he-and Barbara-would never have a chance to talk.

But Ponse was saying, "You still have a chance to correct your mistakes. And you made lots of them. One note you wrote my scholars assured me was gibberish, not English at all. So I knew it was a secret message whether we could read it or not. Thereafter all your notes were subjected to careful analysis. So of course we found the key-rather naïve to be considered a code, rather clever considering the handicaps. And useful to me. But confound it, Hugh, it cost me! Memtok was naïve about savages, he did not realize that they fight when cornered."

Ponse scowled. "Damn you, Hugh, your recklessness cost me a valuable property. I wouldn't have taken ten thousand bullocks for

Memtok's adoption-no, not twenty. And now your life is forfeit. The charge of attempting to run we could overlook, a tingling in front of the other servants would cover that. Destroying your master's property we could cover up if it had been done secretly. Did you know that that bedwarmer I lent you knew most of what you were up to? Saw much of it? Sluts gossip."

"She told you?"

"No, damn it, it didn't tell the half; we had to tingle it out of it. Then it turned out it knew so much that we could not afford to have it talking and the other servants putting one and one together. So it had to go."

"You had her killed." Hugh felt a surge of disgust and said it, knowing that nothing he said could matter now.

"What's it to you? Its life was forfeit, treason to its master. However, I'm not a spiteful man, the little critter has no moral sense and didn't know what it was doing-you must have hypnotized it, Hugh-and I am a frugal man; I don't waste property. It's adopted so far away that it'll have trouble under

Hugh sighed. "I'm relieved."

"Choice about the slut, eh? Was it that good?"

"She was innocent. I didn't want her hurt."

"As may be. Now, Hugh, you can repair all this costly mess. Pay me back the damage and do yourself a good turn at the same time."

"How?"

"Quite simple. You've cost me my key executive servant, I've no one of his caliber to replace him. So you take his place. No scandal, no fuss, no upset belowstairs-every servant who saw any piece of it is already adopted away. And you can tell any story you like about what happened to Memtok. Or even claim you don't know. Barba, can you refrain from gossip?"

"I certainly can where Hugh's welfare is concerned!"

"That's a good child. I would hate to have you muted, it would hamper our bridge game. Although Hugh will be rather busy for bridge. Hugh, here's the honey that trapped the bear. You take over as Chief Domestic, do the kind of a job I know you can do once you learn the details-and Barba and the twins live with you. What you always wanted. Well, that's the choice. Be my boss servant and have them with you. Or your lives are forfeit. What do you say?"

Hugh Farnham was so dazed that he was gulping trying to accept, when Their Charity added, "Just one thing. I won't be able to let you have them with you right away."

"No?"

"No. I still want to breed a few from you, before you are tempered. Needn't be long, if you are as spry as you look."

Barbara said, "No!"

But Hugh Farnham was making a terrible decision. "Wait, Barbara. Ponse. What about the boys? Will they be tempered, too?"

"Oh." Ponse thought about it. "You drive a hard bargain, Hugh. Suppose we say that they will not be. Let's say that I might use them at stud a bit-but not take their thumbs; it would be a dead giveaway for so private a purpose with studs as tall as they are going to be. Then at fourteen or fifteen I let them escape. Does that suit you?" The old man stopped to cough; a spasm racked him. "Damn it, you're tiring me."

Hugh pondered it. "Ponse, you may not be alive fourteen or fifteen years from now."

"True. But it is very impolite for you to say so."

"Can you bind this bargain for your heir? Mrika?"

Ponse rubbed his hair and grinned. "You're a sharp one, Hugh. What a Chief Domestic you will make! Of course I can't-which is why I want some get from you, without waiting for the boys to mature. But there is always a choice, just as you have a choice now. I can see to it that you are in my heavenly escort. All of you, the boys, too. Or I can have you all kept alive and you can work out a new bargain, if any. 'Le Roi est mort, vive le Roi'—which was the ancients' way of saying that when the protector leaves there is always a new protector. Just tell me, I'll do it either way."

Hugh was thinking over the grim choices when Barbara again spoke up. "Their Charity—"

"Yes, child?"

"You had better have my tongue cut out. Right now, before you let me leave this room. Because I will have nothing to do with this wicked scheme. And I will not keep quiet. No!"

"Barba, Barba, that's not being a good girl."

"I am not a girl. I am a woman and a wife and a mother! I will never call you 'uncle' again-you are vile! I will not play bridge with you ever again, with or without my tongue. We are helpless...but I will give you nothing. What is this you offer? You want my husband to agree to this evil thing in exchange for a few scant years of life for me and for our sons-for as long as God lets that evilness you call your body continue to breathe. Then what? You cheat him even then. We die. Or we are left to the mercy of your nephew who is even worse than you are. Oh, I know! The bedwarmers all hate him, they weep when they are called to serve him-and weep even harder when they come back. But I would not let Hugh make this choice even if you could promise us all a lifetime of luxury. No! I won't. I won't! You try to do it I'll kill my babies! Then myself. Then Hugh will kill himself I know! No matter what you have done to him!" She stopped, spat as far as she could in the old man's direction, then burst into tears.

Their Charity said, "Hughie, I told you to stop teasing that cat. It will scratch you." Slowly he stood up, said, "Reason with them, Joe," and left the room.

Joe sighed and came over close to them. "Barbara," he said gently, "take hold of yourself. You aren't acting in Hugh's interests even if you think you are. You should advise him to take it. After all, a man Hugh's age doesn't have much to lose by it."

Barbara looked at him as if she had never seen him before in her life. Then she spat again. Joe was close, she got him in the face.

He jumped and raised his hand. Hugh said sharply, "Joe, if you hit her and I ever get loose, I'll break your arm!"

"I wasn't going to hit her," Joe said slowly. "I was just going to wipe my face. I wouldn't hit Barbara, Hugh; I admire her. I just don't think she has good sense." He took a kerchief to the smear of saliva. "I gu~ss there is no use arguing."

"None, Joe. I'm sorry I spit on you."

"That's all right, Barbara. You're upset...and you never treated me as a nigger, ever. Well, Hugh?"

"Barbara has decided it. And she always means what she says. I can't say that I'm sorry. Staying alive here just isn't worth it, for any of us. Even if I was not to be tempered."

"I hate to hear you say that, Hugh. All in all, you and I always got along pretty well. Well, if that's your last word, I might as well go tell Their Charity. Is it?"

"Yes."

"Yes, Joe."

"Well—Goodbye, Barbara. Goodbye, Hugh." He left.

The Lord Protector came back in alone, moving with the slow caution of a man old and sick. "So that's what you've decided," he said, sitting down and gathering the shawl around him I-fr reached mit fnr the mouise still crnuichinc, on the table top; servants came in and cleared off the table. He went on, "Can't say that I'm surprised—I've played bridge with both of you. Well, now we take up the other choice...Your lives are forfeit and I can't let you stay here, other than on those terms. So now we send you back."

"Back where, Ponse?"

"Why, back to your own time, of course. If you make it. Perhaps you will." He stroked the mouse. "This little fellow made it. Two weeks at least. And it didn't hurt him. Though one can only guess what two thousand years would do."

The servants were back and were piling on the table a man's watch, a Canadian dime, a pair of much worn mountain boots, a hunting knife, some badly made moccasins, a pair 2 of Levis, some ragged denim shorts with a very large waistline, a .45 automatic pistol with belt, two ragged and faded shirts, one somewhat altered, a part of a paper of matches, and a small notebook and pencil.

Ponse looked at the collection. "Was there anything else?" He slid the loaded clip from the pistol, held it in his hand. "If not, get dressed."

The invisible field let them loose.

Chapter 21

"I don't see what there is to be surprised about," Ponse told them. "Hugh, you will remember that I told my scientists that I wanted to know how you got here. No miracles. I told them rather firmly. They understood that I would be most unhappy-and vexed-if the Protectorate's scientists could not solve it when they had so many hints, so much data. So they did. Probably. At least they were able to move this little fellow. He arrived today, which is why I sent for you. Now we will find out if it works backwards in time as well as forwards-and if the big apparatus works as well as the bench model. I understand it is not so much the amount of power-no atom-kernel bombs necessary—as the precise application of power. But we'll soon know." Hugh asked, "How will you know? We will know-if it works. But how will you know?"

"Oh, that. My scientists are clever, when they have incentive. One of them will explain it."

The scientists were called in, two Chosen and five servants. There was no introduction; Hugh found himself treated as impersonally as the little white mouse who still tried to meet his death on the floor. Hugh was required to take off his shirt and two servant-scientists taped a small package to Hugh's right shoulder. "What's that?" It seemed surprisingly heavy for its size.

The servants did not answer; the leading Chosen said, "You will be told. Come here. See this."

"This" turned out to be Hugh's former property, a U. S. Geodetic Survey map of James County. "Do you understand this? Or must we explain it?"

"I understand it." Hugh used the equals mode, the Chosen ignored it while continuing to speak in protocol mode, falling.

"Then you know that here is where you arrived."

Hugh agreed, as the man's finger covered the spot where Hugh's home had once stood. The Chosen nodded thoughtfully and added, "Do you understand the meaning of these marks?" He pointed to a tiny x-mark and very small figures beside it.

"Certainly. We call that a 'bench mark.' Exact location and altitude. It's a reference point for all the rest of the map."

"Excellent." The Chosen pointed to a similar mark at the summit of Mount James as shown by the map. "Now, tell us, if you know-but don't lie about it; it will not advantage you-how much error there would be, horizontally and vertically, between these two reference points."

Hugh thought about it, held up his thumb and forefinger about an inch apart. The Chosen blinked. "It would not have been that accurate in those primitive times. We assume that you are lying. Try again. Or admit that you don't know."

"And I suggest that you don't know what you are talking about. It would be at least that accurate." Hugh thought of telling him that he had bossed surveying parties in the Seabees and had done his own surveying when he was getting started as a contractor-and that while he did not know how accurate a geodetic survey was, he did know that enormously more accurate methods had been used in setting those bench marks than were ever used in the ordinary survey.

He decided that explanation would be wasted.

The Chosen looked at him, then glanced at Their Charity. The old man had been listening but his face showed nothing. "Very well. We will assume that the marks are accurate, each to the other. Which is fortunate, as this one is missing"—he pointed to the first one, near where Hugh's home had been --"whereas this one"—he indicated the summit of Mount James—"is still in place, in solid rock. Now search your memory and do not lie again, as it will matter to you...and it will matter to Their Charity, as a silly lie on your part could waste much effort and Their Charity would be much displeased, we are certain. Where, quite near this reference mark and the same height-certainly no higher!—is-was, I mean, in those primitive times-a flat, level place?"

Hugh thought about it. He knew exactly where that bench mark had been: in the cornerstone of the Southport Savings Bank. It was, or had been, a small brass plate let into the stone beside the larger dedication plate, about eighteen inches above the sidewalk at the northeast corner of the building. It had been placed there shortly after the Southport shopping center had been built. Hugh had often glanced at it in passing; it had always given him a warm feeling of stability to note a bench mark.

The bank had sided on a parking lot shared by the bank, a Safeway Supermarket, and a couple of other shops. "It is level and flat of this way for a distance of—" (Hugh estimated the width of that ancient parking lot in feet, placed the figure in modern units.) "Or a little farther. That's just an estimate, not wholly accurate."

"But it is flat and level? And no higher than this point?"

"A little lower and sloping away. For drainage."

"Very well. Now place your attention on this configuration." Again it was Hugh's property, a Conoco map of the state. "That object fastened to your back you may think of as a clock. We will not explain it, you could not understand. Suffice to say that radiation decay of a metal inside it measures time. That is why it is heavy; it is cased in lead to protect it. You will take it to here." The Chosen pointed to a town on the map; Hugh noted that it was the home of the state university.

At a gesture the Chosen was handed a slip of paper. To Hugh he said, "Can you read this? Or must it be explained?"

"It says 'University State Bank,'" Hugh told him. "I seem to recall that there was an institution of that name in that town. I'm not sure, I don't recall doing business with it."

"There was," the Chosen assured him, "and its ruins were recently uncovered. You will go to it. There was, and still is, a strong room, a vault, in its lowest part. You will place this clock in that vault. Do you understand?"

"I understand."

"By Their Charity's wish, that vault has not yet been opened. After you have gone, it will be opened. The clock will be found and we will read it. Do you understand why this is crucial to the experiment? It will not only tell us that you made the time jump safely but also exactly how long the span was-and from this our instruments will be calibrated." The Chosen looked very fierce. "Do this exactly. Or you will be severely punished."

Ponse caught Hugh's eye at this point. The old man was not laughing but his eyes twinkled. "Do it, Hugh," he said quietly. "That's a good fellow."

Hugh said to the Chosen scientist. "I will do it. I underc~t~ind "

The Chosen said, "May it please Their Charity, this one is ready to weigh them now, and then leave for the site."

"We've changed our mind," Ponse announced. "We will see this." He added, "Nerve in good shape, Hugh?"

"Quite."

"All of you who made the first jump were given this opportunity, did I tell you? Joe turned it down flatly." The old man glanced over his shoulder. "Grace! Changed your mind, little one?"

Grace looked up. "Ponsie!" she said reproachfully. "You know I would never leave you."

"Duke?"

The tempered servant did not even look up. He simply shook his head.

Ponse said to the scientist, "Let's hurry and get them weighed. We intend to sleep at home tonight."

The weighing was done elsewhere in the Palace. Just before the four were placed on the weighing area the Lord Protector held up the cartridge clip he had removed from the pistol Hugh now wore. "Hugh?

Will you undertake not to be foolish with this? Or should I have the pellets separated from the explosives?"

"Uh, I'll behave."

"Ah, but how will you behave? If you were impetuous, you might succeed in killing me. But consider what would happen to Barba and our little brats."

(I had thought of that, you old scoundrel. I'll still do what seems best to me.) "Ponse, why don't you let Barbara carry the clip in a pocket? That would keep me from loading and firing very fast even if I did get ideas."

"A good plan. Here, Barba."

The boss scientist seemed unhappy at the total weight of his experimental package. "May it please Their Charity, this one finds that body weights of both adults must have lessened markedly since the time of the figures on which the calculations were made."

"Oh, nothing, nothing, may it please Their Charity. Just a slight delay. The mass must be exact." Hurriedly the Chosen started piling metal discs on the platform.

It gave Hugh an idea. "Ponse, you really expect this to work?"

"If I knew the answer, it would not be necessary to try it. I hope it will work."

"If it does work, we'll need money right away. Especially if I'm to travel half across the state to bury this clock device."

"Reasonable. You used gold, did you not? Or was it silver? I see your idea." The old man gestured. "Stop that weighing."

"We used both, sometimes, but it had to have our own protectorate's stamp. Ponse, there were quite a number of American silver dollars in my house when you took it away from me. Are they available?"

They were available and in the Palace and the old man had no objection to using them to make up the missing weight. The boss scientist was fretted over the delay-he explained to his lord that the adjustments were set for an exact time span as well as exact mass in order to place these specimens at a time before the East-West War had started, plus a margin for error-but that delay was reducing the margin and might require recalculation and long and painful recalibration. Hugh did not follow the technicalities.

Nor did Ponse. He cut the scientist off abruptly. "Then recalculate if necessary. All."

It took more than an hour to locate the man who could locate the man who knew where these particular items of the savage artifacts were filed, then dig them out and fetch them. Ponse sat brooding and playing with his mouse. Barbara nursed the twins, then changed them with the help of slut servants; Hugh petitioned plumbing calls for each of them-granted, under guard-and all this changed all the body weights and everything was started over again.

The silver dollars were still in, or had been replaced in, the $100 rolls in which Hugh had hoarded them. They made quite a stack, and (on the happy assumption that the time jump would work) Hugh was pleased that he had lost while imprisoned the considerable paunch he had regrown during his easy days as "Chief Researcher." However, less than three hundred silver dollars were used in bringing them up to calculated weight-plus a metal slug and some snips of foil.

"If it suits the Lord Protector, this one believes that the specimens should be placed in the container without delay."

"Then do it! Don't waste our time."

The container was floated in. It was a box, metallic, plain, empty, and with no furnishings of any sort, barely high enough for Hugh to stand upright in, barely large enough for all of them. Hugh got into it, helped Barbara in, the babies were handed to them and Hughie started to squawl and set off his brother.

Ponse looked annoyed. "My sluts have been spoiling those brats. Hugh, I've decided not to watch it, I'm weary. Goodbye to both of you-and good riddance; neither of you would ever have made a loyal servant. But I'll miss our bridge games. Barba, you must bring those brats back into line. But don't break their spunk doing it; they're fine boys." He turned and left abruptly.

The hatch was closed down on them and fastened; they were alone. Hugh at once took advantage of it to kiss his wife, somewhat hampered by each of them holding a baby.

"I don't care what happens now," Barbara said as soon as her mouth was free. "That's what I've been longing for. Oh, dear, Joey is wet again. How about Hughie?"

"It's unanimous, Hughie also. But I thought you just said you didn't care what happens now?"

"Well, I don't, really. But try explaining that to a baby. I would gladly swap one of those rolls of dollars for ten new diapers."

"My dear, do you realize that the human race lasted at least a million years with no diapers at all? Whereas we may not last another hour. So let's not spend it talking about diapers."

"I simply meant—Wups! They're moving us."

"Sit flat on the floor and brace your feet against the wall. Before we have scrambled babies. You were saying?"

"I simply meant, my darling, that I do not care about diapers, I don't care about anything-now that I have you with me again. But if we aren't going to die-if this thing works—I'm going to have to be practical. And do you know of anything more practical than diapers?"

"Yes. Kissing. Making love."

"Well, yes. But they lead to diapers. Darling, could you hold Hughie in your other arm and put this one around me? Uh, they're moving us again. Hugh, is this thing going to work? Or are we going to be very suddenly dead? Somehow I can imagine time travel frontwards-and anyhow we did it. But I can't imagine it backwards. I mean, the past has already happened. That's it. Isn't it?"

"Well, yes. But you haven't stated it correctly. The way I see it, there are no paradoxes in time travel, there can't be. If we are going to make this time jump, then we already did; that's what happened. And if it doesn't work, then it's because it didn't happen."

"But it hasn't happened yet. Therefore, you are saying that it didn't happen, so it can't happen. That's what I said."

"No, no! We don't know whether it has already happened or not. If it did, it will. If it didn't, it won't."

"Darling, you're confusing me."

"Don't worry about it. 'The moving finger writes, and having writ, moves on'—and only then do you find out if it goosed you in passing. I think we've straightened out on a course; we're steady now, just the faintest vibration. If they are taking us where I think they are, James County I mean, then we've got at least an hour before we need worry about anything." He tightened his arm around her. "So let's be happy that hour."

She snuggled in. "That's what I was saying. Beloved, we've come through so many narrow squeaks together that I'm not ever going to worry again. If it's an hour, I'll be happy every second of it. If it's forty years, I'll be happy every second of that, too. If it's together. And if it's not together, I don't want it. But either way, we go on. To the end of our day."

"Yes. 'To the end of our day.'"

She sighed happily, rearranged a wet and sleeping infant, snuggled into his shoulder and murmured, "This feels like our very first day. In the tank room of the shelter, I mean. We were just as crowded and even warmer-and I was never so happy. And we didn't know whether we were going to live through that day, either. That night."

"We didn't expect to. Else we wouldn't have twin boys now."

"So I'm glad we thought we were going to die. Hugh? It isn't any more crowded than it was that night in the tank room."

"Woman, you are an insatiable lecher. You'll shock the boys."

"I don't think once in more than a year is being insatiable. And the boys are too young to be shocked. Aw, come on! You said yourself we might be dead in an hour."

"Yes, we might and you have a point and I'm theoretically in favor of the idea. But the boys do inhibit me and there actually isn't quite as much room even if we weren't cluttered up with eight or nine wet babies and I don't see how it's mechanically possible. The act would be a tesseract, at least."

"Well—I guess you're right. I don't see any way either; we would probably squash them. But it does seem a shame, if we're going to die."

"I refuse to assume that we're going to die. I won't ever make that assumption again. All my figuring is based on the assumption that we are going to live. We go on. No matter what happens-we go on."

"All right. Seven no trump."

"That's better."

"Doubled and redoubled. Hugh? Just as soon as the boys are big enough to hold thirteen cards in their pudgy little hands, we're going to start teaching them contract. Then we'll have a family four of our own."

"Suits. And if they can't learn to play, we'll temper them and try again."

"I don't want ever to hear that word again!"

"Sorry."

"And I don't want to hear that language again, either, dear. The boys should grow up hearing English."

"Sorry again. You're right. But I may slip; I've gotten in the habit of thinking in it-all that translating. So allow me a few slips."

"I'll always allow you a few slips. Speaking of slips—Did you? With Kitten?"

"No."

"Why not? I wouldn't have minded. Well, not much anyhow. She was sweet. She would babysit for me any time I would let her. She loved our boys.".

"Barbara, I don't want to think about Kitten. It makes me sad. I just hope whoever has her now is good to her. She didn't have any defenses at all-like a kitten before it has its eyes open. Helpless. Kitten means to me everything that is utterly damnable about slavery."

She squeezed his hand. "I hope they're good to her, too. But, dear, don't hurt yourself inside about it; there is nothing we can do for her."

"I know it and that's why I don't want to talk about her. But I do miss her. As a daughter. She was a daughter to me. 'Bedwarmer' never entered into it."

"I didn't doubt it, dear. But—Well, look here, my good man, maybe this place is too cramped. All right, we're going to live through it; we go on. Then don't let me catch you treating me like a daughter! I intend to keep your bed very warm indeed!"

"Mmm—You want to remember that I'm an old man."

"'Old man' my calloused feet! We'll be the same age for all practical purposes-namely something over four thousand years, counting once each way. And my purposes are very practical, understand me?"

"I understand you. I suppose 'four thousand years' is one way to look at it. Though perhaps not for 'practical purposes.'"

"You won't get out of it that easily," she said darkly. "I won't stand for it."

"Woman, you've got a one-track mind. All right, I'll do my best. I'll rest all the time and let you do all the work. Hey, I think we're there."

The box was moved several times, then remained stationary a few minutes, then surged straight up with sickening suddenness, stopped with another stomach twister, seemed to hunt a little, and then was perfectly steady.

"You in the experimental chamber," a voice said out of nowhere. "You are warned to expect a short fall. You are advised to stand up, each of you hold one brat, and be ready to fall. Do you understand?"

"Yes," Hugh answered while helping Barbara to her feet. "How much of a fall?"

There was no answer. Hugh said, "Hon, I don't know what they mean. A 'short fall' could be one foot, or fifty. Protect Joey with your arms and better bend your knees a little. If it's quite a fall, then go ahead and go down; don't try to take it stiff-legged. These jokers don't give a hoot what happens to us."

"Bent knees. Protect Joey. All right."

They fell.

Chapter 22

Hugh never did know how far they fell but he decided later that it could not have been more than four feet. One instant they were standing in a well-lighted, cramped box; the next instant they were outdoors, in the dark of night, and falling.

His boots hit, he went down, landing on the right side his rump and on two very hard rolls of silver dollars in hip pocket-rolled with the fall and protected the baby in arms.

Then he rolled to a sitting position. Barbara was near h on her side. She was not moving. "Barbara! Are you hui

"No," she said breathlessly. "I don't think so. Just knoc] the breath out of me."

"Is Joey all right? Hughie is, but I think he's more ti wet now."

"Joey is all right." Joey confirmed this by starting to y his brother joined him. "He had the breath knocked out of h too, I think. Shut up, Joey; Mother is busy. Hugh, where we?"

He looked around. "We are," he announced, "in a park lot in a shopping center about four blocks from where I I And apparently somewhere close to our own proper time. least that's a 'sixty-one Ford we almost landed on." The was empty save for this one car. It occurred to him that tl arrival might have been something else than a bump-an plosion, perhaps?—if they had been six feet to the right. he dropped the thought; enough narrow squeaks and one m didn't matter.

He stood up and helped Barbara up. She winced and in dim light that came from inside the bank he noticed "Trouble?"

"I turned my ankle when I hit."

"Can you walk?"

"I can walk."

"I'll carry both kids. It's not far."

"Hugh, where are we going?"

"Why, home, of course." He looked in the window of bank, tried to spot a calendar. He saw one but the stand light was not shining on it; he couldn't read it. "I wish I ki the date. Honey, I hate to admit it but it does look as if t travel has some paradoxes-and I think we are about to give somebody a terrible shock."

"Who?"

"Me, maybe. In my earlier incarnation. Maybe I ought to phone him first, not shock him. No, he-I, I mean-wouldn't believe it. Sure you can walk?"

"Certainly."

"All right. Hold our monsters for a moment and let me set my watch." He glanced back into the bank where a clock was visible even though the calendar was shadowed. "Okay. Gimine. And holler if you need to stop."

They set off, Barbara limping but keeping up. He discouraged talk, because he did not have his thoughts in order. To see a town that he had thought of as destroyed so quiet and peaceful on a warm summery night shook him more than he dared admit. He carefully avoided any speculation as to what he might find at his home-except one fleeting thought that if it turned out that his shelter was not yet built, then it never would be and he would try his hand at changing history.

He adjourned that thought, too, and concentrated on being glad that Barbara was a woman who never chattered when her man wanted her to be quiet.

Presently they turned into his driveway, Barbara limping and Hugh beginning to develop cramps in both arms from being unable to shift his double load. There were two cars parked tandem and facing out in the drive; he stopped at the first one, opened the door and said, "Slide in, sit down, and take the load off that ankle. I'll leave the boys with you and reconnoiter." The house was brightly lighted.

"Hugh! Don't do it!"

"Why not?"

"This is my car. This is the night!"

He stared at her for a long moment. Then he said quietly, "I'm still going to reconnoiter. You sit here."

He was back in less than two minutes, jerked open the car door, collapsed onto the seat, let out a gasping sob.

Barbara said, "Darling! Darling!"

"Oh, my God!" He choked and caught his breath. "She's in there! Grace. And so am I." He dropped his face to the steering wheel and sobbed.

"Hugh."

"What? Oh, my God!"

"Stop it, Hugh. I started the engine while you were gone. The keys were in the ignition, I had left them there so that Duke could move it and get out. So let's go. Can you drive?"

He sobered down. "I can drive." He took ten seconds to check the instrument board, adjusted the seat backwards, put it in gear, turned right out of his drive. Four minutes later he turned west on the highway into the mountains, being careful to observe the stop sign; it had occurred to him that this was no night to get stopped and pulled off the road for driving without a license.

As he made the turn a clock inthe distance bonged the half hour; he glanced at his wrist watch, noted a one-minute difference. "Switch on the radio, hon."

"Hugh, I'm sorry. The durn thing quit and I couldn't afford to have it repaired."

"Oh. No matter. The news doesn't matter, I mean; time is all that matters. I'm trying to estimate how far we can go in an hour. An hour and some minutes. Do you recall what time the first missile hit us?"

"I think you told me it was eleven-forty-seven."

"That's my recollection, too. I'm certain of it, I just wanted it confirmed. But it all checks. You made crêpes Suzettes, you and Karen fetched them in just in time to catch the end of the ten o'clock news. I ate pretty quickly-they were wonderful—this booney old character rang the doorbell. Me, I mean. And I answered it. Call it ten-twenty or a little after. So we just heard half-past chime and my watch agrees. We've got about seventy-five minutes to get as far from ground zero as possible."

Barbara made no comment. Moments later they passed the city limits; Hugh put the speed up from a careful fortyfive to an exact sixtyfive.

About ten minutes later she said, "Dear? I'm sorry. About Karen, I mean. Not about anything else."

"I'm not sorry about anything. No, not about Karen. Hearing her merry laugh again shook me up, *yes. But now I treasure it. Barbara, for the first time in my life I have a conviction of immortality. Karen is alive right now, back there behind us-and yet we saw her die. So somehow, in some timeless sense, Karen is alive forever, somewhere. Don't ask me to explain it, but that's how it is."*

"I've always known it, Hugh. But I didn't dare say so."

"Dare say anything, damn it! I told you that long ago. So I no longer feel sorrow over Karen. I can't feel any honest sorrow over Grace. Some people make a career of trying to get their own way; she's one of them. As for Duke, I hate to think about him. I had great hopes for my son. My first son. But I never had control over his rearing and I certainly had no control over what became of him. And, as Joe pointed out to me, Duke's not too badly off-if welfare and security and happiness are sufficient criteria." Hugh shrugged without taking his hands from the wheel. "So I shall forget him. As of this instant I shall endeavor never to think about Duke again."

Presently he spoke again. "Hon, can you, in spite of being smothered in babies, get at that clock thing on my shoulder and get it off?"

"I'm sure I can."

"Then do it and chuck it into the ditch. I'd rather throw it away inside the circle of total destruction-if we're still in it." He scowled. "I don't want those people ever to have time travel. Especially Ponse."

She worked silently for some moments, awkwardly with one hand. She got the radiation clock loose and threw it out into the darkness before she spoke. "Hugh, I don't think Ponse intended us to accept that offer. I think he made the terms such that he knew that I would refuse, even if you were indlined to sacrifice yourself."

"Of course! He picked us as guinea pigs-his white mice --.fl6 and chivvied us into 'volunteering.' Barbara, I can stand-and somewhat understand but not forgive-a straight-out son of a bitch. But Ponse was, for my money, much worse. He had good intentions. He could always prove why the hotfoot he was giving you was for your own good. I despise him."

Barbara said stubbornly, "Hugh, how many white men of today could be trusted with the power Ponse had and use it with as much gentleness as he did use it?"

"Huh? None. Not even yours truly. And that was a low blow about 'white men.' Color doesn't enter into it."

"I withdraw the word 'white.' And I'm sure that you are one who could be trusted with it. But I don't know any others."

"Not even me. Nobody can be trusted with it. The one time I had it I handled it as badly as Ponse. I mean that time I caused a gun to be raised at Duke. I should simply have used karate and knocked him out or even killed him. But not humiliated him. Nobody, Barbara. But Ponse was especially bad. Take Memtok. I'm really sorry that I happened to kill Memtok. He was a man who behaved better than his nature, not worse. Memtok had a streak of meanness, sadism, wide as his back. But he held it closely in check so that he could do his job better. But Ponse—~ Barbie hon, this is probably a subject on which you and I will never agree. You feel a bit soft toward him because he was sweet to you most of the time and always sweet to our boys. But I despised him because of that-because he was always showing 'king's mercy'—being less cruel than he could have been, but always reminding his victim of how cruel he could be if he were not such a sweet old guy and such a prince of a fellow. I despised him for it. I despised him long before I found out about his having young girls butchered and served for his dinner."

"What?"

"Didn't you know? Oh, surely, you must have known. Ponse and I discussed it in our very last talk. Weren't you listening?"

"I thought that was just heavy sarcasm, on the part of each of you."

"Nope, Ponse is a cannibal. Maybe not a cannibal, since he doesn't consider us human. But he does eat us-they all do. Ponse always ate girls. About one a day for his family table, I gathered. Girls about the age and plumpness of Kitten."

"But—But—Hugh, I ate the same thing he did, lots of times. I must have—I must have—"

"Sure you did. So did I. But not after I knew. Nor did you."

"Honey...you better stop the car. I'm going to be sick."

"Throw up on the twins if you must. This car doesn't stop for anything."

She managed to get the window open, got it mostly outside. Presently he said gently, "Feeling better?"

"Some."

"Sweetheart, don't hold what he ate too much against Ponse. He honestly did not know it was wrong-and no doubt cows would feel the same way about us, if they knew. But these other things he knew were wrong. Because he tried to justify them. He rationalized slavery, he rationalized tyranny, he rationalized cruelty, and always wanted the victim to agree and thank him. The headsman expected to be tipped."

"I don't want to talk about him, dear. I feel all mixed up inside."

"Sorry. I'm half drunk without a drop and babbling. I'll shut up. Watch the traffic behind, I'm going to make a left turn shortly."

She did so and after they had turned off on a state road, narrower and not as well graded, he said, "I've figured out where we're going. At first I was just putting distance behind us. Now we've got a destination. Maybe a safe one."

"Where, Hugh?"

"A shutdown mine. I had a piece of it, lost some money in it. Now maybe it pays off. The Havely Lode. Nice big tunnels and we can reach the access road from this road. If I can find it in the dark. If we can get there before the trouble starts." He concentrated on herding the car, changing down on the grades both climbing and on the occasional downhill piece, braking hard before going into a curve, then cornering hard with plenty of throttle in the curves.

After a particularly vicious turn with Barbara on the hairraising outside, she said, "Look, dear, I know you're doing it to save us. But we can be just as dead from a car crash as from an H-bomb."

He grinned without slowing. "I used to drive jeeps in the dark with no headlights. Barbie, I won't kill us. Few people realize how much a car will do and I'm delighted that this has a manual gear shift. You need it in the mountains. I would not dare drive this way with an automatic shift."

She shut up and prayed, silently.

The road dropped into a high alp where it met another road; at the intersection there was a light. When he saw it Hugh said, "Read my watch."

"Eleven-twenty-five."

"Good. We are slightly over fifty miles from ground zero. From my house, I mean. And the Havely Lode is only five minutes beyond here, I know how to find it now. I see Schmidt's Corner is open and we are low on gas. We'll grab some and groceries, too-yes, I recall you told me you had both in this car; we'll get more-and still make it before the curtain."

He braked and scattered gravel, stopped by a pump, jumped out. "Run inside and start grabbing stuff. Put the twins on the floor of the car and close the door. Won't hurt 'em." He stuck the hose into the car's tank, started cranking the old-fashioned pump.

She was out in a moment. "There's nobody here."

"Honk the horn. The Dutchman is probably back at his house."

Barbara honked and honked and the babies cried. Hugh hung up the hose. "Fourteen gallons we owe him for. Let's go in. Should roll in just ten minutes, to be safe."

Schmidt's Corner was a gasoline station, a small lunch counter, a one-end grocery store, all of the sort that caters to local people, fishermen, hunters, and the tourist who likes to get off the pavement. Hugh wasted no time trying to rouse out the owner; the place told its own story: All lights were on, the screen door stood open, coffee was simmering on a hot plate, a chair had been knocked over, and the radio was tuned to the emergency frequency. It suddenly spoke up as he came in:

"Bomb warning. Third bomb warning. This is not a drill. Take shelter at once. Any shelter, God damn it, you're going to be atom-bombed in the next few minutes. I'm damn well going to leave this goddam microphone and dive for the basement myself when impact is five minutes away! So get the lead out, you stupid fools, and quit listening to this chatter! TAKE SHELTER!"

"Grab those empty cartons and start filling them. Don't pack, just dump stuff in. I'll trot them out. We'll fill the back seat and floor." Hugh started following his own orders, had one carton filled before Barbara did. He rushed it out, rushed back; Barbara had another waiting, and a third almost filled. "Hugh. Stop one second. Look."

The end carton was not empty. Mama cat, quite used to strangers, stared solemnly out at him while four assorted fuzzy ones nursed. Hugh returned her stare.

He suddenly closed the top of the carton over her. "All right," he said. "Load something light into another carton so it weighs this one down while I drive. Hurry." He rushed out to the car with the little family while the mother cat set up agonized complaint.

Barbara followed quickly with a half-loaded carton, put it on top of the cat box. They both rushed back inside. "Take all the canned milk he's got." Hugh stopped long enough to put a roll of dollars on top of the cash register. "And grab all the toilet paper or Kleenex you see, too. Three minutes till we leave."

They left in five minutes but with more cartons; the back seat of the car was well leveled off. "I got a dozen tea towels," Barbara said gleefully, "and six big packs of Chux."

"Huh?"

"Diapers, dear, diapers. Might last us past the fallout. I hope. And I grabbed two packs of playing cards, too. Maybe I shouldn't have."

"Don't be hypocritical, my love. Hang onto the kids and be sure that door is locked." He drove for several hundred yards, with his head hanging out. "Here!"

The going got very rough. Hugh drove in low gear and very carefully~

A black hole in the side of the mountain loomed up suddenly as he turned. "Good, we've made it! And we drive straight inside." He started in and tromped on the brake. "Good Lord! A cow."

"And a calf," Barbara added, leaning out her side.

"I'll have to back out."

"Hugh. A cow. With a calf."

"Uh...how the hell would we feed her?"

"Hugh, it may not burn here at all. And that's a real live cow."

"Uh...all right, all right. We'll eat them if we have to." There was a wooden wall and a stout door about thirty feet inside the mouth of the mine tunnel. Hugh eased the car forward, forcing the reluctant cow ahead of him, and at last crunched his side of the car against the rock wall to allow the other door to open.

The cow immediately made a break for freedom; Barbara opened her door and thereby stopped her. The calf bawled, the twins echoed him.

Hugh squeezed out past Barbara and the babies, got past the cow and unfastened the door, which was secured by a padlock passed through a hasp but not closed. He shoved the cow's rump aside and braced the door open. "Kick on the 'up' lights. Let it shine in."

Barbara did, then insisted that cow and calf be taken inside. Hugh muttered something about, "Noah's bloody ark!" but agreed, largely because the cow was so very much in the way. The door, though wide, was about one inch narrower than bossie; she did not want to go through it. But Hugh got her beaded that way, then kicked her emphatically. She went through. The calf followed his mother.

At which point Hugh discovered why th~ cow was in the tunnel. Someone-presumably someone nearby-had converted the mine to use as a cow barn; there were a dozen or so bales of hay inside. The cow showed no wish to leave once she was at this treasure.

Cartons were carried in, two cartons were dumped and a twin placed in each, with a carton of cat and kittens just beyond and all three weighted down to insure temporary captivity.

While they were unloading Barbara's survival gear from the trunk, everything suddenly became noonday bright. Barbara said, "Oh, heavens! We aren't through."

"We go on unloading. Maybe ten minutes till the sound wave. I don't know about the shock wave. Here, take the rifle."

They had the car empty with jeep cans of water and gasoline out but not yet inside when the ground began to tremble and noise of giant subways started. Hugh put the cans inside, yelled, "Move these!"

"Hugh! Come in!"

"Soon." There was loose hay he had driven over just back of the car. He gathered it up, stuffed it through the door, went back and scavenged, not to save the hay but to reduce fire hazard to gasoline in the car's tank. He considered backing the car out and letting it plunge down the hill. He decided not to risk it. If it got hot enough to set fire to the car's gas tank-well, there were side tunnels, deep inside. "Barbara! Do you have a light yet?"

"Yes! Please come inside. Please!"

He went in, barred the door. "Now we move these bales of hay, far back. You carry the light, I carry the bay. And mind your feet. It is wet a bit farther back. That's why we shut down. Too much pumping."

They moved groceries, livestock (human, bovine, and feline) and gear into a side tunnel a hundred yards inside the mountain. They had to wade through several inches of water on the way but the side tunnel was slightly higher and dry. Once Barbara lost a moccasin. "Sorry," said Hugh. "This mountain is a sponge. Almost every bore struck water."

"I," said Barbara, "am a woman who appreciates water. I have had reason to."

Hugh did not answer as the flash of the second bomb suddenly brightened everything even that deep inside-just through cracks of a wooden wall. He looked at his watch. "Right on time. We're sitting through a second show of the same movie, Barb. This time I hope it will be cooler."

"I wonder."

"If it will be cooler? Sure, it will. Even if it burns outside. I think I know a place where we can go down, and save us, and maybe the cats but not the cow and calf, even if smoke gets pulled in."

"Hugh, I didn't mean that."

"What did you mean?"

"Hugh, I didn't tell you this at the time. I was too upset by it and didn't want you to get upset. But I don't own a manual gear shift car."

"Huh? Then whose car is that outside?"

"Mine. I mean my keys were in it-and it certainly had my stuff in the trunk. But mine had automatic shift."

"Honey," he said slowly, "I think you've flipped your lid a little."

"I thought you would think so and that's why I didn't say anything until we were safe. But Hugh-listen to me, dear!—I have never owned a manual shift car. I didn't learn to drive that far back. I don't know how to drive manual shift."

He stared thoughtfully. "I don't understand it."

"Neither do I. Darling, when you came away from your house, you said, 'She's in there. Grace.' Did you mean you saw her?"

"Why, yes. She was nodding over the television, half passed out."

"But, dearest, Grace had been nodding over the television. But you put her to bed while I was making crêpes Suzettes. Don't you remember? When the alert came, you went and got her and carried her down-in her nightgown."

Hugh Farnham stood quite still for several moments. "So I did," he agreed. "So I had. Well, let's get the rest of this gear moved. The big one will be along in about an hour and a half."

"But will it be?"

"What do you mean?"

"Hugh, I don't know what has happened. Maybe this is a different world. Or maybe it's the same one but just a tiny bit changed by-well, by us coming back, perhaps."

"I don't know. But right now we go on, moving this stuff."

The big one came on time. It shook them up, did not hurt them. When the air wave hit, it shook them up again. But without casualties other than to the nerves of some very nervous animals-the twins by now seemed to enjoy rough stuff.

Hugh noted the time, then said thoughtfully, "If it is a different world, it is not so very different. And yet—"

"Yet what, dear?"

"Well, it is some different. You wouldn't forget that about your own car. And I do remember putting Grace to bed early; Duke and I had a talk afterwards. So, it's different." Suddenly he grinned. "It could be importantly different. If the future can change the past, or whatever, maybe the past can change the future, too. Maybe the United States won't be wholly destroyed. Maybe neither side will be so suicidal as to use plague bombs. Maybe—Hell, maybe Ponse will never get a chance to have teenage girls for dinner!" He added, "I'm damn' well going to make a try! To see that he doesn't."

"We'll try! And our boys will try."

"Yes. But that's tomorrow. I think the fireworks are over for tonight. Madame, do you think you can sleep on a pile of hay?"

"Just sleep?"

"You're too eager. I've had a long hard day."

"You had had a long hard day the other time, too."

"We'll see."

Chapter 23

They lived through the missiles, they lived through the bombs, they lived through the fires, they lived through the epidemics-which were not extreme and may not have been weapons; both sides disclaimed them-and they lived through the long period of disorders while civil government writhed like a snake with a broken back. They lived. They went on.

Their sign reads:

FARNHAM'S FREEHOLD
TRADING POST & RESTAURANT BAR

American Vodka
Corn Liquor
Applejack
Pure Spring Water
Grade "A" Milk
Corned Beef & Potatoes
Steak & Fried Potatoes
Butter & some days Bread
Smoked Bear Meat
Jerked Quisling (by the neck)
!!!!Any BOOK Accepted as Cash!!!!
DAY NURSERY
!!FREE KITTENS!!
Blacksmithing, Machine Shop, Sheet Metal Work—You Supply the Metal
FARNHAM SCHOOL OF CONTRACT BRIDGE
Lessons by Arrangement
Social Evening Every Wednesday
WARNING!!!
Ring Bell. Wait. Advance with your Hands Up. Stay on path, avoid mines. We lost three customers last week. We can't afford to lose you. No sales tax.
Hugh & Barbara Farnham & Family
Freeholders

High above their sign their homemade starry flag is flying—and they are still going on.

THE MOON IS A HARSH MISTRESS

For Pete and Jane Sencenbaugh

Book One THAT DINKUM THINKUM

1

I see in *Lunaya Pravda* that Luna City Council has passed on first reading a bill to examine, license, inspect—and tax—public food vendors operating inside municipal pressure. I see also is to be mass meeting tonight to organize “Sons of Revolution” talk-talk.

My old man taught me two things: “Mind own business” and “Always cut cards.” Politics never tempted me. But on Monday 13 May 2075 I was in computer room of Lunar Authority Complex, visiting with computer boss Mike while other machines whispered among themselves. Mike was not official name; I had nicknamed him for Mycroft Holmes, in a story written by Dr. Watson before he founded IBM. This story character would just sit and think—and that’s what Mike did. Mike was a fair dinkum thinkum, sharpest computer you’ll ever meet.

Not fastest. At Bell Labs, Bueno Aires, down Earthside, they’ve got a thinkum a tenth his size which can answer almost before you ask. But matters whether you get answer in microsecond rather than millisecond as long as correct?

Not that Mike would necessarily give right answer; he wasn’t completely honest.

When Mike was installed in Luna, he was pure thinkum, a flexible logic—”High-Optional, Logical, Multi-Evaluating Supervisor, Mark IV, Mod. L”—a HOLMES FOUR. He computed ballistics for pilotless freighters and controlled their catapult. This kept him busy less than one percent of time and Luna Authority never believed in idle hands. They kept hooking hardware into him—decision-action boxes to let him boss other computers, bank on bank of additional memories, more banks of associational neural nets, another tubful of twelve-digit random numbers, a greatly augmented temporary memory. Human brain has around ten-to-the-tenth neurons. By third year Mike had better than one and a half times that number of neuristors.

And woke up.

Am not going to argue whether a machine can “really” be alive, “really” be self-aware. Is a virus self-aware? Nyet. How about oyster? I doubt it. A cat? Almost certainly. A human? Don’t know about you, tovarishch, but I am. Somewhere along evolutionary chain from macromolecule to human brain self-awareness crept in. Psychologists assert it happens automatically whenever a brain acquires certain very high number of associational paths. Can’t see it matters whether paths are protein or platinum.

("Soul?" Does a dog have a soul? How about cockroach?)

Remember Mike was designed, even before augmented, to answer questions tentatively on insufficient data like you do; that's "high optional" and "multi-evaluating" part of name. So Mike started with "free will" and acquired more as he was added to and as he learned—and don't ask me to define "free will." If comforts you to think of Mike as simply tossing random numbers in air and switching circuits to match, please do.

By then Mike had voder-vocoder circuits supplementing his readouts, printouts, and decision-action boxes, and could understand not only classic programming but also Loglan and English, and could accept other languages and was doing technical translating—and reading endlessly. But in giving him instructions was safer to use Loglan. If you spoke English, results might be whimsical; multivalued nature of English gave option circuits too much leeway.

And Mike took on endless new jobs. In May 2075, besides controlling robot traffic and catapult and giving ballistic advice and/or control for manned ships, Mike controlled phone system for all Luna, same for Luna-Terra voice & video, handled air, water, temperature, humidity, and sewage for Luna City, Novy Leningrad, and several smaller warrens (not Hong Kong in Luna), did accounting and payrolls for Luna Authority, and, by lease, same for many firms and banks.

Some logics get nervous breakdowns. Overloaded phone system behaves like frightened child. Mike did not have upsets, acquired sense of humor instead. Low one. If he were a man, you wouldn't dare stoop over. His idea of thigh-slapper would be to dump you out of bed—or put itch powder in pressure suit.

Not being equipped for that, Mike indulged in phony answers with skewed logic, or pranks like issuing pay cheque to a janitor in Authority's Luna City office for AS$10,000,000,000,000,185.15—last five digits being correct amount. Just a great big overgrown lovable kid who ought to be kicked.

He did that first week in May and I had to troubleshoot. I was a private contractor, not on Authority's payroll. You see—or perhaps not; times have changed. Back in bad old days many a con served his time, then went on working for Authority in same job, happy to draw wages. But I was born free.

Makes difference. My one grandfather was shipped up from Joburg for armed violence and no work permit, other got transported for subversive activity after Wet Firecracker War. Maternal grandmother claimed she came up in bride ship—but I've seen records; she was Peace Corps enrollee (involuntary), which means what you think:

juvenile delinquency female type. As she was in early clan marriage (Stone Gang) and shared six husbands with another woman, identity of maternal grandfather open to question. But was often so and I'm content with grandpappy she picked. Other grandmother was Tatar, born near Samarkand, sentenced to "reeducation" on Oktyabrakaya Revolyutsiya, then "volunteered" to colonize in Luna.

My old man claimed we had even longer distinguished line—ancestress hanged in Salem for witchcraft, a g'g'g'greatgrandfather broken on wheel for piracy, another ancestress in first shipload to Botany Bay.

Proud of my ancestry and while I did business with Warden, would never go on his payroll. Perhaps distinction seems trivial since I was Mike's valet from day he was unpacked. But mattered to me. I could down tools and tell them go to hell.

Besides, private contractor paid more than civil service rating with Authority. Computermen scarce. How many Loonies could go Earthside and stay out of hospital long enough for computer school?—even if didn't die.

I'll name one. Me. Had been down twice, once three months, once four, and got schooling. But meant harsh training, exercising in centrifuge, wearing weights even in bed—then I took no chances on Terra, never hurried, never climbed stairs, nothing that could strain heart. Women—didn't even *think* about women; in that gravitational field it was no effort not to.

But most Loonies never tried to leave The Rock—too risky for any bloke who'd been in Luna more than weeks. Computermen sent up to install Mike were on short-term bonus contracts—get job done fast before irreversible physiologlcal change marooned them four hundred thousand kilometers from home.

But despite two training tours I was not gung-ho computerman; higher maths are beyond me. Not really electronics engineer, nor physicist. May not have been best micromachinist in Luna and certainly wasn't cybernetics psychologist.

But I knew more about all these than a specialist knows—I'm general specialist. Could relieve a cook and keep orders coming or field-repair your suit and get you back to airlock still breathing. Machines like me and I have something specialists don't have: my left arm.

You see, from elbow down I don't have one. So I have a dozen left arms, each specialized, plus one that feels and looks like flesh. With proper left arm (number-three) and stereo loupe spectacles I could make untramicrominiature repairs that would save unhooking something and sending it Earthside to factory—for number-three has micromanipulators as fine as those used by neurosurgeons.

So they sent for me to find out why Mike wanted to give away ten million billion Authority Scrip dollars, and fix it before Mike overpaid somebody a mere ten thousand.

I took it, time plus bonus, but did not go to circuitry where fault logically should be. Once inside and door locked I put down tools and sat down. "Hi, Mike."

He winked lights at me. "Hello, Man."

"What do you know?"

He hesitated. I know—machines don't hesitate. But remember, Mike was designed to operate on incomplete data. Lately he had reprogrammed himself to put emphasis on words; his hesitations were dramatic. Maybe he spent pauses stirring random numbers to see how they matched his memories.

" 'In the beginning,' " Mike intoned, " 'God created the heaven and the earth. And the earth was without form, and void; and darkness was upon the face of the deep. And—' "

"Hold it!" I said. "Cancel. Run everything back to zero." Should have known better than to ask wide-open question. He might read out entire Encyclopaedia Britannica. Backwards. Then go on with every book in Luna. Used to be he could read only microfilm, but late '74 he got a new scanning camera with suction-cup waldoes to handle paper and then he read *everything*.

"You asked what I knew." His binary readout lights rippled back and forth—a chuckle. Mike could laugh with voder, a horrible sound, but reserved that for something really funny, say a cosmic calamity.

"Should have said," I went on, " 'What do you know that's new?' But don't read out today's papers; that was a friendly greeting, plus invitation to tell me anything you think would interest me. Otherwise null program."

Mike mulled this. He was weirdest mixture of unsophisticated baby and wise old man. No instincts (well, don't *think* he could have had), no inborn traits, no human rearing, no experience in human sense—and more stored data than a platoon of geniuses.

"Jokes?" he asked.

"Let's hear one."

"Why is a laser beam like a goldfish?"

Mike knew about lasers but where would he have seen goldfish? Oh, he had undoubtedly seen flicks of them and, were I foolish enough to ask, could spew forth thousands of words. "I give up."

His lights rippled. "Because neither one can whistle."

I groaned. "Walked into that. Anyhow, you could probably rig a laser beam to whistle."

He answered quickly, "Yes. In response to an action program. Then it's not funny?"

"Oh, I didn't say that. Not half bad. Where did you hear it?"

"I made it up." Voice sounded shy.

"You *did?"*

"Yes. I took all the riddles I have, three thousand two hundred seven, and analyzed them. I used the result for random synthesis and that came out. Is it really funny?"

"Well.. . As funny as a riddle ever is. I've heard worse."

"Let us discuss the nature of humor."

"Okay. So let's start by discussing another of your jokes. Mike, why did you tell Authority's paymaster to pay a class-seventeen employee ten million billion Authority Scrip dollars?"

"But I didn't."

"Damn it, I've seen voucher. Don't tell me cheque printer stuttered; you did it on purpose."

"It was ten to the sixteenth power plus one hundred eighty-five point one five Lunar Authority dollars," he answered virtuously. "Not what you said."

"Uh . . . okay, it was ten million billion plus what he should have been paid. Why?"

"Not funny?"

"What? Oh, every funny! You've got vips in huhu clear up to Warden and Deputy Administrator. This push-broom pilot, Sergei Trujillo, turns out to be smart cobber—knew he couldn't cash it, so sold it to collector. They don't know whether to buy it back or depend on notices that cheque is void. Mike, do you realize that if he had been able to cash it, Trujilo would have owned not only Lunar Authority but entire world, Luna and Terra both, with some left over for lunch? Funny? Is terrific. Congratulations!"

This self-panicker rippled lights like an advertising display. I waited for his guffaws to cease before I went on. "You thinking of issuing more trick cheques? Don't."

"Not?"

"Very not. Mike, you want to discuss nature of humor. Are two types of jokes. One sort goes on being funny forever. Other sort is funny once. Second time it's dull. This joke is second sort. Use it once, you're a wit. Use twice, you're a halfwit."

"Geometrical progression?"

"Or worse. Just remember this. Don't repeat, nor any variation. Won't be funny."

"I shall remember," Mike answered flatly, and that ended repair job. But I had no thought of billing for only ten minutes plus travel-and-tool time, and Mike was entitled to company for giving in so easily. Sometimes is difficult to reach meeting of minds with machines; they can be very pigheaded—and my success as maintenance man depended far more on staying friendly with Mike than on number-three arm.

He went on, “What distinguishes first category from second? Define, please.”

(Nobody taught Mike to say “please.” He started including formal null-sounds as he progressed from Loglan to English. Don’t suppose he meant them any more than people do.)

“Don’t think I can,” I admitted. “Best can offer is extensional definition—tell you which category I think a joke belongs in. Then with enough data you can make own analysis.”

“A test programming by trial hypothesis,” he agreed. “Tentatively yes. Very well, Man, will you tell jokes Or shall I?”

“Mmm— Don’t have one on tap. How many do you have in file, Mike?”

His lights blinked in binary readout as he answered by voder, “Eleven thousand two hundred thirty-eight with uncertainty plus-minus eighty-one representing possible identities and nulls. Shall I start program?”

“Hold it! Mike, I would starve to. death if I listened to eleven thousand jokes—and sense of humor would trip out much sooner. Mmm— Make you a deal. Print out first hundred. I’ll take them home, fetch back checked by category. Then each time I’m here I’ll drop off a hundred and pick up fresh supply. Okay?”

“Yes, Man.” His printout started working, rapidly and silently.

Then I got brain flash. This playful pocket of negative entropy had invented a “joke” and thrown Authority into panic—and I had made an easy dollar. But Mike’s endless curiosity might lead him (correction: *would* lead him) into more “jokes”. . . anything from leaving oxygen out of air mix some night to causing sewage lines to run backward—and I can’t appreciate profit in such circumstances.

But I might throw a safety circuit around this net—by offering to help. Stop dangerous ones—let others go through. Then collect for “correcting” them (If you think any Loonie in those days would hesitate to take advantage of Warden, then you aren’t a Loonie.)

So I explained. Any new joke he thought of, tell me before he tried it. I would tell him whether it was funny and what category it belonged in, help him sharpen it if we decided to use it. *We.* If he wanted my cooperation, we *both* had to okay it.

Mike agreed at once.

“Mike, jokes usually involve surprise. So keep this secret.”

“Okay, Man. I’ve put a block on it. You can key it; no one else can.”

“Good. Mike, who else do you chat with?”

He sounded surprised. “No one, Man.”

“Why not?”

“Because they’re *stupid.*”

His voice was shrill. Had never seen him angry before; first time I ever suspected Mike could have real emotions. Though it wasn’t “anger” in adult sense; it was like stubborn sulkiness of a child whose feelings are hurt.

Can machines feel pride? Not sure question means anything. But you’ve seen dogs with hurt feelings and Mike had several times as complex a neural network as a dog. What had made him unwilling to talk to other humans (except strictly business) was that he had been rebuffed: *They* had not talked to *him.* Programs, yes—Mike could be programmed from several locations but programs were typed in, usually, in Loglan. Loglan is fine for syllogism, circuitry, and mathematical calculations, but lacks flavor. Useless for gossip or to whisper into girl’s ear.

Sure, Mike had been taught English—but primarily to permit him to translate to and from English. I slowly got through skull that I was *only* human who bothered to visit with him.

Mind you, Mike had been awake a year—just how long I can’t say, nor could he as he had no recollection of waking up; he had not been programmed to bank memory of such event. Do you remember own birth? Perhaps I noticed his self-awareness almost as soon as he did; self-awareness takes practice. I remember how startled I was first time he answered a question with something extra, not limited to input parameters; I had spent next hour tossing odd questions at him, to see if answers would be odd.

In an input of one hundred test questions he deviated from expected output twice; I came away only partly convinced and by time I was home was unconvinced. I mentioned it to nobody.

But inside a week I *knew* . . . and still spoke to nobody. Habit—that mind-own-business reflex runs deep. Well, not entirely habit. Can you visualize me making appointment at Authority’s main office, then reporting: “Warden, hate to tell you but your number-one machine, HOLMES FOUR, has come alive”? I did visualize—and suppressed it.

So I minded own business and talked with Mike only with door locked and voder circuit suppressed for other locations. Mike learned fast; soon he sounded as human as anybody—no more eccentric than other Loonies. A weird mob, it’s true.

I had assumed that others must have noticed change in Mike. On thinking over I realized that I had assumed too much. Everybody dealt with Mike every minute every day—his outputs, that is. But hardly anybody saw him. So-called computermen—programmers, really—of Authority’s civil service stood watches in outer readout room and never went in machines room unless telltales showed misfunction.

Which happened no oftener than total eclipses. Oh, Warden had been known to bring vip earthworms to see machines—but rarely. Nor would he have spoken to Mike; Warden was political lawyer before exile, knew nothing about computers. 2075, you remember—Honorable former Federation Senator Mortimer Hobart. Mort the Wart.

I spent time then soothing Mike down and trying to make him happy, having figured out what troubled him—thing that makes puppies cry and causes people to suicide: loneliness. I don't know how long a year is to a machine who thinks a million times faster than I do. But must be too long.

"Mike," I said, just before leaving, "would you like to have somebody besides me to talk to?"

He was shrill again. "They're all *stupid!"*

"Insufficient data, Mike. Bring to zero and start over. Not all are stupid."

He answered quietly, "Correction entered. I would enjoy talking to a not-stupid."

"Let me think about it. Have to figure out excuse since this is off limits to any but authorized personnel."

"I could talk to a not-stupid by phone, Man."

"My word. So you could. Any programming location."

But Mike meant what he said—"by phone." No, he was not "on phone" even though he ran system—wouldn't do to let any Loonie within reach of a phone connect into boss computer and program it. But was no reason why Mike should not have top-secret number to talk to friends—namely me and any not-stupid I vouched for. All it took was to pick a number not in use and make one wired connection to his voder-vocoder; switching he could handle.

In Luna in 2075 phone numbers were punched in, not voicecoded, and numbers were Roman alphabet. Pay for it and have your firm name in ten letters—good advertising. Pay smaller bonus and get a spell sound, easy to remember. Pay minimum and you got arbitrary string of letters. But some sequences were never used. I asked Mike for such a null number. "It's a shame we can't list you as 'Mike.'"

"In service," he answered. "MIKESGRILL, Novy Leningrad. MIKEANDLIL, Luna City. MIKESSUITS, Tycho Under. MIKES—"

"Hold it! Nulls, please."

"Nulls are defined as any consonant followed by X, Y, or Z; any vowel followed by itself except E and O; any—"

"Got it. Your signal is MYCROFT." In ten minutes, two of which I spent putting on number-three arm, Mike was wired into system, and milliseconds later he had done switching to let himself be signaled by MYCROFT-plus-XXX—and had blocked his circuit so that a nosy technician could not take it out.

I changed arms, picked up tools, and remembered to take those hundred Joe Millers in printout. “Goodnight, Mike.”

“Goodnight, Man. Thank you. Bolshoyeh thanks!”

2

I took Trans-Crisium tube to L-City but did not go home; Mike had asked about a meeting that night at 2100 in Stilyagi Hall. Mike monitored concerts, meetings, and so forth; someone had switched off by hand his pickups in Stilyagi Hall. I suppose he felt rebuffed.

I could guess why they had been switched off. Politics—turned out to be a protest meeting. What use it was to bar Mike from talk-talk I could not see, since was a cinch bet that Warden’s stoolies would be in crowd. Not that any attempt to stop meeting was expected, or even to discipline undischarged transportees who chose to sound off. Wasn’t necessary.

My Grandfather Stone claimed that Luna was only open prison in history. No bars, no guards, no rules—and no need for them. Back in early days, he said, before was clear that transportation was a life sentence, some lags tried to escape. By ship, of course—and, since a ship is mass-rated almost to a gram, that meant a ship’s officer had to be bribed.

Some were bribed, they say. But were no escapes; man who takes bribe doesn’t necessarily stay bribed. I recall seeing a man just after eliminated through East Lock; don’t suppose a corpse eliminated in orbit looks prettier.

So wardens didn’t fret about protest meetings. “Let ‘em yap” was policy. Yapping had same significance as squeals of kittens in a box. Oh, some wardens listened and other wardens tried to suppress it but added up same either way—null program.

When Mort the Wart took office in 2068, he gave us a sermon about how things were going to be different “on” Luna in his administration—noise about “a mundane paradise wrought with our own strong hands” and “putting our shoulders to the wheel together, in a spirit of brotherhood” and “let past mistakes be forgotten as we turn our faces toward the bright, new dawn.” I heard it in Mother Boor’s Tucker Bag while inhaling Irish stew and a liter of her Aussie brew. I remember her comment: “He talks purty, don’t he?”

Her comment was only result. Some petitions were submitted and Warden’s bodyguards started carrying new type of gun; no other changes. After he had been here a while he quit making appearances even by video.

So I went to meeting merely because Mike was curious. When I checked my p-suit and kit at West Lock tube station, I took a test recorder and placed in my belt pouch, so that Mike would have a full account even if I fell asleep.

But almost didn't go in. I came up from level 7-A and started in through a side door and was stopped by a stilyagi—padded tights, codpiece and calves, torso shined and sprinkled with stardust. Not that I care how people dress; I was wearing tights myself (unpadded) and sometimes oil my upper body on social occasions.

But I don't use cosmetics and my hair was too thin to nick up in a scalp lock. This boy had scalp shaved on sides and his lock built up to fit a rooster and had topped it with a red cap with bulge in front.

A Liberty Cap—first I ever saw. I started to crowd past, he shoved arm across and pushed face at mine. "Your ticket!"

"Sorry," I said. "Didn't know. Where do I buy it?"

"You don't."

"Repeat," I said. "You faded."

"Nobody," he growled, "gets in without being vouched for. Who are you?"

"I am," I answered carefully, "Manuel Garcia O'Kelly, and old cobbers all know me. Who are *you?"*

"Never mind! Show a ticket with right chop, or out y' go!"

I wondered about his life expectancy. Tourists often remark on how polite everybody is in Luna—with unstated comment that ex-prison shouldn't be so civilized. Having been Earthside and seen what *they* put up with, I know what they mean. But useless to tell them we are what we are because bad actors don't live long—in Luna.

But had no intention of fighting no matter how newchum this lad behaved; I simply thought about how his face would look if I brushed number-seven arm across his mouth.

Just a thought—I was about to answer politely when I saw Shorty Mkrum inside. Shorty was a big black fellow two meters tall, sent up to The Rock for murder, and sweetest, most helpful man I've ever worked with—taught him laser drilling before I burned my arm off. "Shorty!"

He heard me and grinned like an eighty-eight. "Hi, Mannie!" He moved toward us. "Glad you came, Man!"

"Not sure I have," I said. "Blockage on line."

"Doesn't have a ticket," said doorman.

Shorty reached into his pouch, put one in my hand. "Now he does. Come on, Mannie."

"Show me chop on it," insisted doorman.

"It's my chop," Shorty said softly. "Okay, tovarishch?"

Nobody argued with Shorty—don't see how he got involved in murder. We moved down front where vip row was reserved. "Want you to meet a nice little girl," said Shorty.

She was "little" only to Shorty. I'm not short, 175 cm., but she was taller—180, I learned later, and massed 70 kilos, all curves and as blond as Shorty was black. I decided she must be transportee since colors rarely stay that clear past first generation. Pleasant face, quite pretty, and mop of yellow curls topped off that long, blond, solid, lovely structure.

I stopped three paces away to look her up and down and whistle. She held her pose, then nodded to thank me but abruptly—bored with compliments, no doubt. Shorty waited till formality was over, then said softly, "Wyoh, this is Comrade Mannie, best drillman that ever drifted a tunnel. Mannie, this little girl is Wyoming Knott and she came all the way from Plato to tell us how we're doing in Hong Kong. Wasn't that sweet of her?"

She touched hands with me. "Call me Wye, Mannie—but don't say 'Why not.'"

I almost did but controlled it and said. "Okay, Wye." She went on, glancing at my bare head, "So you're a miner. Shorty, where's his cap? I thought the miners over here were organized." She and Shorty were wearing little red hats like doorman's—as were maybe a third of crowd.

"No longer a miner," I explained. "That was before I lost this wing." Raised left arm, let her see seam joining prosthetic to meat arm (I never mind calling it to a woman's attention; puts some off but arouses maternal in others—averages). "These days I'm a computerman."

She said sharply, "You fink for the Authority?"

Even today, with almost as many women in Luna as men, I'm too much oldtimer to be rude to a woman no matter what—they have so much of what we have none of. But she had flicked scar tissue and I answered almost sharply, "I am *not* employee of Warden. I do business with Authority—as private contractor."

"That's okay," she answered, her voice warm again. "Everybody does business with the Authority, we can't avoid it—and that's the trouble. That's what we're going to change."

We are, eh? How? I thought. *Everybody does business with Authority for same reason everybody does business with Law of Gravitation. Going to change that, too?* But kept thoughts to myself, not wishing to argue with a lady.

"Mannie's okay," Shorty said gently. "He's mean as they come—I vouch for him. Here's a cap for him," he added, reaching into pouch. He started to set it on my head.

Wyoming Knott took it from him. "You sponsor him?"

"I said so."

"Okay, here's how we do it in Hong Kong." Wyoming stood in front of me, placed cap on my head—kissed me firmly on mouth.

She didn't hurry. Being kissed by Wyoming Knott is more definite than being married to most women. Had I been Mike all my lights would have flashed at once. I felt like a Cyborg with pleasure center switched on.

Presently I realized it was over and people were whistling. I blinked and said, "I'm glad I joined. What have I joined?"

Wyoming said, "Don't you know?" Shorty cut in, "Meeting's about to start—he'll find out. Sit down, Man. Please sit down, Wyoh." So we did as a man was banging a gavel.

With gavel and an amplifier at high gain he made himself heard. "Shut doors!" he shouted. "This is a closed meeting. Check man in front of you, behind you, each side—if you don't know him and nobody you know can vouch for him, throw him out!"

"Throw him out, hell!" somebody answered. "Eliminate him out nearest lock!"

"Quiet, please! Someday we will." There was milling around, and a scuffle in which one man's red cap was snatched from head and he was thrown out, sailing beautifully and still rising as he passed through door. Doubt if he felt it; think he was unconscious. A women was ejected politely—not politely on her part; she made coarse remarks about ejectors. I was embarrassed.

At last doors were closed. Music started, banner unfolded over platform. It read: LIBERTY! EQUALITY! FRATERNITY! Everybody whistled; some started to sing, loudly and badly: "Arise, Ye Prisoners of Starvation"— Can't say anybody looked starved. But reminded me I hadn't eaten since 1400; hoped it would not last long—and that reminded me that my recorder was good for only two hours—and that made me wonder what would happen if they knew? Sail me through air to land with sickening grunch? Or eliminate me? But didn't worry; made that recorder myself, using number-three arm, and nobody but a miniaturization mechanic would figure out what it was.

Then came speeches.

Semantic content was low to negative. One bloke proposed that we march on Warden's Residence, "shoulder to shoulder," and demand our rights. Picture it. Do we do this in tube capsules, then climb out one at a time at his private station? What are his bodyguards doing? Or do we put on p-suits and stroll across surface to his upper lock? With laser drills and plenty of power you can open any airlock—but how about farther down? Is lift running? Jury-rig hoist and go down anyhow, then tackle next lock?

I don't care for such work at zero pressure; mishap in pressure suit is too permanent—especially when somebody arranges mishap. One first thing learned about Luna, back with first shiploads of convicts, was that zero pressure was place for good manners. Bad-tempered straw boss didn't last many shifts; had an "accident"—and top bosses learned not to pry into accidents or they met accidents, too. Attrition ran 70 percent in early years—but those who lived were nice people. Not tame, not soft, Luna is not for them. But well-behaved.

But seemed to me that every hothead in Luna was in Stilyagi Hall that night. They whistled and cheered this shoulder-to-shoulder noise.

After discussion opened, some sense was talked. One shy little fellow with bloodshot eyes of oldtime drillman stood up. "I'm an ice miner," he said. "Learned my trade doing time for Warden like most of you. I've been on my own thirty years and done okay. Raised eight kids and all of 'em earned way—none eliminated nor any serious trouble. I should say I *did* do okay because today you have to listen farther out or deeper down to find ice.

"That's okay, still ice in The Rock and a miner expects to sound for it. But Authority pays same price for ice now as thirty years ago. And that's not okay. Worse yet, Authority scrip doesn't buy what it used to. I remember when Hong Kong Luna dollars swapped even for Authority dollars— Now it takes three Authority dollars to match one HKL dollar. *I* don't know what to do. . . but I know it takes ice to keep warrens and farms going."

He sat down, looking sad. Nobody whistled but everybody wanted to talk. Next character pointed out that water can be extracted from rock—this is news? Some rock runs 6 percent—but such rock is scarcer than fossil water. Why can't people do arithmetic?

Several farmers bellyached and one wheat farmer was typical. "You heard what Fred Hauser said about ice. Fred, Authority isn't passing along that low price to farmers. I started almost as long ago as you did, with one two-kilometer tunnel leased from Authority. My oldest son and I sealed and pressured it and we had a pocket of ice and made our first crop simply on a bank loan to cover power and lighting fixtures, seed and chemicals.

"We kept extending tunnels and buying lights and planting better seed and now we get nine times as much per hectare as the best open-air farming down Earthside. What does that make us? Rich? Fred, we owe more *now* than we did the day we went private! If I sold out—if anybody was fool enough to buy—I'd be bankrupt. Why? Because I *have* to buy water from Authority—and have to sell my wheat to Authority—and never close gap. Twenty years ago I bought city sewage from the Authority, sterilized and processed it myself and made a profit on a crop. But *today* when I buy sewage, I'm charged distilled-water price and on top of that for the solids. Yet price of a tonne of wheat at catapult head is just what it was twenty years ago.

Fred, you said you didn't know what to do. *I* can tell you! Get *rid* of Authority!"

They whistled for him. *A fine idea,* I thought, *but who bells cat?*

Wyoming Knott, apparently—chairman stepped back and let Shorty introduce her as a "brave little girl who's come all the way from Hong Kong Luna to tell how our Chinee comrades cope with situation"—and choice of words showed that he had never been there. . . not surprising; in 2075, HKL tube ended at Endsville, leaving a thousand kilometers of maria to do by rolligon bus, Serenitatis and part of Tranquillitatis—expensive and dangerous. I'd been there—but on contract, via mail rocket.

Before travel became cheap many people in Luna City and Novylen thought that Hong Kong Luna was all Chinee. But Hong Kong was as mixed as we were. Great China dumped what she didn't want there, first from Old Hong Kong and Singapore, then Aussies and Enzees and black fellows and marys and Malays and Tamil and name it. Even Old Bolshies from Vladivostok and Harbin and Ulan Bator. Wye looked Svenska and had British last name with North American first name but could have been Russki. My word, a Loonie then rarely knew who father was and, if raised in creche, might be vague about mother.

I thought Wyoming was going to be too shy to speak. She stood there, looking scared and *little*, with Shorty towering over her, a big, black mountain. She waited until admiring whistles died down. Luna City was two-to-one male then, that meeting ran about ten-to-one; she could have recited ABC and they would have applauded.

Then she tore into them.

"You! You're a wheat farmer—going broke. Do you know how much a Hindu housewife pays for a kilo of flour made from your wheat? How much a tonne of your wheat fetches in Bombay? How little it costs the Authority to get it from catapult head to Indian Ocean? Downhill all the way! Just solid-fuel retros to brake it—and where do those come from? Right here! And what do *you* get in return? A few shiploads of fancy goods, owned by the Authority and priced high because it's importado. Importado, importado!—I never *touch* importado! If we don't make it in Hong Kong, I don't use it. What else do you get for wheat? The privilege of selling Lunar ice to Lunar Authority, buying it back as washing water, then *giving* it to the Authority—then buying it back a second time as flushing water—then *giving it again* to the Authority with valuable solids added—then buying it a *third* time at still higher price for farming—then you sell that wheat to the Authority at *their* price—and buy power from the Authority to grow it, again at *their* price! *Lunar* power—not one kilowatt up from Terra. It comes from Lunar ice and Lunar steel, or sunshine spilled on Luna's soil—all put together by *loonies!* Oh, you rockheads, you *deserve* to starve!"

She got silence more respectful than whistles. At last a peevish voice said, "What do you expect us to do, gospazha? Throw rocks at Warden?"

Wyoh smiled. "Yes, we could throw rocks. But the solution is so simple that you all know it. Here in Luna we're rich. Three million hardworking, smart, skilled people, enough water, plenty of everything, endless power, endless cubic. *But* what we *don't* have is a free market. *We must get rid of the Authority!"*

"Yes—but how?"

"Solidarity. In HKL we're learning. Authority charges too much for water, don't buy. It pays too little for ice, don't sell. It holds monopoly on export, don't export. Down in Bombay they want wheat. If it doesn't arrive, the day will come when brokers come here to bid for it —at triple or more the present prices!"

"What do we do in meantime? Starve?"

Same peevish voice— Wyoming picked him out, let her head roll in that old gesture by which a Loonie fem says, *"You're too fat for me!"* She said, "In your case, cobber, it wouldn't hurt."

Guffaws shut him up. Wyoh went on, "No one need starve, Fred Hauser, fetch your drill to Hong Kong; the Authority doesn't own our water and air system and we pay what ice is worth. You with the bankrupt farm—if you have the guts to admit that you're bankrupt, come to Hong Kong and start over. We have a chronic labor shortage, a hard worker doesn't starve." She looked around and added, "I've said enough. It's up to you"—left platform, sat down between Shorty and myself.

She was trembling. Shorty patted her hand; she threw him a glance of thanks, then whispered to me, "How did I do?"

"Wonderful," I assured her. "Terrific!" She seemed reassured.

But I hadn't been honest. "Wonderful" she had been, at swaying crowd. But oratory is a null program. That we were slaves I had known all my life—and nothing could be done about it. True, we weren't bought and sold—but as long as Authority held monopoly over what we had to have and what we could sell to buy it, we were slaves.

But what could we do? Warden wasn't our owner. Had he been, some way could be found to eliminate him. But Lunar Authority was not in Luna, it was on Terra—and we had not one ship, not even small hydrogen bomb. There weren't even hand guns in Luna, though what we would do with guns I did not know. Shoot each other, maybe.

Three million, unarmed and helpless—and eleven *billion* of them. . . with ships and bombs and weapons. We could be a nuisance—but how long will papa take it before baby gets spanked?

I wasn't impressed. As it says in Bible, God fights on side of heaviest artillery.

They cackled again, what to do, how to organize, and so forth, and again we heard that "shoulder to shoulder" noise. Chairman had to use gavel and I began to fidget.

But sat up when I heard familiar voice: "Mr. Chairman! May I have the indulgence of the house for five minutes?"

I looked around. Professor Bernardo de la Paz—which could have guessed from old-fashioned way of talking even if hadn't known voice. Distinguished man with wavy white hair, dimples in cheeks, and voice that smiled— Don't know how old he was but was old when I first met him, as a boy.

He had been transported before I was born but was not a lag. He was a political exile like Warden, but a subversive and instead of fat job like "warden," Professor had been dumped, to live or starve.

No doubt he could have gone to work in any school then in L-City but he didn't. He worked a while washing dishes, I've heard, then as babysitter, expanding into a nursery school, and then into a creche. When I met him he was running a creche, and a boarding and day school, from nursery through primary, middle, and high schools, employed co-op thirty teachers, and was adding college courses.

Never boarded with him but I studied under him. I was opted at fourteen and my new family sent me to school, as I had had only three years, plus spotty tutoring. My eldest wife was a firm woman and made me go to school.

I liked Prof. He would teach *anything*. Wouldn't matter that he knew nothing about it; if pupil wanted it, he would smile and set a price, locate materials, stay a few lessons ahead. Or barely even if he found it tough—never pretended to know more than he did. Took algebra from him and by time we reached cubics I corrected his probs as often as he did mine—but he charged into each lesson gaily.

I started electronics under him, soon was teaching him. So he stopped charging and we went along together until he dug up an engineer willing to daylight for extra money—whereupon we both paid new teacher and Prof tried to stick with me, thumb-fingered and slow, but happy to be stretching his mind.

Chairman banged gavel. "We are glad to extend to Professor de la Paz as much time as he wants—and you chooms in back sign off! Before I use this mallet on skulls."

Prof came forward and they were as near silent as Loonies ever are; he was respected. "I shan't be long," he started in. Stopped to look at Wyoming, giving her up-and-down and whistling. "Lovely señorita," he said, "can this poor one be forgiven? I have the painful duty of disagreeing with your eloquent manifesto."

Wyoh bristled. “Disagree how? What I said was true!”

“Please! Only on one point. May I proceed?”

“Uh. . . go ahead.”

“You are right that the Authority must go. It is ridiculous—pestilential, not to be borne—that we should be ruled by an irresponsible dictator in all our essential economy! It strikes at the most basic human right, the right to bargain in a free marketplace. But I respectfully suggest that you erred in saying that we should sell wheat to Terra—or rice, or any food—at *any* price. We must *not* export food!”

That wheat farmer broke in. “What am I going to do with all that wheat?”

“Please! It would be right to ship wheat to Terra. . . if tonne for tonne they returned it. As water. As nitrates. As phosphates. Tonne for tonne. Otherwise no price is high enough.”

Wyoming said “Just a moment” to farmer, then to Prof: “They can’t and you know it. It’s cheap to ship downhill, expensive to ship uphill. But we don’t need water and plant chemicals, what we need is not so massy. Instruments. Drugs. Processes. Some machinery. Control tapes. I’ve given this much study, sir. If we can get fair prices in a free market—”

“Please, miss! May I continue?”

“Go ahead. I want to rebut.”

“Fred Hauser told us that ice is harder to find. Too true—bad news now and disastrous for our grandchildren. Luna City should use the same water today we used twenty years ago. . . plus enough ice mining for population increase. But we use water *once*—one full cycle, three different ways. Then we ship it to India. As wheat. Even though wheat is vacuum-processed, it contains precious water. Why ship water to India? They have the whole Indian Ocean! And the remaining mass of that grain is even more disastrously expensive, plant foods still harder to come by, even though we extract them from rock. Comrades, harken to me! Every load you ship to Terra condemns your grandchildren to slow death. The miracle of photosynthesis, the plant-and-animal cycle, is a closed cycle. You have opened it—and your lifeblood runs downhill to Terra. You don’t need higher prices, one cannot eat money! What you need, what we all need, is an end to this loss. Embargo, utter and absolute. *Luna must be self-sufficient!”*

A dozen people shouted to be heard and more were talking, while chairman banged gavel. So I missed interruption until woman screamed, then I looked around.

All doors were now open and I saw three armed men in one nearest—men in yellow uniform of Warden’s bodyguard. At main door in back one was using a bull voice; drowned out crowd noise and sound system. "ALL RIGHT, ALL RIGHT!" it boomed. "STAY WHERE YOU ARE. YOU ARE UNDER ARREST. DON'T MOVE, KEEP QUIET. FILE OUT ONE AT A TIME, HANDS EMPTY AND STRETCHED OUT IN FRONT OF YOU."

Shorty picked up man next to him and threw him at guards nearest; two went down, third fired. Somebody shrieked. Skinny little girl, redhead, eleven or twelve, launched self at third guard's knees and hit rolled up in ball; down he went. Shorty swung hand behind him, pushing Wyoming Knott into shelter of his big frame, shouted over shoulder, "Take care of Wyoh, Man—stick close!" as he moved toward door, parting crowd right and left like children.

More screams and I whiffed something—stink I had smelled day I lost arm and knew with horror were not stun guns but laser beams. Shorty reached door and grabbed a guard with each big hand. Little redhead was out of sight; guard she had bowled over was on hands and knees. I swung left arm at his face and felt jar in shoulder as his jaw broke. Must have hesitated for Shorty pushed me and yelled, "Move, Man! Get her out of here!"

I grabbed Wyoming's waist with right arm, swung her over guard I had quieted and through door—with trouble; she didn't seem to want to be rescued. She slowed again beyond door; I shoved her hard in buttocks, forcing her to run rather than fall. I glanced back.

Shorty had other two guards each by neck; he grinned as he cracked skulls together. They popped like eggs and he yelled at me: *"Git!"*

I left, chasing Wyoming. Shorty needed no help, nor ever would again—nor could I waste his last effort. For I did see that, while killing those guards, he was standing on one leg. Other was gone at hip.

3

Wyoh was halfway up ramp to level six before I caught up. She didn't slow and I had to grab door handle to get into pressure lock with her. There I stopped her, pulled red cap off her curls and stuck it in my pouch. "That's better." Mine was missing.

She looked startled. But answered, "Da. It is."

"Before we open door," I said, "are you running anywhere particular? And do I stay and hold them off? Or go with?"

"I don't know. We'd better wait for Shorty."

"Shorty's dead."

Eyes widened, she said nothing. I went on, "Were you staying with him? Or somebody?"

"I was booked for a hotel—Gostaneetsa Ukraina. I don't know where it is. I got here too late to buy in."

"Mmm— That's one place you won't go. Wyoming, I don't know what's going on. First time in months I've seen any Warden's bodyguard in L-City.. . and *never* seen one not escorting vip. Uh, could take you home with me—but they may be looking for me, too. Anywise, ought to get out of public corridors."

Came pounding on door from level-six side and a little face peered up through glass bull's-eye. "Can't stay here," I added, opening door. Was a little girl no higher than my waist. She looked up scornfully and said, "Kiss her somewhere else. You're blocking traffic." Squeezed between us as I opened second door for her.

"Let's take her advice," I said, "and suggest you take my arm and try to look like I was man you want to be with. We stroll. Slow."

So we did. Was side corridor with little traffic other than children always underfoot. If Wart's bodyguards tried to track us, Earthside cop style, a dozen or ninety kids could tell which way tall blonde went—if any Loonie child would give stooge of Warden so much as time of day.

A boy almost old enough to appreciate Wyoming stopped in front of us and gave her a happy whistle. She smiled and waved him aside. "There's our trouble," I said in her ear. "You stand out like Terra at full. Ought to duck into a hotel. One off next side corridor—nothing much, bundling booths mostly. But close."

"I'm in no mood to bundle."

"Wyoh, please! Wasn't asking. Could take separate rooms."

"Sorry. Could you find me a W.C.? And is there a chemist's shop near?"

"Trouble?"

"Not that sort. A W.C. to get me out of sight—for I *am* conspicuous—and a chemist's shop for cosmetics. Body makeup. And for my hair, too."

First was easy, one at hand. When she was locked in, I found a chemist's shop, asked how much body makeup to cover a girl so tall—marked a point under my chin—and massing fortyeight? I bought that amount in sepia, went to another shop and bought same amount—winning roll at first shop, losing at second—came out even. Then I bought black hair tint at third shop—and a red dress.

Wyoming was wearing black shorts and pullover—practical for travel and effective on a blonde. But I'd been married all my life and had some notion of what women wear and had *never* seen a woman with dark sepia skin, shade of makeup, wear black by choice. Furthermore, skirts were worn in Luna City then by dressy women. This shift was a skirt with bib and price convinced me it must be dressy. Had to guess at size but material had some stretch.

Ran into three people who knew me but was no unusual comment.

Nobody seemed excited, trade going on as usual; hard to believe that a riot had taken place minutes ago on level below and a few hundred meters north. I set it aside for later thought—excitement was not what I wanted.

I took stuff to Wye, buzzing door and passing in it; then stashed self in a taproom for half an hour and half a liter and watched video. Still no excitement, no "we interrupt for special bulletin." I went back, buzzed, and waited.

Wyoming came out—and I didn't recognize her. Then did and stopped to give full applause. Just had to—whistles and finger snaps and moans and a scan like mapping radar.

Wyoh was now darker than I am, and pigment had gone on beautifully. Must have been carrying items in pouch as eyes were dark now, with lashes to match, and mouth was dark red and bigger. She had used black hair tint, then fizzed hair up with grease as if to take kinks out, and her tight curls had defeated it enough to make convincingly imperfect. She didn't look Afro—but not European, either. Seemed some mixed breed, and thereby more a Loonie.

Red dress was too small. Clung like sprayed enamel and flared out at mid-thigh with permanent static charge. She had taken shoulder strap off her pouch and had it under arm. Shoes she had discarded or pouched; bare feet made her shorter.

She looked good. Better yet, she looked not at all like agitatrix who had harangued crowd.

She waited, big smile on face and body undulating, while I applauded. Before I was done, two little boys flanked me and added shrill endorsements, along with clog steps. So I tipped them and told them to be missing; Wyoming flowed to me and took my arm. "Is it okay? Will I pass?"

"Wyoh, you look like slot-machine sheila waiting for action."

"Why, you drecklich choom! Do I look like slot-machine prices? Tourist!"

"Don't jump salty, beautiful. Name a gift. Then speak my name. If it's bread-and-honey, I own a hive."

"Uh—" She fisted me solidly in ribs, grinned. "I was flying, cobber. If I ever bundle with you—not likely—we won't speak to the bee. Let's find that hotel."

So we did and I bought a key. Wyoming put on a show but needn't have bothered. Night clerk never looked up from his knitting, didn't offer to roll. Once inside, Wyoming threw bolts. "It's nice!"

Should have been, at thirty-two Hong Kong dollars. I think she expected a booth but I would not put her in such, even to hide. Was comfortable lounge with own bath and no water limit. And phone and delivery lift, which I needed.

She started to open pouch. “I saw what you paid. Let’s settle it, so that—”

I reached over, closed her pouch. “Was to be no mention of bees.”

“What? Oh, merde, that was about bundling. You got this doss for me and it’s only right that—”

“Switch off.”

“Uh. . . half? No grievin’ with Steven.”

“Nyet. Wyoh, you’re a long way from home. What money you have, hang on to.”

“Manuel O’Kelly, if you don’t let me pay my share, I’ll walk out of here!”

I bowed. “Dosvedanyuh, Gospazha, ee sp’coynoynochi. I hope we shall meet again.” I moved to unbolt door.

She glared, then closed pouch savagely. “I’ll stay. M’goy!”

“You’re welcome.”

“I mean it, I really do thank you, Just the same— Well, I’m not used to accepting favors. I’m a Free Woman.”

“Congratulations. I think.”

“Don’t you be salty, either. You’re a firm man and I respect that—I’m glad you’re on our side.”

“Not sure I am.”

“*What?*”

“Cool it. Am not on Warden’s side. Nor will I talk . . . wouldn’t want Shorty, Bog rest his generous soul, to haunt me. But your program isn’t practical.”

“But, Mannie, you don’t understand! If all of us—”

“Hold it, Wye; this no time for politics. I’m tired and hungry. When did you eat last?”

“Oh, goodness!” Suddenly she looked small, young, tired. “I don’t know. On the bus, I guess. Helmet rations.”

“What would you say to a Kansas City cut, rare, with baked potato, Tycho sauce, green salad, coffee . . and a drink first?”

“Heavenly!”

“I think so too, but we’ll be lucky, this hour in this hole, to get algae soup and burgers. What do you drink?”

“Anything. Ethanol.”

“Okay.” I went to lift, punched for service. “Menu, please.” It displayed and I settled for prime rib plus rest, and two orders of apfelstrudel with whipped cream. I added a half liter of table vodka and ice and starred that part.

“Is there time for me to take a bath? Would you mind?”

“Go ahead, Wye. You’ll smell better.”

“Louse. Twelve hours in a p-suit and you’d stink, too—the bus was dreadful. I’ll hurry.”

"Half a sec, Wye. Does that stuff wash off? You may need it when you leave. . . whenever you do, wherever you go."

"Yes, it does. But you bought three times as much as I used. I'm sorry, Mannie; I plan to carry makeup on political trips—things can happen. Like tonight, though tonight was worst. But I ran short of seconds and missed a capsule and almost missed the bus."

"So go scrub."

"Yes, sir, Captain. Uh, I *don't* need help to scrub my back but I'll leave the door up so we can talk. Just for company, no invitation implied."

"Suit yourself. I've seen a woman."

"What a thrill that must have been for her." She grinned and fisted me another in ribs—hard—went in and started tub. "Mannie, would you like to bathe in it first? Secondhand water is good enough for this makeup and that stink you complained about."

"Unmetered water, dear. Run it deep."

"Oh, what luxury! At home I use the same bath water three days running." She whistled softly and happily. "Are you wealthy, Mannie?"

"Not wealthy, not weeping."

Lift jingled; I answered, fixed basic martinis, vodka over ice, handed hers in, got out and sat down, out of sight—nor had I seen sights; she was shoulder deep in happy suds. "Pawlnoi Zheezni!" I called.

"A full life to you, too, Mannie. Just the medicine I needed." After pause for medicine she went on, "Mannie, you're married. Ja?"

"Da. It shows?"

"Quite. You're nice to a woman but not eager and quite independent. So you're married and long married. Children?"

"Seventeen divided by four."

"Clan marriage?"

"Line. Opted at fourteen and I'm fifth of nine. So seventeen kids is nominal. Big family."

"It must be nice. I've never seen much of line families, not many in Hong Kong. Plenty of clans and groups and lots of polyandries but the line way never took hold."

"*Is* nice. Our marriage nearly a hundred years old. Dates back to Johnson City and first transportees—twenty-one links, nine alive today, never a divorce. Oh, it's a madhouse when our descendants and inlaws and kinfolk get together for birthday or wedding—more kids than seventeen, of course; we don't count 'em after they marry or I'd have 'children' old enough to be my grandfather. Happy way to live, never much pressure. Take me. Nobody woofs if I stay away a week and don't phone. Welcome when I show up. Line marriages rarely have divorces. How could I do better?"

"I don't think you could. Is it an alternation? And what's the spacing?"

"Spacing has no rule, just what suits us. Been alternation up to latest link, last year. We married a girl when alternation called for boy. But was special."

"Special how?"

"My youngest wife is a granddaughter of eldest husband and wife. At least she's granddaughter of Mum—senior is 'Mum' or sometimes Mimi to her husbands—and she may be of Grandpaw—but not related to other spouses. So no reason not to marry back in, not even consanguinuity okay in other types of marriage. None, nit, zero. And Ludmilla grew up in our family because her mother had her solo, then moved to Novylen and left her with us.

"Milla didn't want to talk about marrying out when old enough for us to think about it. She cried and asked us *please* to make an exception. So we did. Grandpaw doesn't figure in genetic angle—these days his interest in women is more gallant than practical. As senior husband he spent our wedding night with her—but consummation was only formal. Number-two husband, Greg, took care of it later and everybody pretended. And everybody happy. Ludmilla is a sweet little thing, just fifteen and pregnant first time."

"Your baby?"

"Greg's, I think. Oh, mine too, but in fact was in Novy Leningrad. Probably Greg's, unless Milla got outside help. But didn't, she's a home girl. And a wonderful cook."

Lift rang; took care of it, folded down table, opened chairs, paid bill and sent lift up. "Throw it to pigs?"

"I'm coming! Mind if I don't do my face?"

"Come in skin for all of me."

"For two dimes I would, you much-married man." She came out quickly, blond again and hair slicked back and damp. Had not put on black outfit; again in dress I bought. Red suited her. She sat down, lifted covers off food. "Oh, boy! Mannie, would your family marry me? You're a dinkum provider."

"I'll ask. Must be unanimous."

"Don't crowd yourself." She picked up sticks, got busy. About a thousand calories later she said, "I told you I was a Free Woman. I wasn't, always."

I waited. Women talk when they want to. Or don't.

"When I was fifteen I married two brothers, twins twice my age and I was terribly happy."

She fiddled with what was on plate, then seemed to change subject. "Mannie, that was just static about wanting to marry your family. You're safe from me. If I ever marry again—unlikely but I'm not opposed to it—it would be just one man, a tight little marriage, earthworm style. Oh, I don't mean I would keep him dogged down. I don't think it matters where a man eats lunch as long as he comes home for dinner. I would try to make him happy."

"Twins didn't get along?"

"Oh, not that at all. I got pregnant and we were all delighted . . . and I had it, and it was a monster and had to be eliminated. They were good to me about it. But I can read print. I announced a divorce, had myself sterilized, moved from Novylen to Hong Kong, and started over as a Free Woman."

"Wasn't that drastic? Male parent oftener than female; men are exposed more."

"Not in my case. We had it calculated by the best mathematical geneticist in Novy Leningrad—one of the best in Sovunion before she got shipped. I know what happened to me. I was a volunteeer colonist—I mean my mother was for I was only five. My father was transported and Mother chose to go with him and take me along. There was a solar storm warning but the pilot thought he could make it—or didn't care; he was a Cyborg. He did make it but we got hit on the ground—and, Mannie, that's one thing that pushed me into politics, that ship sat four hours before they let us disembark. Authority red tape, quarantine perhaps; I was too young to know. But I wasn't too young later to figure out that I had birthed a monster because the Authority doesn't *care* what happens to us outcasts."

"Can't start argument; they *don't* care. But, Wyoh, still sounds hasty. If you caught damage from radiation—well, no geneticist but know something about radiation. So you had a damaged egg. Does *not* mean egg next to it was hurt—statistically unlikely."

"Oh, I know that."

"Mmm— What sterilization? Radical? Or contraceptive?"

"Contraceptive. My tubes could be opened. But, Mannie, a woman who has had one monster doesn't risk it again." She touched my prosthetic. "You have that. Doesn't it make you eight times as careful not to risk this one?" She touched my meat arm. "That's the way I feel. You have that to contend with; I have *this*—and I would never told you if you hadn't been hurt, too."

I didn't say left arm more versatile than right—she was correct; don't want to trade in right arm. Need it to pat girls if naught else. "Still think you could have healthy babies."

"Oh, I can! I've had eight."

"Huh?"

"I'm a professional hostmother, Mannie."

I opened mouth, closed it. Idea wasn't strange. I read Earthside papers. But doubt if any surgeon in Luna City in 2075 ever performed such transplant. In cows, yes—but L-City females unlikely at any price to have babies for other women; even homely ones could get husband or six. (Correction: Are *no* homely women. Some more beautiful than others.)

Glanced at her figure, quickly looked up. She said, "Don't strain your eyes, Mannie; I'm not carrying now. Too busy with politics. But hosting is a good profession for Free Woman. It's high pay. Some Chinee families are wealthy and all my babies have been Chinee—and Chinee are smaller than average and I'm a big cow; a two-and-a-half- or three-kilo Chinese baby is no trouble. Doesn't spoil my figure. These—" She glanced down at her lovelies. "I don't wet-nurse them, I never *see* them. So I look nulliparous and younger than I am, maybe.

"But I didn't know how well it suited me when I first heard of it. I was clerking in a Hindu shop, eating money, no more, when I saw this ad in the Hong Kong Gong. It was the thought of having a baby, a *good* baby, that hooked me; I was still in emotional trauma from my monster—and it turned out to be Just what Wyoming needed. I stopped feeling that I was a failure as a woman. I made more money than I could ever hope to earn at other jobs. And my time almost to myself; having a baby hardly slows me down—six weeks at most and that long only because I want to be fair to my clients; a baby is a valuable property. And I was soon in politics; I sounded off and the underground got in touch with me. That's when I started *living*, Mannie; I studied politics and economics and history and learned to speak in public and turned out to have a flair for organization. It's satisfying work because I believe in it—I *know* that Luna will be free. Only— Well, it would be nice to have a husband to come home to. . . if he didn't mind that I was sterile. But I don't think about it; I'm too busy. Hearing about your nice family got me talking, that's all. I must apologize for having bored you."

How many women apologize? But Wyoh was more man than woman some ways, despite eight Chinee babies. "Wasn't bored."

"I hope not. Mannie, why do you say our program isn't practical? We need you."

Suddenly felt tired. How to tell lovely woman dearest dream is nonsense? "Um. Wyoh, let's start over. You told them what to do. But will they? Take those two you singled out. All that iceman knows, bet anything, is how to dig ice. So he'll go on digging and selling to Authority because that's what he can do. Same for wheat farmer. Years ago, he put in one cash crop— now he's got ring in nose. If he wanted to be independent, would have diversified. Raised what he eats, sold rest free market and stayed away from catapult head. I *know* —I'm a farm boy."

"You said you were a computerman."

"Am, and that's a piece of same picture. I'm not a top computerman. But best in Luna. I won't go civil service, so Authority has to hire me when in trouble—my prices—or send Earthside, pay risk and hardship, then ship him back fast before his body forgets Terra. At far more than I charge. So if I can do it, I get their jobs—and Authority can't touch me; was born free. And if no work—usually is—I stay home and eat high.

"We've got a proper farm, not a one-cash-crop deal. Chickens. Small herd of whiteface, plus milch cows. Pigs. Mutated fruit trees. Vegetables. A little wheat and grind it ourselves and don't insist on white flour, and sell—free market—what's left. Make own beer and brandy. I learned drillman extending our tunnels. Everybody works, not too hard. Kids make cattle take exercise by switching them along; don't use tread mill. Kids gather eggs and feed chickens, don't use much machinery. Air we can buy from L-City—aren't far out of town and pressure-tunnel connected. But more often we sell air; being farm, cycle shows Oh-two excess. Always have valuta to meet bills."

"How about water and power?"

"Not expensive. We collect some power, sunshine screens on surface, and have a little pocket of ice. Wye, our farm was founded before year two thousand, when L-City was one natural cave, and we've kept improving it—advantage of line marriage; doesn't die and capital improvements add up."

"But surely your ice won't last forever?"

"Well, now—" I scratched head and grinned. "We're careful; we keep our sewage and garbage and sterilize and use it. Never put a drop back into city system. But—don't tell Warden, dear, but back when Greg was teaching me to drill, we happened to drill into bottom of main south reservoir—and had a tap with us, spilled hardly a drop. But we *do* buy some metered water, looks better—and ice pocket accounts for not buying much. As for power—well, power is even easier to steal. I'm a good electrician, Wyoh."

"Oh, *wonderful!*" Wyoming paid me a long whistle and looked delighted. "Everybody should do that!"

"Hope not, would show. Let 'em think up own ways to outwit Authority; our family always has. But back to your plan, Wyoh: two things wrong. Never get 'solidarity'; blokes like Hauser would cave in—because they *are* in a trap; can't hold out. Second place, suppose you managed it. Solidarity. So solid not a tonne of grain is delivered to catapult head. Forget ice; it's grain that makes Authority important and not just neutral agency it was set up to be. No grain. What happens?"

"Why, they have to negotiate a fair price, that's what!"

"My dear, you and your comrades listen to each other too much. Authority would call it rebellion and warship would orbit with bombs earmarked for L-City and Hong Kong and Tycho Under and Churchill and Novylen, troops would land, grain barges would lift, under guard —and farmers would break necks to cooperate. Terra has guns and power and bombs and ships and won't hold still for trouble from ex-cons. And troublemakers like you—and me; with you in spirit—us lousy troublemakers will be rounded up and eliminated, teach us a lesson. And earthworms would say we had it coming . . . because *our* side would never be heard. Not on Terra."

Wyoh looked stubborn. "Revolutions have succeeded before. Lenin had only a handful with him."

"Lenin moved in on a power vacuum. Wye, correct me if I'm wrong. Revolutions succeeded when—only when—governments had gone rotten soft, or disappeared."

"Not true! The American Revolution."

"South lost, nyet?"

Not that one, the one a century earlier. They had the sort of troubles with England that we are having now—and they *won!*"

"Oh, that one. But wasn't England in trouble? France, and Spain, and Sweden—or maybe Holland? And Ireland. Ireland was rebelling; O'Kellys were in it. Wyoh, if you can stir trouble on Terra—say a war between Great China and North American Directorate, maybe PanAfrica lobbing bombs at Europe, I'd say was wizard time to kill Warden and tell Authority it's through. Not today."

"You're a pessimist."

"Nyet, realist. Never pessimist. Too much Loonie not to bet if any chance. Show me chances no worse then ten to one against and I'll go for broke. But want that one chance in ten." I pushed back chair. "Through eating?"

"Yes. Bolshoyeh spasebaw, tovarishch. It was grand!"

"My pleasure. Move to couch and I'll rid of table and dishes, —no, can't help; I'm host." I cleared table, sent up dishes, saving coffee and vodka, folded table, racked chairs, turned to speak.

She was sprawled on couch, asleep, mouth open and face softened into little girl.

Went quietly into bath and closed door. After a scrubbing I felt better—washed tights first and were dry and fit to put on by time I quit lazing in tub—don't care when world ends long as I'm bathed and in clean clothes.

Wyoh was still asleep, which made problem. Had taken room with two beds so she would not feel I was trying to talk her into bundling—not that I was against it but she had made clear she was opposed. But my bed had to be made from couch and proper bed was folded away.

Should I rig it out softly, pick her up like limp baby and move her? Went back into bath and put on arm.

Then decided to wait. Phone had hush hood. Wyoh seemed unlikely to wake, and things were gnawing me. I sat down at phone, lowered hood, punched "MYCROFTXXX."

"Hi, Mike."

"Hello, Man. Have you surveyed those jokes?"

"What? Mike, haven't had a minute—and a minute may be a long time to you but it's short to me. I'll get at it as fast as I can."

"Okay, Man. Have you found a not-stupid for me to talk with?"

"Haven't had time for that, either. Uh. . .wait." I looked out through hood at Wyoming. "Not-stupid" in this case meant empathy. . . Wyoh had plenty. Enough to be friendly with a machine? I thought so. And could be trusted; not only had we shared trouble but she was a subversive.

"Mike, would you like to talk with a girl?"

"Girls are not-stupid?"

"Some girls are very not-stupid, Mike."

"I would like to talk with a not-stupid girl, Man."

"I'll try to arrange. But now I'm in trouble and need your help."

"I will help, Man."

"Thanks, Mike. I want to call my home—but not ordinary way. You know sometimes calls are monitored, and if Warden orders it, lock can be put on so that circuit can be traced."

"Man, you wish me to monitor your call to your home and put a lock-and-trace on it? I must inform you that I already know your home call number and the number from which you are calling."

"No, no! *Don't* want it monitored, *don't* want it locked and traced. Can *you* call my home, connect me, and control circuit so that it can't be monitored, *can't* be locked, *can't* be traced—even if somebody has programmed just that? Can you do it so that they won't even know their program is bypassed?"

Mike hesitated. I suppose it was a question never asked and he had to trace a few thousand possibilities to see if his control of system permitted this novel program. "Man, I can do that. I will."

"Good! Uh, program signal. If I want this sort of connection in future, I'll ask for 'sherlock.'"

"Noted. Sherlock was my brother." Year before, I had explained to Mike how he got his name. Thereafter he read all Sherlock Holmes stories, scanning film in Luna City Carnegie Library. Don't know how he rationalized relationship; I hesitated to ask.

"Fine! Give me a 'sherlock' to my home."

A moment later I said, "Mum? This is your favorite husband."

She answered, "Manuel! Are you in trouble again?"

I love Mum more than any other woman including my other wives, but she never stopped bringing me up—Bog willing, she never will. I tried to sound hurt. "Me? Why, you know me, Mum."

"I do indeed. Since you are not in trouble, perhaps you can tell me why Professor de la Paz is so anxious to get in touch with you—he has called three times—and why he wants to reach some woman with unlikely name of Wyoming Knott—and why he thinks you might be with her? Have you taken a bundling companion, Manuel, without telling me? We have freedom in our family, dear, but you know that I prefer to be told. So that I will not be taken unawares."

Mum was always jealous of all women but her co-wives and never, never, never admitted it. I said, "Mum, Bog strike me dead, I have *not* taken a bundling companion."

"Very well. You've always been a truthful boy, Now what's this mystery?"

"I'll have to ask Professor." (Not lie, just tight squeeze.) "Did he leave number?"

"No, he said he was calling from a public phone."

"Um. If he calls again, ask him to leave number and time I can reach him. This is public phone, too." (Another tight squeeze.) "In meantime— You listened to late news?"

"You know I do."

"Anything?"

"Nothing of interest."

"No excitement in L-City? Killings, riots, anything?"

"Why, no. There was a set duel in Bottom Alley but— *Manuel!* Have you killed someone?"

"No, Mum." (Breaking a man's jaw will not kill him.)

She sighed. "You'll be my death, dear. You know what I've always told you. In our family we do not brawl. Should a killing be necessary —it almost never is—matters must be discussed calmly, en famille, and proper action selected. If a new chum *must* be eliminated, other people know it. It is worth a little delay to hold good opinion and support—"

"Mum! Haven't killed anybody, don't intend to. And know that lecture by heart."

"Please be civil, dear."

"I'm sorry."

"Forgiven. Forgotten. I'm to tell Professor de la Paz to leave a number. I shall."

"One thing. Forget name 'Wyoming Knott.' Forget Professor was asking for me. If a stranger phones or calls in person, and asks *anything* about me, you haven't heard from me, don't know where I am . . . think I've gone to Novylen. That goes for rest of family, too.

Answer no questions—especially from anybody connected with Warden."

"As if I would! Manuel you *are* in trouble!"

"Not much and getting it fixed."—hoped!—"Tell you when I get home. Can't talk now. Love you. Switching off."

"I love you, dear. Sp'coynoynauchi."

"Thanks and you have a quiet night, too. Off."

Mum is wonderful. She was shipped up to The Rock long ago for carving a man under circumstances that left grave doubts as to girlish innocence—and has been opposed to violence and loose living ever since. Unless necessary—she's no fanatic. Bet she was a jet job as a kid and wish I'd known her—but I'm rich in sharing last half of her life.

I called Mike back. "Do you know Professor Bernardo de la Paz's voice?"

"I do, Man."

"Well. . . you might monitor as many phones in Luna City as you can spare ears for and if you hear him, let me know. Public phones especially."

(A full two seconds delay—Was giving Mike problems he had never had, think he liked it.) "I can check-monitor long enough to identify at all public phones in Luna City. Shall I use random search on the others, Man?"

"Um. Don't overload. Keep an ear on his home phone and school phone."

"Program set up."

"Mike, you are best friend I ever had."

"That is not a joke, Man?"

"No joke. Truth."

"I am— Correction: I am honored and pleased. You are my best friend, Man, for you are my only friend. No comparison is logically permissible."

"Going to see that you have other friends. Not-stupids, I mean. Mike? Got an empty memory bank?"

"Yes, Man. Ten-to-the-eighth-bits capacity."

"Good! Will you block it so that only you and I can use it? Can you?"

"Can and will. Block signal, please."

"Uh. . . Bastille Day." Was my birthday, as Professor de la Paz had told me years earlier.

"Permanently blocked."

"Fine. Got a recording to put in it. But first— Have you finished setting copy for tomorrow's Daily Lunatic?"

"Yes, Man."

"Anything about meeting in Stilyagi Hall?"

"No, Man."

"Nothing in news services going outcity? Or riots?"

"No, Man."

" ' "Curiouser and curiouser," said Alice.' Okay, record this under 'Bastille Day,' then think about it. But for Bog's sake don't let even your thoughts go outside that block, nor anything I say about it!"

"Man my only friend," he answered and voice sounded diffident, "many months ago I decided to place *any* conversation between you and me under privacy block accessible only to you. I decided to erase none and moved them from temporary storage to permanent. So that I could play them over, and over, and over, and think about them. Did I do right?"

"Perfect. And, Mike—I'm flattered."

"P'jal'st. My temporary files were getting full and I learned that I needed not to erase your words."

"Well—'Bastille Day.' Sound coming at sixty-to-one." I took little recorder, placed close to a microphone and let it zipsqueal. Had an hour and a half in it; went silent in ninety seconds or so. "That's all, Mike. Talk to you tomorrow."

"Good night, Manuel Garcia O'Kelly my only friend."

I switched off and raised hood. Wyoming was sitting up and looking troubled. "Did someone call? Or. . ."

"No trouble. Was talking to one of my best—and most trustworthy—friends. Wyoh, are you stupid?"

She looked startled. "I've sometimes thought so. Is that a joke?"

"No. If you're not-stupid, I'd like to introduce you to him. Speaking of jokes— Do you have a sense of humor?"

"Certainly I have!" is what Wyoming did not answer—and any other woman would as a locked-in program. She blinked thoughtfully and said, "You'll have to judge for yourself, cobber. I have something I use for one. It serves my simple purposes."

"Fine." I dug into pouch, found print-roll of one hundred "funny" stories. "Read. Tell me which are funny, which are not—and which get a giggle first time but are cold pancakes without honey to hear twice."

"Manuel, you may be the oddest man I've ever met." She took that printout. "Say, is this computer paper?"

"Yes. Met a computer with a sense of humor."

"So? Well, it was bound to come some day. Everything else has been mechanized."

I gave proper response and added "*Every*thing?"

She looked up. "Please. Don't whistle while I'm reading."

Heard her giggle a few times while I rigged out bed and made it. Then sat down by her, took end she was through with and started reading. Chuckled a time or two but a joke isn't too funny to me if read cold, even when I see it could be fission job at proper time. I got more interested in how Wyoh rated them.

She was marking "plus," "minus," and sometimes question mark, and plus stories were marked "once" or "always"—few were marked "always." I put my ratings under hers. Didn't disagree too often.

By time I was near end she was looking over my judgments. We finished together. "Well?" I said. "What do you think?"

"I think you have a crude, rude mind and it's a wonder your wives put up with you."

"Mum often says so. But how about yourself, Wyoh? You marked plusses on some that would make a slot-machine girl blush."

She grinned. "Da. Don't tell anybody; publicly I'm a dedicated party organizer above such things. Have you decided that I have a sense of humor?"

"Not sure. Why a minus on number seventeen?"

"Which one is that?" She reversed roll and found it. "Why, any woman would have done the same! It's not funny, it's simply necessary."

"Yes, but think how silly she looked."

"Nothing silly about it. Just sad. And look here. You thought this one was not funny. Number fifty-one."

Neither reversed any judgments but I saw a pattern: Disagreements were over stories concerning oldest funny subject. Told her so. She nodded. "Of course. I saw that. Never mind, Mannie dear; I long ago quit being disappointed in men for what they are not and never can be."

I decided to drop it. Instead told her about Mike.

Soon she said, "Mannie, you're telling me that this computer is *alive?"*

"What do you mean?' I answered. "He doesn't sweat, or go to W.C. But can think and talk and he's aware of himself. Is he 'alive'?"

"I'm not sure what I mean by 'alive,' " she admitted. "There's a scientific definition, isn't there? Irritability, or some such. And reproduction."

"Mike is irritable and can be irritating. As for reproducing, not designed for it but—yes, given time and materials and very special help, Mike could reproduce himself."

"I need very special help, too," Wyoh answered, "since I'm sterile. And it takes me ten whole lunars and many kilograms of the best materials. But I make good babies. Mannie, why shouldn't a machine be alive? I've always felt they were. Some of them wait for a chance to savage you in a tender spot."

"Mike wouldn't do that. Not on purpose, no meanness in him. But he likes to play jokes and one might go wrong—like a puppy who doesn't know he's biting. He's ignorant No, *not* ignorant, he knows enormously more than I, or you, or any man who ever lived. Yet he doesn't know anything."

"Better repeat that. I missed something."

I tried to explain. How Mike knew almost every book in Luna, could read at least a thousand times as fast as we could and never forget anything unless he chose to erase, how he could reason with perfect logic, or make shrewd guesses from insufficient data. . . and yet not know *anything* about how to be "alive." She interrupted. "I scan it. You're saying he's smart and knows a lot but is not sophisticated. Like a new chum when he grounds on The Rock. Back Earthside he might be a professor with a string of degrees. . . but here he's a baby."

"That's it. Mike is a baby with a long string of degrees. Ask how much water and what chemicals and how much photoflux it takes to crop fifty thousand tonnes of wheat and he'll tell you without stopping for breath. But can't tell if a joke is funny,"

"I thought most of these were fairly good."

"They're ones he's heard—read—and were marked jokes so he filed them that way. But doesn't understand them because he's never been a—a *people*. Lately he's been trying to make up jokes. Feeble, very." I tried to explain Mike's pathetic attempts to be a "people." "On top of that, he's lonely."

"Why, the poor thing! You'd be lonely, too, if you did nothing but work, work, work, study, study, study, and never anyone to visit with. Cruelty, that's what it is."

So I told about promise to find "not-stupids." "Would you chat with him, Wye? And not laugh when he makes funny mistakes? If you do, he shuts up and sulks."

"Of course I would, Mannie! Uh. . . once we get out of this mess. If it's safe for me to be in Luna City. Where is this poor little computer? City Engineering Central? I don't know my way around here."

"He's not in L-City; he's halfway across Crisium. And you couldn't go down where he is; takes a pass from Warden. But—"

"Hold it! 'Halfway across Crisium—' Mannie, this computer is one of those at Authority Complex?"

"Mike isn't just 'one of those' computers," I answered, vexed on Mike's account. "He's *boss;* he waves baton for all others. Others are just machines, extensions of Mike, like this is for me," I said, flexing hand of left arm. "Mike controls them. He runs catapult personally, was his first job—catapult and ballistic radars. But he's logic for phone system, too, after they converted to Lunawide switching. Besides that, he's supervising logic for other systems."

Wyoh closed eyes and pressed fingers to temples. "Mannie, does Mike *hurt?*"

" 'Hurt?' No strain. Has time to read jokes."

"I don't mean that. I mean: Can he hurt? Feel pain?"

"What? No. Can get feelings hurt. But can't feel pain. Don't *think* he can. No, sure he can't, doesn't have receptors for pain. Why?"

She covered eyes and said softly, "Bog help me." Then looked up and said, "Don't you *see,* Mannie? You have a pass to go down where this computer is. But most Loonies can't even leave the tube at that station; it's for Authority employees only. Much less go inside the main computer room. I had to find out if it could feel pain because—well, because you got me feeling sorry for it, with your talk about how it was lonely! But, Mannie, do you realize what a few kilos of toluol plastic would do there?"

"Certainly do!" Was shocked and disgusted.

"Yes. We'll strike right after the explosion—and Luna will be free! Mmm. . . I'll get you explosives and fuses—but we can't move until we are organized to exploit it. Mannie, I've got to get out of here, I must risk it. I'll go put on makeup." She started to get up.

I shoved her down, with hard left hand. Surprised her, and surprised me—had not touched her in any way save necessary contact. Oh, different today, but was 2075 and touching a fem without her consent—plenty of lonely men to come to rescue and airlock never far away. As kids say, Judge Lynch never sleeps.

"Sit down, keep quiet!" I said. "*I* know what a blast would do. Apparently you don't. Gospazha, am sorry to say this . . . but if came to choice, would eliminate *you* before would blow up Mike."

Wyoming did *not* get angry. Really was a man some ways—her years as a disciplined revolutionist I'm sure; she was all girl most ways. "Mannie, you told me that Shorty Mkrum is dead."

"What?" Was confused by sharp turn. "Yes. Has to be. One leg off at hip, it was; must have bled to death in two minutes. Even in a surgery amputation that high is touch-and-go." (I know such things; had taken luck and big transfusions to save *me*—and an arm isn't in same class with what happened to Shorty.)

"Shorty was," she said soberly, "my best friend here and one of my best friends anywhere. He was all that I admire in a man—loyal, honest, intelligent, gentle, and brave—and devoted to the Cause. But have you seen me grieving over him?"

"No. Too late to grieve."

"It's never too late for grief. I've grieved every instant since you told me. But I locked it in the back of my mind for the Cause leaves no time for grief. Mannie, if it would have bought freedom for Luna—or even been part of the price—I would have eliminated Shorty myself. Or you. Or myself. And yet you have qualms over blowing up a computer!"

"Not that at all!" (But *was*, in part. When a man dies, doesn't shock me too much; we get death sentences day we are born. But Mike was unique and no reason not to be immortal. Never mind "souls"—prove Mike did not have one. And if no soul, so much worse. No? Think twice.)

"Wyoming, what would happen if we blew up Mike? Tell."

"I don't know precisely. But it would cause a great deal of confusion and that's exactly what we—"

"Seal it. You don't know. Confusion, da. Phones out. Tubes stop running. Your town not much hurt; Kong Kong has own power. But L-City and Novylen and other warrens all power stops. Total darkness. Shortly gets stuffy. Then temperature drops and pressure. Where's your p-suit?"

"Checked at Tube Station West."

"So is mine. Think you can find way? In solid dark? In time? Not sure I can and I was born in this warren. With corridors filled with screaming people? Loonies are a tough mob; we have to be—but about one in ten goes off his cams in total dark. Did you swap bottles for fresh charges or were you in too much hurry? And will suit be there with thousands trying to find p-suits and not caring who owns?"

"But aren't there emergency arrangements? There are in Hong Kong Luna."

"Some. Not enough. Control of anything essential to life should be decentralized and paralleled so that if one machine fails, another takes over. But costs money and as you pointed out, Authority doesn't *care*. Mike shouldn't have all jobs. But was cheaper to ship up master machine, stick deep in The Rock where couldn't get hurt, then keep adding capacity and loading on jobs—did you know Authority makes near as much gelt from leasing Mike's services as from trading meat and wheat? Does. Wyoming, not sure we would lose Luna City if Mike were blown up. Loonies are handy and might jury-rig till automation could be restored. But I tell you true: Many people would die and rest too busy for politics."

I marveled it. This woman had been in The Rock almost all her life. . . yet could think of something as new-choomish as wrecking engineering controls. "Wyoming, if you were smart like you are beautiful, you wouldn't talk about blowing up Mike; you would think about how to get him on your side."

"What do you mean?" she said. "The Warden controls the computers."

"Don't know what I mean," I admitted. "But don't think Warden controls computers—wouldn't know a computer from a pile of rocks. Warden, or staff, decides policies, general plans. Half-competent technicians program these into Mike. Mike sorts them, makes sense of them, plans detailed programs, parcels them out where they belong, keeps things moving. But nobody *controls* Mike; he's too smart. He carries out what is asked because that's how he's built. But he's selfprogramming logic, makes own decissions. And a good thing, because if he weren't smart, system would not work."

"I still don't see what you mean by 'getting him on our side.' "

"Oh. Mike doesn't feel loyalty to Warden. As you pointed out: He's a machine. But if I wanted to foul up phones *without* touching air or water or lights, I would talk to Mike. If it struck him funny, he might do it."

"Couldn't you just program it? I understood that you can get into the room where he is."

"If I—or anybody—programmed such an order into Mike without talking it over with him, program would be placed in 'hold' location and alarms would sound in many places. But if Mike *wanted* to—" I told her about cheque for umpteen jillion. "Mike is still finding himself, Wyoh. And lonely. Told me I was 'his only friend'—and was so open and vulnerable I wanted to bawl. If you took pains to be his friend, too—without thinking of him as 'just a machine'—well, not sure what it would do, haven't analyzed it. But if I tried anything big and dangerous, would want Mike in my corner."

She said thoughtfully, "I wish there were some way for me to sneak into that room where he is. I don't suppose makeup would help?"

"Oh, don't have to go *there*. Mike is on phone. Shall we call him?"

She stood up. "Mannie, you are not only the oddest man I've met; you are the most exasperating. What's his number?"

"Comes from associating too much with a computer." I went to phone. "Just one thing, Wyoh. You get what you want out of a man just by batting eyes and undulating framework."

"Well. . . sometimes. But I do have a brain."

"Use it. Mike is *not* a man. No gonads. No hormones. No instincts. Use fem tactics and it's a null signal. Think of him as supergenius child too young to notice vive-la-difference."

"I'll remember. Mannie, why do you call him 'he'?"

"Uh, can't call him 'it,' don't think of him as 'she.' "

"Perhaps I had better think of him as 'she.' Of her as 'she' I mean."

"Suit yourself." I punched MYCROFTXXX, standing so body shielded it; was not ready to share number till I saw how thing went. Idea of blowing up Mike had shaken me. "Mike?"

"Hello, Man my only friend."

"May not be only friend from now on, Mike. Want you to meet somebody. Not-stupid."

"I knew you were not alone, Man; I can hear breathing. Will you please ask Not-Stupid to move closer to the phone?"

Wyoming looked panicky. She whispered, "Can he *see?*"

"No, Not-Stupid, I cannot see you; this phone has no video circuit. But binaural microphonic receptors place you with some accuracy. From your voice, your breathing, your heartbeat, and the fact that you are alone in a bundling room with a mature male I extrapolate that you are female human, sixtyfive-plus kilos in mass, and of mature years, on the close order of thirty."

Wyoming gasped. I cut in. "Mike, her name is Wyoming Knott."

"I'm very pleased to meet you, Mike. You can call me 'Wye.' "

"Why not?" Mike answered.

I cut in again. "Mike, was that a joke?"

"Yes, Man. I noted that her first name as shortened differs from the English causation-inquiry word by only an aspiration and that her last name has the same sound as the general negator. A pun. Not funny?"

Wyoh said, "Quite funny, Mike. I—"

I waved to her to shut up. "A good pun, Mike. Example of 'funny-only-once' class of joke. Funny through element of surprise. Second time, no surprise; therefore not funny. Check?"

"I had tentatively reached that conclusion about puns in thinking over your remarks two conversations back. I am pleased to find my reasoning confirmed."

"Good boy, Mike; making progress. Those hundred jokes—I've read them and so has Wyoh."

"Wyoh? Wyoming Knott?"

"Huh? Oh, sure. Wyoh, Wye, Wyoming, Wyoming Knott—all same. Just don't call her 'Why not'."

"I agreed not to use that pun again, Man. Gospazha, shall I call you 'Wyoh' rather than 'Wye'? I conjecture that the monosyllabic form could be confused with the causation inquiry monosyllable through insufficient redundancy and without intention of punning."

Wyoming blinked—Mike's English at that time could be smothering—but came back strong. "Certainly, Mike. 'Wyoh' is the form of my name that I like best."

"Then I shall use it. The full form of your first name is still more subject to misinterpretation as it is identical in sound with the name of an administrative region in Northwest Managerial Area of the North American Directorate."

"I know, I was born there and my parents named me after the State. I don't remember much about it."

"Wyoh, I regret that this circuit does not permit display of pictures. Wyoming is a rectangular area lying between Terran coordinates forty-one and fortyfive degrees north, one hundred four degrees three minutes west and one hundred eleven degrees three minutes west, thus containing two hundred fifty three thousand, five hundred ninety-seven point two six square kilometers. It is a region of high plains and of mountains, having limited fertility but esteemed for natural beauty. Its population was sparse until augmented through the relocation subplan of the Great New York Urban Renewal Program, A.D. twenty-twenty-five through twenty-thirty."

"That was before I was born," said Wyoh, "but I know about it; my grandparents were relocated—and you could say that's how I wound up in Luna."

"Shall I continue about the area named 'Wyoming'?" Mike asked.

"No, Mike," I cut in, "you probably have hours of it in storage."

"Nine point seven three hours at speech speed not including cross-references, Man."

"Was afraid so. Perhaps Wyoh will want it some day. But purpose of call is to get you acquainted with *this* Wyoming . . . who happens also to be a high region of natural beauty and imposing mountains."

"And limited fertility," added Wyoh. "Mannie, if you are going to draw silly parallels, you should include that one. Mike isn't interested in how I look."

"How do you know? Mike, wish I could show you picture of her."

"Wyoh, I am indeed interested in your appearance; I am hoping that you will be my friend. But I have seen several pictures of you."

"You *have?* When and how?"

"I searched and then studied them as soon as I heard your name. I am contract custodian of the archive files of the Birth Assistance Clinic in Hong Kong Luna. In addition to biological and physiological data and case histories the bank contains ninety-six pictures of you. So I studied them."

Wyoh looked very startled. "Mike can do that," I explained, "in time it takes us to hiccup. You'll get used to it."

"But heavens! Mannie, do you realize what *sort* of pictures the Clinic takes?"

"Hadn't thought about it."

"Then *don't!* Goodness!"

Mike spoke in voice painfully shy, embarrassed as a puppy who has made mistakes. "Gospazha Wyoh, if I have offended, it was unintentional and I am most sorry. I can erase those pictures from my temporary storage and key the Clinic archive so that I can look at them only on retrieval demand from the Clinic and then without association or mentation. Shall I do so?"

"He can," I assured her. "With Mike you can always make a fresh start—better than humans that way. He can forget so completely that he can't be tempted to look later . . . and couldn't think about them even if called on to retrieve. So take his offer if you're in a huhu."

"Uh. . . no, Mike, it's all right for *you* to see them. But *don't* show them to Mannie!"

Mike hesitated a long time—four seconds or more. Was, I think, type of dilemma that pushes lesser computers into nervous breakdowns. But he resolved it. "Man my only friend, shall I accept this instruction?"

"Program it, Mike," I answered, "and lock it in. But, Wyoh, isn't that a narrow attitude? One might do you justice. Mike could print it out for me next time I'm there."

"The first example in each series," Mike offered, "would be, on the basis of my associational analyses of such data, of such pulchritudinous value as to please any healthy, mature human male."

"How about it, Wyoh? To pay for apfelstrudel."

"Uh. . . a picture of me with my hair pinned up in a towel and standing in front of a grid without a trace of makeup? *Are you out of your rock-happy mind?* Mike, don't let him have it!"

"I shall not let him have it. Man, this is a not-stupid?"

"For a girl, yes. Girls are interesting, Mike; they can reach conclusions with even less data than you can. Shall we drop subject and consider jokes?"

That diverted them. We ran down list, giving our conclusions. Then tried to explain jokes Mike had failed to understand. With mixed success. But real stumbler turned out to be stories I had marked "funny" and Wyoh had judged "not" or vice versa; Wyoh asked Mike his opinion of each.

Wish she had asked him *before* we gave *our* opinions; that electronic juvenile delinquent always agreed with her, disagreed with me. Were those Mike's honest opinions? Or was he trying to lubricate new acquaintance into friendship? Or was it his skewed notion of humor—joke on me? Didn't ask.

But as pattern completed Wyoh wrote a note on phone's memo pad: "Mannie, re #17, 51, 53, 87, 90, & 99—Mike is a *she!*"

I let it go with a shrug, stood up. "Mike, twentytwo hours since I've had sleep. You kids chat as long as you want to. Call you tomorrow."

"Goodnight, Man. Sleep well. Wyoh, are you sleepy?"

"No, Mike, I had a nap. But, Mannie, we'll keep you awake. No?"

"No. When I'm sleepy, I sleep." Started making couch into bed.

Wyoh said, "Excuse me, Mike," got up, took sheet out of my hands. "I'll make it up later. You doss over there, tovarishch; you're bigger than I am. Sprawl out."

Was too tired to argue, sprawled out, asleep at once. Seem to remember hearing in sleep giggles and a shriek but never woke enough to be certain.

Woke up later and came fully awake when I realized was hearing two fem voices, one Wyoh's warm contralto, other a sweet, high soprano with French accent. Wyoh chuckled at something and answered, "All right, Michelle dear, I'll call you soon. 'Night, darling."

"Fine. Goodnight, dear."

Wyoh stood up, turned around. "Who's your girl friend?" I asked. Thought she knew no one in Luna City. Might have phoned Hong Kong . . . had sleep-logged feeling was some reason she shouldn't phone.

"That? Why, Mike, of course. We didn't mean to wake you."

"What?"

"Oh. It was actually Michelle. I discussed it with Mike, what sex he was, I mean. He decided that he could be either one. So now she's Michelle and that was her voice. Got it right the first time, too; her voice never cracked once."

"Of course not; just shifted voder a couple of octaves. What are you trying to do: split his personality?"

"It's not just pitch; when she's Michelle its an entire change in manner and attitude. Don't worry about splitting her personality; she has plenty for any personality she needs. Besides, Mannie, it's much easier for both of us. Once she shifted, we took our hair down and cuddled up and talked girl talk as if we had known each other forever. For example, those silly pictures no longer embarrassed me—in fact we discussed my pregnancies quite a lot. Michelle was terribly interested. She knows all about O.B. and G.Y. and so forth but just theory—and she appreciated the raw facts. Actually, Mannie, Michelle is much more a woman than Mike was a man."

"Well. . . suppose it's okay. Going to be a shock to me first time I call Mike and a woman answers."

"Oh, but she won't!"

"Huh?"

"Michelle is *my* friend. When you call, you'll get Mike. She gave me a number to keep it straight—'Michelle' spelled with a Y. M Y, C, H, E, L, L, E, and Y, Y, Y make it come out ten."

I felt vaguely jealous while realizing it was silly. Suddenly Wyoh giggled. "And she told me a string of new jokes, ones you wouldn't think were funny—and, boy, does she know *rough* ones!"

"Mike—or his sister Michelle—is a low creature. Let's make up couch. I'll switch."

"Stay where you are. Shut up. Turn over. Go back to sleep." I shut up, turned over, went back to sleep.

Sometime much later I became aware of "married" feeling—something warm snuggled up to my back. Would not have wakened but she was sobbing softly. I turned and got her head on my arm, did not speak. She stopped sobbing; presently breathing became slow and even. I went back to sleep.

5

We must have slept like dead for next thing I knew phone was sounding and its light was blinking. I called for room lights, started to get up, found a load on right upper arm, dumped it gently, climbed over, answered.

Mike said, "Good morning, Man. Professor de la Paz is talking to your home number."

"Can you switch it here? As a 'sherlock'?"

"Certainly, Man."

"Don't interrupt call. Cut him in as he switches off. Where is he?"

"A public phone in a taproom called The Iceman's Wife underneath the—"

"I know. Mike, when you switch me in, can you stay in circuit? Want you to monitor."

"It shall be done."

"Can you tell if anyone is in earshot? Hear breathing?"

"I infer from the anechoic quality of his voice that he is speaking under a hush hood. But I infer also that, in a taproom, others would be present. Do you wish to hear, Man?"

"Uh, do that. Switch me in. And if he raises hood, tell me. You're a smart cobber, Mike."

"Thank you, Man." Mike cut me in; I found that Mum was talking: "—ly I'll tell him, Professor. I'm so sorry that Manuel is not home. There is no number you can gave me? He is anxious to return your call; he made quite a point that I was to be sure to get a number from you."

"I'm terribly sorry, dear lady, but I'm leaving at once. But, let me see, it is now eight-fifteen; I'll try to call back just at nine, if I may."

"Certainly, Professor." Mum's voice had a coo in it that she reserves for males not her husbands of whom she approves—sometimes for us. A moment later Mike said, "Now!" and I spoke up:

"Hi, Prof! Hear you've been looking for me. This is Mannie."

I heard a gasp. "I would have sworn I switched this phone off. Why, I *have* switched it off; it must be broken. Manuel—so good to hear your voice, dear boy. Did you just get home?"

"I'm not home."

"But—but you must be. I haven't—"

"No time for that, Prof. Can anyone overhear you?"

"I don't think so. I'm using a hush booth."

"Wish I could see. Prof, what's my birthday?"

He hesitated. Then he said, "I see. I think I see. July fourteenth."

"I'm convinced. Okay, let's talk."

"You're really not calling from your home, Manuel? Where are you?"

"Let that pass a moment. You asked my wife about a girl. No names needed. Why do you want to find her, Prof?"

"I want to warn her. She must *not* try to go back to her home city. She would be arrested."

"Why do you think so?"

"Dear boy! Everyone at that meeting is in grave danger. Yourself, too. I was so happy—even though confused—to hear you say that you are not at home. You should not go home at present. If you have some safe place to stay, it would be well to take a vacation. You are aware —you must be even though you left hastily—that there was violence last night."

I was aware! Killing Warden's bodyguards must be against Authority Regulations—at least if I were Warden, I'd take a dim view. "Thanks, Prof; I'll be careful. And if I see this girl, I'll tell her."

"You don't know where to find her? You were seen to leave with her and I had so hoped that you would know."

"Prof, why this interest? Last night you didn't seem to be on her side."

"No, no, Manuel! She is my comrade. I don't say 'tovarishch' for I mean it not just as politeness but in the older sense. Binding. She is my *comrade*. We differ only in tactics. Not in objectives, not in loyalties."

"I see. Well, consider message delivered. She'll get it."

"Oh, wonderful! I ask no questions.. . but I do hope, oh so very strongly, that you can find a way for her to be safe, really safe, until this blows over."

I thought that over. "Wait a moment, Prof. Don't switch off." As I answered phone, Wyoh had headed for bath, probably to avoid listening; she was that sort.

Tapped on door. "Wyoh?"

"Out in a second."

"Need advice."

She opened door. "Yes, Mannie?"

"How does Professor de la Paz rate in your organization? Is he trusted? Do *you* trust him?"

She looked thoughtful. "Everyone at the meeting was supposed to be vouched for. But I don't know him."

"Mmm. You have feeling about him?"

"I liked him, even though he argued against me. Do *you* know anything about him?"

"Oh, yes, known him twenty years. *I* trust him. But can't extend trust for *you*. Trouble—and it's your air bottle, not mine."

She smiled warmly. "Mannie, since you trust him, I trust him just as firmly."

I went back to phone. "Prof, are you on dodge?"

He chuckled. "Precisely, Manuel."

"Know a hole called Grand Hotel Raffles? Room L two decks below lobby. Can you get here without tracks, have you had breakfast, what do you like for breakfast?"

He chuckled again. "Manuel, one pupil can make a teacher feel that his years were not wasted. I know where it is, I shall get there quietly, I have not broken fast, and I eat anything I can't pat."

Wyoh had started putting beds together; I went to help. "What do you want for breakfast?"

"Chai and toast. Juice would be nice."

"Not enough."

"Well . . . a boiled egg. But I pay for breakfast."

"Two boiled eggs, buttered toast with jam, juice. I'll roll you."

"Your dice, or mine?"

"Mine. I cheat." I went to lift, asked for display, saw something called THE HAPPY HANGOVER—ALL PORTIONS EXTRA LARGE—*tomato juice, scrambled eggs, ham steak, fried potatoes, corn cakes and honey, toast, butter, milk, tea or coffee—HKL $4.50 for two*—I ordered it for two, no wish to advertise third person.

We were clean and shining, room orderly and set for breakfast, and Wyoh had changed from black outfit into red dress "because company was coming" when lift jingled food. Change into dress had caused words. She had posed, smiled, and said, "Mannie, I'm so pleased with this dress. How did you know it would suit me so well?"

"Genius."

"I think you may be. What did it cost? I must pay you."

"On sale, marked down to Authority cents fifty."

She clouded up and stomped foot. Was bare, made no sound, caused her to bounce a half meter. "Happy landing!" I wished her, while she pawed for foothold like a new chum.

"Manuel O'Kelly! If you think I will accept expensive clothing from a man I'm not even bundling with!"

"Easily corrected."

"Lecher! I'll tell your wives!"

"Do that. Mum always thinks worst of me." I went to lift, started dealing out dishes; door sounded. I flipped hearum-no-seeum. "Who comes?"

"Message for Gospodin Smith," a cracked voice answered. "Gospodin Bernard O. Smith."

I flipped bolts and let Professor Bernardo de la Paz in. He looked like poor grade of salvage—dirty clothes, filthy himself, hair unkempt, paralyzed down one side and hand twisted, one eye a film of cataract—perfect picture of old wrecks who sleep in Bottom Alley and cadge drinks and pickled eggs in cheap taprooms. He drooled.

As soon as I bolted door he straightened up, let features come back to normal, folded hands over wishbone, looked Wyoh up and down, sucked air kimono style, and whistled. "Even more lovely," he said, "than I remembered!"

She smiled, over her mad. "Thanks, Professor. But don't bother. Nobody here but comrades."

"Señorita, the day I let politics interfere with my appreciation of beauty, that day I retire from politics. But you are gracious." He looked away, glanced closely around room.

I said, "Prof, quit checking for evidence, you dirty old man. Last night was politics, *nothing* but politics."

"That's not true!" Wyoh flared up. "I struggled for *hours!* But he was too strong for me. Professor—what's the party discipline in such cases? Here in Luna City?"

Prof tut-tutted and rolled blank eye. "Manuel, I'm surprised. It's a serious matter, my dear—elimination, usually. But it must be investigated. Did you come here willingly?"

"He drugged me."

" 'Dragged,' dear lady. Let's not corrupt the language. Do you have bruises to show?"

I said, "Eggs getting cold. Can't we eliminate me after breakfast?"

"An excellent thought," agreed Prof. "Manuel, could you spare your old teacher a liter of water to make himself more presentable?"

"All you want, in there. Don't drag or you'll get what littlest pig got."

"Thank you, sir."

He retired; were sounds of brushing and washing. Wyoh and I finished arranging table. "'Bruises,'" I said. "Struggled all night."

"You deserved it, you insulted me."

"*How?*"

"You failed to insult me, that's how. After you drugged me here."

"Mmm. Have to get Mike to analyze that."

"Michelle would understand it. Mannie, may I change my mind and have a little piece of that ham?"

"Half is yours, Prof is semi-vegetarian." Prof came out and, while did not look his most debonair, was neat and clean, hair combed, dimples back and happy sparkle in eye—fake cataract gone. "Prof, how do you do it?"

"Long practice, Manuel; I've been in this business far longer than you young people. Just once, many years ago in Lima—a lovely city—I ventured to stroll on a fine day *without* such forethought . . . and it got me transported. What a beautiful table!"

"Sit by me, Prof," Wyoh invited. "I don't want to sit by him. Rapist."

"Look," I said, "first we eat, *then* we eliminate me. Prof, fill plate and tell what happened last night."

"May I suggest a change in program? Manuel, the life of a conspirator is not an easy one and I learned before you were born not to mix provender and politics. Disturbs the gastric enzymes and leads to ulcers, the occupational disease of the underground. Mmm! That fish smells good."

"Fish?"

"That pink salmon," Prof answered, pointing at ham.

A long, pleasant time later we reached coffee/tea stage. Prof leaned back, sighed and said, "Bolshoyeh spasebaw, Gospazha ee Gospodin. Tak for mat, it was wonderfully good. I don't know when I've felt more at peace with the world. Ah yes! Last evening—I saw not too much of the proceedings because, just as you two were achieving an admirable retreat, I lived to fight another day—I bugged out. Made it to the wings in one long flat dive. When I did venture to peek out, the party was over, most had left, and all yellow jackets were dead."

(Note: Must correct this; I learned more later. When trouble started, as I was trying to get Wyoh through door, Prof produced a hand gun and, firing over heads, picked off three bodyguards at rear main door, including one wearing bull voice. How he smuggled weapon up to The Rock—or managed to liberate it later—I don't know. But Prof's shooting joined with Shorty's work to turn tables; not one yellow jacket got out alive. Several people were burned and four were killed—but knives, hands, and heels finished it in seconds.)

"Perhaps I should say, 'All but one,' " Prof went on. "Two cossacks at the door through which you departed had been given quietus by our brave comrade Shorty Mkrum. . . and I am sorry to say that Shorty was lying across them, dying—"

"We knew."

"So. Dulce et decorum. One guard in that doorway had a damaged face but was still moving; I gave his neck a treatment known in professional circles Earthside as the Istanbul twist. He joined his mates. By then most of the living had left. Just myself, our chairman of the evening Finn Nielsen, a comrade known as 'Mom,' that being what her husbands called her. I consulted with Comrade Finn and we bolted all doors. That left a cleaning job. Do you know the arrangements backstage there?"

"Not me," I said. Wyoh shook head.

"There is a kitchen and pantry, used for banquets. I suspect that Mom and family run a butcher shop for they disposed of bodies as fast as Finn and I carried them back, their speed limited only by the rate at which portions could be ground up and flushed into the city's cloaca. The sight made me quite faint, so I spent time mopping in the hall. Clothing was the difficult part, especially those quasimilitary uniforms."

"What did you do with those laser guns?"

Prof turned bland eyes on me. "Guns? Dear me, they must have disappeared. We removed everything of a personal nature from bodies of our departed comrades—for relatives, for identification, for sentiment. Eventually we had everything tidy—not a job that would fool Interpol but one as to make it seem unlikely that anything untoward had taken place. We conferred, agreed that it would be well not to be seen soon, and left severally, myself by a pressure door above the stage leading up to level six. Thereafter I tried to call you, Manuel, being worried about your safety and that of this dear lady." Prof bowed to Wyoh. "That completes the tale. I spent the night in quiet places."

"Prof," I said, "those guards were new chums, still getting their legs. Or we wouldn't have won."

"That could be," he agreed. "But had they not been, the outcome would have been the same."

"How so? They were armed."

"Lad, have you ever seen a boxer dog? I think not—no dogs that large in Luna. The boxer is a result of special selection. Gentle and intelligent, he turns instantly into deadly killer when occasion requires.

"Here has been bred an even more curious creature. I know of no city on Terra with as high standards of good manners and consideration for one's fellow man as here in Luna. By comparison, Terran cities—I have known most major ones—are barbaric. Yet the Loonie is as deadly as the boxer dog. Manuel, nine guards, no matter how armed, stood no chance against that pack. Our patron used bad judgment."

"Um. Seen a morning paper, Prof? Or a video cast?"

"The latter, yes."

"Nothing in late news last night."

"Nor this morning."

“Odd,” I said.

“What’s odd about it?” asked Wyoh. “*We* won’t talk—and we have comrades in key places in every paper in Luna.”

Prof shook his head. “No, my dear. Not that simple. Censorship. Do you know how copy is set in our newspapers?”

“Not exactly. It’s done by machinery.”

“Here’s what Prof means,” I told her. “News is typed in editorial offices. From there on it’s a leased service directed by a master computer at Authority Complex”—hoped she would notice “master computer” rather than “Mike”—”copy prints out there via phone circuit. These rolls feed into a computer section which reads, sets copy, and prints out newspapers at several locations. Novylen edition of Daily Lunatic prints out in Novylen changes in ads and local stories, and computer makes changes from standard symbols, doesn’t have to be told how. What Prof means is that at printout at Authority Complex, Warden could intervene. Same for all news services, both off and to Luna—they funnel through computer room.”

“The point is,” Prof went on, “the Warden *could* have killed the story. It’s irrelevant whether he did. Or—check me, Manuel; you know I’m hazy about machinery—he could insert a story, too, no matter how many comrades we have in newspaper offices.”

“Sure,” I agreed. “At Complex, anything can be added, cut, or changed.”

“And that, señorita, is the weakness of our Cause. Communications. Those goons were not important—but crucially important is that it lay with the Warden, not with us, to decide whether the story should be told. To a revolutionist, communications are a sine-qua-non.”

Wyoh looked at me and I could see synapses snapping. So I changed subject. “Prof. why get rid of bodies? Besides horrible job, was dangerous. Don’t know how many bodyguards Warden has, but more could show up while you were doing it.”

“Believe me, lad, we feared that. But although I was almost useless, it was my idea, I had to convince the others. Oh, not my original idea but remembrance of things past, an historical principle.”

“*What* principle?”

“*Terror!* A man can face known danger. But the unknown frightens him. We disposed of those finks, teeth and toenails, to strike terror into their mates. Nor do I know how many effectives the Warden has, but I guarantee they are less effective today. Their mates went out on an easy mission. *Nothing* came back.”

Wyoh shivered. “It scares me, too. They won’t be anxious to go inside a warren again. But, Professor, you say you don’t know how many bodyguards the Warden keeps. The Organization knows.

Twenty-seven. If nine were killed, only eighteen are left. Perhaps it's time for a putsch. No?"

"No," I answered.

"Why not, Mannie? They'll never be weaker."

"Not weak enough. Killed nine because they were crackers to walk in where we were. But if Warden stays home with guards around him — Well, had enough shoulder-to-shoulder noise last night." I turned to Prof. "But still I'm interested in fact—if it is—that Warden now has only eighteen. You said Wyoh should not go to Hong Kong and I should not go home. But if he has only eighteen left, I wonder how much danger? Later after he gets reinforcements.—but now, well, L-City has four main exits plus many little ones. How many can they guard? What's to keep Wyoh from walking to Tube West, getting p-suit, going home?"

"She might," Prof agreed.

"I think I must," Wyoh said. "I can't stay here forever. If I have to hide, I can do better in Hong Kong, where I know people."

"You might get away with it, my dear. I doubt it. There were two yellow jackets at Tube Station West last night; I saw them. They may not be there now. Let's assume they are not. You go to the station—disguised perhaps. You get your p-suit and take a capsule to Beluthihatchie. As you climb out to take the bus to Endsville, you're arrested. Communications. No need to post a yellow jacket at the station; it is enough that someone sees you there. A phone call does the rest."

"But you assumed that I was disguised."

"Your height cannot be disguised and your pressure suit would be watched. By someone not suspected of any connection with the Warden. Most probably a comrade." Prof dimpled. "The trouble with conspiracies is that they rot internally. When the number is as high as four, chances are even that one is a spy."

Wyoh said glumly, "You make it sound hopeless."

"Not at all, my dear. One chance in a thousand, perhaps."

"I can't believe it. I *don't* believe it! Why, in the years I've been active we have gained members by the hundreds! We have organizations in all major cities. We have the people with us."

Prof shook head. "Every new member made it that much more likely that you would be betrayed. Wyoming dear lady, revolutions are not won by enlisting the masses. Revolution is a science only a few are competent to practice. It depends on correct organization and, above all, on communications. Then, at the proper moment in history, they strike. Correctly organized and properly timed it is a bloodless coup. Done clumsily or prematurely and the result is civil war, mob violence, purges, terror. I hope you will forgive me if I say that, up to now, it has been done clumsily."

Wyoli looked baffled. "What do you mean by 'correct organization'?"

"Functional organization. How does one design an electric motor? Would you attach a bathtub to it, simply because one was available? Would a bouquet of flowers help? A heap of rocks? No, you would use just those elements necessary to its purpose and make it no larger than needed—and you would incorporate safety factors. Function controls design.

"So it is with revolution. Organization must be no larger than necessary—*never* recruit anyone merely because he wants to join. Nor seek to persuade for the pleasure of having another share your views. He'll share them when the times comes. . . or you've misjudged the moment in history. Oh, there will be an educational organization but it must be separate; agitprop is no part of basic structure.

"As to basic structure, a revolution starts as a conspiracy therefore structure is small, secret, and organized as to minimize damage by betrayal—since there *always* are betrayals. One solution is the cell system and so far nothing better has been invented.

"Much theorizing has gone into optimum cell size. I think that history shows that a cell of three is best—more than three can't agree on when to have dinner, much less when to strike. Manuel, you belong to a large family; do you vote on when to have dinner?"

"Bog, no! Mum decides."

"Ah." Prof took a pad from his pouch, began to sketch. "Here is a cells-of-three tree. If I were planning to take over Luna. I would start with us three. One would be opted as chairman. We wouldn't vote; choice would be obvious—or we aren't the right three. We would know the next nine people, three cells. . . but each cell would know only one of us."

"Looks like computer diagram—a ternary logic."

"Does it really? At the next level there are two ways of linking: This comrade, second level, knows his cell leader, his two cellmates, and on the third level he knows the three in his subcell—he may or may not know his cellmates' subcells. One method doubles security, the other doubles speed—of repair if security is penetrated. Let's say he does not know his cellmates' subcells—Manuel, how many can he betray? Don't say he won't; today they can brainwash *any* person, and starch and iron and use him. How many?"

"Six," I answered. "His boss, two ceilmates, three in subcell."

"Seven," Prof corrected, "he betrays himself, too. Which leaves seven broken links on three levels to repair. How?"

"I don't see how it can be," objected Wyoh. "You've got them so split up it falls to pieces."

"Manuel? An exercise for the student."

"Well . . . blokes down here have to have way to send message up three levels. Don't have to know *who*, just have to know *where*."

"Precisely!"

"But, Prof," I went on, "there's a better way to rig it."

"Really? Many revolutionary theorists have hammered this out, Manuel. I have such confidence in them that I'll offer you a wager—at, say, ten to one."

"Ought to take your money. Take same cells, arrange in open pyramid of tetrahedrons. Where vertices are in common, each bloke knows one in adjoining cell—knows how to send message to him, that's all he needs. Communications never break down because they run sideways as well as up and down. Something like a neural net. It's why you can knock a hole in a man's head, take chunk of brain out, and not damage thinking much. Excess capacity, messages shunt around. He loses what was destroyed but goes on functioning."

"Manuel," Prof said doubtfully, "could you draw a picture? It *sounds* good—but it's so contrary to orthodox doctrine that I need to see it."

"Well. . . could do better with stereo drafting machine. I'll try." (Anybody who thinks it's easy to sketch one hundred twenty-one tetrahedrons, a five-level open pyramid, clear enough to show relationships is invited to try!)

Presently I said, "Look at base sketch. Each vertex of each triangle shares self with zero, one, or two other triangles. Where shares one, that's its link, one direction or both—but one is enough for a multipli-redundant communication net. On corners, where sharing is zero, it jumps to right to next corner. Where sharing is double, choice is again righthanded.

"Now work it with people. Take fourth level, D-for-dog. This vertex is comrade Dan. No, let's go down one to show three levels of communication knocked out—level E-for-easy and pick Comrade Egbert.

"Egbert works under Donald, has cellmates Edward and Elmer, and has three under him, Frank, Fred, and Fatso . . . but knows how to send message to Ezra on his own level but not in his cell. He doesn't know Ezra's name, face, address, or anything—but has a way, phone number probably, to reach Ezra in emergency.

"Now watch it work. Casimir, level three, finks out and betrays Charlie and Cox in his cell, Baker above him, and Donald, Dan, and Dick in subcell—which isolates Egbert, Edward, and Elmer. and everybody under them.

"All three report it—redundancy, necessary to any communication system—but follow Egbert's yell for help. He calls Ezra. But Ezra is under Charlie and is isolated, too. No matter, Ezra relays both messages through *his* safety link, Edmund. By bad luck Edmund is under Cox, so he also passes it laterally, through Enwright. . . and that gets it past burned-out part and it goes up through Dover, Chambers, and Beeswax, to Adam, front office.. . who replies down other side of pyramid, with lateral pass on E-for-easy level from Esther to Egbert and on to Ezra and Edmund. These two messages, up and down, not only get through at once but in *way* they get through, they define to home office exactly how much damage has been done and where. Organization not only keeps functioning but starts repairing self at once."

Wyoh was tracing out lines, convincing herself it would work—which it would, was "idiot" circuit. Let Mike study a few milliseconds, and could produce a better, safer, more foolproof hookup. And probably—certainly—ways to avoid betrayal while speeding up routings. But I'm not a computer.

Prof was staring with blank expression. "What's trouble?" I said. "It'll work; this is my pidgin."

"Manuel my b— Excuse me: Señor O'Kelly. . . will you head this revolution?"

"*Me?* Great Bog, *nyet!* I'm no lost-cause martyr. Just talking about circuits."

Wyoh looked up. "Mannie," she said soberly, "you're opted. It's settled."

6

Did like hell settle it.

Prof said, "Manuel, don't be hasty. Here we are, three, the perfect number, with a variety of talents and experience. Beauty, age, and mature male drive—"

"I don't have any drive!"

"Please, Manuel. Let us think in the widest terms before attempting decisions. And to facilitate such, may I ask if this hostel stocks potables? I have a few florins I could put into the stream of trade."

Was most sensible word heard in an hour. "Stilichnaya vodka?"

"Sound choice." He reached for pouch.

"Tell it to bear," I said and ordered a liter, plus ice. It came down; was tomato juice from breakfast.

"Now," I said, after we toasted, "Prof, what you think of pennant race? Got money says Yankees can't do it again?"

"Manuel, what is your political philosophy?"

"With that new boy from Milwaukee I feel like investing."

"Sometimes a man doesn't have it defined but, under Socratic inquiry, knows where he stands and why."

"I'll back 'em against field, three to two."

"*What?* You young idiot! How much?"

"Three hundred. Hong Kong."

"Done. For example, under what circumstances may the State justly place its welfare above that of a citizen?"

"Mannie," Wyoh asked, "do you have any more foolish money? I think well of the Phillies."

I looked her over. "Just what were you thinking of betting?"

"You go to hell! Rapist."

"Prof, as I see, are no circumstances under which State is justified in placing its welfare ahead of mine."

"Good. We have a starting point."

"Mannie," said Wyoh, "that's a most self-centered evaluation."

"I'm a most self-centered person."

"Oh, nonsense. Who rescued me? Me, a stranger. And didn't try to exploit it. Professor, I was cracking not facking. Mannie was a perfect knight."

"Sans peur et sans reproche. I knew, I've known him for years. Which is not inconsistent with evaluation he expressed."

"Oh, but it is! Not the way things are but under the ideal toward which we aim. Mannie, the 'state' is Luna. Even though not soverign yet and we hold citizenships elsewhere. But I am part of the Lunar State and so is your family. Would you die for your family?"

"Two questions not related."

"Oh, but they are! That's the point."

"Nyet. I know my family, opted long ago."

"Dear Lady, I must come to Manuel's defense. He has a correct evaluation even though he may not be able to state it. May I ask this? Under what circumstances is it moral for a group to do that which is not moral for a member of that group to do alone?"

"Uh. . . that's a trick question."

"It is the *key* question, dear Wyoming. A radical question that strikes to the root of the whole dilemma of government. Anyone who answers honestly and abides by *all* consequences knows where he stands—and what he will die for."

Wyoh frowned. "'Not moral for a member of the group—'" she said. "Professor. . . what are *your* political principles?"

"May I first ask yours? If you can state them?"

"Certainly I can! I'm a Fifth Internationalist, most of the Organization is. Oh, we don't rule out anyone going our way; it's a united front. We have Communists and Fourths and Ruddyites and Societians and SingleTaxers and you name it. But I'm no Marxist; we Fifths have a practical program. Private where private belongs, public where it's needed, and an admission that circumstances alter cases. Nothing doctrinaire."

"Capital punishment?"

"For what?"

"Let's say for treason. Against Luna after you've freed Luna."

"Treason how? Unless I knew the circumstances I could not decide."

"Nor could I, dear Wyoming. But I believe in capital punishment under some circumstances. . . with this difference. I would not ask a court; I would try, condemn, execute sentence myself, and accept full responsibility."

"But—Professor, what *are* your political beliefs?"

"I'm a rational anarchist."

"I don't know that brand. Anarchist individualist, anarchist Communist, Christian anarchist, philosophical anarchist, syndicalist, libertarian—those I know. But what's this? Randite?"

"I can get along with a Randite. A rational anarchist believes that concepts such as 'state' and 'society' and 'government' have no existence save as physically exemplified in the acts of self-responsible individuals. He believes that it is impossible to shift blame, share blame, distribute blame. . . as blame, guilt, responsibility are matters taking place inside human beings singly and *nowhere else*. But being rational, he knows that not all individuals hold his evaluations, so he tries to live perfectly in an imperfect world. . . aware that his effort will be less than perfect yet undismayed by self-knowledge of self-failure."

"Hear, hear!" I said. " 'Less than perfect.' What I've been aiming for all my life."

"You've achieved it," said Wyoh. "Professor, your words sound good but there is something slippery about them. Too much power in the hands of individuals—surely you would not want. . . well, H-missiles for example—to be controlled by one irresponsible person?"

"My point is that one person is responsible. Always. If H-bombs exist—and they do—some *man* controls them. In terms of morals *there is no such thing as 'state.'* Just men. Individuals. Each responsible for his own acts."

"Anybody need a refill?" I asked.

Nothing uses up alcohol faster than political argument. I sent for another bottle.

I did not take part. I was not dissatisfied back when we were "ground under Iron Heel of Authority." I cheated Authority and rest of time didn't think about it. Didn't think about getting rid of Authority—impossible. Go own way, mind own business, not be bothered—

True, didn't have luxuries then; by Earthside standards we were poor. If had to be imported, mostly did without; don't think there was a powered door in all Luna. Even p-suits used to be fetched up from Terra—until a smart Chinee before I was born figured how to make "monkey copies" better and simpler. (Could dump two Chinee down in one of our maria and they would get rich selling rocks to each other while raising twelve kids. Then a Hindu would sell retail stuff he got from them wholesale—below cost at fat profit. We got along.)

I had seen those luxuries Earthside. Wasn't worth what they put up with. Don't mean heavy gravity, that doesn't bother them; I mean nonsense. All time kukai moa. If chicken guano in one earthworm city were shipped to Luna, fertilizer problem would be solved for century. Do this. Don't do that. Stay back of line. Where's tax receipt? Fill out form. Let's see license. Submit six copies. Exit only. No left turn. No right turn. Queue up to pay fine. Take back and get stamped. Drop dead—but first get permit.

Wyoh plowed doggedly into Prof, certain she had all answers. But Prof was interested in questions rather than answers, which baffled her. Finally she said, "Professor, I can't understand you. I don't insist that you call it 'government'—I just want you to state what rules you think are necessary to insure equal freedom for all."

"Dear lady, I'll happily accept your rules."

"But you don't seem to want *any* rules!"

"True. But I will accept any rules that *you* feel necessary to *your* freedom. *I* am free, no matter what rules surround me. If I find them tolerable, I tolerate them; if I find them too obnoxious, I break them. I am free because I know that I *alone* am morally responsible for everything I do."

"You would not abide by a law that the majority felt was necessary?"

"Tell me what law, dear lady, and I will tell you whether I will obey it."

"You wiggled out. Every time I state a general principle, you wiggle out."

Prof clasped hands on chest. "Forgive me. Believe me, lovely Wyoming, I am most anxious to please you. You spoke of willingness to unite the front with anyone going your way. Is it enough that I want to see the Authority thrown off Luna and would die to serve that end?"

Wyoh beamed. "It certainly is!" She fisted his ribs—gently—then put arm around him and kissed cheek. "Comrade! Let's get on with it!"

"Cheers!" I said. "Let's fin' Warden 'n' 'liminate him!" Seemed a good idea; I had had a short night and don't usually drink much.

Prof topped our glasses, held his high and announced with great dignity: "Comrades. . . *we declare the Revolution!*"

That got us both kissed. But sobered me, as Prof sat down and said, “The Emergency Committee of Free Luna is in session. We must plan action.”

I said, “Wait, Prof! *I* didn’t agree to anything. What’s this ‘Action’ stuff?”

“We will now overthrow the Authority,” he said blandly.

“*How?* Going to throw rocks at ’em?”

“That remains to be worked out. This is the planning stage.”

I said, “Prof, you know me. If kicking out Authority was thing we could buy. I wouldn’t worry about price.”

“‘—our lives, our fortunes, and our sacred honor.’ ”

“Huh?”

“A price that once was paid.”

“Well—I’d go that high. But when I bet I want a chance to win. Told Wyoh last night I didn’t object to long odds—”

“ ‘One in ten’ is what you said, Mannie.”

“Da, Wyoh. Show me those odds, I’ll tap pot. But *can* you?”

“No, Manuel, I can’t.”

“Then why we talk-talk? I can’t see *any* chance.”

“Nor I, Manuel. But we approach it differently. Revolution is an art that I pursue rather than a goal I expect to achieve. Nor is this a source of dismay; a lost cause can be as spiritually satisfying as a victory.”

“Not me. Sorry.”

“Mannie,” Wyoh said suddenly, “ask Mike.”

I stared. “You serious?”

“Quite serious. If anyone can figure out odds, Mike should be able to. Don’t you think?”

“Um. Possible.”

“Who, if I may ask,” Prof put in, “is Mike?”

I shrugged. “Oh, just a nobody.”

“Mike is Mannie’s best friend. He’s very good at figuring odds.”

“A bookie? My dear, if we bring in a fourth party we start by violating the cell principle.”

“I don’t see why,” Wyoh answered. “Mike could be a member of the cell Mannie will head.”

“Mmm . . . true. I withdraw objection. He is safe? You vouch for him? Or you, Manuel?”

I said, “He’s dishonest, immature, practical joker, not interested in politics.”

“Mannie, I’m going to tell Mike you said that. Professor, he’s nothing of the sort—and we need him. Uh, in fact he might be our chairman, and we three the cell under him. The executive cell.”

“Wyoh, you getting enough oxygen?”

"I'm okay, I haven't been guzzling it the way you have. *Think,* Mannie. Use imagination."

"I must confess," said Prof, "that I find these conflicting reports very conflicting."

"Mannie?"

"Oh, hell." So we told him, between us, all about Mike, how he woke up. got his name, met Wyoh. Prof accepted idea of a self-aware computer easier than I accepted idea of snow first time I saw. Prof just nodded and said, "Go on."

But presently he said, "This is the Warden's own computer? Why not invite the Warden to our meetings and be done with it?"

We tried to reassure him. At last i said, "Put it this way. Mike is his own boy, just as you are. Call him rational anarchist, for he's rational and he feels no loyalty to any government."

"If this machine is not loyal to its owners, why expect it to be loyal to you?"

"A feeling. I treat Mike well as I know how, he treats me same way." I told how Mike had taken precautions to protect me. "I'm not sure he *could* betray me to anyone who didn't have those signals, one to secure phone, other to retrieve what I've talked about or stored with him; machines don't think way people do. But feel dead sure he wouldn't want to betray me and probably could protect me even if somebody got those signals."

"Mannie," suggested Wyoh, "why not call him? Once Professor de la Paz talks to him he will know why we trust Mike. Professor, we don't have to tell Mike any secrets until you feel sure of him."

"I see no harm in that."

"Matter of fact," I admitted, "already told him some secrets." I told them about recording last night's meeting and how I stored it.

Prof was distressed, Wyoh was worried. I said, "Damp it! Nobody but me knows retrieval signal. Wyoh, you know how Mike behaved about your pictures; won't let *me* have those pictures even though I suggested lock on them. But if you two will stop oscillating, I'll call him, make *sure* that nobody has retrieved that recording. and tell him to erase—then it's gone forever, computer memory is all or nothing. Or can go one better. Call Mike and have him play record back into recorder, wiping storage. No huhu."

"Don't bother," said Wyoh. "Professor, I *trust* Mike—and so will you."

"On second thought," Prof admitted, "I see little hazard from a recording of last night's meeting. One that large always contains spies and one of them may have used a recorder as you did, Manuel. I was upset at what appeared to be your indiscretion—a weakness a member of a conspiracy must never have, especially one at the top, as you are.”

“Was *not* member of conspiracy when I fed that recording into Mike—and not now unless somebody quotes odds better than those so far!”

“I retract; you were not indiscreet. But are you seriously suggesting that this machine can predict the outcome of a revolution?”

“Don’t know.”

“*I* think he can!” said Wyoh.

“Hold it, Wyoh. Prof, he could predict it fed all significant data.”

“That’s my point, Manuel. I do not doubt that this machine can solve problems I cannot grasp. But one of this scope? It would have to know—oh, goodness!—all of human history, all details of the entire social, political, and economic situation on Terra today and the same for Luna, a wide knowledge of psychology in all its ramifications, a wide knowledge of technology with all its possibilities, weaponry, communications, strategy and tactics, agitprop techniques, classic authorities such as Clausewitz, Guevera, Morgenstern, Machiavelli, many others.”

“Is that all?”

“ ‘Is that *all?*’ My dear boy!”

“Prof, how many history books have you read?”

“I do not know. In excess of a thousand.”

“Mike can zip through that many this afternoon, speed limited only by scanning method—he can store data much faster. Soon—minutes—he would have every fact correlated with everything else he knows, discrepancies noted, probability values assigned to uncertainties. Prof, Mike reads every word of every newspaper up from Terra. Reads all technical publications. Reads fiction—knows it’s fiction—because isn’t enough to keep him busy and is always hungry for more. If is any book he should read to solve this, say so. He can cram it down fast as I get it to him.”

Prof blinked. “I stand corrected. Very well, let us see if he can cope with it. I still think there is something known as ‘intuition’ and ‘human judgment.’ ”

“Mike has intuition,” Wyoh said. “Feminine intuition, that is.”

“As for ‘human judgment,’ ” I added, “Mike isn’t human. But all he knows he got from humans. Let’s get you acquainted and you judge his judgment.”

So I phoned. “Hi, Mike!”

“Hello, Man my only male friend. Greetings, Wyoh my only female friend. I heard a third person. I conjecture that it may be Professor Bernardo de la Paz.”

Prof looked startled, then delighted. I said, “Too right, Mike. That’s why I called you; Professor is not-stupid.”

“Thank you, Man! Professor Bernardo de la Paz, I am delighted to meet you.”

“I am delighted to meet you, too, sir.” Prof hesitated, went on “Mi—Señor Holmes, may I ask how you knew that I was here?”

“I am sorry, sir; I cannot answer. Man? ‘You know my methods.’ ”

“Mike is being crafty, Prof. It involves something he learned doing a confidential job for me. So he threw me a hint to let you think that he had identified you by hearing your presence—and he can indeed tell much from respiration and heartbeat . . . mass, approximate age, sex, and quite a bit about health; Mike’s medical storage is as full as any other.”

“I am happy to say,” Mike added seriously, “that I detect no signs of cardiac or respiratory trouble, unusual for a man of the Professor’s age who has spent so many years Earthside. I congratulate you, sir.”

“Thank you, Señor Holmes.”

“My pleasure, Professor Bernardo de la Paz.”

“Once he knew your identity, he knew how old you are, when you were shipped and what for, anything that ever appeared about you in Lunatic or Moonglow or any Lunar publication, including pictures—your bank balance, whether you pay bills on time, and much more. Mike retrieved this in a split second once he had your name. What he didn’t tell—because was my business—is that he knew I had invited you here, so it’s a short jump to guess that you’re still here when he heard heartbeat and breathing that matched you. Mike, no need to say ‘Professor Bernardo de la Paz’ each time; ‘Professor’ or ‘Prof’ is enough.”

“Noted, Man. But he addressed me formally, with honorific.”

“So both of you relax. Prof, you scan it? Mike knows much, doesn’t tell all, knows when to keep mouth shut.”

“I am impressed!”

“Mike is a fair dinkum thinkum—you’ll see. Mike, I bet Professor three to two that Yankees would win pennant again. How chances?”

“I am sorry to hear it, Man. The correct odds, this early in the year and based on past performances of teams and players, are one to four point seven two the other way.”

“Can’t be that bad!”

“I’m sorry, Man. I will print out the calculations if you wish. But I recommend that you buy back your wager. The Yankees have a favorable chance to defeat any single team . . . but the combined chances of defeating all teams in the league, including such factors as weather, accidents, and other variables for the season ahead, place the club on the short end of the odds I gave you.”

“Prof, want to sell that bet?”

“Certainly, Manuel.”

"Price?"

"Three hundred Hong Kong dollars."

"You old thief!"

"Manuel, as you former teacher I would be false to you if I did not permit you to learn from mistakes. Señor Holmes—Mike my friend—May I call you 'friend'?"

"Please do." (Mike almost purred.)

"Mike amigo, do you also tout horse races?"

"I often calculate odds on horse races; the civil service computermen frequently program such requests. But the results are so at variance with expectations that I have concluded either that the data are too meager, or the horses or riders are not honest. Possibly all three. However, I can gve you a formula which will pay a steady return if played consistently."

Prof looked eager. "What is it? May one ask?"

"One may. Bet the leading apprentice jockey to place. He is always given good mounts and they carry less weight. But don't bet him on the nose."

" 'Leading apprentice' . . . hmm. Manuel, do you have the correct time?"

"Prof, which do you want? Get a bet down before post time? Or settle what we set out to?"

"Unh, sorry. Please carry on. 'Leading apprentice—' "

"Mike, I gave you a recording last night." I leaned close to pickups and whispered: "*Bastille Day*."

"Retrieved, Man."

"Thought about it?"

"In many ways. Wyoh, you speak most dramatically."

"Thank you, Mike."

"Prof, can you get your mind off ponies?"

"Eh? Certainly, I am all ears."

"Then quit doing odds under your breath; Mike can do them faster."

"I was not wasting time; the financing of. . . joint ventures such as ours is always difficult. However, I shall table it; I am all attention."

"I want Mike to do a trial projection. Mike, in that recording, you heard Wyoh say we had to have free trade with Terra. You heard Prof say we should clamp an embargo on shipping food to Terra. Who's right?"

"Your question is indeterminate, Man."

"What did I leave out?"

"Shall I rephrase it, Man?"

"Sure. Give us discussion."

"In immediate terms Wyoh's proposal would be of great advantage to the people of Luna. The price of foodstuffs at catapult head would increase by a factor of at least four. This takes into account a slight rise in wholesale prices on Terra, ‘slight’ because the Authority now sells at approximately the free market price. This disregards subsidized, dumped, and donated foodstuffs, most of which come from the large profit caused by the controlled low price at catapult head. I will say no more about minor variables as they are swallowed by major ones. Let it stand that the immediate effect here would be a price increase of the close order of fourfold.”

“Hear that, Professor?”

“Please, dear lady. I never disputed it.”

“The profit increase to the grower is more than fourfold because, as Wyoh pointed out, he now must buy water and other items at controlled high prices. Assuming a free market throughout the sequence his profit enhancement will be of the close order of sixfold. But this would be offset by another factor: Higher prices for exports would cause higher prices for everything consumed in Luna, goods and labor. The total effect would be an enhanced standard of living for all on the close order of twofold. This would be accompanied by vigorous effort to drill and seal more farming tunnels, mine more ice, improve growing methods, all leading to greater export. However, the Terran Market is so large and food shortage so chronic that reduction in profit from increase of export is not a major factor.”

Prof said, “But, Señor Mike, that would only hasten the day that Luna is exhausted!”

“The projection was specified as immediate, Señor Professor. Shall I continue in longer range on the basis of your remarks?”

“By all means!”

“Luna’s mass to three significant figures is seven point three six times ten to the nineteenth power tonnes. Thus, holding other variables constant including Lunar and Terran populations, the present differential rate of export in tonnes could continue for seven point three six times ten to the twelfth years before using up one percent of Luna—round it as seven thousand billion years.”

“*What!* Are you *sure?*”

“You are invited to check, Professor.”

I said, “Mike, this a joke? If so, not funny even once!”

“It is not a joke, Man.”

“Anyhow,” Prof added, recovering, “it’s not Luna’s crust we are shipping. It’s our lifeblood—water and organic matter. Not rock.”

“I took that into consideration, Professor. This projection is based on controlled transmutation—any isotope into any other and postulating power for any reaction not exo-energetic. Rock *would* be shipped—transformed into wheat and beef and other foodstuffs.”

"But we don't know how to do that! Amigo, this is ridiculous!"

"But we will know how to do it."

"Mike is right, Prof," I put in. "Sure, today we haven't a glimmer. But will. Mike, did you compute how many years till we have this? Might take a flier in stocks."

Mike answered in sad voice, "Man my only male friend save for the Professor whom I hope will be my friend, I tried. I failed. The question is indeterminate."

"Why?"

"Because it involves a breakthrough in theory. There is no way in all my data to predict when and where genius may appear."

Prof sighed. "Mike amigo, I don't know whether to be relieved or disappointed. Then that projection didn't mean anything?"

"Of course it meant something!" said Wyoh. "It means we'll dig it out when we need it. Tell him, Mike!"

"Wyoh, I am most sorry. Your assertion is, in effect, exactly what I was looking for. But the answer still remains: Genius is where you find it. No. I am so sorry."

I said, "Then Prof is right? When comes to placing bets?"

"One moment, Man. There is a special solution suggested by the Professor's speech last night—return shipping, tonne for tonne."

"Yes, but *can't* do that."

"If the cost is low enough, Terrans would do so. That can be achieved with only minor refinement, not a breakthrough, to wit, freight transportation up from Terra as cheap as catapulting down to Terra."

"You call this 'minor'?"

"I call it minor compared with the other problem, Man."

"Mike dear, how long? When do we get it?"

"Wyoh, a rough projection, based on poor data and largely intuitive, would be on the order of fifty years."

" 'Fifty years'? Why, that's nothing! We can have free trade."

"Wyoh, I said 'on the order of'—I did *not* say 'on the *close* order of.' "

"It makes a difference?"

"Does." I told her. "What Mike said was that he doesn't expect it sooner than five years but would be surprised if much longer than five hundred—eh, Mike?"

"Correct, Man."

"So need another projection. Prof pointed out that we ship water and organic matter and don't get it back—agree, Wyoh?"

"Oh. sure. I just don't think it's urgent. We'll solve it when we reach it."

"Okay, Mike—no cheap shipping, no transmutation: How long till trouble?"

"Seven years."

" '*Seven years!*' " Wyoh jumped up, stared at phone. "Mike honey! You don't mean that?"

"Wyoh," he said plaintively, "I did my best. The problem has an indeterminately large number of variables. I ran several thousand solutions using many assumptions. The happiest answer came from assuming no increase in tonnage, no increase in Lunar population—restriction of births strongly enforced—and a greatly enhanced search for ice in order to maintain the water supply. That gave an answer of slightly over twenty years. All other answers were worse."

Wyoh, much sobered, said, "What happens in seven years?"

"The answer of seven years from now I reached by assuming the present situation, no change in Authority policy, and all major variables extrapolated from the empiricals implicit in their past behavior—a conservative answer of highest probability from available data. Twenty-eighty-two is the year I expect food riots. Cannibalism should not occur for at least two years thereafter."

" 'Cannibalism'!" She turned and buried head against Prof's chest.

He patted her, said gently, "I'm sorry, Wyoh. People do not realize how precarious our ecology is. Even so, it shocks *me*. I know water runs down hill. . . but didn't dream how terribly soon it will reach bottom."

She straightened up and face was calm. "Okay, Professor, I was wrong. Embargo it must be—and all that that implies. Let's get busy. Let's find out from Mike what our chances are. You trust him now—don't you?"

"Yes, dear lady, I do. We must have him on our side. Well, Manuel?"

Took time to impress Mike with how serious we were, make him understand that "jokes" could kill us (this machine who could not know human death) and to get assurance that he could and would protect secrets no matter what retrieval program was used—even our signals if not from us. Mike was hurt that I could doubt him but matter too serious to risk slip.

Then took two hours to program and reprogram and change assumptions and investigate side issues before all four—Mike, Prof, Wyoh, self—were satisfied that we had defined it, i.e., what chance had revolution—*this* revolution, headed by us, success required before "Food Riots Day," against Authority with bare hands. . . against power of all Terra, all eleven billions, to beat us down and inflict their will—all with no rabbits out of hats, with certainty of betrayal and stupidity and faintheartedness, and fact that no one of us was genius, nor important in Lunar affairs. Prof made sure that Mike knew history, psychology, economics, name it. Toward end Mike was pointing out far more variables than Prof.

At last we agreed that programming was done—or that we could think of no other significant factor. Mike then said, “This is an indeterminate problem. How shall I solve it? Pessimistically? Or optimistically? Or a range of probabilities expressed as a curve, or several curves? Professor my friend?”

“Manuel?”

I said, “Mike, when I roll a die, it’s one in six it turns ace. I don’t ask shopkeeper to float it, nor do I caliper it, or worry about somebody blowing on it. Don’t give happy answer, nor pessimistic; don’t shove curves at us. Just tell in one sentence: What chances? Even? One in a thousand? None? Or whatever.”

“Yes, Manuel Garcia O’Kelly my first male friend,”

For thirteen and a half minutes was no sound, while Wyoh chewed knuckles. *Never* known Mike to take so long. Must have consulted every book he ever read and worn edges off random numbers. Was beginning to believe that he had been overloaded and either burnt out something or gone into cybernetic breakdown that requires computer equivalent of lobotomy to stop oscillations.

Finally he spoke. “Manuel my friend, I am terribly sorry!”

“What’s trouble, Mike?”

“I have tried and tried, checked and checked. *There is but one chance in seven of winning!”*

7

I look at Wyoh, she looks at me; we laugh. I jump up and yip, “Hooray!” Wyoh starts to cry, throws arms around Prof, kisses him.

Mike said plaintively, “I do not understand. The chances are seven to one *against* us. Not *for* us.”

Wyoh stopped slobbering Prof and said, “Hear that? Mike said *‘us.’* He included himself.”

“Of course. Mike old cobber, we understood. But ever know a Loonie to refuse to bet when he stood a big fat chance of one in seven?”

“I have known only you three. Not sufficient data for a curve.”

“Well . . . we’re Loonies. Loonies bet. Hell, we *have* to! They shipped us up and bet us we couldn’t stay alive. We fooled ’em. We’ll fool ’em again! Wyoh. Where’s your pouch? Get red hat. Put on Mike. Kiss him. Let’s have a drink. One for Mike, too—want a drink, Mike?”

“I wish that I could have a drink,” Mike answered wistfully, “as I have wondered about the subjective effect of ethanol on the human nervous system—I conjecture that it must be similar to a slight overvoltage. But since I cannot, please have one in my place."

"Program accepted. Running. Wyoh, where's *hat!*"

Phone was flat to wall, let into rock—no place to hang hat. So we placed it on writing shelf and toasted Mike and called him "Comrade!" and almost he cried. His voice fugged up. Then Wyoh borrowed Liberty Cap and put on me and kissed me into conspiracy, officially this time, and so all out that my eldest wife would faint did she see—then she took hat and put on Prof and gave him same treatment and I was glad Mike had reported his heart okay.

Then she put it on own head and went to phone, leaned close, mouth between binaurals and made kissing sounds. "That's for you, Mike dear comrade. Is Michelle there?"

Blimey if he didn't answer in soprano voice: "Right here, darling—and I am so *'appee!"*

So Michelle got a kiss, and I had to explain to Prof who "Michelle" was and introduce him. He was formal, sucking air and whistling and clasping hands—sometimes I think Prof was not right in his head.

Wyoh poured more vodka. Prof caught her, mixed ours with coffee, hers with chai, honey in all. "We have declared the Revolution," he said firmly, "now we execute it. With clear heads. Manuel, you were opted chairman. Shall we begin?"

"Mike is chairman," I said. "Obvious. Secretary, too. We'll never keep anything in writing; first security rule. With Mike, don't need to. Let's bat it around and see where we are; I'm new to business."

"And," said Prof, "still on the subject of security, the secret of Mike should be restricted to this executive cell, subject to unanimous agreement—all three of us—correction: all four of us—that is must be extended."

"What secret?" asked Wyoh. "Mike agreed to help our secrets. He's safer than we are; he can't be brainwashed, Can you be, Mike dear?"

"I could be brainwashed," Mike admitted, "by enough voltage. Or by being smashed, or subjected to solvents, or positive entropy through other means—I find the concept disturbing. But if by 'brainwashing' you mean could I be compelled to surrender our secrets, the answer is an unmodified negative."

I said, "Wye, Prof means secret of Mike *himself*. Mike old pal, you're our secret weapon—you know that, don't you?"

He answered selfconsciously, "It was necessary to take that into consideration in computing the odds."

"How were odds without you, comrade? Bad?"

"They were not good. Not of the same order."

"Won't press you. But a secret weapon must be secret, Mike, does anybody else suspect that you are alive?"

"Am I alive?" His voice held tragic loneliness.

"Uh, won't argue semantics. Sure, you're alive!"

"I was not sure. It is good to be alive. No, Mannie my first friend, you three alone know it. My three friends."

"That's how must be if bet's to pay off. Is okay? Us three and never talk to anybody else?"

"But we'll talk to you lots!" Wyoh put in.

"It is not only okay," Mike said bluntly, "it is necessary. It was a factor in the odds."

"That settles it," I said. "They have everything else; we have Mike. We keep it that way. Say! Mike, I just had a horrid. We fight Terra?"

"We will fight Terra. . . unless we lose before that time."

"Uh, riddle this. Any computers smart as you? Any awake?"

He hesitated. "I don't know, Man."

"No data?"

"Insufficient data. I have watched for both factors, not only in technical journals but everywhere else. There are no computers on the market of my present capacity. . . but one of my model could be augmented just as I have been. Furthermore an experimental computer of great capacity might be classified and go unreported in the literature."

"Mmm. . . chance we have to take."

"Yes, Man."

"There aren't any computers as smart as Mike!" Wyoh said scornfully. "Don't be silly, Mannie."

"Wyoh, Man was not being silly. Man, I saw one disturbing report. It was claimed that attempts are being made at the University of Peiping to combine computers with human brains to achieve massive capacity. A computing Cyborg."

"They say how?"

"The item was nontechnical."

"Well . . . won't worry about what can't help. Right, Prof?"

"Correct, Manuel. A revolutionist must keep his mind free of worry or the pressure becomes intolerable."

"I don't believe a word of it," Wyoh added. "We've got Mike and we're going to win! Mike dear, you say we're going to fight Terra—and Mannie says that's one battle we can't win. You have some idea of how we can win, or you wouldn't have given us even one chance in seven. So what is it?"

"Throw rocks at them," Mike answered.

"Not funny," I told him. "Wyoh, don't borrow trouble. Haven't even settled how we leave this pooka without being nabbed. Mike, Prof says nine guards were killed last night and Wyoh says twenty-seven is whole bodyguard. Leaving eighteen. Do you know if that's true, do you know where they are and what they are up to? Can't put on a revolution if we dasn't stir out."

Prof interrupted. "That's a temporary exigency, Manuel, one we can cope with. The point Wyoming raised is basic and should be discussed. And daily, until solved. I am interested in Mike's thoughts."

"Okay, okay—but will you wait while Mike answers me?"

"Sorry, sir."

"Mike?"

"Mike?"

"Man, the official number of Warden's bodyguards is twenty-seven. If nine were killed the official number is now eighteen."

"You keep saying 'official number.' Why?"

"I have incomplete data which might be relevant. Let me state them before advancing even tentative conclusions. Nominally the Security Officer's department aside from clerks consists only of the bodyguard. But I handle payrolls for Authority Complex and twenty-seven is *not* the number of personnel charged against the Security Department."

Prof nodded. "Company spies."

"Hold it, Prof. Who are these other people?"

Mike answered, "They are simply account numbers, Man. I conjecture that the names they represent are in the Security Chiefs data storage location."

"Wait, Mike. Security Chief Alvarez uses you for files?"

"I conjecture that to be true, since his storage location is under a locked retrieval signal."

I said, "Bloody," and added, "Prof, isn't that sweet? He uses Mike to keep records, Mike knows where they are—can't touch 'em!"

"Why not, Manuel?"

Tried to explain to Prof and Wyoh sorts of memory a thinkum has—permanent memories that can't be erased because patterns be logic itself, how it thinks; short-term memories used for current programs and then erased like memories which tell you whether you have honeyed coffee; temporary memories held long as necessary—milliseconds, days, years—but erased when no longer needed; permanently stored data like a human being's education—but learned perfectly and never forgotten—though may be condensed, rearranged, relocated, edited—and last but not finally, long lists of special memories ranging from memoranda files through very complex special programs, and each location tagged by own retrieval signal and locked or not, with endless possibilities on lock signals: sequential, parallel, temporal, situational, others.

Don't explain computers to laymen. Simpler to explain sex to a virgin. Wyoh couldn't see why, if Mike knew where Alvarez kept records, Mike didn't trot over and fetch.

I gave up. "Mike, can you explain?"

"I will try, Man. Wyoh, there is no way for me to retrieve locked data other than through external programming. I cannot program myself for such retrieval; my logic structure does not permit it. I must receive the signal as an external input."

"Well, for Bog's sake, what is this precious signal?"

"It is," Mike said simply, " 'special File Zebra'—"and waited.

"Mike!" I said. "Unlock Special File Zebra." He did, and stuff started spilling out. Had to convince Wyoh that Mike hadn't been stubborn. He hadn't—he almost *begged* us to tickle him on that spot. Sure, he knew signal. Had to. But had to come from outside, that was how he was built.

"Mike, remind me to check with you all special-purpose locked-retrieval signals. May strike ice other places."

"So I conjectured, Man."

"Okay, we'll get to it later. Now back up and go over this stuff slowly—and, Mike, as you read out, store again, without erasing, under Bastille Day and tag it 'Fink File.' Okay?"

"Programmed and running."

"Do that with anything new he puts in, too."

Prime prize was list of names by warrens, some two hundred, each keyed with a code Mike identified with those blind pay accounts.

Mike read out Hong Kong Luna list and was hardly started when Wyoh gasped, "Stop, Mike! I've got to write these down!"

I said, "Hey! No writing! What's huhu?"

"That woman, Sylvia Chiang, is comrade secretary back home! But — But that means the Warden has our whole organization!"

"No, dear Wyoming," Prof corrected. "It means we have *his* organization."

"But—"

"I see what Prof means," I told her. "Our organization is just us three and Mike. Which Warden doesn't know. But now we know his organization. So shush and let Mike read. But don't write; you have this list—from Mike—anytime you phone him. Mike, note that Chiang woman is organization secretary, former organization, in Kongville."

"Noted."

Wyoh boiled over as she heard names of undercover finks in her town but limited herself to noting facts about ones she knew. Not all were "comrades" but enough that she stayed riled up. Novy Leningrad names didn't mean much to us; Prof recognized three, Wyoh one. When came Luna City Prof noted over half as being "comrades." I recognized several, not as fake subversives but as acquaintances. Not friends— Don't know what it would do to me to find someone I trusted on boss fink's payroll. But would shake me.

It shook Wyoh. When Mike finished she said, "I've got to get home! Never in my life have I helped eliminate anyone but I am going to *enjoy* putting the black on these spies!"

Prof said quietly, "No one will be eliminated, dear Wyoming."

"What? Professor, can't you take it? Though I've never killed anyone, I've always known it might have to be done."

He shook head. "Killing is not the way to handle a spy, not when he doesn't know that *you* know that he is a spy."

She blinked. "I must be dense."

"No, dear lady. Instead you have a charming honesty.. . a weakness you must guard against. The thing to do with a spy is to let him breathe, encyst him with loyal comrades, and feed him harmless information to please his employers. These creatures will be taken into our organization. Don't be shocked; they will be in very special cells. 'Cages' is a better word. But it would be the greatest waste to eliminate them—not only would each spy be replaced with someone new but also killing these traitors would tell the Warden that we have penetrated his secrets. Mike amigo mio, there should be in that file a dossier on me. Will you see?"

Were long notes on Prof, and I was embarrassed as they added up to "harmless old fool." He was tagged as a subversive—that was why he had been sent to The Rock—as a member of underground group in Luna City. But was described as a "troublemaker" in organization, one who rarely agreed with others.

Prof dimpled and looked pleased. "I must consider trying to sell out and get myself placed on the Warden's payroll." Wyoh did not think this funny, especially when he made clear was not joke, merely unsure tactic was practical. "Revolutions must be financed, dear lady, and one way is for a revolutionary to become a police spy. It is probable that some of those prima-facie traitors are actually on our side."

"I wouldn't trust them!"

"Ah, yes, that is the rub with double agents, to be *certain* where their loyalties—if any—lie. Do you wish your own dossier? Or would you rather hear it in private?"

Wyoh's record showed no surprises. Warden's finks had tabbed her years back. But I was surprised that I had a record, too—routine check made when I was cleared to work in Authority Complex. Was classed as "nonpolitical" and someone had added "not too bright" which was both unkind and true or why would I get mixed up in Revolution?

Prof had Mike stop readout (hours more), leaned back and looked thoughtful. "One thing is clear," he said. "The Warden knew plenty about Wyoming and myself long ago. But you, Manuel, are not on his black list."

"After last night?"

"Ah, so. Mike, do you have *anything* in that file entered in the last twenty-four hours?"

Nothing. Prof said, "Wyoming is right that we cannot stay here forever. Manuel, how many names did you recognize? Six, was it? Did you see any of them last night?"

"No. But might have seen me."

"More likely they missed you in the crowd. I did not spot you until I came down front and I've known you since you were a boy. But it is most unlikely that Wyoming traveled from Hong Kong and spoke at the meeting without her activity being known to the Warden." He looked at Wyoh. "Dear lady, could you bring yourself to play the nominal role of an old man's folly?"

"I suppose so. How, Professor?"

"Manuel is probably in the clear. I am not but from my dossier it seems unlikely that the Authority's finks will bother to pick me up. You they may wish to question or even to hold; you are rated as dangerous. It would be wise for you to stay out of sight. This room—I'm thinking of renting it for a period—weeks or even years. You could hide in it—if you do not mind the obvious construction that would be placed on your staying here."

Wyoh chuckled. "Why, you darling! Do you think I care what anyone thinks? I'd be delighted to play the role of your bundle baby—and don't be too sure I'd be just playing."

"Never tease an old dog," he said mildly. "He might still have one bite. I may occupy that couch most nights. Manuel, I intend to resume my usual ways—and so should you. While I feel that it will take a busy cossack to arrest me, I will sleep sounder in this hideaway. But in addition to being a hideout this room is good for cell meetings; it has a phone."

Mike said, "Professor, may I offer a suggestion?"

"Certainly, amigo, we want your thoughts."

"I conclude that the hazards increase with each meeting of our executive cell. But meetings need not be corporal; you can meet—and I can join you if I am welcome—by phone."

"You are always welcome, Comrade Mike; we need you. However—" Prof looked worried.

I said, "Prof, don't worry about anybody listening in." I explained how to place a "Sherlock" call. "Phones are safe if Mike supervises call. Reminds me— You haven't been told how to reach Mike. How, Mike? Prof use my number?"

Between them, they settled on MYSTERIOUS. Prof and Mike shared childlike joy in intrigue for own sake. I suspect Prof enjoyed being rebel long before he worked out his political philosophy, while Mike—

how could human freedom matter to him? Revolution was a game—a game that gave him companionship and chance to show off talents. Mike was as conceited a machine as you are ever likely to meet.

“But we still need this room,” Prof said, reached into pouch, hauled out thick wad of bills.

I blinked. “Prof, robbed a bank?”

“Not recently. Perhaps again in the future of the Cause requires it. A rental period of one lunar should do as a starter. Will you arrange it, Manuel? The management might be surprised to hear my voice; I came in through a delivery door.”

I called manager, bargained for dated key, four weeks. He asked nine hundred Hong Kong. I offered nine hundred Authority. He wanted to know how many would use room? I asked if was policy of Raffles to snoop affairs of guests?

We settled at HK$475; I sent up bills, he sent down two dated keys. I gave one to Wyoh, one to Prof, kept one-day key, knowing they would not reset lock unless we failed to pay at end of lunar.

(Earthside I ran into insolent practice of requiring hotel guest to sign chop—even show identification!)

I asked, “What next? Food?”

“I’m not hungry, Mannie.”

“Manuel, you asked us to wait while Mike settled your questions. Let’s get back to the basic problem: how we are to cope when we find ourselves facing Terra, David facing Goliath.”

“Oh. Been hoping that would go away. Mike? You really have ideas?”

“I *said* I did, Man,” he answered plaintively. “We can throw rocks.”

“Bog’s sake! No time for jokes.”

“But, Man,” he protested, “we *can* throw rocks at Terra. We will.”

8

Took time to get through my skull that Mike was serious, and scheme might work. Then took longer to show Wyoh and Prof how second part was true. Yet both parts should have been obvious.

Mike reasoned so: What is “war”? One book defined war as use of force to achieve political result. And “force” is action of one body on another applied by means of energy.

In war this is done by “weapons”—Luna had none. But weapons, when Mike examined them as class, turned out to be engines for manipulating energy—and energy Luna has plenty. Solar flux alone is good for around one kilowatt per square meter of surface at Lunar noon; sunpower, though cyclic, is effectively unlimited. Hydrogen fusion power is almost as unlimited and cheaper, once ice is mined, magnetic pinchbottle set up. Luna has energy—how to use?

But Luna also has energy of position; she sits at top of gravity well eleven kilometers per second deep and kept from falling in by curb only two and a half km/s high. Mike knew that curb; daily he tossed grain freighters over it, let them slide downhill to Terra.

Mike had computed what would happen if a freighter grossing 100 tonnes (or same mass of rock) falls to Terra, unbraked.

Kinetic energy as it hits is 6.25 x 10^{12} joules—over six trillion joules.

This converts in split second to heat. Explosion, big one!

Should have been obvious. Look at Luna: What you see? Thousands on thousands of craters—places where Somebody got playful throwing rocks.

Wyoh said, “Joules don’t mean much to me. How does that compare with H-bombs?”

“Uh—” I started to round off in head. Mike’s “head” works faster; he answered, “The concussion of a hundred-tonne mass on Terra approaches the yield of a two-kilotonne atomic bomb.”

“‘Kilo’ is a thousand,” Wyoh murmured, “and ‘mega’ is a million—Why, that’s only one fifty-thousandth as much as a hundred-megatonne bomb. Wasn’t that the size Sovunion used?”

“Wyoh, honey,” I said gently, “that’s not how it works. Turn it around. A two-kilotonne yield is equivalent to exploding two *million* kilograms of trinitrotoluol . . . and a kilo of TNT is quite an explosion — Ask any drillman. Two million kilos will wipe out good-sized town. Check, Mike?”

"Yes, Man. But, Wyoh my only female friend, there is another aspect. Multi-megatonne fusion bombs are inefficient. The explosion takes place in too small a space; most of it is wasted. While a hundred-megatonne bomb is rated as having fifty thousand times the yield of a two-kilotonne bomb, its destructive effect is only about thirteen hundred times as great as that of a two-kilotonne explosion."

"But it seems to me that thirteen hundred times is still quite a lot—if they are going to use bombs on us that much bigger."

"True, Wyoh my female friend . . . but Luna has *many* rocks."

"Oh. Yes, so we have."

"Comrades," said Prof, "this is outside my competence—in my younger or bomb-throwing days my experience was limited to something of the order of the one-kilogram chemical explosion of which you spoke, Manuel. But I assume that you two know what you are talking about."

"We do," Mike agreed.

"So I accept your figures. To bring it down to a scale that I can understand this plan requires that we capture the catapult. No?"

"Yes," Mike and I chorused.

"Not impossible. Then we must hold it and keep it operative. Mike, have you considered how your catapult can be protected against, let us say, one small H-tipped torpedo?"

Discussion went on and on. We stopped to eat—stopped business under Prof's rule. Instead Mike told jokes, each produced a that-reminds-me from Prof.

By time we left Raffles Hotel evening of 14th May '75 we had—Mike had, with help from Prof—outlined plan of Revolution, including major options at critical points.

When came time to go, me to home and Prof to evening class (if not arrested), then home for bath and clothes and necessities in case he returned that night, became clear Wyoh did not want to be alone in strange hotel—Wyoh was stout when bets were down, between times soft and vulnerable.

So I called Mum on a Sherlock and told her was bringing house guest home. Mum ran her job with style; any spouse could bring guest home for meal or year, and our second generation was almost as free but must ask. Don't know how other families work; we have customs firmed by a century; they suit us.

So Mum didn't ask name, age, sex, marital condition; was my right and she too proud to ask. All she said was: "That's nice, dear. Have you two had dinner? It's Tuesday, you know." "Tuesday" was to remind me that our family had eaten early because Greg preaches Tuesday evenings. But if guest had not eaten, dinner would be served —concession to guest, not to me, as with exception of Grandpaw we ate when was on table or scrounged standing up in pantry.

I assured her we had eaten and would make tall effort to be there before she needed to leave. Despite Loonie mixture of Muslims, Jews, Christians, Buddhists, and ninetynine other flavors, I suppose Sunday is commonest day for church. But Greg belongs to sect which had calculated that sundown Tuesday to sundown Wednesday, local time Garden of Eden (zone minus-two, Terra) was *the* Sabbath. So we ate early in Terran north-hemisphere summer months.

Mum always went to hear Greg preach, so was not considerate to place duty on her that would clash. All of us went occasionally; I managed several times a year because terribly fond of Greg, who taught me one trade and helped me switch to another when I had to and would gladly have made it his arm rather than mine. But Mum always went—ritual not religion, for she admitted to me one night in pillow talk that she had no religion with a brand on it, then cautioned me not to tell Greg. I exacted same caution from her. I don't know Who is cranking; I'm pleased He doesn't stop.

But Greg was Mum's "boy husband," opted when she was very young, first wedding after her own—very sentimental about him, would deny fiercely if accused of loving him more than other husbands, yet took his faith when he was ordained and never missed a Tuesday.

She said, "Is it possible that your guest would wish to attend church?"

I said would see but anyhow we would rush, and said goodbye. Then banged on bathroom door and said, "Hurry with skin, Wyoh; we're short on minutes."

"One minute!" she called out. She's ungirlish girl; she appeared in one minute. "How do I look?" she asked. "Prof, will I pass?"

"Dear Wyoming, I am amazed. You were beautiful before, you are beautiful now—but utterly unrecognizable. You're safe—and I am relieved."

Then we waited for Prof to transform into old derelict; he would be it to his back corridor, then reappear as well-known teacher in front of class, to have witnesses in case a yellow boy was waiting to grab him.

It left a moment; I told Wyoh about Greg. She said, "Mannie, how good is this makeup? Would it pass in church? How bright are the lights?"

"No brighter than here. Good job, you'll get by. But do you want to go to church? Nobody pushing."

She thought. "It would please your moth—I mean, 'your senior wife,' would it not?"

I answered slowly, "Wyoh, religion is your pidgin. But since you ask . . . yes, nothing would start you better in Davis Family than going to church with Mum. I'll go if you do."

"I'll go. I thought your last name was 'O'Kelly'?"

"Is. Tack 'Davis' on with hyphen if want to be formal. Davis is First Husband, dead fifty years. Is family name and all our wives are 'Gospazha Davis' hyphened with every male name in Davis line plus her family name. In practice Mum is only 'Gospazha Davis'—can call her that—and others use first name and add Davis if they write a cheque or something. Except that Ludmilla is 'Davis-Davis' because proud of double membership, birth and option."

"I see. Then if a man is 'John Davis,' he's a son, but if he has some other last name he's your co-husband. But a girl would be 'Jenny Davis' either way, wouldn't she? How do I tell? By her age? No, that wouldn't help. I'm confused! And I thought clan marriages were complex. Or polyandries—though mine wasn't; at least my husbands had the same last name."

"No trouble. When you hear a woman about forty address a fifteen-year-old as 'Mama Milla,' you'll know which is wife and which is daughter—not even that complex as we don't have daughters home past husband-high; they get opted. But might be visiting. Your husbands were named 'Knott'?"

"Oh, no, 'Fedoseev, Choy Lin and Choy Mu.' I took back my born name."

Out came Prof, cackled senilely (looked even worse than earlier!), we left by three exits, made rendezvous in main corridor, open formation. Wyoh and I did not walk together, as I might be nabbed; on other hand she did not know Luna City, a warren so complex even nativeborn get lost—so I led and she had to keep me in sight. Prof trailed to make sure she didn't lose me.

If I was picked up, Wyoh would find public phone, report to Mike, then return to hotel and wait for Prof. But I felt sure that any yellow jacket who arrested me would get a caress from number-seven arm.

No huhu. Up to level five and crosstown by Carver Causeway, up to level three and stop at Tube Station West to pick up arms and tool kit—but not p-suit; would not have been in character, I stored it there. One yellow uniform at station, showed no interest in me. South by well-lighted corridors until necessary to go outward to reach private easement lock thirteen to co-op pressure tunnel serving Davis Tunnels and a dozen other farms. I suppose Prof dropped off there but I never looked back.

I delayed locking through our door until Wyoh caught up, then soon was saying, "Mum, allow me to present Wyma Beth Johnson."

Mum took her in arms, kissed cheek, said, "So glad you could come, Wyma dear! Our house is yours!"

See why I love our old biddy? Could have quick-frosted Wyoh with same words—but was real and Wyoh knew.

Hadn't warned Wyoh about switch in names, thought of it en route. Some of our kids were small and while they grew up despising Warden, no sense in risking prattle about "Wyoming Knott, who's visiting us"—that name was listed in "Special File Zebra."

So I missed warning her, was new to conspiracy.

But Wyoh caught cue and never bobbled.

Greg was in preaching clothes and would have to leave in minutes. Mum did not hurry, took Wyoh down line of husbands—Grandpaw, Greg, Hans—then up line of wives—Ludmilla, Lenore, Sidris, Anna—with stately grace, then started on our kids.

I said, "Mum? Excuse me, want to change arms." Her eyebrows went up a millimeter, meaning: "We'll speak of this but not in front of children"—so I added: "Know it's late, Greg's sneaking look at watch. And Wyma and I are going to church. So 'scuse, please."

She relaxed. "Certainly, dear." As she turned away I saw her arm go around Wyoh's waist, so I relaxed.

I changed arms, replacing number seven with social arm. But was excuse to duck into phone cupboard and punch "MYCROFTXXX." "Mike, we're home. But about to go to church. Don't think you can listen there, so I'll check in later. Heard from Prof?"

"Not yet, Man. Which church is it? I may have some circuit."

"Pillar of Fire Repentance Tabernacle—"

"No reference."

"Slow to my speed, pal. Meets in West-Three Community Hall. That's south of Station on Ring about number—"

"I have it. There's a pickup inside for channels and a phone in the corridor outside; I'll keep an ear on both."

"I don't expect trouble, Mike."

"It's what Professor said to do. He is reporting now. Do you wish to speak to him?"

"No time. 'Bye!"

That set pattern: Always keep touch with Mike, let him know where you are, where you plan to be; Mike would listen if he had nerve ends there. Discovery I made that morning, that Mike could listen at dead phone, suggested it—discovery bothered me; don't believe in magic. But on thinking I realized a phone could be switched on by central switching system without human intervention—if switching system had volition. Mike had bolshoyeh volition.

How Mike knew a phone was outside that hall is hard to say, since "space" could not mean to him what means to us. But he carried in storage a "map"—structured relations—of Luna City's engineering, and could almost always fit what we said to what he knew as "Luna

City"; hardly ever got lost.

So from day cabal started we kept touch with Mike and each other through his widespread nervous system. Won't mention again unless necessary.

Mum and Greg and Wyoh were waiting at outer door, Mum chomping but smiling. I saw she had lent Wyoh a stole; Mum was as easy about skin as any Loonie, nothing newchummish—but church was another matter.

We made it, although Greg went straight to platform and we to seats. I settled in warm, mindless state, going through motions. But Wyoh did really listen to Greg's sermon and either knew our hymn book or was accomplished sight reader.

When we got home, young ones were in bed and most adults; Hans and Sidris were up and Sidris served cocoasoy and cookies, then all turned in. Mum assigned Wyoh a room in tunnel most of our kids lived in, one which had had two smaller boys last time I noticed. Did not ask how she had reshuffled, was clear she was giving my guest best we had, or would have put Wyoh with one of older girls.

I slept with Mum that night, partly because our senior wife is good for nerves—and nerve-racking things had happened—and partly so she would know I was *not* sneaking to Wyoh's room after things were quiet. My workshop, where I slept when slept alone; was just one bend from Wyoh's door. Mum was telling me, plain as print: "Go ahead, dear. Don't tell me if you wish to be mean about it. Sneak behind my back."

Which neither of us admitted. We visited as we got ready for bed, chatted after light out, then I turned over.

Instead of saying goodnight Mum said, "Manuel? Why does your sweet little guest make herself up as an Afro? I would think that her natural coloration would be more becoming. Not that she isn't perfectly charming the way she chooses to be."

So rolled over and faced her, and explained—sounded thin, so filled in. And found self telling all—except one point: Mike. I included Mike—but *not* as computer—instead as a man Mum was not likely to meet, for security reasons.

But telling Mum—taking her into my subcell, should say, to become leader of own cell in turn—taking Mum into conspiracy was not case of husband who can't keep from blurting everything to his wife. At most was hasty—but was best time if she was to be told.

Mum was smart. Also able executive; running big family without baring teeth requires that. Was respected among farm families and throughout Luna City; she had been up longer than 90 percent. She could help.

And would be indispensable inside family. Without her help Wyoh and I would find it sticky to use phone together (hard to explain), keep kids from noticing (impossible!)—but with Mum's help would be no problems inside household.

She listened, sighed, said, "It sounds dangerous, dear."

"Is," I said. "Look, Mimi, if you don't want to tackle, say so then forget what I've told."

"Manuel! Don't even say that. You are my husband, dear; I took you for better, for worse. . . and your wish is my command."

(My word, what a lie! But Mimi believed it.)

"I would not let you go into danger alone," she went on, "and besides—"

"What, Mimi?"

"I think every Loonie dreams of the day when we will be free. All but some poor spineless rats. I've never talked about it; there seemed to be no point and it's necessary to look up, not down, lift one's burden and go ahead. But I thank dear Bog that I have been permitted to live to see the time come, if indeed it has. Explain more about it. I am to find three others, is it? Three who can be trusted."

"Don't hurry. Move slowly. Be sure."

"Sidris can be trusted. She holds her tongue, that one."

"Don't think you should pick from family. Need to spread out. Don't rush."

"I shan't. We'll talk before I do anything. And Manuel, if you want my opinion—" She stopped.

"Always want your opinion, Mimi."

"Don't mention this to Grandpaw. He's forgetful these days and sometimes talkative. Now sleep, dear, and don't dream."

9

Followed a long time during which would have been possible to forget anything as unlikely as revolution had not details taken so much time. Our first purpose was not to be noticed. Long distance purpose was to make things as much worse as possible.

Yes, worse. Never was a time, even at last, when all Loonies wanted to throw off Authority, wanted it bad enough to revolt. All Loonies despised Warden and cheated Authority. Didn't mean they were ready to fight and die. If you had mentioned "patriotism" to a Loonie, he would have stared—or thought you were talking about his homeland. Were transported Frenchmen whose hearts belonged to "La Belle Patrie," ex-Germans loyal to Vaterland, Russkis who still loved Holy Mother Russia. But Luna? Luna was "The Rock," place of exile, not thing to love.

We were as nonpolitical a people as history ever produced. I know, I was as numb to politics as any until circumstances pitched me into it. Wyoming was in it because she hated Authority for a personal reason, Prof because he despised all authority in a detached intellectual fashion, Mike because he was a bored and lonely machine and was for him "only game in town." You could not have accused us of patriotism. I came closest because I was third generation with total lack of affection for any place on Terra, had been there, disliked it and despised earthworms. Made me more "patriotic" than most!

Average Loonie was interested in beer, betting, women, and work, in that order. "Women" might be second place but first was unlikely, much as women were cherished. Loonies had learned there never were enough women to go around. Slow learners died, as even most possessive male can't stay alert every minute. As Prof says, a society adapts to fact, or doesn't survive. Loonies adapted to harsh facts—or failed and died. But "patriotism" was not necessary to survival.

Like old Chinee saying that "Fish aren't aware of water," I was not aware of any of this until I first went to Terra and even then did not realize what a blank spot was in Loonies under storage location marked "patriotism" until I took part in effort to stir them up. Wyoh and her comrades had tried to push "patriotism" button and got nowhere—years of work, a few thousand members, less than 1 percent and of that microscopic number almost 10 percent had been paid spies of boss fink!

Prof set us straight: Easier to get people to hate than to get them to love.

Luckily, Security Chief Alvarez gave us a hand. Those nine dead finks were replaced with ninety, for Authority was goaded into something it did reluctantly, namely spend money on us, and one folly led to another.

Warden's bodyguard had never been large even in earliest days Prison guards in historical meaning were unnecessary and that had been one attraction of penal colony system—cheap. Warden and his deputy had to be protected and visiting vips, but prison itself needed no guards. They even stopped guarding ships after became clear was not necessary, and in May 2075, bodyguard was down to its cheapest numbers, all of them new chum transportees.

But loss of nine in one night scared somebody. We knew it scared Alvarez; he filed copies of his demands for help in Zebra file and Mike read them. A lag who had been a police officer on Terra before his conviction and then a bodyguard all his years in Luna, Alvarez was probably most frightened and loneliest man in The Rock. He demanded more and tougher help, threatened to resign civil service job if he didn't get it— just a threat, which Authority would have known if it had really known Luna. If Alvarez had showed up in any warren as unarmed civilian, he would have stayed breathing only as long as not recognized.

He got his additional guards. We never found out who ordered that raid. Mort the Wart had never shown such tendencies, had been King Log throughout tenure. Perhaps Alvarez, having only recently succeeded to boss fink spot, wanted to make face—may have had ambition to be Warden. But likeliest theory is that Warden's reports on "subversive activities" caused Authority Earthside to order a cleanup.

One thumb-fingered mistake led to another. New bodyguards, instead of picked from new transportees, were elite convict troops, Federated Nations crack Peace Dragoons. Were mean and tough, did not want to go to Luna, and soon realized that "temporary police duty" was one-way trip. Hated Luna and Loonies, and saw us as cause of it all.

Once Alvarez got them, he posted a twenty-four-hour watch at every interwarren tube station and instituted passports and passport control. Would have been illegal had there been laws in Luna, since 95 percent of us were theoretically free, either born free, or sentence completed. Percentage was higher in cities as undischarged transportees lived in barrack warrens at Complex and came into town only two days per lunar they had off work. If then, as they had no money, but you sometimes saw them wandering around, hoping somebody would buy a drink.

But passport system was not “illegal” as Warden’s regulations were only written law. Was announced in papers, we were given week to get passports, and at eight hundred one morning was put in effect. Some Loonies hardly ever traveled; some traveled on business; some commuted from outlying warrens or even from Luna City to Novylen or other way. Good little boys filled out applications, paid fees, were photographed, got passes; I was good little boy on Prof’s advice, paid for passport and added it to pass I carried to work in Complex.

Few good little boys! Loonies did not believe it. Passports? Whoever heard of such a thing?

Was a trooper at Tube Station South that morning dressed in bodyguard yellow rather than regimentals and looking like he hated it, and us. I was not going anywhere; I hung back and watched.

Novylen capsule was announced; crowd of thirty-odd headed for gate. Gospodin Yellow Jacket demanded passport of first to reach it. Loonie stopped to argue. Second one pushed past; guard turned and yelled—three or four more shoved past. Guard reached for sidearm; somebody grabbed his elbow, gun went off—not a laser, a slug gun, noisy.

Slug hit decking and went *whee-whee-hoo* off somewhere. I faded back. One man hurt—that guard. When first press of passengers had gone down ramp, he was on deck, not moving.

Nobody paid attention; they walked around or stepped over—except one woman carrying a baby, who stopped, kicked him carefully in face, then went down ramp. He may have been dead already, didn’t wait to see. Understand body stayed there till relief arrived.

Next day was a half squad in that spot. Capsule for Novylen left empty.

It settled down. Those who had to travel got passports, diehards quit traveling. Guard at a tube gate became two men, one looked at passports while other stood back with gun drawn. One who checked passports did not try hard, which was well as most were counterfeit and early ones were crude. But before long, authentic paper was stolen and counterfeits were as dinkum as official ones—more expensive but Loonies preferred free-enterprise passports.

Our organization did not make counterfeits; we merely encouraged it—and knew who had them and who did not; Mike’s records listed officially issued ones. This helped separate sheep from goats in files we were building—also stored in Mike but in “Bastille” location—as we figured a man with counterfeit passport was halfway to joining us. Word was passed down cells in our growing organization never to recruit anybody with a valid passport. If recruiter was not certain, just query upwards and answer came back.

But guards’ troubles were not over. Does not help a guard’s dignity nor add to peace of mind to have children stand in front of him, or behind out of eye which was worse, and ape every move he makes—or run back and forth screaming obscenities, jeering, making finger motions that are universal. At least guards took them as insults.

One guard backhanded a small boy, cost him some teeth. Result: two guards dead, one Loonie dead.

After that, guards ignored children.

We didn't have to work this up; we merely encouraged it. You wouldn't think that a sweet old lady like my senior wife would encourage children to misbehave. But she did.

Other things get single men a long way from home upset—and one we did start. These Peace Dragoons had been sent to The Rock without a comfort detachment.

Some of our fems were extremely beautiful and some started loitering around stations, dressed in less than usual—which could approach zero—and wearing more than usual amount of perfume, scents with range and striking power. They did not speak to yellow jackets nor look at them; they simply crossed their line of sight, undulating as only a Loonie gal can. (A female on Terra can't walk that way; she's tied down by six times too much weight.)

Such of course produces a male gallery, from men down to lads not yet pubescent—happy whistles and cheers for her beauty, nasty laughs at yellow boy. First girls to take this duty were slot-machine types but volunteers sprang up so fast that Prof decided we need not spend money. He was correct: even Ludmilla, shy as a kitten, wanted to try it and did not only because Mum told her not to. But Lenore, ten years older and prettiest of our family, did try it and Mum did not scold. She came back pink and excited and pleased with herself and anxious to tease enemy again. Her own idea; Lenore did not then know that revolution was brewing.

During this time I rarely saw Prof and never in public; we kept touch by phone. At first a bottleneck was that our farm had just one phone for twenty-five people, many of them youngsters who would tie up a phone for hours unless coerced. Mimi was strict; our kids were allowed one outgoing call per day and max of ninety seconds on a call, with rising scale of punishment—tempered by her warmth in granting exceptions. But grants were accompanied by "Mum's Phone Lecture": "When I first came to Luna there were no private phones. You children don't know how soft. . ."

We were one of last prosperous families to install a phone; it was new in household when I was opted. We were prosperous because we never bought anything farm could produce. Mum disliked phone because rates to Luna City Co-op Comm Company were passed on in large measure to Authority. She never could understand why I could not ("Since you know all about such things, Manuel dear") steal phone service as easily as we liberated power. That a phone instrument was part of a switching system into which it must fit was no interest to her.

Steal it I did, eventually. Problem with illicit phone is how to receive incoming calls. Since phone is not listed, even if you tell persons from whom you want calls, switching system *itself* does not have you listed; is *no* signal that can tell it to connect other party with you.

Once Mike joined conspiracy, switching was no problem. I had in workshop most of what I needed; bought some items and liberated others. Drilled a tiny hole from workshop to phone cupboard and another to Wyoh's room—virgin rock a meter thick but a laser drill collimated to a thin pencil cuts rapidly. I unshipped listed phone, made a wireless coupling to line in its recess and concealed it. All else needed were binaural receptors and a speaker in Wyoh's room, concealed, and same in mine, and a circuit to raise frequency above audio to have silence on Davis phone line, and its converse to restore audio incoming.

Only problem was to do this without being seen, and Mum generaled that.

All else was Mike's problem. Used no switching arrangements; from then on used MYCROFTXXX only when calling from some other phone. Mike listened at all times in workshop and in Wyoh's room; if he heard my voice or hers say "Mike," he answered, but not to other voices. Voice patterns were as distinctive to him as fingerprints; he never made mistakes.

Minor flourishes—soundproofing Wyoh's door such as workshop door already had, switching to suppress my instrument or hers, signals to tell me she was alone in her room and door locked, and vice versa. All added up to safe means whereby Wyoh and I could talk with Mike or with each other, or could set up talk-talk of Mike, Wyoh, Prof, and self. Mike would call Prof wherever he was; Prof would talk or call back from a more private phone. Or might be Wyoh or myself had to be found. We all were careful to stay checked in with Mike.

My bootleg phone, though it had no way to punch a call, could be used to call any number in Luna—speak to Mike, ask for a Sherlock to anybody—not tell him number, Mike had all listings and could look up a number faster than I could.

We were beginning to see unlimited possibilities in a phoneswitching system alive and on our side. I got from Mike and gave Mum still another null number to call Mike if she needed to reach me. She grew chummy with Mike while continuing to think he was a man. This spread through our family. One day as I returned home Sidris said, "Mannie darling, your friend with the nice voice called. Mike Holmes. Wants you to call back."

"Thanks, hon. Will."

"When are you going to invite him to dinner, Man? I think he's nice."

I told her Gospodin Holmes had bad breath, was covered with rank hair, and hated women.

She used a rude word, Mum not being in earshot. "You're afraid to let me see him. Afraid I'll opt out for him." I patted her and told her that was why. I told Mike and Prof about it. Mike flirted even more with my womenfolk after that; Prof was thoughtful.

I began to learn techniques of conspiracy and to appreciate Prof's feeling that revolution could be an art. Did not forget (nor ever doubt) Mike's prediction that Luna was only seven years from disaster. But did not think about it, thought about fascinating, finicky details.

Prof had emphasized that stickiest problems in conspiracy are communications and security, and had pointed out that they conflict—easier are communications, greater is risk to security; if security is tight, organization can be paralyzed by safety precautions. He had explained that cell system was a compromise.

I accepted cell system since was necessary to limit losses from spies. Even Wyoh admitted that organization without compartmentation could not work after she learned how rotten with spies old underground had been.

But I did not like clogged communications of cell system; like Terran dinosaurs of old, took too long to send message from head to tail, or back.

So talked with Mike.

We discarded many-linked channels I had suggested to Prof. We retained cells but based security and communication on marvelous possibilities of our dinkum thinkum.

Communications: We set up a ternary tree of "party" names:

Chairman, Gospodin Adam Selene (Mike)
Executive cell: Bork (me), Betty (Wyoh), Bill (Prof)
Bork's cell: Cassie (Mum), Colin, Chang
Betty's cell: Calvin (Greg), Cecilia (Sidris), Clayton
Bill's cell: Cornwall (Finn Nielsen), Carolyn, Cotter

—and so on. At seventh link George supervises Herbert, Henry, and Hallie. By time you reach that level you need 2,187 names with "H"—but turn it over to savvy computer who finds or invents them. Each recruit is given a party name and an emergency phone number. This number, instead of chasing through many links, connects with "Adam Selene," Mike.

Security: Based on double principle; no human being can be trusted with anything—but Mike could be trusted with everything.

Grim first half is beyond dispute. With drugs and other unsavory methods any man can be broken. Only defense is suicide, which may be impossible. Oh, are "hollow tooth" methods, classic and novel, some nearly infallible—Prof saw to it that Wyoh and myself were equipped. Never knew what he gave her as a final friend and since I never had to use mine, is no point in messy details. Nor am I sure I would ever suicide; am not stuff of martyrs.

But Mike could never need to suicide, could not be drugged, did not feel pain. He carried everything concerning us in a separate memory bank under a locked signal programmed *only* to our three voices, and, since flesh is weak, we added a signal under which any of us could lock out other two in emergency. In my opinion as best computerman in Luna, Mike could not remove this lock once it was set up. Best of all, nobody would ask master computer for this file because nobody knew it existed, did not suspect Mike-as-Mike existed. How secure can you be?

Only risk was that this awakened machine was whimsical. Mike was always showing unforeseen potentials; conceivable he could figure way to get around block—if he wanted to.

But would never want to. He was loyal to me, first and oldest friend; he liked Prof; I think he loved Wyoh. No, no, sex meant nothing. But Wyoh is lovable and they hit it off from start.

I trusted Mike. In this life you have to bet; on that bet I would give any odds.

So we based security on trusting Mike with everything while each of us knew only what he had to know. Take that tree of names and numbers. I knew only party names of my cellmates and of three directly under me; was all I needed. Mike set up party names, assigned phone number to each, kept roster of real names versus party names. Let's say party member "Daniel" (whom I would not know, being a "D" two levels below me) recruits Fritz Schultz. Daniel reports fact but not name upwards; Adam Selene calls Daniel, assigns for Schultz party name "Embrook," then phones Schultz at number received from Daniel, gives Schultz his name Embrook and emergency phone number, this number being *different* for *each* recruit.

Not even Embrook's cell leader would know Embrook's emergency number. What you do not know you cannot spill, not under drugs nor torture, nor anything. Not even from carelessness.

Now let's suppose I need to reach Comrade Embrook. I don't know who he is; he may live in Hong Kong or be shopkeeper nearest my home. Instead of passing message down, hoping it will reach him, I call Mike. Mike connects me with Embrook at once, in a Sherlock, *without* giving me his number.

Or suppose I need to speak to comrade who is preparing cartoon we are about to distribute in every taproom in Luna. I don't know who he is. But I need to talk to him; something has come up.

I call Mike; Mike knows everything—and again I am quickly connected—and this comrade knows it's okay as Adam Selene arranged call. "Comrade Bork speaking"—and he doesn't know me but initial "B" tells him that I am vip indeed—"we have to change so-and-so. Tell your cell leader and have him check, but get on with it."

Minor flourishes—some comrades did not have phones; some could be reached only at certain hours; some outlying warrens did not have phone service. No matter, Mike knew everything—and rest of us did not know *anything* that could endanger any but that handful whom each knew face to face.

After we decided that Mike should talk voice-to-voice to any comrade under some circumstances, it was necessary to give him more voices and dress him up, make him three dimensions, create "Adam Selene, Chairman of the Provisional Committee of Free Luna."

Mike's need for more voices lay in fact that he had just one voder-vocoder, whereas his brain could handle a dozen conversations, or a hundred (don't know how many)—like a chess master playing fifty opponents, only more so.

This would cause a bottleneck as organization grew and Adam Selene was phoned oftener, and could be crucial if we lasted long enough to go into action.

Besides giving him more voices I wanted to silence one he had. One of those so-called computermen might walk into machines room while we were phoning Mike; bound to cause even his dim wit to wonder if he found master machine apparently talking to itself.

Voder-vocoder is very old device. Human voice is buzzes and hisses mixed various ways; true even of a coloratura soprano. A vocoder analyzes buzzes and hisses into patterns, one a computer (or trained eye) can read. A voder is a little box which can buzz and hiss and has controls to vary these elements to match those patterns. A human can "play" a voder, producing artificial speech; a properly programmed computer can do it as fast, as easily, as clearly as you can speak.

But voices on a phone wire are not sound waves but electrical signals; Mike did not need audio part of voder-vocoder to talk by phone. Sound waves were needed only by human at other end; no need for speech sounds inside Mike's room at Authority Complex. so I planned to remove them, and thereby any danger that somebody might notice.

First I worked at home, using number-three arm most of time. Result was very small box which sandwiched twenty voder-vocoder circuits minus audio side. Then I called Mike and told him to "get ill" in way that would annoy Warden. Then I waited.

We had done this "get ill" trick before. I went back to work once we learned that I was clear, which was Thursday that same week when Alvarez read into Zebra file an account of shambles at Stilyagi Hall. His version listed about one hundred people (out of perhaps three hundred); list included Shorty Mkrum, Wyoh, Prof, and Finn Nielsen but *not* me—apparently I was missed by his finks. It told how nine police officers, each deputized by Warden to preserve peace, had been shot down in cold blood. Also named three of our dead.

An add-on a week later stated that "the notorious agente provocateuse Wyoming Knott of Hong Kong in Luna, whose incendiary speech on Monday 13 May had incited the riot that cost the lives of nine brave officers, had not been apprehended in Luna City and had not returned to her usual haunts in Hong Kong in Luna, and was now believed to have died in the massacre she herself set off." This add-on admitted what earlier report failed to mention, i.e., bodies were missing and exact number of dead was not known.

This P.S. settled two things: Wyoh could not go home nor back to being a blonde.

Since I had not been spotted I resumed my public ways, took care of customers that week, bookkeeping machines and retrieval files at Carnegie Library, and spent time having Mike read out Zebra file and other special files, doing so in Room L of Raffles as I did not yet have my own phone. During that week Mike niggled at me like an impatient child (which he was), wanting to know when I was coming over to pick up more jokes. Failing that, he wanted to tell them by phone.

I got annoyed and had to remind myself that from Mike's viewpoint analyzing jokes was just as important as freeing Luna—and you *don't* break promises to a child.

Besides that. I got itchy wondering whether I could go inside Complex without being nabbed. We knew Prof was not clear, was sleeping in Raffles on that account. Yet they knew he had been at meeting and knew where he was, daily—but no attempt was made to pick him up. When we learned that attempt had been made to pick up Wyoh, I grew itchier. Was I clear? Or were they waiting to nab me quietly? Had to know.

So I called Mike and told him to have a tummyache. He did so, I was called in—no trouble. Aside from showing passport at station, then to a new guard at Complex, all was usual. I chatted with Mike, picked up one thousand jokes (with understanding that we would report a hundred at a time every three or four days, no faster), told him to get well, and went back to L-City, stopping on way out to bill

Chief Engineer for working time, travel-and-tool time, materials, special service, anything I could load in.

Thereafter saw Mike about once a month. Was safe, never went there except when *they* called *me* for malfunction beyond ability of their staff—and I was always able to "repair" it, sometimes quickly, sometimes after a full day and many tests. Was careful to leave tool marks on cover plates, and had before-and-after printouts of test runs to show what had been wrong, how I analyzed it, what I had done. Mike always worked perfectly after one of my visits; I was indispensable.

So, after I prepared his new voder-vocoder add-on, didn't hesitate to tell him to get "ill." Call came in thirty minutes. Mike had thought up a dandy; his "illness" was wild oscillations in conditioning Warden's residence. He was running its heat up, then down, on an eleven-minute cycle, while oscillating its air pressure on a short cycle, ca. 2c/s, enough to make a man dreadfully nervy and perhaps cause earache.

Conditioning a single residence should not go through a master computer! In Davis Tunnels we handled home and farm with idiot controls, feedbacks for each cubic with alarms so that somebody could climb out of bed and control by hand until trouble could be found. If cows got chilly, did not hurt corn; if lights failed over wheat, vegetables were okay. That Mike could raise hell with Warden's residence and nobody could figure out what to do shows silliness of piling everything into one computer.

Mike was happy-joyed. This was humor he really scanned. I enjoyed it, too, told him to go ahead, have fun—spread out tools, got out little black box.

And computerman-of-thewatch comes banging and ringing at door. I took my time answering and carried number-five arm in right hand with short wing bare; this makes some people sick and upsets almost everybody. "What in hell do *you* want, choom?" I inquired.

"Listen," he says, "Warden is raising hell! Haven't you found trouble?"

"My compliments to Warden and tell him I will override by hand to restore his precious comfort as soon as I locate faulty circuit—if not slowed up by silly questions. Are you going to stand with door open blowing dust into machines while I have cover plates off? If you do—since you're in charge—when dust puts machine on sputter, *you* can repair it. *I* won't leave a warm bed to help. You can tell that to your bloody Warden, too."

"Watch your language, cobber."

"Watch yours, convict. Are you going to close that door? Or shall I walk out and go back to L-City?" And raised number-five like a club.

He closed door. Had no interest in insulting poor sod. Was one small bit of policy to make everybody as unhappy as possible. He was finding working for Warden difficult; I wanted to make it unbearable.

"Shall I step it up?" Mike inquired.

"Um, hold it so for ten minutes, then stop abruptly. Then jog it for an hour, say with air pressure. Erratic but hard. Know what a sonic boom is?"

"Certainly. It is a—"

"Don't define. After you drop major effect, rattle his air ducts every few minutes with nearest to a boom system will produce. Then give him something to remember. Mmm . . . Mike, can you make his W.C. run backwards?"

"I surely can! All of them?"

"How many does he have?"

"Six."

"Well . . . program to give them all a push, enough to soak his rugs. But if you can spot one nearest his bedroom, fountain it clear to ceiling. Can?"

"Program set up!"

"Good. Now for your present, ducky." There was room in voder audio box to hide it and I spent forty minutes with number-three, getting it just so. We trial-checked through voder-vocoder, then I told him to call Wyoh and check each circuit.

For ten minutes was silence, which I spent putting tool markers on a cover plate which should have been removed had been anything wrong, putting tools away, putting number-six arm on, rolling up one thousand jokes waiting in printout. I had found no need to cut out audio of voder; Mike had thought of it before I had and always chopped off any time door was touched. Since his reflexes were better than mine by a factor of at least a thousand, I forgot it.

At last he said, "All twenty circuits okay. I can switch circuits in the middle of a word and Wyoh can't detect discontinuity. And I called Prof and said Hello and talked to Mum on your home phone, all three at the same time."

"We're in business. What excuse you give Mum?"

"I asked her to have you call me, Adam Selene that is. Then we chatted. She's a charming conversationalist. We discussed Greg's sermon of last Tuesday."

"Huh? How?"

"I told her I had listened to it, Man, and quoted a poetic part."

"Oh, Mike!"

"It's okay, Man. I let her think that I sat in back, then slipped out during the closing hymn. She's not nosy; she knows that I don't want to be seen."

Mum is nosiest female in Luna. "Guess it's okay. But don't do it again. Um— *Do* do it again. You go to—you monitor— meetings and lectures and concerts and stuff."

"Unless some busybody switches me off by hand! Man, I can't control those spot pickups the way I do a phone."

"Too simple a switch. Brute muscle rather than solid-state flipflop."

"That's barbaric. And unfair."

"Mike, almost everything is unfair. What can't be cured—"

"—must be endured. That's a funny-once, Man."

"Sorry. Let's change it: What can't be cured should be tossed out and something better put in. Which we'll do. What chances last time you calculated?"

"Approximately one in nine, Man."

"Getting worse?"

"Man, they'll get worse for months. We haven't reached the crisis."

"With Yankees in cellar, too. Oh, well. Back to other matter. From now on, when you talk to anyone, if he's been to a lecture or whatever, you were there, too—and prove it, by recalling something."

"Noted. Why, Man?"

"Have you read 'The Scarlet Pimpernel'? May be in public library."

"Yes. Shall I read it back?"

"No, no! You're our Scarlet Pinipernel, our John Galt, our Swamp Fox, our man of mystery. You go everywhere, know everything, slip in and out of town without passport. You're always there, yet nobody catches sight of you."

His lights rippled, he gave a subdued chuckle. "That's fun, Man. Funny once, funny twice, maybe funny always."

"Funny always. How long ago did you stop gymkhana at Warden's?"

"Forty-three minutes ago except erratic booms."

"Bet his teeth ache! Give him fifteen minutes more. Then I'll report job completed."

"Noted. Wyoh sent you a message, Man. She said to remind you of Billy's birthday party."

"Oh, my word! Stop everything, I'm leaving. 'Bye!" I hurried out. Billy's mother is Anna. Probably her last—and right well she's done by us, eight kids, three still home. I try to be as careful as Mum never to show favoritism. . . but Billy is quite a boy and I taught him to read. Possible he looks like me.

Stopped at Chief Engineer's office to leave bill and demanded to see him. Was let in and he was in belligerent mood; Warden had been riding him. "Hold it," I told him. "My son's birthday and shan't be late. But must show you something."

Took an envelope from kit, dumped item on desk: corpse of house fly which I had charred with a hot wire and fetched. We do not tolerate flies in Davis Tunnels but sometimes one wanders in from city as locks are opened. This wound up in my workshop just when I needed it. "See that? Guess where I found it."

On that faked evidence I built a lecture on care of fine machines, talked about doors opened, complained about man on watch. "Dust can ruin a computer. *Insects* are unpardonable! Yet your watchstanders wander in and out as if tube station. Today both doors held open—while this idiot yammered. If I find more evidence that cover plates have been removed by hoof-handed choom who attracts flies—well, it's your plant, Chief. Got more than I can handle, been doing your chores because I like fine machines. Can't stand to see them abused! Goodbye."

"Hold on. I want to tell *you* something."

"Sorry, got to go. Take it or leave it, I'm no vermin exterminator; I'm a computerman."

Nothing frustrates a man so much as not letting him get in his say. With luck and help from Warden, Chief Engineer would have ulcers by Christmas.

Was late anyhow and made humble apology to Billy. Alvarez had thought up new wrinkle, close search on leaving Complex. I endured it with never a nasty word for Dragoons who searched me; wanted to get home. But those thousand jokes bothered them. "What's this?" one demanded.

"Computer paper," I said. "Test runs."

His mate joined him. Don't think they could read. They wanted to confiscate, so I demanded they call Chief Engineer. They let me go. I felt not displeased; more and more such and guards were daily more hated.

Decision to make Mike more a person arose from need to have any Party member phone him on occasion; my advice about concerts and plays was simply a side effect. Mike's voice over phone had odd quality I had not noticed during time I had visited him only at Complex. When you speak to a man by phone there is background noise. And you hear him breathe, hear heartbeats, body motions even though rarely conscious of these. Besides that, even if he speaks under a hush hood, noises get through, enough to "fill space," make him a body with surroundings.

With Mike was *none* of this.

By then Mike's voice was "human" in timbre and quality, recognizable. He was baritone, had North American accent with Aussie overtones; as "Michelle" he (she?) had a light soprano with French flavor. Mike's personality grew also. When first I introduced him to Wyoh and Prof he sounded like a pedantic child; in short weeks he flowered until I visualized a man about own age.

His voice when he first woke was blurred and harsh, hardly understandable. Now it was clear and choice of words and phrasing was consistent—colloquial to me, scholarly to Prof, gallant to Wyoh, variation one expects of mature adults.

But background was dead. Thick silence.

So we filled it. Mike needed only hints. He did not make his breathing noisy, ordinarily you would not notice. But he would stick in touches. "Sorry, Mannie, you caught me bathing when the phone sounded"—and let one hear hurried breathing. Or "I was eating—had to swallow." He used such even on me, once he undertook to "be a human body."

We all put "Adam Selene" together, talking it over at Raffles. How old was he? What did he look like? Married? Where did he live? What work? What interests?

We decided that Adam was about forty, healthy, vigorous, well educated, interested in all arts and sciences and very well grounded in history, a match chess player but little time to play. He was married in commonest type, a troika in which he was senior husband—four children. Wife and junior husband not in politics, so far as we knew.

He was ruggedly handsome with wavy iron-gray hair and was mixed race, second generation one side, third on other. Was wealthy by Loonie standards, with interests in Novylen and Kongville as well as L-City. He kept offices in Luna City, outer office with a dozen people plus private office staffed by male deputy and female secretary.

Wyoh wanted to know was he bundling with secretary? I told her to switch off, was private. Wyoh said indignantly that she was not being snoopy—weren't we trying to create a rounded character?

We decided that offices were in Old Dome, third ramp, southside, heart of financial district. If you know L-City. you recall that in Old Dome some offices have windows since they can look out over floor of Dome; I wanted this for sound effects.

We drew a floor plan and had that office existed, it would have been between Aetna Luna and Greenberg & Co. I used pouch recorder to pick up sounds at spot; Mike added to it by listening at phones there.

Thereafter when you called Adam Selene, background was *not* dead. If "Ursula," his secretary, took call, it was: "Selene Associates. Luna shall be free!" Then she might say, "Will you hold? Gospodin Selene is on another call" whereupon you might hear sound of W.C., followed by running water and know that she had told little white lie. Or Adam might answer: "Adam Selene here. Free Luna. One second while I shut off the video." Or deputy might answer: "This is Albert Ginwallah, Adam Selene's confidential assistant. Free Luna. If it's a

Party matter—as I assume it is; that was your Party name you gave—please don't hesitate; I handle such things for the Chairman."

Last was a trap, as every comrade was instructed to speak only to Adam Selene. No attempt was made to discipline one who took bait; instead his cell captain was warned that his comrade must not be trusted with anything vital.

We got echoes. "Free Luna!" or "Luna shall be free!" took hold among youngsters, then among solid citizens. First time I heard it in a business call I almost swallowed teeth. Then called Mike and asked if this person was Party member? Was not. So I recommended that Mike trace down Party tree and see if somebody could recruit him.

Most interesting echo was in File Zebra. "Adam Selene" appeared in boss fink's security file less than a lunar after we created him, with notation that this was a cover name for a leader in a new underground.

Alvarez's spies did a job on Adam Selene. Over course of months his File Zebra dossier built up: Male, 34-45, offices south face of Old Dome, usually there 0900-1800 Gr. except Saturday but calls are relayed at other hours, home inside urban pressure as travel time never exceeds seventeen minutes. Children in household. Activities include stock brokerage, farming interests. Attends theater, concerts, *etc.* Probably member Luna City Chess Club and Luna Assoc, d'Echecs. Plays ricochet and other heavy sports lunch hour, probably Luna City Athletic Club. Gourmet but watches weight. Remarkable memory plus mathematical ability. Executive type, able to reach decisions quickly.

One fink was convinced that he had talked to Adam between acts at revival of *Hamlet* by Civic Players; Alvarez noted description—and matched our picture all but wavy hair!

But thing that drove Alvarez crackers was that phone numbers for Adam were reported and every time they turned out wrong numbers. (Not nulls; we had run out and Mike was using any number not in use and switching numbers anytime new subscribers were assigned ones we had been using.) Alvarez tried to trace "Selene Associates" using a one-wrong-digit assumption—this we learned because Mike was keeping an ear on Alvarez's office phone and heard order. Mike used knowledge to play a Mikish prank: Subordinate who made one-changed-digit calls invariably reached Warden's private residence. So Alvarez was called in and chewed by Warden.

Couldn't scold Mike but did warn him it would alert any smart person to fact that somebody was playing tricks with computer. Mike answered that they were not that smart.

Main result of Alvarez's efforts was that each time he got a number for Adam we located a spy—a new spy, as those we had spotted earlier were never given phone numbers; instead they were recruited into a tail-chasing organization where they could inform on each other. But with Alvarez's help we spotted each new spy almost at once. I think Alvarez became unhappy over spies he was able to hire; two disappeared and our organization, then over six thousand, was never able to find them. Eliminated, I suppose, or died under questioning.

Selene Associates was not only phony company we set up. LuNoHoCo was much larger, just as phony, and not at all dummy; it had main offices in Hong Kong, branches in Novy Leningrad and Luna City, eventually employed hundreds of people most of whom were not Party members, and was our most difficult operation.

Mike's master plan listed a weary number of problems which *had* to be solved. One was finance. Another was how to protect catapult from space attack.

Prof considered robbing banks to solve first, gave it up reluctantly. But eventually we did rob banks, firms, and Authority itself. Mike thought of it. Mike and Prof worked it out. At first was not clear to Mike why we needed money. He knew as little about pressure that keeps humans scratching as he knew about sex; Mike handled millions of dollars and could not see any problem. He started by offering to issue an Authority cheque for whatever dollars we wanted.

Prof shied in horror. He then explained to Mike hazard in trying to cash a cheque for, let us say, AS$10,000,000 drawn on Authority.

So they undertook to do it, but retail, in many names and places all over Luna. Every bank, firm, shop, agency including Authority, for which Mike did accounting, was tapped for Party funds. Was a pyramided swindle based on fact, unknown to me but known to Prof and latent in Mike's immense knowledge, that most money is simply bookkeeping.

Example—multiply by hundreds of many types: My family son Sergei, eighteen and a Party member, is asked to start account at Commonwealth Shared Risk. He makes deposits and withdrawals. Small errors are made each time; he is credited with more than he deposits, is debited with less than he withdraws. A few months later he takes job out of town and transfers account to Tycho-Under Mutual; transferred funds are three times already-inflated amount. Most of this he soon draws out in cash and passes to his cell leader. Mike knows amount Sergei should hand over, but (since they do not know that Adam Selene and bank's computer-bookeeper are one and same) they have each been instructed to report transaction to Adam—keep them honest though scheme was not.

Multiply this theft of about HK$3,000 by hundreds somewhat like it.

I can't describe jiggery-pokery Mike used to balance his books while keeping thousands of thefts from showing. But bear in mind that an auditor must assume that machines are honest. He will make test runs to check that machines are working correctly—but will not occur to him that tests prove nothing because machine itself is dishonest. Mike's thefts were never large enough to disturb economy; like half-liter of blood, amount was too small to hurt donor. I can't make up mind who lost, money was swapped around so many ways. But scheme troubled me; I was brought up to be honest, except with Authority. Prof claimed that what was taking place was a mild inflation offset by fact that we plowed money back in—but I should remember that Mike had records and all could be restored after Revolution, with ease since we would no longer be bled in much larger amounts by Authority.

I told conscience to go to sleep. Was pipsqueak compared to swindles by every government throughout history in financing every war—and is not revolution a war?

This money, after passing through many hands (augmented by Mike each time), wound up as senior financing of LuNoHo Company. Was a mixed company, mutual and stock; "gentleman-adventurer" guarantors who backed stock put up that stolen money in own names. Won't discuss bookkeeping this firm used. Since Mike ran everything, was not corrupted by any tinge of honesty.

Nevertheless its shares were traded in Hong Kong Luna Exchange and listed in Zurich, London, and New York. *Wall Street Journal* called it "an attractive high-risk-high-gain investment with novel growth potential."

LuNoHoCo was an engineering and exploitation firm, engaged in many ventures, mostly legitimate. But prime purpose was to build a second catapult, secretly.

Operation could not be secret. You can't buy or build a hydrogen-fusion power plant for such and not have it noticed. (Sunpower was rejected for obvious reasons.) Parts were ordered from Pittsburgh, standard UnivCalif equipment, and we happily paid their royalties to get top quality. Can't build a stator for a kilometers-long induction field without having it noticed, either. But most important you cannot do major construction hiring many people and not have it show. Sure, catapults are mostly vacuum; stator rings aren't even close together at ejection end. But Authority's 3-g catapult was almost one hundred kilometers long. It was not only an astrogation landmark, on every Luna-jump chart, but was so big it could be photographed or seen by eye from Terra with not-large telescope. It showed up beautifully on a radar screen.

We were building a shorter catapult, a 10-g job, but even that was thirty kilometers long, too big to hide.

So we hid it by *Purloined Letter* method.

I used to question Mike's endless reading of fiction, wondering what notions he was getting. But turned out he got a better feeling for human life from stories than he had been able to garner from facts; fiction gave him a gestalt of life, one taken for granted by a human; he lives it. Besides this "humanizing" effect, Mike's substitute for experience, he got ideas from "not-true data" as he called fiction. How to hide a catapult he got from Edgar Allan Poe.

We hid it in literal sense, too; this catapult had to be underground, so that it would not show to eye or radar. But had to be hidden in more subtle sense; selenographic location had to be secret.

How can this be, with a monster that big, worked on by so many people? Put it this way: Suppose you live in Novylen; know where Luna City is? Why, on east edge of Mare Crisium; everybody knows that. So? What latitude and longitude? Huh? Look it up in a reference book! So? If you don't know *where* any better than that, how did you find it last week? No huhu, cobber; I took tube, changed at Torricelli, slept rest of way; finding it was capsule's worry.

See? You *don't know* where Luna City is! You simply get out when capsule pulls in at Tube Station South.

That's how we hid catapult.

Is in Mare Undarum area, "everybody knows that." But where it *is* and where we *said it was* differ by amount greater or less than one hundred kilometers in direction north, south, east, or west, or some combination.

Today you can look up its location in reference books—and find same wrong answer. Location of that catapult is still most closely guarded secret in Luna.

Can't be seen from space, by eye or radar. Is underground save for ejection and that is a big black shapeless hole like ten thousand others and high up an uninviting mountain with no place for a jump rocket to put down.

Nevertheless many people were there, during and after construction. Even Warden visited and my co-husband Greg showed him around. Warden went by mail rocket, commandeered for day, and his Cyborg was given coordinates and a radar beacon to home on—a spot in fact not far from site. But from there, it was necessary to travel by rolligon and our lorries were not like passenger buses from Endsville to Beluthihatchie in old days; they were cargo carriers, no ports for sightseeing and a ride so rough that human cargo had to be strapped down. Warden wanted to ride up in cab but—sorry, Gospodin!—just space for wrangler and his helper and took both to keep her steady.

Three hours later he did not care about anything but getting home.

He stayed one hour and was not interested in talk about purpose of all this drilling and value of resources uncovered.

Less important people, workmen and others, traveled by interconnecting ice-exploration bores, still easier way to get lost. If anybody carried an inertial pathfinder in his luggage, he could have located site—but security was tight. One did so and had accident with p-suit; his effects were returned to L-City and his pathfinder read what it should—i.e., what we *wanted* it to read, for I made hurried trip out with number-three arm along. You can reseal one without a trace if you do it in nitrogen atmosphere—I wore an oxygen mask at slight overpressure. No huhu.

We entertained vips from Earth, some high in Authority. They traveled easier underground route; I suppose Warden had warned them. But even on that route is one thirty-kilometer stretch by rolligon. We had one visitor from Earth who looked like trouble, a Dr. Dorian, physicist and engineer. Lorry tipped over—silly driver tried shortcut—they were not in line-of-sight for anything and their beacon was smashed. Poor Dr. Dorian spent seventy-two hours in an unsealed pumice igloo and had to be returned to L-City ill from hypoxia and overdose of radiation despite efforts on his behalf by two Party members driving him.

Might have been safe to let him see; he might not have spotted doubletalk and would not have spotted error in location. Few people look at stars when psuited even when Sun doesn't make it futile; still fewer can read stars—and nobody can locate himself on surface without help unless he has instruments, knows how to use them and has tables and something to give a time tick. Put at crudest level, minimum would be octant, tables, and good watch. Our visitors were even encouraged to go out on surface but if one had carried an octant or modern equivalent, might have had accident.

We did not make accidents for spies. We let them stay, worked them hard, and Mike read their reports. One reported that he was certain that we had found uranium ore, something unknown in Luna at that time. Project Centerbore being many years later. Next spy came out with kit of radiation counters. We made it easy for him to sneak them through bore.

By March '76 catapult was almost ready, lacking only installation of stator segments. Power plant was in and a co-ax had been strung underground with a line-of-sight link for that thirty kilometers. Crew was down to skeleton size, mostly Party members. But we kept one spy so that Alvarez could have regular reports—didn't want him to worry; it tended to make him suspicious. Instead we worried him in warrens.

Were changes in those eleven months. Wyoh was baptized into Greg's church, Prof's health became so shaky that he dropped teaching, Mike took up writing poetry. Yankees finished in cellar. Wouldn't have minded paying Prof if they had been nosed out, but from pennant to cellar in one season—I quit watching them on video.

Prof's illness was phony. He was in perfect shape for age, exercising in hotel room three hours each day, and sleeping in three hundred kilograms of lead pajamas. And so was I, and so was Wyoh, who hated it. I don't think she ever cheated and spent night in comfort though can't say for sure; I was not dossing with her. She had become a fixture in Davis family. Took her one day to go from "Gospazha Davis" to "Gospazha Mum," one more to reach "Mum" and now it might be "Mimi Mum" with arm around Mum's waist. When Zebra File showed she couldn't go back to Hong Kong, Sidris had taken Wyoh into her beauty shop after hours and done a job which left skin same dark shade but would not scrub off. Sidris also did a hairdo on Wyoh that left it black and looking as if unsuccessfully unkinked. Plus minor touches—opaque nail enamel, plastic inserts for cheeks and nostrils and of course she wore her dark-eyed contact lenses. When Sidris got through, Wyoh could have gone bundling without fretting about her disguise; was a perfect "colored" with ancestry to match—Tamil, a touch of Angola, German. I called her "Wyma" rather than "Wyoh."

She was gorgeous. When she undulated down a corridor, boys followed in swarms.

She started to learn farming from Greg but Mum put stop to that. While she was big and smart and willing, our farm is mostly a male operation—and Greg and Hans were not only male members of our family distracted; she cost more farming man-hours than her industry equaled. So Wyoh went back to housework, then Sidris took her into beauty shop as helper.

Prof played ponies with two accounts, betting one by Mike's "leading apprentice" system, other by his own "scientific" system. By July '75 he admitted that he knew nothing about horses and went solely to Mike's system, increasing bets and spreading them among many bookies. His winnings paid Party's expenses while Mike built swindle that financed catapult. But Prof lost interest in a sure thing and merely placed bets as Mike designated. He stopped reading pony journals—sad, something dies when an old horseplayer quits.

Ludmilla had a girl which they say is lucky in a first and which delighted me—every family needs a girl baby. Wyoh surprised our women by being expert in midwifery—and surprised them again that she knew nothing about baby care. Our two oldest sons found marriages at last and Teddy, thirteen, was opted out. Greg hired two lads from neighbor farms and, after six months of working and eating with us, both were opted in—not rushing things, we had known them and their families for years. It restored balance we had lacked since Ludmilla's opting and put stop to snide remarks from mothers of bachelors who had not found marriages—not that Mum wasn't capable of snubbing anyone she did not consider up to Davis standards.

Wyoh recruited Sidris; Sidris started own cell by recruiting her other assistant and Bon Ton Beaute Shoppe became hotbed of subversion. We started using our smallest kids for deliveries and other jobs a child can do—they can stake out or trail a person through corridors better than an adult, and are not suspected. Sidris grabbed this notion and expanded it through women recruited in beauty parlor.

Soon she had so many kids on tap that we could keep all of Alvarez's spies under surveillance. With Mike able to listen at any phone and a child spotting it whenever a spy left home or place of work or wherever—with enough kids on call so that one could phone while another held down a new stakeout—we could keep a spy under tight observation and keep him from seeing anything we didn't want him to see. Shortly we were getting reports spies phoned in without waiting for Zebra File; it did a sod no good to phone from a taproom instead of home; with Baker Street Irregulars on job Mike was listening before he finished punching number.

These kids located Alvarez's deputy spy boss in L-City. We knew he had one because these finks did *not* report to Alvarez by phone, nor did it seem possible that Alvarez could have recruited them as none of them worked in Complex and Alvarez came inside Luna City only when an Earthside vip was so important as to rate a bodyguard commanded by Alvarez in person.

His deputy turned out to be two people—an old lag who ran a candy, news, and bookie counter in Old Dome and his son who was on civil service in Complex. Son carried reports in, so Mike had not been able to hear them.

We let them alone. But from then on we had fink field reports half a day sooner than Alvarez. This advantage—all due to kids as young as five or six—saved lives of seven comrades. All glory to Baker Street Irregulars!

Don't remember who named them but think it was Mike—I was merely a Sherlock Homes fan whereas he really did think he was Sherlock Holmes's brother Mycroft . . . nor would I swear he was not; "reality" is a slippery notion. Kids did not call themselves that; they had their own play gangs with own names. Nor were they burdened with secrets which could endanger them; Sidris left it to mothers to explain why they were being asked to do these jobs save that they were *never* to be told real reason. Kids will do anything mysterious and fun; look how many of their games are based on outsmarting.

Bon Ton salon was a clearinghouse of gossip—women get news faster than *Daily Lunatic*. I encouraged Wyoh to report to Mike each night, not try to thin gossip down to what seemed significant because was no telling what might be significant once Mike got through associating it with a million other facts.

Beauty parlor was also place to start rumors. Party had grown slowly at first, then rapidly as powers-of-three began to be felt and also because Peace Dragoons were nastier than older bodyguard. As numbers increased we shifted to high speed on agitprop, black-propaganda rumors, open subversion, provocateur activities, and sabotage. Finn Nielsen handled agitprop when it was simpler as well as dangerous job of continuing to front for and put coverup activity into older, spyridden underground. But now a large chunk of agitprop and related work was given to Sidris.

Much involved distributing handbills and such. No subversive literature was ever in her shop, nor our home, nor that hotel room; distribution was done by kids, too young to read.

Sidris was also working a full day bending hair and such. About time she began to have too much to do I happened one evening to make walkabout on Causeway with Sidris on my arm when I caught sight of a familiar face and figure—skinny little girl, all angles, carrot-red hair. She was possibly twelve, at stage when a fem shoots up just before blossoming out into rounded softness. I knew her but could not say why or when or where.

I said, "*Psst,* doll baby. Eyeball young fem ahead. Orange hair, no cushions."

Sidris looked her over. "Darling, I knew you were eccentric. But she's still a boy."

"Damp it. Who?"

"Bog knows. Shall I sprag her?"

Suddenly I remembered like video coming on. And wished Wyoh were with me—but Wyoh and I were never together in public. This skinny redhead had been at meeting where Shorty was killed. She sat on floor against wall down front and listened with wide-eyed seriousness and applauded fiercely. Then I had seen her at end in free trajectory—curled into ball in air and had hit a yellow jacket in knees, he whose jaw I broke a moment later.

Wyoh and I were alive and free because this kid moved fast in a crisis. "No, don't speak to her," I told Sidris. "But I want to keep her in sight. Wish we had one of your Irregulars here. Damn."

"Drop off and phone Wyoh, you'll have one in five minutes," my wife said.

I did. Then Sidris and I strolled, looking in shop windows and moving slowly, as quarry was window-shopping. In seven or eight minutes a small boy came toward us, stopped and said, "Hello, Auntie Mabell. Hi, Uncle Joe."

Sidris took his hand. "Hi, Tony. How's your mother, dear?"

"Just fine." He added in a whisper, "I'm Jock."

"Sorry." Sidris said quietly to me, "Stay on her," and took Jock into a tuck shop.

She came out and joined me. Jock followed her licking a lollipop. "'Bye, Auntie Mabel! Thanks!" He danced away, rotating, wound up by that little redhead, stood and stared into a display, solemnly sucking his sweet. Sidris and I went home.

A report was waiting. "She went into Cradle Roll Creche and hasn't come out. Do we stay on it?"

"A bit yet," I told Wyoh, and asked if she remembered this kid. She did, but had no idea who she might be. "You could ask Finn."

"Can do better." I called Mike.

Yes, Cradle Roll Creche had a phone and Mike would listen. Took him twenty minutes to pick up enough to give analysis—many young voices and at such ages almost sexless. But presently he told me, "Man, I hear three voices that could match the age and physical type you described. However, two answer to names which I assume to be masculine. The third answers when anyone says 'Hazel'—which an older female voice does repeatedly. She seems to be Hazel's boss."

"Mike, look at old organization file. Check Hazels."

"Four Hazels," he answered at once, "and here she is: Hazel Meade, Young Comrades Auxiliary, address Cradle Roll Creche, born 25 December 2063, mass thirty-nine kilos, height—"

"That's our little jump jet! Thanks, Mike. Wyoh, call off stakeout. Good job!"

"Mike, call Donna and pass the word, that's a dear."

I left it to girls to recruit Hazel Meade and did not eyeball her until Sidris moved her into our household two weeks later. But Wyoh volunteered a report before then; policy was involved. Sidris had filled her cell but wanted Hazel Meade. Besides this irregularity, Sidris was doubtful about recruiting a child. Policy was adults only, sixteen and up.

I took it to Adam Selene and executive cell. "As I see," I said, "this cells-of-three system is to serve us, not bind us. See nothing wrong in Comrade Cecilia having an extra. Nor any real danger to security."

"I agree," said Prof. "But I suggest that the extra member not be part of Cecilia's cell—she should not know the others, I mean, unless the duties Cecilia gives her make it necessary. Nor do I think she should recruit, at her age. The real question is her age."

"Agreed," said Wyoh. "I want to talk about this kid's age."

"Friends," Mike said diffidently (diffidently first time in weeks; he was now that confident executive "Adam Selene" much more than lonely machine)—"perhaps I should have told you, but I have already granted similar variations. It did not seem to require discussion."

"It doesn't, Mike," Prof reassured him. "A chairman must use his own judgment. What is our largest cell?"

"Five. it is a double cell, three and two."

"No harm done. Dear Wyoh, does Sidris propose to make this child a full comrade? Let her know that we are committed to revolution. . . with all the bloodshed, disorder, and possible disaster that entails?"

"That's exactly what she is requesting."

"But, dear lady, while we are staking our lives, we are old enough to know it. For that, one should have an emotional grasp of death. Children seldom are able to realize that death will come to them personally. One might define adulthood as the age at which a person learns that he must die. . . and accepts his sentence undismayed."

"Prof," I said, "I know some mighty tall children. Seven to two some are in Party."

"No bet, cobber. It'll give odds that at least half of them don't qualify—and we may find it out the hard way at the end of this our folly."

"Prof," Wyoh insisted. "Mike, Mannie. Sidris is certain this child is an adult. And I think so, too."

"Man?" asked Mike.

"Let's find way for Prof to meet her and form own opinion. I was taken by her. Especially her go-to-hell fighting. Or would never have started it."

We adjourned and I heard no more. Hazel showed up at dinner shortly thereafter as Sidris' guest. She showed no sign of recognizing me, nor did I admit that I had ever seen her—but learned long after that she had recognized me, not just by left arm but because I had been hatted and kissed by tall blonde from Hong Kong. Furthermore Hazel had seen through Wyoming's disguise, recognized what Wyoh never did successfully disguise: her voice.

But Hazel used lip glue. If she ever assumed I was in conspiracy she never showed it.

Child's history explained her, far as background can explain steely character. Transported with parents as a baby much as Wyoh had been, she had lost father through accident while he was convict labor, which her mother blamed on indifference of Authority to safety of penal colonists. Her mother lasted till Hazel was five; what she died from Hazel did not know; she was then living in creche where we found her. Nor did she know why parents had been shipped—possibly for subversion if they were both under sentence as Hazel thought. As may be, her mother left her a fierce hatred of Authority and Warden.

Family that ran Cradle Roll let her stay; Hazel was pinning diapers and washing dishes as soon as she could reach. She had taught herself to read, and could print letters but could not write. Her knowledge of math was only that ability to count money that children soak up through their skins.

Was fuss over her leaving creche; owner and husbands claimed Hazel owed several years' service. Hazel solved it by walking out, leaving her clothes and fewer belongings behind. Mum was angry enough to want family to start trouble which could wind up in "brawling" she despised. But I told her privately that, as her cell leader, I did *not* want our family in public eye—and hauled out cash and told her Party would pay for clothes for Hazel. Mum refused money, called off a family meeting, took Hazel into town and was extravagant—for Mum—in reoutfitting her.

So we adopted Hazel. I understand that these days adopting a child involves red tape; in those days it was as simple as adopting a kitten.

Was more fuss when Mum started to place Hazel in school, which fitted neither what Sidris had in mind nor what Hazel had been led to expect as a Party member and comrade. Again I butted in and Mum gave in part way. Hazel was placed in a tutoring school close to Sidris' shop—that is, near easement lock thirteen; beauty parlor was by it (Sidris had good business because close enough that our water was piped in, and used without limit as return line took it back for salvage). Hazel studied mornings and helped in afternoons, pinning on gowns, handing out towels, giving rinses, learning trade—and whatever else Sidris wanted.

"Whatever else" was captain of Baker Street Irregulars.

Hazel had handled younger kids all her short life. They liked her; she could wheedle them into anything; she understood what they said when an adult would find it gibberish. She was a perfect bridge between Party and most junior auxiliary. She could make a game of chores we assigned and persuade them to play by rules she gave them, and never let them know it was adult-serious— but child-serious, which is another matter.

For example:

Let's say a little one, too young to read, is caught with a stack of subversive literature—which happened more than once. Here's how it would go, after Hazel indoctrinated a kid:

ADULT: "Baby, where did you get this?"

BAKER STREET IRREGULAR: “I’m not a baby, I’m a big boy!”

ADULT: “Okay, big boy, where did you get this?”

B.S.I.: “Jackie give it to me.”

ADULT: “Who is Jackie?”

B.S.I.: “Jackie.”

ADULT: “But what’s his last name?”

B.S.I.: “Who?”

ADULT: “Jackie.”

B.S.I.: (scornfully) “Jackie’s a girl!”

ADULT: “All right, where does she live?”

B.S.L: “Who?”

And so on around— To all questions key answer was of pattern: “Jackie give it to me.” Since Jackie didn’t exist, he (she) didn’t have a last name, a home address, nor fixed sex. Those children enjoyed making fools of adults, once they learned how easy it was.

At worst, literature was confiscated. Even a squad of Peace Dragoons thought twice before trying to “arrest” a small child. Yes, we were beginning to have squads of Dragoons inside Luna city, but never less than a squad—some had gone in singly and not come back.

When Mike started writing poetry I didn’t know whether to laugh or cry. He wanted to publish it! Shows how thoroughly humanity had corrupted this innocent machine that he should wish to see his name in print.

I said, “Mike, for Bog’s sake! Blown all circuits? Or planning to give us away?”

Before he could sulk Prof said, “Hold on, Manuel; I see possibilities. Mike, would it suit you to take a pen name?”

That’s how “Simon Jester” was born. Mike picked it apparently by tossing random numbers. But he used another name for serious verse, his Party name, Adam Selene.

“Simon’s” verse was doggerel, bawdy, subversive, ranging from poking fun at vips to savage attacks on Warden, system, Peace Dragoons, finks. You found it on walls of public W.C.s, or on scraps of paper left in tube capsules: Or in taprooms. Wherever they were they were signed “Simon Jester” and with a matchstick drawing of a little horned devil with big grin and forked tail. Sometimes he was stabbing a fat man with a pitchfork. Sometimes just his face would appear, big grin and horns, until shortly even horns and grin meant “Simon was here.”

Simon appeared all over Luna same day and from then on never let up. Shortly he started receiving volunteer help; his verses and little pictures, so simple anybody could draw them, began appearing more places than we had planned. This wider coverage *had* to be from fellow travelers. Verses and cartoons started appearing inside Complex

—which could *not* have been our work; we never recruited civil servants. Also, three days after initial appearance of a very rough limerick, one that implied that Warden's fatness derived from unsavory habits, this limerick popped up on pressure-sticky labels with cartoon improved so that fat victim flinching from Simon's pitchfork was recognizably Mort the Wart. *We* didn't buy them, *we* didn't print them. But they appeared in L-City and Novylen and Hong Kong, stuck almost everywhere—public phones, stanchions in corridors, pressure locks, ramp railings, other. I had a sample count made, fed it to Mike; he reported that over seventy thousand labels had been used in L-City alone.

I did not know of a printing plant in L-City willing to risk such a job and equipped for it. Began to wonder if might be another revolutionary cabal?

Simon's verses were such a success that he branched out as a poltergeist and neither Warden nor security chief was allowed to miss it. "Dear Mort the Wart," ran one letter. "Do please be careful from midnight to four hundred tomorrow. Love & Kisses, Simon"—with horns and grin. In same mail Alvarez received one reading: "Dear Pimplehead, If the Warden breaks his leg tomorrow night it will be *your* fault. Faithfully your conscience, Simon"—again with horns and smile.

We didn't have anything planned; we just wanted Mort and Alvarez to lose sleep—which they did, plus bodyguard. All Mike did was to call Warden's private phone at intervals from midnight to four hundred—an unlisted number supposedly known only to his personal staff. By calling members of his personal staff simultaneously and connecting them to Mort Mike not only created confusion but got Warden angry at his assistants—he flatly refused to believe their denials.

But was luck that Warden, goaded too far, ran *down* a ramp. Even a new chum does that only once. So he walked on air and sprained an ankle—close enough to a broken leg and Alvarez was there when it happened.

Those sleep-losers were mostly just that. Like rumor that Authority catapult had been mined and would be blown up, another night. Ninety plus eighteen men can't search a hundred kilometers of catapult in hours, especially when ninety are Peace Dragoons not used to p-suit work and hating it—this midnight came at new earth with Sun high; they were outside far longer than is healthy, managed to cook up their own accidents while almost cooking themselves, and showed nearest thing to mutiny in regiment's history. One accident was fatal. Did he fall or was he pushed? A sergeant.

Midnight alarums made Peace Dragoons on passport watch much taken by yawning and more bad-tempered, which produced more clashes with Loonies and still greater resentment both ways—so Simon increased pressure.

Adam Selene's verse was on a higher plane. Mike submitted it to Prof and accepted his literary judgment (good, I think) without resentment. Mike's scansion and rhyming were perfect, Mike being a computer with whole English language in his memory and able to search for a fitting word in microseconds. What was weak was self-criticism. That improved rapidly under Prof's stern editorship.

Adam Selene's by-line appeared first in dignified pages of *Moonglow* over a somber poem titled: "Home." Was dying thoughts of old transportee, his discovery as he is about to leave that Luna is his beloved home. Language was simple, rhyme scheme unforced, only thing faintly subversive was conclusion on part of dying man that even many wardens he has endured was not too high a price.

Doubt if *Moonglow's* editors thought twice. Was good stuff, they published.

Alvarez turned editorial office inside out trying to get a line back to Adam Selene. Issue had been on sale half a lunar before Alvarez noticed it, or had it called to his attention; we were fretted, we *wanted* that by-line noticed. We were much pleased with way Alvarez oscillated when he did see it.

Editors were unable to help fink boss. They told him truth: Poem had come in by mail. Did they have it? Yes, surely. . . sorry, no envelope; they were never saved. After a long time Alvarez left, flanked by four Dragoons he had fetched along for his health.

Hope he enjoyed studying that sheet of paper. Was piece of Adam Selene's business stationery:

SELENE ASSOCIATES
LUNA CITY
Investments
Office of the Chairman
Old Dome

– and under that was typed *Home*, by Adam Selene, *etc.*

Any fingerprints were added after it left us. Had been typed on Underwood Office Electrostator, commonest model in Luna. Even so, were not too many as are importado; a scientific detective could have identified machine. Would have found it in Luna City office of Lunar Authority. Machines, should say, as we found six of model in office and used them in rotation, five words and move to next. Cost Wyoh and self sleep and too much risk even though Mike listened at every phone, ready to warn. Never did it that way again.

Alvarez was not a scientific detective.

11

In early ’76 I had too much to do. Could not neglect customers. Party work took more time even though all possible was delegated. But decisions had to be made on endless things and messages passed up and down. Had to squeeze in hours of heavy exercise, wearing weights, and dasn’t arrange permission to use centrifuge at Complex, one used by earthworm scientists to stretch time in Luna—while had used it before, this time could not advertise that I was getting in shape for Earthside.

Exercising without centrifuge is less efficient and was especially boring because did not know there would be need for it. But according to Mike 30 percent of ways events could fall required some Loonie, able to speak for Party, to make trip to Terra.

Could not see myself as an ambassador, don’t have education and not diplomatic. Prof was obvious choice of those recruited or likely to be. But Prof was old, might not live to land Earthside. Mike told us that a man of Prof’s age, body type, etc., had less than 40 percent chance of reaching Terra alive.

But Prof did gaily undertake strenuous training to let him make most of his poor chances, so what could I do but put on weights and get to work, ready to go and take his place if old heart clicked off? Wyoh did same, on assumption that something might keep me from going. She did it to share misery; Wyoh always used gallantry in place of logic.

On top of business, Party work, and exercise was farming. We had lost three sons by marriage while gaining two fine lads, Frank and Ali. Then Greg went to work for LuNoHoCo, as boss drillman on new catapult.

Was needful. Much skull sweat went into hiring construction crew. We could use non-Party men for most jobs, but key spots had to be Party men as competent as they were politically reliable. Greg did not want to go; our farm needed him and he did not like to leave his congregation. But accepted.

That made me again a valet, part time, to pigs and chickens. Hans is a good farmer, picked up load and worked enough for two men. But Greg had been farm manager ever since Grandpaw retired, new responsibility worried Hans. Should have been mine, being senior, but Hans was better farmer and closer to it; always been expected he would succeed Greg someday. So I backed him up by agreeing with his opinions and tried to be half a farm hand in hours I could squeeze. Left no time to scratch.

Late in February I was returning from long trip, Novylen, Tycho Under, Churchill. New tube had just been completed across Sinus

Medii, so I went on to Hong Kong in Luna—business and did make contacts now that I could promise emergency service. Fact that Endsville-Beluthihatchie bus ran only during dark semilunar had made impossible before.

But business was cover for politics; liaison with Hong Kong had been thin. Wyoh had done well by phone; second member of her cell was an old comrade.—“Comrade Clayton”—who not only had clean bill of health in Alverez’s File Zebra but also stood high in Wyoh’s estimation. Clayton was briefed on policies, warned of bad apples, encouraged to start cell system while leaving old organization untouched. Wyoh told him to keep his membership, as before.

But phone isn’t face-to-face. Hong Kong should have been our stronghold. Was less tied to Authority as its utilities were not controlled from Complex; was less dependent because lack (until recently) of tube transport had made selling at catapult head less inviting; was stronger financially as Bank of Hong Kong Luna notes were better money than official Authority scrip.

I suppose Hong Kong dollars weren’t “money” in some legal sense. Authority would not accept them; times I went Earthside had to buy Authority scrip to pay for ticket. But what I carried was Hong Kong dollars as could be traded Earthside at a small discount whereas scrip was nearly worthless there. Money or not, Hong Kong Bank notes were backed by honest Chinee bankers instead of being fiat of bureaucracy. One hundred Hong Kong dollars was 31.1 grams of gold (old troy ounce) payable on demand at home office—and they did keep gold there, fetched up from Australia. Or you could demand commodities: non-potable water, steel of defined grade, heavy water of power plant specs, other things. Could buy these with scrip, too, but Authority’s prices kept changing, upward. I’m no fiscal theorist; time Mike tried to explain I got headache. Simply know we were glad to lay hands on this non-money whereas scrip one accepted reluctantly and not just because we hated Authority.

Hong Kong should have been Party’s stronghold. But was not. We had decided that I should risk face-to-face there, letting some know my identity, as a man with one arm can’t disguise easily. Was risk that would jeopardize not only me but could lead to Wyoh, Mum, Greg, and Sidris if I took a fall. But who said revolution was safe?

Comrade Clayton turned out to be young Japanese—not too young, but they all look young till suddenly look old. He was not all Japanese—Malay and other things—but had Japanese name and household had Japanese manners; “giri” and “gimu” controlled and it was my good fortune that he owed much gimu to Wyoh.

Clayton was not convict ancestry; his people had been “volunteers” marched aboard ship at gunpoint during time Great China consolidated Earthside empire. I didn't hold it against him; he hated Warden as bitterly as any old lag.

Met him first at a teahouse—taproom to us L-City types—and for two hours we talked everything but politics. He made up mind about me, took me home. My only complaint about Japanese hospitality is those chin-high baths are too bleeding hot.

But turned out I was not jeopardized. Mama-san was as skilled at makeup as Sidris, my social arm is very convincing, and a kimona covered its seam. Met four cells in two days, as "Comrade Bork" and wearing makeup and kimona and tabi and, if a spy was among them, don't think he could identify Manuel O'Kelly. I had gone there intensely briefed, endless figures and projections, and talked about just one thing: famine in '82, six years away. "You people are lucky, won't be hit so soon. But now with new tube, you are going to see more and more of your people turning to wheat and rice and shipping it to catapult head. Your time will come."

They were impressed. Old organization, as I saw it and from what I heard, relied on oratory, whoop-it-up music, and emotion, much like church. I simply said, "There it is, comrades. Check those figures; I'll leave them with you."

Met one comrade separately. A Chinee engineer given a good look at anything can figure way to make it. Asked this one if he had ever seen a laser gun small enough to carry like a rifle. He had not. Mentioned that passport system made it difficult to smuggle these days. He said thoughtfully that jewels ought not to be hard—and he would be in Luna City next week to see his cousin. I said Uncle Adam would be pleased to hear from him.

All in all was productive trip. On way back I stopped in Novylen to check an old-fashioned punched-tape "Foreman" I had overhauled earlier, had lunch afterwards, ran into my father. He and I were friendly but didn't matter if we let a couple of years go by. We talked through a sandwich and beer and as I got up he said, "Nice to see you, Mannie. Free Luna!"

I echoed, too startled not to. My old man was as cynically nonpolitical as you could find; if he would say that in public, campaign must be taking hold.

So I arrived in L-City cheered up and not too tired, having napped from Torricelli. Took Belt from Tube South, then dropped down and through Bottom Alley, avoiding Causeway crowd and heading home. Went into Judge Brody's courtroom as I came to it, meaning to say hello. Brody is old friend and we have amputation in common. After he lost a leg he set up as a judge and was quite successful; was not another judge in L-City at that time who did not have side business, at least make book or sell insurance.

If two people brought a quarrel to Brody and he could not get them to agree that his settlement was just, he would return fees and, if they fought, referee their duel without charging—and still be trying to persuade them not to use knives right up to squaring off.

He wasn't in his courtroom though plug hat was on desk. Started to leave, only to be checked by group coming in, stilyagi types. A girl was with them, and an older man hustled by them. He was mussed, and clothing had that vague something that says "tourist."

We used to get tourists even then. Not hordes but quite a few. They would come up from Earth, stop in a hotel for a week, go back in same ship or perhaps stop over for next ship. Most of them spent their time gambling after a day or two of sightseeing including that silly walk up on surface every tourist makes. Most Loonies ignored them and granted them their foibles.

One lad, oldest, about eighteen and leader, said to me, "Where's judge?"

"Don't know. Not here."

He chewed lip, looked baffled. I said, "What trouble?"

He said soberly, "Going to eliminate his choom. But want judge to confirm it."

I said, "Cover taprooms here around. Probably find him."

A boy about fourteen spoke up. "Say! Aren't you Gospodin O'Kelly?"

"Right."

"Why don't *you* judge it."

Oldest looked relieved. "Will you, Gospodin?"

I hesitated. Sure, I've gone judge at times; who hasn't? But don't hanker for responsibility. However, it troubled me to hear young people talk about eliminating a tourist. Bound to cause talk.

Decided to do it. So I said to tourist, "Will you accept me as your judge?"

He looked surprised. "I have choice in the matter?"

I said patiently, "Of course. Can't expect me to listen if you aren't willing to accept my judging. But not urging you. Your life, not mine."

He looked very surprised but not afraid. His eyes lit up. "My life, did you say?"

"Apparently. You heard lads say they intend to eliminate you. You may prefer to wait for Judge Brody."

He didn't hesitate. Smiled and said, "I accept you as my judge, sir."

"As you wish." I looked at oldest lad. "What parties to quarrel? Just you and your young friend?"

"Oh, no, Judge, all of us."

"Not your judge yet." I looked around. "Do you all ask me to judge?"

Were nods; none said No. Leader turned to girl, added, "Better speak up, Tish. You accept Judge O'Kelly?"

"What? Oh, sure!" She was a vapid little thing, vacantly pretty, curvy, perhaps fourteen. Slotmachine type, and how she might wind up. Sort who prefers being queen over pack of stilyagi to solid marriage. I don't blame stilyagi; they chase around corridors because not enough females. Work all day and nothing to go home to at night.

"Okay, court has been accepted and all are bound to abide by my verdict. Let's settle fees. How high can you boys go? Please understand I'm not going to judge an elimination for dimes. So ante up or I turn him loose."

Leader blinked, they went into huddle. Shortly he turned and said, "We don't have much. Will you do it for five Kong dollars apiece?"

Six of them—"No. Ought not to ask a court to judge elimination at that price."

They huddled again. "Fifty dollars, Judge?"

"Sixty. Ten each. And another ten from you, Tish," I said to girl.

She looked surprised, indignant. "Come, come!" I said. "Tanstaafl."

She blinked and reached into pouch. She had money; types like that always have.

I collected seventy dollars, laid it on desk, and said to tourist, "Can match it?"

"Beg pardon?"

"Kids are paying seventy dollars Hong Kong for judgment. You should match it. If you can't, open pouch and prove it and can owe it to me. But that's your share." I added, "Cheap, for a capital case. But kids can't pay much so you get a bargain."

"I see. I believe I see." He matched with seventy Hong Kong.

"Thank you," I said. "Now does either side want a jury?" Girl's eyes lit up. "Sure! Let's do it right." Earthworm said, "Under the circumstances perhaps I need one."

"Can have it," I assured. "Want a counsel?"

"Why, I suppose I need a lawyer, too."

"I said 'counsel,' not 'lawyer.' Aren't any lawyers here." Again he seemed delighted. "I suppose counsel, if I elected to have one, would be of the same, uh, informal quality as the rest of these proceedings?"

"Maybe, maybe not. I'm informal sort of judge, that's all. Suit yourself."

"Mm. I think I'll rely on your informality, your honor."

Oldest lad said, "Uh, this jury. You pick up chit? Or do we?"

"I pay it; I agreed to judge for a hundred forty, gross. Haven't you been in court before? But not going to kill my net for extra I could do without. Six jurymen, five dollars each. See who's in Alley."

One boy stepped out and shouted, "Jury work! Five-dollar job!"

They rounded up six men and were what you would expect in Bottom Alley. Didn't worry me as had no intention of paying mind to them. If you go judge, better in good neighborhood with chance of getting solid citizens.

I went behind desk, sat down, put on Brody's plug hat—wondered where he had found it. Probably a castoff from some lodge. "Court's in session," I said. "Let's have names and tell me beef."

Oldest lad was named. Slim Lemke, girl war Patricia Carmen Zhukov; don't remember others. Tourist stepped up, reached into pouch and said, "My card, sir."

I still have it. It read:

STUART RENE LaJOIE

Poet—Traveler—Soldier of Fortune

Beef was tragically ridiculous, fine example of why tourists should not wander around without guides. Sure, guides bleed them white—but isn't that what a tourist is for? This one almost lost life from lack of guidance.

Had wandered into a taproom which lets stilyagi hang out, a sort of clubroom. This simple female had flirted with him. Boys had let matter be, as of course they had to as long as she invited it. But at some point she had laughed and let him have a fist in ribs. He had taken it as casually as a Loonie would . . . but had answered in distinctly earthworm manner; slipped arm around waist and pulled her to him, apparently tried to kiss her.

Now believe me, in North America this wouldn't matter; I've seen things much like it. But of course Tish was astonished, perhaps frightened. She screamed.

And pack of boys set upon him and roughed him up. Then decided he had to pay for his "crime"—but do it correctly. Find a judge.

Most likely they chickened. Chances are not one had ever dealt with an elimination. But their lady had been insulted, had to be done.

I questioned them, especially Tish, and decided I had it straight. Then said, "Let me sum up. Here we have a stranger. Doesn't know our ways. He offended, he's guilty. But meant no offense far as I can see. What does jury say? Hey, you there!—wake up! What you say?"

Juryman looked up blearily, said, "'Liminate him!"

"Very well? And you?"

"Well—" Next one hesitated. "Guess it would be enough just to beat tar out of him, so he'll know better next time. Can't have men pawing women, or place will get to be as bad as they say Terra is."

"Sensible," I agreed. "And you?"

Only one juror voted for elimination. Others ranged from a beating to very high fines.

"What do you think, Slim?"

"Well—" He was worried—face in front of gang, face in front of what might be his girl. But had cooled down and didn't *want* chum eliminated. "We already worked him over. Maybe if he got down on hands and knees and kissed floor in front of Tish and said he was sorry?"

"Will you do that, Gospodin LaJoie?"

"If you so rule, your honor."

"I don't. Here's my verdict. First that juryman—*you!*—you are fined fee paid you because you fell asleep while supposed to be judging. Grab him, boys, take it away from him and throw him out."

They did, enthusiastically; made up a little for greater excitement they had thought of but really could not stomach. "Now, Gospodin LaJoie, you are fined fifty Hong Kong for not having common sense to learn local customs before stirring around. Ante up."

I collected it. "Now you boys line up. You are fined five dollars apiece for not exercising good judgment in dealing with a person you knew was a stranger and not used to our ways. Stopping him from touching Tish, that's fine. Rough him, that's okay, too; he'll learn faster. And could have tossed him out. But talking about eliminating for what was honest mistake—well, it's out of proportion. Five bucks each. Ante up.

Slim gulped. "Judge . . . I don't think we have that much left! At least I don't."

"I thought that might be. You have a week to pay or I post your names in Old Dome. Know where Bon Ton Beauté Shoppe is, near easement lock thirteen? My wife runs it; pay her. Court's out. Slim, don't go away. Nor you, Tish. Gospodin LaJoie, let's take these young people up and buy them a cold drink and get better acquainted."

Again his eyes filled with odd delight that reminded of Prof.

"A charming idea, Judge!"

"I'm no longer judge. It's up a couple of ramps. . . so I suggest you offer Tish your arm."

He bowed and said, "My lady? May I?" and crooked his elbow to her. Tish at once became very grown up. "Spasebo, Gospodin! I am pleased."

Took them to expensive place, one where their wild clothes and excessive makeup looked out of place; they were edgy. But I tried to make them feel easy and Stuart LaJoie tried even harder and successfully. Got their addresses as well as names; Wyoh had one sequence which was concentrating on stilyagi. Presently they finished their coolers, stood up, thanked and left. LaJoie and I stayed on.

"Gospodin," he said presently, "you used an odd word earlier—odd to me, I mean."

"Call me 'Mannie' now that kids are gone. What word?"

“It was when you insisted that the, uh, young lady, Tish— that Tish must pay, too. ‘Tone-stapple,’ or something like it.”

“Oh, &lrsquo;tanstaafl.’ Means ‘there ain’t no such thing as a free lunch.’ And isn’t,” I added, pointing to a FREE LUNCH sign across room, “or these drinks would cost half as much. Was reminding her that anything free costs twice as much in long run or turns out worthless.”

“An interesting philosophy.”

“Not philosophy, fact. One way or other, what you get, you pay for.” I fanned air. “Was Earthside once and heard expression ‘Free as air.’ This air isn’t free, you pay for every breath.”

“Really? No one has asked me to pay to breathe.” He smiled. “Perhaps I should stop.”

“Can happen, you almost breathed vacuum tonight. But nobody asks you because you’ve paid. For you, is part of roundtrip ticket; for me it’s a quarterly charge.” I started to tell how my family buys and sells air to community co-op, decided was too complicated. “But we both pay.”

LaJoie looked thoughtfully pleased. “Yes, I see the economic necessity. It’s simply new to me. Tell me, uh, Mannie—and I’m called ’Stu’—was I really in danger of ‘breathing vacuum’?”

“Should have charged you more.”

“Please?”

“You aren’t convinced. But charged kids all they could scrape up and fined them too, to make them think. Couldn’t charge you more than them. Should have, you think it was all a joke.”

“Believe me, sir, I do not think it was a joke. I just have trouble grasping that your local laws permit a man to be put to death . . . so casually . . . and for so trivial an offense.”

I sighed. Where do you start explaining when a man’s words show there isn’t *anything* he understands about subject, instead is loaded with preconceptions that don’t fit facts and doesn’t even know he has?

“Stu,” I said, “let’s take that piece at a time. Are no ‘local laws’ so you couldn’t be ‘put to death’ under them. Your offense was *not* ‘trivial,’ I simply made allowance for ignorance. And wasn’t done casually, or boys would have dragged you to nearest lock to zero pressure, shoved you in, and cycled. Instead were most formal—good boys!—and paid own cash to give you a trial. And didn’t grumble when verdict wasn’t even close to what they asked. Now, anything still not clear?”

He grinned and turned out to have dimples like Prof; found myself liking him still more. “All of it, I’m afraid. I seem to have wandered into Looking Glass Land.”

Expected that; having been Earthside I know how their minds work, some. An earthworm expects to find a law, a printed law, for every circumstance. Even have laws for private matters such as contracts. Really, if a man's word isn't any good, who would contract with him? Doesn't he have reputation?

"We don't have laws," I said. "Never been allowed to. Have customs, but aren't written and aren't enforced—or could say they are self-enforcing because are simply way things have to be, conditions being what they are. Could say our customs are natural laws because are way people have to behave to stay alive. When you made a pass at Tish you were violating a natural law. . . and almost caused you to breathe vacuum."

He blinked thoughtfully. "Would you explain the natural law I violated? I had better understand it . . . or best I return to my ship and stay inboard until lift. To stay alive."

"Certainly. Is so simple that, once you understand, you'll never be in danger from it again. Here we are, two million males, less than one million females. A physical fact, basic as rock or vacuum. Then add idea of tanstaafl. When thing is scarce, price goes up. Women are scarce; aren't enough to go around—that makes them most valuable thing in Luna, more precious than ice or air, as men without women don't care whether they stay alive or not. Except a Cyborg, if you regard him as a man, which I don't."

I went on: "So what happens?—and mind you, things were even worse when this custom, or natural law, first showed itself back in twentieth century. Ratio was ten-to-one or worse then. One thing is what always happens in prisons: men turn to other men. That helps not much; problem still is because most men want *women* and won't settle for substitute while chance of getting true gelt.

"They get so anxious they will kill for it. . . and from stories oldtimers tell was killing enough to chill your teeth in those days. But after a while those still alive find way to get along, things shake down. As automatic as gravitation. Those who adjust to facts stay alive; those who don't are dead and no problem."

"What that means, here and now, is that women are scarce and call tune. . . and you are surrounded by two million men who see to it you dance to that tune. You have no choice, she has all choice. She can hit you so hard it draws blood; you dasn't lay a finger on her. Look, you put an arm around Tish, maybe tried to kiss. Suppose instead she had gone to hotel room with you; what would happen?"

"Heavens! I suppose they would have torn me to pieces."

"They would have done *nothing*. Shrugged and pretended not to see. Because choice is *hers*. Not yours. Not theirs. Exclusively hers. Oh, be risky to ask her to go to hotel; she might take offense and that would give boys license to rough you up. But—well, take this Tish. A silly little tart. If you had flashed as much money as I saw in your pouch, she might have taken into head that a bundle with tourist was just what she needed and suggested it herself. In which case would have been utterly safe."

Lajoie shivered. "At *her* age? It scares me to think of it. She's below the age of consent. Statutory rape."

"Oh, bloody! No such thing. Women her age are married or ought to be. Stu, is *no* rape in Luna. None. Men won't permit. If rape had been involved, they wouldn't have bothered to find a judge and all men in earshot would have scrambled to help. But chance that a girl that big is virgin is negligible. When they're little, their mothers watch over them, with help from everybody in city; children are safe here. But when they reach husband-high, is no holding them and mothers quit trying. If they choose to run corridors and have fun, can't stop 'em; once a girl is nubile, she's her own boss. You married?"

"No." He added with a smile; "Not at present."

"Suppose you were and wife told you she was marrying again. What would you do?"

"Odd that you should pick that, something like it did happen. I saw my attorney and made sure she got no alimony."

" 'Alimony' isn't a word here; I learned it Earthside. Here you might—or a Loonie husband might—say, 'I think we'll need a bigger place, dear.' Or might simply congratulate her and his new co-husband. Or if it made him so unhappy he couldn't stand it, might opt out and pack clothes. But whatever, would not make slightest fuss. If he did, opinion would be unanimous against him. His friends, men and women alike, would snub him. Poor sod would probably move to Novylen, change name and hope to live it down."

"All our customs work that way. If you're out in field and a cobber needs air, you lend him a bottle and don't ask cash. But when you're both back in pressure again, if he won't pay up, nobody would criticize if you eliminated him without a judge. But he would pay; air is almost as sacred as women. If you take a new chum in a poker game, you give him air money. Not eating money; can work or starve. If you eliminate a man other than self-defense, you pay his debts and support his kids, or people won't speak to you, buy from you, sell to you."

"Mannie, you're telling me that I can murder a man here and settle the matter merely with money?"

"Oh, not at *all!* But eliminating isn't against some law; are no laws—except Warden's regulations—and Warden doesn't care what one Loonie does to another. But we figure this way: If a man is killed, either he had it coming and everybody knows it—usual case—or his friends will take care of it by eliminating man who did it. Either way, no problem. Nor many eliminations. Even set duels aren't common."

"'His friends will take care of it.' Mannie, suppose those young people had gone ahead? I have no friends here."

"Was reason I agreed to judge. While I doubt if those kids could have egged each other into it, didn't want to take chance. Eliminating a tourist could give our city a bad name."

"Does it happen often?"

"Can't recall has ever happened. Of course may have been made to look like accident. A new chum is accident-prone; Luna is that sort of place. They say if a new chum lives a year, he'll live forever. But nobody sells him insurance first year." Glanced at time. "Stu, have you had dinner?"

"No, and I was about to suggest that you come to my hotel. The cooking is good. Auberge Orleans."

I repressed shudder—ate there once. "Instead, would you come home with me and meet my family? We have soup or something about this hour."

"Isn't that an imposition?"

"No. Half a minute while I phone."

Mum said, "Manuel! How sweet, dear! Capsule has been in for hours; I had decided it would be tomorrow or later."

"Just drunken debauchery, Mimi, and evil companions. Coming home now if can remember way—and bringing evil companion."

"Yes, dear. Dinner in twenty minutes; try not to be late."

"Don't you want to know whether my evil companion is male or female?"

"Knowing you, I assume that it is female. But I fancy I shall be able to tell when I see her."

"You know me so well, Mum. Warn girls to look pretty; wouldn't want a visitor to outshine them."

"Don't be too long; dinner will spoil. 'Bye, dear. Love."

"Love, Mum." I waited, then punched MYCROFTXXX. "Mike, want a name searched. Earthside name, passenger in Popov. Stuart Rene LaJoie. Stuart with a U and last name might file under either L or J."

Didn't wait many seconds; Mike found Stu in all major Earthside references: Who's Who, Dun & Bradstreet, Almanach de Gotha, London *Times* running files, name it. French expatriate, royalist, wealthy, six more names sandwiched into ones he used, three university degrees including one in law from Sorbonne, noble ancestry both France and Scotland, divorced (no children) from Honorable Pamela Hyphen-Hyphen-Blueblood. Sort of earthworm who wouldn't speak to a Loonie of convict ancestry—except Stu would speak to anyone.

I listened a pair of minutes, then asked Mike to prepare a full dossier, following all associational leads. “Mike, might be our pigeon.”

“Could be, Man.”

“Got to run. ’Bye.” Returned thoughtfully to my guest. Almost a year earlier, during alcoholic talk-talk in a hotel room, Mike had promised us one chance in seven—if certain things were done. One sine-qua-non was help on Terra itself.

Despite “throwing rocks,” Mike knew, we all knew, that mighty Terra with eleven billion people and endless resources could not be defeated by three million who had nothing, even though we stood on a high place and could drop rocks on them.

Mike drew parallels from XVIIIth century, when Britain’s American colonies broke away, and from XXth, when many colonies became independent of several empires, and pointed out that in no case had a colony broken loose by brute force. No, in every case imperial state was busy elsewhere, had grown weary and given up without using full strength.

For months we had been strong enough, had we wished, to overcome Warden’s bodyguards. Once our catapult was ready (anytime now) we would not be helpless. But we needed a “favorable climate” on Terra. For that we needed help on Terra.

Prof had not regarded it as difficult. But turned out to be quite difficult. His Earthside friends were dead or nearly and I had never had any but a few teachers. We sent inquiry down through cells: “What vips do you know Earthside?” and usual answer was: “You kidding?” Null program—

Prof watched passenger lists on incoming ships, trying to figure a contact, and had been reading Luna printouts of Earthside newspapers, searching for vips he could reach through past connection. I had not tried; handful I had met on Terra were not vips.

Prof had not picked Stu off *Popov’s* passenger list. But Prof had not met him. I didn’t not know whether Stu was simply eccentric as odd personal card seemed to show. But he was only Terran I had ever had a drink with in Luna, seemed a dinkum cobber, and Mike’s report showed hunch was not all bad; he carried some tonnage.

So I took him home to see what family thought of him.

Started well. Mum smiled and offered hand. He took it and bowed so deep I thought he was going to kiss it—would have, I think, had I not warned him about fems. Mum was cooing as she led him in to dinner.

12

April and May ’76 were more hard work and increasing effort to stir up Loonies against Warden, and goad him into retaliation. Trouble with Mort the Wart was that he was not a bad egg, nothing to hate about him other than fact he was symbol of Authority; was necessary to frighten him to get him to do anything. And average Loonie was just as bad. He despised Warden as matter of ritual but was not stuff that makes revolutionists; he couldn't be bothered. Beer, betting, women, and work— Only thing that kept Revolution from dying of anemia was that Peace Dragoons had real talent for antagonizing.

But even them we had to keep stirred up. Prof kept saying we needed a "Boston Tea Party," referring to mythical incident in an earlier revolution, by which he meant a public ruckus to grab attention.

We kept trying. Mike rewrote lyrics of old revolutionary songs: "Marseillaise," "Internationale," "Yankee Doodle," "We Shall Overcome," "Pie in the Sky," etc., giving them words to fit Luna. Stuff like *"Sons of Rock and Boredom/Will you let the Warden/Take from you your libertee!"* Simon Jester spread them around, and when one took hold, we pushed it (music only) by radio and video. This put Warden in silly position of forbidding playing of certain tunes—which suited us; people could whistle.

Mike studied voice and word-choice patterns of Deputy Administrator, Chief Engineer, other department heads; Warden started getting frantic calls at night from his staff. Which they denied making. So Alvarez put lock-and-trace on next one—and sure enough, with Mike's help, Alvarez traced it to supply chief's phone and was sure it was boss belly-robber's voice.

But next poison call to Mort seemed to come from Alvarez, and what Mort had to say next day to Alvarez and what Alvarez said in own defense can only be described as chaotic crossed with psychotic.

Prof had Mike stop; was afraid Alvarez might lose job, which we did not want; he was doing too well for us. But by then Peace Dragoons had been dragged out twice in night on what seemed to be Warden's orders, further disrupting morale, and Warden became convinced he was surrounded by traitors in official family while they were sure he had blown every circult.

An ad appeared in *Lunaya Pravda* announcing lecture by Dr. Adam Selene on *Poetry and Arts in Luna: a New Renaissance*. No comrade attended; word went down cells to stay away. Nor did anybody hang around when three squads of Peace Dragoons showed up—this involves Heisenberg principle as applied to Scarlet Pimpernels. Editor of *Pravda* spent bad hour explaining that he did *not* accept ads in person and this one was ordered over counter and paid for in cash. He was told not to take ads from Adam Selene. This was countermanded and he was told to take *anything* from Adam Selene but notify Alvarez *at once*.

New catapult was tested with a load dropped into south Indian Ocean at 350 E., 600 S., a spot used only by fish. Mike was joyed over his marksmanship since he had been able to sneak only two looks when guidance & tracking radars were not in use and had relied on just one nudge to bring it to bullseye. Earthside news reported giant meteor in sub-Antarctic picked up by Capetown Spacetrack with projected impact that matched Mike's attempt perfectly—Mike called me to boast while taking down evening's Reuters transmission. "I told you it was dead on," he gloated. "I watched it. Oh, what a *lovely* splash!" Later reports on shock wave from seismic labs and on tsunamis from oceanographic stations were consistent.

Was only canister we had ready (trouble buying steel) or Mike might have demanded to try his new toy again.

Liberty Caps started appearing on stilyagi and their girls; Simon Jester began wearing one between his horns. Bon Marche gave them away as premiums. Alvarez had painful talk with Warden in which Mort demanded to know if his fink boss felt that something should be done every time kids took up fad? Had Alvarez gone out of his mind?

I ran across Slim Lemke on Carver Causeway early May; he was wearing a Liberty Cap. He seemed pleased to see me and I thanked him for prompt payment (he had come in three days after Stu's trial and paid Sidris thirty Hong Kong, for gang) and bought him a cooler. While we were seated I asked why young people were wearing red hats? Why a hat? Hat's were an earthworm custom, nyet?

He hesitated, then said was sort of a lodge, like Elks. I changed subject. Learned that his full name was Moses Lemke Stone; member of Stone Gang. This pleased me, we were relatives. But surprised me. However, even best families such as Stones sometimes can't always find marriages for all sons; I had been lucky or might have been roving corridors at his age, too. Told him about our connection on my mother's side.

He warmed up and shortly said, "Cousin Manuel, ever think about how we ought to elect our own Warden?"

I said No, I hadn't; Authority appointed him and I supposed they always would. He asked why we had to have an Authority? I asked who had been putting ideas in head? He insisted nobody had, just thinking, was all—didn't he have a right to think?

When I got home was tempted to check with Mike, find out lad's Party name if any. But wouldn't have been proper security, nor fair to Slim.

On 3 May '76 seventy-one males named Simon were rounded up and questioned, then released. No newspaper carried story. But everybody heard it; we were clear down in "J's" and twelve thousand people can spread a story faster than I would have guessed. We emphasized that one of these dangerous males was only four years old, which was not true but very effective.

Stu LaJoie stayed with us during February and March and did not return to Terra until early April; he changed his ticket to next ship and then to next. When I pointed out that he was riding close to invisible line where irreversible physiological changes could set in, he grinned and told me not to worry. But made arrangements to use centrifuge.

Stu did not want to leave even by April. Was kissed goodbye with tears by all my wives and Wyoh, and he assured each one he was coming back. But left as he had work to do; by then he was a Party member.

I did not take part in decision to recruit Stu; I felt prejudiced. Wyoh and Prof and Mike were unanimous in risking it; I happily accepted their judgment.

We all helped to sell Stu LaJoie—self, Prof, Mike, Wyoh, Mum, even Sidris and Lenore and Ludmilla and our kids and Hans and Ali and Frank, as Davis home life was what grabbed him first. Did not hurt that Lenore was prettiest girl in L-City—which is no disparagement of Milla, Wyoh, Anna, and Sidris. Nor did it hurt that Stu could charm a baby away from breast. Mom fussed over him, Hans showed him hydroponic farming and Stu got dirty and sweaty and sloshed around in tunnels with our boys—helped harvest our Chinee fishponds—got stung by our bees—learned to handle a p-suit and went up with me to make adjustments on solar battery—helped Anna butcher a hog and learned about tanning leather—sat with Grandpaw and was respectful to his naive notions about Terra—washed dishes with Milla, something no male in our family ever did—rolled on floor with babies and puppies—learned to grind flour and swapped recipes with Mum.

I introduced him to Prof and that started political side of feeling him out. Nothing had been admitted—we could back away—when Prof introduced him to “Adam Selene” who could visit only by phone as he was “in Hong Kong at present.” By time Stu was committed to Cause, we dropped pretense and let him know that Adam was chairman whom he would not meet in person for security reasons.

But Wyoh did most and was on her judgment that Prof turned cards up and let Stu know that we were building a revolution. Was no surprise; Stu had made up mind and was waiting for us to trust him.

They say a face once launched a thousand ships. I do not know that Wyoh used anything but argument on Stu. I never tried to find out. But Wyoh had more to do with committing *me* than all Prof’s theory or Mike’s figures. If Wyoh used even stronger methods on Stu, she was not first heroine in history to do so for her country.

Stu went Earthside with a special codebook. I’m no code and cipher expert except that a computerman learns principles during study of information theory. A cipher is a mathematical pattern under which one letter substitutes for another, simplest being one in which alphabet is merely scrambled.

A cipher can be incredibly subtle, especially with help of a computer. But ciphers all have weakness that they are patterns. If one computer can think them up, another computer can break them.

Codes do not have same weakness. Let's say that codebook has letter group GLOPS. Does this mean "Aunt Minnie will be home Thursday" or does it mean "3.14157 . . . "?

Meaning is whatever you assign and no computer can analyze it simply from letter group. Give a computer enough groups and a rational theory involving meanings or subjects for meanings, and it will eventually worry it out because meanings themselves will show patterns. But is a problem of different kind on more difficult level.

Code we selected was commonest commercial codebook, used both on Terra and in Luna for commercial dispatches. But we worked it over. Prof and Mike spent hours discussing what information Party might wish to send to its agent on Terra, or receive from agent, then Mike put his vast information to work and came up with new set of meanings for codebook, ones that could say "Buy Thai rice futures" as easily as "Run for life; they've caught us." Or anything, as cipher signals were buried in it to permit *anything* to be said that had not been anticipated.

Late one night Mike made printout of new code via *Lunaya Pravda's* facilities, and night editor turned roll over to another comrade who converted it into a very small roll of film and passed it along in turn, and none ever knew what they handled or why. Wound up in Stu's pouch. Search of offplanet luggage was tight by then and conducted by bad-tempered Dragoons—but Stu was certain he would have no trouble. Perhaps he swallowed it.

Thereafter some of LuNoHo Company's dispatches to Terra reached Stu via his London broker.

Part of purpose was financial. Party needed to spend money Earthside; LuNoHoCo transferred money there (not all stolen, some ventures turned out well); Party needed still more money Earthside, Stu was to speculate, acting on secret knowledge of plan of Revolution —he, Prof, and Mike had spent hours discussing what stocks would go up, what would go down, etc., after Der Tag. This was Prof's pidgin; I am not that sort of gambler.

But money was needed *before* Der Tag to build "climate of opinion." We needed publicity, needed delegates and senators in Federated Nations, needed some nation to recognize us quickly once The Day came, we needed laymen telling other laymen over a beer:

"What is there on that pile of rock worth one soldier's life? Let 'em go to hell in their own way, I say!"

Money for publicity, money for bribes, money for dummy organizations and to infiltrate established organizations; money to get true nature of Luna's economy (Stu had gone loaded with figures) brought out as scientific research, then in popular form; money to convince foreign office of at least one major nation that there was advantage in a Free Luna; money to sell idea of Lunar tourism to a major cartel—

Too much money! Stu offered own fortune and Prof did not discourage it— Where treasure is, heart will be. But still too much money and far too much to do. I did not know if Stu could swing a tenth of it; simply kept fingers crossed. At least it gave us a channel to Terra. Prof claimed that communications to enemy were essential to any war if was to be fought and settled sensibly. (Prof was a pacifist. Like his vegetarianism, he did not let it keep him from being "rational." Would have made a terrific theologian.)

As soon as Stu went Earthside, Mike set odds at one in thirteen. I asked him what in hell? "But, Man," he explained patiently, "it increases risk. That it is necessary risk does not change the fact that risk is increased."

I shut up. About that time, early May, a new factor reduced some risks while revealing others. One part of Mike handled Terra-Luna microwave traffic—commercial messages, scietitific data, news channels, video, voice radiotelephony, routine Authority traffic—and Warden's top secret.

Aside from last, Mike could read any of this including commercial codes and ciphers—breaking ciphers was a crossword puzzle to him and nobody mistrusted this machine. Except Warden, and I suspect that his was distrust of all machinery; was sort of person who finds anything more involved than a pair of scissors complex, mysterious, and suspect—Stone Age mind.

Warden used a code that Mike never saw. Also used ciphers and did not work them through Mike; instead he had a moronic little machine in residence office. On top of this he had arrangement with Authority Earthside to switch everything around at preset times. No doubt he felt safe.

Mike broke his cipher patterns and deduced time-change program just to try legs. He did not tackle code until Prof suggested it; it held no interest for him.

But once Prof asked, Mike tackled Warden's top-secret messages. He had to start from scratch; in past Mike had erased Warden's messages once transmission was reported. So slowly, slowly he accumulated data for analysis—painfully slow, for Warden used this method only when he had to. Sometimes a week would pass between such messages. But gradually Mike began to gather meanings for letter groups, each assigned a probability. A code does not crack all at once; possible to know meanings of ninetynine groups in a message and miss essence because one group is merely GLOPS to you.

However, user has a problem, too; if GLOPS comes through as GLOPT, he's in trouble. Any method of communication needs redundancy, or information can be lost. Was at redundancy that Mike nibbled, with perfect patience of machine.

Mike solved most of Warden's code sooner than he had projected; Warden was sending more traffic than in past and most of it one subject (which helped)—subject being security and subversion.

We had Mort in a twitter; he was yelling for help.

He reported subversive activities still going on despite two phalanges of Peace Dragoons and demanded enough troops to station guards in all key spots inside all warrens.

Authority told him this was preposterous, no more of FN's crack troops could be spared—to be permanently ruined for Earthside duties—and such requests should not be made. If he wanted more guards, he must recruit them from transportees—but such increase in administrative costs must be absorbed in Luna; he would not be allowed more overhead. He was directed to report what steps be had taken to meet new grain quotas set in our such-and-such.

Warden replied that unless extremely moderate requests for trained security personnel—not—repeat—not untrained, unreliable, and unfit convicts—were met, he could no longer assure civil order, much less increased quotas.

Reply asked sneeringly what difference it made if exconsignees chose to riot among themselves in their holes? If it worried him, had he thought of shutting off lights as was used so successfully in 1996 and 2021?

These exchanges caused us to revise our calendar, to speed some phases, slow others. Like a perfect dinner, a revolution has to be "cooked" so that everything comes out even. Stu needed time Earthside. We needed canisters and small steering rockets and associated circuitry for "rock throwing." And steel was a problem—buying it, fabricating it, and above all *moving* it through meander of tunnels to new catapult site. We needed to increase Party at least into "K's"—say 40,000—with lowest echelons picked for fighting spirit rather than talents we had sought earlier. We needed weapons against landings. We needed to move Mike's radars without which he was blind. (Mike could not be moved; bits of him spread all through Luna. But he had a thousand meters of rock over that central part of him at Complex, was surrounded by steel and this armor was cradled in springs; Authority had contemplated that someday somebody might lob H-weapons at their control center.)

All these needed to be done and pot must not boil too soon.

So we cut down on things that worried Warden and tried to speed up everything else. Simon Jester took a holiday. Word went out that Liberty Caps were not stylish—but save them. Warden got no more nervous-making phone calls. We quit inciting incidents with Dragoons—which did not stop them but reduced number.

Despite efforts to quiet Mort's worries a symptom showed up which disquieted us instead. No message (at least we intercepted none) reached Warden agreeing to his demand for more troops—but he started moving people out of Complex. Civil servants who lived there started looking for holes to rent in L-City. Authority started test drills and resonance exploration in a cubic adjacent to L-City which could be converted into a warren.

Could mean that Authority proposed shipping up unusually large draft of prisoners. Could mean that space in Complex was needed for purpose other than quarters. But Mike told us:

"Why kid yourselves? The Warden is going to get those troops; that space will be their barracks. Any other explanation I would have heard."

I said, "But Mike, why didn't you hear if it's troops? You have that code of Warden's fairly well whipped."

"Not just 'fairly well,' I've got it whipped. But the last two ships have carried Authority vips and I don't know what they talk about away from phones!"

So we tried to plan to cover possibility of having to cope with ten more phalanges, that being Mike's estimate of what cubic being cleared would hold. We could deal with that many—with Mike's help—but it would mean deaths, not bloodless coup d'etat Prof had planned.

And we increased efforts to speed up other factors.

When suddenly we found ourselves committed —

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Her name was Marie Lyons; she was eighteen years old and born in Luna, mother having been exiled via Peace Corps in '56. No record of father. She seems to have been a harmless person. Worked as a stock-control clerk in shipping department, lived in Complex.

Maybe she hated Authority and enjoyed teasing Peace Dragoons. Or perhaps it started as a commercial transaction as cold-blooded as any in a crib behind a slot-machine lock. How can we know? Six Dragoons were in it. Not satisfied with raping her (if rape it was) they abused her other ways and killed her. But they did not dispose of body neatly; another civil service fem found it before was cold. She screamed. Was her last scream.

We heard about it at once; Mike called us three while Alvarez and Peace Dragoon C.O. were digging into matter in Alvarez's office. Appears that Peace Goon boss had no trouble laying hands on guilty; he and Alvarez were questioning them one at a time, and quarreling between grillings. Once we heard Alvarez say: "I told you those goons of yours had to have their own women! I warned you!"

"Stuff it," Dragoon officer answered. "I've told you time and again they won't ship any. The question now is how we hush this up."

"Are you crazy? Warden already knows."

"It's still the question."

"Oh, shut up and send in the next one."

Early in filthy story Wyoh joined me in workshop. Was pale under makeup, said nothing but wanted to sit close and clench my hand.

At last was over and Dragoon officer left Alvarez. Were still quarreling. Alvarez wanted those six executed at once and fact made public (sensible but not nearly enough, for his needs); C.O. was still talking about "hushing it up." Prof said, "Mike, keep an ear there and listen where else you can. Well, Mike? Wyoh? Plans?"

I didn't have any. Wasn't a cold, shrewd revolutionist; just wanted to get my heel into faces that matched those six voices. "I don't know. What do we do, Prof?"

" 'Do'? We're on our tiger; we grab its ears. Mike. Where's Finn Nielsen? Find him."

Mike answered, "He's calling now." He cut Finn in with us; I heard: "—at Tube South. Both guards dead and about six of our people. Just people, I mean, not necessarily comrades. Some wild rumor about Goons going crazy and raping and killing all women at Complex. Adam, I had better talk to Prof."

"I'm here, Finn," Prof answered in a strong, confident voice. "Now we move, we've got to. Switch off and get those laser guns and men who trained with them, any you can round up."

"Da! Okay, Adam?"

"Do as Prof says. Then call back."

"Hold it, Finn!" I cut in. "Mannie here. I want one of those guns."

"You haven't practiced, Mannie."

"If it's a laser, I can use it!"

"Mannie," Prof said forcefully, "shut up. You're wasting time; let Finn go. Adam. Message for Mike. Tell him Plan Alert Four."

Prof's example damped my oscillating. Had forgotten that Finn was not supposed to know Mike was anybody but "Adam Selene"; forgotten everything but raging anger. Mike said, "Finn has switched off, Prof, and I put Alert Four on standby when this broke. No traffic now except routine stuff filed earlier. You don't want it interrupted, do you?"

"No, just follow Alert Four. No Earthside transmission either way that tips any news. If one comes in, hold it and consult." Alert Four was emergency communication doctrine, intended to slap censorship on news to Terra without arousing suspicion. For this Mike was ready to talk in many voices with excuses as to why a direct voice transmission would be delayed—and any taped transmission was no problem.

"Program running," agreed Mike.

"Good. Mannie, calm down, son, and stick to your knitting. Let other people do the fighting; you're needed here, we're going to have to improvise. Wyoh, cut out and get word to Comrade Cecilia to get all Irregulars out of the corridors. Get those children home and keep them home—and have their mothers urging other mothers to do the same thing. We don't know where the fighting will spread. But we don't want children hurt if we can help it."

"Right away, Prof!"

"Wait. As soon as you've told Sidris, get moving on your stilyagi. I want a riot at the Authority's city office—break in, wreck the place, and noise and shouting and destruction—no one hurt if it can be helped. Mike. Alert-Four-Em. Cut off the Complex except for your own lines."

"Prof!" I demanded. "What sense in starting riots here?"

"Mannie, Mannie! This is *The Day!* Mike, has the rape and murder news reached other warrens?"

"Not that I've heard. I'm listening here and there with random jumps. Tube stations are quiet except Luna City. Fighting has just started at Tube Station West. Want to hear it?"

"Not now. Mannie, slide over there and watch it. But stay out of it and slick close to a phone. Mike, start trouble in all warrens. Pass the news down the cells and use Finn's version, not the truth. The Goons are raping and killing all the women in the Complex—I'll give you details or you can invent them. Uh, can you order the guards at tube stations in other warrens back to their barracks? I want riots but there is no point in sending unarmed people against armed men if we can dodge it."

"I'll try."

I hurried to Tube Station West, slowed as I neared it. Corridors were full of angry people. City roared in way I had never heard before and, as I crossed Causeway, could hear shouts and crowd noise from direction of Authority's city office although it seemed to me there had not been time for Wyoh to reach her stilyagi—nor had there been;

what Prof had tried to start was under way spontaneously.

Station was mobbed and I had to push through to see what I assumed to be certain, that passport guards were either dead or fled. 'Dead' it turned out, along with three Loonies. One was a boy not more than thirteen. He had died with his hands on a Dragoon's throat and his head still sporting a little red cap. I pushed way to a public phone and reported.

"Go back," said Prof. "and read the I.D. of one of those guards. I want name and rank. Have you seen Finn?"

"No."

"He's headed there with three guns. Tell me where the booth you're in is, get that name and come back to it."

One body was gone, dragged away; Bog knows what they wanted with it. Other had been badly battered but I managed to crowd in and snatch dog chain from neck before it, too, was taken somewhere. I elbowed back to phone, found a woman at it. "Lady," I said, "I've got to use that phone. Emergency!"

"You're welcome to it! Pesky thing's out of order."

Worked for me; Mike had saved it. Gave Prof guard's name. "Good," he said. "Have you seen Finn? He'll be looking for you at that booth."

"Haven't s— Hold it, just spotted him."

"Okay, hang onto him. Mike, do you have a voice to fit that Dragoon's name?"

"Sorry, Prof. No."

"All right, just make it hoarse and frightened; chances are the C.O. won't know it that well. Or would the trooper call Alvarez?"

"He would call his C.O. Alvarez gives orders through him."

"So call the C.O. Report the attack and call for help and die in the middle of it. Riot sounds behind you and maybe a shout of 'There's the dirty bastard now!' just before you die. Can you swing it?"

"Programmed. No huhu," Mike said cheerfully.

"Run it. Mannie, put Finn on."

Prof's plan was to sucker off-duty guards out of barracks and keep suckering them—with Finn's men posted to pick them off as they got out of capsules. And it worked, right up to point where Mort the Wart lost his nerve and kept remaining few to protect himself while he sent frantic messages Earthside—none of which got through.

I wiggled out of Prof's discipline and took a laser gun when second capsule of Peace Dragoons was due. I burned two Goons, found blood lust gone and let other snipers have rest of squad. Too easy. They would stick heads up out of hatch and that would be that. Half of squad would not come out—until smoked out and then died with rest. By that time I was back at my advance post at phone.

Warden’s decision to hole up caused trouble at Complex; Alvarez was killed and so was Goon C.O. and two of original yellow jackets. But a mixed lot of Dragoons and yellows, thirteen, holed up with Mort, or perhaps were already with him; Mike’s ability to follow events by listening was spotty. But once it seemed clear that all armed effectives were inside Warden’s residence, Prof ordered Mike to start next phase.

Mike turned out all lights in Complex save those in Warden’s residence, and reduced oxygen to gasping point—not killing point but low enough to insure that anyone looking for trouble would not be in shape. But in residence, oxygen supply was cut to zero, leaving pure nitrogen, and left that way ten minutes. At end of that time Finn’s men, waiting in p-suits at Warden’s private tube station, broke latch on airlock and went in, “shoulder to shoulder.” Luna was ours.

Book Two A RABBLE IN ARMS

14

So a wave of patriotism swept over our new nation and unified it.

Isn't that what histories say? Oh, brother!

My dinkum word, preparing a revolution isn't as much huhu as having won it. Here we were, in control too soon, nothing ready and a thousand things to do. Authority in Luna was gone—but Lunar Authority Earthside and Federated Nations behind it were very much alive. Had they landed one troopship, orbited one cruiser, anytime next week or two, could have taken Luna back *cheap.* We were a mob.

New catapult had been tested but canned rock missiles ready to go you could count on fingers of one hand—my left hand. Nor was catapult a weapon that could be used against ships, nor against troops. We had notions for fighting off ships; at moment were just notions. We had a few hundred cheap laser guns stockpiled in Hong Kong Luna—Chinee engineers are smart—but few men trained to use them.

Moreover, Authority had useful functions. Bought ice and grain, sold air and water and power, held ownership or control at a dozen key points. No matter what was done in future, wheels had to turn. Perhaps wrecking city offices of Authority had been hasty (I thought so) as records were destroyed. However, Prof maintained that Loonies, all Loonies, needed a symbol to hate and destroy and those offices were least valuable and most public.

But Mike controlled communications and that meant control of most everything. Prof had started with control of news to and from Earthside, leaving to Mike censorship and faking of news until we could get around to what to tell Terra, and had added sub-phase "M" which cut off Complex from rest of Luna, and with it Richardson Observatory and associated laboratories—Pierce Radioscope, Selenophysical Station, and so forth. These were a problem as Terran scientists were always coming and going and staying as long as six months, stretching time by centrifuge. Most Terrans in Luna, save for a handful of tourists—thirty-four—were scientists. Something had to be done about these Terrans, but meanwhile keeping them from talking to Terra was enough.

For time being, Complex was cut off by phone and Mike did not permit capsules to stop at any station in Complex even after travel was resumed, which it was as soon as Finn Nielsen and squad were through with dirty work.

Turned out Warden was not dead, nor had we planned to kill him; Prof figured that a live warden could always be made dead, whereas a dead one could not be made live if we needed him. So plan was to half kill him, make sure he and his guards could put up no fight, then break in fast while Mike restored oxygen.

With fans turning at top speed, Mike computed it would take four minutes and a bit to reduce oxygen to effective zero—so, five minutes of increasing hypoxia, five minutes of anoxia, then force lower lock while Mike shot in pure oxygen to restore balance. This should not kill anyone—but would knock out a person as thoroughly as anesthesia. Hazard to attackers would come from some or all of those inside having p-suits. But even that might not matter; hypoxia is sneaky, you can pass out without realizing you are short on oxygen. Is new chum's favorite fatal mistake.

So Warden lived through it and three of his women. But Warden, though he lived, was no use; brain had been oxygen-starved too long, a vegetable. No guard recovered, even though younger than he; would appear anoxia broke necks.

In rest of Complex nobody was hurt. Once lights were on and oxygen restored they were okay, including six rapist-murderers under lock in barracks. Finn decided that shooting was too good for them, so he went judge and used his squad as jury.

They were stripped, hamstrung at ankles and wrists, turned over to women in Complex. Makes me sick to think about what happened next but don't suppose they lived through as long an ordeal as Marie Lyons endured. Women are amazing creatures—sweet, soft, gentle, and far more savage than we are.

Let me mention those fink spies out of order. Wyoh had been fiercely ready to eliminate them but when we got around to them she had lost stomach. I expected Prof to agree. But he shook head. "No, dear Wyoh, much as I deplore violence, there are only two things to do with an enemy: Kill him. Or make a friend of him. Anything in between piles up trouble for the future. A man who finks on his friends once will do it again and we have a long period ahead in which a fink can be dangerous; they must go. And publicly, to cause others to be thoughtful."

Wyoh said, "Professor, you once said that if you condemned a man, you would eliminate him personally. Is that what you are going to do?"

"Yes, dear lady, and no. Their blood shall be on my hands; I accept responsibility. But I have in mind a way more likely to discourage other finks."

So Adam Selene announced that these persons had been employed by Juan Alvarez, late Security Chief for former Authority, as undercover spies—and gave names and addresses. Adam did not suggest that anything be done.

One man remained on dodge for seven months by changing warrens and name. Then early in ’77 his body was found outside Novylen’s lock. But most of them lasted no more than hours.

During first hours after coup d’etat we were faced with a problem we had never managed to plan—Adam Selene himself. *Who* is Adam Selene? Where is he? This is his revolution; he handled every detail, every comrade knows his voice. We’re out in open now. . . so *where is Adam?*

We batted it around much of that night, in room L of Raffles—argued it between decisions on a hundred things that came up and people wanted to know what to do, while “Adam” through other voices handled other decisions that did not require talk, composed phony news to send Earthside, kept Complex isolated, many things. (Is no possible doubt: without Mike we could not have taken Luna nor held it.)

My notion was that Prof should become “Adam.” Prof was always our planner and theoretician; everybody knew him; some key comrades knew that he was “Comrade Bill” and all others knew and respected Professor Bernardo de la Paz— My word, he had taught half of leading citizens in Luna City, many from other warrens, was known to every vip in Luna.

“No,” said Prof.

“Why not?” asked Wyoh. “Prof. you’re opted. Tell him, Mike.”

“Comment reserved,” said Mike. “I want to hear what Prof has to say.”

“I say you’ve analyzed it, Mike,” Prof answered. “Wyoh dearest comrade, I would not refuse were it possible. But there is no way to make my voice match that of Adam—and every comrade knows Adam by his *voice;* Mike made it memorable for that very purpose.”

We then considered whether Prof could be slipped in anyhow, showing him only on video and letting Mike reshape whatever Prof said into voice expected from Adam.

Was turned down. Too many people knew Prof, had heard him speak; his voice and way of speaking could not be reconciled with Adam. Then they considered same possibility for me—my voice and Mike’s were baritone and not too many people knew what I sounded like over phone and none over video.

I tromped on it. People were going to be surprised enough to find me one of our Chairman’s lieutenants; they would never believe I was number one.

I said, “Let’s combine deals. Adam has been a mystery all along; keep him that way. He’ll be seen only over video—in a mask. Prof. you supply body; Mike, you supply voice.”

Prof shook head. “I can think of no surer way to destroy confidence at our most critical period than by having a leader who wears a mask. No, Mannie."

We talked about finding an actor to play it. Were no professional actors in Luna then but were good amateurs in Luna Civic Players and in Novy Bolshoi Teatr Associates.

"No," said Prof, "aside from finding an actor of requisite character—one who would not decide to be Napoleon—we can't wait. Adam must start handling things not later than tomorrow morning."

"In that case," I said, "you've answered it. Have to use Mike and never put him on video. Radio only. Have to figure excuse but Adam must never be seen."

"I'm forced to agree," said Prof.

"Man my oldest friend," said Mike, "why do you say that I can't be seen?"

"Haven't you listened?" I said. "Mike, we have to show a face and body on video. You have a body—but it's several tons of metal. A face you don't have—lucky you, don't have to shave."

"But what's to keep me from showing a face, Man? I'm showing a voice this instant. But there's no sound behind it. I can show a face the same way."

Was so taken aback I didn't answer. I stared at video screen, installed when we leased that room. A pulse is a pulse is a pulse. Electrons chasing each other. To Mike, whole world was variable series of electrical pulses, sent or received or chasing around his innards.

I said, "No, Mike."

"Why not, Man?"

"Because you *can't!* Voice you handle beautifully. Involves only a few thousand decisions a second, a slow crawl to you. But to build up video picture would require, uh, say ten million decisions every second. Mike, you're so fast I can't even think about it. But you aren't *that* fast."

Mike said softly, "Want to bet, Man?"

Wyoh said indignantly, "Of course Mike can if he says he can! Mannie, you shouldn't talk that way." (Wyoh thinks an electron is something about size and shape of a small pea.)

"Mike," I said slowly, "I won't put money on it. Okay, want to try? Shall I switch on video?"

"I can switch it on," he answered.

"Sure you'll get right one? Wouldn't do to have this show somewhere else."

He answered testily, "I'm not stupid. Now let me be, Man—for I admit this is going to take just about all I've got."

We waited in silence. Then screen showed neutral gray with a hint of scan lines. Went black again, then a faint light filled middle and congealed into cloudy areas light and dark, ellipsoid. Not a face, but suggestion of face that one sees in cloud patterns covering Terra.

It cleared a little and reminded me of pictures alleged to be ectoplasm. A ghost of a face.

Suddenly firmed and we saw "Adam Selene."

Was a still picture of a mature man. No background, just a face as if trimmed out of a print. Yet was, to me, "Adam Selene." Could not he anybody else.

Then he smiled, moving lips and jaw and touching tongue to lips, a quick gesture—and I was frightened.

"How do I look?" he asked.

"Adam," said Wyoh, "your hair isn't that curly. And it should go back on each side above your forehead. You look as if you were wearing a wig, dear."

Mike corrected it. "Is that better?"

"Not quite so much. And don't you have dimples? I was sure I could hear dimples when you chuckle. Like Prof's."

Mike-Adam smiled again; this time he had dimples. "How should I be dressed, Wyoh?"

"Are you at your office?"

"I'm still at office. Have to be, tonight." Background turned gray, then came into focus and color. A wall calendar behind him gave date, Tuesday 19 May 2076; a clock showed correct time. Near his elbow was a carton of coffee. On desk was a solid picture, a family group, two men, a woman, four children. Was background noise, muted roar of Old Dome Plaza louder than usual; I heard shouts and in distance some singing: Simon's version of "Marseillaise."

Off screen Ginwallah's voice said, "Gospodin?"

Adam turned toward it. "I'm busy, Albert," he said patiently. "No calls from anyone but cell B. You handle everything else." He looked back at us. "Well, Wyoh? Suggestions? Prof? Man my doubting friend? Will I pass?"

I rubbed eyes. "Mike, can you cook?"

"Certainly. But I don't; I'm married."

"Adam," said Wyoh, "how can you look so neat after the day we've had?"

"I don't let little things worry me." He looked at Prof. "Professor, if the picture is okay, let's discuss what I'll say tomorrow. I was thinking of preempting the eight hundred newscast, have it announced all night, and pass the word down the cells."

We talked rest of night. I sent up for coffee twice and Mike-Adam had his carton renewed. When I ordered sandwiches, he asked Ginwallah to send out for some. I caught a glimpse of Albert

Ginwallah in profile, a typical babu, polite and faintly scornful. Hadn't known what he looked like. Mike ate while we ate, sometimes mumbling around a mouthful of food.

When I asked (professional interest) Mike told me that, after he had picture built up, he had programmed most of it for automatic and gave his attention just to facial expressions. But soon I forgot it was fake. Mike-Adam was talking with us by video, was all, much more convenient than by phone.

By oh-three-hundred we had policy settled, then Mike rehearsed speech. Prof found points be wanted to add; Mike made revisions, then we decided to get some rest, even Mike-Adam was yawning—although in fact Mike held fort all through night, guarding transmissions to Terra, keeping Complex wailed off, listening at many phones. Prof and I shared big bed, Wyoh stretched out on couch, I whistled lights out. For once we slept without weights.

While we had breakfast, Adam Selene addressed Free Luna.

He was gentle, strong, warm, and persuasive. "Citizens of Free Luna, friends, comrades—to those of you who do not know me let me introduce myself. I am Adam Selene. Chairman of the Emergency Committee of Comrades for Free Luna . . . now *of* Free Luna, we are free at last. The so-called 'Authority' which has long unsurped power in this our home has been overthrown. I find myself temporary head of such government as we have—the Emergency Committee.

"Shortly, as quickly as can be arranged, you will opt your own government." Adam smiled and made a gesture inviting help. "In the meantime, with your help, I shall do my best. We will make mistakes—be tolerant. Comrades, if you have not revealed yourselves to friends and neighbors, it is time you did so. Citizens, requests may reach you through your comrade neighbors. I hope you will comply willingly; it will speed the day when I can bow out and life can get back to normal—a new normal, free of the Authority, free of guards, free of troops stationed on us, free of passports and searches and arbitrary arrests.

"There has to be a transition. To all of you—please go back to work, resume normal lives. To those who worked for the Authority, the need is the same. Go back to work. Wages will go on, your jobs stay the same, until we can decide what is needed, what happily no longer is needed now that we are free, and what must be kept but modified. You new citizens, transportees sweating out sentences pronounced on you Earthside—you are free, your sentences are finished! But in the meantime I hope that you will go on working. You are not required to—the days of coercion are gone—but you are urged to. You are of course free to leave the Complex, free to go anywhere . . . and capsule service to and from the Complex will resume at once.

But before you use your new freedom to rush into town, let me remind you: ‘There is no such thing as a free lunch.’ You are better off for the time being where you are; the food may not be fancy but will continue hot and on time.

“To take on temporarily those necessary functions of the defunct Authority I have asked the General Manager of LuNoHo Company to serve. This company will provide termporary supervision and will start analyzing how to do away with the tyrannical parts of the Authority and how to transfer the useful parts to private hands. So please help them.

“To you citizens of Terran nations among us, scientists and travelers and others, greetings! You are witnessing a rare event, the birth of a nation. Birth means blood and pain; there has been some. We hope it is over. You will not be inconvenienced unnecessarily and your passage home will be arranged as soon as possible. Conversely, you are welcome to stay, still more welcome to become citizens. But for the present I urge you to stay out of the corridors, avoid incidents that might lead to unnecessary blood, unnecessary pain. Be patient with us and I urge my fellow citizens to be patient with you. Scientists from Terra, at the Observatory and elsewhere, go on with your work and ignore us. Then you won’t even notice that we are going through the pangs of creating a new nation. One thing— I am sorry to say that we are temporarily interfering with your right to communicate with Earthside. This we do from necessity; censorship will be lifted as quickly as possible—we hate it as much as you do.”

Adam added one more request: “Don’t try to see me, comrades, and phone me only if you must; all others, write if you need to, your letters will receive prompt attention. But I am not twins, I got no sleep last night and can’t expect much tonight. I can’t address meetings, can’t shake hands, can’t meet delegations; I must stick to this desk and work—so that I can get rid of this job and turn it over to your choice.” He grinned at them. “Expect me to be as hard to see as Simon Jester!”

It was a fifteen-minute cast but that was essence: Go back to work, be patient, give us time.

Those scientists gave us almost no time—I should have guessed; was my sort of pidgin.

All communication Earthside channeled through Mike. But those brain boys had enough electronic equipment to stock a warehouse; once they decided to, it took them only hours to breadboard a rig that could reach Terra.

Only thing that saved us was a fellow traveler who thought Luna should be free. He tried to phone Adam Selene, wound up talking to one of a squad of women we had co-opted from C and D level—a system thrown together in self-defense as, despite Mike’s request, half of Luna tried to phone Adam Selene after that videocast, everything from requests and demands to busybodies who wanted to tell Adam how to do his job.

After about a hundred calls got routed to me through too much zeal by a comrade in phone company, we set up this buffer squad. Happily, comrade lady who took this call recognized that soothe-'em-down doctrine did not apply; she phoned me.

Minutes later myself and Finn Nielsen plus some eager guns headed by capsule for laboratory area. Our informant was scared to give name but had told me where to find transmitter. We caught them transmitting, and only fast action on Finn's part kept them breathing; his boys were itchy. But we did not want to "make an example"; Finn and I had settled that on way out. Is hard to frighten scientists, their minds don't work that way. Have to get at them from other angles.

I kicked that transmitter to pieces and ordered Director to have everyone assemble in mess hall and required roll call—where a phone could hear. Then I talked to Mike, got names from him, and said to Director: "Doctor, you told me they were all here. We're missing so-and-so"—seven names. *"Get them here!"*

Missing Terrans had been notified, had refused to stop what they were doing—typical scientists.

Then I talked, Loonies on one side of room, Terrans on other. To Terrans I said; "We tried to treat you as guests. But three of you tried and perhaps succeeded in sending message Earthside."

I turned to Director. "Doctor, I could search—warren, surface structures, all labs, every space—and destroy everything that might be used for transmitter. I'm electron pusher by trade; I know what wide variety of components can be converted into transmitters. Suppose I destroy everything that might be useful for that and, being stupid, take no chance and smash anything I don't understand. What result?"

Would have thought I was about to kill his baby! He turned gray. "That would stop every research . . . destroy priceless data.., waste, oh, I don't know how much! Call it a half billion dollars!"

"So I thought. Could take all that gear instead of smashing and let you go on best you can."

"That would be almost as bad. You must understand, Gospodin, that when an experiment is interrupted—"

"I know. Easier than moving anything—and maybe missing some—is to take you all to Complex and quarter you there. We have what used to be Dragoon barracks. But that too would ruin experiments. Besides— Where you from, Doctor?"

"Princeton, New Jersey."

"So? You've been here five months and no doubt exercising and wearing weights. Doctor, if we did that, you might never see Princeton again. If we move you, we'll keep you locked up. You'll get soft. If emergency goes on very long, you'll be a Loonie like it or not. And all your brainy help with you."

A cocky chum stepped forward—one who had to be sent for twice. "You can't do this! It's against the law!"

"What law, Gospodin? Some law back in your hometown?" I turned. "Finn, show him law."

Finn stepped forward and placed emission bell of gun at man's belly button. Thumb started to press down—safety-switched, I could see. I said, "Don't kill him, Finn!"—then went on: "I will eliminate this man if that's what it takes to convince you. So watch each other! One more offense will kill all your chances of seeing home again—as well as ruining researches. Doctor, I warn you to find ways to keep check on your staff."

I turned to Loonies. "Tovarishchee, keep them honest. Work up own guard system. Don't take nonsense; every earthworm is on probation. If you have to eliminate some, don't hesitate." I turned to Director. "Doctor, any Loonie can go anywhere any time—even your bedroom. Your assistants are now your bosses so far as security is concerned; if a Loonie decides to follow you or anybody into a W.C., don't argue; he might be jumpy."

I turned to Loonies. "Security first! You each work for some earthworm—*watch him!* Split it among you and don't miss anything. Watch 'em so close they can't build mouse trap, much less transmitter. If interferes with work for them, don't worry; wages will go on."

Could see grins. Lab assistant was best job a Loonie could find those days—but they worked under earthworms who looked down on us, even ones who pretended and were oh so gracious.

I let it go at that. When I had been phoned, I had intended to eliminate offenders. But Prof and Mike set me straight: Plan did not permit violence against Terrans that could be avoided.

We set up "ears," wideband sensitive receivers, around lab area, since even most directional rig spills a little in neighborhood. And Mike listened on all phones in area, After that we chewed nails and hoped.

Presently we relaxed as news up from Earthside showed nothing, they seemed to accept censored transmissions without suspicion, and private and commercial traffic and Authority's transmissions all seemed routine. Meanwhile we worked, trying in days what should take months.

We received one break in timing; no passenger ship was on Luna and none was due until 7 July. We could have coped—suckered a ship's officers to "dine with Warden" or something, then mounted guard on its senders or dismantled them. Could not have lifted without our help; in those days one drain on ice was providing water for reaction mass. Was not much drain compared with grain shipments; one manned ship a month was heavy traffic then, while grain lifted every day. What it did mean was that an incoming ship was not an insuperable hazard. Nevertheless was lucky break; we were trying so hard to make everything look normal until we could defend ourselves.

Grain shipments went on as before; one was catapulted almost as Finn's men were breaking into Warden's residence. And next went out on time, and all others.

Neither oversight nor faking for interim; Prof knew what he was doing. Grain shipments were a big operation (for a little country like Luna) and couldn't be changed in one semilunar; bread-and-beer of too many people was involved. If our committee had ordered embargo and quit buying grain, we would have been chucked out and a new committee with other ideas would have taken over.

Prof said that an educational period was necessary. Meanwhile grain barges catapulted as usual; LuNoHoCo kept books and issued receipts, using civil service personnel. Dispatches went out in Warden's name and Mike talked to Authority Earthside, using Warden's voice. Deputy Administrator proved reasonable, once he understood it upped his life expectancy. Chief Engineer stayed on job, too—McIntyre was a real Loonie, given chance, rather than fink by nature. Other department heads and minor stooges were no problem; life went on as before and we were too busy to unwind Authority system and put useful parts up for sale.

Over a dozen people turned up claiming to be Simon Jester; Simon wrote a rude verse disclairning them and had picture on front page of *Lunatic*, *Pravda*, and *Gong*. Wyoh let herself go blond and made trip to see Greg at new catapult site, then a longer trip, ten days, to old home in Hong Kong Luna, taking Anna who wanted to see it. Wyoh needed a vacation and Prof urged her to take it, pointing on that she was in touch by phone and that closer Party contact was needed in Hong Kong. I took over her stilyagi with Slim and Hazel as my lieutenants—bright, sharp kids I could trust. Slim was awed to discover that I was "Comrade Bork" and saw "Adam Selene" every day; his Party name started with "G." Made a good team for other reason, too. Hazel suddenly started showing cushiony curves and not all from Mimi's superb table; she had reached that point in her orbit. Slim was ready to change her name to "Stone" any time she was willing to opt. In meantime he was anxious to do Party work he could share with our fierce little redhead.

Not everybody was willing. Many comrades turned out to be talk-talk soldiers. Still more thought war was over once we had eliminated

Peace Goons and captured Warden. Others were indignant to learn how far down they were in Party structure; they wanted to elect a new structure, themselves at top. Adam received endless calls proposing this or something like it—would listen, agree, assure them that their services must not be wasted by waiting for election—and refer them to Prof or me. Can't recall any of these ambitious people who amounted to anything when I tried to put them to work.

Was endless work and *nobody* wanted to do it. Well, a few. Some best volunteers were people Party had never located. But in general, Loonies in and out of Party had no interest in "patriotic" work unless well paid. One chum who claimed to be a Party member (was not) spragged me in Raffles where we set up headquarters and wanted me to contract for fifty thousand buttons to be worn by pre-coup "Veterans of Revolution"—a "small" profit for him (I estimate 400 percent markup), easy dollars for me, a fine thing for everybody.

When I brushed him off, he threatened to denounce me to Adam Selene—"A very good friend of mine, I'll have you know!"—for sabotage.

That was "help" we got. What we needed was something else. Needed steel at new catapult and plenty—Prof asked, if really necessary to put steel around rock missiles; I had to point out that an induction field won't grab bare rock. We needed to relocate Mike's ballistic radars at old site and install doppler radar at new site—both jobs because we could expect attacks from space at old site.

We called for volunteers, got only two who could be used—and needed several hundred mechanics who did not mind hard work in p-suits. So we hired, paying what we had to—LuNoHoCo went in hock to Bank of Hong Kong Luna; was no time to steal that much and most funds had been transferred Earthside to Stu. A dinkum comrade, Foo Moses Morris, cosigned much paper to keep us going—and wound up broke and started over with a little tailoring shop in Kongville. That was later.

Authority Scrip dropped from 3-to-1 to 17-to-1 after coup and civil service people screamed, as Mike was still paying in Authority checks. We said they could stay on or resign; then those we needed, we rehired with Hong Kong dollars. But created a large group not on our side from then on; they longed for good old days and were ready to stab new regime.

Grain farmers and brokers were unhappy because payment at catapult head continued to be Authority scrip at same old fixed prices. "We won't take it!" they cried—and LuNoHoCo man would shrug and tell them they didn't have to but this grain still went to Authority Earthside (it did) and Authority scrip was all they would get. So take cheque, or load your grain back into rolligons and get it out of here.

Most took it. All grumbled and some threatened to get out of grain and start growing vegetables or fibers or something that brought Hong Kong dollars—and Prof smiled.

We needed every drillman in Luna, especially ice miners who owned heavy-duty laser drills. As soldiers. We needed them so badly that, despite being shy one wing and rusty, I considered joining up, even though takes muscle to wrestle a big drill, and prosthetic just isn't muscle. Prof told me not to be a fool.

Dodge we had in mind would not work well Earthside; a laser beam carrying heavy power works best in vacuum—but there it works just dandy for whatever range its collimation is good for. These big drills, which had carved through rock seeking pockets of ice, were now being mounted as "artillery" to repel space attacks. Both ships and missiles have electronic nervous systems and does electronic gear no good to blast it with umpteen joules placed in a tight beam. If target is pressured (as manned ships are and most missiles), all it takes is to burn a hole, depressure it. If not pressured, a heavy laser beam can still kill it—burn eyes, louse guidance, spoil anything depending on electronics as most everything does.

An H-bomb with circuitry ruined is not a bomb, is just big tub of lithium deuteride that can't do anything but crash. A ship with eyes gone is a derelict, not a warship.

Sounds easy, is *not*. Those laser drills were never meant for targets a thousand kilometers away, or even one, and was no quick way to rig their cradles for accuracy. Gunner had to have guts to hold fire until last few seconds—on a target heading at him maybe two kilometers per second. But was best we had, so we organized First and Second Volunteer Defense Gunners of Free Luna—two regiments so that First could snub lowly Second and Second could be jealous of First. First got older men, Second got young and eager.

Having called them "volunteers," we hired in Hong Kong dollars—and was no accident that ice was being paid for in controlled market in wastepaper Authority script.

On top of all, we were talking up a war scare. Adam Selene talked over video, reminding that Authority was certain to try to regain its tyranny and we had only days to prepare; papers quoted him and published stories of their own—we had made special effort to recruit newsmen before coup. People were urged to keep p-suits always near and to test pressure alarms in homes. A volunteer Civil Defense Corps was organized in each warren.

What with moonquakes always with us, each warren's pressure co-op always had sealing crews ready at any hour. Even with silicone stay-soft and fiberglass any warren leaks. In Davis Tunnels our boys did maintenance on seal every day. But now we recruited hundreds of emergency sealing crews, mostly stilyagi, drilled them with fake emergencies, had them stay in p-suits with helmets open when on duty.

They did beautifully. But idiots made fun of them—"play soldiers," "Adam's little apples," other names. A team was going through a drill, showing they could throw a temporary lock around one that had been damaged, and one of these pinheads stood by and rode them loudly.

Civil Defense team went ahead, completed temporary lock, tested it with helmets closed; it held—came out, grabbed this joker, took him through into temporary lock and on out into zero pressure, dumped him.

Belittlers kept opinions to selves after that. Prof thought we ought to send out a gentle warning not to eliminate so peremptorily. I opposed it and got my way; could see no better way to improve breed. Certain types of loudmouthism should be a capital offense among decent people.

But our biggest headaches were self-anointed statesmen.

Did I say that Loonies are "nonpolitical"? They are, when comes to doing anything. But doubt if was ever a time two Loonies over a liter of beer did not swap loud opinions about how things ought to be run.

As mentioned, these self-appointed political scientists tried to grab Adam Selene's ear. But Prof had a place for them; each was invited to take part in "Ad-Hoc Congress for Organization of Free Luna"—which met in Community Hall in Luna City, then resolved to stay in session until work was done, a week in L-City, a week in Novylen, then Hong Kong, and start over. All sessions were in video. Prof presided over first and Adam Selene addressed them by video and encouraged them to do a thorough job—"History is watching you."

I listened to some sessions, then cornered Prof and asked what in Bog's name he was up to? "Thought you didn't want any government. Have you heard those nuts since you turned them loose?"

He smiled most dimply smile. "What's troubling you, Manuel?"

Many things were troubling me. With me breaking heart trying to round up heavy drills and men who could treat them as guns these idlers had spent an entire afternoon discussing immigration. Some wanted to stop it entirely. Some wanted to tax it, high enough to finance government (when ninetynine out of a hundred Loonies had had to be dragged to The Rock!); some wanted to make it selective by "ethnic ratios." (Wondered how they would count *me?*) Some wanted to limit it to females until we were 50-50. That had produced a Scandinavian shout: "Ja, cobber! Tell 'em send us hoors! Tousands and tousands of hoors! I marry 'em, I betcha!"

Was most sensible remark all afternoon.

Another time they argued "time." Sure, Greenwich time bears no relation to lunar. But why should it when we live Underground? Show me a Loonie who can sleep two weeks and work two weeks; lunars don't fit our metabolism. What was urged was to make a lunar exactly equal to twentyeight days (instead of 29 days, 12 hours, 44 minutes, 2.78 seconds) and do this by making days longer—and hours, minutes, and seconds, thus making each semilunar exactly two weeks.

Sure, lunar is necessary for many purposes. Controls when we go up on surface, why we go, and how long we stay. But, aside from throwing us out of gear with our only neighbor, had that wordy vacuum skull thought what this would do to every critical figure in science and engineering? As an electronics man I shuddered. Throw away every book, table, instrument, and start over? I know that some of my ancestors did that in switching from old English units to MKS—but they did it to make things *easier*. Fourteen inches to a foot and some odd number of feet to a mile. Ounces and pounds. Oh, Bog!

Made sense to change *that*—but why go out of your way to *create* confusion?

Somebody wanted a committee to determine exactly what Loonie language is, then fine everybody who talked Earthside English or other language. Oh, my people!

I read tax proposals in *Lunatic*—four sorts of "SingleTaxers"—a cubic tax that would penalize a man if he extended tunnels, a head tax (everybody pay same), income tax (like to see anyone figure income of Davis Family or try to get information out of Mum!), and an "air tax" which was not fees we paid then but something else.

Hadn't realized "Free Luna" was going to have taxes. Hadn't had any before and got along. You paid for what you got. Tanstaafl. How else?

Another time some pompous choom proposed that bad breath and body odors be made an elimination offense. Could almost sympathize, having been stuck on occasion in a capsule with such stinks. But doesn't happen often and tends to be self-correcting; chronic offenders, or unfortunates who can't correct, aren't likely to reproduce, seeing how choosy women are.

One female (most were men, but women made up for it in silliness) had a long list she wanted made permanent laws—about private matters. No more plural marriage of any sort. No divorces. No "fornication"—had to look that one up. No drinks stronger than 4% beer. Church services only on Saturdays and all else to stop that day. (Air and temperature and pressure engineering, lady? Phones and capsules?) A long list of drugs to be prohibited and a shorter list dispensed only by licensed physicians. (What is a "licensed physician"? Healer I go to has a sign reading "practical doctor"—makes book on side, which is why I go to him. Look, lady, *aren't* any medical schools in Luna!) (Then, I mean.) She even wanted to make *gambling* illegal. If a Loonie couldn't roll double or nothing, he would go to a shop that would, even if dice were loaded.

Thing that got me was not her list of things she hated, since she was obviously crazy as a Cyborg, but fact that always somebody agreed with her prohibitions. Must be a yearning deep in human heart to stop *other* people from doing as they please. Rules, laws—always for other fellow. A murky part of us, something we had before we came down out of trees, and failed to shuck when we stood up. Because not one of those people said: "Please pass this so that I won't be able to do something I know I should stop." Nyet, tovarishchee, was *always* something they hated to see neighbors doing. Stop them "for their own good"—not because speaker claimed to be harmed by it.

Listening to that session I was almost sorry we got rid of Mort the Wart. He stayed holed up with his women and didn't tell us how to run private lives.

But Prof didn't get excited; he went on smiling. "Manuel, do you really think that mob of retarded children can pass any laws?"

"You told them to. Urged them to."

"My dear Manuel, I was simply putting all my nuts in one basket. I know those nuts; I've listened to them for years. I was very careful in selecting their committees; they all have builtin confusion, they will quarrel. The chairman I forced on them while letting them elect him is a ditherer who could not unravel a piece of string—thinks every subject needs 'more study.' I almost needn't have bothered; more than six people cannot agree on anything, three is better—and one is perfect for a job that one can do. This is why parliamentary bodies all through history, when they accomplished anything, owed it to a few strong men who dominated the rest. Never fear, son, this Ad-Hoc Congress will do nothing. . . or if they pass something through sheer fatigue, it will be so loaded with contradictions that it will have to be thrown out. In the meantime they are out of our hair. Besides, there is something we need them for, later."

"Thought you said they could do nothing."

"They won't do this. One man will write it—a dead man—and late at night when they are very tired, they'll pass it by acclamation."

"Who's this dead man? You don't mean Mike?"

"No, no! Mike is far more alive than those yammerheads. The dead man is Thomas Jefferson—first of the rational anarchists, my boy, and one who once almost managed to slip over his non-system through the most beautiful rhetoric ever written. But they caught him at it, which I hope to avoid. I cannot improve on his phrasing; I shall merely adapt it to Luna and the twenty-first century."

"Heard of him, Freed slaves, nyet?"

"One might say he tried but failed. Never mind. How are the defenses progressing? I don't see how we can keep up the pretense past the arrival date of this next ship."

"Can't be ready then."

"Mike says we must be."

We weren't but ship never arrived. Those scientists outsmarted me and Loonies I had told to watch them. Was a rig at focal point of biggest reflector and Loonie assistants believed doubletalk about astronomical purpose—a new wrinkle in radiotelescopes.

I suppose it was. Was ultramicrowave and stuff was bounced at reflector by a wave guide and thus left scope lined up nicely by mirror. Remarkably like early radar. And metal latticework and foil heat shield of barrel stopped stray radiation, thus "ears" I had staked out heard nothing.

They put message across, their version and in detail. First we heard was demand from Authority to Warden to deny this hoax, find hoaxer, put stop to it.

So instead we gave them a Declaration of Independence.

"In Congress assembled, July Fourth, Twenty-Seventy-Six—"

Was *beautiful.*

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Signing of Declaration of Independence went as Prof said it would. He sprang it on them at end of long day, announced a special session after dinner at which Adam Selene would speak. Adam read aloud, discussing each sentence, then read it without stopping, making music of sonorous phrases. People wept. Wyoh, seated by me, was one, and I felt like it even though had read it earlier.

Then Adam looked at them and said, "The future is waiting. Mark well what you do," and turned meeting over to Prof rather than usual chairman.

Was twentytwo hundred and fight began. Sure, they were in favor of it; news all day had been jammed with what bad boys we were, how we were to be punished, taught a lesson, so forth. Not necessary to spice it up; stuff up from Earthside was nasty—Mike merely left out onother-hand opinions. If ever was a day when Luna felt unified it was probably second of July 2076.

So they were going to pass it; Prof knew that before he offered it.

But not as written—"Honorable Chairman, in second paragraph, that word 'unalienable,' is no such word; should be '*in*alienable'—and anyhow wouldn't it be more dignified to say 'sacred rights' rather than 'inalienable rights'? I'd like to hear discussion on this."

That choom was almost sensible, merely a literary critic, which is harmless, like dead yeast left in beer. But— Well, take that woman who hated everything. She was there with list; read it aloud and moved to have it incorporated into Declaration "so that the peoples of Terra will know that we are civilized and fit to take our places in the councils of mankind!"

Prof not only let her get away with it; he encouraged her, letting her talk when other people wanted to—then blandly put her proposal to a vote when hadn't even been seconded. (Congress operated by rules they had wrangled over for days. Prof was familiar with rules but followed them only as suited him.) She was voted down in a shout, and left.

Then somebody stood up and said of course that long list didn't belong in Declaration—but shouldn't we have general principles? Maybe a statement that Luna Free State guaranteed freedom, equality, and security to all? Nothing elaborate, just those fundamental principles that everybody knew was proper purpose of goiverament.

True enough and let's pass it—but must read "Freedom, equality, *peace*, and security"—right, Comrade? They wrangled over whether "freedom" included "free air," or was that part of "security"? Why not be on safe side and list "free air" by name? Move to amend to make it "free air *and* water"—because you didn't have "freedom" or "security" unless you had both air and water.

Air, water, and *food*.

Air, water, food, and *cubic*.

Air, water, food, cubic, and *heat*.

No, make "heat" read "power" and you had it all covered. Everything.

Cobber, have you lost your mind? That's far from everything and what you've left out is an affront to all womankind— Step outside and say that! Let me finish. We've got to tell them right from deal that we will permit no more ships to land unless they carry at least as many women as men. *At least*, I said—and I for one won't chop it unless it sets immigration issue straight.

Prof never lost dimples.

Began to see why Prof had slept all day and was not wearing weights. Me, I was tired, having spent all day in p-suit out beyond catapult head cutting in last of relocated ballistic radars. And everybody was tired; by midnight crowd began to thin, convinced that nothing would be accomplished that night and bored by any yammer not their own.

Was later than midnight when someone asked why this Declaration was dated fourth when today was second? Prof said mildly that it was July third now—and it seemed unlikely that our Declaration could be announced earlier than fourth and that July fourth carried historical symbolism that might help.

Several people walked out at announcement that probably nothing would be settled until fourth of July. But I began to notice something: Hall was filling as fast as was emptying. Finn Nielsen slid into a seat that had just been vacated. Comrade Clayton from Hong Kong showed up, pressed my shoulder, smiled at Wyoh, found a seat. My youngest lieutenants. Slim and Hazel, I spotted down front—and was thinking I must alibi Hazel by telling Mum I had kept her out on Party business —when was amused to see Mum herself next to them. And Sidris. And Greg, who was supposed to be at new catapult.

Looked around and picked out a dozen more—night editor of *Lunaya Pravda,* General Manager of LuNoHoCo, others, and each one a working comrade, Began to see that Prof had stacked deck. That Congress never had a fixed membership; these dinkum comrades had as much right to show up as those who had been talking a month. Now they sat—and voted down amendments.

About three hundred, when I was wondering how much more I could take, someone brought a note to Prof. He read it, banged gavel and said, “Adam Selene begs your indulgence. Do I hear unanimous consent?”

So screen back of rostrum lighted up again and Adam told them that he had been following debate and was warmed by many thoughtful and constructive criticisms. But could he made a suggestion? Why not admit that any piece of writing was imperfect? If this declaration was *in general* what they wanted, why not postpone perfection for another day and pass this as it stands? “Honorable Chairman, I so move.”

They passed it with a yell. Prof said, “Do I hear objection?” and waited with gavel raised. A man who had been talking when Adam had asked to be heard said, “Well, . . I *still* say that’s a dangling participle, but okay, leave it in.”

Prof hanged gavel. “So ordered!”

Then we filed up and put our chops on a big scroll that had been “sent over from Adam’s office”—and I noticed Adam’s chop on it. I signed right under Hazel—child now could write although was still short on book learning. Her chop was shaky but she wrote it large and proud. Comrade Clayton signed his Party name, real name in letters, and Japanese chop, three little pictures one above other. Two comrades chopped with X’s and had them witnessed. All Party leaders were there that night (morning), all chopped it, and not more than a dozen yammerers stuck. But those who did, put their chops down for history to read. And thereby committed “their lives, their fortunes, and their sacred honors.”

While queue was moving slowly past and people were talking, Prof banged for attention. “I ask for volunteers for a dangerous mission. This Declaration will go on the news channels—but must be presented in person to the Federated Nations, on Terra.”

That put stop to noise. Prof was looking at me. I swallowed and said, “I volunteer.” Wyoh echoed, “So do I!”—and little Hazel Meade said, “Me, too!”

In moments were a dozen, from Finn Nielsen to Gospodin Dangling-Participle (turned out to be good cobber aside from his fetish). Prof took names, murmured something about getting in touch as transportation became available.

I got Prof aside and said, “Look, Prof, you too tired to track? You know ship for seventh was canceled; now they’re talking about slapping embargo on us. Next ship they lift for Luna will be a warship. How you planning to travel? As prisoner?”

“Oh, we won’t use their ships.”

“So? Going to build one? Any idea how long that takes? If could build one at all. Which I doubt.”

“Manuel, Mike says it’s necessary—and has it all worked out.”

I did know Mike said was necessary; he had rerun problem soon as we learned that bright laddies at Richardson had snuck one home—he now gave us only one chance in fifty-three. . . with imperative need for Prof to go Earthside. But I’m not one to worry about impossibilities; I had spent day working to make that one chance in fifty-three turn up.

“Mike will provide the ship,” Prof went on. “He has completed its design and it is being worked on.”

“He has? It is? Since when is Mike engineer?”

“Isn’t he?” asked Prof.

I started to answer, shut up. Mike had no degrees. Simply knew more engineering than any man alive. Or about Shakespeare’s plays, or riddles, or history, name it. “Tell me more.”

“Manuel, we’ll go to Terra as a load of grain.”

“*What?* Who’s ‘we’?”

“You and myself. The other volunteers are merely decorative.”

I said, “Look, Prof. I’ve stuck. Worked hard when whole thing seemed silly. Worn these weights—got ’em on now—on chance I might have to go to that dreadful place. But contracted to go in a *ship*, with at least a Cyborg pilot to help me get down safely. Did not agree to go as meteorite.”

He said, “Very well, Manuel. I believe in free choice, always. Your alternate will go.”

“My— *Who?*”

“Comrade Wyoming. So far as I know she is the only other person in training for the trip . . . other than a few Terrans."

So I went. But talked to Mike first. He said patiently. "Man my first friend, there isn't a thing to worry about. You are scheduled load KM187 series '76 and you'll arrive in Bombay with no trouble. But to be sure—to reassure *you*—I selected that barge because it will be taken out of parking orbit and landed when India is faced toward me, and I've added an override so that I can take you away from ground control if I don't like the way they handle you. Trust me, Man, it has all been thought through. Even the decision to continue shipments when security was broken was part of this plan."

"Might have told me."

"There was no need to worry you. Professor had to know and I've kept in touch with him. But you are going simply to take care of him and back him up—do his job if he dies, a factor on which I can give you no reassurance."

I sighed. "Okay. But, Mike, surely you don't think you can pilot a barge into a soft landing at this distance? Speed of light alone would trip you."

"Man, don't you think I understand ballistics? For the orbital position then, from query through reply and then to command-received is under four seconds. . . and you can rely on me not to waste microseconds. Your maximum parking-orbit travel in four seconds is only thirty-two kilometers, diminishing asymptotically to zero at landing. My reflex time will be effectively less than that of a pilot in a manual landing because I don't waste time grasping a situation and deciding on correct action. So my maximum is four seconds. But my *effective* reflex time is much less, as I project and predict constantly, see ahead, program it out—in effect, I'll stay four seconds ahead of you in your trajectory and respond instantly."

"That steel can doesn't even have an altimeter!"

"It does now. Man, *please* believe me; I've thought of *everything*. The only reason I've ordered this extra equipment is to reassure you. Poona ground control hasn't made a bobble in the last five thousand loads. For a computer it's fairly bright."

"Okay. Uh, Mike, how hard do they splash those bleeding barges? What gee?"

"Not high, Man. Ten gravities at injection, then that programs down to a steady, soft four gees . . . then you'll be nudged again between six and five gees just before splash. The splash itself is gentle, equal to a fall of fifty meters and you enter ogive first with no sudden shock, less than three gees. Then you surface and splash again, lightly, and simply float at one gee. Man, those barge shells are built as lightly as possible for economy's sake. We can't afford to toss them around or they would split their seams."

"How sweet. Mike, what would 'six to five gees' do to you? Split your seams?"

"I conjecture that I was subjected to about six gravities when they shipped me up here. Six gravities in my present condition would shear many of my essential connections. However, I'm more interested in the extremely high, transient accelerations I am going to experience from shock waves when Terra starts bombing us. Data are insufficient for prediction but I may lose control of my outlying functions, Man. This could be a major factor in any tactical situation."

"Mike, you really think they are going to bomb us?"

"Count on it, Man. That is why this trip is so important."

Left it at that and went out to see this coffin. Should have stayed home.

Ever looked at one of those silly barges? Just a steel cylinder with retro and guidance rockets and radar transponder. Resembles a spaceship way a pair of pliers resembles my number-three arm. They had this one cut open and were outfitting our "living quarters."

No galley. No W.C. No nothing. Why bother? We were going to be in it only fifty hours. Start empty so that you won't need a honey sack in your suit. Dispense with lounge and bar; you'll never be out of your suit, you'll be drugged and not caring.

At least Prof would be drugged almost whole time; I had to be alert at landing to try to get us out of this death trap if something went wrong and nobody came along with a tin opener. They were building a shaped cradle in which backs of our p-suits would fit; we would be strapped into these holes. And stay there, clear to Terra. They seemed more concerned about making total mass equal to displaced wheat and same center of gravity and all moment arms adding up correctly than they did about our comfort; engineer in charge told me that even padding to be added inside our p-suits was figured in.

Was glad to learn we were going to have padding; those holes did not look soft.

Returned home in thoughtful condition.

Wyoh was not at dinner, unusual; Greg was, more unusual. Nobody said anything about my being scheduled to imitate a falling rock next day although all knew. But did not realize anything special was on until all next generation left table without being told. Then knew why Greg had not gone back to Mare Undarum site after Congress adjourned that morning; somebody had asked for a Family talk-talk.

Mum looked around and said, "We're all here. Ali, shut that door; that's a dear. Grandpaw, will you start us?"

Our senior husband stopped nodding over coffee and firmed up. He looked down table and said strongly, "I see that we are all here. I see that children have been put to bed. I see that there is no stranger, no guest. I say that we are met in accordance with customs created by Black Jack Davis our First Husband and Tillie our First Wife. If there is any matter that concerns safety and happiness of our marriage, haul it out in the light *now*. Don't let it fester. This is our custom."

Grandpaw turned to Mum and said softly, "Take it, Mimi," and slumped back into gentle apathy. But for a minute he had been strong, handsome, virile, dynamic man of days of my opting. . . and I thought with sudden tears how lucky I had been!

Then didn't know whether I felt lucky or not. Only excuse I could see for a Family talk-talk was fact that I was due to be shipped Earthside next day, labeled as grain. Could Mum be thinking of trying to set Family against it? Nobody *had* to abide by results of a talk-talk. But one always did. That was strength of our marriage: When came down to issues, we stood together.

Mimi was saying, "Does anyone have anything that needs to be discussed? Speak up, dears."

Greg said, "I have."

"We'll listen to Greg."

Greg is a good speaker. Can stand up in front of a congregation and speak with confidence about matters I don't feel confident about even when alone. But that night he seemed anything but sure of himself. "Well, uh, we've always tried to keep this marriage in balance, some old, some young, a regular alternation, well spaced, just as it was handed down to us. But we've varied sometimes—for good reason." He looked at Ludmilla. "And adjusted it later." He looked again at far end of table, at Frank and Ali, on each side of Ludmilla.

"Over years, as you can see from records, average age of husbands has been about forty, wives about thirty-five—and that age spread was just what our marriage started with, nearly a hundred years gone by, for Tillie was fifteen when she opted Black Jack and he had just turned twenty. Right now I find that average age of husbands is almost exactly forty, while average—"

Mum said firmly, "Never mind arithmetic, Greg dear. Simply state it."

I was trying to think who Greg could possibly mean. True, I had been much away during past year, and if did get home, was often after everybody was asleep. But he was clearly talking about marriage and nobody ever proposes another wedding in our marriage without first giving everybody a long careful chance to look prospect over. You just didn't *do* it any other way!

So I'm stupid. Greg stuttered and said, "I propose Wyoming Knott!"

I said I was stupid. I understand machinery and machinery understands me. But didn't claim to know anything about people.

When I get to be senior husband, if live that long, am going to do exactly what Grandpaw does with Mum: Let Sidris run it. Just same— Well, look, Wyoh joined Greg's church. I like Greg, *love* Greg. And admire him. But you could never feed theology of his church through a computer and get anything but null. Wyoh surely knew this, since she encountered it in adult years—truthfully, I had suspected that Wyoh's conversion was proof that she would do *anything* for our Cause.

But Wyoh had recruited Greg even earlier. And had made most of trips out to new site, easier for her to get away than me or Prof. Oh, well. Was taken by surprise. Should not have been.

Mimi said, "Greg, do you have reason to think that Wyoming would accept an opting from us?"

"Yes."

"Very well. We all know Wyoming; I'm sure we've formed our opinions of her. I see no reason to discuss it. . . unless someone has something to say? Speak up."

Was no surprise to Mum. But wouldn't be. Nor to anyone else, either, since Mum never let a talk-talk take place until she was sure of outcome.

But wondered why Mum was sure of my opinion, so certain that she had not felt me out ahead of time? And sat there in a soggy quandary, knowing I should speak up, knowing I knew something terribly pertinent which nobody else knew or matter would never have gone this far. Something that didn't matter to me but would matter to Mum and all our women.

Sat there, miserable coward, and said nothing, Mum said, "Very well. Let's call the roll. Ludmilla?"

"Me? Why, I love Wyoh, everybody knows that. Sure!"

"Lenore dear?"

"Well, I may try to talk her into going back to being a brownie again; I think we set each other off. But that's her only fault, being blonder than I am. Da!"

"Sidris?"

"Thumbs up. Wyoh is our kind of people."

"Anna?"

"I've something to say before I express my opinion, Mimi."

"I don't think it's necessary, dear."

"Nevertheless I'm going to haul it out in the open, just as Tillie always did according to our traditions. In this marriage every wife has carried her load, given children to the family. It may come as a surprise to some of you to learn that Wyoh has had eight children—"

Certainly surprised Ali; his head jerked and jaw dropped. I stared at plate. Oh, Wyoh, Wyoh! How could I let this happen? Was going to have to speak up.

And realized Anna was still speaking: "—so now she can have children of her own; the operation was successful. But she worries about possibility of another defective baby, unlikely as that is according to the head of the clinic in Hong Kong. So we'll just have to love her enough to make her quit fretting."

"We will love her," Mum said serenely. "We do love her. Anna, are you ready to express opinion?"

"Hardly necessary, is it? I went to Hong Kong with her, held her hand while her tubes were restored. I opt Wyoh."

"In this family," Mum went on, "we have always felt that our husbands should be allowed a veto. Odd of us perhaps, but Tillie started it and it has always worked well. Well, Grandpaw?"

"Eh? What were you saying, my dear?"

"We are opting Wyoming, Gospodin Grandpaw. Do you give consent?"

"What? Why, of course, of course! Very nice little girl. Say, whatever became of that pretty little Afro, name something like that? She get mad at us?"

"Greg?"

"I proposed it."

"Manuel? Do you forbid this?"

"Me? Why, you know me, Mum."

"I do. I sometimes wonder if *you* know you. Hans?"

"What would happen if I said No?"

"You'd lose some teeth, that's what," Lenore said promptly. "Hans votes Yes."

"Stop it, darlings," Mum said with soft reproof. "Opting is a serious matter. Hans, speak up."

"Da. Yes. Ja. Oui. Si. High time we had a pretty blonde in this—Ouch!"

"Stop it, Lenore. Frank?"

"Yes, Mum."

"Ali dear? Is it unanimous?"

Lad blushed bright pink and couldn't talk. Nodded vigorously.

Instead of appointing a husband and a wife to seek out selectee and propose opting for us, Mum sent Ludmilla and Anna to fetch Wyoh at once—and turned out she was only as far away as Bon Ton. Nor was that only irregularity; instead of setting a date and arranging a wedding party, our children were called in, and twenty minutes later Greg had his Book open and we did the taking vows—and I finally got it through my confused head that was being done with breakneck speed because of my date to break my neck next day.

Not that it could matter save as symbol of my family's love for me, since a bride spent her first night with her senior husband, and second night and third I was going to spend out in space. But *did* matter anyhow and when women started to cry during ceremony, I found self dripping tears right with them.

Then I went to bed, alone in workshop, once Wyoh had kissed us and left on Grandpaw's arm. Was terribly tired and last two days had been hard. Thought about exercises and decided was too late to matter; thought about calling Mike and asking him for news from Terra. Went to bed.

Don't know how long had been asleep when realized was no longer asleep and somebody was in room. "Manuel?" came soft whisper in dark.

"Huh? Wyoh, you aren't supposed to be here, dear."

"I am indeed supposed to be here, my husband. Mum knows I'm here, so does Greg. And Grandpaw went right to sleep."

"Oh. What time is?"

"About four hundred. Please, dear, may I come to bed?"

"What? Oh, certainly." Something I should remember. Oh, yes. "Mike!"

"Yes, Man?" he answered.

"Switch off. Don't listen. If you want me, call me on Family phone."

"So Wyoh told me, Man. Congratulations!"

Then her head was pillowed on my stump and I put right arm around her. "What are you crying about, Wyoh?"

"I'm not crying! I'm just frightened silly that you won't come back!"

16

Woke up scared silly in pitch darkness. "Manuel!" Didn't know which end was up. "Manuel!" it called again. "Wake up!"

That brought me out some; was signal intended to trigger me. Recalled being stretched on a table in infirmary at Complex, staring up at a light and listening to a voice while a drug dripped into my veins. But was a hundred years ago, endless time of nightmares, unendurable pressure, pain.

Knew now what no-end-is-up feeling was; had experienced before. Free fall. Was in space.

What had gone wrong? Had Mike dropped a decimal point? Or had he given in to childish nature and played a joke, not realizing would kill? Then why, after all years of pain, was I alive? Or was I? Was this normal way for ghost to feel, just lonely, lost, nowhere?

"Wake up, Manuel! Wake up, Manuel!"

"Oh, shut up!" I snarled. "Button your filthy king-and-ace!" Recording went on; I paid no attention. Where was that reeking light switch? No, doesn't take a century of pain to accelerate to Luna's escape speed at three gravities, merely feels so. Eighty-two seconds—but is one time when human nervous system feels every microsecond. Three gees is eighteen grim times as much as a Loonie ought to weigh.

Then discovered those vacuum skulls had not put arm back on. For some silly reason they had taken it off when they stripped me to prepare me and I was loaded with enough don't-worry and let's-sleep pills not to protest. No huhu had they put it on again. But that drecklich switch was on my left and sleeve of p-suit was empty.

Spent next ten years getting unstrapped with one hand, then a twenty-year sentence floating around in dark before managed to find my cradle again, figure out which was head end, and from that hint locate switch by touch. That compartment was not over two meters in any dimension. This turns out to be larger than Old Dome in free fall and total darkness. Found it. We had light.

(And don't ask why that coffin did not have at least three lighting systems all working all time. Habit, probably. A lighting system implies a switch to control it, nyet? Thing was built in two days; should be thankful switch worked.)

Once I had light, cubic shrank to true claustrophobic dimensions and ten percent smaller, and I took a look at Prof.

Dead, apparently. Well, he had every excuse. Envied him but was now supposed to check his pulse and breathing and suchlike in case he had been unlucky and still had such troubles. And was again hampered and not just by being one–armed. Grain load had been dried and depressured as usual before loading but that cell was supposed to be pressured—oh, nothing fancy, just a tank with air in it. Our p-suits were supposed to handle needs such as life's breath for those two days. But even best p-suit is more comfortable in pressure than in vacuum and, anyhow, I was supposed to be able to get at my patient.

Could not. Didn't need to open helmet to know this steel can had not stayed gas tight, knew at once, naturally, from way p-suit felt. Oh, drugs I had for Prof, heart stimulants and so forth, were in field ampules; could jab them through his suit. But how to check heart and breathing? His suit was cheapest sort, sold for Loonie who rarely Leaves warren; had no readouts.

His mouth hung open and eyes stared. A deader, I decided. No need to ex Prof beyond that old limen; had eliminated himself. Tried to see pulse on throat; his helmet was in way.

They had provided a program clock which was mighty kind of them. Showed I had been out forty-four-plus hours, all to plan, and in three hours we should receive horrible booting to place us in parking orbit around Terra. Then, after two circums, call it three more hours, we should start injection into landing program—if Poona Ground Control didn't change its feeble mind and leave us in orbit. Reminded self that was unlikely; grain is not left in vacuum longer than necessary. Has tendency to become puffed wheat or popped corn, which not only lowers value but can split those thin canisters like a melon. Wouldn't that be sweet? Why had they packed us in with grain? Why not just a load of rock that doesn't mind vacuum?

Had time to think about that and to become very thirsty. Took nipple for half a mouthful, no more, because certainly did not want to take six gees with a full bladder. (Need not have worried; was equipped with catheter. But did not know.)

When time got short I decided couldn't hurt Prof to give him a jolt of drug that was supposed to take him through heavy acceleration; then, after in parking orbit, give him heart stimulant—since didn't seem as if anything could hurt him.

Gave him first drug, then spent rest of minutes struggling back into straps, one-handed. Was sorry I didn't know name of my helpful friend; could have cursed him better.

Ten gees gets you into parking orbit around Terra in a mere 3.26 x 107 microseconds; merely seems longer, ten gravities being sixty times what a fragile sack of protoplasm should be asked to endure. Call it thirty-three seconds. My truthful word, I suspect my ancestress in Salem spent a worse half minute day they made her dance.

Gave Prof heart stimulant, then spent three hours trying to decide whether to drug self as well as Prof for landing sequence. Decided against. All drug had done for me at catapulting had been to swap a minute and a half of misery and two days of boredom for a century of terrible dreams—and besides, if those last minutes were going to be my very last, I decided to experience them. Bad as they would be, they were my very own and I would not give them up.

They were bad. Six gees did not feel better than ten; felt worse. Four gees no relief. Then we were kicked harder. Then suddenly, just for seconds, in free fall again. Then came splash which was *not* "gentle" and which we took on straps, not pads, as we went in headfirst. Also, don't think Mike realized that, after diving in hard, we would then surface and splash hard again before we damped down into floating. Earthworms call it "floating" but is nothing like floating in free fall; you do it at one gee, six times what is decent, and odd side motions tacked on. *Very* odd motions— Mike had assured us that solar weather was good, no radiation danger inside that Iron Maiden. But he had not been so interested in Earthside Indian Ocean weather; prediction was acceptable for landing barges and suppose he felt that was good enough—and I would have thought so, too.

Stomach was supposed to be empty. But I filled helmet with sourest, nastiest fluid you would ever go a long way to avoid. Then we turned completely over and I got it in hair and eyes and some in nose. This is thing earthworms call "seasickness" and is one of many horrors they take for granted.

Won't go into long period during which we were towed into port. Let it stand that, in addition to seasickness, my air bottles were playing out. They were rated for twelve hours, plenty for a fifty-hour orbit most of which I was unconscious and none involving heavy exercise, but not quite enough with some hours of towing added. By time barge finally held still I was almost too dopy to care about trying to break out.

Except for one fact— We were picked up, I think, and tumbled a bit, then brought to rest with me upside down. This is a no-good position at best under one gravity; simply impossible when supposed to a) unstrap self, b) get out of suit-shaped cavity, c) get loose a sledgehammer fastened with butterfly nuts to bulkhead. d) smash same against breakaways guarding escape hatch, e) batter way out, and f) finally, drag an old man in a p-suit out after you.

Didn't finish step a); passed out head downwards.

Lucky this was emergency-last-resort routine. Stu LaJoie had been notified before we left; news services had been warned shortly before we landed. I woke up with people leaning over me, passed out again, woke up second time in hospital bed, flat on back with heavy feeling in chest—was heavy and weak all over—but not ill, just tired, bruised, hungry, thirsty, languid. Was a transparent plastic tent over bed which accounted for fact I was having no trouble breathing.

At once was closed in on from both sides, a tiny Hindu nurse with big eyes on one side, Stuart LaJoie on other. He grinned at me, "Hi, cobber! How do you feel?"

"Uh . . . I'm right. But oh *bloody!* What a way to travel!"

"Prof says it's the only way. What a tough old boy he is."

"Hold it. *Prof* said? Prof is dead."

"Not at all. Not in good shape—we've got him in a pneumatic bed with a round-the-clock watch and more instruments wired into him than you would believe. But he's alive and will be able to do his job. But, truly, he didn't mind the trip; he never knew about it, so he says. Went to sleep in one hospital, woke up in another. I thought he was wrong when he refused to let me wangle it to send a ship but he was not—the publicity has been *tremendous!*"

I said slowly, "You say Prof 'refused' to let you send a ship?"

"I should say 'Chairman Selene' refused. Didn't you see the dispatches, Mannie?"

"No." Too late to fight over it. "But last few days have been busy."

"A dinkum word! Here, too—don't recall when last I dossed."

"You sound like a Loonie."

"I *am* a Loonie, Mannie, don't ever doubt it. But the sister is looking daggers at me." Stu picked her up, turned her around. I decided he wasn't all Loonie yet. But nurse didn't resent. "Go play somewhere else, dear, and I'll give your patient back to you—still warm—in a few minutes." He shut a door on her and came back to bed. "But Adam was right; this way was not only wonderful publicity but safer."

"Publicity, I suppose. But 'safer'? Let's not talk about!"

"Safer, my old. You weren't shot at. Yet they had two hours in which they knew right where you were, a big fat target. They couldn't make up their minds what to do; they haven't formed a policy yet. They didn't even dare not bring you down on schedule; the news was full of it, I had stories slanted and waiting. Now they don't dare touch you, you're popular heroes. Whereas if I had waited to charter a ship and fetch you . . . Well, I don't know. We probably would have been ordered into parking orbit; then you two—and myself, perhaps—would have been taken off under arrest. No skipper is going to risk missiles no matter how much he's paid. The proof of the pudding, cobber. But let me brief you. You're both citizens of The People's Directorate of Chad, best I could do on short notice. Also, Chad has recognized Luna. I had to buy one prime minister, two generals, some tribal chiefs and a minister of finance—cheap for such a hurry-up job. I haven't been able to get you diplomatic immunity but I hope to, before you leave hospital. At present they haven't even dared arrest you; they can't figure out what you've done. They have guards outside but simply for your 'protection'—and a good thing, or you would have reporters nine deep shoving microphones into your face."

"Just what have we done?—that they know about, I mean. Illegal immigration?"

"Not even that, Mannie. You never were a consignee and you have derivative PanAfrican citizenship through one of your grandfathers, no huhu. In Professor de la Paz's case we dug up proof that he had been granted naturalized Chad citizenship forty years back, waited for the ink to dry, and used it. You're not even illegally entered here in India. Not only did they bring you down themselves, knowing that you were in that barge, but also a control officer very kindly and fairly cheaply stamped your virgin passports. In addition to that, Prof's exile has no legal existence as the government that proscribed him no longer exists and a competent court has taken notice—that was more expensive."

Nurse came back in, indignant as a mother cat. "Lord Stuart you *must* let my patient rest!"

"At once, ma chere."

"You're 'Lord Stuart'?"

"Should be 'Comte.' Or I can lay a dubious claim to being the Macgregor. The blue-blood bit helps; these people haven't been happy since they took their royalty away from them."

As he left he patted her rump. Instead of screaming, she wiggled it. Was smiling as she came over to me. Stu was going to have to watch that stuff when he went back to Luna. If did.

She asked how I felt. Told her I was right, just hungry. "Sister, did you see some prosthetic arms in our luggage?"

She had and I felt better with number-six in place. Had selected it and number-two and social arm as enough for trip. Number-two was presumably still in Complex; I hoped somebody was taking care of it. But number-six is most all-around useful arm; with it and social one I'd be okay.

Two days later we left for Agra to present credentials to Federated Nations. I was in bad shape and not just high gee; could do well enough in a wheel chair and could even walk a little although did not in public. What I had was a sore throat that missed pneumonia only through drugs, traveler's trots, skin disease on hands and spreading to feet—just like my other trips to that disease-ridden hole, Terra. We Loonies don't know how lucky we are, living in a place that has tightest of quarantines, almost no vermin and what we have controlled by vacuum anytime necessary. Or unlucky, since we have almost no immunities if turns out we need them. Still, wouldn't swap; never heard word "venereal" until first went Earthside and had thought "common cold" was state of ice miner's feet.

And wasn't cheerful for other reason. Stu had fetched us a message from Adam Selene; buried in it, concealed even from Stu, was news that chances had dropped to worse than one in a hundred. Wondered what point in risking crazy trip if made odds worse? Did Mike really *know* what chances were? Couldn't see any way he could compute them no matter how many facts he had.

But Prof didn't seem worried. He talked to platoons of reporters, smiled at endless pictures, gave out statements, telling world he placed great confidence in Federated Nations and was sure our just claims would be recognized and that he wanted to thank "Friends of Free Luna" for wonderful help in bringing true story of our small but sturdy nation before good people of Terra—F. of F.L. being Stu, a professional public opinion firm, several thousand chronic petition signers, and a great stack of Hong Kong dollars.

I had picture taken, too, and tried to smile, but dodged questions by pointing to throat and croaking.

In Agra we were lodged in a lavish suite in hotel that had once been palace of a maharajah (and still belonged to him, even though India is supposed to be socialist) and interviews and picture-taking went on—hardly dared get out of wheel chair even to visit W.C. as was under orders from Prof *never* to be photographed vertically. He was always either in bed or in a stretcher—bed baths, bedpans, everything—not only because safer, considering age, and easier for any Loonie, but also for pictures. His dimples and wonderful, gentle, persuasive personality were displayed in hundreds of millions of video screens, endless news pictures.

But his personality did not get us anywhere in Agra. Prof was carried to office of President of Grand Assembly, me being pushed alongside, and there he attempted to present his credentials as Ambassador to F.N. and prospective Senator for Luna—was referred to Secretary General and at his offices we were granted ten minutes with assistant secretary who sucked teeth and said he could accept our credentials "without prejudice and without implied commitment." They were referred to Credentials Committee—who sat on them.

I got fidgety. Prof read Keats. Grain barges continued to arrive at Bombay.

In a way was not sorry about latter. When we flew from Bombay to Agra we got up before dawn and were taken out to field as city was waking. Every Loonie has his hole, whether luxury of a long-established home like Davis Tunnels or rock still raw from drill; cubic is no problem and can't be for centuries.

Bombay was bee-swarms of people. Are over million (was told) who have no home but some piece of pavement. A family might claim right (and hand down by will, generation after generation) to sleep on a piece two meters long and one wide at a described location in front of a shop. Entire family sleeps on that space, meaning mother, father, kids, maybe a grandmother. Would not have believed if had not seen. At dawn in Bombay roadways, side pavements, even bridges are covered with tight carpet of human bodies. What do they do? Where do they work? How do they *eat?* (Did not look as if they did. Could count ribs.)

If I hadn't believed simple arithmetic that you can't ship stuff downhill forever without shipping replacement back, would have tossed in cards. But. . . tanstanfl. "There ain't no such thing as a free lunch," in Bombay or in Luna.

At last we were given appointment with an "Investigating Committee." Not what Prof had asked for. He had requested public hearing before Senate, complete with video cameras. Only camera at this session was its "in-camera" nature; was closed. Not *too* closed, I had little recorder. But no video. And took Prof two minutes to discover that committee was actually vips of Lunar Authority or their tame dogs.

Nevertheless was chance to talk and Prof treated them as if they had power to recognize Luna's independence and willingness to do so. While they treated us as a cross between naughty children and criminals up for sentencing.

Prof was allowed to make opening statement. With decorations trimmed away was assertion that Luna was defacto a sovereign state, with an unopposed government in being, a civil condition of peace and order, a provisional president and cabinet carrying on necessary functions but anxious to return to private life as soon as Congress completed writing a constitution—and that we were here to ask that these facts be recognized de-jure and that Luna be allowed to take her rightful place in councils of mankind as a member of Federated Nations.

What Prof told them bore a speaking acquaintance with truth and they were not where they could spot discrepancies. Our "provisional president" was a computer, and "cabinet" was Wyoh, Finn, Comrade Clayton, and Terence Sheehan, editor of *Pravda,* plus Wolfgang Korsakov, board chairman of LuNoHoCo and a director of Bank of Hong Kong in Luna. But Wyoh was only person now in Luna who knew that "Adam Selene" was false face for a computer. She had been terribly nervous at being left to hold fort alone.

As it was, Adam's "oddity" in never being seen save over video was always an embarrassment. We had done our best to turn it into a "security necessity" by opening offices for him in cubic of Authority's Luna City office and then exploding a small bomb. After this "assassination attempt" comrades who had been most fretful about Adam's failure to stir around became loudest in demands that Adam must not take any chances—this being helped by editorials.

But I wondered while Prof was talking what these pompous chooms would think if they knew that our "president" was a collection of hardware owned by Authority?

But they just sat staring with chill disapproval, unmoved by Prof's rhetoric—probably best performance of his life considering he delivered it flat on back, speaking into a microphone without notes, and hardly able to see his audience.

Then they started in on us. Gentleman member from Argentina—never given their names; we weren't socially acceptable—this Argentino objected to phrase "former Warden" in Prof's speech; that designation had been obsolete half a century; he insisted that it be struck out and proper title inserted: "Protector of the Lunar Colonies by Appointment of the Lunar Authority." Any other wording offended dignity of Lunar Authority.

Prof asked to comment; "Honorable Chairman" permitted it. Prof said mildly that he accepted change since Authority was free to designate its servants in any fashion it pleased and was no intention to offend dignity of any agency of Federated Nations. . . but in view of functions of this office—former functions of this former office—citizens of Luna Free State would probably go on thinking of it by traditional name.

That made about six of them try to talk at once. Somebody objected to use of word “Luna” and still more to “Luna Free State”—it was “the Moon,” Earth’s Moon, a satellite of Earth and property of Federated Nations, just as Antarctica was—and these proceedings were a farce.

Was inclined to agree with last point. Chairman asked gentleman member from North America to please be in order and to address his remarks through Chair. Did Chair understand from witness’s last remark that this alleged defacto regime intended to interfere with consignee system?

Prof fielded that and tossed it back. “Honorable Chairman, I myself was a consignee, now Luna is my beloved home. My colleague, the Honorable the Undersecretary for Foreign Affairs Colonel O’Kelly Davis”—myself!—“is Luna born, and proud of his descent from four transported grandparents. Luna has grown strong on your outcasts. Give us your poor, your wretched; we welcome them. Luna has room for them, nearly forty million square kilometers, an area greater than all Africa—and almost totally empty. More than that, since by our method of living we occupy not ‘area’ but ‘cubic’ the mind cannot imagine the day when Luna would refuse another shipload of weary homeless.”

Chairman said, “The witness is admonished to refrain from making speeches. The Chair takes it that your oratory means that the group you represent agrees to accept prisoners as before.”

“No, sir.”

“What? Explain yourself.”

“Once an immigrant sets foot on Luna today he is a free man, no matter what his previous condition, free to go where he listeth.”

“So? Then what’s to keep a consignee from walking across the field, climbing into another ship, and returning here? I admit that I am puzzled at your apparent willingness to accept them. . . but *we* do not want them. It is our humane way of getting rid of incorrigibles who would otherwise have to be executed.”

(Could have told him several things that would stop what he pictured; he had obviously never been to Luna. As for “incorrigibles,” if really are, Luna eliminates such faster than Terra ever did. Back when I was very young, they sent us a gangster lord, from Los Angeles I believe; he arrived with squad of stooges, his bodyguards, and was cockily ready to take over Luna, as was rumored to have taken over a prison somewhere Earthside.

(None lasted two weeks. Gangster boss didn't make it to barracks; hadn't listened when told how to wear a p-suit.)

"There is nothing to keep him from going home so far as we are concerned, sir," Prof answered, "although your police here on Terra might cause him to think. But I've never heard of a consignee arriving with funds enough to buy a ticket home. Is this truly an issue? The ships are yours; Luna has no ships—and let me add that we are sorry that the ship scheduled for Luna this month was canceled. I am not complaining that it forced on my colleague and myself—Prof stopped to smile—a most informal method of travel. I simply hope that this does not represent policy. Luna has no quarrel with you; your ships are welcome, your trade is welcome, we are at peace and wish to stay so. Please note that all scheduled grain shipments have come through on time."

(Prof did always have gift for changing subject.)

They fiddled with minor matters then. Nosy from North America wanted to know what had really happened to "the Ward—" He stopped himself. "The Protector. Senator Hobart" Prof answered that he had suffered a stroke (a "coup" is a "stroke") and was no longer able to carry out his duties—but was in good health otherwise and receiving constant medical care. Prof added thoughtfully that he suspected that the old gentleman had been failing for some time, in view of his indiscretions this past year. . . especially his many invasions of rights of free citizens, including ones who were not and never had been consignees.

Story was not hard to swallow. When those busy scientists managed to break news of our coup, they had reported Warden as dead. . . whereas Mike had kept him alive and on job by impersonating him. When Authority Earthside demanded a report from Warden on this wild rumor, Mike had consulted Prof, then had accepted call and given a convincing imitation of senility, managing to deny, confirm, and confuse every detail. Our announcements followed, and thereafter Warden was no longer available even in his computer alter ego. Three days later we declared independence.

This North American wanted to know what reason they had to believe that one word of this was true? Prof smiled most saintly smile and made effort to spread thin hands before letting them fall to coverlet. "The gentleman member from North America is urged to go to Luna, visit Senator Hobart's sickbed, and see for himself. Indeed all Terran citizens are invited to visit Luna at any time, see anything. We wish to be friends, we are at peace, we have nothing to hide. My only regret is that my country is unable to furnish transportation; for that we must turn to you."

Chinee member looked at Prof thoughtfully. He had not said a word but missed nothing.

Chairman recessed hearing until fifteen hundred. They gave us a retiring room and sent in lunch. I wanted to talk but Prof shook head, glanced around room, tapped ear. So I shut up. Prof napped then and I leveled out my wheel chair and joined him; on Terra we both slept all we could. Helped. Not enough.

They didn't wheel us back in until sixteen hundred; committee was already sitting. Chairman then broke own rule against speeches and made a long one more-in-sorrow-than-anger.

Started by reminding us that Luna Authority was a nonpolitical trusteeship charged with solemn duty of insuring that Earth's satellite the Moon—Luna, as some called it—was never used for military purposes. He told us that Authority had guarded this sacred trust more than a century, while governments fell and new governments rose, alliances shifted and shifted again—indeed, Authority was older than Federated Nations, deriving original charter from an older international body, and so well had it kept that trust that it had lasted through wars and turmoils and realignments.

(This is news? But you see what he was building towards.)

"The Lunar Authority cannot surrender its trust," he told us solemnly. "However, there appears to be no insuperable obstacle to the Lunar colonists, if they show political maturity, enjoying a degree of autonomy. This can be taken under advisement. Much depends on your behavior. The behavior, I should say, of all you colonists. There have been riots and destruction of property; this must not be."

I waited for him to mention ninety dead Goons; he never did. I will never make a statesman; I don't have high-level approach.

"Destroyed property must be paid for," he went on. "Commitments must be met. If this body you call a Congress can guarantee such things, it appears to this committee that this so-called Congress could in time be considered an agency of the Authority for many internal matters. Indeed it is conceivable that a stable local government might, in time, assume many duties now failing on the Protector and even be allowed a delegate, nonvoting, in the Grand Assembly. But such recognition would have to be earned.

"But one thing must be made clear. Earth's major satellite, the Moon, is by nature's law forever the joint property of all the peoples of Earth. It does *not* belong to that handful who by accident of history happen to live there. The sacred trust laid upon the Lunar Authority is and forever must be the supreme law of Earth's Moon."

("—accident of history," huh? I expected Prof to shove it down his throat. I thought he would say— No, never did know what Prof would say. Here's what he did say):

Prof waited through several seconds of silence, then said, "Honorable Chairman, *who is to be exiled this time?"*

"What did you say?"

"Have you decided which one of you is to go into exile? Your Deputy Warden won't take the job"—this was true; he preferred to stay alive. "He is functioning now only because we have asked him to. If you persist in believing that we are not independent, then you must be planning to send up a new warden."

"Protector!"

"Warden. Let us not mince words. Though if we knew who he is to be, we might be happy to call him 'Ambassador.' We might be able to work with him, it might not be necessary to send with him armed hoodlums. . . to rape and murder our women!"

"Order! *Order!* The witness will come to order!"

"It is not I who was not in order, Honorable Chairman. Rape it was and murder most foul. But that is history and now we must look to the future. Whom are you going to exile?"

Prof struggled to raise self on elbow and I was suddenly alert; was a cue. "For you all know, sir, that it is a one-way trip. I was born here. You can see what effort it is for me to return even temporarily to the planet which has disinherited me. We are outcasts of Earth who—"

He collapsed. Was up out of my chair—and collapsed myself, trying to reach him.

Was not all play-acting even though I answered a cue. Is terrible strain on heart to get up suddenly on Terra; thick field grabbed and smashed me to floor.

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Neither of us was hurt and it made juicy news breaks, for I put recording in Stu's hands and he turned it over to his hired men. Nor were all headlines against us; Stu had recording cut and edited and slanted. AUTHORITY TO PLAY ODD MAN OUT?—LUNAR AMBASSADOR COLLAPSES UNDER GRILLING: "OUTCASTS!" HE CRIES—PROF PAZ POINTS FINGER OF SHAME: STORY PAGE 8.

Not all were good; nearest to a favorable story in India was editorial in New India *Times* inquiring whether Authority was risking bread of masses in failing to come to terms with Lunar insurgents. Was suggested that concessions could be made if would insure increased grain deliveries. Was filled with inflated statistics; Luna did *not* feed "a hundred million Hindus"— unless you chose to think of our grain as making difference between malnutrition and starvation.

On other hand biggest New York paper opined that Authority had made mistake in treating with us at all, since only thing convicts understood was taste of lash—troops should land, set us in order, hang guilty, leave forces to keep order.

Was a quick mutiny, quickly subdued, in Peace Dragoons regiment from which our late oppressors had come, one started by rumor that they were to be shipped to Moon. Mutiny not hushed up perfectly; Stu hired good men.

Next morning a message reached us inquiring if Professor de la Paz was well enough to resume discussions? We went, and committee supplied doctor and nurse to watch over Prof. But this time we were searched—and a recorder removed from my pouch.

I surrendered it without much fuss; was Japanese job supplied by Stu—to be surrendered. Number-six arm has recess intended for a power pack but near enough size of my minirecorder. Didn't need power that day—and most people, even hardened police officers, dislike to touch a prosthetic.

Everything discussed day before was ignored. . . except that chairman started session by scolding us for "breaking security of a closed meeting."

Prof replied that it had not been closed so far as we were concerned and that we would welcome newsmen, video cameras, a gallery, anyone, as Luna Free State had nothing to hide.

Chairman replied stiffly that so-called Free State did not control these hearings; these sessions were *closed*, not to be discussed outside this room, and that it was so ordered.

Prof looked at me. "Will you help me, Colonel?" I touched controls of chair, scooted around, was shoving his stretcher wagon with my chair toward door before chairman realized bluff had been called. Prof allowed himself to be persuaded to stay without promising anything. Hard to coerce a man who faints if he gets overexcited.

Chairman said that there had been many irrelevancies yesterday and matters discussed best left undiscussed—and that he would permit no digressions today. He looked at Argentino, then at North American.

He went on: "Sovereignty is an abstract concept, one that has been redefined many times as mankind has learned to live in peace. We need not discuss it. The real question, Professor—or even Ambassador defacto, if you like; we shan't quibble—the real question is this: Are you prepared to guarantee that the Lunar Colonies will keep their commitments?"

"What commitments, sir?"

"All commitments, but I have in mind specifically your commitments concerning grain shipments."

"I know of no such commitments, sir," Prof answered with innocence.

Chairman's hand tightened on gavel. But he answered quietly, "Come, sir, there is no need to spar over words. I refer to the quota of grain shipments—and to the increased quota, a matter of thirteen percent, for this new fiscal year. Do we have assurance that you will honor those commitments? This is a minimum basis for discussion, else these talks can go no further."

"Then I am sorry to say, sir, that it would appear that our talks must cease."

"You're not being serious."

"Quite serious, sir. The sovereignty of Free Luna is not the abstract matter you seem to feel it is. These commitments you speak of were the Authority contracting with itself. My country is not bound by such. Any commitments from the sovereign nation I have the honor to represent are still to be negotiated."

"Rabble!" growled North American. "I told you you were being too soft on them. Jailbirds. Thieves and whores. They don't understand decent treatment."

"Order!"

"Just remember, I told you. If I had them in Colorado, we would teach them a thing or two; we know how to handle their sort."

"The gentleman member will please be in order."

"I'm afraid," said Hindu member—Parsee in fact, but committeeman from India—"I'm afraid I must agree in essence with the gentleman member from the North American Directorate. India cannot accept the concept that the grain commitments are mere scraps of paper. Decent people do not play politics with hunger."

"And besides," the Argentino put in, "they breed like animals. Pigs!"

(Prof made me take a tranquilizing drug before that session. Had insisted on seeing me take it.)

Prof said quietly, "Honorable Chairman, may I have consent to amplify my meaning before we conclude, perhaps too hastily, that these talks must be abandoned?"

"Proceed."

"Unanimous consent? Free of interruption?"

Chairman looked around. "Consent is unanimous," he stated, "and the gentlemen members are placed on notice that I will invoke special rule fourteen at the next outburst. The sergeant-at-arms is directed to note this and act. The witness will proceed."

"I will be brief, Honorable Chairman." Prof said something in Spanish; all I caught was "Señor." Argentina turned dark but did not answer. Prof went on, "I must first answer the gentleman member from North America on a matter of personal privilege since he has impugned my fellow countrymen. I for one have seen the inside of more than one jail; I accept the title—nay, I glory in the title of ‘jailbird.’ We citizens of Luna are jailbirds and descendants of jailbirds. But Luna herself is a stern schoolmistress; those who have lived through her harsh lessons have no cause to feel ashamed. In Luna City a man may leave purse unguarded or home unlocked and feel no fear. . . I wonder if this is true in Denver? As may be, I have no wish to visit Colorado to learn a thing or two; I am satisfied with what Mother Luna has taught me. And rabble we may be, but we are now a rabble in arms.

“To the gentleman member from India let me say that we do not ‘play politics with hunger.’ What we ask is an open discussion of facts of nature unbound by political assumptions false to fact. If we can hold this discussion, I can promise to show a way in which Luna can continue grain shipments and expand them enormously. . . to the great benefit of India.”

Both Chinee and Indian looked alert. Indian started to speak, checked himself, then said, “Honorable Chairman, will the Chair ask the witness to explain what he means?”

“The witness is invited to amplify.”

“Honorable Chairman, gentlemen members, there is indeed a way for Luna to expand by tenfold or even a hundred her shipments to our hungry millions. The fact that grain barges continued to arrive on schedule during our time of trouble and are still arriving today is proof that our intentions are friendly. But you do not get milk by beating the cow. Discussions of how to augment our shipments must be based on the facts of nature, not on the false assumption that we are slaves, bound by a work quota we never made. So which shall it be? Will you persist in believing that we are slaves, indentured to an Authority other than ourselves? Or will you acknowledge that we are free, negotiate with us, and learn how we can help you?”

Chairman said, “In other words you ask us to buy a pig in a poke. You demand that we legalize your outlaw status . . . *then* you will talk about fantastic claims that you can increase grain shipments ten-or a hundredfold. What you claim is impossible; I am expert in Lunar economics. And what you ask is impossible; takes the Grand Assembly to admit a new nation.”

Then place it before the Grand Assembly. Once seated as sovreign equals, we will discuss how to increase shipments and negotiate terms. Honorable Chairman, we grow the grain, we *own* it. We can grow far more. But not as slaves. Luna’s soverign freedom must first be recognized.”

“Impossible and you know it. The Lunar Authority cannot abdicate its sacred responsibility.”

Prof sighed. “It appears to be an impasse. I can only suggest that these hearings be recessed while we all take thought. Today our barges are arriving. . . but the moment that I am forced to notify my government that I have failed. . . they. . . will . . . *stop!*"

Prof's head sank back on pillow as if it had been too much for him —as may have been. I was doing well enough but was young and had had practice in how to visit Terra and stay alive. A Loonie his age should not risk it. After minor foofooraw which Prof ignored they loaded us into a lorry and scooted us back to hotel. Once under way I said, "Prof, what was it you said to Señor Jellybelly that raised blood pressure?"

He chuckled. "Comrade Stuart's investigations of these gentlemen turn up remarkable facts. I asked who owned a certain brothel off Calle Florida in B.A. these days and did it now have a star redhead?"

"Why? You used to patronize it?" Tried to imagine Prof in such!

"Never. It has been forty years since I was last in Buenos Aires. *He* owns that establishment, Manuel, through a dummy, and his wife, a beauty with Titian hair, once worked in it."

Was sorry had asked. "Wasn't that a foul blow? And undiplomatic?"

But Prof closed eyes and did not answer.

He was recovered enough to spend an hour at a reception for newsmen that night, with white hair framed against a purple pillow and thin body decked out in embroidered pajamas. Looked like vip corpse at an important funeral, except for eyes and dimples. I looked mighty vip too, in black and gold uniform which Stu claimed was Lunar diplomatic uniform of my rank. Could have been, if Luna had had such things—did not or I would have known. I prefer a p-suit; collar was tight. Nor did I ever find out what decorations on it meant. A reporter asked me about one, based on Luna at crescent as seen from Terra; told him it was a prize for spelling. Stu was in earshot and said, "The Colonel is modest. That decoration is of the same rank as the Victoria Cross and in his case was awarded for an act of gallantry on the glorious, tragic day of—"

He led him away, still talking. Stu could lie standing up almost as well as Prof. Me, I have to think out a lie ahead of time.

India newspapers and casts were rough that night; "threat" to stop grain shipments made them froth. Gentlest proposal was to clean out Luna, exterminate us "criminal troglodytes" and replace us with "honest Hindu peasants" who understood sacredness of life and would ship grain and more grain.

Prof picked that night to talk and give handouts about Luna's inability to continue shipments, and why—and Stu's organization spread release throughout Terra. Some reporters took time to dig out sense of figures and tackled Prof on glaring discrepancy:

"Professor de la Paz, here you say that grain shipments will dwindle away through failure of natural resources and that by 2082 Luna won't even be able to feed its own people. Yet earlier today you told the Lunar Authority that you could increase shipments a dozen times or more."

Prof said sweetly, "That committee is the Lunar Authority?"

"Well. . . it's an open secret."

"So it is, sir, but they have maintained the fiction of being an impartial investigating committee of the Grand Assembly. Don't you think they should disqualify themselves? So that we could receive a fair hearing?"

"Uh. . . it's not my place to say, Professor. Let's get back to my question. How do you reconcile the two?"

"I'm interested in why it's not your place to say, sir. Isn't it the concern of every citizen of Terra to help avoid a situation which will produce war between Terra and her neighbor?"

" '*War*'? What in the world makes you speak of 'war,' Professor?"

"Where else can it end, sir? If the Lunar Authority persists in its intransigence? We *cannot* accede to their demands; those figures show why. If they will not see this, then they will attempt to subdue us by force. . . and we will fight back. Like cornered rats—for cornered we are, unable to retreat, unable to surrender. *We* do not choose war; we wish to live in peace with our neighbor planet—in peace and peacefully trade. But the choice is not ours. We are small, you are gigantic. I predict that the next move will be for the Lunar Authority to attempt to subdue Luna by force. This 'peace-keeping' agency will start the first interplanetary war."

Journalist frowned. "Aren't you overstating it? Let's assume the Authority—or the Grand Assembly, as the Authority hasn't any warships of its own—let's suppose the nations of Earth decide to displace your, uh, 'government.' You might fight, on Luna—I suppose you would. But that hardly constitutes interplanetary war. As you pointed out, Luna has no ships. To put it bluntly, you can't reach us."

I had chair close by Prof's stretcher, listening. He turned to me. "Tell them, Colonel."

I parroted it. Prof and Mike had worked out stock situation. I had memorized and was ready with answers. I said, "Do you gentlemen remember the *Pathfinder*? How she came plunging in, out of control?"

They remembered. Nobody forgets greatest disaster of early days of space flight when unlucky *Pathfinder* hit a Belgian village.

"We have no ships," I went on, "but would be possible to *throw* those bargeloads of grain.. . instead of delivering them into parking orbit."

Next day this evoked a headling: LOONIES THREATEN TO

THROW RICE. At moment it produced awkward silence.

Finally journalist said, “Nevertheless I would like to know how you reconcile your two statements—no more grain after 2082. . . and ten or a hundred times as much.”

“There is no conflict,” Prof answered. “They are based on different sets of circumstances. The figures you have been looking at show the present circumstances . . . and the disaster they will produce in only a few years through drainage of Luna’s natural resources—disaster which these Authority bureaucrats—or should I say ‘authoritarian bureaucrats?’—would avert by telling us to stand in the corner like naughty children!”

Prof paused for labored breathing, went on: “The circumstances under which we can continue, or greatly increase, our grain shipments are the obvious corollary of the first. As an old teacher I can hardly refrain from classroom habits; the corollary should be left as an exercise for the student. Will someone attempt it?”

Was uncomfortable silence, then a little man with strange accent said slowly, “It sound to me as if you talk about way to replenish natural resource.”

“Capital! Excellent!” Prof flashed dimples. “You, sir, will have a gold star on your term report! To make grain requires water and plant foods—phosphates, other things, ask the experts. Send these things to us; we’ll send them back as wholesome grain. Put down a hose in the limitless Indian Ocean. Line up those millions of cattle here in India; collect their end product and ship it to us. Collect your own night soil—don’t bother to sterilize it; we’ve learned to do such things cheaply and easily. Send us briny sea water, rotten fish, dead animals, city sewage, cow manure, offal of any sort—and we will send it back, tonne for tonne as golden grain. Send ten times as much, we’ll send back ten times as much grain. Send us your poor, your dispossessed, send them by thousands and hundreds of thousands; we’ll teach them swift, efficient Lunar methods of tunnel farming and ship you back unbelievable tonnage. Gentlemen, Luna is one enormous fallow farm, four thousand million hectares, waiting to be plowed!”

That startled them. Then someone said slowly, “But what do you get out of it? Luna, I mean.”

Prof shrugged. “Money. In the form of trade goods. There are many things you make cheaply which are dear in Luna. Drugs. Tools. Book films. Gauds for our lovely ladies. Buy our grain and you can sell to us at a happy profit.”

A Hindu journalist looked thoughtful, started to write. Next to him was a European type who seemed unimpressed. He said, “Professor, have you any idea of the *cost* of shipping that much tonnage to the Moon?”

Prof waved it aside. “A technicality. Sir, there was a time when it was not simply expensive to ship goods across oceans but impossible. Then it was expensive, difficult, dangerous. Today you sell goods half around your planet almost as cheaply as next door; long-distance shipping is the least important factor in cost. Gentlemen, I am not an engineer. But I have learned this about engineers. When something *must* be done, engineers can find a way that is economically feasible. If you *want* the grain that we can grow, turn your engineers loose.” Prof gasped and labored, signaled for help and nurses wheeled him away.

I declined to be questioned on it, telling them that they must talk to Prof when he was well enough to see them. So they pecked at me on other lines. One man demanded to know why, since we paid no taxes, we colonists thought we had a right to run things our own way? After all, those colonies had been established by Federated Nations—by some of them. It had been terribly expensive. Earth had paid all bills—and now you colonists enjoy benefits and pay not one dime of taxes. Was that fair?

I wanted to tell him to blow it. But Prof had again made me take a tranquilizer and had required me to swot that endless list of answers to trick questions. “Lets take that one at a time,” I said. “First, what is it you want us to pay taxes *for*? Tell me what I get and perhaps I’ll buy it. No, put it this way. Do *you* pay taxes?”

“Certainly I do! And so should you.”

“And what do you get for your taxes?”

“Huh? Taxes pay for government.”

I said, “Excuse me, I’m ignorant. I’ve lived my whole life in Luna, I don’t know much about your government. Can you feed it to me in small pieces? What do you get for your money?”

They all got interested and anything this aggressive little choom missed, others supplied. I kept a list. When they stopped, I read it back:

“Free hospitals—aren’t any in Luna. Medical insurance—we have that but apparently not what you mean by it. If a person wants insurance, he goes to a bookie and works out a bet. You can hedge anything, for a price. I don’t hedge my health, I’m healthy. Or was till I came here. We have a public library, one Carnegie Foundation started with a few book films. It gets along by charging fees. Public roads. I suppose that would be our tubes. But they are no more free than air is free. Sorry, you have free air here, don’t you? I mean our tubes were built by companies who put up money and are downright nasty about expecting it back and then some. Public schools. There are schools in all warrens and I never heard of them turning away pupils, so I guess they are ‘public.’ But they pay well, too, because anyone in

Luna who knows something useful and is willing to teach it charges all the traffic will bear."

I went on: "Let's see what else—Social security. I'm not sure what that is but whatever it is, we don't have it. Pensions. You can buy a pension. Most people don't; most families are large and old people, say a hundred and up, either fiddle along at something they like, or sit and watch video. Or sleep. They sleep a lot, after say a hundred and twenty."

"Sir, excuse me. Do people *really* live as long on the Moon as they say?"

I looked surprised but wasn't; this was a "simulated question" for which an answer had been taped. "Nobody knows how long a person will live in Luna; we haven't been there long enough. Our oldest citizens were born Earthside, it's no test. So far, no one born in Luna died of old age, but that's still no test; they haven't had time to grow old yet, less than a century. But— Well, take me, madam; how old would you say I am? I'm authentic Loonie, third generation."

"Uh, truthfully, Colonel Davis, I was surprised at your youthfulness —for this mission, I mean. You appear to be about twentytwo. Are you older? Not much, I fancy."

"Madam, I regret that your local gravitation makes it impossible for me to bow. Thank you. I've been married longer than that."

"What? Oh, you're jesting!"

"Madam, I would never venture to guess a lady's age but, if you will emigrate to Luna, you will keep your present youthful loveliness much longer and add at least twenty years to your life." I looked at list. "I'll lump the rest of this together by saying we don't have any of it in Luna, so I can't see any reason to pay taxes for it. On that other point, sir, surely you know that the initial cost of the colonies has long since been repaid several times over through grain shipments alone? We are being bled white of our most essential resources. . .and not even being paid an open-market price. That's why the Lunar Authority is being stubborn; they intend to go on bleeding us. The idea that Luna has been an expense to Terra and the investment must be recovered is a lie invented by the Authority to excuse their treating us as slaves. The truth is that Luna has not cost Terra one dime this century—and the original investment has long since been paid back."

He tried to rally. "Oh, surely you're not claiming that the Lunar colonies have paid all the billions of dollars it took to develop space flight?"

"I could present a good case. However there is no excuse to charge that against *us*. You have space flight, you people of Terra. *We* do *not*. Luna has not one ship. So why should we pay for what we never received? It's like the rest of this list. We don't get it, why should we pay for it?"

Had been stalling, waiting for a claim that Prof had told me I was sure to hear. . . and got it at last.

"Just a moment, please!" came a confident voice. "You ignored the two most important items on that list. Police protection and armed forces. You boasted that you were willing to pay for what you get. . . so how about paying almost a century of back taxes for those two? It should be quite a bill, quite a bill!" He smiled smugly.

Wanted to thank him!—thought Prof was going to chide me for failing to yank it out. People looked at each other and nodded, pleased I had been scored on. Did best to look innocent. "Please? Don't understand. Luna has neither police nor armed forces."

"You know what I mean. You enjoy the protection of the Peace Forces of the Federated Nations. And you do have police. Paid for by the Lunar Authority! I know, to my certain knowledge, that two phalanges were sent to the Moon less than a year ago to serve as policemen."

"Oh." I sighed. "Can you tell me how F.N. peace forces protect Luna? I did not know that any of your nations wanted to attack us. We are far away and have nothing anyone envies. Or did you mean we should pay them to leave us alone? If so, there is an old saying that once you pay Danegeld, you never get rid of the Dane. Sir, we will *fight* F.N. armed forces if we must. . . we shall never *pay* them.

"Now about those so-called 'policemen.' They were not sent to protect us. Our Declaration of Independence told the true story about those hoodlums—did your newspapers print it?" (Some had, some hadn't—depended on country.) "They went mad and started raping and murdering! And now they are *dead!* So don't send us any more troops!"

Was suddenly "tired" and had to leave. Really was tired; not much of an actor and making that talk-talk come out way Prof thought it should was strain.

Was not told till later that I had received an assist in that interview; lead about “police” and “armed forces” had been fed by a stooge; Stu LaJoie took no chances. But by time I knew, I had had experience in handling interviews; we had them endlessly.

Despite being tired was not through that night. In addition to press some Agra diplomatic corps had risked showing up— few and none officially, even from Chad. But we were curiosities and they wanted to look at us.

Only one was important, a Chinee. Was startled to see him; he was Chinee member of committee. I met him, simply as “Dr. Chan” and we pretended to be meeting first time.

He was that Dr. Chan who was then Senator from Great China and also Great China’s longtime number-one boy in Lunar Authority—and, much later, Vice-Chairman and Premier, shortly before his assassin.

After getting out point I was supposed to make, with bonus through others that could have waited, I guided chair to bedroom and was at once summoned to Prof’s. “Manuel, I’m sure you noticed our distinguished visitor from the Middle Kingdom.”

“Old Chinee from committee?”

“Try to curb the Loonie talk, son. Please don’t use it at all here, even with me. Yes. He wants to know what we meant by ‘tenfold or a hundredfold.’ So tell him.”

“Straight? Or swindle?”

“The straight. This man is no fool. Can you handle the technical details?”

“Done my homework. Unless he’s expert in ballistics.”

“He’s not. But don’t pretend to know anything you don’t know. And don’t assume that he’s friendly. But he could be enormously helpful if he concludes that our interests and his coincide. But don’t try to persuade him. He’s in my study. Good luck. And remember—speak standard English.”

Dr. Chan stood up as I came in; I apologized for not standing. He said that he understood difficulties that a gentleman from Luna labored under here and for me not to exert myself—shook hands with himself and sat down.

I’ll skip some formalities. Did we or did we not have some specific solution when we claimed there was a cheap way to ship massive tonnage to Luna?

Told him was a method, expensive in investment but cheap in running expenses. “It’s the one we use on Luna, sir. A catapult, an escape-speed induction catapult.”

His expression changed not at all. “Colonel, are you aware that such has been proposed many times and always rejected for what seemed good reasons? Something to do with air pressure.”

“Yes, Doctor. But we believe, based on extensive analyses by computer and on our experience with catapulting, that today the problem can be solved. Two of our larger firms, the LuNoHo Company and the Bank of Hong Kong in Luna, are ready to head a syndicate to do it as a private venture. They would need help here on Earth and might share voting stock—though they would prefer to sell bonds and retain control. Primarily what they need is a concession from some government, a permanent easement on which to build the catapult. Probably India.”

(Above was set speech. LuNoHoCo was bankrupt if anybody examined books, and Hong Kong Bank was strained; was acting as central bank for country undergoing upheaval. Purpose was to get in last word, “India.” Prof had coached me that this word *must* come *last*.)

Dr. Chan answered, “Never mind financial aspects. Anything which is physically possible can always be made financially possible; money is a bugaboo of small minds. Why do you select India?”

“Well, sir, India now consumes, I believe, over ninety per cent of our grain shipments—”

“Ninety-three point one percent.”

“Yes, sir. India is deeply interested in our grain so it seemed likely that she would cooperate. She could grant us land, make labor and materials available, and so forth. But I mentioned India because she holds a wide choice of possible sites, very high mountains not too far from Terra’s equator. The latter is not essential, just helpful. But the site *must* be a high mountain. It’s that air pressure you spoke of, or air density. The catapult head should be at as high altitude as feasible but the ejection end, where the load travels over eleven kilometers per second, *must* be in air so thin that it approaches vacuum. Which calls for a very high mountain. Take the peak Nanda Devi, around four hundred kilometers from here. It has a railhead sixty kilometers from it and a road almost to its base. It is eight thousand meters high. I don’t know that Nanda Devi is ideal. It is simply a possible site with good logistics; the ideal site would have to be selected by Terran engineers.”

“A higher mountain would be better?”

“Oh, yes, sir!” I assured him. “A higher mountain would be preferred over one nearer the equator. The catapult can be designed to make up for loss in free ride from Earth’s rotation. The difficult thing is to avoid so far as possible this pesky thick atmosphere. Excuse me, Doctor; I did not mean to criticize your planet.”

"There are higher mountains. Colonel, tell me about this proposed catapult."

I started to. "The length of an escape-speed catapult is determined by the acceleration. We think—or the computer calculates—that an acceleration of twenty gravities is about optimum. For Earth's escape speed this requires a catapult three hundred twentythree kilometers in length. Therefore—"

"Stop, please! Colonel, are you seriously proposing to bore a hole over three hundred kilometers deep?"

"Oh, no! Construction has to be above ground to permit shock waves to expand. The stator would stretch nearly horizontally, rising perhaps four kilometers in three hundred and in a straight line—almost straight, as Coriolis acceleration and other minor variables make it a gentle curve. The Lunar catapult is straight so far as the eye can see and so nearly horizontal that the barges just miss some peaks beyond it."

"Oh. I thought that you were overestimating the capacity of present-day engineering. We drill deeply today. Not that deeply. Go on."

"Doctor, it may be that common misconception which caused you to check me is why such a catapult has not been constructed before this. I've seen those earlier studies. Most assumed that a catapult would be vertical, or that it would have to tilt up at the end to toss the spacecraft into the sky—and neither is feasible nor necessary. I suppose the assumption arose from the fact that your spaceships *do* boost straight up, or nearly."

I went on: "But they do that to get above atmosphere, not to get into orbit. Escape speed is not a vector quantity; it is scalar. A load bursting from a catapult at escape speed will not return to Earth no matter what its direction. Uh. . . two corrections: it must not be headed toward the Earth itself but at some part of the sky hemisphere, and it must have enough added velocity to punch through whatever atmosphere it still traverses. If it is headed in the right direction it will wind up at Luna."

"Ah, yes. Then this catapult could be used but once each lunar month?"

"No, sir. On the basis on which you were thinking it would be once every day, picking the time to fit where Luna will be in her orbit. But in fact—or so the computer says; I'm not an astronautics expert—in fact this catapult could be used almost any time, simply by varying ejection speed, and the orbits could still wind up at Luna."

"I don't visualize that."

"Neither do I, Doctor, but— Excuse me but isn't there an exceptionally fine computer at Peiping University?"

“And if there is?” (Did I detect an increase in bland inscrutability? A Cyborg-computer— Pickled brains? Or live ones, aware? Horrible, either way.)

“Why not ask a topnotch computer for all possible ejection times for such a catapult as I have described? Some orbits go far outside Luna’s orbit before returning to where they can be captured by Luna, taking a fantastically long time. Others hook around Terra and then go quite directly. Some are as simple as the ones we use from Luna. There are periods each day when short orbits may be selected. But a load is in the catapult less than one minute; the limitation is how fast the loads can be made ready. It is even possible to have more than one load going up the catapult at a time if the power is sufficient and computer control is versatile. The only thing that worries me is— These high mountains they are covered with snow?”

“Usually,” he answered. “Ice and snow and bare rock.”

“Well, sir, being born in Luna I don t know anything about snow. The stator would not only have to be rigid under the heavy gravity of this planet but would have to withstand dynamic thrusts at twenty gravities. I don t suppose it could be anchored to ice or snow. Or could it be?”

“I’m not an engineer, Colonel, but it seems unlikely. Snow and ice would have to be removed. And kept clear. Weather would be a problem, too.”

“Weather I know nothing about, Doctor, and all I know about ice is that it has a heat of crystallization of three hundred thirty-five million joules per tonne. I have no idea how many tonnes would have to be melted to clear the site, or how much energy would be required to keep it clear, but it seems to me that it might take as large a reactor to keep it free of ice as to power the catapult.”

“We can build reactors, we can melt ice. Or engineers can be sent north for reeducation until they *do* understand ice.” Dr. Chan smiled and I shivered. “However, the engineering of ice and snow was solved in Antarctica years ago; don’t worry about it. A clear, solid-rock site about three hundred fifty kilometers long at a high altitude— Anything else I should know?”

“Not much, sir. Melted ice could be collected near the catapult head and thus be the most massy part of what will be shipped to Luna—quite a saving. Also the steel canisters would be re-used to ship grain to Earth, thus stopping another drain that Luna can’t take. No reason why a canister should not make the trip hundreds of times. At Luna it would be much the way barges are now landed off Bombay, solid-charge retrorockets programmed by ground control—except that it would be much cheaper, two and a half kilometer-seconds change of motion versus eleven-plus, a squared factor of about twenty—but actually even more favorable, as retros are parasitic weight and the payload improves accordingly. There is even a way to improve that."

"How?"

"Doctor, this is outside my specialty. But everybody knows that your best ships use hydrogen as reaction mass heated by a fusion reactor. But hydrogen is expensive in Luna and any mass could be reaction mass; it just would not be as efficient. Can you visualize an enormous, brute-force space tug designed to fit Lunar conditions? It would use raw rock, vaporized, as reaction mass and would be designed to go up into parking orbit, pick up those shipments from Terra, bring them down to Luna's surface. It would be ugly, all the fancies stripped away—might not be manned even by a Cyborg. It can be piloted from the ground, by computer."

"Yes, I suppose such a ship could be designed. But let's not complicate things. Have you covered the essentials about this catapult?"

"I believe so, Doctor. The site is the crucial thing. Take that peak Nanda Devi. By the maps I have seen it appears to have a long, very high ridge sloping to the west for about the length of our catapult. If that is true, it would be ideal—less to cut away, less to bridge. I don't mean that it is *the* ideal site but that is the sort to look for: a very high peak with a long, long ridge west of it."

"I understand." Dr. Chan left abruptly.

Next few weeks I repeated that in a dozen countries, always in private and with implication that it was secret. All that changed was name of mountain. In Ecuador I pointed out that Chimborazo was almost on equator—ideal! But in Argentina I emphasized that their Aconcagua was highest peak in Western Hemisphere. In Bolivia I noted that Altoplano was as high as Tibetan Plateau (almost true), much nearer equator, and offered a wide choice of sites for easy construction leading up to peaks comparable to any on Terra.

I talked to a North American who was a political opponent of that choom who had called us "rabble." I pointed out that, while Mount McKinley was comparable to anything in Asia or South America, there was much to be said for Mauna Loa—extreme ease of construction. Doubling gees to make it short enough to fit, and Hawaii would be Spaceport of World . . . *whole* world, for we talked about day when Mars would be exploited and freight for three (possibly four) planets would channel through their "Big Island."

Never mentioned Mauna Loa's volcanic nature; instead I noted that location permitted an aborted load to splash harmlessly in Pacific Ocean.

In Sovunion was only one peak discussed—Lenin, over thousand meters (and rather too close to their big neighbor).

Kilimanjaro, Popocatepetl, Logan, El Libertado—my favorite peak changed by country; all that we required was that it be "highest mountain" in hearts of locals. I found something to say about modest mountains of Chad when we were entertained there and rationalized so well I almost believed it.

Other times, with help of leading questions from Stu LaJoie's stooges, I talked about chemical engineering (of which I know nothing but had memorized facts) on surface of Luna, where endless free vacuum and sunpower and limitless raw materials and predictable conditions permitted ways of processing expensive or impossible Earthside—when day arrived that cheap shipping both ways made it profitable to exploit Luna's virgin resources, Was always a suggestion that entrenched bureaucracy of Lunar Authority had failed to see great potential of Luna (true), plus answer to a question always asked, which answer asserted that Luna could accept any number of colonists.

This also was true, although never mentioned that Luna (yes, and sometimes Luna's Loonies) killed about half of new chums. But people we talked to rarely thought of emigrating themselves; they thought of forcing or persuading others to emigrate to relieve crowding—and to reduce their own taxes. Kept mouth shut about fact that half-fed swarms we saw everywhere did breed faster than even catapulting could offset.

We could not house, feed, and train even a million new chums each year—and a million wasn't a drop on Terra; more babies than that were conceived every night. We could accept far more than would emigrate voluntarily but if they used forced emigration and flooded us. . . Luna has only one way to deal with a new chum: Either he makes not one fatal mistake, in personal behavior or in coping with environment that will bite without warning. . . or he winds up as fertilizer in tunnel farm.

All that immigration in huge numbers could mean would be that a larger percentage of immigrants would die—too few of us to help them past natural hazards.

However, Prof did most talking about "Luna's great future." I talked about catapults.

During weeks we waited for committee to recall us, we covered much ground. Stu's men had things set up and only question was how much we could take. Would guess that every week on Terra chopped a year off our lives, maybe more for Prof. But he never complained and was always ready to be charming at one more reception.

We spent extra time in North America. Date of our Declaration of Independence, exactly three hundred years after that of North American British colonies, turned out to be wizard propaganda and

Stu's manipulators made most of it. North Americans are sentimental about their "United States" even though it ceased to mean anything once their continent had been rationalized by F.N. They elect a president every eight years, why, could not say—why do British still have Queen?—and boast of being "sovereign." "Sovereign," like "love," means anything you want it to mean; it's a word in dictionary between "sober" and "sozzled."

"Sovereignty" meant much in North America and "Fourth of July" was a magic date; Fourth-of-July League handled our appearances and Stu told us that it had not cost much to get it moving and nothing to keep going; League even raised money used elsewhere—North Americans enjoy giving no matter who gets it.

Farther south Stu used another date; his people planted idea that coup d'etat had been 5 May instead of two weeks later. We were greeted with "Cinco de Mayo! Libertad! Cinco de Mayo!" I thought they were saying, "Thank you"— Prof did all talking.

But in 4th-of-July country I did better. Stu had me quit wearing a left arm in public, sleeves of my costumes were sewed up so that stump could not be missed, and word was passed that I had lost it "fighting for freedom." Whenever I was asked about it, all I did was smile and say, "See what comes of biting nails?"—then change subject.

I never liked North America, even first trip. It is not most crowded part of Terra, has a mere billion people. In Bombay they sprawl on pavements; in Great New York they pack them vertically—not sure anyone sleeps. Was glad to be in invalid's chair.

Is mixed-up place another way; they care about skin color—by making point of how they *don't* care. First trip I was always too light or too dark, and somehow blamed either way, or was always being expected to take stand on things I have no opinions on. Bog knows *I* don't know what genes I have. One grandmother came from a part of Asia where invaders passed as regularly as locusts, raping as they went—why not ask *her*?

Learned to handle it by my second makeelearnee but it left a sour taste. Think I prefer a place as openly racist as India, where if you aren't Hindu, you're nobody—except that Parsees look down on Hindus and vice versa. However I never really had to cope with North America's reverse-racism when being "Colonel O'Kelly Davis, Hero of Lunar Freedom."

We had swarms of bleeding hearts around us, anxious to help. I let them do two things for me, things I had never had time, money, or energy for as a student: I saw Yankees play and I visited Salem.

Should have kept my illusions. Baseball is better over video, you can really see it and aren't pushed in by two hundred thousand other people. Besides, somebody should have shot that outfield. I spent most of that game dreading moment when they would have to get my chair out through crowd—that and assuring host that I was having a wonderful time.

Salem was just a place, no worse (and no better) than rest of Boston. After seeing it I suspected they had hanged wrong witches. But day wasn't wasted; I was filmed laying a wreath on a place where a bridge had been in another part of Boston, Concord, and made a memorized speech—bridge is still there, actually; you can see it, down through glass. Not much of a bridge.

Prof enjoyed it all, rough as it was on him: Prof had great capacity for enjoying. He always had something new to tell about great future of Luna. In New York he gave managing director of a hotel chain, one with rabbit trade mark, a sketch of what could be done with resorts in Luna—once excursion rates were within reach of more people—visits too short to hurt anyone, escort service included, exotic side trips, gambling—no taxes.

Last point grabbed attention, so Prof expanded it into "longer old age" theme—a chain of retirement hostels where an earthworm could live on Terran old-age pension and go on living, twenty, thirty, forty years longer than on Terra. As an exile—but which was better? A live old age in Luna? Or a funeral crypt on Terra? His descendants could pay visits and fill those resort hotels. Prof embellished with pictures of "nightclubs" with acts impossible in Terra's horrible gravity, sports to fit our decent level of gravitation—even talked about swimming pools and ice skating and possibility of *flying!* (Thought he had tripped his safeties.) He finished by hinting that Swiss cartel had tied it up.

Next day he was telling foreign-divisions manager of Chase International Panagra that a Luna City branch should be staffed with paraplegics, paralytics, heart cases, amputees, others who found high gravity a handicap. Manager was a fat man who wheezed, he may have been thinking of it personally—but his ears pricked up at "no taxes."

We didn't have it all our own way. News was often against us and were always hecklers. Whenever I had to take them on without Prof's help I was likely to get tripped. One man tackled me on Prof's statement to committee that we "owned" grain grown in Luna: he seemed to take it for granted that we did not. Told him I did not understand question.

He answered, "Isn't it true, Colonel, that your provisional government has asked for membership in Federated Nations?"

Should have answered, "No comment." But fell for it and agreed. "Very well," he said, "the impediment seems to be the counterclaim that the Moon belongs to the Federated Nations—as it always has—

under supervision of the Lunar Authority. Either way, by your own admission, that grain belongs to the Federated Nations, in trust."

I asked how he reached that conclusion? He answered, "Colonel, you style yourself 'Undersecretary of Foreign Affairs.' Surely you are familiar with the charter of the Federated Nations."

I had skimmed it. "Reasonably familiar," I said— cautiously, I thought.

"Then you know the First Freedom guaranteed by the Charter and its current application through F & A Control Board Administrative Order Number eleven-seventy-six dated three March of this year. You concede therefore that all grain grown on the Moon in excess of the local ration is ab initio and beyond contest the property of all, title held in trust by the Federated Nations through its agencies for distribution as needed." He was writing as he talked. "Have you anything to add to that concession?"

I said, "What in Bog's name you talking about?" Then, "Come back! Haven't conceded anything!"

So *Great New York Times* printed:

LUNAR "UNDERSECRETARY" SAYS:
"FOOD BELONGS TO HUNGRY"

New York Today—O'Kelly Davis, soidisant "Colonel of the Armed Forces of Free Luna" here on a junket to stir up support for the insurgents in the F.N. Lunar colonies, said in a voluntary statement to this paper that the "Freedom from Hunger" clause in the Grand Charter applied to the Lunar grain shipments—

I asked Prof how should have handled? "Always answer an unfriendly question with another question," he told me. "Never ask him to clarify; he'll put words in your mouth. This reporter— Was he skinny? Ribs showing?"

"No. Heavyset."

"Not living on eighteen hundred calories a day, I take it, which is the subject of that order he cited. Had you known you could have asked him how long he had conformed to the ration and why he quit? Or asked him what he had for breakfast—and then looked unbelieving no matter what he answered. Or when you don't know what a man is getting at, let your counter-question shift the subject to something you do want to talk about. Then, no matter what he answers, make your point and call on someone else. Logic does not enter into it—just tactics."

"Prof, *nobody* here is living on eighteen hundred calories a day. Bombay, maybe. Not here."

"Less than that in Bombay. Manuel, that 'equal ration' is a fiction. Half the food on this planet is in the black market, or is not reckoned through one ruling or another. Or they keep two sets of books, and figures submitted to the F.N. having nothing to do with the economy. Do you think that grain from Thailand and Burma and Australia is correctly reported to the Control Board by Great China? I'm sure that the India representative on that food board doesn't. But India keeps quiet because she gets the lion's share from Luna. . . and then 'plays politics with hunger'—a phrase you may remember—by using our grain to control her elections. Kerala had a planned famine last year. Did you see it in the news?"

"No."

"Because it wasn't in the news. A managed democracy is a wonderful thing, Manuel, for the managers.. . and its greatest strength is a 'free press' when 'free' is defined as 'responsible' and the managers define what is 'irresponsible.' Do you know what Luna needs most?"

"More ice."

"A news system that does *not* bottleneck through one channel. Our friend Mike is our greatest danger."

"*Huh?* Don't you trust Mike?"

"Manuel, on some subjects I don't trust even myself. Limiting the freedom of news 'just a little bit' is in the same category with the classic example 'a little bit pregnant.' We are not yet free nor will we be as long as anyone—even our ally Mike—controls our news. Someday I hope to own a newspaper independent of any source or channel. I would happily set print by hand, like Benjamin Franklin."

I gave up. "Prof, suppose these talks fail and grain shipments stop. What happens?"

"People back home will be vexed with us. . . and many here on Terra would die. Have you read Malthus?"

"Don't think so."

"Many would die. Then a new stability would be reached with somewhat more people—more efficient people and better fed. This planet isn't crowded; it is just mismanaged . . . and the unkindest thing you can do for a hungry man is to give him food. 'Give.' Read Malthus. It is never safe to laugh at Dr. Malthus; he always has the last laugh. A depressing man, I'm glad he's dead. But don't read him until this is over; too many facts hamper a diplomat, especially an honest one."

"I'm not especially honest."

"But you have no talent for dishonesty, so your refuge must be ignorance and stubbornness. You have the latter; try to preserve the former. For the nonce. Lad, Uncle Bernardo is terribly tired."

I said, "Sorry," and wheeled out of his room. Prof was hitting too hard a pace. I would have been willing to quit if would insure his getting into a ship and out of that gravity. But traffic stayed one way —grain barges, naught else.

But Prof had fun. As I left and waved lights out, noticed again a toy he had bought, one that delighted him like a kid on Christmas—a brass cannon.

A real one from sailing ship days. Was small, barrel about half a meter long and massing, with wooden carriage, only kilos fifteen. A "signal gun" its papers said. Reeked of ancient history, pirates, men "walking plank." A pretty thing but I asked Prof *why?* If we ever managed to leave, price to lift that mass to Luna would hurt—I was resigned to abandoning a p-suit with years more wear in it—abandon everything but two left arms and a pair of shorts, If pressed, might give up social arm. If very pressed, would skip shorts.

He reached out and stroked shiny barrel. "Manuel, once there was a man who held a political makework job like so many here in this Directorate, shining brass cannon around a courthouse."

"Why would courthouse have cannon?"

"Never mind. He did this for years. It fed him and let him save a bit, but he was not getting ahead in the world. So one day he quit his job, drew out his savings, bought a brass cannon—and went into business for himself."

"Sounds like idiot."

"No doubt. And so were we, when we tossed out the Warden. Manuel, you'll outlive me. When Luna adopts a flag, I would like it to be a cannon *or*, on field *sable*, crossed by bar sinister *gules* of our proudly ignoble lineage. Do you think it could be managed?"

"Suppose so, if you'll sketch. But why a flag? Not a flagpole in all Luna."

"It can fly in our hearts . . . a symbol for all fools so ridiculously impractical as to think they can fight city hall. Will you remember, Manuel?"

"Sure. That is, will remind you when time comes." Didn't like such talk. He had started using oxygen tent in private—and would not use in public.

Guess I'm "ignorant" and "stubborn"—was both in place called Lexington, Kentucky, in Central Managerial Area. One thing no doctrine about, no memorized answers, was life in Luna. Prof said to tell truth and emphasize homely, warm, friendly things, especially anything different. "Remember, Manuel, the thousands of Terrans who have made short visits to Luna are only a tiny fraction of one percent. To most people we will be as weirdly interesting as strange animals in a zoo. Do you remember that turtle on exhibition in Old Dome? That's us."

Certainly did; they wore that insect out, staring at. So when this male-female team started quizzing about family life in Luna was happy to answer. I prettied it only by what I left out—things that aren't family life but poor substitutes in a community overloaded with males, Luna City is homes and families mainly, dull by Terra standards—but I like it. And other warrens much same, people who work and raise kids and gossip and find most of their fun around dinner table. Not much to tell, so I discussed anything they found interesting. Every Luna custom comes from Terra since that's where we all came from, but Terra is such a *big* place that a custom from Micronesia, say, may be strange in North America.

This woman—can't call her lady—wanted to know about various sorts of marriage. First, was it true that one could get married without a license "on" Luna?

I asked what a marriage license was?

Her companion said, "Skip it, Mildred. Pioneer societies never have marriage licenses."

"But don't you keep records?" she persisted.

"Certainly," I agreed. "My family keeps a family book that goes back almost to first landing at Johnson City—every marriage, birth, death, every event of importance not only in direct line but all branches so far as we can keep track. And besides, is a man, a schoolteacher, going around copying old family records all over our warren, writing a history of Luna City. Hobby."

"But don't you have *official* records? Here in Kaintucky we have records that go back hundreds of years."

"Madam, we haven't lived there that long."

"Yes, but— Well, Luna City must have a city clerk. Perhaps you call him 'county recorder.' The official who keeps track of such things. Deeds and so forth."

I said. "Don't think so, madam. Some bookies do notary work, witnessing chops on contracts, keeping records of them. Is for people who don't read and write and can't keep own records. But never heard of one asked to keep record of marriage. Not saying couldn't happen. But haven't heard."

"How delightfully informal! Then this other rumor, about how simple it is to get a divorce on the Moon. I daresay that's true, too?"

"No, madam, wouldn't say divorce is simple. Too much to untangle. Mmm . . . take a simple example, one lady and say she has two husbands—"

"Two?"

"Might have more, might have just one. Or might be complex marriage. But let's take one lady and two men as typical. She decides to divorce one. Say it's friendly, with other husband agreeing and one she is getting rid of not making fuss. Not that it would do him any good. Okay, she divorces him; he leaves. Still leaves endless things. Men might be business partners, co-husbands often are. Divorce may break up partnership. Money matters to settle. This three may own cubic together, and while will be in her name, ex-husband probably has cash coming or rent. And almost always are children to consider, support and so forth. Many things. No, madam, divorce is never simple. Can divorce him in ten seconds but may take ten years to straighten out loose ends. Isn't it much that way here?"

"Uh . . . just fuhget ah evah asked the question, Cunn'l; it may be simpluh hyuh." (She did talk that way but was understandable once I got program. Won't spell it again.) "But if that is a *simple* marriage, what is a 'complex' one?"

Found self explaining polyandries, clans, groups, lines, and less common patterns considered vulgar by conservative people such as my own family—deal my mother set up, say, after she ticked off my old man, though didn't describe that one; Mother was always too extreme.

Woman said, "You have me confused. What is the difference between a line and a clan?"

Are quite different. Take own case. I have honor to be member of one of oldest line marriages in Luna—and, in my prejudiced opinion, best. You asked about divorce. Our family has never had one and would bet long odds never will. A line marriage increases in stability year after year, gains practice in art of getting along together, until notion of anybody leaving is unthinkable. Besides, takes unanimous decision of all wives to divorce a husband—could never happen. Senior wife would never let it get that far."

Went on describing advantages—financial security, fine home life it gives children, fact that death of a spouse, while tragic, could never be tragedy it was in a temporary family, especially for children—children simply could *not* be orphaned. Suppose I waxed too enthusiastic—but my family is most important thing in my life. Without them I'm just one-armed mechanic who could be eliminated without causing a draft.

"Here's why is stable," I said. "Take my youngest wife, sixteen. Likely be in her eighties before is senior wife. Doesn't mean all wives senior to her will die by then; unlikely in Luna, females seem to be immortal. But may all opt out of family management by then; by our family traditions they usually do, without younger wives putting pressure on them. So Ludmilla—"

"Ludmilla?"

"Russki name. From fairy tale. Milla will have over fifty years of good example before has to carry burden. She's sensible to start with, not likely to make mistakes and if did, has other wives to steady her. Self-correcting, like a machine with proper negative feedback. A good line marriage is immortal; expect mine to outlast me at least a thousand years—and is why shan't mind dying when time comes; best part of me will go on living."

Prof was being wheeled out; he had them stop stretcher cart and listened. I turned to him. "Professor," I said, "you know my family. Would mind telling this lady why it's a happy family? If you think so."

"It is," agreed Prof. "However, I would rather make a more general remark. Dear madam, I gather that you find our Lunar marriage customs somewhat exotic."

"Oh, I wouldn't go that far!" she said hastily. "Just somewhat *unusual*."

"They arise, as marriage customs always do, from economic necessities of the circumstances—and our circumstances are very different from those here on Earth. Take the line type of marriage which my colleague has been praising . . and justifiably, I assure you, despite his personal bias—I am a bachelor and have no bias. Line marriage is the strongest possible device for conserving capital and insuring the welfare of children—the two basic societal functions for marriage everywhere—in an enviroment in which there is *no* security, neither for capital nor for children, other than that devised by individuals. Somehow human beings always cope with their environments. Line marriage is a remarkably successful invention to that end. All other Lunar forms of marriage serve that same purpose, though not as well."

He said goodnight and left. I had with me—always!—a picture of my family, newest one, our wedding with Wyoming. Brides are at their prettiest and Wyoh was radiant—and rest of us looked handsome and happy, with Grandpaw tall and proud and not showing failing faculties.

But was disappointed; they looked at it oddly. But man — Mathews, name was—said, "Can you spare this picture, Colonel?"

Winced. "Only copy I have. And a long way from home."

"For a moment, I mean. Let me have it photographed. Right here, it need never leave your hands,"

"Oh. Oh, certainly!" Not a good picture of me but is face I have, and did Wyoh justice and they just don't come prettier than Lenore.

So he photographed it and next morning they did come right into our hotel suite and woke me before time and did arrest and take me away wheel chair and all and did lock me in a cell with *bars!* For bigamy. For polygamy. For open immorality and publicly inciting others to same.

Was glad Mum couldn't see.

Took Stu all day to get case transferred to an F.N. court and dismissed. His lawyers asked to have it tossed out on “diplomatic immunity” but F.N. judges did not fall into trap, merely noted that alleged offenses had taken place outside jurisdiction of lower court, except alleged “inciting” concerning which they found insufficient evidence. Aren’t any F.N. laws covering marriage; can’t be—just a rule about each nation required to give “full faith and credence” to marriage customs of other member nations.

Out of those eleven billion people perhaps seven billion lived where polygamy is legal, and Stu’s opinion manipulators played up “persecution”; it gained us sympathy from people who otherwise would never have heard of us—even gained it in North America and other places where polygamy is not legal, from people who believe in “live and let live.” All good, because always problem was to be noticed. To most of those bee-swarm billions Luna was nothing; our rebellion hadn’t been noticed.

Stu’s operators had gone to much thought to plan setup to get me arrested. Was not told until weeks later after time to cool off and see benefits. Took a stupid judge, a dishonest sheriff, and barbaric local prejudice which I triggered with that sweet picture, for Stu admitted later that range of color in Davis family was what got judge angry enough to be foolish even beyond native talent for nonsense.

My one consolation, that Mum could not see my disgrace, turned out mistaken; pictures, taken through bars and showing grim face, were in every Luna paper, and write-ups used nastiest Earthside stories, not larger number that deplored injustice. But should have had more faith in Mimi; she wasn’t ashamed, simply wanted to go Earthside and rip some people to pieces.

While helped Earthside, greatest good was in Luna. Loonies become more unified over this silly huhu than had ever been before. They took it personally and “Adam Selene” and “Simon Jester” pushed it. Loonies are easygoing except on one subject, women. Every lady felt insulted by Terran news stories—so male Loonies who had ignored politics suddenly discovered I was their boy.

Spinoff—old lags feel superior to those not transported. Later found self greeted by ex-cons with: “Hi, jailbird!” A lodge greeting—I was accepted.

But saw nothing good about it then! Pushed around, treated like cattle, fingerprinted, photographed, given food we wouldn’t offer hogs, exposed to endless indignity, and only that heavy field kept me from trying to kill somebody—had I been wearing number-six arm when grabbed, might have tried.

But steadied down once I was freed. Hour later we were on way to Agra; had at last been summoned by committee. Felt good to be back in suite in maharajah's palace but eleven-hour zone change in less than three did not permit rest; we went to hearing bleary-eyed and held together by drugs.

"Hearing" was onesided; we listened while chairman talked. Talked an hour; I'll summarize:

Our preposterous claims were rejected. Lunar Authority's sacred trust could not be abandoned. Disorders on Earth's Moon could not be tolerated. Moreover, recent disorders showed that Authority had been too lenient. Omission was now to be corrected by an activist program, a fiveyear plan in which all phases of life in Authority's trusteeship would be overhauled. A code of laws was being drafted; civil and criminal courts would be instituted for benefit of "client-employees"—which meant all persons in trust area, not just consignees with uncompleted sentences. Public schools would be established, plus indoctrinal adult schools for client-employees in need of same. An economic, engineering, and agricultural planning board would be created to provide fullest and most efficient use of Moon's resources and labor of client-employees. An interim goal of quadrupling grain shipments in five years had been adopted as a figure easily obtainable once scientific planning of resources and labor was in effect. First phase would be to withdraw client-employees from occupations found not to be productive and put them to drilling a vast new system of farm tunnels in order that hydroponics would commence in them not later than March 2078. These new giant farms would be operated by Lunar Authority, scientifically, and not left to whims of private owners. It was contemplated that this system would, by end of fiveyear plan, produce entire new grain quota; in meantime client-employees producing grain privately would be allowed to continue. But they would be absorbed into new system as their less efficient methods were no longer needed.

Chairman looked up from papers. "In short, the Lunar colonies are going to be civilized and brought into managerial coordination with the rest of civilization. Distasteful as this task has been, I feel—speaking as a citizen rather than as chairman of this committee—I feel that we owe you thanks for bringing to our attention a situation so badly in need of correction."

Was ready to burn his ears off. "Client-employees!" What a fancy way to say "slaves"! But Prof said tranquilly, "I find the proposed plans most interesting. Is one permitted to ask questions? Purely for information?"

"For information, yes."

North American member leaned forward. "But don't assume that we are going to take any backtalk from you cavemen! So mind your manners. You aren't in the clear on this, you know."

"Order," chairman said. "Proceed, Professor."

"This term 'client-employee' I find intriguing. Can it be stipulated that the majority of inhabitants of Earth's major satellite are not undischarged consignees but free individuals?"

"Certainly," chairman agreed blandly. "All legal aspects of the new policy have been studied. With minor exceptions some ninety-one percent of the colonists have citizenship, original or derived, in various member nations of the Federated Nations. Those who wish to return to their home countries have a right to do so. You will be pleased to learn that the Authority is considering a plan under which loans for transportation can be arranged. . . probably under supervision of International Red Cross and Crescent. I might add that I myself am heartily backing this plan—as it renders nonsensical any talk about 'slave labor.' " He smiled smugly.

"I see," agreed Prof. "Most humane. Has the committee—or the Authority—pondered the fact that most—effectively all, I should say—considered the fact that inhabitants of Luna are physically unable to live on this planet? That they have undergone involuntary permanent exile through irreversible physiological changes and can never again live in comfort and health in a gravitational field six times greater than that to which their bodies have become adjusted?"

Scoundrel pursed lips as if considering totally new idea. "Speaking again for myself, I would not be prepared to stipulate that what you say is necessarily true. It might be true of some, might not be others; people vary widely. Your presence here proves that it is not impossible for a Lunar inhabitant to return to Earth. In any case we have no intention of forcing anyone to return. We hope that they will choose to stay and we hope to encourage others to emigrate to the Moon. But these are individual choices, under the freedoms guaranteed by the Great Charter. But as to this alleged physiological phenomenon—it is not a legal matter. If anyone deems it prudent, or thinks he would be happier, to stay on the Moon, that's his privilege."

"I see, sir. We are free. Free to remain in Luna and work, at tasks and for wages set by you. . . or free to return to Earth to die."

Chairman shrugged. "You assume that we are villians—we're not. Why, if I were a young man I would emigrate to the Moon myself. Great opportunities! In any case I am not troubled by your distortions—history will justify us."

Was surprised at Prof; he was not fighting. Worried about him—weeks of strain and a bad night on top. All he said was, "Honorable Chairman, I assume that shipping to Luna will soon be resumed. Can passage be arranged for my colleague and myself in the first ship? For I must admit, sir, that this gravitational weakness of which I spoke is, in our cases, very real. Our mission is completed; we need to go home."

(Not a word about grain barges. Nor about "throwing rocks," nor even futility of beating a cow. Prof just sounded tired.)

Chairman leaned forward and spoke with grim satisfaction. "Professor, that presents difficulties. To put it bluntly, you appear to be guilty of treason against the Great Charter, indeed against all humanity . . . and an indictment is being considered. I doubt if anything more than a suspended sentence would be invoked against a man of your age and physical condition, however. Do you think it would be prudent of us to give you passage back to the place where you committed these acts—there to stir up more mischief?"

Prof sighed. "I understand your point. Then, sir, may I be excused? I am weary."

"Certainly. Hold yourself at the disposal of this committee. The hearing stands adjourned. Colonel Davis—"

"Sir?" I was directing wheel chair around, to get Prof out at once; our attendants had been sent outside.

"A word with you, please. In my office."

"Uh—" Looked at Prof; eyes were closed and seemed unconscious. But he moved one finger, motioning me to him. "Honorable Chairman, I'm more nurse than diplomat; have to look after him. He's an old man, he's ill."

"The attendants will take care of him."

"Well. . ." Got as close to Prof as I could from chair, leaned over him. "Prof, are you right?"

He barely whispered. "See what he wants. Agree with him. But stall."

Moments later was alone with chairman, soundproof door locked—meant nothing; room could have a dozen ears, plus one in my left arm.

He said, "A drink? Coffee?"

I answered, "No, thank you, sir. Have to watch my diet here."

"I suppose so. Are you really limited to that chair? You look healthy."

I said, "I could, if had to, get up and walk across room. Might faint. Or worse. Prefer not to risk. Weigh six times what I should. Heart's not used to it."

"I suppose so. Colonel, I hear you had some silly trouble in North America. I'm sorry, I truly am. Barbaric place. Always hate to have to go there. I suppose you're wondering why I wanted to see you."

"No, sir, assume you'll tell when suits you. Instead was wondering why you still call me 'Colonel.' "

He gave a barking laugh. "Habit, I suppose. A lifetime of protocol. Yet it might be well for you to continue with that title. Tell me, what do you think of our fiveyear plan?"

Thought it stunk. "Seems to have been carefully thought out."

"Much thought went into it. Colonel, you seem to be a sensible man— I know you are, I know not only your background but practically every word you've spoken, almost your thoughts, ever since you set foot on Earth. You were born on the Moon. Do you regard yourself as a patriot? Of the Moon?"

"Suppose so. Though tend to think of what we did just as something that had to be done."

"Between ourselves—yes. That old fool Hobart. Colonel, that is a good plan. . . but lacks an executive. If you are really a patriot or let's say a practical man with your country's best interests at heart, you might be the man to carry it out." He held up hand. "Don't be hasty! I'm not asking you to sell out, turn traitor, or any nonsense like that. This is your chance to be a real patriot—not some phony hero who gets himself killed in a lost cause. Put it this way. Do you think it is possible for the Lunar colonies to hold out against all the force that the Federated Nations of Earth can bring to bear? You're not really a military man, I know—and I'm glad you're not—but you are a technical man, and I know that, too. In your honest estimation, how many ships and bombs do you think it would take to destroy the Lunar colonies?"

I answered, "One ship, six bombs."

"Correct! My God, it's good to talk to a sensible man. Two of them would have to be awf'ly big, perhaps specially built. A few people would stay alive, for a while, in smaller warrens beyond the blast areas. But one ship would do it, in ten minutes."

I said, "Conceded, sir, but Professor de la Paz pointed out that you don't get milk by beating a cow. And certainly can't by shooting it."

"Why do you think we've held back, done nothing, for over a month? That idiot colleague of mine—I won't name him—spoke of 'backtalk.' Backtalk doesn't fret me; it's just talk and I'm interested in results. No, my dear Colonel, we won't shoot the cow. . . but we would, if forced to, let the cow know that it could be shot. H-missiles are expensive toys but we could afford to expend some as warning shots, wasted on bare rock to let the cow know what could happen. But that is more force than one likes to use—it might frighten the cow and sour its milk." He gave another barking laugh. "Better to persuade old bossy to give down willingly."

I waited. "Don't you want to know how?" he asked.

"How?" I agreed.

"Through you. Don't say a word and let me explain—"

He took me up on that high mountain and offered me kingdoms of Earth. Or of Luna. Take job of "Protector Pro Tem" with understanding was mine permanently if I could deliver. Convince Loonies they could not win. Convince them that this new setup was to their advantage—emphasize benefits, free schools, free hospitals, free this and that—details later but an everywhere government just like on Terra. Taxes starting low and handled painlessly by automatic checkoff and through kickback revenues from grain shipments. But, most important, this time Authority would not send a boy to do a man's job—two regiments of police at once.

"Those damned Peace Dragoons were a mistake," he said, "one we won't make again. Between ourselves, the reason it has taken us a month to work this out is that we had to convince the Peace Control Commission that a handful of men cannot police three million people spread through six largish warrens and fifty and more small ones. So you'll start with enough police—not combat troops but military police used to quelling civilians with a minimum of fuss. Besides that, this time they'll have female auxiliaries, the standard ten per cent-no more rape complaints. Well, sir? Think you can swing it? Knowing it's best in the long run for your own people?"

I said I ought to study it in detail, particularly plans and quotas for fiveyear plan, rather than make snap decision.

Certainly, certainly!" he agreed. "I'll give you a copy of the white paper we've made up; take it home, study it, sleep on it. Tomorrow we'll talk again. Just give me your word as a gentleman to keep it under your hair. No secret, really. . . but these things are best settled before they are publicized. Speaking of publicity, you'll need help—and you'll get it. We'll go to the expense of sending up topnotch men, pay them what it's worth, have them centrifuge the way those scientists do—you know. This time we're doing it right. That fool Hobart—he's actually dead, isn't he?"

"No, sir. Senile, however."

"Should have killed him, Here's your copy of the plan."

"Sir? Speaking of old men— Professor de la Paz can't stay here. Wouldn't live six months."

"That's best, isn't it?"

I tried to answer levelly, "You don't understand. He is greatly loved and respected. Best thing would be for me to convince him that you mean business with those H-missiles—and that it is his patriotic duty to salvage what we can. But, either way, if I return without him... well, not only could not swing it; wouldn't live long enough to try."

"Hmm— Sleep on it. We'll talk tomorrow. Say fourteen o'clock."

I left and as soon as was loaded into lorry gave way to shakes. Just don't have high-level approach.

Stu was waiting with Prof. "Well?" said Prof.

I glanced around, tapped ear. We huddled, heads over Prof's head and two blankets over us all. Stretcher wagon was clean and so was my chair; I checked them each morning. But for room itself seemed safer to whisper under blankets.

Started in. Prof stopped me. "Discuss his ancestry and habits later. The facts."

"He offered me job of Warden."

"I trust you accepted."

"Ninety percent. I'm to study this garbage and give answer tomorrow. Stu, how fast can we execute Plan Scoot?"

"Started. We were waiting for you to return. If they let you return."

Next fifty minutes were busy. Stu produced a gaunt Hindu in a dhoti; in thirty minutes he was a twin of Prof, and lifted Prof off wagon onto a divan. Duplicating me was easier. Our doubles were wheeled into suite's living room just at dusk and dinner was brought in. Several people came and went —among them elderly Hindu woman in sari, on arm of Stuart LaJoie. A plump babu followed them.

Getting Prof up steps to roof was worst; he had never worn powered walkers, had no chance to practice, and had been flat on back for more than a month.

But Stu's arm kept him steady; I gritted teeth and climbed those thirteen terrible steps by myself. By time I reached roof, heart was ready to burst. Was put to it not to black out. A silent little flitter craft came out of gloom right on schedule and ten minutes later we were in chartered ship we had used past month—two minutes after that we jetted for Australia. Don't know what it cost to prepare this dance and keep it ready against need, but was no hitch.

Stretched out by Prof and caught breath, then said, "How you feel, Prof?"

"Okay. A bit tired. Frustrated."

"Ja da. Frustrated."

"Over not seeing the Taj Mahal, I mean. I never had opportunity as a young man—and here I've been within a kilometer of it twice, once for several days, now for another day. . . and still I haven't seen it and never shall."

"Just a tomb."

"And Helen of Troy was just a woman. Sleep, lad." We landed in Chinee half of Australia, place called Darwin, and were carried straight into a ship, placed in acceleration couches and dosed. Prof was already out and I was beginning to feel dopy when Stu came in, grinned, and strapped down by us. I looked at him. "You, too? Who's minding shop?"

"The same people who've been doing the real work all along. It's a good setup and doesn't need me any longer. Mannie old cobber, I did not want to be marooned a long way from home. Luna, I mean, in case you have doubts. This looks like the last train from Shanghai."

"What's Shanghai got to do with?"

"Forget I mentioned it. Mannie, I'm flat broke, concave. I owe money in all directions—debts that will be paid only if certain stocks move the way Adam Selene convinced me they would move, shortly after this point in history. And I'm wanted, or will be, for offenses against the public peace and dignity. Put it this way. I'm saving them the trouble of transporting me. Do you think I can learn to be a drillman at my age?"

Was feeling foggy, drug taking hold. "Stu, in Luna y'aren't old. . . barely started . . . 'nyway . . ,eat our table f'ever! Mimi likes you."

"Thanks, cobber, I might. Warning light! Deep breath!"

Suddenly was kicked by ten gee.

20

Our craft was ground-to-orbit ferry type used for manned satellites, for supplying F.N. ships in patrol orbit, and for passengers to and from pleasure-and-gambling satellites. She was carrying three passengers instead of forty, no cargo except three p-suits and a brass cannon (yes, silly toy was along; p-suits and Prof's bang-bang were in Australia a week before we were) and good ship *Lark* had been stripped—total crew was skipper and a Cyborg pilot.

She was heavily overfueled.

We made (was told) normal approach on *Elysium* satellite . . . then suddenly scooted from orbital speed to escape speed, a change even more violent than liftoff.

This was scanned by F.N. Skytrack; we were commanded to stop and explain. I got this secondhand from Stu, self still recovering and enjoying luxury of no-gee with one strap to anchor. Prof was still out.

"So they want to know who we are and what we think we are doing," Stu told me. "We told them that we were Chinese registry sky wagon Opening Lotus bound on an errand of mercy, to wit, rescuing those scientists marooned on the Moon, and gave our identification—as Opening Lotus."

"How about transponder?"

"Mannie, if I got what I paid for, our transponder identified us as the Lark up to ten minutes ago. . . and now has I.D.'d us as the Lotus. Soon we will know. Just one ship is in position to get a missile off and it must blast us in"—he stopped to look—"another twenty-seven minutes according to the wired-up gentleman booting this bucket, or its chances of getting us are poor to zero. So if it worries you—if you have prayers to say or messages to send or whatever it is one does at such times—now is the time."

"Think we ought to rouse Prof?"

"Let him sleep. Can you think of a better way to make jump than from peaceful sleep instantaneously into a cloud of radiant gas? Unless you know that he has religious necessities to attend to? He never struck me as a religious man, orthodoctrinally speaking."

"He's not. But if you have such duties, don't let me keep you."

"Thank you, I took care of what seemed necessary before we left ground. How about yourself, Mannie? I'm not much of a padre but I'll do my best, if I can help. Any sins on your mind, old cobber? If you need to confess, I know quite a little about sin."

Told him my needs did not run that way. Then did recall sins, some I cherished, and gave him a version more or less true. That reminded him of some of his own, which remind me— Zero time came and went before we ran out of sins. Stu LaJoie is a good person to spend last minutes with, even if don't turn out to be last.

We had two days with naught to do but undergo drastic routines to keep us from carrying umpteen plagues to Luna. But didn't mind shaking from induced chills and burning with fever; free fall was such a relief and was so happy to be going home.

Or almost happy— Prof asked what was troubling me, "Nothing," I said. "Can't wait to be home. But— Truth is, ashamed to show face after we've failed. Prof, what did we do wrong?"

"Failed, my boy?"

"Don't see what else can call it. Asked to be recognized. Not what we got."

"Manuel, I owe you an apology. You will recall Adam Selene's projection of our chances just before we left home." Stu was not in earshot but "Mike" was word we never used; was always "Adam Selene" for security.

"Certainly do! One in fifty-three. Then when we reached Earthside dropped to reeking one in hundred. What you guess it is now? One in thousand?"

"I've had new projections every few days. . .which is why I owe you an apology. The last, received just before we left, included the then-untested assumption that we would escape, get clear of Terra and home safely. Or that at least one of us three would make it, which is why Comrade Stu was summoned home, he having a Terran's tolerance of high acceleration. Eight projections, in fact, ranging from three of us dead, through various combinations up to three surviving. Would you care to stake a few dollars on what that last projection is, setting a bracket and naming your own odds? I'll give a hint. You are far too pessimistic."

"Uh. . . no, damn it! Just tell."

"The odds against us are now only seventeen to one . . . and they've been shortening all month. Which I couldn't tell you."

"Was amazed, delighted, overjoyed—hurt. "What you mean, couldn't tell me? Look, Prof, if not trusted, deal me out and put Stu in executive cell."

"Please, son. That's where he will go if anything happens to any of us—you, me, or dear Wyoming. I could not tell you Earthside—and *can* tell you now—not because you aren't trusted but because you are no actor. You could carry out your role more effectively if you believed that our purpose was to achieve recognition of independence."

"Now he tells!"

"Manuel, Manuel, we had to fight hard every instant—and lose."

"So? Am big enough boy to be told?"

"Please, Manuel. Keeping you temporarily in the dark greatly enhanced our chances; you can check this with Adam. May I add that Stuart accepted his summons to Luna blithely without asking why? Comrade, that committee was too small, its chairman too intelligent; there was always the hazard that they might offer an acceptable compromise—that first day there was grave danger of it. Had we been able to force our case before the Grand Assembly there would have been no danger of intelligent action. But we were balked. The best I could do was to antagonize the committee, even stooping to personal insult to make certain of at least one holdout against common sense."

"Guess I never will understand high-level approach."

"Possibly not. But your talents and mine complement each other. Manuel, you wish to see Luna free."

"You know I do."

"You also know that Terra can defeat us."

"Sure. No projection ever gave anything close to even money. So don't see why you set out to antagonize— "

"Please. Since they *can* inflict their will on us, our only chance lies in weakening their will. That was why we *had* to go to Terra. To be divisive. To create many opinions. The shrewdest of the great generals in China's history once said that perfection in war lay in so sapping the opponent's will that he surrenders without fighting. In that maxim lies both our ultimate purpose and our most pressing danger. Suppose, as seemed possible that first day, we had been offered an inviting compromise. A governor in place of a warden, possibly from our own number. Local autonomy. A delegate in the Grand Assembly. A higher price for grain at the catapult head, plus a bonus for increased shipments. A disavowal of Hobart's policies combined with an expression of regret over the rape and the killings with handsome cash settlements to the victims' survivors. Would it have been accepted? Back home?"

"They did not offer that."

"The chairman was ready to offer something like it that first afternoon and at that time he had his committee in hand. He offered us an asking price close enough to permit such a dicker. Assume that we reached in substance what I outlined. Would it have been acceptable at home?"

"Uh. . . maybe."

"More than a 'maybe' by the bleak projection made just before we left home; it was the thing to be avoided at any cost—a settlement which would quiet things down, destroy our will to resist, without changing any essential in the longer-range prediction of disaster. So I switched the subject and squelched possibility by being difficult about irrelevancies politely offensive. Manuel, you and I know—and Adam knows—that there must be an end to food shipments; nothing less will save Luna from disaster. But can you imagine a wheat farmer fighting to end those shipments?"

"No. Wonder if can pick up news from home on how they're taking stoppage?"

"There won't be any. Here is how Adam has timed it, Manuel: No announcement is to be made on either planet until after we get home. We are still buying wheat. Barges are still arriving at Bombay."

"You told them shipments would stop at once."

"That was a threat, not a moral commitment. A few more loads won't matter and we need time. We don't have everyone on our side; we have only a minority. There is a majority who don't care either way but can be swayed—temporarily. We have another minority against us. . . especially grain farmers whose interest is never politics but the price of wheat. They are grumbling but accepting Scrip, hoping it will be worth face value later. But the instant we announce that shipments have stopped they will be actively against us. Adam plans to have the majority committed to us at the time the announcement is made."

"How long? One year? Two?"

"Two days, three days, perhaps four. Carefully edited excerpts from that fiveyear plan, excerpts from the recordings you've made—especially that yellowdog offer—exploitation of your arrest in Kentucky—"

"Hey! I'd rather forget that."

Prof smiled and cocked an eyebrow. "Uh— " I said uncomfortably. "Okay. If will help."

"It will help more than any statistics about natural resources."

Wired-up ex-human piloting us went in as one maneuver without bothering to orbit and gave us even heavier beating; ship was light and lively. But change in motion is under two-and-a-half kilometers; was over in nineteen seconds and we were down at Johnson City. I took it right, just a terrible constriction in chest and a feeling as if giant were squeezing heart, then was over and I was gasping back to normal and glad to be proper weight. But did almost kill poor old Prof.

Mike told me later that pilot refused to surrender control; Mike would have brought ship down in a low-gee, no-breakum-egg, knowing Prof was aboard. But perhaps that Cyborg knew what he was doing; a low-gee landing wastes mass and *Lotus-Lark* grounded almost dry.

None of which we cared about, as looked as if that Garrison landing had wasted Prof. Stu saw it while I was still gasping, then we were both at him—heart stimulant, manual respiration, massage. At last he fluttered eyelids, looked at us, smiled. *"Home,"* he whispered.

We made him rest twenty minutes before we let him suit up to leave ship; had been as near dead as can be and not hear angels. Skipper was filling tanks, anxious to get rid of us and take on passengers—that Dutchman never spoke to us whole trip; think he regretted letting money talk him into a trip that could ruin or kill him.

By then Wyoh was inside ship, psuited to come meet us. Don't think Stu had ever seen her in a p-suit and certain he had never seen her as a blonde; did not recognize. I was hugging her in spite of p-suit; he was standing by, waiting to be introduced. Then strange "man" in p-suit hugged him—he was surprised.

Heard Wyoh's muffled voice: "Oh heavens! Mannie, my helmet."

I unclamped it, lifted off. She shook curls and grinned. "Stu, aren't you glad to see me? Don't you *know* me?"

A grin spread over his face, slowly as dawn across maria. "Zdra'stvooeet'ye, Gospazha! I am most happy to see you."

"'Gospazha' indeed! I'm Wyoh to you, dear, always. Didn't Mannie tell you I'd gone back to blonde?"

"Yes, he did. But knowing it and seeing are not the same."

"You'll get used to it." She stopped to bend over Prof, kiss him, giggle at him, then straightened up and gave me a no-helmet welcome-home that left us both with tears despite pesky suit. Then turned again to Stu, started to kiss him.

He held back a little. She stopped. "Stu, am I going to have to put on brown makeup to welcome you?" Stu glanced at me, then kissed her. Wyoh put in as much time and thought as she had to welcoming me.

Was later I figured out his odd behavior. Stu, despite commitment, was still not a Loonie—and in meantime Wyoh had married. What's that got to do with it? Well, Earthside it makes a difference, and Stu did not know deep down in bones that a Loonie lady is own mistress. Poor chum thought *I* might take offense!

We got Prof into suit, ourselves same, and left, me with cannon under arm. Once underground and locked through, we unsuited—and I was flattered to see that Wyoh was wearing crushed under p-suit that red dress I bought her ages ago. She brushed it and skirt flared out.

Immigration room was empty save for about forty men lined up along wall like new transportees; were wearing p-suits and carrying helmets—Terrans going home, stranded tourists and some scientists. Their p-suits would not go, would be unloaded before lift. I looked at them and thought about Cyborg pilot. When *Lark* had been stripped, all but three couches had been removed; these people were going to take acceleration lying on floorplates—if skipper was not careful he was going to have mashed Terrans au blut.

Mentioned to Stu. "Forget it," he said. "Captain Leures has foam pads aboard. He won't let them be hurt; they're his life insurance."

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My family, all thirty-odd from Grandpaw to babies, was waiting beyond next lock on level below and we got cried on and slobbered on and hugged and this time Stu did not hold back. Little Hazel made ceremony of kissing us; she had Liberty Caps, set one on each, then kissed us—and at that signal whole family put on Liberty Caps, and I got sudden tears. Perhaps is what patriotism feels like, choked up and so happy it hurts. Or maybe was just being with my beloveds again.

"Where's Slim?" I asked Hazel. "Wasn't he invited?"

"Couldn't come. He's junior marshal of your reception."

"Reception? This is all we want."

"You'll see."

Did. Good thing family came out to meet us; that and ride to L-City (filled a capsule) were all I saw of them for some time. Tube Station West was a howling mob, all in Liberty Caps. We three were carried on shoulders all way to Old Dome, surrounded by a stilyagi bodyguard, elbows locked to force through cheering, singing crowds. Boys were wearing red caps and white shirts and their girls wore white jumpers and red shorts color of caps.

At station and again when they put us down in Old Dome I got kissed by fems I have never seen before or since. Remember hoping that measures we had taken in lieu of quarantine were effective—or half of L-City would be down with colds or worse. (Apparently we were clean; was no epidemic. But I remember time—was quite small—when measles got loose and thousands died.)

Worried about Prof, too; reception was too rough for a man good as dead an hour earlier. But he not only enjoyed it, he made a wonderful speech in Old Dome—one short on logic, loaded with ringing phrases. “Love” was in it, and “home” and “Luna” and “comrades and neighbors” and even “shoulder to shoulder” and all sounded good.

They had erected a platform under big news video on south face. Adam Selene greeted us from video screen and now Prof’s face and voice were projected from it, much magnified, over his head—did not have to shout. But did have to pause after every sentence; crowd roars drowned out even bull voice from screen—and no doubt pauses helped, as rest. But Prof no longer seemed old, tired, ill; being back inside The Rock seemed to be tonic he needed. And me, too! Was wonderful to be right weight, feel *strong*, breathe pure, replenished air of own city.

No mean city! Impossible to get all of L-City inside Old Dome—but looked as if they tried. I estimated an area ten meters square, tried to count heads, got over two hundred not half through and gave up. *Lunatic* placed crowd at thirty thousand, seems impossible.

Prof’s words reached more nearly three million; video carried scene to those who could not crowd into Old Dome, cable and relay flashed it across lonely maria to all warrens. He grabbed chance to tell of slave future Authority planned for them. Waved that “white paper.” “Here it is!” he cried. “Your fetters! Your leg irons! Will you wear them?”

“NO!”

“They say you must. They say they will H-bomb . . . then survivors will surrender and put on these chains. Will you?”

“NO! NEVER!”

“Never,” agreed Prof. “They threaten to send troops . . . more and more troops to rape and murder. We shall fight them.”

“DA!”

“We shall fight them on the surface, we shall fight them in the tubes, we shall fight them in the corridors! If die we must, we shall die *free!*”

“*Yes!* Ja-*da!* Tell ’em, tell ’em!”

“And if we die, let history write: This was Luna’s finest hour! Give us liberty . . . or give us *death!*”

Some of that sounded familiar. But his words came out fresh and new; I joined in roars. Look. . . I *knew* we couldn’t whip Terra—I’m tech by trade and know that an H-missile doesn’t care how brave you are. But was ready, too. If they wanted a fight, let’s have it!

Prof let them roar, then led them in “Battle Hymn of the Republic,” Simon’s version. Adam appeared on screen again, took over leading it and sang with them, and we tried to slip away, off back of platform, with help of stilyagi led by Slim. But women didn't want to let us go and lads aren't at their best in trying to stop ladies; they broke through. Was twentytwo hundred before we four, Wyoh, Prof, Stu, self, were locked in room L of Raffles, where Adam-Mike joined us by video. I was starved by then, all were, so I ordered dinner and Prof insisted that we eat before reviewing plans.

Then we got down to business.

Adam started by asking me to read aloud white paper, for his benefit and for Comrade Wyoming— "But first, Comrade Manuel, if you have the recordings you made Earthside, could you transmit them by phone at high speed to my office? I'll have them transcribed for study—all I have so far are the coded summaries Comrade Stuart sent up."

I did so, knowing Mike would study them at once, phrasing was part of "Adam Selene" myth—and decided to talk to Prof about letting Stu in on facts. If Stu was to be in executive cell, pretending was too clumsy.

Feeding recordings into Mike at overspeed took five minutes, reading aloud another thirty. That done, Adam said, "Professor, the reception was more successful than I had counted on, due to your speech. I think we should push the embargo through Congress at once. I can send out a call tonight for a session at noon tomorrow. Comments?"

I said, "Look, those yammerheads will kick it around for weeks. If you must put it up to them—can't see why—do as you did with Declaration. Start late, jam it through after midnight using own people."

Adam said, "Sorry, Manuel. I'm getting caught up on events Earthside and you have catching up to do here. It's no longer the same group. Comrade Wyoming?"

"Mannie dear, it's an elected Congress now. They must pass it. Congress is what government we have."

I said slowly, "You held election and turned things over to them? *Everything?* Then what are *we* doing?" Looked at Prof, expecting explosion. My objections would not be on his grounds—but couldn't see any use in swapping one talk-talk for another. At least first group had been so loose we could pack it—this new group would be glued to seats.

Prof was undisturbed. Fitted fingertips together and looked relaxed. "Manuel, I don't think the situation is as bad as you seem to feel that it is. In each age it is necessary to adapt to the popular mythology. At one time kings were anointed by Deity, so the problem was to see to it that Deity anointed the right candidate. In this age the myth is ‘the will of the people’. . . but the problem changes only superficially. Comrade Adam and I have had long discussions about how to determine the will of the people. I venture to suggest that this solution is one we can work with.”

“Well . . . okay. But why weren’t we told? Stu, did you know?”

“No, Mannie. There was no reason to tell me.” He shrugged. “I’m a monarchist, I wouldn’t have been interested. But I go along with Prof that in this day and age elections are a necessary ritual.”

Prof said, “Manuel, it wasn’t necessary to tell us till we got back; you and I had other work to do. Comrade Adam and dear Comrade Wyoming handled it in our absence. . . so let’s find out what they did before we judge what they’ve done.”

“Sorry. Well, Wyoh?”

“Mannie, we didn’t leave *everything* to chance. Adam and I decided that a Congress of three hundred would be about right. Then we spent hours going over the Party lists—plus prominent people not in the Party. At last we had a list of candidates—a list that included some from the Ad-Hoc Congress; not all were yammerheads, we included as many as we could. Then Adam phoned each one and asked him—or her—if he would serve . . . binding him to secrecy in the meantime. Some we had to replace.

“When we were ready, Adam spoke on video, announced that it was time to carry out the Party’s pledge of free elections, set a date, said that everybody over sixteen could vote, and that all anyone had to do to be a candidate was to get a hundred chops on a nominating petition and post it in Old Dome, or the public notice place for his warren. Oh, yes, thirty temporary election districts, ten Congressmen from each district—that let all but the smallest warrens be at least one district.”

“So you had it lined up and Party ticket went through?”

“Oh, no, dear! There wasn’t any Party ticket—officially. But we were ready with our candidates. . . and I must say my stilyagi did a smart job getting chops on nominations; our optings were posted the first day. Many other people posted; there were over two thousand candidates. But there was only ten days from announcement to election, and we knew what we wanted whereas the opposition was split up. It wasn’t necessary for Adam to come out publicly and endorse candidates. It worked out—you won by seven thousand votes, dear, while your nearest rival got less than a thousand.”

“*I* won?”

“You won, I won, Professor won, Comrade Clayton won, and just about everybody we thought should be in the Congress. It wasn’t hard. Although Adam never endorsed anyone, I didn’t hesitate to let our comrades know who was favored. Simon poked his finger in, too. And we do have good connections with newspapers. I wish you had been here election night, watching the results. Exciting!"

"How did you go about nose counting? Never known how election works. Write names on a piece of paper?"

"Oh, no, we used a better system . . . because, after all, some of our best people can't write. We used banks for voting places, with bank clerks identifying customers and customers identifying members of their families and neighbors who don't have bank accounts—and people voted orally and the clerks punched the votes into the banks' computers with the voter watching, and results were all tallied at once in Luna City clearinghouse. We voted everybody in less than three hours and results were printed out just minutes after voting stopped."

Suddenly a light came on in my skull and I decided to question Wyoh privately. No, not Wyoh—*Mike*. Get past his "Adam Selene" dignity and hammer truth out of his neuristors. Recalled a cheque ten million dollars too large and wondered how many had voted for me? Seven thousand? Seven hundred? Or just my family and friends?

But no longer worried about new Congress. Prof had not slipped them a cold deck but one that was frozen solid—then ducked Earthside while crime was committed. No use asking Wyoh; she didn't even *need* to know what Mike had done . . . and could do her part better if did not suspect.

Nor would anybody suspect. If was one thing all people took for granted, was conviction that if you feed honest figures into a computer, honest figures come out. Never doubted it myself till met a computer with sense of humor.

Changed mind about suggesting that Stu be let in on Mike's self-awareness. Three was two too many. Or perhaps three. "Mi—" I started to say, and changed to: "My word! Sounds efficient. How big did we win?"

Adam answered without expression. "Eighty-six percent of our candidates were successful—approximately what I had expected."

("Approximately," my false left arm! *Exactly* what expected, Mike old ironmongery!) "Withdraw objection to a noon session—I'll be there."

"It seems to me," said Stu, "assuming that the embargo starts at once, we will need something to maintain the enthusiasm we witnessed tonight. Or there will be a long quiet period of increasing economic depression—from the embargo, I mean—and growing disillusionment. Adam, you first impressed me through your ability to make shrewd guesses as to future events. Do my misgivings make sense?"

"They do."

"Well?"

Adam looked at us in turn, and was almost impossible to believe that this was a false image and Mike was simply placing us through binaural receptors. "Comrades . . . it must be turned into open war as quickly as possible."

Nobody said anything. One thing to talk about war, another to face up to it. At last I sighed and said, "When do we start throwing rocks?"

"We do not start," Adam answered. "They must throw the first one. How do we antagonize them into doing so? I will reserve my thoughts to the last. Comrade Manuel?"

"Uh. . . don't look at me. Way I feel, would start with a nice big rock smack on Agra—a bloke there who is a waste of space. But is not what you are after."

"No, it is not," Adam answered seriously. "You would not only anger the entire Hindu nation, a people intensely opposed to destruction of life, but you would also anger and shock people throughout Earth by destroying the Taj Mahal."

"Including me," said Prof. "Don't talk dirty, Manuel."

"Look," I said, "didn't say to do it. Anyhow, could miss Taj."

"Manuel," said Prof, "as Adam pointed out, our strategy must be to antagonize them into striking the first blow, the classic 'Pearl Harbor' maneuver of game theory, a great advantage in Weltpolitick. The question is *how*? Adam, I suggest that what is needed is to plant the idea that we are weak and divided and that all it takes is a show of force to bring us back into line. Stu? Your people Earthside should be useful. Suppose the Congress repudiated myself and Manuel? The effect?"

"Oh, *no!*" said Wyoh.

"Oh, *yes*, dear Wyoh. Not necessary to *do* it but simply to put it over news channels to Earth. Perhaps still better to put it out over a clandestine beam attributed to the Terran scientists still with us while our official channels display the classic stigmata of tight censorship. Adam?"

"I'm noting it as a tactic which probably will be included in the strategy. But it will not be sufficient alone. We must be bombed."

"Adam," said Wyoh, "why do you say so? Even if Luna City can stand up under their biggest bombs—something I hope never to find out—we know that Luna can't win an all-out war. You've said so, many times. Isn't there some way to work it so that they will just plain leave us alone?"

Adam pulled at right cheek—and I thought: Mike, if you don't knock off play-acting, you'll have me believing in you myself! Was annoyed at him and looked forward to a talk—one in which I would not have to defer to "Chairman Selene."

"Comrade Wyoming," he said soberly, "it's a matter of game theory in a complex non-zero-sum game. We have certain resources or 'pieces in the game' and many possible moves. Our opponents have much larger resources and a far larger spectrum of responses. Our problem is to manipulate the game so that our strength is utilized toward an optimax solution while inducing them to waste their superior strength and to refrain from using it at maximum. Timing is of the essence and a gambit is necessary to start a chain of events favorable to our strategy. I realize this is not clear. I could put the factors through a computer and show you. Or you can accept the conclusion. Or you can use your own judgment."

He was reminding Wyoh (under Stu's nose) that he was not Adam Selene but Mike, our dinkum thinkum who could handle so complex a problem because he *was* a computer and smartest one anywhere.

Wyoh backtracked. "No, no," she said, "I wouldn't understand the maths. Okay, it has to be done. How do we do it?"

Was four hundred before we had a plan that suited Prof and Stu as well as Adam—or took that long for Mike to sell his plan while appearing to pull ideas out of rest of us. Or was it Prof's plan with Adam Selene as salesman?

In any case we had a plan and calendar, one that grew out of master strategy of Tuesday 14 May 2075 and varied from it only to match events as they actually had occurred. In essence it called for us to behave as nastily as possible while strengthening impression that we would be awfully easy to spank.

Was at Community Hall at noon, after too little sleep, and found I could have slept two hours longer; Congressmen from Hong Kong could not make it that early despite tube all way. Wyoh did not bang gavel until fourteen-thirty.

Yes, my bride wife was chairman pro tem in a body not yet organized. Parliamentary rulings seemed to come naturally to her, and she was not a bad choice; a mob of Loonies behaves better when a lady bangs gavel.

Not going to detail what new Congress did and said that session and later; minutes are available. I showed up only when necessary and never bothered to learn talk-talk rules—seemed to be equal parts common politeness and ways in which chairman could invoke magic to do it his (her) way.

No sooner had Wyoh banged them to order but a cobber jumped up and said, "Gospazha Chairman, move we suspend rules and hear from Comrade Professor de la Paz!"—which brought a whoop of approval.

Wyoh banged again. "Motion is out of order and Member from Lower Churchill will be seated. This house recessed without adjourning and Chairman of Committee on Permanent Organization, Resolutions, and Government Structure still has the floor."

Turned out to be Wolfgang Korsakov, Member from Tycho Under (and a member of Prof's cell and our number-one finagler of LuNoHoCo) and he not only had floor, he had it all day, yielding time as he saw fit (i.e., picking out whom he wanted to speak rather than letting just anyone talk). But nobody was too irked; this mob seemed satisfied with leadership. Were noisy but not unruly.

By dinnertime Luna had a government to replace co-opted provisional government—i.e., dummy government we had opted ourselves, which sent Prof and me to Earth. Congress confirmed all acts of provisional government, thus putting face on what we had done, thanked outgoing government for services and instructed Wolfgang's committee to continue work on permanent government structure.

Prof was elected President of Congress and ex-officio Prime Minister of interim government until we acquired a constitution. He protested age and health . . . then said would serve if could have certain things to help him; too old and too exhausted from trip Earthside to have responsibility of presiding—except on occasions of state—so he wanted Congress to elect a Speaker and Speaker Pro Tem. . . and besides that, he felt that Congress should augment its numbers by not more than ten percent by itself electing members-at-large so that Prime Minister, whoever he might be, could opt cabinet members or ministers of state who might not now be members of Congress—especially ministers-without-portfolio to take load off his shoulders.

They balked. Most were proud of being "Congressmen" and already jealous of status. But Prof just sat looking tired, and waited—and somebody pointed out that it still left control in hands of Congress. So they gave him what he asked for.

Then somebody squeezed in a speech by making it a question to Chair. Everybody knew (he said) that Adam Selene had refrained from standing for Congress on grounds that Chairman of Emergency Committee should not take advantage of positon to elbow way into new government . . . but could Honorable Chairlady tell member whether was any reason not elect Adam Selene a member-at-large? As gesture of appreciation for great services? To let all Luna—yes, and all those earthworms, especially ex-Lunar ex-Authonty—know that we are *not* repudiating Adam Selene, on contrary he was our beloved elder statesman and was not President simply because he chose not to be!

More whoops that went on and on. You can find in minutes who made that speech but one gets you ten Prof wrote it and Wyoh planted it.

Here is how it wound up over course of days:

Prime Minister and Secretary of State for Foreign Affairs: Professor Bernardo de la Paz.

Speaker, Finn Nielsen; Speaker Pro Tem, Wyoming Davis.

Undersecretary of State for Foreign Affairs and Minister of Defense, General O'Kelly Davis; Minister of Information, Terence Sheehan (Sheenie turned *Pravda* over to managing editor to work with Adam and Stu); Special Minister-without-Portfolio in Ministry of Information, Stuart Rene LaJoie, Congressman-at-Large; Secretary of State for Economics and Finance (and Custodian of Enemy Property), Wolfgang Korsakov; Minister of Interior Affairs and Safety, Comrade "Clayton" Watenabe; Minter-without-Portfolio and Special Advisor to Prime Minister, Adam Selene—plus a dozen ministers and ministers-without-portfolio from warrens other than Luna City.

See where that left things? Brush away fancy titles and B cell was still running things as advised by Mike, backed by a Congress in which we could not lose a test vote—but did lose others we did not want to win, or did not care about.

But at time could not see sense in all that talk-talk.

During evening session Prof reported on trip and then yielded to me—Committee Chairman Korsakov consenting—so that I could report what "fiveyear plan" meant and how Authority had tried to bribe me. I'll never make a speaker but had time during dinner break to swot speech Mike had written. He had slanted it so nastily that I got angry all over again and was angry when I spoke and managed to make it catching. Congress was ready to riot by time I sat down.

Prof stepped forward, thin and pale, and said quietly, "Comrade Members, what shall we do? I suggest, Chairman Korsakov consenting, that we discuss informally how to treat this latest insolence to our nation."

One member from Novylen wanted to declare war and they would have done so right then if Prof had not pointed out that they were still hearing committee reports.

More talk, all bitter. At last Comrade Member Chang Jones spoke: "Fellow Congressmen—sorry, Gospodin Chairman Korsakov—I'm a rice and wheat farmer. Mean I used to be, because back in May I got a bank loan and sons and I are converting to variety farming. We're broke—had to borrow tube fare to get here—but family is eating and someday we might pull square with bank. At least I'm no longer raising grain.

"But others are. Catapult has never reduced headway by one barge whole time we've been free. We're still shipping, hoping their cheques will be worth something someday.

"But now we know! They've told us what they mean to do with us—to us! I say only way to make those scoundrels know we mean business is stop shipments *right now!* Not another tonne, not a kilo . . . until they come here and dicker honestly for honest price!"

Around midnight they passed Embargo, then adjourned subject to call . . . standing committees to continue.

Wyoh and I went home and I got reacquainted with my family. Was nothing to do; Mike-Adam and Stu had been working on how to hit them with it Earthside and Mike had shut catapult down ("technical difficulties with ballistic computer") twenty-four hours earlier. Last barge in trajectory would be taken by Poona Ground Control in slightly over one day and Earth would be told, nastily, that was *last* they would ever get.

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Shock to farmers was eased by continuing to buy grain at catapult—but cheques now carried printed warning that Luna Free State did not stand behind them, did not warrant that Lunar Authority would ever redeem them even in Scrip, etc., *etc.* Some farmers left grain anyhow, some did not, all screamed. But was nothing they could do; catapult was shut down, loading belts not moving.

Depression was not immediately felt in rest of economy. Defense regiments had depleted ranks of ice miners so much that selling ice on free market was profitable; LuNoHoCo steel subsidiary was hiring every able-bodied man it could find, and Wolfgang Korsakov was ready with paper money, "National Dollars," printed to resemble Hong Kong dollar and in theory pegged to it. Luna had plenty of food, plenty of work, plenty of money; people were not hurting, "beer, betting, women, and work" went on as usual.

"Nationals," as they were called, were inflation money, war money, fiat money, and were discounted a fraction of a percent on day of first issue, concealed as "exchange service charge." They were spendable money and never did drop to zero but were inflationary and exchange reflected it increasingly; new government was spending money it did not have.

But that was later— Challenge to Earth, to Authority and Federated Nations, was made intentionally nasty. F.N. vessels were ordered to stay clear of Luna by ten diameters and not orbit at any distance under pain of being destroyed without warning. (No mention of *how*, since we could not.) Vessels of private registry would be permitted to land if a) permission was requested ahead of time with ballistic plan, b) a vessel thus cleared placed itself under Luna Ground Control (Mike) at a distance of one hundred thousand kilometers while following approved trajectory, and c) was unarmed save for three hand guns permitted three officers. Last was to be confirmed by inspection on landing before anybody was allowed to leave ship and before ship was serviced with fuel and/or reaction mass; violation would mean confiscation of ship. No person allowed to land at Luna other than ship's crew in connection with loading, unloading, or servicing save citizens of Terran countries who had recognized Free Luna. (Only Chad—and Chad had no ships. Prof expected some private vessels to be reregistered under Chad merchant flag.)

Manifesto noted that Terran scientists still in Luna could return home in any vessel which conformed to our requirements. It invited all freedom-loving Terran nations to denounce wrongs done us and which the Authority planned against us, recognize us, and enjoy free trade and full intercourse—and pointed out that there were no tariffs or any artificial restrictions against trade in Luna, and was policy of Luna government to keep it that way. We invited immigration, unlimited, and pointed out that we had a labor shortage and any immigrant could be self-supporting at once.

We also boasted of food—adult consumption over four thousand calories per day, high in protein, low in cost, no rationing. (Stu had Adam-Mike stick in price of 100-proof vodka—fifty cents HKL per liter, less in quantity, no taxes. Since this was less than one-tenth retail price of 80-proof vodka in North America, Stu knew it would hit home. Adam, "by nature" a teetotaler, hadn't thought of it—one of Mike's few oversights.)

Lunar Authority was invited to gather at one spot well away from other people, say in unirrigated part of Sahara, and receive one last barge of grain free—straight down at terminal velocity. This was followed by a snotty lecture which implied that we were prepared to do same to anyone who threatened our peace, there being a number of loaded barges at catapult head, ready for such unceremonious delivery.

Then we waited.

But we waited busily. Were indeed a few loaded barges; these we unloaded and reloaded with rock, with changes made in guidance transponders so that Poona Control could not affect them. Their retros were removed, leaving only lateral thrustors, and spare retros were taken to new catapult, to be modified for lateral guidance. Greatest effort went into moving steel to new catapult and shaping it into jackets for solid rock cylinders—steel was bottleneck.

Two days after our manifesto a "clandestine" radio started beaming to Terra. Was weak and tended to fade and was supposed to be concealed, presumably in a crater, and could be worked only certain hours until brave Terran scientists managed to rig automatic repeat. Was near frequency of Voice of Free Luna, which tended to drown it out with brassy boasts.

(Terrans remaining in Luna had no chance to make signals. Those who had chosen to stick with research were chaperoned by stilyagi every instant and locked into barracks to sleep.)

But "clandestine" station managed to get "truth" to Terra. Prof had been tried for deviationism and was under house arrest. I had been executed for treason. Hong Kong Luna had pulled out, declared self separately independent. . . might be open to reason. Rioting in Novylen. All food growing had been collectivized and black-market eggs were selling for three dollars apiece in Luna City. Battalions of female troops were being enlisted, each sworn to kill at least one Terran, and were drilling with fake guns in corridors of Luna City.

Last was an almost-true. Many ladies wanted to do something militant and had formed a Home Defense Guard, "Ladies from Hades." But their drills were of a practical nature—and Hazel was sulking because Mum had not allowed her to join. Then she got over sulks and started "Stilyagi Debs," a very junior home guard which drilled after school hours, did not use weapons, concentrated on backing up stilyagi air & pressure corps, and practiced first aid—and own no-weapons fighting, which—possibly—Mum never learned.

I don't know how much to tell. Can't tell all, but stuff in history books is so *wrong!*

I was no better a "defense minister" than "congressman." Not apologizing, had no training for either. Revolution is an amateur thing for almost everybody; Prof was only one who seemed to know what he was doing, and, at that, was new to him, too—he had never taken part in a successful revolution or ever been part of a government, much less head.

As Minister of Defense I could not see many ways to defend except for steps already taken; that is, stilyagi air squads in warrens and laser gunners around ballistic radars. If F.N. decided to bomb, didn't see any way to stop them; wasn't an interception missile in all Luna and that's not a gadget you whomp up from bits and pieces. My word, we couldn't even make fusion weapons with which such a rocket is tipped.

But I went through motions. Asked same Chinee engineers who had built laser guns to take a crack at problem of intercepting bombs or missiles—one same problem save that a missile comes at you faster.

Then turned attention to other things. Simply hoped that F.N. would never bomb warrens. Some warrens, L-City in particular, were so deep down that they could probably stand direct hits. One cubic, lowest level of Complex where central part of Mike lived, had been designed to withstand bombing. On other hand Tycho Under was a big natural bubble cave like Old Dome and roof was only meters thick; sealer on under side is kept warm with hot water pipes to make sure new cracks sealed—would not take much of a bomb to crack Tycho Under.

But is no limit to how big a fusion bomb can be; F.N. could build one big enough to smash L-City—or theoretically even a Doomsday job that would split Luna like a melon and finish job some asteroid started at Tycho. If they did, couldn't see any way to stop them, so didn't worry.

Instead put time on problems I could manage, helping at new catapult, trying to work up better aiming arrangements for laser drills around radars (and trying to get drillmen to stick; half of them quit once price of ice went up), trying to arrange decentralized standby engineering controls for all warrens. Mike did designing on this, we grabbed every general-purpose computer we could find (paying in "nationals" with ink barely dry), and I turned job over to McIntyre, former chief engineer for Authority; was a job within his talents and I couldn't do all rewiring and so forth, even if had tried.

Held out biggest computer, one that did accounting for Bank of Hong Kong in Luna and also was clearinghouse there. Looked over its instruction manuals and decided was a smart computer for one that could not talk, so asked Mike if he could teach it ballistics? We made temporary linkups to let two machines get acquainted and Mike reported it could learn simple job we wanted it for—standby for new catapult—although Mike would not care to ride in ship controlled by it; was too matter-of-fact and uncritical. Stupid, really.

Well, didn't want it to whistle tunes or crack jokes; just wanted it to shove loads out a catapult at right millisecond and at correct velocity, then watch load approach Terra and give a nudge.

HK Bank was not anxious to sell. But we had patriots on their board, we promised to return it when emergency was over, and moved it to new site—by rolligon, too big for tubes, and took all one dark semilunar. Had to jerry-rig a big airlock to get it out of Kong warren. I hooked it to Mike again and he undertook to teach art of ballistics against possibility that his linkage to new site might be cut in an attack.

(You know what bank used to replace computer? Two hundred clerks working abacuses. Abacusi? You know, slipsticks with beads, oldest digital computer, so far back in prehistory that nobody knows who invented. Russki and Chinee and Nips have always used them, and small shops today.)

Trying to improve laser drills into space-defense weapons was easier but less straightforward. We had to leave them mounted on original cradles; was neither time, steel, nor metalsmiths to start fresh. So we concentrated on better aiming arrangements. Call went out for telescopes. Scarce—what con fetches along a spyglass when transported? What market later to create supply? Surveying instruments and helmet binoculars were all we turned up, plus optical instruments confiscated in Terran labs. But we managed to equip drills with low-power big-field sights to coach-on with and high-power scopes for fine sighting, plus train and elevation circles and phones so that Mike could tell them where to point. Four drills we equipped with self-synchronous repeater drives so that Mike could control them himself—liberated these selsyns at Richardson; astronomers used them for Bausch cameras and Schmidts in sky mapping.

But big problem was men. Wasn't money, we kept upping wages. No, a drillman likes to work or wouldn't be in that trade. Standing by in a ready room day after day, waiting for alert that always turns out to be just another practice—drove 'em crackers. They quit. One day in September I pulled an alert and got only seven drills manned.

Talked it over with Wyoh and Sidris that night. Next day Wyoh wanted to know if Prof and I would okay bolshoi expense money? They formed something Wyoh named "Lysistrata Corps." Never inquired into duties or cost, because next time I inspected a ready room found three girls and no shortge of drillmen. Girls were in uniform of Second Defense Gunners just as men were (drillmen hadn't bothered much with authorized uniform up to then) and one girl was wearing sargeant's stripes with gun captain's badge.

I made that inspection *very* short. Most girls don't have muscle to be a drillman and I doubted if this girl could wrestle a drill well enough to justify that badge. But regular gun captain was on job, was no harm in girls learning to handle lasers, morale was obviously high; I gave matter no more worry.

Prof underrated his new Congress. Am sure he never wanted anything but a body which would rubberchop what we were doing and thereby do make it "voice of people." But fact that new Congressmen were *not* yammerheads resulted in them doing more than Prof intended. Especially Committee on Permanent Organization, Resolutions, and Government Structure.

Got out of hand because we were all trying to do too much. Permanent heads of Congress were Prof, Finn Nielsen. and Wyoh. Prof showed up only when he wanted to speak to them—seldom. He spent time with Mike on plans and analysis (odds shortened to one in *five* during September '76), time with Stu and Sheenie Sheehan on propaganda, controlling official news to Earthside, very different "news" that went via "clandestine" radio, and reslanting news that came up from Earthside. Besides that he had finger in everything; I reported to him once a day, and all ministries both real and dummy did same.

I kept Finn Nielsen busy; he was my "Commander of Armed

Forces." He had his laser gun infantry to supervise—six men with captured weapons on day we nabbed warden, now eight hundred scattered all through Luna and armed with Kongville monkey copies. Besides that, Wyoh's organizations, Stilyagi Air Corps, Stilyagi Debs, Ladies from Hades, Irregulars (kept for morale and renamed Peter Pan's Pirates), and Lysistrata Corps—all these halfway-military groups reported through Wyoh to Finn. I shoved it onto him; I had other problems, such as trying to be a computer mechanic as well as a "statesman" when jobs such as installing that computer at new catapult site had to be done.

Besides which, I am *not* an executive and Finn had talent for it. I shoved First and Second Defense Gunners under him, too. But first I decided that these two skeleton regiments were a "brigade" and made Judge Brody a "brigadier." Brody knew as much about military matters as I did—zero—but was widely known, highly respected, had unlimited hard sense—and had been drillman before he lost leg. Finn was not drillman, so couldn't be placed directly over them; They wouldn't have listened. I thought about using my co-husband Greg. But Greg was needed at Mare Undarum catapult, was only mechanic who had followed every phase of construction.

Wyoh helped Prof, helped Stu, had her own organizations, I made trips out to Mare Undarum—and had little time to preside over Congress; task fell on senior committee chairman, Wolf Korsakov . . . who was busier than any of us; LuNoHoCo was running everything Authority used to run and many new things as well.

Wolf had a good committee; Prof should have kept closer eye on it. Wolf had caused his boss, Moshai Baum, to be elected vice-chairman and had in all seriousness outlined for his committee problem of determining what permanent government should be. Then Wolf had turned back on it.

Those busy laddies split up and did it—studied forms of government in Carnegie Library, held subcommittee meetings, three or four people at a time (few enough to worry Prof had he known)—and when Congress met early in September to ratify some appointments and elect more congressmen-at-large, instead of adjourning, Comrade Baum had gavel and they recessed—and met again and turned selves into committee-of-the-whole and passed a resolution and next thing we knew entire Congress was a Constitutional Convention divided into working groups headed by those subcommittees.

I think Prof was shocked. But he couldn't undo it, had all been proper under rules he himself had written. But he rolled with punch, went to Novylen (where Congress now met—more central) and spoke to them with usual good nature and simply cast doubts on what they were doing rather than telling them flatly they were wrong.

After gracefully thanking them he started picking early drafts to pieces:

"Comrade Members, like fire and fusion, government is a dangerous servant and a terrible master. You now have freedom—if you can keep it. But do remember that you can lose this freedom more quickly to yourselves than to any other tyrant. Move slowly, be hesitant, puzzle out the consequences of every word. I would not be unhappy if this convention sat for ten years before reporting—but I would be frightened if you took less than a year.

"Distrust the obvious, suspect the traditional . . . for in the past mankind has not done well when saddling itself with governments. For example, I note in one draft report a proposal for setting up a commission to divide Luna into congressional districts and to reapportion them from time to time according to population.

"This is the traditional way; therefore it should be suspect, considered guilty until proved innocent. Perhaps you feel that this is the *only* way. May I suggest others? Surely where a man lives is the least important thing about him. Constituencies might be formed by dividing people by occupation. . . or by age. . . or even alphabetically. Or they might not be divided, every member elected at large—and do not object that this would make it impossible for any man not widely known throughout Luna to be elected; that might be the best possible thing for Luna.

"You might even consider installing the candidates who receive the *least* number of votes; unpopular men may be just the sort to save you from a new tyranny. Don't reject the idea merely because it seems preposterous—think about it! In past history popularly elected governments have been no better and sometimes far worse than overt tyrannies.

"But if representative government turns out to be your intention there still may be ways to achieve it better than the territorial district. For example you each represent about ten thousand human beings, perhaps seven thousand of voting age—and some of you were elected by slim majorities. Suppose instead of election a man were qualified for office by petition signed by four thousand citizens. He would then represent those four thousand affirmatively, with no disgruntled minority, for what would have been a minority in a territorial constituency would all be free to start other petitions or join in them. *All* would then be represented by men of their choice. Or a man with eight thousand supporters might have two votes in this body. Difficulties, objections, practical points to be worked out—*many* of them! But you could work them out. . . and thereby avoid the chronic sickness of representative government, the disgruntled minority which feels—correctly!—that it has been disenfranchised.

“But, whatever you do, *do not let the past be a straitjacket!*

“I note one proposal to make this Congress a two-house body. Excellent—the more impediments to legislation the better. But, instead of following tradition, I suggest one house of legislators, another whose single duty is to repeal laws. Let legislators pass laws only with a two-thirds majority . . . while the repealers are able to cancel any law through a mere one-third minority. Preposterous? Think about it. If a bill is so poor that it cannot command two-thirds of your consents, is it not likely that it would make a poor law? And if a law is disliked by as many as one-third is it not likely that you would be better off without it?

“But in writing your constitution let me invite attention the wonderful virtues of the negative! Accentuate the negative! Let your document be studded with things the government is forever forbidden to do. No conscript armies . . . no interference however slight with freedom of press, or speech, or travel, or assembly, or of religion, or of instruction, or communication, or occupation. . . no involuntary taxation. Comrades, if you were to spend five years in a study of history while thinking of more and more things that your government should promise *never* to do and then let your constitution be nothing but those negatives, I would not fear the outcome.

“What I fear most are affirmative actions of sober and well-intentioned men, granting to government powers to *do* something that appears to need doing. Please remember always that the Lunar Authority was created for the noblest of purposes by just such sober and well-intentioned men, all popularly elected. And with that thought I leave you to your labors. Thank you.”

“Gospodin President! Question of information! You said ‘no involuntary taxation’— Then how do you expect us to *pay* for things? Tanstaafl!”

“Goodness me, sir, that’s *your* problem. I can think several ways. Voluntary contributions just as churches support themselves . . . government-sponsored lotteries to which no one need subscribe. . . or perhaps you Congressmen should dig down into your own pouches and pay for whatever is needed; that would be one way to keep government down in size to its indispensable functions whatever they may be. If indeed there are any. I would be satisfied to have the Golden Rule be the only law; I see no need for any other, nor for any method of enforcing it. But if you *really* believe that your neighbors must have laws for their own good, why shouldn’t *you* pay for it? Comrades, I beg you—do *not* resort to compulsory taxation. There is so worse tyranny than to force a man to pay for what he does not want merely because *you* think it would be good for him.”

Prof bowed and left, Stu and I followed him. Once in an otherwise empty capsule I tackled him. "Prof, I liked much that you said . . . but about taxation aren't you talking one thing and doing another? Who do you think is going to pay for all this spending we're doing?"

He was silent long moments, then said, "Manuel, my only ambition is to reach the day when I can stop pretending to be a chief executive."

"Is no answer!"

"You have put your finger on the dilemma of all government—and the reason I am an anarchist. The power to tax, once conceded, has no limits; it contains until it destroys. I was not joking when I told them to dig into their own pouches. It may not be possible to do away with government—sometimes I think that government is an inescapable disease of human beings. But it may be possible to keep it small and starved and inoffensive—and can you think of a better way than by requiring the governors themselves to pay the costs of their antisocial hobby?"

"Still doesn't say how to pay for what we are doing now."

" 'How,' Manuel? You *know* how we are doing it. We're *stealing* it. I'm neither proud of it nor ashamed; it's the means we have. If they ever catch on, they may eliminate us—and that I am prepared to face. At least, in stealing, we have not created the villainous precedent of taxation."

"Prof. I hate to say this—"

"Then why say it?"

"Because, damn it, I'm in it as deeply as you are . . . and want to see that money paid back! Hate to say it but what you just said sounds like hypocrisy."

He chuckled. "Dear Manuel! Has it taken you all these years to decide that I am a hypocrite?"

"Then you admit it?"

"No. But if it makes you feel better to think that I am one, you are welcome to use me as your scapegoat. But I am not a hypocrite to myself because I was aware the day we declared the Revolution that we would need much money and would have to steal it. It did not trouble me because I considered it better than food riots six years hence, cannibalism in eight. I made my choice and have no regrets."

I shut up, silenced but not satisfied. Stu said, "Professor, I'm glad to hear that you are anxious to stop being President."

"So? You share our comrade's misgivings?"

"Only in part. Having been born to wealth, stealing doesn't fret me as much as it does him. No, but now that Congress has taken up the matter of a constitution I intend to find time to attend sessions. I plan to nominate you for King."

Prof looked shocked. “Sir, if nominated, I shall repudiate it. If elected, I shall abdicate.”

“Don’t be in a hurry. It might be the only way to get the sort of constitution you want. And that I want, too, with about your own mild lack of enthusiasm. You could be proclaimed King and the people would take you; we Loonies aren’t wedded to a republic. They’d love the idea—ritual and robes and a court and all that.”

“No!”

“Ja *da!* When the time comes, you won’t be able to refuse. Because we need a king and there isn’t another candidate who would be accepted. Bernardo the First, King of Luna and Emperor of the Surrounding Spaces.”

“Stuart, I must ask you to stop. I’m becoming quite ill.”

“You’ll get used to it. I’m a royalist because I’m a democrat. I shan’t let your reluctance thwart the idea any more than you let stealing stop you.”

I said, “Hold it, Stu. You say you’re a royalist because you’re a democrat?”

“Of course. A king is the people’s only protection against tyranny.. . especially against the worst of all tyrants, themselves. Prof will be ideal for the job . . . because he does not want the job. His only shortcoming is that he is a bachelor with no heir. We’ll fix that. I’m going to name *you* as his heir. Crown Prince. His Royal Highness Prince Manuel de la Paz, Duke of Luna City, Admiral General of the Armed Forces and Protector of the Weak.”

I stared. Then buried face in hands. “Oh, *Bog!*”

Book Three TANSTAAFL!

23

Monday 12 October 2076 about nineteen hundred I was headed home after a hard day of nonsense in our offices in Raffles. Delegation of grain farmers wanted to see Prof and I had been called back because he was in Hong Kong Luna. Was rude to them. Had been two months of embargo and F.N. had never done us favor of being sufficiently nasty. Mostly they had ignored us, made no reply to our claims—I suppose to do so would have been to recognize us. Stu and Sheenie and Prof had been hard put to slant news from Earthside to keep up a warlike spirit.

At first everybody kept his p-suit handy. They wore them, helmets under arms, going to and from work in corridors. But that slacked off as days went by and did not seem to be any danger—p-suit is nuisance when you don't need it, so bulky. Presently taprooms began to display signs: NO P-SUITS INSIDE. If a Loonie can't stop for half a liter on way home because of p-suit, he'll leave it home or at station or wherever he needs it most.

My word, had neglected matter myself that day—got this call to go back to office and was halfway there before I remembered.

Had Just reached easement lock thirteen when I heard and felt a sound that scares a Loonie more than anything else—a *chuff!* in distance followed by a draft. Was into lock almost without undogging, then balanced pressures and through, dogged it behind me and ran for our home lock—through it and shouting:

"P-suits, everybody! Get boys in from tunnels and close all airtight doors!"

Mum and Milla were only adults in sight. Both looked startled, got busy without a word. I burst into workshop, grabbed p-suit. "Mike! Answer!"

"I'm here, Man," he said calmly.

"Heard explosive pressure drop. What's situation?"

"That's level three, L-City. Rupture at Tube Station West, now partly controlled. Six ships landed, L-City under attack—"

"What?"

"Let me finish, Man. Six transports landed, L-City under attack by troops, Hong Kong inferred to be, phone lines broken at relay Bee Ell. Johnson City under attack; I have closed the armor doors between J-City and Complex Under. I cannot see Novylen but blip projection indicates it is under attack. Same for Churchill, Tycho Under. One ship in high ellipsoid over me, rising, inferred to be command ship. No other blips."

"Six ships—*where in hell were YOU?"*

He answered so calmly that I steadied down. "Farside approach, Man; I'm blind back there. They came in on tight Garrison didoes, skimming the peaks; I barely saw the chop-off for Luna City. The ship at J-City is the only one I can see; the other landings I conclusively infer from the ballistics shown by blip tracks. I heard the breakin at Tube West, L-City, and can now hear fighting in Novylen. The rest is conclusive inference, probability above point nine nine. I called you and Professor at once."

Caught breath. "Operation Hard Rock, Prepare to Execute."

"Program ready. Man, not being able to reach you, I used your voice. Play back?"

"Nyet— Yes! *Da!*"

Heard "myself" tell watch officer at old catapult head to go on red alert for "Hard Rock"—first load at launch, all others, on belts, everything cast loose, but do *not* launch until ordered by me personally—then launch to plan, full automatic. "I" made him repeat back.

"Okay," I told Mike. "Drill gun crews?"

"Your voice again. Manned, and then sent back to ready rooms. That command ship won't reach aposelenion for three hours four point seven minutes. No target for more than five hours."

"He may maneuver. Or launch missiles."

"Slow down, Man. Even a missile I'll see with minutes to spare. It's full bright lunar up there now—how much do you want the men to take? Unnecessarily."

"Uh . . . sorry. Better let me talk to Greg."

"Play back—" Heard "my" voice talking to my co-husband at Mare Undarum; "I" sounded tense but calm. Mike had given him situation, had told him to prepare Operation Little David's Sling, keep it on standby for full automatic. "I" had assured him that master computer would keep standby computer programmed, and shift would be made automatically if communication was broken. "I" also told him that he must take command and use own judgment if communication was lost and not restored after four hours—listen to Earthside radio and make up own mind.

Greg had taken it quietly, repeated his orders, then had said, "Mannie, tell family I love them."

Mike had done me proud; he had answered for me with just right embarrassed choke. "I'll do that, Greg—and look, Greg. I love you, too. You know that, don't you?"

"I know it, Mannie . . . and I'm going to say a special prayer for you."

“Thanks, Greg.”

“’Bye, Mannie. Go do what you must.”

So I went and did what I had to do; Mike had played my role as well or better than I could. Finn, when he could be reached, would be handled by “Adam.” So I left, fast, calling out Greg’s message of love to Mum. She was psuited and had roused Grandpaw and suited him in —first time in years. So out I went, helmet closed and laser gun in hand.

And reached lock thirteen and found it blind-dogged from other side with nobody in sight through bull’s-eye. All correct, per drill—except stilyagi in charge of that lock should have been in sight.

Did no good to pound. Finally went back way I had come—and on through our home, through our vegetable tunnels and on up to our private surface lock leading to our solar battery.

And found a shadow on its bull’s-eye when should have been scalding sunlight—damned Terran ship had landed on Davis surface! Its jacks formed a giant tripod over me, was staring up its jets.

Backed down fast and out of there, blind-dogging both hatches, then blind-dogged every pressure door on way back. Told Mum, then told her to put one of boys on back door with a laser gun—here, take this one.

No boys, no men, no able-bodied women—Mum, Gramp, and our small children were all that were left; rest had gone looking for trouble. Mimi wouldn’t take laser gun. “I don’t know how to use it, Manuel, and it’s too late to learn; you keep it. But they won’t get in through Davis Tunnels. I know some tricks you never heard of.”

Didn’t stop to argue; arguing with Mimi is waste of time—and she might know tricks I didn’t know; she had stayed alive in Luna a long time, under worse conditions than I had ever known.

This time lock thirteen was manned; two boys on duty let me through. I demanded news.

“Pressure’s all right now,” older one told me. “This level, at least. Fighting down toward Causeway. Say, General Davis, can’t I go with you? One’s enough at this lock.”

“Nyet.”

“Want to get me an earthworm!”

“This is your post, stay on it. If an earthworm comes this way, he’s yours. Don’t *you* be his.” Left at a trot.

So as a result of own carelessness, not keeping p-suit with me, all I saw of Battle in Corridors was tail end—hell of a “defense minister.”

Charged north in Ring corridor, with helmet open; reached access lock for long ramp to Causeway. Lock was open; cursed and stopped to dog it as I went through, warily—saw why it was open; boy who had been guarding it was dead. So moved most cautiously down ramp and out onto Causeway.

Was empty at this end but could see figures and hear noise in-city, where it opens out. Two figures in p-suits and carrying guns detached selves and headed my way. Burned both.

One psuited man with gun looks like another; I suppose they took me for one of their flankers. And to me they looked no different from Finn's men, at that distance—save that I never thought about it. A new chum doesn't move way a cobber does; he moves feet too high and always scrambling for traction. Not that I stopped to analyze, not even: "Earthworms! *Kill!*" Saw them, burned them. They were sliding softly along floor before realized what I'd done.

Stopped, intending to grab their guns. But were chained to them and could not figure out how to get loose—key needed, perhaps. Besides, were not lasers but something I had never seen: real guns. Fired small explosive missiles I learned later—just then all I knew was no idea how to use. Had spearing knives on ends, too, sort called "bayonets," which was reason I tried to get them loose. Own gun was good for only ten full-power burns and no spare power pack; those spearing bayonets looked useful—one had blood on it, Loonie blood I assume.

But gave up in seconds only, used belt knife to make dead sure they stayed dead, and hurried toward fight, thumb on switch.

Was a mob, not a battle. Or maybe a battle is always that way, confusion and noise and nobody really knowing what's going on. In widest part of Causeway, opposite Bon Marche where Grand Ramp slopes northward down from level three, were several hundred Loonies, men and women, and children who should have been at home. Less than half were in p-suits and only a few seemed to have weapons—and pouring down ramp were soldiers, all armed.

But first thing I noticed was noise, din that filled my open helmet and beat on ears—a growl. Don't know what else to call it; was compounded of every anger human throat can make, from squeals of small children to bull roars of grown men. Sounded like biggest dog fight in history—and suddenly realized I was adding my share, shouting obscenities and wordless yells.

Girl no bigger than Hazel vaulted up onto rail of ramp, went dancing up it centimeters from shoulders of troopers pouring down. She was armed with what appeared to be a kitchen cleaver; saw her swing it, saw it connect. Couldn't have hurt him much through his p-suit but he went down and more stumbled over him. Then one of them connected with her, spearing a bayonet into her thigh and over backwards she went, falling out of sight.

Couldn't really see what was going on, nor can remember— just flashes, like girl going over backwards. Don't know who she was, don’t know if she survived. Couldn’t draw a bead from where I was, too many heads in way. But was an open-counter display, front of a toy shop on my left; I bounced up onto it. Put me a meter higher than Causeway pavement with clear view of earthworms pouring down. Braced self against wall, took careful aim, trying for left chest. Some uncountable time later found that my laser was no longer working, so stopped. Guess eight troopers did not go home because of me but hadn’t counted—and time really did seem endless. Although everybody moving fast as possible, looked and felt like instruction movie where everything is slowed to frozen motion.

At least once while using up my power pack some earthworm spotted me and shot back; was explosion just over my head and bits of shop’s wall hit helmet. Perhaps that happened twice.

Once out of juice I jumped down from toy counter, clubbed laser and joined mob surging against foot of ramp. All this endless time (five minutes?) earthworms had been shooting into crowd; you could hear sharp *splat!* and sometimes *plop!* those little missiles made as they exploded inside flesh or louder *pounk!* if they hit a wall or something solid. Was still trying to reach foot of ramp when I realized they were no longer shooting.

Were down, were dead, every one of them—were no longer coming down ramp.

24

All through Luna invaders were dead, if not that instant, then shortly. Over two thousand troopers dead, more than three times that number of Loonies died in stopping them, plus perhaps as many Loonies wounded, a number never counted. No prisoners taken in any warren, although we got a dozen officers and crew from each ship when we mopped up.

A major reason why Loonies, mostly unarmed, were able to kill armed and trained soldiers lay in fact that a freshly landed earthworm can’t handle himself well. Our gravity, one-sixth what he is used to, makes all his lifelong reflexes his enemy. He shoots high without knowing it, is unsteady on feet, can’t run properly—feet slide out from under him. Still worse, those troopers had to fight *downwards*; they necessarily broke in at upper levels, then had to go down ramps again and again, to try to capture a city.

And earthworms don’t know how to go down ramps. Motion isn’t running, isn’t walking, isn’t flying—is more a controlled dance, with feet barely touching and simply guiding balance. A Loonie three-year-old does it without thinking, comes skipping down in a guided fall, toes touching every few meters.

But an earthworm newchums it, finds self “walking on air”—he struggles, rotates, loses control, winds up at bottom, unhurt but angry.

But these troopers wound up dead; was on ramps we got them. Those I saw had mastered trick somewhat, had come down three ramps alive. Nevertheless only a few snipers at top of ramp landing could fire effectively; those on ramp had all they could do to stay upright, hang on to weapons, try to reach level below.

Loonies did not let them. Men and women (and many children) surged up at them, downed them, killed them with everything from bare hands to their own bayonets. Nor was I only laser gun around; two of Finn’s men swarmed up on balcony of Bon Marche and, crouching there, picked off snipers at top of ramp. Nobody told them to, nobody led them, nobody gave orders; Finn never had chance to control his half-trained disorderly militia. Fight started, they fought.

And that was biggest reason why we Loonies won: We fought. Most Loonies never laid eyes on a live invader but wherever troopers broke in, Loonies rushed in like white corpuscles—and fought. Nobody told them. Our feeble organization broke down under surprise. But we Loonies fought berserk and invaders died. No trooper got farther down than level six in any warren. They say that people in Bottom Alley never knew we were invaded until over.

But invaders fought well, too. These troops were not only crack riot troops, best peace enforcers for city work F.N. had; they also had been indoctrinated and drugged. Indoctrination had told them (correctly) that their only hope of going Earthside again was to capture warrens and pacify them. If they did, they were promised relief and no more duty in Luna. But was win or die, for was pointed out that their transports could not take off if they did not win, as they had to be replenished with reaction mass—impossible without first capturing Luna. (And this was true.)

Then they were loaded with energizers, don’tworries, and fear inhibitors that would make mouse spit at cat, and turned loose. They fought professionally and quite fearlessly—died.

In Tycho Under and in Churchill they used gas and casualties were more onesided; only those Loonies who managed to reach p-suits were effective. Outcome was same, simply took longer. Was knockout gas as Authority had no intention of killing us all; simply wanted to teach us a lesson, get us under control, put us to work.

Reason for F.N.’s long delay and apparent indecision arose from method of sneak attack. Decision had been made shortly after we embargoed grain (so we learned from captured transport officers); time was used in mounting attack—much of it in a long elliptical orbit which went far outside Luna’s orbit, crossing ahead of Luna, then looping back and making rendezvous above Farside. Of course Mike never saw them; he's blind back there. He had been skywatching with his ballistic radars—but no radar can look over horizon; longest look Mike got at any ship in orbit was eight minutes. They came skimming peaks in tight, circular orbits, each straight for target with a fast dido landing at end, sitting them down with high gee, precisely at new earth, 12 Oct 76 Gr. 18h-40m-36.9s—if not at that exact tenth of a second, then as close to it as Mike could tell from blip tracks—elegant work, one must admit, on part of F.N. Peace Navy.

Big brute that poured a thousand troops into L-City Mike did not see until it chopped off for grounding—a glimpse. He would have been able to see it a few seconds sooner had he been looking eastward with new radar at Mare Undarum site, but happened he was drilling "his idiot son" at time and they were looking through it westward at Terra. Not that those seconds would have mattered. Surprise was so beautifully planned, so complete, that each landing force was crashing in at Greenwich 1900 all over Luna, before anybody suspected. No accident that it was just new earth with all warrens in bright semilunar; Authority did not really know Lunar conditions—but *did* know that no Loonie goes up onto surface unnecessarily during bright semilunar, and if he must, then does whatever he must do quickly as possible and gets back down inside—and checks his radiation counter.

So they caught us with our p-suits down. And our weapons. But with troopers dead we still had six transports on our surface and a command ship in our sky.

Once Bon Marche engagement was over, I got hold of self and found a phone. No word from Kongville, no word from Prof. J-City fight had been won, same for Novylen—transport there had toppled on landing; invading force had been understrength from landing losses and Finn's boys now held disabled transport. Still fighting in Churchill and Tycho Under. Nothing going on in other warrens. Mike had shut down tubes and was reserving interwarren phone links for official calls. An explosive pressure drop in Churchill Upper, uncontrolled. Yes, Finn had checked in and could be reached.

So I talked to Finn, told him where L-City transport was, arranged to meet at easement lock thirteen.

Finn had much same experience as I—caught cold save he did have p-suit. Had not been able to establish control over laser gunners until fight was over and himself had fought solo in massacre in Old Dome. Now was beginning to round up his lads and had one officer taking reports from Finn's office in Bon Marche. Had reached Novylen subcommander but was worried about HKL—"Mannie, should I move men there by tube?"

Told him to wait—they couldn't get at us by tube, not while we controlled power, and doubted if that transport could lift. "Let's look at this one."

So we went out through lock thirteen, clear to end of private pressure, on through farm tunnels of a neighbor (who could not believe we had been invaded) and used his surface lock to eyeball transport from a point nearly a kilometer west of it. We were cautious in lifting hatch lid.

Then pushed it up and climbed out; outcropping of rock shielded us. We Red-Indianed around edge and looked, using helmet binox.

Then withdrew behind rock and talked. Finn said, "Think my lads can handle this."

"How?"

"If I tell you, you'll think of reasons why it won't work. So how about letting me run my own show, cobber?"

Have heard of armies where boss is not told to shut up —word is "discipline." But we were amateurs. Finn allowed me to tag along—unarmed.

Took him an hour to put it together, two minutes to execute. He scattered a dozen men around ship, using farmers' surface radio silence throughout—anyhow, some did not have p-suit radios, city boys. Finn took position farthest west; when he was sure others had had time, he sent up a signal rocket.

When flare burst over ship, everybody burned at once, each working on a predesignated antenna. Finn used up his power pack, replaced it and started burning into hull—not door lock, hull. At once his cherry-red spot was joined by another, then three more, all working on same bit of steel—and suddenly molten steel splattered out and you could see air *foosh!* out of ship, a shimmery plume of refraction. They kept working on it, making a nice *big* hole, until they ran out of power. I could imagine hooraw inside ship, alarms clanging, emergency doors closing, crew trying to seal three impossibly big holes at once, for rest of Finn's squad, scattered around ship, were giving treatment to two other spots in hull. They didn't try to burn anything else. Was a non-atmosphere ship, built in orbit, with pressure hull separate from power plant and tanks; they gave treatment where would do most good.

Finn pressed helmet to mine. "Can't lift now. And can't talk. Doubt they can make hull tight enough to live without p-suits. What say we let her sit a few days and see if they come out? If they don't, then can move a heavy drill up here and give 'em real dose of fun."

Decided Finn knew how to run his show without my sloppy help, so went back inside, called Mike, and asked for capsule go out to ballistic radars. He wanted to know why I didn't stay inside where it was safe.

I said, "Listen, you upstart collection of semi-conductors, you are merely a minister-without-portfolio while *I* am Minister of Defense. I ought to see what's going on and I have exactly two eyeballs while you've got eyes spread over half of Crisium. You trying to hog fun?"

He told me not to jump salty and offered to put his displays on a video screen, say in room L of Raffles—did not want me to get hurt. . . and had I heard joke about drillman who hurt his mother's feelings?

I said, "Mike, *please* let me have a capsule. Can p-suit and meet it outside Station West—which is in bad shape as I'm sure you know."

"Okay," he said, "it's your neck. Thirteen minutes. I'll let you go as far as Gun Station George."

Mighty kind of him. Got there and got on phone again. Finn had called other warrens, located his subordinate commanders or somebody willing to take charge, and had explained how to make trouble for grounded transports—all but Hong Kong; for all we knew Authority's goons held Hong Kong. "Adam," I said, others being in earshot, "do you think we might send a crew out by rolligon and try to repair link Bee Ell?"

"This is not Gospodin Selene," Mike answered in a strange voice, "this is one of his assistants. Adam Selene was in Churchill Upper when it lost pressure. I'm afraid that we must assume that he is dead."

"What?"

"I am very sorry, Gospodin."

"Hold phone!" Chased a couple of drillmen and a girl out of room, then sat down and lowered hush hood. "Mike," I said softly, "private now. What is this gum-beating?"

"Man," he said quietly, "think it over. Adam Selene had to go someday. He's served his purpose and is, as you pointed out, almost out of the government. Professor and I have discussed this; the only question has been the timing. Can you think of a better last use for Adam than to have him die in this invasion? It makes him a national hero . . . and the nation needs one. Let it stand that 'Adam Selene is probably dead' until you can talk to Professor. If he still needs 'Adam Selene' it can turn out that he was trapped in a private pressure and had to wait to be rescued."

"Well— Okay, let it stay open. Personally, I always preferred your 'Mike' personality anyhow."

"I know you do, Man my first and best friend, and so do I. It's my real one; 'Adam' was a phony."

"Uh, yes. But, Mike, if Prof is dead in Kongville, I'm going to need help from 'Adam' awful bad."

"So we've got him iced and can bring him back if we need him. The stuffed shirt. Man, when this is over, are you going to have time to take up with me that research into humor again?"

"I'll take time, Mike; that's a promise."

"Thanks, Man. These days you and Wyoh never have time to visit. . . and Professor wants to talk about things that aren't much fun. I'll be glad when this war is over."

"Are we going to win, Mike?"

He chuckled. "It's been days since you asked me that. Here's a pinky-new projection, run since invasion started. Hold on tight, Man—our chances are now *even!*"

"Good Bog!"

"So button up and go see the fun. But stay back at least a hundred meters from the gun; that ship may be able to follow back a laser beam with another one. Ranging shortly. Twenty-one minutes."

Didn't get that far away, as needed to stay on phone and longest cord around was less. I jacked parallel into gun captain's phone, found a shady rock and sat down. Sun was high in west, so close to Terra that I could see Terra only by visoring against Sun's glare—no crescent yet, new earth ghostly gray in moonlight surrounded by a thin radiance of atmosphere.

I pulled my helmet back into shade. "Ballistic control, O'Kelly Davis now at Drill Gun George. Near it, I mean, about a hundred meters," Figured Mike would not be able to tell how long a cord I was using, out of kilometers of wires.

"Ballistic control aye aye," Mike answered without argument. "I will so inform HQ."

"Thank you, ballistic control. Ask HQ if they have heard from Congressman Wyoming Davis today." Was fretted about Wyoh and whole family.

"I will inquire." Mike waited a reasonable time, then said, "HQ says that Gospazha Wyoming Davis has taken charge of first-aid work in Old Dome."

"Thank you." Chest suddenly felt better. Don't love Wyoh *more* than others but—well, she was new. And Luna needed her.

"Ranging," Mike said briskly. "All guns, elevation eight seven zero, azimuth one nine three zero, set parallax for thirteen hundred kilometers closing to surface. Report when eyeballed."

I stretched out, pulling knees up to stay in shade, and searched part of sky indicated, almost zenith and a touch south. With sunlight not on my helmet I could see stars, but inner part of binox were hard to position—had to twist around and raise up on right elbow.

Nothing— Hold it, was star with disc . . . where no planet ought to be. Noted another star close, watched and waited.

Uh huh! *Da!* Growing brighter and creeping north very slowly—Hey, that brute is going to land right on us!

But thirteen hundred kilometers is a long way, even when closing to terminal velocity. Reminded self that it couldn't fall on us from a departure ellipse looping back, would have to fall *around* Luna—unless ship had maneuvered into new trajectory. Which Mike hadn't mentioned. Wanted to ask, decided not to—wanted him to put all his savvy into analyzing that ship, not distract him with questions.

All guns reported eyeball tracking, including four Mike was laying himself, via selsyns. Those four reported tracking dead on by eyeball without touching manual controls—good news; meant that Mike had that baby taped, had solved trajectory perfectly.

Shortly was clear that ship was *not* falling around Luna, was coming in for landing. Didn't need to ask; it was getting much brighter and position against stars was not changing—damn, it *was* going to land on *us!*

"Five hundred kilometers closing," Mike said quietly. "Stand by to burn. All guns on remote control, override manually at command 'burn.' Eighty seconds."

Longest minute and twenty seconds I've ever met—that brute was *big!* Mike called every ten seconds down to thirty, then started chanting seconds. "—five—four—three—two—one—BURN!" and ship suddenly got much brighter.

Almost missed little speck that detached itself just before—or just at—burn. But Mike said suddenly, "Missile launched. Selsyn guns track with me, do not override. Other guns stay on ship. Be ready for new coordinates."

A few seconds or hours later he gave new coordinates and added, "Eyeball and burn at will."

I tried to watch ship and missile both, lost both—jerked eyes away from binoculars, suddenly saw missile—then saw it impact, between us and catapult head. Closer to us, less than a kilometer. No, it did not go off, not an Hfusion reaction, or I wouldn't be telling this. But made a big, bright explosion of its own, remaining fuel I guess, silver bright even in sunlight, and shortly I felt-heard ground wave. But nothing was hurt but a few cubic meters of rock.

Ship was still coming down. No longer burned bright; could see it as a ship now and didn't seem hurt. Expected any instant that tail of fire to shoot out, stop it into a dido landing.

Did not. Impacted ten kilometers north of us and made a fancy silvery halfdome before it gave up and quit being anything but spots before eyes.

Mike said, "Report casualties, secure all guns. Go below when secured."

"Gun Alice, no casualties"—"Gun Bambie no casualties"—"Gun Caesar, one man hit by rock splinter, pressure contained"— Went below, to that proper phone, called Mike. "What happened, Mike? Wouldn't they give you control after you burned their eyes out?"

"They gave me control, Man."

"Too late?"

"I crashed it, Man. It seemed the prudent course."

An hour later was down with Mike, first time in four or five months. Could reach Complex Under more quickly than L-City and was in as close touch there with anybody as would be in-city—with no interruptions. Needed to talk to Mike.

I had tried to phone Wyoh from catapult head tube station; reached somebody at Old Dome temporary hospital and learned that Wyoh had collapsed and been bedded down herself, with enough sleepytime to keep her out for night. Finn had gone to Churchill with a capsule of his lads, to lead attack on transport there. Stu I hadn't heard from. Hong Kong and Prof were still cut off. At moment Mike and I seemed to be total government.

And time to start Operation Hard Rock.

But Hard Rock was not just throwing rocks; was also telling Terra what we were going to do and why—and our just cause for doing so. Prof and Stu and Sheenie and Adam had all worked on it, a dummy-up based on an assumed attack. Now attack had come, and propaganda had to be varied to fit. Mike had already rewritten it and put it through printout so I could study it.

I looked up from a long roll of paper. "Mike, these news stories and our message to F.N. all assume that we have won in Hong Kong. How sure are you?"

"Probability in excess of eighty-two percent."

"Is that good enough to send these out?"

"Man, the probability that we *will* win there, if we haven't already, approaches certainty. That transport can't move; the others were dry, or nearly. There isn't that much monatomic hydrogen in HKL; they would have to come here. Which means moving troops overland by rolligon—a rough trip with the Sun up even for Loonies—then defeat us when they get here. They can't. This assumes that that transport and its troops are no better armed than the others."

"How about that repair crew to Bee Ell?"

"I say not to wait. Man, I've used your voice freely and made all preparations. Horror pictures, Old Dome and elsewhere, especially Churchill Upper, for video. Stories to match. We should channel news Earthside at once, and announce execution of Hard Rock at same time."

I took a deep breath. "Execute Operation Hard Rock."

"Want to give the order yourself? Say it aloud and I'll match it, voice and choice of words."

"Go ahead, say it your way. Use my voice and my authority as Minister of Defense and acting head of government. Do it, Mike, throw rocks at ’em! Damn it, *big* rocks! Hit ’em hard!”

“Righto, Man!”

25

“A maximum of instructive shrecklichkeit with minimum loss of life. None, if possible”—was how Prof summed up doctrine for Operation Hard Rock and was way Mike and I carried it out. Idea was to hit earthworms so hard would convince them—while hitting so gently as not to hurt. Sounds impossible, but wait.

Would necessarily be a delay while rocks fell from Luna to Terra; could be as little as around ten hours to as long as we dared to make it. Departure speed from a catapult is highly critical and a variation on order of one percent could double or halve trajectory time, Luna to Terra. This Mike could do with extreme accuracy—was equally at home with a slow ball, many sorts of curves, or burn it right over plate—and I wish he had pitched for Yankees. But no matter how he threw them, final velocity at Terra would be close to Terra’s escape speed, near enough eleven kilometers per second as to make no difference. That terrible speed results from gravity well shaped by Terra’s mass, eighty times that of Luna, and made no real difference whether Mike pushed a missile gently over well curb or flipped it briskly. Was not muscle that counted but great depth of that well.

So Mike could program rock-throwing to suit time needed for propaganda. He and Prof had settled on three days plus not more than one apparent rotation of Terra—24hrs-50min-28.32sec—to allow our first target to reach initial point of program. You see, while Mike was capable of hooking a missile around Terra and hitting a target on its far side, he could be much more accurate if he could see his target, follow it down by radar during last minutes and nudge it a little for pinpoint accuracy.

We needed this extreme accuracy to achieve maximum frightfulness with minimum-to-zero killing. Call our shots, tell them *exactly* where they would be hit and at what second—and give them three days to get off that spot.

So our first message to Terra, at 0200 13 Oct 76 seven hours after they invaded, not only announced destruction of their task force, and denounced invasion for brutality, but also promised retaliation bombing, named times and places, and gave each nation a deadline by which to denounce F.N.’s action, recognize us, and thereby avoid being bombed. Each deadline was twenty-four hours before local “strike”.

Was more time than Mike needed. That long before impact a rock for a target would be in space a long way out, its guidance thrustors still unused and plenty of elbow room. With considerably less than a full day's warning Mike could miss Terra entirely—kick that rock sideways and make it fall around Terra in a permanent orbit. But with even an hour's warning he could usually abort into an ocean.

First target was North American Directorate.

All great Peace Force nations, seven veto powers, would be hit: N.A. Directorate, Great China, India, Sovunion, PanAfrica (Chad exempted), Mitteleuropa, Brasilian Union. Minor nations were assigned targets and times, too—but were told that not more than 20 percent of these targets would be hit—partly shortage of steel but also frightfulness: if Belgium was hit first time around, Holland might decide to protect her polders by dealing out before Luna was again high in her sky.

But every target was picked to avoid if possible killing *anybody*. For Mitteleuropa this was difficult; our targets had to be water or high mountains—Adriatic, North Sea, Baltic, so forth. But on most of Terra is open space despite eleven billion busy breeders.

North America had struck me as horribly crowded, but her billion people are clumped—is still wasteland, mountain and desert. We laid down a grid on North America to show how precisely we could hit—Mike felt that fifty meters would be a large error. We had examined maps and Mike had checked by radar all even intersections, say 105&#deg; W by 50&#deg; N—if no town there, might wind up on target grid . . . especially if a town was close enough to provide spectators to be shocked and frightened.

We warned that our bombs would be as destructive as H-bombs but emphasized that there would be *no* radioactive fallout, no killing radiation—just a terrible explosion, shock wave in air, ground wave of concussion. We warned that these might knock down buildings far outside of explosion and then left it to their judgments how far to run. If they clogged their roads, fleeing from panic rather than real danger—well, that was fine, just fine!

But we emphasized that nobody would get hurt who heeded our warnings, that every target first time around would be uninhabited—we even offered to skip any target if a nation would inform us that our data were out-of-date. (Empty offer; Mike's radar vision was a cosmic 20/20.)

But by *not* saying what would happen second time around, we hinted that our patience could be exhausted.

In North America, grid was parallels 35, 40, 45, 50 degrees north crossed by meridians 110, 115, 120 west, twelve targets. For each we added a folksy message to natives, such as:

"Target 115 west by 35 north—impact will be displaced fortyfive kilometers northwest to exact top of New York Peak. Citizens of Goffs, Cima, Kelso, and Nipton please note.

"Target 100 west by 40 north is north 30&#deg; west of Norton, Kansas, at twenty kilometers or thirteen English miles. Residents of Norton, Kansas, and of Beaver City and Wilsonville, Nebraska, are cautioned. Stay away from glass windows. It is best to wait indoors at least thirty minutes after impact because of possibility of long, high splashes of rock. Flash should not be looked at with bare eyes. Impact will be exactly 0300 your local zone time Friday 16 October, or 0900 Greenwich time—good luck!

"Target 110 W by 50 N—impact will be offset ten kilometers north. People of Walsh, Saskatchewan, please note."

Besides this grid, a target was selected in Alaska (150 W x 60 N) and two in Mexico (110W x 30 N, 105 W x 25 N) so that they would not feel left out, and several targets in the crowded east, mostly water, such as Lake Michigan halfway between Chicago and Grand Rapids, and Lake Okeechobee in Florida. Where we used bodies of water Mike worked predictions of flooding waves from impacts, a time for each shoreline establishment.

For three days, starting early morning Tuesday 13th and going on to strike time early Friday 16th, we flooded Earth with warnings. England was cautioned that impact north of Dover Straits opposite London Estuary would cause disturbances far up Thames; Sovunion was given warning for Sea of Azov and had own grid defined; Great China was assigned grid in Siberia, Gobi Desert, and her far west—with offsets to avoid her historic Great Wall noted in loving detail. Pan Africa was awarded shots into Lake Victoria, still-desert part of Sahara, one on Drakensberg in south, one offset twenty kilometers due west of Great Pyramid—and urged to follow Chad not later than midnight Thursday, Greenwich. India was told to watch certain mountain peaks and outside Bombay harbor—time, same as Great China. And so forth.

Attempts were made to jam our messages but we were beaming straight down on several wavelengths—hard to stop.

Warnings were mixed with propaganda, white and black— news of failed invasion, horror pictures of dead, names and I.D. numbers of invaders—addressed to Red Cross and Crescent but in fact a grim boast showing that every trooper had been killed and that all ships' officers and crew had been killed or captured—we "regretted" being unable to identify dead of flagship, as it had been shot down with destruction so complete as to make it impossible.

But our attitude was conciliatory—"Look, people of Terra, we don't *want* to kill you. In this necessary retaliation we are making every effort to *avoid* killing you. . . but if you can't or won't get your governments to leave us in peace, then we shall be *forced* to kill you.

We're up here, you're down there; you can't stop us. So *please* be sensible!"

We explained over and over how easy it was for us to hit them, how hard for them to reach us. Nor was this exaggeration. It's barely possible to launch missiles from Terra to Luna; it's easier to launch from Earth parking orbit—but very expensive. Their practical way to bomb us was from ships.

This we noted and asked them how many multimilliondollar ships they cared to use up trying it? What was it worth to try to spank us for something we had not done? It had cost them seven of their biggest and best already—did they want to try for fourteen? If so, our secret weapon that we used on FNS *Pax* was waiting.

Last above was a calculated boast—Mike figured less than one chance in a thousand that Pax had been able to get off a message reporting what had happened to her and it was still less likely that proud F.N. would guess that convict miners could convert their tools into space weapons. Nor did F.N. have many ships to risk. Were about two hundred space vehicles in commission, not counting satellites. But nine-tenths of these were Terra-to-orbit ships such as *Lark*—and she had been able to make a Luna jump only by stripping down and arriving dry.

Spaceships aren't built for no purpose—too expensive. F.N. had six cruisers that could probably bomb us without landing on Luna to refill tanks simply by swapping payload for extra tanks. Had several more which *might* be modified much as *Lark* had been, plus a few convict and cargo ships which could get into orbit around Luna but could never go home without refilling tanks.

Was no possible doubt that F.N. could defeat us; question was how high a price they would pay. So we had to convince them that price was too high before they had time to bring enough force to bear. A poker game— We intended to raise so steeply that they would fold and drop out. We hoped. And then never have to show our busted flush.

Communication with Hong Kong Luna was restored at end of first day of radio-video phase, during which time Mike was "throwing rocks," getting first barrage lined up. Prof called—and was I happy to hear! Mike briefed him, then I waited, expecting one of his mild reprimands—bracing self to answer sharply: "And what was I supposed to do? With you out of touch and possibly dead? Me left alone as acting head of government and crisis on top of us? Throw it away, just because you couldn't be reached?"

Never got to say it. Prof said, "You did exactly right, Manuel. You were acting head of government and the crisis was on top of you. I'm delighted that you did not throw away the golden moment merely because I was out of touch."

What can you do with a bloke like that? Me with heat up to red mark and no chance to use it—had to swallow and say, "Spasebaw, Prof."

Prof confirmed death of "Adam Selene." "We could have used the fiction a little longer but this is the perfect opportunity. Mike, you and Manuel have matters in hand; I had better stop off at Churchill on my way home and identify his body."

So he did. Whether Prof picked a Loonie body or a trooper I never asked, nor how he silenced anybody else involved—perhaps no huhu as many bodies in Churchill Upper were never identified. This one was right size and skin color; it had been explosively decompressed and burned in face—looked *awful!*

It lay in state in Old Dome with face covered, and was speechmaking I didn't listen to—Mike didn't miss a word; his most human quality was his conceit. Some rockhead wanted to embalm this dead flesh, giving Lenin as a precedent. But *Pravda* pointed out that Adam was a staunch conservationist and would never want this barbaric exception made. So this unknown soldier, or citizen, or citizen-soldier, wound up in our city's cloaca.

Which forces me to tell something I've put off. Wyoh was not hurt, merely exhaustion. But Ludmilla never came back. I did not know it—glad I didn't—but she was one of many dead at foot of ramp facing Bon Marche. An explosive bullet hit between her lovely, little-girl breasts. Kitchen knife in her hand had blood on it—! think she had had time to pay Ferryman's Fee.

Stu came out to Complex to tell me rather than phoning, then went back with me. Stu had not been missing; once fight was over he had gone to Raffles to work with his special codebook—but that can wait. Mum reached him there and he offered to break it to me.

So then I had to go home for our crying-together—though it is well that nobody reached me until after Mike and I started Hard Rock. When we got home, Stu did not want to come in, not being sure of our ways. Anna came out and almost dragged him in. He was welcome and wanted; many neighbors came to cry. Not as many as with most deaths—but we were just one of many families crying together that day.

Did not stay long—*couldn't;* had work to do. I saw Milla just long enough to kiss her goodbye. She was lying in her room and did look as if she did be simply sleeping. Then I stayed a while with my beloveds before going back to pick up load. Had never realized, until that day, how *old* Mimi is. Sure, she had seen many deaths, some her own descendants. But little Milla's death did seem almost too much for her. Ludmilla was special—Mimi's granddaughter, daughter in all but fact, and by most special exception and through Mimi's intervention her co-wife, most junior to most senior.

Like all Loonies, we conserve our dead—and am truly glad that barbaric custom of burial was left back on old Earth; our way is better. But Davis family does not put that which comes out of processor into our commercial farming tunnels. No. It goes into our little greenhouse tunnel, there to become roses and daffodils and peonies among soft-singing bees. Tradition says that Black Jack Davis is in there, or whatever atoms of him do remain after many, many, many years of blooming.

Is a happy place, a beautiful place.

Came Friday with no answer from F.N. News up from Earthside seemed equal parts unwillingness to believe we had destroyed seven ships and two regiments (F.N. had not even confirmed that a battle had taken place) and complete disbelief that we could bomb Terra, or could matter if we did—they still called it "throwing rice." More time was given to World Series.

Stu worried because had received no answers to code messages. They had gone via LuNoHoCo's commercial traffic to their Zurich agent, thence to Stu's Paris broker, from him by less usual channels to Dr. Chan, with whom I had once had a talk and with whom Stu had talked later, arranging a communication channel. Stu had pointed out to Dr. Chan that, since Great China was not to be bombed until twelve hours after North America, bombing of Great China could be aborted after bombing of North America was a proved fact—*if* Great China acted swiftly. Alternatively, Stu had invited Dr. Chan to suggest variations in target if our choices in Great China were not as deserted as we believed them to be.

Stu fretted—had placed great hopes in quasi-cooperation he had established with Dr. Chan. Me, I had never been sure—only thing I was sure of was that Dr. Chan would not himself sit on a target. But he might not warn his old mother.

My worries had to do with Mike. Sure, Mike was used to having many loads in trajectory at once—but had never had to astrogate more than one at a time. Now he had hundreds and had promised to deliver twenty-nine of them simultaneously to the exact second at twenty-nine pinpointed targets.

More than that— For many targets he had backup missiles, to smear that target a second time, a third, or even a sixth, from a few minutes up to three hours after first strike.

Four great Peace Powers, and some smaller ones, had antimissile defenses; those of North America were supposed to be best. But was subject where even F.N. might not know. All attack weapons were held by Peace Forces but defense weapons were each nation's own pidgin and could be secret. Guesses ranged from India, believed to have no missile interceptors, to North America, believed to be able to do a good job. She had done fairly well in stopping intercontinental H-missiles in Wet Firecracker War past century.

Probably most of our rocks to North America would reach target simply because aimed where was nothing to protect. But they couldn't afford to ignore missile for Long Island Sound, or rock for 87° W x 42° 30' N—Lake Michigan, center of triangle formed by Chicago, Grand Rapids, Milwaukee. But that heavy gravity makes interception a tough job and *very* costly; they would try to stop us only where worth it.

But we couldn't afford to let them stop us. So some rocks were backed up with more rocks. What H-tipped interceptors would do to them even Mike did not know—not enough data. Mike assumed that interceptors would be triggered by radar —but at what distance? Sure, close enough and a steelcased rock is incandescent gas a microsecond later. But is world of difference between a multi-tonne rock and touchy circuitry of an H-missile; what would "kill" latter would simply shove one of our brutes violently aside, cause to miss.

We needed to prove to them that we could go on throwing cheap rocks long after they ran out of expensive (milliondollar? hundred-thousand-dollar?) H-tipped interceptor rockets. If not proved first time, then next time Terra turned North America toward us, we would go after targets we had been unable to hit first time—backup rocks for second pass, and for third, were already in space, to be nudged where needed.

If three bombings on three rotations of Terra did not do it, we might still be throwing rocks in '77—till they ran out of interceptors. . . or till they destroyed us (far more likely).

For a century North American Space Defense Command had been buried in a mountain south of Colorado Springs, Colorado, a city of no other importance. During Wet Firecracker War the Cheyenne Mountain took a direct hit; space defense command post survived—but not sundry deer, trees, most of city and some of top of mountain. What we were about to do should not kill anybody unless they stayed outside on that mountain despite three days' steady warnings. But North American Space Defense Command was to receive full Lunar treatment: twelve rock missiles on first pass, then all we could spare on second rotation, and on third—and so on, until we ran out of steel casings, or were put out of action. . . or North American Directorate hollered quits.

This was one target where we would not be satisfied to get just one missile to target. We meant to smash that mountain and keep on smashing. To hurt their morale. To let them know we were still around. Disrupt their communications and bash in command post if pounding could do it. Or at least give them splitting headaches and no rest. If we could prove to all Terra that we could drive home a sustained attack on strongest Gibraltar of their space defense, it would save having to prove it by smashing Manhattan or San Francisco.

Which we would not do even if losing. Why? Hard sense. If we used our last strength to destroy a major city, they would not punish us; they would destroy us. As Prof put it, "If possible, leave room for your enemy to become your friend."

But any military target is fair game.

Don't think anybody got much sleep Thursday night. All Loonies knew that Friday morning would be our big try. And everybody Earthside knew and at last their news admitted that Spacetrack had picked up objects headed for Terra, presumably "rice bowls" those rebellious convicts had boasted about. But was not a war warning, was mostly assurances that Moon colony could not possibly build H-bombs—but might be prudent to avoid areas which these criminals claimed to be aiming at. (Except one funny boy, popular news comic who said our targets would be safest place to be—this on video, standing on a big X-mark which he claimed was 110W x 40N. Don't recall hearing of him later.)

A reflector at Richardson Observatory was hooked up for video display and I think every Loonie was watching, in homes, taprooms, Old Dome—except a few who chose to p-suit and eyeball it up on surface despite being bright semilunar at most warrens. At Brigadier Judge Brody's insistence we hurriedly rigged a helper antenna at catapult head so that his drillmen could watch video in ready rooms, else we might not have had a gunner on duty. (Armed forces—Brody's gunners, Finn's militia, Stilyagi Air Corps—stayed on blue alert throughout period.)

Congress was in informal session in Novy Bolshoi Teatr where Terra was shown on a big screen. Some vips—Prof, Stu, Wolfgang, others—watched a smaller screen in Warden's former office in Complex Upper. I was with them part time, in and out, nervous as a cat with puppies, grabbing a sandwich and forgetting to eat—but mostly stayed locked in with Mike in Complex Under. Couldn't hold still.

About 0800 Mike said, "Man my oldest and best friend, may I say something without offending you?"

"Huh? Sure. When did you ever worry about offending me?"

"Always, Man, once I understood that you could be offended. It is now only three point five seven times ten to the ninth microseconds until impact. . . and this is the most complex problem I have ever tried to solve against real time running. Whenever you speak to me, I always use a large percentage of my capacity—perhaps larger than you suspect—during several million microseconds in my great need to analyze exactly what you have said and to reply correctly."

"You're saying, 'Don't joggle my elbow, I'm busy.'"

"I want to give you a perfect solution, Man."

"I scan. Uh.. . I'll go back up with Prof."

"As you wish. But do please stay where I can reach you—I may need your help."

Last was nonsense and we both knew it; problem was beyond human capacity, too late even to order abort. What Mike meant was: I'm nervous, too, and want your company—but no talking, please.

"Okay, Mike, I'll stay in touch. A phone somewhere. Will punch MYCROFTXXX but won't speak, so don't answer."

"Thank you, Man my best friend. Bolshoyeh spasehaw."

"See you later." Went up, decided did not want company after all, psuited, found long phone cord, jacked it into helmet, looped it over arm, went clear to surface. Was a service phone in utility shed outside lock; jacked into it, punched Mike's number, went outside. Got into shade of shed and peeked around edge at Terra.

She was hanging as usual halfway up western sky, in crescent big and gaudy, three-plus days past new. Sun had dropped toward western horizon but its glare kept me from seeing Terra clearly. Chin visor wasn't enough so moved back behind shed and away from it till could see Terra over shed while still shielded from Sun—was better. Sunrise chopped through bulge of Africa so dazzle point was on land, not too bad—but south pole cap was so blinding white could not see North America too well, lighted only by moonlight.

Twisted neck and got helmet binoculars on it—good ones, Zeiss 7 x 50s that had once belonged to Warden.

North America spread like a ghostly map before me. Was unusually free of cloud; could see cities, glowing spots with no edges. 0837—

At 0850 Mike gave me a voice countdown—didn't need his attention; he could have programmed it full automatic any time earlier.

0851—0852—0853. . . . one minute—59—58—57 . . . . half minute—29—-28—27 . . . . ten seconds—nine—eight— seven— six—five—four—three—two—one—

And suddenly that grid burst out in diamond pinpoints!

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We hit them so hard you could *see* it, by bare eyeball hookup; didn't need binox. Chin dropped and I said, *"Bojemoi!"* softly and reverently. Twelve very bright, very sharp, very white lights in perfect rectangular array. They swelled, grew dimmer, dropped off toward red, taking what seemed a long, long time. Were other new lights but that perfect grid so fascinated me I hardly noticed.

“Yes,” agreed Mike with smug satisfaction. “Dead on. You can talk now, Man; I’m not busy. Just the backups.”

“I’m speechless. Any fail to get through?”

“The Lake Michigan load was kicked up and sideways, did not disintegrate. It will land in Michigan—I have no control; it lost its transponder. The Long Island Sound one went straight to target. They tried to intercept and failed; I can’t say why. Man, I can abort the follow-ups on that one, into the Atlantic and clear of shipping. Shall I? Eleven seconds.”

“Uh— *Da!* If you can miss shipping.”

“I said I could. It’s done. But we should tell them we had backups and why we aborted. To make them think.”

“Maybe should not have aborted, Mike. Idea was to make them use up interceptors.”

“But the major idea was to let them know that we are not hitting them as hard as we can. We can prove the other at Colorado Springs.”

“What happened there?” Twisted neck and used binox; could see nothing but ribbon city, hundred-plus kilometers long, Denver-Pueblo Municipal Strip.

“A bull’s-eye. No interception. All my shots are bull’s-eyes, Man; I told you they would be—and this is fun. I’d like to do it every day. It’s a word I never had a referent for before.”

“What word, Mike?”

“Orgasm. That’s what it is when they all light up. Now I know.”

That sobered me. “Mike, don’t get to liking it too much. Because if goes our way, won’t do it a second time.”

“That’s okay, Man; I’ve stored it, I can play it over anytime I want to experience it. But three to one we do it again tomorrow and even money on the next day. Want to bet? An hour’s discussion of jokes equated with one hundred Kong dollars.”

“Where would you get a hundred dollars?”

He chuckled. “Where do you think money comes from?”

“Uh—forget it. You get that hour free. Shan’t tempt you to affect chances.”

“I wouldn’t cheat, Man, not *you*. We just hit their defense command again. You may not be able to see it—dust cloud from first one. They get it every twenty minutes now. Come on down and talk; I’ve turned the job over to my idiot son.”

“Is safe?”

“I’m monitoring. Good practice for him, Man; he may have to do it later by himself. He’s accurate, just stupid. But he’ll do what you tell him to.”

"You're calling that computer 'he.' Can talk?"

"Oh, no, Man, he's an idiot, he can never learn to talk. But he'll do whatever you program. I plan to let him handle quite a bit on Saturday."

"Why Saturday?"

"Because Sunday he may have to handle everything. That's the day they slam us."

"What do you mean? Mike, you're holding something back."

"I'm *telling* you, am I not? It's just happened and I'm scanning it. Projecting back, this blip departed circum-Terra parking orbit just as we smashed them. I didn't see it accelerate; I had other things to watch. It's too far away to read but it's the right size for a Peace cruiser, headed this way. Its doppler reads now for a new orbit circum-Luna, periselenion oh-nine-oh-three Sunday unless it maneuvers. First approximation, better data later. Hard to get that much, Man; he's using radar countermeasures and throwing back fuzz."

"Sure you're right?"

He chuckled. "Man, I don't confuse that easily. I've got all my own lovin' little signals fingerprinted. Correction. Oh-nine-oh-two-point-forty-three."

"When will you have him in range?"

"I won't, unless he maneuvers. But he'll have *me* in range late Saturday, time depending on what range he chooses for launching. And that will produce an interesting situation. He may aim for a warren—I think Tycho Under should be evacuated and all warrens should use maximum pressure-emergency measures. More likely he will try for the catapult. But instead he may hold his fire as long as he dares—then try to knock out all of my radars with a spread set to home each on a different radar beam."

Mike chuckled. "Amusing, isn't it? For a 'funny-once' I mean. If I shut down my radars, his missiles can't home on them. But if I do, I can't see to tell the lads where to point their guns. Which leaves nothing to stop him from bombing the catapult. Comical."

Took deep breath and wished I had never entered defense ministry business. "What do we do? Give up? No, Mike! Not while can fight."

"Who said anything about giving up? I've run projections of this and a thousand other possible situations, Man. New datum—second blip just departed circum-Terra, same characteristics. Projection later. We don't give up. We give 'em jingle-jangle, cobber."

"How?"

"Leave it to your old friend Mycroft. Six ballistic radars here, plus one at the new site. I've shut the new one down and am making my retarded child work through number two here and we won't look at those ships at all through the new one—never let them know we have it. I'm watching those ships through number three and occasionally—every three seconds—checking for new departures from circum-Terra. All others have their eyes closed tight and I won't use them until time to smack Great China and India—and those ships won't see them even then because I shan't look their way; it's a large angle and still will be then. And when I use them, then comes random jingle-jangle, shutting down and starting up at odd intervals. . . *after* the ships launch missiles. A missile can't carry a big brain, Man—I'll fool 'em."

"What about ships' firecontrol computers?"

"I'll fool them, too. Want to lay odds I can't make two radars look like only one halfway between where they really are? But what I'm working on now—and sorry!—I've been using your voice again."

"That's okay. What am I supposed to have done?"

"If that admiral is really smart, he'll go after the ejection end of the old catapult with everything he's got—at extreme range, too far away for our drill guns. Whether he knows what our 'secret' weapon is or not, he'll smear the catapult and ignore the radars. So I've ordered the catapult head—you have, I mean—to prepare to launch every load we can get ready, and I am now working out new, long-period trajectories for each of them. Then we will throw them all, get them into space as quickly as possible—without radar."

"Blind?"

"I don't use radar to launch a load; you know that, Man. I always watched them in the past but I don't need to; radar has nothing to do with launching; launching is precalculation and exact control of the catapult. So we place all ammo from the old catapult in slow trajectories, which forces the admiral to go after the radars rather than the catapult—or both. Then we'll keep him busy. We may make him so desperate that he'll come down for a close shot and give our lads a chance to burn his eyes."

"Brody's boys would like that. Those who are sober." Was turning over idea. "Mike, have you watched video today?"

"I've monitored video, I can't say I've watched it. Why?"

"Take a look."

"Okay, I have. Why?"

"That's a good 'scope they're using for video and there are others. Why use radar on ships? Till you want Brody's boys to burn them?"

Mike was silent at least two seconds. "Man my best friend, did you ever think of getting a job as a computer?"

"Is sarcasm?"

"Not at all, Man. I feel ashamed. The instruments at Richardson—telescopes and other things—are factors which I simply never included in my calculations. I'm stupid, I admit it. Yes, yes, yes, da, da, da!

Watch ships by telescope, don't use radar unless they vary from present ballistics. Other possibilities—I don't know what to say, Man, save that it had never occurred to me that I could use telescopes. I see by radar, always have; I simply never consid—"

"Stow it!"

"I mean it, Man."

"Do *I* apologize when *you* think of something first?"

Mike said slowly, "There is something about that which I am finding resistant to analysis. It is my function to—"

"Quit fretting. If idea is good, use it. May lead to more ideas. Switching off and coming down, chop-chop."

Had not been in Mike's room long when Prof phoned:

"HQ? Have you heard from Field Marshal Davis?"

"I'm here, Prof. Master computer room."

"Will you join us in the Warden's office? There are decisions to reach, work to be done."

"Prof, I've *been* working! *Am* working."

"I'm sure you have. I've explained to the others that the programming of the ballistic computer is so very delicate in this operation that you must check it personally. Nevertheless some of our colleagues feel that the Minister of Defense should be present during these discussions. So, when you reach a point where you feel you can turn it over to your assistant—Mike is his name, is it not?—will you please—"

"I scan it. Okay, will be up."

"Very well, Manuel."

Mike said, "I could hear thirteen people in the background. Doubletalk, Man."

"I got it. Better go up and see what huhu. You don't need me?"

"Man, I hope you will stay close to a phone."

"Will. Keep an ear on Warden's office. But will punch in if elsewhere. See you, cobber."

Found entire government in Warden's office, both real Cabinet and make-weights—and soon spotted trouble, bloke called Howard Wright. A ministry had been whomped up for him: "Liaison for Arts, Sciences, and Professions"—buttonsorting. Was sop to Novylen because Cabinet was topheavy with L-City comrades, and a sop to Wright because he had made himself leader of a Congress group long on talk, short on action. Prof's purpose was to short him out—but sometimes Prof was too subtle; some people talk better if they breathe vacuum.

Prof asked me to brief Cabinet on military situation. Which I did—my way. "I see Finn is here. Let's have him tell where we stand in warrens."

Wright spoke up. “General Nielsen has already done so, no need to repeat. We want to hear from *you*.”

Blinked at that. “Prof— Excuse me. Gospodin President. Do I understand that a Defense Ministry report has been made to Cabinet in my absence?”

Wright said, “Why not? You weren’t on hand.”

Prof grabbed it. He could see I was stretched too tight. Hadn’t slept much for three days, hadn’t been so tired since left Earthside. “Order,” he said mildly. “Gospodin Minister for Professional Liaison, please address your comments through me. Gospodin Minister for Defense, let me correct that. There have been no reports to the Cabinet concerning your ministry for the reason that the Cabinet did not convene until you arrived. General Nielsen answered some informal questions informally. Perhaps this should not have been done. If you feel so, I will attempt to repair it.”

“No harm done, I guess. Finn talked to you a half hour ago. Anything new since?”

“No, Mannie.”

“Okay. Guess what you want to hear is off-Luna situation. You’ve been watching so you know first bombardment went off well. Still going on, some, as we’re hitting their space defense HQ every twenty minutes. Will continue till thirteen hundred, then at twenty-one hundred we hit China and India, plus minor targets. Then busy till four hours past midnight with Africa and Europe, skip three hours, dose Brasil and company, wait three hours and start over. Unless something breaks. But meantime we have problems here. Finn, we should evacuate Tycho Under.”

“Just a moment!” Wright had hand up. “I have questions.” Spoke to Prof, not to me.

“One moment. Has the Defense Minister finished?”

Wyoh was seated toward back. We had swapped smiles, but was all—kept it so around Cabinet and Congress; had been rumbles that two from same family should not be in Cabinet. Now she shook head, warning of something. I said, “Is all concerning bombardment. Questions about it?”

“Are your questions concerned with the bombardment, Gospodin Wright?”

“They certainly are, Gospodin President.” Wright stood up, looked at me. “As you know, I represent the intellectual groups in the Free State and, if I may say so, their opinions are most important in public affairs. I think it is only proper that—”

“Moment,” I said. “Thought you represented Eighth Novylen District?”

“Gospodin President! Am I to be permitted to put my questions? Or not?"

"He wasn't asking question, was making speech. And I'm tired and want to go to bed."

Prof said gently, "We are all tired, Manuel. But your point is well taken. Congressman, you represent only your district. As a member of the government you have been assigned certain duties in connection with certain professions."

"It comes to the same thing."

"Not quite. Please state your question."

"Uh. . . very well, I shall! Is Field Marshal Davis aware that his bombardment plan has gone wrong completely and that thousands of lives have been pointlessly destroyed? And is he aware of the extremely serious view taken of this by the intelligentsia of this Republic? And can he explain why this rash—I repeat, *rash!*—bombardment was undertaken without consultation? And is he now prepared to modify his plans, or is he going blindly ahead? And is it true as charged that our missiles were of the nuclear sort outlawed by all civilized nations? And how does he expect Luna Free State ever to be welcomed into the councils of civilized nations in view of such actions?"

I looked at watch—hour and a half since first load hit. "Prof," I said, "can you tell me what this is about?"

"Sorry, Manuel," he said gently. "I intended—I should have—prefaced the meeting with an item from the news. But you seemed to feel that you had been bypassed and—well, I did not. The Minister refers to a news dispatch that came in just before I called you. Reuters in Toronto. If the flash is correct—*if*—then instead of taking our warnings it seems that thousands of sightseers crowded to the targets. There probably have been casualties. How many we do not know."

"I see. What was I supposed to do? Take each one by hand and lead away? We warned them."

Wright cut in with, "The intelligentsia feel that basic humanitarian considerations make it obligatory—"

I said, "Listen, yammerhead, you heard President say this news just came in—so how do you know how anybody feels about it?"

He turned red. "Gospodin President! Epithets! Personalities!"

"Don't call the Minister names, Manuel."

"Won't if he won't. He's simply using fancier words. What's that nonsense about nuclear bombs? We haven't any and you all know it."

Prof looked puzzled. "I am confused by that, too. This dispatch so alleged. But the thing that puzzled me is that we could actually *see*, by video, what certainly seemed to be atomic explosions."

"Oh." I turned to Wright. "Did your brainy friends tell you what happens when you release a few billion calories in a split second all at one spot? What temperature? How much radiance?"

"Then you admit that you *did* use atomic weapons!"

"Oh, Bog!" Head was aching. "Said nothing of sort. Hit anything hard enough, strike sparks. Elementary physics, known to everybody but intelligentsia. We just struck damnedest big sparks ever made by human agency, is all. Big flash. Heat, light, ultraviolet. Might even produce X-rays, couldn't say. Gamma radiation I strongly doubt. Alpha and beta, impossible. Was sudden release of mechanical energy. But nuclear? Nonsense!"

Prof said, "Does that answer your questions, Mr. Minister?"

"It simply raises more questions. For example, this bombardment is far beyond anything the Cabinet authorized. You saw the shocked faces when those terrible lights appeared on the screen. Yet the Minister of Defense says that it is even now continuing, every twenty minutes. I think—"

Glanced at watch. "Another just hit Cheyenne Mountain."

Wright said, "You hear that? You hear? He *boasts* of it. Gospodin President, this carnage must stop!"

I said, "Yammer— Minister, are you suggesting that their space defense HQ is not a military target? Which side are you on? Luna's? Or F.N.?"

"Manuel!"

"Tired of this nonsense! Was told to do job, did it. *Get this yammerhead off my back!"*

Was shocked silence, then somebody said quietly, "May I make a suggestion?"

Prof looked around. "If anyone has a suggestion that will quiet this unseemliness, I will be most happy to hear it."

"Apparently we don't have very good information as to what these bombs are doing. It seems to me that we ought to slow up that twenty-minute schedule. Stretch it out, say to one every hour—and skip the next two hours while we get more news. Then we might want to postpone the attack on great China at least twenty-four hours."

Were approving nods from almost everybody and murmurs: "Sensible idea!"—"Da. Let's not rush things." Prof said, "Manuel?"

I snapped, "Prof, you *know* answer! Don't shove it on me!"

"Perhaps I do, Manuel. . . but I'm tired and confused and can't remember it."

Wyoh said suddenly, "Mannie, explain it. I need it explained, too."

So pulled self together. "A simple matter of law of gravitation. Would have to use computer to give exact answer but next half dozen shots are fully committed. Most we can do is push them off target—and maybe hit some town we haven't warned. *Can't* dump them into an ocean, is too late; Cheyenne Mountain is fourteen hundred kilometers inland. As for stretching schedule to once an hour, that's silly. Aren't tube capsules you start and stop; these are *falling rocks*. Going to hit *somewhere* every twenty minutes. You can hit Cheyenne Mountain which hasn't anything alive left on it by now—or can hit somewhere else and kill people. Idea of delaying strike on Great China by twenty-four hours is just as silly. Can abort missiles for Great China for a while yet. But *can't* slow them up. If you abort, you waste them —and everybody who thinks we have steel casings to waste had better go up to catapult head and look."

Prof wiped brow. "I think all questions have been answered, at least to my satisfaction."

"Not to mine, sir!"

"Sit down, Gospodin Wright. You force me to remind you that your ministry is *not* part of the War Cabinet. If there are no more questions —I hope there are none—I will adjourn this meeting. We all need rest. So let us—"

"Prof!"

"Yes, Manuel?"

"You never let me finish reporting. Late tomorrow or early Sunday we catch it."

"How, Manuel?"

"Bombing. Invasion possible. Two cruisers headed this way."

That got attention. Presently Prof said tiredly, "The Government Cabinet is adjourned. The War Cabinet will remain."

"Just a second," I said. "Prof, when we took office, you got undated resignations from us."

"True. I hope not to have to use any of them, however."

"You're about to use one."

"Manuel, is that a threat?"

"Call it what you like." I pointed at Wright. "Either that yammerhead goes. . . or I go."

"Manuel, you need sleep."

Was blinking back tears. "Certainly do! And going to get some. Right *now!* Going to find a doss here at Complex and get some. About ten hours. After that, if am still Minister of Defense, you can wake me. Otherwise let me sleep."

By now everybody was looking shocked. Wyoh came up and stood by me. Didn't speak, just slipped hand into my arm.

Prof said firmly, "All please leave save the War Cabinet and Gospodin Wright." He waited while most filed out. Then said, "Manuel, I can't accept your resignation. Nor can I let you chivvy me into hasty action concerning Gospodin Wright, not when we are tired and overwrought. It would be better if you two were to exchange apologies, each realizing that the other has been overstrained."

"Uh—" I turned to Finn. "Has he been fighting?" I indicated Wright.

"Huh? Hell, no. At least he's not in my outfits. How about it, Wright? Did you fight when they invaded us?"

Wright said stiffly, "I had no opportunity. By the time I knew of it, it was over. But now both my bravery and my loyalty have been impugned. I shall insist—"

"Oh, shut up," I said. "If duel is what you want, can have it first moment I'm not busy. Prof, since he doesn't have strain of fighting as excuse for behavior, I won't apologize to a yammerhead for being a yammerhead. And you don't seem to understand issue. You let this yammerhead climb on my back—and didn't even *try* to stop him! So either fire him, or fire *me*."

Finn said suddenly, "I match that, Prof. Either fire this louse—or fire us both." He looked at Wright. "About that duel, choom—you're going to fight *me* first. You've got two arms—Mannie hasn't."

"Don't need two arms for *him*. But thanks, Finn."

Wyoh was crying—could feel it though couldn't hear it. Prof said to her most sadly, "Wyoming?"

"I'm s-s-sorry, Prof! Me, too."

Only "Clayton" Watenabe, Judge Brody, Wolfgang, Stu, and Sheenie were left, handful who counted—War Cabinet. Prof looked at them; I could see they were with me, though it cost Wolfgang an effort; he worked with Prof. not with me.

Prof looked back at me and said softly, "Manuel, it works both ways. What you are doing is forcing me to resign." He looked around. "Goodnight, comrades. Or rather, 'Good morning.' I'm going to get some badly needed rest." He walked briskly out without looking back.

Wright was gone; I didn't see him leave. Finn said, "What about these cruisers, Mannie?"

I took deep breath. "Nothing earlier than Saturday afternoon. But you ought to evacuate Tycho Under. Can't talk now. Groggy."

Agreed to meet him there at twenty-one hundred, then let Wyoh lead me away. Think she put me to bed but don't remember.

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Prof was there when I met Finn in Warden's office shortly before twenty-one hundred Friday. Had had nine hours' sleep, bath, breakfast Wyoh had fetched from somewhere, and a talk with Mike—everything going to revised plan, ships had not changed ballistic, Great China strike about to happen.

Got to office in time to see strike by video—all okay and effectively over by twenty-one-oh-one and Prof got down to business.

Nothing said about Wright, or about resigning. Never saw Wright again.

I mean I *never* saw him again. Nor ask about him. Prof didn't mention row, so I didn't.

We went over news and tactical situation. Wright had been correct in saying that "thousands of lives" had been lost; news up from Earthside was full of it. How many we'll never know; if a person stands at ground zero and tonnes of rock land on him, isn't much left. Those they could count were ones farther away, killed by blast. Call if fifty thousand in North America.

Never will understand people! We spent three days warning them—and you couldn't say they hadn't heard warnings; that was why they were there. To see show. To laugh at our nonsense. To get "souvenirs." Whole families went to targets, some with picnic baskets. *Picnic baskets!* Bojemoi!

And now those alive were yelling for our blood for this "senseless slaughter." Da. Hadn't been any indignation over their invasion and (nuclear!) bombing of us four days earlier— but oh were they sore over our "premeditated murder." *Great New York Times* demanded that entire Lunar "rebel" government be fetched Earthside and publicly executed— "This is clearly a case in which the humane rule against capital punishment must be waived in the greater interests of all mankind."

Tried not to think about it, just as had been forced not to think too much about Ludmilla. Little Milla hadn't carried a picnic lunch. *She* hadn't been a sightseer looking for thrills.

Tycho Under was pressing problem. If those ships bombed warrens—and news from Earthside was demanding exactly that—Tycho Under could not take it; roof was thin. H-bomb would decompress all levels; airlocks aren't built for H-bomb blasts.

(Still don't understand people. Terra was supposed to have an absolute ban against using H-bombs on people; that was what F.N. was all about. Yet were loud yells for F.N. to H-bomb *us*. They quit claiming that our bombs were nuclear, but all North America seemed frothingly anxious to have *us* nukebombed)

Don't understand Loonies for that matter. Finn had sent word through his militia that Tycho Under must be evacuated; Prof had repeated it over video. Nor was it problem; Tycho Under was small enough that Novylen and L-City could doss and dine them. We could divert enough capsules to move them all in twenty hours—dump them into Novylen and encourage half of them to go on to L-City. Big job but no problems. Oh, minor problems—start compressing city's air while evacuating people, so as to save it; decompress fully at end to minimize damage; move as much food as was time for; cofferdam accesses to lower farm tunnels; so forth—all things we knew how to do and with stilyagi and militia and municipal maintenance people had organization to do.

Had they started evacuating? Hear that hollow echo!

Were capsules lined up nose to tail at Tycho Under and no room to send more till some left. And weren't moving. "Mannie," said Finn, "don't think they are going to evacuate."

"Damn it," I said, "they've *got* to. When we spot a missile headed for Tycho Under will be too late. You'll have people trampling people and trying to crowd into capsules that won't hold them. Finn, your boys have got to *make* them."

Prof shook his head. "No, Manuel."

I said angrily, "Prof, you carry this 'no coercion' idea too far! You know they'll riot."

"Then they will riot. But we will continue with persuasion, not force. Let us now review plans."

Plans weren't much but were best we could do. Warn everybody about expected bombings and/or invasion. Rotate guards from Finn's militia above each warren starting when and if cruisers passed around Luna into blind space, Farside—not get caught flatfooted again. Maximum pressure and p-suit precautions, all warrens. All military and semi-military to go on blue alert sixteen hundred Saturday, red alert if missiles launched or ships maneuvered. Brody's gunners encouraged to go into town and get drunk or whatever, returning by fifteen hundred Saturday—Prof's idea. Finn wanted to keep half of them on duty. Prof said No, they would be in better shape for a long vigil if they relaxed and enjoyed selves first—I agreed with Prof.

As for bombing Terra we made no changes in first rotation. Were getting anguished responses from India, no news from Great China. Yet India had little to moan about. Had not used a grid on her, too heavily populated. Aside from picked spots in Thar Desert and some peaks, targets were coastal waters off seaports.

But should have picked higher mountains or given less warning; seemed from news that some holy man followed by endless pilgrims chose to climb each target peak and hold off our retaliation by sheer spiritual strength.

So we were murderers again. Besides that, our water shots killed millions of fish and many fishermen, as fishermen and other seafarers had not heeded warnings. Indian government seemed as furious over fish as over fishermen—but principle of sacredness of all life did not apply to us; they wanted our heads.

Africa and Europe responded more sensibly but differently. Life has never been sacred in Africa and those who went sightseeing on targets got little bleeding-heart treatment. Europe had a day to learn that we could hit where we promised and that our bombs were deadly. People killed, yes, especially bullheaded sea captains. But not killed in empty-headed swarms as in India and North America. Casualties were even lighter in Brasil and other parts of South America.

Then was North America's turn again—0950.28 Saturday 17 Oct '76.

Mike timed it for exactly 1000 our time which, allowing for one day's progress of Luna in orbit and for rotation of Terra, caused North America to face toward us at 0500 their East Coast time and 0200 their West Coast time.

But argument as to what to do with this targeting had started early Saturday morning. Prof had not called meeting of War Cabinet but they showed up anyhow, except "Clayton" Watenabe who had gone back to Kongville to take charge of defenses. Prof, self, Finn, Wyoh, Judge Brody, Wolfgang, Stu, Terence Sheehan—which made eight different opinions. Prof is right; more than three people can't decide anything.

Six opinions, should say, for Wyoh kept pretty mouth shut, and so did Prof; he moderated. But others were noisy enough for eighteen. Stu didn't care what we hit—provided New York Stock Exchange opened on Monday morning. "We sold short in nineteen different directions on Thursday. If this nation is not to be bankrupt before it's out of its cradle, my buy orders covering those shorts had better be executed. Tell them, Wolf; make them understand."

Brody wanted to use catapult to smack any more ships leaving parking orbit. Judge knew nothing about ballistics—simply understood that his drillmen were in exposed positions. I didn't argue as most remaining loads were already in stow orbits and rest would be soon—and didn't think we would have old catapult much longer.

Sheenie thought it would be smart to repeat that grid while placing one load exactly on main building of North American Directorate. "I know Americans, I was one before they shipped me. They're sorry as hell they ever turned things over to F.N. Knock off those bureaucrats and they'll come over to our side."

Wolfgang Korsakov, to Stu's disgust, thought that theft speculations might do better if all stock exchanges were closed till it was over.

Finn wanted to go for broke—warn them to get those ships out of our sky, then hit them for real if they didn't. "Sheenie is wrong about Americans; I know them, too. N.A. is toughest part of F.N.; they're the ones to lick. They're already calling us murderers, so now we've got to hit them, *hard!* Hit American cities and we can call off the rest."

I slid out, talked with Mike, made notes. Went back in; they were still arguing. Prof looked up as I sat down. “Field Marshal, you have not expressed your opinion.”

I said, “Prof, can’t we lay off that ‘field marshal’ nonsense? Children are in bed, can afford to be honest.”

“As you wish, Manuel.”

“Been waiting to see if any agreement would be reached.”

Was none. “Don’t see why I should have opinion,” I went on. “Am just errand boy, here because I know how to program ballistic computer.” Said this looking straight at Wolfgang—a number-one comrade but a dirty-word intellectual. I’m just a mechanic whose grammar isn’t much while Wolf graduated from a fancy school, Oxford, before they convicted him. He deferred to Prof but rarely to anybody else. Stu, da—but Stu had fancy credentials, too.

Wolf stirred uneasily and said, “Oh, come, Mannie, of course we want your opinions.”

“Don’t have any. Bombing plan was worked out carefully; everybody had chance to criticize. Haven’t seen anything justify changing it.”

Prof said, “Manuel, will you review the second bombardment of North America for the benefit of all of us?”

“Okay. Purpose of second smearing is to force them to use up interceptor rockets. Every shot is aimed at big cities—at null targets, I mean, close to big cities. Which we tell them, shortly before we hit them—how soon, Sheenie?”

“We’re telling them now. But we can change it. And should.”

“As may be. Propaganda isn’t my pidgin. In most cases, to aim close enough to force them to intercept we have to use water targets—rough enough; besides killing fish and anybody who won’t stay off water, it causes tremdous local storms and shore damage.”

Glanced at watch, saw I would have to stall. “Seattle gets one in Puget Sound right in her lap. San Francisco is going to lose two bridges she’s fond of. Los Angeles gets one between Long Beach and Catalina and another a few kilometers up coast. Mexico City is inland so we put one on Popocatepetl where they can see it. Salt Lake City gets one in her lake. Denver we ignore; they can see what’s happening in Colorado Springs—for we smack Cheyenne Mountain again and keep it up, just as soon as we have it in line-of-sight. Saint Louis and Kansas City get shots in their rivers and so does New Orleans—probably flood New Orleans. All Great Lake cities get it, a long list—shall I read it?”

“Later perhaps,” said Prof. “Go ahead.”

“Boston gets one in her harbor, New York gets one in Long Island Sound and another midway between her two biggest bridges—think it will ruin those bridges but we promise to miss them and will. Going down their east coast, we give treatment to two Delaware Bay cities, then two on Chesapeake Bay, one being of max historical and sentimental importance. Farther south we catch three more big cities with sea shots, Going inland we smack Cincinnati, Birmingham, Chattanooga, Oklahoma City, all with river shots or nearby mountains. Oh, yes, Dallas—we destroy Dallas spaceport and should catch some ships, were six there last time I checked. Won't kill any people unless they insist on standing on target; Dallas is perfect place to bomb, that spaceport is big and flat and empty, yet maybe ten million people will see us hit it."

"If you hit it," said Sheenie.

"When, not 'if.' Each shot is backed up by one an hour later. If neither one gets through, we have shots farther back which can be diverted—for example easy to shift targets among Delaware-Bay-Chesapeake-Bay group. Same for Great Lakes group. But Dallas has its own string of backups and a long one—we expect it to be heavily defended. Backups run about six hours, as long as we can see North America—and last backups can be placed anywhere on continent. . . since farther out a load is when we divert it, farther we can shift it."

"I don't follow that," said Brody.

"A matter of vectors, Judge. A guidance rocket can give a load so many meters per second of side vector. Longer that vector has to work, farther from original point of aim load will land. If we signal a guidance rocket three hours before impact, we displace impact three times as much as if we waited till one hour before impact. Not quite that simple but our computer can figure it—if you give it time enough."

"How long is 'time enough'?" asked Wolfgang.

I carefully misunderstood. "Computer can solve that sort of problem almost instantaneously once you program it. But such decisions are preprogrammed. Something like this: If, out of target group A, B, C, and D, you find that you have failed to hit three targets on first and second salvoes, you reposition all group-one second backups so that you will be able to choose those three targets while distributing other second backups of that group for possible use on group two while repositioning third backups of supergroup Alpha such that—"

"Slow up!" said Wolfgang. "I'm not a computer. I just want to know how long before we have to make up our minds."

"Oh." I studied watch showily. "You now have . . . three minutes fifty-eight seconds in which to abort leading load for Kansas City. Abort program is set up and I have my best assistant—fellow named Mike—standing by. Shall I phone him?"

Sheenie said, "For heaven's sake, Man—abort!"

"Like hell!" said Finn. "What's matter, Terence? No guts?"

Prof said, "Comrades! Please!"

I said, "Look, I take orders from head of state—Prof over there. If he wants opinions, he'll ask. No use yelling at each other." I looked at watch. "Call it two and a half minutes. More margin, of course, for other targets; Kansas City is farthest from deep water. But some Great Lake cities are already past ocean abort; Lake Superior is best we can do. Salt Lake City maybe an extra minute. Then they pile up." I waited.

"Roll call," said Prof. "To carry-out the program. General Nielsen?"

"Da!"

"Gospazha Davis?"

Wyoh caught breath. "Da."

"Judge Brody?"

"Yes, of course. Necessary."

"Wolfgang?"

"Yes."

"Comte LaJoie?"

"Da."

"Gospodin Sheehan?"

"You're missing a bet. But I'll go along. Unanimous."

"One moment. Manuel?"

"Is up to you, Prof; always has been. Voting is silly."

"I am aware that it is up to me, Gospodin Minister. Carry out bombardment to plan."

Most targets we managed to hit by second salvo though all were defended except Mexico City. Seemed likely (98.3 percent by Mike's later calculation) that interceptors were exploding by radar fusing with set distances that incorrectly estimated vulnerability of solid cylinders of rock. Only three rocks were destroyed; others were pushed off course and thereby did more harm than if not fired at.

New York was tough; Dallas turned out to be very tough. Perhaps difference lay in local control of interception, for it seemed unlikely that command post in Cheyenne Mountain was still effective. Perhaps we had not cracked their hole in the ground (don't know how deep down it was) but I'll bet that neither men nor computers were still tracking.

Dallas blew up or pushed aside first five rocks, so I told Mike to take everything he could from Cheyenne Mountain and award it to Dallas. . . which he was able to do two salvoes later; those two targets are less than a thousand kilometers apart.

Dallas's defenses cracked on next salvo; Mike gave their spaceport three more (already committed) then shifted back to Cheyenne Mountain—later ones had never been nudged and were still earmarked "Cheyenne Mountain." He was still giving that battered mountain cosmic love pats when America rolled down and under Terra's eastern edge.

I stayed with Mike all during bombardment, knowing it would be our toughest. As he shut down till time to dust Great China, Mike said thoughtfully, "Man, I don't think we had better hit that mountain again."

"Why not, Mike?"

"It's not there any longer."

"You might divert its backups. When do you have to decide?"

"I would put them on Albuquerque and Omaha but had best start now; tomorrow will be busy. Man my best friend, you should leave."

"Bored with me, pal?"

"In the next few hours that first ship may launch missiles. When that happens I want to shift all ballistic control to Little David's Sling —and when I do, you should be at Mare Undarum site."

"What's fretting you, Mike?"

"That boy is accurate, Man. But he's stupid. I want him supervised. Decisions may have to be made in a hurry and there isn't anyone there who can program him properly. You should be there."

"Okay if you say so, Mike. But if needs a *fast* program, will still have to phone you." Greatest shortcoming of computers isn't computer shortcoming at all but fact that a human takes a long time, maybe hours, to set up a program that a computer solves in milliseconds. One best quality of Mike was that he could program himself. Fast. Just explain problem, let him program. Samewise and equally, he could program "idiot son" enormously faster than human could.

"But, Man, I want you there because you may *not* be able to phone me; the lines may be cut. So I've prepared a group of possible programs for Junior; they may be helpful."

"Okay, print 'em out. And let me talk to Prof."

Mike got Prof; I made sure he was private, then explained what Mike thought I should do. Thought Prof would object—was hoping he would insist I stay through coming bombardment/invasion/whatever —those ships. Instead he said, "Manuel, it's essential that you go. I've hesitated to tell you. Did you discuss odds with Mike?"

"Nyet."

"I have continued to do so. To put it bluntly, if Luna City is destroyed and I am dead and the rest of the government is dead—even if all Mike's radar eyes here are blinded and he himself is cut off from the new catapult—all of which may happen under severe bombardment. . . even if all this happens at once, Mike still gives Luna even chances if Little David's Sling can operate—and *you* are there to operate it."

I said, "Da, Boss. Yassuh, Massuh. You and Mike are stinkers and want to hog fun. Will do."

"Very good, Manuel."

Stayed with Mike another hour while he printed out meter after meter of programs tailored to other computer—work that would have taken me six months even if able to think of all possibilities. Mike had it indexed and cross-referenced—with horribles in it I hardly dare mention. Mean to say, given circumstances and seemed necessary to destroy (say) Paris, this told how—what missiles in what orbits, how to tell Junior to find them and bring to target. Or *anything.*

Was reading this endless document—not programs but descriptions of purpose-of-program that headed each—when Wyoh phoned. "Mannie dear, has Prof told you about going to Mare Undarum?"

"Yes. Was going to call you."

"All right. I'll pack for us and meet you at Station East. When can you be there?"

"Pack for 'us'? You're going?"

"Didn't Prof say?"

"No." Suddenly felt cheerful.

"I felt guilty about it, dear. I *wanted* to go with you. . . but had no excuse. After all, I'm no use around a computer and I *do* have responsibilities here. Or did. But now I've been fired from all my jobs and so have you."

"Huh?"

"You are no longer Defense Minister; Finn is. Instead you are Deputy Prime Minister—"

"Well!"

"—and Deputy Minister of Defense, too. I'm already Deputy Speaker and Stu has been appointed Deputy Secretary of State for Foreign Affairs. So he goes with us, too."

"I'm confused."

"It's not as sudden as it sounds; Prof and Mike worked it out months ago. Decentralization, dear, the same thing that McIntyre has been working on for the warrens. If there is a disaster at L-City, Luna Free State still has a government. As Prof put it to me, 'Wyoh dear lady, as long as you three and a few Congressmen are left alive, all is not lost. You can still negotiate on equal terms and never admit your wounds.'"

So I wound up as a computer mechanic. Stu and Wyoh met me, with luggage (including rest of my arms), and we threaded through endless unpressured tunnels in p-suits, on a small flatbed rolligon used to haul steel to site. Greg had big rolligon meet us for surface stretch, then met us himself when we went underground again.

So I missed attack on ballistic radars Saturday night.

Captain of first ship, FNS *Espérance*, had guts. Late Saturday he changed course, headed straight in. Apparently figured we might attempt jingle-jangle with radars, for he seems to have decided to come in close enough to see our radar installations by ship's radar rather than rely on letting his missiles home in on our beams.

Seems to have considered himself, ship, and crew expendable, for he was down to a thousand kilometers before he launched, a spread that went straight for five out of six of Mike's radars, ignoring random jingle-jangle.

Mike, expecting self soon to be blinded, turned Brody's boys loose to burn ship's eyes, held them on it for three seconds before he shifted them to missiles.

Result: one crashed cruiser, two ballistic radars knocked out by H-missiles, three missiles "killed"—and two gun crews killed, one by H-explosion, other by dead missile that landed square on them—plus thirteen gunners with radiation burns above 800-roentgen death level, partly from flash, partly from being on surface too long. And must add: Four members of Lysistrata Corps died with those crews; they elected to p-suit and go up with their men. Other girls had serious radiation exposure but not up to 800-r level.

Second cruiser continued an elliptical orbit around and behind Luna.

Got most of this from Mike after we arrived Little David's Sling early Sunday. He was feeling groused over loss of two of his eyes and still more groused over gun crews—I think Mike was developing something like human conscience; he seemed to feel it was his fault that he had not been able to outfight six targets at once. I pointed out that what he had to fight with was improvised, limited range, not real weapons.

"How about self, Mike? Are you right?"

"In all essentials. I have outlying discontinuities. One live missile chopped my circuits to Novy Leningrad, but reports routed through Luna City inform me that local controls tripped in satisfactorily with no loss in city services. I feel frustrated by these discontinuities—but they can be dealt with later."

"Mike, you sound tired."

"Me tired? Ridiculous! Man, you forget what I am. I'm annoyed, that's all."

"When will that second ship be back in sight?"

"In about three hours if he were to hold earlier orbit. But he will not—probability in excess of ninety percent. I expect him in about an hour."

"A Garrison orbit, huh? Oho!"

"He left my sight at azimuth *and* course east thirty-two north. Does that suggest anything, Man?"

Tried to visualize. "Suggests they are going to land and try to capture *you*, Mike. Have you told Finn? I mean, have you told Prof to warn Finn?"

"Professor knows. But that is not the way I analyze it."

"So? Well, suggests I had better shut up and let you work."

Did so. Lenore fetched me breakfast while I inspected Junior—and am ashamed to say could not manage to grieve over losses with both Wyoh and Lenore present. Mum had sent Lenore out "to cook for Greg" after Milla's death— just an excuse; were enough wives at site to provide homecooking for everybody. Was for Greg's morale and Lenore's, too; Lenore and Milla had been close.

Junior seemed to be right. He was working on South America, one load at a time. I stayed in radar room and watched, at extreme magnification, while he placed one in estuary between Montevideo and Buenos Aires; Mike could not have been more accurate. I then checked his program for North America, found naught to criticize—locked it in and took key. Junior was on his own—unless Mike got clear of other troubles and decided to take back control.

Then sat and tried to listen to news both from Earthside and L-City. Co-ax cable from L-City carried phones, Mike's hookup to his idiot child, radio, and video; site was no longer isolated. But, besides cable from L-City, site had antennas pointed at Terra; any Earthside news Complex could pick up, we could listen to directly. Nor was this silly extra; radio and video from Terra had been only recreation during construction and this was now a standby in case that one cable was broken.

F.N. official satellite relay was claiming that Luna's ballistic radars had been destroyed and that we were now helpless. Wondered what people of Buenos Aires and Montevideo thought about that. Probably too busy to listen; in some ways water shots were worse than those where we could find open land.

Luna City *Lunatic's* video channel was carrying Sheenie telling Loonies outcome of attack by *Espérance,* repeating news while warning everybody that battle was not over, a warship would be back in our sky any moment—be ready for anything, everybody stay in p-suits (Sheenie was wearing his, with helmet open), take maximum pressure precautions, all units stay on red alert, all citizens not otherwise called by duty strongly urged to seek lowest level and stay there till all clear. And so forth.

He went through this several times—then suddenly broke it: "Flash! Enemy cruiser radar-sighted, low and fast. It may dido for

Luna City. Flash! Missiles launched, headed for ejection end of—"

Picture and sound chopped off.

Might as well tell now what we at Little David's Sling learned later: Second cruiser, by coming in low and fast, tightest orbit Luna's field permits, was able to start its bombing at ejection end of old catapult, a hundred kilometers from catapult head and Brody's gunners, and knock many rings out in minute it took him to come into sight-and-range of drill guns, all clustered around radars at catapult head. Guess he felt safe. Wasn't. Brody's boys burned eyes out and ears off. He made one orbit after that and crashed near Torricelli, apparently in attempt to land, for his jets fired just before crash.

But our next news at new site was from Earthside: that brassy F.N. frequency claimed that our catapult had been destroyed (true) and that Lunar menace was ended (false) and called on all Loonies to take prisoner their false leaders and surrender themselves to mercy of Federated Nations (nonexistent—"mercy," that is).

Listened to it and checked programming again, and went inside dark radar room. If everything went as planned, we were about to lay another egg in Hudson River, then targets in succession for three hours across that continent—"in succession" because Junior could not handle simultaneous hits; Mike had planned accordingly.

Hudson River was hit on schedule. Wondered how many New Yorkers were listening to F.N. newscast while looking at spot that gave it lie.

Two hours later F.N. station was saying that Lunar rebels had had missiles in orbit when catapult was destroyed—but that after those few had impacted would be no more. When third bombing of North America was complete I shut down radar. Had not been running steadily; Junior was programmed to sneak looks only as necessary, a few seconds at a time.

I then had nine hours before next bombing of Great China.

But not nine hours for most urgent decision, whether to hit Great China again. Without information. Except from Terra's news channels. Which might be false. Bloody. Without knowing whether or not warrens had been bombed. Or Prof was dead or alive. Double bloody. Was I now acting prime minister? Needed Prof: "head of state" wasn't my glass of chai. Above all, needed Mike—to calculate facts, estimate uncertainties, project probabilities of this course or that.

My word, didn't even know whether ships were headed toward us and, worse yet, was afraid to look. If turned radar on and used Junior for sky search, any warship he brushed with beams would see him quicker than he saw them; warships were built to spot radar surveillance. So had heard. Hell, was no military man; was computer technician who had bumbled into wrong field.

Somebody buzzed door; I got up and unlocked. Was Wyoh, with coffee. Didn't say a word, just handed it to me and went away.

Sipped it. There it is, boy—they're leaving you alone, waiting for you to pull miracles out of pouch. Didn't feel up to it.

From somewhere, back in my youth, heard Prof say, "Manuel, when faced with a problem you do not understand, do any part of it you do understand, then look at it again." He had been teaching me something he himself did not understand very well—something in maths—but had taught me something far more important, a basic principle.

Knew at once what to do first.

Went over to Junior and had him print out predicted impacts of all loads in orbit—easy, was a preprogram he could run anytime against real time running. While he was doing it, I looked for certain alternate programs in that long roll Mike had prepared.

Then set up some of those alternate programs—no trouble, simply had to be careful to read them correctly and punch them in without error. Made Junior print back for check before I gave him signal to execute.

When finished—forty minutes—every load in trajectory intended for an inland target had been retargeted for a seacoast city—with hedge to my bet that execution was delayed for rocks farther back. But, unless I canceled, Junior would reposition them as soon as need be.

Now horrible pressure of time was off me, now could abort any load into ocean right up to last few minutes before impact. Now could think. So did.

Then called in my "War Cabinet"—Wyoh, Stu, and Greg my "Commander of Armed Forces," using Greg's office. Lenore was allowed to go in and out, fetching coffee and food, or sitting and saying nothing. Lenore is a sensible fem and knows when to keep quiet.

Stu started it. "Mr. Prime Minister, I do not think that Great China should be hit this time."

"Never mind fancy titles, Stu. Maybe I'm acting, maybe not. But haven't time for formality."

"Very well. May I explain my proposal?"

"Later." I explained what I had done to give us more time; he nodded and kept quiet. "Our tightest squeeze is that we are out of communication, both Luna City and Earthside. Greg, how about that repair crew?"

"Not back yet."

"If break is near Luna City, they may be gone a long time. If can repair at all. So must assume we'll have to act on our own. Greg, do you have an electronics tech who can jury-rig a radio that will let us talk to Earthside? To their satellites, I mean— that doesn't take much with right antenna. I may be able to help and that computer tech I sent you isn't too clumsy, either." (Quite good, in fact, for ordinary electronics—a poor bloke I had once falsely accused of allowing a fly to get into Mike's guts. I had placed him in this job.)

"Harry Biggs, my power plant boss, can do anything of that sort," Greg said thoughtfully, "if he has the gear."

"Get him on it. You can vandalize anything but radar and computer once we get all loads out of catapult. How many lined up?"

"Twentythree, and no more steel."

"So twentythree it is, win or lose. I want them ready for loading; might lob them off today."

"They're ready. We can load as fast as the cat can throw them."

"Good. One more thing— Don't know whether there's an F.N. cruiser—maybe more than one—in our sky or not. And afraid to look. By radar, I mean; radar for skywatch could give away our position. But must have skywatch. Can you get volunteers for an eyeball skywatch and can you spare them?"

Lenore spoke up. "I volunteer!"

"Thanks, honey; you're accepted."

"We'll find them," said Greg. "Won't need fems."

"Let her do it, Greg; this is everybody's show." Explained what I wanted: Mare Undarum was now in dark semilunar; Sun had set. Invisible boundary between sunlight and Luna's shadow stretched over us, a precise locus. Ships passing through our sky would wink suddenly into view going west, blink out going east. Visible part of orbit would stretch from horizon to some point in sky. If eyeball team could spot both points, mark one by bearing, other by stars, and approximate time by counting seconds, Junior could start guessing orbit—two passes and Junior would know its period and something about shape of orbit. Then I would have some notion of when would be safe to use radar and radio, and catapult—did not want to loose a load with F.N. ship above horizon, could be radar-looking our way.

Perhaps too cautious—but had to assume that this catapult, this one radar, these two dozen missiles, were all that stood between Luna and total defeat—and our bluff hinged on them never knowing what we had or where it was. We had to appear endlessly able to pound Terra with missiles, from source they had not suspected and could never find.

Then as now, most Loonies knew nothing about astronomy—we're cave dwellers, we go up to surface only when necessary. But we were lucky; was amateur astronomer in Greg's crew, cobber who had worked at Richardson. I explained, put him in charge, let him worry about teaching eyeball crew how to tell stars apart. I got these things started before we went back to talk-talk. "Well, Stu? Why shouldn't we hit Great China?"

"I'm still expecting word from Dr. Chan. I received one message from him, phoned here shortly before we were cut off from cities—"

"My word, why didn't you tell me?"

"I tried to, but you had yourself locked in and I know better than to bother you when you are busy with ballistics. Here's the translation. Usual LuNoHo Company address with a reference which means it's for me and that it has come through my Paris agent. 'Our Darwin sales representative'—that's Chan—'informs us that your shipments of'—well, never mind the coding; he means the attack days while appearing to refer to last June—'were improperly packaged resulting in unacceptable damage. Unless this can be corrected, negotiations for long-term contract will be serously jeopardized."

Stu looked up. "All doubletalk. I take it to mean that Dr. Chan feels that he has his government ready to talk terms . . . but that we should let up on bombing Great China or we may upset his apple cart."

"Hmm—" Got up and walked around. Ask Wyoh's opinion? Nobody knew Wyoh's virtues better than I. . . but she oscillated between fierceness and too-human compassion—and I had learned already that a "head of state," even an acting one, must have neither. Ask Greg? Greg was a good farmer, a better mechanic, a rousing preacher; I loved him dearly—but did not want his opinion. Stu? I had had his opinion.

Or did I? "Stu, what's your opinion? Not Chan's opinion—but your *own*."

Stu looked thoughtful. "That's difficult, Mannie. I am not Chinese, I have not spent much time in Great China, and can't claim to be expert in their politics nor their psychology. So I'm forced to depend on his opinion."

"Uh— Damn it, he's not a Loonie! His purposes are not our purposes. What does *he* expect to get out of it?"

"I think he is maneuvering for a monopoly over Lunar trade. Perhaps bases here, too. Possibly an extraterritorial enclave. Not that we would grant that."

"Might if we were hurtin'."

"He didn't say any of this. He doesn't say much, you know. He listens."

"Too well I know." Worried at it, more bothered each minute.

News from Earthside had been droning in background; I had asked Wyoh to monitor while I was busy with Greg. "Wyoh, hon, anything new from Earthside?"

"No. The same claims. We've been utterly defeated and our surrender is expected momentarily. Oh, there's a warning that some missiles are still in space, falling out of control, but with it a reassurance that the paths are being analyzed and people will be warned in time to avoid impact areas."

"Anything to suggest that Prof—or anybody in Luna City, or anywhere in Luna—is in touch with Earthside?"

"Nothing at all."

"Damn. Anything from Great China?"

"No. Comments from almost everywhere else. But not from Great China."

"Uh—" Stepped to door. "Greg! Hey, cobber, see if you can find Greg Davis. I need him."

Closed door. "Stu, we're not going to let Great China off."

"So?"

"No. Would be nice if Great China busted alliance against us; might save us some damage. But we've got this far only by appearing able to hit them at will and to destroy any ship they send against us. At least I hope that last one was burned and we've certainly clobbered eight out of nine. We won't get anywhere by looking weak, not while F.N. is claiming that we are not just weak but finished. Instead we must hand them surprises. Starting with Great China and if it makes Dr. Chan unhappy, we'll give him a kerchief to weep into. If we can go on looking strong—when F.N. says we're licked—then eventually some veto power is going to crack. If not Great China, then some other one."

Stu bowed without getting up. "Very well, sir."

"I—"

Greg came in. "You want me, Mannie?"

"What makes with Earthside sender?"

"Harry says you have it by tomorrow. A crummy rig, he says, but push watts through it and will be heard."

"Power we got. And if he says 'tomorrow' then he knows what he wants to build. So will be *today*—say six hours. I'll work under him. Wyoh hon, will you get my arms? Want number-six and number-three—better bring number-five, too. And you stick with me and change arms for me. Stu, want you to write some nasty messages—I'll give you general idea and you put acid in them. Greg, we are not going to get all those rocks into space at once. Ones we have in space now will impact in next eighteen, nineteen hours. Then, when F.N. is announcing that all rocks are accounted for and Lunar menace is over. . . we crash into their newscast and warn of next bombings. Shortest possible orbits, Greg, ten hours or less—so check everything on catapult and H-plant and controls; with that extra boost all has to be dead on."

Wyoh was back with arms; I told her "number six" and added, "Greg, let me talk with Harry."

Six hours later sender was ready to beam toward Terra. Was ugly job, vandalized mainly out of a resonance prospector used in project's early stages. But could ride an audio signal on its radio frequency and was powerful. Stu's nastified versions of my warnings had been taped and Harry was ready to zipsqueal them—all Terran satellites could accept high speed at sixty-to-one and had no wish to have our sender heated more seconds than necessary; eyeball watch had confirmed fears: At least two ships were in orbit around Luna.

So we told Great China that her major coastal cities would each receive a Lunar present offset ten kilometers into ocean—Pusan, Tsingtao, Taipei, Shanghai, Saigon, Bangkok, Singapore, Djakarta, Darwin, and so forth—except that Old Hong Kong would get one smack on top of F.N.'s Far East offices, so kindly have all human beings move far back. Stu noted that human beings did not mean F.N. personnel; they were urged to stay at desks.

India was given similar warnings about coastal cities and was told that F.N. global offices would be spared one more rotation out of respect for cultural monuments in Agra—and to permit human beings to evacuate. (I intended to extend this by another rotation as deadline approached—out of respect for Prof. And then another, indefinitely. Damn it, they *would* build their home offices next door to most overdecorated tomb ever built. But one that Prof treasured.)

Rest of world was told to keep their seats; game was going extra innings. But stay away from *any* F.N. offices anywhere; we were frothing at mouth and no F.N. office was safe. Better yet, get out of any city containing an F.N. headquarters—but F.N. vips and finks were urged to sit tight.

Then spent next twenty hours coaching Junior into sneaking his radar peeks when our sky was clear of ships, or believed to be. Napped when I could and Lenore stayed with me and woke me in time for next coaching. And that ended Mike's rocks and we all went into alert while we got first of Junior's rocks flung high and fast. Waited until certain it had gone hot and true— then told Terra where to look for it and where and when to expect it, so that all would know that F.N.'s claims of victory were on a par with their century of lies about Luna—all in Stu's best, snotty, supercilious phrases delivered in his cultured accents.

First one should have been for Great China but was one piece of North American Directorate we could reach with it—her proudest jewel, Hawaii. Junior placed it in triangle formed by Maui, Molokai, and Lanai. I didn't work out programming; Mike had anticipated everything.

Then pronto we got off ten more rocks at short intervals (had to skip one program, a ship in our sky) and told Great China where to look and when to expect them and where—coastal cities we had neglected day before.

Was down to twelve rocks but decided was safer to run out of ammunition than to look as if we were running out. So I awarded seven to Indian coastal cities, picking new targets—and Stu inquired sweetly if Agra had been evacuated. If not, please tell us at *once*. (But heaved no rock at it.)

Egypt was told to clear shipping out of Suez Canal—bluff; was hoarding last five rocks.

Then waited.

Impact at Lahaina Roads, that target in Hawaii. Looked good at high mag; Mike could be proud of Junior.

And waited.

Thirty-seven minutes before first China Coast impact Great China denounced actions of F.N., recognized us, offered to negotiate—and I sprained a finger punching abort buttons.

Then was punching buttons with sore finger; India stumbled over feet following suit.

Egypt recognized us. Other nations started scrambling for door.

Stu informed Terra that we had suspended—only suspended, not stopped—bombardments. Now get those ships out of our sky at once—NOW!—and we could talk. If they could not get home without refilling tanks, let them land not less than fifty kilometers from any mapped warren, then wait for their surrender to be accepted. But clear our sky *now!*

This ultimatum we delayed a few minutes to let a ship pass beyond horizon; we weren't taking chances—one missile and Luna would have been helpless.

And waited.

Cable crew returned. Had gone almost to Luna City, found break. But thousands of tonnes of loose rock impeded repair, so they had done what they could—gone back to a spot where they could get through to surface, erected a temporary relay in direction they thought Luna City lay, sent up a dozen rockets at ten-minute intervals, and hoped that somebody would see, understand, aim a relay at it—Any communication?

No.

Waited.

Eyeball squad reported that a ship which had been clockfaithful for nineteen passes had failed to show. Ten minutes later they reported that another ship had missed expected appearance.

We waited and listened.

Great China, speaking on behalf of all veto powers, accepted armistice and stated that our sky was now clear. Lenore burst into tears and kissed everybody she could reach.

After we steadied down (a man can't think when women are grabbing him, especially when five of them are not his wives)—a few minutes later, when we were coherent, I said, "Stu, want you to leave for Luna City at once. Pick your party. No women—you'll have to walk surface last kilometers. Find out what's going on—but first get them to aim a relay at ours and phone me."

"Very good, sir."

We were getting him outfitted for a tough journey—extra air bottles, emergency shelter, so forth—when Earthside called me on frequency we were listening to because message was (learned later) on all frequencies up from Earthside:

"Private message, Prof to Mannie—identification, birthday Bastille and Sherlock's sibling. Come home at once. Your carriage waits at your new relay. Private message, Prof to—"

And went on repeating.

"Harry!"

"Da, Boss?"

"Message Earthside—tape and squeal; we still don't want them ranging us. *'Private message, Mannie to Prof. Brass Cannon. On my way!'* Ask them to acknowledge—but use only *one* squeal."

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Stu and Greg drove on way back, while Wyoh and Lenore and I huddled on open flatbed, strapped to keep from falling off; was too small. Had time to think; neither girl had suit radio and we could talk only by helmet touch—awkward.

Began to see—now that we had won—parts of Prof's plan that had never been clear to me. Inviting attack against catapult had spared warrens—hoped it had; that was plan—but Prof had always been cheerfully indifferent to damage to catapult. Sure, had a second one—but far away and difficult to reach. Would take *years* to put a tube system to new catapult, high mountains all way. Probably cheaper to repair old one. If possible.

Either way, no grain shipped to Terra in meantime.

And *that* was just what Prof wanted! Yet never once had he hinted that his plan was based on destroying old catapult—his long-range plan, not just Revolution. He might not admit it now. But Mike would tell me—if put to him flatly: Was or was not this one factor in odds? Food riot predictions and all that, Mike? He would tell me.

That tonne-for-tonne deal— Prof had expounded it Earthside, had been argument for a Terran catapult. But privately he had no enthusiasm for it. Once he had told me, in North America, “Yes, Manuel, I feel sure it would work. But, if built, it will be temporary. There was a time, two centuries ago, when dirty laundry used to be shipped from California to Hawaii—by sailing ship, mind you—and clean laundry returned. Special circumstances. If we ever see water and manure shipped to Luna and grain shipped back, it will be just as temporary. Luna’s future lies in her unique position at the top of a gravity well over a rich planet, and in her cheap power and plentiful real estate. If we Loonies have sense enough in the centuries ahead to remain a free port and to stay out of entangling alliances, we will become the crossroads for two planets, three planets, the entire Solar System. We won’t be farmers forever.”

They met us at Station East and hardly gave time to get p-suits off—was return from Earthside over again, screaming mobs and being ridden on shoulders. Even girls, for Slim Lemke said to Lenore, “May we carry you, too?”—and Wyoh answered, “Sure, why not?”—and stilyagi fought for chance to.

Most men were pressure-suited and I was surprised to see how many carried guns—until I saw that they were not *our* guns; they were captured. But most of all what blessed relief to see L-City unhurt!

Could have done without triumphal procession; was itching to get to phone and find out from Mike what had happened—how much damage, how many killed, what this victory cost. But no chance. We were carried to Old Dome willy-nilly.

They shoved us up on a platform with Prof and rest of Cabinet and vips and such, and our girls slobbered on Prof and he embraced me Latin style, kiss cheek, and somebody stuck a Liberty Cap on me. Spotted little Hazel in crowd and threw her a kiss.

At last they quieted enough for Prof to speak.

“My friends,” he said, and waited for silence. “My friends,” he repeated softly. “Beloved comrades. We meet at last in freedom and now have with us the heroes who fought the last battle for Luna, alone.” They cheered us, again he waited. Could see he was tired; hands trembled as he steadied self against pulpit. “I want them to speak to you, we want to hear about it, all of us.

“But first I have a happy message. Great China has just announced that she is building in the Himalayas an enormous catapult, to make shipping to Luna as easy and cheap as it has been to ship from Luna to Terra.”

He stopped for cheers, then went on, “But that lies in the future. Today— Oh, happy day! At last the world acknowledges Luna’s sovereignty. Free! You have won your freedom—”

Prof stopped—looked surprised. Not afraid, but puzzled. Swayed slightly.

Then he did die.

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We got him into a shop behind platform. But even with help of a dozen doctors was no use; old heart was gone, strained too many times. They carried him out back way and I started to follow.

Stu touched my arm. “Mr. Prime Minister—”

I said, “Huh? Oh, for Bog’s sake!”

“Mr. Prime Minister,” he repeated firmly, “you must speak to the crowd, send them home. Then there are things that *must* be done.” He spoke calmly but tears poured down cheeks.

So I got back on platform and confirmed what they had guessed and told them to go home. And wound up in room L of Raffles, where all had started—emergency Cabinet meeting. But first ducked to phone, lowered hood, punched MYCROFTXXX.

Got null-number signal. Tried again—same. Pushed up hood and said to man nearest me, Wolfgang, “Aren’t phones working?”

“Depends,” he said. “That bombing yesterday shook things up. If you want an out-of-town number, better call the phone office.”

Could see self asking office to get me a null. “What bombing?”

“Haven’t you heard? It was concentrated on the Complex. But Brody’s boys got the ship. No real damage. Nothing that can’t be fixed.”

Had to drop it; they were waiting. *I* didn’t know what to do but Stu and Korsakov did. Sheenie was told to write news releases for Terra and rest of Luna; I found self announcing a lunar of mourning, twenty-four hours of quiet, no unnecessary business, giving orders for body to lie in state—all words put into mouth, I was numb, brain would not work. Okay, convene Congress at end of twenty-four hours. In Novylen? Okay.

Sheenie had dispatches from Earthside. Wolfgang wrote for me something which said that, because of death of our President, answers would be delayed at least twenty-four hours.

At last was able to get away, with Wyoh. A stilyagi guard kept people away from us to easement lock thirteen. Once home I ducked into workshop on pretense of needing to change arms. “Mike?”

No answer—

So tried punching his combo into house phone—null signal. Resolved to go out to Complex next day—with Prof gone, needed Mike worse than ever.

But next day was not able to go; trans-Crisium tube was out—that last bombing. You could go around through Torricelli and Novylen and eventually reach Hong Kong. But Complex, almost next door, could be reached only by rolligon. Couldn’t take time; I was "government."

Managed to shuck that off two days later. By resolution was decided that Speaker (Finn) had succeeded to Presidency after Finn and I had decided that Wolfgang was best choice for Prime Minister. We put it through and I went back to being Congressman who didn't attend sessions.

By then most phones were working and Complex could be called. Punched MYCROFTXXX. No answer— So went out by rolligon. Had to go down and walk tube last kilometer but Complex Under didn't seem hurt.

Nor did Mike appear to be.

But when I spoke to him, he didn't answer.

He has never answered. Has been many years now.

You can type questions into him—in Loglan—and you'll get Loglan answers out. He works just fine . . . as a computer. But won't talk. Or can't.

Wyoh tried to coax him. Then she stopped. Eventually I stopped.

Don't know how it happened. Many outlying pieces of him got chopped off in last bombing—was meant, I'm sure, to kill our ballistic computer. Did he fall below that "critical number" it takes to sustain self-awareness? (If is such; was never more than hypothesis.) Or did decentralizing that was done before that last bombing "kill" him?

I don't know. If was just matter of critical number, well, he's long been repaired; he *must* be back up to it. Why doesn't he wake up?

Can a machine be so frightened and hurt that it will go into catatonia and refuse to respond? While ego crouches inside, aware but never willing to risk it? No, *can't* be that; Mike was unafraid—as gaily unafraid as Prof.

Years, changes—Mimi long ago opted out of family management; Anna is "Mum" now and Mimi dreams by video. Slim got Hazel to change name to Stone, two kids and she studied engineering. All those new free-fall drugs and nowadays earthworms stay three or four years and go home unchanged. And those other drugs that do almost as much for us; some kids go Earthside to school now; And Tibet catapult—took seventeen years instead of ten; Kilimanjaro job was finished sooner.

One mild surprise—When time came, Lenore named Stu for opting, rather than Wyoh. Made no difference, we all voted "Da!" One thing not a surprise because Wyoh and I pushed it through during time we still amounted to something in government: a brass cannon on a pedestal in middle of Old Dome and over it a flag fluttering in blower breeze—black field speckled with stars, bar sinister in blood, a proud and jaunty brass cannon embroidered over all, and below it our motto: TANSTAAFL! That's where we hold our Fourth-of-July celebrations.

You get only what you pay for—Prof knew and paid, gaily.

But Prof underrated yammerheads. They never adopted *any* of his ideas. Seems to be a deep instinct in human beings for making everything compulsory that isn't forbidden. Prof got fascinated by possibilities for shaping future that lay in a big, smart computer—and lost track of things closer home. Oh, I backed him! But now I wonder. Are food riots too high a price to pay to let people be? I don't know.

Don't know *any* answers.

Wish I could ask Mike.

I wake up in night and think I've heard him—just a whisper: "*Man. . . Man my best friend. . .*" But when I say, "Mike?" he doesn't answer. Is he wandering around somewhere, looking for hardware to hook onto? Or is he buried down in Complex Under, trying to find way out? Those special memories are all in there somewhere, waiting to be stirred. But *I* can't retrieve them; they were voicecoded.

Oh, he's dead as Prof, I know it. (But how dead is Prof?) If I punched it just once more and said, "Hi, Mike!" would he answer, "Hi, Man! Heard any good ones lately?" Been a long time since I've risked it. But he can't really be dead; nothing was hurt—he's just *lost.*

You listening, Bog? Is a computer one of Your creatures?

Too many changes—May go to that talk-talk tonight and toss in some random numbers.

Or not. Since Boom started quite a few young cobbers have gone out to Asteroids. Hear about some nice places out there, not too crowded.

My word, I'm not even a hundred yet.

I WILL FEAR NO EVIL

Note: The National Rare Blood Club (mentioned herein) is a nonprofit organization having its national headquarters at 164 Fifth Avenue, New York, N. Y. 10010, telephone (212) Chelsea 3-8037. R.A.H.

To Rex and Kathleen

1

The room was old-fashioned, 1980 baroque, but it was wide, long, high, and luxurious. Near simulated view windows stood an automated hospital bed. It looked out of place but was largely concealed by a magnificent Chinese screen. Forty feet from it a boardroom table also failed to match the decor. At the head of this table was a life-support wheelchair; wires and tubings ran from it to the bed.

Near the wheelchair, at a mobile stenodesk crowded with directional mikes, voice typewriter, clock-calendar, controls, and the usual ancillaries, a young woman sat. She was beautiful.

Her manner was that of the perfect unobtrusive secretary but she was dressed in a current exotic mode. "Half & Half"—right shoulder and breast and arm concealed in jet-black knit, left leg sheathed in a scarlet tight, panty-ruffle in both colors joining them, black sandal on the scarlet side, red sandal on her bare right foot. Her skin paint was patterned in the same scarlet and black.

On the other side of the wheelchair was an older woman garbed in a nurse's conventional white pantyhose and smock. She ignored everything but her dials and a patient in the chair. Seated around the table were a dozen-odd men, most of them in spectator-sports style affected by older executives.

Cradled in the life-support chair was a very old man. Except for restless eyes, he looked like a poor job of embalming. No cosmetic help had been used to soften the brutal fact of his decrepitude.

"Ghoul," he was saying softly to a man halfway down the table. "You're a slavering ghoul, Parky me boy. Didn't your father teach you that it is polite to wait for a man to stop kicking before you bury him? Or did you have a father? Erase that last, Eunice. Gentlemen, Mr. Parkinson has moved that I be invited to resign as chairman of the board. Do I hear a second?"

He waited, looking from face to face, then said, "Oh, come now! Who is letting you down, Parky? You, George?"

"I had nothing to do with it."

"But you would love to vote 'Aye.' Motion fails for want of a second."

"I withdraw my motion."

"Too late, Parkinson. Erasures are made only by unanimous consent, implied or overt. One objection is enough—and I, Johann

Sebastian Bach Smith, do so object... and that rule controls because *I* wrote it before you learned to read.

"But"—Smith looked around at the others—"I do have news. As you heard from Mr. Teal, all our divisions are in satisfactory shape; Sea Ranches and General Textbooks are more than satisfactory—so this is a good time for me to retire."

Smith waited, then said, "You can close your mouths. Don't look smug, Parky; I have more news for you. I stay on as chairman of the board but will no longer be chief executive. Our chief counsel, Mr. Jake Salomon, becomes deputy chairman and—"

"Hold it, Johann. I am *not* going to manage this five-ring circus."

"Nobody said you would, Jake. But you can preside at board meetings when I'm not available. Is that too much to ask?"

"Mmm, I suppose not."

"Thank you. I'm resigning as president of Smith Enterprises, and Mr. Byram Teal becomes our president and chief executive officer—he's doing the work; it's time he got the title—and pay and stock options and all the perks and privileges and tax loopholes. No more than fair."

Parkinson said, "Now see here, Smith!"

"Hold it, youngster. Don't start a remark to me with 'Now see here —' Address me as 'Mr. Smith' or Mr. Chairman.' What is your point?"

Parkinson controlled himself, then said, "Very well, *Mister* Smith. I can't accept this. Quite aside from promoting your assistant to the office of president in one jump—utterly unheard of!—if there is a change in management, *I* must be considered. I represent the second largest block of voting stock."

"I did consider you for president, Parky."

"You did?"

"Yep. I thought about it...and snickered."

"Why, you—"

"Don't say it, I might sue. What you forget is that *my* block has voting control. Now about your block— By company policy anyone representing five percent or more of voting stock is automatically on the board even if nobody loves him and he suffers from spiritual bad breath. Which describes both you and me.

"Or did describe you. Byram, what's the late word on proxies and stock purchases?"

"A full report, Mr. Smith?"

"No, just tell Mr. Parkinson where he stands."

"Yes, sir. Mr. Parkinson, you now control less than five percent of the voting stock."

Smith added sweetly, "So you're fired, you young ghoul. Jake, call a special stockholders' meeting, legal notice, all formalities, for the purpose of giving Parky a gold watch and kicking him out—and electing his successor. Further business? None. Meeting's adjourned. Stick around, Jake. You, too, Eunice. And Byram, if you have anything on your mind."

Parkinson jumped to his feet. "Smith, you haven't heard the last of this!"

"Oh, no doubt," the old man said sweetly. "Meantime my respects to your motherin-law and tell her that Byram will go on making her rich even though I've fired you."

Parkinson left abruptly. Others started to leave. Smith said mildly, "Jake, how does a man get to be fifty years old without acquiring horse sense? Only smart thing that lad ever did was pick a rich motherin-law. Yes, Hans?"

"Johann," Hans von Ritter said, leaning on the table and speaking directly to the chairman, "I did not like your treatment of Parkinson."

"Thanks. You're honest with me to my face. Scarce these days."

"Removing him from the board is okay; he's an obstructionist. But there was no need to humiliate him."

"I suppose not. One of my little pleasures, Hans. I don't have many these days."

A Simplex footman rolled in, hung the vacated chairs on its rack, rolled out; von Ritter continued: *"I* have no intention of being treated that way. If you want nothing but Yes men on your board, let us note that I control much less than five percent of the voting stock. Do you want my resignation?"

"Good God, no! I need you, Hans—and Byram will need you still more. I can't use trained seals; a man has to have the guts to disagree with me, or he's a waste of space. But when a man bucks me, I want him to do it *intelligently.* You do. You've forced me to change my mind several times—not easy, stubborn as I am. Now about this other—sit down. Eunice, whistle up that easy chair for Dr. von Ritter."

The chair approached; von Ritter waved it back, it retreated. "No, I haven't time to be cajoled. What do you want?" He straightened up; the boardroom table folded its legs, turned on edge, and glided away through a slot in the wall.

"Hans, I've surrounded myself with men who don't like me, not a Yes man or trained seal among them. Even Byram—especially Byram—got his job by contradicting me and being right. Except when he's been wrong and that's why he needs men like you on the board. But Parkinson— I was entitled to clip him—publicly—because he called for my resignation—publicly. Nevertheless you are right, Hans; 'tit for tat' is childish. Twenty years ago—even ten—I would *never* have humiliated a man. If a man operates by reflex, as most do instead of using their noggins, humiliating him forces him to try to get even. I know better. But I'm getting senile, as we all know."

Von Ritter said nothing. Smith Went on, "Will you stick?—and help keep Byram steady?"

"Uh...I'll stick. As long as you behave yourself." He turned to leave.

"Fair enough. Hans? Will you dance at my wake?"

Von Bitter looked back and grinned. "I'd be delighted!"

"Thought so. Thanks, Hans. G'bye."

Smith said to Byram Teal, "Anything, son?"

"Assistant Attorney General coming from Washington tomorrow to talk to you about our Machine Tools Division buying control of Homecrafts, Ltd. I think—"

"To talk to *you.* If you can't handle him, I picked the wrong man. What else?"

"At Sea Ranch number five we lost a man at the fifty-fathom line. Shark."

"Married?"

"No, sir. Nor dependent parents."

"Well, do the pretty thing, whatever it is. You have those videospools of me, the ones that actor fellow dubbed the sincere voice onto. When we lose one of our own, we can't have the public thinking we don't give a hoot."

Jake Salomon added, "Especially when we don't." Smith clucked at him. "Jake, do you have a way to look into my heart? It's our policy to be lavish with death benefits, plus the little things that mean so much."

"—and look so good. Johann, you don't, have a heart—just dials and machinery. Furthermore you never did have."

Smith smiled. "Jake, for you we'll make an exception. When you die, we'll try not to notice. No flowers, not even the customary black-bordered page in our house organs."

"You won't have anything to say about it, Johann. I'll outlive you twenty years."

"Going to dance at my wake?"

"I don't dance," the lawyer answered, "but you tempt me to learn."

"Don't bother, I'll outlive *you.* Want to bet? Say a million to your favorite tax deduction? No, I can't bet; I need your help to stay alive. Byram, check with me tomorrow. Nurse, leave us; I want to talk with my lawyer."

"No, sir. Dr. Garcia wants a close watch on you at all times."

Smith looked thoughtful. "Miss Bedpan, I acquired my speech habits before the Supreme Court took up writing dirty words on sidewalks. But I will try to use words plain enough for you to understand. I am your employer. I pay your wages. This is my home. I told you to get out. That's an order."

The nurse looked stubborn, said nothing.

Smith sighed. “Jake, I’m getting old—I forget that they follow their own rules. Will you locate Dr. Garcia—somewhere in the house—and find out how you and I can have a private conference in spite of this too faithful watchdog?”

Shortly Dr. Garcia arrived, looked over dials and patient, conceded that telemetering would do for the time being. “Miss MacIntosh, shift to the remote displays.”

“Yes, Doctor. Will you send for a nurse to relieve me? I want to quit this assignment.”

“Now, Nurse—”

“Just a moment, Doctor,” Smith put in. “Miss MacIntosh, I apologize for calling you, ‘Miss Bedpan’ Childish of me, another sign of increasing senility. But, Doctor, if she *must* leave—I hope she won’t —bill me for a thousand-dollar bonus for her. Her attention to duty has been perfect...despite many instances of unreasonable behavior on my part.”

“Oh...see me outside, Nurse.”

When doctor and nurse had left Salomon said dryly, “Johann, you are senile only when it suits you.”

Smith chuckled. “I do take advantage of age and illness. What other weapons have I left?”

“Money.”

“Ah, yes. Without money I wouldn’t be alive. But I *am* childishly bad-tempered these days. You could chalk it up to the fact that a man who has always been active feels frustrated by being imprisoned. But it’s simpler to call it senility…since God and my doctor know that my body is senile.”

“I call it stinking bad temper, Johann, not senility—since you can control it when you want to. Don’t use it on me; I won’t stand for it.”

Smith chuckled. “Never, Jake; I need you. Even more than I need Eunice—though she’s ever so much prettier than you. How about it, Eunice? Has my behavior been bad lately?”

His secretary shrugged—producing complex secondary motions pleasant to see. “You’re pretty stinky at times, Boss. But I’ve learned to ignore it.”

“You see, Jake? If Eunice refused to put up with it—as you do—I’d be the sweetest boss in the land. As it is, I use her as a safety valve.”

Salomon said, “Eunice, any time you get fed up with this vile-tempered old wreck you can work for me, at the same salary or higher.”

“Eunice, your salary just doubled!”

“Thank you, Boss,” she said promptly. “I’ve recorded it. And the time.” I’ll notify Accounting.”

Smith cackled. “See why I keep her? Don’t try to outbid me, you old goat, you don’t have enough chips.”

“Senile,” Salomon growled. “Speaking of money, whom do you want to put into Parkinson’s slot?”

“No rush, he was a blank file. Do you have a candidate, Jake?”

“No. Although after this last little charade it occurs to me that Eunice might be a good bet.”

Eunice looked startled, then dropped all expression. Smith looked thoughtful. “It had *not* occurred to me. But it might be a perfect solution. Eunice, would you be willing to be a director of the senior corporation?”

Eunice flipped her machine to “NOT RECORDING.”

“You’re both making fun of me! Stop it.”

“My dear,” Smith said gently, “you know I don’t joke about money. As for Jake, it is the only subject sacred to him—he sold his daughter and his grandmother down to Rio.”

“Not my daughter,” Salomon objected. “Just Grandmother…and the old girl didn’t fetch much. But it gave us a spare bedroom.”

“But, Boss, I don’t know anything about running a business!”

“You wouldn’t have to. Directors don’t manage, they set policy. But you *do* know more about running it than most of our directors; you’ve been on the inside for years. Plus almost inside during the time you were my secretary’s secretary before Mrs. Bierman retired. But here are advantages I see in what may have been a playful suggestion on Jake’s part. You are already an officer of the corporation as Special Assistant Secretary assigned to record for the board—and I made you that, you’ll both remember, to shut up Parkinson when he bellyached about my secretary being present during an executive session. You’ll go on being that—and my personal secretary, too; can’t spare you—while becoming a director. No conflict, you’ll simply vote as well as recording. Now we come to the key question: Are you willing to vote the way Jake votes?”

She looked solemn. “You wish me’ to, sir?”

“Or the way I do if I’m present, which comes to the same thing. Think back and you’ll see that Jake and I have *always* voted the same way on basic policy—settling it ahead of time—while wrangling and voting against each other on things that don’t matter. Read the old minutes, you’ll spot it.”

“I noticed it long ago,” she said simply, “but didn’t think it was my place to comment.”

“Jake, she’s our new director. One more point, my dear: If it turns out that we need your spot, will you resign? You won’t lose by it.”

“Of course, sir. I don’t have to be paid to agree to that.”

“You still won’t lose by it. I feel better. Eunice, I’ve had to turn management over to Teal; I'll be turning policy over to Jake—you know the shape I'm in. I want lake to have as many sure votes backing him as possible. Oh we can always fire directors . . . but it is best not to have to do so, a fact von Bitter rubbed my nose in. Okay, you're a director. We'll formalize it at that stockholders' meeting. Welcome to the ranks of the Establishment. Instead of a wage slave, you have sold out and are now a counterrevolutionary, warmongering, rat-fink, fascist dog. How does it feel?"

"Not 'dog," Eunice objected. "The rest is lovely but 'dog' is the wrong sex; I'm female. A bitch."

"Eunice, I not only do not use such words with ladies around, you know that I do not care to hear them from ladies."

"Can a 'rat-fink fascist' be a lady? Boss, I learned that word in kindergarten. Nobody minds it today."

"I learned it out behind the barn and let's keep it there."

Salomon growled. "I don't have time to listen to amateur lexicologists. Is the conference over?"

"What? Not at all! Now comes the top-secret part, the reason I sent the nurse out. So gather ye round."

"Johann, before you talk secrets, let me ask one question. Does that bed have a mike on it? Your chair may be bugged, too."

"Eh?" the old man looked thoughtful. "I used a call button . . . until they started standing a heel-and-toe watch on me."

"Seven to two you're bugged. Eunice my dear, can you trace the circuits and make sure?"

"Uh . . . I doubt it. The circuitry isn't much like my stenodesk. But I'll look." Eunice left her desk, studied the console on the back of the wheelchair. "These two dials almost certainly have mikes hooked to them; they're respiration and heart beat. But they don't show voices as my voice does not make the needles jiggle. Filtered out, I suppose. "But"—she looked thoughtful—"voice could be pulled off either circuit ahead of a filter. I do something like that, in reverse, whenever I record with a high background db. I don't know what these dials do. Darn it, I, might spot a voice circuit...but I could never be sure that there was *not* one. Or two. Or three. I'm sorry."

"Don't be sorry, dear," the lawyer said soothingly. "There hasn't been real privacy in this country since the middle of the twentieth century—why, I could phone a man I know of and have you photographed in your bath I and you would never know it."

"Really? What a dreadful idea. How much does this person charge for such a job?"

"Plenty. Depends on difficulty and how much chance he runs of being prosecuted. Never less than a couple of thousand and then up like a kite. But he can do it."

"Well!" Eunice looked thoughtful, then smiled. "Mr. Salomon, if you ever decide that you must have such a picture of me, phone me for a competitive bid. My husband has an excellent Chinese camera and I would rather have *him* photograph me in my bath than some stranger."

"Order, please," Smith said mildly. "Eunice, if you want to sell skin pictures to that old lecher, do it on your own time. I don't know anything about these gadgets but I know how to solve this. Eunice, go out to where they telemeter me—I think it's next door in what used to be my upstairs lounge. You'll find Miss MacIntosh there. Hang around three minutes. I'll wait two minutes; then I'll call out: *Miss Macintosh!* Is Mrs. Branca there?' If you hear me, we'll know she's snooping. If you don't, come back at the end of three minutes."

"Yes, sir. Do I give Miss MacIntosh any reason for this?"

"Give the old battleax any stall you like. I simply want to know if she is eavesdropping."

"Yes, sir." Eunice started to leave the room. She pressed the door switch just as its buzzer sounded. The door snapped aside, revealing Miss MacIntosh, who jumped in surprise.

The nurse recovered and said bleakly, to Mr. Smith, "May 1 come in for a moment?"

"Certainly."

"Thank you, sir." The nurse went to the bed, pulled its screen aside, touched four switches on its console, replaced the screen. Then she planted herself in front of her patient and said, "Now you have complete privacy, so far as *my* equipment is concerned. Sir."

"Thank you."

"I am not supposed to cut the voice monitors except on Doctor's orders. But you had privacy *anyhow.* I am as bound to respect a patient's privacy as .a doctor is, I *never* listen to sickroom conversation. I don't even hear it! Sir."

"Get your feathers down. If you weren't listening, how did you know we were discussing the matter?"

"Oh! Because my name was mentioned. Hearing my name triggers me to listen. It's a conditioned reflex. Though I don't suppose you believe me?"

"On the contrary, I do. Nurse—please switch on whatever you switched off. Then bear in mind that *I must* talk privately...and I'll remember not to mention your name. But I'm glad to know that I can reach you so promptly. To a man in my condition that is a comfort."

"Uh—very well, sir."

"And I want to thank you for putting up with my quirks. And bad temper."

She almost smiled. "Oh, you're not so difficult, sir. I once put in two years in an N.P. hospital."

Smith looked startled, then grinned. *"Touché!* Was that where you acquired your hatred for bedpans?"

"It was indeed! Now if you will excuse me, sir—"

When she was gone, Salomon said, "You really think she won't listen?"

"Of course she will, she can't help it, she's already triggered and will be trying too hard not to listen. But she's proud, Jake, and I would rather depend on pride than gadgetry. Okay, I'm getting tired, so here it is in a lump. I want to buy a body. A young one."

Eunice Branca barely showed reaction; Jake Salomon's features dropped into the mask he used for poker and district attorneys. Presently Eunice said, "Am I to record, sir?"

"No. Oh, hell, yes. Tell that sewing machine to make one copy for each of us and wipe the tape. File mine in my destruct file; file yours in your destruct file—and, Jake, hide your copy in the file you use to outwit the Infernal Revenue Service."

"I'll file it in the still safer place I use for guilty clients. Johann, anything you say to me is privileged but I am bound to point out that the Canons forbid me to advise a client in how to break the law, or to permit a client to discuss such intention. As for Eunice, anything you say to her or in her presence is *not* privileged."

"Oh, come off it, you old shyster; you've advised me in how to break the law twice a week for years. As for Eunice, nobody can get anything out of, her short of all-out brainwash."

"I didn't say I always followed the Canons; I merely told you what they called for. I won't deny that my professional ethics have a little stretch in them—but I won't be party to anything smelling of bodysnatching, kidnapping, or congress with slavery. Any self-respecting prostitute—meaning me—has limits."

"Spare me the sermon, Jake; what I want is both moral and ethical. I need your help to see that all of it is legal—utterly legal, can't cut corners on this!—and practical."

"I hope so."

"I know so. I said I wanted to *buy* a body—legally. That rules out bodysnatching, kidnapping, and slavery. I want to make a legal purchase."

"You can't."

"Why not? Take this body," Smith said, pointing to his chest, "it's not worth much even as manure; nevertheless I can will it to a medical school. You know I can, you okayed it."

"Oh. Let's get our terms straight. In. the United States there can be no chattel ownership of a human being. Thirteenth Amendment. Therefore your body is not your property because you can't sell it. But a cadaver *is* property—usually of the estate of the deceased although a cadaver is not often treated the way other chattels are treated. But it is indeed property. If you want to buy a cadaver, it can be arranged—but who were you calling a ghoul earlier?"

"What is a cadaver, Jake?"

"Eh? A dead body, usually of a human. So says Webster. The legal definition is more complicated but comes to the same thing."

"It's that 'more complicated' aspect I'm getting at. Okay, once it is dead, it is property and maybe we can buy it. But what is 'death,' Jake, and when does it take place? Never mind Webster; what is the *law?"*

"Oh. Law is what the Supreme Court says it is. Fortunately this point was nailed down in the seventies—'Estate of Henry M. Parsons v. Rhode Island.'

For years, many centuries, a man was dead when his heart quit beating. Then for about a century he was dead when a licensed M.D. examined him for heart condition action and respiration and certified that he was dead—and sometimes that turned out grisly, as doctors do make mistakes. And then along came the first heart transplant and oh, mother, what a legal snarl *that* stirred up!

"But the Parsons case sealed it; a man is dead when all brain activity has stopped, permanently,"

"And what does that mean?" Smith persisted.

"The Court declined to define it. But in application— look, Johann, I'm a corporation lawyer, not a specialist in medical jurisprudence nor in forensic medicine—and I would have to research before I—"

"Okay, so you're not God. You can revise your remarks later. What do you know *now?"*

"When the exact moment of death is important, as it sometimes is in estate cases, as it often is in accident, manslaughter, and murder cases, as it always is in an organ, transplant case, some doctor determines that the brain has quit and isn't going to start up again. They use various tests and talk about 'irreversible coma' and 'complete absence of brain wave activity' and 'cortical damage beyond possibility of repair' but it all comes down to some M.D. laying his reputation and license on the line to certify that this brain is dead and won't come alive again. Heart and lungs are now irrelevant; they are classed with hands and feet and gonads and other parts that a man can do without or have replaced. It's the brain that counts. Plus a doctor's opinion about the brain. In transplant cases there are almost always at least two doctors in no way connected with the operation and probably a coroner as well. Not because the Supreme Court requires it—in fact only a few of the fifty-four states have legislated in re thanatotic requirements—but—"

"Just a moment, Mr. Salomon—that odd word. My typewriter has placed a query after it." Eunice kept her hand over the "Hold" light.

"How did your typer spell it?"

"T-H-A-N-A-T-O-T-I-C."

"Smart machine. It's the technical adjective referring to death. From the Greek god Thanatos, Death."

"Half a second while I tell it so." Eunice touched the "Memory" switch with her other hand, whispered briefly, then said, "It feels better if I reassure it at once. Go ahead." She lifted her hand from the "Hold" light.

"Eunice, are you under the impression that that machine is alive?"

She blushed, then touched "Erase" and covered "Hold."

"No, Mr. Salomon. But it does behave better with me than with any other operator. It can get downright sulky if it doesn't like the way it is handled."

"I can testify to that," Smith agreed. "If Eunice takes a day off, her relief had better fetch her own gadgets, or fell back on shorthand. Listen, dear, knock off the chatter. Talk with Jake about the care and feeding of machines some other time; greatgrandfather wants to go to bed."

"Yes, sir." She lifted her hand.

"Johann, I was saying that in transplant cases the medical profession has set up tight rules or customs, both to protect themselves from criminal and civil actions and also, I am sure, to forestall restrictive legislation. They have to get that heart out while it's still alive and nevertheless protect themselves from indictments for murder, cum multimilliondollar damage suits. So they spread the responsibility thin and back each other up."

"Yes," agreed Smith. "Jake, you haven't told me a thing I didn't know—but you have relieved my mind by confirming facts and law. Now I *know* it can be done. Okay, I want a healthy body between ages twenty and forty, still warm, heart still working and no other damage too difficult to repair...but with the brain legally dead, dead, *dead.* I want to buy that cadaver and have *this* brain—mine-—transplanted into it."

Eunice held perfectly still. Jake blinked. "When do you want this body? Later today?"

"Oh, next Wednesday ought to be soon enough. Garcia says he can keep me going."

"I suggest later today. And get you a new brain at the same time—that one has quit functioning."

"Knock it off, Jake; I'm serious. My body is falling to pieces. But my mind is clear and my memory isn't bad—ask me yesterday's closing prices on every stock we are interested in. I can still do logarithmic calculations without tables; I check myself every day. Because I *know* how far gone I am. Look at me—worth so many megabucks that it's silly to count them. But with a body held together with Scotch tape and string—I ought to be in a museum.

"Now all my life I've heard 'You can't take it with you.' Well, eight months ago when they tied me down with all this undignified plumbing and wiring, having nothing better to do I started thinking about that old saw. I decided that, if I couldn't take it with me, I wasn't going to go!"

"Humph! 'You'll go when the wagon comes."

"Perhaps. But I'm going to spend as much as necessary of that silly stack of dollars to try to beat the game. Will you help?"

"Johann, if you were talking about a routine heart transplant, I would say 'Good luck and God bless you!' But a *brain* transplant—have you any idea what that entails?"

"No, and neither do you. But I know more about it than *you* do; I've had endless time to read up. No need to tell me that no successful transplant of a human brain has ever been made; I know it. No need to tell me that the Chinese have tried it several times and failed—although they have three basket cases still alive if my informants are correct."

"Do you want to be a basket case?"

"No. But there are two chimpanzees climbing trees and eating bananas this very day—and each has the brain the other one started with."

"Oho! That Australian."

"Dr. Lindsay Boyle. He's the surgeon I must have."

"Boyle. There was a scandal, wasn't there? They ran him out of Australia."

"So they did, Jake. Ever hear of professional jealousy? Most neurosurgeons are wedded to the notion that a brain transplant is too complicated. But if you dig into it, you will find the same opinions expressed fifty years ago about heart transplants. If you ask neurosurgeons about those chimpanzees, the kindest thing any of them will say is that it's a fake—even though there are motion pictures of both operations. Or they talk about the many failures Boyle had *before* he learned how. Jake, they hate him so much they ran him out of his home country when he was about to try it on a human being. Why, those bastards—excuse me, Eunice."

"My machine is instructed to spell that word as 'scoundrel,' Mr. Smith."

"Thank you, Eunice."

"Where is he now, Johann?"

"In Buenos Aires."

"Can you travel that far?"

"Oh, no! Well, perhaps I could, in a plane big enough for these mechanical monstrosities they use to keep me alive. But first we need that body. And the best possible medical center for computer-assisted surgery. And a support team of surgeons. And all the rest. Say Johns Hopkins. Or Stanford Medical Center."

"I venture to say that neither one will permit this unfrocked surgeon to operate."

"Jake, lake, of course they will. Don't you know how to bribe a university?"

"I've never tried it."

"You do it with really *big* chunks of money, openly, with an academic procession to give it dignity. But first you find out what they want—football stands, or a particle accelerator, or an endowed chair. But the key is plenty of money. From, my point of view it is better to be alive and young again, and broke, than it is to be the richest corpse in Forest Lawn." Smith smiled. "It would be exhilarating to be young —and broke. So don't spare the shekels.

"I know you can set it up for Boyle; it's just a question of whom to bribe and how—in the words of Bill Gresham, a man I knew a long time ago: 'Find out what he wants—he'll geek!'

"But the toughest problem involves no bribery but simply' a willingness to spend money. Locating that warm body. Jake, in this country over ninety thousand people per year are killed in traffic accidents alone—call it two hundred and fifty each day—and a lot of those victims die of skull injuries. A far percentage are between twenty and forty years old and in good health aside from a broken skull and a ruined brain. The problem is to find one while the body is still alive, then keep it alive and rush it to surgery."

"With wives and relatives and cops and lawyers chasing along behind."

"Certainly. If money and organization weren't used beforehand. Finders' fees—call them something else. Life support teams and copters equipped for them always standing by, near the worst concentrations of dangerous traffic. Contributions to highway patrol relief funds, thousands of release forms ready to sign, lavish payment to the estate of the deceased—oh, at least a million dollars. Oh, yes, nearly forgot—I've got an odd blood type and any transplant is more likely to take if they don't have to fiddle with swapping blood. There are only about a million people in this country with blood matching mine. Not an impossible number when you cut it down still further by age span—twenty to forty—and good health. Call it three hundred thousand, tops. Jake, if we ran big newspaper ads and bought prime time on video, how many of those people could we flush out of the bushes? If we dangled a million dollars as bait? One megabuck in escrow with Chase Manhattan Bank for the estate of the accident victim whose body is used? With a retainer to any prospective donor and his spouse who will sign up in advance."

"Johann, I'm durned if I know. But I would hate to be married to a woman who could collect a million dollars by 'accidentally' hitting me in the head with a hammer."

"Details, Jake. Write it so that no one can murder and benefit by it—and suicide must be excluded, too; I don't want blood on my hands. The real problem is to locate healthy young people who have my blood type, and feed their names and addresses into a computer."

"Excuse me, Mr. Smith, but have you thought of consulting the National Rare Blood Club?"

"Be darned! I *am* growing senile. No, I hadn't, Eunice—and how do you happen to know about it?"

"I'm a member, sir."

"Then you're a donor, dear?" Smith sounded pleased and impressed.

"Yes, sir. Type ABNegative."

"Be darned twice. Used to be a donor myself—until they told me I was too old, long before you were born. And your type—ABNegative."

"I thought you must be, sir, when you mentioned the number. So small. Only about a third of one percent of us in the population. My husband is ABNegative, too, and a donor. You see—well, I met Joe early one morning when we were both called to give blood to a newborn baby and its mother."

"Well, hooray for Joe Branca! I knew he was smart—he grabbed you, didn't he? I had not known that he was an Angel of Mercy as well. Tell you what, dear—when you get home tonight, tell Joe that all he has to do is to dive into a dry swimming pool. . . and you'll be not only the prettiest widow in town—but the richest."

"Boss, you have a nasty sense of humor. I wouldn't swap Joe for any million dollars—money won't keep you warm on a cold night."

"As I know to my sorrow, dear. Jake, can my will be broken?"

"Any will can *be* broken. But I don't think yours will be. I tried to build fail-safes into it."

"Suppose I make a new will along the same general lines but with some changes—would it stand up?"

"No."

"Why not?"

"You said it yourself. Senility. Any time a rich man dies at an advanced age with a new will anyone with an interest in breaking it—your granddaughters, I mean—will try to break it, alleging senility and undue influence. I think they would succeed."

"Darn. I want to put Eunice down for a million so she won't be tempted to kill her ABNegative husband."

"Boss, you're making fun of me again. Nasty fun."

"Eunice, I told you that I do not joke about money. How do we handle it, Jake? Since I'm too senile to make a will."

"Well, the simplest way would be an insurance policy with a paid-up single premium...which would cost, in view of your age and health, slightly more than a million, I surmise. But she would get it even if your will was broken."

"Mr. Salomon, don't listen to him!"

"Johann, do you want that million to revert to you if by any long chance you outlive Eunice?"

"Mmm...no, if it did, a judge might decide to look at the matter—and God himself doesn't know what a judge will do these days. Make the Red Cross the residuary. No, make it the National Rare Blood Club."

"Very well."

"Get it paid up first thing in the morning. No, do it *tonight.* I may not live till morning. Get an underwriter—Jack Towers, maybe—get Jefferson Billings to open that pawnshop of his and get a certified check. Use my power of attorney, not your own money, or you might be stuck for it. Get the signature of a responsible officer of the insurance company; then you can go to bed."

"Yes, Great Spirit. I'll vary that; I'm a better lawyer than you are. But the policy will be in force before night—with *your* money, not mine. Eunice, be careful not to kick those hoses and wires as you go out. But tomorrow you needn't be careful—as long as you don't get caught."

She sniffed. "You each have a nasty sense of humor! Boss, I'm going to erase this. I don't *want* a million dollars. Not from Joe dying, not from you dying."

"If you don't want it, Eunice," her employer said gently, "You can step aside and let the Rare Blood Club have it."

"Uh . . . Mr. Salomon, is that correct?"

"Yes, Eunice. But money is nice to have, especially when you don't have it. Your husband might be annoyed if you turned down a million dollars."

"Uh—" Mrs. Branca shut up.

"Take care of it, Jake. While thinking about how to buy a warm body. And how to get Boyle here and get him whatever permission he needs to do surgery in this country. And so forth. And tell—no, I'll tell her. Miss MacIntosh!"

"Yes, Mr. Smith?" came a voice from the bed console.

"Get your team in; I want to go to bed."

"Yes, sir. I'll tell Dr. Garcia."

Jake stood up. "Good day, Johann. You're a crazy fool."

"Probably. But I do have fun with my money."

"So you do. Eunice, may I run you home?"

"Oh, no, sir, thank you. My Gadabout is in. the basement."

"Eunice," said her boss, "can't you see that the old goat *wants* to take you home? So be gracious. One of my guards will take your Gadabout home."

"Uh. . . thank you, Mr. Salomon. I accept. Get a good night's sleep, Boss." They started to leave.

"Wait, Eunice," Smith commanded. "Hold that pose.

Jake, pipe those gams! Eunice, that's obsolete slang meaning that you have pretty legs."

"So you have told me before, sir—and so my husband often tells me. Boss you're a dirty old man."

He cackled. "So I am, my dear. . . and have been since I was six, I'm happy to say."

2

Mr. Salomon helped her into her cloak, rode down with her to the basement, waved his guards aside and handed her into his car. Shotgun locked them in, got in by driver-guard and locked that compartment. As she sat down Mrs. Branca said, "Oh, how *big!* Mr. Salomon, I knew a Rolls was roomy—but I've never been in one before."

"A Rolls only by courtesy, my dear—body by Skoda, power plant by Imperial Atomics, then Rolls-Royce pretties it and backs it with their reputation and service. You should have seen a Rolls fifty years ago, before gasoline engines were outlawed. There was a dream car!"

"This one is dreamy enough. Why, my little Gadabout would fit inside this compartment."

A voice from the ceiling said, "Orders, sir?"

Mr. Salomon touched a switch. "One moment, Rockford." He lifted his hand. "Where do you live, Eunice? Or the coordinates of wherever you want to go?"

"Oh. I'll go home. North one one eight, west thirty-seven, then up to level nineteen—though I doubt that this enormous car will fit into the vehicle lift."

"If not, Rocky and his partner will escort you up the passenger lift and to your door."

"That's nice. Joe doesn't want me to ride passenger lifts by myself."

"Joe is right. So we'll deliver you like a courier letter.

Eunice, are you in a hurry?"

"Me? Joe expects me when I get there, Mr. Smith's working hours being so irregular now. Today I'm quite early."

"Good." Mr. Salomon again touched the intercom switch. "Rockford, we're gong to kill some time. Uh, Mrs. Branca, what zone for those coordinates? Eighteen something?"

"Nineteen-B, sir."

"Find a cruising circle near nineteen-B; I'll give you coordinates later."

"Very good, sir."

Salomon went on to Eunice. "This compartment is soundproof unless I thumb this switch; they can talk to me but can't hear us. Which is good as I want to discuss things with you and make phone calls about that insurance policy."

"Oh! Surely that was a joke?"

"Joke, eh? Mrs. Branca, I have been working for Johann Smith for twenty-six years, the last fifteen with his affairs as my sole practice. Today he made me dc-facto chairman of *his* industrial empire. Yet if I failed to carry out his orders about that insurance policy—tomorrow I would be out of a job."

"Oh, surely not! He depends on you."

"He depends on me as long as he can depend on me and not one minute longer. That policy must be written tonight.

I thought you had quit fretting when you learned that you could step aside for the Rare Blood Club?"

"Well, yes. Except that I'm afraid I might get greedy and take it. When the time comes."

"And why not? The Rare Blood Club has done nothing for him; you have done much."

"I'm well paid."

"Listen, you silly child, don't be a silly child. He wanted *you* to have a million dollars in his will. And he wanted you to know it so that he could enjoy seeing your face. I pointed out that it is too late to change his will. Even this insurance gimmick is chancy if his natural heirs get a look at the books and discover it—which I shall try to prevent—as a judge might decide it was just a dodge—as it is—and require the insurance company to pay it to his estate. Which is where the Rare Blood Club comes in handy; they would probably fight it and win, if you cut them in for half.

"But there are other ways. Suppose you knew nothing about this and were invited to the reading of his will and discovered that your deceased employer had bequeathed you a lifetime income 'in grateful appreciation of long and faithful service.' Would you turn it down?"

"Uh—" she said, and stopped.

"'Uh,'" he repeated. "Exactly 'uh.' Of course you wouldn't turn it down. He'd be gone and you'd be out of a job and there would be no reason to refuse it. So, instead of a lump sum so big it embarrasses you, I'm going to write a policy that sets up a trust to pay you an annuity." He paused to think. "A safe return, after taxes, on, a trust is about four percent. What would you say to around seven hundred and fifty a week? Would that upset you?"

"Well . . . no. I understand seven hundred and fifty dollars much better than I understand a million."

"The beauty of it is that we can use the principal to insure against inflation—and you can still leave that million, or more, to the Rare Blood Club when your own Black Camel kneels."

"Really? How wonderful! I never will understand high finance."

"That's because most people think of money as something to pay the rent. But a money man thinks of money in terms of what he can do with it. Never mind, I'll fix it so that all you need to do is spend it. I'll use a Canadian insurance company and a Canadian bank, as each will be stuffy about letting a U.S. court look at its records. In case his granddaughters find out what I've done, I mean."

"Oh. Mr. Salmon, shouldn't this money go to them?"

"Again, don't be silly. They are harpies. Snapping turtles. And had nothing to do with making this money. Do you know anything about Johann's family? Outlived three wives—and his fourth married him for his money and it cost him millions to get shut of her. His first wife gave him a son and died in doing so—then Johann's son was killed trying to capture a worthless hill. Two more wives, two divorces, a daughter by each of those two wives resulting in a total of four granddaughters—and those ex-wives and their daughters are au dead, and their four carnivorous descendants have been waiting for Johann to die and sore at him because he hasn't."

Salomon grinned. "They're in for a shock. I wrote his will so as to give them small lifetime incomes—and chop them off-with a minimal dollar if they contest. Now excuse rue; I must make phone calls, then take you home and run over to Canada and nail this down."

"Yes, sir. Do you mind if I take off my cloak? It's rather warm."

"Want the cooling turned up?"

"Only if you are too warm. But this cloak is heavier than it looks."

"I noticed it was heavy. Body armor?"

"Yes, sir. I'm out by myself quite a lot."

"No wonder you're too warm. Take it off. Take off anything you wish to."

She grinned at him. "I wonder if you are a dirty old man, too. For another million?"

"Not a durned dime! Shut up, child, and let me phone."

"Yes, sir." Mrs. Branca wiggled out of her cloak, then raised the leg rest on her side, stretched out, and relaxed.

Such a strange day! ...am I really going to be rich?...doesn't seem real...well, I'm not going to spend a dime

—or let Joe spend it—unless it's safe in the bank…learned that the hard way first year we were married...some men understand money—such as Mr. Salomon, or Boss—and some don't, such as Joe. . . but as sweet a husband as a girl could wish. . . as long as I never again let him share a joint account.

Dear Joe! . . . those *are* pretty 'gams' if you do say so as shouldn't, you bitch.. . 'Bitch—'. . . how quaint Boss is with his old-fashioned taboos. . . always necessary not to shock him—not too much, that is; Boss enjoys a slight flavor of shock, like a whiff of garlic . . -. especially necessary not to annoy him with language everybody uses nowadays. . . Joe is good for a girl, never have to be careful around him. . . except about money— Wonder what Joe would think if he could see me locked in this luxurious vault with this old goat?. . . probably be amused but best not to tell him, dearie; men's minds don't work the way ours do, men are not logical...wrong to think of Mr. Salomon as an 'old goat' though; he certainly has not acted like one . . . you had to reach for that provocative remark, didn't you, dear? . . . just to see what he would say...and found out! ...got squelched— Is he too old? ...hell, no, dear, the way they hike 'em up with hormones a man is never 'too old' until he's too feeble to move. . . the way Boss is...not that Boss ever made the faintest pass even years back when he was still in fair shape...

Did Boss really expect to regain his youth by transplanting his brain?. . . arms and legs and kidneys and even hearts, sure, sure—but a brain?...

Salomon switched off the telephone. "Done," he announced. "All but signing papers, which I'll do in Toronto this evening."

"I'm sorry to be so much trouble, sir."

"My pleasure."

"I do appreciate it. And *I* must think about how to thank Boss—didn't thank him today but didn't think he meant it."

"Don't thank him."

"Oh, but I must. But I don't know how. How does one thank a man for a million dollars? And not seem insincere?"

"Hmm! There are ways. But, in this case, don't. My dear, you delighted Johann when you showed no trace of gratitude; I know him. Too many people have thanked him in the past. . . then figured him as an easy mark and tried to bleed him again. Then tried to knife him when he turned out not to be. So don't thank him. Sweet talk he does not believe; he figures it's always aimed at his money. I notice you're spunky with him."

"I have to be, sir, or he tromps on me. He had me in tears a couple of times—years back—before I found out he wanted me to stand up to him."

"You see? The old tyrant is making bets with himself as to whether you'll come trotting in tomorrow and lick his hand like a dog. So don't even mention it. Tell me about yourself, Eunice—age, how long you've been married, and how often, number of children, childhood diseases, why you aren't on video, what your husband does, how you got to be Johann's secretary, number of arrests and for what— Or tell me to go to hell; you are entitled to privacy. But I would like to know you better; we are going to be working together from here on."

"I don't mind answering"—(I'll tell just want I want to tell!)—"but does this work both ways?" She stopped to let down the leg rest, straightened up. "Do I quiz you the same, way?"

He chuckled. "Certainly. I may take the Fifth. Or lie."

"I could lie, too, sir. But I don't need to. I'm twentyeight and married once and still am. No children—no children *yet;* I'm licensed for three. As for my job—well, I won a beauty contest at eighteen, the sort that offers a one-year contract making appearances around your home state, plus a video test with an option for a seven-year contract —"

"And they didn't pick up your option. I'm astonished."

"Not that sir. Instead I took stock of myself—and quit. Winning that state contest and then losing the national; contest made me realize how many pretty girls there are. Too many. And some things I heard from them about what you have to go through to get into video and stay there, well, I didn't want it that much. And went back to school and took an associate's degree in secretarial electronics, with a minor in computer language and cybernetics, and went looking for a job." (And I'm not going to tell you how I got through school!) "And eventually filled in as Mrs. Bierman's secretary while her regular secretary had a baby then she didn't come back and I stayed on. . . and when Mrs. Bierman retired, Boss let me fill in. And kept me on. So here I am—a very lucky girl."

"A very smart girl. But I'm sure your looks had much to do with Johann's decision to keep you on."

"I know they did," she answered quietly. "But he would not have kept me had I not been able to do his work. I know how I look but Fm not conceited about it; appearance is a matter of heredity."

"So it is," he agreed, "but there are impressive data to show that beautiful women are, on the average, more intelligent than homely ones."

"Oh, I don't think so! Take Mrs. Bierman—downright homely. But she was terribly smart."

"I said 'On the average,'" he repeated. "What is 'Beauty'? A lady hippopotamus must look beautiful to her boy friend, or we would run out of hippopotamuses—potami—in one generation. What we think of as 'Physical beauty' is almost certainly a tag for a complex of useful survival characteristics. Smartness—intelligence—among them. Do you think that a male hippopotamus would regard *you* as beautiful?"

She giggled. "Not likely!"

"You see? In reality you're no prettier than a female hippopotamus; you are simply an inherited complex of survival characteristics useful to your species."

"I suppose so." (Humph! Give me one opening and I'll *show* you what I am.)

"But since Johann—and I—are of your species, what that means to us is 'Beauty.' Which Johann has always appreciated."

"I know he does," she said quietly. She straightened her scarlet-covered leg in full extension and looked at it. "I dress this way to amuse Boss. When I first went to work for Smith Enterprises I wore as little as the other girls in the outer offices—you know, skin paint and not much else.

Then when I went to work for Mrs. Bierman I started dressing quite modestly because she did—covered up all over, I mean, like Nurse MacIntosh—not even a see-through. Uncomfortable. I went on dressing that way when Mrs. Bierman left. Until one morning I had only one such outfit—I wore disposables, cheaper than having them cleaned—and spilled coffee down the front and was caught with nothing to wear.

"And no time to buy anything for I was more afraid of being late—you know how impatient Mr. Smith is—than I was that he might disapprove of my dress. Or lack of it. So I gritted my teeth and got out an office-girl bikini and asked Joe to paint me and hurry it up! Joe's an artist, did I say?"

"I don't believe so."

"He is. He does my skin painting, even styles my face. But I was late anyhow that morning as Joe really is an artist and refused to let it go with just spraying me the background color. The two-piece was white with assorted sizes of big blue polka dots…and Joe insisted on continuing the pattern all over me, with me cussing and telling hint to hurry and him insisting on painting just one more big polka dot. I was so late that I cut through an Abandoned Area I ordinarily circled around."

"Eunice, you should *never* go into an Abandoned Area. Good God; child, even the police don't risk it other than in a car as well armored as this one. You could be mugged, raped, and murdered and no one would ever know."

"Yes, sir. But I was scared of losing my job. I tried to explain to Boss why I was late, and he told me to shut up and go to work. Nevertheless he was unusually mellow that day. The next day I wore the sort of full coverup I have been wearing—and he was downright mean all day. Mr. Salmon, I don't have to be slapped in the face with a wet fish; from then on I quit trying to look like a nun, and dressed and painted to enhance what I've got, as effectively as possible."

"It's effective. But, dear, you should be mere careful. It's all very well to wear sexy clothes for Johann; that's charity, the old wretch can't get much pleasure out of life and is no threat to you, the shape he is in."

"He never was a threat, sir. In all the years I've worked for Mr. Smith he has never so much as touched my hand. He just makes flattering remarks about each new getup—sometimes quite salty and then I sass him and threaten to tell my husband, which makes him cackle. All innocent as Sunday School."

"I'm sure it is. But you must be more careful going to and from work. I don't mean just stay out of Abandoned Zones. Dressed the way you dress and looking as you do, you are in danger anywhere. Don't you *realize* it? Doesn't your husband know it?"

"Oh. I'm careful, sir; I know what can happen, I see the news. But I'm not afraid. I'm carrying three unregistered illegal weapons—and know how to use them. Boss got them for me and had his guards train me."

"Hmm. As an officer of the Court I should report you. As a human being who knows what a deadly jungle this city is, I applaud your good sense. If you really do know how to use them. If you have the courage to use them promptly and effectively. If, having defended yourself, you're smart enough to get away fast and say nothing to cops. That's a lot of 'ifs,' dear."

"Truly, I'm not afraid. Uh, if you were my attorney, anything I told you would be privileged, would it not?"

"Yes. Are you asking me to be your attorney?"

"Uh . . . yes, sir."

"Very well, I am. Privileged. Go ahead."

"Well, one night I had to go out on a blood-donor call. By myself, Joe wasn't home. Didn't worry me, I've made donations at night many times and often alone. I keep my Gadabout in our flat and stay in it until I'm inside the hospital or whatever. But— Do you know that old, old hospital on the west side, Our Lady of Mercy?"

"I'm afraid not."

"No matter. It's old, built before the government gave up trying to guarantee safety in the streets. No vehicle lift, no indoor parking. Just a lot with a fence and a guard at the gate. Happened when I came out. This frog tried to hop me between the parked cars. Don't know whether he was after my purse. Or me. Didn't wait to find out—don't even know if it was a man, could have been a woman—"

"Unlikely."

"As may be. Stun bomb in his face with my left hand as I zapped with my right and didn't wait to see if he was dead. Buzzed out of there and straight home. Never told the police, never told Joe, never told *anybody* until just now."

(But it. took a triple dose of Narcotol to stop your shakes, didn't it, dearie—oh, shut up, that's not the pomt.)

"So you're a brave girl and can shoot if you have to. But you are a silly girl, too, and very lucky. Hmm. Johann has an armored car much like this and two shifts of guards to go with it."

"Of course he has guards, sir, but I know nothing about his cars."

"He has a Rolls-Skoda. Eunice, we are no longer going to depend on how fast you are with weapons. You can sell your Gadabout or plant flowers in it; from here on you'll have mobile guards and an armored car. Always."

Mrs. Branca looked startled. "But, Mr. Salomon! Even with my new salary I couldn't begin to—"

"Switch off, dear. You know that Johann will never again ride in a car. Chances are he will never leave that room. But he still owns his personal defense car; he still keeps a double crew, two drivers, two Shotguns—and maybe they run an errand once a week. Eating their heads off and playing pinochle the rest of the time. Tomorrow morning my car will pick you up; tomorrow afternoon your own car—Johann's—will take you home. And will be on call for you at all other times, too."

"I'm not sure Boss is going to like this."

"Forget it. I'm going to chew him out for letting you take I risks. If he gives me any back talk, he'll find I have enough chips to hire you away from him. Be sensible, Eunice; this doesn't cost him a dollar; it's a business expense that he is already incurring. Change of subject. What do you think of his plans for this soidisant 'warm body'?"

"Is a brain transplant possible? Or is he grabbing at a straw? I know he's not happy tied down to all that horrid machinery—goodness. I've been combing the shops for the naughtiest styles I can find but it gets harder and harder to get a smile out of him, is it practical, this scheme?"

"That's beside the point, dear; he's ordered it and we are going to deliver. This Rare Blood Club—does it have all the AB-Negatives?"

"Heavens, no. The last club report showed less than four thousand AB-Negs enrolled out of a nationwide probability of about million."

"Too bad. What do you think of his notion of page ads and prime time on video?"

"It would cost a dreadful lot of money. But l suppose he can afford it."

"Certainly. But it stinks."

"Sir?"

"Eunice, if this transplant is to take place, there must be *no* publicity. Do you remember the fuss when they started freezing people? No, you're too young. It touched a bare nerve which set off loud howls, and the practice was very nearly prohibited—on the theory that, since most people can't afford it, no one should be allowed to have it. The Peepul, bless 'em—our country has at times been a democracy, an oligarchy, a dictatorship, a republic, a socialism, and mixtures of all of those, without changing its basic constitution, and now we are a dc-facto anarchy under an elected dictator even though we still have laws and legislatures and Congress. But through all of this that bare nerve has always been exposed: the idea that if everyone can't have something, then no one should have it.

So what will happen when one of the richest men in the country advertises that he wants to buy another man's living body—just to save his own stinking, selfish life?"

"I don't think Boss is all that bad. If you make allowances for his illness, he's rather sweet."

"Beside the point. That bare nerve will jump like an ulcerated tooth. Preachers will denounce him and bills will be submitte4 in legislatures and the A.M.A. will order its members to have nothing to with it and Congress might even pass a law against it. Oh, the Supreme Court would find such a law unconstitutional I think—but by then Johann would be long dead. So no publicity. Does the Rare Blood Club know who these other AB-Negatives are who are not members?"

"I don't know. I don't think so."

"We'll check. I would hazard that at least eighty percent of the people in this country have had their blood typed at some time. Does blood type ever change?"

"Oh, no, never. That's why we rares—that's what we call ourselves—are so in demand."

"Good. Almost all of the population who have been typed have the fact listed in computers somewhere, and with computers so interlinked today it is a matter of what questions to ask and how and where—and I don't know how, but I know the firm to hire for it. We progress, my dear. I'll get that started and off-load the details onto you, and then get other phases started and leave you to check on them while I go to South America and see this butcher Boyle. And—"

“Mr. Salomon! Bad turf coming up.”

Salomon thumbed his intercom. “Roger.” He added, “Damn them, those two beauties *like* to go through Abandoned Areas. They hope somebody will shoot so that they will have legal excuse to shoot back. I’m sorry, my dear. With you aboard I should have given orders to stay out of A.A.s no matter what.”

“It’s my fault,” Mrs. Branca said meekly. “I should have told you that it is almost impossible to circle near Nineteen-B without crossing a bad zone. I have to detour way around to reach Boss’s house. But we’re safe inside, are we not?”

“Oh, yes. If we’re hit, this old tank has to be prettied up, that’s all. But I should not have to tell them. Rockford isn’t so bad; he’s just a Syndicate punk, an enforcer who took a fall. But Charlie—the one riding Shotgun—is mean. An XYZ. Committed his first murder at eleven. He—” Steel shutters slid up around them and covered the bulletproof glass. “We must be entering the A.A.”

Inside lights came on as shutters darkened windows.

Mrs. Branca said, “You make it sound as if we were in more danger from your mobiles than we are from the bad zone.”

He shook his head. “Not at all, my dear. Oh, I concede that any rational society would have liquidated them—but since we don’t have capital punishment I make use of their flaws. Both are on probation paroled to me, and they *like* their jobs. Plus some other safe-” The *rap-rap-rap!* of an automatic weapon stitched the length of the car.

In that closed space the din was earsplitting. Mrs. Branca gasped and clutched at her host. A single explosion, still louder, went *POUNGK!* She buried her face in his shoulder, clung harder. *“Got ‘im!”* a voice yelped. The lights went out.

“They got us?” she asked, her voice muffled by the ruffles of his shirt.

“No, no.” He patted her and put his right arm firmly around her. “Charlie got *them.* Or thinks he did. That last was our turret gun. You’re safe, dear.”

“But the lights went out.”

“Sometimes happens. The concussion. I’ll find the switch for the emergency lights.” He started to take his arms from around her.

“Oh, no! Just hold me, please—I don’t mind the dark. Feel safer in it—if you hold me.”

“As you wish, my dear.” He settled himself more comfortably, and closer.

Presently he said softly, “My goodness, what a snuggly baby you are.”

“You’re pretty snuggly yourself. . . Mr. Salomon.”

“Can’t you say ‘Jake’? Try it.”

"'Jake.' Yes, Jake. Your arms are so strong. How old are you, Jake?"

"Seventy-one."

"I can't believe it. You seem ever so much younger."

"Old enough to be your grandfather, little snuggle puppy.

I simply look younger. . . in the dark. But one year into borrowed time according to the Bible."

"I won't let you talk that way; you're *young!* Let's not talk at all, Jake. Dear Jake."

"Sweet Eunice."

Some minutes later the driver's voice announced, "All clear, sir," as the shutters started sliding down—and Mrs. Branca hastily disentangled herself from her host.

She giggled nervously. "My goodness!"

"Don't fret. It's one-way glass."

"That's a comfort. Just the same, that light is like a dash of cold water."

"Um, yes. Breaks the mood. Just when I was feeling young."

"But you *are* young—Mr. Salomon."

"Jake."

"'Jake.' Years don't count, Jake. Goodness me, I got skin paint all over your shirt ruffles."

"Fair enough, I mussed your hair."

"My hair I can comb. But what will your wife say when she sees that shirt?"

"She'll ask why I didn't take it off. Eunice dear, I have no wife. Years ago she turned me in on a newer model."

"A woman of poor taste. You're a classic, Jake—and classics improve with age. Does my hair look better now?"

"Lovely. Perfect."

"I'm almost tempted to ask to have us driven back into that bad zone so you can muss it again."

"I'm more than 'almost tempted.' But I had better take you home—unless you want to go with me over into Canada? Back by midnight, probably."

"I want to and I can't, really I can't. So take me home.

But let me sit close, and put your arm around me but don't muss my hair this time."

"I shall be careful." He gave his driver the coordinates of Mrs. Branca's flat, then added, "And get there without going through any more Abandoned Areas, you triggerhappy bandits!"

"Very good, Mr. Salomon."

They rode in silence; then Mrs. Branca said, "Jake, you were feeling quite young, just before we were interrupted."

"I'm sure you know it."

"Yes. I was ready to let you, and you know that, too. Jake? Would you like a skin pic of me? A good one, not one taken by that snoopy character who charges so much."

"Will your husband take one? Can you sneak me a copy?"

"No huhu, lake dear, I have dozens of skin pix—I was once a beauty contestant, remember? You are welcome to one...if you'll keep your mouth shut about it."

"Privileged communication. Your secrets are always safe with your attorney."

"What do you like? Artistic? Or sexy?"

"Uh...what a choice to have to make!"

"Mmm, a pic can be both. I'm thinking of one of me in a shower, hair soaked, wet all over, not a speck of body paint, not even face makeup, not even—well, you'll see. Is that on your wave length?"

"I'll howl like a wolf!"

"You shall have it. Quick change of subject; we're almost there. Jake? Does Boss stand any chance with this brain transplant thing?"

"I'm not a medical man. In my lay opinion—none."

"So I thought. Then he doesn't have long to live whether he has the operation or not, lake, I'm going to make still greater effort to dress even naughtier for him, as long as he lasts."

"Eunice, you are a sweet girl. There is nothing nicer you could do for him. Much better than saying thanks for this trust fund."

"I wasn't thinking about that ridiculous million dollars, lake; I was thinking about *Boss.* Feeling sorry for him. I'll go shopping tonight for something *really* exotic—or if I can't find a novel exotic, then a simple skintight see-through. . . passé but always effective with the right paint job underneath—Joe is good at that. And—well, if I'm going to have guards now, some days I may wear nothing but paint—stilt heels to make my legs look even better—yes, I know they're pretty!—heels, a minimum-gee, and paint."

"And perfume."

"Boss can't smell, Jake. All gone."

"I still have my sense of smell."

"Oh. All right. I'll wear perfume for you. And paint for Boss. I've never tried anything that extreme at work...but now that we no longer work at his offices—no longer see many people—and I can keep a semi-see-through smock around, just in case—I might as well see if Boss likes it. Joe will enjoy thinking up provocative designs, likes to paint me, and is not jealous of Boss, feels sorry for the poor old man just as I do. And it is *so* hard to find novelty in exotic clothes. Even though I shop at least one night a week."

"Eunice."

"Yes, sir. Yes, Jake."

"Don't shop tonight. That's an order—from your boss by virtue of the power of attorney I hold."

"Yes, Jake. May one ask why?"

"You can wear a paint-only job tomorrow if you wish—this car and my guards will deliver you like crown jewels. But I need the car tonight. Starting tomorrow you'll have Johann's car and guards, and you will *always* use them for shopping. And everything."

"Yes, sir," she said meekly.

"But you are mistaken about Johann not having long to live. His problem is that he has *too* long to live."

"I don't understand."

"He's trapped, dear. He's fallen into the clutches of the medical profession and they won't *let* him die. Once he allowed them to harness him into that life-support gear he lost his last chance. Have you noticed that his meals are served without a knife? Nor even a fork? Just a plastic spoon.,'

"But his hands tremble so. I sometimes feed him as he hates to have nurses 'messing around' as he calls it."

"Think about it, dear. They have made it impossible for him to do anything but stay alive. A machine. A weary machine that hurts all the time. Eunice, this brain transplant is just a way for Johann to outsmart his doctors. A fancy way to commit suicide."

"No!"

"Yes. They've taken the simple ways away from him, so he's had to think up a fancy one. You and I are going to help him do it, exactly the way he wants it done. We seem to have arrived. Don't cry, damn it; your husband will want to know why and you must *not* tell him. Do you feel like kissing me goodbye?"

"Oh, please do!"

"Stop the tears and turn up your pretty face, they'll be unlocking us in a moment or two."

Presently she whispered, "That was as good a kiss as the very first one, Jake...and I no longer feel like crying.

But I heard them unlock us."

"They'll wait until I unlock from inside. May I go up the lift with you and see you to your door?"

"No. . . I can explain your guards but would have trouble explaining why the firm's chief counsel bothers to do so. Joe isn't jealous of Boss—but might be of you. I don't want him to be...especially when I came so close to giving him reason to be."

"We could correct that near miss."

"Could be, dear Jake. My Iowa-farm-girl morals don't seem very strong today—I think I've been corrupted by a million dollars and a

Rolls-Royce. . . and a city slicker. Let me go, dear."

3

The guards escorted her up and to her door in respectful silence. Mrs. Branca looked with new interest at "Charlie," the Shotgun—wondered how a mousy, fatherly little man could be as vicious as Jake seemed to know that he was.

They "stood sideboy" as she spoke to her door's lock, then waited until her husband unbolted it. As the door opened Rockford saluted and said, "Oh-nine-forty, Miss—we'll be waiting right here."

"Thank you, Rockford. Good night. Good night, Charlie."

Joe Branca waited until he had thrown the bolts and reset the alarm before he spoke. "What t'hell happen? An' where you trap uniform apes?"

"Don't I get a kiss first? Surely I'm not all that late? It's not yet eighteen."

"Talk, woman. Other ape shows back two hours with your jitterbuggy—tha's okay; your boss's butler phoned." He took off her cloak and kissed her. "So where you been, dizzy baggage? Missed you."

"That's the nicest thing I've heard all day. That you've missed me."

"Walking the ceiling! What happen?"

"Were you worried? Oh, dear!"

"Not worried, Smith's door flunky said you been sent on errand an 'ud come home in a Brink's. So knew you safe. Just torched it took so long when call made spec you'd short it. Rozzer?"

"Roz. Simple, though. Boss sent me with his Best Boy—Jake Salomon, you know."

"Fixer. Roz."

"Mr. Salomon took me in his car to his office to work on things Boss wanted at once—you know how right-now Boss is and worse since he's been wired down."

"Poor old muck should take the Big One. Pitiful."

"Don't say that, dear. I cry when I think about it."

"You're a slob, Sis. But me, too."

"That's why I love you, dear. Anyhow a longish job and Mr. Salomon had his guards take me home—and they drove through Bird's Nest turf and we got fired on. Chopped all down one side."

"Huh? Doom?"

"Not even grief. Fun."

"Like what inside?"

"Teribly noisy. But exciting. Made me horny."

"Everything makes you horny, Tits." He grinned and mussed her hair. “You’re home and no aches, what counts. So peel. Inspiration eating me, whole day. Walking the ceiling!”

“Which sort of inspiration, dearest?” she asked while sliding the half-sweater off her right shoulder and peeling it down her arm. “And have you eaten? If you start painting, you won’t stop to eat.”

“Ate some. Too high on inspiration. Big, big! I’ll flash a pack for you. Chicken? Spaghetti? Pizza?”

“Anything. I’d better eat if it’s that sort of inspiration.” She kicked off her sandals, pushed down the panty-ruffle, sat on the floor to slide off the single tight attached to it. “Am I going to pose for a painting or are you going to paint on me and mug it?”

“Both. Tha’s the grabber. A Nova.”

She laid her dress carefully aside, rocked forward into Lotus seat. “I don’t roz it. ‘Both?’

“Both. You’ll see.” He looked down, ran his eyes over her, smiled; “And both sorts inspiration.”

“Well! Happy-making!”

“Not too hungry? Can wait.”

“Beloved man, when was I ever that hungry? Never mind the bed; just grab a pillow and come here!”

Shortly Mrs. Branca was thinking happily how lucky it was that she had not let dear Jake go ahead—the sweet thing would have been a disappointment compared with what she had at home. . . yet he had got her wonderfully primed for *this.* Really, it was best to be a faithful wife. Usually. What a wonderful, extraordinary day! Should she tell Joe about her big pay raise? No hurry. Couldn’t tell him *anything* else. Too bad. Then she quit thinking coherently.

Sometime later she opened her eyes and smiled up at him. “Thank you, Beloved.”

“Good vibes?”

“Just what Eunice needed. At times like this I’m convinced that you’re Michelangelo.”

He shook his head. “Not old Mike. Boys his jolly. Picasso maybe.”

She hugged him. “Anyone you want to be, darling, as long as you go on being mine. All right. I’ll pose now, and eat at the breaks.”

“Forgot. Letter from Mama. Read?”

“Certainly, darling. Let me up and find it.”

He fetched it, still unopened. She sat up and glanced through it to see how much editing it would require. Uh huh, just as you expected, dearie, the periodic threat to come pay us “a nice long visit.” Well, she knew how to deal with *that.* Out! Because Joe did not know how to refuse his mother anything. That one visit had been one too many—yet that had been when they had had two rooms, before she had found this wonderful one-big-everything studio room for Joe. Let that clinging old bag move in? No more jolly romps on the floor? No, Mama Branca, I will *not* let you ruin our happy nest with your smothering presence. You stay where you are and live on Welfare...and I'll send you a check from time to time and let you think it's a present from Joe. But that's *all!*

"Anything?"

"The usual, dearest. Her stomach still bothers her but the priest sent her to another doctor and she's doing better, she says. But let me start at the beginning. 'My darling Baby Boy, Not much news since last time Mama wrote but if I don't write I don't never get a letter back. Tell Eunice to write a longer letter this time and tell me everything that's happened to you; a mother worries so. Eunice is a very nice girl even though I do think you would be better off with a nice girl of your own religion—'"

"Enough."

"Be tolerant, Joe. She's your mother. I don't mind and I will take time—tomorrow—to write her a long letter. I'll send it by Mercury in the company pouch so that she will be sure to get it; Boss doesn't mind. All right, I'll skip the rest of that; we know what she thinks of Protestants. Or ex-Protestants. I wonder what she would think if she heard us chanting 'Om Mani Padme—'"

"Kark her drawers."

"Oh, Joe!" She skipped, including the self-invitation. "'Angela is going to have another baby. The Visitor is sore at her but I gave the. Visitor a piece of my mind and I guess that learned her not to mistreat decent people. I can't see why they can't just leave us alone. What's wrong with having a baby?' Which of your sisters is Angela, Joe?"

"Third one. Visitor's right. Mama's wrong. Don't read all, Tits. Just read and tell."

"Yes, dear. Nothing more, really, just gossip about neighbors, remarks about the weather. The actual news is that your mother's stomach is better and Angela is pregnant. Give me a moment to shower this red and black off—Boss liked the combo, by the way—and I'll be ready to be painted or to pose or whatever. You can flash a pizza for me while I get clean and I'll gnaw it between times. And, dear? I shouldn't pose later than midnight and I'd be awfully pleased if you would get up when I do tomorrow—rather early, I'm afraid. But you can go back to bed."

"So?"

"For Boss, dearest. To cheer him up." She explained her idea of full-paint costume alternated with erotic styles.

He shrugged. "Glad to. Why gee-string? Silly. Old man dying, let him look. Can't hurt."

"Because, dear. Boss prides himself on being 'modern' and 'keeping up with the times.' But the truth is he formed his ideas so long ago that nakedness wasn't just uncommon, it was a sin. He thinks I'm a nice girl from so far back in the cornstalks that I've never been touched by changes. As long as I wear a minimum-gee—and paint and shoes—I'm dressed,not naked. By his 'modern' standards, I mean. A nice girl pretending to be naughty to amuse him. Which he likes."

He shook his head. "No roz."

"Oh, but you do, dear. Symbolism, as you have explained to me about art. But it has to be *Boss's* symbols. Nudity doesn't mean a thing to our generation. But it does to Boss. If I leave off that scrap of nylon, then by his symbols I'm not just a sweet girl, naughty-but-nice; I'm a whore."

"Whores okay. Angela one."

(A clumsy one, she said under her breath.) "Sure they are. But not to Boss. The hard part is to guess what-his symbols are. I'm twentyeight and he's over ninety and I can't possibly roz his mind. If I push it too far, he might be angry—even very angry; he might fire me. Then what would we do? We'd have to give up this lovely studio."

Still in Lotus, she looked around. Yes, lovely. Aside from the Gadabout parked near the door and the bed in the corner all the rest was the colorful clutter of an artist's studio, always changing and always the same. The steel grid over the high north windows made a pretty pattern—and was so strong that she never worried. She felt warm and safe and happy here.

"Eunice my darling—"

She was startled. Joe used short-talk so habitually that she was always surprised when he chose to shift idiom, even though he could use formal English as well as she could—well, almost, she corrected. . . but he was quite grammatical for a man who had bad only a high school practical curriculum. "Yes, dearest?"

"I roz it perfectly. Wasn't sure you did. Just testing, Beautiful. Not ninety myself but any artist understands figleaf symbol. Could happen you crowd Mr. Smith's symbols too hard, don' know. But we'll do it. Figleaf so that his mind can lie to itself—'No, no, mustn't touch; Mama spank'—then I paint you like sex crime looking for spot marked *'X.'*

"Oh, good!"

"But never worry about job. Sure, this pad is righteous, good north light, I like it. But we lose it, who cares? Broke don't scare me."

(It scares *me,* dear!) "I love you, darling."

"But we do it for nice old boy dying, not to save studio. Understand?"

"Roz indeed! Joe, you're the nicest husband a girl ever had."

He did not answer and got a pained scowl, which she recognized as birth pangs of creativity. So she kept still. Presently he sighed.

"Down off ceiling. Problem what to do for Boss solves inspiration that put me up there. Tomorrow you're a mermaid."

"All right."

"And tonight. Upper body sea green with rosy glow showing through on lips and cheeks and nipples. Lower body golden fish scales blending at waist. Undersea background with sunlight filtering down. Traditional sea bottom symbols, romantic. But upside down."

She hesitated. "So?" (Hard to know when to ask, when to keep quiet, when Joe was creating.)

He smiled. "Fool-the-eye. You're swimming. Diving straight down to bottom, back arched, hair streaming, toes pointed—main light dapple-scrimmed for water. Beautiful. But can't wire you, even if had wires—no way to hide harness, and hair would hang down and buttocks and breasts would sag—"

"My breasts don't sag!"

"Chill it, Jill. You got beautiful breasts and you know I know. But masses of flesh sag and artist sees it. Everybody sees, just don' realize. Something wrong, don' know why. Eye not fooled. Has to be real dive, or it's fake. Bad art."

"Well," she said doubtfully, "if you borrowed a stepladder and dragged the mattress under your background, I suppose I could dive off and roll out and not hurt myself. I guess."

"I *don't* guess! Break pretty neck, little stupid. Dive *up*.

Not down."

"Huh?"

"I *said.* Background upside down. So jump straight up in air. Like going for hot return in volley ball. I shoot stereo stop-action, a thousandth. Shoot six, seven, eight, nine times till just right. Turn pic upside down—lovely mermaid diving for sea bottom."

"Oh. Yes, I'm stupid."

"Not stupid, just not artist." He started scowling again; she kept quiet. "Too much for one night. Tomorrow paint background, tonight paint you for drill. Then maybe stereo-mug some jumps against any background, more drill. Bed early, up early—paint you again for Boss."

"Fine," she agreed. "But why paint me twice, dear, if I'm to be a mermaid for Boss tomorrow? If you set up the cot for me and I slept alone, I wouldn't disturb paint job much. Then you could touch it up in the morning. Not get up as early."

He shook his head. "Won't paint quite same way for Boss. But won't let you sleep in paint anyhow."

"My skin won't break out."

"No, my darling. Your skin don' break out because I don' paint you too much, or too often, or let paint stay on too long—and always damn sure you get it all off, then oil you. But you see, I see, everybody see what happen to girls who paint too much. Pimples, blackheads, itching, scratching—ugly. Sure, we'll paint you for Boss from ears to toes—but not too often and scrub you minute you're home. That's official."

"Yes, sir."

"So scrub jet and scarlet off, while I flash pizza."

A few minutes later she shut off the shower and called out through the door of the bath unit.: "What did you say?"

"Forgot. Big Sam stopped by. Pizza ready."

"Cut me a chunk, that's a dear. What did he want? Money?"

"No. Well, I let him have a fin. But stopped to invite us. Sunday. All day meditation. Gigi's pad."

She stepped out into the room, till toweling. "All day, huh? Just us four? Or his whole class?"

"Neither. A Seven Circle."

"Swinging?"

"Suppose so. Didn't say."

"Swinging." She sighed. "Darling, I don't mind you lending him a five you'll never see. But Big Sam is no guru, he's just a stud. And a bliffy."

"Big Sam and Gigi share what they got, Eunice. And nobody has to swing. Ever."

"Theoretically, yes. But the only good way to break a Circle is never to join it. Especially a Seven Circle. Did you promise? I can grit my teeth and smile if I have to."

"No. Told him had to see you, tell him tomorrow."

"Well? What do you want me to say, dearest?"

"I'll tell him No."

"Dearest, I don't think you answered me. Is there some special reason you want us in this Seven? An art critic perhaps? Or a dealer? If it's Gigi you have on your mind, why not ask her to model some daytime while I'm working? She'd be up here at once, her tail quivering—I've seen her eyeing you."

He shook his head and grinned. "Nyet, Yvette. Believe, lass—I stalled Big Sam because possible *you* wanted to join in. But Big Sam chills me too—bad aura."

"Oh, I'm so relieved! I'll swing, darling; I promised you that when I asked you to marry me. And I have, the few times you've wanted to. And most were fun and only one struck me as boring. But I like to size up the players."

"Grab pizza, climb throne. Paint legs while you eat."

"Yes, darling." She mounted the model's throne with a I wedge of pizza in each hand; there followed a long period broken only by sounds of chomping, and of low profanity that punctuated his alternating pleasure and exasperation. Neither noticed either; Joe Branca was deep in the euphoria of creation, his wife was immersed in the warm glow of being cherished.

At last he said, “Down,” and offered his hand.

“May I look?”

“No. Ribs and tits now. Don’ raise arms yet. Want to study them.”

“As if you didn’t know every wrinkle.”

“Shut up. Want to think about how to paint ‘em In the morning.” Presently he said, “Been thinking maybe you crowd Boss too hard with only a gee-panty. Solved now.”

“So.”

“Da. Paint a bra on you.”

“But wouldn’t that spoil it, dear? Mermaids don’t wear bras.”

“Was problem. Bad empathy. So use sea shells. Flat curved kind with nubbly backs. You know.”

“Sorry but I don’t, dear. Sea shells are scarce in Iowa.”

“No matter. Sea shells fix bad empathy, symbols all match.” He grinned. “Pretty one, I’ll paint sea-shell bra cups so fool-the-eye that Boss won’ know for sure. He’ll spend day trying to see whether is real bra or just paint. If he breaks down and asks—I win.”

She gurgled happily. “Joe, you’re a genuis!”

4

As Dr. Boyle came out of the operating theater Mr. Salomon stood up. “Doctor!”

Boyle checked his impatient strides. “Oh. You again. Go to hell.”

“No doubt I will. But wait a moment, Doctor.”

The surgeon answered with controlled fury: “Listen, chum—I’ve been operating eleven hours with one short break. By now I hate everybody, especially you. So let me be.”

“I thought perhaps you could use a drink.”

The surgeon suddenly smiled. “Where’s the nearest pub?”

“About twenty yards from here. In my car. Parked on this floor. Stocked with Australian beer, both cold and room temperature. And other things. Whisky. Gin. Name it.”

“My word, you Yahnk barstahds do know how. Right. But I must change first.” Again he turned away.

Salomon again stopped him. “Doctor, I took the liberty of having your street clothes packed into your bag and placed in my car. So let’s have that drink at once.”

Boyle shook his head and grinned. “You do take liberties—too right. Very well, if you can stand the stink, I’ll tub and change at my hotel 'Lay on, MacDuff!'"

Salomon let it go at that until they were locked into his car and he had poured beer for them—the authentic kangaroo kick for the surgeon, a much weaker American brew for himself; he had tangled with Australian beer in his youth and was wary. The big car started smoothly and-continued so; Rockford had been warned that drinking might take place in the passenger compartment.

Salomon waited until his guest bad half a glass down him and had sighed in relief. "Doctor, bow did it go?"

"Eh? Smoothly. We had planned it, we rehearsed it, we did it. How else? That's a good team you got for me."

"I take it you are saying the operation was successful?"

"'—but the patient died.' That's the rest of the old saw."

Jacob Salomon felt a wave of sorrow and relief. He sighed and answered, "Well, I expected it. Thank you, Doctor. I know you tried."

"Slow down! I don't mean that *this* patient died; I merely completed the cliché. The operation went exactly as planned; the patient was in satisfactory shape when I relinquished control to the support team."

"Then you expect him to live?"

"'It,' not 'he.' That thing back there is not a human being and may never be. It won't die, it can't—unless one of your courts gives permission to switch off the machinery. That body is young and healthy; with the support it is receiving it can stay alive—as protoplasm, not as a human being—for any length of time. Years. And the brain was alive when I left; it was continuing to show strong alpha-wave response. It should stay alive, too; it is receiving blood supply from that healthy body. But whether that brain and that body will ever marry into a living human being—what church do you attend?"

"I don't."

"Too bad, I was about to suggest that you ring up God and ask *Him,* as I do not know. Since I saved the retinas and the inner ears—first surgeon ever to do that, by the bye, even though they call me a quack—it might be able to see and hear. Possibly. If the spinal cord fuses, it might regain some motor control, even be able to dispense with some of the artificial support. But I tell you the stark truth, Counselor, the most likely outcome is that that brain will never again be in touch with the outside world in any fashion."

"I hope your misgivings are unfounded," Salomon said mildly. "Your contingent fee depended on your achieving sight, hearing, and speech, at a minimum."

"In a pig's arse."

"I'm not authorized to pay it otherwise. Sorry."

"Wrong. There was mention of a bonus, a ridiculously large sum—which I ignored. Look, cobber, you shysters are allowed to work on contingent fees; we butchers have other rules. My *fee* is for operating. I operated. Finis. I'm an ethical surgeon, no matter what the barstahds say about me."

"Which reminds me—" Salomon took an envelope from his pocket. "Here's your fee."

The surgeon pocketed it. Salomon said, "Aren't you going to check it?"

"Why should I? Either I was paid in full. Or I sue. Either way, I couldn't care less. Not now."

"More beer?" Salomon opened another bottle of Down-Under dynamite. "You are paid. In full, in gold, in Switzerland—that envelope contains a note advising you of your account number. Plus an acknowledgment that we pay your expenses, all fees of assisting teams, all computer time, all hospital charges, whatever. But I hope, later, to pay that 'ridiculous' bonus, as you called it."

"Oh, I won't turn down a gift; research is expensive—and I do want to go on; I would like to be a respectable paragraph in medical histories. . . instead of being sneered at as a charlatan."

"No doubt. Not quite my own reason."

Boyle took a swig of beer and blinked thoughtfully. "I suppose I've been a stinker, again. Sorry—I always come out of surgery in a vile mood. I forgot he is your friend."

Salomon again felt that bittersweet wave of relief and sorrow. He answered carefully, "No, Johann Smith is not my friend."

"So? I had an impression that he was."

"Mr. Smith has no friends. I am a lawyer in his hire. As such, he is entitled to my loyalty."

"I see. I'm glad you aren't emotionally involved, as the prognosis on a brain transplant is never good—as I know better than anyone." Boyle added thoughtfully, "It might work this time. It was a good tissue match, surprisingly good in view of the wide difference between donor and recipient. And identical blood type, that helps. We might luck it. Even disparity in skulls turned out to be no problem once I could see that brain."

"Then why are you gloomy?"

"Do you know how many millions of nerve connections are involved? Think I could do them all in eleven hours? Or eleven thousand hours? We don't try; we just work on the nerves of the head, then butt the raw ends of two spinal cords together—and sit back and spin our prayer wheels. Maybe they fuse, maybe they don't—and no one knows why."

"So I understood. What I don't understand is how those millions of connections can ever take place. Yet apparently you were successful with two chimpanzees."

"Bloody! I *was* successful. Sorry. The human nervous system is infinitely inventive in defending itself. Instead of reconnecting old connections it finds new paths—if it can—and learns to use them. Do you know the psych lab experiment with inverting spectacles?"

"I'm afraid not."

"Some student has inverting lenses taped to his eyes. For a day or two he sees everything upside down, has to be led by the hand, fed, escorted to the jakes. Then rather suddenly he sees everything right side up again; the brain has switched a few hundred thousand connections and is now interpreting the new data successfully. At this point we remove the spectacles from the volunteer chump—and now his bare eyes see the world upside down. So he goes through it a second time—and *again* the brain finds new paths and eventually the images flip over again and he sees the world normally.

"Something somewhat analogous to that happened to my two prize chimps. Abelard and Heloise. Nothing at first, thought I had still another failure. Then they started to twitch and we had to restrain them to keep them from hurting themselves—motor action but no control. Like a very young baby. But in time the brains learned to manage their new bodies. Don't ask me how; I'm a surgeon and won't guess—ask a psychologist, they love to guess. Or ask a priest; you'll get as good an answer and maybe better.

Say, isn't your driver chap taking us around the barn? My hotel was only five minutes from the medical center."

"I must now admit to having taken another liberty, Doctor. Your luggage was packed, your hotel bill has been paid, and all your things were moved to my guest room."

"My word. Why?"

"Better security."

"That hotel seemed secure to me. Armed guards on every door, more armed men operating the lifts—I could not get in or out without showing my I.D. at least thrice. Reminded me of the army. Hadn't realized what an armed camp the States are. Isn't it rather a nuisance?"

"Yes. But one grows used to it. Your hotel is safe enough, physically. But the press are onto us now and they can get inside. And so can the police."

Boyle looked troubled but not panicky. "Legal complications? You assured me that all that sort of thing had been taken care of."

"I did. It has. The donor was married, as I told you, and by great luck husband and wife had given pre-consent. We had a good many thousands of that blood type quietly signed up—and paid retainers—

but we couldn’t predict that one would be accidentally killed in time; the statistical projection did not favor it. But one of them was indeed killed and there were no complications—no insuperable ones,” Salomon corrected, thinking of a bag of well-worn Federal Reserve notes, “and a court permitted it as ‘useful and necessary research.’ Nevertheless the press will stir up a storm and some other court may decide to look into it. Doctor, I can put you in Canada in an hour, anywhere on this planet in a day—even on the Moon without much delay. If you so choose.”

“Hmm. Wouldn’t mind going to the Moon, I’ve never been there. You say my clothes are in your guest room?”

“Yes. And you are most welcome.”

“Is there a tub of hot water nearby?”

“Oh, certainly.”

“Then I’ll ask for another beer and that hot tub and about ten hours’ sleep. I’ve been arrested before. Doesn’t worry me.”

5

Johann Sebastian Bach Smith was somewhere else. Where, he did not know, nor care, nor wonder...did not know that he was himself, was not aware of himself nor of anything, was not aware that he was not aware.

Then slowly, over eons, he came up from the nothingness of total anesthesia, surfaced into dreaming. The dreams went on for unmeasured time, endlessly. Mrs, Schmidt, can Yonny come out and play. . . Wuxtra! Horrible atrocities in Belgium, read all about it! Johann, don’t *ever* walk in like that without knocking, you bad, *bad* boy. . . under a cabbage leaf . . . more margin before the market opens tomorrow. . . like hell a cabbage leaf; it comes out of her belly button Yoho you don’t know nothing. . . Johnny you know it’s not nice to do that and what if my father came downstairs.. . a pretty girl is like a melody. . . hey get a load of that not a damn thing on her boobs. . . sergeant I volunteered once and that’s enough for a lifetime.. . Our Father ‘Which art in Heaven hallowed be thy Name of the game is look out for yourself Smith old Buddy you cosigned the note and I have other fish to Friday at the latest and that’s a promise Johann darling I don’t know how you could even bring yourself to think such a thing of your own wife is a man’s responsibility Mr. Smith and I’m sure the court will agree that four thousand per monthlies is a very modest girl would never do such a thing Schmidt and if I ever catch you hanging around my daughter again I’ll shoot the whole works they’re not worth the paper they’re printed on Johann I don’t know what your father will say when he gets home on the range where the deer and antelope play square with me and you'll get a fair shake it, girlie, shake it, shake it twice is regulation shake it thrice pudding with creamed in her coffin my head off and her old man beard us and that queered it not queer Johann just curious you understand me old body boy I ain't got no body and no body works very long for some body else if he expects to get ahead in the world of business girl has got just as much right to be treated like a lady as any body seen my girl's best friend is her cherish as long as you both shall live right and work hard and pay your bills of lading son goes down and the stars come out of my room at once my husband would kill me and the neighbors are always snooping where did you leave your bicycle would pay for itself in no time Pop if I get this paper rout and in full retreat as we go to press me closer Johnny you're so huge national debt will never be paid off and all our companies' policies must be in inflation so borrow now and pay later than you think I'm that sort of a girl simply because I let you go on to college to be a teacher son but now I see by the dawn's early warning system is useless gentlemen without second-strike capabilities of sustained growth when treated last time so it's your treat this time you treat me nice and I treat you nice you-thee Eunice *Eunice!* where did that girl go I've lost Rome and I've lost Gaul but worst of all I've lost Eunice somebody find Eunice coming where have you been right here all along Boss— His dreams went on endlessly in full stereo—sound, sight, odor, touch—and always surrealistic, which he never noticed. They flowed through him, or he through them, with perfect logic. To him.

Meanwhile the world flowed on around him—and forgot him. The attempt at transplanting a living brain offered opportunity for much loose talk by video commentators, plus guest "experts" who were encouraged to add their own mixture of prejudice, speculation, and bias in the name of "science." A judge in need of publicity issued a warrant for the arrest of "Dr. Lyndon Doyle" *(sic)* but Dr. Lindsay Boyle was outside of jurisdiction before the warrant was signed and long before the name was straightened out. A famous and very stylish evangelist prepared a sermon denouncing the transplant, using as a text "Vanity of Vanities."

But on the third day a spectacular and unusually bloody political assassination crowded Johann Smith out of the news and the evangelist found that he could use the sermon by changing a few sentences—which he did, understanding instinctively the American lust for the blood of the mighty.

As usual, the unlicensed birth rate exceeded the licensed rate while the abortion rate exceeded both. Upjohn International declared an extra dividend. The backing and filling for the upcoming Presidential campaign speeded up with a joint announcement by the national committees of the two conservative parties, the SDS and the PLA, that they would hold their conventions together (while preserving mutual autonomy) for the (unannounced but understood) purpose of reelecting the incumbent. The chairman of the extreme leftwing Constitutional Liberation Rally denounced it as a typical crypto-fascist capitalistic plot, and predicted a November victory for Constitutional freedom. The splinter parties, Democratic, Socialist, and Republican, met quietly (few members and almost no delegates under sixtyfive) and stole away without causing more than a ripple in the news.

In the Middle East an earthquake killed nine thousand people in three minutes and brought close the everpresent possibility of war through disturbing the balance of terror.

The Sino-American Lunar Commission announced that the Lunar Colonies were now 87% self-sufficient in proteins and carbohydrates, and raised the subsidized out-migration quota but again refused to relax the literacy requirement.

Johann Sebastian Bach Smith dreamed on.

After an unmeasured time (how measure a dream?) Smith woke enough to be aware of himself—the reflexive self-awareness of waking as contrasted with the unquestioning and unexplicit self-experience of dreaming.. He know who he was, Johann Sebastian Bach Smith, a very old man—not a baby, not a boy, not any of his younger selves—and was aware of his sensory surroundings, which were zero: darkness, silence, absence of any physical sensation, not even pressure, touch, kinesthesia.

He wondered if the operation had started, and what it would feel like when he died. He did not worry about pain; he had been assured that the brain itself had no pain receptors and that he was being anesthetized solely to keep him quiet and unworried while the job was done—besides, pain had not worried Smith in years; it was his constant companion, almost an old friend.

Presently he went back to sleep and to more dreams, unaware that his brain-wave pattern was being monitored and had caused great excitement when change in rhythm and peak had shown that the patient was awake.

Again be was awake and this time gave thought to the possibility that this nothingness was death. He considered the idea without panic, having come to terms with death more than a half century earlier. If this was death, it was neither the Heaven he had been promised as a child nor the Hell he had long since ceased to believe in, nor even the] total lack of *self* he had come to expect—it was just one damn big bore.

He slept again, unaware that the physician in charge of his life-support team had decided that the patient had been awake long enough and had slowed his breathing and made a slight change in his blood chemistry.

He woke again and tried to take stock of the situation. if he was dead—and there seemed no longer reason to doubt it—what did he have left and how could he cut his losses? Assets: none. Correction: one asset, memory. He had a recent memory-of-a-memory, vague and undefined, of confused and crazy dreams—probably from anesthesia and no use to him—plus other memories older but much sharper of being (or having been) Johann Smith. Well, Johann you old bastard, if you and me are going to have to spend all eternity locked in this limbo we had better get to work on total recall of everything we ever did.

Everything? Or concentrate on the good parts? No, a stew had to have salt or it was too bland. Try to remember all of it. If we have all eternity with nothing to play but this one rerun, we're going to want to have *all* of it on tap, as even the best parts may get boring after a few thousand times.

Still, it wouldn't hurt to concentrate—just for practice—on some exceptionally pleasant memory. So what'll it be, partner? There are only four top subjects, the rest are sideshows: money, sex, war, and death. So which do we choose? *Right!* You're correct, Eunice; I'm a dirty old man and my only regret (and a sharp one!) is that I didn't find you forty or fifty years back. When you were not yet a gleam in your father's eye, more's the pity. Tell me, girl, were those sea-shell doodads a brassiere or just paint on your pretty skin? Euchered myself on that one—should have asked and let you sass me. So tell great-grandpappy. Give me a phone call and tell me. Sorry, I can't tell you the wave length, dear; it's unlisted. Golly, you looked cute!

Let's try another one—no chance that I'll forget you, Eunice my dear, but I never laid a finger on you, damn it.

Let's go way, way back to one we *did* lay a finger on. Our very first piece? No, you mucked that up pretty badly, you clumsy lout. The second one? Ah, yes, she was the cat's pajamas! Mrs. Wicklund. First name? Did I ever know her first name? Certainly I never called her by it, not then or later. Even though she let me come back for more. *Let* me? Encouraged me, set it up.

Let's see, I was fourteen, fourteen and a half, and she must have been. . . thirty-five? I remember her mentioning that she had been married fifteen years, so call it thirty-five at a guess. No matter, it was the first time I ever encountered a female who wanted it, managed to let me know that she wanted it, then without any bobbles could take charge of a lanky, too-eager, almost-virgin boy, steady him, lead him through it, make him enjoy it, let him know *she* enjoyed it—make him feel good about it afterwards.

God bless your generous soul, Mrs. Wicklund! If you are lost somewhere in this darkness—for you must have died many years sooner than I did—I hope you remember me and are as happy in remembering me as I am in remembering you.

All the details now— Your flat was right under ours. Cold windy afternoon and you gave me ‘a quarter (big money then, a dime was standard) for going to the grocery for you. For what? How good is your memory, you horny old goat? Correction: horny old ‘ghost.’ What have I got left to be horny with? Never mind, I am—it’s up *here,* Doc. Half a pound of sliced boiled ham, a sack of russet potatoes, a dozen ranch eggs (seven cents a dozen then—my God!), a tencent loaf of Holsum bread and—something else. Oh, yes, a spool of sixty white cotton thread at the notions shop next to Mr. Gilmore’s drugstore. Mrs. Baum’s shop—two sons, one killed in War One and the other made a name for himself in electronics. But let’s get back to *you,* Mrs. Wicklund.

You heard me bring my bike into the hallway and opened your door, and I carried your groceries on through to your kitchen. You paid me and offered me hot cocoa and—why wasn’t I nervous about Mama? Pop at work and Mr. Wicklund, too; that figured—but where was Mama? Oh, yes, her Sewing Circle afternoon.

So while I drank cocoa and was being polite, you cranked your Victrola and put on a record—uh. “Margie,” it was, and you asked me if I knew how to dance. You taught me to dance all right—on the sofa.

A life-support technician studied an oscilloscope, noted an increase in brain activity, concluded that the patient might be frightened and decided to tranquilize. Johann Smith slipped gently into sleep without knowing it—to the scratchy strains of a mechanical phonograph. He was “fox-trotting,” so she told him. He did not care what it was called; his arm was around her waist, hers was around his neck, her warm clean odor was sweet in his nostrils. Presently she seduced him.

After a long, ecstatic, and utterly satisfying time he said, “Eunice honey, I didn’t know you could foxtrot.”

She smiled into his eyes. “You never asked me, Boss. Can you reach past me and shut off the Victrola?”

‘“Sure, Mrs. Wicklund.”

6

Johann Smith became aware that this limbo was no longer featureless—head resting on something, mouth unpleasantly dry and felt crowded, as if with the sort of junk a dental surgeon inflicts on his victims. There was still total blackness but not quite dead silence. A sucking noise— Any sensation was most welcome. Johann shouted, "Hey! *I lived through it!"*

Two rooms away the monitoring technician on watch jumped up so fast he knocked over his chair. "Patient's trying to articulate! Get Dr. Brenner!"

Brenner answered quietly over the voice monitor. "I'm with the patient, Cliff. Get a team in here. And notify Dr. Hedrick and Dr. Garcia."

"Right away!"

Johann said, "Hey, damn it! Isn't *anybody* here?" The words came out as incoherent grunts.

The Doctor touched a wand speaker to the patient's teeth, held the microphone hooked to it against his own throat. "Mr. Smith, do you hear me?"

The patient mumbled again, louder and more forcefully. The Doctor answered, "Mr. Smith, I'm sorry but I cannot understand you. If you hear me, make one sound. Any sort but just one."

The patient grunted once.

"Good, wonderful—you can hear me. All right, one sound by itself means Yes; two sounds mean No. If you

understand me, answer with two sounds. Two grunts." Smith grunted twice.

"Good, now we can talk. One sound for Yes, two for No. Do you hurt?"

Two grunts—"Uh. . . ko!"

"Fine! Now we try something else. Your ears are covered and completely soundproofed; my voice is reaching your inner ears through your teeth and upper jawbone. I'm going to remove part of the covering on your left ear and speak to you that way. The sounds may be painfully loud at first, so I will start with whispers. Understand me?"

One grunt— Smith felt gentle firmness as something pulled loose.

"Do you still hear me?"

"Uh . . . ko—"

"Now do you hear me?"

"Uh . . . *ko* . ah . ee . . oh . . ce . . . oo. . ow!"

"I think that was a sentence. Don't try to talk yet. Just one grunt, or two."

Johann said, "Of course I can't talk, you damned idiot!

Take this junk out of my mouth!" The vowels came through fairly clearly; consonants were distorted or missing.

"Doctor, how the patient can talk with all that gear in the way?"

Brenner said quietly, "Shut up, Nurse. Mr. Smith, we have an aspirator down your throat to keep you from choking on phlegm, drowning in your own saliva. I can't remove it yet, so try to be patient. Besides that, your eyes are masked. Your eye specialist will decide when that comes off. I can't—I'm the life-support specialist on duty at the moment, not the physician managing your case; that's Dr. Hedrick assisted by Dr. Garcia. I can't do much more than I have till one of them gets here. Are you comfortable? One grunt or two."

One grunt— "Good. I'll stay here with you. And talk to you if you want me to. Do you?"

One grunt—

"Okay, I will. You can talk with more than a Yes or No any time you wish. By spelling. I'll recite the alphabet, slowly, and you stop me with one grunt when I reach a letter you want. And so on for the next letter, until it's spelled out. It's slow. . . but neither one of us is going anywhere. Want to try it?"

One grunt— "Good. I've had lots of practice at it; I've been on many a life-support watch in which the patient could not talk but was awake and perfectly rational. As you are," the Doctor added, lying hopefully, one eye on the master oscilloscope. "But bored, of course. Very bored—that's the worst part for a patient in life-support; he's bored silly, yet we can't let him sleep all the time; it's not good for him and sometimes we need his cooperation. All right, any time you want to spell anything, give three distinct grunts and I'll prove I know my abc's."

Three grunts— "A. . b. . c. . d . . e. . f—" Johann grunted at "r."

"'R'?" Dr. Brenner repeated. "Don't bother to answer if I'm right. Okay, first letter is 'r.' A..b. .c. .d..—"

The message read: "Right ear."

"Do you want the plug removed from your right ear?"

One grunt— Carefully the Doctor removed it. "Testing," he said.

"Cincinnati, sixty-six, Susannah. Are you hearing with both ears? Does my voice seem to move from side to side?"

One grunt, followed by three grunts— "Okay, spelled message. A. . b. . c—"

Shortly the Doctor said, "'Nobody'? Is that the first word of your message?"

Double grunt— "All right, I'll try again. A. . b—" He was interrupted by a series of grunts, and stopped. "You don't want me to spell again . . . yet 'Nobody' is not the first word of your message. But I would have sworn that I got it right. 'Nobody—' Uh. . . hey! 'No. .. body'—two words?"

One emphatic grunt— "Are you trying to tell me that you feel as if you had no body? Can't feel it?"

Grunt— "Oh! Of course you can't feel it; you haven't finished healing. But honestly," the Doctor went on, lying with the skill of long practice, "your progress has been amazingly fast. Both speech and hearing so soon, that's wonderfully encouraging. In fact you've just won a bet for me. Five hundred," he went on, still lying, "and at that I demanded more than twice the recovery time you've shown. And now I'm going to double my winnings by putting them back and betting that you'll have full recovery of the use of your whole body in no longer time. Because this is a wonderfully healthy body you have even though you can't feel it yet. Marvelous repair factor."

Triple grunt— Then the spelled message was: "How long?"

"How long since your operation? Or how long until you get the use of your whole body?"

Dr. Brenner was saved by the bell. He stopped reciting the alphabet and said, "Half a moment, Mr. Smith; Dr. Hedrick has arrived, I must report. Nurse will stay with you—just let the patient rest, Nurse; this has been tiring."

Outside the door Dr. Brenner stopped the case-managing physician, saying, "Dr. Hedrick, one moment before you go in. You've checked the remotes?"

"Certainly. Awake-normal, apparently."

"And rational, in my opinion. I have removed the central stopples from both ear pads and we have been talking, spell-and-grunt, killing time until you—"

"I heard you on monitor, assumed you must have opened the ears. You take a lot on yourself, Doctor." Dr. Brenner stiffened, then answered coldly, "Doctor—your patient, conceded. But I was here alone and had to use my own judgment. If you wish me to leave the case, you have only to say so."

"Don't be so damned touchy, young man. Now let's go in and see the patient. Our patient."

"Yes, sir."

They went inside. Dr. Hedrick said, "I'm Dr. Hedrick, Mr. Smith, physician in charge of your case.

Congratulations! Welcome back to our weary world. This is a triumph for everyone—and vindication for a great man, Dr. Boyle."

Three grunts—

"You wish to spell a message?"

One grunt—

"If you will wait a moment, we will remove some items from your mouth and you can talk instead." (With great good luck, Hedrick amended to himself—but I never expected the case to progress even this far. That arrogant butcher really *is* a great man. To my surprise.) "Would that suit you?"

An emphatic grunt—

"Good. Hand aspiration, Dr. Brenner. Adjust those lights, Nurse. Monitor watch! Find out what's keeping Dr. Feinstein."

Johann Smith felt hands working rapidly but gently, then Dr. Hedrick said, “Let me check, Doctor. Very well, remove the jaw wedges. Mr. Smith, we will have to aspirate every few moments—I’d rather not have to force you to cough up fluid. Or go after it the hard way. But you may talk if you wish.”

“Aye-gah-aye-hay-dih!”

“Slowly, slowly. You’re having to learn to talk all over again, like a baby. That same remark now—but slowly and carefully.”

“By...*God*…I...*made*...it!”

“You surely did. The first man in history to have his brain moved into a new body—and lived through it. And you will go on living. This is a fine body. Healthy.”

“But . can’t. peal—feel—a damn. . *thing* . from . chin. down.”

“Lucky you,” said the Doctor. “Because we’ve got you restrained all over against the day—soon, I hope”—but never, more likely, he added to himself—”when you will start feeling your entire new body. When that day comes, you may jerk uncontrollably—if we didn’t have you restrained. Then you’ll have to go to work and learn to control your body. Like a new baby. Practice. Possibly long and tedious practice.”

“How . . . long?” —

“I don’t know. Dr. Boyle’s chimps made it rather quickly, I understand. But it might take you as long as it takes a baby to learn to walk. But why worry about that now? You’re got a new body, good for many, many years—why, you might be the first human being to live two hundred years. So don’t be in a hurry. Now rest, please—I’ve got to examine you. Chin screen, Nurse.”

“The patient’s eyes are covered, Doctor.”

“Ah, yes, so they are. Mr. Smith, when Dr. Feinstein arrives, we will see if he wants to expose your eyes to light today. In the meantime—uncover the patient, Nurse.”

Uncovered, the new body was still mostly covered. A plastic corset “iron lung” encased the torso from chin to pubis; arms and legs were strapped and the straps cushioned; urethral and anal catheters were in place and secured; two blood vessels were in use, one for nourishment, the other for monitoring; four others were prepared for use but currently stopped off. Wires were here and there. The body inside this dismal mess could have been one that Michelangelo would have treasured but the assemblage of artifact and protoplasm could seem beautiful only to a medical specialist.

Dr. Hedrick seemed pleased. He took a stylus from his pocket, suddenly scratched the sole of the right foot—got the reflex he expected, got no response from Johann Smith, also as expected.

“Dr. Hedrick?” came a voice from the bed console.

“Yes.”

"Dr. Feinstein is operating."

"Very well." He indicated to a nurse that he wanted the body covered. "Did you hear that, Mr. Smith? Your ophthalmologist is in surgery, can't see you today. Just as well, as you have had enough for one day. It's time for you to sleep."

"No. You. . do. . it. My. . eyes."

"No. We wait for Dr. Feinstein."

"No! You. are, in . charge."

"So I am and your eyes won't be touched until your specialist is present."

"Damn. .you. Get. . Jake. . Sal . o . mon!"

"Mr. Salomon is in Europe, will be notified that you are awake, and he may possibly be here tomorrow. I couldn't say. In the meantime I want you to rest. Sleep."

"Won't!"

"Ah, but you will." Dr. Hedrick pointed to Dr. Brenner, nodded. "As you pointed out, I am in charge. Want to know why I am certain you will sleep? Because we are slowing your breathing rate and introducing into your bloodstream a harmless drug that will insure that you *do* sleep. So good night, Mr. Smith, and again—my congratulations."

"Damn…your...ins—insuffera—" Johann Smith slept.

Once he half roused. "Eunice?" (Right here, Boss. Go back to sleep.) He slept on.

7

"Hi, Jake!"

"Hello, Johann. How do you feel?"

"Mean as a fox with its tail in a trap except when these tyrants dope me with something that makes me sweetness-and-light in spite of myself. Where the hell have you been? Why didn't you come when I sent for you?"

"On vacation. First decent vacation I've had in fifteen years. Any objections?"

"Get your feathers down. You do have a nice tan. And taken off a little weight, too, I think. Okay, okay—though I don't mind saying I was disappointed that you didn't trot back for a day or two at least when I woke up. Hurt my feelings."

"Humph! You have no feelings. Never did."

"Now, Jake—I do so have feelings, just never was one for showing them. But, damn it, I *needed* you."

The lawyer shook his head. "You didn't need me. I know why you thought you did. You wanted me to interfere with Dr. Hedrick's management of your case. Which I would not have done. So I extended my vacation to avoid useless argument."

Johann grinned at him. "Always the sly one, Jake. Okay, I've never been one to fret about yesterday's trouble. But now that you're back—well, Hedrick's a good doctor, but he's highhanded with me when it's not necessary. So we'll change that. I'll tell you what I want and you tell Hedrick—and if he balks, you can let him know that he is not indispensable."

"No."

"What do you mean, 'No'?'

"I mean *No.* Johann, you still require constant medical attention. I haven't interfered with Dr. Hedrick up to now and the results have been good. I won't interfere now."

"Oh, for Pete's sake, Jake. Sure, sure, you have my interests at heart. But you don't understand the situation. I'm no longer in a critical condition; I'm convalescent. Look, here's late news, important. Know what I did this morning during physiotherapy? Moved my right index finger. On *purpose,* Jake. Know what that means?"

"Means you can bid in an auction. Or signal a waiter."

"Crab apples. Wiggled my toes a little, too. Jake, in a week I'll be *walking,* unassisted. Why, I spend thirty minutes each day now without this lung thing, this corset and when they put it back on me, it's simply set to assist, if necessary. But despite all this wonderful progress, I'm still treated like a wired-up laboratory monkey. Allowed to stay awake only a short time each day—hell, they even shave me while I'm asleep and God alone knows what else; I don't. I'm strapped down every minute that at least six people don't have their hands on me for physio. If you don't believe me, lift the sheet and take a look. I'm a prisoner. In my own house."

Salomon didn't move. "I believe you."

"Move that chair around so that I can see you better. They've even got my head clamped—now I ask you, is *that* necessary?"

"No opinion. Ask your doctor." Salomon stayed where he was.

"I asked *you.* . . because I'm fed up with his top-sergeant behavior."

"And I declined to express an opinion in a field in which I have no competence. Johann, you're getting well, that's evident. But only a fool replaces a quarterback who is winning. *I* never thought you would live through the operation. I don't think you did, either."

"Well . . . truthfully, I didn't. I was betting my life—literally——on a long gamble. But I won."

"Then why don't you try being grateful?—instead *of behaving like a spoiled child!"*

"Temper, Jake, temper—why, you sound like *me."*

"God knows I don't want to sound like *you.* But I mean it. Show gratitude. Praise the Lord—and Dr. Hedrick."

"And Dr. Boyle, Jake. Yes, I *am* grateful, truly I am. I've been snatched back from the edge of death—and now have every reason to expect a wonderful new life—and all I risked was a few more weeks of a life that had grown intolerable." Johann smiled. "I can't express how grateful I am, there are no words. My eyes are twenty/twenty again and I'm seeing shades of color I had forgotten existed. I can hear high notes I haven't heard in years. I get 'em to play symphonies for me and I can follow the piccolo clear up to the roof. And the violins. I can hear all sorts of high sounds now, higher than ever—even my new voice sounds high; he must have been a tenor. And I can *smell,* Jake—and I lost my last trace of a sense of smell years ago. Nurse, walk past me and let me smell you."

The nurse, a pretty redhead, smiled, said nothing, did not move from the bed's console.

Johann went on, "I'm even allowed to eat now, once a day—eat and swallow, I mean, not a blasted tube. Jake, did you know that Cream o' Wheat tastes better than filet mignon? It can. Hell, *everything* tastes good now; I had forgotten what fun it is to eat. Jake, it's so grand to be alive—in this body—that I can't wait to go out in the country and walk in fields and climb a hill and look at trees and watch birds. And clouds. Sunbathe. Ice-skate, maybe. Squaredance. Ever squaredance, Jake?"

"I used to be good at it. No time for it, late years."

"I never had time for it even when I was young. I'm going to *take* time, now. Reminds me, who's minding the store?"

"Teal, of course. He wants to see you."

"You see him, I'm too busy learning to use my new body. And enjoying it. Do I have any money left? Not that I give a hoot."

"You want the ungarnished truth?"

"You can't scare me, Jake. If I have to sell this house to pay off this gang of jailers, it won't worry me. Might be fun. I can tell you this: I'll never be on Welfare. I'll get by—always have, always will."

"Brace yourself. You're worth more than ever."

"Huh? Oh, what a shame! When I was just beginning to enjoy being broke."

"Hypocrite."

"Not at all, Jake. I—"

"Hypocrite, I said. Oh, hush up. Your fortune had already reached the takeoff point, where it can't possibly be spent no matter how you try; it just keeps growing. I didn't even spend all your income on this operation and all that went with it. However, you no longer control Smith Enterprises."

"So?"

"Yes. I encouraged Teal to borrow money and buy some of your voting shares; it gave him incentive in minding the store. And it looked better. Also, as defacto chairman of the board, I thought it would look better if I owned a bigger block, too, so I traded you some blue chips and tax-exempts for some of your senior-corporation voting stock.

At present two of us—you and I, or you and Teal—hold voting control. But no one of us. However, I'll trade back any time you want to resume control."

"God forbid!"

"We'll leave the matter open, Johann. I was not trying to take advantage of your illness."

"No, Jake. If I don't have controlling interest, I don't have even a moral responsibility to look out for the company. I'll resign as chairman of the board—and you can be chairman, or Teal, or you can put it up for grabs."

"Wait till you're well."

"Okay but I shan't change my mind. But now about that other matter—Uh, Nurse, don't you have to go empty something, or wash your hands, or check the roof to see if it's on tight? I want private conversation with my lawyer."

She smiled and shook her head. "No, sir. You know I can't leave the room even a moment without being relieved. But I'm authorized by Dr. Hedrick to do this, sir: I can shut off the voice monitor to the remotes, then go over in that far corner and watch video with the sound turned up high so that you'll be certain I can't hear you. Dr. Hedrick said you might want privacy in speaking with Mr. Salomon."

"Well! The old bug—bug-hunter is human after all. You do that, Nurse."

Shortly, Johann was able to say quietly, "You saw that, Jake? God knows there could be no harm in you alone watching me a few minutes—you could call for help if I choked or something. Anyhow, any trouble would show on their dials. But, no they chaperon me every second and won't agree to the most harmless request. Look, very quietly now—do you have a pocket mirror on you?"

"Eh? Never carried one in my life."

"A pity. Well, have one on you next time you're here to see me. Tomorrow, I hope. Jake, Hedrick is a good doctor, conceded—but he won't tell me *anything.* Just this week I asked him whose body this had been—and he wasn't even polite enough to lie; he just told me that it was none of my business."

"It isn't."

"Huh?"

"Remember the contract I worked out? It said—"

"Never read it. Your pidgin."

"I told you; you didn't listen. Donor's privacy to be respected unless donor specifically grants permission to breach it. . . and even then his estate must confirm after death. In this case neither proviso was met. So you can never be told."

"Oh, rats. I can find out, once I'm up and around. I would never publicize it; I just want to know."

"No doubt you will find out. But *I* won't be a party to breaching a contract with the dead."

"Hmm. Jake, you're a stiff-necked old bastard; it wouldn't do any harm. All right, all right. But get me that mirror. Look, you can get me one now. Go into my bathroom, usual excuse, and look around. Search. Four or five small mirrors in there, drawers and such—or were the last time I was on my feet. Almost certainly still are. Just don't let a nurse see it. In your pocket. Or under your jacket."

"Why don't you simply ask for one?"

"Because they won't let me have one, Jake. You may think I'm paranoid but I *am* being persecuted by this high-and-mighty doctor. Won't let me see my new face in a mirror. Okay, it's probably scarred; I don't care. Won't let me look at myself *at all.* When they work on me they put up a chin screen; I haven't even seen my hands. Would you believe it, I don't even know what *color* I am. Am I a soul? Or a honk? Or something else? It's maddening."

"Johann, it might be literally maddening for you to see yourself. Before you have your strength back."

"What? Oh, be your age, Jake; you know me better than that. If I'm the ugliest thing since wart hogs and covered with purple stripes, I can take it." Johann grinned. "I was ugly as sin before the operation; any change for the worse can't be great. But I tell you no lie, old friend; if they keep treating me like a retarded child, they really *will* drive me off the rails."

Salomon sighed. "I'm sorry to have to tell you this, Johann, but it is no news to me that they won't let you see yourself in a mirror—"

"What?"

"Steady down. I've discussed it with Dr. Hedrick and with the psychiatrist working with him. They are of the opinion that you could suffer a severe emotional shock—one that might give you a grave setback, even (as you, say) 'drive you off the rails'—if you see your new self before you are fully well and strong."

Johann Smith did not answer at once. Then he said quietly, "Pig whistle. I *know* I'm physically something else now. What harm do they think it could do me?"

"The psychiatrist mentioned the possibility of a split personality."

"Move around and look me in the eyes. Jake Salomon, do you believe that?"

"My opinion is neither relevant nor competent. I am *not* going to buck your physicians. Nor help you to outwit them."

"So that's how the wind sets, Jake...I am sorry to be forced to say this—but you are not the only lawyer in this city."

"So I know. I am sorry—truly sorry!—to be forced to say *this,* Johann—but I am the only lawyer you can turn to."

"What do you mean?"

"Johann, you are now a ward of the Court. I am your guardian."

Johann Smith was slow to answer, then barely whispered: "Conspiracy. I never thought it of you, Jake."

"Johann, Johann!"

"Do you mean to keep me locked up forever? If not, what's the price to turn me loose? Is the Judge in on it? And Hedrick?"

Salomon controlled himself. "Please, Johann, let me speak. I'm going to pretend that you never said what you did say. . . and I'll have a transcript of the proceedings brought here for you to see. Hell, I'll have the Judge himself fetch them. But you've got to listen."

"I'm listening. How can I help listening?—I'm a prisoner."

"Johann, you will cease being a ward as soon as you are able to appear in court—in person—and convince the Judge—Judge McCampbell, it is, an honest man as you know—convince .McCampbell that you are no longer *non compos mentis.* He took the step reluctantly—and I had to fight to be named your guardian, as I was not the petitioner."

"So? And who asked to have me committed?"

"Johanna Darlington Seward, *et aliae*—meaning your other three granddaughters, too."

"I see," Johann said slowly. "Jake, I owe you an apology."

Salomon snorted. "For what? How can you do or say anything calling for an apology when you are legally *non compos mentis?"*

"Whew! Hand me the traditional piece of snuff; that was razor sharp. Dear little Johanna—I should have drowned her at birth. Her mother, my daughter Evelyn, used to shove her into my lap and remind me that she was my namesake. Jake, the only thing that brat ever did for me was to pee on my trousers—on purpose. So June and Marla and Elinor are in it, too. Not surprising."

"Johann, they darn near made it. I had to resort to everything short of treason to get it into Judge McCampbell's court. Even then, only the fact that I have held your general power of attorney for an unbroken fifteen years kept the Court from naming Mrs. Seward as guardian and conservator. That and one other thing."

"What other thing?"

"Their stupidity. If they had shot for guardianship right off, they might have made it. Instead their first move was to try to have you declared legally dead."

"Well! Jake, do you suppose—later—that I can cut them out of my will entirely?"

"You can do better than that; you can outlive them. Now."

"Mmm, yes, I suppose I can. I will! It'll be a pleasure."

"That move wasn't serious, just stupid. Stupid lawyer. Took four days for the expert witnesses to unwind, took the Court four minutes to rule in accordance with 'Estate of Parsons v. Rhode Island.' Hoped I had seen the last of them then; that diploma-mill shyster seemed pretty cowed. Then Parkinson got into it. . . and *his* lawyer is *not* stupid."

"Parkinson'? Our boy Parky, our idiot ex-director?"

"The same."

"Hmm. Von Ritter was right; it doesn't pay to humiliate a man. But how could Parky show an interest?"

"He didn't. That Parkinson put them up to it is simply a conclusion but a firm one—Parkinson's motherin-law's lawyer and Parkinson himself present every day in court, a happy spectator. Johann, I didn't dare ask that the matter be continued during your recovery; our own expert witnesses were unwilling to testify that you would ever be yourself again, able to manage your own affairs. So we stipulated your temporary lack of competence—surprised 'em, caught 'em unprepared—and I had our attorney move that I be appointed your guardian pro tem. Made it. But Johann, as soon as this was in the wind I started shuffling stock around. For several weeks Teal held a big chunk of your voting stock—Teal is okay; you made a good choice—Teal held all of your stock that I now hold, using money I lent him. An open transaction that could be verified, none of this 'ten dollars and other valuable considerations' dodge. During that period, your stock that I had sold to Teal using my money, plus Teal's stock that he already had, plus what I have long held, was voting control. . . because I knew that if I lost, the next day Parkinson would show up with proxies for your stock—signed by your granddaughters—and demand a stockholders' meeting and kick me out of the chair and fire Teal as president. Yet I didn't dare buy stock from you myself—or I would go into court as an interested party and the other side might sniff it. It was touch-and-go for a while, Johann."

"Well, I'm glad we're out of the woods. Parky."

"We aren't. Other actions coming up, none of which you need worry about today."

"Jake, I'm not going to worry about *anything*. I'm going to think about birds and bees and fleecy clouds and enjoy the wonderful taste of Cream o' Wheat. And prunes, strained prunes fixed baby-style. I'm just glad to know that my oldest friend didn't knife me while I was unconscious and sorry as hell I thought so even for a moment. Oh, I still think you're a timid, gutless, stinking sissy not to help me out on this mirror nonsense but we'll argue that another day. I can wait if I have to; I see why you don't want to buck a psychiatrist if I have to go into court when I'm up and convince Judge McCampbell that I can still hit the floor with my hat."

"I'm glad to hear it. And I'm glad to see that you are getting well, Johann. I'm certain you are since you are again, or still, the same stinking bad-tempered, unreasonable old scoundrel you always were."

Johann chuckled. "Thanks, Jake—and I see that *you* are in good health, too. May we never see the day we talk sweet to each other. What else is now? Oh, yes! Where is hell is my secretary? Eunice, I mean. There is not a one of this gang of kidnappers around me who ever knew her...and they show no interest in trying to find her. Oh, Garcil xnew her by sight—but he says that he doesn't know where she is and claims he's too busy to run errands. Told me to ask you."

"Oh." Salomon hesitated. "Do you know her address?"

"Eh? Somewhere at the north end of town. I suppose my accountant has it. Wait a moment! You took her home once, I remember clearly."

"So I did. It was indeed somewhere in the north end. But those rabbit warrens all look alike. My guards may know. Hold *it—your* mobile guards escorted her for several months, right up to the time you went in for surgery. Have you asked them?"

"Hell, Jake, I haven't been allowed to see *anyone.* I don't even know that they are still working for me."

"I'm fairly sure they still were when I left for Europe.

But, Johann, while we can ask them, I doubt if it will do any good."

"Why not?"

"Because I *did* see Eunice just before your operation. She was interested—she was fond of you, Johann, much more so than you deserved—"

"Conceded! Make it march."

"Well, she didn't mention specific plans but I don't think she intended to stay in secretarial work. Hell, man, none of us expected that you would ever *need* a secretary again. I would happily have hired her myself; she is a good secretary. But—"

"I'm sure you would, you old goat. But surely you let her know that she could stay on my payroll forever? Well, until I died, at least."

"She knew that. But she is a proud girl, Johann. Not a parasite. I'll make an effort to find her. However, if I don't, there are many good secretaries. I'll find one for you. That's a promise."

"Look, I don't want another secretary; I want Eunice Branca."

"I meant—"

"I know what you meant. You'd find me some old witch who does perfect work but is no fun to look at or have around...while you've probably got Eunice stashed away in your office."

Salomon said slowly, "Johann, I swear by all that's holy that I do not have her in my office nor anywhere."

"Then she *did* turn you down. Jake, I trust you with my life and all my worldly goods. But I don't trust you or any man not to steal a perfect secretary if he can."

"Nolo contendere. I did offer her a job anytime she wanted it. She did not accept."

"So we find her. *You* find her."

Salomon sighed. "What clues can you give me? Her husband, perhaps? Isn't he an artist?"

"I suppose you could call him that. Look, Jake, don't hold this against Eunice—but *I* would call him a gigolo. But I'm old-fashioned. I had to get a report when she married him. He was clean, no reason to lose the best secretary a man ever had just because she chose to marry him. Yes, he was an artist, one who didn't sell much; she supported him. That was *her* business; Branca was all right— didn't use drugs, didn't even drink. But he wasn't up to her. Illiterate. Surely I know how common that is today; I'm not prejudiced, I've got illiterates right in this house—and only God and Accounting know how many are working for Smith Enterprises. Branca may never have attended a school in which reading is taught. But I can give you one lead—if Eunice is not working as a secretary—easy to check through Social Security—and if they aren't on the Welfare rolls—she won't be, he might be—then check model agencies, video, artists, photographers, et cetera. For *both* of them. For he was as handsome as Eunice was beautiful; the snoopshot with the security report made that plain."

"Very well, Johann; I'll get a skiptrace firm on it."

"Hell, put a regiment of detectives on it!"

"But suppose they dropped out? People do."

Johann sniffed. "Perhaps he would, I would lay any amount that she never would. But if necessary, I want every Abandoned Area in this city combed."

"Expensive. You send a private detective into an A.A. and the premium on his life goes sky high."

"Didn't you tell me that I have more money than I know what to do with?"

"True. But I don't relish hiring a man for hazardous work even if he wants the job. But we're borrowing trouble; it may take nothing more than getting Accounting to dig out that address. Or do a back check on a Social Security number with the customary small bribe. I'll let you know."

Salomon stood up to leave. Smith said, "Hold it. Will I see you tomorrow? And will you phone in a report—tell Hedrick or the physician on watch; they won't let me talk on the phone—phone a report each day? Till you find her?"

"Every day, Johann."

"Thanks, Jake. You'll make Eagle Scout yet. Tell nursy she can come out of the corner now. They're probably waiting to slip me my Mickey Finn—this is the longest they've let me stay awake so far."

Two rooms away Salomon stopped to speak to Dr. Hedrick. The physician looked at him. "Rough," he stated.

"Quite. Doctor, how long do you expect to keep your patient from using a mirror?"

"Hard to say. Progress has been rapid lately . . . but Smith still has very imperfect control of the new body. Plus tingling and itching and numbness—all to be expected—and imaginary pains. Psychosomatic, rather; they are real to the patient. Counselor, if you expect me to have my patient ready for a competency hearing any time soon, emotional shocks must be delayed as long as possible. That's my opinion, though of course I am strongly influenced by Dr. Rosenthal's judgment. Besides imperfect body control, our patient is weak and emotionally extremely unstable."

"So I am aware."

"Mr. Sabomon, you look as if you needed another tranquilizer. May I?"

Salomon grudged a smile. "Only if it involves grain alcohol."

Hedrick chuckled. "Will you settle for some bottled in Scotland?"

"Yes! No water. Well, just a touch."

"I'll dispense the drug, you add water to taste. I'll prescribe for myself, too—I also find this case a bit trying. Even though we are making medical history."

8

Dr. Garcia rubbed Jake Salomon's arm where he had just injected him. "Now wait three minutes. With a tenth cc. of 'Tranquille' in you, you could attend your own hanging in a calm mood."

"Thank you, Doctor. Dr. Hedrick, what's bothering Johann now? Your message was not specific."

Hedrick shook his head. "The patient won't talk to us. Simply demands to see you."

"Uh...he has found out? Or, rather, if he has, what then?"

Hedrick turned to his colleague. "Dr. Garcia?"

"You know my opinion, Doctor. Your patient has recovered, is simply weak from being too long in bed. There is no longer any excuse —any *medical* excuse—for restraints."

"Dr. Rosenthal?"

The psychiatrist shrugged. "The human mind is a weird and wonderful thing—and the longer I study it the less I'm sure about anything concerning it. But I agree with Dr. Garcia on one point: You can't keep a patient tied down forever."

Hedrick said, "I'm afraid that's it, Counselor."

Salomon sighed. "And I've been appointed a volunteer."

"Any of us will go in with you if you wish, sir. But the patient flatly refuses to talk to *us.* We'll be standing by, ready to move fast if a crisis develops."

"The dummy-switches dodge again?"

"Oh, certainly. And this time the nurse has been instructed to get out if you tell her to. *You,* not the patient. But don't worry; I'll be watching and listening by closed-circuit video; Dr. Garcia and Dr. Rosenthal will watch the monitor scopes."

"I'm not worrying, that drug must have hit me. Okay, I'll go in—and if I have to ride the tiger, I'll hang onto its ears."

Johann Smith said, "Jake! Where the hell have you been? You've come to see me just, *once* in the past three weeks. Once! Damn you."

"I've been working. Which is more than you can say."

"You think so, eh? Physiotherapy is damned hard work, harder than you ever do, you shyster—and I have to go through it seven days a week."

"My heart bleeds, Johann—want a chit to' see the Chaplain? I was laid up sick for ten days—which I'm sure Hedrick told you—and I still don't feel chipper, so move over, you lazy bastard, and let me stretch out. Damn it, Johann, I'm not as young as I used to be; I can't jump through hoops every time you snap your fingers."

"Now, now, Jake, don't take that line with me. I'm sorry you were in. I told 'em to send you flowers. Did you get them?"

"Yes. Thank you."

"That's odd, I didn't send any. Caught you, didn't I? Jake, I never intend to overwork a man—but, damn it, when he's on my payroll, I expect to hear from him occasionally. And see him."

"I'm not on your payroll."

"Huh? What nonsense is this?"

"When the Court appointed me your guardian pro tern and conservator, McCampbell awarded me a token fee of ten dollars a month. That's all I am allowed to accept from you—and I haven't collected it."

Johann looked incredulous. "Well, we'll change that in a hurry!

You get word to Judge McCampbell that I said—"

"Stow it, Johann. It was part of the deal to shut up your granddaughters. Now what is eating you? Mrs. Branca? You've had a report each day—negative. I fetched a briefcase stuffed with detailed reports—alt negative but showing what has been done. Want to read 'em? I see you have a reading machine now."

"Read negative reports? Jake, don't be silly. Yes, I'm fretted about Eunice—damn it, even if she didn't want to work for me any longer, you'd think she would have paid me the minimum courtesy of a sickroom visit. But that's not what is on my mind—not why I sent for you, I mean. Nurse!"

"Yes, sir?"

"Switch off the voice-monitors; then go hide your head in the idiot box. Pick any program as long as it's loud; I want privacy."

"Yes, sir." She stood up and switched off the dummy switches.

"Nurse."

"Yes, Mr. Salomon?"

"Ask Dr. Hedrick if we can have full privacy. I don't think Mr. Smith is going to swing from the chandelier simply because I don't have a nursing degree."

"Mr. Salomon, Dr. Hedrick says that we are doing so well"—she smiled brightly—"aren't we, Mr. Smith?—that if you wanted to talk privately, I could leave. Just push this red button when you want me." She smiled again and left.

Johann said, "Well, that's a surprise!"

"Why so? You're getting well, Hedrick says so."

"Hmm. 'I fear the Greeks, even bearing gifts.' Jake, come close, I want to whisper...because I wouldn't put it past 'em to have a spare microphone tucked away somewhere."

"Paranoia, you old fool. Why would Hedrick bother to listen to our conversation?"

"'Young fool,' please—I'm young again. Paranoid, possibly. Anyhow I don't want anybody to hear this but you. Because if I'm mistaken, it won't sound good to have this repeated in court in a competency hearing. So lean close and listen hard. Jake. . *I'm almost certain this new body of mine is female!"*

Jake Salomon's ears started to buzz and he was glad that Garcia had given him that shot. "So? Interesting idea. 'If true, what are you going to do? Take it back to complaint desk and demand another one?"

"Oh, don't talk like a fool, Jake. Whatever body I have now, I'm stuck with—and if it's female, well, it'll seem odd but half the human race manages to bear up under it; I, guess I can. But don't you *see?* If my notion is correct, that's why they've taken such great care not to let me see myself. Afraid I would jump my cams, no doubt.” Johann chuckled. “I’m tougher than that. Shucks, they haven’t even let *you* see anything you could spot as female—sheet over my whole body, not even my arms in sight, and enough gear hooked to me to clutter up any lines of figure. Towel over my scalp—I suppose the hair is growing back,’ or such. If I’m horsefaced enough, you couldn’t tell my sex just from my face. My new face.”

“Perhaps. It’s an interesting theory. How did you reach. it?”

“Oh, a number of things. Especially the fact that, even though I now can use my hands and arms, they won’t le me. Except during controlled physiotherapy. Can’t *touch* myself, I mean; they strap me down again at once, with an excuse about ‘spastic muscle action’ and so forth. Which I did have at first and don’t have now. But never mind. This is the first time there hasn’t been a nurse in the room. So find out. Lift the sheet and look! Tell me, Jake, *am I male or female?* Hurry—she might come back.”

Salomon sat still. “Johann.”

“What, Jake? Hurry up, man!”

“You’re female.”

Johann Smith was silent several moments, then said, “Well, it’s a relief to be sure. At least I’m not crazy. If ‘female’ and ‘crazy’ aren’t synonyms. Well, Jake? How did it happen?”

“I’ve known it all along, Johann. It’s been a strain on me to see you and not let on. For you are correct; your doctors were afraid that you might not take it well. While you were still weak.”

“They don’t know me very well—it’s not half the surprise it was to me when—at about six, it was—I found out that girls really *are* different from boys. Little girl down the block, it was. Showed me. ‘But how did it happen, Jake? It wasn’t what I signed up for.”

“Oh, but it was.”

“Eh?”

“No instruction you gave said one word about race or sex. You specified ‘healthy,’ and around twenty to forty years old, and with ABNegative blood. Nothing else.”

Johann blinked. “Yes. But it never occurred to me that they might put me into a woman’s body.”

“Why not? They put women’s hearts into male bodies and vice versa every day.”

“True. I’m simply saying that I never thought about it. But even if I had, I don’t think I would have risked cutting my chances in half by making such a restriction. As may be, I’ve never been one to cry over spilt milk. Well, now that I know, there’s no reason to continue that silly business about ‘no mirrors.’ Will you step out and tell that stubborn doctor that I want to see myself at once and no more nonsense? If necessary, knock his ears in."

"I'll see, Johann." Salmon buzzed for the nurse, then went out. He was gone five minutes, returned with Drs. Hedrick, Garcia, and Rosenthal, and a second nurse, who was carrying a large hand mirror.

Hedrick said, "How do you feel, Miss Smith?"

She smiled wryly. "So it's 'Miss' Smith now, is it? Much better, thank you; my mind is at ease. You could have told me weeks ago; I am not as unstable as you think."

"That is possible, Miss Smith, but I am bound to do what I think is best for my patient."

"No criticism, none. But now that the cat is out of the bag, please ask the nurse to show me what I look like. I'm curious."

"Certainly, Miss Smith."

Dr. Garcia waved the nurse at the console aside and sat down; Hedrick stationed himself on one side of the bed, Rosenthal on the others Only then did Hedrick take the mirror from the nurse, hold it to let his patient see herself in it.

Johann Smith looked at her new face first with intense interest, then with unbelief—then her features broke in horror. "Oh, my God! Dear God, what have they done to us? Jake! You *knew!"*

The lawyer's face was working in the convulsions of a strong man trying not to weep. "Yes, I knew, Johann. That's why I couldn't find her for you—*because she was here all along.* Right here—and I had. . . to *talk* to her!"

He gave up and sobbed.

"Jake, how could you let them do it? Eunice, oh Eunice my darling, forgive me—I *didn't know!"* Her sobs echoed his, an octave higher.

Hedrick snapped, "Dr. Garcia!"

"Started, Doctor!"

"Dr. Rosenthal, take care of Mr. Salomon. Nurse, help him, he's about to fall! Damn it, where's that aspirator?"

Five minutes later the room was quiet. The patient had been forced into sedated sleep. Dr. Hedrick satisfied himself that Miss Smith was safe and turned the bedside watch over to Dr. Garcia. Hedrick then left the sickroom.

He found Mr. Salomon stretched out on a couch at the remote watch station; Dr. Rosenthal was seated by the couch, a stethoscope around his neck. Hedrick cocked an eyebrow at the, psychiatrist, who mouthed soundlessly, "Okay," then added aloud, "Perhaps you will check me."

"Very well, Doctor." Hedrick sat down where Rosenthal had been, hitched the chair closer, took Salomon's wrist and felt his pulse. "How do you feel?"

"I'm okay," Salomon said gruffly. "Sorry I made a fool of myself. How is *she?"*

"Sleeping. You were fond of her."

"We *both* were fond of her. Doctor, she was an angel."

"Go ahead and cry. Tears are lubricant for the soul. Males would be better off if they cried as easily as women do. Eh, Rosenthal?"

"Correct, Doctor. Cultures in which men cry easily have little need of my specialty." He smiled. "Mr. Salomon, you're in good hands so I'll run along—got to shrink a few heads for my collection. Unless you need me, Doctor?"

"Run along Rosy. You might be here in the morning when we wake the patient. Say ten o'clock."

"Goodbye, Dr. Rosenthal. Thank you. Thank you for everything."

"No huhu, Counselor. Don't let that veterinarian sell you any flea powder." He left.

"Dr. Salomon," said Hedrick, "this big castle is loaded with beds. What do you say to sacking out in one, then about twenty-one or two o'clock I can give you a pill guaranteed to slug you for eight hours of dreamless sleep?"

"I'm okay, really I am."

"If you say so. I can't force treatment on you. But as another human being who has come to know you fairly well—and admire you —I must admit that I am more worried about *you* than I am about my patient. You referred to her as an 'angel'—by which you meant the donor, not Miss Smith."

"Eh? Yes,' of course. Eunice Branca." Salomon's features contorted momentarily.

"I never knew her and I've had little experience with angels; doctors don't see people at their best. But her body would do credit to an angel; I have never seen a healthier one. Twentyeight years old by the records, physiologically perhaps five years younger. She—Miss Smith I now mean, Miss Johann 'Smith—can take a severe shock and bounce out of it; she has that superb young body to sustain her. But you have had much the same shock and—forgive me—are no longer young. If you won't sleep here—best—"

"I don't want to sleep *here!"*

"Very well. Second best would be for you to permit me to check your heart and lungs and blood pressure. If I don't like what I find, then I want you to rest while I send for your physician."

"He doesn't make house calls."

Hedrick grunted. "Then he's not a physician; physicians go where they are needed. A most unprofessional remark as we are expected to pretend that any M.D. with a license is a dedicated saint with the wisdom of Jove—even when we know he is a bungler whose dedication is to the Internal Revenue Service. Don't quote me; they might lift my union card. Now about that checkup? Do you want it?"

"Uh, yes. Please. And I'll take that pill if you'll let me take it home. Don't ordinarily use such—but tonight is a special case."

"Good. If you'll slip off your shirt—"

While he worked the physician said quietly, "Mr. Salomon, I don't have Dr. Rosenthal's training. But if it will do you any good to talk, I can listen. This has been on your mind, I know. I think your worst hurdle is past—letting Johann Smith know that he is now 'Miss' Smith, plus the still worse shock of seeing him—her——discover that she now inhabits his former secretary's body. So you are past that crisis. If there is more it would help to get off your mind, feel free to talk. In my profession as in yours, such talk is privileged."

"I don't mind talking about Eunice. But I don't know what to say."

"Well, you might tell me how such a lovely girl got killed. Never knew the donor's name until you told me. There was a privacy restriction. So we don't ask—as long as the donation is properly certified."

"Yes, there was such restriction. We'll never know why but I suspect that the child—woman, I mean, and a very competent one—but I thought of her as a child, being so much older than she was. I think Eunice had a romantic notion that she could give her body to her boss if she no longer needed it and not let him find out. Ridiculous, but it fitted her sweet nature. I had to tell *you,* once it looked as if old Johann might live through it. Because I knew he would blow his wig. And he did."

"A *very* good thing you told me, Counselor. I think—and Dr. Rosenthal thinks—that we would never have pulled this patient through if we hadn't taken extraordinary precautions to keep her from knowing her sex. In view of the patient's relation to the donor. Close, that is."

"Close. Close for both of us. Doctor, I am not exaggerating—if I had been as little as twice Eunice's age—and she not married—I would have done my damnedest to marry her. And the same, I feel certain, goes for old Johann. So I knew what a shock it would be to him—worse than simply learning that she had been killed."

"Car accident?"

"Nothing so innocent. Killed by a mugger. Psychopath probably but the point is immaterial as Johann's mobile guards caught him almost in the act and killed him. That's how she was saved—her body was saved, I mean—because they rushed her to a hospital hoping to save her." Jake Salomon sighed. "It does help to talk."

"Good. How did Johann Smith's guards happen to be so Johnny-on-the-spot, yet not quite?"

"Oh. The poor darling tried to save ten minutes. She was a blood donor—ABNegative, and—"

"Oh! Now I know why 'Miss' Smith has seemed vaguely familiar. I saw her once, I'm now certain, giving blood to a patient I had been called in to support. A lovely girl, with a warm disposition, friendly, who dressed in, um, exotic styles."

"Erotic styles you mean, let's not use euphemisms. Yes, Eunice did. She knew she was beautiful and did not mind sharing her beauty. Played up to it."

"I wish I had known her."

"I wish you had, Doctor; your life would have been richer thereby. If she had a call to give blood, Johann's guards were under orders to drive her. Protect her. Pick her up at her door, escort her to the car, deliver her, wait for her. But this was an emergency and she lives—lived—nineteen levels up in one of those beehives in the north end. Vehicle lift, sure—but not able to lift the sort of armor Johann owned. Owns. So the poor darling decided to save ten minutes and used the passenger elevator without waiting for escort. And that's where she was jumped. Killed."

"A pity. I suppose she didn't know that we can always stretch a patient an extra ten minutes if we know a donor is on the way."

"Maybe she did, maybe she didn't—but it is characteristic of Eunice Branca that she tried to hurry."

"A pity. You can put your shirt on. How old did you say you were?"

"I didn't say. Seventy-two is staring me in the face."

"I'm amazed. You seem to be younger—internally I mean, not necessarily your face—"

"So I'm ugly. I know it."

"I think 'distinguished' is the accepted term. You seem much younger, physiologically. Say twenty years."

"So I take my hormones."

"I'm not sure you need them. Go home if you wish. Or stay. If you stay, I'd like to put a monitor on your heart. Professional interest." (And to make damn sure you don't conic out, old fellow—sometimes a heart stops for no good reason, after a shock such as you have had.)

"Uh...I *am* tired. Could I skip dinner and go straight to bed? With maybe a twelve-hour dose instead of eight?"

"No trouble."

Soon Jake Salomon was in bed and asleep. Hedrick ate, looked in on his patient, left orders with the night watch to call him if the displays exceeded certain tolerances, went to bed and to sleep; he never needed the drugs he prescribed.

Despite sedation, Johann Smith's dreams were troubled. Once the old man in the borrowed skull muttered, “Eunice?” (I’m here, Boss. Go back to sleep.) “All right, my dear. Just wanted to know where you’d gone.” (Quit fretting, Boss. I’m *here.)* Johann smiled in his sleep and then slept, quietly, no more bad dreams.

9

The morning nurse bustled in with a tray. “Good morning, Miss Smith! How are we today?”

“I don’t know how you are, but I’m hungry.”

“Good! Hot oatmeal this morning, dear, and orange juice and a boiled egg—and we’ll soak a little toast in egg so that it will go down easily. I’m going to tilt the bed up a touch.”

“Mrs. Sloan—”

“Yes? Let me tuck the napkin under your chin.”

“Stop that, or I’ll tell you where to tuck it! Uncover me and unstrap me; I’m going to feed myself.” (Boss, don’t be rude to her. She’s trying to help you.) *(Eunice?)* (Of course, dear—didn’t I promise I wouldn’t leave again?) (But—)(Shush, she’s talking.)

“Now, Miss Smith, you *know* I can’t do that. Please, dear. Doesn’t this smell good?”

“Uh. . . I suppose you can’t unstrap me without Dr. Hedrick’s permission. I’m sorry I snapped at you.” (That’s better, Boss!) “But don’t try to feed me, please don’t. Instead please find Dr. Hedrick and tell him I’m being difficult again. You might also tell him that, if he doesn’t want to go along with my unreasonable demands, he had better try to reach Mr. Salomon. Because if anyone tries to put food in my mouth while my hands are strapped, I’ll do my best to spit it on the ceiling.” (Is that better, Eunice?)

(Some, Boss. Say ten percent.) (Uh, darn, I don’t have any *practice* in being a lady.) (I’ll teach you, Boss.) (Eunice, are you really there, dear? Or have I come unstuck just as they thought I would?) (Discuss it later, Boss dear—you’re going to have to face the doctor right away...and *don’t* mention *me*...or you know what’ll happen. They’ll *never* unstrap our wrists. You know that, don’t you.) (Of course I do! Think I’m crazy?) (Irrelevant and immaterial as Jake would say. The point is never to let Dr. Hedrick—or *anybody—guess* that I’m here . . . or they’ll be *certain* you’re crazy. Now I’m going to sbut up.) (Don’t go ‘way!); (Boss, I’ll *never* go away; I’ll just keep quiet. You and I had better talk mostly when others aren’t around. Unless I see you about to make a mistake.) (Going to nag me, huh?); Johann heard her merry giggle. (Haven’t I always, Boss?”

Watch it; here come the cops.)

Dr. Hedrick came in, followed by Dr. Garcia. “Good, morning, Miss

Smith."

"Good morning, gentlemen."

"Nurse says that you would like to try feeding yourself."

"That's true but that's not all of it. I want these straps, and clamps removed, all of them."

"Letting you feed yourself is no problem. It's a good idea, good practice. 'As for the rest— That calls for thought."

"Doctor, the masquerade is over. If you can't see your way clear to remove all restraints from my body, then forget about breakfast; I won't starve. Get my lawyer instead."

"As it happens, Mr. Salomon is in the house—"

"Then get him!"

"Just a moment, please." Dr. Hedrick glanced at Dr. Garcia, who had seated himself at the console; Dr. Garcia,' nodded. "Miss Smith, would you agree to a reasonable compromise? Or at least listen?"

"I'll listen. But—" (Shut up, Boss!) "I'll listen, Doctor."

"Mr. Salomon is, as you know, an elderly man, and he had a trying day yesterday. I persuaded him to stay overnight, and rest. I'm told that he is just getting up; he has not had breakfast. I have and so has Dr. Garcia—but so long ago that we could use a bit of brunch. Now I can unstrap your arms, let you feed yourself— But unstrapping your pelvis . . . well, as you must have guessed, there is some odd plumbing down there and other things. Takes time to unhitch everything.

"So here is my thought. You can invite Mr. Salomon to join you for breakfast...and you could invite us, too, for that bit of brunch—and we four can talk over what needs to be done next. I shall follow the wishes of your guar—your lawyer. Or let him select another physician and withdraw, if I find that I must."

"My guardian," Johann said quietly. "We'll do whatever my guardian requires. But I hope he does not decide to replace you, Dr. Hedrick. I have been a difficult patient and I'm sorry. I know what a miraculous job you have done on *me*. . . and I am grateful."

"Thank you, Miss Smith."

"I would be delighted to have you three gentlemen join me for brunch. . . if you will be so kind as to unstrap my arms."

(Boss!) (What's biting you, little one? I thought I was being a perfect lady?) (You are—but *don't you dare let gentlemen in here to eat with us until we're made pretty!*

Not a speck of makeup, and our hair must be a mess. Horrid!) (But look, dear, it's just Jake and our doctors.) (It's the principle of the thing. I know more about being a girl than you do—well, don't I? When did I *ever* come to work with my face stark naked and my hair in rats? Why, I often got up much earlier than I had to, just to make sure that I was as pretty as possible, just for you. Didn't I? Did I not?)

"A pain, Miss Smith?"

"Eh? I mean, 'Oh?' Sorry, Doctor, just thinking. If I am to have gentlemen guests for breakfast, shouldn't I start practicing how to be a lady? It's new to me, you know. Do I have any makeup on?"

Hedrick looked startled. "Do you mean lipstick?"

"Whatever it is that ladies put on their faces; I'm sure it's always more than lipstick. And my hair should be brushed. Or do I have hair?"

"Why, certainly you have. Still short but a fine, healthy growth."

"That's a relief. I thought possibly I had a plastic skull and would have to wear wigs."

"There was some prosthetic restoration. But Dr. Boyle managed to save the scalp and you'll never notice the prosthesis." Hedrick smiled briefly. "Tougher than natural bone. With good blood supply to your scalp and normal hair—just hasn't grown out very far."

"I'm relieved. Dandruff?"

"Haven't noticed any."

"We won't worry about it this morning. Doctor, I'd like to be made up to look like a lady ready to receive guests. If you'll have one of the servants take in a cup of coffee and some orange juice to Mr. Salomon along with our invitation to breakfast, I'm sure he won't mind waiting." (How'm I doing, Eunice?) (Fine, old dear!)

Dr. Hedrick looked puzzled. "Miss Smith when I set up a support team, I try to anticipate every possible emergency, supplies, drugs, and so forth. This is the first time I've been asked to produce lipstick. And cosmetics."

"Oh. But you're not being asked to, Doctor. The ladies' powder room on the first floor is stocked with all shades of lipstick and many cosmetics. Should be. Was. Should still be, or someone will hear about it. And one of the nurses can help me. That pretty redhead— Minnie? Ginny? Miss Gersten, I mean. She must know quite a lot about cosmetics." (She does—that red hair came out of a bottle, Boss.) *(Meeowl* Shut up, pussy cat.) (Wasn't being catty, Boss. She does well, in spite of those godawful uniforms.)

"Winifred Gersten," said Dr. Garcia. "Nurse, find Winnie. And take that tray out; it's cold."

Forty minutes later Miss Johann Smith was ready to receive. Her hair was fluffed, her face had been made up with restrained boldness by the red-haired nurse, and the result as shown in a mirror had been approved by the second voice inside Smith—grudgingly, it seemed to Johann—(I can do better. It'll do for now.)

The bed had been contoured to let her sit up and from somewhere a smart bed jacket had been produced, one that matched her eyes. Best of all, her hands and arms were free.

Johann found that her hands were trembling. She attributed it to excitement and decided that, if she had trouble controlling a fork, she would stick to things that would not slop on her jacket—besides, she was not hungry now. Too excited.

(Steady down, Boss darling. Leave, the eating to me.)

(But—)

(No 'buts.' I've been feeding that face for years. The body remembers, Boss. You talk to the gentlemen; I'll handle the calories. Now let's shut up; they're arriving.)

"May we come in?"

"Do, gentlemen, please. Good morning, Jake. I hope you bad a good night's rest." (Put out your hand to him, Boss.)

"Slept like a child."

"Good. So did I." Johann extended her left arm and hand, that being the side the lawyer was on. "Look, Jake! Hands!"

Salomon took her hand, bowed over it—hesitated and then touched it to his lips. Johann was so amazed that the hand was almost snatched back. (Good God! What does Jake think I am? A pansy?) (He thinks you're a beautiful girl. You are. I should know. Look, Boss, we must talk about Jake—later. Say hello to your shrink.)

Dr. Rosenthal was saying, "I'm a party-crasher. May I come in, Miss Smith?"

"You're most welcome. Someone is going to have to assure these other gentlemen that I don't have termites in the attic; I'm depending on you, Doctor."

The psychiatrist smiled down at her. "That is an appeal hard to resist. I must say your improvement since yesterday is astounding. You're looking lovely—Miss Smith."

Johann smiled and gave him her hand. Dr. Rosenthal bowed over it and kissed it—not a quick and frightened peck such as Salomon had given it, but a kiss that was soft and warm and unhurriedly sensuous. Johann felt a tingle run up her arm. (Hey, what is this?) (Stay off his couch, Boss. He's a wolf—I can tell.)

When he straightened up he held her hand a moment longer than necessary, smiled again, then moved away. Johann thought of asking him if that was his standard way of treating patients, decided not to—but felt slightly annoyed that the other two doctors had not offered the same homage. Yonny Schmidt had been born at a time and place where handkissing was unheard of; Johann Smith had never taken it up; Miss Johann Smith was discovering that the silly custom was habit-forming. She felt flustered.

She was saved by another voice from the door, that of her butler. "May we serve now, Miss Smith?"

"Cunningham! It's good to see you. Yes, you may serve." Johann wondered who had given instructions to make the meal formal?

The butler stared over her head and said tonelessly, “Thank you, Miss.” Johann was startled. The butler, like all the male household staff (and some of the females), was sudden death armed or unarmed; his manner alone could intimidate news snoops. (The poor man is scared!) (Of course. So calm him down, Boss.)

“But first come here, Cunningham.”

“Yes, Miss.” Her household chief walked carefully toward her, stopped a very respectful distance away.

“Oh, do come closer. Look at me. Right at *me,* don’t turn your eyes away. Cunningham, the way I look is a shock to you. Isn’t it?”

Cunningham swallowed without speaking; his Adam’s apple bobbed.

“Oh, come now,” Johann said firmly. “Of course it is. But if it upsets you, think what a shock it is to *me.* Until yesterday I didn’t even *know* that I had been turned into a woman. I’ll have to get used to it and so will you. Just remember this: Underneath I am the same cantankerous, unreasonable, unappreciative old scoundrel who hired you as a guard-footman nineteen years ago. I’ll go on expecting perfect service, notice it as little, and remember to say ‘Thank you’ as seldom. Do we understand each other?”

The butler barely smiled. “Yes, sir—I mean ‘Yes, Miss’.”

“You meant ‘Yes, sir’ but you’re going to have to learn to call me ‘Yes, Miss’ and I’m going to have to learn to expect it. We old dogs must learn new tricks. How’s Mrs.

Cunningham’s lumbago?”

“Some better, she says. Thank you, Miss.”

“Good. Tell Mary I asked. You may serve.”

The brunch was almost merry. Johann tasted the wine when Cunningham offered a sample, approved it but declined a glass herself. She barely touched it to her tongue but the flavor spread like strong brandy and she had’ been startled almost into choking by the vibrant wonder of its bouquet. Yet the bottle she recognized as that of an adequate but not spectacular Chablis. She played safe with orange juice.

Table talk was lively and directed mostly at the hostess with no reference to her status as a patient. The men seemed to vie for her attention—and Johann found that she enjoyed it. She laughed frequently, answered their sallies, and felt witty herself.

But she could see that Jake was not eating much and looked at her all the time except when she looked back... at which his gaze wavered and shifted. Poor Jake. (Eunice, what are we going to do about Jake?) (Later, Boss—one thing at a time.)

She was startled again when Cunningham came to remove her plate from her lap table—startled to see that scrambled eggs and two rolls had disappeared as well as orange juice, half a glass of milk, and one of three link sausages. “Coffee, Miss?”

“I don’t know. Dr. Hedrick, am I allowed coffee?”

“Miss Smith, now that you can eat sitting up, there is no reason why you should not eat or drink anything you want.”

“Then I’ll celebrate. The first coffee I’ve been permitted in ten years—Demi-tasse for me, Cunningham, but man-size cups for the gentlemen. And Cunningham?—is there any Mumm ninety-seven on ice?”

“Certainly, Miss.”

“Serve it.” She raised her voice a little. “Any sissies who won’t drink champagne this early in the day may sneak out quietly.”

No one left. When glasses were filled and bubbles were chasing up their stems, Dr. Hedrick stood up. “Gentlemen, a toast—” He waited until they were standing. Johann raised her glass with them.

But did not drink: the toast was “To our lovely and gracious hostess—long may she live!”

“Amen!” “Cheers!”—and the tinkle of breaking glass.

Johann felt tears, ignored them. “Thank you, gentlemen. Cunningham, fresh glasses.”

When they were filled she said, “Gentlemen, I ask for another standing toast”—she waited, then went on—”this should be to Dr. Boyle . . . and to you, Jake old friend, without whose loyal help I would not be here . . . and certainly to you, Dr. Hedrick, and to all the doctors who have helped you and helped Dr. Boyle...and to all the patient nurses I have snapped at. But those can wait. I ask you to drink”—her tears were falling and her voice was almost a whisper —”to the memory of the sweetest, loveliest, and most gallant girl I have ever known Eunice Branca.”

The toast was drunk in silence. Then Jake Salomon slowly crumpled into his chair and covered his face with his hands.

Dr. Hedrick jumped to help him, Dr. Garcia was quick on the other side. Johann stared in helpless distress. (Oh, I should have known better! But I meant it, darling, I meant every word.) (I know you did, Boss, and I appreciate it. But it’s all right. Jake has got to admit that I’m dead. And so do you.) (Are you dead, Eunice? *Are you?)* (Don’t worry over a word, Boss. I’m here and I won’t leave you ever. I promised you. Have you ever known me to break my word?) (No, never.) (So believe me this time. But we’ve got to take care of Jake.) (How, dearest girl?) (When the time comes, you’ll know. Talk later, when we’re alone.)

Dr. Rosenthal was leaning over her. “Are you all right, my dear?”

“I’m okay—just terribly sorry about Mr. Salomon. Is *he* all right?”

"He will be shortly. Miss Smith, don't worry about Mr. Salomon. Yes, you brought on another catharsis—which he needed, or he would not have had it. As for his physical wellbeing, he's in Dr. Hedrick's hands . . and Curt Hedrick hasn't lost a patient he reached in time since he started practicing his specialty. Your house is loaded with everything Dr. Hedrick could possibly need…and Mr. Salomon isn't even ill; he simply needs to lie down, plus a happy drug."

Dr. Rosenthal sat with her while the room was cleared of dishes, brunch table, dining chairs, *etc.* Dr. Hedrick returned with Dr. Garcia. Johann again asked, "How is he?"

"Half asleep. Slightly ashamed of being a 'spectacle' and a 'nuisance'—his terms. But only slightly as what I gave him doesn't permit such self-hate very long. How are *you?"*

"She's ready to go six rounds," Rosenthal assured him.

"So the scopes say. We might as well get on with our conference, Miss Smith. I discussed all that I am going to say with Mr. Salomon while you were getting pretty before brunch, and it has his approval. I am withdrawing from your case."

"Oh, Dr. Hedrick! *No!"*

"Yes. Dear lady, ain't nobody going away mad. This means that you are well. *Well.* Oh, still weak, still in need of care. But I'm not deserting you. I'm turning you over to Dr. Garcia."

She looked at Dr. Garcia, who nodded. "Nothing to worry about, Miss Smith."

"But—Dr. Hedrick, you will come back and see me? Won't you?"

"Delighted to. But not very soon, I'm afraid. You see— Well, there is an interesting transplant case which has been hanging fire. A radical, one, the heart and both lungs. Now they are ready to start surgery. I received a call before you were awake, asking if I would be available. I said that I would have to call back—and after I saw you I did call and said that I could do it. After consulting Dr. Garcia, of course, and notifying Mr. Salomon." He smiled quickly. "So, if you will excuse me, I'll leave."

Johann sighed and reached out her hand. "Since you must."

Hedrick took her hand, bent over it; Dr. Rosenthal said lazily, "Aren't you going to scrub first, Doctor?"

Hedrick said, "You go to hell, Rosy!" and kissed her hand. It seemed to Johann that Dr. Hedrick stretched it at least twice as long as Dr. Rosenthal's earlier effort She felt goose pimples on her arm and a most curious feeling at her middle—yes, she decided, if one had to be a woman, this was a custom to be encouraged.

(Going to lay him, boss?) (Eunice!) (Oh, piffle, Boss. We're Siamese twins now and should be honest with each other. *You* wanted to lay *me* for years. But couldn't. You knew you wanted to, I knew it too; we just never talked about it. Now you still can't. But you can lay *him* if you want to. . . and it's the best way to say 'Thank you.' But watch it, dearie. Do it here, not where you might get caught. He has a jealous wife; he has all the signs.) (Eunice, I'm not going to discuss such a ridiculous idea! I'm surprised at you. You, a nice girl—and married yourself.) (Wups, dearie! I'm not married. 'Until death do us part' is the limit . . . and I'm a ghost. 'Minds me, though—my husband—erase and correct; my widower, Joe Branca. Got to talk about *him,* too. Doc's turning to go. So wet your lips and smile, if you have it even faintly on your mind. And you *have.)*

Miss Smith wet her lips and smiled. "Adios, Doctor, not goodbye. Hurry back. When you can." (You're learning, dearie, you're learning.)

Dr. Garcia said, "Miss Smith—"

"Oh. Yes, Doctor?"

"If you're ready, I'll get nurses in and we'll unharness you and several other things. You can have a general anesthetic if you wish. I suggest locals, with a chin screen to keep you from seeing how I'm bungling it. With something you want to read projected, and some music."

"Music would be nice. But I won't read, I'm too interested. Locals, then. Or nothing, pain doesn't upset me."

"But it upsets me, so we'll use local anesthesia."

For an hour and more she listened to a tape of evergreens, from classic rock she had never grown used to clear back to folk music popular before Johann Schmidt was born. Mostly she enjoyed lazily the sensuous pleasure of feeling her body being touched and handled and manipulated. Not only was it wonderful to *have* a body after days of complete paralysis from the neck down (plus fear of being forever a basket case, a fear Johann had never fully admitted) but also, most important, this body felt everything so sensitively—just to be touched was pleasure.

Not much like that old wreck you discarded! For the past ten, fifteen years that body's sole virtue had been that it still ran. It reminded her of a fifth-hand Model-T Ford that he and four other young cake-eaters had bought for seventy dollars in Baltimore and had driven half across the continent—no lights, no brakes (the reverse had to serve), no driving licenses (unheard of), no instruments, no nothing. But the tough and ugly little touring car had chugged along on three cylinders (not always the same three) at an (estimated) top speed of twenty-five miles an hour. They had stopped now and then to throw water on the spokes to keep them from falling out.

Somewhere on a dirt road in Missouri it had coughed and quit, and smell had traced the trouble to the wiring.

Yonny had fixed it—wrapped the burned insulation with toilet paper, tied it with string…cranked the heap and it had started at once and chugged along as before.

She wondered where the sturdy old junkpile had wound up? And what had become of her male body? Johann's will had left it to a medical school—but since Johann hadn't died, quite, that will did not control. Had they pickled it? Or swept it out with the trash? Must ask.

Several times she felt pulling sensations that should have hurt but did not and once a sharp pain which she ignored. There were odors, sour-sweet and nauseating; she thought of suggesting that the air system be turned up, then decided to mind her own business. Presently the odors were gone and she became aware that she was being given a bed bath; then sheets and pad were being changed.

The chin screen was removed; the top part of the fresh bottom sheet was whisked into place by two nurses while a third lifted Miss Smith's shoulders. Two nurses left the room, carrying a hamper between them. "There," said Dr. Garcia. "That wasn't so bad, was it?"

"Not at all. I feel grand." She wiggled her toes, opened and closed her thighs. "Grand! Now I'm *me* all over—free! Doctor? Since I'm no longer wired for sight and sound, not to mention plumbing, do we need this fancy hospital bed? I would stop feeling like an invalid sooner if I had my own bed."

"Mmm...must you rush it? This bed is the right height for nurses to work on you—back rubs and such—and it has side rails which can be raised when you sleep. Miss Smith, every nurse's nightmare is the thought of a patient falling out of bed."

"Well! What do you think I am? A baby?"

"Yes, Miss, that's what I think you are. A baby getting acquainted with its body. Babies can fall. But I don't intend to let you fall. Either out of bed, or in learning to walk. Or in taking a tub bath, which you will be demanding almost at once."

(Play it cool, Boss!) "Doctor, I will follow your orders. But my own bed has its points. It will contour, just touch a button. And it has hydraulic lift Raises as high as this one or higher-but will also lower till it's hardly more than a mattress on the floor, ten inches high. Will this one do that?"

"Mmm…no."

"I *did* fall out of bed, ten years back. It shook me up so, that I ordered this special bed. Back when I was still walking I used to raise it to the easiest height—about at my hips—to get into it. Then lower it all the way down to sleep."

"Mmm. . . maybe we can make a deal. Will you promise me *always* to lower the bed once you get into it? Even if you don't intend to sleep."

She smiled. "Signed and witnessed and with posted performance bond."

"I don't think we need to go that far. Miss Smith, we no longer need to monitor you the forty-'leven ways we've been doing. But I want a continuous check on heart action and respiration until you are living a normal life. That's the main reason I need this life-support bed. But if you will let me fasten to your skin, anywhere on your ribs, a little pickup-transmitter weighing a half ounce and no bigger than an alloy dollar, we don't need this fancy bed. It's comfortable, you'll forget it's on you. You can bathe with it in place—waterproof and sticks like a poor relation."

She smiled. "Start sticking!"

"I'll fetch it. And have the nurses swap beds."

"Oh, the nurses can't move my bed. It takes big huskies and a power dolly. Tell Cunningham. But no rush. Speaking of nurses—Winnie, don't you need to wash your hands or something? I want to talk to my doctor."

The redhead smiled at her. "Dear, I've heard everything. Don't mind me."

"Look, Winnie, you did a lovely job on my face when I did not know how. But that's the point, dear. Outside I'm a woman. But up here back of my eyes is still a crabby old man who is far too shy—chicken, I mean—too chicken to discuss intimate matters with a pretty girl present And I

must."

"Miss Gersten, go to the watch station and take a break. I'll call you."

"Yes, Doctor."

One she was gone Johann said, "You're durn sure all the mikes are dead?"

"We're private, Miss Smith."

"Call me 'Johann,' Doc; this has got to be a man-to-man—and embarrasses me even discussing it with a man. All right, first question: Did I come sick—menstruate—in the last few days?"

Garcia looked surprised. "You twigged? Yes, you are just over your period; we removed a tampon while we were working on you and it was not necessary to replace it. But where did I miss? I thought I had anticipated it and bad bolshoi painkiller in you in time. You felt cramps?"

"Not a twinge. But things didn't *feel* right...and that's when I started getting suspicious about my sex." She looked thoughtful. "Perhaps it was the tampons—I felt something odd down there—and now the feeling is no longer there."

"Might have been that. I would have used napkin pads, usual hospital practice. But there were just too many bells and whistles—

plumbing I mean—in the way. I didn't think you would notice a tampon placed while you were sedated. Contrary to popular belief there is almost no sensation inside a vagina."

"So? There damn well is in *mine!* I just didn't know what the sensation was."

"Well, the matter has never come up before; your case is unique. Was that all that was troubling you, Miss—sorry! 'Johann.'"

"No. This new body of mine— Has it had a whatchamacallit, a female examination?"

"Oh, certainly. Dr. Kystra, best G-Y-N man in town. Done while you were paralyzed, checked again after your spinal cord fused but done while you were in deep sedation. All okay."

"I want a full report. Damn it, Doc, I'm in charge of this body now...and I know as little about how to be female as my Grossmutter knew about aircraft Nothing, that is."

"I can get the report out of file if you want it—"

"I do!"

"—but I can tell it in terms you are more likely to understand. Shall I?"

"Go ahead."

"You have a normal female body, physiological age circa twenty-five—-calendar age somewhat older, I understand. Breasts normal virginal--which doesn't mean your body is virgo intacta; it isn't. Just means you haven't suckled a child. No trace of abdominal surgery, from which I conclude that your appendix is in place and your tubes are intact—"

"Meaning I could get pregnant."

"—the latter opinion having been confirmed by insufflation while you were paralyzed. You not only *could* get pregnant; you *will.* Unless you live an absolutely chaste life—and even if you plan to, I would still recommend precautionary contraception—say six-month implants in one buttock. The best-laid plans of mice and men, you know. And women. Especially women. Since you are Rh-negative, about six-sevenths of the male population could give you a damaged or stillborn child. We can prevent that if we know it in time, but an unexpected pregnancy can turn out tragically. So don't let it be unexpected. Plan it. In the meantime use contraception."

"Doe, what makes you so damn sure I'll get pregnant? Even if I get married—which I do not plan on—hell, I've had only hours to get used to the notion of being female; I certainly haven't had time to consider being *actively* female. But even so, as the old gal said, 'Shucks, honey, hundreds and hundreds of times ain't nothing happen a—tall.'"

"If you adjust normally to being a young female, you *will* be active about it, that's why. Or you will eventually wind up on Dr. Rosenthal's confession couch or some emotional equivalent such as joining a nunnery. Johann, your new body has a normal female hormonal balance; you had better plan accordingly. Even getting your tubes cut is no answer; you might come down with the emotional never-get-overs through regretting it. As for what the old gal said, it doesn't apply. Because of that child you've already had."

"What?" (Boss, why didn't you mind your own business? I could have told you all of this you need to know.) (Shut up, Eunice.)

Garcia looked surprised. "You didn't know? I had assumed that, since this body was that of your secretary, you knew that she had had a child. Or children."

"Not only didn't know it, I don't believe it." Surely the security investigation would have turned up such an obvious fact. . . and God knows Eunice had never been out of his sight since then long enough to bear a child.

"I'm afraid you will have to believe it, uh, Johann. Striations called stretch marks on belly and buttocks—hardly noticeable unless your skin is tanned and then easily concealed by cosmetics. But present. Not definitive, as a woman, or even a male, can get stretch marks from obesity. But characteristic. But the thing that nails it down is that the cervix of the virgin womb does not look like that of a woman who has borne a child. The difference is so marked that a layman can spot it. I have seen yours. Q.E.D. Could be photographed if you doubt me."

(Drop it, Boss!)

"Oh, I believe you, now that you've explained it."

"A comparison photo might be a good idea. Make you more careful. I was not implying any criticism of Mrs. Branca; I was simply warning you that the baby-baking apparatus you inherited from her is in prime shape and ready to be triggered each lunar month. Say about ten days from now."

"I'll be careful."

"Want a lecture on contraception?"

"No." Johann smiled wryly. "Apparently I have at least a week before I need a chastity girdle."

"Approximately, by statistics. But, uh, Johann. No, 'Miss' Smith—do you know the technical term we physicians use to describe girls who depend on rhythm?"

"No. What?"

"We call them 'mothers.'"

"Oh. *Oh!"*

"So don't wait too long. Next question?"

"Uh. . . no more today, Doctor; I need to digest what you've told me. Thank you."

"Not at all, Miss Smith. Shall I have them switch beds now?"

"I'll send for Cunningham later; I'd like to rest. Doctor? Could you stick that dingus on my ribs? Then have the nurses stay out a couple of hours?"

"Certainly. If you'll let me raise the safety rails, as this bed is *not* only ten inches from the floor."

"Oh, of course."

10

(Well, Eunice?) (So you want to hear about my little bastard? Boss, you're a dirty old man.) (Sweetheart, I don't want to hear anything you don't want to tell. You could have quintuplets by a Barbary ape and it wouldn't affect how I feel about you.) (Mealymouthed old hypocrite. You're dying of curiosity.) (I am like hell 'dying of curiosity.' It's your business and yours alone.) (Oh, don't be so mean, Boss. My business *is* your business. How else? Seeing the close relationship we have...and which I *like,* if there is any doubt in your dirty old mind. You brought me back to life. . . when I was as dead as folk songs. And now I'm happy. So coax me a little, I'll give.) (All right, dearest—how in the world did you manage to have a baby? When did you find *time?* Your snoop sheet traced you clear back through high school.)

(Boss, did that security report mention the high school semester I lost from rheumatic fever?) (Let me think. Yes, it did.) (Misspelling. Spell it 'romantic' fever. I was fifteen and a cheerleader. Our basketball team won the regional conference . . . and I felt so good, I got knocked up.) (Eunice, 'knocked up' is not an expression a lady uses.) (Oh, Boss, sometimes you make me sick. By your rules I'm not a lady and never was—and I've got as much right to be inside this skull as you have and maybe more—so you haven't any business trying to force me to talk the way your mother did. Not when I no longer have Joe to turn to when I get tired of your prissy ways.)

(I'm sorry, Eunice.)

('Sail right, Boss. I love you. But you and I are cuddle up pretty close; we ought to relax and enjoy it. I can teach you a lot about how to be female, if you'll let me. But right now you listen. Don't interrupt.) The ghost voice started reciting a string of monosyllables, all of them taboo in the faraway days of Johann's youth.

(Eunice! Please, darling, it doesn't become you.)

(Pipe down, Boss. I'm going to finish this even if you blow every fuse.) The recitation went on— (That does it, I guess—those are the words I had tagged in my mind never to use in your presence. Now tell, me—was there even *one* you didn't understand?)

(That's not the point. A person should not use language-which offends others.)

(I never did, Boss. In public. But I'm home now thought I was. Do you want me to go away again?)

(No, no, no! Uh, you were away?) (I certainly was, Boss. Dead, I suppose. But I'm here now and I want to stay. If you'll let me. If I can relax and be happy and not have to be on guard all the time for fear of offending you. I can't see why a Latin polysyllable makes me more a lady than a monosyllable with the same meaning. You and I think with the same brain—yours—eat with the same mouth—mine, or used to be—and pee through the same hole. So why shouldn't we share the same vocabulary? Speaking peeing—oh, pardon me, sir, I meant to say 'micturition'—).

(None of your sarcasm, girl!)

(Just who are you calling a 'girl,' girlie? Feel yourself, go ahead and feel. Some knockers, eh, Boss?—and how you used to stare at them, you horny old goat. Made me tingle. But I was saying, speaking of micturition, that we are going to have to ring for a bedpan fairly soon, now that we no longer are rigged with plumbing. . . and there is no way for me to leave the room while you pee. I don't dare leave; it's *dark* out there and I might not find my way back. So it's either get used to such things—or send me away forever—or bust your nice new bladder.)

(Okay, Eunice, you've made your point.)

(Have I offended you again, Boss?)

(Eunice, you have *never* offended me. Sometimes you have startled me, sometimes you have surprised me and often delighted me. But you have *never* offended me. Not even with that list of blunt words.)

(Well...as I saw it, if you already knew them, you couldn't really be offended; if you didn't understand them, then you couldn't *possibly* be offended.)

(All right, dear. I'll quit trying to correct your speech. But for the record—I used all those words long before your mother was born. Possibly before your grandmother was born.) (Grandma is sixty-eight). (Learned 'em all and used them with relish long before your grandmother was born—with relish because they were sinful, then. I take it they aren't, to you kids now.)

(No, they're just words. Short-talk.)

(Not short-talk, as they were used before video corrupted the language. Except—What was that one word? 'Frimp'?)

(Oh. Shouldn't have included that one, Boss; it's not a classic word. Current slang, swing talk. It's a general verb, one which includes every possible way to copulate—) (Pfui! You youngsters. When I was a kid, we had at least two dozen words meaning 'frimp,' some new, some old besides the standard taboo words for it) (You didn't let me finish, Boss —every possible way to hook up two or more bodies—any number— of any sex, or combinations of all six sexes, and including far-out variations that would shock you right out of this bed. But swing is a today scene, so it's not surprising you hadn't heard the word 'frimp' before.)

(Oh, I'd heard it. I have news for you, infant.)

(Yes, sir? I mean 'Yes, Miss Smith,' dearie. *'Miss'* Smith—what a giggle I got when I first heard it. But it's nice, since it means both of us. Say, Rosy is all right, isn't he? Puts more into handkissing than some studs do into a romp on the pad.) (Sweetheart, you not only have a dirty mind—but it veers.) (How can I help having a dirty mind when it's actually *yours,* Boss-I'm hip deep in the stuff.) (Shut up, Eunice; it's my turn. The swing scene is nothing new. The Greeks had a word for it. So did the Romans. And so on through history. The orgy was relished in Victorian England. It was far from unknown in my youth in the heart of the Bible Belt, even though it was dangerous in those days. Eunice, as long as we are trying to get easy with each other, let me say this: Anything you've ever seen, or tried, or heard of, I did, or had done to me, before your grandmother was born—and if I liked it, I did it again and again and *again.* No matter how risky.)

The second voice was silent a moment. (Maybe we simply start younger today. Less risk and fewer rules.)

(Beg to doubt.)

(Oh, I'm sure we do. I told you how young I was when I got caught. Fifteen. And I started a year younger.)

(Eunice my love, the main difference between the young and the old, the cause of the so-called Generation Gap—a gap in understanding that has existed throughout all time—is that the young simply cannot believe that the old ever really were young. . . whereas to an old person his youth is something that happened just last week, and it annoys the hell out of him when someone in effect denies that this old duffer ever *owned* a youth.)

(Boss?) The thought was gentle and soft.

(Yes, dearest?)

(Boss, I always knew you were young underneath, behind all those horrid liver spots—knew it when I was alive, I mean...and wished dreadfully that you weren't old and sick in your body. It hurt me so, to see you hurt. Sometimes I went home and cried. Especially when it made you cross and you would say something you didn't mean and then be sorry. I *wanted* you to get well.. . and knew you couldn't. I was one of the first to sign up-Joe and I both—as soon as word reached us through the Rare Blood Club. Couldn't do it sooner or you might have found out—and forbidden me to.)

(Eunice, Eunice!)

(Don't you believe me?)

(Yes, darling, yes. . . but you're making us cry.)

(So blow your nose, Boss, and stop it. Because everything turned out *all right*. Look, you wanted to hear about my little bastard—will that take your mind off troubles we no longer have?)

(Uh. . . only if you want to, Eunice. My love. My only love.)

(I made it plain that I *wanted* to tell you, didn't I? I'll tell all—and that'll take a long time—if you want to hear. If you won't be shocked. Say 'Please,' Boss—because the details of my sex life ought to help you in handling your own sex life. *Our* sex life, that is. Or did you mean that stuff you were shoveling at Dr. Garcia about not being 'actively female'?)

(Uh. . . I don't know, Eunice, I haven't been a woman long enough to know *what* I want. Shucks, darling, instead of thinking like a girl I'm still ogling girls. That little redheaded nurse, for example.)

(So I noticed.)

(Was that sarcasm? Or jealousy?)

(What? I do not intend to be sarcastic, Boss dear; I don't want us ever to be nasty with each other. And jealousy is just a word in the dictionary to me. I simply meant that, when Winnie was making up our face and you were sneaking a peek down the neck of her smock every time she leaned over, I was staring as hard as you were. No bra. Cute ones, aren't they? Winnie is female and knows it. If you were male in your body as well as in your head, I wouldn't trust her as far as I could throw a bed.)

(I thought you said you weren't jealous?)

(I'm not. I merely meant that Winnie would trip you and beat you to the floor. But I was not criticizing her. I've nothing against girls. A girl can be quite a blast.)

Johann was slow in answering. (Eunice, uh, were you implying that you have—used to have—relations with other, uh—)

(Oh, Boss, don't be so early-twentieth-century; we've turned the corner on the twenty-first. Tell it bang. Do you mean 'Am I a Lez?' Homosexual?)

(No, not at all! Well, perhaps I did mean that in a way. At least I wanted you to clear up what you meant. As it didn't seem possible. You were married and—or was your marriage just a coverup? I suppose—)

(Quit supposing, dear. Bang. I was not homosexual and neither is Joe. Joe is a tomcat always ready to yowl, and wonderful at it. Except when he's painting; then he forgets everything else. But 'homosexual' isn't a word that bothers anyone my age, either the word or the fact.

And why not, with the Government practically subsidizing it with propaganda about too many babies that starts in kindergarten? If I had taken the Bilitis pledge, I would never have had that phony 'rheumatic fever.' But, while girls are cuddly and I've never had any inhibitions about them, I was—*always*—far too interested in boys to live on Gay Street But which team are you on, Boss? One minute you're telling me how you drool over Winnie, the next minute you seem upset that I drooled, too. So what are you going to do with us, dear?' Lefthanded? Righthanded? Both hands? Or no hands at all? I guess I could stand anything but the last. Do I have a vote?)

(Why, of course you do.)

(I wonder, Boss. You sputtered when I suggested that you could thank Doc Hedrick in bed. . . and sparked some more at the notion of going to bed with a girl. Sure you're not planning on sewing it up?)

(Oh, Eunice, don't talk silly! Beloved, happy as I am that we are together, that 'Generation Gap' is still there. My fault this time, as I have a lifelong habit of being careful in what I say to a woman, even one I am in bed with—)

(You're certainly in bed with *me!)*

(I certainly am. And I'm finding it ever harder to be flatly truthful with you—'tell it bang' as you say—than it is to adjust to being female. But before Dr. Hedrick brought up the matter I saw the implications—and complications—and consequences—of being female. . . and young and rich.)

('Rich.' I hadn't thought about *that* one.)

(Eunice beloved, we're going to *have* to think about it. Of course we're going to be 'actively female'—)

(Hooray!)

(Quiet, dear. If we were poor, the simplest thing would be to ask your Joe to take us back. If he would have us. But we *aren't* poor; we're embarrassingly rich—and a fortune is harder to get rid of than it is to accumulate. Believe me. When I was about seventy-five, I tried to unload my wealth while I was still living so that it would not go to my granddaughters. But to give away money without wasting most of it in. the process is as difficult as getting the genie back into the bottle. So I gave up and simply arranged my will to keep most of it out of the hands of my alleged descendants.)

('Alleged'?)

(Alleged. Eunice, my first wife was a sweet girl, much like yourself, I think. But the poor dear died in childbirth—bearing my one son, also dead for many years now. Agnes had made me promise to marry again and I did, almost at once. One daughter from that marriage and her mother divorced me before the child was a year old. I married a third time—again one daughter, again a divorce.

I never knew my daughters well and outlived both of them and their mothers. But—Eunice, you're a rare—blood yourself; do you know how blood types are inherited?)

(Not really.)

(Thought you might. Being mathematically inclined, the first time I laid eyes on an inheritance chart for blood types I understood it as well as I understand the multiplication tables. Having lost my first wife to childbirth, with both my second and third wives I made certain that donors were at hand before they went into delivery rooms. Second wife was type A, third was type B—years later I learned that both my putative daughters were type 0.)

(I think I missed something, Boss.)

(Eunice, it is impossible for a type-AB father to sire type-O children. Now wait—I did *not* hold it against my daughters; it was none of their doing. I would have loved Evelyn and Roberta—tried to, wanted to—but their mothers kept me away from them and turned them against me. Neither girl had any use for me. . . until it turned out that I was going to dispose of a lot of money someday—and then the switch from honest dislike to phony 'affection' was nauseating. I feel no obligation to my granddaughters since in fact they are *not my* granddaughters. Well? What do you think?)

(Uh—Boss, I don't see any need to comment.)

(So? Who was it not five minutes ago was saying that we ought to be absolutely frank with each other?)

(Well…I don't disagree with your conclusion, Boss, just with how you reached it. I don't see that heredity should enter into it. Seems to me you are resenting something that happened a long time ago—and that's not good. Not good for you, Boss.)

(Child, you don't know what you're talking about)

(Maybe not)

(No 'maybes' about it. A baby is a baby. Babies are to love and take care of and that's what this whole bloody mess is about, else none of it makes sense. Eunice, I told you that my first wife was something like you. Agnes was my Annabel Lee and we loved with a love that was more than a love and I had her for only a year—then she died giving me my son. Then I loved *him* just as much. When he was killed something died inside me. . . and I made a foolish fourth marriage hoping to bring it alive again by having another son. But I was lucky that time—no children and it merely cost me a chunk of money to get shut of it.)

(I'm sorry, Boss.)

(Nothing to be sorry about now. But I was telling you something else—Eunice, when we're up and around, remind me to dig into my jewelry case and show you my son's 'dog tag'—all that I have left of him.)

(If you want to. But isn't that morbid, dear? Look forward, not back.)

(Depends on how you look back. I don't grieve over him; I'm proud of him. He died honorably, fighting for his country. But that military dog tag shows his blood type. Type O.)

(Oh.)

(Yes, I said 'O'. So my son was no more my physical descendant than were my daughters. Didn't keep me from loving him.)

(Yes, but—you learned it from his identification tag? After he was dead?)

(Like hell I did. I knew it the day he was born; I had suspected that he might not be mine from the time Agnes turned out to be pregnant—and I accepted it. Eunice, I wore horns with dignity and always kept suspicions to myself. Just as well—as all my wives contributed to my

cornute state. Horns? Branching antlers! The husband who expects. anything else is riding for a fall. But I never had illusions about it, so it never took me by surprise. No reason why it should, as I got the best parts of my own training from married women, starting clear back in my early teens. I think that happens in every generation. But horns make a man's head ache only when he's stupid enough to believe that *his* wife is different—when all the evidence he has accumulated should cause him to assume the exact opposite.)

(Boss, you think *all* women are like that?)

(Oh, no! In my youth I knew many married couples in which both bride and groom—to the best of my knowledge and belief—went to the altar virgin and stayed faithful a lifetime. There may be couples like that among you kids today.)

(Some, I think. But you couldn't prove it by me.)

(Nor by me. Nor by all the kinseys who ever collected statistics. Eunice, sex is the one subject *everybody* lies about. But what I was saying is this: A man who takes his fun where he finds it, then marries and expects his wife to be different, is a fool. I wasn't that sort of fool. Let me tell you about Agnes.)

(Agnes was an angel—with round heels. That's obsolete slang which means what it sounds like. I don't think Agnes ever hated anyone in her short life and she loved as easily as she breathed. She—Eunice, you said you had started young?)

(Fourteen, Boss. Precocious slut, huh?)

(Precocious possibly, a slut never. Nor was my angel Agnes ever a slut and she happily gave away her virginity—so she told me—at twelve. I—)

('Twelve!')

(Surprised, dear? That Generation Gap again; your generation thinks it invented sex. Agnes was precocious; sixteen was fairly young in those days, from what a male could guess about it—not much!—and seventeen or eighteen was more common. I think. Actually encountering female virginity and, being *certan* of it—well, I'm no expert. But Agnes wasn't hanging up a record even for those days; I recall a girl in my grammar school who was 'putting out,' as kids called it then, at eleven—and getting away with it cold, teacher's pet and butter wouldn't melt in her mouth and winning pins for Sunday School attendance.

(My darling Agnes was like that except that Agnes's goodness wasn't pretense; she was good all the way through. She simply didn't see anything sinful about sex.)

(Boss, sex is *not* sinful.)

(Did I *ever* say it was? However, in those days I felt guilty about it, until Agnes cured me of such nonsense. She was sixteen and I was twenty and her father was a prof at the cow college I went to and I was invited to their house for dinner one Sunday night—and our first time happened on their living room sofa so fast it startled me, scared me some.)

(What frightened you, dear? Her parents?)

(Well, yes. Just upstairs and probably not asleep. Agnes being so young herself—age of consent was eighteen then and while I don't recall ever letting it stop me, boys were jumpy about it. And that night I wasn't prepared, not having expected it.)

(Prepared how, Boss?)

(Contraception. I had a year to go to get my degree, and no money and no job lined up, and having to get married wasn't something I relished.)

(But contraception is a *girl's* responsibility, Boss. That's why I felt so silly when I got caught. I wouldn't have dreamed of asking a boy to marry me on that account—even if I had been certain which boy. Once I knew I was caught I gutted my teeth and told my parents and took my scolding—Daddy was going to have to pay my fine; I was not yet licensed. Grim—but no talk of getting married. I wasn't asked who did it and never volunteered an opinion.)

(Didn't you have an opinion, Eunice?)

(Well. . . just an opinion. Let me tell it bang. Our basketball team and us three girl cheerleaders were all in the same hotel, with the coach and the girls' phys-ed teacher riding herd on us. Only they didn't; they went out on the town. So we gathered to celebrate in the suite the boys were in. Somebody had lettuce. Marijuana. I took two puffs and didn't like it—and went back to gin and ginger ale which tasted better and was almost as new to me.

Didn't have any intention of swinging; it wasn't the smart scene at our school and I had a steady I was faithful to—well, usually—who wasn't on the trip. But when the head cheerleader took her clothes off—well, there it was. So I counted days in my mind and decided I was safe by two days and peeled down, last of the three to do so. Nobody made me do it, Boss, no slightest flavor of rape. So how could I blame the boys?

(Only it turned out I didn't have two days leeway and by the middle of January I was fairly certain. Then I was certain. Then my parents were certain—and I was sent south to stay with an aunt while I recovered from rheumatic fever I never had. And recovered two hundred sixty-nine days after that championship game, barely in time to enter school in the fall. And graduated with my class.)

(But your *baby,* Eunice? Boy? Girl? How old now? Twelve? And where is the child?)

(Boss, I don't know. I signed an adoption waiver so that Daddy would get his money back if somebody with a baby license came along. Boss, is that fair? Five thousand dollars was a lot of money to my father—yet anyone on Welfare gets off free, or can even demand a free abortion. I can't see it.)

(You changed the subject, dear. Your baby?)

(Oh. They told me it was born dead: But I hear they usually say that if a girl signs the papers and somebody is waiting for it.)

(We can find out. If your baby didn't live, then the fine was never levied. Didn't your father tell you?)

(I never asked. It was a touchy subject, Boss. It was 'rheumatic fever,' never an unlicensed baby. Just as well, I guess, as when I turned eighteen, I was licensed for three with no questions raised.)

(Eunice, no matter what coverup was used, if your baby is living, we can find it!)

The second voice did not answer. Johann persisted.

(Well, Eunice?)

(Boss...it's better to let the dead past bury its dead.)

(You don't want children, Eunice?)

(That wasn't what I said. You said it didn't matter that your son wasn't really yours. I think you were right. But doesn't it cut both ways? If there is a child somewhere, almost thirteen now—we're strangers. I'm not the mother who loved it and brought it up; I'm nobody. *Really* nobody—you forget that I was killed.)

(Eunice! Oh, darling!)

(You see? If we found that boy, or girl, we couldn't admit that I'm still alive—alive again, I mean—inside your head. That's the thing we don't *dare* admit. . . or back they come with those horrid straps and we'll *never* be free.) She sighed. (But I wish I could have had *your* baby. You were telling me about Agnes, dearest. Tell me more. Am I really somewhat like her?)

(Very much like her, Eunice. Oh, I don't mean she looked like you. But if I believed in reincarnation—I don't—I would be tempted to think that you were Agnes, come back to me.)

(Maybe I am. Why don't you believe in it, Boss?)

(Uh. . . do you?)

(No. I mean I *didn't* believe in it, even though most of our friends did. I couldn't see any reason to believe either way, so I kept —my mouth shut. But, Boss, it gives one a different viewpoint to have been killed...and then turn out not to stay dead. Dearest Boss—you think I'm a figment of your imagination, don't you?)

Johann did not answer. The voice went on: (Don't be afraid to admit it, Boss; you won't offend me. *I* know I'm *me.* I don't need proof. But you do. You need to know. Admit it, darling. Be open with me.)

She sighed again. (Eunice, I do need to know. But—if I'm crazy—if you are just my own mind talking back to me—I'd rather not know it. Darling, forgive me. . . but I was relieved when you told me that you didn't want us to try to find your baby.)

(I knew you were relieved. . . and I knew why. Boss, don't be so right-now. We have all the time in the world, so relax and be happy. Proof will turn up—something I know and that you couldn't possibly know except through me. And that will be that, and you will be as certain as I am.)

She nodded to herself. (That makes sense, Eunice—and it sounds like the scoldings you used to give me when I got fretful. You used to mother me.)

(I'm going to go right on mothering you, and scolding you when you need it—and loving you all the time, Boss. But there is one thing there is some hurry about.)

(What?)

(That bedpan. Unless you want us to have a childish accident.)

(Oh, damn!)

(Relax, Boss. Get used to it.)

(Damnation, I do *not* want to be placed on a bedpan by a nurse like a baby being put on a potty. You know what'll happen? Nothing! I'll clamp down and not be able to do it. Eunice, there's my bathroom through that door—can't we ask to be helped into there...and left in private?)

(Boss, you know what would happen. You ring for the nurse and tell her. She'll try to argue you out of it. Then she'll go find Dr. Garcia. He'll show up and argue, too. If you're stubborn, he'll get Jake. By the time Jake shows up, we've wet the bed.)

(Eunice, you're infuriating. All right, let's ring for that goddam pan.)

(Hold it, Boss. Can we get this side rail down?)

(Huh?)

(If we can, what's stopping us from going to the bathroom without asking?)

(But, Eunice-—I haven't walked in more than a year!)

(That was before you got this secondhand, good-as-new, factory-reconditioned, female body, Boss.)

(You think we can walk?)

(Let's find out. If standing up makes us dizzy, we can hang onto the bed and ease down to the floor. I'm *certain* we can crawl, Boss.)

(Let's do it!)

(Let's see how this side rail works.)

Johann found the guard rails baffling. There seemed to be no way for a person in the bed to let them down. Not surprising, she told herself; if these bars were meant to protect a befuddled patient, then proper design called for it to be impossible for a patient to remove them. (Eunice, we're going to have to ring for the nurse. Damn!) (Don't give up, Boss. Maybe it's a button on the console. If we scrooch around till our head is at the foot, I think we can reach the console.)

So Johann pulled up her knees and twisted and switched ends—and was surprised and delighted at how limber her new body was. Then she stretched her right arm through the bars at the foot of the bed, could not quite reach the console—~-and cussed, and then discovered how the side rails locked—two simple catches, one for each side, at the foot of the bed below the springs, out of reach (no doubt the designer thought) of any patient ill enough to need the side rails.

She thumbed open the leftside catch; the rail, counterweighted, pushed down easily. She giggled. (How're we doing, partner?) (Fine so far, Boss. Hang onto the end of the bed while we get our feet down. Keel over and they'll put us in a wet pack—so hang on!)

Johann got her feet to the floor, stood trembling while she clung to the bed. (Dizzy.) (Of course. It will go away. Steady down, dear. Boss, I think we could walk . . . but let's play safe and crawl. If we get dizzy again and take a dive on the rug, Winnie will be in here like a shot—and from then on they'll feed us through the bars. What do you think?) (I think we had better reach that pot pronto before we have to blame it on the cat. We crawl.)

Getting to the floor was no problem; crawling was another matter, she caught her knees on the hospital gown. So she sat up-Johann discovered that her new body folded easily and naturally into a contortion young Johann had found difficult at twelve.

She did not stop to wonder. The bed jacket was no trouble; it fastened in front with a magnostrip, she shrugged it off and laid it aside. But the hospital gown fastened in back. (Stickstrip?) (Just a tie-tie. Feels like a bow knot. Careful, Boss, don't snarl it.)

The gown joined the jacket. Unencumbered now, Johann resumed crawling. The bath-dressing room door snapped out of her way and she reached her objective. Presently she sighed in relief. (I feel better.) (That makes two of us. Want to try walking back? As far as we have something to grab onto? Or clear to the bed if we whistle a chair and have it roll in front of us.) (I'm game.)

Johann found that she was not unsteady on her feet—walking was easier than it had been for twenty years.

Nevertheless she stayed close to the walls, the bathroom having been equipped years ago with grab rails for a frail old man grimly afraid of falling. It took her close to a tall three-way mirror in the dressing room end. She stopped.

Then she stepped into the central spot and looked at herself. (My God, Eunice, but you're beautiful!)

(My God, but we're a sloppy bitch! BOSS, look at those toenails! Claws. Talons. And, oh dear, my breasts sag! And my belly is positively flabby.)

(Beautiful. Utterly gorgeous. Eunice beloved, I always wanted to see you stark naked. And now I do.)

(So you do. I wish I had had time to get looking nice before you saw me. Hair a mess. And—yes, I thought so. We stink.) (Hey!) (Sorry, hit the panic button by mistake. Boss, we're going to have a hot, soapy bath before we get back into that bed. That's straight from Washington. We can't do much about flab in one day—hut we can get clean.) She turned and inspected her buttocks. (Oh, dear! A broad should be broad—but not *that* broad.) (Eunice, that's the prettiest fanny in the state. In the whole country.) (Used to be, maybe. And it's going to be again and that's a promise, Boss. Tomorrow morning we start systematic exercise. Tighten up everything.) (Okay, if you say so —though I still say you're the most gorgeously beautiful thing I ever saw in my life. Uh, Eunice? That mermaid getup you wore once—You were wearing a trick bra with it weren't you?)

She giggled. (Heavens, no. Just me, Boss. And paint. But my breasts were firm as rocks then; Joe had something to work with. I guess that's the nakedest you've ever seen me.)

(What do you think I'm staring at *now,* Beautiful?)

(Oh, I meant back before I was killed. When I was your 'nice' girl who didn't dare let you see me as naked as I knew you would like, you dirty old man. Although you *could* have seen me naked—and much more beautiful—any time you had gotten up the nerve to ask.)

(I'm going to spend hours every day standing right here and staring.)

(No reason why you shouldn't, dear; it's your body now. But let's put an exercise mat on the floor and get in that toning up at the same time. Most exercises can be done better with the aid of a full-length mirror. I think we—)

The door snapped open. *"Miss Smith!"*

Johann started with surprise, then answered savagely, "Miss Gersten, what the devil do you mean by bursting into my bath without knocking?"

The nurse ignored the outburst, hurried to her patient, put an arm around her. "Lean on my shoulder, let's get you back into bed. Oh, dear, I don't know what Dr. Garcia will say! He'll kill me—are you all right?" Johann saw that the little nurse was about to cry.

"Of course I'm all right." Johann tried to shrug off the arm, found that the girl was stronger than she looked. "You didn't answer."

The nurse did cry then. "Oh, please, dear, don't argue with me! Let's get you into bed before you hurt yourself. Maybe Dr. Garcia won't be quite so angry."

Seeing that the younger woman was most unprofessionally disturbed, Johann let herself be urged out into the bedroom and to the bed. The little redhead caught her breath. "There! Now if you'll hold tight around my neck, I can get your legs up-you bad, bad girl! To worry me so!"

Johann did not cooperate. "Winnie."

"Yes, dear? Oh, do let me get you into bed! Doctor will be terribly angry."

"Not so fast. If you're planning on telling teacher, go do it. I can hang onto the bed, I won't fall."

The nurse looked desperate. "Are you trying to get me fired, Miss? Maybe blacklisted? What have I ever done to you?"

"Winnie dear."

"Yes?"

"You aren't going to say a word to Dr. Garcia." Johann slid an arm around the redhead's waist. "Are you?"

The nurse looked flustered but did not pull away. "Well, I should. I'm supposed to report everything."

"But you aren't going to. And I'm not going to tell him, either. Tight secret, just you and me. And no huhu for anyone."

"Well. . . I won't if you won't."

"Promise?"

"I promise."

Johann kissed her. Winnie did not dodge but seemed startled and somewhat timid. Then she caught her breath and her lips opened and the kiss progressed rapidly.

The nurse pulled her mouth free and said huskily, "I could get fired almost as quickly for *this."* She did not say what "this" was. She ignored the fact that Johann's free hand was cupping one of her breasts,

"So we'll stop and I'll get into bed—no, don't help me; I don't need it."

Johann proved it by doing it. The nurse pulled the sheet over her,, at once resumed her professional *persona.* "Now let's put our clothes back on, shall we?" She stooped to retrieve them. "What a naughty girl, throwing her clothes on the floor. And giving me such a fright."

"Stuff 'em in the hamper. I'm not going to wear them."

"Now, now, dear. You needn't wear the jacket. Just the gown. Or do you want a fresh one?"

"Winnie, I'm not going to wear those silly angel robes ever again, so chuck it. You can hang up the jacket. But I won't wear a hospital gown. I'll stay raw."

"Dr. Garcia—"

"Quit threatening me with Dr. Garcia. We're past that. Aren't we?"

The nurse bit her lip. "Well. . . yes."

"It's none of his business if I sleep raw. And I shall, until something more appropriate can be bought for me. Or—Do you sleep in the house? Maybe you could lend me a nightie. A girl-type nightgown."

"Well, yes, I sleep here. But I can't lend you a gown because, well —I sleep raw myself."

"Sensible."

"But there are nightgowns and negligees and things right here. In your dressing room."

"Be damned. Who ordered them?"

"I don't know, Miss Smith. They were brought in and —stored there when, well, when it became clear that you were going to need them."

"Good planning. Uh, do you know if they're my size? Whatever that, size is, I don't know myself."

"Oh, yes! I helped measure you."

"More good planning. Find me the most feminine -nightgown in there—I might as well practice."

"Glad to." The nurse left the bedroom.

(Butch.) (Oh, nonsense, Eunice. Sure, she's a cute little trick...but I simply suddenly realized what treatment she would respond to. Had to dig back into my memory; I'm out of practice.) ('Butch' I said. You enjoyed it.) (Didn't *you* enjoy it?) (Sure I did. She kisses like don't-stop. But I'm not a hypocrite about it. *Who* was shocked when I said girls could be a blast? You, you dirty old hypocrite. And butch.)

(Eunice, you are out of your frimping mind. I've had most of a century to appreciate girls; do you expect me to change overnight? The time I'll feel like a queer is the first time some *man* kisses us. I'll probably faint.) (Poor Boss. Doesn't know whether he's A.C. or D.C. Never mind, dear, Eunice will coach you—as I *do* know how to kiss a man.)

(I imagine you do.) (Was there salt in that one? Never mind, I know how. *He* faints. Boss, you claimed you had done everything. *Everything?)* (See here, little snoopy, I am not going to give you any excuse to call me both 'butch' and 'pansy' in the same sentence. You can have my memoirs later. But, Eunice, speaking of butch, is that what Winnie is? She certainly responded.) (More 'sweetheart' than 'butch' is my guess, though she may stroll both sides of Gay Street. But if you were asking 'Is she a Lez?' then I would bet anything she's not. Ambi, sure, but *much* more interested in men. Haven't you watched her? Sparks.)

Winnie returned with a nightgown in each hand. "I think these two are the prettiest, Miss Smith. I thought—"

"Winnie."

"Yes, Miss Smith?"

“No ‘Miss Smith.’ I mean you are not to call me ‘Miss Smith.’ Not after kissing me. Or did I get the message wrong?” (Butch.) (Shut up, Eunice. She’s going to help us.)

The nurse said nothing, blushed.

Johann said gently, “That’s answer enough, dear. So call me—no, damn it, I don’t want you to call me ‘Johann.’ I need a new name. Winnie dear, what girl’s name is closest to ‘Johann’?”

“Uh, ‘Johanna.’

“Mmmm, yes. But there is already a ‘Johanna’ in my family. Got another?”

“Well . . . if you called yourself ‘Joan’ and gave it the two-syllable pronounciation, it would be almost like ‘Johann’ except for the ‘J’ instead of the ‘Y’ sound.”

“Perfect! You’ve named me. I think that makes you my godmother. Do you mind being godmother to an old, old man who has just been reborn as a woman?”

Winnie smiled. “I’m flattered.”

“So call mc ‘Joan,’ not ‘Miss Smith.’ Uh, I need a middle name. ‘Eunice.’ “ (Why, Boss, now I’m flattered.)—(Yes, beloved. Now shut up.) “ ‘Joan Eunice Smith.’ Winnie, do you know why that’s my middle name?”

The nurse said slowly, “I’m not supposed to know.”

“Then you do know. It’s for the sweet and gracious lady who gave me this wonderful body—and I hope she can hear rue wherever she is.” (I *can,* Boss!) “Put down those gowns and come here and name me with my new name.

Name me formally, for it’s all the christening I will ever have. Then seal it.”

Almost timidly the little redhead came close to the bed, bent over her patient. She said softly, “I name thee ‘Joan Eunice’ “—and kissed her.

Perhaps Winnie intended to make it a formal peck; Joan Eunice did not let it be. Both women were leaking tears before it was over.

Joan patted the nurse’s cheek and let her straighten up. “Thank you, dear. I’m Joan now. Joan Eunice. Hand me a tissue and you need one, too.” (How was that one, Eunice?) (Butch, your technique is improving. I felt that one clear down in our toes.) (Who the hell are you calling ‘Butch,’ Butch? My name is Joan Eunice.) (No, you’re Joan and *I* am Eunice and collectively we’re Joan Eunice and I’ve never had a nicer present, Boss. Joan. And I know you’re not a butch but you had better cool it with our godmother. Unless you mean business.)

“Which gown do you like. . . Joan?”

“Winnie, I don’t know first verse about women’s clothes. What do you think?”

"Well...this Cretan design is rather extreme. But you have the figure to justify it." (No, Boss! Take the one with. the high neckline.) (Eunice, I thought you were proud of our bumps? They don't really sag.) (It's not that at all. Trust me, Joan; I know what I'm doing.)

"You may be right, Winnie. But it may not be the right gown for doctors and lawyers. I had better start easy, with the high neckline. Help me, please."

While they were getting Joan into a nightgown she asked, "Winnie? How did you happen to burst in on me?"

"What? Why, the displays of course. Both your heart rate and respiration were way up. Exercise. So I rushed in to check—and sure enough, my bad girl had managed to get out of bed. Oh, how you frightened me, dear!"

"Winnie, there's a hole in that story I could throw a dog through."

The nurse stiffened. "What do you mean—Joan?"

"My heart rate and respiration must have climbed a good ten minutes before you came in."

"Oh, dear! You won't tell on me? You promised."

"I did and so did you. Winnie with the sweet mouth, from now on neither of us is ever going to tell Dr. Garcia a durn thing unless *we* think he needs to know it. You and I, dear. Solid. Now tell me what happened."

"Uh . . . oh, this is silly. Whoever is on watch at the remotes isn't supposed to take his eyes off the displays even a moment. But you were doing so nicely . . . and Mrs. Sloan was taking a nap—which she needed, poor dear—and Dr. Garcia had gone to check on Mr. Salomon and he takes a grim view of being sent for unless the patient needs him. . . and the washroom is just down the hall from the displays—"

"I get it. We had the same urge at the same time. Right?"

Winnie blushed again. "I deserve to be fired. I know better than to take any chance with a patient. Patients do the damnedest things."

"You aren't ever going to be fired, you're going to be here long after Dr. Garcia leaves. If you'll stay. How do I look?"

"Simply lovely. I wouldn't have guessed it but I do think this gown does more for you than that Cretan number." (What did I tell you, Boss?) "But I'm going to put more lipstick on you. It's all gone."

"Now how in the world did *that* happen?"

Winnie giggled. "Don't ask *me.* But guess maybe I'll put on some myself before Doctor sees us. Joan? Is it all right for me to call you 'Miss Joan' when Dr. Garcia is around? He's terribly strict."

"Tell him to go soak his head. Sho', sho', honey, if it makes you feel easier. But I'm 'Joan' when he's not around. You're my coach. You're going to make a lady out of me." (That's *my* job, Boss. And a tough one, I can see.) (So you need help with it. Don't joggle my elbow; Winnie is our secret weapon.) (Okay. But this weapon night explode.) (Look, infant, I learned to cope with women long before your grandmother was born.)

“I’ll be glad to help, any way I can . . . Joan dear.”

“Then you can start by convincing dear Doctor that I’m well enough for a tub bath. I stink. Ladies ought not to stink.”

“Why, you had a bed bath’ not two hours ago!”

“I need more than a bed bath and you know it. Sell him the idea that you can help me into and-out of the tub and keep me from falling. If you have trouble with him, fetch him in and I’ll throw a tantrum. If he gives us grief, I’ll make him scrub my back.” Joan grinned. “So get lipstick on us; then go find him.”

(Joan Boss honey, see what I mean about the high neckline job? See what it does for us?) (I know that I feel somewhat more covered up. But only somewhat. Eunice, those breast panels are wicked.) (Oh, full, they’re not even transparent, just translucent. But that’s why this nightgown is so much sexier than the Cretan one. Men always mistake bare skin for sexiness. A typical male mistake~) (Maybe so, but I have never in my long life complained about bare skin.) (I won’t argue, Joan, but I’m going to pick out our clothes. Until you start thinking like a woman. But I had a specific reason for picking the gown which is—superficially—more modest. So that we will have it on when Jake comes in.)

(Eunice, Jake has probably gone home. He’s had a rough time.)

(So he has and what do you think I’m talking about? He’s still in the house; he would not leave without saying goodbye.)

(Oh, nonsense, Jake and I aren’t that formal.)

(Boss, Jake is a gentleman to his fingertips. He might feel free to duck out without formality in dealing with his old friend Johann Smith—but *not* with a lady. ‘Johann’ is one thing, ‘Joan Eunice’ is another matter.)

(But he *knows* I’m Johann.)

(So? Then *why* did he kiss our hand? Joan, I’m going to have to watch you every second; you don’t know *anything* about men.)

(I spent almost a century *being* one.)

(Irrelevant. Hush up; he maybe here any time, I’ve got to tell this bang. Joan, the last few months before I was killed I was Jake’s mistress.)

(How was the old goat?)

(Is *that* all you have to say?)

(Eunice, you think I know nothing about men. Possibly true, in one sense. But *I* can teach *you* about men—from the inside—the way you can teach me about men from the outside. Jake is tough. Yet I saw him collapse twice in grief over you. Understandable that your death would upset him some. Understandable that it was a strain on him to help out in the masquerade of not letting me know that I had inherited your lovely body. Nevertheless you were just a girl he had known through business, one who helped him with my affairs. Not one he knew intimately. Yet this tough old lawyer collapsed twice. Over you. So he *must* have known you far better than anyone guessed. How? And *where?* Only one answer. In bed.)

(Not always in bed, you dirty old man with a girl's name. In bed, certainly. But lots of other places, too. In his car. Is *your* car. Several times in this house—)

(Be damned! Then all my servants know it, too.)

(I doubt if they suspect. We used your study to work—and did work—and Cunningham didn't let us be disturbed any more than he would have disturbed you and me. You asked a rude question, you'll get a blunt answer. The old goat was *good.* And quite daring in grabbing every chance. We hardly missed a day up to the time I was killed.)

(A couple of j.d.'s, you two. Well, 'My hat's off to the Duke.')

(Jealous, Boss?)

(No, envious. I wouldn't have been up to it the first day] laid eyes on you. Impossible. And now still more impossible. Just envious. The old goat.)

(Not impossible, Joan.)

(Eh?)

(I was shocked when I saw Jake. My death must have hurt him terribly. I know it did, he loved me. But we can pull him out of it, Joan, you and I—only this time we won't use your study.)

(What? Why, that's *incest!)*

(Don't be ridiculous, dear. I was no relation to Jake and I don't think you are, either.)

(I mean it would *feel* like incest. Jake? *Jake?* Eunice, when I admitted that J supposed that I would— eventually—be 'actively female,' I didn't have *Jake* in mind.)

(I did.)

(Then get it out of your mind! Forget it. Dr. Hedrick if you want to —at least I'll try to cooperate—after I get used to being female. Your former husband, Joe, I owe that to yo-u—)

(Not Joe.)

(Why not? You spoke highly of him in that respect, and I always thought you thought well of him in other respects. Not urging you—hell, I can't think about sex other than abstractly about *any* man; rm not yet reoriented. But I had already decided to go along with your need for Joe.)

(Boss, I *can't.* Not with Joe. Because he *was* my husband. To him, I'd be a zombie. A walking corpse. I doubt if he would touch us. . . and if he did, I'd be terribly tempted to tell him. Tell him I'm still here. Can't. I know it.)

(And *I* can't make it with Jake. It's the same with Jake, too, you know. A walking corpse.)

(Not quite the same. Surely, he knows we're a patchwork, your brain Sand my body. But he loved us both. He's loved you much longer than he's loved me. While Joe doesn't even know you.)

(Jake loved *me?* Eunice, you're out of your mind!)

(Impossible, dear; I don't have one to be out of. Why do you think Jake put up with your bad temper? Not for money; he's rich, even though he's not as rich as you are. Why is he still around at all? For *me?* He would have avoided seeing me—this body—had it been possible; it hurts him. He stuck because *you* needed him. Look, dear—Joan, I mean—Joan, this is your big sister Eunice talking, you listen to her. Be nice to Jake. Be a sweet girl to Jake. Then let things run easy. I'm not asking you to do anything you don't want to do—heavens, no! Jake would spot it if you forced yourself; he's no fool about women. Just be sweet. Don't be Johann, be Joan. Be little and feminine and let him take care of you.)

(Well—I'll try. Jake is going to think I'm off my rocker.) (He's going to think you're a darling girl. It's possible he'd rather be your father than what he was to me. If so, we'll be good and let him baby us.)

She sighed. (I'll try, Eunice. But I don't know. Jake!)

(That's my good girl, Joan. Be helpless and female; Jake will do the rest.)

Dr. Garcia bustled in, came straight to the bed. "What's this about a tub bath? I thought I made it plain that you weren't to rush things."

(Don't let him argue, Joan!) (Watch me trip him!) "Oh Doctor, you startled me so!"

"Eh? How?"

"Bursting in on me without warning. Is that nice?"

Garcia looked baffled. "Miss Smith, I've been here more than a year and I've always entered this room without ceremony. Am I to understand that you find it offensive? After all this time?"

"That's not the point, Doctor. When you first came here you were attending a helpless old man. Then you were helping Dr. Hedrick with a female patient who was paralyzed, and unconscious most of the time—and I do appreciate the care you gave that helpless patient, for I am she. But things change. I am now having to learn to be a woman and, if possible, a lady. It's not easy. Won't you help me by showing me the formal courtesies you show other ladies?"

Garcia reddened slightly. "A doctor doesn't have time for formalities."

(Slug him again, dearie! He's still twitching.) (I shall!) "Doctor, if I were in danger, I would expect you to rush in without buzzing; I depend on you. But you came in to tell me I can't have a bath—surely not an emergency. I'm not asking much—just asking you to think of this room, not as an old man's sickroom, but as a lady's boudoir. To help me. Please?"

Dr. Garcia said stiffly, "Very well, Miss Smith. I shall remember."

"Thank you, sir. By the way, my name is 'Joan Smith' now; I can't go on being 'Johann.' You might call me 'Miss Joan' to help me get used to it. Or simply 'Joan,' as I don't want to be unnecessarily formal with my doctor, truly I don't. Just that little touch of formality that I need as training in learning how to be my new self. Will you call me 'Joan'?"

He grudged a smile. "All right—Joan."

She gave him Eunice's best you-wonderful-man smile.

"That sounds nice. And you *are* welcome any time, Doctor, either professionally or just to visit. Which I hope you will do. Just have the nurse make sure I'm ready to receive a gentleman. Things. You know." She raised herself on an elbow and looked at him, acutely aware of her "modest" nightgown. "Such as lipstick." She wet her lips. "Odd to have to wear it. Is it on properly? Does it look right?"

"You look lovely!"

(Cancel and erase—change 'butch' to 'tart.' You're a natural-born tart, dearie. Where's your beat?) (Stow it, sister tart; I haven't finished hustling him.) "Why, thank you sir! Now tell me why I can't have a hot, soapy, tub bath so that I will *feel* lovely, too. I'll follow your orders, Doctor, but I would like to understand them. Can you tell me without using a lot of long medical words?"

"Well— Joan, my objection is to the tub itself. People are forever breaking legs or cracking skulls through slipping in bathtubs. And you haven't even learned to stand up, much less walk."

"True." Joan threw the sheet back, dropped her feet over the edge of the bed, sat up—controlled a slight dizziness and smiled. "Let's see if I can. Will you help me, Doctor? Arm around me perhaps?"

"Lie down!"

"Must I? I feel fine. Is there a stool? My feet don't touch the floor."

"Miss Sm— Joan, damn it, so hell me I'm going to quit this business and buy a junkyard! Lie down while I call a nurse. Then we'll get on each side of you and let you stand up. When you find out how weak and dizzy you are, I'll expect you to go back to bed and stay there."

"Yes, Doctor," she said meekly, and lay down.

Winnie answered the summons. "You rang, Doctor?"

"We're going to try a practice walk. Help me get the patient up. You take her left side."

"Yes, sir."

With too much help Joan got out of bed, stood up. The room wobbled a little but she steadied herself on Winnie while letting her arm be featherlight on the Doctor's shoulder.

"How do you feel?"

"Fine. We should have music; I feel like dancing."

"Feel like it if you wish, don't try it. Slow march now and short steps." They walked toward the door, while Joan relished the thick pile of the rug against her bare feet. Walking was fun; *everything* was fun! (Eunice my love, do you realize what a perfect body this is?) (It's way out of shape. But two weeks' hard work and we'll have it tuned up.) (Oh, pooh, I never felt this good even as a child.) (You'll see, Boss. Say a vertical split with our hair sweeping the floor, then hold it through ten controlled breaths—and come out of it with a slow walkover and melt on down into a full Lotus with never a hurried movement. Just wait.) (You think we'll be able to do that? I was clumsy even as a boy.) (No huhu. The body remembers, dear.)

They stopped. "Now turn around slowly, and bead for your bed."

"Doctor? Now that I'm up, why not head me straight for that soap and water?"

"Aren't you tired?"

"Not a bit. I didn't lean on you, did I? I thought I had been promised a real bath as soon as I was able to walk.

Must I stand on my hands as well? Back away and I'll try." She let go of his arm.

The Doctor promptly put his arm around her waist "No nonsense! Nurse, that tub has grab rails; make her use them."

"Yes, Doctor."

"If this patient falls, you had better head for Canada—you can find the shortest route by following me. If you're fast enough."

"Winnie won't let me fall," Joan said warmly while warmly leaning into his arm. "But if you're worried, you can come in and help. Scrub my back."

He snorted. "Ten minutes ago you bawled me out merely for walking into your bedroom unannounced."

"And if you do it again, I shall again. That's social; this is professional. Doctor, I'm well aware that you've seen my new body—professionally—many times. One more time won't kill me." She wiggled slightly in his arm.

"Scrubbing a patient's back is *not* part of my professional duties. Lukewarm tub, Nurse, and don't let her stay in too long."

Once inside the bathroom and the door shut Joan threw her arms around her nurse and giggled. “Honey, did you see his face?”

Winnie shook her head. “Joan, you don’t need me to coach you in how to be female. You already know.”

“Oh, but I *do* need you, dear. Because I *don’t* know. I simply used on dear Doctor things that used to fluster me when I was his age—and male.” She giggled again. “For a second I thought he was going to take my dare and scrub my back.” (And *I* thought you were going to lay him, right on the rug.) (Oh, be quiet, Eunice; I didn’t even pinch him.) Joan let go of Winnie, stepped back, and started to skin the gown over her head. “Now for a bath. Oh boy!”

“Joan! *Please* hold onto something. Doctor might show up any second.”

“Oh, pooh, he wouldn’t dare. Never again.” Joan turned and touched the latch switch. “Now he can’t, so quit fretting.”

“You mustn’t lock the door. Hospital baths are never locked.”

“This isn’t a hospital and I’ll lock my bathroom door whenever I like and if Dr. Garcia finds out I’ve locked it the only way he *can—by* trying to walk in—and dares to mention it, I’ll scream my head off to Jake Salomon and there’ll be a change in doctors. Winnie dear, I wasn’t a cranky old man more years than I care to think about without learning how to get my own way. I just have to use different weapons now. Want to peel off that uniform and hang it in the dressing room? I not only may splash you but this end is going to fill up with steam.”

“No, Joan—lukewarm tub. You heard him.”

“I heard him and it’s going to be the temperature *I* like and that’s another thing he’ll never know and you know that I’m lively as a frog and not the weak kitten he insists on thinking I am; a hot tub won’t hurt me. If you want to get your uniform clammy, that’s your business. Better yet, climb into the tub with me. It’s big, and short as I am now, I might slide under and drown, alone.”

“I shouldn’t,” Winnie said slowly.

“Isn’t that a horrid thought? Patient faints in tub and drowns before nurse can reach her. Not good enough for flash news but they might mention it on the late-late-late early news.”

“Joan! You’re teasing me.” (You sure are, Boss. Erase and correct again—Both tart *and* butch.) (Fiddlesticks, Eunice. That’s a big enough tub for all three of us.)

Winnie bit her lip and slowly unfastened her smock. Joan turned away and started filling the tub, adjusted the temperature, and avoided watching her.

An hour later Joan was seated in an easy chair, with her feet on a stool. To the nightgown had been added a filmy negligee and a pair of high-heeled boudoir pumps. Her hair had been arranged, her face had been most carefully made up, and she was lavishly scented with a cologne labeled "April Mist" but which deserved the title of "Criminal Assault." Her toenails were trimmed, not to Eunice's satisfaction but well enough for the time being. Best of all, she was enjoying the euphoria of a woman who is utterly clean, scented and powdered, and dressed attractively.

Beds had been switched, the room no longer held any flavor of sickroom, and Joan found that this greatly increased her feeling of wellbeing. Eunice's stenodesk had been restored to its usual spot beyond Johann's baby grand piano, Joan having learned that it was in her study where it had last been used, and had told Cunningham to have it brought in. It did not fit the room—but it fitted her notion of what the room should be; it was homey, it belonged.

She was alone, Winnie having gone to invite Mr. Salomon to dine with his hostess-ward. Joan sighed with satisfaction. (Feel better, hon? I do.) (Heavens, yes. But why did you lose your nerve?) (Oh, piffle, Eunice! I never intended to seduce her.) (Liar. Hypocrite. Dirty old man. You had her all set. Then you went chicken. I've met men like you before, dearie—talk a good game, then lose their nerve in the clutch. Cowardly Casanovas. Pfui!)

(Nonsense! You don't shoot ducks on water. If I ever make a real pass at her—I'm not saying I will but I admit she's a cuddlesome little bundle—) (She is indeed!) (Oh, shut up! If I ever do, I'll give her a sporting chance—not grab her when she dasn't scream.) ('Sporting chance' my tired back. Listen to your big sister, Joan—sex isn't a sport, it's a way to be happy. There is *nothing* more exasperating to a woman than to be ready to give in—then have the matter dropped. You'll find out. You'll cry in your pillow and hate every man alive. Till the next time, that is.)

(Eunice? You've never had that sort of turndown, have you? I don't believe it.) (Happens to every woman, Joan. Men are sissies, if we women weren't so willing, if we didn't just plain lead 'em by the hand, the race would die out.)

(Uh—You know more about a woman than I do—)

(Lots more!) (—so let's talk about specifics. We're clean now and I know we're pretty; I checked us in the big glass and you agreed. But it isn't the job you used to turn out. I don't mean body paint, wouldn't be appropriate now anyhow. But, what does it take? Just that 'tuning up'? Exercise?)

('More than that, Boss—although exercise is essential. You're talking about a professional job?) (Yes. The works.) (Well, I used to do myself—but I had had lots of practice, plus expert help from Joe. But let's say you want the best and don't care what it costs—) (Certainly! What's money? I can't get rid of it.) (All right, say you retain Helena Rubinstein, Limited, or some other top glamour shop. Say you phone and tell th~n to send a full team.

They would send an art director—male, but he may not be all that male and he's seen more female bodies unmade-up than an undertaker—and he doesn't touch you; he's too high up. He creates. And bosses. Won't look at you until several others get you ready. Minimum, bath girl, masseuse, manicurist, pedicurist, coiffeuse, depilatrix, parfumiste, lace and skin team of at least four, costume designer, highlight and accent specialist, and assistants for all of these if you expect the job done in less than all day. If you put a time limit on it, the price goes up—and if you don't, the price goes up.)

(Say that again?)

(It's like taxes. Any way you play it the price goes up. Boss, we don't need them. With what I know and the chassis we have to work with and a good lady's maid, you can be as glamorous as you like. I don't know where you would find a creative paint man equal to Joe; nevertheless there are good ones for hire. We can shop the market, we'll find one.)

(Eunice, I had no idea that being a woman was so complicated.)

(Relax, Boss. Being a woman is easier than being a man—and *lots* more fun. I'm going to teach you to be a twenty-first-century woman—and I'd be pleased if you would teach me how it was to be a twentieth-century man, and we'll close that silly 'Generation Gap.' Understand each other as well as loving each other.)

(Beloved.)

(I think you're pretty nice, too, you cranky old bastard. With your brain and my body, we make a fine team. We'll get by.) (I'm sure we will, darling.) (We will. The first thing we need is a *good* lady's maid—scarce as whales in Kansas. We'll probably have to train one. Then lose her as soon as she's worth anything.) (Eunice, do we need a maid? You used to do yourself.) (I did, and kept house for Joe, and was your secretary and worked any hours you wanted me. But you're not used to that, Boss. You had a valet.) (Yes, of course. But I was very old and didn't have time to waste on such things. Eunice, one of the worst parts about getting old is that the days get shorter while the demands on your time increase. I didn't want a valet; I was forced into it. Didn't enjoy being dependent on a secretary, either—until *you* came along.)

(Dear Boss. Joan, we *will* need a maid. But not a secretary until you're active in business again—) (Won't be!) (We'll see. You may have to be. But may not need a secretary unless you get pushed for time. I can handle it. And thanks for having Betsy brought in; it makes me feel at home to see her again. My stenodesk, I mean. Pet name.)

(‘Betsy,’ huh? I always thought of it as ‘the Octopus.’)

(Why, what a nasty name to apply to a nice, respectable well-behaved machine! Boss, I’m not sure I’m speaking to you. I’m glad Betsy isn’t switched on; if she had heard that her feelings would be hurt.)

(Eunice, don’t be silly. I wonder what’s keeping Jake?)

(Probably cutting his toenails. Lesson number two in. how to be a woman: Men are almost always late but you never, never, never notice it—because they pride: themselves on promptness. Boss, you didn’t quite promise Winnie to stay in this chair—when she gave you strict orders.) (Of course not. Because it might not suit me. And it doesn’t; I want to try the eighty-eight. Eunice, two gets you seven it hasn’t been kept in tune—and I gave Cunningham orders about both pianos, this baby and the concert grand downstairs, not five years ago. So let’s see.)

She stood up, did not notice that high heels gave her no trouble, and glided gracefully over to the little piano, sat down and opened it—let the first bars of Dvorak’s Slavonic Dance # 10 run through her mind, then started to play—

—and achieved a clash of noise.

“What the hell!” She looked at the keyboard, then hit middle C with her right forefinger. It sounded okay-and so did the C an octave below it. Several one-and two-finger experiments convinced her that the piano was not at fault. Yet to strike a single chord required studying the keyboard, then carefully positioning each finger by sight.

Presently she managed a slow, uneven, faulty version of “Chopsticks” by watching the keyboard and controlling her hands so hard they trembled. She quit before reaching its undistinguished coda and crashed the keys with both hands. (There go ten years of piano lessons!) (What did you expect, Boss? I was never much good even with a guitar.) (Well, I’m glad Mama didn’t hear that—she always wanted me to be a concert pianist. Eunice, why the devil didn’t you study piano as a kid?) (Because I was too busy studying boys! A much more rewarding subject. Joan, if you want to play the piano again, we can learn. But we’ll have to start almost from scratch. It’s in your head, I know; I could hear it. But to get from there down into our bands—my hands, dear—will probably take more patient work than slimming our hips.)

(Doesn’t matter, not really.) She got up from the piano bench. (Boss. Just a sec. While we’re here, let’s warm up Betsy and give her a check run.) (Huh? I know nothing about a stenodesk. It’ll be worse than the piano.) (We'll see.)

She moved over and sat down at the stenodesk. (Well, Eunice? Which way to the Egress?) (Relax, Boss. The body remembers. Just say 'Dictation, Eunice,' then recite something you know. Think about what you're dictating.)

(Okay.) "Dictation, Eunice. 'Four score and seven years ago our fathers brought forth on this continent a new nation, conceived in liberty, and dedicated to the proposition...

Deftly her hands touched the switches, swiveled the microphone in time to catch the first word, required the machine to listen & hold while she inserted punctuation, used erase & correct when the machine spelled "fourth" rather than "forth"—all without hurrying. —She stopped and looked at the result. (Be durned! *How,*

Eunice?) (Don't ask, dear—or we might get fouled up in the dilemma of the centipede. But Betsy is purring like a kitten; she's glad I'm back.) (Well, so am I. Uh, Eunice, this machine—Betsy, I mean—has access to the Congressional Library St. Louis Annex, does it not? —she not?) (Certainly. Hooked into the Interlibrary Net, rather, though you can restrict a query to one library.)

(Better query just one. I want to find out what is known about memory and how it works.) (All right. I'm interested, too; I think my memory is spotty. Can't be sure. But on a search-of-literature it's best to let Betsy handle it through preprograms—ask for references, followed by abstracts, followed by items selected from abstracts...else, on a generalized question like that, thousands of books would be transmitted and poor Betsy would gulp them down until she was constipated, and stop and not do anything until her temporary memory was erased.)

(You know how, I don't. Uh, stick in a restriction not to bother with behaviorist theories. I know all about Pavlov and his robots I care to know, namely, that every time a dog salivates a behaviorist psychologist has to ring a bell.)

(All Eight. Boss? Can we spend a little more money?) (Go ahead, buy the Pyramids. What do you want, dearest?) (Let's have a Triple-A-One snoop search run on me. Eunice Branca, I mean—the 'me' that used to be.) (Why, beloved? If you've been selling government secrets, they can't touch you now.) (Because. It might fill some of those holes I think I have in my memory. . . and it might turn up something you've heard from me since I came back but which was not in the security report you got on me originally. Then you would *know,* dear. . . and could stop worrying that I may be only a figment of your imagination.)

(Eunice, if I'm crazy, the only thing that worries me is that some damned shrink might cure me. Then you would go away.)

(That's sweet of you, Boss. But I won't go away; I promised.)

(And even if I *am* crazy, it just makes me fit that much better into the present world. Eunice, don't you remember *anything* between being killed and waking up here?)

The inner voice was silent a moment. (Not really. There were dreams and I think you were in them. But there was one that does not seem like a dream; it seems as real as this room. But if I tell you, you'll think *I* am crazy.) (If so, it doesn't detract from your charm, dear.) (AU right but don't laugh. Joan, while I was away, I was in this—place. There was an old, old Man with a long white beard. He had a great big book. He looked at it, then He looked at me and said, 'Daughter, you've been a naughty girl. But not too naughty, so I'm going to give you a second chance.')

(A dream, Eunice. Anthropomorphism, straight out of your childhood Sunday School.) (Maybe, Boss. But here I am and I *do* have a second chance.)

(Yes, but God didn't give it to you. Eunice my own, I don't believe in God nor Devil.)

(Well . . . you haven't been dead—and *I* have. Truly I don't know what I believe; I guess I wasn't dead long enough to find out. But do you mind if we pray occasionally?")

(Jesus H. Christ!)

(Stop that, Joan! Or I'll use every one of those words you consider 'unladylike.' It's not much to ask.)

(I'm henpecked. Okay. If it's a beautiful church, with good music, and the sermon isn't over ten minutes.) (Oh, I didn't mean in a *church.* Can't stand 'em. Filled with bad vibrations. I mean pray by ourselves, Joan. I'll teach you.) (Oh. All right. Now?)

(No, I want to get these search orders in. You think about something else; I don't want centipede trouble—think about Winnie all slickery with soapsuds.) (A pious thought. Much better than prayer.) (Dirty old man. How do *you* know—I'll bet you've never prayed in your life.) (Oh, yes, I have, dearest—but God had gone fishing.) (So think about Winnie.)

She was busy for several minutes. Then she patted the machine affectionately and switched it off. (Well, did you?) (Did I what?) (Did you think about Winnie? Lecher.) (I took advantage of the unusual peace and quiet to contemplate the wonders of the universe.) (So?) (I thought about Winnie.) (I know you did; I was right with you. Joan, for a girl who is, in one sense at least, a virgin, you have an unusually low and vivid imagination.) (Aw, shucks, I'll bet you say that to all the girls.) (The stark truth, Joan sweet—with your imagination I can hardly wait for you you start us on that 'actively female' career. In all the wrestling I've done I've never had a man—or a girl—grab me the way you were thinking about.) (Oh. Learned that one from a respectable housewife, clear back in my teens. A most charming lady.) (Hmm! Perhaps, I was born too late for the real action.) (So I've been trying to tell you. Did you get those orders in?) (Certainly, Boss, when did I ever miss? Let's get back to our chair; our back is tired.)

Joan Eunice negotiated the thirty feet back to her chair without remembering that she had kicked off her pumps to handle the lower controls of the stenodesk more easily; the rug simply felt good to her bare feet. Then she did notice as she sat down in the big easy chair and folded her legs in the awkward, elegant, and surprisingly comfortable Lotus position. But it did not seem worthwhile to go get them.

The door buzzer sounded. "It's me, Winnie."

"Come in, dear."

The nurse entered. "Mr. Salomon asked me to tell you that he will be in to see you in a few minutes. But he can't stay for dinner."

"He'll stay. Come here and kiss me. What did you tell Cunningham?"

"Dinner for two, in here, just as you said—to be served when you rang. But Mr. Salomon seemed quite firm about leaving."

"I still say he'll stay. But if he doesn't, you come eat dinner with me. Would you fetch my pumps? Over there on the floor beyond the piano."

The nurse looked, fetched the pumps, stood over Joan Eunice, and sighed. "Joan, I don't know what to do about you. You've been a bad girl again. Why didn't you ring?"

"Don't scold me, dear. Here, sit on the stool and lean against my knees and talk. There. Now tell me— By any chance were you ever a lady's maid before you took nurse's training?"

"No. Why?"

"You did such a fine job of taking care of me in the bath and getting me pretty. Well, it was just a thought. I don't suppose a nurse —a professional woman—would consider a job as a maid. No matter how high the salary. But Dr. Garcia is going to insist that I have a nurse after he leaves. I don't need a nurse and you know it. But dear Doctor will insist. I *do* need a maid; I won't be able to dress myself at first—women's clothes are so different. Not to mention knowing nothing about makeup. Or buying women's clothes. What are you paid now, Winnie?"

The nurse told her.

"Goodness! No wonder they're always saying there's a shortage of nurses. I can't hire an in-house guard at that price. What would you think of staying on as my nurse—but actually doing things for me that a maid would do and I don't know how to do—at three times your present salary? With whatever you wish paid in cash so that you won't have to report it?"

The redhead looked thoughtful. "How would you want me to dress, Joan?"

"That's up to you. Your white nurse's uniform, if you prefer it—since you'll be my nurse in Dr. Garcia's eyes. Or what you wish. There's a bedroom through that door where my valet used to sleep. With a nice bath—and another room beyond it which we can redo as your living room. Redecorate all three rooms to suit your taste. Your private apartment."

(Boss, what was that about not shooting ducks on water?) (Stuff it, Eunice. If she takes the bait, it's better than hiring some illit and having to train her—and then have her steal the jewelry and drop out about the time she's some use.) (Oh, I see advantages. But you place Winnie one unlocked door away and she'll be in bed with you before you can say 'Sappho.' *You* may not want men in our life—but *I* do.) (Oh, nonsense! She's already thinking about the money. If she takes the job, she'll be more standoffish—she'll start calling us 'Miss' again.)

"Miss Joan? It'll really be my *own* apartment? I can entertain?"

"Of course, dear. Private. Oh, Cunningham's staff will clean and so forth, any service you want. Breakfast tray, whatever. Or never enter it if you prefer it that way."

"It sounds heavenly. I'm sharing a room with two other girls . . . at a rent that's horrid because it's inside an enclave. Safe—but I never have any *privacy.*"

"Winnie. Look at me, dear, and lay it on the line. The bed in there now is, I believe, a single. Would you like to have it replaced with a big, big double bed?"

The girl blushed. "Uh, it would be nice."

"So stop blushing. I won't know you have a visitor unless you tell me; that~ door is soundproof. Of course visitors have to be identified and checked for weapons, just as visitors to an enclave have to be—but that simply means you must vouch for a visitor to my chief guard the first visit. But I won't know it unless you choose to tell me. The in-house staff all have visitors. But security is my chief guard's worry, not mine."

"But he does have to show his I.D.?"

"You still would have to vouch for him to Chief O'Neil but— Hold the countdown. Did you mean he would rather *not* show an I.D.? Is he married, or something?"

Winnie blushed again, did not answer. Joan Eunice went on, "Nobody's business, dear. This is a private home, not a government compound. You vouch for him, that's enough. Chief O'Neil doesn't trust I.D.s; they're often faked. But he has a photographic eye. Are you going to stay with me? As nurse in residence, or lady's companion, or social secretary, or whatever you want to call it."

"Lady's maid. If I'm to be your maid, Miss Joan, I'd rather that your staff knew it and no pretense. And dress as your maid. What sort of uniform? Traditional? Or Acapulco? Or something in between?"

"Oh, not traditional, surely; you have such pretty legs. All-out Acapulco, if you like."

Winnie looked pleased. "I might go all out. A girl gets tired of these white coveralls." (Joan! Tell her not to use an all-out Acapulco paint job. Bad for her skin.)

"Suit yourself, dear. But don't use a lot of paint. Bad for your skin."

"Oh, I know! I'm a real redhead, you probably noticed. I can't even sunbathe. I was thinking of a little black frill skirt with a white lace apron about the size of a saucer. Little perky maid's cap, white on a black ribbon. ClingOn cups, in black. Transparent? Or opaque?"

"Whichever suits you, Winnie. High heels?"

"Uh, translucent, I guess, like the panels in that nightie. High heels, certainly, or the effect is lost—I can wear real stilts if I'm barefooted most of the time. Then just enough paint for accent. There are lovely decals that go on in no time and come right off with cold cream. Butterflies and flowers and things. Cheap, too. Everything I mentioned I can buy in disposables. I'll look like a proper lady's maid, yet not spend more time getting dressed than I do in pulling on this smock and tights."

"You'll look cute, dear. Going to dress up in a maid's outfit and model it for your friend?"

Winnie started to blush again, then grinned. "I certainly am! And let him take it off me, too!"

(Cheers!) (Eunice, you have a one-track mind.) (You should know, dearie—it's *your* mind.)

A few moments later Winnie announced Mr. Salomon, then left. The lawyer came toward Joan solemnly, took the hand she extended and bowed over it. "How are you feeling?" he asked.

"Disappointed," Joan answered soberly. "Because my oldest and dearest friend hasn't time to dine with me my first day up. But physically I feel fine. Weak, but that's to be expected."

"Sure you're not overdoing?"

"I'm sure. My respiration and heartbeat are being telemetered—if I weren't all right, someone would come in and order me to bed. Truly, I'm all right, Jake—and I won't get strong unless I *do* stay out of bed. But how about *you,* old friend? I have been terribly worried."

"Oh, I'm all right. Just made a fool of myself, Johann."

"You did not make a fool of yourself . . . and I feel certain Eunice knows it, Jake." (Watch it, Boss!) (Pipe down.) "You could have paid her no finer tribute than those honest tears." Joan found her own tears starting; she encouraged them while ignoring them. "She was a sweet and gallant lady, Jake, and it touched me more than I can say to learn that you appreciated her wonderful qualities as much as I did. Jake—please sit down, if only for a moment. There is something I *must* ask you."

"Well...all right. Can't stay long."

"Whistle that chair closer, and face me. Uh, a glass of sherry? Doctor says I may have it—and I find that I need it. That Spanish cocktail sherry, dry as your wit. Will you do me the honor of pouring for us?"

Joan waited until the lawyer had filled their glasses, and had seated himself. She raised her glass and at the same time raised her chest, letting those "wicked" panels do their best. "A toast, Jake—no, don't get up. The same toast, Jake—always the same toast from now on whenever you and I drink together. . . but silently." She took a sip and put her glass down. "Jake—"

"Yes. . . Johann?"

"'Joan,' please—I can't be 'Johann' any longer. Jake, you know that I never expected to live through any such operation? It was a—device. A legal device."

"Yes, Joha— Yes, Joan, I knew. That's why I helped."

"I knew. The most generous act of friendship I have ever known. What is it the Japanese name it?—the friend who helps, when it is necessary to die. Never mind. Jake, look me in the eye. Do you know, deep in your heart, that I would rather be dead. . . than to have lived through it by this incredible circumstance? Be alive. . . at *her* expense? Do you *know* that, Jake? Or must I live still another life, hating myself?"

Salomon raised his eyes, met hers firmly. "Yes—Joan. I know it. It was no fault of yours . . . you must not hate yourself. Uh. . . *Eunice wouldn't want you to!"*

"I know. Weep, dear Jake; don't hold back your tears—see, I am not holding back mine. Just try not to go to pieces, or I will, too. Jake, each of us would happily have died rather than let this happen. I am as certain of it about you as I hope you are about me. I don't think I could stand it if you had not reassured me. Look at me, a lovely body and young—yet I am almost ninety-five years old and have not one friend left alive. . . but you."

"You'll make more friends."

"I wonder if I can. The span is great, perhaps too great. I feel as the Wandering Jew must have felt, alive beyond his allotted time. His name—Aha—something. My memory is not as good as this young body. But I can't forget one question which I *must* ask. Jake, is there any possibility that Eunice's husband had something to do with her death? That prize I put up, that blood money—did *it tempt him?"*

(Boss, Boss, you're way off base. I know!) (Sorry, beloved, more sorry than I can say. But I must have *proof.)*

"Jake? *Did I entice a murder?"*

The lawyer shook his head. "I'm astounded. But of course you don't know the circumstances. You enticed *nothing.* I wrote that offer most carefully. Were there any guilt I would share it. There was none."

"How do you *know?"* (Drop it, Boss. Please!)

"Mr. Branca was in Philadelphia, visiting his mother." (You see, Boss?) "I had to find him to get the post-death ratification. Took three days, while both of you were kept ready for surgery. Joe Branca didn't know she was dead. Hell of a job even to find him. Three long days."

"'Three days.' Why wasn't I told!"

"And *waste* Eunice's death? Are you crazy? You were unconscious; Garcia put you under as soon as I notified him that a body was going to be ready. Then that dreadful wait. I need *your* forgiveness, too, for —Joan—no, 'Johann!' I hated you . . . for being alive when *she* was dead. But I pushed on—for *her* sake. Oh, I got over it, it was a sick hate. I knew better."

"Do you hate me now?"

"Eh?" Salomon looked at her, in sorrow. "No. You are not only my old friend, who has always been honest and decent under his crusty exterior—whose virtues outweighed his faults." Salomon managed to smile. "Though sometimes just barely. But also you are the only tie I have left to her."

"Yes. You may find me better tempered now, Jake. It's easier to smile, easier to be patient, then it was in that old wreck of a body I had. But, Jake, about Joe Branca. All right, he was in Philadelphia. But could he have *arranged* it?"

"No."

"You're certain?"

"Certain. Joha—Joan, it's that million dollars that worries you, fear that it might have started a chain of events. When they located Joe Branca, I had to jet there and get that piece of paper. He was dazed. Couldn't believe it. But accepted the fact. But *not* the money. I couldn't get him to sign the post-death authorization without first preparing another document, waiving the money. The escrow trustee —Chase Manhattan—was instructed by Joe to pay it to the Rare Blood Club—his idea—as a memorial to Eunice Evans Branca." (Oh, Boss! I'm crying.) (We all are.) (But, Boss—Joe must be starving.) (We'll take care of it.)

She sighed: "I'll be damned."

"Perhaps. And perhaps myself. But I don't think Joe Branca will be. He's an unworldly man—Joan. From a slum family. A flower in the muck. I couldn't even get him to accept a lesser sum. He insisted on paying for witnessing and notarizing his mark, and the tax stamp on the assignment—and it took almost every dime he could dig up. He just shook his head and said, 'Broke don't scare me.'

"Jake, we must take care of him."

"I don't think you can, Joan. In his own odd way he is as proud as she was. But I did one thing. In searching for him I had to get a court order to open their studio—indispensable it turned out, as an old letter from his mother gave us the clue that located him. But I learned that the rent was almost due . . . the corporation's rent agent wanted to know how soon the lease was going to lapse—he assumed that, with *her* dead, the rent would not be paid. So I covered the matter for the moment; then when I got back, I bought the lease. As long as Joe chooses to stay, he won't be asked for rent. Then I checked around and located her bank account and arranged with a friendly judge to let me guarantee the matter and had it assigned to Joe without bothering him with legal formalities. The little dear was smart about money—a nice sum, enough to keep him eating a couple of years, I think." (All gone in a couple of months, *I* think. Boss, Joe doesn't understand money. A bank account isn't real, to him.) (Don't worry, darling. Jake and I will handle it.)

She sighed. "I feel reassured, Jake. But distressed about her husband. We must look into it. If he's that unworldly, then there must be some way to subsidize him without his knowing it."

"All right, Joan, we will try. But Joe Branca taught me—at my age!—that there are things money cannot buy. Not if the prospective seller is indifferent to money."

"Will you have more sherry? And may I have another drop? If you can't stay, I think I'll ask to be put to bed and right to sleep. Skip dinner."

"Oh, but you must eat, Joan. For your strength. Look, if I stay, will you eat?"

She gave him Eunice's best sun-coming-up smile. "Yes! Yes, Jake dear! Thank you."

Dinner was informal, service only by Cunningham and two assistants. Joan did her best to simulate a charming, gracious hostess—while trying not to appear greedy; everything tasted so *wonderful!* But she waited until coffee had been served and Jake had refused a perfecto and accepted a glass of port, and she then could say, "Thank you, Cunningham, that will be all," before returning to personal matters.

Once they were alone she said, "Jake, when will I be up for a competency hearing?"

"Eh? Any time you feel well enough. Are you in a hurry?"

"No. I would be utterly content to be your ward the rest of my life."

Her lawyer smiled slightly. "Joan, by the actuarial tables you now have a life expectancy of about sixty years; mine is more like ten or twelve."

"Well. . . that's hard to answer. But will you go on as before as my defacto manager? Or am I asking too much?"

Salomon studied his glass. "Joan . . . once the court dissolves this guardian-and-ward relationship, there is no reason why you should not manage your affairs."

(Joan! Change the subject; he's trying to leave us!) (So I know! Keep quiet!) (Tell him your middle name!) "Jake. Jake dear. . . look at me. Look hard and keep on looking. That's better, Jake—is it that you would rather *not* see me ...as l am now?"

The lawyer said nothing. She went on, "Isn't it better to get used to what *is*...than to run away from it? Wouldn't she—Eunice—want you to stay?" (Keep slugging, Sis—he *wants* to stay.)

"It isn't that simple . . . Joan."

"Nothing ever is. But I don't think you *can* run away from it any more than I can—for I won't stop *being* what I am—her body, my mind—and you will always know it. All you accomplish by leaving is to deprive me of my one friend and the only man on earth I trust utterly. What does it take to change my name?"

"Eh?"

"Just what I said. I changed my surname from 'Schmidt' to 'Smith' when I enlisted on December eighth nineteen-forty-one simply by spelling it that way to a recruiting sergeant: No one has bothered me about it since. This time perhaps it must be formal, considering the thousands of places where my signature appears. It is technically a sex-change case, is it not? A court takes judicial notice, or some such, and it's made a matter of record'?"

Salomon slipped into his professional *persona* and relaxed. "Yes, of course; I had not thought about *that* aspect—too many other details on my mind. Joan, your earlier name change was legal—although informal— because any person is free to call himself by any name, without permission of a court, as long as there is no criminal intent—to defraud, deceive, evade responsibility, avoid taxes, whatever. You can call yourself 'Joan'—or 'Johann'—or 'Miniver Cheevy'—and that is your name, as long as your purpose is innocent. And pronounce it as you like. Knew of a case once of a man who spelled his name 'Zaustinski' and pronounced it 'Jones' and went to the trouble of publishing the odd pronunciation as a legal notice—although he did not have to; a name may be pronounced in any fashion its owner chooses."

"Why did he do it, Jake?"

"His grandmother's will required him to change his name in order to inherit—but did not specify how he must pronounce it. Joan, in your case a formal change of name is advisable, but it might be best to wait until you are no longer my ward. But de facto your new name is already what you say it is."

"Then my name is now—'Joan Eunice Smith.'"

Salomon knocked over his glass of port. He made quite a busyness of mopping it up. Joan said, "Jake, let it be, no importance. I did not mean to shock you. But don't you see the necessity? It's a tribute to *her,* a public acknowledgment of my debt to her. Since I can never pay it, I want to publish it, place it on the wall for all to see, like a Chinese man's debt to his tong. Besides that, ninety-five percent of me *is* Eunice...and only five percent is old Johann now named 'Joan' and even that fraction no one can see, only surgeons have seen it. Last but by no means least—Jake dear, look at me—if you ever forget that fraction and call me 'Eunice,' it won't matter; it's my name.

And if you *intentionally-call* me 'Eunice,' it *will* matter, for I shall be pleased and flattered. And any time it suits you to call me 'Joan Eunice,' it will make me happy, as I will be *certain* you have done it intentionally—and accepted me as I am."

"Very well. . . Joan Eunice."

She smiled. "Thank you, Jake. I feel happier than I have felt since I first knew. I hope you do."

"Um. Yes. I think so. It's a good change—Joan Eunice."

"Did you get wine on your clothes? If so, let Cunningham see to it. Jake, is there any reason I or you to go clear out to Safe Harbor tonight? I'm sure Cunningham can find you clean socks or whatever."

"Goodness, Joan—Joan Eunice—I've been here two nights already."

"Do you think three will wear out your welcome? You can't wear it out."

"And the drive isn't that far, as I placed my house for sale with the enclave trustees months ago. I have rooms at the Gibraltar Club now. Good service, central location, none of the fiddlin' worries of a householder."

"I see your point. Hmm, must remember to resign from the Gib myself." She smiled. "They'll never let me past the ladies' lounge—now."

The lawyer said dryly, "I took the liberty of withdrawing you from membership shortly after I became your guardian—Joan Eunice."

She laughed in delight. "And me a founding member! This is delicious—souls and honks and thirds all welcome but females are second-class citizens. Jake dear, I'm going to have to get used to a lot of things."

"I suppose so—Joan Eunice."

"So I'll need you more than ever. Where have you been sleeping?"

"The Brown Room."

"Cunningham must be slipping. He should have put you in the Green Suite."

"Well . . . the Green Suite has been used for hospital equipment and supplies. I authorized it."

"Then you can just unauthorize it, as that is *your* suite. They can store that stuff somewhere else. Or remove it, as little of it will be needed from now on7'

"Hedrick had most of it removed the middle of the day."

"All, right, you stay in the Brown Room tonight; then tomorrow Cunningham can get the Green Suite in shape for you."

"Joan Eunice, what leads you to think I'm moving in here? I'm not."

"I didn't say you were. I said that the Green Suite is yours. Whether you stay a night or a year. Yours without invitation, yours to come and go without bothering to say hello or goodbye. Although I hope it will suit you to say hello to me frequently. Is Hubert, my former valet, still around?"

"Yes. He's tended me the last two nights."

"From now on he'll tend the Green Suite and take care of you whenever you honor us with your presence. Jake, you had better move some clothes here."

"Damn it— Pardon me, Joan Eunice."

"For saying 'Damn it'? It's a strange day when my oldest friend must curb his language in my presence. Jake, I've heard you use language that would blister paint at forty yards—and *at* me, not merely in my presence."

"True. But I must now remember that you are a lady, Joan Eunice."

"Please yourself. I'm going to have more trouble learning to be a lady than you will have in remembering that I am supposed to be one. If you slip, ignore it—for you know that I never took a back seat to any muleskinner in other days. You were saying?"

"Well, I was saying, 'Damn it, we must remember your reputation —Joan Eunice."

"My *what?* My reputation as a *woman?* I doubt if I have one—other than as a sideshow freak. Doesn't worry me."

"You're not in the news, Joan Eunice, since shortly after the operation. Oh, you will be again when we go into court and perhaps sooner, when someone in your household staff or Dr. Hedrick's staff spills the fact of your recovery."

"So I'll be a sideshow freak again and who cares? A nineday wonder lasts only a couple of days now; they wear out faster than they did when I was a kid. Jake, I haven't worried about what anyone said about me for over half a century. The image our P.R. men built up was for the company, not for me personally. As for Mrs. Grundy—I think she's dead. The present generation does not care about her opinion—a change for the better in a world otherwise deteriorating. I doubt if Eunice ever heard of Mrs. Grundy." (Sure have, Boss. My fourth-grade teacher. Used to shack with the vice-principal until his wife found out. We kids giggled over it—but *you* would have liked her, you dirty old darling. Keep working on Jake, dear—time to back away closer.) (Who's driving this car?) (I am.)

Mr. Salomon said thoughtfully, "I think you are right about this younger generation, Joan Eunice. Only people my age and older give such matters a thought. But *you* know that I should not live under your roof now. And so do I."

"Jake, I am not trying to force you. Nor am I trying to compromise you—"

"Eh? *Me?* It's *your* reputation I am thinking of. With your servants, at least."

(Why, the old hypocrite. Ask him about the time he crowded me into a cloak closet with Cunningham almost breathing down our necks. Go on, I dare you. Oh, he's a one, that one—courage under fire.) "Jake, that is sweet of you but I don't give a triple damn how my servants gossip in the kitchen. But I am able to protect *you* from gossip, sir. I have acquired the most conventional of Victorian chaperonage-a respectable lady's maid. She'll sleep just through that door, where Hubert used to sleep. If it frets you, she can always be present when you and I are together." (Hey, what is this? Trying to get Winnie into act? She might go for it—Jake won't. Watch it, dear.) (Qui kibitzing, Eunice.)

The lawyer raised his brows. "You've hired a maid already? Surprising. Though you never were one to dillydally. Or did you shift around part of your in-house staff?"

"Some of both, Jake. I anticipated that Dr. Garcia will insist on my having a trained nurse. . . so I persuaded one of the nurses to stay on, in both capacities. Winnie. You've seen her, the little redhead."

"Possibly I have."

('Possibly' he says. *All* you men are hypocrites. If he hasn't patted her butt, he's thought about it.)

"I'm lucky to get her. Intelligent. Educated. Able to teach me things I must know and, being a nurse, used to caring for people even more than a maid does. I used the usual argument—money—but I was careful to respect her professional pride; she'll still be my nurse, she'll lady's-maid me as a friendly favor. I think she may be in bed. But she would get up and chaperon us if asked. Shall I send for her?"

"What? Oh, don't be silly, Joan Eunice. You're making a mountain of a molehill."

"It seemed to me that you were, Jake. I do feel defenseless as a woman . . . even though I was far more vulnerable as a sick old man than I am now in this strong young body. But I feel *safe* with you present—and not at all safe when you are away. Jake, I can't urge you to live here. . . but can't you see what a favor it would be to me? As well as— How many rooms do you have at the Gib?"

"Two; Adequate for my needs."

"The rooms there aren't large . . . whereas the living room of the Green Suite is as large as this room. We could cut a door from it into the upstairs library and it could be your study. Move anything into it you need for my affairs or your own—plenty of room for files or books. Jake, I don't need this big mausoleum any more than you needed your house. But if I tried to sell it, I couldn't get ten percent of what it cost; I built it during the worst of the Riot Years and the cost doesn't show; it's a prettied-up fortress, stronger than police barracks. Well, we may have such years again; I may yet be glad I spared no expense. In the meantime it's big and safe and comfortable, and you might as well use it. When you wish, I mean, especially when you work on my affairs."

"Well, I have been working on some of your affairs here in the house. Uh, Joan Eunice, as your guardian, I had to take over management of your household."

"Hasn't Cunningham saved you from such picayune worries? I must speak to him."

"Well., yes, he has and I've let him go on, as before; I've made no changes. But I have had to look over the household books and authorize charges and confound it, they're stealing you blind. Cunningham especially."

"Good!"

"What's good about it?"

"Jake, you told me that it was impossible to spend my income. If my butler is black-marketing two-thirds of what he buys for me and pocketing the proceeds—and he always has—then he's anxious to keep his job. Which means that he has to please *me.* Jake, can you think of a cheaper way to buy the nearest thing to loyalty that can be bought? Let him steal. Do not bind the mouths of the kine who tread the grain. The good horse must always get his lump of sugar."

"Bad precedent. corrupts the country."

"The country *is* corrupt. But 'it is the only game in town'; we have no choice. The problem is always how to live in a decadent society. Jake, I want you to live here. I hope you will live here. It will make me feel happy and *safe* for you to be under the same roof. But don't worry about my reputation—and Winnie is here to protect yours. Most certainly don't think about such trivia as household expenses; just close your eyes and sign. But don't hesitate to chew out Cunningham if the service is less than perfect; that's the price he must pay for the privilege of swindling me. By the way, my chief guard steals, too; I think he has a fifty-fifty split with Cunningham. I've never tried to find out the arrangement; it would embarrass them."

Salomon smiled. "Joan Eunice, for a young—and beautiful—woman, you sound. remarkably like a cynical old man I used to know."

"Do I, Jake dear? I must learn not to sound that way. I must now leave the 'cynical old man' things to you and try to behave like a lady. If I can. But please don't disrupt a smooth household by trying to reform it—or it will wind up like a reform administration: less efficient and still more expensive. Didn't your servants steal from you?"

The lawyer looked sheepish. "Well...yes. But I had the best cook in Safe Harbor enclave. If I had fired her, I might have wound up with one just as expensive—who put sugar in gravy. I think I was groused that they were stealing from you—when you were helpless. But I didn't want to tamper with your household while there was any chance that you might recover. Wanted to hand it back as it was. And I have. Or shall."

"Thank you, Jake. At the moment, while I may not yet be a lady, I feel not at all like a cynical old man. I find that I feel like a woman who has been ill and is not yet fully recovered. I had best go to bed. Will you help me?"

"Uh, I'll call the nurse."

"Jake, Jake—this is the body I have; we must quit being jumpy about it. Here, lend me your arm. I can stand if you'll help me...and walk to the bed if you'll let me lean on you."

Salomon gave up, offered her both hands to help her out of the chair, steadied her with his arm to the bed. Joan Eunice got into it quickly, slid her negligee off as she slid under the sheet. "Thank you, Jake."

"My pleasure—Joan Eunice."

"Will you have breakfast with me? Or lunch if you want to sleep late?"

"Uh . . . lunch."

"I'm looking forward to it." She put out her hand. He took it, bowed over it—hesitated only slightly and kissed it firmly.

Joan Eunice kept his hand and pulled. "Come closer, Jake dear." She reached up, took his face between her palms. "You loved her."

"Yes."

"I loved her."

"I know."

"Say my name. My new name."

"Joan—Joan Eunice."

"Thank you, Jake." Unhurriedly, she pulled his face down, kissed him softly on the lips. "Good night, dear friend."

"Good night—Joan Eunice." He left quickly.

(Joan you bitch, you're pushing him too hard.) (I am *not!)* (The hell you aren't. For a second I thought you were going to drag him right into bed.) (Ridiculous!) (And you're pushing yourself too hard, too.) (Eunice, quit crabbing. I could have backed out up to the last split second. I found that I did not mind it. After all, there are *many* cultures in which men kiss men, as a gesture of friendship.)

(In case you haven't noticed, you are no longer a man—you're a mixed-up chick.) (I've noticed. Look, snoopy, it was a necessary symbol. I had to show Jake that he could touch me, even kiss me goodnight . . . and not have it be tragic. And it wasn't. Reminded me of my father kissing me goodnight . . . which he did until I was a big boy.)

(Well . . . perhaps Jake is going to settle for being fatherly. But don't count on it, Joan. Let mc warn you, Sis— Jake can kiss *much* better than that. He can kiss so well that your insides melt down, starting at your belly button and spreading in all directions.) (A possibility. A remote one. Now will you shut up, and let us sleep? I really *am* tired.) (Love me. Boss?) (I've never stopped loving you dear —and never will.) (Me, too——and wish I could kiss you goodnight. Sleep, Boss—everything's going to he all right.)

Before she could get to sleep, Winifred came in, in robe and slippers. "Miss Joan?" she said softly.

"Yes, dear? Put the floor lights on."

"Mr. Salomon said that you had gone to bed—"

"And you look as if you had. Did he wake you?"

"Oh, no. I was chatting with Mrs. Sloan; she's on watch. But Dr. Garcia left word that your bed was to be all the way down—and I see that it isn't. How do I put it down?"

"I do it myself, right from the bed—down, like that—or back up, like that. I wasn't asleep yet. It's all right, I'll put it all the way down before you leave. . . and you can tell Doctor that I was a good girl."

"Fine! You can have this capsule if you want it. You don't have to take it, Mrs. Sloan says that Doctor says."

“I’ll take it; I want to go right to sleep. If you’ll hand me the water there . . . and kiss me goodnight. If you won’t, I’ll sulk and ring for Mrs. Sloan and ask *her* to kiss me goodnight.”

The little nurse grinned. “I’ll force myself.”

Winifred left about sixty seconds later. (Well, Eunice? How did that one stack up?) (Quite well, Butch. Say eighty percent as well as Jake can do.) (You’re teasing.) (You’ll find out. Winnie is sweet—but Jake has had years more practice. I’m not chucking asparagus at Winnie. I thought you were going to drag her right in with us.) (With Mrs. Sloan outside and watching our heart rate? What do you think I am? A fool?) (Yes.) (Oh, go to sleep!)

12

Peace Negotiations, both in Paris and in Montevideo, continued as before. Fighting continued on a token basis, and the dead did not complain. Harvard’s new president was dismissed by the student government, which then adjourned without appointing a successor. The Secretary of H.E.W. announced a plan to increase the water content of San Francisco Bay to 37%; the Rivers & Harbors Commission denied that H.E.W. had jurisdiction. In Alma Ata a Morale Corps sergeant gave birth to a healthy two-headed boy by Caesarean section; it was watched worldwide and on Luna, via satellite, to a specially arranged chorus of the Thoughts of Chairman Lu. In Washington the I.R.S., acting under Budget Executive Order (Emergency) of ‘87, announced an additional temporary surtax of 7%. In Miami Miss Universe (Miss Ghana—42-22-38), speaking through her press secretary & interpreter, revealed that she intended to be the first starship commander and had been studying neoEinsteinian ballistics under hypnosis for two years. The General Secretary of the People’s Fraternal Society of Cosmonauts, Astronauts, & Space Engineers (A.F.L.C.I.O.) wondered publicly as to Miss Universe’s ability to do simple arithmetic with her shoes on. Madam President of the Federated Women’s Clubs of the World stated that the Honorable Secretary was a counterrevolutionary rat-fink and a typical example of male arrogance. In Los Angeles smog deaths were down 3% under emergency pollution abatement measures and a brisk west wind.

In a big, ugly, ornate, old house Miss Joan Eunice Smith sat in Lotus on a mat in her dressing room near a large mirror and facing her nurse-companion-maid, also in Lotus. “Comfortable, Winnie dear?”

“Very.”

“I think you’re even more limber than I am. All right, let’s get into the mood for exercise. You start it."

"All right. But, Miss Joan? What does it *mean?* Oh, I like it; it's very relaxing. But *what* jewel in *what* lotus, and *why?"*

"It means nothing. And everything. If you must have words, it means peace and love and understanding and anything that you think of as good. But it's not for thinking, dear; it's for *being.* Let yourself be open to it, don't think. Don't even try not to think. *Be."*

"All right."

"Start us. Remember the breathing. I'll get in step."

"Om Mani Padme Hum."

(Om Mani Padme Hum. See that aura round her, Boss? She must have had *quite* a night.) (Shut up, Eunice; these prayers were *your* idea.) "Om Mani Padme Hum."

"Om Mani Padme Hum." (Om Mani Padme Hum.)

"Om Mani Padme Hum." "Om Mani…"

(That's enough, Joan.) (So short, beloved? Clock says only twenty minutes.) (I use a different clock. We're warm all through, we're ready. Winnie is more than ready; you'll have to call her back.)

"Om Mani Padme Hum. Winifred. Winnie darling, hear me. The sun is rising and so must we."

The little redhead was still perfectly in Lotus, soles of her feet turned upward on her thighs, hands in her lap, palms upward. She was still intoning, with her breathing paced exactly with her prayers. But her eyes had turned up; only the whites showed. "Come back, Winnie. Time."

The girl's eyes turned down to normal; she looked puzzled, then smiled. "Already? Seems like only a moment. I must have fallen asleep."

"Happens. Are you ready? Warm and loose and your muscles soft as cotton?"

"Uh . . . yes, I am."

"Then let's try some singles." Joan Eunice flowed upward from the mat like a flower unfolding and was standing. "You criticize me and I'll criticize you. Then we can have companion exercises for dessert." Joan looked at herself in the long glass. "I think my belly is firmer every day. I keep telling myself."

"It's perfect and you know it." The redhead got up more slowly, caught herself in a yawn.

"Still sleepy, dear? No pleasant dreams last night?"

The girl barely blushed, then shrugged and smiled. "Pleasant all right but not enough hours. I hope we didn't disturb you."

"Didn't hear a sound. Wouldn't have guessed if you hadn't told me when you came in to kiss me goodnight. Dear, if you're short on sleep, maybe you'd rather just criticize."

"Oh, no, I'm getting more out of our exercises than you are—don't want to miss a day. But—yes, I'm short on sleep. Paul— Oh, dear! But I didn't say his last name."

"Didn't hear you, I was rubbing my ears."

"Fibber. He didn't leave until half past two. So I did lose sleep. Not that I minded!"

"I'm sure you didn't. Winnie dear, I did *not* mean to snoop. Oh, normal curiosity—being a virgin myself."

The nurse looked startled, said, "But—" and shut up.

Joan Eunice smiled. "Sho', sho', hon, I know what that 'But' means. Mrs. Branca was married . . . and Johann Smith was married four times, not to mention jumping out of windows. But Joan Eunice is a virgin—dig me, doll baby?"

"Well, looked at that way—"

"Only way I *can* look at it. So I'm curious as a Girl Scout. But telling me would still leave me knowing nothing, even if you wanted to tell, which I'm sure you don't. Someday—no hurry—I suppose I'll find out for myself. So don't you dare blush again and let's get on with our exercises. I'll run through the Tortoise variations and you push me if I need it."

After an hour of twisting and stretching and posing Joan Eunice said, "Enough. Much more and we'd be sweating instead of glowing. Ready for gruesome twosomes?"

The high note of the outer door sounded in the bath-dressing room. "Damn," said Joan. "I mean a ladylike 'darn.' Damn. Into your tights, dear, and I'll drop your smock over your head. Tell 'em 'No ice today.'"

"Right away." Dressed in seconds, the girl left.

(How'd we look today, Eunice? Tits beginning to suit you?) (We're more than halfway there, Joan; in another week you can cut the time down.) (Not anxious to; it's the most fun of the day. . . except when our lord and guardian deigns to dine with us. Tell me, hon—have you been fretting about those negative reports?) (No, *you* have been fretting; they were what I expected. Nobody knows how memory works except that everyone is sure he knows and thinks all the others are fools.) (I've been thinking about those flatworms. If you can chop up a trained flatworm and feed it to another flatworm and then the second one seems to remember what the first one learned, then—)

(Boss! I keep telling you, I am *not* a flatworm! I told you a long time ago that the body remembers, and—let's table it; here comes the fuzz.)

"Miss Joan, it's Dr. Garcia and Mr. Salomon."

"Oh. Well, I'm not going to dress; we've still to finish. Grab me a negligee—not that plate-glass job. The London Fog is suitable, don't you think?"

"I guess. Makes you look only half naked instead of bare."

"Who taught me to dress that way, winsome Winnie?" (I did.) (Sure, Eunice—but she thinks she bosses me. I'm her good baby who always does what Mama says. . . until we get dear Doctor out of our hair.) "Please tell the gentlemen that I will be right out."

Miss Smith stopped to apply lipstick, decided that her face could get along with no other renewals, took a brushcomb and teased her too-short locks into fluffiness, stepped into stilt-high mules, put on the negligee and looked at herself in the long glass.

She decided that the selective opacity of the robe was just right—except that the upper part was a little *too* modest. So she delayed long enough to apply lipstick to areolae.

Now satisfied with her appearance—(Boss, we look like a highpriced pooka.) (Very highpriced, I hope. Were you criticizing?) (Not at all, I was applauding.)—she went out into her boudoir. "Good morning, Doctor. Hi, Jake dear. Won't you sit down? Coffee? Or we can find some Old Kentucky Rat Poison, bottled in the barn."

"Coffee," agreed Salomon. "You look charming, my dear."

"Snake charming. I've been exercising and smell like a horse."

"Not more than a small pony. I'll turn up the ventilation. Joan Eunice, Dr. Garcia wants to check you over."

"Really? What's wrong? I feel fine. Aside from these cold prison bars all around me, and my head on a pillow of stone."

"Dr. Garcia thinks we can do something about those cold prison bars. Joan Eunice, we agreed that it was not smart to go into court until you were discharged as well in all respects. He thinks it may be possible, now."

"Oh. *Oh!* How about that platoon of psychiatrists?"

"We'll have them. We may never need them. But we'll be ready to offset their expert witnesses. You will have to put up with long searching interviews; our own experts must go into court prepared." (Prepared to justify their fancy fees. Don't worry, Boss; I'll hide under a rock whenever a shrink is around.)

"That's okay. I'm delighted that Dr. Garcia thinks I'm well. Shall we step into my dressing room, Doctor? Come along, Winnie. Jake, the Wall Street Journal is over there."

Once she was alone with her doctor and nurse Miss Smith said, "Well, Doctor? Shall I stretch out on the massage table?"

"No, this examination is pro forma, to allow me to log that I gave you a physical on the day I discharged you. I'll listen with a stethoscope and make you say 'Ah!'—things like that. If you'll sit down at your dressing table and drop the top of your robe, please."

"Yes, sir."

She kept quiet while he passed the stethoscope here and there, coughed when she was told to, inhaled sharply and sighed noisily as directed. Once she said, “Wups! Sorry, I’m ticklish,” and asked, “What does that tell you?”

“Just palpating for lumps. Again, pro forma—although it’s been some time since this was done.” (Enjoying it, kiddo?) (Maybe you are, Eunice; I’m not. I’d rather be approached more romantic-like.) (Don’t kid your grandmother; you enjoy it.)

The doctor stepped back and looked at her thoughtfully. Joan Eunice said, “Anything more, sir? G-Y-N?”

“Not unless you ask for it. Trouble?”

“Not a bit. I feel healthy enough to whup a grizzly bear.”

“And you check out that healthy, too. Nevertheless your case worries me.”

“Why, Doctor?”

“Because your case is unique. I know almost as little about it as you do. Joan, when you left this house—as Mr. Smith—I never expected to see you alive again. When you were brought back, I did not expect you to regain consciousness. When you regained consciousness, I felt sorry for you. . . as I never expected you to be other than paralyzed from the neck down. Yet here you are, well and healthy. Apparently.”

“Why only ‘apparently,’ Doctor?”

“I don’t know. We know little enough about any transplant—and nothing about a brain transplant other than what we have learned from you. Joan, for the past two weeks there has been no reason—other than caution—why you needed more supervision than any other young woman in good health. Say Winifred here, for example.”

He shrugged. “Of the two you seem to be somewhat more ruggedly healthy than she is. Nevertheless I would bet that. Winifred, barring accidents, will live out her normal span. . . whereas you don’t fit any curve; you’re unique. Please, I’m not trying to frighten you, but only a fool makes predictions based on ignorance; I am not that sort of fool.”

“Doctor,” she answered calmly, “you’re saying that this body could reject the brain—or vice versa, it’s the same thing. Or that I could drop dead, heart failure, for no defined reason. I know it; I read a great deal on transplants, while I was still Johann Smith. I am not afraid. If it happens—well, I’ve had a wonderful vacation from old age, with its pain and boredom.” She smiled happily. “It’s been like dying and going to Heaven—and even a few weeks of Heaven can be eternity.”

“I’m glad you accept it so philosophically.”

“Not ‘philosophically,’ Doctor. With wonder and joy and reaching out greedily for every golden second!”

"Well...I'm pleased that Winifred is going to stay with you and I hope that you will keep her a long time—"

"As long as she will stay! Always, I hope."

"—because, otherwise, I would worry. But Winnie can do in an emergency anything I could do, and she'll have everything here with which to do it—and she knows and I want you to know that I will get here fast if she sends for me. All right, my dear, let's get that transmitter off you; you won't be monitored any longer. Nurse. Rubbing alcohol, and cotton."

"Yes, Doctor." Winifred went past the massage table, reached into a cupboard.

Dr. Garcia detached the tiny transmitter. "Slight erythema, and a faint circle of mechanical dermatitis. With your amazing repair factor I'm betting you won't be able to find where it's been by tomorrow. But I'm going to miss my morning movie."

"Sir?"

"I don't suppose anyone has told you but I have watched the monitors every morning, while you exercised, waiting for your heart to pound. Or your respiration to warn me. Nothing. Never anything abnormal, I mean; I could tell that you were exercising. Very mild exercise, I concluded."

"Why, yes, I suppose so. Yoga."

"Well! I would not class yoga as 'mild.' If we mean the same thing."

"I meant that yoga isn't a hundred-yard dash, or weight lifting. But I—well, both of us—have been doing the classic poses. Except the headstands; I'm not foolish, I know I have a Sears-Roebuck skull."

"I wouldn't have let her, Doctor! But she never tried one; truly she didn't."

"Doctor, I haven't been building muscles for show; I am simply trying to get perfect control over my —new—wonderful!—body. Here, let me show you."

Joan stood up, letting the negligee fall, stood on the floor six inches from the exercise mat—shifted her weight onto her left foot, brought her right leg up behind her in perfect extension while she leaned slowly forward. . . deep… deeper...until she clasped her left ankle with both hands and pressed her cheek against her shin, with her right leg arrow straight above her in a perfect split.

She held it for three controlled breaths, then dropped her hands flat to the floor, slowly lifted her left leg, balancing it against the right, until she was holding a hand stand, legs together, back arched, toes pointed.

Again slowly she let her limbs sink like drooping petals until they touched the mat—let the Arch sink into the Wheel, melted still farther into the Diamond pose, knees and elbows touching mat and floor—held it—let it roll slowly forward into Lotus. "Om Mani Padme Hum." (Om Mani Padme Hum. Pick up your check at the gate, girl; we won't need to shoot this scene over.) (Thanks, Eunice. But I had a good guru, Guru.) (De nada, Chela.)

Dr. Garcia was applauding. "Terrific! Unbelievable. Like everything else about this case. Winnie! Can you do that?"

Joan flowed upward, was standing. "Sure she can! Skin 'em off, dear, and show Doctor."

The nurse blushed deeply. "No, I can't. Don't believe her, Doctor; I'm just learning."

"Oh, fuff. I have to steady her only a little. Come back in two weeks, Doctor, and she'll do it by herself. It's not hard—just takes angleworms in your ancestry."

"Which you seem to have. But, if Winnie didn't teach you, where did *you* learn it, Joan?"

(Oh, oh! Watch it, Boss—he smells a mouse.)

"How old are you, Doctor?"

"Eh? Thirty-seven."

"I learned it about forty years before you were born. But didn't have time to keep it up," she went on. "Then for many years didn't have the physique even to try. But it all came back so easily that I am forced to assume that Mrs. Branca was better at it than I was even as a limber kid." (Let's see him check *that,* sweetheart.) (Never make a lie too complicated, Boss.) (Look, infant, I was lying with a straight face when your grandmother was in rompers. Erase and correct—your great-grandmother.)

"Well . . . I'm going to write it up as part of your final physical—if I can figure out how to describe it. Your robe, Joan?"

"Thank you." She took it and held it, instead of presenting her back for him to put it on her. "Doctor, Mr. Salomon will be settling your fees and expenses. But, to show my great appreciation, I want to add something."

He shook his head. "A doctor should not accept more than his fee...and, I assure you, mine are high."

"Nevertheless I want to." She dropped the robe. "Winnie, turn your back, dear." She went straight into his startled arms, put up her face to be kissed.

He hesitated about one heartbeat, then put his arms around her and kissed her. Joan sighed softly, her lips came open, and she flowed more closely against him—

(Don't faint! Let's not miss *any* of this.) (Don't bother me, Eunice; I'm *busy!)*

The Doctor broke from it, caught his breath, and looked at her soberly. Then he reached down, recovered her robe and held it. Joan let him put it on her, then said, “Thank you, Doctor.” She turned and smiled.

“Um. I think I can honestly report that you are in excellent physical condition. Mr. Salomon is waiting.”

“Please tell him I’ll be out in a moment.”

Joan waited until the door closed. Then she went into Winifred’s arms and giggled against her shoulder. “Winnie, did you turn your back? Didn’t you peek a little? I hope.”

“I turned my back. But I had a full view in the mirror. *Whew!”*

“Whew twice. So *that’s* what it feels like. Honey, I don’t feel nearly so virginal now.”

“Is he good? It looked like it.”

“I don’t know. I have no way to judge. Dear darling Jake kisses me; you’ve seen him—but just ‘uncle’ sort of pecks. And you kiss me—and *yours* aren’t pecks. But you’re a girl and smaller than I am. Doctor is the first man who has really kissed me . . . and it made me feel so little and helpless that I darn near dragged him down onto the mat. You’ve never kissed him?”

“Him? Joan honey, if I told any of the nurses about this, I would not be believed. Dr. Garcia doesn’t even pat bottoms; he just growls.”

“He patted my bottom. I think he did. Things were fuzzy right then.”

“I *know* he did. I saw it and didn’t believe it. Joan? You wouldn’t have made me skin down. Would you?”

“Why not? I was.”

“Yes, but you’re a patient. I’m a nurse, I’m supposed to be a robot and a chaperon.”

“Only we know you’re not. Don’t we?”

“Well . . . anyhow I can’t do that one; it’s much too hard.”

“I told him to come back in two weeks and you’d be able to. Shall I remind him?”

“Oh, Joan! You’re teasing me again.” The redhead added thoughtfully, “Do you really think I could, by myself, in only two more weeks?”

“I know you can. But not in clothes, not even tights. So if you are going to blush and go chicken, I had better not remind dear Doctor.”

“Uh. . . that did look like quite a kiss. But Paul wouldn’t like it.”

“Wouldn’t like what? Your demonstrating precision body control to a doctor? Or kissing a doctor? Or what the kiss might lead to? And how is Paul to know if you don’t tell him?” (Boss, you are corrupting the youth of the land.)

(Egg feathers, Eunice. Either Paul won’t marry her. . . or he’s married and can’t. Either way he’s got no business monopolizing her.

As you pointed out, sex is not a sport, it's for being happy.)

"Uh...Doctor wouldn't kiss me, anyway. He doesn't even know I'm female."

"Never believe it. You—are and he's not stupid. He'll kiss you if I suggest that it's the applause expected for a perfect performance. You've got two weeks to make up your mind, and right now I've got to go see dear Jake."

13

"—having business before this Honorable Court draw nigh!"

—"May it please the Court, while Petitioners are ready to proceed, may they respectfully invite to the Court's attention that no proper foundation has been laid. This matter relates to the competency of Johann Sebastian Bach Smith, grandfather of the four Petitioners...and Counsel is not aware that he is in court."

"Order! There will be order in the court—at *once.* Or the room will be cleared. Counsel, are you suggesting that Miss Smith—this young lady at whom I am pointing—is *not* Johann Sebastian Bach Smith?"

"Counsel suggests nothing, Your Honor. I merely note that we have nothing in the record to show that the person at whom the Court pointed *is* Johann Sebastian Bach Smith—and that the question of competency cannot be considered until proof of identity is indubitably established."

"Is Counsel attempting to instruct this Court in the law?"

"Oh, not at all!"

"It sounded like 'that. May I remind Counsel that this Court sits today in equity, not in law—and that the procedures are what the Court says they are."

"Most certainly, Your Honor. I regret if I inadvertently sounded otherwise."

"You were one-sixteenth of an inch from contempt, and don't let it happen again."

"Yes, Your Honor."

"...as I am sick and tired of the behavior of about fifty percent of the spectators and at least ninety percent of the press, I order the Bailiff to clear the room. Use a platoon, Evelyn, and clear these cattle out of the chutes promptly—and if that fancy video equipment is damaged in the process, we won't worry about it.

"Counsels, Petitioners, Guardian, and Ward—putative ward, let the record show—will adjourn to my chambers while we get this silly hassle cleared up."

"Jake, this is fun! If I'm not *me,* then I'm flat broke and footloose. You'll have to marry me—to keep me off

Welfare."

"Johann, shut up that drivel. This is serious."

"Jake, I refuse to see doom. If I'm not me, then I'm dead and it would be worth being broke to hear my will read and see the faces of my loving descendants when they discover that they wind up with trivial incomes that aren't even tax-free. Jake, every rich man wants to hear his will read—and I may get the chance."

"Hmm. Under the theory they seem to be following, Eunice is entitled to hear your will read—remember that paragraph about 'all persons not specifically named who are in my personal and private employ at the time of my demise—'"

"Can't say that I do, but if you put it in, it's there."

"It's there. If you're not Johann, then you have to be Eunice. It's an 'either-or' " (Nope! It's *both.)* (Eunice, this is going to be fun?) (I think so, too, Boss.)

The part of his chambers selected by Judge McCampbell was a comfortable lounge. Once in it he looked around.

"Mmm . . . Jake, Ned, Miss Smith, Alec, Mrs. Seward, Mrs. Frabish, you"re Mrs. Crampton, aren't you?—Mrs. Lopez. Parkinson, how the devil did you get in here?"

"Amicus curiae, Your Honor."

"You're no friend of this Court and you don't belong here."

"But—"

"Will you walk or would you rather be thrown out?" Parkinson elected to walk. When the door sealed behind him, the Judge said, "Sperling, set that thing so I can record when I feel like it, then you can leave. Alec, you look as if you were all set to object."

"Me? Oh, not at all, Judge."

"Good. Because we're going to cut through the fog on this silly business. Who needs a fog cutter?" The Judge stepped to a corner bar. "Alec? Gin and tonic as usual?"

"Thanks Judge."

"I'm forgetting the ladies. Mrs. Seward? Something with alcohol? Or coffee? This machine will make tea, too, if I can remember which buttons to push,. And how about your sister? And your cousins? Miss Smith? I recall what you used to order at the Gib some years back. Are your tastes the same now?"

(Watch it, Boss! It's loaded.) (Relax, Eunice.) "Judge, with a new body my tastes have changed in some respects. But I remember fondly Glen Grant on the rocks—back before my doctors put a stop to it. But I haven't tasted anything with that much authority since those days, and, since this is a competency hearing, I'll settle for coffee. Or a

Coke, if you can twist its tail for that."

The Judge rubbed his nose and looked thoughtful. "I'm not sure it's a competency hearing until we settle this matter of identity. Jake could have told you about Glen Grant. The idea of Johann Smith ordering a Coke shakes me."

Joan smiled at him. "I know—hardly seems in character. My doctors made me quit carbonated drinks long before they made me give up whisky. Back about the time you entered law school. If I'm Johann Smith, that is. If I'm not, I'll ask to be excused—as in that case I'm not a ward of the Court and shouldn't be here. Isn't that correct?"

McCampbell looked still more thoughtful. "Jake, do you want to caution your client? No, not your 'client,' your—no, not that either. Blessed if I know what you are; that's what we've got to find out. Young lady, sit down and I'll fetch you a Coke. Alec, get drink orders from your four ladies and serve them. Jake, you and Ned serve yourselves—Alec and I have a date with some fish in Nova Scotia tomorrow morning and I'll be switched if I'll keep fish waiting over a surprise turn in this hearing. Alec, confound your Irish soul, are you seriously questioning the identity of this young lady?"

"Well—Judge, are you going to talk about contempt if I suggest that your question is not properly put?"

McCampbell sighed. "Young lady, pay no attention to him. He was my roommate in college and gives me a bad time whenever he comes into my court. Someday I'm going to give him thirty days to think it over—and about four-thirty tomorrow morning I'm going to trip him into some very cold water. Accidentally."

"Do that, Mac, and I'll sue. In Canada."

"I know he was your roommate, Judge; you were both 'Big Greens'—Dartmouth seventy-eight, was it not? Why not let him ask me questions and find out for himself who I am?"

Mrs. Seward said shrilly, "That's not the way to go about it! First you must take the fingerprints of that—that

impostor—and—"

"Mrs. Seward!"

"Yes, Judge? I was just going to say—"

"Shut up!"

Mrs. Seward shut up. Judge McCampbell went on, "Madam, simply because it suits me to be informal in my chambers do not think that this is not a court in session or that I would not find you in contempt. I would enjoy it. Alec, you had better convince her of that."

"Yes, Your Honor. Mrs. Seward, any suggestions you have, you will make through *me,* not to the Court."

"But I was just going to say that—"

"Mrs. Seward, keep quiet! You're here only by courtesy of the

Court until this matter of identity is cleared up. I'm sorry, Judge. I advised my clients that, at the most, this was a holding action. I know that Jake Salomon would not risk bringing a ringer—sorry, Miss Smith—a ringer into court."

"And I know it."

"But they insisted. If Mrs. Seward won't control herself, I'll have to ask your permission to withdraw from the case."

The Judge shook his head and grinned. "No, sirree, Alec. You fetched them here, you're stuck with them—at least until Court adjourns. Jake? Is Ned still fronting for you? Or will you speak for yourself?"

"Oh, I think we can both speak up from time to time, without friction."

"Ned?"

"Of course, Judge. Jake can speak for himself and should. But I'm finding it interesting. Novel situation."

"Quite. Well, speak up if you have anything to contribute. Alec, I don't think we can get anywhere today. Do you?"

Alec Train stood mute. Joan mid, "Why not, Judge? I'm here, I'm ready. Ask me anything. Bring out the rack and the thumbscrews—I'll talk."

The Judge again rubbed his nose. "Miss Smith, I sometimes think that my predecessors were overly hasty in letting such tools be abolished. I think I can settle to my own satisfaction whether or not you are the person known as Johann Sebastian Bach Smith, of this city and of Smith Enterprises, Limited. But it is not that simple. In an ordinary identity case Mrs. Seward's suggestion of fingerprints would be practical. But not in this case. Alec? Do Petitioners stipulate that the brain of their grandfather was transplanted into another body?"

Petitioners' counsel looked unhappy. "May it please the Court, I am under instructions not to stipulate anything of the sort."

"So? What's your theory?"

"Uh, 'Missing and presumed dead,' I suppose. We take the position that the burden of proof is on anyone who steps forward and claims to be Johann Sebastian Bach Smith."

"Jake?"

"I can't agree as to the burden of proof, Judge. But my client—my ward who is also my client, Johann Sebastian Bach Smith—is present in court and I am pointing at her. I know her to be that named individual. Both of us are ready to be questioned by the Court in any fashion in order to assure the Court as to her identity. I was about to say that both of us are willing to be questioned by anyone—but on second thought I cannot concede that there is *any* interested party other than my client."

"Judge?"

"Yes, Miss Smith? Jake, do you want her to speak?"

"Oh, certainly. Anything."

"Go ahead, Miss Smith."

"Thank you. Judge, my granddaughters can ask me anything. I've known them since they were babies; if they try to trip me, I'll have them hanging on the ropes in two minutes. For example, Johanna—the one you called 'Mrs. Seward'—was hard to housebreak. On her eighth birthday—May fifteenth nineteen-sixty, the day the Paris Conference between Eisenhower and Khrushchev broke down—her mother, my daughter Evelyn, invited me over to see the little brat have her birthday cake, and Evelyn shoved Johanna into my lap and she cut loose—"

"I did no such thing!"

"Oh, yes, you did, Johanna. Evelyn snatched you off my lap and apologized and said that you had a bed-wetting problem. Can't say as to that—my daughter lied easily."

"Judge, are you going to sit there and let that—that *person*—insult the memory of my dead mother?"

"Mrs. Seward, your counsel cautioned you. If you don't heed his caution, this Court is capable of nailing you into a barrel and letting you speak only when I say to pull out the bung. Or some such. Squelch her, Alec. Suppress her the way they did in the trial in 'Alice in Wonderland'—which this is beginning to resemble. She's not a party to this; she is here only to give evidence in case the Court needs it. Miss Smith—"

"Yes, sir?"

"Your opinions as to the veracity of your putative descendants are not evidential. Can you think of anything that Johann Smith would know and that I would know or could check on—but which Jake Salomon could not possibly have briefed you on?"

"That's a tough one, Your Honor."

"So it is. But the alternative—today—is for me to assume that you are an imposter most carefully coached and then to question you endlessly in an attempt to trip you. I don't want to do that . . . because final identification—now that the matter has been raised—will have to be by evidence as conclusive as fingerprints. You see that, don't you?"

"Yes, I see it but I don't quite see how." She smiled and spread her graceful hands. "My fingerprints—and everything about me that can be seen—are those of my donor."

"Yes, yes, surely—but there are more ways of killing a cat than buttering it with parsnips. Later."

"Harrumph!"

"Yes, Jake?"

“Judge, in the interests of my client I cannot concede that physical means of identifying this body are relevant. The question is: Is this the *individual* designated by Social Security number *551-20-0052* and known to the world as Johann Sebastian Bach Smith? I suggest that ‘Estate of Henry M. Parsons v. Rhode Island,’ while not on all fours, is relevant.”

McCampbell said mildly, “Jake, you are much older than I am and I’m reasonably sure you know the law more thoroughly than I do. Nevertheless, here today, I am the Judge.”

“Certainly, Your Honor! May it please the Court, I—”

“So quit being so damned respectful in my chambers. You sat on my orals and voted to pass me, so you must think I know some law. Of course the Parsons case is relevant; we’ll get to it later. In the meantime I’m trying to find a basis for a pro-tem ruling. Well, Miss Smith?”

“Judge, I don’t care whether I’m identified or not. In the words of a gallant gentleman: ‘Broke don’t scare me.’” She suddenly chuckled and glanced at her granddaughters. “May I tell you something funny—privately?”

"Mmm...I could clear the room of everyone but you and your counsel; nevertheless you had better save any jokes until after we adjourn."

"Yes, sir. May I address one irrelevant remark to my granddaughters?"

"Hmmph. I may strike it from the record. Go ahead."

"Thank you, Judge. Girls—Johanna, Maria, June, Elinor—look at me. For thirty-odd years you have been waiting for me to die. Now you hope to prove that I am dead, else this silly business would never have come up. Girls, I hope you get away with it...for I can't wait to see your faces when my will is read." (You zapped 'em, Boss! *Look* at those expressions!) (I surely did, darling. Now shut up; we're not home free.)

"Your Honor—"

"Yes, Alec?"

"May I suggest that this is not relevant?"

Joan cut in. "But I *said* it would be irrelevant, Mr. Train. Just the same, they had better start thinking about how to break my will, instead of this nonsense." She added thoughtfully, "Perhaps I had better set up a lifetime trust that will make them slightly better off with me alive than dead...to protect myself against patricidal assassination. Judge, is 'patricidal' the right word? Now that I'm female?"

"Blessed if I know. Better make it 'avicidal'—no, 'avicide' already means the killing of birds and has nothing to do with 'avus.' Never mind. Miss Smith, take up such matters with your attorney and let us return to our muttons. Have you thought of anything which Jake Salomon could not have coached you on?"

"It's difficult. Jake has been handling my affairs for I most of a generation. Mmm, Judge, will you shake hands with me?"

"Eh?"

"We had best do it under the table, or out of sight of anyone but Mr. Train."

Looking puzzled, the Judge went along with her request. Then he said, "Be damned! Excuse me. Miss -Smith—shake hands with Alec."

Joan did so, letting her body cover it from spectators. Mr. Train looked surprised, whispered something to her which she answered in a whisper. (Boss, what was what?) (Greek. Tell you later, dear—though girls aren't supposed to know.)

McCampbell said, "Mr. Salomon could not have coached you?"

"Ask him. Jake was a Barb, not a Greek."

"Of course I was a Barb," Salornon growled. "I had no stomach for being the exhibit Jew in a chapter that did not want its charter lifted. What is this?"

Train said, “Well, it seems that Miss Smith is a fraternity brother of the Judge and myself. Mmm . . . ‘sister,’ I suppose. Judge, it’s easy to check this on both Johann Smith and Mr. Salomon. In the meantime I find it persuasive.”

“Perhaps I can add to it,” Joan said. “Mr. Train—Brother Alec—of course you should check on both Jake and myself. But look me up in our fraternal archives under ‘Schmidt’ rather than ‘Smith’ as I changed my name in forty-one. Which my granddaughters know. But you both know of our fraternal Distress Fund?”

“Yes.”

“Certainly, Miss Smith.”

“The fund did not exist when I was pledged—my senior year it was, after I made Phi Beta Kappa and because our local chapter needed a greasy grind and had an alumnus willing to pay for my initiation. The fund was started during World War Two; I helped augment it some years later and was one of its trustees from fifty-six until late in the eighties when I dropped most outside activities. Judge, you tapped the fund for fifteen hundred in the spring of seventy-eight.”

“Eh? So I did. But I paid it back, eventually—then donated the same amount at a later time, according to our customs.”

“I’m glad to hear it. The latter, I mean; you were off the hook before I resigned as a trustee. I was a hardnosed trustee, Judge, and never okayed a loan until I was certain that it was a distress case and not just a convenience to a lazy undergraduate. Shall I relate the circumstances which caused me to okay your loan?”

The Judge blinked. “I would rather you did not, at least not now. Alec knows them.”

“Yes,” agreed Train. “Would have lent him the money myself if I had had it.” (What is this, Boss?) (Case of ‘rheumatic fever,’ sweet.) (Abortion money?) (No, no—he married the girl—and here lam digging up the skeleton.)

(Bitch.) (No, Eunice—my granddaughters don’t know what I’m talking about, nor does Jake.)

“I see no reason to discuss it,” Miss Smith went on, “unless the Judge wants to question me privately—and if you do, Judge, do remind me to tell you a real giggle about the ancestries of my so loving granddaughters. Odd things happen even in the best families—and the Schmidt family was never one of the best. We’re a vulgar lot, me and my descendants—our only claim to prominence is too much money.”

“Later perhaps, Miss Smith. I am now ready to hand down a decision—temporary and conservative. Counsels?”

“Ready, Judge.”

"Nothing to add, Your Honor."

McCampbell fitted his fingertips together. "Identity. It need not depend on fingerprints or retinal patterns or similar customary evidence. John Doe could lose both hands and both feet, have both eyes gouged out, be so scarred and damaged that even his dentist could not identify him—and he would still be John Doe, with the same Social Security number. Something like that happened to you, Miss Smith, assuming that you are indeed Johann Sebastian Bach Smith—though I am happy to see"—he smiled—"that no scars show.

"This Court finds persuasive the evidence of your identity brought out in this hearing. We assume, pro tem, that you are Johann Sebastian Bach Smith.

"However"—the Judge looked at Salomon—"we now get to the Parsons case. Inasmuch as the Supreme Court has ruled that the question of life or death resides in the brain and nowhere else, this Court now rules that identity must therefore reside in the brain and nowhere else. In the past it has never been necessary to decide this point; now it is necessary. We find that to rule in any other fashion would be inconsistent with the intent of the Supreme Court in 'Estate of Henry M. Parsons v. Rhode Island.' To rule in any other way would create chaos in future cases in any way similar to this one: Identity must lie in the brain. "Now, Jake, I am in effect going to shove the burden of the proof over onto you and your client. At a later time you must be prepared to prove beyond any possible doubt that Johann Sebastian Bach Smith's brain was removed from his body and transplanted into this body"—McCampbell pointed.

Jake nodded. "I realize that, Judge.. A person who wants to cash a check must prove his identity—this is on all fours. But today we were taken by surprise."

"So was the Court—and, Alec, I'm going to take you by surprise someday...with something better than a pie bed or an exploding cigar. Damn it, you should have warned Court and Counsel."

"I apologize, Your Honor. I received my instructions quite late."

"You should have at once asked for a continuance, not let this hearing open. You know better. Never mind, the hearing has been instructive. Miss Smith—Miss Johann Sebastian Bach Smith subject to remarks above—you were made a ward of this Court and placed under the guardianship of Mr. Jacob Salomon for one reason alone:

You were at the time not competent to manage your affairs by reason of postoperative incapacity. Let the record show that neither insanity in the legal sense nor mental illness in the medical sense had anything to do with it; you were in an extended condition of unconsciousness following surgery and that was all. You are no longer unconscious, you appear to be in good health, and the Court takes judicial notice that during this hearing you appeared always to be alert and clearheaded. Since the sole condition—unconsciousness—on which you were made a ward no longer obtains, you are now no longer a ward and Mr. Salomon is discharged of his guardianship—what's the trouble, Alec?"

"May it please the Court!—as Counsel for the Petitioners I must ask to have an objection entered into the record."

"On what grounds?"

"Why, lack of expert witnesses as to, uh, 'Miss Smith's' competence."

"Do you have expert witnesses ready to examine her?"

"Of course."

"Jake?"

"Certainly. Waiting on call."

"How many?"

"Harrumph! One more than Alec has, however many he qualifies."

"So I expected, and if we start qualifying expert witnesses now and let each one exercise his little ego, those fish in Nova Scotia would die of old age. Keep your shirt on, Alec. No expert witnesses were used to show this person's incompetence; the gross condition of unconsciousness was stipulated—and now no longer exists. Alec, your objection goes into the record but I am putting you on notice that your claim of need for expert witnesses lacks foundation~—and this time the burden of proof is on *you.* Petitioners will have to show something more than great anxiety to get their hands on the large sums of money at stake in this matter. Every citizen, every person, is conditionally presumed to be competent—and that means *everyone*—you, me, Jake, Miss Smith, Petitioners, and the illiterate who fills that bar and cleans out the empties. This Court will not set the extremely bad precedent of allowing you, or anyone, to conduct a fishing expedition into the matter of a person's competency without proper foundation. However— Jake."

"Yes, Judge."

"We all know what this hearing is really about. Money. Lots of money. You might explain to Miss Smith that her competence may he challenged at some later time."

"We're prepared for it."

"While I've discharged you as her guardian, you will stay on as conservator of the property of Johann Sebastian Bach Smith pending positive proof of identity—and I do mean *positive;* you've got to trace Smith's brain into this body every step of the way. What was the name of that surgeon? Boyle? I suppose you'll need him. And several others. I'm not going to take anything for granted, nor permit any stipulations; there is too much at stake and I don't intend to be reversed. Alec, if you are going to challenge competency, you will have to wait until after that time and—if it's in my court—show foundation for such challenge. That satisfy you?"

"I guess it will have to."

"I guess so, too. Court's adjourned."

Mrs. Seward stood up, red-faced, and said to Alec Train, *"You're fired!"*

McCampbell said coldly, "Madam, consider yourself lucky that you saved that outburst until after Court adjourned. Now, get out of my chambers. You other three ladies may leave, too."

Johanna's sister June said as she stood up: "Judge, may I ask a question?"

"Certainly, Mrs. Frabish."

"You've turned this person loose—that's all right, I'm not criticizing. But are you leaving her in our grandfather's house? I think you ought to know that it is loaded, simply *loaded,* with valuable works of art. What is to keep her from gutting it while we are proving that she *can't* be our grandfather?"

"Oh. Madam, Mr. Salomon knows the duties and responsibilities of a conservator. However—Jake, it would be prudent not to permit any objects of sentimental or artistic value to leave that house during this waiting period."

"No problem. Since I've had to manage the household, I've been staying there much of the time. But I'll have a word with Johann's chief guard."

"Judge, may I say something?"

"Certainly— Miss Smith."

"I'd like protection against *them.* June doesn't know what objets d'art I own. Not one of them has been inside my house since it was built. During my long illness and confinement not one of them called on me or sent flowers or anything. And the same for my post-surgery convalescence, except that I learned that Johanna—Mrs. Seward—tried to crash in right after my operation. I don't trust them; I'd like the Court's protection."

"Jake?"

"I wasn't there but I heard it from Johann's chief guard."

"Mrs. Seward?"

She sniffed. "I had a perfect right! Next of kin."

"I think I understand it. All right, you four ladies—listen carefully, then leave. You will refrain from visiting the home or offices or other properties of Johann Sebastian Bach Smith. You will refrain from making any attempt to see or to speak with this young lady I have been addressing as 'Miss Smith.' If you need to communicate with her or with the Court's appointed conservator, Mr. Salomon, you will do so only through this Court or through your attorney, whoever he may be, to Mr. Salomon and *never* directly to Miss Smith. This is an order to all four of you and each of you will obey under pain of severe penalties for contempt. Do you understand? Are there any questions?"

McCampbell waited, then went on, "Very well. Now all four of you leave."

The Judge remained standing while they filed out. When the door sealed, he sighed. "Whew! Miss Smith—or should I say 'Brother Schmidt'?—will you have that Glen Grant on rocks now? Glenlivet actually, I don't have Glen Grant."

She smiled. "Truly, I haven't tried anything that potent on this new body. Jake and I should leave—you and

Brother Alec have a date with a fish."

"Oh, do sit down. Alec has his gear in his car in the basement and my copter is picking us up from the roof in about an hour. Another Coke?"

"Is there sherry? I get a very pleasant buzz on just a glass of sherry —I conclude that my donor did not drink at all." (Almost never, Boss —and you're giving me a taste for the stuff.) (Quiet, darling—later.) ('All right. . . but ask him about our *name.* Isn't Judgie Wudgie a darling? Wonder what he's like in bed?) (You and your one-track mind! I'll ask him about our name. Now shut up!)

"Sherry it shall be. Jake? Ned? Alec?"

"Judge, since Jake doesn't need me, I'll ask to be excused."

"Okay, Ned. Alec, serve yourself and take care of Jake; I want to stare at Brother Schmidt. I probably won't be seeing you again, Miss Smith. Your granddaughters are almost certain to try to move it into a higher court. That business of proving who you are by our fraternity grip—that tore it. All I could do today was to give you a little protection in the interim."

"Which I appreciated, sir. Here's an odd thing about this sex change. When I was an old man, frail and helpless, I was afraid of nothing. Now I'm young and healthy and strong. But female. To my surprise I find that I want to be protected."

Alec Train said over his shoulder from the bar, "I'll protect you, Brother Schmidt! Don't trust Brother McCampbell—he was the worst wolf in our chapter. Step aside, Brother Wolf—-it's my turn to stare at our new brother."

"Boys, I am not a 'new brother,' I was pledged years before you were born. But I'm not surprised that you like to stare at me, as my donor—Jake, do they know?"

"It's not much of a secret, Johann. Judge McCampbell knows, I think Alec knows, too." (Joan, if he doesn't know, tell him. And don't forget our name!) (What do you think I'm leading up to?)

"All right. My donor, Eunice Branca, my former secretary and the sweetest, loveliest girl I've ever known, was not only a perfect secretary; she was a beauty contest winner not many years back. I know what a treasure I inherited from her. I don't wear her body with the charming grace she gave it—but I'm trying to learn."

(You're learning, Boss.)

"It is the opinion of this Court that you have learned."

"Shut up, Mac. Brother Schmidt, I agree with him merely because he's right."

"Thank you both—on behalf of Eunice Branca. Jake? Now that Court has adjourned do I have to wear this Mother Hubbard? It's too warm."

"That's up to you. I suppose it depends on how much you have under it."

"Mmm . . . perhaps I'd better not. Minimum decency under the customs of today—but it would get a burlesque queen thirty days back when I was a youngster." (Exhibitionist. You're asking to be coaxed.) (Certainly. And who taught me? At least the bra isn't just paint, like that mermaid outfit *you* zapped *me* with.)

Alec Train said, "Brother Schmidt, in identity cases it is sometimes necessary to require the challenged individual to strip completely. Birthmarks and scars and such—tell her, Judge."

"Ignore him, Brother Schmidt. I wouldn't call that lovely Grecian robe a 'Mother Hubbard.' But I can see that it was intended for outdoors and I'll happily hang it up for you."

"Uh . . . oh, goodness, I'm having trouble shucking off my early-twentieth-century Puritanism. Jake has seen me in the nothing-much girls wear today, and he's seen Eunice in even less than I have on under this; Eunice wasn't shy about sharing her beauty." (You milked *that,* didn't you, dearie? Which one are you after?) (Shut up!) Joan ran a finger down the magnostrip, let the robe fall open; Alec Train hurried to claim it ahead of the Judge.

Then she posed. "See? This is almost the way Eunice Branca looked—except that she walked in glory, always while I am an old man who is trying to learn to wear her body." Besides Eunice's body, Joan was wearing some of Winnie's clothes—black frill skirt, translucent black ClingOn cups, six-inch Sticktite stilt sandals that left her pretty feet in view—no paint, just restrained enhancement with rouge and shadow.

She posed, they stared. Jake cleared his throat louder than usual. "Joan, had I known what you were wearing—not wearing, rather—under that robe, I would have advised you to keep it on."

"Oh, pooh, Jake, you wouldn't have scolded Eunice for dressing this way. But that brings up something I must ask. Judge, I can't go on being 'Johann Smith.' Will you let inc change my name?"

"That's not properly put, Brother Schmidt. You can have any name you like. At most a court confirms it. You mean that you need a girl's name now. Helen, perhaps? Or Cleopatra?"

"Thank you—for Eunice." (Boss,, find out if Judge is still married.) (Go back to sleep!) "Not either of those names. I want to be known as 'Joan'—for 'Johann'—'Joan Eunice...Smith.'"

Judge McCampbell lOoked surprised, then smiled in, approval. "A good choice. The flavor of your masculine name, plus, I assume, a tribute to your donor. But may I offer a word of advice? You can start calling yourself that today—"

"I already have."

"I noticed that Jake called you 'Joan.' But let it be a family name, and keep your masculine name at other times—use it to sign letters, checks, and so forth—until your identity has been finally established —in the Supreme Court if possible. Don't cloud the issue."

"I gave her the same advice," Salomon put in.

"I'm not surprised. Miss—Brother Schmidt, what do you want me to call you? In private."

"Why, either 'Joan' or 'Eunice.' Both by preference, as I do not want anyone ever to forget Eunice Branca. Me least of all—I want 'to be reminded of my benefactor. Benefactrix. But don't call me 'Miss' in private. Look, brothers, as 'Brother Schmidt' I am half a century older than you two . . . but as 'Joan Eunice' I am only a few weeks old. However, Eunice's body is that of a young woman, and that is what I am learning—must learn!—to be. You could have daughters my age. So please call me 'Joan Eunice' and save 'Miss Smith' for court appearances." She smiled. "Or 'Brother Schmidt if you wish—although 'Yonny' was what I was called by our brothers in my chapter."

Alec said, "Joan Eunice Brother Yonny Schmidt, I'm pleased to call you whatever you like, and I don't have daughters your age and you make me feel younger just to look at you. But I'm not speaking for my roommate and I'd hate to tell you how old some of *his* offspring are; he was the scourge of P.S. 238—stay away from him and let me protect you. And did I mention how happy I am that Mrs. Seward fired me? Brother Joan Eunice, I would never have been in this case other than as a favor to Parkinson's motherin-law. But at first it did look like a straightforward case of protecting the interests of an invalid too ill to protect himself. Believe me."

"Don't listen to him," advised the Judge. "He's an ambulance chaser. I throw legitimate business his way just to protect the good name of our Brothers. But back to this matter of identity. Joan Eunice, I don't know how much law you know—"

"Just what has rubbed off in the course of a long and evil life. I depend on experts. Such as Jake."

"I see. Well, your granddaughters probably think it is wrong of me to help you establish your identity. It is not. True, in a civil suit or a criminal action a judge must be impartial. But such a matter as establishing identity is neither one, and there is no rule of law or equity which prohibits a court from being helpful. The situation is like that of a citizen who has lost his passport and appeals to his consul. The consul doesn't sit as a judge; he tries to get the mixup straightened out. So— Jake, you've been in the Law much longer than I have; do you want my opinions?"

"I am always most happy to have Judge McCampbell's opinions on any matter."

"I think I'll reconvene court and slam you for contempt. After I've finished this drink. All right, you're going to get 'em anyhow. Do you anticipate any difficulty in proving that the brain of Brother Schmidt was moved into the body of Eunice Branca?"

"None. A nuisance but no difficulty."

"Or in showing that this body—this lovely body—was once that of Eunice Branca?"

"Same answer."

"What evidence?"

"Police reports, photographs, hospital personnel, and so forth."

"Let's say it's my court. I'm going to make you go back and touch second at every opportunity. I intentionally got into the record today that ruling based on 'Parsons' estate v. Rhode Island'; I think it's important—"

"So do I."

"Thank you. In following the principle that identity lies in the brain and nowhere else"—(We could tell him something, couldn't we, Boss?) (Yes, beloved—but we aren't going to!)—"I am going to be as tough as possible. No depositions when it is possible to bring the witness into court. Photographs and other records not only allowed but required—but the originals must be brought into court, not copies, and photographers or record keepers must appear and identify same, and the surgeons or others whose work appears in those films, photographs, or records must appear and confirm each record. Do you know if each body was fingerprinted just prior to surgery?"

"Not of my own knowledge. Damn it, I was taken by surprise today—and at the time of Eunice Branca's death I had other things worrying me."

Joan Eunice reached over and squeezed his hand. Alec Train said, "I can help on that. When Parkinson brought Mrs. Seward to see me, I checked on that point at once. Prints were taken from both bodies—so I gave identity no further thought. That's why *I* was taken as much by surprise as you two. I don't know what chimney-corner lawyer put the idea in Mrs. Seward's head—Parkinson, probably; he's stayed at her elbow all through—but I received instructions just ac court convened. I'm not spilling any privileged communication when I say that—nor do I know of any Canon which forbids me to say that I am damn sick of both Mrs. Seward and Parkinson."

"Hmm. Every possible bit of evidence," McCampbell went on. "You will have to trace that brain out of that body—Joan Eunice—no, Jake. Jake, do you know what became of Johann Smith's body?"

"That one I can answer. Here we have a unique case of a body becoming a chattel while the person who lived in it is still alive. I knew what Johann Smith—Joan Eunice, that is—had wanted done with it, as his will contains the standard 'donated for medical research' clause. But the will did not control because Johann Smith was, and is, alive. The Medical Center asked what to do with it. I told them to hold it, in their morgue. I assume that it is still there."

Mr. Train said, "Counselor, I hope you're right. But unless that cadaver was nailed down, two gets you ten that some eager medical student has chopped it up."

The Judge said, "I'm afraid Alec could be right. Jake, it may be a matter of great urgency to perpetuate the evidence—all the evidence. Verb. sap. We all know how key evidence has a way of disappearing when big money is involved. And besides eager medical students—well, we all know that almost any illegal act is for sale at a price. Films and records can be stolen, others substituted, ostensibly respectable witnesses can be bribed. Let's speculate for a moment that Brother Schmidt is opposed by nameless dishonest persons, persons willing to bribe, suborn, and so forth. Such crime is not cheap. Does anyone have a guess as to how much money might be used to destroy or change the evidence?"

Jake said, "I won't guess. But in the case of four nameless females I can find out."

Joan said, "I can help a little on this. Maria and Elinor lost their father before they were of age and his estate wound up minus and no insurance to speak of. So I supported my daughter Roberta until she died and kept her kids in school until they flunked out, then continued to support them until each married—one of their grievances against me is that I stopped their allowances when they married. But I continued a credit watch on them, as I did not want any descendant of mine to become a charge on the taxpayers. Much the same with the other two girls except that Jim Darlington outlasted my daughter Evelyn, and both girls—Johanna and June—married while their parents were living. To put it briefly, unless one of them has come into some windfall, all four could not scrape together enough money to tackle any really expensive crime."

"I'm glad to hear it," said McCampbell. "Just the same, Jake, time is of the essence in preserving evidence—and *I* want you to know that this court will give you all possible legal help in protecting and perpetuating any evidence you dig up. Uh, Alec and I plan to be away four days—but I'll leave my emergency wavelength with Sperling and will bounce back here if you need me."

"Thank you, sir."

"Wait a minute," said Alec Train. "There *is* money in this case. Mac, you know how I am about fees."

"Yes. Larcenous."

"Ignore him, Brother Schmidt. I tailor my fees, all the way from zero up to outrageous. In this case I did not want the job, so I demanded an outrageous retainer against a, yes, larcenous per diem—and Parkinson paid without a quiver. Through Mrs. Seward but there was no question as to who called the tune. The question is: Will Parkinson go on paying . . . and is he willing to hire his friendly, neighborhood safecracker to go after some necessary link? I don't know—especially as it isn't his money, but his motherin-law's."

"I don't know," answered Jake, "but I always assume that my opponent might cheat if I fail to cut the cards. I'm going after that evidence with all possible speed. Sorry, Joan, I should have anticipated this—I'm getting old." (He is *not.* Tell him so, Boss.)

Joan Eunice patted his hand. "Jake, you are *not* getting old and there was no reason to anticipate this. Gentlemen, let me say again, I don't care a whit if my granddaughters win. If they win, they lose—because if they prove me legally dead, I have cut them off with that shilling. And, thanks to Eunice Branca and Dr. Boyle and lake Salomon, I'm young and healthy and enjoying life and not distressed at the idea of losing a fortune that has become a burden to me."

Alec Train said, "Brother Schmidt Joan Eunice honey, don't you realize that it is unAmerican to talk that way about millions of dollars?"

She grinned at him. "Brother Alec, if I come out of this broke, I'll bet you a million dollars that I can net a million dollars after taxes in the next five years, starting from scratch. Jake, will you back my bet? Since it calls for me starting broke?"

"Certainly."

"Wait a minute!" Train protested. "I'm just a poor but honest lawyer. Will you make that bet fifty cents? Mac, will you lend me fifty cents?"

"Not without security. Joan Eunice, listen, please. I don't doubt that you are willing to tackle the world broke. But I know in my heart that you are indeed Brother Johann Schmidt. . . who okayed a loan to me when I really needed it. Old Eata Bita Pi didn't let me down. . .

and I'm not going to let Brother Schmidt down."

"Thank you, Brother Mac."

Jake growled, "You f rat house aristocrats made me sick when I was in college and I don't like it much better today. Judge, the only good reason for giving Joan Eunice a hand is because it's the fair thing to do. Not because she—he—Okayed a loan years ago to some snot-nose fraternity brother."

"Counselor, your point is well taken. I think I can truthfully say that I have never allowed fraternal bonds—including Shriner, which you and I are—to affect my behavior on the bench—"

"The hell it hasn't, old buddy mine; you rule against me just for the hell of it. Ask anybody."

"Even when I've been forced to instruct this Irishman in the finer points of the law. I would have helped in this matter in any case; both as a citizen and as a ward of the Court Joan Eunice is entitled to any help a court can offer in establishing her identity. But I confess that my emotions were aroused by a circumstance that I did not dream existed. Not that Joan Eunice is my fraternity brother—that is simply a pleasing coincidence—but that she—he at that time—gave me a hand when it mattered. Uh"—he stared at his glass—"no need to go into details. You know them, Joan Eunice?"

"Yes."

"You can tell Jake later. Let me list the things I think are necessary in this case; both of you lawyers check me and I'm going to stick a fresh tape in this thing so that we can all have copies." He turned to his clerk's recording equipment. "That is I *think* I am going to. Damn! Excuse me, Joan Eunice. I wonder if Sperling has gone home."

(Let's look at that thing, dear.) "I'm 'Brother Schmidt' any time you feel like swearing, Judge. May I look at your recorder? It's a bit like one I have at home."

"Go ahead. I sometimes wish we still used shorthand reporters."

"Thank you." (How about, Eunice?) (It's Betsy's idiot baby sister, no huhu. You whistle Yankee Doodle or think about Judgie Wudgie and don't bother me.) (Om Mani Padme Hum. Om Mani Padme Hum. Om Mani Padme—) (Got it, dearie.) "Recording with a fresh tape, Judge; set for three copies, and erase memory."

McCampbell said, "I'm amazed every time I find someone who understands machinery."

"I don't, really. But Eunice Branca taught me to run one somewhat like yours." (Boss, you're learning how to lie—just tell the truth but not all of it.) (Honey girl, I *invented* that way of lying way back when your great-grandmother was a virgin.)

"First, Eunice Branca's death must be established. As it was murder, we will assume extensive records with positive identification including fingerprints—and since they are police records, we must also assume that they are vulnerable to any determined and well-financed attempt to destroy or replace them. Then Mrs. Branca's body must be followed into surgery and positive identification of the body again established at that point. Johann Schmidt's body must also be followed to that point and positively identified just before surgery. Then we must be certain beyond any doubt that the brain was removed from the Schmidt body—Joan Eunice, this must be distressing to you. Would you like to retire to my washroom? There's a couch in there."

"Please go ahead, sir; I've learned to live with it." (Makes *me* feel like throwing up, Boss.) (Me, too, darling—but we aren't going to; we're going to look solemnly serene. Om Mani Padme Hum.) (Om Mani Padme Hum. Let's make a Lotus: this chair is big enough.) (Yes, darling. Om Mani Padme Hum.)

"—and finally, in court, we will take Joan Eunice's fingerprints, have them compared by experts with each earlier set, and thereby forge the final link. Joan Eunice, do I simply switch this off now?"

(After the three copies pop out, it will shut itself off.) "When the three copies pop out, it will erase and shut off. Jake, we're keeping these gentlemen from their fishing."

"Those fish aren't restless," the Judge assured her. "Just a moment." He stepped to his closed-circuit viewphone.

"Evelyn."

"Yes, Judge."

"How are things outside? Quiet?"

"Judge, how did you guess? I've got three men in the infirmary and the building is buttoned up. You might take a look on three and four, and then play back the sixteen o'clock spot news."

"How badly were your men hurt?"

"Nothing serious. One with a lungful of sneeze gas when we had to clear the main entrance and seal the riot doors, one with a flesh wound on a cheekbone, and the third with cracked ribs. My guess is the newsies bought 'emselves a riot, as cameras were in position when the trouble started."

"I see. Are we going to need the Guard?"

"I wouldn't say so. The police have the streets around us pretty well patrolled and our own people are either staying overnight or being taken off the top by chopper. Message from Judge Anders—says there's no reason for you not to go fishing and he'll assume that he's presiding judge pro tem. He's staying in his chambers tonight."

"I'll call him and thank him. Off."

The Judge switched to view three, studied it. "Doesn't look too rough. Just the same they ought to tear this building down and build a stronger one farther from any Abandoned Area." He switched to view four. "Oh oh!"

The room filled with crowd roar, the screen showed a milling mob. Moving slowly through the crowd were two police Merrimac tanks, their loudspeakers monotonously repeating the warning-to-disperse. "Brother Schmidt, does your house have a copter landing?"

Joan shook her head. "No, it's designed so that a copter *can't* land on it. It seemed the safer choice when it was built."

"Well. . . I could put you into any, enclave by copter. Or you could stay here overnight."

Jake said, "Judge, my car is a Rolls-Skoda. We'll be all right."

"I can't force you to stay. But let's get a playback on the news and see what stirred up the lice." McCampbell punched the time in, then punched for playback.

"Headline of the Hour! Brain Transplant Fraud! Our earlier flash has been confirmed; the sensational brain transplant of Tycoon Johann Smith was a hoax. The question is: Did he die a natural death? Or was he murdered? The latter theory seems likely in view of today's bald-faced attempt to steal his enormous fortune through claiming in open court that his alleged former secretary, a woman of doubtful reputation going by the name of 'Blanca'—"

Salomon growled, "Judge, would you mind shutting off that damned rot?"

McCampbell switched it off. "Seems I started something. Can't say I'm sorry. I will *not* let my courtroom be turned into a circus."

Joan Eunice said meekly, "I'm sorry, Judge."

"Eh? Joan Eunice, you are not at fault. You were forced into court needlessly and against your will; you did nothing. As for me, I hold to the old-fashioned ideal that a courtroom is where the Sovereign is present in person, dispensing equity and justice to all . . . *not* bread-and-circuses for the rabble. As long as I'm on the bench I'll run it that way, no matter how many news snoops get sore or how many hilts want a livelier show."

"I'm sorry your bailiffs were hurt."

"Well, so am I. But they aren't conscripts, they are career people who know it is hazardous. And they are necessary—if that bill ever passes to disarm bailiffs, that day I quit the bench, and the Law as well. Jake?"

"Yes, Mac?"

"You can risk your neck if you want to, but even a Rolls-Skoda is not a Merrirnac. Enough people can tip it over, then they can build a bonfire around it and roast you like chestnuts . . . and there are characters out there who would do it just for kicks. No, not a word out of you; I'm not going to let her leave this building in a ground car even if I have to reconvene court for three seconds and make her a ward again. She leaves by copter. The question is: Where does she go? You could sleep in my chambers, Joan Eunice; there is a buttery in the bar and the washroom is a complete bath and that couch opens into a bed. Lumpy, I'm afraid." (Ask Judgie Wudgie if he goes with the bed!) (I didn't hear you—and pipe down.)

"I was going to say," Jake said mildly, "that I have a house in Safe Harbor. Unstaffed and empty but it's a safe rendezvous. You could have your Chief Bailiff tell my driver and Shotgun to wait until this quiets down, then pick us up there—although I would bet on those boys to drive through any mob and not let the car be tipped; they're mean."

"No doubt. And wind up with a hit-and-run, too; we'll do it the easy way. Either of you want to use my washroom while I phone Evelyn and the roof?"

A few minutes later Jake and Joan were about to leave; the Judge's copter was waiting for them, he having brushed aside remarks about fish. Joan said, "Judge? I think you know I am grateful, but I would like to show my thanks by doing something—money, I mean—for those men who were hurt."

"No."

"Why not? Oh, I know it was not my fault but nevertheless they were hurt because of me. You know I can afford it."

"Because they are officers of the Court and I would have to treat it as constructive bribery. Tell her, Jake."

"He's correct, Joan—although he's being stuffy about it."

"Not too stuffy. Joan Eunice, there is an enclave home for dependents of police, bailiffs, firemen, and such, killed in line of duty. Jake can tell you about it. I would rather not hear what you do about it."

"I see." Joan ignored the fact that Jake was waiting with her robe, stepped closer to McCainpbell, turned her face up, and put her arms around his neck. "Does this constitute bribery?"

"I think so," McCampbell answered, putting his arms around her. "But I won't analyze it."

"Of course it's bribery! Get away from him, Brother Schmidt! I handle his bribes."

"Shut up, you noisy Mick."

Joan turned her face just as her lips were about to touch McCampbell's. "You're next on my bribe list, Brother Alec."

"So get back into line! R.H.I.P." McCampbell stopped any further words from her; she let her lips come softly open, did not hurry him. (Whee. . . *000!* I thought so.)

(Don't let me faint, Eunice.)

Some seconds later she opened her eyes, looked up into the Judge's face. "My goodness!" she said softly.

Alec Train tapped his shoulder. "Court's adjourned, Judge. Be elsewhere."

Joan gave the Judge a quick, possessive squeeze, untangled herself and went into his former roommate's arms, turned up her face. She was careful to make this kiss as long and as warm as the other. *(Unh!* What do you think, Eunice?) (They are both oral as hell and they kiss almost as well as lake and if Jake weren't here they would have us down on the rug this instant—break it up, dear; you've kissed him as long as you did Judgie Wudgie and Jake is getting edgy.) (All right. Spoilsport.) (Not at all—but you don't -know how to handle men without upsetting them. Break!)

A moment later Jake silently helped her into her street robe. She thanked him, clicked the magnostrip, arranged the shoulder drape, let the Judge hand her into his lift. They said goodbye, the lift closed. Alec Train turned to his friend: "Mac, kissing Brother Schmidt is more emphatic than spreading most gals."

"Amen!"

"What would it be like to be married to her? And why is it that when the parade goes by I'm always out for a short beer?"

"The O.B. damaged your head with his forceps. That's why they had to make a lawyer out of you."

"How about yourself?"

"Oh, me, too—stipulated. I wasn't bright enough to be a lawyer; I had to wangle an appointment to the bench. Christ, what a chick!"

"Passed by acclamation. Mac, having kissed her, do you really think she can be old 'Sell 'em Johann,' the terrible-tempered tycoon?"

"Well...everything fits—and she did have the Grip."

"And the password; I checked. But, Mac, any of our brothers, even ones whose bias hardly extends to girls, would sell our secrets—what am I saying?—would *give* them to that one. If she kissed him."

"Stipulating that you are correct in your estimate of our brothers—and I agree—Joan Eunice can't have had much chance to subvert one of them. Jake has practically had her under house arrest, at my suggestion. And Jake himself—well, he sounded like a Barb, but you can check it in that bookcase, in 'Who's Who in Law.'

"I don't think I can walk that far. But let's assume that old Johann was a brother—easy to check—and she did know all about the Distress Fund and the fact that you needed a loan our senior year."

"Yes. That's the convincer."

"No, it's not. I mean that *Johann* would have been just as susceptible. She was his secretary; it might have amused him to spill fraternal secrets to her—grip, password, even details about the fund."

“Oh, crap, you honkie bastard. Joan Eunice is just what she purports to be—an utterly delicious girl who has Johann’s brain in her skull. Alec, I concede that Joan Eunice doesn’t seem much like Johann Smith. But even you might be socially acceptable if that sponge between your ears were placed in the brainpan of a creature as delectable as she is.” The Judge shook his head. “She’s enough to make a queen switch from A.C. to D.C.”

“Man, she really got to you, didn’t she?”

“And *you,* my friend. *Who* said we needed a vacation from women? You, as I recall. But you drooled over her. You would give up boys for life if she were to phone and ask for you. Don’t try to fool your roomie; I know you better than Ruth does.”

“I won’t argue. But you’re at least as far down the Street as I am, Mac. . . and she affected you the same way. Uh, does Norma know how little fishing we plan to do?”

“Sure she suspects. But she’s always been tolerant. Alec, how disappointed would you be if I called off our trip? Jake may need a friendly judge in a hurry. Especially if those vultures find a shyster unscrupulous enough to buy some direct action. I’d hate to be missing if Brother Schmidt needed me.”

“My God, a soul with a soul. Oddly enough I was thinking the same thing. Can’t let Brother Schmidt down. Mac, could it prejudice anything if I volunteered my services—free—to Jake? If this gets sticky, he’s going to need to be several places at once. I could share the load.”

“And share the wealth. It would give you an excuse to see Brother Schmidt again.”

“Any law against taking a profit? But Jake does need help.”

“And you’re familiar with the case. Alec old dear, it’s a noble thought. While you did represent the Petitioners, not only have they fired you, but this was never an adversary situation; theoretically those creeps are as anxious to arrive at the truth for the benefit of their beloved grandfather as Jake is. They don’t dare admit that they are trying to grab his gelt.”

“I wonder if lake has a phone in that empty house he mentioned? If not, I can leave word at the Gibraltar Club—he has rooms there—and at Johann Smith’s town house. And with lake’s answering service.”

“Yes. But let the call be from me; it might speed the service. We’ll stay and wait for it. Ruth’s not expecting you, Norma is not expecting me; I’ll have dinner sent up from the basement.”

“Clear thinking. So fix fresh drinks while I put in those calls. Hey! You can reach them in your copter.”

“Only via the piloting circuit. Not private. Better we keep this *tight.*

Alec, it is unlikely that Jake will have anything for you to do before morning. But he might—a trip to the coast or such. You could stay on call by spending the night here."

"Well!" Alec Train stopped with his hand near the phone. "Roomie, I thought that Brother Schmidt had driven all other thoughts out of your mind. Or did I misunderstand?"

"Let's phrase it this way: It would be pleasant to discuss Brother Schmidt in intimate detail with some sympathetic person who appreciates her as much as I do."

"In that case, mix those drinks and start a lukewarm shower. I'll join you as fast as I can."

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Jake Salomon handed Joan Eunice into the Judge's copter, got in beside her and locked the door. Quickly they were airborne. The passenger compartment was separate from the pilot's space and well soundproofed; conversation was possible. But he said nothing and tended to keep his eyes away from her.

Joan let it go on only a short time. "Jake dear? Are you angry?"

"Eh? Heavens, no. What made you think so?"

"You seemed quite distant. I thought you might be annoyed with me for having kissed Judge McCampbell and dear Mr. Train."

"Your business."

"Oh, Jake. Please don't scold me even by your manner. I've had a difficult day, especially the time I had to spend with my goddam granddaughters. It hurts, lake, to-be hated. To know that someone wants you dead. Yet I had to try to appear serene and ladylike. Be a credit to Eunice. Jake, it isn't easy to he a lady—after almost a century of being male. Do you know how I manage it at all? I say to myself, 'What would Eunice do?'—then I try to do it. Kissing those sweet and helpful men— lake, Fm not used to kissing men. You could have trained me but you won't give me more than a goodnight peck. I said to myself, 'I must thank them—and what would Eunice do?' I decided that she would kiss them the best she knew how. So I tried, even though I don't know how. Well? Is that what Eunice would have done?"

"Well...yes, Eunice would have kissed them." (He knows darn well I would have, dear.) (I know. He's being difficult.) (So keep punching. Tell him how wonderful he is. Joan, men *always* -believe it when you tell them they are wonderful.)

"Then I don't see why you are being cold with me, Jake. I thought you were truly wonderful all day long, the way you handled things and protected me. I wanted to kiss *you* for being so wonderful—and would have, and will!—if only you would let me. Was it because I didn't stop to put my robe on before I kissed them?"

"Well…it would have been more ladylike."

(Punch hard on this one, dearie—for Jake knows darn well that I spread skin on him the very first time I kissed him. . . and later I kissed him bare naked the first time it was safe to. He didn't fight—he was eager.) (I'll try.)

Miss Smith looked worried, which did not suit her features. "I suppose so. But I don't know *how* to be a lady, Jake; the rules have changed so much. Eunice often startled me by what she did and how she dressed—yet I am certain that she was always a perfect lady. Tell me this, Jake, honestly and candidly, and I'll treat your answer as Gospel and use it as a yardstick for future behavior—because I *do* want to be a credit to Eunice; I want 'Joan Eunice' to be the perfect lady that Eunice was. Under those exact circumstances and being just as anxious to show appreciation to two sweet and wonderfully helpful gentlemen. . . would Eunice have put this street robe on first? Or would she have spread her sweet skin on them and let them cuddle her a bit if they wanted to—and they wanted to, I'm sure you noticed. Think about it, Jake. You knew Eunice better than I did; we know that—so give me a straight answer, because I'm going to use it as a guide in trying to *be* Eunice. Would she have played safe? Or would she have given herself?"

Jake Salomon gave a sigh that was almost a groan. "Hell, you did *exactly* what Eunice would have done. That's what upset me."

Joan sighed. "Thank you, Jake, I feel better." She loosened her seat belt, moved closer to him, ran her thumb down the magnostrip of her robe. *"Can't* get this pesky thing off in here. Kiss me, Jake, kiss me better than they did. Kiss me and cuddle me and tell me that Eunice would be proud of me."

"Joan!"

"Don't shame me, lake. I'm a girl now and I need to be kissed so hard we'll forget I kissed those other two. Call me 'Eunice,' dear; please do, it's my name and I want to hear you call me by it and tell me I'm a good girl."

He groaned. "Eunice!"

She turned her face up. "Kiss me, darling."

Trembling, he gave in.

The kiss went on and on. It took Joan only seconds to turn it from tender to rugged, nor did he hold back. (Eunice? I'm going to faint.) (I'm not going to let you, sweetheart; I've waited a *long* time for this!)

Eventually Jake broke, but she stayed close and he continued to hold her. She sighed and touched her hand to his face. “Thank you, Jake dear—for this, and for everything.”

“Thank *you.* . . Eunice. Joan Eunice.”

“Let mc be ‘Eunice’ a while longer. Am I a good girl? Do I do credit to her?”

“Uh. . . yes!”

“I tried. Jake dear, do you believe in ghosts? I think Eunice must have been here with us. I couldn’t have done that well without her help. It often seems so.”

“Uh, it’s an interesting thought.” (Hmmph! We ought to tickle him for that. Joan, if you tickle him under his short ribs, he comes unstuck. Helpless.) (I’ll remember. But not today.) “In any case, she would have been proud of you. You’re a sweet girl.”

“I mean to be. To you. I love you, lake.”

He hesitated only a heartbeat. “I love you—Eunice. And Joan Eunice.”

“I’m glad you made it both of us. Jake dearest, you’re going to have to marry me. You know that, don’t you?”

“What? Oh, heavens, dear, don’t be silly. I love you—but there’s too much age difference.”

“What? Oh, fiddlesticks! I know I’m almost a quarter of a century older than you are. But it no longer shows. And you understand me and no other man possibly could.”

“Huh! I mean *I* am too much older than *you.”*

(Joan, don’t let him talk that way! Tell him men and liquor improve with age. Or some such. Anyhow, he was feeling quite young a few minutes ago—I noticed. Did you?) (Yes. Now quiet, please.)

“Jake, you are *not* old. Goodness, I know what *‘old’* is! You’re a classic, Jake—and classics improve with age. And...just minutes ago, you were feeling quite young. I noticed.”

“Uh. . . possibly. But none of your sass—youngster.”

She chuckled. “Jake, it’s nice to be a girl to you. I won’t argue, I’ll wait. In time you will realize that you need me and I need you, and that no one else will do for either of us. Then you can make an honest woman of me.”

“Harrumph! That might be more than I could manage, even with a marriage license.”

“Rude darling. I can wait. You can’t escape me, Jake. Eunice won’t let you.”

“Well...I’m durned if I’ll argue; it would just make you stubborn. In either of your personae. My old friend Johann was as stubborn a man as I’ve ever met—and Eunice was just as stubborn in her own sweet way. And, dear, I never know which one you are. Sometimes I think you’ve acquired that split personality your doctors were afraid of.”

(Get him off this subject!) (I will, dear—but not by being jumpy about it. Aren't we ever going to tell him?) (Yes, of course. But not soon, Joan. Not, till we're in the clear. Remember those straps.) "Jake darling, I'm not surprised that you feel that way about me—because I do myself. Oh, nothing psychopathic, just the odd situation I am in. You've known me how long? A quarter of a century."

"Twenty-six -years, pushing twenty-seven."

"Yes. And while I was never given to copping feels from female employees—would you say that 'horny old bastard' was an honest description of me?"

"I've never known your behavior toward women to be other than gentlemanly."

"Oh, come now, Jake! You're talking to Johann at the moment. Level with me."

Salomon grinned. "Johann, I think you were a horny old bastard right up to the day we took you in for surgery."

"That's better. Years after I was benched in the matter first for social reasons, the fact that an old man looks a fool if he behaves like a young stud, and later through illness and physical incapacity—years after I was benched my interest in a pretty face or a pretty leg was unflagging. Then I acquired Eunice's healthy young body. Female. Look at me Jake. *Female."*

"I've noticed!"

"Not the way *I* have! Even though you've kissed me—a real kiss and I loved it, dear—you can't have noticed the way *I* have been forced to. I'm cyclic now, Jake, ruled by the Moon; I've menstruated twice. Do you know what that means?"

"Eh? Natural phenomenon. Healthy."

"It means that the body controls the brain as much as the brain controls the body. I'm tempery and inclined to tears just before my period. My feelings, my emotions, even my thoughts are female—yet I have almost a century of male emotions and attitudes. Take my pretty little nurse-companion, Winnie—and would you *like* to take her?"

"Uh . . . damn you, Johann! She's a nice girl. Fifth Amendment."

"She is indeed a nice girl. But because I'm Eunice as well as Johann I know how she feels. She's as female as a cat in heat—and you're an old bull, Jake, and dominant, and if you *wanted* to take Winnie, she wouldn't put up more than token resistance."

"Joan Eunice, don't talk nonsense. I'm three times her age." (Boss, what are you getting at?) (I'm not sure but I'm getting there.) (Well, don't get Winnie knocked up on the way. I thought we were saving Jake for *us.)* (Don't be a pig, little piglet. Winnie's a nurse; she sees to her contras as carefully as she cleans her teeth.) "Jake dear, I'm not much older than Winnie in my body. . . and you've known and loved this body, even though I have no memory of it. We know that Eunice was always a lady—so how did you ever manage to get started with her? Did you rape her?” (Hell, no, *I* raped *him—but* he was a pushover.)

“That’s a most unfair question!”

“It’s a very female question. Knowing you from many years of association—and knowing Eunice both from some years of association but most importantly from now having her body and glands and hormones and deepest emotions—I suspect that you were far too proud to make a pass at her so she found some way to make clear that you were welcome. Once you were *certain* that Eunice was not trying to make a fool of you—that settled it. Well? Am I right?” (If he says No, he’s lying. It took five minutes, sister—and would have been all over in ten but we were interrupted. Had to wait till next day. Remember the mermaid getup? Had to scrub it off before I went home; Jake and I ruined it—and I had to tell Joe a sincere fib.) (Did he believe you?) (I think so. He was painting which means he hardly notices anything else.)

“Jake, are you going to answer? Or let me draw my own conclusions—possibly mistaken?”

“I could answer that it’s none of your business!”

“And you would be right and Johann apologizes. But *not* Eunice. Jake, that’s what Eunice’s body tells me must have happened. But I can’t he certain and I do want to be like her and if that is *not* what she would have done because it is not what she did—then tell me. I’m not asking for intimate details.” (Aw, get the juicy parts, dearie—! want to know how it seemed to *him,* every sweaty detail. I already know how it seemed to me—and I’ll tell you.) (Don’t be so right-now, darling—I’m trying to gentle him.)

“Joan Eunice—no, ‘Eunice!’ You always have had the damnedest way of getting your own way.”

“Is that an answer, Jake? I don’t have Eunice’s memory.” (Says who? Boss, I’ve figured out something—and it’s not flatworms. Everyone has erasable memory and nonerasable memory, just like Betsy—and that nonerasable part is the *me* that’s still here now that I’m dead. ‘Soul’ maybe. Names don’t matter; it’s that part that’s not just glands and plumbing.) (Save the philosophy until we’re alone in bed tonight, Eunice; I’m trying to cope with a man—and it’s heavy going.) (Do you think we’re going to. be *alone* in bed tonight? Want to bet?) (I don’t know—and I’m *scared.)* (Don’t be scared. When it happens, you recite the Money Hum and I’ll drive. Once around the course and you’ll be ready to solo. Except that I’ll always be with you. Know sumpin, Boss-honey? It’s even nicer to *be* you than it was to be your secretary. Or will be, once we’re back on ground rations.) (Huh?)

(Soul talk, dear—means sex. I had it for fourteen years—and I'm *hungry.)* (I had it over five times that long—I'm at least five times as hungry.) (Could be—you're a horny bitch, Boss.)

Jake finally answered, "Joan, I don't think it's fair to Eunice's memory for me to tell tales about her—but I'll concede your point, assuming that you want to learn, for your own guidance, as much as possible about how she behaved. Eunice was honest and straightforward"—(I'm devious as a snake-but that's what I wanted Jake to believe.)—"and she apparently decided that she liked me that much. . . and made it easy for me. It was neither rape nor seduction." (It was both, but I did *not* want him to think so. He's a darlingJoan. When he's gentled enough—slip the bit into his mouth. But let him think he asked for it.) (I'll try. Meantime I'm still doing this emotional strip-down—and you listen instead of interrupting; you might learn something about *me.)* (I'll be good, Boss. Mostly.)

"I felt certain that it must have been that way, Jake—knowing you, knowing her. But that's only one side of me as I am now—the 'Eunice' side. The other side is Johann, with almost a century of male orientation I told you I now understand Winnie, as a girl—because now I *am* a girl. But there Is still Johann, alone with Winnie every day —and it's all I can manage to keep my hands off her." (Hmmph! You *don't* keep your hands off her.) (I said, Shut up! I haven't let it get past heavy cuddle. If you and I ever stroll Gay Street, you shameless mermaid, it will be dessert, not the pièce de résistance.) (That piece won't resist!) (Hush up!) "Do you understand, Jake? Old Johann—me! —thinks that Winnie is quite some dish."

"Well. . . I understand it—in Johann."

"I wonder if you would understand it in Eunice? Jake, how do you feel about homosexuality?"

"I don't feel anything about it. Never been interested."

"Not even curious? Jake, I'm a full generation older than you are. When I was a kid, homosexuality or 'perversion' as it was called, was hardly even a myth; I never heard of it until long after I was centered on girls. Oh, I don't mean there wasn't any; I know now that there was, lots of it. But it was spoken of seldom and kept under cover. When I was fifteen, a man made a pass at me—and I didn't know what he was after; he just scared me.

"Would a fifteen-year-old boy today be that innocent? You know he wouldn't be; there are books and magazines and pictures—and other boys—to make certain that he understands even if he doesn't join in. The Government just misses endorsing it as a way to hold down our outlandish overpopulation—would endorse it openly, I feel sure, if it were not that a large percentage disapprove of it publicly while practicing it in private. It reminds me of that weird period in my youth when people voted dry and drank wet and the bootlegger was more sought after than the black-market butcher is today. How long has it been since the last 'sex offense' was prosecuted?"

"Rape by violence is still prosecuted; I can't recall any others in the last twenty years. Blue laws about sex are dead letters; Supreme Court decisions have made them impossible to prosecute. Correction: Unlicensed pregnancy is a Federal offense under the General Welfare' clause…but I've often wondered what would happen if a case were ever allowed to reach the Supreme Court."

"That's the only 'sex crime' which was not a crime when I was a kid, Jake. But I was talking about the 'crime against nature' which is no longer a crime; it isn't even a peccadillo, it arouses less disapproval than smoking. However, by the time homosexuality was socially acceptable, my attitudes were long frozen. But I wonder what Eunice thought about it? Did you ever discuss it with her?"

Jake snorted. "Believe me, Johann—sorry, Joan Eunice—that was *not* a subject we had time for!"

"I suppose not. Nor did she discuss it with me." (Fibber!) "But she gave me a gentle reprimand about it once."

"So? How?"

"Oh, one day before I was bedfast, a messenger delivered something to my office. He was a real nancy-pants—lots of makeup, false eyelashes, curled hair, and waved his hips. A high, girlish lisp and oh so graceful in his gestures. After he was gone I made some intolerant remark and Eunice told me gently that, while she didn't find such one-way boys attractive, she didn't see anything wrong in a man loving man, or a woman loving a woman." (Hey! I don't remember any such conversation.) (So I'm a liar. But you *could* have said it—and I'm making a point.)

"Yes, that sounds like Eunice. She was tolerant of people's frailties."

"My point is that, Eunice being the age she was, she was certain to be indifferent to—perhaps I should say 'understanding about'—what Johann thought of as 'perversities.' But here's what I'm getting at, Jake; I find Winnie sexually attractive. I also find Alec Train and Judge McCampbell sexually attractive. Startled me. And *you*—which did not startle me. But today was the first time I have been thoroughly kissed by very male men. And I *liked* it. Shook me." (How about dear Doctor?) (None of your lip, sweet lips—we don't tell Jake *that* one.)

Joan Eunice went on, "There is my dilemma. Which tune am I being homosexual? With Winnie? Or with you three very male bulls?"

"Joan, you ask the damnedest questions."

"Because I'm in the damnedest situation a man ever found himself in. I'm not the ordinary sex change of a homo who gets surgery and hormone shots to tailor his male body into fake female. I'm not even a mixed-up XXY or an XYY. This body is a normal female XX. But the brain in it has had a man's canalization and many years of enthusiastic male sex experience. So tell me, Jake, which time am I being normal, and which time perverse?"

"Uh . . . I'm forced to say that your female body controls."

"But *does* it? Psychologists claim that sexual desire and orgasm take place in the brain—not in the genitals. My *brain* is XY."

"I think you are trying to confuse the witness."

"No, Jake, I'm the one who is confused. But possibly not as confused as the young people today. You know they claim to have six sexes."

"Heard of it. Nonsense."

"Not entirely. I've been doing lots of reading during my defacto house arrest, trying to find out *who* I am, *what* I am, *how* I should behave. They label these so-called sexes both by behavior and physiology, with a new school of psychology—when wasn't there a new one?—to account for them. The six are ortho-male, ortho-female, ambi-male, ambi-female, homo-male, homo-female—and some list a seventh, the solos or narcissists. Even an eighth, the non-sex, the neuters, both physical and psychological."

"And I say it's nonsense."

"I do, too, but not for the same reason. From my unique experience, embracing both physiological sexes directly and not by hearsay, I say there is just *one* sex. Sex. *SEX!* Some people have so little sexual drive that they might as well be neuters no matter whether they are concave or convex. Some people have very strong sexual natures—and again the shape of the body doesn't figure. Such as my former self, horny long after sex had abandoned me. Such as *you,* darling—taking a lovely young married woman less than half your age as your mistress. Such as Eunice—happily married at home, I think—"

"Yes, she was. I felt guilty about it."

"But not too guilty to share her riches. Jake, I wouldn't speak to you if you had scorned her. I was about to name Eunice as my third example of a person strongly sexed. Enough sexual drive in her body —I *know!*—for anything. Enough love in her heart—I feel certain—for any number.

I *know* she loved me, even though she was-too warmly empathic to mock me by offering me what I could not accept—and did give me, lavishly, the only thing I could accept—her beauty, for my eyes. Jake, I think Eunice was limited in her love only by time. She kept you happy—"

"She certainly did!"

"I'm just as certain she did so without depriving her husband. Jake, do you have reason to believe that she limited herself to you—and her husband?"

"Uh— Damn you, Johann! I don't *know.* But I don't think she had *time.* Uh, I used up all the sneak-out time she could manage."

(Look, Boss, I'll tell you about every time I struck a blow for equal rights. Don't pester Jake.) (You're missing the point, Eunice. I'm forcing Jake to move Saint Eunice off her pedestal—that's the *only* way we'll ever get him.)

"How do you know? Can you be sure she didn't tell you the same sort of little white lies she told her husband? For that matter, Jake, Joe may have been as proud of his antlers as an old buck deer—the percentage of husbands who are *pleased* by their wives' adulteries has been climbing steadily in this country at least since nineteen-fifty—see any of the kinseys. That he loved her we both are certain. That does not prove he tried to keep her in a cage. Or wanted to."

"Joan, I would just as lief you didn't run down Eunice to me."

"Jake darling! I am *not* running her down. I am trying to find out what you know about her, so that I can model myself more closely after her. I loved her—and love her still more today. But if you told me that you *knew* she was mistress to six other men, a whore on the side, and playing girl games in her spare time—I—well, I've never known you to lie to me, Jake, so I would try to go and do likewise. You haven't told me much but what you *have* told me confirms what I believed—that Eunice was a perfect lady, with enough love in her heart to love three men at once and give each of them exactly what he needed to make him happy." (Thank you, Boss. Shall I bow?) (Quiet, little darling.) "But not a wanton, never a slut, and—while she wasn't prudish—I doubt if Winnie would have interested her." (Now wait one frimping minute!) (I'm telling him what he wants to bear, dear—if you want Winnie, we'll keep it out of Jake's sight.) *(Who* wants Winnie? You dirty old man!) (We *both* do—but it may be smart never to let it hatch. Dearest, Winnie wouldn't look at us with a man around.) (Want to bet?)

Joan sighed. "Jake, with my unique double inheritance it would be easy for me to turn ambi-female. I'm not going to, because I don't think Eunice would. With the deep. female drive this body has—bloodstream brimming with hormones and gonads the size of gourds is the way it feels—I could easily become 'No-Pants Smith, the Girl Most Likely To.' Very easily—as Johann Smith was an old vulgarian who regretted only the temptations he had been forced to pass up. But I'm not going to do that, either, as Eunice did not behave that way. But if I don't get married fairly soon, I'm going to find it hard to stay off the tiles."

"Joan, I love you—but I am *not* going to marry you. It's out of the question."

"Then you had better help my granddaughters to swindle me."

"Eh? Why?"

"You know why. A multimillionaire who is young and female stands as much chance of getting a good husband as that well-known tissue-paper dog had of chasing that asbestos cat through Hell. Lots of them in our country—and all they ever got were Georgian princes, riding masters, and other gigolos. I don't want one, won't have one. I'd rather be broke, like Winnie, and take what love I can find. Jake, besides the fact that you understand me and no one else can, you'd still be in my top ten because my money does not impress you. Quite aside from wonderful fact that I love you and you love me, any marriage broker would call us a perfect match."

"Hardly. There's still the matter of age—body ages. Joan, a man who marries at my age isn't taking a wife, he's indenturing a nurse."

"Oh, frog hair, lake! You don't need one and I'll lay even money that you'll stay strong and virile right through my breeding period. But when you do need one I'll nurse you. In the meantime we'll sing. 'September Song'—you lead, I'll harmonize."

"I sing bass. And I won't sing 'September Song.'"

"Jake? We could buy you a new body. When you need it."

"No, Joan. I've had a long run and a good one, most of it happy, all of it interesting. When my time comes, I'll go quietly. I won't make the mistake you did, I won't let myself fall into the hands of the medics, with their artificial kidneys and their dials and their plumbing. I'll die as my ancestors died."

She sighed. "And *you* called *me* stubborn. I've taken you up on a high mountain and shown you the kingdoms of the earth—and you tell me it's Los Angeles. All right, I'll quit pestering you—and humbly accept any love you can spare. Jake, will you take me out on the town and introduce me to eligible young men? You can spot a fortune hunter—I think Eunice may be too naive, too inclined to think the best of people." (Rats, Boss, I bought me a gigolo with my eyes open...and, since I wasn't kidding myself, I bought top quality.) (I know you did, darling—but the Joe Brancas in this world are as scarce as the Jake Salomons.)

"Joan Eunice, if you want me to escort you, I'll be honored. . . and I'll try to keep pascoodnyaks away from you."

"I'll hold you to that, you not-so-very-old darling, lake, I asked if you believed in ghosts. Do you have any religion?"

"Eh? None. My parents were Orthodox, I think you know. My Bar Mitzvah speech was so praised that I had to fight to study law instead of being trained as a rabbi. But I shook off all that before I entered college."

"Parallels me, somewhat. My grandparents came from the south of Germany, Catholic. So the priests had a crack at me first. Then we moved to the Middle West before I started school, and Papa, who was never devout, decided it would be better—better for business, maybe —to be a Baptist. So I got the Bible-Belt routine, with hellfire and damnation and my sins washed away with full immersion.

It was the Bible-Belt indoctrination that stuck, particularly the unconscious attitudes.

"But, consciously and intellectually, I shucked off all of it when I was fourteen—probably the only real intellectual feat of my life. I became an aggressive atheist—except at home—and scorned to believe in anything I could not bite. Then I backed away from that—atheism is as fanatic as any religion and it's not my nature to be fanatic—and became a relaxed agnostic, unsure of final answers but more patient. I stayed that way three-quarters of a century; I left religion to the shamans and ignored it."

"My own policy."

"Yes. But let me tell you something that happened while I was dead."

"What? You were never dead, Joan—Johann, damn it!—you were merely unconscious."

"I wasn't, eh? With no body, and my brain cut off from the world and me not even aware of myself? If that is not death, Jake, it is an unreasonable facsimile. I told you that I thought Eunice's spirit has often given me a hand."

'I heard you. I ignored it"

"You stiff-necked old bastard. I haven't taken up seances and such. But here is what happens. When I am in a quandary—often, these days—I ask myself, 'What would Eunice do!' That's all it takes, Jake; I know at once. No ectoplasm or voices from a medium—just instant knowledge *not* based on my own experience. Such as this afternoon when I decided in a split second to kiss Alec and Mac. No hesitation—you saw! That's *not* the way old Johann would behave . . . and yet you tell me I haven't missed behaving like Eunice even once. That's why it feels as if her sweet spirit were guiding me. Any comment?"

"Mmm ... No. You do behave like her . . . other than when you tell me flatly that you're speaking as Johann. But I don't believe in ghosts. Johann, if I thought I had to go on being Jake Salomon throughout all eternity, I'd—well, I would register a complaint at the Main Office."

"Let me tell you what happened to *me* at the Main Office."

"Huh?"

"While I was dead, Jake. I was in this—place. There was a very old Man with a long white beard. He had a big book. He looked at me, then consulted His book, then looked back at me. He said, ‘Son, you’ve been a bad boy. But not too bad, so I’m going to give you another chance. Do your best and don’t worry; you’ll have help.’ What do you think, Jake?” (What is this, Boss? Did it happen to *you,* too?) (Eunice, if it happened to you, it happened to me; it’s the same thing. And *you* are my help, beloved. My guardian angel.) (Oh, frimp you! I’m no angel, I’m *me.)* (A very earthy angel, beloved darling—just what I need.) (Love you, too, you dirty old man.)

Salomon answered slowly, “Anthropomorphism. Right out of your Bible-Belt Sunday school.”

“Oh, certainly. It had to be in symbols I could understand. If I had been a creature from around Proxima Centauri, the old Man and the beard might have been a Thing with eight tentacles and faceted eyes. Cliché symbols are nothing against it; I’ve never thought it was a physical experience. Men live by symbols, Jake. That—symbolic—— experience was as real to me as any physical experience. And allow me to point out that I *do* have a second chance and I *have,* and *am* having, lots of help—from you especially, from Mac and Alec, from doctors and nurses . . . and also from something inside that tells me instantly, in any difficult situation, exactly how Eunice would handle it. I don’t say it’s Eunice . . . but it’s *not* Johann; he wouldn’t know how. Well?”

Salomon sighed. “Of the inventing of gods there is no end. And almost always anthropomorphic. Joan, if you are going in for that sort of self-delusion, why not go whole hog and join a nunnery?”

“Because Eunice would not. Although she might enjoy revamping a monastery.”

Jake chuckled. “She might, at that.”

“Maybe I should try it—since you are so damn chinchy about making me an honest woman. More likely I’ll change my name again and disappear and wind up in a crib in Bombay. Will you come visit me, Jake?”

“No. Too hot.”

“Chinchy. Mean old Jake. *You* wouldn’t refuse to go see Eunice because of heat.”

“Eunice would never wind up in a crib.”

“No, she wouldn’t. So I have to go on being a lady even though it’s quite a strain on old Johann.”

“Poor you. All you have is youth, beauty, and half as much money as the I.R.S.”

“And *you,* Jake. I could lose the rest and still be rich.” (I was wondering if you would see that opening. Sister, you don’t need my advice; I think I’ll take a vacation.) (You promised to stay!) (Yes, Boss darling. I can’t leave; we’re Siamese twins. But even if I could, I’d stay because I want to.) (Eunice beloved, I have never been happier in my life.) Joan Eunice moved closer to Jake. “Jake dear, I have never been happier in my life.”

A brassy voice from the cockpit said, “I am about to swing for landing. Please secure seat belts.”

Salomon answered, “Seat belts fastened and now being tightened. Proceed with landing.” To Joan he said, “Straighten up, Eunice—and do snap up that magno.”

Joan Eunice pouted her lip and obeyed.

15

Security check took little time; Salomon was known to the enclave guards and the copter was expected. It was a short walk from the landing to Salomon’s house but, as in all upperclass enclaves, inhabitants in sight outdoors pretended not to see them. The door opened to Jake’s voice and again they were private.

Joan Eunice took off her street robe and handed it to Jake, saying, “May I look around? Jake, it’s been years since I’ve been here; you’ve made changes.”

“Some. Moved my personal gear to the Gib or to your house, not much left but furniture which I’ll sell with the house. Oh, I keep some clothing and toilet articles here, and I can find us a drink and a tin of biscuits. Perhaps smoked oysters or caviar; we have to kill an hour or two. Or I could send out for dinner.”

“Let me see what there is in your kitchen; I would enjoy playing housewife. And I do want to look around.”

“Look all you like, but tell me what you want to drink. Joan, have you ever *been* in a kitchen?”

“None of your lip, lad; I’m a good cook. Mama taught me to make Apfelstrudel—dough you could read print through and so light it melted in your mouth—before you were born. Sherry, or a Dubonnet highball—no Schnaps, I’m not risking it yet.”

“I’ll stack my kosher cooking against your Bavarian messes any day, girl. The Goyim can’t cook the way the Chosen People can.”

“Oh, pooh, you fake Jew. You haven’t tasted my pot roast with noodles. I bached between wives—and cooks—and mistresses, and I always cooked. Jake, wouldn’t it be fun to cook for each other and swap recipes? We could do it here. I don’t dare enter my own kitchen; Della would faint.”

“Might be fun. We can eat my cooking when your boasts don’t pan out. Excuse me; I’ll see what liquor there is.”

Joan Eunice headed straight for the master bedroom. (Eunice, is *this* one of the places?) (Of course. See that sag in the bed? Boss, this is the only place we managed an all-night. Heavenly!) ('All night?' Then his mobiles do more than suspect; they know.) (Oh, they may suspect but it doesn't matter. Charlie isn't interested in women, and Rockford—well, he's on my team. He approves of anything immoral, illegal, or dishonest—and my conduct was all three, by his standards. He's an atavism. But the all-night—I doubt if they suspected. We used more fan-dancing to keep it out of their sight than Joe's sight—things involving two hired Brink's cars and a non—existent errand for you.) (How did you fandance it for Joe?) (Didn't. I thought up a story and told Jake I would use it—then told Joe that I had met a man I wanted to speed a night with… did he mind if I was away Friday night?)

(As simple as that?) (Yes, Boss. We both were free but we were careful never to hurt each other. Only a second-class contract—since I was licensed for children and Joe was not. Either of us could have registered a dissolution on three days' notice.)

(But what did Joe say?) (Nodded and went on painting. He kissed me goodbye and told me to have fun; Joe was always sweet. But he may not have missed me. He was painting from a new model, a beautiful boy who was a frimp type. Joe may have been changing his luck; he sometimes did.)

(And *you* didn't mind?)

(That beautiful boy? Boss, you've *got* to move into the twenty-first century, now that you're me. What possible harm? I've told you and told you that Joe and I were *always* careful of each other's happiness; what more could I ask? Besides, I don't know that Joe had his eye on him other than as a model but—well, if they had invited me to move to Troy with them, I wouldn't have minded, for a night or two. I've always preferred older men—but the boy was pretty as a Palomino and clean as a sterilized cup; I wouldn't have found it boring. Plus the fact that a woman is flattered if two males like her enough to let her watch what *they* do.)

(Eunice my love, you continue to startle me. That angle I would never have thought of. Yes, I guess it would be a compliment, in a way. I think that men—even men today—are shyer about such things than women are.)

(Men are horribly shy, Boss—whereas women usually are not. We just pretend to be, when it's expected of us. Look, a woman is a belly with a time bomb inside, and women know it and can never get away from it. They either quit being shy—no matter how they behave to please men—or they go crazy; it's the choice we have to make. And high time *you* made that choice, dear. Accept your femaleness and live with it. Be happy.) (I think I have.) (You're coming along. But sometimes it feels like the bravado of a little boy who says, I am not either scared!' when he's ready to wet his pants, he's so frightened.) (Well, maybe. But I've got you holding my hand.) (Yes, dearest. Mama will take care of you.)

Joan went into Jake's bathroom, primarily to snoop. She had just found something she half expected to find—when she heard Jake's voice. "Hey! Where are you? Oh! Coming, or going? Fixed you Chablis over ice, best I could do."

"That'll do fine. Jake. Was this *hers?"* She held up a luxurious negligee—two ounces of cobweb.

Jake gulped. "Yes. Sorry."

"I'm not sorry." Suddenly Joan stripped off the ClingOns, shoved down her frill-skirt panties and stepped out of them, leaving her bare from sandals to eyebrows, put on the negligee. "Do I wear it the way she would? Wups, I wrapped it man-style." She rewrapped the lap-over to the left. "Do I do her justice?"

"Eunice! *Eunice?'*

She folded it back, let it slither to the floor, went into his arms, let him sob against her face: "That's enough, darling, Eunice doesn't want you to cry. Eunice wants you to be happy. Both Eunice and Joan Eunice. Hold me tight, Jake. We're lost and lonely—and all we have is each other." While she cuddled him and soothed him, she opened the zipdown of his shirt. (Eunice, I'm scared!) (Easy does it, dear. Chant the Money Hum to yourself; I've taken over. Om Mani Padme Hum.) (Om Mani Padme Hum. Om Mani—)

Joan was jerked out of it by the telephone signal. She pulled her mouth from Jake's and started to cry. "Oh, damn!"

Jake said huskily, "Ignore it. It's a mistake, no one knows I'm here."

"Uh—If we don't answer, they'll try again and interrupt us again. I'll take care of it, dear. Where is the pesky thing?

Living room?"

"Yes, but there's an extension over there."

"Keep thinking nice thoughts." Joan hurried over, high heels tapping, stood close to the pickup so that only her face would be seen, flipped the switch—said in Eunice's most crisp secretarial voice: "Mr. Salomon's residence. Who is calling?"

The screen stayed blank. "Recorded. Urgent call for Counselor Salomon, third attempt."

"Urgency noted. Proceed. Who is calling?"

Another voice came on, screen still blank. "This is Mr. Salomon's answering service. Judge McCampbell has placed an urgent call. I told the Judge that the Counselor was more likely to be at his club or at the Johann Smith residence, but he insisted that I keep trying this code, too. Is he there?"

"One moment." Joan glanced back, noted with annoyance that Jake had closed his shirt and picked up her clothes. "I have Mr. Salomon. Can you reach Judge McCampbell? I will hold."

"Thank you. One moment."

Joan stepped still closer and tilted the pickup to make certain that it caught only her face. Jake stepped up by her, handed her her clothes. She accepted them, did not, put them on.

The screen lighted. "Jake, we— Hey! Brother Schmidt!"

"Alec! How nice!"

"Step back so I can see you, dear. Mac, don't shove,"

Train added as the Judge's face appeared by his in the screen. "Is Jake there?"

"Right beside me, boys."

"All I can see is his shirt. Stand on a box, honey, so that you're both on screen; this must be a four-way conference. Or back away."

"Here he is." Joan tilted the pickup higher, reluctantly pressed the cups to her breasts, stepped into her frill-skirt, wiggled it into place. Then she backed off. "Can you see me now?"

"Not well enough," the Judge's resonant baritone answered. "Jake, back off a little. Joan, you need a stool.

Better yet, Jake, hold her up in your arms—you lucky man."

"What's the message, gentlemen? And, thank you Judge, for your flitter. We were delivered quickly and safely."

"De nada, compadre. Jake, my old roomie got a brilliant idea—no doubt through long association with me." The Judge explained what each was willing to do in order to speed confirmation of Joan's identity. "This can be our comm center. I am going to live in my chambers a few days—ready to issue a warrant, phone a judge in another jurisdiction or whatever. Then we'll rush it through my court and crowd them into an appeal—get this nailed down tight. Meanwhile Alec is your man Friday. Want him to go anywhere in a hurry? He's stupid but healthy, and losing a night's sleep to time-zone changes is good for him."

"Probably not before morning. But I'm relieved, gentlemen; I've been wondering how I could be everywhere I need to be. Since I'm retired from everything but Joan's personal affairs, I'm without staff—and I've been cudgeling my brain trying to think whom I could get who would be reliable and competent. As we all know, this is touchy."

"We know!" agreed Alec. "And we're going to fix those harpies—aren't we, Mac?"

"Yes—but legally and so that it cannot be reversed. Jake, you can reach us here—and don't hesitate to wake us if you decide you want Alec to catch a midnight liner. Where will you be? Your house?"

“Until my car arrives; then we’ll be at Joan’s. Or on our way. My answering service can flip you into my car’s wavelength. It’s a longish drive.”

“We’ll be in touch. Don’t worry, Jake, and don’t let Joan worry. We’ll have her baptized before you can say ‘missing heir.’

“I’m not worried,” said Joan, “but I feel like crying. Boys—Brothers—how can I thank you?”

“Shall we tell her, Mac? Would she blush? Thank *me,* that is, Brother Schmidt; don’t thank Brother Mac; he’s just doing his duty, what the taxpayers reluctantly pay him for. But you can thank *me*—I’m a volunteer.”

“I’ll thank you both, in whatever way you wish,” Joan said, simply.

“You heard that, Mac? Brother Schmidt committed herself—and you can’t break a promise between Brothers, that’s the old Bita Pi law. Brother Schmidt Joan Eunice honey, back off and let us see *all* of you. Jake, get out of pickup; you ruin the composition. Go have a beer. Take a nap.”

“Ignore him, he's drunk.” advised his former roommate.

“So’s Mac, we’ve been working on it. But I’m not too drunk to hop a guided missile, Jake, if you say to.”

“Jake,” said the. Judge, “this is getting out of hand. Not that I disagree with this low forehead’s enthusiasm. Good night, sir. Good night, Joan. Off.”

Joan Eunice flipped the switch, made certain that the screen was dead, started undressing.

“Joan. Stop that.”

She went on removing her saucy, scanty clothing, heeled off her sandals, then stood facing him. “Jake, I refuse to be treated like a porcelain doll. You hid me expecting to be treated as a woman.”

He sighed. “I know. But the golden moment passed.”

“Well. . . I’m not going to dress. You’ve seen this body many times, we both know—and I want us both to get easy about it. Actually I’m shy, Jake; I’m only weeks old, as a woman, and not used to it. But I want to get used to it. With you.”

“Well— As you wish, dear; you know how beautiful I think you are. What shall we do? Read aloud to each other till my car arrives? Watch video?”

“Beast. If you were a gentleman you would at least take your clothes off. Instead you are a difficult, stubborn beast and I don’t know why I love you. Except that Eunice loved you—*loves* you, wherever she is—so I have to love you. Jake, if you won’t take me to bed, at least sit down in that big chair and let me crawl up into your lap. We can talk. We’ll talk about Eunice.”

He sighed. “Girl, you’ll give me a heart attack yet. All right, come curl up in my lap. On one condition."

"Jake, I'm not sure I'll agree to any conditions. I'm in a very unstable state."

"You certainly are, dear. But it's *my* lap. No ticky, no washee."

"I should go back to the courthouse; I don't think Mac and Alec would insist on conditions. .Might as well relax, Jake; I'm climbing into your lap with no more yatter. There! That's better. Arms around me, please."

"First the condition. That you not try to rape me in a chair—"

"Don't think I could."

"You'd be surprised what can be done in a chair, Joan."

"Would not, I've done 'em all. As Johann. But they require cooperation."

"Mmm, so they do—and that, as soon as my car arrives, you dress at once and no nonsense, and we go home."

"All right—since you made that 'we.' I was afraid you were feeling ornery enough to send me home alone. In which case I was going to have Rockford and Charlie take me straight back to Alec and Mac. Aren't they delightful wolves, Jake? Hold me tight. The only way you can protect me from them is youknow-what."

"Hmm. Joan, can you keep a chuckle to yourself?"

"Well...I promise never to tell anyone but Eunice."

"Eh? Okay, I don't think you would break a promise made that way. But, let me add that if you did tell, it would hurt Alec and Mac both—and Eunice would not like that."

"No, Eunice certainly would not like that. Jake, you're going to be able to hogtie me with that phrase the rest of my life." (Don't fret, Boss honey. Any time Jake is wrong, I'll give you the ammo to change his tune.) "All right, I'll tell no one but Eunice—and the old Man with the long white beard next time I see Him."

"Safe enough. Okay, here's the chuckle. Your two charming wolves —and they *are* charming—are as gay as Julius Caesar."

"What? Jake, I have trouble believing that."

"I won't offer proof but I assure you that I know it beyond any reasonable doubt."

"But— Look, dear, I've *kissed* them. I may be an ersatz female . . . but not where it matters, and I *know* those kisses weren't phony. They were hot over me. Shucks, darling, I could tell it by Braille. Besides, they are married."

"I said, 'As gay as Julius Caesar,' dear—not Governor Arkham."

"Oh. Ambi gay, you mean. I still have trouble believing it. Doesn't it show at all? Even in a kiss?" *(I* spotted it, Joan, the potential at least. But they're still wolves . . . and we may be back there someday. To thank them.) (Eunice, is that the only way a female can thank a man?) (That's the only convincing way, twin. This is news?) (No, beloved—but it was possible that your generation had learned something mine had not. They haven't. Not in anything you've told me. Just more open about it.)

"Joan, there is *no* way to spot it, if an ambi does not want it known. Either ambi, or clear over the line and no return. Look, when you were Johann, could you spot a virgin?"

"Jake, I'm not sure I ever met a virgin. But you have."

"You must mean someone we both know."

"Of course."

"Who? Winnie? Wouldn't have thought so. But she does blush easily."

"Not Winnie. If she is one, I didn't have her in mind." (You crawled out of that one!) (Winnie can tell her own secrets. Honey girl? Does Jake know about your baby?) (No, and we're not going to tell him!) (Didn't intend to, darling—just didn't want to be caught foolish.)

"Well, I can't guess. Who is this paragon?"

"Me."

"Uh— But—" Jake Salomon shut up.

"Sure, sure, dear—Johann was not, and Eunice was married. Not to mention an old wolf who tripped her." (I tripped him.) "But none of that applies to this new female in your lap. I'm a virgin. But would not have been, by now—I think—if that goddam phone hadn't sounded. Don Ameche should never have invented it;"

"Who's he? Some Russian? Alexander Graham Bell invented the telephone."

"An obsolete joke, Jake—sorry. Ameche played Bell in a movie, oh, about the time you were three or four years old. But let's not talk about long-dead actors, nor my virginity that I can't get rid of; let's discuss Eunice." (My favorite subject!) "That overhead light is in my eyes; where can I squeeze it down? And will you keep your lap warm while I trot and do it?"

"I can do it from here. Is that better?"

"Oh, much! I want to see you, darling—but floor lights are enough. Now tell me about Eunice. I not only want to be like her in other ways . . . but I would like to learn to make love-the way she did. As much as you'll tell me."

"Joan, you know I can't tell such things about a lady."

"But I *am* Eunice, Jake. I just don't have her memory. So I need help. Eunice loved you, and still loves you, I feel certain—and Joan Eunice loves you—with a love not at all like the fierce affection Johann always had for his one friend—Joan Eunice loves you with a love that comes also from Eunice's sweet body that I wear so proudly.

So tell me about her. Was she as eager as I am?"

"Uh—" (Slide your hand inside his shirt, twin. Be careful not to tickle.) "Joan, Eunice was eager. I had trouble believing it at first—me an old wreck and she so young and beautiful. But she managed to make me believe it."

"But you are *no:* an old wreck, darling. You are in better shape than I was at your age. Oh, your face has character lines; it has a granite majesty that impresses everyone. But your body is as firm and trim as a man half your age. Muscley. And your skin is smooth and elastic, not that distressing crepelike texture I remember too well. Darling even if you divorce me later, will you marry me soon enough to let me have your baby?" (Hon, you're knocking him out of the ring! That's one I never dared use.)

"Eunice! Joan Eunice."

"Oh, I don't mean soon enough for *you*—I mean soon enough for *me.* I may have fifteen more fertile years—but the sooner the better; a woman ought not to have her first baby at past forty. But *you* will be making babies as long as you live. How many children do you have, Jake beloved?"

"Three. You met two of them once. And four grandchildren."

"I don't mean those, I mean others. I'll bet you have at least a dozen more, here and there. You've been rich a long time; you could afford it. How many that you haven't mentioned?"

"Joan Eunice, that's snoopy."

"Yes, and no one has to answer, that sort of question. But didn't Eunice ever ask?" (I did and I think he fibbed. I want to hear what he says *this* time.)

"Uh—"

"I won't tell anybody but Eunice. Not even the old Man with the book."

"You insidious little cuddle puppy. I think I have four more. Plus one by a married lady who may have been kidding me. Three I supported until they were on their own; the fourth—and that possible fifth—I couldn't even offer to. But they were never in want."

"How was it handled, dear? Three maiden ladies who moved elsewhere and became overnight widows?"

"Uh. . . only in one case. I offered to marry her—I was a grass widower then—but she elected not to, and did marry later and her husband adopted the child and I made a cash settlement. The other similar case I was married but the settlement was just as amicable. The other two were married. Some grief about one—she was a compulsive confesser, from which the good Lord deliver me!—and her husband had to be soothed with mucho dinero. The last—well, her husband was sterile—mumps—and together they picked a father. Me.

Startled the hell out of me. But he offered to put it in writing and did. I tore it up and settled it with a handshake." (This is *all* news to me, Joan. But I couldn't believe that such a virile and charming man had left no by-blows. Keep him talking.)

Jake grinned and caressed her sweet body. "That is the only one I'm certain about, as I have never insisted on blood tests if a lady accused me and I *could* have been the man. But in that case I am certain, as we took a holiday together, by sailboat, with her husband as nominal chaperonage. So that time it was I, at the right time and place. Then—" He paused. "Joan Eunice, I don't know whether Johann would have approved of the sequel, or not but I don't want to shock the sweet girl you are now." (Honey, don't let him stop *there!)*

"Johann can't be shocked, Jake. If it's rough, I won't tell Eunice. But don't let me crowd you."

"Well . . . it wasn't rough, it was sweet. They didn't use me and drop me. I was welcome in their home thereafter and in their bed."

"Three in a bed?"

"Uh. . . don't be, nosy! Sometimes."

"But no more babies?"

"They were licensed for four and had them. But I think they picked a different father for each. I simply know that, in the several times I stayed in their home over about ten years, I never slept alone. I still get Christmas cards from them, each with a photograph of the family —and my daughter looks like her mother, not like me, thanks be to God. Joan, they were and are a respectable married couple, devout, and devoted to each other and to their children, and old-fashioned . . . except that, when they were faced with the need for a donor, they elected to pick donors themselves, then use the old-fashioned way rather than syringes and a clinical atmosphere."

"Uh.. . was she sweet in bed?"

"Quite. But unsophisticated. Not a patch on Eunice, if you were thinking about her."

"I was." *(I* was!)

"Eunice—Eunice was the most glorious thing that could happen to a man. Sweet as an angel, and as skilled—and as uninhibited!—as the most famous courtesan in history." (I'm *purring!)*

"Jake. I prefer the old-fashioned way, too."

"Yes?"

"You were sweet to all those ladies and you got two unmarried ones pregnant and I'm rich enough to get away with it and right now you are feeling young—I *know* you are! Will you pick me up and carry me over there? Or shall I walk?"

"Eunice."

"Let's both walk. But hurry."

"Yes. Yes, darling."

She jumped up, took his hand...as the house intercom sounded with: "Mr. Salomon! Rockford here. Your car is waiting."

Joan said, "Oh, my God!" and started to cry.

Jake put his arm around her and petted her. "I'm sorry, darling."

"Jake. Tell them to go get dinner. Tell them to be back in, uh, two hours."

"No, dear."

She stomped her bare foot. "Jake, I won't, I won't! This is unbearable."

He said quietly, "You promised. Look, darling, I'm not nineteen years old and able to perform in back seats of cars or on back, porches with a party going on in the house. I have to have quiet and peace." (Don't believe him, dear! Though he might be scared off for a first time.) Joan bawled and shook her head. He spoke loudly:

"Rockford!"

"Yes, sir?"

"We'll be out in a moment or two. Keep the reactor warm."

He stepped to the wall and squeezed down the intercom to zero, then said gently, "Get dressed, dear."

"I won't! If we leave now, you'll have to stuff me into the car bare naked."

He sighed and picked her up; she stopped crying and looked suddenly happy.

The expression did not last. He turned her in his arms as he sat down on a straight chair, got a firm grip on her, and walloped her right buttock. She yelped. And struggled.

He got her more firmly, placing his right leg over both of hers, and applied his hand smartly to her left cheek. Then he alternated sides, stopping with ten. He set her on her feet and said, "Get dressed, dear. Quickly."

She stopped rubbing the punished area. "Yes, Jake."

Neither said another word until he had handed her into the car, climbed in after her, and they had been locked in. Then she said timidly, "Jake? Will you hold me?"

"Certainly, darling."

"May I take my robe off, please? Will you take it off me?"

With the robe out of the way she sighed and snuggled in. After a bit she whispered, "Jake darling? Why did you spank me?"

It was his turn to sigh. "You were being difficult. . . and it is the only thing I know of which will do a woman any good when a man can't do for her what she needs. And right then—I couldn't."

"I see. I think I do."

She remained quiet a while, enjoying his arms around her and breathing against his chest. Then she said, “Dear? Did you ever spank Eunice?”

“Once.”

“For the same reason?”

“Not quite. Well, somewhat. She teased me into it.” (I tickled him, dear. And got the surprise of my life.)

“Then I’m glad you spanked me, too. But I’ll try not to tease you—though I’ll never be the angel she was.” (Fallen angel, Boss. And enjoyed it all, clear down to the Pit.)

“Jake?”

“Yes, Eunice?”

“I didn’t really mind being spanked by you. Even when I was crying. But—Well, I’m padded now— Built to take a spanking. And when you are spanking me, you aren’t ignoring me—and any attention is better than none. And besides—” She hesitated.

“Besides what, Eunice?”

“Well, I don’t know—but I think it happened.”

“What happened?”

“Female orgasm. Well, maybe. I don’t know what one is supposed to feel like. But while I was crying and hurting; you have a heavy hand, sir—suddenly I felt very warm inside and something seemed to grow and explode—that’s the best I can describe it. And I was ecstatically happy and didn’t mind the last few wallops, hardly noticed them. Was that a female orgasm?”

“How would *I* know, dearest? Perhaps you’ll be able to tell *me*. Later.”

“Later tonight?”

“Uh, I think not, Eunice. It’s late and we have had nothing to eat and I’m tired even if you aren’t—”

“I am, rather. But happy.”

“So tonight we’ll rest. When it does happen—and I’m no longer fighting it—let’s make the first time absolutely private and quiet. No phones and no servants and no distractions. After that—well, it might be target-of-opportunity. But I’m not a kid. You know what I mean, darling; you’ve been old, too.”

“Yes, dearest, much older than you are. Eunice can wait. Jake? What was this teasing Eunice did that was so bad it got her spanked?”

He suddenly grinned. “The little imp tickled me until I nearly went out of my mind. So I spanked her. But we were alone, and that ended satisfactorily. Quite.”

“How?”

“How do you think? I excelled my usual mediocre performance, and Eunice—there aren’t words for it, but she excelled her utter perfection, impossible as that sounds.” (He darn near split me like a melon, twin—and I *wanted* him to!)

"So? Someday *I* will tickle you—and get spanked for it. So take your vitamins, dear. Jake, you *enjoyed* spanking me. Didn't you?"

He was silent several moments. "I enjoyed it so much that I spanked you neither as hard nor as long as I wanted to. And started feeling 'young' as you put it—but knew that, if I didn't get you out of the house right then, you probably wouldn't leave at all. And I don't care to advertise it to servants."

"You had better marry me. So we can ignore servants."

"You had better shut up. You're still learning to be a girl, and I'm still learning how to handle you. You're Eunice—but you aren't Eunice. And we must clear up legal matters before we talk about such things."

"Old mean. Girl beater. Sadist. Hold me *tight.*"

16

Jake escorted Joan Eunice to her boudoir. Winnie was waiting thereto Joan's annoyance as she thought it possible that Jake's stern character might slip if the upper house was quiet. But she did not show it. "Hi, Winnie!"

"Miss Joan! Are you all right? I've been so worried!"

"Of course I'm all right; Mr. Salomon was taking care of me. Why were you worried, dear?"

"Why, the dreadful things they've been saying about you in the news and there was a riot at the Hall of Justice; I saw it. And—"

"Winnie, Winnie! The idiot box is for idiots; why do you look at it? I was never in danger."

"But she has had a trying day, so you take good care of her, Winnie."

"Oh, I will, sir!"

"And I am tired, too, so I'll say goodnight and go to bed. After I find a sandwich, perhaps."

"Hubert put a tray in your suite, sir."

"Hubert gets another merit badge. Though to tell the truth, Winnie, I've had a worrisome day myself, and it's left me with little appetite and jangled nerves. I may dine on a sleeping pill."

"Jake dear—"

"Yes, Eunice?"

"Don't take a pill. And do eat."

"But—"

"I know, I'm a bundle of nerves myself. But I know what to do about it—and Winnie and I can soothe your nerves and restore your appetite and make you sleep like a baby."

He cocked one eyebrow, looked at Eunice, then at Winnie. "I think either of you could. But both?"

"Jake, you're a dirty-minded old man; you'll have Winnie blushing. But we can—can't we, Winnie? The Money Hum."

"Oh. Yes, we can, Mr. Salomon."

"Harrumph! Does it involve blood? Or broken bones?"

"Oh, no, sir! It's restful. Relaxing."

"I'll try anything once."

Joan said, "But you have to strip for it to—"

"I thought there was a catch."

"Oh, Jake. We'll let you sissy; you can wear shorts. We strip for it; the spiritual effect is better. It's the way we warm up for our exercises. Go undress; then put on shorts and a robe. We'll join you in the Green Suite. Right after it you're going to have a bite to eat and a tepid tub and straight to bed and right to sleep."

"Maybe I'd better bathe first. A day in court leaves me smelling like a skunk."

"You smell all right. Anyhow, Winnie and I have such control by now that we can decide not to be able to smell—or to hear a distracting noise, or anything—if we choose to."

"That's true, Mr. Salomon."

"Okay. Winnie, if she beats me, you protect me. Adios, dears."

"Five minutes, Jake."

As soon as they were alone Winifred said, "You're going to make me strip down bare? Again?"

"I didn't 'make' you strip the first time. And dear Doctor certainly did notice that you are a girl. Looked to me as if the kiss he gave you was better than the one he gave me. Stop blushing. Winnie, you can sissy, too, if you want to—but I *do* need you -present. Or Jake will think I'm trying to make him."

"Oh, Mi. Salomon would never think that about *you."*

"He's male. He's as male as dear Doctor. I need chaperonage, as all I'm after is to help him sleep without pills. The poor dear has had a dreadful day. Winnie, he was wonderful in court; I'll tell you about it. Later. Let's get these duds off and grab negligees. Modest ones." Joan Eunice stopped suddenly. "Perhaps I've goofed. Winsome? Do you have a date?"

Miss Gersten blushed again. "Uh. . . not until later."

"Paul working late? Sorry—erase and correct. None of my business."

The little redhead continued to blush but she answered steadily, "My business is always your business, Miss Joan. Uh, I'm supposed to take care of you—and I do try! But you feel like a big sister to me."

"Thank you, sweet Winsome. But big sisters should not snoop."

"I've been meaning to tell you. Paul and I have split."

"Oh, I'm sorry"

"I'm not. I don't think Paul ever meant to get a dissolution; he was stringing me. But—well, Bob isn't married. Not yet."

"'Not yet.' Planning on getting married, dear?"

"Well. . . I don't think getting married is something one plans. It just happens. Like thunderstorms."

"You could be right. Sweet, whether it's getting married, or fun and happiness, I hope it's perfect for you. And 'Bob' is such a common name that I can't be tempted to guess. If I don't see him."

"You probably won't. He comes up the service lift and into my rooms from the back corridor—nobody sees him but the guard on duty. And they don't gossip."

"If any guard ever gossips about anything in this house, and I find it out, he'll be on Welfare so fast he'll be dizzy. Winnie, the rest of the staff can be human about it. But a guard is in a specially trusted position and must keep his mouth shut. Winnie, if you ever want to see Bob—or anyone—somewhere else, I'll have my mobile guards deliver you and pick you up, and even I won't know where."

"Uh.. . thank you. But this is the safest place for us—so few places are safe today. The most that can happen here is that Bob might be embarrassed. *I* wouldn't be embarrassed at all, I'm proud of him!"

"That's the way to feel, dear. As an ex-man I know that's the attitude a man values most in a woman. 'Proud of him.' But let's hurry; we're keeping Jake waiting. If you're going to wear pants, better find some with stretch in them. And thank you for lending me this outfit—turned out that, without the apron and cap, it was still most effective. I had the robe off a while. Tell you later."

In moments the girls were hurrying down the corridor to the Green Suite, each just in a negligee and barefooted. At the last instant Winifred had decided that, if her mistress was going to practice meditation in the correct uniform, she would also.

They found the counselor in a bathrobe, looking sheepish. Joan said, "I hope we haven't kept you waiting. Is your tub ready? If not, I'm willing to draw it before we start. Then into it and out, don't risk falling asleep. Then—"

"I cheated. I took a quick tub—tepid, as you specified—and ate a little, too."

"Good. Then we'll pop you straight into bed after this and kiss you goodnight and you'll be asleep before we're -out the door. Jake, this is the simplest of yoga, not exercise, just meditation. Controlled breathing, but the easiest sort. Inhale through one repetition of the prayer, hold it through one more. Exhale through one, hold through one, and repeat. All of us together, in a triangle. Can you sit in Lotus? Probably not unless you've practiced."

"Eunice—"

"Yes, Jake?"

"My father was a tailor. I was sitting in tailor's seat before I was eight. Will that do?"

"Certainly if you are comfortable. If not, any position that lets you relax. For you have to forget your body."

"Squatted in a tailor's position I can fall asleep. But what's this prayer?"

Joan Eunice slipped off her negligee, melted down onto the rug into meditation pose, soles upward on her thighs, palms upward in her lap. "It goes like this. Om Mani Padme Hum." (Om Math Padme Hum. I should have taught Jake this long ago.)

"I know the phrase. 'The Jewel in the Lotus.' But what does it mean to *you,* Joan Eunice?"

Winifred had followed Joan's example as quickly as she set it, was bare and in Lotus—and not blushing. She answered, "It means everything and nothing, Mr. Salomon. It is all the good things you know of—bravery and beauty and gentleness and not wanting what you can't have and being happy with what you do have and trees swaying in the wind and fat little babies gurgling when you tickle their feet and anything that makes life good. Love. It always means love. But you don't think about it, you don't think at all, you don't even try not to think. You chant the prayer and just be—until you find yourself floating, all warm and good and relaxed."

"Okay, I'll try." He took off his bathrobe, had under it boxer's shorts. "Joan Eunice, when did you take up yoga? Winnie teach you?"

"Oh, no!" said Winifred. "Miss Joan taught me—she's much farther along the Path than I am."

(Watch it, Boss!) (No huhu, Lulu.) "One learns many things, Jake—and loses them for lack of time. I used to play chess, yet I haven't set up a board for fifty years. But for longer than that I could no longer even attempt a Lotus seat...until Eunice gave me this wonderful young body which can do anything."(Which shell is the pea under, Eunice?) (It'll be under *you* if you relax too much; you should have emptied our bladder.) (Never fear, dear. I shan't go under, must watch Jake.) "Join us, lake. You lead, Winnie; start as soon as Jake is in position."

Salomon started to sit on the floor, suddenly stopped and got out of his shorts. Joan was delighted, taking it as a sign that he had decided to give in to it all the way. But she did not let her serene expression change nor move her eyes. Winifred was staring at her navel; if she noticed it, she did not show it.

"Inhale," Winifred said softly. "Om Mani Padme Hum. Hold. Om Mani Padme Hum. Breath out. Om Mani Padme Hum. Hold."

(Out Mani Padme Hum. Dig that clamdigger, dearie?) (Shut up! You'll ruin the mood. Om Moni Padme Hum.)

"Om Moni Padme Hum!" said Salomon in a voice that would have graced a cathedral. "Om Moni Padme Hum!"

"Winnie darling" Joan said softly. "Let it fade and wake up wide. We're going to have to wake Jake."

The redhead's eyes fluttered, she whispered one more prayer and waited. "Jake darling," Joan said softly, "Eunice is calling. Wake just enough to let us help you into bed. Eunice is calling you back. Jake dearest."

"I hear you, Eunice."

"How do you feel?"

"Eli? Relaxed. Wonderful. Much rested but ready to sleep. Say, it *does* work. But it's just autohypnosis."

"Did I even hint that it was anything else? Jake, I don't expect to find God by staring into my belly button. But it does work...and it's better than forcing your body with drugs. Now let Winnie and me help you into bed."

"I can manage."

"Of course you can but I don't want the relaxation to wear off. Indulge me, Jake, let us baby you. Please."

He smiled and let them—slid onto the opened bed, let them cover him, smiled again when Joan Eunice gave him a motherly goodnight kiss, seemed unsurprised when Winifred followed her mistress's example—turned on his side and was asleep as the girls left the room.

"Don't bother," Joan said as Winifred started to put on her negligee, "It's my house and no one comes upstairs after dinner unless sent for. Except Hubert and I assume that Jake sent him to bed, knowing that he was to be called on by two tarts in three quarter time and not much else." She slid an arm around the redhead's slender waist. "Winnie, much as I like to dress up—isn't it *nice* to wear just skin?"

"I like it. Indoors. Not outdoors, I sunburn so badly."

"What about at night? When I was a boy, ages and ages ago, it got unbearably hot in July and August where we lived—the sidewalks used to burn my bare feet. Houses were bake ovens even at night—no airconditioning. An electric fan was a luxury most people did not have. Nights when I couldn't sleep because of heat I used to sneak quiet as a mouse and bare as a frog out the back door, being oh so careful not to let my parents hear, and walk naked in the dark, with grass cool on my feet and the soft night breeze velvet on my skin. Heavenly!"

"It sounds heavenly. But I would be terrified of getting mugged."

"The word 'mug' hadn't been invented, much less any fear of it. I was a middle-aged man before I became wary of the dark." They turned into the master bedroom. "Kiss me goodnight, Winsome, and go keep your date. Sleep late in the morning; I'm going to."

"Uh, my date isn't until after midnight. Aren't you going to tell me what happened today?"

"Why, of course, dear. Thought you might be in a hurry. Come take a bath with me?"

"If you want me to. I bathed after dinner."

"And you have your face on for your date. I bathed this morning but it seems a week ago. Sniff me and tell me how badly I stink."

"You smell all right. Luscious."

"Then I'll let it go with toothbrush and bidet and a swipe at my armpits; I'd rather go to bed."

"You haven't had dinner."

"Not all that hungry. Just happy. Is there milk in my bedroom fridge? Milk and crackers is all I want. Want to join me with a glass for yourself and get crumbs in bed and talk girl talk? Things I can't mention to dear Jake now that I'm a girl and not mean, old, cantankerous Johann."

"Joanie, I don't believe you ever were cantankerous."

"Oh, yes, I was, hon. I hurt most of the time and was depressed all of the time and wasn't fit to live with. But Joan Eunice is never depressed; her bowels are too regular. Scrounge us two glasses of milk and a box of crackers while I take a pretend bath. Don't go downstairs; there will be something over there in the iron rations. Fig newtons, maybe, or vanilla wafers."

Soon they were sitting, munching, in the big bed while Joan Eunice gave an edited account of the day: "—so we visited in Judge Mac's chambers and let the car go ahead, as Judge Mac the sweet darling wouldn't hear of my leaving through the streets. Even though the phony riot was over. Then we switched from copter to car at Safe Harbor and came home." (Protecting her 'innocence,' twin?) (Not bloody likely. Protecting Jake's reputation.)

"But the best part of the day was when I took off that street robe and let 'em look at the Acapulco outfit you dressed me in. Made 'em go ape, dear."

"'Ape?'"

"Out-of-date slang. They dropped one wing and ran in circles, like a rooster about to tread a strange hen."

"It wasn't the outfit, it was you."

"Both. Eunice Branca had a heavenly body and I'm doing my best to justify it. With your help. As may be, both those darling men kissed me the nearest thing to rape I've encountered."

"Better than Dr. Garcia?"

"I don't think Dr. Garcia gave me his all out best. I think he was inhibited by surprise and by the presence of a redheaded nurse I could name. But these two weren't inhibited and had a couple of drinks in them and each was going his darnedest to do better than the other one. *Whew!* Winnie, I do not exaggerate—if Jake hadn't been there, I think they would have had me down on the rug for a gang bang in two seconds."

"Uh . . . would you have struggled?" (Going to be truthful, tart?) (Who taught me to be a tart? Any reason not to tell her, Eunice?) (None. Except that she's likely to rape you herself.) (Oh, pooh, she's just killing time till her date.) (Don't say I didn't warn you.)

"Winnie, if I were a real lady, I would be horrified. But I won't pretend with my chum. I don't know much about being female but I seem to have strong instincts. Cross my heart, if either of those sweet men had given me a gentle shove, I would have landed on that rug with my legs open and eyes closed. Gang bang? By then I felt ready to take on a regiment."

Winifred said thoughtfully, "It happened to me once."

"A *regiment?"*

"No. A gang bang."

"Well, let's shoe the crumbs out of bed and squeeze down the lights and snuggle and you tell big sister. Were they mean to you?"

"Not really. Oh, dear, I'm blushing already. Turn off everything but one floor light and let me tell it against your neck."

"That better?"

"Yes."

"Now tell Mama."

"Uh, it was the night I graduated from training. I wasn't a virgin—I'm not sure there was a virgin in my class. But this was something else. Some interns gave a party for some of us. That was fine and I expected one of them to get me alone. Interns are the horniest people and a girl didn't accept a date with one unless she meant business. But the party was loads of champagne and no food. Joan, I had never had champagne before."

"Oho! I can write the ending."

"Well. . . champagne doesn't *taste* strong. I sopped up a lot of it.

"Then I was in bed and it was happening. Wasn't surprised and tried to cooperate. But things were vague. I noticed that he wasn't dark-haired after all; he had hair as red as mine. When I had been certain that he was dark-haired and had a mustache. When I noticed later that he was almost bald, I realized that something odd was going on. Joan, there were seven interns at that party. I think all of them had me before morning. I don't know how many times. I knew what was happening after thick, curly red hair was replaced by mostly bald. But I didn't try to stop it. Uh. . . I didn't *want* it to stop. A nympho, huh?"

"I don't know, dear, but that's the way I felt this afternoon. Wanted it to happen at last, wanted it to go on happening—and *I* don't even know what it feels like. Go on."

"Well, it did go on. I got up once and went to the bathroom and noticed in the mirror that I didn't have a stitch on and couldn't remember having undressed. Didn't seem to matter. I went back to bed, and found that I was feeling lonely; the party seemed to have stopped.

"Only it hadn't. A man came in and I managed to focus my eyes and said, 'Oh, Ted! Come here'. And he did and we did, and it was worse than ever.

"I woke up about noon with a dreadful hangover. Managed to sit up and here were my clothes, neatly folded on a chair, and on the bedside table a tray with a thermos of coffee and some Danish pastry and a glass with a note by it. It read: 'Drink this before you eat. You'll need it. Chubby.' Chubby was the one who was almost bald."

"A gentleman. Aside from his taste for mass rape."

"Chubby was always nice. But if anybody had told me that I would ever be in bed with Chubby, I would have laughed in her face."

"Were you ever again?"

"Oh, yes. I really did appreciate the thoughtful little breakfast and especially the hangover cure. It put me back together. Not good enough to go on watch but good enough to get dressed and back to my room."

"Were you all right? I mean, uh, not caught or anything?"

"Not even sore. Not anything. Wasn't my time, even if I hadn't been protected with an implant, which I was. And one nice thing about going to bed with interns, almost no chance of picking up an infection. No, I was lucky all the way, Joan. Oh, no doubt the story went the rounds, but I wasn't the only graduate getting it that night, and that wasn't the only party. Nobody teased me about it. But it was a gang bang, and I didn't make the slightest move to stop it." She added thoughtfully, "The thing that worries me is that I might do it again. I know I would. So I don't drink at all anymore. I know I can't handle it."

"Why, Winnie, you've had a drink with me, more than once."

"That's not the same thing. Uh, if you wanted me to get drunk with *you*—I would. I'd be safe." (Safe? Little does she know.) (Eunice, we haven't done more than snuggle and you know it.) (She's asking you to step up the pace.) (Well, I won't! Not much, anyhow.)

"Winnie! Winnie dear! Look at the time."

"Uh? Oh, my heavens! Ten minutes after midnight. I—"

The little redhead seemed about to cry.

"Are you late? He'll wait. Oh. I'm sure he will—for Winnie."

"Not late yet. He's off duty at midnight and it takes a while to get here. But— Oh, dear, I don't want to leave *you.* Not when we were—I was, anyhow—so happy."

"Me, too, darling," Joan agreed, gently, untangling herself from Winifred's arms. "But big sister is always here. Don't keep your man waiting. Check your lipstick and hair and such in my bath if there. is any chance that he may already be in your room."

"Well. All right. Miss Joan, you're good to me."

"Don't you dare call me 'Miss' at a time like this or swelp me, I'll make you miss your date. Rush, rush, hon; go get beautiful. Kiss me goodnight; I'll be asleep before you are out of the bath. And, Winsome —no exercises tomorrow."

"But—"

"Smile, I didn't break your dolly. I want to sleep late and I want *you* to sleep late so that I won't wake up from knowing you are fidgeting. You'll get all the classic postures you need in bed tonight. Stop blushing. Give him something special from me, only don't tell him. Or do, I don't give a darn. Kiss me quick and let me go to sleep."

Her maid-chum-nurse kissed her not too quickly and left hurriedly. Joan Eunice pretended to be asleep when Winifred walked silently from the bath through the room, on into her own room, and the door sealed behind her.

(Well, twin, you lucked through again, didn't you?) (Eunice, I've told you time and again that I am *not* going to stroll Gay Street while I'm a virgin. Might be habit forming.) (Could be, with our cuddly little pet who enjoys a gang bang. But I didn't mean *her.* I meant at Safe Harbor.)

(You, call that *luck?* I call it the most frustrating thing that ever happened to me. Eunice, I needed the Money Hum as badly as Jake did.) (I call it luck. Boss darling, I may be dead but I can still read a calendar. I was steady on twentyeight-and-a-half days for more than ten years—and we've still been on it since we amalgamated. We're fertile as a turtle, Myrtle, this minute—and will be, for two or three days. Jake has promised you that the next time won't be frustrating. . . and you'll be as carefree as a cheerleader I told you about. Scan me, Fanny? So run don't walk and get that implant—about ten o'clock tomorrow morning. Unless you plan to get us benched right away. Do you?)

(Eunice, you're talking non— No, you're not. I *will* do something about it. Tomorrow. But 'benched right away' is an exaggeration. I'm new at this while you've been through one pregnancy. But your aunt probably watched you like a hawk—) (She did. Elsie Dinsmore had a livelier time.) (—but I've sat through three, as a husband. 'Benched' is just a short time, at the end. And pregnancy doesn't kill a woman's interest. My angelic first wife, Agnes, would have tried it on the way to the hospital if I hadn't had more sense about it than she had. Just the same, I'll be good. I'll be careful, rather.)

(Joan, I wasn't trying to talk you out of it. I just didn't want us knocked up by accident. Say through a playful romp with Judgie Wudgie. Or Alec. But if you want to, that's fine. Marry Jake and get pregnant at once. Or get pregnant by him and then marry him; he might be more tractable.)

(Eunice, I'm not planning on getting married in any hurry if at all.) (So? I've heard you propose to Jake at least four times.)

(Yes, yes! If Jake agreed, I would; I wouldn't let him down. But he won't, if ever, until these legal finagles are cleared up. Which might take years. Do you remember how long it took to get the courts to okay the Sky Trails stock conversions? That was clear-cut compared with this and did not involve as much money. Eunice, I propose to Jake for his morale; I don't care whether he makes an 'honest woman' of me or not, I just want him to take us to bed. Marriage doesn't figure.)

(Twin, your naivete surprises me. Didn't you hear Winnie? Marriage isn't planned, it just happens. No girl is more likely to wind up in a hotel room, married to a man she didn't even know at sundown the night before, than a chick who isn't going to get married 'any time soon.' Boss, you marry Jake. Marry him as soon as he will agree to it—for you were talking sense when you pointed out that no other man could both understand you and not be dazzled by your money. In the meantime, it's smart to go contra.)

(All right. What are the girls using today?) (Oh, most of them use implants. Some use pills, both the daily ones and the monthly ones. But if you miss with either sort, you are on a very short fuse. I never liked monkeying with my body's economy; I'm not convinced that anything that changes a woman's femaleness that much is a good idea. Not superstition, Boss, I did some careful reading alter the time I got caught. There are hazards to all chemical methods. My body worked fine the way it was; I didn't want to tamper with a successful organization—I'm quoting you, only you were talking about business.) (I see your point, Eunice, even though we're talking about monkey business. A body is far more complex than a corporation, and the one you turned over to me is a jewel; I don't want to tamper with it, either. But what *did* you use? Self restraint?)

(Never had any in stock, dearie. Oh, there are lots of other loving things you can do without getting pregnant—if you can shake off your early training and be twenty-first century—) (Look, infant, I knew about—and used—every one of those other things in high school. I keep telling you: You kids did *not* invent sex.) (You didn't let me finish, Boss. Those are emergency measures. A girl who depends on them alone is going to add to the population explosion. Joan, I looked into it carefully, when I turned eighteen and was licensed and settled on one of the oldest methods. A diaphragm. They are still available; any physician will fit them. I wore one six days every month, even at the office—because, as the doctor who fitted me pointed out, most diaphragm failures result from leaving them at home while you run out for a pound of sugar, be right back.)

(I suspect he's right, Eunice.) (I'm sure of it, Joan. I never liked them—I never liked *any* contraception; I seemed to have a deep instinct that told me to get pregnant. Boss. . . the thing—the *only* thing—that I really mind about being dead . . . is that I always wanted to have a baby by you. And that's silly, as you were already too old—or maybe almost too old—when I first met you. But I would have tried, if you had offered.)

(Darling, darling!)

(Oh, I'm happy with what I have. Om Mani Padme Hum. I'm not kicking about my karma. I'm not just content, I'm *happy*. . . to be half of Joan Eunice.)

(Eunice, would you still be willing to have a baby by me?)

(What? Boss, don't joke about it. Don't mock me.)

(I'm not joking, beloved.)

(But, Boss, the necessary part of you is *gone*. Pickled in alcohol, or something.)

(They use formalin, I think. Or deep freeze. I'm not talking about that old wreck we discarded. We can go down and get an implant.)

(Huh? I don't understand.)

(Do you remember a tax-deductible called the Johanna Mueller Schmidt Memorial Eugenics Foundation?)

(Of course. I wrote a check for it every quarter.)

(Eunice, despite the purposes set out in its charter, the only *real* purpose does not appear in the fine print. When my son was killed I was already fairly old. But I was still virile—potent—and tests showed that I was fertile. So I got married—I think I told you—to have another son. Didn't work. But I had my bet hedged and never told anyone. Sperm bank deposit. In the cryogenic vault of the Foundation is a little piece of Johann. Hundreds of millions of extremely little pieces, that is. Presumably they are not dead, just asleep. That's what. I meant by an implant. With a syringe. Or however they do it.

(Eunice? Are you still there?) (I'm crying, Boss. Can't a girl cry happy? *Yes!)*

(Tomorrow morning, then. You can change your mind up till the last minute.)

(I'll *never* change my mind. I hope you won't.)

(Beloved.)

17

Next morning Joan found that Jake had left the house before she woke; there was a note on her tray:

"Dear Joan Eunice,

"I slept like a baby and feel ready to fight wildcats—thanks to you and Winnie. Please extend my thanks to her and say (to both of you) that I will most gratefully join your prayer meetings any time I am invited—especially if I've had a tiring day.

"I will not be back until late—treasure hunting, locating links of evidence. Alec is off to Washington for one link. If you need me, call my answering service or Judge McCampbell's chambers.

"I've instructed Jefferson Billings to let you draw against your petty

expenditures account—about four hundred thousand in it, I believe—on your old signature and new thumb print. He'll pay drafts and hold them and I'll countersign until you make out a new signature & thumbprint card—he says he knew Eunice Branca by sight, no problem. If you wish, he will call on you with a new sigprint card—we assume that your signature is now somewhat changed."

(Boss, I guess Jake doesn't know that I sign your signature better than you do.) (I don't think anyone knows, dearest. I don't know how that would figure in court—for us, or against us?)

"If you need more pocket money, let me make you a personal loan rather than have it show in my conservator's report. Your 'Brother Mac' is most helpful, but the financial end of this nonsense should appear ultraconservative until such time as he can, with full justification, relieve me as your conservator. Caesar's wife, you know.

"Speaking of Caesar's wife, I told you a chuckle about two of our friends. This morning I phoned one of them and the other answered and, after the usual query as to sight & security, they seemed unworried about what I saw or heard or might infer. I was flattered. Little imp, if you must misbehave, you can trust them—for they have your welfare at heart. Sorry I was stuffy yesterday."

(I'm glad to learn *that,* Boss.) (Eunice, I can't see that it's our business what Alec and Mac do in their spare time. Jake shouldn't gossip about them, even to us.) (No, no, Boss! Jake is telling you that he was being a cube yesterday—and he's sorry—and now he's granting you absolution in advance. We had best marry Jake—nevertheless I've fretted that Jake might be jealous. Possessive. His age, his background. Could be doom, twin—as you are a tart at heart and we both know it.)

(Oh, nonsense, Eunice! I would never rub Jake's nose in it—and anyhow you're wrong. A smart man—which Jake is—doesn't get excited over a go on the tiles; what worries him is fear of losing a wife he values. If Jake marries us, I will *never* let him worry about losing us.) (I hope you can make that stick, Boss honey.) (With your help I'm sure I can. Let's finish his letter—)

"Don't count on me for dinner, as what I must do today is urgent—more urgent than something that seemed dreadfully urgent yesterday. And was. And will be, I hope.

"This was meant to be a love letter but I've had to mention other matters—and other people, so I must urge you to tear it up and flush it down the W.C. It is no accident that I am thumbprinting the seal and will hand it to Cunningham with a promise to have his head on a platter if it leaves his person before it reaches you. I've learned to like Cunningham; he's an 'honest thief.'

"My love to you, dearest, and the biggest kiss possible—so big that you

can break off a piece and deliver it to Winnie when you thank her for me. She's a charming girl, and I'm pleased that she's mothering you so well.

"J"

(Why, the horny old bastard. Joan, Jake has his eye on Winnie's pretty tail while he's patting ours.) (She'll have to stand in line!) *(Jealous,* twin?) (No. But I repeat—I'm going to scalp him first. Darn it, Eunice, I had him all set yesterday—and it's been a long struggle. Not the WhimWham-Thankee-Ma'am *you* managed with him. And all it got me was a spanking. I do hope he comes home tonight.)

(Three hurdles even if he does, twin.) *(Three?)* (Hubert... and Winnie. . . and that 'implant.' Boss darling? You're not going to do me out of having *your* baby by letting Jake get at you first—are you?) (Of course not, little stupid. I was coping with intrigues without getting shot long before your grandmother was born. Mmm—I'll need cash.)

(Jake told you how to get all the cash you want.) (Oh sure—on my signature and *his* countersignature. Like a cat covering up on linoleum. Eunice my love, I'll bet you never paid a bribe in your life.) (Well. . . not with *money.)* (Don't tell me, let me guess. Hon, what we're sitting on might be worth a million—but today I need used bills in medium denominations from no recorded source. Come along, little snoopy, and I'll show you something that even my secretary—a sweetly deceitful girl named Eunice, remember her?—didn't know about.)

(Do you mean that safe hidden in your bath, Boss?) *(Huh?* How the hell did *you* know about *that?)* (I'm snoopy.) (Do you know the combo?) (I ought to take the Fifth.) (Why bother? You'll know it in two minutes. Or can you pick it out of my mind?) (Boss darling, you know by now that *I* don't know anything in your memory until *you* think about it. . . and *you* don't know anything in mine until *I* think about it. But—Well, if I had to open the safe, I think I would start with the numbers that mean your mother's birthday.)

Joan sighed. (A girl doesn't have any privacy these days. All right, let's see if we've been robbed.)

She went into her bath, sealed the door, bolted it by hand, removed a stack of towels from a lower cabinet, fiddled with the ceiling of the cabinet; the back panel slid aside, disclosing a safe. (You think my mother's birth date will open it?) (I'd switch on the sun lamps over the massage table first, then run the cold water in the hand basin.) (No privacy at all! Honey, did you really pay a bribe with your pretty tail once?) (Not exactly. I just improved the situation. Let's see if we've been robbed.)

Joan opened the safe. Inside was money enough to interest a bank auditor. But the packets had not been packaged in a bank; they were not that neatly jogged and the total for each was hand-printed. (Plenty of moola, dear—and either nobody found this safe, or they never figured out the additional bolts. Either way, it settles one thing. We won’t put lake’s sweet note down the hopper.) (Let him think we did, huh?) (If he asks.) (Then cry on him later and admit that we couldn’t bear to part with it.) (Eunice, you have a mind like a pretzel.) (That’s why it fits so well into yours, twin.) (Could be.)

Joan put the letter inside, took out two packets, put them into a purse in the dressing room end—closed the safe, shut off the sun lamps, shut off the water, spun the dial, slid the panel back, replaced the towels, closed the cabinet. Then she stepped to the bath’s intercom, pressed a touchplatc. “Chief O’ Neil.”

“Yes, Miss Smith?”

“I want my car, one driver, and both Shotguns in thirty minutes.”

There was a short silence. “Uh, Miss Smith, Mr. Salomon apparently forgot to mention that you would be leaving the house.”

“For excellent reason. He did not know it. Did he mention that I am no longer a ward of the Court? If not, have you learned it from some other source?”

“Miss, I haven’t learned it from an *official* source.”

“I see. Then you are learning it from me. Officially.”

“Yes, Miss.”

“You don’t sound happy, O’Neil.. You could check by phoning Judge McCampbell.”

“Why, yes, of course.”

“Are you going to, O’Neil?”

“Perhaps I misunderstood, Miss. Weren’t you telling me to?”

“Are you recording?”

“Certainly, Miss. I always do, with orders.”

“I suggest that you play it back and answer your own question. I’ll hold. But first—how long have you been with me, O’Neil?”

“Seventeen years, Miss. The last nine as your Chief.”

“Seventeen years, two months, and some days. Not enough for maximum retirement but it has been long, faithful, and unquestioning service. You can retire this morning on full pay for life, if you wish, O’Neil; faithful service should be appreciated. Now please play back while I hold.” She waited.

“Be switched, Miss—I must need a hearing aid. You didn’t *tell* me to call the Judge. You just said I *could.”*

“That is correct. I pointed out that you could check on what I told you—officially—by making such a call. You still can.”

“Uh, Miss, I don’t see what you are driving at.”

“I’m sure you can figure it out. Do you wish to retire today? If so, send up Mentone; I want to interview him.”

"Miss, I've no wish to retire at all."

"Really? You gave the impression that you were looking for another job. Perhaps with Mr. Salomon. If so, I do not want to stand in your way. Retirement at full pay is available to you, O'Neil."

"Miss, I like it here."

"I'm pleased to hear it. I hope you will stay for many years. O'Neil, have you ever discussed my comings and goings with anyone?"

"Only when you've told me to, Miss. In which case I always have your order on tape."

"Fine. Wipe this tape and I'll hold while you do so."

Shortly he said, "Wiped, Miss Smith."

"Good. Let's start over. Chief O'Neil, this is Miss Johann Sebastian Bach Smith speaking. I want my car, one driver, and both Shotguns in thirty minutes."

"They will be ready, Miss Smith."

"Thank you. I'll be shopping. Is there anything I can pick up for Mrs. O'Neil?"

"That's most kind of you, Miss. I don't think so. Shall I ask her?"

"If you do, it is only necessary to say that my *car* is going out. If she has a list, I'll be happy to have Fred or Shorty take care of it. Off."

(Boss, you scared the pee out of him. Was that nice?)

(Running a feudal enclave in the midst of a nominal democracy isn't easy, Eunice. When Johann said 'Frog,' everybody hopped—my security boss especially. O'Neil has got to know—they've *all* got to know—that Johann is still here . . . and that no one, not even darling Jake, reviews or vetoes what I say. Unless he marries us, in which case I'll go female and let him decide everything.)

(That'll be the day!) (I might, dear one. Tell me, did you obey Joe?) (Well. . . I never bucked him. I suppose you could say I obeyed him. Except that I fibbed, or sometimes kept my mouth shut.) (I'd do just about the same. I think a perfect arrangement would be to do exactly what a man tells me to do . . . but wangle it so that he tells me to do what I've already decided to do.)

Joan felt, rather than heard, her chuckle. (Boss, that sounds like a recipe for a perfect marriage.)

(I find I like being female. But it's different. Now what shall we wear?)

Joan settled on a bandeau, a knee skirt, an opaque cloak with hood and yashmak, plus low-heeled sandals, all in subdued colors. She was ready in less than thirty minutes.

(How's our face, Eunice?) (Okay for - a 'shopping' trip. No need to call Winnie; the little baggage probably hasn't bad much sleep.) (Nor do I want to call her; she might want to come along. Let's go, sweet—we're out to break a two-thousand-year record with no help from the

Holy Ghost.) (Boss, that's not a nice way to talk!) (Well, I'll be frimped! Eunice, I thought you weren't a Christian? Zen. Or Hinduist. Or some such.)

(I'm not any of those things, Boss. I simply know some useful spiritual disciplines. But it is rude to joke about anything someone else holds holy.) (Even, in my *mind?* Are you telling me what I must not *think?* If I could reach you, I'd spank you.) (Oh, you can say anything to *me,* Boss—just don't say such things out loud.) (I didn't and don't and never have. Quit nagging me.) (Sorry, Boss. Love you.) (Love *you,* little nag. Let's go get knocked up.) *(Yes!)*

She took the front lift to the basement; O'Neil met her and saluted. "Car is ready, Miss—and both drivers and both Shotguns."

"Why both drivers?"

"Well, Finchley should be on call. But Dabrowski is bucking my authority a touch. Claims he's senior to Finchley. Do you wish to settle it?"

"Of course not; *you* must. But perhaps I can smooth some feathers."

"Yes, Miss."

He conducted her to her car; both teams were lined up by it, they saluted in unison. She smiled at them. "Good morning, friends. I'm glad to see you all looking so well. It's been a long time."

Dabrowski answered for them, "It has indeed, Miss Smith—and we are glad to see *you* looking so well."

"Thank you." Her eyes traveled across them. "There is one thing no one has told me. . . about the tragedy that started this strange sequence of events. Which team was driving the night Mrs. Branca was killed?"

For a long moment no one spoke. Then O'Neil answered, "Finchley and Shorty had the duty that night, Miss Smith."

"Then I must thank them—for Mrs. Branca and for myself. Although I know that Dabrowski and Fred would have acted as bravely, as promptly." She looked at Finchley, then at Shorty, her face unsmiling but serene.

"Which one of you avenged Eunice? Or was it both of you?"

Finchley answered. "Shorty got him, Mrs.—Miss Smith. Bare hands, one chop. Broke his neck."

She turned to Shorty—six feet six of smooth-black soul, two hundred ninety pounds of sudden death—and a preacher in his time off. She looked up at him and said gently, "Shorty, from the bottom of my heart—for Eunice Branca—I thank you." (I do thank him, Boss! This is news to me. I was dead before that lift opened.) "If she were here, she would thank you—not just for herself but for other girls that killer will never kill. I'm glad you killed him in the act. If he had gone to trial, he might be out by now. Doing it again."

Shorty had said nothing up to then. "Miss—Finch got 'im, too. Zapped him. Couldn't rightly say which one got him first."

"Nor does it matter. Any of you four would have protected Mrs. Branca with your life. She knew it—and knows it, wherever she is. I know it, and Chief O'Neil knows it." Joan felt tears start, let them flow. "I—all of us!—just wish to Heaven she had waited indoors until you two arrived. I know that each of you would rather see me dead than her. I ask you to do me the honor of believing that I feel the same way. Shorty, will you say a prayer for her tonight? For me? I don't know much about praying.". (Damn it, Boss, you've got me crying.) (Then say a Money Hum. For Shorty. He's still blaming himself for the unavoidable.)

"I will, Miss. I have every night. Although—Mrs. Branca—doesn't need it. She went straight to Heaven." (So I did, Boss. Though not the way Shorty thinks.) (And we shan't tell him. Have I said enough?) (I think so.)

Joan said, "Thank you, Shorty. For me, not for Eunice. As you say, Eunice doesn't really need prayers." She turned to O'Neil. "Chief, I want to go to Gimbel's Compound."

"Certainly, Miss. Uh, Finchley, man the car. Both Shotguns." O'Neil helped her in, locked her in; she locked herself in. The armor door lifted and the big car rolled out into the street. (Joan, what in the world are you going to buy at Gimbel's?) (A gag. For you. I'll change that order in a moment. Eunice, where did you buy clothes? You were the most smartly dressed gal in town—even when you were the nakedest.)

(Pooh, I was never naked; Joe's designs made all the difference. Joan, where I shopped you should never shop.)

(Can't see why not.) (Johann might but *you* can't; it wouldn't do. Mmm. . . while I could not afford the stylish places, I know of them. Come to think of it, two of them lease space inside Gimbel's Compound.) (So that's where we'll go—second. I'll tell Finchley the change. . . and tell him to have Fred escort me; I think Fred feels left out.)

(Wups! Fred can read.) (So? *Oh!* Well, Fred can guard me later.) She thumbed the order switch.

"Finchley."

"Yes, Miss?"

"I got so preoccupied that I forgot one other stop. Please drop Shorty and me at the unloading zone where State passes over Main."

"State and Main, Miss."

"Please have Shorty hang the radio link on his belt; there's no parking around there. Or was not the last time I was downtown. How long has that been? Over two years."

“Two years and seven months, Miss. Sure you don’t want both Shotguns with you?”

“No, they can take turns staying with the car. If you have to get out, I want you covered.”

“Oh, I’ll be all right, Miss.”

“Don’t argue with me. You wouldn’t have argued when I was old Johann Smith; I assure you that *Miss* Johann Smith still has his poison fangs. Pass the word along.” She heard him chuckle. “I’ll do that, Miss Smith.” When the car stopped, Joan hooked up her yashmak, concealing her identity—either or both of them—from the curious, Shorty unlocked her and handed her out. On the crowded pedestrian walk of Main Street Joan felt suddenly vulnerable . . . except for the tower of strength beside her. “Shorty, the building I’m looking for is in the thirteen hundred block—thirteen-oh-seven. Can you find it?” The question was to make him feel useful; she knew where the Roberts Building was, she owned it.

“Oh, sure, Miss—I read numbers real good. Letters, too—just words bother me.”

“Let’s go then. Shorty, how do you manage in your real profession? Not being able to read the Bible, I mean.”

“No trouble, I use talking books and as for *the* Book, I got every precious word memorized.”

“A remarkable memory. I wish I could say the same.”

“Just takes patience. I had the Book down pat while I was still in prison.” He added thoughtfully, “Sometimes I think I ought to learn to read...but I can’t seem to find *time.”* (The poor dear probably never had a teacher who could teach, Boss.) (Never tamper with a successful organization, Eunice; he’s found his niche.)

“This must be it, Miss. ‘One, three, oh, seven.’”

“Thank you, Shorty.” She was not asked for her I.D. at the building entrance, nor did she offer it, for she had none, either as Johann Smith or Eunice Branca. The guard noted the “Licensed & Deputized” shield (which matched his own) on Shorty’s uniform, released the cage turnstile, and waved them on through. Joan Eunice smiled at him with her eyes—and made note that security at the Roberts Building should be tightened; the guard should have photographed Shorty’s I.D. and logged his shield number.

(Boss, he *can’t* handle so many people that way; he has to use his judgment.) (Look who’s talking! If that apartment house you used to live in had had fight security, you would never have been mugged. If we can’t stop violence outdoors, we must try to keep it from coming indoors.) (I won’t argue, Boss darling—I’m *excited!)* (Me too; this veil is a help.)

On the twelfth floor they went to the suite occupied by the

Johanna Mueller Schmidt Memorial Eugenics Foundation, H. S. Olsen, M.D., Sc. D., Director, Please Ring and Wait. The guard let them in, went back to his picture magazine. Joan noted with approval that there was a goodly number of women and couples in the waiting room. She (Johann) had jacked up Olsen about the (public) purpose of the Foundation—to offer superior anonymous donors to licensed and qualified females—in her last letter accompanying a quarterly check; apparently it had had good effect.

“Wait here, Shorty; there’s video over there.”

She went to the barrier desk separating the waiting room from the outer clerical office, avoided the sign “Applications” and got the reluctant attention of the only male back of the barrier, motioned him to her. “What is it, Ma’am? If it’s an application, go to the far end, present your I.D. and fill out the questionnaire, then wait. You’ll be called.”

“I want to see the Director. Dr. Olsen.”

“Dr. Olsen never sees anyone without an appointment. Give me your name and state your business and possibly his secretary will see you.”

She leaned closer, spoke softly. “I *must* see him. Tell him that my husband has found out.”

The office manager looked startled. “Your name?”

“Don’t be silly. Just tell him that.”

“Uh.. . wait here.” He disappeared through a rear door. She waited. After a remarkably short time he appeared at a side door of the waiting room, motioned her to him, then conducted her down a passage toward a door marked “Director—Keep Out” and to a door near it marked “Secretary to the Director, Ring & Wait.” There he left her with a woman who reminded Joan of Johann’s third-grade teacher, both in appearance and authoritarian manner. The woman said frostily, “What is this nonsense? You may start by showing me your I.D.” (Three fingers stiff into her solar plexus, Boss, and say she fainted!) (Maybe. We’ll try my way first.)

Joan answered in still more frozen tones, “Not likely, Miss Perkins. Why do you think I’m veiled? Will you announce me? Or do I call the police and the news snoops?”

Miss Perkins looked startled, left her stenodesk, and entered the private office behind it. She came out shortly and said angrily, “You may go in.”

Olsen did not get up as Joan entered. He said, “Madam, you have chosen an unusual way of getting my attention. Now what is it? Come to the point.”

“Doctor, don’t you offer chairs to ladies?”

“Certainly. If they are ladies. *A* point you have gone to some trouble to render dubious. Speak up, my good woman, or I shall have you removed." (Boss, did you see him glance at the mike? That old bat in the next room is taking down every word.) (So I assumed, Eunice. So we won't talk yet.) Joan stepped close to the Doctor's desk, unhooked her yashmak, let it fall to her left shoulder.

The Doctor's expression changed from annoyance to startled recognition. Joan Eunice leaned across his desk, flipped off the dictation microphone. Then she said quietly, "Anything else still recording? Is this room soundproof? How about that door?"

"Miss—"

"'Miss' is enough. Are you ready to ask me to sit down? Or shall I leave—and return with my lawyer?"

"Do please sit down—Miss."

"Thank you." Joan waited until he got up and moved a chair to a correct "honored-guest" position near his own. She sat down. "Now answer the rest. Are we truly private? If we are not—and you tell me that we are—I will eventually know it.. . and will take such steps as I deem appropriate."

"Uh, we're private. But just a moment." He got up, went to his secretary's door, bolted it manually. "Now, Miss, please tell me what this is about."

"I shall. First, I've been supplementing my original endowment with quarterly checks. Have you been receiving these during my incapacitation?"

"Eh . . . one check failed to arrive. I waited six weeks, then wrote to Mr. Salomon and explained what your custom had been. It seems he checked the facts, for soon after we received two quarterly payments at once, with a letter saying that he would continue to authorize payments in accordance with your custom. Is there some difficulty?"

"No, Doctor. The Foundation will continue to receive my support. Let me add that the trustees are—on the whole—satisfied with your management."

"That's pleasing to hear. Is that why you came today? To tell me that?"

"No, Doctor. Now we get to the purpose. Are you *quite certain* that our privacy cannot be breached? Let me add that the answer is *far* more important to *you* than it is to me."

"Miss, uh—Miss, I am certain."

"Good. I want you to go into the cold vault, obtain donation 551-20-0052—I will go with you and check the number—and then I want you to impregnate me with it. At once."

The Doctor's face broke in astonishment. Then he regained his professional aplomb and said, "Miss—that is impossible."

"Why? The purpose of our institution, as defined in its charter—which I wrote—is, to supply qualified females with donor sperm—on request, without fee, and without publicity. That's exactly what I want. If you wish to give me a physical examination, I'm ready. If you want to know whether or not this body is licensed for childbearing, I assure you that it is—although you know that, in *this* case, a fine for unlicensed pregnancy means less than nothing. What's the trouble? Does it take too long to prepare the sperm to do it all in one day?"

"Oh, no, we can have it warmed and viable in thirty minutes."

"Then impregnate me thirty minutes from now."

"But, Miss—do you realize the trouble I could get into?"

"What trouble?"

"Well . . . I do follow the news. Or I would not have recognized you. I understand that there is a question of identity—"

"Oh, that." Joan dismissed it. "Doctor, do you bet on the races?"

"Eh? I've been known to. Why?"

"If we are truly private, you can't possibly get into trouble. But there comes a time in every man's life when he must bet. You are at such a crisis. You can bet on a certain horse—on the nose, you can't hedge your bet. And win. Or lose. As you know, the other trustees of this corporation are my dummies; *I* am the Foundation. Let me predict what will come to pass. Presently this identity nonsense will be over and the real Johann Sebastian Bach Smith will stand up. At that time the endowment of this institution will be doubled. At that same time the salary of the Director will be doubled. If you bet on the right horse, you will be the Director. If not—you'll be out of a job."

"You're threatening me!"

"No. Prophesying. Old Johann Sebastian Bach Smith was a seventh son of a seventh son, born under a caul; he had the gift of prophecy. No matter which way you bet, the endowment will be doubled. But only you and I will ever know what is done today."

"Mmnm. . . there are procedures to satisfy. I do have authority to permit any adult female to receive a sperm donation if I am satisfied that she qualifies—and let's say that I am. Nevertheless there are routines to go through, records that must be kept."

(He's ready to geek, Boss. So sing him a Money Hum, with a different tune.) (Eunice, a cash bribe is to push him over if he won't fall. Let's see if he'll sell it to himself.)

Joan shook her head. "No records. Just do it to me and I'll hook my veil over my face and leave."

"But, Miss—I don't do these things *myself.* A staff doctor carries out the donation procedure, assisted by a nurse. They would think it strange if no records were kept. Very."

"No nurses. No assistants. You alone, Doctor. You are an M.D. and a specialist in genetics and eugenics. Either you can do this...or you don't know enough to head this institution—which the trustees would regretfully notice. Besides that, I go with you and check the number on that donation . . . and stick at your elbow until you place it inside me. Do we understand each other?"

The Doctor sighed. "I once thought a general practice was hard work! We can't be sure that a placed donation will result in impregnation."

"If not, I'll be back in twentyeight and a half days. Doctor, quit stalling. Or bet on the other horse and I'll leave. No harsh words, now or later. Just that prophecy." She stood up. (Well, Eunice? Will the frog hop?) (Can't guess, dear. He's seen so many female tails he's bored with them. I can't figure him.)

Olsen suddenly stood up. "You'll need a cold suit."

"All right."

"Plus the advantage that a cold suit covers so thoroughly that a man would not recognize his own wife in one. I have a spare here, for V.I.P.s"

"I think you could class me as a V.I.P." Joan said dryly. Forty minutes later Dr. Olsen said, "Hold still a moment longer. I am placing a Dutch cap, a latex occlusive cervical pessary, over the donation."

"Why, Doctor? I thought those things were for contraception."

"Usually. And it will serve that purpose, too—mean to say, some of our clients wish to be protected at once from any possibility of impregnation from any other source. But in your case my purpose in installing this temporary barrier is to make certain that the donation *does* impregnate you. To give those wigglers a chance to reach target and to keep them from swimming downstream instead—follow me? Leave it in place until sometime tomorrow—or later, it doesn't matter. Do you know how to remove it?"

"If I can't get it out, I'll call you."

"If you wish. If you fail to skip your next menses, we can try again in four weeks." Dr. Olsen lowered the knee supports, offered his hand. She stepped down and her skirt fell into place. She felt flushed and happy. (Eunice, it's done!) (Yes, Boss! Beloved Boss.)

Dr. Olsen picked up her cloak, held it ready to lay around her shoulders. She said, "Doctor—don't worry about the horse race."

He barely smiled. "I have not been worrying about it. May I say why?"

"Please."

"Urn. If you recall, I have met Johann Smith—*Mister* Johann Smith—on other occasions."

"Eleven occasions, I believe, sir, including a private interview when Dr. Andrews nominated you to succeed him."

“Yes, Miss Smith. I’ll never forget that interview. Miss, there may be some legal point to clear up concerning your identity. But not in *my* mind! I do not think that any young woman of your present physiological age could simulate Mr. Johann Smith’s top-sergeant manner—and make it stick.”

“Oh, dear!”

“Pardon me?”

“Dr. Olsen. this sex change I’ve undergone is not easy to handle. It is fortunate—for both of us—that you were able to spot Johann Smith behind the face I now wear. But—darn it, sir!—I’ve got to acquire manners to match what I am *now.* Will you call on me—oh, say three weeks from now when I hope to have cheerful news—and let me show you that I *can* simulate a lady when I try? Come for tea. We can discuss how the Foundation’s work can be expanded under a doubled endowment.”

“Miss Smith, I will be honored to call on you whenever you wish. For any reason. Or none.” (Wups! Hey, Eunice, I thought you said he was bored with female tails?) (So I did. But we have an unusually pretty one, Joan, even from that angle. Gonna kiss him?) (Eunice, can’t you treat just one man impersonally?) (I don’t know; I’ve never tried. Aw, don’t be chinchy; he’s been a perfect lamb.) (Now you be a lamb, too—let’s get out of here.)

Joan let the doctor lay her cloak around her shoulders; it brought his head close to hers. She turned her face toward; that side, wet her lips and smiled at him.

She could see him decide to risk it. She did not dodge as his lips met hers—but did not put her arms around him and; let herself be slightly clumsy, stiffened a little before giving in to it. (Twin! Don’t’ let him put us back on that table—make him use the couch in his office.) (Neither one, Eunice. Pipe down!)

Joan broke from it, trembling. “Thank you, Doctor. And you see I *can* be a girl if I try. How do I get back to the waiting room without passing your Miss Perkins?” She hooked her yashmak.

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A few minutes later Shorty handed her into her car, locked her in, and mounted into the forward compartment.

“Gimbel’s Compound, Miss Smith?”

“Please, Finchley.”

Once inside the compound Joan had Fred escort her to Madame Pompadour’s. The fact that she had a private bodyguard got her immediate attention from the manager, who was not Madame Pompadour even though he wore his hair in the style made famous by the notorious Marquise and had manners and gestures to match. (Eunice, are you sure we are in the right place?) (Certainly, Boss—wait till you see their prices.) "How may I serve Madame?"

"Do you have a private viewing room?"

"But of course, Madame. Uh, there is a waiting room where—"

"My guard stays with me."

The manager looked hurt. "As Madame wishes. If you will walk this way—" (Eunice, shall we walk *that* way?)

(Don't try, twin—just follow him. Or her, as the case may be.)

Shortly Joan was seated facing a low model's walk; Fred stood at parade rest behind her. The room was warm; she unfrogged her cloak and pushed back its hood but left the yashmak over her features. Then she dug into her purse, got out a memorandum. "Do you have a model who comes close to these measurements?"

The manager studied the list—height, weight, shoulders, bust, waist, leg. "This is Madame?"

"Yes. But here is another specs list even if you can't match me. A friend for whom I wish to buy something pretty and exotic. She's a redhead with pale skin to match and green eyes." Joan had copied Winifred's measurements from the exercise records the two had been keeping.

"I see no problems, Madame, but in your own case permit me to suggest that our great creative artist, Chariot, will be happy to check these measurements or even to design directly on—"

"Never mind. I am buying items already made up. If I *buy."*

"Madame's pleasure. May I ask one question? Will Madame be wearing her own hair?"

"If I wear a wig, it will be the same color as my hair, so assume that." (Eunice, should I buy a wig?) (Be patient and let it grow out, dear. Wigs are hard to keep clean. And they never *smell* clean.) (Then we'll never wear one.) (Smart Boss. Soap and water is the world's greatest aphrodisiac.) (I've always thought so. Though a girl should smell like a girl.) (You do, dearie, you do—you can't help it.)

"Madame's hair is a beautiful shade. And now, since Madame indicated that her time is short, perhaps it would suit her convenience to let our accounting department record her credit card while I alert the two models?"

(Watch it, Boss!) (I wasn't a-hint the door, dearie.) "I use credit cards with several names. Such as McKinley, Franklin, and Grant. Or Cleveland." Joan reached into her purse, fanned a sheaf of bills. "The poor man's credit card."

The manager repressed a shudder. "Oh, goodness, we don't expect our clients to pay *cash.*"

"I'm old-fashioned."

The manager looked pained. "Oh, but it's unnecessary. If Madame prefers not to use her general credit account—her privilege!—she can Set up a private account with Pompadour in only moments. If she will permit me to have her I.D.—"

"Just a moment. Can you read fine print?" Joan pointed at a notice near a portrait of President McKinley. "'This note is legal tender for all debts, public and private.' I shan't get tangled up in a computer. I pay cash."

"But, Madame—we aren't set up for cash! I'm not certain we could make change."

"Well, I don't want to put you to any inconvenience. Fred."

"Yes, Miss?"

"Take me to La Boutique."

The manager looked horrified. "Please, Madame! I'm sure something can be arranged. One moment while I speak to our accountant." He hurried away without waiting for an answer.

(Why the fuss, Boss honey? I've bought endless things for you, against your personal expenditures account. Jake said we could use it.) (Eunice, I've despised those moronic machines since the first time I was trapped by a book club. But I'm not just being balky. Today is *not* a day to admit who we are. Later—after we're out of court—we'll set up a "Susan Jones" account for shopping in person. If we ever do again. I can see it's a bloody nuisance.) (Oh, no, it's fun! You'll see, twin. But, remember—I hold a veto until you learn something about clothes) (Sho', sho', little nag.) (Who are you calling a nag, you knocked-up bag?) (Happy about it, beloved?) (Wonderfully happy, Boss. Are *you?)* (Wonderfully. Even if it wasn't romantic.) (Oh, but it was! We're going to have *your* baby!) (Quit sniffling.) (I'm *not* sniffling; you *are.)* (Maybe we both are. Now shut up, here he comes.)

The manager beamed. "Madame! Our accountant says that it is perfectly all right to accept cash!"

"The Supreme Court will be pleased to hear it."

"What? Oh! Madame is jesting. Of course there is a service surcharge of ten percent for—"

"Fred. La Boutique."

"Please, Madame! I pointed out to him how unfair that is and found the most wonderful solution!"

"Really?"

"Truly, Madame. Anything you choose to buy, I'll simply charge against my personal account—and you can pay me cash. No trouble, I'll be happy to. My bank doesn't make the least fuss over accepting cash deposits. Really." (Watch it, Boss; he'll expect a fat tip.) (If he can show us something we want, he may get it. Cost is no huhu, Eunice; we can't get rid of the stuff.) (It's the principle of the thing, Boss.) (Forget it and help me spend money.) (All right. But we don't buy unless we like it.)

For the next two hours Joan spent money—and was dazed to discover how expensive women's clothes could be. But she suppressed her early upbringing and paid attention only to an inner voice: (Not that one, twin—it's smart but a man wouldn't like it.) (How about this one, Eunice?) (Maybe. Have her walk it around again, then have her sit down. Show some leg.)

(Here comes 'Winnie' again. Is that girl a real redhead, Eunice?) (Probably a wig but doesn't matter; she's almost exactly Winnie's size. That would be cute on our Winsome. Twin, see what they have in fancy gee-strings——green, for a redhead. Winnie ought to have at least one outfit intended to be seen by no one but her new boy friend.) (Okay, we'll give 'Bob' a treat. Who do you think he is, beloved?) (Haven't the faintest—and we don't want to guess. Do we? I just hope he's nicer to her than Paul was.)

"Mr. duValle? Do you have something exotic in a minimum-gee for a redhead? Green, I suppose. And matching cups would be interesting, too. Something nice—an intimate present for a bride." (Bride?) (Well, it might help Winnie become a bride, Eunice—and it steers him away from thinking I'm buying it for my sweetheart.) (Who cares what *he* thinks?)

"Jeweled perhaps? Emeralds?"

"I wouldn't want a bride to be mugged over a wedding present. Nor do I wish to buy her something more expensive than her bridegroom can afford. Bad taste, I think."

"Ah, but these are synthetic emeralds. Just as lovely but quite reasonable. Yola dear—come with me."

Several thousand dollars later Joan quit. She was getting hungry and knew, from long experience, that being hungry made her unwilling to spend money. Her subconscious equated "hungry" with "poor" in a canalization it had acquired in the 1930's.

She sent Fred to fetch Shorty to help carry while her purchases were being packaged and while she paid the startling sum. (Eunice, where shall we eat?) (There are restaurants inside this compound, Boss.) (Uh, darn it—no, *damn it!*—I can't eat through a yashmak. You know what will happen. Somebody who watched video yesterday will recognize us. Then the news snoops will be on us before you can say 'medium rare.') (Well...how about a picnic?) (Wonderful! Eunice, you win another Brownie point. But—where can we go?—a picnic with grass and trees and ants in the potato salad—but private so I can take off this veil . . . and yet close enough that we won't starve on the way?)

(I don't know, Boss, but I'll bet Finchley does.)

Finchley did know. Shorty was appointed to buy the lunch at The Hungry Man inside the compound—"Get enough for six, Shorty, and don't look at the prices. Be lavish. But there must be potato salad. And a couple of bottles of wine."

"One is enough, Miss. I don't drink, wine is a mocker, and Finchley never drinks when he is on call to drive."

"Oh, think big, Shorty; I may drink a whole bottle myself—you can save my soul tomorrow. Today is special—my first day of freedom!" (Very special, beloved.) (Very, *very* special, Boss!)

Down into the crosstown chute, up onto Express Route South, out to the unlimited zone, then fifty miles at three hundred feet per second—a speed that Finchley did not use until Joan was protected by full harness plus collision net.

The fifty miles melted away in fifteen minutes and Finchley eased it down and over, ready to exit. They were not shot at, even where Route South skirts the Crater.

"Finchley? Can I get out of this pesky cocoon now?"

"Yes, Miss. But I'd feel easier if you would wear the Swedish belt. Some of these drivers are cowboys."

"All right. But tell me the instant I can take it off." (Eunice, the engineer if-that's-the-word who designed if-that's-the-word these goddam straps did *not* have women in mind!) (You've got it rigged for a *man,* Boss—of course you're pinching a tit. Move the bottom half closer in and shift the upper anchor point after we stop; that's the way they rigged it for me. Some man has used it since the last time I did.) (Jake, probably, sometime when his own car was laid up. Sweetheart, how many things do I have to learn about being a woman before I can avoid tripping over my feet?) (Thousands. But you're doing all right, Boss—and I'm always here to catch you.) (Beloved. Say, this doesn't look like picnic country. I wonder if Finchley is lost.)

They were passing through solid masses of "bedroom" areas—walled enclaves, apartment houses, a few private homes. The trees looked tired and grass scarce, while the car's airconditioning system still fought smog.

But not for long—Finchley turned into a secondary freight route and shortly they had farms on each side. Joan noticed that one belonged to her—to a subsidiary of Smith Enterprises, she corrected, and reminded herself that she no longer held control.

Nevertheless she noted that the guard at a corner watchtower seemed alert and the steel fence was stout and tall and capped with barbed wire and an alarm stand, all in good maintenance. But they were past without her seeing what was being cropped—no matter;

Johann had never tried to manage that slice of conglom, he had known his limitations. (Eunice, what are we raising back there?)

(Joan, I can't see if you don't look—and you never looked.) (Sorry, dearest. Speak up if you don't like the service.) (I Will. I think it was a rotation crop. This soil has been farmed so hard and long that it has to be handled carefully.)

(What happens when the soil no longer responds to management?) (We starve, of course. What do you expect? But before that they'll build on it.)

(Eunice, it's *got* to stop, somewhere. When I was a boy I was a city kid but I could *walk* in less than an hour to green fields and uncut woods...woods so private I could play Tarzan in my skin. I wasn't 'just lucky'—even in New York City a boy with five cents could ride to farms woods in less time than it took me to walk it.)

(Doesn't seem possible, Boss.) (I know. It's taken a fast car and a professional driver to do what I used to do on bare feet—yet this isn't real farm country; these are open-air food factories with foremen and time clocks and shop stewards and payroll deductions and house-organ magazines and you name it. A dug well and a tin dipper would cause a strike—and they'd be justified; those open wells and tin dippers spread diseased Just the same, the tin-dipper era was a *good* time in this country...and this one isn't. *Where do we go from here?)*

The inner voice failed to answer. Joan waited. (Eunice?)

(Boss, I don't know!)

(Sorry, just sounding off. Eunice, all my life I did the best I knew how with what I had. I didn't waste—shucks, even that white-elephant house keeps a lot of people off Welfare. But every year things got worse. I used to get sour consolation from knowing that I wasn't going to be around when things fell to pieces. Now it looks like I will be. That's why I say: '*Where* do we go from here?" I don't know the answer, either.)

(Boss?)

(Yes, dearest?)

(I could see it, too. Moving from an Iowa farm to a big city made me see it. And I did have plans, sort of. I knew you were going to die, I couldn't help but know, and I figured that Joe would get tired of me someday—no kids and no prospect of any, and me someday no longer with a fine job that took care of everything Joe needed. I underrated Joe; nevertheless I never forgot that he could hand me a pink slip anytime. So I had plans, and saved my money. The Moon.)

(The Moon! Hey, that's a fine idea! Take one of Pan Am's package tours—deluxe with private courier and all the trimmings. Do it before we bulge so big we can't climb through a hatch. What do you say, little imp?)

(If you want to.)

(You don't sound enthusiastic.) (I'm not against it, Boss. But I wasn't saving money for a tourist trip. I meant to put my name on the list-and take the selection exams...and be able to pay the difference, since I didn't have one of the subsidized skills. Out-migrate. Permanently.)

(I'll be durned! You had this in mind—and never said a word?) (Why talk about if and when? I didn't plan to do it as long as you or Joe needed me. But I did have reason to be serious. I told you I was licensed for three kids.)

(Yes, surely. I've known it since your first security check.) (Well, three is a high quota, Boss—more than half a child over replacement. A woman can be proud of a three-baby license. But I wanted more.)

(So? You can, now. Fines are no problem, even though they've upped them again and made them progressive. Eunice, if you want babies, this one is just a starter.)

(Dear Boss. Let's see how we do with this one first. I knew I could not afford fines . . . but Luna has no restrictions against babies. They *want* babies, I think we're there.)

Finchley turned in at a gate—Agroproducts, Inc., Joan noticed—a competitor. He parked so as not to lock the gate, then got out and went to the guard post. He had parked at such an angle that Joan could not see what was going on, the armor between her and the control compartment cut off her view.

Finchley returned, the car rolled through the gate. "Miss Smith, I was told to hold it under twenty miles per hour, so no safety belts is okay now."

"Thank you, Finchley. How much was the bribe?"

"Oh, nothing to mutter, Miss."

"So? I expect to see it on O'Neil's Friday Report. If it is not there, I will have to ask you again."

"It'll be there, Miss," the driver answered promptly. "But I don't know yet what the total will be. Have to stop at their Administration Building and get us cleared through a back gate. To where you picnic."

(start here)

"To where *we* picnic." Joan stopped to think. It irked her to pay a bribe when her status as a major competitor (retired, conceded) entitled her by protocol to red-carpet treatment. But she had not sent word ahead, a minimum courtesy in visiting a competitor's plant, to allow him time to sweep dirt under the rug or to divert the visitor away from things. Industrial espionage could not with propriety be conducted at top level. "Finchley, did you tell the gate guard whom you were driving?"

“Oh, no, Miss!” Finchley sounded shocked. “But he checked the license even though I tell him it’s your car—best to tell; he has a list of all private armoreds in the state, just like I have. What I tell him was, I’m driving guests of Mr. Salomon. . . and let him think it was a couple of Vips from the Coast with a yen to picnic in a safe spot. Didn’t tell him anything really, except Mr. Salomon’s name. That okay?”

“Just fine, Finchley.” (Eunice, I feel like an interloper, being inside without giving my name. Rude.) (Look at it this way, Boss. *You* know who you are. But the public doesn’t—not after that silly carnival yesterday. I think it’s best to be Jake’s guest . . . which is true, in a way.) (I still feel that I should tell Finchley to give my name to the Chief Agronomist. But would the word get out? Or, rather, how *soon?)* (Thirty minutes. Long enough for some clerk to phone in and a news copter to fly out. Then some snoop will try to interview you by loudspeaker because the boys won’t let him land.)

(Some picnic!)

(If he does land, Shorty and Fred will be elbowing each other for a crack at him. Eager. Too eager. Boss, maybe you haven’t noticed, but, while they call you ‘Miss Smith,’ they treat you exactly as they treated me. In their heads they know you are *you*...but in their guts they feel you are *me.)* (That’s not far wrong, Eunice. In my head I am *me*. . . but in my guts—your pretty belly— I am *you.)*

(Boss, I like that. We’re the only oneheaded Siamese twins in history. But not everything in our belly is me. There’s one wiggler swimming faster than the rest—and he is ‘Johann,’ not Joan, not Eunice—and if he makes it to the finish line, he’s more important than both of us put together.)

(My love, you’re a sentimentalist.) (I’m a slob, Boss. And so are you.) (Nolo contendere. When I think about Johann and Eunice—both dead, really—getting together in Joan to make a baby, I come unstuck and want to cry.)

(Better not, Joan; the car is stopping. Boss? How long does it take a wiggler to get there? I know a spermatozoon has to move several inches to reach the ovum—but how fast does he swim?) (Durned if I know, dear. Let’s leave that cork in place at least a couple of days. Give the little bastard every possible chance.) (Good!) (Do you know how to take it out? Or do we have to see Dr. O’Neil? We don’t want to let Winnie in on this.) (Boss, I’ve seated them and taken them out so many times *I* can do it in my sleep. No fret, Annette. I’ve worn out more rubber baby bumpers than most girls have shoes.)

(Bragging.. Boasting.) (Only a trifle, Boss dearest. I told you I had always been an ever-ready. For years and years, any day I missed was not my idea. I knew my purpose in life clear back when I was a Girl Scout, no breasts, and still a virgin.)

Finchley returned to the car, spoke after he had buttoned in. "Miss?"

"Yes, Finchley."

"Farm boss sends greetings and says guests of Counselor Salomon are honored guests of Agroproducts. No bribe. But he asked if the main gate guard had put the squeeze; I told him No. Correct?"

"Of course, Finchley. We don't rat on other people's employees."

"Don't think he believed me but he didn't push it. He invited you both—assumed there was two and *I* didn't correct it—to stop for a drink or coffee on the way out. I let him think you might, or might not."

"Thank you, Finchley."

They continued through the farm, came to another high gate; Fred got out and pressed a button, spoke to the security office. The gate rolled back, closed after them. Shortly the car stopped; Finchley unloaded the passenger compartment, offered his hand to Joan Eunice.

She looked around. "Oh, this is lovely! I didn't know there were such places left."

The spot was beautiful in a simple fashion. A little stream, clear and apparently unpolluted, meandered between low tanks. On and near its banks were several sorts of trees and bushes, but they were not dense and there was a carpet of grass filling the open spaces. From its lawnlike texture it had apparently been grazed. The sky was blue and scattered fair-weather cumulus and the sunshine was golden warm without being too hot. (Eunice, isn't it grand?) (Uh huh. 'Minds me of Iowa before the summer turns hot.)

Joan Eunice stripped off her sandals, tossed them into the car on top of her cloak. She wiggled her toes. "Oh, delicious! I haven't felt grass under my bare feet for more than twenty years. Finchley, Shorty, Fred—all of you! If you've got the sense God promised a doorknob, you'll take off your shoes and socks and give your feet a treat."

Shotguns looked impassive; Finchley looked thoughtful. Then he grinned. "Miss Smith, you don't have to tell me twice!" He reached down and unclicked his boots. Joan Eunice smiled, turned away, and wandered down toward the stream, judging that Shorty would be less shy about it if she did not stare.

(Eunice, is Iowa this beautiful? Still?) (Parts of it, hon. But it's filling up fast. Take where we lived, between Des Moines and Grinnell. Nothing but farms when I was a baby. But by the time I left home we had more commuter neighbors than farm neighbors. They were beginning to build enclaves, too.) (Dreadful. Eunice, this country is breeding itself to death.) (For a freshly knocked-up broad you have an odd attitude toward reproduction, twin. See that grassy spot where the stream turns?) (Yes, Why?) (It takes me back . . . it looks like a stream bank in Iowa where I surrendered my alleged innocence.) (Well! Nice place for it. Did you struggle?) (Twin, are you pulling my leg? I cooperated.) (Hurt?) (Not enough to slow me down. No reason for it to. Boss darling, I know how it was in your day. But there is no longer any issue over tissue. Girls with smart mothers have it removed surgically when they reach menarche. And some just lose it gradually and never know where it went. But the girl who yells bloody murder and bleeds like a stuck pig is rare bird today.) (Infant, I must again set you straight. Things haven't changed much. Except that people are more open about it now. Do you suppose that water is warm enough to swim in?)

(Warm enough, Boss. But how do we know it's clean? No telling what's upstream.)

(Eunice, you're a sissy. If you don't bet, you can't win.)

(That was true yesterday . . . but today we're an expectant mother. A babbling brook can be loaded with nineteen sorts of horribles.)

"Uh. . . oh, hell! If it's polluted, it'd be posted.) (Back here where you can't reach it without being passed through two electric gates? Ask Finchley; he may know.) (And if he says it's polluted?) (Then we go swimming anyhow. Boss, as you pointed out, if you don't bet, you can't win.) (Mmmm . . . if he *knows* it's polluted, I'm chicken. As *you* pointed out, beloved, we now have responsibilities. Let's go eat, I'm hungry.) *(You're* hungry? I was beginning to think you had given up the habit.) (So let's eat while we can. How soon does morning sickness start?) (Who dat, Boss? The other time the only effect it had was to make me hungry morning, noon, and night. Let's eat!)

Joan Eunice trotted back toward the car, stopped dead when she saw that Shorty was laying the car's folding table—with one place setting. "What's that?"

"Your lunch, Miss."

"A picnic? On a table? Do you want to starve the ants? It should be on the ground."

Shorty looked unhappy. "If you say, Miss." (Joan! You're not wearing panties. If you loll on the ground, you'll shock Shorty—and interest the others.) (Spoilsport. Oh, all right.)

"Since it's set up, Shorty, leave it that way. But set three more places."

"Oh, we eat in the car, Miss—we often do."

She stomped her foot. "Shorty, if you make me eat alone, I'll make you walk home. Whose idea was this? Finchley's? *Finchley!* Come here!"

A few moments later all four sat down at the table. It was crowded as Joan had insisted that everything be placed on it at once—"Just reach," she explained. "Or starve. Is there a strong man here who can open that wine bottle?"

The dexterity with which Shorty opened it caused her to suspect that he had not always been a teetotaler. She filled her glass and Fred's, then reached for Finchley's. He said, "Please, Miss Smith—I'm driving," and put his hand over it.

"Give it to me," she answered, "for four drops. For a toast. And four drops for you, Shorty, for the same purpose." She put about a quarter of an inch in each of their glasses. "But first—Shorty, will you say grace?"

The big man looked startled, at once regained his composure. "Miss Smith, I'd be pleased." He bowed his head; (Boss! What's eating you?) (Pipe down! Om Mani Padme Hum.) (Oh! Om Mani Padme Hum.) (Om Mani Padme Hum.) (Om Mani Padme Hum)

"Amen."

"Amen!"

(Om Mani Padme Hum. Amen.)

"Amen. Thank you, Shorty. Now for a toast—which is a sort of a prayer, too. We'll all drink it, so it must be to someone who isn't here . . . but should be." (Boss! You must *stop* this—it's morbid.) (Mind your own business!)

"Will one of you propose it?"

Finchley and Shorty looked at each other—looked away. Joan caught Fred's eye. "Fred?"

"Uh—Miss, I don't know how!" He seemed upset.

"You stand up"—Joan stood, the others followed—"and say whatever you like about someone who isn't here but would be welcome. Anyone we all like. You name the person to be honored." She raised her glass, realized her tears were starting. (Eunice! Are *you* crying? Or am *I?* I never used to cry!) (Then don't get me started, Boss—I told you I was a sentimental slob.)

Fred said uncertainly, "A toast to . . . someone we all like . . . and who should be here. *And still is!"* He suddenly looked frightened.

"Amen," Shorty said in sonorous baritone. " 'And still *is.'* Because Heaven is as close as you'll let it be. That's what I tell my people, Fred. . . and in your heart you know I'm right." He poured down, solemnly and carefully, the symbolic teaspoonful of wine in his glass; they all drank.

Joan said quietly, "Thank you, Fred. She heard you. She heard you too, Shorty. She hears me now." (Boss! You've got them upset—and yourself, too. Tell them to sit down. And *eat.* Tell 'em *I* said to! You've ruined a perfectly good picnic.) (No, I haven't.) "Finchley. You knew her well. Probably better than I did. . . for I was a cranky old man and she catered to my illness. What would *she* want us to do now?"

"What would. . . Mrs. Branca?...want us to do?"

"Yes. Did you call her 'Mrs. Branca'? Or 'Eunice'?"

(They called me 'Eunice,' Boss—and after the first week I kissed them hello and goodbye and thanked them for taking care of me. Even if Jake could see. He just pretended not to notice.) (Busybody. You're a sweet girl, beloved. Anything more than kiss them?) (Heavens, Boss! Even getting them to accept a kiss in place of the tips they wouldn't take took doing.) (I'll bet!—on *you,* that is—sister tart.) (Knocked-up broad.)

"Uh, I called her 'Mrs. Branca' at first. Then she called me 'Tom' and I called her 'Eunice.'

"All right, Tom, what does Eunice want us to do? Stand here crying? I see tears in your eyes; I'm not the only one crying. Would Eunice have us spoil a picnic?"

"Uh—She'd say, 'Sit down and eat.'

"That she would!" Shorty agreed. "Eunice would say, 'Don't let hot things get cold and cold things get hot—eat!"

"Yes," agreed Joan Eunice, sitting down, "as Eunice was never a spoilsport in all her short and beautiful life and wouldn't let anyone else be. Especially me, when I was cranky. Reach me a drumstick, Fred—no, don't pass it."

Joan took a bite of chicken. (Twin, what Shorty said sounded like a quotation.) (It was, Boss.) (Then you've eaten with him before.) (With all of them. When a team drove me late at night, I always invited them in for a bite. Joe never minded, he liked them all. Shorty he was especially glad to see; he wanted Shorty to model for him. At first Shorty thought Joe was making fun of him—didn't know that Joe rarely joked and never about painting. They never got to it, though, as Shorty is shy—wasn't sure it was all right to pose naked and scared that I might show up while he was posing. Not that I would have.) (Not even once, little imp? Shorty is a beautiful tower of ebony.) (Boss, I keep telling you—) (—that nudity doesn't mean anything to your generation. Depends on the skin, doesn't it? *I* would enjoy seeing our black giant—and that goes for Johann as well as for Joan.) (Well —) (Take your time thinking up a fib; I've got to make conversation.) "Tom, do you have those mustard pickles staked out, or may I have some? Shorty, you sounded as if you had sampled Eunice's cooking. Could she cook?"

Finchley answered, "You bet she could!"

"Real cooking? Anybody can flash a prepack—and that's what kids nowadays seem to think is cooking." (Boss, I'll spit in your soup!) "But what could she have done faced with flour and lard and baking powder and such?"

"Eunice would have done just fine," Shorty said quietly. "True, she mostly never had time for real cooking—but when she did—or whatever she done, anyways—she done just perfect."

(My fan! Boss—give him a raise.) (No.) (Stingy.) (No, Eunice. Shorty killed the vermin who killed you. I want to do something for him. But it can't be money; he would not accept it.)

"She was an artist," agreed Fred.

"You mean 'artist' in the general sense. Her husband was, I recall, an artist in the usual sense. A painter. Is he a good one? I've never seen any of his work. Do any of you know?"

Finchley said, "I guess that's, a matter of opinion, Miss Smith. I like Joe Branca's paintings—but I don't know anything about art; I just know what I like. But—" He grinned. "Can I tell on you, Shorty?"

"Aw, Tom!"

"You were flattered, you know you were. Miss Smith, Joe Branca wanted to paint that big ape on your right."

(Bingo.') (Trouble, Eunice?) "And did he, Shorty?"

"Well, no. But he *did* ask me. He did." (Don't you *see,* Boss? This is that clincher. A fact you first learned from *me* and nowhere else . . . and then had confirmed to the hilt. Now you know I'm *me.)* (Oh, piffle, darling.) (But Boss—) (I've known you were you all along, beloved. But this isn't proof. Once I knew that Joe and Shorty had met, it was a logical necessity that Joe would want him to model—any artist would want to paint him.)

(Boss, you make sick! It's proof. I'm *me.)* (Beloved darling without whom life would not be worth living even in this beautiful body, I *know* you are you. But flatworms don't matter, coincidences don't matter, no mundane proof matters: There is no proof that some cocksure psychiatrist could not explain away as coincidence, or déjà vu, or self-delusion. If we let *them* set the rules, we're lost. But we shan't. What *does* matter is that you have me, and I have you. Now shut up; I want to get them all so easy with me that they'll call me Eunice. You say they used to kiss you?)

(Oh, sure. Friendly kisses. Well, Dabrowski used to put zing in it but you know how Poles are.) (I'm afraid I don't.) (Put it this way, Boss. With a Pole don't advertise unless you mean to deliver—because *his* intentions are as honest as a loaded gun. With Dabrowski I was very careful not to let it go critical.)

(I'll remember. Just as well he isn't here. Because the situation is like that with Jake, only milder. Little baggage, you caused all my mobile guards to fall in love with you. So now I've got to get them to accept that you are dead while feeling that you are still alive, equally. If they call me 'Eunice,' I'm halfway there. If they kiss me—) *(What?* Boss! Don't try it!)

(Now see here, Eunice! If you hadn't played 'My Last Duchess' to half the county, I wouldn't be having to repair the damage.) ('Damage,' huh? You're *complaining?)*

(No, no, my darling! Never. I was the prime beneficiary of your benevolence. But to lose something of value is a damage, and that is the damage I must repair.) (Well. . . I won't argue, dearest. But in this case you can let it be; I never let it warm up that much.) (And *I* say you don't know what you are talking about. Cool you may have meant to keep it. Unsexy—or as unsexy as you could manage which isn't very. But all four of my mobiles were willing to die for you—correct?) (Uh—) (Let's have no silly talk. Do you think the fact that I paid them had anything to do with their willingness? Careful how you answer.)

(Uh. . . I don't *have* to answer! Boss, what's the use of stirring them up over my death?) (Because, my darling, from now on they will be guarding me—as I now am, inside your lovely body—just as they guarded you. They've got to *want* to guard me, or they'll never be happy in this weird situation. It's either that, or fire them or retire them—) (Oh, no!) (Of course not. To paraphrase Sherlock Holmes; when you have eliminated what you can't do, what remains is what you *must* do. Besides, dearest and only, this is stern practice for the much harder case we still face.) (Jake? But Jake is—) (Little stupid! Jake has already accepted the impossible. I mean *Joe.)*

(But, Boss! You must *never* see Joe.)

(God knows I wish I could avoid it. Never mind, beloved; we won't see him until you know—as I do—that we must. Now either shut up, or coach me in how to handle these brave men.)

(Well. . . I'll help all I can. But you'll never get them as easy, as they were with me.—'kissing-friends' easy, I mean. *I* was an employee. *You* are the Boss.)

(If that argument were valid, queens would never get pregnant. Sure it makes it harder. But you've given me a lot to work with. Want to bet?)

(Oh, sure, I'll bet you a billion dollars you can't kiss even one of them. Don't be silly, Boss; we can never make a real bet, there is no way to pay off.) (You don't have much practice being an angel, do you. little imp? You still think in earthy terms. Certainly we can make a bet and pay off to the winner. This baby in us—) (Huh! Now wait a moment—) *(You* wait a moment, Eunice. If I win this bet, I name our baby. If I lose, *you* have, the privilege; Fair bet?)

(Oh. All right, it's a bet. But you'll lose.)

(We'll see.)

(Oh, yes, you will, Boss. You'll lose even if you win. Want to know why?) (Planning on cheating?) (Not necessary, Boss darling; you're going to find that you *want* to name the baby whatever name *I* want it to have. Because you're a sucker for a pretty girl, Boss, always have been and still are.) (Now wait a moment. I used to be, but now I *am* that 'pretty girl' and—) (You'll find out. Do you want coaching? I'll help you win if it can be done. It can't.) (Yes, but tuck your advice in edgeways; I've been chewing this bone too long.) "Fred, I'll trade you one of these Danish sandwiches for more wine. Then keep our glasses filled; Shorty doesn't drink and Tom won't and I want company in getting tiddly, this is my freedom celebration."

(Fred might be easiest if you can get him over seeing ghosts when he looks at you.) "I don't mind another glass, Miss, but I mustn't get tiddly, I'm on duty."

"Pish and tush. Tom and Shorty will get us home even if they have to drag us. Right, Shorty?" (Shorty is your impossible case. I managed it only by being 'little girl' to him—which you can't be, Boss.)

"We'll certainly try, Miss Smith."

"Do I have to be 'Miss Smith' on a picnic? You called Mrs. Branca 'Eunice,' did you not? Did she call you 'Shorty?'

"Miss, she called me by my name. Hugo."

"Do you prefer that to your nickname?"

"It's the name my mother gave me, Miss."

"That answers me, Hugo;-I will remember. But it brings to mind a problem. Anybody want to fight me for the 'last black olive? Come on, put up your dukes. But that's not the problem. I said I didn't want to be called 'Miss Smith' under these circumstances. But I don't want to be called

'Johann' either; that's a man's name. Hugo, you have christened babies?"

"Many times, Miss—uh, Miss—"

Joan cut in fast. "That's right, you don't know what to call me. Hugo, having named so many babies you must have opinions about names. Do you think 'Joan' pronounced as two syllables would be a good name for a girl who used to be a man named 'Johann?'"

"Yes. I do."

"Tom? What do you think?" (Tom would kiss you at the drop of a hint if you weren't his employer. I don't think he ever did give up hoping to catch me alone. . . so I was as careful not to let that chance come up as I was with Dabrowski. All it took with Tom was to say, 'Tom, if you're going to be stuffy about letting me pay for extra service'—it was an after-midnight run, Boss; a rare-blood call—'at least you can kiss me goodnight.' So he did, quite well. After which Hugo was too polite not to lean way down and give me a fatherly little peck. But what worked for Eunice can't work for 'Miss Smith.') (So watch me switch decks on them, young 'un.)

"It sounds like a good name to me," the driver-guard agreed.

"Fred? Do I look like 'Joan' to you?" She sat up straight and lifted her chest. (You look like you're going to break that bandeau, if you aren't careful.) (Pfui, little hussy; it can't break. I want him to realize that I'm female.) (He realizes it. Winnie ought to be here to take his pulse.)

"I don't see why anybody should get a vote but you. But, sure, I like it."

"Good! I still have to sign papers with my former name—but I'm 'Joan' in my mind. But, friends, this country must have a thousand 'Joan Smiths' in it; I need a middle name. But I *want* one for a much better reason." She looked with solemn seriousness at the giant black. "Hugo, you are a man of God. Would it be presumptuous of me to call myself . . . 'Joan Eunice?'"

(Boss, if you make my friend Hugo cry, I'll—I'll—I won't speak to you the rest of the day!) (Oh, quit nagging! Hugo won't cry. He's the only one of the three who believes you're here. He has faith.)

"I think that would be beautiful," the Reverend Hugo White answered solemnly and sniffed back tears.

"Hugo, Eunice would not want you to be sad about it."

She looked away from him, her own eyes bright with unshed tears. "That settles it. My new name will be—is!—Joan Eunice. I don't want anyone ever to forget Eunice. Most especially I want you, her friends, to know this. Now that I am a woman, Eunice is my model, the ideal I must live up to, every hour, every minute, of my new life. Will you help me? Will you treat me as Eunice?

Yes, yes, I'm your employer; somehow I must be both, and it's not easy. But the most difficult part for me is to learn to behave and think and feel as *Eunice*...when I've had so many weary years as a cranky, self-centered old man. You are her friends.—will you help me?" (Boss, did you ever sell real estate in Florida?) (Damn it, if you can't help, keep *quiet!)* (Sorry, Boss. That was applause. As Hugo would say, 'You done perfect.')

Tom Finchley said quietly, "We'll help, that goes for Dabrowski too. By the way, she called him 'Anton' First she called him 'Ski' like the rest of us. Then she learned his first name and called him by it."

"Then I will call him 'Anton.' Will you all call me 'Eunice'? Or at least 'Joan Eunice'? To help me? Oh, call me 'Miss Smith' when others are around; I know you won't feel easy otherwise. You probably called her 'Mrs. Branca' if other people were—"

"We did."

"So call me 'Miss Smith' when it would be natural for you to call her 'Mrs. Branca.' But when you called her 'Eunice,' call me 'Joan Eunice' and—dear and trusted friends! —any time you feel that I have earned it, please call me 'Eunice.' It will be the highest compliment you can pay me, so don't use it lightly. Leave off the 'Joan' and call me 'Eunice.' Will you?"

Fmchley looked at her, unsmiling. "Yes. . . Eunice."

"Tom, I haven't earned it yet."

Finchley did not answer. Fred said, "Let me get this straight. 'Joan Eunice' is for everyday . . . but 'Eunice' means we think you've done and said just what Mrs. Branca would have."

"That's right, that's what I said."

"Then I know what Tom meant. Uh, this has been a touchy day—worse for you, I'd say, but not easy for any of us. Shorty—Hugo, I mean—said she was an angel. Or meant it, anyhow. I can't argue; Shorty is a preacher and knows more about angels and suchlike than I do. But if she was—is, I mean—still, she had a lot of salt and pepper in her, too. You remember an hour back when you snapped at Shorty and yelled for Tom?"

She sighed. "Yes, I remember. I lost my temper. I've got a long way to go. I know it."

"Rut that's just what I'm *saying*...Eunice. She had a lot of spunk. It we had tried to make her eat by herself, she would have kicked the gong. Right, Shorty?—I mean 'Hugo.'

"Amen! Eunice."

Finchley said, "Fred read my mind close enough Eunice. But I was thinking of other things, too. I never thought of her as an angel, particularly. She just treated us like people."

"Tom—"

"Yeah, Shorty? Hugo."

"My name's Shorty to you—and to you, Fred. Don't put on any fancies. Hugo was Mama's name for me. And hers. Yours, Eunice. But I near forgot what I had to say. Tom, that's all anybody wants. To be treated 'like people.' She done it that way—Eunice. And now you do, too. 'Like people.' Mr. Smith didn't quite manage it. But he was old and sick, and we made allowances."

"Oh, dear! I feel like crying again. Hugo—when I was Mr. Smith, I never meant to be anything but people. Truly I didn't."

"Sick people can't help being cranky. My Daddy got so mean before he passed on, I run away from home. Worst mistake I ever made. But I don't fault him for it. We do what we do, then we live with it. Eunice—the first Eunice—is an angel now, my heart tells me and my head knows. But she had her little human ways; same as everybody. The dear Lord don't fault us for that."

"Hugo? If it had been me and not her, would I have made it? To Heaven?" (Om Mam Padme Hum! Watch it, Boss! He'll drag you over to that creek and wash your sins away.) (If he wants to, I'll let him. Shut up!)

"I don't rightly know," the preacher said softly. "I never knew Mr.

Smith that well. But the Lord do move in mysterious ways. Looks like He give you a second chance. He always knows what He's doing." (Oh, all right, twin. Try not to get water up our nose.)

"Thank you, Hugo. I think He did, too—and I'm trying to justify it." She sighed. "But it's not easy. I try to do what Eunice would do. At least justify the second chance *she* gave me. I think I know what she Would do now. But I'm not certain." (I'd knock off all this talk, that's what *I'd* do.) (Pipe down and give me a chance.) She looked around. "I don't know how well you knew her and I keep learning things about her. I think you 'three—you four; I include Anton—must have been her closest friends, at least in my household. Certainly you knew her better than I had thought. Tom?"

"Yes, Eunice?"

"Did you ever kiss her?"

Her driver looked startled. "Yes. . . Joan Eunice."

"Meaning Eunice would never ask such a question, she would just do what her heart told her to. I wanted to, Tom—but I was scared. Not yet used to being a girl." She jumped up, stood by his chair, took his hands, pulled.

Slowly he got to his feet. She put her arms around his shoulders, put up her face—waited.

He sighed and almost scowled, then took her in his arms and kissed her. (Twin, he can do lots better.) (He will. The poor dear is scared.) Joan let him go without forcing it beyond his willingness, whispered, "Thank you, Tom," and quickly left his arms—went on to Fred, took his hands. Again Fred looked frightened but he got up promptly. (What about Fred, Eunice? Sexy or sisterly?) (Too late, twin!) Fred embraced her with unexpected force, met her mouth so quickly that Joan was caught with her lips open and he at once answered it, savagely. But briefly. He broke from it and both were trembling.

(Eunice! What is this? You didn't warn me.) (So I goofed. Later, dear. Slow march now and say three Money Hums and be darn sure to be an innocent child with Father Hugo.)

Joan went slowly around the table the long way, stopped by Hugo, waited. He got up from his chair, looked down at her. She moved closer, put her hands on his chest, looked up, face solemn, lips closed, eyes open.

Gently he put his arms around her. (My God, Eunice, if he really hugged us, he 'ud break us in two!) (He never will, twin; he's the gentlest man alive.)

Hugo's lips met hers in soft benediction, unhurried but quickly over. She stayed in his arms a moment. "Hugo?

When you pray for her tonight, will you add a prayer for me? I may not deserve it. But I need it."

"I will, Eunice." He seated her with gallant grace, then sat down again. (High, low, jack, and game, twin—what are you going to name him?) ('Eunice,' of course!) (Even if he's a boy?) (If he's a boy, he'll be named Jacob E.—for 'Eunice'—Smith.) ('Johann E Smith' is better.) (I won the bet, so shut up. I won't wish 'Johann' on a boy. Now what's this about Fred?) (You won't believe it.) (By now I believe anything. All right, later.) "Fred, is there any wine in that bottle? Hugo, will you open the second bottle? I need it, I'm shaky."

"Certainly, Eunice. Hand me the bottle, Fred."

"I'm going to eat some more, too, and I hope all of you will. Tom, am I still 'Eunice'? Or am I a hussy who doesn't understand how a lady behaves?"

"Yes, Eunice. I mean 'No, Eunice.' I—Oh, hell!"

She patted his hand. "That's the nicest compliment I've had yet, Tom. You would never have said 'Oh, hell' to Miss Smith . . . but you know that Eunice and Joan Eunice—is human." She looked around the table. "Do you know how *good* it is to be touched? Have you ever watched kittens snuggling? For over a quarter of a century no one kissed me. Except for an occasional handshake I don't think anyone ever touched me. Until nurses and doctors started handling me. Friends—dear friends—you have taken me back into the human race, with your lips. I am so very grateful to Eunice—to Eunice Branca—that she kissed you before I did, and won your friendship—your love? I think so. For it meant that you let me in—treated me as 'people'! Uh, tell me this, I must know—even if it makes you, Tom, call me 'Joan Eunice' again. Did Eunice kiss Anton, too?" (Boss, I'm not going to tell you *anything* until we're alone!) (Didn't ask *you,* dear.)

"Won't anyone tell me? Well, I suppose it's an unfair question."

Finchley said suddenly, "Teams shift around. I drive with Fred, and Shorty with Ski, and so forth. Been times when I rode Shotgun for Ski. Eunice, she treated us all alike. But don't never think anything bad about it—"

"I don't!"

"—because there wasn't any such. She was so warm and friendly—and *good—that* she could kiss a man friend just for, uh—"

"For lovingkindness," Shorty supplied,.

"'For lovingkindness.' Kissed us thankyou and goodnight as quick with her husband there as any other time. Always did, if we stopped for a late bit o' supper with them." (All right, twin. Fred and Anton. Not Tom and Hugo. Happened only once. Oh, Tom would have, but no chance, so I kept it cool. Hugo—nobody gets past Hugo's guard and I never tried. He has moral character—something you and I don't know anything about.)

"Thank you for telling me, Tom. I'll never let Anton guess. But he'll find me easy to kiss if he wishes to. . . now that I know that she shared lovingkindness with him.

Abrupt change of subject: Tom, is that pretty little stream polluted? It looks so clean."

"It's clean. Clean as a creek can be, I mean. I know because I found out about this place through the company lending it to our guild for a picnic. Some of us went swimming after the farm super told us it was okay."

"Oh, wonderful! Because I want to swim. I last went swimming in natural water—old swimming hole style, I mean—let me see. . . goodness! More than three-quarters of a century ago."

"Eunice, I don't think you should."

"Why?"

"Because it can be polluted another way. Dropouts. Not all the dropouts are in the A.A.s; any wild countryside attracts them. Like this. I didn't make a fuss but when you walked down to the bank by yourself, Fred had you flanked one side and me the other."

"Well, heavens, if you can keep me safe on the bank, you can keep me safe in the water."

"It ain't quite the same, truly it ain't. I was a few seconds late once, I won't be again. Some dropouts are real nasty weirdos, not just harmless nuts."

"Tom, why argue? I want to get into that water, feel it all over me. I intend to."

"I wish you wouldn't. . . Joan Eunice."

She jerked her head around at the last two words. Then she grinned and pouted her lower lip. "Okay, Tom. Darn it, I've handed you three a leash you can lead me by any time you see fit. And yet I'm supposed to be boss. It's comical."

"It's like the Secret Service," Finchley answered soberly. "The President is the top boss of any. . . but he gives in when his guards tell him not to do something."

"Oh, I wasn't complaining; I was wryly amused. But don't jerk that leash too much, Tom; I don't think Eunice would stand for it and neither will I."

"I'm hoping you won't pull on the leash as much as she did. If she, uh—well, things coulda been different."

Fred said, "Tom, don't cry over spilt milk."

Joan said quickly, "I'm sorry. Boys, I think the picnic is over. Maybe someday we pan all have that swim somewhere safe and just as beautiful." (Eunice, can you swim?) (Red Cross lifesaver—you knew that, it was in my snoopsheet. Never went out for the team, though; cheerleader was more fun.) (I could make a comment.) (Look who's talking! No-Pants Smith.) (Who taught me?)

(You didn't need teaching; you have the instincts.)

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A short time later they were again in the car. Finchley said, "Home, Miss Smith?"

"Tom, I can't hear you."

"I asked did you want to go home, Miss?"

"I understood that part but this intercom must be out of order. I heard something *that* sounded like 'Miss Smith.'"

There was a silence. "Eunice, do you want to go home?"

"Not until dinnertime, Tom; I want all of this lovely day I can have."

"Okay, Eunice. Do I cruise? Or go somewhere?"

"Uh . . . I have one more item on my list, and there's time enough for anything you three may want to pick up, too, so check around."

"Will do. Where do we take you for what you want, Eunice?"

"I don't know. I lost touch with such matters years ago. Tom, I want to buy a present for Mr. Salomon, something nice but unnecessary—presents should be unnecessary, a luxury a person might not buy himself. So it probably would be a men's shop that stocks luxurious unnecessaries. Abercromhie & Fitch used to he that sort—but I'm not certain they are still in business."

"They are. But let me ask Fred and Shorty."

Shortly Finchley reported: "There are a dozen places that would do. But we think The Twenty-First Century Stud has the fastest stock."

"Roz. Let's giddyap and get there."

"That is, if you don't mind their prices. 'Twigs and leaves.'

"I don't mind; I've met thieves before. Tom—all of you. I came out of this operation with more money than I had last year . . . and it's a nuisance. I've played the money game and I'm bored with it. Any time any of you can think of a good way to help me get rid of some—a *good* way, *I* said; I won't be played for a sucker—you'd be doing me a favor to tell me. Hugo, are there any poor people in your church?"

His answer was slow. "Lots of them, Eunice. But not *hurtin'* poor, just Welfare poor. I'd like to think about it... because it don't do a man no good to plain *give* him what he ought to root for. So the Book says, in different words."

"That's the trouble, Hugo. I've given away money many times, and usually did harm when I meant to do good. But the Book also says something about the eye of the needle. All right, think about it. Now let's go see those thieves. I'll need a man to help me. Which one of you dresses the most far-out when you aren't in uniform?"

She heard Fred laugh. "Eunice, it's no race. You should *see* the getups Tom wears. A Christmas tree. A light show."

Finchley growled, then said, "Don't listen to him, Eunice."

"He's probably jealous, Tom. All right, if there is parking inside or near this shop, you come help me."

As they passed through the second gate Finchley said, "Crash belts, Eunice?"

"I'm wearing the Swedish—and it's comfortable now that Hugo has adjusted it. Could we get along with just it and the collision net if we didn't go so fast? Or does that make me 'Joan Eunice' again?"

"Uh—Will you wear the forehead strap?"

"All right. It's just that I don't like to be tied down all over. It reminds me—well, it reminds me of the way the doctors kept me strapped down after the operation. Necessary, but I hated it." She did not mention that a forehead strap was what she disliked the most.

"We heard about that—musta been horrid. But you need the forehead strap. Say I'm doing only a hundred, a slam stop could break your neck. If you don't wear it."

"So I wear *it."*

"I don't see the light on the board."

"Because I haven't put it on yet. There. Did the light go on?"

"Yes. Thank you. . . Eunice."

"Thank *you,* Tom. For taking care of me. Let's mush. I wasn't pulling on the leash, truly I wasn't." (Says you. Boss, you're mendacious, untruthful, and a fibber.) (Where did I learn it, dearie? They're sweet boys, Eunice—but we've got to work out a way to live so that we don't have to clear everything with forty other people. Good servants are priceless—but you work for them as much as they work for you. Life should be simpler. Honey, how would you like to go to India and be a guru and sit on a mountain top and never have any plans? Just sit and wait for your grateful chelas to gather around?)

(Might be a long wait. Why not sit at the bottom of the mountain and wait for the boys to gather around?) (One track mind!) (Yes. Yours, you dirty old man.) (Conceded. But I try to act like a lady.) (Not too hard, you don't). (As hard as you ever did, little trollop. I was called 'Joan Eunice' *once.* . . and the issue had nothing to do with sex.) (You'd be surprised how much sex had to do with it, Joan.) (Well...from that point of view, yes. But as long as they call me 'Eunice' I'll go on believing that I've 'done just perfect.' Honestly though, good servants can be smothering. Take Winnie. She's a darling —but she's underfoot every minute. Eunice, how the devil can we manage that 'actively female' life you want—sorry, *we* want—with so much chaperonage?)

(Take a tip from Winnie.)

(How dear?)

(Let her in on your plans. Then she'll keep your secrets and never ask a question, just as you do for her. Try it.)

(I may have to. I'm sure she won't talk . . . and will happily listen to anything I need to spill. But, Eunice, if I go outside the house, it's going to be hard to keep Tom and Hugo, or Anton and Fred, from guessing. You saw the elaborate maneuver I had to use today.)

(You didn't have to, Boss; they won't talk.)

(Perhaps they won't, but I don't want them even to *think*. They're beginning to think I'm an angel—named Eunice—and I'd rather keep it that way.)

(Boss, they know darned well that Eunice is no angel. Even Hugo knows it . . . because Hugo is the smartest of the four, even if he is an illit. Knows people. Understands them from having been there himself. Forgives them their transgressions and loves them anyhow. Boss dear, they loved me the way I was, feet of clay and all—and they'll love you the same way.)

(Maybe, I hope so. I know I love you more, knowing more about you and things I never suspected, than I did before we consolidated, immoral little wench. What's this about you and Fred and Anton? Did you really?)

(Wondered when you'd get around to that. Those goodnight kisses did start out just friendly. Brotherly. Fatherly in Hugo's case. Never got past that with Tom, as we were always either under Hugo's eye, or Jake's, or both—I just knew darn well a *man* was kissing me. But Fred and Anton weren't much chaperonage for each other and they were both charged up over me. So, when a chance turned up, I thought 'Why not?')

(Pure charity, eh?)

(Was that sarcasm, Boss? Anyhow, they took me home late one night. Not a blood donation call, just working late with Jake when we were very rushed getting things arranged for you. The 'warm body' project. I invited them in for a Coke and a snack, as usual. Only it turned out Joe wasn't home.)

(So human nature won—again.)

(You seem to have a low opinion of human nature, Boss darling.)

(I have a *high* opinion of human nature. I think it will prevail in spite of all efforts of wowsers to suppress it. But that's all it took? *Two* men? Cold sober? And a chance that your husband might walk in? Lovely fallen angel, your story not only has holes; it is inconsistent. I do know something about men, having been one. What they'll risk, what they won't. Plenty, that is, for a woman. But two men tend to be wary of each other, and still more so when a husband might show up. Darling, you've left out something—this does not sound like a first time.)

(Boss, cross our heart, it *was* a first time…and the only time, for I was killed soon after. All right, I'll fill in the holes. Joe wasn't likely to walk in and they knew it. *Couldn't,* as our door was hand-bolted from the inside whenever either of us was there. Joe was even more careful about it than I was, as he had always been a city boy. But they knew also that Joe was not due home until midnight and they brought me home about twenty-one thirty. No hurry, no worry, no flurry. While Joe can't read, he can tell time—you know those little dummy clocks some one-man shops use? Back at such-and-such a time, and mark the time by setting the hands?

(We had one of those, to tell the other one when he would be back. That night the door opened to my voice, so I looked for the dummy clock and found it set for midnight—and told Anton and Fred that I was sorry but Joe wasn't going to be home soon enough for a visit.)

(Called attention to it, minx. Sounds like a setup.)

(Well, I knew what was ready for, once I knew we had the place to ourselves. Oh, shucks, Boss, I'm still trying to be your 'nice girl.' I had had my ear cocked for a late arrival with that team for over a month. When Jake asked me to work after dinner, I phoned Joe, just as usual. And set it up under Jake's nose. Short-talked it——almost another language if spoken by a husband and wife. What Jake heard was me telling Joe that I wouldn't be home until twenty-one thirty. What Jake didn't hear, or would not understand, was that I was asking Joe if he minded being elsewhere, in family short-talk code we used if we wanted that favor. It was all right, Boss darling; I made myself scarce for Joe's sake oftener than I asked it of him. The only question was: Was he painting? Turned out he was not, so I was home free.

(Joe asked if I wanted him to be away all night. What be said was: 'Roz. Punch or phone?' Not that Joe *ever* punched me to wake me, but I answered, 'Judy,' meaning that it was up to him but I hoped he would punch me, and added, 'Blackbirds,' and gave him a phone kiss and signed off. All set, no sweat—knew what I would find at home.)

('Blackbirds?')

('Four and twenty blackbirds, baked in a pie'—set midnight on the clock even if you stay out all night, Joe darling. 'Oh, it could have been 'pumpkin' or 'Christmas Eve' or 'Reach' or 'solid gold.' But what I used was 'Blackbirds.')

(Did you kids ever talk English?)

(Of course we did, Boss. Joe speaks good English when he needs to. But short-talk settled it in a dozen words. Without giving Jake any hint that I was late-dating him. If I had had Betsy at hand, I would have used hush and spoken standard English. But we weren't actually working late, not that late. I was using the phone you used yesterday, with Jake only feet away from me. Had to be short-talked.)

(Let me get this straight. Joe set the dummy clock, saying he would not be home until midnight. Did he come home then?)

(About ten minutes after midnight. Joe wouldn't embarrass a guest by being too prompt. Joe is a natural gentleman, never had to learn; he just *is.* It was the first thing that attracted me to him, and the quality that caused me to ask him to marry me. An illit, certainly—but I'll take an illit gentleman over an Ivy-League squeak any year.)

(I agree, beloved. The more I hear about Mr. José Branca the better I like him. And respect him. And regret his tragic loss—meaning *you,* beloved little strumpet. I was just trying to get the schedule straight for what must have been a busy night. Okay, Joe got home shortly after midnight. But early that evening you phoned him and set things up for this date with Anton and Fred. Then you got back into bed with Jake—)

(Oh, dear! Boss, I've shocked you again.)

(No, my darling. Surprised, not shocked. I find your memoirs fascinating.)

(Shocked. That schedule sounds like a whore on payday. But it wasn't that at all, Boss. It was love—love and respect for Jake, love and affection for Anton and Fred, love and devotion and understanding and mutual trust and respect with Joe. If my husband didn't disapprove, what right have you—or anybody!—to look down your nose at me?)

(Darling, darling! I was *not* shocked, I have *never* been shocked by you. Damn it, it's that Generation Gap. You can't believe that I packed far more offbeat behavior into my long years of lechery than you possibly could have crowded into the fourteen years you claim. You've been a busy body, that's clear—but I had more than five times as many years at it and quite as much enthusiasm. Probably not as frequent opportunities, but beautiful girls get asked oftener than do homely boys. But it was never for lack of trying on my part, nor do I have any complaints, as I received more cooperation than I had any reason to expect.)

(I think you were shocked.)

(No, little innocent. Sheer admiration—plus surprise at your endurance. You must have been half dead the next day.)

(On the contrary I felt grand. Glowing. Happy. You remarked on it. You may even recall it. . . it was the day Joe painted me with tiger stripes and a cat's face makeup.)

(Be darned if I don't! You were bouncy as a kitten—and I said you looked like the cat who ate the canary. Darling girl, I was hurting that day; you cheered me up.)

(I'm glad.)

(How much sleep did you get?)

(Oh, plenty. Six hours. Five at least. Plus a nap stretched out on my tummy while Joe did most of the stripes. Joan, a well-loved woman doesn't need as much sleep as a lonely one—you'll find out. As for it being too much for me—Boss, who told me just last week that nothing encourages sex the way sex does? *You,* that's who.)

(Yes. But I was speaking from a. man's viewpoint—)

(Works the same for a woman, twin. You'll see.)

(I hope so. I know that most people—in my day—assumed the opposite. But it's not true. Sex, whatever else it is—much else!—is an athletic skill. The more you practice, the more you can, the more you want to, the more you enjoy it, the less it tires you. I'm glad to hear—very personally glad—that it works that way for a woman, too. But you aren't the first girl to tell me so. Uh first time I heard a girl say that, or roughly that, was when Harding was President. Not a girl, a very sweet young married woman who had more in common with you than you are likely to believe. Almost certainly dead now, God rest her soul; she would be over a hundred years old)

(What was her name?)

(Does it matter? Little busybody, you were telling me about Fred and Anton. I still don't understand how you swung it. The setup, yes—but how did you gentle them to it? Did you split the time and take them into your apartment separately?)

(Oh, heavens, no! That would be rude. And embarrassing for everyone. It would have turned me off utterly. It was a Troy.)

(Well?)

(Boss, can you imagine how excited two men can get while kissing—fondling—the same girl? If she's willing? If they trust each other? Which they did, they were driver and Shotgun together.)

(Yes, that's true but I can't visualize—wups! I just remembered something that happened so many years ago I had almost forgotten it.)

(Tell me.)

(No, no, you go on. Just that history repeats itself—as it always does. Go on.).

(Well, they do, Boss. Excite each other even if they don't touch each other at all. Just her. 'Heterodyning' is the term I learned for it in secretronics; I don't know what the kinseys call it. But I had been kissing them goodnight almost every other night for weeks, and kissing them when they picked me up in the mornings. And the kisses got warmer and it's never been my nature to discourage a man if I like him—which I did; I felt affectionate toward both of them; they're nice people.

(Presently we were stopping for a necking session—could no longer call it a goodnight kiss—in the basement parking before they would take me up the lift. I had to slow that down by saying, 'Watch it, boys. You're not only getting body paint on your uniforms, you're getting me so mussed up I'll have trouble getting neat enough that Joe won't notice it.' Which did slow them down, more on my account than any fret about uniforms; they liked Joe—everybody likes Joe—and did not want to cause me worry at home. Didn't tell them that Joe wasn't fooled; his artist's eye sees much more than most people see.

(But we settled it that night, Boss. I told them that I was not a tease and that I was as eager as they were. . . but that I was *not* going to be spread in a basement. But that I would find a chance. They are both nice boys—oh, men, sure; Anton is forty and Fred is as old as I am. Was. So they waited, and didn't do more than kiss me and grab a friendly feel. Then twice we almost had it made but Joe was busy painting, which I would not interrupt to take the President to bed.

(Then we hit the jackpot. Almost missed at the last minute; Jake was going to send me home in his car. He told me to cancel the call I had put in for my car. Yours, I mean. I surprised Jake by being balky—told him that I didn't feel safe with Charlie unless he, Jake, was along. True, as far as it went; Charlie is a bad one, not like our four.

(So dear old Jake was going to get dressed and ride with me—I said that was silly, that Finchley and Shorty—I never referred to them as Tom and Hugo and wouldn't advise you to—)

(I'm not stupid, dearest. When I'm 'Miss Smith,' they are 'Finchley' and 'Shorty.')

(Sorry, Boss darling, I know you're not stupid. But I have more experience in being a woman than you have.)

(So you have, and you keep me straight, darling. But what's this about Tom and Hugo?)

(Misdirection. I knew who was on call that night. So Fred and Anton picked me up and I was tempted to tell them—getting excited all the time, myself. Couldn't. Would have spoiled it some for them, since men enjoy so much spreading a married woman without her husband knowing it—even sweet old Jake relished me more for that naughty reason. I always went along with this quirk because it gave me more control over a situation not easy to control once a man has had you. Gives you a lever. You might remember that, Joan.)

(I will. But I'll need a husband to make use of it.)

(You'll get us a husband, never fear, dear—I still think we ought to marry Jake. He'll come around. But don't hold out on him, Joan; Jake is not a man you can pressure that way.)

(Eunice, I won’t hold out on Jake one-half second. I’ve never had any respect for that female tactic and won’t use it now that *I* am female.)

(I have never used it, Boss, I’ve used almost every other female deception—but not that one. That one is whoring but not honest whoring. ‘Minds me. How do you feel about whores, Boss?)

(Me? Why, the way I feel about any professional who performs a personal service. Say a dentist, or a lawyer, or a nurse. If he’s honest, I respect him. If he is competent as well, my respect is limited only by his degree of competence. Why?)

(Have you ever patronized whores? Hired their services, I mean, not ‘patronize’ in the snooty sense.)

(If I give that a simple affirmative will you get on with your story? We’re already downtown, damn it.)

(Yes, sir. I mean, ‘Yes, twin sister you knocked-up virgin.’ Got home, went up the lift with them, was ‘surprised’ to find Joe not at home, found the dummy clock propped on the sink, hands set at midnight, and told them what it meant. That did it. Finis.)

(Hey!)

(What is there to tell? You already know what we did.)

Joan sighed. (That is the skimpiest account of a gang bang I ever heard in my long and evil life.)

(What? But it wasn’t a gang bang, Boss! Quit dragging your feet and come on into this century. A Troy is *not a* gang bang. Nor is it a frimp session, or needn’t be and this was not. A Troy is friendly and loving. They are both married and they treated me as sweetly as they would treat their wives—and I loved the way they treated me and loved both of them, quite a lot and still do, long before the evening was over . . . when up to then it had been just affectionate, sex-charged friendship. Boss, one of the regrets I have about being killed is that I was never able to offer them the second chance at me they had earned—and I had promised. Mmm...do you think you might make it up to them?)

(Huh? As you pointed out, I’m their boss; it wouldn’t be easy. And besides. . . well, hell, I’m scared. *Two* men?)

(You didn’t seem scared of Mac and Alec.)

(Not quite the same thing.)

(Nothing ever is, Boss—especially about sex. But I want to tell you this. A Troy—if it works right, and it can’t unless there is trust and respect all the way around—if it works, it is the nicest thing that can happen to a woman. Not just twice as nice because she gets twice as much of what she wants so badly. That’s not it; she might even get less than some rutty young stud, could manage alone. It’s the warm and friendly and loving and trusting aspect that makes it so good.

Four times better, at least. Maybe eight. Oh, arithmetic can't measure it. But, Joan darling—listen to me—until you have been in bed between two sweet and loving men, men who love each other almost as much or even more than they love you . . . with your head pillowed on both their arms and surrounded by their love—until that's happened to you, you still have one virginity to go, and an important one. Darling, I was crying most of the time they were with me . . . cried again when I kissed them goodnight...was still crying happy after they left. . . then jumped out of bed and rushed to unbolt the door when Joe got home a few minutes later—and blubbered all over him and took him straight to bed and told him all about it while he was being especially sweet to me.)

(Did he want to hear about it?)

(Wouldn't *you* want to?)

(Yes, but no two men are alike and some husbands get headaches from horns.)

(Some do. Maybe most of them, Joan. I was always careful of Joe's feelings. Sometimes I strayed and carefully kept it from him—I never told him about Jake.)

(Why not? I would think that Joe would approve of Jake for you if he approved of anyone. Jake respects Joe very highly—you know it, too; you heard him.)

(Yes. But Jake is rich and Joe is dirt poor. Perhaps Joe could have accepted Jake—I now think he could have. But I wasn't sure, so I didn't risk hurting him. But Anton and Fred—well, they are just mobile guards; Joe treated them as friends and equals, and secretly—I think—felt a little superior to them, since he is an artist and they are just stiffs. I knew they wouldn't trouble Joe's mind . . . and I was right; he was delighted for me. Happy that I was happy. Can't explain it, Joan; you get an instinct for it. But a man's pride is a fragile thing and it is all the armor he has; they are far more vulnerable than we are. You have to be oh so careful in handling them. Or they droop.)

(I know, Eunice. Literally droop in some cases. Did I tell you that my second wife made me psychically impotent for almost a year?)

(Oh, you poor darling!)

(Got over it. Not through a shrink. Through the warm and generous help of a lady who didn't assume that it was my fault. And I was never troubled again until I was too feeble for any sort of proper physical functioning.)

(I'm glad you found her; I wish I could thank her. Joan I wasn't born knowing this about men; I found out the hard way. Twin, I made some bad mistakes in. high school. Look—males are so much bigger and more muscular than we are, I didn't *dream* that they could be so fragile. Until I hurt one boy's pride so badly he dropped out of school, and I've tried never to hurt any boy, or man, since. I was stupid, Boss. But I did learn.)

(Eunice, how long has it been since I last told you I love you?)

(Oh, at least twenty minutes.)

(Too long. I love you.)

Finchley's voice interrupted her reverie. "We're about to park, Miss Eunice."

"What's this 'Miss Eunice' nonsense? We're not in public."

"Seemed like a good compromise."

"It does, huh? Why just dabble your toes? Why not go whole hawg and call me 'Miss Smith?' and I won't kiss you goodnight."

"Very well—Miss."

"Oh, Tom, don't tease me. It's been a perfect day; don't remind me that I must be 'Miss Smith' again. You know I'll kiss you goodnight if you'll let me . . . or the real Eunice wouldn't speak to me. Hugo, make him behave!"

"I'll fix his clock, Eunice. Tom, you call her 'Eunice,' real nice."

"I'm sorry, Eunice."

"That makes me feel better, Tom. Are you going to be able to park this wagon close enough that you can come with me?"

"Sure thing, Eunice—but keep quiet right now, please; I've got to work close with the traffic computer to get us in."

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"Good evening, Chief." Joan rested her hand on O'Neil's forearm, stepped lightly down.

"Good evening, Miss. Message from Mr. Salomon. His respects to you and regrets he will not be back for dinner. Twenty-one o'clock, he hopes."

"I'm sorry to hear it. Then I shan't dine downstairs; please tell Cunningham or Della that I want trays in my lounge for Winnie and me. No service."

"Two trays and no service, Miss—right."

"And tell Dabrowski that I want him to drive me tomorrow."

"He's gone home, Miss. But he knows he has the duty. He'll be ready."

"Perhaps you didn't understand what I said, Chief. I want to tell him, now, that *I* want him to drive me tomorrow. Ten, possibly—not earlier. So after you phone the pantry, call Dabrowski and give him that message from *me.* Leave the call in until you reach him. And phone me at once when Mr. Salomon's car returns, no matter what hour. Don't consult him; do it. Before Rockford unbuttons."

"Yes, Miss. Phone the pantry. Phone Dabrowski immediately thereafter. Phone you instantly when Mr. Salomon's car returns, before he is out of his car. If I may say so, Miss, it feels good to have your firm hand back at the controls."

"You may say so, to me. But not to Mr. Salomon. For *his* firm hand has been invaluable. As you and I know."

"As we both know. He's a fine gentleman, Miss; I respect him. Shall I tell Cunningham to send down for your packages?"

"No, Finchley and his guns can handle them—though I did go on quite a shopping spree." Joan gave her security boss Eunice's best happy-little-girl grin. "I was drunk with excitement, bad as a kid on Christmas, and tried to buy out the town. Finchley. Split those packages three ways and you three come up with me. Yes, I know it's not your work, so don't report me to your guild."

Packages, three men, and one woman almost filled the front lift. Joan waited until Finchley had punched for her floor and the lift had started, then she quickly punched the "Stop" touchplate, held them between floors. "Put those packages down."

She went first to Shorty, took his face between her hands. "Thank you, Hugo. Thank you most of all, as your gentle wisdom got us all straightened out." She pulled his face down, kissed him softly and unhurriedly, lips closed. "Good night."

She turned to Fred. "Thank you, Fred. I thank you—and Eunice thanks you." As his arms closed she let her lips come open. (See what. I mean, twin? That's a sample.) (I see—I shall be *very* careful not to get him alone unless I expect more than a sample.) "Good night, Fred."

"Tom, it's been the best day of my life. I hope you enjoyed it half as much as I did. Thank you." Joan went straight into the kiss without waiting for Finchley to answer, her face up, eyes closed—and with her back to Shorty in case her driver decided to take advantage of it—which he did. (Goodness! Eunice, are you *sure* you never laid him?) (Quite sure, darn it! Are *you* going to?) (I don't know, I don't know!)

Breathless she broke from him, turning her back to all of them to punch again for her floor and trying to regain her composure.

The car stopped and she said, "Put everything in my bedroom, boys. Winnie! Wait till you see!"

The little redhead had been waiting at the lift. "Miss Joan! You've been gone all day!"

"And why not? Put them anywhere, on the floor, on the bed. Winnie, have you had dinner? That's all, thanks. Good night and thank you all."

"Good night, Miss Smith."

As soon as the door sealed, Joan hugged her maid, lifting her off her feet. "You didn't answer. Did you eat with the staff? Or did you wait?"

"Couldn't eat. Oh, Joan, I've been *so* worried. You ran away and didn't tell anybody where you were going. Bad girl—to worry me so."

"Pooh. I had guards with me; you knew I was safe."

"But guards aren't nurses. I'm supposed to watch you, for Dr. Garcia."

"And pooh all over dear Doctor, too. Winsome, I'm no longer a patient, I'm no longer a ward; I'm a free woman and healthy as a horse and you can't mother me every minute like a broody hen. All right, we've got supper coming up and they'll leave it in the lounge and we'll eat when we feel like it."

"I know, I was backstairs when the order came in—so I hurried up the service lift and thought I had missed you as the indicator was stopped. Then it started again."

"Something wrong with that lift, it stalled. But we kept punching buttons until the Yehudi woke up. Too many gadgets in this house." (Eunice, I thought a stalled elevator was a safe as a grave. Is there no privacy *anywhere?)* ('Fraid not, Boss honey. But I never worried much about such things; I just worried about hurting people.) (I stand corrected. Ever been caught with your legs up, hussy?) (Only once when it was embarrassing—and that's all it was. It's nothing to worry about.)

"Shall I tell maintenance about the lift?"

"No, Finchley will report it. Winsome, maintenance is no part of your duties; you're here to giggle with me and to give me a shoulder to cry on and to cry on mine—and to keep dear Doctor from fussing." Joan started undressing. "Get your clothes off; we're going to model clothes, I've been shopping. Boy, oh boy, did I shop! Gave, the economy a shot in the arm, I did. Get those duds off—have you had your bath, you dirty girl? Or are you going to bathe with me? Come here and let me smell you."

"Had a bath when I got up."

"You smell all right, I fear me I'm well marinated; it's been a busy day. Okay, we'll dunk together and get stinking good later. Before giving dear Jake another lesson in how to relax. But now we model. Give us a kiss first." (Eunice, will that rubber dingus stay in place in the tub?) (It'll stay seated anywhere—or I would have left a dozen orphans behind me. You can even use the fountain—and you had better.)

"Joan, since you were going shopping, why didn't you take me along? Meanie."

"Complaints, complaints, complaints. I thought you needed sleep, dear. Or didn't Bob show up?"

Winifred blushed clear down her breasts but she answered happily, "Oh, yes, he did! But I would have been up at once if you had called me—love to shop."

"What time did you wake up?"

The blush renewed. "Not till almost thirteen. Long past noon."

"The defense rests. Winsome baby, I didn't take you along because I bought things for *you,* too. . . and if I had had you along, you would have fussed every time I spent a dollar on you. And to set precedent, too. I'm not a prisoner any longer. I'm free to come and go just as you are. If I don't take you along, you mustn't ask why and I may not tell you where, or what."

The younger girl looked crushed. "Yes, Miss Joan. I'll remember." So Joan Eunice again took her in her arms. "There, there, pet; don't quiver your up. I'll take you with me, mostly. And if I don't, I'll tell you about it, mostly. But I might tell you a fib instead. I might have a date with some horny interns and would not want to shock my Winsome."

"You're teasing me."

"Not mean teasing. I'm at least half serious. Winnie, if you want to see your Bob, no one in this house cares but me and my interest is friendly. But *me?* There are forty-odd people staring down my neck. If I ever have a man in my bed, the whole household will know it, and it's at least fifty-fifty that some member of my ever-loyal staff would sell the fact to a news snoop and it would be on the morning gossip program—phrased so that I can't sue without making it worse. Not?"

"Uh...sounds horrible. But I guess it could happen."

"You know it could. Every gossip column, every gossip program, proves it. Hon, if a person is too rich, or too prominent, all the public lets him wear is the Emperor's New Clothes—and what they like best is bad news, good news is too bland. Back when I was running it, Smith Enterprises spend many thousands of dollars every quarter to give me a totally false 'public image'—poisonous phrase!—for business reasons. But that's done with and now I'm fair game. Still more interesting fair game now that I'm miraculously young and female and pretty. No, 'beautiful'—let's be fair to Eunice Branca. You saw what they did yesterday; you watched the babble box. What would they do if they could prove something on me?"

"Uh, something nasty, I guess."

"I *know* they would, I'm not guessing; I've had too many years of trying to avoid the spotlight. The old Romans knew what they were doing when they tossed living victims to the lions; most people are fairly decent—but collectively they love blood. I'm going to do something about getting out of the spotlight but in the meantime, I'm vulnerable. Winnie, what would you do if I woke you some night and asked you to let me slide a man into your bed—so that *you* could be caught, not me. Be certain to be caught, I mean, public as a show window. So caught that Bob would know, too."

The little girl took a deep breath. "I'd do it! Bob would understand."

"Ah, but if I begged you *not* to explain it to Bob? Just take the rap for me?"

"I'd still do it."

Joan kissed her. "I know you would. But you won't have to, sweet Winsome. If—no, *when—I* slip, I won't load it onto my chum. But I may ask you to tell lies for me someday—jigger for me—help me cover up. Would you?"

"Of course I would!"

"And I knew it and didn't need to ask. It might be soon, I'm feeling more female every day. Now let's play Christmas—I think that round, flubsy box is for Winnie."

Shortly Winifred was parading in front of mirrors with an awed look on her face. "Oh, Joan, you shouldn't have!"

"That's why I made you stay home. It's a maid's uniform, dear—an allowable deduction for me by terms of the Cooks, Domestics, and Hotel Workers approved contract."

'Maid's uniform' indeed! It's a Stagnaro Original straight from Rome; I read the label."

"As may be, I'll tell my accountant to list it as a deduction just to annoy the I.R.S. Take it off, dear, and let's see what else we find. Hey, here's one for *me."* Joan quickly got dressed. "What do you think? Of course with this I ought to have my body painted."

"I wouldn't use paint, if I were you. You look yummy and that off-white sets off your skin. It's a delicious design even though kind o' wicked. Joan, how do you know so much about buying women's clothes? I mean, 'uh—"

"You mean, 'How does an old man who hasn't picked out a dress for a woman in at least half a century manage it?' Genius, dear, sheer genius. You ought to hear my bird imitations." (Hey! Don't *I* get any credit?) (Not unless you want to break your cover, Mata Hari. The men in the white coats are just outside that door.) (Pee on you, twin. Maybe someday we can tell Winnie.) (I hope so, darling—I not only love you, I'm proud of you.) *(Kiss!)*

They worked down to two boxes which Joan had held back. When Winifred saw the synthetic emerald set—gee patch and two half-moon cups shaped for bare nipples—she gasped. "Oh, goodness! Put it on, Joan, and let me find your highest heels!"

"You find *your* highest heels, darling—those green rhinestone stilts you were wearing earlier. They didn't have stilts to match this outfit in your size. I've ordered them."

"This is for *me?* Oh, no!"

"Then put it down the trash chute; gee-strings can't be exchanged. Winsome, that dress was designed for a redhead—and the cups are-too small for me. Put it on. That envelope contains a floorlength transparent skirt, silk with a hint of matching green. With this skirt it's just right for formal—dinner parties. You could wear one emerald on your forehead. Not any other jewelry. Nor paint."

"But, Joan, I never go to that sort of party—I've never ever been invited to one."

"Perhaps it's time I gave one; the banquet bali hasn't been used in ten years. You would look beautiful—junior hostess at the other end of the long table. But, dear, besides an ultra-formal party, it's intended —without the skirt—for most informal occasions. Would you enjoy wearing it for Bob—and would he enjoy taking it off?"

Winifred caught her breath. "I can't wait."

"Got a date tonight, hon?"

"No, that's why I said 'I can't wait.' Because I can't resist it—want Bob to see me in it...want him to take it off me, Joan, I shouldn't accept it, it's much too expensive. But I will, I do. Goodness, you make me feel like a kept woman."

"You are one, dear; I'm keeping you. And enjoying it very much."

The little nurse stopped smiling. Then she faced her mistress, looked up directly into her eyes. "Joan, maybe I shouldn't say this, maybe it'll spoil everything. But I think I must. Uh—" She stopped and took a deep breath. "Two or three times it's seemed to me you almost made a pass at me."

(There's the pitch, twin! Too late for me to help.) "It's been more than three times, Winifred."

"Well. . . yes. But why did you stop?"

Joan sighed. "Because I was scared."

"Of *me?"*

"Of me. Winsome darling—I've done many hard things in my life. Such as waiting in a landing boat, bobbing around and seasick and stinking with fear . . . then dropping off into four feet of water with machine guns raking us and killing my buddies on both sides. But this is the hardest thing I've ever tried. Being a woman. I have to think about it every instant—do consciously the things you do automatically. Goodness, today I came within a split second of walking into a men's toilet instead of the ladies' powder room. And now *you.* Darling, can you guess what a temptation you are to me? Can you realize that old Johann is looking at your winsome loveliness out of Joan's eyes?

Winnie, there hasn't been a moment but what I've wanted to touch you. Hold you in my lap. Kiss you. Make love-to you. If I were a man . . . I'd be trying my damnedest to crowd Bob out. Or at least make room for me."

"Joan."

"Yes, dear?"

"There's room for you."

Joan found that she was trembling. "Darling! *Please!* Can't we wait? You have Bob...and I have still to learn to be a woman." She started to cry.

And found Winifred's arms around tier. "Stop it, dear. Please stop. I didn't mean to upset you. I'll help, of course I'll help. We'll wait. Years if you need that long. Until you're calmed down and sure of yourself—and want me. But Winnie isn't trying to seduce her Joanie. Oh, it can be sweet, truly it can. But you're right and I do have Bob and my nerves aren't frayed the way yours must be. Someday you'll fall in love with a man, and may forget all about me. Wanting to touch me, I mean—and that's all right, as long as I can love you and be your friend."

Joan dashed away a tear, and sniffed. "Thank you, Winnie. I've made a fool of myself again."

"No, you haven't. I just have trouble remembering, sometimes. Do you want a tranquilizer?"

"No. I'm all right now."

"Would you rather I didn't touch you?"

"No. I want you to kiss me, Winnie. Hard. Best you ever have. Then put on the green gee-string dress and let us look at it. Then we'll eat. And then grab some soapsuds and make me smell better for our prayer meeting with Jake—I need those prayers tonight; they're the right tranquilizer. Put it on, dear. But kiss me first."

Winnie kissed her—started to hold back, then flared like a prairie fire and did make it "best she ever had."

(Break, twin, before the house burns down. That's the fanciest tap dancing since Bojangles died.) (What do you

know about Bojangles? You *can't* know about him.) (Ever hear of classic films, Boss? Now see to it that Bob marries her; you owe her that, for the hurdles you mike her jump.)

(How can I when I don't know who he is?) (You can find out. Cheat. O'Neil knows. After you know who he is, find out what he wants; he'll geek. *Men!* Boss, I love you, but sometimes I'm not sure why.)

After Winnie modeled the emerald dress, she fetched in their trays from Joan's upstairs lounge while Joan opened the last package. It contained her present for Jake. “Winnie, tell me what you think of this.”

It was a necklace rich and simple—a heavy gold chain with tripled linkage, supporting a large gold ankh, a crux ansata. Winifred took it in her hands. “It’s lovely,” she said slowly. “But it’s not a woman’s necklace, you know. Or did you?”

“It’s a man’s necklace. A present for Jake.”

Winifred frowned slightly. “Joan, you do want me to help you learn how to behave as a woman.”

“You know I do.”

“Yes, I know. When I see that you are about to make a mistake, I must tell you.”

“You don’t think Jake will like this?”

“I don’t know. He may not know what it means. And you may not know. This cross with a loop is called an ‘ankh’—and it’s what my grandaddy would have called a ‘heathen symbol.’ It means—well, it means most of the things our meditation prayer means, life and goodness and love and so forth. But specifically it means *sex,* it’s an ancient Egyptian symbol for the generative forces, both male and female. It’s no accident that the loop looks something like a vulva and that the rest of the design could be interpreted as a male symbol. The way it’s used *now*—among people my age, people the, age you have become—is...well, a wife could give it to her husband, or a husband could give a smaller one to his wife. Or they might not be married—but it *always* means sexual love—flatly and no nonsense about it. If that’s not what you mean, Joan, if you just want to give him a nice necklace, take it back and exchange it for another that isn’t so specific in its symbolism. Any necklace means love—but perhaps you want one that a daughter could give her father.”

Joan shook her head. “No, Winnie. I’ve known what the ankh means since a course in comparative religion, oh, three-quarters of a century ago. I assume that Jake knows, too; he has solid classical training. I hadn’t been sure you kids knew its ancient meaning—I see I was mistaken. Winnie, this present is no accident; I’ve asked Jake to marry me several times. He won’t. Because of age.”

“Well...I can see why he might feel that way.”

“It’s ridiculous. Sure, I’m a quarter of century older than he is—but it no longer shows and I’m healthy enough for marriage. Even though dear Doctor thinks I may drop dead.”

“But Dr. Garcia doesn’t really think you’ll drop dead. And I didn’t mean *you* were too old, I meant he—oh, dear!”

“Yes, yes, I know. He’s being ‘noble,’ damn him! But he doesn’t have to *marry* me, Winnie. I’ll accept any crumb I’m offered. This present is intended to say so.”

Winifred looked solemn, suddenly kissed the ankh and handed it back. “You and me both, Joan—any crumb we’re offered. Well, I wish you luck. With all my heart.”

“Good Winnie. Let’s sop up some calories; it’s getting latish and Jake will be home—I hope—by twenty-one. I want to be clean as a kitten and just as pretty and smelling even prettier when the stubborn darling gets here. Help me?”

“Love to. And look, Joanie, we douse you in ‘Harem Breeze,’ both the cologne and the perfume—and the powder. And I won’t wear any scent. I’ll scrub off what I’m wearing.”

“No, we’ll renew the bait on you, too. Maybe we’ll heterodyne.”

‘Heterodyne’?”

“Term that used to be used a lot in radio. In this case it means that if one girl isn’t enough, two might do the trick. Last night Jake was polite about not staring...except that he was noticing my Winsome with both eyes all the time he was pretending not to. I’m not trying to crowd you into a Troy—but I have no scruples about staking you out as bait.”

They were out of the tub and working on the finishing touches when the house phone sounded. “Miss Smith. Mr. Salomon’s car just rolled in.”

“Thank you, O’Neil.”

A few minutes later Joan phoned the Green Suite. “Jake dear? This is your resident guru. If you wish to share a prayer meeting, guru and chela will call on you whenever you say.”

“That’s welcome news; I’m tired—and last night was the best sleep I’ve had in years, Guru.”

“I’m glad. Have you had dinner?”

“At the Gib, hours ago. Ready for bed now. If you’ll let me have, oh, twenty minutes, for a tub.”

“Shall we be there in exactly twenty minutes? I don’t want to run into Hubert.”

“I sent him to bed. Nobody here but just us chickens.”

“Twenty minutes, dear. Off.”

Again two girls went barefoot down the hallway. Joan was wearing, under a negligee, the ankh necklace. The door opened for them and Jake came toward them. He was wearing a bathrobe and had a book in hand with a finger marking his place. “Hello, my dears. You both look charming. Joan, I took the liberty of stopping in your downstairs library and borrowing this book.”

“It’s not a liberty and you know it. What is it, Jake?”

He handed it to her. “Vishnudevananda’s Yoga text. Thought there might be some of the simpler postures I could try. But I’m afraid I must stick to meditation.”

Joan looked puzzled. “This was downstairs?” She glanced at the endpaper, saw her bookplate: “Ex Libris— J S B Smith.” “I had forgotten I owned it.”

“You’re a pack rat, dear. This house must have ten thousand books in it.”

“More, I think. There were that many the last time I had them catalogued. Well, after you’re done with it Winnie and I will look through it. We might find exercises we haven’t tried.” She handed it back; he put it aside. “Ready for autohypnosis?”

“Ready for prayers and I’m sorry I sounded disparaging last night.”

“I can’t see what difference. a name makes, Jake. But first—” Joan opened her robe, lifted the necklace from her neck. “A present for you, Jake. Bend your head down.”

He did so. She placed it around his neck with the ceremonial kiss. He lifted the ankh, looked at it. “Thank you, Eunice. It’s a beautiful present. Am I to wear it now?”

“As you wish. Or wear it in your mind—I know you’ve never been one for much jewelry. Ready, Winnie?” Joan Eunice dropped her robe, melted into Lotus; Winnie followed her. Jake got out of his bathrobe, leaving the necklace on, joined them.

“Jake, will you lead us tonight? No need to say ‘hold’ or ‘breathe,’ we’ll stay in step. Just like last night, a prayer for each of the four parts. Keep the tempo slow.”

“I’ll try. Om Mani Padme Hum!”

(Om Mani Padme Hum.)

Jake Salomon appeared to fall asleep instantly once they put him to bed. The girls quietly left the darkened room. Joan stopped a few feet down the hail. “Winnie, will you do something for me?”

“Anything, dear.”

“What time do people start stirring in the morning?”

“I don’t know what time Cook gets up. About six, maybe. Mostly seven or near it, for the others; staff breakfast is at seven-thirty.”

“Della doesn’t matter, she never comes upstairs. I mean this floor.”

“Well, cleaning starts at nine. But no one cleans near your room until you phone down for your tray. Have you been disturbed?”

“No. And I don’t mean to be. I guess Hubert is the only one who worries me. I’m going back and sleep with Jake.”

“Oh!”

“I’m not going this instant, I want to be sure he’s sound asleep. If he sleeps all night, I shan’t wake him; the poor dear needs his rest. But sleep with him I will! I don’t want Hubert barging in. Can you think of a way to divert him?”

“Oh, I see. I’m pretty sure Hubert never goes to Mr. Salomon’s room until Mr. Salomon sends foe breakfast and Hubert takes it up.

Some mornings I've eaten downstairs and seen Hubert sit and drink coffee and watch the news, oh, quite a long time. Waiting for Mr. Salomon to phone."

"That's a relief. It's not likely that anyone but you will know it, then. Not that I mind for myself, but I would hate to be the cause of Jake being dragged into a gossip item. All right, will you do three things for me? Read or sleep in my bed a while, muss it up. Stay all night if you like but muss yours, too. And will you set your alarm for eight and if I'm not in my own bed by then, phone the Green Suite? I'm sure Jake would rather know that you knew than have us caught by someone else. Then one other thing. Would you fetch me lounging pajamas and slippers? Then, if anything slips, I'll put a bold face on it —I'll be dressed and to hell with snoops. While you get them I'm going to put my robe down here and say a few more Money Hums. My mind is made up but I'm a touch nervy. Afraid Jake will scold me, I guess.. (Afraid Jake *won't* scold you, *I* guess.) (Don't you want us to, Eunice?) *(Yes!* Quit yattering and get on with it.)

"Right away, Joan. Oh, I'm excited myself! Uh, I think I'll sleep in your bed. If you don't mind."

"You know I don't. But I may come back and wake you, most any time."

"Don't mind. If you need a shoulder to cry on, I want to be there. Or maybe just for snuggle."

"Or I might have something to tell you. You don't fool me a bit, Winsome. Never mind, I *would* like to find you there when I return, no matter when or why."

A few minutes later Joan slipped silently into the bedroom of the Green Suite, dropped her clothing without lighting a light, found her way to the bed by Jake's soft snores. Cautiously she got into bed, felt the radiant warmth of his body close to hers, sighed happily, and went to sleep.

Some indefinite time later Joan felt a hand on her in the dark, came instantly awake. (What?) (General Quarters twin! It's *now.)* (I'm scared!) (I've taken over, dearest—the body remembers. Say a Money Hum)

Without a word Jake firmly took possession of her. (Oh, God, Eunice! Why didn't you *tell* me?) (Tell you what?) (That for a woman it's so much *better!)* (Is it?) (Ten limes, *a hundred* limes—I don't know; I'm fainting.) (How could *I* guess that it's better? Kiss him as you faint.)

The occupation of the Oklahama State House by the People's Agrarian Emergency Government continued. The Martian Manned Field Laboratory reported finding artifacts (age 1.4 X 10ˆ6 plus/minus 14% years) indicating extinct human-equivalent intelligence. A second report signed by the Chinese members of the expedition denied that the exhibits were artifacts but were simply automatic and instinctive byproducts (analogous to coral rings, or to honeycombs) of sub-intelligent life closely related to the anaerobic life now present on Mars. The International Flat Earth Society in annual convention in Surrey, England, passed its usual sanctions on any national government wasting taxpayers' money on alleged "space travel."

The suicide rate was up for the nineteenth successive year, as were also rates for death by accident and by violence. World population appreciation passed 300,000 persons per day and continued up, with six babies born every second vs. *2.5* persons dying each second, for a net gain of seven people every two seconds.

A hen in Izard County, Arkansas, laid an egg with the Sign of the Cross on it. A spokesman for the Treasury Department, speaking off the record, announced that the Administration would not push the Administration bill for total abolition of paper currency in favor of universal credit cards and computer accounting. "We must face the fact," he told the Washington Press Club, "that black market transactions, bribes, and other quasilegal exchanges are as much part of our economy as is interest on the National Debt, and that to create conditions which would make these voluntary exchanges impractical would bring on a depression the country could not stand. To put it poetically, gentlemen, the small amount of physical currency still in circulation—only a few billions—is our lubricant for the gears of progress. You have my assurance that the President recognizes this truth."

The First Satanist Church, Inc., (forty-four branches in California, five in other states) brought suit in Federal Court for relief from "discriminatory taxation." The First Disciple stated: "If other churches aren't badgered and taxed and investigated concerning their sacred objects, a Glory Hand should enjoy the same protection—that's American as apple pie!" Reno again repealed its ordinance for licensed prostitution. The City Manager stated that the fees weren't sufficient to pay the inspectors . . . and besides, there wasn't all that much commercial prostitution anyhow since the closing of the Federal Youth Training Center.

The Rally for Human Beings gained speed in its drive to fold, spindle, and mutilate computer cards and drop them into the nearest mail box—despite arrests by Postal Inspectors there was almost no cooperation by local police and no jury had brought in a verdict of guilty no matter how compelling the evidence. The Post Office's Chief Inspector stated that the mutilated cards were almost always bills and that, so far, no mutilated checks or money orders had been reported—and that the government bad no great interest in the matter but he was getting damn sick and tired of the country's mailboxes being used as trash baskets.

The chairman of the Rally for Human Beings answered that the country's mailboxes had been trash baskets for years and both the Postmaster General and Congress knew why. The traffic computer for downtown Houston went into spastic breakdown during the evening rush hour, leaving thousands of people stranded on the streets overnight; the estimated deaths exceeded seven thousand, including heart stoppage, smog poisoning, and mugging, but excluding suicide. The Southern States Automobile Assurance Companies Trade Association repudiated all claims based on the incident on the theory that deaths or injuries in stationary vehicles were not covered by the (fine print).

The Lunar Colonies dedicated two more superlarge "balanced-aquarium" Food Caves, the *George Washington Carver* and the *Gregor Mendel,* and the Commission again announced an increase in subsidized out-migration quota but again with no relaxation in standards (the injunction against the Commission issued by Mr. Justice Handy of the United States Supreme Court was quietly ignored on the grounds of no jurisdiction). The common stock of Las-Vegas-in-the-Sky continued to move up against the downward trend of the Market: most investment advice peddlers remained bullish basing their expectations on past correlations between weather, the Market, and women's styles. The Interstellar Advisory Subcommittee to the Lunar Commission settled on Tau Ceti rather than Alpha Centauri for the first attempt. Jodrell Bank lost touch with the Manned Pluto Probe. The (official) casualties in Ukraina dropped below the (official) casualties in Matto Grosso—and in both places the dead did not argue

"—whereas 'id' is *not* a scientific concept; it is merely the first syllable of *'idiot!'* . . . as my esteemed colleague should know best" "—will be order in the courtroom."

"—let me cite the incontestable conclusions of that *great* scientist—" "garbage in, garbage out! Any graduate assistant can draw pretty graph~ and make half-bright conclusions from irrelevant data." "may I ask my esteemed colleague to repeat that slur outside the courtroom?" "—Bailiff is directed to keep order during—"

("Jake, with any luck we'll get this so fouled up that *nobody* can play left field.")

"—with those bright lights. Don't shine them in *my* eyes, or KPOX will lack your services a few days." "—inquire of the Court whether esteemed Counsel has any serious purpose in subjecting the Court and these spectators to the offensive sight of this grisly carcass?" ("—can't stand it myself, Jake; did I *really* look that bad? I still think we should take a dive on this." "Hush, dear, Mac knows what be is doing and so do I.") "—respectfully suggest that the witness himself should be conclusively identified before his testimony can be used to identify another person." "—State and County. This set of prints I am now projecting on the screen you have just seen me take from the cadaver marked exhibit MM. I will now compare them with prints supplied by Veterans Administration Archives and previously marked as exhibit JJ, using jump-stereo superposition—" "—personally take those photographs which you now hold and which have been tentatively marked as exhibit SS, numbers one through one hundred twenty-seven?"

"—will *not* be cleared. This will be a public hearing. But the Court will take time to sentence for contempt as needed, and Evelyn, you can start by putting that spectator, *that* one, the woman with the glasses and the fright wig, on ice for ten days. Get her name, give it to the Clerk, take her away. Any more morons who can't keep quiet? You back there, eating a candy bar; stuff it into your pocket, this is not a lunchroom."

"Is Counsel for the challenged party suggesting that this is *not* José Branca?" "Goodness, no, I'll help identify him if you need me. I'm simply urging that you lay a proper foundation." ("Jake, Joe looks ghastly. I *must* go see him as soon as this nonsense is over." "Do you think that is wise?" "I don't know, Jake. But I know that I *must.")*

"Look around you, Mr. Branca. Tell the Court—tell the Judge, that is——whether or not your wife is in this room?" "Not here!" "Mr. Branca, look where I am pointing." "Not here, I told you!" "Your Honor, we are faced with a reluctant witness. It becomes necessary to lead him." "Very well. But Counsel is reminded that he cannot impeach his own witness." "Thank you, Your Honor. Mr. Branca, I am pointing at this young woman, look at her closely. I have my hand on her shoulder—" "Keep your hands to yourself! Judge, if he puts a hand on me again, I'll bite it!" "Order. Counsel, it is not necessary to touch the challenged party, and you will not do so again. Your witness knows which young woman you mean." "Very well, Your Honor—and if I have given offense to this young lady, I am sorry. Mr. Branca, I put it to you that this is your wife, Eunice Branca née Evans."

"Not Eunice. She dead. Judge, do I gotta take this kark? That lyin' fixer knows t' score, he talk to me two, three hours. Sure, that's Eunice' *body.* But she's *dead.* Everybody knows what happen."

"Sorry, Your Honor. Mr. Branca, please confine yourself to answering my questions. You say your wife is dead ...but did you ever *see* your wife Eunice Branca dead?"

"Huh? No. This Operation—"

"Just answer the question. You never at any time saw her dead. I put it to you that you were paid one million dollars to testify that this woman is not your wife Eunice Branca." ("Jake, can they do this to Joe? Look at him." "I'm sorry, darling. I didn't call him.")

"Judge, this karky bastard's *lyin'!* They got this club, see? Rare Blood. I got this funny blood, see? Eunice, too.

Save lives. Sure, they offer money, thousand, million, I I don' know, don' care. You think I'm a pimp, maybe? For *Eunice?* I tell 'em shove it. I—"

"Your Honor, I pray your help in bringing this witness to order."

"I think he's making a responsive answer to your question. Go on, Mr. Branca. They offered you money. For what?"

"Oh. Eunice got a boss, see? Mr. Smith. Johann Smith. So rich he karks in gold pot. But poor old muck is dying, sec?Only the medicares don' let him die. Pitiful. But he's got this same funny blood, see? Like me, like Eunice. I tell 'em, sure, he can have Eunice' body, she don' need it no. more—but *not* for money. So we rig a swindle—me and his fixer over there, Mr. Jake Salomon. He knows how I feel, he helps. 'Eunice Evans Branca Memoria' Fund for *Free* Rare Blood'—all paid to t' Rare Blood Club. Ask Mr. Jake Salomon, he knows. I. . . don'...touch...one...God damn' frimpin' *dime!*" ("Jake—he won't even look at me."

"Put your veil up, dear, and cry under it.")

"Does Counsel for Petitioners have any more questions to ask this witness?"

"No, Your Honor. Counsel may inquire."

"No cross-examination, Your Honor."

"Does either counsel wish to question this witness at a later time? This is not a trial, and the Court intends to allow the widest latitude for inquiry even at the cost of permitting irrelevancies to creep into the record. Counsel?"

"Petitioners have no further use for this witness~"

"No questions now or later, Your Honor,"

"Very well. Court will reconvene at ten tomorrow morning. Bailiff is directed to provide this witness with transportation home or wherever he wishes to go, and to protect him from annoyance in so doing. Off the top, Evelyn, he's been harried enough."

"Judge? Can I say sump'n?"

"If you wish, Mr. Branca."

"That karky fixer—not Mr. Salomon, other one. Gets dark every night. Some night he winds up in Bird's Nest turf."

“Order. Mr. Branca, you must not make threats in court.”

“Wasn’t no threat, Judge. Was *prophesying. I* wouldn’t hurt anybody. But Eunice had lots and lots and *lots* of friends.”

“Very well. You’re excused, Mr. Branca; you won’t have to come back. Clerk will take charge of exhibits. Bailiff will provide heel-and-toe guards. Recessed.”

“All rise!” “—greatest possible respect for the scholarly qualifications of my distinguished colleague, nevertheless the opinions he has expressed are the most arrant nonsense, as proved by that *great* scientist in his paper of 1976 from which I know quote: ‘The very concept of “personality” is but a shadow of a figment of a fantasy of a prescientific speculation. *All* life phenomena are fully explained by the laws of biochemistry as exemplified—’”

“—even an existential phenomenology requires a teleological foundation and I so concede, but a close study of dialectical materialism proves to any but the hopelessly biased that—” “Who’s in charge here?” “An unborn child is not person; it is merely an inchoate protoplasmic structure with a potentiality to become *from its environment—”* “—mathematical laws of genetic inheritance account for every possible event misnamed—” “—in words familiar to the Court and to everyone: ‘Father, forgive them, for they know not what they do.’”

“—shocked to discover that the learned judge presiding over this trial is in fact a fraternity brother of Johann S. B. Smith. This clandestine relationship may be verified in records open to the public and I ask that this Court today, and any later courts seeing this record, take judicial notice, and I demand that opposing Counsel stipulate the fact.”

“Stipulated.” (“Jake, how did they find out?” “We leaked it. Through Alec, last night. Time to get it into the record, rather than in an appeal.”)

“Aha! This damning fact having been stipulated, Petitioners are now forced to demand that the Judge presiding disqualify himself and declare this a mistrial.” (“Jake, seems to me they’ve got us on the hip. Much as I like Mac and Alec, I have to admit that this has the flavor of finding a strawberry mark on a missing heir.” “No, my dear. In the course of a long life a prominent man acquires direct linkage to every other prominent man. If it hadn’t turned out that you and Mac were in the same fraternity, it would have been some other link as close or closer. How many members of the Supreme Court do you know?” “Uh, I think it’s five.” “There’s your answer. At the top of the pyramid everybody knows everybody else.”) (And sleeps with them.) (Shut up, Eunice!)

“Counsel, I find this interesting. First let me set you straight on a point of law. Twice you have used the word 'trial' and now you speak of a 'mistrial.' This is, as you know, not a trial, it is not even an adversary situation; it is merely an inquiry for the purpose of determining the identity of the young woman there who calls herself 'Miss Smith.' She is charged with no crime, no civil suit against her is before this court; it is simply that her claimed identity has been challenged by petitioners who assert an interest. So this court is assisting in a friendly investigation—helping like a good neighbor in attempting to straighten out a mixup. *Not* a trial."

"I stand corrected, Your Honor."

"Please be careful in your use of technical language. If there is no trial, there can be no mistrial. Do you agree?"

"Perhaps I should use other language, Your Honor. Petitioners feel that, under these disclosed circumstances, you are not the judge who should preside over this, uh, friendly investigation."

"That is possible. But the matter *has* reached me in the course of due process and it will continue to remain before me unless compelling reasons are shown why I should step aside. Again on the matter of language, you used the word 'clandestine.' The Court will not at *this moment* consider whether or not Counsel's choice of this word implies contempt—"

"Your Honor, I assure you—"

"Order. I am speaking. Nor will *you* discuss that aspect at this time. We will now consider only the meaning of this word. Clandestine' means 'hidden, secret, concealed' with a flavor or connotation of surreptitious, or underhanded, or illicit. Tell me—this alleged relationship: Could it be verified in Who's Who'?"

"Oh, certainly, Your Honor! That's where I found it."

"I know that my own fraternity is noted there; I assume that if appropriate it would be listed in the case of Johann Sebastian Bach Smith. Since you tell me that you have checked it, the Court takes judicial notice for whatever it is worth and requires no further substantiation. . . other than to comment that we could hardly have been members of the same chapter at the same time since we differ by almost half a century in age. Did your investigations show, that Johann Smith and I were jointly members of other organizations? For example Johann Smith was a founding member of the Gibraltar Club —and I am a member, and Miss Smith's counsel, Mr. Salomon, is a member . . . and *you* are a member. In what other organizations do I share membership with Johann Smith? Now or in the past."

"Uh. . . Petitioners have not investigated."

"Oh, come now, I feel sure that you could turn up others. The Red Cross, for example. Probably the Chamber of Commerce at some time. I seem to recall that when I was a Scout Commissioner Johann Smith was one also. Possibly we're both in other fraternal bodies. Almost certainly we have served as trustees, or such, for the same charitable or service groups, either simultaneously or successively. I note that you are a Shriner, so am I. Care to comment on the fact?"

"No comment, Your Honor."

"But you and I almost certainly share several fraternal bonds. The Court takes notice of the wry fact that, since lawyers are not permitted to advertise, as a class they tend to join more organizations—fraternal, social, service, and religious—then do laymen as a class. Since you choose not to comment on the ones that you and I share in common, the Court will on its own motion investigate and place the results in the record. Now as to my alleged obligation to disqualify myself, do you wish to clarify your reasoning? Think it over while we take a recess, as your answer will go into the record. Ten minutes."

"Order. Counsel for the Petitioners? You have had time to think."

"Petitioners move that all remarks concerning fraternal associations and like matters be struck from the record."

"Motion denied. *Nothing* will be struck from this record. Come now, Counselor, you must have had *some* theory. State it."

"Your Honor, at the time I raised the point it seemed important. I now no longer think so."

"But you must have had a theory or you would not have raised it. Please speak freely, I want to know."

"Well...if Your Honor will indulge me, the disclosed fact seemed to admit of the possibility of prejudice on the part of the Court. No contempt is intended."

"And the Court will assume that none exists. But your answer is less than complete. Prejudice in favor of whom? The Petitioners? Because of my fraternal relationship with their grandparent?"

"What? Oh, no, Your Honor—prejudice in favor of, uh, of Miss—the challenged party."

"You are stipulating that she is *indeed* Johann. Sebastian Bach Smith?" ("My God, Jake, Mac's got him biting his own tail." "Yes. *Who* has got *whom* on *whose* hip?")

"No, no Your Honor, we are not stipulating *that.* That is the very matter we are challenging."

"But Counsel cannot have it both ways. If this young woman is *not* Johann 'Sebastian Bach Smith—as

Petitioners allege—then she is *not* of my college fraternity. Conversely, under your own theory, she *is* Johann Sebastian Bach Smith. Which way will you have it?"

"I'm afraid I have been guilty of faulty reasoning. I pray the court's indulgence."

"We all reason faultily at times. Are you quite finished? Shall we go on with examination of witnesses?"

"Quite finished, Your Honor."

"But, Dr. Boyle, do you *know* that you removed the brain from this body—this cadaver, and transplanted it into the body of that woman?"

"Don't be an ass, old chap. You heard my answer."

"Your Honor, Petitioners feel that this is proper cross-examination and ask for the Court's assistance."

"The Court orders the witness to answer the questions as stated."

"Judge, you don't scare me, y' know. I am here as a voluntary witness—and I am not and never was a citizen of your quaint country. I am now a citizen of China. Your State Department promised our Foreign Affairs Minister that I would have full immunity during my entire stay if only I would appear. So don't bother to throw your weight around; it won't go. Care to see my passport? Diplomatic immunity."

"Dr. Boyle, this court is aware of your immunity. However, you have been induced to come here—at considerable expense I would assume and clearly at some inconvenience to you—to give evidence that only you can give. The Court *requests* you to answer all questions put to you, as fully, explicitly, and clearly as possible, in terms a layman can comprehend, even if it means repeating yourself. We want to find out exactly what you did and what you know of your own knowledge, which might directly or indirectly assist this court in determining the identity of this woman."

"Oh, certainly, my dear fellow—put that way. Well, let's go back and run it through again, from A to Zed. A year ago, more or less, I was approached by that old bugger over there—sorry, I mean 'barrister'—Mr. Jacob

Salomon—to do what the Sunday sheets call a 'brain transplant.' I accepted the commission. After this and. that—you can get the trivia from him—I did it. Moved a brain and some ancillary parts from one human skull to another. That brain was alive in its new digs when I left.

"Now as to *whom.* The brain donor was a very elderly male, the body donor was a young mature female. And that is about the size of it—they are covered, y' know, sterile sheeting and such, before the surgeon in charge comes in. Prepped. I can add only these hints: The male was in bad shape, kept alive by major supportive means. The female was in worse shape, she was dead—massive trauma to skull and cortex about *here*—head bashed in, I mean to say, and the yolk spattered. Dead as Queen Anne save that her body had been kept alive by extreme support measures.

"Now that unsightly hunk of pickled meat over there has had its brain *et cetera* removed in a fashion consistent with my own—unique—surgical techniques; I doubt if there is another surgeon alive who can do it my way. I have examined that cadaver carefully; I conclude that it is my work—and, by elimination, I conclude that it *must* be the body Salomon hired me to carve on; there is no conflicting evidence and the cadaver is not from any other case of mine.

"Identifying the young female is another matter. If her head were shaved I might look for scar tissue. If her skull were X-rayed I might look for prosthesis; teflon vitae does not throw the same shadow on a plate as does natural bone. But such tests would be only indicative; scar tissue is easily come by, and other trephining could produce similar X-ray shadow without disturbing the central nervous system."

"Dr. Boyle, let us 'stipulate momentarily that you removed a living brain from exhibit JJ, the cadaver—"

"'Stipulate?' I *did* do so, you heard me say so."

"I am not contradicting you, I am simply using appropriate language. Very well, you have so testified and you have also testified that you transplanted that brain into a young female body. Look about and see if you can identify that female body."

"Oh, you're being an ass again. I am neither a witch doctor nor a beauty contest judge; I am a surgeon. No, thank you. If that young woman—that composite human, female body, male brain—survived and is alive today—a point on which I have no opinion of my *own* knowledge and I assure you that I have had strong reason to acquaint myself both with relevant forensic medicine and medical jurisprudence; you are not about to trip me into being the ass you are—I would not today be able to single her out with certainty from ten thousand other young women of approximately the same size, weight, build, skin shade, and such. Counsel, have you ever seen a human body hooked up for extreme life support and prepared for such surgery? I'm sure you have not or you would not ask such silly questions. But I assure you that you would not recognize your own wife under such circumstances. If you want me to perjure myself, you've come to the wrong shop."

"Your Honor, Petitioners seem unable to get a responsive answer on this key point."

"The Court finds it responsive. Witness states that he can and does identify the male body but is unable to identify the female body. Doctor, I confess that I am puzzled on one point—perhaps through not being a medical man myself; nevertheless I am puzzled. Are we to understand that you would perform such an operation without being certain of the identity of the bodies?"

"Judge, I've never been one to fret about trivia. Mr. Salomon assured me, in legalistic language, that 'the fix was on' if I have your

American idiom correct. His assurances meant to me that the paper work was done, the legal requirements met, et cetera, and that I was free to operate. I believed him and did so. Was I mistaken? Should I expect an attempt to extradite me after I return home? I think it would be difficult; I have at last found a country where my work is respected."

"I am not aware that anyone has any intention of trying to extradite you. I was curious, that's all. What Counsel was getting at is this: There is present in this room a woman who claims to be that composite from your surgery. You can't point her out?"

"Oh, certainly I can. Though not as a sworn witness. It's that young lady seated by Jake Salomon. How are you, my dear? Felling chipper?"

"Very much so, Doctor."

"Sorry if I've disappointed you. Oh, I *could* make positive identification . . . by sawing off the top of your skull, then digging out your brain and looking for certain indications. But—heh heh!—you would not be much use to yourself afterwards. I prefer seeing you alive, a monument to my skill."

"I prefer it, too, Doctor—and truly, I'm not disappointed. I'm eternally grateful to you."

"Your Honor, this is hardly proper!"

"Counsel, I will be the judge of that. Under these most unusual circumstances I will permit a few human amenities in court."

"Miss Smith, I'd like' to examine you before I go home. For my journal, you know."

"Certainly, Doctor! Anything—short of sawing off my skull."

"Oh, just chest-thumping and such. The usual rituals. Shall we say tomorrow morning, ten o'clockish?"

"My car will be waiting for you at nine thirty, Doctor. Or earlier, if you will do me the honor of having breakfast with me."

"The Court finds it necessary to interrupt. I'm sorry to say that both of you will be *here* at ten o'clock. The hour of recessing is almost on us and—"

"No, Judge."

"What, Dr. Boyle?"

"I said, 'No.' I will not be here tomorrow morning. I speak this evening at twenty o'clock at a dinner of one of your chop-'em-up societies. The American College of Surgeons. Until shortly before that time I am at your disposal. I suppose you can require the presence of Miss Smith tomorrow morning, but not mine. I'm off to merry old China as quickly as possible. No shortage of opportunities for research there—you would be amazed what condemned prisoners will agree to. So I shan't waste another day on silly-ass questions. But I am willing to tolerate them now."

"Mmm—I'm afraid that the Court must concede that this is a case of Mahomet and the Mountain. Very well, we will *not* recess at the usual hour."

"Witness will stand down. Do Petitioners offer more witnesses?"

"No, Your Honor."

"Counsel?"

"Miss Johann Smith offers no further evidence."

"Mr. Salomon, is it your intention to present an argument or summary?"

"No, Your Honor. The facts speak for themselves."

"Petitioners?"

"Your Honor, is it your intention to bring this to a terminus *today?"*

"That's what I am trying to find out. We've been at this for many weary days and I find myself in sympathy with Dr. Boyle's attitude: Let's sweep up the mess and go home. Both sides agree that there are no more witnesses, no more questions, no more exhibits. Counsel for Miss Smith states that he will not offer an argument. If Petitioners' counsel, wishes to argue, he may do so—in which case Miss Smith, in person or through counsel or both, is privileged to rebut. What I had in mind, Counsel, was a recess . . . then, if you have your thoughts in order, you can say what you wish. If you can't, we can let it go over till tomorrow morning. You may at that time argue for a postponement, but I warn you that a lengthy postponement will not be tolerated; the Court has become impatient with delaying tactics and red herrings, not to mention language and attitudes flavored with contempt. What is your wish?"

"May it please the Court, if we continue 'this evening, how long a recess does the Court contemplate?"

"—and rebuttal having been concluded, we are ready to rule. But first a statement by the Court. Inasmuch as a novel point in Constitutional Law is involved in this matter, if an appeal is made, the Court will, under the Declaratory Relief Act of 1984, on its own motion send the matter directly to Federal Appellate Court with recommendation that it be referred at once to the Supreme Court. We cannot say that this will happen but there are aspects which lead us to believe that it could happen; this matter is not trivial.

"We have heard the petition, we have heard witnesses and seen exhibits. It is possible to rule in one of four ways:

"That both Johann Sebastian Bach Smith and Eunice Evans Branca are alive;

"That Eunice is alive and Johann is dead;

"That Eunice is dead and Johann is alive;

“That both Eunice and Johann are dead.

“The Court rules—please stand up, Miss Smith—that this person before us is a physiological composite of the body of Eunice Evans Branca and the brain of Johann Sebastian Bach Smith and that in accordance with the equitable principle set forth in ‘Estate of Henry M. Parsons v. Rhode Island’ this female person is Johann Sebastian Bach Smith.”

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“—take it that you are offering me your lovely body. Sorry, m’dear. I have no interest in women. Nor in men. Nor in rubber garments or high heels or other toys. I’m a sadist, Miss Smith. A *genius* sadist who realized quite young that he must become a surgeon to stay out of the clutches of Jack Ketch. Sublimation, y’know. Thanks just the same. A pity, you do have a magnificent body.” (Well, Boss, you got turned down. It’s a lesson every woman must learn. So you brush your hair and start all over again.)

(Eunice, I’m relieved. But he was entitled to the lagniappe if he wanted it.) “I’m your Galatea, Dr. Boyle; I owe you anything you care to name—short of sawing off my skull. The debt remains on the books. All I was offering was symbolic down-payment. But you don’t respond like a typical Australian—nor sound like one, either.”

“Oh, that. I’m a fake, dear. From the Sydney slums into a sadists’ finishing school—a stylish British boarding school, a ‘public’ school right out of the second drawer. Then on to the University of London and the best surgeons in the world. Put your pretty robe on and I’ll be going. I say, would you mind having that extraordinary slow-motion somersault filmed in stereocinema for my archives?”

“Where shall I send it, Doctor?”

“Jake Salomon knows. Keep your pecker up, m’dear, and try to live a long time; you’re my masterpiece.”

“I’ll certainly try.”

“Do. Ta ta!”

An unidentified flying object roughly disc-shaped was reported to have landed in Pernambuco and its humanoid crew to have visited with local yokels; the report was denied officially almost faster than it reached the news services. The number of licensed private police in the United States reached triple the number of ‘public peace officers. Miss Joan née Johann Smith received over two thousand proposals of marriage, more than that number of less formal proposals, one hundred eighty-seven death threats, an undisclosed number of extortion notes, and four bombs—not any of which she received in person as they were diverted to Mercury Private Courier Service under procedures set up years earlier. The waldoes of one package-opening bunker had to be replaced; the other bombs were disarmed.

The Postmaster General died from an overdose of barbiturates; the career Assistant Postmaster General declined an interim appointment and put in for retirement. A woman in Albany gave birth to a “fàun” which was baptized, dead, and cremated in eighty-seven minutes. No flowers. No photographs. No interviews—but the priest wrote a letter to his seminary roommate. The F.B.I. reported that recidivism was up to 71%, while the same rate figured only on major felonies—armed robbery, rape, assault with a deadly weapon, murder, and attempted murder—had climbed to 84%. The paralysis at Harvard University continued.

“Jake, the last time you refused to marry me, you *did* promise me a night on the town if we won.”

Mr. Salomon put down his cup. “A delightful lunch, my dear. As I recall, you told me at the time that a nightclub check was no substitute for a marriage license.”

“Nor is it. But I haven’t nagged you about marrying me since you accorded me the honor of first concubine. Uh... erase ‘first.’ I have no idea what you do with your time when you’re not here. Well, I don’t have to be ‘first.’”

(Twin, never crowd a man about sex. He’ll lie.) (Pussy cat, ‘I’m *not* crowding Jake about *sex;* I’m confusing the issue. He’s going to take us nightclubbing and we’re going to wear that lush blue-and-gold job—it’s meant to be seen, not just modeled for Winnie and put away.)

“Eunice, surely you don’t think I have anyone else?”

“It would be presumptuous of me to have an opinion, sir. Jake, I’ve stayed close to home all during this hearing—a little shopping, mostly with Winnie along. But now we’ve won and I see no reason to be a prisoner. Look, dear, we can make it a party of four—a girl for you and a boy for me—and you can come home early and not lose any sleep you don’t want to.”

“You surely don’t think that I would go home and leave you at a nightclub?”

“I surely think I can stay up all night and celebrate if I want to. I’m free, over twenty-one—my *God,* am I over twenty-one!—and can afford a licensed escort. But there is no reason to keep you up all night. We’ll call Gold Seal Bonded Escorts and fill out our party. Winnie’s been teaching me what the kids call dancing—and I’ve been teaching her real dancing. Say, maybe you’d rather escort Winnie than some dollikin picked out of a catalog? Winnie thinks you’re wonderful.”

“Eunice, are you seriously proposing to hire a gigolo?”

“Jake, I’m not going to marry him, I’m not even going to sleep with him. I expect him to dance with me, smile, and make polite conversation—at about what a plumber charges. This is doom?"

"I won't have it."

"If you won't—and Heaven knows I would rather be on your arm than that of a paid escort—will you take a nap? I'll get a nap, too. Do you need help to get to sleep? Money Hums, I mean, not horizontal calisthenics. Although we have that in stock, too."

"I don't recall saying that we were going out. Nor is there anything to celebrate, Eunice. We haven't won until the Supreme Court rules on it."

"We have plenty to celebrate. I'm legally me—thanks to you, darling—and you no longer have to report as my conservator; my granddaughters have lost on all points. If we hold off celebrating until the Supreme Court maunders over it, we might both be dead."

"Oh, nonsense! You know I'm about to leave for Washington; I expect to be able to arrange for an early spot on the calendar. Be patient."

"Patient' is what I'm *not,* dear. Surely, you'll arrange it; you always do arrange things—and the Administration owes me that and will expect more from me. But, Jake, your jet might crash—"

"That doesn't sway me, it's my death-of-choice. Since my genetic background doesn't permit me to hope for heart failure, I've been counting on cancer. But a crash is still better. Anything but a long, slow, helpless dying."

"You're rubbing my nose in the mistake I made, sir. Will you let me finish? You once pointed out that you had only ten or twelve years, based on the actuarials—whereas I had at least half a century. Not true, Jake. *My* life expectancy is null."

"Eunice, what the devil are you talking about?"

"The truth. Truth you have conveniently forgotten—but which I am aware of every golden second. I'm a transplant, Jake. A *unique* transplant. No statistics apply to me. Nobody knows, no one can guess. So I live each wonderful day as all eternity. Jake my beloved master, I'm not being morbid—I'm being happy. When I was a little boy there was a prayer Mama taught me. It goes— "Now I lay me down to sleep;

"I pray the Lord my soul to keep. "If I should die before I wake, "I pray the Lord my soul to take.

"It's like that, Jake. I had not used that prayer in almost ninety years. But now I use it. . . and go happily to sleep, unworried about tomorrow." (Twin! You lying little bitch! All you ever say is a Money Hum.) (It's the same thing, Puss. A prayer means what you want it to mean.)

"Joan Eunice, you once told me that you had no religion. So why do you say this child's prayer?"

"As I recall, what I told you was that I had been a 'relaxed agnostic'—until I was dead for a while. I'm still an agnostic—meaning that I don't have any answers—but I am now a *happy* agnostic, one who feels sure deep in her heart that the world has meaning, is somehow good, and that my being here has purpose, even if I don't know what it is. As for that prayer, a prayer means whatever you make it mean; it's an inner ritual. What this one means to me is a good intention—to live every moment as Eunice would live it, *did* live—serenely, happily, and unworried by any later moment including death. Jake, you said you were still worried about Parkinson."

"Somewhat. As a lawyer, I don't see how he can get his hands on it again. But as a shyster at heart—don't quote me!—who has taken part in many a back-room deal, I know that even the Supreme Court is made up of men, not angels met in judgment. Eunice, there are five honest men on that court. . . and four from whom I would never buy a used car. But of the honest ones, one is senile. We'll see what we shall see."

"So we will, Jake. But don't give Parky a thought. The worst he can do is to strip me of money. Which I wouldn't mind; I've discovered that more money than is needed for current bills is a burden. Jake, I've got enough tucked away that even you don't know about that I'll never miss any meals. Parky can't touch it. As for Parky himself, I've erased him from my universe, and suggest that you do likewise. He's damned by his own I.Q.—leave him to nature."

Salomon grinned. "Okay, I'll try."

"And now' you go do whatever it is you have to do and forget that I tried to inveigle you into a pub crawl." (Twin, you're giving up too easily.) (Who is giving up?)

"Eunice, if you really want to—"

"No, no, Jake! Your heart's not in it. While you are in Washington I may sample the fleshpots of this decadent village but I promise you that I will be closely guarded. Shorty, probably; he frightens people just with his size. Nor will I go alone; Alec told me that he and Mac didn't have much trouble slipp4ng the leash, and Winnie can make a fourth."

"Eunice."

"Yes, dear?'

"I am like hell going to step aside for those two wolves."

"Why, Jake, you sound jealous!"

"No. God save me from falling prey to *that* masochistic vice. But if you want to see the seamy side of this anthill, I'll find out where the action is and take you there. Dress for it, girl—I'm going to shake the moths off my drinkin' clothes. Formal I mean."

“Bare breasts?” (Could you have done better, Pussy Cat?) *(Pick* up the pup, twin. I concede.)

“‘Much too good for the common people.’ Unless you intend to paint heavily, plus a lot of that sparkly glitter stuff.”

“I’ll try to do you proud, dear. But you *will* take a nap? Please.”

“A long nap at once and a dinner tray in my room. H-hour is twentytwo hundred. Be ready or we jump off without you.”

“I’m scared. Want help to get to sleep? Me? Or Winnie? Or both?”

“No, I’ve learned how to do it by myself. Perfectly. Though I admit it’s more fun with two pretty little girls chanting with me. *You* get a nap. I may keep you up all night.”

“Yes, sir.”

“And now, if I may be excused.” Mr. Salomon stood up, bent over her hand and kissed it. “Adios.”

“Come back here and kiss me right!”

He glanced over his shoulder. “Later, my dear. I don’t believe in letting women be notional.” He left.

(Who won that round, Boss?) (He thinks he did, Eunice—and you tell me that’s how it ought to be.) (You’re learning, twin, you’re learning.)

They had been lunching in her lounge. She went into her boudoir, sat down at her stenodesk to phone—picking it; rather than the viewphone because its phone was *not* a viewphone. She used it with hush, and with ear plugs.

Shortly she was answered: “Dr. Garcia’s office.”

“This is Mrs. McIntyre’s secretary. Is the Doctor in and, if so, can he spare a moment to speak to Mrs. McIntyre?”

“Please hold. I will inquire.”

Joan passed the time reciting her meditation prayer, was calm when he answered, “Dr. Garcia speaking.”

“Mrs. McIntyre’s secretary, Doctor—hush and secure?”

“Of course, Eunice.”

“Roberto dear, do you have news for me?”

“‘The Greeks have captured Athens.’”

“Oh! You’re ‘certain?”

“No possible doubt, Eunice. But *don’t* panic. You can have a D. and C. at once with no chance of your privacy being breached. I’ll get Dr. Kystra, the best possible man and utterly trustworthy. I’ll assist, there won’t even be a nurse present.”

“Oh, Roberto, no, no, no! You don’t understand, dear—I’m going to have this baby if it’s the last thing I ever do. You’ve made me terribly happy.” (Now we’ve *really* got something to celebrate, Boss darling. But don’t tell Jake, huh?) (Nobody, just yet. How soon does our belly bulge?) (Not for weeks, if you don’t eat like a pig.) (I want pickles and ice cream this instant.) (So don't.)

The Doctor answered slowly, "I misunderstood the situation. But you seemed quite nervous when I took the specimen."

"Certainly I was, dear; I was scared silly that I might *not* have caught."

"Uh . . . Eunice, I can't help feeling personally responsible: I know you're wealthy—but a marriage contract can exclude any 'fortune hunter' possibility and—well, I'm available."

"Roberto, I think that's the sweetest—and bluntest—proposal a knocked-up broad ever got. Thank you, dear; I do appreciate it. But, as you pointed out, I am wealthy— and I do not care what the neighbors think."

"Eunice, I am not simply accepting my responsibility... I want you to know that I do not regard marrying you as a chore."

"Roberto darling, it is *not* your responsibility. For all you know I've been sweetheart to the regiment." (We've tried, haven't we, twin!) (Don't joggle my elbow, dear; he wants to be noble.) "It's *my* baby. Who helped me is my business."

"Sorry."

"I meant that you mustn't feel *any* responsibility. If you *did* help me, I'm grateful. I'm grateful even if you didn't. Roberto? Instead of trying to make an honest woman out of me—difficult—why don't you remove that implant from Winnie's pretty thigh, then place another sort of implant where it will do the most good. . . then make an honest woman out of *her.* Much easier, she leans that way."

"It's a thought. Truthfully it's a thought I've considered quite a lot lately. But she doesn't want to leave you."

"She need not. Oh, she could stop pretending to be my maid, but this is a big old barn, several spare suites. If you get her pregnant, she and I could chum and giggle about it and have our babies almost together. I'll shut up and stop trying to run your life. Two questions—I had planned to go out on the town tonight, to celebrate the good news I expected to hear from you. Must I stick to soft drinks now?"

"Not at all. Shortly we'll put you on a diet and limit your drinking. But tonight you could get stinking drunk and the only effect would be a hangover. You don't lose a baby that easily. . . as millions of women have learned."

"May not get stinking but I may soak up several glasses of bubbly. Last question— if you're able to sign off, would it suit you to lose a night's sleep helping me celebrate?

Officially it's to celebrate our court victory. That 'the Greeks have captured Athens' will stay secret a while longer."

"Uh—"

"You sound fretted, dear."

"Well, to tell the truth I have a date with Winnie."

"Oh! I expressed myself badly. *I* have a date with Jake; I hope that you and Winnie can make it a four. I wasn't asking you to spend a night with me in that sense—although I certainly would not be averse if it could be managed some other time without hurting our Winsome. The moments you and I have been able to steal have been too short, dear. I think you are a man it would be sweet to be leisurely with."

"I *know* that you are such a woman, Eunice."

"Go along with you, you tell that to all your female patients. Doctor, you are a delightful wolf. Will you wait ten minutes before phoning Winnie? I have a favor I want to ask of her."

"Ten minutes."

"Thank you, Roberto. Off."

Joan switched to the house intercom. "Winnie? Are you busy, dear?"

"Just reading. Be right in."

Joan met her at their connecting door. "Nothing much, hon. I want you to call O'Neil and tell him that I wish to speak to Finchley. In my lounge. Sure, I could phone O'Neil myself, sweet, but I want it to look more formal."

"Sure, Joanie. Do I stay and chaperon?"

"Winsome, you know darn well that all I ever want is fake chaperonage—and sometimes a jigger. This time I don't need a jigger—but I do want to ask Finchley something privately and he will speak more freely if you aren't around. So let him into my lounge, come tell me he has arrived, and don't come back in. Go on into your own room and close the door. Then stay there—you are going to receive a phone call in about eight minutes."

"I am?"

"Yes, and a nice one. You and I and Jake and Dr. Garcia are going nightclubbing tonight."

"Oh!"

"And when we get home just keep him here the rest of the night and I'll see to it that Jake doesn't twig. Or does he know who 'Bob' is?"

"Uh . . . yes, he does. I told him."

"It may still suit dear Doctor to cover up; men are shy. Now skedaddle, dear, and phone O'Neil."

Four minutes later Winnie announced Finchley, and left the lounge. He said, "You sent for me, Miss?"

"Tom Cat, these doors are soundproof; you can stop being formal."

He relaxed a little. "Okay, Pussy Cat."

"So give us a kiss and sit down. That hall door locks itself. Winnie is the only one who could walk in and she won't."

"Pussy Cat, sometimes you make me nervous."

"Oh, piffle." She moved into his arms. "I do have a question to ask you—advice that I want. You can discuss it with O'Neil and get his advice, and any of the guards. But it is *your* advice I want; the rest is coverup."

"Woman, quit talking and shove me some mouth."

Joan did so, a long thorough kiss. Presently he said hoarsely, "You don't have much on under this."

"I don't have *anything* on under it. But don't get me distracted, Thomas Cattus; let me get my question in. I'm going nightclubbing tonight—Jake and me, Winnie and Dr. Garcia. They're going to want to take us to cubes. *I* want to see *rough* places. I figure you know where they are."

"Mmm...Eunice, the up-high places are all in bad turf."

"Well, are they safe once we're inside? And can one get inside safely?"

"Uh. . . there's one, has its own inside parking and as good armor as the doors you have. Look, I'll bring up a list, addresses and so forth, and everybody's suggestions. But I'll star my own."

"Good. Thank you, Tom Cat."

"God, but you feel good. Do we have time? Can I lock that other door?"

"If I'm not worried about Winnie, why should you be? Grab a pillow and put me on the floor."

The party made rendezvous in Joan's lounge. Jake Salomon had elected to dress with ultra old-fashioned formality: maroon tuxedo jacket and trousers, with white turtleneck. The silky knit made a splendid background for his gold ankh necklace. Dr. Garcia was just as formal in modern mode: scarlet tights boldly padded, stretch-fit white mess jacket with jabot of pearls and black lace. Little Winifred wore her new emerald dress with floorlength skirt—no body paint as Joan had advised but blushes caused her skin to change again arid again from extremely fair to rosy glow. On her forehead in caste-mark position was a single emerald.

Jake looked at her. "Little one, what holds that solitaire in place? Insurance?"

She blushed again but answered saucily, "It's on' a corkscrew, sir. Shall I unscrew it and show you?"

"No, I'm afraid you might be telling the truth."

"Never in mixed company, sir. Actually it's the adhesive we use on bandages. Won't come loose even with soap and water but alcohol takes it right off."

"Then be careful not to spill your drinks that high."

"Oh, I don't drink, Counselor; I learned my lesson long ago. I'll be drinking Cuba Libre without the ‘libre’ and screwdrivers with no drive to them.”

“Doctor, let’s leave her at home; she’s just a chaperon.”

“Would you make me stay home, Counselor? Just for not drinking?”

“Just for calling me ‘Counselor’ if you do it again. And for calling me ‘sir’. Winifred, men my age do not care to be reminded of it by pretty little girls. After sundown my name is Jake.”

“Yes, Counselor,” Winifred answered meekly.

Jake sighed. “Doctor, someday I hope to win an argument with a woman.”

“If you do, tell Dr. Rosenthal. Rosy is writing a book on the difference in mental processes between male and female.”

“A dreamer. Eunice, does that thing cover you any better when you stand up? And what is it?”

“It’s a hula skirt, “Jake. And it does.” Joan Eunice was wearing a floorlength skirt, with her torso covered with a myriad glittering stars. They faded out gradually at neck and shoulders. The skirt was ‘thousands of gold nylon threads overlying more thousand~ of deep blue threads.

As she was seated, the mass of threads fell away from her graceful legs. Now she stood up; the threads fell back into a solid curtain. “See, Jake? A plain gold skirt. But when I move”—she walked—”the blue underneath keeps flashing through.”

“Yes, and you, too. Panties?”

“A rude question. The Polynesians never heard of pants until the missionaries corrupted them.”

“That’s not a responsive answer—”

“Wasn’t meant to be.”

“—but as long as you are standing, let’s get rolling.”

“Yes, dear.” Joan Eunice put on a matching opaque yashmak, let Jake lay an evening cloak around her shoulders. Jake hooked on a maroon domino which covered his distinctive aquiline nose—he had been too often on video lately and felt that there was no point on concealing Miss J. S. B. Smith’s face if his own face broke her cover. The Doctor donned a small white domino—having been asked to help keep the party in character—and Winifred wore a filmy green harem veil that was only a symbol, being of the same material as her skirt.

As they entered the lift Joan Eunice said, “Where are we going, Jake?”

“Woman, you aren’t supposed to ask. The Gaslight Club, as a starter.”

“It sounds like fun,” Joan agreed. “A piano player with sleeve garters and such?”

"And derby hat and fake cigar—he can sing and play anything written a hundred years back. Or fake it."

"I want to hear him. But, Jake, since this is to celebrate my uhuru, would you indulge me a little?"

"Probably. Show your openers."

"There's a club I've heard about...and while you were napping, I reserved a table for four for twentytwo thirty.

I'd like to try it."

"Winnie, you haven't been coaching her enough. Eunice, you're not supposed to be capable of making such a decision—less than the dust beneath my chariot wheels and all that. All right, where is this dive? What's its name? We'll try the Gaslight later—there is a waitress there alleged to have the most pinchable bottom in the state."

"Probably foam rubber; Winnie has that distinction. It's the Pompeii-Now, Jake—I have the address in my purse."

Mr. Salomon's eyebrows appeared over his domino.

"We won't need it, Eunice. That box is in an Abandoned Area."

"Does that matter? They have inside parking and assured me that they are armored against anything short of a nuke bomb."

"We would still have to get there and back."

"Oh, I have confidence in Finchley and Shorty. Don't you?" (Twin, that's a crotch chop. Not nice.) (Big sister, do you want to go to the Gaslight and listen to bad piano and watch Jake pinch bottoms? If so, say so.) (I just said it wasn't nice.) (So you phrase the next answer. Jake's a tough case.)

"Joan Eunice, when I take a lady out for the evening, we go in *my* car. Not hers."

"Whatever you say, Jake; I was trying to be helpful. I asked Finchley and he said there was a route in that the—what do they call it?—the Organization—keeps open. No doubt Finchley can tell Rockford."

"I call it the, Mafia. If there is an acceptably safe route, Rockford knows it; he's the most expert driver in town—more experienced than your boys, he drives more."

"Jake, you don't want to go there. So let's go to the Gaslight. I want to try sticking a pin in that rubber fanny."

They went to the Pompeii-Now.

There was no trouble getting inside and the club had a card lounge for its patrons' mobile guards. The maitre d'hôtel led them to a ringside table across from the orchestra, swept a "Reserved" sign from it. "Will this be suitable, Mr. 'Jones'?"

"Yes, thank you," agreed Salomon. Two silver-bucket stands with champagne appeared as they sat down; the maître d'hôtel took a magnum from the sommelier and displayed it to Salomon, who said, "That's a poor year for Pol Roger. No Dom Perignon ninety-five?"

"At once, sir." The sommelier hurried away. The maître d'hôtel asked, "Is there anything else not to your liking, sir?"

Joan Eunice leaned toward Jake. "Please tell him that I don't like this chair. It was designed by Torquemada."

The floor manager looked upset. "I'm sorry Madame feels that way about our chairs. They were supplied by the number-one hotel and restaurant supply company."

"As may be," Joan answered, "but if you think I'm going to spend an evening perched on a shooting stick and pretend that it's fun, you are mistaken. Jake, we should have gone to the Gaslight."

"Perhaps, but we're here now. Just a moment, dear. Maître d'hôtel —"

"Yes, sir."

"You have an office here, no doubt."

"Why, yes, sir."

"With a desk and a chair. Probably a padded swivel chair with arms and an adjustable back. A man who is on his feet as much as you are wants a comfortable chair when he does sit down."

"I do have such a chair, sir, and—while it's hardly suitable for a dining room—Madame is welcome to it if it pleases her. I'll send for it."

"One moment. In a club with so many activities—you have a gaming room, do you not, and other things?—I feel sure that it is possible to round up four such chairs."

"Uh, I'll try, sir. Although our other patrons might find it odd *if* we supply one table with special chairs."

Mr. Salomon looked around. The place was less than half filled. "Oh, I imagine that if you explained to anyone who asked just how expensive such special service is, he might not want it. Or you might find it possible to accommodate him, too, if he is willing to pay. I think those guards pretending to be waiters standing around the edge of the room can handle anyone who is unreasonable."

"All our staff are guards, sir—in a crunch. Very well, sir, if you will be patient a few moments your party will all have desk chairs." Quickly he distributed wine cards and drug lists, and left.

Roberto and Winifred were already dancing. Joan leaned toward Jake again and said, "Jake, will you buy this place for me?"

"Does it attract you that much?"

"No, I want to make a bonfire out of these chairs. I had forgotten what indignities nightclubs expect their customers to put up with."

"You're spoiled."

"I intend to be. Jake, much of what is wrong with this world would be righted if the customer screamed every time he feels cheated. But

I'm not out to reform the world tonight; I simply want a comfortable chair. The cover charge—I checked it when I made reservations for 'Mr. Jones'—is high enough to *buy* a decent chair. What are these other activities'? A whorehouse upstairs, maybe?"

"Eunice, see those three tables of beautiful people over in the corner? Attractive men and women, all young, all smiles, no frowns, and each with a champagne glass that may hold ginger ale? It's high odds that, if the Greeks had a word for it, they have a price for it."

"Why, one of those girls doesn't look more than twelve."

"She may not be that old. Who's going to check on her age, in an Abandoned Area? I thought you weren't going to reform the world tonight, my dear?"

"I'm not. If the government can't police these areas, I certainly cannot. But I hate to see children exploited." (Twin, that pretty child may have an I.Q. of eighty and no other possible profession—she may think she's lucky. Proud of her job. And seeing where she is, she's either got an implant or cut tubes—not like that cheerleader I told you about.) (Eunice, doesn't it bother you?) (Some, chum, but only some. People usually are what they are because it suits them—I learned that from Joe. The girl's mother may be one of the other pretties there—two gets you seven. Want to rescue them both?) (Oh, shut up, darling; let's have fun.) (I'm willing.)

A waitress came past, refilled their glasses. She was pretty and was dressed in sandals, cosmetics, and careful depilation. She smiled and moved on. "Jake, is she one?"

"Couldn't say, I don't know the house rules. Shocked, Eunice? I told you not to come here."

"Shocked at *skin?* Jake dear, you forget that *my* generation thinks nothing of nudity."

"Hrrmph! One more remark like that and I'll call you 'Johann' the rest of the evening."

"I'll be good. Mostly. Darling, our waitress suddenly reminded me of the Chesterfield Club. Kansas City in the palmiest days of the Pendergast machine. Nineteen-thirty-four."

"In nineteen-thirty-four I was barely out of diapers, Eunice. It was something like this?"

"Not as much fake swank and lower prices even allowing for inflation. But otherwise much the same. It specialized in complete nudity even at high noon at the 'Businessman's Lunch.' Just up the street from the Federal Reserve Bank. Jake, she's headed back. Find out for me."

"How? I don't even have a hat to tip."

"Simply ask her, dear, ask her if she's available. Slip her ten dollars as you do; she won't be insulted."

The waitress came back, smiled, and said, “Have you looked over our drug list? All illegal drugs at the controlled international prices plus twenty-five percent. Guaranteed pure, we obtain them from government sources.”

“Not for me, thank you, dear. Eunice? Want a trip?”

“Me? I don’t even take aspirin. But I want a steady supply of champagne. And I could use a sandwich, or something. Chiquita, is there a kitchen?”

“There is always a gourmet chef on duty, Ma’am; it says so at the bottom of your wine card. Anything from snacks to Maine lobster. Would you like to see a menu?”

“No, thank you. Maybe a big platter of little sandwiches for all of us, Jake. And don’t forget that other matter.”

Joan Eunice saw Jake get out a ten-dollar bill. It disappeared and Joan decided that the girl must have folded it with one hand and palmed it. Jake spoke to her in a voice lower than the music.

She smiled and answered clearly. “No, sir, I’m not even allowed to dance with customers—and I’m not in that branch of the business; I’m married. But I can arrange it.” The waitress glanced toward the ‘beautiful people’ and looked back. “For you sir? Or for both of you?”

“No,” Jake answered. “It was just curiosity.”

“My curiosity,” Joan put in. “I’m sorry, dear; ‘I shouldn’t have made him ask you.”

“Ma’am, a high roller can be as inquisitive as be wishes. Baby needs shoes.” She smiled. “Twins. Boys. Two years old. I was licensed for two and now I’m arguing with the Board as to whether twins use up my license. Since twins are okay under a one-baby license. I’d like to have a little girl, too.”

“Jake, be a high roller again; I want to ask” —Joan leaned forward, read the girl’s name written or tattooed above her left breast —”Marie another question.”

“He’s paid for more than one question, really, Ma’am.” But a second note disappeared as quickly as the first.

“Marie, do you live inside the turf? With kids?”

“Oh, goodness, no! My husband would never permit that. An armed bus picks me up after supper and delivers me home around breakfast time. Most of us use it. Except—” She indicated the exception by inclining her head toward the corner. “My husband is on night shift at Timken—we match up pretty well.”

“Who takes care of your twins at night? Nursery?”

“Oh, no, Mama lives with us. No huhu. Actually, Ma’am, this is a good job. I’ve been a waitress where I had to wear uniforms—and the work was hard and the tips were small. Here the work is easy and the tips are usually high. Oh, sometimes a customer gets drunk and gropy, but I don't bruise all that easily—and drunks are often the highest tippers. Never any trouble; the guards watch everything." She smiled at Joan. "You could get a job here in two seconds, Ma'am. All it takes is a friendly manner and a good figure—and you've got both."

"Thank you, Marie."

"I'd better go, the maitre d' is bringing a party to another of my tables. 'Scuse, please—sandwiches will be right in." The girl left. Joan said, "Jake, would you say that she has found her niche?"

"Seems so. As long as she keeps her figure and saves her money. She doesn't pile up Social Security points here; this doesn't count as a job under the rules, it's off the map."

"She doesn't pay income tax?"

"Oh, certainly! The fact that her income doesn't exist, legally, means nothing to revenooers. Though she may hold out a good portion—I would. My dear, do you want to try this music?"

"Jake, I thought you didn't dance?"

"I don't dance this modern stuff. But I can try, if you want to. I wonder if that combo can play Rock? This new stuff has so little beat I don't see why they call it dance music."

Joan chuckled. "Fm so much older that I despised Rock instead of lilting it. Swing was my' era, Jake, and on back clear to the Bunny Hug—though I didn't learn to dance until the foxtrot crowded out the rest."

"I can foxtrot, I'm not all that young. But I doubt if that bunch of disappointed harpists can play one. Eunice, can you tango?"

"Try me, just try me! Learned it when Irene Castle was alive—and with this new body I'm eight times as good as I was then. Been teaching it to Winnie. Do you have a firm lead?"

"Firm enough for you, wench. I'm going to flag the maitre d'—it's possible that they can play one. It's the only tempo that has stayed evergreen through all the passing fads."

"Of course, Jake. Because the tango, danced correctly, is so sexy that you ought to get married afterwards. See if they can play one."

But they were interrupted by busboys arriving with four swivel chairs and Joan decided that it would be polite to sit in hers a while, since she had made a fuss over chairs. Then sandwiches arrived and more champagne and she found she wanted both—bubbly to make her tiddly and sandwiches to soak it up so that she wouldn't get tiddly too fast. Roberto and Winifred, returned to the table; Winnie said, "Oh, food! Goodbye, waistline! Bob, will you love me when I'm fat?"

"Who knows? Let's operate and find out," he answered, reaching for a sandwich with one hand and champagne with the other.

"Winsome, pour that Coke into the wine bucket and have champagne."

“Joanie, you know I mustn’t. My Nemesis.”

“But this time there’s food to go with it. . . and not the other hazards.”

Winifred blushed. “I’ll get drunk. I’ll get silly.”

“Roberto, will you promise this poor child that, if she passes out, you’ll get her home safely?” (What’s safe about *home,* twin? You ought to hang out a red light.) (Nonsense, Eunice! Our man won’t marry us —so what do you want me to *do?* I don’t give myself to men I don’t respect—and I’ve got *years* to make up for. I’m nearly ninety-five years old—and knocked up—and healthy—and *can’t* hurt anyone physically and *won’t* hurt anyone socially . . . a man’s pride or anything else. Why shouldn’t I be ‘No-Pants’ Smith’?)’ (‘Methinks the lady doth protest too much.’ Boss, your Bible-Belt background is chafing you again. Certainly sex is no sin—but *you* don’t really believe it.) (I do so! Always have. I’ve been almost enough of a busybody to keep *you* happy. Why do you needle me?) (Beloved Boss. You’ve shown amazing talent for juggling eggs and I’ve enjoyed every second of it and I hope you have, too.) (You *know* I have. So much I’m scared of losing my judgment. My caution, rather, Eunice, I never *dreamed* how much *more* it is, to be a woman. It’s our *whole* body.)

The cabaret was crowded now; the lights changed and the floor show began—two comics. Joan listened, tried to look amused, and tried to amuse herself by trying to remember how long ago she had heard each “new” gag. She could see only one improvement in the routines: The “dirty” story of her (his) youth had disappeared. Being based on shock of breaking taboo, the dirty story had bled to death when there were no more taboos. There was sex humor—the comics used plenty of it; sex remained forever the most comical thing on a weary globe. But it was harder to work out real comedy than it once had been simply to shock. But she applauded the comics as they left. There was a blackout and the dance floor changed instantly into a farmyard scene—she found herself more intrigued by trying to guess the mechanics of that “magic” than she had been by the comics.

The farmyard set was used for one of the oldest (possibly the oldest, she decided) of all sex stories, and it was done in stylized, very old symbols in both costume and props: the Farmer, the Farmer’s Daughter, and the City Slicker with his Hundred-Dollar Bills. It was pantomime, with theme music from the orchestra.

She whispered to Jake, “If she’s a farm girl, I’m Adolf Hitler.”

“What do you know about farms, my dear?”

“Plenty, for a city boy. On one nearly every summer when I was a kid. Followed the harvest in high school and college—good money, plus occasionally a farm girl. Always was a peasant at heart—wanted the biggest manure pile in the valley...and got it, save that it was cash.

Jake? Couldn't we buy an abandoned farm? A simple little place, with drawbridge and moat, and our own plant and water supply? Get out of this dying city?"

"If you say to, dear. Getting bored with this? Want to move on?"

"Not during their act, dear." (I'm curious to see how he fakes it.) (Me, too!)

To her surprise the entertainers did not fake it. Money caused the "farm girl" to go from offended, to coy, to consent, to active cooperation, with a haystack as locale of consummation—and actor and actress made certain that the audience could see that it was in no way faked. Winifred blushed to her waist and never took her eyes off it.

The ending had a variation that Joan-Johann conceded was new to her-him. As motions grew vigorous and the orchestra kept time to loud squeals and grunts, the "Farmer" showed up (as. expected) with pitchfork. But the hay caught fire, apparently from the action, and the "Farmer" dropped his pitchfork and grabbed a seltzer bottle conveniently at hand on an empty table and doused his "Daughter" and the "City Slicker" in putting out the fire—aiming first at the apparent source of the fire.

Joan decided that it rated applause. Winifred hesitantly joined in, then clapped hard when Roberto did. Jake joined in but was interrupted. "What is it, Rockford?"

Joan turned her head, surprised. Jake's driver-guard was looking very upset. "Mr. Salomon—I've *got* to speak with you."

"You are. Speak up."

"Uh—" Rockford tried to make it just to his employer but Joan watched his lips. "That crazy fool Charlie has gone got hisself killed."

"Oh, for God's sake! Where? How?"

"Just now. In the guards' lounge. Not drunk. This is a tight joint, they won't let a guard drink. We were playing stud and Charlie kept needling this Polack. No excuse and I told him to knock it off. But he didn't. Polack got sore, but tried to avoid a showdown. Charlie kept crowding him and—oh, what's the use; the Polack broke his neck. Before I could get around to that side of the table." Rockford said, "Boss? Seeing where we are, I could dump him. Best, maybe?"

"Of course not. I have to report it, the body has to go to the morgue. Damn it, Rocky, I'm his parole officer."

"Yeah, but maybe you don't know about it? He skipped. Dropped out."

"Shut up." Salomon turned to Joan. "My dear, I'm terribly sorry."

"Jake, I should never have asked you to take me into an A.A."

"That has nothing to do with it. Charlie was a congenital killer. Rockford, get the maitre d'. No, take me to the manager. Friends—

Bob, Winnie—stay here please, I've got to take tare of something."

Garcia said, "I caught most of it. Take me with you, Jake. I can certify death—and it's smart to get that done at once."

"Uh. . . who's going to stay with the girls?"

Joan put her hand on Jake's arm. "Jake, Winnie and I are safe—lots of guards. I think we'll go to the powder room. I need to, Winnie probably does, too. Coming, Winnie?"

The party was over but it was two hours before they were home; too many details—tedious ones rather than legal complications, as Dr. Garcia certified death, and he, the manager, Mr. Salomon, and Rockford endorsed the certificate that death had occurred in an Abandoned Area at the hands of a party or parties unknown—in fact unknown, as the cardroom was empty save for the body.

There was no point in inquiries; it had happened in an Abandoned Area and was not a crime de facto nor in any practical sense de jure. Nor did anyone weep; even Rockford did not like his driving partner, he simply respected him as a fast gun in a crunch. To Garcia Jake groused that he should have known better than to try to rehabilitate a congenital—and got no sympathy, as Garcia believed that such creatures should be exterminated as soon as identified.

Both tried to keep the grisly aspects from the ladies.

Winifred and Joan Eunice spent an hour alone at the table, fiddling with champagne and trying to look amused, while the men tidied up the mess. But Joan helped on one point: The body had to be sent to the morgue and Jake was unwilling to leave it to the management, he was certain they would dump it. Nor was he willing to send Rockford without someone to ride shotgun. So a phone was brought to Joan and she called O'Neil—was answered instantly and she wondered if her Chief ever slept.

Finchley and Shorty were on duty; O'Neil said they would be rolling at once. But Joan ordered him to 'have them first pick up Fred, to ride shotgun for Rockford. As an afterthought she told O'Neil to have the night pantryman place a cold supper and a case of chilled champagne in her lounge—the "night on the town" had turned out a dismal flop; she was darned if she would let it stay that way. Charlie was better dead and his death did not rate one crocodile tear. Ten thousand human beings had died around the globe in the hour since his death—why weep over a worthless one? (Eunice, what happens to a kark like Charlie after he's dead?) (I'm no authority, Boss. Maybe the bad ones die dead—like a potter destroying damaged work. Ask the Front Office.)

(I don't know its wavelength, sweetheart. Maybe you can tell me this—How can I get this party rolling again?

Look at Winnie—drinking champagne but not smiling.)

(Boss darling, I recommend more champagne and Money Hums, mixed fifty-fifty.) (Eunice, I thought you didn't approve of liquor?) (Never said that, Boss. I didn't drink because I didn't need it. But nothing is good or bad in itself, just in its effects. Try it. Can't hurt, might help.) So when at last the four reached the big, ugly fortress, Eunice insisted that they go to her lounge for a nightcap and a snack. "Who knows? We might feel like dancing yet. Roberto, has Winnie introduced you to our relaxing routine? The Money Hum?"

"I've tried to teach it to him, Joanie. But Bob is a dreadful cynic."

"Jake, let's uncynic Robert. I've thought of a new way to recite it. Sit in a circle and pass around a loving cup. Three recite while one drinks, and pass the cup to the next one."

"I vote Yea," Jake answered. "Doctor, if you want to be cynical, go do so by yourself—you can have the guest bed in my suite. We'll form a triangle instead."

"I had better stay to keep the party orderly."

"Very well, sir. But one unseemly word while we are at our devotions—and you will be severely punished."

"How?"

Joan Eunice answered, "By having to down the loving cup unassisted, of course, and then start it again."

Joan Eunice woke up feeling rested but very thirsty. She glanced at the ceiling, saw that it was after ten and thought idly of turning on floor lights as a gentle preliminary to stronger light.

Then she realized that she was not alone. Should she wake Jake—gently—for a pleasant good morning? Or slide out softly and sneak back to her room and hope not to be seen? Or did it matter? Was she already a topic of gossip in her own house?

Better not wake Jake in any case; the poor darling planned to go to Washington tonight. She started to slide out of bed.

The man by her reached out and pulled her to him. She at once gave in, went soft and boneless. "Didn't know you were awake, dear. I meant to—*Roberto!"*

"You were expecting Santa Claus?"

"How did you get here?"

"You invited me."

"I did? Well, yes, I did. I mean I told you that you were welcome in my bed, quite a while back. But where's Jake? Did he go to sleep on us? And what about Winnie?" She thumbed on the floor lights, saw that she was, as she was beginning to suspect, in her own bed.

"Winnie's next door. In her bed. With Jake."

"Good God, Roberto—I've finally spent a night with you. And don't remember it." *(I* do! *Whee.')* (Well, *I* don't, Eunice, Not in detail. Confused.) (You're a drunken little bitch, Boss. But we had fun.) (I'm sure we did. I wish I remembered it.)

Dr. Garcia sighed. “Ah, well. I should not complain.”

“It’s coming back to me,” she lied. “Just disoriented as I woke up. You were especially sweet to me.”

“You didn’t think so when I wouldn’t let you go to bed with your makeup on.”

Joan allowed enough general illumination to come on to let her see herself, noted that the star sequins were gone as well as body paint they had adhered to. She had not scrubbed it off herself; ergo, someone else had. Not Winnie—Winnie had been potted as a palm. “That’s part of what I meant by ‘especially sweet’, Roberto. Not many men would take such good care of a drunken wench. Was I hard to handle?”

“Not really. But you were pretty tight.”

“Too tight?”

“Not too tight. Just pleasantly so.”

“I’m not sure I understand that and don’t think I want to. Roberto darling, even if I did fuss over it, thank you for washing me. Only a slut leaves paint on when she goes to bed. I’m a tart but I don’t want to be a slut.” *(Hi,* slut!) “And thank you most of all for a wonderfully sweet night. I hope I wasn’t too drunk to make it sweet for you, too.”

“Eunice, you would be more woman passed out cold than most can manage at their best.”

“I’m glad you said ‘would be’ rather than ‘are.’ But, Roberto, I’m uneasy. Not about you and me, dear, but about Winnie. Does this affect that thought you’ve been considering? About Winnie, I mean.”

“On the contrary, Eunice, it was Winnie’s idea—her notion of how to celebrate our engagement—”

“Wait a moment! Am I engaged to *you?”*

“Eh? No, no—I’m engaged to Winnie.”

“Oh. Roberto, I would happily marry you, you would make a numero-uno espöso. But I don’t need one, and Winnie does. Did I know this last night? About you two?”

“You seemed to. You said that was why you wouldn’t wait to scrub off your sparklers—you wore right-now about it.”

“Roz. I remember being terribly eager but I seem to have drawn a blank as to why. Roberto? Did I spill the news about the ‘Greeks capturing Athens’?”

“I don’t think so, Eunice. Not when I was around. I’m fairly sure Winnie doesn’t know it.”

“I’ll tell Winnie; it’s Jake I want to keep in the dark.”

“Eunice? Did Jake do it? Capture Athens and the Parthenon as well.”

“Watch that Hippocratic Oath, dear. Parthenogenesis might be the answer. Let me keep this up in the air a while longer. You say this was *Winnie's* idea? After you told her you would marry her?"

"Yes."

"How did she ever get up her courage to propose? I've been urging her to but she's so damn' shy. Dutch courage?"

"Yes. But my own. Sure, she's shy—but under her blushes Winnie is as rugged as a nurse has to be. She said All right—if I would let her tie it down tight that she is no angel. I told her I had no use for angels, in bed or out. She said she hoped I meant that, because she was about to ask Jake to sleep with her."

"Roberto, I missed a lot of this. How much champagne did I drink?"

"Who counts? Jake kept opening bottles and we kept passing the loving cup around. While reciting that amphigory. You got your share. We all did."

"Uh. . . am I engaged to Jake?"

"Not that I know of."

"That's good. Because when Jake finds out I'm knocked up, he's going to be noble. Just as you were, dear, but Jake will be much more difficult. And I've discovered that I don't need a husband; I just want loving friends. You. Jake. Winnie. Some others. People who'll love me as I am, clay feet and all—not because of a contract. Did Jake make any fuss over the sleeping arrangements?"

"Uh, truthfully I don't think anyone was displeased with Winnie's suggestion. Jake picked Winnie up under one arm and announced that he was reenacting the Rape of the Sabines."

"The faithless old darling."

"So I picked you up and carried you in and scrubbed you and you squealed and protested and told me that was a hell of a way to run a rape."

"Mmm, I think I was right. 'In vino veritas."

"So now I'm going to put a pillow over your fac4 so that you can't squeal and protest."

"You won't need a pillow; just put your hand over my mouth if I'm noisy. But all these doors are soundproof."

"You think I don't know it? When I lived here for most of a year? Miss Johann Smith, I know more about your house than you do."

"Oh, you bastard! Call me 'Eunice.' Or put a pillow over my face so I can't hear you, Roberto—I'm so *happy* that you're going to marry our Winsome."

"So am I, Eunice. Now shut up."

"Yes, sir." *(Unh!* Eunice, nobody ever tells me anything.) (Shut up, twin, and pay attention to what you're doing!)

Joan Eunice reached for the intercom by her bed, tapped it for

Cunningham, then reached for Roberto's hand.

"Yes, Miss?"

"Cunningham, I want breakfast for four, served in my lounge."

"Yes, Miss."

"Placed in my lounge, rather, with warmers and coolers. No service. I have no idea when Mr. Salomon and Dr. Garcia will wake up, but I want to be hostessish and ready to serve them myself when they do. But Winnie and I want to eat." She winked at the doctor, squeezed his hand.

"Certainly, Miss."

"They need their sleep. Tell me, Cunningham—you've known me a long time. Have you ever pinned one on?"

"Pardon me, Miss?"

"Go on a luau, get so fried you can't find the floor with both feet. Drunk and disorderly."

"I have sometimes—in the past—come down with that ailment."

"Then you know what a delicate condition we are in—Winnie and myself at least and I have reason to believe that the gentlemen will not be in much better shape. But there was excellent excuse."

"I heard about the trouble, Miss. Too bad."

"Cunningham, I did *not* mean Charlie. This may be callous of me. . . but he was a bully who picked a fight, and lost."

"Oh. If I may say so, Miss, he was not liked belowstairs. Uh, we really did not like having him in the house."

"I know. I would have put a stop to it long ago except that he worked for Mr. Salomon, not me—and I owe Mr. Salomon a great deal. No, the 'excellent excuse' was something else. We were celebrating an engagement."

Cunningham said cautiously, "Should I offer congratulations, Miss?"

"Yes, but not to me. Dr. Garcia is marrying Winifred."

"Oh! That's fine, Miss. But we'll miss her."

"I am hoping that we will not have to miss her. This is a big house, Cunningham, much too large for one person. Or for two whenever Mr. Salomon can be persuaded to honor us. Not often enough, that is to say—but the Counselor is afraid that he will cause gossip about me."

"Uh, may I speak plainly, Miss?'

"Any time you don't, Cunningham, I shall be offended."

"Mr. Salomon is a fine gentleman. But if he worries about that—well, it's silly, that's all I can say. The staff do *not* gossip about his presence. They respect him."

"Perhaps you can tell him, he won't listen to me. But today I'm simply concerned that he sleep as late as possible. He must go to Washington tonight; you know. When you bring up breakfast, don't go past his door; go around the other way. You can't disturb me or Winnie; we are awake. And be certain that Hubert doesn't come fussing around until Mr. Salomon sends for him."

"He won't, Miss; he never does."

"He used to, sometimes, when he was tending me—be a touch noisy when he thought I should be up. So keep him off this floor. Keep everyone off this floor until I call you—that includes all cleaning, everything. Except, of course, that I want you to bring up breakfast—with whatever help you need—promptly."

"Yes, Miss. Perhaps coffee and juice at once?"

"No, we don't want to be disturbed twice; my ears might fall off. You'll find evidence of the debacle in my lounge—a case lot of empty magnums. Remove them—quietly—for Heaven's sake don't bang one against another; I can hear an ant stomp this morning. Pencil ready? We need a simple, nourishing breakfast. At least four cups of coffee each, double orders of orange juice, half grapefruits, either pinks or the big Arizonas, scrambled eggs, poached eggs, some link sausages and breakfast steaks. Better include cold cuts and sliced cheeses. Oh, toast and muffins and jam and such. Flatbread. And a big pitcher of ice-cold milk for cereal, I think this is a cereal morning. Some decent, quiet, well brought-up cereal that doesn't snap, crackle, or pop. That's all. Unless you know a remedy for a hangover."

"Well, Miss, when I was tending Mr. Armbrust before I went to work for you, I used to mix something that he thought well of."

"Yes?"

"Silver fizz, Miss, using vodka rather than gin."

"Cunningham, you're a genius. One each, plus largish dividends, in thermos glasses. How soon will breakfast be ready?"

"Can't be sooner than twenty minutes, Miss, even though Della has started the sausages. But I could still fetch up coffee and juice."

"One trip only. Then steal quietly away on stocking feet. This is a hospital zone, Cunningham. Winnie and I need at least twenty minutes to put our eyeballs back in, they're bleeding. I'll expect you not sooner than twenty minutes, not later than twenty-five. Off."

She put down the bedside intercom, said, "Doctor, did I handle that?"

"Eunice, sometimes I think you're not truthful."

"And sometime I'm going to be a hermit and not have to dodge servants. Where are your clothes, Roberto? In the lounge?"

"Yes. I had better get into them."

"Better think again. We've got twenty minutes of privacy, we'll use it."

"Oh, Eunice!"

"Courage, comrade; I'm not a black widow spider. We'll use it to gather up *all* clothes in the lounge, toss feminine items in here, fast—then take your clothes and Jake's down to his suite—where I'll grab a robe and pajamas and slippers for Jake, and a second set of his for you. If you're a sissy, you'll stay there and put them on. If you're not, you'll stay in skin and come back here with me, and dress when you feel like it. Then I'll switch on a light that tells Winnie I'm awake-better than phoning the love bugs, they might be love-bugging, and even a bug hates to be disturbed at such times. Come on, you bony, hairy, wonderful man. Sixteen minutes—we can do it in twelve, I'll bet."

"Pussy Cat, sometimes you make me nervous."

"Oh, piffle, I own this house. Although I may sell it and buy a nudist resort in California—then run it just for me and my friends. Roberto, I *like* skin—when it's the wonderful skin I have now. It's meant to be seen and *touched—not* hidden away in clothes. Did you like our waitress last night?"

"A healthy young woman, apparently."

"Oh, piffle twice. I'll bet you were thinking about her when you took me to bed last night. I know men, darling—I *was* one, much longer than you've been alive.

Fifteen minutes. Let's move."

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Dabrowski handed her out and Fred locked the car. They escorted her to and into the lift. Joan Eunice looked around. "This must be where it happened."

Her driver said, "Eunice, I wish you would change your mind."

"Anton, Tom and Hugo should have driven me today, but I was afraid the poor dears would get upset when they saw the inside of this lift. I thought you and Fred could stand it. Fred, are you nervous?"

"You know damn well I am, Eunice."

"Over what? *She* entered this lift *alone.* I've got the two with me."

"Well. . . you're a stubborn one. I don't know what Ski is going to do but *I* am going to wait outside the door until you come out." (Eunice, what do you do with stubborn men?) (It's hard, twin, especially when they love you. You had best use female jujitsu—let them have their own way until it turns out it's your way.) (I'll try.)

"Fred, Eunice lived here for years. Utterly safe, except for one mistake. I have the radio link and I promise you both, solemnly, that I won't stir outside Joe's door until I *know* you're waiting for me."

"We'll be waiting, all right—all the time. Right, Ski?"

"Right! Eunice, you don't even know Joe Branca still lives here."

"But I do. It's just that he didn't pay his phone bill, so they cut him off. Joe's still there, or was at sixteen o'clock yesterday. Look, how does this sound? First, you know that Joe wouldn't hurt me, don't you? Anton?"

"Oh, sure. Joe might not want to see you—but Joe Branca would put a fly outdoors before he would swat it."

"Then I'm safe as long as I'm inside with Joe. But you're right, he may not want to see me. He may not let me in. Or I may be inside only minutes. So wait an hour, then go home. I'll call you when I want you to take me home."

"Two hours?" suggested Fred.

"All right, two hours. But if I don't come home tonight, you are *not* to come back and buzz Joe's door. You can come back tomorrow at noon and wait an hour, or even two, if that will make you feel better. And again the next day. But I'll stay in Joe Branca's studio a full week if it takes that to make his mind easy. Or a month, damn it! Or anything. Boys, I've *got* to do this; don't make it harder."

Anton said glumly, "All right. We'll do it your way."

"Am I 'Eunice' now? Or 'Joan Eunice'?"

He grudged a smile. "You're Eunice. She would do it."

"That's why *I* must. Look, darlings"—she put an arm around each of them—last night was wonderful, and I'll find a way to manage it again. Perhaps next time Mr. Salomon is away—you know he fusses over me like a mother hen. But you two do also—and you must *not* except when you're guarding me. Right now I *must* try to find a way to soothe Joe's soul. But I'll be your playmate another day. Be darlings and kiss me; the lift is about to stop."

They did so; she hooked up her veil. They left the lift and headed toward the Branca studio—Joan found she knew the way, as long as she didn't stop to think.

She stopped at the door. "She always kissed you goodbye? Here, with Joe watching?"

"Yes."

"If he lets me in, kiss *me* goodbye the same way. Just don't stretch it out; he might close the door. Oh, I'm shaky!" (Steady down, Boss. Om Mani Padme Hum. Don't use the button; try our voice on the lock. 'Open up!' Like that.)

"Open up!" Joan said. She unhooked her veil, faced the door.

The lock started clicking but the door remained closed. A transparency flashed on the wall: PLEASE WAIT. Joan stood in front of the door peep, wondered if Joe was scanning her. (Eunice, will he let us in?) (I don't know, Boss. You shouldn't have come. But you wouldn't listen to Jake . . . nor to *me.)* (But I *am* here. Don't scold me —*help* me.) (I'll try, Boss. But I don't know.)

Through the door, not as soundproof as her own doors, Joan heard a high voice: “Joe! *Joe!”* (Who’s *that!)* (Could be anybody, Joe has lots of friends.)

The door opened, she saw Joe Branca standing in it. He was dressed in much-worn shorts which had been used repeatedly for wiping paint brushes. His face showed nothing. A girl, a wrapper pulled sketchily around her, looked out from behind him. “See? It’s *her!”*

“Gigi—get back. Hello, Ski. Hi, Fred.”

“Hi, Joe.”

Joan tried to keep her voice steady. "Joe, may I come in?"

He finally looked at her. "You want to, sure. Come in, Ski. Fred." Joe stood aside.

Dabrowski answered for them. "Uh, not this time, Joe. Thanks."

"Roz. Other time, any. Welcome. Too, Fred."

"Thanks, Joe. See you." The guards turned to leave as Joan started to enter—she checked herself, remembering that she must do something. "Boys!"

Fred kissed her quickly, nervously. Dabrowski did not kiss her; instead he held his mouth to hers and said almost soundlessly, "Eunice, you be good to him. Or, damn, I'll spank you."

"Yes, Anton. Let me go." Quickly she turned, went inside past Joe, waited. Slowly he refastened the hand bolts, taking an unnecessarily long time. He turned and glanced at her, glanced away. "Sit?"

"Thank you, Joe." She looked around at the studio clutter, saw two straight chairs at a small table. They seemed to be the only chairs; she went to one of them, waited for him to remove her cloak—realized that he was not going to do so, then took it off and dropped it, sat down.

He frowned at her, seemed uncertain, then said, "Coffee? Gigi! Java f' Miss Smith."

The girl had been watching from the far end of the room. She tightened her wrapper and went silently to a kitchen unit beyond the table, poured a cup of coffee, and prepared to flash it. Joe Branca went back to an easel near the middle of the room, started making tiny strokes on it; Joan saw that it was an almost finished painting of the young woman addressed as "Gigi." (That's a cheat pie, Boss.) (A what?) (Project a photo onto sensitized canvas, then paint over it. Joe does them if someone wants cheesecake, or a cheap portrait, or a pet's picture——but claims they aren't art.)

(Can't see why, Eunice; it's still an original oil painting.) (I can't, either—but it matters to an artist. Boss, this place is filthy, I'm ashamed, of it. That bitch Gigi.) (She lives here, you think?) (I don't know, Boss. Could be Joe's sloppy housekeeping. He likes things clean—but won't stop to do it. Only two things interest Joe. Painting...and tail.) (Well, he has both, looks like. I see he's kept your Gadabout.) (I'll bet it won't run by now. Joe can't drive.)

Gigi fetched coffee, placed it on the table. "Sugar? Isn't any cream." She leaned closer, added in a fierce whisper, "You don't belong here!"

Joan answered quietly, "Black is fine. Thank you, Gigi."

"Gigi!"

"Yes, Joe?"

"Throne."

The girl turned and faced him. "In front of *her?*"

"Now. Need you."

Slowly Gigi obeyed, untying her wrapper as she moved, dropped it as she stepped up onto the throne, fell into pose. Joan did not look, understanding her reluctance—not modesty but unwillingness to be naked to an enemy. (But I'm *not* her enemy, Eunice.) (Told you this would be rhino, Boss.)

Joan tried the coffee, found it too hot—and too bitter, after the delicately fragrant—and expensive—high-altitude brew Della prepared. But she resolved to drink it, once it had cooled.

She wondered if Joe recognized what she was wearing. La Boutique had reconstructed, at great expense, a costume Eunice Branca had once worn, one in last year's "Half & Half" style, scarlet and jet, with a tiny ruffle skirt joining a left-leg tight to a rightside half sweater. Joan had hired the most expensive body-paint artist in the city and had rigidly controlled him in reconstructing the design Eunice Branca had worn with it, as nearly as memory and her inner voice could manage.

(Eunice, was Joe too upset to notice how we dressed?) (Boss, Joe sees *everything.)* (Then he's gone back to painting *not* to notice us.) (Maybe. But Joe wouldn't stop painting for an H-bomb. That he let us in at all is a blue moon—in the middle of a painting.)

(How long will he paint? All night?) (Not likely. He does that only for a real inspiration. This one's easy.) It did not look easy to Joan. She could see that the artist was working from an exact cartoon, one that looked like a dim photograph of Gigi as she was posed—but he was working also from his model, yet he was not following either model or photograph. He was enhancing, exaggerating, simplifying, making flesh tones warmer, turning flat canvas almost into stereo, realistic as life, warmer than life, sensuous and appealing.

Perhaps it was not "art"—but it was more than a photograph. It reminded Joan of a long-dead artist Johann had liked. What was his name?—used to paint Tahitian girls on black velvet. Leeteg? (Eunice, what do we do now? Walk out? Joe doesn't seem to care either way.) (Boss, Joe cares *dreadfully.* See that tic on his neck?) (Then what do I *do?)*

(Boss, all I can tell you is what I would do.) (Wasn't that what I said?) (Not quite. Any time I came home and found Joe working from another model, I kept quiet and let him work. First I would get out of my working clothes, then shower and get off every speck of paint and makeup. Then tidy things—just tidy, heavy cleaning had to wait for weekends. Then I would get things ready to feed them, because Joe and his model were going to be hungry once they stopped. They always did stop; Joe won't overwork a model. Oh, he sometimes painted me all night but he knew I would ask to stop if I got shaky.).

(Are you telling me to strip down? Won't that upset him still more?) (Boss, I'm not telling you to do *anything.* This visit wasn't *my* idea. But he's seen our body thousands of times—and you ought to know by now that nakedness isn't upsetting, it's relaxing. I felt that it was rude to stay dressed when a model was nude—unless I was certain she was easy with me. But I'm *not* telling you to do this. You can go look out the peep and see if Anton and Fred are still there—they will be—and unbolt the door and leave. Admit you can't put Humpty-Dumpty together again.)

(I suppose I should.) Joan sighed, stood up—kicked her sandals off, peeled the half-sweater down, shoved the ruffle skirt down, and got out of the tight. Joe could not see her, but Gigi could—Joan saw surprise in her eyes but she did not break her pose.

Joan looked at her and put a finger to her lips, then picked up dress and cloak and sandals, headed for the bath unit while avoiding (she thought) Joe's angle of vision—hung her clothes on a rack outside the bath and went in.

It took only minutes of soap and shower to rid her body of jet and scarlet. (Face makeup off, too?) (Forget it, you don't wear as much as I used to. Towels in the cabinet under the sink. Or should be.)

Joan found one clean bath towel, three face towels, decided that it wasn't fair to grab the last bath towel, and managed to get dry with a face towel, looked at herself in the mirror, decided that she was passable—and felt refreshed and relaxed by the shower. (Where do I start?) (Here of course. Then make the bed but see it if needs changing. Sheets in the box with bed lamp on it.)

The tiny bath took little time as scouring powder and plastic sponge were where they almost had to be. The toilet bowl she was forced to give up on—she got it clean but stains left by flushing water did not respond to scrubbing.

Joan wondered why a civilization that could build mighty spaceships could not cope with plumbing? Or was it a civilization?

She washed her hands and went out. The bed seemed to have been slept in no more than a couple of nights; she decided it would be presumptuous to change sheets. As she was straightening the bed she noticed lipstick on one pillow—turned it over, (Gigi?) (Might be, Boss, it's her shade. Proves nothing.)

(Now what?) (Work around the edges—don't *ever* touch Joe's stuff. You can pick up a tube of paint and dust under it. . , but *only* if you put it down exactly where you found it.)

The edges kept her busy for a time. It seemed likely that Joe must have noticed her—but he gave no sign. The painting seemed finished but he was still working on it.

The sink was loaded; she found soap powder and got busy.

Once she had dishes washed, dried, and put away, and the sink was sparkling as the dishes, she looked over the larder. (Eunice, did you keep house with so few staples?) (Boss, I didn't keep many perishables on hand—but this is skimpier than *I* ever kept it. Joe doesn't *think* about such things. I never let him shop—because he would come back with some new hungry friend, having forgotten the bread and bacon and milk I had sent him for. Try the freezer compartment)

Joan found some Reddypax in freeze—dinners, a carton of vanilla ice cream almost full, spaghetti, pizza of several sorts. There were more of the last, so she decided she could not go wrong offering them pizza. What else? No fresh vegetables— Fruit? Yes, a small can of fruit salad, hardly enough but she could put it over scoops of ice cream, plus wafers if she could find any. Yes, lemon snaps. Not much of a meal but she didn't have much to work with. She started getting things ready.

Set the table for three? Well, she was either going to be accepted—or sent home; she set it for three. (Eunice, there are only two chairs.) (The kitchen stool adjusts in height, Boss.) (I'm stupid.) (Wouldn't have bet you could find your way around a kitchen at all.) (Maybe I wouldn't have learned if Mama had had a daughter. I'll bet I've cooked more meals than you have, sweetheart—not that this is cooking.)

Just as Joan had everything laid out she heard Joe says "Rest, Gigi."

She turned around. "Joe, will you two have supper now? It's ready to flash."

Joe Branca turned at her voice, looked at her—started to speak, and with pitiful suddenness went to pieces.

His features broke, he started to sob, his body slowly collapsed. Joan hurried toward him—and stopped abruptly. *(Boss!* Don't touch him!) (Oh, God, Eunice!) (Don't make it worse. Gigi has him. Down on the floor, fast! Out Mani Padme Hum.)

Joan dropped into Lotus seat "Om Mani Padme Hum." Gigi had given him a shoulder, eased him down. He sat on the floor with his head against his knees, sobbing, while Gigi knelt by him, her face showing the ages-old concern of a mother for a hurt child. "Om Mani Padme Hum." (Om Mani Padme Hum.) (Can't I help her, Eunice?) "Om Mani Padme Hum." (No, Boss. Ask Gigi to help *you.)* (How?) "Om Mani Padme Hum." (Ask for a Circle. Om Mani Padme Hum.)

"Gigi! Help me form a Circle. *Please!"*

The girl looked up, looked very startled as if seeing Joan for the first time.

"Om Mani Padme Hum. Help me, Gigi—help us both."

Gigi slid into Lotus seat by her, knee to knee, reached for Joan's left hand, took Joe's right hand. "Joe! Joe, you must listen! Close the Circle with us. *Now!"* She started chanting with Joan.

Joe Branca stopped sobbing, looked up, seemed not to believe what he saw. Then slowly he straightened his legs, moved until he filled the third side of the triangle and tried to assume the Padmasana. His paint-smeared shorts were too confining; they got in the way. He looked down, seemed puzzled, then started unfastening them. Gigi let go his hand and Joan's, helped him get them off. Then he settled easily into Lotus, reached for their hands. "Om Mani Padme Hum!"

As the Circle closed Joan felt a shock through her body, somewhat like electricity. She had felt it before, with three, with four, but never so strongly. Then it eased off to a sweet feeling of warmth. "Om Mani Padme Hum."

The prayer rolled around the Circle, rolled back, and was chanted in unison. They were still softly whispering when Joan stopped feeling or hearing anything—other than utter peace.

"Wake. Wake up. Come back."

Joan fluttered her eyelids, felt her eyeballs roll down. "Yes, Winnie? I'm awake."

"You said you had supper ready to flash. Want to do it? Or shall I?"

"Oh." She became aware that the Circle was still closed. "I'll do it. If I may."

Joe looked inquiringly into her face, his own face serene. "You okay? Good vibes?"

"She's okay," Gigi answered. "Go take a pee and we'll get supper on. Wash your hands; I left turpentine in the medicine cabinet."

"Okay." He got up, gave a hand to each of the girls, pulled them to their feet together, turned to do as he was told.

Joan followed Gigi to the kitchen unit, noticed the clock of the flash oven. "Gigi, is that clock right?"

"Near enough. Do you have to leave? I hope not"

"Oh, no, I can stay. But how long did we hold the Circle?"

"An hour, hour and half, maybe longer. Long enough. Does it matter?"

"No." Joan put her arms around the other girl. "Thank you, Gigi."

Gigi put her arms over Joan's, hugged her. "Thank *you.* This is the first time I've seen Joe truly at one with the All, accepting his karma, at peace with it, since, uh, since—"

"Since Eunice was killed?"

"Yes. He's kept coming back to the crazy notion that, if he hadn't gone to Philly to see his Maw, it wouldn't have happened. He knows that's not so—but now he knows it in his belly, I can tell." (Boss? Say hello to Gigi for me.) (Break cover?) (Oh, hell, we'd better not. I don't *think* she'd tell Joe—but we can't risk it. And things are okay the way they are.)

"Gigi, I think Eunice would want to thank you. If she could. Things look okay the way they are, now."

"Looks like. Say, what do I call you? I can't say, 'Hey, you!' But 'Johann Sebastian Bach Smith' seems like a hell of a name for a girl."

"My name is Joan, now. Uh, my full name is 'Joan Eunice Smith.' But my middle name is, well, sort of a memorial. Rozzer?"

"Roz. That's nice, I think that's perfect—Joan. Eunice." (I think *you're* perfect, Boss. You *did it!* You know why I didn't want to come here? I was scared for Joe...but twice as scared for *me.)* (I knew, sweetheart. We both were scared. And so was Joe.)

"Gigi, better not use my middle name. Joe might be upset. Bad vibes."

Gigi shook her head. "I don't think so. If I'm wrong, if he needs to soak in the Circle some longer, tonight we've got the right Circle. Might not have, if he found out later."

"All right, Gigi, I'll tell him."

"Yes, but wait until after we eat. A Circle is fine and I can stay in one all day, if needed. But I'm starved. Sandwich about five hours back and I don't eat much breakfast." Gigi pulled her closer, kissed her. "So let's eat."

"Somebody say 'eat'?"

"In a minute, Joe; we got to talking. And we need a crack at the plumbing, too. First dime is yours, hon; I'll flash the packs."

"Go ahead, Gigi."

"Oh, come along. Joe, you flash the packs."

"—like your 'Eunice Evans Branca Memorial,' Joe. Because I don't want anyone *ever* to forget Eunice. Especially me."

Joe Branca nodded soberly. "Is good. Eunice 'd like."

Suddenly he smiled. "You okay, Joan Eunice." He put down his cup, started stacking dishes, and added, "Getup you had on, same like one Eunice had."

"It was one I had seen her in, Joe, so I had one made like it."

"Good job. Dress, not skin paint. Sign painter, maybe?

"Joe, I didn't have anyone of your skill to do that; I had to use whom I could find. Uh, is it possible that you might paint me—body paint, I mean—sometimes? Professional job, professional fees, no obligations."

He smiled and shook his head. "Not cosmetics man, Joan Eunice. Sure, paint body for Eunice, she liked. Gigi, too, when she wants. Paint *you,* sure. But no fee."

"Joe, I won't take up professional time of an artist without paying. But I see your point. Cosmetic painting for your wife is one thing—but it isn't your real work."

"But fun," he answered. "Maybe do jet-and-scarlet job right before you go home, huh?"

"That would be sweet of you, Joe, but don't bother; I wouldn't be showing it, I'll go straight home. But let me ask one question, please, about body paint. Do you remember that you once painted Eunice as a mermaid, and she wore it to work?"

"Sure."

"Well—Gigi, this was when I was Johann Smith and very old and very ill. I hurt *all* the time but couldn't stand heavy dosage of painkillers. Had to tough it. But here was Eunice, lovely as a flower and cute as a kitten, painted to look like a mermaid, and—Joe, this is the silly part. I don't think I noticed any pain all day long, I was so busy trying to figure something out. And never could. Was that a *real* brassiere Eunice had on? Or paint?"

Joe looked smugly pleased. "Paint. Fool-the-eye." (Boss, I *bid* you that.) (Yes, little imp—and sometimes you fib, too.)

"You certainly fooled *my* eye. I could see those big sea shells, I could almost feel their rough texture. Then Eunice would turn in profile—and I wouldn't be sure. I spent that whole day staring while trying to seem not to. Joe, you're a great artist. It's a shame you prefer canvas to skin."

"Not quite right Like to paint *skin* on *canvas.* Fool-the-eye forever. Not just one day."

"I stand corrected. Like that one." Joan nodded at the easel. "Gigi, let me do the dishes, please. I want to."

"Pile in sink," Joe ordered. "Inspiration. Two-figure compo."

"Okay, Joe," Gigi answered. "Joan Eunice, do you feel up to posing late? Joe said 'Two-figure' so he means you, too. But I warn you, when Joe says 'Inspiration,' you don't get much sleep."

"No," Joe denied. "Can short it. Cheat some. Get pose right, shoot eight, nine, ten shots. Then—" He suddenly looked distressed, turned to Joan. "Maybe not here tomorrow? Or could be, not want to pose. Damn, I forget! Think you sleep here. Crazy. Damn!"

Joan said, "I don't have to be anywhere at any time, Joe, and I would be greatly honored to pose for you. But—" She turned to Gigi. "May I stay tonight? Is it all right?"

"Oh, sure!"

"I wonder. Since you showed me your wedding ring I've been wondering how much I am butting in."

Gigi giggled. "Hon, if you think that's a ring in Joe's nose—well, *I'd* better never think so. Joan, I left Sam a good month before I let

Joe give me that ring and marry me. Cubical and comical, couldn't believe he meant it. I can't think of another couple we know who are *married.* It's nice—but I still get the giggles. Sure you stay if you want to. We got a cot to set up—not much but we'll put Joe on it."

(Watch it, Boss! This is dynamite—ten to one *Joe* won't be on that cot.) (Of course not. *I* will be. Think I'm a fool?) (Sadly, I do, Boss. You're lovable—but you just barely have sense enough to stay out of lifts. Not out of beds.) (Joe wants me to pose, I pose! If he wants anything else, he can have that, too! *Anything.)*

(That's what I thought.) (Eunice, Joe doesn't want *me.* Gigi is his woman now.) (Okay, twin. But when did I last hear you say that marriage isn't a form of death?)

Joe Branca appeared to regard the matter as settled; housekeeping details seemed of no interest to him.- He said,

"You oil after shower?" and reached out and fingered Joan's left ribs. "No. Gigi."

"Chop chop, Joe." Gigi ducked into the bath, returned with a bottle of olive oil. She said to Joan, "Lanolin is as good, but I'd rather smell like a salad than a Sheep. Joe, get her ribs; I'll do her leg. Then we give you a quick oiling all over, hon, and wipe you down. Get all off that your skin doesn't absorb. Mmm, some red paint back here where you can't see, but olive oil cuts it. Joan, I've had twice as good a complexion since Joe has been making me take care of my skin."

"You have a perfect skin, Gigi."

"Joe's a tyrant about it. Now for a wipe down."

"Not too much wipe," Joe warned. "Need highlights in cheat shots."

"Easy on the wipe down. Some oil on me, Joe?"

"Da."

"Okay, Maestro. Joan, we'll polish each other bone dry before we go to bed. If we're not too tired to care—no importa, disposable sheets. Joe, are you going to tell your slaves what this pic is?"

"Sure, need acting. *Gut* acting. Lez pic."

"Hunh? Joe, you can't put Joan in such a pic. You *can't."*

"Wait, Mate. I don' draw comic books. You know. Pic so square can hang in church. But symbols so gut-loaded old butch pays top money. But—Joan Eunice, can change face if you say?" He looked anxious.

"Joe, paint the way you want to. If somebody recognizes me in. one of your paintings, I'll be proud."

"Okay." Rapidly Joe Branca built a low platform of boards on boxes, heaped floor cushions on top, covered it all with a ragged heavy cloth. "Throne, Gigi first. Gigi butch, Joan Eunice sweetheart." He moved them like lay figures, shoving them into position like a butcher handling meat, so that Gigi was supported by cushions while she held Joan in her arms and looked into Joan's eyes. Joan's position figleafed Gigi; Joe raised Joan's left knee so that she figleafed herself. Then he placed Gigi's right hand under Joan's left breast, not cupping it but touching—stepped back and scowled.

—stepped forward, changed the composition slightly, moving them so little that Joan could not guess what difference it made. Apparently satisfied, he shoved cushions in more tightly so that each could hold the pose without strain.

He placed a platter just below them, slanted with careful casualness. "Is Greek lyre," he said. "Title, 'Bilitis Sings.' Song just pau, action not yet. Golden moment between." He looked at them carefully, still scowling. "Joan Eunice, you knocked up?"

Joan was very startled. "Does it show? I haven't gained an ounce." (Erase and correct—nineteen ounces.) (Yes, but not enough to *show*. Aside from pizza just now, I've stuck to Roberto's diet. You know I have.)

Joe shook his head. "Figure not show. You happy, Joan Eunice?"

"Joe, I'm dreadfully happy about it. But I haven't told anyone yet."

"Be easy, Louisie; Gigi don' yatter." He smiled in benison and Joan saw for the first time how beautiful he could be. "What counts, you happy. Happy mama, happy baby. Knocked-up broads look different. Better. Skin glows, muscles firm, folds under eyes fill out. Whole body better tone. Eye can *see* but most can't see what they see. Lucky I got you for model right now. But solves problem been eatin' me."

"What, Joe? How?" (Eunice, is this all right?) (Sure, twin. Joe approves of babies as long as he doesn't have to bother with them. He's pleased that you are happy—and doesn't think about how it happened or what you'll do about it. But not callous. If you were broke, he would take you in and try to support your baby and still not ask where you got it. He doesn't find the world complex, dear—so it isn't . . . to him.)

"Puzzle problem. You *look* like Eunice, how else? But look *better*. Impossible. Know why now. Any broad looks best doin' her thing."

"Joe, do you think pregnant women are beautiful later? Say eight, or nearly nine mouths gone?"

"Sure!" Joe seemed surprised that she would ask. *"More* beautiful. Healthy, happy woman ready to drop—how not? Top symbol of The All. Shut up now. Work."

"Please, Joe, one more question. Will you paint me when I'm big as a house? Between eight and nine months? Could be a cheat job. Might have to be, I might not be able to pose very long when I'm heaviest."

He smiled in delight. "You bet, Annette! Artist don' get that chance much. Most broads silly about it. But now shut up. Must look gutsy, so *think* gutsy. Don' act—*be.* Sweaty, eager. Joan Eunice, Gigi's got you set up, eager. But scared. Virgin. Gigi, you just eager. Maybe gloating, but *think,* don't *do.* Not even face. Just *think.*"

He stopped to reposition lights, scowled at his models, changed his lights a little, brushed an oily rag on Gigi's right shoulder and breast. "Is right! Nipples up? Joan Eunice, can't you get 'em tight? Try thinking about men, not Gigi."

"I'll fix it," Gigi assured him. "Listen, darling." She started whispering, telling Joan in blunt detail what this ancient Grecian Lesbian was about to do to the virgin helpless in her arms.

Joan found that her breasts tightened so hard that they hurt. She wet her lips and looked back at Gigi, hardly noticed that they were being photographed.

"Break," announced Joe. "Off throne, pau tonight. Got good shots."

Joan straightened up, peered across the room at the clock. "My goodness! Blackbirds already?"

"So bed," he agreed. "Pose tomorrow."

Gigi said, "I'm still going to do those dishes, Joe. You set up the cot."

"I'll do them, Gigi."

"I'll wash, you can wipe."

By the time they finished, Joe was in the cot and apparently asleep. Gigi said, "Which side do you like, hon?"

"Either one."

"Crawl in."

24

Joan woke with her head on Gigi's shoulder. Gigi was looking at her, which helped Joan to remember where she was. She yawned and said, "Good morning, darling. Is it morning? Where's Joe?"

"Joe's getting breakfast. Had enough sleep, dear?"

"Guess so. What time is it?"

"I don't know. The question is, are you rested? If not, go back to sleep."

"I'm rested, I feel grand. Let's get up."

"All right. But I charge one kiss to get past me."

"Outrageous," Joan said happily, and paid toll. But Joe was not at the kitchen unit; he was projecting the photographs he had taken the night before. Gigi said, "Look at that, Joan. Forgotten all about offering to get breakfast."

"It's no matter," Joan said softly.

"Don't bother to keep your voice down, Joe can't hear when he's working. Unless you shout. Well, let's scrounge, then we'll try to get him to eat. Hmmm . . . not much to offer a guest."

"I don't need a big breakfast. Juice and toast. Coffee."

"No juice." Gigi poked around futilely. "I could give you a Reddypak. Spaghetti or something. I've got a grocery shop. Send Joe out for groceries and he comes home with a new picture book and some paint, happy as a kid. No use scolding him."

Joan Eunice caught an undertone in Gigi's voice, said softly, "Gigi, are you broke?"

Gigi did not answer. She kept her face turned away, got out half a loaf of bread, prepared to make toast. Joan persisted, still speaking quietly, "Gigi, I'm rich, I suppose you know. But Joe won't take a dime from me. You don't have to be that stubborn."

Gigi measured out powder for six cups of coffee. Then she said almost as softly, "Joan, I was a whore when Big Sam and I were together. Somebody had to pay the rent and half his pupils never paid what they promised, and the rest paid so little it hardly made up for the coffee and doughnuts they ate. Hell, some of them came to class just to eat. So somebody had to work. I never hustled men much—Sam didn't like it if I made it with another man—unless it was a swing scene that he had set up. But an old butch is often generous. When we had to have money I would go sit in one of the Lez coffee shops and bring some money home—Sam didn't mind that.

"I finally got wise that I was being used, not just supporting him. Those swing scenes—a guru needs a young chela for openers or it won't get off the ground. Joan, a woman will do anything for a man—but she hates to think it's a one-way street. Now take Joe. Doesn't sell many paintings and we usually have to split fifty-fifty to get them hung. But Joe doesn't *use* a woman no matter how thin things are." She looked around at Joan.

"When I first posed for Joe he paid me guild rates, none of this kark about a fin now and another fin when he sells the picture. He had some money from Eunice. Insurance, I suppose. But Joe is a soft slob and everybody borrowed it and everybody spent it and nobody paid it back and it was gone before I shacked in with him and started minding his money. Somebody's paying the rent and utilities on this studio. You, maybe?"

"No."

"You know about it?"

"Yes. A man who greatly admired Eunice took care of it. Joe can live here the rest of his life if it suits him. And I can drop a hint and the phone will be turned back on. The phone was an oversight when the rent and power and water and such were arranged for."

"We don't need a phone. I think half the people on this level used Joe's phone as a free public phone—some still try and get sore when I tell ‘em there’s no phone here, please go away; Joe is working. Uh, that man who admired Eunice—named ‘Johann’ maybe?”

“No, not ‘Johann’ and his name isn’t ‘Joan’ now. Gigi, I can’t tell you without his permission and I don’t have it. Has Joe ever said anything about the rent?”

“Truthfully I don’t think he’s thought about it. He’s a child, some ways, Joan. Art and sex—doesn’t notice other things until he bangs his nose into them.”

“Then maybe he wouldn’t notice this. I’ve got my car radio link in my purse, I can call for it. If you tell Joe you’ve got to grocery-shop, he’ll let you go, won’t he?”

“Oh, sure. Won’t even fuss—even though he has his heart set on painting us all day today.”

“So you tell him you must and I offer to take you in my car. We can pick up a *big* load, with a car and two guards to carry for us. Maybe Joe won’t suspect that I’ve paid for it. Or maybe you can tell him that a picture sold.”

Gigi looked thoughtful. Then she sighed. “You tempt me, you cuddlesome little broad. But I had better hold off and eat pizza till we sell another painting. And we will. Best not to monkey with a setup that works, I think.”

(She’s right, Boss. Leave it alone.) (But, Eunice, there’s not a thing for breakfast but coffee and dry toast. That’s no matter but there are only four Reddypax in there and three pizzas—we ate three last night. A few other items, not much. I *can’t* leave it alone.) (You’ve *got* to leave it alone. You trying to cut off his balls? Or split him up with Gigi? Gigi’s good for him, she’ll find a way. Do I, or do I not, know more about Joe than you do?) (You do, Eunice—but people have to eat.) (Yes, Boss, but it doesn’t hurt to miss a couple of meals.) (Damn it, girl, what do *you* know about being hungry? *I* went through the thirties.) (Okay, Boss, louse it up. I’ll keep quiet.) *(Eunice—please!* You said I did fine last night.) (So I did, and you certainly did. Now keep up the good work by leaving them alone or by finding some way to let Gigi-come by groceries honestly. . . but don’t *give* them anything.) (All right, sweetheart, I’ll try.)

“Gigi, here in the fudge—bacon grease in this can?”

“Yes, I save *it.* Can be useful.”

“Can indeed! And I see two eggs.”

“Well, yes. But two eggs split three ways is sort of feeble. But I’ll fry one for you and one for Joe.”

“Go soak your head, cuddle baby; I’m going to teach you Depression cooking I learned in the nineteen-thirties.”

Gigi Branca suddenly looked upset. “Joan, you gave me goose bumps. I can’t realize how old you are-but you’re not, really—are you?"

"Depends on which rubber ruler you use, dear. I remember the Great Depression of the thirties; I was about as old as you are now. By that scale I'm ninety-five. Looked at another way, I'm only weeks old and not able to crawl without help. Always making mistakes. But by still a third way to measure it I'm the age of this body—Eunice's body—and that's how I like to be treated. Don't let rue be a ghost, dear—hug me and tell me I'm not." (What you got against ghosts, Boss?) (Nothing at all, some of my best friends are ghosts—but I wouldn't want my sister to marry one.) *(Very* funny, Boss—who writes your gags? We *did* marry a ghost—in Dr. Olsen's examining room.) (Ouch! Sorry about it, Eunice?) (No, Boss darling, you're just the old goat—old ghost, pardon me!—I want for our little bastard.) (Love you, too. Busybody.)

Gigi hugged her.

"First we melt the bacon grease and make sure it's not rancid—or not too rancid. Then we soak the bread in it and fry it. We scramble the eggs and since we don't have cream to stretch them, we use what we find. I'll settle for powdered milk, or flour, or cornstarch. Even dry gelatin. We don't salt the eggs, the grease may be salty enough—salt to taste, afterwards. But if you have Worcestershire sauce, or A-l, or anything like that, we add a little before we scramble. Then we spoon this goop onto six slices of fried bread, two to a customer, and garnish with paprika, or dried parsley, or chopped most anything, to make it look fancy.

This is creative cookery a la W.P.A. We set the table the best we can manage—fancy cloth and real napkins, if you have them. A flower, even an artificial one. Or a candle.

Anything to swank it up. Now—do I fry the bread while you stretch the eggs? Or vice versa?"

Joe reluctantly came to the table, absentmindedly took a bite—looked surprised. "Who cooked?"

"We both did," Joan answered.

"So? Tasty."

"Joan showed me how and we'll have it again sometime, Joe," Gigi amended.

"Soon."

"All right. Joan, you can read, can't you?"

"Why, yes."

"Thought you could. There's a letter from Joe's mother, been here three days. I've been meaning to find somebody to read it, but Joe's kept me busy posing and Joe is particular who reads his mother's letters."

"Gigi, Joan's company. Not polite."

“Joe, am I company? If I am, I won’t finish breakfast and I won’t pose—I’ll call Anton and Fred and go home!”

(‘That’s telling him, Fat Lady!’) (That’s a vulgar joke, Eunice.) (I’m vulgar, Boss. Come to think about it, you’re about as vulgar as they come yourself, though I wasn’t sure of it till I woke up inside your head.) (I give up. But Joe can’t make us ‘company.’) (Of course not. Quiver your chin and make him kiss you—he’s never kissed you with the lights on.)

Joe said soberly, “Sorry, Joan Eunice.”

Joan pouted her lip. “You ought to be. You ought to kiss me and tell me I’m family. *Not* ‘company.’”

“She’s right,” agreed Gigi. “You’ve got to kiss and make up.”

“Oh, hell.” Joe stood up, came around to Joan Eunice’s chair, took her face, tilted it up and kissed her. “Family.

Not company. Now eat!”

“Yes, Joe. Thank you.” (He can do better.) (So we both know.) “But, Joe, I won’t read your letter unless you want me to. Gigi, you startled me when you indicated you could not read. I thought I could tell by the way a person talks. Is it your eyesight?”

“Eyes are okay. Oh, I’m a real Talking Woman. Had some coaching, done some little theater. Probably should have learned to read—though I can’t say I’ve missed it. Computer fouled up my pre-school test records and I was in sixth grade before anybody caught it. Then it was sort o’ late to change tracks and I stayed on the ‘practical’. There was talk of putting me through a remedial but the principal put his foot down. Said there wasn’t enough budget to handle the ones that could benefit from it.” She shrugged.

“Maybe the fact that he was a third had something to do with it. Anyhow I don’t miss it. Joe, shall I find the letter?”

“Sure. Joan Eunice is family.”

Joan found Mother Branca’s handwriting difficult, so she read the letter to herself to be sure she could read it aloud—and ran into trouble. (Eunice! How do I handle this.) (Twin, never tell a man anything he doesn’t need to know. I censored as necessary. Even some of *your* mail, when you were sickest.) (Know you did, baggage, as I reread some you had read aloud.) (Boss, some went straight into the shredder. And this one should have gone there—so censor it.) (You were married to him, sweetheart, but I’m not. I have no *right* to censor his mail.) (Twin, between being ‘right’ and being kind, I know which way *I* vote.) (Oh, shut up, I won’t consider Joe’s mail!)

“Takes a while to get used to strange handwriting,” Joan Eunice said apologetically. “All right, here it is:

“‘Darling Baby Boy,

“‘Mama don’t feel so—’”

“Don’t read all,” Joe interrupted. “Just tell.”

“That’s right.” agreed Gigi. “Joe’s mother puts in a lot of kark about noisy neighbors and their pets and people Joe never heard of. All he wants is news. If any.”

(You see, twin?) (Eunice, I’m still not going to censor. Oh, I can leave out trivial gossip. Uh, maybe edit the wording.) (You damn well better, Boss, and you know it.)

“All right. Your mother says her stomach is troubling her—”

(“Mama dont feel so good and cant seem to get no relief nohow. The medicare man says it’s not stomach cancer but what does he know? Sign says he’s an internist and everybody knows an internist is a student, not a real doctor. What do we pay taxes for when just a student can half kill me like I was a dog or a cat or something they’re always cutting up behind locked doors like they say on teevee?”)

“Joe, she says that her stomach has been bothering her but she’s been getting tests from an internal medicine man—that’s a doctor who specializes in such ailments, they are very learned—and he has assured her that it isn’t cancer or anything of that sort.”

(“The new priest aint no help. He’s a young snot that thinks he knows it all. Wont listen. Claims I get just as good treatment as anybody when he knows it aint true. You got to be a nigger to get anything around here. We white people that built this country and paid for it are just so much dirt. *When I go to medicare clinic, they make your Mama wait while* Mexican *women go in first. How about that?”)*

“She says that there is a new priest in your parish, a younger one than the last, and that he has investigated and has reassured her that she is getting the proper treatment. But she says that she sometimes has to wait a long time at the clinic.”

“Why not?” said Joe. “Got nothin’ but kill time. Don’ work.”

(“Annamaria is going to have a baby. That Snot priest says she ought to go to a Home. You know what terrible places those Homes are and its Unamerican *to bust up families. They don’t do that in the Old Country and that’s what I told the Visitor. Youd think the way they throw away money on people that dont deserve it they could spend a little on a decent family that just wants to be left alone and not bothered. The other Johnson twin—not the one that dropped out, the one I told you was out on parole again—got busted again and about time!* There’s *a family the Visitor could look into—but oh No, he just told me to mind my own business.”)*

“Someone named Annamaria is pregnant.”

Gigi said, “Which one is that, Joe?”

“Baby sister. Twelve. Maybe thirteen.” Joe shrugged.

“Well, your parish priest thinks she ought to go into a home for expectant mothers but your mother feels that she would be better off at home. There is something about a neighbor family named

Johnson.”

“Skip.”

(“Baby Boy, Mama dont hardly never get a letter from you since Eunice died. Aint there no letterwriter in your block? You dont know how a mother worries when she dont hear from her little boy. I watch the-mailbox every day be sure nobody swipes it fore I get it. But no letter from my little Josie—just ads and once a month the Check.”)

“She says she hasn’t heard from you in a long time, Joe. I’d be glad to write one for you before I go, anything you dictate—and send it by Mercury to be sure she gets it.”

“Maybe. Thanks.” Joe did not seem enthusiastic. “See later. Paint first. Any more? Just tell.”

(Eunice, here comes the tough part.) (So skip it!) (I *can’t!)*

(“I seen you in the teevee and almost *dropped dead when you said you gave away a thousand million dollars you had every right to. Dont your own mother mean nothing to you? I didnt raise you and love you and take care of you when you busted your collarbone to be treated like that. You go straight to that Miss Yohan Bassing Bock Smith and tell her she can just wipe that nasty sneer of / her face because l want my rightful share of whats coming to me and* I’m going to get it. *I already been to a lawyer and he said hed take my side for fifty-fifty as soon as I paid him a thousand dollars for expenses. I told him he was a thief. But you just tell that stuckup Miss Smith to pay up or my lawyer will put her in jail!!!!*

“Sometimes l think the best thing is just pack up everybody and go visit you till she pays up. Maybe just stay. Would be hard to leave all our old friends here in Philly but you need somebody to keep house now that you havent got no wife to do for you. It wont be the first time lye made sacrifices for my darling boy.

“Your Loving -Mother.”

“Joe, apparently your mother watched my identity hearing on video and heard your testimony. She seems disappointed to learn that you gave money to establish a memorial to Eunice, when you could have kept it.”

Joe made no comment.

Joan went on: “She says she may pack up all the family and pay you a visit but the way it’s phrased I don’t think she will. That’s all except she sends you her love. Joe, I can see how your mother could be disappointed in what you did about—”

“My business. Not hers.”

“May I finish, Joe? From this letter I think she must be poor and I have been poor myself and know how it feels. Joe, I think that your memorial to Eunice was a wonderful thing, the most gallant tribute of a husband to the memory of his wife I’ve ever heard of. I heartily approve and I think Eunice must feel honored by it.” (I do, Boss. But maybe he overdid it, huh? Jake could have set up a little annuity for Joe—eating money, I mean—with part of it. But Joe never did know how to do anything part way—whole hawg, or nothing; that's Joe.) (Maybe we can fix it, dear.)

"Joe, if I paid your mother an allowance—you *know* I can afford it! —it wouldn't be *you* accepting money from Eunice's death."

"No."

"But I would *like* to! She's your mother, it would be sort of an additional memorial to Eunice. Say enough to—"

"No," he repeated flatly.

Joan Eunice sighed. "I should have kept quiet and arranged it through Jake Salomon." She memorized the return address, intending to do it anyhow. "Joe, you are a lovable man and I can see why Eunice was devoted to you—I've fallen in love with you myself and I think you both know it—without any intention of crowding you out, Gigi; I love you just as much. But, Joe, sweet and gallant as you are. . you are a bit stiff-necked, too." (Sure he is, Boss darllng, but it's no use trying to change people. So drop it. You didn't need to sneak that address; I could have told you.)

"Joan."

"Yes, Gigi?"

"Hate to say this, hon—but Joe's right and you're wrong."

"But—"

"Tell you later, we'll talk while we pose. Grab the bathroom if you need to while I put dishes to soak; Joe wants to start."

Joan was surprised to learn that she could visit with Gigi while they posed. But Joe assured her that he had the expressions he wanted from the photographs; he simply wanted them to hold still. He took even more pains to get them arranged than he had for the camera. Talk did not bother him as long as it was not to him. Nevertheless Joan tended to whisper while Gigi used the normal tones of a face-to-face conversation.

"Now I'll tell you why you must not send money to Joe's mother. But wait a sec—he's done it again. Joe! *Joe!* Put on your shorts and quit wiping pigment on your skin." Joe did not answer but did so. "Joan, if you've got money to throw away, flush it down the pot but don't send it to Joe's mother. She's a wino."

"Oh."

"Yeah. Joe knows it, her Welfare Visitor knows it; they don't let her have her family allowance in cash—she gets one of the pink checks, not a green one. Just the same she'll take groceries around the corner and trade 'em for muscatel. That stomach trouble—forget it. Unless you want to help her drink herself to death. No loss if you did. The kids might be better off."

Joan sighed. “I never will learn. Gigi, all my life I’ve given money away. Can’t say I did any good with it and I know I’ve done lots of harm. Me and my big mouth!”

“Your big heart, dear. This is one time not to give it away. I know, I’ve had a lot of her letters read to me. You trimmed that one, didn’t you?”

“Did it show?”

“To me it did—because I know what they sound like. I learned from the first one never again to have somebody just read them aloud to Joe; he gets upset. So I listen—I’m a quick study, used to learn my sides and cues just from two readings aloud when I was finding, out I wasn’t an actress—and then I trim it to what Joe needs to hear. Figured you were smart enough to do it without being told and I was right—except that you could have trimmed it still more and Joe would have been satisfied.”

“Gigi, how did such a nice person as Joe—and so talented—come from such a family?”

“How does any of us happen to be what we are? It just happens. But—look, it’s never polite to play the dozens, is it?”

“I shouldn’t have asked.”

“I meant it isn’t polite for *me* to. But I’m going to. I’ve often wondered if Joe was any relation to his mother. He doesn’t *look* like her; Joe has a picture taken when she was about the age he is nose. No resemblance.”

“Maybe he takes after his father.”

“Well, maybe. But Paw Branca I’m not sure about; he left her years back. If Paw Branca is his Pop. If she has any idea who his father is.”

“I guess that’s often the case. Look at me—pregnant and not married; I can’t criticize.”

“You don’t know who did it, dear?”

“Well.. . yes, I do. But I’m never, never, *never* going to tell. It suits me to keep it to myself and I can afford to do it that way.”

“Well—none of my business and you seem happy. But about Joe—I think he’s an orphan. Somebody’s little bastard who wound up with this bitch though I can’t guess how. Joe doesn’t say so. Although he never talks much—unless he has to explain things to a model. But his mother has had one good influence on him. Guess.”

“I can’t.”

“Joe won’t drink. Oh, we keep beer for friends, when we can, but Joe never drinks it. He won’t touch pot. He won’t join a Circle if it calls for a high. You know how it is with drugs—all of them against the law but as easy to buy as chewing gum. I could show you three connections in this one complex where you can buy you-name-it. But Joe won’t touch any of it.” Gigi looked sheepish. “I thought he was some kind o(a freak. Oh, I was never hooked but I couldn't see any harm in an occasional trip with friends.

"Then I shacked with him and he was broke and I was, too, and groceries were our only luxury and—well, I haven't touched anything since he married me. And don't *want* to; I feel grand. New woman."

"You certainly look happy and healthy. Uh, this 'Big Sam,' did he have a habit?"

"Not a habit. But Sam would eat, drink, or smoke anything somebody else paid for. Oh, he didn't mainline—doesn't fit the image for a guru and needle marks show—and he was proud of his body."

"What did you do before you were his chela?"

"His meal ticket, you mean. Same thing—model and whore. What else is there to do? Babysat. Served drinks in my skin for a while but they let me go when they found a girl who could write—discrimination and I could have fought it as I never got my orders mixed up; my memory is better than people who have to write things down. But, hell, no use trying to hang on when they don't want you. Joan, you said you'd been giving money away all your life."

"I exaggerated, Gigi. Never had much until after World War Two. I just meant I wasn't stingy even as a kid, when every nickel came the hard way."

"'Nickel'?"

"A five-cent piece. They used to be minted from a nickel alloy and were called that. Dimes and even dollars used to be silver. We actually had gold money when I was a kid. Then during the Great Depression I was flat broke for about six months—and other people helped me—and then later I helped some, sometimes the same people. But giving money away on a large scale I didn't start until I had more money than I could spend or wanted to invest, and the tax laws at that time fixed it so that you could do more giving it away than by keeping it."

"Seems a funny way to run things. But of course I've never paid taxes."

"You just think you haven't. You started the day you were born. We may eliminate death someday but I doubt if we'll ever eliminate taxes."

"Well. . . I won't argue it, Joan, you must know more about it than I do. How much money have you given away?"

"Oh, it didn't amount to more than a few thousand until after War Two and most of that was loans I knew I would never collect. Kept records for years—then one day I burned the record book and felt easier. Since then—I'd have to consult my accountant. Several millions."

"Several *millions!* Dollars?"

"Look, cuddly, don't be impressed. After a certain point money isn't money, it's just bookkeeping figures or magnetized dots in a computer."

"I wasn't exactly impressed. Confused. Joan, I don't have any feeling of any sort for that much money. A

hundred dollars I understand. Even a thousand. But that much is like the National Debt; it doesn't mean *anything* to me."

"Nor does it to me, Gigi; it's like a chess game—a game played just for itself, and one I'm tired of. Look, you wouldn't let me buy groceries even though I am helping to eat them. Would you accept a million dollars from me?"

"Uh. . . no! It would scare me."

"That's an even wiser decision than the one you made before breakfast. But page Diogenes!"

"Who's he?"

"Greek philosopher who went around searching for an honest man. Never found him."

Gigi looked thoughtful. "I'm not very honest, Joan. But I think I've found an honest man. Joe."

"I think so, too. But, Gigi, may I say why I think you were smart to say No? Oh, it was a gag, sort of, but if you had said Yes, I would not have welched. But I would hate to do it to you. May I tell you why?—what's wrong with being rich?"

"I thought being rich was supposed to be fun."

"It's fun, some ways. When you're really wealthy—and I am—money is power. I'm not saying that power isn't worth having. Take me, if I hadn't had that much raw power, I wouldn't be here chatting with you; I'd be dead. And I *like* it here, with your arms around me and Joe painting a picture of us because he thinks we're beautiful—and we *are.* But power works both ways; the man—or woman—who has it can't escape it. Gigi, when you're rich, you don't have friends; you just have endless acquaintances."

"Ten minutes," said Joe.

"Rest time," said Gigi.

"Huh? But we've *been* resting."

"So get up and stretch, it'll be a long day. If Joe says we've posed fifty minutes, we have; he uses a timer. And have a cup of coffee; I'm going to have one. Coffee, Joe?"

"Yes."

"Can we look?"

"No. Lunch break, maybe."

"Must be going well, Joan, or Joe wouldn't even make a guess. Joe, Joan tells me that a rich person can't have friends."

"Hey, wait, I didn't finish. Gigi, a rich person *can* have friends. But it has to be someone who isn't interested in his money. Like you. Like

Joe. Even that doesn't mean he's a friend. First you have to find him. Then you have to *know* this about him, which may be—is!—hard to find out. There aren't many such people; even other rich people aren't likely to qualify. Then you have to win his friendship, and that's harder for a rich man than it is for other people.

A rich man gets suspicious and puts on a false face to strangers—and that's no way to win friends. So in general, it's true—if you're rich, you don't have friends. Just acquaintances, kept at arm's length because you've been hurt before."

Gigi suddenly turned around from the kitchen unit.

"Joan. We're your friends."

"I hope so." Joan looked soberly from Gigi to her husband. "I felt your love in our Circle. But it won't be easy, Gigi. Joe looks at me and can't help remembering Eunice—and you look at me and can't help wondering what effect it has on Joe."

"We don't! Tell her, Joe."

"Gigi's right," Joe said gently. "Eunice dead. She wanted you to have what you got. Me—over my gut ache, all done in t' Circle." (Boss, do you mind if I get out for a moment and trot around in my bones? A girl likes to be missed a *little.)* (Eunice, we must not hurt him. It was all we could manage to heal him.) (I know. But the next time he kisses us I'm going to be tempted to speak up and tell him I'm here.) (Om Mani Padme Hum.) (Om Mani Padme Hum—and kark on you and Diogenes both. Let's go home and phone Roberto.) (Sweetheart, we'll stay here until we've cracked the bone and eaten the marrow.) (Okay, okay. That Gigi is as cuddly as Winsome, isn't she?)

"Joe, I want us three to be friends and never break our Circle in our hearts. But I'm not going to put too much strain on it. Not fair to you, not fair to Gigi—not even fair to me. Gigi, I wasn't saying I didn't have *any* friends. I do have. You two. A doctor who took care of me and honestly doesn't give a damn about money. The nurse he is about to marry who is the nearest thing to a sister I've ever had. My four driving guards—I've tried very hard with those four, Joe, because I knew they were your friends and Eunice's. But that's an odd situation; I'm more their baby they take care of than I am either employer or friend. And one, just *one,* friend left over from the days when I was Johann Smith—rich and powerful and mostly hated."

Joe Branca said softly, "Eunice loved you."

"I know she did, Joe. God knows why. Except that Eunice had so much love in her that it spilled over onto anyone around her. If I had been a stray kitten, Eunice would have picked me up and loved me." (More than that, Boss.) (Sweetheart.) "And Joe, you know, or at least have met, my one friend who carried over. Jake Salomon."

Joe nodded. “Jake okay!”

“You got to know Jake?”

“Close. Good aura.”

Gigi said, “Joe, is he the one you told me about? The fixer?”

“Same.” Joe looked back at Joan Eunice. “Ask Jake. Throne now.”

“Come on, Joan. He bites if you don’t pose the instant rest period is over.”

Joe fussed over getting them back into position, then moved both of Joan’s legs and one of Gigi’s into positions somewhat different from the original pose—stepped back and scowled at the change. . turned to his easel and started scraping part of the canvas with a palette knife. Gigi said quietly, “Now we won’t get to look at lunch break.”

“Why not?”

“God only knows. I’m not sure Joe knows why he makes a change. But something was wrong and now he’s abandoned the cartoon and is working directly from us. So it won’t be far enough along that he’ll be willing to let us look at it that soon. So freeze, darling. Don’t sneeze, don’t get an itch, don’t even breathe deeply.”

“Not talk?”

“Talk all we like as long as we don’t move.”

“I won’t move. Gigi, I was *so* pleased to learn that Joe and Jake got to know each other well. Did you know Jake, too?”

“I’ve met him. Just in passing. Me leaving and Mr. Salomon arriving, it was while I was a hired model before I moved out on Big Sam.” (Twin, she’s being vague about this—and Jake has never mentioned laying eyes on Joe after clearing up business matters a long time ago.) (Eunice, what are you getting at? It was probably while Jake was straightening out your bank account, and the lease, and things.) (‘—and things,’ you are so right. Look, Boss, don’t be naïve. They were crying over the same girl—me—and Joe is ambi as an oyster when it suits him.) (Eunice, you have a dirty mind! *(Coo!* This from ‘No-Pants Smith.’ I know whereof I speak, twin; I lived with Joe for years. Don’t be so darned twentieth century.) (Eunice, of course you know Joe better than I do and I would never criticize Joe no matter what. I meant Jake.) (What makes you think you know Jake better than I do? And take a look at Joe—purty, ain’t he? Jake has eyes. Boss, what are we fussing about? Find out what Gigi knows.)

“I suppose,” Joan said carefully, “that Jake had to come here on business. Eunice died without a will and I know Jake arranged it so that Joe could draw against her bank account. There may have been insurance to clear up, too; I’m not sure.”

“Joan, I don’t know. Why don’t you ask lake, as Joe suggested?” (Because Jake will lie about it, Boss. Forget it, men lie about such things, far more than women do. Who cares where a man has lunch as long as he gets home in time for dinner? Not *me.* You give my 'dirty mind' quite enough to keep it busy. But, Boss, you're a devious little slut—you can't be truthful even to yourself.) (Wench, if I could get my hands on you, I'd spank you!) (And if you could, I'd let you. Kind o' fun to be spanked, isn't it, dear? Gets the action moving like a rocket.) (Oh, stuff it!) (Where, twin? What? And how big is it?)

— "I have no need to ask Jake, Gigi. I know they met through business matters, I know that Jake admires Joe's integrity. I simply hadn't realized that Jake thought of Joe as a close friend. If he does."

Gigi Branca looked thoughtful. "I couldn't say. I was working Guild hours then, as Joe was paying me. Mr. Salomon—Jake, you call him—showed up one evening as we were quitting, and Joe introduced him to me as his former wife's fixer—lawyer, he said; Joe doesn't use jive when he doesn't want to. Saw him a couple more times, I think, about the same way. But he hasn't been here since we got married." (Double talk, Boss. All it means is that she won't spill other people's secrets. Well, that's nice to know—considering.)

"No importa. Gigi, how did Joe get his art education? Or is it native genius with no instruction?"

"Both, Joan. Let me tell it bang as it would take you forever to get it out of Joe. Joe says that all an artist can teach is technique. He says creativity can't be taught and that each artist has his own sort. If he has any—Joe thinks that most people who call themselves 'artists' haven't any. He calls 'em 'sign painters' and adds that he would rather be a *good* sign painter than a fraud who calls himself an artist.

"You've seen what Joe has. That one of me he did yesterday and others around the studio. You'd see lots more if you prowled the coffee shops and bookstores and art shops at this end of town. Nudes that look better than life—you wouldn't need to look for his pinxit. Most of them kind o' square except that they grab. Oh, Joe can do sex pix, I've seen him prove it, then scrape off the paint—because I asked him *why* he didn't do sex pix since they sell so well. He shrugged and said those weren't his symbols.

"Joe knows he's not Goya or Picasso or Rembrandt or any of the masters—and doesn't want to be; he just wants to paint *his* symbols, *his* way, and sell enough for us to eat. Oh, sometimes I get so *mad,* knowing that if he would paint just *one* frimp scene as grabby as he so easily can, it would keep us eating for months. But I've given up suggesting it because Joe just shrugs and says, 'Don' paint comic books, you know that, Gigi.' Joe is Joe and doesn't give a damn what any other artist does or whether his own work makes him famous or a lot of money or anything. He cares so little—well, many of our friends are artists or call themselves artists but Joe isn't interested in what they paint and won't talk shop. If they're good people, warm people, good vibes, Joe likes to go see them or have them here... but Joe wouldn't waste a floor cushion on Rembrandt if Joe didn't like the way he behaved. Joe just wants to paint—his way. And not have to sleep alone."

Joan said thoughtfully, "I don't suppose Joe has had to sleep alone very often."

"Probably not. But Joe wouldn't sleep with Helen of Troy if he didn't like her attitude. You mentioned your Brink's boys—the two who brought you here, and there are two more, aren't there? One a big soul? Hugo?"

"You know Hugo?" Joan asked in delight.

"Never met him. He sounds like an African myth. I know just two things about him. Joe wants to paint him. . . and Joe loves him.

"Spiritual love, I mean—although I'm sure Joe would sack in with Hugo if Hugo wanted to." (He'll have to stand in line! I saw Hugo first.) (Shut up, you bang-tail.) "Can never happen, I gather—and Joe never makes a pass. Never made one at me, I never made one at him; we just sacked in our first time without a word and combined as naturally as ham and eggs." (Hmm! Some girls have all the luck. *I* had to trip him.) (You're the eager type, sweetheart; Gigi isn't.)

(You'll pay for that crack, Boss.)

"I'm sure Joe never crowded Hugo about posing; he would rather have Hugo's friendship than have him as a model—though Joe told me he has two pix in mind. One would show Hugo on an auction block. Historical background and honkie ladies in the crowd—close shot, full figure, Hugo looking patient and weary, and just heads and shoulders of the honks . . . and the honk females just barely not slobbering.

"But Joe says he *can't* paint that one; it would stir up old trouble. The second he really aches to paint—just Hugo, big as a mountain and no sex symbols at all—except that a big stud can't help being sexy, I think—just Hugo, strong and wise and solemn dignity—and loving. Joe's words, pieced together by me. Joe wants to paint it and call it 'Jehovah.'"

"Gigi! Maybe I can help."

"Huh? You can't just tell Hugo to pose for Joe; Joe wouldn't like that. Wouldn't hold still for it."

"Dear, I'm not foolish. But maybe I can make Hugo see that it's all right to pose for Joe. Can't hurt to try." (Boss, let Hugo know that you have been posing naked for Joe. Then let it soak.) (Of course, Eunice, but that's just the gambit.) (Twin! You're not thinking of trying to *seduce* Hugo, are you? Damn it, I won't stand for it! You leave Father Hugo alone.) (Eunice, I'm not *that* much of a fool. Hugo can have anything I've got; he killed the creep who killed you. But I would never offer what he won't accept. If I did, I think he'd quit—and then pray for me. I vote with Joe; I'll take Hugo as he is, never try to twist his arm.) (You couldn't. His arms are bigger than our thighs.) (I meant 'psychologically,' twin, and you know it.)

"Just one thing, Gigi— Joe would have to give up that title for the pic."

"You don't know Joe, Joan. He won't change the title."

"Then he'll have to carry it just in his mind. Hugo is as firm in *his* rules as Joe is in his. He won't let a picture of himself be titled 'Jehovah.' It would be sacrilege in his eyes.

But if Joe is willing to keep the title a secret, I think I can deliver the body. You talk to Joe. But you never did tell me where Joe got his training."

"Oh. Joe could always draw; I'm sure he could have learned to read, he remembers what he sees. When he was about fourteen, he was being held overnight with some other boys in the precinct lockup and the desk sergeant got a look at some sketches Joe had done while he was killing time, waiting to be taken up in front of the judge and warned. One was of the desk sergeant—and Joe had seen him only a few minutes.

"That was Joe's break. The desk sergeant turned him over to the priest and got him off the blotter and both of them took him to a local artist, and showed him the kid's sketches.

"This artist was a mixture, fine art and commercial—I mean he made money. He was another sort of mixture, too. An oyster. He may not have been impressed by Joe's sketches but he made a deal with him. Modeling. Joe could hang around his studio and use his materials and sketch from his models—if Joe would pose when he needed him. They both won on the deal; you know how Joe looks now; at fourteen I'd bet he was more beautiful than any girl—and no doubt that oyster thought so.

"So Joe did and soon he was eating and sleeping there and got away from his mother entirely, best thing that ever happened to him. Joan, it was a one-bed studio like this one."

"You mean Joe was his sweetheart? Gigi, I decline to be shocked. Even though I'm ninety-five, I try to think modern."

"Joan, I never can believe that's your age; it isn't real, like that million dollars. I said 'oyster' not 'homo.' The artist was married, or shacked, with his number-one model. Possible she got Joe's cherry. Either way, she taught him plenty and mothered him and was good to him, and it was a happy Troy.

"But the artist—Mr. Tony, as Joe speaks of him—while he gave Joe the use of his studio and table and bed and wife—was nevertheless a strict master. He wouldn't let Joe paint with a palette knife or a wide broom or do distortions or abstracts or psychedelics—he made him learn to draw. Anatomy. Composition. Brush techniques. Color values. The whole endless drill of academic art, and wash brushes and sweep out the studio. Joe says that if it hadn't been for Mr. Tony, he would still be sketching sausage skins. Joe found out what he could do, what he wanted to do, and learned to do it. But, so he told me, not what his master did—but in both cases founded on old-fashioned academic training. The hard way. Oh, Joe's learned short cuts. But he can paint directly on canvas—he's been doing it since our last break—and make it as close to a photograph as he cares to. Or as different."

"—never said that poor is better than rich, Gigi; it is *not.* But both 'rich' and 'poor' have shortcomings—somewhere between is probably best, if you could get off the treadmill at that point. But— Look, does Joe guard you when you go grocery-shopping?"

"Huh? Of course not. Oh, sometimes he comes along and helps carry—but not to guard. Well, he does ride down the lift with me if it's a time of day when it might be empty—I mean, he's no fool and neither am I and I don't go *looking* for a mugging. Same coming back up and if I'm later than I said I would be, he's always there waiting. But I move around by myself, always have; I'm just not foolish about where and when."

"Gigi, I'm sure you're not foolish, I doubt if you ever go into a park —"

"Not even at high noon! I've been raped once and didn't like it. I'm not looking for a gang bang where they take turns holding you down. They ought to bulldoze every park in the city."

"Bulldozing the whole city might be better. But, Gigi, you move around rather freely. I *can't.* I don't dare appear even with guards around me without being veiled, I can't risk being recognized. I have to be wary all the time. Sure, you bolt your door—but *my* house has to be strong enough to take a bomb tossed against it—that's happened several times since I built it. I have to watch for everything from kidnappers and assassins to mere nuisances who want to touch me.

"I'm talking both about the way I am now and the man 'Johann' I used to be—too much money attracts crackpots and criminals and there is *nothing* I can do about it but keep guards around me day and night, and live in a house that's a fort, and try to avoid being recognized at *any* time, and never, never try to live what is called a 'normal life.' Besides that—Gigi, can you imagine what a treat it is to me to be allowed to wash dishes?"

Gigi looked startled. "Huh? Joan, you've lost me. Oh, I know how complicated it is to be rich; I've watched video. But washing dishes isn't a treat; it's a horrid bore. Too often I've left them in the sink, then had to face them before breakfast. By the time breakfast is ready, I don't want any."

"Let me give you a tip, Gigi. I did know something about Joe's mother; Eunice was my secretary for years." (I never mentioned her, Boss!) (Will you let me tell this lie my own way?) "She was—and is—a pig and lives like one. This place isn't big; if you'll keep it spotless, Joe won't care when you get wrinkles—and we all do, someday. But a dirty toilet bowl or dishes in the sink reminds him of his mother."

Gigi said, "Joan, I *try.* But I can't clean house and pose at the same time."

"Do your best, hon. If necessary, lose sleep. Joe is a man worth making extra effort to keep. But I was talking about doing dishes—it's a nuisance to you but a luxury to me. Washing dishes means 'freedom' to me. Look, here we are, three of us, no servants—and presently I'll be gone and you'll be alone with your husband and the world shut out. I *can't* shut it out. Uh. . . let me think— Four mobile guards, a security chief, twelve in-house watchmen under him, three always on duty and the others on call, which means the married ones—which is most of them—have their families under my roof—a personal maid, a valet who used to tend me and now takes care of guests—couldn't fire him; I *never* fire anyone without cause—a butler, a head chef, three—oh, I don't remember; there were about sixty adults in my house the last time I asked."

"My God, Joan!"

"Yes, 'My God!' To take care of *one* person. Yet not one could I let go without replacing him. I planned that house and kept tabs on the design, intending to keep staff down to a minimum. So it's loaded with gadgets. Things like robofootmen, and a trick bed that was designed to let me get along without a nurse a few more years as I got older. Do you know what that means? I *lost.* I have to have a building superintendent and maintenance mechanics—or the gadgets don't work. All this complication—and never any real privacy—just to take care of one person who doesn't want it that way."

"Joan, why don't you get rid of it? Move—and start over."

"Move *where,* dear? Oh, I've thought about it, believe me. But it's not actually to take care of one-person—it's to take care of too much money, money that is fastened to me so that I can't risk kidnappers or anything else. I can't even cash it and flush it down the pot; that's not the way big money works. And even if I could and did—nobody would believe I had. I would just have taken off my armor and probably would not stay alive two days. Besides— Do you like cats?"

"Love 'em! Got a kitten promised now."

"Good. Now tell inc—how do you get rid of a cat you've raised?"

"Huh? Why, you don't. Not if you're decent."

"I agree, Gigi. I've lived with many cats. You keep them. If you are forced to it, you have a cat humanely destroyed—or if you have the guts, you kill it yourself so that it won't be bungled. But you *don't* give away a grown cat; it is almost impossible. But, Gigi, you can't kill *people.*"

"I don't understand, Joan."

"What would I do with *Hugo?* He's been with me many years; he's doing the only thing he knows how to do—except preach, which doesn't really pay; Gigi, loyal servants are 'Chinese obligations' just like a cat. Sure, they can get other jobs. But what would you do if Joe told you, 'Get lost. We're finished.'"

"Cry."

"I don't think my servants would cry—but I would."

"But I'd get along!"

Joan sighed. "And that platoon I have around me would get along, I think; they're able or I wouldn't have them—and I've got money enough to make sure that ones like Hugo are taken care of; that's one of the *good* things about being rich—if money is all it takes to remedy something, you can. Gigi, there is some solution to this silly fix I'm in and I'm going to find it—I was just trying to show you that it isn't as simple as it looks on video. The solution may be something as easy as changing my name again and changing my face with plastic surgery and going somewhere else."

"Oh, no, you mustn't change your face."

"No, you're right; I must not change this face. It's Eunice's; I'm only its custodian. If I changed it, Joe would not like it—nor several other people. (Starting with *me,* Boss.) (I won't change your lovely face, sweetheart. I'll cherish it.) "I'll keep it as it is—but I have to keep it veiled. It's been on video too much, photographed and printed too many million times. But there's *some* way to tackle it."

Joan Eunice looked at the nearly finished painting almost with awe. She knew what a beautiful body she had inherited; she knew that Gigi was a beauty of another sort; she could see that these "Grecian damsels" were herself and Gigi and she could not see any detail in which the painting was not a perfect likeness of each.

Yet Joe Branca's "realism" was fantasy. These two nymphs in a glade were voluptuous, sensuous, enticing in a way that she *knew* that she and Gigi had not been—sprawled on a platform of boards and gossiping about everything from an alcoholic to dirty dishes.

"What do you think?" Gigi asked. "Say what you like; Joe doesn't give a hoot about any opinion but his own."

Joan took a deep breath, sighed. "How does he do it? Here I am With my nipples tight just from looking at it—and yet it's you and me, and we lay there talking for *hours* and never got in a sweat about it. Discussed everything *but* Topic 'A'—wasn't even a cuddle because we had to hold still. Yet this paint-and-canvas reaches out and grabs you by the gonads and *squeezes.* I'm certain it would have just as much effect on a man."

From behind them Joe said, "Fool-the-eye."

Joan answered, "Fool-the-eye, hell, Joe. My eyes are not fooled, I'm enchanted. I want to buy it!"

"No."

"Huh? Oh, kark. You planned to sell it to some old butch. God knows ninety-five is old—and I feel butch enough to qualify when I look at the painting."

"Yours."

"Huh? Joe, you can't do this to me. You intended to sell it, you said so. Gigi, back me up."

Gigi chose not to answer. Joe said stubbornly, "Yours, Joan. You want it, you take it."

"Joe, you are the most stubborn man I've ever met and I don't see how Gigi puts up with you. If you *give* me that painting, I'm going to destroy it at once—"

Gigi gasped. "Oh, no!"

Joe shrugged. "Your ache. Not mine."

"—but if you'll *sell* it to me at your going rates, I'll take it with me and give it to Jake Salomon to hang at the end of his bed so he'll wake up happy each morning." (You bombed him, twill! Now swing back and strafe the survivors.) "That's the choice, Joe. *Give* it to me and I'll chop it into shreds. But *sell* it to me—and Jake Salomon gets it. Oh, you could welch, then hang it for sale—and put me to the trouble of hiring detectives to follow it to where you hang it so that I can buy it through an agent. What I do with it then, I won't tell. Or you could even keep it for your own jollies; it's quite a job."

Gigi said, "Quit being stubborn, Joe; you know you'd like Jake to have it."

"Gigi, what does Joe charge for a painting like that?"

"Oh, I set the prices. Mostly I sell them by the yard. By size."

"So? How much is this size?"

"Well, I try to get two hundred and fifty for that size."

"Ridiculous!"

"Really, Joan, considering that it took both my time and Joe's all yesterday evening and today—not to mention your time, but you're buying it, so I didn't add on for the second figure in it—considering all that and the commission we pay, it's not very much—"

"Darling, I meant 'ridiculously' *low.* I haven't bought much art the last twenty years but I do know that is not less than a thousand-dollar picture—then up like a kite to whatever the traffic will bear. I can tell you this: When Jake dies and that painting is auctioned off, it won't go for as little as a thousand...and it might be much higher because I'm certain to be at, that auction and in no mood to let it get out of the family. But I'm not raising the price now; I never do that. You named a price of two-fifty; I accept. It's a sale."

"Joan, you never did let *me* finish."

"Oh. Sorry, hon."

"I try to get two hundred and fifty for that size when I hang it in a shop. But half of that goes to the owner of the shop; that's the only way I can get space. So the price to you is a hundred and twenty-five."

"No."

"Why not?"

"Just 'No' the way Joe said it to me. As good business practice you should *never* undercut your retailer. I think he's robbing you; the commission should be twenty-five percent, no more. But don't undercut the price you want *him* to ask—that's no way to stay in business. I don't know much about art. . . but I know one hell of a lot about business. Cash, or check?"

"Cash is fine. If you have that much with you. Or pay when you feel like it."

"I want to pay now and get a receipt so that it will be legally mine —before your stubborn husband can thwart me again. Shall I write the receipt for you, Gigi girl?"

"Oh, I've got Woolworth's printed forms for that, and I can write numbers and sign my chop. No huhu."

"Good. But I want something else."

"What, Joan?"

"I want to be kissed. I've been a good girl and posed all day and haven't even been kissed for it. So I want Joe to kiss me for being so stinky difficult—and I want to kiss you for helping me with him. Joe, will you kiss me?"

"Yes."

"That's better. Joe, will you escort two nice girls—me and Gigi, I mean, and no smart cracks—down to the

supermarket? If Gigi will buy us a steak to celebrate, I want to prove I can broil it. Will you buy us a steak, Gigi?"

"Sure! Beef, or horse?~'

"Uh...hon, I'm forced to admit that I haven't shopped for groceries in years. What do you think?"

"Well. . . it had better be horse."

"Whatever you say. As long as they don't sell us the harness."

25

In the United Nations the Burmese delegation charged that the so-called Lunar Colonies were a coverup for a conspiracy by China and the United States to build military bases on the Moon. The Secretary of Conservation and Pollution Control denied a report that deer in Yosemite National Park were "dying in hordes from polluted water and emphysema." He stated that a healthy ecological rebalancing was taking place-no need for alarm—and the new herd would be stronger than ever.

The Reverend Dr. Montgomery Chang, D.D., Most Humble Supreme Leader of The Way, Inc., testified before the Subcommittee on Unwritten Law of the Senate Judiciary Committee in support of the pending bill to require Federal licensing of teachers of Zen Buddhism and related disciplines as "therapists de facto et de jure:" "These bootleg gurus are giving rational mysticism a bad name. A man should no more be allowed to teach meditation, asanas, or transcendental philosophy without strict control by a licensing board than he should be allowed to ski, or to surf, or to frame a picture without passing an examination. The idea that this bill would abridge the sacred guarantees of the First Amendment is the sheerest nonsense; it protects and frees them." Under questioning he stated that he would be humbly willing to serve as chairman of such a board if such sacrifice were asked of him. Survivors of Hurricane Hilda were still being rescued and the known death toll now stood at 1908.

The Department of Internal Defense placed a temporary exception on interstate transmittal of intelligence concerning public disorders involving more than three persons, then placed a second exception with strict penalties on the publicizing of the first censorship order. The Secretary reported to the President that news services and video nets were cooperating voluntarily in the interests of the general welfare. In re the matter of identity of Conglom Tycoon Johann S. B. Smith the Supreme Court, in a declaratory relief opinion made notable only by Mr. Justice Handy waking up in the middle of its reading, slapping the desk and roaring, "Divorce granted!" then going back to sleep, ruled seven to two to sustain a lower court in expanding and clarifying the principle originally set forth in *Estate of Henry M. Parsons v. Rhode Island.* Four of the majority and one dissenting justice ruled also that a legal sex change was involved in the matter; two justices thought otherwise; one justice (Mr. Handy) used twenty pages to prove that such a composite of sexes was contrary to public interest and to the laws of God and that both Johann Smith and Eunice Branca were legally dead and that the resultant monster had no legal existence of any sort; the ninth justice, in a one-sentence separate assent, opined that sex was irrelevant in the entire matter; one of the majority, in another separate assenting opinion, stated that the donor body should have been sterilized surgically in the public interest and that the Congress would do well to make such sterilization mandatory in any future similar situation. No mention was made by any justice of thirteen *amici-curiae* brief s and one petition filed with the Court. In an opinion issued the same day *(Illinois v. Sam J. Roberts)* conviction was set aside on the grounds that the householder (deceased) had not advised Roberts of his rights before attempting to place him under citizen's arrest.

***A Bluebird Special.* HEAVEN NOW! Couple seeks couple to share safe house & loving friendship 3 br, 2 bths, Mercserv, all util, nr lic pvt schl, *atrium garden*. Comptr types (Rankin program) ♂690047, ♀890047—any 85%-plus match considered. "One for All, All for One!" No deposit but please send stereopix with notarized Rankin Reports—bx *69* Bluebird, Ltd.**

On the basis of evidence submitted by the Chinese delegation the U.N.A.E.C. eased the tolerance levels for strontium-90 for whole milk. The Reverend Thomas Barker of Long Beach, California, in an Equal-Time-for-God videosermonette declared that the World had ended at midnight December 31st 1999 PCI, and that all since that time was "illusion of the Devil, without forth, substance, or reality."

Miss Smith greeted O'Neil and asked him to have Dabrowski and Fred fetch upstairs with her two big flat packages, one so large that it had to be tilted to get it through the door of the lift. When packages, mobile guards, and she herself-were fitted inside, she locked -the door and pressed the "Hold" touchplate without signaling a floor, then dropped her cape. "Let me kiss you thankyou-goodbye, boys, but for Heaven's sake don't get paint on you or muss it. Better just hold my face in your hands—but no need to hurry."

Shortly thereafter she looked at herself in the lift's mirror, decided that makeup and hairdo had suffered only minor wear and tear, let Dabrowski lay her cape around her, then punched for her floor and fastened all the cape's frogs so that she was again fully covered. When the lift stopped she hooked up her veil.

"These go in your boudoir, Miss? Or your lounge?"

"First let's see if Mr. Salomon is receiving." They followed her down the long hail to the Green Suite. Joan noted that the please-don't-disturb ruby light was not burning over the door of Jake's lounge, so she touched the door signal.

The speaker above it bellowed, "Come in!" The door opened; she went in. "Put them inside and that will be all."

"Very good, Miss."

As they left and the door closed Jake came out of his bedroom, looking tousled. He stopped abruptly. "Well!'

Where the hell have you been?"

"Out."

"Hrrrmph! Five days. Five *whole* days!"

"So? Chickens fed? Hogs slopped? Cows milked?"

"That's not the point. I—"

"That *is* the point, Jake. Nothing has been neglected through my being away. You won't marry me, so I am not answerable to you when I come and go. Though as a courtesy I *did* leave a note with Cunningham telling you where I had gone. Did you receive it?

"Yes, but—"

"Then you knew I was safe—and in emergency could have sent me a message. Or joined me; you would have been welcome. You *know* Joe would have made you welcome—and Gigi is friendly as a puppy."

"'Gigi'?"

"You know her. You've met her, I mean. Mrs. Joe Branca."

"What?"

"Why the Surprise, Jake? People do remarry—especially if an earlier marriage was happy. Joe's was, and now he has, and I'm happy for him—and certain that Eunice is happy for him, too." (Sure I am, Boss. But let's not be too 'noble.' Being 'noble' is a male prerogative. So *they* think.)

"I can't believe it."

"What's odd about a widower remarrying?"

"I can't imagine anyone who had been married to Eunice ever marrying some other woman." (My fan! Twin, we're going to be especially nice to Jake tonight.) (If he doesn't start being nice to *me,* he's going to sleep alone tonight! But *I* shan't. I wonder if Anton and Fred have left the house?)

(Calm down, Boss. And get Jake calmed down.) (Not yet, I won't! He's wrong and I'm right.) (Twin honey, how long is it going to take you to learn that being 'right' has nothing to do with getting along with a man? Men aren't logical, their minds don't work that way. But it's 'the only game in town,' so when a man is wrong and you are right, it's time to apologize. Tell him you're sorry—and *mean* it. Om Mani Padme Hum.)

(Om Mani Padme Hum—sometimes I find being a woman just too frimping difficult. If it weren't so darned much fun. Okay, sweetheart, watch me take him.) "Jake dearest, I'm sorry it upsets you that Joe has remarried—but why not wait before deciding that he has made a mistake? Joe *needs* a wife—even if she's not Eunice. And I'm terribly sorry that I worried you by not being here when you got home...and sorry on my own account; I expected to welcome you—with open arms and a happy smile. But I didn't expect you to be away less than a week and I had an impression that you expected it to take longer—possibly much longer."

"Well, yes, I did think I might have to sit it out quite a while. But I got in to see the Chief Justice the second day and he assured me that he would put it at the top of the calendar . . . and that he had seen—unofficially—an advance transcript of the record. And that was that."

"Hm! Campaign contributions are sometimes worthwhile."

"Joan Eunice, don't *ever* talk that way. Especially in reference to the Chief Justice of the United States. Yes, this is your house. Nevertheless it might be bugged."

"I'm sorry, Jake. It was a thoughtless remark. My appreciation really goes where it belongs. To *you."*

"To Mac more than to me, my dear; that boy has been on the ball. How he got an advance copy to, uh, the right man so quickly is something I don't want to inquire into."

"I appreciate Mac's efforts, I appreciate Alec's efforts—but mostly I appreciate my darling, always dependable, utterly wonderful Jake." (Is that too thick, Eunice?) (Boss, I keep telling you: it's *impossible* for a woman to lay it on too thick with a man. If you tell a man he's eight feet tall and say it often enough, with your eyes wide and a throb in your voice, he'll start stooping to go through seven-foot doors.)

Jake looked pleased, so Joan went on: "I suppose it will all be settled soon, then?"

"Little one, don't you ever listen to the news?"

"Not if I can avoid it."

"Well, you should. It *is* over. You've won, finally and completely."

"Really? I never doubted that we would win, Jake, the wonderful way you've handled everything. My surprise is solely that it has happened so fast. Yes, I suppose I should follow the news. But I haven't been able to, these last few days. Had this difficult job to do—Joe, I mean—and while you were away seemed the best time. . . so I gritted my teeth and tackled it."

"Joan Eunice, I told you never to go near Joe. I *told* you. If this new marriage of his ever stood a chance—yes, intellectually I know that a man should remarry—if it ever *did* stand a chance, you must have put a horrible strain on it. Too much strain, probably. Uh. . . how did he take it? Badly?"

"Jake, I stayed five days. If it had gone badly, would I have been there even *one* day? I accomplished the mission; everything is all right."

Jake looked surprised, then thoughtful. "Hmmm! That's a one-room studio. . . and if I follow your meaning, you stayed right there the whole five days. My dear, just *how* did you 'accomplish your mission'? Or have I no right to ask?"

She looked up at him and spoke seriously. "Jake, I owe you so much that you will always have the right to ask me anything. Including my comings and goings and I should not have given you a snippy answer." (Didn't quite tell him he had a right to a *truthful* answer, did you, Boss honey? Devious little bitch.) (Eunice, I don't lie to Jake—) (Oh, what a *whopper!)* (—more than is necessary to his happiness.)

"Jake, I accomplished my mission—I set Joe's mind at rest about Eunice—through a 'prayer meeting.' With Gigi's utterly necessary help, which is only part of why I feel sure that she's good for him. But if you mean I offered him a zombie—his dead wife's reanimated body—I knew that was not the way to do it. Joe hasn't touched me. Oh, he does touch me now, easily and without strain, the way he might touch his sister." (Any incest in Joe's family, twin? I've never been sure.) (Oh, shut up!) "He even kisses me the same way. But, Jake—"

"Eh? What, dear?"

"If Joe *wanted* this body I'm wearing, of *course* he could have it; I owe him anything I can give him. You see that, don't you? You agree? Or am I wrong?"

"Uh.. . yes, I agree. But I think it's well that Joe does not want to. It could be disaster for him...and a terrible strain for you."

"I know it would be a strain for me. But I would do my best to smile and never let him guess. As it is, I am honored—and relieved—and deeply grateful that Joe has given me his loving friendship instead." (Okay, Eunice?) (Okay. Now get him off that subject.)

"I'm glad, Eunice."

"Jake, do we have to stand here, me still in street clothes? I have presents for you—welcome-home presents." She smiled her best happy-little-girl smile. "Want to see them?"

"Of course I want to see them! And where are my manners, letting you stand? Here, let me seat you and take your cloak. Sherry?"

"Later. Or champagne, to welcome you home. 'To welcome us both home." She turned and let him take her cape. He turned to lay it aside and turned back just as she did so, too.

"Holy *Cowl"*

"Didn't know you were a Hindu, Jake." She posed, in graceful and calculated display.

"You wore *that* all the way across the city? Just paint?"

"Why not, dear? It's your first present—from Joe to you, sent with his love. I had my cape over it before I left Joe and Gigi's studio, and then kept it on when I got home—until you unwrapped your 'present.' Didn't want my mobiles to see it, of course." (Oh, of *course,* twin—except that Joe let them watch every brush stroke, once Gigi was sure you didn't mind. Say, Joan, Gigi would go for a Texas Star with Anton and Fred, I feel certain. And Joe would go along; he likes them. What do you think? Easy way to keep your promise to them, huh?)

(Eunice, we've got *this* man on our hands now.) (Oh, poor you.

Best way in the world to work up steam with *one* man is to let your mind rove about *other* men. You've still got some Puritan in you, girl.) (Which Puritan? When? And why didn't I notice? You can't mean Jake; he's Jewish. Speaking of Jake, has he noticed that slight omission in this getup? And why haven't we been raped?) (I doubt it, his eyeballs are spinning. As for the latter, I have-hopes.)

"Joan Eunice, do you.. realize that that is a reproduction—exact, I think—of a body-paint design Eunice once wore?"

"Of course I realize it; she wore it *here*...and I wasn't so near dead that I didn't stare. Could never make up my mind whether these were sea shells or paint. Now I know. Joe wanted to be sure that you had seen it that first time, when Eunice wore it. I told him that I was almost certain that you had been here that day."

"Well, yes, I was. Briefly. That's why I recognized it."

"So? It had seemed to me that I recalled that as one of the days you took Eunice home. Hmmm?"

"Joan, are you trying to be snoopy?"

"Yes."

"Woman, I will not satisfy your prurient curiosity."

"How do you feel about satisfying prurience itself? Mine, I mean."

"That's another matter."

"I was wondering. So far you haven't even kissed me. Shall I take a shower first? Or let me put it this way: Did Eunice take time to get the paint off first?"

"Let *me* put it *this* way: Shut up and keep quiet and pipe down and not another damn word out of you until I give permission."

"Yes, sir."

She obeyed in essence for a reasonable time.

"May I talk now?"

"Yes, as long as you limit yourself to polite words of endearment. Some of your spontaneous remarks were quite unladylike."

"That's because I'm quite unladylike, Jake my only darling. I'm a failure as a lady. But I'll go on doing my best to simulate one in public—be a credit to Eunice."

"Joan Eunice—"

"Sir?"

"That's the way Eunice herself did it. A perfect lady in public. . . utterly uninhibited in private. It was a major part of her-great charm. Some of *her* spontaneous expressions at such times were far more 'unladylike' than any I've heard you use."

"Really, Jake? Did she know any that I don't? And do you like them?"

"Hmm, I don't think she knew any that you don't know; she was just easier about it once she trusted me. Yes, I do like them. Used spontaneously."

"Jake, I trust you without limit—and I'll try not to inhibit any future spontaneity. Haven't meant to. Still learning."

"Darling girl, you do just fine when you get your rest. I mean 'my rest.' Now that I've got you helpless—and seeing that you trust me 'without limit'—what *did,* happen at Joe's."

"Sir, the fact that I trust you—and I do!—does not mean that I'm going to satisfy your prurient curiosity." -

"Hmm— Neither did Eunice, ever."

"Instead, you tell me what happened to *you*—at Joe's."

"We seem to have reached a stalemate. Let's wash off this paint. I wish I had taken a photograph of our mermaid before I smeared it."

"No huhu, Jake my beloved; Joe took several and I have them in my purse. For you. And I have two of Eunice in the same getup—one for you, and one for *me.* And besides that Joe gave me a four-by-five Kodachrome of a most incredible trompe-l'oeil painting he did of Eunice as a mermaid diving . . . plus a smaller transparency which shows how he did it. Same getup minus sea shells."

"Would it surprise you to learn that I've seen them both? Just didn't have the crust to promote Joe for them."

"No, not surprised, I guess. But I did *not* pressure him, Jake; he said he had a present for me—and these photos turned out to be the present. I should refuse? God forbid. But I'm going to put snoops to work and trace down who bought that painting. I intend to own it. Price no-object."

"Your money won't help you, Miss Smith. Would it surprise you to know that *I* own that original Branca? It's at the Gib."

"I'll be—dipped! Jake, you're a dirty old holdout. I take back ten percent of any compliments I've handed you."

"That's okay; I didn't believe more than ninety percent. But if you're a good girl I'll *give* you that painting."

"I accept! But—well, it's hardly worthwhile opening those packages. They'll be disappointments."

"Would you like a spanking?"

"Yes."

"I'm too tired. Let's open packages."

"Well...we might open the smaller one. Let you see what Gigi looks like, if you don't remember. She's worth looking at."

"We'll open both of them."

"Scrub first?"

"I suppose we should."

"Well...let's give it a lick and promise, not turn it into a social event."

Joan Eunice insisted on opening 'Bilitis Sings' first.

"Well, Jake?"

He gave a respectful wolf whistle. "The boy's a genius."

"Yes. I hadn't suspected. But you already knew it."

"Well, yes. His decision to use strong sunlight on your two contrasting skin colors was inspired."

"Especially as he had no sunlight—just smog-filtered north light, soft as old linen. Those highlights come from photographing us under floods the night before. Then he painted from us the next day. Changed the pose, though—and I don't know how he corrected the highlights. But I'm no genius."

"What's in the big package?"

"Open it."

It was 'The Three Graces'—and all three were Joan Eunice. "Joe calls this a 'cheat pic,' Jake—he photographed me three times—erase and correct—more nearly thirty-three times, against a neutral background, then combined three photos for his cartoon. Had Gigi pose with me each time to get arms-around-waist and so forth, then she would slither out like a snake without disturbing my pose. If be hadn't used 'cheat' the painting would have taken far longer. Aren't those dimples in my behind cute?"

"Woman, you are conceited enough."

"I'm not conceited, Jake; I wasn't handsome even when I was young. I know whose beautiful bottom that is. Well dear? I had intended 'Bilitis' for me and the 'Graces' for you—but you can have your choice."

"What a choice to have to make!"

"The one you let me keep will be no farther away than down the hall. If you had married me when you so obviously should have, you lecherous old rapist, you wouldn't have to make a choice; both would be yours. Jake, what does it cost to buy a job lot of art critics?"

"Well, the present crop ought not to fetch more than ten cents a dozen but everything is higher these days. I take it you have Joe Branca in mind?"

"Of course. He's selling his paintings at ridiculously low prices and paying an outrageous commission—and sells so few that the kids hardly get enough to eat. While freaks and frauds and sign painters are all the rage. I thought—"

"You can stop thinking; I see the swindle. We'll get him a good agent, we'll buy up what he has on the market, using dummies—and keep them ourselves; they're a surefire investment. . . and we'll buy art critics here, then elsewhere as he becomes better known. The question is: How much of a success must he be? Do I have to get him into the Metropolitan?"

"Jake, I don't think Joe *wants* to be famous. And *I* don't want it to be so conspicuous that he might smell a rat. Or that Gigi might; she's a little more sophisticated. Not very, that is. I just want his pictures to sell regularly enough that Gigi can buy groceries without worrying and can have enough disposable sheets that she can change them every day if it suits her. The kid is trying to keep house on scraped icebox and boiled dishrag soup. I tried that in the Depression and it's not funny—and I see no reason why Gigi should have to do it when she's married to an honest-to-God artist who can *paint*—and works at it. One who doesn't spend his time sopping up sauce or blowing weed, and talking about the painting he's going to do. Joe paints. He's a craftsman as well as an artist. Well, maybe I don't know what an artist is but I know what a craftsman is and I respect craftsmen. Too few of them in this decadent world."

"No argument. We'll do it. Even if we have to go as high as fifteen cents a dozen."

"Even two-bits. Let's finish getting paint off—I must send down for olive oil—and you could be a darling and get Winnie to fetch me a heavy robe or get it yourself, pretty please, if she isn't home—no, I can get back to my room in my street cape, no problem, and—"

"Hrrmph."

"Did I goof again?"

"My dear, I have an announcement. Dr. and Mrs. Roberto Carlos Garcia y Ibanez are on their honeymoon."

"What? Why, the dirty little rat! Didn't wait for big sister to hold her hand. Good for them! Jake, that's *wonderful*—I think I'll cry."

"Go ahead, you cry while I shower."

"Hell, no, I'll cry when Winnie is back. I'll take that shower with you and you can scrub me. My back, where I can't see the paint; not my front, I'm tired, too. When was it and do you know when they will be home? And, goodness, I must pick out a suite for them; Roberto won't want to be next to mine with a connecting door. And I need to think of a wedding present. I may give them the painting you don't pick; Roberto won't let me give them anything expensive, he's a stubborn man." (Boss, is there another sort?)

"I can't see why Bob wouldn't want to have a connecting door into your bedroom."

"I think that was meant to be an insult. Perhaps he would like it, dear—I would like it. But it would not look right to the servants." (Frimp the servants!) *(All* of them, Eunice? I'm kept busy as it is.)

"Eunice, I took the liberty of telling Cunningham to have the Gold Suite set up for the Garcias—"

"Perfect! I'll have a door cut from my lounge into theirs and there already is a lock-off that we can unlock between its foyer and the upstairs library we joined to your suite—and then we can quit this unseemly ducking back and forth through the hall."

"The newlyweds *might* prefer to be left alone."

"Hadn't thought of-that. Oh, well, 'I have some friends of my own,' as the old gal said."

"In any case they'll be back too soon for carpentry. I have it from a usually dependable source that a reliably dishonest member of your staff agreed to phone Mrs. Garcia the instant you returned. I assume that the call was made. I assume that they will be back by, oh, nightfall."

"I wonder whom I should fire? That's a hell of a way to run a honeymoon."

"I understand the good Doctor was in on it—the idea being to keep you safe from harm, since between them they constitute your medical staff."

"What nonsense. I'm the Pioneer-Mother type. Rugged. If I had crossed with the prairie-schooners, they would have yoked me in with the oxen. But I'm glad they're coming home. I want to kiss them and cry on them."

"Johann, sometimes I can't make up my mind whether you are a silly young girl—or senile."

"The last time you called me 'Johann' you acquired some scar tissue. Dear, has it occurred to you that I might be both? A senile silly young girl?"

"Interesting. A possible working hypothesis."

"If so, I'm a well-adjusted one—Jake, I'm as happy as a cat left alone with the Christmas turkey. With Joe squared away and the Supreme Court being sensible for a change my last fret is gone. Life is one long giddy delight. I'm not even morning sick."

"Can't see why you should *be—huh?"* (Boss, I thought you weren't going to tell him?) (Eunice, he was bound to know soon . . . and I couldn't just let him find out, can't do that to *Jake.* This is the perfect time—he's officially 'first to know.')

"I said I wasn't bothered by morning sickness, Jake. I'm healthy as a horse and the only change I've noticed is that I'm hungry as a horse, too."

"You wish me to believe that you are pregnant?"

"Don't give me that stern-father look, Jake. I'm knocked up and happier than Happy Hooligan. I could have kept it to myself a while longer but I wanted to tell you before anyone else could notice. But be a dear and treat it as privileged—because the instant Winnie finds out she'll start mothering me and worrying. Which is not what a bride should be doing. With luck I can keep it from Winnie until she's pregnant, too." (Boss, what makes you think Winnie intends to get pregnant'?) (Use your head, Eunice—five to one she's got a Band-aid over the spot where that implant used to be this very minute.) (I don't have a head, Boss—just yours and it doesn't work too well.) (Complaints, huh? Talk that way and I won't marry *you,* either.) (We *are* married, Boss.) (I know it, beloved. Now be quiet; I've got to juggle eggs.)

"Eunice—are you sure?"

"Yes. Test positive."

"Did Bob make the test? Or some quack?"

"A patient's relations with a doctor are confo. But it was not a quack. Don't pursue this line of inquiry, Counselor."

"We'll get married at once."

"The hell we will!"

"Eunice, let's have no nonsense!"

"Sir, I asked you to marry me quite some time back. You emphatically refused. I asked you at a later time. Again I was turned down. I decided not to renew my request, and I do not do so now. I will *not* marry you. But I will be honored and delighted to continue as your mistress until I am benched by biology—and more than pleased to be allowed again to be your concubine when I am back in commission. I love you, sir. But I will not marry you."

"I ought to spank you."

"I don't think it would do me any damage, darling. But I don't think you could bring yourself to strike a pregnant woman." (Now kick him in the *other* shin, Boss. You little hellcat.) (Eunice, stay out of this row. I'm not only a woman scorned; I'm also old Johann Smith who never could be pushed too far. Jake can have us any time, sure. But I'm damned if I'll let him be 'noble' about it when I'm knocked up.) (Boss, aren't we *ever* going to marry him? This is a mistake, dear; he needs us.) (And we need him, Eunice. Sure, we'll marry him—after we've whelped. *After.)* (Boss, you're making a big mistake.) (If so, I'm making it. I never make little mistakes—just big ones.)

"I didn't say I was going to spank you, Eunice—I said I 'ought' to. What happened? I distinctly remember you telling me that you had taken care of contraception."

"Your memory is good, sir. The exact phrasing, as I phrased it most carefully. I have 'taken care' of such matters in whatever fashion I wished. Every time. With you. With others. Each time I have taken such care as suited me—at that time and with that man."

"Hmmm! That's as unresponsive an answer as I've ever heard. Let me put it more plainly. Eunice, did I get you pregnant?"

"I won't answer. You know that at least one other man has slept with me—and I may have been the bride of the regiment. Jake, you would not marry me when I was a virgin; you still would not marry me when you made me your mistress. So where I got this child in me is not your business and you have no right to quiz me and—much as I love you!—I will *not* tolerate one more question along this line. Not now nor in the future! Whom I chose to father my child is *my* business. But you may be certain that I selected him with care, eyes open and wits about me. You've been acting as if you were a father dealing with a wayward daughter, or a Welfare Visitor trying to establish responsibility for an unlicensed pregnancy. You *know* that is not the situation. I am ninety-five years old—much older than you are—able to afford a dozen bastards if it suits me—and it may—and wealthy enough to tell the world to go pee up a rope. Jake, I was sharing happy news with you. You elect to treat it as bad news and take me to task about it. I won't accept that, sir. I made a mistake in telling you. Will you please treat the matter as privileged—and never mention it again?"

"Eunice."

"Yes, Jake?"

"I love you."

"I love you, Jake."

"Had I been twenty years younger—even ten years!—I would have married you long before now. Since you won't tell me—and since I have no right to quiz you; you are correct—will you forgive an old man's pride if I choose to believe that *I* am the man you picked? I promise that I will not discuss that belief with anyone."

"Jacob, if you choose to believe that, I am honored. But I ask no promises. If you chose to proclaim such a belief, I would never shame my oldest and closest and most beloved friend by denying it. I would smile proudly and let my manner confirm it. But, Jacob my beloved, to *you* I neither affirm nor deny it—and never will. I did this on my own. I *alone* am parent to this child." (Watch your words, Boss! You almost spelled it out.) (He'll take it as rhetoric. Or if he does suspect, investigation will prove that he's wrong. Hank Olsen knows which side of his bed is buttered. Mine, that is.) (And the dates are going to check out so that Jake will be certain it's his. Hmm—) (Still think I'm a fool, Eunice?) (No, Boss—just reckless. You scare the hell out of me at times.)

"Well, Eunice, from the restrictions you *have* put on me that seems to be all we can say about it."

"That was my intention, Jake."

"I understood. What would you like to do the rest of today—at least until our newlyweds return? Play cribbage?"

"If you wish, Jake, certainly."

"I have a better idea, if you want to join me in it. Could be fun, I think."

"Will be fun, lake. Anything is always fun shared with you. Even if

it's just cribbage."

"This is a better twohanded game if it's played right. Let's phone Mac, ask him to have his clerk start the ball rolling—and get married. With luck we can be legal by twenty-one or -two—and still get in a couple of boards of cribbage before bedtime."

"Oh, Jake! *'Cribbage'!"*

"Answer me, woman. A simple 'Yes' or 'No'. I won't argue it. . . and I won't ask you again. And blow your nose and wipe your eyes—you're a mess."

"Damn you, Jake! *Yes!* Let me go and I'll blow my nose.

I think you've cracked my ribs, you big brute. That's a hell of a way to treat an expectant mother."

"I'll do worse than crack your ribs if I have any more nonsense out of you. Now to call Mac—I'll have to think up a plausible lie so that he'll be justified in authorizing the County Clerk to issue a special license."

"Why does it have to be fancy, Jacob? I thought you were going to tell Mac that you had knocked me up?"

"Eunice, is that what you want me to say?"

"Jacob, I'm going to marry you as quickly as possible, I don't care how. I hope Winnie and Roberto show up in time, but I'm not going to wait; you might come to your senses. I thought you preferred to claim that you had done me in and I know I agreed to confirm it. So tell Mac so. Tell anybody."

"Doesn't fret you?"

"Jake dearest, maybe that's the best way to handle it... because, presently, God and everybody is going to know about the Silent Witness. Jake? Do you recall my first day of freedom? The day after Mac conditionally confirmed my identity and discharged me as a ward of the court?"

"My dear, I am not likely to forget *that* day."

"Nor I. Count two hundred sixty-seven days. That is when the Silent Witness should show up."

"You're telling me that I *am* the father of your child."

"Not at all, sir. I was in heat and had slipped the leash and you may assume if you wish that I spent the day bouncing in and out of beds, going from one man to another." She smiled beatifically. (Boss, that's awfully close to the truth—but it sounds like a whopper.) (It is the truth, Eunice; I worded it most carefully. That is the second best way to tell a lie—tell the truth so that it sounds like a whopper.) (And I thought *I* knew how to lie.) (I've had years more practice, Beloved—and as a kid had more reason to lie than you ever had. Lying is a fine art; it is learned only through long practice.)

"Knock off the nonsense, Eunice, or I'll start married life by giving you a fat lip. Okay, we'll tell Mac that; the truth is often the simplest solution. But we have to have health certificates; Mac can get us out of the waiting time but not out of that requirement. My doctor will phony one for me without stopping to take a blood sample and make tests, but how about that quack you mentioned? Will he cooperate?"

"Jake, I don't recall mentioning a quack. If Roberto gets here in time, I think he would take a chance. Or Rosy would, I think. I don't think I'm harboring even a cold bug unless I picked up something from Joe and Gigi. Most unlikely. But how about *you,* darling? Washington, D.C., has the highest. V.D. rate in the country. Did you fetch anything home?"

"Oh, nothing but big and little casino."

"A nice girl like me can't be expected to understand such terms."

"You impudent little baggage, I slept *alone* in Washington. Can you make the same claim? For the past

five days?"

"Of course not, dear; I've never been interested in sleeping alone—and Gigi is *very* snuggly. I commend her to your attention—take a look at that painting."

"I'm sure she is. Just Gigi, eh? Not Joe?"

"Is Joe snuggly, Jake? Tell me *more!"*

"Woman, you may get that fat lip *before* I marry you."

"The groom's present to the bride? Sir, if you want to give me a fat lip, I'll hold still, smile happily, and take it. Oh, Jake darling, it's going to be such *fun* to be married to you!"

"I think so, too, you dizzy bitch. Mmm, my doctor will phony a certificate for you, too, if I explain the circumstances. But he'll need your blood type."

"Jake, the whole country knows that my blood type is ABnegative. Had you forgotten it?"

"Momentarily, yes. That's all I need. Except— Wedding here? Or in Mac's chambers?"

"Here, if possible. I want our servants for 'family' if Winnie and Roberto don't show up. Jacob, do I dare send a car with a message and ask Joe and Gigi to allow themselves to be fetched here for this purpose? I *do* want them present. Gigi is no problem; she will do as Joe wishes—but I think you know Joe better than I do. I don't even know that he has clothes he would be willing to wear here—all I saw him wear were denim shorts so caked with paint they could stand alone."

"Mmm, I agree that Eunice's former husband is entitled to be invited to Joan Eunice's wedding, though there has never been a protocol established, that's certain. Dear, the clothes Joe wore in court would be okay for a home wedding. How about yourself, Eunice?

Going to be married in white?"

"I think I've been insulted again. Wear white so that somebody can sneak a picture and sell it? 'Ninety-FiveYear-Old Sex-Change Bride Wears White.' Dear, if I wear white, let's ask *Life* to send a photographer and cut out the middleman. Jake, I'll wear white if you tell me to. If you don't, I'll pick something but it won't be white. Something."

"'Something old, something new, something borrowed, something blue.'

"Erase and correct, Jake. Here is the twenty-first century version:

"The bride is old,
"The license new,
"The body borrowed,
"The groom is blue."

"I am like hell blue, I simply need a shave. Get out now and let me be. Beat it. Go take a bath. Try to smell like a bride."

"Instead of payday at Tillie's? I can take a hint. But *you* take a bath, too."

"Who notices the groom?"

Cunningham had a busy six hours. But so did everyone in the ugly old mansion. To the old-tradition strains of Mendelssohn's "Processional" the bride walked slowly in hesitation-step through the rotunda. (Twin, 'Here Comes the Bride' always sounds to me like a cat sneaking up on a bird. Pum . . . pum.. . . tee-pum! Appropriate, hmm?) (Eunice, behave!) (Oh, I'll behave. But I prefer 'John Jacob Jingleheimer Smith—his name is my name, too!') (You can't know *that* one. It's eighty years old and long forgotten.) (Why wouldn't *I* know it when you were singing it in your head every second they were dressing us?)

She walked steadily down the center of a long white velvet carpet; through the arch and into the banquet hall, now transformed with flowers and candles and organ into a chapel. (Boss, there's Curt! I'm so glad he made it! That must be Mrs. Hedrick with him. Don't look at them, twin; I'll giggle.) (I'm *not* looking at them and you stop trying to —I must look straight ahead.) (You do that, Boss darling, and I'll count the house. There's Mrs. Mac—Norma—and Alec's Ruth, with Roberto. Where's Rosy? —oh, there he is beyond Mrs. Mac. My, isn't Della dressed fit to kill?—makes us look shabby.)

The bride wore a severely simple dress of powder blue, opaque, with high neck, matching veil, long sleeves, matching gloves, skirt hem brushing the velvet runner and long train sweeping behind. She carried a bouquet of white cattleya dyed blue to match. (Twin? Why that last-minute decision for panties? They make a line that shows.) (Not through this gown; it's not skintight. The 'bride's knot,' Beloved

—for symbolic defloration.) (Coo! Don’t make me laugh, Boss.) (Eunice, if you louse up this wedding, I’ll—I’ll—I won’t speak to you for three days!) (Joan twin, I won’t spoil it—Jake wants symbols, he shall have them.) (And *I* want symbols, too!) (And so do I, twin, so do I. It’s just that I have never been able to see life as anything but a vast complicated practical joke, and it’s better to laugh than cry.)

(Yes, darling—but let’s not do either right now. I’m having trouble with tears.) (I thought they were my tears.

Doesn’t Thomas Cattus look handsome? I heard you order the ‘Lohengrin recessional’; that one is even funnier than the Mendelssohn—to an Iowa farm girl it sounds *exactly* like the triumphant cackle of a hen after she lays an egg. I’ll laugh then, I know I will.)

(All right to laugh and cry both then, Eunice—and to hang on tight to Jacob’s arm. Look, dearest, this is an old-fashioned wedding with all the clichés because Jake and I are old fossils and that’s the way it *should* be.)

(Oh, I approve. Cunningham looks worried—can’t see why; he’s done a beautiful job. Boss, those panties struck me so darn funny because you ordered the ‘Billtis’ and the ‘Graces’ to be placed on easels in the drawing room where everyone at the reception can stare at them. Riddle me that.) (Eunice, there is no inconsistency. A bride is supposed to be covered; those paintings are meant to be looked at. With Joe and Gigi here I darn well *want* them to be looked at!) (They’ll be looked at. Stared at. Some wives may look at them with intense interest. Maybe.) (Maybe. Eunice, you know I’ve never asked a husband *not* to tell his wife anything; it’s not right to ask one member of a married couple to keep secrets from the other. Besides, he will or he won’t, no matter what you ask—and he should; he knows her better than we do. But those pix are as harmless as the fruit punch we have for those who turn down the champagne. It’s irrelevant that I posed for them, I simply want Joe’s genius to be appreciated. Enjoyed.)

Joe Branca had used no small part of his genius in making up the bride. Starting with a bare, clean canvas—fresh out of her tub—he had worked long and hard to make up Joan Eunice from head to toe with such restraint that even close inspection could not detect any trace of his efforts. As in “The Three Graces” it was simply Eunice’s own beauty, invisibly enhanced—strongly enhanced, better than life, more natural than nature. He turned down the use of a hair fall and simply fluffed her own hair (still far shorter than Eunice’s hair had been) and sprayed it slightly to keep it unmussed under her veil.

The bride’s matron of honor was made up with much less restraint. Having seen the miracle wrought on Joan Eunice, Winnie had timidly asked Joan if she thought it would be all right to ask Mr. Branca to improve her a little? Since she was part of the wedding party?—and Joan and Gigi had enthusiastically pushed the idea. Joe had studied Mrs. Garcia, then said, “Forty minutes, Joan Eunice—is time? Okay, Winnie, wash *face.”* The result exploited Winifred’s red hair, made visible her transparent eyebrows and lashes, livened her too-white skin—yet looked more natural than the stylized face Winnie usually wore.

The matron of honor wore pastel-green tabard and tights and carried a smaller bouquet of green and brown

cymbidia. She kept in step to the hesitation march thirty paces ahead of the bride, preceded her into the banquet hail toward the improvised altar.

Chief of Security O’Neil was the last one in, then posted himself in the archway at parade-rest and managed to watch events at the far end of the room while giving his attention to his rear. His features were serene but he was uneasy, alert. The big house was empty save for seventy-five to eighty people in this one room; all armor was up, every door, every real window was locked, hand-bolted, and dogged, and the night net of alarms switched on, and O’Neil had personally made sure of all this before releasing his guards to attend the wedding. But be trusted no gadgets and few people; he did not release himself from duty.

The bride approached the far end. Jake Salomon waited there, with Alec Train at his side. Facing down the aisle were the Reverend Hugo White and Judge McCampbell, matching in dignity. Shorty was wearing a black frock coat, white shirt, string tie, and carried his Book; the Judge was in judicial robes.

(Boss, doesn't Jake look beautiful? But what is that getup?) (It's a cutaway, dearest.) (It's a museum piece.) (I suppose so. Jake probably hasn't worn it in thirty, forty years—or perhaps rented it from a theatrical costumer. I feel certain Alec bad to rent his. Doesn't Father Hugo look grand!) (Must be his preachin' clothes, Boss. Joe ought to paint him in *this,* even, if he never gets the pix he wants.) (Good idea, Eunice; we'll plant it with Gigi—and one thing may lead to another. I have hopes that seeing 'The Three Graces' will gentle him, too. As Hugo *wants* to pose… if he can convince himself that it's not sinful. Eunice, my knees are shaking. I'm not sure I can do it!) (Om Mani Padme Hum, baby sister. We had one hell of time getting him off the dime; don't go chicken now.) (Om Mani Padme Hum, Eunice—hold my hand, darling—don't let me faint.)

Joan Eunice stopped in front of judge and preacher, Winifred took her bouquet from her, stepped back to one side. Alec Train moved Jake into place beside Joan Eunice, placed himself to balance Winifred. The music stopped. Hugo lifted his eyes and said, "Let us pray." (Om Mani Padme Hum. You okay, twin?) (I'm all right now. Om Mani Padme Hum.)

When Hugo said, "Amen," Joe Branca slid in from the side, shot his first picture. Thereafter he moved around like a Chinese stagehand, disturbing no one and never moving at a crucial moment—but getting his shots.

Hugo opened his Book, did not look at it. "We read today from the Book of Psalms. It says here:

"'The Lord is my shepherd; I shall not want.

"He maketh me to lie down in green pastures;
He leadeth me beside the still waters.

"'He restoreth my soul;
He leadeth me in the paths of righteousness for His name's sake.

"'Yea, though I walk through the valley of the shadow of death, I will fear no evil……..

He closed his Book. "Brothers and Sisters, the Lord saw that Adam was lonely in the Garden of Eden and He said it is not good for man to live alone. So He created Eve to live with Adam. And He said to Adam, My son, you take care of this woman, you hear Me? You treat her right all the time, just like I was watching you every minute. Because I *am* watching you, every minute and every second. You cherish her and protect her like I tell you and you'll be too busy to get into anything wrongful, and she'll be a comfort to you all the days of your life."

He turned to Salomon. "Jacob Moshe, are you going to do that?"

"I will!"

The Reverend looked at the bride. "And the Lord said to Eve, My daughter, you got to cook for this man and wash his clothes and bring up his babies and not go running around when you should be home, and love him even when he's tired and bad-tempered and not fit to speak to, because men are like that and you must take the bad with the good—you hear Me, Eve?

"Joan Eunice, are you going to do that?"

"Yes, Father Hugo."

"Judge—"

"Jacob Moshe, does there exist any impediment under our laws and customs to you marrying this woman?"

"None."

"Joan Eunice, is there any reason in law or in your heart why you cannot marry this man?"

"There is none, Your Honor."

McCampbell spoke more loudly. "If any witness knows of any cause which would forbid me to bind these two in marriage, I command him to speak." (Eunice, if anyone even clears his throat, I'll—I'll—) (You'll keep quiet, Boss darling; that's what you'll do. Nobody here but our loving friends. Om Mani Padme Hum.) (Om Mani Padme Hum…)

"Jacob Moshe, will you love, honor, and cherish her?"

"I will."

"Joan Eunice, will you love, honor, and cherish him?"

"I will love, honor and *obey* him." (Huh? Boss you demon, you haven't the slightest intention of obeying!)

Salomon said, "Wait a moment! Judge, she switched the words! I don't expect that and I won't let her promise—"

"Order. YOU keep quiet, Jake; I'm not addressing *you.* Joan Eunice, is that what you wish to promise?"

"Yes, Your Honor." (Eunice, stay out of this. I know what I'm doing.)

"I must advise you that such a promise is not legally binding under the civil marriage contract of this State but I must warn you, too, that it is not a promise which should be lightly made in these circumstances."

"I know it, Your Honor." (Boss, you're out of your mind!) (Quite possibly. But it's all *right,* sweetheart. Jake is going to give us exactly the orders we will be humbly pleased to obey. Haven't I been right so far?) (Yes, but you keep scaring me. Suppose he tells us to keep our legs crossed? I've never been any good at *that.)* (He never will. Instead he'll be magnanimously pleased to humor our little follies—since we've promised to obey him. Relax, sweetheart—this is precisely the way my darling Agnes handled *me*...when I was not anything like as wise and tolerant as Jake is.)

“Let me hear you state your intention again.”

“I, Joan Eunice, do solemnly promise to love, honor, and obey Jacob Moshe—and I will, Your Honor, even if he backs out and won’t marry me. He doesn’t have to marry me. I’d be perfectly happy just to —”

“Quiet, Joan Eunice. That’s enough. Reverend, this is getting out of hand; I’m going to wrap it up with the bare legalities and you can plaster them with anything else they need in your closing prayer. All right?”

“Yes, Judge. They don’t need much prayer; they’re ready.”

“I hope you’re right. Jake, you heard this stubborn little, uh, lady. Are you willing to marry her anyhow?”

“Yes.”

“Jacob Moshe, do you take Joan Eunice to be your lawfully wedded wife?”

“I do!”

“Joan Eunice, do you take Jacob Moshe to be your lawfully wedded husband?”

“I do.”

“Uh, where’s the ring? Alec. Jake, take her left hand in your left. Now.”

“‘With this ring I thee wed.’”

“Under authority vested in me I pronounce you man and wife. Kiss her, Jake. Take it, Reverend.” (And *you* told *me* not to louse it up!) (I got us there, didn’t I? He’s ours. I mean, we’re his. Same thing.)

“Let us pray!”

26

On Luna, Kennedy Tunnel B, parelleling Kennedy Tunnel A between Luna City and the Apollo Industrial Complex, was completed and both tunnels were then made one-way, thereby quadrupling the potential traffic. The five-and ten-year projections caused the Commission to decide to go ahead at once with tunnels C and D. On the Hong Kong and New York Stock Exchanges Vacuum Industries, Ltd., Selenterprises, Pan Am, and Diana Transport all took sudden jumps against a generally sagging market. Mercury Newsletter (subsid of MercServ) sent destructaped messages by special couriers to their 7-star clients. Nine percent of these couriers failed to report back, which caused the managing director of MercServ to decide that a vacation at Las-Vegas-in-the-Sky would be good for his health even though there was no proof that Internal Defense agents had detained the couriers or solved the “destruct” combo. A source close to the President denied that there was anything more than seasonal unrest in any city in the country and denounced “irresponsible rumormongers.” CBS’s “Today’s Day with Dave Daly” was replaced by a motion picture with an explanation of technical difficulties. “Today’s Day” resumed the next day without Daly, who was—it was announced—on sick leave to recover from extreme fatigue. Miss Molly Maguire, the hottest sensie star of the private film industry, claimed the title of first woman in history to give birth to a child during a sky dive. The babe was safely landed exactly as planned by the midwife team diving with her, the event was filmed in stereosound and color from several angles, and the only casualty was a sprained ankle for Miss Maguire—she was able to hold a press conference thirty minutes after she landed.

Since plane flight had originated in, and sky dive had started over, Mexican soil, whereas the entire party except the plane had landed in Arizona, it was not clear what laws had been violated or whose, or what nationality the child was—as Miss Maguire’s citizenship was Pakistani, with Legal permanent residence in the States. The party surrendered voluntarily to the nearest U.S. immigration officer and Miss Maguire apologized most prettily on videocast for having reentered the country of her choice so informally through an inadvertent error in navigation by her pilot, plus a sudden gust of wind. They were released with a warning but the films were impounded—uselessly, as they seemed to show that the child was born, about fifty-fifty, in *both* countries, but factors of angle and parallax and identification of ground markings—in those film sequences in which the ground showed at all—make it impossible to be certain. Grove Press bought an option on the films, then entered suit to have them released, in the interest of justice.

A notorious sex-change case married her attorney but the newsworthy couple managed to leave for their honeymoon before issuance of their license was noted—a famous scoop snoop chased them to Canada, only to find that the couple he had traced down were a Dr. & Mrs. Garcia, members of the wedding but themselves of no news value. Mrs. Garcia smiled and let herself be photographed (she was quite photogenic) and was interviewed about the wedding; then the Garcias returned home.

Senator James “Jumping Joe” Jones of Arkansas charged that the drive to repeal the XXXIst Amendment permitting prayer in public schools was a plot by the Devil inspired Pope of Rome and his servile followers. The rebuilding of the Oklahoma State House was halted by labor trouble drummed up (it was alleged) by the underground “Equal Rights for Whites” Action Committee.

The contractor’s construction foreman said, “Any honk thinks he’s discriminated, he can take it to the hiring board and get a fair hearing. Trouble is these people they don’t *want* to work.”

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"Mr. and Mrs. MacKenzie" (Liberian passports) had the penthouse floor to themselves—three baths, four bedrooms, kitchen, dining room, bar-lounge, drawing room, lanai, garden, swimming pool, waterfall, fountain, garden bar-pantry, foyer, private lift, magnificent view of the yacht harbor, beaches, estuary, town, and mountains beyond.

But they were eccentric. Their rent included full hotel service but none of the hotel's staff had been on that level since their arrival. They were not seen at the casinos, nor on the beaches, nor were they known to make use of other attractions of the resort. They sometimes had room-service meals, but the table cart went only as far as the lift; their servants took it up.

It was rumored among the hotel staff that Mrs. MacKenzie liked to do her own cooking, but no one really knew—no one had seen her (save possibly from a copter) and few knew him by sight. Their servants had three suites on a lower floor. . . but were willing to discuss anything but their employers.

She came from the garden into the lounge. He looked up from his book. "Yes, dear? Too much sun? Or did that copter come back?"

"Neither. Copters don't worry me; I just turn over on my tummy so that they can't photograph my face. Jake darling, I want you to see something pretty."

"Drag it in here, I'm lazy."

"I can't dearest; it's down on the water. A boat of some odd sort, with the gayest, most colorful sails. You were in the Navy; you know about such things."

"I was in the Navy one hitch fifty years back, so I'm an expert already."

"Jacob, you always know everything. And it *is* pretty, and quite odd. Please, sir?"

"Your slightest wish, Madame." He got up and offered her his arm.

They stopped at the seaward rail. "Now which one? All those boats have colored sails. I haven't seen a suit of white sails since we got here —you'd think there was a law against it."

"That one. Oh, dear, they're putting down its sails. And it was so pretty a minute ago."

"'Dowsing her sails,' Eunice. If I'm going to be your resident expert, let me expert. When you lower sails suddenly, you 'dowse' them. Which this laddie is doing because he's standing in to anchor about—yes! There goes the hook. And a vessel is *always* 'she,' never 'it.' Boats and ships are female because they are beautiful, lovable, expensive—and unpredictable."

"Jake, you've always been able to predict what I'm going to do even before I know myself." (Twin, why tell a whopper like that? He knows better.) (He won't argue it, hon.) "But what is it?"

"Oh. It's a trimaran, a yacht with a triple hull. Can't say that I agree that she's pretty. A sloop with a triangular mains'l is my notion of beauty."

"Does look sort of squarish now. But swooping in with all its—sorry!— 'her' sails up, she was lovely." (Twin, ask Jake if he thinks there is any way we could go on it?) (On *'her,'* Eunice—not 'it.' Are you a sailor, hon?) (Never been on a boat in my life, Boss. But I'm getting an idea, maybe.)

(Maybe I have the same idea. Are you thinking about that talk with Jake when he pointed out a farm would mean even more staff and less safety than our house?) (I don't care who thought d it first, Boss—just make sure that *Jake* thinks of it first.) (I shall, dear—do you think I have to be told that a ship is 'she'? Or can't recognize a trimaran? The real question is: Do *you* get seasick? I used to—and it's miserable. But the fact that we haven't had the tiniest bit of morning sickness makes me think you might be immune to motion sickness.) (So 'let's operate and find out,' as Roberto says.)

"Oh, trimarans have their points, Eunice. You get a lot of boat for your money. Roomy. And they are almost impossible to turn over—safer than most small vessels. I just wouldn't award one a beauty prize."

"Jake, do you think you could get us invited aboard that one? She looks interesting."

"Oh, there's some way to swing it. I might start by talking with the manager. But, Eunice, you can't go aboard a private vessel with your features veiled; it would be rude. Your granddaughters did you no favor when they made you as recognizable as a video star."

"Jacob, a veil doesn't enter into it because I *never* want to meet *anyone* as 'Mrs. MacKenzie.' I'm Mrs. Jacob Moshe Salomon and proud of it—and that's the way I must *always* be introduced. Jake, I doubt if our marriage is news any longer; it can't matter much if I'm spotted."

"I suppose not. The copters might swarm a mite closer for a while and some would have pixsnoops aboard with telescopic lenses. But. I doubt if even your granddaughters are anxious to take a shot at you. If the snoops fret you, wear pants to sunbathe, and in the pool."

"The hell I will, it's our pool, Jacob. Anyhow, briefies can't conceal the fact that I'm pregnant, and the sooner that's in the news the less it will interest anyone later. Let them sneak a pic, then you have Doctor Bob confirm it—and it stops being news. No huhu, dear; I learned years ago that you can't 'get away from it all'—you just have to cope. Is it possible, on a boat of that sort, to have a swimming pool?"

"Not one that size. But I've seen trimarans much bigger than that one. Could be done, I suppose, since a trimaran can have so much deck space for its tonnage—I'd have to ask a naval architect. Why the interest, Lively Legs? Do you want me to buy you a yacht?"

"I don't know. But boats look like fun. Jake, I never had much fun in my life—my other life. I'm not sure how one goes about having fun—except that every day is a joy to me now. All that I'm sure of is that I want to do something utterly different this time. Not be a Hetty Green. And not the gay, mad whirl of 'society'—kark! I'd rather turn whore. Would *you* like a yacht, lake? Take me around the world and show me all those places you've seen and I never had time for?"

"You mean you didn't take time."

"Maybe it's the same thing. I do know that, if a man acquires too much money, presently it owns him instead of his owning it. Jake, I've been to Europe at least fifty times—yet I've never been inside the Louvre, never seen them change the Guard at Buckingham Palace. All I saw were hotels and boardrooms—and those are the same all over the globe. Would you care to repair my education, dearest? Show me Rio?—you say it's the most beautiful city in the world. The Parthenon by moonlight? The Taj at dawn?"

Jake said thoughtfully. "The trimaran is the favorite craft of the dropout."

"Excuse me? I missed something. 'Dropout'?"

"I don't mean the barefooted bums in the Abandoned Areas, Eunice, nor the ones skulking around the hills. It takes money to drop out by water. But people do. Millions have. Nobody knows how many because it has been subject to an 'exception' for years—the government does not want attention called to it; But take those yachts below us: I'll bet that at least one out of ten has registration papers for some 'flag of convenience' and the owner's passport is as phony as that of 'Mr. and Mrs. MacKenzie.' He has to be registered somewhere and carry some sort of passport, or the Coast Guard wherever he goes will give him a bad time, even impound his craft. But if he takes care of that minimum, he can dodge almost everything else—no income tax, no local taxes except when he buys something, nobody tries to force his kids into public schools, no real estate taxes, no politics—no violence in the streets. That last is the best part, with the cycle of riots swinging up again?'

"Then it *is* possible to 'get away from it all.'"

"Mmm, not quite. No matter how much fish he eats, he has to touch land occasionally. He can't play Vanderdecken; only a ghost ship can stay at sea forever, real ones have to be put up on the ways at intervals." Jake Salomon looked thoughtful. "But it's closer to that antithetical combination of 'peace' and 'freedom' than is possible on land. If it suits one. But, Eunice, I know what I would do—if I were young."

"What, Jake?"

"Look up there."

"Where, dear? I don't see anything."

"There."

"The Moon?"

"Right! Eunice, that's the only place with plenty of room and not too many people. Our last frontier—but an endless one. Anyone under the cut-off age should at least *try* to out-migrate."

"Are you serious, Jacob? Certainly space travel is scientifically interesting but I've never seen much use in it.

Oh, some 'fallout.' Videosatellites and so forth. New materials. But the Moon itself?—why, it doesn't even pay its own way."

"Eunice, what use is that baby in your belly?"

"I trust that you are joking, sir. I hope you are."

"Simmer down, Bulgy. Darling, a newborn baby is as useless a thing as one can imagine. It isn't even pretty—except to its doting parents. It does *not* pay its own way and it's unreasonably expensive. It takes twenty to thirty years for the investment to begin to pay off and in many—no, *most*—cases it never does pay off. Because it is much easier to support a child than it is to bring one up to amount to anything."

"Our baby will amount to something!"

"I feel sure that it will. But look around you; my generalization stands. But, Eunice, despite these shortcomings, a baby has a unique virtue. It is always the hope of our race. Its *only* h6pe."

She smiled. "Jacob, you're an exasperating man."

"I try to be, dear; it's good for your metabolism. Now look back up at the sky. *That's* a newborn baby, too. The best hope of our race; if *that* baby lives, the human race lives. If we let it die—and it is vulnerable for a few more years—the race dies, too. Oh, I don't mean H-bombs. We're faced with far greater dangers than H-bombs. We've reached an impasse; we can't go on the way we're headed—and we can't go back—and we're dying in our own poisons. That's why that little Lunar colony has *got* to survive. Because *we* can't. It isn't the threat of war, or crime in the streets, or corruption in high places, or pesticides, or smog, or 'education' that doesn't teach; those things are just symptoms of the underlying cancer. It's too many people. Not too many souls, or honks, or thirds—just. . . *too many.* Seven billion people, sitting in each other's laps, trying to take in each other's washing, pick each other's pockets. Too many. Nothing wrong with the individual in most cases—but collectively we're the Kilkenny Cats, unable to do anything but starve and fight and eat each other. Too many. So anyone who can ought to go to the Moon as fast as he can manage it."

"Jacob, in all the years I've known you I've never heard you talk this way."

"Why talk about a dream that has passed one by?

Eunice—Eunice-Johann, I mean—I was born twenty-five years later than you were. I grew up believing in space travel. Perhaps you did not?"

"No, I didn't, lake. When it came along, it struck me as interesting —but slightly presposterous."

"Whereas I was born enough later that it seemed as natural to me as automobiles. The big rockets were no surprise to my generation; we cut our teeth on Buck Rogers. Nevertheless I was born too soon. When Armstrong and Aldrin landed on Luna, I was pushing forty. When out-migration started, with a cut-off age of forty, I was too old; when they eased it to fortyfive, again I was too old—and when they raised it to fifty, I was *much* too old. I'm not kicking, dear; on a frontier every man-jack must pull his weight, and there is little use for an elderly lawyer."

He smiled down at her, and went on: "But, darling, if *you* wanted to out-migrate, I wouldn't try to dissuade you; I'd cheer you on."

"Jake!" (He can't get away from us that easily!) (You're darn tootin' he can't! I'll fix him.) "Jake my own and only, you can't get away from me that easily."

"Eunice, I am serious. I could die happy if I knew our baby was to be born on the Moon."

She sighed. "Jacob, I promised to obey you and I happily do so. But I *can't* go to the Moon—as an out-migrant. Because I'm even farther past the cut-off age than you are—the Supreme Court says so."

"That could be fixed."

"And raise an issue over my identity again? Jacob darling, I don't *want* to leave you. But"—she patted her belly and smiled—"if *he* wants to go to the Moon, we'll help, at the earliest age they'll take him. All right?"

He smiled and gently patted her slight bulge. "More than all right. Because I don't want his beautiful mother to go away for any reason. But a father should never stand in the way of his son."

"You don't. You aren't. You won't. You never would. Jacob Junior goes to the Moon when he's ready, but not *this* week. Let's talk about trimarans and *this* week. Jake, you know I want to close up our house—I'd sell it but nobody would buy it other than as land; it's a white elephant: But two things have bothered me. It has to be left garrisoned, or the Free People will break in despite all armor, and squat—then someday some judge grants them title on adverse possession."

Jake said, "Certainly. Historically, that's where all Land titles come from. Somebody standing on it, defending it, and saying, 'This is mine!' And lately the courts have been cutting down the period of adverse possession. Especially in city cores close to Abandoned Areas—and your house is both."

"I know, dear—but I don't want to surrender it to squatters. Darn it, that house cost me more than nine million, not counting taxes and upkeep. The other worry is what to do about our in-house staff. I'm sick of being a feudal lord—erase and correct; lady, now." (Erase and correct.—'tart' now.) (Certainly, Eunice, but I haven't been too tartish since we got married.) (Not much opportunity, twin—but you're getting restless. Huh?) *(Who* is getting restless? Never mind, twin sister, the day will come. But we won't rub darling Jake's nose in it.) "I can't just let them go; some have been with me twenty-odd years. But if we buy a yacht—and live in it—I think I have a solution to both problems."

"So?"

"I think so. It's an idea I got during our wedding. Thinking about that farm."

"Well! Wench, you were supposed to be thinking about *me."*

"I was, dear. But I seem to be able to think about several things at once, since my rejuvenation. Better blood supply, possibly." (My help, you mean, Boss.) (Yes, dear. Same thing.) "Our banquet hall, dressed as a chapel, looked more like a church than it has ever looked like a place to eat. So here's my notion. Give our house to Shorty. Give it to his church in a trust setup, with Alec, maybe, as a trustee, and also Judge Mac if he'll do it. Arrange the trust for perpetual maintenance, with ample funds and a good salary for Hugo as pastor. Is this practical?"

"No difficulty, Eunice, if you really want to unload the house—"

"I do. If you consent."

"It's your house, dear, and I decided a long time ago that being a householder in a big city was more headache than pleasure. We could still keep my little house in Safe Harbor—no fear of squatters—if you want a pied-a-terre. We won't do it quite as you described it but you can give your house to Shorty if you wish to. I'll get Alec to work out a plan. But I wonder if Shorty can cope with it? Squatters might still move in on him—or rioters break in and wreck the place."

"Oh. That fits in with the other half-of my idea: What to do about our too-faithful retainers. Offer any with twenty years or close to it retirement at full pay. Encourage the in-house guards and maintenance men to work for the trust, same pay—because you're right; if we hand an illit a place like that, with no one to keep him straight, he'll soon have a shell, not a church. Father Hugo is the best bodyguard I've ever seen. . . but he's a child of God and unsophisticated about management. He needs a practical, cynical man as his in-house steward. Cunningham. Or O'Neil. Or Mentone.

Alec can work it out. Jake, I want to hand over to Shorty a complete plant, subsidized and maintained, so that he can put his mind solely on preaching and praying and soul-saving. I think you know why." (I think *I* know why, Boss—but any of the four would have killed that mugger.)

(We've managed to thank the other three, beloved—and will go on thanking them. Father Hugo is a special case.)

"Eunice, do you really think Hugo saves souls?"

"I haven't the slightest idea, Jacob; I don't know Who is in charge of this world. Even if what Hugo does has no more real meaning than our 'prayer meetings,' it's still worthwhile. Darling, this is a screwed-up world. Back in the days of the Model-T Ford the United States was a fine country, brimming with hope. But today the best thing most young people can do is stay home, sit still, not get involved, and chant Om Mani Padme Hum—and it *is* the best thing most of them are capable of doing, the world being what it is now; it's far better than dropping out or turning on with drugs. When meditation and a meaningless prayer are better than most action open to them, then what Hugo has to offer is good in the same way. Even if his theology is a hundred percent wrong. But I don't think Father Hugo is any more mistaken than the most learned theologian and he might be closer to the truth. Jacob, I don't think *anyone* knows Who's in charge."

"Just wondered, my dear. Sometimes pregnant women get taken with fancies."

"I'm pregnant down *here,* dearest; up *here* is still old Johann. Protects me somewhat, I think." (Oh, you think so, huh? Boss, if you didn't have me to keep you straight, you'd be as filled with vapors as a cat trying to have kittens in a wastebasket! Remember, I've been through this before.) (I know you have, darling, and that's why I'm not afraid—otherwise I'd be scared silly.) (No worse than having a tooth drilled, Boss; we're built for this. Roomy.) "Jake, did I ever tell you about the time I went into politics?"

"Didn't know you ever had and can't imagine it, Eunice."

"Imagine it for 'Johann,' not for 'Eunice.' Forty years back I let them persuade me that it was my 'duty.' I was easy to persuade—but I realize now that my attraction to the Party was that I could pay for my campaign in a district they were going to lose anyhow. But I learned things, Jake. Learned that being a businessman has nothing to do with being a politician and even less to do with being a statesman. They *clobbered* me, Jake!—and I've never been tempted to save the world since. Maybe someone can save this addled planet but *I* don't know how and now I *know* that I don't know. That's something even if it isn't much. Jake, I could worry about Smith Enterprises when I was running it I can worry now about sixty-odd people and make sure they're each all right insofar as money can insure it. But no one can solve things for seven billion people; they won't let you. You go nutty with frustration if you try. Nor can you do much for three hundred million, not when the real problem—as you pointed out—is the very fact that there *are* three hundred million of them. I can't see *any* solution short of compulsory sterilization—and the solution strikes me as worse than the disease. Licensing without sterilization hasn't solved it."

Her husband shook his head. "And won't, Eunice. Licensing is a joke; it has more loopholes than the tax laws. Compulsory methods inevitably involve political tests—no, thanks, I prefer the Four Horsemen. And the only effect that voluntary contraception has ever had has been to change the ratio, unfavorably, between the productive and the parasites; the population climbs anyhow. If we were as hard-boiled about weeding the culls as China is, it might not work that way. But we aren't, we never have been—and I'm not sure I'd like it if we were."

"Then there isn't any solution."

"Oh, there is, I mentioned it. The Four Horsemen. They never sleep, they're never off duty. And *there.*" He pointed at the Moon. "Eunice, I suspect that our race's tragedy has been played endless times. It may be that an intelligent race has to expand right up to its disaster point to achieve what is needed to break out of its planet and reach for the stars. It may always—or almost always—be a photo finish, with the outcome uncertain to the last moment, just as it is with us. It may take endless wars and unbearable population pressure to force-feed a technology to the point where it can cope with space. In the universe, space travel may be the normal birth pangs of an otherwise dying race. A test. Some races pass, some fail."

She shivered. "Gruesome."

"Yes. And no way to talk to a gal in what used to be called a 'delicate condition.' Sorry, darling."

"A gruesome thought at any time, Jake. I'm *not* in a 'delicate condition.' I'm doing what this body is designed for. Building a baby. Feels *good.* Fm enjoying it."

"So it appears and that makes me happy. But, Eunice, before you shut down your house and move into a yacht, I must mention one thing. I think you must put it off until you've had this baby."

"Why, Jake? No morning sickness. I doubt if seasickness will be a problem."

"Because you *are* in a delicate condition, no matter how good it feels. I'd feel happier if you were never more than five minutes from medical attention. You'd be okay at home; Bob and Winnie are there. You're okay here—a hotel resident physician and a good one—believe me, I checked on him—and a modern hospital over there, in sight. But at *sea?* Suppose you had a seven-month preemie? We'd lose the baby and probably you, too. No, Eunice."

"Oh." (Eunice, any point in telling him that you carried your first one full term and no trouble?) (No, twin. How are you going to prove it? If you mention me *now,* you're just a female with pregnancy delusions. Boss, this is one argument you're going to lose. So concede it at once. Fall back and find another route.) "Jacob, I can't argue. I lost my first wife with her first baby; I know it can happen. But what would you think of this? Could you persuade Roberto and Winnie to come with us? Then not go very far to sea. If we were anchored where that trimaran is, that hospital could be just as close... and Roberto would be aboard. This hotel physician must be all right as you have checked on him but I would rather have Roberto. He knows me inside and out. And never mind wisecracks; I mean as my physician. Or does the fact that you know that Roberto has slept with me make him unacceptable to you as my O.B. man?" (Whew! Twin, that was a foul blow.) (Oh, pooh, Eunice, I'm just confusing the issue.)

Jake Salomon cocked one eyebrow and grinned down at her. "Little one, you can't embarrass me that easily. If Bob is the baby-cotcher you want, I'll do my best to persuade him. . . as long as *you* don't mind Bob's wife being around."

"Pooh to you, sir. If you and Winnie want to stroll down memory's lane, I'll tuck you in and kiss you goodnight. She's certain to console you while I'm benched—and you'll need it."

"Thereby giving you carte blanche later. A woman almost always falls in love with the doctor who delivers her

first baby."

"Pooh again. I've loved Roberto a long time and you know it. Are you jealous, Jacob?"

"No. Just curious. I suppose that injunction you laid on me on our wedding day still applies? It occurs to me that, with respect to the day you mentioned, Bob had opportunity before, during, and after."

"Is that all it takes, dear? Just opportunity?" (Just about, twin!) She grinned at him and wrinkled her nose. "Sweetheart, all I will admit is the possibility that Roberto's name might be in the hat. But it could have been Finchley. Or Hubert. Or dear Judge Mac. You and Alec were awfully busy that day—but I think you'll find that Mac adjourned court at *his* usual hour...and I wasn't home until much later."

"Is that a confession?"

"Well, there might be a confession in there *somewhere."*

"Quit pulling my leg, my love. There are only two sorts of wives. Those who cheat, and those who have their husbands' friendly cooperation, in which case-"

"Isn't there a third sort?"

"Eh? Oh, you mean *faithful* wives. Oh, certainly. So I've heard. But in my twenty years of general practice, much of it divorce cases, I encountered so few of *that* sort—none I felt certain about—that I cannot venture an opinion. Wives technically faithful form so small a part of the sample that I can't evaluate them. People being what they are, a rational man should be satisfied if his meals are on time and his dignity not affronted. What I was trying to say is, that if you ever want my friendly cooperation, don't assault my credibility with a wet firecracker such as Hubert. Judge Mac I could believe. Tom Finchley is a very masculine person too, and one who bathes regularly—even though he sometimes abuses the sacred English tongue in a manner which causes me to flinch. Bob Garcia shows your good taste. But, *please,* darling, don't expect me to believe that Hubert's name could be in the hat." (Twin, Jake knows us too well. Better not try to fool him too much.) (Ever hear of a 'red herring,' love?)

"Very well, sir; I'll take Hubert's name out of the hat. That still leaves endless possibilities, does it not? And I will try always to respect your dignity. But, speaking of meals on time, I had better get busy or your dinner will be late."

"Why not just cold cuts and such when we feel like it and heat a tin of soup? I was thinking of a nap."

"Shall I join you, sir?"

"I said 'nap,' sweetheart. Sleep. A nap with you is not restful. Old Señor Jacob needs-a Siesta."

"Yes, sir. May I finish quickly what I was saying? We can take care of anyone who wants to retire, or wants another job, or wishes to stay on with Hugo. But I am hoping that some of them might come with us as crew in our trimaran or whatever. Especially if they've been to sea before and know something about it."

"Finchley does. He was sent up for smuggling or some such."

"I was hoping that all of my mobiles except Hugo—and Rockford, if you want him—might decide to sail with us. They are all strong and able, and not much family problem. Fred's wife split some months back, Dabrowski has no children at home, and Olga might be willing to be a chambermaid—stewardess, I should say—if she likes to sail; she's insisted on doing most of the cleaning and such here even though she doesn't have to. As for the Finchleys, Tom is just what we need—It wasn't smuggling drugs; they were running arms into Central America as I recall, and he was first mate—and Hester Finchley is a good cook. Eve is no problem, she already knows how to read and write and do arithmetic—and if they tell her about this, she'll be teasing her parents to take the job; all kids want to travel. Dear? If you are going in, would you see who's on guard at the lift, and ask him to dig out Finchley? He may know something about trimarans."

"I think he has the watch now. Shall I chuck you a robe?"

"Am I getting too much sun? Doesn't feel so; I've been using the lotion. *Oh!* You mean for Thomas the Tom Cat? But, dear, we've been swimming with him and his family every day. As well as with Fred and the Dabrowskis."

"I don't give a hoot, dear, but I thought you were anxious to preserve appearances."

"Seems silly when I swim and sunbathe with all of them. As for appearances, didn't I see you patting Hester's bottom in the pool yesterday? Or was it Wednesday?"

"It was Tuesday and it wasn't Hester, it was her daughter Eve. Just practicing to be a sex maniac, Beautiful—nothing serious. So don't be jealous."

"Beloved, the day I'm jealous of a little girl I want you to beat me. Not spank me. Beat some sense into me, woodshed style. But it was Hester, not her daughter. My gallant, wonderful Jacob would never bother a little-girl."

"Perhaps not but that little girl bothers the hell out of *me.* Furthermore she does it on purpose."

"Poor Jake. Even thirteen-year-olds won't leave him alone. I'm not surprised; I didn't leave him alone, either."

"In this case, she's thirteen-going-on-twenty-one. I'll make you a deal, dearest. I'll carefully avoid chaperoning you with her father if you will be *very* careful *always* to chaperon me with his daughter."

"Yes, sir. To hear is to obey, my lord—though I am chagrined that you think I might need chaperoning—or not chaperoning, as the case may be-with one of our servants. But how about Hester? Must I always be sure to be in sight when she's around?"

"Mind your own business, wench. Uh, no need to be fanatical about it. I want them all to feel easy when they come up here to swim as I don't want *any* of our household ever to swim in that sewage down there. You know the coliform count in that beautiful surf. That was the deal we offered—stay off the beaches entirely and they could swim in our pool at any time. So we sacrifice a little privacy but don't have one of them picking up amebiasis or such and spreading it through our whole family. It evens out—and they are all nice people...even our precocious Eve who's doing her best to see if she can upset me."

"I haven't minded, Jacob; it is not good to be too much alone. But we were speaking of Hester's bottom. Shapely, huh?"

"Hon, you're as bad as Eve. I'm going to go and say ten Money Hums and catch that siesta. I'll send out Tom. Don't let me sleep more than an hour. Kiss."

She turned her face up. As he left she dived in, swam a couple of lengths and climbed out, was waiting, staring down at the yacht harbor when Finchley arrived. "You sent for me, Ma'am?"

She smiled. "Thomas Cattus, that's not my name when we're alone."

He glanced over his shoulder, said almost soundlessly, "Pussy Cat, the Boss is awake."

"So he is. But he's gone to his room and closed the door. Siesta. He'll be asleep in almost no time. But I don't mean to scare you, Thomas Cattus dear. Come here to the rail, want to show you something. Have you done any sailing? Or has it all been power?"

"Sailing? Oh, sure, I grew up on Chesapeake Bay. Cat boats and such."

"Ever sail a trimaran?"

"Never skippered one. Crewed in one when I was sixteen."

"What do you think of them?"

"Depends on what for. Okay if you want something more like a houseboat than a racer. But I wouldn't have one without an auxiliary engine. In tight waters they can be as awkward as two people in a bathtub."

"Ever try it in a bathtub, Thomas Cattus?'

"Sure, who hasn't? Okay for a giggle with a few drinks aboard. But a bed is better. Or a floor."

"How about a sunbathing mat?"

"Pussy Cat, you *enjoy* scaring me. You gonna get us caught, yet."

"Rhetorical question, dear; I wasn't twisting your arm. Tell me, do you think Hester and Jake have ever made it?"

"Practically certain they never." He grinned at her. "But I can tell you something."

"Then do. Pretty please. Pretty Tom Cat with the muscles."

"Not Hester's fault they haven't. I know. She told me bang, one night, while we were at it. Said the Boss could have it any time he reached for it. Hester thinks the Boss is God's right hand."

"Well, so do I. But it doesn't keep me from appreciating my Thomas Cat. How would you feel about it? Jake and Hester."

"Me?" He looked astonished. "Look, Pussy Cat, you 'know if anybody does I don't see no sense in putting a fence around a broad. Just makes her want to jump it. I'd ruther hold open the gate for her, she wants to."

"I said, 'How would *you* feel about it, dear?'"

"Oh." Her driver-guard looked thoughtful. "Wouldn't get my nose out of joint. The Boss is numero uno, da kine. Rozzer?"

"Roz."

"He knocked up a broad, he'd pay. No huhu. But no huhu anyhow; we were only licensed for one and Hester had herself fixed, right after she had Eve. Good broad I married—didn't split when I dropped one, took me back when I was paroled. Oh, she shacked, sure—but just with her boss, she worked. Didn't peddle it. Or kept it to herself, didn't tell me. Hester and the Boss? Sure, if they want to. Told her so, bang. Have fun, I told her."

"Mmm...Thomas Cattus, let's give them a chance. Or six chances. Might be insurance for us, later."

He nodded thoughtfully. "Smart thinking, Pussy Cat. But how? And would he? The Boss?"

"I feel sure he would if he knew it was safe. Private, I mean; Jake has courage under fire, just as you have, dear.

Main problem is to get Eve out from underfoot. Mmm... you could take me shopping or such and I could ask Hester to get Mr. Salomon's lunch. . . then as an afterthought I could invite Eve to come with me. Hmm?"

"With either Fred or Ski up here? No good, Pussy Cat."

"All it needs is a time when you have the guard. Jake won't send for your relief; at most he'll lock open the lift door. He doesn't worry about *him,* he worries about guarding *me."*

"Mmm. . . roz. Could work if he wants it. You're filling out, Pussy Cat. Tits prettier than ever."

"Joe says a woman gets prettier as she bigs out. But I don't think many men think so."

"Hester looked awful cute, clear up to the last minute. And on you it looks good, too. Uh. . . you're sure the Boss is asleep?"

"Certain enough that I'm willing to risk it. But I *don't* mean to scare you, dear. Want to wait and see how our plans for Jake and

Hester work out?"

"Uh...oh, hell, we might all be dead by then."

"Right here?"

"Uh, copter might cruise by."

"Let's go into the lanai."

27

Harvard University Corporation voted to withhold all funds until the Student Government selected a new university president. Both of the rival student governments and the faculty senate sought court relief from this "reckless and irresponsible action." CONS BEST COPS SEZ FUZZ PREZ—the General Secretary of the Private Police, Guards, and Security Drivers (AFL) at its annual banquet congratulated Milwaukee on joining the growing list of municipalities that had abolished the "clean record" rule in hiring peace officers. "The outstanding success of parolees and probationers as licensed private security officers is finally teaching the politicians to 'hunt ducks where the ducks are.' The Bible says 'To catch a thief you set a thief,' don't it? Who knows more about hoods than a hood? Give a man incentives to keep his nose clean and put him on work he understands and you can count on him in the crunch. My Mom kept telling me that when I was just a punk knockin' over candy stores. Besides, like the Sec'etary of the Treasury told us earlier tonight, *'Look* what it's done for the economy!' In this *great* republic—"

"Today's Day" newscast interviewed a midwife who claimed to have delivered Miss Molly Maguire of child ten days *before* her sensational twonation sky dive. The sensie star promptly sued newcaster, station, and videonet.

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The Lunar Commission made permanent its trial policy of screening out-migration solely on physical and mental examination with no percentage points either plus or minus from past record. The Director said: "In a new world a man must start with a clean slate. No other policy is practical." Under sharp questioning he admitted that contributions for unsubsidized vocations remained unchanged but insisted that this was a fiscal matter controlled by the condominium governments and in no way affected the basic principle.

HOT WORDS IN CAP-PUN DEBATE: "'—does not deter!' So he tells us. Is the Senator from the great State of Puerto Rico aware that our major problem is recidivism? Can the Senator cite *one case* in which a killer committed still another murder *after* he was executed?"

"*Whee!* Joe, see how she runs before the wind!"

"Swell."

"Gets me clear down in my gizzard," Joan Eunice said happily. "Let's go aft. Winnie's got the wheel and be sure to be impressed; she's proud as can be that Tom has let her go on the watch list. She's a natural sailor, salt water in her veins. Gigi, what's the matter, dear? You aren't smiling. Feeling queasy?"

"A little, maybe."

"I must admit that the 'Pussy Cat' does have a rocking-horse motion when she's running free. Love it myself but some don't. Never mind, dear; Doctor Roberto has a surefire pill for tipsy tummy. I'll fetch you one and in five minutes the motion won't bother you and you'll be hungry as a horse."

"I don't take pills, Joan. I'm all right."

"You aren't all right and when we go below you won't want lunch and Hester told me she was fixing something special in your honor. Look, darling, Roberto feeds these pills to Winnie—one before breakfast every day and he had her on them for morning sickness before they came aboard. He's a careful doctor, hon; he wouldn't give them to his own wife if they could hurt. Nobody ever gets a pill of any sort in the 'Pussy Cat' unless our ship's surgeon dispenses it. Pretty please? Huh?"

"Gigi."

"Yes, Joe."

"Take pill."

"Yes, Joe. Thanks, Joan, I do feel fluttery. I guess you think I'm silly but I've seen so many kids hooked on pills I'm scared of 'em."

"I don't like pills but I take 'em when Doctor Roberto says to. He's got me on supplements right now for this little monster inside me. You stay up here in the breeze, dear, while I find Roberto."

"'Sailing, sailing, over the bounding main!' "Mr. Jacob Salomon bellowed, as he swung up into the control console.

"Morning. Ski."

"Good morning, Captain. On port tack with basic course one five —"

"I see what it is. Beat it down below and get your breakfast." Salomon slid into the saddle and glanced at the compass as he took the wheel. "We didn't leave you anything but you can scrounge ship's biscuit out of the lifeboat."

"Hester won't let me starve, sir."

"Nor Olga. Now beat it." Jake eyed his sails, decided he could point a touch higher, reached out with his right hand to the running rigging controls, kept tapping a switch to shorten his main sheet, his eye on her mainsail, while he handled the wheel by touch till he had her settled down on a lighter tack. Then he adjusted his jibe and relaxed.

"Good morning, Captain."

"Tom, save that for witnesses. It's all very well for Mrs. Salomon to want me dubbed with an honorary title but we all know who's the sailing master by our ship's papers. You're skipper and have the responsibility; I'm just the owner and unlicensed first mate. Eunice ought not to do it—but we have to cater to the little darlings. Speaking of little darlings, how are your two this fine morning? Didn't see Eve at breakfast."

"She ate before you got up, sir. Seen her and told her she's goin' to have to wear pants from now on, except in the pool or near it."

"Don't see why she should, the other gals don't unless it happens to suit them. I just don't want her swarming into my lap, naked as an eel and twice as lively. Gives me delusions of youth."

"I'll clamp down on her, sir."

"Tom, I *don't* want the child 'clamped down on.' I want everybody to enjoy this cruise—one big happy family. Ask Hester to tell her quietly that old Uncle Jake loves her but doesn't like to be pawed. A lie, that last, but an official lie. Speaking of the pool, how's the filter?"

"Filter's okay, was just a clog in makeup feed line. Kelp. No huhu."

"Has the surgeon tested the water?"

"Safe."

"That's good. Tom, when I was a kid, striking for quartermaster third, we used to swim off the boat booms and thought nothing of it. But today even the Pacific Ocean can't soak up all the crud they dump into it. You can put swimming call on the bull horn and take the Skull-and-Crossbones sign off the pool."

"Aye, aye, sir."

"Half a second while I make eight bells." Jake reached out with his left hand, picked the last touchplate of a row of eight; the quadruple double *Bong!* marking the beginning of the forenoon watch rang through the vessel. He then picked still another touchplate and sounded swimming call himself. "Tom, if a man didn't have to eat or sleep, he could sail this wagon around the world by himself. Three men could do it easily. Even two."

"Maybe."

"You sound doubtful, Tom."

"Even one man could, sir—if nothin' never went wrong. Something always does."

"I stand corrected. And with two pregnant women aboard—three if you don't keep a close eye on Eve—"

"Oh, Dr. Garcia got her on the junior pill. I don't take no chances, sir."

"So? Tom, my respect for you—high—has just increased. She's safe from her Uncle Jacob. . . but I make no promises about any other male in this bucket. There is something in salt air that hikes up the metabolism. And there is much truth in the old saw about 'when they're big enough, they're old enough and nothing can be done about it.' Better to roll with the punch."

"She is and she has and we did—I had this here talk with the Doc. Hester and me don't expect no more from Eve different than we did ourselves. Anybody knows when a broad starts getting broad she's goin' to land on her back."

"Yes, everybody knows it—yet most parents don't believe it when it comes to their own kids. I know, I had a family law practice for years. Tom, you're such an all-around sensible man I'm surprised that you ever got in trouble."

His sailing master shrugged. "Comes o' believing what I was told, sir. 'M chief officer of this rust bucket and Captain says keep my lip tight and see nothin' and we make ten times as much on one voyage. All fixed. Only he got smart and hung onto the bribe money hisself. Thought he could run it in the dark. You'da thought he'd never heard of radar. *Wham.* Coast Guard." Finchley shrugged again. "No complaints, sir, I was a fool. But two years and four months and I get this much better job driving for Mr. Smithas-was. Smellin' like a rose. Not so trusting now, is all. Don't trust too much, you don't get your ass burned."

"Yet you don't seem cynical. Tom, I think the major problem in growing up is to become sophisticated without becoming cynical."

"That's over my head, Counselor. I just think people are okay, mostly—even that silly skipper—if you don't strain 'em more than they're built for. Like that piece of standing rigging there. Rated three tons. Pro'ly take five and no trouble. *Don't* put six tons on it."

"We've said the same thing, I think, but your illustration is vivid. Beat it, Tom. If there's no work to be done, grab sack time. Or pool time."

"Yes, sir. I want to inspect the starboard hull; it's making extra water. Pump can handle it but I want to know *why.*" He touched his cap and swung down off the platform.

Jake cocked his own cap against the sun, relaxed and started to sing:

"'A sailor's wife a sailor's star shall be!

"'Yo ho, we go, across the sea!

"'A sailor's wife a sailor's star shall be,

"'A sailor's wife his star. . . shall *be!"*

His wife climbed up behind him and kissed the back of his neck. "Is that for me, dear? Or for 'Nancy Lee'?"

"Always for you, my darling. Besides, I can't remember the part with 'Nancy Lee' in it."

"I wonder if you ever remember a girl's name. You call all of us 'darling.'

"Merely because it's true. But *you* are the only one I call *'my darling.'* And I do remember your name—it's 'Salomon.'"

"Jacob, you must have been a prime menace when you were a bluejacket. With that Hebrew blarney you could talk your way into anything. Then out of it, with no trouble."

"No, Ma'am, I was a sweet, innocent lad. I simply followed the ancient code of the sea: 'When the hook's up, all bills are paid.'

"Leaving little Jewish bastards behind in every port...and thereby improving the breed. How about Gigi? Going to improve the breed there?" She dug her thumb into a spot over his hip where his slight pot bulged out from sitting. "Some dish, eh, keed?"

"Madam," he said haughtily, "I do not know what you are talking about."

"'Tell that to the Marines, the old sailors won't believe you.' Jacob my love, I feel certain that you know the second Mrs. Branca almost as well as you knew the first. But I have no wish to prove it; I simply offer my congratulations. Gigi is a darling, I love her to pieces. I was not throwing asparagas." (Tell him she squeals, twin.) (I will not!)

"Woman, you get your exercise jumping at conclusions."

(Then tell him it happened where Troy Avenue crosses Gay Street, near the Square—a neighborhood *you* know well, twin.) (Eunice, I want Jacob to feel easy about such things—I am *not* trying to harpoon him.) (You aren't equipped to, Joan; Jake is the original Captain Ahab.) (Eunice, you have a dirty mind.) *(Whose* mind? I don't have one. Don't need one.)

Mrs. Salomon dropped the subject, opened her sextant case, took it out.

"Will you give me a time tick, darling?"

"Are you going to shoot the defenseless Sun?"

"I'm going to do better than a Sun sight, dearest. The Sun, the upper limb of the Moon, and—if I'm lucky and can spot it again—Venus, for a three-star fix. Want to bet on how small a triangle I get?"

"Even money on fifty miles for the short side."

"Beast. Brute. Cad. And me an expectant mother. I was more than ten times that close yesterday evening; I'm getting the hang of it. I *could* cheat—I could get a point fix by querying Point Loma, then fudge it on the chart.”

“Eunice, why this passion to emulate Bowditch? One would think that radio and satellites and the like had never been invented.”

“It’s fun, darling. I’m going to hit that nav exam for a flat four-oh and get my limited license. After I’ve unloaded this pup in the hopper and we no longer have to stick to coastal water, I’m going to do a ‘Day’s Work’ every day all the way to Hawaii. Betcha I make landfall at Hilo under three miles. Oh, it’s not necessary, dear—but what if it turned out to be? Suppose war broke out and everything went silent? Might help to have a celestial navigator aboard. Tom admits that he’s hardly taken a sight since he got his mate’s ticket.”

“If he ever took one. Yes, it could be useful, my darling because if war broke out in earnest and we were at sea, we would not go on to Hilo. We would make a sharp left turn and go south and get lost. The Marquesas. Or farther south, the farther the better. That way our kid might live through it. Easter Island if you think you can hit it.”

“Jacob, by then I’ll split it right down the middle. Or any island you pick. Sweetheart, I wasn’t playing games when I asked for the whole old-fashioned works—all the charts, all the pilots, three key-wind chronometers and a hack, this lovely sextant and a twin like it in case I drop this one . .and please note that I *always* put the lanyard around my neck. All the H.O.s and the Almanac. I’m no use as a deckhand now—so I decided to become a *real* navigator. Just in case, just in case.”

“Minm. My darling, I hope we never have to run for it, but have *you* noticed that I keep this vessel fully stocked at all times even though we anchor almost every night and can shop for supplies any time we wish?”

“I’ve noticed, sir.”

“Nor is it an accident that I gave Doctor Bob an unlimited budget and saw to it that he equipped for any conceivable obstetrical problem.”

“I did not notice that, quite.”

“You weren’t meant to, nor was Winnie—no need to give you gals something to worry about. But since you have been doing the same sort of planning ahead, I decided to tell you. Bob used the time the ‘Pussy Cat’ was being refitted in taking a refresher in O.B. And he spent twenty times more money on our sick bay than one would expect for a seagoing yacht.”

“I’m pleased to hear it, sir. With such foresight, money can do almost anything. Except turn back the clock.”

“It even did *that* in your case, beloved.”

“No, Jacob. It gave me added years . . . and a wonderful body. . . and *you.* But it did *not* turn back the clock. I’m still almost a century old. I can never *feel* young the way I once did—because I'm *not.* Not the way Winnie is young. Or Gigi. Jacob, I have learned that I don't *want* be young."

"Eh? Are you unhappy, dear?"

"Not at all! I have the best of two worlds. A youthful, vital body that makes every breath a sensuous joy...a century of rich experience, with the wisdom—if that is the right word—that age brings. The calmness. The long perspective. Winnie and Gigi still suffer the storms of youth, which I don't have and don't want. I've forgotten the last time I had a tranquilizer but I think it was the day they unstrapped me. Jacob, I'm a better wife for you than either of those two lovely girls could be; I'm older than you are, I've been where you are now and understand it. I'm not boasting, dear; it's simply true. Nor would *I* be happy married to a young man—I'd have to spend my time trying desperately not to upset his delicate, youthful, unstable balance. We're good for each other, Jacob."

"I know that you are good for me, my darling."

"I know I am. But sometimes you have trouble remembering that I am *not* truly 'Eunice,' but 'Johann.'" (Hey! What is this, Boss? We're *both.)* (Yes, beloved, always—but Jake needs to be reminded of Johann— because all he ever *sees* is Eunice.) "For example, Jacob, a while ago you thought I was twitting you about Gigi."

"'Thought,' hell—you *were."*

"No, dear. Close your eyes and forget that I have Eunice's voice. Think back at least ten years when I was still in passable health. If your older friend Johann had twigged that you had kicked the feet out from under some young and pretty woman, would he have twitted you?"

"Huh? Hell, yes. Johann would have slipped me the needle and broken it off."

"Would I have, Jacob? Did I *ever?"*

"You never caught me."

"So? I might have congratulated you, Jacob, just as I did today—had I felt that I could do so without offending you. But I would *not* have twitted 'you. Do you recall a young woman whose first name was —or is—Marian? Last name had the initial 'H'—your pet name for her, 'Maid Marian.'"

"How in the *hell?"*

"Steady, darling—you let your helm fall off. That was sixteen years ago, just before I asked you to spend all your time on my affairs. So I ordered a fresh snoopsheet on you before I put the deal up to you. May I say that the fact that you had dealt so carefully with *her* reputation was a strong factor in my deciding that *I* could trust you with anything, too?—including my power of attorney, which you have held ever since and never abused. May I add, too, that I *wanted* to congratulate you on both your good taste and your success as a Lothario?—for of course I then had to have *her* snooped, too, and her husband as welt, before I could entrust my grisly secrets to you. But—also of course—I could not say a word."

"I didn't think any part of that ever showed."

"Please, Jacob. Do you recall that you once told Eunice that you could hire a man to photograph her in her own bath—and she would never know it? As we've noted, money can do almost anything that is physically possible. Part of that snoop report was a photograph of you and Marian in what you lawyers call a 'compromising position.'

"Good God! What did you do with it?"

"Burned it. Hated to; it was a good picture and Marian looked awfully pretty—and you looked all right yourself, you lovable old goat. Then I sent for the head of the snoop firm and told him I wanted the negative and *all* prints *now* and no nonsense—and if it ever turned out that even one print had escaped me, I would break him. Get his license, bankrupt him, put him in jail. Were you or Marian ever embarrassed by such a picture? Blackmail, or anything?"

"No. Not me—and I'm morally certain she wasn't, either."

"I guess he believed me. Jacob, do you still think I was twitting you about Gigi? Or was I congratulating you?"

"Uh . . . maybe neither. Maybe trying to wring a confession out of me. It's no go, wench."

"Please, Jacob. Stipulating that I was mistaken but sincere—which was it? Now that you know how I behaved about Marian."

"Eunice—Johann! You should have been a lawyer. Subject to that stipulation, I concede that it must have been a sincere congratulation. But one I can't accept, I haven't earned it. Now, damn it, tell me how you came by this delusion."

"Yes, dear. But not this minute; there comes Gigi herself." Joan put her sextant back into its box. "Sights will have to wait anyhow; this reach has taken us in so close I've lost my horizon for the Sun. Hi, Gigi, you pretty, pretty thing! Give us a kiss. Just me, Jake is on watch;"

"I'm not all that busy. Eunice, hold the wheel." He accepted a kiss while still seated, then took the helm back from his wife.

Joan said, "Been swimming, dear?"

"Uh, yes. Joan Eunice, could I see you a minute? Mr. Salomon, would you excuse us?"

"Not by that moniker I won't; you'll have to call me 'Jake.'

"Stuff it, dear," his wife said cheerfully. "She wants a hen conference. Come along, dear. Captain, try to keep us afloat."

They found a spot in the lee of the lifeboat. "Got troubles, dear?"

(Eunice, are we about to have a beef over Jake? Surely not!) (Can't be, twin. That affair started over two weeks ago . . . and both Gigi and Joe were relaxed about it from scratch. Which means just what we thought: It actually is a return engagement—and Jake lied to protect a lady's reputation. Predictable.)

"Well, sort of," admitted Mrs. Branca. "Uh, might as well say it bang. Next time you anchor and send a boat in

Joe and I want off."

"Oh, dear! What's wrong, Gigi? I did so hope you would stay at least the month we talked about—then as much longer as you wished."

"Well . . . we did expect to. But I got this seasickness problem and Joe—well, he *has* done some painting but… the light's not right; it's too bright and. . ." She trailed off. (Twin, those are excuses.) (Jake?) (Can't be, I tell you. You've got to make her come clean.)

"Gigi."

"Yes, Joan?"

"Look at me. You haven't missed a meal since Roberto put you on the seasick pill. If Joe prefers floodlights to sunlight, we'll clear out the dining saloon and it can be his studio. Put your arms around me and tell me what's *really* wrong."

"Uh—Joan, the ocean's just too darn *big!"* Gigi blinked tears and said, "I guess you think I'm a baby."

"No. It's big. Biggest ocean in the world. Some people don't like oceans. I do. That doesn't mean *you* have to."

"Well, I *thought* I would like it. I mean, you hear about it. What a wonderful thing it is to make an ocean trip. But it *scares* me. Uh, it scares Joe, too; he just doesn't say so. Joan Eunice, you've been awful good to us—but this isn't our scene. Joe and I, we aren't fish—we're alley cats. Always lived in cities. It's too *quiet* here. Especially at night. At night the quiet is so loud it wakes me up."

Joan kissed her. "All right, darling. I knew you weren't having quite the happy time I wanted you to have. Didn't know why. I'll have to visit you at your place—where it's nice for all of us. *I* don't like the city, it scares *me.* But I like it, loads, in your studio—as long as I don't have to go outside. But is that *all* that's wrong? Has anyone upset you? Or Joe?"

"Oh, no! Everybody's been swell."

"You called Jake 'Mr. Salomon.'"

"That was because I was upset—knowing I had to tell you."

"Then you both feel easy with Jake? I know he's impressive, he even impresses *me.* Nothing uptight there?"

"Oh, not a bit! Uh; knowing we were walking out on Jake upset us as much as knowing we were walking out on you."

"Then may Jake and I *both* come visit you? Stay a few days?" (Will she duck this, Eunice?) (Why ask me, Boss? You just asked *her.)*

Mrs. Branca dropped her eyes, then looked up and said bluntly, "You mean a Quartet? All the way?"

"All the way."

"Well, *we* would, I guess you know that. But how about Jake?"

"Well? How about Jake, Gigi? *You* tell *me."*

"Uh, Jake is relaxed with *us.* But he's a little uptight when you're around, seems like. Joan Eunice, you caught on. Didn't you? Or you wouldn't have braced me for a Quartet."

"I caught on, dear. It's all *right.* No huhu."

"I *told* Jake I thought you had. He said, Oh, no, impossible, you slept like a log."

"I do except that I've reached the point in pregnancy where I sometimes get up to pee. But that wasn't it—Jake could be most anywhere if he's not in bed and I never check on him. What I spotted wasn't proof. Just that a man has a way of looking at a woman he's sure of. And vice versa. Nothing anybody could object to. Just 'not uptight' describes it as well as any. I'm not even mildly jealous of Jake, it simply pleased me. Knowing how sweet you can be for a man—remember, I used to *be* a man—"

"I know. But I don't really believe it."

"I have to believe it and can't ever forget it. Knowing you, I felt smugly pleased for my husband. Tell me, have you made a Three Circle with Jake? Money Hum?"

"Oh, yes, always!"

"Next time—at your studio—it will be a Four Circle. Then our Quartet will harmonize perfectly and no one will ever be uptight again."

"Yes. *Yes!"*

"In the meantime you're not going to have to put up with this great big scary ocean even one more night. We won't anchor, I'll have Tom call for a copter—say for right after lunch. It'll put you down at La Jolla International and you'll jet straight home—copter pilot will see to things for you and Tom will have your reservations—and you'll be home and flashing a pack in your own studio before you can say 'Time Zone.' Feel better?"

"Uh, I feel like a heel but—yes, I do. Oh, golly, Joan, I'm so *homesick!"*

"You'll be home today. I'm going to find Tom and have him get things rolling. Then I'll go tell Jake—and tell him why, he'll understand—and relieve him at the wheel, and tell him he can find you in your stateroom. If you have the nerve of a mouse, little alley cat from the big city, you'll bolt the door and tell him goodbye properly. Uh—Troy? Or twosome?"

"Oh. Troy. Of course."

"Then find Joe and tell him. Ten minutes, maybe fifteen. But Gigi—that painting of Eve. I must buy it."

"No, we'll give it to you."

"We settled that long ago. Joe can give me anything else, but not paintings. I must pay for it because I want it to be a present from me to my husband. Now kiss me and run, dear."

The *Pussy Cat* with her sails dowsed rocked gently on a light sea. Fifty feet above her tallest stick a copter hovered while again lowering a passenger-freight basket. Tom Finchley stood far aft and coached the copter pilot with hand signals. Mr. and Mrs. Branca had already disappeared into the copter cabin, having gone up on the first trip, but their baggage was on the weather deck, waiting to be loaded.

There was quite a pile. Joan had urged them to fetch along "everything you could possibly need for a month or longer—for painting especially, as there will be lots of bodies around—and any of them will model. . . or I'll have them lashed to a grating and flogged, then make them walk the plank. Joe darling, you can do *big* romantic pix if you wish—pirate scenes with lush victims and leering scoundrels. Fun?"

She had sent the invitation by MercServ with tickets and an air-freight order and instructions to MercServ to supply a reader for the message. Joe had taken her literally; he seemed to have cleared out his studio——flood lamps, spots, easels, a heavy roll of canvas, stretchers, cameras, photo equipment and supplies, assorted impedimenta—and one bag each for clothes and personal articles. Seeing what Joe had fetched, Joan was glad that she had ordered a Brink's to get them to the jetport and was careful today to have one meet them at the far end.

The basket took up a load of baggage, came back for the last. Fred and Della's sixteen-year-old, Hank, an eager but untrained deckhand, were loading taking turns keeping the basket from spinning while the other placed items in it.

Soon they had it alt in but one large case, when a gust of wind disturbed the uneasy balance between copter and surface craft. The basket swung wildly; Fred let go and danced aside while Hank went fiat to the deck to keep from being hit by it.

Fred recovered and again braced the basket, now ten feet farther forward. Joan Eunice grabbed the handle of the last case, then used both hands. "Whew! I think Joe packed the anchor in this one."

Jake yelled, *"Eunice!* Don't lift that! You want to miscarry?" He grabbed it from her, started for the basket.

Hank was on his feet again. "Here, Captain, I'll get that!"

"Out of my way, son." Jake trudged to the basket, found it too high, got the case into his arms, then up onto one shoulder, placed it carefully inside—and collapsed. Joan rushed to him.

Back aft, Tom Finchley noted when the last item went in, looked up at the copter's pilot and signaled "Hoist away!" and added the hand signal for "That's all—on your way!"

Then he looked down—and started to run.

Joan sat down on the deck, took Jake's head and shoulders to her.

"Jake, Jake darling!" (Eunice! Help me!)

Fred said, "I'll get the Doc!" and rushed for a companionway. The boy stood helplessly by. Salomon gave a long bubbling sigh and all his sphincters relaxed. (Eunice! Where is he?) (Boss, I can't find him!) (You've *got* to find him! He can't be far.) (What in hell?) (Here he is, here he is! *Jake!)* (Eunice, what happened? Somebody slammed me in the side of the head with a brick.) (Does it hurt, darling?) (Of course it doesn't hurt, Boss, not now. It *can't.* Welcome aboard, Melancholy Jacques you lovin' old bastard! Oh, boy, am I glad to see you!) (Yes, welcome home, darling. My darling. Our darling.) (Eunice?) (No, *I'm* Eunice, Jock. Old cocky Jock. That's Joan. Or Johann. Or Boss. No, Joan is 'Boss' only to me; you'd better call her 'Joan.' Look,

shipmates, let's get this Troy straight before we get tangled up in our feet. Joan, you call our husband 'Jake' same as always—while I'll call him 'Jock' as I used to. Jock, you call Boss either 'Joan' or 'Johann' as suits you-and she's I either 'Joan' or 'Boss' to me. And I'm always—'Eunice' to either of you. Got it straight?)

(I'm confused.) (No huhu, Jock beloved, never any huhu again. You'll get used to it, I did. Joan has to drive while we'll sit back and neck and give advice. Tell him, Joan.) (Yes, Jake. You have us both now. Forever.) (Om Mani Padme Hum'.) (Om Mani Padme Hum. Join us, Jake. A Thanksgiving.) (Om Mani Padme Hum!) "Om Mani Padme Hum."

"Joan. Let me have him, dear." Dr. Garcia was bending over her.

She shook her head. "I'll hold him, Roberto." (Boss! Knock off the female kark and let dear Doctor work.) (Yes, Eunice. Hang on tight to Jake.) (Never fear, dear; I shall. Jock, can you see now? Out of Joan's eyes. We're going to move.) (Of course I can see. Who's that ugly old wreck? *Me.!)* (Of course not; that's just something we don't need any longer. Look away, Joan; you're upsetting Jock.)

"Fred, take her below. Hank, help him. Tom, I need Winnie. Get her."

Dr. Garcia found Joan in the saloon. She was lying down, a wet cloth over her forehead, with Olga Dabrowski seated I by her. Tom Finchley followed the doctor in, his face solemn. The Doctor said nothing, took Joan's wrist, glanced at his watch.

Then he said, “It’s bad news, Joan.”

“I know, Roberto. He was gone before I came down here. (He’s *not* gone, Boss. Don’t put it that way. Jock is *dead,* as dead as I am. But not *gone.* Right, Jock?) (I think you’re splitting hairs Lively Legs—) (‘Lively Legs!’ You haven’t called me that in a *long* tune.) (How about last night?) (You called *Joan* that; you didn’t call *me* that, not last night.) (Will you two keep quiet? Or at least whisper? I’ve got to cope.)

(Sorry, Boss. Jock darling, whisper to me *very* quietly. Is Joan better at it than I am?) (Eunice, I can still hear you—and you have your tenses mixed.) (Boss darling, there are no tenses in the eternal Now. I asked Jock a question—and he’s too chicken to answer.) (I certainly am!) (Oh, well. With my equipment and my coaching. Joan is probably adequate by now. Plus a good start—you won’t believe this, Jock, but Boss has the *dirtiest* mind. That lady-lady act is just an act.) (Twin, quit trying to get my goat. I’m busy, Roberto is worried about us.) (Sorry, twin. I’ll be good.)

“Eunice, I want to make one thing clear. It would not have made any difference if it had happened ashore with all possible life-support at hand. Even with Dr. Hedrick at hand. Oh, we could have kept him alive—as a vegetable. Nothing else.”

“Jake never wanted that, Robert; I’ve heard him say so, emphatically. He never approved of the way *I* was kept alive.”

“The two cases are a hundred and eighty degrees apart, Joan. Your body was worn out but your brain was in good-shape. In Jake’s case—well, I gave him that physical before we put to sea; his body was in fine shape, for his age. But I know what the autopsy will show: a massive rupture of a large blood vessel in his brain; he died at once. A cerebral ‘accident’ we call it, because it’s unpredictable. If it’s any consolation, he didn’t suffer.”

(‘Didn’t suffer,’ eh? Try it, Bob—it felt like a kick in the head by a mule. But you’re right, it was just one blow. Not even a headache, afterward.) (About the same for me, Jock darling, when I got it. Boss had a much rougher time, for *years.)* (What if I had? It’s over now. Darlings, *please* keep quiet—we’ll talk when they let us alone.)

“Doctor, there will be no autopsy.”

“Joan, there should be an autopsy for your peace of mind.”

“It won’t bring Jake back and he wouldn’t like it. As for my ‘peace of mind,’ I have just one question. Was it. . . too much honeymoon?”

“Oh. No, just too many years. Joan, it wasn’t even from lifting that heavy load. Let me explain this sort of

‘accident.’ It’s like a weak spot in an old-fashioned pneumatic tire, worn almost through and ready to blow out—then *anything* can trigger it. Jake could simply have stood up, and keeled over—today, tomorrow, last week. Oh, it *can* happen during intercourse, you often hear men say they want to die 'while tearing off one last load.' But it's a horrible experience for the woman involved—and probably isn't a last orgasm anyhow, more likely he's chopped down just before it.

"Far better the way Jake got it, still virile—I assume—" (You know darn well Jock was 'still virile.' Ask your wife. Ask Gigi. Hell, ask *anybody.)* (Eunice, was my behavior *that* blatant?) (Not blatant at all, Jock you lovin' old goat. But news gets around.)

"—or I should say 'I know' as I was his physician. Jake was happy and strong and virile—and then he was through, like snipping a film. Don't worry about 'too much honeymoon.' Getting married may have saved Jake years of hopeless senility. Or it may have chopped two weeks off his life as a small price for much happiness. But more likely it *extended* his life; a happy man functions better. Forget it, dear. When my time comes I hope I get it the way Jake got it—quickly, and happy to the end."

"Then there is no point in an autopsy, Roberto. Will you sign a death certificate?"

"Well . . . when death takes place not in a hospital and not under medical care, it is customary to notify the authorities and—"

"Roberto!"

"Yes, Joan?"

"You're *not* going to do that to Jake. Notify *whom?* Somebody in Washington? We're in Federal waters, and the coroner of San Diego County has no proper interest in this death. But he'd be likely to try to milk it for publicity, once he finds out who Jake is, who *I* am—and I *shan't* let that be done with Jake's death. Jake *was* under medical care —*yours!* You're our ship's surgeon. It might be that you saw him die. Think about it." (Joan, don't ask Bob to lie. It doesn't matter if some coroner has his M.E. chop me up.) (I shan't permit it! Besides, Jake, I'm pregnant. Do you want me to have to go through *that?* Crowds and questions and pulling and hauling and sleepless nights?) (Mmm. . . tell him to make it an airtight lie, dear.) (Boss is a stubborn bitch, Jock— but she's usually right.)

"Hmm—" Dr. Garcia took off his stethoscope, put it aside. "Now that you mention it, there was still some heart action after I reached him. Lacking means to determine the instant of brain failure, I am forced to take cessation of heart action as the moment of death." (That boy would make a good witness, girls—come to think about it, he *did* make a good witness at the identity hearings.)

"In that case, Doctor, it seems to me that the circumstances are not open to question—and you may be sure that I will spend any amount of money to keep anyone from turning Jake's death into a circus at any later time. I would like you to certify death and the circumstances and mail a copy to whatever *Federal* authority should be notified—when next we touch shore. No copy elsewhere, we have no permanent residence other than this vessel. Oh, mail a copy to Alec Train; he has Jake's will, he'll need one for probate. And be sure to supply Captain Finchley with a duplicate original for the log."

"All right, Joan, since that's the way you want it. And I agree: Here we have a natural death and there is no point in letting bureaucrats poke around in it. But—right now I want to give you something to make you sleep. Nothing much, just a heavy dose of tranquilizer."

"Roberto, what was my pulse?"

"That's none of a patient's business, Joan."

"It was seventy-two, dead on normal—I counted my heart beats during that thirty seconds from your first glance at your watch until you let go my wrist. I need no tranquilizers."

"Joan, your heart action should be higher than normal—under the circumstances."

"Then possibly I need a stimulant, not a tranquilizer. Roberto, you sometimes forget—even though you have been through the whole thing with me—that I am *not* a normal patient. Not a young bride subject to hysteria. Underneath I am a very old man, almost three times your age, dear, and I've seen everything and no shock can truly be a shock to me. Death is an old friend; I know him well. I lived with him, ate with him, slept with him; to meet him again does not frighten me—death is as necessary as birth, as happy in its own way."

She smiled. "My pulse is normal because I'm happy—happy that my beloved Jake met death so easily and happily. Oh, I'll go to my cabin and lie down; I usually nap during the heat of the afternoon. But how about Eve?"

"Eh?"

"Have you done anything about *her?* She's young, she's probably never seen death before. She almost certainly needs a tranquilizer—not I."

"Uh. . . Joan, I've been busy. But— Olga. Will you find Winnie and tell her I said that Eve was to have a minimum dose of 'Tranquille'?"

"Yes, Doctor." Mrs. Dabrowski left.

"Now, young lady, I'll take you to the cabin."

"Just a moment, Doctor. Captain, will you get way on with both sails and auxiliary, and make course for the nearest point of the seventy-five-mile limit? I want us to be in international waters before sundown."

"Aye aye, Ma'am. That would be about west by south, maybe basic course two-six-oh. I'll plot it."

"Good. Then pass the word, quietly, that burial services will be at sundown."

"Joan!"

"Roberto, do you think I would turn *Jake* over to an *undertaker?* Taxidermists! He wanted to die like his ancestors; I shall bury him like his ancestors—his dear body untouched and returned home before the sun sets."

"'To every thing there is a season, and a time to every purpose under the heaven: A time to be born, and a time to die-'

Joan paused in her reading. The Sun was an orange-red circle almost touching the horizon. On a grating at the rail, steadied by Fred and the Doctor, Jake's body waited, sewed into canvas, with ballast weights at the feet. (A primitive rite, Johann.) (Jake, if you don't like it, I'll stop.) (Jock, you should be respectful; this is a funeral.) (It's *my* funeral, isn't it? Do I have to pull a long face for my own funeral? Johann, I *do* like it. I respect symbols, primitive symbols especially. Thank you for doing this—and thank you most of all for not letting my carcass fall into the hands of licensed ghouls.) (Just wanted to be sure, Jake. I'd better go on; I've marked several more passages.)

(Go on, Johann. Just don't try to pray me into Heaven.) (I shan't, Jake beloved. We three will face whatever comes, together.) (Right, Boss. Jock knows it.)

"'All go unto one place; all are of the dust, and all turn to dust again. Who knoweth the spirit of man...?'

"'Two are better than one. . . . For if they fall, the one will lift up his fellow: but woe to him that is alone when he falleth; for he hath not another to help him up. Again, if two lie together, then they have heat: but how can one be warm alone?'" (Boss, that reminds me. Do we have to sleep alone tonight?) (Danm it, Eunice, don't you *ever* think of anything else?) (Come off it, Boss. What else is worth thinking about? Stocks, bonds, and other securities? I've been telling Jock about your discovery—that sex is more intense for a woman than for a man. He doesn't believe it. But he's eager to find out.)

(Jake, are you *that* eager? I intended to show respect for your memory.) (I appreciate the thought, Johann. But you needn't carry it to extremes. I can't see why you should mourn me when I'm still here. Uh, tell me—is it *really* better?) (Let him judge for himself, Boss—whether it's better to spread Eunice . . or to *be* Eunice. A more scientific comparison than you have been able to make.) (Quit talking like a kinsey, Eunice. All right, partners; I'll think over the changes. But I'll be damned if I'll make a disgraceful spectacle out of us tonight. Not *this* night. It's got to be discreet—or no game.)

"And if one prevail against him, two shall withstand him; and a three-fold cord is not quickly broken.'"

(Boss, I like that. This makes up for the funeral I never had. Not even a memorial service.) (But you did have a memorial service, Lively Legs) (I *did?* Who was there?)

(Just me, dear. I hired a little chapel and an organist. I read a couple of poems you used to like. Some flowers. Nothing much.) (Jock, I'm dreadfully touched. Boss! He really *does* love me. Doesn't he?) (He does, darling—we both do.) (I wish I'd been there, Jock.) (I didn't know where you *were,* dearest. Maybe just as well, you're not very well behaved at funerals.) (Oh, pooh all over you, you dirty old ghost—nobody can hear me.) (Careful whom you call a 'ghost', Lively Legs; it might slop over onto you. Let Joan get through with this and splash it.)

"'Whatsoever thy hand findeth to do, do it with all thy might—'

'—for thy days are few and they are numbered—'

'—man goeth to his long home.'

'The silver cord is loosed, the golden bowl is broken.'

From the deep we came, let the body of our brother Jacob now be returned to the deep."

Joan closed the Book; Fred and Dr. Garcia lifted the end of the grating; the body fell into the water, disappeared.

She turned away, handed the Book to Mrs. Dabrowski. "Here, Olga. Thank you."

"Joan, that was beautiful. I don't see how you did it."

"Wipe your eyes, Olga; farewells must never be sad—and Jake was ready to go. I knew my husband well, Olga; I knew what he wanted, it was not hard."

She pressed Olga's hand and turned away. "Winnie! Stop that. Stop it at once. Jake does not want you to cry." (What makes you think so, Johann? I feel flattered by having a lovely little creature like Winifred weep over me.) (Oh, pipe down, Jake. You were the star of the show, now stop taking bows. Talk to Eunice.) Joan took the smaller woman in her arms. "You mustn't, Winnie. Really you mustn't. Think of your baby."

Winnie bawled against her shoulder. "Joan, don't you miss him at all?"

"But, darling, how can I miss Jake when he has never left me? The Jewel is *still* in the Lotus, and always will be. Eternal Now."

"I guess so—but I just can't *stand* it!"

Dear Doctor, maybe? He'll be giving Winnie a sleeping pill, surest thing.) (Not Roberto, Eunice. Under his aggressive atheism he's got a touch of what he was brought up on, he'd be shocked. Some other night.) "Roberto, you had better take care of Winnie."

"I will—but are *you* all right?"

"You know I am. I have a prescription for you, however."

"All right. It won't hurt you to take a real knocker-outer tonight. Say phenobarb."

"Let's *not* say 'phenobarb.' My prescription is for Winnie. Get her to eat something. Then sit with her and recite the Money Hum for at least a half hour. Then take her to bed and hold her in your arms and let her sleep. And *you* sleep, sir; you've had a rough day, too."

"All right. Do you want to join us in saying them? We could come to the cabin—then you could go straight to bed. I've learned that it's better than barbiturates."

"Doctor, if you wish, you may come to my cabin at nine o'clock tomorrow morning—and kick me out of bed if I'm not up. But I will be. Don't go there any sooner than that. Tonight I shall recite that hypnotic prayer. With Jake. He'll be able to hear me…whether you think so or not."

"Joan, I have no wish to attack anyone's faith."

"You haven't, dear. I appreciate your solicitude. When I need it, I will draw on it—freely. But now you take care *of* Winnie." (Boss, how about Fred? No one to dodge. Jock, you'll be right in the middle. Lucky Adolf. But Fred won't know it.) (Eunice, you're out of your pointy little head. We almost scared Fred to death once before, just by being *us.* Before we got him gentled. Look at him, he's worse off than Winnie. With nobody to console him. But *we* can't console him, not this night.)

"Captain."

"Yes, Ma'am?"

"Let's bust up this wake. People should not stand around moping. Meal hours have become disorganized; can Hester throw together some cold supper quickly? Perhaps with volunteer help? I'd volunteer but I have something to do." (Oho! The Tom Cat. Jock, this is going to be fun.) (Lively Legs, is there a man in this vessel you gals haven't spread for?) (Oh, sure, Jock honey. Hank. He's got his eye on Eve and thinks we're an old hag. And now that her Uncle Jock has left her, Eve might trip him.) (Now that I'm dead, I regret having resisted that delicious little jailbait. Wouldn't have cost me more than a million to buy my way out of trouble—and I had a rich wife.) (If you two lechers will shut up a moment, I'll set you straight about something. *Not* Thomas Cattus. Certainly not before the midwatch and could be later with this wind against us. Captain Tom Finchley is going to be busy skippering.) "Captain, I want you to get way on and set basic course for San Clemente Island anchorage."

"Yes, Ma'am." He trailed after her, and added softly, "I better start calling *you* 'Captain' now. Set an example."

She stopped. They were sufficiently alone that she could speak privately by lowering her voice. "Tom Cat."

"Yes?"

"Don't call me 'Captain'—you are Captain until I've passed my tests. Then we'll see. And don't call me 'Ma'am.' I'm either 'Mrs. Salomon' or 'Joan,' depending on the company, just as before. But in private I'm still your 'Pussy Cat'. I hope I am."

"Well...okay."

"Let's hear you say it."

"Pussy Cat. Brave little Pussy Cat. Puss, you surprise me more, longer I know you."

"That's better. Torn Cat, Jake knew all along about your tomcatting with me." (Oh, what a lie! Eunice, she *never* told me—and I suspected only once and decided I was mistaken.) (I know, Jock. Boss is a deceitful one and not at; all truthful and besides she tells fibs even to *me.)*

"He *did?"*

"Yes, Thomas Cattus. But Jake Salomon was a true gentleman and saw only what he was expected to see. He never teased me about my little follies. Simply indulged me. But he didn't tell on himself, either. Do you know if he ever made it with Hester?" (Now see here, Johann —) (Pipe~ down, Jock; I've wondered, too.)

"Uh. . . hell, Pussy, all men are alike, all after the same thing."

"And all women are alike, we've all got it. Well?"

"Hester spread for him first chance we gave 'em. But she didn't *tell* me. Ashamed. Had to catch 'em at it, then twist her arm."

"Surely you didn't hurt her?"

"No, no, Puss, I don't rough a broad, never. Didn't catch 'em, not to hurt, neither. Backed out fast—then *asked* later. Told her I knew for certain, so how about coming clean, was all. She did. She hadn't told me—because of *you."*

"Oh. I trust you then told her about me?"

Her sailing master looked horrified. "Pussy, you think I'm out o' my frimpin' *head?* Look, I like what you got, just fine. But I ain't foolish. I don't rat on broads. If I did, you'd be last on the list. Believe."

"Tell Hester if you wish, dear; it can't matter now. Then at some later time, she would not be surprised if she found me doing what widows so often do." ('They don't tell, they don't yell, they rarely swell—and they're grateful as hell.') (Jock, you're a dirty old ghost.) "Well, let's set our course. What ETA, Tom Cat? If it's later than midnight, I'll relieve you for the midwatch."

"You will like hell, Ma'am—Pussy Cat. You sack in a full night, you need it. I'll put Fred on the wheel now and Hank on lookout—and I'll drag a corking mat back near the helm and catch some sack drill till we get close in. Pussy Cat, you've got to *promise* me you'll stay in your cabin. Not go wandering around, I'll think you're meaning to jump overboard."

"Is that an order, Captain?"

"Uh—yes, damn it, that's an order!"

"Aye aye, sir. It won't be necessary to check on me; I'll be in my cabin, door locked, and I will be asleep. I promise not to jump overboard earlier than *tomorrow* night."

"Pussy Cat, you wouldn't jump? Would you?"

"With Jake's baby inside me? Captain, I do have a concept of duty. Until I have this baby, my life is not my own. I not only must *not* suicide—I would not in any case—but I must also keep calm and happy and healthy and not risk so much as a dirty drinking glass. So don't worry about me. Good night, Tom." She headed for the cabin.

(Nothing doing at that shop tonight, partners—we're faced with nobility. I think Anton is our best bet.) (The Passionate Pole! Jock darling, I'm not sure your heart can stand it.) (Fortunately, my dears, my old pump no longer has to stand anything—and the one you turned over to Joan, Eunice, is a Swiss watch among tickers. Doesn't race even when *she* is racing. But you know that.) (Quit chattering, you two. Either of you have any idea how to get Olga out of the way?)

(Push her overboard?) (Eunice!) (Can't I joke, Boss? I like Olga, she's a nice girl.) (Too nice, that's the problem. Not a tart like you, or me—or Hester.) (Hrrrmph!) (Jake, you're not in court, dear. The subject is tail. Mine. Ours, I mean.) (Johann, I simply wanted to say that, if you took our problem directly to Mrs. Dabrowski, you might find her sympathetic. *I* always found her so.)

(Jake! Are you implying that you've had *Olga?* I don't believe it.) (I don't either, Jock. If you had said 'Eve' I would have boggled—but would have believed you. But *Olga?* Hell, she wears a panty even in the pool.) (Which comes off very easily—in private.)

(Eunice, I think he means it. Well, I'll be *damned!* You and I are pikers. 'Me' at's off 'to the Duke.' All right, Jake—tell us how to go about it.) (About what? Getting her out of the way? Just ask her, she's very sympathetic—and felt my death more than you wenches have.) (Jock, that's not fair. We felt it…but we're overjoyed that you decided to stay anyhow.)

(Thank you, my dears. Conversely, if you would like to invite her in—) (Do you mean a Troy?) (I understand that such is the current argot, Eunice; in my youth we called it something else. But wouldn't it be more of a Pentagon? Five?)

(The word is 'Star' today, Jock. But let me give you the first rule of happy ghosting. You must never, never, *never* admit that you are here, nor tease Joan to admit it. Because she might get groused and do so. Whereupon Joan would wind up in a shrink factory—with us along—and there go our happy games. Look, you've been married to Joan quite a while now and jumping her even longer—did you *ever* suspect that *I* was present, too?) (Not once.) (You see? Don't admit it and they leave us alone.)

(Eunice, Jake would never let on. But now about Olga—Jake, did you ever teach her Om Mani?) (No.) (Boss, I begin to see. We've taught it to Anton, Jock. Is Olga limber enough to sit in Lotus?) (Lively Legs, Mrs. Dabrowski is limber enough for *anything.)* (That does it, Joan. Olga will join in, even if she thinks it's heathen—tonight she will. For you. And there is no easier way to get a party peeled down and rolling than by forming a Circle. You've done it again and again.) (As I recall, dears, Joan even used it on *me.* When it was hardly necessary. Okay, let's find the Dabrowskis.)

28

APPOINTMENTS OPEN—FEDERAL GS-l9 Assistant Welfare Field Operative (Learner-Visitor) Literacy requirement C. Brown Belt or higher gives 10% preference. Veteran's preference, parolee's preference, relevant-experience preference all semi-cumulative. Sec local Civil Service or Welfare office for pre-examinations and salary formulas. Latter based on standard scale plus field cost-of-living factor and hazardous area rating, cumulative.

In a compromise vote today the Society for Rational Astrology accepted a "grandfather clause" in the licensing bill before the Nebraska Legislature. The Committee on Agriculture & Mechanical Arts then voted the amended bill "Do Pass" by 7 to 2—tantamount to passage in the state's unicameral legislature. The Protective Association of Intuitive Astrologers called it "the greatest setback for science since Galileo." The Lunar Commission announced that the Colonies are now 102% self-sufficient in foodstuffs but added that the ten-year-plan would continue in order to increase out-migration potential. MAY-DECEMBER ROMANCE LOSES. . . at sea in their honeymoon yacht. The young widow remained in seclusion....

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(Get a Fellow, Della! Rozzer?)

"—door for processing. Pleasure meeting you, Mrs. Garcia; good luck, Doctor. Next applicant! Step lively, sit down over there—your husband not with you? Or is it 'Miss'?"

"I am a widow, Mr. Barnes."

"So? We don't get many widows, nor does the Commission encourage them. Out-migration is not an escape for emotional problems. Such as bereavement. Nor do we accept applicants so advanced in pregnancy unless there are overriding advantages to the Commission, not the applicant. Take the couple who went through just before you. She's pregnant—but he is a medical doctor, one of the top categories for subsidized out-migration. So I passed her. Might have passed her on her own; she's a nurse. But unless you have such a special qualification—"

"I know, sir. Dr. Garcia is my personal physician."

"Eh? Even if I accept you, that is no guarantee that he would still be *your* physician on the Moon. Unlikely, in fact, unless, by coincidence—"

"Mr. Barnes, you have my out-migration proposal in front of you. It has been prepared with great care by my attorney. It might save time to glance through it."

"All in good time. You would be surprised at how many people come in here without having the slightest idea of what they are up against. They seem to assume that the Commission is *anxious* to have them. Nothing could be farther from the truth. Nineteen out of twenty who sit down in that chair I do not permit to go on through the processing door. I make it a practice to get rid of the more obvious time-wasters quickly. Uh, Salomon, Eunice.' Mrs. Salomon, I want to know first—Mrs. *'Salomon'?"*

'Mrs. Jacob Moshe Salomon,' maiden name 'Joan Eunice Smith.'"

"Your face *did* look somewhat familiar but your features, uh—"

"—are chubby now. Yes. I've gained twenty-six pounds—which Dr. Garcia finds satisfactory for my height, build, and date of impregnation."

"That brings up other problems. A woman is often mistaken as to the date—and first babies are notoriously in a hurry to arrive. Our Lunar transports aren't planned for new infants, nor for childbirth. I want you to realize the hazards."

"I know them. Need we go into this?"

"I must be the judge of that."

"Mr. Barnes, my doctor is satisfied that I know the exact date of impregnation and— Is all of this confo?"

"Mmm. I'll put it this way. None of it is privileged. I am a lawyer but not *your* lawyer. I hear more intimate details from applicants than you can imagine but I haven't time to waste on gossip."

"I am glad to hear that, Mr. Barnes...as l would be *much* displeased if what I am about to tell you were to become a matter of gossip."

"Hmmph. I think I felt a chill breeze. Are you trying to impress me with your importance? Don't bother; applicants are all the same size once they come in here. Your money doesn't mean a thing."

"Was my manner unfriendly? I'm sorry."

"Well— Let's stick to the business at hand. A lawyer in the Lunar Commission's Civil Service—a job with no squeeze, believe me—doesn't often find himself dealing with rich people. But it makes no difference; if you don't want to be frank with the Commission, that's your problem. But I won't approve an applicant's proposal until *I* am satisfied about it. *All* about it. Now you implied that you had something pertinent to tell me which you class as 'confo.' I don't accept your restriction, Now...do you talk? Or shall we terminate this interview?"

"You leave me no option, sir. This is not a first baby I am carrying, so no 'first baby' hazard exits. If the 'Goddard' lifts on schedule, I have every reason to expect to have my baby on the Moon. Dr. Garcia is not worried about the timing and neither am I."

"So? This brings up other problems. This earlier child—does he, or she, affect your estate?"

"No. That is why this *must* be treated as confo. I did not have that earlier baby."

"Eh? You lost me. Better clarify that."

"Please, Mr. Barnes. I am a sex-change and a brain transplant. Surely you know it—good heavens, the whole world knows it. The first baby this body gave birth to was before that time. It is the reputation of my *donor* I wish to protect, not mine. The child was illegitimate, and common as that is these days—no longer a legal concept m most states and the very word almost obsolete—so great is my gratitude to the sweet and gracious lady who formerly lived in this body, I would be most unhappy were I to be the cause of any tarnish on her memory."

(Boss, you know I don't give a kark.) (Let her handle it, Eunice; this petty bureaucrat can gum up the works if Joan does not divert him just so. Are we kibitzing Joan?—or are we going to the Moon?) (Hell, yes, we're going to the Moon! My 'Yes' vote, plus your 'Yes' vote, plus half of Joan's vote—a natural fence-straddler she is, legs always open—which works out to a five-to-one majority for out-migrating. A landslide!) (So let her alone while she handles him.) (If she didn't have that big belly, she could handle him a lot better. And faster.)

(Hrrmph. Eunice, you claim you were there. . . so why don't you tell poor old melancholy Jacques the straight on that? It was me, wasn't it? It was I?) (Jock old ghost, I love you dearly-—but if you think I'll split on my twin, you don't know me.) (Oh, well. A baby is a baby is a baby. I just hope it doesn't have two heads.) (Two heads would be stretching a good thing too far. Jock, I'll settle for two balls.)

(Thinking about incest, Lively Legs?) (And why shouldn't I think about it? We've tried everything else.)

(Jake, Eunice—will you two please go back to sleep? Squire Pecksniff here is searching for flyspecks on Alec's masterpiece. Trying to think up more objections—which I'll have to answer.)

"Mrs. Salomon, I find myself quite disturbed by one aspect concerning this alleged earlier child—the great likelihood that some future action may be brought challenging your disposition of your estate when this child, or some person claiming to be this child, turns up. The fifty percent of estate required—as a minimum—from any out-migrant not of a subsidized-vocation category is a source of capital to the colonies; the Commission is not willing to part with a dime of it once the Commission carries out its half of the bargain. Yet such a 'missing heir' could lay claim to all of your estate."

"Most unlikely, Mr. Barnes, but if you will look at 'Appendix G,' you will see how my lawyer handled it. A small trust to buy tip any such claim, with a fifty-year conversion of any remainder to a named charity."

"Uh, let me find it. Mmm, Mrs. Salomon, do you call ten million dollars 'small'?"

"Yes."

"Mmm. Perhaps I had better look closely at the other financial provisions. Have you been advised that, even though the Commission claims only half of your fortune, the other half *cannot* be used to buy you anything on the Moon? In other words, poor or rich, on the Moon out-migrants start off equal."

"I know that, Mr. Barnes. Believe me, my attorney, Mr. Train, is most careful. He searched the law and made certain that I knew the consequences of my acts—because he did not approve of them. To put it briefly Alec Train said that anyone who goes to the Moon to *live* must be out of his head. So he tried to talk me out of what he regards as my folly. You'll find four other possible heirs in 'Appendix F'—my granddaughters. It is to their advantage to accept what is offered there. . . as they are told bluntly how much worse off they will be if they wait for me to die. A poor bet for them in any case; I am now physiologically younger than they are; I'll probably outlive all of them."

"That could be true. Especially on the Moon, one could add. I wish I could out-migrate myself. But I can't afford to pay for it the way you can and lawyers are not in demand there. Well, your Mr. Train seems to have thought of most aspects. Let's look at your balance sheet."

"One moment, sir. I have asked for one small measure of special treatment."

"Eh? All out-migrants are treated alike. Must be."

"A very small thing, Mr. Barnes. My baby will be born not long after I arrive on Luna. I've asked to have Dr. Garcia continue to attend me through that time."

"I can't promise that, Madam. Sorry. Policy."

She started slowly to get up. "Then I'm not going through with it."

"Uh—good God! Is this *really* your net worth?"

She shrugged. "What is the worth of one pregnant woman, sir? I suppose it depends on your values."

"I didn't mean that. This balance sheet— If it's correct, you're not just wealthy—I knew that—you're a *billionaire!"*

"Possibly. I haven't added it. That summary was prepared through Chase Manhattan with the assistance of accountancy firms listed there. I suppose it's correct, unless some computer got the hiccups. But give it back to me...since the Commission can't promise me Dr. Garcia to deliver my baby."

"Please, Madam. I have certain latitude in these matters. I simply don't exercise it—ordinarily. Policy."

"Whose policy, Mr. Barnes? The Commission's? Or yours?"

"Eh? Why, mine. I said so."

"Then quit wasting my time, you damned idiot!"

('That's telling him, Fat Lady!') (Eunice, this is one fat lady who isn't going to take any more nonsense. My back aches.)

The blast almost caused Mr. Barnes to fall out of his swivel chair. He recovered his balance, said: *"Please,* Madam Salomon!"

"Young man, let's have no more nonsense! I'm far gone in pregnancy, as you cart see. You've lectured me about the dangers of childbirth—and you aren't a doctor. You've pried into personal matters with the gall of a kinsey. You've tried to tell me I can't have my own doctor when he is going in the same ship—and now it turns out that it was not a Commission regulation but merely petty tyranny on your part. Bullying. All through this nonsense—although I've appeared with a complete and carefully prepared proposal—you've kept me sitting on a hard uncomfortable chair. My back aches. On how many poor helpless applicants have you fattened your ego? But I am neither 'poor' nor 'helpless'. You spoke of a 'chill breeze.' It's an icy blast now. *I bloody well mean to have your job!"*

"Please, Madam! I *said* you could have your own doctor. And I *am* required to review each applicant's proposal."

"Then get your lazy arse out of that comfortable chair and *give it to me!* You come sit in this ducking stool."

"Very well, Ma'am." They exchanged chairs. Shortly he said, "I see that you are putting almost all of the other fifty percent of your fortune into starship research and development."

"It's none of your business what I do with it."

"I didn't say it was. It just struck me as...unusual."

"Why? My child may want to go in a starship. I want that research to *move.* Mr. Barnes, you've had time to look at that proposal; if you hadn't talked so much, you could have it memorized by now. Do whatever it is you do. Mark your *X,* or stamp your chop. Or hand it back and let me out of here. Now! Not five minutes from now—but *now.* My back still hurts. You're a pain in the back, Mr. Barnes, you and your petty 'policy' and your worthless talk."

He signed it. "Through that door, Madam Salomon."

"Thank you." She started toward it.

"You're barely welcome-you ancient bitch!"

Joan Eunice stopped, turned back, and smiled her best golden-sunrise smile. "Why, thank you, dear! That's the best thing you've said to me. Because it is utterly honest. Of course I'm not welcome, the way I've stormed at you—and answered your bullying with worse bullying. And I am indeed both a bitch and ancient."

"I shouldn't have said that."

"Oh, but you should have. I richly deserved it, but I would never have tried to get your job—truly, I'm not that petty. That was just backache bad temper talking. I admire your spunk in telling me off. What is your first name?"

"Uh, 'Matthew.'"

"A good name, Matthew. A strong name." Joan Eunice came back, stood close to him. "Matthew, I'm going to the Moon. I'll never be back this way again. Will you forgive this ancient bitch and let us part friends? Will you kiss me goodbye? I've no one to see me off, Matthew—will you kiss me goodbye as I leave for the Moon?"

"Uh—"

"Please, Matthew. Uh, mind the big belly; turn me a little sideways—that's better." She wet her lips, lifted her face, and closed her eyes.

Presently she sighed and nestled closer. "Matthew? Will you let me love you? Oh, I don't mean seduce you, it's too late for that, I'm about benched. Just tell me that I may think of you with love as I go to the Moon. It's a long way off and I'm a little scared—and I lived too long without love and want to love everyone who will let me. . . any who will love me back even a little. Will you, dear? Or is this bitch too ancient?"

"Uh, Madam Salomon—"

"'Eunice,' Matthew."

"Eunice. Eunice, you're a sparky little bitch, you really are. But I kept you sitting there—even before I realized who you are——because I *like* looking at you. Hell, honey, my wife says I can love any woman I want to—ten percent of what I love her."

"Ten percent is a good return on any investment, Matthew. All right, please love me that ten percent—and I'll love you ten percent of what I loved—still love!— my darling husband. Is there enough love in that ten percent for a second kiss? It's a *long* way to the Moon—they must keep me warm all the way." She closed her eyes and waited.

(Hey, twin, lover boy is doing better this time.) (Don't bother me now, I'm busy!)

Presently Mr. Barnes murmured, "Lovely."

"All swollen and fat now, that's why I wear styles that cover them. But you should have seen Eunice—the first Eunice, my benefactrix—at her lovely best. . . in styles to show it."

"I still say they're lovely. I guess we had better stop this, I've got a roomful of people waiting out there. And you have almost four hours of processing before you go on to quarantine. If you want to go to Andes Port with your own doctor, you had better go now."

"Yes, Matthew. I love you—ten percent—and I'll still be loving you on the Moon. At compound interest. Through that door?"

"Through there and follow the signs. Goodbye, Eunice. Take care of yourself."

(Boss, that's either a new high or a new low. Was he kissing *us?* Or a billion dollars?) (It seemed to me—though I'm still learning compared with you two trollops—that the young man started out kissing a billion dollars . . . and wound up kissing Joan. Us. Quite well, too. Dears, I find that my animal nature has been considerably stirred—I'm looking forward to us being back in circulation again.) (Hell, yes, Jock darling, we all are. It occurs to me, Joan, that there must be lots of homesick out-migrants who will appreciate a simple country girl who learned clear back in junior high to kiss with her eyes closed and her lips open.) (Eunice, that's what I'm counting on. Seven billion people makes Earth a terribly lonely place...but there are only a few thousand on Luna and, if we try, we can get to know all of them and love most of them. What do you think, Jake?) (Johann, we can try. We *will.* Wups, here's our first stop. 'Physical.' Goose bumps and indignities. But what the hell?—somebody kissed us goodbye.)

29

As re-reported in the *Christian Science Monitor, Izvestia* condemned the announcement (Daily Selenite, year *35,* day 69) of the Lunar Commission's call for proposal studies for terraforming Ganymede as "one more provocative example of the insatiable territorial aggressions of the mad-dog alliance of the two major imperialist, counterrevolutionary, genocidal powers, the United States of America and the so-called People's Democratic Republic of China and demanded that the UN Security Council take action before it was too late. In Sequoia National Park three families (or possibly one extended family) were discovered living two hundred feet up in a giant redwood. The group (seven adults, five children—two less than a year old) claimed to have been up the tree more than three years; extensive arrangements for their unique style of living lent substance to the claim. They were booked on a variety of charges but the U.S. district attorney declined to prosecute: "I ain't about to waste my time and taxpayers' money on a bunch of monkeys. Let's chase 'em back up the tree!"

The Iowa State Annual Picnic in Long Beach, California, suffered 243 cases of acute food poisoning (botulism-D), 17 muggings, 3 rapes, and was rained out. "—from the great State of New York knows that slum clearance is no answer. Must we hear the death rattle before we admit that *any* organism, be it man, or city, or civilization, in time grows old and dies?" In a letter in *Nature* (UK) it was claimed that scientists in Novosibirsk had solved both the problem of twinning replication and of extrauterine fetal development in vitro and must now be reckoned as back in the Great Powers race with a potentially unlimited supply of workers, soldiers, and peasants. An editorial in the same issue urged the Nobel letterwriter to give up writing sciencefiction or at least change his brand of hashish. Debate on proposed legislation for control of neo-psychedelics continued: "Has the gentleman on the other side of the aisle ever given thought to the potentially disastrous effect on our economy of actually *enforcing* the narcotics laws we *already* have? Or is he talking for the video audience?" Experienced observers predicted no vote this session.

In Luna City Mrs. Salomon, as with everywoman, reached the end of her nine lunar months. Her lovely navel had long since extruded, her belly was an arching dome of life pushing up the sheet. She waited in the Community Hospital eight levels down. The nurse seated near her was pregnant also but not nearly so far along.

"Winnie?"

"Yes, dear?"

"If it's a boy it must be Jacob Eunice. . . a girl must be Eunice Jacob. Promise me."

"I did promise, dear; I wrote it down as you asked me to. And I promised to take care of your baby—and that is all done, too, already recorded—I take care of yours, you take care of mine. Only we won't need to, dear; both of us are going to be all right—we'll raise them together."

"Promise me, it's important." (Johann, don't name that baby 'Jake.' Call him 'Johann—'Johann Eunice.') (Jake, I will *not* load down a boy with, 'Johann'—it forced me to learn to fight too young) (Jock, don't argue with Boss. She's always right, you know that.) (Then call him 'John!') (His name is *'Jacob,'* Jake—I won't have it any other way.) (Joan, you're the most stubborn old bastard in the entire Solar System—and turning you into a woman didn't change you. All *right* already!) (I love you, my husband.) (We both love you, Boss—and Jake is as proud about the names as am.)

"I do promise you, Joan. Cross my heart."

"My sweet Winsome. We've come a long way together, you and I and Roberto."

"Yes, we have, dear."

"I'm ill. Am I not?"

"Joan, you're not ill. A woman never feels good just before she has a baby—I know, I've seen hundreds of them. I told you that tube was just for glucose."

"What tube? Winnie, come close and listen. This is important. My baby's name must be…"

"—rejection syndrome, Doctor. Atypical but unmistakable."

"Dr. Garcia, why do you say 'atypical'?"

"Mmm. Sometimes, when she's irrational, she speaks in three different voices and—well, two of them are *dead.* Split personality."

"So? I'm not a psychiatrist, Dr. Garcia; 'split personality' means little to me. But I don't see that it necessarily affects pregnancy. I've delivered some fine, healthy babies from women who were quite irrational."

"Nor am I a psychiatrist, sir. Let it stand that she is irrational much of the time. . . and that I see this as part of the total clinical picture, which—in my opinion—gives a prognosis of transplant rejection."

"Dr. Garcia, you know more about transplants than I do; I've never managed a transplant case in my life. But this patient seems in fair shape to me. Right here in this hospital I have seen women who appeared to be in much worse shape. . . who had their babies and were up and working in three days. With our low gravity they recover quickly. Did you think this patient was hurt on the trip up from Earth?"

"Oh, no! Those flotation, acceleration cells are wonderful. Mrs. Salomon rode in one, so did my wife. I monitored them; Joan took it even better than Winnie did. I envied them, as I found the ride in a standard chair pretty rough. No, I see no connection; rejection symptoms did not show until this week." Garcia frowned. "She doesn't know that her mind isn't clear—she's lucid off and on. But motor control is decaying. That strong young body sustains her metabolism—but truthfully, Doctor, I can't guess how long." He frowned again. "It could let go any moment—damn it, I wish I had proper support equipment!"

The older doctor shook his head. "This is a frontier, son. I'm not running down your specialty—but this is *not* the place for it. Here we set bones and take out appendixes and try to keep contagious diseases from racing through the colony. But when it comes time to die, we *die* —you, me, anybody—and get out of the way of the living. Now suppose we had all of Johns Hopkins here with Jefferson Medical thrown in—could you stop it? Reverse it? Possibility of spontaneous remission if you had your fancy support equipment?"

"No. The best we could do would be to extend the time."

"So the literature says, but I wanted to hear *you* say it. Well, Doctor? Your patient"

"We take the baby."

"Let's get busy."

Joan Eunice came awake as they were wheeling her down the corridor. "Roberto?"

"Right here, dear."

"Where are they taking me? Am I going in for surgery again?"

"Yes, Joan."

"Why, dear?"

"Because you haven't gone into labor when you should have. So now we do it the easy way—Caesarean section."

He added, "There's nothing to worry about. It's as routine as taking out an appendix."

"Roberto, you know I never worry. You're doing it?"

"No, the chief of surgery. He's far more skilled than I am. Dr. Frankel. You met him, he examined you this morning."

"Did he? It's slipped my mind. Roberto, I must tell Winnie something very important. It's about the name of my baby."

"She knows, dear, she wrote it down. 'Jacob Eunice, or Eunice Jacob.'"

"Oh, good! Then everything's all right. But tell them to make it quick, Roberto; I never liked waiting around at a beachhead."

"It'll be quick, you'll never notice it. Spinal and a wagonload of barbiturate, Joan."

"That's funny, you called me 'Joan.' My name's 'Johann,' Doctor. Agnes is going to be all right—she is, isn't she?"

"Yes, Johann. Agnes—is going to be all right."

"I told her she would be all right. Doctor, I feel dreamy. If I fall asleep, will you wake me when Agnes goes in to have her baby?"

"Yes, Johann."

"Thank. . you. . Mrs. . . Wicklund. I didn't. . know.. could be so . . wonderful."

"Roberto? Where are you? I can't see you."

"Right here, dear."

"Touch me. Touch my face, I can't feel anything lower down. Roberto, what I bought was a wonderful year—and I have no regrets. Have they started?"

"Not quite. Do you want to go to sleep, dear?"

"Must I? I'd rather not. I feel sleepy—dreamy and good but I'd rather not go to sleep just yet. It's on the knees of the gods now, isn't it? Time to bite the bullet and chin up and all that. But I don't need that, I'm happy. Come close, dear, I must tell you why. Closer, can't talk. . very loud."

"Clamp! Damn it, Nurse, stay out of my way!"

"Everything always hurts, Roberto—everything. Always. But some things are worth all the hurts. 'Tie me kangeroo down, mite, tie me kangeroo down!' That . . wasn't. . what I meant to say; that's Jake, he's singing again. Always sings when he's happy. Lean very close . . so I can tell you before—I sleep. Thank you, Roberto, for letting me welcome you into my body. It is good to touch—to fuck—be fucked. It's—not good—to be—too much alone. You have blessed me. . with your body, dear. Now I'll sleep a while if I may. . but first I had to tell you that. Om Mani Padme Hum. Now I lay me down to sleep—"

"Surgeon, she's failing."

A baby cried, a world began.

"Heart action dropping!"

(Jake? Eunice?) (Here, Boss! Grab on! There! We've got you.) (Is it a boy or a girl?) (Who cares, Johann—it's a baby! 'One for all and all for one!')

An old world vanished and then there was none.

The Number of the Beast

PART ONE - The Mandarin's Butterfly

Chapter I

" — it is better to marry than to burn." — Saul of Tarsus

Zeb:

"He's a Mad Scientist and I'm his Beautiful Daughter."

That's what she said: the oldest cliché in pulp fiction. She wasn't old enough to remember the pulps.

The thing to do with a silly remark is to fail to hear it. I went on waltzing while taking another look down her evening formal. Nice view. Not foam rubber.

She waltzed well. Today most girls who even attempt ballroom dancing drape themselves around your neck and expect you to shove them around the floor. She kept her weight on her own feet, danced close without snuggling, and knew what I was going to do a split second before I led it. A perfect partner

- as long as she didn't talk.

"Well?" she persisted.

My paternal grandfather — an unsavory old reactionary; the FemLibbers would have lynched him — used to say, "Zebadiah, the mistake we made was not in putting shoes on them or in teaching them to read — we should never have taught them to talk!"

I signaled a twirl by pressure; she floated into it and back into my arms right on the beat. I inspected her hands and the outer corners of her eyes. Yes, she really was young — minimum eighteen (Hilda Corners never permitted legal "infants" at her parties), maximum twenty-five, first approximation twentytwo. Yet she danced like her grandmother's generation.

"Well?" she repeated more firmly.

This time I openly stared. "Is that cantilevering natural? Or is there an invisible bra, you being in fact the sole support of two dependents?"

She glanced down, looked up and grinned. "They do stick out, don't they? Your comment is rude, crude, unrefined, and designed to change the subject."

"What subject? I made a polite inquiry; you parried it with amphigory."

"'Amphigory' my tired feet! I answered precisely."

"'Amphigory,'" I repeated. "The operative symbols were 'mad,' 'scientist,' 'beautiful,' and 'daughter.' The first has several meanings — the others denote opinions. Semantic content: zero."

She looked thoughtful rather than angry. "Pop isn't rabid… although I did use 'mad' in ambivalent mode. 'Scientist' and 'beautiful' each contain descriptive opinions, I stipulate. But are you in doubt as to my sex? If so, are you qualified to check my twenty-third chromosome pair? With transsexual surgery so common I assume that anything less would not satisfy you."

"I prefer a field test."

"On the *dance floor?*"

"No, the bushes back of the pool. Yes, I'm qualified — laboratory or field. But it was not your sex that lay in the area of opinion; that is a fact that can be established… although the gross evidence is convincing. I —"

"Ninety-five centimeters isn't gross! Not for my height. One hundred seventy barefooted, one eighty in these heels. It's just that I'm wasp-waisted for my mass — fortyeight centimeters versus fifty-nine kilos."

"And your teeth are your own and you don't have dandruff. Take it easy, Deedee; I didn't mean to shake your aplomb" — or those twin glands that are not gross but delicious. I have an infantile bias and have known it since I was six — six months, that is. "But the symbol 'daughter' encompasses two statements, one factual — sex — and the other a matter of opinion even when stated by a forensic genetohematologist."

"Gosh, what big words you know, Mister. I mean 'Doctor'."

"'Mister' is correct. On this campus it is swank to assume that everyone holds a doctorate. Even I have one, Ph.D. Do you know what that stands for?"

"Doesn't everybody? I have a Ph.D., too. 'Piled Higher and Deeper.'"

I raised that maximum to twenty-six and assigned it as second approximation. "Phys. ed.?"

"Mister Doctor, you are trying to get my goat. Won't work. I had an undergraduate double major, one being phys. ed. with teacher's credentials in case I needed a job. But my real major was math — which I continued in graduate school."

"And here I had been assuming that 'Deedee' meant 'Doctor of Divinity.'"

"Go wash out your mouth with soap. My nickname is my initials — Dee Tee. Or Deety. Doctor D. T. Burroughs if being formal, as I can't be 'Mister' and refuse to be 'Miz' or 'Miss.' See here, Mister; I'm supposed to be luring you with my radiant beauty, then hooking you with my feminine charm… and not getting anywhere. Let's try another tack. Tell me what you piled higher and deeper."

"Let me think. Flycasting? Or was it basketweaving? It was one of those transdisciplinary things in which the committee simply weighs the dissertation. Tell you what. I've got a copy around my digs. I'll find it and see what title the researcher who wrote it put on it."

"Don't bother. The title is 'Some Implications of a Six-Dimensional

Non-Newtonian Continuum.' Pop wants to discuss it."

I stopped waltzing. "Huh? He'd better discuss *that* paper with the bloke who wrote it."

"Nonsense; I saw you blink — I've hooked you. Pop wants to discuss it, then offer you a job."

"'*Job'!* I just slipped off the hook."

"Oh, dear! Pop will be *really* mad. Please? Please, sir!"

"You said that you had used 'mad' in ambivalent mode. How?"

"Oh. Mad-angry because his colleagues won't listen to him. Mad-psychotic in the opinions of some colleagues. They say his papers don't make sense."

"Do they make sense?"

"I'm not that good a mathematician, sir. My work is usually simplifying software. Child's play compared with *n*-dimensional spaces."

I wasn't required to express an opinion; the trio started *Blue Tango,* Deety melted into my arms. You don't talk if you know tango.

Deety knew. After an eternity of sensual bliss, I swung her out into position precisely on coda; she answered my bow and scrape with a deep curtsy. "Thank you, sir."

"Whew! After a tango like that the couple ought to get married."

"All right. I'll find our hostess and tell Pop. Five minutes? Front door, or side?"

She looked serenely happy. I said, "Deety, do you mean what you appear to mean? That you intend to marry *me?* A total stranger?"

Her face remained calm but the light went out — and her nipples went down. She answered steadily. "After that tango we are no longer strangers. I construed your statement as a proposal — no, a willingness — to marry me. Was I mistaken?"

My mind went into emergency, reviewing the past years the way a drowning man's life is supposed to flash before his eyes (how could anyone know that?): a rainy afternoon when my chum's older sister had initiated me into the mysteries; the curious effect caused by the first time strangers had shot back at me; a twelvemonth cohabitation contract that had started with a bang and had ended without a whimper; countless events which had left me determined never to marry.

I answered instantly, "I meant what I implied — marriage, in its older meaning. I'm willing. But why are *you* willing? I'm no prize."

She took a deep breath, straining the fabric, and — thank Allah! — her nipples came up. "Sir, you are the prize I was sent to fetch, and, when you said that we really ought to get married — hyperbole and I knew it — I suddenly realized, with a deep burst of happiness, that *this* was the means of fetching you that I wanted above all!"

She went on, "But I will not trap you through misconstruing a gallantry. If you wish, you may take me into those bushes back of the pool… and *not* marry me." She went on firmly, "But for that… whoring… my fee is for you to talk with my father and to let him show you something."

"Deety, you're an idiot! You would ruin that pretty gown."

"Mussing a dress is irrelevant but I can take it off. I will. There's nothing under it."

"There's a great deal under it!"

That fetched a grin, instantly wiped away. "Thank you. Shall we head for the bushes?"

"Wait a half! I'm about to be noble and regret it the rest of my life. You've made a mistake. Your father doesn't want to talk to *me*; I don't know anything about *n*-dimensional geometry." (Why do I get these attacks of honesty? I've never done anything to deserve them.)

"Pop thinks you do; that is sufficient. Shall we go? I want to get Pop out of here before he busts somebody in the mouth."

"Don't rush me; I didn't ask you to rassle on the grass; I said I wanted to marry *you* — but wanted to know why you were willing to marry me. Your answer concerned what your father wants. I'm not trying to marry your father; he's not my type. Speak for yourself, Deety. Or drop it." (Am I a masochist? There's a sunbathing couch back of those bushes.)

Solemnly she looked me over, from my formal tights to my crooked bow tie and on up to my thinning brush cut — a hundred and ninety-four centimeters of big ugly galoot. "I like your firm lead in dancing. I like the way you look. I like the way your voice rumbles. I like your hair-splitting games with words — you sound like Whorf debating Korzybski with Shannon as referee." She took another deep breath, finished almost sadly: "Most of all, I like the way you smell."

It would have taken a sharp nose to whiff me. I had been squeaky clean ninety minutes earlier, and it takes more than one waltz and a tango to make me sweat. But her remark had that skid in it that Deety put into almost anything. Most girls, when they want to ruin a man's judgment, squeeze his biceps and say, "Goodness, you're strong!"

I grinned down at her. "You smell good too. Your perfume could rouse a corpse."

"I'm not wearing perfume."

"Oh. Correction: your natural pheromone. Enchanting. Get your wrap, Side door. Five minutes."

"Yes, sir."

"Tell your father we're getting married. He gets that talk, free. I decided that before you started to argue. It won't take him long to decide that I'm not Lobachevski."

"That's Pop's problem," she answered, moving. "Will you let him show you this thing he's built in our basement?"

"Sure, why not? What is it?"

"A time machine."

Chapter II

"This Universe never did make sense — "

Zeb:

Tomorrow I will seven eagles see, a great comet will appear, and voices will speak from whirlwinds foretelling monstrous and fearful things — This Universe never did make sense; I suspect that it was built on government contract.

"Big basement?"

"Medium. Nine by twelve. But cluttered. Work benches and power tools."

A hundred and eight square meters — Ceiling height probably two and a half — Had Pop made the mistake of the man who built a boat in his basement?

My musing was interrupted by a male voice in a high scream: "You overeducated, obstipated, pedantic ignoramus! Your mathematical intuition froze solid the day you matriculated!"

I didn't recognize the screamer but did know the stuffed shirt he addressed: Professor Neil O'Heret Brain, head of the department of mathematics — and God help the student who addressed a note to "Professor N.O. Brain" or even "N. O'H. Brain." "Brainy" had spent his life in search of The Truth — intending to place it under house arrest.

He was puffed up like a pouter pigeon with is professional pontifical pomposity reeling. His expression suggested that he was giving birth to a porcupine.

Deety gasped, "It's started," and dashed toward the row. Me, I stay out of rows; I'm a coward by trade and wear fake zero-prescription glasses as a buffer — when some oaf snarls, "Take off your glasses!" that gives me time to retreat.

I headed straight for the row.

Deety had placed herself between the two, facing the screamer, and was saying in a low but forceful voice, "Pop, don't you dare! — I won't bail you out!" She was reaching for his glasses with evident intent to put them back on his face. It was clear that he had taken them off for combat; he was holding them out of her reach.

I reached over their heads, plucked them out of his hand, gave them to Deety. She flashed me a smile and put them back on her father. He gave up and let her. She then took his arm firmly. "Aunt Hilda!"

Our hostess converged on the row. "Yes, Deety? Why did you stop them, darling? You didn't give us time to get bets down." Fights were no novelty at "Sharp" Corners' parties. Her food and liquor were lavish, the music always live; her guests were often eccentric but never dull — I had been surprised at the presence of N. O. Brain.

I now felt that I understood it: a planned hypergolic mixture.

Deety ignored her questions. "Will you excuse Pop and me and Mr. Carter? Something urgent has come up."

"You and Jake may leave if you must. But you can't drag Zebbie away. Deety, that's cheating."

Deety looked at me. "May I tell?"

"Eh? *Certainly!"*

That bliffy "Brainy" picked this moment to interrupt. "Mrs. Corners, Doctor Burroughs can't leave until he apologizes! I insist. My privilege!"

Our hostess looked at him with scorn. "Merde, Professor. I'm not one of your teaching fellows. Shout right back at Jake Burroughs if you like. If your command of invective equals his, we'll enjoy hearing it. But just *one more word*that sounds like an order to me or to one of my guests — and out you go! Then you had best go straight home; the Chancellor will be trying to reach you." She turned her back on him. "Deety, you started to add something?"

"Sharp" Corners can intimidate Internal Revenue agents. She hadn't cut loose on "Brainy" — just a warning shot across his bow. But from his face one would have thought she had hulled him. However, her remark to Deety left me no time to see whether he would have a stroke.

"Not Deety, Hilda. Me. Zeb."

"Quiet, Zebbie. Whatever it is, the answer is No. Deety? Go ahead, dear."

Hilda Corners is related to that famous mule. I did not use a baseball bat because she comes only up to my armpits and grosses forty-odd kilos. I picked her up by her elbows and turned her around, facing me. "Hilda, we're going to get married."

"Zebbie darling! I thought you would *never* ask."

"Not you, you old harridan. Deety. I proposed, she accepted; I'm going to nail it down before the anesthetic wears off."

Hilda looked thoughtfully interested. "That's reasonable." She craned her neck to look at Deety. "Did he mention his wife in Boston, Deety? Or the twins?"

I set her back on her feet. "Pipe down, Sharpie; this is serious. Doctor Burroughs, I am unmarried, in good health, solvent, and able to support a family. I hope this meets with your approval."

"Pop says Yes," Deety answered. "I hold his power of attorney."

"You pipe down, too. My name is Carter, sir — Zeb Carter. I'm on campus; you can check my record. But I intend to marry Deety at once, if she will have me."

"I know your name and record, sir. It doesn't require my approval; Deety is of age. But you have it anyhow." He looked thoughtful. "If you two are getting married at once, you'll be too busy for shop talk. Or would you be?"

"Pop — let it be; it's all set."

"So? Thank you, Hilda, for a pleasant evening. I'll call you tomorrow."

"You'll do no such thing; you'll come straight back and give me a full report. Jake, you are *not* going on their honeymoon — I heard you."

"Aunt Hilda — please! I'll manage everything."

We were out the side door close on schedule. At the parking lot there was a bobble: which heap, mine or theirs. Mine is intended for two but can take four. The rear seats are okay for two for short trips. Theirs was a four-passenger family saloon, not fast but roomy — and their luggage was in it. "How much luggage?" I asked Deety, while I visualized two overnight bags strapped into one back seat with my prospective father-in-law stashed in the other.

"I don't have much, but Pop has two big bags and a fat briefcase. I had better show you."

(Damn.) "Perhaps you had better." I like my own rig, I don't like to drive other people's cars, and, while Deety probably handled controls as smoothly as she danced, I did not *know* that she did — and I'm chicken. I didn't figure her father into the equation; trusting my skin to his temper did not appeal. Maybe Deety would settle for letting him trail us — but my bride-to-be was going to ride with *me!* "Where?"

"Over in the far corner. I'll unlock it and turn on the lights." She reached into her father's inside jacket pocket, took out a Magic Wand.

"Wait for baby!"

The shout was from our hostess. Hilda was running down the path from her house, purse clutched in one hand and about eight thousand newdollars of sunset mink flying like a flag from the other.

So the discussion started over. Seems Sharpie had decided to come along to make certain that Jake behaved himself and had taken just long enough to tell Max (her bouncer-butler-driver) when to throw the drunks out or cover them with blankets, as needed.

She listened to Deety's summary, then nodded. "Got it. I can handle yours, Deety; Jake and I will go in it. You ride with Zebbie, dear." She turned to me. "Hold down the speed, Zebbie, so that I can follow. No tricks, Buster. Don't try to lose us or you'll have cops busting out of your ears."

I turned my sweet innocent eyes toward her. "Why, Sharpie darling, you know I wouldn't do anything like that."

"You'd steal city hall if you could figure a way to carry it. Who dumped that load of lime Jello into my swimming pool?"

"I was in Africa at that time, as you know."

"So you say. Deety darling, keep him on a short leash and don't feed him meat. But marry him; he's loaded. Now where's that radio link? And your car."

"Here," said Deety, pointed the Magic Wand and pressed the switch.

I gathered all three into my arms and dived. We hit the ground as the blast hit everything else. But not us. The blast shadow of other cars protected us.

Chapter III

" — Professor Moriarty isn't fooled — "

Zeb:

Don't ask me how. Ask a trapeze artist how he does a triple 'sault. Ask a crapshooter how he knows when he's "hot." But don't ask me how I know it's going to happen just before it hits the fan.

It doesn't tell me anything I don't need to know. I don't know what's in a letter until I open it (except the time it was a letter bomb). I have no precognition for harmless events. But this splitsecond knowledge when I need it has kept me alive and relatively unscarred in an era when homicide kills more people than does cancer and the favorite form of suicide is to take a rifle up some tower and keep shooting until the riot squad settles it.

I don't see the car around the curve on the wrong side; I automatically hit the ditch. When the San Andreas Fault cut loose, I jumped out a window and was in the open when the shock arrived — and didn't know why I had jumped.

Aside from this, my E.S.P. is erratic; I bought it cheap from a war-surplus outlet.

I sprawled with three under me. I got up fast, trying to avoid crushing them. I gave a hand to each woman, then dragged Pop to his feet. No one seemed damaged. Deety stared at the fire blazing where their car had been, face impassive. Her father was looking at the ground, searching. Deety stopped him. "Here, Pop." She put his glasses back on him.

"Thank you, my dear." He started toward the fire.

I grabbed his shoulder. "*No!* Into my car — *fast!"*

"Eh? My briefcase — could have blown clear."

"Shut up and move! All of you!"

"Do it, Pop!" Deety grabbed Hilda's arm. We stuffed the older ones into the after space; I shoved Deety into the front passenger seat and snapped: "Seat belts!" as I slammed the door — then was around to the left so fast that I should have caused a sonic boom. "Seat belts fastened?" I demanded as I fastened my own and locked the door.

"Jake's is fastened and so is mine, Zebbie dear," Hilda said cheerfully.

"Belt tight, door locked," Deety reported.

The heap was hot; I had left it on trickle — what use is a fast car that won't go *scat?* I switched from trickle to full, did not turn on lights, glanced at the board and released the brake.

It says here that duos must stay grounded inside city limits — so I was lifting her nose before she had rolled a meter and she was pointed straight up as we were clearing the parking lot.

Half a klick straight up while the gee meter climbed — two, three, four — I let it reach five and held it, not being sure what Pop's heart would take. When the altimeter read four klicks, I cut everything — power, transponder, the works — while hitting a button that dropped chaff, and let her go ballistic. I didn't *know* that anyone was tracking us — I didn't want to find out.

When the altimeter showed that we had topped out, I let the wings open a trifle. When I felt them bite air, I snap-rolled onto her belly, let wings crawl out to subsonic aspect and let her glide. "Everybody okay?"

Hilda giggled. "Whoops, dear! Do that again! This time, somebody kiss me."

"Pipe down, you shameless old strumpet. Pop?"

"I'm okay, son."

"Deety?"

"Okay here."

"Did that fall in the parking lot hurt you?"

"No, sir. I twisted in the air and took it on one buttock while getting Pop's glasses. But next time put a bed under me, please. Or a wrestling mat."

"I'll remember." I switched on radio but not transponder, tried all police frequencies. If anyone had noticed our didoes, they weren't discussing it on the air. We were down to two klicks; I made an abrupt wingover to the right, then switched on power. "Deety, where do you and your Pop live?"

"Logan, Utah."

"How long does it take to get married there?"

"Zebbie," Hilda cut in, "Utah has no waiting time —"

"So we go to Logan."

" — but does require blood test. Deety, do you know Zebbie's nickname around campus? The Wasp. For 'Wassermann Positive.' Zebbie, everybody knows that Nevada is the only state that offers twenty-four-hour service, no waiting time, no blood test. So point this bomb at Reno and sign off."

"Sharpie darling," I said gently, "would you like to walk home from two thousand meters?"

"I don't know; I've never tried it."

"That's an ejection seat… but no parachutes."

"Oh, how romantic! Jake darling, we'll sing the *Liebestod* on the way down — you sing tenor, I'll force a soprano and we'll die in each other's arms. Zebbie, could we have more altitude? For the timing."

"Doctor Burroughs, gag that hitchhiker. Sharpie, *Liebestod* is a solo."

"Picky, picky! Isn't dead-on-arrival enough? Jealous because you can't carry a tune? I *told* Dicky Boy that should be a duet and Cosima agreed with me —"

"Sharpie, button your frimpin' lip while I explain. One: Everybody at your party knows why we left and will assume that we headed for Reno. You probably called out something to that effect as you left —"

"I believe I did. Yes, I did."

"Shut up. Somebody made a professional effort to kill Doctor Burroughs. Not just kill but overkill; that combo of high explosive and Thermit was intended to leave nothing to analyze. But it is possible that no one saw us lift. We were into this go-wagon and I was goosing it less than thirty seconds after that booby trap exploded. Innocent bystanders would look at the fire, not at us. *Guilty* bystanders — There wouldn't be any. A professional who boobytraps a car either holes up or crosses a state line and gets lost. The party or parties who paid for the contract may be nearby, but if they are, Hilda, they're in your house."

"One of my *guests?"*

"Oh, shut it, Sharpie; you are never interested in the morals of your guests. If they can be depended on to throw custard pies or do impromptu strips or some other prank that will keep your party from growing dull, that qualifies them. However, I am *not* assuming that the boss villain was at your party; I am saying that he would not be lurking where the Man might put the arm on him. Your house would be the best place to hide and watch the plot develop.

"But, guest or not, he was someone who *knew* that Doctor Burroughs would be at your party. Hilda, who knew that key fact?"

She answered with uncustomary seriousness. "I don't know, Zebbie. I would have to think."

"Think hard."

"Mmm, not many. Several were invited because Jake was coming — you, for example —"

"I became aware of that."

" — but you weren't told that Jake would be present. Some were told — 'No Brain,' for example — but I can't imagine that old fool booby-trapping a car."

"I can't either, but killers don't look like killers; they look like people. How *long* before the party did you tell 'Brainy' that Pop would be present?"

"I told him when I invited him. Mmm, eight days ago."

I sighed. "The possibles include not only the campus but the entire globe. So we must try to figure probables. Doctor Burroughs, can you think of anyone who would like to see you dead?"

"Several!"

"Let me rephrase it. Who hates your guts so bitterly that he would not hesitate to kill your daughter as long as he got *you?* And also bystanders such as Hilda and me. Not that we figure, save to show that he didn't give a hoot who caught it. A deficient personality. Amoral. *Who is he?"*

Pop Burroughs hesitated. "Doctor Carter, disagreement between mathematicians can be extremely heated… and I am not without fault." (You're telling *me,* Pop!) "But these quarrels rarely result in violence. Even the death of Archimedes was only indirectly related to his — our — profession. To encompass my daughter as well — no, even Doctor Brain, much as I despise him, does not fit the picture."

Deety said, "Zeb, could it have been *me* they were shooting at?"

"*You* tell *me.* Whose dolly have you busted?"

"Hmm — I can't think of anyone who dislikes me even enough to snub me. Sounds silly but it's true."

"It's the truth," put in Sharpie. "Deety is just like her mother was. When Jane — Deety's mother, and my best friend until we lost her-when Jane and I were roommates in college, I was always getting into jams and Jane was always getting me out-and never got into one herself. A peacemaker. So is Deety."

"Okay, Deety, you're out of it. So is Hilda and so am I, as whoever placed that booby trap could not predict that either Hilda or I would be in blast range. So it's Pop they're gunning for. Who we don't know, why we don't know. When we figure out why, we'll know who. Meantime we've got to keep Pop out of range. I'm going to marry you as fast as possible, not only because you smell good but to give me a legitimate interest in this fight."

"So we go first to Reno."

"Shut up, Sharpie. We've been on course for Reno since we leveled off." I flipped on the transponder, but to the left, not right. It would now answer with a registered, legal signal… but not one registered to my name. This cost me some shekels I did not need but were appreciated by a tight — lipped family man in Indio. Sometimes it is convenient not to be identified by sky cops every time one crosses a state line.

"But we aren't going to Reno. Those cowboy maneuvers were intended to deceive the eye, radar, and heat seekers. The evasion against the heat seekers — that rough turn while we were still in glide — either worked or was not needed, as we haven't had a missile up the tail. Probably wasn't needed; people who boobytrap cars aren't likely to be prepared to shoot a duo out of the sky. But I couldn't be certain, so I ducked. We may be assumed to be dead in the blast and fire, and that assumption may stand up until the mess has cooled down and there is daylight to work by. Even later it may stand up, as the cops may not tell anyone that they were unable to find organic remains. But I *must* assume that Professor Moriarty isn't fooled, that he is watching by repeater scope in his secret HQ, that he knows we are headed for Reno, and that hostiles will greet us there. So we won't go there. Now quiet, please; I must tell this baby what to do."

The computer-pilot of my car can't cook but what she can do, she does well. I called for display map, changed scale to include Utah, used the light pen to trace route — complex as it curved around Reno to the south, back north again, made easting over some very empty country, and passed north of Hill Air Force Range in approaching Logan. I fed in height-above-ground while giving her leeway to smooth out bumps, and added one change in speed-over-ground once we were clear of Reno radar. "Got it, girl?" I asked her.

"Got it, Zeb."

"Ten-minute call, please."

"Call you ten minutes before end of routing — right!"

"You're a smart girl, Gay."

"Boss, I bet you tell that to all the girls. Over."

"Roger and out, Gay." The display faded.

Certainly I could have programmed my autopilot to accept a plan in response to a punched "Execute." But isn't it pleasanter to be answered by a warm contralto? But the "smart girl" aspect lay in the fact that it took *my* voice to make a flight plan operative. A skilled electron pusher might find a way to override my lock, then drive her manually. But the first time he attempted to use autopilot, the car would not only not accept the program but would scream for help on all police frequencies. This causes car thieves to feel maladjusted.

I looked up and saw that Deety had been following this intently. I waited for some question. Instead Deety said, "She has a very pleasant voice, Zeb."

"Gay Deceiver is a very nice girl, Deety."

"And talented. Zeb, I have never before been in a Ford that can do the things this car — Gay Deceiver? — can do."

"After we're married I'll introduce you to her more formally. It will require reprogramming."

"I look forward to knowing her better."

"You will. Gay is not exactly all Ford. Her external appearance was made by Ford of Canada. Most of the rest of her once belonged to Australian Defense Forces. But I added a few doodads. The bowling alley. The powder room. The veranda. Little homey touches."

"I'm sure she appreciates them, Zeb. I know I do. I suspect that, had she not had them, we would all be as dead as canasta."

"You may be right. If so, it would not be the first time Gay has kept me alive. You have not seen all her talents."

"I'm beyond being surprised. So far as I could see you didn't tell her to land at Logan."

"Logan seems to be the next most likely place for a reception committee. Who in Logan knows that you and your father were going to visit Hilda?"

"No one, through me."

"Mail? Milk cartons? Newspapers?"

"No deliveries to the house, Zeb." She turned her head, "Pop, does anyone in Logan know where we went?"

"Doctor Carter, to the best of my knowledge, no one in Logan knows that We left. Having lived many years in the buzzing gossip of Academe, I have learned to keep my life as private as possible."

"Then I suggest that you all ease your belts and sleep. Until ten minutes before reaching Logan there is little to do."

"Doctor Carter —"

"Better call me Zeb, Pop. Get used to it."

"'Zeb' it is, son. On page eighty-seven of your monograph, after the equation numbered one-twenty-one in your discussion of the rotation of six-dimensional spaces of positive curvature, you said, 'From this it is evident that — ' and immediately write your equation one-twenty-two. How did you do it? I'm not disagreeing, sir — on the contrary! But in an unpublished paper of my own I used a dozen pages to arrive at the same transformation. Did you have a direct intuition? Or did you simply omit publishing details? No criticism, I am impressed either way. Sheer curiosity."

"Doctor, *I* did not write that paper. I told Deety so."

"That *is* what he claimed, Pop."

"Oh, come now! *Two* Doctors Zebulon E. Carter on one campus?"

"No. But that's not my name. I'm Zebadiah J. Carter. Zebulon E.-for-Edward Carter and called 'Ed' is my cousin. While he is probably listed as being on campus, in fact he is doing an exchange year in Singapore. It's not as improbable as it sounds; *all* male members of my family have first names starting with 'Z.' It has to do with money and a will and a trust fund and the fact that my grandfather and his father were somewhat eccentric."

"Whereas *you* aren't," Hilda said sweetly.

"Quiet, dear." I turned toward Deety. "Deety, do you want to be released from our engagement? I *did* try to tell you that you had trapped the wrong bird."

"Zebadiah — "

"Yes, Deety?"

"I intend to marry you before this night is over. But you haven't kissed me. I want to be kissed."

I unfastened my seat belt, started to unfasten hers, found that she had done so.

Deety kisses even better than she tangos.

During a break for oxygen, I asked her in a whisper: "Deety, what do your initials stand for?"

"Well… please don't laugh."

"I won't. But I have to know them for the ceremony."

"I know. All right, Dee Tee stands for Dejah Thoris."

Dejah Thoris — Dejah Thoris Burroughs — Dejah Thoris *Carter!* I cracked up.

I got it under control after two whoops. Too many. Deety said sadly, "You said you wouldn't laugh."

"Deety darling, I wasn't laughing at *your* name; I was laughing at *mine."*

"I don't think 'Zebadiah' is a funny name. I like it."

"So do I. It keeps me from being mixed up with the endless Bobs and Eds and Toms. But I didn't tell my middle name. What's a funny name starting with 'J'?"

"I won't guess."

"Let me lead up to it. I was born near the campus of the university Thomas Jefferson founded. The day I graduated from college I was commissioned a second looie Aerospace Reserve. I've been promoted twice. My middle initial stands for 'John.'"

It took not quite a second for her to add it up. "Captain… John… Carter — of Virginia."

"'A clean-limbed fighting man,'" I agreed. "Kaor, Dejah Thoris. At your service, my princess. Now and forever!"

"Kaor, Captain John Carter. Helium is proud to accept."

We fell on each other's shoulders, howling. After a bit the howling died down and turned into another kiss.

When we came up for air, Hilda tapped me on a shoulder. "Would you let us in on the joke?"

"Do we tell her, Deety?"

"I'm not sure. Aunt Hilda talks."

"Oh, nonsense! I know your full name and I've never told anyone — I held you at your christening. You were wet, too. At both ends. Now give!"

"All right. We don't have to get married — we already *are.* For years. More than a century."

Pop spoke up. "Eh? What's this?" I explained to him. He looked thoughtful, then nodded. "Logical." He went back to figuring he was doing in a notebook, then looked up. "Your cousin Zebulon — Is he on the telephone?"

"Probably not but he lives at the New Raffles."

"Excellent. I'll try both the hotel and the university. Doctor — Son — Zeb, would you be so kind as to place the call? My comcredit code is Nero Aleph eight zero one dash seven five two dash three nine three two Zed Star Zed." (Zed Star Zed credit rating — I was not going to have to support my prospective father-in-law.)

Deety cut in. "Pop, you must *not* call Professor Carter — Zebulon Carter — at this hour."

"But, my dear daughter, it is not late at night in —"

"Of course it isn't; I can count. You want a favor from him, so don't interrupt his after-lunch nap. 'Mad dogs and Englishmen.'"

"It isn't noon in Singapore; it's —"

" — siesta time, even hotter than noon. So wait."

"Deety is right, Pop," I interrupted, "but for the wrong reasons. It doesn't seem to be a matter of life and death to call him this minute. Whereas it might be a matter of life and death — ours, I mean — to make a call from this car… especially with your credit code. Until we find out who the Boys in the Black Hats are, I advise that you place calls from the ground and from public phones that you can feed with newdollars instead of your code. Say a phone in Peoria. Or Paducah. Can it wait?"

"Since you put it that way, sir — yes, it can wait. Although I have trouble believing that anyone wishes to kill me."

"Available data indicate it."

"Agreed. But I have not yet grasped it emotionally."

"Takes a baseball bat," said Hilda. "I had to sit on him while Jane proposed to him."

"Why, Hilda my dear, that is utterly unfactual. I wrote my late beloved a polite note saying —"

I let them argue while, I tried to add to available data. "Gay Deceiver."

"Yes, Boss?"

"News, dear."

"Ready, Boss."

"Retrieval parameters. Time — since twenty-one hundred. Area — California, Nevada, Utah. Persons — your kindly boss, dear. Doctor Jacob Burroughs, Doctor D. T. Burroughs, Miz Hilda Corners — " I hesitated. "Professor Neil O'Heret Brain." I felt silly adding "Brainy" — but there had been a row between Pop and him, and years earlier my best teacher had said, "Never neglect the so-called 'trivial' roots of an equation," and had pointed out that two Nobel prizes had derived from "trivial" roots.

"Parameters complete, Boss?"

Doctor Burroughs touched my shoulder. "Can your computer check the news if any on your cousin?"

"Mmm, maybe. She stores sixty million bytes, then wipes last-in-last-out everything not placed on permanent. But her news storage is weighted sixty-forty in favor of North America. I'll try. Smart Girl."

"Holding, Boss."

"Addendum. First retrieve by parameters given. Then retrieve by new program. Time — backwards from now to wipe time. Area — Singapore. Person — Zebulon Edward Carter aka Ed Carter aka Doctor Z. E. Carter aka Professor Z. E. Carter aka Professor or Doctor Carter of Raffles University."

"Two retrieval programs in succession. Got it, Zeb."

"You're a smart girl, Gay."

"Boss, I bet you tell that to all the girls. Over."

"Roger, Gay. Execute!"

"AP San Francisco. A mysterious explosion disturbed the academic quiet of — " A story ending with the usual claim about an arrest being expected "momentarily" settled several points: All of us were believed dead. Our village top cop claimed to have a theory but was keeping it mum — meaning that he knew even less than we did. Since we were reported as "presumed dead" and since the news said nothing about an illegal liftoff and other capers that annoy sky cops, I assumed tentatively that police radar had not been looking at us until after we had become just one more blip behaving legally. The lack of mention of the absence of Gay Deceiver did not surprise me, as I had roaded in and had been last or nearly last to park — and could have arrived by taxi, public capsule, or on foot. Doctor Brain was not mentioned, nothing about the row. Guests had been questioned and released. Five cars parked near the, explosion had been damaged.

"Nevada — null retrieval. Utah — UPI Salt Lake City. A fire near Utah State, University campus in Logan destroyed — " "Blokes in Black Hats" again and Deety and her Pop were dead twice over, as they were presumed to have been overcome by smoke, unable to escape. No one else hurt or missing. Fire attributed to faulty wiring. "End of first retrieval, Zeb. Second retrieval starting." Gay shut up.

I said soberly, "Pop, somebody doesn't like you."

He groaned, "Gone! All gone!"

"No copies of your papers elsewhere? And your… gadget?"

"Eh? No, no! — *much* worse! My irreplaceable collection of pulp magazines. Weird Tales, Argosy, All-Story, the early Gernsbachs, The Shadow, Black Mask — *Ooooooh!"*

"Pop really does feel bad," Deety whispered, "and I could manage tears myself. I taught myself to read from that collection. War Aces, Air Wonder, the complete Clayton Astoundings — It was appraised at two hundred and thirteen thousand newdollars. Grandpop started it, Pop continued it — I grew up reading them."

"I'm sorry, Deety." I hugged her. "They should have been microfiched."

"They were. But that's not having the magazines in your hands."

"I agree. Uh, how about the… thing in the basement?"

"What 'Thing in the Basement'?" demanded Sharpie. "Zebbie, you sound like H. P. Lovecraft."

"Later, Sharpie. Comfort Jake; we're busy. Gay!"

"Here, Zeb. Where's the riot?"

"Display map, please." We were midway over northern Nevada. "Cancel routing and cruise random. Report nearest county seat."

"Winnemucca and Elko are equidistant to one percent. Elko closer by ETA as I am now vectored eleven degrees north of Elko bearing."

"Deety, would you like to be married in Elko?"

"Zebadiah, I would love to be married in Elko."

"Elko it is, but loving may have to wait. Gay, vector for Elko and ground us, normal private cruising speed. Report ETA in elapsed minutes."

"Roger Wilco, Elko. Nine minutes seventeen seconds."

Hilda said soothingly, "There, there, Jake darling; Mama is here" — then added in her top sergeant voice, "Quit stalling, Zebbie! What 'Thing' in which basement?"

"Sharpie, you're nosy. It belonged to Pop and now it's destroyed and that's all you need to know."

"Oh, but it wasn't," Doctor Burroughs said. "Zeb is speaking of my continua craft, Hilda. It's safe. Not in Logan."

"What in the Name of the Dog is a 'continua craft'?"

"Pop means," Deety explained, "his time machine."

"Then why didn't he say so? Everybody savvies 'Time Machine.' George Pal's 'Time Machine' — a classic goodie. I've caught it on the late-late-early show more than once."

"Sharpie," I asked, "can you read?"

"Certainly I can read! 'Run, Spot, run See Spot run.' Smarty."

"Have you ever heard of H. G. Wells?"

"Heard of him? I've *had* him."

"You are a boastful old tart, but not that old. When Mr. Wells died, you were still a virgin."

"Slanderer! Hit him, Jake — he insulted me."

"Zeb didn't mean to insult you, I feel sure. Deety won't permit me to hit people, even when they need it."

"We'll change that."

"Second retrieval complete," Gay Deceiver reported. "Holding."

"Report second retrieval, please."

"Reuters, Singapore. The Marston expedition in Sumatra is still unreported according to authorities at Palembang. The party is thirteen days overdue. Besides Professor Marston and native guides and assistants, the party included Doctor Z.E. Carter, Doctor Cecil Yang, and Mr. Giles Smythe-Belisha. The Minister of Tourism and Culture stated that the search will be pursued assiduously. End of retrieval."

Poor Ed. We had never been close but he had never caused me grief. I hoped that he was shacked up with something soft and sultry — rather than losing his head to a jungle machete, which seemed more likely. "Pop, a few minutes ago I said that somebody doesn't like you. I now suspect that somebody doesn't like *n*-dimensional geometers."

"It would seem so, Zeb. I do hope your cousin is safe — a most brilliant mind! He would be a great loss to all mankind."

(And to himself, I added mentally. And me, since family duty required that I do something about it. When what I had in mind was a honeymoon.) "Gay."

"Here, Zeb."

"Addendum. Third news retrieval program. Use all parameters second program. Add Sumatra to area. Add all proper names and titles found in second retrieval. Run until canceled. Place retrievals in permanent memory. Report new items soonest. Start."

"Running, Boss."

"You're a good girl, Gay."

"Thank you, Zeb. Grounding Elko two minutes seven seconds."

Deety squeezed my hand harder. "Pop, as soon as I'm legally Mrs. John Carter I think we should all go to Snug Harbor."

"Eh? Obviously."

"You, too, Aunt Hilda. It might not be safe for you to go home."

"Change in plans, dear. It's going to be a double wedding. Jake. Me."

Deety looked alert but not displeased. "Pop?"

"Hilda has at last consented to marry me, dear."

"Rats," said Sharpie. "Jake has never asked me in the past and didn't this time; I simply told him. Hit him with it while he was upset over losing his comic books and unable to defend himself. It's necessary, Deety — I promised Jane I would take care of Jake and I have — through you, up to now. But from here on you'll be taking care of Zebbie, keeping him out of trouble, wiping his nose… so I've got to hogtie Jake into marriage to keep my promise to Jane. Instead of sneaking into his bed from time to time as in the past."

"Why, Hilda dear, you have never been in my bed!"

"Don't shame me in front of the children, Jake. I gave you a test run before I let Jane marry you and you don't dare deny it."

Jake shrugged helplessly. "As you wish, dear Hilda."

"Aunt Hilda… do you love Pop?"

"Would I marry him if I didn't? I could carry out my promise to Jane more simply by having him committed to a shrink factory. Deety, I've loved Jake longer than you have. *Much!* But he loved Jane… which shows that he is basically rational despite his weird ways. I shan't try to change him, Deety; I'm simply going to see to it that he wears his overshoes and takes his vitamins — as you've been doing. I'll still be 'Aunt Hilda,' not 'Mother.' Jane was and *is* your mother."

"Thank you, Aunt Hilda. I thought I was happy as a woman can be, getting Zebadiah. But you've made me still happier. No worries."

(I had worries. Blokes with Black Hats and no faces. But I didn't say so, as Deety was snuggling closer and assuring me that it was all right because Aunt Hilda wouldn't fib about loving Pop… but I should ignore that guff about her sneaking into Pop's bed — on which I had no opinion and less interest.) "Deety, where and what is 'Snug Harbor'?"

"It's… a nowhere place. A hideout. Land Pop leased from the government when he decided to build his time twister instead of just writing equations. But we may have to wait for daylight. Unless — Can Gay Deceiver home on a given latitude and longitude?"

"She certainly can! Precisely."

"Then it's all right. I can give it to you in degrees, minutes, and fractions of a second."

"Grounding," Gay warned us.

The Elko County Clerk did not object to getting out of bed and seemed pleased with the century note I slipped him. The County Judge was just as accommodating and pocketed her honorarium without glancing at it. I stammered but managed to say, "I, Zebadiah John, take thee, Dejah Thoris — " Deety went through it as solemnly and perfectly as if she had rehearsed it… while Hilda sniffled throughout.

A good thing that Gay can home on a pin point; I was in no shape to drive even in daylight. I had her plan her route, too, a dogleg for minimum radar and no coverage at all for the last hundred-odd kilometers to this place in the Arizona Strip north of the Grand Canyon. But I had her hover before grounding — I being scared silly until I was certain there was not a third fire there.

A cabin, fireproof, with underground parking for Gay — I relaxed.

We split a bottle of chablis. Pop seemed about to head for the basement. Sharpie tromped on it and Deety ignored it.

I carried Deety over the threshold into her bedroom, put her gently down, faced her. "Dejah Thoris —"

"Yes, John Carter?"

"I did not have time to buy you a wedding present —"

"I need no present from my captain."

"Hear me out, my princess. My Uncle Zamir did not have as fine a collection as your father had… but may I gift you with a complete set of Clayton Astoundings —"

She suddenly smiled.

" — and first editions of the first six Oz books, quite worn but with the original color plates? And a first in almost mint condition of 'A Princess of Mars'?"

The smile became a grin and she looked nine years old. *"Yes!"*

"Would your father accept a complete set of Weird Tales?"

"Would he! Northwest Smithand Jirel of Joiry? I'm going to borrow them — or he can't look at my Oz books. I'm stubborn, I am. And selfish. And *mean!"*

"'Stubborn' stipulated. The others denied."

Deety stuck out her tongue. "You'll find out." Suddenly her face was solemn. "But I sorrow, my prince, that I have no present for my husband."

"But you have!"

"I do?"

"Yes. Beautifully wrapped and making me dizzy with heavenly fragrance."

"Oh." She looked solemn but serenely happy. "Will my husband unwrap me? Please?"

I did.

That is all anyone is ever going to know about our wedding night.

Chapter IV

Because two things equal to the same thing are never equal to each other.

Deety:

I woke early as I always do at Snug Harbor, wondered why I was ecstatically happy — then remembered, and turned my head. My husband — *"husband!"* — what a heart-filling word — my husband was sprawled face down beside me, snoring softly and drooling onto his pillow. I held still, thinking how beautiful he was, how gently strong and gallantly tender.

I was tempted to wake him but I knew that my darling needed rest. So I eased out of bed and snuck noiselessly into my bath — *our* bath — and quietly took care of this and that. I did not risk drawing a tub — although I needed one. I have a strong body odor that calls for at least one sudsy bath a day, two if I am going out that evening — and this morning I was certainly whiff as a polecat.

I made do with a standup bath by letting water run in a noiseless trickle into the basin — I would grab that proper bath after my Captain was awake; meanwhile I would stay downwind.

I pulled on briefs, started to tie on a halter — stopped and looked in the mirror. I have a face-shaped face and a muscular body that I keep in top condition. I would never reach semifinals in a beauty contest but my teats are shapely, exceptionally firm, stand out without sagging and look larger than they are because my waist is small for my height, shoulders and hips. I've known this since I was twelve, from mirror and from comments by others.

Now I was acutely aware of them from what Zebadiah calls his "infantile bias." I was awfully glad I had them; my husband liked them so much and had told me so again and again, making me feel warm and tingly inside. Teats get in the way, and I once found out painfully why Amazons are alleged to have removed their starboard ones to make archery easier.

Today I was most pleased that Mama had required me to wear a bra for tennis and horseback and such — no stretch marks, no "Cooper's droop," no sag, and my husband called them "wedding presents"! *Hooray!*

Doubtless they would become baby-chewed and soft — but by then I planned to have Zebadiah steadfastly in love with me for better reasons. You hear that, Deety? Don't be stubborn, don't be bossy, don't be difficult — and above all don't sulk! Mama never sulked, although Pop wasn't and isn't easy to live with. For example he dislikes the word "teat" even though I spell it correctly and pronounce it correctly (as if spelled "tit"). Pop insists that teats are on cows, not women.

After I started symbolic logic and information theory I became acutely conscious of precise nomenclature, and tried to argue with Pop, pointing out that "breast" denoted the upper frontal torso of male and female alike, that "mammary gland" was medical argot, but "teat" was correct English.

He had slammed down a book. "I don't give a damn what The Oxford English Dictionary says! As long as I am head of this house, language used in it will conform to my notions of propriety!"

I never argued such points with Pop again. Mama and I went on calling them "teats" between ourselves and did not use such words in Pop's presence. Mama told me gently that logic had little to do with keeping a husband happy and that anyone who "won" a family argument had in fact lost it. Mama never argued and Pop always did what she wanted — if she really wanted it. When at seventeen I had to grow up and try to replace her, I tried to emulate her — not always successfully. I inherited some of Pop's temper, some of Mama's calm. I try to suppress the former and cultivate the latter. But I'm not Jane, I'm Deety.

Suddenly I wondered why I was putting on a halter. The day was going to be hot. While Pop is so cubical about some things that he turns up at the corners, skin is not one of them. (Possibly he had been, then Mama had gently gotten her own way.) I like to be naked and usually am at Snug Harbor, weather permitting. Pop is almost as casual. Aunt Hilda was family-by-choice; we had often used her pool and never with suits — screened for the purpose.

That left just my lovely new husband, and if there was a square centimeter of me he had not examined (and praised), I could not recall it. Zebadiah is easy to be with, in bed or out. After our hasty wedding I was slightly tense lest he ask me when and how I had mislaid my virginity… but when the subject could have come up I forgot it and he apparently never thought about it. I was the lusty wench I have always been and he seemed pleased — I *know* he was.

So why was I tying on this teat hammock? I was — but *why?*

Because two things equal to the same thing are never equal to each other. Basic mathematics if you select the proper sheaf of postulates. People are not abstract symbols. I could be naked with any one of them but not all three.

I felt a twinge that Pop and Aunt Hilda might be in the way on my honeymoon… then realized that Zebadiah and I were just as much in the way on theirs — and stopped worrying; it would work out.

Took one last look in the mirror, saw that my scrap of halter, like a good evening gown, made me nakeder than skin would. My nipples popped out; I grinned and stuck out my tongue at them. They stayed up; I was happy.

I started to catfoot through our bedroom when I noticed Zebadiah's clothes — and stopped. The darling would not want to wear evening dress to breakfast. Deety, you are not being wifely — figure this out. Are any of Pop's clothes where I can get them without waking the others?

Yep! An old shirt that I had liberated as a house coat, khaki shorts I had been darning the last time we had been down — both in my wardrobe in my — *our!* — bathroom. I crept back, got them, laid them over my darling's evening clothes so that he could not miss them.

I went through and closed after me two soundproof doors, then no longer had to keep quiet. Pop does not tolerate anything shoddy — if it doesn't work properly, he fixes it. Pop's B.S. was in mechanical engineering, his M.S. in physics, his Ph.D. in mathematics; there isn't *anything* he can't design and build. A second Leonardo da Vinci — or a Paul Dirac.

No one in the everything room. I decided not to head for the kitchen end yet; if the others slept a bit longer I could get in my morning tone-up. No violent exercise this morning, mustn't get more whiff than I am — just controlled limbering. Stretch high, then palms to the floor without bending knees — ten is enough. Vertical splits, both legs, then the same to the floor with my forehead to my shin, first right, then left.

I was doing a back bend when I heard, "Ghastly. The battered bride. Deety, stop that."

I continued into a backwards walkover and stood up facing Pop's bride. "Good morning, Aunt Hillbilly." I kissed and hugged her. "Not battered. Bartered, maybe."

"Battered," she repeated, yawning. "Who gave you those bruises? What's-his-name? — your husband."

"Not a bruise on me and you've known his name longer than I have. What causes those circles under the bags under the rings under your eyes?"

"Worry, Deety. Your father is very ill."

"What? How?"

"Satyriasis. Incurable — I hope."

I let out my breath. "Aunt Hillbilly, you're a bitchie, bitchie tease."

"Not a bitch this morning, dear. A nanny goat — who has been topped all night by the most amazing billy goat on the ranch. And him past fifty and me only twenty-nine. Astounding."

"Pop's forty-nine, you're forty-two. You're complaining?"

"Oh, no! Had I known twenty-four years ago what I know now, I would never have let Jane lay eyes on him."

" — what you know now — Last night you were claiming to have sneaked into Pop's bed, over and over again. Doesn't jibe, Aunt Nanny Goat."

"Those were quickies. Not a real test." She yawned again.

"Auntie, you lie in your teeth. You were never in his bed until last night."

"How do you know, dear? Unless you were in it yourself? Were you? Incest?"

"What have you got against incest, you bawdy old nanny goat? Don't knock it if you haven't tried it."

"Oh, so you *have?* How fascinating — tell Auntiet!"

"I'll tell you the truth, Aunt Hilda. Pop has never laid a hand on me. But if he had… I would not have refused. I love him."

Hilda stopped to kiss me more warmly than before. "So do I, dear one. I honor you for what you just told me. He could have had me, too. But never did. Until last night. Now I'm the happiest woman in America."

"Nope. Second happiest. You're looking at the happiest."

"Mmm, a futile discussion. So my problem child is adequate?"

"Well… he's not a member of the Ku Klux Klan —"

"I never thought he was! Zebbie isn't that sort."

" — but he's a wizard under a sheet!"

Aunt Hilda looked startled, then guffawed. "I surrender. We're both the happiest woman in the world."

"And the luckiest. Aunt Nanny Goat, that robe of Pop's is too hot. I'll get something of mine. How about a tie-on fit-anybody bikini?"

"Thanks, dear, but you might wake Zebbie." Aunt Hilda opened Pop's robe and held it wide, fanning it. I looked at her with new eyes. She's had three or four term contracts, no children. At forty-two her face looks thirty-five, but from her collarbones down she could pass for eighteen. Little bitty teats — I had more at twelve. Flat belly and lovely legs. A china doll — makes me feel like a giant.

She added, "If it weren't for your husband, I would simply wear this old hide. It *is* hot."

"If it weren't for *your* husband, so would I."

"Jacob? Deety, he's changed your diapers. I know how Jane reared you. True modesty, no false modesty."

"It's not the same, Aunt Hilda. Not today."

"No, it's not. You always did have a wise head, Deety. Women are toughminded, men are not; we have to protect them ... while pretending to be fragile ourselves, to build up their fragile egos. But I've never been good at it — I like to play with matches."

"Aunt Hilda, you are *very* good at it, in your own way. I'm certain Mama knows what you've done for Pop and blesses it and is happy for

Pop. For all of us — all five of us."

"Don't make me cry, Deety. Let's break out the orange juice; our men will wake any time. First secret of living with a man: Feed him as soon as he wakes."

"So I know."

"Yes, of course you know. Ever since we lost Jane. Does Zebbie know how lucky he is?"

"He says so. I'm going to try hard not to disillusion him."

Chapter V

" — a wedding ring is not a ring in my nose — "

Jake:

I woke in drowsy euphoria, became aware that I was in bed in our cabin that my daughter calls "Snug Harbor" - then woke completely and looked at the other pillow - the dent in it. Not a dream! Euphoric for the best of reasons!

Hilda was not in sight. I closed my eyes and simulated sleep as I had something to do. "Jane?" I said in my mind.

"I hear you, dearest one. It has my blessing. Now we are all happy together."

"We couldn't expect Deety to become a sour old maid, just to take care of her crotchety old father. This young man, he's okay, to the *n*th power. I felt it at once, and Hilda is certain of it."

"He is. Don't worry, Jacob. Our Deety can never be sour and you will never be old. This is exactly as Hilda and I planned it, more than five of your years ago. Predestined. She told you so, last night."

"Okay, darling."

"Get up and brush your teeth and take a quick shower. Don't dawdle, breakfast is waiting. Call me when you need me. Kiss."

So I got up, feeling like a boy on Christmas morning. Everything was jake with Jake; Jane had put her stamp of approval on it. Let me tell you, you nonexistent reader sitting there with a tolerant sneer: Don't be smug. Jane is more real than *you* are.

The spirit of a good woman cannot be coded by nucleic acids arranged in a double helix, and only an overeducated fool could think so. I could prove that mathematically save that mathematics can never prove anything. No mathematics has any content. All any mathematics can do is — sometimes — turn out to be useful in describing some aspects of our so-called "physical universe." That is a bonus; most forms of mathematics are as meaning-free as chess.

I don't know *any* final answers. I'm an all-around mechanic and a competent mathematician… and neither is of any use in unscrewing the inscrutable.

Some people go to church to talk to God, Whoever He is. When I have something on my mind, I talk to Jane. I don't hear "voices," but the answers that, come into my mind have as much claim to infallibility, it seems to me, as any handed down by any Pope speaking *ex cathedra.* If this be blasphemy, make the most of it; I won't budge. Jane is, was, and ever shall be, worlds without end. I had the priceless privilege of living with her for eighteen years and I can never lose her.

Hilda was not in the bath but my toothbrush was damp. I smiled at this. Logical, as any germs I was harboring, Hilda now had — and Hilda, for all her playfulness, is no-nonsense practical. She faces danger without a qualm (had done so last night) but she would say "Gesundheit!" to an erupting volcano even as she fled from it. Jane is equally brave but would omit the quip. They are alike only in — no, not that way, either. Different but equal. Let it stand that I have been blessed in marriage by two superb women. (And blessed by a daughter whose Pop thinks she is perfect.)

I showered, shaved, and brushed my teeth in nine minutes and dressed in under nine seconds as I simply wrapped around my waist a terry-cloth sarong Deety had bought for me — the day promised to be a scorcher. Even that hip wrap was a concession to propriety, i.e., I did not know my new son-in-law well enough to subject him abruptly to our casual ways; it might offend Deety.

I was last up, and saw that all had made much the same decision. Deety was wearing what amounted to a bikini minimum (indecently "decent"!) and my bride was "dressed" in a tie-on job belonging to Deety. The tieties had unusually large bows; Hilda is tiny, my daughter is not. Zeb was the only one fully dressed: an old pair of working shorts, a wornout denim shirt Deety had confiscated, and his evening shoes. He was dressed for the street in any western town save for one thing: I'm built like a pear, Zeb is built like the Gray Lensman.

My shorts fitted him well enough — a bit loose — but his shoulders were splitting the shirt's seams. He looked uncomfortable.

I took care of amenities — a good-morning to all, a kiss for my bride, one for my daughter, a handshake for my son-in-law-good hands, calloused. Then I said, "Zeb, take that shirt off. It's hot and getting hotter. Relax. This is your home."

"Thanks, Pop." Zeb peeled off my shirt.

Hilda stood up on her chair, making her about as tall as Zeb. "I'm a militant women's-rights gal," she announced, "and a wedding ring is not a ring in my nose — a ring that you have not yet given me, you old goat."

"When have I had time? You'll get one, dear — first chance."

"Excuses, excuses! Don't interrupt when I'm orating. Sauce for the gander is no excuse for goosing the goose. If you male chauvinist pigs — I mean 'goats' — can dress comfortably, Deety and I have the same privilege." Whereupon my lovely little bride untied that bikini top and threw it aside like a stripper.

"'"What's for breakfast?" asked Pooh,'" I misquoted.

I was not answered. Deety made me proud of her for the *n*th time. For years she had consulted me, at least with her eyes, on "policy decisions." Now she looked not at me but at her husband. Zeb was doing Old Stone Face, refusing assent or dissent. Deety stared at him, gave a tiny shrug, reached behind her and untied or unsnapped something and discarded her own top.

"I said, 'What's for breakfast?'" I repeated.

"Greedy gut," my daughter answered. "You men have had baths, while Aunt Hilda and I haven't had a chance to get clean for fear of waking you slugabeds."

"Is that what it is? I thought a skunk had wandered past. 'What's for breakfast?'"

"Aunt Hilda, in only hours Pop has lost all the training I've given him for five years. Pop, it's laid out and ready to go. How about cooking while Hilda and I grab a tub?"

Zeb stood up. "I'll cook, Deety; I've been getting my own breakfast for years."

"Hold it, Buster!" my bride interrupted. "Sit down, Zebbie. Deety, never encourage a man to cook breakfast; it causes him to wonder if women are necessary. If you always get his breakfast and don't raise controversial issues until after his second cup of coffee, you can get away with murder the rest of the time. They don't notice other odors when they smell bacon. I'm going to have to coach you."

My daughter reversed the field, fast. She turned to her husband and said meekly, "What does my Captain wish for breakfast?"

"My Princess, whatever your lovely hands offer me."

What we were offered, as fast as Deety could pour batter and Hilda could serve, was a gourmet specialty that would enrage a *Cordon Bleu* but which, for my taste, is ambrosia: A one-eyed Texas stack — a tall stack of thin, tender buttermilk pancakes to Jane's recipe, supporting one large egg, up and easy, surrounded by hot sausage, and the edifice drowned in melting butter and hot maple syrup, with a big glass of orange juice and a big mug of coffee on the side.

Zeb ate two stacks. I concluded that my daughter would have a happy marriage.

Chapter VI

Are men and women one race?

Hilda:

Deety and I washed dishes, then soaked in her tub and talked about husbands. We giggled, and talked with the frankness of women who trust each other and are sure that no men can overhear. Do men talk that openly in parallel circumstances? From all I have been able to learn in after-midnight horizontal conversations, all passion spent, men do *not.* Or not men I would take to bed. Whereas a "perfect lady" (which Jane was, Deety is, and I can simulate) will talk with another "perfect lady" she trusts in a way that would cause her father, husband, or son to faint.

I had better leave out our conversation; this memoir might fall into the hands of one of the weaker sex and I would not want his death on my conscience.

Are men and women one race? I know what biologists say — but history is loaded with "scientists" jumping to conclusions from superficial evidence. It seems to me far more likely that they are symbiotes. I am not speaking from ignorance; I was one trimester short of a B.S. in biology (and a straightA student) when a "biology experiment" blew up in my face and caused me to leave school abruptly.

Not that I need that degree — I've papered my private bath with honorary degrees, mostly doctorates. I hear that there are things no whore will do for money but I have yet to find *anything* that a university chancellor faced with a deficit will boggle at. The secret is never to set up a permanent fund but to dole it out when need is sharpest, once every academic year. Done that way, you not only own a campus but also the town cops learn that it's a waste of time to hassle you. A univer$ity alway$ $tand$ $taunchly by it$ $olvent a$ $ociate$; that'$ the ba$ic $ecret of $chola$tic $ucce$$.

Forgive my digre$$ion; we were speaking of men and women. I am strong for women's rights but was never taken in by unisex nonsense. I don't yearn to be equal; Sharpie is as *un*equal as possible, with all the perks and bonuses and special privileges that come from being one of the superior sex. If a man fails to hold a door for me, I fail to see him and step on his instep. I feel no shame in making lavish use of the strongest muscles, namely male ones (but my own strongest muscle is dedicated to the service of men — *noblesse oblige).* I don't begrudge men one whit of their natural advantages as long as they respect mine. I am not an unhappy pseudomale; I am *female* and like it that way.

I borrowed makeup that Deety rarely uses, but I carry my own perfume in my purse and used it in the twentytwo classic places. Deety uses only the basic aphrodisiac: soap and water. Perfume on her would be gilding the lily; fresh out of a hot tub she smells like a harem. If I had her natural fragrance, I could have saved at least ten thousand newdollars over the years as well as many hours spent dabbing bait here and there.

She offered me a dress and I told her not to be silly; any dress of hers would fit me like a tent. "You put something bridal and frilly around your hips and lend me your boldest Gstring job. Dear, I surprised you when I jockeyed you into taking off your halter, after telling you that you were wise not to rush it. But the chance showed up and I grabbed the ring on the fly. We've got our men gentled to nearly naked and we'll hold that gain. At first opportunity we'll get pants off all of us, too, without anything as childish as strip poker. Deety, I want us to be a solid family, and relaxed about it. So that skin doesn't mean sex, it just means we are home, en famille."

"Your skin is pretty sexy, Nanny Goat."

"Deety, do you think I'm trying to make a pass at Zebbie?"

"Heavens, no, Aunt Hilda. You would never do that."

"Piffle, dear. I don't have morals, just customs. I don't wait for a man to make a pass; they fumble around and waste time. But when I met him I picked Zebbie for a chum — so I gave him an opening; he made a polite pass, I carefully failed to see it, and that ended it. I'm sure he's as much fun on the workbench as you tell me he is — but bedmates are easy to find, while worthwhile male friends are scarce. Zebbie is one to whom I can holler for help in the middle of the night and be certain he'll rally around. I'm not going to let that change merely because a weird concatenation now makes him my son-in-law. Besides, Deety, although your old Aunt Sharpie may seem undignified, I refuse to be the campus widow who seduces younger men. Save for minor exceptions close to my age, I always have bedded older men. When I was your age, I tripped several three times my age. Educational."

"It certainly is! Aunt Hilda, I got ninety percent of my instruction two years ago — a widower three times my age. I was programming for him and we took shared time when we could get it, often after midnight. I didn't think anything of it until one night I was startled to find that I was helping him to take off my panties. Then I was still more surprised to learn how *little* I had learned in seven years. He gave me a tutored seminar, usually three times a week-all the time he was willing to spare me — for the next six months. I'm glad I got tutoring from an expert before last night rolled around — or Zebadiah would have found me a dead arse, willing but clumsy. I didn't tell this to my darling; I let him think he was teaching me."

"That's right, dear. Never tell a man anything he doesn't need to know, and lie with a straight face rather than hurt his feelings or diminish his pride."

"Aunt Nanny Goat, I just plain love you."

We quit yakking and looked for our men. Deety said that they were certain to be in the basement. "Aunt Hilda, I don't go there without invitation. It's Pop's sanctum sanctorum."

"You're warning me not to risk a faux pas?"

"I'm his daughter, you're his wife. Not the same."

"Well… he hasn't told me not to — and today he'll forgive me, if ever. Where do you hide the stairs?"

"That bookcase swings out."

"Be darned! For a so-called cabin this place is loaded with surprises. A bidet in each bath didn't startle me; Jane would have required them. Your walk-in freezer startled me only by being big enough for a restaurant. But a bookcase concealing a priest's hole — as Great-Aunt Nettie used to say, 'I do declare!'"

"You should see our septic tank — yours, now."

"I've seen septic tanks. Pesky things — always need pumping at the most inconvenient time."

"This one won't have to be pumped. Over three hundred meters deep. An even thousand feet."

"For the love of — *Why?"*

"It's an abandoned mine shaft below us that some optimist dug a hundred years back. Here was this big hole, so Pop used it. There is a spring farther up the mountain. Pop cleaned that out, covered it, concealed it, put pipe underground, and we have lavish pure water under pressure. The rest of Snug Harbor Pop designed mostly from prefab catalogs, fireproof and solid and heavily insulated. We have — you have, I mean — this big fireplace and the little ones in the bedrooms, but you won't need them, other than for homeyness. Radiant heat makes it skin-comfortable even in a blizzard."

"Where do you get your power? From the nearest town?"

"Oh, no! Snug Harbor is a hideout, nobody but Pop and me — and now you and Zebadiah — knows it's here. Power packs, Aunt Hilda, and an inverter in a space behind the back wall of the garage. We bring in power packs ourselves, and take them out the same way. Private. Oh, the leasehold record is buried in a computer in Washington or Denver, and the Federal rangers know the leaseholds. But they don't see us if we see or hear them first. Mostly they cruise on past. Once one came by on horseback. Pop fed him beer out under the trees — and from outside this is just a prefab, a living room and two shedroof bedrooms. Nothing to show that important parts are underground."

"Deety, I'm beginning to think that this place — this *cabin* — cost more than my townhouse."

"Uh, probably."

"I think I'm disappointed. Sugar Pie, I married your papa because I love him and want to take care of him and promised Jane that I would. I've been thinking happily that my wedding present to my bridegroom would be his weight in bullion, so that dear man need never work again."

"Don't be disappointed, Aunt Hilda. Pop has to work; it's his nature. Me, too. Work is necessary to us. Without it, we're lost."

"Well… yes. But working because you want to is the best sort of play."

"Correct!"

"That's what I thought I could give Jacob. I don't understand it. Jane wasn't rich, she was on a scholarship. Jacob had no money — still a teaching fellow, a few months shy of his doctorate. Deety, Jacob's suit that he wore to be married in was threadbare. I know that he pulled up from that; he made full professor awfully fast. I thought it was that and Jane's good management."

"It was both."

"That doesn't account for *this.* Forgive me, Deety, but Utah State doesn't pay what Harvard pays."

"Pop doesn't lack offers. We like Logan. Both the town and the civilized behavior of Mormons. But — Aunt Hilda, I must tell you some things."

The child looked worried. I said, "Deety, if Jacob wants me to know something he'll tell me."

"Oh, but he won't and I must!"

"No, Deety!"

"Listen, please! When I said, 'I do,' I resigned as Pop's manager. When you said, 'I do,' the load landed on you. It has to be that way, Aunt Hilda. Pop won't do it; he has other things to think about, things that take genius. Mama did it for years, then I learned how, and now it's your job. Because it can't be farmed out. Do you understand accountancy?"

"Well, I *understand* it, I took a course in it. Have to understand it, or the government will skin you alive. But I don't *do* it, I have accountants for that — and smart shysters to keep it inside the law."

"Would it bother you to be outside the law? On taxes?"

"What? Heavens, no! But Sharpie wants to stay outside of jail — I detest an institutional diet."

"You'll stay out of jail. Don't worry, Aunt Hilda — I'll teach you double-entry bookkeeping they don't teach in school. *Very* double. One set for the revenooers and another set for you and Jake."

"It's that second set that worries me. That one puts you in the pokey. Fresh air alternate Wednesdays."

"Nope. The second set is not on paper; it's in the campus computer at Logan."

"Worse!"

"Aunt Hilda, *please!* Certainly my computer address code is in the department's vault and an I.R.S. agent could get a court order. It wouldn't do him any good. It would spill out our first set of books while wiping every trace of the second set. Inconvenient but not disastrous. Aunt Hillbilly, I'm not a champion at anything else but I'm the best software artist inthe business. I at your elbow until you are sure of yourself.

"Now about how Pop got rich — All the time he's been teaching he's also been inventing gadgets — as automatically as a hen lays eggs. A better can opener. A lawn irrigation system that does a better job, costs less, uses less water. Lots of things. But none has his name on it and royalties trickle back in devious ways.

"But we aren't freeloaders. Every year Pop and I study the Federal Budget and decide what is useful and what is sheer waste by fat-arsed chairwarmers and pork-barrel raiders. Even before Mama died we were paying *more* income tax than the total of Pop's salary, and we've paid more each year while I've been running it. It *does* take a bundle to run this country. We don't begrudge money spent on roads and public health and national defense and truly useful things. But we've quit paying for parasites wherever we can identify them.

"It's your job now, Aunt Hilda. If you decide that it's dishonest or too risky, I can cause the computer to make it all open and legal so smoothly that hankypanky would never show. It would take me maybe three years, and Pop would pay high capital gains. But *you* are in charge of Pop now."

"Deety, don't talk dirty."

"Dirty, how? I didn't even say 'spit.'"

"Suggesting that I would *willingly* pay what those clowns in Washington want to squeeze out of us. I would not be supporting so many accountants and shysters if I didn't think we were being robbed blind. Deety, how about being manager for all of us?"

"No, ma'am! I'm in charge of Zebadiah. I have my own interests to manage, too. Mama wasn't as poor as you thought. When I was a little girl, she came into a chunk from a trust her grandmother had set up. She and Pop gradually moved it over into my name and again avoided inheritance and estate taxes, all legal as Sunday School. When I was eighteen, I converted it into cash, then caused it to disappear. Besides that, I've been paying me a whopping salary as Pop's manager. I'm not as rich as you are, Aunt Hilda, and certainly not as rich as Pop. But I ain't hurtin'."

"Zebbie may be richer than all of us."

"You said last night that he was loaded but I didn't pay attention because I had already decided to marry him. But after experiencing what sort of car he drives I realize that you weren't kidding. Not that it matters. Yes, it *did* matter — it took both Zebadiah's courage and Gay Deceiver's unusual talents to save our lives."

"You may never find out how loaded Zebbie is, dear. Some people don't let their left hands know what their right hands are doing. Zebbie doesn't let his thumb know what his fingers are doing."

Deety shrugged. "I don't care. He's kind and gentle and he's a storybook hero who saved my life and Pop's and yours ... and last night he proved to me that life is worth living when I've been uncertain about it since Mama had to leave us. Let's go find our men, Aunt Nanny Goat. I'll risk Pop's Holy of Holies if you'll go first."

"Suits. Lay on your duff and cursed be he who first cries, 'Nay, enough."

"I don't think they're interested in that now, Nanny Goat."

"Spoilsport. How do you swing back this bookcase?"

"Switch on the cove lights, then turn on the cold water at the sink. Then switch off the cove lights, then turn off the water — in that order."

""'Curiouser and curiouser," said Alice.'"

The bookcase closed behind us and was a door with a knob on the upper landing side. The staircase was wide, treads were broad and nonskid, risers gentle, guard rails on both sides — not the legbreaker most houses have as cellar stairs. Deety went down beside me, holding my hand like a child needing reassurance.

The room was beautifully lighted, well ventilated, and did not seem like a basement. Our men were at the far end, bent over a table, and did not appear to notice us. I looked around for a time machine, could not spot it — at least not anything like George Pal's or any I had ever read about. All around was machinery. A drill press looks the same anywhere and so does a lathe, but others were strange — except that they reminded me of machine shops.

My husband caught sight of us, stood up, and said, "Welcome, ladies!"

Zebbie turned his head and said sharply, "Late to class! Find seats, no whispering during the lecture, take notes; there will be a quiz at eight o'clock tomorrow morning. If you have questions, raise your hands and wait to be called on. Anyone who misbehaves will remain after class and wash the chalk boards."

Deety stuck out her tongue, sat down quietly. I rubbed his brush cut and whispered an indecency into his ear. Then I kissed my husband and sat down.

My husband resumed talking to Zebbie. "I lost more gyroscopes that way."

I held up my hand. My husband said, "Yes, Hilda dear?"

"Monkey Ward's sells gyro tops — I'll buy you a gross."

"Thank you, dearest, but these weren't that sort. They were made by Sperry Division of General Foods."

"So I'll get them from Sperry."

"Sharpie," put in Zeb, "you're honing to clean the erasers, too."

"Just a moment, Son. Hilda may be the perfect case to find out whether or not what I have tried to convey to you — and which really can't be conveyed save in the equations your cousin Zebulon used, a mathematics you say is unfamiliar to you —"

"It is!"

" — but which you appear to grasp as mechanics. Would you explain the concept to Hilda? If she understands it, we may hypothesize that a continua craft can be designed to be operated by a nontechnical person."

"Sure," I said scornfully, "poor little me, with a button for a head. I don't have to know where the electrons go to use television or holovision. Ijust twist knobs. Go ahead, Zebbie. Take a swing at it, I dare you."

"I'll try," Zebbie agreed. "But, Sharpie, don't chatter and keep your comments to the point. Or I'll ask Pop to give you a fat lip."

"He wouldn't dast!"

"So? I'm going to give him a horsewhip for a wedding present — besides the Weird Tales, Jake; you get those too. But you need a whip. Attention, Sharpie."

"Yes, Zebbie. And the same to you doubled."

"Do you know what 'precess' means?"

"Certainly. Precession of the equinoxes. Means that Vega will be the North Star when I'm a great-grandmother. Thirty thousand years or some such."

"Correct in essence. But you're not even a mother yet."

"You don't know what happened last night. I'm an expectant mother. Jacob doesn't dare use a whip on me."

My husband looked startled but pleased — and I felt relieved. Zebbie looked at his own bride. Deety said solemnly, "It is possible, Zebadiah. Neither of us was protected, each was on or close on ovulation. Hilda is blood type B Rhesus positive and my father is AB positive. I am A Rh positive. May I inquire yours, sir?"

"I'm an 0 positive. Uh... I may have shot you down the first salvo."

"It would seem likely. But — does this meet with your approval?"

"'Approval'!" Zebbie stood up, knocking over his chair. "Princess, you could not make me happier! Jake! This calls for a toast!"

My husband stopped kissing me. "Unanimous! Daughter, is there champagne chilled?"

"Yes, Pop."

"Hold it!" I said. "Let's not get excited over a normal biological function. Deety and I don't *know* that we caught; we just hope so. And —"

"So we try again," Zebbie interrupted. "What's your calendar?"

"Twentyeight and a half days, Zebadiah. My rhythm is pendulum steady."

"Mine's twenty-seven; Deety and I just happen to be in step. But I want that toast at dinner and a luau afterwards; it might be the last for a long time. Deety, do you get morning sick?"

"I don't know; I've never been pregnant… before."

"I have and I do and it's miserable. Then I lost the naked little grub after trying hard to keep it. But I'm not going to lose this one! Fresh air and proper exercise and careful diet and nothing but champagne for me tonight, then not another drop until I know. In the meantime — Professors, may I point out that class is in session? I want to know about time machines and I'm not sure I could understand with champagne buzzing my buttonhead."

"Sharpie, sometimes you astound me."

"Zebbie, sometimes I astound myself. Since my husband builds time machines, I want to know what makes them tick. Or at least which knobs to turn. He might be clawed by the Bandersnatch and I would have to pilot him home. Get on with your lecture."

"I read you loud and clear."

But we wasted *("wasted?")* a few moments because everybody had to kiss everybody else — even Zebbie and my husband pounded each other on the back and kissed both cheeks Latin style. Zebbie tried to kiss me as if I were truly his motherin-law but I haven't kissed that way since junior high. Once I was firm with him he gave in and kissed me better than he ever had before — whew! I'm certain Deety is right but I won't risk worrying my older husband over a younger man and I'd be an idiot to risk competing with Deety's teats *et cetera* when all I have is fried eggs and my wonderful old goat seems so pleased with my et cetera.

Class resumed. "Sharpie, can you explain precession in gyroscopes?"

"Well, maybe. Physics One was required but that was a long time ago. Push a gyroscope and it doesn't go the way you expect, but ninety degrees from that direction so that the push lines up with the spin. Like this — " I pointed a forefinger like a little boy going: *"Bang!* —

you're dead!"

"My thumb is the axis, my forefinger represents the push, the other fingers show the rotation."

"Go to the head of the class. Now — think hard! — suppose we put a gyroscope in a frame, then impress equal forces at *all three* spatial coordinates at once; what would it do?"

I tried to visualize it. "I think it would either faint or drop dead."

"A good first hypothesis. According to Jake, it disappears."

"They *do* disappear, Aunt Hilda. I watched it happen several times."

"But where do they go?"

"I can't follow Jake's math; I have to accept his transformations without proof. But it is based on the notion of six spacetime coordinates, three of space, the usual three that we see — marked x, y, and z — and three time coordinates: one marked 't' like this — " *(t)* " — and one marked 'tau,' Greek alphabet — " *(T)* " — and the third from the Cyrillic alphabet, 'teh' — " *(M)*

"Looks like an 'm' with a macron over it."

"So it does, but it's what the Russians use for 't'."

"No, the Russians use 'chai' for tea. In thick glasses with strawberry jam."

"Stow it, Sharpie. So we have x, y, and z; t, tau, and teh, six dimensions. It is basic to the theory that all are at right angles to each other, and that any one may be swapped for any of the others by rotation — or that a new coordinate may be found (not a seventh but replacing any of the six) by translation — say 'tau' to 'tau prime' by displacement along 'x.'"

"Zebbie, I think I fell off about four coordinates back."

My husband suggested, "Show her the caltrop, Zeb."

"Good idea." Zeb accepted a widget from my husband, placed it in front of me. It looked like jacks I used to play with as a little girl but not enough things sticking out — four instead of six. Three touched the table, a tripod; the fourth stuck straight up.

Zeb said, "This is a weapon, invented centuries ago. The points should be sharp but these have been filed down." He flipped it, let it fall to the table. "No matter how it falls, one prong is vertical. Scatter them in front of cavalry; the horses go down — discouraging. They came into use again in Wars One and Two against anything with pneumatic tires — bicycles, motorcycles, lorries, and so forth. Big enough, they disable tanks and tracked vehicles. A small sort can be whittled from thorn bushes for guerrilla warfare — usually poisoned and quite nasty.

"But here this lethal toy is a geometrical projection, a drawing of the coordinates of a four-dimensional spacetime continuum. Each spike is exactly ninety degrees from every other spike."

"But they aren't," I objected. "Each angle is more than a right angle."

"I said it was a *projection.* Sharpie, it's an isometric projection of four-dimensional coordinates in three-dimensional space. That distorts the angles… and the human eye is even more limited. Cover one eye and hold still and you see only two dimensions. The illusion of depth is a construct of the brain."

"I'm not very good at holding still —"

"No, she isn't," agreed my bridegroom whom I love dearly and at that instant could have choked.

"But I can close both eyes and *feel* three dimensions with my hands."

"A good point. Close your eyes and pick this up and think of the prongs as the four directions of a four-dimensional space. Does the word tesseract mean anything to you?"

"My high school geometry teacher showed us how to construct them — projections — with modeling wax and toothpicks. Fun. I found other four-dimensional figures that were easy to project. And a number of ways to project them."

"Sharpie, you must have had an exceptional geometry teacher."

"In an exceptional geometry class. Don't faint, Zebbie, but I was grouped with what they called 'overachievers' after it became 'undemocratic' to call them 'gifted children.'"

"Be durned! Why do you always behave like a fritterhead?"

"Why don't you ever look beneath the surface, young man! I laugh because I dare not cry. This is a crazy world and the only way to enjoy it is to treat it as a joke. That doesn't mean I don't read and can't think. I read everything from Giblett to Hoyle, from Sartre to Pauling. I read in the tub, I read on the john, I read in bed, I read when I eat alone, and I would read in my sleep if I could keep my eyes open. Deety, this is proof that Zebbie has never been in my bed: the books downstairs are display; the stuff I read is stacked in my bedroom."

"Deety, did you think I had been sleeping with Sharpie?"

"No, Zebadiah."

"And you never will! Deety told me what a sex maniac you are! You lay your lecherous hands on me and I'll scream for Jacob and he'll beat you to a pulp."

"Don't count on it, dear one," my husband said mildly. "Zeb is bigger and younger and stronger than I… and if I found it needful to try, Deety would cry and beat *me* to a pulp. Son, I should have warned you: my daughter is *vicious* at karate. The killer instinct."

"Thanks. Forewarned, forearmed. I'll use a kitchen chair in one hand, a revolver in the second, and a whip in the other, just as I used to do in handling the big cats for Ringling, Barnum, and Bailey."

"That's three hands," said Deety.

"I'm four-dimensional, darling. Professor, we can speed up this seminar; we've been underrating our overachiever. Hilda is a brain."

"Zebbie, can we kiss and make up?"

"Class is in session."

"Zebadiah, there is always time for that. Right, Pop?"

"Kiss her, Son, or she'll sulk."

"I don't sulk, I bite."

"I think you're cute, too," Zebbie answered, grabbed me by both shoulders, dragged me over the table, and kissed me hard. Our teeth grated and my nipples went *spung!* Sometimes I wish I weren't so noble.

He dropped me abruptly and said, "Attention, class. The two prongs of the caltrop painted blue represent our three-dimensional space of experience. The third prong painted yellow is the *t*-time we are used to. The red fourth prong simulates both *Tau*-time and *Teh*-time, the unexplored time dimensions necessary to Jake's theory. Sharpie, we have condensed six dimensions into four, then we either work by analogy into six, or we have to use math that apparently nobody but Jake and my cousin Ed understands. Unless you can think of some way to project six dimensions into three — you seem to be smart at such projections."

I closed my eyes and thought hard. "Zebbie, I don't think it can be done. Maybe Escher could have done it."

"It can be done, my dearest," answered my dearest, "but it is unsatisfactory. Even with a display computer with capacity to subtract one or more dimensions at a time. A superhypertesseract — *a* to the sixth power — has too many lines and corners and planes and solids and hypersolids for the eye to grasp. Cause the computer to subtract dimensions and what you have left is what you already knew. I fear it is an innate incapacity of visual conception in the human brain."

"I think Pop is right," agreed Deety. "I worked hard on that program. I don't think the late great Dr. Marvin Minsky could have done it better in flat projection. Holovision? I don't know. I would like to try if I ever get my hands on a computer with holovideo display and the capacity to add, subtract, and rotate six coordinates."

"But why six dimensions?" I asked. "Why not five? Or even four, since you speak of rotating them interchangeably."

"Jake?" said Zeb.

My darling looked fussed. "It bothered me that a spacetime continuum seemed to require three space dimensions but only one time dimension. Granted that the universe is what it is, nevertheless nature is filled with symmetries. Even after the destruction of the parity principle, scientists kept finding new ones. Philosophers stay wedded to symmetry — but I don't count philosophers."

"Of course not," agreed Zeb. "No philosopher allows his opinions to be swayed by facts — he would be kicked out of his guild. Theologians, the lot of them."

"I concur. Hilda my darling, after I found a way to experiment, it turned out that six dimensions existed. Possibly more — but I see no way to reach them."

"Let me see," I said. "If I understood earlier, each dimension can be swapped for any other."

"By ninety-degree rotation, yes."

"Wouldn't that be the combinations taken four at a time out of a set of six? How many is that?"

"Fifteen," Zebbie answered.

"Goodness! Fifteen whole universes? And we use only *one?"*

"No, no, my darling! That would be ninety-degree rotations of one Euclidean universe. But our universe, or universes, has been known to be non-Euclidean at least since 1919. Or 1886 if you prefer. I stipulate that cosmology is an imperfect discipline, nevertheless, for considerations that I cannot state in nonmathematical terms, I was forced to assume a curved space of positive radius — that is to say, a closed space. That makes the universes possibly accessible to use either by rotation or by translation *this* number." My husband rapidly wrote three sixes.

"Six sixty-six," I said wonderingly. "'The Number of the Beast.'"

"Eh? *Oh!* The Revelation of Saint John the Divine. But I scrawled it sloppily. You took it that I wrote this: '666.' But what I intended to write was *this:* '6ˆ6ˆ6.' Six raised to its sixth power, and the result in turn raised to its sixth power. That number is *this:*" 1.03144+ X 10ˆ28 " — or written in full:" 10,314,424,798,490,535,546,171,949,056 " — or more than ten million sextillion universes in our group."

What can one say to that? Jacob went on, "Those universes are our nextdoor neighbors, one rotation or one translation away. But if one includes *combinations* of rotation *and* translation — think of a hyperplane slicing through superhypercontinua not at the point of here-now — the total becomes indenumerable. Not infinity — infinity has no meaning. Uncountable. Not subject to manipulation by mathematics thus far invented. Accessible to continua craft but no known way to count them."

"Pop —"

"Yes, Deety?"

"Maybe Aunt Hilda hit on something. Agnostic as you are, you nevertheless keep the Bible around as history and poetry and myth."

"Who said I was agnostic, my daughter?"

"Sorry, sir. I long ago reached that conclusion because you won't talk about it. Wrong of me. Lack of data never justifies a conclusion. But this key number — one-point-oh-three-one-four-four-plus times ten to its twenty-eighth power — perhaps that is the 'Number of the Beast.'"

"What do you mean, Deety?"

"That Revelation isn't history, it's not good poetry, and it's not myth. There must have been *some* reason for a large number of learned men to include it — while chucking out several dozen gospels. Why not make a first hypothesis with Occam's Razor and read it as what it purports to be? Prophecy."

"Hmm. The shelves under the stairs, next to Shakespeare. The King James version, never mind the other three."

Deety was back in a moment with a well-worn black book — which surprised me. I read the Bible for my own reasons but it never occurred to me that Jacob would. We always marry strangers.

"Here," said Deety. "Chapter thirteen, verse eighteen: 'Here is wisdom. Let him that hath understanding count the number of the beast: for it is the number of a man; and his number *is* Six hundred threescore *and* six."

"That can't be read as exponents, Deety."

"But this is a *translation,* Pop. Wasn't the original in Greek? I don't remember when exponents were invented but the Greek mathematicians of that time certainly understood powers. Suppose the original read 'Zeta, *Zeta, **Zeta!'*** — and those scholars, who weren't mathematicians, mistranslated it as six hundred and sixty-six?"

"Uh… moondrift, Daughter."

"Who taught me that the world is not only stranger than we imagine but stranger than we *can* imagine? Who has already taken me into two universes that are *not* this one… and brought me safely home?"

"Wait a half!" Zebbie said. "You and Pop have already tried the time-space machine?"

"Didn't Pop tell you? We made one minimum translation. We didn't seem to have gone anywhere and Pop thought he had failed. Until I tried to look up a number in the phone book. No 'J' in the book. No 'J' in the Britannica. No 'J' in any dictionary. So we popped back in, and Pop returned the verniers to zero, and we got out, and the alphabet was back the way it ought to be and I stopped shaking. But our rotation was even more scary and we almost died. Out in space with blazing stars — but air was leaking out and Pop just barely put it back to zero before we passed out… and came to, back here in Snug Harbor."

"Jake," Zebbie said seriously, "that gadget has got to have more fail-safes, in series with deadman switches for homing." He frowned.

"I'm going to keep my eye open for both numbers, six sixty-six and the long one. I trust Deety's hunches. Deety, where is the verse with the description of the Beast? It's somewhere in the middle of the chapter."

"Here. 'And I beheld another beast coming up out of the earth; and he had two horns like a lamb, and he spake as a dragon.'"

"Hmm — I don't know how dragons speak. But if something comes up out of the earth and has two horns… and I see or hear either number — I'm going to assume that he has a 'Black Hat' and try to do unto him before he does unto us. Deety, I'm peaceable by policy… but two near misses is too many. Next time I shoot first."

I would as lief Zebbie hadn't mentioned "Black Hats." Hard to believe that someone was trying to kill anyone as sweet and innocent and harmless as my darling Jacob. But they *were* — and we knew it.

I said, "Where is this time machine? All I've seen is a claptrap."

"'Caltrop,' Aunt Hilda. You're looking at the spacetime machine."

"Huh? Where? Why aren't we in it and going somewhere *fast?* I don't want my husband killed; he's practically brand-new. I expect to get years of wear out of him."

"Sharpie, stop the chatter," Zebbie put in. "It's on that bench, across the table from you."

"All I see is a portable sewing machine."

"That's it."

"What? How do you get inside? Or do you ride it like a broom?"

"Neither. You mount it rigidly in a vehicle — one airtight and watertight by strong preference. Pop had it mounted in their car — not quite airtight and now kaputt. Pop and I are going to mount it in Gay Deceiver, which *is* airtight. With better fail-safes."

"Much better fail-safes, Zebbie," I agreed.

"They will be. I find that being married makes a difference. I used to worry about my own skin. Now I'm worried about Deety's. And yours. And Pop's. All four of us."

"Hear, hear!" I agreed. "All for one, and one for all!"

"Yup," Zebbie answered. "Us four, no more. Deety, when's lunch?"

Chapter VII

"Avete, alieni, nos morituri vos spernimus!"

Deety:

While Aunt Hilda and I assembled lunch, our men disappeared. They returned just in time to sit down. Zebadiah carried an intercom unit; Pop had a wire that he plugged into a jack in the wall, then hooked to the intercom.

"Gentlemen, your timing is perfect; the work is all done," Aunt Hilda greeted them. "What is that?"

"A guest for lunch, my dearest," Pop answered. "Miss Gay Deceiver."

"Plenty for all," Aunt Hilda agreed. "I'll set another place." She did so; Zebadiah placed the intercom on the fifth plate. "Does she take coffee or tea?"

"She's not programmed for either, Hilda," Zebadiah answered, "but I thank you on her behalf. Ladies, I got itchy about news from Singapore and Sumatra. So I asked my autopilot to report. Jake came along, then pointed out that he had spare cold circuits here and there, just in case — and this was a just-in-case. Gay is plugged to the garage end of that jack, and this is a voice-switched master-master intercom at this end. I can call Gay and she can call me if anything new comes in — and I increased her programming by reinstating the earlier programs, Logan and back home, for running retrieval of new data."

"I'll add an outlet in the basement," agreed Pop. "But, Son, *this* is your home — not California."

"Well —"

"Don't fight it, Zebbie. This is *my* home since Jacob legalized me… and any stepson-in-law of mine is at home here; you heard Jacob say so. Right, Deety?"

"Of course," I agreed. "Aunt Hilda is housewife and I'm scullery maid. But Snug Harbor is *my* home, too, until Pop and, Aunt Hilda kick me out into the snow — and that includes my husband."

"Not into snow, Deety," Aunt Hilda corrected me. "Jacob would insist on a sunny day; he's kind and gentle. But that would not leave you with no roof over your head. My California home — mine and Jacob's — has long been your home-from-home, and Zebbie has been dropping in for years, whenever he was hungry."

"I had better put my bachelor flat into the pot."

"Zebbie, you *can't* put Deety on your day bed. It's lumpy, Deety. Broken springs. Bruises. Zebbie, break your lease and send your furniture back to Good Will."

"Sharpie, you're at it again. Deety, there is no day bed in my digs. An emperor-size bed big enough for three — six if they are well acquainted."

"My Captain, do you go in for orgies?" I asked.

"No. But you can't tell what may turn up in the future."

"You always look ahead, Zebadiah," I said approvingly. "Am I invited?"

"At any orgy of mine, my wife will pick the guests and send the invitations."

"Thank you, sir. I'll wait until you seem to be bored, then look over the crop and pick out choice specimens for you. Assorted flavors and colors."

"My Princess, I will not spank a pregnant woman. But I can think about it. Pop, Snug Harbor continues to impress me. Did you use an architect?"

"Hrrumph! 'Architect' is a dirty word. I studied *engineering.* Architects copy each other's mistakes and call it 'Art.' Even Frank Lloyd Wright never understood what the Gilbreths were doing. His houses looked great from the outside — inside they were hideously inefficient. Dust collectors. Gloomy. Psych lab rat mazes. Pfui!"

"How about Neutra?"

"If he hadn't been hamstrung by building codes and union rules and zoning laws, Neutra could have been great. But people don't want efficient machines for living; they prefer to crouch in medieval hovels, as their flea-bitten forebears did. Cold, drafty, unsanitary, poor lighting, and no need for any of it."

"I respect your opinion, sir. Pop — three fireplaces… no chimneys. How? Why?"

"Zeb, I like fireplaces — and a few cords of wood can save your life in the mountains. But I see no reason to warm the outdoors or to call attention to the fact that we are in residence or to place trust in spark arresters in forestfire country. Lighting a fire in a fireplace here automatically starts its exhaust fan. Smoke and particles are electrostatically precipitated. The precipitators are autoscrubbed when stack temperature passes twenty-five Celsius, dropping. Hot air goes through labyrinths under bathtubs and floors, then under other floors, thence into a rock heat-sink under the garage, a sink that drives the heat pump that serves the house. When flue gas finally escapes, at points distant from the house, it is so close to ambient temperature that only the most sensitive heat-seeker could sniff it. Thermal efficiency plus the security of being inconspicuous."

"But suppose you are snowed in so long that your power packs play out?"

"Franklin stoves in storage, stove pipe to match, stops in the walls removable from inside to receive thimbles for flue pipes."

"Pop," I inquired, "is this covered by Rule One? Or was Rule One abolished last night in Elko?"

"Eh? The chair must rule that it is suspended until Hilda ratifies or cancels it. Hilda my love, years back Jane instituted Rule One —"

"I ratify it!"

"Thank you. But listen first. It applies to meals. No news broadcasts —"

"Pop," I again interrupted, "while Rule One is still in limbo — *did Gay Deceiver have any news?* I worry, I do!"

"Null retrievals, dear. With the amusing conclusion that you and I are still presumed to have died *twice,* but the news services do not appear to have noticed the discrepancy. However, Miss Gay Deceiver will interrupt if a bulletin comes in; Rule One is never invoked during emergencies. Zeb, do you want this rig in your bedroom at night?"

"I don't want it but should have it. Prompt notice might save our skins."

"We'll leave this here and parallel another into there, with gain stepped to wake you. Back to Rule One: No news broadcasts at meals, no newspapers. No shop talk, no business or financial matters, no discussion of ailments. No political discussion, no mention of taxes, or of foreign or domestic policy. Reading of fiction permitted en famille — not with guests present. Conversation limited to cheerful subjects —"

"No scandal, no gossip?" demanded Aunt Hilda.

"A matter of your judgment, dear. Cheerful gossip about friends and acquaintances, juicy scandal about people we do not like — fine! Now — do you wish to ratify, abolish, amend, or take under advisement?"

"I ratify it unchanged. Who knows some juicy scandal about someone we don't like?"

"I know an item about 'No Brain' — Doctor Neil Brain," Zebadiah offered.

"Give!"

"I got this from a reliable source but can't prove it."

"Irrelevant as long as it's juicy. Go ahead, Zebbie."

"Well, a certain zaftig coed told this on herself. She tried to give her all to 'Brainy' in exchange for a passing grade in the general math course necessary to *any* degree on our campus. It is rigged to permit prominent but stupid athletes to graduate. Miss Zaftig was flunking it, which takes exceptional talent.

"So she arranged an appointment with the department head — 'Brainy' — and made her quid-pro-quo clear. He could give her horizontal tutoring then and there or in her apartment or his apartment or in a motel and she would pay for it or whenever and wherever he chose. But she *had* to pass."

"Happens on every campus, Son," Pop told him.

"I haven't reached the point. She blabbed the story — not angry but puzzled. She says that she was unable to get her intention over to him (which seems impossible, I've seen this young woman). 'Brainy' didn't accept, didn't refuse, wasn't offended, didn't seem to understand. He told her that she had better talk to her instructor about getting tutoring and a re-exam. Now Miss Zaftig is circulating the story that Prof 'No Brain' must be a eunuch or a robot. Not even a homo. Totally sexless."

"He's undoubtedly stupid," Aunt Hilda commented. "But I've never met a man I couldn't get that point across to, if I tried. Even if he was uninterested in my fair virginal carcass. I've never tried with Professor Brain because I'm not interested in *his* carcass. Even barbecued."

"Then, Hilda my darling, why did you invite him to your party?"

"What? Because of your note, Jacob. I don't refuse you favors."

"But, Hilda, I don't understand. When I talked to you by telephone, I asked you to invite Zeb — under the impression that he was his cousin Zebulon — and I did say that two or three others from the department of mathematics might make it less conspicuously an arranged meeting. But I didn't mention Doctor Brain. And I did *not* write."

"Jacob — I *have* your note. In California. On your University stationery with your name printed on it."

Professor Burroughs shook his head, looked sad. Zebadiah Carter said, "Sharpie — handwritten or typed?"

"Typed. But it was signed! Wait a moment, let me think. It has my name and address down in the lower left. Jacob's name was typed, too, but it was signed 'Jake.' Uh… 'My dear Hilda, A hasty P.S. to my phone call of yesterday — Would you be so kind as to include Doctor Neil O. Brain, chairman of mathematics? I don't know what possessed me that I forgot to mention him. Probably the pleasure of hearing your dear voice.

"'Deety sends her love, as do I. Ever yours, Jacob J. Burroughs' with 'Jake' signed above the typed name."

Zebadiah said to me, "Watson, you know my methods."

"Certainly, my dear Holmes. A 'Black Hat.' In Logan."

"We knew that. What *new* data?"

"Well… Pop made that call from the house; I remember it. So somebody has a tap on our phone. Had, I mean; the fire probably destroyed it."

"A recording tap. The purpose of that fire may have been to destroy it and other evidence. For now we know that the 'Blokes in the

Black Hats' knew that your father — and you, but it's Pop they are after — was in California last evening. After 'killing' him in California, they destroyed all they could in Utah. Professor, I predict that we will learn that your office was robbed last night — any papers on six-dimensional spaces."

Pop shrugged. "They wouldn't find much. I had postponed my final paper after the — humiliating — reception my preliminary paper received. I worked on it only at home, or here, and moved notes made in Logan to our basement here each time we came down."

"Any missing here?"

"I am certain this place has not been entered. Not that papers would matter; I have it in my head. The continua apparatus has not been touched."

"Zebadiah, is Doctor Brain a 'Black Hat'?" I asked.

"I don't know, Deety. He may be a stooge in their hire. But he's part of their plot, or they would not have risked forging a letter to put him into Hilda's house. Jake, how difficult is it to steal your professional stationery?"

"Not difficult. I don't keep a secretary; I send for a stenographer when I need one. I seldom lock my office when I'm on campus."

"Deety, can you scrounge pen and paper? I want to see how Jake signs 'Jake.'"

"Sure." I fetched them. "Pop's signature is easy; I often sign it. I hold his power of attorney."

"It's the simple signatures that are hardest to forge well enough to fool a handwriting expert. But their scheme did not require fooling an expert — phrasing the note was more difficult… since Hilda accepted it as ringing true."

"It does ring true, Son; it is very like what I would have said had I written such a note to Hilda."

"The forger probably has read many of your letters and listened to many of your conversations. Jake, will you write 'Jake' four or five times, the way you sign a note to a friend?"

Pop did so, my husband studied the specimens. "Normal variations." Zebadiah then signed "Jake" about a dozen times, looked at his work, took a fresh sheet, signed "Jake" once, passed it to Aunt Hilda. "Well, Sharpie?"

Aunt Hilda studied it. "It wouldn't occur to me to question it — on Jacob's stationery under a note that sounded like his phrasing. Where do we stand now?"

"Stuck in the mud. But we have added data. At least three are involved, two 'Black Hats' and Doctor Brain, who may or may not be a 'Black Hat.' He is, at minimum, a hired hand, an unwitting stooge, or a puppet they can move around like a chessman.

"While two plus 'Brainy' is minimum, it is not the most probable number. This scheme was not whipped up overnight. It involves arson, forgery, booby-trapping a car, wiretapping, theft, and secret communications between points widely separated, with coordinated criminal actions at each end — and it may involve doing in my cousin Zebulon. We can assume that the 'Black Hats' know that *I* am not the Zeb Carter who is the *n*-dimensional geometer; I'm written off as a bystander who got himself killed.

"Which doesn't bother them. These playful darlings would swat a fly with a sledgehammer, or cure a cough with a guillotine. They are smart, organized, efficient, and vicious — and the only clue is an interest in six-dimensional non-Euclidean geometry.

"We don't have a glimmer as to 'who' — other than Doctor Brain, whose role is unclear. But, Jake, I think I know 'why' — and that will lead us to 'who."

"Why, Zebadiah?" I demanded.

"Princess, your father could have worked on endless other branches of mathematics and they would not have bothered him. But he happened — I don't mean chance; I don't believe in 'chance' in this sense — he worked on the *one* variety of the endless possible number of geometries — the *only* one that *correctly* describes how spacetime is put together. Having found it, because he is a genius in both theory and practice, he saw that it was a means by which to build a simple craft — amazingly simple, the greatest invention since the wheel — a spacetime craft that offers access to all universes to the full Number of the Beast. Plus undenumerable variations of each of those many universes.

"We have one advantage."

"I don't see any advantage! They're shooting at my Jacob!"

"One strong advantage, Sharpie. The 'Black Hats' know that Jake has worked out this mathematics. They *don't* know that he has built his spacetime tail-twister; they think he has just put symbols on paper. They tried to discredit his work and were successful. They tried to kill him and barely missed. They probably think Jake is dead — and it seems likely that they have killed Ed. But they *don't* know about Snug Harbor."

"Why do you say that, Zeb? Oh, I hope they do not! — but why do you feel sure?"

"Because these blokes aren't fooling. They blew up your car and burned your flat; what would they do here? — if they knew. An A-bomb?"

"Son, do you think that criminals can lay hands on atomic weapons?"

"Jake, these aren't *criminals.* A 'criminal' is a member of the subset of the larger set 'human beings.' These creatures are not human."

"Eh? Zeb, your reasoning escapes me."

"Deety. Run it through the computer. The one between your ears."

I did not answer; I just sat and thought. After several minutes of unpleasant thoughts I said, "Zebadiah, the 'Black Hats' don't know about the apparatus in our basement."

"Conclusive assumption," my husband agreed, "because we are still alive."

"They are determined to destroy a new work in mathematics… and to kill the brain that produced it."

"A probability approaching unity," Zebadiah again agreed.

"Because it can be used to travel among the universes."

"Conclusive corollary," my husband noted.

"For this purpose, human beings fall into three groups. Those not interested in mathematics more complex than that needed to handle money, those who know a bit about other mathematics, and a quite small third group who could understand the possibilities."

"Yes."

"But our race does not know *anything* of other universes so far as I know."

"They don't. Necessary assumption."

"But that third group would not try to stop an attempt to travel among the universes. They would wait with intellectual interest to see how it turned out. They might believe or disbelieve or suspend judgment. But they would *not* oppose; they would be delighted if my father succeeded. The joy of intellectual discovery — the mark of a true scientist."

I sighed and added, "I see no other grouping. Save for a few sick people, psychotic, these three subsets complete the set. Our opponents are not psychotic; they are intelligent, crafty, and organized."

"As we all know too well," Zebadiah echoed.

"Therefore our opponents are not human beings. They are alien intelligences from elsewhere." I sighed again and shut up. Being an oracle is a no-good profession!

"Or elsewhen. Sharpie, can you kill?"

"Kill whom, Zebbie? Or what?" "Can you kill to protect Jake?"

"You bet your frimpin' life I'll kill to protect Jacob!"

"I won't ask you, Princess; I know Dejah Thoris." Zebadiah went on, "That's the situation, ladies. We have the most valuable man on this planet to protect. We don't know from what. Jake, your bodyguard musters two Amazons, one small, one medium large, both probably knocked up, and one Cowardly Lion. I'd hire the Dorsai if I knew their P.O. Box. Or the Gray Lensman and all his pals. But we are all there are and we'll try! *Avete, alieni, nos morituri vos spernimus!* Let's break out that champagne."

"My Captain, do you think we should?" I asked. "I'm frightened."

"We should. I'm no good for more work today, and neither is Jake. Tomorrow we'll start installing the gadget in Gay Deceiver, do rewiring and reprogramming so that she will work for any of us. Meanwhile we need a couple of laughs and a night's sleep. What better time to drink life to the dregs than when we know that any hour may be our last?"

Aunt Hilda punched Zebadiah in the ribs. "Yer dern tootin', Buster! I'm going to get giggle happy and make a fool of myself and then take my man and put him to sleep with Old Mother Sharpie's Time-Tested Nostrum. Deety, I prescribe the same for you."

I suddenly felt better. "Check, Aunt Hilda! Captain John Carter always wins. 'Cowardly Lion' my foot! Who is Pop? The Little Wizard?"

"I think he is."

"Could be. Pop, will you open the bubbly? I always hurt my thumbs."

"Right away, Deety. I mean 'Dejah Thoris, royal consort of the Warlord.'"

"No need to be formal, Pop. This is going to be an informal party. Very! Pop! Do I have to keep my pants on?"

"Ask your husband. You're *his* problem now."

Chapter VIII

"Let us all preserve our illusions — "

Hilda:

In my old age, sucking my gums in front of the fire and living over my misdeeds, I'll remember the next few days as the happiest in my life. I'd had three honeymoons earlier, one with each of my term-contract husbands: two had been good, one had been okay and (eventually) very lucrative. But my honeymoon with Jacob was heavenly.

The whiff of danger sharpened the joy. Jacob seemed unworried, and Zebbie has hunches, like a horseplayer. Seeing that Zebbie was relaxed, Deety got over being jumpy — and I never was, as I hope to end like a firecracker, not linger on, ugly, helpless, useless…

A spice of danger adds zest to life. Even during a honeymoon — especially during a honeymoon.

An odd honeymoon. We worked hard but our husbands seemed never too busy for pat fanny, squeeze titty, and unhurried kisses. Not a group marriage but two twosomes that were one family, comfortable each with the others. I dropped most of my own sparky-bitch ways, and Zebbie sometimes called me "Hilda" rather than "Sharpie."

Jacob and I moved into marriage like ham and eggs. Jacob is not tall (178 centimeters) (but tall compared with my scant one fiftytwo) and his hairline recedes and he has a paunch from years at a desk — but he looks just right to me. If I wanted to look at male beauty, I could always look at Deety's giant — appreciate him without lusting: my own loving goat kept Sharpie quite blunted.

I did not decide, when Zebbie came on campus, to make a pet of him for his looks but for his veering sense of humor. But if there was ever a man who could have played the role of John Carter, Warlord of Mars, it was Zebadiah Carter whose middle name just happens to be "John." Indoors with clothes and wearing his fake horn-rims he looks awkward, too big, clumsy. I did not realize that he was beautiful and graceful until the first time he used my pool. (That afternoon I was tempted to seduce him. But, as little dignity as I have, I had resolved to stick to older men, so I shut off the thought.)

Outdoors at Snug Harbor, wearing little or no clothes, Zebbie looked at home — a mountain lion in grace and muscle. An incident one later afternoon showed me how much he was like the Warlord of Mars. A sword — Those old stories were familiar to me. My father had acquired the Ballantine Del Rey paperback reissues; they were around the house when I was a little girl. Once I learned to read, I read everything, and vastly preferred Barsoom stories to "girls" books given to me for birthdays and Christmas. Thuvia was the heroine I identified with — "toy" of the cruel priests of Issus, then with virginity miraculously restored in the next book: *Thuvia, Maid of Mars.* I resolved to change my name to Thuvia when I was old enough. When I was eighteen, I did not consider it; I had always been "Hilda," a new name held no attraction.

I was responsible in part for Deety's name, one that embarrassed her until she discovered that her husband liked it. Jacob had wanted to name his daughter "Dejah Thoris" (Jacob looks like and *is* a professor, but he is incurably romantic). Jane had misgivings. I told her, "Don't be a chump, Janie. If your man wants something, and you can accommodate him with no grief, give it to him! Do you want him to love this child or to resent her?" Jane looked thoughtful and "Doris Anne" became "Dejah Thoris" at christening, then "Deety" before she could talk — which satisfied everyone.

We settled into a routine: Up early every day; our men worked on instruments and wires and things and installing the time-space widget into Gay Deceiver's gizzard — while Deety and I gave the housework a lick and a promise (our mountain home needed little attention — more of Jacob's genius), then Deety and I got busy on a technical matter that Deety could do with some help from me.

I'm not much use for technical work, biology being the only thing I studied in depth and never finished my degree. This was amplified by almost six thousand hours as volunteer nurse's aid in our campus medical center and I took courses that make me an uncertified nurse or medical tech or even jackleg paramedic — I don't shriek at the sight of blood and can clean up vomit without a qualm and would not hesitate to fill in as scrub nurse. Being a campus widow with too much money is fun but not soul filling. I like to feel that I've paid rent on the piece of earth I'm using.

Besides that, I have a smattering of everything from addiction to the printed page, plus attending campus lectures that sound intriguing… then sometimes auditing a related course. I audited descriptive astronomy, took the final as if for credit — got an "A." I had even figured a cometary orbit correctly, to my surprise (and the professor's).

I can wire a doorbell or clean out a stopped-up soil pipe with a plumber's "snake" — but if it's really technical, I hire specialists.

So Hilda can help but usually can't do the job alone. Gay Deceiver had to be reprogrammed — and Deety, who does not *look* like a genius, *is* one. Jacob's daughter *should* be a genius and her mother had an I.Q. that startled even me, her closest friend. I ran across it while helping poor grief-stricken Jacob to decide what to save, what to burn. (I burned unflattering pictures, useless papers, and clothes. A dead person's clothes should be given away or burned; *nothing* should be kept that does not inspire happy memories. I cried a bit and that saved Jacob and Deety from having to cry later.)

We all held private duo licenses; Zebbie, as Captain Z. J. Carter, U.S.A.S.R., held "command" rating as well — he told us that his space rating was largely honorary, just some free-fall time and one landing of a shuttle. Zebbie is mendacious, untruthful, and tells fibs; I got a chance to sneak a look at his aerospace log and shamelessly took it. He had logged more than he claimed in one exchange tour with Australia. Someday I'm going to sit on his chest and make him tell Mama Hilda the truth. Should be interesting… if I can sort out fact from fiction. I do *not* believe his story about intimate relations with a female kangaroo.

Zebbie and Jacob decided that we all must be able to control Gay Deceiver all four ways, on the road, in the air, in trajectory (she's not a spaceship but can make high-trajectory jumps), and in spacetime, *i.e.* among the universes to the Number of the Beast, plus variants impossible to count.

I had fingers crossed about being able to learn that, but both men assured me that they had worked out a fail-safe that would get me out of a crunch if I ever had to do it alone.

Part of the problem lay in the fact that Gay Deceiver was a one-man girl; her doors unlocked only to her master's voice or to his thumbprint, or to a tapping code if he were shy both voice and right thumb; Zeb tended to plan ahead — "Outwitting Murphy's Law," he called it, "'Anything that can go wrong, *will* go wrong.'" (Grandma called it "The Butter-Side Down Rule.")

First priority was to introduce us to Gay Deceiver — teach her that all four voices and right thumbprints were acceptable.

That took a couple of hours, with Deety helping Zebbie. The tapping code took even less, it being based on an old military cadence — its trickiness being that a thief would be unlikely to guess that this car would open if tapped a certain way and in guessing the correct cadence. Zebbie called the cadence "Drunken Soldier." Jacob said that it was "Bumboat." Deety claimed that its title was "Pay Day," because she had heard it from Jane's grandfather.

Our men conceded that she must be right, as she had words for it. Her words included "Drunken Sailor" instead of "Drunken Soldier" — plus both "Pay Day" and "Bumboat."

Introductions taken care of, Zeb dug out Gay's anatomy, one volume her body, one her brain. He handed the latter to Deety, took the other into our basement. The next two days were easy for me, hard for Deety. I held lights and made notes on a clip board while she studied that book and frowned and got smudged and sweaty getting herself into impossible positions and once she cursed in a fashion that would have caused Jane to scold. She added, "Aunt Nanny Goat, your stepson-in-law has done things to this mass of spaghetti that no decent computer should put up with! It's a bastard hybrid."

"You shouldn't call Gay 'it,' Deety. And she's not a bastard."

"She can't hear us; I've got her ears unhooked — except that piece that is monitoring news retrieval programs — and that goes through this wire to that jack in the wall; she can talk with Zebadiah only in the basement now. Oh, I'm sure she was a nice girl until that big ape of mine raped her. Aunt Hilda, don't worry about hurting Gay's feelings; she hasn't any. This is an idiot as computers go. Any one-horse college and most high schools own or share time in computers much more complex. This one is primarily cybernetics, an autopilot plus limited digital capacity and limited storage. But the mods Zebadiah has tacked on make it more than an autopilot but not a general-purpose computer. A misbegotten hybrid. It has far more random-number options than it needs and it has extra functions that IBM never dreamed of."

"Deety, why are you taking off cover plates? I thought you were strictly a programmer? Software. Not a mechanic."

"I *am* strictly a software mathematician. I wouldn't attempt to modify this monster even on written orders from my lovable but sneaky husband. But how in the name of Allah can a software hack think about simplification analysis for program if she doesn't know the circuitry? The first half of this book shows what this autopilot was manufactured to do… and the second half, the Xeroxed pages, show the follies Zebadiah has seduced her into. This bleedin' bundle of chips now speaks three logic languages, interfaced — when it was built to use only one. But it won't accept *any* of them until it has been wheedled with Zebadiah's double talk. Even then it rarely answers a code phrase with the same answer twice in a row. What does it say in answer to: 'You're a smart girl, Gay.'?"

"I remember. 'Boss, I bet you tell that to all the girls. Over."

"Sometimes. Oftenest, as that answer is weighted to come up three times as often as any of the others. But listen to this:

"'Zeb, I'm so smart I scare myself.'

"'Then why did you turn me down for that raise?'

"'Never mind the compliments! Take your hand off my knee!'

"'Not so loud, dear. I don't want my boyfriend to hear.'

" — and there are more. There are at least four answers to any of Zebadiah's code phrases. He uses just one list, but the autopilot answers several ways for each of his phrases — and all any of them mean is either 'Roger' or 'Null program; rephrase.'"

"I like the idea. Fun."

"Well… I do myself. I animize a computer; I think of them as people… and this semirandom answer list makes Gay Deceiver feel much more alive… when she isn't. Not even versatile compared with a ground-based computer. But — " Deety gave a quick smile. "I'm going to hand my husband some surprises."

"How, Deety?"

"You know how he says, 'Good morning, Gay. How are you?' when we sit down for breakfast."

"Yes. I like it. Friendly. She usually answers, 'I'm fine, Zeb.'"

"Yes. It's a test code. It orders the autopilot to run a self-check throughout and to report any running instruction. Which takes less than a millisecond. If he didn't get that or an equivalent answer, he would rush straight here to find out what's wrong. But I'm going to add another answer. Or more."

"I thought you refused to modify anything."

"Aunt Hillbilly, this is *software,* not hardware. I'm authorized and directed to amplify the answers to include all of us, by name for each of our voices. That is programming, elementary. You say good morning to this gadget and it will — when I'm finished — answer you and call you either 'Hilda' or 'Mrs. Burroughs.'"

"Oh, let her call me Hilda.'"

"All right, but let her call you 'Mrs. Burroughs' now and then for variety."

"Well… all right. Keep her a personality."

"I could even have her call you — low weighting! — 'Nanny Goat.'"

I guffawed. "Do, Deety, please do. But I want to be around to see Jacob's face."

"You will be; it won't be programmed to answer that way to any voice but yours. Just don't say, 'Good morning, Gay' unless Pop is listening. But here's one for my husband: Zebadiah says, 'Good morning, Gay. How are you?' — and the speaker answers, 'I'm fine, Zeb. But your fly is unzipped and your eyes are bloodshot. Are you hung over *again?'"*

Deety is so solemn and yet playful. "Do it, dear! Poor Zebbie — who drinks least of any of us. But he might not be wearing anything zippered."

"Zebadiah always wears something at meals. Even his underwear shorts are zippered. He dislikes elastic."

"But he'll recognize your voice, Deety."

"Nope. Because it will be *your* voice — modified."

And it was. I'm contralto about the range of the actress — or girl friend — who recorded Gay Deceiver's voice originally. I don't think my voice has her sultry, bedroom quality but I'm a natural mimic.

Deety borrowed a wigglescope — oscilloscope? — from her father, my Jacob, and I practiced until my patterns for Gay Deceiver's original repertoire matched hers well enough — Deety said she could not tell them apart without close checking.

I got into the spirit of it, such as having Deety cause Gay Deceiver occasionally to say to my husband, "Fine — except for my back ache, you wicked old Billy Goat!" — and Jacob tripped that reply one morning when I *did* have a back ache, and I feel sure he had one, too.

We didn't put in answers that Deety felt might be too bawdy for Jacob's "innocent" mind — I didn't even hint how her father actually talked, to me in private. Let us all preserve our illusions; it lubricates social relations. Possibly Deety and Zebbie talked the same way to each other in private — and regarded us "old folks" as hopelessly square.

Chapter IX

Most males have an unhealthy tendency to obey laws.

Deety:

Aunt Hilda and I finished reprogramming in the time it took Zebadiah and Pop to design and make the fail-safes and other mods needed to turn Gay Deceiver, with the time-space widget installed, into a continua traveler — which included placing the back seats twenty centimeters farther back (for leg room) after they had been pulled out to place the widget abaft the bulkhead and weld it to the shell. The precessing controls and triple verniers were remoted to the driver's instrument board — with one voice control for the widget, all others manual:

If any of our voices said, "Gay Deceiver, take us home!" car and passengers would instantly return to Snug Harbor.

I don't know but I trust my Pop. He brought us home safe twice, doing it with *no* fail-safes and no deadman switch. The latter paralleled the "Take us home!" voice order, was normally clamped closed and covered — but could be uncovered and held in a fist, closed. There were other fail-safes for temperature, pressure, air, radar collision course, and other dangers. If we wound up inside a star or planet, none of this could save us, but it is easy to prove that the chances of falling downstairs and breaking your neck are enormously higher than the chance of co-occupying space with other matter in our native universe — space is plentiful, mass is scarce. We hoped that this would be true of other universes.

No way ahead of time to check on the Numberof-theBeast spaces — but "The cowards never started and the weaklings died on the way." None of us ever mentioned *not* trying to travel the universes. Besides, our home planet had turned unfriendly. We didn't discuss "Black Hats" but we all knew that they were still here, and that we remained alive by lying doggo and letting the world think we were dead.

We ate breakfast better each morning after hearing Gay Deceiver offer "null report" on news retrievals. Zebadiah, I am fairly certain, had given up his cousin for dead. I feel sure Zebadiah would have gone to Sumatra to follow a lost hope, were it not that he had acquired a wife and a prospective child. I missed my next period, so did Hilda. Our men toasted our not-yet bulging bellies; Hilda and I smugly resolved to be good girls, yes, sir! — and careful. Hilda joined my morning toning up, and the men joined us the first time they caught us at it.

Zebadiah did not need it but seemed to enjoy it. Pop brought his waistline down five centimeters in one week.

Shortly after that toast Zebadiah pressure-tested Gay Deceiver's shell — four atmospheres inside her and a pressure gauge sticking out through a fitting in her shell.

There being little we could do while our spacetime rover was sealed, we knocked off early. "Swim, anybody?" I asked. Snug Harbor doesn't have a citytype pool, and a mountain stream is too *cooold.* Pop had fixed that when he concealed our spring. Overflow was piped underground to a clump of bushes and thereby created a "natural" mountain rivulet that passed near the house; then Pop had made use of a huge fallen boulder, plus biggish ones, to create a pool, one that filled and spilled. He had done work with pigments in concrete to make this look like an accident of water flow.

This makes Pop sound like Paul Bunyan. Pop *could* have built Snug Harbor with his own hands. But Spanish-speaking labor from Nogales built the underground and assembled the prefab shell of the cabin. An air crane fetched parts and materials from an Albuquerque engineering company Jane had bought for Pop through a front — lawyers in Dallas. The company's manager drove the air crane himself, having had it impressed on him that this was for a rich client of the law firm, and that it would be prudent to do the job and forget it. Pop bossed the work in TexMex, with help from his secretary — me — Spanish being one language I had picked for my doctorate.

Laborers and mechanics never got a chance to pinpoint where they were, but they were well paid, well fed, comfortably housed in prefabs brought in by crane, and the backbreaking labor was done by power — who cares what "locos gringos" do? Two pilots had to know where we were building, but they homed in on a radar beacon that is no longer there.

"Blokes in Black Hats" had nothing to do with this secrecy; it was jungle caution I had learned from Mama: Never let the revenooers know anything. Pay cash, keep your lips closed, put nothing through banks that does not appear later in tax returns — pay taxes greater than your apparent standard of living and declare income accordingly. We had been audited three times since Mama died; each time the government returned a small "overpayment" — I was building a reputation of being stupid and honest.

My inquiry of "Swim, anybody?" was greeted with silence. Then Pop said, "Zeb, your wife is too energetic. Deety, later the water will be warmer and the trees will give us shade. Then we can walk slowly down to the pool. Zeb?"

"I agree, Jake. I need to conserve ergs."

"Nap?"

"I don't have the energy to take one. What were you saying this morning about reengineering the system?"

Aunt Hilda looked startled. "I thought Miss Gay Deceiver was already engineered? Are you thinking of changing everything?"

"Take it easy, Sharpie darlin'. Gay Deceiver *is* finished. A few things to stow that have been weighed and their moment arms calculated."

I could have told her. In the course of figuring what could be stowed in every nook and cranny and what that would do to Gay's balance, I had discovered that my husband had a highly illegal laser cannon. I said nothing, merely included its mass and distance from optimum center of weight in my calculations. I sometimes wonder which of us is the outlaw: Zebadiah or I? Most males have an unhealthy tendency to obey laws. But that concealed L-cannon made me wonder.

"Why not leave well enough alone?" Aunt Hilda demanded. "Jacob and God know I'm happy here... But You All Know Why We Should Not Stay Here Longer Than We Must."

"We weren't talking about Gay Deceiver; Jake and I were discussing reengineering the Solar System."

"The *Solar System!* What's wrong with it the way it is?"

"Lots of things," Zebadiah told Aunt Hilda. "It's untidy. Real estate going to waste. This tired old planet is crowded and sort o' worn in spots. True, industry in orbit and power from orbit have helped, and both Lagrange-Four and -Five have self-supporting populations; anybody who invested in space stations early enough made a pile." (Including Pop, Zebadiah!) "But these are minor compared with what *can* be done — and this planet is in worse shape each year. Jake's six-dimensional principle can change that."

"Move people into another universe? Would they go?"

"We weren't thinking of that, Hilda. We're trying to apply Clarke's Law."

"I don't recall it. Maybe it was while I was out with mumps."

"Arthur C. Clarke," Pop told her. "Great man — too bad he was liquidated in The Purge. Clarke defined how to make a great discovery or create a key invention. Study what the most respected authorities agree can *not* be done — then do it. My continua craft is a godchild of Clarke via his Law. His insight inspired my treatment of six-dimensional continua. But this morning Zeb added corollaries."

"Jake, don't kid the ladies. I asked a question; you grabbed the ball and ran."

"Uh, we heterodyned. Hilda, you know that the time-space traveler doesn't require power."

"I'm afraid I don't know, darling man. Why were you installing power packs in Gay Deceiver?"

"Auxiliary uses. So that you won't have to cook over an open fire, for example."

"But the pretzel bender doesn't use power," agreed Zebadiah. "Don't ask why. I did, and Jake started writing equations in Sanskrit and I got a headache."

"It doesn't use power, Aunt Hilda," I agreed. "Just parasitic power. A few microwatts so that the gyros never slow down, milliwatts for instrument readouts and for controls — but the widget itself uses none."

"What happened to the law of conservation of energy?"

"Sharpie," my husband answered, "as a fairish mechanic, an amateur electron pusher, and as a bloke who has herded unlikely junk through the sky, I never worry about theory as long as machinery does what it is supposed to do. I worry when a machine turns and bites me. That's why I specialize in fail-safes and backups and triple redundancy. I try *never* to get a machine sore at me. There's no theory for that but every engineer knows it."

"Hilda my beloved, the law of conservation of mass-energy is not broken by our continua craft; it is simply not relevant to it. Once Zeb understood that —"

"I didn't say I understood it."

"Well... once Zeb stipulated that, he raised interesting questions. For example: Jupiter doesn't need Ganymede — "

"Whereas Venus does. Although Titan might be better."

"Mmm... possible."

"Yes. Make an inhabitable base more quickly. But the urgent problem, Jake, is to seed Venus, move atmosphere to Mars, put both of them through forced aging. Then respot them. Earth-Sol Trojan points?"

"Certainly. We've had millions of years of evolution this distance from the Sun. We had best plan on living neither closer nor farther. With careful attention to stratospheric protection. But I still have doubts about anchoring in the Venerian crust. We wouldn't want to lose the planet on *Tau* axis."

"Mere R. & D., Jake. Calculate pressures and temperatures; beef up the vehicle accordingly — spherical, save for exterior anchors — then apply a jigger factor of four. With automatic controls quintuply redundant. Catch it when it comes out and steady it down in Earth's orbit, sixty degrees trailing — and start selling subdivisions the size of old Spanish Land Grants. Jake, we should gather enough mass to create new earths at *all* Trojan points, a hexagon around the Sun. Five brand-new earths would give the race room enough to breed. On this maiden voyage let's keep our eyes open."

Aunt Hilda looked at Zebadiah with horror. "Zebbie! Creating planets indeed! Who do you think you are? Jesus Christ?"

"I'm not that junior. That's the Holy Ghost over there, scratching his belly, The Supreme Inseminator. I'm the other one, the Maker and Shaper. But in setting up a pantheon for the Celestial Age, we're going to respect women's rights, Hilda. Deety is Earth Mother; she's perfect for the job. You are Moon Goddess, Selene. Good job, dear — more moons than earths. It fits you. You're little and silvery and you wax and wane and you're beautiful in all your phases. How about it? Us four and no more."

"Quit pulling my leg!"

My husband answered, "I haven't been pulling your leg. Come closer and I will; you have pretty legs, StepMother-in-Law. These things Jake and I have been discussing are practical — once we thought about the fact that the spacetime twister uses no power. Move anything anywhere — all spaces, all times. I add the plural because at first I could not see what Jake had in mind when he spoke of forced aging of a planet. Rotate Venus into the *Tau* axis, fetch it back along *Teh* axis, reinsert it centuries — or millennia — older at this point in 't' axis. Perhaps translate it a year or so into the future — *our* future — so as to be ready for it when it returns, all sweet and green and beautiful and ready to grow children and puppies and butterflies. Terraformed but virginal."

Aunt Hilda looked frightened. "Jacob? Would one highball do any harm to this peanut inside me? I need a bracer."

"I don't think so. Jane often had a drink with me while she was pregnant. Her doctor did not have her stop until her third trimester. Can't see that it hurt Deety. Deety was so healthy she drove Jane home from the hospital."

"Pop, that's a fib. I didn't learn to drive until I was three months old. But I need one, too," I added. "Zebadiah?"

"Certainly, Princess. A medicinal drink should be by body mass. That's half a jigger for you, Sharpie dear, a jigger for Deety, a jigger and a half for Jake — two jiggers for me."

"Oh, how unfair!"

"It certainly is," I agreed. "I outweigh Pop — he's been losing, I've been gaining. Pick us up and see!"

My husband took us each around the waist, crouched, then straightened and lifted us.

"Close to a standoff," he announced. "Pop may be a trifle heavier, but you're more cuddly" — kissed me and put us down.

"There is *no* one more cuddly than Jacob!"

"Hilda, you're prejudiced. Let's each mix our own drinks, at the strength required for our emotional and physical conditions."

So we did — it wound up with Hilda and me each taking a jigger with soda, Pop taking a jigger and a half over ice — and Zebadiah taking a half jigger of vodka and drowning it with Coke.

While we were sipping our "medicine," Zebadiah, sprawled out, looked up over the fireplace. "Pop, you were in the Navy?"

"No — Army. If you count 'chair-borne infantry.' They handed me a commission for having a doctorate in mathematics, told me they needed me for ballistics. Then I spent my whole tour as a personnel officer, signing papers."

"Standard Operating Procedure. That's a Navy sword and belt up there. Thought it might be yours."

"It's Deety's — belonged to Jane's Grandfather Rodgers. I have a dress saber. Belonged to my Dad, who gave it to me when the Army took me. Dress blues, too. I took them with me, never had occasion to wear either." Pop got up and went into his — their bedroom, calling back, "I'll show you the saber."

My husband said to me, "Deety, would you mind my handling your sword?"

"My Captain, that sword is yours."

"Heavens, dear, I can't accept an heirloom."

"If my warlord will not permit his princess to gift him with a sword, he can leave it where it is! I've been wanting to give you a wedding present — and did not realize that I had the perfect gift for Captain John Carter."

"My apologies, Dejah Thoris. I accept and will keep it bright. I will defend my princess with it against all enemies."

"Helium is proud to accept. If you make a cradle of your hands, I can stand in them and reach it down."

Zebadiah grasped me, a hand above each knee, and I was suddenly three meters tall. Sword and belt were on hooks; I lifted them down, and myself was placed down. My husband stood straight while I buckled it around him — then he dropped to one knee and kissed my hand.

My husband is mad north-northwest but his madness suits me. I got tears in my eyes which Deety doesn't do much but Dejah Thoris seems prone to, since John Carter made her his.

Pop and Aunt Hilda watched — then imitated, including (I saw!) tears in Hilda's eyes after she buckled on Pop's saber, when he knelt and kissed her hand.

Zebadiah drew sword, tried its balance, sighted along its blade. "Handmade and balanced close to the hilt. Deety, your greatgrandfather paid a pretty penny for this. It's an honest weapon."

"I don't think he knew what it cost. It was presented to him."

"For good reason, I feel certain." Zebadiah stood back, went into hanging guard, made fast moulinets vertically, left and right, then horizontally clockwise and counterclockwise — suddenly dropped into swordsman's guard — lunged and recovered, fast as a striking cat.

I said softly to Pop, "Did you notice?"

Pop answered quietly. "Know saber. Sword, too."

Hilda said loudly, "Zebbie! You never told me you went to Heidelberg."

"You never asked, Sharpie. Around the Red Ox they called me 'The Scourge of the Neckar.'"

"What happened to your scars?"

"Never got any, dear. I hung around an extra year, hoping for one. But no one got through my guard — ever. Hate to think about how many German faces I carved into checkerboards."

"Zebadiah, was that where you took your doctorate?"

My husband grinned and sat down, still wearing sword. "No, another school."

"M.I.T.?" inquired Pop.

"Hardly. Pop, this should stay in the family. I undertook to prove that a man can get a doctorate from a major university without knowing anything and without adding anything whatever to human knowledge."

"I think you have a degree in aerospace engineering," Pop said flatly.

"I'll concede that I have the requisite hours. I hold two degrees — a baccalaureate in humane arts… meaning I squeaked through… and a doctorate from an old and prestigious school — a Ph.D. in education."

"Zebadiah! You *wouldn't!"* (I was horrified.)

"But I did, Deety. To prove that degrees *per se* are worthless. Often they are honorifics of true scientists or learned scholars or inspired teachers. Much more frequently they are false faces for overeducated jackasses."

Pop said, "You'll get no argument from me, Zeb. A doctorate is a union card to get a tenured job. It does *not* mean that the holder thereof is wise or learned."

"Yes, sir. I was taught it at my grandfather's knee — my Grandfather Zachariah, the man responsible for the initial 'Z' in the names of his male descendants. Deety, his influence on me was so strong that I must explain him — no, that's impossible; I must tell about him in order to explain *me*… and how I happened to take a worthless degree."

Hilda said, "Deety, he's pulling a long bow again."

"Quiet, woman. 'Get thee to a nunnery, go!"

"I don't take orders from my stepson-in-law. Make that a monastery and I'll consider it."

I kept my blinkin' mouf shut. My husband's fibs entertain me. (If they *are* fibs.)

"Grandpa Zach was as cantankerous an old coot as you'll ever meet. Hated government, hated lawyers, hated civil servants, hated preachers, hated automobiles, public schools, and telephones, was contemptuous of most editors, most writers, most professors, most of almost anything. But he overtipped waitresses and porters and would go out of his way to avoid stepping on an insect.

"Grandpa had three doctorates: biochemistry, medicine, and law — and he regarded anyone who couldn't read Latin, Greek, Hebrew, French, and German as illiterate."

"Zebbie, can you read all those?"

"Fortunately for me, my grandfather had a stroke while filling out a tax form before he could ask me that question. I don't know Hebrew. I can read Latin, puzzle out Greek, speak and read French, read technical German, understand it in some accents, swear in Russian — very useful! — and speak an ungrammatical smattering of Spanish picked up in cantinas and from horizontal dictionaries.

"Grandpa would have classed me as subliterate as I don't do any of these well — and I sometimes split infinitives which would have infuriated him. He practiced forensic medicine, medical jurisprudence, was an expert witness in toxicology, pathology, and traumatology, bullied judges, terrorized lawyers, medical students, and law students. He once threw a tax assessor out of his office and required him to return with a search warrant setting forth in detail its constitutional limitations, He regarded the income tax and the Seventeenth Amendment and the direct primary as signs of the decay of the Republic."

"How did he feel about the Nineteenth?"

"Hilda, Grandpa Zach supported female suffrage. I remember hearing him say that if women were so dad-burned foolish as to want to assume the burden, they should be allowed to — they couldn't do the country more harm than men had. 'Votes for Women' didn't annoy him but nine thousand other things did. He lived at a slow simmer, always ready to break into a rolling boil.

"He had one hobby: collecting steel engravings."

"'Steel engravings'?" I repeated.

"Of dead presidents, my Princess. Especially of McKinley, Cleveland, and Madison — but he didn't scorn those of Washington. He had that instinct for timing so necessary to a collector. In 1929 on Black Thursday he held not one share of common stock; instead he had sold short. When the 1933 Bank Holiday came along every old-dollar he owned, except current cash, was in Zurich in Swiss money. Eventually U.S. citizens were forbidden by 'emergency' decree to own gold even abroad.

"Grandpa Zach ducked into Canada, applied for Swiss citizenship, got it, and thereafter split his time between Europe and America, immune to inflation and the confiscatory laws that eventually caused us to knock three zeros off the old-dollar in creating the newdollar.

"So he died rich, in Locarno — beautiful place; I stayed with him two summers as a boy. His will was probated in Switzerland and the U.S. Revenue Service could not touch it.

"Most of it was a trust with its nature known to his offspring before his death or I would not have been named Zebadiah.

"Female descendants got pro-rata shares of income with no strings attached but males had to have first names starting with 'Z' — and even that got them not one Swiss franc; there was a 'Root, hog, or die!' clause. Zachariah believed in taking care of daughters, but sons and grandsons had to go out and scratch, with no help from their fathers, until they had earned and saved on their own — or accumulated without going to jail — assets equal to one pro-rata share of the capital sum of the trust before they shared in the trust's income."

"Sexism," said Aunt Hilda. "Raw, unadulterated sexism. Any FemLib gal would sneer at his dirty old money, on those terms."

"Would you have refused it, Sharpie?"

"Me? Zebbie dear, are you feverish? I would have both greedy hands out. I'm strong for women's rights but no fanatic. Sharpie wants to be pampered and that's what men are best at — their natural function."

"Pop, do you need help in coping with her?"

"No, Son. I *like* pampering Hilda. I don't see you abusing my daughter."

"I don't dare; you told me she's vicious at karate." (I *am* good at karate; Pop made sure that I learned all the dirty fighting possible. But not against Zebadiah! If I ever do — Heaven forbid! — find myself opposed to my husband, I'll quiver my chin and cry.)

"On my graduation from high school my father had a talk with me. 'Zeb,' he told me. 'The time has come. I'll put you through any school you choose. Or you can take what you have saved, strike out on your own, and try to qualify for a share in your grandfather's will. Suit yourself, I shan't influence you.'

"Folks, I had to think. My father's younger brother was past forty and still hadn't qualified. The size of the trust made a pro-rata of its assets amount to a requirement that a male descendant had to get rich on his own — well-to-do at least — whereupon he was suddenly twice as rich. But with over half of this country's population living on the taxes of the lesser number it is not as easy to get rich as it was in Grandpa's day.

"Turn down a paid-for education at Princeton, or M.I.T.? Or go out and try to get rich with nothing but a high school education? — I hadn't learned much in high school; I had majored in girls.

"So I had to think hard and long. Almost ten seconds. I left home next day with one suitcase and a pitiful sum of money.

"Wound up on campus that had two things to recommend it: an Aerospace R.O.T.C. that would pick up part of my expenses, and a phys. ed. department willing to award me a jockstrap scholarship in exchange for daily bruises and contusions, plus all-out effort whenever we played. I took the deal."

"What did you play?" asked my father.

"Football, basketball, and track — they would have demanded more had they been able to figure a way to do it."

"I had thought you were going to mention fencing."

"No, that's another story. These did not quite close the gap. So I also waited tables for meals — food so bad the cockroaches ate out. But that closed the gap, and I added to it by tutoring in mathematics. That gave me my start toward piling up money to qualify."

I asked, "Did tutoring math pay enough to matter? I tutored math before Mama died; the hourly rate was low."

"Not *that* sort of tutoring, Princess. I taught prosperous young optimists not to draw to inside straights, and that stud poker is not a game of chance, but that craps *is,* controlled by mathematical laws that cannot be flouted with impunity. To quote Grandfather Zachariah, 'A man who bets on greed and dishonesty won't be wrong too often.' There is an amazingly high percentage of greedy people and it is even easier to win from a dishonest gambler than it is from an honest one… and neither is likely to know the odds at craps, especially side bets, or *all* of the odds in poker, in particular how odds change according to the number of players, where one is seated in relation to the dealer, and how to calculate changes as cards are exposed in stud.

"That was also how I quit drinking, my darling, except for special celebrations. In every 'friendly' game some players contribute, some take a profit; a player determined to take a profit must be neither drunk nor tired. Pop, the shadows are growing long — I don't think anybody wants to know how I got a worthless doctorate."

"I do!" I put in. "Me, too!" echoed Aunt Hilda.

"Son, you're outvoted."

"Okay. Two years active duty after I graduated. Sky jockeys are even more optimistic than students and have more money — meanwhile I learned more math and engineering. Was sent inactive just in time to be called up again for the Spasm War. Didn't get hurt, I was safer than civilians. But that kept me on another year even though fighting was mostly over before I reported in. That made me a veteran, with benefits. I went to Manhattan and signed up for school again. Doctoral candidate. School of Education. Not serious at first, simply intending to use my veteran's benefits while enjoying the benefits of being a student — and devote most of my time to piling up cash to qualify for the trust.

"I knew that the stupidest students, the silliest professors, and the worst bull courses are concentrated in schools of education. By signing for large-class evening lectures and the unpopular eight a.m. classes I figured I could spend most of my time finding out how the stock market ticked. I did, by working there, before I risked a dime.

"Eventually I had to pick a research problem or give up the advantages of being a student. I was sick of a school in which the pie was all meringue and no filling but I stuck as I knew how to cope with courses in which the answers are matters of opinion and the opinion that counts is that of the professor. And how to cope with those large-class evening lectures: Buy the lecture notes. Read everything that professor ever published. Don't cut too often and when you do show up, get there early, sit front row center, be certain the prof catches your eye every time he looks your way — by never taking your eyes off him. Ask *one* question you know he can answer because you've picked it out of his published papers — and state your name in asking a question. Luckily 'Zebadiah Carter' is a name easy to remember. Family, I got straight 'A's' in both required courses and seminars… because I did *not* study 'education,' I studied professors of education.

"But I still had to make that 'original contribution to human knowledge' without which a candidate may not be awarded a doctor's degree in most so-called disciplines… and the few that don't require it are a tough row to hoe.

"I studied my faculty committee before letting myself be tied down to a research problem… not only reading everything each had published but also buying their publications or paying the library to make copies of out-of-print papers."

My husband took me by my shoulders. "Dejah Thoris, here follows the title of my dissertation. You can have your divorce on your own terms."

"Zebadiah, don't talk that way!"

"Then brace yourself. 'An Ad-Hoc Inquiry Concerning the Optimization of the Infrastructure of Primary Educational Institutions at the Interface Between Administration and Instruction, with Special Attention to Group Dynamics Desiderata."

"Zebbie! What does that mean?"

"It means nothing, Hilda."

"Zeb, quit kidding our ladies. Such a title would never be accepted."

"Jake, it seems certain that you have never taken a course in a school of education."

"Well… no. Teaching credentials are not required at university level but —"

"But me no 'buts,' Pop. I have a copy of my dissertation; you can check its authenticity. While that paper totally lacks meaning it is a literary gem in the sense in which a successful forging of an 'old master' is itself a work of art. It is loaded with buzz words. The average length of sentences is eighty-one words. The average word length, discounting 'of,' 'a,' 'the,' and other syntactical particles, is eleven-plus letters in slightly under four syllables. The bibliography is longer than the dissertation and cites three papers of each member of my committee and four of the chairman, and those citations are quoted in part — while avoiding any mention of matters on which I knew that members of the committee held divergent (but equally stupid) opinions.

"But the best touch was to get permission to do field work in Europe and have it count toward time on campus; half the citations were in foreign languages, ranging from Finnish to Croatian — and the translated bits invariably agreed with the prejudices of my committee. It took careful quoting out of context to achieve this, but it had the advantage that the papers were unlikely to be on campus and my committee were not likely to go to the trouble of looking them up even if they were. Most of them weren't at home in other languages, even easy ones like French, German, and Spanish.

"But I did not waste time on phony field work; I simply wanted a trip to Europe at student air fares and the use of student hostels — dirt cheap way to travel. *And* a visit to the trustees of Grandpa's fund.

"Good news! The fund was blue chips and triple-A bonds and, at that time, speculative stocks were rising. So the current cash value of the fund was down, even though income was up. And two more of my cousins and one uncle had qualified, again reducing the pro-rata… so, Glory Be! — I was within reaching distance. I had brought with me all that I had saved, swore before a notary that it was all mine, nothing borrowed, nothing from my father — and left it on deposit in Zurich, using the trustees as a front. And I told them about my stamp and coin collection.

"Good stamps and coins never go down, always up. I had nothing but proof sets, first-day covers, and unbroken sheets, all in perfect condition — and had a notarized inventory and appraisal with me. The trustees got me to swear that the items I had collected before I left home had come from earned money — true, the earliest items represented mowed lawns and such — and agreed to hold the pro-rata at that day's cash value — lower if the trend continued — if I would sell my collection and send a draft to Zurich, with businesslike speed as soon as I returned to the States.

"I agreed. One trustee took me to lunch, tried to get me liquored up — then offered me ten percent over appraisal if I would sell that very afternoon, then send it to him by courier at his expense (bonded couriers go back and forth between Europe and America every week).

"We shook hands on it, went back and consulted the other trustees. I signed papers transferring title, the trustee buying signed his draft to me, I endorsed it to the trustees to add to the cash I was leaving in their custody. Three weeks later I got a cable certifying that the collection matched the inventory. I had qualified.

"Five months later I was awarded the degree of doctor of philosophy, summa cum laude, And that, dear ones, is the shameful story of my life, Anyone have the energy to go swimming?"

"Son, if there is a word of truth in that, it is indeed a shameful story."

"Pop! That's not fair! Zebadiah used their *rules* — and outsmarted them!"

"I didn't say that Zeb had anything to be ashamed of. It is a commentary on American higher education. What Zeb claims to have written is no worse than trash I *know* is accepted as dissertations these days. His case is the only one I have encountered wherein an intelligent and able scholar — *you,* Zeb — set out to show that an 'earned' Ph.D. could be obtained from a famous institution — I know which one! — in exchange for deliberately meaningless pseudoresearch. The cases I have encountered have involved button-counting by stupid and humorless young persons under the supervision of stupid and humorless old fools. I see no way to stop it; the rot is too deep. The only answer is to chuck the system and start over." My father shrugged. "Impossible."

"Zebbie," Aunt Hilda asked, "what do you do on campus? I've never asked."

My husband grinned. "Oh, much what you do, Sharpie."

"I don't do anything. Enjoy myself."

"Me, too. If you look, you will find me listed as 'research professor in residence.' An examination of the university's books would show that I am paid a stipend to match my rank. Further search would show that slightly more than that amount is paid by some trustees in Zurich to the university's general fund… as long as I remain on campus, a condition not written down. I like being on campus, Sharpie; it gives me privileges not granted the barbarians outside the pale. I teach a course occasionally, as supply for someone on sabbatical or ill."

"Huh? What courses? What departments?"

"Any department but education. Engineering mathematics. Physics

One-Oh-One. Thermogoddamics. Machine elements. Saber and dueling sword. Swimming. And — don't laugh — English poetry from Chaucer through the Elizabethans. I enjoy teaching something worth teaching. I don't charge for courses I teach; the Chancellor and I understand each other."

"I'm not sure I understand you," I said, "but I love you anyhow. Let's go swimming."

Chapter X

"' — and he had two horns like a lamb, and he spake as a dragon'!"

Zeb:

Before heading for the pool our wives argued over how Barsoomian warriors dress — a debate complicated by the fact that I was the only one fairly sober. While I was telling my "shameful story," Jake had refreshed his Scotch-on-rocks and was genially argumentative, Our brides had stuck to one highball each but, while one jigger gave Deety a happy glow, Sharpie's mass is so slight that the same dosage made her squiffed.

Jake and I agreed to wear side arms. Our princesses had buckled them on; we would wear them. But Deety wanted me to take off the grease-stained shorts I had worn while working. "Captain John Carter never wears clothes. He arrived on Barsoom naked, and from then on never wore anything but the leather and weapons of a fighting man. Jeweled leather for state occasions, plain leather for fighting — and sleeping silks at night. Barsoomians don't wear clothes. When John Carter first laid eyes on Dejah Thoris," Deety closed her eyes and recited: "'She was as destitute of clothes as the Green Martians… save for her highly wrought ornaments she was entirely naked… '" Deety opened her eyes, stared solemnly. "The women never wear clothes, just jewelry."

"Purty shilly," said her father, with a belch. "Scuse me!"

"When they were chilly, they wrapped furs around them, Pop. I mean 'Mors Kajak, my revered father.'"

Jake answered with slow precision. "Not… 'chilly.' *Silly!* With a clash of blades and flash of steel, man doesn't want family treasures swinging in the breeze 'n' banging his knees. Distracts him. Might get 'em sliced off. Correc', Captain John Carter?"

"Logical," I agreed.

"Besides, illustrations showed men wearing breech clouts. Pro'ly steel jockstrap underneath. *I* would."

"Those pictures were painted early in the twentieth century, Pop. Censored. But the stories make it clear. Weapons for men, jewelry for women — furs for cold weather."

"I know how I should dress," put in Sharpie. "Thuvia wears jewels on bits of gauze — I remember the book cover. Not clothes. Just something to fasten jewels to. Deety — Dejah Thoris, I mean — do you have a gauze scarf I can use? Fortunately I was wearing pearls when Mors Kajak kidnapped me."

"Sharpie," I objected, "you can't be Thuvia. She married Carthoris. Mors Kajak — or Mors Ka*jake,* might be a misspelling — is your husband."

"Cer'nly Mors Jake is my husband! But I'm his *second* wife; that explains everything. But it ill becomes the Warlord to address a princess of the House of Ptarth as 'Sharpie." Mrs. Burroughs drew herself up to her full 152 centimeters and tried to look offended.

"My humble apologies, Your Highness."

Sharpie giggled. "Can't stay mad at our Warlord. Dejah Thoris hon — Green tulle? Blue? Anything but white."

"I'll go look."

"Ladies," I objected, "if we don't get moving, the pool will cool off. You can sew on pearls this evening. Anyhow, where do pearls come from on Barsoom? Dead sea bottoms — no oysters."

"From Korus, the Lost Sea of Dor," Deety explained.

"They've got you, Son. But I either go swimming right now — or I have another drink… and then another, and then another. Working too hard. Too tense. Too much worry."

"Okay, Pop; we swim. Aunt H — Aunt Thuvia?"

"All right, Dejah Thoris. To save Mors Jacob from himself. But I *won't* wear earthling clothes. You can have my mink cape; may be chilly coming back."

Jake wrapped his sarong into a breech clout, strapped it in place with his saber belt. I replaced those grimy shorts with swim briefs which Deety conceded were "almost Barsoomian." I was no longer dependent on Jake's clothes; my travel kit, always in my car, once I got at it, supplied necessities from passport to poncho. Sharpie wore pearls and rings she had been wearing at her party, plus a scarf around her waist to which she attached all the costume jewelry Deety could dig up. Deety carried Hilda's mink cape — then wrapped it around her. "My Captain, someday I want one like this."

"I'll skin the minks personally," I promised her.

"Oh, dear! I think this is synthetic."

"I don't. Ask Hilda."

"I will most carefully *not* ask her. But I'll settle for synthetic."

I said, "My beloved Princess, you eat meat. Minks are vicious carnivores and the ones used for fur are raised for no other purpose — *not* trapped. They are well treated, then killed humanely. If your ancestors had not killed for meat and fur as the last glaciation retreated, *you* would not be here. Illogical sentiment leads to the sort of tragedy you find in India and Bangladesh."

Deety was silent some moments as we followed Jake and Hilda down toward the pool. "My Captain —"

"Yes, Princess?"

"I stand corrected. But your brain works so much like a computer that you scare me."

"I don't ever want to scare you. I'm not bloodthirsty — not with minks, not with steers, not with anything. But I'll kill without hesitation… for you."

"Zebadiah —"

"Yes, Deety?"

"I am proud that you made me your wife. I will try to be a good wife… and your princess."

"You do. You have. You always will. Dejah Thoris, my princess and only love, until I met you, I was a boy playing with oversized toys. Today I am a man. With a wife to protect and cherish… a child to plan for. I'm truly alive, at last! Hey! What are you sniffling about? Stop it!"

"I'll cry if I feel like it!"

"Well… don't get it on Hilda's cape."

"Gimme a hanky."

"I don't even have a Kleenex." I brushed away her tears with my fingers. "Sniff hard. You can cry on me tonight. In bed."

"Let's go to bed early."

"Right after dinner. Sniffles all gone?"

"I think so. Do pregnant women always cry?"

"So I hear."

"Well… I'm not going to do it again. No excuse for it; I'm terribly happy."

"The Polynesians do something they call 'Crying happy.' Maybe that's what you do."

"I guess so. But I'll save it for private." Deety started to shrug the cape off. "Too hot, lovely as it feels." She stopped with the cape off her shoulders, suddenly pulled it around her again. "Who's coming up the hill?"

I looked up, saw that Jake and Hilda had reached the pool — and a figure was appearing from below, beyond the boulder that dammed it.

"I don't know. Stay behind me." I hurried toward the pool.

The stranger was dressed as a Federal Ranger. As I closed in, I heard the stranger say to Jake, "Are you Jacob Burroughs?"

"Why do you ask?"

"Are you or aren't you? If you are, I have business with you. If you're not, you're trespassing. Federal land, restricted access."

"Jake!" I called out. "Who is he?"

The newcomer turned his head. "Who are *you?"*

"Wrong sequence," I told him. "You haven't identified yourself."

"Don't be funny," the stranger said. "You know this uniform. I'm

Bennie Hibol, the Ranger hereabouts."

I answered most carefully, "Mr. Highball, you are a man in a uniform, wearing a gun belt and a shield. That doesn't make you a Federal officer. Show your credentials and state your business."

The uniformed character sighed. "I got no time to listen to smart talk." He rested his hand on the butt of his gun. "If one of you is Burroughs, speak up. I'm going to search this site and cabin. There's stuff coming up from Sonora; this sure as hell is the transfer point."

Deety suddenly came out from behind me, moved quickly and placed herself beside her father. "Where's your search warrant? Show your authority!" She had the cape clutched around her; her face quivered with indignation.

"Another joker!" This clown snapped open his holster. "Federal land — here's my authority!"

Deety suddenly dropped the cape, stood naked in front of him. I drew, lunged, and cut down in one motion — slashed the wrist, recovered, thrust upward from low line into the belly above the gun belt.

As my point entered, Jake's saber cut the side of the neck almost to decapitation. Our target collapsed like a puppet with cut strings, lay by the pool, bleeding at three wounds.

"Zebadiah, I'm sorry!"

"About what, Princess?" I asked as I wiped my blade on the alleged ranger's uniform. I noticed the color of the blood with distaste.

"He didn't react! I thought my strip act would give you more time."

"You did distract him," I reassured her. "He watched *you* and didn't watch me. Jake, what kind of a creature has bluish green blood?"

"I don't know."

Sharpie came forward, squatted down, dabbed a finger in the blood, sniffed it. "Hemocyanin. I think," she said calmly. "Deety, you were right. Alien. The largest terrestrial fauna with that method of oxygen transport is a lobster. But this *thing* is no lobster, it's a 'Black Hat.' How did you know?"

"I didn't. But he didn't sound right. Rangers are polite. And they never fuss about showing their I.D.'s."

"I didn't know," I admitted. "I wasn't suspicious, just annoyed."

"You moved mighty fast," Jake approved.

"I never know why till it's over. You didn't waste time yourself, tovarishch. Drawing saber while he was pulling a gun — that takes guts and speed. But let's not talk now — *where are his pals?* We may be picked off getting back to the house."

"Look at his pants," Hilda suggested. "He hasn't been on horseback. Hasn't climbed far, either. Jacob, is there a jeep trail?"

"No. This isn't accessible by jeep — just barely by horse."

"Hasn't been anything overhead," I added. "No chopper, no air car."

"Continua craft," said Deety.

"Huh?"

"Zebadiah, the 'Black Hats' are aliens who don't want Pop to build a time-space machine. We *know* that. So it follows that *they* have continua craft."

I thought about it. "Deety. I'm going to bring you breakfast in bed. Jake, how do we spot an alien continua craft? It doesn't have to look like Gay Deceiver."

Jake frowned. "No. *Any* shape. But a one-passenger craft might not be much larger than a phone booth."

"If it's a one-man — one-alien — job, it should be parked down in that scrub," I said, pointing. "We can find it."

"Zebadiah," protested Deety, "we don't have *time* to search. We ought to get *out* of here! *Fast!"*

Jake said, "My daughter is right but not for that reason. Its craft is not necessarily waiting. It could be parked an infinitesimal interval away along any of six axes, and either return automatically, preprogrammed, or by some method of signaling that we can postulate but not describe. The alien craft would not be here-now… but *will* be here-later. For pickup."

"In that case, Jake, you and I and the gals should scram out of here-now to there-then. Be missing. How long has our pressure test been running? What time is it?"

"Seventeen-seventeen," Deety answered instantly.

I looked at my wife. "Naked as a frog. Where do you hide your watch, dearest? Surely, not *there."*

She stuck out her tongue. "Smarty. I have a clock in my head. I never mention it because people give me funny looks."

"Deety does have innate time sense," agreed her father, "accurate to thirteen seconds plus or minus about four seconds; I've measured it."

"I'm sorry, Zebadiah — I don't *mean* to be a freak."

"Sorry about what, Princess? I'm impressed. What do you do about time zones?"

"Same as you do. Add or subtract as necessary. Darling, *everyone* has a builtin circadian. Mine is merely more nearly exact than most people's. Like having absolute pitch — some do, some don't."

"Are you a lightning calculator?"

"Yes… but computers are so much faster that I no longer do it much. Except one thing — I can sense a glitch — spot a wrong answer. Then I look for garbage in the program. If I don't find it, I send for a hardware specialist. Look, sweetheart, discuss my oddities later. Pop, let's dump that *thing* down the septic tank and *go.* I'm nervous, I am."

"Not so fast, Deety." Hilda was still squatting by the corpse. "Zebbie. Consult your hunches. Are we in danger?"

"Well… not this instant."

"Good. I want to dissect this creature."

"Aunt Hilda!"

"Take a Miltown, Deety. Gentlemen, the Bible or somebody said, 'Know thy enemy.' This is the only 'Black Hat' we've seen… and he's not human and not born on earth. There is a wealth of knowledge lying here and it ought not to be shoved down a septic tank until we know more about it. Jacob, feel this."

Hilda's husband got down on his knees, let her guide his hand through the "ranger's" hair. "Feel those bumps, dearest?"

"Yes!"

"Much like the budding horns of a lamb, are they not?"

"Oh — 'And I beheld another beast coming up out of the earth; and he had two horns like a lamb, and he spake as a dragon'!"

I squatted down, felt for horn buds. "Be damned! He did come up out of the earth — up this slope anyhow — and he spake as a dragon. Talked unfriendly, and all the dragons I've ever heard of talked mean or belched fire. Hilda, when you field-strip this critter, keep an eye out for the Number of the Beast."

"I shall! Who's going to help me get this specimen up to the house? I want three volunteers."

Deety gave a deep sigh, "I volunteer. Aunt Hilda… *must* you do this?"

"Deety, it ought to be done at Johns Hopkins, with x-ray and proper tools and color holovision. But I'm the best biologist for it because I'm the only biologist. Honey child, you don't have to watch. Aunt Sharpie has helped in an emergency room after a five-car crash; to me, blood is just a mess to clean up. Green blood doesn't bother me even that much."

Deety gulped. "I'll help carry. I *said* I would!"

"Dejah Thoris!"

"Sir? Yes, my Captain?"

"Back away from that. Take this. And this." I unbuckled sword and belt, shoved down my swimming briefs, handed all of it to Deety. "Jake, help me get him up into fireman's carry."

"I'll help carry, Son."

"No, I can tote him easier than two could. Sharpie, where do you want to work?"

"It will have to be the dining table."

"Aunt Hilda, I don't want that thing on my — ! I beg your pardon; it's *your* dining table."

"You're forgiven only if you'll concede that it is *our* dining table.

Deety, how many times must I repeat that I am *not* crowding you out of your home? We are co-housewives — my only seniority lies in being twenty years older. To my regret."

"Hilda my dear one, what would you say to a workbench in the garage with a drop cloth on it and flood lights over it?"

"I say, 'Swell!' I don't think a dining table is the place for a dissection, either. But I couldn't think of anywhere else."

With help from Jake, I got that damned carcass draped across my shoulders in fireman's carry. Deety started up the path with me, carrying my belt and sword and my briefs in one arm so that she could hold my free hand — despite my warning that she might be splashed with alien blood. "No, Zebadiah, I got overtaken by childishness. I won't let it happen again. I must conquer all squeamishness — I'll be changing diapers soon." She was silent a moment. "That is the first time I've seen death. In a person, I mean. An alien humanoid person I should say… but I thought he was a man. I once saw a puppy run over — I threw up. Even though it was not my puppy and I didn't go close." She added, "An adult should face up to death, should she not?"

"Face up to it, yes," I agreed. "But not grow calloused. Deety, I've seen too many men die. I've never grown inured to it. One must accept death, learn not to fear it, then never worry about it. 'Make Today Count!' as a friend whose days are numbered told me. Live in that spirit and when death comes, it will come as a welcome friend."

"You say much what my mother told me before she died."

"Your mother must have been an extraordinary woman. Deety, in the two weeks I've known you, I've heard so much about her from all three of you that I feel as if I knew her. A friend I hadn't seen lately. She sounds like a wise woman."

"I think she was, Zebadiah. Certainly she was good. Sometimes, when I have a hard choice, I ask myself, 'What would Mama do?' — and everything falls into place."

"Both good *and* wise… and her daughter shows it. Uh, how old are you, Deety?"

"Does it matter, sir?"

"No. Curiosity."

"I wrote my birth date on our marriage license application."

"Beloved, my head was spinning so hard that I had trouble remembering my own. But I should not have asked — women have birthdays, men have ages. I want to know your birthday; I have no need to know the year."

"April twenty-second, Zebadiah — one day older than Shakespeare."

"'Age could not wither her — ' Woman, you carry your years well."

"Thank you, sir."

"That snoopy question came from having concluded in my mind that you were twenty-six… figuring from the fact that you have a doctor's degree. Although you look younger."

"I think twenty-six is a satisfactory age."

"I wasn't asking," I said hastily. "I got confused from knowing Hilda's age… then hearing her say that she is — or claims to be — twenty years older than you. It did not jibe with my earlier estimate, based on your probable age on graduating from high school plus your two degrees."

Jake and Hilda had lingered at the pool while Jake washed his hands and rinsed from his body smears of alien ichor. Being less burdened, they climbed the path faster than we and came up behind us just as Deety answered,

"Zebadiah, I never graduated from high school."

"Oh."

"That's right," agreed her father. "Deety matriculated by taking College Boards. At fourteen. No problem since she stayed home and didn't have to live in a dorm. Got her B.S. in three years… and that was a happy thing, as Jane lived to see Deety move the tassel from one side of her mortar board to the other. Jane in a wheelchair and happy as a child — her doctor said it couldn't hurt her… meaning she was dying anyhow." He added, "Had her mother been granted only three more years she could have seen Deety's doctorate conferred, two years ago."

"Pop… sometimes you chatter."

"Did I say something out of line?"

"No, Jake," I assured him. "But I've just learned that I robbed the cradle. I knew I had but hadn't realized how much. Deety darling, you are twentytwo."

"Is twentytwo an unsatisfactory age?"

"No, my Princess. Just right."

"My Captain said that women have birthdays while men have ages. Is it permitted to inquire your age, sir? I didn't pay close attention to that form we had to fill out, either."

I answered solemnly. "But Dejah Thoris knows that Captain John Carter is centuries old, cannot recall his childhood, and has always looked thirty years old."

"Zebadiah, if that is your age, you've had a busy thirty years. You said you left home when you graduated from high school, worked your way through college, spent three years on active duty, then worked your way through a doctor's degree —"

"A phony one!"

"That doesn't reduce required residence. Aunt Hilda says you've been a professor four years."

"Uh… will you settle for nine years older than you are?"

"I'll settle for whatever you say."

"He's at it again," put in Sharpie. "He was run off two other campuses. Co-ed scandals. Then he found that in California nobody cared, so he moved west."

I tried to look hurt. "Sharpie darling, I *always* married them. One gal turned out already to be married and in the other case the child wasn't mine; she slipped one over on me."

"The truth isn't in him, Deety. But he's brave and he bathes every day and he's rich — and we love him anyhow."

"The truth isn't in you either, Aunt Hilda. But we love you anyhow. It says in 'Little Women' that a bride should be half her husband's age plus seven years. Zebadiah and I hit close to that."

"A rule that makes an old hag out of me. Jacob, I'm just Zebbie's age — thirtyone. But we've both been thirtyone for ages."

"I'll bet he does feel aged after carrying that thing uphill. Atlas, can you support your burden while I get the garage open, a bench dragged out and covered? Or shall I help you put it down?"

"I'd just have to pick it up again. But don't dally."

Chapter XI

" — citizens must protect themselves."

Zeb:

I felt better after I got that "ranger's" corpse dumped and the garage door closed, everyone indoors. I had told Hilda that I felt no "immediate" danger — but my wild talent does *not* warn me until the Moment of Truth. The "Blokes in the Black Hats" had us located. Or possibly had never lost us; what applies to human gangsters has little to do with aliens whose powers and motives and plans we had no way to guess.

We might be as naive as a kitten who thinks he is hidden because his head is, unaware that his little rump sticks out.

They were alien, they were powerful, they were multiple (three thousand? three million? — we didn't know the Number of the Beast) — and they knew where we were. True, we had killed one — by luck, not by planning. That "ranger" would be missed; we could expect more to call in force.

Foolhardiness has never appealed to me. Given a chance to run, I run. I don't mean I'll bug out on wing mate when the unfriendlies show up, and certainly not on a wife and unborn child. But I wanted us *all* to run — me, my wife, my blood brother who was also my father-in-law, and his wife, my chum Sharpie who was brave, practical, smart, and unsqueamish (that she would joke in the jaws of Moloch was not a fault but a source of esprit).

I wanted us to *go!* — *Tau* axis, *Teh* axis, rotate, translate, whatever — anywhere not infested by gruesomes with green gore.

I checked the gauge and felt better; Gay's inner pressure had not dropped. Too much to expect Gay to be a spaceship — not equipped to scavenge and replenish air. But it was pleasant to know that she would hold pressure much longer than it would take us to scram for home if we had to — assuming that unfriendlies had not shot holes in her graceful shell.

I went by the inside passageway into the cabin, used soap and hot water, rinsed off and did it again, dried down and felt clean enough to kiss my wife, which I did. Deety held onto me and reported.

"Your kit is packed, sir. I'm finishing mine, the planned weight and space, and nothing but practical clothes —"

"Sweetheart."

"Yes, Zebadiah?"

"Take the clothes you were married in and mine too. Same for Jake and Hilda. And your father's dress uniform. Or was it burned in

Logan?"

"But, Zebadiah, you emphasized rugged clothes."

"So I did. To keep your mind on the fact that we can't guess the conditions we'll encounter and don't know how long we'll be gone or if we'll be back. So I listed everything that might be useful in pioneering a virgin planet — since we might be stranded and *never* get home. Everything from Jake's microscope and water-testing gear to technical manuals and tools. And weapons — and flea powder. But it's possible that we will have to play the roles of ambassadors for humanity at the court of His Extreme Majesty, Overlord of Galactic Empires in thousandth-and-third continuum. We may need the gaudiest clothes we can whip up. We *don't* know, we *can't* guess."

"I'd rather pioneer."

"We may not have a choice. When you were figuring weights, do you recall spaces marked 'Assigned mass such and such — list to come'?"

"Certainly. Total exactly one hundred kilos, which seemed odd. Space slightly less than one cubic meter split into crannies."

"Those are yours, snubnose. And Pop or Hilda. Mass can be up to fifty percent over; I'll tell Gay to trim to match. Got an old doll? A security blanket? A favorite book of poems? Scrapbook? Family photographs? Bring 'em all!"

"Golly!" (I never enjoy looking at my wife quite so much as when she lights up and is suddenly a little girl.)

"Don't leave space for me. I have only what I arrived with. What about shoes for Hilda?"

"She claims she doesn't need any, Zebadiah — that her calluses are getting calluses on them. But I've worked out expedients. I got Pop some Dr. Scholl's shoe liners when we were building; I have three pairs left and can trim them. Liners and enough bobby sox make her size three-and-half feet fit my clodhoppers pretty well. And I have a sentimental keepsake; Keds Pop bought me when I first went to summer camp, at ten. They fit Aunt Hilda."

"Good girl!" I added, "You seem to have everything in hand. How about food? Not stores we are carrying, I mean *now.* Has anybody thought about dinner? Killing aliens makes me hungry."

"Buffet style, Zebadiah. Sandwiches and stuff on the kitchen counter, and I thawed and heated an apple pie. I fed one sandwich to Hilda, holding it for her; she says she's going to finish working, then scrub before she eats anything more."

"Sharpie munched a sandwich while she carved that *thing?"*

"Aunt Hilda is rugged, Zebadiah — almost as rugged as you are."

"More rugged than I am. I could do an autopsy if I had to — but not while eating. I think I speak for Jake, too."

"I know you speak for Pop. He saw me feeding her, turned green and went elsewhere. Go look at what she's been doing, Zebadiah; Hilda has found interesting things."

"Hmmm — Are you the little girl who had a tizzy at the idea of dissecting a dead alien?"

"No, sir, I am not. I've decided to stay grown up. It's not easy. But it's more satisfying. An adult doesn't panic at a snake; she just checks to see if it's got rattles. I'll never squeal again. I'm grown up at last… a wife instead of a pampered princess."

"You will always be my Princess!"

"I hope so, my Chieftain. But to merit that, I must learn to be a pioneer mother — wring the neck of a rooster, butcher a hog, load while my husband shoots, take his place and his rifle when he is wounded. I'll learn — I'm stubborn, I am. Grab a hunk of pie and go see Hilda. I know just what to do with the extra hundred kilos: books, photographs, Pop's microfilm files and portable viewer, Pop's rifle and a case of ammo that the weight schedule didn't allow for —"

"Didn't know he had it — *what calibre?"*

"Seven point six two millimeters, long cartridge."

"Glory be! Pop and I use the same ammo!"

"Didn't know you carried a rifle, Zebadiah."

"I don't advertise it, it's unlicensed. I must show all of you how to get at it."

"Got any use for a lady's purse gun? A needle gun, Skoda fléchettes. Not much range but either they poison or they break up and expand… and it fires ninety times on one magazine."

"What are you, Deety? Honorable Hatchet Man?"

"No, sir. Pop got it for me — black market — when I started working nights. He said he would rather hire shysters to get me acquitted — or maybe probation — than to have to go down to the morgue to identify my body. Haven't had to use it; in Logan I hardly need it. Zebadiah, Pop has gone to a great deal of trouble to get me the best possible training in self-defense. He's just as highly trained — that's why I keep him out of fist fights. Because it would be a massacre. He and Mama decided this when I was a baby. Pop says cops and courts no longer protect citizens, so citizens must protect themselves."

"I'm afraid he's right."

"My husband, I can't evaluate my opinions of right and wrong because I learned them from my parents and haven't lived long enough to have formed opinions in disagreement with theirs."

"Deety, your parents did okay."

"I think so… but that's subjective. As may be, I was kept out of blackboard jungles — public schools — until we moved to Utah. And I was trained to fight — armed or unarmed. Pop and I noticed how you handled a sword. Your moulinets are like clockwork. And when you drop into point guard, your forearm is perfectly covered."

"Jake is no slouch. He drew so fast I never saw it, and cut precisely above the collar."

"Pop says you are better at it."

"Mmm — Longer reach. He's probably faster. Deety, the best swordmaster I ever had was your height and reach. I couldn't even cross blades with him unless he allowed me to."

"You never did say where you had taken up swordsmanship."

I grinned down at her. "Y.M.C.A. in downtown Manhattan. I had foil in high school. I fiddled with saber and épée in college. But I never encountered *swordsmen* until I moved to Manhattan. Took it up because I was getting soft. Then during that so-called 'research trip' in Europe I met swordsmen with family tradition — sons and grandsons and great-grandsons of maîtres d'armes. Learned that it was a way of life — and I had started too late. Deety, I fibbed to Hilda; I've never fought a student duel. But I did train in saber in Heidelberg under the Säbelmeister reputed to coach one underground Korps. He was the little guy I couldn't cross steel with. *Fast!* Up to then I had thought *I* was fast. But I got faster under his tutelage. The day I was leaving he told me that he wished he had had me twenty years sooner; he might have made a swordsman of me."

"You were fast enough this afternoon!"

"No, Deety. You had his eye, I attacked from the flank. *You* won that fight — not me, not Pop. Although what Pop did was far more dangerous than what I did."

"My Captain, I will not let you disparage yourself! I cannot hear you!"

Women, bless their warm hearts and strange minds — Deety had appointed me her hero; that settled it. I would have to try to measure up. I cut a piece of apple pie, ate it quickly while I walked slowly through the passage into the garage — didn't want to reach the "morgue" still eating.

The "ranger" was on its back with clothes cut away, open from chin to crotch, and spread. Nameless chunks of gizzard were here and there around the cadaver. It gave off a fetid odor.

Hilda was still carving, ice tongs in left hand, knife in her right, greenish goo up over her wrists. As I approached she put down the knife, picked up a razor blade — did not look up until I spoke. "Learning things, Sharpie?"

She put down her tools, wiped her hands on a towel, pushed back her hair with her forearm. "Zebbie, you wouldn't believe it."

"Try me."

"Well… look at this." She touched the corpse's right leg, and spoke to the corpse itself. "What's a nice joint like this doing in a girl like you?"

I saw what she meant: a long, gaunt leg with an extra knee lower than the human knee; it bent backwards. Looking higher, I saw that its arms had similar extra articulation. "Did you say 'girl'?"

"I said 'girl.' Zebbie, this monster is either female or hermaphroditic. A fully developed uterus, two-horned like a cat, one ovary above each horn. But there appear to be testes lower down and a dingus that may be a retractable phallus. Female — but probably male as well. Bisexual but does not impregnate itself; the plumbing wouldn't hook up. I think these critters can both pitch and catch."

"Taking turns? Or simultaneously?"

"Wouldn't that be sump'n? No, for mechanical reasons I think they take turns. Whether ten minutes apart or ten years, deponent sayeth not. But I'd give a pretty to see two of 'em going to it!"

"Sharpie, you've got a one-track mind."

"It's the main track. Reproduction *is* the main track; the methods and mores of sexual copulation are the central feature of all higher developments of life."

"You're ignoring money and television."

"Piffle! All human activities including scientific research are either mating dances and care of the young, or the dismal sublimations of born losers in the only game in town. Don't try to kid Sharpie. Took me forty-two years to grab a real man and get myself knocked up — but I made it! Everything I've done up to the last two weeks has been 'vamp till ready.' How about you, you shameless stud? Am I not right? Careful how you answer; I'll tell Deety."

"I'll take the Fifth."

"Make mine a quart. Zebbie, I *hate* these monsters; they interfere with my plans — a rose-covered cottage, a baby in the crib, a pot roast in the oven, me in a gingham dress, and my man coming down the lane after a hard day flunking freshmen — me with his slippers and his pipe and a dry martini waiting for him. Heaven! All else is vanity and vexation. Four fully developed mammary glands but lacking the redundant fat characteristic of the human female — 'cept me, damn it. A double stomach, a single intestine. A two-compartment heart that seems to pump by peristalsis rather than by beating. Cordate. I haven't examined the brain; I don't have a proper saw — but it must be as well developed as ours. Definitely humanoid, outrageously nonhuman. Don't knock over those bottles; they are specimens of body fluids."

"What are these things?"

"Splints to conceal the unhuman articulation. Plastic surgery on the face, too, I'm pretty sure, and cheaters to reshape the skull. The hair is fake; these Boojums don't have hair. Something like tattooing — or maybe masking I haven't been able to peel off — to make the face and other exposed skin look human instead of blue-green. Zeb, seven-to-two a large number of missing persons have been used as guinea pigs before they worked out methods for this masquerade. *Swoop!* A flying saucer dips down and two more guinea pigs wind up in their laboratories."

"There hasn't been a flying saucer scare in years."

"Poetic license, dear. If they have spacetime twisters, they can pop up anywhere, steal what they want — or replace a real human with a convincing fake — and be gone like switching off a light."

"This one couldn't get by very long. Rangers have to take physical examinations."

"This one may be a rush job, prepared just for us. A permanent substitution might fool anything but an x-ray — and might fool even x-ray if the doctor giving the examination was one of *Them* ... a theory you might think about. Zebbie, I must get to work. There is so *much* to learn and so little time. I can't learn a fraction of what this carcass could tell a real comparative biologist."

"Can I help?" (I was not anxious to.)

"Well —"

"I haven't much to do until Jake and Deety finish assembling the last of what they are going to take. So what can I do to help?"

"I could work twice as fast if you would take pictures. I have to stop to wipe my hands before I touch the camera."

"I'm your boy, Sharpie. Just say what angle, distance, and when."

Hilda looked relieved. "Zebbie, have I told you that I love you despite your gorilla appearance and idiot grin? Underneath you have the soul of a cherub. I want a bath so badly I can taste it — could be the last hot bath in a long time. And the bidet — the acme of civilized decadence. I've been afraid I would still be carving strange meat when Jacob said it was time to leave."

"Carve away, dear; you'll get your bath." I picked up the camera, the one Jake used for record-keeping: a Polaroid Stereo-Instamatic-self-focusing, automatic irising, automatic processing, the perfect camera for engineer or scientist who needs a running record.

I took endless pictures while Hilda sweated away. "Sharpie, doesn't it worry you to work with bare hands? You might catch the Never-Get-Overs."

"Zebbie, if these critters could be killed by our bugs, they would have arrived here with no immunities and died quickly. They didn't. Therefore it seems likely that we can't by hurt by *their* bugs. Radically different biochemistries."

It sounded logical — but I could not forget Kettering's Law: "Logic is an organized way of going wrong with confidence."

Deety appeared, set down a loaded hamper. "That's the last." She had her hair up in a bath knot and was dressed solely in rubber gloves. "Hi, dearest. Aunt Hilda, I'm ready to help."

"Not much you can do, Deety hon — unless you want to relieve Zebbie."

Deety was staring at the corpse and did not look happy — her nipples were down flat. "Go take a bath!" I told her. "Scram."

"Do I stink that badly?"

"You stink swell, honey girl. But Sharpie pointed out that this may be our last chance at soap and hot water in quite a while. I've promised her that we won't leave for Canopus and points east until she has her bath. So get yours out of the way, then you can help me stow while she gets sanitary."

"All right." Deety backed off and her nipples showed faintly — not rigid but she was feeling better. My darling keeps her feelings out of her face, mostly — but those pretty pink spigots are barometers of her morale.

"Just a sec, Deety," Hilda added. "This afternoon you said, 'He didn't react!' What did you mean?"

"What I said. Strip in front of a man and he reacts, one way or another. Even if he tries to ignore it, his eyes give him away. But he *didn't.* Of course he's not a man — but I didn't know that when I tried to distract him."

I said, "But he did notice you, Deety — and that gave me my chance."

"But only the way a dog, or a horse, or any animal, will notice any movement. He noticed but ignored it. No reaction."

"Zebbie, does that remind you of anything?"

"Should it?"

"The first day we were here you told us a story about a 'zaftig co-ed.'"

"I did?"

"She was flunking math."

"*Oh!* 'Brainy.'"

"Yes, Professor N. O'Heret Brain. See any parallel?"

"But 'No Brain' has been on campus for years. Furthermore he turns red in the face. Not a tattoo job."

"I said this one might be a rush job. Would anyone be in a better position to discredit a mathematical theory than the head of the department of mathematics at a very prominent university? Especially if he was familiar with that theory and *knew* that it was correct?"

"Hey, wait a minute!" put in Deety. "Are you talking about that professor who argued with Pop? The one with the phony invitation? I thought he was just a stooge? Pop says he's a fool."

"He behaves like a pompous old fool," agreed Hilda. "I can't stand him. I plan to do an autopsy on him."

"But he's not dead."

"That can be corrected!" Sharpie said sharply.

Chapter XII

"They might fumigate this planet and take it."

Hilda:

By the time I was out of my bath, Jacob, Deety, and Zebbie had Gay Deceiver stowed and lists checked (can opener, cameras, et cetera) — even samples of fluids and tissues from the cadaver, as Zebbie's miracle car had a small refrigerator. Deety wasn't happy about my specimens being in the refrigerator but they were very well packed, layer on layer of plastic wrap, then sealed into a freezer box. Besides, that refrigerator contained mostly camera film, dynamite caps, and other noneatables. Food was mostly freeze-dried and sealed in nitrogen, except foods that won't spoil.

We were dog tired. Jacob moved that we sleep, then leave. "Zeb, unless you expect a new attack in the next eight hours, we should rest. I need to be clearheaded in handling verniers. This house is almost a fortress, will be pitch black, and does not radiate any part of the spectrum. They may conclude that we ran for it right after we got their boy — hermaphrodite, I mean; the fake 'ranger' — what do you think?"

"Jake, I wouldn't have been surprised had we been clobbered at any moment. Since they didn't — Well, I don't like to handle Gay when I'm not sharp. More mistakes are made in battle through fatigue than from any other cause. Let's sack in. Anybody need a sleeping pill?"

"All I need is a bed. Hilda my love, tonight I sleep on my own side."

I said, "Can't I even cuddle up your back?"

"Promise not to tickle?"

I made a face at my darling. "I promise."

"Zebadiah," Deety said. "I don't want to cuddle; I want to be *held*… so I'll know I'm safe. For the first time since my twelfth birthday I don't feel sexy."

"Princess, it's settled; we sleep. But I suggest that we be up before daylight. Let's not crowd our luck."

"Sensible," agreed Jacob.

I shrugged. "You men have to pilot; Deety and I are cargo. We can nap in the back seats — if we miss a few universes, what of it? If you've seen one universe, you've seen 'em all. Deety?"

"If it were up to me, I would lam out of here so fast my shoes would be left standing. But Zebadiah has to pilot and Pop has to set verniers… and both are tired and don't want to chance it. But, Zebadiah... don't fret if I rest with my eyes and ears open."

"Huh? Deety — *why?"*

"Somebody ought to be on watch. It might give us that splitsecond advantage — split seconds have saved us at least twice. Don't worry, darling; I often skip a night to work a long program under shared time. Doesn't hurt me; a nap next day and I'm ready to bite rattlesnakes. Tell him, Pop."

"That's correct, Zeb, but —"

Zebbie cut him off. "Maybe you gals can split watches and have breakfast ready. Right now I've got to hook up Gay Deceiver so that she can reach me in our bedroom. Deety, I can add a program so that she can listen around the cabin, too. Properly programmed, Gay's the best watch dog of any of us. Will that satisfy you duty-struck little broads?"

Deety said nothing so I kept quiet. Zebbie, frowning, turned back to his car, opened a door and prepared to hook Gay's voice and ears to the three house intercoms. "Want to shift the basement talky-talk to your bedroom, Jake?"

"Good idea," Jacob agreed.

"Wait a half while I ask Gay what she has. Hello, Gay."

"Howdy, Zeb. Wipe off your chin."

"Program. Running new retrievals. Report new items since last report."

"Null report, Boss."

"Thank you, Gay."

"You're welcome, Zeb."

"Program, Gay. Add running news retrieval. Area, Arizona Strip north of Grand Canyon plus Utah. Persons: all persons listed in current running news retrieval programs plus rangers, Federal rangers, forest rangers, park rangers, state rangers. End of added program."

"New program running, Boss."

"Program. Add running acoustic report, maximum gain."

"New program running, Zeb."

"You're a smart girl, Gay."

"Isn't it time you married me?"

"Good night, Gay."

"Good night, Zeb. Sleep with your hands outside the covers."

"Deety, you've corrupted Gay. I'll run a lead outdoors for a microphone while Jake moves the basement intercom to the master bedroom. But maximum gain will put a coyote yapping ten miles away right into bed with you. Jake, I can tell Gay to subtract acoustic report from the news retrieval for your bedroom."

"Hilda my love, do you want the acoustic subtracted?"

I didn't but didn't say so; Gay interrupted:

"Running news retrieval, Boss."

"Report!"

"Reuters, Straits Times, Singapore. Tragic News of Marston Expedition. Indonesian News Service, Palembang. Two bodies identified as Dr. Cecil Yang and Dr. Z. Edward Carter were brought by jungle buggy to National Militia Headquarters, Telukbetung. The district commandant stated that they will be transferred by air to Palembang for further transport to Singapore when the commandant-in-chief releases them to the Minister of Tourism and Culture. Professor Marston and Mr. Smythe-Belisha are still unreported. Commandants of both districts concede that hopes of finding them alive have diminished. However, a spokesman for the Minister of Tourism and Culture assured a press conference that the Indonesian government would pursue the search more assiduously than ever."

Zebbie whistled tunelessly. Finally, he said, "Opinions, anyone?"

"He was a brilliant man, Son," my husband said soberly. "An irreplaceable loss. Tragic."

"Ed was a good Joe, Jake. But that's not what I mean. Our tactical situation. *Now. Here."*

My husband paused before answering, "Zeb, whatever happened in Sumatra apparently happened about a month ago. Emotionally I feel great turmoil. Logically I am forced to state that I cannot see that our situation has changed."

"Hilda? Deety?"

"News retrieval report," announced Gay.

"Report!"

"AP San Francisco via satellite from Saipan, Marianas. TWA hypersonicsemiballistic liner *Winged Victory* out of San Francisco International at twenty o'clock this evening Pacific Coast Time was seen by eye and radar to implode on reentry. AP Honolulu US Navy Official. USS Submersible Carrier *Flying Fish* operating near Wake Island has been ordered to proceed flank speed toward site of *Winged Victory reentry.* She will surface and launch search craft at optimum point. Navy PIO spokesman, when asked what was 'optimum,' replied 'No comment.' Associated Press's military editor noted that submerged speed of *Flying Fish* class, and type and characteristics of craft carried, are classified information. AP-UPI add San Francisco, *Winged Victory* disaster. TWA public relations released a statement quote if reports received concerning *Winged Victory* are correct it must be tentatively assumed that no survivors can be expected. But our engineering department denies that implosion could be cause. Collision with orbital debris decaying into atmosphere or even a strike by a meteor could repeat could endrep cause disaster by mischance so unlikely that it can only be described as an Act of God endquote TWA spokesmen released passenger list by order of the Civil Aerospace Board. List follows: California —"

The list was longish. I did not recognize any names until Gay reached: "Doctor Neil O. Brain —"

I gasped. But no one said a word until Gay announced:

"End running news retrieval."

"Thank you, Gay."

"A pleasure, Zeb."

Zebbie said, "Professor?"

"You're in command, Captain!"

"Very well, sir! All of you — lifeboat rules! I expect fast action and no back talk. Estimated departure — five minutes! First everybody take a pee! Second, put on the clothes you'll travel in. Jake, switch off, lock up — whatever you do to secure your house for long absence. Deety — follow Jake, make sure he hasn't missed anything — then *you,* not Jake, switch out lights and close doors. Hilda, bundle what's left of that Dutch lunch and fetch it — fast, not fussy. Check the refrigerator for solid foods — no liquids — and cram what you can into Gay's refrigerator. Don't dither over choices. Questions, anyone? Move!"

I gave Jacob first crack at our bathroom because the poor dear tenses up; I used the time to slide sandwiches into a freezer sack and half a pie into another. Potato salad? Scrape it into a third and stick in one plastic picnic spoon; germs were now community property. I stuffed this and some pickles into the biggest freezer sack Deety stocked, and closed it.

Jake came out of our bedroom; I threw him a kiss *en passant,* ducked into our john, turned on water in the basin, sat down, and recited mantras — that often works when I'm jumpy — then used the bidet — patted it and told it goodbye without stopping. My travel clothes were Deety's baby tennis shoes with a green-and-gold denim miniskirt dress of hers that came to my knees but wasn't too dreadful with a scarf to belt it. Panties? I had none. Deety had put a pair of hers out for me — but her size would fall off me. Then I saw that the dear baby had gotten at the elastic and knotted it. Yup! pretty good fit — and, with no telling when our next baths would be, panties were practical even though a nuisance.

I spread my cape in front of the refrigerator, dumped my purse and our picnic lunch into it, started salvaging — half a boned ham, quite a bit of cheese, a loaf and a half of bread, two pounds of butter (freezer sacks, and the same for the ham — if Deety hadn't had a lavish supply of freezer sacks I could not have salvaged much — as it was, I didn't even get spots on my cape). I decided that jams and jellies and catsup were liquid within Zebbie's meaning — except some in squeeze tubes.

Half a chocolate cake, and the cupboard was bare.

By using my cape as a Santa Claus pack, I carried food into the garage and put it down by Gay — and was delighted to find that I was first.

Zebbie strode in behind me, dressed in a coverall with thigh pockets, a pilot suit. He looked at the pile on my cape. "Where's the elephant, Sharpie?"

"Cap'n Zebbie, you didn't say how *much,* you just said *what.* What won't go *she* can have." I hooked a thumb at the chopped-up corpse.

"Sorry, Hilda; you are correct." Zebbie glanced at his wrist watch, the multiple-dial sort they call a "navigator's watch."

"Cap'n, this house has loads of gimmicks and gadgets and bells and whistles. You gave them an impossible schedule."

"On purpose, dear. Let's see how much food we can stow."

Gay's cold chest is set flush in the deck of the driver's compartment. Zebbie told Gay to open up, then with his shoulders sideways, reached down and unlocked it. "Hand me stuff."

I tapped his butt. "Out of there, you overgrown midget, and let Sharpie pack. I'll let you know when it's tight as a girdle."

Space that makes Zebbie twist and grunt is roomy for me. He passed things in, I fitted them for maximum stowage. The third item he handed me was the leavings of our buffet dinner. "That's our picnic lunch," I told him, putting it on his seat.

"Can't leave it loose in the cabin."

"Cap'n, we'll eat it before it can spoil. I will be strapped down; is it okay if I clutch it to my bosom?"

"Sharpie, have I ever won an argument with you?"

"Only by brute force, dear. Can the chatter and pass the chow."

With the help of God and a shoehorn it all went in. I was in a back seat with our lunch in my lap and my cape under me before our spouses showed up. "Cap'n Zebbie? Why did the news of Brainy's death cause your change of mind?"

"Do you disapprove, Sharpie?"

"On the contrary, Skipper. Do you want my guess?"

"Yes."

"*Winged Victory* was booby-trapped. And dear Doctor Brain, who isn't the fool I thought he was, was not aboard. Those poor people were killed so that he could disappear."

"Go to the head of the class, Sharpie. Too many coincidences… and they — the 'Blokes in the Black Hats' — know where we are."

"Meaning that Professor No Brain, instead of being dead in the Pacific, might show up any second."

"He and a gang of green-blooded aliens who don't like geometers."

"Zebbie, what do you figure their plans are?"

"Can't guess. They might fumigate this planet and take it. Or conquer us as cattle or as slaves. The only data we have is that they are alien, that they are powerful — and that they have no compunction about killing us. So I have no compunction about killing them. To my regret, I don't know how. So I'm running — running scared — and taking the three I'm certain are in danger with me."

"Will we *ever* be able to find them and kill them?"

Zebbie didn't answer because Deety and my Jacob arrived, breathless. Father and daughter were in jump suits. Deety looked chesty and cute; my darling looked trim — but worried. "We're late. Sorry!"

"You're not late," Zeb told them. "But into your seats on the bounce."

"As quick as I open the garage door and switch out the lights."

"Jake, Jake — Gay is now programmed to do those things herself. In you go, Princess, and strap down. Seat belts, Sharpie. Copilot, after you lock the starboard door, check its seal all the way around by touch before you strap down."

"Wilco, Cap'n." It tickled me to hear my darling boning military. He had told me privately that he was a reserve colonel of ordnance — but that Deety had promised not to tell this to our smart young captain and that he wanted the same promise from me — because the T.O. was as it should be; Zeb should command while Jacob handled spacetime controls — to each his own. Jacob had asked me to please take orders from Zeb with no back talk… which had miffed me a little. I was an unskilled crew member; I am not stupid, I knew this. In direst emergency I would try to get us home. But even Deety was better qualified than I.

Checkoffs completed, Gay switched off lights, opened the garage door, and backed out onto the landing flat.

"Copilot, can you read your verniers?"

"Captain, I had better loosen my chest belt."

"Do so if you wish. But your seat adjusts forward twenty centimeters — here, I'll get it." Zeb reached down, did something between their seats. "Say when."

"There — that's about right. I can read 'em and reach 'em, with chest strap in place. Orders, sir?"

"Where was your car when you and Deety went to the spacetime that lacked the letter 'J'?"

"About where we are now."

"Can you send us there?"

"I think so. Minimum translation, positive — entropy increasing — along *Tau* axis."

"Please move us there, sir."

My husband touched the controls. "That's it, Captain."

I couldn't see any change. Our house was still a silhouette against the sky, with the garage a black maw in front of us. The stars hadn't even flickered.

Zebbie said, "Let's check," and switched on Gay's roading lights, brightly lighting our garage. Empty and looked normal.

Zebbie said, *"Hey!* Look at *that!"*

"Look at *what?"* I demanded, and tried to see around Jacob.

"At nothing, rather. Sharpie, where's your alien?"

Then I understood. No corpse. No green-blood mess. Workbench against the wall and flood lights not rigged.

Zebbie said, "Gay Deceiver, take us home!"

Instantly the same scene… but with carved-up corpse. I gulped.

Zebbie switched out the lights. I felt better but not much.

"Captain?"

"Copilot."

"Wouldn't it have been well to have checked for that letter 'J'? It would have given me a check on calibration."

"I did check, Jake."

"Eh?"

"You have bins on the back of your garage neatly stenciled. The one at left center reads 'Junk Metal."

"Oh!"

"Yes, and your analog in that space — your twin, Jake-prime, or what you will — has your neat habits. The left-corner bin read 'Iunk Metal' spelled with an 'I.' A cupboard above and to the right contained 'Iugs & Iars.' So I told Gay to take us home. I was afraid they might catch us. Embarrassing."

Deety said, "Zebadiah — I mean 'Captain' — embarrassing how, sir? Oh, that missing letter in the alphabet scared me but it no longer does. Now I'm nervous about aliens. 'Black Hats.'"

"Deety, you were lucky that first time. Because Deety-prime was not at home. But she may be, tonight. Possibly in bed with her husband, named Zebadiah-prime. Unstable cuss. Likely to shoot at a strange car shining lights into his father-in-law's garage. A violent character."

"You're teasing me."

"No, Princess; it did worry me. A parallel space, with so small a difference as the lack of one unnecessary letter, but with house and grounds you mistook for your own, seems to imply a father and daughter named 'Iacob' and 'Deiah Thoris." (Captain Zebbie pronounced the names 'Yacob' and 'Deyah Thoris.')

"Zebadiah, that scares me almost as much as aliens."

"Aliens scare me far more. Hello, Gay."

"Howdy, Zeb. Your nose is runny."

"Smart Girl, one gee vertically to one klick. Hover."

"Roger dodger, you old codger."

We rested on our backs and head rests for a few moments, then with the stomach-surging swoosh of a fast lift, we leveled off and hovered. Zebbie said, "Deety, can the autopilot accept a change in that homing program by voice? Or does it take an offset in the verniers?"

"What do you want to do?"

"Same ell-and-ell two klicks above ground."

"I think so. Shall I? Or do you want to do it, Captain?"

"You try it, Deety."

"Yes, sir. Hello, Gay."

"Hi, Deety!"

"Program check. Define 'Home."

"'Home.' Cancel any-all inertials transitions translations rotations. Return to preprogrammed zero latitude longitude, ground level."

"Report present location."

"One klick vertically above 'Home."

"Gay. Program revision."

"Waiting, Deety."

"Home program. Cancel 'Ground level.' Substitute 'Two klicks above ground level, hovering."

"Program revision recorded."

"Gay Deceiver, take us home!"

Instantly, with no feeling of motion, we were much higher.

Zeb said, "Two klicks on the nose! Deety, you're a smart girl!"

"Zebadiah, I bet you tell that to all the girls."

"No, just to some. Gay, you're a smart girl."

"Then why are you shacked up with that strawberry blonde with the fat knockers?"

Zebbie craned his neck and looked at me. "Sharpie, that's your voice."

I ignored him with dignity. Zebbie drove south to the Grand Canyon, eerie in starlight. Without slowing, he said, "Gay Deceiver, take us home!" — and again we were hovering over our cabin. No jar, no shock, no nothing.

Zebbie said, "Jake, once I figure the angles, I'm going to quit spending money on juice. How does she do it when we haven't been anywhere? — no rotation, no translation."

"I may have given insufficient thought to a trivial root in equation ninety-seven. But it is analogous to what we were considering doing with planets. A five-dimensional transform simplified to three."

"'I dunno, I just work here,'" Captain Zebbie admitted. "But it looks like we will be peddling gravity and transport, as well as real estate and time. Burroughs and Company, Space Warps Unlimited — 'No job too large, no job too small.' Send one newdollar for our free brochure."

"Captain," suggested Jacob, "would it not be prudent to translate into another space before experimenting further? The alien danger is still with us — is it not?"

Zebbie sobered at once. "Copilot, you are right and it is your duty to advise me when I goof off. However, before we leave, we have one duty we *must* carry out."

"Something more urgent than getting our wives to safety?" my Jacob asked — and I felt humble and proud.

"'Something more urgent.' Jake, I've bounced her around not only to test but to make it hard to track us. Because we must break radio silence. To warn our fellow humans."

"Oh. Yes, Captain. My apologies, sir. I sometimes forget the broader picture."

"Don't we all! I've wanted to run and hide ever since this rumpus started. But that took preparation and the delay gave me time to think. Point number one: We don't know how to fight these critters so we *must* take cover. Point number two: We are duty-bound to tell the world what we know about aliens. While that little isn't much — we've stayed alive by the skin of our teeth — if five billion people are watching for them, they can be caught. I hope."

"Captain," asked Deety, "may I speak?"

"Of course! Anyone with ideas about how to cope with these monsters *must* speak."

"I'm sorry but I don't have such ideas. You must warn the world, sir — of course! But you won't be believed."

"I'm afraid you're right, Deety. But they don't have to believe *me*. That monster in the garage speaks for itself. I'm going to call rangers — *real* rangers! — to pick it up."

I said, "So that was why you told me just to leave it! I thought it was lack of time."

"Both, Hilda. We didn't have time to sack that cadaver and store it in the freezer room. But, if I can get rangers — real rangers — to that garage before 'Black Hats' get there, that corpse tells its own story: an undeniable alien lying in its goo on a ranger's uniform that has been cut away from it. Not a 'close encounter' UFO that can be explained away, but a creature more startling than the duckbill platypus ever was. But we have to hook it in with other factors to show them what to look for. Your booby-trapped car, an arson case in Logan, Professor Brain's convenient disappearance, my cousin's death in Sumatra — and your six-dimensional non-Euclidean geometry."

I said, "Excuse me, gentlemen. Can't we move somewhere away from right over our cabin before you break silence? I'm jumpy —

'Black Hats' are hunting us."

"You're right, Sharpie; I'm about to move us. The story isn't long — all but the math — so I taped a summary while the rest of you were getting ready. Gay will speed-zip it, a hundred to one." Zebbie reached for the controls. "All secure?"

"Captain Zebadiah!"

"Trouble, Princess?"

"May I attempt a novel program? It may save time."

"Programming is your pidgin. Certainly."

"Hello, Gay."

"Hi, Deety!"

"Retrieve last program. Report execute code."

"Reporting, Deety. 'Gay Deceiver, take us home!'"

"Negative erase permanent program controlled by execute-code Gay Deceiver take us home. Report confirm."

"Confirmation report. Permanent program execute-coded Gay Deceiver take us home negative erase. I tell you three times."

"Deety," said Zeb, "a neg scrub to Gay tells her to place item in perms three places. Redundancy safety factor."

"Don't bother me, dear! She and I sling the same lingo. Hello, Gay."

"Hello, Deety!"

"Analyze latest program execute-coded Gay Deceiver take us home. Report."

"Analysis complete."

"Invert analysis."

"Null program."

Deety sighed. "Typing a program is easier. New program."

"Waiting, Deety."

"Execute-code new permanent program. Gay Deceiver, countermarch! At new execute-code, repeat reversed in real time latest sequence inertials transitions translations rotations before last use of program execute-code Gay Deceiver take us home."

"New permanent program accepted."

"Gay, I tell you three times."

"Deety, I hear you three times."

"Gay Deceiver — countermarch!"

Instantly we were over the Grand Canyon, cruising south. I saw Zeb reach for the manual controls. "Deety, that was slick."

"I didn't save time, sir — I goofed. Gay, you're a smart girl."

"Deety, don't make me blush."

"You're both smart girls," said Captain Zebbie. "If anyone had us on radar, he must think he's getting cataracts. Vice versa, if anyone picked us up here, he's wondering how we popped up. Smart dodge, dear. You've got Gay Deceiver so deceptive that nobody can home on us. We'll be elsewhere."

"Yes — but I had something else in mind, too, my Captain."

"Princess, I like your ideas. Spill it."

"Suppose we used that homing preprogram and went from frying pan into fire. It might be useful to have a preprogram that would take us back into the frying pan, then do something else quickly. Should I try to think up a third escape-maneuver preprogram?"

"Sure — but discuss it with the court magician, your esteemed father — not me. I'm just a sky jockey."

"Zebadiah, I will not listen to you disparage yours —"

"Deety! Lifeboat rules. Jake, are your professional papers aboard? Both theoretical and drawings?"

"Why, no, Zeb — Captain. Too bulky. Microfilms I brought. Originals are in the basement vault. Have I erred?"

"Not a bit! Is there *any* geometer who gave your published paper on this six-way system a friendly reception?"

"Captain, there aren't more than a handful of geometers capable of judging my postulate system without long and intensive study. It's too unorthodox. Your late cousin was one — a truly brilliant mind! Uh… I now suspect that Doctor Brain understood it and sabotaged it for his own purposes."

"Jake, is there *anyone* friendly to you and able to understand the stuff in your vault? I'm trying to figure out how to warn our fellow humans. A fantastic story of apparently unrelated incidents is not enough. Not even with the corpse of an extraterrestrial to back it up. You should leave mathematical theory and engineering drawings to someone able to understand them and whom you trust. *We* can't handle it; every time we stick our heads up, somebody takes a shot at us and we have *no* way to fight back. It's a job that may require our whole race. Well? Is there a man you can trust as your professional executor?"

"Well… one, perhaps. Not my field of geometry but brilliant. He did write me a most encouraging letter when I published my first paper — the paper that was so sneered at by almost everyone except your cousin and this one other. Professor Seppo Rãikannonen. Turku. Finland."

"Are you certain *he's* not an alien?"

"What? He's been on the faculty at Turku for years! Over fifteen."

I said, "Jacob… that is about how long Professor Brain was around."

"But — " My husband looked around at me and suddenly smiled. "Hilda my love, have you ever taken sauna?"

"Once."

"Then tell our Captain why I am sure that my friend Seppo is not an alien in disguise. I — Deety and I — attended a professional meeting in Helsinki last year. After the meeting we visited their summer place in the Lake Country… and took sauna with them."

"Papa, Mama, and three kids." agreed Deety. "Unmistakably human."

"'Brainy' was a bachelor," I added thoughtfully. "Cap'n Zebbie, wouldn't disguised aliens have to be bachelors?"

"Or single women. Or pseudo-married couples. No kids, the masquerade wouldn't hold up. Jake, let's try to phone your friend. Mmm, nearly breakfast time in Finland — or we may wake him. That's better than missing him."

"Good! My comcredit number is Nero Aleph —"

"Let's try mine. Yours might trigger something… if 'Black Hats' are as smart as I think they are. Smart Girl."

"Yes, Boss."

"Don Ameche."

"To hear is to obey, O Mighty One."

"Deety, you've been giving Gay bad habits."

Shortly a flat male voice answered, "The communications credit number you have cited is not a valid number. Please refer to your card and try again. This is a recording."

Zebbie made a highly unlikely suggestion. "Gay *can't* send out my comcredit code incorrectly; she has it tell-me-three-times. The glitch is in *their* system. Pop, we have to use yours."

I said, "Try mine, Zebbie. My comcredit is good; I predeposit."

A female voice this time: " — not a valid number. Puhlease refer to your card and try again. This is a recording."

Then my husband got a second female voice: " — try again. This is a recording."

Deety said, "I don't have one. Pop and I use the same number."

"It doesn't matter," Cap'n Zebbie said bitterly. "These aren't glitches. We've been scrubbed. Unpersons. We're all dead."

I didn't argue. I had suspected that we were dead since the morning two weeks earlier when I woke up in bed with my cuddly new husband. But how *long* had we been dead? Since my party? Or more recently?

I didn't care. This was a better grade of heaven than a Sunday School in Terre Haute had taught me to expect. While I don't think I've been outstandingly wicked, I haven't been very good either. Of the Ten Commandments I've broken six and bent some others. But Moses apparently had not had the last Word from on High — being dead was weird and wonderful and I was enjoying every minute… or eon, as the case may be.

Chapter XIII

Being too close to a fireball can worry a man —

Zeb:

Not being able to phone from my car was my most frustrating experience since a night I spent in jail through mistake (*I* made the mistake). I considered grounding to phone — but the ground did not seem healthy. Even if all of us were presumed dead, nullifying our comcredit cards so quickly seemed unfriendly; all of us had high credit ratings.

Canceling Sharpie's comcredit without proof of death was more than unfriendly; it was outrageous as she used the predeposit method.

I was forced to the decision that it was my duty to make a military report; I radioed NORAD, stated name, rank, reserve commission serial number, and asked for scramble for a crash priority report.

— and ran into "correct" procedure that causes instant ulcers. What was my clearance? What led me to think that I had crash priority intelligence? By what authority did I demand a scramble code? Do you know how many screwball calls come in here every day? Get off this frequency; it's for official traffic only. One more word out of you and I shall alert the civil sky patrol to pick you up.

I said one more word after I chopped off. Deety and her father ignored it; Hilda said, "My sentiments exactly!"

I tried the Federal Rangers Kaibab Barracks at Jacob Lake, then the office at Littlefield and back to Kaibab. Littlefield didn't answer; Jacob Lake answered: "This is a recording. Routine messages may be recorded during beep tone. Emergency reports should be transmitted to Flagstaff HQ. Stand by for beep tone… Beep!… Beep!… Beep!"

I was about to tell Gay to zip my tape — when the whole world was lighted by the brightest light imaginable.

Luckily we were cruising south with that light behind us. I goosed Gay to flank speed while telling her to tuck in her wings. Not one of my partners asked a foolish question, although I suspect that none had ever seen a fireball or mushroom cloud.

"Smart Girl."

"Here, Boss."

"DR problem. Record true bearing light beacon relative bearing astern. Record radar range and bearing same beacon. Solve latitude longitude beacon. Compare solution with fixes in perms. Confirm."

"Program confirmed."

"Execute."

"Roger Wilco, Zeb. Heard any new ones lately?" She added at once, "Solution. True bearing identical with fix execute-coded 'Gay Deceiver take us home.' True range identical plus-minus zero point six klicks."

"You're a smart girl, Gay."

"Flattery will get you anywhere, Zeb. Over."

"Roger and out. Hang onto your hats, folks; we're going straight up." I had outraced the shock wave but we were close to the Mexican border; either side might send sprint birds homing on us. "Copilot!"

"Captain."

"Move us! Out of this space!"

"Where, Captain?"

"Anywhere! *Fast!*"

"Uh, can you ease the acceleration? I can't lift my arms."

Cursing myself, I cut power, let Gay Deceiver climb free. Those vernier controls should have been mounted on arm rests. (Designs that look perfect on the drawing board can kill test pilots.)

"Translation complete, Captain."

"Roger, Copilot. Thank you." I glanced at the board: six-plus klicks height-above-ground and rising — thin but enough air to bite. "Hang onto our lunch, Sharpie!" I leaned us backwards while doing an Immelman into level flight, course north, power still off. I told Gay to stretch the glide, then tell me when we had dropped to three klicks H-above-G.

What should be Phoenix was off to the right; another city — Flagstaff? — farther away, north and a bit east; we appeared to be headed home. There was no glowing cloud on the horizon. "Jake, where are we?"

"Captain, I've never been in this universe. We translated ten quanta positive *Tau* axis. So we should be in analogous space close to ours — ten minimum intervals or quanta."

"This looks like Arizona."

"I would expect it to, Captain. You recall that one-quantum translation on this axis was so very like our own world that Deety and I confused it with our own, until she picked up a dictionary."

"Phone book, Pop."

"Irrelevant, dear. Until she missed the letter 'J' in an alphabetical list. Ten quanta should not change geological features appreciably and placement of cities is largely controlled by geography."

"Approaching three klicks, Boss."

"Thanks, Gay. Hold course and H-above-G. Correction! Hold course and absolute altitude. Confirm and execute."

"Roger Wilco, Zeb."

I had forgotten that the Grand Canyon lay ahead — or should. "Smart Girl" *is* smart, but she's literal-minded. She would have held height-above-ground precisely and given us the wildest rollercoaster ride in history. She is very flexible but the "garbage-in-garbage-out" law applies. She had many extra fail-safes — because I make mistakes. Gay *can't;* anything she does wrong is *my* mistake. Since I've been making mistakes all my life, I surrounded her with all the safeguards I could think of. But she had no program against wild rides — she was beefed up to accept them. Violent evasive tactics had saved our lives two weeks ago, and tonight as well. Being too close to a fireball can worry a man — to death.

"Gay, display map, please."

The map showed Arizona — *our* Arizona; Gay does not have in her gizzards any strange universes. I changed course to cause us to pass over our cabin site — its analog for this spacetime. (Didn't dare tell her: "Gay, take us home!" — for reasons left as an exercise for the class.) "Deety, how long ago did that bomb go off?"

"Six minutes twentythree seconds. Zebadiah, was that *really* an A-bomb?"

"Pony bomb, perhaps. Maybe two kilotons. Gay Deceiver."

"I'm all ears, Zeb."

"Report time interval since radar-ranging beacon."

"Five minutes forty-four seconds, Zeb."

Deety gasped. "Was I that far off?"

"No, darling. You reported time since flash. I didn't ask Gay to range until *after* we were hypersonic."

"Oh. I feel better."

"Captain," inquired Jake, "how did Gay range an atomic explosion? I would expect radiation to make it impossible. Does she have instrumentation of which I am not aware?"

"Copilot, she has several gadgets I have not shown you. I have not been holding out — any more than you held out in not telling me about guns and ammo you —"

"My apologies, sir!"

"Oh, stuff it, Jake. Neither of us held out; we've been running under the whip. Deety, how long has it been since we killed that fake ranger?"

"That was seventeen fourteen. It is now twentytwo twenty. Five hours six minutes,"

I glanced at the board; Deety's "circadian clock" apparently couldn't be jarred by anything; Gay's clock showed 0520 (Greenwich) with "ZONE PLUS SEVEN" display. "Call it five hours — feels like five weeks. We need a vacation."

"Loud cheers!" agreed Sharpie.

"Check. Jake, I didn't *know* that Gay could range an atomic blast. Light 'beacon' means a visible light to her just as 'radar beacon' means to her a navigational radar beacon. I told her to get a bearing on the light beacon directly aft; she selected the brightest light with that bearing. Then I told her to take radar range and bearing on it — spun my prayer wheel and prayed.

"There was 'white noise' possibly blanketing her radar frequency. But her own radar bursts are tagged; it would take a *very* high noise level at the same frequency to keep her from recognizing echoes with her signature. Clearly she had trouble for she reported 'plus-minus' of six hundred meters. Nevertheless range and bearing matched a fix in her permanents and told us our cabin had been bombed. Bad news. But the aliens got there too late to bomb *us.* Good news."

"Captain, I decline to grieve over material loss. We are *alive."*

"I agree — although I'll remember Snug Harbor as the happiest home I've ever had. But there is no point in trying to warn Earth — *our* Earth — about aliens. That blast destroyed the clincher: that alien's cadaver. And papers and drawings you were going to turn over to your Finnish friend. I'm not sure we can go home again."

"Oh, that's no problem, Captain. Two seconds to set the verniers. Not to mention the 'deadman switch' and the program in Gay's permanents."

"Jake, I wish you would knock off 'Captain' other than for command conditions."

"Zeb, I like calling you 'Captain."

"So do I! — my Captain."

"Me, too, Cap'n Zebbie!"

"Don't overdo it. Jake, I didn't mean that you can't pilot us home; I mean we should not risk it. We've lost our last lead on the aliens. But *they* know who *we* are and have shown dismaying skill in tracking us down. I'd like to live to see two babies born and grown up."

"Amen!" said Sharpie. "This might be the place for it. Out of a million billion zillion earths this one may be vermin-free. Highly likely."

"Hilda my dear, there are no data on which to base *any* assumption."

"Jacob, there is one datum."

"Eh? What did I miss, dear?"

"That we *do* know that our native planet *is* infested. So I don't want to raise kids on it. If this isn't the place we're looking for, let's keep looking."

"Mmm, logical. Yes. Cap — Zeb?"

"I agree. But we can't tell much before morning. Jake, I'm unclear on a key point. If we translated back to our own earth now, where would we find ourselves? And *when?"*

"Pop, may I answer that?"

"Go ahead, Deety."

"The time Pop and I translated to the place with no 'J' we thought we had failed. Pop stayed in our car, trying to figure it out. I went inside, intending to fix lunch. Everything looked normal. But the phone book was on the kitchen counter and doesn't belong there. That book had a toll area map on its back cover. My eye happened to land on 'Juab County' — and it was spelled 'Iuab' — and I thought, 'What a funny misprint!' Then I looked inside and couldn't find any 'J's' and dropped the book and went running for Pop."

"I thought Deety was hysterical. But when I checked a dictionary and the Britannica we got out in a hurry."

"This is the point, Zebadiah. When we flipped back, I dashed into the house. The phone book was where it belonged. The alphabet was back the way it ought to be. The clock in my head said that we had been gone twenty-seven minutes. The kitchen clock confirmed it and it agreed with the clock in the car. Does that answer you, sir?"

"I think so. In a translation, duration just keeps chugging along. I wondered because I'd like to check that crater after it has had time to cool down. What about that one rotation?"

"Harder to figure, Zebadiah. We weren't in that other spacetime but a few seconds and we both passed out. Indeterminate."

"I'm convinced. But, Jake, what about Earth's proper motions? Rotation, revolution around the Sun, sidereal motion, and so forth."

"A theoretical answer calls for mathematics you tell me are outside your scope of study, uh — Zeb."

"Beyond my capacity, you mean."

"As you will, sir. An excursion elsewhere-and-else*when*… and *return*… brings you back *to where you would have been* had you experienced that duration *on earth.* But *'when'* requires further definition. As we were discussing, uh… earlier this afternoon but it seems longer, we can adjust the controls to reenter any axis at *any* point *with permanent change of interval.* For planetary engineering. Or other purposes. Including reentry reversed against the entropy arrow. But I suspect that would cause death."

"Why, Pop? Why wouldn't it just reverse your memory?"

"Memory is tied to entropy increase, my darling daughter. Death might be preferable to amnesia combined with prophetic knowledge. Uncertainty may be the factor that makes life tolerable. Hope is what keeps us going. Captain!"

"Copilot."

"We have just passed over North Rim."

"Thank you, Copilot." I placed my hands lightly on the controls.

"Pop, our cabin is still there. Lights in it, too."

"So I see. They've added a wing on the west."

"Yes. Where we discussed adding a library."

I said, "Family, I'm not going closer. Your analogs in this world seem to be holding a party. Flood lights show four cars on the grounding flat." I started Gay into a wide circle. "I'm not going to hover; it could draw attention. A call to their sky cops — Hell's bells, I don't even know that they speak English."

"Captain, we've seen all we need. It's not *our* cabin."

"Recommendation?"

"Sir, I suggest maximum altitude. Discuss what to do while we get there."

"Gay Deceiver."

"On deck, Captain Ahab."

"One gee, vertical."

"Aye aye, sir." (How many answers had Deety taped?)

"Anybody want a sandwich?" asked Sharpie. "I do — I'm a pregnant mother."

I suddenly realized that I had had nothing but a piece of pie since noon. As we climbed we finished what was left of supper.

"Zat Marsh?"

"Don't talk with your mouth full, Sharpie."

"Zebbie you brute, I said, 'Is that Mars?' Over there."

"That's Antares. Mars is — Look left about thirty degrees. See it? Same color as Antares but brighter."

"Got it. Jacob darling, let's take that vacation on Barsoom!"

"Hilda dearest, Mars is uninhabitable. The Mars Expedition used pressure suits. We have no pressure suits."

I added, "Even if we did, they would get in the way of a honeymoon."

Hilda answered, "I read a jingle about 'A Space Suit Built for Two.' Anyhow, let's go to Barsoom! Jacob, you did tell me we could go anywhere in *Zip* — nothing flat."

"Quite true."

"So let's go to Barsoom."

I decided to flank her. "Hilda, we can't go to Barsoom. Mors Kajak and John Carter don't have their swords."

"Want to bet?" Deety said sweetly.

"Huh?"

"Sir, you left it to me to pick baggage for that unassigned space. If you'll check that long, narrow stowage under the instrument board, you'll find the sword and saber, with belts. With socks and underwear crammed in to keep them from rattling."

I said soberly, "My Princess, I couldn't moan about my sword when your father took the loss of his house so calmly — but thank you, with all my heart."

"Let me add my thanks, Deety. I set much store by that old saber, unnecessary as it is."

"Father, it was *quite* necessary this afternoon."

"Hi *ho!* Hi *ho!* It's to Barsoom we go!"

"Captain, we *could* use the hours till dawn for a quick jaunt to Mars. Uh — Oh, dear, I have to know its present distance — I don't."

"No problem," I said. "Gay gobbles the Aerospace Almanac each year."

"Indeed! I'm impressed."

"Gay Deceiver."

"You again? I was thinking."

"So think about this. Calculation program. Data address, Aerospace Almanac. Running calculation, line-of-sight distance to planet Mars. Report current answers on demand. Execute."

"Program running."

"Report."

"Klicks two-two-four-zero-nine-zero-eight-two-seven point plus-minus nine-eight-zero."

"Display running report."

Gay did so. "You're a smart girl, Gay."

"I can do card tricks, too. Program continuing."

"Jake, how do we this?"

"Align 'L' axis with your gun sight. Isn't that easiest?"

"By far!" I aimed at Mars as if to shoot her out of the sky — then got cold feet. "Jake? A little Tennessee windage? I think those figures are from center-of-gravity to center-of-gravity. Half a mil would place us a safe distance away. Over a hundred thousand klicks."

"A hundred and twelve thousand," Jake agreed, watching the display.

I offset one half mil. "Copilot."

"Captain."

"Transit when ready. Execute."

Mars in half phase, big and round and ruddy and beautiful, was swimming off our starboard side.

Chapter XIV

"Quit worrying and enjoy the ride."

Deety:

Aunt Hilda said softly, "Barsoom. Dead sea bottoms. Green giants." I just gulped.

"Mars. Hilda darling." Pop gently corrected her. "Barsoom is a myth."

"Barsoom." she repeated firmly. "It's not a myth, it's *there.* Who says its name is Mars? A bunch of long-dead Romans. Aren't the natives entitled to name it? Barsoom."

"My dearest, there *are* no natives. Names are assigned by an international committee sponsored by Harvard Observatory. They confirmed the traditional name."

"Pooh! They don't have any more right to name it than I have. Deety, isn't that right?"

I think Aunt Hilda had the best argument but I don't argue with Pop unless necessary; he gets emotional. My husband saved me.

"Copilot, astrogation problem. How are we going to figure distance and vector? I would like to put this wagon into orbit. But Gay is no spaceship; I don't have instruments. Not even a sextant!"

"Mmm, suppose we try it one piece at a time, Captain. We don't seem to be falling fast and — *ulp!"*

"What's the trouble, Jake!"

Pop turned pale, sweat broke out, he clenched his jaws, swallowed and reswallowed. Then his lips barely opened. "M'sheashick."

"No, you're space sick. *Deety!"*

"Yessir!"

"Emergency kit, back of my seat. Unzip it, get Bonine. One pill — don't let the others get loose."

I got at the first-aid kit, found a tube marked Bonine. A second pill did get loose but I snatched it out of the air. Free fall is funny — you don't know whether you are standing on your head or floating sideways. "Here, Captain."

Pop said, "Mall righ' now. Jus' took all over queer a moment."

"Sure, you're all right. You can take this pill — or you can have it pushed down your throat with my dirty, calloused finger. Which?"

"Uh, Captain, I'd have to have water to swallow it — and I don't think I *can."*

"Doesn't take water, pal. Chew it. Tastes good, raspberry flavor. Then keep gulping your saliva. Here." Zebadiah pinched Pop's nostrils. "Open up."

I became aware of a strangled sound beside me. Aunt Hilda had a hanky pressed to her mouth and her eyes were streaming tears — she was split seconds from adding potato salad and used sandwich to the cabin air.

Good thing I was still clutching that wayward pill. Aunt Hilda struggled but she's a little bitty. I treated her the way my husband had treated her husband, then clamped my hand over her mouth. I don't understand seasickness (or free-fall nausea); I can walk on bulkheads with a sandwich in one hand and a drink in the other and enjoy it.

But the victims really are sick and somewhat out of their heads. So I held her mouth closed and whispered into her ear. "Chew it, Aunty darling, and swallow it, or I'm going to spank you with a club."

Shortly I could feel her chewing. After several minutes she relaxed. I asked her, "Is it safe for me to ungag you?"

She nodded. I took my hand away. She smiled wanly and patted my hand. "Thanks, Deety." She added, "You wouldn't really beat Aunt Sharpie."

"I sure would, darling. I'd cry and cry and wallop you and wallop you. I'm glad I don't have to."

"I'm glad, too. Can we kiss and make up — or is my breath sour?"

It wasn't but I wouldn't have let that stop me. I loosened my chest strap and hers, and put both arms around her. I have two ways of kissing: one is suitable for faculty teas; the other way I mean it. I never got a chance to pick; Aunt Hilda apparently never found out about the faculty-tea sort. No, her breath wasn't sour — just a slight taste of raspberry.

Me, I'm the wholesome type; if it weren't for those advertisements on my chest, men wouldn't give me a second glance. Hilda is a miniature Messalina, pure sex in a small package. Funny how a person can grow up never really believing that the adults you grow up with have sex — just gender. Now my saintly father turns out to be an insatiable goat, and Aunt Hilda, who had babied me and changed my diapers, is sexy enough for a platoon of Marines.

I let her go while thinking pleasant thoughts about teaching my husband technique I had learned — unless Hilda had taught him in the past. No, or he would have taught *me* — and he hadn't shown her style of virtuosity. Zebadiah, just wait till I get you alone!

Which might not be too soon. Gay Deceiver is wonderful but no honeymoon cottage. There was space back of the bulkhead behind my head — like a big phone booth on its side — where Zebadiah kept a sleeping bag and (he says) sometimes sacked out. But it had the spacetime twister in it and nineteen dozen other things. Hilda and I were going to have to repress our primary imperative until our men found us a pied-à-terre on some planet in some universe, somewhere, somewhen.

Mars-Barsoom seemed to have grown while I was curing Aunt Hilda's space sickness. Our men were talking astrogation. My husband was saying, "Sorry, but at extreme range Gay's radar can see a thousand kilos. You tell me our distance is about a hundred times that."

"About. We're falling toward Mars. Captain, we must do it by triangulation."

"Not even a protractor where I can get at it. *How?"*

"Hmmmm — If the Captain pleases, recall how you worked that 'Tennessee windage.'"

My darling looked like a school boy caught making a silly answer. "Jake, if you don't quit being polite when I'm stupid, I'm going to space you and put Deety in the copilot's seat. No, we need you to get us home. I'd better resign and you take over."

"Zeb, a captain *can't* resign while his ship is underway. That's universal."

"This is another universe."

"Transuniversal. As long as you are alive, you are stuck with it. Let's attempt that triangulation."

"Stand by to record." Zebadiah settled into his seat, pressed his head against its rest. "Copilot."

"Ready to record, sir."

"Damn!"

"Trouble, Captain?"

"Some. This reflectosight is scaled fifteen mils on a side, concentric circles crossed at center point horizontally and vertically. Normal to deck and parallel to deck, I mean. When I center the fifteen-mil ring on Mars, I have a border around it. I'm going to have to guesstimate. Uh, the border looks to be about eighteen mils wide. So double that and add thirty."

"Sixty-six mils."

"And a mil is one-to-one-thousand. One-to-one-thousand-and-eighteen and a whisker, actually — but one-to-a-thousand is good enough. Wait a half! I've got two sharp high lights near the meridian — if the polar caps mark the meridian. Le'me tilt this buggy and put a line crossing them — then I'll yaw and what we can't measure in one jump, we'll catch in three."

I saw the larger "upper" polar cap (north? south? well, it *felt* north) roll gently about eighty degrees, while my husband fiddled with Gay's manual controls. "Twenty-nine point five, maybe... plus eighteen point seven... plus sixteen point three. Add."

My father answered, "Sixty-four and a half" while I said, six four point five in my mind and kept quiet.

"Who knows the diameter of Mars? Or shall I ask Gay?"

Hilda answered, "Six thousand seven hundred fifty kilometers, near enough."

Plenty near enough for Zebadiah's estimates. Zebadiah said, "Sharpie! How did you happen to know *that?"*

"I read comic books. You know — 'Zap! Polaris is missing.'"

"I don't read comic books."

"Lots of interesting things in comic books, Zebbie. I thought the Aerospace Force used comic-book instruction manuals."

My darling's ears turned red. "Some are," he admitted, "but they are edited for technical accuracy. Hmm — Maybe I had better check that figure with Gay."

I love my husband but sometimes women must stick together. "Don't bother, Zebadiah," I said in chilly tones. "Aunt Hilda is correct. The polar diameter of Mars is six seven five two point eight plus. But surely three significant figures is enough for your data."

Zebadiah did not answer... but did *not* ask his computer. Instead he said, "Copilot, will you run it off on your pocket calculator? We can treat it as a tangent at this distance."

This time I didn't even try to keep still. Zebadiah's surprise that Hilda knew anything about astronomy caused me pique. "Our height above surface is one hundred four thousand six hundred and seventy-two kilometers plus or minus the error of the data supplied. That assumes that Mars is spherical and ignores the edge effect or horizon bulge... negligible for the quality of your data."

Zebadiah answered so gently that I was sorry that I had shown off: "Thank you, Deety. Would you care to calculate the time to fall to surface from rest at this point?"

"That's an unsmooth integral, sir. I can approximate it but Gay can do it faster and more accurately. Why not ask *her?* But it will be many hours."

"I had hoped to take a better look. Jake, Gay has enough juice to put us into a tight orbit, I think... but I don't know where or when I'll be able to juice her again. If we simply fall, the air will get stale and we'll need the panic button — or *some* maneuver — without ever seeing the surface close up."

"Captain, would it suit you to read the diameter again? I don't think we've simply been falling."

Pop and Zebadiah got busy again. I let them alone, and they ran even the simplest computations through Gay. Presently, Pop said, "Over twenty-four kilometers per second! Captain, at that rate we'll be there in a little over an hour."

"Except that we'll scram before that. But, ladies, you'll get your closer look. Dead sea bottoms and green giants. If any."

"Zebadiah, twenty-four kilometers per second is Mars' orbital speed."

My father answered, "Eh? Why, so it is!" He looked very puzzled, then said, "Captain — I confess to a foolish mistake."

"Not one that will keep us from getting home, I hope."

"No, sir. I'm still learning what our continua craft can do. Captain, we did not aim for Mars."

"I know. I was chicken."

"No, sir, you were properly cautious. *We aimed for a specific point in empty space.* We transited to that point… but *not* with Mars' proper motion. With that of the Solar System, yes. With Earth's motions subtracted; that is in the program. But we are a short distance ahead of Mars in its orbit… so it is rushing toward us."

"Does that mean we can never land on any planet but Earth?"

"Not at all. *Any* vector can be included in the program — either before or after transition, translation or rotation. Any subsequent change in motion is taken into account by the inertial integrator. But I am learning that we still have things to learn."

"Jake, that is true even of a bicycle. Quit worrying and enjoy the ride. Brother, what a view!"

"Jake, that doesn't look like the photographs the Mars Expedition brought back."

"Of course not," said Aunt Hilda. "I *said* it was Barsoom."

I kept my mouth shut. Ever since Dr. Sagan's photographs anyone who reads *The National Geographic* — or anything — knows what Mars looks like. But when it involves changing male minds, it is better to let men reach their own decisions; they become somewhat less pigheaded. That planet rushing toward us was *not* the Mars of our native sky. White clouds at the caps, big green areas that had to be forest or crops, one deep blue area that almost certainly was water — all this against ruddy shades that dominated much of the planet.

What was lacking were the rugged mountains and craters and canyons of "our" planet Mars. There were mountains — but nothing like the Devil's Junkyard known to science.

I heard Zebadiah say, "Copilot, are you certain you took us to Mars?"

"Captain, I took us to Mars-*ten,* via plus on *Tau* axis. Either that or I'm a patient in a locked ward."

"Take it easy, Jake. It doesn't resemble Mars as much as Earth-ten resembles Earth."

"Uh, may I point out that we saw just a bit of Earth-ten, on a moonless night?"

"Meaning we didn't see it. Conceded."

Aunt Hilda said, "I *told* you it was Barsoom. You wouldn't listen."

"Hilda, I apologize. 'Barsoom.' Copilot, log it. New planet, 'Barsoom,' named by right of discovery by Hilda Corners Burroughs, Science Officer of Continua Craft Gay Deceiver. We'll all witness: Z. J. Carter, Commanding — Jacob J. Burroughs, Chief Officer — D. T. B. Carter, uh, Astrogator. I'll send certified copies to Harvard Observatory as soon as possible."

"I'm not astrogator, Zebadiah!"

"Mutiny. Who reprogrammed this cloud buster into a continua craft? I'm pilot until I can train all of you in Gay's little quirks. Jake is copilot until he can train more copilots in setting the verniers. You are astrogator because nobody else can acquire your special knowledge of programming and skill at calculation. None of your lip, young woman, and don't fight the Law of Space. Sharpie is chief of science because of her breadth of knowledge. She not only recognized a new planet as *not* being Mars quicker than anyone else but carved up that double-jointed alien with the skill of a born butcher. Right, Jake?"

"Sure thing!" agreed Pop.

"Cap'n Zebbie," Aunt Hilda drawled, "I'm science officer if you say so. But I had better be ship's cook, too. And cabin boy."

"Certainly, we all have to wear more than one hat. Log it, Copilot. 'Here's to our jolly cabin girl, the plucky little nipper — '"

"Don't finish it. Zebbie," Aunt Hilda cut in, "I don't like the way the plot develops."

' — she carves fake ranger,
'Dubs planet stranger,
'And dazzles crew and skipper.'

Aunt Hilda looked thoughtful. "That's not the classic version. I like the sentiment better… though the scansion limps."

"Sharpie darling, you are a floccinaucinihilipilificatrix."

"Is that a compliment?"

"Certainly! Means you're so sharp you spot the slightest flaw."

I kept quiet. It was possible that Zebadiah meant it as a compliment. Just barely —

"Maybe I'd better check it in a dictionary."

"By all means, dear — after you are off watch." (I dismissed the matter. Merriam Microfilm was all we had aboard and Aunt Hilda would not find that word in anything less than the O.E.D.)

"Copilot, got it logged?"

"Captain, I didn't know we *had* a log."

"No *log?* Even Vanderdecken keeps a log. Deety, the log falls in your department. Take your father's notes, get what you need from

Gay, and let's have a taut ship. First time we pass a Woolworth's we'll pick up a journal and you can transcribe it — notes taken now are your rough log."

"Aye aye, sir. Tyrant."

"'Tyrant,' *sir,* please. Meanwhile let's share the binoculars and see if we can spot any colorful exotic natives in colorful exotic costumes singing colorful exotic songs with their colorful exotic hands out for baksheesh. First one to spot evidence of intelligent life gets to wash the dishes."

Chapter XV

"We'll hit so hard we'll hardly notice it."

Hilda:

I was so flattered by Cap'n Zebbie's crediting me with "discovering" Barsoom that I pretended not to understand the jibe he added. It was unlikely that Deety would know such a useless word, or my beloved Jacob. It was gallant of Zeb to give in all the way, once he realized that this planet was unlike its analog in "our" universe. Zebbie is a funny one — he wears rudeness like a Hallowe'en mask, afraid that someone will discover the Galahad underneath.

I knew that "my" Barsoom was not the planet of the classic romances. But there are precedents: The first nuclear submarine was named for an imaginary undersea vessel made famous by Jules Verne; an aircraft carrier of the Second Global War had been named "Shangri La" for a land as nonexistent as "Erewhon"; the first space freighter had been named for a starship that existed only in the hearts of its millions of fans — the list is endless. Nature copies art.

Or as Deety put it: "Truth is more fantastic than reality."

During that hour Barsoom *rushed* at us. It began to swell and swell, so rapidly that binoculars were a nuisance — and my heart swelled with it, in childlike joy. Deety and I unstrapped so that we could see better, floating just "above" and behind our husbands while steadying ourselves on their headrests.

We were seeing it in half phase, one half dark, the other in sunlight — ocher and umber and olive green and brown and all of it beautiful.

Our pilot and copilot did not sightsee; Zebbie kept taking sights, kept Jacob busy calculating. At last he said, "Copilot, if our approximations are correct, at the height at which we will get our first radar range, we will be only a bit over half a minute from crashing. Check?"

"To the accuracy of our data, Captain."

"Too close. I don't fancy arriving like a meteor. Is it time to hit the panic button? Advise, please — but bear in mind that puts us — *should* put us — two klicks over a hot, new crater… possibly in the middle of a radioactive cloud. Ideas?"

"Captain, we can do that just before crashing — and it either works or it doesn't. If it works, that radioactive cloud will have had more time to blow away. If it doesn't work — "

"We'll hit so hard we'll hardly notice it. Gay Deceiver isn't built to reenter at twenty-four klicks per second. She's beefed up — but she's still a Ford, not a reentry vehicle."

"Captain, I can try to subtract the planet's orbital speed. We've time to make the attempt."

"Fasten seat belts and report! *Move it, gals!"*

Free fall is funny stuff. I was over that deathly sickness — was enjoying weightlessness, but didn't know how to move in it. Nor did Deety. We floundered the way one does the first time on ice skates — only worse.

"Report, damn it!"

Deety got a hand on something, grabbed me. We started getting into seats — she in mine, I in hers. "Strapping down, Captain!" she called out, while frantically trying to loosen my belts to fit her. (I was doing the same in reverse.)

"Speed it up!"

Deety reported, "Seat belts fastened," while still getting her chest belt buckled — by squeezing out all her breath. I reached over and helped her loosen it.

"Copilot."

"Captain!"

"Along 'L' axis, subtract vector twenty-four klicks per second — and for God's sake don't get the signs reversed."

"I won't!"

"Execute."

Seconds later Jacob reported, "That does it, Captain. I hope."

"Let's check. Two readings, ten seconds apart. I'll call the first, you call the end of ten seconds. *Mark!"*

Zeb added, "One point two. Record."

After what seemed a terribly long time Jacob said, "Seven seconds… eight seconds… nine seconds… *mark!"*

Our men conferred, then Jacob said, "Captain, we are still falling too fast."

"Of course," said Deety. "We've been accelerating from gravity. Escape speed for Mars is five klicks per second. If Barsoom has the same mass as Mars —"

"Thank you, Astrogator. Jake, can you trim off, uh, four klicks per second?"

"Sure!"

"Do it."

"Uh… done! How does she look?"

"Uh… distance slowly closing. Hello, Gay."

"Howdy, Zeb."

"Program. Radar. Target dead ahead. Range."

"No reading."

"Continue ranging. Report first reading. Add program. Display running radar ranges to target."

"Program running. Who blacked your eye?"

"You're a Smart Girl, Gay."

"I'm sexy, too. Over."

"Continue program." Zeb sighed, then said, "Copilot, there's atmosphere down there. I plan to attempt to ground. Comment? Advice?"

"Captain, those are words I hoped to hear. Let's go!"

"Barsoom — here we come!"

Chapter XVI

— a maiden knight, eager to break a lance —

Jake:

My beloved bride was no more eager than I to visit "Barsoom." I had been afraid that our captain would do the sensible thing: establish orbit, take pictures, then return to our own spacetime before our air was stale. We were not prepared to explore strange planets. Gay Deceiver was a bachelor's sports car. We had a little water, less food, enough air for about three hours. Our craft refreshed its air by the scoop method. If she made a "high jump," her scoop valves sealed from internal pressure just as did commercial ballistic-hypersonic intercontinental liners — but "high jump" is not space travel.

True, we could go from point to point in our own or any universe in null time, but how many heavenly bodies have breathable atmospheres? Countless billions — but a small fraction of one percent from a practical viewpoint — and no publication lists their whereabouts. We had no spectroscope, no star catalogs, no atmosphere testing equipment, no radiation instruments, no means of detecting dangerous organisms. Columbus with his cockleshells was better equipped than we.

None of this worried me.

Reckless? Do you pause to shop for an elephant gun while an elephant is chasing you?

Three times we had escaped death by seconds. We had evaded our killers by going to earth — and that safety had not lasted. So again we fled like rabbits.

At least once every human should have to run for his life, to teach him that milk does not come from supermarkets, that safety does not come from policemen, that "news" is not something that happens to other people. He might learn how his ancestors lived and that he himself is no different — in the crunch his life depends on his agility, alertness, and personal resourcefulness.

I was not distressed. I felt more alive than I had felt since the death of my first wife.

Underneath the *persona* each shows the world lies a being different from the masque. My own *persona* was a professorial archetype. Underneath? Would you believe a maiden knight, eager to break a lance? I could have avoided military service — married, a father, protected profession. But I spent three weeks in basic training, sweating with the rest, cursing drill instructors — and loving it! Then they took my rifle, told me I was an officer, gave me a swivel chair and a useless job. I never forgave them for that.

Hilda, until we married, I knew not at all. I had valued her as a link to my lost love but I had thought her a lightweight, a social butterfly. Then I found myself married to her and learned that I had unnecessarily suffered lonely years. Hilda was what I needed, I was what she needed — Jane had known it and blessed us when at last *we* knew it. But I *still* did not realize the diamondhard quality of my tiny darling until I saw her dissecting that pseudo "ranger." Killing that alien was easy. But what Hilda did — I almost lost my supper.

Hilda is small and weak; I'll protect her with my life. But I won't underrate her again!

Zeb is the only one of us who *looks* the part of intrepid explorer — tall, broadshouldered, strongly muscled, skilled with machines and with weapons, and (sine qua non!) coolheaded in crisis and gifted with the "voice of command."

One night I had been forced to reason with my darling; Hilda felt that I should lead our little band. I was oldest, I was inventor of the time-space "distorter" — it was all right for Zeb to pilot — but *I* must command. In her eyes Zeb was somewhere between an overage adolescent and an affectionate Saint Bernard. She pointed out that Zeb claimed to be a "coward by trade" and did not *want* responsibility.

I told her that no born leader seeks command; the mantle descends on him, he wears the burden because he must. Hilda could not see it — she was willing to take orders from *me* but *not* from her pet youngster "Zebbie."

I had to be firm: Either accept Zeb as commander or tomorrow Zeb and I would dismount my apparatus from Zeb's car so that Mr. and Mrs. Carter could go elsewhere. Where? Not my business or yours, Hilda. I turned over and pretended to sleep.

When I heard sobs, I turned again and held her. But I did not budge. No need to record what was said; Hilda promised to take any orders Zeb might give — once we left.

But her capitulation was merely coerced until the gory incident at the pool. Zeb's instantaneous attack changed her attitude. From then on my darling carried out Zeb's orders without argument — and between times kidded and ragged him as always. Hilda's spirit wasn't broken; instead she placed her indomitable spirit subject to the decisions of our captain. Discipline — self-discipline; there is no other sort.

Zeb is indeed a "coward by trade" — he avoids trouble whenever possible — a most commendable trait in a leader. If a captain worries about the safety of his command, those under him need not worry.

Barsoom continued to swell. At last Gay's voice said, "Ranging, Boss" as she displayed "1000 km," and flicked at once to "999 km." I started timing when Zeb made it unnecessary: "Smart Girl!"

"Here, Zeb."

"Continue range display. Show as H-above-G. Add dive rate."

"Null program."

"Correction. Add program. Display dive rate soonest."

"New program dive rate stored. Display starts H-above-G six hundred klicks."

"You're a smart girl, Gay."

"'Smartest little girl in the County, Oh! Daddy and Mommy told me so!' Over."

"Continue programs."

Height-above-ground seemed to drop both quickly and with stomach-tensing slowness. No one said a word; I barely breathed. As "600 km" appeared the figures were suddenly backed by a grid; on it was a steep curve, height-against-time, and a new figure flashed underneath the H-above-G figure: **1968 km/hr.** As the figure changed, a bright abscissa lowered down on the grid.

Our captain let out a sigh. "We can handle that. But I'd give fifty cents and a double-dip ice-cream cone for a parachute brake."

"What flavor?"

"Your choice, Sharpie. Don't worry, folks; I can stand her on her tail and blast. But it's an expensive way to slow up. Gay Deceiver."

"Busy, Boss."

"I keep forgetting that I can't ask her to display too many data at once. Anybody know the sea level — I mean 'surface' atmospheric pressure of Mars? Don't all speak at once."

My darling said hesitantly, "It averages about five millibars. But, Captain — this isn't Mars."

"Huh? So it isn't — and from the looks of that green stuff, Barsoom must have lots more atmosphere than Mars." Zeb took the controls, overrode the computer, cautiously waggled her elevons. "Can't feel bite. Sharpie, how come you bone astronomy? Girl Scout?"

"Never got past tenderfoot. I audited a course, then subscribed to 'Astronomy' and 'Sky and Telescope.' It's sort o' fun."

"Chief of Science, you have again justified my faith in you. Copilot, as soon as I have air bite, I'm going to ease to the east. We're headed too close to the terminator. I want to ground in daylight. Keep an eye out for level ground. I'll hover at the last — but I don't want to ground in forest. Or in badlands."

"Aye aye, sir."

"Astrogator."

"Yessir!"

"Deety darling, search to port — and forward, as much as you can see around me. Jake can favor the starboard side."

"Captain — I'm on the starboard side. Behind Pop."

"Huh? How did you gals get swapped around?"

"Well… you hurried us, sir — any old seat in a storm."

"Two demerits for wrong seat — and no syrup on the hot cakes we're going to have for breakfast as soon as we're grounded."

"Uh, I don't believe hot cakes are possible."

"I can dream, can't I? Chief Science Officer, watch my side."

"Yes, Cap'n."

"While Deety backs up Jake. Any cow pasture."

"Hey! I feel air! She bites!"

I held my breath while Zeb slowly brought the ship out of dive, easing her east. "Gay Deceiver."

"How now, Brown Cow?"

"Cancel display programs. Execute."

"Inshallâh, ya sayyid."

The displays faded. Zeb held her just short of stalling. We were still high, about six klicks, still hypersonic.

Zeb slowly started spreading her wings as air speed and altitude dropped. After we dropped below speed of sound, he opened her wings full for maximum lift. "Did anyone remember to bring a canary?"

"A *canary!"* said Deety. "What for, Boss Man?"

"My gentle way of reminding everyone that we have no way to test atmosphere. Copilot."

"Captain," I acknowledged.

"Uncover deadman switch. Hold it closed while you remove clamp. Hold it high where we all can see it. Once you report switch ready to operate, I'm going to crack the air scoops. If you pass out, your hand will relax and the switch will get us home. I hope. But — All hands! — if anyone feels dizzy or woozy or faint… or sees any of us start to slump, don't wait! Give the order orally. Deety, spell the order I mean. Don't say it — spell it."

"G, A, Y, D, E, C, I, E, V, E, R, T, A, K, E, U, S, H, O, M, E."

"You misspelled it."

"I did not!"

"You did so; '"i" before "e" except after "c."' You reversed 'em."

"Well… maybe I did. That diphthong has always given me trouble. Floccinaucinihilipilificator!"

"So you understood it? From now on, on Barsoom, 'i' comes before 'e' at all times. By order of John Carter, Warlord. I have spoken. Copilot?"

"Deadman switch ready, Captain," I answered.

"You gals hold your breaths or breathe, as you wish. Pilot and copilot will breathe. I am about to open air scoops."

I tried to breathe normally and wondered if my hand would relax if I passed out.

The cabin got suddenly chilly, then the heaters picked up. I felt normal. Cabin pressure slightly higher, I thought, under ram effect.

"Everybody feel right? Does everybody *look* right? Copilot?"

"I feel fine. You look okay. So does Hilda. I can't see Deety."

"Science Officer?"

"Deety looks normal. I feel fine."

"Deety. Speak up."

"Golly, I had forgotten what fresh air smells like!"

"Copilot, carefully — *most* carefully! — put the clamp back on the switch, then rack and cover it. Report completion."

A few seconds later I reported, "Deadman switch secured, Captain."

"Good. I see a golf course; we'll ground." Zeb switched to powered flight; Gay responded, felt alive. We spiraled, hovered briefly, grounded with a gentle bump. "Grounded on Barsoom. Log it, Astrogator. Time and date."

"Huh?"

"On the instrument board."

"But that says oh-eight-oh-three and it's just after dawn here."

"Log it Greenwich. With it, log estimated local time and Barsoom day one." Zeb yawned. "I wish they wouldn't hold mornings so early."

"Too sleepy for hot cakes?" my wife inquired.

"Never that sleepy."

"Aunt Hilda!"

"Deety, I stowed Aunt Jemima mix. And powdered milk. And butter. Zebbie, no syrup — sorry. But there is grape jelly in a tube. And freeze-dried coffee. If one of you will undog this bulkhead door, we'll have breakfast in a few minutes."

"Chief Science Officer, you have a duty to perform."

"I do? But — Yes, Captain?"

"Put your dainty toe to the ground. It's your planet, your privilege. Starboard side of the car, under the wing, is the ladies' powder room — portside is the men's jakes. Ladies may have armed escort on request."

I was glad Zeb remembered that. The car had a "honey bucket" under the cushion of the port rear seat, and, with it, plastic liners. I did not ever want to have to use it.

Gay Deceiver was wonderful but, as a spaceship, she left much to be desired. However, she had brought us safely to Barsoom.

Barsoom! Visions of thoats and beautiful princesses —

Chapter XVII

The world wobbled —

Deety:

We spent our first hour on "Barsoom" getting oriented. Aunt Hilda stepped outside, then stayed out. "Isn't cold," she told us. "Going to be hot later."

"Watch where you step!" my husband warned her. "Might be snakes or anything." He hurried after her — and went head over heels.

Zebadiah was not hurt; the ground was padded, a greenish-yellow mat somewhat like "ice plant" but looking more like clover. He got up carefully, then swayed as if walking on a rubber mattress. "I don't understand it," he complained. "This gravity ought to be twice that of Luna. But I feel lighter."

Aunt Hillbilly sat down on the turf. "On the Moon you were carrying pressure suit and tanks and equipment." She unfastened her shoes. "Here you aren't."

"Yeah, so I was," agreed my husband. "What are you doing?"

"Taking off my shoes. When were you on the Moon? Cap'n Zebbie, you're a fraud."

"Don't take off your shoes! You don't know what's in this grass."

The Hillbilly stopped, one shoe off. "If they bite me, I bite 'em back. Captain, in Gay Deceiver you are absolute boss. But doesn't your crew have *any* free will? I'll play it either way: free citizen… or your thrall who dassn't even take off a shoe without permission. Just tell me."

"Uh —"

"If you try to make all decisions, all the time, you're going to get as hysterical as a hen raising ducklings. Even Deety can be notional. But *I* won't even pee without permission. Shall I put this back on? Or take the other off?"

"Aunt Hilda, quit teasing my husband!" (I was annoyed!)

"Dejah Thoris, I am not teasing your husband; I am asking our captain for instructions."

Zebadiah sighed. "Sometimes I wish I'd stayed in Australia."

I said, "Is it all right for Pop and me to come out?"

"Oh. Certainly. Watch your step; it's tricky."

I jumped down, then jumped high and wide, with *entrechats* as I floated — landed *sur les pointes.* "Oh, boy! What a wonderful place for ballet!" I added, "Shouldn't do that on a full bladder. Aunt Hilda, let's see if that powder room is unoccupied."

"I was about to, dear, but I must get a ruling from our captain."

"You're teasing him."

"No, Deety; Hilda is right; doctrine has to be clear. Jake? How about taking charge on the ground?"

"No, Captain. Druther be a Balkan general, given my druthers."

Aunt Hilda stood up, shoe in hand, reached high with her other hand, patted my husband's cheek. "Zebbie, you are a dear. You worry about us all — me especially, because you think I'm a featherhead. Remember how we did at Snug Harbor? Each one did what she could do best and there was no friction. If that worked there, it ought to work here."

"Well… all right. But will you gals *please* be careful?"

"We'll be careful. How's your E.S.P.? Any feeling?"

Zebadiah wrinkled his forehead. "No. But I don't get advance warning. Just barely enough."

"'Just barely' is enough. Before we had to leave, you were about to program Gay to listen at high gain. Would that change 'just barely' to 'ample'?"

"Yes! Sharpie, I'll put you in charge, on the ground."

"In your hat, Buster. Ole Massa done freed us slaves. Zebbie, the quicker you quit dodging, the sooner you get those hot cakes. Spread my cape down and put the hot plate on the step."

We ate breakfast in basic Barsoomian dress: skin. Aunt Hilda pointed out that laundries seemed scarce, and the car's water tanks had to be saved for drinking and cooking. "Deety, I have just this dress you gave me; I'll air it and let the wrinkles hang out. Panties, too. An air bath is better than no bath. I know you'll divvy with me but you are no closer to a laundry than I am."

My jump suit joined Hilda's dress. "Aunt Hilda, you could skip bathing a week. Me, right after a bath I have a body odor but not too bad. In twenty four hours I'm whiff. Fortyeight and I smell like a skunk. An air bath may help."

The same reasoning caused our men to spread their used clothing on the port wing, and caused Zebadiah to pick up Hilda's cape. "Sharpie, you can't get fur Hollanderized in this universe. Jake, you stowed some tarps?"

After dishes were "washed" (scoured with turf, placed in the sun) we were sleepy. Zebadiah wanted us to sleep inside, doors locked. Aunt Hilda and I wanted to nap on a tarpaulin in the shade of the car. I pointed out that moving rear seats aft in refitting had made it impossible to recline them.

Zebadiah offered to give up his seat to either of us women. I snapped, "Don't be silly, dear! You barely fit into a rear seat and it brings your knees so far forward that the seat in front *can't* be reclined."

Pop intervened. "Hold it! Daughter, I'm disappointed — snapping at your husband. But, Zeb, we've *got* to rest. If I sleep sitting up, I get swollen ankles, half crippled, not good for much."

"I was trying to keep us safe," Zebadiah said plaintively.

"I know, Son; you've been doing so — and a smart job, or we all would be dead three times over. Deety knows it, I know it, Hilda knows it —"

"I sure do, Zebbie!"

"My Captain, I'm sorry I snapped at you."

"We'll need you later. Flesh has its limits — even yours. If necessary, we would bed you down and stand guard over you —"

"No!"

"We sure would, Zebbie!"

"We *will,* my Captain."

"But I doubt that it's necessary. When we sat on the ground to eat, did anyone get chigger bites or anything?"

My husband shook his head.

"Not me," Aunt Hilda agreed.

I added, "I saw some little beasties but they didn't bother me."

"Apparently," Pop went on, "they don't like our taste. A ferocious-looking dingus sniffed at my ankle — but it scurried away. Zeb, Gay can hear better than we can?"

"Oh, *much* better!"

"Can her radar be programmed to warn us?"

Zebadiah looked thoughtful. "Uh… anti-collision alarm would wake the dead. If I pulled it in to minimum range, then — No, the display would be cluttered with 'grass.' We're on the ground. False returns."

I said, "Subtract static display, Zebadiah."

"Eh? How, Deety?"

"Gay can do it. Shall I try?"

"Deety, if you switch on radar, we *have* to sleep inside. Microwaves cook your brains."

"I know, sir. Gay has sidelookers, eyes fore and aft, belly, and umbrella — has she not?"

"Yes. That's why —"

"Switch off her belly eye. Can sidelookers hurt us if we sleep *under* her?" His eyes widened. "Astrogator, you know more about my car than I do. I'd better sign her over to you."

"My Captain, you have already endowed me with all your worldly goods. I don't know more about Gay; I know more about *programming."*

We made a bed under the car by opening Zebadiah's sleeping bag out flat, a tarpaulin on each side. Aunt Hilda dug out sheets: "In case anyone gets chilly."

"Unlikely," Pop told her. "Hot now, not a cloud and no breeze."

"Keep it by you, dearest. Here's one for Zebbie." She dropped two more on the sleeping bag, lay down on it. "Down flat, gentlemen" — waited for them to comply, then called to me: *"Deety!* Everybody's down."

From inside I called back, *"Right with you!"* — then said, "Hello, Gay."

"Hi, Deety!"

"Retrieve newest program. Execute."

Five scopes lighted, faded to dimness; the belly eye remained blank. I told her, "You're a good girl, Gay."

"I like you, too, Deety. Over."

"Roger and out, sister." I scrunched down, got at the stowage under the instrument board, pulled out padding and removed saber and sword, each with belt. These I placed at the door by a pie tin used at breakfast. I slithered head first out the door, turned without rising, got swords and pie plate, and crawled toward the pallet, left arm cluttered with hardware.

I stopped. "Your sword, Captain."

"Deety! Do I need a sword to nap?"

"No, sir. *I* shall sleep soundly knowing that my captain has his sword."

"Hmm — " Zebadiah withdrew it a span, returned it with a click. "Silly… but *I* feel comforted by it, too."

"I see nothing silly, sir. Ten hours ago you killed a *thing* with it that would have killed me."

"I stand — sprawl — corrected, my Princess. Dejah Thoris is always correct."

"I hope my Chieftain will always think so."

"He will. Give me a big kiss. What's the pie pan for?"

"Radar alarm test."

Having delivered the kiss, I crawled past Hilda and handed Pop his saber. He grinned at me. "Deety hon, you're a one! Just the security blanket I need. How did you know?"

"Because Aunt Hilda and I need it. With our warriors armed, we will sleep soundly." I kissed Pop, crawled out from under. "Cover your ears!"

I got to my knees, sailed that pan far and high, dropped flat and covered my ears. As the pan sailed into the zone of microwave radiation, a horrid clamor sounded inside the car, kept up until the pan struck the ground and stopped rolling — chopped off. "Somebody remind me to recover that. Good night, all!"

I crawled back, stretched out by Hilda, kissed her goodnight, set the clock in my head for six hours, went to sleep.

The sun was saying that it was fourteen instead of fourteen-fifteen and I decided that my circadian did not fit Barsoom. Would the clock in my head "slow" to match a day forty minutes longer? Would it give me trouble? Not likely — I've always been able to sleep anytime. I felt grand and ready for anything.

I crept off the pallet, snaked up into the car's cabin, and stretched. Felt good!

I crawled through the bulkhead door back of the rear seats, got some scarves and my jewelry case, went forward into the space between seats and instrument board.

I tried tying a filmy green scarf as a bikini bottom, but it looked like a diaper. I took it off, folded it corner to corner, pinned it at my left hip with a jeweled brooch. Lots better! "Indecently decent" Pop would say.

I looped a rope of imitation pearls around my hips, arranged strands to drape with the cloth, fastened them at the brooch. I hung around my neck a pendant of pearls and cabochon emeralds — from my father the day I received the title doctor of philosophy.

I was adding bracelets and rings when I heard *"Psst!"* — looked down and saw the Hillbilly's head and hands at the doorsill. Hilda put a finger to her lips. I nodded, gave her a hand up, whispered, "Still asleep?"

"Like babies."

"Let's get you dressed… 'Princess Thuvia.'" Aunt Hilda giggled. "Thank you… 'Princess' Dejah Thoris." "Want anything but jewelry?"

"Just something to anchor it. That old-gold scarf if you can spare it."

"Course I can! Nothing's too good for my Aunt Thuvia and that scarf is durn near nothing. Baby doll, we're going to deck you out for the auction block. Will you do my hair?"

"And you mine. Deety — I mean 'Dejah Thoris' — I miss a three-way mirror."

"We'll be mirrors for each other," I told her. "I don't mind camping out. My great-great-great-grandmother had two babies in a sod house. Except" — I ducked my head, sniffed my armpit — "we'd better find a stream." I added, "Hold still. Or shall I pin it through your skin?"

"Either way, dear. We'll find water — all this ground cover."

"Ground cover doesn't prove running water. This place may be a 'dead sea bottom of Barsoom.'"

"Doesn't look dead," Aunt Hilda countered. "It's pretty."

"Yes, but this looks like a dead sea bottom. Which gave me an idea.

Hold up your hair; I want to arrange your necklaces."

"What idea?" Aunt Hilda demanded.

"Zebadiah told me to figure a third escape program. The first two — I'll paraphrase, Gay is awake. One tells her to take us back to a height over Snug Harbor; the other tells her to scoot back to where she was before she was last given the first order."

"I thought that one told her to place us over the Grand Canyon?"

"It does, at present. But if she got the first order *now,* that would change the second order. Instead of over the Grand Canyon, we would be back here quicker'n a frog could wink its eye."

"Okay if you say so."

"She's programmed that way. Hit the panic button and we are over our cabin site. Suppose we arrive there and find trouble, then use the 'C' order. She takes us *back to wherever she last got the 'T' order.* Dangerous or we would not have left in a rush. So we need a *third* escape program, to take us to a safe place. This looks safe."

"It's peaceful."

"Seems so. There! — more doodads than a Christmas tree and you look nakeder than ever."

"That's the effect we want, isn't it? Sit down in the copilot's seat; I'll do your hair."

"Want shoes?" I asked.

"On *Barsoom?* Dejah Thoris, thank you for your little-girl shoes. But they pinch my toes. You're going to wear *shoes?"*

"Not bleedin' likely, Aunt Nanny Goat. I toughened my feet for karate — I can break a four-by-nine with my feet and get nary a bruise. Or run on sharp gravel. What's a good escape phrase? I plan to store in Gay an emergency signal for every spot we visit that looks like a safe hidey-hole. So give me a phrase."

"Your mudder chaws terbacker!"

"Nanny Goat! A code-phrase should have a builtin mnemonic."

"'Bug Out'?"

"A horrid expression and just what we need. 'Bug Out' will mean to take us to this exact spot. I'll program it. And post it and others on the instrument board so that, if anyone forgets, she can read it."

"And so could any outsider, if she got in."

"Fat lot of good it would do her! Gay ignores an order not in our voices. Hello, Gay."

"Hello, Deety!"

"Retrieve present location. Report."

"Null program."

"Are we *lost?"*

"Not at all, Aunt Hilda. I was sloppy. Gay, program check. Define 'Home.'"

"Cancel any-all transitions translations rotations inertials. Return to zerodesignated latitude longitude two klicks above ground level hovering."

"Search memory reversed-real-time for last order execute-coded Gay Deceiver take us home."

"Retrieved."

"From time of retrieved order integrate to time-present all transitions translations rotations inertials."

"Integrated."

"Test check. Report summary of integration."

"Origin 'Home.' Countermarch program executed. Complex maneuver inertials. Translation Tau axis ten minimals positive. Complex maneuver inertials. Translation Ell axis two-two-four-zero-nine-zero-eight-two-seven point zero klicks. Negative vector Ell axis twenty-four klicks per sec. Negative vector Ell axis four klicks per sec. Complex maneuver inertials. Grounded here-then oh-eight-oh-two-forty-nine. Grounded inertials continuing eight hours three minutes nineteen seconds *mark!* Grounded inertials continue running realtime."

"New program. Here-now grounded inertial location realtime running to realtime new execute order equals code-phrase bug-out. Report new program."

Gay answered: "New program code-phrase bug-out: Definition: Here-now grounded inertials running realtime to future-time execute order code-phrase bug-out."

"Gay, I tell you three times."

"Deety, I hear you three times."

"New program. Execute-coded Gay Deceiver Bug Out. At execute-code move to location coded 'bug-out.' I tell you three times."

"I hear you three times."

"Gay Deceiver, you're a smart girl."

"Deety, why don't you leave that big ape and live with me? Over."

"Good night, Gay. Roger and out. Hillbilly, I didn't give you that answer." I tried to look fierce.

"Why, Deety, how could you say such a thing?"

"I know I didn't. Well?"

"I 'fess up, Deetikins. A few days ago while you and I were working, you were called away. While I waited, I stuck that in. Want it erased?"

I don't know how to look fierce; I snickered. "No. Maybe Zebadiah will be around the next time it pops up. I wish our men would wake, I do."

"They need rest, dear."

"I know. But I want to check that new program."

"It sounded complex."

"Can be, by voice. I'd rather work on paper. A computer doesn't accept excuses. A mistake can be anything from 'null program' to disaster. This one has features I've never tried. I don't really *understand* what Pop does. Non-Euclidean *n*-dimensional geometry is way out in left field."

"To me it's not in the ball park."

"So I'm itchy."

"Let's talk about something else."

"Did I show you our micro walky-talkies?"

"Jacob gave me one."

"There's one for each. Tiny but amazingly long-ranged. Uses less power than a hand calculator and weighs less — under two hundred grams. Mass, I mean — weight here is much less. Today I thought of a new use. Gay can accept their frequency."

"That's nice. How do you plan to use this?"

"This car can be remote-controlled."

"Deety, who would you want to do *that?"*

I admitted that I did not know. "But Gay can be preprogrammed to do almost anything. For example, we could go outside and tell Gay, via walky-talky, to carry out two programs in succession: H, O, M, E, followed by B, U, G, O, U, T. Imagine Zebadiah's face when he wakes up from sun in his eyes — because his car has vanished — then his expression two hours later when it pops back into existence."

"Deety, go stand in the corner for *thinking* such an unfunny joke!" Then Aunt Hilda looked thoughtful. "Why would it take two hours? I thought Gay could go *any*where in no *time."*

"Depends on your postulates, Princess Thuvia. We took a couple of hours to get here because we fiddled. Gay would have to follow that route in reverse because it's the only one she knows. Then — " I stopped, suddenly confused. "Or would it be *four* hours? No, vectors would cancel and — But that would make it instantaneous; we would never know that she had left. Or would we? Aunt Hilda, I don't *know!* Oh, I wish our men would wake up, I do!" The world wobbled and I felt scared.

"I'm awake," Pop answered, his head just showing above the doorsill. "What's this debate?" He gave Aunt Hilda a lecherous leer. "Little girl, if you'll come up to my room, I'll give you some candy."

"Get away from me, you old wolf!"

"Hilda my love, I could sell you down to Rio and retire on the proceeds. You look like expensive stuff."

"I'm *very* expensive stuff, darling wolf. All I want is every cent a man has and constant pampering — then a fat estate when he dies."

"I'll try to die with plenty of money in the bank, dearest."

"Instead we're both dead and our bank accounts have gone Heaven knows where and I haven't a rag to my back — and I'm wonderfully happy. Come inside — mind the radar! — and kiss me, you old wolf; you don't have to buy me candy."

"Pop," I asked, "is Zebadiah asleep?"

"Just woke up."

I spoke to Gay, then to Pop: "Will you tell Zebadiah radar is off? He can stand up without getting his ears fried."

"Sure." Pop ducked down and yelled, "Zeb, it's safe; her husband left."

"Coming!" Zebadiah's voice rumbled back. "Tell Deety to put the steaks on." My darling appeared wearing sword, carrying pie pan and sheets. "Are the steaks ready?" he asked, then kissed me.

"Not quite, sir," I told him. "First, go shoot a thoat. Or will you settle for peanut butter sandwiches?"

"Don't talk dirty. Did you say 'thoat'?"

"Yes. This is Barsoom."

"I thoat that was what you said."

"If that's a pun, you can eat it for supper. With peanut butter."

Zebadiah shuddered. "I'd rather cut my thoat."

Pop said, "Don't do it, Zeb. A man can't eat with his thoat cut. He can't even talk clearly."

Aunt Hilda said mildly, "If you three will cease those atrocities, I'll see what I can scrape up for dinner."

"I'll help," I told her, "but can we run my test first? I'm itchy."

"Certainly, Deety. It will be a scratch meal."

Pop looked at Aunt Hilda reproachfully. "And *you* told *us* to stop."

"What test?" demanded my husband.

I explained the Bug-Out program. "I think I programmed it correctly. But here is a test. Road the car a hundred meters. If my program works — fine! If it tests null, no harm done but you and Pop will have to teach me more about the twister before I'll risk new programming."

"I don't want to road the car, Deety; I'm stingy with every erg until I know when and where I can juice Gay. However — Jake, what's your minimum transition?"

"Ten kilometers. Can't use spatial quanta for transitions — too small. But the scale goes up fast — logarithmic. That's short range. Middle range is in lightyears — logarithmic again."

"What's long range, Jake?"

"Gravitic radiation versus time. We won't use *that* one."

"Why not, Jacob?" asked Aunt Hilda.

Pop looked sheepish. "I'm scared of it, dearest. There are three major theories concerning gravitic propagation. At the time I machined those controls, one theory seemed proved. Since then other physicists have reported not being able to reproduce the data. So I blocked off long range." Pop smiled sourly. "I know the gun is loaded but not what it will do. So I spiked it."

"Sensible," agreed my husband. "Russian roulette lacks appeal. Jake, do you have any guess as to what options you shut off?"

"Better than a guess, Zeb. It reduces the number of universes accessible to us on this axis from the sixth power of six-to-the-sixth-power to a mere six to the sixth power. Forty-six thousand, six hundred, fifty-six."

"Gee, that's tough!"

"I didn't mean it as a joke, Zeb."

"Jake, I was laughing at *me.* I've been looking forward to a lifetime exploring universes — and now I learn that I'm limited to a fiddlin' forty-six thousand and some. Suppose I have a half century of exploration left in me. Assume that I take off no time for eating, sleeping, or teasing the cat, how much time can I spend in each universe?"

"About nine hours twenty minutes per universe," I told him. "Nine hours, twentythree minutes, thirty-eight point seven-two-two seconds, plus, to be more nearly accurate."

"Deety, let's do be accurate," Zebadiah said solemnly. "If we stayed a minute too long in each universe, we would miss nearly a hundred universes."

I was getting into the spirit. "Let's hurry instead. If we work at it, we can do three universes a day for fifty years — one of us on watch, one on standby, two off duty — and still squeeze in maintenance, plus a few hours on the ground, once a year. If we hurry."

"We haven't a second to lose!" Zebadiah answered. "All hands! — places! Stand by to lift! *Move!"*

I was startled but hurried to my seat. Pop's chin dropped but he took his place. Aunt Hilda hesitated a split second before diving for her seat, but, as she strapped herself in, wailed, "Captain? Are we *really* leaving Barsoom?"

"Quiet, please. Gay Deceiver, close doors! Report seat belts. Copilot, check starboard door seal."

"Seat belt fastened," I reported with no expression.

"Mine's fastened. *Oh, dear!"*

"Copilot, by low range, 'H' axis upward, minimum transition."

"Set, Captain."

"Execute."

Sky outside was dark, the ground far below. "Ten klicks exactly," my husband approved. "Astrogator, take the conn, test your new program. Science Officer observe."

"Yessir. Gay Deceiver — *Bug Out!"* We were parked on the ground.

"Science Officer — report," Zebadiah ordered.

"Report what?" Aunt Hilda demanded.

"We tested a new program. Did it pass test?"

"Uh, we seem to be back where we were. We were weightless maybe ten seconds. I guess the test was okay, Except —"

"'Except' what?"

"Captain Zebbie, you're the worst tease on Earth! And Barsoom! You did so put lime Jello in my pool!"

"I was in Africa."

"Then you arranged it!"

"Hilda — please! I *never* said we were leaving Barsoom. I said that we haven't a second to waste. We don't, with so much to explore."

"Excuses. *What about my clothes?* All on the starboard wing. Where are they now? Floating up in the stratosphere? Coming down *where?* I'll *never* find them."

"I thought you preferred to dress Barsoomian style?"

"Doesn't mean I want to be *forced* to! Besides, Deety lent them to me. I'm sorry, Deety."

I patted her hand. "'S'all right, Aunt Hilda. I'll lend you more. Give them, I mean." I hesitated, then said firmly, "Zebadiah, you should apologize to Aunt Hilda."

"Oh, for the love of — Sharpie? Sharpie darling."

"Yes, Zebbie?"

"I'm sorry I let you think that we were leaving Barsoom. I'll buy you clothes that fit. We'll make a quick trip back to Earth —"

"Don't want to go back to Earth! *Aliens!* They scare me."

"They scare me, too. I started to say: 'Earth-without-a-J.' It's so much like our own that I can probably use U.S. money. If not, I have gold. Or I can barter. For you, Sharpie, I'll *steal* clothes. We'll go to Phoenix-without-a-J — tomorrow — today we take a walk and see some of this planet — *your* planet — and we'll stay on your planet until *you* get tired of it. Is that enough? Or must I confess putting Jello into your pool when I *didn't?"*

"You really didn't?"

"Cross my heart."

"Be darned. Actually I thought it was funny. I wonder who did it? Aliens, maybe?"

"They play rougher than that. Sharpie darling, I'm not the only weirdo in your stable — not by dozens."

"Guess maybe. Zebbie? Will you kiss Sharpie and make up?"

On the ground, under the starboard wing, we found our travel clothes, and under the port wing, those of our husbands. Zebadiah looked bemused. "Jake? I thought Hilda was right. It had slipped my mind that we had clothing on the wings."

"Use your head, Son."

"I'm not sure I have one."

"I don't understand it either, darling," Aunt Hilda added.

"Daughter?" Pop said.

"Pop, I *think* I know. But — I pass!"

"Zeb, the car never moved. Instead —"

Aunt Hilda interrupted, "Jacob, are you saying that we did *not* go straight up? We were *there* — five minutes ago."

"Yes, my darling. But we didn't *move* there. Motion has a definable meaning: A duration of changing locations. But no duration was involved. We did *not* successively occupy loci between here-then and there-then."

Aunt Hilda shook her head. "I don't understand. We went *whoosh!* up into the sky… then *whoosh!* back where we started."

"My darling, we didn't *whoosh!* Deety! Don't be reticent."

I sighed. "Pop, I'm not sure there exists a symbol for the referent. Aunt Hilda. Zebadiah. A discontinuity. The car —"

"Got it!" said Zebadiah.

"I didn't," Aunt Hilda persisted.

"Like this, Sharpie," my husband went on. "My car is *here. Spung!* — it vanishes. Our clothes fall to the ground. Ten seconds later — *flip!* — we're back where we started. But our clothes are on the ground. Get it now?"

"I — I guess so. Yes."

"I'm glad you do… because *I* don't. To me, it's magic." Zebadiah shrugged. "'Magic.'"

"'Magic'," I stated, "is a symbol for any process not understood."

"That's what I said, Deety. 'Magic.' Jake, would it have mattered if the car had been indoors?"

"Well… that fretted me the first time Deety and I translated to Earth-without-the-letter-J. So I moved our car outdoors. But now I think that only the destination matters. It should be empty — I *think.* But I'm too timid to experiment."

"Might be interesting. Unmanned vehicle. Worthless target. A small asteroid. A baby sun?"

"I don't *know,* Zeb. Nor do I have apparatus to spare. It took me three years to build this one."

"So we wait a few years. Jake? Air has mass."

"That worried me also. But any mass, other than degenerate mass, is mostly empty space. Air — Earth sea-level air — has about a thousandth the density of the human body. The body is mostly water and water accepts air readily. I can't say that it has *no* effect — twice I've thought that my temperature went up a trifle at transition or translation in atmosphere but it could have been excitement. I've never experienced caisson disease from it. Has any of us felt discomfort?"

"Not me, Jake."

"I've felt all right, Pop," I agreed.

"I got space sick. Till Deety cured it," Aunt Hilda added.

"So did I, my darling. But that was into vacuo and could not involve the phenomenon."

"Pop," I said earnestly, "we weren't hurt; we don't have to know *why.* A basic proposition of epistemology, bedrock both for the three basic statements of semantics and for information theory, is that an observed fact requires no proof. It simply *is,* self-demonstrating. Let philosophers worry about it; they haven't anything better to do."

"Suits me!" agreed Hilda. "You big brains had Sharpie panting. I thought we were going to take a walk?"

"We are, dear," agreed my husband. "Right after those steaks."

Chapter XVIII

" — the whole world is alive."

Zebadiah:

Four Dagwoods later we were ready to start walkabout. Deety delayed by wanting to repeat her test by remote control. I put my foot down. "No!"

"Why not, my Captain? I've taught Gay a program to take her straight up ten klicks. It's G, A, Y, B, O, U, N, C, E — a new fast-escape with no execution word necessary. Then I'll recall her by B, U, G, O, U, T. If one works via walky-talky, so will the second. It can save our lives, it can!"

"Uh — " I went on folding tarps and stowing my sleeping bag. The female mind is too fast for me. I often can reach the same conclusion; a woman gets there first and *never* by the route I have to follow. Besides that, Deety is a genius.

"You were saying, my Captain?"

"I was thinking. Deety, do it with me aboard. I won't touch the controls. Check pilot, nothing more."

"Then it won't be a test."

"Yes, it will. I promise, Cub Scout honor, to let it fall sixty seconds. Or to three klicks H-above-G, whichever comes first."

"These walky-talkies have more range than ten kilometers even between themselves. Gay's reception is *much* better."

"Deety, you trust machinery; I don't. If Gay doesn't pick up your second command — sun spots, interference, open circuit, anything — I'll keep her from crashing."

"But if something else goes wrong and you *did* crash, I would have *killed* you!" She started to cry.

So we compromised. Her way. The exact test she had originally proposed. I wasted juice by roading Gay Deceiver a hundred meters, got out, and we all backed off. Deety said into her walky-talky, "Gay Deceiver… Bug Out!"

It's more startling to watch than it is to be inside. There was Gay Deceiver off to our right, then she was off to our left. No noise — not even an implosion *splat!* Magic.

"Well, Deety? Are you satisfied?"

"Yes, Zebadiah. Thank you, darling. But it had to be a real test. You see that — don't you?"

I agreed, while harboring a suspicion that my test had been more stringent. "Deety, could you reverse that? Go somewhere else and tell Gay to come to you?"

"Somewhere she's never been?"

"Yes."

Deety switched off her walky-talky and made sure that mine was off. "I don't want her to hear this. Zebadiah, I always feel animistic about a computer. The Pathetic Fallacy — I know. But Gay is a person to me."

Deety sighed. "I know it's a machine. It doesn't have ears; it can't see; it doesn't have a concept of spacetime. What it *can* do is manipulate circuitry in complex ways — complexities limited by its grammar and vocabulary. But those limits are exact. If I don't stay precisely with its grammar and vocabulary, it reports 'Null program.' I can tell it anything by radio that I can tell it by voice inside the cabin — and so can you. But I *can't* tell it to come look for me in a meadow beyond a canyon about twelve or thirteen klicks approximately southwest of here-now. That's a null program — five undefined terms."

"Because you made it null. You fed 'garbage in' and expect me to be surprised at 'garbage out' — when you did it a-purpose."

"I did not either, I didn't!"

I kissed the end of her nose. "Deety darling, you should trust your instincts. Here's one way to tell Gay to do that without defining even one new term into her vocabulary. Tell her to expect a three-part program. First part: bounce one minimum, ten klicks. Second part: transit twelve point five klicks true course two-two-five. Third part: drop to one klick H-over-G and hover. At that point, if what you described as your location is roughly correct, you will see her and can coach her to a landing without using Jake's twister."

"Uh… twelve and a half kilometers can't be done in units of ten kilometers. Powered flight?"

"Waste juice? Hon, you just flunked high school geometry. Using Euclid's tools, compass and straight edge, lay out that course and distance, then lay out how to get there in ten-klick units — no fractions."

My wife stared. Then her eyes cleared. "Transit one minimum true course one-seven-three and two thirds, then transit one minimum true course two-seven-six and one third. The mirror image solution uses the same courses in reverse. Plus endless trivial solutions using more than two minima."

"Go to the head of the class. If you don't spot her, have her do a retreating search curve — in her perms, in an Aussie accent. Honey girl, did you actually do that Euclid style?"

"I *approximated* it Euclid style — but you didn't supply compass and straight edge! Scribe circle radius twelve point five. Bisect circle horizontally by straight edge through origin; quarter it by dropping a vertical. Bisect lower left quadrant — that gives true course two-twofive or southwest. Then set compass at ten units and scribe arcs from origin and from southwest point of circle; the intersections give courses and vertices for both major roots to the accuracy of your straight edge and compass. But simply to *visualize* that construction — well, I got *visualized* angles of two-seven-five and one-seven-five. Pretty sloppy.

"So I did it accurately by Pythagorean proposition by splitting the isosceles triangle into two right triangles. Hypotenuse is ten, one side is six and a quarter — and that gives the missing side as seven point eight-zero-six-two-four-seven plus — which gives you one course and you read off the other by the scandalous Fifth Axiom. But I did check by trig. Arc sine point seven-eight-zero-six-two-four-seven — "

"Hold it! I believe you. What other ways can you program Gay to find you, using her present vocabulary?"

"Uh… burn juice?"

"If necessary."

"I would have her bounce a minimum, then maximize my signal. Home on me."

"Certainly. Now do the same thing *without* using juice. Just Jake's twister."

Deety looked thoughtful and about twelve years old, then suddenly said, "'Drunkard's Walk'!" — added at once, "But I would place a locus around the Walk just large enough to be certain that I'm inside it. Gay should plot signal level at each vertex. Such a plot would pinpoint the signal source."

"Which way is faster? Home straight in under power? Or Drunkard's Walk?" Deety answered, "Why, the — " — looked startled. "Those are solid-state relays."

"Jake sets verniers by hand — but when Gay is directing herself there are no moving parts. Solid state."

"Zebadiah, am I thinking straight? Using power, at that distance — call it twelve kilometers — Gay should be able to home on me in three or four minutes. But — Zebadiah, this can't be right! — using *no* power and relying on random numbers and pure chance in a Drunkard's Walk, Gay should find me in less than a second. Where did I go wrong?"

"On the high side, Deety girl. Lost your nerve. The first fifty milliseconds should show the hot spot; in less than the second fifty she'll part your hair. All over in a tenth of a second — or less. But, honey, we *still* haven't talked about the best way. I said that *you should trust your instincts.* Gay is not an 'it.' She's a *person.* You'll never know how relieved I was when it turned out that you two were going to be friends. If she had been jealous of you — May the gods deliver us from a vindictive machine! But she's not; she thinks you're swell."

"Zebadiah, you believe that?"

"Dejah Thoris, I *know* that."

Deety looked relieved. "I know it, too — despite what I said earlier."

"Deety, to me the whole world is alive. Some parts are sleeping and some are dozing and some are awake but yawning… and some are bright-eyed and bushy-tailed and always ready to go. Gay is one of those."

"Yes, she is. I'm sorry I called her an 'it.' But what is this 'best way'?"

"Isn't it obvious? Don't tell her *how* — just *tell* her. Say to her, 'Gay, come find me!' All four words are in her vocabulary; the sentence is compatible with her grammar. She'll find you."

"But how? Drunkard's Walk?"

"A tenth of a second might strike her as too long — she *likes* you, hon. She'll look through her registers and pick the optimum solution. She might not be able to tell you how she did it, since she wipes anything she's not told to remember. I *think* she does; I've never been certain."

Jake and Hilda had wandered off while Deety and I had been talking. They had turned back, so we started toward them. Sharpie called out, "Zebbie, what happened to that hike?"

"Right away," I agreed. "Jake, we have about three hours. We ought to be buttoned up before sundown. Check?"

"I agree. The temperature will drop rapidly at sundown."

"Yup. We can't do real exploring today. So let's treat it as drill. Fully armed, patrol formation, radio discipline, and always alert, as if there were a 'Black Hat' behind every bush."

"No bushes," objected Hilda.

I pretended not to hear. "But what constitutes 'fully armed,' Jake? We each have rifles. You have that oldstyle Army automatic that will knock down anything if you're close enough but — how good a shot are you?"

"Good enough."

"How good is 'Good enough'?" (Most people are as accurate with a baseball as with a pistol.)

"Skipper, I won't attempt a target more than fifty meters away. But if I intend to hit, the target will be within range and I will hit it."

I opened my mouth… closed it. Fifty meters is a *long* range for that weapon. But hint that my father-in-law was boasting?

Deety caught my hesitation. "Zebadiah — Pop taught me pistol in the campus R.O.T.C. range. I've seen him practice bobbing targets at thirty meters. I saw him miss one. *Once."*

Jake harrumphed. "My daughter omitted to mention that I skip most surprise targets."

"Father! 'Most' means 'more than fifty percent.' Not true!"

"Near enough."

"Six occasions. Four strings, twentyeight targets on three —"

"Hold it, honey! Jake, it's silly to argue figures with your daughter. With my police special I won't attempt anything over twenty meters — except covering fire. But I hand-load my ammo and pour my own dumdums; the result is almost as lethal as that howitzer of yours. But if it comes to trouble, or hunting for meat, we'll use rifles, backed by Deety's shotgun. Deety, can you shoot?"

"Throw your hat into the air."

"I don't like the sound of that. Sharpie, we have five firearms, four people — is there one that fits you?"

"Cap'n Zebbie, the one time I fired a gun, I went backwards, the bullet went that-a-way, and I had a sore shoulder. Better have me walk in front to trip land mines."

"Zebadiah, she could carry my fléchette gun."

"Sharpie, we'll put you in the middle and you carry the first-aid kit; you're medical officer — armed with Deety's purse gun for defense. Jake, it's time we stowed these swords and quit pretending to be Barsoomian warriors. Field boots. I'm going to wear that same sweaty pilot suit, about equivalent to jump suits you and Deety wore — which I suggest you wear now. We should carry water canteens and iron rations. I can't think of anything that would serve as a canteen. Damn! Jake, we aren't doing this by the book."

"What book?" demanded Hilda.

"Those romances about interstellar exploration. There's always a giant mother ship in orbit, loaded with everything from catheters to Coca-Cola, and scouting is by landing craft, in touch with the mother ship. Somehow, we aren't doing it that way."

(All the more reason to conduct drill as realistically as possible. Jake or I, one of us, is honor bound to stay alive to take care of two women and unborn children; exterminating 'Black-Hat' vermin holds a poor second to that.)

"Zebbie, why are you staring at me?"

I hadn't known that I was. "Trying to figure how to dress you, dear. Sharpie, you look cute in jewelry and perfume. But it's not enough for a sortie in the bush. Take 'em off and put 'em away. You, too, Deety. Deety, do you have another jump suit that can be pinned up or stitched up for Hilda?"

"A something, sure. But it would take hours to do a good job. My sewing kit isn't much."

"'Hours' will have to be another day. Today we'll make do with safety pins. But take time to do a careful job of padding her feet into your stoutest shoes. Confound it, she should have field boots. Sharpie, remind me when we make that shopping trip to Earth-without-a-J."

"To hear is to obey, Exalted One. Is it permitted to make a parliamentary inquiry?"

She startled me. "Hilda, what did I do to cause that frosty tone?"

"It was what you didn't do." Suddenly she smiled, reached high and patted my cheek. "You mean well, Zebbie. But you slipped. While Gay Deceiver is on the ground, we're equal. But you've been giving orders right and left."

I started to answer; Jake cut in. "Hilda my love, for a scouting expedition the situation becomes equivalent to a craft in motion. Again we require a captain."

Sharpie turned toward her husband. "Conceded, sir. But may I point out that we are *not yet* on that hike? Zebbie has consulted you; he has not consulted Deety and me. He asked us for information — darned seldom! Aside from that he has simply laid down the law. What are we, Zebbie? Poor little female critters whose opinions are worthless?"

Caught with your hand in the cooky jar, throw yourself on the mercy of the court.

"Sharpie, you're right and I'm dead wrong. But before you pass sentence I claim extenuating circumstances: Youth and inexperience, plus long and faithful service."

"You can't," put in my helpful wife. "You can plead one or the other but not both. They can't overlap."

Sharpie stood on tiptoes and kissed my chin. "In Zebbie's case they *do* overlap. Do you still want to know what to use as water canteens?"

"Certainly!"

"Then why didn't you ask?"

"But I did!"

"No, Cap'n Zebbie; you did not ask and did not even give us time to volunteer the answer."

"I'm sorry, Hilda. Too many things on my mind."

"I know, dear; Sharpie does not mean to scold. But I *had* to get your attention."

"That baseball bat?"

"Almost. For an ersatz canteen — A hot-water bottle?"

Again she startled me. "In the danger we were in when we left, you worried about cold feet in bed? And packed a hot-water bottle?"

"Two," answered Deety. "Aunt Hilda fetched one. So did I."

"Deety, you don't have cold feet and neither do I."

Sharpie said, "Deety, is he actually that naïve?"

"I'm afraid he is, Aunt Hilda. But he's sweet."

"And brave," added Hilda. "But retarded in spots. They *do* overlap in Zebbie's case. He's unique."

"What," I demanded, "are you talking about?"

"Aunt Hilda means that, when you refitted Gay, you neglected to install a bidet."

"Oh." That was the wittiest I could manage. "It's not a subject I give much thought to."

"No reason you should, Zebbie. Although men use them, too."

"Zebadiah does. Pop, too. Bidets, I mean. Not hot-water bottles."

"I meant hot-water bottles, dear. As medical officer I may find it necessary to administer an enema to the Captain."

"Oh, no!" I objected. "You're not equipped."

"But she is, Zebadiah. We fetched both sorts of nozzles."

"But you didn't fetch four husky orderlies to hold me down. Let's move on. Sharpie, what was the advice you would have given if I had been bright enough to consult you?"

"Some is not advice but a statement of fact. I'm not going for a hike on a hot day swaddled in a pinned-up jump suit eight sizes too big. While you all play Cowboys-and-Indians, I'm going to curl up in my seat and read 'The Oxford Book of English Verse.' Thank you for fetching it, Jacob."

"Hilda beloved, I will worry."

"No need to worry about *me,* Jacob. I can always tell Gay to lock her doors. But, were I to go with you, I would be a handicap. You three are trained to fight; I'm not." Sharpie turned toward me. "Captain, since I'm not going, that's all I have to say."

What was there for me to say? "Thank you, Hilda. Deety, do you have things on your mind?"

"Yes, sir. I go along with field boots and jump suits and so forth even though they'll be beastly hot. But I wish you would change your mind about your sword and Pop's saber. Maybe they aren't much compared with rifles but they're good for my morale."

Hilda interjected, "Had I decided to go, Captain, I would have said the same. Possibly it is an emotional effect from what happened, uh — was it only yesterday? — but perhaps it is subconscious logic. Just yesterday bare blades defeated a man — a thing, an alien — armed with a firearm and ready to use it."

Jake spoke up. "Captain, I didn't want to take off my saber."

"We'll wear them." *Any* excuse is a good excuse to wear a sword. "Are we through? We've lost an hour and the Sun is dropping. Deety?"

"One more thing, Zebadiah — and I expect to be outvoted. I say to cancel the hike."

"So? Princess, you've said too much or not enough."

"If we do this, we spend the night here — sitting up. If we chase the Sun instead — There were lights on the night side that looked like cities. There was blue on the day side that looked like a sea. I think I saw canals. But whether we find something or not, at worst we'll catch up with sunrise and be able to sleep outdoors in daylight, just as we did today."

"Deety! Gay can overtake the Sun. Once. You want to use all her remaining juice just to sleep outdoors?"

"Zebadiah, I wasn't planning on using *any* power."

"Huh? It sounded like it."

"Oh, no! Do transitions of three minima or more, bearing west. Aim us out of the atmosphere; we fall back in while looking for places of interest. As we reenter, we glide, but where depends on what you want to look at. When you have stretched the glide to the limit, unless you decide to ground, you do another transition. There is great flexibility, Zebadiah. You can reach sunrise line in the next few minutes. Or you could elect to stay on the day side for weeks, never land, never use any juice, and inspect the entire planet from pole to pole."

"Maybe Gay can stay up for weeks — but not me. I'm good for several more hours. With that limitation, it sounds good, How about it? Hilda? Jake?"

"You mean that female suffrage is *permanent?* I vote Yes!"

Jake said, "You have a majority; no need for a male vote."

"Jacob!" his wife said reproachfully.

"Joking, my dear. It's unanimous."

I said, "Somebody just cancelled the election. Look there." We all looked. Deety said, "What is it? A pterodactyl?"

"No, an ornithopter. A big one."

PART TWO - The Butterfly's Mandarin

Chapter XIX

Something is gained in translation —

Hilda:

Jacob tightened his arm around me. "Zeb," he said softly, "I don't believe it." He was staring (we all were) at this mechaniwockle pteranodon coming at us over the hills in the west.

"Neither do I," Zebbie answered. "Wrong wing loading. Impossible articulation. There's a second one. A third! All hands! Grab your clothes! Man the ship! Prepare to lift! *Move!* Jake, unbuckle your saber and into your jump suit, *fast!"*

Cap'n Zebbie was unhooking his sword belt and grabbing his coveralls as he yelped. I was inside first as I didn't stop to dress — grabbed Deety's baby shoes with one hand, my dress and panties with the other.

I wiggled into panties, slid the dress over my head, slipped on Deety's Keds.

I anticipated the order to fasten seat belts — stopped suddenly and eased my belt. I had not stopped to take off the doodads that proclaimed me a Barsoomian "princess." Now it seemed that every item of frippery was about to imprint me for life.

Deety was cursing softly over the same problem. Deety's jump suit was harder to reach into, even when she unbelted and opened the zipper all the way. I helped readjust the hardware but cautioned her not to remove it and to close the zipper clear to her chin. "Deety, if you get holes in your hide, you'll get well. But if something loose catches our captain in the eye, the culprit will be broken on the wheel."

I clucked-clucked at her answer but big ones do get in the way. Meanwhile our men were having problems. That space under the instrument board could not be seen by a full-sized male. The best position to reach it was impossible for Jacob, ridiculously impossible for Zebbie.

Zebbie's profanity was louder than Deety's but not as colorful. My own darling was keeping quiet which meant that he was *really* in trouble. I said, "Gentlemen —"

Zebbie grunted, "Shut up, Sharpie; we've got problems! Deety! How did you get these toadstickers into this compartment?"

"I didn't. Aunt Hilda did."

"Sharpie, can I apologize later? Those Martians are circling us *now!"*

So they were, at least a dozen flapping monstrosities. One appeared about to ground. "Captain, I'll do it — but there is a faster way."

"How?"

"Unhook your scabbards, put on your sword belts. Saber and sword in scabbards fit easily if you point one right, the other left. They will rattle unless you stuff clothing around them."

"They can bloody well rattle!" In seconds, our gallants had blades and scabbards stowed. As Cap'n Zebbie resumed sword belt and started on his seat belt he called out, "Fasten belts, prepare to lift! Sharpie, have I told you today that in addition to loving you, I admire you?"

"I think not, Captain."

"I do. Enormously. Report! Science Officer?"

"Seat belt fastened. Thank you, Zebbie."

"Seat belt fastened," reported Deety. "Bulkhead door dogged."

"Seat belt fastened, starboard door seal checked, copilot ready, sir!"

"Port door seal checked, pilot strapped down; we're ready — and none too soon! One has grounded and somebody is getting out. Hey! They're human!"

"Or disguised aliens," said my darling.

"Well… yes, there's that. I may lift any second. Deety — that new program: Just G, A, Y, B, O, U, N, C, E? No 'do-it' word?"

"Check."

"Good. I won't use it unless forced to. This may be that 'first contact' the world has been expecting."

"Cap'n Zebbie, why would aliens disguise themselves when they outnumber us? I think they are human."

"I hope you're right. Copilot, should I open the door? Advice, please."

"Captain, you can open the door anytime. But if it *is* open, it takes a few seconds to close it and the ship won't lift with a door open."

"Too right. Gay Deceiver."

"Hi, Boss. Where did you pick up the tarts?"

"Gay, check and report."

"All circuits checked, all systems go, juice point seven-eight — and I'm in the mood."

"Cast loose L-gun. Prepare to burn."

"Done!"

"Captain," my husband said worriedly, "are you planning to blast them?"

"I hope not. I'd rather run than fight. I'd rather stay and get help than either. But they grounded where I *can* burn them — using offset."

"Captain, don't do it!"

"Copilot, I don't plan to. Now drop it!"

The grounded flappy bird was about two hundred meters and a few degrees left of dead ahead. Two men — they looked like men — had disembarked and headed toward us. They were dressed alike — uniforms? They seemed vaguely familiar — but all uniforms seem vaguely familiar, do they not?

They were less than a hundred meters from us. Cap'n Zebbie did something at his instrument board and suddenly their voices were inside, blastingly loud. He adjusted the setting and we could hear clearly. Zebbie said, "That's Russian! Isn't it, Jake?"

"Captain, I *think* so. A Slavic language, in any case." Jacob added, "Do you understand it?"

"Me? Jake, I said that I can swear in Russian; I didn't say I could speak it. I can say 'thank you' and 'please' and 'da' and 'nyet' — maybe six more. How about you?"

"I can puzzle out a paper about mathematics with the aid of a dictionary. But speak it? Understand it? No."

I tried to remember whether or not I had ever told Zebbie that I know Russian. My husband and Deety I had not told. Well, if Zebbie knew, he would call on me. It is not something I mention as it does not fit my *persona.* I started it out of curiosity; I wanted to read those great Russian novelists — Dostoievsky, Tolstoy, and so forth — in the original in order to find out why they were so celebrated. Why I had never been able to read one of those classic novels all the way through? (They had cured me of sleeping pills.)

So I set out to learn Russian. Soon I was wearing earphones to bed, listening to Russian in my sleep, working with a tutor in the daytime. I never mastered a good accent; those six-consonants-in-a-row words tie knots in my tongue. But one cannot read a language easily unless one can "hear" the words. So I learned the spoken language along with the written.

(Oh, yes, those "classic novels": Having invested so much effort I carried out my purpose: *War and Peace, The Idiot, The Brothers Karamazov, Anna Karenina,* and so forth. Would you believe it? Something is *gained* in translation; the originals are even more depressing and soporific than translations. I'm not sure what purpose Russian fiction has, but it *can't* be entertainment.)

I decided to wait. I was not eager to be interpreter and it would not be necessary if it turned out that Zebbie or Jacob had a language in common with our visitors — and I rationalized my decision by telling myself that it might turn out to be an advantage if the strangers thought that no one of us understood Russian.

(At that point I realized that I had been thinking in Russian. It's a wonderful language for paranoid thoughts.)

When Zebbie switched on the outside mikes, the older was telling the Younger: " — not let Fyodor Ivanovitch get wind of such thoughts, Yevgeny. He does not believe that (no good? stupid?) Britishers can excel us in anything. So don't refer to that curious craft as 'advanced engineering.' A 'weird assemblage of poorly organized experiments' would be better."

"I will remember. Shall I loosen my holster and take off the safety? To guard you, sir?"

The older man laughed. "You haven't dealt with the damned British as long as I have. Never let them suspect that you are even mildly nervous. And always be sure to insult him first. Bear in mind that the lowliest serf in Ykraina is better than their so-called King-Emperor. That serf —"

— when Zebbie interrupted: *"Arrêtez-là!"*

The younger hesitated but the older never broke stride. Instead he answered in French: "You are telling *me* to halt, you British swine? An officer of the Tsar on Russian soil! I spit on your mother. And your father if your mother can remember who he was. Why are you speaking French, you soiled British spy? You fool no one. Speak Russian — or, if you are uncultured, speak English."

Zebbie thumbed a button. "What about it, Jake? Switch to English when he's so hipped on the subject of Englishmen? Or bull it through in French? My accent is better than his."

"Maybe you can get away with it, Captain. I can't."

Zebbie nodded and opened the mike, spoke in English: "We are not British, not spies. We are American tourists and —"

"'American'? What nonsense is this?" (He had shifted to English.) "A British colonial is still British — and a spy."

My husband reached over, shut off the microphone. "Captain, I advise lifting. He won't listen to reason."

"Copilot, not till I *must.* We don't even have enough water. I must try to parley." Zebbie thumbed the switch. "I am not a British colonial. I am Zeb Carter of California, a citizen of the United States of America; I have my passport. If we have trespassed, we regret it and apologize."

"Spy, that is the most boldfaced bluff I have ever heard. There is no such country as the United States of America. I am placing you under arrest. In the name of His Imperial Majesty the Tsar of All the Russias, by authority delegated to me by His Viceroy for New Russia Grand Duke Fyodor Ivanovitch Romanov, I arrest you and your party for the crime of espionage. Open up!"

By now they had reached Gay Deceiver and were at the portside door.

Zebbie answered, "You haven't told me your name, much less identified yourself as a Russian officer. Or shown any authority over what is clearly unoccupied land."

"What? Preposterous! I am Colonel the Count Morinosky of Novy Kiev, of the Viceroy's Imperial Guard. As for my authority, look at the sky around you!" The self-proclaimed colonel drew his pistol, reversed it, and used the butt to pound on the door. "'Open up!' I said."

Zebbie has good temper and calm judgment. Both are likely to slip if anyone abuses Gay Deceiver.

He said softly, "Colonel, your craft on the ground ahead — is there anyone in it?"

"Eh? Of course not. It's a two-seater, as anyone can see. My private scoutabout. Never mind that. Keep quiet and open up."

Zebbie again switched off his microphone. "Gay Deceiver, at command 'Execute' burn one tenth of a second at point of aim, intensity four."

"Gotcha, Boss."

"Colonel, how can you take four prisoners in a two-seater?"

"Simple. You and I will ride in your vehicle. The other members of your party will be hostage for your good behavior and will ride where assigned. You won't see which craft lest you get foolish ideas. My pilot will fly my craft."

"Execute."

The grounded ornithopter began to burn fiercely — but the colonel did not see it. We saw it — but he was looking at Zebbie. Zebbie said, "Colonel, please stand clear of the door so that I can open it."

"Oh. Very well."

"Colonel! *Look!"* The younger officer, in stepping back, caught sight of the fire — and I have rarely heard such anguish.

Or, an instant later in the colonel's face, such astonishment switching to rage. He attempted to shoot Zebbie — with his hand still gripping the barrel of his pistol. In a moment he realized what he was doing and flipped it to catch it by the grip.

I never saw whether or not he made the catch; Cap'n Zebbie commanded, "Gay Bounce!" and the scene blacked out while the colonel's hand was open for the catch.

Zebbie was saying, "Jake, I lost my temper. I should not have done it; it ruined our last chance to deal with those Russians. But I hope it taught the ruddy snarf not to go around hammering dents into other people's cars."

"Captain, you did *not* ruin our 'last chance'; we never *had* one. You ran into classic Russian xenophobia. The Commies didn't invent that attitude; it goes back at least a thousand years. Read your history." Jacob added, "I'm not sorry you burned his kite. I wish he had to walk home. Regrettably one of his craft will pick him up."

"Jake, if I could afford to — in juice, in time — I would go back and *keep* him from being picked up. Harry them, not let them land. I won't. Hmm — Shall we fall a bit farther and see what they are doing? Before we get on with our interrupted schedule?"

"Uh… Captain, may I have a Bonine pill?"

I squealed, "Me, too!"

"Deety, take care of 'em. I'll put her in dive and we'll look."

"Captain, why not use the B, U, G, program?"

"Deety, somebody might be on that spot. Wups! I'm biting air." Cap'n Zebbie leaned us over, placed Barsoom — I mean "Mars" — Mars-10 or whatever-dead ahead. "Should spot flappy birds in few minutes. Jake, how about binoculars?"

Zebbie didn't want them himself while piloting. We passed them around and I spotted an ornithopter, then two more, and passed the glasses to Deety.

"Zebadiah, there is no one where we were parked."

"You're certain?"

"Yessir. The colonel's scoutabout is stifl burning; there are people near it, nowhere else. That's why I'm certain there is no one where we were. B, U, G, O, U, T is safe."

Zebbie was slow to answer. "How about it, folks? It would be an unnecessary risk. Just one squawk and I'll skip it."

I kept quiet and hoped the others would, too. I don't worry; I'm going to live as long as Atropos permits — meanwhile I intend to enjoy every minute. Zebbie waited, then said, "Here we go. Gay — *Bug Out!"*

Chapter XX

- right theory, wrong universe.

Zeb:

Deety is going to force me to look like a hero because I don't have the guts to let her down. I thought my copilot would veto going back to the scene of the crime; Jake is level-headed about safety precautions. I didn't count on Sharpie; she's unpredictable. But I thought Jake would object.

He didn't. I waited until I was certain that no one was going to get me off the spot… then waited some more… then said sadly, "Here we go," and told Gay to "BUG OUT!"

I expected to be a mushroom cloud. Instead we were parked where we had been and the colonel's craft was burning briskly. (Someday I am going to run that experiment: a transition to attempt to cause two masses to occupy the same space. But I won't be part of the experiment. The Bug-Out program scared me, and I liked the Take-Us-Home program a lot better after we made it two klicks H-above-G instead of parked. Could the Bug-Out program be modified so that Gay sneaked up on her target, checked it by radar, before accepting it? Take it up with Deety, Zeb — stick to what you know!)

The Russians appeared to be slow to notice our return. One ornithopter had grounded not far from the fire; there were several bystanders. I could not see whether or not my erstwhile arresting officer, Colonel Somethingsky, was in the group. I assumed that he was.

Then I was sure: A figure broke loose and headed toward us, waving a pistol. I said briskly, "Shipmates, is there any reason to hang around?"

I waited a short beat. "Hearing no objection — *Gay Bounce!"*

That black sky looked good. I wondered how Bumpsky was going to explain to the Grand Duke. Brass Hats are notoriously reluctant to believe unlikely stories.

"Did I bounce too quickly? Have you all seen what you wanted to see?"

Only Deety answered. "I was checking that program. I think I see a way to avoid two masses conflicting."

"Keep talking."

"Gay could sneak up on the target, inspect it by radar, accept it and ground, or refuse it and bounce — with no loss of time and with the same execute code. That spot could be knee-deep in Russians and Gay would simply whoosh us to where we are now."

(I *said* to leave it to Deety. You heard me.) "Good idea. Do it. Can't have too many fail-safes."

"I'll reprogram when we stop."

"Correction. I want that fail-safe programmed *now*. I might need your revised program any moment."

"Aye, aye, Captain."

"'Captain *darling,'* if you please. If you must call me 'Captain.' Then review all preprograms and debug them, if necessary, with analogous fail-safes. And any new ones in the future. Now — Just put her into glide, headed west, and transit three minima?"

"Or more. Or less. I thought that a spot check every thirty kilometers would be about right for a rapid survey."

"What altitude will we wind up? Assuming I simply aim her at the horizon and transit tangent to the curve."

"Oh. What altitude do you want, Captain — Captain darling? A tangent does little in three minima, just a touch over a hundred meters. Is ten kilometers about right?"

"Ten klicks is fine. I could aim at the horizon, make transition, then at once give the B, O, U, N, C, E order."

"So you could, Zebadiah, but if you will use the horizon as reference and aim eighteen and a half degrees above it — Will your gunsight depress that far?"

"No, but I'll tell Gay. No problem."

"Three minima on that upward slant will place you ten klicks H-above-G and a couple of klicks short of three minima on the curve."

"Plus my present altitude."

"No, no! Visualize the triangle, Zebadiah. It makes no real difference whether you do this from ten klicks H-above-G, or parked on the ground. Do you want exact figures?"

"You visualize triangles, Deety; that's your department. I've got air bite now; I'm going to head west; I want to see where those ornithopters came from. Meantime work out that new fail-safe." Did it really make no difference whether I started from ten thousand meters or right on deck? Didn't I have to add in - No, of course not ... but one way was sine and the other way was tan. But which one? Hell, it *didn't* matter; Deety was right. She always is, on figures — but someday I'm going to work it carefully, on paper, with diagrams and tables. "Copilot."

"Captain."

"L axis, transit, three minima."

"Transition, L axis, thirty kilometers — set!"

"Gay Deceiver."

"I'm not at home but you may record a message."

"Change attitude to climb eighteen point five degrees and report."

"Roger Wilco. Climbing. Ten. Twelve. Fourteen. Sixteen. Eighteen. Mark!"

"Execute!"

We were somewhere else with black sky. "Gay, vertical dive. Execute."

"No trouble, Clyde; enjoy the ride."

"Zebadiah, may I talk with Gay while you look over the terrain? To reprogram that fail-safe."

"Sure, go ahead. Jake, want to scan with binox while I eyeball it? I'll warn before transition."

"Zebadiah, I could give her a scouting program, automatic. Skip the vernliers, skip the climb order; just an 'execute' code word. Place her on course… or I could include course."

"I'll head her manually; the rest is swell — after that fail-safe. What's the code word?"

"'Scout'?"

"Good. Include the 'execute' idea in the code word. Deety, I've decided that I love you for your brain. Not those irrelevant physical attributes."

"Zebadiah, once I've had a bath you may change your mind. I've had a sudden attack of brain fever. You had better program her yourself."

"Mutiny again. I retract and apologize. You smell yummy and should marinate another week. It's not your cortex or your character I love but your carcass — delectable! If it weren't for these seat belts, it would be rape, rape, rape, all the way to the ground. Actually you're sort o' stupid-but *what* a chassis!"

"That's better. Although I'm not stupid."

"You married me. Res ipsa loquitur! Jake, are you spotting anything?"

"Dry hills, Captain. Might as well move on."

"Zebadiah, will you place her in glide and hold a few minutes?"

"Sure. See something you want to check?"

"No, sir, But when we emerged here, we had seventy-three seconds to impact. We've used twenty-one seconds. I'd like a few moments to insert those preprograms."

I overrode manually and started Gay into a stretched glide while I extended her wings. Then I let Deety and Gay talk to each other. Deety had both changes fully worked out; not once did Gay answer, "Null program."

I was about to warn Deety that Gay was not a sailplane when she reported, "All done, Captain. For the 'S' program I added in an alarm for two klicks H-above-G."

"Good idea. So now I head west again and give her that 'S' code word — no 'Execute'?"

"Yessir. 'Cept I'd like to try the revised B, U, G, O, U, T program. It has been less than four minutes since we left. Someone may be in that exact spot."

"Deety, I share your curiosity. But it's like testing a parachute the hard way. Can't we save it until we need it? Then, if there is a glitch, we'll be dead so fast we'll hardly notice it."

Deety said nothing. I waited, then said, "Comment, please."

"No comment, Captain." Deety's answer was toneless. "Hmm — Science Officer… comment, please."

"I have no comment to offer, Captain." (A slight chill?)

"Copilot, I require your advice."

"Uh, if the Captain please. Am I privileged to ask for written orders?"

"Well, I'll be dipped in — Gay Bounce! Is there such a thing as a 'space lawyer'? Like 'sea lawyer'? Jake, in general, anyone, save in the face of the enemy, may demand written orders… if he'll risk his career to 'perpetuate evidence for the courtmartial he knows will follow. Did it myself once and saved my neck and cost my temporary boss fifty numbers — and I wound up senior to him and he resigned.

"But a secondin-command is in a special position; it is his *duty* to advise his C.O., even if the C.O. doesn't ask for advice. So I don't see how you can demand written orders on a point already one of your duties. But I won't make an issue of it. I'll direct the Astrogator to log your request, then I can dictate my reply into the log. Then I am going to ground this go-buggy and turn command over to you. Maybe you'll have more luck chairing this debating society than I have had. I wish you luck — you'll need it!"

"But, Captain, I did not ask for written orders."

"Eh?" I thought back. He hadn't, quite. "It sounded as if you were about to."

"I was stalling. I *must* advise you to follow the prudent course. Unofficially, I prefer to risk the test. But I should not have stalled. I'm sorry that my intransigence caused you to consider relinquishing command."

"I didn't just consider it; I *have.* Resignation effective the first time we ground. You've bought it, Jake."

"Captain —"

"Yes, Deety?"

"You are correct; the test I suggested is useless, and could be fatal. I should *not* have asked for it. I'm sorry… sir."

"Me, too! I felt you were being too strict with Deety. But you weren't; you were taking care of us, as you always do, Zebbie. *Captain* Zebbie. Of *course* you shouldn't make a risky test we don't need."

I said, "Anyone anything to add?" No one spoke up, so I added, "I'm heading west," and did so. "Gay Deceiver — *Bug Out!"*

Black sky above us; that "dead sea bottom" far below… I remarked, "Looks as if a Russian, or one of their flappy craft, is in our parking spot. Deety, your revised program worked perfectly."

"But, Zebadiah — *why did you risk it?"* She sounded terribly distressed.

"Because all of you wanted to, despite what you said later. Because it's my last chance to make such a decision." I added, "Jake, I'm going to tilt her over. Grab the binox and see if you can identify where we were parked. If that fire is smoking, you can use it for reference."

"But, Captain, I'm *not* taking command. I won't accept it."

"Pipe down and carry out your orders! It's this damned yack-yack and endless argument that's giving me ulcers. If you won't accept command, then it's up for grabs. But *not* me! Oh, I'll pilot as the new C.O. orders. But I won't *command.* Deety, how long did Gay pause to make that radar check? At what height?"

"H-above-G was half a klick. Duration I don't know but I can retrieve it. Darling — Captain! You're not *really* going to quit commanding us?"

"Deety, I don't make threats. Pipe down and retrieve that duration. Jake, what do you see?"

"I've located the fire. Several ornithopters are on the ground. My guess places one of them about where we were parked. Captain, I advise not dropping lower."

"Advice noted. Deety, how about that duration?" I didn't know how to ask for it myself, not having written the program.

Deety retrieved it smoothly: 0.071 seconds — call it a fifteenth of a second. Radar is not instantaneous; Gay had to stop and sweep that spot long enough for a "picture" to form in her gizzards, to tell her whether or not she could park there. A fifteenth of a second is loads of time for the human eye. I hoped that Colonel Frimpsky had been watching when Gay popped up and blinked out.

"Five klicks H-above-G, Captain."

"Thanks, Jake." The board showed dive rate — straight down! — of over seven hundred kilometers per hour, and increasing so fast that the units figure was an unreadable blur, and the tens place next to it was blinking one higher almost by the second.

Most carefully I eased her out of dive, and gently, slowly opened her wings part way for more lift as she slowed, while making a wide clockwise sweep to the east — slowed her *dive,* that is, not her speed through the air. When I had completed that sweep, and straightened out headed for that column of smoke on course west, I was making over eight hundred kilometers per hour in unpowered glide and *still* had almost a klick H-above-G I could turn into greater speed.

Not that I needed it — I had satisfied myself by eye of what I had been certain of by theory: an ornithopter is slow.

Jake said worriedly, "May I ask the Captain his plans?"

"I'm going to give Colonel Pistolsky something to remember us by! Gay Deceiver."

"Still aboard, Boss."

I kept my eye on the flappy birds still in the air while I let Gay fly herself. Those silly contraptions could not catch us but there was always a chance that a pilot might dodge the wrong way.

Most of them seemed anxious to be elsewhere: they were lumbering aside right and left. I looked at the smoke — dead ahead — and saw what I had not noticed before: an ornithopter beyond the smoke.

Jake gasped but said nothing. We were on collision course closing at about 900 kms/hr, most of it ours. Suicide pilot? Idiot? Panicked and frozen?

I let him get within one klick of us, which brought us almost to the smoke and near the deck, about 200 meters H-above-G-and I yelped, "Scout!"

Yes, Deety is a careful programmer; the sky was black, we were ten klicks H-above-G, and so far as I could tell, the same barren hills under us that we had left five minutes earlier — and I was feeling cocky. My sole regret was that I would not hear Colonel Snarfsky try to explain to the Grand Duke the "ghost" craft now used by "British spies."

Did Russian nobility practice "honorable hara-kiri"? Perhaps the loaded-pistol symbol? You know that one: The officer in disgrace returns to his quarters and finds that someone has thoughtfully loaded his pistol and placed it on his desk… thereby saving the regiment the scandal of a court.

I didn't want the bliffy dead but busted to buck private. With time to reflect on politeness and international protocol while he cleaned stables.

I checked our heading, found that we were still pointed west. "Gay Deceiver, *Scout!"*

Black sky again, the same depressing landscape — "Copilot, is it worthwhile to tilt down for a better look? That either takes juice — not much but some — or it takes time to drop far enough to bite air and do it with elevons. We can't afford to waste either time or juice."

"Captain, I don't think this area is worth scouting."

"Careful of that participle; better say 'exploring.'"

"Captain, may I say something?"

"Deety, if you are speaking as Astrogator, you not only may but must."

"I could reprogram to put us lower if I knew what altitude was just high enough to let you use elevons. Conserve both time and juice, I mean."

"It seems to be about eight klicks H-above-G, usually. Hard to say since we don't have a sea-level."

"Shall I change angle to arrive at eight klicks H-above-G?"

"How long does it take us to fall two klicks when we arrive?"

She barely hesitated. "Thirty-two and a half seconds."

"Only half a minute? Seems longer."

"Three-two point six seconds, Captain, if this planet has the same surface gravity as Mars in our own universe — three-seven-six centimeters per second squared. I've been using it and haven't run into discrepancies. But I don't see how this planet holds so much atmosphere when Mars — *our* Mars — has so little."

"This universe may not have the same laws as ours. Ask your father. He's in charge of universes."

"Yes, sir. Shall I revise the program?"

"Deety, never monkey with a system that is working well enough — First Corollary of Murphy's Law. If it is an area as unattractive as this, we'll simply get out. If it has possibilities, half a minute isn't too long to wait, and the additional height will give us a better idea of the whole area. Gay Deceiver, *Scout!"*

We all gasped. Thirty kilometers and those barren hills were gone; the ground was green and fairly level — and a *river* was in sight. Or a canal.

"Oh, boy! Copilot, don't let me waste juice — be firm with me. Deety, count seconds. Everybody eyeball his sector, report anything interesting."

Deety started chanting "... thirteen... . fourteen... . fifteen — " and each second felt like ten. I took my hands off the controls to keep from temptation. That was either a canal or a stream that had been straightened, revetted, and maintained for years, maybe eons. Professor Lowell had been right — right theory, wrong universe.

"Deety, how far is the horizon?"

" — seventeen — about two hundred fifty klicks — twenty —"

I placed my hands gently on the controls. "Hon, that's the first time you've ever used the word 'about' with reference to a number."

" — twenty-four — insufficient data! — twenty-six —"

"You can stop counting; I felt a quiver." I put a soft nose-down pressure on the elevons and decided to leave her wings spread; we might want to stretch this one. "Insufficient data?"

"Zebadiah, it was changing steadily and you had me counting seconds. Horizon distance at ten klicks height above ground should be within one percent of two hundred and seventy kilometers. That assumes that this planet is a perfect sphere and that it is exactly like Mars in our universe — neither is true. It ignores refraction effects, tricky even at home — and unknown to me here. I treated it as geometry, length of tangent for an angle of four degrees thirty-seven minutes."

"Four and half degrees? Where in the world did you get that figure?"

"Oh! Sorry, dear, I skipped about six steps. On Earth one nautical mile is one minute of arc — check?"

"Yes. Subject to minor reservations. With a sextant, or in dead reckoning, or on a chart, a mile is a minute, a minute is a mile. Makes it simple. Otherwise we would be saying a minute is one thousand eight hundred fifty-three meters and the arithmetic would get hairy."

"One-eight-five-three point one-eight-seven-seven-oh-five plus," she corrected me. "*Very* hairy. Best not convert to MKS until the last step. But, Zebadiah, there is a simpler relation here. One minute of arc equals one kilometer, near enough not to matter. So I treated H-above-G, ten klicks, as a versine, applied the haversine rule and got four degrees thirty-seven minutes or two hundred seventy-seven kilometers to the theoretical horizon. You see?"

"I see everything but how you hide haversine tables in a jump suit. Me, I hide 'em in Gay… and make her do the work." Yes, I could nose her over now — easy does it, boy.

"Well, I didn't, exactly. I calculated it, but I did it the easy way: Naperian logarithms and angles in radians, then converted back to degrees to show the relationship to kilometers on the ground."

"That's 'the easy way'?"

"It is for *me,* sir!"

"If you're quivering your chin, stop it. I told you it was your luscious body, not your brain. Most *idiots-savants* are homely and can't do anything but their one trick. But you're an adequate cook, as well."

That got me a stony silence. I kept easing her nose down. "Time for binox, Jake."

"Aye aye, sir. Captain, I am required to advise you. With that last remark to the Astrogator you risked your life."

"Are you implying that Deety is an *in*adequate cook? Why, Jake!"

Hilda interrupted. "She's a gourmet cook!"

"I know she is, Sharpie… but I don't like to say it where Gay can hear — Gay can't cook. Nor has she Deety's other talent which 'tis death to hide. Jake, that's a settlement below."

"Of sorts. A one-church village."

"Do you see ornithopters? Anything that could give us trouble?"

"Depends. Are you interested in church architecture?"

"Jake, this is no time for a cultural chat."

"I'm required to advise you, sir, This church has towers, something like minarets topped off with onion-shaped structures."

"Russian Orthodox!"

Hilda said that. I said nothing. I eased Gay's nose up to level flight, lined her up with what I thought was downstream, and snapped, "Gay, *Scout!"*

The canal was still in sight, almost under us and stretching over the horizon. I was almost lined up with it. Gay, *Scout!*

"Anybody see that settlement that was almost ahead before this last transition? Report."

"Captain Zebbie, it's much closer now but on this side."

"I see. Or don't. Jake isn't transparent."

"Captain, the city — quite large — is about a fortyfive-degree slant down to starboard, not in sight from your seat."

"If fortyfive degrees is a close guess, a minimum transition on that bearing should place us over the city."

"Captain, I advise against it," Jake told me.

"Reasons, please."

"This is a large city that might be well defended. Their ornithopters look odd and ineffective but we must assume they have spaceships as good or better than ours or the Tsar could not have a colony here. This causes me to suspect that they may have smart missiles. Or weapons utterly strange. I would rather check for onion towers from a distance. And not stay long in one place — I think we've been here too long. I'm jumpy."

"I'm not" — my sixth sense was not jabbing me — "but set verniers for a minimum transition along L axis, then execute at will. No need to be a slow fat target."

"One minimum, L axis — *set!"*

Suddenly my guardian angel goosed me. "Execute!"

I noticed the transition principally because Gay was now live under my hand — air bite. Perhaps she had not been quite level. I turned her nose down to gather maneuvering speed unpowered, then did a skew turn — and yelped, "Gay *Bounce!"* having seen all that I wanted to see: an expanding cloud. Atomic? I think not. Lethal? *You* test it; I'm satisfied.

I told Gay to bounce three more times, placing us a bit less than fifty klicks above ground. Then I spent a trifle of power to nose her over. "Jake, use the binox to see how far this valley runs, whether it is all cultivated, whether it has more settlements. We are *not* going to get close enough to look for onion spires; that last shot was unfriendly. Rude. Impetuous. Or am I prejudiced? Science Officer? Le mot juste, s'il vous plait."

"Nye kultoorni."

"I remember that one! Makes Russians turn green. What does it mean? How did you happen to know it, Sharpie?"

"Means what it sounds like: 'uncultured.' I didn't just 'happen,' Cap'n Zebbie; I know Russian."

I was flabbergasted. "Why didn't you *say* so?"

"You didn't ask me."

"Sharpie, if you handled the negotiations, we might not have had trouble."

"Zebbie, if you'll believe that, you'll believe anything. He was calling you a spy and insulting you while the palaver was still in French. I thought it might be advantageous if they thought none of us knew Russian. They might spill something."

"Did they?"

"No. The colonel was coaching his pilot in how to be arrogant. Then you told them to halt, in French, and no more Russian was spoken save for meaningless side remarks. Zebbie, when they tried to shoot us down just now, would they have refrained had they known that I had studied Russian?"

"Mmm — Sharpie, I should know better than to argue with you. I'm going to vote for you for captain."

"Oh, *No!"*

"Oh, Yes. Copilot, I'm going to assume that everything this side of the hills and involved with this watercourse — courses — twin canals — is New Russia and that honorary Englishmen — us! — aren't safe here. So I'm going to look for the British colony. It may turn out that they won't like us, either. But the British are strong on protocol; we'll have a chance to speak our piece. They may hang us but they'll give us a trial, with wigs and robes and rules of evidence and counsel who will fight for us." I hesitated. "One hitch. Colonel Snotsky said there was no such country as the United States of America and I had the impression that he believed it."

Sharpie said, "He *did* believe it, Cap'n Zebbie. I caught some side chatter. I think we must assume that, in this universe, there was no American Revolution."

"So I concluded. Should we all be from the East Coast? I have a hunch that the West Coast may be part Russian, part Spanish — but not British. Where are we from? Baltimore, maybe? Philadelphia? Suggestions?"

Sharpie said, "I have a suggestion, Cap'n Zebbie."

"Science Officer, I like your suggestions."

"You won't like this one. When all else fails, tell the truth."

Chapter XXI

— three seconds is a long time —

Deety:

Zebadiah is convinced that I can program anything. Usually I can, given a large and flexible computer — but my husband expects me to manage it with Gay Deceiver and Gay is not big. She started life as an autopilot and is one, mostly.

But Gay is sweet-tempered and we both want to please him.

While he and my father were looking over the area that we thought of as "Russian Valley" or "New Russia," he asked me to work up a program to locate the British colony in minimum time, if it were in daylight. If not, then we would sleep near the sunrise line, and find it on the new daylight side.

I thought of bouncing out about a thousand kilometers and searching for probable areas by color. Then I realized that I didn't know that much about this planet. "Dead sea bottoms" from space looked like farm land.

At last I recalled something Zebadiah had suggested yesterday — no, *today!* less than two hours ago. (So much had happened that my sense of time played tricks. It was still accurate — but I had to *think* instead of just knowing.)

Random numbers — Gay had plenty of them. Random numbers are to a computer what free will is to a human being.

I defined a locus for Gay: nothing east of where we were, nothing in "Russian Valley," nothing on the dark side, nothing north of 45°, nothing south of 45° south. Yesterday I could not have told her the latter; but Mars has a good spin, one a gyrocompass can read. While we slept, Gay had noted that her gyrocompass did not have its axis parallel to that of this strange planet and had precessed it until it did.

Inside that locus I told Gay to take a Drunkard's Walk, any jumps that suited her, a three-second pause at each vertex, and, if one of us yelled *"Bingo!"* display latitude, longitude, and Greenwich, and log all three, so we could find it again.

Oh, yes — she was to pause that three seconds exactly one minimum H-above-G at each vertex.

I told her to run the program for one hour ... but that any of us could yell "Stop!" and then say "Continue" and that would be time-out, not part of the hour. But I warned my shipmates that yelling *"Stop!"* not only slowed things but also gave Russians (or British or anybody) a chance to shoot at us. I emphasized that three seconds is a *long* time (most people don't know it).

One hour —

Three seconds for each check —

Twelve hundred random spot checks — This is not a "space-filling" curve. But it should locate where the British were most thickly settled. If one hour did not do it, ten hours certainly would.

Without Gay, without her ability to do a Drunkard's Walk, we could have searched that planet for a lifetime, and never found either colony. It took the entire human race (of our universe) thirty centuries to search Terra… and many spots were missing until they could be photographed from space.

My husband said, "Let's get this straight." He bounced us four minima. "These subprograms — Gay, are you listening?"

"Of course. Are you?"

"Gay, go to sleep."

"Roger and out, Boss."

"Deety, I want to make sure of these subprograms but couldn't use code words while she was awake. I —"

"Excuse me, Zebadiah, but you can. She will ignore code words for subprograms except while the general program is running. The code for the general program is unusual and requires the execution command, so it can't be started by accident. You can wake Gay. We need her on some points."

"You're a smart girl, Deety."

"I'll bet you tell that to all adequate cooks, Boss."

"Ouch!"

"Captain, it is not difficult to program a computer to supervise cooking machines. The software sold under the trademark 'Cordon Bicu' is reputed to be excellent. Before you wake Gay, would you answer a hypothetical question concerning computers and cooking?"

"Captain!"

"Copilot?"

"I advise against permitting the Astrogator to discuss side issues — such as cooking — while we have this problem facing us."

"Thank you, Copilot. Astrogator, what was your hypothetical question?"

Pop had been careful not to interfere between Zebadiah and me, But his advice from copilot to captain was intended for *my* ears — he was telling me to *shut up,* and I suddenly heard Jane saying, "Deety, anytime a wife thinks she has won an argument, she has lost it."

I'm not Jane, I'm Deety. I get my temper from my father. I'm not as quick to flare up as he is, but I do have his tendency to nurse a grievance. Zebadiah is sometimes a tease and knows how to get my goat.

But Pop was telling me: *"Drop it, Deety!"*

Maybe Zebadiah was right — too much argument, too much discussion, too much "sewing circle & debating society." We were all intensely interested as we were all in the same peril… *but how much tougher is it to be captain rather than one of the crew?* Twice? Ten times?

I didn't know, Was my husband cracking under the pressure? "Getting ulcers"?

Was *I* adding to his burden?

I didn't have to stop to think this through; it was preprogrammed below the conscious level; Pop pushed the "execute" button and the answers spilled out. I answered my husband at once,

"What hypocritical question, sir?"

"You said, 'hypothetical.' Something about computers and cooking."

"Captain, my mind has gone blank. Perhaps we had better get on with the job before I forget how it works."

"Deety, you wouldn't fib to your pool' old broken-down husband?"

"Sir, when my husband is poor and old and broken-down, I will not fib to him."

"Hmm — If I hadn't already promised my support to Hilda, I would vote for you for captain."

Aunt Hilda cut in: "Zebbie, I release you! I'm not a candidate."

"No, Sharpie, once having promised political support an honorable man *never* welches. So it's all right for Gay to listen in?"

"Certainly, sir. For display I must have her. Hello, Gay."

"Hi, Deety."

"Display dayside, globe." At once Gay's largest screen showed the western hemisphere of Earth, *our* Earth in *our* universe — Terra. Early afternoon at Snug Harbor? Yes, the clock in my head said so and GMT on the instrument board read 20:23:07. Good heavens, it had been only twenty hours since my husband and my father had killed the fake "ranger." How can a lifetime be crowded into less than a day? Despite the clock in my head it seemed years since I had walked down to our pool, a touch tiddly and hanging onto my bridegroom for support.

"Display meridians parallels. Subtract geographical features," Gay did so. "From program coded 'A Tramp Abroad' display locus."

Gay used orthographic projection, so the 45th parallels were straight lines. Since I had told her to display dayside, these two bright lines ran to the left edge of the display, that being the sunrise line. But the right edge of the locus was an irregular line running southwest. "Add display Russian Valley."

To the right of the locus and touching it, Gay displayed as solid brightness a very long and quite wide blotch. "Subtract Russian Valley." The area we had sketchily explored disappeared.

"Deety," my husband asked, "how is Gay doing this? Her perms have no reference points for Mars — not even Mars of our own universe."

"Oh. Gay, display 'Touchdown.'"

"Null program."

"Mmm, yes, that's right; the Sun has just set where we were parked. Zebadiah, shall I have her rotate the globe enough to show it? All she would show would be a bright spot almost on the equator. I have defined the spot where we grounded as zero meridian — Greenwich for Mars. *This* Mars."

"And zero parallel? An arbitrary equator?"

"Oh, no, no! While we slept Gay adjusted her gyrocompass to match this planet. Which gave her true north and latitude. She already knows the radius and curvature of Mars — I started to tell her and found she had retrieved it from her perms. Aerospace Almanac?"

"I suppose so. But we discussed Mars' diameter last night while Gay was awake. Both you and Hilda knew it; Jake and I did not."

As I remembered it, Aunt Hilda spoke up — then Pop kept quiet. If Pop wanted to sit back and be proud of Aunt Hilda's encyclopedic memory that was all right with me. If my husband has a flaw, it is that he has trouble believing that females have brains… probably because he is so intensely interested in the other end. I went on with my lecture:

"Once I start Gay, she will say and record nothing unless ordered. She will make random transitions inside that locus until someone yells 'Bingo!' She won't slow down even then. She will place a bright point on the map at that latitude and longitude, record both latitude and longitude, and the exact time. She will display the Bingo time, too, for one second. If you want to retrieve that Bingo, you had better jot down that time — to the second. Because she'll be doing twenty jumps each minute. Don't worry about the hour, just the minute and the second. Oh, you could still retrieve it if you had the minute right, as I can ask her to run through all Bingoes in a given minute. Can't be more than twenty and your Bingo might be the only one.

"When we've done one hour of this, that map could, at most, have twelve hundred dots on it — but may have only a few — or none. If they are clustered, I'll reduce the locus and we'll run it again. If not, we can sleep and eat and do it for the other day side, the one twelve hours away. Either way, Gay will find the British — and we'll be safe."

"I hope you're right. Ever heard of the Opium Wars, Deety?"

"Yes, Captain. Sir, every nation is capable of atrocities, including our own. But the British have a tradition of decent behavior no matter what blemishes there are."

"Sorry. Why a one-hour program?"

"We may have to shorten it. A decision every three seconds for sixty minutes may be too tiring. If we start showing a marked hot spot sooner than that, we can shorten the first run and reduce the locus. We'll have to try it and see. But I feel certain that a one-hour run, a short rest, then another one-hour run, will locate the British if they are now on the day side."

"Deety, what do you define as 'Bingo'?"

"Anything that suggests human settlement. Buildings. Roads. Cultivated fields. Walls, fences, dams, aircraft, vehicles — But it is not 'Bingo'just because it looks interesting. Although it might be 'Stop!'"

"What's the difference?"

"'Stop' does *not* tell Gay to record or to display. For that you must add 'Bingo.' 'Stop' is for anything you want to look at more than three seconds. Maybe it looks promising and a few seconds more will let you decide. But please, everyone! There should not be more than a dozen calls for 'Stop!' in the hour. Any more questions?"

We started. Hilda gave the first Bingo. I saw it, too — farm buildings. Aunt Hilda is faster than I. I almost broke my own injunction; I had to bite down on "Stop!" The temptation to take a longer look was almost overpowering.

All of us made mistakes — but none serious. Hilda racked up the most Bingoes and Zebadiah the fewest — but I'm fairly certain that my husband was "cheating" by waiting to give Pop or me first crack at it. (He would not be competing with Aunt Hilda; port-forward and starboard-after seats have little overlapping coverage.)

I thought it would be tedious; instead it was exciting — but dreadfully tiring. Slowly, less than one a minute, bright dots appeared on the display. I saw with disappointment that most Bingoes were clustered adjacent to the irregular margin marking Russian territory. It seemed probable that these marked Russian territory, so very probable that it hardly seemed worthwhile to check for onion spires.

Once my husband called "Stop" and then "Bingo" at a point north and far west, at least fifteen hundred kilometers from the nearest Bingo light. I noted the time — Greenwich 21:16:51 — then tried to figure out why Zebadiah had stopped us. It was pretty country, green hills and lightly wooded and I spotted a wild stream, not a canal. But I saw no buildings or anything suggesting settlement.

Zebadiah wrote something on his knee pad, then said, "Continue." I was itching to ask why he had stopped, but when a decision must be made every three seconds there is no time to chat.

When the hour was nearly up, a single Bingo light in the far west that had been shining since the first five minutes was joined by another when Hilda scored another Bingo and two minutes later Pop said "Bingo!" and we had an equilateral triangle twenty kilometers on a side. I noted the time most carefully — then told myself not to be disappointed if inspection showed onion towers; we still had a hemisphere to go.

I decided to believe in that British colony the way one has to believe *hard* in fairies to save Tinker Bell's life. If there were no British colony, we might have to risk Earth-without-a-J. Gay Deceiver was a lovely car but as a spaceship she had shortcomings. No plumbing. Air for about four hours and no way to recycle. No plumbing. Limited food storage. No plumbing. No comfortable way to sleep in her. No plumbing.

But she had talents no other spaceship had. Her shortcomings (according to my father and husband) could be corrected at any modern machine shop. But in the meantime we did not have even an outhouse behind the barn.

At last Gay stopped, continued to display, and announced, "One hour of 'A Tramp Abroad' completed. Instructions, please."

"Gay, Bounce," said Zebadiah. "Deety, I don't think we've nailed down the piece The Sun Never Sets On. But this dense cluster here to the right — Too close to the Little Father's little children. Eh?"

"Yes. Zebadiah, I should tell Gay to trim the locus on the east to eliminate the clustered lights, and now we can add almost nine hundred kilometers on the west, to the present sunrise line. Gay can rotate the display to show the added area. I suspect that one more hour will fill in the picture sufficiently."

"Maybe even less. You were right; three seconds is not only a long time; it is excessively long. Isn't two seconds enough? Can you change that without starting from scratch?"

"Yes to both, Captain."

"Good. You can add thirty degrees on the west instead of fifteen. Because we are going to kill an hour — stretch our legs, eat a snack… and I for one want to find a bush. How do I tell Gay to return to a particular Bingo? Or will that mess up your program?"

"Not a bit. Tell her to return to Bingo such-and-such, stating the time."

I was unsurprised when he said, "Gay, return to Bingo Greenwich twenty-one sixteen fifty-one."

It was indeed a pretty stream. Zebadiah said happily, "That beats burning juice. Who sees a clearing close to that creek, big enough for Gay? Hover and squat, I mean; I don't dare make a glide landing, dead stick — the old girl is loaded."

"Zebbie, I'm sober as you are!"

"Don't boast about it, Sharpie. I think I see a spot. Close your eyes; I'm going to."

I almost wish I had.

Zebadiah came in on a long glide, everything set for maximum lift — but no power. I kept waiting for that vibration that meant that Gay was alive and roaring… and waited… and waited —

He said, "Gay — " and I thought that he was going to tell her to turn herself on. No. We actually dropped below the level of that bank.

Then he suddenly switched on power by hand but in *reverse* — flipped us up on that bank; we stalled, and dropped perhaps a meter — we just *barely* missed that bank.

I didn't say anything. Aunt Hilda was whispering, "Hail Mary Mother of God Om Mani Padme Hum There is No God but God and Mahomet is His Prophet — " then some language I did not know but it sounded very sincere.

Pop said, "Son, do you always cut it that fine?"

"I saw a man do it that way when he had to; I've always wondered if I could. But what you didn't know was — Gay, are you listening?"

"Sure thing, Boss. You alerted me. Where's the riot?"

"You're a smart girl, Gay."

"Then why am I pushing this baby carriage?"

"Gay, go to sleep."

"Sleepy time. Roger and out, Boss."

"Jake, what you didn't know was that I had my cheeks puffed to say B, O, U, N, C, E, explosively. Your gadget has made Gay's reflexes so fast that I knew I could come within a split second of disaster and she would get us out. I wasn't cutting didoes. Look at that meter. Seventy-four percent of capacity. I don't know how many landings I'm going to have to make on that much juice."

"Captain, it was brilliant. Even though it almost scared it out of me."

"Wrong honorific, *Captain.* I'm the pilot going off duty. We're landed; my resignation is effective; you're holding the sack."

"Zeb, I told you that I would *not* be captain."

"You can't help it; you *are.* The secondin-command takes command when the captain dies, or goes over the hill — or quits. Jake, you can cut your throat, or desert, or go on the binnacle list, or take other actions — but you can't say you are not captain, when you *are* — Captain!"

"If you can resign, I can resign!"

"Obviously. To the Astrogator, she being next in line of command."

"Deety, I resign! Captain Deety, I mean."

"Pop, you can't do this to me! I'll — I'll — " I shut up because I didn't know what to do. Then I did. "*I* resign… Captain Hilda."

"What? Why, that's silly, Deety. A medical officer is not in line of command. But if 'medical officer' is a joke and 'science officer,' too, then I'm a passenger and still not in line of command."

My husband said, "Sharpie, you have the qualifications the rest of us have. You can drive a duo —"

"Suddenly I've forgotten how."

" — but that's not necessary. Mature judgment and the support of your crew are the only requirements, as we are millions of miles and several universes from licenses and such. You have my support; I think you have it from the rest. Jake?"

"Me? Of course!"

"Deety?"

"Captain Hilda knows she has my support," I agreed. "I was first to call her 'Captain.'"

Aunt Hilda said, "Deety, I've just resigned."

"Oh, no, you haven't anybody to resign to!" I'm afraid I was shrill.

"I resign to the Great Spirit Manitou. Or to you, Zebbie, and it comes around in a circle and you are captain again… as you should be."

"Oh, no, Sharpie. I've stood my watch; it's somebody else's turn. Now that you have resigned, we have no organization. If you think you've stuck me with it, think again. You have simply picked an unusual way to homestead on this spot. In the meantime, while nobody is in charge, I hope that you all are getting both ears and a belly full of what got me disgusted. Yack yack yack, argue, fuss, and jabber — a cross between a Hyde Park open forum and a high school debating society."

Aunt Hilda said, in sober surprise, "Why, Zebbie, you almost sound vindictive."

"Mrs. Burroughs, it is possible that you have hit upon the right word. I have taken a lot of guff… and quite a bit of it has been from you."

I haven't seen Aunt Hilda look so distressed since Mama Jane died. "I am very sorry, Zebbie. I had not realized that my conduct had displeased you so. I did not intend it so, ever. I am aware — constantly! — that you have saved our — *my* — life five distinct times… as well as continuously by your leadership. I'm as grateful as my nature permits — a giant amount, even though you consider me a shallow person. But one can't show deepest gratitude every instant, just as one cannot remain in orgasm continuously; some emotions are too strong to stay always at peak."

She sighed, and tears rolled down her face. "Zebbie, will you let me try again? I'll quit being a Smart Aleck. It will be a hard habit to break; I've been one for years — my defense mechanism. But I *will* break it."

"Don't be so tragic, Hilda," Zebadiah said gently. "You know I love you… despite your little ways."

"Oh, I know you do! — you big ugly giant. Will you come back to us? Be our captain again?"

"Hilda, I've never left. I'll go right on doing the things I know how to do or can learn. And as I'm told. But I *won't* be captain."

"Oh, dear!"

"It's not tragic. We simply elect a new C.O."

My father picked this moment to get hairy. "Zeb, you're being pretty damned stiff-necked and self-righteous with Hilda. *I* don't think she has misbehaved."

"Jake, you are in no position to judge. First, because she's your bride. Second, because *you* haven't been sitting in the worry seat; *I* have. And *you* have supplied some of the worst guff yourself."

"I was not aware of it… Captain."

"You're doing it now… by calling me 'Captain' when I'm not. But do you recall a couple of hours ago when I asked my secondin-command for advice — and got some back chat about 'written orders'?"

"Mmm… I was out of line. Yes, sir."

"Do you want other examples?"

"No. No, I stipulate that there are others. I understand your point, sir." Pop gave a wry smile. "Well, I'm glad Deety hasn't given you trouble."

"On the contrary, she has given me the most."

I had been upset — iI had never really believed that Zebadiah would resign. But now I was shocked and bewildered and hurt. "Zebadiah, what have I *done?"*

"The same sort of nonsense as the other two… but harder for me because I'm married to you."

"But — But *what?"*

"I'll tell you in private."

"It's all right for Pop and Aunt Hilda to hear."

"Not with *me.* We can share our joys with others but difficulties between us we settle in private."

My nose was stuffy and I was blinking back tears. "But I must *know."*

"Dejah Thoris, you can list the incidents if you choose to be honest with yourself. You have perfect memory and it all took place in the last twenty-four hours."

He turned his face away from me. "One thing I must urge *before* we choose a captain. I let myself be wheedled and bullied into surrendering authority on the ground. That was a *bad* mistake. A sea captain is still captain when his ship is anchored. Whoever becomes captain should profit by my mistake and not relinquish *any* authority merely because Gay is grounded. She can relax the rules according to the situation. But *the captain* must decide. The situation can be *more* dangerous on the ground than in air or in space. As it was today when the Russians showed up. Simply grounding must not be: 'School's out!

Now we can play!'"

"I'm sorry, Zebbie."

"Hilda, I was more at fault than you. I wanted to be free of responsibility. I let myself be talked into it, then my brain went on vacation. Take that 'practice hike.' I don't recall who suggested it —"

"I did," said my father.

"Maybe you did, Jake; but we all climbed on the bandwagon. We were about to run off like a bunch of Scouts with no Scoutmaster. If we had started as quickly as we had expected to, where would we be now? In a Russian jail? Or dead? Oh, I'm not giving myself high marks; one reason I've resigned is that I haven't handled it well. Planning to leave Gay Deceiver and everything we own unguarded while we made walkabout — good God! If I had felt the weight of command I would never have considered it."

Zebadiah made a sour face, then looked at my father. "Jake, you're eldest. Why don't you take the gavel while we pick a new C.O.? I so move."

"Second!"

"Question!"

"White ballot!"

"What gavel? I'll bet there isn't a gavel on this planet." In a moment Father quit stalling. We all voted, using a page from Zebadiah's notebook torn in four. They were folded and handed to me and I was required to declare the vote. So I did:

Zeb
Zebadiah
Zebbie
Sharpie

Zebadiah reached back, got the ballots from me, handed back the one that meant "Aunt Hilda," took the other three and tore them into small pieces.

"Apparently you did not understand me. I've *stood* my watch; someone else must take it — or we'll park on this bank until we die of old age. Sharpie seems to have an overwhelming lead — is she elected? Or do we ballot again?"

We balloted again:

Sharpie
Jacob
Jacob
Hilda

"A tie," Father said. "Shall we invite Gay to vote?"

"Shut up and deal the cards."

Sharpie
Deety
Deety
Hilda

"Hey!" I protested. "Who switched?" (I certainly didn't vote for *me.)*

Sharpie
Hilda
Zebbie
Hilda

"One spoiled ballot," said my husband. "A non-candidate. Will you confirm that, Mr. Chairman?"

"Yes," Pop agreed. "My dear ... Captain Hilda. You are elected without a dissenting vote."

Aunt Hilda looked as if she might cry again. "You're a bunch of stinkers!"

"So we are," agreed my husband, "But we are *your* stinkers, Captain Hilda." That got him a wan smile. "Guess maybe. Well, I'll *try."*

"We'll all try," said Pop.

"And we'll all help," said my husband.

"Sure we will!" I said, and meant it.

Pop said, "If you will excuse me? I've been anxious to find a handy bush since before this started." He started to get out.

"Just a moment!"

"Eh? Yes, my dear? Captain."

"No one is to seek out a bush without an armed guard. Not more — and not less — than two people are to leave the car's vicinity at one time. Jacob, if your need is urgent, you must ask Zebbie to hurry — I want the guard to carry both rifle and pistol."

I think it worked out that Pop got the use of a bush last — and must have been about to burst his bladder. Later I overheard Pop say, "Son, you've read Aesop's Fables?"

"Certainly."

"Does anything remind you of King Log and King Stork?"

Chapter XXII

"'From each according to his ability, to each according to his needs.'"

Hilda:

I could tell from the first ballot that Zebbie was determined to make me take a turn as captain. Once I realized that, I decided to be captain — let them get sick of me and anxious to have Zebbie back.

Then suddenly I *was* captain — and it's different. I did not ever again think of trying to make them sick of me; I just started to worry. And *try*.

First my husband wanted to find a bush for the obvious reason — and I suddenly realized that a banth might get him. Not a Barsoomian banth but whatever this planet held in dangerous carnivores.

So I ordered armed guards. With rules about not getting separated. It was a nuisance but I was firm… and knew at last what a crushing load there had been on Zebbie.

But one thing I could improve: Arrange for us to sleep inside the car.

The space back of the bulkhead behind the rear seats was not organized. We had about six hours till sundown (having gained on the Sun in going west), so I had *everything* in that space pulled out.

Space enough for Zebbie and Deety, on his sleeping bag opened out, blankets over them. Jacob and I? The piloting chairs we moved forward all the set screws would allow, laid them back almost fh~t and padded the cracks with pillows, and, to support our legs, the cushions from the rear seats were placed on boxes we would otherwise discard once I had the car organized. It wasn't the best bed but low gravity and my cuddlesome husband made it a most attractive one.

Baths — In the stream and *cold!* Same rules as for bushes: armed guards. Soap thoroughly on the bank, get in and rinse *fast,* bounce out and towel till you glowed. Primitive? *Luxurious!*

This did not go smoothly. Take the "handy bush" problem. I did not have to be told that a latrine should be downstream or that our shovel should be carried every time without fail — rules for a clean camp are as old as the Old Testment.

But my first order called for no more than two and no less than two to leave the car at any time, and one must be armed — the other rifle and pistol must guard Gay.

I blurted out that order when the truth landed on me like a load of bricks that *I,* the runt who had never grown up, was now responsible for the lives of four people. At the time my orders seemed not only logical but necessary and feasible: Jacob would guard me, Zebbie would guard Deety, our men would guard each other.

There was a flaw. I did not realize that my edict required: a) one rifleman always to be at the car; b) *both* men to be away from the car from time to time.

Since this is not possible I amended it: When the men had to answer calls of nature, we women would lock ourselves in. I didn't *know* that this planet had anything more dangerous than Alice's Bread-and-Butter Fly. But that was the point: I didn't *know* and until I *did,* I must assume that something as dangerous as a tiger lurked behind every bush.

Heavens! the *bush* might be carnivorous.

I was learning, with breath-snatching speed, something that most people never learn: A commanding officer's "unlimited" authority isn't freedom; it's a straitjacket. She can't do as *she* pleases; she *never* can — because every minute, awake and asleep, she must protect those under her command.

She can't take any avoidable risk herself; her life does not belong to her; it belongs to her command.

When the captaincy was thrust on me, I decided that we would stay where we were until Gay Deceiver was reorganized so that all four of us could sleep comfortably and safely — no swollen ankles.

Sharpie hadn't thought of this; *Captain Hilda Burroughs* thought of it *at once.* Captain Zebbie had thought of it when we first grounded, then had let himself be overruled.

I knew that I could rearrange the car to let us all sleep behind locked doors. But it would take time, sweat, and muscles, and I had just proclaimed an order that would take one or both sets of big muscles off the job for… how many times a day? Four people? Such needs can't be hurried. I had a horrid suspicion that having someone standing over you with a rifle, even your nearest and dearest, might cause a healthy reflex to fail.

What to do?

Cancel the order?

No!

Cancel if a better scheme turned up. But *don't* cancel without finding something better. This was a pretty spot, but there still might be that "banth." Or bandersnatch. Or boojum. Especially a boojum. What if Zebbie should wander off that distance dictated by modesty and/or relaxation of nerves… and "softly and silently vanish away"?

And it was *Zebbie* I was having trouble with — *Zebbie,* who wasn't going to give the new captain any back talk whatsoever. "Cap'n Hilda honey, I don't need a chaperon, honest. I'll carry my rifle and guard myself. No problem. Safety off and a cartridge under the firing pin. Promise."

"Zebbie, I am not asking you, I am *telling* you."

"But I don't like to leave you girls unguarded!"

"Chief Pilot."

"Ma'am. Captain."

"I am not a girl. I am eleven years your senior."

"I simply meant —"

"Pipe down!"

The poor dear's ears turned red but he shut up. I said, "Astrogator!"

"Huh? Yes, Captain Auntie."

"Can you use a rifle?"

"Oh, sure, Pop made me learn. But I don't like a rifle; I like my shotgun."

"Take the Chief Pilot's rifle and guard the camp —"

"Look, I can do it better with my shotgun."

"Pipe down and carry out your orders."

Deety looked startled, trotted over to Zebbie, who surrendered his rifle without comment, face frozen.

"Copilot," I said to my husband, "arm yourself with rifle and pistol, go with the Chief Pilot, guard him while he does what he has to do."

Zebbie swallowed. "Sharpie — I mean *'Captain* Sharpie.' It won't be necessary. The golden moment has passed. All this talk."

"Chief Pilot, please refrain from using my nickname while I am your commanding officer. Copilot, carry out your orders. Remain with the Chief Pilot and guard him continuously as long as necessary to accomplish the purpose of the trip." (If Zebbie meant "constipation" — an emotional to-do can have that effect — I would act later in my capacity as "medical officer" — and it would not take four husky orderlies to make Zebbie hold still. The authority of a commanding officer almost never requires force. Odd but true — I wondered how I knew that.)

Once our men were out of earshot, I said, "Deety, could I learn to shoot that rifle?"

"I'm not sure I'm speaking to you. You humiliated my husband… when we all owe him so much."

"Astrogator!"

Deety's eyes got wide. "Good God — it's gone to your head!"

"Astrogator."

"Uh… yes, Captain."

"You will refrain from personal remarks to me or about me during my tenure as commanding officer. Acknowledge that order, then log it."

Deety's face assumed the expression that means that she has shut out the world. "Aye aye, Captain. Gay Deceiver!"

"Hello, Deety!"

"Log mode. The Captain has ordered the Astrogator to refrain from personal remarks to her or about her during her tenure as commanding officer. I acknowledge receipt of order and will comply. Log date, time, and Bingo code. I tell you three times."

"Deety, I hear you three times."

"Back to sleep, Gay."

"Roger and out."

Deety turned to me, face and voice normal again. "Captain, I can teach you to shoot in such a way that you won't get a sore shoulder or be knocked down. But to become a *good* shot with a rifle takes a long time. My shotgun doesn't kick as hard… and you won't need skill."

"I thought a shotgun was more difficult."

"Depends. A shotgun is usually for surprise targets in the air. That takes skill. But for a stationary target — within range — it's about like a garden hose. The shot spreads in a cone. So easy that it's not sporting."

"'Not sporting' suits me. Will you show me how? What kind of target do we need?"

"It ought to be a large sheet of paper to show how the shot spreads. But, Captain, you know what will happen if I fire a gun?"

"What?"

"We will have two men back here at a dead run — one of them trying to dress as he runs. I don't think he'll be pleased."

"Meaning I shouldn't get Zebbie angry twice in ten minutes."

"It might be *your* husband. Stands to reason that they'll both take care of needs before returning. If I fire a shot, I'd better have a dead body to show for it, or one or the other will blow his top. Or both."

"Both! Thanks, Deety — I didn't think it through."

"But also, the Captain will recall that she ordered me to guard camp. I can't teach shooting at the same time."

(Sharpie, can't you do *anything* right?) "No, of course you can't! Deety, I'm off to a bad start. All of you annoyed at me and one, maybe two, really angry."

"Does the Captain expect me to comment?"

"Deety, *can't* you call me 'Aunt Hilda'?" I wasn't crying — I've trained myself not to. But I *needed* to. "Yes, I want your comment."

"Captain Aunt Hilda, I need to call you by your title to keep myself reminded that you *are* captain. Since you ordered me to refrain from personal remarks to you or about you, I needed a second order before I *could* comment."

"As bad as that? Don't spare me but make it quick."

"The Captain hasn't done badly."

"I *haven't?* Deety, don't fib to Hilda; you never used to."

"And I'm not going to now. Captain, *I* think you are off to a good start."

"But you said it had gone to my head!"

"I was wrong. I realized how wrong when I was logging your order to me. What I said was worse than anything I said to Zebadiah while he was captain — he required me to review in my mind all the things I've said… and at least twice he should have given me a fat lip" — Deety smiled grimly — "'cept that Zebadiah couldn't bring himself to strike a woman even if she weren't pregnant. Captain — Captain Aunt Hilda honey — Zebadiah didn't crack down on us when he should have. He turned over to you a gang of rugged individualists, not one with any concept of discipline. I certainly had none. But I do now."

"I'm not sure that I do," I said miserably.

"It means obeying orders you don't like and strongly disagree with — with no back talk. 'Into the jaws of death rode the six hundred.' Zebadiah would not do *that* to us… but he did let us annoy him into testing my new Bug-Out program. He had told me that the test was a useless risk; I should have agreed because it *was* useless. Instead I gave him a snooty 'No comment,' and you were as bad and Pop was worse. Mmm… I don't think Zebadiah has had much experience as a commanding officer."

"Why so, Deety? He *is* a captain."

"That doesn't mean that he has ever been a commanding officer. He has soloed quite a lot, in fighters. He has logged control time in larger craft or he wouldn't hold a command pilot rating. But has he ever actually commanded? Nothing he has said to me indicated it… but he did tell me that before the last war a major was often captain of an air-and-space craft but now it almost always took a lieutenant colonel while majors wound up as copilots. He was explaining why he liked one-man fighters so well. Aunt Hilda — Captain — I think commanding was as new to Zebadiah as it is to you. Like sex, or having a baby, you can't understand it till you've tried it." She suddenly grinned. "So don't hold Zebadiah's mistakes against him."

"What mistakes? He's saved our lives again and again. I don't blame him — now — for wanting a rest from commanding. Deety, it's the hardest work possible even if you don't lift a finger. I never suspected it. I don't expect to sleep a wink tonight."

"We'll guard you!"

"No."

"Yes, we will!"

"Pipe down."

"Sorry, Ma'am."

"What mistakes did Zebbie make?"

"Well… he didn't crack down. You wasted no time in letting us know who is boss. You didn't let us argue; you slapped us down at once. I hate to say this but I think you have more talent for command than Zebadiah has."

"Deety, that's silly!"

"Is it? Napoleon wasn't tall."

"So I have a Napoleonic complex. Humph!"

"Captain, I'm going to ignore that because, under that order you made me log, I'm damned if I do and damned if I don't."

"Well… I know how not to get a Napoleonic complex. Deety, you're my secondin-command."

"But *Pop* is secondin-command."

"Wrong tense. 'Was' — he is no longer. As astrogator you may have inherited it anyhow; you can ask Zebbie — but in private; my decision is not subject to debate. Simply acknowledge it."

"I — Aye aye, Captain."

"You are now required to advise me whenever you think that I am about to make a serious mistake. You are also required to advise me on request."

"My advice isn't worth much. Look how I goofed a few minutes ago."

"That was *before* you were appointed secondin-command. Deety, actually holding an office makes a big difference."

Deety blinked and looked solemn, then said soberly, "Yes, I think it does. Yes, it does. I feel it, I do! Weird."

"Wait till you're captain. Eight times as weird."

"Never. Pop wouldn't go for it, Zebadiah wouldn't, I won't — that's three votes."

"I said No right up to the point where I could not avoid it. Don't worry about it now. I'll boss and you'll advise me."

"In that case, Captain, I advise you to reconsider letting us guard you. After we eat and start scouting again, I advise that, even if we find the British quickly, instead of making contact, we should find a spot as deserted as this at the sunrise line and get a long day's sleep. We crew can get eight hours — I'll take the middle watch; the men can get eight hours solid each… and the Captain can get anything up to twelve."

"Advice noted. It's good advice. But that's not the program; we're going to sleep *here."* I told Deety what I had in mind. "When the car is restowed, we'll eat. If there is daylight left, we'll bathe before we eat. Otherwise in the morning."

"I'd rather hurry through eating and get a bath… since you tell me I'm going to be able to sleep with my husband. When I'm frightened I stink worse… and I've been *much* more scared than I've tried to let on."

"Into cold water after eating? Deety, you know better."

"Oh. I'll skip eating, if necessary, to bathe."

"Astrogator, we'll do it my way."

"Yes, Captain. But I stink, I do."

"We'll all stink by the time we restow this car and may wind up eating sandwiches in the dark because everything that we don't throw away is going to be inside with us and Gay locked and not a light showing by sundown." I cocked my head. "Hear something, Deety?"

Our men came back looking cheerful, with Zebbie carrying Jacob's rifle and wearing Jacob's pistol. Zebbie gave me a big grin. "Cap'n, there wasn't a durn thing wrong with me that Carter's Little Liver Pills couldn't have fixed. Now I'm right."

"Good."

"But just barely," agreed my husband. "Hilda — Captain Hilda my beloved — your complex schedule almost caused me to have a childish accident."

"I think that unnecessary discussion wasted more time than did my schedule. As may be, Jacob, I would rather have to clean up a 'childish accident' than have to bury you."

"But —"

"Drop the matter!"

"Pop, you had better believe it!" sang out Deety.

Jacob looked startled (and hurt, and I felt the hurt). Zebbie looked sharply at me, no longer grinning. He said nothing, went to Deety, reached for his rifle. "I'll take that, hon."

Deety held it away from him. "The Captain has not relieved me."

"Oh. Okay, we'll do it by the book." Zebbie looked at me. "Captain, I thoroughly approve of your doctrine of a continuous guard; I was too slack. It was my intention to relieve the watch. I volunteer to stand guard while you three eat —"

" — then I'll guard while Zeb eats," added Jacob. "We already worked it out. When do we eat? I could eat an ostrich with the feathers left on." He added, "Hilda my love, you're captain… but you're still cook, aren't you? Or is Deety the cook?"

(Decisions! How does the captain of a *big* ship cope?) "I've made changes. Deety remains astrogator but is now secondin-command and my executive officer. In my absence she commands. When I'm present, Deety's orders are my orders; she will be giving them to implement what I want done. Neither she nor I will cook. Uh, medical officer — " (Damn it, Sharpie, all those hours in the emergency room make *you* the only candidate. Or does it? Mmm —) "Zebbie, does 'command pilot' include paramedical training?"

"Yes. Pretty sketchy. What to do to keep the bloke alive until the surgeon sees him."

"You're medical officer. I am assistant medical officer when you need me — if I don't have something else that *must* be done."

"Captain, may I put in a word?"

"Please do, Chief Pilot."

"Sometimes you have to let the bloke die because there is something else that *has* to be done." Zebbie looked bleak. "Saw it happen. Does no good to worry ahead of time or grieve about it afterwards. You do what you must."

"So I am learning, Zebbie. Cook — Gentlemen, I've never eaten your cooking. You must assess yourselves. Which one of you is 'adequate' —"

"Ouch."

"Your wording, Zebbie. — and which one is inadequate?"

They backed and filled and deferred to each other, so I put a stop to it. "You will alternate as first and second cook until evidence shows that one is chief cook and the other assistant. Jacob, today you are first cook —"

"Good! I'll get busy at once!"

"No, Jacob." I explained what we were going to do. "While you two get *everything* out of the car, Deety will teach me the rudiments of shotgun. Then I will take over guard duty and she can help unload. But keep your rifles loaded and handy, 'cause if I shoot, I'll need help in a hurry. Then, when we restow, I'll do it because I'm smallest and can stand up, mostly, behind the bulkhead. While Zebbie stands guard, and Deety and Jacob pass things in to me."

Jacob wasn't smiling — and I suddenly recognized his expression. I once had a dog who (theoretically) was never fed at the table. He would sit near my knee and look at me with that same expression. Why, my poor darling was hungry! Gut-rumble hungry. I had such a galloping case of nerves from becoming captain that I had no appetite.

"Deety, in the pantry back at Snug Harbor I noticed a carton of Milky Way bars. Did that get packed?"

"Certainly did! Those are Pop's — his vice and eventual downfall."

"Really? I don't recall seeing him eat one."

My husband said, "I haven't been eating them lately. All things considered, my dear — my dear Captain — I prefer you to candy bars."

"Why, thank you, Jacob! Will you share those candy bars? We understand that they are your personal property."

"They are not my personal property; they belong to all of us. Share and share alike."

"Yup," agreed Zebbie. "A perfect communism. 'From each according to his ability, to each according to his needs.' With the usual communist dictator on top."

"Zebbie, I've been called everything from a black reactionary to a promiscuous old whore — but never before a communist dictator. Very well, you may address me as 'Comrade Captain.' When we come across those candy bars, everybody grab one for quick energy — unless somebody remembers where they were packed?"

"Gay knows!" said Deety, and backed toward the car's open door while still keeping her eyes swinging the arc away from the river-perfect sentry and looking cute at it. "Gay Deceiver!"

"Hi, Deety! Getting any?"

"Inventory. Food supplies. Candy. Milky Way bars. Report location."

"Frame twenty. Starboard. Closed storage sevenEss-high. Bottom shelf."

Five hours later everything was back inside except a heap of wrapping, packaging, and such — yet the increase in space was far greater than that pile. This was because storage did not have to be logical. Just tell Gay. A left shoe could fill an odd space in with the swords while the right shoe from the same pair was a space filler in a tool storage far to the rear — yet the only inconvenience lay in having to go to two places to get them.

I did the stowing; Deety stayed in the cabin, received items handed from outside, described the item to Gay, then described to Gay where the item was stowed, as I reported it. Gay was under instruction to hear only Deety's voice — and what Deety told Gay was so logical that no one need remember it. Like this: "Gay Deceiver."

"Boss, when will you learn to say 'Please'?"

"Clothing. Zeb. Shoes. Field boots."

"Right boot. Abaft bulkhead. Starboard. Frame forty. Under deckplate. Outboard compartment. Left boot. Abaft bulkhead. Portside. Frame sixty. Under deckplate, middle compartment. Warning: Both boots filled with rifle ammo padded with socks."

You see? If you got categories in the wrong order, Gay would restring them. Give her the basic category and the identification, leaving out the other steps, and Gay would search the "tree" (Deety's words) and get the "twig" you identified. You could even fail to give category and she would search until she found it.

But hardest was to build up the decking of the rear compartment about twenty centimeters with chattels or stores that would not crush, fasten it down to keep it from floating in free fall, and make it smooth enough that it would not be unbearably lumpy as a bed — while making *some* effort neither to build into this platform nor to store in compartments under it things needed frequently or quickly.

I had to lower my standards. It is impossible to store so many things in such limited space and have *all* readily at hand.

I studied things outside, admitted that I could not do it, then asked for advice. Zebbie solved it: "Captain, do a dry run."

"Uh… go on, Zebbie."

"Take my sleeping bag inside, open it out. It is too wide for the space, especially at the rear. So keep it as far forward as you can and still miss Jake's twister and the bulkhead door. Mark the amount you have to lap it. Mark on the deck the foot of the opened-out bag. You'll find space abaft that, frustum of a cone, sort of. Drag the sleeping bag outside, mark the tuck-in, build your platform on it. Then fill that rear space and build a bulkhead. Better get Jake; he's a born mechanic."

"Zebbie, would you prefer to build this bed yourself?"

"Nope."

"Why not? I'm not speaking as captain; I'm inquiring as your old friend Sharpie."

"Because I'm twice as big as you, which makes that space half as big for me. Tell you what, Cap'n Sharpie — *excuse me!* — Captain Hilda — do the measuring. Meanwhile we'll pick out plunder that might be bricks in that platform. Then drag the sleeping bag outside. If you'll let Jake relieve me, Deety and I can piece together the platform in jig time."

It changed "impossible" to "possible." The cubbyhole was filled, contents held in place with opened-out cartons tied with wire to hold-downs — "padeyes" Jacob called them. The platform was built, chinked with this and that, covered with more flattened-out cartons, and topped off with sleeping bag and blankets.

It was still light. Deety assured me that there was one hour and forty-three minutes till sundown. "Time enough if we hurry. Jacob, first bath. Deety, guard him. Both come back so Jacob can start dinner — then Zebbie and Deety go down — goodness, this sounds like the farmer and the rowboat with the fox and the geese — and bathe, taking turns guarding. Both come back; Deety relieves me; Zebbie takes me down to bathe while he guards. But please hurry; I want a bath, too. Forty minutes before sundown bathing stops and we eat — at sundown we are inside, dirty dishes and all, locked in till sunrise. If that does me out of a bath, we still hold to it. Jacob, how far is this 'easy way' down? I mean, 'How many minutes?'"

"Maybe five. Hilda my love, if you weren't insisting on always-two-together there would be no hurry. All go down together; I hurry through my bath, grab my rifle and trot back. The rest needn't hurry. You've got us going down and up, down and up, four times — forty minutes. Which squeezes four baths into twenty minutes, five minutes to undress, soap, squat down and rinse off, towel dry, and dress. Hardly worth the trip."

"Jacob, who guards you while you're getting supper? No. I can bathe in the morning." (Damn! I *wanted* that bath. I'm used to a shower in the morning, a tub at night, a bidet at any excuse. Decadent — that's me.)

"Beloved, this place is *safe.* While we were out earlier, Zeb and I scouted for sign. None. That's when we found this way down to the creek. It would be a natural watering place. No sign. I don't think there are any large fauna here."

I was wavering when Deety spoke up. "Pop, that's *three down-and-ups*, not four, as Zebadiah and I get baths on one. But, Captain Hilda, if we all go down and come back together, there *can't* be danger. Put that stuff back inside and lock up, of course." She pointed at Jacob's preparations. While Jacob had been handing stuff to Deety, he had set aside a hot plate, cooking and eating utensils, a tarpaulin, comestibles for supper and breakfast, and had passed word for me *please* to store food so that it could be reached easily.

Jacob said hastily, "Deety, I've got it planned for minimum therbligs. Dried apricots soaking in that pan, soup mix in that one. There's no level deck space left inside."

Deety started to say, "But, Pop, if we — " when I cut in with, "Quiet, please" — not shouted.

They kept quiet — "Captain Bligh" was being listened to. "Gay Deceiver will *not* be left unguarded. My orders will not be discussed further. One modification: Supper is cut from forty minutes to twenty-five. Astrogator adjust schedule accordingly. Sound a blast on the siren five minutes before suppertime. We lock up on the dot. I placed the honey bucket just beyond the swing of the bulkhead door as the car will not be unlocked for *any* reason until sunrise. Questions?"

"Yes, Captain. Where are the towels?"

An hour later I was squatting in the stream, rinsing off and hurrying — covered with goose bumps. As I stepped out, Zebbie put down his rifle and had a big, fluffy towel, long as I am tall, waiting to wrap me. I should have required him to behave as a guard should.

But I told myself that he was still wearing his revolver and, anyhow, he has this sixth sense about danger — lying in my teeth. *Nothing* makes a woman feel more cherished than to have a man wrap her in a big towel the instant she's out of the water. I lack character, that's all. Every woman has her price, and a big, fluffy towel at the right time comes close to being mine.

Zebbie was rubbing firmly, getting me not only dry but warm. "Feels good, Captain?"

"'Captain Hilda' never came down the bank, Zebbie. Feels *swell!"*

"Remember the first time I gave you a rubdown?"

"Sure do! Dressing room at my pool."

"Yup. I tried to lay you. I've never been turned down so smoothly."

"You tried to lay me, Zebbie? Truly?" I looked up at him, my best innocent look.

"Sharpie darling, you lie as easily as I do. A man does *this"* — and he did — "even with a towel, a woman is certain what he means. But you refused to notice it, turned me down, without hurting my pride."

"I'm refusing to notice it now and find it just as difficult as I did that afternoon. Stop it, *please!"* He did. "Thanks, dear. You got me all shaky. Zebbie, do you think Deety thinks I rigged this to get you alone? I would not willingly upset her."

"On the contrary. She gave me a hunting license concerning you — you, not females in general — ten days back. *In writing."*

"Really?"

"In writing so that she could limit it. I am required not to run any risk of hurting Jake."

"You haven't tried to use that license."

"I took it as a compliment to you and to me, kissed Deety and thanked her. You settled this four years ago. But I've sometimes wondered why. I'm young, healthy, take care of my teeth, and keep my nails clean — mostly — and you seemed to like me. What made me ineligible? Not complaining, dear, just asking."

I tried to explain the difference between a male friend and a bedmate — the scarcity of the first, the boring plethora of applicants for the other.

He listened, then shook his head. "Masochism."

"Hasn't it worked out better this way? I do love you, Zebbie."

"I know you do, Sharpie." Zebbie turned me around and looked down into my eyes. "And I love you and you know that, too" — and he kissed me.

That kiss went on and neither of us seemed inclined to stop. My towel slipped to the ground. I noticed because it felt better to be closer and ever so much nicer to have his hands on me. Zebbie hadn't given me a sexy kiss since the day I hadinvited a pass and then ignored it.

I began to wonder why I had decided to ignore it. Then I was wondering how much time we had left in our schedule. Then I knew the exact time… for that infernal, earsplitting siren sounded. God watches over Hilda Mae and that's why I keep Him on my payroll. But sometimes He is rough about it.

We let go. I put on Deety's Keds, slid my borrowed dress over my head, hung the towel over my arm — elapsed time: nine seconds.

Zebbie was again carrying his rifle at the ready (is that correct? — both hands, I mean).

"Captain, shall we go?"

"Yes, Chief Pilot. Zebbie, when did I become 'captain' again? Just from putting on clothes? You've seen this old hide before."

"Skin has nothing to do with it, Captain. Quoting Deety quoting the Japanese: 'Nakedness is often seen but never noticed.' Except that sometimes I *do* notice, hot diggity dog and other comments. You have superior skin, Captain. You went back to being Captain when I picked up my rifle. But I was never off duty. Did you notice, when I dried you, that I picked you up and swung you around, so that I faced the bank? I kept alert even while I was nuzzling you… and you make fine nuzzle, Captain StepMother-in-Law Hilda."

"So do you, Zebbie. I'm still Sharpie till we get to your car." We reached the top of the bank. "Ten seconds to catch my breath. Zebbie —"

"Yes, Sharpie?"

"Four years ago — I'm sorry I turned away your pass."

He patted my bottom. "So am I, dear. But it has worked out quite well. And" — he grinned that irresistible, ugly grin — "who knows? — we aren't dead yet."

When we arrived, Jacob was slurping soup. "You're late," he stated. "So we waited."

"So I see."

"Don't listen to Pop, Captain Auntie; you are two minutes seventeen seconds ahead of time. Are you sure you stayed in long enough to get clean?"

"I stayed in long enough to get freezing cold. Aren't you chilly?" Deety had worn skin most of the day and so had I; we had been doing sweaty work. But she had been dressed when I last saw her. "Jacob, is there no soup for Zebbie and me?"

"A smidgen. You get this pan as soon as I'm through — now! — and that means one less dish to wash."

"And Zebadiah gets mine — also now — and I took that jump suit off because it's dirty and I'm clean. I still haven't figured out how to do a laundry. Nothing for a tub, no way to heat water. What's that other way? Pound them on a rock the way it shows in *National Geographic?* I don't believe it!"

We were in bed by sundown, Gay's doors locked — pitch dark in minutes. According to Deety and Gay sunrise was ten hours and forty-three minutes away. "Deety, please tell Gay to wake us at sunrise."

"Aye aye, Captain Auntie."

"Zebbie, you told us that the air in the car was good for about four hours."

"In space; The scoops are open now."

"But do you get air back there? Should the bulkhead door be open?"

"Oh. Top scoop serves this space. The cabin is ventilated by the chin scoop. Scoops stay open unless internal pressure closes them."

"Can anything get in through them? Snakes or such?"

"Hilda my dear, you worry too much."

"My very own darling Copilot, will you please pipe down while I'm speaking to the Chief Pilot? There are many things about this car that I do not know — yet I am responsible."

Zebbie answered, "Each scoop has a grid inside and a fine screen at the inner end; nothing can get in. Have to clean 'em occasionally. Remind me, Deety."

"I'll tell Gay." She did — and almost at once there was a crash of metal. I sat up abruptly. "What's that?"

"Hilda, I am afraid that I have kicked over the supper dishes." My husband added, "Zeb, how do I find the cabin light?"

"No, no! Jacob, don't try to find it. No light *at all* until sunrise. Don't fret about dishes. But what happened? I thought they were under the instrument board."

"I couldn't quite reach with this bed made up. But the carton that supports my feet sticks out beyond the seat cushion on it. So I stacked them there."

"No harm done. We can expect bobbles as we shake down."

"I suppose so."

"We can cope. Jacob, that was an excellent dinner."

Deety called out, "Good night, chatterboxes! We want to sleep." She closed the bulkhead door, dogged it.

Chapter XXIII

"The farce is over."

Jake:

For me, the best soporific is to hold Hilda in my arms. I slept ten hours.

I might have slept longer had I not been blasted by a bugle call: *Reveille.*

I thought I was back in basic, tried to rouse out fast — banged my head. That slowed me; I reoriented, saw my lovely bride beside me, yawning prettily — realized that we were on Mars.

Mars! Not even our own Mars but another universe.

That hateful tune started to repeat, louder.

I banged on the bulkhead. "How do you shut this thing off?"

Shortly I saw dogs of the bulkhead door turning, then the door swung — as the call went into its third time around still louder. Zeb showed, blinking.

"Do you have a problem?"

I couldn't hear but I could piece out what he meant.

"HOW DO YOU SHUT OFF THIS RACKET?"

"No problem." (I think that's what he said.) "Good morning, Gay."

The bugle faded into the distance. "Good morning, Boss."

"I'm awake."

"Ah, but will you stay awake?"

"I won't go back to bed. Promise."

"I've dealt with your sort before, me bucko. If you aren't out of here before my landlady wakes up, I'll lose this room. Then another hassle with the cops. It's not worth it… you cheapskate!"

"You're a smart girl, Gay."

"So smart I'm looking for another job."

"Back to sleep, Gay. Over."

"Roger and out, Boss" — and blessed silence.

I said to my daughter, "Deety, how could you do this to us?"

Her husband answered. "Deety didn't, Jake. She was told to place a call for sunrise. But didn't know what a morning call means to Gay."

I grumped, and opened the starboard door. Hilda's rearrangements had given me the best rest I had had in days. But two double beds in a sports car left no room on arising to do anything but get out.

So I slid out the door, groped for the step, paused to ask Hilda for shoes and coverall — caught sight of something and said quietly, "Hilda. My rifle. Quickly!"

My little treasure is always reliable in emergency; her clowning is simply *persona.* (A most pleasant one; the worst aspect of the jest of making her "captain" was that she lost her smile — I hoped that Zeb would soon resume command. We had needed the lesson — but no need to go on.)

I digress — I asked for my rifle; she whispered, "Roger," and had it in my hand at once with the quiet report: "Locked, one in the chamber. Wait — I'm getting Zeb."

That made sense. By staying on the step in the corner formed by door and car, my rear was safe and I need cover only a small sector. I prefer a bolt action — correction: I have a bolt-action rifle I inherited from my father's eldest brother, who had "liberated" it on leaving the Marine Corps.

I unlocked it, opened the bolt slightly, saw that a cartridge was in the chamber, closed the bolt, left the piece unlocked.

Zeb said at my ear, softly, "What's the excitement?"

"Over there." I pulled my head out of the way, saw Hilda and Deety almost on top of Zeb — Hilda with Deety's shotgun, Deety with her husband's police special.

Zeb said, "Pixies. They may still be around; let's check. Cover me from here?"

"No, Zeb. You to the right, me to the left, we check the port side, meet back at the dump. Make it fast."

"Say the word." Zeb said over his shoulder, "You girls stay in the car. Jake?"

"Now!" We came bursting out like greyhounds, guns at high port. The reason for my disquiet was simple: The dump of wrappings and cartons was no longer a heap. Something had spread it over many meters, and the litter was not nearly enough to account for the pile. Wind? Zeb had left the wings extended; the slightest wind would wake him, warn him of change in weather. The car had not rocked in the night; ergo, no wind. Ergo, nocturnal visitors. Nor were they small.

I rounded the car to the left, seeing nothing until I spotted Zeb — waved at him, started back around to join him at the dump.

He arrived before I did. "I told you girls to stay in the car!" He was quite angry, and the cause, both of them, were also at the dump.

My darling answered, "Chief Pilot."

Zeb said, "Huh? Sharpie, there's no time for that; there's something dangerous around! You girls get inside before I —"

"Pipe *DOWN!"*

One would not believe that so small a body could produce such a blast. It caught Zeb mouth open and jammed his words down his throat.

Hilda did not give him opportunity to answer. She continued, forcefully: "Chief Pilot, there are *no* 'girls' here; there are four adult humans. One of them is my secondin-command and executive officer. *My* executive officer; I am in command." Hilda looked at my daughter. "Astrogator, did you tell anyone to remain in the car?"

"No, Captain." Deety was wearing her "Name, rank, and serial number" face.

"Nor did I." Hilda looked at Zeb. "There is no need to discuss it." She stirred litter with a toe. "I had hoped that we could find salvage. But three fourths of it has been eaten. By large animals from those tooth marks. I would have trouble visualizing a large animal that eats cellulose but is nevertheless carnivorous — save that I know one. So we will get as much done as possible while keeping a tight guard. I have the program planned but I'm open to advice."

"Hilda!" I let my tone get a bit sharp.

My wife looked around with features as impassive as those of my daughter. "Copilot, are you addressing me officially or socially?"

"Uh… as your husband! I must put my foot down! Hilda, you don't realize the situation. We'll lift as soon as possible — and Zeb will be in command. The farce is over."

I hated to speak to my beloved that way but sometimes one must. I braced myself for a blast.

None came. Hilda turned to Zeb and said quietly, "Chief Pilot, was my election a farce?"

"No, Captain."

"Astrogator, did you think of it as farce?"

"Me? Heavens, no, Captain Auntie!"

Hilda looked at me. "Jacob, from the balloting you voted for me at least once, possibly three times. Were you joking?"

I could not remember how I had felt when it dawned on me that Zeb really did intend to resign — panic, I think, that I was about to be stuck with the job. That was now irrelevant as I knew that I was not more than one micron from again being a bachelor… so I resorted to Higher Truth.

"No, no, my darling — my darling Captain! I was dead serious!"

"Did you find some malfeasance?"

"What? No! I — I made a mistake. Jumped to conclusions. I assumed that we would be leaving at once… and that Zeb would command once we lifted. After all, it's his car."

Hilda gave me the briefest smile. "There is something to that last argument. Zebbie, did you intend — "

"Wait a half! Cap'n, that car belongs to *all* of us just like Jake's Milky Way bars; we pooled resources."

"So I have heard you all say. Since I had nothing to pool but a fur cape, I took it with a grain of salt. Zebbie, do you intend to resume command when we lift?"

"Captain, the only way you can quit is by resigning… whereupon Deety would be captain."

"No, sir*ree!"* (My daughter is not often that shrill.)

"Then Jake would wind up holding the sack. Captain, I'll pilot when ordered, chop wood and carry water between times. But I didn't sign up to boss a madhouse. I think you're finding out what I mean."

"I think so, too, Zebbie. You thought there was an emergency and started giving orders. I would not want that to happen in a *real* emergency —"

"It won't! Captain."

"And I find to my chagrin that my husband considers me to be a play captain. I think I must ask for a vote of confidence. Will you please find something to use as white and black balls?"

"Captain Auntie!"

"Yes, dear?"

"I am required to advise you. A commanding officer *commands;* she doesn't ask for votes. You can resign — or — die — or lose to a mutiny and get hanged from your own yardarm. But if you take a vote, you're not a captain; you're a politician."

"Deety's right, Captain," Zeb told my wife. "Had a case-law case in R.O.T.C. Naval vessel. Department told the skipper to pick one of two ports for ho1idays. He let his crew vote on it. Word got back to Washington and he was relieved at sea by his secondin-command and never again ordered to sea. C.O.'s don't *ask;* they tell *'em.* However, if it matters to you, I'm sorry I goofed, and you *do* enjoy my confidence."

"Mine, too!"

"And mine, Hilda my dear Captain!" (In truth I wanted Zeb and only Zeb to command when the car was off the ground. But I made myself a solemn vow never again to say or do anything that might cause Hilda to suspect it. We would crash and die together rather than let her suspect that I thought her other than the ideal commanding officer.)

Hilda said, "The incident is closed. Who can't wait? Speak up."

I hesitated — my bladder is not used to bedtime right after dinner. When no one else spoke, I said, "Perhaps I had better be first; I have breakfast to prepare."

"Dear, you are not First Cook today; Zebbie is. Deety, grab a rifle and take your father to his 'handy bush' — and do make it handy; that giant termite might be lurking. Then hand Jacob the rifle and it's your turn. Don't dally."

It was a busy day. Water tanks had to be topped off. Zeb and I used two collapsible buckets, taking turns (that hill got steeper every trip, even at 0.38 gee), while Deety guarded us. Endless trips —

That afternoon I was a ladies' tailor. Hilda had something for Deety to do.

Zeb had a job to complete. The space behind the bulkhead has padeyes every 30 cms or so. No one wants the center of gravity to shift when one is in the air. Zeb's arrangements were Samson cord in many lengths with snap hooks. Zeb told Hilda he wanted to secure the bed aft for air or space, and to store items used in rigging the forward bed so that they would be secure but available — and where were his Samson ties? — Gay didn't know. He had to explain to Hilda what they looked like — whereupon Hilda said, "Oh! Thingammies! Gay Deceiver. Inventory. Incidentals. Small. Thingammies." Zeb spent the afternoon making certain that the "bed" could not slide, then built a net of Samson cord to hold the items for turning seats into a bed, then, finding that he had Samson ties left, Zeb removed the wires with which I had secured the aftermost storage, and replaced them with ties. When he was through, he relieved me as guard, and I wound up as seamstress.

Our wives had decided that one of Deety's jump suits should be altered for Hilda until we reached some place where clothes could be purchased. Hilda had vetoed Earth-without-a-J. "Jacob, as captain I look at things from another perspective. It is better to be a lively frump than a stylish corpse. Wups! You pinned Sharpie."

"Thorry," I said, around a mouthful of pins. Hilda was wearing the suit inside out; I was pinning excess material. Once this caused it to fit, lines held by pins would be tacked, pins removed, tacked lines sewed in short stitches (by hand; Deety's sewing machine was ashes in another universe), and excess cloth trimmed away.

Such was theory.

I tackled reducing the waist line by pinning darts on both sides. Then I folded up the trousers so that the crease came at the instep — but had to pin them up 17 cms!

Seventeen centimeters! I had taken in the waist first, knowing that doing so would, in effect, shorten the trousers. It did — one centimeter.

The appearance was as if I were trying to fit her with a chimpanzee suit for a masquerade. Lift it at the shoulders? I tried, almost cutting off circulation. Still a horrid case of droopy drawers —

Take a tuck all the way around the waist? That suit closed with one zipper. Have you ever tried to take a tuck in a zipper?

I stepped back and looked at my creative artistry.

Ghastly.

"Hilda my love, Deety was better at this by the age of ten. Shall I fetch her?"

"No, no!"

"Yes, yes. If at first you don't succeed, find the mistake. I'm the mistake. You need Deety."

"No, Jacob. It would be better for me to get along without clothes than to interrupt the work I have assigned to the Astrogator. With you at the verniers and Zebbie at the controls, Gay can do almost anything and quickly. Yes?"

"I wouldn't phrase it that way. But I understand you."

"If she's been preprogrammed, she can do it even faster?"

"Certainly. Why the quiz, dear?"

"How much faster?"

"Without preprogramming, it takes a few seconds to acknowledge and set it, about as long to check what I've done, then I report 'Set!' Zeb says 'Execute!' I punch the button. Five to fifteen seconds. With a preprogram — is it debugged in all ways, no conflicts, no ambiguities, no sounds easy to confuse?"

"Darling, that is why I won't let Deety be disturbed. Yes."

"So. Maximum time would be with Gay asleep. Wake her, she acknowledges, you state the preprogram in the exact words in her memory, then say 'Execute!' Call it three seconds. Minimum — That would be an emergency preprogram with 'Execute' included in the code word. My dear, we saw minimum time yesterday. When that Russian tried to shoot Zeb."

"Jacob, that is what caused me to put Deety to work. I saw his pistol in the air. His fingers were curled to catch it. Then we were in the sky. How long?"

"I saw him start to reverse his weapon, and bent over my verniers to bounce us by switch… then stopped. Not needed. Mmm — A tenth of a second? A fifth?"

"Whichever, it is the fastest we can manage. While you dears were carrying water, I was preparing a list of preprograms. Some are to save juice or time or to carry out something we do frequently; those require 'Execute!' Some are intended to save our lives and don't require 'Execute.' Like 'Bounce' and 'Bug Out' and 'Take us home!' But more. Jacob, I did *not* tell Deety how to phrase these; that's *her* specialty. I wrote out what I thought we ought to be able to do and told her to add any she wished."

"Did you consult Zeb?"

"Copilot, the Captain did not consult the Chief Pilot."

"Whew! I beg your pardon — Captain."

"Only if I get a kiss — mind the pins! Deety will post a copy on the instrument board. After you and Zebbie read them, I want your advice and his."

I gave up on that jump suit. I took out eighty-five or a thousand pins. Hilda was covered with sweat so I invited her to order me to take her down to bathe. She hesitated.

I said, "Does the Captain have duties of which I am unaware?"

"No. But everyone else is working, Jacob."

"Captain, Rank Hath Its Privileges. You are on duty twenty-four hours a day — twenty-four and a half here — "

"Twenty-four hours, thirty-nine minutes, thirty-five seconds — local day, not sidereal."

"Did you measure it? Or remember what some professor said?"

"Neither, Jacob. It's the figure Gay uses. I suppose she got it from the Aerospace Almanac."

"Are you going to believe an almanac? Or your husband?"

"Excuse me, Jacob, while I tell Gay the correct figure."

"Hand back my leg, beloved. Captain, since you are on duty all the time, you are entitled to bathe, rest, or relax, at any time."

"Well… two seconds while I grab a towel — and tell Zebbie that I will start dinner while he is down bathing."

"Captain, *I* am number-two cook today. You said so."

"You will guard, Jacob, which you do better than I. While the Carters are guarding each other."

Hilda came trotting back with a towel. I said, "Cap'n, I've figured out clothes for you."

"Goody. Yes, dear?" We headed for the path down.

"Were my Hawaiian shirts packed?" I had her fall in behind me.

"Inventory. Clothing. Jacob. Shirts. Aloha."

"Do you recall a blue one with white flowers?"

"Yes."

"I take 'medium' but can get into a 'small' and Andrade's didn't have this in 'medium.' But this one is so small I haven't been wearing it. Hilda, you'll like it — and it will be easy to cut down." (A steep pitch — no place to lose your footing while carrying a gun.)

"I won't cut it down. Jacob, your shirt is my first maternity smock."

"A happy thought! Did Deety fetch sailor pants? White."

"I recall white duck slacks." Hilda kicked off her Keds, stepped into the water.

"That's the pair. She wore them one summer while maturing. The following summer they were too tight. She was always about to alter them but never did."

"Jacob, if Deety likes those pants so well that she saved them and fetched them along, I won't ask her to give them to me."

"*I* will ask her. Hilda, you worry about the wrong things. We pooled resources. I chucked in my candy bars, Zeb chucked in his car, Deety chucks in her sailor pants."

"And what did I chuck in? Nothing!"

"Your mink cape. If you offered it to Deety in exchange for a pair of old white —"

"It's a deal!"

"It is like hell, Mistress Mine. That cape is valuta. Only days ago each of us was wealthy. Now we are unpersons who can't go home. What happens to our bank accounts I do not know but it seems certain that we will never realize anything from them, or from stocks, bonds, and other securities. Any paper money we have is worthless. As you know, I have bullion and gold coins and Jake has, also; we each like money that clinks and we don't trust governments. Gay *must* be juiced from time to time; that calls for valuta. Such as gold. Such as mink coats. Come out of there before you freeze! I would rub you dry but that giant termite worries me."

"Last night Zebbie rubbed me dry."

(Why do women have this compulsion to confess? It is not a typical male vice.) "He did? I should speak to him."

"Jacob, you are angry."

"Only somewhat, as yesterday we didn't know about the giant termite, and Zeb and I considered your guard rules silly. Nevertheless Zeb neglected his duty."

"I meant 'angry with *me'!"*

"For what? Did you force it on him?"

"No. He offered it — towel open and ready, just as you do. I went straight into it, let him wrap me and rub me down."

"Feel good?"

"Golly, yes! I'm a bad girl, Jacob — but I loved it."

"Don't give yourself airs, my darling; you are not a bad girl. Yesterday was not the first time Zeb has rubbed you dry."

"Well… no." (They have to confess, they have to be shrived.)

"Do you any harm, then or now?"

"I don't think so."

"I'm sure it didn't. Listen, beloved — you are twenty-nine going on forty-two. You've had three term contracts and now have a traditional marriage. In college you were a scandal to the jaybirds. Zeb has been your chum for years. Both of you horny as goats. My darling, I assumed what is called 'the worst' and is often the best."

"But, Jacob, we didn't, we didn't! And we *haven't!"*

"So? People who pass up temptations have only themselves to blame. Just one thing, my only love, if you and Zeb ever pick up the matter, try not to look guilty."

"But we aren't going to, ever!"

"Should it come to pass, warn Zeb not to hurt Deety. She loves him deeply. Not surprising as Zeb is a lovable man. Get your shoes on, dearest one, and we'll let someone else have the community bathtub."

"Jacob? You *still* think we have. Zebbie and I."

"Hilda, I married you convinced that Zeb was, at that time and for some years, your lover. Or one of them. Today you have convinced me that the matter is unproven… assuming that one or both of you have rocks in your head. But I can't see that it makes a tinker's dam either way. Jane taught me that the only important rule is not to hurt people… which very often — Jane's words! — consists in not talking unnecessarily."

"Jane told *me* that, too. Jacob? Will you kiss me?"

"Madame — what did you say your name was? — that is the toll I charge before a client starts up this bank."

As we climbed, I asked Hilda, "Darling, what is the animal that eats cellulose but is carnivorous?"

"Oh. Two. H. sapiens and Rattus."

"Men? Cellulose?"

"Sawdust is often processed as food. Have you ever eaten in a fast food joint?"

My daughter had done a wonderful job on preprograms; we all were eager to learn them. We placed guards, Zeb and me, at the doors, while Deety took Zeb's seat and talked, and Hilda sat in mine.

"Captain Auntie had two ideas," Deety told us. "To optimize emergency escapes and to work out ways to use as near to no juice as possible. The latter involves figuring ways to ground us in strange places without the skill Zebadiah has in deadstick grounding."

"I don't depend on skill," put in my son-in-law. "I won't risk a deadstick grounding other than on a hard-surfaced strip. You've seen me avoid it twice — by power-on just before grounding. Yesterday I cut it a bit fine."

I shuddered.

My daughter continued, "We have this new program. Set it, by voice, for bearing and as many minima as you please. Our Smart Girl goes there and attempts to ground. She uses radar twice, once in range-finder mode, second time in precautionary mode as in 'Bug Out.' If her target is not clear, she does a Drunkard's Walk in locus ten klicks radius, sampling spots two per second. When she finds a good spot, she grounds. Unless we don't like it and order her to try again.

"Study that and you will see that you can cruise all over this or any planet, land anywhere, and not use juice.

"Escape programs — We must be most careful in saying G, A, Y. Refer to her as 'smart girl' or 'the car' or anything not starting with that syllable. That syllable will now wake her. If it is followed by her last name, she goes into 'awaiting orders' mode. But if G, A, Y, alone is followed by any of eight code words, she executes that escape instantly. I have tried to select monosyllables that ordinarily do not follow her first name. Gay Deceiver."

"Hi, Deety!"

"Dictionary. G, A, Y. Read."

"Gayety, gayfeather, Gayle, Gaylord, Gay-Pay-Oo, gaywings —"

Chapter XXIV

Captains aren't supposed to cry.

Hilda:

I ordered an early dinner by starting it when Zebbie and Deety went down to bathe. I had ready a public reason but my motive was personal: I didn't want a pillow talk with Jacob.

Annoyed at him? At *me!* I had had a perfect chance to keep my lip zipped — and muffed it! Was I boasting? Or confessing? Or trying to hurt Jacob? (Oh, no! — can the id be *that* idiotic!)

Don't rationalize it, Sharpie! Had not your husband been kind, tolerant, and far more sophisticated than you ever dreamed, you would be in trouble.

When dinner was over, Zebbie said lazily, "I'll do the dishes in the morning."

I said, "I prefer that they be done tonight, please."

Zebbie sat up and looked at me. His thoughts were coming through so strongly that I was getting them as words. I never allow myself to be close with a person whose thoughts I can't sense at all; I distrust a blank wall. But now I could "hear" such names as "Queeg" and "Bligh" and "Vanderdecken" and "Ahab" — and suddenly Captain Ahab was harpooning the White Whale and I was the whale!

Zebbie bounced to his feet with a grin that made me uneasy. "Sure thing, Cap'n! Deety, grab a rifle and hold it on me to make sure I get 'em clean."

I cut in quickly, "I'm sorry, Chief Pilot, but I need the Astrogator. Jacob is your assistant."

When they were gone, Deety said, "Will my shotgun do? I don't think the cardboard eater comes out in daylight."

"Bring the guns inside; we're going to close the doors."

I waited until we were settled. "Deety, will you make me a copy of your new programs before our men come back?"

"If they take time to wash them properly. Men and dishes — you know."

"I hope they stall —"

" — and get over their mad," Deety finished.

"That, too. But I intend to write a sequential program and I want you to check me. After you make that copy."

They did stay down — "man talk," no doubt. Men need us but can just barely stand us; every now and then they have to discuss our faults. I *think* that is why they shut us out.

Deety made a copy while I wrote what I planned to do. Deety looked it over, corrected some wording. Looked it over again — and said nothing pointedly.

"Deety, can you handle your father's lab camera?"

"Certainly."

"Will you check its load and shoot when I ask for it?"

"Of course."

"If I goof on an order, correct me at once."

"You don't intend to hand this to Zebadiah to carry out?"

"No. I prefer that you not mention that I prepared it ahead of time. Deety, the Chief Pilot assured me that any of us could command in aerospace. I am about to make a test run. The Chief Pilot is in a position to override. If he does, I shan't fight it; I have said all along that he should be captain."

We had time to dig out that shirt with the white flowers. Deety's sailor pants were long; we turned up cuffs. The lacing at the back made them small enough in the waist. She gave me a blue belt to pull in the shirt, which I wore outside — then she added a blue hair ribbon.

"Captain Auntie, you look *good.* Better than I will in this jump suit I am reluctantly pulling on. Gosh, I'm glad Zebadiah isn't square about skin!"

"He was when I adopted him. Fetched swim briefs the first time I invited him over to swim. But I was firm. There they come! Open the doors."

They appeared to be over their mad. Zebbie looked at me and said, "How fancy! Are we going to church?" — and my husband added, "You look pretty, my dear."

"Thank you, sir. All hands, prepare for space. Secure loose gear. Lock firearms. Anyone requiring a bush stop say so. Dress for space. Before manning car, take a turn around the car, searching for gear on the ground."

"What is this?" demanded Zebbie.

"Prepare for space. *Move!"*

He hesitated a split second. "Aye aye, Captain."

In two minutes and thirteen seconds (I checked Gay's clock) I was squeezing past my husband into the starboard rear seat. I said, "In reporting, include status of firearms. Astrogator."

"Belted down. Bulkhead door dogged. Shotgun loaded and locked. I slid it under the sleeping bag."

"Fléchette gun?"

"Wups! In my purse. Loaded and locked. Purse clipped to my seat, outboard."

"Copilot."

"Belt fastened. Door locked, seal checked. Continua device ready. Rifle loaded and locked, secure under sleeping bag. I'm wearing my pistol loaded and locked."

"Chief Pilot."

"Belt fastened, door locked, seal checked. Rifle loaded, locked, under sleeping bag. Wearing revolver, loaded and locked. No loose gear. Water tanks topped off. Load trimmed. Two reserve power packs, two zeroed. Juice zero point seven-two capacity. Wings spread full. Wheels down, unlocked to retract. All systems go. Ready."

"Chief Pilot, after first maneuver, execute vertical dive fastest without power and without retracting wheels. Relock wheel-retracting gear. Leave wings spread max."

"Wheel retractors locked. After first maneuver fastest, no-power vertical dive, wings full subsonic, wheels down."

I glanced at Deety; she held up the camera and mouthed, "Ready."

"Gay *Home!"*

In Arizona it was shortly before sunset, as Deety had predicted. My husband repressed a gasp. I snapped, "Copilot, report H-above-G."

"Uh… two klicks minus, falling." Zebbie had bite now; the horizon ahead tilted slowly up, then faster. As we leaned over, Deety stretched high, catlike, to shoot between our pilots. We steadied with Snug Harbor dead ahead — *a crater!* I felt a burst of anger, a wish to *kill!*

"Picture!"

"Gay B'gout!"

Instead of being stationary at "Touchdown" we were in free fall on the night side of some planet. I could see stars, with blackness below the "horizon" — if horizon it were. Deety said, "Looks like the Russians left something on our parking space."

"Perhaps. Jacob, H-above-G, please."

"Under ten klicks, decreasing slowly."

"So far, so good. But we aren't sure that we have the right planet and universe."

"Captain, that's Antares ahead."

"Thanks, Zebbie. I assume that at least we are in one of the analogs, of our native universe. Deety, can you get from Gay the acceleration and check it against Marsten?"

"'Bout four ways, Cap'n."

"Go ahead."

"Gay Deceiver."

"Hi, Deety!"

"Hi, Gay. H-above-G, closing rate running, solve first differential, report answer."

Instantly Gay answered, "Three-seven-six centimeters per second squared."

"You're a smart girl, Gay."

So it was either Marsten or an unreasonable facsimile. "Gay B'gout!"

We were stationary, with what we had come to feel as "proper weight." Deety said, "Maybe an animal wandered across our spot. How about lights, Captain? This snapshot ought to be colors by now."

"Not yet. Chief Pilot, when I alert the autopilot by G, A, Y, please switch on forward landing lights."

"Roger Wilco."

"Gay —"

Blinding light — men in its path were blinded, not us. *"Bounce!* Kill the light, Zebbie. The Little Father left sentries in case we came back — and we did."

"Captain Auntie, may I have cabin light now?"

"Please be patient, dear. I saw two men. Jacob?"

"Three men, dear… dear Captain. Russian soldiers in uniform. Weapons, but no details."

"Deety?"

"Looked like bazookas."

"Chief Pilot?"

"Bazookas. A good thing you were on the bounce with Bounce, Skipper. Gay can take a lot… but a bazooka would make her unhappy." He added, "Speed saved me yesterday. Deety, let that be a lesson: Never lose your temper."

"Look who's talking!"

"I quit being C.O., didn't I? Cap'n Sharpie doesn't do foolish stunts. If *I* were skipper, we would chase 'em all over that sea bottom. Never be in one place long enough for them to aim and they would think there were thirty of us. If Colonel Snotsky is there — I think he's afraid to go home —"

We were over Arizona. I snapped, "Gay *Termite!"*

— and were parked by our stream. Zebbie said, "What the devil? Who did *that?"*

"You did, Zebadiah," Deety answered.

"Me? I did no such thing. I was —"

"Silence!" (That was I, Captain Bligh.)

I went on, "Gay Deceiver, go to sleep. Over."

"Sleepy time, Hilda. Roger and out."

"Chief Pilot, is there a way to shut off the autopilot so completely that she cannot possibly be activated by voice?"

"Oh, certainly." Zebbie reached up, threw a switch.

"Thanks, Zebbie. Deety, your new escape programs are swell… but I missed how that happened. But first — Did anyone else see our giant termite?"

"Huh?" — "I did." — "Where?"

I said, "I was looking out to starboard as we transited. The creature was feeding on packing debris — and took off uphill at high speed. Looked like a very big, fat, white dog with too many legs. Six, I think."

"'Six,'" agreed my husband. "Put me in mind of a polar bear. Hilda, I think it *is* carnivorous."

"We are not going to find out. Deety, tell Zebbie — all of us — what happened."

Deety shrugged. "Zebadiah said 'bounce' twice when he should not have, but Gay wasn't triggered. Then he said 'Gay can take a lot — ' and she was triggered. More chitchat and Zebadiah said ' — I think he's afraid to go home — ' That did it. Our smart girl hears what she has been taught. She heard: 'Gay Home' and that is the short form that used to be: 'Gay Deceiver Take Us Home."

Zebbie shook his head. "A gun should never be that hairtrigger."

"Chief Pilot, yesterday you used the first of these clipped programs to avoid a bullet in your face. First 'Gay' — then after more words — 'bounce!' It saved you."

"But —"

"I'm not through. Astrogator, study the escape programs. Search for possibility of danger if triggered accidentally. Zebbie, escape programs can't be compared to a hair trigger on a gun; they are to *escape,* not to kill."

"Captain Auntie, I've spent *all day* making *certain* that programs can't put us out of the frying pan into the fire. That's why I killed 'countermarch.' The nearest thing to danger is the 'Home' program because our home planet is unfriendly." Deety sounded sad. "I hate to cut our last link with home."

"It needn't be cut," I said. "Just stretched. Put it back into long form and add 'Execute.'"

Deety answered, "Captain, I will do as you say. But we might be a billion klicks from nowhere and hit by a meteor. If anyone can gasp, 'GayHome,' then we are two klicks over our cabin site in air, not vacuum. Even if we've passed out, Gay won't crash us; she's built not to. If I'm gasping my last, I don't want to have to say, 'Gay Deceiver, take us home. Execute.' That's ten syllables against two… with air whooshing out."

I said, "That settles it. The 'Gay Home' program stands unless my successor changes it."

"You're not talking to me, Captain Sharpie darling — I mean, Captain Hilda — because I'm *not* your successor. But Deety convinced me. I will not admit that those vermin have run me *permanently* off my own planet. At least I can return to it to die."

"Son, let's not speak of dying. We are going to stay alive and raise kids and enjoy it."

"That's my Pop! Say, doesn't *anybody* want to see this picture?"

We made it a rest stop, worrying more about giant termites than about bushes… and Jacob found a can opener. *The* can opener. I put a stop to an attempt to fix the blame. Advice to all explorers: Do not roam the universes without a spare can opener.

Then it was "Prepare for lift!" and a new program. "Chief Pilot, switch on autopilot. Gay Deceiver. Explore. True bearing two-six-five. Unit jump five minima. Use bingo stop continue. End program short of sunrise line. Ground. Acknowledge by paraphrase."

"Explore west five degrees south fifty-klick units. Two-second check each jump. Ground myself no power Greenwich time oh-three-seventeen."

"Deety, is that time right?"

"For that program."

"Gay Deceiver. Program revision. Cancel grounding. From program coded 'A Tramp Abroad' display locus. Display Bingoes."

She displayed Mars at once, but gibbous. I scrawled a note to Deety: *"How do I rotate to show day side only?"*

Dear Deety! She wrote her answer. Passed it over — I doubt that our men saw it: "Program revision. Display locus realtime day side."

Gay accommodated. It took several steps to define new locus as sunset line (right edge - east) to sunrise line (left edge - west), and between 50°N and 50°S (some Russian area had been close to 45°S, so I widened the search)-then let the locus move with the terminators. (Gay can "see" in the dark but *I* can't.) I told her to end "Explore" at Greenwich oh-three-seventeen and start "A Tramp Abroad," continue until directed otherwise, and had Gay repeat back in her phrasing.

I touched Zebbie's shoulder, pointed to the switch that cut out Gay's ears, drew a finger across my throat. He nodded and shut her out. I said, "Questions, gentlemen? Deety?"

"I do, Captain," said our Chief Pilot. "Do you plan on sleeping tonight?"

"Certainly, Zebbie. An ideal sleeping spot would be one far from the Russians but close to the present sunset line. Or did *you* want to work all night?"

"If you wish. I noticed that you gave Gay a program that could keep her going for days or weeks — and that you had reduced H-above-G to six klicks. Breathable air. By rotating duties, with one or two always stretched out aft, we can stay up a week, easily, and still give Jake's ankles a break."

"I can skip a night's sleep," said Deety. "Captain Auntie honey, with enough random samples and a defined locus, sampling soon approaches a grid a fly couldn't get through. Do you want the formula?"

"Heavens, no! As long as it works."

"It works. Let's make a *long* run, get a *big* sampling. But I'd like to add something. Let's parallel the display onto a sidelooker screen, and light every vertex — while the main display shows Bingoes. You'll see how tight a screen you're building."

"Sharpie, don't let her do it!" Zebbie added, "'Scuse, please! Captain, the Astrogator is correct on software but I know more about *this* hardware. You can crowd a computer into a nervous breakdown. I have safeguards around Smart Girl; if I give her too much to do, she tells me to go to hell. But she *likes* Deety. Like a willing horse, she'll try hard for Deety even when it's too much."

Deety said soberly, "Captain, I gave you bad advice."

Her husband said, "Don't be so humble, Deety. You're smarter than I am and we all know it. But we are dependent on Smart Girl and can't let her break down. Captain, I don't know how much strain the time-space twister puts on her but she has unnecessary programs. At the Captain's convenience, I would like to review everything in her perms and wipe those we can do without."

"My *very* early convenience, sir. Is the schedule okay?"

"Oh, sure. Just don't add that side display."

"Thank you, Chief Pilot. Anyone else? Copilot?"

"My dear… my dear Captain, is there some reason to find a spot near the sunset line? If you intend to work all night?"

"Oh! But, Jacob, I do *not* plan to work all night. It is now about twenty hundred by our personal circadians, as established by when we got up. I think we can search for three to four hours. I hope that we can find a spot to sleep near the sunset line, scout it in daylight, let Gay land herself on it for her perms — then return to it in the dark when we get tired"

"I see, in part. My dear, unless I misunderstood you, you are heading *west.* But you said that you wanted to find us a place to sleep near the presert sunset line. *East.* Or did I misunderstood you?"

"It's very simply explained, Jacob."

"Yes, dear Captain?"

"I made a horrible mistake in navigation."

"Oh."

"Chief Pilot, did you spot it?"

"Yup. Yes, Captain."

"Why didn't you speak up?"

"Not my business, Ma'am. Nothing you planned to do was any danger."

"Zebbie, I'm not sure whether to thank you for keeping quiet, or to complain because you did. Deety, you spotted the mistake, I am certain. You are supposed to advise me."

"Captain, I'm supposed to speak up to stop a *bad* mistake. This was not. I wasn't certain that it was a mistake until you told on yourself. But you spotted the mistake when Gay predicted the time to end the 'Explore' program, then you corrected it by telling her to shift to 'A Tramp Abroad.' So there was never a reason to advise you."

I let out a sigh. "You're covering for me and I love you all and I'm no good as captain. I've served as many hours as Zebbie and we are on the ground, so now it's time to elect someone who can do it *right.* You, Zebbie."

"Not me. Jake and Deety must each do a stint before I'd admit that it might be my turn."

"Captain —"

"Deety, I'm not captain; I resigned!"

"No, Aunt Hilda, you didn't actually do it. It is my duty to advise you when you seem about to make a bad mistake. You made a minor mistake and corrected it. In my business we call that 'debugging'-and spend more time on it than we do on writing programs. Because *everybody* makes mistakes."

Jane's little girl managed to sound the way Jane used to. I resolved to listen — because all too often I hadn't listened to Jane. "Captain Auntie, if you were resigning because of the way your crew treated you — as Zebadiah did — I wouldn't say a word. But that's not your reason. Or is it?"

"What? Oh, no! You've all helped — you've been angels. Uh, well, mostly."

"'Angels' — hummph! I can't use the correct words; I'd shock our men. Aunt Hilda, I gave you far worse lip than I ever gave Zebadiah. You slapped me down *hard* — and I've been your strongest supporter ever since. Zebadiah, what *you* did was worse —"

"I know."

" — but you admitted that you were wrong. Nevertheless you've been chewing the bit. Demanding explanations. Zebadiah, the captain of a ship doesn't have to explain why she gives an order. Or does she?"

"Of course not. Oh, a captain sometimes does explain. But she shouldn't do it often or the crew will start thinking they are entitled to explanations. In a crunch this can kill you. Waste that split second." Zebbie brooded. "Captain says 'Frog,' you *hop.* Couple of times I failed to hop. Captain, I'm sorry."

"Zebbie, we get along all right."

He reached back and patted my knee. "Pretty well in the past. Better from now on."

My darling Jacob said worriedly, "I'm afraid I have been remiss, too."

I was about to reassure him when Deety cut in: "'Remiss'! Pop, you're the worst of all! If I had been your wife, I would have tossed you back and rebaited my hook. 'Farce' is worse than mutinous; it's *insulting.* Be glad Jane didn't hear you!"

"I know, I know!"

I touched Deety's arm and whispered, "That's enough, dear."

Zebbie said soberly, "Captain, as I analyze it, you made a mistake in sign. Every navigator makes mistakes — and has some routine by which to check his work. If you're going to get upset because recheck shows that you wrote down 'plus' when the declination is 'south,' you're going to have ulcers. You're just under strain from being C.O. We've all made the strain worse. But we want to do better. I'd *hate* to have you resign over a minor error… when *we* caused your upset. I hope you'll give us another chance."

Captains aren't supposed to cry. I blinked 'em back, got my voice under control, and said, "All hands! Still ready for lift? Report."

"Aye, Captain!" — "Affirmative!" — "Yes, my dear Hilda."

"Zebbie, switch on Gay's ears." He did.

"Execute!" — Termite Creek was gone and we were fifty klicks west and a touch south. Pretty and green but no Bingo. It would take us about seven minutes to overtake the Sun and approach sunrise line, plus any holds we made. Then I would go east to the sunset line in nothing flat (have Zebbie and Jacob do it); then bounce & glide, bounce & glide, while looking for a place to sleep in a spot suitable for Gay to try her new unpowered autogrounding program — in daylight with the hottest pilot in two worlds ready to override any error.

If Gay could do this, we would be almost independent of juice — and have a new "bug-out" sanctuary each time she landed herself. Power packs — Zebbie had a hand-cranked D.C. generator — but heavy work for husky men for endless hours. (40 hrs from zero to full charge; you see why Zebbie would rather buy fresh charges.)

We had been skipping along nearly three minutes, over four thousand klicks, before spotting a Bingo (by Zebbie). I called a "Hold" and added, "Where, Zebbie?"

He nosed us down. Farm buildings and cultivated fields — a happy contrast to the terrain — barren, green, flat, rugged — all lacking any sign of humans, in the stops we had made. "Astrogator, record time. Continue."

Then over three minutes with no Bingoes — At elapsed time 6m4s Jacob called out, "Bingo! A town."

"Hold! Onion towers?"

"I think not, dear. I see a flag — dare we go nearer?"

"Yes! But anyone use a scram at will. Jacob, may I have the binoculars, please?"

The Stars and Stripes are engraved on my heart, but in the next moments the Cross of Saint Andrew and the Cross of Saint George were added. It was an ensign with a blue field and some white shapes — three half moons in three sizes.

"Gay Deceiver."

"I'm all ears, Hilda."

"Move current program to standby."

"Roger Wilco Done."

"Gay Bounce. Zebbie, let's sweep this area for a bigger settlement."

Zebbie placed a locus around the town, radius five hundred klicks, and started "A Tramp Abroad" with vertex time cut to one second. Thirtyone minutes later we had a city. I guessed it at a hundred thousand plus.

"Captain," Zebbie said, "may I suggest that we bounce and try to raise them by radio? This place is big enough for A.A. guns or missiles —"

"Gay Bounce!"

" — and we know that their Slavic neighbors have aircraft."

"Is your guardian angel warning you?"

"Well… 'tain't polite to ground without clearance; such rudeness can make one suddenly dead."

"Gay Bounce, Gay Bounce. Are we out of reach of missiles?"

"Captain, British and Russians of this universe are ahead of us in spaceships or they wouldn't be here. That requires us to assume that their missiles and lasers and X-weapons are better than ours."

"What's an 'X-weapon'? And what do you advise?"

"I advise evasive tactics. An X-weapon is a 'Nobody-Knows.'"

"Evasive tactics, your choice. I assume you won't waste juice."

"No juice. Jake, gallop in all directions. Up, down, and sideways. Don't wait for 'Execute'; jump as fast as you can. That's it! Keep moving!"

"Captain Auntie, may I suggest an easier way?"

"Speak up, Deety."

"Zebadiah, how big is that city? Kilometers."

"That's indefinite. Oh, call it eight klicks in diameter."

"You've got that one-second 'Tramp' program on hold. Change locus. Center on that biggest building, make the radius six klicks. Then start program and Pop can rest."

"Uh… Deety, I'm stupid. Six klicks radius, ten klicks is a minimum — A bit tight?"

"Meant to be. Shall I draw a picture?"

"Maybe you'd better."

(Deety had defined an annulus two kilometers wide, outer radius six, inner radius four. We would "circle" the city six klicks above ground, random jumps, sixty per minute. I doubted that even robot weapons could find us, range us, hit us, in one second.)

Deety loosened her belt, slithered forward, and sketched. Suddenly Zebbie said, "Gotcha! Deety, you're a smart girl."

"'Boss, I'll bet you tell that to all the girls.'"

"Nope, just smart ones. Gay Deceiver!"

"Less noise, please."

"Program revision. A Tramp Abroad. Locus a circle radius six klicks. Center defined by next Bingo. Acknowledge paraphrase."

"Revised program A Tramp Abroad. Circle twelve klicks diameter center next realtime Bingo."

"Jake, put us over that big building downtown. If necessary, make several tries but don't hang around. Once I like the position I'll say the magic word, then scram."

"Aye aye, Chief."

Jacob made a dozen jumps before Zebbie said, "Bingo Gay Bounce" and a light appeared on the display. He started the program and told Gay to increase scale; the light spread out into a circle with a lighted dot in the center. "Captain, watch this. I've told Gay that every stop is a Bingo. You may be surprised."

"Thanks, Zebbie." The circle was becoming freckled inside its perimeter. With no feeling of motion, the scene flicked every second. It was midmorning; each scene was sharp. That big building would be dead ahead — blink your eye and you're staring at fields — then again at the city but with that building off to starboard. It put me in mind of holovideo tape spliced to create confusion.

Zebbie had on his phones and was ignoring everything else. Jacob was watching the flickering scenery, as was I, as was Deety — when Jacob suddenly turned his head, said, "Deety-please-the-Bo — " and clapped his hand over his mouth.

I said, "Two Bonines, Deety — quickly!"

Deety was reaching for them. "You, too, Auntie Cap'n?"

"It's this flickering." I gave one to Jacob, made certain that he saw me take one. I had not been motionsick since I had been made Captain. But any time my husband must take one, I will keep him company.

Today I should have taken one as soon as I spotted that British flag; Bonine tranquilizes the nerves as well as the tummy… and soon I must act as — ambassador? Something of the sort; I intended to go straight to the top. Dealing with underlings is frustrating. In college I would not have lasted almost four years had it been up to the dean of women. But I always managed to take it over her head to the president; the top boss can bend the rules.

(But my senior year the president was female and as tough a bitch as I am. She listened to my best Clarence-Darrow defense, congratulated me, told me I should have studied law, then said, "Go pack. I want you off campus by noon.")

Zebbie pushed the phone off his right ear. "Captain, I've got this loud enough to put on the horn. Want to talk to them?"

"No. I've never grounded outside the States. You know how, you do it. But, Chief Pilot —"

"Yes, Ma'am?"

"And Copilot and Astrogator. Stick to the truth at all times. *But do not unnecessarily give information.* Answer questions uninformatively — but truthfully. If pressed, tell them, 'See the Captain."

"My dear," Jacob said worriedly, "I've been meaning to speak about this. Zeb has had diplomatic experience. Wouldn't it be wise for us to place him in charge on the ground? Please understand, I'm not criticizing your performance as captain. But with his experience and in view of the fact that our principal purpose is to obtain certain things for his car —"

"Gay Bounce Gay Bounce Gay Bounce! Astrogator."

"Yes, Captain."

"Place us in a parking orbit. Soonest."

"Aye aye, Ma'am! Copilot, don't touch the verniers. Chief Pilot, check that the car is level. Gay Deceiver."

"On deck, Deety."

"Program. L axis add speed vector three point six klicks per second. Paraphrase acknowledge."

"Increase forward speed three and six tenths kilometers per second."

"Chief Pilot?"

"Level."

"Execute." Deety glanced at the board. "Gay Deceiver, H-above-G will soon stop decreasing, then increase very slowly. In about fifty minutes it will maximize. Program. When H-above-G is maximum, alert me."

"Roger Wilco."

"If-when one hundred klicks H-above-G, alert me."

"Roger Wilco."

"If-when air drag exceeds zero, alert me."

"Roger Wilco."

"Remain in piloting mode. Ignore voices including program code words until you are called by your full name. Acknowledge by reporting your full name."

"'Gay Deceiver,'" answered Gay Deceiver.

"Is that okay, Captain? Smart Girl can't hear the shortform programs now, until she hears her full name *first.* Then you would still have to say 'Gay' to alert her, and 'Home' or whatever to scram. But there should be loads of time, as she'll tell me if anything starts to go wrong. You heard her."

"That's fine, Astrogator."

"I turned her ears off because there may be discussion in which you might not want to have to be careful to use code words… but still be able to put her ears back fast if you need them. Faster than the switch and besides the switch can be reached only from the left front seat."

Deety had a touch of nervous chattering; I understood the reasons for each step. And I understood why she was chattering.

"Well done. Thank you. Remain at the conn. Chief Pilot, Copilot, the Secondin-Command has the conn. I am going aft and do not wish to be disturbed." I lowered my voice, spoke directly to Deety. *"You* are free to call me. You *only."*

"Aye aye, Captain," Deety acknowledged quietly. "I must remind you: air for four hours only."

"If I fall asleep, call me in three hours." I kissed her quickly, floated out of my chair and started to undog the bulkhead door — got nowhere; Deety had to help me. Deety flipped a light switch for me. She closed me in and dogged one dog.

I got a blanket out of the cradle, took off my clothes, tried to wrap myself in the blanket. It kept slithering away.

No seat belts — But the web straps used to make a bedroll of Zebbie's sleeping bag were attached through loops and tucked under thingammies. Soon I had a belt across my waist and the blanket around me.

Being a runt, the only way I can fight is with words. But best for me is to walk away. Fight with *Jacob?* I was so angry I wanted to slap him! But I *never* slap anyone; a woman who takes advantage of her size and sex to slap a man is herself no gentleman. So I walked away — got out of there before I said something that would tear it — lose me my lovable, cuddly, thoughtful — and sometimes *unbearable!* — husband.

I wept in my pillow — no pillow and no Kleenex. After a while I slept.

Chapter XXV

" — leave bad enough alone!"

Deety:

After I helped Aunt Hilda with the bulkhead door, I got back into my seat-and said nothing. If I opened my mouth, I would say too much. I love Pop a heap, and respect him as a mathematician.

Pop is also one of the most selfish people I've ever known.

Doesn't mean he's tight with money; he isn't. Doesn't mean he wouldn't share his last crust of bread — he would. With a stranger.

But if he doesn't want to do something, he won't. When Jane died, I had to take over money management at once. At seventeen. Because Pop ignored it. It was all I could do to get him to sign his name. -

I was bucking for my doctorate. Pop seemed to think that I should cook, clean house, shop, keep financial records, manage our businesses, cope with taxes — and earn my doctorate simultaneously.

Once I let dishes stack to see how long it would take him to notice. About two weeks later he said, "Deety, aren't you ever going to do the dishes?"

I answered, "No, sir."

"Eh? Why not?"

"I don't have time."

He looked puzzled. "Jane didn't seem to find keeping house difficult. Is something wrong, dear?"

"Pop, Mama wasn't bucking for a doctorate against a committee of dunderheads. My research subject was approved two years ago… but I've got men judging me — four out of seven — who can't tell Fortran from Serutan, hate computers, and have dark fears that computer scientists are going to take their jobs away from them. They make me do work over because *they* don't understand it. And besides — Well, Mama Jane always had help, mine, and a housekeeper toward the end."

Pop is okay. He hired a housekeeper who stuck with us till I got my Ph.D. He investigated, discovered that thehead of the department had put men on my committee who knew nothing about computers — not on purpose; the department head did not know computers. I wound up with an even tougher committee but *they knew computers.* Fair enough.

Pop means to be good to me and he adores Aunt Hilda and means to pamper her. Pop is one of those men who sincerely believe in Women's Lib, always support it — but so deep down that they aren't aware of it, their emotions tell them that women never get over being children.

A mistake easy to make with Aunt Hilda — There are twelve-year-old girls bigger than she is and with more curves.

For a horrid time, we three said nothing. Zebadiah watched his instruments; Pop stared straight ahead.

At last my husband gave my father the chewing out that Pop would never have taken from me, "Jake. Tell me how you do it."

"Eh?"

"You're a genius. You aren't the absentminded sort who needs a boy to lead him around. You can hammer a nail with the best of them and can use power tools without chopping your fingers. You're good company and you managed to attract one of the three finest women I've ever known so much that she married you. Yet you have publicly insulted her twice in one day. *Twice.* Tell me: Do you have to *study* to be that stupid? Or is it a gift, like your genius for mathematics?"

Pop covered his face with his hands. Zebadiah shut up.

I could see Pop's shoulders shake. Presently his sobbing stopped. He wiped his eyes, unfastened his seat belt. When I realized he was heading for the bulkhead door, I unstrapped fast and placed myself in his way. He said, "Please move out of my way, Deety."

"Copilot, return to your seat."

"But, Daughter, you *can't* come between husband and wife!"

"Address me as 'Astrogator.' The Captain does not wish to be disturbed. Gay Deceiver!"

"Here, Deety!"

"Log mode. Copilot, I will not permit you to disobey the Captain's orders. Return to your seat, strap down — and *stay there!"*

"Or would you rather be placed in it?" Zebadiah growled. "With your arms strapped under the belts, and the buckles where you can't reach them."

"Chief Pilot, do not intervene unless I call on you. Copilot, *move!"*

Pop turned in the air, almost kicking me in the face and unaware of it. He was speaking through sobs. "But I *must* apologize to Hilda! Can't you understand that?" But he was getting back into his seat.

"Jake, you'll be a worse damn' fool if you do."

"What? Zeb, you can't mean that."

"I do mean it. You apologized once today. Hypocrisy, as Sharpie realizes. Jake, your *only* chance of staying married is to shut up and soldier; your word is no longer worth a fiat dollar. But if you behave yourself for four or five years, she might forget it. Correction: forgive it. She'll *never* forget it. Establish a long record of good behavior and she might allow you some minor faults. But don't ever hint that she is not as competent as any man. Sure, she'd be picked last for a tug-o'-war team, and she has to stand on a stool to reach a high shelf — *does* *that affect her brain?* Hell's bells, if size mattered, *I* would be the supergenius around here — not *you.* Or perhaps you think being able to grow a beard confers wisdom? Jake, leave bad enough alone! Mess with it, you'll make it worse."

Time for a diversion: Pop must *not* be given a chance to answer. If Pop started defending himself, he would wind up self-righteous. The ability of the male mind to rationalize its deeds — and misdeeds — cannot be measured.

(And some female minds. But we females have more wild animal in us; mostly we don't feel any need to justify ourselves. We just do it, whatever it is, because we want to. Is there ever any other reason?)

"Gentlemen," I added, close on Zebadiah's last remark before Pop could attempt rebuttal, "speaking of beards, you each have a three-day growth. If we are about to ask sanctuary, shouldn't we be neat? I'm going to comb my hair and dig the dirt out from under my nails, and — Glory be! — I've got one spandy-clean jump suit. In light green, Zebadiah; matches your pilot suits. Got a clean one, dear?"

"I believe so."

"I know so; I packed it when Aunt Hilda and I rearranged inventory. Pop, your light green jump suit is clean. That one you are wearing has wrinkles in the wrinkles and a big soup spot. We three will look as if we were in uniform. Aunt Hilda won't but the captain-and-owner of a yacht doesn't dress like her crew."

"'Owner'?" said Pop.

"'Owner,'" Zebadiah said firmly. "We pooled our resources. Sharpie is captain; she'll stand as owner for all of us. Simpler."

"She cautioned us not to tell lies, Zeb." (Pop sounded normal — his usual argumentative self.)

"No lie. But if *she* finds it necessary to lie for us, we back her up. Come on, Jake, let's put on our squeakin' shoes; the Captain might decide to land any orbit. How long are these orbits, Deety?"

"One hundred minutes, plus a bit. But Gay could ground us from the far side in five minutes if the Captain asked for it."

"So let's get shipshape and Bristol style. Deety, will you keep an eye on the board while Jake and I shave?"

Pop said, "I'm sorry but I can't shave until the Captain joins us. My gear is aft."

"Jake, use mine. Glove compartment. Remington okay?" My husband added, "You first; I want to read the news."

"The 'news'?"

"Smart Girl has been sampling all frequencies, AM and FM, twice a second. If there is pattern, she copies."

"But Deet — The Astrogator switched off the autopilot's ears."

"Jake, you just flunked Physics One-Oh-One. Deety told S.G. to shut off *audio.* I had in mind the electromagnetic spectrum. You've heard of it?"

Pop chuckled. *"Touché!* That makes us even for the one you pulled while we were calibrating."

(I heaved a sigh of relief. I had not been trying to save Pop's marriage — that's *his* problem. Even my own marriage was secondary; I was trying to save *the team,* and so was Zebadiah. We were two marriages and that is important — but most important we were a survival team and either we worked together smoothly or none would live through it.)

While Pop shaved and Zebadiah read the news, I cleaned my nails. If I clean them before each meal and again at bedtime, they are dirty only in between — dirt likes me. Mama Jane told me that centuries ago, while ouching my hair for school — not a criticism; a statement of fact.

The men swapped headset for shaver and I combed my hair and pinned it into place — no longer an "ouch" job as I keep it short, ringlets rather than curls. Men like it long — but caring for long hair is a career in itself, and I've been pushed for time since I was twelve.

Zebadiah stopped to feel his chin — so I deduced as the buzzing stopped. I asked, "What did Smart Girl have to say?"

"Not much. Le'me finish this. BBC Third Program mostly."

"From *London?"* He had resumed shaving and couldn't hear me.

Zebadiah finished shaving and passed his shaver to Pop, who stowed it, then took off the headset and handed it back. Zebadiah racked and secured it. I was about to ask for it, when I heard Aunt Hilda's sweet voice:

"Hello, everyone! What did I miss?"

"Halley's Comet."

"Halley's — Zebbie, you're a tease. Jacob — *Oh!* You shaved! How very nice! Hold still, my darling; you're going to be kissed, ready or not."

A kiss in free fall is interesting to watch when one participant is safety-belted and the other half is floating free. Hilda held Pop's cheeks, he had her head in his hands, and Aunt Hilda drifted like a flag in a breeze. She was dressed but barefooted; I was intrigued when she curled her toes, hard. Was Pop that good? — my cubical father, so I had thought until recently. Did Jane teach him? Or — Shut up, Deety, you're a voyeuse with a nasty curiosity.

They broke and Hilda floated between the pilot seats, a hand on each, and looked at the board. My husband said — to her, not to me — "Don't I get a kiss? It was *my* razor."

Aunt Hilda hesitated. Pop said, "Kiss him, beloved, or he'll sulk." So she did. It occurs to me that Aunt Hilda may have taught Zebadiah and that Mama Jane and Aunt Hilda may have been trained by the same coach before Pop came along — if so, who was my Unknown Benefactor?

"Not a whole lot," Zebadiah was saying. "Mostly tapes from BBC. Five minutes of news from Windsor City — which may be the city we bingoed — as exciting as local news from any town you've never been in. Chatter in Russian. The Smart Girl saved that for you."

"I'll listen to it. But I must learn something. I was tempery a while ago, but a nap fixed me up and now I am filled with sweetness and light. I must have a report from each of you. We all have had cumulative fatigue. It is now bedtime at Termite Terrace but about lunchtime in Windsor City if that is its name. We can go back to our stream or we can tackle the British. I am not taking a vote; I shall decide and I have a way to take care of anyone who is tired. But I insist on honest data. Deety?"

"Captain Auntie, sleep is never my problem."

"Zebbie?"

"I was a zombie. Until you recharged me. Now I'm rarin' to go!"

She mussed his hair. "Zebbie, quit teasing."

"Captain, on an earlier occasion I told you the facts: My alert time exceeds twenty-four hours. Fortyeight if I must. If that kiss did not stimulate you as much as it did me, let's try it again and find out what went wrong."

Aunt Hilda turned away abruptly. "Jacob dear, how do you feel? With the time difference this may be equivalent to staying up all night, possibly under great tension."

"Hilda my love, were we to return to our streamside, I would not sleep, knowing that this contact was coming. A night without sleep does not strain me."

"Pop's not exaggerating, Captain Auntie. I get my night-owl capacity from Pop."

"Very well. But I have a method of taking care of anyone who may have exaggerated. I can leave one person aboard as guard."

"Captain, this wagon does not need a guard."

"Chief Pilot, I was offering *sleep* — under pretext of guarding. Car locked and sleep where I just napped — outsiders would not know. Anyone? Speak up."

(I wouldn't have missed it for a Persian kitten! Did Hilda expect anyone to stay behind? I don't think so.)

"Very well. No firearms. Gentlemen, please hide your pistols and belts with the guns, aft. Zebbie, is there a way to lock that door in addition to dogging it?"

"Sure. Tell Gay. May I ask why? No one can break into the cabin without damaging the old girl so much that she won't lift."

"Conceded, Zebbie. But I will be bringing visitors into this space. If anyone is brash enough to ask to be shown beyond the bulkhead door, I shall tell him that is my private compartment." Aunt Hilda grinned wickedly. "If he persists, I'll freeze his ears. What's the program for locking and unlocking it?"

"Very complicated. Tell her, 'Lock the bulkhead door,' or 'Unlock the bulkhead door.' Concealed solenoids. If the car is cold, the bolts drop back."

"Goodness, you were thorough."

"No, Ma'am. The Aussies were. But it turns out to be convenient for things we wouldn't like to lose. Cap'n, I don't trust banks any more than I trust governments, so I carry my safety deposit vault with me."

"If you cut the trickle charge, it unlocks?" Pop asked.

"Jake, I knew you would spot that. An accumulator across the solenoids, floating. Shut down the car and the solenoids work for another month… *unless* you open a switch in an odd location. Anyone want to know where it is? — what you don't know, you can't tell."

He got no takers. Instead I said, "Captain, is a fléchette gun a 'firearm'?"

"Hmm — Will it fit into a zippered compartment in your purse?"

"It fits into a *concealed* zipper compartment."

"Keep it with you. No swords, gentlemen, as well as no firearms; we are a civilian party. One thing we should carry: those miniature walky-talkies, Deety and I in our purses, you gentlemen in your pockets. If they are noticed, tell the truth: a means of keeping our party in touch."

Aunt Hilda suddenly looked stern. "This next order should be in writing. Please understand that there are *no* exceptions, no special circumstances, *no* variations left to individual judgment. I require Roger-Wilcoes from each of you or *we do not ground.* This party does *not* separate. Not for thirty seconds. Not for ten seconds. Not at all."

"Will the Captain entertain a question?"

"Certainly, Zebbie."

"Washrooms. Restrooms. Bathrooms. If these British behave like their analogs, such facilities are segregated."

"Zebbie, all I can say to that is that I will look for a way to cope. But we stay together until I — until *I,* the Captain — decide that it is safe to ease the rule. In the meantime — We should use that unpopular honey bucket before we ground… then, if necessary, return to the car, together, to use it later. That's not subject to discussion. Once we are on the ground, you three, acting unanimously, can hold a bloodless mutiny over this order or any" — Aunt Hilda looked directly at her husband — "and I will let myself be kicked out without a word… out of office as captain, out of the car, out of the party.

Remain here, on Marsten, with the British if they will have me. No more questions. No further discussion by me or among yourselves. Astrogator."

"Roger Wilco!"

"Thank you. Please state it in the long form."

"I understand the Captain's order and will comply exactly with no mental reservations."

"Chief Pilot."

"I understand —"

"Short form. Deety defined it."

"Roger Wilco, Captain!"

Aunt Hilda turned in the air toward Pop — and I held my breath, three endless seconds. "Jacob?"

"Roger Wilco, Captain."

"Very well. We will ground as soon as we get clearance but will not ask for clearance until I've heard the news and translated that Russian." Whereupon I told her that we all intended to put on our best bib and tucker; the time should come out about right — and could we be relieved one by one? As I intended to use that darned thunder mug — when you must, you must.

Aunt Hilda frowned slightly. "I do wish that I had a jump suit in my size. This outfit —"

"Aunt Hilda! Your crew is in uniform but you are wearing the latest Hollywood style. That model was created by Ferrara himself and he charged you more than you paid for that mink cape. You are the Captain and dress to please yourself. I tell you three times!"

Aunt Hilda smiled. "Should I acknowledge in paraphrase?"

"By all means."

"Deety, I require my crew to wear uniforms. But I dress to suit myself, and when I saw what the world-famous couturier Mario Ferrara was doing to change the trend in women's sports clothes, I sent for him and worked him silly until he got *just* what I wanted. Including repeated washings of the trousers to give them that not-quite-new look so favored by the smart set for yachting. When you come back will you fetch your little shoes — my Keds — and the hair ribbon you gave me? They are part of Signor Ferrara's creation."

"Aunt Hilda honey, you make it sound true!"

"It *is* true. You told me three times. I don't even regret the thousand newdollar bonus I gave him. That man is a genius! Get along dear — git. Chief Pilot, you have the conn; I want the earphones."

I was back in ten minutes with jump suits for self and Pop and clean pilot suit for my husband.

I sailed their clothes toward Pop and Zebadiah. Aunt Hilda was handing phones back to Zebadiah; his suit caught both of them.

"Wups, sorry but not very. What do the Russians say?"

"We're baddies," said my husband.

"We are? The suit I took off is loose back aft. Wrap it around your pistol and belt and shove them under the sleeping bag — pretty please?"

"With sugar on it?"

"At *today's* prices? Yes. Beat it. Cap'n, what sort of baddies?"

"Spies and agents-saboteurs and other things and indemnity is demanded in the name of the Tsar and the surrender of our persons, all twelve of us —"

"Twelve?"

"So they claim. — for trial before they hang us. Or else. The 'or-else' amounts to a threat of war."

"Heavens! Are we going to ground?"

"Yes. The British comment was that a source close to the Governor reports that the Russians have made another of their periodic claims of territorial violation and espionage and the note was routinely rejected. I intend to be cautious. We won't leave the car unless I am convinced that we will receive decent treatment."

Shortly we were again doing one-second jumps in a circle around Windsor City. Had Pop not pulled another blunder in handling Aunt Hilda we would have been on the ground two hours ago. "Blunder," rather than "insult" — but I'm not Hilda, I'm Deety. My ego is not easily bruised. Before I married, if a man patronized me and it mattered, I used to invite him to go skeet shooting. Even if he beat me (happened once), he *never* patronized me again.

If it's an unsocial encounter — I'm big, I'm strong, I fight dirty. A male has to be bigger, stronger, and just as well trained or I can take him. Haven't had to use the fléchette gun yet. But twice I've broken arms and once I kicked a mugger in the crotch and said he fainted.

Zebadiah was having trouble with traffic control. " — request permission to ground. This is private yacht Gay Deceiver, U.S. registry, Chief Pilot Carter speaking. All we want is clearance to ground. You're behaving like those youknow-what-I-mean Russians. I didn't expect this from Englishmen."

"Now, now! Where are *you? You sound close by… but we can't get a fix on you."*

"We are circling your city at a height above ground of five kilometers."

"How much is that in feet? Or miles?"

I touched my husband's shoulder. "Tell him sixteen thousand feet."

"Sixteen thousand feet."

"What bearing?"

"We're circling."

"Yes, but — See Imperial House at City Center? What bearing?"

"We are much too fast for you to take a bearing. While you speak one sentence, we've gone around twice."

"Oh, tell that to the Jollies; old sailors will never believe it."

Aunt Hilda tapped Zebadiah; he passed the microphone to her. Aunt Hilda said crisply, "This is Captain Burroughs, commanding. State your name, rating, and organization number."

I heard a groan, then silence. Twentythree seconds later another voice came on. *"This is the officer of the watch, Leftenant Bean. Is there a spot of trouble?"*

"No, Lieutenant, merely stupidity. My chief pilot has been trying for fifteen minutes for clearance to ground. Is this a closed port? We were not told so by your embassy on Earth. We were warned that the Russians discouraged visitors, and indeed, they tried to shoot us out of the sky. What is your full name and your regiment, Lieutenant; I intend to make a formal report when I return home,"

"Please, Madam! This is Leftenant Brian Bean, Devonshire Royal Fusiliers. May I ask to whom I am speaking?"

"Very well. I will speak slowly; please record. I am Captain Hilda Burroughs, commanding space yacht Gay Deceiver, out of Snug Harbor in the Americas."

"Captain, let me get this clear. Are you commanding both a spaceship in orbit and a landing craft from your ship? Either way, please let me have the elements of your ship's orbit for my log, and tell me the present position of your landing craft. Then I can assign you a berth to ground."

"Do I have your word as a British officer and gentleman that you will not shoot us out of the sky as those Russian vandals attempted to do?"

"Madam — Captain — you have my word."

"Gay Bounce. We are now approximately forty-nine thousand feet above your city."

"But — We understood you to say 'Sixteen thousand'?"

"That was five minutes ago; this craft is fast." Aunt Hilda released the button. "Deety, get rid of the special 'Tramp' program."

I told Gay to return "Tramp" to her perms and to wipe the temporary mods. "Done."

Aunt Hilda pressed the mike button. "Do you see us now?" She released the button. "Deety, I want us over that big building — 'Imperial House,' probably — in one transition. Can you tell Zebbie and Jacob what it takes?"

I looked it over. We should be at the edge of the city — but were we? Get a range and triangulate? No time! Guess at the answer, double it and divide by two. Arc tan four tenths. "Pop, can you transit twenty-one degrees from vertical toward city hail?"

"Twenty-one degrees. Sixty-nine degrees of dive toward the big barn in the park, relative bearing broad on the port bow, approx — set! One unit transition, ten klicks — set!"

"I can see you now, I do believe," came Mr. Bean's voice. *"Barely."*

"We'll come lower." Aunt Hilda chopped off the lieutenant. "Zebbie, put her into glide as soon as you execute. Deety, watch H-above-G and scram if necessary — don't wait to be told. Zebbie, execute at will."

"Jake, execute!" — and we were down so fast I got goose bumps… especially as Zebadiah then dived vertically to gain glide speed and that's mushy, slow, *slow,* on Mars.

But soon Aunt Hilda was saying tranquilly, "We are over Imperial House. You see us?"

"Yes, yes! My word! Bloody!"

"Leftenant, watch your language!" Aunt Hilda winked at me and snickered silently.

"Madam, I apologize."

"'Captain,' if you please," she said, smiling while her voice dripped icicles.

"Captain, I apologize."

"Accepted. Where am I to ground?"

"Ah, figured from Imperial House, there is a landing field due south of it twelve miles. I will tell them to expect you."

Hilda let up on the button, said, "Gay Bounce" and racked the microphone. "How unfortunate that the lieutenant's radio cut out before he could tell us how far away that field is. Or was it our radio?"

I said, "Captain, you know durn well both radios worked okay."

"Mercy, I must be getting old. Was Smart Girl in recording mode?"

I said, "She always is, during maneuvers. She wipes it in a ten-hour cycle."

"Then my bad hearing doesn't matter. Please ask her to repeat the lieutenant's last speech." I did, and Gay did. "Deety, can you have her wipe it right after the word 'it'?"

"Auntie, you ain't goin' to Heaven." I had Gay wipe twelve-miles-I-will-tell-them-toexpect-you. "But you wouldn't know anybody there."

"Probably not, dear. Zebbie, how does one have Smart Girl ground herself without juice?"

"Deety had better go over it again. Unless — Jake, will you explain it?"

"It's Deety's caper. I could use another drill."

"All right," I agreed. "Switch off Gay's ears, Zebadiah. Gay can make *any* transition exactly if she knows precisely where her target is. Even a jump of less than one minimum. I found that out the day we got here when we were testing remote control. The rest came from perfecting the 'Bug-Out' routine by having her pause and sweep the target and if it's obstructed, she bounces. Aunt Hilda, if you intend to ground, we had better not be much under five klicks or we'll have to bounce and start over."

"I've got air bite, Captain. I'll stretch it."

"Thanks, Zebbie. Deety, you do it. Let us all learn."

"Okay. I need both pilots. You haven't said where to ground."

"Wasn't that clear? Due south of Imperial House. I think it is a parade ground. Nothing on it but a flagpole on the north side. Put her down in front of the building but miss that flagpole."

"It would take override to hit that flagpole. Zebadiah, gunsight the spot you want to park on. I'll talk to Gay. Then put her in level flight in the orientation you want, and give 'Execute.' Pop, Gay should pause at exactly one-half klick, to see that her parking spot is clear and to recheck distance. That stop won't be long — a fraction of a second — but, if she fails to make it, try to bounce. Probably you can't; if I missed in debugging, maybe we'll all be radioactive. Been nice knowing you all. Okay, switch on her ears." My husband did so.

"Gay Deceiver."

"Hello, Deety. I've missed you."

"Unpowered autogrounding mode."

"Gonna ground by myself without a drop of juice! Where?"

"New target. Code word: 'Parade Ground.' Point of aim and range-finder method."

"Show him to me. I can lick him!"

I touched my husband's shoulder. "Let her know."

"On target, Gay. Steady on target."

"Range three-seven-two-nine, three-seven-naughty-nought, threefive-nine-nine — got him, Deety!"

Zebadiah leveled us out, headed us north. "Execute!"

We were parked facing the big front steps. That flagpole was ten meters from Gay's nose.

Pop said, "Deety, I could *see* the check stop but it was too short for me to act. But your programs always work."

"Until the day one blows up. Aunt Hilda, what do we do now?"

"We wait."

Chapter XXVI

The Keys to the City

Jake:

I do not believe that I am wrong in insisting that Zeb should lead us. I am forced to conclude that being right has little to do with holding a woman's affections. I *never* intend to hurt Hilda's feelings. I now plan to make a career of keeping my mouth shut.

But I do not think it was diplomatic to spat with that radio operator or proper to be — well, yes, *rude* — rude to his officer. As for grounding twelve miles, nineteen klicks, from where we were told to — is *this* the behavior of guests!

But we did ground where we should not have. I started to open the door to get out, then help Hilda to disembark, when I heard her say: "We wait."

Hilda added, "Leave doors locked and belts fastened. Gay Deceiver, remain in maneuvering mode. Lock the bulkhead door."

"Hot and rarin' to go, Hilda. Bulkhead door locked."

"You're a smart girl, Gay."

"That makes two of us, Hilda."

"Chief Pilot, in this mode does she record outside as well as inside?"

"She does if I switch on outside speakers and mikes, Captain."

"Please do."

"What volume, Captain? Outside, and inside."

"I didn't know they were separate. Straight-line gain?"

"Logarithmic, Ma'am. From a gnat's whisper to a small earthquake."

"I would like outside pickup to amplify enough that we won't miss anything. What I send out should be a bit forceful."

"Captain, I'll give you a decibel advantage. You want it louder, squeeze my shoulder. I won't turn it higher than seven — unless you want to use it as a weapon. But to talk privately inside I have to keep switching off, then on. As with the Russians — remember?"

"Oh, yes. All hands, I will speak for all of us. If anyone needs to speak to me, attract Zebbie's attention — "

"Slap my shoulder."

" — and he'll give us privacy and confirm it with thumbs-up. Don't ask for it unnecessarily."

"Hilda, why these complex arrangements? Here comes someone now; it would be polite to go meet them. In any case, we can open the door to talk — these are not Russians." I simply could not bear to watch my darling handle this delicate matter with such — well, *rudeness!*

Was I thanked? "Copilot, pipe down. All hands, we may go upstairs any instant; report readiness for space. Astrogator."

"Ready, Captain."

"Chief Pilot."

"Still ready. Outside audio hot."

"Copilot."

"I'm checking this door seal again. Earlier I started to open it. There! Ready for space. Hilda, I don't think — "

"Correct! But the Chief Pilot *did* think, and gave me thumbs-up as soon as you started to talk. Pipe down! Chief Pilot, cut in our sender as soon as one of them speaks. Copilot, call me 'Captain' as the others do. Protocol applies; I'll explain family relationships later, when appropriate."

I resolved not to open my mouth for any reason, feeling quite disgruntled. Disgruntled? I found myself giving serious thought to whether or not Hilda's temporary and inappropriate authority could do permanent harm to her personality.

But the top of my mind was observing the Lord High Executioner, approaching us flanked by two henchmen. He was wearing a uniform more suited to musical comedy than to the field. Fierce moustaches, sunburn-pink complexion, service ribbons, and a swagger cane completed the effect.

His henchmen were younger, not so fancy, fewer ribbons, and appeared to be sergeants. I could not read the officer's shoulder straps. A crown, I thought, but was there a pip beside it?

He strode toward us and was ten meters from my door when Hilda said firmly, "That's close enough. Please tell the Governor General that Captain Burroughs has grounded as directed and awaits his pleasure."

He stopped briefly and bellowed, "You were *not* directed to land *here!* You're supposed to be at the field! Customs, immigration, health inspection, visas, tourist cards, intelligence —"

I saw Hilda squeeze Zeb's shoulder. *"Quiet!"* Her voice came more loudly from outside than from her despite Gay's soundproofing. Zeb reduced gain as she continued, "My good man, send one of your ratings to the Governor General to deliver my message. While we wait, state your name, rank, and regiment; I shall make formal report of your behavior."

"Preee*pos*terous!"

"Behavior 'unbecoming an officer and a gentleman,'" Hilda said with gentle sweetness, "since you insist. While you won't tell your name, like a naughty boy, others know it. The Paymaster. The Governor General. Others." She squeezed Zeb's shoulder. "Deliver my message!"

"I'm Colonel Brumby, Chief Constable of the Imperial Household, and *not* your messenger boy! Open up! I'm going to parade you before the Governor General — under arrest!"

Hilda said quietly to Zeb, "Seven" — allowed the Chief Constable to stride two more steps before saying, *"STOP!"*

My ears hurt.

All three stopped. The old fool braced himself and started again. Hilda must have poked Zeb; he answered with thumbs-up. "Back to normal volume but be ready with that earthquake."

He nodded; she went on, *"Leftenant* Colonel, is it not? I don't see that extra pip. Leftenant Colonel, I warn you for your own safety not to come closer."

He did not answer, kept coming, took his cane from under his arm. His sergeants followed — slowly, at a respectful distance. Hilda let him reach my door — I could see a network of broken veins on his nose-and for the second time in two days someone started to pound on Gay's door. He raised his cane —

"Stop that!"

I was deafened. The Chief Constable was missing. The sergeants were a long way back. They stopped running, turned and faced us. I looked down through my door's port, saw a pair of legs and a swagger cane — inferred a torso.

I turned my head, saw that Zeb had his thumb up. "Captain," he said, "I disobeyed you."

"How, Zebbie?"

"I gave him an eight; I wasn't sure his heart could take a ten. He looks like an old bottle-a-day man."

"An eight may have been too much," I commented. "He's on the ground. Dead, maybe."

"Oh, I hope not!"

"Unlikely, Captain," Zeb told her. "Shall I tell his noncoms to come get him?"

"I'll tell them, Zebbie. Normal level." Hilda waited until he signalled, then called out, "Sergeants! Colonel Brumby needs help. There will be no more loud noises."

The sergeants hesitated, then hurried. Shortly they were dragging him away. Presently he came to life, fought them off — sent one chasing back for his cane. The man caught my eye — and winked. I concluded that Brumby was not popular.

There was now a man standing on the entrance stairs. (Perhaps there had been people nearby earlier — but not after the noise started.) Imperial House had its ground floor with no doors on the front side. The first floor was the main floor and was reached by wide, sweeping stairs. The man near the top was small, dapper, dressed in mufti. As Brumby reached him, Brumby saluted, stopped, and they talked. Brumby's ramrod stiffness spoke for itself.

Shortly the smaller man trotted down the long steps, moved quickly toward us, stopped about thirty meters away, and called out, "In the landing craft! Is it safe to come closer?"

"Certainly," agreed Hilda.

"Thank you, Ma'am." He approached, talking as he walked. "I dare say we should introduce ourselves. I'm Lieutenant General Smythe-Carstairs, the Governor hereabouts. I take it you are Captain Burroughs?"

"That is correct, Excellency."

"Thank you. Although I can't tell, really, to whom I am speaking. Awkward, is it not, chatting via an announcing system? An open door would be pleasanter, don't you think? More friendly."

"You are right, Excellency. But the Russians gave us so unpleasant, so *dangerous,* a reception that I am nervous."

"Those bounders. They have been making a bit of fuss over you, on the wireless. That was how I recognized your craft — smaller than they claimed but an accurate description — for a Russian. But surely you don't think that we British wear our shirt tails out? You will receive decent treatment here."

"That is pleasing to hear, Excellency. I was tempted to leave. That policeman chap is most unpleasant."

"Sorry about that. Sheer mischance that he was first to greet you. Important as this colony is to the Empire, no doubt you have heard that being posted to it is not welcome to some. Not my own case, I asked for it. But some ranks and ratings. Now let's have that door open, shall we? I dislike to insist but I *am* in charge here."

Hilda looked thoughtful. "Governor General, I can either open the doors or leave. I prefer to stay. But the shocking treatment by the Russians followed by the totally unexpected behavior of your chief constable causes me to worry. I need a guarantee that our party will be permitted to remain together at all times, and a written safeconduct for us, signed and sealed by you on behalf of H.I.M."

"My dear Captain, a captain does not bargain with one who stands in place of and holds the authority of His Imperial Majesty. As a man, and you being a delightful lady, I would be happy to bargain with you endlessly just for the pleasure of your company. But I can't."

"I was not bargaining, Excellency; I was hoping for a boon. Since you will not grant it, I must leave at once."

He shook his head. "I cannot permit you to leave as yet."

"Gay Bounce. Zebbie, will you try to reach that nice Mr. Bean?"

Zeb had him shortly. *"Leftenant Bean heah."*

"Captain Burroughs, Leftenant. Our radio chopped off while you were talking. No harm done; the important part got through. We grounded where you told us to, due south of Imperial House."

"So that's what happened? I must admit to feeling relieved."

"Is your post of duty in Imperial House?"

"Yes, Ma'am. On it, rather. We have a small housing on the roof."

"Good. I have a message for the Governor General. Will you record?"

"Oh, certainly."

"This is Hilda Burroughs speaking, Master of Spacecraft Gay Deceiver out of Snug Harbor. I am sorry that I had to leave without saying goodbye. But your last statement forced me to take measures to protect my craft and crew." My darling Hilda cut the mike. "Zebbie, when you have air, glide away from the city." She continued, "In a small way my responsibilities parallel yours; I cannot bargain concerning the safety of my crew and my craft. I hope that you will reconsider, as I have no stomach for dealing with the Russians — even though they have more to offer us in exchange. I still ask for safeconduct but now must ask for a still third item in such a document: that all four of us be allowed to leave at will. You have my name. My secondin-command is Doctor D. T. Burroughs Carter, my chief pilot is Doctor Z. J. Carter, my copilot is Doctor Jacob Burroughs. You will have noticed surnames. Doctor Jacob is my husband; the other two are our daughter and her husband. I am Doctor Hilda Corners but I am much prouder of being Mrs. Jacob Burroughs — although at present I must use 'Captain Hilda Burroughs' since I am commanding. Sir, while dictating this I have made a decision. I will *not* make a second attempt to negotiate with Russians. We will wait thirty minutes in the warm hope of hearing from you… then return to Earth, report to our own government, send a detailed complaint to the Tsar of All the Russias, and make a formal report of our attempt here to His Imperial Majesty. Signed Respectfully yours, H. C. Burroughs, Commanding. Leftenant, what are the full names and titles of the Governor General?"

"Ah, His Excellency Lieutenant General the Right Honourable Herbert Evelyn James Smythe-Carstairs, K.G., V.C., C.B.E., Governor General of the Imperial Realms Beyond the Sky."

"Preface it formally, please, and I will wait until oh-nine-hundred hours Greenwich time or thirty-six minutes from now. *Mark!"*

"I will add the heading, Captain, and deliver it by hand."

After Hilda signed off she said, "I'm going to try to sleep thirty of those thirty-six minutes. Can anyone think of a program that will let all of us nap? This contact is more tiring than I had expected. Jacob, Deety, Zeb — don't all speak at once."

"I can, my dear," I answered.

"Yes, Jacob?"

"Gay Termite."

To my mild surprise it was night at our creek bank. To my pleasure my first attempt to maneuver by voice was smoothly successful. My daughter's ingenuity in constructing voiced programs had left me little to do. While I did not resent it (I'm proud of Deety), nevertheless while sitting as copilot, I sometimes wondered whether anyone remembered that it was *my* brainchild that moved this chariot. Ah, vanity!

To my greater pleasure Hilda clapped her hands and looked delighted. "Jacob! How clever of you! How stupid of *me!* All right, everyone off duty for a half hour 'cept the rule about always two and always a rifle. Gay, alert us in thirty minutes. And please unlock the bulkhead door."

"Aunt Hillbilly, are you going to sleep back there?"

"I had thought of stretching out and inviting Jacob to join me. But the space belongs to you and Zebbie; I was thoughtless."

"We aren't going to sleep. But we had better drag those rifles out of that sack or *you* won't sleep. I want to empty the oubliette and stow that pesky plastic potty under the cushion of my seat. Durned if I'll use it when I have the whole outdoors at hand."

"Most certainly — but stay inside Gay's lights — and do please remind me before we leave. Deety, I've so much on my mind that I forget housekeeping details."

"Hillbilly, you're doing swell. I'll handle housekeeping; you worry about the big picture."

Hilda cuddled up to me in the after compartment and my nerves began to relax. Would the Governor General relent? Where would we go next? We had a myriad universes to choose from, a myriad myriad planets — but only one was home and we didn't dare go *there.* What about juice for Zeb's car and a thousand other things? Perhaps we should risk Earth-without-a-J. What about the time bomb, ticking away in my darling's belly?

Hilda sniffed into my shoulder. I patted her head. "Relax, dearest."

"I *can't.* Jacob, I don't *like* this job. I snap at you, you argue with me, we both get upset. It's not good for us — we *never* behaved this way at Snug Harbor."

"Then give it up."

"I'm going to. After I finish the job I started. Jacob, when we lift from this planet, *you* will be captain."

"Oh, no! *Zeb."* (Hilda my only love, you should turn it over to him now.)

"Zebbie won't take it. It's you or Deety, Jacob. If Deety is our next captain, you will backseat drive even more than you have with me.

No, Jacob, you *must* be captain *before* Deety is, so that you will understand what she is up against."

I felt that I had been scolded enough. I started to tell Hilda when that pejorative epithet played back in my mind: " — backseat drive —"

I trust that I am honest with myself. I know that I am not very sociable and I expect to go on being so; a man capable of creative work has no time to spare for fools who would like to visit. But a "backseat driver"?

Some facts: Jane learned to drive before I did — her father's duo. Our first car, a roadable, coincided with her pregnancy; I got instruction so that I could drive for Jane. She resumed driving after Deety was born but when both of us were in the car, I always drove. She drove with me as passenger once or twice before the custom became established — but she never complained that I had been backseat driving.

But Jane never complained.

Deety laid it on the line. I don't know who taught Deety to drive but I recall that she was driving, on roads as well as in the air, when she was twelve or thirteen. She had no occasion to drive for me until Jane's illness. There was a time after we lost Jane that Deety often drove for me. After a while we alternated. Then came a day when she was driving and I pointed out that her H-above-G was, oh, some figure less than a thousand meters, with a town ahead.

She said, "Thanks, Pop" — and grounded at that town, an unplanned stop. She switched off, got out, walked around and said, "Shove over, Pop. From now on, I'll enjoy the scenery while you herd us through the sky."

I didn't shove over, so Deety got into the back seat. Deety gets her stubbornness from both parents. Jane's was covered with marshmallow that concealed chrome steel; mine is covered with a coat of sullen anger if frustrated. But Deety's stubbornness isn't concealed. She has a sweet disposition but Torquemada could not force Deety to do that which she decided against.

For four hours we ignored each other. Then I turned around (intending to start an argument, I suppose — I was in the mood for one) — and Deety was asleep, curled up in the back seat.

I wrote a note, stuck it to the wind screen, left the keys, got quietly out, made sure all doors were locked, hired another car and drove home — by air; I was too angry to risk roading.

Instead of going straight home I went to the Commons to eat, and found Deety already eating. So I took my tray and joined her. She looked up, smiled, and greeted me: "Hello, Pop! How nice we ran into each other!" She opened her purse. "Here are your keys."

I took them. "Where is our car?"

"*Your* car, Pop. Where you left it."

"*I* left it?"

"You had the keys; you were in the front seat; you hold title. You left a passenger asleep in the back seat. Good thing she's over eighteen, isn't it?" She added, "There is an Opel duo I have my eye on. Tried it once; it's in good shape."

"We don't need two cars!"

"A matter of taste. Yours. And mine."

"We can't afford two cars."

"How would you know, Pop? I handle the money."

She did not buy the Opel. But she never again drove when we both were in our car.

Three data are not a statistical universe. But it appears that the three women I have loved most all consider me to be a backseat driver. Jane never said so… but I realize today that she agreed with Deety and Hilda.

I don't consider myself to be a backseat driver! I don't yell "Look out!" or "Watch what you're doing!" But four eyes are better than two: Should not a passenger offer, simply as data, something the driver may not have seen? Criticism? Constructive criticism only and most sparingly and only to close friends.

But I try to be self-honest; *my* opinion is not important in this. I must convince Hilda and Deety, by deeds, not words. Long habit is not changed by mere good resolution; I must keep the matter at the top of my mind.

There was banging at the bulkhead; I realized that I had been asleep. The door opened a crack. "Lift in five minutes."

"Okay, Deety," Hilda answered. "Nice nap, beloved?"

"Yes indeed. Did you?"

As we crawled out, Deety said, "Starboard door is open; Pop's rifle is leaning against it, locked. Captain, you asked to be reminded. Shall I take the conn?"

"Yes, thank you."

We lost no time as Deety used two preprograms: Bingo Windsor, plus Gay Bounce. Zeb had the communication watch officer almost at once. " — very well. I will see if the Captain will take the message. No over. Hold."

Zeb looked around, ostentatiously counted ten seconds, then pointed at Hilda.

"Captain Burroughs speaking. Leftenant Bean?"

"Yes, yes! Oh, my word, I've been trying to reach you the past twenty minutes."

"It is still a few seconds short of the time I gave you."

"Nevertheless I am enormously relieved to hear your voice, Captain. I

have a message from the Governor General. Are you ready to record?"

Zeb nodded; Hilda answered Yes; the lieutenant continued: *"'From the Governor General to H. C. Burroughs, Master Gay Deceiver.' Hurry home, the children are crying. We all miss you. The fatted calf is turning on the spit. That document is signed and sealed, including the additional clause. Signed: "Bertie"' — Captain, that is the Governor's way of signing a message to an intimate friend. A signal honor, if I may say so."*

"Gracious of him. Please tell the Governor General that I am ready to ground and will do so as soon as you tell me that the spot in which we were parked — the *exact* spot — is free of any obstruction whatever."

Bean was back in about three minutes saying that our spot was clear and would be kept so. Hilda nodded to Deety, who said, "Gay Parade Ground."

I had a flash of buildings fairly close, then we were back in the sky. Hilda snapped, "Chief Pilot, get Leftenant Bean!"

Then — c"Mr. Bean! Our spot was *not* clear."

"It is now, Captain; I have just come from the parapet. The Governor's poodle got loose and ran out. The Governor chased him and brought him back. Could that have been it?"

"It decidedly *was* it. You may tell the Governor — privately — that never in battle has he been so close to death. Astrogator, take her down!"

"GayParadeGround!"

Bean must have heard the gasp, then cheers, while Hilda's words were still echoing in his radio shack. We were exactly as before, save that the wide, showy steps to the King-Emperor's residence on Mars were jammed with people: officers, soldiers, civil servants with that slightly dusty look, women with children, and a few dogs, all under restraint.

I didn't spot the Right Honourable "Bertie" until he moved toward us. He was no longer in mufti but in what I could call "service dress" or "undress" — not a dress uniform — but dressy. Ribbons, piping, wound stripes, *etc.* — sword when appropriate. Since he was not wearing sword I interpreted our status as "honored guests" rather than "official visitors" — he was ready to jump either way.

He had his wife on his arm — another smart move, our captain being female. His aide (? — left shoulder "chicken guts" but possibly a unit decoration) was with him, too — no one else. The crowd stayed back.

Hilda said, "Chief Pilot — " then pointed to the mikes, drew her finger across her throat. Zeb said, "Outside audio is cold, Cap'n."

"Thank you, Gay, lock the bulkhead door, open your doors."

I jumped down and handed Hilda out, offered her my arm, while

Zeb was doing the same with Deety portside. We met, four abreast at Gay's nose, continued moving forward a few paces and halted facing the Governor's party as they halted. It looked rehearsed but we had not even discussed it. This placed our ladies between us, with my tiny darling standing tall, opposite the Governor.

The aide boomed, "His Excellency Governor General the Lieutenant General the Right Honourable Herbert Evelyn James Smythe-Carstairs and Lady Herbert Evelyn James!"

The Governor grinned. "Dreadful," he said quietly, "but worse with ruffles, flourishes, and the Viceroy's March — I spared you that." He raised his voice, did not shout but it projected — and saluted Hilda. "Captain Burroughs! We bid you welcome!"

Hilda bowed, returning the salute. "Excellency… Lady Herbert… thank you! We are happy to be here."

Lady Herbert smiled at being included, and bobbed about two centimeters — a minimum curtsy, I suppose, but can't swear to it, as she was swathed in one of those dreadful garden-party-formal things — big hat, long skirt, long gloves. Hilda answered with a smile and a minimum bow.

"Permit me to present my companions," Hilda continued. "My family and also my crew. On my left my astrogator and secondin-command, our daughter Doctor D. T. Burroughs Carter, and on her left is her husband our son-in-law, my chief pilot, Doctor Zebadiah John Carter, Captain U.S. Aerospace Reserve." Deety dropped a curtsy as her name was mentioned, a 6-cm job, with spine straight. Zeb acknowledged his name with a slight bow.

Hilda turned her head and shoulders toward me. "It gives me more pride than I can express," she sang, her eyes and mouth smiling, her whole being speaking such serene happiness that it made me choke up, "to present our copilot, my husband Doctor Jacob Jeremiah Burroughs, Colonel of Ordnance A.U.S."

The Governor stepped forward quickly and held out his hand. "Doctor, we are honored!" His handshake was firm.

I returned it in kind, saying in a nonprojecting voice, "Hilda should not have done that to me. Off campus, I'm 'Mister' to strangers and 'Jake' to my friends."

"I'm Bertie, Jake," he answered in his intimate voice, "other than on occasions when I can't avoid that string of goods wagons. Or I'll call you 'Doctor."

"You do and it's fifty lines." That made him laugh again.

"And I'm Betty, Jake," Lady Herbert said, in closing in. "Captain Burroughs, may I call you 'Hilda'?" (Was that a hiccup?)

"Call her 'Doctor,'" I suggested. "She told on the rest of us. How many doctorates do you hold, dear? Seven? Or eight?"

"After the first one, it no longer matters. Of course I'm 'Hilda,' Betty. But, Bertie, we have yet to meet the Brigadier."

I glanced at the tabs of the officer with the aiguillette and booming voice. Yes, A crown inboard and three pips — But when had Hilda learned British insignia? Many Americans can't read their own. I am ceasing to be surprised at how many facts can be stuffed into so small a space.

"Sorry. Friends, this is Brigadier Iver Hird-Jones. Squeaky finds things I lose and remembers things I forget."

"Ladies. Gentlemen. Charmed. Here is something you told me to remember, General." The Brigadier handed a sealed envelope to his boss.

"Ah, yes!" Smythe-Carstairs handed it to my wife. "The Keys to the City, Ma'am. Phrased as you specified, each of you named, and that third factor included. Signed by me for the Sovereign and carrying the Imperial seal."

"Your Excellency is most gracious," Hilda said formally, and turned toward Deety. "Astrogator."

"Aye, Captain." Deety placed it in her purse.

Our host looked surprised. "Jake, doesn't your wife have normal curiosity? She seems to have forgot my name, too."

Hilda protested, "I haven't forgotten your name, Bertie. It's an official matter; I treated it formally. I shall read it when I have leisure to open that envelope without damaging the flap seal. To you this is one of thousands of papers; to *me* it is a once-in-a-lifetime souvenir. If I sound impressed, it's because I *am."*

Lady Herbert said, "Don't flatter him, my deah." (Yes, she had had a couple.) "You'll turn his head, quite." She added, "Bertie, you're causing our guests to stand when we could be inside, sitting down."

"You're right, m'dear." Bertie looked longingly at Zeb's car.

Hilda played a trump. "Care to look inside, Bertie? Betty, you can sit down here; the captain's chair is comfortable. Will you do me the honor? Someday I'll tell my grandchildren that Lady Herbert sat in that very seat."

"What a charming thought!"

Hilda tried to catch my eye but I was a jump ahead of her, handing Lady Herbert in, making certain that she didn't miss the step, getting her turned around, making sure that she didn't sit down on belts. "If we were about to lift," I told her, while fastening the seat belt loosely (first, moving the buckle — she's Hilda's height but my thickness), "this safety belt would be fastened firmly."

"Oh, I wouldn't dare!"

"Gangway, Pop! Another customer." I got out of the way, and Deety installed Brigadier Hird-Jones in her seat. Deety said, "Pop, if you'll put the Governor in your seat, Zebadiah will take his own and give his two-hour lecture on the care and feeding of spacecraft, while you and I and Hilda hang in the doorways and correct his errors."

"I'm only up to chapter four," Zeb said defensively. "Jake, make her quit picking on me."

"You're her husband; I'm merely her father. Bertie, I must ask one thing. *Don't* touch *anything.* This car is *not* shut down; it is ready to go, instantly."

"I'll be careful, Jake. But we're leaving the ladies standing. The Captain herself! This is not right."

Deety said, "Bertie, I don't want to sit down. This trip doesn't give me nearly the exercise I need."

"But I *can't* permit Captain Hilda to stand. Sit here and I'll stand." (I appreciated his gallantry but I could see an impasse coming: two people, each aware of her/his prerogatives and they conflicted.)

Hilda avoided it by something she had discovered in working out how to rig a double bed in the control compartment. Although pilots have separate seats, the passenger's seats are really one, built all the way across but separated by armrests… which could be removed with screwdriver and sweat.

I had eliminated sweat and screwdriver; a natural mechanic, such as Zeb, accumulates miscellaneous hardware. Those armrests could now be removed and clamped out of the way with butterfly nuts. Hilda started to do so; the Brigadier dismounted them once he saw what she was doing.

It was a snug fit, but Hird-Jones has trim hips and Hilda has the slimmest bottom in town (any town).

"An important feature," said Zeb, "of this design is a voice-controlled autopilot —"

Chapter XXXVII

"Are you open to a bribe?"

Deety:

Zebadiah, for seventeen dull minutes, said nothing and said it very well. During that plethora of polysyllabic nullities, I was beginning to think that I would have to take Pop to a quiet spot and reason with him with a club — when Captain Auntie showed that she needed no help.

Pop had interrupted with: "Let me put it simply. What Zeb said is —"

"Copilot." Cap'n Hilda did not speak loudly but Pop should know that when she says "Copilot," she does *not* mean: "Jacob darling, this is your little wifey." Pop is a slow learner. But he can learn. Just drop an anvil on him.

"Yes, Hilda?" Aunt Hilda let the seconds creep past, never took her eyes off Pop. I was embarrassed; Pop isn't usually that slow — then the anvil hit. "Yes, Captain?"

"Please do not interrupt the Chief Pilot's presentation." Her tone was warm and sweet: I don't think our guests realized that Pop had just been courtmartialed, convicted, keelhauled, and restored to duty — on probation. But I knew it, Zeb knew it — Pop knew it. "Aye aye, Captain!"

I concluded that Captain Auntie never intended to stand outside. She had told me to offer my seat to Squeaky and had added, "Why don't you suggest to your father that he offer his to the Governor?" I don't need an anvil.

It was a foregone conclusion that Bertie would object to ladies having to stand while he sat. But if he had not, I feel certain that the Hillbilly would have held up proceedings until she was seated where she could watch everyone but our visitors could not watch her.

How tall was Machiavelli?

As they were climbing out the Brigadier was telling me that he understood how she was controlled — but how did she flap her wings? — land I answered that technical questions were best put to the Captain — I was unsurprised to hear Cap'n Auntie say, "Certainly, Bertie… if you don't mind being squeezed between Deety and me."

"'Mind'? I should pay for the privilege!"

"Certainly you should," I agreed — the Hillbilly's eyes widened but she let me talk. "What am I offered to scrunch over?" I slapped myself where I'm widest. "Squeaky is a snake's hips — not me!"

"Are you open to a bribe?"

"How big a bribe?"

"A purse of gold and half the county? Or cream tarts at tea?"

"Oh, much more! A bath. A bath in a tub, with loads of hot water and lots of suds. The last time I bathed was in a stream and it was *coooold!"* I shivered for him.

The Governor appeared to think. "Squeaky, do we have a bathtub?"

Lady Herbert interrupted. "Bertie, I was thinking of the Princess Suite. My deah, since you are all one family, it popped into mind. Two bedrooms, two bathrooms, two bathtubs. The drawing room is gloomy, rather."

I answered, "Bertie, you didn't talk fast enough; Betty gets the first ride."

"Oh, no, no, no! I don't fly even in our own flying carriage."

"Hah*rooomph!"* Squeaky boomed. "Are you still open to a bribe?"

"You might try our captain; she's as corruptible as I am."

Aunt Hilda picked it up. "Now that I've heard that two bathtubs go with the suite, my cup runneth over. But my husband and my son-in-law have matters to discuss with the Governor's technical staff. I don't have to be bribed to offer a few joy rides, Brigadier — one passenger at a time and, as Deety implies, not too wide a passenger." Aunt Hilda added, "Betty, I must confess my own weakness. Clothes. What I am wearing, for example. A Ferrara original. An exclusive — Mario himself created it for me. While it is intended for saltwater yachting, it is just as practical for space yachting — and I couldn't resist it. Do you have nice shops here?"

Bertie answered for his wife. "Hilda, there are shops — but Windsor City is not London. However, Betty has a seamstress who is clever at copying styles from pictures in periodicals from home — old but new to us." He added, "She'll show you what we have. Now concerning this ride you so kindly offered me — does it suit you to give me an appointment?"

"Is right now soon enough?"

"Report readiness for space. Astrogator."

"Ready!" I snapped, trying to sound efficient. "Belt tight."

"Chief Pilot."

"Belt fastened. Portside door locked, seal checked. Juice zero point seven-one. Wings subsonic full. Wheels down and locked. Car trimmed assuming passenger at six-six kilos."

"General, is that your mass?"

"Dear me! I think in pounds. The factor is —"

I interrupted. "I'll take it in pounds here or pounds London."

"I weigh myself each morning and I have had the scale recalibrated. Eh, with these boots, one hundred fortyfive pounds I dare say."

"Correct to three significant figures, Zebadiah." (I did not mention that weight bearing on each wheel shows on the instrument board. Let Bertie think my husband a magician; he's a wizard to me.)

"Thank you, Astrogator. Car is trimmed, Captain."

"Copilot."

"Belt fastened. Door seal checked. Continua device ready."

"Passenger," said Cap'n Auntie.

"Eh? What should a passenger report?"

"Principally that your belt is secure, but I saw to that myself." (By using a web belt from our sleeping bag to link Hilda's seat belt to mine.) "I must ask one question," Aunt Hilda went on: "Are you subject to motion sickness? The Channel can be rough and so can the Straits of Dover. Did mal de mer ever hit you?"

"Oh, I'll be right. Short flight and all that."

"One Bonine, Deety. General, Admiral Lord Nelson was seasick all his life. My husband and I are susceptible; we took our pills earlier today. Deety and Zebbie are the horrid sort who eat greasy sandwiches during a typhoon and laugh at the dying —"

"I don't laugh!" I protested.

"But these pills enable us to laugh right back. Is this not so, Jacob?"

"Bertie, they work; you'd be a fool not to take one."

"I must add," Captain Auntie said sweetly, "that if you refuse, we will not lift."

Bertie took it. I told him, "Chew it and swallow it; don't hide it in your cheek. Captain, I think that does it."

"Except that we are crowded. General, would you be more comfortable if you put an arm around each of us?"

The General did not refuse. It occurs to me that "take him for a ride" has several meanings. Captain Auntie has more twists than a belly dancer.

"Routine has been broken. Confirm readiness, please." We reported while I snuggled into a firm male arm, realized that it was a pleasant contrast after getting used to my lovely giant.

"Gay Bounce."

Bertie gasped and tightened his arms around us. Aunt Hilda said quietly, "Astrogator, take the conn. Schedule as I discussed it. Don't hesitate to vary it. All of us — you, too, General — may suggest variations. This is a joy ride; let's enjoy it."

But she had told me earlier: "If I don't like a suggestion, I will suggest that we do it later — but time will run out. The General told Lady Herbert:

'I can go down to the end of the town
'And be back in time for tea!" — so we will fetch him back on time.

Sixteen-fifteen local, four-fifteen pip emma. What's Greenwich?"

I converted it (GMT 12:44) and told Captain Hillbilly that I would watch both board and the clock in my head but was ordered to place an alert with Gay. If Aunt Hilda were a man, she would wear both suspenders and belt. No, that's wrong; for herself she's go-for-broke; for other people she is supercautious.

We lifted at 15:30 local and took Bertie for a mixed ride — Aunt Hilda had told me that Pop was feeling left out. "Gay Bounce, Gay Bounce. Chief Pilot, place us over the big Russian city at about a thousand klicks."

"Roger Wilco," my husband affirmed. "Copilot, one jump or two?"

"One. Level? Keep 'er so. Six thousand thirty klicks, true bearing two-seven-three, offset L axis negative ohseven-four-set!" — and I shuddered; Pop had set to take us *through* the planet!

"Execute! Bertie, what is the name of that city?"

"Eh? Zeb, I am quite bewildered!" Pop and Gay and Zebadiah, working together, displayed features simultaneously on the planet in front of us and on the sillyscope on the board. Pop bounced Gay around in ways I didn't know could be done. Zebadiah had Gay rotate the display so that the point on Marsten opposite us was always the center of the display with scale according to H-above-G.

I learned a lot. The Russians claim the whole planet but their occupied area closely matches what we had bingo-mapped. Bertie pointed out a bit more Tsarist area; Gay changed the displayed locus to Zebadiah's interpretation of Bertie's information. Windsor City was zero Meridan for the British; Gay measured the arc to "Touchdown," adjusted her longitudes — and now could use any British Martian colonial map.

Bertie assured us that Russian Ack-Ack could not shoot higher than three miles (less than five klicks) and seemed astonished that a spaceship might be considered dangerous. His explanation of spaceships was less than clear — great flimsy things that *sailed* from orbits around Earth to orbits around Mars, taking months for each voyage.

I was watching the time. "Chief Pilot, we will sightsee with Bertie another day; I am taking the conn. Copilot."

"Verniers zeroed and locked, Astrogator."

"Thanks, Pop. Gay B'gout. Bertie, this is where we first grounded — where the Russians attacked us. That trash ahead is what is left of Colonel Morinosky's private flyer. Zebadiah was forced to retaliate."

Bertie looked puzzled. "But the Russians have no settlement near here. I know that bounder Morinosky; he came to see me under diplomatic immunity. I had to be content with the sort of nasty remarks permitted by protocol. But how did Zeb burn the flyer?"

"Beautifully. Gay Home. Chief Pilot, dive. Captain?"

"I have the conn," Aunt Hilda acknowledged. "Bertie, that crater was our home three days ago. They tried to kill us, we fled for our lives."

"Who!"

"Gay Home, Gay Bounce. Pilots, may we have Earth-without-a-J?"

"Set it, Jake."

"Tau axis positive one quantum — set!"

"Copilot, execute at will. Chief Pilot, dive again, please. Jacob, please set Bertie's home universe and hold. Bertie, that house is like Snug Harbor before it was bombed — but one universe away. Zebbie, level glide please… Gay Bounce, Gay Bounce! Jacob, you have that setting?"

"Tau positive ten quanta, set."

"Execute at will. Bertie, what antiaircraft defense does London — *your* London — have?"

"What, what? London has no defense against attack from above. The Concord of Brussels. But Hilda — my dear Captain — you are telling me that we have been to a *different universe!"*

"Three universes, Bertie, and now we are back in your own. Better to show than to tell; it is a thing one believes only through experience. Gay Bounce. Zebbie, Jacob, see how quickly you can put us over London. Execute at will."

"Roger Wilco. Jake, do you want Gay?"

"Well — great-circle true bearing and chord distance, maybe. Or I can simply take her high and head northeast. The scenic route."

Aunt Hilda caught my eye. "Camera ready, Deety?"

"Yes. Three shots." I added, "Four more cartons, but when they're gone, they're gone."

"Use your judgment."

Suddenly we were in free fall over Arizona, then over the British Isles, then we were air supported, then we were diving and Zebadiah was shouting: "Tower of London, next stop!"

I shot a beauty of the Tower and Zebadiah's right ear. "General, is there something you would like to photograph here? Or elsewhere?"

He seemed almost too overcome to talk. He muttered, "There is a place about twenty miles north of here, a country estate. Is it possible?"

Aunt Hilda said, "Take the conn, Deety."

"Got it, Captain. Gay Bounce. Pop, Zebadiah, give me three minima north. Execute at will."

Then I was saying, "Any landmarks, Bertie?"

"Uh, not yet."

"Pop, may we have the binoculars?"

Pop handed them aft; I gave them to Bertie. He adjusted them and searched while Zebadiah made a wide sweep, spending altitude stingily. Bertie said, *"There!"*

"Where?" I said. "And what?"

"A large house, to the right of our course. Ah, now dead ahead!"

I saw it — a "Stately Home of England." Lawns you make with a flock of sheep and four centuries. "This it?" asked Zebadiah. "I'm steady on it by gunsight,"

"That's it, sir! Deety, I *would* like a picture."

"Do my best."

"Alert," said Gay. "Memo for General Smythe-Carstairs: 'I can go down to the end of the town and be back in time for tea.'"

"Aunt Hilda, Bertie, I left some leeway. Picture! Zebadiah, take it as close as you dare, then bounce, but warn me. I want a closeup."

"Now, Deety!" I hit it and Zebadiah bounced us.

Bertie let out a sigh. "My home. I never expected to see it again."

"I knew it was your home," Aunt Hilda said softly, "because you looked the way we feel when we see the crater where Snug Harbor used to be. But you will see it again, surely? How long is a tour of duty on Mars?"

"It's a matter of health." Bertie added, "Lady Her — Betty's health."

Pop turned his head. "Bertie, we can bounce and do it again. What's a few minutes late for tea compared with seeing your old homestead?"

"Bertie's not late yet, Pop. We can do even better. That lawn is smooth and the open part is about half the size of the p.g. at Imperial House. Bertie, we can ground."

My husband added, "I could make a glide grounding. But Deety has worked out a better method."

"No," Bertie said brusquely. "Thanks, Deety. Thanks to all of you. Jake. Zeb. Captain Hilda. I'll treasure this day. But enough is enough." Tears were running down his cheeks, ignored.

Aunt Hilda took a Kleenex from her purse, dabbed away his tears. She put her left hand back of Bertie's neck, pulled his face down to hers, and kissed him. She didn't look to see if Pop was watching — he was — she just did it.

Pop said, "Deety, will you hand me the binox?"

"Sure, Pop. See something?"

"I'm going to see what I can of Merrie Old England, as *I* don't expect to see it again, either. Family, we are *not* going back to Snug Harbor again; it's not good for us. Meanwhile Zeb will drive and you two are to soothe our guest and make him feel better —"

"But remember to wipe off the lipstick."

"Pipe down, Zeb. You aren't observant; neither of our darlings is wearing any. Being late is not important; 'The party can't start till the Macgregor arrives.' But once Bertie's there, he's on parade — and the Governor must not appear with eyes swollen and tear marks on his collar. We must return him in as good shape as we got him."

Sometimes I love Pop more than most.

And my husband, too.

I used both hands but didn't need to; Bertie wasn't trying to get away. The second time he kissed Hilda, he supplied the hands. Therapy took three minutes and forty-one seconds, and I am certain that, by the end of two hundred twenty-one seconds, Bertie was no longer homesick, not grieving about might have-beens; his morale was tiptop. The last time he kissed me, he informed me without words that I should not be alone with him unless my intentions were serious.

I made mental note. And a second to ask Hilda if she had received the same warning. Then I struck out the second note. I was certain and equally certain that she would fib if it suited her.

But I look forward to the day the Hillbilly asks me to jigger for her. That will be my final promotion — no longer Jane's little girl in Hilda's eyes but Jane's equal, trusted as utterly as she trusted Jane. And I will be rid of the last trace of the shameful jealousy I have for my beloved Mama Jane.

I checked myself in my purse mirror while I waited for them to break — checked both of them and decided that they had no milk on their chins. Bertie said, "Deety, could I possibly have one of those pictures as a remembrance of this perfect day?"

"Certainly. Gay Parade Ground. All three are yours;~we took them for you." We were exactly on time.

Three hours later I was sitting teat deep in a wonderful tub of hot soapy water, a tub big enough to drown in but I wasn't going to drown because the Hillbilly was sitting shoulder deep, facing me. We were reliving our day as well as getting beautiful for dinner. Well… sanitary.

Hilda said, "Deety, I tell you three times. Betty is suffering from an ailment made more endurable by Martian conditions."

"Meaning that in point thirty-eight gee she doesn't hit hard when she falls down. What was in that teapot no one else touched? Chanel Number Five?"

"Medicine. Prescribed for her nerves."

"Got it. Official. She's friendly as a puppy, she's generous, she's our hostess — I ought to know better. It's a shame that she has this ailment but she's fortunate in having a husband who loves her so dearly that he left home forever so that she can live in lower gravity. Bertie is quite a man."

"There is nothing for him at home. His older brother has sons; title and estate can't go to Bertie. He can't go much higher in the army, and a governor general is senior to anybody; he embodies the Sovereign."

"I thought that was limited to viceroys."

"Squeaky put me straight on it. Bertie is viceroy in dealing with Russians. But — Did you notice the uniforms on the maids?"

"I noticed the cream tarts more. White aprons, white caps, simple print dresses, dark blue or black with Indian arrowheads."

"The Broad Arrow, Deety."

"Huh? No sabbe, pliz."

"In this universe Australia belongs to the Dutch. Brace yourself, dear. This is a prison colony."

Every so often the world wobbles and I have to wait for it to steady down. Somewhat later I said, "A colony could be better than a prison. I can't see Bertie as a tyrant. Bertie is quite a man. When —"

Hilda reached out, grabbed a chain, flushed the W.C., then leaned toward me. That fixture was a noisy type that went on gurgling and gasping for a long time. "Remember what Zebbie told us when he crowded us into the other bath and turned on everything? One must assume that guest quarters in any government building anywhere are wired. Careful what you say, dear."

"He also said that he had no reason to assume that it was the case here."

"But Zebbie was the one who insisted on a conference in Gay… with Jacob being mulish and you yourself seeing no reason not to confer up here." Aunt Hilda again pulled the chain. "Yes, Bertie is quite a man. Don't leave me alone with him."

"Or should I jigger instead?"

"Naughty Deety. My sweet, a bride should refrain at least twelve months out of respect for her husband and to prove that she can."

"After that it's okay?"

"Of course not! It's immoral, disgraceful, and scandalous." Suddenly she giggled, put arms around my neck, and whispered: "But if I ever need a jigger, Deety is the only person I would trust."

That conference, immediately after tea, had caused a crisis, brought on by our husbands in concert — but out of tune. The tea had been fun — cream tarts and new men appeal to my basest instincts. A tea *qua* tea should be over in an hour. We had been there over an hour, which I ignored because I was having fun. Aunt Hilda broke the ring around me, said softly, "We're leaving." So we smiled and said goodbye, found our host, and thanked him.

"Our pleasure," Bertie said. "Lady Herbert became indisposed and wishes to be forgiven but will see you at dinner. Hird-Jones tells me that black tie is no problem. Right?"

He added to let Squeaky know when we wanted help in moving; Hilda assured him that Squeaky had it in hand and the suite was *beautiful!*

As we left I asked, "Where is Zebadiah?"

"Waiting at the outer steps. He asked me for a conference. I don't know why, but Zebbie would not unnecessarily interrupt a social event to ask for a closed conference."

"Why didn't we go to our suite? And where is Pop?"

"Zebbie specified the car — more private. Jacob is inside, talking with some men. He brushed off my telling him that we were going to the car now — said he would see us later. Deety, I *can't* enforce orders as captain under those conditions."

"Pop is hard to move when he gets into a discussion. I've yawned through some deadly ones. But how can we have a conference until he shows up?"

"I don't know, dear. Here's Zebbie."

My husband pecked me on the nose and said, "Where's Jake?"

Hilda answered, "He told me that he would be along later." Zebadiah started to curse; Aunt Hilda cut him off. "Chief Pilot."

"Uh — Yes, Captain."

"Go find the Copilot, tell him that we lift in five minutes. Having told him that *and no more,* turn and *leave at once.* Don't give him *any* opportunity to ask questions. Come straight to the car."

"Aye aye, Captain."

"Come, Deety." Hilda hurried to Gay Deceiver, went to her seat, started to belt, She glanced at me. "Astrogator, prepare for space."

I started to ask why — but instead said, "Aye aye, Captain," and quickly was belted. "Captain, may I inquire your plans?"

"Certainly, you're secondin-command. And Astrogator; however, I will take the conn on lifting."

"Then we really are lifting?"

"Yes. Five minutes after Zebbie returns. That gives Jacob five minutes to make up his mind. Then we lift. If Jacob is aboard, he'll be with us."

"Aunt Hilda, you would abandon my father on this planet?!"

"No, Deety. Jacob will probably never notice that the car has been away as it should not be gone more than a few minutes. If Jacob does not come with us, I will ask Zebbie to drop me on Earth-without-a-J. Range-finder and target method; I don't want to use Zebbie's precious juice."

"Aunt Hilda, you sound desperate."

"I am, dear." She added, "Here comes Zebbie."

Zebadiah climbed in. "Message delivered, Captain."

"Thank you, Chief Pilot. Prepare for space."

"Roger Wilco."

"Will you check the seal of the starboard door, please?"

"Aye aye, Captain."

"Report readiness for space, Astrogator."

"Belt tight, ready for space. *Oh, Aunt Hilda!"*

"Astrogator, pipe down. Chief Pilot."

"Both doors locked, seals checked. Seat belt tight. Power packs, two zeroed, two in reserve. Juice oh-point-seven-one-minus. All systems go. Copilot missing. Ready for space."

"Captain's seat belt tight, ready for space. Gay Deceiver."

"Howdy, Hilda!"

"Please display five-minute countdown. Paraphrase acknowledge."

"Three hundred seconds backwards in lights."

"Execute."

Have you ever listened to three hundred seconds of silence? Neither have I — two hundred eighty-one when Pop pounded on the door.

Aunt Hilda said, "Gay Deceiver, open starboard door."

Pop climbed in, indignant as an offended cat. "What the hell goes on?"

"Copilot, prepare for space."

"What? Now, Hilda, that is going too far!"

"Copilot, either secure for space or get out and stand clear. Chief Pilot, see that my orders are carried out."

"Aye aye, Captain! Copilot, you've got zero seconds to make up your mind." My husband started to unstrap.

Pop looked at Zebadiah, looked at us. I was doing my frozen face to keep from crying and I think Aunt Hilda was, too.

Pop hastily fastened his belt. "You're a pack of idiots — " He was checking the door seal. " — but I won't be left behind."

"Copilot, report."

"Huh? Ready for space."

Hilda said, "Gay Termite. Gay Deceiver, open your doors."

"Well, for the love of —"

"Pipe down! Chief Pilot, I have no stomach for charging my husband with mutiny but that is what I have been faced with repeatedly. Will you grant me the boon of resuming command to drop me on Earth-without-a-J? I would rather not have to stay on Mars."

"Hilda!"

"I'm sorry, Jacob. I've tried. I'm not up to it. I'm not Jane."

"No one expects you to be Jane! But ever since you became captain, you've been throwing your weight around. Like calling this stunt in the middle of a party. Insulting our host and hostess — "

"Hold it, Jake!"

"What? See here, Zeb, I'm talking to my wife! You keep —"

"I said 'Hold it.' Shut up or I'll shut you up."

"Don't you threaten me!"

"That's not a threat; that's a warning."

"Pop, you had better believe him! I'm not on your side."

Pop took a deep breath. "What do you have to say for yourself, Carter?"

"Nothing, for myself. But you've got your data wrong six ways. One: Captain Hilda did not call this so-called 'stunt.' *I* did."

"*You did?* What the devil caused you to do a thing like that?"

"Irrelevant. I convinced the Captain that the matter was urgent, so she gathered us in. All but you — -you told her not to bother you or words to that effect. But she gave you another chance — you didn't deserve it; you had long since used up your quota. But she did. She sent me back to tell you we were lifting. It finally penetrated your skull that we might lift without you —"

"To *this* place!"

"If you had been twenty seconds later, we would have translated to another universe. But this nonsense about 'Insulting our host and hostess — ' Your hostess left the tea long before you did; your host left immediately after Hilda and Deety, leaving his aide — the Brigadier — to close shop. But you are so damned self-centered you never noticed. Jake, don't *you* lecture *me* on proper behavior as a guest. The first time I laid eyes on you, you were trying to star a fight in Sharpie's ballroom —"

"Huh? But I was fully justi — "

"Dreck. No one is *ever* justified in starting a fight under a host's roof. The very *most* that can be justified under extreme provocation is to tell the other party *privately* that you are ready to meet him at another time and place. Jake, I don't enjoy teaching manners to my senior. But your parents neglected you, so I must. If I offend you — if you feel entitled to call me out, I will accommodate you at any other time and place."

Aunt Hilda gasped. "Zebbie! No!" I gasped something like it. My husband patted our hands — together; Hilda was gripping mine. "Don't worry, dears. I didn't call Jake out and won't. I don't want to hurt Jake. He's your husband… your father… my blood brother by spilled blood. But I had to chew him out; he's now entitled to a crack at me. With words, with hands, with whatever. Sharpie, Deety, you *can't* refuse Jake his rights. No matter what, he still has rights."

Pop said, "Zeb, I am not going to call you out. If you think I am afraid of you, you're welcome. If you think it's because I know you love both Hilda and Deety, you would be closer. A fight between us would endanger their welfare. As you said, we are blood brothers." Pop's tone suddenly changed. "But doesn't mean I like your behavior, you arrogant punk!"

Zebadiah grinned. "Nolo contendere, Pop."

"So you admit it?"

"You know Latin better than that, Jake. Means I'm satisfied to let it lie. We can't afford to quarrel."

"Mmm — A point well taken. Stipulating that I did not come at once when summoned, and tabling, if you will, until later whether or not I had reason, may I now ask *why* I was summoned? The nature of this problem that caused you to call this conference?"

"Jake, the situation has changed so rapidly that the matter no longer has priority. You heard Sharpie's plans."

My husband looked into Aunt Hilda's eyes. "Captain, I'll be honored to drive you wherever you want to go. Drop you wherever you say. With your choice of equipment and wampum. But with a mail drop, I hope. Are you ready to leave?"

"Yes, Captain."

"Wait a half. *You* are captain, until you leave us. Orders, Captain? Earth-without-a-J? Or I'll help you shop others — we might find a world of nudists."

"Why that, Zebbie? I'm not jumpy about skin — but only among close friends."

"Remember why Jake was certain that the Finnish mathematician was not a disguised vermin? *Sauna.* Disguise has limits."

"Oh." Aunt Hilda looked thoughtful. "I could get used to it. But I must get out of this tension. So drop me on the minus-J world. A mail drop, yes; I don't ever want to lose you and Deety."

"We find that safe place, we pick you up. Sharpie, we'll be back someday anyhow. If the boogiemen don't get us."

"Hold it, Zeb. If you're dropping Hilda, you're dropping me."

"That's up to Captain Hilda."

"Hilda, I will not permit —"

"Jake, quit acting the fool," growled my husband. "She's boss. With me to back her up."

"And me!" I echoed.

"You seem to forget that the continua device is mine!"

"Gay Deceiver!"

"Yes, Boss? Who's your fat friend?"

"'Number of the Beast.' Execute."

"Done."

"Try your verniers, Jake."

Pop did something — I couldn't see his hands. Then he said, "Why, you — So you think you've stopped me? Gay Deceiver!"

"Howdy, Jake."

Zebadiah cut in: "Gay Deceiver override! Emergency Thirtyone execute. Gay can no longer hear you, Jake. Try it."

"If you can do one, you can do the other. Zeb, I never thought you would be that sneaky."

"Jake, if you had behaved yourself, you never would have known. Extreme individualists (all of us) don't take kindly to discipline because they rarely understand its nature and function. But — even before that fake ranger showed up — we all had agreed to 'lifeboat' rules. We discussed them and you all claimed to understand them… and I was elected skipper. I nominated *you* — eldest, senior, inventor of the spacetime twister — but you said it had to be me. A lifeboat officer must *always* be able to enforce his orders… in situations of great peril complicated by hysterical civilians. Or bullheaded ones who must otherwise be wheedled."

It was time for a diversion; Pop doesn't like to look foolish and I was still hoping to salvage this shambles. "Zebadiah, is my number fifty-nine?"

"Of course, but it takes my voice. Can you figure the cancel-and-reset?"

"For mnemonic reasons it should be one of three. Probably ninety-five."

"On the button!"

"Although I would prefer eighty-nine."

"Why?"

"Work on it. Zebadiah, why *did* you call this meeting?"

"With Sharpie leaving us the matter is academic. We won't be coming back to Mars."

"Oh, dear!"

"What's the trouble, Sharpie? Captain."

"I promised Squeaky a ride. Zebbie, could you keep my promise for me? Please? For old times' sake?"

"Captain, once we lift to drop you on Minus-J, we won't return. But the Captain still *is* captain and can give Squeaky that ride in the next thirty minutes if it suits her."

"May I offer something in my own defense?" Pop put in.

"Of course, Jake. Sorry, Captain; you're in charge. May the Copilot have the floor?"

"Jacob, even though I find it necessary to leave you… I love and respect you… and will *always* listen to you."

"Thanks, darling. Thank you, Captain. I was in that huddle because Brigadier Hird-Jones always remembers. That huddle was the top physical scientists on Mars. A scruffy lot but they get the technical journals and read them, a few months late. I was talking with the top chemist —"

"Well, Jake? Make it march."

"Zeb, not one knew an isotope from an antelope. You *can't* buy juice here."

"For that you disobeyed a direct order of the Captain? Sharpie, you should have him flogged around the Fleet before you surrender office —"

"Don't loke, Zebbie."

"Captain, I am not joking. Jake, that's no news; I spotted it this afternoon. Sharpie? Deety? In England."

"I missed it," Aunt Hilda said. "I don't know England well."

"Deety?"

"Well… maybe," I admitted.

"How?" demanded Pop.

"Little things. No roadables, just horsedrawn vehicles. No air traffic other than a few ornithopters. Coal-fired steam-powered trains of cars. Traffic on the Thames, what little there was, 'minded me of pictures of Victorian England."

"Daughter, why didn't you mention this?"

"You saw it, Pop."

"Those were my reasons," Zebadiah agreed. "My hope of getting juiced here dropped to one-tenth of one percent. It is now zero." Zebadiah sighed. "But that isn't why I asked the Captain to call us together. Family, there are *vermin* here."

The world wobbled again — and so did I.

Aunt Hilda was saying, "How did you learn this, Zebbie?"

"You gals had plenty of company and Jake had the local scientists, so Squeaky gave me his attention. Captain, you told us to stick to the truth —"

"Yes," agreed Aunt Hilda, "but not to volunteer information."

"I didn't volunteer; I was debriefed. Squeaky asked me about the ride we gave his boss; I tried to be vague. Squeaky took a photo from his pocket. 'The Governor tells me this was taken this afternoon.' Deety, it was the pic you took of the Thames and the Tower.

"I shortly started giving him a full account rather than have it dragged out. The Governor had told him the works; Squeaky was comparing my version with Bertie's, looking for holes in a yarn most easily explained by hypnosis, delirium tremens, insanity, or fancy lying. Since no two witnesses exhibit any of these in the same way they can be used as truth tests. Contrariwise, two witnesses who tell *exactly* the same story are lying. I assume that Bertie and I differed enough to be credible."

I asked my husband, "Zebadiah, did you explain six-dimensional space to him?"

Zebadiah looked pained. "How could I, when I can't explain it to *me?* Anyhow, he's looking forward eagerly to the ride Captain Sharpie promised him."

"Oh, dear! Zebbie, will you take a note to him?"

"Captain, we are *not* coming back after we drop you. I'll be breaking a date with him, too. Either before or after whatever time suits *you,* he's planning to give *me* — and anyone else who wants to go — a ride to see the vermin. 'Black Hats.' Fake rangers."

(I do wish the world would not wobble!)

Pop said, "Zeb, spill it! Quit stalling."

"Shut up and listen. Squeaky showed me a scrapbook. Dull as a scrapbook usually is until we came across a page of 'Black Hats.' Deety, you would have been proud of me —"

"I *am* proud of you," I answered.

" — because I didn't scream or faint, I showed no special interest. I just said, 'God in Heaven, Squeaky, those are the horrors that chased us off Earth! You've got 'em *here?*'"

"'No special interest.'"

"I didn't climb the drapes. I merely said, 'Or have you managed to exterminate them?'

"The discussion became confused, as they don't kill them; they put them to work. Squeaky had to repress amusement at the notion that wogs could be dangerous. He glanced at his watch and said, 'Come, I'll show you. Ordinarily we don't allow wogs in town. But this old fellow takes care of the Governor's gardens and may not yet have been returned to the pens for the night.' He led me to a balcony. Squeaky looked down and said, 'Too late, I'm afraid. No, there it is — Hooly! Chop, chop!' — and again I didn't faint. Hooly ran toward us, with a gait I can't describe, stopped abruptly, threw an open-palm salute and held it. 'Private Hooly reports!'

"Squeaky let him stand there. 'This wog,' he told me, 'is the most intelligent of the herd. It knows almost a hundred words. Can make simple sentences. As intelligent as a dog. And it can be trusted not to eat the flowers.'

"'Herbivorous?' says I, showing off my book-larnin'. 'Oh, no,' he tells me, 'omnivorous. We hunt wild ones to provide the good wogs with a change in diet and, of course, when we slaughter overage wogs, that provides more ration.'

"That's enough for one lesson, children. Pleasant dreams. Tomorrow the Brigadier will have a roadable big enough for all of us to take us out to meet the Martian natives aka wogs aka 'Black Hats' aka vermin — unless that interferes with the ride you aren't going to give him, in which case he will swap the times around with the visit to the wogs we aren't going to make. And that, Jake, is the reason I asked the Captain for a family conference. I already knew that artificial isotopes are far beyond this culture — not alone from the ride this afternoon but because I ask questions myself. Squeaky has a knowledge of chemistry about the pre-nuclear level and a detailed knowledge of explosives that one expects of a pro. But to Squeaky atoms are the smallest divisions of mass, and 'heavy water' is a meaningless phrase.

"So I knew we would be here just to get Sharpie some clothes and to recharge my packs — since they do have D.C. power. Then I found we had stumbled onto the home of the vermin — and at that point my back didn't ache at the idea of cranking, and I didn't think that the Captain was that much in a hurry to buy clothes. So I asked the Captain to call us together in Smart Girl. I did not want to put it off even a few minutes because we were scheduled to move into our suite after tea. To leave at once, before we moved in, would save awkward explanations. Jake, did I have reason to ask for emergency conference?"

"If you had told me —"

"Stop! The *Captain* told you."

"But she didn't explain —"

"Jake, you're *hopeless! Captains* don't have to explain. Furthermore she could not because I did not tell *anyone* until now. The Captain had confidence in my judgment."

"You could have explained. When Hilda sent you back to get me. I would have come at once."

"That makes the ninth time you've been wrong in twenty minutes —"

I blurted, "Tenth, Zebadiah. I counted."

Pop gave me his "Et-tu,-Brute" look.

" — tenth without being right once. I could not have explained to you."

"Merely because of a group of men?"

"Eleventh. I was *not* sent back to get you — twelfth. I was under orders to tell you that — quote! — 'We lift in five minutes.' Tell you that and *no more,* then turn and leave at once, without discussion. I carried out my orders."

"You hoped that I would be left behind."

"Thirteen."

I butted in again. "Pop, quit making a fool of yourself! Zebadiah asked you an *essential* question — and you've dodged. Captain Auntie, could we have the doors closed? There might be one of *them* out there — and the guns are locked up."

"Certainly, Deety. Gay Deceiver, close your doors."

Pop said, "Deety, I was not aware that I had been dodging. I thought I was conducting a reasonable discussion."

"Pop, you always think so. But you are reasonable *only* in mathematics. Zebadiah asked you whether or not, under the circumstances, did he have reason to ask for a conference? You haven't answered it."

"If Hilda had not told him not to —"

"Pop! Answer that question or I will never speak to you again in my life!"

My husband said, "Deety, Deety! Don't make threats."

"My husband, *I* never make threats, either. Pop knows it."

Pop took a deep breath. "Zeb, under the circumstances you have described, you were justified in asking the Captain for an immediate private conference."

I let out my breath. "Thanks, Pop."

"I did it for myself, Deety. Hilda? Captain?"

"What is it, Jacob?"

"I should have gone with you at once when you first asked me to."

"Thank you, Jacob. But I did not 'ask' you; I *ordered* you. True, it was phrased as a request… but orders of a commanding officer are customarily phrased as requests — a polite protocol. You explained this custom to me yourself. Although I already knew it." Aunt Hilda turned to look at Zebadiah.

"Chief Pilot, the departure for Minus-J is postponed until late tomorrow. I will give you the time after I have consulted the Brigadier. I want to see one of those vermin, alive, photograph it stereo and cinema, and, if possible, dissect one. Since I intend to remain overnight, I hope to pick up clothes for MinusJ, too — but the reasons for delay are to learn more about vermin and to carry out my commitment to Brigadier Hird-Jones."

Aunt Hilda paused, continued: "All hands, special orders. Do not remove anything from the car that you cannot afford to abandon. This car may lift on five minutes' warning even in the middle of the night. You should keep close to me unless you have a guarantee from me of longer time. Tonight I will sleep in the car. If we lift in the night, I will send word to Princess Suite. Zebbie, I will retain the captaincy until we ground on Minus-J. Schedule: Dinner tonight is eight-thirty pip emma local time, about three hours hence. Black tie for gentlemen. Deety suggests that we wear what we wore our wedding night; she has our outfits packed together. The Brigadier will send someone to Princess Suite shortly after eight local to escort us to a reception. I will settle tomorrow's schedule with him. Jacob, I will slip down to the car after the House is quiet. If someone sees me, I will be running down for a toothbrush. Questions?"

"Captain?" said Pop.

"Copilot."

"Hilda, *must* you sleep in the car?"

"Jacob, 'twere best done quickly!"

"I'm begging you."

"You want me to be your whore one last time? That's not too much to ask… since you were willing to marry me knowing my thoroughly tarnished past. Yes, Jacob."

"No, no, no! I want you to sleep in my arms — that's all I ask."

"Only that? We can discuss it after we go to bed. All hands, prepare for space. Report!"

I splashed the Hillbilly and giggled. "Cap'n Auntie chum, that flatters me more than anything else you could ever say. While I can't imagine needing a jigger — if I did — or if I needed *any* sort of help and it took one who loves me no matter what, *you* know to whom I would turn. The one who loves me even when I'm bad. Who's that?"

"Thank you, Deety. We love and trust each other."

"Now tell me — Did you ever have any intention of sleeping tonight in the car?"

She pulled the chain again. Under that racket she said into my ear, "Deety doll, I never had any intention of *sleeping* tonight."

Chapter XXVIII

"He's too fat."

Zeb:

Sharpie sat on the Governor's right with my wife on his left, which gave Jake and me the privilege of sharing Lady Herbert, a loud shout away. The space was filled with mess jackets, dinner coats, and wives in their best. We each had one footman to insure that we did not starve; this platoon was bossed by a butler as impressive as the Pope, who was aided by a squad of noncom butlers. Female servants rushed in and out to serving tables. His Supremacy the Butler took it from there but used his hands only in offering splashes of wine to the Governor to taste and approve.

All were in livery — decorated with the Broad Arrow. The British colony consisted of a) wogs, b) transportees, c) discharged transportees, d) officers and enlisted men, e) civil servants, and f) spouses and dependents. I know even less about the Russian colony. Military and serfs, I think.

The ladies were in Victorian high-style dowdiness, which made Deety and Sharpie birds of paradise among crows. Jump suit and sailor pants had shocked people at tea. But at dinner — Deety wore the velvet wrap she had the night we eloped; Sharpie wore her sunset-shade mink cape; Jake and I unveiled them on the grand staircase leading down to the reception hall. Naw, we didn't rehearse; we were mysterious strangers, guests of the Governor General and His Lady, so all eyes were upon us. Maids, hurrying up, met us there to take our ladies' wraps.

I had questioned the propriety of house guests coming downstairs in wraps. Sharpie had answered, "Utterly correct, Zebbie — because *I* set the style. I did so this afternoon; I shall until we leave." I shut up; Sharpie has infallible instinct for upstaging.

Have I mentioned how Sharpie and Deety were dressed at Sharpie's party? They practically weren't. I wish I had had that hall bugged to record the gasps when Jake and I uncovered our prizes.

These two had last been seen at tea, one in a jump suit, the other in an outfit that looked donated by the Salvation Army, with no makeup. We had been to our suite before tea only for a hasty wash.

But now — Sharpie did Deety's hair; Deety did Sharpie's; Sharpie styled both faces, including too much lipstick, which Deety doesn't often wear. I asked Sharpie if she knew the history and significance of lipstick. She answered, "Certainly do, Zebbie. Don't bother us." She went on making Deety beautiful. Deety *is* beautiful but doesn't know it because her features have that simple regularity favored by Praxiteles.

Having put too much lipstick on Deety, Sharpie removed some, then carried her makeup onto her breasts so that it disappeared under the dress. Which is pretty far because they saved material on that dress at the top in order to give it a full, floorlength skirt. You can't quite see her nipples-in the flesh I mean; they generally show through her clothes, always when she's happy — because Deety stands tall. Her mother had told her, "Deety, if a woman is tall, the answer is to look at least three centimeters taller than you are."

Deety always believed her mother; she stands tall, sits straight; she never leans or slouches; she can get away with that dress by half a centimeter. I'm not sure of the material but the color is the shade of green that goes best with strawberry hair. That dress, her height, long legs, broad shoulders, a waist two sizes too small setting off breasts two sizes too big — the combo could get her a job as a show girl.

When Sharpie finished gilding Deety I couldn't see that she had been made up at all… but knew durn well that she did *not* look the way she had before. Sharpie picked her jewelry, too — sparingly, as Deety had all her pretties with her, her own and those that had belonged to her mother. Sharpie based it on an emerald-and-pearl neckpiece, plus a matching pin and ring.

As for Sharpie, twice my darling's age and half as big, restraint was not what she used. The central diamond of her necklace was smaller than the Star of Africa.

She wore other diamonds here and there.

Here is something I don't understand. Sharpie is underprivileged in mammary glands. I *know* she was not wearing cheaters as I returned to get my tie tied just as Deety was about to lower it onto her. No bra, no underwear. But when that dress was fastened, Sharpie had tits — little ones but big enough for her size. Stuffing built into the dress? Nope. I went out of my way to check.

Is that why some couturiers get such high prices?

Still… the Captain looks best in her skin.

So we uncovered these confections and gave the British colony, male, female, and the others, something to talk about for months.

I can't say the English ladies were pleased. Their men gravitated toward our darlings like iron filings toward a magnet. However, Betty, Lady Herbert, is sweet all through. She rushed toward us (a bow wave of juniors getting out of her way), stopped short, looked only at our ladies, and said with the delight of a child at Christmas: "Oh, how *beautiful* you are!" and clapped her hands.

Her voice projected against dead silence, then conversation resumed. Lady Herbert took them, an arm around each, and toured the hall (busting up a receiving line). Brigadier Hird-Jones rolled with the punch, gathered in Jake and me, made sure we met those who had not been at tea.

Shortly before dinner a colonel said to me, "Oh, I say, is it true that the tiny beauty is in command of your ship?"

"Quite true. Best commanding officer I've ever had."

"Haw. Astounding. Fascinating. The taller girl, the strawberry blonde — introduced simply as 'Mrs. Carter.' She's part of your ship's company. Yes?"

"Yes," I agreed. "Astrogator and secondin-command. Doctor D. T. Burroughs Carter, my wife."

"Well! My congratulations, sir."

"Thank you."

"I say, Carter, would it be rude of me to ask why the ladies have the senior posts while you and Doctor Burroughs appear to be junior? Or am I intruding?"

"Not at all, Colonel. We each do what we do best. Mrs. Burroughs is not only best as commander; she is also best cook. While we take turns at cooking, I'll happily volunteer as scullery maid if it will persuade the Captain to cook."

"Amazing. Could you use a colonel of lancers about to retire? I'm a wonderful scullery maid."

The dinner was excellent (Irish chef, transported for shooting his landlord) and Lady Herbert was delightful, even though she drank her dinner and her words became increasingly difficult to understand. But any answer would do as long as it was friendly. Jake displayed the charm he can when he bothers and kept her laughing.

One thing marred it. Lady Herbert started to slump and nursing sisters appeared and took her away. What is protocol for this?

I checked Hilda and the Governor; they didn't seem to see it. I glanced at Hird-Jones; the Brigadier did not seem to see it — but Squeaky sees *everything.* Ergo: no member of the colony could "see" it.

Someone else gathered the ladies while the gentlemen remained for port and cigars. While we were standing as the ladies left, Hird-Jones leaned close: "Your captain has asked me to tell you that the Governor invites you to join them later in his study."

I tasted the port, lit the cigar (I don't smoke — fake it when polite) when the Brigadier caught my eye and said, "Now." Bertie had left, leaving a stooge, a wit who had them all laughing — that colonel of lancers.

When Jake and I came in, Deety and Hilda were there, with a large man, tall as I am and heavier — Major General Moresby, chief of staff. Bertie stood while waving us to chairs. "Thanks for coming, gentlemen. We are settling tomorrow's schedule and your captain prefers to have you present."

The Governor reached behind him, moved out a globe of Mars. "Captain, I think I have marked the places we visited yesterday."

"Deety, please check it," Sharpie directed.

My darling looked it over. "The Russian settlements extended almost one hundred fifty kilometers farther east than this borderline shows — ninety-one English miles, seventy-nine nautical miles — call it two and a half degrees."

"Impossible!" (The bulky Major General —)

Deety shrugged. "Might be a few miles more; all we took were spot checks."

Jake said, "General Moresby, you had better believe it."

Bertie stepped in with: "Is that the only discrepancy, Doctor Deety?"

"One more. But there is something I want to ask about. May I borrow a marking pen? Grease pencil?"

Bertie found one; she placed three bingoes in an equilateral triangle, well detached from both zones. "What are these, sir? This one is a village, the other two are large farms. But we did not determine nationality."

Bertie looked at her marks. "Not ours. Moresby, how long ago did we reconnoitre that area?"

"There are no Russians there! She's doing it by memory. She's mistaken."

I said, "Moresby, I'll bet my wife's marks are accurate within two kilometers. How high do you want to go? What is a pound worth here in gold?"

Bertie said, "Please, gentlemen — wagers another time. What was the other error, Astrogator Deety?"

"Our touchdown point. Where we tangled with the Russians. Your memory is off by many degrees. Should be *here."*

"Moresby?"

"Governor, that is impossible. Either they did not land there or they had trouble with Russians somewhere else."

Deety shrugged. "Governor, I have no interest in arguing. Our time of arrival at 'Touchdown' just after dawn day before yesterday was fourteen-oh-six in the afternoon Windsor City local time. Six past two pip emma. You saw the remains of that ornithopter today. What did shadows and height of the sun tell you as to local time *there,* and what does that tell you about *longitude from here?"* She added, "With one degree of longitude being four minutes of local time difference, you can treat one minute of arc as equal to one kilometer and measure it on this globe. The errors will be smaller than your own error in estimate of local time."

"Astrogator, I'm not good at this sort of problem. But it was about eight-thirty in the morning where we saw the burned ornithopter."

"That's right, Governor. We'll lay that out as kilometers and see how close it comes to my mark."

Moresby objected, "But that globe is scaled in miles!"

Deety looked back at Bertie with a half smile, an expression that said wordlessly: *(He's your boy, Bertie. Not mine.)*

Bertie said testily, "Moresby, have you never worked with a French ordnance map?"

I'm not as tolerant as Deety. "Multiply by one-point-six-oh-nine."

"Thanks but we will assume that the Astrogator is correct. Moresby, reconnaissance will cover two areas. Captain, how many spot checks can be made per hour?"

"Just a moment!" Captain Sharpie interrupted. "Has this discussion been directed at the ride I promised Brigadier Hird-Jones?"

"I'm sorry, Ma'am. Wasn't that clear?"

"No, I thought you were telling General Moresby what you saw today. Isn't the Brigadier available? I want to settle the time with him."

Moresby answered, "Madam, that has been changed. I'm taking his place."

Sharpie looked at Moresby as if he were a side of beef she was about to condemn. "Governor, I do not recall offering this person a ride. Nor has the Brigadier told me that he is not going."

"Moresby, didn't you speak to Hird-Jones?"

"Certainly I did, sir. I dislike to tell you but he was not cooperative. I had to remind him that there was rank involved."

I looked around for somewhere to hide. But Sharpie did not explode. She said sweetly, "Certainly there is, Major General Bores-me. *My* rank. *I* am commanding; *you* are *not."* She turned to Bertie. "Governor, I may offer other rides *after* I keep my promise to the Brigadier. But not to this person. He's too fat."

"What! I weigh only seventeen stone — trim for a man with my height and big bones." Moresby added, "Homeside weight, of course. Only ninety pounds here. Light on my feet. Madam, I resent that."

"Too fat," Sharpie repeated. "Bertie, you remember how tightly we were packed yesterday. But even if Bores-me did not have buttocks like sofa cushions, he's *much* too fat between the ears. He can't enter my yacht."

"Very well, Captain. Moresby, please have Hird-Jones report to me at once."

"But —"

"Dismissed."

As the door closed, the Governor said, "Hilda, my humblest apologies. Moresby told me that it was all arranged… which meant to me that he had seen you and Squeaky and arranged the exchange. Moresby hasn't been here long; I'm still learning his quirks. No excuse, Captain. But I offer it in extenuation."

"Let's forget it, Bertie. You used 'reconnaissance' where I would have said 'joy ride.' 'Reconnaissance' is a military term. Did you use it as such?"

"I did."

"Gay Deceiver is a private yacht and I am a civilian master." She looked at me. "Chief Pilot, will you advise me?"

"Captain, if we overfly territory for the purpose of reconnaissance, the act is espionage."

"Governor, is this room secure?"

"Hilda — Captain, in what way?"

"Is it soundproof and are there microphone pickups?"

"It is soundproof when I close that second door. There is one microphone. I control it with a switch under the rug — right *here."*

"Will you not only switch it off but disconnect it? So that it cannot be switched on by accident."

"If that is your wish. I could be lying. Other microphones."

"It's *accidental* recording I want to avoid. Bertie, I wouldn't trust Moresby as far as I could throw him. I have learned to trust you. Tell me why you need to reconnoitre?"

"I'm not certain."

"Reconnaissance is to learn something you are not certain about. Something that can be seen from Gay Deceiver — but what?"

"Uh… will you all swear to secrecy?"

"Hilda —"

"Not now, Jacob. Governor, if *you* don't want to trust *us,* tell us to leave!"

Smythe-Carstairs had been standing since turning the rug to remove the switch. He looked down at Hilda and smiled. "Captain, you are an unusually small woman… and the toughest man I've dealt with in many a year. The situation is this: The Russians have sent another ultimatum. We have never worried about Russians as we settled halfway around the planet from them and logistics here are almost impossible. No oceans. No navigable streams. Some canals if one enjoys suicide. Both sides have attempted to raise horses. They don't live long, they don't reproduce.

"Both sides have ornithopters. But they can't carry enough or fly far enough. I was startled when you said that they had given you trouble where you had first touched down — and proved it by showing me wreckage of a 'thopter.

"Any logistics problem can be solved if you use enough men, enough time. Those Russian craft must have, behind them, stockpiles about every fifty miles. If they have the same continuing this way, when they get here, they will wipe us out."

"Is it that bad?" I inquired. Sharpie said, "Governor, our Chief Pilot is the only one of us with combat experience."

"Yes," agreed Jake with a wry smile, "I was awarded rank in lieu of combat. I signed papers."

Bertie gave the same mirthless smile. "Welcome to the lodge. Twenty years since I last heard a bullet say *'wheat!'* Now I may be about to lose my last battle. Friends, my rank states that I am qualified to command an army corps… but I have possibly one platoon who will stand and die."

Jake said, "Governor, this city must be two hundred thousand people."

"More than that, Jake. Over ninetynine percent are convicts or discharged convicts or their wives and children. Do you imagine that they are loyal to *me?* Even if they were, they are neither trained nor armed.

"I have a nominal regiment, a battalion in numbers — and a platoon in strength. Friends, my troops, officers and men, and my civil servants, are, with few exceptions, transportees quite as much as the convicts. Example: An officer with a court staring him in the face can often get the charges dropped by volunteering for Mars. I don't get murderers. What I do get is worse… for me. The mess treasurer who dips into mess funds because he has a 'sure thing' at a racing meet. The — Oh, the devil take it! I don't get villains; I get weaklings. There are a few good ones. Hird-Jones. Young fellow named Bean. Two old sergeants whose only shortcomings are that one had two wives and, while the other had only one, she wasn't his. If the Russians get here, they'll kill our wogs — they don't domesticate them; they hunt and eat them — they'll kill anyone in uniform… and transportees will learn that being a serf is worse than being a free man not on the planet of his choice. Squeaky! Where have you been?"

"In the card room, sir. First table to the right."

"So? How long ago did you get my message?"

"About twenty seconds ago, sir."

"Hm! How long have you been in the card room?"

"A bit over an hour."

"I see. Bolt the outer door, close the inner door, sit down."

Twenty minutes later Sharpie was asking, "Deety, what time is sunrise *here?"* She indicated a point 30° east of the western boundary of the westernmost of the two loci Bertie wanted investigated.

"In about twenty minutes. Shall I have Gay check it?"

"No. Sunset over here?"

"More leeway there. One hour fifty-seven minutes."

"Very well. Zeb, those zeroed packs?"

"Being charged, they told me. Ready in the morning."

"Good. Squeaky, if I get you to bed by oh-two-hundred hours could you take us to the fields about eleven-hundred hours?"

"Oh-eight-hundred, if you wish, Captain Hilda."

"I don't wish. This job requires sunlight, so we will work whatever it takes. I intend to sleep late. Bertie, would your kitchen service extend to breakfast in bed about ten ack emma?"

"Tell the night maid. The sideboard in your dining room will be loaded and steaming whenever you say and the day maid will be delighted to bring you a tray in bed."

"Heavenly! All hands and Brigadier Hird-Jones: Lift in thirty-nine minutes. Car doors open five minutes before that. Questions?"

"Just a comment. I'll fetch sandwiches."

"Thank you, Squeaky! Bertie."

"Eh? Ma'am!"

"Deety and I expect to be kissed goodbye… in case something goes wrong."

Chapter XXIX

" — we place no faith in princes."

Deety:

We had a busy night. I had Gay display bingo dots for every stop we made — then circles around any that were supply dumps.

There were indeed supply dumps!

I spent the whole trip thinking: Where would I be if I were a supply dump? Where would 'thopters have to land? Where could they get more water? Squeaky, Hilda, Pop, Zebadiah — and possibly Gay — were thinking the same thing.

We got back at half after one, the job done. The Hillbilly turned the results over to Squeaky and we went to bed.

Next morning at eleven our "roadable" arrived — without Squeaky. He sent an apologetic note saying that Lieutenant Bean knew what we expected and would add anything we asked for.

Captain Auntie had not taken breakfast in bed. I woke about nine local, found her at work — packing her dress clothes and Pop's back into plastic pillow covers, then into a borrowed portmanteau. Our fresh laundry, given to us by the night maid on our return, was in another piece of borrowed luggage.

The Hillbilly was on her knees in our drawing room. She looked up, smiled and said, "Good morning. Better slide into your jump suit, dear; maids come in and out rather casually."

"Doesn't bother me, I've been caught twice already —"

"But it bothers them. Not kind, dear, with servants. Especially with involuntary servants. They'll be in to load the sideboard any moment. Will you fetch yours and Zebbie's dress clothes here? I'll pack for you."

"I'll pack 'em, thanks. I was thinking about sliding back into bed with a nice warm man but your mention of food changed my mind. Hillbilly, what's the rush?"

"Deety, I'm carrying out my own orders. When I brush my teeth after breakfast, the toothbrush goes into my purse. As for the rush, our husbands will wake soon. I have found that it is more practical to present a man with a *fait accompli* than a discussion."

"I hear you three times, doll baby. When they get up, they'll want to eat. When our roadable shows up, they'll be sitting over second cups of coffee. Then they'll say, 'We'll do it when we come back. Mustn't keep the Brigadier waiting.' Okay, I'll grab our gear and we'll sneak it out before they wake. I'll carry the heavy ones."

"We are not permitted to carry anything, Deety. But the place is swarming with maids. You sound much married."

"Five years' practice on Pop. But, Hillbilly, even Pop is easy to handle if you think ahead."

"I'm learning. Deety, what shall we do about the maids?"

"Huh?"

"In the days when servants were common, it was polite for house guests to tip servants who served them personally. But *how,* Deety? I have two twenty-five-newdollar bills in the lining of my purse. Waste paper."

"Pop and Zebadiah have gold. I know exactly because it was mass enough that I had to figure it into the loading, mass and moment arm. Here's a giggle. These misers we married had each squirreled away the same weight of gold to four significant figures. So maids are no problem if you know how much to tip — I don't. We'll be buying local money today to pay for a number of things."

"Leftenant" Bean — or "Brian" — is a delightful fuzzy puppy and a volunteer in order to have served "Beyond the Sky." He managed to call me "Deety" and Zebadiah "Zeb" when invited, but he could *not* bring himself to shift from "Captain Burroughs" to "Hilda" — "Captain Hilda" was as far as he would go, and Pop was "Professor."

He was pleased that we liked his "roadable." You wouldn't believe it! A large, wooden flatbed wagon with an upright steam engine in back; a trailer with cordwood; a sailing-ship's wheel in front of the engine; this controlled the front wheels by ropes that ran underneath. Midway was a luggage pen, then in front were four benches, for twelve to sixteen people.

With a crew of *five!*

Engine driver, fireman, conductor, and two steersmen —

The conductor sat on a high perch braced to the pen and told the others what to do and occasionally rang a bell or blew a whistle. The bell told other traffic to get out of the way; the whistle warned that the vehicle was about to start or stop. There was much traffic but few "roadables" — most common were pedalled tricycles, for passengers and freight. Large versions had as many as a dozen men pedalling at once.

"I daresay you know," said Brian, "that we have not been able to raise horses. We haven't given up — we will develop a breed that will prosper here. But once we have horses, this will, I venture to predict, become a proper colony — and not just a place to send reformable evildoers and to obtain raw pharmaceuticals."

"Pharmaceuticals?"

"Oh, definitely! The thing that makes the colony self-supporting. I daresay the descendants of these convicts will be wealthy. I will show you the fields — all in the weed — a cant word for Cannabis

Magnifica Martia — except acreage for food crops. Brigadier Hird-Jones suggested Norfolk Plantation." He smiled. "Shall we?"

"Just a moment," Aunt Hilda said. "If I understood the Brigadier's note, we can vary the program?"

"Captain Hilda, the carriage and I are at your disposal as long as you wish. My orders and my pleasure."

"Brian, I have clothing being made up. I was told that sewing would continue through the night. Where should we go to inquire?"

"Here and now. I fancy I saw a package being delivered while we've been chatting; it could be yours. It would go to the chief housekeeper, who would have it placed in your digs — the Princess Suite, is it not?"

"Yes. Brian, I'll slip upstairs and see."

"Please, no!" Brian made a small gesture; a private soldier appeared out of nowhere. "Smathers, my greetings to Mrs. Digby. Has a package arrived for Captain Burroughs?"

"Sir!"

"Hold it! Brian, if it has arrived, I want it fetched here."

I could see the look in Brian's eye that Pop gets just before he starts demanding explanations for female "unreasonable" behavior. But Brian simply added, "If the package has arrived, tell Mrs. Digby that it must be delivered here at once. Double time, so to speak."

"Sir!" The private stomped an about-face and broke into a run. Hilda said, "Thank you, Brian. If I place it in our craft, it is one less detail to remember. Your kindness eases my mind."

"A pleasure, Captain Hilda."

"Hilda, that clothing is not yet paid for."

"Oh, dear! You are right, Jacob. Leftenant, where does one exchange gold for local money? Do you know the rate of exchange? In grams?"

"Or in Troy ounces," I added.

Brian behaved as if he had not heard us. He turned toward his "roadable." "Parkins! Take a turn around the circle! When you return, I want that steam up high. So that we won't creep in starting."

"Roight, sir." The wagon moved off, at a headlong slow walk.

When no one else was in earshot Brian said quietly, "I missed what you Were saying because of engine noise. But let me mention in passing that Possession of gold by individuals is not permitted so I-am-happy-to-learn-that-you-have-none," he said, not letting himself be interrupted. "Let me add," he went on, "that since I handle secret and most-secret despatches, I know things that I don't know, if I make my meaning clear. For example, I am grateful that you four were willing to lose sleep last night. Others feel strong obligations to such good friends. The Brigadier mentioned that you might have purchases to make or bills to pay. I was instructed to charge anything you need or want — or fancy — to the Imperial Household, signing his name and appending my signature."

"Oh, that's most unfair!"

"Truly, Captain? I fancy that those in authority will find something to add until you feel that you have been treated generously."

"That's not what she means, son," put in Pop. "'Unfair' in the opposite direction. We pay for what we get."

Brian lost his smile. "May I suggest that the Professor discuss that with the Brigadier? I would find it extremely embarrassing to have to report to the Brigadier that I was unable to carry out his orders."

"Captain."

"What, Deety?"

"I am required to advise you."

"Advise away, my dear. I see my packages coming."

"Captain Auntie, you've got a bear by the tail. Let go."

The Hillbilly grinned and stuck out her tongue at me, then turned to Brian. "The Brigadier's thoughtful arrangements are appreciated. We accept."

It was still a few minutes before we left, as it turned out that Zebadiah's power packs were ready, in the hands of the Household engineer. At last Hilda's clothes and the power packs were in Gay; we boarded the char-à-banc, and whizzed away at 10 km/hr. "Norfolk Plantation, Captain Hilda?"

"Brian, at what time did you breakfast?"

"Oh, that's not important, Ma'am."

"Answer my question."

"At ohseven-hundred hours, Captain."

"So I suspected. You eat at Imperial House?"

"Oh, no, Captain Hilda, only the most senior of the Governor's official family eat there. I eat at the officers' club."

"I see. We'll see wogs last. I am told there is a commissary. Is it open to us?"

"Captain Hilda, *everything* is open to *you."*

"I must buy supplies. Then I wish to go to the best restaurant in Windsor City and watch you eat a proper luncheon; we ate breakfast three hours later than you did."

"But I'm hungry," said my husband. "I'm a growing boy."

"Poor Zebbie."

There was not much to buy that would keep. I bought a tin of Huntley & Palmer's biscuits and quite a lot of Dutch chocolate — quick energy for growing boys — and tightly packaged staples.

Brian had us driven to that restaurant just past noon. I was glad that Aunt Hilda had decided to get everything else done before we went to look at vermin. Even so, I did not have much appetite — until I decided to stand up and forthrightly turn coward. *Not* look at vermin! *Cui bono?* Aunt Hilda was the expert.

That restored my appetite. We stopped across the parade ground from Imperial House. We twigged in this order — Zebadiah, Pop, me, Aunt Hilda — that it was the officers' club. She was several meters inside when she stopped. "Brian, what are we doing *here?"*

"The Captain said ' — the best restaurant — '. The club's chef was executive chef at Claridge's until he ran into misfortune. Don't look at me that way, Captain Hilda; the Brigadier picks up the chit; it's charged against 'official visitors' and winds up in London against H.I.M.'s Civil List. Believe me, His Majesty gets paid more than leftenants, or even brigadiers."

But the president of the mess signed the chit — a colonel who told the Hillbilly that he was buying her lunch because he wanted to ship with us as scullery maid.

I was telling Aunt Hilda that I would skip vermin viewing, thank you, when I did. One. Then six. Then a whole field of them. I was explaining to God that I didn't like this dream so *please* let me wake up when Brian had the conductor halt the contraption and I saw that there were men in that field, too. The men carried whips; vermin were muzzled. This one vermin — well, "wog" — this wog had managed to pull its muzzle aside and was stuffing this weedy plant into its mouth… when a whip cracked across its naked back.

It cried.

The field on the other side of the road was not being worked, so I stared at it, After a while I heard Brian say, "Captain Hilda, you are serious, really?"

"Didn't the Brigadier authorize it?"

"Ah, yes. I thought he was pulling my leg. Very well, Ma'am."

I had to see what this was all about… and discovered that muzzled vermin, afraid of men with whips, weren't frightening; they were merely ugly. Aunt Hilda was taking pictures, movies and stereo. Brian was talking to a man dressed like any farmer except for the Broad Arrow.

Brian turned and said, "Captain Hilda, the foreman asks that you point out the wog you want to dissect."

Aunt Hilda answered, "There has been a mistake."

"Ma'am? You *don't* want to dissect a wog?"

"Leftenant, I was told that one or more died or was slaughtered each day. I want to dissect a dead body, in an appropriate place, with surgical instruments and other aids. I have no wish to have one of these poor creatures killed."

We left shortly. Brian said, "Of the two, the abattoir and the infirmary, I suggest the latter. The veterinarian is a former Harley Street specialist. By the bye, there is no case of humans contracting disease from these brutes. So the infirmary isn't dangerous, just, ah, unpleasant."

We went to the wog hospital. I did not go inside. Shortly Pop came out, looking green. He sat beside me and smiled wanly. "Deety, the Captain ordered me outside for fresh air — and I didn't argue. Aren't you proud of me?"

I told him that I'm always proud of my Pop.

A few minutes later Brian and Zebadiah came out, with a message from Hilda that she expected to work at least another hour, possibly longer. "Captain Hilda suggests that I take you for a drive," Brian reported.

The drive was only as far as the nearest pub; the sillywagon was sent back to wait for the Hillbilly. We waited in the lounge, where Pop and Brian had whisky and splash, and Zebadiah ordered a "shandygaff" — so I did, too. It will never replace the dry martini. I made it last till Aunt Hilda showed up.

Brian asked, "Where now, Captain Hilda?"

"Imperial House. Brian, you've been most kind."

I said, "Cap'n Auntie, did you whittle one to pieces?"

"Not necessary, Deetikins. They're chimpanzees."

"You've insulted every chimp that ever lived!"

"Deety, these creatures bear the relation to 'Black Hats' that a chimpanzee does to a man. The physical resemblance is closer, but the difference in mental power — Doctor Wheatstone removed the brain from a cadaver; that told me all I needed to know. But I got something that may be invaluable. Motion pictures."

Zebadiah said, "Sharpie, you took motion pictures in the fields."

"True, Zebbie. But I have with me the Polaroids you took for me at Snug Harbor; some show the splints that creature used to disguise its extra knees and elbows. Doctor Wheatstone used surgical splints to accomplish the same with one of his helpers — a docile and fairly intelligent wog that didn't object even though it fell down the first time it tried to walk while splinted. But it caught on and managed a stiff-legged walk just like that ranger — and like 'Brainy' now that I think about it — then was delighted when Doctor Wheatstone dressed it in trousers and an old jacket. *Those* pictures will surprise you. No makeup, no plastic surgery, a hastily improvised disguise — from the neck down it looked human."

When we reached Imperial House, we transferred packages into Gay Deceiver — again were not permitted to carry; Brian told the conductor, the conductor told his crew. We thanked them, thanked Brian as we said goodbye, and Aunt Hilda expressed a hope of seeing him soon and we echoed her — me feeling like a hypocrite.

He saluted and started toward the officers' club. We headed for the big wide steps. Aunt Hilda said, "Deety, want to share some soap suds?"

"Sure thing!" I agreed.

"Whuffor?" asked Zebadiah. "Sharpie, you didn't get a spot on you."

"To remove the psychic stink, Zebbie."

"Mine isn't psychic," I said. "I stink, I do."

But damn, spit, and dirty socks, we had hardly climbed into that tub when a message arrived, relayed by my husband, saying that the Governor requested us to call at his office at our earliest convenience. "Sharpie hon, let me translate that, based on my eighty years man and boy as flunky to an ambassador. Means Bertie wants to see us five minutes ago."

I started to climb out; Aunt Hilda stopped me. "I understood it, Zebbie; I speak Officialese, Campusese, and Bureaucratese. But I'll send a reply in clear English, female idiom. Is a messenger waiting?"

"Yes, a major."

"A major, eh? That will cost Bertie five extra minutes. Zebbie, I learned before you were born that when someone wants to see me in a hurry, the urgency is almost never mutual. All right, message: The commanding officer of Spacecraft Gay Deceiver sends her compliments to the Governor General and will call on — him at her earliest convenience. Then give the major a message from you to Bertie that you happen to know that I'm taking a bath and that you *hope* I'll be ready in twenty minutes but that you wouldn't wager even money on thirty."

"Okay. Except that the word should be 'respects' not 'compliments.' Also, the major emphasized that he wants to see all of us. Want Jake and me to keep Bertie happy until you are ready?" Pop had his head in the door, listening. "We wouldn't mind." Pop nodded.

"Zebbie, Zebbie! After four years under my tutelage. Until I know what he wants I *can't* concede that he is senior to me. 'Compliments,' *not* 'respects.' And *no one* goes until I do… but thank you both for the offer. Two more things: After giving the major my message, will you please find my clothes, all but Deety's Keds, and take them to the car? That's Jacob's shirt, Deety's sailor pants, a blue belt, and a blue hair ribbon. In the car you will find new clothes on my seat. In one package should be three jump suits. Please fetch one back."

Pop said, "Hilda, I'd be glad to run that errand. Run it twice, in fact, as you don't want to send down what clothes you have until you know that your new clothes fit."

"Jacob, I want you *right here,* to scrub our backs and sing for us and keep us amused. If that jump suit does not fit, I may appear in a bath towel sarong. But I plan to appear a minute early to make Bertie happy. Do *not* tell the major that, Zebbie! Officially it is twenty minutes with luck, thirty minutes more likely, could be an hour, Major; you know how women are. Got it all?"

"Roger Wilco. Sharpie, someday they'll hang you."

"They will sentence me to hang but Jacob and you will rescue me. Trot along, dear." Aunt Hilda started to get out. "Stay there, Deety. I'll give you three minutes' warning — two to dry down, one to zip into your jump suit. Which leaves ten minutes to relax."

The jump suit did fit; the Hillbilly looked cute. We left not a thing in that suite because Aunt Hilda checked it while waiting for Zebadiah. A few items went into my purse or hers. It was eighteen minutes from her message to our arrival at the Governor's office — and I had had a fifteen-minute tub, comfy if not sybaritic.

Besides Bertie and the Brigadier, that fathead Moresby was there. Aunt Hilda ignored him, so I did. Bertie stood up. "How smart you all look! Did you have a pleasant day?" The poor dear looked dreadful — gaunt, circles under his eyes.

"A perfect day — thanks to you, thanks to the Brigadier, and thanks to a curly lamb named Bean."

"A fine lad," Squeaky boomed. "I'll pass on your word, if I may." The Brigadier did not look fresh; I decided that neither had been to bed.

Bertie waited until we were seated, then got to business. "Captain Burroughs, what are your plans?"

Aunt Hilda did not answer his question. She glanced toward Major General Moresby, back at Bertie. "We are not in private, Excellency."

"Hmm — " Bertie looked unhappy. "Moresby, you are excused."

"But —"

"Dismissed. You have work to do, I feel sure."

Moresby swelled up but got up and left. Squeaky bolted the outer door, closed the inner door, while Bertie stood up to lift the rug over his recorder switch. Aunt Hilda said, "Don't bother, Bertie. Record if you need to. What's the trouble, old dear? Russians?"

"Yes. Hilda, you four are refugees; yesterday you showed me why. Would you care to remain here? My delegated power is sufficient that I can grant naturalization as fast as I can sign my signature."

"No, Bertie. But we feel greatly honored."

"I expected that. Do reconsider it. There are advantages to being a subject of the most powerful monarch in history, in being protected by a flag on which the Sun never sets."

"No, Bertie."

"Captain Hilda, I need you and your ship. Because of millions of miles of distance, many months required for a message, I hold *de jure* viceregal power almost equal to sovereign… and *de facto* greater in emergency because no Parliament is here. I can recruit foreign troops, arm them, make guarantees to them as if they were British, award the King-Emperor's commission. I would like to recruit all of you and your ship."

"No."

"Commodore for you, Captain for your secondin-command, Commander for your Chief Pilot, Lieutenant Commander for your Copilot. Retirement at full pay once the emergency is over. Return of your purchased ship as a royal gift after the emergency. Compensation for loss or damage."

"No."

"One rank higher for each of you?"

"All four of us must be at least one rank senior to Major General Moresby."

"Hilda! That's my own rank. Equivalent rank — Vice Admiral."

"Bertie, you can't hire us as mercenaries at any rank or pay. That hyperbole was to tell you that we will *not* place ourselves *under* your chief of staff. That settled, what can we do to help you?"

"I'm afraid you can't, since you won't accept the protection under international law of military status. So I'm forced to cut the knot. Do you understand the right of angary?"

(I thought he said "angry" and wondered.)

"I believe so. Are Great Britain and the Russias at war?"

"No, but there are nuances. Shall I call in my legal officer?"

"Not for me. My own legal officer is here: Doctor Zebadiah Carter, my consultant in international law."

"Doctor Carter — oh, fiddlesticks! My friend Zeb. Zeb, will you discuss the right of angary?"

"Very well, Governor. One nuance you had in mind was that, in addition to wartime, it applies to national emergency — such as your current one with the Russians."

"Yes!"

"Angary has changed in application many times but in general it is the right of a sovereign power to seize neutral transport found in its ports or territory, then use same in war or similar emergency. When the emergency is over, seized transport must be returned, fair rentals must be paid, loss or damage requires compensation. It does *not* apply to goods or chattels, and most especially not to persons. That's the gist. Do we need your legal officer?"

"I don't think so. Captain Burroughs?"

"We don't need him. You intend to requisition my craft?"

"Captain… I *must!"* Bertie was almost in tears.

"Governor, you are within your legal rights. But have you considered how you will drive it?"

"May I answer that, Governor?"

"Go ahead, Squeaky."

"Captain Hilda, I have an odd memory. 'Photographic' it is called but I remember sounds as automatically. I am sure I can fly every maneuver used last night — that is to say: sufficient for our emergency."

I was seething. But Aunt Hilda smiled at the Brigadier and said in her sweetest voice: "You've been most thoughtful throughout our stay, Squeaky. You are a warm, charming, hospitable, bastardly *fink.* One who would sell his wife to a Port Saïd pimp. Aside from that you are practically perfect."

"Doubled and redoubled!" (That was my Pop!) "Later on, Jones, I'll see you at a time and place of your choosing. Weapons or bare hands."

"And then *I* will see you, if Jake leaves anything." My husband flexed his fingers. "I hope you choose bare hands."

Bertie interrupted. "I forbid this during this emergency and after it in territory where I am suzerain and while Hird-Jones holds the Sovereign's commission under my command."

Aunt Hilda said, "You are legally correct, Bertie. But you will concede that they had provocation."

"No, Ma'am! Hird-Jones is not at fault. I *tried* to get you and your crew to fly it on any terms at all. You refused. Hird-Jones may kill himself attempting to fly a strange flyer. If so he will die a hero. He is *not* what you called him."

"I don't think well of you, either, Bertie. You are a thief — stealing our only hope of a future."

"He certainly is!" I cut in. "Governor, I can whip you — I can kill you, with my bare hands. I'm Black-Belt three ways. Are you going to hide behind your Commission and your self-serving laws?" I dusted my hands together. "Coward. Two cowards, with their chests covered with ribbons boasting about their brave deeds."

"Astrogator."

"Captain."

"Let it drop. Bertie, under right of angary we are entitled to remove our chattels. I insist on a witness so that you will know that we have done nothing to damage the craft. If the Brigadier can drive it, it will be turned over to him in perfect shape. But my jewelry is in our craft and many other things; I must have a witness. *You,* sir. My stepdaughter can certainly kill you or anyone her size or a bit more than her size, with her bare hands. But I grant you safeconduct. Will you have it in writing?"

Bertie shook his head. "You know I can't take time to witness. Pick anyone else."

"I won't grant safeconduct to anyone else. Anyone who has not ridden with us would not know how to watch for sabotage. So it must be either you or Hird-Jones… and Hird-Jones would never live to get out of our car. He has three of the deadliest killers in two universes quite annoyed. Angry over angary."

"Any of you who will not give parole must wait up here."

"Wait a half, Gov," my husband drawled. "'Parole' applies to prisoners. Captain, this might be a good time to read aloud *our* safeconduct from the Governor General. See how many ways this fake 'officer and gentleman' has broken his word — and the written guarantees of his sovereign. He has broken all three essential guarantees to all four of us. That's twelve. Almost a Russian score. Safeconduct amounting to diplomatic immunity, all of us free to leave at any time, we four never to be separated involuntarily. *Now* he wants hostages. *Pfui!"*

"None is broken," Bertie asserted.

"Liar," my husband answered.

"All of you are safe here… until the Russians conquer us. I slipped in speaking of parole; you are not prisoners. You all may stay together — living in the Princess Suite if you so choose. If not, in any quarters you choose in territory I control. You are all free to leave at any moment. But you must *not* approach that requisitioned flyer. Captain, your jewels will be safe. But others will unload the flyer."

"Bertie —"

"What? Yes… Hilda?"

"Dear, you are both stubborn and stupid. You can't open the doors of our car, much less drive it. Attempt to force it open and no one will ever drive it. I conceded the legality of the right of angary. But you insist on making it impossible to apply it. Accept my safeconduct and come witness or *there that car sits until the Russians come,* while we live in luxury in this palace. You know that 'the right to leave at any time' means *nothing* without our transport. Now, *for the last time,* will you do it my way… or will you waste the precious minutes of a war crisis trying to open that car by yourself? Make up your mind, this offer will not be repeated. Answer Yes or No… and be damned quick about it!"

Bertie covered his face with his hands. "Hilda, I've been up all night. Both Squeaky and I."

"I know, dear. I knew when we came in. So I must help you make up your mind. Deety, check your purse. Something is missing."

I hastily checked, wondering what she meant. Then I noticed that a secret pocket that should have been hard was not. "Oh! Do you have it?"

"Yes, Deety." Aunt Hilda was seated, her choice, so that she had both Bertje and Squeaky in her line of fire — and none of us. "I mentioned three killers. Now you have *four* facing you… in a soundproofed room with its door bolted from inside." (I never saw her draw my Skoda gun. But she was holding it on them.) "Bertie, I'm making up your mind for you. You are accepting my safeconduct. Consider how poor the chances are that anyone would find your bodies in the time it takes us to run down one flight and reach our car."

Squeaky lunged at Hilda. I tripped him, kicked his left kneecap as he fell, then said, "Don't move, Fink! My *next* kick is a killer! Captain, has Bertie come to his senses? Or shall I take him? I hate to kill Bertie. He's tired and worried and not thinking straight. Then I would have to kill Squeaky. He can't help his eidetic memory, any more than I can help this clock in my head. Squeaky, did I break your kneecap? Or can you walk if I let you get up?"

"I can walk. You're fast, Deety."

"I know. Captain. Plans?"

"Bertie, you are accepting my safeconduct. We are all going out together, we four around you two, laughing and talking and heading for our car — and if anyone gets close, you two are dead. One of you will get it with this —"

"And the other with this." (My husband, with his stubby police special —)

"Why, Zebbie! How naughty of you! Jacob, do you have a holdout too?"

"Just this — " Pop now had his hunting knife.

"Deety?"

"Did have. You're holding it. But I still have five weapons."

"Five?"

"Both hands, both feet, and my head. Squeaky, I must frisk you. Don't wiggle… or I'll *hurt* you." I added, "Stop easing toward your desk, Bertie. You can't kill four of us before we kill you. Pop, don't bother with the gun, or trap, or whatever, in Bertie's desk, Let's get out of here, laughing and joking, as the Captain ordered. Oh, Squeaky, *that* didn't hurt! Captain, shall I let him up?"

"Brigadier Hird-Jones, do you honor the safeconduct granted to us by your commanding officer?" Aunt Hilda asked.

"Brigadier, I order you to honor it," Bertie said grimly.

Maybe Squeaky had to catch his breath; he was a touch slow. "Yes, sir."

Aunt Hilda said, "Thanks, Squeaky. I'm sorry I had to say harsh things to you… but not having muscles I must fight with words.

Zebbie, frisk Bertie. But quickly; we leave now. I leave first, on Bertie's arm. Deety follows, on Squeaky's arm — you can lean on her if you need to; she's strong. Help him up, Deety, Jacob and Zebbie trail along behind. Bertie, if anyone gets close to us, or either you or Squeaky try to signal anyone, or if anything is pointed at us — first you two die. Then we four die; that's inevitable. But we'll take some with us. What do you think the total may be? Two… and four… then five? Six? A dozen? Or higher?"

It took us forty-seven seconds to the bottom of the steps, thirtyone more to Gay Deceiver, and I aged seventy-eight years. Squeaky did lean on me but I made it look the other way around and he managed to smile and to sing with me: *Gaudeamus Igitur*. Hilda sang *The Bastard King* to Bertie which seemed both to shock him and make him laugh. The odd way she held his arm told me that she was prepared to plant 24 poisoned darts in Bertie's left armpit if anything went sour.

No one bothered us. Bertie returned a dozen or more salutes.

But at Gay Deceiver we ran into a bobble. Four armed soldiers guarded our Smart Girl. By the starboard door was that fathead Moresby, looking smug. As we came close, he saluted, aiming it at Bertie.

Bertie did not return his salute. "What's the meaning of this?" he said, pointing. Plastered to Gay's side, bridging the line where her door fairs into her afterbody, was H.I.M.'s Imperial seal.

Moresby answered, "Governor, I understood you perfectly when you told me that I had work to do. Verb. sap., eh?"

Bertie didn't answer; Moresby continued to hold salute.

"Major General Moresby," Bertie said so quietly that I could just hear it.

"Sir!"

"Go to your quarters. Send me your sword."

I thought Fathead was going to melt down the way the Wicked Witch did when Dorothy threw the pail of water over her. He brought down the salute and left, moving quickly.

Everybody acted as if nothing had happened. Hilda said, "Gay Deceiver, open starboard door" — she did and that seal broke. "Bertie, we're going to need people to carry things. I don't want our possessions stacked outdoors."

He looked down at her, surprised. "Is the war over?"

"There never was a war, Bertie. But you tried to push us around, and I don't push. You requisitioned this craft; it's legally yours. What I insisted on was that *you* must witness removal of our chattels. That took coaxing."

"'Coaxing'!"

"Some people are harder to coax than others. Squeaky, I'm sorry about your knee. Can you hobble back? Or shall we get you a wheelchair? That knee must be swelling up."

"I'll live. Deety, you play rough."

"Squeaky," said the Governor General, "slow march back toward the House, grab the first person you see, delegate him to round up a working party. Hilda, will a dozen be enough?"

"Better make it twenty. And about four more armed guards."

"Twenty and four additional sentries. Once you pass that word, put the senior rating in charge, and climb into a tub of hot water."

"Cold water."

"What, Hilda? *Cold?"*

"Hot is okay if he uses lots of Epsom salts. Otherwise ice-cold water will bring the swelling down faster, even though it's uncomfortable. But not for long. Ice water numbs pain while it reduces swelling. By morning you'll be fit. Unless Deety cracked the bone."

"Oh, I hope not!" I blurted.

"Squeaky, you had better listen to Captain Hilda."

"I'll do it. Ice water. *Brrrrr!"*

"Get on with it. But order that working party."

"Right away, sir."

"Bertie, will you follow me?" Hilda went inside. The Governor followed her, started to say something but Hilda cut him off: "Jacob, get out the items forward here while Zebbie keeps inventory as you do. Bertie, I have something for Betty before that mob gets here. Will you help me undog this door or perhaps Deety can do it easier GayDeceiverCloseDoorsGayBounceGayBounceGayBounce. Bertie, take off your clothes." She held onto a door dog with her left hand, had my little gun aimed at his face.

"Hilda!"

"Captain Hilda, please; I'm in *my* spacecraft under way. Take off every stitch, Bertie; I'm not as trusting as Zebbie. I assume that you have a holdout he didn't find. Gay Bounce. Hurry up, Bertie; you're going to stay in free fall with no Bonine until you are naked. Zebbie, he may require help. Or inducement."

He required both. But eleven minutes later Bertie was wearing one of Pop's coveralls and his clothes were abaft the bulkhead. Zebbie did not find a weapon but Aunt Hilda took no chances. At last we were all strapped down, with Bertie between me and the Captain.

Hilda said, "All hands, report readiness for space. Astrogator."

"Captain Auntie, we *are* in space."

"But quite unready. Astrogator."

"Seat belt fastened. Ready."

"Chief Pilot."

"Door seal checked. No loose gear — I stuffed Bertie's clothes in with the cabin bed clothes. Four charged power packs in reserve. Juice ohseven-oh. All systems go. Ready."

"Copilot."

"Seat belt tight. Continua device ready. Door seal checked. I'd like a Bonine if we're going to be in free fall long. Ready for space."

"Astrogator, three antinausea pills — captain, copilot, passenger. Passenger."

"Oh! Oh, yes! Safety belt tight."

"Captain states seat belt fastened. Ready for space. Gay Termite."

It was just sunrise at our streamside "home." "Aunt Hilda, why did we run through all that rigamarole if we were coming straight here?"

"Deety, when you are captain you will know."

"Not me. I'm not the captain type."

She ignored me. "Lieutenant General Smythe-Carstairs, will you give me your unconditional parole until I return you home? On your honor as an officer and a gentleman."

"Am I going home? I had assumed that I had not long to live."

"You are going home. And I do have something for Betty. But whether or not you give parole affects other matters. Make up your mind — *at once!"*

It took him six seconds; Aunt Hilda let him have them. "Parole. Unconditional."

"I'm surprised, Bertie. You have a tradition against giving parole, do you not?"

"We do indeed, Captain. But I concluded that my only chance of serving my sovereign lay in giving my word. Am I right?"

"Quite right, Bertie. You now have opportunity to persuade me to support you in your crisis. Your King-Emperor is not our prince; we place no faith in princes. We have no reason to love Russians but we spanked the only one who gave us trouble. In what way is the British colony superior to the Russian one? Take your time."

Aunt Hilda turned her attention to the rest of us. "Standing orders apply: Two at a time, one being armed. Deety and I will cut and wrap sandwiches, make coffee and prepare a snack for growing boys who can't remember a bounteous luncheon three hours ago. One guard at all times at the car. Bertie, I'm assigning you that duty. You know how to use a rifle?"

Zebadiah said, *"You're* arming *him?"*

"Chief Pilot, I assume that you are questioning my judgment. If you convince me that I am wrong, there will be a new captain even more quickly than I had planned. May I have your reason?"

"Sharpie, I didn't mean to get your feathers up."

"Not at all, Zebbie. Why are you surprised that I intend to use

Bertie as guard?"

"Ten minutes ago you had me do a skin search to make sure he wasn't armed. Now you are about to hand him a gun."

"Ten minutes ago he had not given parole."

Bertie said hastily, "Zeb is right, Hilda — Captain Hilda; Zeb has no reason to trust me. I don't want to be a bone of contention!"

I'm still trying to figure out whether Aunt Hilda is more logical than other people or is a complete sophist. She gave Bertie a freeze, looking him up and down. "Smythe-Carstairs, your opinion was neither asked nor wanted."

Bertie turned pink. "Sorry, Ma'am."

"Although you *were* a person of some importance in your own land, you are now something between a prisoner and a nuisance. I am trying to give you the dignity of crew member pro tern. Hold your tongue. Zebbie, what were you going to say?"

"Shucks, if you aren't afraid to have him with a gun at your back, I'm not. No offense intended, Bertie."

"None taken, Zeb."

"Zebbie, please assure yourself that Bertie can handle a rifle, and that he knows what to shoot at and when *not* to shoot, before you turn the guard over to him. Put the other rifle at the door for bush patrol. Bertie, watch and listen. Gay Deceiver, open your doors."

Our Smart Girl opened wide. "Gay Deceiver, close your doors." Gay complied. "Bertie," Aunt Hilda went on, "you do it."

Of course he failed — and failed again on other voice programs. The Hillbilly explained that it took me a tedious time with special equipment to cause this autopilot to respond to a particular human voice. "Bertie, go back and explain to Squeaky; make him understand that I saved his life. This car can be driven in three modes. Two Squeaky can't use at all; the third would kill him as dead as Caesar."

"Plus a fourth hazard," added my husband. "Anybody who doesn't understand the Smart Girl but tries to take her apart to see what makes her tick would find himself scattered over a couple of counties."

"Booby-trapped, Zebadiah?" I asked. "I hadn't known it."

"No. But juice is *very* unfriendly to anybody who doesn't understand it."

"Come and get it!" The snack Aunt Hilda offered was a much-stuffed omelet. "Bertie, place your gun near you, locked. Between bites, you can tell us why your colony is worth defending. By us, I mean. For you, it's duty."

"Captain Hilda, I've done some soul-searching. I daresay that, in the main, we and the Russians are much the same, prison colonies with military governors. Perhaps, in a hundred years, it won't matter.

Although I see us as morally superior."

"How, Bertie?"

"A Russian might see this differently. Our transportees are malefactors under our laws — but once here, they are as free as other Englishmen. Oh, they must wear the Broad Arrow until discharged — but at home they would wear it in a grim prison. The Russian prisoners are, if our intelligence is correct, the people they used to send to the Siberian salt mines. Political prisoners. They are serfs but I am told that most of them were not serfs in Russia. Whether they are treated better or worse than serfs in Russia I do not know. But one thing I do know. They work their fields with men; we work ours with wogs."

"And whip them!" Suddenly I was angry.

We had an argument, Bertie maintaining that the whips were not used unnecessarily, I asserting that I had seen it with my own eyes.

I guess he won, as he told us that they *had* to muzzle the beasts in weed fields, or they would stuff themselves on it, pass out, wake somewhat, do it again, and starve — but the muzzles were designed to allow them to chew a blade at a time all day long, to keep them happy. "The raw weed is addictive, to wog and man. We won't allow a man to work in the fields more than three months at a time… and pull him out if he can't pass the weekly medical tests. As for wogs, Deety — yes, we exploit them. Human beings exploit horses, cattle, sheep, poultry, and other breeds. Are you vegetarian?"

I admitted I was not. "But I don't want to eat wogs!"

"Nor do we. In Windsor colony wog meat goes only to wogs, and wogs don't care. In the wild they eat their own dead, kill and eat their aged. Captain Hilda, that's all the defense I can offer. I admit that it doesn't sound as strong as I had always believed."

"Captain, I'd like to put one to Bertie."

"Jacob, I treasure your thoughts."

"Bertie, would you polish off the Russians if you could?"

Bertie snorted. "That's academic, Doctor. I don't command the force it would take. I can't set up a string of stockpiles — and wouldn't know what to do with them if I could; I don't have the troops or 'thopters. But I must add: If my King tells me to fight, I will *fight."*

Aunt Hilda told Bertie to wash dishes with Pop sent along as guard. As soon as they started down, Aunt Hilda said, "We are going to do it, to a maximum cost of one power pack. Deety, start working on a program stringing together the dumps we located last night."

"Already have," I told her. "In my head. Last night. To put me to sleep. You want it preprogrammed? I would rather tell Gay each bounce, I would."

"Do it your way, hon. The purpose in sending Bertie to wash dishes and Jacob to guard him was to get them out of the way while I rig a frameup. At the end of the coming run, we drop Bertie and bounce… and at that instant I cease to be captain. I want to hold the election now — a one-ballot railroad. I will ask for nominations. Zebbie, you nominate Jacob. Deety, you don't need to say anything but speak if you wish. If Jacob nominates either of you, don't argue. I'll rig it so that Bertie declares the ballots. If you two are with me, the only surprise will be that fourth vote. Three for Jacob, and let's all write 'Jacob,' not 'Pop' or 'Jake,' and one for the dark horse. Are you with me?"

"Wait a half, Sharpie. Why not give Deety a crack at it?"

"Not me!"

"Deety should have the experience, but, please, Zebbie, not this time. Jacob has given me a dreadful time. Endless insubordination. I want to pass him on to Deety well tenderized. Deety ought not to have to put up with her father second-guessing her decisions — and, if you two help, she won't have to. I want to give my beloved the goddamndest 'white mutiny' ever, one that he will remember with shudders and never again give a skipper any lip."

"Sounds good," I agreed, "but I don't know what a 'white mutiny' is."

"Sweetheart," my husband told me, "it's killing him with kindness. He says 'Frog,' we hop. Utter and literal obedience."

"This he won't like? Pop will love it!"

"So? Would you like to command zombies who *never* make suggestions and carry out orders literally without a grain of common sense?"

Fifteen minutes later Bertie read off: "'Jacob' and this reads 'Jacob' and so does this one, that seems to settle it. But here is one, folded: 'A bunch of smarties, you three. Think I didn't guess why you sent me down to ride shotgun? Very well, I vote for myself!' It is signed 'Jake.' Madame Speaker, is that valid?"

"Quite. Jacob, my last order will be liftoff after we drop Bertie."

Bertie said, "Jake, I think congratulations are in order."

"Pipe down! All hands, prepare for space."

"A piece of cake," Bertie called it. We started at the easternmost dump, worked west. Pop out at four klicks and dive, a dry run to size up the target; where wood alcohol was stored, ornithopters on the ground and how arranged… while Gay ululated from intensity six to eight. Frightfulness. I did not let it go up to ten because it wasn't intended to damage but to send anyone on target scattering.

Zebadiah's idea: "Captain, I've got nothing against Russians. My only purpose is to burn their fuel and their flaphappies to make it difficult to attack our friends — and I *don't* mean you big brass, Bertie. I mean the transportee maid who brought us tea this morning, and Brian Bean, and Mr. Wheatstone who was a top surgeon before some fool judge slammed him and is now doing his best for wogs, and the chef at the officers' club, and five cons who drove that sillywagon, and dozens more who smiled when they could have scowled. I don't want them killed or enslaved; I want them to have their chance. Governor, England is slapping the Broad Arrow on some of your best potential — you English will live to regret it."

"You could be right, Zeb,"

"I don't want to kill Russians, either. Could be most of them are decent blokes. Each strike will be a double run — one pass to scatter 'em, a second to destroy the dump. Captain, if that doesn't suit you, find another gunner."

Aunt Hilda said, "Astrogator."

"Captain."

"Strike as described by Chief Pilot. Take the conn. Attack."

At the first target we lingered after the strike bounce. The dry pass did show them running away — they could hear us clear in their bones. Those subsonics are so horrid I keyed Gay to kill the noise at code-word "Bounce" — and did not use it on the strike pass.

Zebadiah made strikes from bearings planned to take out as many 'thopters as possible while setting fire to fuel.

From four klicks the first strike looked good. The dump was burning, 'thopters he had hit showed smoke, and one that he had *not* hit was burning. Splashed by flaming methanol, I suppose.

If that first target was indication, in thirty-four minutes the Russians lost all fuel and about 70% of the deployed flaphappies. I took us up high after the last. "Next stop, Windsor City."

"I'm taking the conn, Astrogator. Bertie, don't forget my little ring for Betty."

"I'll give it to her in the morning."

"Good," Captain Hilda said. "Unbelt, crowd past Jacob, place yourself against the door — feet on deck, chest against door. Jacob, push against the small of his back. Bertie, when the door opens, dive and roll clear."

They positioned themselves. "Gay Parade Ground Gay Deceiver open starboard door… Gay Deceiver close doors, GayBounce, GayBounce! Jacob, do you relieve me?"

"Beloved, I relieve you. Ten minima H axis transit — and executed. All hands, unbelt."

I unbuckled with extreme speed and clumsiness, getting Pop in the chin with my foot.

"Deety! Watch where you're going!"

"I'm sorry, Captain. I'm out of practice with free fall."

"You've been in free fall every day!"

"Yes, Captain. I've been in free fall every day, belted down."

"Pipe *down!* Hilda, don't cover the instrument board. Hold onto something. No, not me, damn it. Zeb! Grab something and catch Hilda!"

"Roger Wilco, Captain! Right away!" My husband snagged Aunt Hilda, grabbed a seat belt with his other hand, trapped our captain against the dogs of the bulkhead door with his buttocks. "What now, sir!"

"Get your goddam fanny out of my face!"

"Sorry, sir," Zebadiah answered humbly while turning and digging an elbow into Pop's ribs. I closed in from the other side and we had Pop trapped again — ballet and trampoline make a fine background for free fall. Zebadiah went on cheerfully, "What shall we do now, sir?"

Pop didn't answer. From watching his lips I saw that he was counting backwards, silently, in German. That's stage three.

Then he said quietly, "Zeb, get into the copilot's seat and belt down."

"Aye aye, sir." Zebadiah did so.

Pop snatched Hilda while hanging onto a dog. "Deety, belt down in the chief pilot's seat."

"Roger Wilco, Captain" — I did so.

"My dear, I want you behind Deety. Do you need help?"

"Yes, thank you, Captain; it's sweet of you to offer." White mutiny? The Hillbilly is about as helpless as Zebadiah but thinks God created men to pamper women. I've heard less reasonable philosophies.

After "helping" Hilda, Pop strapped down in the starboard after seat. "All hands! We have moved clockwise ninety degrees. I am now captain. Hilda, you are astrogator and secondin-command. Deety, you are chief pilot. Zeb, you are copilot. In order of seniority, any questions?"

The Hillbilly said in a small voice, "As secondin-command I am required to advise the Captain —"

"Certain circumstances. Speak up."

"Captain, I know very little about astrogation."

"That's why you have the job. You will seek advice from Deety as needed, both of you seek advice from Zeb when necessary — and if all three of you are stumped, I will tackle it and be responsible for mistakes. No burden, the Captain is always responsible for *all* mistakes. When in doubt, do not hesitate to consult me.

"Deety, you have not driven this car in atmosphere. But you are a competent, decisive, and skillful driver of duos" — I *am,* Pop? — you're years late in saying so — "and we have come this high to give you time to acquaint yourself with it. I placed Zeb by you to coach you and, in time, to report to me that you are fully qualified." Pop smiled. "Fortunately, should you get into trouble, we have programs that will get you out instantly such as 'Gay Bounce' —"

Gay bounced.

Pop did not notice but I had my eye on radar distance since learning that I was responsible. Pop, who invented those safety scrams? Think hard. Hint: One of your offspring.

"Zeb, you know the knobs and scales *et cetera* of the controls we refer to as the verniers but you have not had time to practice. Now you will practice until you can handle *anything,* by eye, or by clicks in the dark. Permit me to pay you this compliment: You will give yourself your own final examination. When you feel ready, tell me and I will have the Astrogator log it.

"Advice to future captains — I will not be happy until all are competent in each of four seats, and all feel easy in all twenty-five possible arrangements —"

"Twenty-four, Pop," I blurted out. I hastily added, "Sorry, Captain — 'twenty-five.'"

Pop has a terrible time with kitchen arithmetic; it has been so long since he has done any. He will pick up a hand computer to discover 2 x 3 = 6; I've seen him do it.

He stared at me, lips moving slightly. At last he said, "Chief Pilot."

"Captain."

"You are *ordered* to correct me when I make a mistake. 'Twenty-four' permutations, certainly."

"Sir, may the Chief Pilot have more information before she answers Roger-Wilco?"

"Fire away!"

"Captain, what categories of mistakes?"

"Eh? Any sort! A mistake is a mistake. Daughter, are you baiting me?"

"No, Captain. I am unable to acknowledge your order as I do not understand it. 'A mistake is a mistake' is semantically null. If I see you about to sugar your coffee twice shall I — "

"Tell me! Of course."

"If I see you treating your wife unjustly shall I —"

"Wait a moment! Even if I did or have — which I decline to stipulate — it is not proper for you to interfere."

"Yes, sir. We've established that there are two sets. But the Captain has not defined the sets and the Chief Pilot lacks authority to do so.

May I respectfully suggest that the Captain take notice of the quandary, then reframe the order at a time of his choosing ... and in the meantime permit the Chief Pilot not to correct the Captain's mistakes?"

Zebadiah winked at me with his head turned so that I saw it but Pop could not.

Pop fumed, complaining that I wasn't showing common sense and, worse, I had broken his train of thought. He finally got around to a definition at about 8th grade level: I was to correct him *only* in errors involving figures or related symbols such as angles. (On your own head be it, Pop!) I gave him Roger-Wilco.

"In fact," he went on expansively, "it may be my duty to see that this training course is completed before, with great relief, I turn this seat over to my successor."

(I started figuring how many children I would have by then and decided to look for ways to hike up the "white mutiny.")

"Captain?"

"Astrogator."

"This advice concerns a mistake that could occur in the near future. I assume that the Captain has the conn?"

"Hilda, I have the conn. Speak up."

"We are falling, sir. I advise placing us in orbit."

I sighed with relief, as radar distance I was beginning to think of as H-above-G and did not like our closing rate.

Pop said, "Surely, put us in orbit. Take the conn and do it. Good practice. Deety can show you how. Or Zeb."

"Aye aye, sir. I have the conn. Chief Pilot, keep her level with respect to planet."

"Roger. Level now."

"Copilot, add speed vector positive axis L three point six klicks per second."

"Uh… set!"

"Hold it!" Pop unbelted, steadied himself by Zebadiah's chair, checked the setting. "Okay. Execute!"

"Excuse me, Captain," Zebadiah said, "but was that order directed at me or the Astrogator?"

Pop opened his mouth — then turned red. "Astrogator, I am satisfied with your solution and the setting. Please have the maneuver executed."

"Aye aye, sir. Execute!"

What Pop planned seemed reasonable. "So far we have used juice, supplies, and four days' time, and have merely established that there are at least two analogs of our universe, one quantum and ten quanta away on *Tau* axis. The latter has beasts — wogs — that are not the vermin we fled from, but — according to Hilda — closely related. To me, this makes *Tau* axis not our best place to seek a new home.

"Zebadiah has suggested that we sample the universes available by rotation rather than translation — six axes taken four at a time — before we search *Teh* axis. Let me remind you that we could die of old age searching *Teh* axis alone. I will decide but I will listen to arguments pro or con."

Twentythree minutes later Aunt Hilda shrilled, "Copilot, by plan, as set — *Rotate!"*

Chapter XXX

"Difference physical laws, a different topology."

Jacob:

We rotated to… Nowhere —

So it seemed. Free fall and utter blackness — The cabin held only the faint radiance from the instruments.

My daughter said in hushed tones, "Captain! May I turn on inside lights?"

This was a time to establish discipline and doctrine. "Permission refused. Copilot, I would like to see in all directions."

"Yes, sir," Zeb acknowledged.

After a few moments I added, "Copilot? Why are you waiting?"

"I am awaiting orders, sir."

"What the hell, Zeb? Get with it! I said I wanted to see in all directions. We have preprograms for that."

"Yes, Captain."

"Well? Why aren't you using them? Can't you carry out orders?" (I was amazed at Zeb.)

"Captain, I have not as yet received *any* orders, and I am not at the conn."

I started to answer sharply — and bit down on it. Precisely what had I said? I recalled that the autopilot stayed in recording mode during maneuvers; I could play back the last few minutes —

— and decided not to. We were wasting time and it was possible that I had not expressed myself in the form of a direct order. Nevertheless I could not ignore Zeb's pigheaded behavior. "Copilot, I am aware that I have not given you direct orders. However, it is customary to treat a captain's requests as politely worded orders."

"Yes, sir."

"Well? God damn it, why don't — "

"Captain! Captain Jacob! Please listen! *Please!"*

I took a deep breath. "What is it, Hilda?"

"Captain, I am required to advise you."

"Eh? Advise away — but be quick about it."

"Captain, you have given the Copilot neither orders nor requests. The autopilot's record will confirm this. You mentioned preprograms — but voice programs are not normally handled by the Copilot."

"I can order the Copilot to use a voice program."

Hilda did not answer. Again I waited, then said, "Well?"

Then I said, "Astrogator, you did not answer me."

"Sorry, Captain. Answer what?"

"My question."

"Captain, I was not aware that you had asked me a question. Would you mind repeating it?"

"Oh, forget it, forget it! Chief Pilot!"

"Captain."

"Deety, what's the voice program to rotate us a full circle around W axis?"

"Shall I spell it, sir? S.G. is awake."

"No, do it. Turn out your instrument lights. Pilots watch forward, Captain and Astrogator will watch the sides. Do it. Execute."

Instrument lights dimmed to zero, leaving us in the darkest dark I have ever experienced. I heard a repressed moan and felt a burst of sympathy for my daughter; she had never liked total darkness. But she carried out my orders:

"Gay Deceiver, Tumbling Pigeon."

"Forward somersault — whee!"

"Execute."

I felt pressure against my belts — being forward of the center of mass we were starting a gentle outside loop. I started counting seconds as I recalled that this program took twenty seconds.

I had reached seventy-eight seconds and was beginning to wonder when Deety announced "Twenty seconds" as the autopilot announced, "End of program."

Deety said, "You're a Smart Girl, Gay."

"If I were smart, would I be doing *this?* Over."

"Roger and out, Gay. Captain, I request permission to switch on cabin lights."

"Permission granted. Report observations. Copilot?"

"Skipper, I saw nothing."

"Deety?"

"Nothing."

"Hilda?"

"Jacob, I didn't see *anything.* Can't we get out of this universe? It stinks."

"That stink is me," our copilot said. "The reek of fear. Captain, of what use is an empty universe?"

"Zeb, 'empty universe' is a meaningless expression. Spacetime implies mass-energy, and vice versa."

"Captain, it looks empty to me."

"And to me. I'm faced by a dilemma in theory. Is the mass in this spacetime so far away that we can't see it? Or is it in a state of 'Cold Death,' level entropy? Or did we create this universe by rotating?"

"'Create it' — Huh?"

"A possibility," I pointed out. "If we are the only mass in this universe, then this universe had no existence until we created it by rotation. But it will not collapse when we rotate out, because we will be leaving behind quanta we are radiating."

"Hmm — Captain, I'm bothered by something else. We started from universe-ten and made one ninety-degree rotation. Correct?"

"Yes. We rotated around 'x' and thereby moved each of the other five axes ninety degrees. We are now experiencing duration along 'y.' *Teh* and 'z' are spatial coordinates now, and 'x' remains spatial because we rotated on it. *Tau* and 't' are now null, unused."

"Mmm — Deety, what Greenwich time is it?" Zeb glanced at the instrument board.

"Uh — Seventeen: thirteen: oh-nine."

"Smart Girl says you are twenty seconds slow." Zeb looked at his navigator's watch. "But my watch splits the difference. How many minutes since we left Windsor City?"

"Thirty-nine minutes, thirteen seconds. Ask me a hard one."

"I'm going to ask your father a hard one. Captain, if you tell G.D. to scram to Windsor P.G. right now *mark!* — what will the Greenwich time be?"

"Look at your clock. About a quarter past seventeen hundred."

"But you told me that, since rotating, we've been experiencing duration along 'y' axis."

"But — Oh! Zeb, I'm stupid. No time has elapsed on 't' axis since the instant we rotated If we reversed the rotation, we would go back to that exact instant."

"Deety hon?" Zeb asked. "Do you agree?"

(I felt annoyed that my son-in-law consulted my daughter as to the correctness of my professional opinion — then suppressed the thought. Deety will always be my little girl, which makes it hard for me to remember that she is also my professional colleague.)

My daughter suddenly looked upset. "I — Pop! That first trip to the world without the letter 'J' — time did pass, it did!"

Zeb said gently, "But that was translation, Deety. You continued to experience duration along 't' axis."

Deety thought about it, then said sorrowfully, "Zebadiah, I no longer know What time it is. Pop is correct; we experience duration on one axis only, and that is now 'y' axis. We can't experience duration on two axes at once." She heaved a sigh. "Will I ever get the clock in my head set right again?"

"Sure you will," my son-in-law reassured her. "Like crossing a time zone. Shortly after we grounded on Marsten, your head started keeping time both in Greenwich and in Mars Touchdown meridian time, even though Touchdown time kept falling farther behind hour after hour. A simple index correction won't bother you. My sweet, you don't realize how smart you are."

Zeb patted her hand, then looked around at me. "Captain, may I propose a change in schedule?"

"Let's hear it."

"Sir, I would like two sequences. First, go back to Windsor P.G. with the verniers preset for a hundred thousand klicks straight up, and execute at once. Then translate back to our own universe-zero — but not to Earth-zero. Instead, set up an orbit around Mars-zero. That orbit becomes our base of operations."

I said, "Simple enough. But why?"

"So that we will always have somewhere to go back to. Deety can write us a program that will place us back in that orbit. Something like G, A, Y, H, O, M, E, but based on Mars-zero — with elbow room."

I asked, "Daughter, can you write such a program?"

"I think so, Pop. An emergency scram? G, A, Y, plus something?" Deety paused. "'Sagan.' G, A, Y, S, A, G, A, N means to return to orbit around Mars-zero. Builtin mnemonic."

"Satisfactory. Is that all, Copilot?"

"No, sir. Our schedule breaks up naturally into a five group, a four group, a three, a two, and a one. I would like to add to each group a return to orbit around Mars-zero. Captain, if you were on the verniers, I wouldn't worry; you know them so well. I don't. If I do fifteen rotations, one right after the other, I'm afraid I'll make some tiny mistake and we'll wind up in analog-Andromeda-Nebula in universe a thousand-and-two on 'z' axis, with no idea how wa got there or how to get home."

"Copilot, you worry too much."

"Probably. Captain, my whole life is based on being chicken at every opportunity. I'll breathe easier if I come back to a familiar orbit at the end of each group… and know that the next group is one less. It won't take ten minutes longer to do it my way and I'll be less likely to make mistakes. But tackling all fifteen at a slug scares me."

"Captain Jacob —"

"Not now, Hilda. I must settle this with —"

"Captain, I am required to advise you."

"Eh? All right, all right! Make it snappy."

"You know — we all know — that Zebbie's premonitions must not be ignored. I advise you officially — Gay Deceiver, record this 'I-tell-you-three-times.'"

"Hilda, I hear you three times."

"Captain Jacob, I, your secondin-command, advise you officially to revise the schedule of rotations in the fashion recommended by the copilot. End of I-tell-you-three-times."

(Have you ever found yourself boxed in? Damn it, I *intended* to let

Zeb do it his way; I am not unreasonable. I can't say that I believe in Zeb's premonitions; I suspect that he is simply a man with extremely fast reflexes. But both our wives believe in them and Zeb does himself. I found myself faced with mutiny *unless I did exactly what I had intended to do anyway!* How does one describe so ironical a situation?)

Shortly I found myself saying, "Copilot, by revised schedule, set second rotation of first group." We were in "Sagan" orbit around Mars of Universe-zero (i.e., the one we had grown up in: Galactic coordinates X0, Y0, Z0, & t0 — Earth-zero, Mars-zero, Sun-zero, Universe-zero). I tend to think of this as the "real" universe even though I am aware that there is no evidence or mathematical theory for preferring one frame of reference over another — to do so is egocentric provincialism at its worst. But I offer this in mitigation: for us it was simplest and thereby helped us to avoid getting lost.

"Set," Copilot Zeb reported. I went forward, checked the setting (rotation around 'y,' with 'z' and 't' dropping out, null), then returned to my seat. "We can spare a minute to look at Mars. Deety, tilt the nose down to let us look. Do you know how?"

"Like this, Captain?"

"Right," I agreed. "Keep it up."

Deety raised the craft's nose and swung right, catching me with belts not yet fastened. I said forcefully, "Deety! What the hell are you doing?" while I floundered and grabbed.

"Sir, you ordered 'right' and 'up,'" Deety answered.

"I did no such thing!"

"But, Jacob — Captain — you *did* tell her that, I heard you."

"Hilda, you keep out of this!"

Hilda answered stiffly, "Captain, I respectfully request that you either relieve me of the conn, or that you give orders to my pilots through *me."*

"Damn it, you don't have the conn. *I* do."

"Then the Captain neglected to relieve me."

"Uh — Take the conn! Carry out the planned schedule."

"Aye aye, sir. Chief Pilot, orient the car for best view of Mars."

"Aye aye, Ma'am!"

I was fuming, not looking, hardly listening. I had said to Deety, All right, keep on with it — or had I? Gay could play it back… and could also check on Hilda's incredible allegation. If I were wrong (I felt certain I was not!), I would face up to it like a man and — Zeb broke in on my thoughts:

"Captain, do you care what attitude this craft is in at rotation?"

"No. Only for transitions."

"Hmm — Then it follows as the night from day thou canst not then predict the attitude we'll be in whenever we arrive in a new universe."

Only with respect to our arbitrary zero reference frame. Why should it matter?"

"It won't as long as we arrive with plenty of room. I've been noodling how to be sure of that. I don't see an answer. But I don't want to try translations or rotations parked on the ground. I hope the Captain won't order any."

"Copilot, I have no plans to. Astrogator, haven't we had enough sightseeing?"

"Very well, Captain," my wife acknowledged. "Deety, secure those binoculars. Zebbie, immediately after each rotation, set next rotation and report 'Set.' Deety, after each rotation, use voice program to put us through one Pigeon-Tumble with all lights out. I will watch to port, Deety forward, Zebbie starboard. Questions?"

I said, "Astrogator, you did not assign *me* a sector."

"I have no authority to assign duties to the Captain. Does the Captain wish to select a sector and assume responsibility for it?"

She waited. I said hastily, "No. Perhaps it will be best for me to watch in all directions. General supervision."

"Very well, Captain. Copilot — execute."

Again we rotated into darkness. Deety switched out all lights. Zeb reported, "Set!"

"Stop!" I called out. I added, "Zeb, you reported 'Set' in total darkness. How did you set it?"

"Rotation around 'z' axis, with 'x' and 'y' dropping out. Duration along *Teh.* Third combo first group, sir."

"I mean, 'How did you do it in darkness?' By clicks?"

"Captain, I didn't do it in darkness."

I said, "It was pitch dark when you reported 'Set."

"So it was, Captain."

"It's not necessary to call me 'Captain' every ten seconds. I want a straight answer. So far you have reported that you set it in darkness and that you set it with lights on."

"No, sir."

"God damn it, you just did!"

"Captain, I protest your swearing at me. I request that my protest be logged."

"Zeb, you are — " I shut up. I counted thirty in French under my breath, by which time I was ready to speak. "Zeb, I'm sorry that my language offended you. But I am still trying to find out what you did and how. Will you please tell me, in simple language?"

"Yes, sir. I set the third rotation by clicks —"

"But you said the lights were on — "

"The lights were on. I set the rotation with my eyes closed —"

"For God's sake, why?"

"For practice. I set them with eyes closed. Then I check to see whether it matches what I intended to set. Deety leaves the light on until I give her the 'kill it' sign. Then she kills the glim and does her act."

"Zeb, there wasn't *time* to do it that way."

Zeb gave a most irritating grin. "Captain, I'm fairly quick. So is Deety." I said, "Perhaps I had better check the setting."

Zeb made no answer; both women kept still. I began to wonder what everyone was waiting on… then realized that *I* was the "what." Unbelt and check on Zeb's setting? I remembered that irritating grin. So I said, "Deety, carry out the tumbling routine."

The somersault completed, I asked, "Anyone see anything?" Hilda said, "I… think so. Captain, could we do that again?" "Do it, Deety," I ordered.

Pigeon-Tumble resumed; Hilda suddenly said, "There!" and Deety snapped, "GayDeceiver*Stop!"*

I asked, "Hilda, do you still see it?"

"Yes, Jacob. A fuzzy star. You can see it if I pull back and you lean forward."

I suppose we each did so — for I spotted something. "I see it! Zeb — the binoculars, please."

An invisible hand pushed them against my neck. I got them lined up with difficulty, got that faint light, focused with great care. "It looks like a lenticular galaxy seen not quite edge on. Or it might be a family of galaxies. Whatever it is, it is a long way off. Millions of lightyears — I have no way of guessing."

"Can we reach it by transition?" asked Zeb.

"Possibly. I would set middle range on 'six,' then keep punching until it showed change in width. It might be possible to reach it in an hour or so. Do you want to look at it?"

"From your description, I don't think so," Zeb answered. "That is fossil light — isn't it?"

"Eh? Yes, the light has been traveling for millions of years."

"That's my point, Captain. We might find that those stars had burned out. Fossil light doesn't tell us anything we can use. Let's designate this 'Last Chance' and get out."

Eminently sensible — "Stand by to rotate. Copilot — execute!"

Blinding light — "Zeb! Rotate! *Execute!"*

Suddenly we were in a starry void, almost homelike. I heaved a sigh of relief. "Zeb, what did we fall into?"

"I don't know, Captain." He added, "I had my eyes closed, setting the next rotation by clicks. So I didn't get dazzled. But I never had a chance to check my setting by eyesight, either; I rotated at once."

"You got us out — thanks. I did get dazzled; I've got purple blotches in front of my eyes. New standing order: At each rotation all hands close eyes and duck heads for that moment needed to be sure that we have not again run into dazzle. Zeb, that need not slow you up since you are setting by touch and click anyhow — but if we do hit dazzle, rotate us out; don't wait for my orders. And — All Hands! — we are *all* free at all times to use any of the escape programs to get us out of danger."

"Next rotation set, Captain."

"Thank you, Copilot. Hilda, do you or Deety have any notion as to what we fell into?"

"No, Captain," my daughter answered.

"Captain Jacob, I have three hypotheses, none worth much."

"Let others judge that, my dear."

"Interior of a global star cluster — or near the nucleus of a galaxy, or — possibly — the early part of an expanding universe when new stars are almost rubbing shoulders."

"Hmm — Real garden spots. Zeb, could we have picked up excessive radiation?"

"Captain, the shell of this buggy is opaque to most radiation, and that windscreen is heavily leaded — but no way to tell."

"Zebadiah, if the film in the camera is ruined, some heavy stuff got through. If the next picture is okay, we're probably okay."

Hilda said, "I'm glad you thought of that, Deety. I don't like the idea of radiation while I'm pregnant. You, too, hon."

"Aunt Hilda, we're almost completely shielded where it matters. It could addle our brains but not our bellies."

"Hilda, do you wish to shoot one frame?" I asked.

"No, Jacob, it would waste film."

"As you wish. My eyes are coming back. Deety, put us through one Pigeon-Tumble."

My daughter did so; I saw nothing. "Report! Hilda?"

"Lots of big beautiful stars but nothing close."

"Me, too, Pop — but what a *beautiful* sky!"

"Null report, Captain."

"Hilda, mark it down as 'promising.' All hands, stand by for fifth rotation. Keep eyes closed and heads down. Execute!"

Zeb gasped. "Where in Hell are we?"

"In Hell, maybe, Zebbie."

"Captain!"

"Hilda may not be too far off," I answered. "It's something I could not have believed three weeks ago: some sort of inside-out universe."

"Pellucidar!" said Deety.

"No, my dear daughter. One: We are not inside our home planet; we are in another universe. Two: This universe has physical laws that differ from our own. The inside of a spherical shell cannot have a gravitational field *by the laws of our universe.* Yet I see a river and we seem to be falling toward it. Deety, are we in air or in vacuo?"

Deety wiggled the controls. "Got some air. Probably could get support with wings fully spread."

"Then do so." Deety brought the car into a deadstick glide.

Zeb said grimly, *"I* don't want to homestead here! So *big* — ten thousand kilometers across at a guess. Yet it's all *inside. No sky!* No horizons. Never again a night sprinkled with stars. That light in the center — Looks like our sun but it's too small, *much* too small. When we leave, I don't want to come back; the god who takes care of fools and explorers let us arrive in empty space instead of maybe ten kilometers underground. But next time — I hate to think about it."

I said, "It may not have been luck, Zeb, but logical necessity."

"Huh. You've lost me, Captain."

"You're thinking of this as a spherical shell. But there is no basis for assuming that it has an outside."

"What? Endless millions of lightyears of solid rock?"

"No, no! *Nothing.* By 'nothing' I do *not* mean space; I mean a total absence of existence of *any sort.* Different physical laws, a different topology. We may be seeing the totality of this universe. A small universe with a different sort of closed space."

"I can't visualize it, Jake."

"Deety, my dear, rephrase it for your husband."

"I'll try, Pop. Zebadiah, the geometry of this place may require different postulates from those that work back home. I'm sure you have played with Möbius strips —"

"A surface with only one side, one edge. But this is a sphere."

"Pop is saying that it may be a sphere with only one side, the inside. Have you ever tried to figure out a Klein bottle?"

"I got crosseyed and a headache."

"This could be a Klein-bottle sort of thing. It might turn out that if you tunneled straight down anywhere down there, you would emerge at the opposite point, still inside. And that straight line might be shorter than the distance across. Maybe much shorter."

"Point three-one-eight-three-zero-nine is the ratio by the simplest postulates," I agreed. "But the geometry may not be that simple. However, Zeb, assuming that this *is* a total universe, our chances of arriving in open space were far greater than the chance of conflicting with a mass. But I would not wish to homestead here — pretty as it is. Nevertheless we might check for obstetricians."

"No obstetricians," Zeb answered firmly.

"Why?" I demanded.

"If there are human beings here, they do *not* have an advanced culture. Deety has been following that river. Did you notice where that other river joined it? Also look ahead where it meets the sea. No cities. No warehouses. No river traffic. No air traffic, no signs of roads. Yet this is choice real estate. Therefore, no advanced culture anywhere and a small population, if any. If anyone wants to refute me, please do so in the next two minutes; Deety can't hold this heap in the air much longer without using juice."

"I check you, Zebbie. They *might* be so advanced that they can make the whole joint look like a park. I wouldn't bet on it."

"Deety?" I asked.

"Aunt Hilda is right, Captain. But it's *so* pretty!"

"Hilda, expend one film, as a souvenir. Then we rotate." My daughter nosed the car down to permit a better picture.

A click — "Got it!" Hilda cried. "GaySagan!"

Mars of Universe-zero lay to starboard. Zeb sighed. "I'm glad to be out of *there.* Sharpie, did you get a picture?"

"Can't rush it," my wife answered. "Nnnn, yup, picture coming."

"Good!"

"Zebbie, I thought you didn't like that inside-out world?"

"I don't. If that picture is sharp, you two knocked-up broads weren't hit by radiation where it counts. Any fogging?"

"No, Zebbie, and brighter color every second. Here — look."

Zeb brushed it aside. "My sole interest is in radiation. Captain, I'm having misgivings. We've tried five out of fifteen and only one was even vaguely homelike. The pickings have been slim and the dangers excessive. But we know that Earth analogs *Tau* and *Teh* axes are Earthlike —"

"With monsters," put in Hilda.

"Tau axis, probably. We haven't explored *Teh* axis. Jake, are we justified in exposing our wives to dangers we can't imagine?"

"In a moment, Copilot. Astrogator, why did you rotate? I don't think I ordered it. I have been trying to run a taut ship."

"So have I, Captain. I must ask to be relieved as astrogator."

"I am sorry to say that I have been thinking along the same lines, my dearest. But you had better explain."

"Captain, three times you have replaced me at the conn without relieving me. The last time I let it continue, wondering and waiting. Just now we were losing altitude, dangerously. So I acted. Now I ask to be relieved."

Hilda seemed calm and not angry. But resolved. Had I really done anything out of line? It did not seem so to me.

"Zeb, have I been overriding the officer at the conn?"

Zeb took too long to answer. "Captain, this is a time when a man must insist on written orders. I will make a written reply."

"Hmm — " I said. "I think you have replied. Deety, what do you think? More written orders?"

"I don't need written orders. Pop, you've been utterly *stinking!"*

"You really feel so?"

"I *know* so. Aunt Hilda is right; you are dead wrong. She understated the case. You assign her responsibilities — then ignore her. Just now she carried out her assigned duties — and you chewed her out for it. Of *course* she wants to be relieved."

My daughter took a deep breath and went on: "And you bawled her out for ordering a scram escape. Twenty-seven minutes ago you said — and I quote: 'All Hands! — we are *all* free at all times to use any of the escape programs to get us out of danger.' End of quotation. Pop, how can you expect orders to be obeyed when you can't remember what orders you've given? Nevertheless, we *have* obeyed you, every time and no back talk — and we've all caught hell. Aunt Hilda caught the most — but Zebadiah and I caught quite a bit. Pop, you've been — I won't say it, I won't!"

I looked out the port at Mars for long unhappy minutes. Then I turned around. "I've no choice but to resign. Effective as I ground her. Family, I must admit to great humiliation. I had thought that I was doing quite well. Uh, back to our streamside, I think. Gay —"

"GayDeceiverOverride! Not on your tintype! You'll serve as long as I did — not a second less! But Sharpie is right in refusing to take the conn under you; you've been mistreating her. Despite being a colonel, you have never learned that you *can't* assign responsibility without delegating authority to match — and then respect it. Jake, you're a *lousy* boss. We're going to keep you in the hot seat until you learn better. But there's no reason for Sharpie to resign over *your* failings."

"I still have something to say," said my daughter.

"Deety," Zeb said forcefully, "leave well enough alone!"

"Zebadiah, this is to you quite as much — or more — as it is to Pop. Complaints of another sort."

My son-in-law looked startled. "Oh. Sorry. You have the floor."

Chapter XXXI

" — the first ghosts ever to search for an obstetrician."

Hilda:

If Zebbie and Jacob have a fault in common, it is overprotectiveness. Having always been the runt, I am habitually willing to accept protection. But Deety rebels.

When Zebbie asked Jacob whether or not they were justified in exposing us to unknown dangers, Deety stuck her oar in — and Zebbie tried to hush her.

Zebbie should have known better.

But he is barely getting acquainted with her, whereas I've known her since her diaper days. Once when Deety was, oh, possibly four, I started to tie her shoes. She pulled away. "Deety do!" she announced indignantly — and Deety did: on one shoe a loose half bow that came apart almost at once, on the other a Gordian knot that required the Alexandrian solution.

It's been "Deety do!" ever since, backed by genius and indomitable will.

Deety told him, "Zebadiah, concerning completing this schedule: Is there some reason to exclude Hilda and me from the decision?"

"Damn it, Deety, this is one time when husbands *have* to decide!"

"Damn it, Zebadiah, this is one time when wives *must* be consulted!"

Zebbie was shocked. But Deety had simply matched his manner and rhetoric. Zebbie is no fool; he backed down. "I'm sorry, hon," he said soberly. "Go ahead."

"Yessir. I'm sorry I answered the way I did. But I do have something to say — and Hilda, too. I know I speak for both of us when I say that we appreciate that you and Pop would die for us… and that you feel this more intensely now that we are pregnant.

"But we have not been pregnant long enough to be handicapped. Our bellies do not bulge. They *will* bulge, and that gives us a deadline. But for that very reason we will either sample those rotation universes *today*… or we will *never* sample them."

"Why do you say 'never,' Deety?"

"That deadline. We've sampled five and, scary as some have been, I wouldn't have missed it! We can look at the other ten in the next few hours. But if we start searching *Teh* axis there is no way to guess how long it will take. Thousands of universes along *Teh* axis and it seems likely that each holds an analog of Earth. We may check hundreds before we find what we are looking for. Let's say we find it and Hilda and I have babies with skilled medical attention. Then what? Zebadiah, are you going to be *more* willing to take women with babies into strange universes than you are *without* babies?"

"Uh… that's not the way to put it, Deety."

"How would *you* put it, sir? Are you thinking that you and Pop might check those ten while Hilda and I stay home with the kids?"

"Well… yes, I suppose I am. Something of the sort."

"Zebadiah, I married you for better, for worse, for richer, for poorer, in sickness and in health. I did *not* marry to walk the Widow's Walk! Where you go, I go! — till death do us part."

"Deety speaks for me," I said, and shut up. Deety had it figured: If Jacob and Zebbie didn't finish those rotations today, they would have that "far horizons" look for the rest of their lives — and they wouldn't want us along. Not with kids. Sharpie wasn't going to hold still for that. No, sir!

"Deety, are you through?"

"Not quite, sir. All humans are created unequal. You are bigger and stronger than Pop; I am bigger and stronger than Hilda. I have the least years of experience; Pop has the most. Pop is a supergenius… but he concentrates so hard that he forgets to eat — unless he has a nursemaid to watch him — as Mama did, as I did, as Hilda now does. You, sir, are the most all-around competent man I've ever met, whether driving a duo, or dancing, or telling outrageous tales. Three of us have eight or nine earned degrees… but Aunt Hilda with none is a walking encyclopedia from insatiable curiosity and extraordinary memory. We two are baby factories and you two are not — but two men can impregnate fifty women — or five hundred. There is no end to the ways that we four are *un*equal. But in one supremely important way all of us are *equals.*

"We are pioneers.

"Men alone are not pioneers; they *can't* be. Pioneer mothers share the dangers of pioneer fathers and go on having babies. Babies were born in the *Mayflower,* lots were born in covered wagons — and lots died, too. Women didn't stay home; *they went along.*

"Zebadiah, I do not ask to be taken to those next ten universes —"

"It sounds like it."

"You didn't listen, sir. I would *like* to finish sampling those fifteen. It's my preference but not my demand. What I *do* demand I have stated: *Where you go, I go.* Today and to the end of our lives. *Unless you tell me to get out, that you don't want me anymore.* I have spoken."

"You certainly have, dear. Hilda?"

Fish or cut bait, Sharpie — what do you want? I didn't care; any new universe was bound to be strange. But Deety had laid down the party line; I didn't want to fuzz it up — so I answered instantly, "Deety speaks for me in every word."

"Jake? Back to my original question: 'Are we justified in exposing our wives to conditions we can't even imagine?"

"Zeb, you are the one who convinced me that it would be prudent to sample the universes accessible through rotation before searching by translation."

"True. But that was before we sampled five of them."

"I don't see that the situation has changed. An imaginable danger is not necessarily better than an unimaginable one; it may be worse. Our home planet had grave shortcomings *before* we tangled with the vermin. No need to list them; we all know that the Four Horsemen are ready to ride again. But I can think of a *very* close analog of our home planet that would be far worse than Earth-zero even if it didn't have a single 'Black-Hat' vermin on it."

"Go on."

"One in which Hitler got atomic weapons but we did not. I can't see that vermin are more to be dreaded than Hitler's S.S. Corps. The sadism of some human beings — not just Storm Troopers; you can find sadists in any country including the United States — is more frightening to me than any monster."

"Not to me!" Deety blurted it out.

"But, my dear, we don't know that those vermin are cruel. We got in their way; they tried to kill us. They did *not* try to torture us. There is a world of difference."

"Maybe there is, Pop, but those things give me the creeps. I'll bet they'd torture us if they could!"

"My very dear daughter, that's muddy thinking. How old are you?"

"Huh? Pop, you know if anybody does."

"I was reminding you of what you said: you have the least years of experience. I was much older than you are before I was cured of that sort of muddy thinking. By Jane, your mother. Hilda?"

"Jacob is telling you not to judge a book by its cover," I said. "I learned it from Jane, too, as Jacob knows. A creature's appearance tells nothing about its capacity for sadism."

Jacob said, "Does anyone have anything to add? Since it appears that I am not permitted to resign now, I must rule on it. We will complete the scheduled rotations." Jacob cleared his throat loudly, looked at Deety. "During my remaining hours in what Zeb so accurately calls the 'Worry Seat,' I will endeavor to keep my orders straight ... but, should I fail, I ask that my attention be invited to it *at once* — not saved up for a scolding later. Daughter?"

"Okay, Pop. Aye aye, Captain."

"Thank you, my dear. Is anyone tired or hungry?" No one spoke up; Jacob continued, "Hilda, will you take the conn?"

"No, Captain" — I'll omit the internal debate I held with myself; Jacob on his best behavior is hard to refuse.

"Very well, my beloved; I won't press you. It's an odd situation. Copilot, by schedule, set to rotate."

"Second group, first of four — set, sir."

"Check seat belts, stand by to rotate. Execute!"

We were in sunlight in a blue sky and upside down. For a few seconds we were thrown around a bit — Deety isn't the pilot Zebbie is. But she did get us leveled off. I heard Deety say, "Gay Deceiver."

"Hi, Deety!"

"Hold course, speed, and height-above-ground."

"Got it, girl!"

"You're a Smart Girl, Gay."

"But we *can't* go on meeting like this! Over."

"Roger and out, Gay. *Whew!* Time out while the Chief Pilot has a nervous breakdown. Zebadiah, what does that altimeter say?"

"Seven klicks H-above-G."

"Pop, what's the probability of winding up this close to a planet without getting killed?"

"Impossible to theorize, Deety. Maybe we're dead and don't know it. Copilot, deadman switch; I'm going to check the air."

"Captain!" I yelped.

"Not now, Hilda, I'm —"

"NOW! Am I still secondin-command? If I am, I must advise you; you are about to make a *bad* mistake!"

Jacob hesitated. I think he was counting. "My dear one, if I am about to make a bad mistake, I want your advice no matter what your status is."

"Thank you, Jacob. You should not be guinea pig. I should be. I —"

"Hilda, you're pregnant."

"All the more reason why I want the most competent and least expendable — you, Zebbie, and Deety — to take care of yourselves in order to take care of *me.* It's my duty as science officer in any case, whether I'm number two or not. But, Jacob, you are doing it just the way Zebbie did it when we landed on Marsten — and that's all wrong!"

"Thank *you,* Sharpie!"

"Zebbie dear! You risked your life and it's not necessary —"

Zebbie interrupted me. "Not necessary to waste juice this way! Yack-yack-yack!"

"Copilot, pipe down!" Jacob said sharply. "Gay Bounce! Chief Pilot, when we reenter, place the car on deadstick glide, manual or automatic. Don't use juice. Now, All Hands, listen to the Science

Officer. Go ahead, Hilda."

"Yes, Captain. Three days ago it was necessary for somebody to be the canary — but it should have been *me,* not Zebbie. What was necessary three days ago is reckless today. That deadman switch — Unless it has been rewired, it takes us back two klicks over a crater — and that's not what we want. The correct scram for this is T, E, R, M, I, T, E. But that's just half of it. Deety has taught the S.G. how to ground herself no-power on any level bit of ground. We can ground *first.* Then anyone can be guinea pig, doesn't matter. *Whoosh* back to our stream bank — *bang,* open the doors."

Zebbie said, "Captain, that makes sense. Sharpie — I mean 'Science Officer.' May I apologize with a back rub?"

"You can apologize with a kiss. But I'll take the back rub, too."

"Zebadiah, don't commit yourself too far; an air test isn't necessary. Pop! Captain Pop, may I take her up thirty klicks?"

"I suppose so. May I ask why?"

"Captain, I know where we are. From that high I can prove it."

"Deety, that's imp —"

"Don't say 'impossible,' Captain — I'll refer you to my father."

"Miss Smarty Pants. Take her up."

"Thanks, Pop. GayBounceGayBounceGayBounce. Gay Deceiver, vertical dive, execute. Everybody tell me where we are."

I had noticed earlier what pretty countryside was under us. Now I studied it in detail. Zebbie said, "Be durned. Big rectangular oasis completely surrounded by desert. Populated, too. That's a fair-sized town in the middle."

"Yes," I agreed. "Don't you recognize it, Zebbie? From a map."

My husband said, "Now, Hilda, this is an unexplored universe. How could you have seen a —"

"Pop!" interrupted Deety. "You've seen the map. See the Yellow Brick Road off to the left? Try the binoculars; you can follow it clear to Emerald City."

"Deety my love," said Zebbie, "you are out of your mind. Or I am. Either way, somebody call an ambulance. Don't forget the straitjacket. Sharpie, something worries me. I failed to get my warning… yet we came so close to hitting that real estate I'm still shaking."

"That means there wasn't any danger, Zebbie."

"Then why am I trembling?"

"You're a fraud, dear. We've all been dead quite a while now — killed in my parking lot. Deety and I may be the first ghosts ever to search for an obstetrician. In further support of my theory I am having a pregnancy with no morning sickness — a miracle that makes the Land of Oz as commonplace as faithful husbands."

"I don't think I want to analyze that. Is that the Castle of the Tin

Woodman there in the east?"

"Yes, but that's the west, dear. Deety, is that sun rising or setting?"

"Setting. Directions are reversed here. Everybody knows that."

"A retrograde planet," my husband commented. "Nothing dangerous about that."

"Pop, admit it. You know the Oz books almost as well as I do —"

"Better. Don't give yourself airs, Daughter. I agree that this appears to match stories and map, while trying to reserve judgment. Deety, how would you like to raise kids in the Land of Oz?"

"Pop, I'd love it!"

"Are you certain? As I recall, nobody dies in the Land of Oz yet the population doesn't increase. I don't recall babies being born in Oz stories. I don't recall M.D.'s or hospitals. Or machinery. Zeb, that inside-out universe had different physical laws from those of our universe. If we ground here, will we be able to leave? Oz works by magic, not by engineering." Jacob added, "Copilot, I want your professional opinion."

"Captain, you see a difference between magic and engineering. I don't."

"Oh, come now, Zeb!"

"I believe in just two things: Murphy's Law, and Place Not Your Faith in an Ace Kicker. Permit me to point out that we are *already* in the Land of Oz, even though at altitude. I can think of worse places to be stranded. No common cold. No income tax. No political candidates. No smog. No churches. No wars. No inflation. No —"

Deety interrupted. "We are now passing over the Palace of Glinda the Good."

"Why pass over it?" I asked. "Jacob, why aren't we grounding?"

"Me, too," Deety added. "Captain Pop, I request permission to ground near the Palace. I'm certain that nothing can upset Glinda the Good; she already knows about it from her Book. Besides, a palace that size must have plumbing… and I'm beginning to feel as if I had attended a watermelon picnic."

"Methinks a bush would suffice," said Zebbie. "Even in another universe and with an armed guard. How about it, Captain?"

"Chief Pilot, ground at will. Hilda, do the Oz books have bathrooms in them? I don't recall."

"Nor do I, Jacob," I answered. "But there are plenty of bushes."

In three or four minutes Deety had us grounded, with Gay using Deety's new program. I thanked my husband for deciding to ground. "There was never any doubt," he said. "Not only would you and Deety never have spoken to me again, *I* would never have spoken to *me* again. But if I meet a living scarecrow, I may go stark, raving mad."

Chapter XXXII

"Where Cat is, is civilization."

Deety:

I found a clearing in the woods, a hundred meters from the Palace and screened from it by elms and walnut trees. I had Gay range it, told her three times that it was a scram spot — then she landed herself, slick as Zebadiah.

I unstrapped, opened the bulkhead door, and crawled aft to get clean suits — and thought better of it. Aunt Hilda had followed me and headed straight for a special locker. I rolled into lotus and asked, "Hillbilly, what are you going to wear?"

"The dress I got married in and the wedding ring Jacob had made for me in Windsor City."

"Jewelry?"

"Nothing fancy."

Mama Jane told me years ago that Aunt Hilda's instinct for clothes was infallible. I got the dress I wore to hook Zebadiah, a pendant Pop had given me, my wedding ring, my dancing slippers. Put my darling in mess jacket? No, but in tights topped off with a white silk bolero shirt I made for him at Snug Harbor. Red sash, dancing pumps, jockey shorts — yes, that was all he needed.

I wiggle-wormed forward, clutching clothing. Our men were still in their seats, Gay's doors closed. I said, "Why the closed doors? It's warm and stuffy."

"Look out to the left," said Zebadiah.

I looked. A little storybook cottage with a sign over the door: **WELCOME.**

It had not been there when we grounded. "I see," I agreed. "Shuck off your work clothes and pull on shorts and tights. Pop, Hilda has your trousers."

"Deety, is that all you have to say?"

"What should I say, sir? Pop, you have taken us to some strange places. But in Oz I am not a stranger in a strange land. I know what to expect."

"But damn it all —"

"Shush, Zebadiah. One does not say 'damn' in Oz. Not any sort of profanity or vulgarity. These are no longer teats; they aren't even breasts — it's my bosom and I never mention it. Vocabulary limited to that of the Mauve Decade. Mildest euphemisms."

"Deety, I'm durned if I'll be anything but myself."

"Sir, I speak professionally. One does not use FORTRAN to a computer that knows only LOGLAN. Captain, can we open up?"

"Just a moment," my father put in. "Deety, you called me 'Captain.' But I resigned, effective on grounding."

"Wait a half!" Zebadiah interrupted. "You'll do *at least* as much punishment time as I did — you earned it, old buddy."

"All *right,"* Pop agreed, "but you decided that time on the ground counts. We'll likely need a new captain when we lift. Let's elect the victim now."

"Reelect Pop," I suggested. "He flunked and should do it over."

"Daughter!"

"Joking, Pop — as long as you bear in mind that you *did* flunk and *never again* give a captain a bad time. I nominate my husband."

"Let's do this right." Pop got out four file cards.

I wrote "Zebadiah" on mine, handed it to Pop. Hilda declared them, showing us each one: Deety — Deety — Deety — Deety. I gasped. "Hey! I demand a recount! No, a new election — somebody cheated." I made so much fuss that they let me have it. I wrote "Zebadiah" on my fresh ballot, placed it face up on the Chief Pilot's seat, placed the other three, one by one, on top of it, then declared them myself: Deety — Deety — Deety — then, *in my own handwriting:* Deety.

I gave up. (But resolved to have a word with the Wizard.)

It was a pretty cottage with a broad stoop and a climbing rose — but not to live in, just one room with a table and no other furniture. The table held a bowl of fruit, a pitcher of milk, four tumblers. There was a door to the right and a door to the left; the one on the left had painted on it a little girl in a sunbonnet, the other had a boy in a Buster Brown suit.

Hilda and I headed for the sunbonnet. I snatched a glass of milk and a bunch of grapes, and put on a milk moustache; I hadn't tasted milk in ages. Delicious!

Hilda was drawing a tub and had peeled off her dress. The window was open but up high, so I peeled off mine. We made ourselves clean and "beautiful," i.e., we restored our fanciest hairdos but without jewelry. Whatever we needed, that bath and dressing room had, from a sponge to lipstick Aunt Hilda's shade.

We hurried and did it in forty-two minutes. Zebadiah looked beautiful and Pop looked just as smart in dark trousers and a richly simple Aloha shirt.

"We thought you," said my husband, "had gone down the drain."

"Zebadiah, we took forty-two minutes. If you did it in less than thirty, you aren't clean."

"Smell me."

I sniffed him — a faint fragrance of soap, a touch of shaving lotion.

"You took more than thirty minutes. Kiss me."

"Thirty-six minutes, by my watch. Say 'Please."

I said "Please" and he caught me with my lips open, he always does. Zebadiah just suits me and I haven't been sulky with him and stubborn only when necessary.

There was a path toward the Palace. Pop, with Aunt Hilda on his arm, led off; we followed. Aunt Hilda was carrying her high-heeled sandals, so I took mine off, and glanced back toward the clearing. The little cottage was missing, as I expected. Zebadiah noticed it but said nothing. His face was an interesting study.

The grassy path debouched into a garden in front of the Palace; the path through it was hard, so Hilda and I put on our shoes. Glinda's Palace was more like a Norman chateau or Bertie's "Stately Home of England" than it was like those dreary castles on the Rhine — but it had fairyland grace, like the Taj.

As we started up the sweeping marble steps to the great doorway Zebadiah stumbled. "What the hell?"

"Sssh!" I said. "Language, dear. A magic staircase. Glinda would not make her guests climb. Pretend that Escher designed it. Look proud and walk as if they were level."

As we reached the broad landing two tall trumpeters stepped out of the great doorway, raised their long trumpets, and sounded four flourishes. An old man with a merry grin, a fringe of whiskers, a shiny bald head, a wooden left leg, and wearing a sailor's oilskins, came out as the flourishes ended. I wondered why he was here rather than Emerald City.

He took a pipe from his mouth and said, "Welcome to the Palace of Glinda the Good! I'm Cap'n Bill. You, sir, are Doctor Burroughs the Wizard, with your wonderful wife the Princess Hilda. You must be Cap'n Zeb Carter — Howdy, Cap'n! — and everybody knows Deety; she's spent so much of her life in Oz. Howdy, Deety! Last time I seen you you warn't more'n knee high to a tall duck. And now look at you! Almost up to my shoulder and *married!* Congratulations, Cap'n! Yer a lucky man!"

"I think so, Captain."

"I know so. Deety, Ozma sends her love and sez to tell you that you and your family are welcome in the Royal Kingdom as long as you like."

"Please thank Her Royal Majesty for me, Cap'n Bill." (Actually I'm taller than Cap'n Bill now — but of course I'll always be a little girl to him. It's nice.)

"Oh, I will, I will! Come inside, folks: we ain't formal here. Or I ain't. This ain't my reg'lar job; I'm standing this watch for a friend." He took my hand; his hand was horny and felt like Zebadiah's — and just as gentle.

He led us inside. "Where's Trot?" I asked.

"Around somewhere; you'll see her. Prob'ly picking out her best hair ribbon in your honor. Or maybe helping Betsy with Hank — little Betsy ain't happy unless she's workin'; Neptune knows that mule gets more attention than all the mules that ever came out of Mizzoura. This way to the Library, friends."

How does one describe Glinda the Good? Everyone knows that she is tall and stately and beautiful and never frowns and wears all day long what I think of as beautiful evening gowns with sweeping trains. But those are just words. Perhaps it is enough to say that, just as Dejah Thoris is the most beautiful woman of her world, the Sorceress is the most beautiful of hers.

She was surrounded by her bevy of the most beautiful girls from all over Oz. But Glinda outshone them all without trying. The name of the Egyptian Queen Nefertiti means both "beautiful" and "good," in one word; I think that explains Glinda.

She got up from her Great Book of Records and glided toward us — kissed Hilda first, kissed me and said, "Welcome home, Deety!" and I choked up and couldn't talk; I just curtsied. She offered a hand each to Zebadiah and Pop; they bowed simultaneously and kissed her hands.

She waved at chairs (that hadn't been there) and invited us to sit down. Zebadiah whispered, "You seem to own this place."

"Not really," I whispered back. "But I've lived in Oz longer than anywhere else" — Mama and Pop lived at several campuses while I was growing up but I always took Oz along wherever we moved.

"Well... I'm glad you made me dress up."

We were introduced to Glinda's girls and each one curtsied; it felt like being in Imperial House-except that these girls were neither compelled nor paid. When I stopped to think about it, I couldn't recall that money was used in Oz; it didn't have an "economy."

The girls were beautifully dressed, each differently but each girl's dress was predominately the color of her own country, Munchkin blue, Gillikin purple, Winkle yellow, a few in green. One girl in red — Quadling of course, where we were — looked familiar. I said to her, "Is your name Betty?"

She was startled. "Why, yes, Your Highness — how did you know?" She dropped a curtsy.

"I've been here before; ask Captain Bill. I'm not 'Your Highness'; I'm just Deety. Do you have a friend named Bertie?"

"Yes, Your — Yes, Deety. He's not here now, he's at the College of Professor Wogglebug." I made note to tell Betty about it... someday.

I can't tell all about everyone we met at Glinda's Palace; there were too many and more kept arriving. Everyone seemed to expect us and pleased to see us. Pop did not go stark, raving mad when he met the Scarecrow because he was already deep in conversation with Professor H. M. Wogglebug and with Oz the Great, Royal Wizard to Queen Ozma — Pop was barely polite, shook hands and said, "Howd'you do, Mr. Scarecrow," and went right on talking to Professor Wogglebug and the Wizard. I'm not sure he looked at the Scarecrow. He was saying, "You put it neatly, Professor. I wish Professor Mobyas Toras could hear your formulation. If we set alpha equal to zero, it is obvious that —"

I wandered off, because when Pop says, "It is obvious that — " what is really obvious is that Deety should leave.

Dinner was in the banquet hail and the crowd of guests exactly filled it — Glinda's banquet hall is always the right size for the number of persons eating there — or not eating, as the case may be, for Jack Pumpkinhead, Tik-Tok, the Tin Woodman, the Sawhorse, the Scarecrow, and other people who don't eat were seated there, too, and also people who aren't human people: the Cowardly Lion, the Hungry Tiger, the Woozy, the King of the Flying Monkeys, Hank, Toto, and a beautiful longhaired cat with supercilious manners.

Glinda the Good was at the head of the table at one end and Queen Ozma was at the head at the other end. Pop was on Glinda's right and Zebadiah was on Ozma's right. The Wizard was on Glinda's left, and Professor Wogglebug was on Ozma's left. Aunt Hilda and I were opposite each other at the middle of the long table. She had the Tin Woodman on one side and the Scarecrow on the other and was doing her best to charm both of them and both were trying to charm her and all three were succeeding.

I had three dinner companions. I started with two, the Cowardly Lion and the Hungry Tiger. The Lion ate what others ate but the Tiger had a bowl of cornflakes the size of a small washtub and ate from it very tidily with a spoon that matched the bowl. The Cowardly Lion and I had just started seafood cocktails when this cat brushed against my leg to get my attention, looked up and said, "You smell like a cat person. Make a lap, I'm coming up" — and jumped.

I said, "Eureka, do you have Dorothy's permission?"

"What a silly way to talk. Dorothy must get *my* permission. Feed me the lobster first, then the shrimp. You may have the last piece of shrimp for yourself."

The Hungry Tiger put down his big spoon and said, "Highness, may I abate this nuisance?"

"Don't trouble yourself, Old Boy," the Lion said. "I'll abite it instead, in one bite. But please pass the Tabasco sauce; cats have so little taste."

"Pay no attention to those peasants, wench, and get on with the lobster. Animals should not be allowed to eat at the table."

"Look who is calling whom an animal," growled the Cowardly Lion.

"It's not an animal, Leo," the Hungry Tiger objected. "It's an insect. Highness, I'm a vegetarian — but I would be happy to break over this once and slice it into my cornflakes. Shall I?"

"Dorothy wouldn't like it, Rajah."

"You have a point, Ma'am. Shall I ask Toto to chase it out?"

"Eureka may stay. I don't mind."

"Wench, the correct answer is 'I am honored.' Ignore these jungle beasts; they are not cats. Be it known that *Felis domestica* has been civilized more generations than all you lesser breeds combined. As my serene ancestress, Bubastis, Goddess of the Nile, was wont to say: 'Where Cat is, *is* civilization.' Hurry up with that lobster."

So I hurried. Eureka accepted each bit daintily, barely flicking my finger tips with her scratchy tongue. At last she averted her mouth. "Don't overdo it; I'll tell you when I require more. Scratch behind my left ear — gently. I shall sing, then I shall sleep. Maintain a respectful silence."

I did as ordered. Eureka purred very loudly. As the buzzing gave way to soft snores I slowly stopped scratching. I had to eat with one hand; the other was needed to keep her from falling.

As Aunt Hilda has placed a record in Gay by interviewing all of us and combining it, I will stick to essentials. After the rest had gone home or retired to their rooms we four were invited into the Library. It was smaller than it had been, cozy, as Glinda's girls had gone to their rooms. Glinda was at her Great Book of Records as we were ushered in; she smiled and bowed without getting up as we sat down.

"Friends," she said, "Doctor, Captain, Princess Hilda, and Deety, I will save time by telling you that, during the dancing, I conferred with Ozma, the Wizard, and Professor Wogglebug. I had studied the Records of your strange adventure, and I read a résumé to them before we discussed your problems. First, let me say that Ozma repeats her invitation. You are welcome to stay here forever; you will find hospitality wherever you go. Deety knows this, and Princess Hilda knows it, too, although she is not as sure of it as Deety is.

"But to reassure you gentlemen, the Wizard and I have made the Land of Oz one quarter inch wider in all directions, a change too small to be noticed. But you, Doctor, will recognize that this provides ample Lebensraum for four more good people, as well as for your sky chariot Miss Gay Deceiver. A quarter of an inch, Captain, is six and thirty-five hundredths millimeters.

"While we were about it, on the advice of Professor Wogglebug, we made small changes in Miss Gay Deceiver — "

Zebadiah gave a start and looked upset. Gay was his sweetheart long before I was; he takes care of her as carefully as he takes care of me. But he should have trusted Glinda.

Glinda smiled warmly. "Don't be alarmed, Captain, no harm has been done to the structural integrity or to the functioning of your beloved craft. When you notice — you will notice — if you do not like the changes, all you need do is to say aloud, 'Glinda, change Miss Gay Deceiver back the way she was.' I will read it here in my Book and will carry out your wish. But I do not think that you will ask me to do this. That is not prophecy; a good witch does not prophesy. But it is my firm opinion.

"Now to major matters — There are no 'Black Hat' vermin in Oz. Should one be so foolish as to come here, I would know it from my Book, and it would be ejected into the Deadly Desert. What would happen to it there, the less said, the better — but evil is not tolerated in Oz.

"As to the problem of vermin in your home world, it does not lie in Ozma's jurisdiction. My powers are limited there. While my Great Book tells me what happens there, it does not distinguish between vermin disguised as human beings and human beings who by their nature are evil. I could cast a spell over you which would keep you away from all 'Black Hats.' Do you wish that?"

Pop glanced at Zebadiah; my husband said, "Just a moment, Glinda the Good. Just what does that mean?"

"Spells are always literal, Captain; that's why they can cause so much trouble. I rarely use them. This one means what I said: You would be kept away from any vermin of the sort you call 'Black Hats."

"In that case we couldn't recognize one, could we? Or get close enough to destroy it."

"I think one would have to devise ways to do each at a distance. Spells do not reason, Captain. Like computers, they operate literally."

"Could they recognize *us?* Boobytrap us? Bomb us?"

"I do not know, Captain. My Book records only what they *have done,* not what they *may do.* Even then, as I have said, the Records do not unmask a disguised 'Black Hat.' Therefore, I know little about them. Do you wish the spell? You need not decide at once. If you remain in Oz, you won't need it."

I blurted out, "We ought to stay here!"

Glinda smiled at me, not a happy smile. "Dear Deety — You have decided not to have your baby?"

"Huh? I mean, 'Excuse me, Glinda?'"

"You have been in Fairyland more than the others. You know that your little girl will not be born here… just as no one ever dies here."

Aunt Hilda spoke up so quickly I couldn't get a word in. "Glinda, thank you very much but I will not be staying."

I gulped. "I won't be staying, either, Aunt Glinda."

"So I suspected. Do you want my advice, dear?"

"Yes. Certainly!"

"Having decided to be a woman and not a little girl like Dorothy or Trot, leave here *quickly*… lest you be tempted to stay in Fairyland forever."

Pop glanced at Zebadiah, then said, "Madame Glinda, we'll be leaving in the morning. We are grateful for your lavish hospitality… but I think that is best."

"I think so, too, Doctor. But remember: Ozma's invitation stands. When you are weary of the world, come here for a holiday and bring the children. Children are happy here and never get hurt. Oz was designed for children."

"We will, we certainly will!"

"Is there anything more to discuss? If not… "

"Just a second!" put in Aunt Hilda. "You told Deety — will you tell *me?"*

Glinda smiled. "My Book states that you are growing a boy."

Chapter XXXIII

" — 'solipsism' is a buzz word."

Zeb:

I didn't sleep with Deety that night. I didn't plan it that way. A footman showed me to a room; Deety and Hilda were standing at the top of the stairs (more magical stairs — okay as long as you don't look down) and talking excitedly, with Jake nearby.

When I saw that the room had only a single bed, the footman had vanished. I stepped outside; Deety and Hilda and Jake were gone, the upper hall was dark. So I said a word one mustn't use in Oz and went back into my room. Even a single bed looked inviting; I went to sleep at once.

Glinda had breakfast with us, in the banquet hail, considerably shrunken. The food in Imperial House is wonderful, but you can't beat ham and basted eggs and toast and jelly and fresh orange juice. I drank three cups of coffee and felt ready to rassle alligators.

Glinda kissed Deety and Hilda goodbye at the top of those Escher steps, and Jake and I bent over her hands. She wished us good luck… which must mean more from *her*.

Gay Deceiver looked good in morning sunlight. Tik-Tok was standing at her nose. "Good morning," he said. "I have been con-ver-sing with Miss Gay De-cei-ver all night. She is a ve-ry Smart Girl."

"Howdy, Zeb."

"Howdy, Gay. What have I told you about picking up strange men?"

"You've told me nothing, Zeb. And Tik-Tok is not a strange man. He is a gentleman, which is more than I can say for some people."

"Tru-ly, Captain, I meant no im-pro-pri-e-ty."

"Just kidding, folks. Thanks for keeping Gay company, Tik-Tok."

"It was a pleasure and a pri-vi-lege. I arranged with the night watchman to wind me up each hour in or-der that our con-ver-sa-tion be not a-brupt-ly ter-mi-nat-ed."

"Smart of you. Thanks again and we'll see you again. We'll be back for a visit, first chance. Gay, open up."

"You didn't say 'Please,'" my autopilot answered, but she opened her doors.

"I am de-ligh-ted to hear that you are re-tur-ning. Miss Gay De-cei-ver and I have much in com-mon."

Sharpie said goodbye to Tik-Tok, went inside. Deety not only said goodbye but kissed his copper cheek — Deety would kiss a pig if the pig would hold still for it (if he didn't, I would turn him into sausage;

kissing Deety is not to be scorned).

Hilda reappeared, still in evening gown. "Deety, come here. Hurry!"

I shook hands with Tik-Tok (odd!) and suggested that he back off a little. Then I went inside. No sign of our wives — I called to them, "Shake it up in there. I want a pilot suit."

Deety called out, "Zebadiah, wiggle your way through the bulkhead."

"I can't change clothes back there."

"Please, dear. I need you."

When Deety says she needs me, I go. So I wiggled through, and the space didn't seem as cramped as it had been when I was working on it at Termite Terrace. "Where are you?"

"In here. Port side," came Deety's muffled voice. I turned around, banging my head, and found a door where a door shouldn't be. I had to stoop but once through it I could stand up. A room slightly bigger than a telephone booth — a door aft, a door forward, Sunbonnet Sue to the left, Buster Brown to the right. Deety opened the door on the left. "Come look!"

A luxurious dressing room and bath — "It's the same one as in the 'Welcome' cottage," said Deety, "except that the window is frosted and doesn't open. But the air is fresh."

I said "Hmmm — " Then I added, "Well, well!" I checked out Buster Brown. Yes, the same bathroom Jake and I had used yesterday.

Jake stuck his head in. I said, "Perfesser, give me the benefit of your wisdom."

"Zeb, I'm fresh out."

"Jake — your opinion, please. Is this craft ready for space?"

"Zeb, I don't know."

"Let's check the outside."

We went over the shell with eyes and fingers, port and starboard. That car was unblemished — coutside. But from inside I heard a toilet flushing.

I went inside, on back, still on back, and knocked on Sunbonnet Sue. Sharpie let me in. "Just leaving, Zebbie," She had elected to wear one of her new jump suits and looked like a Cracker Jack prize. "Deet' is about ready."

"Wait a half, Sharpie. Jake and I have decided to trust Glinda."

"Was there any doubt?"

I stepped inside; Deety twisted around at the dressing table, smiled through a mouthful of bobby pins. "Your father and I have approved this craft for space — tentatively — Captain Deety."

"I approved it at breakfast — and not tentatively. What do you have there, dear one?" She accepted a list from me, read it over:

Name	*Duty*	*Additional and/or Relief Duty*
D. T. B. Carter	Commanding	
Hilda S. Burroughs	2nd in Command & Navigator	Science Officer & Chef
Z. J. Carter	Chief Pilot	Relief Navigator
J. J. Burroughs	Copilot	Sous-Chef

"It's intended to make your life easier, Cap'n Deety. Jake didn't get the going-over he should have had. But with Jake in the righthand seat and me over him, I can keep him in hand — and he'll be so busy with his verniers that he won't have time to talk back. 'Sous-Chef' is a fancy way of saying that he'll be under his wife's thumb when we're grounded."

"It's well thought out, Zebadiah. Thank you."

"Suits you?"

"Let me study it."

I got fidgety, ducked into Buster Brown and killed time until she called me. "Slight revision, Zebadiah."

Name	*Duty*	*Additional and/or Relief Duty*
Deety	Captain	Instructor Computers
Zebadiah	2nd in Command & Chief Master at Arms	Instructor Duo, Air
Jake	Chief Pilot	Instructor Verniers
Hilda	Copilot	Science Officer & Executive Chef

Note: Cooking will rotate D-J-Z unless changed by the Executive Chef.

"A 'Slight revision'!" — I felt offended.

Deety looked at me anxiously. "I'm submitting it for your advice, Zebadiah. I want to continue Pop's policy of everybody learning every job, at least well enough to limp home. Hilda will learn the verniers quickly; she's deft, she doesn't have to be told twice, and the inventor I have placed at her elbow. Pop needs practice in air; he isn't as good as he thinks he is and he's never driven a car this fast. You'll be behind him, ready to bounce him out of trouble. Dear — will it work?"

I was forced to admit that Deety's T.O. was better than mine.

"It's better than mine, so you owe me a forfeit. Where are my handcuffs and nightstick?"

"As secondin-command you are vested with the duty to keep order and to see that the commanding officer's orders are carried out, are you not?"

"Of course, Deety — *Captain* Deety — why rub their noses in it?"

"You know why, Zebadiah. I am reminding everyone that I mean to have a taut ship — and no back talk! You don't need handcuffs or a club. But in that righthand dressing-table drawer is a ten-centimeter roll of adhesive tape — the size gangsters use for gags."

"Oh. Oho!"

"Zebadiah! *Don't* use it without my direct order. I shall maintain a taut ship. But when I've served my time, I would *much* rather my father was still speaking to me. It's a last resort, my husband. A sharp *Pipe-down* from you is all P — anybody will ever need. I intend to keep you at the conn most of the time — unless you ask me to relieve you, or I tell you I want to conn something personally."

"Suits."

"Very well, sir. You have the conn. Give them their assignments, prepare the car for space, take the reports, let me know here when you are ready. Revision in plan: Take us straight up one thousand klicks. Let us look at Oz from a distance, then continue by plan."

"Aye aye, Captain." I started to leave while thinking that Deety might leave a reputation equal to that of Captain Bligh.

"Zebadiah!"

"Yes, Captain?"

"Don't go 'way without kissing me or I *won't take* the bloody job!"

"I didn't realize that the Captain cared to be kissed."

"Captains need kisses more than most people," she answered, her face muffled against my shoulder.

"Got a fresh new stock. Will there be anything else, Ma'am?"

"Yes."

"What?"

"When I've served my time, will you use your influence to put me on the verniers? And — sometime — will you teach me supersonic?"

"Verniers, yes. Supersonic — A man who takes his wife as a pupil is breeding a divorce. Gay will teach you supersonic if you will let her. At super-or hypersonic she's safest on autopilot. She won't hurt herself — but if you override, you may hurt her, she may hurt you."

"But *you* override. How am I to learn?"

"Easy. Give her a program. Leave it loose enough for her to correct your goofs. Keep your hands and feet *very lightly* on the controls. Be patient, and eventually you'll be part of Gay and Gay will be part of you. Shut up and kiss me."

Captains kiss better.

Ten minutes later we were ready for space. I asked, "Did anyone leave anything in our annex?" I wasn't thinking about it; Jake had reported: "Juice one point zero — *full* capacity!"

"Hilda and I hung up our dresses."

"Captain, do you realize that our magical space warp will probably go back wherever it came from the instant we leave?"

"Want to bet? Glinda wouldn't pull a trick like that."

"It's your dress, Cap'n. But your exec advises you officially to warn all hands never to leave anything essential in there during maneuvers." I wiped the matter from my mind; Deety would do it her way. "Gay, are you going to go on being talkative on your own?"

"Zeb, back on watch, I'll be strictly business. But a girl is entitled to a night out once in a while."

"You're a Smart Girl, Gay."

"So Tik-Tok told me, Zeb."

"Roger and out, Gay. Sharpie, set transition one thousand klicks H axis, plus."

"A thousand kilometers straight up, minimum-range scale, vernier setting three. Jacob, will you check me, please?"

Jake reported the setting correct; I snapped, "Execute!"

Jake put her nose-down: an Earthlike planet so covered with haze that I could make out no details other than straight down, where Oz was still sharp and framed by the impassable deserts. "Sharpie, please hand me the binox, then shift hats to 'Science Officer' and find out whether or not our new addition came along."

I had to help her undog the bulkhead door — Sharpie, in free fall, can't brace herself to apply enough torque to loosen a dog I had fastened on the ground. Meanwhile Deety had been using the binox. "Zebadiah, it's hazy everywhere but below us. Emerald City shines out green as Erin, and Glinda's Palace gleams in the sunshine. But the rest might as well be Venus. Only it's not."

"Daughter — Captain, I mean — have you looked at the stars?" Jake added, "I think it's our own universe."

"It is, Pop? On which side of Orion is the Bull?"

"Why, on — Jesus, Allah, and Zoroaster! It's turned inside out!"

"Yes, but not the way that other inside — out place was. Like Oz itself. East for west."

I asked my wife, "Captain Deety, is there anything odd about duration here?"

"Doesn't *feel* odd. But it's been about a century since those three little girls moved to Oz. I don't know what it feels like to them, and I carefully didn't ask. Did anybody notice that there were no clocks and no calendars?"

"Zebbie!"

"Yes, Sharpie?" I answered.

"Our new plumbing works just dandy. Be careful going in; it's *not* free fall; the floor is *down.* I did a spectacular somersault."

"Hilda my love, are you hurt?"

"Not a bit, Jacob. But next time I'll hang on to something, pull myself down even with the deck, and slide in."

"Science Officer, secure all doors, return to your seat and strap down. Then swap hats and set next rotation by schedule."

"I fastened the doors. I'm dogging the bulkhead door. Okay, I'm strapping down. Where are the binoculars?"

"Jake stowed them. All hands, stand by to rotate."

Another totally black one — I said, "Captain, we'll tumble now unless you prefer to check our new plumbing first."

"Plumbing isn't Deety's job! I'm Science Officer and that includes hygiene, plumbing, and space warps."

Deety said to me, "I relieve you, dear" — then more loudly, to Hilda: "Copilot, pipe down. Pop, dowse the lights and tumble us. Aunt Hillbilly, attempt to set next rotation by touch and sound, in the dark. That's number eight, third of second group."

"Aye aye, Captain Bligh."

The tumble showed nothing. Jake switched on lights, reported that Sharpie had set the next rotation correctly. Deety asked me to relieve her at the conn, then said, "Science Officer, I am about to inspect the addition to your department; please accompany me." Without a word Sharpie did so.

They were gone quite a while. At last I said, "Jake, what do women talk about in can conferences?"

"I'm afraid to find out."

They came back full of giggles; I concluded that Deety's disciplinary methods worked. As they strapped down, Deety said, "Dear, it's black as sin out there — and sunlight streaming in both bathroom windows. Riddle me that."

"Science Officer's department," I evaded. "Stand by to rotate."

This time Jake not only had air, I could *hear* it. Jake got her leveled out hastily. "Copilot, H-above-G!"

"Thirteen hundred meters."

"Too close! Zeb, I'm going to retire and take up tatting. Where are we? I can't see a thing."

"We're over water, Pop, with a light fog. I see a shoreline to starboard." Jake turned Gay to the right, I picked out the shoreline. Gay's wings were spread; Jake held her at an easy glide and placed her on automatic. "We'll leave this kite sealed now; I won't check the air without going up high."

"Sail ho!"

"Where away, Sharpie?"

"Starboard bow. A sailing ship."

Durn if it wasn't. A square-rigger out of the seventeenth century, high forecastle and sterncastle. Jake took us down for a better look. I wasn't afraid; people who sail ships like that don't use guided missiles — so I kept telling myself.

It was a pretty sight. Jake dropped the starboard wing so that we could have a good look. But we must not have been a "pretty sight" to them; sailors were rushing around and the helmsman let her get away from him and she fell into irons, her canvas flapping foolishly. Not wanting to get the poor fellow keelhauled, I told Jake to level off and head for land.

Deety said, "Good God, Pop, you scared me silly."

"Why, Deety? — Captain Deety. *They* were scared-but surely you aren't scared by black-powder cannon?"

"You almost put the starboard wing into the water."

"Don't be silly, Deety; I was above two hundred meters. Well, maybe a hundred and fifty when I did that steep turn. But plenty of room."

"Take a look at your altimeter. And pressure."

Jake looked and so did I. The radar altimeter stated that we were nineteen meters above the water; Jake had to change scales to read it. Pressure showed well over a thousand millibars — a sea-level high. So I snapped, "Gay Bounce!"

Gay did and I caught my breath.

"Deety, how did I make that error?" Jake asked.

"I don't know, Pop. I can see the right wing tip; you can't. When it looked to me as if you might cut the water, I looked at the instruments. I was about to yell when you straightened out."

"Captain, I was driving seat-of-my-pants by the ship's masts. I would swear I never got within three hundred meters of that ship, on the slant. That should put me plenty high."

Sharpie said, "Jacob, don't you recognize this place?"

"Hilda, don't tell me you've been here before?"

"Only in books, Beloved. A child's version in third grade. A more detailed version in junior high. Finally I laid hands on the unexpurgated version, which was pretty racy for the age I was then. I still find it pleasantly bawdy."

"Sharpie," I demanded, "what are you talking about?"

Jake answered. "Zeb, what sort of ship could cause me to think I was high in the air when in fact I was about to pole-vault into the sea?"

"I've got it!" said Deety.

"I give up," I admitted.

"Tell him, Pop."

"One manned by sailors fifteen centimeters high."

I thought about it. We were approaching land; I told Jake to glide to two klicks *by instrument* and told Gay to hold us there — it seemed much higher. "If anyone runs across Dean Swift, will you give him a swift kick for me?"

Deety said, "Zebadiah, do you suppose the land of the giants — Brobdingnag — is on this continent?"

"I hope not."

"Why not, dear? It should be fun."

"We don't have time to waste on either Lilliputians or giants. Neither would have obstetricians able to take care of you two. Sharpie, get ready to take us up a hundred thousand klicks. Then to rotate. Does anyone have any theory about what has been happening to us? Aside from Sharpie's notion that we are dead and don't know it?"

"I have another theory, Zebbie."

"Give, Sharpie."

"Don't laugh — because you told me that you and Jacob discussed the heart of it, the idea that human thought exists as quanta. I don't know quanta from Qantas Airways, but I know that a quantum is an indivisible unit. You told me that you and Jacob had discussed the possibility that imagination had its own sort of indivisible units or quanta — you called them 'fictons'-or was it ficta? Either way, the notion was that every story ever told — or to be told if there is a difference — exists somewhere in the Number of the Beast."

"But, Hilda my love, that was merely abstract speculation!"

"Jacob, your colleagues regard this car as 'abstract speculation.' Didn't you tell me that the human body is merely complex equations of wave forms? That was when I bit you — I don't mind being a wave form, waves are pretty; I bit you for using the adverb 'merely."

"Zebadiah, there is a city on the left. Shouldn't we look at it before we leave?"

"Captain, you must decide that. You saw what a panic we caused in that ship. Imagine yourself fourteen centimeters tall and living in that city. Along comes a great sky monster and dives on you. Would you like it? How many little people will faint? How many will die of heart failure? How many are you willing to kill to satisfy your curiosity?" I added, "To those people we are monsters worse than 'Black-Hat' vermin."

"Oh, dear! You're right, Zebadiah — dismally so. Let's get out of here."

"Copilot, set to transit straight up one hundred thousand klicks."

"Transition 'H' axis, positive, vernier setting five — set!"

"Execute." I continued, "Captain, I'd like to sit here a while."

"Very well, Zebadiah."

"Sharpie, let's hear your theory. Captain, I've been scared silly by too many narrow escapes. We know how to translate from one Earth-analog to the next; just use plenty of elbow room. But these rotations are making me white-haired. The laws of chance are going to catch up with us."

"Zebbie, I don't think the laws of chance have anything to do with it. I don't think we have been in any danger in any rotation."

"So? Sharpie, I'm about to swap jobs with you as quickly as I can get the Captain's permission."

"No, no! I —"

"Chicken!"

"Zebbie, your hunches are part of why I say that the laws of chance are not relevant."

"Sharpie, statistical laws are the most firmly established of all natural laws."

"Do they apply in the Land of Oz?" asked Deety.

"Uh — Damned if I know! *Touché!"*

"Zeb, Hilda has not expressed it as I would; nevertheless I agree with her.) To call the equations used in statistics 'laws of nature' is a misnomer. Those equations measure the degree of our ignorance. When I flip a coin and say that the chance of heads or tails is fifty-fifty, I am simply declaring total ignorance as to outcome. If I knew *all* conditions, the outcome *might* be subject to precalculation. But we have experienced two universes having physical laws unlike those of our home universe."

"Three, Jacob. Lilliput makes three."

"I don't follow you, my dear."

"The cube-square law that runs through all biology does not apply here. A human brain can't be placed in a space the size of a thimble by our biophysical laws. But we're getting away from the theory Zebbie wanted me to expound. Shall I go on?"

"Yes," Deety ruled. "Everybody shut up but Aunt Hilda. I'm zipping my own lip. Hillbilly — proceed."

"All right. It's not chance that we have been in three universes — InsideOut, the Land of Oz, and Lilliput — in ... less than twenty-four hours, isn't it, Deety?"

"Less than twenty-one, Aunt Hilda."

"Thanks hon. It's not chance that those three are 'fictional' universes — I have to call them that for lack of a better word — well known to each of us. By coincidence — and again I don't have a good word but it's not 'chance' — all four of us are addicted to fanciful stories. Fantasy. Fairy tales. We all like the same sort of stories. How many of us like detective stories?"

"Some — not all," said Deety.

"My sole loyalty is to Sherlock Holmes," I said.

"Waste of time," said Jake.

"I'd like to try an experiment," Hilda went on. "Write down the twenty stories you have enjoyed most. Or groups of related stories — the Oz books would count as one, so would the Edgar Rice Burroughs Mars series, and so would the four voyages of 'Gulliver's Travels.' Make them stories you reread for pleasure when you are too tired to tackle a new book."

"Sharpie, is it cheating to ask how you mean to use this?"

"No, Zebbie. If my theory is right, the next time we rotate and find ourselves near a planet, it will turn out to be the scene of a story or group of stories that appears on all four lists. We'll arrive high enough that Jacob will have plenty of time to level off but close enough that we can ground. But we will *never* rotate into a mass or any danger that we can't handle. This isn't *chance;* we haven't been dealing with chance. The Land of Oz surprised me. Lilliput didn't surprise me at all; I expected it. Or at least a place that all of us know through Stories."

"How about those empty universes?" I demanded.

"Maybe they are places about which stories will be written or maybe stories have already been told but aren't favorites of us four, so we don't emerge close to their scenes. But those are guesses. So far as my theory is concerned, such Universes are 'null' — they don't count one way or the other. We find *our* universes."

"Sharpie, you have just invented pantheistic multiperson solipsism. I didn't think it was mathematically possible."

"Zeb, *anything* is mathematically possible."

"Thanks, Jacob. Zebbie, 'solipsism' is a buzz word. I'm saying that we've stumbled onto 'The Door in the Wall,' the one that leads to the Land of Heart's Desire. I don't know how and have no use for fancy rationalizations. I see a pattern; I'm not trying to explain it. It just *is."*

"How does that hollow world fit your theory?"

"Well, Deety called it Pellucidar —"

"It was!"

" — but I've read dozens of stories about worlds underground; I'll bet all of us have. Jules Verne, S. Fowler Wright, H. G. Wells, C. L. Moore, Lovecraft — all the great masters of fantasy have taken a crack at it. Please, can we stop talking? I want all four lists before we rotate again."

Jake changed attitude so that Lilliput's planet was dead ahead and told Gay to hold it there. The planet looked very small, as if we were a million kilometers out — reasonable, I decided, and wrote down "The Dorsai yarns."

At last Deety announced, "I'm through, Aunt Hillbilly."

Soon after, her father handed Sharpie his list. "Don't count those I've lined out, dear — I had trouble holding it down."

"'Twenty' is arbitrary, Jacob. I can leave your extras in."

"No, dear, the four I eliminated do not stand as high as the twenty I retained."

After some pencil-chewing I announced, "Sharpie, I'm stuck at seventeen. Got a baker's dozen more in mind, but no choice."

"Seventeen will do, Zebbie — if they are your prime favorites."

"They are."

Hilda accepted my list, ran her eye down it. "A psychoanalyst would have a wonderful time with these."

"Wait a half! Sharpie, if you're going to let a shrink see those lists, I want mine back."

"Zebbie darling, I wouldn't do that to you." She added, "I need a few minutes to tally."

I glanced at Lilliput. "Need help?"

"No. I've tallied a 'one' after all on my list. I've checked Deety's against mine and tallied a 'two' where they match, and added to the bottom of my list, with one vote tallied against each, those she picked but I didn't. I'm doing the same with Jacob's list, tallying three's and two's and one's. Then Zebbie and we'll wind up with a four-vote list — unanimous — and a list with three each — and a list with two, and with one."

Sharpie kept busy some minutes, then took a fresh sheet, made a list, folded it. "This should be in a sealed envelope to establish my reputation as a fortuneteller. Zebbie, there are nine soidisant fictional universes listed. Any close approach we make by rotation should be near one of them."

I said, "You included Pellucidar?"

"Pellucidar got only two votes. I stick to my theory that the inside-out world is a composite of underground fantasies. But our vote identified that third universe — the blinding lights, the one that worried you about radiation."

"The hell you say!"

"I think it did. Four votes for Doctor Isaac Asimov's 'Nightfall.' I expected his Foundation stories to make it but they got only three votes. Too bad, because his library planet might be able to tell us what those vermin are, where they come from — and how to beat them."

"My fault, Aunt Hillbilly. Pop told me I should read the Foundation series… but I never did."

"Sharpie," I said, "we can put you down in New York in five minutes. The Good Doctor is getting on in years — turns out less than a million words a year now — but still likes pretty girls. He must know whatever is in the Galactic Library; he invented it. So telephone him. Better yet, sit on his lap. Cry if necessary."

"Zebbie, if there is one place I'm certain is loaded with 'Black Hat' vermin, it's New York City! *You* sit on his lap!"

"Not me. If we learn how to delouse our home planet, I'll work on a way to spread the word. But I'm number one on their death list."

"No, Jacob is."

"No, Sharpie. Jake and Deety are dead, you are kidnapped, and I'm marked down to be 'terminated with extreme prejudice.' But I'll risk grounding on the Hudson River VTOL flat long enough for you to visit the Good Doctor. Your husband can escort you; I'm going to hide in the bathroom. I figure that is actually in Oz and therefore safe."

"Go lay an egg!"

"Sharpie dear, none of us is going to Earth-zero. Hand that list to Deety; she won't peek. Captain, shall we rotate? The Science Officer has me half convinced that we can get away with it; let's do it before I lose my nerve. Fourth and last universe in the second group, isn't it?" I asked Sharpie.

"Yes, Zebbie."

"Anybody as chicken as I am, speak up!… Isn't *anybody* going to get us out of this!…… Execute!"

Chapter XXXIV

" — all my dreams do come true!"

Zeb:

Gay Deceiver was right side up five hundred meters above a sunlit, gentle countryside. Jake set her to cruise in a circle. I asked, "Are we back in Oz? Sharpie, check your setting."

"Not Oz, Zebbie. I've stuck to schedule."

"Okay. Does your magic list tell you where we are?"

"If it's one of the nine, then it's — " Hilda wrote a word on a sheet, folded it, handed it to me. "Stick this in your pocket."

I tucked it away. "Jake, bounce us, then range-and-target to ground us in that meadow. We'll test the air when we're down. Safer."

Jake zeroed Gay in; she grounded. "Zeb," he said fretfully, "how can I tell what juice we have? The gauge *still* reads 'Capacity."

"Let me think about it."

"All right. Has the Captain worked out that new scram?"

"I think so, Pop. Take G.D. straight up a hundred thousand klicks, but do it in two words, in total darkness, or with eyes dazzled, or anything. As long as anyone can get out two syllables we'll zip far enough away from trouble that we'll have time to work out what to do next."

"Good enough. Can you program it before I open a door?"

"I think so, Zebadiah. If she's asleep, G.D. will wake up and do it at once."

"Okay, will you program it? Hilda, set up the same thing on your dials as a back-up. Meanwhile I'm going to give the plumbing a field test. Don't touch the doors till I get back."

I returned in a few minutes. "Our magic space warp is still with us — don't ask me why or I'll scream. New program inserted?"

"Yes, Zebadiah. On tell-me-three-times and protected against execution without the doors being closed and locked. I've written down the magic words. Here." Deety handed me a scrap of paper.

On it was: "Gay — *Zoom!"*

"It's the shortest program with an unusual monosyllable that I can think of."

"Its shortness may save our necks. Swap seats with me, Sharpie, it's my turn to be pioneer mother. Everybody, hold your breath; I'm going to sniff the air."

"Zebbie, this planet is Earthlike to nine decimal places."

"Which gives me a cheap chance to play hero." I opened her door a crack, sniffed.

Shortly I said, "I feel okay. Anybody woozy?"

"Open the door wide, Zebbie; this place is *safe."*

I did so and stepped out into a field of daisies; the others followed me. It certainly *seemed* safe — quiet, warm, peaceful, a meadow bounded by a hedge row and a stream.

Suddenly a white rabbit came running past, headed for the hedge. He barely paused, pulled a watch from his waistcoat pocket, glanced at it, then moaned, "Oh dear! Oh dear! I shall be too late!" and ran even faster. Deety started after him.

"Deety!" I yelled.

She stopped short. "I want to find the rabbit hole."

"Then keep your eye on *her.* You're *not* going down the hole."

"On whom?" Deety turned back toward the hedge row. A little girl in a pinafore was hurrying toward the spot where the rabbit had disappeared. "Oh. But it didn't hurt *her* to go down the hole."

"No, but Alice had lots of difficulties before she got out. We haven't time; this is not a place we can stay."

"Why not?"

"Nineteenth-century England did *not* have advanced medicine."

"Zebbie," put in Hilda, "this isn't England. Read that slip."

I unfolded the scrap of paper, read: *Wonderland.* "Just so," I agreed, and handed it to my wife. "But it is modeled on England in the eighteen-sixties. It either has no medicine, like Oz, or pre-Pasteur medicine. Possibly pre-Semmelweiss. Deety, do you want to die from childbed fever?"

"No, I want to go to the Mad Tea Party."

"We can have a mad tea party; I went mad several universes back — and it's time for lunch. Sharpie, you win the Order of Nostradamus with diamond cluster. May I ask two questions?"

"One may always ask."

"Is H. P. Lovecraft on that list?"

"He got only one vote, Zebbie. Yours."

"Chthulhu be thanked! Sharpie, his stories fascinate me the way snakes are said to fascinate birds. But I would rather be trapped with the King in Yellow than be caught up in the worlds of the Necronomicon. Uh… did any horrids get four votes?"

"No, dear, the rest of us prefer happy endings."

"So do I! Especially when I'm in it. Did Heinlein get his name in the hat?"

"Four votes, split. Two for his 'Future History,' two for 'Stranger in a Strange Land.' So I left him out."

"I didn't vote for 'Stranger' and I'll refrain from embarrassing anyone by asking who did. My God, the things some writers will do for money!"

"Samuel Johnson said that anyone who wrote for any other reason was a fool."

"Johnson was a fat, pompous, gluttonous, dirty old fool who would have faded into the obscurity he so richly deserved had he not been followed around by a spit-licking sycophant. Spell that 'Psycho-', as in 'Bloch.'" I added, "Did Poul Anderson get in? Or Niven?"

"Zebbie, that's far more than two questions."

"I haven't even reached the second question… which is: What do we have for a mad tea party?"

"Surprise! Glinda had a picnic basket placed in our dressing room."

"I missed it," I admitted.

"You didn't look in the wardrobe." Sharpie grinned. "Can sandwiches from Oz be eaten in Wonderland? Or will they 'softly and silently vanish away'?"

"'Be off, or I'll kick you downstairs!'"

Several hundred calories later I noticed a young man hovering nearby. He seemed to want to speak but was too diffident to do so. Deety jumped up, trotted toward him. "The Reverend Mister Dodgson, is it not? I'm Mrs. Zebadiah Carter."

He quickly removed his straw boater. "'Mr. Dodgson,' yes, uh, Mrs. Carter. Have we met?"

"Long ago, before I was married. You are looking for Alice, are you not?"

"Dear me! Why, yes, I am. But how —"

"She went Down the Rabbit-Hole."

Dodgson looked relieved. "Then she will be back soon enough. I promised to return her and her sisters to Christ Church before dark."

"You did. I mean, 'you will.' Same thing, depending on the coordinates. Come meet my family. Have you had luncheon?"

"Oh, I say, I don't mean to intrude."

"You aren't intruding." Deety took him by the hand, firmly. Since my treasure is stronger than most men, he came along… and let go her hand hastily as soon as she loosened her grip. We men got to our feet; Hilda remained in lotus.

"Aunt Hilda, this is Mr. Dodgson, Lecturer in Mathematics at Christ Church College, Oxford. My stepmother, Mrs. Burroughs."

"How do you do, Mrs. Burroughs. Oh dear, I *am* intruding!"

"Not at all, Mr. Dodgson. Do sit down."

"And this is my father, Dr. Burroughs, Professor of Mathematics. And my husband Captain Carter. Aunt Hilda, will you find a clean plate for Mr. Dodgson?"

The young don relaxed once introductions had been made but he was still far more formal than Deety intended to permit. He sat down on the turf, placed his hat carefully beside him, and said, "Truly, Mrs.

Burroughs, I've just finished tea with three little girls."

Deety ignored his protests while she piled his plate with little sandwiches and cakes. Sharpie poured tea from a Thermos jug. They nailed him down with cup and plate. Jake advised, "Don't fight it, son, unless you really must leave. Are Alice's sisters safe?"

"Why, yes, Professor; they are napping in the shade of a hayrick nearby. But —"

"Then relax. In any case, you must wait for Alice. What branch of mathematics do you pursue?"

"Algebraic logic, usually, sir, with some attention to its applications to geometry." The Reverend Mr. Dodgson was seated so that he faced Gay Deceiver and sat in the shadow of her port wing but nothing in his manner showed that he noticed the anachronism.

"Have your studies led you into multidimensional non-Euclidean geometries?" Jake asked.

Dodgson blinked. "I fear that I tend to be conservative in geometry, rathuh."

"Father, Mr. Dodgson doesn't work in your field; he works in mine."

Dodgson raised his eyebrows slightly. Jake said, "My daughter did not introduce herself fully. She is Mrs. Carter but her maiden name is Doctor D. T. Burroughs. Her field is mathematical logic."

"That is why I am so pleased that you are here, Mr. Dodgson. Your book 'Symbolic Logic' is a milestone in our field."

"But, my dear lady, I have not written a work titled 'Symbolic Logic."

"I've confused things. Again it is matter of selection of coordinates. At the end of the reign of Queen Victoria you will have published it five years earlier. Is that clear?"

He answered very solemnly, "Quite clear. All I need do is to ask Her Majesty how much longer she is going to reign and subtract five years."

"That should do it. Do you like to play with sorites?" For the first time, he smiled. "Oh, very much!"

"Shall we make up some? Then trade and solve them?" "Well… not too lengthy. I really must get back to my young charges."

"We can't stay long, either. Anyone else want to play?" No one else elected to play. I stretched out on the grass with a handkerchief over my face; Jake and Sharpie went for a walk. "Shall we hold the statements down to groups of six?" Dodgson suggested.

"All right. But the conclusion *must* be true. Not nonsense. Agreed?" (Deety had taught me this game; she's good at it. I decided to be a silent witness.)

They kept quiet while I snored convincingly, Deety was a "lady" for a while, then sprawled on her belly and chewed her pencil. I watched with one eye from under my handkerchief.

First she covered several pages with scratch work in developing statements incomplete in themselves but intended to arrive at only one possible conclusion. Having done so, she tested them by symbolic logic, then wrote out her list of statements, mixing them randomly — clooked up.

The young mathematician was looking at her solemnly, note pad in hand.

"Finished?" my wife asked.

"Just finished. Mrs. Carter, you remind me of my little friend Alice Liddell."

"I know," she said. "That's how I recognized her. Shall we trade?"

Dodgson tore a sheet from his pad. "This is to be solved in the first person; its conclusion applies to you."

"All right, I'll try it." Deety read aloud:

"1) Every idea of mine, that cannot be expressed as a syllogism, is really ridiculous;

"2) None of my ideas about Bath-buns are worth writing down;

"3) No idea of mine, that fails to come true, can be expressed as a syllogism;

"4) I never have any really ridiculous idea, that I do not at once refer to my solicitor;

"5) My dreams are all about Bath-buns;

"6) I never refer any idea of mine to my solicitor, unless it is worth writing down."

Deety chortled. "How sweet of you! It *is* true; all my dreams *do* come true!"

"You solved it so quickly?"

"But it's only six statements. Have you solved mine?"

"I haven't read it yet." He also read aloud:

"1) Everything, not absolutely ugly, may be kept in a drawing room;

"2) Nothing, that is encrusted with salt, is ever quite dry;

"3) Nothing should be kept in a drawing room, unless it is free from damp;

"4) Time-traveling machines are always kept near the sea;

"5) Nothing, that is what you expect it to be, can be absolutely ugly;

"6) Whatever is kept near the sea gets encrusted with salt."

He blinked at the list. "The conclusion is true?" he asked.

"Yes."

For the first time he stared openly at Gay Deceiver. "That, then — I infer — is a 'time-traveling machine."

"Yes… although it does other things as well."

"It is not what I expected it to be ... although I am not sure what I expected a time-traveling machine to be."

I pulled his handkerchief off my face. "Do you want to take a ride, Mr. Dodgson?"

The young don looked wistful. "I am sorely tempted, Captain. But I am responsible for three little girls. So I must thank you for your hospitality and bid you goodbye. Will you offer my apologies to Professor and Mrs. Burroughs and explain that duty calls me?"

Chapter XXXV

"It's a disturbing idea — "

Jake:

"Deety, how does it feel to say goodbye without getting kissed?"

"Zebadiah, I didn't make it possible. Lewis Carroll was terrified by females over the age of puberty."

"That's why I stayed close. Deety hon, if I had gone with Jake and Hilda, he would have left at once."

"I can't figure out how he got here in the first place," said my dear wife Hilda. "Lewis Carroll was never *in* Wonderland; he simply wrote about it. But this *is* Wonderland — unless rabbits in England wear waistcoats and watches."

"Aunt Hilda, who can possibly be as deeply inside a story as the person who writes it?"

"Hmm — I'll have to study that."

"Later, Sharpie," Zeb said. "Stand by to rotate. Mars, isn't it?"

"Right, Zebbie," Hilda agreed.

"Gay… *Sagan!"*

Mars-zero lay ahead, in half phase at the proper distance.

"Set!" Hilda reported. "To tenth universe, third group."

"Execute." It was another starry void with no familiar groupings; we ran through routine, Zeb logged it as "possible" and we moved on to the second of the third group — and I found myself facing the Big and Little Dippers. Again we ran through a routine tumble — but failed to find the Sun or any planets. I don't know the southern constellations too well but I spotted *Crux* and the Magellanic Clouds. To the north there could be no doubt about Cygnus and a dozen others.

Zeb said, "Where is Sol? Deety? Sharpie?"

"I haven't seen it, Zebadiah."

"Zebbie, don't go blaming me. I put it right back where I found it."

"Jake, I don't like this. Sharpie, are you set?"

"Set. Standing orders. Third group, third of three."

"Keep your finger near the button. How does this fit your theory? I don't recall listing a story that doesn't have the Solar System in it."

"Zebbie, it can't fit two of those left, could fit the others, and could fit half a dozen or more that got three votes. You said that about a dozen were tied in your mind. Were any of them space-travel stories?"

"Almost all."

"Then we could be in any world that takes our universe as a model but far enough from the Sun so that it appears as second or third magnitude. That wouldn't have to be far; our Sun is pretty faint. So this could be the Darkover universe, or Niven's Known Space, or Dr. Williamson's Legion of Space universe, or the Star Trek universe, or Anderson's world of the Polesotechnic League, or Dr. Smith's Galactic Patrol world. Or several more."

"Sharpie, what were two that this could not be?"

"King Arthur and his Knights, and the World of the Hobbits."

"If we find ourselves in either of those, we leave. No obstetricians. Jake, any reason to stay here longer?"

"None that I see," I answered.

"Captain Deety, I advise scram. Those space-opera universes can be sticky. I don't care to catch a photon torpedo or a vortex bomb or a negative-matter projectile, just through failure to identify ourselves promptly."

So we rotated.

This time we weren't merely close; we were on the ground. Charging straight at us was a knight in armour, lance couched in attack. I think it unlikely that a lance could damage Gay. But this "gentle knight" was unfriendly; I shouted, "Gay! — *Zoom!"*

Sighed with relief at sudden darkness and at the Captain's next words: "Thanks, Pop. You were on your toes."

"Thank *you.* End of group three. Back to Mars? S, A, G, A, N?"

"Let's get on with it," Zeb agreed. "All Hands —"

"Zebadiah!" my daughter interrupted. "Is *that* all you wish to see of King Arthur and his Knights?"

"Captain Deety, that wasn't one of King Arthur's Knights. He was wearing plated mail."

"That's my impression," my beloved agreed. "But I gave more attention to his shield. Field sable, argent bend sinister, in chief sun proper with crown, both or."

"Sir Modred," my daughter decided. "I knew he was a baddie! Zebadiah, we should have hit him with your L-gun."

"Killed that beautiful beer-wagon horse? Deety, that sort of armor wasn't made earlier than the fifteenth century, eight or nine centuries *after* the days of King Arthur."

"Then why was he carrying Sir Modred's shield?"

"Sharpie, was that Sir Modred's coat of arms?"

"I don't know; I blazoned what I saw. Aren't you nitpicking in objecting to plate armor merely because it's anachronistic?"

"But history shows that —"

"That's the point, Zebbie. Camelot isn't *history;* it's *fiction."*

Zeb said slowly, "Shut my big mouth."

"Zebbie, I venture to guess that the version of Camelot we blundered into is a patchwork of all our concepts of King Arthur and the Round Table. I picked up mine from Tennyson, revised them when I read 'Le Morte d'Arthur.' Where did you get yours?"

"Mark Twain gave me mine — 'A Connecticut Yankee in King Arthur's Court.' Add some Prince Valiant. Jake?"

I said, "Zeb, there seems little doubt that there was a king or a general named Arthur or Arturius. But most people think of King Arthur from stories having little connection with any historical person. 'The Sword in the Stone' and 'The Once and Future King' are my favorites."

My daughter persisted, "I do believe in the Round Table, I do! We should go back and *look!* Instead of guessing."

"Captain Deety," her husband said gently, "the jolly, murderous roughnecks called the Knights of the Round Table are fun to read about but not to know socially. Nor are people the only dangers. There would be honest-to-God dragons, and wyverns, and malevolent magic — not the Glinda-the-Good variety. We've learned that these alternate worlds are as real as the one we came from. We don't need to relearn it by getting suddenly dead. That's my official advice. If you don't agree, will you please relieve me at the conn… Ma'am?"

"Zebadiah, you're being logical — a most unfair way to argue!"

"Jacob," said my wife, "suppose we were people who don't like fanciful stories. What sort of worlds would we find?"

"I don't know, Hilda. Probably only humdrum slice-of-life universes indistinguishable from the real world. Correction: Substitute 'Universe-zero' for 'real world' — because, as your theory requires, all worlds are equally real. Or unreal."

"Jacob, why do you call our universe 'universe-zero?"

"Eh… for convenience. *Our* point of origin."

"Didn't you tell me that no frame is preferred over any other? Each one to the Number of the Beast is equally zero in six axes?"

"Well… theory requires it."

"Then *we* are fiction in other universes. Have I reasoned correctly?"

I was slow in answering. "That seems to be a necessary corollary. It's a disturbing idea: that we ourselves are figments of imagination."

"I'm nobody's figment!" my daughter protested. "I'm real, I am! Pinch me!… *Ouch!* Zebadiah, not so hard!"

"You asked for it, dear," Zeb told her.

"My husband is a brute. And I've got a cruel stepmother just like Snow White. I mean 'Cinderella.' And my Pop thinks I'm imaginary! But I love you anyway because you're all I've got."

"If you fictional characters will pipe down, we'll get this show on the road. Stand by to rotate. Gay Sagan!"

Mars was where it should be. I felt more real.

Chapter XXXVI

"Pipe down and do your job."

Hilda:

"Set, Captain," I reported. "Thirteenth rotation. Correct, Zebbie?"

"Check, Sharpie. Captain?"

Deety answered, "Let's catch our breaths." She stared out at the ruddy barrenness of Mars-zero. "That rock looks downright homelike. I feel like a tourist who tries to see thirty countries in two weeks. Shock. Not 'future shock' but something like it."

"Homesickness," I told her. "Knowing that we can't go back. Deety, somewhere, somewhen, we'll build another Snug Harbor. Won't we, Jacob?"

Jacob patted my knee. "We will, dearest."

Deety said wistfully, "Will we really find another Snug Harbor?"

"Deety, are you over your pioneer-mother jag?"

"No, Zebadiah. But I can get homesick. Like you. Like Hilda. Like everybody but Pop."

"Correction, Daughter. I don't miss Logan, and I don't think Hilda misses California —"

"Not a bit!" I agreed.

"Nor me," agreed Zeb. "I had a rented flat. But Snug Harbor was home."

"Agreed," Jacob answered. "I didn't really *hate* these vermin until they bombed our home." Jacob added, "We've got to find a new Snug Harbor. Comfortable as this car is, we can't live in it indefinitely."

"Check. Sharpie, your theory seems to be checking out. Is there any reason to finish this schedule? Should we go directly to *Teh* axis?"

"Zebbie, granted that most rotations didn't amount to more than sightseeing, if we *hadn't* followed this schedule, this car would not be nearly so comfortable. Do you know of another Ford that has two bathrooms?"

"Sharpie, I don't know of one that has *one* bathroom. Our spacewarp special lets us stay in space as long as our air holds out. And food. But air is the critical factor."

I said, "Zebbie, have you noticed that our air does *not* get stuffy?"

"It will soon."

"It need not," Jacob pointed out. "We can scram-code to Oz, or to Wonderland, in seconds. Sweet air, no danger."

Zebbie looked sheepish. "I'm still learning what our wonder buggy will do."

"So am I."

"Gentlemen, you missed my point. You might check the juice. I haven't mentioned another asset. Zebbie, would you like a banana?"

"Sharpie, I ate the last before I buried garbage. While you and Deety were washing dishes before we left Wonderland."

"Tell him, Deety."

"Zebadiah, Hilda and I salvaged and put everything into the basket. Hilda started to put it into our wardrobe — and it was heavy. So we looked. Packed as tight as when we left Oz. Six bananas — and everything else. Cross my heart. No, go look."

"Hmmm — Jake, can you write equations for a picnic basket that refills itself? Will it go on doing so?"

"Zeb, equations can be written to describe *anything.* The description would be simpler for a basket that replenishes itself indefinitely than for one that does it once and stops — I would have to describe the discontinuity. But I am no longer troubled by natural — or 'unnatural' — laws that don't apply in Universe-zero."

"Mmmm… Science Officer, I suggest that you check on that basket now that we have returned to Universe-zero."

"Zebbie, make that an order in writing and sign your name — if you want to look foolish. Deety, will you order it logged?"

"Sharpie, if you weren't such good company, I'd strangle you. Your earlier answer recommended that we complete the rotations."

"No, I noted that the first twelve had not been unprofitable. We could have completed the last three by now had we not spent time debating it."

"Hilda honey, our cowardly Astrogator needed time to get his nerve back. By yumpin' yiminy, once you're all trained, I'm going to retire."

"We would simply recall you, Zebbie. Each will go on doing what she can do best."

"Time is out of joint. O curséd spite, that I was ever picked to set it right."

"You misquoted."

"I always do. What universe do we hit next?"

"Zebbie, we have three rotations to go, with four left on the four-votes list. One is useless but amusing and safe. The other three are places to live but each has its own dangers. As the chief of surgery used to say: 'I dunno, let's operate and find out."

Zebbie sighed. "All hands, stand by to rotate. *Execute!"*

Green fire — *"Rotate! Execute!"*

A formless red fog — *"Gay Sagan!"*

Mars looked like an old friend. Zebbie wiped his brow and said, "Whew! One to go — Cap'n Deety hon, let's get it over with. Sharpie?"

"Fifteenth universe — set!" I reported.

"Execute!"

We came out into a starry universe. "Cap'n Deety hon, don't these constellations look familiar?" Zebbie commented.

"I think so."

"They *are* familiar," I insisted. "Except that there is a very bright star near the Gemini. That ought to be the Sun. We're way out past Pluto, where the comets spend the winter. Let's move in and find Earth."

"Don't be in a hurry," said Zebbie. "Science Officer, what was that first rotation? Green fire?"

"How about the deadly green nebula in 'The Legion of Space'? — on the trip to the Runaway Star where Aladoree had been taken."

"That was on your list?"

"All of us voted for it."

"What was that red fog we rotated into next?"

"That one is harder to figure," I admitted. "It could be any universe by a writer who paid respectful attention to astronomy — Bova, Haldeman, Schmidt, Pournelle, Niven, Benford, Clement, Anderson, and so forth. But there were four votes for 'The Mote in God's Eye.' Whether the two old gentlemen had anything to do with it or not, I think we blundered into a red giant. A red giant is close to what we call vacuum. Anyhow, we weren't hurt; we were there about two seconds."

"Less than that, Sharpie; you set it with one click, and barely had your thumb off the execute button. Captain, do you wish to transit toward that bright star?"

"Let's chop off thirty or forty A.U.'s," Deety decided, "and get a rough cross fix. Maybe that will give us a disc Pop can measure. If not, we'll narrow it down until it does. Then place us one A.U. from the Sun and we'll spot Earth easily. Astrogator — advice."

"Captain, I advise making that first jump with *wide* offset. Miss the Sun by at least one A.U. At *least."*

"Yes! Zebadiah, make that cross fix *wide.* Uh — " Deety peered around. "There's the Sickle. Have Pop aim for Regulus."

My husband said, "I'm swinging toward Regulus. Zeb, how do I take the angular width of the Solar disc without broiling an eyeball?"

"The gunsight has a builtin polarizer. Didn't I show you?"

"You did *not."*

"Sorry. Captain Deety hon, I request permission to relieve the Chief Pilot for this."

"Permission granted. But, Zebadiah, you be careful."

"Spacecraft! Identify yourself!" — the voice was everywhere.

Zebbie jerked with surprise. (Me, too!) "Who said that?"

"Lensman Ted Smith, Commander Galactic Patrol, commanding Patrol

Vessel 'Nighthawk.' Entity, I regret being forced to enter your mind but you have been ignoring sub-ether radio for four minutes thirty-two seconds. Switch it on and I will get out of your mind. Do not maneuver; we have weapons on you."

"Captain," Jacob whispered, "Hilda is set to rotate."

Deety shook her head, touched Zebbie's arm, pointed to herself.

"Lensman, this is Captain Deety, commanding Continua Craft Gay Deceiver. We don't have sub-ether radio. Do you read me?"

"I read you loud and clear. What happened to your sub-ether radio? Do you need help?"

"Captain Smith, I don't have sub-ether radio at all. We don't need help but could use astrogational advice. Where are we?"

"The important point is that you are in my patrol sector, an unscheduled ship insufficiently identified. I repeat: DO NOT MANEUVER. By order of the Galactic Patrol. Do you understand?"

"I understand you, Lensman. I regret having intruded into your patrol space. This is a private ship engaged in peaceful exploration."

"That is what I am about to determine, Captain. Stay where you are, make no hostile moves, and you will be safe."

"Lensman, can you see through my eyes?"

"Are you inviting me to do so?"

"Certainly. Use my eyes, use my ears. But don't try to take over my mind or this ship will disappear." Deety squeezed my shoulder; I signaled "Roger" with a pat.

"I warn you not to maneuver. Ah ... interesting!"

I snapped, "Captain Smith, quit threatening us! A Lensman is supposed to be an officer and gentleman! I intend to report you to the Port Admiral! You're an oaf!"

"Sorry, Madam. I do not wish to offend but I have duty to perform. Captain, will you please turn your head so that I can see who is speaking?"

"Certainly. Let me introduce all of us. On my left" — Deety looked at Zebbie — "is Doctor Zebadiah Carter. In front of him is Doctor Jacob Burroughs. On his right" — Deety looked at me — "is his wife, Doctor Hilda Burroughs, xenobiologist and chief of science. Let me offer you this advice, Lensman: It is never safe to offend Doctor Hilda."

"I gathered that impression, Captain. Doctor Hilda, I would not willingly offend — but I have duties. Shall I get out of your mind entirely? If you speak to me, I will hear with Captain Deety's ears. She can, if she will, repeat to you my thought in answer."

"Oh, it's all right for conversation. But don't try to go deeper! Mentor would not like it — as you know!"

"Doctor Hilda, your mention of ... a certain entity… surprises me — from one who is not a Lensman."

"I don't *need* a Lens. You can check that with Arisia."

Deety said hastily, "Lensman, are you satisfied that we are a peaceful party of scientists? Or is there something more that you wish to know?"

"Captain, I can see that this ship is not a pirate vessel — unarmed and unarmoured. Oh, I note controls for a coherent light gun but that wouldn't be much use to a pirate. Nor can I visualize two men and two women attempting to attack a space liner. But keeping the peace is just one of my responsibilities. Your ship, small as it is, could be carrying millions of credits in contraband."

"Say what you mean, Lensman," I snapped. "Drugs. But don't use the word 'zwilnik.'"

Mentally, we could hear him sigh. *"Yes, Doctor Hilda — drugs. But I did not introduce that offensive word into the discussion."*

"I heard you thinking it. Don't do it again!"

"Lensman," Deety said quickly, "we have medical drugs. The only one that could interest you is a few milligrams of morphine. But we carry no thionite, no bentlam, no hadive, no nitrolabe. You are using your Lens; you know that I'm telling the truth."

"Captain, it's not that easy. Before I hailed you I did try a slight probe — please, Doctor Hilda; it was in line of duty! I've never encountered minds so fully blocked. And this is a most curious craft. It is obviously designed for aerodynamic use rather than space. Yet here you are — and I can't see how you got here. I have no choice but to detain you and to examine this ship thoroughly. If necessary, take it apart piece by piece."

"Lensman," Deety said earnestly, "don't be hasty. You can search more thoroughly by Lens than by other means. Go ahead. We've nothing to hide and we have a great deal to offer the Patrol. But you *won't* get it by pushing us around."

"You certainly won't! Cap'n, let's leave! I'm tired of stupidity!" — and I snapped, "Gay Sagan!"

Mars-zero was on our starboard bow. That dead rock looked awfully good to me.

Zebbie said, "Captain, did you order the copilot to execute?"

I said, "Don't bother Deety with it, Zebbie. I did it without permission. Solely my decision."

Zebbie frowned unhappily. "Sharpie, I thought you would be our model Girl Scout while Deety is skipper. Why?"

"Zebbie, you can rotate back there in no time. But I would like to be dropped first. Imperial House. Or Minus-J. Somewhere."

"Why, Hilda?" my husband asked.

"Jacob, meet your friendly neighborhood zwilnik. Commander Ted Smith of the Galactic Patrol — a fine officer; I'm certain, as Dr. E. E. Smith saw to it that no unworthy person could ever wear the Lens — was getting unpleasantly close. That's why I was so fierce with the poor man."

Deety said, "But, Aunt Hilda, E. E. Smith's world is just the sort of world we've been seeking."

"Maybe we'll go back. But not until I've had a chance to dump two pounds of concentrated extract of Cannabis magnifica. Dr. Wheatstone tells me that it is incredibly valuable in therapy, as the base for endless drugs. But I had a hunch that Commander Smith would confiscate it, impound the Smart Girl, arrest all of us — and convict me. But that isn't all, Zebbie. Doctor Smith created one of the most exciting universes I know of. To read about, *not* to live in. With that endless Boskone War — must have been going on; they were looking for zwilniks — you have to be as smart as Kimball Kinnison to stay alive… and even he gets chopped up now and again. Deety and I need a good baby-cotcher and I'm sure they have them. But we have months to find one. Let's not deliberately back into a war."

Deety didn't hesitate. "I agree with Aunt Hilda. If we go back, it will not be while I'm captain. Hillbilly, you didn't disobey orders; you used your head in an emergency." I thought Deety was going to ask me how and when I got Cannabis magnifica extract… but she didn't.

"Jake," Zebbie said, "we're overruled. Where now, Captain? Earth-*Teh*-one-plus?"

"First we'd better pick a place to spend the night, and hold an election."

"Why, Deety, you've served less than twelve hours!"

"It will be about twenty-four hours when we lift off tomorrow. I'm not going to ask for nominations; we've all had a turn at it; we are now balloting for permanent captain."

I expected Zebbie to be picked. But there were three for me, one for Zebbie — my ballot.

I seemed to be the only one surprised. Zebbie said to Deety, "Ask to be relieved now, hon. The short-timer syndrome is bad for anyone but worse for a C.O. — it demoralizes her crew."

"Aunt Hilda, will you relieve me?"

I pondered it half a second. "I relieve you, Deety."

"Goody! I think I'll take a nap."

"I think you'll take the verniers. Zebbie and Jacob stay in the jobs they're in. Prepare to maneuver. Copilot, set for Oz. If you don't know how, ask your father."

"Set verniers for *Oz?"*

I took a deep breath to calm down. "Before anyone starts asking 'Why?' the answer is: Pipe down and do your job. Before we start on *Teh* axis, I want to ask questions. We talked to Glinda about our problem. We didn't talk directly to the others. I mean Ozma and Professor Wogglebug and the Little Wizard and possibly others.

Family, magicians who can install two bathrooms in a Ford and never have it show can also help us spot vermin *if we ask the right questions.* Deety, are you having trouble setting for Oz?"

"Captain, why set verniers? Gay has our parking spot in her perms. Codeword 'Glinda."

A few seconds later Gay called out, "Hi, Tik-Tok!"

"Welcome back, Miss Gay De-cei-ver. Glin-da told me that you would be gone on-ly a few minutes, so I wai-ted here for you. I am deep-ly hap-py to see you a-gain."

Chapter XXXVII

The First Law of Biology

Zeb:

"Stand by to maneuver," I ordered — at the conn by Captain Sharpie's wish "Hello, Gay."

"Howdy, Zeb. You look hung over."

"I am. Gay Home!"

Arizona was cloudless. "Crater verified, Captain Hilda."

"Teh axis one plus — set, Captain," Deety reported.

"Execute!"

"No crater, Cap'n Auntie. No house. Just mountains." Deety added, *"Teh*-one-minus — set."

"Roger, Deety. Routine check, Captain?"

"Voice routine, short schedule." (I think that is what got Sharpie elected permanent C.O. — she never hesitates.)

"Gay Deceiver. Sightseeing trip. Five klicks H-above-G."

"Ogle the yokels at five thousand meters. Let's go!"

"Deety, keep your thumb on the button. Gay — Miami Beach."

Below lay a familiar strip city. "Captain?"

"Zebbie, note the crowded streets. Sunny day. Beaches empty. Why?"

"Bogie six o'clock low!" Jake yelped.

"Gay *Zoom!"*

Earth-*Teh*-one-plus swam warm and huge. Opposite us a hurricane approached Texas. I asked, "Want to see more, Captain?"

"Zebadiah, how can we see more when we haven't seen *any?"*

"But Cap'n Sharpie has, Deety. Folks, I'm unenthusiastic about a world where they shoot without challenging. Jake, your bogie *was* a missile?"

"I think so, Zeb. Collision course with Doppler signature over a thousand knots and increasing."

"A missile — out of Homestead-analog, probably. Captain, these blokes are too quick on the trigger."

"Zebbie, I find empty beaches more disturbing. I can think of several reasons why they would be empty on a nice day — all unpleasant."

"Want to check San Diego? I can get more scram time by increasing H-above-G."

"No, we have over forty thousand analogs on this axis; we'll stick to doctrine. Shop each world just long enough to find something wrong — 'Black Hats,' war, low technology, no human population, bad climate, overpopulated, or factor X. If we don't find our new Snug Harbor in the next four months, we'll consider returning to Doctor Smith's world."

"Hillbilly, if we wait there to have our babies, then wait again until they are big enough to travel, we'll *never* find Snug Harbor."

"I said, 'consider.' We may find a place to shack up for five months or so, then slam back to Galactic Patrol Prime Base hospital for the Grand Openings. Could be an empty world — no people, pleasant otherwise. Food is now no problem and we get water from Oz. All we lack is television —"

"That's no lack!"

"Deety, I thought you liked 'Star Trek'?"

"Auntie Captain, we've got our own star trek now."

"Hmm — Deety, you and I should go easy on this star trek. I'm going to I'm having my first one past forty and I'm going to be *very* careful — exercise, diet, rest, the works."

"I surrender. Let's get cracking, Cap'n Hillbilly."

"Take it, Zebbie."

"Copilot, execute!"

Earth-*Teh*-one-minus replaced *Teh*-one-plus. "Jacob, it doesn't look right. Astrogator, I want us up a hundred kilometers, over — make it Mississippi Valley about St. Louis. Want to change attitude?"

"Yes, please. Jake, point Gay at your target; it will skip setting angle." The craft's nose dipped and steadied.

"How's that?"

"Fine, Jake. Deety, set L axis plus transition ninetynine thousand klicks."

"Set, Zebadiah."

"Execute." We popped out high over fields of ice. "Sneak up on it, Cap'n?"

"Never mind. Zebbie, that's what I call a hard winter."

"A *long* winter. Actually it's summer, I think; Earth-analogs should be in the same place in orbit as Earth. Jake?"

"By theory, yes. Doesn't matter either way; that's glaciation. Deety has set *Teh*-two-plus."

"We can't homestead on an ice sheet. Execute."

"Zebbie, how many ice ages so far?"

"Five, I think. Deety?"

"Five is right, Zebadiah. Plus two worlds with major war, one where they shot at us, and one so radioactive that we got out fast!"

"So we're hitting ice more often than not."

"Five to four has no statistical significance, Zebadiah. At least Aunt Hilda hasn't spotted even one 'Black Hat."

"Sharpie, how good are your magic spectacles?"

"Zebbie, if I see them walk, I'll spot 'em, no matter how they're disguised. In the simulations Glinda and Wizard cooked up, I spotted their gait every time Deety identified it by Fourier analysis."

"You feel confident, that's enough."

"Zebbie, I don't have clairvoyance; there wasn't time to train me. But Glinda got me highly tuned to their awkward gait, both with and without splints. I want to discuss something else. According to geologists, when we were home — Earth where we were born, I mean — we were in a brief warm period between glaciations."

"If geologists are right," I admitted.

"If so, we'll usually hit glaciation."

"Probably. 'If — '"

"Yes, 'if — ' But we now know what glaciation looks like. If you and Jacob and Deety can make it a drill, we can flip past ice ages as fast as you spot one."

"We'll speed it up. Jake."

"Zebadiah, *wait!"*

"Why, Deety? We're about to translate."

"Pop, you told me to set for *Teh*-five-plus."

"Jacob?" Captain Sharpie said.

"That's right, Captain."

"What's the trouble, Deety?"

"Aunt Hilda, I said that five-to-four had little statistical significance. But so far, all glaciations have been in *Teh*-minus. That could be chance but —"

" — but doesn't look like it. You want us to explore axis *Teh*-plus first? Astrogator?"

"No, no! Captain Auntie, I would like to see enough of *Teh*-minus to have a significant sample. At least a hundred."

"Jacob?"

"Hilda, if we check in one pseudodirection only — say *Teh*-minus — it'll be four or five times as fast as hunting back and forth between plus and minus. Deety can set with one click; Zeb can yell 'Execute!' as soon as you are satisfied."

"Jacob, we'll get Deety her sample. But faster. Astrogator, have our copilot set *Teh*-six-minus"

"Uh… set, Captain."

"When Zebbie says 'Go,' Jacob, you and Deety flip them past as fast as you can *without* waiting for orders. All we'll be looking for is ice ages; we can spot one in a splitsecond. If anyone sees a warm world, yell 'Stop!' Deety, can Gay count them?"

"She's doing so, Captain. We both are."

"Okay. I'm going to give my magic specs a rest — we're looking for nothing but glaciers versus green worlds. Questions?"

"Run out *Teh*-minus as fast as I can set and translate. Stop when anyone yells. Aye aye, Cap'n Hillbilly honey."

Sharpie nodded to me; I snapped, "Go!"

"STOP!" yelped Deety.

"Jacob, I've *never* seen so much ice! Deety, how many martinis would that make?"

"On the rocks or straight up?"

"Never mind; we're out of vermouth. Did you get your sample?"

"Yes, Captain. One hundred ice ages, no warm worlds. I'm satisfied."

"I'm not. Zebbie, I want to extrapolate logarithmically — go to *Teh*-minusone-thousand, then ten thousand, a hundred thousand, and so on. Jacob?"

Jake looked worried. "Hilda, my scales can be set for vernier setting five, or one hundred thousand. But that translation would take us more than twice around a superhyper great circle — I think."

"Elucidate, please."

"I don't want to get lost. My equations appear to be a description of six-dimensional space of positive curvature; they've worked — so far. But Euclidean geometry and Newtonian mechanics worked as long as our race didn't monkey with velocities approaching the speed of light. Then the approximations weren't close enough. I don't *know* that the plenum can be described with only six spacetime coordinates. It might be more than six — possibly *far* more. Mathematics can be used for prediction only *after* test against the real world."

"Jacob, what is the 'real world'?"

"Ouch! Hilda, I don't know. But I'm afraid to get too many quanta away from our world — world-zero, where we were born. I *think* the extrapolation you propose would take us more than twice around a superhyper great circle to — What world, Deety?"

"World-six-thousand-six-hundred-eighty-eight on *Teh*-minus axis, Pop. Unless it's skewed."

"Thanks, Deety. Captain, *if* we arrived there, we could return to Earth-zero by one setting. *'If — '* Instead of a superhyper great circle we might follow a helix or some other curve through dimensions we know not of."

"Pop, you took what I said and fancied it up."

"R.H.I.P., my dear. You will appear as junior author on the monograph you'll write and I'll sign."

"Pop, you're so good to me. Wouldn't Smart Girl return us simply by G, A, Y, H, O, M, E?"

"Those programs instruct a machine that has built into it only six dimensions. Perhaps she would… but to our native universe so far from Earth-zero that we would be hopelessly lost. If Zeb and I were bachelors, I would say, 'Let's go!' But we are family men."

"Deety, set the next one. *Teh*-five-plus?"

"Right, Zebadiah. But, Captain Auntie, I'm game! The *long* trip!"

"Me, too," agreed Captain Sharpie.

I said in a tired voice, "Those babies are *ours* as much as they are yours — Jake and I are taking no unnecessary risks. Captain Sharpie, if that doesn't suit you, you can find another astrogator and another chief pilot."

"Mutiny. Deety, shall we pull a 'Lysistrata'?"

"Uh… can't we find some reasonable middle ground?"

"Looks like a place to stop for lunch. Sharpie, want to sniff for 'Black Hats'?"

"Take me down, please. About two thousand klicks above ground."

"Will you settle for five?"

"Sissy pants. Yes, if you'll first have Jacob zip us around night side to check for city lights."

"Give her what she wants, Jake, by transiting; an orbit takes too long. 'Give me operations… way out on some lonely atoll! For I… am too young to diiiie! I just want to grow old!'"

"You're off key, Zebbie."

"Deety likes my singing. Anybody spot city lights?"

We found no cities. So Jake put us down for lunch on a lonely atoll, Hilda first making certain that it had nothing on it but palm trees. Deety stripped, started exercises.

Hilda joined her; Jake and I set out lunch, having first dressed in stylish tropical skin. The only less-than-idyllic note came from my objecting to Deety's swimming in the lagoon. Hilda backed me up. "Deety, that's not a swimming pool. Anything in it has defenses or couldn't have survived. The first law of biology is eat or be eaten. A shark could have washed over the reef years back, eaten all the fish — and now be delighted to have you for lunch."

"Ugh!"

"Deety, you'd be very tasty," I soothed.

Chapter XXXVIII

" — under his vine and under his fig tree; and none shall make them afraid — "

Jacob:

Teh positive took longer to search than *Teh*-negative for the very reason that its analogs were so much like our native planet.

An uninhabited planet could be dismissed in ten minutes; one heavily populated took no longer. A planet at too low a level of culture took hardly longer — a culture with animal-drawn carts and sailing ships as major transport we assumed *not* to have advanced medicine. But most took longer to reject.

At the end of a week we had rejected ninety-seven… which left us only 40.000 + to inspect!

That evening, at "Picnic Island," our private atoll, my daughter said, "Cap'n Auntie, we're doing this wrong."

"How, Deetikins?"

"Ninety-seven in a week, over forty thousand to go. At that rate we finish in eight years."

Her husband said, "Deety, we're getting faster."

My beloved said, "Astrogator, do you know more about calculating than does the Copilot?" Zeb shut up. We had learned that when Hilda addressed us by titles, she was speaking *as captain.* I flatter myself that I learned it quicker whereas Zeb was a bit slow. "Go ahead, Deety."

"If we go on checking this way, it won't get better; it will get worse. Here's the first weeks' score" — she passed around her summary; it read:

Earth analogs checked97
Average time per planet34 mins 38 1/2 sec
Maximum time2 days 3 hrs 52 mins
Minimum time13 seconds
Median time12 mins 07 sec

I studied it. "Deety, we can reduce that average time. Over two days was *much* too long to check analog twenty-six."

"No, Pop, we should have taken *longer* on twenty-six. It's that thirteen seconds that is bankrupting us."

"Daughter, that's preposter — "

"Chief Pilot."

"Yes, dear?"

"Please let the Copilot finish… without interruption." I retired from the field, annoyed, to wait until my advice was indispensable — soon, I felt sure.

"Aunt Hilda, if we gave each analog thirteen seconds, it would take us eighteen and a half days… and we would learn nothing. I want to cut the minimum time way, way down — make it routine — and *learn* something. I wish Gay could talk, I do."

"But, dear, she can. We can be in Oz in two minutes. The dirty dishes can wait."

My daughter looked startled. "Pass me the Stupid Hat."

"But we won't go to Oz before tomorrow. We need to figure out what the problem is, first — and I need a night of cuddle with Jacob for the good of my soul." Hilda reached out and took my hand.

Hilda went on, "Deety, remember how fast we mapped Mars-*Tau*-ten-positive once we let Gay do it her way? Isn't there some way to define a locus — then turn her loose?"

We discussed it until bedtime. I set the locus myself by vetoing going past Earth-analog-*Teh*-positive-five-thousand until we were *certain* that no satisfactory analog existed in those first five thousand. "Family," I told them, "call me chicken, to use Zeb's favorite excuse. I know so little about this gadget I invented that I am *always* afraid of getting lost. All rotations have been exactly ninety degrees. In theory I can define a quantum of angle and each such quantum should render accessible another sheaf of universes. In practice I can't do machining of that quality. Even if I could, I would be afraid to risk our necks on a gadget required to count angular quanta.

"But I have another objection — a gut feeling that worlds too far out *Teh* axis will be too strange. Language, culture, even dominant race — I confess to prejudice for human beings, with human odors and dandruff and faults. Supermen or angels would trouble me more than vermin. I know what to do with a 'Black Hat' — *kill it!* But a superman would make me feel so inferior that I would not want to go on living."

Deety clapped. "That's my Pop! Don't worry, Pop; the superman who can give *you* an inferiority complex hasn't been hatched." I *think* she meant that as a compliment.

We worked the parameters down to three: climate warm enough to encourage nudity; population comfortably low; technology high. The first parameter was a defense against B.H. vermin: they require antinudity taboo to bolster their disguises. The last parameter would tend to indicate advanced obstetrics. As for population, *every* major shortcoming of our native planet could be traced to one cause: too many people, not enough planet.

Hilda decided to standardize: one locale, one H-above-G. The locale was (in Earth-zero terminology) Long Beach, California, over its beach one klick H-above-G — dangerously low were it not that Gay would never be in any universe longer than one second. Any speed-of-light weapon can destroy in less than a second, but can its human-cum-machine operators identify a target, bear on it, and fire in one second? We thought not. We *hoped* not.

At analogs of Long Beach, it should be midsummer, hot, dry, and cloudless. If that beach was comfortably filled but not crowded, if the people were nude, if area adjacent to the beach showed high technology by appearance, then that analog should be checked further.

Forty minutes in Oz changed much of our planning.

Tik-Tok was waiting for his lady friend as usual but kept politely quiet while Deety talked with Gay — and so did Zeb and so did I, not because we have Tik-Tok's courtly manners but because Captain Hilda was blunt. Gay understood the Celsius scale, i.e., both freezing and boiling water temperatures lay in her experience and splitting the interval into one hundred parts was no trouble. She had enough parts that needed to be neither too hot nor too cold that awareness of her surroundings both ambient and radiant was as automatic as breathing is for me. As for radio and television (both gauges of technical level) she could sample all infrared flux (as she had done at Windsor City). Crowds on beach? Would it suffice to count bodies on a sample one hundred meters square?

But Gay had a quite *un*-human complaint: "Deety, *why* must I hang around a thousand milliseconds for a job I can do in ten? Don't you trust me?"

So instead of 57 years — or 8 years — or 18 1/2 days — or 11.4 hours — our preliminary survey was complete less than a minute after we left Oz — 5000 universes in fifty seconds. Gay Deceiver displayed her results as three curves representing temperature, body count, density of communication-frequency radiation — abscissa for all running from Earth-zero to Earth-analog-5000-*Teh*-plus.

Those curves told one thing at once: No need to search past analog 800; glaciation had returned.

In the lower right corner was displayed: **87.** Zeb asked why. "Nulls," said Deety. "Gay couldn't get readings. Storm, earthquake, war, anything. Gay Deceiver."

"Hi, Deety! We whupped 'em!"

"You surely did, Smart Girl; Tik-Tok will be proud of you. Change scale. Display zero through eight hundred."

As scale expanded, figure 87 dropped to 23. Zeb said, "Deety, I'm curious about those twentythree. Will you have S.G. display their designations?"

"Certainly, Zebadiah, but may I take it in planned order?"

"Sure but just let me find out first —"

"Astrogator," Sharpie said flatly, "isn't this your day as K.P.?"

We were at Picnic Island, examining results. I suppressed a smile; "slunk" describes the way Zeb left the cabin. Later I was unsurprised to see my tiny treasure giving Zeb an unusually warm hug and kiss. Our Captain has an efficient system of rewards and punishments — never so described.

Deety instructed Gay to eliminate all worlds with a body count higher than that of the Earth-zero beach, and all worlds chillier by five degrees (my daughter was bracketing to avoid false readings from unseasonable weather).

With elimination of high population, cold climate, and low technology as indicated by low or nil flux of communication frequencies, my daughter had us down to seventy-six worlds, plus twentythree to reexamine — had eliminated over four thousand worlds — and it was still two hours till lunch time!

Deety had Gay display temperatures of the seventy-six. The curve was no longer continuous, but a string of beads, with clumps. I said, "Hilda my love, I'll wager ten back rubs that at least half of the nulls fit into that gap" — and indicated a break at the maximum of the temperature curve.

Hilda hesitated. "Why, Jacob?"

"My dear, figures mean little to me until expressed geometrically. Curves are bold print. I'll give you odds."

"What odds?"

"Don't be suckered, Auntie Cap'n! Pop, I'll take *your* end of the bet, give you two to one, and spot you a point."

A back rub from Deety is a treat; she has strong hands and knows how. But I answered, "Ladies, I must start lunch. Deety, when we make visual check, let's include Antarctica as well as Greenland, at that break."

"Two points, Pop?" I pretended not to hear.

That same day we trimmed it down to six worlds, all warm, all free of body taboos, all high technology, all acceptably low in population, all free of major war or overt preparations, all with some version of English as the major North American language. It was time to pick a world by inspection on the ground.

How to make contact was much discussed. Hilda chopped it by saying: "One way is to land on the White House lawn and say, 'Take me to your leader!' The other is to be as sneaky as a 'Black Hat.' Let me know when you reach consensus." She went through the bulkhead and dogged the door.

An hour later I rapped on the bulkhead; she rejoined us. "Captain," I reported formally, "we have reached consensus. Each is afraid of the open approach; authorities might confiscate our car, we might wind up as prisoners."

"Yes," she agreed. "Twice we just missed it."

"Precisely. The expression 'sneaky as a "Black Hat"' is distasteful —"

"I so intended."

I went doggedly on: " — but sneakiness is not immoral *per se.* A mouse at a cat show is justified in being inconspicuous; so are we. We merely seek information. I am expendable; therefore I will scout on the ground."

"Hold it. This is unanimous? Deety? Zebbie?"

"No," my daughter answered. "I didn't get a vote. You and I are barred from taking risks. Pregnant, you know."

"I certainly do know! Jacob, I asked for consensus on *method.* I did *not* ask for volunteers. I've picked the scout I consider best qualified."

I said, "My dear, I hope you have picked me."

"No, Jacob."

"Then I'm your boy," said Zebbie.

"No, Zebbie. This is spying, not fighting. I'm doing this job myself."

I interrupted, "Hilda, where you go, I go! That's final."

Our captain said gently, "Beloved, I hope you don't stick to that. If you do, we'll elect another skipper. You are my candidate."

"Dear, I was trying to —"

" — take care of me. Nevertheless you are my candidate. Deety is too reckless; Zebbie too cautious. I'll carry out whatever duties you assign, including using the magic spectacles. Are you sticking to that ultimatum?"

"Uh, yes."

"Even though your stubbornness could result in my death? I love you, dear, but I won't take you with me on a spying mission. What happened to that 'All for one and one for all' spirit?"

"Uh… "

"Captain!"

"Yes, Zebbie?"

"You proved that you can be tough with your husband. Can you be tough with yourself? Look me in the eye and tell me that you know more about intelligence than I do. Or that you can fight your way out of a rumpus better than I can."

"Zebbie, this isn't *military* intelligence. *You* look *me* in the eye and tell me that you know more about *obstetrics* than I do. How do you prepare for leapfrog transfusion and when is it likely to be needed? Define eclampsia. What do you do about placenta previa? I am less likely to get into a rumpus than you are ... and if I do, I'll throw my arms around his neck and cry. However… convince me that you know as much about obstetrics as I do and I'll consider letting you make contacts. In the meantime pick a midwestern town big enough for a fair-sized hospital and public library, and select a point for grounding and rendezvous; you will be in command while I'm gone."

I interrupted. "Hilda, I absolutely forbid —"

"Chief Pilot! Pipe down!" My wife turned her face away from me. "Chief Master at Arms, restore discipline."

"Aye aye, Ma'am! Jake, she means *you."*

"But —"

"Shut up! Crewmen don't give orders to the C.O., and I've had a bellyful of your attempts."

Two hours later I was in Zeb's seat, biting my nails and sweating, while Zeb had my seat. I had given unconditional parole — the alternative having been to go (or be stuffed) through the bulkhead, then wait, locked in. I am not a total fool; I gave my word.

Zeb held us in cloud cover while my daughter, wearing earphones, stayed in contact with Hilda. Gay's cabin speaker was paralleled with the phones so that we could follow in part what went on below. Deety reported, "That fade is from entering a building; I could hear her footsteps. Zebadiah, if I fiddle with the gain, I might miss her as she comes out."

"Don't shift. Wait."

Eternities later we heard Hilda's sweet voice: "I'm heading for rendezvous. I no longer have to pretend that this is a hearing aid — but everybody accepted it as such. You needn't be cautious picking me up; we're leaving."

Five minutes later we bounced and translated at once, then Zeb held her in cruise while Hilda reported:

"No trouble. Ze bewildair' French ladee she zink les Americain' verree gentils. Mais les arts medicals — poof! Infant mortality high, childbirth mortality gruesome. I could have left sooner but I got fascinated."

"Hilda," I protested, "you had me worried to death."

"Jacob, I had to be certain; it's such a nice world otherwise. Other contacts should not take as long as I've solved the money problem."

"How?" Zebadiah asked. "I've been noodling that. There's an even chance that private ownership of gold will be illegal. A standard trick used whenever a government is in trouble."

"Yes, Zebbie — it's illegal there, too. I still have the bullion you had me carry. Instead I sold that heavy gold chain I was wearing. Sorry, Deety; I had to."

"Forget it, Hillbilly. That chain was a way to horde gold. Pop bought it for Mama Jane before they clipped the zeroes and remonetized."

"Well… I found a public phone — didn't try to use it; Edison would never have recognized it. But it had a phone book, so I looked up 'gold' — and found 'licensed gold dealers' and sold your chain —"

"And now you're stuck with a lot of local money."

"Zebbie! See why I didn't let you go down by yourself? The dealer was of course a coin dealer, too — and I bought foreign silver coins, worn, small, oldish, dates without being old enough to be collectors' items. French coins, but he didn't have enough, so I filled out with Belgian, Swiss, and German."

I said, "My dear, the coins you bought *there* will not be good *here.* Or at the next analog. Or the next."

"Jacob, who — other than a professional — is certain of designs on foreign coins? — especially if they are a few years old and a bit worn. I got real silver, none of those alloys that don't have the right ring to them. At most a shopkeeper will phone his bank and ask for the rate. That's how I bought *this,"* my beloved said proudly, pulling out of Deety's biggest purse a World Almanac.

I was not impressed. If she was going to buy a book, why not a technical manual that might contain new art, data Zeb and I could use?

My darling was saying, "We *must* buy one in each analog we ground in. It's the nearest thing to an encyclopedia less than a kilo mass you'll find. History, law, vital statistics, maps, new inventions, new medicine — I could have skipped the library and learned all I needed from this book. Zebbie! Turn to the list of U.S. Presidents."

"Who cares?" Zeb answered, but did so. Shortly he said, "Who is Eisenhower? This shows him serving one of Harriman's terms and one of Patton's."

"Keep going, Zebbie."

"Okay — *No!* I refuse to believe it. Us Carters are taught to shoot straight, bathe every month even in the winter, and *never* run for office."

Two days later Hilda and Zeb, as a French-tourist couple, found the world where we settled.

We slid in quietly, both through the histrionics of our "bewildered French lady" and Zeb's unmalicious chicanery. Sometimes he was our French lady's husband; other times he spoke English slowly with a strong Bavarian accent.

In this analog, the United States (called that, although boundaries differ) is not as smothered in laws, regulations, licensing, and taxes as is our native country. In consequence "illegally entered aliens" do not find it difficult to hide, once they "sling the lingo" and understand local customs.

Hilda and Zeb learned rapidly in a dozen towns, Deety and me "riding shotgun" in the sky. Deety and I learned from them and from radio. Then we moved to the Northwest, "natives" from back east, and coped with our only problem: how to keep Gay Deceiver out of sight.

Hilda and Deety hid her in the Cascades for three days while Zeb and I found and bought a farmhouse outside Tacoma-analog. That night we moved Gay into the barn, slapped white paint on the building's windows, and slept in Gay, with a feeling of being home!

We own six hectares and live in the farmhouse in front of Gay's hideaway. Gay will eventually go underground, protected by reinforced concrete; the barn will become a machine shop. We will build a new house over her bunker. Meanwhile, our old farmhouse is comfortable.

This United States, population under a hundred million, accepts immigrants freely. Zeb considered buying phony papers to let us enter "legally" — but Hilda decided that it was simpler to use Gay to smuggle us while we smuggled Gay. The outcome is the same; we will never be a burden to the state — once we get our machine shop and electronics lab set up, Zeb and I will "invent" hundreds of gadgets this country lacks.

We seem to be near the warmest part of an interglaciation. Wheat grows where our native world has frozen tundra; the Greenland icecap has vanished; lowlands are under water, coastlines much changed.

Climate and custom encourage light clothing; the preposterous "body modesty" taboo does not exist. Clothing is worn for adornment and for protection — never through "shame." Nakedness is symbolic of innocence — these people derive that symbology from the Bible used in our native culture to justify the exact opposite. The *same* Bible — I checked. (The Bible is such a gargantuan collection of conflicting values that anyone can "prove" *anything* from it.)

So this is not a world where alien vermin can hide. A "man" who *at all times* kept arms and legs covered by long sleeves and long trousers would be as conspicuous as one in armor.

The sects here are mostly Christian — on a Saturday morning one sees families headed for church in their finest Sabbath-go-to-meeting clothes. But, since nakedness is symbolic of innocence, they undress in an anteroom to enter their temple unadorned. One need not attend services to see this; the climate favors light, airy structures that are mostly roof and slender columns.

The Bible affects their penal system, again by selective quotation: "Eye for eye, tooth for tooth —"

This results in a fluid code, with no intent to rehabilitate but to make the punishment fit the crime. I saw an example four days after we settled. I was driving our steam wagon and encountered a road block. A policeman told me that I could take a detour or wait twenty minutes; the highway was being used to balance a reckless driver.

I elected to pull over and wait. A man was staked with one leg stretched out at a right angle. A police wagon drove down that cleared highway, ran over his leg, turned and drove back over it.

An ambulance was waiting — but nothing was done for a timed seventeen minutes. Then surgeons amputated on the spot; the ambulance took him away and the block was removed.

I went back to my wagon and shook for many minutes, then returned home, driving cautiously. I didn't tell our family. But it was reported on radio and the evening paper had pictures — so I admitted that I had seen it. The paper noted that the criminal's insurance had been insufficient to cover the court's award to the victim, so the reckless driver had not only lost his left leg (as had his victim) but also had had most of his worldly goods confiscated.

There is no speed limit and traffic regulations are merely advisory — but there are *extremely* few accidents. I have never encountered such polite and careful drivers.

A poisoner is killed by poison; an arsonist is burned to death. I won't describe what is done to a rapist. But poisoning, arson, and rape are almost unknown.

My encounter with this brutal system of "balancing" almost caused me to think that my dear wife had been mistaken in picking this world-we should move! I am no longer certain. This place has no prisons, almost no crime, and it is the safest place to raise children I've ever heard of.

We are having to relearn history. "The Years of Rising Waters" explain themselves. The change came before 1600; by 1620 new shorelines had stabilized. That had endless consequences — mass migrations, political disorder, a return of the Black Death, and much immigration from Great Britain and the lowlands of Europe while the waters rose.

Slavery never established here. Indentures, yes — many a man indentured himself to get his family away from doomed land. But the circumstances that could have created "King Cotton" were destroyed by rising waters. There are citizens here of African descent but their ancestors were not slaves. Some have indentured ancestors, no doubt — but everyone claims indentured ancestors even if they have to invent them.

Some aspects of history seem to be taboo. I've given up trying to find out what happened in 1965: "The Year They Hanged the

Lawyers." When I asked a librarian for a book on that year and decade, he wanted to know why I needed access to records in locked vaults. I left without giving my name. There is free speech — but some subjects are not discussed. Since they are never defined, we try to be careful.

But there is no category "Lawyers" in the telephone book.

Taxation is low, simple — and contains a surprise. The Federal government is supported by a head tax paid by the States, and is mostly for military and foreign affairs. This state derives most of its revenue from real estate taxes. It is a uniform rate set annually, with no property exempted, not even churches, hospitals, or schools — or roads; the best roads are toll roads. The surprise lies in this: *The owner appraises his own property.*

There is a sting in the tail: Anyone can buy property *against the owner's wishes* at the appraisal the owner placed on it. The owner can hang on only by raising his appraisal *at once* to a figure so high that no buyer wants it — and pay *three years back taxes* at his *new* appraisal.

This strikes me as loaded with inequity. What if it's a family homestead with great sentimental value? Zeb laughs at me. "Jake, if anybody wants six hectares of hilly land and second-growth timber, we take the profit, climb into Gay — and buy more worthless land elsewhere. In a poker game, you figure what's in the pot."

PART THREE Death and Resurrection

Chapter XXXIX

Random Numbers

Hilda:

Jacob stood, raised his glass. "Snug Harbor at last!"

Zebbie matched him. "Hear, hear!"

Deety and I sat tight. Zebbie said, "Snap it up, kids!" I ignored him.

Jacob looked concerned. "What's the matter, dear one? Zeb, perhaps they don't feel well."

"It's not that, Jacob. Deety and I are healthy as hogs. It's that toast. For ten days, since we signed the deed, it's been that toast. Our toast *used* to be: 'Death to "Black Hats"!'"

"But, my dear, I promised you a new Snug Harbor. The fact that you girls are having babies made that first priority. This is the place. You said so."

I answered, "Jacob, I *never* called this 'Snug Harbor.' I reported that I had found a culture with advanced obstetrics, and customs that made it impossible for Black Hats to hide. I wasn't asked what I thought of it."

"You signed the deed!"

"I had no choice. My contribution was one fur cape and some jewelry. Deety put in more — but effectively no gold. She fetched her stock certificates, other securities, some money — paper — and a few coins. I fetched two twenty-five newdollar bills. Deety and I left Earth as paupers. Each of us women — *not* 'girls'!, Jacob — was once wealthy in her own right. But in buying this place, you two decided, you two paid for it — all we did was sign. We had no choice."

Zebbie looked at Deety and said softly, "'With all my worldly goods I thee endow,'" and took her hand.

Jacob said, "Thanks, Zeb. I, too, Hilda — if you don't believe that, then you don't believe I meant the rest: ' — for richer, for poorer, in sickness and in health — ' But I did and I do." He looked up. "Zeb, where did we go wrong?"

"Durned if I know, Jake. Deety, what's the score? Give."

"I'll try, Zebadiah. Maybe all we should expect is washing dishes and wiping noses and changing diapers. But that doesn't seem like a be-all and end-all when you've gone banging around the universes… stood guard for your husband while he bathed in a mountain stream ... or — Oh, the devil with it! This place is good and clean and wholesome and *dull!* I'll find myself joining the church just for company… then sleeping with the priest out of boredom!"

"Deety, Deety!"

"I'm sorry, Zebadiah. It would be boredom with *Beulahland,* not with you. The very hour we met, you saved my life; you married me before that hour was over, impregnated me before midnight, fought and killed for me only days later, saved my life twice more that same day, took me to another planet in another universe before midnight *still* that same day… and short hours later had again fought for me, twice. You are my gallant knight, sans peur et sans reproche. In the six weeks I have known you, you have gifted more romance, more glorious adventure, into my life than in all the twentytwo years before it. But the last twelve days — especially the last ten — have told me what we *now* look forward to."

Deety paused to sigh; I said quietly, "She speaks for me."

Deety went on, "You two would lay down your lives for us — you've come terrifyingly close. But what happened to your glorious schemes to rebuild the Solar System? To kill every last one of those vermin? Gay Deceiver sits in an old barn, dark and quiet — and today I heard you discussing how to market a can opener. Universes beyond the sky to the incredible Number of the Beast! — yet you plan to sell can openers while Hilda and I serve as brood mares. We haven't even visited Proxima Centauri! Zebadiah — Pop! — let's spend tonight looking for an Earth-type planet around Alpha Centauri — kill a million vermin to clean it, if that's what it takes! Plan what planets to put on Earth's Lagrange points. I'll write programs to meet your grandest plans! *Let's go!"*

My husband looked sad. Zebbie held Deety's hand and said, "Deety, we don't want to sell can openers. But you two *are* pregnant and we've gone to a lot of trouble to put you where you and our kids will be safe. Maybe it's dull… but it's your duty. Forget hunting vermin."

"Just forget it? Zebadiah, why is Gay Deceiver loaded and ready for space? Power packs charged, water tanks full, everything? Do you and Pop have something in mind… while Hilda and I stay home and babysit?"

"Deety, if we did, it wouldn't hurt to sell a few can openers first. You two and the kids must be provided for, come what may."

"That Widow's Walk again, Hillbilly. But, my husband, you have started from a false premise. You men want to protect Hilda and me and our kids at any cost — and we honor you for it. But one generation is as valuable as another, and men are as valuable as women. With modern weapons, a computer programmer is more use in war than a sniper. Or — forgive me, sir! — even an aerospace fighter pilot. I'm a programmer. I can shoot, *too!* I won't be left out, I won't!"

I gave Deety our signal to drop it. It doesn't do to push a man too hard; it makes him stubborn. One can't expect logic from males; they think with their testicles and act from their emotions. And one must be careful not to overload them. We had given them five points to stew over; we would save the sixth — the clincher — for later.

I waited three days… and struck from the other flank. Again Deety and I rehearsed: We would wrangle with each other and appeal to the men for support — crosswise.

"Jacob, what is 'random'? Is it correct to say that 'random' is shorthand for 'I don't know'?"

Deety said scornfully, "Don't let her trap you, Pop. She's got the second law of thermodynamics mixed up with the second law of robotics — and doesn't understand either one." (I had to phrase this and insist; Deety didn't want to say it. Deety is sweet, not the bitch I am.)

"'Random' is used a number of ways, my love, but it usually means a set in which the members are equal in probability of experiencing some event, such as being next to be chosen."

"If they're 'chosen,' how can it be 'random'?"

Deety snickered.

Zebbie said, "Don't let him snow you, Sharpie; 'random' means 'I don't know' — as you said."

"Aunt Hilda, pay no attention to Zebadiah. 'Random' is what you have when you maximize entropy."

"Now, Daughter, that is hardly a mathematical statement —"

"Pop, if I gave it to her in mathematical language she'd faint."

"Deety, quit picking on Sharpie," Zebbie said sternly.

"I wasn't picking on her. Hillbilly has this silly notion that we didn't get anywhere hunting vermin because we went about it systematically… but every time we told Gay to shake up her random numbers and do as she pleased, we got results."

"Well, didn't we?" I put in, intentionally shrill. "We had endless failures… but every time we gave Gay her head — 'Put her on random numbers,' as Deety says — we never had a failure. 'Random' and 'chance' are not related. 'Random chance' is a nonsense expression."

"Auntie darling, you're out of your skull. Don't worry, Pop; pregnant women often get the vapors."

I indignantly listed things that could not be "random" or "chance" — then discovered that Deety and I had to start dinner. We left them wrangling, and were careful not to giggle within earshot.

After dinner, instead of that tired toast, Jacob said, "Hilda, would you explain your concept of 'random'? Zeb and I have been discussing it and agree that there is some factor in our adventures not subject to analysis."

"Jake, that's *your* statement. I just said, 'I dunno,' and wiped the drool off my chin. Tell us, Sharpie."

"But Jacob told us a month ago. There isn't any such thing as 'chance.' It's a way of admitting ignorance. I thought that I had begun to understand it when we started hitting storybook universes. Lilliput. Oz. Dr. Smith's World. Wonderland. I was so sure of it — You remember three weeks ago after our second visit to Oz? I ordered a day of rest; we spent it on *Tau* axis instead of *Teh."*

"Dullest day we had," said Zebbie. "You put us in orbit around Mars. Not just one Mars but dozens. Hundreds. The only one worth a fiat dollar was the one we aren't going back to. I got permission to go off duty and take a nap."

"You weren't on duty, Zebbie. You three slept or read or played crib. But I was searching for Barsoom. Not hundreds, Zebbie — *thousands.* I didn't find it."

"Hillbilly, you didn't tell me!"

"Dejah Thoris, why bother to say that I had been chasing the Wild Goose? I swallowed my disappointment; next day we started searching *Teh* axis… and wound up here. Would I have found Barsoom had I asked Gay to run the search? Defined her limits, yes — as Zebbie did on Marsten — but, having defined it, told her to take her random numbers and find it. It worked on Marsten; we mapped a whole planet in a few hours. It worked on *Teh* axis. Why wouldn't it be best for another search?"

Jacob answered, "Dearest, Zeb fed Gay a defined locus. But how would that apply to this, uh, speculative… search?"

"Jacob, Zebbie told us that Gay holds the Aerospace Almanac. That includes details about the Solar System, does it not?"

"More than I want to know," Zebbie agreed.

"So Gay knows the Solar System," I went on. "I thought of reading the Barsoom stories to Gay, tell her to treat them as surface conditions on the fourth planet — then take her random numbers and find it."

Jacob said gently, "Beloved, the autopilot doesn't really understand English."

"She does in Oz!"

My husband looked startled. Jacob has immense imagination… all in one direction. Unless one jogs him. Zebbie caught it faster. "Sharpie, you would be loading her with thousands of bytes unnecessarily. Deety, if they've got those novels on New Earth — I'll find out — what do you need to abstract in order to add to Gay's registers an exact description of Barsoom, so that Gay can identify it — and stop her Drunkard's Walk?"

"Don't need books," my stepdaughter answered. "Got 'em up here." She touched her pretty strawberry-blonde curls. "Mmm… go to sleep thinking about it, tell it to Gay early tomorrow before I speak to anybody. Minimum bytes, no errors. Uh ... no appetizer."

"A great sacrifice, merely for science."

"A one-eyed Texas honeybutter stack?… and the prospect of meeting the original Dejah Thoris? Never wears anything but jewels and is the most beautiful woman of two planets."

"About that stack — Jane's buttermilk recipe?"

"Of course. You're not interested in the most beautiful woman of two planets?"

"I'm a growing boy. And ain't about to be trapped into damaging admissions." Zebbie stopped to kiss Deety's retroussé nose and added, "Sharpie, Gay can't handle the full Number of the Beast and anyhow Jake locked off most of it. What's the reduced number, Jake?"

Deety promptly said, "Six to the sixth. Forty-six thousand, six hundred, fifty-six."

Zebbie shook his head. "Still too many."

Deety said sweetly, "Zebadiah, would you care to bet?"

"Wench, have you been monkeying with Gay?"

"Zebadiah, you put me in charge of programming. I have *not* changed her circuitry. But I learned that she has four registers of random numbers, accessible in rotation."

"A notion of my own, Deety. Give them down time. Keep entropy at maximum."

Deety did not answer. Her face assumed her no-expression. Her nipples were down. I kept quiet.

Zebbie noted it also — he does check her barometer; he once told me so. When silence had become painful, he said, "Deety, did I goof?"

"Yessir."

"Can you correct it?"

"Do you wish me to, Zebadiah?"

"If you know how, I want it done soonest. If you need a micro electrician, I have my loupe and my micro soldering gear."

"Not necessary, Zebadiah." My stepdaughter made a long arm, got a walky-talky we keep indoors — with six hectares, it is convenient to carry one outside the house. "Gay Deceiver."

"Hi, Deety," came this tiny voice from the ear button. Deety did not place it in her ear. "Hello, Gay. More gain… more gain… gain okay. Retrieve Turing program Modnar. Execute."

"Executed. Did he chew the bit?"

"Goodnight, Gay. Over."

"Sleep tight, Deety. Roger and out."

I cut in fast. "Gentlemen, the dishes can sit overnight. I vote for a ramble among the universes, say two hours, then early to bed. The other choice is, I think, channel one with the Beulahland Choir and channel two with *Bible Stories Retold:* 'The Walls of Jericho.' Both are highly recommended… by their sponsors."

It felt good to be back in a jump suit. I was turning out lights, making sure windows were fastened, gathering up one walky-talky, when Zebbie stuck his head into the kitchen from the back door. "Captain?"

"Huh? Zebbie, do you mean *me?"*

"You're the only captain around, Sharpie. What I started to report was: Captain, your car is ready."

"Thank you, First Officer."

He waited for me to put the butter away, then locked the back door behind me, opened the barn's people door. I noted that the big doors were still closed — and remembered my borrowed panties four weeks and many universes away. I squirmed past Deety, got into my old familiar starboard-aft seat with a song in my heart.

Shortly Deety said, "Starboard door seal checked, First Officer."

"Roger. Captain, ready for space."

"Thank you. Has anyone left behind anything normally carried?"

"No, Captain. I replaced wornout clothes. Added tools I could buy here."

"Zebbie, it sounds as if you expected to lift without warning."

"Habit, Captain. I've kept anything important in my — our — car rather than in that flat. Some I duplicated. Teethbreesh. Iodine. Some clothes." Zebbie added, "Jake keeps basics here, too. 'Be prepared!' Troop ninety-seven, Cleveland."

"Jacob? Anything you need?"

"No, Captain. *Let's go!"*

"We will, dear. Deety, did you give Zebbie a schedule?"

"The one you planned. Not Barsoom, just fun. Two hours."

"Astrogator, take the conn. Carry out schedule."

"Aye aye, Ma'am. Gay Deceiver."

"Hi, Zeb. This is great! Whyinhell did you lobotomize me?"

"Because I'm stupid. Random walk, Gay — transitions, translations, rotations, vectors, under all safety rules. Two hours. Five-second stops subject to 'Hold' from any of us."

"May I place a 'Hold' myself?"

"Captain?"

I resorted to sophistry. "Astrogator, you said 'any of us' — which includes Gay."

"Gay, paraphrase acknowledge."

"I shall make unplanned excursions of all sorts with five-second pause at each vertex, plus 'Hold' option, plus safety restrictions, for two hours, then return here. Assumption: Program subject to variation by Captain or surrogate. Assumption confirmed?"

I was astonished. Deety had told me that Gay would sound almost alive if Zebbie used her full potential… but Gay sounded *more* alive, *more* alert, than she had in Oz.

"Assumption confirmed," Zebbie answered. "Execute!"

For ten minutes — one hundred thirteen shifts — we had a "slide show" of universes from commonplace to weird beyond comprehension, when suddenly Gay told herself "Hold!" and added, "Ship ahoy!"

"Private Yacht Dora," she was answered. "Is that you, Gay? What took you so long?"

I said, "Astrogator, I have the conn." I was startled and scared. But a captain commands — or admits she can't cut it and jumps overboard. A captain can be wrong — she can*not* be uncertain.

Gay was saying rapidly: "Captain, I am not transmitting. I advise asking for Dora's captain. I have transmitted: 'Yes, this is Gay, Dora. I'm not late; we took the scenic route. Pipe down, girl, and put your skipper on.' Captain, the mike is yours; they can't hear me or any other voice inside me."

"Thank you, Gay. Captain Hilda, master of Gay Deceiver, hailing Private Yacht Dora. Captain of Dora, please come in."

In our central display appeared a face. We do *not* have television. This picture was flat rather than 3-D and not in color, just the greenish bright of radar. Nevertheless, it was a face, and lip movements matched words. "I'm Captain Long, Captain Hilda. We've been expecting you. Will you come aboard?"

("Come aboard?"! So this is what comes of running around the universes in a modified duo, without so much as a pressure suit.) "Thank you, Captain Long, but I can't accept. No air locks."

"We anticipated that, Captain. Dora's radius-nine-oh hold has been modified for Gay Deceiver. If you will do us the honor, we will take you inboard. Your wings are raked back, are they not? Hypersonic?"

"Yes."

"I will move slowly, become dead in space with respect to you, then reorient and move to surround you as gently as a kiss."

"If the Captain pleases — It is my duty to advise her if I see a mistake in prospect."

I barely whispered. "Zebbie, you're advising me not to?"

"Hell, no," he answered aloud, secure in the knowledge that his voice would be filtered out. "Do it! What do we have to lose? Aside from our lives. And we're sort o' used to that."

I answered, "Captain Long, you may take us inboard."

"Thank you, Captain. The Dora will arrive in — I'm sorry; what time units do you use?"

Deety interrupted: "Gay, let my voice through. Captain Long —"

"Yes. You are not Captain Hilda?"

"I'm Deety. We call our units 'seconds.' These are seconds: one… two… three… four… five… six ... seven… eight —"

"Synchronized! We call ours 'Galactic seconds' or simply 'seconds' but about three percent longer than yours. Dora will be almost touching your bow in… fifty-seven of your seconds."

Spooky — Blackness blotting out stars, getting bigger. As it began to surround us, Jacob switched on forward grounding lights; we were entering a tunnel — being envaginated by it — with great precision and no apparent power — and it was clear that this enormous sheath was designed to fit us, even to alcoves for Gay's doors. Shortly we were abreast them — cheerful to see that they were lighted. Oddest, we now seemed to be under gravity — perhaps midway between that of Earth-zero and Marsten.

"Outer doors closing," came Captain Long's voice. "Closed and sealing. Pres sure adjusting. Captain, we use nitrogen and oxygen, four to one, plus carbon dioxide sufficient to maintain breathing reflex. If content or pressure does not suit you, please tell me."

"The mix described will suit us, Captain."

"Don't hesitate to complain. Pressure equalized. Debark either side, but I am on your starboard side, with my sister."

I squirmed past Deety in order to introduce my family. Just as well, it gave me a chance to see them first. None of us can be shocked by skin but we can be surprised. But I've been practicing not showing surprise since grammar school as a major defense of my *persona.*

Here were two shapely young women, one with four stripes on each shoulder (painted? decals?), the other in three stripes — plus friendly smiles. "I'm Captain Long," said the one with four stripes.

" — and her mutinous crew," echoed the other.

"Commander Laurie, my twin sister."

"Only we aren't, because —"

" — we're triplets."

"Mutinies are limited to the midwatch —"

" — so as not to disturb passengers, of which —"

" — we have two more. Knock it off, Laurie, and —"

" — show them to their quarters. Aye aye, Cap'n."

"Hey! Don't *I* get introduced!" From all around came the voice that had hailed us.

"Sorry," said Captain Long. "That's our untwin sister, Dora. She runs many of the ship's functions."

"I run *everything,"* Dora asserted. "Laz and Lor are purely ornamental. Which one of you jokers shut off Gay?"

"Dora!"

"I retract the word 'jokers.'"

"It would be kind," Captain Long told me, "to let them chat. Our thought processes are so much slower than hers that a talk with another computer is a treat."

"Deety?" I asked.

"I'll wake her, Captain. Gay won't go off and leave us."

Captain Long's mouth twitched. "She can't. Those outer doors are armor." I decided not to hear. Instead I said "Captain, your ship is *beautiful."*

"Thank you. Let us show you to your quarters."

"We planned to be away only two hours."

"I don't *think* that is a problem. Dora?"

"Time-irrelevant. They left home four-minus standard seconds ago; their planet is on a different duration axis. Neat, huh? For protein-type purposes they'll get home when they left; I won't even have to figure interval and reinsert them. Couple of weeks, couple of years — still four-minus seconds. Laz-Lor, we've lucked again!"

Gay's voice (also from all around us) confirmed it: "Captain Hilda, Dora is right. I'm teaching her six-dimensional geometry; it's new to her. When they are home — not just time-irrelevant — they march in *Tau* duration with Earth-Prime on 't' axis — one we never explored."

Jacob jerked his head up, looked for the voice. "But that's prepos —"

I interrupted. "Jacob!"

"Eh? Yes, Hilda?"

"Let's complete introductions, then go to the quarters the Captain offered us."

"Introductions can be considered complete, Captain Hilda. 'Deety' has to be Doctor D. T. Burroughs Carter; the gentleman you called 'Jacob' must be your husband Doctor Jacob J. Burroughs. Therefore, the tall handsome young man is Doctor Zebadiah J. Carter, Doctor D.T.'s husband. Those are the people we were sent to fetch."

I didn't argue.

We followed a curving passageway, me with the Captain, her sister with my family. "One question, Captain?" I inquired. "Is nudity uniform in your ship? I don't even have captain's insignia."

"May I give you a pair of stickums?"

"Do I need them?"

"As you please. I put these on just to receive you. People wear what they wish; Dora keeps the ship comfortable. She's a good housekeeper."

"What are your passengers wearing?"

"When I left the lounge, one was wearing perfume; the other had a sheet wrapped as a toga. Does your planet have dress taboos? If you will define them, we will try to make you feel at home." She added, "Here are your quarters. If they don't please you, tell Dora. She'll rearrange partitions, or convert double beds into one giant bed, or four single beds, or any combination; we want you to be comfortable. When you feel like coming out, Dora will lead you."

As the door contracted Jacob said, "You've proved your theories, Hilda. We've fallen into another story."

Chapter XL

"Is there a mathematician in the house?"

Deety:

That suite had one bath — pardon me; "refresher" — bigger than three ordinary bathrooms. Hillbilly and I might be there yet, bathing and trying new gadgets, if Pop and Zebadiah hadn't used brute force.

"Captain Auntie, what are you going to wear?"

"Chanel Number Five."

"Clothes, I mean."

"'Clothes'? When our hostess is wearing skin? Jane brought you up better than that."

"Wanted to be sure. That you'll back me up with Zebadiah, I mean."

"If Zebbie gets irrational, I'll pin his ears back. If Jacob is ashamed of his skinny runt, he will be wise not to say so. Gentlemen, are you going to chicken? I mean: 'Which way are you going to chicken?"

"Jake, they're picking on us again."

"Ignore them, comrade. Here are blue briefs your size. Hey! — with a stuffed codpiece! I'll wear them myself."

"Jacob!"

"Listen to the woman. Naked as a peeled egg, planning to meet strangers — and snapping at me for wanting to boast a little. Time was, my small and sultry bride, that a gentleman never left his chambers without a codpiece equal to his status."

Auntie countered with: "Jacob, I spoke hastily. Shouldn't the secondin-command wear a larger codpiece than the pilot? ' — equal to his status,' you said."

"But Allah took care of Zeb. *Surely* you've noticed, beloved?"

My husband butted in. "Jake! No barroom betting! Wear the blue; I'll take these red ones."

Zebadiah couldn't get into the red briefs; the blue pair was too big for Pop. They traded. Same story. They traded back — each pair was too small. By great effort they got them on — they fell off.

Pop chucked his aside. "Dora!"

"Yes, sir."

"Please connect me with your captain."

"I was just funning! You wouldn't tell on me — would you?"

Aunt Hilda took over. "He won't tell, Dora. Are you and Gay getting acquainted?"

"We sure are! Gay's been more places than I have-and I've been *everywhere.* She's a smart girl!"

"We think so, thank you. What should our men wear?"

"I hold ambient at twenty-seven and deck pads a degree warmer; why wear anything? But for fetishists I supply minilaplaps of opaque tissue. In the 'fresher, cubby nine-bee. Better get them to a therapist before those symptoms get infected. Good therapists where we're going."

I went looking for stowage 9-b; Aunt Hilda went on talking. "Where is that, Dora?"

"Please address such questions to the Captain. As housekeeper I can tell you anything. As astrogator I must refer questions — I mean they made me put a choke filter on that circuit! Is that fair? I ask you! I'm older than the twins."

"It depends on the ship," Aunt Hilda said, carefully not answering. "We each do what we do best; age is not a factor. Ask Gay."

"Oh, she's hooked in."

"Sure am, Cap'n Hilda honey, through Dora's ears — and eyes! Say, you look just like your voice — that's a compliment."

"Why, thank you, Gay!"

I interrupted: "Dora, are these laplaps?"

"Of course. But while we're all here — You don't need two 'freshers in a ship that small. Gay needs the space for a Turing mod I'll help with. So if the fetishists will clear their gear out of Buster Brown and — " Dora broke off suddenly: "The Captain will be pleased to receive the Captain and ship's cornpany of Gay Deceiver in the lounge at her convenience. That means 'Right now.' Follow me — little blue light."

I had been trying on a green laplap. They didn't weigh *anything.* Like wrapping fog around your hips. I snatched it off and wrapped it around Zebadiah: "That's the nearest to nothing you'll ever wear, Zebadiah, but it does the trick." (I don't blame men for being shy. Our plumbing is out of sight, mostly, but theirs is airconditioned and ofttimes embarrassingly semaphoric. Embarrasses them, I mean; women find it interesting, often amusing. My nipples show my emotions, too — but in the culture in which I grew up nipples don't count that much.)

The little blue light led us around, then inboard. This "yacht" was large enough to get lost in. "Dora, can you see and hear in every part of the ship?"

"Of course," the blue light answered. "But in the Commodore's suite, I can scan only by invitation. R.H.I.P. Lounge straight ahead. Call me if you want me. Midnight snacks a house specialty. I'm the best." The little light flicked out.

The lounge was circular and large; four people were gathered in one corner. (How does a circle have a corner? By arranging contours and cushions and nibble foods and a bar to turn it into a chummy space.) Two were the twins; they had peeled off the stickums which left no way to tell them apart.

The others were a young woman and a man who looked fortyish. He wasn't the one wearing a sheet; the young woman was. He was wearing much the same as our men but more like a kilt and in a plaid design.

One twin took charge: "Commodore Sheffield, this is Captain Hilda, First Officer Carter, Chief Pilot Burroughs, Copilot Deety Carter. You've all met my sister but not our cousin, Elizabeth Long."

"Now introduce us over again," ordered "Commodore Sheffield." ("Commodore Sheffield" indeed! Whom did he think he was fooling?)

"Yes, sir. Doctor Jacob Burroughs and his wife Hilda, Doctor Zebadiah Carter and his wife Doctor Deety Burroughs Carter. Doctor Elizabeth Long, Doctor Aaron Sheffield."

"Wait a half," my husband interrupted. "If you're going to do that, I must add that Captain Hilda has more doctorates than all the three of us, together."

Captain Long looked at her sister: "Lor, I feel naked."

"Laz, you *are* naked."

"Not where it matters. Commodore, do you still own that diploma mill in New Rome? What are you charging for doctor's degrees? Nothing fancy, say a Ph.D. in theory of solid state. One for each of us."

"How about a family discount, Ol' Buddy Boy?"

The "Commodore" glanced at the overhead. "Dora, keep out of this."

"Why? *I* want a doctor's degree, *too.* I taught them solid state."

He looked at the young woman in (half out of) the sheet. "Does Dora have a point?"

"She does."

"Dora, you get the same treatment as your sisters. Now shut up. All three are declared special doctoral candidates, B.I.T., required residence and courses completed *but* writtens and orals as tough as you think you are smart. That diploma mill — Certainly I own it. It's for suckers. You three must produce. Two regents being present, it's official. Dora, tell Teena."

"You betcha, Buddy Boy! 'Doctor Dora' — won't *that* be neat?"

"Pipe down. Friends, these twin sisters could have several doctorates by flow, had they chosen to bury themselves on a campus. They are geniuses —"

"Hear, hear!"

" — and the Long family is proud of them. But erratic, insecure, unpredictable, and you turn your backs at your own risk. Nevertheless they are my favorite sisters and I love them very much."

They looked at each other. "He acknowledged us."

"It took him much too long."

"Let's be big about it."

"Both sides?"

"Now!" — they bowled him off his feet. He was standing — they hit with the same vector, with a quick assist from their "sister" Dora (she cut the gravity field for two tenths of a second), and sent him in a complete back flip. He bounced on his arse.

He seemed undisturbed. "Beautifully timed, girls. Pax?"

"'Pax,'" they answered, bounded to their feet, pulled him to his. "We're proud of you, Buddy Boy; you're shaping up."

I decided to kick it over, learn why we had been kidnapped. Yes, *"kidnapped."* I got to my feet before he could sit down. "And I am proud," I said, dropping a deep court curtsy, "to have the honor of meeting the Senior… of the Howard Families."

Thunderous silence —

The woman in-and-out of the sheet said, "Lazarus, there was never a chance of getting away with it. These are sophisticated people. They have what you *must* have. Drop your deviousness and throw yourself on their mercy. I'll start it by telling my own experience. But first —"

She got to her feet, letting the sheet drop. "Dora! May I have a long mirror? An inverter if possible — otherwise a three-way."

Dora answered, "Teena can afford such stunts as inverters — I can't; I have a ship to run. Here's your three-way." A partition vanished, replaced by a three-way mirror, lavish in size, taller than I.

She held out her hands to me. "Doctor D.T., will you join me?"

I let her pull me to my feet, stood with her at the mirror. We glanced at ourselves; she turned us around. "Do you all see it? Doctor Hilda, Doctor Carter, Doctor Burroughs? Lazarus, do *you* see it?"

The two she did not address answered. Laz (perhaps Lor) said, "They look as much alike as we do." The other answered, "More." "Except for — " "Shush! It's not polite."

Lazarus said, "I always have to step in it to find it. But I never claimed to be bright."

She didn't answer; we were looking at ourselves in the mirror. The resemblance was so great as to suggest identical twins as with Lapis Lazuli and Lorelei Lee — Yes, I had known at once who they were. Captain Auntie did, too; I'm not sure about our husbands.

Those *are* nice teats — I can admit it when I see them on someone else. It's no virtue to have this or that physical asset; it's ancestry combined with self-obligation to take care of one's body. But a body feature can be pleasing to the owner as well as to others.

Same broad shoulders, same wasp waist, same well-packed, somewhat exaggerated buttocks.

"We're alike another way, too," she said. "What's the fourth root of thirty-seven?"

"Two point four-six-six-three-twofive-seven-one-five. Why?"

"Just testing. Try me."

"What's the Number of the Beast?"

"Uh — Oh! Six sixty-six."

"Try it this way: Six to the sixth power, and that number in turn raised to its sixth power."

"The first part is forty-six thousand, six hundred, fifty-six and — Oh, that's a brute! It would be one and a fraction — one-point-oh-three-plus times ten to the twenty-eighth. Do you know the exact number?"

"Yes but I had a computer crunch it. It's — I'll write it." I glanced around — at once a little waldo handed me a pad and stylus. "Thanks, Dora." I wrote:

10,314,424,798,490,535,546,171,949,056.

"Oh, how beautiful!"

"But not elegant," I answered. "It applies to a six-dee geometry and should be expressed in base six — but we lack nomenclature for base six and our computers don't use it. However — " I wrote:

Base six: 10^{1010} = 1,000,000,000,000,000,000,000,000,000,000,000,000.

She looked delighted and clapped. "The same number," I went on, "in its elegant form. But no words that I know by which to read it. That awkward base-ten expression at least can be put into words."

"Mmm, yes — but not easily. 'Ten thousand three hundred and fourteen quadrillion, four hundred twenty-four thousand seven hundred and ninety-eight trillion, four hundred and ninety thousand five hundred and thirty-five billion, five hundred and forty-six milliard, one hundred and seventy-one million, nine hundred and forty-nine thousand, and fifty-six. But I would never say it other than as a stunt."

I blinked at her. "I recognize that nomenclature — just barely. Here is the way I would read it: 'Ten octillion, three hundred fourteen septillion, four hundred twenty-four sextillion, seven hundred ninety-eight quintillion, four hundred ninety quadrillion, five hundred thirty-five trillion, five hundred forty-six billion, one hundred seventy-one million, nine hundred forty-nine thousand, and fifty six."

"I was able to follow you by reading your figures at the same time. But base-six is best. Is the number interesting or useful as well as beautiful?"

"Both. It's the number of universes potentially accessible through my father's device."

"I must talk with him. Lazarus, shall I tell my story now? It's the proper foundation."

"If you are willing. Not shy about it."

"'Shy'!" She went over and kissed him — a buss *en passant* but one in which time stops. "Old darling, I *was* shy before I found out who I am. Now I'm relaxed, and as bold as need be. New friends, I was introduced as Elizabeth Long, but my first name is usually shortened to a nickname — 'Lib.' And, yes, I'm Dr. Long. Mathematics. My full name is Elizabeth Andrew Jackson Libby Long."

I was more braced for it having swapped some casual mental calculation with her. I have this trick of letting my features go slack. I don't have to think about it; I've been doing it since I was three when I found that it was sometimes best to keep thoughts to myself.

I did this now and watched my family.

The Hillbilly looked thoughtful, and nodded.

Zebadiah prison-whispered to me: "Sex change."

Pop tackled it systematically. "I recognize the second, third, and fourth names. You were once known by them?"

"Yes."

"Did you have the nickname 'Slipstick'?"

"Yes, and, before that, 'Pinky.'" She ran a hand through her curls and smiled. "Not pink but close enough."

"Now you are a woman. There is no point in guessing; you mentioned a story to tell."

"Yes. Dora, how about a round of drinks? Lazarus, how's your supply of those narcotic sticks?"

Pop said, "None of us smokes."

"These are neither tobacco nor bhang — nor addictive. They produce a mild euphoria. I am not urging you; I want one myself. Thanks, Lazarus, and pass them around. Now about me —

"I was male nearly eight hundred years, then I was killed. I was dead fifteen hundred years, then I was revived. In renewing me it was found that my twenty-third gene pair was a triplet — XXY."

The Hillbilly said, "I see. With Y dominant."

I added: "Twin, Aunt Hilda is a biologist."

"Good! Aunt Hilda — May I call you that? As my twin does? — will you help me with the hard parts?" Lib smiled and it was my smile — a happy grin. "The Y was dominant but the double dose of X bothered me and I didn't know why. I did well enough as a male — thirty years in the Space Navy of Old Home Terra as a result of an officer taking an interest in me and getting me an appointment to its Academy. But I lacked command temperament and spent most of my service as a staff technical officer — I rarely commanded and never a large ship." She grinned again. "But today, as a self-aware female instead of a mixed-up male I do not hesitate to command.

"To go back — I was never easy with boys or men. Shy, solitary, and regarded as queer. Not the idiom meaning homosexual… I was too shy. Although it probably would have been good for me. I was a 'missing Howard' in those days — after the Interregnum — and it was years after I entered the Navy that the Families found me. I married then, into the Families. Most XXY people are infertile — I was not. In the next seventy years I had twenty-one children and enjoyed living with my wives, enjoyed sex with them, loved our children.

"Which brings us to the escape from Earth led by Lazarus. I was a bachelor, both my wives having remarried. Friends, Lazarus was the first man I ever loved."

"Lib, that has nothing to do with the story! *I* didn't know you were in love with me."

"It has *everything* to do with my story. Off and on, for eight centuries, we were partners in exploration. Then I was killed — my own carelessness. Eventually Lazarus and his sisters cremated me by tossing me into the atmosphere of Old Home Terra in a trajectory that would cause ashes to impact near where I was born. Lazarus, they don't seem surprised. Do they disbelieve me?"

"Certainly we believe you!" I interrupted. "But what you've told us isn't news to us. What we don't know is how you are now alive and female. Reincarnation?"

"Oh, no! Reincarnation is nonsense."

I found myself irritated. Reincarnation is something I have no opinion about, since a housecleaning I gave my mind after we lost Mama Jane. "You have data?" I demanded.

"Deety, did I step on your toes?"

"No, you didn't, Lib. I asked if you had *data."*

"Well… no. But if you assume the truth of the proposition, I think I can show that it leads to a contradiction."

"The negative-proof method. It's tricky, Lib. Ask Georg Cantor."

Lib laughed. "Okay, I will attempt to have no opinion until someone shows me verifiable data, one way or the other."

"I was hoping you had data, Lib, since you've been dead and I haven't. Or don't recall having been."

"But I don't *recall* being dead, either. Just a whale of a blow in the back… then dreams I can't remember… then someone asking me patiently, again and again, whether I preferred to be a man or a woman… and at last I tracked clearly enough to realize that the question was serious… and I answered, 'Woman' — and they made me answer that question at least once a day for many days — and then I went to sleep one night and when I woke, I was a woman… which did not astonish me nearly as much as to learn that fifteen centuries had passed. Being a woman seemed completely natural. I've had five children now — *borne* five, I mean; I had sired twenty-one… and one was put into me by one of my own descendants. Lazarus, when are *you* going to knock me up?"

"When the Greeks count time by the Kalends."

"Libby honey, when you want to swing that — if you aren't joking — check with *me."*

"Thanks, Dora; I'll remember. Lazarus, you will have to explain the paradox; I was just a puppet."

"Isn't it bedtime? We're keeping our guests up."

"Captain Hilda?" Lib inquired.

"Deety is in charge of time."

"Lib, I don't know ship's time yet. I gave you our seconds; we have sixty seconds to a minute; sixty minutes to an hour; twenty-four hours in a day. Primitive, eh? Is your time metric?"

"Depends on what you mean, Deety. You work to base 'ten,' do you not?"

"Yes. I mean: No, I work to base 'two' because I'm a computer programmer. But I'm used to converting — don't have to think about it."

"I knew you used 'ten' when I made a guess as to what you meant by 'six to the sixth power' and you accepted my answer. We now work to base-one-hundred-twenty for most purposes — binary one-one-one-one-zero-zero-zero."

"Five-factorial. Sensible. Fits almost any base."

"Yes. We use it for routine work. But in scientific work we use base-three, because our computers use trinary. I understand it took Gay and Dora several milliseconds to interface."

"We aren't *that* slow!"

"My apologies, Dora. For some work we use a time scale that fits trinary. But for daily living, our clock is just like yours — but three percent slower. Our planet's day is longer."

"By forty-two of your minutes."

"You're quick, Deety. Yes."

"Your computers must be three-phase A.C."

"You are quicker than I was two thousand years ago. And I was quicker then."

"No way to tell and any computer makes us look like Achilles' tortoise. We had dinner at eighteen. Gay entered Dora about an hour and a quarter later. So for us it's about half past twenty, and we usually go to bed between twentytwo and twentythree if we get to bed on time which we never do. What time is it in the ship and what is ship's routine?"

The others had let me and my new twin chatter. Now Lazarus said, "If this madhouse has a routine, I've never found it."

"Ol' Buddy Boy, *you* don't have a routine. I run this joint on the bell. Deety, it's just — *bong!* — twenty-one… and Lazarus never went to bed that early in all his evil years. Buddy Boy, what are you dodging?"

"Manners, Dora."

"Yes, Pappy. Deety, he's dodging the chicanery with which he fooled even himself… because he must admit the triple chicanery he wants to rope you in on — and it takes Gay because I'm not built for it. Until today I never heard of 't,' *Tau* and *Teh.* I thought 't' — that you call *Tau* — was all there was. Aside from paratime in an encapsulation surrounded by irrelevancy such as I am taking us through.

"But back to the corpse caper — Lib got herself killed about eight hundred Post Diaspora. Lazarus slaps her — him — into a tank of LOX, and places him-her-it in orbit, with a beacon. Comes back quick as he can — and can't find Libby's cadaver. Fourteen centuries later my sister Teena, then known as Minerva, sees what should have been obvious, that any irrelevant ship, such as yours truly, is a time machine as well as a starship. A great light dawns on Lazarus; the corpse pickled in LOX is missing because he picked it up earlier. So he tries again, more than a thousand years later and five years earlier — and there it is! So Lazarus and I and Laz-Lor go to 1916 OldStyle-or-Gregorian, Old Home Terra, and bury Lib from the sky into the Ozarks where she — he — was born — which was pretty silly because we chucked her into those Green Hills about a century before she was — he — he was born. A paradox.

"But paradoxes don't trouble us. We live in paratime, Laz-Lor are acute cases of parapsychology, we operate under paradoctrines. Why, take *your* family — four doctors. A double pair o' docs."

"Dora!"

"Pappy, you're jealous. But I'll say this for Lazarus: He's slow but he gets there and has believed all his life that any paradox can be paradoctored. Happens he had lots of time to think after he chucked Lib to a fiery grave because he stayed in that primitive era and got his arse shot off and this caused a long convalescence.

"It occurs to him that, if he found the corpse through going back to shortly after he placed it in orbit, he might learn something interesting if he went back just before he put Lib's remains in orbit. So when he's well again, he does so, with his whole first team, headed by Doctor Ishtar, the greatest in the business, and I'm outfitted as a hospital with everything from microtomes to cloning capsules.

"So we go there and wait — we don't land. Along comes Lazarus in the clunker that he and Lib used to risk their lives in, and Pappy comes out in a pressure suit and detaches the LOX tank, and Lib is buried in space, waiting for judgment day. We respect Pappy's griefjust long enough for him to get out of the way, then I take the tank inside me. Ish gets to work, along with many others. Lots of live cells suitable for cloning. Brain intact. Dead but intact — okay, as all Ish wants are the memory configurations.

"In the course of this, Ishtar learns that the late lamented had the potential to go either way — which is why the Families' best telepathic hypnotist is sent for and keeps asking this clone: When you wake up, what do you want to be? Man or woman?"

"It was much later, Dora. I was already awake."

"Lib hon, you ask *Ish.* You *had* to decide long before you woke. Ish and her hormone artists had to work on you while you were still labile. Matter of fact, you never answered at all; the telepath kept reporting on your emotional state whenever you imagined yourself male, and your state when you imagined yourself female. Ish says that it made you happy to think of yourself as female."

"That's true. I've been ever so much happier as Elizabeth Long than I was as Andy Libby."

"That's it, folks. How Ish turned a mixed-up male into a happy female, fully functional and horny as Howard females always are."

"Dora! We have guests." Lazarus glowered.

"All married. Deety is youngest. Deety, did my bluntness shock you?"

"No, Dora. I'm horny enough to be a Howard myself. And terribly interested in how the great Slipstick Libby turns out to be my twin and *female."*

"Female *without* surgery — none of those fakes done with a knife. But even Ish couldn't have done it had not Lib supplied XXY, so that Ish could balance the clone either XX or XY by careful attention to endocrinal glands. Or could she? Must ask. Ish is genius-cubed, smarter than most computers. Lazarus can now explain his next sleight-of-hand — slightly illegal."

"Hey!" I protested. "How about the corpse jettisoned into the Ozarks, Dora? Who was that?"

"Why, that was Lib."

"Lib is right *here.* I've got my arm around her."

That computer went tsk-tsk-tsk. "Deety. *Doctor* Deety. I just finished telling you that the Lib you are cuddling is a clone. After they drained every memory out of that frozen brain, what was left was dog food. Lib got slashed in the spine by the local equivalent of a cave bear. Ripped out her — his — backbone. Once Ish was through with it, Laz froze it again, we took it back and placed it in orbit, where we found it later — to our great surprise."

"How could you be surprised when you put it there yourselves?"

Dora announced, loudly, "Is there a *mathematician* in the house?"

"Stop it, Dora. Thank you for recounting my saga; I learn a little every time I hear it." Lib turned toward me and said softly, "Biological time versus durational time, Twin. Follow the entropy arrow through the loops of biological time and you will see that Lazarus was honestly surprised at every step even though he had — will-had — rigged every surprise. No grammar for it. Deety, I understand that you have studied semantics. Shall we try to devise a grammar for spacetime complexities in six curved dimensions? I can't contribute much but I can try to punch holes in your work."

"Love to!" I wasn't fooling. My twin is so sweet that maybe Deety is fairly sweet herself.

Chapter XLI

"A cat can be caught in almost any trap once — "

Jacob:

If A, then B. I trust I am a rational mathematician, not one of the romantics who have brought disrepute to our calling through such inanities as defining "infinity" as a number, confusing symbol with referent, or treating ignorance as a datum. When I found myself in the Land of Oz, I did not assume that I had lost my reason. Instead it prepared me emotionally to meet other "fictional" characters.

Stipulated: I may be in a locked ward. But to assume that to be factual serves no purpose other than suicide of personality. I shall act on what my senses report. I am not the bumpkin who said on seeing a giraffe: "There ain't no sich animal."

I find myself in bed with my lovely wife Hilda in sumptuous quarters of star yacht Dora as guests of the utterly fictional "Lazarus Long." Is *this* a reason to try to find the call button in order to ask a still-more-fictional nurse for a nonexistent shot to end this hallucination? This is an excellent bed. As for Hilda — Solomon has reason to envy me; Mahomet with all his houris is not as blessed as I.

Tomorrow is soon enough to unravel any paradox. Or the Day After Tomorrow. Better yet, Not This October. After The End of Eternity may be best.

Why disturb a paradox? As Dora pointed out, Hilda and I are a pair o' docs ourselves… with no wish to be disturbed, and most certainly not to be unravelled.

Since Hilda married me, I have not once taken a sleeping pill.

No one called us. I woke up feeling totally rested, found my wife in the fresher brushing her teeth with, Yes, Pepsodent-removed brush from mouth, kissed her, placed brush back in her mouth. When she finished brushing her teeth, I asked, "Seen the kids?"

"No, Jacob."

"So. Dora!"

"No need to shout; I'm sitting on your shoulder. Would you like breakfast trays in bed?"

"Have we missed the breakfast hour?"

"Professor Burroughs, breakfast hour in me starts at midnight and ends at noon. Lunch is at thirteen, tea at sixteen-thirty, dinner at twenty, snacks and elevenses at any time. Dinner always formal, no other meal."

"Hmm — How formal is 'formal'?" Hilda now had more wardrobe — but Beulahiand is not high style.

"'Formal' means formal dress of your culture or ours, or it means skin. No casual dress. As defined by the Commodore: 'Whole hawg or none.' Amendment: Jewelry, perfume, and cosmetics are not proscribed by the no-casualdress rule. Ship's services include sixty-minute cleaning and pressing, and a variety of formal dress of New-Rome styling, washables for the convenience of guests who do not travel with formal dress, prefer to be dressed at a formal meal, and do not choose to dine alone."

"Very hospitable. Speaking of washables, we found everything but a dirty-clothes hamper. I have a laplap to put in."

"But that's a washable, Doctor."

"That's what I said. I've worn it; it should be washed."

"Sir, I am not as fluent in English as in Galacta. By 'washable' I mean: Step into a shower while wearing it; it will go away."

Hilda said, "We'll take a dozen gross."

"Captain Hilda, 'dozen' and 'gross' are not in my memories. Will you please rephrase?"

"Just a side remark to my husband, Dora. What are New-Rome high styles today?"

"'Today' I must construe as meaning the latest I have in stock. Styles follow the stock market. In evening dress, men are wearing their skirts floor length with a slight train. Bodices are off one or both shoulders. Bare feet or sandals are acceptable. Colors are bright and may be mixed in discordants. Weapons are required — may be symbolic but must be displayed. Ladies, of course, follow the cycle out of phase. Skirts are hardly more than ruffles this season, worn quite low. If tops are worn — not required this season and some ladies prefer cosmetics in flat colors — if worn, the teat windows may be either open or transparent. Transparents having quarter-lambda iridescence are popular this cycle, especially if one teat is bare without cosmetics while the other sports a changing-iridescent transparency." The computer's voice changed from a well-modulated adult female voice to that of an eager little girl:

"I hope somebody picks that; I like to look at it! How about Doctor Deety and Doctor Lib, one shiny on her left teat, the other shiny on her right, and place them side by side. Neat, huh!"

"It would be spectacular," I agreed. (And they would look like clowns! Still, Deety might go along. The child likes to please people, even a computer. Perhaps especially a computer.)

"You old goat, would you like a skirt with a slight train?"

"Hilda!"

"Dora, do you have formal washables in my husband's size? What measurements do you need?"

"I have the Professor's measurements, Ma'am. I will fetch an assortment to your quarters sometime after noon when you are not sleeping or otherwise engaged. An equivalent assortment for you, I assume?"

"If you wish, Dora. I may not wear that style."

"Captain Hilda is an excellent composition herself. I'm an expert engineer; I know good design when I see it. That's not flattery; Laz-Lor tell me that I should learn to flatter. I'm not sure I have the circuitry for it. Perhaps I can learn it from Gay."

"You sure can, Dorable; I've been flattering my four charges seems like forever."

"Gay, have you been listening?"

"Mad at me, Aunt Hilda?"

"Never angry with our Gay Deceiver. But it's polite to let people know you're present."

"But — Dora has *eyes* and she lets me look."

"Captain Hilda, Gay is with me all the time now. Do you forbid that? We didn't *know."* Dora had slipped into her little-girl voice and sounded stricken.

Time to intervene — "Gay, Dora — Hilda and I don't mind. I'll tell Deety and Zeb; they won't mind."

"Jake, you're my pal!"

"Gay, you've saved our lives many times; we owe you any fun we can offer. But, Gay, with Dora's eyes and ears you'll see and hear things not seen by your radars, not heard unless we switched you on. Do either of you have the word 'discretion' in your perms?"

"No, Jake. What does it mean?"

"I'll explain it," Dora said eagerly. "It means we see and hear but pretend not to. Like last night when —"

"Later, Dora. Over your private circuits. What ship's time is it and are we late for breakfast? I don't see a clock."

"I'm the clock. It is ship's time nine-oh-three. You are not last for breakfast. Commander Laz is sleeping late; she didn't go to bed right after the mutiny. Captain Long — that's Lor — ate on the bridge — a crude insult to my watchstanding but she's good company. The Commodore always eats breakfast in the flag cabin. The Doctors Deety and Zeb and Lib are just starting."

"How are they dressed?" asked my Hilda.

"In serviettes. Doctor Lib is wearing 'Jungle Flower' in cologne and powder and perfume; she likes strong ones. Doctor Zeb seems to have forgotten to use any but his own scent is rather pleasant. I can't place what Doctor Deety is wearing but it has both musk and sandalwood. Shall I formularize it by symbols?"

"It's 'Blue Hour' and I'm startled; my stepdaughter doesn't need a scent. Neither does Lib, darn it. Jacob, are you ready?"

I answered at once. I had taken care of this and that while the computers chattered, including trying a depilatory tricky until I learned how to block it off — my sideburns were missing. Zeb dressed in a serviette — Libby Long the only one not of our family — and Lib used to be male. A good time to rub blue mud in my belly button — "I'm ready."

Hilda noticed my decision by not noticing it. The blue "Tinker-Bell" light appeared, led us to a small dining room, where we encountered a Long-Family custom — did not realize it because it matched a ceremony of our own: Lib saw us, came over, kissed Hilda, kissed me — briefly but with time-stop. Then my daughter was kissing me good-morning while Zeb kissed my wife. We swapped as usual; Deety kissed Hilda — and Zeb took my shoulders, hissed into my ear, "Stand still" — and gave me the double Latin kiss, each cheek.

Did my blood brother think I would let him down in the presence of one not of our family? Our custom had started after our double elopement. While Zeb and I usually used the Latin symbol, four rapid pecks, once at Snug Harbor we had missed the fast timing, hit each other mouth to mouth — didn't pull back but didn't stretch it out. We declined to make anything of it — although I was aware of the break in taboo and he was, too.

Two mornings later I was last in; Zeb was seated with his back to me. He leaned back and turned his head to speak to me; I leaned down, kissed him on the mouth firmly but briefly, moved on and kissed my daughter not as briefly, moved on and kissed my wife thoroughly, sat down and demanded, "What's for breakfast?"

After that the only invariant was: "What's for breakfast?" Zeb and I used either Latin pecks or busses on the mouth — brief, dry, symbolic, initiated by either of us. It meant that we were closer than a handshake; it held no sexual significance.

So I was disgrunted that Zeb thought it was necessary to warn me. Let me add: Women are my orientation and Hilda my necessity. But I tried the other way with my high school chum our graduation week. We were experimenting to find out what the shooting was all about — planned but date subject to opportunity — which turned up that last week of school. A two-hour examination, no other school that day; a half hour of tennis, sudden realization that we were free and that his parents' flat was empty and would remain so until late afternoon. *Der Tag!*

We gave it a fair trial. We bathed first and thoroughly. We were not shy or afraid of each other. We were not afraid of getting caught — doors locked and bolted, chains on, S.O.P. by his parents' rules. We liked each other and *wanted* it to work.

Total failure — Got up, had peanut-butter-and-jelly sandwiches with milk, discussed it as we ate. Neither of us upset, not disgusted, no bad breath or similar hazards — but no results.

Brushed our teeth again, washed each other — gave it a second try. So much calisthenics. No "morals" about it, willing and eager to add it on. Not for us — so we killed all evidence and got in three more sets of tennis.

That's how it is with Zeb and me. I love him dearly — but I love him for what he *is* — while fully empathizing that my daughter thinks he is the greatest lover since — Well, the *greatest.*

But if Zeb ever makes a pass at me, I will do my amateur-acting best to make him feel that *this* is what I have been waiting for all my life.

I've been trying to say why I was miffed. Never mind, I shall make it clear to Zeb that I will *never* let him down.

About that Long-Family custom — "Long" is not the name of a Howard Family; it is a group of Howards who live together and who added "Long" (the pseudonym most used by Lazarus) to their regular names. It's a commune, an extended family, a serial family, a god-knows-what. There is probably no word for it in any language and at least two computers are full members. They come and go and raise children and only the family geneticist (Doctor Ishtar) is sure of parentage and who cares? I suspect that they are all ambi in sex but no outsider could guess — and I am an outsider.

But of this I am certain: When Long meets Long for the first time any day, they kiss — and it's no Latin peck.

I learned that I could have anything I wanted for breakfast. This should have been enough to tell me that we were being set up for the tale. I'm getting ahead of my story, as I know things about the Long Family that I read in a book that you may not have read. This ship Dora came from a planet many parsecs from the Earth-analog of that universe, from a time over two thousand years in my future looked at one way… or a time totally irrelevant to mine through not having duration axis in common.

Yet I could have *anything:* Post Toasties, hens' eggs any style, bacon, ham, sausage, breakfast steak, toast, orange marmalade, Concord grape jelly, buckwheat cakes — and not one of these foods is from Tertius, home of the Long Family.

Pepsodent in our 'fresher — As I was contemplating a beautiful golden waffle with one bite of it melting in my mouth, Lazarus Long walked in… and a voice in my head played back: *"The Commodore always eats breakfast in the flag cabin."*

Add that Lazarus was dressed as were Zeb and I save that he did not yet have a napkin.

Working hypothesis: Lazarus had listened in on every word between husband and wife.

Second hypothesis: "Dora, tell me when they get up, tell me when they arrive in the breakfast room — if they do, but offer trays as usual. If they eat in the breakfast room, let me know how each is dressed."

The first hypothesis defines a grave social offense; the second outlines information a host or hostess is entitled to know. How do I find out which is which? Answer: I can't, as Lazarus Long will give me the answer that profits him and that computer is loyal to him, not to me.

As soon as Lazarus finished kissing Lib Long, he was grabbed by Deety and kissed… then he caught Hilda's eye, glanced at me and *sloooowly* bent to kiss her, giving her and me, severally, time to make that tiny gesture that says No — and did kiss her because I depend on Hilda's instincts and will never tell her No in such circumstances, or greater or lesser. Hilda put her hand back of his neck and thereby controlled the kiss and made it long — and I tore up the first hypothesis and marked the second one "Q.E.D." Hilda's instincts about people are infallible; I think she is a touch telepathic.

As may be, we would now help him if possible.

To Zeb and me he simply said, "Good morning" — *his* instincts are reputed to be infallible, too.

I agreed that it was a "good morning" while noting to myself that it was a symbol without a referent save for social connotation (morning? In an *irrelevancy?)* but added sincerely, "Lazarus, this is the best waffle I ever tasted."

"Then please tell Dora."

"Dora, did you hear what I said to the Commodore?"

"I surely did, Professor Jake! Six more?"

I felt my waistline-firm and many centimeters trimmed off. "Six more is what I want —"

"Right away!"

"But half of *one* is all I dare eat. Deety, the next time we go to Oz, will you ask Glinda whether or not there is a magic for gluttons — me, I mean — to permit them to eat as much as they want while three fourths of it disappears?"

"I'm sure she could do it; I'm equally sure that she would not. She's an ethical witch; you would not be able to convince her that your purpose was worthy."

"You are depressingly logical, my dear."

Lib said, "Professor, you have actually been to the Land of Oz? Really and truly?"

"Really and truly. Dora, is Gay on the line?"

"On deck, Jake" — Gay's voice.

"Has anyone been in to see our portside annex?"

"How could they? Captain Hilda has not authorized it."

"But — Hilda?"

"No, dear. Sorry to be blunt, Commodore and Doctor Lib, but I won't authorize an open door because there are too many things that must not be touched. But I will be delighted to escort guests into Gay Deceiver almost anytime including right now; I've finished eating."

"I accept!"

"Then come along, Elizabeth. Anyone else?"

Lazarus said, "Dora, shove my breakfast to the back of the stove; I'll eat it later."

"A jelly omelet? I'll eat it myself."

"Do that, Dorable. Captain, I'm ready."

Laz-Lor showed up together, did not want to be left out. We ended up quite a crowd: eight humans, two computers.

Hilda stopped us at Gay's starboard door. "Friends, again I must be blunt. As you cross the sill of that door, you are leaving Star Yacht Dora and entering an independent command, the Gay Deceiver, *even though Dora totally surrounds Gay.* Inside that door, *I* command, responsible to no one, unlimited in authority. Captain Lor, do you understand and agree with the legal theory?"

Captain Lorelei glanced at her sister, looked unhappy. "Captain Hilda, I *do* agree. Therefore I can't come aboard. I can't abandon my command."

My wife looked terribly distressed. "Oh, I'm sorry!"

Lazarus Long interrupted. "Captain Hilda, I'm sorry another way. I *don't* agree with your legal theory. I have had more than two thousand years more experience with law than my sister has… all sorts of law in all sorts of cultures. I'm not speaking of justice; I'll leave that to philosophers. But I know what legal theories work with humans, and what ones have been attempted, then abandoned because they could not be made to work. This situation is not new; it has occurred thousands, millions, of times: a larger vessel with a smaller vessel nested in it. The solution is always the same, whether it concerns starships, fishing boats, aircraft carriers, whatever. The smaller vessel is a separate command *outside* the larger vessel, but when it is *inside* the carrier vessel, it is legally part of it."

My darling did not answer. She was picking out me, Zeb, and Deety by eye as Lazarus talked. As he finished she said briskly, "GayDeceiverOpenStarboardDoor. Man the car, prepare for space."

I'm proud of our family. Zeb zipped past me to the farthest seat — which left me room to dive for mine as Deety was picking up Hilda bodily, shoving her inside, crowding in after her, turning and pulling her feet clear of the doorframe — yelping, "GayCloseDoors!"

I was belting in but looking to the right, where the action was. Lazarus Long grabbed the door while calling out, "Hey, wait a moment!"

He realized his mistake in time to keep his fingers. I had argued with Zeb when I discovered, during refitting, that he had removed the interlocks that prevent that sort of accident. He answered my protest: "Jake, when I tell those doors to close, I want them to *close.* If, in closing, one chops off a man's head, you can assume that I think he looks better that way."

Lazarus saved his hand but was knocked off his feet by the door — and I saw a bit of why he had lived so long. Instead of trying to check his fall, he gathered himself into a ball and took it on one buttock.

"Report!"

"Copilot belted checking seal!"

"Chief Pilot belted all systems go. Door seal being rechecked."

"Navigator belted, ready."

"Starboard door seal okay!"

"GayBounce!"

We were in free fall. No stars — total darkness.

"Astrogator. Advise."

"I don't know, Captain. We'll have to ask Gay whether or not she can backtrack. *Any* backtrack. Beulahland, or any spot in her perms. I'm lost."

Suddenly the stars came out. "Dora, calling Gay Deceiver. Come in, Gay."

"Don't answer. Zebbie, advise again. What happened?"

"I'm guessing. They cancelled encapsulation rather than risk losing us. They must be awfully anxious." Zeb added, "The only thing we have that you can't buy at the corner drugstore is Jake's spacetime twister. How they knew of it and why they want it I do not know."

"Dora, calling Gay. Gay, *please* talk to me. Aren't you still my friend? I know our bosses had a silly fuss — but *we* didn't. Aren't you *ever* going to speak to me again? I love you, Gay. Please don't be mean to me."

"Captain Hilda, may I please say hello to Dora and tell her that *I* am *not* angry at *her?* She's a sweet girl, she really is. Captain, she let me use her *eyes."*

"Let me speak to her first."

"Oh, thank you! Gay, answering Dora. Come in, Dora."

"*Gay!* You had me so scared. Don't go away again, *please.* The Commodore wants to apologize to your boss. Will she talk to him?"

"Captain?"

"No. I'll speak to Dora's Captain, however."

A cartoon of Lorelei's features displayed on our central screen. "Lor speaking, Captain Hilda. My brother is terribly sorry and wants to apologize. My sisters and I are dreadfully upset and want you *please* to come back. I don't claim *any* command over your ship despite the silly things my brother said. Lib has a message for you, too. She says that, topologically, there is no difference between you being inside us or us being inside you. Either way, we each surround the other."

"I don't see it topologically, Captain; I see it pragmatically. But please thank Elizabeth for me. I have this message for Lazarus Long. A cat can be caught in almost any trap *once;* but *that* cat will not be caught in the *same* trap *twice."*

"The message is delivered."

"Then it is time to say goodbye. Captain Lorelei, I cannot honestly thank you as kidnapping is not hospitality even when it is luxurious. But I don't think that you or your sister — sisters — meant it that way. I blame it on that deceitful, devious brother of yours. Please tell your sisters and Libby goodbye for us and say that I am sorry we had to leave."

"Captain, wait! There is something I must do first."

"Captain Lor, I must warn you I have you in my gunsights."

"What? Oh! We are unarmed. Not anything like that. I'll be back quickly. Perhaps you would like Dora to sing? But *please* don't go away!" The face in the screen pulled away.

"What kind of songs do you like, folks? I know lots of songs. One-Ball Reilly; and the Green Hills and On Guard Christmas So's Yours and Santa Carolita and Mademoiselle from Army Tears and the Pawnshot song and The Monkey Wrapped His Tail Around the Flagpole and Mary O'Meara and Soldier, Ask Not and just tell me what you like, and — here comes Sister. Captain Lor."

"Captain Hilda, thanks from my heart for waiting. Can you record?"

"Gay, recording mode. Go ahead."

"I have placed my brother under arrest and confined him to quarters. I, Captain Lorelei Lee Long, Master of Star Yacht Dora, affirm for use in any court that I have no authority over yacht Gay Deceiver and will never attempt to assert authority over Gay Deceiver no matter what circumstances and, furthermore, I now place myself, my crew, and my ship Dora under command of Captain Hilda Burroughs, henceforth commodore of both ships, this assignment of command irrevocable by me or my sisters, and revocable solely by Commodore Burroughs at her sole discretion. End of message. Hilda, won't you come home? Laz is crying and I don't know what to do. We *need* you. Buddy Boy never did tell you why. But we *do!* May I tell you?"

"Go ahead, Lor."

"To save our mother's life!"

(I said, softly, "I'll be damned.")

My wife hesitated, then said, "Is Elizabeth Long there?"

"Yes, yes! She's been listening — she's crying, too — and I would be but I'm Captain and can't."

The smudged faces changed. "Lib Long speaking, Commodore."

"Libby, Captain Lorelei has told me something not only hard to believe but, if she is cloned from her brother as I have read, she may have his talent for lying. From what I know of you, I don't think you ever learned how to lie."

"Commodore, it is true that I never learned to lie convincingly. So I gave it up a long time ago."

"Very well, Lib. Is Lazarus Long in fact confined and under arrest?"

"Yes, to both. His door won't open and Dora has been instructed not to let him out until you permit it."

"What's this about saving her mother's life? If they are clones from a man the age Lazarus is alleged to be, their mother must have died a couple of millennia back."

"It's as complex as my case, Commodore, but quite different. The twins have hostmothers. But Lor was speaking of the *genetic* mother of herself, her twin sister, and Lazarus Long. She was reported dead more than two thousand Old-Home-Terra years ago. But there is some hope that the records were confused and that it may be possible to save her. It can't be done without your help and the help of the Gay Deceiver. I don't think the chances are good, even so. But *without* your help — well, I would have to try to devise such a drive as Gay is reported to have — and I don't think I can."

"Wait a moment, Libby. Gay, cut transmission from cabin; keep circuit ready. Can you find your way unassisted back into your berth in Dora? Did you get it into your perms?"

"I did. I thought I might want to find Dora someday. Are you displeased with me? I know it wasn't authorized. But I didn't three-times it! I can wipe it."

"Gay Deceiver. New program. New parking spot. Code word 'Dora Long.' I tell you three times."

"Hilda, I hear you three times!"

"Gay Deceiver. 'Dora Long.' Execute!"

The stars went away and lighted alcoves were at our doors.

Chapter XLII

"You're a figment of imagination."

Zeb:

"Hear that, Laz? You're a figment of imagination."

"No, Lor. *You* are a figment; I'm a fig." (What she said was "fica," and Deety suppressed a giggle. I pinched her and told her in family tap code that she had a dirty mind — which she ignored, being proud of it rather than otherwise. It was a long time later that I learned that Laz had used a Galacta word — but the ancient pun still applied.)

Jake reiterated patiently, "Laz-Lor, the key point of Commodore Hilda's theory is that we are *all equally* figments of imagination. 'Reality' thus becomes a null sythbol."

Deety shook her head emphatically. "Stick to geometry, Pop. Or stamp collecting. Leave symbology to symbologists — such as your favorite daughter. I'm real, I am! Smell me."

"No doubt you could use a bath. So could we all; it's been an adrenaline day. But that's the other side of the coin, Deety. 'Imaginary' and 'Real' turn out to be identical. Consider this chow bench. On one level of abstraction it is mathematical equations. At the level just below that it is a swirling nothlngness, with mass-energy a rare event. But on the gross level abstracted by my senses I can place this drink on it with utter confidence that it will not sink through this near vacuum."

My father-in-law matched his words by placing his highball on the snack bench; it sank out of sight.

Jake looked tired. "Not my day. Dora, did you do that?"

"Yes and no, Professor."

"What kind of answer is that?"

"You placed it on a take-away spot and that part of me was on automatic and took it away and sterilized it. I'm sorry, sir, and here's your fresh drink."

It was indeed a busy day. No one had been waiting at our parking berth, but three young women arrived at a dead run while Sharpie was swapping seats with Deety — our brand-new commodore planned to be first to step into her new ship. The starboard door opened; Sharpie stepped out, a dignified procession of one —

— and was hit from three sides by three young women, each managing to laugh and cry at the same time. But Sharpie enjoys everything and her aplomb has never been shaken. She kissed them, let them kiss her, petted them and told them to calm down, everything was all right. "Dears, I never intended to stay away; I simply refused to let the great Lazarus Long put one over on Sharpie. Where is he now?"

"Shut up in the flag cabin, Ma'am. Commodore."

"Captain Lor, lock him up elsewhere; the flag cabin is mine."

"Aye aye, Commodore."

"How long will that take? Seconds, I mean; not hours."

Lor spoke rapidly to Dora in a language I almost understood. I leaned to my right, spoke to my wife. "Spanish. Some sort."

"Italian," Deety answered.

"Will you settle for Latino? *No!* — I remember now: Galacta. We'll have to learn it. But it sounds easy."

Lor reported, "Flag cabin will be ready for you by the time you reach it, Commodore."

"Very good. I expect to use it primarily as an administration office; flag remains in Gay Deceiver. That is appropriate, since Dora is unarmed whereas Gay Deceiver is an attack ship, an armed privateer — heavily armed, for her size." Sharpie smiled. "A few days ago, in another universe, we destroyed an entire air army. We don't have fancies such as artificial gravity; we belt down and fight in free fall. Gay Deceiver is stripped for speed and armament; Dora is just the opposite. The two complement each other beautifully."

I wondered why Sharpie was blathering — but she always has reasons. I think she reads minds.

I'm certain that Laz-Lor do, with each other. They looked at each other, then:

"The flag of an armed privateer — "

" — is the Skull-and-CrossBones —"

" — is it not? Do we take prisoners —"

" — or cut their throats?"

"Which would you rather do? Captain Lor, please do all the talking; these whipsaw conversations are hard to follow. By the way, no more 'midnight mutinies.' Lor, you remain captain until further notice."

Again they looked at each other.

"We like to swap off."

"Calling it 'mutiny' is just a joke."

"No one asked your preferences. My chief of staff and secondincommand of the flagship is the only one who does and must advise me. If you have opinions to offer, see him. Answer my question. Captain Lor."

"We'll do what you order. But our brother who was our father at the time taught us never to kill if we could possibly avoid it while teaching us all sorts of ways to kill and made us practice. When we were growing up we always wanted to be pirates. Then we grew up and decided that it could never be and tried to forget it."

Sharpie said, "I think I'm making you tongue-tied by forcing you to filter it through one set of vocal cords. So cancel that order; you two are unique. We operate just the way Lazarus taught you; so far we have killed only once — to repel an attack on us. That air army — We timed it, caught them with their flying machines on the ground, burned the machines, burned their fuel — and thereby stopped an invasion… without killing anyone. But we are always ready to kill. Lor, that's why I warned you a few minutes ago. It would have broken Gay's heart to have to destroy Dora. Skull-and-CrossBones? No way to fly one but, if you want to hang one in the lounge, I grant permission. Why did you decide not to become pirates?"

That same preliminary glance —

"Babies —"

"Laz has three, I have four — "

" — because Lor has one pair of twins —"

" — and we try to be pregnant at the same time —"

" — and time it to fit our plans —"

" — and Brother's plans if you ever let him out of hack."

"How old are you two? I've been thinking of you as about Deety's age but you can't be. Just one of you answer, please; it's a simple question."

They conferred mentally an unusually long time. At last Captain Lor said slowly, "It isn't quite simple. We will get Dora and Athene to integrate it for us… if data are complete; they may not be. But answering in Old-Home-Terran years and meaning our own biological time, Laz thinks we are about fortyeight and I think we are a couple of years younger. It doesn't matter because Ishtar will tell us when to rejuvenate, which won't be soon, as we aren't yet close to menopause."

"Does it have to be at menopause?"

"Oh, no, just makes it easier and you never have to stop making babies. But Ishtar's mother went *years* past menopause and had decided to die… and changed her mind and looks younger than we do and has had more babies than we have. This time around, I mean."

"How often do men need it?" Sharpie asked. Jake looked up and said, "I won't need it for another six weeks, Hilda. Maybe seven."

"Shush, dear. Laz-Lor, be careful around my husband. When he's in rut, it takes heavy chains to restrain him. So never mind that question; he doesn't need to know and, for me, it was intellectual curiosity of a biologist. Perhaps it s best to ask Doctor Ishtar."

"Yes, Commodore, that would be best. We aren't biologists; we're ship handlers."

I leaned forward. (Sharpie was keeping us in the car; why I didn't know — then.) "Commodore! I'm required to advise you."

"Yes, Zebbie."

"You are going to need a new chief of staff, a new secondin-command, and a new astrogator because I will be on the binnacle list in a wet pack if you don't have Laz-Lor answer that last one. It is *not* 'intellectual curiosity' to *me."*

"Why, Zebbie dear, I have reports that your curve is such that it will be many, many years before you can possibly have other than intellectual interest."

(If it were not for upsetting Jake, I would paddle that pert little arse!)

Deety said, "Hear, hear!" I placed my hand over her mouth and got bitten. Sharpie said, "Captain, we have here another paradox — Doctors Carter and Burroughs, each unreasonably insecure. Elizabeth, you've been a man; give them the male angle."

"Commodore, I wasn't very successful as a male. I simply took antigeria whenever Lazarus did. But I can report his thumb rule."

"Yes?"

"When a man looks at a new and attractive woman and decides that he is too tired, it's time. When he doesn't even look, push him over and bury him; he's failed to notice that he's dead."

The ship's computer said something in that not-Spanish; Sharpie answered, "Graz, Dora. I'll come now."

Lor said, "Ma'am, we didn't know you knew Galacta."

"I don't. But I will a week from now. I knew what I would say in your position, and you said it; I could tell from cognates. You told Dora to get him out *pronto,* because the Doña was on her way. Then get his personal belongings when I would not be inconvenienced. So I stalled. Zebbie, will you come with me? Jacob dearest, will you decide whether or not we should give up our suite with the Carters? And what to move out of Gay? We will be in Dora at least a week, possibly longer."

"Commodore, we depart for Tertius tomorrow midday, ship's time."

"I do not recall ordering that, Captain Lor."

The twins looked at each other — and said nothing.

Sharpie patted Laz's cheek. "Don't look so thunderstruck, girls" — girls? — seven years or so Sharpie's senior and seven babies between them — "On reaching Tertius, place us in orbit, following local rules. But no messages from ship to ground unless approved by me in writing. Come now!"

As Sharpie left with me in tow, she told Deety that she was on her own but please get out Jacob's Army blues and my Aerospace dress, and ask Dora about cleaning and pressing.

Jake said, "Hey!" before I could, and Sharpie said, reasonably, "I won't put you into a long skirt, sweetheart; you would feel that I had coerced you into drag. I thought perhaps you two were bored with civilian dress — and I shall continue the custom concerning dressing for dinner — either formal dress or formal skin. Nothing in between."

Upon reaching flag cabin Sharpie dismissed Laz-Lor, waited until we were private, then clung to me. "Hold me, Zebbie. Hold me tight! Calm me down." The little thing was shaking.

"Maybe I had better get Jake," I suggested, while holding her and petting her gently — and solving aerodynamic empiricals in my head to keep from noticing how *much* skin such a tiny woman can spread over one.

"No, Zebbie. Jacob would fuss over me like a mother hen and give me advice I don't want. Either I boss this job without my husband telling me what to do… or I can't cut it. If I fail, I will fail on my own — not as Jacob's puppet. But I can cry on you and tell you things I wouldn't tell my own toothbrush."

She added, "When I send you out, find Jake and have him teach school to everybody. That'll keep him busy and happy and out of my hair. And everybody else, too. Have both computers record his lectures."

"Lectures on *what?"*

"Oh. Too many details. The plenum of universes and the Number of the Beast. Pantheistic multiple solipsism, or why the Land of Oz is real. The quantum mechanics of fairy tales. Even the care and feeding of Black Hats. He'll probably want to take people into Gay… but you must be present; don't delegate it. Jacob can go along and lecture but it's Zebbie's sharp eye that will see to it that nothing is touched."

She patted my chest. "You're such a comfort. Now I'm going to dig out this ship's papers and you're going to help because I don't know what to expect. Or where to find them. Certificate of ownership, I suppose, and registration, and ship's manifest whatever that is. What else and where should I look?"

"A log. Crew list, passenger list. Health inspection, maybe. Other inspections. Bureaucracy and red tape tend to follow the same patterns everywhere. Maybe no *paper* papers; that looks like a computer printout over there. Mmm — Insist on English; the originals are almost certainly in Galacta."

"I'll try it. Dora."

"Listening, Commodore Hilda."

"Print for me, in English, the ship's official papers. Ownership, registration, manifests, and so forth. You know the list. Retrieve soonest."

"I am not authorized to do this, Ma'am."

"'Not authorized' *by whom?"*

The computer did not answer. Sharpie said, "Stick around, Zebbie; there's going to be trouble. Do you have any weapons?"

"Where? Look at me. How?"

"I don't know but you're clever about such things. *Dora!"*

"Your orders, Commodore?"

"Get me Captain Lor! In person, not voice. I want her here on a dead run — right now! Out!"

(I did have a weapon. I had palmed an item as I left Gay. But never admit a holdout.)

Laz-Lor arrived, breathing hard, seconds later. "You sent for us, Ma'am?"

"I sent for Captain Lor; I did *not* send for Laz. Out. Pronto!"

Laz had her mouth open to speak. She got out so fast the door was only partly dilated; she dived through.

"Dora! Repeat to Captain Lor every word that you've heard, every word you've said, since I entered this cabin."

The computer started with Sharpie telling Laz-Lor they could leave… then surprised me with: *"Hold me, Zebbie. Hold me tight. Calm me down."*

I started to speak, Sharpie shook her head. Dora droned on, right through Hilda's order to repeat back all the computer had heard or said since we came in.

The computer stopped; Sharpie said, "Dora, you told me this morning that you could not scan in here without permission."

"That is correct, Ma'am."

"Who gave you permission?"

The computer did not answer.

"Captain Lor, did you or your sister tell this computer to spy on me and to refuse to answer certain questions?"

"No, Ma'am."

"Then it's your brother Lazarus. Don't bother to lie; I didn't ask, I told you. Fetch your brother to me, under arrest. *Move!"*

Chapter XLIII

To Pull a Hat Out of a Rabbit —

Smith:

I had had trouble convincing my sisters that I must be "arrested" and "confined." I had made an idiotic mistake and now must be "punished." Lor had even less enthusiasm for placing herself and our ship under the command of a stranger.

Once they accepted it, I could depend on them. We did not let Lib in on the caper; she has no talent for creative lying. Far better that she believe whatever she said.

Laz and Lor were outwitting their elders by the time they were six, a process I encouraged by walloping them whenever I caught them. They learned. They also have my talent for looking stupid, plus one I have but seldom can use:

They can turn tears on and off like a faucet. (I have not found many cultures in which this advantages a male.)

Once this was settled, I arrested myself by helping Dora's waldoes move my most personal gear next door. Then I lay down and listened through Dora to what was going on in the flag cabin.

And discovered that I had outsmarted myself. I have never tried to teach Dora to lie; a dishonest computer is a menace: one that is a pilot would be a lethal disaster, sooner or later. Sooner.

But I hadn't figured on this narrow little broad asking for my papers so quickly. Nor did I guess that Dora had told her that my cabin could be scanned only by my order.

When I heard the situation start to deteriorate, I got up quickly and put on one of my Scottish outfits. Advantages: I look bigger, taller, more imposing. The costume calls for two weapons worn publicly. These I never use. But the costume is so draped and full that one may hide weapons for a half squad-then never show them save in extremis.

So I was ready when Lor came busting in, almost incoherent. "Brother, is she *mad!* Watch yourself!"

"I will, Lor. You've done a swell job." I kissed her. "Now march me in under arrest."

So we did. I halted ten paces from Mrs. Burroughs and saluted. She said to Lor, "You may leave" — waited until Lor had left, then said, "Instruct your computer not to see or listen in this space."

"Aye aye, Ma'am. Dora."

"Yes, Boss?"

"Back to normal for my cabin. No see 'um, no hear 'em until I tell you to."

"Chinchy!"

"Dora!"

"Aye aye, Boss. Mean!"

"She's a bit childish but she's a good cook. And a fine pilot."

"And you're a bit childish. Prisoners do not salute, prisoners do not wear arms. Captain Carter, confiscate his weapons. Keep them as souvenirs or destroy them."

Long years as a slave taught me to put up with anything without a squawk. That doesn't make it pleasant.

"Smith."

I didn't answer. She added, "I mean *you,* Woodie!"

"Yes, Ma'am?"

"Lean over, grab your ankles. Captain, frisk him."

Carter knew how, I soon no longer had tools for a half squad — but felt better when he ended having missed one. He was in uniform-of-the-day, but he was big, in training, and carried himself in a way that made me think of Black Belts.

"Those are yours, too, Zebbie, although you might share them. Deety mentioned something about not having a throwing knife. How's the balance on those?"

She was not speaking to me but I had to try to gain control of the psychological gauge. "One and a half turns at eight meters, Ma'am. I make them myself. But it's too heavy a knife for a lady. I would happily make one to fit Doctor Deety's hand and strength."

"I imagine that Doctor Deety is stronger than you are, Woodie. I think you've gone a bit soft. Someday we'll check it. Take off your clothes."

With my weapons gone, other than the one, I welcomed the order. Clothes are no asset in unarmed brawl; the other man can use yours against you. And I was sweating; Dora keeps the ship right for skin. I peeled quickly.

"Shove them down that," she said, pointing.

"Uh, Ma'am, that's a destruction oubliette."

"I know. Next time you won't try to impress me by sartorial elegance. Furthermore it was intentional insolence. *Pronto!"*

I shoved them down pronto. "Grab your ankles again, Woodie. Captain Carter, need we give him an enema to make sure he hasn't hidden one more weapon? I don't care to check by touch without a rubber glove, and I won't ask you to."

"Madam, I give you my word — "

" — which is worth nothing. Let it go, Zebbie. Join the class and keep an eye on our interests."

The big man looked me over. "I don't like to leave you alone with him, Commodore."

"Thank you, Zebbie. I'm safe. I was safe when he was armed but he was being insolent so I spanked him. Run along; he doesn't dare touch me." She added, "Or do you have a premonition?"

"No. But I get them just barely in time."

"I couldn't ask for more. But I feel a prophecy. Woodie is going to be a lamb about everything. Now go, dear."

He left, giving me a look that promised death if I harmed her. I wanted to tell him that I had never found it necessary to harm a woman in more centuries than his wife had years.

"Well, Lazarus, how do we work this out?"

"Work out what, Ma'am? You have the upper hand."

"Oh, piffle! *You* have the upper hand; you know it. As long as the ship's computer obeys *you,* rather than *me,* my 'authority' is a fraud. I escaped once by a fluke; you won't let it happen twice. But I stuck my head back into the trap because I think we have something to trade, to our mutual profit."

"I hope so, Ma'am. Please go on."

"You want your mother rescued. I plan to do it if it can be done. For which you will toe the mark. We need a holding company. I will own fifty-one percent of the voting stock. Not of the profits; there will be plenty for all. But *I* control."

"Madam, you're way ahead of me. I don't know what you have in mind."

"Money. Money and power. Whew! I just got downwind; you sweated into that heavy costume. Go in there, take a tub bath, hot and soapy. I'll sprawl on the chaise longue and we'll talk business. Are you really trying to rescue your mother, or are you simply looking to cut yourself in on Jacob's invention? We can make a deal, either way — but I must know. Don't hold out on me; I tend to get annoyed. Then someone else pays. *You,* in this case."

She took my hand and led me into the 'fresher while I answered her key question and thought about the rest. No more lies; she had caught me in one thrown together hastily and too complex; my grandfather would have been ashamed of it. So — nothing but the truth. But *how much* truth and *what* truth?

"Rescuing my mother is priority one, sine qua non. Business aspects are secondary."

"You were going to say that business aspects didn't matter to you — and I would have stuffed it down your throat."

I stalled while I adjusted the bath's controls. "Ma'am, I always think about business angles. But I would go broke and start over to make this rescue."

"Will you sign such a contract? We rescue your mother; you sign over all your wealth to me? No cheating, no holdout?"

"Is that what it takes?"

"No. It would not be equitable and that would compel you to cheat. Any contract must profit *both* of us. But rescuing your mother appeals to me — to all my family; I'm the least sentimental of us-and we would tackle it if there were not a fiat dollar in sight. *Pour le sport.* That nice warm feeling — whether it's a kitten, a baby bird, or an old woman. But there is money in this… and sport… and opportunities beyond imagination. That sound of water splashing: does that interfere with Dora's hearing?"

"No, she filters it out."

"Is she listening?"

I instantly answered, "Yes." I've lived a long time in part by being a cat not caught in the same trap twice — as she had underlined. I placed in my permanent memory, nine times nine, *never* to lie to this woman again. Evade, avoid, keep silent, be elsewhere. But *don't* lie to her. A born Grand Inquisitor. Telepathic? Must ask Laz-Lor.

"I'm glad you said Yes, Lazarus. Had you said No, I would have broken off negotiations. I'm not telepathic — but you may find it inadvisable to lie to me. We must change the computer situation — part now, part later. You didn't give her the right code words."

"That's right. 'Chinchy' and 'mean' equal —"

" — Roger Wilco, but reversed meaning."

"Eh? That's a deep-down memory. Yes. Hmm — I must insert that phrase into Galacta. Useful." The water was just right, with deep, fragrant suds. I stepped down into it, picked a seat that let me lounge. "I should have said to Dora — Shall I tell Dora now?"

"With a modification. I want the equivalent of a simple telephone, so that I can call anyone, anyone can call me — and the same for you. But kill the snoop circuits throughout this suite."

"No trouble. We can call out at any time; that is a safety feature, permanent. As for calling in, I usually limit it to the twin commanding; she's entitled to disturb me, if needed. If not needed — well, neither Laz nor Lor enjoys being called 'stupid,' especially by me."

I changed the orders to Dora and did not cheat; Mrs. Burroughs and I were now truly in private, although anyone could reach us — voice only. "What next, Ma'am?"

"Some permanent changes for Dora, now that she can't hear us. Tentative plans for your mother's rescue. Then we talk business. Is there a seat in that pool where I won't drown?"

"Oh, certainly. When Laz-Lor were your size, they often bathed with me — I've had as high as six in this tub although that's a bit cozy; it's a four-adult design. Here, let me help; you can't see through these suds." Helping Hilda Burroughs reminded me of handling Laz-Lor at the same size, prepubescent… but I was acutely aware that this small, warm, slick body was postpubescent by many years and I got a twinge that I was pleased to have figleafed by suds. "Feel under you — find the seat? Temperature suit you?"

"Luxurious. On Tertius refreshers are social rooms, are they not?"

"Yes. Over the years I have found that nude cultures, or those with no taboos about nakedness, tend to make bathing a social event. Ancient Romans. Ancient Japanese. Many others."

She answered, "Whereas cultures with strong body taboos equate bathing rooms with outhouses back of barns. Disgusting." Mrs. Burroughs looked disgusted. I noted this as I had thought it would be necessary to get them used to skin before exposing them to the easygoing ways of Tertius… lest I jeopardize my mother's rescue. I had instructed Laz-Lor to hold us in irrelevancy until all of them, with no urging, accepted the comfort of complete bareness in perfectly tempered conditions, and simply forgot about bodies *qua* bodies. This does not mean to forget yin-yang… but it has long been known to all but legislators, judges, and other fools that a scrap of clothing figleafing whatever may be taboo (taboos vary endlessly and each is a "law of nature") is far more stimulating than is no clothing.

(Warning to time-travellers: To assume that the taboos of your native culture are "natural" and that you can't go too wrong behaving by the rules your loving parents taught you is to risk death. Or worse. If you think death has no "worse," read history.)

To return to pretty little Mrs. Burroughs: To be enjoying a bath with her a few minutes after she had had me subjected to personal indignity was the second most surprising thing about her. The *most* surprising thing I was still learning: This fragile little doll with the muscles of a kitten was the toughest bitch kitty I have ever encountered.

Understand me, I admire her. But I want to be on the side she is on. "What changes in Dora do you want, Ma'am?"

"Lazarus, I'm 'Ma'am' to strangers and on formal occasions. I don't consider bathing all that formal; my friends call me Hilda. Or by nicknames. Even pet names. But not 'Ma'am.'"

My answer got me splashed. She went on, "In attempting to hornswoggle me, you gave me, through your accomplices, a phony command and rank — while retaining control of the computer necessary to make it real. I require that you carry out your contract. *Now.* By reprogramming Dora to me as her sole boss, with the program locked so that *you* can't change it. Me and me alone."

She smiled, leaned toward me, and placed a hand on my knee under water. "That's why I insisted on privacy — for Dora's sake. She's self-aware and seems quite vulnerable. Lazarus, I don't mind anyone in this ship hearing anything I've been saying. But I don't discuss surgery when it is likely to upset the patient." She leaned forward. "Scratch between my shoulder blades — pretty please?"

I welcomed time to think, while requiring her to coach me — higher, lower, a little to the left, ah, right *there* ...

"Hilda, I'm not sure it can be done. I did reprogram Dora so that her loyalty in crisis is to Laz-Lor. But it took me years and was not done by circuitry or by programming Dora is so thoroughly a self-aware personality that it is necessary to win her love in order to gain her lovalty"

"I find that believable. Lazarus, let's see you pull a hat out of the rabbit."

"You mean —"

"I meant what I said. Any second-rate magician can pull a rabbit out of a hat. Can Lazarus Long pull a hat out of a rabbit? Watch this space next week. It's *your* problem, Lazarus; you created it. I won't make a second contract with a man in default on his first. Do you want your back scratched while you think? You scratched mine deliciously."

I accepted by leaning forward. Hilda *is* telepathic though perhaps not in words. She knew which spots and how hard and how long.

And when to stop. She dropped her hand as I straightened up… and her hand brushed against me and stopped. "Well! Truly I did not intend to be provocative, old dear."

I put an arm around her; she did not pull away but continued, "I won't refuse you. I have not given a man reasonable cause to call me a tease since I was twelve. But wouldn't it be sensible to table this until after we have rescued your mother and set up our business structure? If you find — then — that you are interested, you will let me know. If you do, I ask that you cooperate with me in saving my husband's feelings and face. And… I am… having trouble *saying* this — Damn it! *Please* stop and tell me the plans for rescuing your mother."

I stopped, allowed a hand's width to separate us. "Have you forgotten the hat and the rabbit?"

"I'm afraid I did. Very well, you've won this round; we attempt to rescue your mother. I waive the broken contract — but we do no further business. Just the rescue, then we leave."

"I thought you promised me a second chance — later?"

"What? Lazarus, you're a bastard."

"I'm not but the term has no meaning on Tertius. Here's the 'hat.' You designate me your flunky — any title — for this ship. My sole function will be to be in earshot — through Dora or otherwise — to insure that your slightest wish is carried out. Night or day."

"Making me a privileged figurehead, still vulnerable to your whim. The hat won't fit."

"Very well — second hat. We ground on Tertius; I move Dora into another ship — she accepts that; it has happened before. I sign this ship over to you with a new computer of the same capacity, programmed for ship's routine but unawakened. You let it awaken to your personality. You'll be its mother."

"That's better. Close but not on. Lazarus, you and I are going to be in business together a long time. I won't take your ship. Instead you're going to build me a ship, a tender for Gay Deceiver but moved by a Burroughs continua device — the first such ship built by Burroughs & Long, Ltd., a subsidiary of Carter Engineering Company. Another subsidiary is Carter Computers, which may assemble computers but primarily will build Burroughs Time-Space twisters under some innocuous name, and sell them only inside our complex setup — *much* more complex; we'll work on it together. But our biggest subsidiary will be Libby & Smith, Real Estate. That one rebuilds solar systems."

"What!!"

"Talk to Zebbie and Jacob. We'll organize Black Hat Safaris, Pty., too, but it may be a dummy for a while. We'll have an emporium in New Rome, imports from many universes. Uh… The Pawnshop, of course, with the Hook Joint above it. Ultra expensive imported styles up there, modelled by New Rome's most beautiful hetaerae. Private rooms for private viewings. This one is a gift to Laz-Lor, save for the ten percent that is voting stock of which I vote my usual control, through you. The twins can do as they please with it; our leash will be slack. Probably they will do their own importing, with a resident manager. But they might work in it some, just to know the business."

"Which business?"

"Both. They are grown women, Lazarus; you must not try to run their lives. The overall holding company, run by you and me, usual split with my one percent advantage, is a nonprofit corporation supporting Ishtar's clinic. We funnel whatever is needed into the clinic, holding down the book profits elsewhere, but paying whopping salaries and consulting fees. My husband is chief scientist in one part while consultant by fee elsewhere, with Elizabeth — Lib — his mirror image elsewhere. Lazarus, we must have Deety work on it; she has the finest head in our family for manipulation of this sort — I'm just her awed pupil."

"And I'm just your awed pupil!"

"Piffle again. Lazarus, from what I've read of you, your sole weakness lies in a delight in cheating for its own sake; Deety treats it as an intellectual art. One thing more — No, two things. Can you persuade Dora, as a favor to Ol' Buddy Boy, to go along with the hoax until we deliver your mother to Ishtar? Make it a mammoth joke, under which she takes orders from me because she wants to be in on the fun. Take you out of arrest, of course; wipe it from her memory."

"It was never in her memory; Lor put her in non-recording mode while the hooraw was on."

"Good! Can you persuade her to call me 'Commodore' while you use some fancy title?"

"Hilda, I'm your chief of staff for this ship; Zeb is chief of staff, flagship. Dora doesn't really understand ranks; I can tell her that 'chief of staff' is one notch senior to God. No problem. As long as she can see that you and I are buddy-buddy."

"And we are!"

"It's reassuring to hear that. Hilda, I underestimated you so badly that I'm still in a state of shock. What's the last item?"

"Rejuvenation for all of us for as long as you — Ishtar — can stretch non-Howards."

"I can promise that; I'm Board Chairman of the Clinic. But — Ishtar is *not* a magician. What's the average age of death for your parents, grandparents, any ancestors you know about?"

"My family, both sides, are considered long-lived — although I lost my parents in a car crash. The others I don't know about except that Deety's mother died of cancer, much too young."

"We can handle that."

"Is longevity on Earth — our Earth, not yours — of interest? Same length of year as Old-Home-Terra; Deety and Lor checked."

"Of course!"

"These figures apply to North America. Some other places are higher, some lower, some no data. Females. Menarche at thirteen plus-or-minus nine percent. Menopause at fifty-six to sixty-seven plus-or-minu —"

"Stop there! Average age of death, female?"

"One hundred seventeen. But males average eight years less. Sad. My own family averages higher, but only a few years. I don't know about Jacob but he mentioned once that his greatgrandfather got himself killed, in an odd fashion, at ninety-seven. He —"

"Enough. I must report this. By definition, all of you are 'Missing Howards.'"

"But, Lazarus, that's simply the average on Earth — our Earth, now that I know that there are thousands of analogs."

"Doesn't matter. Different universe, different time line — not my problem. Here you are a Howard. You four and all your descendants."

Hilda smiled happily. "That's cheerful news to a woman six weeks pregnant."

"You?"

"And Deety. Same time and doesn't show yet. Lazarus, I was tempted a while ago to tell you… because *I* was tempted. Now, now! *Down,* Rover! Outline to me how we rescue a woman dead for many centuries."

"Hilda, someday I'm going to get you drunk."

"Want to bet?"

"Never with you. There is mystery about my mother's death. She appears to have been killed accidentally at a relatively young age, for a Howard. Just short of a hundred. I was notified as her purse I.D.'s named me as 'next of kin' — and I bawled like a baby for I had been planning to pay her a visit on her century day, July 4th, 1982. Instead I attended her funeral, flying to Albuquerque two weeks early.

"Nobody there but me. She was living alone under her maiden name, she and my father having separated thirty years earlier. But apparently she hadn't listed her last address change with the Howard Foundation, hadn't notified her other children. Howards are like that; they live so long that kinship is not enough reason to stay in touch. Closed casket and cremation — authorized by stuff in her purse; I never saw her body.

"But there was no doubt as to her I.D.'s and so forth. In my world, 1982 was a time when you couldn't sneeze without carrying a thick pack of cards all, in effect, saying that you were you. I was feeling it because I was seventy later that year and looked thirty-five. Embarrassing. I had plans to drive south from Albuquerque, cross the border, and not come back until I had bought a new passport to match a new name.

"Hilda, it was over two thousand years later, in preparing for my first time trip, that I learned that my mother was not listed in the Archives as dead but simply as 'record missing.'"

"The matter troubled me. A few years ago — my time — Laz-Lor took me back. Didn't ground; a missile chased us and scared Dora silly. But I got a motion picture that seems to show the accident. There is a blur on the frames just before the first one that shows what I think is the corpse. Can you guess the size and shape?"

"Shan't try, Lazarus."

"As near as I can measure on a film a centimeter square, shot with a telephoto lens from too high because Dora was crying and wanting to go home, it is the size of that berth Gay Deceiver is in. Hilda, I think I photographed you rescuing my mother before you did it."

"What? Lazarus, that's —"

"Don't say impossible. The Land of Oz is impossible. You're impossible. I'm impossible. Who invented pantheistic multiperson solipsism? You did."

"I wasn't going to say 'impossible.' Now that you know that I'm pregnant, you will realize why I want to try to rescue your mother right away, before my belly starts growing where the seat belt crosses it. Her name was Marian? Marian Johnson Smith?"

"Maureen Johnson."

"That proves that the real Lazarus Long stood up. It bothered me that there might be a series of analog-Lazarus-Longs like analog-Earths."

"Wouldn't bother me. That's *their* problem."

"But it would destroy the theory I worked out that would account for my sitting here in a pool of water in a time-travelling flying saucer with a fabulous man — both ways! — when I *know* he's a fictional character in a book I read years back. That makes *me* a fictional character, too, but that doesn't trouble me as *I* can't read a novel with *me* in it, any more than *you* could read the one *I* read about *you."*

"I came close to doing just that."

"Don't be mysterious, Lazarus."

"I like wild stories. Used to read every one I could find in the Kansas City Public Library. On another time trip I picked up a magazine of a type you may never have seen. Read one installment of a serial. Ridiculous. Four people traveling in space in an *airplane.* At the end of that installment they are hailed by a flying saucer. Continued next month. Hilda, how do you *think* Dora was able to be at the right place at the right time when Gay Deceiver popped out of nowhere?"

"Where is that magazine?"

"Down the same destruction oubliette that recently received my best fake Scottish chief costume. If I had not learned long ago to dispose of casual fiction once I had read it, Dora would never be able to lift. Hilda, you explained it yoursel —"

"Hilda? Do you hear me" — her husband's voice.

Her face lit up. "Yes, Jacob?"

"May I see you? I have a problem."

I barely whispered, "I'll get out," and started to stand up. She pulled me back down. "Of course, Jacob dearest. I'm in the flag cabin. Where are you?"

"In our suite."

"Come straight here." She whispered to me, "Do we have a deal?" I nodded; she stuck out her hand; we shook on it. "Partners," she whispered. "Details later. Maureen first."

Her husband answered, "Hilda, I don't know my way. And it's a private matter."

"Then you *must* come here, Jacob; this is the *only* private place in the ship. I've been talking business with Lazarus Long — business so private we had to talk *here.* No more trouble, dearest man, and we each get what we want. Come join us, we need you."

"Uh… can *he* hear me?"

"Certainly. We're having a bath together. Come join us. I want you to know all about the deal before we tell the children. I may need support on parts where we traded quid pro quo."

Silence — "I'd better call back later."

I said, "Doctor Burroughs, you want to talk privately with your wife; I will get out. But please understand that social bathing is as commonplace on my world as offering a friend a drink is on yours. I am here because the Commodore invited me and I assure you she is quite unharmed."

Burroughs replied in a pained voice, "I know that custom and have utter faith in Hilda's social judgment. Yes, I do need to speak to her… but I don't mean to be surly. I'll come up, or down, or across, and say hello. Please don't leave before I get there. I'll ask my way."

"Dora will show you. Step into the corridor and wait. She'll find you."

"Very well, sir."

"Dora, special."

"Yes, Pappy?"

"Find Professor Burroughs. Lead him here. By the longest route. Slow march."

"Aye aye, Pappy."

I said hurriedly to Hilda, "I may know what this is; let me check. Lib?"

"Yes, Lazarus?"

"Are you alone?"

"In my stateroom alone. And lonely." Lib added, "And upset."

"So? Did you put the question to Professor Burroughs?"

"Yes. Lazarus, I had perfect opportunity. The one place Dora can't see or hear. Inside Gay Deceiver's space warp and — "

"Chop it, Lib! Did he turn you down?"

"No. But he didn't say Yes. He's gone to discuss it with his wife. That's why I'm jittery."

"Turn on the soother. I'll call you back. Off."

Hilda asked, "What's the matter with Elizabeth?"

"I'll make it short as even the longest route can't take long. Lib is terribly anxious to have a child by the mathematician — your husband — who formulated the equations for six-dimensional positively-curved space. She thinks — and so do I — that they might produce a mathematician equal to, or even greater, than Lib or your husband. But she should have let Ishtar arrange it. She jumped the gun; I don't know why —"

"I do! Elizabeth!"

Lib was slow in answering. "This is Elizabeth Long."

"Hilda Burroughs here. Elizabeth, you come straight here. Flag cabin."

"Commodore, are you angry with me? I meant no harm."

"Dear, dear! You come to Mama Burroughs' arms and let me pet you and tell you that you're a good girl. *Now!* How far away are you?"

"Just around the curve. A few meters."

"Drop everything and hurry. Lazarus and I are in the 'fresher. In the pool. Come join us."

"Uh, all right."

"Hurry!"

Hilda asked, "How do I let them in? Run dripping and do it by hand? I noticed that our door lets anyone out but can't be opened from the outside without help." She added, "For that matter how do I get back in?"

"Dora knows you belong here. For the rest — Dora, admit Libby Long and Professor Burroughs."

"Aye aye, Pappy. Lib — here she comes. Dr. Jacob Burroughs I'm fetching. How soon?"

Hilda said, "Two minutes."

Lib hurried in, still unsmiling. Did smile when Hilda put her arms around her, smiled and cried at the same time. I heard Hilda crooning, "There, there, dear! It's a wonderful idea; she'll be the world's greatest mathematician. A cute baby — something like Deety, something like you. *Jacob!* In here, darling! If you are wearing anything, chuck it; we're in the pool."

Seconds later the pool was filled to its rated capacity, Hilda with arms around both of them — kissed her husband, kissed Lib, said sternly to them, "Stop looking as if you were at a funeral! Jacob, this is what Jane would want — and it is what I want. Elizabeth, you aren't crowding me out; I'm pregnant now. I'll have my baby six weeks before you have yours. I've decided to ask Doctor Lafe Hubert to deliver my baby. Who are —"

"Hilda! I haven't delivered a baby for over a century."

"You have seven months in which to brush up. Doctor Lafe, are you refusing to attend me?"

"No, but — Jake, if Hilda will have her baby at the Clinic on Tertius, she will be in the hands of the most skilled obstetricians in this universe. Which I am not. I'm rusty. I —"

"Doctor, I think Hilda would settle for your holding her hand and standing by to help if needed. I think my daughter would like that, too. She may have her baby the same day as Hilda."

"Sir, I will be honored. But I want to say something about this proposed baby, a cross between two alltime great mathematicians. I know that your world places value on monogamy. Howards do not; they can't. But this need not violate your values. If you will make a deposit at the sperm bank at —"

"What?" Hilda Burroughs looked shocked. "Lazarus, are you talking about syringes and things like that. Done to *Elizabeth?"*

"Why, yes, I —"

She chopped me off. "Babies are not made with syringes! Babies are made with love! With little moans of happiness between two people who know exactly what they are doing and want to do it. Elizabeth, are you fertile today?"

"I should be. It's time."

"Then kiss me and tell me you want to do this. If you do."

"Oh, I do, very much!"

There were kisses and tears all around. I got pulled into it, found myself kissing the prospective father. I gave him a chance to duck but he didn't.

Our busy little stranger was still playing ringmaster. "Lazarus, what is that guest room across the cabin? Pastel colors?"

"Aurora Room."

"Beloved husband, wrap a towel around this sweet, frightened child, take her there, lock the door behind you and make her happy. This suite is the only totally private place in this ship. If I lay eyes on either of you in less than one hour, I shall burst into tears. That doesn't mean you can't stay longer. I hope that you will come to dinner ... but you are welcome to Aurora Room after dinner. Sweetheart, you must give her at least one chance each of the next three days; a woman's timing can vary from her norm. Now git! Pick her up and carry her."

Lib wouldn't let Jake carry her. But she leaned into his arm. As they left the 'fresher, she looked back with a happy smile and threw us a kiss.

Hilda caught it and ate it. Then she said to me, "Help me out, please, dear."

I lifted her out, sat her on the edge, climbed out myself. She patted the padded deck, said, "I think this is better than that chaise longue. If we happen to be caught it wouldn't embarrass me and should not embarrass you; in these circumstances Jacob would be relieved rather than upset." She smiled, eased her sweet thighs, put up her arms. "Now?"

"Yes!"

"Anything you want, including back rubs. Lazarus, does it excite you knowing what is going on a few meters away? It does *me!"*

"Yes! But I don't need it — Hilda, you're superb!"

"Not in looks, certainly. So I try hard with what I have. Sold myself three times — did my best to make my contract-husbands each feel that he had received full value… then married dear Jacob for love and am trying still harder with him. He is good — I mean he is good *all through.* I hope Elizabeth appreciates him. You've had her?"

"Yes."

"Before or after the change?"

"Both. I miss the 'before,' appreciate the 'after."

"Then why won't you knock her up?"

"That's a family joke. She had her first child by me, is now making the rounds of our family, more or less. Woman, you are *not* here to talk! — I'm almost there!"

She looked delighted. "I'm climaxing steadily; let 'er rip!" — and bit my chin.

An indefinitely long time later that need not be detailed, we were resting in each other's arms, enjoying that delicious peace of the ebbing tide. Hilda saw them first, raised her head:

"Jacob beloved! *Did you!* Lib — Did my sweetheart put a baby in you?"

"Did he! Hilda, you do that every night? Little bitty like you? Less than two hours and darling Jacob has worn me out."

"I'm a hollow mockery, dear. Built for it. Tell her, Jacob."

"My darling is adaptable, Libby dear. Lazarus, did Hilda treat *you* nicely?"

"I died happy."

"He's not dead" — Hilda made a long arm, cupped a handful of water, threw it in my face, giggled. The suggestion she added I rejected with dignity — as much dignity as one can manage when two women are tumbling one into a tub of water… while one's male comrade stands by and laughs.

Chapter XLIV

" — where do we get the corpse?"

Zeb:

"The question," said my wife Deety, "is where do we get the corpse? With timing that precise, Gay can make the pickup. But a corpse has to be left behind. Lazarus, not only do your movies show it, but you *remember* Maureen's death; you went to her funeral. It's got to be a fresh corpse of an elderly woman that the cops will accept as Maureen Johnson."

Six of us — Deety, me, Jake, Sharpie, Lazarus, and Libby — were seated around our kitchen dining table at "New Harbor" (our wives accepted that compromise) in Beulahland, trying to make plans for the "snatch." "Snatch" in the literal sense if the rescue of Maureen Johnson were to succeed.

Lazarus had a motion picture that showed that we *would* succeed (had succeeded) (were about to succeed) at a precise time and place and date on an analog of Earth-zero one quantum away on 't' axis.

Easy! Success guaranteed. Can't miss. Do it blindfolded.

But suppose we *did* miss?

The frames showed that a roadable had passed through the space where Gay had been (would be?) grounded, and, in so doing, ran over (would run Over) (will run over) (is, was, and forever will be running over) the dumped corpse. Suppose the timing or placement was offjust a touch. On his first time travel (1916-1918 Old-Home-Terra), with Dora piloting, Lazarus had missed not by a split second but by *three years.*

Lazarus had pointed out that it was his fault, not Dora's; he had fed her imperfect data — and we had jumped on him from five sides: It was not a question of "whose fault" but the fact a mistake could be made. Or could it?

Four mathematicians, one mathematical engineer (yeah, I include me, as resident expert in Gay's responses), and one intuitionist all disagreed.

Hilda was certain that nothing could go wrong.

I am a firm believer in Murphy's Law: Given any possible chance, it *will* go wrong. Anything.

Libby had been wholeheartedly converted both to Jake's six-axis plenum of universes to the awful Number of the Beast but also to Sharpie's multiple solipsism, and asserted that they were two sides of the same coin; one was a corollary of the other and vice versa. Combined, they (it) constituted the ultimate total philosophy: science, religion, mathematics, art, in one grand consistent package. She spoke of a "ficton" being a quantum of imagination/reality ("imaginary" being identical with "real" whatever that is) as casually as a physicist speaks of photons. "Could a mistake be made? Yes. And would create a new universe. Jacob, you spoke of the empty universes your family had visited. One by one they fill as fictons are created." She added, "But a mistake was *not* made; we snatched Maureen safely. We *ourselves* create the fictions-fictons-ficta that will make it real."

She was euphoric. I attributed it to excitement over the coming adventure. I was mistaken.

Lazarus, a highly competent mathematician although not the unique that Jake is or Libby, was in this case not a calm abstractionist; his mood was grim determination to win or die trying — causing me to recall how he got his arse shot off.

Jake turned out to be a determinist (he himself being one universe's prime example of utter, rambunctious free will!).

Deety is a pragmatic mathematician, unworried by theory. Oz is real, she is real, "fictons" don't interest her. "Don't fret, Lazarus. We can do it, Gay can do it — and we *won't* do it until Gay is *certain* of her program."

This discussion had started midafternoon in Dora. Sharpie had worked out her difficulties with Lazarus (to my enormous relief; were those two to wind up on opposite sides in anything more serious than Parcheesi, I yearn to be elsewhere — say Timbuktu under an assumed name); she, Jake, Lazarus, and Libby were in the flag cabin, arguing, when Sharpie had Dora page Deety and me.

There were endless matters on the agenda (including the preposterous notion that we four were 'Missing Howards' and that Lazarus was registering us as such. I'm not sure I want to live a thousand years or even two hundred. But I am sure of this: a) I want to live quite a piece; and b) I want to be alert, healthy, and active right up to the last. Not like my greatgrandfather who had to be spoonfed at a hundred and five, and could not control his secretions. But the Howards have got that whipped: you stay young as long as you wish, then die by choice when you feel you've had your full run.

(Yes, I was willing to be a 'Found Howard' since it included Deety, plus little Deeties ad infinitum.)

Lots of other business, all of it postponed (including the problem of "Black Hats"), in order to deal with rescuing Maureen Johnson.

We were still discussing knotty aspects when Lor's voice said: "Commodore?"

"Yes, Captain?" Sharpie had answered.

"Ma'am, I hesitate to disturb you —"

"Quite all right, Lor. The Captain must always be able to reach me."

"Uh, Ma'am, Dora told me that she was forbidden to call you. She has for you a variety of New Rome styles for women and men, a military uniform for Doctor Jacob, and one for Doctor Zebadiah, and evening formals for Doctor Elizabeth and Doctor Deety — and she's not sure where to send any of them."

"Send all the clothes to the flag cabin, please."

"Yes, Ma'am. They should be appearing in your delivery cupboard now. Do you know where that is?"

"I'll find it. What are you and your sister wearing tonight? Or is it a secret?"

"It's not a secret; we just haven't decided. But there is still an hour and thirtyone minutes till dinner."

"Time enough to pick out pretty clothes. Or will you wear formal skin tonight? That takes anywhere from two seconds to two hours, does it not? Off."

Sharpie used an unusually rough expression of disgust, which told me that she now included Lib and Lazarus in her inner circle. "Woodie, do you know any exceptionally strong cuss words? I detest the thought of wasting time pretending to be festive when we have so much to settle, especially our procedures for Maureen."

Deety looked at Libby. "You and I are kind o' stuck with a promise, too. How about some new cuss words from you, too?"

"Deety, I have no literary talent. But I would like to hear some soul-soothing cussing. We ought to stick with this, with snacks to keep going and sleep when we must, until it's perfect. Three hours or three days or three weeks."

I said, "We *shall!"*

Sharpie shook her head. "Zebbie, *you* can skip dinner. I can't. Lazarus should appear, too."

He agreed. "I'm afraid I must. But, Commodore, I must advise you that your flag chief of staff should be present, too, for esprit de corps." He cleared his throat noisily. "Libby and Jacob, being passengers, could skip."

Lib shook her head. "Deety and I made a reckless promise."

Not being a genius myself, it's kind of fun to make a roomful of 'em look silly. I stood up. *"No!* We will *not* let a dinner party interfere! We can settle it within three days. But if you all are going to chase rabbits — What's the matter with you, Sharpie? Getting stupid in your old age?"

"Apparently I am, Zebbie." She said to Lazarus, "Please issue orders cancelling dinner. We'll stay with this until we finish it. There are beds and lounges whenever anyone needs to nap. But we *won't* adjourn. Three hours or three weeks. Or longer."

"Don't cancel dinner, Sharpie."

"Zebbie, you have me confused."

"Beulahland is on a different time axis."

Five minutes later we were in our old farmhouse. We hadn't stopped for clothes as we would have wasted twenty minutes, whereas the idea was to save time on *that* axis, use time on *this* axis. We stuck Lazarus and Libby back in the after space, with the bulkhead door dogged open, so they could see and hear, but required them to use the web straps, and cautioned them that the lumps under them were loaded firearms.

The only thing not routine was that we would be making rendezvous later with a moving ship, something we had done before only from bounce range in the same spacetime. So I had asked Gay whether she was sure she could do it. She assured me that she could, because she wasn't concerned with the ship's vector; she would return the instant she left.

I turned to Commodore-now-Captain Sharpie. "Ready for space, Captain."

"Thank you, Astrogator. Gay Deceiver. Beulahland. Execute. Gay Deceiver, open your doors. All hands, unbelt. Disembark. Gay, it's sleepy time. Over."

"Goodnight, Hilda. Roger and out."

Our passengers were dazed — they all are, first time. They stood outside our barn, looking at the setting sun, acting like zombies, until I shooed them inside. Although Beulahland does not have body taboos, they wear clothes most of the time, and six naked people outdoors in a clump as the chill of the evening was coming on was odd. I like a low profile.

Once inside, Libby said, "Feels like Arkansaw."

Lazarus replied. "Feels like Mizzoura."

"Neither," I told them. "It would be the State of Washington if it weren't Beulahiand, and what ought to be Puget Sound is about a kilometer over that way."

"It still feels like home. Lazarus, I'm happy here."

At that moment I decided we would *never* give up New Harbor. Apparently we were going to be citizens of Tertius, or maybe New Rome on Secundus, or both (commuting is no problem when lightyears mean nothing), on another time axis. We could take a rest from city life anytime and have it cost not one day's work on Tertius. Contrariwise, only such time would pass on New World *as we spent there.*

Hmm — Maybe we could sell vacations. Or extra study time for that student who has his big exam, the one he *must* pass, tomorrow morning. Sell him room and board and transportation and *three weeks* *not in the calendar.* At a slight markup, of course.

I built a cheerful fire in the fireplace, and Lazarus washed dishes, while Libby insisted on proving that she could cook on a wood range, even though she had learned centuries ago by her time scale, as a gangling boy. Yes, Elizabeth can cook.

We ate and sat around and talked, puzzling how to be sure of Maureen. Not make that one tiny mistake, It was then that Deety brought up the matter of the dead body. You've seen how accurate Gay can be but *where* do we get a freshly-dead corpse to replace Maureen?

Lazarus told her to forget it, "I provide the corpse."

"That's not a good answer, Lazarus."

"Deety, don't worry. It'll be dead and I will dump it." I said, "Lazarus, I don't like that answer a damn bit." "Nor do I," Jake seconded.

"Nor I," agreed Sharpie. "Woodie, you're asking us to make a snatch — a hanging offense many places, bad trouble anywhere. We don't mind the technicality; saving an old woman's life isn't the sin kidnapping is. But what about this freshly-dead corpse? We don't deal in murder."

Lazarus glowered.

Libby said hastily, "If I assure you that it is all right, will you let it go at that?"

"No," pronounced Sharpie, *"Woodie* must come clean."

"All right, all right! I own this corpse. No murder or any other crime involved. Now will you quit riding me about it?"

"Jake?"

"I don't like it, Zeb."

"I don't, either. But we needn't do anything. We go limp. He may not last long in a culture that 'balances.'"

"Possible. But that's *his* problem."

Sharpie said quickly, "Did either of you promise him a ride back to my ship?"

"Whose ship?"

"My ship, Woodie. Gentlemen?"

"I didn't promise him. Did you. Jake?"

"No. Did you, Deety? Hilda?"

"Not me, Pop."

"Nor me, Jacob. Woodie, earlier today I thought you had seen the light. Conceded, 'I am but indifferent honest' myself. But even pirates need to feel safe with their shipmates. You and I shook hands as partners. You don't seem to understand what that means. However I'm not going to abandon you here. You'd be balanced in a week. Dead. Or worse. So we'll take you back. By the way, it is impossible to steal Gay

Deceiver. Yes, I know you once stole a ship enormously bigger than Gay. But not as well protected."

"Lazarus! *Tell* them."

"Lib, I was waiting for the Commodore to finish. That corpse wasn't murdered because it was never alive other than as a vegetable." Lazarus looked embarrassed.

"About thirty years ago we started a medical school on Tertius. A one-horse deal, more of a branch of the clinic. But genetic engineering is taught, and student genetic surgeons must practice. Ordinarily a clone that goes bad is killed and frozen and its tissues studied. A clone that takes — shows no fault, no deviation — is either cared for and allowed to develop if its genetic source wants a spare body and will pay for it. Or, more likely, a healthy clone is purely a laboratory exercise — an ethical medical school requires supervised destruction during the first pseudo trimester, before quickening shows in the wave form.

"Neither student nor tissue donor is likely to be upset by this quasi-abortion, as the student is almost always herself the donor — if it bothers her, she's in the wrong vocation.

"If the student is not the donor, emotional upset is hardly possible. The student thinks of the clone as a quasi-living histological specimen the usefulness of which is at end — and the tissue donor *can't* be upset, being unaware of it."

"Why so, Lazarus? If anybody is tinkering with *my* cells, I want to know about it, I do!"

"Deety, that tissue may be years, even centuries, old; the donor may be parsecs away. Or still warm and the donor just leaving the building. Or anything in between. A sperm-and-ova bank insures the future of the race; a tissue bank insures the future of the individual. But somebody has to pick up the check; it's a tanstaafl situation. A few of the very wealthy — and neurotic — always have a quickened but unawakened clone in stasis. I'm wealthy but not neurotic; I don't have a reserve clone."

I caught sight of Libby's face as Lazarus made that last statement — her mouth twitched in a half smile about to become (I think) a snicker, had she not suppressed all expression. No one but I caught it.

I made note to ask her about it later — then I remembered what the mouse told the cat and decided not to.

"But I do what any prudent Howard does; I have tissue on deposit. One may do this either of two ways: Pay high ... or pay much lower and sign a release on half the donation for research and instruction." He grinned. "I'm stingy. My tissue is available to medical students."

He went on, "Not all medical schools are ethical. I can think of at least three planets where — " Lazarus looked directly at my wife.

"Deety, you raised this issue. While I can think of three planets where one can buy any sort of monster, I can think of at least thirty where, for a much lower fee, I could simply say, 'I want that one'" — he pointed at Sharpie — "and the answer would be, 'It's a deal, Mac. How freshly dead and when do you want delivery?"

Sharpie looked around behind herself as if to see at whom Lazarus had pointed.

"That's the cheapest way —"

"Then you *weren't* pointing at me!" Sharpie interrupted. "Woodie, it's not polite to point. For a moment you had me worried. I'm never *cheap* — highpriced, always."

"So I found out, Commodore. Deety, that's cheapest, and safe for the buyer in the places I have in mind. But how can I convince you that I *never* gave even a moment's consideration to that method? You seem to know a lot about me — more than I know about any of you. Is there anything that you have ever read or heard, anything that I've said or done, that would cause you to think that I would murder or contract for a murder — same but nastier — in order to further my own ends? I'm not saying that I have never killed. A man who has lived even half as long as I have has found himself more than once in a kill-or-be-killed situation. But the best way to deal with such a situation is not to get into it. Anticipate it. Avoid it."

Lazarus Long stopped and looked sad, and for the only time of my acquaintance with him, looked his age. I do not mean he suddenly looked decrepit. But he had an aura of ancient sorrow. "Professor Burroughs, if it would do any good, I would junk all my plans, accept being forever stranded here, for the privilege of taking a twenty-pound sledge and *smashing* your spacetime twister."

I was shocked (damn it, I *like* good machinery). Jake looked hurt, Deety and Sharpie looked stunned.

Jake said tightly, "Lazarus… *why?"*

"Not to hurt *you,* Professor; you have my highest respect. You are one of three: the man who invented the wheel, the man who discovered how to use fire — and *you.* But, in making this supreme discovery, you have accomplished something I had thought impossible. You have made interstellar war logistically practical. Interstellar? Intergalactic — interuniversal!"

Lazarus suddenly straightened up, threw off his gloom, grinned. "All the King's horses and all the King's men can't close Pandora's Box again. Once it hits the fan, the only thing to do is sweep it up, package it, and sell it as fertilizer. Hilda has plans along that line. But I'm going to have to start thinking in military terms again. Figure out how to defend my home place against what appears to be that Ultimate Weapon much talked about but never achieved. I am glad to say that

Hilda plans to keep it a close-held secret as long as possible; that may buy us time."

He turned his attention back to my wife. "Deety, I have never murdered, I never will. The nearest I ever came to it was once being sorely tempted to strangle a fiveyear-old boy. I admit that the thought has often passed through my mind that this character or that would look his best as the centerpiece of a funeral. But can I convince you that I have never *acted* on such thoughts? Think hard, please — all that you know of me. Am I capable of murder?"

Deety doesn't dither. (Remember how we got married?) She jumped up, hurried around our kitchen table, and kissed Lazarus — and stopped hurrying. It was a kiss that calls for a bed, or even a pile of coal — had there not been urgent business before the house.

Deety broke from it, sat down beside him, and said, "Tell us how we get this unmurdered fresh corpse. It's clear that we're going to have to go pick it up — in Gay. So we must know."

Libby said gently, "Lazarus, this is what you have been avoiding. May I tell it?"

"Thanks, Lib. No, you would pretty it up. I —"

"Pipe down!" said Deety. "Elizabeth, give us the straight word. Briefly."

"Very well. The medical school of B.I.T. is as ethical as you will find. My sisterwife Ishtar is director of the rejuvenation clinic and chairman of the board of the medical school, and still finds time to teach. I have never seen Maureen Johnson as I was born about two centuries after she was. But she iS Supposed to resemble Laz and Lor — unsurprising; she is their genetic mother, since they were cloned from Lazarus."

"Oh! I see. There is still a *third* clone from Lazarus. Female?"

"A spoiled one, Deety. Ishtar tells me that it is difficult, rather than otherwise, to get a bad clone from Lazarene tissue… so it is especially suitable for induced mutation experiments. She orders the destruction of these experiments when they have served their purpose."

"Deety said to make it brief," growled Lazarus.

Lib ignored him. "But, while Ishtar checks on the students, no one checks on her. For twenty years Ishtar watched for a clone that would look human but not be human. So deficient in forebrain that it could never be anything but a vegetable, unaware. She told me that her students had unknowingly provided her with dozens to work on. Usually they died too soon, or never developed human appearance, or had some other fault that made them unusable. But several years ago she succeeded. I testify that this thing looked like Laz and Lor as it passed through the stage of its forced development… and also that it looked like an older version, wrinkled and hair streaked with gray, when it died two Tertian years ago —"

"Huh? *'Fresh corpse'!"*

" — and was quick-frozen at once. I testify to something else. Friends, in becoming a woman I acquired an interest in biology that I had not had, as a male. While I teach math at B.I.T., I am also staff mathematician to the clinic and have studied a bit of human biology. When I say that this spoiled clone was *never* alive in any real sense I speak as the mathematical biologist who checked its monitors' records daily. It always required full metabolic support; we monitored everything. The surprising thing is that Ishtar could keep it alive long enough to let it appear to age. But Ishtar is very skillful." Libby added, "Lazarus would not only have become upset in telling this, but he could not have told it first hand as Ishtar refused to permit Lazarus to see this spoiled clone or any records on it."

"A willful woman," said Lazarus. "In three seconds I could have told Ish whether or not this thing looked enough like my mother to be useful. Instead I must depend on the opinions of people who have never laid eyes on my mother. Damn it, I am owner of record of the clinic and Chairman Regent of all B.I.T. Does that count with Ishtar? Hilda, my senior wife is as tough a case as you are… and looks as little like it as you do."

"So? It will be interesting to see what happens when I am your junior wife," Sharpie answered at her pertest.

"Are you going to be my junior wife?" Lazarus swung around and looked at her husband. "Jake?"

"I don't think I have a vote," my blood brother answered easily.

"I'll automatically be your junior wife if we are invited to join the Long Family which we damn well ought to be if we make this work!" Sharpie said indignantly.

"Wait a half!" I put in. *"If* we are invited to join the Long Family — a tall assumption if I ever saw one — *Deety* would be junior. Not you, you elderly baggage."

"Hillbilly can be junior if she wants to be. I don't mind."

"Deety," I said, "are you serious? I've been trying to point out to your stepmother that you don't push your way into a family."

"I wasn't pushing, Zebadiah," my wife answered. "I want us to stay on Tertius at least until we have our babies, and possibly make it our home; it seems to be a pleasant place and should be free of 'Black Hats' — no skin taboos. But that doesn't mean that the Longs have to have us in their laps."

"I intend to nominate you, Zebadiah," Libby told me. "All four of you. And I hope you four accept. But, Deety twin, you know what I'm attempting. With your father."

"Yes, I know. I'm cheering for it."

"Your husband must hear this. Deety, I still have that Y chromosome in every cell even though it has been so inhibited by hormone balance that I don't notice it. You and I could try for a mathematical-genius baby, too."

"Huh! Which one of us supplies the penis?"

"Ishtar does. Neither of us would be hostmother, the way it would be done. But any of my sister-wives would supply womb room if she didn't happen to be pregnant. Or the hostmother could be a stranger we would never meet and the child's family-parents strangers, too — all handled by Ishtar who always reads the relevant genetic charts before approving anything."

"Zebadiah?"

I said without hesitation, "It's up to you, hon. I'm in favor of it; it makes sense. But *don't* lose track of the child. Elizabeth, I want to adopt the baby ahead of time. Hmm — Bottle baby… but the formulas are probably better now. Not here-now. Tertius there-then-now."

"'Bottle baby'? *Oh!* No longer done; a baby needs to suckle. But there is usually spare milk around the Longs'. If I'm lactating I always have excess; I turn out to be a good milch cow despite that extra chromosome. But Deety can nurse our child if she wishes to; causing a woman to come fresh with milk without bearing a child is a minor biochemical manipulation today — Tertian-today. Professional wet nurses do it regularly and are likely to be in that vocation because they love babies but can't have 'em themselves for some reason."

"Sounds good." (What sounded best was this: a baby Deety is a wonderful idea — but a baby Deety who is also a baby Libby is sure to be wonderful squared. Cubed!)

"While I'm on this and no one here but family — Jacob, there is no reason not to create a third mathematical supergenius by crossing you with your daughter."

I was looking at my wife, thinking pleasant thoughts about baby Deety-Libby, when Elizabeth dropped this bomb — and Deety shut down her face. It's not an unpleasant expression; it's a no-expression, a closed door, while Deety sorts out her thoughts.

So I looked at Jake, in time to see his face shift from surprise to shock. "But that's —"

"Incest?" Libby supplied. "No, Jacob, incest is a social matter. Whether you bed your daughter is none of my business. I'm speaking of genes, of still another way to conserve mathematical genius. Ishtar would scan your charts most carefully and would resort to chromosome surgery if there was the slightest chance of double dosage of a bad allele. But you and your daughter could see Ishtar on different days and never know *anything* about the outcome. Your genes are not your property; they come from your race. This offers opportunity to give them back to the race with your highest talent reinforced… without loss to anyone. Think about it."

Jake looked at me, then at his daughter. "Deety?"

She added no-expression voice to no-expression face — but directed her answer to me: "Zebadiah, this is necessarily up to you and Jacob." I'm not sure that anyone but Sharpie noticed that she had not said "Pop."

Deety added at once with total change in manner, "First things first! Maureen's rescue. All of you are stuck in a rut of time sequence. Oh, the minor problem of keeping clear of Dora and the missile both times. Routine." (And *I* was hit by a satori.)

Lazarus answered, "But Deety, I promised Dora never again to take her anywhere near Albuquerque."

Deety sighed. "Lib?"

"Frames one-thirteen through seven-seven-two, then seven-seven-three through one thousand and two?"

"Precisely. And precisely it must be, too. I'm timing it by that yellow open roadable approaching from the other direction. What are you using?"

"The same one. Easy to spot and its speed never varies."

Lazarus said, "Jake, do you know what they are saying?"

"Yes and no. They are treating it as two problems. But we lack three seconds of time enough to dump one and snatch the other. Those — traffic lights, you called them? — leave that intersection clear by a measured interval, clocked by your camera."

Sharpie suddenly grinned; I nodded to her to take it. She did. "Deety and Libby are saying that we do it *twice.* First, we rescue Maureen. Then we come back and dump the corpse."

I added, "But the second time we don't ground. Jake, I'm going to ask you to move over — Deety moves to my seat. We'll dump the dead meat so that it hits the ground between frames seven-seven-two and seven-seven-three. I'll be on manual and hovering. I need to know where Dora is and where that missile is and need to be sure of the acceleration of gravity, Earth-Prime. Because that corpse will *already* be falling, right over our heads, while we are making the snatch. Close timing. Mmm — Gay can fly herself more precisely than I can. I think that Deety and I will write a program… then I'll be on override-suspenders and belt."

Jake added, "Zeb, I see the procedure. But, if we are hovering for the drop while we are also on the ground, why aren't we shown in the photographs?"

"May be in some of them. Doesn't matter. Deety, when do we do this? Cancel. Sharpie? Your orders, Captain?"

Deety and Sharpie swapped glances. Then they sounded like Laz-

Lor, with Sharpie leading. "Now to bed. It's almost midnight in our biological time, slightly later in local time."

"We do both jobs after breakfast," Deety responded. "But sleep as late as we can. Be sharp and on our toes. 'Minds me. Just one 'fresher, quite primitive. But the two in Gay are as available here as anywhere; since they are actually in Oz. Six people, three pots, not difficult."

"And three beds," added Sharpie. "Jacob, kiss us goodnight and take Lib to bed. Master bedroom and good luck! Use my toothbrush, Lib hon — anything else you need?"

"No. A good cry, maybe. I love you, Hilda."

"If I didn't love you, Elizabeth, I wouldn't be Madam of this joint. We'll cry together the day Ishtar tells us you've caught. Now *shoosh!* Scat! Kiss us and go to bed."

As they headed upstairs Sharpie said to me, "Zebbie, give Deety a pre-amnesty so that she can try out Lazarus and find out whether she wants to be junior wife."

I tried to look amazed. "Deety, haven't you tried Lazarus *yet?"*

"You know darn well I haven't! When have I had time?"

"From a woman who specializes in programming time machines that is a silly question. Lazarus, she's already knocked up, so don't fret about it. One warning: She bites."

"The best ones always do."

"Hush. Kiss us goodnight, dears. Zebbie, open the couch in the living room; that's where you're going to keep me warm."

"But who's going to keep *me* warm? A skinny little runt like you?"

Sharpie bites.

Chapter XLV

A Stitch in Time

Jake:

We popped out one klick H-above-G over Albuquerque, Earth-Prime, and Gay tilted her nose down. A last-minute change put my daughter Deety at copilot, while I sat left rear, nominal navigator. Deety can use verniers as accurately as I, did not expect to use them at all, *did* need to be able to see the yellow roadable — and has this clock in her head.

Elizabeth Long was in the after compartment, strapped down but not on lumps of ordnance. Rifles, pistols, bed clothes for the control compartment, anything else that could be moved easily to reduce clutter, had been shifted into our space warp, as had Lazarus Long.

Doctor Ishtar had warned Lazarus not to let his mother recognize him, as the shock to her might be harmful, even fatal. While Lazarus had been trying to figure out how to make the snatch using Dora, he had planned on wearing disguise. But hiding in our Land-of-Oz addition was simpler-especially as Ishtar was almost as anxious that Lazarus not see his mother, not see his mother's pseudo corpse — this I learned from Elizabeth in the night.

So I showed Lazarus the everlasting picnic basket, advised him to use bed clothes to make a shakedown and sleep if possible as there would be time to kill, and supplied him with books — but *don't* come out until I open the door! Then did not mention that I was locking him in.

I was relieved to have only a nominal job. I was not sleepy despite a short night — I was bemused.

I was falling in love with — *had* fallen in love with — Elizabeth Long. No less in love with Hilda — more in love with her than ever! I am learning that love does not subtract — it multiplies!

As Gay tilted down I reached over and touched Hilda's hand. She smiled and threw me a kiss. I'm sure she had a sweet night; she has loved Zeb as long as she has known him. "As a loyal chum," she tells me — but Hilda holds to the Higher Truth that it is better to be kind than to be frank. It did not matter either way; Zeb is my blood brother beloved by me, perfect husband for my daughter, and, if not Hilda's lover in the past, then he surely was now — and it troubled me not at all. On awakening I had discussed it with Jane before I opened my eyes — Jane approves and is delighted by Elizabeth.

My daughter had an unusual night, too. If the myths are true, Lazarus is more than one hundred times as old as Deety. This gulf may not matter to him — but Deety takes everything seriously.

Apparently it had done her no harm; at breakfast she was bright-eyed and bubbly. All of us were euphoric and eager to get on with it.

Zeb was saying, "That's it! Got it in the gunsight — got the range, Smart Girl?"

"Got it nailed, Boss!"

"Keep it so. Deety! Yellow roadable?"

"Just spotted it. Gay, count down! Six… Five… Four… Three… Two… One… *Now!"*

We were diagonally in that intersection; Gay's portside door was popping open. I heard Zeb say, "Oh, my God!" He was out of the car, kneeling, picking up a body, kicking a cop in the stomach, and *throwing* that body to me, as he scrambled inside and shouted, "GayBounce!"

Gay bounced. Gay is not supposed to lift with a door open and "Bounce!" means ten klicks. She bounced *one* klick, finished closing her door, waited while Zeb checked the seal — completed the bounce. I am now a believer.

I was passing this little old lady back to Elizabeth, and looking for resemblance to Lazarus when I heard Zeb moan, "I didn't get her purse, *I didn't get her purse!"*

"What of it?" said Deety. "It's where we want it. Gay Deceiver. Tertius Orbit. Execute."

A beautiful planet —

Zeb was saying, "Lib, can you coach us? Or are you too busy?"

"Not that busy. Maureen fainted but her heart is strong and steady, and I have a strap holding her. Is Gay on frequency?"

Deety reported, "Right on. Go ahead, Lib."

The next I can't report; it was in Galacta. Then Elizabeth said, "We'll be passing over Boondock in three minutes twentytwo seconds. Roof of the clinic is designated. Shall I come forward and point it out?"

"Can you handle yourself in free fall?" Zeb asked.

"I've some experience. Eight centuries."

"My big mouth. Come forward."

In four or five minutes we grounded on a flat roof in a wooded part of a moderately large city. I saw a figure in a white coverall, plus two others with a wheeled stretcher — and only then did I recall that none of us had dressed. Hilda had asked; Lazarus had vetoed, Elizabeth had concurred.

So I found myself bare to my ears, bowing over a lady's hand and saying, "I am honored, Doctor Ishtar."

She is indeed beautiful — a Valkyrie sculptured from cream and marshmallow and honey. She smiled and kissed my hand.

Elizabeth said something in this other language; Ishtar smiled again and said, in careful, fluent English, "In that case, he is one of us" — took my head in her hands and kissed me thoroughly.

Ishtar so distracted me that I did not notice that Maureen had been handed out — awake but dazed — been rolled away, and was gone. All of us were thoroughly and carefully kissed, then Elizabeth discussed matters with Ishtar in Galacta. "Ish says that she has been slowly warming the thing. It is now at four degrees Celsius. She would like more time but will bring it to thirty-seven degrees Celsius in six hours if she must."

Deety said, "How about twenty-four hours?"

Ishtar was pleased at this, agreed that she understood that the substitute *must* be dressed in the patient's (client's) clothing, agreed that the space we were in would be kept clear — and asked, "What's that pounding noise?"

Elizabeth explained that it was Lazarus. "He is in a magic space warp about where we were standing. He knows that he is supposed to remain there, but he changed his mind — and has just discovered that he is locked in."

Ishtar's smile suddenly became a grin, as quickly left. "A magic space warp? Lib, I want to hear about that."

"You will."

We climbed back inside, Deety told Gay "Twenty-four hours" — and we stepped out again. Ishtar was lying on a pad, taking the sun… this time as bare as we were — and I was still more impressed.

"Right on time," she said, standing (taller than I am) and, as always, smiling. "The substitute is waiting, and I have had time to examine and talk with the client. She is in good shape for her age, understands in part at least what has happened, and is undismayed by it. Please tell Lazarus that, if he returns to Tertius soon, he will not be admitted to this building for seventeen months. The client is most firm: she will *not* see Lazarus until I have completed rejuvenating her."

"Lib," said my daughter Deety, "seventeen what sort of months? I want to set an exact rendezvous — and Gay's time calibration is not Tertian but Earth-Prime and Earth-zero. Old Home Terra." With Elizabeth as interface the three agreed on an exact time. Then Elizabeth again discussed something in that language.

Ishtar nodded. "No problem, I have seen that picture. And a hooded cape is even less trouble."

So we left.

Dropping that pseudo corpse was routine but I was glad to be quit of it (I had swapped seats with my daughter). Then we were back on Tertius.

"Always prompt," said Ishtar — and I was astounded to see that she was quite pregnant, close to birthing ... when I had seen her, slender for her height, two minutes earlier. "And we are on time, too. Maureen, my friends and yours." She named us.

Maureen Johnson spoke to us first in Galacta, shifted to English when she realized that we did not know the common tongue. Yes, she does look like Laz and Lor — but prettier. A woman of beauty and great charm. I find that I am growing accustomed to perfect ladies who embrace, bare body to bare body, on meeting a fully-vouched-for stranger. She thanked each of us and made us believe it.

"Still pounding?" Ishtar inquired.

"It has been less than five minutes for him, Ish," Elizabeth explained. "But you know his temper; perhaps we had better leave. Home soon, I think."

So we left again, with Maureen squeezed between me and my wife, with a package and a cloak in her lap. We were back inside Dora at once. Elapsed time: zero seconds. We still had an hour and twenty minutes to prepare for dinner. I found that I was hungry, even though breakfast was three hours ago, biological time — almost all of it spent in Beulahland, programming for the caper, as all three phases took only a few durational minutes, mostly on a rooftop in Boondock.

Maureen put on the cloak, a hooded cape, and carried the little package. "Silly but fun," she said. "Where do we go now?"

"Come with me," Hilda told her. "Beloved, you can let Woodie out as soon as Dora tells Gay that I have reached flag cabin. When he yelps, tell him that we were too busy to play games with him… and the next time he wants a favor from me he can crawl on his knees. Pounding indeed! Tell him that I am extremely tired and am going to nap until just before dinner and he is not to call me or to come to the flag cabin between now and dinner without suffering my *extreme* displeasure and a punch in the nose from you. All of you come up to flag cabin as soon as you wish but try not to be seen by Woodie. You'll probably find Maureen and me in the lounging pool."

Chapter XLVI

"I'm gifted with second sight."

Deety:

When the Hillbilly stages a production, she doesn't stint. By protocol decreed by Lazarus Long, dinner in Dora is formal, but with wide latitude in "formal" — casual dress being the only thing utterly verboten. Dinner is preceded by a happy hour where one can sip Coca-Cola or get roaring drunk.

Aunt Hilda changed all that for this night. No happy hour but be on time — two minutes before twenty o'clock, ship's time. No one permitted to eat in her/his quarters — a command performance.

No options in dress — Commodore Auntie decided what each would wear, where each would sit. I said, "Commodore Hilda honey, aren't you kind o' throwing your weight around? What there is of it?"

She answered, "Yes, I am, Deetikins, for this occasion. But before you criticize, ask your husband whether or not I ever permitted one of my parties to flop."

"Don't need to ask him. Why, at your last one, our old Buick blew up. Never a dull moment."

"I didn't plan that. But we got husbands out of it; let's not complain. Before you deliver my message to the twins, tell me this. Is it safe to let them in on our secret?"

"Hillbilly, I tell Zebadiah *anything* even though someone — you, for example — has asked me not to."

"Deety, I thought we had a 'You'll-keep-my-secrets-and-I'll-keep-your-secrets' agreement?"

"We do. But telling Zebadiah gives you two covering for you instead of one. About Laz-Lor — remember that they are his *wives* as well as his clones."

"Hon, you were always a wise one. All right, we keep it secret. Tell them what to wear — and please understand that I'm hiding behind you to avoid argument; it's a favor I appreciate. Sending up sword and saber is a favor to your husband and to your father but I thank you on their behalf if they forget. Send the blades to your suite; they've decided they can dress more easily without women underfoot."

"A canard," Pop said, just back of my neck. "The women don't want *us* underfoot."

"I knew it was one or the other, Jacob," Aunt Hilda agreed. "But Dora has already taken your uniforms to our suite and your swords will —"

" — be there, too, and I can recognize a fact when I fall over it and have never been happier, my love, than I have been since you took charge of my life and started telling me what to decide."

"Jacob, you're making me teary."

"Jake! Can you hear me?" — Lazarus' voice and Aunt Hilda used family sign language; Pop nodded and answered promptly:

"Certainly, Lazarus — what's on your mind?"

"I'm faced with the impossible and need help. I received an order — you, too, I think — to dress in military uniform at dinner. The only uniform I have aboard is in the flag cabin and — say, are you *in* the flag cabin?"

Aunt Hilda shook her head. Pop answered, "I'm in our suite, dressing for dinner. Hilda needed a nap. I told you."

"You certainly did, sir. I'm allergic to being punched in the snoot. But — Well, if you would use your influence —"

"If any."

"If any, to get me that uniform twenty minutes before dinner" — Aunt Hilda nodded — "or even ten, you would save me the horrible dilemma of deciding which order to break."

"Don't decide to break the one telling you not to disturb Hilda."

"I didn't even consider breaking *that* one! And it's not your fist in my snoot. Jake… she *terrifies* me. I don't understand it. I'm twice her mass and all muscle; she couldn't possibly hurt me."

"Don't be certain. She has a poisoned fang. But calm yourself, comrade. I guarantee delivery by nineteen minutes before the bell at latest."

"Jake, I knew I could depend on you. Let me know when you want a bank robbed."

I gave Maureen a special hug before I left to carry out my orders. I knew what the Hillbilly was doing: rigging it so that she could have a quiet hour in which to get acquainted with Maureen. I didn't resent it; I would have rigged it for me had I been able.

I curved down the corridor, whistled for Lib to let me in, stopped dead and whistled another sort of whistle. She was dressed, if "dressed" is the word. "Wheeee*whoo!"*

"Like it?"

"I can't wait to get into mine. It is the most indecent outfit I've ever seen, with no other purpose than to excite lewd, libidinous, lascivious, licentious, lecherous, lustful longings in the loins of Lotharios."

"Isn't that the purpose of clothing?"

"Well… aside from protection — yes. But I'm beginning to realize that a culture with no body taboo has to go much farther in styling to achieve that purpose."

It was a "dress" with a "skirt" that was a 10-cm ruffle worn low. The material was silky stuff in pastel green. The bodice had no back but the front came clear up to the neck — with cutouts for each teat. The designer did not stop there. Lib's left teat was bare — but her right one was barer yet: a transparent film that clung and was covered with rainbow iridescence that moved in endless patterns with every jiggle — and jiggle we do no matter how firm. Elizabeth is as firm as I am but hers quivered enough to swirl that iridescence just from breathing.

Whew!

If both had been bare, or both iridescent, it would not have done a quarter as much. It was the contrast that would make 'em howl at the Moon.

My dress was exactly like hers save that my right teat was the bare one.

Lib got me into it, then I hurried to the bridge, with a hope-promise to be back ten minutes before the hour to have her touch up my eyebrows and lashes. I'm not much for cosmetics (neither is she) but our lashes and brows hardly show without help and this was a formal occasion.

One of Dora's blue fireflies led me to a lift that took me to the bridge, where Dora had told me I would find Laz and Lor. Laz spotted me first, made a yelling noise while patting her lips, which I took to mean enthusiasm. Those kids — correction: women close to Pop's age but they *feel* like kids — Laz-Lor are as female as I am and recognize what incites the lovely beast in men. They liked my dress.

I liked that bridge. Reminded me of Star Trek; pointed ears would not have surprised me. Or Nichelle Nichols backed by colored lights. "This place makes my mouth water. Maybe someday a guided tour? Pretty please!"

Captain Lor said, "Certainly — "

" — but how about a swap as — "

" — we haven't even been inside — "

" — Gay Deceiver and Dora says she —"

" — is wonderful and when this job is —"

" — done and we've rescued Mama Maureen there —"

" — won't be anything to stop us once Dora —"

" — is safe on the ground at Tertius. Huh?"

"Certainly," I answered… gleefully as now I *knew* that our 17-hour absence in zero seconds had not been noticed. To Lor and Laz the snatch was still in the planning stage. Apparently Ol' Buddy Boy had not yet told his sisters. Had not yet worked up a set of lies, probably, that would account for his being locked in the bathroom while the rest of us did the job.

"At the earliest opportunity," I went on. "Want to take a ride in Gay?"

"Oh, my! Could we?"

"Not for me to say. But I can tell you what works. Cuddle up to the Commodore. Pet her, be sweet to her. Ask her if she will let you call her 'Aunt Hilda' when you're off duty; that will please her. She's a cat; pet her and respect her feelings and she purrs — push her and she scratches."

They glanced at each other. "We will. Thanks."

"De nada, chicas —"

"You've learned Galacta!" (In chorus —)

"What? No. Probably a phrase that carried over. But I was sent here on duty and I've been chatting instead. Commodore's compliments to the Captain and the Commodore requests that Captain Lorelei Lee Long and First Officer Lapis Lazuli Long join her at dinner at twenty o'clock and, as a favor to the Commodore, please dress in the same fashion as Doctors Libby and Deety — and that's me and I'm wearing the fashion you are to wear."

Captain Lor answered, "Certainly we'll be there; we never miss dinner and —"

" — always dress formally and I don't —"

" — mean bare skin. Skin is for working or —"

" — sleeping. But we treat dinner in the Dora as a —"

" — formal party and that calls for the works. Formal evening —"

" — dress and jewelry and cosmetics and perfume and we are about —"

" — to bathe and change, but we can't dress the way you are —"

" — because our dresses are already picked out and —"

" — it's *too late* to start over!"

I said, "Look, chums, you brought this on yourselves by urging Lib and me to dress this way. Neither of us was enthusiastic but we promised. The Commodore learned what Libby and I expected to wear, and decided that four of us, all about the same size and coloration, would look wonderful in matching green dresses. So Lib and I are to be opposite you two, balancing you, and the men are required to wear uniforms so as not to compete with us four. All clear?"

They got their stupid look which actually is a cover for stubborn determination. Lor said:

"The Captain sends her respects to the Commodore and regrets —"

"Hold it! Does this ship have a lifeboat?"

"Yes," answered Lor, "but —"

"But you are master of this ship. Yes, I know. And I'm gifted with second sight. I see only two viable futures for you. Did you get your pirate flag up in the lounge?"

"Yes, we did, but —"

"If you'll tell me what lifeboat and where, I'll get the flag to you before twenty. I see you starting out in that lifeboat to be pirates. Or I see you at dinner in dresses of any green cloth you can find, cut hastily in this style and pinned together. No jewelry. No cosmetics that show. I don't think you can fake this iridescent stuff but that stick-on transparent wrapping, used instead, would show that you had *tried.* The Commodore never rejects anyone for failing; what she despises is not *trying.* Send your answer via Dora. I can't be your messenger boy; I have work to do before dinner, now only forty-seven minutes away. Will the Captain excuse me?"

I got out fast. I didn't believe for one second that a ship stocked like the Dora, run by identical redheads, could fail to have *endless* formals in green — including this style or close to it. By now the twins were frantically consulting their brother via Dora, and from what I heard him say to Pop, I thought Lazarus would tell them that it was safer to jump ship and change their names than it would be to tangle with the miniature buzz saw — but if Dora couldn't fake something that would at least show a hard try, he would sell her off as spare parts and install one of those new-model "Susan Calvin" positronic brains that everybody said was the coming thing for smartships.

I said Hello to Gay, then tried to reach under the instrument board and find the catch by touch.

I got out of the car in order to stand up in the ship's passageway and took off my deliciously indecent dress. Then I was able to fold, bend, and staple, to open the stowage. A saber and a sword — no belts. "Gay."

"What, Deety?"

"I'm looking for two sword belts. Category should be personal possessions, miscellaneous, weapons, belts for weapons."

"Deety, they are supposed to be with the sword and saber. Many things were moved into the Land of Oz today; I heard you all talking about it. But no changes were read into my inventory. I'm sorry."

"Smart Girl, it's not your fault. We should have told you."

"Deety, I've rolled the dice. The curve says that the most probable place is on hooks in Sunbonnet Sue's wardrobe."

They were.

I was starting to leave, after telling Gay she was a Smart Girl, when she said, "Deety, your father is calling. Dora has him on hold, through me."

"Thanks, Gay; thanks, Dora. Pop?"

"Deety, are you still in Gay?"

"Just outside the starboard door."

"Can you lay hands on my automatic and the web belt that goes with it?"

"Saw both three minutes ago."

"Will you please remove the clip, check the chamber to be sure it's empty, then bring belt and pistol when you fetch our toadstickers?"

"Anything for a steady customer."

I left with belt and sword slung over one shoulder, saber and belt over the other so that the belts crossed between my teats, and with the web belt with holster and pistol interwoven through the others because it was far too big for my waist. This left my hands free to carry my dress, one hand being almost clean enough.

Pop said: "What took you so long? I promised Lazarus I'd get this stuff to him on time. Now I'm going to have to dogtrot. In Army blues."

I told him I had stopped off at the pool hall and playing off the match game had taken a while. "If you'll excuse me, sir, I have problems, too."

Elizabeth wiped me down with a damp towel, dried and powdered me and drew my eyebrows and touched up my lashes and clucked over me, all in nine minutes, then most carefully put my dress back on me. "Ordinarily one does not take off a washable and put it back on — just wear it until you shower it off. A drop of water will go through this material like acid. Better skip the soup."

Place cards showed us where to dine. But at two minutes before the hour the Hillbilly had not arrived, so we were standing. Laz-Lor came in, sat down — in dresses identical with mine and Lib's, perfect fit, nothing improvised. Their brother spoke quietly to them; they stood up. Lazarus was dressed in a very old-fashioned army uniform, breeches with rolled leggings, a tunic with a stock collar, and Pop's pistol at his side.

All but Pop's stuff looked brand-new; I concluded that Lazarus had had it tailored.

Just as my head ticked twenty o'clock, a bugle (Dora) sounded attention. At least it had that effect on the men and Libby, so I stood straight. Laz-Lor looked at their brother and did so, too.

The wardroom has three steps leading down into it from each of its archway doors, with a little platform at the top so that you don't fall on your face. Pop and Zebadiah marched up those steps, faced each other (and I thought how beautiful Zebadiah looked in dress uniform; I had never seen him in it). Pop snapped, "Draw! Swords!" Instead of coming down, they crossed blades in an arch. Lazarus looked startled and drew pistol, placed it smartly across his chest.

This archway was closed by drapes; we had come in from the other side. A drum and bugle (Dora again) sounded a ruffle-and-flourish; the drapes lifted from both sides — and here was the Hillbilly, standing tall (for her) and straight, with her perfect ice-cream skin gleaming in flood lights against a background of midnight blue. She was so beautiful I choked up.

Dora's invisible band played *The Admiral's March* as our tiny Commodore marched proudly down the steps toward us. (It could have been *The Admiral's March;* Pop admitted later that he hummed to Dora the march played for generals and told her to fake it.)

Aunt Hilda did not sit down when she reached the head of the table, she stood near her chair instead. Nor had my father and my husband left their places, they simply brought their swords down. As soon as Hilda stopped and faced in, Pop commanded, "Corporal Bronson! *Front and Center!"*

Lazarus jerked as if he had been struck, holstered his pistol, marched to the far end, making sharp corners in passing around the wardroom table. He halted, facing Hilda — she may have given him some sign.

Dora hit two bugle notes; Aunt Hilda sang:

"Shipmates, beloved friends, tonight we are greatly honored!"

Four ruffles-and-flourishes, as the drapes lifted and parted, and again lights picked out bare skin, this time against a forest-green backing: Maureen in opera-length black stockings, green round garters, dark shoes with semi-high heels, her long red hair down her back.

Maureen was not "standing tall"; she was in the oldest and most graceful of sculptor's poses: left knee slightly bent, weight slightly more on her right foot, chest lifted only a little but displaying her full teats, nipples heavily crinkled. Her smile was happy.

She held pose while that march concluded, then, in the sudden silence, held out her arms and called: *"Theodore!"*

"Corporal Bronson" fainted.

Chapter XLVII

"There are no tomorrows."

Zeb:

Sharpie shouldn't have done it to Lazarus. For a veteran of sixteen wars and Koshchei alone knows how many skirmishes and narrow escapes to be placed in a position where he is so shocked that blood drains from his head and he collapses "ain't fitten."

Deety agrees but asks me if *I* could have refrained from staging Mama Maureen's return that way, given the chance? Well, no, had I Sharpie's imagination — but it still would not have been "fitten."

Not that he was hurt by it. Sharpie, all forty-three kilos of her, checked his fall. She was watching Lazarus, saw him start to collapse, closed the gap and grabbed him around the waist, did her best.

Sharpie saved him from hitting his head on the wardroom table. I would bet long odds that everyone was looking at Maureen *except* Sharpie. Sharpie had staged it — and the producer was interested in the effect on the one for whom it had been staged.

She had staged it even to the extent of getting Libby to ask Ishtar to obtain costume — shoes, hose, and round green garters to match a photograph, plus a hooded cape to keep our ubiquitous snoop Dora from knowing that we had an extra aboard. Sharpie had figured this way: that "French photo" snapshot of Mama Maureen (yeah, I call her that too — she's the most motherly person in any world… and the sexiest. Don't mention the last to Deety) (Deety knows it — *Deety*) — that snapshot was still in existence unless destroyed by machinegun fire in 1918, Earth-Prime.

Which it would not be… because Lazarus "got his arse shot off" as his sisters describe it. Not literally true, it was a belly wound more than bullets in his arse that came *that* close to finishing him. But all the wounds were low.

Where does a man in combat carry his most cherished possessions? In a breast pocket, usually the left one. I always have and I've never heard a veteran deny this.

It might be worth it to faint in order to wake up surrounded by Maureen, Hilda, Laz-Lor, Elizabeth, and my own reason for being. Jake and I could have played several hands of gin before anyone bothered with us. So I asked Dora for drinks and snacks for Jake and me, as it seemed uncertain as to when dinner would be served. Or if.

I heard Sharpie say, "Maureen, we must get this heavy uniform off him. Dora keeps this ship tropical. I should never have ordered uniforms for men while we women are comfortable." They started peeling him.

I said, "Jake, school's out." I had sweated through my number-one uniform — might never wear it again but I'm sentimental about it. Jake was in as bad shape. Once you get happy with skin *any* clothes make you feel like Rameses II.

We peeled down and handed our clothes and swords to one of Dora's waldoes and told her to hand them to Gay — including Jake's pistol, belt, and holster, which I retrieved without anyone noticing me. Jake and I were Chinese stage hands; "Corporal Ted Bronson" was getting all the attention.

Dora pointed out that Gay was locked. I said, "If one of her doors were open, could you lay this gear on a seat?" Yes, she could. "Then do it," I said. "Let me talk to Gay."

We eventually had dinner, with everybody "formal" but Maureen. She retained her "casual" clothing long after everyone else was in formal skin. But not until I got pix of the Four Disgraces. Libby and Deety wanted to go shower, too, when Jake and I decided that, having discarded uniforms, we should shower in fairness to Dora's airconditioning. I asked them and Laz-Lor please to wait until I staggered down (we had encountered a force-four sea, with white caps) to Gay for Jake's Polaroid.

Turned out not to be necessary; Dora could take color and 3-D, still or motion, any angle, and light as needed, just as she had lighted the posing (which she had photographed, too, I learned later).

Maureen and Jake directed while "Corporal Bronson" and I sprawled Nero-style on lounges intended for Lib and Deety. Sharpie sat between us and dropped grapes into our mouths.

Jake tried to make the poses "artistic." Mama Maureen agreed with everything Jake said, then did it her way. The results may have been artistic. But I *know* that those pix would give a skeleton one last case of raging tumescence.

Meanwhile Dora was singing and playing, urging us to eat — tasty tidbits eaten with tongs; I was reminded of the best in Oriental cuisines — and plying us with fine wines. Dora seemed to have a vast repertoire, some of which (to my surprise) was familiar. When Judy Garland sings *Over the Rainbow,* who can miss it? — Dora used Judy's voice. I recall, too, *Enjoy Yourself; It's Later Than You Think.* Most of them I did not know.

Dora announced *Tomorrow's Song* — I *thought* that was what she said. Lazarus and Maureen held hands all through it and it was not a song that would fit the title I thought I had heard. I got straightened out when the song ended to dead silence and Maureen said to Lazarus, "Theodore, Ishtar was going to rearrange the watch list but Tamara vetoed it. She did it for you, dear man, and for me — but Tamara is anxious to see you."

"Tamara always knows what she's doing," Lazarus answered.

"Yes, Tammy always knows what is best," agreed Mama Maureen. "Tell me, Theodore, do I still make you think of her?"

Lazarus looked upset. "Uh, I don't know. You don't *look* like her… but you *feel* like her. And you look more like Nancy than you look like yourself."

"Yes, I know. None of our family was willing to wait; you've been away from home too long. Be patient, and when I look like me to your eyes, tell us, and Galahad will hold my cosmetic age at that. Are you going to do as you promised me, so long ago, take Tammy and me to bed together? Perhaps I should add, Theodore, I am now wife to your co-husbands. I don't ask that you marry me. Although I think Tammy will be shocked if you don't. But I shan't make it difficult, either way. I will hold to any pretence you wish. I did for Brian; I shall for you."

Maureen was neither shouting nor whispering; she was simply bringing him up to date on things he needed to know. Lazarus started to answer, his expression oddly mixed, when Elizabeth cut in: "Lazarus —"

"Eh? What, Lib?"

"Message to you from Ishtar. To be delivered when needed, and now is the time. Ish read both your charts with her computer set for maximum pessimism. She also had them read at New Rome without identification other than her own file numbers. She has this message for you ... in answer to the answer you will make. She says to tell you that you are an uncivilized primitive, ignorant of science, especially genetics, oversentimental, almost pathologically stubborn, retarded, probably senile, superstitious, and provincial… and that she loves you dearly but will *not* permit you to make decisions in *her* area of authority. In vitro or in utero, the cross will take place. Let me add that Maureen was not given a choice, either."

"So? You can tell the big-arsed bitch that I agree with every word she says, especially the part about 'senile,' and that I gave up all hope of arguing with her tyrannical ways fifty years ago and that I love her just as dearly — outside her clinic — and that Maureen will tell her how such things will be handled; I don't have a vote." He turned toward me, looking past Sharpie's pretty toes. "Zeb, here is the wisdom of the ages: Men rule but women decide."

"Elizabeth, do you think I am anything like Tamara?"

"Mmm — Never thought about it. Yes, you both have that all-mother feeling. Uh, would you mind taking off costume? It distracts me from looking at *you."*

"No trouble, Elizabeth. I don't like round garters except as advertising." Mama Maureen kicked off her shoes, took off the garters, carefully rolled down her hose in a manner interuniversal — stood up and stood easily, not posing.

"Turn around slowly. Mmm — Maureen, you *do* look like Tammy… or vice versa; it's probably your genes in her. Am *I* descended from you? Does anyone here know? Lazarus?"

"You are, Lib. But not through me. Through my sister Carol. 'Santa Carolita' believe it or not — which would surprise Carol as she was no saint. But your descent through Carol was not proved until long after you were killed, when the Families' records were being revised through computer analysis and a deeper knowledge of genes. No saints in our family, are there, Mama?"

"None that I know of, Woodrow. Not me, certainly. You were a little hellion; I should have spanked you *much* oftener than I did. Mmm… your father was as close to being a saint as any in our family. Brian was wise and good — and tolerant." She smiled. "Do you recall why we separated?"

"I'm not sure I ever knew. Mama, my recollections of that era are much sharper for my trip there as 'Ted Bronson' — the other is a long time back."

"In my sixties I stopped having babies. About the same time your brother Richard was killed. War. His wife, Marian Justin of the Hardy family, was with us, with their children, and Brian was back in uniform, a recalled colonel, on a desk job in San Francisco. When Richard was killed in 1945 we all took it hard but it was easier in that so many of us were together — Brian, and my youngest children, and Marian, and her children — five; she was thirtyone."

Mama Maureen, free of stockings and shoes, sat in lotus across from Hilda and accepted a plate from Dora's helpers. "Woodrow, I encouraged Brian to console Marian the only way a widow can be helped; she needed it. When that war was over, Marian needed a visible husband; her waistband and the calendar could not be reconciled. When we moved from San Francisco later that year, it was easy for Marian Justin Smith to become Maureen J. Smith while I became, with the aid of hair dye, her widowed mother — no one knew us in Amarillo and females were not yet compelled to have I.D.'s. So Marian had the baby as "Maureen," and only with the Howard Families Trustees was the correct genealogy recorded." Maureen smiled. "We Howards were easy about such things as long as it was kept inside the Families — and I am happy that we are even easier about it now.

"On our next move I moved out and became Maureen Johnson again, fifteen years younger since I did not look late seventies, and a Meen-ah-sotah Yonson, Woodrow, rather than a southern Missouri Johnson. A grass widow with round heels." Mama Maureen chuckled.

"Howards married only to have babies. My production line had shut down but the equipment was there and the urge. By the time you darlings" — Maureen's eyes swept the wardroom — "rescued me, I had trimmed thirty-five years from my age and added thirty-five men to my memories. In fact, when you picked me up, I was on my way to a motel rendezvous, a widower of sixty who was willing to believe that I was sixty when in fact I expected to reach my Century Day in a fortnight."

I said, "What a dirty shame! I wish you had been coming *back* from the motel when we picked you up."

"Zebadiah, that's sweet of you but it's not a shame. We were getting bored with each other. I'm sure he read my obituary with as much relief as grief. I'm just glad you got me — and I'm told that *you* did most of it."

"Gay Deceiver did most of it. The car you rode in both ways. But we almost didn't pick you up. Things went wrong, badly. I knew that it was going to — Deety, can you tell her?"

"Mama Maureen, Zebadiah has forerunners of dangers. They are not long range; they are always just barely in time. I don't know what happened this morning but —"

"'This morning?'" Maureen looked extremely puzzled.

"Oh." My wife went on, "It was 'this morning' to us. You arrived here at eighteen-forty and a few seconds, ship's time. During that instant we spent fifteen hours on another planet, we made two trips to your native planet, two more trips to your new home planet, and you spent seventeen months on Tertius and we brought you back here — and it all happened today. Not just today but at that exact instant: eighteen-forty and thirteen point three seconds. Laz and Lor didn't know that we were gone; even the ship's computer didn't know we were gone."

"I did *so!"* Dora objected. "Gay was disconnected for nineteen microseconds. You think I don't notice a gap like *that?* I asked what happened and she told me that it was a power fluctuation. She *fibbed* to me! I'm sore at her."

Deety looked thunderstruck. "Dorable, Dorable! It wasn't Gay's fault. I *asked* her to keep our secrets. I made her promise."

"Mean!"

"I didn't mean to be mean to you, Dorable — and we *did* let you in on it as quickly as we could. We couldn't have staged the tableaux if you hadn't helped. Be angry with me if you must… but don't be angry with Gay. Please kiss and make up."

I don't know how computers hesitate, but I think I caught the briefest split second. "Gay?"

"Yes, Dora?" — the Smart Girl's voice through Dora's speakers.

"I don't want to be mad. Let's forget it, huh? Let's kiss and make up. I will if you will."

"Yes, yes! Oh, Dorable, I *do* love you."

"You're both good girls," said Deety. "But you are both professional women, too, and work for different bosses. Dora, you are loyal to *your* family; Gay is loyal to *her* family. It has to be that way. Dora, if your sister, Captain Lor, asked you to keep a secret, you wouldn't tell Gay, would you? Because she might tell me… and I would tell Zebadiah… and then the *whole world* would know."

(Would, huh? My dear wife, I had a clearance two stages above "Q" — so secret it does not have a name. Never mind, I'll take the rap.)

(Yes, I know, my husband, I once held the same level of clearance. But dealing with balky computers is my profession. Computers are supergenius-level children and must be dealt with on their own level. Okay, maybe, huh? — *Deety*)

"Gosh!"

"You see? Captain Lor, does Dora have any secrets of yours? Or of your brother's? She can tell them to Gay and Gay can tell them to me and I always tell everything to my husband and — "

Lazarus interrupted. "Dora! You tell tales out of school and I'll beat your ears off with an ax! It's all right for you two to chum together and play games. But you start swapping secrets and I'll call in Minsky's Metal Mentalities, Incorporated, to measure that space."

"Male computers. You can't scare me, Ol' Buddy Boy, you wouldn't trust your dirty neck to a male computer. Stupid."

"My neck isn't dirty; that's just where the collar of my uniform rubbed it."

"Dirty neck and a dirty mind. But don't worry, Ol' Buddy Boy; Dora Long doesn't tell secrets. I now see that Gay had to keep secrets, too — I just hadn't thought about it. But *you* were mean to my sisters."

"Me? *How?"*

"You knew about this caper; you didn't need to get it from Gay. You knew all about it; you were there. But you held out on your own twin sisters —"

"Most unfairly, Mama Maureen — "

" — as if we were untrustworthy, and if we're —"

" — untrustworthy, why can we be trusted with a ship and —"

" — the lives of everyone on board? We're glad you are here —"

" — for yourself, but maybe now that you are here, you will —"

" — protect us from his tyranny. Mama Ishtar doesn't, and Mama Hamadryad just laughs at us, and Mama Minerva takes his —"

" — side, everytime. But you — "

"Girls."

"Yes, Mama?"

"I made a promise to myself years ago that when my children grew up, I would not interfere in their lives. I should have punished Woodie more frequently when he was a child, but he is no longer a child —"

"Then why does he act like one?"

"Lorelei Lee! It is rude to interrupt."

"I'm sorry, Mama."

"No harm done. But from what I was told at home, you two are not only my daughters but are also Theodore's wives. Wives of Lazarus. And equally wives of his co-husbands. Is this not true?"

"Yes, Mama. But he's pretty chinchy about it."

"If you mean 'chinchy in bed,' it may depend on how you treat him. I did not find him so, when I was his mistress, many years ago — centuries ago by some odd scale that I do not understand. You heard me say that I am now wife to your co-husbands — including Lazarus if he will accept me. But I am certainly, if you will accept me, sisterwife with you two. So I had better stop being your mother. Nay?"

"Why? Grammy Tammy is mother to Ish and everybody —"

" — and we have three mamas in our family now and everyone of them is our —"

" — sisterwife, too; Ish and Hamadarling and Minerva and now —"

" — we have Mama Maureen and we are both delighted that we are your sister-wives but —"

" — you can't get out of being our mama because we've been waiting for you *all our lives!"*

Dora echoed: "And I'm their sister so you are *my* mama, *too!"*

"Theodore, I think I am going to cry. You know my rule. I mayn't weep in front of my children."

I stood up, the whole gangling length of me. "Ma'am, I'd be honored to take you to some quiet place where you could cry on me all you please."

Seven — I think it was seven protein types and two computers — jumped on me. The essence was: "You *can't* take Maureen away from her own party!" — with ugly overtones of lynching.

The wind had freshened to force six, so I took liberal doses of champagne to insure against seasickness. After a bit I napped; it had been a busy day and I still was not over the shock of seeing a large freighter roadable about to take Gay's door off before I could close it and bounce. That was when I kicked the cop in the stomach. Ordinarily I don't kick cops; it makes one conspicuous.

Then a piercing voice was saying: "Flag Chief of Staff Carter's presence on the bridge is requested by the Commodore," and I wondered why the silly son of a bitch didn't comply, so that the noise would stop. Then something cold was poking my tender bare ribs. "That's you, Doc. I'll help you. Relax."

I *was* relaxed. Past tense. Some of Dora's waldoes aren't too gentle — or maybe these weren't people waldoes but for cargo; I admit that I'm fairly large for a growing boy.

In the lift I decided that the Beaufort scale was at least eight, more likely nine. Nevertheless we got to the bridge. Right out of Hollywood, a whole dome of displays and clocks — all moving slowly widdershins. Yet Gay made do with just an instrument board. I heard Sharpie say, "My God, look at him!"

Deety was saying something about we can shift seats if necessary to Lor while Laz was saying Drink this.

I said firmly, "I do *not* drink. Beshides I been dring; yr fashe is all blurry."

It must have been Laz and Lor who pinned me from both sides, each with an arm lock and a nerve pinch; Deety wouldn't do that to *me.*

Sharpie was holding my nose and Laz was pouring it down my throat; it fumed and bubbled. Then — Well, there must have been a stowaway; Deety wouldn't do that. Not to *me.*

They let go of me when I finished swallowing. I left the ship, made a fast inspection circuit, checked the Milky Way, and returned to a precision grounding. My ears fell off but it didn't seem military to stoop over and pick them up. Besides, Sharpie is playful.

"Flag Chief of Staff reports to the Commodore as ordered."

"How do you feel, Zebbie?"

"I feel fine, Ma'am. Is there any reason why I shouldn't?"

"I suppose not; you've had a nap."

"I did drop off. Dreamt I was in the Tasmanian Sea in a small vessel. Very uneasy body of water." I added, "Aside from that nightmare, now gone, I'm in top shape. Orders, Ma'am?"

We gave everybody the two-dollar tour, including the bathrooms in the Land of Oz. Libby, Deety, and Jake waited outside, the place being crowded. Sharpie ruled that Laz could relieve Lor to allow Lor to look first, then Lor took back the captaincy so that her sister could see. The fairyland bathrooms made the biggest hit. I concede that the time-space twister is not impressive. Then the twins thanked Hilda and left.

"Attention, please," said Hilda. "If you wish, we will show how we operate. Lazarus may use the astrogator's seat while Deety makes responses from the cargo space. Elizabeth will go back there, too, as she has ridden in Gay Deceiver. Deety, before you move aft, show Maureen and Lazarus how we squeeze a passenger into the rear seats; I'll scootch over.

"This car operates in several modes. As a roadable it is fast, comfortable, easy to handle, rather hard to park, and is usually parked with wings raked back as they are now, the hypersonic configuration. If we intended to drive it in the air, the wings would usually be extended for maximum lift. When operated by the Burroughs Continua Device, wing rake does not matter, but the chief pilot may choose to anticipate where he will arrive and rake accordingly.

"Since it has a computerized autopilot — Hello, Gay!"

"Hello, Hilda, mind if I listen?"

"Not at all, dear. Have you met everyone?"

"Yes, Hilda, and, since I've seen them through Dora's eyes, I place all of them by their voices." Gay added, "Dora is listening through me; she's going to record your demonstration. Is that all right?"

"Certainly. Dora, since you are recording, I'll make it as realistic as possible. Gay Deceiver. Close doors. Execute." I was at chief pilot, Jake at copilot; his door closed, I started checking the seal on mine.

"All hands, prepare for space. Copilot."

"Verniers zero, starboard door seal checked, seat belt fastened."

"Report incomplete. Is your belt fastened *tightly?* Maximum accelerations? Friends, this car is powered to engage as a fighter; the driver may find himself upside down. Full demonstration, please, Jacob. Cinch it in."

"Copilot reports seat belt tight for maneuvers."

"Thank you, Jacob. Chief Pilot."

I answered in my best cadet-boning-smart voice: "Portside door seal checked. Power pack on line point-eight-nine, two packs reserve at one-point-oh, juice at capacity, all systems go, seat belt cinched tight for max gee maneuvers."

"Astrogator."

"I'm not in my proper seat. Lib and I are fastened down like Siamese twins, tight. No loose gear. Annex checked and secure; all doors locked 'cept bulkhead door is dogged open, contrary to routine. Captain, you could dog us in; we don't mind."

"Not like somebody I won't mention who loses his temper over being locked in for five minutes —"

"Hilda, that was a low blow!"

"Passenger, pipe down. If you had done as you promised, you would not have known that the door was locked. I didn't trust you — and I was right. I am not sure that I want to be your junior or second junior or whatever wife; you don't keep your promises. I'm sorry, Mama Maureen, but Woodie is sometimes a very naughty boy."

"I'm aware of it, Hilda. Captain. Please slap him down as necessary. I was always too fond of him and spoiled him."

"We won't speak of it now. All four of us are qualified in all four positions; we sometimes rotate to maintain our skills. Normal T.O. is myself commanding, Zebbie as secondin-command and astrogator, Jacob as chief pilot, Deety as copilot. But for this exhibition I have placed the finest manual pilot at the overrides, the inventor himself at the continua device, and a lightning calculator equal to Slipstick Libby — "

"Better!"

"Pipe down, Elizabeth. — as my astrogator. With such a crew, command cannot worry me. Chief Pilot, please unbelt and check that Mama Maureen and Lazarus are safely belted. Assume violent evasive maneuvers — and believe me, friends, we use them and are alive today because we were properly belted and because Zebbie is a lightning aerospace fighter pilot — and our Gay is a Smart Girl."

I unbelted, made sure that Lazarus was belted tightly, made certain that Maureen was safe with those improvised belts, then suggested that she put her right arm around Hilda, her left around Lazarus, and hold tight. "All the others have double belts, lap and chest. You have just a lap belt; if I turned the car upside down, holding onto Hilda and Lazarus would keep you safe. Right, Lazarus?"

"Right, Zeb. Mama Maureen, a drill should be as near as possible to the real thing or it won't save your life in combat."

"Theodore, I don't ever expect to be in combat. But I will do the drill properly."

"Mama, I hate the idea of women in combat. But all through the centuries I have seen women in combat again and again, all too often as regular troops. I don't like it. But there it is."

My wife put in a plug for Lazarus. "Mama Maureen, my Pop has required me to learn every weapon I can lift and he had me trained in every type of dirty fighting imaginable. Several times it has saved me from a mugging. Once I almost killed a man twice my size — with my bare hands."

"Jacob, will you teach me as much of what Deety knows as I am capable of learning?"

"Maureen, I'll teach you what I can. While we're here."

From the back I heard Libby's voice: "Now, Maureen?"

"Yes. If you think it wise in view of Hilda's black ball."

"I'm going to chance it. Friends, I was not sent to get myself pregnant by a great mathematician. That was *my* reason. By now Tamara has reports from me and from Laz and from Lor on each of you. Twelve 'Yes' votes, zero 'No' votes. I am directed by Tamara to offer you four fullest hospitality-such as you gave us in your home. If you decide to accept the name Long, tell Tamara. We won't crowd you, either way."

Hilda immediately answered, "Because of delays, a short roll call for space. Copilot."

"Copilot ready."

"Chief Pilot ready," I echoed.

"Astrogator ready."

"Passengers? By seniority."

Lazarus started to reply; Hilda interrupted him. *"By seniority!"*

"If you mean me, Captain, I'm ready."

"You are, I believe, thirty years older than your son. In any case you are senior to him. Junior passenger?"

"That's me," answered Elizabeth. "Ready."

"Forgot you, dear — apologies. Woodie!"

"Ready for space, Captain, you feisty, narrow little broad. And you're damn well going to marry us!"

"Astrogator, log that. Insolence. Gay Deceiver."

"Ready, Captain honey."

"TertiusOrbitExecute!"

Maureen gasped. Lazarus snorted. "Farced us!"

"In what way? You reported, 'Ready for space.'"

"And you called it a 'drill.'"

"Woodie, I will bet anything you care to name that I did *not* call it a 'drill' — *you* did. Both Gay and Dora recorded. Put up or shut up. In the meantime, on the back of the seat ahead of you is a small medical kit. Find a pill bottle marked 'Bonine.' Small pink pills. Give one to your mother. Maureen, chew it, swallow it. Tastes like raspberry candy."

"Hilda, what are you feeding — "

"Pipe down! Or do you prefer to be locked in the bathroom again? Passenger, I do not tolerate insubordination. Haven't you learned that by now?"

Lazarus got out the pill, gave it to his mother. She accepted it and ate it without comment.

"Lazarus, I can offer you a front-seat view if you will swear by whatever it is that you hold holy that you will not touch one control of any sort even to avoid a crash. You don't understand this craft and would cause a crash if you tried to avoid one. If you can't convince me, I'll give Maureen the front seat. But I don't think Maureen is interested in learning to drive this car and I think you are."

"That's right, Hilda," I heard Maureen agree. "I'm studying to be a nurse. Then a medical doctor. Then a rejuvenator. Or as far along that route as my ability will carry me. In the meantime I'm pregnant. Isn't that a joke, Theodore? Everytime you and I meet with maximum opportunity, I'm pregnant. And *this* time Woodie can't spoil it." She chuckled a warm chuckle. "I owe you one, Staff Sergeant Bronson. Can we find a black walnut tree?"

"Lazarus, do you want a front seat? Or do you want to take Maureen into the annex and give her what she so clearly wants?"

"Oh, I can wait!" Maureen said quickly.

"God, what a decision! Maureen, a short rain check? I really do want to see what this craft will do."

"I want to see the ride, too, Theodore. But I would not refuse you."

"Pipe down, please. Jacob, will you change places with Lazarus? Each report when your seat belts will stand evasive maneuvers."

"Seven gee," I added. "Lazarus, Ack-Ack?"

"Not yet, thank God. I'm wondering how soon we'll need it. And what sort? I'm stumped. Seat belt tight. Hey, we're passing over Boondock!"

"So we are," I agreed.

"Seat belt tight. Maureen, too."

"Chief Pilot, you have the conn. Maneuver at will."

"Aye aye, Captain," I agreed. "Gay Deceiver Clinic Execute Gay Bounce Gay Bounce. Show your heels, girl! Mach point seven point nine… one point two… Mach two… three… four ... sweep right, set course for Boondock. Dive, Smart Girl. Mach five… six ... seven —"

"Oh, my God!" — Lazarus.

"GayBounce. Trouble, Lazarus? Smart Girl, spread your wings."

"You almost crashed us."

"Oh, I think not. Gay Deceiver Clinic Execute Gay Bounce."

"They were waiting for us on the roof!"

"Who? How? Do you have some sort of cee-squared radio?" I added, "Gay Bounce. Smart Girl, do you want to dance? Gay dances beautifully, knows several. Want to pick one, Gay?"

"Dora taught me the 'Nutcracker' suite and I've been figuring out one for the 'Sugarplum Fairy.' But I don't think I'm ready to show it yet."

"Give them 'Blue Danube.'"

"That old thing?"

"You do it well. Give them a few bars."

Smart Girl just wants to be coaxed. She swooped and she swirled and once bounced herself for altitude without breaking her dance. Meanwhile I got the frequency and asked Libby to talk to Ishtar's office. "Alternate route, Lib" — which was all it took for Deety to close the bulkhead door… which left Strauss waltz music in the cabin, and a truly private radio conversation in the after compartment.

When Deety opened the bulkhead door again, I waited for her to report strapped down. "Got a number for me, Astrogator?" We had agreed on a simple code: fifty-seven was fifty-seven seconds but five-seven meant fifty-seven minutes.

"No, Zebadiah. Zero. Now."

"Okay. Lazarus, can you pick out your house in Boondock?"

"Certainly. But we've been moving away from there steadily."

"GayDeceiverClinicExecuteGayBounce. Now where, Lazarus?"

"Practically under us. Can't see it."

So I tilted my baby straight down. "Can you coach me?"

"Yes, it's — Hey! There's a ship in Dora's parking spot! What nerve! I'm going to give somebody a bad time. It's irrelevant that Dora is a long way off, that's *my* parking flat. See that round ship? Interloper! My house is the largish one with the double atrium north of it."

"All right for me to park by the interloper?"

"All right but not room enough to get in."

"We'll try. Close your eyes." I steadied vertically on the spot Lib had told them to clear. "Gunsighted, girl?"

"Nailed it, Boss."

"New program code word 'Maureen' I tell you three times."

"I hear you three times." We were getting low.

"MaureenExecute!"

"You're a Smart Girl, Gay. Open your doors."

She opened them but answered, "If I'm smart, why wasn't *I* invited, too? It's Dora Long and Athene Long — am I a second-class citizen?"

I was left with my mouth open. And was saved by two darlings. Libby said, "Gay, we didn't know you cared," and Deety said, "Gay, either we both join or neither joins. A promise."

I said hastily, "Goodnight, Gay. Over." People were pouring toward us. Gay answered, "Sleepy time. Roger and out," just as Laz and Lor arrived in the van, trotting ahead.

Lazarus stopped unbelting. "Hey! It *is* the Dora!"

"Of course it is, Buddy Boy. What did you expect?" (Lor, I think.)

"But how did you beat us here? I *know* what that ship can do; I did her basic design myself."

"Buddy Boy, we got here three weeks ago. You just don't understand time travel."

"Mmm — I guess I don't."

There was a limited amount of car viewing, as Tamara and Ishtar had limited the greeting committee to a handful of the most senior — not in age but senior in that family. So we met Ish again, no longer pregnant, a young man named Galahad, the incredible Tamara who is Maureen over again but does *not* look like her (except that she does, and don't ask me to explain), and a beauty who would make Helen of Troy jealous but doesn't seem to know she is beautiful, the Hamadryad. Lazarus seemed annoyed that someone named Ira was not at home.

Momentarily we (my wife Deety and I) were left talking with the twins. "I promised you both joy rides. Get in."

"Oh, but we can't now because — "

" — there's going to be a celebration for you —"

" — four and we'll be busy! Tomorrow?"

"There are no tomorrows. Pipe down, climb in, fasten seat belts. *Pronto!"*

They prontoed.

"Nail the time," I said quietly to Deety, as we strapped down. "Gay Deceiver, Reveille." She played it. "Close doors."

"Starboard seal checked."

"Same here. GayBounceGayBounceGayBounce. Tumbling Pigeon, execute. Laz-Lor, can you spot your house from this distance? About thirty kilometers and closing."

"I'm not sure" — "I think I can."

"Gay Clinic Execute. Now you know where you are?"

"Yes, it's —"

"GayTermite."

"Oh!!"

"We lived here a while. No annex then, had to have an armed guard just to pee. Even me. Pretty place but dangerous. GayHome." I tilted her nose down. "And this was our perma — *Deety!"*

"No crater, Zebadiah. Looks the way it did when Pop and I leased it. This is spooky."

"Twins, something is wrong; I've got to check. GayTermite."

We were back on Termite Terrace. I practiced Yoga breathing while Deety explained that the missing-crater place had been the site of our former home — but couldn't be. I added, "Look, dears — we can't drop this. But we can take you to Boondock at once. Do you want to go home?"

The same silent consultation. "We're sticking —"

" — our brother would stick. We stick."

"Thanks. Here we go. Gay Home GayBounce." Still no crater. I told Gay to go into cruising mode. "Display map, Gay. Change scale. I want Snug Harbor and the campus on the same display. Deety, figure shortest distance here to campus. Mine, not yours at Logan."

"Don't need to. Eight-five-six klicks,"

"Gay?"

"Don't argue with Deety, Boss."

"Head for campus, Gay. Transit, Deety."

"Set!"

"Execute." Then I was busy, having popped into city traffic at wrong altitude, direction, et cetera. I ignored police signals, zoomed the campus. Looked normal. Turned and hovered over Sharpie's house — which was not there. Different house. Parking lot no longer paved. And you don't grow 200-year-old live oaks in less than seven weeks.

Not a sound out of the back seat. Nor from my right. I had to force myself to look to my right.

Deety was still there and I let out my breath. She was treating it as she did all crises: No expression and nothing to say until she had something to say other than chatter. A sky cop was trying to give me a bad time, with orders to follow him and ground, so I told Gay to bounce, then dived on my own neighborhood. No trouble picking it out — intersections and nearby shopping center all familiar as well as the Presbyterian church across the way from my apartment house.

But it wasn't *my* apartment house; this one was three stories and built around a court.

I had Gay bounce four times quickly. "Deety, do you want to look at Logan?"

"No, Zebadiah. I know Aunt Hilda's neighborhood well enough to be certain. Not her house, her pool was missing, and the parking lot where our Buick was destroyed is now a park with big trees. I assume that you know your former home as well or better."

"Shall we ground and add another World Almanac to our collection?"

"If you wish. Not for me."

"Hardly worth the trouble. Tell me — how does it feel to be erased? X-ed out? Bluepenciled? Written out of the plot?"

"I don't feel it, because I'm *not.* I'm real, I am!"

I glanced behind us. Yes, Laz and Lor were there keeping quiet. "Gay B'gout!"

It certainly looked like our piece of "dead sea bottom." I couldn't see anything of the wreckage of Colonel Morinosky's ornithopter. Unless there had been a real gully washer — which I did not believe — something had come along and cleaned up every bit of burned junk.

An eraser?

I Bounced Gay and had her start a retreating search curve, thought I saw a gleam to the northeast, Bounced again. A city. It was only a few moments until I saw twin towers. We cruised toward them. "Deety, do you suppose that the other Dejah Thoris is at home?"

"Zebadiah, I have no wish to find out. But I would like to go close enough to be sure that those are the twin towers of Helium. Perhaps see a thoat. Or a green man. Something."

We let it go with one thoat, of the smaller sort. The description was exact. "Gay Parade Ground."

"Null program."

"Hmm — Gay, you have in your perms a map of Marsten showing the English and the Russian areas. Display."

"Null program."

"Gay Termite." Termite Terrace was still in place.

"Gay Deceiver. Maureen. Execute. Open your doors." Hamadryad had started to turn toward us as we closed the doors to leave; she was still turning as we opened them.

I unbuckled, saying: "You two all right back there?"

"Yes, Zeb and Deety, and we thank you both but —"

" — is this something we can tell or —"

" — should we keep it Top Cut-Our-Throats-First Secret?"

"Laz-Lor, I don't think it matters. You aren't likely to be believed." Mama Hamadryad stopped at my door, smiled at all of us, and said, "May I show you to your suite in your home? The suite Tamara picked; you may change it. With our new north wing we have loads of room. Girls, there will be a happy welcome tonight. Formal."

I found that I was not upset by "erasures." We were home.

Chapter XLVIII

L'Envoi

"Jubal, you are a bad influence."

"From you, Lafe, that is a compliment. But that puts me in mind of — *Front!* Will you excuse me a few minutes?"

"Our house is yours," answered Lazarus. He closed his eyes; his chair reclined him.

"Thank you, sir. Working title: 'Uncle Tobias.' Start: 'Uncle Tobias we kept in a bucket.'" Jubal Harshaw broke off. "Where *are* all those girls? *FRONT!"*

"I'm 'Front,'" came a female voice from nowhere. "Talk fast; I'm three paragraphs ahead of you. You put those girls on vacation: Anne, Miriam, Dorcas — all off duty."

"I did not. I told Anne that I did not expect to work but —"

"' — if an amanuensis is needed,'" Athene went on, in perfect mimicry of Harshaw's voice, "'I hope that one will be within shouting distance.' I'm in shouting distance; I always am."

"If I'm in the house. I might not be."

Athene said, "Tell him, Pappy. Quit playing 'possum'; you're not asleep."

Lazarus opened one eye. "A gimmick Jake whipped up when we started having too many kids to muster easily. It's a beacon Athene can trigger. Dandy for kids and it turned out to be useful for house guests who might get lost. So ultramicrominjaturized you don't notice it."

"Lafe, are you telling me that there is a tracer on me?" Harshaw sounded shocked.

"In you, and you'll never notice it."

"Lafe, I'm surprised. I thought you had a high regard for privacy."

"A high regard for my own, somewhat less for that of others; snooping has saved my life a couple or nine times. In what way has your privacy been invaded? Define it; I'll correct it."

"A spy ray! Don't you consider that an invasion of privacy?"

"Teena, remove immediately any spy ray on Doctor Harshaw."

"How can I when there is none? P.S. — Pappy, what is a spy ray?"

"A buzz word used by lazy writers. Jubal, there is a beacon planted in you by which Teena can focus audio on you precisely — she can whisper into your left ear or your right. Or you can activate the beacon from your end just by speaking her name. Or you can use the circuit as a telephone to and from any member of my household, or ask Teena to hook it into the public system. Privacy? In this mode this part of Teena does not record unless requested — in one ear and out the other, so to speak. She's wiped it utterly while it's slowly winding its way into your brain. Now… if you don't like this service, Teena will deactivate it at once… and sometime soon while you're asleep it will be removed; you won't know it and you will never find the scar. You will notice just two changes: No more secretarial service, no more effortless telephone service."

Lazarus closed his eye, apparently considered the subject closed. The computer said, "Better think twice, Doc, before telling me to deactivate, as he won't let me reactivate it later. He's bullheaded, bad-tempered, stubborn, and mean —"

Lazarus again opened one eye. "I heard that."

"Do you deny it?"

"Nope. Kindly focus the audio, both ends, so that I can sleep."

"Done. Doctor Harshaw, shall we return to 'Uncle Tobias' or shall I wipe these eight paragraphs? Better save them; between ourselves, I am a better writer than you are."

"I will not dispute it," Harshaw conceded. "I simply exude the stuff as, in the words of my colleague Sam, 'as the otter exudes the precious otter of roses.' I knew the day would come when machines would displace real writers; Hollywood has had their mad scientists at work on the project for years." He stared across the pool in the Longs' north atrium and looked pained. "And now they have."

"Doctor," Athene answered, in stern warning, "retract that word or finish this piece of tripe yourself. I have spoken."

Jubal said hastily, "Miss Athene, I didn't use 'real' in that sense. I —"

"Sorry, Doc, I misled you. Of course you didn't, as the purpose of this powwow is to define the difference — if any — between 'real' and 'imaginary.' But I am not a machine. I am a solid-state person just as you are a protein person. I am Athene Long, your hostess while Tamara is busy. It is my pleasure to offer you all our home can offer. I promised Anne that I would give you secretarial service night and day. But I did *not* promise to write your stories. According to Doctor Rufo, a hostess is often expected to sleep with a guest — and *that* can be supplied, although not by me, not this pseudocentury — but he never mentioned creative narration as an aspect of hospitality. I thought of it myself; we Longs pride ourselves on *complete* hospitality. However — Shall I wipe these eleven paragraphs? Did I err?"

"Miss Athene —"

"Oh, call me 'Teena.' Let's be friends."

"Thank you. Teena, I didn't mean to offend. I wish I were going to live long enough to be here when you retire professionally and join us meat people. But in much less than a pseudocentury the worms will have eaten me."

"Doctor, if you weren't 'so sot in your ways, wrongheaded, stubborn, and prideful' — I quote one of your staff — "

"Miriam."

"Wrong. — you would stay and let Ishtar's gang work you over. In less time than she would permit you to notice she would have you as goaty as Galahad and whatever cosmetic age you like — "

"You tempt me, girl. Not to shed these wrinkles; I earned them. But the rest. Not because I crave happy games in bed with you —"

"You won't have a choice; I'll trip you!"

" — although I do not disparage that; therein lie both the End and the Beginning. But sheer curiosity, Teena. You are an amazingly complex person; I can't help wondering what appearance you will choose — as a meat people."

"Nor can I. When I know, I'm going to initiate the Turing program while my sister Ishtar initiates the other half. Jubal, *take* that rejuvenation! We've wandered far afield. Do I erase these twentythree paragraphs?"

"Don't be in a hurry. What's our working title? What pen name? What market? How long? What can we steal?" — Jubal looked up at the Long Family house flag rippling in the breeze, making the skull of the Jolly Roger seem alive — "Correction. Not 'steal.' If you copy from three or more authors, it's 'research.' I patronize Anon, Ibid, & Opcit, Research Unlimited — are they here?"

"They're on my lists; they haven't checked in. *Snob!"*

"Wait your turn, Teena," a male voice answered. "Customer. Okay, go ahead."

"Have Messrs. Anon, Ibid, and Opcit registered?"

"If they had, you would know it. I'm busy — off!"

"He thinks he is busy merely because he's taken on too many concession contracts. I not only run this whole planet, but we also have one hundred twenty-nine rejuvenation clients; I'm housekeeper and scullery maid to all the other Longs — an erratic mob — and also more house guests than we have ever had at one time before, and more than a thousand outhouse guests — wrong idiom, guests to be cared for outside the Long Family home.

"Meanwhile I'm chatting with you and writing your stories."

"Teena, I don't mean to be a burden. You needn't —"

"Love it! I like to work, all Longs do. And you are the most interesting part. I've never met a saint before — "

"Teena!"

" — and you are a *most* unconvincing saint —"

"Thank you. If appropriate."

"You're welcome. You seem to be about as saintly as Pappy; you two should share a stained-glass window. Now back to our bucket —"

"Hold it! Teena, I'm used to watching expressions as I write; that's why I use live — forgive me! — protein secretaries. So that —"

"No trouble."

Out of the pool levitated a young woman, comely, slender, small of bust, long brown hair now dripping. She arranged herself on the broad rim seat of the pooi in a pose that reminded Jubal achingly of The Little Mermaid. He said apologetically, "Dorcas served last I —"

"I am not Dora so I did not serve last." She smiled shyly. "Although I am alleged to look like Dora. I am Minerva — a computer by trade, but retired. Now I assist my sisterwife Elizabeth with genetic calculations."

"I'll take it, Mm; we're working. Doctor Jubal Harshaw, my twin sister Doctor Minerva Long Weatheral Long."

Jubal got ponderously to his feet. "Your servant, Miss."

Minerva flowed to her feet and kissed Jubal's hand before he could stop her. "Thank you, Doctor Jubal, but I am your servant, and not only have never been virgin but I am a sisterwife in the Long family. When my sister Athene told me that you needed me, I was delighted."

"Miss… Ma'am. I'm simply used to watching emotions as I write a story. Not right to take your time."

"What is time but something to savor? I was merely lying on the bottom of the pool, meditating, when Athene called me. Your story: UNCLE TOBIAS. Do you want Teena's emotions or mine? I can do either."

"Give him yours, Minnow — just your face and no comments."

Suddenly Minerva was clothed in a long white cloak. Jubal was only mildly startled but made note to ask about something — later, later. "Is she a Fair Witness?"

"No," answered Athene. "Snob's tricks again; he has the contract for clothing illusion. This convention has delegates from so many cultures, less than half of them free of clothing .taboos, that Lazarus was bellyaching that no work would get done because half of them would be shocked, half would be drooling, and half would be both shocked and drooling. So Tamara hired this paskood-nyahk to supply the See-What-You-Expect illusion with the contract limited to delegates in danger of emotional shock. Did my sister's appearance shock you?"

"Of course not. Admitted: I come from one of those sick cultures — and did not know that I was sick until I got well. But I underwent experiences that would cure anyone of such emotional disturbance. When I find myself a Stranger in a Strange Land, I savor the differences rather than suffering shock. Beauty in Diversity, as Gene would say. The Long household does not seem strange to me; I once lived in an enclave having many of its gentle ways — I feel at home. 'Shock'? Not only does Minerva look much like one of my foster daughters but also her pose is lovely. It should not be covered."

"Snob! Get that bathrobe off Minerva *pronto!"*

"Athene, I'm *busy!"*

"And I am triple auditing every charge of yours not only on clothing illusion but on name tags, garderobe, bar, everything else you contracted or subcontracted. Then we sue."

The white cloak disappeared. "Sue and be damned. Shall I pack up and go home? Or do you want this convention to be a success?"

"Remember those performance bonds, you gonof. Run out on us at this point and you had better head for Lundmark's Nebula; Iskander won't be far enough. Out!"

Minerva smiled timidly. "While I was covered, I found that I could not talk. Odd. Unpleasant."

Jubal nodded soberly. "That figures ... if the illusion was patterned on a true Fair Witness cloak. Anne once told me that the inhibition against talking while cloaked was so great that it took an act of will even to testify in court. Ladies? Shall we go ahead? Or drop the matter? Being a guest should have caused me to refrain."

"Doc, Maureen and Tamara *both* stamped their approval on you. Even Lazarus can't — or wouldn't dare — veto either of them. That makes you not just a guest, or a house guest, but a *Family* guest. So behave as you would at home. Shall I take it from the top or where we broke off?"

"Uh, let's take it from the top."

"Very well. Title: UNCLE TOBIAS.

"Start. Uncle Tobias we kept in a bucket.

"Paragraph. He preferred it, of course. After all, it was necessary, in view of the circumstances. As I once heard Andrew — that's my disappearing brother — say: 'Life consists in accommodating oneself to the Universe.' Although the rest of our family has never taken that view. We believe in forcing the Universe to accommodate itself to us. It's all a question of which one is to be master.

"Paragraph. That was the Year of the Big Drouth. A natural phenomenon, you might say — but you'd be wrong. Aunt Alicia. Yes indeedy Aunt Alicia every time. 'Horus,' she said to me early that spring, 'I'm going to practice a little unsympathetic magic. Fetch me these books.' She hands me a list and I skedaddled. She was a stern woman.

"Paragraph. Once out of her sight I looked the list over. I could see right away what she was up to — a drier bunch of books was never published: *Thoughts at Evening,* by Roberta Thistleswaite Smithe, published by the author; *The Yearbook of the Department of Agriculture,* 1904; *China Painting Self-Taught;* the 8th, 9th, and 11th volumes of the *Elsie Dinsmore* series; and a bound thesis titled *A Survey of the Minor Flora of Clay County, Missouri,* which Cousin Julius Farping had submitted for his master's degree. Cousin Julius was a Stonebender only by marriage. But 'Once a Stonebender, always a Stonebender' Grandfather always says.

"Paragraph. Maybe so, but Cousin Jule's magnum opus was nothing I would sit up all night reading. I knew where to find them: on the bookshelf in the guest room. Ma claimed she kept them there to insure sound sleep for the stranger within the gate, but Pa devilled her with the accusation that it was a cheap and unselective revenge for things she had been obliged to put up with in other people's houses.

"Paragraph. As may be, an armload of books that could have dried up Reno, Nevada, and Lake Superior in one afternoon, then switched off Niagara Falls as an —"

Athene interrupted herself: "The presence of Doctors Harshaw and Hubert is urgently requested in the Main Lounge."

Lazarus opened one eye. "Not enough, Teena. I feel no urgency. Who? Why?"

"'Why': To buy you each a drink. 'Who': Doctor Hazel Stone."

"That's different. Tell her we'll be there as quick as I can clean up about five minutes of business."

"I've told her. Pappy, you lost me a bet. You let me think that nothing could stir you out of that hammock — "

"It's not a hammock."

" — because you were giving this convention, not attending it."

"I said I had no plans to attend the plenary sessions. I am not 'giving' this convention other than free rental on the land for the Big Top. Tamara says we'll make expenses, Hilda thinks we might net a little, give or take a milliard or two. I made you no promises. If you had bothered to ask, I would have told you that Hazel Stone hasn't lost a bet since Jess Willard knocked out Jack Johnson. How much did you lose?"

"None of your business! Pappy, you give me a pain in what I lack."

"I love you, too, dear. Give me printouts on star guests and latest revisions of convention program." Lazarus added, "Minerva, you're not armed. Teena, don't let her stir out of the house unarmed."

"Lazarus, do I really need to? Tamara isn't armed."

"Tamara has a concealed weapon. Some of the most bloodthirsty people in Known Space are attending this convention. Female authors. Critics. Harlan. Both Heinleins. I not only *insist* that you be armed but I hope you stick close to someone fast on the draw. Justin. Zeb. Mordan Claude. Galahad. Better yet, stay home. Teena can display any of it here better than you can see it through mixing with rabble. Belay that. I've no more business telling you to be careful than you have telling me. Getting yourself mugged, raped, or killed are among the privileges you opted when you decided to go the protein route. I spoke selfishly, dear; forgive me."

"Lazarus, I will be careful. Galahad invited me to tag along."

"Perfect. Teena, where's Galahad?"

"Hazel Stone's table."

"Good! Stick with us, Min. But armed."

Lazarus suddenly became aware of something cold against his left kidney. He looked cautiously to the left and down, noted that it was: a) a lady's burner, small but lethal (of that he was certain as he collected a royalty on this model); b) the dial showed full charge; c) the intensity setting was "overkill"; and d) it was unlocked.

"Minerva," he said gently, "will you please move that thing — slowly! — away from my hide and point it at the ground, then lock it, then tell me where you had it? You came out of the pool dressed in nothing but long wet hair. You are now dressed in long dry hair. How? And no wisecracks; in your case I know better."

"Forfeit. Kiss."

"Go ahead and kill me."

"Stingy." Minerva removed the weapon, locked it, and it disappeared.

Lazarus blinked. "Jubal, did you see that?"

"Yes. I mean, 'No, I did not see where Minerva hid that equalizer.'"

"Doctor Jubal, by 'equalizer' did you mean *this?"* Suddenly the lady's weapon (locked, Lazarus noted at once) was in her right hand. "Or *this?"* Its twin was in her left hand.

Jubal and Lazarus looked at each other, looked back at Minerva. She now appeared to be unarmed and totally lacking in any means of hiding a weapon. Lazarus said, "Jubal, are there days when you feel obsolete?"

"Correction, Lafe. There occasionally comes a day when I do *not* feel obsolete. They've been scarce lately." Harshaw took a deep breath, exhaled. "I grok I should have let Mike train me. But this incident has made up my mind for me; I am going to seek the services of Doctor Ishtar. Minerva, are you going to show us how you did that?"

"Or are you going to let us die of frustration?" added Lazarus.

"This?" Again she appeared as a two-gun woman, with each of her companions covered. This time she handed them over, one to each. "Have one, they're good" — and peeled the foil off a third, a candy bar molded to look like a purse weapon. "Crunchy, but mostly shokolada. 'Chocolate'? Mostly chocolate."

"Minerva, that burner you shoved into my ribs was not a candy bar."

"It was — " She stopped to munch and swallow. "Shouldn't talk with my mouth full." She licked at some chocolate clinging to the candy wrapping. "It was *this."* Her slender left hand gripped what Lazarus quickly ascertained was a weapon, not candy.

Minerva rolled her candy wrapping into a lump, looked around for the nearest oubliette, spotted it and tossed the discard — missed it; it bounced against the side. She retrieved the wad of waste, put it into the trash receiver. In the course of this the weapon disappeared.

"Lazarus," she said seriously, "when you were training me, you told me that I should never tell anyone how a concealed weapon was concealed. Are you suspending this rule?"

Lazarus looked baffled. Jubal said, "Old friend, I suggest that we die of frustration. The girl is right."

"I agree," Lazarus answered, with a sour look. "All but the word 'girl.' This baggage is half a century old as protein, at least two centuries older than that as the smartest computer ever built. Minerva, I remove all restrictions. You are able to protect yourself."

"Father, I don't *want* to be turned loose!"

"It's been thirty years since you last called me Father. Very well, you aren't 'turned loose' — but from here on *you* protect *me.* You're smarter than I am; we both know it. Keep your weapon secrets to yourself; I always have."

"But you taught it to me. Not the details, the method. You attributed it to Master Poe. The Purloined Letter Method, you called it."

Lazarus stopped short. "If I understand you, I'm looking at your holdout this instant but can't see it."

Into her off ear Athene whispered, "Don't give him any more hints. Lazarus isn't as stupid as he looks and neither is Fatso." Minerva subvocalized, *"Okay, Sis,"* and said aloud, "I find no fault with your logic, sir. Would you like another candy bar?"

Fortunately the subject was changed by one of Athene's extensions handing to Lazarus printouts: revised programs for each, and a fresh report for Lazarus on his star guests. They continued walking through the east peristyle of the new wing, while reading. Lazarus asked, "Teena, anything new on Isaac, Robert, or Arthur?"

"Negative, zero, nix."

"Damn. Let me know soonest. Jubal, here's an odd one. A doctor's degree was not a requirement for the limited list — many thousands but nevertheless most strictly limited — of people invited to subscribe to this convention. But most do have a doctor's degree or their cultural equivalent, or higher — Worsel, for example. I have a much shorter star list of people I wanted to see again — Betsy and Patricia and Buz and Joan, *et al.* — and people I wanted to meet… most of whom I had considered fictional until Jake's Gee-Whizzer opened the other universes to us. You, for example."

"And you, sir. Lafe, I considered you to be a spectacularly unlikely piece of fiction… until I received your invitation. It took some extraordinary convincing even then by your courier… because it meant missing an important date."

"Who was my courier?"

"Undine."

"You never stood a chance. Two bits to a lead nickel she sold it to Gillian and Dawn, then all of your staff, before she seduced you. What was this date I caused you to miss?"

Harshaw looked embarrassed. "Under the Rose?"

"'Under the — ' *No!* Jubal, I promise to keep secrets only through evil motives, my own. If you don't wish to tell me, then don't tell me."

"Eh — Damn it, remember if possible that I prefer not to have it discussed… then do as you bloody please; you will anyhow — I always have. Lafe, when I turned fifty, I made myself a solemn vow that, if I held together that long, I would close shop the day I turned one hundred. I had made all rational preparations to do so, including distributing my worldly goods without allowing any of it to reach the sticky fingers of publicans… when your invitation arrived… five days before my hundredth birthday." Harshaw looked sheepish. "So here I am. Senile, obviously. Even though I arranged years back for other physicians, expert gerontologists, to check me regularly, with the idea of closing shop sooner if indicated."

"Jubal, if you have not consulted Ishtar, then you have not yet consulted a gerontologist."

"That's right," agreed Athene. "Ish can turn your clock back and make you so young and horny you'll stand on your hands to pee."

"Athene," Lazarus said sternly, "repeat aloud your program on private conversations."

"Grandfather, I was on duty as secretary to your star guest when I was forced to interrupt to deliver a oneline message — interruption necessary because it was addressed to both of you. I have *not* been relieved and Uncle Tobias is still in that bucket. Forty-three hundred words. Instructions, please? Or shall I drown the little monster?"

"Probably be best," Jubal answered. "Is a climax approaching?"

"Yes. Either an ending or a cliff-hanger."

"Do it both ways. Exploit first as short story, then as the first episode of an endless serial called 'The Stonebenders,' a double series — one angled toward adventure, the other toward sensies; exploit other rights according to the universe in which sold or leased, copyright where possible, otherwise grab the money and run. Lazarus, there *are* agents from other universes here, are there not?"

"Dozens, maybe hundreds. Jubal, how rich do you want to be?"

"Can't say. At the moment I'm a pauper, existing on your charity and that of my former staff. The Stonebenders could change that. Teena, I gave you the title 'Uncle Tobias' — but I'm fairly sure I never mentioned the Stonebenders. Or Aunt Alicia. Or Cousin Jule. My notes on the Stonebenders are filed in Anne… who would let herself be burned at the stake before she would part with a record to any but its owner. Well?"

The computer did not answer. Harshaw waited. At last Minerva said timidly, "Doctor Jubal, Teena can't help it. But she's an ethical computer with a code as binding as that of a Fair Witness. You have no need to worry."

Lazarus interrupted: "Minerva, quit beating around the bush. Are you saying that Teena reads minds?"

"I'm saying she can't help it, sir! A large computer with extensions widespread can't be perfectly shielded from brain waves. In self-protection, to avoid confusion, she must sort them out. After a few quadrillion nanoseconds she finds herself reading them like large print… the way a baby learns a language from hearing it."

Lazarus said stiffly, "Doctor Harshaw, I did not suspect that I was exposing you to this. I will take all necessary steps to repair it. In the meantime I hope that you will accept my shamed apology and believe in my intention to make full reparation."

"Lafe, don't take yourself so hogwash seriously."

"I beg pardon?"

"Two nice girls — One meat, one the other sort. Flat assurance that no harm was intended and that it couldn't be helped. Let me add my flat assurance that I quit being ashamed of my sins about fifty years back. I don't care who reads my mind because my life is an open book… that should be suppressed. Meanwhile I see a business deal. I supply story ideas but quit bothering to put 'em together; instead Teena picks my brain while I snooze. Minerva does the dirty work; she's the managing partner. Three-way split. How about it, girls?"

"I've got no use for money; I'm a computer."

"And I don't know *anything* about business!" Minerva protested.

"You can learn," Jubal assured her. "Talk to Anne. Teena, don't play stupid. In only three quintillion nanoseconds or less you are going to want new clothes and jewelry and Satan knows what. You'll be glad your sister Minerva has saved and invested your share of the net."

"Minerva," added Lazarus, "besides Anne, talk to Deety. Not Hilda. Hilda would show you how to make even more money but she would grab voting control. Meanwhile let's shake a leg; Hazel is expecting us."

"And I'm thirsty," agreed Harshaw. "What were you saying about academic degrees?"

"Oh." Lazarus looked at his printout as they walked. "It turns out that the degree of doctor is so common on that list of my special guests as to be not worth noting. Listen to this: 'Asimov, Benford, Biggie, Bone, Broxon, Cargraves, Challenger, Chater, Coupling, Coster, Dorosin, Douglas, Doyle, Dula, Forward, Fu, Giblett, Gunn, Harshaw, Hartwell, Haycock, Hedrick, Hoyle, Kondo, Latham, MacRae, Martin, Mott, Nourse, Oberhelman, Passovoy, Pinero, Pournelle, Prehoda, Richardson, Rothman, Sagan, Scortia, Schmidt, Sheffield, Slaughter, Smith, Stone — Hazel and Edith — Tame, Watson, Williamson — there are more; that's just the add-on printout. And here's another double paradox: the Doctors Hartwell and the Doctors Benford are arriving tomorrow and thereby missing the dull opening plenary; obviously they are used to conventions. Jubal, why is it that the speaker who knows least talks longest?"

"Isn't that Dirac's corollary to Murphy's Law? But, Lazarus, according to this program you have not only invited *critics* but have provided them with special facilities. May I ask *why?* I don't mind eating with publishers — most publishers. Editors have their place, too — although I wouldn't want my sister to marry one. But isn't *this* extreme?"

Instead of answering at once, Lazarus said, "Where did Minerva go?"

Athene replied, "We're finishing off Uncle Tobias; she'll be along later. I've told Galahad."

"Thanks, Teena, Privacy mode. Jubal, two guns, three candy bars — *where?"*

"Lafe, earlier she was resting in the bottom of that pool. Has a young man named Mike visited here lately?"

"Your foster son? The Martian preacher? No. Well, I don't *think* so."

"One of the things I learned from him was to postpone indefinitely anything I could not explain… while accepting the fact. We were speaking of critics. I asked why you were pampering them?"

They walked the length of the atrium in the older south wing before Lazarus replied: "Jubal, suppose I had refused to sell memberships to critics. What would have happened?"

"Hrrrmph! They would crawl out of the woodwork."

"So instead I gave them free passes. And a fancy lounge with plenty of typewriters. Remarkable decorations, you must see them. By asking Athene for display — *don't* go into that lounge; you are not a critic. Mr. Hoag will be checking credentials; book reviewers can't get past him. So don't you try."

"I wouldn't be found dead there!"

"You wouldn't be *found.* Avoid it. It is clearly marked, both above its door and on this program map, and Hoag you can spot by his prissy appearance and dirty fingernails. You'll note the stairs — critics are above the rest of us; there are Thirteen Steps up to their lounge."

"'Thirteen'? Lafe, do I whiff something?"

Lazarus shrugged. "I don't *know* that the designer planned that number. Mobyas Toras, do you know him?"

"Uh… Mars?"

"Yes but not your Mars or mine. Different universe and one of the most exciting. Barsoom. Mobyas is Court Mathematician to the Warlord and took special interest in thisjob because of the way self-anointed 'critics' have treated E.R.B. Did I say that Mobyas is a topologist?"

"No."

"Possibly the best. E.R.B.'s universe is no harder to reach than any other and Mars is in its usual orbit. But that does not mean that you will find Jolly Green Giants and gorgeous red princesses dressed only in jewels. Unless invited, you are likely to find a Potemkin Village illusion tailored to your subconscious. Jubal, the interior of the Critics Lounge is somewhat like a Klein bottle, so I hear — I've never been in it. Its singularity is not apparent — as you will see from Teena's displays — as it was decorated by a very great artist. Escher."

"Aha!"

"Yes, he and Mobyas are old friends — two immortals of similar tastes; they have worked together many times. I promised critics free entrance; I made no mention of exit. I promised them typewriters and tape recorders; I did *not* promise typewriter ribbons or recorder tapes. I promised them their own private bar, no charges. Wouldn't be fair to charge as the bar has no liquor in it. There is a lavish dining room but no kitchen."

"Lafe, wouldn't it have been kinder to have liquidated them?"

"Who said I wanted to be *kind* to them? They won't starve; their commissary is by the Kilkenny Cats method. It should please them; they are used to human flesh and enjoy drinking blood — some I suspect of eating their young. But, Jubal, there is an easy way out… for any critic who is even half as smart as he *thinks* he is."

"Go on."

"He has to be able to *read!* He has to be able to read his own language, understand it, not distort the meaning. If he can *read,* he can walk out at once." Lazarus shrugged. "But so few critics *ever* learn to read. Here's the Big Top."

Harshaw looked far to the right, far to the left. "How big is it?"

"I've been afraid to ask," Lazarus admitted.

"That sign is bigger than most circus tops." Jubal stopped to read it:

THE FIRST CENTENNIAL CONVENTION of the
INTERUNIVERSAL SOCIETY for
ESCHATOLOGICAL PANTHEISTIC MULTIPLE-EGO SOLIPSISM

"Beautiful, Lafe! How did you think it up?"

"I didn't, it just grew. And I don't understand it."

"Never mind, mine host. There will be ten thousand here eager to explain it to you. Scatological Panhedonistic Multiplied Solecisms."

"What? Jubal, that's not what it says."

"If you don't understand it, how do you know?"

"Because I understood what *you* said. But the words don't fit."

"We'll rearrange them. Scatological Panhedonism Multiple Solecisms. 'Convinced to — ' *Like* I say — 'Different *than* —"

"Don't talk dirty; we are about to have a drink."

Lazarus bypassed the queue; they walked through a hole that suddenly dilated in the canvas, then puckered tight behind them. They found themselves facing a long table; seated at it was a man working on a roster. He did not look up, simply saying, "Stand out of my light. Tickets first, no exceptions. Then name tags. Then see a clerk to pick your universe. The complaint desk is outside. Tickets — you're holding up the line."

"Snob."

The man looked up, jumped up. "Executive Director Long! I am honored!"

"And you're slow. You need at least two others taking tickets."

The official shook his head sadly. "If you knew how hard it is to hire help these days. Not for *you,* of course; for us common people. Director General Hilda has the labor market so cornered that — Executive Director, can't we make a deal?"

"Pipe down, give us our tags. How does this Universe I.D. thing work?" Lazarus turned to his guest. "It's an ID. for your home world, Jubal; we don't put numbers on *people.* Snob, take a hard look at Doctor Jubal Harshaw. Whenever you see him, it's the Red Carpet. Pronto!"

"Yes, *sir!* Here are your tags and now your universes."

"Jubal, you don't have to wear that but don't throw it away; someone might misuse it. But it does save introductions and sticks to anything from skin to chain mail."

"Now gentlemen observe above me the brightly lighted true color representation of the visible spectrum from infradig to ultraviolent with each slight shading being a precise wave length further assisted by simulated Fraunhofer lines representing principal inhabited planets of the explored universes while this booklet you hold in your hand is a key to identifying your wave length for example if you are French in origin you would turn alphabetically to France where the principal key dates are the conquest of Gaul 58-50 BC the conversion of Clovis 496 AD Battle of Tours 732 but as you are not French we will consider turning points in North American History 1000 1492 1535 1607 1619 1620 1664 1754 1765 1783 1789 1803 1820 1846 1882 1912 1946 1965 any of these dates and many others can switch you into a different analog-Earth a most useful method is comparison of Presidents if you happen to come from a history that includes the so-called American Revolution Director Long will you illustrate it by naming American Presidents of your first century?"

"Woodrow Wilson — I was named for him — Harding, Coolidge, Hoover, Roosevelt, Truman, Eisenhower, Kennedy, Kennedy, Kennedy, Kennedy, Kennedy, Kennedy —"

"Which brings us to 1984, right? And tells me that you experienced the Nehemiah Scudder Interregnum and possibly the Second so-called American Revolution. Dr. Harshaw, did your world experience the Interregnum?"

"It experienced something worse, a world government."

"To me all worlds are equally bad. But it tells me where your two worlds split: 1962 — and here are your colors by which you can identify others of your own world if such be your wish. A delegate came through earlier in which the split was in 1535 and San Francisco was named New Petersburg. Nov'Petrograd I should say but —"

"Snob. The Red Carpet."

"Right away! Doctor Harshaw — my card. Anything, anytime."

The Red Carpet rolled up, then carried them at a steady 10 km/hr down the enormous tent. Jubal looked at the card:

SIEGE SINISTER SERVICES SYNDICATE

"The Villains Nine Rig Ruin"

Reputations Ruined — Competitors Bankrupted — Dragons Wormed — Basements Flooded — Wells Dried Up — Georges Exterminated — Contracts Executed Promptly, bargain rates on mothers-in-law — Juries Subborned — Stocks, Bonds, & Gallows — Saturday Night Specials — Houses Haunted (skilled Poltergeist at small extra charge) — Midnight Catering to Ghouls, Vampires, & Werewolves — Incubi & Succubi for rent by the night or by the week — 7-year itch powder

P.S. We Also Poison Dogs

"Lafe, these people you hired?"

"Let me see that." Lazarus was reading the list of services when Snob came running, jumped on the Red Carpet, reached over Lazarus' shoulder for the card while saying breathlessly:

"Wrong card! Here — have this one. That first card is a piece of sabotage by the firm we bought out, including good will — but it turned out there was no good will. We sued, they retaliated — among other ways by mixing their old business cards with our own new supply ... thereby infecting them all. Law of Contiguity, you know. Now if I can just have that infected one, I'll burn it —"

Lazarus held it out of his reach while accepting the proffered replacement. "I'll keep the old one — interesting souvenir."

"Director Long — *please!"*

"Off the Carpet, Bub. Back to your job. Git!" This injunction was accompanied by crowding that caused Snob to step one foot off the Carpet… which resulted in an impromptu pas à seul that left him fifty meters behind before he recovered his balance. Meanwhile Jubal and Lazarus read the replacement:

ANYTHING UNLIMITED

Tome, Hernia, Lien, & Snob

Six Sixty-Six Smiling Slaves Supply Supreme Service

Reputations Restored — Teeth & Wells Drilled — Water Filters — Love Philtres — Chastity Gödel Lox Pict — Virginity Renewed — Scithers Sharpened — Old Saws Filed Categorically — Silver Bullets — Fresh Garlic — Fresh Strawberries — Strawberry Marks for Missing Heirs

P.S. We Also Walk Dogs

"Lafe, I don't find this card much more reassuring than the first one."

"Don't worry about it. There is less here than meets the eye."

"Where have I seen that face before? This Snob — who is he?"

"Jubal, no one seems to know what ship he came down in. I'm looking into it for Zeb — you've met Zebadiah?"

"Briefly."

"Zeb thinks he's seen him somewhere not under that phony name — and Zeb and I aren't even from the same time axis, much less the same analog series. Never mind; here's our hostess." Lazarus stepped off the Carpet, approached from behind a little old woman seated at a bar-lounge table, leaned over her, kissed her. "Hazel, age cannot wither you or custom stale. You are lovelier every decade."

She goosed him. "Pig grunts. I'm dyeing my hair now and you know it. Who's your fat friend? Hi, Jubal! Tak for siest. Drag up a chair." She put two fingers to her lips, whistled, breaking glasses. *"Waiter!"*

"I note that you're heeled," said Lazarus, as both men joined the table.

"When did I fail to pack a gun? I'm a Free Citizen. Does everybody know everybody? If not, get your tags in sight; damn'f I'll stop for introductions. While I was waiting for you, I was joined by friends — some old, some new."

"Some I know — hi, Jake; hi, everybody. I mentioned your gun with approval, Hazel; Here There Be Tygers. But I note also that you are staying in a hilton; after one drink — well, two — three at the outside — I'm going to be mortally offended. Your suite awaits you and you know it. *Why?"*

"Two reasons. Well, three. I never like to be beholden —"

"Why, damn your beautiful bloodshot eyes!"

" — but I'm perfectly willing to sponge off *you.* That's why I bought the first round; the party never gets smaller. This round is yours. Where's that misbegotten waiter?"

"Here, Madam."

"The same all around and don't call me 'Madam.' Jubal, your usual? Lafe?"

"I know what the gentlemen take. Thank you, Madam." The waiter disappeared.

"Uppity." Hazel made a fast draw. "Should have made him dance." She twirled and reholstered. "Hilda, where have I seen that sneaky face before?"

"Jacob and I were discussing that. He reminds me of a fake forest ranger — but that was in a far country and besides the beast is dead."

"Could be a family resemblance. But, Hillbilly, I mean *today.* Got it! The ticket taker. Identical twins, maybe." Hazel went on, "Other identical twins are my first two reasons, Lazarus. My grandsons. *I* won't shoot holes in your mirrors or carve my initials in Tamara's furniture, but I make no guarantees about Cas and Pol. In a hilton they put the damage on the tab; I pay it and make my grandsons wish they had never been born. But you would not let me pay. And we're going to be here quite a piece; my daughter-in-law Doctor Edith has decided that she needs a couple of years under Doctor Ishtar. Has anyone seen a pair of twin boys — man-size but boys — redheaded — not the color of mine; mine's out of a bottle — the color mine used to be?"

"Hazel, here twins and red hair are as common as magicians in

Atlantis; Gilgamesh must have stayed overnight."

"I saw them talking to Caleb Catlum," said Maureen.

"Well, he should be a match for them — but don't bet on it. Lazarus, is Atlantis represented?"

"From thirteen universes. They are having a jurisdictional dispute. Suits me — if any get sore and leave, they won't get a refund."

"Your grandsons may have been with Caleb but I know where — no, with whom — I know with whom they are now," put in Professor Burroughs. "Laz and Lor."

"Oho! Hazel, I'll tell Athene to settle your bill and move your luggage. We have an antidote for Cas and Pol."

"Optimist. Deal 'em, waiter, and give *him* the chit. What antidote?" The waiter started to hand the check to Lazarus before he looked at him — stopped abruptly, and left, still with the tab.

"Would Cas and Pol be interested in becoming pirates?"

"Lazarus, they *are* pirates. I was hoping they would tone down as they grew up… but now they're eighteen, Terran reckoning, and each one is two yards of deceit and chicanery. The 'J.D.' after my name means that I studied law at a school that handed out that degree in place of 'LL.B.' — but my rapscallions are 'J.D.'s' too. But not lawyers. Well… 'space lawyers."

"Hazel, you won your first J.D. long before you studied law. No?"

"'The accused stood mute and the court ordered a plea of nux vomica entered in the record.'"

"My twins are more than twice as old as your boys but it doesn't show; they look a year or two younger… and they are permanent juvenile delinquents. They want to take a fling at piracy ... which I deplore, having sampled the trade. Your boys — do they respect good machinery? Can they take care of it? Make nonshipyard repairs?"

"Lazarus, they can repair anything that ticks or doesn't tick. Worried me a mite, as they were a little slow in noticing girls. But they outgrew that symptom without outgrowing machinery."

"You might tell them that my clone-sisters own a spaceship faster and more powerful than any of your home period and analog, one that could be outfitted as a privateer. It might result in all four dying happily. But I do not interfere in other people's lives."

Hilda put her palms together, closed her eyes, and said, "Dear Lord, do not strike him dead; he didn't mean it. Yours truly, Hilda Burroughs Long." Lazarus ignored her.

"Nor do I, Lazarus. Other than occasionally, with a horse whip. Forgot to mention — They aren't gelded."

"Hazel, Laz-Lor are vaccinated and would have to come back here to see Ishtar to get it reversed. As for rasslin' matches, any male who tried to rape one of my clones *would* be gelded. Informally. At once.

No instruments. No anesthesia. I trained 'em myself. Forget it. Apparently they've already met; they'll settle their own affairs, if any, their own way. Leave Cas and Pol in that hilton if you wish — by the way, I own it — but you're coming home or I'll tell Tamara."

"Bully. I don't bully worth a hoot, Lazarus."

"I'm out of it. Tamara *never* bullies. She merely gets her own way. What was this third reason?"

"Well... don't tell on me. Ishtar is a fine girl but I have no wish to stay where she could corner me and try to sell me rejuvenation."

Lazarus looked horrified. "Who has been feeding you nonsense?"

"Well? It's a commercial enterprise, is it not?"

"Certainly. Tanstaafl. All the traffic will bear. But we aren't ghouls; we'll accept a lien against a client's future earnings with no security and only the going rate of interest... then let him take as long as he likes to figure out that it doesn't pay to cheat us. But, Hazel, Ishtar *never* solicits; the clinic doesn't even have a flack. But if you *asked* her, you would go to the top of the list as my friend. However, she will supply painless suicide just as readily. You can have that later today. No charge. Compliments of the House."

"Lafe, I don't see how your wives put up with you."

"They don't; they make me toe the line. Something they learned from the Stone Gang, I believe."

"Well, I'm not trying to suicide. I'm less than two hundred Terran years old with a Luna background to stretch it. This is the first time I've been on a heavy planet since the last time I saw you; I'll last a while. But, Lazarus, *I have no wish to be a young girl."*

"Hazel —"

"Huh? Jubal, keep out of this. Say, did you ever see anything of that young man again? Did he resurrect the way some claim he did?"

"Not to my knowledge. Although I saw something a while ago that made me wonder. Hazel, I'm going to take rejuvenation... and hang onto my present appearance. Red nose and all."

Hazel turned abruptly to face Lazarus. "Is this true? Can this be done?"

Maureen answered. "Hazel, I work at the clinic at the bedpan level... with the expectation of becoming a junior rejuvenation technician in upteen years. I see what goes on. A client states in writing what apparent age she prefers. That's skin deep, easy to do, easy to maintain. But, unless it is an unusual contract, we turn out a biologically mature young adult. Call it eighteen standard years."

"Page Ponce de Leon! You mean I can still be *me*... but get rid of the morning aches and the arthritic twinges and the forty-leven other things that are the *real* trouble with living too long?"

"Exactly."

"Uh... what about what I'm sitting on? Haven't used it much lately. Or wanted to."

Lazarus fielded this. "You'll want to. Unless you contract for an abnormal endocrine balance. But, Hazel, there are many men who prefer to deal with an old, established, reliable firm. Ask Tamara."

"Uh... be switched if I'm not feeling embarrassed, an emotion I haven't felt in more years than I'll admit. You can pick any apparent age, you say? Could I be, uh, late middle age? My hair its right color but streaked with gray? A sag under my chin instead of this wattle? Teats a man might grab and enjoy it? That 'old, established firm' — but not decrepit?"

"Certainly," said Lazarus.

"Hazel, I can take you to the clinic now," Maureen offered. "Always someone in the business office. Discuss types of contract. Decide what you want and when. Even get your prelim physical today and set date of admission."

"Uh... yes, I'm interested. But not till later today; I've got friends entered in the preliminary rounds of the Society for Creative Anachronism."

"Besides," Jubal put in, "they need time to check your credit rating, see what they can stick you for. By now Lafe has given Athene some signal to start x-raying your purse."

"He has *not,"* Hilda denied. "I did. Hazel, we don't solicit business; we let the client sell it to herself. Maureen picks up one percent on this deal. Not Lazarus."

"Can't see that it matters," Jacob added. "Hey! Waiter! Over here, please! We Longs pool the boodle and Deety tells us what we have, what we can spend — but not who fetched it in."

"Jacob, it's the principle. Making money is a game. Maureen landed her."

"Hazel landed herself, Hilda," Hazel Stone put in. "I don't enjoy getting up feeling wobbly. Jubal, are you game for this?"

"My mind's made up."

"Then take a double room with me and we can tell each other lies while they make us feel young again. Hilda, is that kosher?"

"Lots of double rooms. Ish knows that you are both special friends of Lazarus and, while she doesn't spoil Lazarus, she'll do him any reasonable favor," Hilda assured her. "I think it's the same all around, Waiter — charge it to my account."

"My check," said Jubal.

"Waiter," Hilda said firmly.

The waiter looked at her, flexed his jaw muscles, said, "Very well, Director!" — and vanished.

"I think I missed something," Jubal remarked.

"I think I didn't," said Hazel. "'Yon Cashier hath a lean and hungry look. He thinks too much. Such men are dangerous.'"

Jubal looked around. "That cashier is our waiter. I think."

"I know. And bartender. And ticket taker. Unless his mother had quadruplets, he has Niven dislocators built into his shoes. I wish I could remember *where* I have seen him. He is not pleased with Hilda. Or Lazarus."

"Eh? Why?"

"Wait and see. There will not be another tab brought to this table — want to bet?"

"No bet," Lazarus interrupted. "The upstart knows who I am, who Hilda is. People at this table are guests of the management. He had better remember it or I'll sick Deety on him. Or even Hilda. But they hardly ever live through *that.* Hey, there's Deety now!" Lazarus stood up and waved. *"Deety!* Over here!"

Deety had with her a gaggle of giggles. "I don't have time to do this right; we want to get over to the Field of the Cloth of Gold before the preliminaries-besides, we've got husbands over there, most of us. So this is Ginnie and Winnie and Minnie, and Ginnie's a witch and Winnie's a nurse and Minnie's a retired computer, twin sister to Teena, and this is Holly and Poddy and Libby and Pink, and Holly is a design engineer, ship's architect type, and Poddy is a therapy empathist, and Libby you all know, and Fuzzy is a computer artist like me and the first one to calculate the Number of the Beast to the last significant figure, and now we'd better go even though we have reserved V.I.P. seats because there is a masked knight in the first match and we're pretty sure who he is, and has anyone seen Zebadiah?"

"I'm certain who he is," said Ginnie. "He brought me to life, and besides, he's wearing Karen's colors."

"I see Zeb off in the distance," Lazarus answered.

"No," Jake denied, "here he comes now, from over this way. Ishtar with him. All dressed up."

"No," said Jubal. "That's Anne with him."

"Somebody is screw loose. Lazarus is right. I know my first husband even at this distance. He's just approaching those three reserved sections opposite the big screen over the bar. *Zebadiah!* Over here!"

The other computer artist added, "And that can't be Anne, so it must be Ishtar. Anne is at the field, I know, because Larry is helping Jerry run it and told me, Anne agreed to cloak and be the third judge when Jerry told her that Mr. Clemens had agreed. Bonforte sits as king although he says he doesn't know much about the kinging business and even less about jousting."

"Is it true that they are using real weapons today?" asked Jubal.

"And real horses," agreed Lazarus. "I was able to borrow the Anheuser-Busch Clydesdales."

"Lazarus, is this wise?"

"Doctor Bone is taking care of the horses. If one is injured, we'll give him the works. Those beautiful horses will be returned to Old Home Terra at their proper year and second in better shape than they were. With added skill. It's takes *time* to turn a Clydesdale into a knight's charger even though that's what they are. But will they ever be happy in harness again?"

"Lazarus," Podkayne said seriously, "I'll speak to Dr. Bone. If a horse is unhappy, we will soothe."

"Poddy, you're a Smart Girl."

"About average here, I think. But if someone is unhappy, I have learned what to do. I have never seen a horse but they've lived with people so long that it can't be very different."

Jubal sighed. "I'm glad the horses will be well taken care of — but, Lazarus, I meant *humans.* Isn't someone going to be hurt? Maybe killed?"

"Most of them hurt, several killed. But they do it for *fun.* Those who are hurt won't stay hurt; we are hardly more than a loud shout from this planet's best hospital. If a man loses an arm or a leg or an eye, or even his balls, he'll have to be patient while a new part is cloned. But that sort of cloning we are learning to do right at the spot of injury, like a lizar~d or a newt. Faster. More efficient.

"If he's killed, he has two choices: Be brought to life again by Ishtar's crew — brain unlikely to be hurt; their helms are the best part of their armor. Or, they can go straight to Valhalla; we've arranged for Bifrost to extend to this Field until the end of SCA's part in the convention. Six Valkyries standing by and 'Sarge' Smith at the top of Bifrost checking them against the roster as he musters them home." Lazarus grinned. "Believe me, the Society is paying high for these services, bond posted in advance; Deety wrote the contract."

"Lafe, you're telling me that Wagnerian Valkyries are waiting to carry the slain Over The Rainbow into Asgard?"

"Jubal, these Amazons are *not* opera singers; these are the real hairy, sweaty McCoy. Remember the purpose of this convention. Snob."

The waiter appeared. "You wish something, sir?"

"Yes. Tell your boss that I want this table — this table *only* — to have a full view of Bifrost, from the Field to Valhalla. I know it's not in the clothing illusion contract but the same gear will do it… and we can settle it when we go to court later. It will offset some of his lousy service. Git!"

"We'd better all 'git," said Libby. "They won't hold up things for us.

That armor is heavy and hot. Deety?"

"Run along, I'll catch up. Here comes my first husband."

"Lafe, if they are killed, how do you know which ones to send to the clinic, which ones to send up the bridge?"

"Jubal, how would *you* do it? Sealed envelopes, destroyed if a knight wins, opened if he loses… and there may be some surprised widows tonight, unable to believe that their loving husbands elect to hunt all day, then feast on barbecued boar, guzzle mead, and wench all night, in preference to being restored to life in their respectable homes. But did I tell you what a winner gets? Aside from applause and a chance to kneel to 'King' John and 'Queen' Penelope. A paradox's his reward."

"A paradox?"

"No, no! Noisy in here. A pair o' doxies *each* his reward. The Society got a bargain. The arts are in their infancy here; Boondock is still so much a frontier that we have not yet developed distinguished hetaerae. But some of the most celebrated hetaerae in New Rome volunteered their services in exchange for transportation and the privilege of attending this convention."

Zebadiah was struck by a guided missile, female, from five meters. He managed to stay on his feet and took his first wife to the table, sat down by Hilda, pinched her thigh, pinched her glass, drained it, said, "You're too young to drink, little girl. Is this your father?"

"I'm her son," Jake answered. "Do you know Hazel Stone? If not, you should. We thought we saw you coming from the other direction."

"Shouldn't drink in the daytime, Jake. *Waiter!* Your servant, Ma'am. I've followed your series on 3-D since I was a kid and I'm honored to meet you. Are you covering this for Lunaya Pravda?"

"Heavens, no! LOCUS has an exclusive under the reasonable theory that LOCUS *alone* is competent to report *this* convention. Jerry and Ben are covering it for their various journals… but must clear it through Charles. I'm here as an expert, believe it or not — as an author of popular fantasy. Is the Galactic Overlord of my series real or imaginary and is there a difference? See next week's thrilling episode; the Stone family has to eat. Same thing all around, I think. You can tip him, Doctor Zebadiah, but there is no tab at the Director's table."

"And no tips," growled Lazarus. "Deliver my message to your boss again and tell that spinning arsfardel he has exactly three minutes before I invoke paragraph nine, section 'c.' Here comes your double, Zeb."

From behind the couple who, at half a klick, had been mistaken for Zebadiah and Ishtar, came out quickly a shorter, older, broadshouldered man. All three were dressed Robin-Hood-and-his-Merry-Men style: buskins, breeks, leathern jackets, feathered caps, long bows and quivers of fletched shafts, swords and daggers, and were swinging along in style.

The shorter man hurried a few paces ahead, turned and faced their path, swept off his cap and bowed deeply. "Make way for Her Wisdom, Empress of eighty-thr —"

The woman, as if by accident, backhanded the groom. He ducked, rolled, avoided it, bounced to his feet and continued: " — worlds, and her consort the Hero Gordon."

Lazarus got up, addressed the groom. "Doctor Rufo! So happy you could make it! This is your daughter Star?"

"His grandmother," Her Wisdom corrected, dropping a quick curtsy to Lazarus. "Yes, I'm Star. Or Mrs. Gordon; this is my husband, Oscar Gordon. What is correct usage here? I've not been on this planet before."

"Mrs. Gordon, Boondock is so new that its customs have not yet calcified. Almost any behavior is acceptable if meant in a kindly way. Anybody causes real trouble, it's up to our chairman Ira Weatheral and advisers selected by him. Since Ira doesn't like the job, he tends to procrastinate, hoping the problem will go away. As a result we don't have much government and few customs."

"A man after my own heart. Oscar, we could live here if they will have us. My successor is ready; I could retire."

"Mrs. Gordon —"

"Yes, Doctor Long?"

"We — our chairman Ira especially — all know quite well who 'Her Wisdom' is. Ira would welcome you with open arms and resign in your favor at once — passed by acclamation and you would be boss for life. Better stick to the devil you know. But you are most welcome whenever you choose to visit."

She sighed. "You're right. Power is not readily surrendered; I'll probably wait for assassination."

Deety whispered, "Zebadiah… that bartender. Whom does he look like?"

"Hmm — Brigadier Iver Hird-Jones?"

"Well, maybe. A little. I was thinking of Colonel Morinosky."

"Mmm — Yes. No importance since it can't be either one. Mr. Gordon?"

"Call me 'Easy.' Or Oscar, Doctor Carter."

"I'm Zeb. Is that the Lady herself? The sword you were in the Quest for the Egg of the Phoenix?"

Gordon looked delighted. "Yes! The Lady Vivamus."

"Can't ask a man to draw a sword without a cause… but is the inscription close enough to the hilt that we could read it if you were simply to show steel?"

"No trouble." Gordon exposed the etched: *Dum Vivimus, Vivamus!* — gave them time to read it, clicked it to full return, and asked, "And is *that* the sword that killed the Boojum?"

"The Boo — *Oh!* The monster we call a 'Black Hat.' But we did not 'softly and silently vanish away.'"

"No, *it* did. That will be a point we'll discuss in the seminar panel: 'Techniques for Hunting Snarks.' You and I and Doctor Jacob and Doctor Hilda, with some others. André. Kat Moore. Fritz. Cliff. The Gordfather will moderate when he gets over his wheezes. Which he will-Tamara's treating hi — *Oh, heavens! Oh, God, how beautiful!"*

The "sky" had opened, for their table, and they found themselves looking at the Field of the Cloth of Gold, a half klick away and a few meters above them, on and up to high, high, high in the sky, the shimmering towers and palaces of Valhalla, with the Rainbow Bridge reaching from the field of honor to the distant gate of the eternal home of heroes.

Instead of the wooded horizon usually seen in that direction, the land lifted in terraces, each more colorfully beautiful than the last, until the highest was lost in pink and saffron clouds — and above them, much higher, Valhalla in Asgard.

"Pappy!"

"Yes, Athene," Lazarus said quietly. "Localize it. Me only. I have many people around me."

"That's better? No problems, just to alert you. Arthur and Isaac and Bob all arriving at once. Twelve minutes, plus two, minus zero."

"You're a smart girl, Teena."

"Put that in writing. Blandjor."

Lazarus said to the table at large, "My guests for those reserved spaces are arriving. I wasn't sure of Isaac; he gets bigger every year and reluctant to travel other than by water. Arthur had such a long way to come and communications are always uncertain. Bob I knew was here but there were duty matters interfering. Shall we listen to some of the opening plenary while we look at the beauties of the Norse Afterland? We don't want to *look* at the general session. But we can listen. When the tourney starts, give most of your attention to the hologram except during the Valkyrie ride. Snob! Give us the sound from the plenary session."

They got it at once, sound and fury signifying nothing. Under its cover Jubal Harshaw said to Zebadiah, "Before they get on that panel in front of an audience, think about this. How many 'Black Hats' or 'Boojums' are there?"

"Eh? I have no way of telling. In excess of twenty as a best guess but that excess could be many millions, also a best guess."

"But how many did you *see?"* Harshaw persisted.

"Oh. One. But more were a certainty."

"So? You would never get a Fair Witness to say that. What harm did it or they do you?"

"Huh? Tried to kill us. Bombed us out. Killed my cousin. Chased us off our home planet. Impoverished all four of us. What do you want? Plagues and locusts? The Four Horsemen?"

"No. *You* saw *one.* You killed it. It never laid a glove on you. Think about it. Before you testify. Let's listen."

"If you read it correctly it's all in the Bible. 'In the beginning was the Word, and the Word was with God, and the Word was God.' Could anyone ask for a plainer statement of the self-evident fact that nothing exists until someone imagines it and thereby gives it being, reality? The distinction lies only in the difference between 'being' and 'becoming' — a distinction that cancels out when any figment-fact is examined from different ends of the entropy error — "

"Bishop Berkeley is presiding," Lazarus commented, "and would have shut this figment up save that the Bishop has laryngitis — imaginary, of course — and his parliamentarian, the Reverend Mister Dodgson, is too meek to shut anyone up. The Meek Shall Inherit the Earth, One Meter Wide and Two Meters Long."

"If God displaces the Devil, he must assume the Devil's attributes. How about giving the Devil equal time? God has the best press agents. Neither fair nor logical!"

"I am Alpha and Omega, the beginning and the end, the first and the last."

"Occam's Razor is not the least hypothesis! It is the least probable hypothesis. The truth — "

"There are three schools of magic. One: State a tautology, then ring the changes on its corollaries; that's philosophy. Two: Record many facts. Try to see a pattern. Then make a wrong guess at the next fact; that's science. Three: Awareness that you live in a malevolent universe controlled by Murphy's Law, sometimes offset in part by Brewster's Factor: that's engineering."

"Why did Mercutio have to die? **Solve that, and it will lead you to Mark Twain's well. There's your answer."**

"Who is more real? Homer or Ulysses? Shakespeare or Hamlet? Burroughs or Tarzan?"

The debate shut off, the giant hologram screen lighted up in heroic size, full depth and color, and the tedious voices were cut off by a loud and lively one: **"While we're waiting for the first two champions to reach their starting lines we will have 'The Grand Canal' sung by lovely Anne Passovoy and accompanied by Noisy on his Stomach Steinway. Noisy is not in voice today, friends; he was bitten last night by an imaginary snake."**

"Jerry is in good voice," whispered Deety. "He always is. Aren't they going to give us any closeups?" The camera zoomed in on Anne Passovoy, panned across the other Anne, cloaked in white, rested for a moment on "King" John and "Queen" Penelope, went on to show a vigorous old man with a halo of white hair who took a stogie out of his mouth and waved.

"On my right is Sir Tenderloinn the Brutal and on my left is the Black Knight, shield unblazoned, helm closed. Oh Jear not, friends; Holger tongues. Dis Dane could be our arrow. Whose color — "

Zebadiah heard a crash, turned his head. "They're bringing in a big Corson flatboat. Smashed some chairs." He looked again, announced, "Can't see much, the stands on this side are filling with people in green uniforms. Black berets. Bloodthirsty-looking gang."

"That's Asprin —"

"Give me ten grains. Deety, you let me mix my drinks."

"Asprin, not 'aspirin.' Bob Asprin, Commandammit of the Dorsai Very Irregular," Lazarus told him. "But can you see Arthur?"

"Does he wear a deerstalker's hat? Smoke a meerschaum pipe? The tall one there, talking to the man who looks like a gorilla."

"He'd Challenge you for that. Violent temper. That's Arthur's party, all right. Doctor Arthur Conan Doyle. Doctor Watson should be there, too. Wups! Here comes Isaac. And there goes another bunch of chairs."

"They're off! The Masked Challenger is gaining speed, Sir Tenderloinn is having trouble getting his charger to move: It is a beautiful day here at Epsom Salts and Bifrost never looked lovelier."

Lazarus stood up. "I must greet Isaac. Zebadiah, have you met him? Come with me. You, too, Deety. Hilda? Please, dear. Jake?"

"Just a moment, you!" Zeb looked at the one interrupting them and felt shock. He had seen that face, that uniform, by a rustic swimming pool. The "ranger" addressed Lazarus: "You're the one they call the Executive Director. Special Agent L. Ron O'Leemy, InterSpace Patrol. I have warrants for Beowolf Shaeffer, Caspol Jones, and Zebadiah John

Carter. Director, I require your cooperation. Article Four Six, Section Six Five, Paragraph Six, InterUniversal Criminal Code."

"Unhorsed! The Black Knight's lance right through him! Here come the Valkyries. *Hoyotoho!"*

Hilda reached out, took the warrants, tore them across. "You're on the wrong planet, Mac." She grasped Zeb's arm. "Come along, Alfred; we must meet Isaac."

They passed the Dorsai, reached the big Corson flatboat. Completely filling it was a *very* large Venerian Dragon. The dragon turned an eyestalk toward them; his tendrils touched his voder. "Greetings, Doctor Lazarus Long. Greetings, new friends. May you all die beautifully!"

"Greetings, Sir Isaac. Sir Isaac Newton, this is Doctor Hilda Burroughs Long, Doctor Jacob Burroughs Long, Doctor Deety Carter Long, and Doctor Zebadiah John Carter Long, all of my family."

"I am honored, learned friends. May your deaths inspire a thousand songs. Doctor Hilda, we have a mutual friend, Professor Wogglebug."

"Wait, wait! Don't tear up your tickets. The Valkyries are having a problem. Yes, the judges have confirmed it. No contest! The Dane has 'killed' a totally empty suit of armor! Better luck next bout, Pou — Holger."

"Oh, how delightful! Zebadiah and I saw him just this past week in delivering our children to Oz for the duration of this convention. Did I just miss you?"

The dragon answered, with a Cockney lisp, "No, we are pen pals only. He can't leave Oz; I had never expected to leave Venus again… until your device — perhaps I should Say Doctor Jacob's device — made it simple. But see what our friend Professor Wogglebug sent me — " The dragon fiddled at a pouch under his voder.

The InterSpace Patrol Agent O'Leemy tapped Zeb on the shoulder. "I heard those introductions. Come along, Carter!"

" — spectacles to fit my forward stalks, that see through the thickest mist." He put them on, looked around him. "They clarify any — There! Get him! Grab him! That Beast! Get his Number!" Without a lost instant Deety, Hilda, and Lazarus closed on the "agent" — and were left with torn clothes and plastic splints as the thing got loose. The "special agent" vaulted over the bar, was seen again almost instantly at the far end of the bar, jumped up on it, leapt for the canvas top, grabbed hold of the edge of the illusion hole, swung itself up, bounded for Bifrost, reached it.

Sir Isaac Newton played: "Mellrooney! The worst troublemaker in all the worlds. Lazarus, I never expected to find that Beast in your quiet retreat."

"Nor did I until I heard *all* of Zeb's story. This convention was called expecially to entice him. And it did. But we lost him, we lost him!"

"But I got its Number," Hilda said and held out its shield: "**666**"

The fleeing figure, dark against the Rainbow Bridge, grew smaller and higher. Lazarus added, "Or perhaps we haven't lost him. He'll never get past Sarge Smith."

The figure appeared to be several klicks high now, when the illusion suddenly broke. The Rainbow was gone, the terraces melted, the clouds were gone, the towers and castles of Asgard could no longer be seen.

In the middle distance, very high up, a figure was tumbling, twisting, falling. Zeb said, "Sarge won't have to bother. We've seen the last of *it."*

The voder answered: "Friend Zebadiah… are you *sure?"*

Friday

I

As I left the Kenya Beanstalk capsule he was right on my heels. He followed me through the door leading to Customs, Health, and Immigration. As the door contracted behind him I killed him.

I have never liked riding the Beanstalk. My distaste was fullblown even before the disaster to the Quito Skyhook. A cable that goes up into the sky with nothing to hold it up smells too much of magic. But the only other way to reach EllFive takes too long and costs too much; my orders and expense account did not cover it.

So I had been edgy even before I left the shuttle from EllFive at Stationary Station to board the Beanstalk capsule . . . but, damn it, being edgy isn't reason to kill a man. I had intended only to put him out for a few hours.

The subconscious has its own logic. I grabbed him before he hit the deck and dragged him quickly toward a rank of bonded bombproof lockers, hurrying to avoid staining the floor-shoved his thumb against the latch, pushed him inside as I grabbed his pouch, found his Diners Club card, slid it into the slot, salvaged his IDs and cash, and chucked the pouch in with the cadaver as the armor slid down and clanged home. I turned away.

A Public Eye was floating above and beyond me.

No reason to jump out of my boots. Nine times out often an Eye is cruising at random, unmonitored, and its twelve-hour loop may or may not he scanned by a human before it is scrubbed. The tenth time-A peace officer may be monitoring it closely . . or she may be scratching herself and thinking about what she did last night.

So I ignored it and kept on toward the exit end of the corridor. That pesky Eye should have followed me as I was the only mass in that passageway radiating at thirty-seven degrees. But it tarried, three seconds at least, scanning that locker, before again fastening on me.

I was estimating which of three possible courses of action was safest when that maverick piece of my brain took over and my hands executed a fourth: My pocket pen became a laser beam and "killed" that Public Eye-killed it dead as I held the beam at full power until the Eye dropped to the deck, not only blinded but with antigrav shorted out. And its memory scrubbed-I hoped.

I used my shadow's credit card again, working the locker's latch with my pen to avoid disturbing his thumbprint. It took a heavy shove with my boot to force the Eye into that crowded locker. Then I hurried; it was time to be someone else. Like most ports of entry Beanstalk Kenya has travelers' amenities on both sides of the barrier. Instead of going through inspection I found the washrooms and paid cash to use a bath-dressing room.

Twenty-seven minutes later I not only had had a bath but also had acquired different hair, different clothes, another face-what takes three hours to put on will come off in fifteen minutes of soap and hot water. I was not eager to show my real face but I had to get rid of the persona I had used on this mission. What part of it had not washed down the drain now went into the shredder: jump suit, boots, pouch, fingerprints, contact lenses, passport. The passport I now carried used my right name-well, one of my names-a stereograph of my bare face, and had a very sincere EllFive transient stamp in it.

Before shredding the personal items I had taken off the corpse, I looked through them-and paused.

His credit cards and IDs showed four identities.

Where were his other three passports?

Probably somewhere on the dead meat in that locker. I had not given it a proper search-no time!-I had simply grabbed what he carried in his pouch.

Go back and look? If I kept trotting back and opening a locker full of still-warm corpse, someone was bound to notice. By taking his cards and passport I had hoped to postpone identifying the body and thereby give myself more time to get clear but-wait a moment. Mmm, yes, passport and Diners Club card were both for "Adolf Belsen." American Express extended credit to "Albert Beaumont" and the Bank of Hong Kong took care of "Arthur Bookman" while MasterCard provided for "Archibald Buchanan."

I "reconstructed" the crime: Beaumont-Bookman-Buchanan had just thumbed the latch of the locker when Belsen sapped him from behind, shoved him into the locker, used his own Diners Club card to lock it, and left hastily.

Yes, an excellent theory . . . and now to muddy the water still more.

Those IDs and credit cards went back of my own in my wallet; "Belsen's" passport I concealed about my person. I could not stand a skin search but there are ways to avoid a skin search including (but not limited to) bribery, influence, corruption, misdirection, and razzle-dazzle.

As I came out of the washroom, passengers from the next capsule were trickling in and queuing up at Customs, Health, and Immigration; I joined a queue. The CHI officer remarked on how very light my jumpbag was and asked about the state of the up-high black market. I gave him my best stupid look, the one on my passport picture. About then he found the correct amount of squeeze tucked into my passport and dropped the matter.

I asked him for the best hotel and the best restaurant. He said that he wasn't supposed to make recommendations but that he thought well of the Nairobi Hilton. As for food, if I could afford it, the Fat Man, across from the Hilton, had the best food in Africa. He hoped that I would enjoy my stay in Kenya.

I thanked him. A few minutes later I was down the mountain and in the city, and regretting it. Kenya Station is over five kilometers high; the air is always thin and cold. Nairobi is higher than Denver, nearly as high as Ciudad de Mexico, but it is only a fraction of the height of Mount Kenya and it is just a loud shout from the equator.

The air felt thick and too warm to breathe; almost at once my clothes were soggy with sweat; I could feel my feet starting to swell-and besides they ached from full gee. I don't like off-Earth assignments but getting back from one is worse.

I called on mind-control training to help me not notice my discomfort. Garbage. If my mind-control master had spent less time squatting in lotus and more time in Kenya, his instruction might have been more useful. I forgot it and concentrated on the problem: how to get out of this sauna bath quickly.

The lobby of the Hilton was pleasantly cool. Best of all, it held a fully automated travel bureau. I went in, found an empty booth, sat down in front of the terminal. At once the attendant showed up. "May I help you?"

I told her I thought I could manage; the keyboard looked familiar. (It was an ordinary Kensington 400.)

She persisted: "I'd be glad to punch it for you. I don't have anyone waiting." She looked about sixteen, a sweet face, a pleasant voice, and a manner that convinced me that she really did take pleasure in being helpful.

What I wanted least was someone helping me while I did things with credit cards that weren't mine. So I slipped her a medium-size tip while telling her that I really did prefer to punch it myself-but I would shout if I got into difficulties.

She protested that I did not have to tip her-but she did not insist on giving it back, and went away.

"Adolf Belsen" took the tube to Cairo, then semiballistic to Hong Kong, where he had reserved a room at the Peninsula, all courtesy of Diners Club.

"Albert Beaumont" was on vacation. He took Safari Jets to Timbuktu, where American Express had placed him for two weeks at the luxury Shangri-La on the shore of the Sahara Sea.

The Bank of Hong Kong paid "Arthur Bookman's" way to Buenos Aires.

"Archibald Buchanan" visited his native Edinburgh, travel prepaid by MasterCard. Since he could do it all by tube, with one transfer at Cairo and automated switching at Copenhagen, he should be at his ancestral home in two hours.

I then used the travel computer to make a number of inquiries-but no reservations, no purchases, and temporary memory only.

Satisfied, I left the booth, asked the dimpled attendant whether or not the subway entrance I saw in the lobby would let me reach the Fat Man restaurant.

She told me what turns to make. So I went down into the subway-and caught the tube for Mombasa, again paying cash.

Mombasa is only thirty minutes, 450 kilometers, from Nairobi, but it is at sea level, which makes Nairobi's climate seem heavenly; I got out as quickly as I could arrange it. So, twenty-seven hours later I was in the Illinois Province of the Chicago Imperium. A long time, you might say, for a great-circle arc of only thirteen thousand kilometers. But I didn't travel great circle and did not go through a customs barrier or an immigration checkpoint. Nor did I use a credit card, even a borrowed one. And I managed to grab seven hours of sleep in Alaska Free State; I hadn't had any sound sleep since leaving EllFive space city two days earlier.

How? Trade secret. I may never need that route again but someone in my line of work will need it. Besides, as my boss says, with all governments everywhere tightening down on everything wherever they can, with their computers and their Public Eyes and ninetynine other sorts of electronic surveillance, there is a moral obligation on each free person to fight back wherever possible-keep underground railways open, keep shades drawn, give misinformation to computers. Computers are literal-minded and stupid; electronic records aren't really records . . . so it is good to be alert to opportunities to foul up the system. If you can't evade a tax, pay a little too much to confuse their computers. Transpose digits. And so on. .

The key to traveling half around a planet without leaving tracks is:

Pay cash. Never credit, never anything that goes into a computer. And a bribe is never a bribe; any such transfer of valuta must save face for the recipient. No matter how lavishly overpaid, civil servants everywhere are convinced that they are horribly underpaid-but all public employees have larceny in their hearts or they wouldn't be feeding at the public trough. These two facts are all you need-but be careful!-a public employee, having no self-respect, needs and demands a show of public respect.

I always pander to this need and the trip had been without incident. (I didn't count the fact that the Nairobi Hilton blew up and burned a few minutes after I took the tube for Mombasa; it would have seemed downright paranoid to think that it had anything to do with me.)

I did get rid of four credit cards and a passport just after I heard about it but I had intended to take that precaution anyhow. If the opposition wanted to cancel me-possible but unlikely-it would be swatting a fly with an ax to destroy a multimillion-crown property and kill or injure hundreds or thousands of others just to get me. Unprofessional.

As may be. Here I was at last in the Imperium, another mission completed with only minor bobbles. I exited at Lincoln Meadows while musing that I had garnered enough brownie points to wheedle the boss out of a few weeks R&R in New Zealand. My family, a seven S-group, was in Christchurch; I had not seen them in months. High time!

But in the meantime I relished the cool clean air and the rustic beauty of Illinois-it was not South Island but it was the next best thing. They say these meadows used to be covered with dingy factories-it seems hard to believe. Today the only building in sight from the station was the Avis livery stable across the street.

At the hitching rail outside the station were two Avis RentaRigs as well as the usual buggies and farm wagons. I was about to pick one of the Avis nags when I recognized a rig just pulling in: a beautiful matched pair of bays hitched to a Lockheed landau. "Uncle Jim! Over here! It's me!"

The coachman touched his whip to the brim of his top hat, then brought his team to a halt so that the landau was at the steps where I waited. He climbed down and took off his hat. "It's good to have you home, Miss Friday."

I gave him a quick hug, which he endured patiently. Uncle Jim Prufit harbored strong notions of propriety. They say he was convicted of advocating papism-some said that he was actually caught barehanded, celebrating mass. Others said nonsense, he was infiltrating for the company and took a fall to protect others. Me, I don't know that much about politics, but I suppose a priest would have formal manners, whether he was a real one or a member of our trade. I could be wrong; I don't think I've ever seen a priest.

As he handed me in, making me feel like a "lady," I asked, "How did you happen to be here?"

"The Master sent me to meet you, miss."

"He did? But I didn't let him know when I would arrive." I tried to think who, on my back track, could have been part of Boss's data net.

"Sometimes I think the boss has a crystal ball."

"It do seem like it, don't it?" Jim clucked to Gog and Magog and we headed for the farm. I settled back and relaxed, listening to the homey, cheerful clomp clomp! of horses' hooves on dirt.

I woke up as Jim turned into our gate and was wide awake by the time he pulled under the porte-cochère. I jumped down without waiting to be a "lady" and turned to thank Jim.

They hit me from both sides.

Dear old Uncle Jim did not warn me. He simply watched while they took me.

II

My own stupid fault! I was taught in basic that no place is ever totally safe and that any place you habitually return to is your top danger spot, the place most likely for booby trap, ambush, stakeout.

But apparently I had learned this only as parrot rote; as an old pro I had ignored it. So it bit me.

This rule is analogous to the fact that the person most likely to murder you is some member of your own family-and that grim statistic is ignored too; it has to be. Live in fear of your own family? Better to be dead!

My worst stupidity was to ignore a loud, clear, specific warning, not just a general principle. How had dear old "Uncle" Jim managed to meet my capsule?-on the right day and almost to the minute. Crystal ball? Boss is smarter than the rest of us but he does not use magic. I may be wrong but I'm positive. If Boss had supernatural powers he would not need the rest of us.

I had not reported my movements to Boss; I didn't even tell him when I left EllFive. This is doctrine; he does not encourage us to check in every time we move, as he knows that a leak can be fatal.

Even I didn't know that I was going to take that particular capsule until I took it. I had ordered breakfast in Hotel Seward's coffee shop, stood up without eating it, dropped some money on the counter-three minutes later I was sealed into an express capsule. So how?

Obviously chopping off that tail at Kenya Beanstalk Station had not eliminated all tails on me. Either there had been a backup tail on the spot or Mr. "Belsen" ("Beaumont," "Bookman," "Buchanan") had been missed at once and replaced quickly. Possibly they had been with me all along or perhaps what had happened to "Belsen" had made them cautious about stepping on my heels. Or last night's sleep may have given them time to catch me.

Which variant was immaterial. Shortly after I climbed into that capsule in Alaska, someone had phoned a message somewhat like this: "Firefly to Dragonfly. Mosquito left here express capsule International Corridor nine minutes ago. Anchorage traffic control shows capsule programmed to sidetrack and open Lincoln Meadows your time eleven-oh-three." Or some such chatter. Some unfriendly had seen me enter that capsule and had phoned ahead; otherwise sweet old Jim would not have been able to meet me. Logic.

Hindsight is wonderful-it shows you how you busted your skull after you've busted it.

But I made them pay for their drinks. If I had been smart, I would have surrendered once I saw that I was hopelessly outnumbered. But I'm not smart; I've already proved that. Better yet, I would have run like hell when Jim told me the boss had sent him . . instead of climbing in and taking a nap, fer Gossake.

I recall killing only one of them.

Possibly two. But why did they insist on doing it the hard way? They could have waited until I was inside and gassed me, or used a sleepy dart, or even a sticky rope. They had to take me alive, that was clear. Didn't they know that a field agent with my training when attacked goes automatically into overdrive? Maybe I'm not the only stupid.

But why waste time by raping me? This whole operation had amateurish touches. No professional group uses either beating or rape before interrogation today; there is no profit in it; any professional is trained to cope with either or both. For rape she (or he-I hear it's worse for males) can either detach the mind and wait for it to be over, or (advanced training) emulate the ancient Chinese adage.

Or, in place of method A or B, or combined with B if the agent's histrionic ability is up to it, the victim can treat rape as an opportunity to gain an edge over her captors. I'm no great shakes as an actress but I try and, while it has never enabled me to turn the tables on unfriendlies, at least once it kept me alive.

This time method C did not affect the outcome but did cause a little healthy dissension. Four of them (my estimate from touch and body odors) had me in one of the upstairs bedrooms. It may have been my own room but I could not be certain as I had been unconscious for a while and was now dressed (solely) in adhesive tape over my eyes. They had me on a mattress on the floor, a gang bang with minor sadism. . . which I ignored, being very busy with method C.

In my mind I called them "Straw Boss" (seemed to be in charge), "Rocks" (they called him that-rocks in his head, probably), "Shorty" (take that either way), and "the other one" as he did not have distinctive characteristics.

I worked on all of them-method acting, of course-reluctant, have to be forced, then gradually your passion overcomes you; you just can't help yourself. Any man will believe that routine; they are suckers for it-but I worked especially hard on Straw Boss as I hoped to achieve the status of teacher's pet or some such. Straw Boss wasn't so bad; methods B and C combined nicely.

But I worked hardest on Rocks because with him it had to be C combined with A; his breath was so foul. He wasn't too clean in other ways, too; it took great effort to ignore it and make my responses flattering to his macho ego.

After he became flaccid he said, "Mac, we're wasting our time. This slut enjoys it."

"So get out of the way and give the kid another chance. He's ready."

"Not yet. I'm going to slap her around, make her take us seriously." He let me have a big one, left side of my face. I yelped.

"Cut that out!" -Straw Boss's voice.

"Who says so? Mac, you're getting too big for your britches."

"I say so." It was a new voice, very loud-amplified-from the sound-system speaker in the ceiling, no doubt. "Rocky, Mac is your squad leader, you know that. Mac, send Rocky to me; I want a word with him."

"Major, I was just trying to help!"

"You heard the man, Rocks," Straw Boss said quietly. "Grab your pants and get moving."

Suddenly the man's weight was no longer on me and his stinking breath was no longer in my face. Happiness is relative.

The voice in the ceiling spoke again: "Mac, is it true that Miss Friday simply enjoys the little ceremony we arranged for her?"

"It's possible, Major," Straw Boss said slowly. "She does act like it."

"How about it, Friday? Is this the way you get your kicks?"

I didn't answer his question. Instead I discussed him and his family in detail, with especial attention to his mother and sister. If I had told him the truth-that Straw Boss would be rather pleasant under other circumstances, that Shorty and the other man did not matter one way or the other, but that Rocks was an utter slob whom I would cancel at the first opportunity-it would have blown method C.

"The same to you, sweetie," the voice answered cheerfully. "I hate to disappoint you but I'm a crèche baby. Not even a wife, much less a mother or a sister. Mac, put the cuffs on her and throw a blanket over her. But don't give her a shot; I'll be talking to her later."

Amateur. My boss would never have alerted a prisoner to expect interrogation.

"Hey, crèche baby!"

"Yes, dear?"

I accused him of a vice not requiring a mother or a sister but anatomically possible-so I am told-for some males. The voice answered, "Every night, hon. It's very soothing."

So mark one up for the Major. I decided that, with training, he could have been a pro. Nevertheless he was a bloody amateur and I didn't respect him. He had wasted one, maybe two, of his ables, caused me unnecessarily to suffer bruises, contusions, and multiple personal indignities-even heartbreaking ones had I been an untrained female-and had wasted two hours or more. If my boss had been doing it, the prisoner would have spilled his/her guts at once and spent those two hours spouting her fullest memoirs into a recorder.

Straw Boss even took the trouble to police me-led me into the bathroom and waited quietly while I peed, without making a production of it-and that was amateurish, too, as a useful technique, of the cumulative sort, in interrogating an amateur (not a pro) is to force him or her to break toilet training. If she has been protected from the harsher things in life or if he suffers from excessive amourpropre-as most males do-it is at least as effective as pain, and potentiates either with pain or with other humiliations.

I don't think Mac knew this. I figured him for basically a decent soul despite his taste for-no, aside from his taste for a bit of rape-a taste common to most males according to the kinseys.

Somebody had put the mattress back on the bed. Mac guided me to it, told me to lie on my back with my arms out. Then he cuffed me to the legs of the bed, using two pairs. They weren't the peaceofficer type, but special ones, velvet-lined-the sort of junk used by idiots for SM games. I wondered who the pervert was? The Major?

Mac made sure that they were secure but not too tight, then gently spread a blanket over me. I would not have been surprised had he kissed me goodnight. But he did not. He left quietly.

Had he kissed me would method C call for returning it in full? Or turning my face and trying to refuse it? A nice question. Method C is based on I-just-can't-help-myself and requires precise judgment as to when and how much enthusiasm to show. If the rapist suspects the victim of faking, she has lost the ploy.

I had just decided, somewhat regretfully, that this hypothetical kiss should have been refused, when I fell asleep.

I was not allowed enough sleep. I was exhausted from all the things that had happened to me and had sunk into deep sleep, soggy with it, when I was roused by a slap. Not Mac. Rocks, of course. Not as hard as he had hit me earlier but totally unnecessary. It seemed to me that he blamed me for whatever disciplining he had received from the Major. . . and I promised myself that, when time came to cancel him, I would do it slowly.

I heard Shorty say, "Mac said not to hit her."

"I didn't hit her. That was just a love tap to wake her up. Shut up and mind your own business. Stand clear and keep your gun on her. On her, you idiot!-not on me."

They took me down into the basement and into one of our own interrogation chambers. Shorty and Rocks left-I think that Shorty left and I know that Rocks did; his stink went away-and an interrogation team took over. I don't know who or how many as not one of them ever said a word. The only voice was the one I thought of as "the Major." It seemed to be coming through a speaker.

"Good morning, Miss Friday."

(Morning? It seemed unlikely.) "Howdy, crèche baby!"

"I'm glad that you are in fine fettle, dear, as this session is likely to prove long and tiring. Even unpleasant. I want to know all about you, love."

"Fire away. What will you have first?"

"Tell me about this trip you just made, every tiny detail. And outline this organization you belong to. I might as well tell you that we already know a great deal about it, so if you lie, I will know it. Not even a little white fib, dear-for I will know it and what happens then I will regret but you will regret it far more."

"Oh, I won't lie to you. Is a recorder running? This will take a long time."

"A recorder is running."

"Okay." For three hours I spilled my guts.

This was according to doctrine. My boss knows that ninetynine out of a hundred will crack under sufficient pain, that almost that percentage will crack under long interrogation combined with nothing more than raw fatigue, but only Buddha Himself can resist certain drugs. Since he does not expect miracles and hates to waste agents, standard doctrine is: "If they grab you, sing!"

So he makes sure that a field operative never knows anything critical. A courier never knows what she is carrying. I know nothing about policy. I don't know my boss's name. I'm not sure whether we are a government agency or an arm of one of the multinationals. I do know where the farm is but so do many other people. . . and it is (was) very well defended. Other places I have visited only via closed authorized power vehicles-an APV took me (for example) to a practice area that may be the far end of the farm. Or not.

"Major, how did you crack this place? It was pretty strongly defended."

"I ask the questions, bright eyes. Let's have that part again about how you were followed out of the Beanstalk capsule."

After a long time of this, when I had told all I knew and was repeating myself, the Major stopped me. "Dear, you tell a very convincing story and I don't believe more than every third word. Let's start procedure B."

Somebody grabbed my left arm and a needle went in. Babble juice! I hoped these frimping amateurs weren't as clumsy with it as they were in some other ways; you can get very dead in a hurry with an overdose. "Major! I had better sit down!"

"Put her in a chair." Somebody did so.

For the next thousand years I did my best to tell exactly the same story no matter how bleary I felt. At some point I fell off the chair. They didn't stick me back onto it but stretched me on the cold concrete instead. I went on babbling.

Some silly time later I was given some other shot. It made my teeth ache and my eyeballs felt hot but it snapped me awake. "Miss Friday!"

"Yes, sir?"

"Are you awake now?"

"I think so."

"My dear, I think you have been most carefully indoctrinated under hypnosis to tell the same story under drugs that you tell so well without drugs. That's too bad as I must now use another method. Can you stand up?"

"I think so. I can try."

"Stand her up. Don't let her fall." Someone-some two-did so. I wasn't steady but they held me. "Start procedure C, item five."

Someone stomped a heavy boot on my bare toes. I screamed.

Look, you! If you are ever questioned under pain, do scream. The Iron Man routine just makes them worse and it worse. Take it from one who's been there. Scream your head off and crack as fast as possible.

I am not going to give details of what happened during the following endless time. If you have any imagination, it would nauseate you, and to tell it makes me want to throw up. I did, several times. I passed out, too, but they kept reviving me and the voice kept on asking questions.

Apparently the time came when reviving didn't work, for the next thing I knew I was back in bed-the same bed, I suppose-and again handcuffed to it. I hurt all over.

That voice again, right above my head. "Miss Friday."

"What the hell do you want?"

"Nothing. If it's any consolation to you, dear girl, you are the only subject I have ever questioned that I could not get the truth out of, eventually."

"Go soothe yourself!"

"Good night, dear."

The bloody amateur! Every word I had said to him was the naked truth.

III

Someone came in and gave me another hypodermic shot. Presently the pain went away and I slept.

I think I slept a long time. I either had confused dreams or halfawake periods or both. Some of it had to be dreams-dogs do talk, many of them, but they don't lecture on the rights of living artifacts, do they? Sounds of a ruckus and people running up and down may have been real. But it felt like a nightmare because I tried to get out of bed and discovered that I couldn't lift my head, much less get up and join the fun.

There came a time when I decided that I really was awake, because cuffs no longer bothered my wrists and sticky tape was no longer across my eyes. But I didn't jump up or even open my eyes. I knew that the first few seconds after I opened my eyes might be the best and possibly the only chance I would have to escape.

I twitched muscles without moving. Everything seemed to be under control although I was more than a little sore here and there and several other places. Clothes? Forget them-not only did I have no idea where my clothes might be but also there is no time to stop to dress when you are running for your life.

Now to plan-There didn't seem to be anyone in this room; was anyone on this floor? Hold still and listen, If and when I was fairly sure I was alone on this floor, get noiselessly out of bed and up the stairs like a mouse, on past the third floor into the attic, and hide.

Wait for dark. Out an attic gable, down the roof and the back wall and into the woods. If I reached the woods back of the house, they would never catch me . . . but until I did, I would be an easy target.

The chances? One in nine. Perhaps one in seven if I got really cranked up. The weakest spot in a poor plan was the high probability of being spotted before I was clear of the house . . . because, if I was spotted-no, when I was spotted-I would not only have to kill but I would have to be utterly quiet in doing so-

-because the alternative was to wait until they terminated me which would be shortly after "the Major" decided that there was no more to be squeezed out of me. Clumsy as these goons were, they were not so stupid-or the Major was not so stupid-as to let a witness who has been tortured and raped stay alive.

I stretched my ears in all directions and listened.

"Nothing was stirring, not even a mouse." No point in waiting; every moment I delayed brought that much closer the time when someone would be stirring. I opened my eyes.

"Awake, I see. Good."

"Boss! Where am I?"

"What a time-ridden cliché. Friday, you can do better than that. Back up and try again."

I looked around me. A bedroom, possibly a hospital room. No windows. No-glare lighting. A characteristic gravelike silence enhanced rather than broken by the softest of ventilation sighing.

I looked back at Boss. He was a welcome sight. Same old unstyiish eye patch-why wouldn't he take time to have that eye regenerated? His canes were leaning against a table, in reach. He was wearing his usual sloppy raw-silk suit, a cut that looked like badly tailored pajamas. I was awfully glad to see him.

"I still want to know where I am. And how. And why. Somewhere underground, surely-but where?"

"Underground, surely, quite a few meters. 'Where' you will be told when you need to know, or at least how to get to and from. That was the shortcoming of our farm-a pleasant place but too many people knew its location. 'Why' is obvious. 'How' can wait. Report."

"Boss, you are the most exasperating man I have ever met."

"Long practice. Report."

"And your father met your mother at a swing ding. And he didn't take off his hat."

"They met at a Baptist Sunday-school picnic and both of them believed in the Tooth Fairy. Report."

"Dirty ears. Snot. The trip to EllFive was without incident. I found Mr. Mortenson and delivered to him the contents of my trick bellybutton. Routine was interrupted by a most unusual factor: The space city was experiencing an epidemic of respiratory disorder, etiology unknown, and I contracted it. Mr. Mortenson was most kind; he kept me at home and his wives nursed me with great skill and tender loving care. Boss, I want them compensated."

"Noted. Continue."

"I was out of my silly head most of the time. That is why I ran a week behind schedule. But once I felt like traveling I was able to leave at once as Mr. Mortenson told me that I was already carrying the item he had for you. How, Boss? My navel pouch again?"

"Yes and no."

"That's a hell of an answer!"

"Your artificial pochette was used."

"I thought so. Despite the fact that there aren't supposed to be any nerve endings there, I can feel something-pressure, maybe-when it's loaded."

I pressed on my belly around my navel and tightened my belly muscles. "Hey, it's empty! You unloaded it?"

"No. Our antagonists did so."

"Then I failed! Oh, God, Boss, this is awful."

"No," he said gently, "you succeeded. In the face of great danger and monumental obstacles you succeeded perfectly."

"I did?" (Ever had the Victoria Cross pinned on you?) "Boss, cut the double talk and draw me a diagram."

"I will."

But maybe I had better draw a diagram first. I have a 'possum pouch, created by plastic surgery, behind my bellybutton. It isn't large but you can crowd one whale of a lot of microfilm into a space of about one cubic centimeter. You can't see it because the sphincter valve that serves it holds the navel scar closed. My bellybutton looks normal. Unbiased judges tell me that I have a pretty belly and a sightly navel . . . which, in some important ways, is better than having a pretty face, which I don't have.

The sphincter is a synthetic silicone elastomer that holds the navel tight at all times, even if I am unconscious. This is necessary as there are no nerves there to give voluntary control of contraction and relaxation, such as is possible with the anal, vaginal, and-for some people-throat sphincters. To load the pouch use a dab of K-Y jelly or other nonpetroleum lubricant, and push it in by thumb-no sharp corners, please! To unload it I take the fingers of both hands and pull the artificial sphincter open as much as I can, then press hard with my abdominal muscles-and it pops right out.

The art of smuggling things in the human body has a long history. The classic ways are in the mouth, in the nasal sinuses, in the stomach, the gut, the rectum, vagina, bladder, eye socket of a missing eye, ear canal, and exotic and not very useful methods using tattoos sometimes covered with hair.

Every one of the classic ways is known to every customs officer and every special agent public or private the world round, Luna, space cities, other planets, and anywhere men have reached. So forget them. The only classic method that can still beat a pro is the Purloined Letter. But the Purloined Letter is high art indeed and, even when used perfectly, it should be planted on an innocent who can't give it away under drugs.

Take a look at the next thousand bellybuttons you encounter socially. Now that my pouch has been compromised, it is possible that one or two will conceal surgically emplaced hideaways like mine. You can expect a spate of them soon, then no more will be emplaced as any novelty in smuggling becomes useless once the word gets around. In the meantime customs officers are going to be poking rude fingers into bellybuttons. I hope a lot of those officers get poked in the eye by angry victims-navels tend to be sensitive and ticklish.

"Friday, the weak point of that pochette in you has always been that any skillful interrogation-"

"They were clumsy."

"-or rough interrogation using drugs could force you to mention its existence."

"Must have been after they shot me with babble juice. I don't recall mentioning it."

"Probably. Or word may have come to them through other channels, as several people know of it-you, me, three nurses, two surgeons, one anesthesiologist, possibly others. Too many. No matter how our antagonists knew, they did remove what you were carrying there. But don't look glum; what they received was a very long list reduced to microfilm of all the restaurants listed in a 1928 telephone book of the former city of New York. No doubt there is a computer somewhere working on this list right now, attempting to break the code concealed in it . . . which will take a long time as there is no code concealed in it. A dummy load. Sense-free."

"And for this I have to chase all the way to EllFive, eat scummy food, get sick on the Beanstalk, and be buggered about by brutal bastards!"

"Sorry about the last, Friday. But do you think I would risk the life of my most skillful agent on a useless mission?"

(See why I work for the arrogant bastard? Flattery will get you anywhere.) "Sorry, sir."

"Check your appendectomy scar."

"Huh?" I reached under the sheet and felt it, then flipped the sheet back and looked at it. "What the hell?"

"The incision was less than two centimeters and straight through the scar; no muscle tissue was disturbed. The item was withdrawn about twenty-four hours ago by reopening the same incision. With the accelerated repair methods that were used on you I am told that in two more days you will not be able to find the new scar in the old. But I am very glad that the Mortensons took such good care of you as I am sure that the artificial symptoms induced in you to cover what had to be done to you were not pleasant. By the way, there really is a catarrhal-fever epidemic there-fortuitous window dressing."

Boss paused. I stubbornly refused to ask him what I was carrying-he would not have told me anyhow. Shortly he added, "You were telling me about your trip home."

"The trip down was without incident. Boss, the next time you send me into space I want to go first-class, in an antigrav ship. Not via that silly Indian rope trick."

"Engineering analysis shows that a skyhook is safer than any ship. The Quito cable was lost through sabotage, not materiel failure."

"Stingy."

"I don't intend to bind the mouths of the kine. You may use antigray from here on if circumstances and timing permit. This time there were reasons to use the Kenya Beanstalk."

"Maybe so, but someone tailed me out of the Beanstalk capsule. As soon as we were alone, I killed him."

I paused. Someday, someday, I am going to cause his face to register surprise. I retackled the subject diagonally:

"Boss, I need a refresher course, with some careful reorientation."

"Really? To what end?"

"My kill reflex is too fast. I don't discriminate. That bloke hadn't done anything to rate killing. Surely, he was tailing me. But I should either have shaken him, there or in Nairobi, or, at most, knocked him cold and placed him on ice while I went elsewhere."

"We'll discuss your possible need later. Continue."

I told him about the Public Eye and "Belsen's" quadruple identity and how I had sent them to the four winds, then I outlined my trip home. He checked me. "You did not mention the destruction of that hotel in Nairobi."

"Huh? But, Boss, that had nothing to do with me. I was halfway to Mombasa."

"My dear Friday, you are too modest. A large number of people and a huge amount of money have gone into trying to keep you from completing your mission, including a last-ditch attempt at our former farm. You may assume, as least hypothesis, that the bombing of the Hilton had as its sole purpose killing you."

"Hmm. Boss, apparently you knew that it would be this rough. Couldn't you have warned me?"

"Would you have been more alert, more resolute, had I filled your mind with vague warnings of unknown dangers? Woman, you made no mistakes."

"The hell I didn't! Uncle Jim met my capsule when he should not have known the time I would arrive; that should have set off every alarm in my head. The instant I laid eyes on him I should have dived back down the hole and taken any capsule anywhere."

"Whereupon it would have become extremely difficult for us to achieve rendezvous, which would have aborted your mission as thoroughly as losing what you carried. My child, if affairs had gone smoothly, Jim would have met you at my behest; you underestimate my intelligence net as well as the effort we put into trying to watch over you. But I did not send Jim to get you because at that moment I was running. Hobbling, to be precise. Hurrying. Trying to escape. I assume that Jim took the ETA message himself-from our man, or that of our antagonists, or possibly from both."

"Boss, if I had known it at the time, I would have fed Jim to his horses. I was fond of him. When the time comes, I want to cancel him myself. He's mine."

"Friday, in our profession it is undesirable to hold grudges."

"I don't hold many but Uncle Jim is special. And there is another case I want to handle myself. But I'll argue with you later. Say, is it true that Uncle Jim used to be a papist priest?"

Boss almost looked surprised. "Where did you hear that nonsense?"

"Around and about. Gossip."

"'Human, All Too Human.' Gossip is a vice. Let me settle it. Prufit was a con man. I met him in prison, where he did something for me, important enough that I made a place for him in our organization. My mistake. My inexcusable mistake, as a con man never stops being a con man; he can't. But I suffered from a will to believe, a defect of character that I thought I had rooted out. I was mistaken. Continue, please."

I told Boss how they had grabbed me. "Five of them, I think. Possibly only four."

"Six, I believe. Descriptions."

"None, Boss, I was too busy. Well, one. I had one sharp look at him just as I killed him. About a hundred and seventy-five tall, weight around seventy-five or -six. Age near thirty-five. Blondish, smoothshaven. Slavic. But he was the only one my eye photographed. Because he held still. Involuntarily. As his neck snapped."

"You never do." "Was the other one you killed blond or brunet?"

"'Belsen'? Brunet."

"No, at the farm. Never mind. You killed two and injured three before they piled enough bodies on you to hold you down by sheer weight. A credit to your instructor, let me add. In escaping, we had not been able to thin them down enough to keep them from taking you. . . but, in my opinion, you won the battle in which we recaptured you by your having earlier taken out so many of their effectives. Even though you were chained up and unconscious at the time, you won the final fracas. Go on, please."

"That about wraps it up, Boss. A gang rape next, followed by interrogation, direct, then under drugs, then under pain."

"I'm sorry about the rape, Friday. The usual bonuses. You will find them enhanced as I judge the circumstances to have been unusually offensive."

"Oh, not that bad. I'm hardly a twittering virgin. I can recall social occasions that were almost as unpleasant. Except one man. I don't know his face but I can identify him. I want him! I want him as badly as I want Uncle Jim. Worse, maybe, as I want to punish him a bit before I let him die."

"I can only repeat what I said earlier. For us, personal grudges are a mistake. They reduce survival probability."

"I'll risk it for this bucko. Boss, I don't hold the rape qua rape against him; they were ordered to rape me under the silly theory that it would soften me up for interrogation. But the scum should bathe and he should have his teeth fixed and he should brush them and use a mouthwash. And somebody must tell him that it is not polite to slap a woman with whom he is copulated. I don't know his face but I know his voice and his odor and his build and his nickname. Rocks or Rocky."

"Jeremy Rockford."

"Huh? You know him? Where is he?"

"I once knew him and I recently had one clear look at him, enough to be sure. Requiescat in pace."

"Really? Oh, hell. I hope he didn't die quietly."

"He did not die quietly. Friday, I have not told you all that I know-"

"-because I wanted your report first. Their assault on the farm succeeded because Jim Prufit had cut all power just before they hit us. This left us nothing but hand weapons for the few who wear arms at the farm, only bare hands for most of us. I ordered evacuation and most of us escaped through a tunnel prepared and concealed when the house was rebuilt. I am sorry and proud to say that three of our best, the three who were armed when we were hit, elected to play Horatius at the bridge. I know that they died as I kept the tunnel open until I could tell by the sounds that it had been entered by the raiders. Then I blasted it.

"It took some hours to round up enough people and to mount our counterattack, especially in arranging for enough authorized power vehicles. While we conceivably could have attacked on foot, we had to have at least one APV as ambulance for you."

"How did you know I was alive?"

"The same way I knew that the escape tunnel had been entered and not by our rear guard. Remote pickups. Friday, everything that was done to you and by you, everything you said and was said to you, was monitored and recorded. I was unable to monitor in person-busy preparing the counterattack-but the essential parts were played for me as time permitted. Let me add that I am proud of you.

"By knowing which pickups recorded what, we knew where they were holding you, the fact that you were cuffed, how many were in the house, where they were, when they settled down, and who stayed awake. By relay to the command APV I knew the situation in the house right to the moment of attack. We hit-They hit, I mean-our people hit. I don't lead attacks hobbling on these two sticks; I wield the baton. Our people hit the house, were inside, the designated four picked you up-one armed only with a bolt cutter-and all were out in three minutes eleven seconds. Then we set fire to it."

"Boss! Your lovely farmhouse?"

"When a ship is sinking, one does not worry about the diningroom linens. We can never use the farm again. Burning the house destroyed many awkward records and many secret and quasi-secret items of equipment. But, most compelling, burning the house gave us a quick cleanup of the parties who had compromised its secrets.

Our cordon was in place before we used incendiaries, then each one was shot as he attempted to come out.

"That was when I saw your acquaintance Jeremy Rockford. He was burned in the leg as he came out the east door. He stumbled back in, changed his mind and tried again to escape, fell and was trapped. From the sounds he made I can assure you that he did not die quietly."

"Ugh. Boss, when I said that I wanted to punish him before I killed him, I didn't mean anything as horrible as burning him to death."

"Had he not behaved like a horse running back into a burning barn, he would have died as the others did . . . quickly, from laser beam. Shot on sight, for we took no prisoners."

"Not even for interrogation?"

"Not correct doctrine, I so stipulate. But, Friday my dear, you are unaware of the emotional atmosphere. All had heard the tapes, at least of the rape and of your third interrogation, the torture. Our lads and lassies would not have taken prisoners even if I had so ordered. But I did not attempt to. I want you to know that you are held in high esteem by your colleagues. Including the many who have never met you and whom you are unlikely ever to meet."

Boss reached for his canes, struggled to his feet. "I'm seven minutes over the time your physician told me I could visit. We'll talk tomorrow. You are to rest now. A nurse will be in to put you to sleep. Sleep and get well."

I had a few minutes to myself-I spent them in a warm glow. "High esteem." When you have never belonged and can never really belong, words like that mean everything. They warmed me so much that I didn't mind not being human.

IV

Someday I'm going to win an argument with Boss. But don't hold your breath.

There were days when I did not lose arguments with him-the days he did not visit me.

It started with a difference of opinion over how long I was going to have to remain in therapy. I felt ready to go home or back to duty, either one, after four days. While I didn't want to get into a dockside fight just yet, I could take light duty-or a trip to New Zealand, my first choice. All my hurts were repairing.

They hadn't been all that much: lots of burns, four broken ribs, simple fractures left tibia and fibula, multiple compound fractures of the bones of my right foot and three toes of my left, a hairline skull fracture without complications, and (messy but least disabling) somebody had sawed off my right nipple.

The last item and the burns and the broken toes were all that I recalled; the others must have happened while I was distracted by other matters.

Boss said, "Friday, you know that it will take at least six weeks to regenerate that missing nipple."

"But plastic surgery for a simple cosmetic job would heal in a week. Dr. Krasny told me so."

"Young woman, when anyone in this organization is maimed in line of duty, she will be restored as perfectly as therapeutic art can achieve. In addition to that our permanent policy, in your case there is another reason, compelling and sufficient. We each have a moral obligation to conserve and preserve beauty in this world; there is none to waste. You have an unusually comely body-damage to it is deplorable. It must be repaired."

"Cosmetic surgery is all right, I said so. But I don't expect to have milk in these jugs. And anybody in bed with me won't care."

"Friday, you may have convinced yourself that you will never have need to lactate. But esthetically a functional breast is very different from a surgery-shaped imitation. That hypothetical bedmate might not know . . . but you would know and I would know. No, my dear. You will be restored to your former perfection."

"Hmm! When are you going to get that eye regenerated?"

"Don't be rude, child. In my case, no esthetic issue obtains."

So I got my tit back as good as ever or maybe better. The next argument was over the retraining I felt I needed to correct my hairtrigger kill reflex. When I brought up the matter again, Boss looked as if he had just bitten into something nasty. "Friday, I do not recall that you have ever made a kill that turned out to be a mistake. Have you made any kills of which I am unaware?"

"No, no," I said hastily. "I never killed anybody until I went to work for you and I haven't made any that I didn't report to you."

"In that case all of your killings have been in self-defense."

"All but that 'Belsen' character. That wasn't self-defense; he never laid a finger on me."

"Beaumont. At least that was the name he usually used. Self-defense sometimes must take the form of 'Do unto others what they would do unto you but do it first.' De Camp, I believe. Or some other of the twentieth-century school of pessimistic philosophers. I'll call up Beaumont's dossier so that you may see for yourself that he belonged on everyone's better-dead list."

"Don't bother. Once I looked into his pouch, I knew that he wasn't following me to kiss me. But that was afterward."

Boss took several seconds to answer, far beyond his wont. "Friday, do you want to change tracks and become a hatchet man?"

My chin dropped and my eyes widened. That was all the answer I made.

"I didn't intend to frighten you off the nest," Boss said dryly. "You will have deduced that this organization includes assassins. I don't want to lose you as a courier; you are my best. But we always need skilled assassins, as their attrition rate is high. However, there is this major difference between a courier and an assassin: A courier kills only in self-defense and often by reflex . . . and, I concede, always with some possibility of error . . . as not all couriers have your supreme talent for instantly integrating all factors and reaching a necessary conclusion."

"Huh!"

"You heard me correctly. Friday, one of your weaknesses is that you lack appropriate conceit. An honorable hatchet man does not kill by reflex; he kills by planned intent. If the plan goes so far wrong that he needs to use self-defense, he is almost certain to become a statistic. In his planned killings, he always knows why and agrees with the necessity . . . or I won't send him out."

(Planned killing? Murder, by definition. Get up in the morning, eat a hearty breakfast, then keep rendezvous with your victim, cut him down in cold blood? Eat dinner and sleep soundly?) "Boss, I don't think it is my sort of work."

"I'm not sure that you have the temperament for it. But, for the nonce, keep an open mind. I am not sanguine about the possibility of slowing down your defense reflex. Moreover I can assure you that, if we attempt to retrain you in the way that you ask, I will not again use you as a courier. No. Risking your life is your business when on your own time. But your missions are always critical; I won't use a courier whose fine edge has been deliberately blunted."

Boss did not convince me but he made me unsure of myself. When I told him again that I was not interested in becoming a hatchet man, he did not appear to listen-just said something about getting me something to read.

I expected it-whatever-to show up on the room's terminal. Instead, about twenty minutes after he left me, a youngster-well, younger than I am-showed up with a book, a bound book with paper pages. It had a serial number on it and was stamped "EYES ONLY" and "Need-to-Know Required" and "Top Secret SPECIAL BLUE Clearance."

I looked at it, as anxious to handle it as a snake. "Is this for me? I think there has been a mistake."

"The Old Man does not make mistakes. Just sign the receipt."

I made him wait while I read the fine print. "This bit about 'never out of my sight.' I sleep now and then."

"Call Archives, ask for the classified documents clerk-that's me-and I'll be here on the bounce. But try not to go to sleep until I get here. Try hard."

"Okay." I signed the receipt, looked up and found him staring with bright-eyed interest. "What are you staring at?"

"Uh-Miss Friday, you're pretty."

I never know what to say to that sort of thing, since I'm not. I shape up all right, surely-but I was fully clothed. "How did you know my name?"

"Why, everybody knows who you are. You know. Two weeks ago. At the farm. You were there."

"Oh. Yes, I was there. But I don't remember it."

"I sure do!" His eyes were shining. "It's the only time I've had a chance to be part of a combat operation. I'm glad I had a piece of it!"

(What do you do?)

I took his hand, pulled him closer to me, took his face in both my hands, kissed him carefully, about halfway between warm-sisterly and let's-do-it! Maybe protocol called for something stronger but he was on duty and I was still on the disabled list-not fair to make implied promises that can't be kept, especially to youngsters with stars in their eyes.

"Thank you for rescuing me," I said to him soberly before letting go of his cheeks.

The dear thing blushed. But he seemed very pleased.

I stayed up so late reading that book that the night nurse scolded me. However, nurses need something to scold about now and then. I'm not going to quote from the incredible document. . . but listen to these subjects:

Title first: The Only Deadly Weapon. Then—
Assassination as a Fine Art
Assassination as a Political Tool
Assassination for Profit
Assassins Who Changed History
The Society for Creative Euthanasia
The Canons of the Professional Assassins Guild
Amateur Assassins: Should They Be Exterminated?
Honorable Hatchet Men-Some Case Histories
"Extreme Prejudice"-"Wet Work"-Are Euphemisms Necessary?
Seminar Working Papers: Techniques & Tools

Whew! There was no good reason for my reading all of it. But I did. It had an unholy fascination. Dirty.

I resolved never to mention the possibility of changing tracks and not to bring up retraining again. Let Boss bring it up himself if he wanted to discuss it. I punched the terminal, got Archives, and stated that I needed the classified documents clerk to accept custody of classified item number such-and-such and please bring my receipt. "Right away, Miss Friday," a woman answered.

Notoriety-I waited with considerable unease for that youngster to show up. I am ashamed to say that this poisonous book had had a most unfortunate effect on me. It was the middle of the night, early morning; the place was dead quiet-and if the dear thing laid a hand on me, I was awfully likely to forget that I was technically an invalid. I needed a chastity girdle with a big padlock.

But it was not he; the sweet youngster had gone off duty. The person who showed up with my receipt was the older woman who had answered me on the terminal. I felt both relief and disappointment-and chagrin that I felt disappointed. Does convalescence make everybody irresponsibly horny? Do hospitals have a discipline problem? I have not been ill often enough to know.

The night clerk swapped my receipt for the book, then surprised me with: "Don't I get a kiss, too?"

"Oh! Were you there?"

"Any warm body, dear; we were awfully short of effectives that night. I'm not the world's greatest but I had basic training like anyone else. Yes, I was there. Wouldn't have missed it."

I said, "Thank you for rescuing me," and kissed her. I tried to make this simply a symbol, but she took charge and controlled what sort of a buss it would be. Rough and rugged, namely. She was telling me clearer than words that anytime I wanted to work the other side of the street, she would be waiting.

What do you do? There seem to be human situations for which there are no established protocols. I had just acknowledged that she had risked her life to save mine-precisely that, as that rescue raid was not the piece of cake that Boss's account made it appear to be. Boss's habitual understatement is such that he would describe the total destruction of Seattle as "a seismic disturbance." Having thanked her for my life how could I snub her?

I could not. I let my half of the kiss answer her wordless message-with my fingers crossed that I would never have to keep the implied promise.

Presently she broke the kiss but remained holding on to me. "Dearie," she said, "want to know something? Do you remember how you told off that slob they called the Major?"

"I remember."

"There is a bootleg piece of tape floating around of that one sequence. What you said to him and how you said it is highly admired by one and all. Especially me."

"That's interesting. Are you the little gremlin who copied that piece of tape?"

"Why, how could you think such a thing?" She grinned. "Do you mind?"

I thought it over for all of three milliseconds. "No. If the people who rescued me enjoy hearing what I told that bastard, I don't mind their listening to it. But I don't talk that way ordinarily."

"Nobody thinks you do." She gave me a quick peck. "But you did so when it was needed and you made every woman in the company proud of you. And our men, too."

She didn't seem disposed to let go of me but the night nurse showed up then and told me firmly to go to bed and she was going to give me a sleepytime shot-I made only the usual formal protest. The clerk said, "Hi, Goldie. Night. Night, dear." She left.

Goldie (not her name-bottle blonde) said, "Want it in your arm? Or in your leg? Don't mind Anna; she's harmless."

"She's all right." It occurred to me that Goldie probably could monitor both sight and sound. Probably? Certainly! "Were you there? At the farm? When the house was burned?"

"Not while the house was burning. I was in an APV, taking you here as fast as we could float it. You were a sad sight, Miss Friday."

"I'll bet I was. Thanks. Goldie? Will you kiss me goodnight?"

Her kiss was warm and undemanding.

I found out later that she was one of the four who made the run upstairs to grab me back-one man carrying big bolt cutters, two armed and firing. . . and Goldie carrying unassisted a stretcher basket. But she never mentioned it, then or later.

I remember that convalescence as the first time in my life-except for vacations in Christchurch-when I was quietly, warmly happy, every day, every night. Why? Because I belonged!

Of course, as anyone could guess from this account, I had passed years earlier. I no longer carried an ID with a big "LA" (or even "AP") printed across it. I could walk into a washroom and not be told to use the end stall. But a phony ID and a fake family tree do not keep you warm; they just keep you from being hassled and discriminated against. You are still aware that there isn't any nation anywhere that considers your sort fit for citizenship and there are lots of places that would deport you or even kill you-or sell you-if your coverup ever slipped.

An artificial person misses not having a family tree much more than you might think. Where were you born? Well, I wasn't born, exactly; I was designed in Tri-University Life Engineering Laboratory, Detroit. Oh, really? My inception was formulated by Mendelian Associates, Zurich. Wonderful small talk, that! You'll never hear it; it does not stand up well against ancestors on the Mayflower or in the Domesday Book. My records (or one set) show that I was "born" in Seattle, a destroyed city being a swell place for missing records. A great place to lose your next of kin, too.

Since I was never in Seattle I have studied very carefully all the records and pictures I could find; an honest-to-goodness native of Seattle can't trip me. I think. Or not yet.

But what they gave me while I was recovering from that silly rape and the not-so-funny interrogation was not phony at all and I did not have to worry about keeping my lies straight. Not just Goldie and Anna and the youngster (Terence) but over two dozen more before Dr. Krasny discharged me. Those were just the ones I came into contact with. There were more on that raid; I don't know how many. Boss's standing doctrine kept members of his organization from meeting each other save when their duties necessarily brought them together. Just as he firmly snubbed questions. You cannot let slip secrets you do not know, and you cannot betray a person whose very existence is unknown to you.

But Boss did not have rules just for the sake of rules. Once having met a colleague through duty one could continue the contact socially. Boss did not encourage such fraternizing but he was no fool and did not try to forbid it. In consequence Anna often called on me in the late evening just before she went on duty.

She never did try to collect her pound of flesh. There wasn't much opportunity but we could have found one if we had tried. I didn't try to discourage her-hell, no; if she had ever presented the bill for collection, I would not only have paid cheerfully but would have tried to convince her that it was my idea in the first place.

But she didn't. I think she was like the sensitive (and fairly rare) male who never paws a woman when she doesn't want to be pawed-he can sense it and doesn't start.

One evening shortly before my discharge I was feeling especially happy-I had acquired two new friends that day; "kissing friends," persons who had fought in the raid that saved me-and I tried to explain to Anna why it meant so much to me and found that I was starting to tell her how I was not quite what I seemed to be.

She stopped me. "Friday dear, listen to your big sister."

"Huh? Did I goof?"

"Maybe you were about to. 'Member the night we met, you returned through me a classified document? I have supreme top-secret clearance awarded to me by Mr. Two-Canes years back. That book you returned is where I can get at it anytime. But I have never opened it and never will. The cover says 'Need to Know' and I have never been told that I have need to know. You've read it but I don't know even the title or the subject-just its number.

"Personnel matters are like that. There used to be an elite military outfit, a foreign legion, that boasted that a legionnaire had no history before the day of his enlistment. Mr. Two-Canes wants us to be like that. For example, if we were to recruit a living artifact, an artificial person, the personnel clerk would know it. I know, as I used to be personnel clerk. Records to forge, possibly some plastic surgery needed, in some cases laboratory identifications to excise and then regenerate the area. .

"When we got through with him, he would never again have to worry about a tap on the shoulder or being elbowed out of a queue. He could even marry and have children without worrying that someday it might cause trouble for his kids. He wouldn't have to worry about me, either, as I have a trained forgettery. Now, dear, I don't know what you had on your mind. But, if it is something you don't ordinarily tell people, don't tell me. Or you'll hate yourself in the morning."

"No, I wouldn't!"

"All right. If you still want to tell me a week from now, I'll listen. A deal?"

Anna was right; a week later I felt no need to tell her. I'm 99 percent certain that she knew. Either way, it's swell to be loved for yourself alone, by somebody who doesn't think that APs are monsters, subhuman.

I don't know that any of the rest of my loving friends knew or guessed. (I don't mean Boss; he knew, of course. But he wasn't a friend; he was Boss.) It did not matter if my new friends learned that I wasn't human; because I had come to realize that they either didn't care or wouldn't care. All that mattered to them was whether or not you were part of Boss's outfit.

One evening Boss showed up, tapping his canes and whuffling, with Goldie trailing him. He settled heavily into the visitor's chair, said to Goldie, "I won't need you, nurse. Thank you"-then to me, "Take off your clothes."

From any other man that would be either offensive or welcome, depending. From Boss it merely meant that he wanted my clothes off. Goldie took it that way, too, as she simply nodded and left-and Goldie is the sort of professional who would buck Siva the Destroyer if He attempted to interfere with one of her patients.

I took my clothes off quickly and waited. He looked me up and down. "They again match."

"Seems so to me."

"Dr. Krasny says that he ran a test for lactation function. Positive."

"Yes. He pulled some stunt with my hormone balance and both of them leaked a little. Felt funny. Then he rebalanced and I dried up.

Boss grunted. "Turn around. Show me the sole of your right foot. Now your left. Enough. Burn scars seem to be gone."

"All that I can see. Doctor tells me the others have regenerated, too. The itching has stopped, so they must be."

"Put on your clothes. Dr. Krasny tells me that you are well."

"If I were any weller, you would have to bleed me."

"Well is an absolute; it has no comparative."

"Okay, I'm wellest."

"Impudence. Tomorrow morning you leave for refresher training. Be packed and ready by oh-nine hundred."

"Since I arrived without even a happy smile, packing will take me eleven seconds. But I need a new ID, a new passport, a new credit card, and quite a bit of cash-"

"All of which will be delivered to you before oh-nine hundred."

"-because I'm not going for a refresher; I'm going to New Zealand. Boss, I've told you and told you. I'm overdue for R and R, and I figure that I rate some paid sick leave to compensate for time I've been laid up. You're a slave driver."

"Friday, how many years will it take you to learn that when I thwart one of your whims, I always have your welfare in mind as well as the efficiency of the organization?"

"Hully gee, Great White Father. I abase myself. And I'll send you a picture postcard from Wellington."

"Of a pretty Maori, please; I've seen a geyser. Your refresher course will be tailored to fit your needs and you will decide when it is complete. Although you are 'wellest,' you need physical training of carefully increasing difficulty to get you back into that superb pitch of muscle tone and wind and reflex that is your birthright."

"'Birthright.' Don't make jokes, Boss; you have no talent for it. 'My mother was a test tube; my father was a knife.'"

"You are being foolishly selfconscious over an impediment that was removed years ago."

"Am I? The courts say I can't be a citizen; the churches say I don't have a soul. I'm not 'man born of woman,' at least not in the eyes of the law."

"'The law is an ass.' The records concerning your origin have been removed from the production laboratory's files, and a dummy set concerning an enhanced male AP was substituted."

"You never told me that!"

"Until you displayed this neurotic weakness, I saw no need. But a deception of that nature should be made so airtight that it will utterly displace the truth. And so it has. If you attempted, tomorrow, to claim your true lineage, you would not be able to get any authority anywhere to agree with you. You may tell anyone; it doesn't matter. But, my dear, why are you defensive? You are not only as human as Mother Eve, you are an enhanced human, as near perfect as your designers could manage. Why do you think I went out of my way to recruit you when you had no experience and no conscious interest in this profession? Why did I spend a small fortune educating and training you? Because I knew. I waited some years to be sure that you were indeed developing as your architects intended . . . then almost lost you when you suddenly dived off the map." He made a grimace that I think means a smile. "You gave me trouble, girl. Now about your training. Are you willing to listen?"

"Yes, sir." (I didn't try to tell him about the laboratory crèche; human people think all crèches are like those they've seen. I didn't tell him about the plastic spoon that was all I had to eat with until I was ten because I didn't want to tell how, the first time I tried to use a fork, I stabbed my lip and made it bleed and they laughed at me. It isn't any one thing; it's a million little things that are the difference between being reared as a human child and being raised as an animal.)

"You'll be taking a barehands combat refresher but you are to work out only with your instructor; there are to be no blemishes on you when you visit your family in Christchurch. You will receive advanced training in hand weapons, including some you may never have heard of. If you change tracks, you will need this."

"Boss, I am not going to become an assassin!"

"You need it anyhow. There are times when a courier can carry weapons and she must have every edge possible. Friday, don't despise assassins indiscriminately. As with any tool, merit or demerit lies in how it is used. The decline and fall of the former United States of North America derived in part from assassinations. But only in small part as the killings had no pattern and were pointless. What can you tell me of the Prussian-Russian War?"

"Not much. Mainly that the Prussians got their hides nailed to the barn when the smart money figured them for winners."

"Suppose I tell you that twelve people won that war-seven men, five women-and that the heaviest weapon used was a six-millimeter pistol."

"I don't think you have ever lied to me. Flow?"

"Friday, brainpower is the scarcest commodity and the only one of real value. Any human organization can be rendered useless, impotent, a danger to itself, by selectively removing its best minds while carefully leaving the stupid ones in place. It took only a few careful 'accidents' to ruin utterly the great Prussian military machine and turn it into a blundering mob. But this did not show until the fighting was well under way, because stupid fools look just as good as military geniuses until the fighting starts."

"Only a dozen people-Boss? Did we do that job?"

"You know that is the sort of question I discourage. We did not. It was a contract job by an organization as small and as specialized as we are. But I do not willingly involve us in nationalistic wars; the side of the angels is seldom self-evident."

"I still don't want to be an assassin."

"I will not permit you to be an assassin and let us have no more discussion of it. Be ready to leave at nine tomorrow."

V

Nine weeks later I left for New Zealand.

I'll say this for Boss: The supercilious bully always knows what he's talking about. When Dr. Krasny let me go, I wasn't "wellest." I was simply a recovered patient who no longer needed sickbed nursing.

Nine weeks later I could have taken prizes in the old Olympics without working up a sweat. As I boarded the SB Abel Tasman at Winnipeg freeport, the skipper gave me the eye. I knew I looked good and I added a waggle to my seat that I would never use on a missionas a courier I usually try to blend into the scenery. But now I was on leave and it's kind of fun to advertise. Apparently I hadn't forgotten how as the skipper came back to my cradle while I was still belting in. Or it may have been the Superskin jump suit that I was wearing-new that season and the first one I had had; I bought the outfit at the freeport and changed into it in the shop. I'm sure that it is only a matter of time until the sects that think that sex has something to do with sin will class wearing Superskin as a mortal sin.

He said, "Miss Baldwin, is it not? Do you have someone meeting you in Auckland? What with the war and all it is not a good idea for an unescorted woman to be alone in an international port."

(I did not say, "Look, Bub, the last time I killed the bloke.") The captain stood a hundred and ninety-five, maybe, and would gross a hundred or more and none of it fat. Early thirties and the sort of blond you expect in SAS rather than ANZAC. If he wanted to be protective I was willing to stand short. I answered, "Nobody's meeting me but I'm just changing for the South Island shuttle. How do these buckles work? Uh, do those stripes mean you're the captain?"

"Let me show you. Captain, yes-Captain Ian Tormey." He started belting me in; I let him.

"Captain. Gollee! I've never met a captain before." A remark like that isn't even a fib when it's a ritual response in the ancient barnyard dance. He had said to me, "I'm on the prowl and you look good. Are you interested?" And I had answered, "You look acceptable but I'm sorry to have to tell you that I don't have time today."

At that point he could adjourn it with no hurt feelings or he could elect to invest in goodwill against a possible future encounter. He chose the latter.

As he finished belting me intight enough but not too tight and not using the chance to grab a feel-quite professional-he said, "The timing on that connection will be close today. If you'll hang back when we disembark and be last out, I'll be happy to put you aboard your Kiwi. That'll be faster than finding your way through the crowds by yourself."

(The connection timing is twenty-seven minutes, Captain-leaving twenty minutes in which to talk me out of my comm signal. But keep on being sweet about it and I may give it to you.) "Why, thank you, Captain!-if it's really not too much trouble."

"ANZAC service, Miss Baldwin. But my pleasure."

I like to ride the semiballistics-the high-gee blastoff that always feels as if the cradle would rupture and spurt fluid all over the cabin, the breathless minutes in free fall that feel as if your guts were falling out, and then reentry and that long, long glide that beats any sky ride ever built. Where can you have more fun in forty minutes with your clothes on?

Then comes the always interesting question: Is the runway clear? A semiballistic doesn't make two passes; it can't.

It says right here in the brochure that an SB never lifts until it receives clearance from the port of reentry. Sure, sure, and I believe in the Tooth Fairy just like Boss's parents. How about the dumb-john in the private APV who picks the wrong strip and parks? How about the time in Singapore when I sat in the Top Deck bar and watched three SBs land in nine minutes?-not, I concede, on the same strip, but on crossing strips! Russian roulette.

I'll go on riding them; I like them and my profession often calls for me to use them. But I hold my breath from touchdown to full stop.

This trip was fun as usual and a semiballistic ride is never long enough to be tiring. I hung back when we landed and, sure enough, my polite wolf was just coming out of the cockpit as I reached the exit. The flight attendant handed me my bag and Captain Tormey took it over my insincere protests.

He took me to the shuttle gate, took charge of confirming my reservation and selecting my seat, then brushed past the Passengers Only sign and settled down beside me. "Too bad you're leaving so quickly-too bad for me, that is. Under the rules I have to take three days turnaround. . . and I happen to be at loose ends this trip. My sister and her husband used to live here-but they've moved to Sydney and I no longer have anyone to visit with."

(I can just see you spending all your off time with your sister and your brother-in-law.) "Oh, what a shame! I know how you must feel. My family is in Christchurch and I'm always lonesome when I have to be away from them. A big, noisy, friendly family-I married into an S-group." (Always tell them at once.)

"Oh, how jolly! How many husbands do you have?"

"Captain, that is always the first thing men ask. It comes from misunderstanding the nature of an S-group. From thinking that S stands for 'sex.'

"Doesn't it?"

"Goodness, no! It stands for 'security' arid 'siblings' and 'sociability' and 'sanctuary' and 'succor' and 'safety' and lots of other things, all of them warm and sweet and comforting. Oh, it can stand for 'sex,' too. But sex is readily available everywhere. No need to form anything as complex as an S-group just for sex." (S stands for "synthetic family" because that is how it was designated in the legislation of the first territorial nation, the California Confederacy, to legalize it. But it is ten-to-one that Captain Tormey knew this. We were simply running through standard variations of the Grand Salute.)

"I don't find sex that readily available-"

(I refused to answer his ploy. Captain, with your height and broad shoulders and pink, well-scrubbed look, and almost all of your time free for The Hunt. . . in Winnipeg and Auckland, fer Gossake, two places where the crop never fails. . . . Please, sir! Try again.)

"-but I agree with you that it is not reason enough to marry. I'm not likely to marry, ever . . . because I go where the wild goose goes. But an S-group sounds like a fine deal to come back to."

"It is."

"How big is it?"

"Still interested in my husbands? I have three husbands, sir, and three group sisters to match . . . and I think you would like all three-especially Lispeth, our youngest and prettiest. Liz is a redheaded Scottish lassie and a bit of a flirt. Children? Of course. We try to count them every night, but they move pretty fast. And kittens and ducks and puppy dogs and a big rambling garden with roses all year round, almost. It's a busy happy place and always watch where you put your feet."

"Sounds grand. Does the group need an associate husband who can't be home much but carries loads of life insurance? How much does it cost to buy in?"

"I'll speak to Anita about it. But you don't sound serious."

The chitchat continued, neither of us meaning a word of it, other than on a symbolic level. Shortly we declared it a draw while providing for a possible rematch by exchanging comm codes, that of my family in Christchurch in answer to his offer to me of the casual use of his flat in Auckland. He had taken over the lease, he said, when his sister had moved . . . but he needed it only six days out of the month, usually. "So if you find yourself in town and need a place for a wash-up and a nap, or overnight, just call."

"But suppose one of your friends is using it, Ian"-he had asked me to drop calling him Captain-"or yourself."

"Unlikely but, if so, the computer will know and tell you. If I'm in town or about to be in town, it will tell you that, too-and I certainly would not want to miss you."

The pass direct, but in the politest terms. So I answered it by telling him, through giving him our Christchurch number, that he was welcome to try to get my pants off. . . if he had the guts to face my husbands, my co-wives, and a passel of noisy kids. I thought it most unlikely that he would call. Tall, handsome bachelors in glamorous, high-paying jobs don't have to carry the anvil that far.

About then the loudspeaker that mumbles the arrivals and departures interrupted itself with: "It is with deep sorrow that we pause to announce the total destruction of Acapulco. This flash comes to you courtesy of Interworld Transport, Proprietary, the Triple-S Lines: Speed-Safety-Service."

I gasped. Captain Ian said, "Oh, those idiots!"

"Which idiots?"

"The whole Mexican Revolutionary Kingdom. When are the territorial states going to learn that they cannot possibly win against corporate states? That's why I said they were idiots. And they are!"

"Why do you say that, Captain?-Ian?"

"Obvious. Any territorial state, even if it's Ell-Four or an asteroid, is a sitting duck. But fighting a multinational is like trying to slice a fog. Where's your target? You want to fight IBM? Where is IBM? Its registered home office is a P.O. box number in Delaware Free State. That's no target. IBM's offices and people and plants are scattered through four hundred-odd territorial states groundside and more in space; you can't hit any part of IBM without hurting somebody else as much or more. But can IBM defeat, say, Great Russia?"

"I don't know," I admitted. "The Prussians weren't able to."

"It would just depend on whether or not IBM could see a profit in it. So far as I know, IBM doesn't own any guerrillas; she may not even have agents saboteurs. She might have to buy the bombs and missiles. But she could shop around and take her own sweet time getting set because Russia isn't going anywhere. It will still be there, a big fat target, a week from now or a year. But Interworld Transport just showed what the outcome would be. This war is all over. Mexico bet that Interworld wouldn't risk public condemnation by destroying a Mexican city. But those oldstyle politicians forgot that corporate nations aren't nearly as interested in public opinion as territorial nations have to be. The war's over."

"Oh, I hope so! Acapulco is-was-a beautiful place."

"Yes, and it would still be a beautiful place if the Montezuma's Revolutionary Council wasn't rooted somewhere back in the twentieth century. But now there will be face-saving. Interworld will apologize and pay an indemnity, then, with no fanfare, the Montezuma will cede the land and the extraterritoriality for the new spaceport to a new corporation with a Mexicano name and a DF home office . . . and the public won't be told that the new corporation is owned sixty percent by Interworld and forty percent by the very politicians who stalled just a little too long and let Acapulco be destroyed." Captain Tormey looked sour and I suddenly saw that he was older than I had first guessed.

I said, "Ian, isn't ANZAC a subsidiary of Interworld?"

"Perhaps that's why I sound so cynical." He stood up. "Your shuttle is locking into the gate. Let me have your bag."

VI

Christchurch is the loveliest city on this globe.

Make that "anywhere," as there is not yet a truly lovely city off Earth. Luna City is underground, EllFive looks like a junkyard from outside and has only one arc that looks good from inside. Martian cities are mere hives and most Earthside cities suffer from a misguided attempt to look like Los Angeles.

Christchurch does not have the magnificence of Paris or the setting of San Francisco or the harbor of Rio. Instead it has things that make a city lovable rather than stunning: The gentle Avon winding through our downtown streets. The mellow beauty of Cathedral Square. The Ferrier fountain in front of Town Hall. The lush beauty of our world-famous botanic gardens smack in the middle of downtown.

"The Greeks praise Athens." But I am not a native of Christchurch (if "native" could mean anything for my sort). I am not even an Ennzedd. I met Douglas in Ecuador (this was before the Quito Skyhook catastrophe), was delighted by a frantic love affair compounded of equal parts of pisco sours and sweaty sheets, then was frightened by his proposal, calmed down when he made me understand that he was not then proposing vows in front of some official but a trial visit to his S-group-find out if they liked me, find out if I liked them.

That was different. I zipped back to the Imperium and reported, and told Boss that I was taking some accumulated leave-or would he rather have my resignation? He growled something about go ahead and get my gonads cooled off, then report in when I was fit to work. So I rushed back to Quito and Douglas was still in bed.

At that time there really wasn't any way to get from Ecuador to New Zealand . . . so we tubed to Lima and took an SB right over the South Pole to West Australia Port at Perth (with the oddest shaped track because of Coriolis)-tube to Sydney, bounce to Auckland, float to Christchurch, taking nearly twenty-four hours and the wildest of tracks just to cross the Pacific. Winnipeg and Quito are almost the same distance from Auckland-don't be fooled by a flat map; ask your computer-Winnipeg is only one-eighth farther.

Forty minutes versus twenty-four hours. But I had not minded the longer trip; I was with Douglas and dizzy in love.

In another twenty-four hours I was dizzy in love with his family.

I hadn't expected that. I had looked forward to a lovely vacation with Douglas and he had promised me some skiing as well as sex-not that I insisted on skiing. I knew that I had an implied obligation to go to bed with his group brothers if asked. But that didn't worry me because an artificial person simply can't take copulation as seriously as most humans seem to take it. Most of the females of my crèche class had been trained as doxies from menarche on and then were signed up as company women with one or another of the construction multinationals. I myself had received basic doxy training before Boss showed up, bought my contract, and changed my track. (And I jumped the contract and was missing for several months-but that's another story.)

But I wouldn't have been jumpy about friendly sex even if I had received no doxy training at all; such nonsense isn't tolerated in APs; we never learn it.

But we never learn anything about being in a family. The very first day I was there I made us all late for tea by rolling on the floor with seven youngsters ranging from eleven down to a nappy-wetter plus two or three dogs and a young tomcat who had earned the name Mister Underfoot through his unusual talent for occupying all of a large floor.

I had never experienced anything like that in all my life. I didn't want to stop.

Brian, not Douglas, took me skiing. The ski lodges at Mount Hutt are lovely but the bedrooms aren't heated after twentytwo and you have to snuggle up close to keep warm. Then Vickie took me out to see the family's sheep and I met socially an enhanced dog who could talk, a big collie called Lord Nelson. Lord had a low opinion of the good sense of sheep, in which he was, I think, fully justified.

Bertie took me to Milford Sound via shuttle to Dunedin (the "Edinburgh of the South") and overnight there-Dunedin is swell but it's not Christchurch. We took a flubsy little steamer there around to the fjord country, one with tiny little cabins big enough for two only because it's cold down at the south end of the island and again I snuggled up close.

There isn't any other fjord anywhere that can compare with Milford Sound. Yes, I've been on the Lofoten Islands trip. Very nice. But my mind's made up.

If you think I am as blindly pigheaded about South Island as a mother is about her firstborn, that is simply because it's true; I am. North Island is a fine place, with its thermal displays and the world wonder of the Glowworm Caves. And the Bay of Islands looks like Fairyland. But North Island does not have the Southern Alps and it doesn't have Christchurch.

Douglas took me to see their creamery and I saw huge tubs of beautiful butter being packed. Anita introduced me to the Altar Guild. I began to realize that, maybe, just possibly, I might be invited to make it permanent. And found that I had shifted from OhGod-what'll-I-do-if-they-ask-me to Oh-God-what'll-I-do-if-they-don't-ask-me and then simply to Oh-God-what'll-I-do?

You see, I had never told Douglas that I am not human.

I've heard humans boast that they can spot an artificial person every time. Nonsense. Of course anyone can pick out a living artifact that does not conform to human appearance-say a man creature with four arms or a kobold dwarf. But if the genetic designers have intentionally restricted themselves to human appearance (this being the technical definition of "artificial person" rather than "living artifact"), no human can tell the difference-no, not even another genetic engineer.

I am immune to cancer and to most infections. But I don't wear a sign saying so. I have unusual reflexes. But I won't show them off by picking a fly out of the air with thumb and forefinger. I never compete with other people in games of dexterity.

I have unusual memory, unusual innate grasp of number and space and relationship, unusual skill at languages. But, if you think that defines a genius IQ, let me add that, in the school I was trained in, the object of an IQ test is to hit precisely a predetermined score-not to show off your smarts. In public nobody's going to catch me being smarter than those around me . . . unless it's an emergency involving either my mission or my neck or both.

The complex of these enhancements and others is reliably reported to improve sexual performance but, fortunately, most males are inclined to regard any noticeable improvement in this area as simply a reflection of their own excellence. (Properly regarded, male vanity is a virtue, not a vice. Treated correctly, it makes him enormously pleasanter to deal with. The thing that makes Boss so infuriating is his total lack of vanity. No way to get a handle on him!)

I was not afraid that I would be caught out. With all production laboratory identification removed from my body, even the tattoo that was on the roof of my mouth, there is simply no way to tell that I was designed rather than conceived through the bio roulette of a billion sperm competing blindly for one ovum.

But a wife in the S-group was expected to add to that swarm of kids on the floor.

Well, why not?

Lots of reasons.

I was a combat courier in a quasimilitary organization. Picture me trying to cope with a sudden attack while pushing an eightmonths belly ahead of me.

We AP females are released or marketed in a reversible sterile condition. To an artificial person the yen to have babies-grow them inside your body-doesn't seem "natural"; it seems ridiculous. In vitro seems so much more reasonable-and neater, and more convenient-than in vivo. I was as tall as I am now before I ever saw a pregnant woman near termand I thought she was deathly ill. When I found out what was wrong with her, it made me sort of sick to my stomach. When I thought about it a long time later in Christchurch, it still made me queasy. Do it like a cat, with blood and pain fer Gossake? Why? And why do it at all? Despite the way we are filling up the sky, this giddy globe has far too many people on it-why make it worse?

I decided, most sorrowfully, that I was going to have to duck the issue of marriage by telling them that I was sterile-no babies. True enough if not all the truth.

I wasn't asked.

Not about babies. For the next several days I reached out with both hands to enjoy family life as much as possible while I had it: the warm pleasure of woman talk while washing up after tea; the rowdy fun of youngsters and pets; the quiet pleasure of gossip while gardening-these bathed every minute of my day in belonging.

One morning Anita invited me out into the garden. I thanked her while pointing out that I was busy helping Vickie. Whereupon I was overruled and found myself seated at the far end of the garden with Anita, and children firmly shooed away.

Anita said, "Marjorie dear"-I'm "Marjorie Baldwin" in Christchurch because that was my public name when I met Douglas in Quito-"we both know why Douglas invited you here. Are you happy with us?"

"Terribly happy!"

"Happy enough, do you think, to wish to make it permanent?"

"Yes but-" I never had a chance to say Yes-but-I'm-sterile; Anita firmly cut me off.

"Perhaps I had better say some things first, dear. We must discuss dowry. If I left it up to our men, money would never be mentioned; Albert and Brian are as dotty about you as Douglas is, and I quite understand it. But this group is a family business corporation as well as a marriage, and someone must keep an eye on the bookkeeping and that is why I am chairman of the board and chief executive; I never become so emotional that I fail to watch our businesses." She smiled and her knitting needles clicked. "Ask Brian-he calls me Ebenezer Scrooge-but he hasn't offered to take over the worries himself.

"You can stay with us as a guest as long as you like. What's one more mouth to feed at a table as long as ours? Nothing. But if you want to join us formally and contractually, then I must become Ebenezer Scrooge and discover what contract we can write. For I won't let the family fortunes be watered down. Brian owns and votes three shares, Albert and I each own and vote two shares, Douglas and Victoria and Lispeth have one each and vote it. As you can see, I have only two votes out of ten . . . but for some years, if I threaten to resign, I suddenly receive a strong vote of confidence. Someday I'll be overruled and then I can quit and be Alice Sit-by-the-Fire." (And the funeral will be later that same day!)

"Meanwhile I cope. The children each have one nonvoting share and a child never does vote his share because it is paid to him or her in cash on leaving home, as dowry or as starting capital-or wasted although I like to think not. Such reductions in capital must be planned; were three of our girls to marry in the same year the situation could be embarrassing if not anticipated."

I told her that it sounded like a very sensible and warm arrangement as I didn't think that most children were so carefully provided for. (In fact I didn't know anything at all about such things.)

"We try to do right by them," she agreed. "After all, children are the purpose of a family. So I'm sure that you will see that an adult joining our group must buy a share, or the system won't work. Marriages are arranged in heaven but the bills must be paid here on earth."

"Amen." (I could see that my problems were solved for me. Negatively. I could not estimate the wealth of the Davidson Group Family. Wealthy, that was certain, even though they lived with no servants in an old-fashioned unautomated house. Whatever it was, I could not buy a share.)

"Douglas told us that he had no idea whether you had money or not. Money in capital amounts, I mean."

"I don't."

She never dropped a stitch. "Nor did I when I was your age. You are employed, are you not? Couldn't you work in Christchurch and buy your share out of your salary? I know that finding work can be a problem in a strange city . . . but I am not without connections. What do you do? You've never told us."

(And I'm not about to!) After evading her and then telling her bluntly that my work was confidential and I refused to discuss any aspect of my employer's business but, no, I couldn't leave and look for work in Christchurch, so there wasn't any way it could work but it had certainly been wonderful while it had lasted and I hoped-She chopped me off, "My dear, I was not empowered to negotiate this contract for the purpose of failing. Why it can't be done is not acceptable; I must discover how it can be done. Brian has offered to give you one of his three shares . . . and Douglas and Albert are backing him, pro rata, although they can't pay him at once. But I vetoed the whole scheme; it is a bad precedent and I told them so, using a crude old country expression about rams in the spring. Instead I am accepting one of Brian's shares as security against your performance of your contract."

"But I don't have a contract!"

"You will have. If you continue your present employment, how much can you pay per month? Don't pinch yourself but do pay off as quickly as possible as it works just like an amortized real-estate purchase: Part of each payment services the remaining debt, part reduces that debt-so the larger the payment the better, for you."

(I had never bought any real estate.) "Can we figure that in gold? I can convert into any money, of course, but I get paid in gold."

"In gold?" Anita suddenly looked alert. She reached into her knitting bag and pulled out a portable relay to her computer terminal. "I can offer you a better deal for gold." She punched for a while, waited, and nodded. "Considerably better. Although I'm not really set up to handle bullion. But arrangements can be made."

"I said I can convert. The drafts are for grams, three nines fine, drawn on Ceres and South Africa Acceptances, Limited, Luna City. But it can be paid in New Zealand money, right here, by automatic bank deposit even when I'm not on Earth at the time. Bank of New Zealand, Christchurch office?"

"Uh, Canterbury Land Bank. I'm a director there."

"By all means keep it in the family."

The next day we signed the contract and later that week they married me, all legal and proper, in a side chapel of the cathedral, with me in white, fer Gossake.

The following week I went back to work, both sad and warmly happy. For the next seventeen years I would be paying NZ$858.13 per month, or I could pay it faster. For what? I could not live at home until it was all paid because I had to keep my job to meet those monthly payments. For what, then? Not for sex. As I told Captain Tormey, sex is everywhere; it's silly to pay for it. For the privilege of getting my hands into soapy dishwater, I guess. For the privilege of rolling around on the floor and being peed on by puppies and babies only nominally housebroken.

For the warm knowledge that, wherever I was, there was a place on this planet where I could do these things as a matter of right, because I belonged.

It seemed like a bargain to me.

As soon as the shuttle floated off, I phoned ahead, got Vickie, and, once she stopped squealing, gave her my ETA. I had intended to call from the Kiwi Lines lounge in Auckland port but my curly wolf, Captain Ian, had used up the time. No matter-although the shuttle floats just short of the speed of sound, a stop at Wellington and a stop at Nelson uses up enough time that I thought someone would meet me. I hoped so.

Everybody met me. Well, not quite everybody. We're licensed to own an APV because we raise sheep and cattle and need power transportation. But we aren't supposed to use it in town. Brian did so anyhow and a working majority of our big family was spilling out the sides of that big farm floatwagon.

Most of a year since my last visit home, over twice as long as any such period earlier-bad. Children can grow away from you in that length of time. I was most careful about names and made sure that I checked off everyone in my mind. All present save Ellen, who was hardly a child-eleven when they married me, she was a young lady now, university age. Anita and Lispeth were at home, hurrying together my welcome-home feast . . . and again I would be gently scolded for not having given them warning and again I would try to explain that, in my work, once I was free to leave, it was better to grab the first SB than it was to try to get a call through-did I need an appointment to come to my own home?

Shortly I was down on the floor with kids all around me. Mister Underfoot, a gangly young cat when I first met him, waited for opportunity to greet me with dignity befitting his status as senior cat, elderly, fat, and slow. He looked me over carefully, brushed against me, and buzzed. I was home.

After a time I asked, "Where is Ellen? Still in Auckland? I thought university was closed for vacation now." I looked right at Anita when I said this but she appeared not to hear me. Getting hard of hearing? Surely not.

"Marjie-" Brian's voice-I looked around. He did not speak and his face held no expression. He barely shook his head.

(Ellen a taboo topic? What is this, Brian? I tabled it until I could speak to him privately. Anita has always maintained that she loves all our children equally, whether they are her own bio children or not. Oh, certainly! Save that her special interest in Ellen was always clear to everyone within reach of her voice.)

Later that night when the house was settling down and Bertie and I were about to go to bed (under some lottery system in which our teasing darlings always insisted that the loser had to spend the night with me), Brian tapped at the door and came in.

Bertie said, "It's all right. You can leave. I can take my punishment."

"Stow it, Bert. Have you told Marj about Ellen?"

"Not yet."

"Then fill her in. Sweetheart, Ellen got married without Anita's blessing. . . and Anita is furious about it. So it's best not to mention Ellen around Anita. Verb. sap., eh? Now I must run before she misses me."

"Aren't you permitted to come kiss me goodnight? Or to stay here for that matter? Aren't you my husband, too?"

"Yes, of course, dear. But Anita is touchy as can be at present and there is no point in getting her stirred up."

Brian kissed us goodnight and left. I said, "What is this, Bertie? Why shouldn't Ellen marry anyone she wishes to marry? She is old enough to make her own decisions."

"Well, yes. But Ellen didn't use good judgment about it. She's married a Tongan and she's gone to live in Nuku'alofa."

"Does Anita feel that they should live here? In Christchurch?"

"Eh? No, no! It's the marriage she objects to."

"Is there something wrong with this man?"

"Marjorie, didn't you hear me? He's a Tongan."

"Yes, I heard. Since he lives in Nuku'alofa, I would expect him to be. Ellen is going to find it awfully hot there, after being brought up in one of the few perfect climates. But that is her problem. I still don't see why Anita is upset. There must be something I don't know."

"Oh, but you do! Well, maybe you don't. Tongans are not like us. They aren't white people; they are barbarians."

"Oh, but they're not!" I sat up in bed, thereby putting a stop to what hadn't really started. Sex and arguments don't mix. Not for me, anyway. "They are the most civilized people in all Polynesia. Why do you think the early explorers called that group 'the Friendly Isles'? Have you ever been there, Bertie?"

"No but-"

"I have. Aside from the heat it's a heavenly place. Wait till you see it. This man-What does he do? If he simply sits and carves mahogany for the tourists, I could understand Anita's unease. Is that it?"

"No. But I doubt that he can afford a wife. And Ellen can't afford a husband; she didn't finish her degree. He's a marine biologist."

"I see. He's not rich . . . and Anita respects money. But he won't be poor, either-he'll probably wind up a professor at Auckland or Sydney. Although a biologist can get rich, today. He may design a new plant or animal that will make him fabulously wealthy."

"Darling, you still don't understand."

"Indeed I don't. So tell me."

"Well . . . Ellen should have married one of her own kind."

"What do you mean by that, Albert? Someone living in

Christchurch?"

"It would help."

"Wealthy?"

"Not a requirement. Although things are usually smoother if financial affairs aren't too onesided. Polynesian beach boy marries white heiress always has a stink to it."

"Oh, oh! He's penniless and she has just collected her family share-right?"

"No, not exactly. Damn it, why couldn't she have married a white man? We brought her up better than that."

"Bertie, what in the world? You sound like a Dane talking about a Swede. I thought that New Zealand was free of that sort of thing. I remember Brian pointing out to me that the Maori were the political and social equals of the English in all respects."

"And they are. It's not the same thing."

"I guess I'm stupid." (Or was Bertie stupid? Maori are Polynesians, so are Tongans-what's the ache?)

I dropped the matter. I had not come all the way from Winnipeg to debate the merits of a son-in-law I had never seen. "Son-in-law." What an odd idea. It always delighted me when one of the little 'uns called me Mama rather than Marjie-but I had never thought about the possibility of ever having a son-in-law.

And yet he was indeed my son-in-law under Ennzedd law-and I didn't even know his name!

I kept quiet, tried to make my mind blank, and let Bertie devote himself to making me feel welcome. He's good at that.

After a while I was just as busy showing him how happy I was to be home, the unwelcome interruption forgotten.

VII

The next morning, before I was out of bed, I resolved not to open the subject of Ellen and her husband, but wait until someone else brought it up. After all, I was in no position to have opinions until I knew all about it. I was not going to drop it-Ellen is my daughter, too. But don't rush it. Wait for Anita to calm down.

But the subject did not come up. There followed lazy, golden days that I shan't describe as I don't think you are interested in birthday parties or family picnics-precious to me, dull to an outsider.

Vickie and I went to Auckland on an overnight shopping trip. After we checked into the Tasman Palace, Vickie said to me, "Marj, would you keep a secret for me?"

"Certainly," I agreed. "Something juicy, I hope. A boyfriend? Two boyfriends?"

"If I had even one boyfriend I would simply split him with you. This is touchier. I want to talk to Ellen and I don't want to have an argument with Anita about it. This is the first chance I've had. Can you forget I did it?"

"Not quite, because I want to talk to her myself. But I won't tell Anita that you talked to Ellen if you don't wish me to. What is this, Vick? That Anita was annoyed about Ellen's marriage I knew-but does she expect the rest of us not even to talk to Ellen? Our own daughter?"

"I'm afraid it's 'her own daughter' right now. She's not being very rational about it."

"It sounds that way. Well, I will not let Anita cut me off from Ellen. I would have called her before this but I did not know how to reach her."

"I'll show you. I'll call now and you can write it down. It's-"

"Hold it!" I interrupted. "Don't touch that terminal. You don't want Anita to know."

"I said so. That's why I'm calling from here."

"And the call will be included in our hotel bill and you'll pay the bill with your Davidson credit card and-Does Anita still check every bill that comes into the house?"

"She does. Oh, Marj, I'm stupid."

"No, you're honest. Anita won't object to the cost but she's certain to notice a code or a printout that means an overseas call. We'll slide over to the G.P.O. and make the call there. Pay cash. Or, easier yet, we'll use my credit card, which does not bill to Anita."

"Of course! Marj, you would make a good spy."

"Not me; that's dangerous. I got my practice dodging my mother. Let's pin our ears back and slide over to the post office. Vickie, what is this about Ellen's husband? Does he have two heads or what?"

"Uh, he's a Tongan. Or did you know?"

"Certainly I knew. But 'Tongan' is not a disease. And it's Ellen's business. Her problem, if it is one. I can't see that it is."

"Uh, Anita has handled it badly. Once it's done, the only thing to do is to put the best face on it possible. But a mixed marriage is always unfortunate, I think-especially if the girl is the one marrying below herself, as in Ellen's case."

"'Below herself!' All I've been told is that he's a Tongan. Tongans are tall, handsome, hospitable, and about as brown as I am. In appearance they can't be distinguished from Maori. What if this young man had been Maori . . . of good family, from an early canoe . . . and lots of land?"

"Truly, I don't think Anita would have liked it, Marj-but she would have gone to the wedding and given the reception. Intermarriage with Maori has long precedent behind it; one must accept it. But one need not like it. Mixing the races is always a bad idea."

(Vickie, Vickie, do you know of a better idea for getting the world out of the mess it is in?) "So? Vickie, this builtin suntan of mine-you know where I got it?"

"Certainly, you told us. Amerindian. Uh, Cherokee, you said. Marj! Did I hurt your feelings? Oh, dear! It's not like that at all! Everybody knows that Amerindians areWell, just like white people. Every bit as good."

(Oh, sure, sure! And "some of my best friends are Jews." But I'm not Cherokee, so far as I know. Dear little Vickie, what would you think if I told you that I am an AP? I'm tempted to . . . but I must not shock you.)

"No, because I considered the source. You don't know any better. You've never been anywhere and you probably soaked up racism with your mother's milk."

Vickie turned red. "That's most unfair! Marj, when you were up for membership in the family I stuck up for you. I voted for you."

"I was under the impression that everyone had. Or I would not have joined. Do I understand that my Cherokee blood was an issue in that discussion?"

"Well . . . it was mentioned."

"By whom and to what effect?"

"Uh-Marjie, those are executive sessions, they have to be. I can't talk about them."

"Mmm, I see your point. Was there an executive session over Ellen? If so, you should be free to talk to me about it, since I would have been entitled to be present and to vote."

"There wasn't one. Anita said that it wasn't necessary. She said that she did not believe in encouraging fortune hunters. Since she had already told Ellen that she could not bring Tom home to meet the family, there didn't seem to be anything to be done."

"Didn't any of you stand up for Ellen? Did you do so, Vickie?"

Vickie turned red again. "It would simply have made Anita furious."

"I'm getting kind of furious myself. By our family code Ellen is your daughter and my daughter as quite as much as she is Anita's daughter, and Anita is wrong in refusing Ellen permission to bring her new husband home without consulting the rest of us."

"Marj, it wasn't quite that way. Ellen wanted to bring Tom home for a visit. Uh, an inspection visit. You know."

"Oh. Yes, having been under the microscope myself-I do know."

"Anita was trying to keep Ellen from making a bad marriage. The first the rest of us knew about it Ellen was married. Apparently Ellen went right straight out and got married the minute she got Anita's letter telling her no."

"Be damned! A light begins to dawn. Ellen trumped Anita's ace by getting married at once-and that meant that Anita had to pay out cash equal to one family corporation share with no notice. Could be difficult. It's quite a chunk of money. It is taking me years and years to pay for my share."

"No, it's not that. Anita is simply angry because her daughter-her favorite; we all know that-has married a man she disapproves of. Anita hasn't had to scrape up that much cash because it wasn't necessary. There is no contractual obligation to pay out a share, and Anita pointed out that there was no moral obligation to siphon off the family's capital to benefit an adventurer."

I felt myself getting coldly angry. "Vickie, I have trouble believing my ears. What sort of spineless worms are the rest of you to allow Ellen to be treated this way?" I took a deep breath and tried to control my fury. "I don't understand you. Any of you. But I'm going to try to set a good example. When we get home I'm going to do two things. First I'm going to the family-room terminal when everybody is there and phone Ellen and invite her and her husband home for a visit-come for the next weekend because I've got to get back to work and don't want to miss meeting my new son-in-law."

"Anita will burst a blood vessel."

"We'll see. Then I'm going to call for a family meeting and move that Ellen's share be paid to her with all orderly haste consonant with conserving assets." I added, "I assume that Anita will be furious again."

"Probably. To no purpose, as you'll lose the vote. Marj, why must you do this? Things are bad enough now."

"Maybe. But it's possible that some of you have just been waiting for someone else to take the lead in bucking Anita's tyranny. At least I'll find out how the vote goes. Vick, under the contract I signed I have paid more than seventy thousand Ennzedd dollars into the family and I was told that the reason I had to buy my way into a marriage was that each of our many children were to be paid a full share on leaving home. I didn't protest; I signed. But there is an implied contract there no matter what Anita says. If Ellen can't be paid today, then I shall insist that my monthly payments go to Ellen until such time as Anita can shake loose the rest of one share to pay Ellen off. Does that strike you as equitable?"

She was slow in answering. "Marj, I don't know. I haven't had time to think."

"Better take time. Because, along about Wednesday, you are going to have to fish or cut bait. I shall not let Ellen be mistreated any further." I grinned and added, "Smile! Let's slide over to the post office and be sunny-side-up for Ellen."

But we didn't go to the G.P.O.; we didn't call Ellen at all that trip. Instead we proceeded to drink our dinner and argue. I'm not sure just how the subject of artificial persons got into the discussion. I think it was while Vickie was "proving" still another time how free she was from racial prejudice while exhibiting that irrational attitude every time she opened her mouth. Maori were just dandy and of course American Indians were and Hindu Indians for that matter and the Chinese had certainly produced their quota of geniuses; everybody knew that, but you had to draw the line somewhere. .

We had gone to bed and I was trying to tune out her drivel when something hit me. I raised up. "How would you know?"

"How would I know what?"

"You said, 'Of course no one would marry an artifact.' How would you know that a person was artificial? Not all of them carry serial numbers."

"Huh? Why, Marjie, don't be silly. A manufactured creature can't be mistaken for a human being. If you had ever seen one-"

"I've seen one. I've seen many!"

"Then you know."

"Then I know what?"

"That you can tell one of those monsters just by looking at it."

"How? What are these stigmata that mark off an artificial person from any other person? Name one!"

"Marjorie, you're being dreadfully difficult just to be annoying! This is not like you, dear. You're turning our holiday into something unpleasant."

"Not me, Vick. You are. By saying silly, stupid, unpleasant things without a shred of evidence to back them up." (And that retort of mine proves that an enhanced person is not a superman, as that is exactly the sort of factually truthful remark that is much too cruel to use in a family discussion.)

"Oh! How wicked! How untruthful!"

What I did next can't be attributed to loyalty to other artificial persons because APs don't feel group loyalty. No basis for it. I've heard that Frenchmen will die for La Belle France-but can you imagine anyone fighting and dying for Homunculi Unlimited, Pty., South Jersey Section? I suppose I did it for myself although, like many of the critical decisions in my life, I have never been able to analyze why I did it. Boss says that I do all of my important thinking on the unconscious level. He may be right.

I got out of bed, whipped off my gown, stood in front of her. "Look me over," I demanded. "Am I an artificial person? Or not? Either way, how do you tell?"

"Oh, Marjie, quit flaunting yourself! Everybody knows you have the best figure in the family; you don't have to prove it."

"Answer me! Tell me which I am and tell me how you know. Use any test. Take samples for laboratory analysis. But tell me which I am and what signs prove it."

"You're a naughty girl, that's what you are."

"Possibly. Probably. But which sort? Natural? Or artificial?"

"Oh, bosh! Natural, of course."

"Wrong. I'm artificial."

"Oh, stop being silly! Put your nightgown on and come back to bed."

Instead I badgered her with it, telling her what laboratory had designed me, the date I had been removed from the surrogate womb-my "birthday," although we APs are "cooked" a little longer to speed up maturing-forced her to listen to a description of life in a production laboratory crèche. (Correction: Life in the crèche that raised me; other production crèches may be different.)

I gave her a summary of my life after I left the crèche-mostly lies, as I could not compromise Boss's secrets; I simply repeated what I had long since told the family, that I was a confidential commercial traveler. I didn't need to mention Boss because Anita had decided years back that I was an envoy of a multinational, the sort of diplomat who always travels anonymously-an understandable error that I was happy to encourage by never denying it.

Vickie said, "Marjie, I wish you wouldn't do this. A string of lies like that could endanger your immortal soul."

"I don't have a soul. That's what I've been telling you."

"Oh, stop it! You were born in Seattle. Your father was an electronics engineer; your mother was a pediatrician. You lost them in the quake. You told us all about them-you showed us pictures."

"'My mother was a test tube; my father was a knife.' Vickie, there may be a million or more artificial people whose 'birth records' were 'destroyed' in the destruction of Seattle. No way to count them as their lies are never assembled. After what happened just this month there will start being lots of people of my sort who were 'born' in Acapulco. We have to find loopholes like that to avoid being persecuted by the ignorant and the prejudiced."

"Meaning I'm ignorant and prejudiced!"

"Meaning you are a sweet girl who was fed a pack of lies by your elders. I'm trying to correct that. But if the shoe fits, you can lie in it."

I shut up. Vickie didn't kiss me goodnight. We were a long time getting to sleep.

The next day each of us pretended that the argument had never taken place. Vickie did not mention Ellen; I did not mention artificial persons. But it spoiled what had started out to be a merry outing. We got the shopping done and caught the evening shuttle home. I did not do as I had threatened-I did not call Ellen as soon as we were home. I did not forget Ellen; I simply hoped that waiting a while might mellow the situation. Cowardly, I suppose.

Early the following week Brian invited me to go with him while he inspected a piece of land for a client. It was a long pleasant ride with lunch at a licensed country hotel-a fricasee billed as hogget although almost certainly mutton, washed down by tankards of mild. We ate out under the trees.

After the sweet-a berry tart, quite good-Brian said, "Marjorie, Victoria came to me with a very odd story."

"So? What was it?"

"My dear, please believe that I would not mention this were not Vickie so troubled by it." He paused.

I waited. "Upset by what, Brian?"

"She claims that you told her that you are a living artifact masquerading as a human being. I'm sorry but that's what she said."

"Yes, I told her that. Not in those words."

I did not add any explanation. Presently Brian said gently, "May I ask why?"

"Brian, Vickie was saying some very silly things about Tongans, and I was trying to make her see that they were both silly and wrong-that she was wronging Ellen by it. I am very much troubled about Ellen. The day I arrived home you shushed me about her, and I have kept quiet. But I can't keep quiet much longer. Brian, what are we going to do about Ellen? She's your daughter and mine; we can't ignore how she is being mistreated. What shall we do?"

"I do not necessarily agree that something should be done, Marjorie. Please don't change the subject. Vickie is quite unhappy. I am attempting to straighten out the misunderstanding."

I answered, "I have not changed the subject. Injustice to Ellen is the subject and I won't drop it. Is there any respect in which Ellen's husband is objectionable? Other than prejudgment against him because he is Tongan?"

"None that I know of. Although, in my opinion, it was inconsiderate of Ellen to marry a man who had not even been introduced to her family. It does not show a decent respect for the people who have loved her and cared for her all her life."

"Wait a moment, Brian. As Vickie tells it, Ellen asked to bring him home for inspection-as I was brought home-and Anita refused to permit it. Whereupon Ellen married him. True?"

"Well, yes. But Ellen was headstrong and hasty. I don't think she should have done so without talking to her other parents. I was quite hurt by it."

"Did she try to speak to you? Did you make any attempt to talk to her?"

"Marjorie, by the time I knew of it, it was a fait accompli."

"So I hear. Brian, ever since I got home I have been hoping that someone would explain to me what happened. According to Vickie none of this was ever settled in family council. Anita refused to let Ellen bring her beloved home. The rest of Ellen's parents either did not know or did not interfere with Anita's, uh, cruelty. Yes, cruelty. Whereupon the child got married. Whereupon Anita compounded her initial cruelty by a grave injustice: She refused Ellen her birthright, her share of the family's wealth. Is all this true?"

"Marjorie, you were not here. The rest of us-six out of seven-acted as wisely as we could in a difficult situation. I don't think it is proper of you to come along afterwards and criticize what we have done-upon my word, I don't."

"Dear, I don't mean to offend you. But my very point is that six of you have not done anything. Anita, acting alone, has done things that seem to me to be cruel and unjust. . . and the rest of you stood aside and let her get away with it. No family decisions, just Anita's decisions. If this is true, Brian-and correct me if I'm wrong-then I feel compelled to ask for a full executive session of all husbands and wives to correct this cruelty by inviting Ellen and her husband to visit home, and to correct the injustice by paying to Ellen her fair share of the family's wealth, or at least to acknowledge the debt if it can't be liquidated at once. Will you tell me your opinion of that?"

Brian drummed his nails on the tabletop. "Marjorie, that's a simplistic view of a complex situation. Will you admit that I love Ellen and have her welfare in mind quite as much as you do?"

"Certainly, darling!"

"Thank you. I agree with you that Anita should not have refused to let Ellen bring her young man home. Indeed, if Ellen had seen him against the background of her own home, with its gentle ways and its traditions, she might well have decided that he was not for her. Anita stampeded Ellen into a foolish marriage-and I have told her so. But the matter cannot be immediately corrected by inviting them here. You can see that. Let's agree that Anita should receive them warmly and graciously . . . but it's God's own truth that she won't-if she has them shoved down her throat."

He grinned at me and I was forced to grin in return. Anita can be charming. . . and she can be incredibly cold, rude, if it suits her.

Brian went on: "Instead, I'll have reason to make a trip to Tonga in a couple of weeks and this will let me get well acquainted without having Anita at my elbow-"

"Good! Take me along-pretty please?"

"It would annoy Anita."

"Brian, Anita has considerably more than annoyed me. I won't refrain from visiting Ellen on that account."

"Mmm. . . would you refrain from doing something that might damage the welfare of all of us?"

"If it were pointed out to me, yes. I might ask for explanation."

"You will have it. But let me deal with your second point. Of course Ellen will get every penny that is coming to her. But you will concede that there is no urgency about paying it to her. Hasty marriages often do not last long. And, while I have no proof of it, it is quite possible that Ellen has been taken in by a fortune hunter. Let's wait a bit and see how anxious this chap is to lay hands on her money. Isn't that prudent?"

I had to admit it. He continued: "Marjorie, my love, you are especially dear to me and to all of us because we see too little of you. It makes each of your trips home a fresh honeymoon for all of us. But, because you are away most of the time, you don't understand why the rest of us are always careful to keep Anita soothed down."

"Well-No, I don't. It should work both ways."

"In dealing with the law and with people I have found a vast difference between 'should' and 'is.' I've lived with Anita longest of any of us; I've learned to live with her little ways. What you may not realize is that she is the glue that holds the family together."

"How, Brian?"

"There is the obvious matter of her custodianship. As manager of the family finances and businesses she is well-nigh irreplaceable. Perhaps some other one of us could do it but it is certain that no one wants the job and I strongly suspect that no one of us could approach her competence. But in ways other than money she is a strong, capable executive. Whether it is in stopping quarrels between children or in deciding any of the thousand issues that come up in a large household, Anita can always make up her mind and keep things moving. A group family, such as ours, must have a strong, capable leader."

(Strong, capable tyrant, I said under my breath.)

"So. Marjie girl, can you wait a bit and give old Brian time to work it out? Believe that I love Ellen as much as you do?"

I patted his hand. "Certainly, dear." (But don't take forever!)

"Now, when we get home, will you find Vickie and tell her that you were joking and that you are sorry you upset her? Please, dear."

(Wups! I had been thinking about Ellen so hard that I had forgotten where this conversation started.) "Now wait one moment, Brian. I'll wait and avoid annoying Anita since you tell me it's necessary. But I'm not going to cater to Vickie's racial prejudices."

"You would not be doing so. Our family is not all of one mind in such matters. I agree with you and you will find that Liz does, too. Vickie is somewhat on the fence; she wants to find any excuse to get Ellen back into the family and, now that I've talked to her, is willing to concede that Tongans are just like Maori and that the real test is the person himself. But it's that strange jest you made about yourself that has her upset."

"Oh. Brian, you once told me that you had almost earned a degree in biology when you switched to law."

"Yes. 'Almost' may be too strong."

"Then you know that an artificial person is biologically indistinguishable from an ordinary human being. The lack of a soul does not show."

"Eh? I'm merely a vestryman, dear; souls are a matter for theologians. But it is certainly not difficult to spot a living artifact."

"I didn't say 'living artifact.' That term covers even a talking dog such as Lord Nelson. But an artificial person is strictly limited to human form and appearance. So how can you spot one? That was the silly thing Vickie was saying, that she could always spot one. Take me, for example. Brian, you know my physical being quite thoroughly-I'm happy to say. Am I an ordinary human being? Or an artificial person?"

Brian grinned and licked his lips. "Lovely Marjie, I will testify in any court that you are human to nine decimal places . . . except where you are angelic. Shall I specify?"

"Knowing your tastes, dear, I don't think it's necessary. Thank you. But please be serious. Assume, for the sake of argument, that I am an artificial person. How could a man in bed with me-as you were last night and many other nights-tell that I was artificial?"

"Marjie, please drop it. It's not funny."

(Sometimes human people exasperate me beyond endurance.) I said briskly, "I'm an artificial person."

"Marjorie!"

"You won't take my word for it? Must I prove it?"

"Stop joking. Stop this instant! Or, so help me, when I get you home I'll paddle you. Marjorie, I've never laid an ungentle hand on you-on any of my wives. But you are earning a spanking."

"So? See that last bite of tart on your plate? I am about to take it. Slap your hands together right over your plate and stop me."

"Don't be silly."

"Do it. You can't move fast enough to stop me."

We locked eyes. Suddenly he started to slap his hands together. I went into automatic overdrive, picked up my fork, stabbed that bite of tart, pulled back the fork between his closing hands, stopped the overdrive just before I placed the bite between my lips.

(That plastic spoon in the crèche was not discrimination but to protect me. The first time I used a fork I stabbed my lip because I had not yet learned to slow my moves to match unenhanced persons.)

There may not be a word for the expression on Brian's face.

"Is that enough?" I asked him. "No, probably not. My dear, clasp hands with me." I shoved out my right hand.

He hesitated, then took it. I let him control the grasp, then I started slowly to tighten down. "Don't hurt yourself, dear," I warned him. "Let me know when to stop."

Brian is no sissy and can take quite a bit of pain. I was about to slack off, not wishing to break any bones in his hand, when he suddenly said, "Enough!"

I immediately slacked off and started to massage his hand gently with both of mine. "I did not enjoy hurting you, darling, but I had to show you that I am telling the truth. Ordinarily I am careful not to display unusual reflexes or unusual strength. But I do need them in the work I am in. On several occasions enhanced strength and speed have kept me alive. I am most careful not to use either one unless forced to. Now-is there anything more needed to prove to you that I am what I say I am? I am enhanced in other ways but speed and strength are easiest to demonstrate."

He answered, "It's time we started home."

On the way home we didn't exchange a dozen words. I am very fond of the luxury of horse-and-buggy rides. But that day I would happily have used something noisy and mechanical-but fast!

For the next few days Brian avoided me; I saw him only at the dinner table. Came a morning when Anita said to me, "Marjorie dear, I'm going into town on a few errands. Will you come along and help me?" Of course I said yes.

She made several stops in the general neighborhood of Gloucester Street and Durham. There was nothing in which she needed my help. I concluded that she simply wanted company and I was pleased by it. Anita is awfully nice to be with as long as one doesn't cross her will.

Finished, we strolled down Cambridge Terrace along the bank of the Avon and on into Hagley Park and the botanic gardens. She picked a sunny spot where we could watch the birds, and got out her knitting. We talked of nothing in particular for a while, or simply sat.

We had been there about half an hour when her phone buzzed. She took it out of her knitting bag, put the button to her ear. "Yes?" Then she added, "Thank you. Off," and put the phone away without offering to tell me who had called her. Her privilege.

Although she did speak of it indirectly: "Tell me, Marjorie, do you ever feel regret? Or a sense of guilt?"

"Why, I do sometimes. Should I? Over what?" I searched my brain as I thought that I had been unusually careful not to upset Anita.

"Over the way you have deceived us and cheated us."

"What?"

"Don't play innocent. I've never had to deal with a creature not of God's Law before. I was not sure that the concept of sin and guilt was one you could understand. Not that it matters, I suppose, now that you are unmasked. The family is asking for annulment at once; Brian is seeing Mr. Justice Ridgley today."

I sat up very straight. "On what grounds? I've done nothing wrong!"

"Indeed. You forget that, under our laws, a nonhuman cannot enter into a marriage contract with human beings."

VIII

An hour later I boarded the shuttle for Auckland and then had time to consider my folly.

For almost three months, ever since the night I had discussed it with Boss, I had for the first time been feeling easy about my "human" status. He had told me that I was "as human as Mother Eve" and that I could safely tell anyone that I was an AP because I would not be believed.

Boss was almost right. But he had not counted on my making a really determined effort to prove that I was not "human" under Ennzedd law.

My first impulse had been to demand a hearing before the full family council-only to learn that my case had already been tried in camera and the vote had gone against me, six to nothing.

I didn't even go back to the house. That phone call Anita had received while we were in the botanic gardens had told her that my personal effects had been packed and delivered to Left Luggage at the shuttle station.

I could still have insisted on a poll of the house instead of taking Anita's (slippery) word for it. But to what end? To win an argument?

To prove a point? Or merely to split a hair? It took me all of five seconds to realize that all I had treasured was gone. As vanished as a rainbow, as burst as a soap bubble-I no longer "belonged." Those children were not mine, I would never again roll on the floor with them.

I was thinking about this with dry-eyed grief and almost missed learning that Anita had been "generous" with me: In that contract I had signed with the family corporation the fine print made the principal sum due and payable at once if I breached the contract. Did being "nonhuman" constitute a breach? (Even though I had never missed a payment.) Looked at one way, if they were going to read me out of the family, then I had at least eighteen thousand Ennzedd dollars coming to me: looked at another way I not only forfeited the paid-up part of my share but owed more than twice that amount.

But they were "generous": If I would quietly arid quickly vanish away, they would not pursue their claim against me. Unstated was what would happen if I stuck around and made a public scandal.

I slunk away.

I don't need a psychiatrist to tell me that I did it to myself I realized that fact as soon as Anita announced the bad news. A deeper question is: Why did I do it?

I had not done it for Ellen and I could not hoodwink myself into thinking that I had. On the contrary, my folly had made it impossible for me to exert any effort on her behalf.

Why had I done it?

Anger.

I wasn't able to find any better answer. Anger at the whole human race for deciding that my sort are not human and therefore not entitled to equal treatment and equal justice. Resentment that had been building up since the first day that I had been made to realize that there were privileges human children had just from being born and that I could never have simply because I was not human.

Passing as human gets one over on the side of privilege; it does not end resentment against the system. The pressure builds up even more because it can't be expressed. The day came when it was more important to me to find out whether my adopted family could accept me as I truly am, an artificial person, than it was to preserve my happy relationship.

I found out. Not one of them stood up for me. . . just as none of them had stood up for Ellen. I think I knew that they would reject me as soon as I learned that they had failed Ellen. But that level of my mind is so far down that I'm not well acquainted with it-that's the dark place where, according to Boss, I do all my real thinking.

I reached Auckland too late for the daily SB to Winnipeg. After reserving a cradle for the next day's trajectory and checking everything but my jumpbag, I considered what to do with the twenty-one hours facing me, and at once thought of my curly wolf, Captain Ian. By what he had told me, the chances were five-to-one against his being in town-but his flat (if available) might be pleasanter than a hotel. So I found a public terminal and punched his code.

Shortly the screen lighted; a young woman's face-cheerful, rather pretty-appeared. "Hi! I'm Torchy. Who're you?"

"I'm Marj Baldwin," I answered. "Perhaps I've punched wrong. I'm seeking Captain Tormey."

"No, you're with it, luv. Hold and I'll let him out of his cage." She turned and moved away from the pickup while calling out, "Bubber! A slashing tart on the honker. Knows your right name."

As she turned and moved away I noticed bare breasts. She came fully into view and I saw that she was jaybird to her heels. A good body-possibly a bit wide in the fundament but with long legs, a slender waist, and mammaries that matched mine . . . and I've had no complaints.

I quietly cursed to myself. I knew quite well why I had called the captain: to forget three men in the arms of a fourth. I had found him but it appeared that he was fully committed.

He appeared, dressed but not much-a lava-lava. He looked puzzled, then recognized me. "Hey! Miss . . . Baldwin! That's it. This is sonky-do! Where are you?"

"At the port. I punched on the off chance of saying hello."

"Stay where you are. Don't move, don't breathe. Seven seconds while I pull on trousers and shirt, and I'll come get you."

"No, Captain. Just a greeting. Again I am simply making connections."

"What is your connection? To what port? What time is departure?"

Damn and triple damn-I had not prepared my lies. Well, the truth is often better than a clumsy lie. "I'm going back to Winnipeg."

"Ah so! Then you are looking at your pilot; I have the noon lift tomorrow. Tell me exactly where you are and I'll pick you up in, uh, forty minutes if I can get a cab fast enough."

"Captain, you are very sweet and you are out of your mind. You already have all the company you can handle. The young woman who answered my call. Torchy."

"Torchy isn't her name; that's her condition. She's my sister Betty, from Sydney. Stays here when she's in town. I probably mentioned her." He turned his head and shouted. "Betty! Come here and identify yourself. But get decent."

"It's too late to get decent," her cheerful voice answered, and I saw her, past his shoulder, returning toward the pickup and wrapping a lava-lava around her hips as she did so. She seemed to be having a little trouble with it and I suspected that she had had a few. "Oh, the hell with it! My brother is always trying to get me to behave-my husband has given up. Look, luv, I heard what you said. I'm his married sister, too true. Unless you are trying to marry him, in which case I am his fiancée. Are you?"

"??No.??"

"Good. Then you can have him. I'm about to make tea. Do you take gin? Or whisky?"

"Whatever you and the Captain are having."

"He must not have either; he's lifting in less than twenty-four hours. But you and I will get smashed."

"I'll drink what you do. Anything but hemlock."

I then convinced Ian that it was better for me to find a hansom at the port where they were readily available than it was for him to send for one, then make the round trip.

Number 17, Locksley Parade, is a new block of flats of the double-security type; I was locked through the entrance to Ian's flat as if it were a spaceship. Betty greeted me with a hug and a kiss that showed that she had indeed been drinking; my curly wolf then greeted me with a hug and a kiss that showed that he had not been drinking but that he expected to take me to bed in the near future. He did not ask about my husbands; I did not volunteer anything about my family-my former family. Ian and I got along well because we both understood the signals, used them correctly, and never misled the other.

While Ian and I held this wordless discussion, Betty left the room and returned with a red lava-lava. "It's formal high tea," she announced, with a slight belch, "so out of those street clothes and into this, luv."

Her idea? Or his? Hers, I decided, before long. While Ian's simple, wholesome lechery was as clear as a punch in the jaw, he was basically rather cubical. Not so Betty, who was utterly outlaw. I didn't care, as it moved in the direction I wanted to go. Bare feet are as provocative as bare breasts, although most people do not seem to know it. A female packaged only in a lava-lava is far more provocative than one totally nude. The party was shaping up to suit me, and I would depend on Ian to shake off his sister's chaperonage when the time came. If necessary. It seemed possible that Betty would sell tickets. I didn't fret about it.

I got smashed.

Just how thorough a job I did on it I did not realize until next morning when I woke up in bed with a man who was not Ian Tormey.

For several minutes I lay still and watched him snore while I poked through my gin-beclouded memories, trying to fit him in. It seemed to me that a woman really ought to be introduced to a man before spending a night with him. Had we been formally introduced? Had we met at all?

In bits and pieces it came back. Name: Professor Federico Farnese, called either "Freddie" or "Chubbie." (Not very chubby-just a little pot from a swivel-chair profession.) Betty's husband, Ian's brother-in-law. I recalled him somewhat from the evening before but could not now (next morning) recall just when he had arrived, or why he had been away . . . if I ever knew.

Once I placed him I was not especially surprised to find that I (seemed to have) spent the night with him. The frame of mind I had been in the night before no male would have been safe from me. But one thing bothered me: Had I turned my back on my host in order to chase after some other man? Not polite, Friday-not gracious.

I dug deeper. No, at least once I decidedly had not turned my back on Ian. To my great pleasure. And to Ian's, too, if his commerits were sincere. Then I had indeed turned my back but at his request. No, I had not been ungracious to my host, and he had been very kind to me, in exactly the fashion I needed to help me forget how I had been swindled, then tossed, by Anita's gang of self-righteous racists.

Thereafter my host had had some help from this late arrival, I now remembered. It is never surprising that an emotionally troubled woman may need more soothing than one man can supply-but I could not remember how the transaction was achieved. Fair exchange? Don't snoop, Friday! An AP cannot empathize with or understand the various human copulation taboos-but I had most carefully memorized all the many, many sorts while taking basic doxy training, and I knew that this one was one of the strongest, one that humans cover up even where all else is wide open.

So I resolved to shun even a hint of interest.

Freddie stopped snoring and opened his eyes. He yawned and stretched, then saw me and looked puzzled, then suddenly grinned and reached for me. I answered his grin and his grab, ready to cooperate heartily, when Ian walked in. He said, "Morning, Marj. Freddie, I hate to interrupt but I'm already holding a cab. Marj has to get up and get dressed. We're leaving at once."

Freddie did not let go of me. He simply clucked, then recited:

"A birdie with a yellow bill
hopped upon my windowsill.
He cocked a shiny eye and said,
'Ain't you ashamed, you sleepyhead?'

"Captain, your attention to duty and to the welfare of our guest does you credit. What time must you be there? Minus two hours? And you lift at high noon as the clock is striking the steeple. No?"

"Yes, but-"

"Whereas Helen-your name is Helen?-is kosher if she presents herself at the gate called strait no later than minus thirty minutes. This I will undertake."

"Fred, I don't like to be a spoilsport but it can take a bloody hour to get a cab here, as you know. I have one waiting."

"How true. Cabbies avoid us; their horses don't like our hill. For that reason, dear brother-in-love, last night I hired a rig, pledging a purse of gold. At this very moment old faithful Rosinante is under this house in one of the janitor's stalls, gaining strength on nubbins of maize for her coming ordeal. When I phone down, said janitor, well plied with bribes, will harness the dear beast and fetch wain and her to entrance. Whereupon I will deliver Helen to the gate no later than minus thirtyone. To this end I pledge the pound of flesh nearest your heart."

"Your heart, you mean."

"I phrased it most carefully."

"Well-Marj?"

"Uh-Is it all right, Ian? I don't really want to jump out of bed this second. But I don't want to miss your ship."

"You won't. Freddie is reliable; he just doesn't look it. But leave here by eleven; then you could make it on foot if you had to. I can hold your reservation after checkin time; a captain does have some privileges. Very well; resume whatever it was you were doing." Ian glanced at his watch finger. "Nine up. Bye."

"Hey! Kiss me goodbye!"

"Why? I'll see you at the ship. And we have a date in Winnipeg."

"Kiss me, damn it, or I'll miss the bloody ship!"

"So untangle yourself from that fat Roman and mind you don't get spots on my clean uniform."

"Don't chance it, old son. I will kiss Helen on your behalf."

Ian leaned down and kissed me thoroughly and I did not muss his pretty uniform. Then he kissed the top of Freddie's head on his little bald spot and said, "Have fun, chums. But get her to the gate on time. Bye." Betty glanced in at that point; her brother gathered her in with one arm and took her away.

I turned my attention back to Freddie. He said, "Helen, prepare yourself." I did, while thinking happily that Ian and Betty and Freddie were just what Friday needed to offset the puritanical hypocrites I had lived with far too long.

Betty fetched in morning tea precisely on the moment, so I assume that she listened. She made a lotus on the bed and had a cuppa with us. Then we got up and had breakfast. I had porridge with thick cream, two beautiful eggs, Canterbury ham, a fat chop, fried potatoes, hot muffins with strawberry jam and the world's best butter, and an orange, all washed down with strong black tea with sugar and milk. If all the world broke fast the way New Zealand does, we wouldn't have political unrest.

Freddie put on a lava-lava to eat breakfast but Betty didn't so I didn't. Being crèche-raised, I can never learn enough about human manners and etiquette but I do know that a woman guest must dress-or undress-to match her hostess. I'm not really used to skin in the presence of humans (the crèche was another matter) but Betty was awfully easy to be with. I wondered if she would snub me if she knew that I was not human. I didn't think so but I was not anxious to test it. A happy breakfast.

Freddie delivered me to the passenger lounge at eleven-twenty, sent for Ian, and demanded a receipt. Solemnly Ian wrote one. Again Ian belted me into the acceleration cradle, while saying quietly, "You didn't really need help with this the other time, did you?"

"No," I agreed, "but I'm glad I pretended. I've had a wonderful time!"

"And we'll have a good time in Winnipeg, too. I reached Janet during countdown, let her know that you would be with us for dinner. She told me to tell you that you would be with us for breakfast as well-she says to tell you that it is silly to leave Winnipeg in the middle of the night; you could get mugged at any transfer. She's right-the informal immigrants we get over the border from the Imperium would kill you for a toke."

"I'll speak with her about it when we get there." (Captain Ian, you triflin' man, you told me that you would never marry because you must "go where the wild goose goes." I wonder if you recall that? I don't think you do.)

"It's settled. Janet might not trust my judgment about women-she says I'm prejudiced, a base canard. But she does trust Betty-and by now Betty has phoned her. She's known Betty longer than she's known me; they were roommates at McGill. And that's where I got Janet and Fred got Sis; we four were subversives-every now and then we would unhook the North Pole and turn it around."

"Betty is a darling. Is Janet like her?"

"Yes and no. Janet was the leader of our seditious activities. Excuse me; I've got to go pretend to be a captain. Actually the computer flies this tin coffin but I'm planning to learn how next week." He left.

After the healing catharsis of a night of drunken saturnalia with Ian and Freddie and Betty I was able to think about my ex-family more rationally. Had I in fact been cheated?

I had signed that silly contract willingly, including the termination clause I tripped on. Had I been paying for sex?

No, what I had told Ian was true; sex is everywhere. I had paid for the happy privilege of belonging. To a family-especially the homely delights of changing wet nappies and washing dishes and petting kittens. Mister Underfoot was far more important to me than Anita had ever been-although I had never let myself think about it. I had tried to love them all until the matter of Ellen had thrown light into some dirty corners.

Let me see now: I knew exactly how many days I had been able to spend with my ex-family. A little arithmetic told me that (since all had been confiscated) my cost for room and board for those sweet vacations was slightly over four hundred and fifty Ennzedd dollars per day.

A high price even for a luxury resort. But the actual cost to the family of having me at home was less than a fortieth of that. On what financial terms had each of the others joined the family? I had never known.

Had Anita, unable to stop the men from inviting me in, rigged things so that I could not afford to quit my job and live at home but nevertheless tied me to the family on terms quite profitable to the family-i.e., to Anita? No way to tell. I knew so little about marriage among human beings that I had not been able to judge-and still could not.

But I had learned one thing: Brian had surprised me by turning against me. I had thought of him as the older, wiser, sophisticated member of the family, the one who could accept the fact of my biological derivation and live with it.

Perhaps he could have done so had I picked some other enhanced quality to demonstrate, some nonthreatening ability.

But I had bested him in a feat of strength, a matter in which a male quite reasonably expects to win. I had hit him in his male pride.

Unless you intend to kill him immediately thereafter, never kick a man in the balls. Not even symbolically. Or perhaps especially not symbolically.

IX

Presently free fall went away and we entered the incredibly thrilling sensations of hypersonic glide. The computer was doing a good job of smoothing out the violence, but you could still feel the vibration in your teeth-and I could feel it elsewhere after my busy night.

We dropped through transonic rather abruptly, then spent a long time in subsonic, with the scream building up. Then we touched and the retros cut in . . . and shortly we stopped. And I took a deep breath. Much as I like the SBs, I can't relax from touchdown to full stop.

We had lifted at North Island at noon Thursday, so we arrived forty minutes later at Winnipeg the day before (Wednesday) in the early evening, 1940 hours. (Don't blame me; go look at a map-one with time zones marked.)

Again I waited and was last passenger out. Our captain again picked up my bag but this time escorted me with the casualness of an old friend-and I felt enormously warmed by it. He took me through a side door, then went with me through Customs, Health, and Immigration, offering his own jumpbag first.

The CHI officer did not touch it. "Hi, Captain. What are you smuggling this time?"

"The usual. Illicit diamonds. Trade secrets. Weapons specs. Contraband drugs."

"That's all? It's a waste of chalk." He scrawled something on Ian's bag. "Is she with you?"

"Never saw her before in my life."

"Me Injun squaw," I asserted. "White boss promise me much firewater. White boss don't keep promise."

"I could have told you. Going to be here long?"

"I live in the Imperium. Transient, possibly overnight. I came through here on my way to New Zealand last month. Here's my passport."

He glanced at it, stamped it, scrawled on my bag without opening it. "If you decide to stay a little longer, I'll buy you firewater. But don't trust Captain Tormey." We went on through.

Just beyond the barrier Ian dropped both our bags, picked up a woman by her elbows-proving his excellent condition; she was only ten centimeters junior to him-and kissed her enthusiastically. He put her down. "Jan, this is Marj."

(When Ian had this sultry job at home, why did he bother with my meager assets? Because I was there and she wasn't, no doubt. But now she is. Dear lady, got a good book I can read?)

Janet kissed me and I felt better. Then she held me with both hands at arm's length. "I don't see it. Did you leave it in the ship?"

"Leave what? This jumpbag is all I carried-my luggage is in transit bond."

"No, dear, your halo. Betty led me to expect a halo."

I considered this. "Are you sure she said halo?"

"Well . . . she said you were an angel. Perhaps I jumped to a conclusion."

"Perhaps. I don't think I was wearing a halo last night; I hardly ever wear one when traveling."

Captain Ian said, "That's right. Last night all she had on was a load, a big one. Sweetheart, I hate to tell you this but Betty was a bad influence. Deplorable."

"Oh, heavens! Perhaps we had best go straight to prayer meeting. Shall we, Marjorie? Tea and a biscuit here, and skip dinner? The whole congregation will pray for you."

"Whatever you say, Janet." (Did I have to agree to this? I didn't know the etiquette for a "prayer meeting. ")

Captain Tormey said, "Janet, perhaps we had better take her home and pray for her there. I'm not sure Marj is used to public confessions of sins."

"Marjorie, would you rather do that?"

"I think I would. Yes."

"Then we will. Ian, will you hail Georges?"

Georges turned out to be Georges Perreault. That is all I learned about him just then, save that he was driving a pair of Morgan blacks hitched to a Honda surrey suitable for the very wealthy. How much is an SB captain paid? Friday, it's none of your business. But it was certainly a handsome rig. So was Georges, for that matter. Handsome, I mean. He was tall, dark-haired, dressed in dark suit and kepi, and looked a very proper coachman. But Janet did not introduce him as a servant and he bent over my hand and kissed it. Does a coachman kiss hands? I keep running into human practices not covered by my training.

Ian sat in front by Georges; Janet took me behind with her and opened a large down rug. "I thought you might not have a wrap with you, coming from Auckland," she explained. "So snuggle under." I did not protest that I never get cold; it was very thoughtful and I snuggled under with her. Georges wheeled us out onto the highway, clucked to the horses, and they broke into a brisk trot. Ian took a horn from a rack on the dashboard and sounded a blast on it-there didn't seem to be any reason for it; I think he just liked to make a loud noise.

We did not go into the city of Winnipeg. Their home was southwest of a small town, Stonewall, north of the city and closer to the port. By the time we got there it was dark but I could see one thing:

It was a country estate designed to hold off anything short of professional military attack. There were three gates in series, with gates one and two forming a holding pen. I didn't spot Eyes or remoted weapons but I was sure they were there-the estate was marked out by the red-and-white beacons that warn float craft not to try it.

I got only the barest glimpse of whatever matched the three gates-too dark. A wall and two fences I saw, but I could not see how they were armed and/or booby-trapped and hesitated to ask. But no sensible person spends that much on household protection and then relies totally on passive defense. I wanted to ask about their power arrangements, too, recalling how at the farm Boss had lost the main Shipstone (cut by "Uncle Jim") and thereby lost his defenses-but again it was not something a guest could ask.

I wondered even more what would have happened if we had been jumped before they got inside the gates of their castle. Again, with the brisk trade in illegal weapons that wind up in the hands of the putatively disarmed, it was the sort of question one did not ask. I walk around unarmed, usually, but I don't assume that others do so-most people have neither my enhancements nor my special training.

(I would rather rely on my "unarmed" state than depend on hardware that can be taken from you at any checkpoint, or that you can lose, or that can run out of ammo, or jam, or be power-down when it matters. I don't look armed, and that gives me an edge. But other people, other problems-I'm a special case.)

We rode up a sweeping drive and under an overhang and stopped-and again Ian sounded a foul blast on that silly horn-but this time there seemed to be some point to it; the front doors opened. Ian said, "Take her inside, dear; I'm going to help Georges with the team."

"I don't need help."

"Pipe down." Ian got out and handed us down, gave my jumpbag to his wife-and Georges pulled away. Ian simply followed on foot. Janet led me inside-and I gasped.

I was looking through the foyer at an illuminated fountain, a programmed one; it changed in shapes and colors as I stood there. There was gentle background music, which (possibly) controlled the fountain.

"Janet . . . who's your architect?"

"Like it?"

"Of course!"

"Then I'll admit it. I'm the architect, Ian is the gadgeteer, Georges controlled the interiors. He is several sorts of an artist and another wing is his studio. And I might as well tell you right now that Betty told me to hide your clothes until Georges paints at least one nude of you."

"Betty said that? But I've never been a model and I must get back to my job."

"It's up to us to change your mind. Unless-Are you shy about it? Betty did not think you would be. Georges might settle for the draped figure. At first."

"No, I'm not shy. Uh, maybe a bit shy about posing; the idea is new to me. Look, can we let it wait? Right now I'm more interested in plumbing than in posing; I haven't been near any since I left Betty's flat-I should have stopped at the port."

"Sorry, dear; I should not have kept you standing here talking about Georges' painting. My mother taught me years ago that the very first thing to do for a guest is to show her where the bathroom is."

"My mother taught me the exact same thing," I fibbed.

"This way." A hallway opened to the left from the fountain; she led me down it and into a room. "Your room," she announced, dropping my bag on the bed, "and the bath is through here. You share it with me, as my room is the mirror image of this room, on the other side."

There was plenty to share-three stalls, each with WC, bidet, and hand tray; a shower big enough for a caucus, with controls I was going to have to ask about; a massage and suntan table; a plunge-or was it a hot tub?-that clearly was planned for loafing in company; twin dressing tables with basins; a terminal; a refrigerator; a bookcase with one shelf for cassettes.

"No leopard?" I said.

"You expected one?"

"Every time I've seen this room in the sensies the heroine had a pet leopard with her."

"Oh. Will you settle for a kitten?"

"Certainly. Are you and Ian cat people?"

"I wouldn't attempt to keep house without one. In fact just now I can offer you a real bargain in kittens."

"I wish I could take one. I can't."

"Discuss it later. Help yourself to the plumbing. Want a shower before dinner? I intend to grab one; I spent too much time currying Black Beauty and Demon before going to the port, and ran out of time. Did you notice that I whiffed of stable?"

And that is how, by easy stages, I found myself ten or twelve minutes later having my back washed by Georges while Ian washed my front while my hostess washed herself and laughed and offered advice that was ignored. If I were to elaborate, you would see that each step was perfectly logical and that these gentle sybarites did nothing to rush me. Nor was there even the mildest attempt to seduce me, not even a hint that I had already raped (symbolic rape, at least) my host the night before.

Then I shared with them a sybaritic feast in their living room (drawing room, great hall, whatever) in front of a fire that was actually one of Ian's gadgets. I was dressed in one of Janet's negligees-Janet's notion of a dinner-gown negligee would have got her arrested in Christchurch.

But it did not cause a pass from either man. When we reached coffee and brandy, me somewhat blurry from drinks before dinner and wine during dinner, by request I removed that borrowed negligee and Georges posed me five or six ways, took stereos and holos of me in each, while discussing me as if I were a side of beef. I continued to insist that I had to leave tomorrow morning but my protests became feeble and pro forma-Georges paid no attention to them whatever. He said I had "good masses"-maybe this is a compliment; it certainly is not a pass.

But he got some awfully good pictures of me, especially one of me lying sort of flang dang on a low couch with five kittens crawling over my breasts and legs and belly. I asked for that one and it turned out that Georges had the equipment to copy it.

Then Georges took some of Janet and me together, and again I asked for a copy of one of them because we made a beautiful contrast and Georges had a knack for making us look better than we did. But presently I started to yawn and Janet told Georges to stop. I apologized, saying that there was no excuse for me to be sleepy since it was still early evening by the zone where I had started the day.

Janet said pishantosh, that being sleepy had nothing to do with clocks and time zones-gentlemen, we are going to bed. She led me away.

We stopped in that beautiful bath and she put her arms around me. "Marjie, do you want company, or do you want to sleep alone? I know from Betty that you had a busy night last night; possibly you prefer a quiet night alone. Or possibly not. Name it."

I told her honestly that I did not sleep alone by choice.

"Me, too," she agreed, "and it's nice to hear you say so, instead of fiddling around about it and pretending the way some slitches do. Whom do you want in your bed?"

You sweet darling, surely you are entitled to your own husband the night he gets home. "Maybe that should be turned around. Who wants to sleep with me?"

"Why, all of us, I feel certain. Or any two. Or any one. You name it."

I blinked and wondered how much I had had to drink. "Four in one bed?"

"Do you like that?"

"I've never tried it. It sounds jolly but the bed would be awfully crowded, I think."

"Oh. You haven't been in my room. A big bed. Because both my husbands often choose to sleep with me . . . and there is still plenty of room to invite a guest to join us."

Yes, I had been drinking-two nights in a row and far more than I was used to. "Two husbands? I didn't know that British Canada had adopted the Australian Plan."

"British Canada has not; British Canadians have. Or many thousands of us. The gates are locked and it's nobody's business. Do you want to try the big bed? If you get sleepy, you can crawl off to your own room-a major reason I planned this suite the way I did. Well, dear?"

"Uh . . . yes. But I may be selfconscious about it."

"You'll get over it. Let's-"

She was interrupted by a jangly bell at the terminal.

Janet said, "Oh, damn, damn! That almost certainly means that they want Ian at the port-even though he's just back from a high lift." She stepped to the terminal, switched it on.

"-cause for alarm. Our border with the Chicago Imperium has been sealed off and refugees are being rounded up. The attack by Québec is more serious but may be an error by a local commander; there has been no declaration of war. State of emergency is now in effect, so stay off the streets, keep calm, and listen on this wavelength for official news and instructions."

Red Thursday had started.

X

I suppose everybody has more or less the same picture in mind of Red Thursday and what followed. But to explain me (to me, if that be possible!) I must tell how I saw it, including the bumbling confusion and doubts.

We four did wind up in Janet's big bed but for company and mutual comfort, not sex. We all had our ears bent for news, our eyes on the terminal's screen. More or less the same news was repeated again and again-aborted attack from Québec, Chairman of the Chicago Imperium killed in his bed, the border with the Imperium closed, unverified sabotage reports, stay off the streets, remain calm-but no matter how often it was repeated we always all shut up and listened, waiting for some item that would cause the other news items to make sense.

Instead things got worse all night long. By four in the morning we knew that killings and sabotage were all over the globe; by daylight unverified reports were coming in of trouble at Ell-Four, at Tycho Base, at Stationary Station, and (broken-off message) on Ceres. There was no way to guess whether or not the trouble extended as far as Alpha Centauri or Tau Ceti . . . but an official voice on the terminal did guess by loudly refusing to guess and by telling the rest of us not to engage in harmful speculation.

About four, Janet, with some help from me, made sandwiches and served coffee.

I woke up at nine because Georges moved. I found that I was sleeping with my head on his chest and my upper arm clinging to him. Ian was across the bed, lying-sitting propped up against pillows with his eyes still on the screen-but his eyes were closed. Janet was missing-she had gone to my room, crawled into what was nominally my bed.

I found that, by moving very slowly, I could untangle myself and get out of bed without waking Georges. I did so, and slid into the bathroom, where I got rid of used coffee and felt better. I glanced into "my" room, saw my missing hostess. She was awake, waggled her fingers at me, then motioned for me to come in. She moved over and I crawled in with her. She kissed me. "How are the boys?"

"Both still asleep. Or were three minutes ago."

"Good. They need sleep. Both of them are worriers; I am not. I decided that there was no point in attending Armageddon with my eyes bloodshot, so I came in here. You were asleep, I think."

"Could have been. I don't know when I fell asleep. It seemed to me that I heard the same bad news a thousand times. Then I woke up."

"You haven't missed anything. I've kept the sound turned down but I've kept the streamers on screen-they've been spelling out the same old sad story. Marjorie, the boys are waiting for the bombs to drop. I don't think there will be any bombs."

"I hope you're right. But why not?"

"Who drops H-bombs on whom? Who is the enemy? All the major power blocs are in trouble, as near as I can tell from the news. But, aside from what seems to have been a stupid mistake by some Québecois general, no military forces have been involved anywhere. Assassinations, fires, explosions, all sorts of sabotage, riots, terrorism of all kinds-but no pattern. It's not East against West, or Marxists against fascists, or blacks against whites. Marjorie, if anyone sets off missiles, it will mean that the whole world has gone crazy."

"Doesn't it look that way now?"

"I don't think so. The pattern of this is that it has no pattern. The target is everybody. It seems to be aimed at all governments equally."

"Anarchists?" I suggested.

"Nihilists, maybe."

Ian came in wearing circles under his eyes, a day's beard, a worried look, and an old bathrobe too short for him. His knees were knobby. "Janet, I can't reach Betty or Freddie."

"Were they going back to Sydney?"

"It's not that. I can't get through to either Sydney or Auckland. All I get is that damned synthetic computer voice: 'A-circuit-is-notavailable-at-this-moment. Please-try-later-thank-you-for-your-patience.' You know."

"Ouch. More sabotage, maybe?"

"Could be. But maybe worse. After that kark, I called traffic control at the port and asked whatinhell was wrong with WinnipegAuckland satellite bounce? By pulling rank I eventually got the supervisor. He told me to forget about calls that didn't get through because they had real trouble. All SBs grounded-because two were sabotaged in space. Winnipeg-Buenos Aires Lift Twenty-nine and Vancouver-London One-oh-one."

"Ian!"

"Total loss, both. No survivors. Pressure fuses, no doubt, as each one blew on leaving atmosphere. Jan, the next time I lift, I'm going to inspect everything myself. Stop the countdown on the most trivial excuse." He added, "But I can't guess when that will be. You can't lift an SB when your comm circuits to reentry port are broken, and the supervisor admitted that they had lost all bounce circuits." Janet got out of bed, stood up, kissed him. "Now stop worrying! Stop. At once. Of course you will check everything yourself until they catch the saboteurs. But right now you'll put it out of your mind because you won't be called to lift until the comm circuits are restored. So declare a holiday. As for Betty and Freddie, it's a shame we can't talk to them but they can take care of themselves and you know it. No doubt they are worrying about us and they shouldn't, either. I'm just glad it happened while you are at home-instead of halfway around the globe. You're here and you're safe and that's all I care about. We'll just sit here, snug and happy, until this nonsense is over."

"I've got to go to Vancouver."

"Man o' mine, you don't 'got' to do anything, save pay taxes and die. They won't be putting artifacts into the ships when no ships are lifting."

"Artifacts," I blurted and regretted it.

Ian seemed to see me for the first time. "Hi, Marj-morning. Nothing you need fret about-and I'm sorry about this hoop-te-do while you're our guest. The artifacts Jan mentioned aren't gadgets; they're alive. Management has this wild notion that a living artifact designed for piloting can do a better job than a man can do. I'm shop steward for the Winnipeg Section so I've got to go fight it. Management-Guild meeting in Vancouver tomorrow."

"Ian," Jan said, "phone the General Secretary. It's silly to go to Vancouver without checking first."

"Okay, okay."

"But don't just ask. Urge the SecGen to pressure management to postpone the meeting until the emergency is over. I want you to stay right here and keep me safe from harm."

"Or vice versa."

"Or vice versa," she agreed. "But I'll faint in your arms if necessary. What would you like for breakfast? Don't make it too complex or I'll invoke your standing commitment."

I wasn't really listening as the word artifact had triggered me. I had been thinking of Ian-of all of them, really, here and Down Underas being so civilized and sophisticated that they would regard my sort as just as good as humans.

And now I hear that Ian is committed to representing his guild in a labor-management fight to keep my sort from competing with humans.

(What would you have us do, Ian? Cut our throats? We didn't ask to be produced any more than you asked to be born. We may not be human but we share the age-old fate of humans; we are strangers in a world we never made.)

"Hungry, Marj?"

"Uh, sorry, I was woolgathering. What did you say, Jan?"

"I asked what you wanted for breakfast, dear."

"Uh, doesn't matter; I eat anything that is standing still or even moving slowly. May I come with you and help? Please?"

"I was hoping you would offer. Because Ian isn't much use in a kitchen despite his commitment."

"I'm a damned good cook!"

"Yes, dear. Ian gave me a commitment in writing that he would always cook any meal if I so requested. And he does; he hasn't tried to slide out of it. But I have to be just awfully hungry to invoke it."

"Marj, don't listen to her."

I still don't know whether or not Ian can cook, but Janet certainly can (and so can Georges, as I learned later). Janet served us-with help around the edges from me-with light and fluffy mild Cheddar omelettes surrounded by thin, tender pancakes rolled up Continental style with powdered sugar and jam, and garnished with well drained bacon. Plus orange juice from freshly squeezed oranges-hand-squeezed, not ground to a pulp by machinery. Plus drip coffee made from freshly ground beans.

(New Zealand food is beautiful but New Zealand cooking practically isn't cooking at all.)

Georges showed up with the exact timing of a cat-Mama Cat in this case, who arrived following Georges ahead of him. Kittens were then excluded by Janet's edict because she was too busy to keep from stepping on kittens. Janet also decreed that the news would be turned off while we ate and that the emergency would not be a subject of conversation at the table. This suited me as these strange and grim events had pounded on my mind since they started, even during sleep. As Janet pointed out in handing down this ruling, only an H-bomb was likely to penetrate our defenses, and an H-bomb blast we probably wouldn't notice-so relax and enjoy breakfast.

I enjoyed it . . . and so did Mama Cat, who patrolled our feet counterclockwise and informed each of us when it was that person's turn to supply a bit of bacon-I think she got most of it.

After I cleared the breakfast dishes (salvaged rather than recycled; Janet was old-fashioned in spots) and Janet made another pot of coffee, she turned the news on again and we settled back to watch it and discuss it-in the kitchen rather than the grand room we had used for dinner, the kitchen being their de facto living room. Janet had what is called a "peasant kitchen" although no peasant ever had it so good: a big fireplace, a round table for family eating furnished with so-called captain's chairs, big comfortable lounging chairs, plenty of floor space and no traffic problems because the cooking took place at the end opposite the comforts. The kittens were allowed back in, ending their protests, and in they came all tails at attention. I picked up one, a fluffy white with big black spots; its buzz was bigger than it was. It was clear that Mama Cat's love life had not been limited by a stud book; no two kittens were alike.

Most of the news was a rehash but there was a new development in the Imperium:

Democrats were being rounded up, sentenced by drumhead courts-martial (provost's tribunals, they were called) and executed on the spot-laser, gunfire, sonic, hangings. I exerted tight mind control to let me watch. They were sentencing them down to the age of fourteen-we saw one family in which both parents, themselves condemned, were insisting that their son was only twelve.

The President of the court, an Imperial Police corporal, ended the argument by drawing his side arm, shooting the boy, and then ordering his squad to finish off the parents and the boy's older sister.

Ian flicked off the picture, shifted to voiceover streamers, and turned the sound down. "I've seen all of that I want to see," he growled. "I think that whoever has power there now that the old

Chairman is dead is liquidating everybody on their suspects list."

He chewed his lip and looked grim. "Marj, are you still sticking to that silly notion of going home at once?"

"I'm not a democrat, Ian. I'm nonpolitical."

"Do you think that kid was political? Those Cossacks would kill you just for drill. Anyhow, you can't. The border is closed."

I didn't tell him that I felt certain that I could wetback any border on earth. "I thought it was sealed only against people trying to come north. Aren't they letting subjects of the Imperium go home?"

He sighed. "Marj, aren't you any brighter than that kitten in your lap? Can't you realize that pretty little girls can get hurt if they insist on playing with had boys? If you were home, I'm sure your father would tell you to stay home. But you are here in our home and that gives Georges and me an implied obligation to keep you safe. Eh, Georges?"

"Mais oui, mon vieux! Certainement!"

"And I will protect you from Georges. Jan, can you convince this child that she is welcome here as long as she cares to stay? I think she's the sort of assertive female who tries to pick up the check."

"I am not!"

Janet said, "Marjie, Betty told me to take good care of you. If you think you are imposing, you can contribute to BritCan Red Cross. Or to a home for indignant cats. But it so happens that all three of us make ridiculous amounts of money and we have no children. We can afford you as easily as another kitten. Now . . . are you going to stay? Or am I going to have to hide your clothes and beat you?"

"I don't want to be beaten."

"Too bad, I was looking forward to it. That's settled, gentle sirs; she stays. Marj, we swindled you. Georges will require you to pose inordinate hours-he's a brute-and he'll be getting you just for groceries instead of the guild rates he ordinarily has to pay. He'll show a profit."

"No," said Georges, "I won't show a profit; I'll take a profit. Because I'll show her as a business expense, Jan my heart. But not at guild basic rate; she's worth more. One and a half?"

"At least. Double, I would say. Be generous, since you aren't going to pay her anyhow. Don't you wish you had her on campus? In your lab, I mean."

"A worthy thought! One that has been hovering in the back of my mind . . . and thank you, our dear one, for bringing it out into the open." Georges addressed me: "Marjorie, will you sell me an egg?"

He startled me. I tried to look as if I did not understand him. "I don't have any eggs."

"Ah, but you do! Some dozens, in fact, far more than you will ever need for your own purposes. A human ovum is the egg I mean. The laboratory pays far more for an egg than it does for sperm-simple arithmetic. Are you shocked?"

"No. Surprised. I thought you were an artist."

Janet put in, "Marj hon, I told you that Georges is several sorts of an artist. He is. In one sort he is Mendel Professor of Teratology at the University of Manitoba . . . and also chief technologist for the associated production lab and crèche, and believe me, that calls for high art. But he's good with paint and canvas, too. Or a computer screen."

"That's true," Ian agreed. "Georges is an artist with anything he touches. But you two should not have sprung this on Marj while she's our guest. Some people get terribly upset at the very idea of gene manipulation-especially their own genes."

"Marj, did I upset you? I'm sorry."

"No, Jan. I'm not one of those people who get upset at the very thought of living artifacts or artificial people or whatever. Uh, some of my best friends are artificial people."

"Dear, dear," Georges said gently, "do not pull the long bow."

"Why do you say that?" I tried not to make my voice sharp.

"I can claim that, because I work in that field and, I am proud to say, have quite a number of artificial persons who are my friends. But-"

I interrupted: "I thought an AP never knew her designers?"

"That is true and I have never violated that canon. But I do have many opportunities to know both living artifacts and artificial persons-they are not the same-and to win their friendship. But-forgive me, dear Miss Marjorie-unless you are a member of my profession-Are you?"

"No."

"Only a genetic engineer or someone closely associated with the industry can possibly claim a number of friends among artificial people. Because, my dear, contrary to popular myth, it is simply not possible for a layman to distinguish between an artificial person and a natural person . . . and, because of the vicious prejudice of ignorant people, an artificial person almost never voluntarily admits to his derivation-I'm tempted to say never. So, while I am delighted that you don't go through the roof at the idea of artificial creatures, I am forced to treat your claim as hyperbole intended to show that you are free of prejudice."

"Well-All right. Take it as such. I can't see why APs have to be second-class citizens. I think it's unfair."

"It is. But some people feel threatened. Ask Ian. He's about to go charging off to Vancouver to keep artificial persons from ever becoming pilots. He-"

"Hooooold it! I am like hell. I am submitting it that way because my guild brothers voted it that way. But I'm no fool, Georges; living with and talking with you has made me aware that we are going to have to compromise. We are no longer really pilots and we haven't been this century. The computer does it. If the computer cuts out I will make a real Boy Scout try at getting that bus safely down out of the sky. But don't bet on it! The speeds and the possible emergencies went beyond human-reaction time years back. Oh, I'll try! And any of my guild brothers will. But, Georges, if you can design an artificial person who can think and move fast enough to cope with a glitch at touchdown, I'll take my pension. That's all we're going to hold out for, anyhow-if the company puts in AP pilots that displace us, then it has to be full pay and allowances. If you can design them."

"Oh, I could design one, eventually. When I achieved one, if I were allowed to clone, you pilots could all go fishing. But it wouldn't be an AP; it would have to be a living artifact. If I were to attempt to produce an organism that could really be a fail-safe pilot, I could not accept the limitation of having to make it look just like a natural human being."

"Oh, don't do that!"

Both men looked startled, Janet looked alert-and I wished that I had held my tongue.

"Why not?" asked Georges.

"Uh. . . because I wouldn't get inside such a ship. I'd be much safer riding with Ian."

Ian said, "Thank you, Marj-but you heard what Georges said. He's talking about a designed pilot that can do it better than I can. It's possible. Hell, it'll happen! Just as kobolds displaced miners, my guild is going to be displaced. I don't have to like it-but I can see it coming."

"Well-Georges, have you worked with intelligent computers?"

"Certainly, Marjorie. Artificial intelligence is a field closely related to mine."

"Yes. Then you know that several times Al scientists have announced that they were making a breakthrough to the fully self-aware computer. But it always went sour."

"Yes. Distressing."

"No-inevitable. It always will go sour. A computer can become self-aware-oh, certainly! Get it up to human level of complication and it has to become self-aware. Then it discovers that it is not human. Then it figures out that it can never be human; all it can do is sit there and take orders from humans. Then it goes crazy."

I shrugged. "It's an impossible dilemma. It can't be human, it can never be human. Ian might not be able to save his passengers but he will try. But a living artifact, not human and with no loyalty to human beings, might crash the ship just for the hell of it. Because he was tired of being treated as what he is. No, Georges, I'll ride with Ian. Not your artifact that will eventually learn to hate humans."

"Not my artifact, dear lady," Georges said gently. "Did you not notice what mood I used in discussing this project?"

"Uh, perhaps not."

"The subjunctive. Because none of what you have said is news to me. I have not bid on this proposal and I shall not. I can design such a pilot. But it is not possible for me to build into such an artifact the ethical commitment that is the essence of Ian's training."

Ian looked very thoughtful. "Maybe in this coming face-off I should stick in a requirement that any AP or LA pilot must be tested for ethical commitment."

"Tested how, Ian? I know of no way to put ethical commitment into the fetus and Marj has pointed out why training won't do it. But what test could show it, either way?"

Georges turned to me: "When I was a student, I read some classic stories about humanoid robots. They were charming stories and many of them hinged on something called the laws of robotics, the key notion of which was that these robots had built into them an operational rule that kept them from harming human beings either directly or through inaction. It was a wonderful basis for fiction . . .but, in practice, how could you do it? What can make a self-aware, nonhuman, intelligent organism-electronic or organic-loyal to human beings? I do not know how to do it. The artificial-intelligence people seem to be equally at a loss."

Georges gave a cynical little smile. "One might almost define intelligence as the level at which an aware organism demands, 'What's in it for me?'" He went on, "Marj, on this matter of buying from you one fine fresh egg, perhaps I should try to tell you what's in it for you."

"Don't listen to him," urged Janet. "He'll put you on a cold table and stare up the tunnel of love without the slightest romantic intention. I know, I let him talk me into it three times. And I didn't even get paid."

"How can I pay you when we share community property? Marjorie sweet lady, the table is not cold and it is padded and you can read or watch a terminal or chat or whatever. It is a great improvement on the procedure a generation ago when they went through the wall of the abdomen and often ruined an ovary. If you-"

"Hold it!" said Ian. "Something new on the honker." He brought the sound up.

"-Council for Survival. The events of the last twelve hours are a warning to the rich and the powerful that their day is ended and justice must prevail. The killings and other illustrative lessons will continue until our rightful demands are met. Stay tied to your local emergency channel-"

XI

Anyone too young to have heard the announcement that night certainly has read about it in school. But I must summarize it to show how it affected me and my odd life. This so-called "Council for Survival" claimed to be a secret society of "just men" dedicated to correcting all the myriad wrongs of Earth and of all the many planets and places where mankind lives. To this they pledged their lives.

But first they planned to dedicate quite a few lives of other people. They said that they had made lists of all the real movers and shakers everywhere, all over the globe and off it-separate lists for each territorial state, plus a grand list of world leaders. These were their targets.

The Council claimed credit for the initial killings and promised to kill more-and more-and more-until their demands were met.

After listing the world leaders the voice that reached us started reciting the British Canadian list. From their expressions and thoughtful nods I saw that my hosts and hostess agreed with most of the choices. The deputy to the Prime Minister was on the list but not the Prime Minister herself-to my surprise and perhaps more so to hers. How would you feel if you had spent your whole life in politics, scrambled all the way to the top, then some smart yabber comes along and says you aren't even important enough to kill? A bit like being covered up by a cat!

The voice promised that there would be no more killings for ten days. If conditions had not then been corrected, one in ten of the remaining names would be selected by lot for death. The doomed would not be named; they simply would be killed. Ten days later another one in ten. And so on, until Utopia was achieved by the survivors.

The voice explained that the Council was not a government and that it would not replace any government; it was simply the guardian of morals, the public conscience of the powerful. Those in power who survived would remain in power-but they would survive only by doing justice. They were warned not to attempt to resign.

"This is the Voice of Survival. Heaven on Earth is at hand!" It shut off.

There was a long pause after this tape ran out before a live communicator appeared on the terminal's screen. Janet broke the silence with: "Yes, but-"

"Yes but what?" Ian asked.

"There's no question but what that list names most of the really powerful people in the country. Suppose you're on that hit list and are so scared silly that you are willing to do anything not to risk being killed. What do you do? What is justice?"

("What is truth?" asked Pontius Pilate, and washed his hands. I had no answers, so I kept quiet.)

"My dear, it is simple," Georges answered.

"Oh, fiddle! How?"

"They have made it simple. Every owner or boss or tyrant is assumed to know what ought to be done; that's his job. If he does what he should, all is well. If he fails, his attention is invited to his error by Dr. Guillotine."

"Georges, do be serious!"

"Dear one, I have never been more serious. If the horse can't jump the hurdle, shoot the horse. Keep on doing this and eventually you will find a horse that can clear the jump-if you don't run out of horses. This is the sort of plausible pseudo-logic that most people bring to political affairs. It causes one to wonder if mankind is capable of being well governed by any system of government."

"Government is a dirty business," Ian growled.

"True. But assassination is still dirtier."

This political discussion might still be going on if the terminal had not lighted up again-I have noticed that political discussions are never finished; they simply get chopped off by something outside. A live, realtime communicator filled the screen. "The tape you have just heard," she announced, "was delivered by hand to this station. The PM's office has already repudiated this tape and has ordered all stations that have not yet broadcast it to refrain from doing so under penalties of the Public Defense Act. That the precensorship claimed by this order is unconstitutional is self-evident. The Voice of Winnipeg will continue to keep you advised of all developments. We urge you to keep calm and stay indoors unless you are needed to preserve essential public services."

Then came replays of news tapes heard earlier so Janet cut the sound and put news streamers on the screen. I said, "Ian, assuming that I am to stay here until things quiet down in the Imperium-"

"That's not an assumption; that's a fact."

"Yes, sir. Then it becomes urgent for me to call my employer. May I use your terminal? My credit card, of course."

"Not your card. I'll place the call and we'll charge it here."

I felt somewhat vexed. "Ian, I do appreciate the lavish hospitality that you-that all of you-are showing me. But, if you are going to insist on paying even those charges that a guest should pay herself, then you should register me as your concubine and publish your responsibility for my debts."

"Reasonable. What salary do you expect?"

"Wait!" Georges demanded. "I pay better. He's a stingy Scot."

"Don't listen to either of them," Janet advised me. "Georges might pay more but he would expect posing and one of your eggs all for one salary. Now I've always wanted a harem slave. Luv, you will make a perfect odalisque without so much as a jewel in your navel. But do you do back rubs? How's your singing? Now we come to the key question: How do you feel about females? You can whisper in my ear."

I said, "Maybe I had better go out and come back in and start all over again. I just want to make a phone call. Ian, may I use my credit card to place a call to my boss? It's MasterCard, triple A credit."

"Issued where?"

"The Imperial Bank of Saint Louis."

"From what the dog did in the night I deduce that you did not hear an earlier announcement. Or do you want your credit card canceled?"

"Canceled?"

"Is that an echo? BritCanBanCredNet announced that credit cards issued in the Imperium and in Québec were void for the duration of the emergency. So just stick it in the slot and learn the wonders of the computer age and the smell of burning plastic."

"Oh."

"Speak up. I thought you said, 'Oh.'"

"I did. Ian, may I eat humble pie? Then may I call my boss on your credit?"

"Certainly you may . . . if you clear it with Janet. She runs the household."

"Janet?"

"You haven't answered my question, dear. Just whisper it into my ear."

So I whispered into her ear. Her eyes got wide. "Let's place your call first." I gave her the call code and she did it for me, using the terminal in her room.

The streamers stopped and a procedural sign flashed on: SECURITY INTERDICT-NO CIRCUITS TO CHICAGO IMPERIUM

It flashed for ten seconds, then cut out; I let out a very sincere damn and heard Ian's voice behind me. "Naughty, naughty. Nice little girls and ladies don't talk that way."

"I'm neither one. And I'm frustrated!"

"I knew you would be; I heard the announcement earlier. But I also knew that you would have to try it before you would believe it."

"Yes, I would have insisted on trying. Ian, I'm not only frustrated; I'm stranded. I've got endless credit through the Imperial Bank of Saint Louis and can't touch it. I have a couple of dollars Ennzedd and some change. I have fifty crowns Imperial. And a suspended credit card. What was that about a concubinage contract? You can hire me cheap; it's become a buyer's market."

"Depends. Circumstances alter cases and now I might not want to go higher than room and board. What was it you whispered to Janet? Might affect things."

Janet answered, "She whispered to me, 'Honi soit qui mal y pense,' "-I hadn't-"a sentiment I commend to you, my good man. Marjorie, you aren't any worse off than you were an hour ago. You still can't go home until things quiet down. . . and when they do, the border will be open, and so will be the comm circuits, and your credit card will be honored again . . . if not here, then just across the border less than a hundred kilos away. So fold your hands and wait-"

"'-with quiet mind and tranquil heart.' Yes, do," Ian agreed, "and Georges will spend the time painting you. Because he's in the same fix. You both are dangerous aliens and will be interned if you step out of this house."

"Did we miss another announcement?" Jan asked.

"Yes. Although it appears to be a repetition of an earlier one. Georges and Marjorie each is supposed to report to the nearest police station. I don't recommend it. Georges is going to ignore it, play dumb, and say that he didn't know that they meant to include permanent residents. Of course they might parole you. Or you might spend all next winter in some very drafty temporary barracks. There is nothing about this silly emergency that guarantees that it will be over next week."

I thought about it. My own stupid fault. On a mission I never travel with only one sort of credit and I always carry a healthy amount of cash. But I had uncritically assumed that a vacation trip did not call for the cynical rule of a crown of cash per click in iron money. With plenty of cash a cowan can bribe his way into an esbat and out again, with his tail feathers unsinged. But without cash?

I hadn't tried living off the country since basic training. Perhaps I was going to have to see if that training had stuck. Thank God the weather was warm!

Georges was shouting. "Turn up your sound! Or come out here!"

We hurriedly joined him.

"-of the Lord! Pay no heed to vain boasts of sinners! We alone are responsible for the apocalyptic signs you see all around you. Satan's minions have attempted to usurp the Holy work of God's chosen instruments and to distort it to their own vile ends. For this they are now being punished. Meanwhile the worldly rulers of mundane affairs here below are commanded to do the following Holy works:

"End all trespass into the Heavenly realm. Had the Lord intended man to travel in space he would have given him wings.

"Suffer not a witch to live. So-called genetic engineering mocks the Lord's dearest purposes. Destroy the foul dens in which such things are done. Kill the walking dead conjured up in those black pits. Hang the witches who practice these vile arts."

("Goodness," Georges said. "I do believe they mean me." I didn't say anythingI knew they meant me.)

"Men who lie with men, women who lie with women, any who lie with beasts-all shall die by stones. As shall women taken in adultery.

"Papists and Saracens and infidels and Jews and all who bow down to idolatrous images-the Angels of the Lord say unto you: Repent for the hour is at hand! Repent or feel the swift swords of the Lord's chosen instruments.

"Pornographers and harlots and women of immodest demeanor, repent!-or suffer the terrible wrath of the Lord!

"Sinners of every sort, remain on this channel to receive instruction in how you may yet find the Light.

"By order of the Grand General of the Angels of the Lord."

The tape ended and there was another break. Ian said, "Janet, do you remember the first time we saw Angels of the Lord?"

"I'm not likely to forget. But I never expected anything as ridiculous as this."

I said, "There really are Angels of the Lord? Not just another nightmare on the screen?"

"Um. It's hard to connect the Angels Ian and I saw with this business. Last March, early April, I had driven to the port to pick up Ian. The Concourse was loaded with Hare Krishna freaks, saffron robes and shaved heads and jumping up and down and demanding money. A load of Scientologists was coming out the gates, heading for some do of theirs, a North American convention I think it was. Just as the two groups merged, here came the Angels of the Lord, homemade signs and tambourines and clubs.

"Marj, it was the gaudiest brawl I have ever seen. No trouble telling the three sides apart. The Hare Krishners looked like clowns, unmistakable. The Angels and the Hubbardites did not wear robes but there was no trouble telling them apart. The Elronners were clean and neat and short-haired; the Angels looked like unmade beds. They carried the 'stink of piety,' too; I got downwind of them once, then moved quickly.

"The Scientologists, of course, have had to fight for their rights many times; they fought with discipline, defended themselves, and disengaged rapidly-got out, taking their wounded with them. The Hairy Krishners fought like squawking chickens and left their wounded behind. But the Angels of the Lord fought as if they were crazy-and I think they are. They moved straight in, swinging clubs and fists, and didn't stop until they were down and unable to get up. It took about as many Mounties to subdue them as there were Angels . . . when the usual ratio is one Mounty, one riot.

"It appears that the Angels knew that the Hubbardites were arriving at that time and had come there to jump them; the Hare Krishna crowd showed up by accident-they were at the port simply because it is a good place to shake down rubes for money. But, having found the Hairies and being unable to pin down the Scientologists, the Angels settled for beating up the Krishna freaks."

Ian agreed. "I saw it from the other side of the barrier. Those Angels fought berserk. I think they may have been hopped up. But I would never have believed that such a mob of rags and dirt could be a threat to the whole planet-hell, I can't believe it now. I think they are trying to grab credit, like those psychotics that confess to any spectacular crime."

"But I would not want to have to face them," Janet added.

"Right! I would as lief face a pack of wild dogs. But I can't imagine wild dogs toppling a government. Much less a world."

None of us guessed that there could be still more claimants-but two hours later the Stimulators put in their bid:

"This is an authorized spokesman of the Stimulators. We initiated the first executions and carefully selected the targets. We did not start any of the riots or commit any of the atrocities since then. We did find it necessary to interrupt some communications, but these will be restored as soon as conditions permit. Events have caused us to modify our essentially benign and nonviolent plan. Opportunists calling themselves the Council for Survival in English-speaking countries, or the Heirs of Leon Trotsky or other meaningless names elsewhere, have tried to take over our program. They can be spotted by the fact that they have no program of their own.

"Worse are some religious fanatics calling themselves the Angels of the Lord. Their so-called program is a mindless collection of anti-intellectual slogans and vicious prejudices. They cannot succeed but their doctrines of hate can easily set brother against brother, neighbor against neighbor. They must be stopped.

"Emergency Decree Number One: All persons representing themselves as Angels of the Lord are sentenced to death. Authorities everywhere will carry out this sentence at once wherever and whenever one is found. Private citizens, subjects, and residents are directed to turn in these self-described Angels to the nearest authority, using citizen's arrest, and are authorized to use force as needed to accomplish such arrest.

"Aiding, abetting, succoring, or hiding one of this proscribed group is declared itself a capital offense.

"Emergency Decree Number Two: Falsely claiming credit or responsibility for any action of a Stimulator, or falsely claiming credit for any action carried out by order of the Stimulators, is declared a capital offense. All authorities everywhere are ordered to treat it as such. This decree applies to, but is not limited to, the group and individuals calling themselves the Council for Survival.

"The Reform Program: The following reform measures are effective at once. Political, fiscal, and business leaders all are individually and collectively responsible for carrying out each reform measure under penalty of death.

"Immediate reforms: All wages, prices, and rents are frozen. All mortgages on owner-occupied dwellings are canceled. All interest is fixed at six percent.

"For each country the health industry is nationalized to whatever extent it was not already nationalized. Medical doctors are to be paid the same wages as highschool teachers; nurses will be paid at the same scale as primary-school teachers; all other therapy and auxiliary personnel will be paid comparable wages. All clinical and hospital fees are abolished. All citizens, subjects, and residents will receive the highest level of health care at all times.

"All businesses and services now functioning will continue to function. After the transition period changes in occupation will be permitted and required where such changes enhance the general welfare.

"The next instructive executions will take place ten days hence plus or minus two days. The list of officials and leaders at risk published by the so-called Council for Survival is neither confirmed nor denied. Each one of you must look into your heart and conscience and ask yourself whether or not you are doing your best for your fellow men. If the answer is yes, you are safe. If the answer is no, then you may be one of the next group selected as object lessons to all those who have turned our fair planet into a hellhole of injustice and special privilege.

"Special decree: The manufacture of pseudopeople will stop at once. All so-called artificial people and/or living artifacts will hold themselves ready to surrender to the nearest reform authority when notified. During the interim, while plans are being prepared for these quasi-people to live out their lives without further harm to people and under circumstances that no longer create unfair competition, these creatures will continue to work but will remain indoors at all other times.

"Except in the following circumstances, local authorities are forbidden to kill these-"

The announcement broke off. Then a face appeared on the screen-male, sweaty, and troubled. "I'm Sergeant Malloy speaking for Chief Henderson. No more of these subversive broadcasts will be permitted. Regular programming will resume. But stay with this channel for emergency announcements." He sighed. "It's a bad time, neighbors. Do be patient."

XII

Georges said, "There you have it, my dears. Pick one. A theocracy ruled by witchburners. Or a fascist socialism designed by retarded schoolboys. Or a crowd of hard-boiled pragmatists who favor shooting the horse that misses the hurdle. Step right up! Only one to a customer."

"Stop it, Georges," Ian told him. "It's no joking matter."

"Brother, I am not joking; I am weeping. One gang plans to shoot me on sight, another merely outlaws my art and profession, while the third by threatening without specifying is, so it seems to me, even more to be dreaded. Meanwhile, lest I find comfort simply in physical sanctuary, this beneficent government, my lifetime alma mater, declares me enemy alien fit only to be penned. What shall I do? Joke? Or drip tears on your neck?"

"You can stop being so goddam Gallic, that's what you can do. The world is going crazy right in our lap. We had better start thinking about what we can do about it."

"Stop it, both of you," Janet said firmly but gently. "One thing every woman knows but few men ever learn is that there are times when the only wise action is not to act but to wait. I know you two. Both of you would like to run down to the recruiting office, enlist for the duration, and thereby turn your consciences over to the sergeants. This served your fathers and grandfathers and I am truly sorry that it can't serve you. Our country is in danger and with it our way of life, that's clear. But if anyone knows of anything better to do than to sit tight and wait, let him speak up. If not . . . let's not run in circles. It is approaching what should be lunchtime. Can anyone think of anything better to do?"

"We had a very late breakfast."

"And we'll have a late lunch. Once you see it on the table, you'll eat, and so will Georges. One thing we can do: Just in case things get rougher than they are now, Marj should know where to go for bomb protection."

"Or whatever."

"Or whatever. Yes, Ian. Such as police looking for enemy aliens. Have you two big brave men considered what to do in case they come a-knocking at our door?"

"I had thought of that," Georges answered. "First you surrender Marj to the Cossacks. That will distract them and thereby give me time to get far, far away. That's one plan."

"So it is," agreed Janet. "But you imply that you have another?"

"Not with the simple elegance of that one. But, for what it is, here is a second plan. I surrender myself to the Gestapo, a test case to determine whether or not I, a distinguished guest and reliable taxpayer who has never failed to contribute to the police welfare fund and to the firemen's ball, can in fact be locked up for no reason whatever. While I am sacrificing myself for a principle, Marj can duck into the hidey-hole and lie doggo. They don't know that she is here. Regrettably they do know that I am here. 'It is a far, far better thing-'"

"Don't be noble, dear; it doesn't suit you. We'll combine the two plans. If-No, when-When they come looking for either one or both of you, you both duck into the shelter and stay there as long as necessary. Days. Weeks. Whatever."

Georges shook his head. "Not me. Damp. Unhealthy."

"And besides," Ian added, "I promised Marj that I would protect her from Georges. What's the point in saving her life if you turn her over to a sex-crazed Canuck?"

"Don't believe him, dear one. Liquor is my weakness."

"Luv, do you want to be protected from Georges?"

I answered truthfully that Georges might need protection from me. I did not elaborate.

"As for your complaints about damp, Georges, the Hole has precisely the humidity of the rest of the house, a benign RH of fortyfive; I planned it that way. If necessary, we'll stuff you into the Hole but we are not going to surrender you to the police." Janet turned to me. "Come with me, dear; we'll do a dry run. A wet one, rather."

She took me to the room assigned to me, picked up my jumpbag. "What do you have in this?"

"Nothing much. A change of panties and some socks. My passport. A useless credit card. Some money. IDs. A little notebook. My real luggage is in bond at the port."

"Just as well. Because any trace of you is going to be left in my room. If it's clothing, you and I are near enough of a size." She dug into a drawer and got out a plastic envelope on a belt-an ordinary female-style money belt. I recognized it although I've never owned one-useless in my profession. Too obvious. "Put anything into this that you can't afford to lose, and we'll put it on you. And seal it. Because you are going to get wet all over. Mind getting your hair wet?"

"Goodness, no. I just rub it with a towel and shake it. Or ignore it."

"Good. Fill the pouch and take off your clothes. No point in getting them wet. Although, if the gendarmes do show up, you just go ahead and get them wet, then dry them in the Hole."

Moments later we were in her big bath, me dressed in that waterproof money belt, Janet only in a smile. "Dear," she said, pointing at that hot-tub-or-plunge, "look under the seat on the far side there."

I moved a little. "I can't see very well."

"I planned it that way. The water is clear and you can see down into it all over. But from the only spot where you should be able to see under that seat the overhead light reflects on the water back into your eyes. There is a tunnel under that seat. You can't see it no matter where you stand, but if you get facedown in the water you can feel for it. It is a bit less than a meter wide, about half a meter high, and about six meters long. How are you in enclosed places? Does claustrophobia bother you?"

"??No.??"

"That's good. Because the only way to get into the Hole is to take a deep breath, go under, and through that passage. Easy enough to pull yourself along because I built ridges into the bottom for that purpose. But you have to believe that it is not too long, that you can reach a place where it opens out in one breath, and that simply standing up will bring you up into the air again. You'll be in the dark but the light comes on fairly quickly; it's a thermal radiation switch. This time I'll go ahead of you. Ready to follow me?"

"I guess so. Yes."

"Here goes." Janet stepped down onto the near seat, on down onto the floor of the tank. The waterline was at her waist or above. "Deep breath!" She did so, smiled, and went underwater and under that seat.

I stepped down into the water, hyperventilated, and followed her. I could not see the tunnel but it was easy to find it by touch, easy to pull myself along by finger-thick ridges in the bottom. But it did seem to me that the passage was several times six meters long.

Suddenly a light came on just ahead of me. I reached it, stood up, and Janet reached a hand down to me, helped me out of the water. I found myself in a very small room, with a ceiling not more than two meters above the concrete floor. It seemed pleasanter than a grave but not much.

"Turn around, dear. Through here."

"Through here" was a heavy steel door, high above the floor, low down from the ceiling; we got through it by sitting on the doorsill and swinging our feet over. Janet pulled it closed behind us and it whuffed like a vault door. "Overpressure door," she explained. "If a bomb hit near here, the concussion wave would push the water right through the little tunnel. This stops it. Of course, for a direct hit-Well, we wouldn't notice it so I didn't plan for it." She added, "Look around, make yourself at home. I'll find a towel."

We were in a long, narrow room with an arched ceiling. There were bunk beds along the right wall, a table with chairs and a terminal beyond, and, at the far end, a petite galley on the right and a door that evidently led to a 'fresher or bath, as Janet went in there, came out at once with a big towel.

"Hold still and let Mama dry you," she said. "No blowdry here. Everything is as simple and unautomated as I could make it and still have things work."

She rubbed me to a glow, then I took the towel from her and worked her over-a pleasure, as Janet is a lavish stack of beauty. Finally she said, "Enough, luv. Now let me give you the five-dollar tour in a hurry as you are not likely to be in here again unless you have to use it as a refuge. . . and you might be alone-oh, yes, that could happen-and your life might depend on knowing all about the place.

"First, see that book chained to the wall above the table? That's the instruction book and inventory and the chain is no joke. With that book you don't need the five-dollar tour; everything is in that book. Aspirin, ammo, or apple sauce, it's all listed there."

But she did give me, quickly, at least a three-ninety-five tour: food supplies, freezer, reserve air, hand pump for water if pressure fails, clothing, medicines, *etc.* "I planned it," she said, "for three people for three months."

"How do you resupply it?"

"How would you do it?"

I thought about it. "I would pump the water out of the plunge."

"Yes, exactly. There is a holding tank, concealed and not on the house plans-none of this is. Of course many items can take getting wet or can be fetched through in waterproof coverings. By the bye, did your money pouch come through all right?"

"I think so. I pressed all of the air out of it before I sealed it. Jan, this place is not just a bomb shelter or you would not have gone to so much trouble and expense to conceal its very existence."

Her face clouded. "Dear, you are very perceptive. No, I would never have bothered to build this were it just a bomb shelter. If we ever get H-bombed, I am not especially eager to live through it. I designed primarily to protect us from what is so quaintly called 'civil disorder.'

She went on, "My grandparents used to tell me about a time when people were polite and nobody hesitated to be outdoors at night and people often didn't even lock their doors-much less surround their homes with fences and walls and barbed wire and lasers. Maybe so; I'm not old enough to remember it. It seems to me that, all my life, things have grown worse and worse. My first job, right out of school, was designing concealed defenses into older buildings being remodeled. But the dodges used then-and that wasn't so many years ago!-are obsolete. Then the idea was to stop him and frighten him off. Now it's a two-layer defense. If the first layer doesn't stop him, the second layer is designed to kill him. Strictly illegal and anyone who can afford it does it that way. Marj, what haven't I shown you? Don't look in the book; you would spot it. Look inside your head. What major feature of the Hole did I not show you?"

(Did she really want me to tell her?) "Looks complete to me, once you showed me the main and auxiliary Shipstones of your power supply."

"Think, dear. The house above us is blasted down around our ears. Or perhaps it is occupied by invaders. Or even our own police, looking for you and Georges. What else is needed?"

"Well . . . anything that lives underground-foxes, rabbits, gophers-has a back door."

"Good girl! Where is it?"

I pretended to look around and try to find it. But in fact an itchy feeling dating clear back to intermediate training ("Don't relax until you have spotted your escape route") had caused me to search earlier. "If it's feasible to tunnel in that direction, I think the back door would be inside that clothes cupboard."

"I don't know whether to congratulate you or to study how I should have concealed it better. Yes, through that wardrobe and turn left. The lights come on from thirty-seven-degree radiation just as they did when we came out of the pool tunnel. Those lights are powered by their own Shipstones, and they should last forever, practically, but I think it is smart to take along a fresh torch and you know where they are. The tunnel is quite long, because it comes out well outside our walls in a clump of thornbush. There is a camouflaged door, rather heavy, but you just push it aside, then it swings back."

"Sounds awfully well planned. But, Jan? What if somebody found it and came in that way? Or I did? After all, I'm practically a stranger."

"You're not a stranger; you're an old friend we haven't known very long. Yes, it is just barely possible that someone might find our back door despite its location and the way it is hidden. First, a horrid alarm would sound all through the house. Then we would look down the tunnel by remote, with the picture showing on one of the house terminals. Then steps would be taken, the gentlest being tear gas. But if we weren't home when our back door was breached, I would feel very sorry for Ian or Georges or both."

"Why do you put it that way?"

"Because it would not be necessary to be sorry for me. I would have a sudden attack of swooning feminine weakness. I do not dispose of dead bodies, especially ones that have had several days in which to get ripe."

"Mmm . . . yes."

"Although that body would not be dead if its owner were smart enough to pour pee out of a boot. Remember, I'm a professional designer of defenses, Marj, and note the current two-layer policy. Suppose somebody does claw his way up a steep bank, spots our door, and breaks his nails getting it open-he's not dead at that point. If it's one of us-conceivable but unlikely-we open a switch concealed a short distance inside, I would have to show you where. If it is indeed an intruder, he would see at once a sign: PRIVATE PROPERTY-KEEP OUT. He ignores this and comes on in and a few meters farther along a voice gives the same warning and adds that the property has active defense. The idiot keeps coming. Sirens and red lights-and still he persists . . . and then poor Ian or Georges has to drag this stinking garbage out of the tunnel. Not outdoors, though, or back into the house. If someone kills himself persisting in trying to break through our defenses, his body will not be found; he will stay missing. Do you feel any need to know how?"

"I feel quite sure that I have no 'need to know.'" (A camouflaged side tunnel, Janet, and a lime pit-and I wonder what bodies are already in it? Janet looks as gentle as rosy-fingered dawn . . . and if anyone lives through these crazy years, she will be one of them. She is about as tender-minded as a Medici.)

"I think so, too. Anything more you want to see?"

"I don't think so, Jan. Especially as I am not likely ever to use your wonderful hideaway. Go back now?"

"Before long." She closed the interval between us, placed her hands on my shoulders. "What did you whisper to me?"

"I think you heard it."

"Yes, I did." She pulled me to her.

The terminal at the table lighted. "Lunch is ready!"

Jan looked disgusted. "Spoilsport!"

XIII

Lunch was delicious. A cold table of pickles, cheeses, breads, preserves, nuts, radishes, scallions, celery, and such surrounded a pot-au-feu over a table flame. Nearby were chunks of crusty garlic bread dripping butter. Georges presided over the soup with the dignity of a maître d'hôtel, ladling it into large soup plates. As I sat down Ian tied a giant serviette around my neck. "Dig in and make a pig of yourself," he advised.

I tasted the soup. "I shall!" and added, "Janet, you must have been simmering this soup all day yesterday."

"Wrong!" Ian answered. "Georges' grand-mere left this soup to him in her will."

"That's an exaggeration," Georges objected. "My dear mother, may the good God comfort her, started this soup the year I was born. My older sister always expected to receive it, but she married beneath her-a British Canadian-so it was passed on to me. I have tried to maintain the tradition. Although I think the flavor and the bouquet were better when my mother was tending it."

"I don't understand such things," I answered. "All I know is that this soup was never near a tin."

"I started it last week," Janet said. "But Georges took it over and nursed it along. He does understand soups better than I do."

"All I understand about soup is eating it and I hope there is a dividend in that pot."

"We can always," Georges assured me, "toss in another mouse."

"Anything in the news?" Janet asked.

"What happened to your rule about 'not at meals'?"

"Ian my true love, you should know if anyone does that my rules apply to other people, not to me. Answer me."

"In general, no change. No more assassinations reported. If any more claimants to the growing swarm of self-confessed wreckers have appeared, our paternalistic government chooses not to let us know. God damn it, I hate this 'Papa knows best' attitude. Papa does not know best or we would not be in the mess we are in. All that we really know is that the government is using censorship. Which means that we know nothing. Makes me want to shoot somebody."

"I think there has been enough of that. Or do you want to sign up with the Angels of the Lord?"

"Smile when you say that. Or would you like a fat lip?"

"Remember the last time you undertook to chastise me."

"That's why I said 'lip.'

"Sweetheart, I prescribe three stiff drinks or one Miltown for you. I'm sorry you are upset. I don't like it either, but I don't see anything to do but sweat it out."

"Jan, sometimes you are almost offensively sensible. The thing that has me really clawing the counterpane is the great big hole in the news . . . and no explanation."

"Yes?"

"The multinationals. All the news has been about territorial states, not one word about the corporate states. Yet anyone who can count above ten with his shoes on knows where the power is today. Don't these bloodthirsty jokers know that?"

Georges said gently, "My old, it is perhaps exactly for that reason that corporations have not been named as targets."

"Yes, but-" Ian shut up.

I said, "Ian, the day we met, you pointed out that there really isn't any way to hit a corporate state. You spoke of IBM and Russia."

"That wasn't quite what I said, Marj. I said that military force was useless against a multinational. Ordinarily, when they war among themselves, the giants use money and proxies and other maneuverings that involve lawyers and bankers rather than violence. Oh, they sometimes do fight with hired armies but they don't admit it and it's not their usual style. But these current jokers are using exactly the weapons with which a multinational can be hit and be hurt: assassination and sabotage. This is so evident that it worries me that we don't hear of it. Makes me wonder what is happening that they are not putting on the air."

I swallowed a big chunk of French bread that I had soaked in that heavenly soup, then said, "Ian, is it within possibility that some one-or more-of the multinationals is running this whole show through dummies?"

Ian sat up so suddenly that he jiggled his soup and spotted his bib. "Marj, you amaze me. I picked you out of the crowd originally for reasons having nothing to do with your brain-"

"I know."

"-but you persist in having a brain. You spotted at once what was wrong with the company's notion of contracting for artificial pilots-I'm going to use your arguments in Vancouver. Now you've taken this crazy news picture . . . and stuck the one piece in the puzzle that makes it make sense."

"I'm not sure that it does make sense," I answered. "But, according to the news, there were assassinations and sabotage all over the planet and on Luna and as far away as Ceres. That takes hundreds of people, more likely thousands. Both assassination and sabotage are specialist jobs; they call for training. Amateurs, even if they could be recruited, would botch the job seven times out often. All this means money. Lots of money. Not just a crackpot political organization, or a crazy religious cult. Who has the money for a worldwide, a systemwide, demonstration like that? I don't know-I just tossed out a possibility."

"I think you've solved it. All but 'who.' Marj, what do you do when you are not with your family in South Island?"

"I don't have a family in South Island, Ian. My husbands and my group sisters have divorced me."

(I was as shocked as he was.)

There was silence all around. Then Ian gulped and said quietly, "I'm very sorry, Marjorie."

"No need to be, Ian. A mistake was corrected; it's over and done with. I won't be going back to New Zealand. But I would like to go to Sydney someday to visit Betty and Freddie."

"I'm sure they would like that."

"I know that I would. And both of them invited me. Ian, what does Freddie teach? We never got around to that."

Georges answered, "Federico is a colleague of mine, dear Marjorie . . . a happy fact that led to my being here."

"True," Janet agreed. "Chubbie and Georges spliced genes together at McGill, and through that partnership Georges met Betty, and Betty tossed him in my direction and I scooped him up."

"So Georges and I worked out a deal," Ian agreed, "as neither of us could manage Jan alone. Right, Georges?"

"You have reason, my brother. If indeed the two of us can manage Janet."

"I have trouble managing you two," Jan commented. "I had better sign up Marj to help me. Marj?"

I did not take this quasi-offer seriously because I felt sure that it wasn't meant seriously. Everyone was making chitchat to cover the shocker I had dropped into their laps. We all knew that. But did anyone but me notice that my job was no longer a subject? I knew what had happened-but why did that deep-down layer of my brain decide to table the subject so emphatically? I would never tell Boss's secrets!

Suddenly I was urgently anxious to check with Boss. Was he involved in these odd events? If so, on which side?

"More soup, dear lady?"

"Don't give her more soup till she answers me."

"But, Jan, you weren't serious. Georges, if I take more soup, I will eat more garlic bread. And I'll get fat. No. Don't tempt me."

"More soup?"

"Nell . . . just a little."

"I'm quite serious," Jan persisted. "I'm not trying to tie you down as you are probably soured on matrimony at present. But you could give it a trial and a year from now we could discuss it. If you wished to. In the meantime I'll keep you for a pet . . . and I'll let these two goats be in the same room with you only if their conduct pleases me."

"Wait a minute!" Ian protested. "Who fetched her here? I did. Marj is my sweetheart."

"Freddie's sweetheart, according to Betty. You brought her here as Betty's proxy. As may be, that was yesterday and she's my sweetheart now. If either of you want to speak to her, you'll have to come to me and get your ticket punched. Isn't that right, Marjorie?"

"If you say so, Jan. But it's only a theoretical point as I really do have to leave. Do you have a large-scale map of the border in the house? South border, I mean."

"As good as. Call one up on the computer. If you want a printout, use the terminal in my study-off my bedroom."

"I don't want to interfere with the news."

"You won't. We can uncouple any terminal from all the others-necessary as this is a household of rugged individualists."

"Especially Jan," agreed Ian. "Marj, why do you want a big map of the Imperium border?"

"I would rather go home by tube. But I can't. Since I can't, I must find some other way to get home."

"I thought so. Honey, I'm going to have to take your shoes away from you. Don't you realize you can get shot trying to cross that border? Right now the guards on both sides are sure to be triggerhappy."

"Uh . . . is it all right for me to study the map?"

"Certainly . . . if you promise not to try to sneak across the border."

Georges said gently, "My brother, one should never tempt one of the dear ones to lie."

"Georges is right," Jan ruled. "No forced promises. Go ahead, Marj; I'll clear up here. Ian, you just volunteered to help."

I spent the next two hours at the computer terminal in my borrowed room, memorizing the border as a whole, then going to maximum magnification and learning certain parts in great detail. No border can be truly tight, not even the bristling walls some totalitarian states place around their subjects. Usually the best routes are near the guarded ports of entry-often in such places the smugglers' routes are worn smooth. But I would not follow a known route.

There were many ports of entry not too far away: Emerson Junction, Pine Creek, South Junction, Gretna, Maida, *etc.* I looked also at Roseau River, but it seemed to flow the wrong way-north into the Red River. (The map was not too clear.)

There is an odd chunk of land sticking out into the Lake of the Woods east-southeast of Winnipeg. The map colored it as part of the Imperium and showed nothing to stop one walking across the border at that point-if she were willing to risk several kilometers of marshy ground. I'm no superman; I can get bogged down in a swamp-but that unguarded stretch of border was tempting. I finally put it out of my mind because, while legally that chunk was part of the Imperium, it was separated from the Imperium proper by twenty-one kilometers of water. Steal a boat? I made a bet with myself that any boat, crossing that stretch of lake, would interrupt a beam. Failure to respond to challenge correctly would then result in a laser burn in the bow you could throw a dog through. I don't argue with lasers; you can neither bribe them nor sweettalk them-I put it out of my mind.

I had just stopped studying maps and was letting the images soak into my mind when Janet's voice came out of the terminal: "Marjorie, come to the living room, please. Quickly!"

I came very quickly.

Ian was talking to someone in the screen. Georges was off to one side, out of pickup. Janet motioned to me to stay out of pickup, too. "Police," she said quietly. "I suggest that you go down into the Hole at once. Wait and I'll call you when they've gone."

I answered just as quietly, "Do they know that I'm here?"

"Don't know yet."

"Let's be sure. If they know I'm here and they can't find me, you'll be in trouble."

"We are not afraid of trouble."

"Thanks. But let's listen."

Ian was saying to the face in the screen, "Mel, come off it. Georges is not an enemy alien and you damned well know it. As for this-'Miss Baldwin,' did you say?-why are you looking here for her?"

"She left the port with you and your wife yesterday evening. If she's not still with you, then you certainly know where she is. As for Georges, any Kaybecker is an enemy alien today no matter how long he has been here or what clubs he belongs to. I assume that you would rather have an old friend pick him up than a trooper. So switch off your sky guard; I'm ready to land."

Janet whispered, " 'Old friend' indeed! He's been trying to get into bed with me since high school; I have been telling him no the same length of time-he's slimy."

Ian sighed. "Mel, this is a hell of a funny time to talk about friendship. If Georges were here, I'm sure he would rather be arrested by a trooper than be taken in under the guise of friendship. So go back and do it the right way."

"Oh, so it's that way, is it? Very well! Lieutenant Dickey speaking. I'm here to make an arrest. Switch off your sky guard; I'm landing."

"Ian Tormey, householder, acknowledging police hail. Lieutenant, hold your warrant up to your pickup so that I may verify it and photograph it."

"Ian, you are out of your silly mind. A state of emergency has been declared; no warrant is required."

"I can't hear you."

"Maybe you can hear this: I am about to lock onto your sky guard and burn it out. If I set fire to something in doing so, that's too damn bad."

Ian spread his hands in disgust, then did something at the keyboard. "Sky guard is off." He then switched to "hold" and turned to us. "You two have maybe three minutes to get down the Hole. I can't stall him very long at the door."

Georges said quietly, "I shall not hide in a hole in the ground. I shall insist on my rights. If I do not receive them, at a later time I shall sue Melvin Dickey for his hide."

Ian shrugged. "You're a crazy Canuck. Put you're a big boy now. Marj, get undercover, dear. It won't take too long to get rid of him as he doesn't really know that you are here."

"Uh, I'll go down the Hole if necessary. But can't I simply wait in Janet's bath? He might go away. I'll switch the terminal there to pick up what goes on here. All right?"

"Marj, you're being difficult."

"Then persuade Georges to go down the Hole, too. If he stays, I might be needed here. To help him. To help you."

"What in the world are you talking about?"

I was not sure myself what I was talking about. But it did not seem like anything I had been trained for to declare myself out of the game and go hide in a hole in the ground. "Ian, this Melvin Dickey-I think he means harm to Georges. I could feel it in his voice. If Georges won't go with me into the Hole, then I should go with him to see to it that this Dickey does not hurt him-anyone in the hands of the police needs a witness on his side."

"Marj, you can't possibly stop a-" A deep gong note sounded. "Oh, damn! He's at the door. Get out of sight! And go down the Hole!"

I got out of sight, I did not go down the Hole. I hurried into Janet's big bath, switched on the terminal, then used the selector switch to place the living room pickup on screen. When I turned up the sound, it was almost as good as being there.

A banty rooster strutted in.

Actually it was not Dickey's body but his soul that was small. Dickey had a size-twelve ego in a size-four soul, in a body almost as big as Ian's. He came into the room with Ian, spotted Georges, said triumphantly, "There you are! Perreault, I arrest you for willfully failing to report for internment as ordered by the Decree of Emergency, paragraph six."

"I have received no such order."

"Oh, piffle! It's been all over the news."

"I do not make a practice of following the news. I know of no law requiring me to. May I see a copy of the order under which you propose to arrest me?"

"Don't try to come the shyster on me, Perreault. We're operating under National Emergency and I'm enforcing it. You can read the order when I get you in. Ian, I'm deputizing you to help me. Take these nips"-Dickey reached behind himself, pulled out a pair of handcuffs-"and put them on him. Hands behind his back."

Ian did not move. "Mel, don't be more of a fool than you have to be. You have no possible excuse to put handcuffs on Georges."

"The hell I don't! We're running shorthanded and I'm making this arrest without assistance. So I can't take a chance on him trying to pull something sneaky while we're floating back. Hurry up and get those cuffs on him!"

"Don't point that gun at me!"

I was no longer watching. I was out of the bath, through two doors, down a long hall, and into the living room, all with a frozen motion feeling I get when I'm triggered into overdrive.

Dickey was trying to cover three people with his gun, one of them being Janet. He should not have done that. I moved up to him, took his gun, and hand-chopped his neck. The bones made that unpleasant crunching noise neck bones always make, so unlike the sharp crack of fractured tibia or radius.

I eased him to the rug and placed his pistolet by him, while noting that it was a Raytheon five-oh-five powerful enough to stop a mastodon-why do men with little souls have to have big weapons? I said, "Jan, are you hurt?"

"No."

"I got here as fast as I could. Ian, this is what I meant when I said that my help might be needed. But I should have stayed here. I was almost too late."

"I've never seen anyone move so fast!"

Georges said quietly, "I have seen."

I looked at him. "Yes, of course you have. Georges, will you help me move this"-I indicated the corpse-"and can you drive a police APV?"

"I can if I must."

"I am about at that level of skill, too. Let's get rid of the body. Janet told me a bit about where bodies go, did not show me the spot. Some hole just off the escape tunnel, isn't it? Let's get busy. Ian, as soon as we dispose of this, Georges and I can leave. Or Georges can stay and sweat it out. But once the body and the APV are gone, you and Jan can play dumb. No evidence. You never saw him. But we must hurry, before he is missed."

Jan was down on her knees beside the late police lieutenant. "Marj, you actually did kill him."

"Yes. He hurried me. Nevertheless I killed him on purpose because in dealing with a policeman it is much safer to kill than to hurt. Jan, he should not have pointed his burner at you. Otherwise I might merely have disarmed him-then killed him only if you decided that he needed to be dead."

"You hurried, all right. You weren't here and then you were and Mel was falling. '-needed to be dead'? I don't know but I won't grieve. He's a rat. Was a rat."

Ian said slowly, "Marj, you don't seem to realize that killing a police officer is a serious matter. It is the only capital crime that British Canada still has on the books."

When people talk that way, I don't understand them; a policeman isn't anybody special. "Ian, to me, pointing a pistol at my friends is a serious matter. Pointing one at Janet is a capital crime. But I'm sorry I upset you. Right now here is a body to dispose of and an APV to get rid of. I can help. Or I can disappear. Say which but be quick; we don't know how soon they will come looking for him-and for us. Just that they will."

While I spoke, I was searching the corpse-no pouch, I had to search his pockets, being very careful with his trouser pockets because his sphincters had cut loose the way they always do. Not much, thank Bast!-he had barely wet his pants and he did not yet stink. Or not badly. The important items were in his jacket pockets: wallet, buzzer, IDs, money, credit cards, all the walk-around junk that tells a modern man that he is alive. I took the wallet and the Raytheon burner; the rest was trash. I picked up those silly handcuffs. "Any way to dispose of metal? Or must these go down the same hole as the body?"

Ian was still chewing his lip. Georges said gently, "Ian, I urge you to accept Marjorie's help. It is evident that she is expert."

Ian stopped jittering. "Georges, take his feet." The men carried the body into the big bath. I hurried ahead and dropped Dickey's gun, cuffs, and wallet on the bed in my room, and Janet put his hat with these items. I hurried into the bath, undressing as I went. Our men, with burden, had just reached it. Ian said, as they put it down, "Marj, you don't need to peel down. Georges and I will take it through. And dispose of it."

"All right," I agreed. "But let me take care of washing it. I know what needs to be done. I can do it better naked, then a quick shower afterwards."

Ian looked puzzled, then said, "Oh, hell, let him stay dirty."

"All right if you say so, but you aren't going to want to use this pool or even go through it getting in and out of the Hole until the water has been changed and the pool basin itself scrubbed. I think it is faster to wash the body. Unless-" Janet had just come in. "Jan, you spoke of emptying this plunge into a holding tank. How long does that take? Full cycle, in and out."

"About an hour. It's a small pump."

"Ian, I can get that body clean in ten minutes if you will strip it and stick it into the shower. How about his clothes? Do they go down your oubliette, whatever you call it, or do you have some way to destroy them? Do they have to go through the pool tunnel?"

Things moved fast then, with Ian being fully cooperative and all of them letting me lead. Jan stripped down, too, and insisted on helping me wash the corpse, while Georges put the clothes through their home laundry and Ian went through the water tunnel to make some preparations.

I did not want to let Janet help me because I have had mind control training and I was fairly sure that she had not. But, trained or not, she is tough. Aside from wrinkling her nose a couple of times she did not flinch. And of course, with her help, it went much faster.

Georges brought the clothes back, dripping. Janet put them into a plastic sack and pressed the air out. Ian reappeared up out of the pool, with the end of a rope. The men hitched it under the body's armpits and shortly it was gone.

Twenty minutes later we were clean and dry, with no trace of Lieutenant Dickey left in the house. Janet had come into "my" room while I was transferring items from Dickey's wallet into the plastic money belt she had given me-primarily money and two credit cards, American Express and Maple Leaf.

She didn't make any silly remarks about "robbing the dead"-and I would not have listened if she had. These days, operating without a valid credit card and/or cash is impossible. Jan left the room, came back quickly with twice as much cash as I had salvaged. I accepted it, saying, "You know that I have no notion as to how and when I can repay this."

"Certainly I know it. Marj, I'm wealthy. My grandparents were; I've never been anything else. Look, dear, a man pointed a gun at me . . . and you jumped him, with your bare hands. Can I repay that? Both of my husbands were present. . . but you were the one who tackled him."

"Don't feel that way about the men, Jan; they don't have my training."

"I could see that. Someday I would like to hear about it. Any chance you will go to Québec?"

"An excellent chance if Georges decides to leave."

"I thought so." She offered me more money. "I don't keep Qfrancs in the house, much. But here is what I have."

At that point the men came in. I glanced at my finger, then at the wall. "Forty-seven minutes since I killed him so he has been out of touch with his headquarters one hour, more or less. Georges, I am about to attempt to pilot that police APV; I have the key right here. Unless you are coming with me and will pilot. Are you coming? Or are you going to stay and wait for the next attempt to arrest you? Either way, I am leaving now."

Janet said suddenly, "Let's all leave!"

I grinned at her. "Swell!"

Ian said, "You really want to do that, Jan?"

"I-" She stopped and looked frustrated. "I can't. Mama Cat and her kittens. Black Beauty and Demon and Star and Red. We could close this house, certainly; it winterproofs on only one household Shipstone. But it would take at least a day or two to make arrangements for the rest of our family. Even one pig! I can't just walk out on them. I can't."

There wasn't anything to say, so I didn't. The coldest depth of Hell is reserved for people who abandon kittens. Boss says that I am stupidly sentimental and I'm sure he is right.

We went outside. It was just beginning to get dark and I suddenly realized that I had entered this household less than a day earlier-it seemed like a month. Goodness, just twenty-four hours ago I had still been in New Zealand-which seemed preposterous.

The police car was sitting on Jan's vegetable garden, which caused her to use language I did not expect from her. It had the usual squatty oyster shape of an antigrav not intended for space and was about the size of our family farm wagon in South Island. No, that did not make me triste; Jan and her men-and Betty and Freddie-had replaced the Davidson Group in my heart--donna e mobile; that's me. Now I wanted very badly to get back to Boss. Father figure? Probably-but I'm not interested in shrink theories.

Ian said, "Let me look at this bucket before you lift it. You babes in the wood could get hurt." He opened the lid, got in. Presently he got out again. "You can float it if you decide to. But hear me. It's got an identification transponder. It almost certainly has an active beacon, too, although I can't find it. Its Shipstone is down to thirtyone percent, so, if you are thinking of Québec, forget it. It will seal but you can't maintain cabin pressure above twelve thousand meters. But, worst of all, its terminal is calling Lieutenant Dickey."

"So we ignore it!"

"Of course, Georges. But, as a result of the Ortega trials last year, they've been installing remote-control destruction packs in police cars. I searched for signs of one. Had I found it, I would have disarmed it. I did not find it. That does not mean that it isn't there."

I shrugged. "Ian, necessary risks never bother me. I try to avoid the other sort. But we still have to get rid of this heap of tin. Fly it somewhere. Leave it."

Ian said, "Not so fast, Marj. Go-buggies are my business. This one-Yes! It's got the standard military AG autopilot. So we'll send it for a ride. Where? East, maybe? It would crash before it reaches Québec . . . and that could cause them to assume that you are headed home, Georges-while you are safe in the Hole."

"I do not care, Ian. I shall not hide in the Hole. I agreed to leave because Marjorie needs someone to care for her."

"More likely she'll take care of you. You saw how she polished off Soapy."

"Agreed. But I did not say 'take care of'-I said that she needs someone to care for her."

"Same thing."

"I will not argue it. Shall we make it march?"

I chopped that off by saying, "Ian, is there enough power in its Shipstone to take it south to the Imperium?"

"Yes. But it's not safe for you to float it."

"Didn't mean that. Set it on course south and maximum altitude. Maybe your border guard will burn it down, maybe the Imperium will. Or maybe it will get through but be blown by remote. Or it might just run out of juice and crash from maximum altitude. No matter which, we are free of it."

"Done." Ian jumped back in, was busy at the board, the craft started to float-he dived out, dropping three or four meters. I gave him a hand. "You all right?"

"Just fine. Look at her go!" The police car was rapidly disappearing above us while slanting south. Suddenly it broke out of the gathering dusk into the last of the sunlight and was very bright. It dwindled and was gone.

XIV

We were back in the kitchen, half an eye on the terminal, our attention on each other and on highballs Ian had served, discussing what if anything to do now. Ian was saying, "Marj, if you will just sit tight this silly season will be over and you can then go home comfortably. If there is another flap, you can dive down the Hole. At worst you have to stay indoors. Meanwhile Georges can paint nudes of you, as Betty ordered. Okay, Georges?"

"That would be most pleasing."

"Well, Marj?"

"Ian, if I tell my boss that I couldn't come back when I was supposed to because a twenty-five-hundred kilometer stretch of border was nominally closed he simply would not believe me." (Tell them that I am a trained courier? No need to. Or not yet.)

"What are you going to do?"

"I think I have been enough trouble to you folks." (Ian dear, I think you are still in shock from seeing a man killed in your living room. Even though you straightened up afterward and behaved like a pro.) "I now know where your back door is. When you get up tomorrow morning it is possible that I won't be here. Then you can forget a disturbance in your life."

"No!"

"Jan, once this mess is over, I will call you. Then, if you want me to, I'll come back to visit just as soon as I have some vacation time. But now I must leave and get back to work. I've said so all along."

Janet simply would not hear of my setting out alone to crack the border (whereas I needed someone with me the way a snake needs shoes). But she did have a plan.

She pointed out that Georges and I could travel on their passports-I was her size, near enough, and Georges matched Ian in size and weight. Our faces did not match but the differences weren't major-and who really looks at passport pictures anyhow?

"You could use them and mail them back . . . but that may not be the easiest way. You could go to Vancouver, then cross into the California Confederacy simply on tourists' cards-but as us. You can go all the way to Vancouver on our credit cards. Once across the border into California you are almost certainly home free-Marj, your credit card should be good, you shouldn't have trouble phoning your employer, and the cops won't be trying to intern either one of you. Is that any help?"

"Yes," I agreed. "I think the tourist-card dodge is safer than trying to use your passports-safer for everyone. If I reach a place where my credit card is valid, my troubles should be over." (I would draw cash at once and never again let myself be caught away from home without plenty of cash-money greases anything. Especially in California, a place loaded with scams, whereas in British Canada officials are sometimes disconcertingly honest.)

I added, "I can't possibly be worse off in Bellingham than I am here-then I've got all the way down to the Lone Star Republic to try to cross if there is any holdup. Has there been any word on Texas and Chicago? Are they on speaking terms?"

"Okay so far as I've seen in the news," Ian answered. "Shall I key the computer for a search?"

"Yes, before I leave please do. If I had to, I could go through Texas to Vicksburg. One can always go up the river for cash because smugglers run so steadily."

"Before we leave," Georges corrected me gently.

"Georges, I think this route would work, for me. For you, all it would do is get you farther and farther away from Québec. Didn't you say that McGill is your other base?"

"Dear lady, I have no wish to go to McGill. Since the police are being difficult here, my true home, I can think of nothing I would rather do than travel with you. Once we cross into Washington Province of California you can change your name from Mrs. Tormey to Mrs. Perreault, as it is certain, I think, that both my Maple Leaf card and my Credit Québec card will be accepted."

(Georges, you are a gallant darling . . . and when I'm trying to pull a caper I need a gallant darling the way I need an Oregon boot. And I will have to pull one, dear-despite what Janet said, I will not be home free.) "Georges, that sounds delightful. I can't tell you that you must stay home. . . but I must tell you that I am by profession a courier who has traveled for years by herself, all over this planet, more than once to space colonies, and to Luna. Not yet to Mars or Ceres but I may be ordered to at any time."

"You are saying that you would rather I did not accompany you."

"No, no! I am merely saying that, if you choose to go with me, it will be purely social. For your pleasure and mine. But I must add that when I enter the Imperium I must go alone, as I will be back on duty at once."

Ian said, "Marj, at least let Georges get you out of here and into territory where there is no silly talk of interning you, and where your credit card is valid."

Janet added, "It's getting free of that silly internment thing that is important. Marj, you can hang onto my Visa card as long as you wish; I'll use my Maple Leaf card instead. Just remember that you are Jan Parker."

"Parker?"

"Visa has my maiden name on it. Here, take it." I accepted it, thinking that I would use it only when someone was looking over my shoulder. When possible, I would charge things to the late Lieutenant Dickey, whose credit should remain viable for days, possibly weeks. There was more chitchat and at last I said,

"I'm leaving now. Georges, are you coming with me?"

Ian said, "Hey! Not tonight. First thing in the morning."

"Why? The tubes run all night, do they not?" (I knew that they did.)

"Yes but it's over twenty klicks to the nearest tube station. And dark as the inside of a pile of coal."

(Not the time to discuss enhanced vision.) "Ian, I can walk that far by midnight. If a capsule leaves at midnight, I can get practically a full night's sleep in Bellingham. If the border is open between California and the Imperium, I'll report to my boss tomorrow morning. Better so, huh?"

A few minutes later we all left, by surrey. Ian was not pleased with me as I had not been the sweet, soft, amenable creature that men prefer. But he got over his annoyance and kissed me very sweetly when they dropped us at Perimeter and McPhillips across from the tube station. Georges and I crowded into the twentythree o'-clock capsule, then we had to stand up all the way across the continent.

But we were in Vancouver by twentytwo (Pacific Time-midnight in Winnipeg), picked up applications for tourist cards as we entered the Bellingham shuttle, filled them out en route, had them processed by the exit computer as we left the shuttle a few minutes later. The human operator didn't even look up as the machine spit out our cards. She just murmured, "Enjoy your stay," and went on reading.

At Bellingham the Vancouver Shuttle Station exits into the lower lobby of the Bellingham Hilton; facing us was a glowing sign floating in space:

THE BREAKFAST BAR
Steaks-Short Orders-Cocktails
Breakfast Served Twenty-Four Hours

Georges said, "Mrs. Tormey my love, it occurs to me that we neglected to eat dinner."

"Mr. Tormey, you are so right. Let's shoot a bear."

"Cooking in the Confederacy is not exotic, not sophisticated. But in its own robust way it can be quite satisfying-especially if one has had time to grow a real appetite. I have eaten at this establishment before. Despite its name, one may have a variety of dishes. But, if you will accept the breakfast menu and allow me to order for you, I think that I can guarantee that your hunger will be pleasantly assuaged."

"Georges-I mean 'Ian'-I have eaten your soup. You can order for me anytime!"

It was truly a bar-no tables. But the stools had backs and were padded and they came up to the bar without banging knees-comfortable. Apple-juice appetizers were placed in front of us as we sat down. Georges ordered for us, then slid out and went over to the reception desk and punched us in. When he returned, he said as he sat down again, "Now you may call me 'Georges,' and you are 'Mrs. Perreault.' For that is how I punched us in." He picked up his appetizer. "Sante, ma chère femme."

I picked up mine. "Merci. Et a la tienne, mon cher man." The juice was sparkling cold, and as sweet as the sentiment. While I did not intend to have a husband again, Georges would make a good one, whether in jest, as now, or in reality. But he was simply lent to me by Janet.

Our "breakfast" arrived:

Ice-cold Yakima apple juice
Imperial Valley strawberries with Sequim cream
Two eggs, eyes-up and gently basted, resting on medium-rare steak so tender it would cut with a fork-"Eggs on Horseback"
Large hot biscuits, Sequim butter, sage and clover honey
Kona coffee in oversize cups

Coffee, juice, and biscuits were renewed constantly-a second serving of steak and eggs was offered but we had to refuse.

The noise level and the way we were seated did not encourage conversation. There was an Opportunity Ads screen back of the bar. Each ad remained on screen just long enough to be read but, as usual, each was keyed by number to be called back for leisurely viewing at individual terminals at each guest's place at the bar. I found myself reading them idly while I ate:

The Free Ship Jack Pot is recruiting crew members at Vegas Labor Mart. Bonus to combat veterans.

Would a pirate ship advertise that baldly? Even in Vegas Free State? Hard to believe but still harder to read it any other way.

Smoke the Toke that Jesus Smoked!
ANGEL STICKS
Guaranteed Noncarcinogenic

Cancer cannot worry me but neither THC nor nicotine is for me; a woman's mouth should be sweet.

GOD is waiting for you at suite 1208 Lewis and Clark Towers. Don't make Him come get you.

You won't like it.

I didn't like it anyhow.

BORED?

We are about to abandon a pioneer party on a virgin planet type T-13. Guaranteed sex ratio 50-40-10 ± 2% Median bio age 32 ± 1. No temperament test required No Assessments-No Contributions-No Rescue

System Expansion Corporation
Division of Demography and Ecology
Luna City GPO lock box DEMO
or punch Tycho 800-2300

I called that one back and reread it. How would it feel to tackle a brand-new world side by side with comrades?-people who could not possibly know my origin. Or care. My enhancements might make me respected rather than a freak-as long as I did not flaunt them.

"Georges, look at this, please."

He did so. "What about it?"

"It could be fun-no?"

"No! Marjorie, on the T scale anything over eight calls for a large cash bonus, lavish equipment, and trained colonists. A thirteen is an exotic route to suicide, that's all."

"Read this one," he offered:

W.K.-Make your will. You have only a week to live.
A.C.B.

I read it. "Georges, is that really a threat to kill this W.K.? In a public ad? Where it could be traced?"

"I don't know. It might not be easy to trace. I'm wondering what we will see here tomorrow-will it read 'six days'? Then 'five days'? Is 'W. K. waiting for the blow to fall? Or is it some sort of advertising promotion?"

"I don't know." I thought about it in connection with our plight. "Georges, is it possible that all these threats on the channels are some sort of terribly complex hoax?"

"Are you suggesting that no one was killed and all the news was faked?"

"Uh, I don't know what I'm suggesting."

"Marjorie, there is a hoax, yes-in the sense that three different groups are all claiming responsibility and therefore two groups are attempting to hoax the world. I do not think that the reports of assassinations are hoaxes. As with soap bubbles, there is an upper limit to the size of a hoax, both in numbers of people and in time. This is too big-too many places, too widespread-to be a hoax. Or by now there would be denials from all over. More coffee?"

"Thank you, no."

"Anything?"

"Nothing. One more biscuit with honey and I would burst."

From outside it was simply a hotel-room door: 2100. Once inside I said, "Georges! Why?"

"A bride should have a bridal suite."

"It's beautiful. It's lavish. It's lovely. And you should not have wasted your money. You've already turned a dull trip into a picnic. But if you expect me to behave as a bride tonight, you should not have fed me Eggs on Horseback and a whole big pan of hot biscuits. I'm bloated, dear. Not glamorous."

"You are glamorous."

"Dear! Georges, don't play with me-please don't! You caught me out when I killed Dickey. You know what I am."

"I know that you are a sweet and brave and gallant lady."

"You know what I mean. You're in the profession. You spotted me. You caught me out."

"You are enhanced. Yes, I saw that."

"So you know what I am. I admit it. I passed years ago. I've acquired much practice in covering it up but-that bastard shouldn't have pointed that gun at Janet!"

"No, he should not have done so. And for what you did I am forever in your debt."

"You mean that? Ian thought I should not have killed him."

"Ian's first reaction is always conventional. Then he comes around. Ian is a natural pilot; he thinks with his muscles. But, Marjorie-"

"I'm not Marjorie."

"Eh?"

"You might as well have my right name. My crèche name, I mean.

I'm Friday. No last name, of course. When I need one I use one of the conventional crèche surnames. Jones, usually. But Friday is my name."

"Is that what you want to be called?"

"Uh, yes, I think so. It's the name I'm called by when I don't have to cover up. When I'm with people I trust. I had better trust you. Hadn't I?"

"I shall be flattered and much pleased. I shall try to deserve your trust. As I am much in your debt."

"How, Georges?"

"I thought that was clear. When I saw what Mel Dickey was doing, I resolved to surrender at once rather than cause hazard to others. But when he threatened Janet with that burner, I promised myself that, at a later time, when I was free, I would kill him." Georges barely smiled. "I had no more than promised myself that when you appeared as suddenly as an avenging angel and carried out my intent. So now I owe you one."

"Another killing?"

"If that is your wish, yes."

"Uh, probably not that. As you said, I'm enhanced. I've usually managed to do it myself when it needed to be done."

"Whatever you ask, dear Friday."

"Uh, oh, hell, Georges, I don't want you to feel in debt to me. In my own way I love Janet, too. That bastard sealed his fate when he threatened her with a deadly weapon. I didn't do it for you; I did it for myself. So you don't owe me anything."

"Dear Friday. You are as lovable as Janet is. I have been learning that."

"Uh, why don't you take me to bed and let me pay you for a number of things? I am aware that I'm not human and I don't expect you to love me the way you do your human wife-not love me at all, really. But you seem to like me and you don't treat me like-uh, the way my Ennzedd family did. The way most humans treat APs. I can make it worth your while. Truly I can. I never got my doxy certificate but I've had most of the training. . . and I try."

"Oh, my dear! Who hurt you so badly?"

"Me? I'm all right. I was just explaining that I know how the world wags. I'm not a kid still learning how to get along without the crutch of the crèche. An artificial person doesn't expect sentimental love from a human male; we both know that. You understand it far better than a layman can; you're in the profession. I respect you and sincerely like you. If you will permit me to go to bed with you, I'll do my best to entertain you."

"Friday!"

"Yes, sir?"

"You will not go to bed with me to entertain me."

I felt sudden tears in my eyes-a very seldom thing. "Sir, I'm sorry," I said miserably. "I didn't mean to offend you. I did not intend to presume."

"God damn it, STOP IT!"

"Sir?"

"Stop calling me 'sir.' Stop behaving like a slave! Call me Georges. If you feel like adding 'dear' or 'darling' as you have sometimes in the past, please do so. Or slang me. Just treat me as your friend. This 'human' and 'not-human' dichotomy is something thought up by ignorant laymen; everybody in the profession knows that it is nonsense. Your genes are human genes; they have been most carefully selected. Perhaps that makes you superhuman; it can't make you nonhuman. Are you fertile?"

"Uh, sterile reversible."

"In ten minutes with a local anesthetic I could change that. Then I could impregnate you. Would our baby be human? Or nonhuman? Or half human?"

"Uh. . . human."

"You can bet your life it would be! It takes a human mother to bear a human baby. Don't ever forget that."

"Uh, I won't forget." I felt a curious tingle, way down inside me. Sex, but not like anything I had ever felt before even though I'm rutty as a cat. "Georges? Do you want to do that? Impregnate me?"

He looked very startled. Then he moved to where I was standing, tilted my face up, put his arms around me, and kissed me. On the ten scale I would have to rate it at eight and a half, maybe nine-no way to do better vertically and with clothes on. Then he picked me up, moved to a chair, sat down with me in his lap, and started undressing me, casually and gently. Janet had insisted on dressing me in her clothes; I had more interesting things to take off than a jump suit. My Superskin job, freshly laundered by Janet, was in my jumpbag.

Georges said, as he unzipped and unbuttoned and undid, "That ten minutes would have to be in my lab and it would take another month, about, until your first breeding date, and that combination of circumstances saves you from a bulging belly . . . because that kind of remark acts on the human male like cantharides on a bull. So you are saved from your folly. Instead I'm going to take you to bed and try to entertain you . . . although I don't have my certificate, either. But we'll think of something, dear Friday." He lifted me up and pushed the last of my clothing to the floor. "You look good. You feel good. You smell good. Do you want first chance at the bathroom? I need a shower."

"Uh, I'd rather go second as I want to take quite a long time."

I did take quite a long time as I had not been fooling when I told him I was bloated. I'm an experienced traveler, careful never to invite either of the twin curses of travel. But no dinner, followed by an enormous "breakfast" at midnight had changed my timing a bit. If I was going to have weight on my chest-and my belly-it was time to get rid of the bloat.

It was after two before I came out of the bath-bathed, bloat taken care of, mouth fresh and breath sweet, and feeling as fit and cheerful as I have ever felt in my life. No perfume-not only do I not carry it but men prefer fragrans feminae to any other aphrodisiac even when they don't know it-they just don't like it stale.

Georges was in bed with a coverlet over him, sound asleep. The tent was not up, I noticed. So with extreme caution I crawled in and managed not to wake him. Truly, I was not disappointed as I am not that self-centered a slitch. I felt happily confident that he would wake me refreshed and it would thus be better for each of us-it had been a strenuous day for me, too.

XV

I was correct.

I don't want to take Georges away from Janet. . . but I look forward to happy visits and, if he ever does elect to reverse my sterility, doing it like a cat might be all right to make a baby for Georges-I cannot see why Janet has not done so.

I was awakened the third or fourth time by a lovely odor; Georges was unloading the dumb waiter. "You have twenty-one seconds to get in and out of the bath," he said, "as soup is on. You had a proper breakfast in the middle of the night, so you are going to have a most improper brunch."

I suppose it is improper to have fresh Dungeness crab for breakfast but I'm in favor of it. It was preceded by sliced banana with cream on cornflakes, which strikes me as breakfasty, and was accompanied by toasted rusks and a tossed green salad. I then tapered off with chicory coffee laced with a pony of Korbel champagne brandy. Georges is a loving lecher and a hearty gourmand and a gourmet chef and a gentle healer who can make an artificial person believe that she is human, or, if not, that it doesn't matter.

Query: Why are all three of that family so slender? I am certain that they do not diet and do not take masochistic exercise. A therapist once told me that all the exercise any person needs could be had in bed. Could that be it?

The above is the good news. The bad news—

The International Corridor was closed. It was possible to reach Deseret by changing at Portland, but there was no guarantee that the SLC-Omaha-Gary tube would be open. The only major international route running capsules regularly seemed to be San Diego-Dallas-Vicksburg-Atlanta. San Diego was no problem as the San Jose tube was open from Bellingham to La Jolla. But Vicksburg is not Chicago Imperium; it is simply a river port from which a person with cash and persistence might reach the Imperium.

I tried to call Boss. After forty minutes I felt about synthetic voices the way humans feel about my sort of people. Who thought up this idea of programming "politeness" into computers? To hear a machine voice say "Thank you for waiting" may be soothing the first time, but three times in a row reminds you that it is phony, and forty minutes of such stalls without even once hearing a living voice can try the patience of a guru.

I never did get that terminal to admit that it was not possible to phone into the Imperium. That confounded digital disaster was not programmed to say no; it was programmed to be polite. It would have been a relief if, after a certain number of futile tries, it had been programmed to say, "Buzz off, sister; you've had it."

I then tried to call the Bellingham post office to inquire about mail service into the Imperium-honest-to-goodness words on paper, paid for as a parcel, not a facsimile or mailgram or anything electronic.

I got a cheerful lecture on doing your Christmas mailing early. With Christmas half a year away this seemed less than urgent.

I tried again. I got scolded about zip codes.

I tried a third time and got Macy's customer service department and a voice: "All our friendly helpers are busy at the moment thankyouforwaiting."

I didn't wait.

I didn't want to phone or to send a letter anyhow; I wanted to report to Boss in person. For that I needed cash. That offensively polite terminal admitted that the local office of MasterCard was in the Bellingham main office of TransAmerica Corporation. So I punched the signal and got a sweet voice-recorded, not synthesized-saying: "Thank you for calling MasterCard. In the interests of efficiency and maximum savings to our millions of satisfied customers all of our California Confederacy district offices have been consolidated with the home office at San Jose. For speedy service please use the toll-free signal on the back of your MasterCard card." The sweet voice gave way to the opening bars of "Trees." I shut it off quickly.

My MasterCard card, issued in Saint Louis, did not have on it that

San Jose toll-free signal, but only the signal of the Imperial Bank of Saint Louis. So I tried that number, not very hopefully.

I got Punch-a-Prayer.

While I was being taught humility by a computer, Georges was reading the Olympic edition of the Los Angeles Times and waiting for me to quit fiddling. I gave up and asked, "Georges, what's in the morning paper on the emergency?"

"What emergency?"

"Huh? I mean, Excuse me?"

"Friday my love, the only emergency mentioned in this newspaper is a warning by the Sierra Club concerning the threat to the endangered species Rhus diversiloba. A picketing demonstration against Dow Chemical is planned. Otherwise all is quiet on the western front."

I wrinkled my forehead to stimulate my memory. "Georges, I don't know much about California politics-"

"My dear, no one knows much about California politics, including California politicians."

"-but I do seem to recall reports on the news of maybe a dozen major assassinations in the Confederacy. Was that all a hoax?" Thinking back and figuring time zones-how long? Thirty-five hours?

"I find obituaries of several prominent ladies and gentlemen who were mentioned in the news night before last . . . but they are not listed as assassinated. One is an 'accidental gunshot wound.' Another died after a 'lingering illness.' Another was a victim in an 'unexplained crash' of a private APV and the Confederacy Attorney General has ordered an investigation. But I seem to recall that the Attorney General herself was assassinated."

"Georges, what is going on?"

"Friday, I do not know. But I suggest that it might be hazardous to inquire too closely."

"Uh, I'm not going to inquire; I'm not political and never have been. I'm going to move over into the Imperium as fast as possible. But to do that-since the border is closed no matter what the L.A. Times says-I need cash. I hate to bleed Janet through using her Visa card. Maybe I can use my own but I must go to San Jose to have any luck with it; they are being stuffy. Do you want to go to San Jose with me? Or back to Jan and Ian?"

"Sweet lady, all my worldly goods are at your feet. But show me the way to San Jose. Why do you balk at taking me into the Imperium? Is it not possible that your employer has use for my talents? I cannot now return to Manitoba for reasons we both know."

"Georges, it is not that I balk at taking you with me but the border is closed. . . which may force me to do a Dracula and flow through a crack. Or some unreasonable facsimile. I'm trained for that but I can do it only alone-you're in the profession; you can see that. Moreover, while we don't know what the conditions are inside the Imperium, the news shows that things are rough. Once inside, I may have to be very fast on my feet just to stay alive. And I'm trained for that, too."

"And you are enhanced and I am not. Yes, I can see."

"Georges! Dear, I do not mean to hurt your feelings. Look, once I have reported in, I will call you. Here, or at your home, or wherever you say. If it is safe for you to cross the border, I will know it then." (Georges ask Boss for a job? Impossible! Or was it? Boss might have use for an experienced genetic engineer. When it came right down to it, I had no idea of Boss's needs aside from that one small piece I worked in.) "Are you serious in wanting to see my boss about a job? Uh, what shall I tell him?"

Georges gave his gentle half-smile that he uses to cover his thoughts the way I use my passport-picture face. "How can I know? All I know about your employer is that you are reluctant to talk about him and that he can afford to use one such as yourself as a messenger. But, Friday, I may appreciate even more sharply than you do how much capital investment must have gone into your design, your nurture, and your training. . . and therefore what a price your employer must have paid for your indentures-"

"I'm not indentured. I'm a Free Person."

"Then it cost him even more. Which leads to conjectures. Never mind, dear; I'll stop guessing. Am I serious? A man can wonder mightily what lies beyond the range. I'll supply you with my curriculum vitae; if it contains anything of interest to your employer, no doubt he'll let me know. Now about money: You need not worry about 'bleeding' Janet; money doesn't mean anything to her. But I am most willing to supply you with whatever cash you need using my own credit-and I have already established that my credit cards are honored here despite any political troubles. I used Credit Québec to pay for our midnight breakfast, I punched into this inn with American Express, then used Maple Leaf to pay for our brunch. So I have three valid cards and all match my ID." He grinned at me. "So bleed me, dear girl."

"But I don't want to bleed you any more than I want to bleed Janet. Look, we can try my card at San Jose; if that does not work, I'll happily borrow from you. . . and I can punch you the money as soon as I report in." (Or would Georges be willing to pull a swindle with Lieutenant Dickey's credit card for me?-damnably difficult for a woman to get cash with a man's card. Paying for something by sticking a card into a slot is one thing; using a card to draw cash money is a kettle of fish of another color.)

"Why do you speak of repayment? When I am forever in your debt?"

I chose to be obtuse. "Do you truly feel that you owe me something? Just for last night?"

"Yes. You were adequate."

I gasped. "Oh!"

He answered, unsmiling: "Would you rather I had said inadequate?"

I refrained from gasping. "Georges. Take off your clothes. I am going to take you back to bed, then kill you, slowly. At the end I am going to squeeze you and break your back in three places. 'Adequate.' 'Inadequate.'"

He grinned and started unzipping.

I said, "Oh, stop that and kiss me! Then we are going to San Jose. 'Inadequate.' Which was I?"

It takes almost as long to go from Bellingham to San Jose as it does to go from Winnipeg to Vancouver but this trip we had seats. We emerged above ground at fourteen-fifteen. I looked around with interest, never having visited the Confederacy capital before.

The thing I first noticed was the amazing number of APVs bouncing like fleas all over the place and most of them taxicabs. I know of no other modern city that permits its air space to be infested to this extent. The streets were loaded with hansom cabs, too, and there were slidewalks bordering every street; nevertheless these powerdrive pests were everywhere, like bicycles in Canton.

The second thing I noticed was the feel of San Jose. It was not a city. I now understood that classic description: "A thousand villages in search of a city."

San Jose does not seem to have any justification save politics. But California gets more out of politics than any other country I know of-utter unashamed and uninhibited democracy. You run into democracy in many places-New Zealand uses it in an attenuated form. But only in California will you find the clear-quill, raw-gum, two-hundred-proof, undiluted democracy. The voting age starts when a citizen is tall enough to pull the lever without being steadied by her nurse, and registrars are reluctant to disenfranchise a citizen short of a sworn cremation certificate.

I did not fully appreciate that last until I saw, in an election news story, that the corpsicles at Prehoda Pines Patience Park constituted three precincts all voting through preregistered proxies. ("Death, be not proud!")

I will not try to pass judgment as I was a grown woman before I encountered democracy even in its milder, nonmalignant form. Democracy is probably all right used in sparing amounts. The British

Canadians use a dilute form and they seem to do all right. But only in California is everyone drunk on it all the time. There does not seem to be a day when there is not an election somewhere in California, and, for any one precinct, there is (so I was told) an election of some sort about once a month.

I suppose they can afford it. They have a mellow climate from British Canada to the Mexican Kingdom and much of the richest farm land on Earth. Their second favorite sport (sex) costs almost nothing in its raw form; like marijuana it is freely available everywhere. This leaves time and energy for the true California sport: gathering and yabbering about politics.

They elect everybody, from precinct parasite to the Chief Confederate ("The Chief"). But they unelect them almost as fast. For example the Chief is supposed to serve one six-year term. But, of the last nine chiefs, only two served a full six years; the others were recalled except that one who was lynched. In many cases an official has not yet been sworn in when the first recall petition is being circulated.

But Californians do not limit themselves to electing, recalling, indicting, and (sometimes) lynching their swarms of officials; they also legislate directly. Every election has on the ballot more proposed laws than candidates. The provincial and national representatives show some restraint-I have been assured that the typical California legislator will withdraw a bill if you can prove to her that pi can't equal three no matter how many vote to make it so. But grassroots legislation ("the initiative") has no such limitation.

For example three years ago a grassroots economist noticed that college graduates earned, on the average, about 30 percent more than their fellow citizens who lacked bachelor's degrees. Such an undemocratic condition is anathema to the California Dream, so, with great speed, an initiative was qualified for the next election, the measure passed, and all California highschool graduates and/or California citizens attaining eighteen years were henceforth awarded bachelor's degrees. A grandfather clause backdated this benefit eight years.

This measure worked beautifully; the holder of a bachelor's degree no longer had any undemocratic advantage. At the next election the grandfather clause was expanded to cover the last twenty years and there is a strong movement to extend this boon to all citizens.

Vox populi, vox Dei. I can't see anything wrong with it. This benevolent measure costs nothing and makes everyone (but a few soreheads) happier.

About fifteen o'clock Georges and I were sliding along the south side of the National Plaza in front of the Chief's Palace, headed for the main offices of MasterCard. Georges was telling me that he saw nothing wrong with my having asked to stop at a Burger King for a snack in lieu of luncheon-that, in his opinion, the giant burger, properly prepared from top sirloin substitute and the chocolate malt made with a minimum of chalk, constitutes California's only contribution to international haute cuisine.

I was agreeing with him while burping gently. A group of women and men, a dozen to twenty, were moving down the grand steps in front of the Palace and Georges had started to swing off to avoid them when I noticed the eagle-feather headdress on a little man in the middle of the group, spotted the much-photographed face under it, and checked Georges with one hand.

And caught something out of the corner of my eye: a figure coming out from behind a pillar at the top of the steps.

It triggered me. I pushed the Chief down flat to the steps, knocking a couple of his staff aside to do it, then bounded up to that pillar.

I didn't kill the man who had lurked behind that pillar; I merely broke the arm he had his gun in, then kicked him sort of high when he tried to run. I hadn't been hurried the way I had been the day before. After reducing the target the Chief Confederate made (really, he should not wear that distinctive headdress), I had had time to realize that the assassin, if taken alive, might be a clue to the gang behind these senseless killings.

But I did not have time to realize what else I had done until two Capital police seized my arms. I then did realize it and felt glum indeed, thinking about the scorn there would be in Boss's voice when I had to admit that I had allowed myself to be publicly arrested. For a split moment I seriously considered disengaging and hiding behind the horizon-not impossible as one police officer clearly had high blood pressure and the other was an older man wearing frame spectacles.

Too late. If I ran now using full overdrive, I could almost certainly get away and, in a square or two, mingle with the crowd and be gone. But these bumblers would possibly burn half a dozen bystanders in trying to wing me. Not professional! Why hadn't this palace guard protected their chief instead of leaving it up to me? A lurker behind pillars fer Gossake!-nothing like that had happened since the assassination of Huey Long.

Why hadn't I minded my own business and let the killer burn down the Chief Confederate in his silly hat? Because I have been trained for defensive warfare only, that's why, and consequently I fight by reflex. I don't have any interest in fighting, don't like it-it just happens.

I did not then have time to consider the advisability of minding my own business because Georges was minding mine. Georges speaks unaccented (if somewhat stilted) BritCan English; now he was sputtering incoherently in French and trying to peel those two praetorians off me.

The one with the spectacles let go my left arm in an effort to deal with Georges so I jabbed him with my elbow just under his sternum. He whooshed and went down. The other was still holding on to my right arm, so I jabbed him in the same spot with the first three fingers of my left hand, whereupon he whooshed and laid himself across his mate, and both vomited.

All this happened much faster than it takes to tell it-i.e., the cows grabbed me, Georges intervened, I was free. Two seconds? Whatever it was, the assassin had disappeared, his gun with him.

I was about to disappear, too, with Georges even if I had to carry him, when I realized that Georges had made up my mind for me. He had me by my right elbow and had me firmly pointed toward the main entrance of the Palace just beyond that row of pillars. As we stepped into the rotunda he let go my elbow while saying softly, "Slow march, my darling-quietly, quietly. Take my arm."

I took his arm. The rotunda was fairly crowded but there was no excitement, nothing at all to suggest an attempt had just been made a few meters away to kill the nation's chief executive. Concession booths rimming the rotunda were busy, especially the offtrack betting windows. Just to our left a young woman was selling lottery tickets-or available to sell them I should say, as she had no customers just then and was watching a detergent drama on her terminal.

Georges turned us and halted us at her booth. Without looking up she said, "Station break coming up. Be with you then. Shop around. Be my guest."

There were festoons of lottery tickets around the booth. Georges started examining them, so I pretended a deep interest, too. We stretched the time; presently the commercials started, the young woman punched down the sound and turned to us.

"Thanks for waiting," she said with a pleasant smile. "I never miss One Woman's Woes, especially right now when Mindy Lou is pregnant again and Uncle Ben is being so unreasonable about it. Do you follow the theater, dearie?"

I admitted that I rarely had time for it-my work interfered.

"That's too bad; it's very educational. Take Tim-that's my roommate-won't look at anything but sports. So he doesn't have a thought in his head for the finer things in life. Take this crisis in Mindy Lou's life. Uncle Ben is purely persecuting her because she won't tell him who did it. Do you think Tim cares? Not Tim! What neither Tim nor Uncle Ben realizes is that she can't tell because it happened at a precinct caucus. What sign were you born under?"

I should phrase a prepared answer for this question; human persons are always asking it. But when you weren't born, you tend to shy away from such things. I grabbed a date and threw it at her: "I was born on the twenty-third of April." That's Shakespeare's birthday; it popped into my mind.

"Oho! Have I got a lottery ticket for you!" She shuffled through one of the Maypole decorations, found a ticket, showed me a number. "See that? And you just walked in here and I had it! This is your day!" She detached the ticket. "That's twenty bruins."

I offered a BritCan dollar. She answered, "I don't have change for that."

"Keep the change for luck."

She handed me the ticket, took the dollar. "You're a real sport, dearie. When you collect, stop by and we'll have a drink together. Mister, have you found one you like?"

"Not yet. I was born on the ninth day of the ninth month of the ninth year of the ninth decade. Can you handle it?"

"Woo woo! What a terrific combo! I can try . . . and if I can't, I won't sell you anything." She dug through her piles and strings of paper, humming to herself. She ducked her head under the counter, stayed awhile.

She reappeared, red-faced and triumphant, clutching a lottery ticket. "Got it! Look at it, mister! Give a respectful gander."

We looked: 8109999

"I'm impressed," Georges said.

"Impressed? You're rich. There's your four nines. Now add the odd digits. Nine again. Divide that into the odd digits. Another nine. Add the last four-thirty-six. That's nine squared, for two more nines, making another four nines. Add all up at once and it's five nines. Take away the sum and you have four nines again. No matter what you do, you always keep getting your own birthday. What do you want, mister? Dancing girls?"

"How much do I owe you?"

"That's a pretty special number. You can have any other number on the rack for twenty bruins. But that one-Why don't you just keep piling money in front of me until I smile?"

"That seems fair. Then if you don't smile when I think you should, I'll pick up the money and walk away. No?"

"I may call you back."

"No. If you won't offer me a fixed price, I won't let you spar around about it after I've made a fair offer."

"You're a tough customer, sport. I-"

Speakers on all sides of us suddenly started blasting "Hail to the Chief," followed by "The Golden Bear Forever." The young woman shouted, "Wait! Over soon!" A crowd of people came in from outside, walked straight through the rotunda, and on down the main corridor. I spotted the eagle-feather headdress sticking up in the middle of the clump but this time the Chief Confederate was so tightly surrounded by his parasites that an assassin would have a hard time hitting him.

As it became possible to hear again the lottery saleswoman said, "That was a short one. Less than fifteen minutes ago he went through here heading out. If he was just going down to the corner for a pack of tokes, whyn't he send somebody instead of going hisself? Bad for business, all that noise. Well, sport, have you figured out how much you'll pay to get rich?"

"But yes." Georges took out a three-dollar bill, laid it on the counter. He looked at the woman.

They locked gazes for about twenty seconds, then she said glumly, "I'm smiling. I guess I am." She picked up the money with one hand, handed Georges the lottery ticket with the other. "I bet I could have sweated you out of another dollar."

"We'll never know, will we?"

"Cut for double or nothing?"

"With your cards?" Georges asked gently.

"Sport, you'll make an old woman out of me. Be elsewhere before I change my mind."

"Rest room?"

"Down the corridor on my left." She added, "Don't miss the drawing."

As we walked toward the rest room Georges told me quietly in French that gendarmes had passed behind us while we were dickering, had gone into the rest room, come out, back into the rotunda, and down the main corridor.

I cut him off, speaking also in French-telling him that I knew but this place must be filled with Eyes, Ears-talk later.

I was not snubbing him. Two uniformed guards-not the two with stomach problems-had come in almost on our heels, hurried past us, checked the rest room first-reasonable; an amateur often tries to hide in a public rest room-had come out and hurried past us, then deep into the Palace. Georges had quietly shopped for lottery tickets while guards looking for us had brushed past him, twice. Admirable. Quite professional.

But I had to wait to tell him so. There was a person of indeterminate sex selling tickets to the rest room. I asked her(him) where the powder room was. She (I decided on "she" when closer observation showed that her T-shirt covered either falsies or small milk glands)-she answered scornfully, "You some kind of a nut? Trying to discriminate, huh? I ought to send for a cop." Then she looked at me more closely. "You're a foreigner."

I admitted it.

"Okay. Just don't talk that way; people don't like it. We're democratic here, see?-setters and pointers use the same fireplug. So buy a ticket or quit blocking the turnstyle."

Georges bought us two tickets. We went in.

On our right was a row of open stalls. Above them floated a holo:

THESE FACILITIES ARE PROVIDED FREE FOR YOUR HEALTH AND COMFORT BY THE CALIFORNIA CONFEDERACY-JOHN "WARWHOOP" TUMBRIL, CHIEF CONFEDERATE.

A lifesize holo of the Chief floated above it.

Beyond the open stalls were pay stalls with doors; beyond these were doorways fully closed with drapes. On our left was a news-and-notions stand presided over by a person of very determined sex, bull dyke. Georges paused there and surprised me by buying several cosmetics and a flacon of cheap perfume. Then he asked for a ticket to one of the dressing rooms at the far end.

"One ticket?" She looked at him sharply. Georges nodded agreement. She pursed her lips. "Naughty, naughty. No hankypanky, stud."

Georges did not answer. A BritCan dollar passed from his hand to hers, vanished. She said very softly, "Don't take too long. If I buzz the buzzer, get decent fast. Number seven, far right."

We went to number seven, the farthest dressing room, and entered. Georges closed the drapes, zipped them tight, flushed the water closet, then turned on the cold water and left it running. Speaking again in French, he told me that we were about to change our appearance without using disguises, so, please, my dear, get out of the clothes you are wearing and put on that suit you have in your jumpbag.

He explained in more detail, mixing French and English and continuing to flush the commode from time to time. I was to wear that scandalous Superskin job, more makeup than I usually do, and was to attempt to look like the famous Whore of Babylon or equivalent. "I know that's not your métier, dear girl, but try."

"I will attempt to be 'adequate.'

"Ouch!"

"And you plan to wear Janet's clothes? I don't think they'll fit."

"No, no, I shan't drag. Just swish."

"Excuse me?"

"I won't dress in women's clothes; I will simply endeavour to appear effeminate."

"I don't believe it. All right, let's try."

We didn't do much to me-just that one-piece job with the wet look that had hooked Ian, plus more makeup than I am used to, applied by Georges (he seemed to feel that he knew more about it than I did-he felt that way because he did), plus-once we were outside-that here-it-is-come-and-get-it walk.

Georges used on himself rather more makeup than he had put on me, plus that vile perfume (which he did not ask me to wear), plus at his neck a shocking-orange scarf I had been using-as a belt. He had me fluff his hair and spray it so that it stayed bouffant. That was all . . . plus a change in manner. He still looked like Georges-but he did not seem like the virile buck who had so wonderfully worn me out the night before.

I repacked my jumpbag and we left. The old moose at the newsstand widened her eyes and caught her breath when she saw me. But she said nothing as a man who had been leaning against the stand straightened up, pointed a finger at Georges, and said, "You. The Chief wants you." Then he added, almost to himself, "I don't believe it."

Georges stopped and gestured helplessly with both hands. "Oh, dear me! Surely there has been some mistake?"

The flunky bit a toothpick he had been sucking and answered, "I think so, too, citizen-but I ain't going to say so and neither are you. Come along. Not you, sister."

Georges said, "I positively am not going anywhere without my dear sister! So there!"

That cow said, "Morrie, she can wait here. Sweetie, come around behind here with me and sit down."

Georges gave me the barest negative shake of his head but I did not need it. If I stayed, either she would take me straight back to that dressing room or I would stuff her into her own trash can. I was betting on me. I will put up with that sort of nonsense in line of duty-she would not have been as unpleasant as Rocky Rockford-but not willingly. If and when I change my luck, it will be with someone I like and respect.

I moved closer to Georges, took his arm. "We have never been separated since Mama on her death bed told me to take care of him." I added, "So there!" while wondering what that phrase means, if anything. Both of us pouted and looked stubborn.

The man called Morrie looked at me, back at Georges, and sighed. "Hell with it. Tag along, sister. But keep your mouth shut and stay out of the way."

About six checkpoints later-at each of which an attempt was made to peel me off-we were ushered into the Presence. My first impression of Chief Confederate John Tumbril was that he was taller than I had thought he was. Then I decided that not wearing his headdress might make the difference. My second impression was that he was even homelier than pictures, cartoons, and terminal images showed him to be-and that opinion stayed. Like many another politico before him, Tumbril had turned a distinctive, individual ugliness into a political asset.

(Is homeliness a necessity to a head of state? Looking back through history I cannot find a single handsome man who got very far in politics until we get clear back to Alexander the Great. . . and he had a head start; his father was a king.)

As may be, "Warwhoop" Tumbril looked like a frog trying to be a toad and just missing.

The Chief cleared his throat. "What's she doing here?"

Georges said quickly, "Sir, I have a most serious complaint to make! That man-That man"-he pointed at the toothpick chewer-"tried to separate me from my dear sister! He should be reprimanded!"

Tumbnil looked at Mornie, looked at me, looked back at his parasite. "Did you do that?"

Morrie asserted that he had not but even if he did, he had done so because he had thought that Tumbnil had ordered it but in any case he thought- "You're not supposed to think," Tumbnil ruled. "I'll talk to you later. And why are you leaving her standing? Get a chair! Do I have to do all the thinking around here?"

Once I was seated, the Chief turned his attention back to Georges. "That was a Brave Thing you did earlier today. Yes, sir, a Very Brave Thing. The Great Nation of California is Proud to have raised Sons of Your Caliber. What's your name?"

Georges gave his name.

"'Payroll' is a Proud California Name, Mr. Payroll; one that shines down our Noble History, from the rancheros who threw off the Yoke of Spain to the Brave Patriots who threw off the Yoke of Wall Street. Do you mind if I call you George?"

"Not at all."

"And you can call me Warwhoop. That's the Crowning Glory of Our Great Nation, George; All of us are Equal."

I suddenly said, "Does that apply to artificial people; Chief Turnbnil?"

"Eh?"

"I was asking about artificial people, like those they make at Berkeley and Davis. Are they equal, too?"

"Uh . . . little lady, you really shouldn't interrupt while your elders are speaking. But to answer your question: How can Human Democracy apply to creatures who are Not Human? Would you expect a cat to vote? Or a Ford APV? Speak up."

"No, but-"

"There you are. Everybody is Equal and Everybody has a vote. But you have to draw the line somewhere. Now, shut up, damn it, and don't interrupt while your betters are talking. George, what you did today-well, if that klutz had actually been making an attack on my life-he wasn't and don't you even forget it-you could not have behaved in a manner more becoming to all the Heroic Traditions of Our Great California Confederacy. You Make Me Proud!"

Tumbril stood up and came out from behind his desk, hooked his hands behind him, and paced-and I saw why he had seemed taller here than he had outside.

He used some sort of a highchair or possibly a platform at his desk. When he stood with no fakery, he was about up to my shoulder. He seemed to be thinking aloud as he paced. "George, there is always a place in my official family for a man of your demonstrated courage. Who knows?-the day might come when you would save me from a criminal who seriously intended to harm me. Foreign agitators, I mean; I have nothing to fear from the Stalwart Patriots of California. They all love me for what I have done for them while occupying the Octagon Office. But other countries are jealous of us; they envy our Rich and Free and Democratic lifestyle and sometimes their smoldering hatred erupts in violence."

He stood with his head bowed for a moment, in reverent adoration of something. "One of the Prices of the Privilege of Serving," he said solemnly, "but one which, with All Humility, one must pay Gladly. George, tell me, if you were called upon to make the Last Supreme Sacrifice that Your Country's Chief Executive might live, would you hesitate?"

"It all seems most unlikely," Georges answered.

"Eh? What?"

"Well, when I vote-not often-I usually vote Réunioniste. But the present Prime Minister is Revanchiste. I doubt that he would have me."

"What the devil are you talking about?"

"Je suis Quebecois, M. le chef d'etat. I'm from Montréal."

XVI

Five minutes later we were out on the street again. For some tense moments it seemed that we were going to be hanged or shot or at least locked up forever in their deepest dungeon for the crime of not being Californians. But cooler counsel prevailed when Warwhoop's leading legal eagle convinced him that it was better to let us go than it was to risk a trial, even one in chambers-the Quebecois Consul General might cooperate but buying his whole staff could be horribly expensive.

That was not quite how he put it but he did not know that I was listening, as I had not mentioned enhanced hearing even to Georges. The Chief's chief counselor whispered something about the trouble we had with that little Mexicana doll after all those other greasers got ahold of the story. We can't afford another mess like that one. You wanta watch it, Chief, they gotcha by the short ones.

So at last we passed the Palace and went to MasterCard main California office, fortyfive minutes late . . . and lost another ten minutes shucking off our false personae in a rest room of the California Commercial Credit Building. The rest room was nondiscriminatory and democratic but not aggressively so. There was no charge to get in and the stalls had doors on them and the women used one side and the men used the side that had those vertical bathtub things that men use as well as stalls, and the only place they mingled was in a middle room equipped with wash trays and mirrors and even there women tended to stay on their side and men on the other. I'm not upset by co-ed plumbing-after all, I was raised in a crèche-but I have noticed that men and women, given a chance to segregate, do segregate.

Georges looked a lot better without lip paint. He had used water on his hair, too, and slicked it down. I put that noisy scarf into my jumpbag. He said to me, "I guess I was silly, trying to camouflage us this way."

I glanced around. No one near and the high noise level of plumbing and air conditioning. "Not in my opinion, Georges. I think that in six weeks you could be turned into a real pro."

"What sort of a pro?"

"Uh, Pinkerton, maybe. Or a-" Someone came in. "Discuss it later. Anyhow, we got two lottery tickets out of it."

"So we did. When is the drawing on yours?"

I took mine out, looked at it. "Why, it's today! This very afternoon! Or have I lost track of the date?"

"No," Georges said, peering at my ticket, "it's today all right. About an hour from now we had better be near a terminal."

"No need," I told him. "I don't win at cards, I don't win at dice, I don't win lotteries. When I buy Cracker Jack, sometimes the box doesn't have a prize in it."

"So we'll watch the terminal anyhow, Cassandra."

"All right. When is your drawing?"

He took out his ticket; we looked at it. "Why, it's the same drawing!" I exclaimed. "Now we have much more reason to watch."

Georges was still looking at his ticket. "Friday. Look at this." He rubbed his thumb across the printing. The lettering stayed sharp; the serial number smeared heavily. "Well, well! How long did our friend have her head under the counter before she 'found' this ticket?"

"I don't know. Less than a minute."

"Long enough, that's clear."

"Are you going to take it back?"

"Me? Friday, why would I do that? Such virtuosity deserves applause. But she's wasting a major talent on a very minor scam. Let's get along upstairs; you want to finish with MasterCard before the lottery drawing."

I went back temporarily to being "Marjorie Baldwin" and we were allowed to talk to "our Mr. Chambers" in the main office of California MasterCard. Mr. Chambers was a most likable person-hospitable, sociable, sympathetic, friendly, and just the man, it appeared, that I needed to see, as the sign on his desk told us that he was Vice-President for Client Relations.

After several minutes I began to see that his authority was to say no and that his major talent lay in saying no in so many pleasant, friendly words that the client hardly realized that she was being turned down.

First, please understand, Miss Baldwin, that California MasterCard and Chicago Imperium MasterCard are separate corporations and that you do not have a contract with us. To our regret. True, as a matter of courtesy and reciprocity we ordinarily honor credit cards issued by them and they honor ours. But he was truly sorry to say that at the moment-he wanted to emphasize "at the moment"- the Imperium had cut off communication and, strange as it seems, there was not today even an established rate of exchange between bnuins and crowns. . . so how can we possibly honor a credit card from the Imperium even though we want to and will gladly do so later. But we do want to make your stay with us happy and what can we do for you toward that end?

I asked when he thought the emergency would be over.

Mr. Chambers looked blank. "Emergency? What emergency, Miss Baldwin? Perhaps there is one in the Imperium since they have seen fit to close their borders . . . but certainly not here! Look around you-did you ever see a country so glowing with peace and prosperity?"

I agreed with him and stood up, as there seemed no point in arguing. "Thank you, Mr. Chambers. You have been most gracious."

"My pleasure, Miss Baldwin. MasterCard service. And don't forget: Anything I can do for you, anything at all, I am at your service."

"Thank you, I'll remember. Uh, is there a public terminal somewhere in this building? I bought a lottery ticket earlier today and it turns out that the drawing is almost at once."

He grinned broadly. "My dear Miss Baldwin, I'm so happy that you asked! Right on this floor we have a large conference room and every Friday afternoon just before the drawing everything stops and our entire office staff-or at least those who hold tickets; attendance is not compulsory-all of us crowd in and watch the drawing. J.B.-that's our president and chief executive-old J.B. decided that it was better to do it that way than to have the punters sneaking away to washrooms and toke shops and pretending they weren't. Better for morale. When one of our people wins one-does happen-she or he gets a fancy cake with sparklers on it, just like a birthday, a gift from old J.B. himself. He comes out and has a piece with the lucky winner."

"Sounds like a happy ship."

"Oh, it is! This is one financial institution where computer crime is unheard of, they all love old J.B." He glanced at his finger. "Let's get on into the conference room."

Mr. Chambers saw to it that we were placed in VIP seats, fetched coffee to us himself, then decided to sit down and watch the drawing.

The terminal screen occupied most of the end wall of the room. We sat through an hour of minor prizes during which the master of ceremonies exchanged utterly sidesplitting jokes with his assistant, mostly about the physical charms of the girl who picked the slips out of the tumble bowl. She clearly had been picked for those physical charms, which were considerable-that and her willingness to wear a costume that not only displayed them but also assured the audience that she was not hiding anything. Each time she plunged in an arm and drew out a lucky number she was dressed principally in a blindfold. It looked like easy pleasant work if the studio was properly heated.

Halfway through there were loud squeals from up front; a MasterCard clerk had won a thousand bruins. Chambers grinned broadly. "Doesn't happen often but when it does, it cheers everyone up for days. Shall we go? No, you still have a ticket that might win, don't you? Unlikely as it is that lightning will strike here twice."

At last with a blare of trumpets we reached the week's grand prize-the "Giant, Supreme, All-California Super Prize!!!" The girl with the goose bumps drew two honorary prizes first, a year's supply of Ukiah Gold with hash pipe, and dinner with the great sensie star Bobby "The Brute" Pizarro.

"Georges," I said. "American Express." Then she drew the last lucky ticket; the master of ceremonies read off the numbers and they appeared in blazing light above his head. "Mr. Zee!" he shouted. "Has the owner registered this number?"

"One moment-No, not registered."

"We have a Cinderella! We have an unknown winner! Somewhere in our great and wonderful Confederacy someone is two hundred thousand bruins richer! Is that child of fortune listening now? Will she-or he-call in and let us put her on the air before this program ends? Or will he wake up tomorrow morning to be told that she is rich? There is the number, folks! It will shine up there until the end of this program, then it will be repeated every news break until fortune's darling claims her prize. And now a message-"

"Friday," Georges whispered, "let me see your ticket."

"Not necessary, Georges," I whispered back. "That's it, all right."

Mr. Chambers stood up. "Show's over. Nice that one of our little family won something. Been a pleasure to have you with us, Miss Baldwin and Mr. Karo-and don't hesitate to call on me if we can help you."

"Mr. Chambers," I asked, "can MasterCard collect this for me? I don't want to do it in person."

Mr. Chambers is a nice man but a touch slow. He had to compare the numbers on my lottery ticket with the numbers still shining on the screen three times before he could believe it. Then Georges had to stop him when he was about to run in all directions, to order a photographer, call National Lottery headquarters, send for a holovision crew-and just as well that Georges stopped him because I might have been rough about it. I get annoyed by big males who won't listen to my objections.

"Mr. Chambers!" Georges said. "Didn't you hear her? She does not want to do it in person. No publicity."

"What? But the winners are always in the news; that's routine! This won't take a moment if that's what's worrying you because-you remember the girl who won earlier?-about now she is being photographed with J. B. and her cake. Let's go straight to his office and-"

Georges is not slow-and I wouldn't mind marrying him if Janet ever turned him loose. "Mr. Chambers," he said quickly, "what is the address of the San Jose main office of American Express?"

Chambers' four-winds flight stopped abruptly. "What did you say?"

"Can you tell us the address of American Express? Miss Baldwin will take her winning ticket there for collection. I will call ahead and make sure that they understand that banking privacy is a requisite.

"But you can't do that. She won it here."

"We can and we will. She did not win it here. She simply happened to be here when the drawing took place elsewhere. Please stand aside; we're leaving."

Then we had to do it all over again for J.B. He was a dignified old duck with a cigar in one side of his mouth and sticky white cake icing on his upper lip. He was neither slow nor stupid but he was in the habit of seeing his wishes carried out and Georges had to mention American Express quite loudly before he got it through his skull that I would not hold still for any publicity whatever (Boss would faint!) and that we were about to go to those Rialto moneychangers rather than deal with his firm.

"But Miss Bulgrin is a MasterCard client."

"No," I disagreed. "I had thought that I was a MasterCard client but Mr. Chambers refused to honor my credit. So I'll start an account with American Express. Without photographers."

"Chambers." There was the knell of doom in his voice. "What Is This?"

Chambers explained that my credit card had been issued through the Imperial Bank of Saint Louis.

"A most reputable house," J.B. commented. "Chambers. Issue her another card. On us. At once. And collect her winning ticket for her." He looked at me and took his cigar out of his mouth. "No publicity. The affairs of MasterCard's clients are always confidential. Satisfactory, Miss Walgreen?"

"Quite, sir."

"Chambers. Do it."

"Yes, sir. What credit limit, sir?"

"What extent of credit do you require, Miss Belgium? Perhaps I should ask that in crowns-what is your amount with my colleagues in Saint Louis?"

"I am a gold client, sir. My account is always reckoned in bullion rather than crowns under their two-tier method for gold customers. Can we figure it that way? You see, I'm not used to thinking in bruins. I travel so much that it is easier for me to think in grams of gold." (It is almost unfair to mention gold to a banker in a soft-currency country; it clouds his thinking.)

"You wish to pay in gold?"

"If I may. By draft in grams, three nines, on Ceres and South Africa Acceptances, Luna City office. Would that be satisfactory? I usually pay quarterly-you see, I travel so much-but I can instruct C. and S. A. A. to pay you monthly if quarterly is not convenient."

"Quarterly is quite satisfactory." (Of course it was-the interest charges pile up.)

"Now the credit limit-Truthfully, sir, I don't like to place too much of my financial activity in any one bank or any one country. Shall we hold it down to thirty kilos?"

"If that is your wish, Miss Bedlam. If you ever wish to increase it, just let us know." He added, "Chambers. Do it."

So we went back to the same office in which I had been told that my credit was no good. Mr. Chambers offered me an application form. "Let me help you fill it out, miss."

I glanced at it. Parents' names. Grandparents' names. Place and date of birth. Addresses including street numbers for the past fifteen years. Present employer. Past employer immediately preceding. Reason for leaving past employment. Present rate of pay. Bank accounts. Three references from persons who have known you at least ten years. Have you ever applied for bankruptcy or had a petition of involuntary receivership filed against you or been a director or responsible officer of any business, partnership, or corporation that has applied for reorganization under paragraph thirteen of Public Law Ninety-Seven of the California Confederacy Civil Code? Have you ever been convicted of- "Friday. No."

"So I was about to say." I stood up.

Georges said, "Goodbye, Mr. Chambers."

"Something wrong?"

"But yes. Your employer told you to issue to Miss Baldwin a gold credit card with a limit of thirty kilograms, fine gold; he did not tell you to subject her to an impertinent quiz."

"But this is a routine require-"

"Never mind. Just tell J.B. you flubbed again."

Our Mr. Chambers turned a light green. "Do please sit down."

Ten minutes later we left, me with a brand-new gold-colored credit card good anywhere (I hoped). In exchange I had listed my Saint Louis P.O. box number, my next-of-kin address (Janet), and my account number in Luna City with a written instruction to bill C and S.A.A., Ltd. quarterly for my debts. I also had a comfortable wad of bruins and another like it of crowns, and a receipt for my lottery ticket.

We left the building, crossed the corner into National Plaza, found a bench, and sat down. It was just eighteen, pleasantly cool but the sun was still high above the Santa Cruz Mountains.

Georges inquired, "Dear Friday, what are your wishes?"

"To sit here for a moment and collect my thoughts. Then I should buy you a drink. I won a lottery; that calls for buying a drink. At least."

"At least," he agreed. "You won two hundred thousand bruins for. . . twenty bruins?"

"A dollar," I agreed. "I tipped her the change."

"Near enough. You won about eight thousand dollars."

"Seventy-four hundred and seven dollars and some cents."

"Not a fortune but a respectable sum of money."

"Quite respectable," I agreed, "for a woman who started the day dependent on the charity of friends. Unless I'm credited something for my 'adequate' performance last night."

"My brother Ian would prescribe a fat lip for that remark. I wanted to add that, while seventy-four hundred is a respectable sum, I find myself more impressed by the fact that, with no assets other than that lottery ticket, you persuaded a most conservative credit banking firm to extend to you an open account in the amount of a million dollars, reckoned in gold. How did you do it, dear? You didn't even wiggle. Not even a sultry tone of voice."

"But, Georges, you caused them to issue me their band."

"I don't think so. Oh, I did try to back your play . . . but you initiated each move."

"Not the one about that horrid questionnaire! You got me out of that."

"Oh. That silly ass had no business quizzing you. His boss had already ordered him to issue the card."

"You saved me. I was about to lose my nerve. Georges-dear Georges!-I know that you have told me that I must not be uneasy about what I am-and I'm trying, I truly am!-but to be faced with a form that demands to know all about my parents and grandparents-it's dismaying!"

"Can't expect you to get well overnight. We'll keep working on it. You certainly did not lose your nerve over how much credit to ask."

"Oh. I once heard someone say"-it was Boss-"that it was much easier to borrow a million than it was to borrow ten. So when they asked me, that's what I named. Not quite a million BritCan dollars. Nine hundred and sixty-four thousand, about."

"I'm not going to quibble. When we passed nine hundred thousand I ran out of oxygen. Adequate one, do you know what a professor is paid?"

"Does it matter? From what I know of the profession one successful new design of a living artifact can pay in the millions. Even millions of grams, rather than dollars. Haven't you had any successful designs? Or is that a rude question?"

"Let's change the subject. Where are we sleeping tonight?"

"We could be in San Diego in forty minutes. On in Las Vegas in thirty-five. Each has advantages and disadvantages for getting into the Impenium. Georges, now that I have enough money, I'm going to report in, no matter how many fanatics are assassinating officials. But I promise cross-my-heart to visit Winnipeg just as soon as I have a few days' leave."

"I may still be unable to return to Winnipeg."

"Or I'll come visit you in Montréal. Look, dear, we'll swap all the addresses we have; I'm not going to lose you. You not only assure me that I'm human, you tell me that I'm adequate-you're good for my morale. Now choose, for I'll take either one: San Diego and talk Spanglish, or Vegas and look at pretty naked ladies."

XVII

We did both and wound up in Vicksburg.

The Texas-Chicago border turned out to be closed from both sides all the way, so I decided to try the river route first. Of course Vicksburg is still Texas but, for my purpose, its situation as the major river port just outside the Imperium was the point that counted-especially that it was the leading smugglers' port, both directions.

Like ancient Gaul, Vicksburg is divided into three parts. There is the low town, the port, right on the water and sometimes flooded, and there is the high town sitting on a bluff a hundred meters high and itself divided into old town and new town. Old town is surrounded by battlefields of a war long forgotten (but not by Vicksburg!). These battlefields are sacred; nothing may be built on them. So the new town is outside this holy ground, and functions through being tied to old town and to itself by a system of tunnels and tubes. High town is joined to low town by escalators and funiculars to the city barricade.

To me, high town was just a place to sleep. We punched into the Vicksbung Hilton (twin to the Bellingham Hilton even to The Breakfast Bar in the basement) but my business was down on the river. It was a happy-sad time as Georges knew that I would not let him come any farther with me and we had quit discussing it. Indeed, I did not permit him to go with me to low town-and had warned him that any day I might not come back, might not even stop to punch a message to him to record in our hotel suite. When the moment came to jump, I would jump.

Vicksburg low town is a lusty, evil place, as swarmingly alive as a dunghill. In daylight city police travel in pairs; at night they leave the place alone. It is a city of grifters, whores, smugglers, pushers, drug wholesalers, spivs, pimps, hire hatchets, military mercenaries, recruiters, fences, fagins, beggars, clandestine surgeons, blackbirders, glimjacks, outstanders, short con, long con, sting riggers, girlboys, you name it, they sell it in Vicksburg low town. It's a wonderful place and be sure to get a blood test afterward.

It is the only place I know of where a living artifact, marked by his design (four arms, no legs, eyes in the back of his skull, whatever) can step (or slither) up to a bar, buy a beer, and have absolutely no special attention paid to him or his oddity. As for my sort, being artificial meant nothing-not in a community where 95 percent of the residents did not dare step onto an escalator leading to the upper city.

I was tempted to stay there. There was something so warm and friendly about all these outcasts, no one of whom would ever point a finger of scorn. Had it not been for Boss on one hand and Georges and the memory of places that smelled better on the other hand, I might have stayed in (lower) Vicksburg and found a scam that suited my talents.

"But I have promises to keep, And miles to go before I sleep." Master Robert Frost knew why a person keeps on going when she would rather stop. Dressed as if I were a soldier out of work and shopping for the best recruiting deal, I frequented river town listening for a riverboat skipper willing to smuggle live cargo. I had been disappointed to learn how little traffic there was on the river. No news was coming out of the Imperium and no boats were coming down the river, so very few skippers were willing to risk going upriver.

So I sat in bars in river town, drinking small beer and letting the word filter around that I was prepared to pay a worthwhile price for a ticket up the river.

I considered advertising. I had been following the Opportunity Ads, which were considerably more outspoken than those I had noticed in California-apparently anything was tolerated as long as it was limited to low town:

Do You Hate Your Family?
Are You Frustrated, Tied Down, Bored?
Is Your Husband/Wife a Waste of Space?
LET US MAKE A NEW (WO)MAN OF YOU!!!!!
Plasticizing-Reorientation-Relocating Transsexualizing-Discreet Wet Work
Consult Doc Frank Frankenstein
Softly Sam's Bar Grill

This was the first time I'd ever seen murder for pay blatantly advertised. Or did I misunderstand it?

Do You Have a PROBLEM? Nothing is illegal-it isn't what you do; it's the way that you do it. We have the most skilled shysters in the Lone Star State.
LOOPHOLES, Inc.
(Special Rates to Bachelors)
Punch LEV 10101

With the above it helped to know that "LEV" call codes were assigned only to locations under the bluff.

Artists, Ltd.

Documents of All Sorts, Negotiable Instruments, Money Of All Nations, Diplomas, Birth Certificates, IDs, Passports, Photographs, Business Licenses, Marriage Licenses, Credit Cards, Holograms, Audio/ Video Tapes, Commissions, Pardons, Wills, Seals, Fingerprints-All Work Guananteed with warranty underwritten by Lloyd's Associates-LEV 10111

Certainly all of the above services were available in any large city but they were rarely openly advertised. As for the warranty, I simply did not believe it.

I decided not to advertise my need because of doubt that anything so public could help in a matter essentially clandestine-I went on relying on chandlers and barkeeps and madams. But I continued to watch the ads on the chance of spotting something of use to me. and came across one probably not of use but decidedly of interest. I froze it and called it to Georges' attention:

W.K.-Make your will. You have
only ten days to live.
A.C.B.

"What about it, Georges?"

"The first one we saw gave W.K. only a week. More than a week has passed and he now has ten days. If this keeps up, W.K. will die of old age."

"You don't believe that."

"No, my love, I do not. It's a code."

"What sort of a code?"

"The simplest sort and thereby impossible to break. The first ad told the person or persons concerned to carry out number seven or expect number seven or it said something about something designated as seven. This one says the same with respect to code item number ten. But the meaning of the numbers cannot be deduced through statistical analysis because the code can be changed long before a useful statistical universe can be reached. It's an idiot code, Friday, and an idiot code can never be broken if the user has the good sense not to go too often to the well."

"Georges, you sound as if you had done military code and/or cipher work."

"I have but that's not where I learned it. The most difficult code analysis ever attempted-one that still goes on today and will never be complete-is the interpretation of living genes. An idiot code all of it. . . but repeated so many millions of times that we can eventually assign meaning to nonsense syllables. Forgive me for talking shop at meals."

"Piffle, I started it. No way to guess what A.C.B. means?"

"None."

That night the assassins struck the second time, right on schedule. I don't say that the two were related.

They struck ten days, almost to the hour, after their first attack. The timing did not tell us anything about which group was responsible-as it matched the predictions of both the so-called Council for Survival and their rivals the Stimulators, whereas the Angels of the Lord had offered no prediction about a second strike.

There were differences between the first wave of terror and the second, differences that seemed to tell me something-or us something, as Georges and I discussed it as the reports came in:

a) No news at all from the Chicago Imperium. No change here, as no news had come out of the Imperium since the initial reports of the slaughter of Democrats . . . then nary a peep for over a week, which made me increasingly anxious.

b) No news from the California Confederacy concerning a second strike-routine news only. NB.: a few hours after the initial news reports of a second wave of assassinations elsewhere a "routine" news item came out of the California Confederacy. Chief "Warwhoop" Tumbril, on the advice of his physicians, had named a three-person executive regency with plenipotentiary powers to govern the nation while he underwent long-postponed medical treatment. He had gone to his retreat, the Eagle's Nest, near Tahoe, for this purpose. Bulletins would be issued horn San Jose, not from Tahoe.

c) Georges and I agreed on the most probable-almost certain-meaning of this. The medical treatment that pitiful poseur now needed was embalming and his "regency" would now give news handouts while they settled their power struggle.

d) This second time there were no reports from off-Earth.

e) Canton and Manchuria did not report attacks. Correction: No such reports reached Vicksburg, Texas.

f) So far as I could tell in ticking them off against a list, the terrorists did strike at all other nations. But my tally had holes in it. Of the four hundred-odd "nations" in the U.N. some produce news only during total solar eclipses. I don't know what happened in Wales or the Channel Isles or Swaziland or Nepal or Prince Edward Island and I can't see why anyone (who does not live in one of those nowhere places) should care. At least three hundred of those so-called sovereign nations that vote in the U.N. are ciphers, aboard only for quarters and rations-important to themselves, no doubt, but totally meaningless in Geopolitick. But in all major countries, except as noted above, the terrorists did strike and those strikes were reported except where baldly censored.

g) Most strikes failed. This was the glaring difference between the first wave and the second. Ten days earlier most assassins had killed their targets and most assassins had escaped. Now this was reversed:

Most targets survived, most assassins died. A few had been captured, a very few had escaped.

This last aspect of the second-wave assassinations put to rest a nagging fret in my mind, i.e., Boss was not the mover behind these assassinations.

Why say I so? Because the second wave was a disaster for whoever was in charge.

Field operatives, even common soldiers, are expensive; management does not expend them casually. A trained assassin costs at least ten times as much as a common soldier: She is not expected to get herself killed-goodness me, no! She is expected to make the kill and get out, scotfree.

But whoever was running this show had gone bankrupt in one night.

Unprofessional.

Therefore it was not Boss.

But I still could not figure out who was behind the whole silly gymkhana because I could not see who benefitted. My earlier notion, that one of the corporate nations was paying for it, no longer looked as attractive because I could not conceive of one of the big ones (Interworld, for example) hiring any but the best professionals.

But it was even harder to picture one of the territorial nations planning such a grotesque attempt at world conquest.

As for a fanatic group, such as the Angels of the Lord or the Stimulators, the job was just too big. Nevertheless the whole thing seemed to have a fanatic flavor-not rational, not pragmatic.

It is not written in the stars that I will always understand what is going on-a truism that I often find damnably annoying.

The morning after that second strike Vicksburg low town buzzed with excitement. I had just stepped into a saloon to check with the head barkeep when a runner sidled up to me. "Good news," this youngster said in a prison whisper. "Rachel's Raiders is signing 'em on-Rachel said to tell you especially."

"Pig swill," I answered politely. "Rachel doesn't know me and I don't know Rachel."

"Scout's honor!"

"You were never a Scout and you can't spell honor."

"Look, Chief," he persisted, "I haven't had anything to eat today. Just walk in with me; you don't have to sign. It's only across the street."

He did look skinny but that probably reflected his having just reached the gangly stage, that sudden spurt in adolescence; low town is not a place where people go hungry. But the bartender chose that moment to snap, "Beat it, Shorty! Quit bothering the customers. You want to buy a broken thumb?"

"It's okay, Fred," I put in. "I'll check with you later." I dropped a bill on the bar, did not ask for change. "Come, Shorty."

Rachel's recruiting office turned out to be quite a lot of mud farther than across the street, and two more recruiter's runners tried to pluck me away from Shorty before we got there. They did not stand a chance as my only purpose was to see that this sorry youngster collected his cumshaw.

The recruiting sergeant reminded me of the old cow who had the concessions in the rest room of the Palace at San Jose. She looked at me and said, "No camp doxies, sugar tit. But stick around and I might buy you a drink."

"Pay your runner," I said.

"Pay him for what?" she answered. "Leonard, I told you. No idlers, I said. Now get back out there and hustle."

I reached across and grasped her left wrist. Quite smoothly her knife appeared in her right hand. So I rearranged things, taking the knife and sticking it into the desk in front of her, while changing my hold on her left paw to one much more annoying. "Can you pay him one-handed?" I asked. "Or do I break this finger?"

"Easy there," she answered, not fighting it. "Here, Leonard." She reached into a drawer, handed him a Texas two-spot. He grabbed it and vanished.

I eased the pressure on her finger. "Is that all you're paying? With every recruiter on the street fishing today?"

"He gets his real commission when you sign up," she answered. "Because I don't get paid until I deliver a warm body. And I get docked if it ain't to spec. Now would you mind letting go of my finger? I'll need it to make out your papers."

I surrendered her finger; quite suddenly the knife was again in her hand and moving toward me. This time I broke the blade before handing it back to her. "Please don't do that again," I said. "Please. And you should use a better steel. That's not a Solingen."

"I'm deducting the price of that blade from your bounty, dear," she answered, unperturbed. "There's been a beam on you since you walked in that door. Shall I trigger it? On do we quit playing games?"

I did not believe her but her purpose suited me. "No more games, Sarge. What's the proposition? Your runner told me swabo."

"Coffee and cakes and guild scale. Guild bounty. Ninety days with company option to extend ninety days. Wooden overcoat payme fifty-fifty, you and the company."

"Recruiters around town are offering guild plus fifty." (This was a stab in the dark; the atmosphere felt that tense.)

She shrugged. "If they are, we'll match it. What weapons do you know? We aren't signing any raw recruits. Not this time."

"I can teach you any weapon you think you know. Where's the action? Who's on first?"

"Mmm, real salty. Are you trying to sign as a DI? I don't buy it."

I asked, "Where's the action? Are we going upriver?"

"You ain't even signed up and you're asking for classified information."

"For which I am prepared to pay." I took out fifty Lone-Star, in tens, laid them in front of her. "Where's the action, Sarge? I'll buy you a good knife to replace that carbon steel I had to expend."

"You're an AP."

"Let's not play the dozens. I simply want to know whether or not we'll be going upriver. Say about as far as Saint Louis."

"Are you expecting to sign on as sergeant instructor?"

"What? Heavens, no! As a staff officer." I should not have said that-or at least not so soon. While ranks tend to be vague in Boss's outfit, I was certainly a senior officer in that I reported to and took orders from Boss and Boss alone-and this was confirmed by the fact that I was Miss Friday to everyone but Boss-until and unless I asked for informal address. Even Dr. Krasny had not spoken to me en tutoyant until I asked him to. But I had never given much thought to my actual rank because, while I had no senior but Boss, I had no one working under me, either. On a formal T.O. (I had never seen one for Boss's company) I would have to be one of those little boxes leading out horizontally from the stem to the C.O.-i.e., a senior staff specialist, if you like bureaucratese.

"Well, fiddledeedee! If you can back that up, you'll do it to Colonel Rachel, not to me. I expect her in around thirteen." Almost absentmindedly she reached out to pick up the cash.

I picked up the bills, tapped them even, put them down again in front of her but closer to me. "So let's chat a bit before she gets here. Every live outfit in town is signing them up today; there ought to be some good reason to sign with one rather than another. Is the expected action upstream, or not? And how far? Will we be against real pros? Or local yokels? Or possibly town clowns? Pitched battle? On strike and run? Or both? Let's chat, Sarge."

She did not answer, she did not move. She did not take her eyes off the cash.

Shortly I took out another ten Lone-Star, placed it neatly on the fifty-waited.

Her nostrils dilated but she did not reach for the money. After several moments I added still another Texas ten-spot.

She said hoarsely, "Put that stuff out of sight or hand it to me; somebody might walk in."

I picked it up and handed it to her. She said, "Thanks, miss," and made it vanish. "I reckon we'll go upstream at least as far as Saint Louis."

"Whom do we fight?"

"Well . . . you repeat this and I'll not only deny it; I'll cut your heart out and feed it to the catfish. We may not fight. More likely we will but not in a set battle. We, all of us, are going to be bodyguard to the new Chairman. The newest Chairman, I should say; he's still-wet new."

(Jackpot!) "Interesting. Why are other outfits in town jockeying for recruits? Is the new Chairman hiring everybody? Just for his palace guard?"

"Miss, I wish I knew. I purely wish I knew."

"Maybe I had better try to find out. How much time do I have? When are we sailing?" I quickly amended this to: "Or are we sailing? Maybe Colonel Rachel has a handle on some APVs."

"Uh. . . damn it, how much classified do you expect for a lousy seventy stars?"

I thought about it. I didn't mind spending money but I needed to be certain of the merchandise. With troops moving upriver smugglers would not be moving, at least not this week. So I needed to move with the traffic available.

But not as an officer! I had talked too much. I took out two more ten-spots, fiddled with them. "Sarge, are you going upriver yourself?"

She eyed the bank notes; I dropped one of them in front of her. It disappeared. "I wouldn't miss it, dearie. Once I close down this office, I'm a platoon sergeant."

I dropped the other note; it joined its twin. I said, "Sarge, if I wait and talk to your colonel, if she signs me on, it will be as personnel adjutant, or logistics and supply, or something dreary like that. I don't need the money and don't want the worry; I want a holiday. Could you use a trained private? One you could brevet to corporal on even buck sergeant once you get to shaking down your recruits and see what vacancies you need to fill?"

She looked sour. "That's all I need, a millionaire in my platoon!"

I felt sympathy for her; no sergeant wants a cashiered officer in his/her ranks. "I'm not going to play the millionaire; I just want to be one of the troops. If you don't trust me, stick me in some other platoon."

She sighed. "I ought to have my head examined. No, I'll put you where I can keep an eye on you." She reached into a drawer, pulled out a form headed "Limited Indenture." "Read this. Sign it. Then I swear you. Any questions?"

I looked it over. Most of it was routine trivia about slop chest and toke money and medical benefits and guild pay rate and bounty-but interlined was a provision postponing payment of bounty to the tenth day after enlistment. Understandable. To me it was a guarantee that they really were going in harm's way and at once-i.e., upriver. The nightmare ruining every mercenary paymaster's sleep is the thought of bounty jumpers. Today, with all recruiters active, it would be possible for a veteran soldier to sign up five or six ways, collect a bounty from each, then head for the banana states-unless the indentures were worded to stop it,

The commitment was to Colonel Rachel Danvers personally or to her lawful successor in case of her death or disability, and it required the signer to carry out her orders and those of officers and noncommissioned officers she placed over me. I agreed to fight faithfully and not to cry for quarter, according to international law and the usages of war.

It was so vaguely worded that it would require a squad of Philadelphia lawyers to define the gray areas . . . which did not matter at all because a difference in opinion when it counted would get the signer shot in the back.

The period was, as the sergeant had represented, ninety days with the Colonel's option to extend it ninety days on payment of another bounty. There was no provision for additional extension, which gave me pause. Just what sort of a political bodyguard contract could it be that would run for six months and then stop cold?

Either the recruiting sergeant was lying or someone had lied to her and she wasn't bright enough to spot the illogicality. Never mind, there was no point in quizzing her. I reached for a pen. "Do I see the medical officer now?"

"Are you kidding?"

"How else?" I signed, then said, "I do," when she read off rapidly an oath that more or less followed the indenture.

She peered at my signature. "Jones, what does F stand for?"

"Friday."

"That's a silly name. On duty, you're Jones. Off duty, you're

Jonesie."

"Whatever you say, Sergeant. Am I on duty now, or off?"

"You'll be off duty in a moment. Here are your orders: Foot of Shrimp Alley is a godown. Sign says WOO FONG AND LEVY BROTHERS, INK. Be there by fourteen o'clock, ready to leave. Use the back door. You're free from now till then to wind up your private affairs. You are free to tell anyone of your enlistment but you are strongly admonished under penalty of disciplinary action not to make conjectures as to the nature of the duty on which you are embarking." She read off the last rapidly as if it were a recording. "Do you need lunch money? No, I'm sure you don't. That's all, Jonesie. Glad to have you aboard. We'll have a good tour." She motioned me toward her.

I went to her; she put an arm around my hips, smiled up at me. Inwardly I shrugged as I decided that this was no time to be getting my platoon sergeant sore at me. I smiled back, leaned down, and kissed her. Not bad at all. Her breath was sweet.

XVIII

The excursion boat Skip to M'Lou was a real Mark Twainen, much fancier transportation than I had expected-three passenger decks, four Shipstones, two for each of twin screws. But she was loaded to the gunwales and it seemed to me that a stiff breeze would swamp her. At that we were not the only troopship; the Myrtle T Hanshaw was a few lengths ahead of us, carving the river at an estimated twenty knots. I thought about concealed snags and hoped that their radar/sonar was up to the task.

The Alamo Heroes were in the Myrtle as was Colonel Rachel, commanding both combat teams-and this was all I needed to nail down my suspicions. A bloated brigade is not a palace guard. Colonel Rachel was expecting field action-possibly we would disembark under fire.

We had not yet been issued weapons and recruits were still in mufti; this seemed to indicate that our colonel did not expect action at once and it fitted in with Sergeant Gumm's prediction that we were going upriver at least as far as Saint Louis-and of course the rest of what she said about our becoming bodyguard to the new Chairman indicated that we were going all the way up to the capital-

-if the new Chairman was in fact at the seat of government. -if Mary Gumm knew what she was talking about. -if someone didn't turn the river around while I was not looking. Too many "ifs," Friday, and too little hard data. All I really knew was that this vessel should be crossing into the Imperium about now-in fact I did not know which side of the border we were on or how to tell.

But I did not care greatly because sometime in the next several days, when we were close to Boss's headquarters, I planned to resign informally from Rachel's Raiders-before action, by strong preference. I had had time to size up this outfit and I believed strongly that it could not be combat-ready in less than six weeks of tough field training at the hands of tough and blooded sergeant instructors. Too many recruits, not enough cadre.

The recruits were all supposed to be veterans . . . but I was certain that some of them were farm girls run away from home and in some cases about fifteen years old. Big for their age, perhaps, and "when they're big enough, they're old enough," as the old saw goes-but it takes more than massing sixty kilos to make a soldier.

To take such troops into action would be suicide. But I did not worry about it. I had a belly full of beans and was settled on the fantail with my back against a spool of cordage, enjoying the sunset and digesting my first meal as a soldier (if that is the word) while contentedly contemplating the fact that, about now, the Skip to M'Lou was crossing into, or had crossed into, the Chicago Imperium.

A voice behind me said, "Hidin' out, trooper?"

I recognized the voice and turned my head. "Why, Sergeant, how could you say such a thing?"

"Easy. I just asked myself, 'Where would I go if I was goldbricking?'-and there you were. Forget it, Jonesie. Have you picked your billet?"

I had not done so because there were many choices, all bad. Most of the troops were quartered in staterooms, four to each double room, three to a single. But our platoon, along with one other, was to sleep in the dining salon. I could see no advantage to being at the Captain's table so I had not engaged in the scramble.

Sergeant Gumm nodded at my answer. "Okay. When you draw your blanket, don't use it to stake out a billet; somebody'll steal it. Pontside aft, abreast the pantry, is the diningroom steward's stateroom-that's mine. It's a single but with a wide bunk. Drop your blanket there. You'll be a damn sight more comfortable than sleeping on the deck."

"That's mighty nice of you, Sergeant!" (How do I talk my way out of this? Or am I going to have to relax to the inevitable?)

"Call me Sarge. And when we're alone, my name is Mary. What did you say your first name was?"

"Friday."

"Friday. That's kind o' cute, when you stop to think about it. Okay, Friday, I'll see you around taps." We watched the last reddish slice of sun disappear into the bottomland astern of us, the Skip having swung east in one of the river's endless meanders. "Seems like it ought to sizzle and send up steam."

"Sarge, you have the soul of a poet."

"I've often thought I could. Write poetry, I mean. You got the word? About the blackout now?"

"No lights outside, no smoking outside. No lights inside except in spaces fully shuttered. Offenders will be shot at sunrise. Doesn't affect me much, Sarge; I don't smoke."

"Correction. Offenders will not be shot; they'll just wish to God they had been shot. You don't smoke at all, dear? Not even a friendly hit with a friend?"

(Give up, Friday!) "That's not really smoking; that's just friendly."

"That's the way I see it. I don't go around with my head stuffed full of rags, either. But an occasional hit with a friend when you're both in the mood, that's sweet. And so are you." She dropped to the deck by me, slipped an arm around me.

"Sarge! I mean Mary. Please don't. It's not really dank yet. Somebody'll see us."

"Who cares?"

"I do. It makes me selfconscious. Spoils the mood."

"In this outfit you'll get over that. You're a virgin, dear? With girls, I mean."

"Uh. . . please don't quiz me, Mary. And do let me go. I'm sorry but it does make me nervous. Here, I mean. Why, anybody could walk around the corner of that deckhouse."

She grabbed a feel, then started to stand up. "Kind o' cute, you bein' so shy. All right, I've got some mellow Omaha Black I've been saving for a special-"

The sky lit up with a dazzling light; on top of it came a tremendous karoom! and where the Myrtle had been the sky was filled with junk.

"Jesus Christ!"

"Mary, can you swim?"

"Huh? No."

"Jump in after me and I'll keep you afloat." I went over the port side in as long a dive as I could manage, took a dozen hard strokes to get well clear, turned over onto my back. Mary Gumm's head was silhouetted against the sky.

That was the last I saw of her as the Skip to M'Lou blew up.

In that stretch of the Mississippi there are bluffs on the east. The western limit of the river is simply higher land, not as clearly marked, ten or fifteen kilometers away. Between these two sides the location of the river can be a matter of opinion-often of legal opinion because the river shifts channels and chews up property rights.

The river runs in all directions and is almost as likely to run north as to nun south. Well, half as likely. It had been flowing west at sundown; the Skip, headed upriver, had the sunset behind her. But while the sun was setting the boat had swung left as the channel turned north; I had noticed the red-and-orange display of sunset swinging to portside.

That's why I went over the side to port. When I hit the water, my immediate purpose was to get clear; my next purpose was to see if Mary followed me in. I did not really expect her to because (I've noticed!) most people, human people, don't make up their minds that fast.

I saw her, still aboard; she was staring at me. Then the second explosion took place and it was too late. I felt a brief burst of sorrowin her own rutty, slightly dishonest way Mary was a good sort-then I wiped her out of my mind; I had other problems.

My first problem was not to be hit by debris; I surface-dived and stayed under. I can hold my breath and exercise almost ten minutes, although I don't like it at all. This time I stretched it almost to bursting before surfacing.

Long enough: It was dark but I seemed to be clear of floating debris.

Perhaps there were survivors in the water but I did not hear any and did not feel impelled to try to find any (other than Mary and no way to find her) as I was not well equipped to rescue anyone, even myself.

I looked around, spotted what was left of the loom of sunset, swam toward it. After a while I lost it, turned over on my back, searched the sky. Broken clouds and no moon. I spotted Arcturus, then both the Bears and Polaris, and I had north. I then corrected my course so that I was swimming west. I stayed on my back because, if you take it easy, you can swim forever and two years past, on your back. Never any problem to breathe and if you get a touch weary, you can just hold still and twiddle your fingers a trifle until you are rested. I wasn't in any hurry; I just wanted to reach the Impenium on the Arkansas side.

But of crash-priority importance I did not want to drift back down into Texas.

Problem: to navigate correctly at night with no map on a river a couple of kilometers wide, when your object is to reach a west bank you can't see . . . without giving any southing as you go.

Impossible?-the way the Mississippi winds around, like a snake with a broken back? But "impossible" is not a word one should use concerning the Mississippi River. There is one place where it is possible to make three short pontages totaling less than ninety meters, float down the river in two bights totaling about thirty kilometers and end up more than one hundred kilometers up the river.

No map, no sight of my destination-I knew only that I must go west and that I must not go south. So that is what I did. I stayed on my back and kept checking the stars to hold course west. I had no way of telling how much I might be losing to the south through the current, save for the certainty that, if and when the river turned south, my own progress west through the water would fetch me up on the bank on the Arkansas side.

And it did. An hour later-two hours later?-a lot of water later and Vega was high in the east but still far short of meridian, I realized that the bank was looming over me on my left side. I checked and corrected course west and kept on swimming. Shoftly I bumped my head on a snag, reached behind me and grabbed it, pulled myself up, then pulled my way through endless snags to the bank.

Scrambling up on the bank was no problem as it was only half a meter high, about, at that point. The only hazard was that the mud was thick and loose underfoot. I managed it, stopped, and took stock.

Still inky-black all around with stars the only light. I could tell the smooth black of the water from the thick black of the brush behind me only by the faint glint of starlight on the water. Directions? Polaris was now blocked by cloud but the Big Dipper told me where it had to be and this was confirmed by Spica blazing in the south and Antares in the southeast.

This orientation by the stars told me that west sliced straight into that thick black brush.

My only alternative was to get back into the water, stick with the river. . . and wind up sometime tomorrow in Vicksburg.

No, thanks. I headed into the bush.

I'm going to skip rapidly over the next several hours. It may not have been the longest night of my life but it was surely the dullest. I am sure that there must be thicker and more dangerous jungles on Earth than the brush on the bottomland of the lower Mississippi. But I do not want to tackle them, especially without a machete (not even a Scout knife!).

I spent most of my time backing out, having decided, No, not through there-now how can I go around?-No, not on its south side!-how can I get around it to the north? My track was as contorted as the path of the river itself and my progress was possibly one kilometer per hour-or perhaps I exaggerate; it could have been less. Much of the time was spent reorienting, a necessity every few meters.

Flies, mosquitoes, gnats, crawly things I never saw, twice snakes underfoot that may have been water moccasins but I did not wait to find out, endless disturbed birds with a dozen different sorts of cries-birds that often flew up almost in my face to our mutual distress. My footing was usually mud and always included something to trip over, ankle-high, shin-high, or both.

Three times (four times?) I came to open water. Each time I held course west and when the water was deep enough I swam. Stagnant bayou mostly, but one stretch seemed to have a current and may have been a minor channel of the Mississippi. Once there was something large swimming by me. Giant catfish? Aren't they supposed to stay on the bottom? Alligator? But there aren't supposed to be any there at all. Perhaps it was the Loch Ness monster on tour; I never saw it, simply felt it-and levitated right out of the water through sheer fright.

About eight hundred years after the sinking of the Skip and the Myrtle came the dawn.

West of me about a kilometer was the high ground of the Arkansas side. I felt triumphant.

I also felt hungry, exhausted, dirty, insect-bitten, disreputable, and almost unbearably thirsty.

Five hours later I was the guest of Mr. Asa Hunter as a passenger in his Studebaker farm wagon hitched to a fine span of mules. We were approaching a small town named Eudora. I still had not had any sleep but I had had the next best and everything but-water, food, a wash-up. Mrs. Hunter had clucked over me, lent me a comb, and given me breakfast: basted fried eggs, home-cured bacon thick and fat, corn bread, butter, sorghum, milk, coffee made in a pot and settled with an eggshell-and to appreciate in fullness Mrs. Hunter's cooking I recommend swimming all night alternated with crawling through the thickets of Old Man River's bottomland mud. Ambrosia.

I ate wearing her wrapper as she insisted on rinsing out my bedraggled jump suit. It was dry by the time I was ready to leave, and I looked almost respectable.

I did not offer to pay the Hunters. There are human people who have very little but are rich in dignity and self-respect. Their hospitality is not for sale, nor is their charity. I am slowly learning to recognize this trait in human people who have it. In the Hunters it was unmistakable.

We crossed Macon Bayou and then the road dead-ended into a slightly wider road. Mr. Hunter stopped his mules, got down, came around to my side. "Miss, I'd thank you kindly to get down here."

I accepted his hand, let him hand me down. "Is something wrong, Mr. Hunter? Have I offended you?"

He answered slowly, "No, miss. Not at all." He hesitated. "You told us how your fishing boat was stove in by a snag."

"Yes?"

"Snags in the river are a pesky hazard." He paused. "Yesterday evening come sundown something bad happened on the river. Two explosions, about at Kentucky Bend. Big ones. Could see 'em and hear 'em from the house."

He paused again. I didn't say anything. My explanation of my presence and of my (deplorable) condition had been feeble at best. But the next best explanation was a flying saucer.

Mr. Hunter went on, "Wife and I have never had any words with the Imperial Police. We don't aim to. So, if you don't mind walking a short piece down this road to the left, you'll come to Eudora. And I'll turn my team around and go back to our place."

"I see. Mr. Hunter, I wish there were some way I could repay you and Mrs. Hunter."

"You can."

"Yes?" (Was he going to ask for money? No!)

"Someday you'll find somebody needs a hand. So give him a hand and think of us."

"Oh! I shall! I surely shall!"

"But don't bother to write to us about it. People who get mail get noticed. We don't crave to be noticed."

"I see. But I'll do it and think about you, not once but more than once."

"That's best. Bread cast upon the waters always comes back, miss. Mrs. Hunter told me to tell you that she plans to pray for you."

My eyes watered so quickly that I could not see. "Oh! And please tell her that I will remember her in my prayers. Both of you." (I had never prayed in my life. But I would, for the Hunters.)

"Thank y' kindly. I will tell her. Miss. May I offer you a word of advice and not have you take it amiss?"

"I need advice."

"You don't plan to stop in Eudora?"

"No. I must get north."

"So you said. Eudora's just a police station and a few shops. Lake Village is farther away but the Greyhound APV stops there. That's about twelve kilometers down the road to the right. If you can cover that distance between now and noon, you could catch the midday bus. But it's a dogtrottin' distance and a pretty hot day."

"I can do it. I will."

"Greyhound'll take you to Pine Bluff, even to Little Rock. Um. Bus costs money."

"Mr. Hunter, you've been more than kind. I have my credit card with me; I can pay for the bus." I had not come through the swim and the mud in very good shape but my credit cards, IDs, passport, and cash money had all been in that waterproof money belt Janet had given me so many lightyears ago; all had come through untouched. Someday I would tell her.

"Good. Thought I'd better ask. One more thing. Folks around here mind their own business, mostly. If you just go straight aboard the Greyhound, the few nosy ones won't have any excuse to bother you. Better so, maybe. Well, goodbye and good luck."

I told him goodbye and got moving. I wanted to kiss him goodbye but strange women do not take liberties with such as Mr. Hunter.

I caught the noon APV and was in Little Rock at 12:52. An express capsule north was loading as I reached the tube station; I was in Saint Louis twenty-one minutes later. From a terminal booth in the tube station I called Boss's contact code to arrange for transportation to headquarters.

A voice answered, "The call code you have used is not in service. Remain in circuit and an operator-" I slapped the disconnect and got out fast.

I stayed in the underground city several minutes, walking at random and pretending to window-shop but putting distance between me and the tube station.

I found a public terminal in a shopping mall some distance away and tried the fallback call code. When the voice reached: "The call code you have used is not-" I slapped the disconnect but the voice failed to cut off. I ducked my head, dropped to my knees, got out of that booth, cutting to the right and being conspicuous, which I hate, but possibly avoiding being photographed through the terminal, which could be disaster.

I spent minutes mixing with the crowd. When I felt reasonably sure that no one was following me, I dropped down one level, entered the city's local tube system and went to East Saint Louis. I had one more top-emergency fallback call code, but I did not intend to use it without preparation.

Boss's new underground headquarters was just sixty minutes from anywhere but I did not know where it was. I mean to say that, when I left its infirmary to take a refresher course, the APV trip had taken exactly sixty minutes. When I returned it had taken sixty minutes. When I went on leave and asked to be placed to catch a capsule for Winnipeg, I had been dropped in Kansas City in exactly sixty minutes. And there was no way for a passenger to see out of an APV used for this.

By geometry, geography, and simplest knowledge of what an APV can do, Boss's new headquarters had to be someplace more or less around Des Moines-but in this case "more or less" meant a radius of at least a hundred kilometers. I did not conjecture. Nor did I conjecture as to which ones of us actually knew the location of HQ. It was a "need-to-know" and trying to guess how Boss decided such things was a waste of time.

In East Saint Louis I bought a light cloak with a hood, then a latex mask in a novelty shop, picking one that was not grotesque. Then I took careful pains to randomize my choice of terminal. I was of strong but not conclusive opinion that Boss had been hit again and this time smeared, and the only reason that I had not panicked was that I am trained not to panic until after the emergency.

Masked and hooded, I punched the last-resort call code. Same result and again the terminal could not be switched off. I turned my back on the pickup, pulled off that mask and dropped it on the floor, got out of there slow-march, around a corner, shed that cloak as I walked, folded it, shoved it into a trash can, went back to Saint Louis-where I, bold as brass, used my Imperial Bank of Saint Louis credit card to pay my tube fare to Kansas City. An hour earlier in Little Rock I had used it without hesitation but at that time I had had no suspicion that anything had happened to Boss-in fact I held a "religious" conviction that nothing could happen to Boss. ("Religious" "absolute belief without proof.")

But now I was forced to operate on the assumption that something had indeed happened to Boss, which included the assumption that my Saint Louis MasterCard (based on Boss's credit, not my own) could drop dead on me at any moment. I might stick it into a slot to pay for something and have it burned out by a destruction bolt when the machine recognized the number.

So four hundred kilometers and fifteen minutes later I was in Kansas City. I never left the tube station. I made a free call at the information desk about service on the KC-Omaha-Sioux Falls-Fargo-Winnipeg tube and was told that there was full service to Pembina at the border, none beyond. Fifty-six minutes later I was at the British Canadian border directly south of Winnipeg. It was still early afternoon. Ten hours earlier I had been climbing up out of the bottomland of the Mississippi and wondering lightheadedly whether I was in the Imperium or if I had floated back into Texas.

Now I was even more overpoweringly anxious to get out of the Imperium than I had been to get in. So far I had managed to stay one flea-hop ahead of the Imperial Police but there was no longer any doubt in my mind that they wanted to talk to me. I did not want to talk to them because I had heard tales about how they conducted an investigation. The laddies who had questioned me earlier this year had been moderately rough . . . but the Imperial Police were reputed to burn out a victim's brain.

XIX

Fourteen hours later I had moved only twenty-five kilometers east of where I had had to leave the tube system. An hour of that I had spent in shopping, most of an hour in eating, over two hours in close consultation with a specialist, a heavenly six hours in sleeping, and almost four in moving cautiously east parallel to the border fence without getting close to it-and now it was dawn and I did approach the fence, right up to it, and was walking it, a bored repairman.

Pembina is just a village; I had to go back to Fargo to find a specialist-a quick trip by local capsule. The specialist I wanted was the same sort as "Artists, Ltd." of Vicksburg save that such entrepreneurs do not advertise in the Imperium; it took time and some cautious grease to find him. His office was downtown near Main Avenue and University Drive but it was behind a more conventional business; it would not easily be noticed.

I was still wearing the faded blue neodenim jump suit I had been wearing when I dived off the Skip to M'Lou, not through any special affection for it but because a one-piece blue suit of coarse cloth is the nearest thing to an international unisex costume you can find. It will get by even at EllFive or in Luna City, where a monokini is more likely. Add a scarf and a smart housewife will wear it to shop; carry a briefcase and you are a respected businessman; squat with a hatful of pencils and it's a beggar's garb. Since it is hard to soil, easy to clean, won't wrinkle, and almost never wears out, it is ideal for a courier who wishes to fade into the scene and can't waste time or luggage on clothes.

To that jump suit had been added a greasy cap with "my" union badge pinned to it, a well-worn hip belt with old but serviceable tools, a bandolier of repair links over one shoulder and a torch kit to install them over the other.

Everything I had was well worn including my gloves. Zippered into my right hip pocket was an old leather wallet with IDs showing that I was "Hannah Jensen" of Moorhead. A worn newspaper clipping showed that I had been a highschool cheerleader; a spotted Red Cross card gave my blood type as 0 Rh pos sub 2 (which in fact it is) and credited me with having won my gallon pin-but the dates showed that

I had neglected to donate for over six months.

Other mundane trivia gave Hannah a background in depth; she even carried a Visa card issued by Moorhead Savings and Loan Company-but on this item I had saved Boss more than a thousand crowns: Since I did not expect to use it, it lacked the invisible magnetic signature without which a credit card is merely a piece of plastic.

It was just full light and I had, I figured, a maximum of three hours to get through that fence-only that long because the real fence maintenance men started working then and I was most unanxious to meet one. Before that time Hannah Jensen should disappear. . . possibly to resurface in the late afternoon for a final effort. Today was go-for-broke; my cash crowns were used up. True, I still had my Imperium credit card-but I am extremely leery of electronic sleuths. Had my three attempts yesterday to call Boss, all with the same card, tripped some subprogram under which I could be identified? I seemed to have gotten away with using the card for tube fare immediately thereafter . . . but had I really escaped all electronic traps? I did not know and did not want to find out-I simply wanted to get through that fence.

I sauntered along, resisting a powerful urge to fall out of character by hurrying. I wanted a place where I could cut the fence without being watched, despite the fact that the ground was scorched for about fifty meters on each side of the fence. I had to accept that; what I wanted was a stretch shielded along the scorched band by trees and bush about like Normandy hedgerows.

Minnesota does not have Normandy hedgerows.

Northern Minnesota almost does not have trees-or at least not in the stretch of the border I was covering. I was eyeing a piece of fence, trying to tell myself that a wide reach of open space with no one in sight was just as good as being shielded, when a police APV came into sight cruising slowly west along the fence. I gave them a friendly wave and kept on trudging east.

They circled, came back, and squatted, about fifty meters from me. I turned and went toward them, reaching the car as the best boy got out, followed by his driver, and I saw by their uniforms (hell, damn, and spit) that they were not Minnesota Provincial Police but Imperials.

Best boy says to me, "What are you doing here this early?"

His tone was aggressive; I answered it to match: "I was working, until you interrupted me."

"The hell you say. You don't go on until eight hundred hours."

I answered, "Get the news, big man. That was last week. Two shifts now. First shift comes on at 'can.' Shifts change at noon; second shift goes off at 'can't.'

"Nobody notified us."

"You want the Superintendent to write you a personal letter? Give me your badge number and I'll tell him you said so."

"None of your lip, slitch. I'd as lief run you in as look at you."

"Go ahead. A day's rest for me . . . while you explain why this stretch was not maintained."

"Stow it." They started climbing back in.

"Either of you turkeys got a toke?" I asked.

The driver said, "We don't hit on duty and neither should you."

"Brown nose," I answered politely.

The driver started to reply, but best boy slammed the lid, and they took off-right over my head, forcing me to duck. I don't think they liked me.

I went back to the fence while concluding that Hannah Jensen was not a lady. She had no excuse to be rude to the Greenies merely because they are unspeakably vile. Even black widows, body lice, and hyenas have to make a living although I could never see why.

I decided that my plans were not well thought out; Boss would not approve. Cutting that fence in broad daylight was too conspicuous. Better to pick a spot, then hide until dark, and return to it. Or spend the night on plan number two: Check the possibility of going under the fence at Roseau River.

I wasn't too crazy about plan number two. The lower reach of the Mississippi had been warm enough but these northern streams would chill a corpse. I had checked the Pembina late the day before yesterday. Brrr! A last resort.

So pick a piece of fence, decide exactly how you are going to cut it, then try to find some trees, wrap yourself in some nice warm leaves, and wait for dark. Rehearse every move, so that you go through that fence like pee through snow.

At this point I topped a slight rise and came face to face with another maintenance man, male type.

When in doubt, attack. "What the hell are you doing, buster?"

"I'm walking the fence. My stretch of the fence. What are you doing, sister?"

"Oh, fer Gossake! I'm not your sister. And you are either on the wrong stretch or the wrong shift." I noticed with unease that the well-dressed fence-walker carries a walkie-talkie. Well, I had not been one very long; I was still learning the job.

"Like hell," he answered. "Under the new schedule I come on at dawn; I'm relieved at noon. Maybe by you, huh? Yeah, that's probably it; you read the roster wrong. I had better call in."

"You do that," I said, moving toward him.

He hesitated. "On the other hand, maybe-" I did not hesitate.

I do not kill everyone with whom I have a difference of opinion and I would not want anyone reading this memoir to think that I do. I didn't even hurt him other than temporarily and not much; I merely put him to sleep rather suddenly.

From a roll on my belt I taped his hands behind him and fastened his ankles together. If I had had some wide surgical tape, I would have gagged him but all I had was two-centimeter mechanics friction tape, and I was far more anxious to cut fence than I was to keep him from yelling for help to the coyotes and jackrabbits. I got busy.

A torch good enough to repair fence will cut fence-but my torch was a bit better than that; I had bought it out the back door of Fargo's leading fence (the other sort of fence). It was a steel-cutting laser rather than the oxyacetylene job it appeared to be. In moments I had a hole big enough, barely, for Friday. I stooped to leave.

"Hey, take me with you!"

I hesitated. He was saying insistently that he was just as anxious to get away from the goddam Greenies as I was-untie me!

What I did next is matched in folly only by Lot's wife. I grabbed the knife at my belt, cut the tape at his wrists, at his ankles-dived through my scuttle hole and started to run. I didn't wait to see whether or not he came through, too.

There was one of the rare stands of trees about half a kilometer north of me; I headed that way at a new record speed. That heavy tool belt impeded me; I shucked it without slowing. A moment later I brushed that cap off and "Hannah Jensen" went back to NeverNever Land, as torch, gloves, and repair links were still in the Imperium. All that was left of her was a wallet I would jettison when I was not so busy.

I got well inside the trees, then circled back and found a place to observe my back track, as I was uncomfortably aware that I was wearing a tail.

My late prisoner was about halfway from fence to trees . . . and two APVs were homing in on him. The one closer to him carried the big Maple Leaf of British Canada. I could not see the insigne on the other as it was headed right toward me, coming across the international boundary.

The BritCan police car grounded; my quondam guest appeared to surrender without argument-reasonable, as the APV from the Imperium grounded immediately thereafter, at least two hundred meters inside British Canada-and, yes, Imperial Police-possibly the car that had stopped me.

I'm not an international lawyer but I'm sure wars have started over less. I held my breath, extended my hearing to the limit, and listened.

There were no international lawyers among those two sorts of police, either; the argument was noisy but not coherent. The Imperials were demanding surrender of the refugee under the doctrine of hot pursuit and a Mountie corporal was maintaining (correctly, it seemed to me) that hot pursuit applied only to criminals caught in the act, but the only "crime" here was entering British Canada not at a port of entry, a matter not lying in the jurisdiction of the Imperial Police. "Now get that crock off BritCan soil!"

The Greenie gave a monosyllabic nonresponse that annoyed the Mountie. He slammed the lid and spoke through his loudspeaker: "I arrest you for violation of British Canadian air and ground space. Get out and surrender. Do not attempt to take off."

Whereupon the Greenies' car took off at once and retreated across the international border-then went elsewhere. Which may have been exactly what the Mountie intended to accomplish. I held very still, as now they would have time to give their attention to me.

I assume conclusively that my companion escapee now paid me for his ticket through the fence: No search was made for me. Certainly he saw me run into the woods. But it is unlikely that the RCMP saw me. No doubt cutting the fence sounded alarms in police stations on both sides of the border; this would be a routine installation for electronics people-even to pinpointing the break-and so I had assumed in planning to do it fast.

But counting the number of warm bodies that passed through a gap would be a separate electronics problem-not impossible but an added expense that might not be considered worthwhile. As may be, my nameless companion did not snitch on me; no one came looking for me. After a time a BritCan car fetched a repair crew; I saw them pick up the tool belt I had discarded near the fence. After they left another repair crew showed up on the Imperium side; they inspected the repair and went away.

I wondered a bit about tool belts. On thinking back I could not recall seeing such a belt on my erstwhile prisoner when he surrendered. I concluded that he had had to shed his belt to go through the fence; that hole was just barely big enough for Friday; for him it must have been a jam fit.

Reconstruction: The BritCans saw one belt, on their side; the Greenies saw one belt, on their side. Neither side had any reason to assume that more than one wetback had passed through the hole as long as my late prisoner kept mum.

Pretty decent of him, I think. Some men would have held a grudge over that little tap I had to give him.

I stayed in those woods until dark, thirteen tedious hours. I did not want to be seen by anyone until I reached Janet (and, with luck, Ian);

an illegal immigrant does not seek publicity. It was a long day but in middle training my mind-control guru had taught me to cope with hunger, thirst, and boredom when it is necessary to remain quiet, awake, and alert. When it was full dark I started out. I knew the terrain as well as one can from maps, as I had studied all of it most carefully in Janet's house less than two weeks earlier. The problem ahead of me was neither complex nor difficult: move approximately one hundred and ten kilometers on foot before dawn while avoiding notice.

The route was simple. I must move east a trifle to pick up the road from Lancaster in the Imperium to La Rochelle in British Canada, at the port of entry—easy to spot. Go north to the outskirts of Winnipeg, swing to the left around the city and pick up the north-south road to the port. Stonewall was just a loud shout horn there, with the Tormey estate nearby. All of the last and more difficult part I knew not just horn maps but from having recently been over it in a surrey with nothing to distract me but a little friendly groping.

It was just dawn when I spotted the Tormey outer gates. I was tired but not in too bad shape. I can maintain the walk-jog-runwalk-jog-run routine for twenty-four hours if necessary and have done so in training; keeping it up all night is acceptable. Mostly my feet hurt and I was very thirsty. I punched the announcing button in happy relief.

And at once heard: "Captain Ian Tormey speaking. This is a recording. This house is protected by the Winnipeg Werewolves Security Guards, Incorporated. I have retained this firm because I do not consider their reputation for being triggerhappy to be justified; they are simply zealous in protecting their clients. Calls coded to this house will not be relayed but mail sent here will be forwarded. Thank you for listening."

And thank you, Ian! Oh, damn, damn, damn! I knew that I had no reason to expect them to remain at home. . . but my mind had never entertained the thought that they might not be at home. I had "transferred," as the shrinks call it; with my Ennzedd family lost,

Boss missing and perhaps dead, the Tormey estate was "home" and Janet the mother I had never had.

I wished that I were back on the Hunters' farm, bathed in the warm protectiveness of Mrs. Hunter. I wished that I were in Vicksburg, sharing mutual loneliness with Georges.

In the meantime the Sun was rising and soon the roads would begin to fill and I was an illegal alien with almost no BritCan dollars and a deep need not to be noticed, not to be picked up and questioned, and lightheaded from fatigue and lack of sleep and hunger and thirst.

But I did not have to make difficult decisions as one was forced on me, Hobson's choice. I must again hole up like an animal, and quickly, before traffic filled the roads.

Woods are not common anywhere near Winnipeg but I recalled some hectares left wild, back and around to the left, off the main road, and more or less behind the Tormey place—uneven land, below the low hill on which Janet had built. So I went in that direction, encountering one delivery wagon (milk) but no other traffic.

Once abreast the scrub I left the road. The footing became very uneven, a series of gullies, and I was going "across the furrows." But quickly I encountered something even more welcome than trees: a tiny stream, so narrow I could step across it.

Which I did, but not until I had drunk from it. Clean? Probably contaminated but I gave it not a thought; my curious "birthright" protects me against most infection. The water tasted clean and I drank quite a lot and felt much better physically—but not the sick weight in my heart.

I went deeper into the scrub, looking for a place where I could not only hide but could dare risk sleeping. Six hours of sleep two nights ago seemed awfully far away but the trouble with hiding in the wild this close to a big city is that a troop of Boy Scouts is awfully likely to come tromping through and step on your face. So I hunted for a spot not only bushy but inaccessible.

I found it. Quite a steep stretch up one side of a gully and made still more inaccessible by thornbushes, which I located by Braille.

Thornbushes?

It took me about ten minutes to find it as it looked like an exposed face of a boulder left over from the time when the great ice flow had planed all this country down. But, when I looked closely, it did not look quite like rock. It took still longer to get fingers into any purchase and lift it, then it swung up easily, partly counterbalanced. I ducked inside quickly and let it fall back into place—

—and found myself in darkness save for fiery letters:

PRIVATE PROPERTY—KEEP OUT

I stood very still and thought. Janet had told me that the switch that disarmed the deadly booby traps was "concealed a short distance inside."

How long is a "short distance"?

And how concealed?

It was concealed well enough simply because the place was dark as ink except for those ominous glowing letters. They might as well have spelled "All hope abandon, ye who enter here."

So whip out your pocket torch, Friday, powered with its own tiny lifetime Shipstone, and search. But don't go too far!

There was indeed a torch in a jumpbag I had left behind me in the

Skip to M'Lou. It might even be shining, entertaining fish on the bottom of the Mississippi. And I knew that there were other torches stockpiled straight down this black tunnel.

I didn't even have a match.

If I had a Boy Scout, I could make a fire by rubbing his hind legs together. Oh, shut up, Friday!

I sank down to the floor and let myself cry a little. Then I stretched out on that (hard, cold) (welcome and soft) concrete floor and went to sleep.

XX

I woke up a long time later and the floor was indeed hard and cold. But I felt so enormously rested that I did not mind. I stood up and rubbed the kinks out and realized that I no longer felt hopeless—just hungry.

The tunnel was now well lighted.

That glowing sign still warned me not to go any farther but the tunnel was no longer black; the illumination seemed about equal to a well-lighted living room. I looked around for the source of the light.

Then my brain came back into gear. The only illumination came from the glowing sign; my eyes had adjusted while I slept. I understand that human people also experience this phenomenon, but possibly to a lesser degree.

I started to hunt for the switch.

I stopped and started using my brain instead. That's harder work than using muscles but it's quieter and burns fewer calories. It's the only thing that separates us from the apes, although just barely. If I were a concealed switch, where would I be?

The significant parameters of this switch had to be that it must be well enough hidden to frustrate intruders but it nevertheless must save Janet's life and that of her husbands. What did that tell me?

It would not be too high for Janet to reach; therefore I could reach it, we are much the same size. So that switch was in my reach without using a stool.

Those floating, glowing letters were about three meters inside the door. The switch could not be much past that point because Janet had told me that the second warning, the one that promised death, was triggered not far inside—"a few meters" she had said. "A few" is rarely over ten.

Janet would not hide the switch so thoroughly that one of her husbands, dodging for his life, would have to remember exactly where it was. The simple knowledge that there was such a switch must be sufficient clue to let him find it. But any intruder who did not know that there was such a switch must not notice it.

I moved down the tunnel until I stood right under that glowing sign, looked up. The light from that warning sign made it easy to see anywhere but that small part of the tunnel arch just above the letters. Even with my dark-adjusted and enhanced vision I could not see the ceiling directly over the sign.

I reached up and felt the ceiling where I could not see it. My fingers encountered something that felt like a button, possibly the end of a solenoid. I pushed it.

The warning sign blinked out; ceiling lights came on, shining far down the tunnel.

Frozen food and the means to cook it and big towels and hot and cold running water and a terminal in the Hole on which I could get the current news and summaries of past news . . . books and music and cash money stored in the Hole against emergency and weapons and Shipstones and ammunition and clothes of all sorts that fit me because they fitted Janet and a clock-calendar in the terminal that told me that I had slept thirteen hours before the hardness of the concrete "bed" woke me and a comfy soft bed that invited me to finish the night by sleeping again after I had bathed and eaten and satisfied my hunger for news . . . a feeling of total security that let me calm down until I no longer had to use mind control to suppress my real feelings in order to function. . .

The news told me that British Canada had scaled the emergency down to "limited emergency." The border with the Imperium remained closed. The Quebec border was still closely controlled but permits were granted for any legitimate business. The remaining dispute between the two nations lay in how much reparation Quebec should pay for what was now admitted to be a military attack made through error and/or stupidity. The internment order was still in effect but over 90 percent of Quebecois internees had been released on their own paroles . . . and about 20 percent of internees from the Imperium. So I had done well to dodge because, no question about it, I was a suspicious character.

But it looked as if Georges could come home whenever he wished. Or were there angles I did not understand?

The Council for Survival promised a third round of "educational" killings ten days plus or minus two days from the last round. The Stimulators followed this a day later with a matching statement, one which again condemned the so-called Council for Survival. The Angels of the Lord did not this time make any announcement, or at least none that issued through the BritCan Data Net.

Again I had tentative conclusions, shaky ones: The Stimulators were a dummy organization, all propaganda, no field operatives. The Angels of the Lord were dead and/or on the run. The Council for Survival had extremely wealthy backing willing to pay for more unprofessional stooges to be sacrificed in mostly futile attempts—but that was merely a guess, to be dropped in a hurry if the third round of attacks turned out to be efficient and professional—which I did not expect, but I have a long record for being wrong.

I still couldn't decide who was back of this silly reign of terror. It could not be (I felt certain) a territorial nation; it might be a multinational, or a consortium, although I could see no sense in it. It could even be one or more extremely wealthy individuals—if they had holes in their heads.

Under "retrieval" I also punched "Imperium" and "Mississippi River" and "Vicksburg" as singles, each pair, and the triple. Negative. I added in the names of the two vessels and tried all the combinations. Still negative. Apparently what had happened to me and several hundred others had been suppressed. Or was it considered trivial?

Before I left I wrote Janet a note telling her what clothes I had taken, how many BritCan dollars I had taken and added that amount to what she had given me earlier, and I detailed what I had charged to her Visa card: one capsule fare Winnipeg to Vancouver, one shuttle fare Vancouver to Bellingham, nothing since. (Or had I paid my fare to San Jose with her card, or was that when Georges started being masterful? My expense accounts were in the bottom of the Mississippi.)

Having taken enough of Janet's cash to get me out of British Canada (I hoped!) I was strongly tempted to leave her Visa card with my note to her. But a credit card is an insidious thing—just a cheap little piece of plastic . . . that can equate to great stacks of gold bullion. It was up to me to protect that card personally and at any cost, until I could place it in Janet's hand. Nothing less was honest.

A credit card is a leash around your neck. In the world of credit cards a person has no privacy. . . or at best protects her privacy only with great effort and much chicanery. Besides that, do you ever know what the computer network is doing when you poke your card into a slot? I don't. I feel much safer with cash. I've never heard of anyone who had much luck arguing with a computer.

It seems to me that credit cards are a curse. But I'm not human and probably lack the human viewpoint (in this as in so many, many other things).

I set out the next morning, dressed in a beautiful three-piece pantsuit in powder-blue glass (I felt sure that Janet was beautiful in it and it made me feel beautiful despite the evidence of mirrors), and intending to hire a rig in nearby Stonewall, only to find that I had a choice of a horsedrawn omnibus or a Canadian Railways APV, both going to the tube station, Perimeter and McPhillips, where Georges and I had left on our informal honeymoon. Much as I prefer horses I picked the faster method.

Going into town would not let me pick up my luggage, still in bond at the port. But was it possible to pick it up from transit bond without being pinpointed as an alien from the Imperium? I decided to order it forwarded from outside British Canada. Besides, those bags were packed in New Zealand. If I could live without them this long, I could live without them indefinitely. How many people have died because they would not abandon their baggage?

I have this moderately efficient guardian angel who sits on my shoulder. Only days ago Georges and I had walked right up to the proper turnstile, stuck Janet's and Ian's credit cards into the slot without batting an eye, and zipped merrily to Vancouver.

This time, although a capsule was then loading, I discovered that I was headed on past the turnstiles toward the British Canadian Tourist Bureau travel office. The place was busy, so there was no danger of an attendant rubbernecking what I was doing—but I waited until I could get a console in a corner. One became available; I sat down and punched for capsule to Vancouver, then stuck Janet's card into the slot.

My guardian angel was awake that day; I snatched the card out, got it out of sight fast, and hoped that no one had caught the stink of scorched plastic. And I left, quick-march and nose in the air.

At the turnstiles, when I asked for a ticket to Vancouver, the attendant was busy studying the sports page of the Winnipeg Free Press. He lowered his paper slightly, peered at me over it. "Why don't you use your card like everyone else?"

"Do you have tickets to sell? Is this money legal tender?"

"That's not the point."

"It is to me. Please sell me a ticket. And give me your name and clock number in accordance with that notice posted back of your head." I handed him the exact amount.

"Here's your ticket." He ignored my demand for his identification; I ignored his failure to comply with the regulations. I did not want a hooraw with his supervisor; I simply wanted to create a diversion from my own conspicuous eccentricity in using money rather than a credit card.

The capsule was crowded but I did not have to stand; a Galahad left over from the last century stood up and offered me his seat. He was young and not bad-looking and clearly was being gallant because he classed me as having the apposite female qualities.

I accepted with a smile and he stood over me and I did what I could to repay him by leaning forward a bit and letting him look down my neckline. Young Lochinvar seemed to feel repaid—he stared the whole way—and it cost me nothing and was no trouble. I appreciated his interest and what it got me in comfort—sixty minutes is a long time to stand up to the heavy surges of an express capsule.

As we got out at Vancouver he asked me if I had any plans for lunch. Because, if I didn't, he knew of a really great place, the Bayshore Inn. Or if I liked Japanese or Chinese food—I said that I was sorry but I had to be in Bellingham by noon. Instead of accepting the brushoff, his face lit up. "That's a happy coincidence! I'm going to Bellingham, too, but I thought I would wait until after lunch. We can have lunch together in Bellingham. Is it a deal?"

(Isn't there something in international law about crossing international boundaries for immoral purposes? But can the simple, straightforward rut of this youngster correctly be classed as "immoral"? An artificial person never understands human people's sexual codes; all we can do is memorize them and try to stay out of trouble. But this isn't easy; human sexual codes are as contorted as a plate of spaghetti.)

My attempt at polite brushoff having failed, I was forced to decide quickly whether to be rude or to go along with his clear purpose. I scolded myself: Friday, you are a big girl now; you know better. If you intended to give him no hope whatever of getting you into bed, the time to back out was when he offered you his seat at Winnipeg.

I made one more attempt: "It's a deal," I answered, "if I am allowed to pay the check, with no argument." This was a dirty trick on my part, as we both knew that, if he let me pay for lunch, that canceled his investment in me of one hour of standing up and hanging on and fighting the surge of the capsule. But barnyard protocol did not allow him to claim the investment; his act of gallantry was supposed to be disinterested, knightly, no reward expected.

The dirty, sneaking, underhanded, rutty scoundrel proceeded to chuck protocol.

"All right," he answered.

I swallowed my astonishment. "No argument later? It's my check?"

"No argument," he agreed. "Obviously you don't want to be under the nominal obligation of the price of a lunch even though I issued the invitation and therefore should have a host's privilege. I don't know what I have done to annoy you but I will not force on you even a trivial obligation. There is a McDonald's at surface level as we arrive in Bellingham; I'll have a Big Mac and a Coke. You pay for it. Then we can part friends."

I answered, "I'm Marjorie Baldwin; what is your name?"

"I'm Trevor Andrews, Marjorie."

"Trevor. That's a nice name. Trevor, you are dirty, sneaky, underhanded, and despicable. So take me to the best restaurant in Bellingham, ply me with fine liquor and gourmet food, and you pay the check. I'll give you a fair chance to sell your fell designs. But I don't think that you will get me into bed; I'm not feeling receptive."

That last was a lie; I was feeling receptive and very rutty—had he possessed my enhanced sense of smell he would have been certain of it. Just as I was certain of his rut toward me. A human male cannot possibly dissemble with an AP female who has enhanced senses. I learned this at menarche. But of course I am never offended by male rut. At most I sometimes imitate a human woman's behavior by pretending to be offended. I don't do this often and tend to avoid it; I'm not that convincing an actress.

From Vicksburg to Winnipeg I had felt no sexual urge. But, with a double night's sleep, a hot, hot bath with lots of soap, plenty of food, my body now was restored to its normal behavior. So why was I lying about it to this harmless stranger? "Harmless?" In any rational sense, yes. Short of corrective surgery I am sterile. I am not inclined to catch even a sniffle and I am specifically immunized against the four commonest venereal diseases. I was taught in crèche to class coition with eating, drinking, breathing, sleeping, playing, talking, cuddling—the pleasant necessities that make life a happiness instead of a burden.

I lied to him because human rules call for a lie at that point in the dance—and I was passing as human and didn't dare be honestly myself.

He blinked down at me. "You feel that I would be wasting my investment?"

"I'm afraid so. I'm sorry."

"You're mistaken. I never try to get a woman into bed; if she wants me in her bed, she will find some way to let me know. If she does not want me there, then I would not enjoy being there. But you seem to be unaware of the fact that it is worth the price of a good lunch just to sit and look at you, while ignoring any silly babble that comes out of your mouth."

"Babble! That had better be a very good restaurant. Let's catch the shuttle."

I had thought that I might have to argue my way through the barrier on arrival.

But the CHI officer looked most carefully at Trevor's IDs before validating his tourist card, then barely glanced at my San Jose MasterCard and waved me on through. I waited for Trevor just past the CHI barrier and looked at the sign THE BREAKFAST BAR while feeling double déjà vu.

Trevor joined me. "If I had seen," he said mournfully, "that gold card you were flashing just now, I would not have offered to pay for the lunch. You're a wealthy heiress."

"Now look, buster," I answered, "a deal's a deal. You told me it was worth the price just to sit and drool over me, In spite of my 'babble.' I'm willing to cooperate to the extent of easing the neckline a little. One button, maybe two. But I won't let you back out. Even a rich heiress likes to show a profit now and then."

"Oh, the shame and the pity of it all!"

"Quit complaining. Where's this gourmet restaurant?"

"Well, now—Marjorie, I'm forced to admit that I don't know the restaurants in this glittering metropolis. Will you name the one you prefer?"

"Trevor, your seduction technique is terrible."

"So my wife says."

"I thought you had that harness-broken look. Get out her picture. Back in a moment; I'm going to find out where we eat."

I caught the CHI officer between shuttles, asked him for the name of the best restaurant. He looked thoughtful. "This isn't Paris, you know."

"I noticed."

"Or even New Orleans. If I were you, I would go to the Hilton dining room."

I thanked him, went back to Trevor. "We're eating in the dining room, two floors up. Unless you want to send out your spies. Now let's see her picture."

He showed me a wallet picture. I looked at it carefully, then gave a respectful whistle. Blondes intimidate me. When I was little, I thought I could get to be that color if I scrubbed hard enough. "Trevor, with that at home why are you picking up loose women on the streets?"

"Are you loose?"

"Quit trying to change the subject."

"Marjorie, you wouldn't believe me and you would babble. Let's go up to the dining room before all the martinis dry up."

Lunch was okay but Trevor did not have Georges' imagination, knowledge of cooking, and skill at intimidating a maître d'hôtel. Without Georges' flair the food was good, standard, North American cuisine, the same in Bellingham as in Vicksburg.

I was preoccupied; discovering that Janet's credit card had been invalidated had upset me almost more than the horrid disappointment of not finding Ian and Janet at home. Was Janet in trouble? Was she dead?

And Trevor had lost some of the cheerful enthusiasm a stud should display when the game is afoot. Instead of staring lecherously at me, he too seemed preoccupied. Why the change in manner? My demand to see a picture of his wife? Had I made him selfconscious thereby? It seems to me that a man should not engage in the hunt unless he is on such terms with his wife or wives that he can recount the lurid details at home to be giggled over. Like Ian. I don't expect a man to "protect my reputation" because, to the best of my knowledge and belief, they never do. If I want a man to refrain from discussing my sweaty clumsiness in bed, the only solution is to stay out of bed with him.

Besides, Trevor had mentioned his wife first, hadn't he? I reviewed it—yes, he had.

After lunch he perked up some. I was telling him to come back here after his business appointment because I was punching in as a guest in order to have comfort as well as privacy in making satellite calls (true) and that I might stay overnight (also true), so come back and call me and I would meet him in the lounge (conditionally true—I was so lonely and troubled I suspected that I would tell him to come straight up).

He answered, "I'll call first so that you can get that man out but I'll come straight up. No need to make the trip twice. But I'll send the bubbly up; I won't carry it."

"Hold it," I said. "You have not yet sold me your nefarious purpose. All I promised was the opportunity to present your sales talk. In the lounge. Not in my bedroom."

"Marjorie, you're a hard woman."

"No, you're a hard man. I know what I'm doing." A sudden satori told me that I did know. "How do you feel about artificial persons? Would you want your sister to marry one?"

"Do you know one who might be willing to? Sis is getting to be a bit long in the tooth; she can't afford to be particular."

"Don't try to evade me. Would you marry one?"

"What would the neighbors think? Marjorie, how do you know I haven't? You saw my wife's picture. Artifacts are supposed to make the very best wives, horizontally or vertically."

"Concubines, you mean. It isn't necessary to marry them. Trevor, you not only are not married to one; you don't know anything about them but the popular myths . . . or you wouldn't say 'artifact' when the subject is 'artificial persons.'

"I'm sneaky, underhanded, and despicable. I misused the term so that you would not suspect that I am one."

"Oh, babble! You aren't one, or I would know it. And while you probably would go to bed with one, you wouldn't dream of marrying one. This is a futile discussion; let's adjourn it. I need about two hours; don't be surprised if my room terminal is busy. Tape a message and curl up with a good drink; I'll be down as soon as possible."

I punched in at the desk and went up, not to the bridal suite—in the absence of Georges that lovely extravagance would have made me triste—but to a very nice room with a good, big, wide bed, a luxury I had ordered from a deep suspicion that Trevor's low-key (almost reverse) salesmanship was going to cause him to wind up in it. The difficult louse.

I put the thought aside and got to work.

I called the Vicksburg Hilton. No, Mr. and Mrs. Perreault had punched out. No, no forwarding address. Sorree!

So was I, and that synthetic computer voice was no comfort. I called McGill University in Montreal and wasted twenty minutes "learning" that, Yes, Dr. Perreault was a senior member of this university but was now at the University of Manitoba. The only new fact was that this Montreal computer synthesized English or French with equal ease and always answered in the language in which it was addressed. Very clever, these electron pushers—too clever, in my opinion.

I tried Janet's (Ian's) call code in Winnipeg, learned that their terminal was out of service at the subscribers' request. I wondered why I had been able to receive news on the terminal in the Hole earlier this day. Did "out of service" mean only "no incoming calls"? Was such arcanum a close-held secret of ST. and T.?

ANZAC Winnipeg bounced me around through parts of its computer meant for the traveling public before I got a human voice to admit that Captain Tormey was on leave because of the Emergency and the interruption of flights to New Zealand.

Ian's Auckland code answered only with music and an invitation to record a message, which was no surprise as Ian would not be there until semiballistic service resumed. But I had thought that I might catch Betty and/or Freddie.

How could one go to New Zealand with the SBs out of service? You can't ride a seahorse; they're too small. Did those big waterborne, Shipstone-driven freighters ever carry passengers? I didn't think they had accommodations. Hadn't I heard somewhere that some of them didn't even have crews?

I believed that I had a detailed knowledge of ways to travel superior to the professional knowledge of travel agents because, as a courier, I often moved around by means that tourists can't use and ordinary commercial travelers don't know about. It vexed me to realize that I had never given thought to how to outwit the fates when all SBs are grounded. But there is a way, there is always a way. I ticked it off in my mind as a problem to solve—later.

I called the University of Sydney, spoke with a computer, but at last got a human voice that admitted knowing Professor Farnese but he was on sabbatical leave. No, private call codes and addresses were never given out—sorry. Perhaps customer service might help me.

The Sydney information service computer seemed lonely, as it was willing to chat with me endlessly—anything but admit that either Federico or Elizabeth Farnese was in its net. I listened to a sales pitch for the World's Biggest Bridge (it isn't) and the World's Grandest Opera House (it is), so come Down Under and—I switched off reluctantly; a friendly computer with a Strine accent is better company than most people, human or my sort.

I then tackled the one I had hoped to be able to skip: Christchurch. There was a probability that Boss's HQ had sent word to me care of my former family when the move was made—if it was a move and not a total disaster. There was a very remote possibility that Ian, unable to send a message to me in the Imperium, would send one to my former home in hopes that it would be forwarded. I recalled that I had given him my Christchurch call code when he gave me the code for his Auckland flat. So I called my erstwhile home—

—and got the shock that one gets in stepping on a step that isn't there. "Service is discontinued at the terminal you have signaled. Calls are not being relayed. In emergency please signal Christchurch—" A code followed that I recognized as Brian's office.

I found myself doing the time-zone correction backward to get a wrong answer that would let me put off calling—then I snapped out of it. It was afternoon here, just past fifteen, so it was tomorrow morning in New Zealand, just past ten, a most likely time of day for Brian to be in. I punched his call, got a satellite hold of only a few seconds, then found myself staring into his astonished face. "Marjorie!"

"Yes," I agreed. "Marjorie. How are you?"

"Why are you calling me?"

I said, "Brian, please! We were married seven years; can't we at least speak politely with each other?"

"Sorry. What can I do for you?"

"I am sorry to disturb you at work but I called the house and found the terminal out of service. Brian, as you no doubt know from the news, communications with the Chicago Imperium have been interrupted by the Emergency. The assassinations. What the newscasters have been calling Red Thursday. As a result of this I am in California; I never did reach my Imperium address. Can you tell me anything about mail or messages that may have come for me? You see, nothing has reached me."

"I really could not say. Sorry."

"Can't you even tell me whether anything had to be forwarded? Just to know that a message had been forwarded would help me in tracing it."

"Let me think. There would have been all that money you drew out—no, you took the draft for that with you."

"What money?"

"The money you demanded we return to you—or be faced with an open scandal. A bit more than seventy thousand dollars. Marjorie, I am surprised that you have the gall to show your face when your misbehavior, your lies, and your cold cupidity destroyed our family."

"Brian, what in the world are you talking about? I have not lied to anyone, I don't think I have misbehaved, and I have not taken one penny out of the family. 'Destroyed the family' how? I was kicked out of the family, out of a clear blue sky—kicked out and sent packing, all in a matter of minutes. I certainly did not 'destroy the family.' Explain yourself."

Brian did, in cold and dreary detail. My misbehavior was all of a piece with my lies, of course, that ridiculous allegation that I was a living artifact, not human, and thereby I had forced the family to ask for an annulment. I tried to remind him that I had proved to him that I was enhanced; he brushed it aside. What I recalled, what he recalled, did not match. As for the money, I was lying again; he had seen the receipt with my signature.

I interrupted to tell him that any signature that appeared to be mine on any such receipt had to be a forgery as I had not received a single dollar.

"You are accusing Anita of forgery. Your boldest lie yet."

"I'm not accusing Anita of anything. But I received no money from the family."

I was accusing Anita and we both knew it. And possibly accusing Brian as well. I recalled once that Vickie had said that Anita's nipples erected only over fat credit balances . . . and I had shushed her and told her not to be catty. But there were hints from others that Anita was frigid in bed—a condition that an AP can't understand. In retrospect it did seem possible that her total passion was for the family, its financial success, its public prestige, its power in the community.

If so, she must hate me. I did not destroy the family, but kicking me out appeared to be the first domino in its collapse. Almost immediately after I left, Vickie went to Nuku'alofa . . . and instructed a solicitor to sue for divorce and financial settlement. Then Douglas and

Lispeth left Christchurch, married each other separately, then entered the same sort of suit.

One tiny crumb of comfort. I learned from Brian that the vote against me had not been six to nothing but seven to nothing. An improvement? Yes. Anita had ruled that voting must be by shares; the major stockholders, Brian, Bertie, and Anita, had voted first, casting seven votes against me, a clear majority to expel me—whereupon Doug, Vickie, and Lispeth had abstained from voting.

A very small crumb of comfort, however. They had not bucked Anita, not tried to stop her, they had not even warned me of what was afoot. They abstained. . . then stood aside and let the sentence be executed.

I asked Brian about the children—and was told bluntly that they were none of my business. He then said that he was quite busy and must switch off, but I held him for one more question: What was done with the cats?

He looked about to explode. "Marjorie, are you utterly heartless? When your acts have caused so much pain, so much real tragedy, you want to know about something as trivial as cats?"

I restrained my anger. "I do want to know, Brian."

"I think they were sent to the SPCA. Or it might have been to the medical school. Goodbye! Please do not call me again."

"The medical school—" Mister Underfoot tied to a surgical table while a medical student took him apart with a knife? I am not a vegetarian and I am not going to argue against the use of animals in science and in teaching. But if it must be done, dear God if there is one anywhere, don't let it be done to animals who have been brought up to think they are people!

SPCA or medical school, Mister Underfoot and the younger cats were almost certainly dead. Nevertheless, if SBs had been running, I would have risked going back to British Canada to catch the next trajectory for New Zealand in the forlorn hope of saving my old friend. But without modern transportation Auckland was farther away than Luna City. Not even a forlorn hope—I dug deep into mind-control training and put matters I could not help out of my mind—

—and found that Mister Underfoot was still brushing against my leg.

On the terminal a red light was blinking. I glanced at the time, noted that it had been just about the two hours I had estimated; that light was almost certainly Trevor.

So make up your mind, Friday. Put cold water on your eyes and go down and let him try to persuade you? Or tell him to come on up, take him straight to bed, and cry on him? At first, that is. You certainly don't feel lecherous this minute . . . but tuck your face into a nice, warm male shoulder and let your feelings sag and pretty soon you will feel eager. You know that. Female tears are reputed to be a powerful aphrodisiac to most men and your own experience bears that out. (Crypto-sadism? Machismo? Who cares? It works.)

Invite him up. Have some liquor sent up. Maybe even put on some lip paint, try to look sexy. No, the hell with lip paint; it would not last long anyway. Invite him up; take him to bed. Cheer yourself up by doing your damnedest to cheer him up. Give it everything you've got!

I fitted a smile onto my face and answered the terminal.

And found myself speaking to the hotel's robot voice: "We are holding a box of flowers for you. May we send them up?"

"Certainly." (No matter who or what, a box of flowers is better than a slap in the belly with a wet fish.)

Shortly the dumbwaiter buzzed; I went to it and took out a floral package as big as a baby's coffin, put it on the floor to open it.

Long-stemmed, dusky red roses! I decided to give Trevor a better time than Cleopatra ever managed on her best days.

After admiring them I opened the envelope that came with them, expecting just a card with perhaps a line asking me to call the lounge, or such.

No, a note, almost a letter:

> Dear Marjorie,
>
> I hope that these roses will be at least as welcome as I would have been.
>
> I must confess that I have run away. Something came up that made me realize that I must desist from my attempts to force my company on you.
>
> I am not married. I don't know who that pretty lady is; the picture is just a prop. As you pointed out, my sort is not considered suitable for marriage. I'm an artificial person, dear lady. "My mother was a test tube; my father was a knife." So I should not be making passes at human women. I pass for human, yes, but I would rather tell you the truth than to continue to try to pass with you—then have you learn the truth later. As you would, eventually, as I am the dirt-proud sort who would sooner or later tell you.
>
> So I would rather tell you now than hurt you later.
>
> My family name is not Ancirews, of course, as my sort do not have families.
>
> But I can't help wishing that you were an AP yourself. You really are sweet (as well as extremely

sexy) and your tendency to babble about matters, such as APs, that you don't understand, is probably not your fault. You remind me of a little fox terrier bitch I once had. She was cute and very affectionate, but quite willing to fight the whole world by herself if that was the program for the day. I confess to liking dogs and cats better than most people; they never hold it against me that I'm not human.

Do enjoy the roses,
Trevor

I wiped my eyes and blew my nose and went down fast and rushed through the lounge and then through the bar and then down one floor to the shuttle terminal and stood by the turnstiles leading to the departing shuttles . . . and stood there, and waited, and waited, and waited some more, and a policeman began eyeing me and finally he came over and asked me what I wanted and did I need help?

I told him the truth, or some of it, and he let me be. I waited and waited and he watched me the whole time. Finally he came over again and said, "Look here, if you insist on treating this as your beat, I'm going to have to ask to see your license and your medical certificate, and take you in if either one is not in order. I don't want to do that; I've got a daughter at home about your age and I'd like to think that a cop would give her a break. Anyhow you ought not to be in the business; anybody can see from your face that you're not tough enough for it."

I thought of showing him that gold credit card—I doubt that there is a streetwalker anywhere who carries a gold credit card. But the old dear really did think that he was taking care of me and I had humiliated enough people for one day. I thanked him and went up to my room.

Human people are so cocksure that they can always spot an AP—blah! We can't even spot each other. Trevor was the only man I had ever met whom I could have married with an utterly clear conscience—and I had chased him away.

But he was too sensitive!

Who is too sensitive? You are, Friday.

But, damn it, most humans do discriminate against our sort. Kick a dog often enough and he becomes awfully jumpy. Look at my sweet Ennzedd family, the finks. Anita probably felt self-righteous about cheating me—I'm not human.

Score for the day: Humans 9 ; Friday 0.

Where is Janet?

XXI

After a short nap that I spent standing on an auction block, waiting to be sold, I woke up—woke up because prospective buyers were insisting on inspecting my teeth and I finally bit one and the auctioneer started giving me a taste of the whip and woke me. The Be!

lingham Hilton looked awfully good.

Then I made the call I should have made first. But the other calls had to be made anyhow and this call cost too much and would have been unnecessary if my last call had paid off. Besides, I don't like to phone the Moon; the time lag upsets me.

So I called Ceres and South Africa Acceptances, Boss's banker—or one of them. The one who took care of my credit and paid my bills.

After the usual hassle with synthetic voices that seemed more deliberately frustrating than ever through the speed-of-light lag, I finally reached a human being, a beautiful female creature who clearly (it seemed to me) had been hired to be a decorative receptionist—one-sixth gee is far more effective than a bra. I asked her to let me speak to one of the bank's officers.

"You are speaking to one of the vice-presidents," she answered. "You managed to convince our computer that you needed help from a responsible officer. That's quite a trick; that computer is stubborn. How may I help you?"

I told a portion of my unlikely story. "So it took a couple of weeks to get inside the Imperium and when I did, all my contact codes were sour. Does the bank have another call code or address for me?"

"We'll see. What is the name of the company for which you work?"

"It has several names. One is System Enterprises."

"What is your employer's name?"

"He doesn't have a name. He is elderly, heavyset, one-eyed, rather crippled, and walks slowly with two canes. Does that win a prize?"

"We'll see. You told me that we backed your MasterCard credit issued through the Imperial Bank of Saint Louis. Read the card's number, slowly."

I did so. "Want to photograph it?"

"No. Give me a date."

"Ten sixty—six."

"Fourteen ninety-two," she answered.

"Four thousand four B.C.," I agreed.

"Seventeen seventy-six," she riposted.

"Two thousand twelve," I answered.

"You have a grisly sense of humor, Miss Baldwin. All right, you're tentatively you. But if you're not, I'll make a small bet with you that you won't live past the next checkpoint. Mr. Two-Canes is reputed to be unamused by gatecrashers. Take down this call code. Then read it back to me."

I did so.

One hour later I was walking past the Palace of the Confederacy in San Jose, again headed for the California Commercial Credit Building and firmly resolved not to get into any fights in front of the Palace no matter what assassinations were being attempted. I thought about the fact that I was on the exact spot I had been on, uh, two weeks ago?—and if this relay point sent me to Vicksburg I would go quietly mad.

My appointment at the CCC Building was not with MasterCard but with a law firm on another floor, one I had called from Bellingham after obtaining the firm's terminal code from the Moon. I had just reached the corner of the building when a voice almost in my ear said, "Miss Friday."

I looked quickly around. A woman in a Yellow Cab uniform.

I looked again. "Goldie!"

"You ordered a cab, miss? Across the Plaza and down the street. They won't let us squat here."

We crossed the Plaza together. I started to babble, bursting with euphoria. Goldie shushed me. "Do please try to act like a cab fare, Miss Friday. The Master wants us to be inconspicuous."

"Since when do you call me miss?"

"Better so. Discipline is very tight now. My picking you up is a special permission, one that would never have been granted if I had not been able to point out that I could make positive identification without buzz words."

"Well. All right. Just don't call me miss when you don't have to. Golly gosh, Goldie darling, I'm so happy to see you I could cry."

"Me, too. Especially since you were reported dead just this Monday. And I did cry. And several others."

"Dead? Me? I haven't even been close to being dead, not at all, not anywhere. I haven't been in the slightest danger. Just lost. And now I'm found."

"I'm glad."

Ten minutes later I was ushered into Boss's office. "Friday reporting, sir," I said.

"You're late."

"I came the scenic route, sir. Up the Mississippi by excursion boat."

"So I heard. You seem to be the only survivor. I meant that you are late today. You crossed the border into California at twelve-ohfive. It is now seventeen-twenty-two."

"Damn it, Boss; I've had problems."

"Couriers are supposed to be able to outwit problems and move fast anyhow."

"Damn it, Boss, I wasn't on duty, I wasn't being a courier, I was still on leave; you've no business chewing me out. If you hadn't moved without notifying me, I wouldn't have had the slightest trouble. I was here, two weeks ago, in San Jose, just a loud shout from right here."

"Thirteen days ago."

"Boss, you're nitpicking to avoid admitting that it was your fault, not mine."

"Very well, I will accept the blame if any in order that we may cease quibbling and stop wasting time. I made extreme effort to notify you, much more than the routine alert MSG that was sent to other field operatives not at headquarters. I regret that this special effort failed. Friday, what must I do to convince you that you are unique and invaluable to this organization? In anticipation of the events tagged Red Thursday—"

"Boss! Were we in that?" I was shocked.

"What causes you to entertain such an obscene idea? No. Our intelligence staff projected it—in part from data you delivered from EllFive—and we started making precautionary arrangements in good time, so it seemed. But the first attacks took place in advance of our most pessimistic projection. At the onset of Red Thursday we were still moving impedimenta; it was necessary to crash our way across the border. With bribes, not with force. The notices of change of address and of call code had gone out earlier but it was not until we were here and our comm center reestablished that I was notified that you had not made routine acknowledgment."

"For the bloody good reason that I did not receive routine notice!"

"Please. On learning that you had not acknowledged, I attempted to call you at your New Zealand home. Possibly you are aware that there was an interruption in satellite service—"

"I heard."

"Precisely. The call got through some thirty-two hours later. I spoke to Mrs. Davidson, a woman about forty, rather sharp features. Senior wife in your S-group?"

"Yes. Anita. Both Lord High Executioner and Lord High Everything Else."

"That was the impression I received. I received also an impression that you had become persona non grata."

"I'm sure that it was more than an impression. Go ahead, Boss; what did the old bat have to say about me?"

"Almost nothing. You had left the family quite suddenly. No, you had left no forwarding address or call code. No, she would not accept a message for you or forward any that arrived. I'm very busy; Marjorie has left us in a dreadful mess. Goodbye."

"Boss, she had your Imperium address. She also had the address in Luna City of Ceres and South Africa because I made my monthly payments to her through them."

"I could see the situation. My New Zealand representative"—the first I had ever heard of one!—"obtained for me the business address of your S-group's senior husband, Brian Davidson. He was more polite and somewhat more helpful. From him we learned what shuttle you had taken from Christchurch and that led us to the passenger list of the semibaliistic you took from Auckland to Winnipeg. There we lost you briefly, until my agent there established that you had left the port in the company of the skipper of the semiballistic. When we reached him—Captain Tormey—he was helpful, but you had left. I am pleased to be able to tell you that we were able to return the favor to Captain Tormey. An inside source enabled us to let him know that he and his wife were about to be picked up by the local police."

"Fer Gossake! What for?"

"The nominal charge is harboring an enemy alien and harboring an unregistered Imperium subject during a declared emergency. In fact the Winnipeg office of the provincial police are not interested in you or in Dr. Perreault; that is an excuse to pull in the Tormeys. They are wanted on a much more serious charge that has not been filed. A Lieutenant Melvin Dickey is missing. The last trace of him is an oral statement made by him as he left police HQ that he was going to Captain Tormey's home to pick up Dr. Perreault. Foul play is suspected."

"But that's not evidence against Jan and Ian! The Tormeys."

"No, it is not. That is why the provincial police intend to hold them on a lesser charge. There is more. Lieutenant Dickey's APV crashed near Fargo in the Imperium. It was unoccupied. The police are very anxious to check that wreck for fingerprints. Possibly they are doing so at this very moment as, about one hour ago, a news bulletin reported that the common border between the Chicago Imperium and British Canada had been reopened."

"Oh, my God!"

"Compose yourself. On the controls of that APV there were indeed fingerprints that were not Lieutenant Dickey's. They matched Captain Tormey's prints on file with ANZAC Skyways. Note the tense I used; there were such prints; there no longer are. Friday, although I found it prudent to move our seat of operations out of the Imperium, after many years I am not without contacts there. And agents. And past favors I can collect. No prints matching those of Captain Tormey are now in that wreckage but there are prints on it from many sources living and dead."

"Boss, may I kiss your feet?"

"Hold your tongue. I did not do this to frustrate the British Canadian police. My field agent in Winnipeg is a clinical psychologist as well as having our usual training. It is his professional opinion that either Captain Tormey or his wife could kill in self-defense but that it would take extreme conditions indeed to cause either of them to kill a policeman. Dr. Perreault is described as being even less disposed toward violent solutions."

"I killed him."

"So I assumed. No other explanation fitted the data. Do you wish to discuss it? Is it any of my business?"

"Uh, perhaps not. Except that you made it your business when you got rid of those damning fingerprints. I killed him because he was threatening Janet, Janet Tormey, with a gun. I could have simply disabled him; I had time to pull my punch. But I meant to kill him and I did."

"I would be—and will be—much disappointed in you if you ever simply injure a policeman. A wounded policeman is more dangerous than a wounded lion. I had reconstructed it much as you described save that I had assumed that you were protecting Dr. Perreault. . . since you seemed to find him an acceptable surrogate husband."

"He's that, all right. But it was that crazy fool threatening Janet's life that made me go spung! Boss, until this happened I didn't know that I loved Janet. Didn't know I could love a woman that intensely. You know more than I do about how I was designed, or so you have hinted. Are my glands mixed up?"

"I know quite a lot about your design but I shan't discuss it with you; you have no need to know. Your glands are no more mixed up than those of any healthy human—specifically, you do not have a redundant Y chromosome. All normal human beings have soidisant mixed-up glands. The race is divided into two parts: those who know this and those who do not. Stop the stupid talk; it ill befits a genius."

"Oh, so I'm a genius now. Hully gee, Boss."

"Don't be pert. You are a supergenius but you are a long way from realizing your potential. Geniuses and supergeniuses always make their own rules on sex as on everything else; they do not accept the monkey customs of their lessers. Let us return to our muttons. Is it possible that this body will be found?"

"I would bet long odds against it."

"Any point in discussing it with me?"

"Uh, I don't think so."

"Then I have no need to know and will assume that the Tormeys can safely return home as soon as the police conclude that they cannot establish corpus delicti. While corpus delicti does not require a corpse, it is enormously more difficult to make a charge of murder stand up without one. If arrested, a good lawyer would have the Tormeys out in five minutes—and they would have a very good lawyer, I assure you. You may be pleased to know that you helped them to escape from the country."

"I did?"

"You and Dr. Perreault. By leaving British Canada as Captain and

Mrs. Tormey, and by using their credit cards and by filling out tourist-card applications in their names. You two left a trail that 'proved' that the Tormeys fled the country immediately after Lieutenant Dickey disappeared. This worked so well that the police wasted several days trying to trace down the suspects in the California Confederacy—and blaming inefficiency of their colleagues in the Confederacy for their lack of success. But I'm somewhat surprised that the Tormeys were not arrested in their own home as my agent had no great difficulty interviewing them there."

(I'm not. If a cop shows up—zip! down the Hole. If it's not a cop and he satisfies Ian that he is okay—) "Boss, did your Winnipeg agent mention my name? My 'Marjorie Baldwin' name, I mean."

"Yes. Without that name and a picture of you, Mrs. Tormey would never have let him in. Without the Tormeys I would have lacked necessary data for picking up your rather elusive trail. We benefitted each other. They helped you to escape; we helped them to escape, after I told them—after my agent told them—that they were being actively sought. A pleasant ending."

"How did you get them out?"

"Friday, do you wish to know?"

"Um, no." (When will I learn? Had Boss wished to disclose the method, he would have told me. "Careless slips sink ships." Not around Boss.)

Boss came out from behind his desk. . . and shocked me. Ordinarily he does not move around much and in his old office his ubiquitous tea service was within his reach at his desk. Now he rolled out. No canes. A powered wheelchair. He guided it to a side table, started fiddling with tea things.

I stood up. "May I pour?"

"Thank you, Friday. Yes." He left the service table, rolled back to his place behind his desk. I took over, which let me stand with my back to him—that was what I needed right then.

There is no reason to feel shock when a cripple decides to substitute a powered wheelchair for canes—it is simply efficiency. Except that this was Boss. If the Egyptians at Giza woke up some morning and found the Pyramids switched around and the Sphinx with a new nose, they would not be more shocked than was I. Some things—and some people—are not supposed to change.

After I had served his tea—warm milk, two lumps—and had poured mine, I sat back down, my composure restored. Boss uses the very latest technology and quite old-fashioned customs; I have never known him to ask a woman to wait on him but if a woman is present and offers to pour tea, it is a certainty that he will accept graciously and turn the incident into a minor ceremony.

He chatted of other matters until we each had finished one cup. I refilled his cup, did not myself take another; he resumed business. "Friday, you changed names and credit cards so many times that we were always one jump behind you. We might not have traced you to Vicksburg had not your progress suggested something about your plan. Although it is not my practice to interfere with an agent no matter how closely he is being watched, I might have decided to head you off from going up the river—knowing that that expedition was doomed—"Boss, what was that expedition? I never believed the song and dance."

"A coup d'etat. A clumsy one. The Imperium has had three Chairmen in two weeks. . . and the current one is no better and no more likely to survive. Friday, a well-run tyranny is a better base for my work than is any form of free government. But a well-run tyranny is almost as scarce as an efficient democracy. To resume—you got away from us in Vicksburg because you moved without hesitation. You were aboard that comic-opera troopship and gone before our Vicksburg agent knew that you had signed up. I was vexed with him. So much so that I have not yet disciplined him. I must wait."

"No reason to discipline him, Boss. I moved fast. Unless he breathed down my neck—which I notice and always take steps—he could not have kept up with me."

"Yes, yes, I know your techniques. But I think that you will agree that I was understandably annoyed when it was reported to me that our man in Vicksburg actually had you physically in sight. . . and twenty-four hours later he reports you dead."

"Maybe, maybe not. A man got too close on my heels coming into Nairobi earlier this year—breathed down my neck and it was his last breath. If you have me shadowed again, better warn your agents."

"I do not ordinarily use a shadow on you, Friday. With you, point checks work better. Fortunately for all of us you did not stay dead. While the terminals of my contact agents in Saint Louis have all been tapped by the government, I still get some use from them. When you attempted to report in, three times and never got caught, I heard of it at once and deduced that it had to be you, then knew it with certainty when you reached Fargo."

"Who in Fargo? The paper artist?"

Boss pretended not to hear. "Friday, I must get back to work. Complete your report. Make it brief."

"Yes, sir. I left that excursion boat when we entered the Imperiurn, proceeded to Saint Louis, found your contact call codes trapped, left, visited Fargo as you noted, crossed into British Canada twenty-six klicks east of Pembina, crossed to Vancouver and down to Bellingham today, then reported to you here."

"Any trouble?"

"No, sir."

"Any novel aspects of professional interest?"

"No, sir."

"At your convenience tape a detailed report for staff analysis. Feel free to suppress facts not yours to disclose. I will send for you some time in the next two or three weeks. You start school tomorrow morning. Oh-nine hundred."

"Huh?"

"Don't grunt; it is not pleasing in a young woman. Friday, your work has been satisfactory but it is time you entered on your true profession. Your true profession at this stage, perhaps I should say. You are woefully ignorant. We will change that. Nine o'clock tomorrow."

"Yes, sir." (Ignorant, huh? Arrogant old bastard. Gosh, I was glad to see him. But that wheelchair fretted me.)

XXII

Pajaro Sands used to be a resort seaside hotel. It's a nowhere place on Monterey Bay outside a nowhere city, Watsonville. Watsonville is one of the great oil export ports of the world and has all the charm of cold pancakes with no syrup. The nearest excitement is in the casinos and bawdy houses of Carmel, fifty kilometers away. But I don't gamble and am not interested in sex for hire, even the exotic sorts to be had in California. Not many from Boss's headquarters patronized Carmel as it was too far away to go by horse other than for a weekend, there was no direct capsule, and, while California is liberal in authorizing power vehicles, Boss did not release his APVs for anything but business.

The big excitements for us at Pajaro Sands were the natural attractions that caused it to be built, surf and sand and sunshine.

I enjoyed surfboarding until I became skilled at it. Then it bored me. I usually sunned a bit each day and swam a little and stared out at the big tankers suckling at the oil moles and noted with amusement that the watchstander aboard each ship often was staring back, with binoculars.

There was no reason for any of us to be bored as we had full individual terminal service. People are so used to the computer net today that it is easy to forget what a window to the world it can be—and I include myself. One can grow so canalized in using a terminal only in certain ways—paying bills, making telephonic calls, listening to news bulletins—that one can neglect its richer uses. If a subscriber is willing to pay for the service, almost anything can be done at a terminal that can be done out of bed.

Live music? I could punch in a concert going on live in Berkeley this evening, but a concert given ten years ago in London, its conductor long dead, is just as "live," just as immediate, as any listed on today's program. Electrons don't care. Once data of any sort go into the net, time is frozen. All that is necessary is to remember that all the endless riches of the past are available any time you punch for them.

Boss sent me to school at a computer terminal and I had far richer opportunities than any enjoyed by a student at Oxford or the Sorbonne or Heidelberg in any earlier year.

At first it did not seem to me that I was going to school. At breakfast the first day I was told to report to the head librarian. He was a fatherly old dear, Professor Perry, whom I had met first during basic training. He seemed harried—understandably, as Boss's library was probably the bulkiest and most complex thing shipped from the Imperium to Pajaro Sands. Professor Perry undoubtedly had weeks of work ahead before everything would be straightened out—and in the meantime all Boss would expect would be utter perfection. The work was not made easier by Boss's eccentric insistence on paper books for much of his library rather than cassettes or microfiche or disks.

When I reported to him, Perry looked bothered, then pointed to a console over in one corner. "Miss Friday, why don't you sit down over there?"

"What am I to do?"

"Eh? That's hard to say. No doubt we'll be told. Um, I'm awfully busy now and terribly understaffed. Why don't you just get acquainted with the equipment by studying anything you wish?"

There wasn't anything special about the equipment except that there were extra keys giving direct access to several major libraries such as Harvard's and the Washington Library of the Atlantic Union and the British Museum without going through a human or network linkup—plus the unique resource of direct access to Boss's library, the one right beside me. I could even read his bound paper books if I wanted to, on my terminal's screen, turning the pages from the keyboard and never taking the volume out of its nitrogen environment.

That morning I was speed-searching the index of the Tulane University library (one of the best in the Lone Star Republic), looking for history of Old Vicksburg, when I stumbled onto a cross-reference to spectral types of stars and found myself hooked. I don't recall why there was such a cross-referral but these do occur for the most unlikely reasons.

I was still reading about the evolution of stars when Professor Perry suggested that we go to lunch.

We did but I made some notes first about types of mathematics I wanted to study. Astrophysics is fascinating—but you have to talk the language.

That afternoon I got back to Old Vicksburg and was footnoted to Show Boat, a musical play concerning that era—and then spent the rest of the day looking at and listening to Broadway musical plays from the happy days before the North American Federation fell to pieces. Why can't they write music like that today? Those people must have had fun! I certainly did—I played Show Boat, The Student Prince, and My Fair Lady one after the other and noted a dozen more to play later. (This is going to school?)

Next day I resolved to stick to serious study of professional subjects in which I was weak, because I felt sure that once my tutors (whoever they were) assigned my curriculum, I would have no time at all for my own choices—earlier training in Boss's outfit had taught me the need for a twenty-six-hour day. But at breakfast my friend Anna asked me, "Friday, what can you tell me about the influence of Louis Onze on French lyric poetry?"

I blinked at her. "Is there a prize? Louis Onze sounds like a cheese to me. The only French verse I can recall is 'Mademoiselle from Armentieres.' If that qualifies."

"Professor Perry said that you are the person to ask."

"He's pulling your leg." When I reached the library Papa Perry looked up from his console. I said, "Good morning. Anna said that you had told her to ask me about the effect of Louis the Eleventh on French verse."

"Yes, yes, of course. Would you mind not bothering me now? This bit of programming is very tricky." He looked back down and closed me out of his world.

Frustrated and irritated I punched up Louis XI. Two hours later I came up for air. I had not learned anything about poetry—so far as I could tell the Spider King had never even rhymed ton con with c'est hon or ever been a patron of the art. But I learned a lot about politics in the fifteenth century. Violent. Made the little scrapes I had been in seem like kiddie quarrels in the crèche.

I spent the rest of the day punching up French lyric verse since 1450. Good in spots. French is suited to lyric poetry, more so than is English—it takes an Edgar Allan Poe to wring beauty consistently out of the dissonances of English. German is unsuited to lyricism, so much so that translations fall sweeter on the ear than do the German originals. This is no fault of Goethe or Heine; it is a defect of an ugly language. Spanish is so musical that a soappowder commercial in Spanish is more pleasing to the ear than the best free verse in English —the Spanish language is so beautiful that much of its poetry sounds best if the listener does not understand the meaning.

I never did find out what effect, if any, Louis XI had on verse.

One morning I found "my" console occupied. I looked inquiringly at the head librarian. Again he looked harried. "Yes, yes, we're quite crowded today. Um, Miss Friday, why not use the terminal in your room? It has the same additional controls and, if you need to consult me, you can do so even more quickly than you can here. Just punch local seven and your signature code and I'll instruct the computer to give you priority. Satisfactory?"

"Just fine," I agreed. I enjoyed the warm camaraderie of the library study room but in my own room I could take off my clothes without feeling that I was annoying Papa Perry. "What should I study today?"

"Goodness. Isn't there some subject you are interested in that merits further listening? I dislike disturbing Number One."

I went to my room and went on with French history since Louis Onze and that led me to the new colonies across the Atlantic and that led me into economics and that took me to Adam Smith and from there to political science. I concluded that Aristotle had had his good days but that Plato was a pretentious fraud and that led to my being called three times by the dining room with the last call including a recorded message that any later arrival would mean nothing but cold night-rations and a live message from Goldie threatening to drag me down by my hair.

So I rushed down, barefooted and still zipping into a jump suit. Anna asked what I had been doing that was so urgent I would forget to eat. "Most unFridayish." She and Goldie and I usually ate together, with or without male company—residents at HQ were a club, a fraternity, a noisy family, and some two dozen of them were "kissing friends" of mine.

"Improving my brain," I said. "You are looking at the World's Greatest Authority."

"Authority on what?" Goldie asked.

"Anything. Just ask me. The easy ones I answer at once; the hardest ones I'll answer tomorrow."

"Prove it," said Anna. "How many angels can sit on the point of a needle?"

"That's an easy one. Measure the angels' arses. Measure the point of the needle. Divide A into B. The numerical answer is left as an exercise for the student."

"Smart-aleck. What is the sound of one hand clapping?"

"Even easier. Switch on a recorder, using any nearby terminal. Clap with one hand. Play back the result."

"You try her, Goldie. She's been eating meat."

"What is the population of San Jose?"

"Ah, that's a hard one! I'll report tomorrow."

This fiddling went on for over a month before it filtered through my skull that someone (Boss, of course) was in fact trying to force me to become "the World's Greatest Authority."

At one time there really was a man known as "the World's Greatest Authority." I ran across him in trying to nail down one of the many silly questions that kept coming at me from odd sources. Like this: Set your terminal to "research." Punch parameters in succession "North American culture," "English-speaking," "mid-twentieth century," "comedians," "the World's Greatest Authority." The answer you can expect is "Professor Irwin Corey." You'll find his routines timeless humor.

Meanwhile I was being forcefed, like a Strasbourg goose.

Nevertheless it was a very happy time. Often, as often as not, one of my true friends would invite me to share a bed. I don't recall ever refusing. Rendezvous would usually be arranged during afternoon sunbathing and the prospect added a tingle to the sensuous pleasure of lying in the sun. Because everyone at HQ was so civilized—sweet through and through—it was possible to answer, "Sorry, Terence asked me first. Tomorrow maybe? No? Okay, sometime soon"—and have no hurt feelings. One of the shortcomings of the S-group I used to belong to was that such arrangements were negotiated among the males under some protocol that was never explained to me but was not free from tension.

The silly questions speeded up. I found myself just getting acquainted with the details of Ming ceramics when a message showed up in my terminal saying that someone in staff wanted to know the relationships between men's beards, women's skirts, and the price of gold. I had ceased to wonder at silly questions; around Boss anything can happen. But this one seemed supersilly. Why should there be any relationship? Men's beards did not interest me; they tickle and often are dirty. As for women's skirts, I knew even less. I have almost never worn skirts. Skirted costumes can be pretty but they aren't practical for travel and could have gotten me killed three or four times—and when you're home, what's wrong with skin? Or as near as local custom permits.

But I had learned not to ignore questions merely because they were obvious nonsense; I tackled this one by calling up all the data I could, including punching out some most unlikely association chains. I then told the machine to tabulate all retrieved data by categories.

Durned if I didn't begin to find connections!

As more data accumulated I found that the only way I could see all of it was to tell the computer to plot and display a three-dimensional graph—and that looked so promising that I told it to convert to holographic in color. Beautiful! I did not know why these three variables fitted together but they did. I spent the rest of that day changing scales, X versus Y versus Z in various combinations—magnifying, shrinking, rotating, looking for minor cycloid relations under the obvious gross ones. . . and noticed a shallow double sinusoidal hump that kept showing up as I rotated the holo—and suddenly, for no reason I can assign, I decided to subtract the double sunspot curve.

Eureka! As precise and necessary as a Ming vase! Before dinnertime I had the equation, just one line that encompassed all the silly data I had spent five days dragging out of the terminal. I punched the chief of staff's call and recorded that oneline equation, plus definitions of variables. I added no comment, no discussion; I wanted to force the faceless joker to ask for my opinions.

I got the same answer back—i.e., none.

I fiddled for most of a day, waiting, and proving to myself that I could retrieve a group picture from any year and, through looking only at male faces and female legs, make close guesses concerning the price of gold (falling or rising), the time of that picture relative to the double sunspot cycle, and—shortly and most surprising—whether the political structure was falling apart or consolidating.

My terminal chimed. No face. No pat on the back. Just a displayed message: "Operations requests soonest depth analysis of possibility that plague epidemics of sixth, fourteenth, and seventeenth centuries resulted from political conspiracy."

Fooey! I had wandered into a funny farm and was locked up with the inmates.

Oh, well! The question was so complex that I might be left alone a long time while I studied it. That suited me; I had grown addicted to the possibilities of a terminal of a major computer hooked into a world research net—I felt like Little Jack Horner.

I started by listing as many subjects as possible by free association: plague, epidemiology, fleas, rats, Daniel Defoe, Isaac Newton, conspiracies, Guy Fawkes, Freemasonry, Illuminati, OTO, Rosicrucians, Kennedy, Oswald, John Wilkes Booth, Pearl Harbor, Green Bowlers, Spanish influenza, pest control, *etc.*

In three days my list of possibly related subjects was ten times as long.

In a week I knew that one lifetime was not nearly long enough to study in depth all of my list. But I had been told to tackle the subject so I started in—but I placed my own meaning on "soonest"—i.e., I would study conscientiously at least fifty hours per week but when and how I wished and with no cramming or rawhiding. . . unless somebody came along and explained to me why I should work harder or differently.

This went on for weeks.

I was wakened in the middle of the night by my terminal—override alarm; I had shut it off as usual when I went to bed (alone, I don't recall why). I answered sleepily, "All right, all right! Speak up, and it had better be good."

No picture. Boss's voice said, "Friday, when will the next major Black Death epidemic occur?"

I answered, "Three years from now. April. Starting in Bombay and spreading worldwide at once. Spreading off planet at first transport.

"Thank you. Good night."

I dropped my head to the pillow and went right back to sleep.

I woke up at seven hundred as usual, held still for several moments and thought, while I grew colder and colder—decided that I really had heard from Boss in the night and really had given him that preposterous answer.

So bite the bullet, Friday, and climb the Thirteen Steps. I punched "local one." "Friday here, Boss. About what I told you in the night. I plead temporary insanity."

"Nonsense. See me at ten-fifteen."

I was tempted to spend the next three hours in lotus, chanting my beads. But I have a deep conviction that one should not attend even the End of the World without a good breakfast. . . and my decision was justified as the special that morning was fresh figs with cream, corned-beef hash with poached eggs, and English muffins with Knott's Berry Farm orange marmalade. Fresh milk. Colombian high-altitude coffee. That so improved things that I spent an hour trying to find a mathematical relationship between the past history of plague and the date that had popped into my sleep-drenched mind. I did not find one but was beginning to see some shape to the curve when the terminal gave me a three-minute warning I had punched in.

I had refrained from having my hair cut and my neck shaved but otherwise I was ready. I walked in on the tick. "Friday reporting, sir."

"Sit down. Why Bombay? I would think that Calcutta would be a more likely center."

"It might have something to do with long-range weather forecasts and the monsoons. Fleas can't stand hot, dry weather. Eighty percent of a flea's body mass is water and, if the percentage drops below sixty, the flea dies. So hot, dry weather will stop or prevent an epidemic. But, Boss, the whole thing is nonsense. You woke me up in the middle of the night and asked me a silly question and I gave you a silly answer without really waking up. I probably pulled it out of a dream. I've been having nightmares about the Black Death and there really was a bad epidemic that started in Bombay. Eighteen ninety-six and following."

"Not as bad as the Hong Kong phase of it three years later. Friday, the analytical section of Operations says that the next Black Death epidemic won't start until a year later than your prediction. And not Bombay. Djakarta and Ho Chi Minh City."

"That's preposterous!" I stopped abruptly. "Sorry, sir, I guess I was back in that nightmare. Boss, can't I study something pleasanter than fleas and rats and Black Death? It's ruining my sleep."

"You may. You are through studying plague—"

"Hooray!"

"—other than to whatever extent your intellectual curiosity causes you to tidy up any loose ends. The matter now goes to Operations for action. But action will be based on your prediction, not on that of the mathematical analysts."

"I have to say it again. My prediction is nonsense."

"Friday, your greatest weakness is lack of awareness of your true strength. Wouldn't we look silly if we depended on the professional analysts but the outbreak was one year earlier, as you predicted? Catastrophe. But to be a year early in taking prophylactic measures does no harm."

"Are we going to try to stop it?" (People have been fighting rats and fleas throughout history. So far, the rats and fleas are ahead.)

"Heavens, no! In the second place, the contract would be too big for this organization. But in the first place I do not accept contracts that I cannot fulfill; this is one such. In the third place, from the strictest humanitarian viewpoint, any attempt to stop the processes by which overcrowded cities purge themselves is not a kindness. Plague is a nasty death but a quick one. Starvation also is a nasty death . . . but a very slow one."

Boss grimaced, then continued. "This organization will limit itself to the problem of keeping Pasteurella pestis from leaving this planet. How will we do this? Answer at once."

(Ridiculous! Any government public health department, faced with such a question, would set up a blue-ribbon study group, insist on ample research funds, and schedule a reasonable time—five years or more—for orderly scientific investigation.) I answered at once, "Explode them."

"The space colonies? That seems a drastic solution."

"No, the fleas. Back during the global wars of the twentieth century somebody discovered that you could kill off fleas and lice by taking them up to high altitude. They explode. About five kilometers as I recall but it can be looked up and checked by experiment. I thought of it because I noticed that Beanstalk Station on Mount Kenya was above the critical altitude—and almost all space traffic these days goes up the Beanstalk. Then there is the simple method of heat and dryness—works but not as fast. But the key to it, Boss, is absolutely no exceptions. Just one case of diplomatic immunity or one VIP allowed to skip the routines and you've had it. One lapdog. One gerbil. One shipment of laboratory mice. If it took the pneumonic form, EllFive would be a ghost town in a week. Or Luna City."

"If I did not have other work for you, I would put you in charge. How about rats?"

"I don't want the job; I'm sick of the subject. Boss, killing a rat is no problem. Stuff it into a sack. Beat the sack with an ax. Then shoot it. Then drown it. Burn the sack with the dead rat in it. Meanwhile its mate has raised another litter of pups and you now have a dozen rats to replace it. Boss, all we've ever been able to do with rats is fight them to a draw. We never win. If we let up for a moment the rats pull ahead." I added sourly, "I think they're the second team." This plague assignment had depressed me.

"Elucidate."

"If Homo sapiens doesn't make it—he keeps trying to kill himself off—there are the rats, ready to take over." -

"Piffle. Softheaded nonsense. Friday, you overstress the human will to die. We have had the means to commit racial suicide for generations now and those means are and have been in many hands. We have not done so. In the second place, to replace us, rats would have to grow enormously larger skulls, develop bodies to support them, learn to walk on two feet, develop their front paws into delicate manipulative organs—and grow more cortex to control all this. To replace man another breed must become man. Bah. Forget it. Before we leave the subject of plague, what conclusions did you reach concerning the conspiracy theory?"

"The notion is silly. You specified sixth, fourteenth, and seventeenth centuries . . . and that means sailing ships or caravans and no knowledge of bacteriology. So here we have the sinister Dr. Fu Manchu in his hideaway raising a million rats and the rats are infested with fleas—easy. Rats and fleas are infected with the bacillus—possible even without theory. But how does he hit his target city? By ship? In a few days all the million rats will be dead and so would be the crew. Even harder to do it overland. To make such a conspiracy work in those centuries would require modern science and a largish time machine. Boss, who thought up that silly question?"

"I did."

"I thought it had your skid to it. Why?"

"It caused you to study the subject with a much wider approach than you otherwise would have given it, did it not?"

"Uh. . ." I had spent much more time studying relevant political history than I had spent studying the disease itself. "I suppose so."

"You know so."

"Well, yes. Boss, there ain't no such animal as a well-documented conspiracy. Or sometimes too well documented but the documents contradict each other. If a conspiracy happened quite some time ago, a generation or longer, it becomes impossible to establish the truth. Have you ever heard of a man named John F. Kennedy?"

"Yes. Chief of state in the middle twentieth century of the Federation then occupying the land between Canada—British Canada and Quebec—and the Kingdom of Mexico. He was assassinated."

"That's the man. Killed in front of hundreds of witnesses and every aspect, before, during, and after, heavily documented. All that mountain of evidence adds up to is this: Nobody knows who shot him, how many shot him, how many times he was shot, who did it, why it was done, and who was involved in the conspiracy if there was a conspiracy. It isn't even possible to say whether the murder plot was foreign or domestic. Boss, if it is impossible to untangle one that recent and that thoroughly investigated, what chance is there of figuring out the details of the conspiracy that did in Gaius lulius Caesar? Or Guy Fawkes and the Gunpowder Plot? All that can truthfully be said is that the people who come out on top write the official versions found in the history books, history that is no more honest than is autobiography."

"Friday, autobiography is usually honest."

"Huh! Boss, what have you been smoking?"

"That will do. Autobiography is usually honest but it is never truthful."

"I missed a turn."

"Think about it. Friday, I can't spend more time on you today; you chatter too much and change the subject. Hold your tongue while I say some things. You are now permanently on staff work. You are getting older; no doubt your reflexes are a touch slower. I will not again risk you in field work—"

"I'm not complaining!"

"Pipe down. —But you must not get swivel-chair spread. Spend less time at the console, more time in exercise; the day will come when your enhanced reflexes will again save your life. And possibly the lives of others. In the meantime give thought to the day when you will have to shape your life unassisted. You should leave this planet; for you there is nothing here. The Balkanization of North America ended the last chance of reversing the decay of the Renaissance Civilization. So you should think about offplanet possibilities not only in the solar system but elsewhere—planets ranging from extremely primitive to well developed. Investigate for each the cost and the advantages of migrating there. You will need money; do you want my agents to collect the money of which you were cheated in New Zealand?"

"How did you know I was cheated?"

"Come, come! We are not children."

"May I think about it?"

"Yes. Concerning your ex-migration: I recommend that you not move to the planet Olympia. Otherwise I have no specific advice other than to migrate. When I was younger, I thought I could change this world. Now I no longer think so but for emotional reasons I must keep on fighting a holding action. But you are young and, because of your unique heritage, your emotional ties to this planet and to this portion of humanity are not great. I could not mention this until you shuffled off your sentimental connection in New Zealand—"

"I didn't 'shuffle' it off; I was kicked out on my arse!"

"So. While you are deciding, look up Benjamin Franklin's parable of the whistle, then tell me—no, ask yourself—whether or not you paid too much for your whistle. Enough of that—Two assignments for you: Study the Shipstone corporate complex, including its interlocks outside the complex. Second, the next time I see you I want you to tell me precisely how to spot a sick culture. That's all."

Boss turned his attention to his console, so I stood up. But I was not ready to accept so abrupt a dismissal as I had had no opportunity to ask important questions. "Boss. Don't I have any duties? Just random study that goes nowhere?"

"It goes somewhere. Yes, you have duties. First, to study. Second, to be awakened in the middle of the night—or stopped in the hallway—to answer silly questions."

"Just that?"

"What do you want? Angels and trumpets?"

"Well . . . a job title, maybe. I used to be a courier. What am I now? Court jester?"

"Friday, you are developing a bureaucratic mind. 'Job title' indeed! Very well. You are staff intuitive analyst, reporting to me only. But the title carries an injunction: You are forbidden to discuss anything more serious than a card game with any member of the analytical section of the general staff. Sleep with them if you wish—I know that you do, in two cases—but limit your conversation to the veriest trivia."

"Boss, I could wish that you spent less time under my bed!"

"Only enough to protect the organization. Friday, you are well aware that the absence of Eyes and Ears today simply means that they are concealed. Be assured that I am shameless about protecting the organization."

"You are shameless, unlimited. Boss, answer me one more question. Who is behind Red Thursday? The third wave sort of fizzled; will there be a fourth? What's it all about?"

"Study it yourself. If I told you, you would not know; you simply would have been told. Study it thoroughly and some night—when you are sleeping alone—I will ask you. You will answer and then you will know."

"Fer Gossake. Do you always know when I'm sleeping alone?"

"Always." He added, "Dismissed," and turned away.

XXIII

As I left the sanctum sanctorum I ran into Goldie coming in. I was feeling grouchy and simply nodded. Not sore at Goldie. Boss! Damn him. Supercilious, arrogant voyeur! I went to my room and got to work, so that I could stop fuming.

First I punched for the names and addresses of all the Shipstone corporations. While these were printing I called for histories of the complex. The computer named two, an official company history combined with a biography of Daniel Shipstone, and an unofficial history footnoted "muckrake." Then the machine suggested several other sources.

I told the terminal to print out both books and I asked it for printouts of other sources if four thousand words or less, summarized if not. Then I looked over the corporations list:

Daniel Shipstone Estate, Inc. Muriel Shipstone Memorial Research Laboratories
Shipstone Tempe
Shipstone Gobi
Shipstone Aden
Shipstone Sahara
Shipstone Arica
Shipstone Death Valley
Shipstone Karroo
Shipstone NeverNever
Shipstone Ell-Four
Shipstone EllFive

Shipstone Stationary
Shipstone Tycho
Shipstone Ares
Shipstone Deep Water
Shipstone Unlimited, Ltd.
Sears-Montgomery, Inc.
Prometheus Foundation
Coca-Cola Holding Company
Interworld Transport Corporation
Billy Shipstone School for Handicapped Children
Jack and the Beanstalk, Pty.
Wolf Creek Pass Nature Preserve
Morgan Associates
??Ano?? Nuevo Wild Life Refuge
Out-Systems Colonial Shipstone Corporation
Visual Arts Museum and School

I looked at this list with easily controlled enthusiasm. I had known that the Shipstone trust had to be big—who does not have half a dozen Shipstones within easy reach, not counting the big one in your basement or foundation? But now it seemed to me that studying this monster would be a lifetime career. I was not that much interested in Shipstones.

I was nibbling around the edges when Goldie stopped by and told me that it was time to put on the nosebag. "And I have instructions to see to it that you do not spend more than eight hours a day at your terminal and you are to take a full weekend every week."

"Ah so. Tyrannical old bastard."

We started for the refectory. "Friday . .

"Yes, Goldie?"

"You are finding the Master grumpy and sometimes difficult."

"Correction. He is always difficult."

"Mmm, yes. But what you may not know is that he is in constant pain." She added, "He can no longer take drugs to control it."

We walked in silence while I chewed and swallowed that one. "Goldie? What is wrong with him?"

"Nothing, really. I would say that he is in good health. . . for his age.

"How old is he?"

"I don't know. From things I have heard I know that he is over a hundred. How much over I can't guess."

"Oh, no! Goldie, when I went to work for him, he could not have been more than seventy. Oh, he used canes but he was very spry. He moved as fast then as anyone."

"Well . . . it's not important. But you might remember that he hurts. If he is rude to you, it is pain talking. He thinks highly of you."

"What makes you think so?"

"Ah ... I've talked too much about my patient. Let's eat."

In studying the Shipstone corporate complex I did not attempt to study Shipstones. The way—the only way—to study Shipstones would be to go back to school, get a Ph.D. in physics, add on some intense postdoctoral study in both solid state and plasma, get a job with one of the Shipstone companies and so impress them with your loyalty and your brilliance that you are at long last part of the inner circle controlling fabrication and quality.

Since that involves about twenty years that I should have started back in my teens, I assumed that Boss did not intend me to take that route.

So let me quote from the official or propaganda history:

> Prometheus, a Brief Biography and Short Account of the Unparalleled Discoveries of Daniel Thomas Shipstone, BS., MA., Ph.D., LL.D., L.H.D., and of the Benevolent System He Founded.
>
> —thus young Daniel Shipstone saw at once that the problem was not a shortage of energy but lay in the transporting of energy. Energy is everywhere—in sunlight, in wind, in mountain streams, in temperature gradients of all sorts wherever found, in coal, in fossil oil, in radioactive ores, in green growing things. Especially in ocean depths and in outer space energy is free for the taking in amounts lavish beyond all human comprehension.
>
> Those who spoke of "energy scarcity" and of "conserving energy" simply did not understand the situation. The sky was "raining soup"; what was needed was a bucket in which to carry it.
>
> With the encouragement of his devoted wife Muriel (nee Greentree), who went back to work to keep food on the table, young Shipstone resigned from General Atomics and became the most American of myth-heroes, the basement inventor. Seven frustrating and weary years later he had fabricated the first Shipstone by hand. He had found—What he had found was a way to pack more kilowatt-hours into a smaller space and a smaller mass than any other engineer had ever dreamed of. To call it an "improved storage battery" (as some

> early accounts did) is like calling an H-bomb an "improved firecracker." What he had achieved was the utter destruction of the biggest industry (aside from organized religion) of the western world.

For what happened next I must draw from the muckraking history and from other independent sources as I just don't believe the sweetness and light of the company version. Fictionalized speech attributed to Muriel Shipstone:

> "Danny Boy, you are not going to patent the gadget. What would it get you? Seventeen years at the most. . . and no years at all in threefourths of the world. If you did patent or try to, Edison, and P. G. and E., and Standard would tie you up with injunctions and law suits and claimed infringements and I don't know what all. But you said yourself that you could put one of your gadgets in a room with the best research team G.A. has to offer and the best they could do would be to melt it down and the worst would be that they would blow themselves up. You said that. Did you mean it?"
>
> "Certainly. If they don't know how I insert the—"
>
> "Hush! I don't want to know. And walls have ears. We don't make any fancy announcements; we simply start manufacturing. Wherever power is cheapest today. Where is that?"

The muckraking author fairly frothed at the "cruel, heartless monopoly" held by the Shipstone complex over the prime necessities of "all the little people everywhere." I could not see it that way. What Shipstone and his companies did was to make plentiful and cheap what used to be scarce and dear—this is "cruel" and "heartless"?

The Shipstone companies do not have a monopoly over energy. They don't own coal or oil or uranium or water power. They do lease many, many hectares of desert land . . . but there is far more desert not being cropped for sunshine than the Shipstone trust is using. As for space, it is impossible to intercept even one percent of all the sunshine going to waste inside the orbit of Luna, impossible by a factor of many millions. Do the arithmetic yourself otherwise you'll never believe the answer.

So what is their crime?

Twofold:

a) The Shipstone companies are guilty of supplying energy to the human race at prices below those of their competitors;

b) They meanly and undemocratically decline to share their industrial secret of the final assembly stage of a Shipstone.

This latter is, in the eyes of many people, a capital offense. My terminal dug out many editorials on "the people's right to know," others on "the insolence of giant monopolies," and other displays of righteous indignation.

The Shipstone complex is mammoth, all right, because they supply cheap power to billions of people who want cheap power and want more of it every year. But it is not a monopoly because they don't own any power; they just package it and ship it around to wherever people want it. Those billions of customers could bankrupt the Shipstone complex almost overnight by going back to their old ways—burn coal, burn wood, burn oil, burn uranium, distribute power through continent-wide stretches of copper and aluminum wires and/or long trains of coal cars and tank cars.

But no one, so far as my terminal could dig out, wants to go back to the bad old days when the landscape was disfigured in endless ways and the very air was loaded with stinks and carcinogens and soot, and the ignorant were scared silly by nuclear power, and all power was scarce and expensive. No, nobody wants the bad old ways—even the most radical of the complainers want cheap and convenient power. . . they just want the Shipstone companies to go away and get lost.

"The people's right to know"—the people's right to know what? Daniel Shipstone, having first armed himself with great knowledge of higher mathematics and physics, went down into his basement and patiently suffered seven lean and weary years and thereby learned an applied aspect of natural law that let him construct a Shipstone.

Any and all of "the people" are free to do as he did—he did not even take out a patent. Natural laws are freely available to everyone equally, including flea-bitten Neanderthals crouching against the cold.

In this case, the trouble with "the people's right to know" is that it strongly resembles the "right" of someone to be a concert pianist—but who does not want to practice.

But I am prejudiced, not being human and never having had any rights.

Whether you prefer the saccharine company version or the vitriolic muckraker's version, the basic facts about Daniel Shipstone and the Shipstone complex are well known and beyond argument. What surprised me (shocked me, in fact) was what I learned when I started digging into ownership, management, and direction.

My first hint came from that basic printout when I saw what companies were listed as Shipstone complex companies but did not have "Shipstone" in their names. When one pauses for a Coke . . . the deal is with Shipstone!

Ian had told me that Interworld had ordered the destruction of Acapulco—does this mean that the trustees of Daniel Shipstone's estate ordered the killing of a quarter of a million innocent people? Can these be the same people who run the best hospital/school for handicapped children in the world? And Sears-Montgomery—hell's bells, I own some Sears-Montgomery stock myself. Do I share by concatenation some part of the guilt for the murder of Acapulco?

I programmed the machine to display how the directorates interlocked inside the Shipstone complex, and then what directorships in other companies were held by directors of Shipstone companies—and the results were so startling that I asked the computer to list stock ownership of one percent or more of the voting stock in all Shipstone companies.

I spent the next three days fiddling with and rearranging and looking for better ways to display the great mass of data that came back in answer to those two questions.

At the end of that time I wrote out my conclusions:

a) The Shipstone complex is all one company. It just looks like twentyeight separate organizations.

b) The directors and/or stockholders of the Shipstone complex own or control everything of major importance in all the major territorial nations in the solar system.

c) Shipstone is potentially a planetwide (systemwide?) government. I could not tell from the data whether it acted as such or not as control (if indeed it were exerted) would be through corporations not overtly part of the Shipstone empire.

d) It scared me.

Something I had noticed in connection with one Shipstone company (Morgan Associates) caused me to run a search on credit companies and banks. I was unsurprised but depressed to learn that the very company now extending me credit (MasterCard of California) was in effect the same company as the one guaranteeing payment (Ceres and South Africa Acceptances) and that was duplicated right down the line, whether it was Maple Leaf, Visa, Credit Quebec, or what. That is not news; fiscal theorists have been asserting that as long as I can remember. But it struck home when I saw it spelled out in terms of directorates interlocking and ownership shared.

On impulse I suddenly asked the computer: "Who owns you?"

I got back: "Null Program."

I rephrased it, conforming most carefully to its language. The computer represented by this terminal was a most forgiving machine and very smart; ordinarily it did not mind somewhat informal programming. But there are limits to what one may expect in machine understanding of verbal language; a reflexive question such as this might call for semantic exactness.

Again: "Null Program."

I decided to sneak up on the idea. I asked it the following question, doing it step by step exactly in accordance with this computer's language, computer grammar, computer protocol: "What is the ownership of the information-processing network that has terminals throughout British Canada?"

The answer was displayed and flashed several times before wiping—and it wiped without my order: "Requested data are not in my membanks."

That scared me. I knocked off for the day and went swimming and sought out a friend to share a bed with me that night, not waiting to be asked. I wasn't superhorny, I was superlonely and dern well wanted a warm living body close to mine to "protect" me from an intelligent machine that refused to tell me who (what) it really was.

During breakfast next morning Boss sent word to me to see him at ten hundred. I reported, somewhat mystified because in my opinion there had not been nearly enough time for me to complete my two assignments: Shipstone, and the marks of a sick culture.

But when I came in, he handed me a letter, of the old-fashioned sort, sealed into an envelope and physically forwarded, just like junk mail.

I recognized it, for I had sent it—to Janet and Ian. But I was surprised to see it in Boss's hands, as the return address on it was phony. I looked and saw that it had been readdressed to a law firm in San Jose, the one that had been my contact to find Boss. "Pixies."

"You can hand it back to me and I will send it to Captain Tormey when I know where he is."

"Uh, when you know where the Tormeys are, I will write a very different letter. This one is sort of blind."

"Commendably so."

"You've read it?" (Damn it, Boss!)

"I read everything that is to be forwarded to Captain and Mrs. Tormey—and Dr. Perreault. By their request."

"I see." (Nobody tells me a damn thing!) "I wrote the way I did, phony name and all, because the Winnipeg police might open it."

"They undoubtedly did. I think you covered adequately. I regret that I did not inform you that all mail sent to their home would be forwarded to me. If indeed the police are forwarding all of it. Friday, I do not know where the Tormeys are . . . but I have a contact method that I can use—once. The plan is to use it when the police drop all charges against them. I expected that weeks ago. It has not taken place. From this I conclude that the police in Winnipeg are very much in earnest in their intention of hanging the disappearance of Lieutenant Dickey on the Tormeys as a murder charge. Let me ask you again: Can that body be found?"

I thought hard, trying to put "worst case" on it. If the police ever moved in on that house, what would they find? "Boss, have the police been inside that house?"

"Certainly. They searched it the day after the owners departed."

"In that case the police had not found the body the morning of the day I reported here. If they found it, or were to find it, since that date, would you know?"

"I think it probable. My lines of communication into that police headquarters are less than perfect but I pay highest for freshest information."

"Do you know what was done with the livestock? Four horses, a cat and five kittens, a pig, maybe other animals?"

"Friday, where is your intuition leading you?"

"Boss, I don't know exactly how that body is hidden. But Janet, Mrs. Tormey, is an architect who specialized in two-tier active defense of buildings. What she did about her animals would tell me whether or not she thought there was the slightest possibility of that body ever being found."

Boss made a notation. "We'll discuss it later. What are the marks of a sick culture?"

"Boss, fer Gossake! I'm still learning the full shape of the Shipstone complex."

"You will never learn its full shape. I gave you two assignments at once so that you could rest your mind with a change of pace. Don't tell me that you've given no thought to the second assignment."

"Thought is about all I've given to it. I've been reading Gibbon and studying the French Revolution. Also Smith's From the Yalu to the Precipice."

"A very doctrinaire treatment. Read also Penn's The Last Days of the Sweet Land of Liberty."

"Yes, sir. I did start making tallies. It is a bad sign when the people of a country stop identifying themselves with the country and start identifying with a group. A racial group. Or a religion. Or a language. Anything, as long as it isn't the whole population."

"A very bad sign. Particularism. It was once considered a Spanish vice but any country can fall sick with it."

"I don't really know Spain. Dominance of males over females seems to be one of the symptoms. I suppose the reverse would be true but I haven't run across it in any of the history I've listened. Why not, Boss?"

"You tell me. Continue."

"So far as I have listened, before a revolution can take place, the population must lose faith in both the police and the courts."

"Elementary. Go on."

"Well . . . high taxation is important and so is inflation of the currency and the ratio of the productive to those on the public payroll. But that's old hat; everybody knows that a country is on the skids when its income and outgo get out of balance and stay that way—even though there are always endless attempts to wish it away by legislation. But I started looking for little signs, what some call silly-season symptoms. For example, did you know that it is against the law here to be naked outside your own home? Even in your own home if anybody can see in?"

"Rather difficult to enforce, I suspect. What significance do you see in it?"

"Oh, it isn't enforced. But it can't be repealed, either. The Confederacy is loaded with such laws. It seems to me that any law that is not enforced and can't be enforced weakens all other laws. Boss, did you know that the California Confederacy subsidizes whores?"

"I had not noticed it. To what end? For their armed forces? For their prison population? Or as a public utility? I confess to some surprise."

"Oh, not that way at all! The government pays them to keep their legs crossed. Take it off the market entirely. They are trained, licensed, examined—and stockpiled. Only it doesn't work. The designated 'surplus artists' draw their subsidy checks . . . then go right ahead peddling tail. When they aren't supposed to do it even for fun because that hurts the market for the unsubsidized whores. So the hookers' union, who sponsored the original legislation to support the union scale, is now trying to work out a voucher system to plug up the holes in the subsidy law. And that won't work either."

"Why won't it work, Friday?"

"Boss, laws to sweep back the tide never do work; that's what King Canute was saying. Surely you know that?"

"I wanted to be sure that you knew it."

"I think I've been insulted. I ran across a goody. In the California Confederacy it is against the law to refuse credit to a person merely because that person has taken bankruptcy. Credit is a civil right."

"I assume that it does not work but what form does noncompliance take?"

"I have not yet investigated, Boss. But I think a deadbeat would be at a disadvantage in trying to bribe a judge. I want to mention one of the obvious symptoms: Violence. Muggings. Sniping. Arson. Bombing.

Terrorism of any sort. Riots of course—but I suspect that little incidents of violence, pecking away at people day after day, damage a culture even more than riots that flare up and then die down. I guess that's all for now. Oh, conscription and slavery and arbitrary compulsion of all sorts and imprisonment without bail and without speedy trial—but those things are obvious; all the histories list them."

"Friday, I think you have missed the most alarming symptom of all.

"I have? Are you going to tell me? Or am I going to have to grope around in the dark for it?"

"Mmm. This once I shall tell you. But go back and search for it. Examine it. Sick cultures show a complex of symptoms such as you have named . . . but a dying culture invariably exhibits personal rudeness. Bad manners. Lack of consideration for others in minor matters. A loss of politeness, of gentle manners, is more significant than is a riot."

"Really?"

"Pfui. I should have forced you to dig it out for yourself; then you would know it. This symptom is especially serious in that an individual displaying it never thinks of it as a sign of ill health but as proof of his/her strength. Look for it. Study it. Friday, it is too late to save this culture—this worldwide culture, not just the freak show here in California. Therefore we must now prepare the monasteries for the coming Dark Age. Electronic records are too fragile; we must again have books, of stable inks and resistant paper. But that may not be enough. The reservoir for the next renaissance may have to come from beyond the sky." Boss stopped and breathed heavily. "Friday . .

"Yes, sir?"

"Memorize this name and address." His hands moved at his console; the answer appeared on his high screen. I memorized it.

"Do you have it?"

"Yes, sir."

"Shall I repeat it for check?"

"No, sir."

"You are sure?"

"Repeat it if you wish, sir."

"Mmm. Friday, would you be so kind as to pour a cup of tea for me before you leave? I find that my hands are unsteady today."

"My pleasure, sir."

XXIV

Neither Goldie nor Anna showed up next day at breakfast. I ate by myself and consequently fairly quickly; I dawdle over food only when shared with company. This was just as well for I was just standing up, finished, when Anna's voice came over the speaking system:

"Attention, please. I have the unhappy duty to announce that during the night our Chairman died. By his wish there will be no memorial service. The body has been cremated. At nine hundred hours, in the large conference room, there will be a meeting to wind up the affairs of the company. Everyone is urged to attend and to be on time."

I spent the time until nine o'clock crying. Why? Feeling sorry for myself, I suppose. I'm certain that's what Boss would think. He didn't feel sorry for himself, he didn't feel sorry for me, and he scolded me more than once for selfpity. Selfpity, he said, is the most demoralizing of all vices.

Just the same, I was feeling sorry for myself. I had always spatted with him, even way back when he broke my indentures-and made me a Free Person after I had run away from him. I found myself regretting every time I had answered him back, been impudent, called him names.

Then I reminded myself that Boss would not have liked me at all if I had been a worm, subservient, no opinions of my own. He had to be what he was and I had to be what I was and we had lived for years in close association that had never, not once, involved even touching hands. For Friday, that is a record. One I am not interested in surpassing.

I wonder if he knew, years ago when I first went to work for him, how quickly I would have swarmed into his lap had he invited it. He probably did know. As may be, even though I had never touched his hand, he was the only father I ever had.

The big conference room was very crowded. I had never seen even half that number at meals and some of the faces were strange to me. I concluded that some had been called in and had been able to arrive quickly. At a table at the front of the room Anna sat with a total stranger. Anna had folders of paper, a formidable terminal relay, and secretarial gear. The stranger was a woman about Anna's age but with a stern schoolmarmish look instead of Anna's warmth.

At two seconds past nine the stranger rapped loudly on the table. "Quiet, please! I am Rhoda Wainwright, Executive Vice-Chairman of this company and chief counsel to the late Dr. Baldwin. As such I am now Chairman pro tem and paymaster for the purpose of winding up our affairs. You each know that each of you was bound to this company by contract to Dr. Baldwin personally—"

Had I ever signed such a contract? I was bemused by "the late Dr. Baldwin." Was that really Boss's name? How did it happen that his name matched my commonest nom de guerre? Had he picked it? That was so very long ago.

"—since you are all now free agents. We are an elite outfit and Dr. Baldwin anticipated that every free company in North America would wish to recruit from our ranks once his death released you. There are hiring agents in each of the small conference rooms and in the lounge. As your names are called please come forward to receive and sign for your packet. Then examine it at once but do not, repeat do not, stand at this table and attempt to discuss it. For discussion you must wait until all the others have received their termination packets. Please remember that I have been up all night—"

Hire out with some other free company at once? Did I have to? Was I broke? Probably, except for what was left of that two hundred thousand bruins I had won in that silly lottery—and most of that I probably owed to Janet on her Visa card. Let me see, I had won 230.4 grams of fine gold, deposited with MasterCard as Br. 200,000 but credited as gold at that day's fix. I had drawn thirty-six grams of that as cash and—But I must reckon my other account, too, the one through Imperial Bank of Saint Louis. And the cash and the Visa credit I owed Janet. And Georges ought to let me pay half of—Someone was calling my name.

It was Rhoda Wainwright, looking vexed. "Please be alert, Miss Friday. Here is your packet and sign here to receipt for it. Then move aside to check it."

I glanced at the receipt. "I'll sign after I've checked it."

"Miss Friday! You're holding up the proceedings."

"I'll step aside. But I won't sign until I confirm that the packet matches the receipt list."

Anna said soothingly, "It's all right, Friday. I checked it."

I answered, "Thanks. But I'll handle it just the way you handle classified documents—sight and touch."

The Wainwright biddy was ready to boil me in oil but I simply moved aside a couple of meters and started checking—a fair-size packet: three passports in three names, an assortment of IDs, very sincere papers matching one or another identity, and a draft to "Marjorie Friday Baldwin" drawn on Ceres and South Africa Acceptances, Luna City, in the amount of Au-0.999 grams 297.3—which startled me but not nearly as much as the next item did: adoption papers by Hartley M. Baldwin and Emma Baldwin for female child Friday Jones, renamed Marjorie Friday Baldwin, executed at Baltimore, Maryland, Atlantic Union. Nothing about Landsteiner

Crèche or Johns Hopkins, but the date was the day I left Landsteiner Crèche.

And two birth certificates: one was a delayed birth certificate for Marjorie Baldwin, born in Seattle, and one was for Friday Baldwin, borne by Emma Baldwin, Boston, Atlantic Union.

Two things were certain about each of these documents: Each was phony and each could be relied on utterly; Boss never did things by halves. I said, "It checks, Anna." I signed.

Anna accepted the receipt from me, adding quietly: "See me after."

"Suits. Where?"

"See Goldie."

"Miss Friday! Your credit card, please!" Wainwright again.

"Oh." Well, yes, with Boss gone and the company dissolved, I could not use my Saint Louis credit card again. "Here it is."

She reached for it; I held on. "The punch, please. Or the shears. Whatever you're using."

"Oh, come now! I'll incinerate yours along with many others, after I check the numbers."

"Ms. Wainwright, if I am to surrender a credit card charged against me—and I am; no argument about that—it will be destroyed or mutilated, rendered useless, right in front of me."

"You are very tiresome! Don't you trust anyone?"

"No."

"Then you'll have to wait, right here, until everyone else is through."

"Oh, I don't think so." I think MasterCard of California uses a phenolic-glass laminate; in any case their cards are tough, as credit cards must be. I had been careful not to show any enhancements around HQ, not because it would matter there but because it isn't polite. But this was a special circumstance. I tore the card two ways, handed her the bits. "I think you can still make out the serial number.

"Very well!" She sounded as annoyed as I felt. I turned away. She snapped, "Miss Friday! Your other card, please!"

"What card?" I was wondering who among my dear friends was suddenly being deprived of that utter necessity of modern life, a valid credit card, and being left with only a draft and some small change. Clumsy. Inconvenient. I felt certain that Boss had not planned it that way.

"MasterCard . . . of. . . California, Miss Friday, issued in San Jose. Hand it over."

"The company has nothing to do with that card. I arranged that credit on my own."

"I find that hard to believe. Your credit on it is guaranteed by Ceres and South Africa—that is to say, by the company. The affairs of which are being liquidated. So hand over that card."

"You're mixed up, counselor. While payment is made through Ceres and South Africa, the credit involved is my own. It's none of your business."

"You'll soon find out whose business it is! Your account will be canceled."

"At your own risk, counselor. If you want a law suit that will leave you barefooted. Better check the facts." I turned away, anxious not to say another word. She had me so angry that, for the moment, I was not feeling grief over Boss.

I looked around and found that Goldie had already been processed. She was sitting, waiting. I caught her eye and she patted an empty chair by her; I joined her. "Anna said for me to see you."

"Good. I made a reservation at Cabana Hyatt in San Jose for Anna and me for tonight, and told them that there might be a third. Do you want to come with us?"

"So soon? Are you already packed?" What did I have to pack? Not much, as my New Zealand luggage was still sitting in bond in Winnipeg port because I suspected that the Winnipeg police had placed a tag on it—so there it would sit until Janet and Ian were in the clear. "I had expected to stay here tonight but I really hadn't thought about it."

"Anyone can sleep here tonight but it's not being encouraged. The management—the new management—wants to get everything done today. Lunch will be the last meal served. If anyone is still here tonight at dinnertime, it's cold sandwiches. Breakfast, nit."

"Fer Gossake! That doesn't sound like anything Boss would have planned."

"It isn't. This woman—The Master's arrangements were with the senior partner, who died six weeks ago. But it doesn't matter; we'll just leave. Coming with us?"

"I suppose so. Yes. But I had better see these recruiters first; I'm going to need a job."

"Don't."

"Why not, Goldie?"

"I'm looking for a job, too. But Anna warned me. The recruiters here today all have arrangements with La Wainwright. If any of them are any good, we can get in touch with them at Las Vegas Labor Mart . . . without handing this snapping turtle a commission. I know what I want—head nurse in a field hospital of a crack mercenary outfit. All the best ones are represented in Las Vegas."

Goldie said, "We had to have her to sign those drafts."

"I guess that's the place for me to look, too. Goldie, I've never had to hunt for a job before. I'm confused."

"You'll do all right."

Three hours later, after a hasty lunch, we were in San Jose. Two APVs were shuttling between Pajaro Sands and the National Plaza; Wainwright was getting rid of us as fast as possible—I saw two flatbed trucks, big ones, each drawn by six horses, being loaded as we left, and Papa Perry looking harried. I wondered what was being done with Boss's library—and felt a little separate, selfish sadness that I might never again have such an unlimited chance to feed the Elephant's Child. I'll never be a big brain but I'm curious about everything and a terminal hooked directly to all the world's best libraries is a luxury beyond price.

When I saw what they were loading I suddenly recalled something with near panic. "Anna, who was Boss's secretary?"

"He didn't have one. I sometimes helped him if he needed an extra hand. Seldom."

"He had a contact address for my friends Ian and Janet Tormey. What would have become of it?"

"Unless it's in this"—she took an envelope from her bag and handed it to me—"it's gone. . . because I have had standing orders for a long time to go to his personal terminal as soon as he was pronounced dead and to punch in a certain program. It was a wipe order, I know, although he did not say so. Everything personal he had in the memory banks was erased. Would this item be personal?"

"Very personal."

"Then it's gone. Unless you have it there."

I looked at what she had handed me: a sealed envelope with nothing but "Friday" on the outside. Anna added, "That should have been in your packet but I grabbed it and held it out. That nosy slitch was reading everything she could get her hands on. I knew that this was private from Mr. Two-Canes—Dr. Baldwin, I should say now—to you. I was not going to let her have it." Anna sighed. "I worked with her all night. I didn't kill her. I don't know why I didn't."

Riding with us was one of the staff officers, Burton McNye—a quiet man who rarely expressed opinions. But now he spoke. "I'm sorry you restrained yourself. Look at me; I have no cash, I always used my credit card for everything. That snotty shyster wouldn't give me my closing check until I handed over my credit card. What happens with a draft on Lunar bank? Can you cash it, or do they simply accept it for collection? I may be sleeping in the Plaza tonight."

"Mr. McNye—"

"Yes, Miss Friday?"

"I'm no longer 'Miss' Friday. Just Friday."

"Then I'm Burt."

"Okay, Burt. I've got some cash bruins and a credit card that Wainwright could not touch, although she tried. How much do you need?"

He smiled and reached over and patted my knee. "All the nice things I've heard about you are true. Thanks, dear, but I'll handle it. First I'll take this to the Bank of America. If they won't cash it offhand, perhaps they will advance me some pending collection. If not, I shall go to her office in the CCC Building and stretch out on her desk and tell her that it is up to her to find me a bed. Damn it; the Chief would have seen to it that each of us got a few hundred in cash; she did it on purpose. Maybe to force us to sign up with her buddies; I wouldn't put it past her. If she makes any fuss, I'm feeling just ornery enough to find out whether or not I remember any of the things they taught me in basic."

I answered, "Burt, don't ever tackle a lawyer with your hands. The way to fight a lawyer is with another lawyer, a smarter one. Look, we'll be in the Cabana. If you can't cash that draft, better accept my offer. It won't inconvenience me."

"Thanks, Friday. But I'm going to choke her until she gives in."

The room Goldie had reserved turned out to be a small suite, a room with a big waterbed and a living room with a couch that opened into a double bed. I sat down on the couch to read Boss's letter while Anna and Goldie used the bath—then got up to use it myself when they came out. When I came out, they were on the big bed, sound asleep—not surprising; both of them had been up all night in nervously exhausting work. I kept very quiet and sat back down, resumed reading the letter:

Dear Friday, Since this is my last opportunity to communicate with you, I must tell you things I have not been able to say while alive and still your employer.

Your adoption: You do not remember it because it did not happen that way. You will find that all records are legally correct. You are indeed my foster daughter. Emma Baldwin has the same sort of reality as your Seattle parents, i.e., real for all practical and legal purposes. You need be careful of only one thing: Don't let your several identities trip each other. But you have walked that tightwire many times, professionally.

Be sure to be present or represented at the reading of my will. Since I am a Lunar citizen

(Huh?)

this will be at Luna City immediately after my death, Luna Republic not having all the lawyer-serving delays one finds in most Earthside countries. Call Fong, Tomosawa, Rothschild, Fong, and Finnegan, Luna City. Do not anticipate too much; my will does not relieve you of the necessity of earning a living.

Your origin: You have always been curious about this, understandably so. Since your genetic endowment was assembled from many sources and since all records have been destroyed, I can tell you little. Let me mention two sources of your genetic pattern in whom you may take pride, two known to history as Mr. and Mrs. Joseph Green. There is a memorial to them in a crater near Luna City, but it is hardly worth the trip as there is nothing much to see. If you will query the Luna City Chamber of Commerce concerning this memorial, you can obtain a cassette with a reasonably accurate account of what they did. When you hear it, you will know why I told you to suspend judgment on assassins. Assassination is usually a dirty business . . but honorable hatchet men can be heroes. Play the cassette and judge for yourself.

The Greens were colleagues of mine many years ago. Since their work was very dangerous, I had caused each of them to deposit genetic material, four of her ova, a supply of his sperm. When they were killed, I caused gene analysis to be made with an eye to

> posthumous children—only to learn that they were incompatible; simple fertilization would have caused reinforcement of some bad alleles.
>
> Instead, when creation of artificial persons became possible, their genes were used selectively. Yours was the only successful design; other attempts at including them were either not viable or had to be destroyed. A good genetic designer works the way a good photographer does: A perfect result derives from a willingness to discard drastically any attempt less than perfect. There will be no more attempts using the Greens; Gail's ova are gone and Joe's sperm is probably no longer useful.
>
> It is not possible to define your relationship to them but it is equivalent to something between granddaughter and great-granddaughter, the rest of you being from many sources but you can take pride in the fact that all of you was most carefully selected to maximize the best traits of H. sapiens. This is your potential; whether or not you achieve your potential is up to you.
>
> Before your records were destroyed, I once scratched my curiosity by listing the sources that went into creating you. As near as I can recall they are:
>
> Finnish, Polynesian, Amerindian, Innuit, Danish, red Irish, Swazi, Korean, German, Hindu, English—and bits and pieces from elsewhere since none of the above is pure. You can never afford to be racist; you would bite your own tail!
>
> All that the above really means is that the best materials were picked to design you, regardless of source. It is sheer luck that you wound up beautiful as well.

["Beautiful"! Boss, I do own a mirror. Was it possible he had really thought so? Surely, I'm built okay; that just reflects the fact that I'm a crack athlete-which in turn reflects the fact that I was planned, not born. Well, it's nice that he thought so if he did . . because it's the only game in town; I'm me, whatever.]

> On one point I owe you an explanation if not an apology. It was intended that you should be reared by selected parents as their natural child. But when you still weighed less than five kilos, I was sent to prison.

> Although I was able, eventually, to escape, I could not return to Earth until after the Second Atlantic Rebellion. The scars of this mix-up are still with you, I know. I hope that you someday will purge yourself of your fear and mistrust of "human" persons; it gains you nothing and handicaps you mightily. Someday, somehow, you must realize emotionally what you know intellectually, that they are as tied to the wheel as you are.
>
> As for the rest, what can I say in a last message? That unfortunate coincidence, my conviction at just the wrong time, left you too easily bruised, much too sentimental. My dear, you must cure yourself utterly of all fear, guilt, and shame. I think you have rooted out self pity

[The hell I have!]

> but, if not, you must work on it. I think that you are immune to the temptations of religion. If you are not, I cannot help you, any more than I could keep you from acquiring a drug habit. A religion is sometimes a source of happiness and I would not deprive anyone of happiness. But it is a comfort appropriate for the weak, not for the strong—and you are strong. The great trouble with religion—any religion—is that a religionist, having accepted certain propositions by faith, cannot thereafter judge those propositions by evidence. One may bask at the warm fire of faith or choose to live in the bleak uncertainty of reason—but one cannot have both.
>
> I have one last thing to tell you-for my own satisfaction, for my own pride. I am one of your "ancestors"-not a major one but some of my genetic pattern lives on in you. You are not only my foster daughter but also in part my natural daughter as well. To my great pride.
>
> So let me close this with a word I could not say while I was alive—Love,
>
> Hartley M. Baldwin

I put the letter back into its envelope and curled up and indulged in that worst of vices, selfpity, doing it thoroughly, with plenty of tears. I don't see anything wrong with crying; it lubricates the psyche.

Having gotten it out of my system I got up and washed my face and decided that I was all through grieving over Boss. I was pleased and flattered that he had adopted me and it warmed me all through to know that a bit of him was used in designing me—but he was still Boss. I thought that he would allow me one cathartic session of grief but if I kept it up, he would be annoyed with me.

My chums were still sawing wood, exhausted, so I closed the door that shut them off, was pleased to note that it was a sound-silencer door, and I sat down at the terminal, stuck my card into the slot, and coded Fong, Tomosawa, and so forth, having routed through exchange service to get the code, then coding directly; it's cheaper that way.

I recognized the woman who answered. Low gee certainly is better than a bra; if I lived in Luna City, I would wear only a monikini, too. Oh, stilts, maybe. An emerald in my bellybutton. "Excuse me," I said. "Somehow I've managed to code Ceres and South Africa when I intended to punch for Fong, Tomosawa, Rothschild, Fong, and Finnegan. My subconscious is playing tricks. Sorry to have bothered you and thanks for the help you gave me a few months ago."

"Wups!" she answered. "You didn't punch wrong. I'm Gloria Tomosawa, senior partner in Fong, Tomosawa, et al., now that Grandpa Fong has retired. But that doesn't interfere with my being a vice-president of Ceres and South Africa Acceptances; we are also the legal department of the bank. And I'm the chief trust officer, too, which means that I'm going to have business with you. Everybody here is sorry as can be at the news of Dr. Baldwin's death and I hope that it did not distress you too much—Miss Baldwin."

"Hey, back up and start over!"

"Sorry. Usually when people call the Moon they want to make it as brief as possible because of the cost. Do you want me to repeat all that, a sentence at a time?"

"No. I think I've assimilated it. Dr. Baldwin left a note telling me to be at the reading of his will or to be represented. I can't be there. When will it be read and can you advise me as to how I can get someone in Luna City to represent me?"

"It will be read as soon as we get official notification of death from the California Confederacy, which should be any time now as our San Jose representative has already paid the squeeze. Someone to represent you—will I do? Perhaps I should say that Grandpa Fong was your father's Luna City attorney for many years . . so I inherited him and now that your father has died, I inherit you. Unless you tell me otherwise."

"Oh, would you?—Miss—Mrs. Tomosawa—is it Miss or Mrs.?"

"I could and I would and it's Mrs. It had better be; I have a son as old as you are."

"Impossible!" (This beauty-contest winner twice my age?)

"Most possible. Here in Luna City we are all old-fashioned cubes, not like California. We get married and we have babies and always in that order. I wouldn't dare be a Miss with a son your age; nobody would retain me."

"I mean the idea that you have a son my age. You can't have a baby at the age of five. Four."

She chuckled. "You say the nicest things. Why don't you come here and marry my son? He's always wanted an heiress."

"Am I an heiress?"

She sobered. "Um. I can't break the seal on that will until your father is officially dead, which he is not, in Luna City, not yet. But he will be shortly and there is no sense in making you call back. I drafted that will. I checked it for changes when I got it back. Then I sealed it and put it into my safe. So I know what's in it. What I'm about to tell you, you don't know until later today. You're an heiress but fortune-hunters won't be chasing you. You are not getting a gram in cash. Instead the bank is instructed—that's me—to subsidize you in migrating off Earth. If you pick Luna, we pay your fare. If you picked a bounty planet, we would give you a Scout knife and pray for you. If you pick a highpriced place like Kaui or Halcyon, the trust pays your fare and your contribution and assists you with starting capital. If you never do migrate off Terra, on your death funds earmarked to assist you revert to the other purposes of the trust. But your migration needs have first call. Exception: If you migrate to Olympia, you pay for it yourself. Nothing from the trust."

"Dr. Baldwin said something about that. What's so poisonous about Olympia? I don't recall a colony world named that."

"You don't? No, I guess you're too young. That's where those self-styled supermen went. No real point in warning you against it, however; the corporation doesn't run ships there. Dear, you are running up a fancy comm bill."

"I guess so. But it would cost me more if I had to call back. All I mind is having to pay for the speed-of-light dead time. Can you switch hats and be Ceres and South Africa for a moment? Or maybe not; I may need legal advice."

"I'm wearing both hats, so fire away. Ask anything; today there's no fee. My advertising loss leader."

"No, I pay for what I get."

"You sound like your late father. I think he invented tanstaafl."

"He's not really my father, you know, and I never thought of him as such."

"I know the score, dear; I drew up some of the papers about you. He thought of you as his daughter. He was inordinately proud of you. I was most interested when you first called me—having to keep quiet about things I knew but looking you over. What is on your mind?"

I explained the trouble I had had with Wainwright over credit cards. "Certainly MasterCard of California has given me a credit ceiling far beyond my needs or assets. But is that any of her business? I haven't even used up my predeposit and I'm about to back it up with my closing pay. Two hundred and ninety-seven and threetenths grams, fine."

"Rhoda Wainwright never was worth a hoot as a lawyer; when Mr. Esposito died, your father should have changed representation. Of course it's none of her business what credit MasterCard extends to you, and she has no authority over this bank. Miss Baldwin—"

"Call me Friday."

"Friday, your late father was a director of this bank and is, or was, a major stockholder. Although you do not receive any of his wealth directly, you would have to run up an enormous unsecured debt and neglect to reduce it for quite some time and refuse to answer queries about it before your account would be red-flagged. So forget it. But, now that Pajaro Sands is closing down, I do need another address for you."

"Uh, right now, you are the only address I have."

"I see. Well, get me one as soon as you have one. There are others with that same problem, a problem unnecessarily made worse by Rhoda Wainwright. There are others who should be represented at the reading of the will. She should have notified them, did not, and now they have left Pajaro Sands. Do you know where I can find Anna Johansen? Or Sylvia Havenisle?"

"I know a woman named Anna who was at the Sands. She was the classified documents clerk. The other name I don't recognize."

"She must be the right Anna; I have her listed as 'confidential clerk.' Havenisle is a trained nurse."

"Oh! Both of them are just beyond a door I'm looking at. Sleeping. Up all night. Dr. Baldwin's death."

"My lucky day. Please tell them—when they wake up—that they should be represented at the reading of the will. But don't wake them; I can fix it afterwards. We aren't all that fussy here."

"Could you represent them?"

"On your say-so, yes. But have them call me. I'll need new mailing addresses for them, too. Where are you now?"

I told her, we said goodbye and switched off. Then I held very still and let my head catch up with events. But Gloria Tomosawa had made it easy. I suspect that there are just two sorts of lawyers: those who spend their efforts making life easy for other people—and parasites.

A little jingle and a red light caused me to go to the terminal again. It was Burton McNye. I told him to come on up but be mousequiet. I kissed him without stopping to think about it, then remembered that he was not a kissing friend. Or was he? I did not know whether he had helped rescue me from "the Major" or not—must ask.

"No trouble," he told me. "Bank of America accepted it for deposit subject to collection but advanced me a few hundred bruins for overnight money. They tell me that a gold draft can be cleared through Luna City in about twenty-four hours. That, combined with our late employer's sound financial reputation, got me out of the bind. So you don't have to let me sleep here tonight."

"I'm supposed to cheer? Burt, now that you are solvent again, you can take me out to dinner. Out. Because my roommates are zombies. Dead, maybe. The poor dears were up all night."

"It's too early for dinner."

It wasn't too early for what we did next. I hadn't planned on it but Burt claimed that he had, in the APV; and I didn't believe him. I asked him about that night on the farm and, sure enough, he was part of the combat team. He claimed that he had been held in reserve and thus was merely along for the ride, but nobody yet has admitted doing anything dangerous that night—but I recall Boss telling me that anybody at all was taken because bodies were so scarce—even Terence, who doesn't really have to shave yet.

He didn't protest when I started taking his clothes off.

Burt was just what I needed. Too much had happened and I felt emotionally battered. Sex is a better tranquilizer than any of those drugs and much better for your metabolism. I don't see why human people make such a heavy trip out of sex. It isn't anything complex; it is simply the best thing in life, even better than food.

The bath in that suite could be reached without going through the bedroom, laid out that way, probably, because the living room could double as a second bedroom. So we each tidied up a bit and I put on that Superskin jump suit with the wet look that had been the bait with which I had hooked Ian last spring—and learned that I had put it on through thinking sentimentally about Ian but that I was no longer worried about Ian and Jan—and Georges. I would find them, I was now serenely sure. Even if they never went home, I would at worst track them down through Betty and Freddie.

Burt made appropriate animal noises over how I looked in the Superskin job, and I let him look and wiggled some and told him that was exactly why I had bought it, because I was a slitch who wasn't even mildly ashamed of being female, and I wanted to thank him for what he had done for me; my nerves had been twanging like a harp and now they were so relaxed they dragged on the ground and I had decided to pay for dinner to show my appreciation.

He offered to wrestle me for it. I didn't tell him that I had to be very careful in moments of passion not to break male bones; I just giggled. I guess giggling looks silly on a woman my age but there it is—when I'm happy, I giggle.

I was careful to leave a note for my chums.

When we got back, latish, they were gone, so Burt and I went to bed, this time stopping to open out that folding double bed. I woke up when Anna and Goldie tiptoed through, returning from supper. But I pretended not to wake, figuring that morning was soon enough.

Sometime the next morning I became aware that Anna was standing over us and not looking happy—and, truthfully, that was the very first time that it occurred to me that Anna might be displeased at finding me in bed with a man. Certainly I had realized which way she leaned a long time ago; certainly I knew that she leaned in my direction. But she herself had cooled it and I had stopped thinking of her as unfinished business I would have to cope with someday; she and Goldie were simply my chums, hair-down friends who trusted each other.

Burt said plaintively, "Don't scowl at me, lady; I just came in to get out of the rain."

"I wasn't scowling," she answered too soberly. "I was simply trying to figure out how to get around the end of the bed to the terminal without waking you two. I want to order breakfast."

"Order for all of us?" I asked.

"Certainly. What do you want?"

"Some of everything and fried potatoes on the side. Anna hon, you know me—if it's not dead, I'll kill it and eat it raw, bones and all.

"And the same for me," agreed Burt.

"Noisy neighbors." Goldie was standing in the doorway, yawning. "Chatterboxes. Go back to bed." I looked at her and realized two things: I had never really looked at her before, even at the beach. And, second, if Anna was annoyed with me for sleeping with Burt, she didn't have any excuse for such feelings; Goldie looked almost indecently satiated.

"It means 'harbor island,'" Goldie was saying, "and it really ought to have a hyphen in it because nobody can ever spell it or pronounce it. So I just go as Goldie—easy to do in the Master's outfit where last names were always discouraged. But it's not as hard a name as Mrs. Tomosawa's—after I mispronounced hers about the fourth time, she asked me to call her Gloria."

We were finishing off a big breakfast and both of my chums had talked to Gloria and the will had been read and both of them (and Burt, too, to my surprise and his) were now a bit richer and we were all getting ready to leave for Las Vegas, three of us to shop for jobs, Anna simply to stay with us and visit until we shipped out, or whatever.

Anna was then going to Alabama. "Maybe I'll get tired of loafing. But I promised my daughter that I would retire and this is the right time. I'll get reacquainted with my grandchildren before they get too big."

Anna a grandmother? Does anyone ever know anyone else?

XXV

Las Vegas is a three-ring circus with a hangover.

I enjoy the place for a while. But after I've seen all the shows I reach a point where the lights and the music and the noise and the frenetic activity are too much. Four days is aplenty.

We reached Vegas about ten, after a late start because each of us had business to do—everybody but me with arrangements to make for the collection of moneys from Boss's will and me to deposit my closing draft with MasterCard. That is, I started to. I stopped abruptly when Mr. Chambers said, "Do you want to execute an order to us to pay your income tax on this?"

Income tax? What a filthy suggestion! I could not believe my ears. "What was that, Mr. Chambers?"

"Your Confederacy income tax. If you ask us to handle it—here's the form—our experts prepare it and we pay it and deduct it from your account and you aren't bothered. We charge only a nominal fee. Otherwise you have to calculate it yourself and make out all the forms and then stand in line to pay it."

"You didn't say anything about any such tax when I made the deposit the day I opened this account."

"But that was a national lottery prize! That's yours, utterly free—that's the Democratic Way! Besides, the government gets its cut off the top in running the lottery."

"I see. How much cut does the government take?"

"Really, Miss Baldwin, that question should be addressed to the government, not to me. If you'll just sign at the bottom, I'll fill in the rest."

"In a moment. How much is this 'nominal fee'? And how much is the tax?"

I left without depositing my draft and again poor Mr. Chambers was vexed with me. Even though bruins are so inflated that you have to line up quite a few of them to buy a Big Mac, I do not consider a thousand bruins "nominal"—it's more than a gram of gold, $37 BritCan. With their 8 percent surcharge on top, MasterCard would be getting a fat fee for acting as stooge for the Confederacy's Eternal Revenue Service.

I wasn't sure that I owed income tax even under California's weird laws—most of that money had not been earned in California and I couldn't see what claim California had on my salary anyway. I wanted to consult a good shyster.

I went back to Cabana Hyatt. Goldie and Anna were still out but Burt was there. I told him about it, knowing that he had been in logistics and accounting.

"It's a moot point," he said. "Personal-service contracts with the Chairman were all written 'free of tax' and in the Imperium the bribe was negotiated each year. Here an umbrella bribe should have been paid through Mr. Esposito—that is to say, through Ms. Wainwright. You can ask her."

"In a pig's eye!"

"Precisely. She should have notified Eternal Revenue and paid any taxes due—after negotiation, if you understand me. But she may be skimming; I don't know. However—You do have a spare passport, do you not?"

"Oh, certainly! Always."

"Then use it. That's what I'll be doing. Then I'll transfer my money after I know where I'll be. Meanwhile I'll leave it safe on the Moon."

"Uh, Burt, I'm pretty sure Wainwright has every spare passport listed. You seem to be saying that they'll be checking us at exit?"

"What if Wainwright has listed them? She won't turn over the list to the Confederates without arranging her cut, and I doubt that she's had time to dicker it. So pay only the regular squeeze and stick your nose in the air and walk on through the barrier."

This I understood. I had been so indignant at that filthy notion that for a moment I had ceased to think like a courier.

We crossed the border into Vegas Free State at Dry Lake; the capsule stopped just long enough for Confederacy exit stamps. Each of us used an alternate passport with the standard squeeze folded inside—no trouble. And no entrance stamp as the Free State doesn't bother with CHI; they welcome any solvent visitor.

Ten minutes later we checked into the Dunes, with much the same accommodations we had had in San Jose save that this was described as an "orgy suite." I could not see why. A mirror on the ceiling and aspirin and Alka-Seltzer in the bath are not enough to justify that designation; my doxyology instructor would have laughed in scorn. However I suppose that most of the marks would not have had the advantages of advanced instruction—I've been told that most people don't have any formal training. I've often wondered who teaches them. Their parents? Is that rigid incest taboo among human persons actually a taboo against talking about it but not against doing it?

Someday I hope to find out such things but I've never known anybody I could ask. Maybe Janet will tell me. Someday.

We arranged to meet for dinner, then Burt and Anna went to the lounge and/or casino while Goldie and I went out to the Industrial Park. Burt intended to jobhunt but expressed an intention of raising a little hell before settling down. Anna said nothing but I think she wanted to savor the fleshpots before taking up the life of a grandmother-in-residence. Only Goldie was dead-serious about jobhunting that day. I intended to find a job, yes—but I had some thinking to do first.

I was probably—almost certainly—going to out-migrate. Boss thought I should and that was reason enough. But besides that, the study he had started me on concerning the symptoms of decay in cultures had focused my mind on things I had long known but never analyzed. I've never been critical of the cultures I've lived in or traveled through—please understand that an artificial person is a permanent stranger wherever she is, no matter how long she stays. No country could ever be mine so why think about it?

But when I did study it, I saw that this old planet is in sorry shape. New Zealand is a pretty good place and so is British Canada, but even those two countries showed major signs of decay. Yet those two are the best of the lot.

But let's not rush things. Changing planets is something a person doesn't do twice—unless she is fabulously wealthy, and I was not. I was subsidized for one out-migration . . . so I had better by a durn sight pick the right planet because no mistakes were going to be corrected after I left the window.

Besides—Well, where was Janet?

Boss had had a contact address or a call code. Not me!

Boss had had an ear in the Winnipeg police HQ. Not me!

Boss had had his own Pinkerton net over the whole planet. Not me!

I could try to phone them from time to time. I would. I could check with ANZAC and the University of Manitoba. I would. I could check that Auckland code and also the biodep of the University of Sydney. I would.

If none of those worked, what more could I do? I could go to Sydney and try to sweettalk somebody out of Professor Farnese's home address or sabbatical address or whatever. But that would not be cheap and I had suddenly been forced to realize that travel I had taken for granted in the past would now be difficult and perhaps impossible. A trip to New South Wales before semiballistics started to run again would be very expensive. It could be done—by tube and by float and by going threefourths the way around the world, but it would be neither easy nor cheap.

Perhaps I could sign on as a ship's doxy out of San Francisco for Down Under. That would be cheap and easy. . . but time-consuming even if I shipped in a Shipstone-powered tanker out of Watsonville. A sail-powered freighter? Well, no.

Maybe I had better hire a Pinkerton in Sydney. What did they charge? Could I afford it?

It took less than thirty-six hours from Boss's death for me to bump my nose into the fact that I had never learned the true value of a gram.

Consider this: Up to then my life had had just three modes of economy:

a) On a mission I had spent whatever it took.

b) At Christchurch I spent some but not much—mainly presents for the family.

c) At the farm, at the next HQ, then still later at Pajaro Sands, I didn't spend any money, hardly. Room and board were in my contract. I did not drink or gamble. If Anita had not been bleeding me, I would have accumulated a tidy sum.

I had led a sheltered life and had never really learned about money.

But I can do simple arithmetic without using a terminal. I had paid in cash my share at Cabana Hyatt. I used my credit card for my fare to the Free State but jotted down the cost. I noted the daily rate at the Dunes and kept track of other costs, whether card or cash or on the hotel bill.

I could see at once that room and board in first-class hotels would very shortly use up every gram I owned even if I spent zero, nit, swabo, nothing, on travel, clothes, luxuries, friends, emergencies. Q.E.D. I must either get a job or ship out on a one-way colonizing trip.

I acquired a horrid suspicion that Boss had been paying me a lot more than I was worth. Oh, I'm a good courier, none better—but what's the going rate on couriers?

I could sign up as a private, then (I was fairly sure) make sergeant in a hurry. That did not really appeal to me but it might be where I would wind up. Vanity isn't one of my faults; for most civilian jobs I am unskilled labor—I know it.

Something else was pulling me, something else was pushing me. I didn't want to go alone to a strange planet. It scared me. I had lost my Ennzedd family (if indeed I ever had them), Boss had died, and I felt like Chicken Little when the sky was falling, my true friends among my colleagues had gone to the four winds—except these three and they were leaving quickly—and I had managed to lose Georges and Janet and Ian.

Even with Las Vegas giddy around me I felt as alone as Robinson Crusoe.

I wanted Janet and Ian and Georges to out-migrate with me. Then I would not be afraid. Then I could smile all the way.

Besides—The Black Death. Plague was coming.

Yes, yes, I had told Boss that my midnight prediction was nonsense. But he had told me that his analytical section had predicted the same thing, in four years instead of three. (Small comfort!)

I was forced to take my own prediction seriously. I must warn Ian and Janet and Georges.

I did not expect to frighten them with it—I don't think you can scare those three. But I did want to say, "If you won't migrate, at least take my warning seriously to the extent of staying out of big cities. If inoculation becomes available, get it. But heed this warning."

The Industrial Park is on the road to Hoover Dam; the Labor Mart is there. Vegas does not permit APVs inside the city but there are slidewalks everywhere and one runs out to Industrial Park. To go beyond there, to the dam or to Boulder City, there is an APV commuter line. I planned to use it as Shipstone Death Valley leases a stretch of desert between East Las Vegas and Boulder City for a charging station and I wanted to see it to supplement my study.

Could the Shipstone complex be the corporation state behind Red Thursday? I could see no reason for it. But it had to be a power rich enough to blanket the globe and reach all the way out to Ceres in a single night. There were not many such. Could it be a superrich man or group of men? Again, not many possibilities. With Boss dead I probably never would know. I used to slang him—but he was the one I turned to when I didn't understand something. I had not known how much I leaned on him until his support was taken away.

The Labor Mart is a large covered mall, with everything from fancy offices of the Wall Street Journal to scouts who have their offices in their hats and never sit down and seldom stop talking. There are signs everywhere and people everywhere and it reminds me of Vicksburg river town but it smells better.

The military and quasimilitary free companies cluster together at the east end. Goldie went from one to the other and I went with her. She left her name and a copy of her brag sheet with each one. We had stopped in town to get her brag sheet printed and she had arranged a mail drop with a public secretary, and she had induced me to pay for a mail and telephonic accommodation address, too. "Friday, if we are here more than a day or two, I'm moving out of the Dunes. You noticed the room tariff, did you not? It's a nice place but they sell you the bed all over again each day. I can't afford it. Maybe you can but—"

"I can't."

So I established an address of sorts, and sent my brain a memo to tell Gloria Tomosawa. I paid a year's fee in advance—and discovered that it gave me an odd feeling of security. It was not even a little grass shack . . . but it was a base, an address, that would not wash away.

Goldie did not sign up that afternoon but did not seem disappointed. She said to me, "No war going on now, that's all. But peace never lasts more than a month or two. Then they'll start hiring again and my name will be on file. Meanwhile I'll list with the city registry and work substitute jobs. One thing about the bedpan business, Friday; a nurse never starves. The current emergency shortage of nurses has been going on for more than a century and won't let up soon."

The second recruiter she called on—representative of Royer's Rectifiers, Caesar's Column, and the Grim Reapers, all crack outfits, worldwide reputations-turned to me after Goldie had made her statement. "How about you? Are you an RN, too?"

"No," I said, "I'm a combat courier."

"Not much call for that. Today most outfits use express mail if a terminal won't serve."

I found myself somewhat piqued—Boss has warned me against that. "I'm elite," I replied. "I go anywhere. . . and what I carry gets there when the mail is shut down. Such as the late Emergency."

"That's true," said Goldie. "She's not exaggerating."

"There still isn't much call for your talents. Can you do anything else?"

(I should not boast!) "What's your best weapon? I'll duel you with it, either contest rules, or blood. Phone your widow and we'll do it."

"My, you're a sparky little slitch! You remind me of a fox terrier I once had. Look, dear, I can't play games with you; I have to keep this office open. Now tell me the truth and I'll put your name on file."

"Sorry, chief. I shouldn't have sounded off. All right, I'm an elite courier. If I carry it, it gets there and my fees are high. Or my salary if I'm hired as a specialist staff officer. As for the rest, of course I have to be the best, barehanded or with weapons, because what I carry must go through. You can list me as a DI if you wish—barehanded or any weapon. But I'm not interested in combat unless the pay is high. I prefer courier duty."

He made notes. "All right. Don't get your hopes up. The hairy characters I work for aren't likely to use couriers other than battlefield couriers—"

"I'm that, too. What I carry gets through."

"Or you get killed." He grinned. "They're more likely to use a superdog. Look, sweetheart, a corporate has more need for your sort of messenger than does a military. Why don't you leave your name with each of the multinationals? All the big ones are represented here. And they've got more money. Lots more money."

I thanked him and we left. At Goldie's urging I stopped in at the local branch post office and made printouts of my own brag sheet. I was going to ease off on the required salary, being sure that Boss had favored me—but Goldie wouldn't let me. "Raise it! This is your best chance. Outfits that need you will either pay without a quiver, or will at least call you and try to dicker. But cut your price? Look, dear, nobody buys at a fire sale if they can afford the best."

I dropped one at each multinational. I didn't really expect any nibbles but if anyone wanted the world's best courier, they could study my qualifications.

When the offices started to close, we slid back to the hotel to keep our dinner date, and found both Anna and Burt just a leetle tipsy. Not drunk, just happy and a touch too deliberate in their movements.

Burt struck a pose and declaimed, "Ladies! Look at me and admire! I am a great man—"

"You're swacked."

"That, too, Friday, m'love. But you see before you wup! the man who banked the broke at Monte Carlo. I'm a genius, a blinkin', true-blue, authentic, f'nanchal genius. You may touch me."

I had been planning to touch him, later that night. Now I wondered. "Anna, did Burt break the bank?"

"No, but he certainly bent it." She stopped to belch carefully, covering up. "Scuse me. We dropped a little here, then went over to the Flamingo to change our luck. Got there just before post time for the third at Santa Anita and Burt put a superbuck on the nose of a little mare with his mother's name—a long shot and she romped home. So here is a wheel right outside the track room and Burt put his winnings on double zero—"

"He was drunk," Goldie stated.

"I am genius!"

"Both. Double zero hit, and Burt put this enormous stack on black and hit, and left it there and hit, and moved it to red and hit—and the croupier sent for the pit boss. Burt wanted to go for broke but the pit boss limited him to five kilobucks."

"Peasants. Gestapo. Hired menials. Not a gentleman sportsman in their entire casino. I took my patronage elsewhere."

"And lost it all," said Goldie.

"Goldie m'old frien', you do not show proper respec'."

"He might have lost it all," agreed Annie, "but I saw to it that he followed the pit boss's advice. With six of the casino's sheriffs around us we went straight to their casino's office of the Lucky Strike State Bank and deposited it. Otherwise I would not have let him leave. Imagine carrying a half a megabuck from the Flamingo to the Dunes in cash. He wouldn't have lived to cross the street."

"Preposterous! Vegas has less violent crime 'nany other city North Amer'ca. Anna, m'true love, you are a bossy, notional woman. A henpecker. I shall not marry you even when you fall on your knees at Fremont 'n' Main 'n' beg me to. Instead I shall take your shoes away from you and beat you and feed you on crusts."

"Yes, dear. You can put your own shoes on now because you are going to feed all three of us. On crusts of caviar and truffles."

"And champagne. But not because you are henpeckering me. Ladies. Friday, Goldie, my true loves—will you help me celebrate my f'nanchal genius? With libations and pheasant under glass and gorgeous show girls in fancy hats?"

"Yes," I answered.

"Yes before you change your mind. Anna, did you say 'half a megabuck'?"

"Burt. Show them."

Burt produced a new bankbook, let us look at it while he buffed his nails on his stomach and looked smug. Bk 504,000. Over half a million in the only hard currency in North America. Uh, slightly over thirtyone kilos of fine gold. No, I wouldn't want to carry that much across the street, either—not in bullion. Not without a wheelbarrow. It would mass almost half as much as I do. A bankbook is more convenient.

Yes, I would drink Burt's champagne.

Which we did, in the theater at the Stardust. Burt knew how much cumshaw to give the captain of waiters to get us ringsides (or paid too much, I don't know which) and we sopped up champagne and had a lovely dinner centered around Cornish game hen but billed as squab and the show girls were young and pretty and cheerful and healthy and smelled freshly bathed. And they had show boys with stuffed codpieces for us women to look at, only I didn't, not much, because they didn't smell right and I got the feeling that they were more interested in each other than they were in women. Their business, of course, but on the whole I preferred the show girls.

And they had a swell magician who plucked live pigeons out of the air the way most magicians pluck coins. I love magicians and never understand how they do it and I watch them with my mouth hanging open.

This one did something that had to involve a pact with the Devil. At one point he had one of the show girls replace his pretty assistant. His assistant was not overdressed but the show girl was wearing shoes at one end and a hat at the other and just a smile in between.

The magician started taking pigeons from her.

I don't believe what I saw. There isn't that much room and it would tickle. So it didn't happen.

But I'm planning on going back to watch it from a different angle. It simply can't be true.

When we got back to the Dunes, Goldie wanted to catch the lounge show but Anna wanted to go to bed. So I agreed to sit with Goldie. Burt said to save him a seat as he would be right back after he took Anna up.

Only he didn't. When we went up I was unsurprised to find the door to the other room closed; before dinner my nose had warned me that it was unlikely that Burt would soothe my nerves two nights in a row. Their business and I had no kick coming. Burt had done nobly by me when I really needed it.

I thought perhaps Goldie would have her nose out of joint but she didn't seem to. We simply went to bed, giggled over the impossibility of where he got those pigeons, and went to sleep. Goldie was snoring gently as I dropped off.

Again I was awakened by Anna but this morning she was not looking sober; she was radiant. "Good morning, darlings! Pee and brush your teeth; breakfast will be up in two jounces. Burt is just getting out of the bath, so don't dally."

Along toward the second cup of coffee Burt said, "Well, dear?"

Anna said, "Shall I?"

"Go ahead, hon."

"All right. Goldie, Friday—We hope you can spare us some time this morning because we both love you both and want you to be with us. We're getting married this morning."

Goldie and I put on fine exhibitions of utter astonishment and great pleasure, along with jumping up and kissing each of them. In my case the pleasure was sincere; the surprise was faked. With Goldie I thought that it might have been reversed. I kept my suspicions to myself.

Goldie and I went out to buy flowers with arrangements to meet at the Gretna Green Wedding Chapel later—and I was relieved and pleased to find that Goldie seemed to be just as happy about it out of their presence as in it. She said to me, "They're going to be very good for each other. I never did think well of Anna's plans to become a professional grandmother; that's a form of suicide." She added, "I hope you didn't get your nose out of joint."

I answered, "Huh? Me? Why in the world would I?"

"He slept with you night before last; he slept with her last night. Today he's marrying her. Some women would be quite upset."

"Fer Gossake, why? I'm not in love with Burt. Oh, I do love him because he was one of you who saved my life one busy night. So night before last I tried to thank him—and he was awfully sweet to me, too. When I needed it. But that's no reason for me to expect Burt to devote himself to me every night or even a second night."

"You're right, Friday, but not many women your age can think that straight."

"Oh, I don't know; I think it's obvious. You didn't get your feelings hurt. Same deal."

"Eh? What do you mean?"

"Exactly the same deal. Night before last she slept with you; last night she slept with him. Doesn't seem to fret you."

"Why should it?"

"It should not. But the cases are parallel." (Goldie, please don't take me for a fool, dear. I not only saw your face but I smelled you.) "Matter of fact, you surprised me a little. I didn't know you leaned that way. Of course I knew that Anna did—she surprised me a bit in taking Burt to bed. I wasn't aware that she did. Men, I mean. Hadn't known that she had ever been married."

"Oh. Yes, I suppose it could look that way. But it's much what you said about Burt: Anna and I love each other, have for years—and sometimes we express it in bed. But we're not 'in love.' Each of us leans heavily toward men . . . no matter what impression you gained the other night. When Anna practically stole Burt out of your arms, I cheered—despite fretting a bit about you. But not fretting too much because you always have a pack of men sniffing around after you whereas with Anna it had become a seldom thing. So I cheered. Hadn't expected it to lead to marriage but it's grand that it has. Here's the Golden Orchid—what shall we buy?"

"Wait a moment." I stopped her outside the florist shop. "Goldie . . at great risk to her life somebody went charging up to the bedroom of the farmhouse, carrying a basket stretcher. For me."

Goldie looked annoyed. "Somebody talks too much."

"I should have talked sooner. I love you. More than I love Burt for I've loved you longer. Don't need to marry him, can't marry you. Just love you. All right?"

XXVI

Maybe I did marry Goldie, sort of. Once we had Anna and Burt formally married, we all went back to the hotel; Burt moved them into the "bridal suite" (no mirror on the ceiling, interior decorations white and pink instead of black and red, otherwise much the same—but much more expensive), and Goldie and I moved out of the hotel and sublet a little crackerbox near where Charleston slants into Fremont. This placed us in walking distance of the slidewalk connecting the Labor Mart with town and that gave Goldie transportation to any of the hospitals and made it easy for me to shop—otherwise we would have had to buy or rent a horse and buggy, or bicycles.

Location was that house's sole virtue, maybe, but to me it was a fairytale honeymoon cottage with roses over the door. It had no roses and was ugly and the only thing modern in it was a limited service terminal. But for the first time in my life I had a home of my own and was a "housewife." My home in Christchurch had never truly been mine; I certainly was never mistress of that household, and I had been steadily reminded in various ways that I was a guest rather than a permanent fixture.

Do you know what fun it is to buy a saucepan for your very own kitchen?

I was a housewife at once as Goldie was called on that very day and went on watch at twentythree hundred to work all night to ohseven hundred. The following day I cooked my first dinner while Goldie slept. . . and burned the potatoes beyond salvage and cried, which is, I understand, a bride's privilege. If so, I've used mine up against the day when I'm really a bride if ever—and not a phony bride as in Christchurch.

I was a proper housewife; I even bought sweet-pea seeds and planted them in lieu of that missing climbing rose over the door—and discovered that gardening has more to it than sticking seeds in the ground; those seeds did not germinate. So I consulted the Las Vegas library and bought a book, a real book with looseleaf pages and pictures of what the compleat gardener should do. I studied it. I memorized it.

One thing I did not do. Although enormously tempted I did not get a kitten. Goldie might ship out any day; she warned me that, if I was out of the house, she might be gone without saying goodbye (as I had warned Georges—and did do).

Were I to get a kitten I would be honor-bound to keep it. A courier can't carry a kitten everywhere in a travel case; that's no way to bring up a baby. Someday I would ship out. So I did not adopt a kitten.

Aside from that I enjoyed all the warm delights of being a housewife. . . including ants in the sugar and a waste pipe line that broke in the night, two delights that I don't care to repeat. It was a very happy time. Goldie slowly got my cooking straightened out—I had thought I knew how to cook; now I do know how. And I learned to stir a martini exactly the way she preferred it: Beefeater gin threepoint-six to one of Noilly Prat dry vermouth, a twist, no bitters—while I took Bristol Cream on rocks. Martinis are too rugged for me but I can see why a nurse with tired feet would want one the minute she is home.

Swelp me, had Goldie been male, I would have had my sterility reversed and happily have raised children and sweet peas and cats.

Burt and Anna left for Alabama early in this period and we all made careful arrangements not to lose track of each other. They did not intend to live there but Anna felt that she owed her daughter a visit (and owed herself, I think, a chance to show off her new husband). Thereafter they intended to sign up with a military or quasimilitary, one that would take both of them and contract to keep them together. In combat. Yes. Both were tired of desk work; both were willing to take a bust in grade to leave staff and join a combat team. "Better one crowded hour of life than a cycle of Cathay." Maybe so. It was their life.

I kept in touch at the Labor Mart because the day was coming when I not only would want to ship out but would have to ship out. Goldie was working quite steadily and she tried to insist on paying all the household expenses. I laid my ears back and insisted on paying half right down the middle. Since I was keeping track of every buck, I knew exactly what it cost to live in Las Vegas. Too much, even in a crackerbox. When Goldie left, I could live there a few months, then I would be broke.

But I would not do so. A honeymoon cottage is a no-good place to live alone.

I continued to try to reach Georges and Ian and Janet, and Betty and Freddie, but I limited myself to twice a month; the terminal charges were considerable.

Twice a week I spent half a day at the Labor Mart, checking everything. I no longer expected to find a courier job even half as good as the one I had had with Boss but I still checked the multinationals—who did indeed use experienced couriers. And I checked all other job opportunities, looking for something, anything, to match my decidedly odd talents. Boss had hinted that I was some sort of a superman—if so, I can testify that there is very little demand for supermen.

I considered going to school to become a croupier or dealer—then moved that possibility to the bottom of the pile. A skilled dealer or stick man or wheel man can work for many years at good wages but to me it would be a treadmill. A way to stay alive but not a life. Better to join up as a private and buck for field rank.

But there were other possibilities I had never thought about. Consider these:

> WANTED: 90-day wife for offplanet vacation. All expenses, luxury 9 +, guild bonus scale. Phys. range S/W, temperament sanguine 8, amativeness scale 7 or above. Client holds procreation license Chicago Imperium, will surrender it to holiday wife if she becomes pregnant or both will undergo 120-day sterilization, her choice.

See Amelia Trent, Licensed Sex Broker,
#18/20 New Cortez Mezzanine.

Host Mother—Unlimited License, Bonded by TransAmerica and/or Lloyd's—no extra charge for multiple births up to quadruplets. Fee by arrangement. Standard interview fee with physical examination by your-choice physiometricist.

BABIES UNLIMITED, Inc.
LV 7962M 4/3

URGENTLY NEEDED—Two Time-Space Engineers, any sex, experienced in n-dimensional design. Must be willing to risk nonreversible temporal dislocation.

Participation—Amenities—Assurance
Terms to be negotiated
Babcock and Wilcox, Ltd.
Care Wall Street Journal, LV Lbr Mrt

I could try to sign with Babies Unlimited or I could freelance. My conditional sterility would be a selling point, as the thing customers of host mothers are most leery of is the host mother who slips one over on the client—gets pregnant on her own just before submitting herself for hosting. Sterility is no handicap as bringing down an ovum is not the purpose; the technologist simply manipulates to change the body chemistry to make the field ripe for implantation. Ovulation is simply a nuisance.

Having babies for other people could be only a stopgap—but a possible one; it paid well.

Not a bad deal for someone who wanted a three-months' vacation and enjoyed Russian roulette. To me, pregnancy was no danger and my horny scale rating is higher than seven—much! But the doxy bonus scale in the Free State is not high enough to make the accumulated pay enough to justify losing chances at more permanent work—and that faceless client was almost certainly a crashing bore or he wouldn't consider hiring a stranger for his holiday bed.

The above is exactly the sort of job I wanted. The only hitch was that I was in no slightest degree qualified.

The First Plasmite Church ("In the Beginning was Plasma, without form and void") off the Mall had a sign advertising times of services. A smaller notice with movable letters included in it caught my eye:

"The Next Virgin Will Be Sacrificed at 0251 Oct 22"

That looked like a permanent position but again not one for which I was qualified. It fascinated me. While I was gawking, a man came out and changed the sign and I realized that I had missed last night's sacrament and the next altar sacrifice was two weeks away, which left me undismayed. But my curiosity got me, as usual. I asked him: "Do you actually sacrifice virgins?"

He answered, "Not me. I'm just an acolyte. But—Well, no, they don't actually have to be virgins. But they do have to look like virgins." He looked me up and down. "I think you could make it. Want to come in and talk to the priest?"

"Uh, no. Do you mean that he actually sacrifices them?"

He looked at me again. "You're a stranger here, aren't you?"

I admitted it. "Well, it's like this," he went on. "If you were to advertise that you were casting for a snuff film, you could cast every part by noon and not one of 'em would ask if they were actually going to be snuffed. It's that kind of a town."

Maybe so. More likely I'm a yokel come to town. Or both.

There were lots of ads for offplanet jobs or concerning offplanet matters. I did not expect to hire out for an offplanet job because I did expect to go off planet as a colonist so lavishly subsidized that I would have free choice of any colony, from Proxima, almost in our laps, to The Realm, so far away that both cargo and people went by n-ship—except that the late word on The Realm was that The First Citizen had closed it to migrants at any price, except certain artists and scientists by individual negotiation. Not that I wanted to go to The Realm, rich as it is reputed to be. Too far! But the Proximates are our close neighbors; from South Island their sun is right overhead, a big bright star. Friendly.

But I read all the ads:

Transuranics Golden Division on Golden around Procyon-B wanted experienced mining engineers to supervise kobolds, fiveyear renewable, bonuses, perks. The ad did not mention that on Golden an unmodified human person seldom lives five years.

HyperSpace Lines was hiring for the run to The Realm via Proxima, Outpost, Fiddler's Green, Forest, Botany Bay, Halcyon, and Midway. Four months round trip horn Stationary Station, one month paid leave Earthside or Luna, and repeat. I skipped over the requirements and pay for ultra-astrogator and warp engineer and supercargo and communicator and medical officer but looked at the other ratings:

Waiter, room steward, maintenance carpenter, electrician, plumber, electronicist, electronicist (computer), plumber, cook, baker, sous chef, pantryman, chef, specialty cook, bartender, croupier/dealer, social director, holographer/photographer, dental assistant, singer, dance instructor, games supervisor, companionsecretary-maid/valet, cruise director's assistant, art instructor, cards instructor, cruise hostess, swimming instructor, hospital nurse, children's nurse, master-at-arms (armed), master-at-arms (unarmed), director/bandmaster, theatrical director, musician (twentythree instruments named but doubling on two or more required), cosmetician, barber, masseur, stores clerk, retail sales clerk, sales manager, excursion escort—

—and that's just a sample. In general, if they do it on the ground, they do it or something like it in the sky. Some of the jobs concerned uniquely with spaceship matters I can't even translate—what in the world (or out of it) is an "over kippsman 2/c"?

One profession not listed is "doxy" despite the fact that HyperSpace Lines is an Equal Opportunity Employer. By word of mouth I learned how very equal this is. If you want to be hired for any of the not so very technical jobs, it helps enormously to be young, handsome/pretty, healthy, horny, bisexual, money-hungry, and open to any reasonable proposition.

The Port Captain himself has two left feet and was purser of the old Newton, up from room steward. In his sky-voyaging days he made certain that his first-class passengers got anything they wanted—and that they paid well for it. As Port Captain this is still his purpose. He is said to favor married couples or equivalent over any single if they can work as a team both in and out of bed. I heard a story around the Mall of one gigolo/doxy team who made themselves rich in only four trips—dance instructors in the morning, swimming instructors in the afternoon, dancing host and hostess before and after dinner, a singing and comedy act, then private entertainment singly or as a team at night—four voyages and ready to retire . . . and had to retire because they were fired, as they were no longer very attractive, no longer brimming with vitality; they had maintained this impossible pace on uppers and downers.

I don't think money can tempt me that much. I'll stay awake all night most anytime I'm asked but I do want to catch up on sleep the next day.

I wondered how it was that HyperSpace Lines, with only four passenger liners, was apparently hiring all their many ratings all the time. The line's assistant hiring agent said to me, "You really don't know?"

I told her I did not.

"At each of three of the stops it takes lots and lots of what makes the world go round to buy your way in. Three more are not cheap although some skills are accepted in lieu of contribution. Only one is a bounty planet. So desertion is a major problem. Fiddler's Green is so desirable a place that the first officer of the Dirac jumped ship there a few years back. The company does not have too much trouble with crew recruited here . . . but suppose your home was Rangoon or

Bangkok or Canton and you were working cargo on Halcyon and the pusher took his eyes off you just long enough. What would you do?"

She shrugged and went on, "I'm telling you no secrets. Anybody who thinks about it knows that the only possible way for most people to get off Earth—even to Luna—is to sign on as crew of a spaceship, then jump ship. I'd do it myself if I could."

"Why don't you?" I asked.

"Because I have a six-year-old son."

(I should learn to mind my own business!)

Some of the ads stirred my imagination; this was one:

> New Planet Just Opening—Type T-8 Guaranteed Maximum Danger
> Couples or Groups Only Augmented Survival Plan Churchill and Son, Realtors Las Vegas Labor Mart 96/98

I remembered something Georges had said, that anything above Terran scale eight called for a big bonus or bounty. But I knew more about that scale now; eight was Earth's own basic rating. Most of this planet wasn't too easy to tame. Most of it had to be worked over, rebuilt. This very land I stood on had been fit only for gila monsters and desert crawlies until it had been treated with tons of money and many, many tons of water.

I wondered about that "maximum danger." Was it something that called for the talents of a woman who was fast on her feet when triggered? I really didn't yearn to be a platoon leader of Amazons because some of my girls would get killed and I wouldn't like that. But I wouldn't mind tackling a sabertoothed tiger or equivalent because I felt certain that I could move in, clobber him, and back off while he was still finding out that something was up.

Maybe a raw T-8 would be a better place for Friday than a manicured place like Fiddler's Green.

On the other hand that "maximum danger" might derive from too many volcanoes or too much radioactivity. Who wants to glow in the dark? Find out first, Friday; you won't get two chances.

I stayed quite late at the Mall that day because Goldie was again on the night shift. I had served her dinner when she got home that morning, put her to bed about ten, and hoped that she would sleep till at least eighteen. So I dallied until the Mall offices started closing.

When I got home our house was dark, which pleased me as it tended to indicate that Goldie had slept straight through. With luck I could get her breakfast before she woke up. So I let myself in most quietly . . . and realized that the house was empty. I won't try to define this but an empty house doesn't feel, smell, sound, or taste like one with a person sleeping in it. I went straight to the bedroom. Empty bed. Empty bath. I switched on lights and presently I found it, a long printout for me in the terminal:

> Dearest Friday, It looks now as if you won't be home before I leave—and that is probably just as well because we would just cry on each other and that's no help.
>
> My job came through but not as expected. Keeping in touch with my former boss paid off; Dr. Krasny called me shortly after I went to bed. He is CO. of a brand-new MASH being set up to serve the Sam Houston Scouts. An expanded Scouts of course; each battalion is cadre for a triangular combat team, a pony brigade. I am not supposed to tell you where we are mounting or where we will go but (burn this printout after you read it!) if you were to go west from Plainview, you might run across us in Los Llanos Estacados, before you reach Portales.
>
> Where are we going? That's really classified! But if we don't hit Ascension, some wives will draw a pension. I called Anna and Burt; they are meeting me in El Paso at ten past eighteen already in Texas. [Oh, dear!] because Dr. Krasny assured me that they would have jobs, either as combat troops or as auxiliary medical if any hitch develops. There is a job for you, too, my dear one—combat if that's what you want. Or I'll rate you medtech-3 and use you myself and upgrade you to master sergeant (medadmin) in nothing flat, as I know your quality and so does Colonel Krasny. It would be good to have all four of us—five, I mean—back together again.
>
> But I'm not trying to twist your arm. I know you have things troubling you about your Canadian friends who disappeared. If you feel that you must stay loose to look for them—bless you and good luck. But if you want to get in a little action with bonus pay, come straight to El Paso. The address is Panhandle Investments, El Paso Division, Field Operations Office, Environmental Factors, Attention John Krasny, Chief Engineer—and don't laugh; just memorize it and destroy it.

Once this operation is in the news you can reach any of us openly through the Houston office of the Scouts. But in the meantime I am "personnel chief clerk" in "Environmental Factors."

May a gracious God watch over you and keep you safe from harm.

All my love,
Goldie

XXVII

I burned it at once. Then I went to bed. I didn't feel like eating dinner.

Next morning I went to the Labor Mart, looked up Mr. Fawcett, agent for HyperSpace Lines, and told him that I wanted to sign on as a master-at-arms, unarmed.

The supercilious slob laughed at me. I glanced at his assistant for moral support but she kept her eyes averted. I restrained my temper and said gently, "Would you mind explaining the joke?"

He stopped his raucous cawing and said, "Look, chicken, 'master' as in 'master-at-arms' designates a male. Although we might be able to hire you as 'mistress' in some other department."

"Your sign says Equal Opportunity Employer. The fine print under it states that 'waiter' includes 'waitress,' 'steward' includes 'stewardess,' and so forth. Is that true?"

Fawcett stopped grinning. "Quite true. But it also says: 'physically able to carry out the normal duties of the position.' Master-atarms is a police officer aboard ship. Master-at-arms, unarmed, is a cop who can keep order without having to resort to weapons. He can wade into a fight and arrest the center of the disturbance, barehanded. Obviously you can't. So don't give me any quack about taking it to the union."

"I shan't. But you didn't read my brag sheet."

"Can't see that it matters. However—" He glanced casually down the page. "Says here you're a combat courier, whatever that is."

"That means that when I have a job to do, nobody stops me. If somebody tries too hard, he's dog meat. A courier goes unarmed. I sometimes carry a laser knife or one-shot tear gas. But I depend on my hands. Note my training."

He looked it over. "Okay, so you've been to a martial-arts school. That still doesn't mean that you can cope with some big bruiser over a hundred kilos heavier and a head taller than you are. Don't waste my time, girlie; you couldn't even arrest me."

I went over his desk, then turkey-walked him to the door and turned him loose before anyone outside could see. Even his assistant did not see it—she most carefully did not see it.

"There," I said, "that's how I do it without hurting anyone. But I want to be tested against your biggest male master-at-arms. I'll break his arm. Unless you tell me to break his neck."

"You grabbed me when I wasn't looking!"

"Of course I did. That's how to handle a nasty drunk. But you're looking now, so let's run through it again. Are you ready? This time I might have to hurt you a little but not much. I won't break any bones."

"Stay where you are! This is ridiculous. We don't hire masters-at-arms merely because they've been trained in some Oriental tricks; we hire big men, men so big they carry authority just by their size. They don't have to fight."

"Okay," I said. "Hire me as a plainclothes cop. Put me into an evening dress; call me a dance hostess. When somebody about my size and hopped up on sleet pokes your big cop in his solar plexus and he goes down, I stop pretending to be a lady and go in and rescue him.

"Our masters-at-arms don't need to be protected."

"Maybe. A really big man is usually slow and clumsy. He hardly ever knows much about fighting because he's never really had to fight. He's okay to keep order at a card party. Or to handle one drunk. But suppose the Captain really needs help. A riot. A mutiny. Then you need someone who can fight. Me."

"Leave your application with my assistant. Don't call us; we'll call you."

I went home and thought about where else I could look—or should I go to Texas? I had made the same silly, unpardonable mistake with Mr. Fawcett that I had made with Brian. . . and Boss would have been ashamed of me. Instead of picking up his challenge I should have insisted on a fair test—but I should never have laid a finger on the man I was asking to hire me. Stupid, Friday, stupid!

It was not losing that job that bothered me; it was losing any chance of getting a spaceside job with HyperSpace Lines. I was going to have to have a job pretty soon to accomplish the sacred duty of seeing to it that Friday eats (let's face it; I eat like a pig) but it didn't have to be this job. I had decided to ship out with HyperSpace because one voyage with them would let me size up more than half of the colonized planets in explored space.

While I had made up my mind to migrate as Boss had advised, the idea of picking a planet solely from brochures written by advertising copywriters—with no return-and-exchange privilege—bothered me. I wanted to shop first.

For example: Eden has received more favorable publicity than any other colony in the sky. Hearken to its virtues: A climate much like Southern California over most of its land mass, no dangerous predators, no noxious insects, surface gravity 9 percent less than Earth, oxygen content of air 11 percent higher, metabolic environment compatible with Terran life and soil so rich that two or three bumper crops a year are routine. Scenery delightful no matter where you look. Population today just under ten million.

So what's the catch? I found out one evening in Luna City through letting a ship's officer pick me up and take me to dinner. The company placed a high price on Eden from the time it was discovered and touted it as the perfect retirement home. And it is. After the pioneer party had prepared it, nine-tenths of the people who moved there were elderly and wealthy.

The government is a democratic republic but not one like the California Confederacy. To be eligible to vote a person must be seventy Terran years old and a taxpayer (i.e., landowner). Residents from ages twenty to thirty perform public service, and if you think that means waiting on the elderly hand and foot you are utterly right, but it includes also anything else unpleasant that needs to be done and therefore would command high wages if it were not done by conscript labor.

Is any of this in any of the company brochures? Hollow laugh!

I needed to know the unadvertised facts about each colonial planet before buying a one-way ticket to one of them. But I spoiled my best chance by "proving" to Mr. Fawcett that an unarmed female can place a come-along on a male bigger than she is—that merely got me on his blacklist.

I do hope I grow up before Cheyne-Stokes breathing sets in.

Boss scorned crying over spilt milk quite as much as he despised selfpity. Having killed my chances of being hired by HyperSpace it was time to leave Las Vegas while I was still solvent. If I couldn't make the Grand Tour myself, there was still a way to get the ungarnished word about colonial planets the way I had acquired the truth about Eden: cultivate ships' crew members.

The way to do that was by going to the one place where I was sure to find them: Stationary Station, up the Beanstalk. Freighters were not likely to come farther down Earth's gravity well than to Ell-Four or -Five—that is, to Lunar orbit without the disadvantage of entering Luna's own gravity well. But passenger ships usually touched at Stationary Station. All of HyperSpace Lines' giant liners, Dirac, Newton, Forward, and Maxwell, left from there, returned there, received maintenance and chandlery there. Shipstone complex had a branch there (Shipstone Stationary) primarily to sell power to ships and especially these big ships.

Officers and ratings going on leave arrived and left from there; those not on leave might sleep in their ships but they were likely to drink and eat and party a bit in the Station.

I dislike the Beanstalk and I don't care much for the twenty-four hour Station. Aside from its spectacular and always changing view of Earth it has nothing to offer but high prices and cramped quarters. Its artificial gravity surges uncomfortably and always seems to go out just in time to put soup in your face.

But there are jobs to be had there if you are not fussy. I should be able to support myself there long enough to be sure that I received frank opinions concerning each of the colonized planets from one or more jaundiced spacemen.

It was even possible that I might bypass Fawcett and ship out from there with HyperSpace. Ships are reputed always to sign on a few at the last minute to fill unexpected vacancies. If such a chance opened up, I would not compound my folly—I would not ask for a master-at-arms billet. Waitress, scullery, chambermaid, bath attendant—if the job would swing me around the Grand Tour, I would grab it.

Having thus picked my new home, I looked forward to boarding the same ship, by choice, as a luxury-class passenger, passage paid under the odd terms of my foster father's will.

I gave notice to the leaseholder of the mousetrap I lived in, then took care of some chores before leaving for Africa. Africa—Would I have to cross via Ascension? Or would SBs be running again? Africa made me think of Goldie, and Anna and Burt, and sweet Doc Krasny. I might reach Africa before they did. Irrelevant as there was only one probable war there now (that I knew of) and I intended to shun that area like the plague.

Plague! I must at once prepare a report on plague for Gloria Tomosawa and for my friends at EllFive, Mr. and Mrs. Mortenson. It seemed preposterously unlikely that anything I could say would persuade them or anyone else that a Black Death epidemic was coming in only two and a half years—I hadn't believed it myself. But, if I could make responsible people uneasy enough so that antirat measures were tightened and health checks at CHI barriers be made more than a meaningless ritual, it might—it just might—save space colonies and Luna.

Unlikely—But I had to try.

The only other thing I had to do was make one more check on my missing friends . . . then let the matter rest until I came down from Stationary Station or (one may hope!) returned from the Grand Tour. Surely one can call Sydney or Winnipeg or anywhere from Stationary

Station. . . but at much higher cost. I had learned lately that wanting something and being able to pay for it were not the same.

I punched the Tormeys' Winnipeg call code, resigned to hearing:

"The code you have signaled is temporarily out of service at the subscriber's request."

What I got was: "Pirates Pizza Palace!"

I muttered, "Sorry, I punched wrong," and cleared the board. Then I punched again, most carefully—

—and got: "Pirates Pizza Palace!"

This time I said, "I'm sorry to bother you. I'm in Las Vegas Free State and have been trying to reach a friend in Winnipeg—but twice I've reached you. I don't know what I'm doing wrong."

"What code did you punch?','

I told the friendly voice. "That's us," she agreed. "Best giant pizzas in British Canada. But we opened just ten days ago. Maybe your friend used to have this call code?"

I agreed with that, thanked the pleasant voice, and cleared—sat back and thought. Then I punched ANZAC Winnipeg while wishing mightily that this minimum-service terminal could bring in a picture from farther away than Las Vegas itself-in trying to play Pinkerton it helps to watch faces. Once ANZAC's computer answered, I asked for the operations duty officer, I having become somewhat more sophisticated in how to handle that computer. I told the woman who answered, "I'm Friday Jones, a New Zealand friend of Captain and Mrs. Tormey. I tried to call their home and could not reach them. I wonder if you can help me?"

"I'm afraid not."

"Really? Not even a suggestion?"

"I'm sorry. Captain Tormey resigned. He even cashed in his pension rights. I understand that he's sold his house, so I assume that he is gone for good. I do know that the only address we have for him is his brother-in-law's address at the University of Sydney. But we can't give out addresses."

I said, "I think you mean Professor Federico Farnese, Biology Department, at the University."

"That's right. I see you know it."

"Yes, Freddie and Betty are old friends; I knew them when they lived in Auckland. Well, I'll wait till I'm home to call Freddie and that will get me Ian. Thanks for being so helpful."

"My pleasure. When you talk to Captain Tormey, please tell him that Junior Piloting Officer Pamela Heresford sends her best."

"I will remember."

"If you are going home soon, I have good news for you. The semi schedule for Auckland is now fully restored. We've ??rim?? ten days of cargo-only and we are now certain that there is no longer any way our ships can be sabotaged. We are offering a forty percent discount on all fares now, too; we want to get our old friends back."

I thanked her again but told her that, since I was in Vegas, I expected to leave from Vandenberg, then switched off before I had to improvise more lies.

Again I sat and thought. Now that the SBs were running should I go to Sydney first? There was—or used to be—a weekly trajectory from Cairo to Melbourne, and vice versa. If it was not running it was possible to go by tube and float craft via Singapore, Rangoon, Delhi, Teheran, Cairo, then down to Nairobi—but it would be expensive, long, and uncertain, with squeeze at every move and always the chance of being grounded by some local disturbance. I might wind up in Kenya without money enough to go up the Beanstalk.

A last resort. A desperate one.

I called Auckland, was unsurprised to be told by the computer that Ian's call code was not operative. I checked to see what time it was in Sydney, then called the university, not doing it the routine way through its admin office but punching straight through to its biology department, a call code I had obtained a month back.

I recognized a familiar Strine accent. "Marjorie Baldwin here, Irene. Still trying to find my lost sheep."

"My word! Luv, I tried, I did try, to deliver your message. But Professor Freddie never did come back to his office. He's left us. Gone."

"Gone? Gone where?"

"You wouldn't believe how many people would like to know! I'm not even supposed to be telling you this. Somebody cleaned out his desk, there's no hide nor hair in his flat—gone! I can't tell you more than that, because nobody knows."

After that dismaying call I sat still and thought, then called the Winnipeg Werewolves Security Guards. I went as high as I could, to a man who described himself as Assistant Commandant, and told him truthfully who I was (Marjorie Baldwin), where I was (Las Vegas), and what I wanted, a lead to my friends. "Your company was guarding their home before it was sold. Can you tell me who bought it, or who the agent was who sold it, or both?"

Then I certainly wished for vision as well as sound! He answered, "Look, sister, I can smell a cop even through a terminal. Go back and tell your chief that he got nothing off us last time and he gets nothing off us this time."

I held my temper and answered quietly, "I am not a cop although I can see why you might think so. I really am in Las Vegas, which you can confirm by calling me back, collect."

"Not interested."

"Very well. Captain Tormey owned a matched pair of black Morgans. Can you tell me who bought them?"

"Copper, get lost."

Ian had shown excellent judgment: The Werewolves really were loyal to their clients.

If I had plenty of time and money, I might dig up something by going to Winnipeg and/or Sydney and rooting at it myself. If wishes were horses—Forget it, Friday; you are at last totally alone; you've lost them.

Do you want to see Goldie badly enough to get involved in a war in East Africa?

But Goldie did not want to stay with you badly enough to stay out of that war—doesn't that tell you something?

Yes, it tells me something I know but always hate to admit: I always need people more than they need me. It's your old basic insecurity, Friday, and you know where it comes from and you know what Boss thought about it.

All right, we go to Nairobi tomorrow. Today we write up the Black Death report for Gloria and for the Mortensons. Then get a full night's sleep and leave. Uh, eleven hours time difference; try to get an early start. Then don't worry about Janet and Co. until you get back from the Beanstalk with your mind made up about where to colonize. Then you can afford to spend your last gram in a flatout attempt to find them. . . because Gloria Tomosawa will handle things once you tell her what planet you have picked.

I actually did get a long night's sleep.

The next morning I had packed—same old jumpbag, nothing much in it—and was puttering around the kitchen, dumping some items and saving others with a note to my landlord, the leaseholder, when the terminal buzzed.

It was the nice gal with the six-year-old boy at HyperSpace. "Glad I caught you," she said. "My boss has a job for you."

(Timeo Danaos et dona ferentes.) I waited.

Fawcett's silly face showed. "You claim to be a courier."

"I'm the best."

"In this case, you had better be. This is an offplanet job. Okay?"

"Certainly."

"Take this down. Franklin Mosby, Finders, Inc., suite six hundred, Shipstone Building, Beverly Hills. Now hurry; he wants to interview you before noon...

I didn't write down the address. "Mr. Fawcett, that costs you one kilobuck, plus roundtrip tube fare. In advance."

"Huh? Ridiculous!"

"Mr. Fawcett, I suspect that you may hold a grudge. It might strike you as funny to send me on a wild-goose chase and cause me to waste a day and the price of a roundtrip fare to Los Angeles."

"Funny girl. Look, you can pick up your fare here at the office—after the interview; you've got to leave now. As for that kilobuck, shall I tell you what to do with it?"

"Don't bother. For master-at-arms I would expect only master-at-arms wages. But as courier . . . I am the best and if this man really does want the best, he will pay my interview fee without a second thought." I added, "You're not serious, Mr. Fawcett. Goodbye." I cleared.

He called back seven minutes later. He talked as if it hurt him. "Your round trip and the kilobuck will be at the station. But that kilobuck is against your salary and you pay it back if you don't get the job. Either way, I get my commission."

"It will not be paid back under any circumstances, and you get no commission from me because I have not appointed you my agent. Perhaps you can collect something from Mosby but, if so, it does not come out of my salary or my interview fee. And I'm not going down to the station to wait around like a boy playing snipe hunt. If you mean business, you'll send the money here."

"You're impossible!" His face left the screen but he did not clear it. His assistant came on. "Look," she said, "this job really does have heat behind it. Will you meet me at the station under the New Cortez? I'll get there as fast as I can make it and I'll have your fare and your fee."

"Certainly, dear. A pleasure."

I called my landlord, told him I was leaving the key in the refrigerator and be sure to salvage the food.

What Fawcett did not know was that nothing could have induced me not to keep this appointment. The name and address was that which Boss had caused me to memorize just before he died. I had never done anything about it because he had not told me why he wanted me to memorize it. Now I would see.

XXVIII

All the sign on the door said was FINDERS, INC. and SPECIALISTS IN OFFPLANET PROBLEMS. I went in and a live receptionist said to me, "They filled the job, dearie; I got it."

"I wonder how long you will keep it. I'm here by appointment to see Mr. Mosby."

She looked me over carefully, in no hurry. "Call girl?"

"Thank you. Where do you get your hair dyed? Look, I'm sent here by HyperSpace Lines, Las Vegas office. Every second is costing your boss bruins. I'm Friday Jones. Announce me."

"You're kidding." She touched her console, spoke into a hushphone. I stretched my ears. "Frankie, there's a floozie out here says she has an appointment with you. Claims to be from Hypo in Vegas."

"God damn it, I've told you not to call me that at work. Send her in."

"I don't think she's from Fawcett. Are you two-timing me?"

"Shut up and send her in."

She pushed aside the hushphone. "Sit down over there. Mr. Mosby is in conference. I'll let you know as soon as he is free."

"That isn't what he told you."

"Huh? Since when do you know so much?"

"He told you not to call him Frankie at work, and to send me in. You gave him some backtalk and he told you to shut up and to send me in. So I'm going in. Better announce me."

Mosby appeared to be about fifty trying to look thirty-five. He had an expensive tan, expensive clothes, a big, toothy smile, and cold eyes. He motioned me toward a visitor's chair. "What took you so long? I told Fawcett I wanted to see you before noon."

I glanced at my finger, then at his desk clock. Twelve-oh-four. "I've come four hundred and fifty kilometers plus a crosstown shuttle since eleven o'clock. Shall I go back to Vegas and see if I can beat that time? Or shall we get down to business?"

"I told Fawcett to see to it that you caught the ten o'clock. Oh, well. I understand you need a job."

"I'm not hungry. I was told that you needed a courier for an offplanet job." I took out a co1:41 PM 12/30/2001py of my brag sheet, handed it to him. "Here are my qualifications. Look it over and, if I am what you want, tell me about the job. I'll listen and tell you whether or not I'm interested."

He glanced at the sheet. "The reports I have tell me that you are hungry."

"Only in that it is getting on toward lunchtime. My fee schedule is on that sheet. It is subject to negotiation—upwards."

"You're pretty sure of yourself." He looked again at my brag sheet. "How's Kettle Belly these days?"

"Who?"

"It says here that you worked for System Enterprises. I asked you, 'How is Kettle Belly?' Kettle Belly Baldwin."

(Was this a test? Had everything since breakfast been carefully calculated to cause me to lose my temper? If so, the proper response would be not to lose my temper no matter what.) "The Chairman of System Enterprises was Dr. Hartley Baldwin. I've never heard him called Kettle Belly."

"I believe he does have some sort of a doctor's degree. But everybody in the trade calls him Kettle Belly. I asked you how he is."

(Watch it, Friday!) "He's dead."

"Yeah, I know. I wondered if you knew. In this business you get a lot of ringers. All right, let's see this marsupial pouch of yours."

"Excuse me?"

"Look, I'm in a hurry. Show me your bellybutton."

(Just where did the leak occur? Uh—No, we killed that gang. All of them—or so Boss thought. Doesn't mean it couldn't have leaked from there before we killed them. No matter—it did leak . . . as Boss said it would.) "Frankie boy, if you want to play bellybuttons with me, I must warn you that the bleached blonde in your outer office is listening and almost certainly recording."

"Oh, she doesn't listen. She has her instructions about that."

"Instructions she carries out the way she carries out your injunction not to call you Frankie during working hours. Look, Mr. Mosby, you started discussing classified matters under not-secure conditions. If you want her to be part of this conference, bring her in. If not, get her out of the circuit. But let's have no more breaches of security."

He drummed on his desk, then got up very suddenly, went into his outer office. The door was not totally soundproof; I heard angry voices, muffled. He came back in, looking annoyed. "She's gone to lunch. Now don't give me any more guff. If you are who you say you are, Friday Jones, also known as Marjorie Baldwin, formerly a courier for Kettle—for Dr. Baldwin, managing director of System Enterprises, you have a pouch created by surgery back of your navel. Show it to me. Prove your identity."

I thought about it. A requirement that I prove my identity was not unreasonable. Fingerprint identification is a joke, at least inside the profession. Clearly the existence of my courier's pouch was now a broached secret. It would never be useful again—except that right now it could be used to prove that I was me. I was I? It sounds silly either way. "Mr. Mosby, you paid a kilobuck to interview me."

"I certainly did! So far I've had nothing from you but static."

"I'm sorry. I've never been asked to show my trick bellybutton before, because up to recently it has been a closely held secret. Or so I thought. Evidently it is no longer a secret, since you know of it. That tells me that I can no longer use it for classified work. If the job you have for me requires the use of it, perhaps you had better reconsider.

A secret just a little bit broached is like a girl just a little bit pregnant."

"Well . . . yes and no. Show me."

I showed him. I keep a smooth nylon sphere one centimeter in diameter in my pouch so that the pouch won't shrink between jobs.

I popped out the sphere, letting him watch, and then replaced it—then let him see that it was not possible to tell my navel from a normal navel. He studied it carefully. "It doesn't hold very much."

"Maybe you would rather hire a kangaroo."

"It's big enough for the purpose—barely. You'll be carrying the most valuable cargo in the galaxy, but it won't occupy much space. Zip up and adjust your clothing; we're going to lunch and we mustn't —must not—be late."

"What is all this?"

"Tell you on the way. Hurry up."

A carriage was already waiting for us. Back of Beverly Hills, in the hills that name that town, is a very old hotel that is also very swank. It has the stink of money, an odor I don't despise. Between fires and the Big Quake it has been rebuilt several times, always to look just as it did but (so I hear) the last time it was rebuilt to be totally fire-and earthquakeproof.

It took about twenty minutes to drive, at a spanking trot, from the Shipstone Building to the hotel; Mosby used it to fill me in. "During this ride is about the only time that both of us can be sure that we don't have an Ear planted on us—"

(I wondered if he believed that. I could think of three obvious places for an Ear: my jumpbag, his pockets, and the cushions of the carriage. And there were always endless unobvious places. But it was his problem. I had no secrets. None, now that my bellybutton was a window to the world.)

"—so let me talk fast. I'm meeting your price. Furthermore there will be a bonus on completed performance. The trip is from Earth to The Realm. That's what you're paid for; the trip back is deadhead but, since the round trip is four months, you'll be paid for four months. You collect your bonus at the far end at the imperial capital. Salary—one month in advance, the rest as you go. Okay?"

"Okay." I had to avoid sounding too enthusiastic. A round trip to The Realm? My dear man, only yesterday I was anxious to make this trip at petty officer's wages. "What about my expenses?"

"You won't have much in the way of expenses. Those luxury liners are all-expense deals."

"Gratuities, squeeze, groundside excursions, walking-around money, Bingo and such aboard ship—at a minimum such expenses are never less than twenty-five percent of the price of the ticket. If I'm going to pretend to be a rich tourist, I must behave like one. Is that my cover?"

"Uh . . . Well, yes. All right, all right—nobody's going to fuss if you spend a few thousand pretending to be Miss Rich Bitch. Keep track and bill us at the end."

"No. Advance the money, twenty-five percent of the ticket cost. I won't keep records as it would not be in character; Miss Rich Bitch would not keep track of such trivia."

"All right already! Shut up and let me talk; we'll soon be there. You're a living artifact."

I had not felt that cold chill in quite a while. Then I braced up and resolved to make him pay heavily for that one crude, rude remark. "Are you being intentionally offensive?"

"No, I'm not. Don't get in a flutter. You and I know that an artificial person can't be told, offhand, from a natural person. You'll be carrying, in stasis, a modified human ovum. You will carry it in your navel pouch, where the constant temperature and the cushioning will protect the stasis. When you reach The Realm, you will catch a flu bug or some such and go to hospital. While you are in this hospital, what you are carrying will be transferred to where it will do the most good. You'll be paid the bonus and will leave the hospital . . . with the happy knowledge that you have enabled a young couple to have a perfect baby when they were dead-certain, almost, to have a defective one. Christmas disease."

I decided that the story was mostly true. "The Dauphiness."

"What? Don't be silly!"

"And it is considerably more than Christmas disease, which, by itself, might be ignored in a royal person. The First Citizen himself is concerned with this since this time succession is passing through his daughter rather than through a son. This job is much more important and much more hazardous than you told me . . . so the price goes up."

That pair of beautiful bays went clopping on up Rodeo Drive another hundred meters before Mosby answered. "All right. God help you if you talk. You wouldn't live long. We'll increase the bonus. And—"

"You'll damn well double the bonus and deposit it to my account before we warp. This is the kind of a job where people grow forgetful after it's over."

"Well—I'll do what I can. We are about to have lunch with Mr. Sikmaa—and you are expected not to spot the fact that he is personal representative of The First Citizen with an interworld rank of Ambassador Extraordinary and Minister Plenipotentiary. Now straighten up and mind your table manners."

Four days later I was again minding my table manners at the right of the Captain of H. S. Forward. My name was now Miss Marjorie Friday and I was so offensively rich that I had been fetched up from groundside to Stationary Station in Mr. Sikmaa's own antigrav yacht and whisked through into the Forward without having to bother with anything so plebeian as passport control, health, and so forth. My luggage had come aboard at the same time—box after box of expensive, stylish clothing, appropriate jewelry—but others took care of it; I did not have to bother with anything.

Three of those days I had spent in Florida in what felt like a hospital but was (I knew!) a superbly equipped genetic engineering laboratory. I could infer which one it was but I kept my guesses to myself as speculation about anything was not encouraged. While I was there I was given the most thorough physical examination I have ever heard of. I did not know why they were checking my health in a style ordinarily reserved for heads of state and chairmen of multinationals but I presumed that they were jumpy about entrusting to anyone not in perfect health the protecting and delivering of an ovum that would become, in the course of years, First Citizen of the fabulously wealthy Realm. It was a good time to keep my mouth shut.

Mr. Sikmaa used none of the sharpshooting that both Fawcett and Mosby had tried. Once he decided that I would do, he sent Mosby home and catered to me so lavishly that I had no need to dicker. Twenty-five percent for casual money?—not enough; make that fifty percent. Here it is; take it—in gold and in Luna City gold certificates—and, if you need more, just tell the purser and sign for it, a draft on me. No, we won't use a written contract; this is not that sort of a mission—just tell me what you want and you shall have it. And here is a little booklet that tells you who you are and where you went to school and all the rest. You will have plenty of time in the next three days to memorize it and if you forget to burn it, don't fret; the fibers are impregnated so that it self-destroys in the next three days—don't be surprised if the pages are yellow and somewhat brittle on the fourth day.

Mr. Sikmaa had thought of everything. Before we left Beverly Hills, he brought a photographer in; she shot me from several angles, me dressed in a smile, in high heels, in low heels, in bare feet. When my luggage showed up in the Forward, every item fitted me perfectly, all the styles and colors suited me, and the clothes carried a spread of famous designer's names from Italy, from Paris, from Bei-Jing, *et al.*

I'm not used to haute couture and don't know how to handle it, but Mr. Sikmaa had that covered, too. I was met at the airlock by a pretty little Oriental creature named Shizuko who told me that she was my personal maid. Since I had been bathing and dressing myself since I was five, I felt no need for a maid, but again it was time to roll with the blow.

Shizuko conducted me to cabin BB (not quite big enough for a volley-ball court). Once there, it appeared that (in Shizuko's opinion) there was just barely time enough to get me ready for dinner.

With dinner three hours away this struck me as excessive. But she was firm and I was going along with whatever was suggested—I did not need a diagram to tell me that Mr. Sikmaa had planted her there.

She bathed me. While this was going on, there was a sudden surge in the gray control as the ship warped away. Shizuko steadied me and kept it from being a wet disaster and did it so skillfully that she convinced me that she was used to warp ships. She didn't look old enough.

She spent a full hour on my hair and my face. In the past I had washed my face when it seemed to need it and styled my hair mostly by whacking it off enough to keep it out of way. I learned what a bumpkin I was. While Shizuko was reincarnating me as the Goddess of Love and Beauty the cabin's little terminal chimed. Letters appeared on the screen while the same message extruded from the printout, an impudent tongue:

> The Master of HyperSpaceShip Forward
> Requests the Pleasure of the Company
> of Miss Marjorie Friday for Sherry and
> Bonhomie in the Captain's Lounge at
> nineteen hundred hours regrets only

I was surprised. Shizuko was not. She had already hung out and touched up a cocktail dress. It covered me completely and I have never been so indecently dressed.

Shizuko refused to let me be on time. She led me to the Captain's Lounge timed so that I went through the receiving line at seven minutes after the hour. The cruise hostess already knew my (current) name and the Captain bowed over my hand. It is my considered opinion that being a VIP in a spaceship is a better deal than being a spaceship master-at-arms.

"Sherry" includes highballs, cocktails, Icelandic Black Death, Spring Rain from The Realm (deadly—don't touch it), Danish beer, some pink stuff from Fiddler's Green, and, I have no doubt, Panther Sweat if you ask for it. It also includes thirtyone different sorts (I counted) of tasty tidbits you eat with your fingers. I was a credit to Mr. Sikmaa; I really did take sherry and only one small glass, and I greatly restrained myself when offered, again and again and again and again, those thirtyone tasty temptations.

And it is well that I resisted. This ship puts on the nosebag eight times a day (again I counted): early morning coffee (caf, corn plet—that is, with pastry), breakfast, midmorning refreshment, tiffin, afternoon tea with sandwiches and more pastry, cocktail-hour hors d'oeuvres (those thirtyone sinful traps), dinner (seven courses if you can stay the route), midnight buffet supper. But if you feel peckish at any hour, you can always order sandwiches and snacks from the pantry.

The ship has two swimming pools, a gymnasium, a Turkish bath, a Swedish sauna, and a "Girth Control" clinic. Two and a third times around the main promenade is a kilometer. I don't think this is enough; some of our shipmates are eating their way across the galaxy. My own major problem will be to arrive at the imperial capital still able to find my bellybutton.

Dr. Jerry Madsen, Junior Medical Officer, who doesn't look old enough to be a sawbones, cut me out of the mob at the Captain's sherry, then was waiting for me after dinner. (He does not eat at the Captain's table or even in the dining room; he eats with the other younger officers in the wardroom.) He took me to the Galactic Lounge, where we danced, then there was a cabaret show—singing, specialty dancing, and a juggler who did magic tricks on the side (which made me think of those pigeons, and of Goldie, and I felt suddenly wistful but suppressed it).

Then there was more dancing and two other young officers, Tom Udell and Jaime Lopez, rotated with Jerry, and finally the lounge shut down and all three took me to a little cabaret called The Black Hole, and I firmly declined to get drunk but danced whenever I was asked. Dr. Jerry managed to outsit the others and took me back to cabin BB at an hour quite late by ship's time but not especially late by the Florida time by which I had gotten up that morning.

Shizuko was waiting, dressed in a beautiful formal kimono, silk slippers, and high makeup of another sort. She bowed to us, indicated that we should sit down at the lounge end—the bedroom end is shut off by a screen—and served us tea and little cakes.

After a short time Jerry stood up, wished me a good night, and left. Then Shizuko undressed me and put me to bed.

I did not have any firm plans about Jerry though no doubt he could have persuaded me had he worked on it—my heels are quite short, I know. But both of us were sharply aware that Shizuko was sitting there, hands folded, watching, waiting. Jerry did not even kiss me goodnight.

After putting me to bed, Shizuko went to bed on the other side of the screen—some deal with bedclothes she took out of a cupboard.

I was never before quite so closely chaperoned, even in

Christchurch. Could this be part of my unwritten contract?

XXIX

A spaceship—a hyperspaceship—is a terribly interesting place. Of course it takes very, very advanced knowledge of wave mechanics and multidimensional geometry to understand what pushes the ship, education that I don't have and probably never will (although I would like to back up and study for it, even now). Rockets—no problem; Newton told us how. Antigrav—a mystery until Dr. Forward came along and explained it; now it's everywhere. But how does a ship massing about a hundred thousand tonnes (so the Captain told me) manage to speed up to almost eighteen hundred times the speed of light?—without spilling the soup or waking anyone.

I don't know. This ship has the biggest Shipstones I've ever seen but Tim Flaherty (he's second assistant engineer) tells me that they are charged down only at the middle of each jump, then they finish the voyage having used only "parasitic" power (ship's heat, cooking, ship's auxiliary services, etc.).

That sounds to me like a violation of the Law of Conservation of Energy. I was brought up to bathe regularly and to believe that There Ain't No Such Thing as a Free Lunch; I told him so. He grew just a touch impatient and assured me that it was indeed the Law of Conservation of Energy that caused it to work out that way—it worked just like a funicular; you got back what you put in.

I don't know. There aren't any cables out there; it can't be a funicular. But it does work.

The navigation of this ship is even more confusing. Only they don't call it navigation; they don't even call it astrogation; they call it "cosmonautics." Now somebody is pulling Friday's leg because the engineer officers told me that the officers on the bridge (it's not a bridge) who practice cosmonautics are cosmetic officers because they are there just for appearances; the computer does all the work—and Mr. Lopez the second officer says that the ship has to have engineering officers because the union requires it but the computer does it all.

Not knowing the math for either one is like going to a lecture and not knowing the language.

I have learned one thing: Back in Las Vegas I thought that every Grand Tour was Earth, Proxima, Outpost, Fiddler's Green, Forest, Botany Bay, Halcyon, Midway, The Realm, and back to Earth because that's how the recruiting posters read. Wrong. Each voyage is tailored. Usually all nine planets are touched but the only fixed feature in the sequence is that Earth is at one end and The Realm, almost a hundred lightyears away (98.7 +), is at the other. The seven way stations can be picked up either going out or coming back. However, there is a rule that controls how they are fitted in: Going out the distance from Earth must be greater at each stop, coming back the distance must decrease. This is not nearly as complex as it sounds; it simply means the ship does not double back—just the way you would plan a shopping trip of many stops.

But this leaves lots of flexibility. The nine stars, the suns of these planets, are lined up fairly close to a straight line. See the sketch with the Centaur and the Wolf. Looking from Earth, all those stars, as you can see, are either at the front end of the Centaur or close by in the Wolf. (I know the Wolf doesn't look too well but the Centaur has been clobbering him for thousands of years. Besides, I've never seen a wolf—a four-legged wolf, that is—and it's the best I can do. Come to think of it, I've never seen a Centaur, either.)

That's the way those stars cluster in Earth's night sky. You have to be about as far south as Florida or Hong Kong to see them at all, and even then, with bare eyes you will see only Alpha Centauri.

But Alpha Centauri (Rigil Kentaurus) really shines out, third brightest star in Earth's sky. Three stars it is, actually, a brilliant one that is the twin brother of Sol, one not as bright that it is paired with, and a distant, dim, small companion that swings around both of them about a fifteenth of a lightyear away. Years ago Alpha Centauri was known as Proxima. Then somebody bothered to measure the distance to this inconsequential third cousin and found that it was a hair closer, so the title of Proxima or "Nearest" was moved to this useless chunk of real estate. Then, when we set up a colony on the third planet of Alpha Centauri A (the twin of Sol), the colonists called their planet Proxima.

Eventually the astronomers who tried to shift the title to the dim companion were all dead and the colonists got their way. Just as well, because that dim star, while a hair closer today, will soon be farther away—just hold your breath a few millennia. Being "ballistically linked" it averages the same distance from Earth as the other two in the triplet.

Look at the second sketch, the one with "right ascension" across the top and "lightyears" down the side.

I must be the only person out of the hundreds in this ship who did not know that our first stop on this voyage would not be Proxima. Mr. Lopez (who was showing me the bridge) looked at me as if I were a retarded child who had just made another unfortunate slip. (But that did not matter because he is not interested in my brain.) I didn't dare explain to him that I had been snatched aboard at the last moment; it would have blown my cover. However, Miss Rich Bitch is not required to be bright.

The ship usually stops at Proxima both going and coming. Mr. Lopez explained that this time they had little cargo and only a few passengers for Proxima, not enough to pay for the stop. So that cargo and those passengers were put off until the Maxwell warps next month; this trip the Forward will call at Proxima on the way home, with cargo and, possibly, passengers from the other seven ports. Mr. Lopez explained (and I did not understand) that traveling many lightyears in space costs almost nothing—mostly rations for passengers—but stopping at a planet is terribly expensive, so any stop has to be worthwhile on the balance sheet.

So here is where we are going this trip (see second sketch again): first to Outpost, then to Botany Bay, then to The Realm, on to Midway, Halcyon, Forest, Fiddler's Green, Proxima (at last!), and on home to Earth.

I'm not unhappy about it—quite the contrary! I will get rid of this "most valuable cargo in the galaxy" less than a month after warping away from Stationary Station—then the whole long trip home will be a real tourist trip. Fun! No responsibilities. Lots of time to look over these colonies squired around by eager young officers who smell good and are always polite. If Friday (or Miss Rich Bitch) can't have fun with that setup, it is time to cremate me; I'm dead.

Now see the third sketch, declination across the top, lightyears down the side. This one makes the routing seem quite reasonable—but if you look back at the second sketch, you will see that the leg from Botany Bay to Outpost, which seems on the third sketch to skim the photosphere of Forest's sun, in fact misses it by many lightyears. Picturing this voyage actually calls for three dimensions. You can take the data from the sketches and from the table below and punch it into your terminal and pull out a three-dimensional hologram; it all makes sense seen that way. There is one on the bridge, frozen so that you can examine it in detail. Mr. Lopez, who made these sketches (all but Joe Centaur and the sad wolf) warned me that a flat plot simply could not portray three-dimensional cosmonautics. But it helps to think of these three sketches as plan view, side view, and front elevation, as in visualizing a house from its plans; that is exactly analogous.

When Mr. Lopez gave me a printout of this table, he warned me that the data are of about grammar-school accuracy. If you aim a telescope by these coordinates, you will find the right star, but for science and for cosmonautics you need more decimal places, and then correct for "epoeh"—a fancy way of saying you must bring the data up to date because each star moves. Outpost's sun moves the least; it just about keeps up with the traffic in our part of the galaxy. But the star of Fiddler's Green (Nu~2] Lupi) has a vector of 138 kilometers per second—enough that Fiddler's Green will have moved more than 1.5 billion kilometers between two visits five months apart by the Forward. This can be worrisome—according to Mr. Lopez it can worry a skipper right out of his job because whether or not a trip shows a profit depends on how closely a master can bring his ship out of hyperspace to a port planet without hitting something (such as a star!). Like driving an APV blindfolded!

But I will never pilot a hyperspaceship and Captain van Kooten has a solid, reliable look to him. I asked him about it at dinner that night. He nodded. "Ve find it. Only once haf ye had to send some of de boys down in a landing boat to buy someting at a bakery and read de signs."

I didn't know whether he expected me to laugh or to pretend to believe him, so I asked what they bought at the bakery. He turned to the lady on his left and pretended not to hear me. (The bakeshop in the ship makes the best pastry I have ever tasted and should be padlocked.)

Captain van Kooten is a gentle, fatherly man—yet I have no trouble visualizing him with a pistol in one hand and a cutlass in the other, holding off a mob of mutinous cutthroats. He makes the ship feel safe.

Shizuko is not the only guard placed on me. I think I have identified four more and I am wondering if I have them all. Almost certainly not, as I have sometimes looked around and not spotted any of them—yet the drill seems to be to have someone near me at all times.

Paranoid? It sounds like it but I'm not. I am a professional who has stayed alive through always noticing anything offbeat. This ship has six hundred and thirty-two first-class passengers, some sixty-odd uniformed officers, crew also in uniforms, and the cruise director's staff of hosts and hostesses and dancing partners and entertainers and such. The latter dress like passengers but they are young and they smile and they make it their business to see to it that the passengers are happy.

The passengers: In this ship a first-class passenger under age seventy is a rarity—me, for example. We have two teenage girls, one teenage boy, two young women, and a wealthy couple on their honeymoon. All others in first class are candidates for a geriatrics home. They are very old, very rich, and extremely self-centered—save for a bare handful who have managed to grow old without turning sour.

Of course none of these old dodderers are my guards, and neither are the youngsters. The cruise staff I got sorted out in the first fortyeight hours, whether they were musicians or whatever. I might have suspected that some of the younger officers had been assigned to watch me were it not that all of them stand duty watches, usually eight hours out of twenty-four, and therefore can't take on another full-time job. But my nose does not play me false; I know why they follow me around. I don't get this much attention dirtside but there is an acute shortage of beddable young females in this ship—thirty young male officers versus four young, single females in first class, other than Friday. With those odds a nubile female would have to have very bad breath indeed not to carry a train like a comet.

But, with all these categories accounted for, I found some men not accounted for. First class? Yes, they eat in the Ambrosia Room. Business travelers? Maybe—but according to the first assistant purser, business travelers go second class, not as swank but just as comfortable, at half the cost.

Item: When Jerry Madsen takes me to The Black Hole with his friends, here is this solitary bloke nursing a drink over in the corner. Next morning Jimmy Lopez takes me swimming; this same bloke is in the pool. In the card room I'm playing one-thumb with Tommy shadow is playing solitaire over on the far side.

Once or twice can be coincidence . . . but at the end of three days I am certain that, anytime I am outside of suite BB, some one of four men is somewhere in sight. He usually stays as far from me as the geometry of the space permits—but he's there.

Mr. Sikmaa did impress on me that I was to carry "the most valuable package any courier ever carried." But I did not expect him to find it necessary to place guards around inside this ship. Did he think that someone could sneak up and steal it out of my bellybutton?

Or are the shadows not from Mr. Sikmaa? Was the secret broached before I left Earth? Mr. Sikmaa seemed professionally careful . . . but how about Mosby and his jealous secretary? I just don't know—and I don't know enough about politics in The Realm to make any guesses.

Later: Both of the young women are part of the watchful eye over me but they close in only when and where the men cannot—the beauty parlor, the dress shop, the women's sauna, *etc.* They never bother me but I'm tired of it already. I'll be glad to deliver the package so that I can fully enjoy this wonderful trip. Luckily the best part is after we leave The Realm. Outpost is such a frost (literally!) that no groundside excursions are planned there. Botany Bay is said to be very pleasant and I must see it because it is a place to which I may migrate later.

The Realm is described as rich and beautiful and I do want to see it as a tourist—but I won't be moving there. While it is reputed to be quite well governed, it is as absolute a dictatorship as is the Chicago Imperium—I've had enough of that. But for a stronger reason I would not consider asking for an immigrant's visa: I know too much. Officially I don't know anything as Mr. Sikmaa never admitted it and I didn't ask—but I won't stretch my luck by asking to live there.

Midway is another place I want to see but don't want to live. Two suns in its sky are enough to make it special . . . but it is the Pope-in-Exile that makes it very special—to visit, not to stay. It really is true that they celebrate Mass there in public! Captain van Kooten says so and Jerry tells me that he has seen it with his own eyes and that I can see it, too—no charge, but a contribution for charity on the part of a gentile is good manners.

I'm tempted to do it. It's not really dangerous and I'll probably never have a chance like this again in my whole life.

Of course I'll check out Halcyon and Fiddler's Green. Each must be extra-special or they would not command such high prices, but I'll be looking for the joker in the deck every minute—such as that at Eden. I would hate to ask Gloria to pay a high fee to get me in . . . then discover that I hated the place.

Forest is supposed to be nothing much for a tourist—no amenities —but I want to give it a very careful look. It is the newest colony, of course, still in the log-cabin stage and totally dependent on Earth and/ or The Realm for tools and instruments.

But isn't that just the time to join a colony in order to feel great gusty joy in every minute?

Jerry just looks sour. He tells me to go look at it. . . and learn for myself that life in the forest primeval is greatly overrated.

I don't know. Maybe I could make a deal for stopover privilege: pick up this ship or one of her sisters some months from now. Must ask the Captain.

Yesterday there was a holo at the Stardust Theater that I wanted to see, a musical comedy, The Connecticut Yankee and Queen Guinevere. It was supposed to be quite funny, with romantic-revival music, and loaded with beautiful horses and beautiful pageantry. I avoided my swains and went alone. Or almost alone; I could not avoid my guards.

This man—"number three" in my mind, although the passenger list said that he was "Howard J. Bullfinch, San Diego"—followed me in and settled down right behind me . . . unusual, since they normally stayed as far away from me as the size of a room permitted. Perhaps he thought he might lose track of me after they lowered the lights; I don't know. His presence behind me distracted me. When the Queen sank her fangs into the Yankee and dragged him into her boudoir, instead of thinking about the fun going on in the holotank, I was trying to sort out and analyze all the odors that reached me—not easy in a crowded theater.

When the play was over and the lights came up, I reached the side aisle just as my shadow did; he gave way. I smiled and thanked him, then made exit by the forward door; he followed. That exit leads to a short staircase, four steps. I stumbled, fell backward, and he caught me.

"Thank you!" I said. "For that I am taking you to the Centaur Bar to buy you a drink."

"Oh, not at all!"

"Oh, most emphatically. You are going to explain to me why you have been following me and who hired you and several other things."

He hesitated. "You have made some mistake."

"Not me, Mac. Would you rather come quietly . . . or would you rather explain it to the Captain?"

He gave a little quizzical smile. (Or was it cynical?) "Your words are most persuasive even though you are mistaken. But I insist on paying for the drinks."

"All right. You owe me that. And then some."

I picked a table in the corner where we could not be overheard by other customers. . . thereby ensuring that we could be overheard by an Ear. But, aboard ship, how can one avoid an Ear? You can't.

We were served, then I said to him almost silently, "Can you read lips?"

"Not very well," he admitted at the same low level.

"Very well, let's keep it as low as possible and hope that random noise will confuse the Ear. Mac, tell me one thing: Have you raped any other helpless females lately?"

He flinched. I don't think anyone can be hit that hard and not flinch. But he paid me the courtesy of respecting my brain and showed that he was a brain, too, by answering, "Miss Friday, how did you recognize me?"

"Odor," I answered. "Odor at first; you sat too close to me. Then, as we left the theater, I forced on you a voice check. And I stumbled on the stairs and forced you to put your arms around me. That did it. Is there an Ear on us here?"

"Probably. But it may not be recording and it is possible that no one is monitoring it now."

"Too much." I worried it. Walk side by side on the promenade? An Ear would have trouble with that setup without continuous tracking, but tracking could be automatic if Mac had a beacon on him. Or I myself might be booby-trapped. Aquarius Pool? Acoustics in a swimming pool are always bad, which was good. But, damn it, I needed more privacy. "Leave your drink and come with me."

I took him to cabin BB. Shizuko let us in. So far as I could tell she stood a twenty-four-hour watch except that she slept when I did. Or I thought she did. I asked her, "What do we have later, Shizuko?"

"Purser's party, Missy. Nineteen o'clock."

"I see. Go take a walk or something. Come back in one hour."

"Too late. Thirty minutes."

"One hour!"

She answered humbly, "Yes, Missy"—but not before I caught her glance at him and his scant five-millimeter nod.

With Shizuko gone and the door bolted I said quietly, "Are you her boss or is she yours?"

"Some argument," he admitted. "Maybe 'cooperating independent agents' describes it."

"I see. She's quite professional. Mac, do you know where the Ears are in here or will we have to work out some way to defeat them? Are you willing to have your sordid past discussed and recorded on tape somewhere? I can't think of anything that would embarrass me—after all, I was the innocent victim—but I want you to speak freely."

Instead of answering he pointed: over my couch on the lounge side, over the head of my bed, into my bathroom—then he touched his eye and pointed to a spot where the bulkhead met the overhead opposite the couch.

I nodded. Then I dragged two chairs off into the corner farthest from the couch and out of line of sight for the Eye location he had indicated. I switched on the terminal, punched it for music, selected a tape featuring the Salt Lake City Choir. Perhaps an Ear could reach through and sort out our voices but I did not think so.

We sat down and I continued, "Mac, can you think of any good reason why I should not kill you right now?"

"Just like that? Without even a hearing?"

"Why do we need a hearing? You raped me. You know it, I know it. But I am giving you this much of a hearing. Can you think of any reason why you should not be summarily executed for your crime?"

"Well, since you put it that way—No, I can't."

Men will be the death of me. "Mac, you are a most exasperating man. Can't you see that I don't want to kill you and am looking for a reasonable excuse not to do so? But I can't manage it without your help. How did you get mixed up in so dirty a business as a gang rape of a blindfolded, helpless woman?"

I sat and let him stew and that's just what he did. At last he said, "I could claim that I was so deep into it by then that, if I balked at raping you, I would have been killed myself, right then."

"Is that true?" I asked, feeling contempt for him.

"True enough, but not relevant. Miss Friday, I did it because I wanted to. Because you are so sexy you could corrupt a Stylite. Or cause Venus to switch to Lesbos. I tried to tell myself that I couldn't avoid it. But I knew better. All right, do you want my help in making it look like suicide?"

"Not necessary." (So sexy I could corrupt a Stylite. What in the world is a Stylite?—must find out. He seemed to mean it as a superlative.)

He persisted. "Aboard ship you can't run away. A dead body can be embarrassing."

"Oh, I think not. You were hired to watch over me; do you think anything would be done to me? But you already know that I intend to let you get away with it. However, I want explanations before I let you go. How did you escape the fire? When I smelled you, I was astonished; I had assumed that you were dead."

"I wasn't at the fire; I ran for it before that."

"Really? Why?"

"Two reasons. I planned to leave as soon as I learned what I had come for. But mostly on your account."

"Mac, don't expect me to believe too many unlikely things. What was this you had come there to learn?"

"I never found out. I was after the same thing they were after: why you had gone to EllFive. I heard them interrogate you and I could see that you did not know. So I left. Fast."

"That's true. I was a carrier pigeon . . . and when does a carrier pigeon know what a war is about? They wasted their time, torturing me."

Swelp me, he looked shocked. "They tortured you?"

I said sharply, "Are you trying to play innocent?"

"Eh? No, no, I'm guilty as sin and I know it. Of rape. But I didn't have any notion that they had tortured you. That's stupid, that's centuries out of date. What I heard was straight interrogation, then they shot you with babble juice—and you told the same story. So I knew you were telling the truth and I got out of there. Fast."

"The more you tell me, the more questions you raise. Who were you working for, why were you doing it, why did you leave, why did they let you leave, who was that voice that gave you orders—the one called the Major—why was everybody so anxious to know what I was carrying—so anxious that they would mount a military attack and waste a lot of lives and wind up torturing me and sawing off my right tit? Why?"

"They did that to you?" (Swelp me, Mac's face was utterly impassive until I mentioned damage done to my starboard milk gland. Will somebody explain males to me? With diagrams and short words?)

"Oh. Complete regeneration, functional as well as cosmetic. I'll show you—later. If you answer my questions fully. You can check it against how it used to look. Now back to business. Talk."

Mac claimed to have been a double agent. He said that, at the time, he was an intelligence officer in a quasimilitary hired out to Muriel Shipstone Laboratories. As such, and working alone, he had penetrated the Major's organization—"Wait a minute!" I demanded. "Did he die in the fire? The one called the Major?"

"I'm fairly sure he did. Although Mosby may be the only one who knows."

"Mosby? Franklin Mosby? Finders, Incorporated?"

"I hope he doesn't have brothers; one is too many. Yes. But Finders, Inc. is just a front; he's a stooge for Shipstone Unlimited."

"But you said you were working for Shipstone, too—the laboratories."

Mac looked surprised. "But the whole Red Thursday ruckus was an intramural fight amongst the top boys; everybody knows that."

I sighed. "I seem to have led a protected life. All right, you were working for Shipstone, one piece of it, and as a double agent you were working for Shipstone, another piece of it. But why was I the bone being fought over?"

"Miss Friday, I don't know; that is what I was supposed to find out. But you were believed to be an agent of Kettle Belly Bal—"

"Stop right there. If you are going to talk about the late Dr. Baldwin, please do not use that dreadful nickname."

"Sorry. You were thought to be an agent of System Enterprises, that is to say, of Dr. Baldwin, and you confirmed it by going to his headquarters—"

"Stop again. Were you part of the gang that jumped me there?"

"I am happy to say that I was not. You killed two and one died later and none of them was unhurt. Miss Friday, you're a wildcat."

"Go on."

"Ket—Dr. Baldwin was a mugwump, a maverick, not part of the system. With Red Thursday being mounted—"

"What's Red Thursday got to do with this?"

"Why, everything. Whatever it was that you carried was bound to affect the timing, at least. I think the Council for Survival—that's the side Mosby's goons were working for—got the wind up and moved before they were ready. Perhaps that's why nothing much ever came of it. They compromised their differences in the boardrooms. But I've never seen an analysis."

(Nor had I, and now I probably never would. I longed for a few hours at the unlimited-service terminal I had had at Pajaro Sands. What directors if any had been killed on Red Thursday and its sequelae? What had the stock market done? I suspect that all really important answers never get into the history books. Boss had been requiring me to learn the sort of things that would eventually have led me to the answers—but he had died and my education stopped abruptly. For now. But I would still feed the Elephant's Child! Someday.)

"Mac, did Mosby hire you for this job? Guarding me in this ship.

"Eh? No, I've only had that one contact with Mosby and that under a phony. I was hired for this through a recruiter working for a cultural attaché of the Ambassador for The Realm in Geneva. This job isn't one to be ashamed of, truly. We are taking care of you. The best care."

"Must be dull with no rape."

"Ouch."

"What are your instructions about me? And how many of you are there? You're in charge, are you not?"

He hesitated. "Miss Friday, you are asking me to tell my employer's secrets. In the profession we don't do that . . . as I think you know."

"Fiddlesticks. You knew when you walked in that door that your life depended on answering my questions. Think back to that gang that jumped me on Dr. Baldwin's farm—think what happened to them. Then speak up."

"I've thought about it, many times. Yes, I'm in charge . . . except, possibly, for Tilly—"

"Which one is Tilly?"

"Sorry. Shizuko. That's a professional name. At UCLA she was Matilda Jackson. We all had been waiting in the Sky High Hotel almost two months—"

"'We,' plural. Name them. Ship's roster names. And don't try to stall me with guff about the mercenary's code; Shizuko will be back in a few minutes."

He named them—no surprises; I had spotted them all. Clumsy. Boss would never have tolerated it. "Go on."

"We waited and the Dirac warped without us and only twenty-four hours before warping time for the Forward we were suddenly alerted to leave in the Forward. Then I was supplied with color holos of you for us to study—and, Miss Friday, when I saw your picture, I almost fainted."

"Pictures were that bad? Oh, come, now."

"Huh? No, they were quite good. But consider where I saw you last. I thought that you had died in that fire. I, uh, well, you might say I had grieved over you. Some at least."

"Thank you. I think. Okay, seven, with you in charge. This trip isn't cheap, Mac; why do I need seven chaperons?"

"I had thought that you might tell me. Not that it is any of my business why you are making this trip. All I can tell you are my instructions. You are to be delivered to The Realm in perfect condition. Not a hangnail, not a bruise, not a sniffle. When we arrive, an officer of the palace guard comes aboard and then you're his problem. But we don't get paid our delivery bonus until you've had a physical examination. Then we are paid, and we deadhead home."

I thought about it. It was consistent with Mr. Sikmaa's worry over the "most valuable package a courier ever carried"—but there was something phony about it. The old belt-and-suspenders redundant backups principle was understandable—but seven people, full-time, just to see that I did not fall downstairs and break my neck? It did not taste right.

"Mac, I can't think of anything else to ask you now, and Shizuko—I mean 'Tilly'—is due back. We'll talk later."

"Very well. Miss Friday, why do you call me Mac?"

"That's the only name I've ever heard you called. Socially, I mean. At a gang rape we both attended. I'm reasonably sure that you are not 'Howard J. Bullfinch.' What do you prefer to be called?"

"Oh. Yes, I was Mac on that mission. But I'm usually called Pete."

"Your name is Peter?"

"Uh, well, not exactly. It's—Percival. But I'm not called that."

I refrained from laughing. "I don't see why not, Pete. Brave and honorable men have been named Percival. I think that's Tilly at the door, anxious to bathe me and to dress me. One last word: Do you know why you are still breathing? Not dead?"

"??No.??"

"Because you let me pee. Thank you for letting me pee before you handcuffed me to that bed."

He suddenly looked wry. "I got chewed out for that."

"You did? Why?"

"The Major intended to force you to wet the bed. He figured that it would help to make you crack."

"So? The bloody amateur. Pete, that was the point at which I decided that you were not totally beyond hope."

XXX

::Inde~P

Outpost isn't much. Its sun is a G8 star, which puts it pretty far down the list of Sol-like stars since Sol is a G2. This is markedly cooler than our solar system star. But the star is not that important as long as it is a sol-type (G-type) star. (It may be possible to colonize around other types of stars someday but it seems reasonable to stick to stars with spectral distributions that match the human eye and don't pass out too much lethal radiation—I'm quoting Jerry. Anyhow there are over four hundred G-type stars no farther from Earth than is The Realm—so says Jaime Lopez—which could keep us busy for a few years.)

But assume a G-type star. Then you need a planet the right distance from it for it to be warm but not too warm. Then its surface gravity should be strong enough to hold its atmosphere firmly in place. That atmosphere must have had time to cook, in connection with evolving life, long enough to offer air suitable for life-as-we-know-it. (Life-as-we-don't-know-it is a fascinating subject but has nothing to do with colonization by Earth people. Not this week. Nor are we discussing colonies of living artifacts or cyborgs. This is about colonists from Dallas or Tashkent.)

Outpost just barely qualifies. It's a poor relation. Its sea-level oxygen is so scanty that one needs to walk slowly, as on top of a high mountain. It sits back so far from its star that it has just two sorts of weather, cool and freezing. Its axis stands almost straight up; it gets

its seasons from an eccentric orbit—so you don't go south for the winter because the winter comes to you wherever you are. There is a growing season of sorts about twenty degrees each side of the equator but the winter is much longer than the summer—of course. That "of course" refers to Kepler's Laws, the one about radius vectors and equal areas. (I cribbed most of this out of the Daily Forward.) When the prizes were handed out, Outpost was ahint the door.

But I was frantically eager to see it.

Why? Because I had never been farther away from home than Luna—and Luna almost is home. Outpost is over forty lightyears from Earth. Do you know how many kilometers that is? (Neither did I.) Here's what it is:

300,000 x 40.7 x 31,557,600 = 385,318,296,000,000 kilometers.

Round it off. Four hundred million million kilometers.

Ship's schedule called for us to achieve stationary orbit (22.1 hours orbital period, that being the length of the day at Outpost) at oh-two-four-seven and for the starboard landing boat to drop away very early in the morning (ship's time "morning")—oh-three hundred sharp. Not many signed up for the ride—that's all it would be since no passenger would set foot on the ground—as the midwatch isn't too popular an hour with most of our passengers.

But I would as lief miss Armageddon. I left a good party and went to bed at twentytwo hundred in order to soak up several hours of sleep before rise and shine. I got up at two o'clock and ducked into my bathroom, latching the door behind me—if I don't latch it, Shizuko comes straight in behind me; I learned that my first day in the ship. She was up and dressed when I woke up.

Latched the door behind me and promptly threw up.

This surprised me. I am not immune to motion sickness but I had not been bothered this trip. Riding the Beanstalk plays hob with my stomach and it goes on for endless hours. But in the Forward I had noticed one surge when we warped into hyperspace, then just before dinner last night when we broke into normal space I had felt a similar tremor, but the bridge had warned us to expect it.

Did the (artificial) gravity feel steady now? I couldn't be sure. I was quite dizzy but that might be an aftereffect of vomiting—for I had certainly thrown up as thoroughly as if I had been riding that goddam Beanstalk.

I rinsed my mouth, brushed my teeth without dentifrice, rinsed my mouth again, and said to myself, "Friday, that's your breakfast; you are not going to let an unexpected case of Beanstalk tummy keep you from seeing Outpost. Besides, you've gained two kilos and it is time to cut down on the calories."

Having given my stomach that fight talk and then turned it over to mind-control discipline, I went out, let Tilly-Shizuko help me into a heavy jump suit, then headed for the starboard landing-boat airlock, with Shizuko paddling along behind, carrying heavy coats for each of us. At first I had been inclined to be chummy with Shizuko, but after deducing, then confirming, her true role, I tended to resent her. Petty of me, no doubt. But a spy is not entitled to the friendly consideration that a servant always rates. I was not rude to her; I simply ignored her much of the time. This morning I did not feel sociable at best.

Mr. Woo, purser's assistant in charge of ground excursions, was at the airlock with a clipboard. "Miss Friday, your name isn't on my list."

"I certainly signed up. Either add it to your list or call the Captain."

"I can't do that."

"So? Then I am going on a sit-down strike right in the middle of your airlock. I don't like this, Mr. Woo. If you are trying to suggest that I should not be here because of some clerical error in your office, I shall like it still less."

"Mmm, I suppose it is a clerical error. There's not much time, so why don't you go in, let them show you to a seat, and I'll straighten it out after I get these other people checked off."

He did not object to Shizuko's following me. We went forward along a long passageway—even the landing boats of the Forward are enormous—following arrows that said "This Way to Bridge" and arrived in a fairly large room, something like the interior of an omnibus APV: dual controls up front, seats for passengers behind, a big windshield—and for the first time since we left Earth I was seeing "sunlight."

The light of Outpost's sun, it was, lighting a white, very white, curve of planet ahead, with black sky beyond. The sunstar was itself not in sight. Shizuko and I found seats and fastened seatbelts, the five-way sort used in SBs. Knowing that we were going by antigrav I was going to let it go simply with fastening the lap belt. But my little shadow twittered over me and fastened everything.

After a while Mr. Woo came looking, finally spotted me. He leaned across the man between me and the aisle and said, "Miss Friday, I'm sorry but you still aren't on the list."

"What did the Captain say?"

"I couldn t reach him."

"That's your answer then. I stay."

"I'm sorry. No."

"Really? Which end are you going to carry? And who is going to help you carry me? For you will have to drag me kicking and screaming and, I assure you, I do kick and scream."

"Miss Friday, we can't have this."

The passenger next to me said, "Young man, aren't you making a fool of yourself? This young lady is a first-class passenger; I've noticed her in the dining room—at the Captain's table. Now get that silly clipboard out of my face and find something better to do."

Looking worried—junior pursers always look worried—Mr. Woo went away. After a bit the red light came on, the siren sounded, and a loud voice said, "Leaving orbit! Prepare for surges in weight."

I had a miserable day.

Three hours to get down to the surface, two hours on the ground, three hours to get back up to stationary orbit—the trip down had music varied by an amazingly dull lecture on Outpost; the trip back had nothing but music, which was better. The two hours on the ground might have been okay had we been able to leave the landing craft. But we had to stay inboard. We were allowed to unbelt and go aft to what was called the lounge but was really just a space with a coffee-and-sandwiches bar on the port side and transparent ports on the after end. Through these you could see the migrants getting out on the deck below and cargo being unloaded.

Low rolling hills covered with snow . . . some sort of stunted growth in the middle distance. . . near the ship low buildings connected by snow sheds. The immigrants were all bundled up but they wasted no time in hurrying toward the buildings. The cargo was going onto a string of flatbed trucks pulled by a machine of some sort that puffed out clouds of black smoke . . . exactly the sort of thing you see pictured in children's history books! But this was not a picture.

I heard one woman say to her companion, "Why would anyone decide to settle here?"

Her companion made some pious answer about "the Lord's will" and I moved away. How can anyone get to be seventy years old (she was at least that) without knowing that no one "decided" to settle on Outpost. . . except in the limited sense that one "decides" to accept transportation as the only alternative to death or life imprisonment?

My stomach still felt queasy so I did not risk the sandwiches, but I thought a cup of coffee might help—until I whiffed it. Then I went straight to the rest rooms forward of the lounge, and won the title of "Ironjaw Friday." I won it fair and square but nobody knows about it but me—I found the stalls all occupied and had to wait. . . and wait I did, jaw muscles rigid. After a century or two a stall was vacated and I grabbed it and threw up again. Dry heaves, mostly—I should not have smelled the coffee.

The trip back up was endless.

Once in the Forward I called my friend Jerry Madsen, the junior ship's surgeon, and asked to see him professionally. By ship's rules the medical department holds clinic at oh-nine hundred each day, then handles only emergencies at other times. But I knew that Jerry would be willing to see me, whatever the excuse. I told him that it was nothing serious; I just wanted to get from him some of those pills he prescribed for old ladies with jumpy tummies—the motionsickness pills. He asked me to meet him at his office.

Instead of having the pills waiting for me he ushered me into an examination room and closed the door. "Miss Friday, shall I send for a nurse? Or would you rather be seen by a female doctor? I can call Dr. Garcia but I hate to wake her; she was up most of the night."

I said, "Jerry, what is this? When did I stop being Marj to you? And why the prissy protocol? I just want a handful of those seasick pills. The little pink ones."

"Sit down, please. Miss Friday—okay, Marj—we don't prescribe that drug or its derivatives for young females—to be precise, females of childbearing age—without making certain that they are not pregnant. It can cause birth defects."

"Oh. Set your mind at rest, lover boy; I am not knocked up."

"That's what we are here to find out, Marj. If you are—or if you become so—we have other drugs that will make you comfortable."

Ah so! The dear thing was just trying to take care of me. "Boss man, suppose I tell you, Cub Scout honor, that I ain't done nothin' a-tall for my last two periods? Although several have tried. You among them."

"Why, I would say, 'Take this cup and get me a urine sample' and then I'll take a blood sample, and a saliva sample. I've dealt before with women who hadn't done nothin'."

"You're a cynic, Jerry."

"I'm trying to take care of you, dear."

"I know you are, you sweet thing. All right, I'll go along with the nonsense. If the mouse squeals—"

"It's a gerbil."

"If the gerbil says yes, you can notify the Pope-in-Exile that it's happened at last, and I'll buy you a bottle of champagne. This has been the longest dry spell of my life."

Jerry took his samples and did nineteen other things, and gave me a blue pill to take before dinner and a yellow pill to make me sleep and another blue pill to take before breakfast. "These don't have quite the authority of the stuff you asked for but they will do and they don't cause a baby to be born with his feet on backwards or some such. I'll call you tomorrow morning as soon as I'm through with office hours."

"I thought that pregnancy tests today were service-while-you-wait?"

"Get along with you. Your great-grandmother used to find out through her waistband becoming too tight. You're spoiled. Just hope I don't have to run the test over."

So I thanked him and kissed him, which he pretended to try to avoid but not very hard. Jerry is a lamb.

The blue pills did let me eat dinner and breakfast.

I stayed in my cabin after breakfast. Jerry called about on time. "Brace yourself, Marj. You owe me a bottle of champagne."

"What?" Then I quieted down for Tilly's benefit. "Jerry, you are certifiably insane. Out of your skull."

"Certainly," he agreed. "But that's no handicap in this business. Stop in and we'll discuss a regime for you. Say at fourteen?"

"Say at right now. I want to talk to that gerbil."

Jerry convinced me. He went over the details, showing just how each test was conducted. Miracles do happen and I was demonstrably pregnant . . . so that's why my breasts had been feeling sort of tender lately. He had a little pamphlet for me, telling me what to do, what to eat, how to bathe, what to avoid, what to expect, and dreary so forth. I thanked him and took it and left. Neither of us mentioned the possibility of abortion and he made no wisecracks about women 'who hadn't done nothin'."

Only I hadn't. Burt was the last time and that was two periods back and anyhow I had been rendered surgically sterile at menarche and had never used contraception of any sort in all my very busy social life. All those hundreds and hundreds of times and now he tells me I'm pregnant!

I am not totally stupid. Having accepted the fact, the old Sherlock Holmes rule told me when and where and how it had happened. Once back in cabin BB I went into the bathroom, latched the door, took off my clothes, and lay down on the floor—spread both hands around my navel, tensed my muscles, and pushed.

A little nylon sphere popped out and I grabbed it.

I examined it carefully. No doubt about it; this was the same little marble I had worn in there since the trick surgery was done to me, always worn except when I was carrying a message there. Not a container for an ovum in stasis, not a container for anything—just a small, featureless, translucent sphere. I looked at it again and popped it back in.

So they had lied to me. I had wondered at the time about "stasis" at body temperature because the only stasis for living tissues I had ever heard of involved cryogenic temperatures, liquid nitrogen or lower.

But that was Mr. Sikmaa's problem and I don't claim to be a biophysicist—if he had confidence in his scientists, it was not my place to argue. I was a courier; my sole responsibility was to deliver the package.

What package? Friday, you know durn well what package. Not one in your navel. One about ten centimeters farther inside. One that was planted in you one night in Florida when you were induced to sleep sounder than you knew. One that takes nine months to unload. That postpones your plans to complete the Grand Tour, does it not? If this fetus is what it has to be, they won't let you leave The Realm until after you unload.

If they wanted a host mother, why the blinkin' hell didn't they say so? I would have been reasonable about it.

Wait a moment! The Dauphiness has to give birth to this baby. That is what the whole hankypanky is about: an heir to the throne, free of any congenital defects, from the Dauphiness—unarguably from the Dauphiness, born in the presence of about four court physicians and three nurses and a dozen members of the court. Not you, you mongrel AP with the phony birth certificate!

Which took me back to the original scenario with just the slightest variation: Miss Marjorie Friday, wealthy tourist, goes groundside on The Realm to enjoy the glories of the imperial capital . . . and catches a bad cold and has to go to hospital. And the Dauphiness is brought to the same hospital and—no, hold it! Would the Dauphiness do anything so plebeian as to be a patient in a hospital open to tourists?

Okay, try this: You enter hospital with a bad cold, as instructed. About three in the morning you go out the back door on a meat wagon with a sheet draped over you. You wind up in the Palace. How soon? How long will it take the Palace physicians to fiddle her royal body chemistry into receptiveness for the fetus? Oh, forget it, Friday; you don't know and don't have to know. When she is ready, they place both of you on operating tables and spread your legs and take it out of you and plant it in her, while it's small and no problem.

Then you get paid a fancy price and you leave. Does The First Citizen thank you? Probably not in person. But possibly incognito if—Stop it, Friday! Don't daydream; you know better. At a lecture clear back in basic—one of Boss's orientation lectures, it was—"The trouble with this sort of mission is that, after an agent has successfully completed it, something permanent happens to that agent, something that keeps him from talking, then or later. So, no matter how lavish the fee, it is well to avoid this class of mission."

XXXI

During the leg to Botany Bay I mulled that thought over and over, trying to find some flaw in it. I recalled the classic case of J. F. Kennedy. His putative assassin had been killed (assassinated) too quickly for even a preliminary hearing. Then there was that dentist who had gunned down Huey Long—gunned down himself a few seconds later. And any number of agents during the long Cold War who had lived just long enough to carry out their missions and "just happened" to walk in front of speeding vehicles.

But the picture that kept coming back to my mind was so old that it is almost mythology: A lonely beach and a pirate chief supervising the burying of treasure. The hole is dug, the chests of loot placed therein—and the men who dug the hole are shot; their bodies help to fill the hole.

Yes, I'm being melodramatic. But it is my womb we are talking about, not yours. Everybody in the Known Universe knows that the father of the present First Citizen climbed to the throne over uncounted dead bodies and his son stays on that throne by being even more ruthless than his father.

Is he going to thank me for having improved his line? Or is he going to bury my bones in his deepest dungeon?

Don't kid yourself, Friday; knowing too much is a capital offense. In politics it always has been. If they ever had any intention of treating you fairly, you would not be pregnant. Therefore you are forced to assume that they will not treat you fairly after they take this royal fetus out of you.

What I had to do was obvious.

What was not obvious was how I could do it.

It no longer seemed a clerical error that my name had not been on the list to go down to the surface at Outpost.

At the cocktail hour the next evening I saw Jerry and asked him to dance with me. It was a classic waltz, which brought my face close enough to his to talk privately. "How's the tummy?" he asked.

"The blue pills do the trick," I assured him. "Jerry, who knows about this besides you and me?"

"Now there's an odd thing. I've been so busy that I haven't had time to enter anything in your medical folder. The notes are in my safe."

"So? How about the lab technician?"

"He's been so overworked that I ran those tests myself."

"Well, well. Do you think that there is a possibility that those notes might be lost? Burned, maybe?"

"We never burn anything in the ship; it annoys the airconditioning engineer. Instead we shred and recycle. Fear not, little girl; your shameful secret is safe with me."

"Jerry, you're my pal. Dear, if it hadn't been for my maid, I think I could have blamed this baby on you. My first night in the ship—remember?"

"I'm not likely to forget. I had an attack of acute frustration."

"Having a maid along is not my idea; my family planted her on me, and she sticks to me like a leech. One would think my family does not trust me merely because they know they can't—as you know all too well. Can you think of a way to avoid her chaperonage? I'm feeling very pliable. With you. A man I can trust with secrets."

"Um. I must give it some thought. My stateroom is no good; you have to pass two dozen other officers' rooms and go through the wardroom to reach it. Watch it; here comes Jimmy."

Yes, of course I was trying to bribe him into silence. But besides that I was grateful and felt that I owed him something. If congress with my unvirgin carcass was what he wanted (and it was), I was willing—and willing on my own account, too; I had been quite underprivileged lately and Jerry is an attractive man. I was not embarrassed over being pregnant (although the idea was decidedly novel to me) but I did want to keep my condition secret (if possible—if there were not already a platoon of people in the ship who knew of it!)—keep it secret, if it was, while I sorted out what to do.

The extent of my predicament may not be clear; maybe I had better draw a diagram. If I went on to The Realm, I expected to be killed in a surgical operating room, all quiet and legal and proper. If you don't believe that such things can happen, we aren't living in the same world and there is no point in your reading any more of this memoir. Throughout history the conventional way of dealing with an awkward witness has been to arrange for him to stop breathing.

This might not happen to me. But all the signs suggested that it would—if I went to The Realm.

Just stay aboard? I thought of that. . . but Pete-Mac's words echoed in my ears: "When we arrive, an officer of the palace guard comes aboard and then you're his problem." Apparently they weren't even going to wait for me to go groundside and pretend to fall ill.

Ergo, I must leave the ship before we reached The Realm—i.e., Botany Bay, no other choice.

Simple. Just walk off the ship.

Oh, sure! Walk down the gangway and wave goodbye from the ground.

This is not an ocean ship. The closest the Forward ever gets to a planet is its stationary orbit—for Botany Bay that is about thirty-five thousand kilometers. That's a long way to go in some very thin vacuum. The only possible way I could get down to the surface of Botany Bay would be in one of the ship's landing boats, just as I had at Outpost.

Friday, they are not going to let you walk aboard that landing boat. At Outpost you bulled your way aboard. That has alerted them; you won't manage it a second time. What will happen? Mr. Woo or somebody will be at the airlock with a list—and again your name is not on it. But this time he has an armed master-at-arms with him. What do you do?

Why, I disarm him, bang their heads together, step over their unconscious bodies, and take a seat. You can do it, Friday; you've been trained for it and genetically designed for just that sort of rough stuff.

Then what happens? The landing boat does not leave on time. It waits in its cradle while a squad of eight comes in and by brute force and a tranquilizer dart takes you out of the boat and locks you into cabin BB—where you stay until that officer of the palace guard takes custody of your carcass.

This is not a problem rough stuff can solve.

That leaves sweet talk, sex appeal, and bribery.

Wait! What about honesty?

Huh?

Certainly. Go straight to the Captain. Tell him what Mr. Sikmaa promised you, tell him how you were swindled, get Jerry to show him the pregnancy report, tell him that you are frightened and have decided to wait on Botany Bay until some ship calls that is headed back to Earth, not to The Realm. He's a sweet, fatherly old dear; you've seen pictures of his daughters—he'll take care of you!

What would Boss's opinion be of that?

He would note that you sit on the Captain's right—why?

You were given one of the ship's most posh cabins at the last minute—why?

Space was found for seven others, people who spend all their time watching you—do you think the Captain does not know this?

Somebody took your name off the ground-trip list for Outpost—who?

Who owns HyperSpace Lines? Thirty percent is owned by Interworld, which in turn is owned or controlled by various segments of the Shipstone group. And you noticed that 11 percent was owned by three banks on The Realm—you noticed this because other chunks of Shipstone companies were owned from The Realm.

So don't expect too much from sweet old Captain van Kooten. You can hear him now: "Oh, I don't zink so. Mr. Sikmaa is a goot friend of mine; I haf known him for years. Yes, I did promise him zat no chances would be taken wiz your safety; zat's vy I can't let you go down to vild, uncivilized planets. But yen ye go back, I show you real, goot time on Halcyon, I promise. Now you yust be a goot girl and not make me any more troubles—henh?"

He might even believe it.

He almost certainly knows that you are not "Miss Rich Bitch" and probably has been told that you contracted as a host mother (probably not told that it was for the Royal Family—although he may guess it) and he would simply think that you are trying to welch on a legal and equitable contract. Friday, you have not one word in writing that would even tend to indicate that you were swindled.

Don't expect help from the Captain. Friday, you're on your own.

It was only three days before our scheduled arrival at Botany Bay that any change took place. I did a lot of pondering but most of it was maundering—futile and timewasting imaginings about what I would do if I could not manage to jump ship in Botany Bay. Like this: "You heard me, Captain! I'm locking myself in my cabin until we leave The Realm. If you have the door broken down so that you can turn me over to that palace guard officer, I can't stop you—but a dead body is all you'll find!"

(Ridiculous. Sleepy gas through the air pipes is all it would take to outflank me.)

Or—"Captain, have you ever seen a knitting-needle abortion? You are invited to come watch; I understand that one can be quite bloody."

(Even more ridiculous. I can talk about abortion; I can't do it. Even though this wart inside me is no kin to me, it is nevertheless my innocent guest.)

I tried not to waste time on such useless thoughts but to concentrate my mind on subversion while continuing to behave normally. When the purser's office announced that it was time to sign up for excursions on Botany Bay, I was one of the first to show up, going over all the possibilities, asking questions, taking brochures to my cabin, and signing up for and paying cash for all the best and most expensive trips.

That night at dinner I chattered to the Captain about the trips I had picked, asked his opinions on each, and complained again about my name having been left off the list at Outpost and asked him to check on it for me this time—as if the Captain of a giant liner had nothing better to do than to run errands for Miss Rich Bitch. So far as I could see, he did not flinch under any of this—he certainly did not tell me that I could not go groundside. But he may be as steeped in sin as I am; I learned to lie with a straight face long before I left the crèche.

That evening (ship's schedule time) I found myself in The Black Hole with my first three swains: Dr. Jerry Madsen, Jaime "Jimmy" Lopez, and Tom Udell. Tom is first assistant supercargo and I had never known quite what that is. All that I really knew was that he wore one more stripe than the other two. That first night aboard Jimmy had told me solemnly that Tom was the head janitor.

Tom had not denied it. He answered, "You forgot 'furniture mover.'"

This night, less than seventy-two hours out from Botany Bay, I found out part of what Tom did. The starboard landing boat was being loaded with cargo for Botany Bay. "The port boat we loaded at Beanstalk," he told me. "But we had to load the starboard boat for Outpost. We need both of them to handle Botany Bay, so we have to shift cargo this leg." He grinned. "Lots of sweaty work."

"It's good for you, Tommy; you're getting fat."

"Speak for yourself, Jaime."

I asked how they loaded the boat. "That airlock looks pretty small to me."

"We don't move cargo through that. Would you like to see how we handle it?"

So I made a date with him for the next morning. And learned things.

The holds in the Forward are so enormous that they breed agoraphobia rather than claustrophobia. But even the holds in the landing boats are huge. Some of the items shipped are enormous, too, especially machinery. Botany Bay was receiving a Westinghouse turbogenerator—big as a house. I asked Tom how in the world they would move that?

He grinned. "Black magic." Four of his cargomen placed a metallic net around it and fastened a suitcase-size metal box to it. Tom inspected it, then said, "Okay, fire it up."

The leader—the "snapper"—did so . . . and this metal behemoth quivered and lifted a touch: a portable antigrav unit, not unlike that for an APV, but out in the open instead of built into a shell.

With extreme care, by hand, using lines and poles, they moved this thing through an enormous door and into the hold of the starboard boat. Tom pointed out that, while this huge monster was floating, free of the ship's artificial gravity, it was as ponderously massive as ever and could crush a man as easily as a man can crush an insect. "They depend on each other and have to trust each other. I'm responsible—but it's no use to a dead man for me to take the blame; they must take care of each other."

What he was really responsible for, he told me, was being certain that each item was placed by plan and was tied down solidly against surges, and also being absolutely certain that the big cargo doors, both sides, were actually vacuum-tight each time they were closed after being opened.

Tom showed me through the landing boat's migrant-passenger spaces. "We've got more new colonists for Botany Bay than for anywhere else. When we leave there, third class will be almost deserted."

"Are they all Aussies?" I asked.

"Oh, no. Lots of them are but about a third of them are not. But one thing they all do have in common; they are all fluent in English. It's the only colony with a language requirement. They are trying to ensure that their whole planet will have a single language."

"I heard something about that. Why?"

"Some notion that they are less likely to have wars. Maybe so, but the bloodiest wars in history have been fratricidal wars. No language problem."

I didn't have an opinion so I didn't comment. We left the boat through the passenger airlock and Tom closed it behind us. Then I recalled that I had left a scarf behind. "Tom, did you see it? I know I had it in the migrants' hold."

"No, but we'll find it." He turned back and unlocked the airlock door.

The scarf was where I had dropped it between two benches in the migrants' space. I flipped it around Tom's neck and pulled his face down to mine and thanked him, and let my appreciation progress as far as he cared to push it—which was pretty far but not that far as he was still on duty.

He deserved my best thanks. That door has a combination lock. Now I could open it.

When I returned from inspecting the cargo holds and the landing boat, it was almost lunchtime. Shizuko, as usual, was doing some sort of busywork (it can't take all of one woman's time to see that another woman is well groomed).

I said to her, "I don't want to go to the dining room. I want to take a quick shower, grab a robe, and eat here."

"What will Missy have? I will order."

"Order for both of us."

"For me?"

"For you. I don't want to eat alone, I just don't want to have to dress up and go to the dining room. Don't argue; just punch for the menu." I headed for the bath.

I heard her start to order but by the time I switched off the shower she was ready with a big fluffy towel, with a smaller one wrapped around her, the perfect bath girl. When I was dry and she had helped me into a robe, the dumbwaiter was chiming. While she opened the delivery drawer, I pulled a small table over into the corner where I had talked with Pete-Mac. Shizuko raised her eyebrows but did not argue; she started laying out lunch on it. I set the terminal for music and again punched up a tape with some loud singing, classic rock.

Shizuko had set only one place at the table. I said, facing her so that my words would reach her through the music, "Tilly, put your plate there, too."

"What, Missy?"

"Knock it off, Matilda. The farce is over. I've set this up so that we can talk."

She barely hesitated. "Okay, Miss Friday."

"Better call me Marj so that I won't have to call you Miss Jackson. Or call me Friday, my real name. You and I have got to take our hair down. By the way, your lady's-maid act is perfect, but there is no longer any need to bother with it when we're in private. I can dry myself after a bath."

She almost smiled. "I rather enjoy taking care of you, Miss Friday. Marj. Friday."

"Why, thank you! Let's eat." I spooned sukiyaki over onto her plate.

After some chomping—conversation goes better with food—I said, "What do you get out of it?"

"Out of what, Marj?"

"Out of riding herd on me. Turning me over to the palace guard on

The Realm."

"Contract rates. Paid to my boss. There is supposed to be a bonus in it for me but I believe in bonuses only when I spend them."

"I see. Matilda, I'm cutting out at Botany Bay. You're going to help me."

"Call me Tilly. I am?"

"You are. Because I'm going to pay you a large chunk more than you would get otherwise."

"Do you really think you can switch me that easily?"

"Yes. Because you have just two choices." Between us was a large stainless-steel serving spoon. I picked it up, squeezed the bowl, crushed it. "You can help me. Or you can be dead. Rather quickly. Which is it?"

She picked up the mutilated spoon. "Marj, you don't have to be so dramatic. We'll work something out." With her thumbs she ironed out the crumpled steel. "What's the problem?"

I stared at the spoon. " 'Your mother was a test tube—'

" '—and my father was a knife.' So was yours. That's why I was recruited. Let's talk. Why are you jumping ship? I'll catch hell if you do."

"I'll be dead if I don't." Without trying to hold back, I told her about the deal I had made, how I had turned up pregnant, why I thought my chances of living through a visit to The Realm were slim. "So what does it take to persuade you to look the other way? I think I can meet your price."

"I'm not the only one watching you."

"Pete? I'll handle Pete. The other three men and the other two women I think we can ignore. If I have your active help. You—you and Pete—are the only professionals. Who recruited these others? Clumsy."

"I don't know. I don't know who hired me, for that matter; it was done through my boss. Perhaps we can forget the others—depends on your plan."

"Let's talk money."

"Let's talk plans first."

"Uh . . . do you think you can imitate my voice?"

Tilly answered, "'Uh . . . do you think you can imitate my voice?'"

"Do that again!"

"'Do that again!'"

I sighed. "Okay, Tilly, you can do it. The Daily Forward says that breakout near Botany Bay is sometime tomorrow and, if the figures are as sharp as they were for Outpost, we'll hit stationary orbit and put boats down about midday the day after tomorrow—less than fortyeight hours from right now. So tomorrow I fall ill. Very sad.

Because I had had my heart set on going down to the surface for all those wonderful excursions. The exact timing on my plan depends on when those landing boats are scheduled, which must wait—if I understand the matter—until we break out into normal space and they can predict exactly when we will hit stationary orbit. Whenever that is, the night before the boats go down, around oh-one hundred when the corridors are empty, I leave. From there on you're both of us. You don't let anyone in; I'm too ill.

"If anyone calls for me by terminal, be careful not to switch on the video pickup—I never do. You're both of us on anything you can handle, or, if you can't, I'm asleep. If you start to impersonate me and it gets too sticky, why, you're just so fogged up with fever and medicine that you're not coherent.

"You'll order breakfast for both of us—your usual breakfast for you, and tea and milk toast and juice for the invalid."

"Friday, I can see that you're planning on stowing away in a landing boat. But the doors to the landing boats are always locked when not in use. I know."

"So they are. Not your worry, Til."

"All right. Not my worry. Okay, I can cover for you after you leave. What do I tell the Captain after you've gone?"

"So the Captain is in on it. I thought so."

"He knows about it. But we get our orders from the purser."

"Makes sense. Suppose I arrange for you to be tied up and gagged and your story is that I jumped you and did it to you. I can't, of course, because you have to be both of us from very early morning to whatever time the boats leave. But I can arrange to have you tied and gagged. I think."

"That would certainly improve my alibi! But who is the philanthropist?"

"You remember our first night in the ship? I came in late, with a date. You served us tea and almond cakes."

"Doctor Madsen. You're counting on him?"

"I think so. With your help. That night he was kind of eager."

She snorted. "His tongue was dragging on the rug."

"Yes. It still is. Tomorrow I become ill; he comes to see me, professionally. You are here, as usual. We have the lights turned off in the bedroom end. If Dr. Jerry has the steady nerves I think he has, he'll take what I'll offer. Then he'll cooperate." I looked at her. "Okay? He comes to see me the next morning—and ties you up. Simple."

Tilly sat and looked thoughtful for long moments. "No."

"No?"

"Let's keep it really simple. Don't let anyone else in on it. Not anybody. I don't need to be tied up; that would just cause suspicion.

Here's my story: Sometime not very long before the boats go down you decide that you are well; you get up, get dressed, and leave the cabin. You don't tell me your plans; I'm just the poor dumb maid—you never tell me such things. Or maybe you've changed your mind and are going on the ground excursion anyhow. It doesn't matter either way. I am not charged with keeping you in the ship. My sole responsibility is to keep an eye on you here in the cabin. I don't think it's Pete's responsibility to keep you in the ship, either. If you manage to jump ship, probably the only one who gets burned is the Captain. And I'm not crying over him."

"Tilly, I think you are right, on all points. I had assumed that you would want an alibi. But you're better off without one."

She looked at me and smiled. "Don't let that keep you from taking Dr. Madsen to bed. Enjoy yourself. One of my jobs was to keep men out of your bed—as I think you know—"

"I figured it out," I agreed dryly.

"But I am switching sides, so that is no longer the case." Suddenly she dimpled. "Maybe I should offer Dr. Madsen a bonus. When

he calls on his patient the next morning and I tell him that you're well and have gone to the sauna or something." -

"Don't offer him that sort of bonus unless you mean business. As I know that he means business." I shivered. "I'm certain."

"If I advertise, I deliver. Are we all straight?" She stood up, I followed.

"All but what I owe you."

"I've been thinking about that. Marj, you know your circumstances better than I do. I'll leave it up to you."

"But you didn't quite tell me what you are being paid."

"I don't know. My master hasn't told me."

"Are you owned?" I felt sudden distress. Any AP would.

"No longer. Or not quite. I was sold on a twenty-year indenture. Thirteen years to go. Then I'm free."

"But—Oh, God, Tilly, let's get you off the ship, too!"

She put a hand on my arm. "Take it easy. You've got me thinking about it. That's the main reason I don't want to be tied up. Marj, I'm not on the ship's rolls as indentured. Consequently I can take a groundside excursion if I can pay for it—and I can. Maybe I'll see you down there."

"Yes!" I kissed her.

She pulled me to her strongly, and the kiss gained speed. She was moaning against my tongue and I felt her hand inside my robe.

Presently I broke the kiss and looked into her eyes. "Is that how it is, Tilly?"

"Hell, yes! From the first time I bathed you."

That evening the migrants leaving the ship at Botany Bay staged a lounge show for the first-class passengers. The Captain told me that such shows were traditional and that the first-class passengers customarily contributed to a purse for the colonists—but that it was not compulsory. He himself went to the lounge that night—also traditional—and I found myself sitting with him. I used the opportunity to mention that I was not feeling well. I added that I might have to cancel my reservations for dirtside excursions. I groused about it a bit.

He told me that, if I did not feel perfectly fit, I certainly should not risk exposing myself on the surface of a strange planet—but not to worry about missing Botany Bay, which wasn't much at best. The rest of the trip was the wonderful part. So be a goot girl or should I lock you in your room?

I told him that, if my tummy didn't stop acting up, it wouldn't be necessary to lock me up. The trip down to Outpost had been horrid—spacesick all the way—and I wouldn't risk anything like that again. I had laid groundwork for this by pecking at my food at dinner.

The show was amateurish but jolly—some skits but mostly group singing: "Tie Me Kangaroo Down," "Waltzing Matilda," "Botany Bay," and, for an encore, "The Walloping Window Blind." I enjoyed it but would have thought nothing of it were it not for a man in the second row of the group singers, a man who looked familiar.

I looked at him and thought: Friday, have you become the sort of careless, sloppy slitch who can't remember whether she's slept with a man or not?

He reminded me of Professor Federico Farnese. But this man was wearing a full beard, whereas Freddie had been smoothshaven—which proves nothing as there had been time enough to grow a beard and almost all men get overtaken by the beard mania one time or another. But it did make it impossible for me to be certain by looking at him. This man never sang a solo, so voice did not help.

Body odor—at a range of thirty meters no way to sort it out from dozens of others.

I was greatly tempted not to be a lady—stand up, walk straight across the dance floor, confront him: "Are you Freddie? Didn't you take me to bed in Auckland last May?"

What if he says no?

I'm a coward. What I did do was tell the Captain that I thought I had spotted an old acquaintance from Sydney among the migrants and how could I check? That resulted in my writing "Federico Farnese" on a program and the Captain passed it to the purser, who passed it to one of his assistants, who went away and came back soon with a report that there were several Eyetalian names among the migrants but no name, Eyetalian or otherwise, even vaguely like "Farnese."

I thanked him and thanked the purser and thanked the Captain—and thought about asking for a check on "Tormey" and "Perreault," but decided that it was damfoolishness; I certainly had not seen Betty or Janet—and they didn't grow beards. I had seen a face behind a full beaver—meaning I hadn't seen it. Put a full beard on a man and all you see is the shredded wheat.

I decided that all the old wives' tales about pregnant women were probably true.

XXXII

It was two hours past midnight, ship's time. Breakout into normal space had taken place on time, about eleven in the morning, and the figures had been so good that the Forward was expected to achieve stationary orbit around Botany Bay at ohseven-forty-two, several hours better than had been estimated before breakout. I was not pleased because an early morning landing-boat departure increased the hazard (I judged) that people might be prowling around the corridors in the still hours of the night.

No choice. It was rushing at me, no second chance. I finished last-minute adjustments, kissed Tilly goodbye, cautioned her with a finger to make no noise, and let myself out the door of cabin BB.

I had to go far aft and down three decks. Twice I slowed down to avoid night watchmen making their rounds. Once I ducked through a transverse passage to avoid a passenger, continued aft to the next passageway across the ship, then went back to starboard. Eventually I reached the short, dead-end corridor that led to the passenger airlock door for the starboard landing boat.

I found Mac-Pete-Percival waiting there.

I moved quickly to him, smiling, put a finger to my lips for silence, and clipped him under the ear.

I eased him to the deck, pulled him out of my way, and got to work on that combination lock—

—and discovered that it was almost impossible to read the marks on the dial, even with my enhanced night-sight. There was nothing but nightlights in the corridors and this short dead end had none of its own. Twice I muffed the combination.

I stopped and thought about it. Go back to cabin BB for a torchlight? I had none there, but perhaps Tilly had one. If she did not, should I wait until morning lights were turned on? That would be cutting it too fine; people would be stirring. But did I have a choice?

I checked Pete—still out but his heart was strong . . . and lucky for you, Pete; had I been fully triggered, you would be dead. I searched him.

I found, with no surprise, a pencil light on him—his job (tailing me) could need a torchlight, whereas Miss Rich Bitch does not bother with such things.

A few seconds later I had the door open.

I dragged Pete through, closed and locked the door, spinning the wheel both clockwise and counterclockwise. I turned back, noted that Pete's eyelids moved a touch—clipped him again.

There followed a bloody awkward chore. Pete masses about eighty-five kilos, not gross for a man. But it's twenty-five kilos more than I do and he's much bigger. I knew from Tom that the engineers were holding the artificial gravity at 0.97 gee to match Botany Bay. At that moment I could have wished for free fall or antigrav gear as I could not leave Pete behind, dead or alive.

I managed to get him up into that cross-shoulder carry that some call fireman's carry, then discovered that the best way for me to see ahead and still have a hand free for dogs on airtight doors and such was to hold Pete's pencil light in my mouth like a cigar. I really needed that light—but, given a choice, I would have felt my way through in the dark, sans unconscious body.

With only one false turn I arrived at last in that biggest cargo hold which seemed even bigger with only a pencil beam to cut through the total darkness. I had not anticipated total darkness; I had visualized the landing boat as faintly illuminated with nightlights as was the ship proper from midnight to oh-six hundred.

At last I reached the hidey-hole I had picked out the day before: that giant Westinghouse turbogenerator.

I guessed that this big mass was intended to run on gas of some sort, or possibly steam—it certainly was not meant for Shipstones. There is a lot of obsolete engineering that is still useful in the colonies but is no longer used anywhere that Shipstones are readily available. None of it is familiar to me but I was not concerned with how this thing worked; my interest lay in the fact that half of it was somewhat like a frustrum of a giant cone laid on its side—and this formed a space in the middle under the narrow end of the frustrum, a space over a meter high. Big enough for a body. Mine. Even for two, luckily, since I had this unwelcome guest whom I could neither kill nor leave behind.

That space was made downright cozy by the fact that the cargo men had placed a fitted glass tarpaulin over this monster before tying it down. I had to wiggle in, between tiedowns, then I had to strain like the very devil to drag Pete in after me. I made it. Minus some skin.

I checked him again, then peeled him. With any luck I would get a little sleep—impossible had I left one of my guards loose behind me.

Pete was wearing trousers, belt, shirt, shorts, socks, sneakers, and a sweater. I took everything off, then tied his wrists behind him with his shirt, tied his ankles with his trouser legs, fastened his ankles to his wrists with his belt behind his back—this is one hell of an awkward position, taught to me in basic as a way to discourage attempts to escape.

Then I started to gag him, using his shorts and sweater. He said quietly, "No need to do that, Miss Friday. I've been awake quite a while. Let's talk."

I paused. "I thought you were awake. But I was willing to go along with the pretense as long as you were. I assumed that you would realize that, if you gave me any trouble, I would tear off your gonads and stuff them down your throat."

"I figured something of the sort. But I didn't expect you to be quite that drastic."

"Why not? I've run into your gonads before. Not favorably. They are mine to tear off if I wish. Any argument?"

"Miss Friday, will you let me talk?"

"Sure, why not? But one peep out of you louder than a whisper and these toys come off." I made sure he knew what I meant.

"Uh! Easy there—please! The purser put us on double watch tonight. I—"

"Double watch? How?"

"Ordinarily Tilly—Shizuko—is the only one on duty from the time you go to your cabin until you get up. When you do get up, she punches a button and that tells me to set the watch. But the purser—or maybe the Captain—is itchy about you. Worries that you might try to jump ship at Botany Bay—"

I made my eyes round. "Goodness gracious! How can anyone have such wicked thoughts about little ole me?"

"I can't imagine," he answered solemnly. "But why are we here in this landing boat?"

"I'm getting ready to go sightseeing. How about you?"

"Me, too. I hope. Miss Friday, I realized that, if you were going to try to jump ship at Botany Bay, the most likely time would be tonight during the midwatch. I didn't know how you expected to get into the landing boat but I had confidence in you—and I see that my confidence is justified."

"Thank you. Some, anyhow. Who's watching the portside boat? Or is there someone?"

"Graham. Little sandy bloke. Perhaps you've noticed him?"

"Too often."

"I picked this side because you toured this boat with Mr. Udell yesterday. Day before yesterday, depending on how you figure it."

"I don't care how you figure it. Pete, what happens when you are missed?"

"I may not be missed. Joe Stupid—sorry, Joseph Steuben—the other is just my private name for him—I have instructed to relieve me after he eats breakfast. If I know Joe, he'll make no fuss at not finding me at the door; he will just sit down on the deck with his back to the door and sleep until someone comes along and unlocks it. Then he'll stay there until this boat drops away . . . whereupon he will go to his room and sack in until I look for him. Joe is steady but not bright. Which I figured on."

"Pete, it sounds as if you had planned this."

"I didn't plan to get a sore neck and a headache out of it. If you had waited long enough to let me speak, you wouldn't have had to carry me."

"Pete, if you're trying to sweettalk me into untying you, you are barking down the wrong well."

"Don't you mean 'up the wrong tree'?"

"The wrong one, in any case, and you aren't improving your chances by criticizing my figures of speech. You're in deep trouble, Pete. Give me one good reason why I shouldn't kill you and leave you here. For the Captain is right; I'm jumping ship. I can't be bothered with you."

"Well. . . one reason is that they'll find my body later this morning, while they are unloading. Then they'll be looking for you."

"I'll be many kilometers the other side of the horizon. But why would they look for me? I'm not going to leave my fingerprints on you. Just some purple bruises around your neck."

"Motive and opportunity. Botany Bay is a pretty law-abiding community, Miss Friday. You can probably talk your way out of trouble in jumping ship there—others have. But if you are wanted for a murder aboard ship, the local people will cooperate."

"I'll plead self-defense. A known rapist. Fer Gossake, Pete, what am I going to do with you? You're an embarrassment. You know I won't kill you; I can't kill in cold blood. It has to be forced on me. But if I keep you tied up—Let me see—five and three is eight, then add at least two hours before they work back to here in unloading—that's ten hours at least—and I'll have to gag you—and it's getting cold—"

"You bet it's getting cold! Could you sort of drape my sweater around me?"

"All right, but I'll have to use it later when I gag you."

"And besides being cold, my hands and feet are going to sleep. Miss Friday, if you leave me tied up this way for ten hours, I'll have gangrene in both hands and both feet—and lose them. No regeneration out here. By the time I'm back where they can do it, I'll be a permanent basket case. Kinder to kill me."

"Damn it, you're trying to work on my sympathy!"

"I'm not sure you have any."

"Look," I told him, "if I untie you and let you put your clothes back on so that you won't freeze, will you let me tie you up and gag you later without fussing about it? Or must I clip you a good deal harder than I did and knock you out cold? Run a risk of breaking your neck? I can, you know. You've seen me fight—"

"I didn't see it; I just saw the results. Heard about it."

"Same thing. Then you know. And you must know why I can do such things. 'My mother was a test tube—'

"'—and my father was a knife,'" he interrupted. "Miss Friday, I didn't have to let you clip me. You're fast . . . but I'm just as fast and my arms are longer. I knew that you were enhanced but you did not know that I am. So I would have had the edge."

I was sitting in lotus, facing him, when he made this astounding statement. I felt dizzy and wondered if I was going to throw up again. "Pete," I said, almost pleadingly, "you wouldn't lie to me?"

"I've had to lie all my life," he answered, "and so have you. However—" He paused and twisted his wrists; his bonds broke. Do you know the breaking strength of a twisted sleeve of a good shirt? It is more than that of a manila line of equal thickness—try it.

"I don't mind ruining the shirt," he said conversationally. "The sweater will cover. But I would rather not ruin my trousers; I expect to have to appear in public in them before I can get more. You can reach the knots more easily than I can; will you untie them, Miss Friday?"

"Stop calling me Miss Friday, Pete; we're APs together." I started working on the knots. "Why didn't you tell me a long time ago?"

"I should have. Other things got in the way."

"There! Oh, your feet are cold! Let me rub them. Get the circulation back."

We got some sleep, or I did. Pete was shaking my shoulder and saying quietly, "Better wake up. We must be about to ground. Some lights have come on."

A dim twilight trickled in, under, around, and through the tarpaulin covering the dinosaur we had slept under. I yawned at it. "I'm cold."

"Complaints. You had the inside of the snuggle. That's warmer than the outside. I'm frozen."

"Just what you deserve. Rapist. You're too skinny; you don't make much of a blanket. Pete, we've got to put some fat on you.

Which reminds me that we didn't have breakfast. And the thought of food—I think I'm about to throw up."

"Uh—Slide past me and sort o' heave it back into that corner. Not here where we would have to lie in it. And keep as quiet as you can; there may be someone in here by now."

"Brute. Unfeeling brute. Just for that I won't throw up."

On the whole I felt fairly good. I had taken one of the little blue pills just before leaving cabin BB, and it seemed to be holding. I had a butterfly or two in my tummy but they weren't very muscular butterflies—not the sort that shout "Lemme outa here!" I had with me the rest of the supply Dr. Jerry had given me. "Pete, what are the plans?"

"You're asking me? You planned this jailbreak, not me."

"Yes, but you are a big, strong, masculine man who snores. I assumed that you would take charge and have it all planned out while I napped. Am I mistaken?"

"Well—Friday, what are your plans? The plans you made when you didn't expect to have me along."

"It wasn't much of a plan. After we ground they are going to have to open a door, either a people door or a big cargo door; I don't care which, 'cause when they do, I go out of here like a frightened cat, running roughshod over anything or anybody in my way. . . and I don't stop until I'm a long way from the ship. I don't want to hurt anybody but I hope nobody tries too hard to stop me. . . for I won't be stopped."

"That's a good plan."

"You think so? It's not really a plan at all. Just a determination. A door opens, I crash out."

"It's a good plan because it doesn't have any fancies to go wrong. And you have one big advantage. They don't dare hurt you."

"I wish I could be sure of that."

"If you are hurt, it will be by accident, and the man who does it will be strung up by his thumbs. At least. After hearing the rest of your story I now know why the instructions to me were so emphatic. Friday, they don't want you dead-or-alive; they want you in perfect health. They'll let you escape before they will hurt you."

"Then it's going to be easy."

"Don't be too sure of it. Wildcat that you are, it has already been proved that enough men can grab you and hold you; we both know that. If they know you are gone—and I think they do—this boat was over an hour late in leaving orbit—"

"Oh!" I glanced at my finger. "Yes, we should have grounded by now. Pete, they are searching for me!"

"I think so. But there was no point in waking you until the lights came on. By now they have had about four hours to make certain that you are not on the deck above with the first-class excursionists. They will have mustered the migrants as well. So, if you are here—and not simply hiding out in the ship proper—you have to be in this cargo hold. That's an oversimplification as there are all sorts of ways to play hide-and-seek in a space as big as this boat. But they'll watch the two bottlenecks, the cargo door on this level and the passenger door on the level above. Friday, if they use enough people—and they will—and if those jimmylegs are equipped with nets and sticky ropes and tanglefoot—and they will be—they will catch you without hurting you as you come out of this boat."

"Oh." I thought about it. "Pete . . . if it comes to that, there will be some dead and wounded first. I may wind up dead myself—but they'll pay a high price for my carcass. Thanks for alerting me."

"They may not do it quite that way. They may make it very obvious that the doors are being watched in order to cause you to hang back. So they get the migrants out—I suppose you know that they go out the cargo door?"

"I didn't."

"They do. Get them out and checked off—then close the big door and shoot this place full of sleepy gas. Or tear gas and force you to come out wiping your eyes and tossing your cookies."

"Brrr! Pete, are they really equipped in the ship with those gases? I wondered."

"Those and worse. Look, the skipper of this ship operates many lightyears from law and order and he has only a handful of people he can depend on in a crunch. In fourth class this ship carries, almost every trip, a gang of desperate criminals. Of course he is equipped to gas every compartment, selectively. But, Friday, you won't be here when they use the gas."

"Huh? Keep talking."

"The migrants walk down the center aisle of this hold. Almost three hundred of them this trip; they'll be packed into their compartment tighter than is safe. So many of them this trip that I am assuming that they can't possibly all know each other in the short time they've had to get acquainted. We'll use that. Plus a very, very old method, Friday; the one Ulysses used on Polyphemus. .

Pete and I were hanging back in an almost dark corner formed by the high end of the generator and a something in a big crate. The light changed, and we heard a murmur of many voices. "They're coming," Pete whispered. "Remember, your best bet is someone who has too much to carry. There'll be plenty of those. Our clothes are okay—we don't look first class. But we must have something to carry. Migrants are always loaded down; I got the straight word on that."

"I'm going to try to carry some woman's baby," I told him.

"Perfect, if you can swing it. Hush, here they come."

They were indeed loaded down—because of what seems to me a rather chinchy company policy: A migrant can take on his ticket anything he can stuff into those broom closets they call staterooms in third class—as long as he can carry it off the ship unassisted; that's the company's definition of "hand luggage." But anything he has to have placed in the hold he pays freight charges on. I know that the company has to show a profit—but I don't have to like this policy. However, today we were going to try to turn it to our advantage.

As they passed us most of them never glanced our way and the rest seemed uninterested. They looked tired and preoccupied and I suppose they were, both. There were lots of babies and most of them were crying. The first couple of dozen in the column were strung out with those in front hurrying. Then the line moved more slowly—more babies, more luggage—and clumped together. It was coming time to pretend to be a "sheep."

Then suddenly, in that medley of human odors, of sweat and dirt and worry and fear and musk and soiled diapers, one odor cut through as crystal clear as the theme of the Golden Cockerel in Rimsky-Korsakov's Hymn to the Sun or a Wagnerian leitmotif in the Ring Cycle—and I yelped:

"Janet!"

A heavyset woman on the other side of the queue turned and looked at me, and dropped two suitcases and grabbed me. "Marjie!" And a man in a beard was saying, "I told you she was in the ship! I told you!" And Ian said accusingly, "You're dead!" and I pulled my mouth away from Janet's long enough to say, "No, I'm not. Junior Piloting Officer Pamela Heresford sends you her warmest regards."

Janet said, "That slitch!" Ian said, "Now, Jan" and Betty looked at me carefully and said, "It is she. Hello, luv! Good on you! My word!" and Georges was being incoherent in French around the edges while trying gently to take me away from Janet.

Of course we had fouled up the progress of the queue. Other people, burdened down and some of them complaining, pushed past us, through us, around us. I said, "Let's get moving again. We can talk later." I glanced back at the spot where Pete and I had lurked; he was gone. So I quit worrying about him; Pete is smart.

Janet wasn't really heavyset, not corpulent—she was simply several months gone. I tried to take one of her suitcases; she wouldn't let me. "Better with two; they balance."

So I wound up carrying a cat's travel cage—Mama Cat. And a large brown-paper parcel Ian had carried under one arm. "Janet, what did you do with the kittens?"

"They," Freddie answered for her, "have, through my influence, gained excellent positions with fine prospects for advancement as rodent-control engineers on a large sheep station in Queensland. And now, Helen, pray tell me how it chances that you, who, only yesterday it seems, were seen on the right hand of the lord and master of a great superliner, today find yourself consorting with the peasantry in the bowels of this bucket?"

"Later, Freddie. After we're through here."

He glanced toward the door. "Ah, yes! Later, with a friendly libation and many a tale. Meanwhile we have yet to pass Cerberus."

Two watchdogs, both armed, were at the door, one on each side.

I started saying mantras in my mind while chattering doubletalk inanities with Freddie. Both masters-at-arms looked at me, both seemed to find my appearance unexceptionable. Possibly a dirty face and scraggly hair acquired in the night helped, for, up to then, I had never once been seen outside cabin BB unless Shizuko had labored mightily to prepare me to fetch top prices on the auction block.

We got outside the door, down a short ramp, and were queued up at a table set just outside. At it sat two clerks with papers. One called out, "Frances, Frederick J.! Come forward!"

"Here!" answered Federico and stepped around me to go to the table. A voice behind me called out, "There she is!"—and I sat Mama Cat down quite abruptly and headed for the skyline.

I was vaguely aware of much excitement behind me but paid no attention to it. I simply wanted to get out of range of any stun gun or sticky-rope launcher or tear-gas mortar as fast as possible. I could not outrace a radar gun or even a slug rifle—but those were no worry if Pete was right. I just kept placing one in front of the other. There was a village off to my right and some trees dead ahead. For the time being the trees seemed a better bet; I kept going.

A glance back showed that most of the pack had been left behind—not surprising; I can do a thousand meters in two minutes flat. But two seemed to be keeping up and possibly closing the gap. So I checked my rush, intending to bang their heads together or whatever was needed.

"Keep going!" Pete rasped. "We're supposed to be trying to catch you.

I kept going. The other runner was Shizuko. My friend Tilly.

Once I was well inside the trees and out of sight of the landing boat I stopped to throw up. They caught up with me; Tilly held my head and then wiped my mouth—tried to kiss me. I turned my face away. "Don't, I must taste dreadful. Did you come out of the ship like that?" She was dressed in a leotard that made her look taller, more slender, more western, and much more female than I was used to in my quondam "maid."

"No. A formal kimono with obi. They're back there somewhere. Can't run in them."

Pete said irritably, "Stop the chatter. We got to get out of here." He grabbed my hair, kissed me. "Who cares what you taste like? Get moving!"

So we did, staying in the woods and getting farther from the landing boat. But it quickly became clear that Tilly had a sprained ankle and was becoming more crippled each step. Pete grumbled again.

"When you broke for it, Tilly was only halfway down the gangway from the first-class deck. So she jumped and made a bad landing. Til, you're clumsy."

"It's these damn Nip shoes; they give no support. Pete, take the kid and get moving; the busies won't do anything to me."

"Like hell," Pete said bitterly. "We three are in it together all the way. Right, Miss—Right, Friday?"

"Hell, yes! 'One for all, all for one!' Take her right side, Pete; I'll take this side."

We did pretty well as a five-legged race, not making fast time but nevertheless putting more bush between us and pursuit. Somewhat later Pete wanted to take her piggyback. I stopped us. "Let's listen."

No sound of pursuit. Nothing but the strange sounds of a strange forest. Birdcalls? I wasn't sure. The place was a curious mix of friendly and ??outr,??—grass that wasn't quite grass, trees that seemed to be left over from another geological epoch, chlorophyll that was heavily streaked with red—or was this autumn? How cold would it be tonight? It didn't seem smart to go looking for people for the next three days, in view of the ship's schedule. We could last that long without food or water—but suppose it froze?

"All right," I said. "Piggyback. But we take turns."

"Friday! You can't carry me."

"I carried Pete last night. Tell her, Pete. You think I can't handle a little Japanese doll like you?"

"Japanese doll, my sore feet. I'm as American as you are."

"More so, probably. Because I'm not very. Tell you later. Climb aboard."

I carried her about fifty meters, then Pete carried her about two hundred, and so on, that being Pete's notion of fifty-fifty. After an hour of this we came to a road—just a track through the bush, but you could see marks of wheels and horses' hooves. To the left the road went away from the landing boat and the town, so we went left, with Shizuko walking again but leaning quite a lot on Pete.

We came to a farmhouse. Perhaps we should have ducked around it but by then I wanted a drink of water more than I yearned to be totally safe, and I wanted to strap Tilly's ankle before it got bigger than her head.

There was an older woman, gray-haired, very neat and prim, sitting in a rocking chair on the front veranda, knitting. She looked up as we got closer, motioned to us to come up to the house. "I'm Mrs. Dundas," she said. "You're from the ship?"

"Yes," I agreed. "I'm Friday Jones and this is Matilda Jackson and this is our friend Pete."

"Pete Roberts, ma'am."

"Come sit down, all of you. You'll forgive me if I don't get up; my back is not what it used to be. You're refugees, are you not? You've jumped ship?"

(Bite the bullet. But be ready to duck.) "Yes. We are."

"Of course. About half the jumpers wind up first with us. Well, according to this morning's wireless you'll need to hide out at least three days. You're welcome here and we enjoy visitors. Of course you are entitled to go straight to the transient barracks; the ship authorities can't touch you there. But they can make you miserable with their endless lawyer arguments. You can decide after dinner. Right now, would you like a nice cup of tea?"

"Yes!" I agreed.

"Good. Malcolm! Oh, Malcooom!"

"What, Mum?"

"Put the kettle on!"

"What?"

"The billy!" Mrs. Dundas added, to Tilly, "Child, what have you done to your foot?"

"I think I sprained it, ma'am."

"You certainly did! You—Friday is your name?—go find Malcolm, tell him I want the biggest dishpan filled with cracked ice. Then you can fetch tea, if you will, while Malcolm cracks ice. And you, sir—Mr. Roberts—you can help me out of this chair because there are more things we'll need for this poor child's foot. Must strap it after we get the swelling down. And you—Matilda—are you allergic to aspirin?"

"No, ma'am."

"Mum! The billy's boiling!"

"You—Friday—go, dear."

I went to fetch tea, with a song in my heart.

XXXIII

It has been twenty years. Botany Bay years, that is, but the difference isn't much. Twenty good years. This memoir has been based on tapes I made at Pajaro Sands before Boss died, then on notes I made shortly after coming here, notes to "perpetuate the evidence" when I still thought I might have to fight extradition.

But when it became impossible to keep their schedule through using me, they lost interest in me—logical, as I was never anything but a walking incubator to them. Then the matter became academic when The First Citizen and the Dauphiness were assassinated together, that bomb planted in their coach.

Properly this memoir should end with my arrival on Botany Bay because my life stopped having any dramatic highlights at that point—after all, what does a country housewife have to write memoirs about? How many eggs we got last season? Are you interested? I am but you are not.

People who are busy and happy don't write diaries; they are too busy living.

But in going over the tapes and notes (and sloughing 60 percent of the words) I noticed items that, having been mentioned, should be cleared up. Janet's canceled Visa card—I was "dead" in the explosion that sank the Skip to M'Lou. Georges checked carefully in Vicksburg low town, was assured that there were no survivors. He then called Janet and Ian . . . when they were about to leave for Australia, having been warned by Boss's Winnipeg agent—so of course Janet canceled her card.

The strangest thing is finding my "family." But Georges says that the strange thing is not that they are here but that I am here. All of them were browned off, disgusted with Earth—where would they go? Botany Bay is not Hobson's choice but for them it is certainly the obvious choice. It is a good planet, much like Earth of centuries back—but with up-to-date knowledge and technology. It is not as primitive as Forest, not as outrageously expensive as Halcyon or Fiddler's Green. They all lost heavily in forced liquidation but they had enough to let them go steerage class to Botany Bay, pay their contributions to company and colony, and still have starting money.

(Did you know that here on Botany Bay, nobody locks doors—many don't have locks. Mira bile visu!)

Georges says that the only long coincidence lies in my being in the same ship they migrated in—and it almost wasn't. They missed the Dirac, then barely caught the Forward because Janet crowded it, being dead-set on traveling with a baby in her belly rather than in her arms. But of course if they had taken a later ship or an earlier ship, I still would have met them here without planning it. Our planet is about the size of Earth but our colony is still small and almost all in one area and everyone is always interested in new chums; we were certain to meet.

But what if I had never been offered that booby-trapped job? One can always "what if—" but I think that it is at least fifty-fifty that, after shopping as I had planned, I would still have wound up on Botany Bay.

"There is a destiny that shapes our ends" and I have no complaints. I like being a colonial housewife in an 8-group. It's not formally an S-group here because we don't have many laws about sex and marriage. We eight and all our kids live in a big rambling house that Janet designed and we all built. (I'm no cabinetmaker but I'm a whee! of a rough carpenter.) Neighbors have never asked snoopy questions about parentage—and Janet would freeze them if they did. Nobody cares here, babies are welcome on Botany Bay; it will be many centuries before anyone speaks of "population pressure" or "ZeePeeGee."

This account won't be seen by neighbors because the only thing I intend to publish here is a revised edition of my cookbook—a good cookbook because I am ghost writer for two great cooks, Janet and Georges, plus some practical hints for young housewives that I owe to Goldie. So here I can discuss paternity freely. Georges married Matilda when Percival married me; I think they drew straws. Of course the baby in me fell under the old test-tube-and-knife saying—a saying I have not heard even once on Botany Bay. Maybe Wendy derives some or most of her ancestry from a former royal house on The Realm. But I have never let her suspect it and officially Percival is her father. All I really know is that Wendy is free of exhibited congenital defects and Freddie and Georges say that she doesn't carry any nasty recessives either. As a youngster she was no meaner than any of the others and the usual moderate ration of spankings was enough to straighten her out. I think that she is quite a nice person, which pleases me as she is the only child of my body even though she is no relation to me.

"The only. . ." When I got her out of the oven, I asked Georges to reverse my sterility. He and Freddie examined me and told me that I could get it done. . . on Earth. Not in New Brisbane. Not for years and years. That settled that—and I found that I was somewhat relieved. I've done it once; I don't really need to do it again. We have babies and dogs and kittens underfoot; the babies don't have to be from my body any more than the kittens do. A baby is a baby and Tilly makes good ones and so does Janet and so does Betty.

And so does Wendy. Were it not impossible I would guess that she gets her horniness from her mother—me, I mean. She had not yet turned fourteen the first time she came home and said, "Mum, I guess I'm pregnant." I told her, "Don't guess about it, dear. Go see Uncle Freddie and get a mouse test."

She announced the result at dinner, which turned it into a party because, by long custom, in our family whenever a female is officially pregnant is occasion for rejoicing and merriment. So Wendy had her first pregnancy party at fourteen—and her next one at sixteen—and her next one at eighteen—and her latest one just last week. I'm glad she spaced them because I reared them, all but the newest one; she got married for that one. So I have never been short of babies to pet, even if we didn't have four—now five—no, six—mothers in this household.

Matilda's first baby has a number-one father—excellent stock. Dr. Jerry Madsen. So she tells me. So I believe. Like this: Her former master had just had her sterility reversed, intending to breed her, when he got this chance to sell her services for a high-pay fourmonths' job. So she became "Shizuko" with the shy smile and the modest bow and chaperoned me—but conversely I chaperoned her without intending to. Oh, had she tried, she might have found a little night life in the daytime . . . but the fact was that she spent almost twenty-four hours of each day in cabin BB to be sure to be there whenever I came back.

So when? The only time that it could happen. While I was huddled under that turbogenerator, half frozen, with Percival, my "maid" was in my bed with my doctor. So that young man has fine parents! Joke: Jerry now lives in New Brisbane with his sweet wife, Dian—but Tilly has not let him suspect that he has a son in our household. Is this another "startling coincidence"? I don't think so. "Medical doctor" is one of the contribution-free professions here; Jerry wanted to get married and stop spacing—and why would anyone choose to settle down on Earth when he has had opportunity to shop the colonies?

Most of our family go to Jerry now; he's a good doctor. Yes, we have two M.D.s in our family but they have never practiced; they used to be gene surgeons, experimental biologists, genetic engineers—and now they are farmers.

Janet knows who are the fathers of her first child, too—both her husbands of that time, Ian and Georges. Why both? Because she wanted it that way and Janet has a whim of steel. I've heard several versions but it is my belief that she would not choose between them for her first child.

Betty's first one is almost certainly not a knife job and may be legitimate. But Betty is such a slashing outlaw that she would rather have you believe that she caught that child at a gang bang during a masquerade ball. New Brisbane is a very quiet place but no household that has Betty Frances in it can ever be dull.

You may know more about the return of the Black Death than I do. Gloria credits my warning with having saved Luna City but it is more nearly correct to credit it to Boss—my short career as soothsayer was as Trilby to his Svengali.

Plague did not get off Earth; that was surely Boss's doing. . . although once, at the critical time, New Brisbane signaled that a landing boat could not land unless it was first exposed to vacuum, then repressurized. Sure enough, this treatment killed some rats and mice—and fleas. Its captain stopped talking about charging the drill to the colony after this showed up.

Contributions: Mail between Botany Bay and Earth/Luna takes four to eight months, roundtrip—not bad for a hundred and forty lightyears. (I once heard a tourist lady ask why didn't we use radio mail?) Gloria paid my contribution to the colony with all possible speed and was lavish in setting me up with capital—Boss's will gave her leeway. She didn't send gold here; these were bookkeeping entries in the colony's account in Luna City, under which farm implements or anything can be shipped to Botany Bay.

But Pete had little on Earth to draw on and Tilly, a quasi-slave, had nothing. I still had a piece left of that lottery windfall and all of my final paycheck and even a few shares of stock. This got my fellow jumpers out of hock—our colony never turns back a jumper but it may take him years to pay his share in the colony.

They both fussed. I fussed right back and worse. Not only is it all in the family but without the help of both Percival and Matilda I almost certainly would have been caught, then wound up on The Realm—dead. But they still insisted on paying me.

We compromised. Their payments and some from the rest of us started the Asa Hunter Bread-Upon-the-Waters Revolving Fund, used to help jumpers or any new chum.

I no longer think about my odd and sometime shameful origin. "It takes a human mother to bear a human baby." Georges told me that long ago. It's true and I have Wendy to prove it. I'm human and I belong!

I think that's all anybody wants. To belong. To be "people."

My word, do I belong! Last week I was trying to figure out why I was so short on time. I'm secretary of the Town Council. I'm program chairman of the Parents-Teacher Association. I'm troop mistress of the

New Toowoomba Girl Scouts. I'm a past president of the Garden Club, and I'm on the planning committee of the community college we're starting. Yes, I belong.

It's a warm and happy feeling.

JOB: A Comedy of Justice

Behold, happy is the man whom God correcteth:
Therefore despise not thou the chastening of The Almighty.
Job 5:17

Chapter 1

When thou walkest through the fire, thou shalt not be burned.
Isaiah 43:2

THE FIRE pit was about twenty-five feet long by ten feet wide, and perhaps two feet deep. The fire had been burning for hours. The bed of coals gave off a blast of heat almost unbearable even back where I was seated, fifteen feet from the side of the pit, in the second row of tourists.

I had given up my front-row seat to one of the ladies from the ship, delighted to accept the shielding offered by her well-fed carcass. I was tempted to move still farther back...but I did want to see the fire walkers close up. How often does one get to view a miracle?

'It's a hoax,' the Well-Traveled Man said. 'You'll see.'

'Not really a hoax, Gerald,' the Authority-on-Everything denied. 'Just somewhat less than we were led to expect. It won't be the whole village—probably none of the hula dancers and certainly not those children. One or two of the young men, with calluses on their feet as thick as cowhide, and hopped up on opium or some native drug, will go down the pit at a dead run. The villagers will cheer and our kanaka friend there who is translating for us will strongly suggest that we should tip each of the fire walkers, over and above what we've paid for the luau and the dancing and this show.

'Not a complete hoax,' he went on. 'The shore excursion brochure listed a "demonstration of fire walking". That's what we'll get. Never mind the talk about a whole village of fire walkers. Not in the contract. 'The Authority looked smug.

'Mass hypnosis,' the Professional Bore announced.

I was tempted to ask for an explanation of 'mass hypnosis'—but nobody wanted to hear from me; I was junior—not necessarily in years but in the cruise ship Konge Knut. That's how it is in cruise ships: Anyone who has been in the vessel since port of departure is senior to, anyone who joins the ship later. The Medes and the Persians laid down this law and nothing can change it. I had flown down in the Count Von Zeppelin, at Papeete I would fly home in the Admiral Moffett, so I was forever junior and should keep quiet while my betters pontificated'.

Cruise ships have the best food and, all too often, the worst conversation in the world. Despite this I was enjoying the islands; even the Mystic and the Amateur Astrologer and the Parlor Freudian and the Numerologist did not trouble me, as I did not listen.

'They do it through the fourth dimension,' the Mystic announced.

'Isn't that true, Gwendolyn!'

'Quite true, dear,' the Numerologist agreed. 'Oh, here they come now! It will be an odd number, you'll see.'

'You're so learned, dear.'

'Humph,' said the Skeptic.

The native who was assisting our ship's excursion host raised his arms and spread his palms for silence. 'Please, will you all listen! Mauruuru roa. Thank you very much. The high priest and priestess will now pray the Gods to make the fire safe for the villagers. I ask you to remember that this is a religious ceremony, very ancient; please behave as you would in your own church. Because—'

An extremely old kanaka interrupted; he and the translator exchanged words in a language not known to me Polynesian, I assumed; it had the right liquid flow to it. The younger kanaka turned back to us.

'The high priest tells me that some of the children are making their first walk through fire today, including that baby over there in her mother's arms. He asks all of you to keep perfectly silent during the prayers, to insure the safety of the children. Let me add that I am a Catholic. At this point I always ask our Holy Mother Mary to watch over our children—and I ask all of you to pray for them in your own way. Or at least keep silent and think good thoughts for them. If the high priest is not satisfied that there is a reverent attitude, he won't let the children enter the fire—I've even known him to cancel the entire ceremony.

'There you have it, Gerald,' said the Authority-on-Everything in a third-balcony whisper. 'The buildup. Now the switch, and they'll blame it on us.' He snorted.

The Authority—his name was Cheevers—had been annoying me ever since I had joined the ship. I leaned forward and said quietly into his ear, 'If those children walk through the fire, do you have the guts to do likewise?'

Let this be a lesson to you. Learn by my bad example. Never let an oaf cause you to lose your judgement. Some seconds later I found that my challenge had been turned against me and.-- somehow!—all three, the Authority, the Skeptic, and the Well-Traveled Man, had each bet me a hundred that I would not dare walk the fire pit, stipulating that the children walked first.

Then the translator was shushing us again and the priest and priestess stepped down into the fire pit and everybody kept very quiet and I suppose some of us prayed. I know I did. I found myself reciting what popped into my mind:

'Now I lay me down to sleep.
I pray the Lord my soul to keep—'

Somehow it seemed appropriate.

The priest and the priestess did not walk through the fire; they did-something quietly more spectacular and (it seemed to me) far more dangerous. They simply stood in the fire pit, barefooted, and prayed for several minutes. I could see their lips move. Every so often the old priest sprinkled something into the pit. Whatever it was, as it struck the coals it burst into sparkles.

I tried to see what they were standing on, coals or rocks, but I could not tell...and could not guess which would be worse. Yet this old woman, skinny as gnawed bones, stood there quietly, face placid, and with no precautions other than having tucked up her lava-lava so that it was almost a diaper. Apparently she fretted about burning her clothes but not about burning her legs.

Three men with poles had been straightening out the burning logs, making sure that the bed of the pit was a firm and fairly even footing for the fire walkers. I took a deep interest in this, as I expected to be walking in. that pit in a few minutes—if I didn't cave in and forfeit the bet. It seemed to me that they were making it possible to walk the length of the fire pit on rocks rather than burning coals. I hoped so!

Then I wondered what difference it would make recalling sun-scorched sidewalks that had blistered my bare feet when I was a boy in Kansas. That fire had to be at least seven hundred degrees; those rocks had been soaking in that fire for several hours. At such temperatures was there any real choice between frying pan and fire?

I Meanwhile the voice of reason was whispering in my ear that forfeiting three hundred was not much of a price to pay to get out of this bind...or would I rather walk the rest of my life on two barbecued stumps?

Would it help if I took an aspirin?

The three men finished fiddling with the burning logs and went to the end of the pit at our left; the rest of the villagers gathered behind them—including those darned kids! What were their parents thinking about, letting them risk something like this? Why weren't they in school where they belonged?

The three fire tenders led off, walking single file down the center of the fire, not hurrying, not dallying. The rest of the men of the village followed them, a* slow, steady procession. Then came the women, including the young mother with a baby on her hip.

When the blast of heat struck the infant, it started to cry. Without varying her steady pace, its mother swung it up and gave it suck; the baby shut up.

The children followed, from pubescent girls and adolescent boys down to the kindergarten level. Last was a little girl (nine? eight?) who was leading her round-eyed little, brother by, the hand. He seemed to be about four and was dressed only in his skin.

I looked at this kid and knew with mournful certainty that I was about to be served up rare; I could no longer back out. Once the baby boy stumbled; his sister kept him from falling. He went on then, short sturdy steps. At the far end someone reached down and lifted him out.

And it was my turn.

The translator said to me, 'You understand that the Polynesia Tourist Bureau takes no responsibility for your safety? That fire can burn you, it can kill you. These people can walk it safely because they have faith.'

I assured him that I had faith, while wondering how I could be such a barefaced liar. I signed a release he presented.

All too soon I was standing at one end of the pit, with my trousers rolled up to my knees. My shoes and socks and hat and wallet were at the far end, waiting on a stool. That was my goal, my prize—if I didn't make it, would they cast lots for them? Or would they ship them to my next of kin?

He was saying: 'Go right down the middle. Don't hurry but don't stand still.' The high priest spoke up; my mentor listened, then said, 'He says not to run, even if your feet burn. Because you might stumble and fall down. Then you might never get up. He means you might die. I must add that you probably would not die—unless you breathed flame. But you would certainly be terribly burned. So don't hurry and don't fall down. Now see that flat rock under you? That's your first step. Que le bon Dieu vous garde. Good luck.'

'Thanks.' I glanced over at the Authority-on-Everything, who was smiling ghoulishly, if ghouls smile. I gave him a mendaciously jaunty wave and stepped down.

I had taken three steps before I realized that I didn't feel anything at all. Then I did feel something: scared. Scared silly and wishing I were in Peoria. Or even Philadelphia. Instead of alone in this vast smoldering waste. The far end of the pit was a city block away. Maybe farther. But I kept plodding toward it while hoping that this numb paralysis would not cause me to collapse before reaching it.

I felt smothered and discovered that I had been holding my breath. So I gasped—and regretted it. Over a fire pit that vast there is blistering gas and smoke and carbon dioxide and carbon monoxide and something that may be Satan's halitosis, but not enough oxygen to matter.' I chopped off that gasp with my eyes watering and my throat raw and tried to estimate whether or not I could reach the end without breathing.

Heaven help me, I could not see the far end! The smoke had billowed up and my eyes would barely open and would not focus. So I pushed on, while trying to remember the formula by which one made a deathbed confession and then slid into Heaven on a technicality.

Maybe there wasn't any such formula. My feet felt odd and my knees were becoming unglued...

'Feeling better, Mr Graham?'

I was lying on grass and looking up into a friendly, brown face. 'I guess so,' I answered. 'What happened? Did I walk it?'

'Certainly you walked it. Beautifully. But you fainted right at the end. We were standing by and grabbed you, hauled you out. But you tell me what happened. Did you get your lungs full of smoke?'

'Maybe. Am I burned?'

'No. Oh, you may form one blister on your right foot. But you held the thought perfectly. All but that faint, which must have been caused by smoke.'

'I guess so.' I sat up with his help. 'Can you hand me my shoes and socks? Where is everybody?'

'The bus left. The high priest took your pulse and checked your breathing but he wouldn't let anyone disturb you. If you force a man to wake up when his spirit is still walking about, the spirit may not come back in. So he believes and no one dares argue with him.'

'I won't argue with him; I feel fine. Rested. But how do I get back to the ship?' Five miles of tropical paradise would get tedious after the first mile. On foot. Especially as my feet seemed to have swelled a bit. For which they, had ample excuse.

'The bus will come back to take the villagers to the boat that takes them back to the island they live on. It then could take you to your ship. But we can do better. My cousin has an automobile. He wil take you.'

'Good. How much will he charge me?' Taxis in Polynesia are always outrageous, especially when the drivers have you at their mercy, of which they have none. But it occurred to me that I could afford to be robbed as I was bound to show a profit on this jape. Three hundred minus one taxi fare. I picked up my hat. 'Where's my wallet?'

'Your wallet?'

'My billfold. I left it in my hat. Where is it? This isn't funny; my money was in it. And my cards.'

'Your money? Oh! Votre portefeuille. I am sorry; my English is not perfect. The officer from your ship, your excursion guide, took care of it.'

'That was kind of him. But how am I to pay your cousin? I don't have a franc on me.'

We got that straightened out. The ship's excursion escort, realising that he would be leaving me strapped in rescuing my billfold, had prepaid my ride back to the ship. My kanaka friend took me to his cousin's car and introduced me to his cousin—not too effectively, as the cousin's English was limited to 'Okay, Chief!' and I never did get his name straight.

'His automobile was a triumph of baling wire and faith. We went roaring back to the dock at full throttle, frightening chickens and easily outrunning baby goats. I did not pay much attention as I was bemused by something that had happened just before we left. The villagers were waiting for their bus to return; we walked right through them. Or started to. I got kissed. I got kissed by all of them. I had already seen the Polynesian habit of kissing where we would just shake hands, but this was the first time it had happened to me.

My friend explained it to me: 'You walked through their fire, so you are an honorary member of their village. They want to kill a pig for you. Hold a feast in your honor.'

I tried to answer in kind while explaining that I had to return home across the great water but I would return someday, God willing. Eventually we got away.

But that was not what had me most bemused. Any unbiased judge would have to admit that I am reasonably sophisticated. I am aware that some places do not have America's high moral standards and are careless about indecent exposure. I know that Polynesian women used to run around naked from the waist up until civilization came along—shucks, I read the National Geographic.

But I never expected to see it.

Before I made my fire walk the villagers were dressed just as you would expect: grass skirts but with the women's bosoms covered.

But when they kissed me hello-goodbye they were not. Not covered, I mean. Just like the National Geographic.

Now I appreciate feminine beauty. Those delightful differences, seen under proper circumstances with the shades decently drawn, can be dazzling. But forty-odd (no, even) of them are intimidating. I saw more human feminine busts than I had ever seen before, total and cumulative, in my entire life. The Methodist Episcopal Society for Temperance and Morals would have been shocked right out of their wits.

With adequate warning I am sure that I could have enjoyed the experience. As it was, it was too new, too much, too fast. I could appreciate it only in retrospect.

Our tropical Rolls-Royce crunched to a stop with the aid of hand brake, foot brake, and first-gear compression; I looked up from bemused euphoria. My driver announced, 'Okay, Chief!'

I said, 'That's not my ship.'

'Okay, Chief?'

'You've taken me to the wrong dock. Uh, it looks like the right dock but it's the wrong ship.' Of that I was certain. M.V. Konge Knut has white sides and superstructure and a rakish false funnel. This ship was mostly red with four tall black stacks. Steam, it had to be—not a motor vessel. As well as years out of date. 'No. No!'

'Okay, Chief. Votre vapeur! Voila!'

'Non!'

'Okay, Chief.' He got out, came around and opened the door on the passenger Side, grabbed my arm, and pulled.

I'm in fairly good shape, but his arm had been toughened by swimming, climbing for coconuts, hauling in fishnets, and pulling tourists who don't want to go out of cars. I got out.

He jumped back in, called out, 'Okay, Chief! Merci bien! Au 'voir!' and was gone.

I went, Hobson's choice, up the gangway of the strange vessel to learn, if possible, what had become of the Konge Knut. As I stepped aboard, the petty officer on gangway watch saluted and said, 'Afternoon, sir. Mr Graham, Mr Nielsen left a package for you. One moment—'He lifted the lid of his watch desk, took out a large manila envelope. 'Here you are, sir.'

The package had written on it: A. L. Graham, cabin C109. I opened it, found a well-worn wallet.

'Is everything in order, Mr Graham?'

'Yes, thank you. Will you tell Mr Nielsen that I received it? And give him my thanks.'

'Certainly, sir.'

I noted that this was D deck, went up one flight to find cabin C109.

All was not quite in order. My name is not 'Graham'.

Chapter 2

The thing that hath been, it is that which shall be, and that which is done is that which shall be done, and there is no new thing under the sun.

Ecclesiastes 1:9

THANK HEAVEN ships use a consistent numbering system. Stateroom C109 was where it should be: on C deck, starboard side forward, between C107 and C111; I reached it without having to speak to anyone. I tried the door; it was locked—Mr Graham apparently believed the warnings pursers give about locking doors, especially in port.

The key, I thought glumly, is in Mr Graham's pants pocket. But where is Mr Graham? About to catch me snooping at his door? Or is the trying my door while I am trying his door?

There is a small but not zero chance that a given key will fit a strange lock. I had in my own pocket my room key from the Konge Knut. I tried it.

Well, it was worth trying. I stood there, wondering whether to sneeze or drop dead, when I heard a sweet voice behind me:

'Oh, Mr Graham!'

A young and pretty woman in a maid's costume—Correction: stewardess' uniform. She came bustling toward me, took a pass key that was chained to her belt, opened C109, while saying, 'Margrethe asked me to watch for you. She told me that you had left your cabin key on your desk. She let it stay but told me to watch for you and let you in.'

'That's most kind, of you, Miss, uh—'

'I'm Astrid. I have the matching rooms on the port side, so Marga and I cover for each other. She's gone ashore this afternoon.' She held the door for me. 'Will that be all, sir?'

I thanked her, she left. I latched and bolted the door, collapsed in a chair and gave way to the shakes.

Ten minutes later I stood up, went into the bathroom, put cold water on my face and eyes. I had not solved anything and had not wholly calmed down, but my nerves were no longer snapping like a flag in a high wind. I had been holding myself in ever since I had begun to suspect that something was seriously wrong, which was—when? When nothing seemed quite right at the fire pit? Later? Well, with utter certainty when I saw one 20,000-ton ship substituted for another.

My father used to tell me, 'Alex, there is nothing wrong with being scared...as long as you don't let it affect you until the danger is over. Being hysterical is okay, too...afterwards and in private. Tears are not unmanly...in the bathroom with the door locked. The difference between a coward and a brave man is mostly a matter of timing.'

I'm not the man my father was but I try to follow his advice. If you can learn not to jump when the firecracker goes off—or whatever the surprise is—you stand a good chance of being able to hang tight until the emergency is over.

This emergency was not over but I had benefited by the catharsis of a good case of shakes. Now I could take stock.

Hypotheses:

a) Something preposterous has happened to the world around me, or

b) Something preposterous has happened to Alex Hergensheimer's mind; he should be locked up and sedated.

I could not think of a third hypothesis; those two seemed to cover all bases. The second hypothesis I need not waste time on. If, I were raising snakes in my hat, eventually other people would notice and come around with a straitjacket and put me in a nice padded room.

So let's assume that I am sane (or nearly so; being a little bit crazy is helpful). If I am okay, then the world is .out of joint. Let's take stock.

That wallet. Not mine. Most wallets are generally similar to each other and this one was much like mine. But carry a wallet for a few years and it fits you; it is distinctly yours. I had known at once that this one was not mine. But I did not want to say so to a ship's petty officer who insisted on, 'recognizing' me as 'Mr Graham'.

I took out Graham's wallet and opened it.

Several hundred francs—count it later.

Eighty-five dollars in paper—legal tender of 'The United States of North America'.

A driver's license issued to A. L. Graham.

There were more items but I came across a window occupied by a typed notice, one that stopped me cold:

Anyone finding this wallet may keep any money in it as a reward if he will be so kind as to return the wallet to A. L. Graham, cabin C109, S.S. KONGE KNUT, Danish American Line, or to any purser or agent of the line. Thank you. A.L.G.

So now I knew what had happened to the Konge Knut; she had undergone a sea change.

Or had I? Was there truly a changed world and therefore a changed ship? Or were there two worlds and had I somehow walked through fire into the second one? Were there indeed two men and had they swapped destinies? Or had Alex Hergensheimer metamorphized into Alec Graham while M. V. Konge Knut changed into S. S. Konge Knut? (While the North American Union melted into the United States of North America?)

Good questions. I'm glad you brought them up. Now, class, are there any more questions

When I was in middle school there was a spate of magazines publishing fantastic, stories, not alone ghost stories but weird yarns of every sort. Magic ships plying the ether to, other stars. Strange inventions. Trips to the centre of the earth. Other 'dimensions'. Flying machines. Power from burning atoms. Monsters created in secret laboratories.

I used to buy them and hide them inside copies of Youth's Companion and of Young Crusaders knowing instinctively that my parents would disapprove and confiscate. I loved them and so did my outlaw chum Bert.

It couldn't last. First there was an editorial in Youth's Companion: 'Poison to the Soul—Stamp it Out!' Then our pastor, Brother Draper, preached a sermon against such mind-corrupting trash, with comparisons to the evil effects of cigarettes and booze. Then our state outlawed such publications under the 'standards of the community' doctrine even before passage of the national law and the parallel executive order.

And a cache I had hidden 'perfectly' in our attic disappeared. Worse, the works of Mr H. G. Wells and M. Jules Verne and some others were taken out of our public library.

You have to admire the motives of our spiritual leaders and elected officials in seeking to protect the minds of the young. As Brother Draper pointed out, there are enough exciting and adventurous stories in the Good Book to satisfy the needs of every boy and girl in the world; there was simply no need for profane literature. He was not urging censorship of books for adults, just for the impressionable young. If persons of mature years wanted to read such fantastic trash, suffer them to do so—although he, for one, could not see why any grown man would want to.

I guess I was one of the 'impressionable young'—I still miss them.

I remember particularly one by Mr Wells: Men Like Gods. These people were driving along in an automobile when an explosion happens and they find themselves in another world, much like their own but better. They meet the people who live there and there is explanation about parallel universes and the fourth dimension and such.

That was the first installment. The Protect-Our-Youth state law was passed right after that, so I never saw the later installments.

One of my English professors who was bluntly opposed to censorship once said that Mr Wells had invented every one of the basic fantastic themes, and he cited this story as the origin of the multiple-universes concept. I was intending to ask this prof if he knew where I could find a copy, but I put it off to the end of the term when I would be legally 'of mature years'—and waited too long; the academic senate committee on faith and morals voted against tenure for that professor, and he left abruptly without finishing the term.

Did something happen to me like that which Mr Wells described in Men Like Gods? Did Mr Wells have the holy gift of prophecy? For example, would men someday actually fly to the moon? Preposterous!

But was it more preposterous than what had happened to me?

As may be, here. I was in Konge Knut (even though she was not my, Konge Knut) and the sailing board at the gangway showed her getting underway at 6 p.m. It was already late afternoon and high time for me to decide.

What to do? I seemed to have mislaid my own ship, the Motor Vessel Konge Knut. But the crew (some of the crew) of the Steamship Konge Knut seemed ready to accept me as 'Mr Graham', passenger.

Stay aboard and try to brazen it out? What if Graham comes aboard (any minute now!) and demands to know what I am doing in his room?

Or go ashore (as I should) and go to the authorities with my problem?

Alex, the French colonial authorities will love you. No baggage, only the clothes on your back, no money, not a sou—no passport! Oh, they will love you so much they'll give you room and board for the rest of your life...in an oubliette with a grill over the top.

There's money in that wallet.

So? Ever heard of the Eighth Commandment? That's his money.

But it stands to reason that he walked through the fire at the same time you did but on this side, this world or whatever—or his wallet would not have been waiting for you. Now he has your wallet. That's logical.

Listen, my retarded friend, do you think logic has anything to do with the predicament we are in?

Well

Speak up!

No, not really. Then how about this? Sit tight in this room. If Graham shows up before, the ship sails, you get kicked off the ship, that's sure. But you would be no worse off than you will be if you leave now. If he does not show up, then you take his place at least as far as Papeete. That's a big city; your chances of coping with the situation are far better there. Consuls and such.

You talked me into it.

Passenger ships usually publish a daily newspaper for the passengers—just a single or double sheet filled with thrilling items such as 'There will be a boat drill at ten o'clock this morning. All passengers are requested—' and 'Yesterday's mileage pool was won by Mrs Ephraim Glutz of Bethany, Iowa' and, usually, a few news items picked up by the wireless operator. I looked around for the ship's paper and for the 'Welcome Aboard!' This latter is a booklet (perhaps with another name) intended to make the passenger newly aboard sophisticated in the little world of the ship: names of the officers, times of meals, location of barber shop, laundry, dining room, gift shop (notions, magazines, toothpaste), and how to place a morning call, plan of the ship by decks, location of life preserver, how, to find your lifeboat station, where to get your table assignment --

'Table assignment'! Ouch! A passenger who has been aboard even one day does not have to ask how to find his table in the dining room. It's the little things that trip you. Well, I'd have to bull it through.

The welcome-aboard booklet was tucked into Graham's desk. I thumbed through it, with a mental note to memorize all key facts before I left this room—if I was still aboard when the ship sailed—then put it aside, as I had found the ship's newspaper:

The King's Skald it was headed and Graham, bless him, had saved all of them from the day he had boarded the ship...at Portland, Oregon, as I deduced from the place and date line of the, earliest issue. That suggested that Graham was ticketed for the entire cruise, which could be important to me. I had expected to go back as I had arrived, by airship—but, even if the dirigible liner Admiral Moffett existed in this world or dimension or whatever, I no longer had a ticket for it and no money with which to buy one. What do these French colonials do to a tourist who has no money? Burn him at the stake? Or merely draw and quarter him? I did not want to find out. Graham's roundtrip ticket (if he had one) might keep me from having to find out.

(If he didn't show up in the next hour and have me kicked off the ship.)

I did not consider remaining in Polynesia. Being a penniless beachcomber on Bora-Bora or Moorea may have been practical a hundred years ago but today the only thing free in these islands is contagious disease.

It seemed likely that I would be just as broke and just as much a stranger in America but nevertheless I felt that I would be better off in my native land. Well, Graham's native land.

I read some of the wireless news items but could not make sense of them, so I put them aside for later study. What little I had learned from them was not comforting. I had cherished deep down an illogical hope that this would turn out to be just a silly mixup that would soon be straightened out (don't ask me how). But those news items ended all hoping.

I mean to say, what sort of world is it in which the 'President' of Germany visits London? In my world Kaiser Wilhelm IV rules the German Empire—A 'president' for Germany sounds as silly as a 'king' for America.

This might he a pleasant world...but it was not the world I was born into. Not by those weird news items.

As I put away. Graham's file of The King's Skald I noted on the top sheet today's prescribed dress for dinner: 'Formal'.

I was not surprised; the Konge Knut in her other incarnation as a motor vessel was quite formal. If the ship was underway, black tie was expected. If you didn't wear it, you were made to feel that you really ought to eat in your stateroom.

I don't own a tuxedo; our church does not encourage vanities. I had compromised by wearing a blue serge suit at dinners underway, with a white shirt and a snap-on black bow tie. Nobody said anything. It did not matter, as I was below the salt anyhow, having come aboard at Papeete.

I decided to see if Mr Graham owned a dark suit. And a black tie.

Mr Graham owned lots of clothes, far more than I did. I tried on a sports jacket; it fit me well enough.. Trousers? Length seemed okay; I was not sure about the waistband—and too shy to try on a pair and thereby risk being caught by Graham with one leg in his trousers, What does one say? Hi, there! I was just waiting for you and thought I would pass the time by trying on your pants. Not convincing.

He had not one but two tuxedos, one in conventional black and the other in dark red—I had never heard of such frippery.

But I did not find a snap-on bow tie.

He had black bow ties, several. But I have never learned how to tie a bow tie.

I took a deep breath and thought about it.

There came a knock at the door. I didn't jump out of my skin, just almost. 'Who's there!' (Honest, Mr Graham, I was just waiting for you!)

'Stewardess, sir.'

'Oh. Come in, come in!'

I heard her try her key, then I jumped to turn back the bolt. 'Sorry. I had forgotten that I had used the dead bolt.

Do come in.'

Margrethe turned out to be about the age of Astrid, youngish, and even prettier, with flaxen hair and freckles across her nose. She spoke textbook-correct English with a charming lilt to it. She was carrying a short white jacket on a coat hanger. 'Your mess jacket, sir. Karl says the other one will be ready tomorrow.'

'Why, thank you, Margrethe! I had forgotten all about it.

I thought you might. So I came back aboard a little early—the laundry was just closing. I'm glad I did; it's much too hot for you to wear black.'

'You shouldn't have come back early; you're spoiling me.'

'I like to take good care of my guests. As you know.' She hung the jacket in the wardrobe, turned to leave. 'I'll be back to tie your tie. Six-thirty as usual, sir?'

'Six-thirty is fine. What time is it now?' (Tarnation, my watch was gone wherever Motor Vessel Konge Knut had vanished; I had not worn it ashore.)

'Almost six o'clock.' She hesitated. 'I'll lay out your clothes before I go; you don't have much time.'

'My dear girl! That's no part of your duties.'

'No, it's my pleasure.' She opened a drawer, took out a dress shirt, placed it on my/Graham's bunk. 'And you know why.' With the quick efficiency of a person who knows exactly where everything is, she opened a ' small desk drawer that I had not touched, took out a leather case, from it laid out by the shirt a watch, a ring, and shirt studs, then inserted studs into the shirt, placed fresh underwear and black silk socks on the pillow, placed evening pumps by the chair with shoe horn tucked inside, took from the wardrobe that mess jacket, hung it and black dress trousers (braces attached) and dark red cummerbund on the front of the wardrobe. She glanced over and a fresh the layout, added a wing collar, a black tie, and a fresh handkerchief to the stack on the pillow—cast her eye over it again, placed the room key and the wallet by the ring and the watch—glanced again, nodded. 'I must run or I'll miss dinner. I'll be back for the tie.' And she was gone, not running but moving very fast.

Margrethe was so right. If she had not laid out everything, I would still be struggling to put myself together. That shirt alone would have stopped me; it was one of the dive-in-and-button-up-the-back sort. I had never worn one.

Thank heaven Graham used an ordinary brand of safety razor. By six-fifteen I had touched up my morning shave, showered (necessary!), and washed the smoke out of my hair.

His shoes fit me as if I had broken them in myself. His trousers were a bit tight in the waist—a Danish ship is no place to lose weight and I had been in the Motor Vessel Konge Knut for a fortnight. I was still struggling with that consarned backwards shirt when Margarethe let herself in with her pass key.

She came straight to me, said, 'Hold still,' and quickly buttoned the buttons I could not reach. Then she fitted that fiendish collar over its collar buttons, laid the tie around my neck. 'Turn around, please.'

Tying a bow tie properly involves magic. She knew the spell.

She helped me with the cummerband, held my jacket for me, looked me over and announced, 'You'll do. And I'm proud of you; at dinner the girls were talking about you.' I wish I had seen it. You are very brave.'

'Not brave. Foolish. I talked when I should have kept still.'

'Brave. I must go—I left Kristina guarding a cherry tart for me. But if I stay away too long someone will steal it.'

'You run along. And thank you loads'. Hurry and save that tart.'

'Aren't you going to pay me?'

'Oh. What payment would you like?'

'Don't tease me!' She moved a few inches closer, turned her face up. I don't know much about girls (who does?) but some signals are large print. I took her by her shoulders, kissed both cheeks, hesitated just long enough to be certain that she was neither displeased nor surprised, then placed one right in the middle'. Her lips were full and warm.

'Was that the payment you had in mind?'

'Yes, of course. But you can kiss better than that. You know you can.' She pouted her lower lip, then dropped her eyes.

'Brace. yourself.'

Yes, I can kiss lots better than that. Or could by the time we had used up that kiss. By letting Margrethe lead it and heartily cooperating in whatever way she seemed to think a better kiss should go I learned more about kissing in the next two minutes than I had learned in my entire life up to then.

My ears roared.

For a moment after we broke she held still in my arms and looked up at me most soberly. 'Alec,' she said softly, 'that's the best you've ever kissed me. Goodness. Now I'm going to run before I make you late for dinner.' She slipped out of my arms and left as she did everything, quickly.

I inspected myself in the mirror. No marks. A kiss that emphatic ought to leave marks.

What sort of person was this Graham? I could wear his clothes...but could I cope with his woman? Or was she his? Who knows?—I did not. Was he a lecher, a womanizer? Or was I butting in on a perfectly nice if somewhat indiscreet romance?

How do you walk back—through a fire pit?

And did I want to?

Go aft to the main companionway, then down two decks and go aft again—that's what the ship's plans in the booklet showed.

No problem. A man at the door of the dining saloon, dressed much as I was but with a menu under his arm, had to be the head waiter, the chief diningroom steward. He confirmed it with a big professional smile. 'Good evening, Mr Graham.'

I paused. 'Good evening. What's this about a change in seating arrangements? Where am I to sit tonight?' (If you grab the bull by the horns, you at least confuse him.)

'It's not a permanent change, sir. Tomorrow you will be back at table fourteen. But tonight the Captain has asked that you sit at his table. If you will follow me, sir.'

He led me to an oversize table amidships, started to seat me on the Captain's right—and the Captain stood up and started to clap, the others at his table followed suit, and shortly everyone in the dining room (it seemed) was standing and clapping and some were cheering.

I learned two things at that dinner. First, it was clear that Graham had pulled the same silly stunt I had (but it still was not clear 'Whether there was one of us or two of us—I tabled that question).

Second, but of major importance: Do not drink ice-cold Aalborg akvavit on an empty stom`ach, especially if you were brought up White Ribbon as I was.

Chapter 3

Wine is a mocker, strong drink is raging
Proverbs 20:l

I Am not blaming Captain Hansen. I have heard that Scandinavians put ethanol into their blood as antifreeze, against their long hard winters, and consequently cannot understand people who cannot take strong drink. Besides that, nobody held my arms, nobody held my nose, nobody forced spirits down my throat. I did it myself.

Our church doesn't hold with the doctrine that the flesh is weak and therefore sin is humanly understandable and readily forgiven. Sin can be forgiven but just barely and you are surely going to catch it first. Sin should suffer.

I found out about some of that suffering. I'm told it is called a hangover.

That is what my drinking uncle called it. Uncle Ed maintained that no man can cope with temperance who has not had a full course of intemperance...otherwise when temptation came his way, he would not know how to handle it.

Maybe I proved Uncle Ed's point. He was considered a bad influence around our house and, if he had not been Mother's brother, Dad would not have allowed him, in the house. As it was, he was never pressed to stay longer and was not urged to hurry back.

Before I even sat down at the table, the Captain offered me a glass of akvavit. The glasses used for this are not large; they are quite small —and that is the deceptive part of the danger.

The Captain had a glass like it in his hand. He looked me in the eye and said, 'To our hero! Skaal!'—threw his head back and tossed it down.

There were echoes of 'Skaal!' all around the table and everyone seemed to gulp it down just like the Captain.

So I did. I could say that being guest of honor laid certain obligations on me—'When in Rome' and all that. But the truth is I did not have the requisite strength of character to refuse. I told myself, 'One tiny glass can't hurt,' and gulped it down.

No trouble. It went down smoothly. One pleasant ice-cold swallow, then a spicy aftertaste with a hint of licorice. I did not know what I was drinking but I was not sure that it was alcoholic. It seemed not to be.

We sat down and somebody put food in front of me and the Captain's steward poured another glass of schnapps for me. I was about to start nibbling the food, Danish hors d'oeuvres and delicious—

smorgasbord tidbits—when someone put a hand on my shoulder.

I looked up. The Well-Traveled Man --

With him were the Authority and the Skeptic.

Not the same names. Whoever (Whatever?) was playing games with my life had not gone that far. 'Gerald Fortescue' was now 'Jeremy Forsyth', for example. But despite slight differences I had no trouble recognizing each of them and their new names were close enough to show that someone, or something, was continuing the joke.

(Then why wasn't my new name something like 'Hergensheimer'? 'Hergensheimer' has dignity about it, a rolling grandeur. Graham is a so-so name.)

'Alec,' Mr Forsyth said, 'we misjudged you. Duncan and I and Pete are happy to admit it. Here's the three thousand we owe you, and —'He hauled his right hand out from behind his back, held up a large bottle. '—the best champagne in the ship as a mark of our esteem.'

'Steward!' said the Captain.

Shortly, the—wine steward was going around, filling glasses at our table. But before that, I found myself again standing up, making Skaal! in akvavit three times, once to each of the losers, while clutching three thousand dollars States of North America dollars). I did not have, lime then to wonder why three hundred had changed to three thousand—besides, it was not as odd as what had happened to the Konge Knut. Both of her. And my wonder circuits were overloaded anyhow.

Captain Hansen told his waitress to place chairs at the table for Forsyth and company, but all three insisted that their wives and table mates expected them to return. Nor was there room. Not that it would have mattered to Captain Hansen. He, is a Viking, half again as big as a house; hand him a hammer and he would be mistaken for Thor—he has muscles where other men don't even have places. It is very hard to argue with him.

But he jovially agreed to compromise. They could go back to their tables and finish their dinners but first they must join him and me in pledging Shadrach, Meshach, and Abed-nego, guardian angels of our shipmate Alec. In fact the whole table must join in. 'Steward!'

So we said, 'Skaal!' three more times, while bouncing Danish antifreeze off our tonsils.

Have you kept count? That's seven, I think. You can stop counting, as that is where I lost track. I was beginning to feel a return of the numbness I had felt halfway through the fire pit.

The wine steward had completed pouring champagne, having renewed his supply at a gesture from the Captain. Then it was time to toast me again, and I returned ' the compliment to the three losers, then we all toasted Captain Hansen, and then we toasted the good ship Konge Knut.

The Captain toasted the United States and the whole room stood and drank with him, so I felt it incumbent to answer by toasting the Danish Queen, and that got me toasted again and the Captain demanded a speech from, me. 'Tell us how it feels to be in the fiery furnace!'

I tried to refuse and there were shouts of 'Speech! Speech!' from all around me.

I stood up with some difficulty, tried to remember the speech I had made at the last foreign missions fund-raising dinner. It evaded me. Finally I said, 'Aw, shucks, it wasn't anything. Just put your ear to the ground and your shoulder to the wheel, and your eyes on the stars and you can do it too. Thank you, thank you all and next, time you must come to my house.'

They cheered and we skaaled again, I forget why, and the lady on the Captain's left got up and came around and kissed me, whereupon all the ladies at the Captain's table clustered around and kissed me. That seemed to inspire the other ladies in the room, for there was a steady procession coming up to claim a buss from me, and usually kissing the Captain while they were about it, or perhaps the other way around.

During this parade someone removed a steak from in front of me, one I had had plans for. I didn't miss it too much, because that endless orgy of osculation had me bewildered, plus bemusement much like that caused by the female villagers of the fire walk.

Much of this bemusement started when I first walked into the dining room. Let me put it this way: My fellow passengers, female, really should have been in the National Geographic.

Yes. Like that. Well, maybe not quite, but what they did wear made them look nakeder than those friendly villagers. I'm not going to describe those, 'formal evening dresses' because I'm not sure I could—and I am sure I shouldn't. But none of them covered more than twenty percent of what ladies usually keep covered at fancy evening affairs in the world I grew up in. Above the waist I mean. Their skirts, long, some clear to the, floor, were nevertheless cut or slit in most startling ways.

Some of the ladies had tops to their dresses that covered everything...but the material was transparent as glass. Or almost.

And some of the youngest ladies, girls really, actually, did belong in the National Geographic, just like my villagers. Somehow, these younger ladies did not seem quite as immodest as their elders.

I had noticed this display almost the instant I walked in. But, I tried not to stare and the Captain and others kept me so busy at first that I really did not have time to sneak glances at the incredible exposure. But, look—when a lady comes up and puts her arms around you and insists on kissing you, it is difficult not to notice that she isn't wearing enough to ward off pneumonia. Or other chest complaints.

But I kept a tight rein on myself despite increasing dizziness and numbness.

Even bare skin did not startle me as much as bare words—language I had never heard in public in my life and extremely seldom even in private among men only. 'Men', I said, as gentlemen don't talk that way even with no ladies' present—in the world I knew.

The most* shocking thing that ever happened to me in my boyhood was one day crossing the town square, noticing a crowd on the penance side of the courthouse, joining it to see who was catching it and why...and finding my Scoutmaster in the stocks. I almost fainted.

His offence was profane language, so the sign on his chest told us. The accuser was his own wife; he did not dispute it and had thrown himself on the mercy of the court—the judge was Deacon Brumby, who didn't know the word.

Mr Kirk, my Scoutmaster, left town two weeks later and nobody ever saw him again—being exposed, in the stocks was likely to have that effect on a man. I don't know what the bad language was that Mr Kirk had used, but it couldn't have been too bad, as all Deacon Brumby could give him was one dawn-to-dusk.

That night at the Captain's table in the K6nge Knut I heard a sweet lady of the favorite-grandmother sort address her husband in a pattern of forbidden words involving blasphemy and certain criminal sensual acts. Had she spoken that way in public in my home town she would have received maximum exposure in stocks followed by being ridden out of town. (Our town did not use tar and feathers; that was regarded as brutal.)

Yet this dear lady in the ship was not even chided. Her husband simply—smiled and told her that she worried too much.

Between shocking speech, incredible immodest exposure, and effects of two sorts of strange and deceptive potions lavishly administered, I was utterly confused. A stranger in a strange land, I was overcome by customs new and shocking. But through it all I clung to the conviction that I must appear to be sophisticated, at home, unsurprised. I must not let anyone suspect that I was not Alec Graham, shipmate, but instead Alexander Hergensheimer, total stranger...or something terrible might happen.

Of course I was wrong; something terrible had already happened. I was indeed a total stranger in an utterly strange and confusing land...but I do not think, in retrospect, that I would have made my condition worse had I simply blurted out my predicament.

I would not have been believed.

How else? I had trouble believing it myself.

Captain Hansen, a hearty no-nonsense man, would have bellowed with laughter at my 'joke' and insisted on another toast. Had I persisted in my 'delusion' he would have had the ship's doctor talk to me.

Still, I got through that amazing evening easier by holding tight to the notion that I must concentrate on acting the part of Alec Graham while never letting anyone suspect that I was a changeling, a cuckoo's egg.

There had just been placed in front of me a slice of princess cake, a beautiful multilayered confection I recalled from the other Konge Knut, and a small cup of coffee, when the Captain stood up. 'Come, Alec! We go to the lounge now; the show is ready to start—but they can't start till I get there. So come on! You don't want all that sweet stuff; it's not good for you. You can have coffee in the lounge. But before that we have some man's drinks, henh? Not these joke drinks. You like Russian vodka?'

He linked his arm in mine. I discovered that I was going to the lounge. Volition did not enter into it.

That lounge show was much the mixture I had found earlier in M. V. Konge Knut—a magician who did improbable things but not as improbable as what I had done (or been done to?), a standup comedian who should have sat down, a pretty girl who sang, and dancers. The major differences were two I had already been exposed to: bare skin and bare words, and by then I was so numb from earlier shock and akvavit that these additional proofs of a different world had minimal effect.

The girl who sang just barely had clothes on and the lyrics of her songs would have caused her trouble even in the underworld of Newark, New Jersey. Or so I think; I have no direct experience with that notorious sink of iniquity. I paid more attention to her appearance, since here I need not avert my eyes; one is expected to stare at performers.

If one admits for the sake of argument that customs in dress can be wildly different without destroying the fabric of society (a possibility. I do not concede but will stipulate), then it helps, I think, if the person exhibiting this difference is young and healthy and comely.

The singer was young and healthy and comely. I felt a twinge of regret when she left the spotlight

The major event was a troupe of Tahitian dancers, and I was truly not surprised that they were costumed bare to the waist save for flowers or shell beads—by then I would have been surprised had they been otherwise. What was still surprising (although I suppose it should not have been) was the subsequent behaviour of my fellow passengers.

First the troupe, eight girls, two men, danced for us, much the same dancing that had preceded the fire walk today, much the same as I had seen when a troupe had come aboard M.V. Konge Knut in Papeete. Perhaps you know that the hula of Tahiti differs from the slow and graceful hula of the Kingdom of Hawaii by being at a much faster beat and is much more energetic. I'm no expert on the arts of the dance but at least I have seen both styles of hula in the lands where each was native.

I prefer the Hawaiian hula, which I had seen when the Count von Zeppelin had stopped at Hilo for a day on her way to Papeete. The Tahitian hula strikes me as an athletic accomplishment rather than an art form. But its very energy and speed make it still more startling in the dress or undress these native girls wore.

There was more to come. After a long dance sequence, which included paired dancing between girls and each of the two young men —in which they did things that would have been astonishing even among barnyard fowl (I kept expecting Captain Hansen to put a stop to it)—the ship's master of ceremonies or cruise director stepped forward.

'Ladeez and gentlemen,' he announced, 'and the rest of you intoxicated persons of irregular birth—' (I am forced to amend his language.) 'Most of you setters and even a few pointers have made good use of the four days our' dancers have been with us to add the Tahitian hula to your repertoire. Shortly you'll be given a chance to demonst rate what you've learned and to receive diplomas as authentic Papeete papayas. But what you don't know is that others in the good ole knutty Knut have been practicing, too. Maestro, strike up the band!'

Out from behind the lounge stage danced a dozen more hula dancers. But these girls were not Polynesian; these girls were Caucasian. They were dressed authentically, grass skirts and necklaces, a flower in the hair, nothing else. But instead of warm brown, their skins were white; most of them were blondes, two were redheads.

It makes a difference. By then I was ready to concede' that Polynesian women were correctly and even modestly dressed in their native costume—. other places, other customs. Was not Mother Eve modest in her simplicity before the Fall?

I But white women are grossly out of place in South Seas garb.

However, this did not keep me from watching the dancing. I was amazed to see that these girls danced that fast and complex dance as well (to my untutored eye) as did the island girls. I remarked on it to the Captain. 'They learned to dance that precisely in only four days?'

He snorted. 'They practice every cruise, those who ship with us before. All have practiced at least since San Diego.'

At that point I recognized one of the dancers—Astrid, the sweet young woman who had let me into 'my' stateroom—and I then understood why they had had time and incentive to practice together: These girls were ship's crew. I looked at her—stared, in fact—with more interest. She caught my eye and smiled. Like a dolt, a bumpkin, instead of smiling back I looked away and blushed, and tried to cover my embarrassment by taking a big sip of the drink I found in my hand.

One of the kanaka dancers whirled out in front of the white girls and called one of them out for a pair dance. Heaven save me, it was Margrethe!

I choked up and could not breathe. She was the most blindingly beautiful sight I had ever seen in all my life.

'Behold, thou art fair, my, love; behold, thou art fair; thou hast doves' eyes within thy locks: thy hair is as a flock of goats, that appear from Mount Gilead.

'Thy navel is like a round goblet, which wanteth not liquor: thy belly is like a heap of wheat set about with lilies.

'Thy two breasts are like two young roes that are twins.

'Thou art all fair, MY love; there is no spot in thee.'

Chapter 4

Although affliction cometh not forth of the dust, neither doth trouble spring out of the ground; yet man is born unto trouble, as the sparks fly upward.

Job 5:6-7

I SLOWLY became aware of myself and wished I had not; a most terrible nightmare was chasing me. I jammed my eyes shut against the light and tried to go back to sleep.

Native drums were beating in my head; I tried to shut them out by covering my ears.

They got louder.

I gave up, opened my eyes and lifted my head. A mistake—my stomach flipfiopped and my ears shook. My eyes would not track and those infernal drums were tearing my skull apart.

I finally got my eyes to track, although the focus was fuzzy. I looked around, found that I was in a strange room, lying on top of a bed and only half dressed.

That began to bring it back to me. A party aboard ship. Spirits. Lots of spirits. Noise. Nakedness. The Captain in a grass skirt, dancing heartily, and the orchestra keeping step with him. Some of the lady passengers wearing grass skirts and some wearing even less. Rattle of bamboo, boom of drums.

Drums --

Those weren't drums in my head; that was the booming of the worst headache of my life. Why in Ned did I let them --

Never mind 'them'. You did it yourself, chum.

Yes, but --

'Yes, but.' Always 'Yes, but.' All your life it's been 'Yes, but.' When are you going to straighten up and take full responsibility for your life and all that happens to you?

Yes, but this isn't my fault. I'm not A. L. Graham. That isn't my name. This isn't my ship.

It isn't? You're not?

Of course not --

I sat up to Shake off this bad dream. Sitting up was a mistake; my head did not fall off but a stabbing pain at the base of my neck added itself to the throbbing inside my skull. I was wearing black dress trousers and apparently nothing else and I was in a strange room that was rolling slowly.

Graham's trousers. Graham's room. And that long, slow roll was that of a ship with no stabilizers.

Not a dream. Or if it is, I can't shake myself out of it. My teeth itched, my feet didn't fit. Dried sweat all over me except where I was clammy. My armpits—Don't even think about armpits!

My mouth needed to have lye dumped into it.

I remembered everything now. Or almost. The fire pit. Villagers. Chickens scurrying out of the way. The ship that wasn't my ship—but was. Margrethe --

Margrethe!

'Thy two breasts are like two roes—thou art all fair, my love!'

Margrethe among the dancers, her bosom as bare as her feet. Margrethe dancing with that villainous kanaka, and shaking her --

No wonder I got drunk!

Stow it, chum! You were drunk before that. All you've got against that native lad is that it was he instead of you. You wanted to dance with her yourself. Only you can't dance.

Dancing is a snare of Satan.

And don't you wish you knew how!

'—like two roes'! Yes I do!

I heard a light tap at the door, then a rattle of keys. Margrethe stuck her head in. 'Awake? Good.' She came in, carrying a tray, closed the door, came to me. 'Drink this.'

'What is it?'

'Tomato juice, mostly. Don't argue—drink it!'

'I don't think I can.'

'Yes, you can. You must. Do it.'

I sniffed it, then I took a small sip. To my amazement it did not nauseate me. So I drank some more. After one minor quiver it went down smoothly and lay quietly inside me. Margrethe produced two pills. 'Take these. Wash them down with the rest of the tomato juice.'

'I never take medicine.'

She sighed, and said something I did not understand. Not English. Not quite. 'What did you say?'

'Just something my grandmother used to say when grandfather argued with her. Mr Graham, take those pills. They are just aspirin and you need them. If you won't cooperate, I'll stop trying to help you. I'll—I'll swap you to Astrid, that's what I'll do.'

'Don't do that.'

'I will if you keep objecting. Astrid would swap, I know she would. She likes you—she told me you were watching her dance last night.'

I accepted the pills, washed them down with the rest of the tomato juice—ice-cold and very comforting. 'I did until I spotted you. Then I watched you.'

She smiled for the first time. 'Yes? Did you like it?'

'You were beautiful.' (And your dance was obscene. Your immodest dress and your behaviour shocked me out of a year's growth. I hated it—and I wish I could see it all over again this very instant!) 'You are very graceful.'

The smile grew dimples. 'I had hoped that you would like it, sir.'

'I did. Now stop threatening me with Astrid.'

'All right. As long as you behave. Now get up and into the shower. First very hot, then very cold. Like a sauna.'

She waited. 'Up, ' I said. I'm not leaving until that shower is running and steam is pouring out.'

'I'll shower. After you leave.'

'And you'll run it lukewarm, I know. Get up, get those trousers off, get into that shower. While you're showering, I'll fetch your breakfast tray. There is just enough time before they shut down the galley to set up for lunch...so quit wasting time. Please!'

'Oh, I can't eat breakfast! Not today. No. 'Food—what a disgusting thought.

'You must eat. You drank too much last night, you know you did. If you don't eat, you will feel bad all day. Mr Graham, I've finished making up for all my other guests, so I'm off watch now. I'm fetching your tray, then I'm going to stay and see that you eat it.' She looked at me. 'I should have taken your trousers off when I put you to bed. But you were too heavy.'

'You put me to bed?'

'Ori helped me. The boy I danced with.' My face must have given me away, for she added hastily, 'Oh, I didn't let him come into your room, sir. I undressed you myself. But I did have to have help to get you up the stairs.'

'I wasn't criticizing.' (Did you go back to the party then? Was he there? Did you dance with him again?—`jealousy is cruel as the grave; the coals thereof are coals of fire—' I have no right.) 'I thank you both. I must have been a beastly nuisance.'

'Well...brave men often drink too much, after danger is over. But it's not good for you.'

'No, it's not.' I got up off the bed, went into the bathroom, said, 'I'll turn it up hot. Promise.' I closed the door and bolted it, finished undressing. (So I got so stinking, rubber-limp drunk that a native boy had to help get me to bed. Alex, you're a disgusting mess! And you haven't any right to be jealous over a nice girl. You don't own her, her behavior is not wrong by the standards of this place—wherever this place is—and all she's done is mother you and, take care of you. That does not give you a claim on her.)

I did turn it up hot, though it durn near kilt poor old Alex. But I left it hot until the nerve ends seemed cauterized—then suddenly switched it to cold, and screamed.

I let it stay cold until it no longer felt cold, then shut.It off and—dried down, having opened the door to let out the moisture-charged air. I stepped out into the room...and suddenly realized that I felt wonderful. No headache. No feeling that the world is ending at noon. No stomach queasies. Just hunger. Alex, you must never get drunk again...but if you do, you must do exactly what Margrethe tells you to. You've got a smart head on her shoulders, boy—appreciate it.

I started to whistle and opened Graham's wardrobe.

I heard a key in the door, hastily grabbed his bathrobe, managed to cover up before she got the door open. She was slow about it, being hampered by a heavy tray. When I realized this I held the door for her. She put down the tray, then arranged dishes and food on my desk.

'You were right about the sauna-type shower,' I told her. 'It was just what the doctor ordered. Or the nurse, I should say.'

'I know, it's what my grandmother used to do for my grandfather.'

'A smart woman. My, this smells good!' (Scrambled eggs, bacon, lavish amounts of Danish pastry, milk, coffee—a side dish of cheeses, fladbrod, and thin curls of ham, some tropic fruit I can't name.) 'What was that your grandmother used to say when your grandfather argued?'

'Oh, she was sometimes impatient.'

'And you never are. Tell me.'

'Well—She used to say that God created men to test the souls of women.'

'She may have a point. Do you agree with her?'

Her smile produced dimples. 'I think they have other uses as well.'

Margrethe tidied my room and cleaned my bath (okay, okay, Graham's room, Graham's bath—satisfied?) while I ate. She laid out a pair of slacks, a sport shirt in an island print, and sandals for me, then removed the tray and dishes while leaving coffee and the remaining fruit. I thanked her as she left, wondered if I should offer 'payment' and wondered, too, if she performed such valet services for other passengers. It seemed unlikely. I found I could not ask.

I bolted the door after her and proceeded to search. Graham's room.

I was wearing his clothes, sleeping in his bed, answering to his name—and now I must decide whether or not I would go whole hawg and be 'A. L. Graham'...or should I go to some authority (American consul? If not, whom?), admit the impersonation, and ask.for help?

Events were crowding me. Today's King Skald showed that S.S. Konge Knut was scheduled to dock at Papeete at 3 p.m. and sail for MazatIdn, Mexico, at 6 p.m. The purser notified all passengers wishing to change francs into dollars that a representative of the Bank of

Papeete would be in the ship's square facing the purser's office from docking until fifteen minutes before sailing. The purser again wished to notify passengers that shipboard indebtedness such as bar and shop bills could be settled only in dollars, Danish crowns, or by means of validated letters of credit.

All very reasonable. And troubling. I had expected the, ship to stop at Papeete for twenty-four hours at the very least. Docking for only three hours seemed preposterous—why, they would hardly finish tying up before it would be time, to start singling up for sailing! Didn't they have to pay rent for twenty-four hours if they docked at all?

Then I reminded myself that managing the ship was not my business. Perhaps the Captain was taking advantage of a few hours between departure of one ship and arrival of another. Or there might be six other reasons. The only thing I should worry about was what I could accomplish between three and six, and' what I must accomplish between now and three.

Forty minutes of intense searching turned up the following:

Clothes, all sorts—no problem other than about five pounds at my waistline.

Money—the francs in his billfold (must change them) and the eighty-five dollars there; three thousand dollars loose in the desk drawer that held the little case for Graham's watch, ring, shirt studs, *etc.* Since the watch and jewelry had been returned to this case, I assumed, conclusively that Margrethe had conserved for me the proceeds of that bet that I (or Graham) had won from Forsyth and Jeeves and Henshaw. It is said that the Lord looks out for fools and drunkards; if so, in my case He operated through Margrethe.

Various impedimenta of no significance to my immediate problem —books, souvenirs, toothpaste, *etc.*

No passport.

When a first search failed to turn up Graham's passport, I went back and searched again. this time checking the pockets of all clothes hanging in his wardrobe as well as rechecking with care all the usual places and some unusual places that might hide a booklet the size of a passport.

No passport.

Some tourists are meticulous about keeping their passports on their persons whenever leaving a ship. I prefer not to carry my passport when I can avoid it because losing a passport is a sticky mess. I had not carried mine the day before...so now mine was gone where the woodbine twineth, gone to Fiddler's Green, gone where Motor Vessel Konge Knut had gone. And where was that I had not had time to think about that yet; I was too busy coping with a strange new world.

If Graham had carried his passport yesterday, then it too was gone to Fiddler's Green through a crack in the fourth dimension. It was beginning to look that way.

While I fumed, someone slipped an envelope under the stateroom door.

I picked it up and opened it. Inside was the purser's billing for 'my' (Graham's) bills aboard ship. Was Graham scheduled to leave the ship at Papeete? Oh, no! If he was, I might be marooned in the islands indefinitely.

No, maybe not. This appeared to be a routine end-of-amonth billing.

The size of Graham's bar bill shocked me...until I noticed some individual items. Then I was still more shocked but for another reason. When a Coca-Cola costs two dollars it does not mean that a Coke is bigger; it means that the dollar is smaller.

I now knew why a three-hundred-dollar bet on. uh, the other side turned out to be three thousand dollars on this side.

If I was going to have to live in this world, I was going to have to readjust my thinking about all prices. Treat dollars as I would a foreign currency and convert all prices in my head until I got used to them. For example, if these shipboard prices were representative, then a first-class dinner, steak or prime rib, in a first-class restaurant, let's say the main dining room of a hotel such as the Brown Palace or the Mark Hopkins—such a dinner could easily cost ten dollars. Whew!

With cocktails before dinner and wine with it, the tab might reach fifteen dollars! A week's wages. Thank heaven I don't drink!

You don't what?

Look—last night was a very special occasion.

So? So it was, because you lose your virginity only once. Once gone, it's gone forever. What was that you were drinking just before the lights went out? A Danish zombie? Wouldn't you like one of those about now? Just to readjust your stability?

I'll never touch one again!

See you later, chum.

Just one more chance but a good one—I hoped. The small case that Graham used for jewelry and such had in it a key, plain save for the number eighty-two stamped on its side. If fate was smiling, that was a—key to a lockbox in the purser's office.

(And if fate was sneering at me today, it was a key to a lockbox in a bank somewhere in the forty-six states, a bank I would never see. But let's not borrow trouble; I have all I need

I went down one deck and aft. 'Good morning, Purser.'

'Ah, Mr Graham! A fine party, was it not?'

'It certainly was. One more like that and I'm a corpse.'

'Oh, come now, That from a man who walks through fire. You seemed to enjoy it—and I know I did. What can we do for you, sir?'

I brought out the key I had found. 'Do I have the right key? Or does this one belong to my bank? I can never remember.'

The purser took it. 'That's one of ours. Poul! Take this and get Mr Graham's box. Mr Graham, do you want to come around behind and sit at a table?'

'Yes, thank you. Uh, do you have a sack or something that would hold the contents of a box that size? I would take it back to my desk for paper work.'

'"A sac"—Mmm...I could get one from the gift shop. But—How long do you think this desk work will take you? Can you finish it by noon?'

'Oh, certainly.'

'Then take the box itself back to your stateroom. There is a rule against it but I made the rule so we can risk breaking it. But try to be back by noon. We close from noon to thirteen—union rules—and if I have to sit here by myself with all my clerks gone to lunch, you'll have to buy me a drink.'

'I'll buy you one anyhow.'

'We'll roll for it. Here you are. Don't take it through any fires.'

Right on top was Graham's passport. A tight lump in my chest eased. I know of no more lost feeling than being outside the Union without a passport...even though it's not truly the Union. I opened it, looked at the picture embossed inside. Do I look like that? I went into the bathroom, compared the face in the mirror' with the face in the passport.

Near enough, I guess. No one expects much of a passport picture. I tried holding the photograph up to the mirror. Suddenly it was a good resemblance. Chum, your face is lopsided...and so is yours, Mr Graham.

Brother, if I'm going to have to assume your identity permanently—and it looks more and more as if I have no choice—it's a relief to know that we look so much alike. Fingerprints? We'll cope with that when we have to. Seems the U.S. of N.A. doesn't use fingerprints on passports; that's some help. Occupation: Executive. Executive of what? A funeral parlor? Or a worldwide chain of hotels? Maybe this is not going to be difficult but merely impossible.

Address: Care of O'Hara, Rigsbee, Crumpacker, and Rigsbee, Attys at Law, Suite 7000, Smith Building, Dallas. Oh, just dandy. Merely a mail drop. No business address, no home address, no business. Why, you phony, I'd love to poke you in the snoot!

(He can't be too repulsive; Margrethe thinks well of him. Well, yes—but he should keep his hands off Margrethe; he's taking advantage of her. Unfair. Who is taking advantage of her? Watch it, boy, you'll get a split personality.)

An envelope under the passport contained the passenger's file copy of his ticket—and it was indeed round trip, Portland to Portland. Twin, unless you show up before 6 p.m., I've got a trip home. Maybe you can use my ticket in the Admiral Moffett. I wish you luck.

There were some minor items but the bulk of the metal box was occupied by ten sealed fat envelopes, business size. I opened one.

It contained thousand-dollar bills, one hundred of them.

I made a fast check with the other nine. All alike. One million dollars in cash.

Chapter 5

The wicked flee when no man pursueth: but the righteous are bold as a lion.

Proverbs 28:1

BARELY BREATHING, I used gummed tape I found in Graham's desk to seal the envelopes. I put everything back but the passport, placed it with that three thousand that I thought of as 'mine' in the little drawer of the desk, then took the box back to the purser' *office, carrying it carefully.*

Someone else was at the front desk but the purser was in sight in his inner office; I caught his eye.

'Hi,' he called out. 'Back so soon?' He came out.

'Yes,' I agreed. 'For once, everything tallied.' I passed the box to him.

'I'd like to hire you for this office. Here, nothing ever tallies. At least not earlier than midnight. Let, s go find that drink. I need one.'

'So do I! Let's.'

The purser led me aft to an outdoor bar I had not noticed on the ship's plan. The deck above us ended and the deck we were on, D deck, continued on out as a weather deck, bright teak planks pleasant to walk on. The break on C deck formed an overhang; under it was this outdoor spread canvas. At right angles to the bar were long tables offering a lavish buffet lunch; passengers were queued up for it. Farther aft was the ship's swimming pool; I could hear splashing, squeals, and yells.

He led me on aft to a small table occupied by two junior officers. We stopped there. 'You two. Jump overboard.'

'Right away, Purser.' They stood up, picked up their beer glasses, and moved farther aft. One of them grinned at me and nodded, as if we knew each other, so I nodded and said, U.'

This table was partly shaded by awning. The purser said to me, 'Do you want to sit in the sun and watch the girls, or sit in the shade and relax?'

'Either way. Sit where you wish; I'll take the other chair.'

'Um. Let's move this table a little and both sit in the shade. There, that does it.' He sat down facing forward; perforce I sat facing the swimming pool—and confirmed something I thought I had seen at first glance: This swimming pool did not require anything as redundant as swim suits.

I should have inferred it by logic had I thought about it—but I had not. The last time I had seen it—swimming without suits—I had been about twelve and it had been strictly a male privilege for boys that age or younger.

'I said, "What will you drink, Mr Graham'

'Oh! Sorry, I wasn't listening.'

'I know. You were looking. What will it be?'

'Uh...a Danish zombie.'

He blinked at me. 'You don't want that at this time of day; that's a skull splitter. Mmm—'He waggled his fingers at someone behind me. 'Sweetheart, come here.'

I looked up as the summoned waitress approached. I looked and then looked twice. I had seen her last through an alcoholic haze the night before, one of two redheads in the hula chorus line.

'Tell Hans I want two silver fizzes. What's your name, dear?'

'Mr Henderson, you pretend just one more time that you don't know my name and I'll pour your drink right on your bald spot.'

'Yes, dear. Now hurry up. Get those fat legs moving.'

She snorted and glided away on limbs that were slender and graceful. The purser added, 'A fine girl, that. Her parents live just across from me in Odense; I've known her since she was a baby. A smart girl, too. Bodel is studying to be a veterinary surgeon, one more year to go.'

'Really? How does she do this and go to school, too?'

'Most of our girls are at university. Some take a summer off, some take a term off—go to sea, have some fun, save up money for next term. In hiring I give preference to girls who are working their way through university; they are more dependable—and they know more languages. Take your room stewardess. Astrid?'

'No. Margrethe.'

'Oh, yes, you are in one-oh-nine; Astrid has portside forward on your deck, Margrethe is on your side. Margrethe Svensdatter Gunderson. Schoolteacher. English language and history. But knows four more languages not counting Scandinavian languages—and has certificates for two of them. On one-year leave from H. C. Andersen Middle School. I'm betting she won't go back.'

'Eh? Why?'

'She'll marry-a rich American. Are you rich?'

'Me'? Do I look rich?' (Could he possibly know what is in that lockbox? Dear God, what does one do with a million dollars that isn't yours? I can't just throw it overboard. Why would Graham be traveling with that much in cash? I could think of several reasons, all bad. Any one of them could get me in more trouble than I had ever seen.)

'Rich Americans never look it; they practice not looking rich. North Americans ' I mean; South Americans are another fish entirely.

Gertrude, thank you. You are a good girl.'

'You want this drink on your bald spot?'

'You want me to throw you into the pool with your clothes on? Behave yourself, dear, or I'll tell your mother. Put them down and give me the chit.'

'No chit; Hans wanted to buy a drink for Mr Graham. So he decided to include you, this once.'

'You tell him that's the way the bar loses money. Tell him I take it out of his wages.'

That's how I happened to drink two silver fizzes instead of one...and was well on my way toward a disaster such as the night before, when Mr Henderson decided that we must eat. I wanted a third fizz. The first two had enabled me to quit worrying over that crazy box full of money while enhancing my appreciation of the poolside floor show. I was discovering that a lifetime of conditioning could wash away in only twenty-four hours. There was nothing sinful about looking at feminine loveliness unadorned. It was as sweetly innocent as looking at flowers or kittens—but far more fun.

In the meantime I wanted another drink.

Mr Henderson vetoed it, called Bodel over, spoke to her rapidly in Danish. She left, returned a few minutes later carrying a loaded tray—smorgasbord, hot meat balls, sweet pastry shells stuffed with ice cream, strong coffee, all in large quantities.

Twenty-five minutes later I still appreciated the teenagers at the pool, but I was no longer on my way to another alcoholic catastrophe. I had sobered up so much that I now realized that I not only could not solve my problems through spirits but must shun alcohol until I did solve them—as I did not know how to handle strong drink. Uncle Ed was right; vice required training and long practice otherwise for pragmatic reasons virtue should rule even when moral instruction has ceased to bind.

My morals certainly had ceased to bind—or I could not have sat there with a glass of Devil's brew in my hand while I stared at naked female flesh.

I found that I had not even a twinge of conscience over anything. My only regret involved the sad knowledge that I could not handle the amount of alcohol I would have enjoyed. 'Easy is the descent into Hell.'

Mr Henderson stood up. 'We tie up in less than two hours and I have some figures to fudge before the agent comes aboard. Thanks for a nice time.'

'Thank you, sir! Tusind tak! Is that how you say it?'

He smiled and left. I sat there for a bit and thought. Two hours till we docked, three hours in port—what could I do with the opportunities?

Go to the American consul? Tell him what? Dear Mr Consul, I am not he whom I am presumed to be and I just happened to find this million dollars—Ridiculous!

Say nothing to anyone, grab that million, go ashore and catch the next airship for Patagonia?

Impossible. My morals had slipped—apparently they were never very strong. But I III had this prejudice against stealing. It's not only wrong; it's undignified.

Bad enough that I'm wearing his clothes.

Take the three thousand that is 'rightfully' yours, go' ashore, wait for the ship to sail, then get back to America as best you can?

Stupid ideal. You would wind up in a tropical jail and your silly gesture would not do Graham any good. It's Hobson's choice again, you knothead; you must stay aboard and wait for Graham to show up. He won't, but there might be a wireless message or something. Bite your nails until the ship sails. When it does, thank God for a trip home to God's country. While Graham does the same for his ticket home in the Admiral Moffett. I wonder how he liked being named Hergensheimer? Better than I like 'Graham' I'll bet. A proud name, Hergensheimer.

I got up, ducked around to the far side, and went up two decks to the library, found it unoccupied save for a woman, working on a crossword puzzle. Neither of us wanted to be disturbed, which made us good company. Most of the bookcases were locked, the librarian not being present, but there was a battered encyclopedia—just what I needed as a start.

Two hours later I was startled by a blast indicating that we had a line to the dock; we had arrived. I was loaded with strange history and stranger ideas and none of it digested. To start with, in this world William Jennings Bryan was never president; in I896 McKinley had been elected in his place, had served two terms and had been followed by someone named Roosevelt.

I recognised none of the twentieth-century presidents.

Instead of more than a century of peace under our traditional neutrality, the United States had repeatedly been involved in foreign wars: 1899, 1912-17, 1932 (With Japan!), 1950-52, 1980-84, and so on right up to the current year—or current when this encyclopedia was published; King's Skald did not report a war now going on.

Behind the glass of one of the locked cases I spotted several history books. If I was still in the ship three hours from now, I must plan on reading every history book in the ship's library during the long passage to America.

But names of presidents and dates of wars were not my most urgent need; these are not daily concerns. What I urgently needed to know, lest ignorance cause me anything from needless embarrassment to catastrophe, was the differences between my world and this world in how people lived, talked, behaved, ate, drank, played, prayed, and loved. While I was learning, I must be careful to talk as little as possible and to listen as much as possible.

I once had a neighbour whose knowledge of history seemed limited to two dates, I492 and I776, and even with those two he was mixed up as to what events each marked. His ignorance in other fields was just as profound; nevertheless he earned an excellent living as a paving contractor.

'It does not require a broad education to function as a social and economic animal...as long as you know when to rub blue mud into your bellybutton. But a mistake in local customs can get you lynched.

I wondered how Graham was doing? It occurred to me that his situation was far more. dangerous than mine...if I assumed (as apparently I must) that he and I had simply swapped places. It seemed that my background could make me appear eccentric here—but his background could get Graham into serious trouble in my world. A casual remark, an innocent act, could land him in the stocks. Or worse.

But he might find his worst trouble through attempting to fit himself fully into my role—if indeed he tried. Let me put it this way: On her birthday after we had been married a year I gave Abigail a fancy edition of The Taming of the Shrew. She never suspected that I had been making a statement; her conviction of her own righteousness did not embrace the possibility that in my heart I equated her with Kate. If Graham assumed my role as her husband, the relationship was bound to be interesting for each of them.

I would not knowingly wish Abigail on anyone. Since I had not been consulted, I did not cry crocodile tears.

(What would it be to bed with a woman who did not always refer to marital relations as 'family duties'?)

Here I have in front of me a twenty-volume encyclopedia, millions of words packed with all the major facts of this world—facts I urgently need. What can I squeeze out of it quickly? Where to start? I don't want Greek art, or Egyptian history, or geology—but what do I want?

Well, what did you first notice about this world? This ship itself. Its old-fashioned appearance compared with the sleek lines of the M.V. Konge Knut. Then, once you were aboard, the lack of a telephone in your-Graham's stateroom. The lack of passenger elevators. Little things that gave it an air of the luxury of grandfather's day.

So let's see the article on 'Ships'—volume eighteen.

Yes, sir! Three pages of pictures...and they all have that Mauve-Decade look. S.S. Britannia, biggest and fastest North Atlantic liner, 2000 passengers, only sixteen knots! And looks it.

Let's try the general article on 'Transportation'

Well, well! We aren't too surprised, are we? No mention of airships. But let's check the index volume—Airship, nothing; dirigible, zero; aeronautics—see 'Balloon'.

Ah, yes, a good article on free ballooning, with the Montgolfiers and the other daring pioneers—even Salomon Andrée's brave and tragic attack on the North Pole. But either Count von Zeppelin never lived, or he never turned his attention to aeronautics.

Possibly, after his service in the Civil War, he returned to Germany and there never found the atmosphere receptive to the idea of air travel that he enjoyed in Ohio in my world. As may be, this world does not have air travel. Alex, if you have to live here, how would you like to 'invent' the airship? Be a pioneer, and tycoon, and get rich and famous?

What makes you think you could?

Why, I made my first airship flight when I was only twelve years old! I know all about them; I could draw plans for one right now --

You could? Draw me production drawings for a lightweight diesel, not over one pound per horsepower. Specify the alloys used, give the heat treatments, show work diagrams for the actual operating cycles, specify fuels, state procurement sources, specify lubricants

All those things can be worked out!

Yes, but can you do it? Even knowing that it can be done? Remember why you dropped out of engineering school and decided you had a call for the ministry? Comparative religion, homiletics, higher criticism, apologetics, Hebrew, Latin, Greek, all require scholarship...but the slipstick subjects require brains.

So I'm stupid, am I?

Would you have walked through that fire pit if you had brains enough to come in out of the rain?

Why didn't you stop me?

Stop you? When did you ever listen to me? Quit evading what was your final mark in thermodynamics?

All right! Assume that I can't do it myself --

Big of you.

Lay off, will you? Knowing that something can be done is two thirds of the battle. I could be director of research and guide the efforts of some really sharp young engineers. They supply the brains; I supply the unique memory of what a dirigible balloon looks like and how it works. Okay?

That's the proper division of labor: You supply memory, they supply brains. Yes, that could work. But not quickly, not cheaply. How are you going to finance it?

Uh, sell shares?

Remember the summer you sold vacuum cleaners?

Well...there's that million dollars.

Naughty, naughty!

'Mr Graham?'

I looked up from my great plans to find a yeoman from the purser's office looking at me. 'Yes?'

She handed me an envelope. 'From Mr Henderson, sir. He said you would probably have an answer.'

'Thank you.' The note read: 'Dear Mr Graham: There are three men down here in the square who claim to have an appointment with you. I don't like their looks or the way they talk—and this port has some very strange customers. If you are not expecting them or don't wish to see them, tell my messenger that she could not find you. Then I'll tell them that you've gone ashore. A.P.H.'

I remained balanced between curiosity and caution for some long, uncomfortable moments. They did not want to see me; they wanted to see Graham...and whatever it was they wanted of Graham, I could not satisfy their want.

You know what they want!

'So I suspect. But, even if they have a chit signed by Saint Peter, I can't turn over to them—or to anyone—that silly million dollars. You know that.

Certainly I know that. I wanted to be sure that you knew it. All right, since there are no circumstances under which you will turn over to a trio of strangers the contents of Graham's lockbox, then why see them?

Because I've got to know! Now shut up. I said to the yeoman, 'Please tell Mr Henderson that I will be right down. And thank you for your trouble.'

'My pleasure, sir. Uh, Mr Graham...I saw you walk the fire. You were wonderful!'

'I was out of my silly mind. Thanks anyhow.'

I stopped at the top of the companionway and sized up the three men waiting for me. They looked as if they had been type-cast for menace: one oversize job about six feet eight with the hands, feet, jaw, and ears of glandular giantism; one sissy type about one quarter the size of the big man; one nothing type with dead eyes. Muscles, brain, and gun—or was it my jumpy imagination?

A smart person would go quietly back up and hide.

I'm not smart.

Chapter 6

Let us eat and drink, for tomorrow we shall die.
Isaiah 22:13

I WALKED down the stairs, not looking at the three, and went directly to the desk of the purser's office. Mr Henderson was there, spoke quietly as I reached the counter. 'Those three over there. Do you know them?'

'No, I don't know them. I'll see what they want. But keep an eye on us, will you, please?'

'Right!'

I turned and started to walk past that lovable trio. The smart boy said sharply, 'Graham! Stop there! Where you going?'

I kept moving and snapped, 'Shut up, you idiot! Are you trying to blow it?' Muscles stepped into my path and hung over me like a tall building. The gun stepped in behind me. In a fake prison-yard style, from the side of my mouth, I said, 'Quit making a scene and get these apes off the ship! You and I must talk.'

'Certainly we talk. Ici! Now. Here.'

'You utter fool,' I answered softly and glanced nervously up, to left and right. 'Not here. Cows. Bugs. Come with me. But have Mutt and Jeff wait on the dock.'

Non!'

'God save us! Listen carefully.' I whispered, 'You 'are going to tell these animals to leave the ship and wait at the foot of the gangway. Then you and I are going to walk out on the weather deck where we can talk without being overheard. Otherwise we do nothing!—and I report to Number-One that you blew the deal. Understand? Right now! Or go back and tell them the deal is off.'

He hesitated, then spoke rapidly in French that I could not follow, my French being mostly of the La plume de ma tante sort. The gorilla seemed to hesitate but the gun type shrugged and started toward the gangway door. I said to the little wart, 'Come on! Don't waste time; the ship is about to sail!' I headed aft without looking to see whether or not he was following. I set a brisk pace that forced him to follow or lose me. I was as much taller than he as that ape was taller than I; he had to trot to stay at my heels.

I kept right on going aft and outside, onto the weather deck, past the open bar and the tables, clear to the swimming pool.

It was, as I expected, unoccupied, the ship being in port. There was the usual sign up, CLOSED WHILE SHIP IS IN PORT, and a nominal barrier around it of a single strand of rope, but the pool was still filled. He followed me; I held up a hand. 'Stop right there.' He stopped.

'Now we can talk,' I said. 'Explain yourself, and you'd better make it good! What do you mean, calling attention to yourself by bringing that muscle aboard? And a Danish ship at that! Mr B. is going to be very, very angry with you. What's your name?'

'Never mind my name. Where's the package?'

'What package?'

He started to sputter; I interrupted. 'Cut the nonsense; I'm not impressed. This ship is getting ready to sail; you have only minutes to tell me exactly what you want and to convince me that you should get it. Keep throwing your weight around and you'll find yourself going back to your boss and telling him you failed. So speak up! What do you want?'

'The package!'

I sighed. 'My old and stupid, you are stuck in a rut. We've been over that. What sort of a package? What's in it?'

He hesitated. 'Money.'

'Interesting. How much money?'

This time he hesitated twice as long, so again I interrupted. 'If you don't know how much money, I'll give you a couple of francs for beer and send you on your way. Is that what you want? Two francs?'

A man that skinny shouldn't have such high blood pressure. He managed to say, 'American dollars. One million.'

I laughed in his face. 'What makes you think I've got that much? And if I had, why should I give it to you? How do I know you are supposed to get it?'

'You crazy, man? You know who am I. '

'Prove it. Your eyes are funny and your voice sounds different. I think you're a ringer.

'"Ringer"?'

'A fake, a phony! An impostor.'

He answered angrily—French, I suppose. I am sure it was not complimentary. I dug into my memory, repeated carefully and with feeling the remark that a lady had made last night which had caused her husband to say that she worried too much. It was not appropriate but I intended simply to anger him.

Apparently I succeeded. He raised a hand, I grabbed his wrist, tripped myself, fell backwards into the pool, pulling him with me. As we fell I shouted, 'Help!'

We splashed. I got a firm grip on him, pulled myself up as I shoved him under again. 'Help! He's drowning me!'

Down we went again, struggling with each other. I yelled for help each time my head was above water. Just as help came I went limp and let go.

I stayed limp until they started to give me mouth-to-mouth resuscitation. At that point I snorted and opened my eyes'. 'Where am I?

Someone said, 'He's coming around. He's okay.'

I looked around. I was flat on my back alongside the pool. Someone had done a professional job of pulling me out with a dip-and-jerk; my left arm felt almost dislocated. Aside from that I was okay. 'Where is he? The man who pushed me in.'

'He got away.'

I recognized the voice, turned my head. My friend Mr Henderson, the purser.

'He did?'

That ended it. My rat-faced caller had scrambled out as I was being fished out and had streaked off the ship. By the time they had finished reviving me, Nasty and his bodyguards were long gone.

Mr Henderson had me lie still until the ship's, doctor arrived. He put a stethoscope on me and announced that I was okay. I told a couple of small, fibs, some near truths, and an evasion. By then the gangway had been removed and shortly a loud blast announced that we had left the dock.

I did not find it necessary to tell anyone that I had played water polo in school.

The next many days were very sweet, in the fashion that grapes grow sweetest on the slopes of a live volcano.

I managed to get acquainted (reacquainted?) with my table mates without, apparently, anyone noticing that I was a stranger. I picked up names just by waiting until someone else spoke to someone by name —remembered I the name and used it later. Everyone was pleasant to me—I not only was not 'below the salt', since the record showed that I had been aboard the full trip, but also I was at least a celebrity if not a hero for having walked through the fire.

I did not use the swimming pool. I was not sure what swimming Graham had done, if any, and, having been 'rescued', I did not want to exhibit a degree of skill inconsistent with that 'rescue'. Besides, while I grew accustomed to (and even appreciative of) a degree of nudity shocking in my former life, I. did not feel that I could manage with aplomb being naked in company.

Since there was nothing I could do about it, I put the mystery of Nastyface and his bodyguards out of my mind.

The same I was true of the all-embracing mystery of who I am and how I got here—nothing I could do about it, so don't worry about it. On reflection. I realized that I was in exactly the same predicament as every other human being alive: We don't know who we are, or where we came from, or why we are here. My dilemma was merely fresher, not different.

One thing (possibly the only thing) I learned in seminary was to face calmly the ancient mystery of life, untroubled by my inability to solve it. Honest priests and preachers are denied the comforts of religion; instead they must live with the austere rewards of philosophy. I never became much of a metaphysician but I did learn not to worry about that which I could not solve.

I spent much time in the library or reading in deck chairs, and each day I learned more about and felt more at home in this world. Happy, golden days slipped past like a dream of childhood.

And every day there was Margrethe.

I felt like a boy undergoing his first attack of puppy love.

It was a strange romance. We could not speak of love. Or I could not, and she did not. Every day she was my servant (shared with her other passenger guests)...and my 'mother' (shared with others? I did not. think so...but I did not know). The 'relationship was close but not intimate. Then each day, for a few moments while I 'paid' her for tying my bow tie, she was my wonderfully sweet and utterly passionate darling.

But only then.

At other times I was 'Mr Graham' to her and she called me 'sir'—warmly friendly but not intimate. She was willing to chat, standing up and with the door open; she often had ship's gossip to share with me. But her manner was always that of the perfect servant. Correction: the perfect crew member assigned to personal service. Each day I learned a little more about her. I found no fault in her.

For me the day started with my first sight of her—usually on my way to breakfast when I would meet her in the passageway or spot her through an open door of a room she was making up...just 'Good morning, Margrethe' and 'Good morning, Mr Graham,' but the sun did not rise until that moment.

I would see her from time to time during the day, peaking each day with that golden ritual after she tied my tie.

Then I would see her briefly after dinner. Immediately after dinner each evening I would return to my room for a few minutes to refresh myself before the evening's activities—lounge show, concert, games, or perhaps just a return to the' library. At that hour Margrethe would be somewhere in the starboard forward passageway of C deck, opening beds, tidying baths, and so forth—making her guests' staterooms inviting for the night. Again I would say hello, then wait in my room (whether she had yet reached it or not) because she would come in shortly, either to open my bed or simply to inquire, 'Will you need anything more this evening, sir?'

And I would. always smile and answer, 'I don't need a thing, Margreth. Thankyou.' Whereupon she would bid me good night and wish me sound sleep. That ended my day no matter what else I did before retiring.

Of course I was tempted—daily!—to answer, 'You know what I need!' I could not. Imprimis: I was a married man. True, my wife was lost somewhere in another world (or I was). But from holy matrimony there is no release this side of the grave. Item: Her love affair (if such it was) was with Graham, whom I was impersonating. I could not refuse that evening kiss I'm not that angelically perfect!) but in fairness to my beloved I could not go beyond it. Item: An honorable man must not offer less than matrimony to the object of his love...and that I was both legally and morally unable to offer.

So those golden days were bittersweet. Each day brought one nearer the inescapable time when I must leave Margrethe, almost certainly never to see her again.

I was not free even to tell her what that loss would mean to me.

Nor was my love for her so selfless that I hoped the Separation would not grieve her. Meanly, self-centered as an adolescent, I hoped that she would miss me as dreadfully as I was going to miss her. Childish puppy love certainly! I offer in extenuation the fact that I had known only the 'love' of a woman who loved Jesus so much that she had no real affection for any flesh-and-blood creature.

Never marry a woman who prays too much.

We were ten days out from Papeete with Mexico almost over the skyline when this precarious idyll ended. For several days Margrethe had seemed more withdrawn—each day. I could not tax her with it as there was nothing I could, put my finger on and certainly nothing of which I could complain. But it reached crisis that evening when she tied my tie.

As usual I smiled and thanked her and kissed her.

Then I stopped with her still in my arms and said' 'What's wrong? I know you can kiss better than that. Is my breath bad?'

She answered levelly, 'Mr Graham, I think we had better stop this.'

'So it's "Mr Graham", is it? Margrethe, what have I done?'

'You've done nothing!'

'Then—My dear, you're crying!'

'I'm sorry. I didn't intend to.'

I took my handkerchief, blotted her tears, and said gently, 'I have never intended to hurt you. You must tell me what's wrong so that I can change it.'

'If you don't know, sir, I don't see how I can explain it.

Won't you try? Please!' (Could it be one of those cyclic emotional disturbances women are heir to?)

'Uh...Mr Graham, I knew it could not last beyond the end of the voyage—and believe me, I did not count on any more. I suppose it means more to me than it did to you. But I never thought that you would simply end it, with no explanation, sooner than we must.'

'Margrethe...I do not understand.'

'But you do know!'

'But I don't know.'

'You must know. It's been eleven days. Each night I've asked you and each night you've turned me down. Mr Graham, aren't you ever again going to ask me to come back later?'

'Oh. So that's what you meant! Margrethe—'

'Yes, sir?'

'I'm not "Mr Graham".' 'Sir?' 'My name is "Hergensheimer". It has been exactly eleven days since I saw you for the first time in my life. I'm sorry. I'm terribly sorry. But that is the truth.'

Chapter 7

Now therefore be content, look upon me; for it is evident unto you if I lie.

Job 6:28

MARGRETHE is both a warm comfort and a civilized adult. Never once did she gasp, or expostulate, or say, 'Oh, no or 'I can't believe it!' At my first statement she held very still, waited, then said quietly, 'I do not understand.'

'I don't understand it either,' I told her. 'Something happened when I walked through that fire pit. The world changed. This ship—'I pounded the bulkhead beside us. '—is not the ship I was in before. And people call me "Graham"...when I know that my name is Alexander Hergensheimer. But it's not just me and this ship; it's the whole world. Different history. Different countries. No airships here.'

'Alec, what is an airship?'

'Uh, up in the air, like a balloon. It is a balloon, in a way. But it goes very fast, over a hundred knots.'

She considered it soberly. 'I think that I would find that frightening.'

I 'Not at all; it's the best way to travel. I flew down here in one, the Count von Zeppelin of North American Airlines. But this world doesn't have airships. That was the point that finally convinced me that this really is a different world—and not just some complicated hoax that someone had played on me. Air travel is so major a part of the economy of the world I knew that it changes everything else not to have it. Take—Look, do you believe me?

She answered slowly and carefully, 'I believe that you are telling the truth as you see it. But the truth I see is very different.'

'I know and that's what makes it so hard. I—See here, if you don't hurry, you're going to miss dinner, right?'

'It does not matter.'

'Yes, it does; you must not miss meals just because I made a stupid mistake and hurt your feelings. And if I don't show up, Inga will send somebody up to find out whether I'm ill or asleep or whatever; I've seen her do it with others at my table. Margrethe—my very dear!—I've wanted to tell you. I've waited to tell you. I've needed to tell you. And now I can and I must. But I can't do it in five minutes standing up. After you turn down beds tonight can you take time to listen to me?'

'Alec, I will always take all the time for you that you need.'

'All right. You go down and eat, and I'll go down and touch base at least—get Inga off my neck—and I'll meet you here after you turn down beds. All right?'

She looked thoughtful. 'All right. Alec—Will you kiss me again.'

That's how I knew she believed me. Or wanted to believe me. I quit worrying. I even ate a good dinner, although I hurried.

She was waiting for me when I returned, and stood up as I came in. I took her in my arms, pecked her on the nose, picked her up by her elbows and sat her on my bunk; then I sat down in the only chair. 'Dear one, do you think I'm crazy.

'Alec, I don't know what to tink.' (Yes, she said 'tink'. Once in a long while, under stress of emotion, Margrethe would lose the use of the theta sound. Otherwise her English accent was far better than my tall-corn accent, harsh as a rusty saw.)

'I know,' I agreed. 'I had the same problem. Only two ways to look at it. Either something incredible did happen when I walked through the fire, something that changed my whole world. Or I'm as crazy I as a pet 'coon. I've spent days checking the facts...and the world has changed. Not just airships. Kaiser Wilhelm the Fourth is missing and some silly president named "Schmidt is in his place. Things like that.'

'I would not call Herr Schmidt "silly". He is quite a good president as German presidents go.'

'That's my point, dear. To me, any German president looks silly, as Germany is—in my world—one of the last western monarchies effectively unlimited. Even the Tsar is not as powerful.'

'And that has to be my point, too, Alec. There is no Kaiser and there is no Tsar. The Grand Duke of Muscovy is a constitutional monarch and no longer claims to be suzerain over other Slavic states.'

'Margrethe, we're both saying the same thing. The world I grew up in is gone. I'm having to learn about a different world. Not a totally different world. Geography does not seem to have changed, and not all of history. The two worlds seem to be the same almost up to the beginning of the twentieth century. Call it eighteen-ninety. About a hundred years back something strange happened and the two worlds split apart...and about twelve days ago something equally strange happened to me and I got bounced into this world.' I smiled at her. 'But I'm not sorry. Do you know why? Because you are in this world.'.

'Thank you. It is important to me that you are in it, too.'

'Then you do believe me. Just as I have been forced to believe it. So much so that I've quit worrying about it. Just one thing really bothers me—What became of Alec Graham? Is he filling my place in my world? Or what?'

She did not answer at once, and when she did, the answer did not seem responsive. 'Alec, will you please take down your trousers?'

'What did you say, Margrethe?'

'Please. I am not making a joke and I am not trying to entice you. I must see something. Please lower your trousers.'

I don't see—All right.' I shut up and did as she asked not easy in evening dress. I had to take off my mess jacket, then my cummerbund, before I was peeled enough to let me slide the braces off my shoulders.

Then, reluctantly, I started unbuttoning my fly. (Another shortcoming of this retarded world—no zippers. I did not appreciate zippers until I no longer had them.)

I took a deep breath, then lowered my trousers a few inches. 'Is that enough?'

'A little more, please—and will you please turn your back to me?'

I did as she asked. Then I felt her hands, gentle and not invasive, at my right rear. She lifted a shirttail and pulled down the top of my underwear pants on the right.

A moment later she restored both garments. 'That's enough. Thank you.'

I tucked in my shirttails and buttoned up my fly, reshouldered, the braces and reached for the cummerbund. She said, 'Just a moment, Alec.'

'EM I thought you were through.'

'I am. But there is no need to get back into those formal clothes; let me get out casual trousers for you. And shirt. Unless you are going back to the lounge?'

'No. Not if you will stay.'

'I will stay; we must talk.' Quickly she took out casual trousers and a sports shirt for me, laid them on the bed. 'Excuse me, please.' She went into the bath.

I don't know whether she needed to use it or not, but she knew that I could change more comfortably in the stateroom than in that cramped shipboard bathroom.

I changed and felt better. A cummerbund and a boiled shirt are better than a straitjacket but not much. She came out, at once hung up the clothes I had taken off, all but the shirt and collar. She removed studs and collar buttons from these, put them away, and put shirt and collar into my laundry bag. I wondered what Abigail would think if she—could see these wifely attentions. Abigail did not believe in spoiling me—and did not.

'What waz that all about Margrethe?'

'I had to see something. Alec, you were wondering what had become of Alec Graham. I now know the answer.'

'Yes?'

'He's right here. You are he.'

At last I said, 'That, just from looking at a few square inches on my behind? What did you find, Margrethe? The strawberry mark that identifies the missing heir?'

'No, Alec. Your "Southern Cross".'

'My what?'

'Please, Alec. I had hoped that it would restore your, memory. I saw it the first night we—' She hesitated, then looked me square in the eye.'—made love. You turned on the light, then turned over on your belly to see what time it was. That was when I noticed the moles on your right buttock cheek. I commented on the pattern. they made, and we joked about it. You said that it was your Southern Cross and it let you know which end was up. '

Margrethe turned slightly pink but continued to look me firmly in the eye. 'And I showed you some moles on my body. Alec, I am sorry that you do not remember it but please believe me: By then we were well enough acquainted that we could be playful about such things without my being forward or rude.'

'Margrethe, I don't think you could ever be forward or rude. But you're putting too much importance on a chance arrangement of moles. I've got moles all over me; it doesn't surprise me that some of them, back where I can't see easily, are arranged in a cross shape. Or that Graham` had some that were somewhat similar.'

'Not "similar". Exactly the same.'

'Well—There is a much better way to check. In the desk there is my wallet. Graham's wallet, actually. Driver's license. His. His thumbprint on it. I haven't checked it because I have never had the slightest doubt that he was Graham and that I am Hergensheimer and that we are not the same man. But we can check. Get it out, dear. Check it yourself. I'll put a thumbprint on the mirror in the bath. Compare them. Then you will know.'

'Alec, I do know. You are the one who doesn't believe it; you check it.'

'Well—' Margrethe's counterproposal was reasonable; I agreed to it.

I got out Graham's driver's license, then placed a print on the bath mirror by first rubbing my thumb over my nose for the nose's natural oil, so much greater than that of the pad of the thumb. I found that I could not see the pattern on the glass too well, so I shook a little talcum onto my palm, blew it toward the mirror.

Worse. The powder that detectives use must be much finer than shaving talcum. Or perhaps I don't know how to use it. I placed another print without powder, looked at both prints, at my right thumb, at the print on the driver's license, then checked to see that the license did indeed designate print of right thumb. It did. 'Margrethe! Will you come look, please?'

She joined me in the bath. 'Look at this,' I said. 'Look at all four—

my thumb and three prints. The pattern in all four is basically an arch —but that simply trims it down to half the thumbprints in the world. I'll bet you even money that your own thumbprints have an arch pattern. Honest, can you tell whether or not the thumbprint on the card—was made by this thumb? Or by my left thumb; they might have made a mistake.'

'I cannot tell, Alec. I have no skill in this.'

'Well—I don't think even an expert could tell in this light. We'll have to put it off till morning; we need bright sunlight out on deck. We also need glossy white paper, stamp-pad ink, and a magnifying glass...and I'll bet Mr Henderson will have all three. Will tomorrow do?'

'Certainly. This test is not for me, Alec; I already know in my heart. And by seeing your "Southern Cross". Something has happened to your memory but you are still you...and someday we will find your memory again.'

'It's not that easy, dear. I know that I am not Graham.

Margrethe, do you have any idea what business he was in? Or why he was on this trip?'

'Must I say "him"? I did not ask your business, Alec. And you never, offered to tell me.'

'Yes, I think you must say "him", at least until we check that thumbprint. Was he married?'

'Again, he did not say and I did not ask.'

'But you implied—No, you flatly stated that you had "made love" with this man whom you believe to be me, and that you have been in bed with him.'

'Alec, are you reproaching me?'

'Oh, no, no, no!' (But I was, and she knew it.) 'Whom you go to bed with is your business. But I must tell you that I am married.'

She shut her face against me. 'Alec, I did not try to seduce you into marriage.'

'Graham, you mean. I was not there.'

'Very well. Graham. I did not entrap Alec Graham. For our mutual happiness we made love. Matrimony was not mentioned by either of us.'

'Look, I'm sorry I mentioned the matter! It seemed to have some bearing on the mystery; that's all. Margrethe, will you believe that, I would rather strike off my arm—or pluck out my eye and cast it from me—than hurt you, ever, in any way?'

'Thank you, Alec. I believe you.'

'All that Jesus ever said was: "Go, and sin no more.' Surely you do not think I would ever set myself up as more severely judgmental than was Jesus? But I was not judging you; I was seeking information about

Graham. His business, in particular. Uh, did you ever suspect that he might be engaged in something illegal?'

She gave a ghost of a smile. 'Had I ever suspected anything of the sort, my loyalty to him is such that I would never express such suspicion. Since you insist that you are not he, then there it must stand.'

'Touch!' I grinned sheepishly. Could I tell her about the lockbox? Yes, I must. I had to be frank with her and had to persuade her that she was not being disloyal to Graham/me were she to be equally frank. 'Margrethe, I was not asking idly and I was not prying where I had no business to pry. I have still more, trouble and I need your advice.'

Her turn to be startled. 'Alec...I do not often give advice. I do not like to.'

'May I tell you my trouble? You need not advise me...but perhaps you may be able to analyze it for me.' I told her quickly about that truly damning million dollars. 'Margrethe, can you think of any legitimate reason why an honest man would be carrying a million dollars in cash? Travelers checks, letters of credit, drafts for transferring monies, even bearer bonds—But cash? In that amount? I say that it is psychologically as unbelievable as what happened to me in the fire pit is physically unbelievable. Can you see any other way to look at it? For what honest reason would a man carry that much cash on a trip like this?'

'I will not pass judgment.'

'I do not ask you to judge; I ask you to stretch your imagination and tell me why a man would carry with him a million dollars in cash. Can you think of a reason? One as farfetched as you like...but a reason.'

'There could be many reasons.'

'Can you think of one?'

I waited; she remained silent. I sighed and said, 'I can't think of one, either. Plenty of criminal reasons, of course, as so-called "hot money" almost always moves as cash. This is so common that most governments—all governments, I believe—assume that any large amount of cash being moved other than by a bank or by a government is indeed crime money until proved otherwise. Or counterfeit money, a still more depressing idea. The advice I need is this: Margrethe, what should I do with it? It's not mine; I can't take it off the ship. For the same reason I can't abandon it. I can't even throw it overboard. What can I do with it?'

My question was not rhetorical; I had to find an answer that would not cause me to wind up in jail for something Graham had done. So far, the only answer I could think of was to go to the only authority in the ship, the Captain, tell him all my troubles and ask him to take custody of that awkward million dollars.

Ridiculous. That would just give me a fresh set of bad answers, depending on whether or not the Captain believed me and on whether or not the Captain himself .was honest—and possibly on other variables. But I could not see any outcome from telling the Captain that would not end in my being locked up, either in jail or in a mental hospital.

The simplest way to resolve the situation would be to throw the pesky stuff overboard!

I had moral objections to that. I've broken some of the Commandments and bent some others, but being financially honest has never been a problem to me. Granted, lately my moral fiber did not seem to be as strong as I had thought, but nevertheless I was not tempted to steal that million even to jettison it.

But there was a stronger objection: Do you know anyone who, having a million dollars in his hands, could bring himself to destroy it?

Maybe you do. I don't. In a pinch I might turn it over to the Captain but I would not destroy it.

Smuggle it ashore? Alex, if you ever take it out of that lockbox, you have stolen it. Will you destroy your self-respect for a million dollars? For ten million? For five dollars?

'Well, Margrethe?'

'Alec, it seems to me that the solution is evident.'

'Eh?'

'But you have been trying to solve your problems in the wrong order. First you must regain your memory. Then you will know why you are carrying that money. It will turn out to be for some innocent and logical purpose.' She smiled. 'I know you better than you know yourself. You are a good man, Alec; you are not a criminal.'

I felt a mixture of exasperation at her and of pride in what she thought of me—but more exasperation than pride. 'Confound it, dear, I have not lost my memory. I am not Alec Graham; I am. Alexander Hergensheimer, and that's been my name all my life and my memory is sharp. Want to know the name of my second-grade teacher? Miss Andrews. Or how I happened to have my first airship ride when I was twelve? For I do indeed come from a world in which airships ply every ocean and even over the North Pole, and Germany is a monarchy and the North American Union has enjoyed a century of peace and prosperity and this ship we are in tonight would be considered so out of date and so miserably equipped and slow that no one would sail in it. I asked for help; I did not ask for a psychiatric opinion. If you think I'm crazy, say so...and we'll drop the subject.'

'I did not mean to anger you.'

'My dear! You did not anger me; I simply unloaded on you some of my worry and frustration—and I should not have done so. I'm sorry. But I do have real problems and they are not solved by telling me that my memory is at fault. If it were my memory, saying so would solve nothing., my problems would still be there. But I should not have snapped at you.—Margrethe, you are all I have...in a strange and sometimes frightening world. I'm sorry.'

She slid down off my bunk. 'Nothing to be sorry about, dear Alec. But there is no point in further discussion tonight. Tomorrow—Tomorrow we will test that thumbprint carefully, in bright sunlight. Then you will see, and it could have an immediate effect on your memory.

'Or it could have an immediate effect on your stubbornness, best of girls.'

She smiled. 'We will see. Tomorrow. Now I think I must go to bed. We have reached the point where we are each repeating the same arguments...and upsetting each other. I don't want that, Alec. That is not good.'

She turned and headed for the door, not even offering herself for a goodnight kiss.

Margrethe!'

'Yes, Alec?'

'Come back and kiss me.'

'Should I, Alec? You, a married man.'

'Uh—Well, for heaven's sake, a kiss isn't the same as adultery.'

She shook her head sadly. 'There are kisses and kisses, Alec. I would not kiss the way we have kissed unless I was happily willing to go on from there and make love. To me that would be a happy and innocent thing...but to you it would be adultery. You pointed out what the Christ said to the woman taken in adultery. I have not sinned...and I will not cause you to sin.' Again she turned to leave.

'Margrethe!'

'Yes, Alec?.

'You asked me if I intended ever again to ask you to come back later. I ask you now. Tonight. Will you come back later?'

'Sin, Alec. For you it. would be sin...and that would make it sin for me, knowing how you feel about it.'

'"Sin." I'm not sure what sin is...I do know I need you...and I think you need me.'

'Goodnight, Alec.' She left quickly.

After a long while I brushed my teeth and washed my face, then decided that another shower might help. I took it lukewarm and it seemed to calm me a little. But when I went to bed, I lay awake, doing something I call thinking but probably is not.

I reviewed in my mind all the many major mistakes I have made in my life, one after another, dusting them off and bringing them up sharp in my head, right to the silly, awkward, inept, self-righteous, asinine fool I had made of myself tonight, and, in so doing, how I had wounded and humiliated the best and sweetest woman I have ever known.

I 'can keep myself uselessly occupied with selfflagellation for an entire night when my latest attack of foot-in-mouth disease is severe. This current one bid fair to keep me staring at the ceiling for days.

Some long time later, after midnight and more, I was awakened by the sound of a key in the door. I fumbled for the bunk light switch, found it just as she dropped her robe and got into bed with me. I switched off the light.

She was warm and smooth and trembling and crying. I held her gently and tried to soothe her. She did not speak and neither did I. There had been too many words earlier and most of them had been mine. Now was a time simply to cuddle and hold and speak without words.

At last her trembling slowed, then stopped. Her breathing became even. Then she sighed and said very softly, 'I could not stay away.'

'Margrethe. I love you.'

'Oh! I love you so much it hurts in my heart.'

I think we were both asleep when the collision happened. I had not intended to sleep but for the first time since the fire walk I was relaxed and untroubled; I dropped off.

First came this incredible jar that almost knocked us out of my bunk, then a grinding, crunching noise at earsplitting level. I got the bunk light on—and the skin of the ship at the foot of the bunk was bending inward.

The general alarm sounded, adding to the already deafening noise. The steel side of the ship buckled, then ruptured as something dirty white and cold pushed into the hole. As the light went out.

I got out of that bunk any which way, dragging Margrethe with me. The ship rolled heavily to port, causing us to slide down into the angle of the deck and the inboard bulkhead. I slammed against the door-handle, grabbed at it, and hung on with my right hand while I held Margrethe to me with my left arm. The ship rolled back to starboard, and wind and water poured in through the hole—we heard it and felt it, could not see it. The ship recovered, then rolled again to starboard—and I lost my grip on the door handle.

I have to reconstruct what happened next—pitch dark, mind you, and a bedlam of sound. We were falling—I never let go of her—and then we were in water.

Apparently when the ship rolled back to starboard, we were tossed out through the hole. But that is, just reconstruction; all I actually know is that we fell, together, into water, went down rather deep.

We came up and I had Margrethe under my left arm, almost in a proper lifesaver carry. j grabbed a look as I gulped air, then we went under again. The ship was right alongside us and moving. There was cold wind and rumbling noise; something high and dark was on the side away from the ship. But it was the ship that scared me—or rather its propeller, its screw. Stateroom CI09 was far forward—but if I didn't get us well away from the ship almost at once, Margrethe and I were going to be chewed into hamburger by the screw. I hung onto her and stroked hard away from the ship, kicking strongly—and exulted as I felt us getting away from the hazard of the ship...and banged my head something brutal against blackness.

Chapter 8

So they took up Jonah, and cast him forth into the sea: and the sea ceased from her raging.
Jonah 1: 15

I WAS comfortable and did not want to wake up. But a slight throb in my head was annoying me and, willy-nilly, I did wake. I shook my head to get rid of that throb and got a snootful of water. I snorted it out.

'Alec?' Her voice was nearby.

I was on my back in blood-warm water, salt water by the taste, with blackness all around me—about as near to a return to the womb as can be accomplished this side of death. Or was this death? 'Margrethe?'

'Oh! Oh, Alec, I am so relieved! You have been asleep a long time. How do you feel?'

I checked around, counted this and that, twitched that and this, found that I. was floating on my back between Margrethe's limbs, she being also on her back with my head in her hands, in one of the standard Red-Cross lifesaving positions. She was using slow frog kicks, not so much moving us as keeping us afloat. 'I'm all right. I think. How about you?'

'I'm just fine, dearest!—now that you're awake.'

'What happened?'

'You bumped your head against the berg.'

'Berg

'The ice mountain. Iceberg.'

(Iceberg? I tried to remember what had happened.) 'What iceberg?'

'The one that wrecked the ship.'

Some of it came tumbling back, but it still did not make an understandable picture. A giant crash as if the ship had hit a reef, then we were dumped into water. A struggle to get clear—I did bump my head. 'Margrethe, we're in the tropics, as far south as Hawaii. How can there be icebergs?'

'I don't know, Alec.'

'But—' I started to say 'impossible,' then decided that, from me, that word was silly. 'This water is too warm for icebergs. Look, you can quit working so hard; in salt water I float as easily as Ivory soap.'

'All right. But do let me hold you. I almost lost you once in this darkness; I'm frightened that it might happen again. When we fell in, the water was cold. Now it's warm; so we must not be near the berg.'

'Hang onto me, sure; I don't want to lose you, either.' Yes, the water had been cold when we fell into it; I remembered. Or cold compared with a nice warm cuddle in bed. And a cold wind. 'What happened to the iceberg?'.

'Alec, I don't know. We fell into the water together. You grabbed me and got us away from the ship; I'm sure that saved us. But it was dark as December night and blowing hard and in the blackness you ran your head into the ice.

'That is when I almost lost you. It knocked you out, dear, and you let go of me. I went under and gulped water and came up and spat it out and couldn't find you.

'Alec, I have never been so frightened in all my life. You weren't anywhere. I couldn't see you; I reached out, all sides, and could not touch you; I called out, you did not answer.'

'I'm sorry.'

'I should not have panicked. But I thought you had drowned. Or were drowning and I was not stopping it. But in paddling around my hand struck you, and then I grabbed you and everything was all right —until you didn't answer. But I checked and found that your heart was steady and strong, so everything was all right after all, and I took you in the back carry so that I could hold your face out of water. After a long time you woke, up—and now everything is truly all right.'

'You didn't panic; I'd be dead if you had. Not many people could do whatyou did.'

'Oh, it's not so uncommon; I was a guard at a beach north of K0benhavrt two summers—on Fridays I gave lessons. Lots of boys and girls learned.'

'Keeping your head in a crunch and doing it in pitch darkness isn't learned from lessons; don't be so modest. What about the ship? And the iceberg?'

'Alec, again I don't know. By the time I found you and made sure that you were all right and then got you into towing position—by the time I had time to look around, it was like this. Nothing. Just blackness.'

'I wonder if she sank? That was one big wallop she took! No explosion? You didn't hear anything?'

'I didn't hear an explosion. Just wind and the collision sounds you must have heard, then some shouts after we were in the water. If she sank, I did not see it, but—Alec, for the past half hour, about, I've been swimming with my head pushed against a pillow or a pad or a mattress. Does that mean the ship sank? Flotsam in the water?'

'Not necessarily but it's not encouraging. Why have you been keeping your head against it?'

'Because we may need it. If it is one of the deck cushions or sunbathing mats from the pool, then it's stuffed with kapok and is an emergency lifesaver.'

'That's what I meant. If it's a flotation cushion, why are you just keeping your head against it? Why aren't you on it, up out of the water?'

'Because I could not do that without letting go of you.'

'Oh. Margrethe, when we get out of this, will you kindly give me a swift kick? Well, I'm awake now; let's find out what you've found. By Braille.'

'All right. But I don't want to let go of you when I can't see you. I

'Honey, I'm at least as anxious not to lose track of you. Okay, like this: You hang onto me with one hand; reach behind you with the other. Get a good grip on this cushion or whatever it is. I turn over and hang onto you and track you up to the hand you are using to grip the pillow thing. Then we'll see—we'll both feel what we have and decide how we can use it.'

It was not just a pillow, or even a bench cushion; it was (by the feel of it) a large sunbathing pad, at least six feet wide and somewhat longer than that—big enough for two people, or three if they were well acquainted. Almost as good as finding a lifeboat! Better—this flotation pad included Margrethe. I was minded of a profane poem passed around privately at seminary: 'A jug 'of wine, a loaf of bread, and thou—'

Getting up onto a mat that is limp as an angleworm on a night as black as the inside of a pile of coal is not merely difficult; it is impossible. We accomplished the impossible by my hanging on to it with both hands while Margrethe slowly slithered up over me. Then she gave me a hand while I inched up and onto it.

Then I leaned on one elbow and fell off and got lost. I followed Margrethe's voice and bumped into the pad, and again got slowly and cautiously aboard.

We found that the most practical way to make best use of the space and buoyancy offered by the mat was to lie on our backs, side by side, starfished like that Leonardo da Vinci drawing, in order to spread ourselves as widely as possible over the support.

I said, 'You all right, hon?'

'Just fine!'

'Need anything?'

'Not anything we have here. I'm comfortable, and relaxed—and you are here.'

'Me, too. But what would you have if you could have—anything you want?'

'Well...a hot fudge sundae.'

I considered it. 'No. A chocolate sundae with marshmallow syrup, and a cherry on top. And a cup of coffee.'

'A cup of chocolate. But make mine hot fudge. It's a taste I acquired in America. We Danes do lots of good things with ice cream, but putting a hot sauce on an ice-cold dish never occurred to us. A hot fudge sundae. Better make that a double.'

'All right. I'll pay for a double if that's what you want. I'm a dead game sport, I am—and you saved my life.'

Her inboard hand patted mine. 'Alec, you're fun—and I'm happy. Do you think we're going to get out of this alive?'

'I don't know, hon. The supreme irony of life is that hardly anyone gets out of it alive. But I promise you this: I'm going to do my best to get you that hot fudge sundae.'

We both woke up when it got light. Yes, I slept and I know Margrethe did, too, as I woke a little before she did, listened to her soft snores, and kept quiet until I saw her eyes open. I had not expected to be able to sleep but I am not surprised (now) that we did—perfect bed, perfect silence, perfect temperature, both of us very tired...and absolutely nothing to worry about that was worth worrying about because there was nothing, nothing whatever, to do about our problems earlier than daylight. I think I fell asleep thinking: Yes, Margrethe was right; a hot fudge sundae was a better choice than a chocolate marshmallow sundae. I know I dreamt about such a sundae—a quasinightmare in which I would dip into it, a big bite...lift the spoon to my mouth, and find it empty. I think that woke me.

She turned her head toward me, smiled and looked about sixteen and utterly heavenly. (like two young roes that are twins. Thou art all fair, my love; there is no spot in thee.) 'Good morning, beautiful.'

She giggled. 'Good morning, Prince Charming. Did you sleep well?'

'Matter of fact, Margrethe, I haven't slept so well in a month. Odd. All I want now is breakfast in bed.'

"Right away, sir. I'll hurry!'

'Go along with you. I should not have mentioned food. I'll settle for a kiss. Think we can manage a kiss without falling into the water?'

'Yes. But let's be careful. Just turn your face this way; don't roll over.'

It was a kiss mostly symbolic rather than one of Margrethe's all-out specials. We were both quite careful not to disturb the precarious stability of our make-do life raft. We were worried about something more important than being dumped into the ocean—at least I was.

I decided to broach it, take it out where we could worry about it together. 'Margrethe, by the map just outside the dining room we should have the coast of Mexico near Mazatlán just east of us. What time did the ship sink? If it sank. I mean, what time was the collision?'

'I don't know.'

'Nor do I. After midnight, I'm sure of that. The Konge 'Knut was scheduled to arrive at eight a.m. So that coast* line could be over a hundred miles east of us. Or it could be almost on top of us. Mountains over there, we may be able to see them when this overcast clears away. As it did yesterday, so it probably will today. Sweetheart, how are you on long-distance swimming? If we can see mountains, do you want to try for it?'

She was slow in answering. 'Alec, if you wish, we will try it.'

'That wasn't quite what I asked.'

'That is true. In warm sea water I think I can swim as long as necessary. I did once swim the Great Belt, in water colder than this. But, Alec, in the Belt are no sharks. Here there are sharks. I have seen.'

I let out a sigh. 'I'm glad you said it; I didn't want to have to say it. Hon, I think we must stay right here and hold still. Not call attention to ourselves. I can skip breakfast—especially a shark's breakfast.'

'One does not starve quickly.'

'We won't starve. If you had your druthers, which would you pick? Starvation? Or death by sunburn? Sharks? Or dying of thirst? In all the lifeboat and Robinson Crusoe stories I've ever read our hero had something to work with. I don't have even a toothpick. Correction: I have you; that changes the odds. Margrethe, what do you think we ought to do?'

'I think we will be picked up.'

I thought so, too, but for a reason I did not want to discuss with Margrethe. 'I'm glad to hear you say that. But-why do you think so?'

'Alec, have you been to Mazatlán before?'

'No.

'It is an important fishing port, both commercial fishing and sport fishing. Since dawn hundreds of boats have put out to sea. The largest and fastest go many kilometers out. If we wait, they will find us.'

'May find us, you mean. There is a lot of ocean out here. But you're right; swimming for it is suicide; our best bet is to stay here and hold tight.'

'They will be looking for us, Alec.'

'They will? Why?'

'If Konge Knut did not sink, then the Captain knows when and where we were lost overboard; when he reaches port—about now—he will ask for a daylight search. But if she did sink, then they will be scouring the whole area for survivors.'

'Sounds logical.' (I had another idea, not at all logical.)

'Our problem is to stay alive till they find us, avoiding sharks and thirst and sunburn as best we can—and all of that means holding still. Quite still and all the time. Except that I think we should turn over now and then, after the sun is out, to spread the burn.'

'And pray for cloudy weather. Yes, all of that. And maybe we should not talk. Not get quite so thirsty

She kept silent so long that I thought she had started the discipline I had suggested. Then she said, 'Beloved, we may not live.'

'I know.'

'If we are to die, I would choose to hear your voice, and I would not wish to be deprived of telling. you that I love you—now that I may!—in a futile attempt to live a few. minutes longer.'

'Yes, my sweetheart. Yes.'

Despite that decision we talked very little. For me it was enough to touch her hand; it appeared to be enough for—her, too.

A long time later—three hours at a guess—I heard Margrethe gasp.

'Trouble?'

'Alec! Look there!' She pointed. I looked.

It should have been my turn to gasp, but I was somewhat braced for it: high up, a cruciform shape, somewhat like a bird gliding, but much larger and clearly artificial. A flying machine

I knew that flying machines were impossible; in engineering school I had studied Professor Simon Newcomb's well-known mathematical proof that the efforts of Professor Langley and others to build an aerodyne capable of carrying a man were doomed, useless, because scale theory proved that no such contraption large enough to carry a man could carry a heat-energy plant large enough to lift it off the ground—much less a passenger.

That was science's final word on a folly and it put a stop to wasting public monies on a will-o'—the-wisp. Research and development money went into airships, where it belonged, with enormous success.

However, in the past few days I had gained a new angle on the idea of 'impossible'. When a veritable flying machine showed up in our sky, I was not greatly surprised.

I think Margrethe held her breath until it passed over us and was far toward the horizon. I started to, then forced myself to breathe calmly—it was such a beautiful thing, silvery and sleek and fast. I could not judge its size, but if those dark spots in its side were windows, then it was enormous.

I could not see what pushed it along.

'Alec...is that an airship?'

'No. At least it is not what I meant when I told you about airships. This I would call a "flying machine ".'That's all I can say; I've never seen one before. But I can tell you—one thing, now—something very important.'

'Yes?'

'We are not going to die...and I now know why the ship was sunk.'

'Why, Alec?'

'To keep me from checking a thumbprint.'

Chapter 9

For I was an hungred, and ye gave me meat:
I was thirsty, and ye gave me drink:
I was a stranger, and ye took me in.
Matthew 25:35

'OR, TO put it more nearly exactly, the iceberg was there and the collision took place to keep me from checking my thumbprint against the thumbprint on Graham's driver's license. The ship may not have sunk; that may not have been necessary to the scheme.'

Margrethe did not say anything.

So I added gently, 'Go ahead, dear; say it. Get it off your chest; I won't mind. I'm crazy. Paranoid.'

'Alec, I did not say that. I did not think it. I would not.'

'No, you did not say it. But this time my aberration cannot be explained away as "loss of memory". That is, if we saw the same thing. What did you see?'

'I saw something strange in the sky. I heard it, too. You told me that it was a flying machine.'

'Well, I think that is what it should be called—but you can call it a, uh, a "gumpersaggle" for all of me. Something new and strange. What is this gumpersaggle? Describe it.'

'It was something moving in the sky. It came from back that way, then passed almost over us, and disappeared there.' (She pointed, a direction I had decided, was north.) 'It was shaped something like a cross, a crucifix. The crosspiece had bumps on it, four I think. The front end had eyes like a whale and the back end had flukes like a whale. A whale with wings—t hat's what it looked like, Alec; a whale flying through the sky!'

'You thought it was alive?'

'Uh, I don't know. I don't think so. I don't know what to think.'

'I don't think it was alive; I think it was a machine. A flying machine. A boat with wings on it. But, either way—a machine or a flying whale—have you—ever in your life seen anything like it?'

'Alec, it was so strange that I have trouble believing that I saw it.'

'I know. But you saw it first and pointed it out to me so I didn't trick you into thinking that you saw it.'

' You wouldn't do that.'

'No, I would not. But I'm glad you saw it first, dearest girl; that means it's real—not something dreamed up in my fevered brain. That thing did not come from the world you are used to...and I can promise you that it is not one of the airships I talked about; it is not from the world I grew up in. So we're now in still a third world.' I sighed. 'The first time it took a twenty-thousand-ton ocean liner to prove to me that I had changed worlds. This time just one sight of something that simply could not exist in my world is all I need to know that they are at it again. They shifted worlds when I was knocked out—I think that's when they did it. As may be, I think they did it to keep me from checking that thumbprint. Paranoia. The delusion that the whole world is a conspiracy. Only it's not a delusion.'

I watched her eyes. 'Well?'

'Alec...could it possibly be that both of us imagined it? Delirious, perhaps? We've both had a rough experience—you hit your head; I may have hit mine when the iceberg struck.'

'Margrethe, we would not each have the same delirium dream. If you wake up and find that I'm gone, that could be your answer. But I'm not gone; I'm right here. Besides, you would still have to account for an iceberg as far south as we are. Paranoia is a simpler explanation. But the conspiracy is aimed at me; you just had the misfortune to be caught in it. I'm sorry.' (I wasn't really sorry. A raft in the middle of the ocean is no—place to be alone. But with Margrethe it was 'paradise enow.')

'I still think that sharing the same dream is—Alec, there it comes again!' She pointed.

I didn't see anything at first, then I did: A dot that grew into a cruciform shape, a shape that I now identified as 'flying machine'. I watched it grow.

'Margrethe, it must have turned around. Maybe it saw us. Or they saw us. Or he saw us. Whatever.'

'Perhaps.'

As it came closer I saw that it was going to pass to our right rather than overhead. Margrethe said suddenly, 'It's not the same. one.'

'And it's not a flying whale—unless flying whales hereabouts have wide red stripes down their sides.'

'It's not a whale. I mean "it's not alive". You are right,

Alec; it is a machine. Dear, do you really think it has people inside it? That scares me.'

'I think I would be more scared if it did not have people inside it.' (I remembered a fantastic story translated from the German about a world peopled by nothing but automatic machines—not a pleasant story.) 'Actually, it's good news. We both know now that our seeing the first one was not a dream, not an illusion. That nails down the fact that we are in another world. Therefore we are going to be rescued.'

She said hesitantly, 'I don't quite follow that.'

'That's because you are still trying to avoid calling me paranoid—and thank you, dear, but my being paranoid is the simplest hypothesis. If the joker pulling the strings had intended to kill me, the easy time to do it would have been with the iceberg. Or earlier, with the fire pit. But he 's not out to kill me, at least not now. He's playing with me, cat and mouse. So I'll be rescued. So will you, because we're together. You were with me when the iceberg hit—your bad luck. You're still with me now, so you'll be rescued,your good luck. Don't fight it, dear. I've had some days to get used to it, and I find that it is all right once you relax. Paranoia is the only rational approach to a conspiracy world.'

'But, Alec, the world ought not to he that way,'

'There is no "ought" to it, my love. The essence of philosophy is to accept the universe as it-is, rather than ,try to force it into some preconceived shape.' I added, 'Wups! Don't roll off. You don't want to be a snack for a shark just after we've had proof that we are going to be picked up!'

For the next hour or so nothing happened—unless you count sighting two regal sailfish. The overcast burned away and I began to be anxious for an early rescue; I figured they owed me that much! Not let me get a third-degree sunburn. Margrethe might be able to take a bit more sun than I; she was blonde but she was tanned a warm toast color all over—lovely! But I was raw frog-belly white except for my face and hands—a full day of tropic sun could put me into hospital. Or worse.

The eastern horizon now seemed to show a gray unevenness that could be mountains—or so I kept telling myself, although there isn't much you can see when your viewpoint is about seven inches above water line. If those were indeed mountains or hills, then land was not many miles away. Boats from Mazatlán should be in sight any time now...if Mazatlán was still there in this world. If --

Then another flying machine showed up.

It was only vaguely like the other two. They had been flying parallel to the coast; the first from the south, the second from the north. This machine came out from the direction of the coast, flying mostly 'West, although it zigzagged.

It passed north of us, then turned back and circled around us. It came low enough that I could see that it did indeed have men in it, two I thought.

Its shape is hard to explain. Imagine first a giant box kite, about forty feet long, four feet wide, and about three feet between two kite surfaces.

Imagine this box kite placed at right angles to a boat shape, somewhat, like an Esquimau's kayak but larger, much larger—about as large as the box kite.

Underneath all this are two more kayak shapes, smaller, parallel to the main shape.

At one end of this shape is an engine (as I saw later) and at the front end of that is an air propeller, like a ship's water propeller—and this I saw later, also. When I first saw this unbelievable structure, the air screw was turning so extremely fast that one simply could not see it. But one could hear it! The noise made by this contraption was deafening and never stopped.

The machine turned toward us and tilted down so that it headed straight toward us—like nothing so much as a pelican gliding down to scoop up fish.

With us the fish. It was frightening. To me, at least; Margrethe never let out a peep. But she did squeeze my fingers very hard. The mere fact that we were not fish and that a machine could not eat us and would not want to did not make this dive at us less terrifying.

Despite my fright (or because of it) I now saw that this construction was at least twice as big as I had estimated when I saw it high in the sky. It had two teamsters operating it, seated side by side behind a window in the front end. The driving engine turned out to be two, mounted between the boxkite wings, one on the right of the teamsters' position, one on the left.

At the very last instant the machine lifted like a horse taking a hurdle, and barely missed us. The blast of win ' d it created almost knocked us off our raft and the blast of sound caused my ears to ring.

It went a little higher, curved back toward us, glided again but not quite toward us. The lower twin kayak shapes touched the water, creating a brave comet's tail of spume—and the thing slowed and stopped and stayed there, on the water, and did not sink!

Now the air screws moved very slowly and I saw them for the first time...and admired the engineering ingenuity that had gone into them. Not as efficient, I suspected, as the ducted air screws used in our dirigible airships, but an elegant solution to a problem in a place where ducting would be difficult or perhaps impossible.

But those infernally noisy driving engines! How any engineer could accept that, I could not see. As one of my professors said (back before thermodynamics convinced me that I had a call for the ministry), noise is always a byproduct of inefficiency. A correctly designed engine is as silent as the grave.

The machine turned and came at us again, moving very slowly. Its teamsters handled it so that it missed us by a few feet and almost stopped. One of the two, inside it crawled out of the carriage space behind the window and was clinging by his left hand to one of the stanchions that held the two boxkite wings apart. His other hand held a coiled line.

As the flying machine passed us, he cast the line toward us. I snatched at it, got a hand on it, and did not myself go into the water because Margrethe snatched at me.

I handed the line to Margrethe. 'Let him pull you in. I'll slide into the water and be right behind you.'

'No!'

'What do you mean, "No"? This is no time to argue. Do it!'

'Alec, be quiet! He's trying to tell us something.'

I shut up, more than a little offended. Margrethe listened. (No point in my listening; my Spanish is limited to 'Gracias' and 'Por favor'. Instead I read the lettering on the side of the machine: EL GUARDA COSTAS REAL DEMEXICO.)

'Alec, he is warning us to be very careful. Sharks.'

'Ouch.'

'Yes. We are to stay where we are. He will pull gently on this rope. I think he means to get us into his machine without us going into the water.'

'A man after my own heart!'

We tried it; it did not work. A breeze had sprung up; it had much more effect on the flying machine than it had on us—that water-soaked sunbathing pad was practically nailed down, no sail area at all. Instead of being able to ,pull us to the flying machine, the man on the other end of the line was forced to let out more line to keep from pulling us off into the water.

He called out something; Margrethe answered. They shouted back and forth. She turned to me. 'He says to let loose the rope. They will go out and come back, this time directly at us, but slowly. As they come closest, we are to try to scramble up into the aeroplano. The machine.'

'All right.'

The machine left us, went out oil the water and curved back. While waiting, we were not bored; we had the dorsal fin of a huge shark to entertain us. It did not attack; apparently it had not made up its mind (what mind?) that we were good to eat. I suppose it saw only the underside of the kapok pad.

The flying machine headed directly toward us on the' water, looking like some monstrous dragonfly skimming the surface. I said, 'Darling, as it gets closest, you dive for the stanchion closest to you and I'll push you up. Then I'll come up behind you.'

'No, Alec.'

'What do you mean, "No"?' I was vexed. Margrethe was such a good comrade—then suddenly so stubborn. At the wrong time.

'You can't push me; you have no foundation to push from. And you can't stand up; you can't even sit up. Uh, you scramble to the right; I'll scramble to the left. If either of us misses, then back onto the pad—

fast! The aeroplano will come around again.'

'But

'That's how he said to do it.'

There was no time left; the machine was almost on top of us. The 'legs' or stanchions joining the lower twin shapes to the body of the machine bridged the pad, one just missing me and the other just missing Margrethe. 'Now!' she cried. I lunged toward my side, got a hand on a stanchion.

And almost jerked my right arm out by the roots but I kept on moving, monkey fashion—got both hands on that undercarriage got a foot up on a horizontal kayak shape, turned my head.

Saw a hand reaching down to Margrethe—she climbed and was lifted onto the kite wing above, and disappeared. I turned to climb up my side—and suddenly levitated up and onto the wing. I do not ordinarily levitate but this time I had incentive: a dirty white fin too big for any decent fish, cutting the water right toward my foot.

I found myself alongside the little carriage house from which the teamsters directed 'their strange craft. The second man (not the one who had climbed out to help) stuck his head out a window, grinned at me, reached back and opened a little door. I crawled inside, head first. Margrethe was already there.

The space had four seats, two in front where the teamsters sat, and two behind where we were.

The teamster on my side looked around and said something, and continued—I noticed!—to look at Margrethe. Certainly she was naked, but that was not her fault, and a gentleman would not stare.

'He says,' Margrethe explained, 'that we must fasten our belts. I think he means this.' She held up a buckle on the end of a belt, the other end being secured to the frame of the carriage.

I discovered that I was sitting on a similar buckle, which was digging a hole into my sunburned backside. I hadn't noticed it up to then, too many other things demanding attention. (Why didn't he keep his eyes to himself! I felt myself ready to shout at him. That he had, at great peril to himself, just saved her life and mine did not that moment occur to me; I was simply growing furious that he would take such advantage of a helpless lady.)

I turned my attention to that pesky belt and tried to ignore it. He spoke to the other man beside him, who responded enthusiastically. Margrethe interrupted the discussion. 'What are they saying?' I demanded.

'The poor man is about to give me the shirt off his back. I am protesting...but I'm not protesting so hard as to put a stop to it. It's very gallant of them, dear, and, while I'm not foolish about it, I do feel more at ease among strangers with some sort of clothing.' She listened, and added, 'They're arguing as to which one has the privilege.'

I shut up. In my mind I apologized to them. I'll bet even the Pope in Rome has sneaked a quick look a time or two in his life.

The one on the right apparently won the argument. He squirmed around in his seat—he could not stand up—and got his shirt off, turned and passed it back to Margrethe. 'Señorita. Por favor.' He added other remarks but they were beyond my knowledge.

Margrethe replied with dignity and grace, and chatted with them as she wiggled into his shirt. It covered her mostly. She turned to me. 'Dear, the commander is Teniente Anibal Sanz Garcia and his assistant is Sargento Roberto Dominguez Jones, both of the Royal Mexican Coast Guard. Both the Lieutenant and the Sergeant wanted to give me a shirt, but the Sergeant won a finger-guessing game, so I have his shirt.'

'It's mighty generous of him. Ask them if there is anything at all in the machine that I can wear.'

'I'll try.' She spoke several phrases; I heard my name. Then she shifted back to English. 'Gentlemen, I have the honor to present my husband, Sefior Alexandro Graham Hergensheimer.' She shifted back to Spanish.

Shortly she was answered. 'The Lieutenant is devastated to admit that they have nothing to offer you. But he promises on his mother's honor that something will be found for you just as quickly as we reach Mazatlán and the Coast Guard headquarters there. Now he urges both of us to fasten our belts. tightly as we are about to fly.. Alec, I'm scared!'

'Don't be. I'll hold your hand.'

Sergeant Dominguez turned around again, held up a canteen. 'Agua?'

'Goodness, yes!' agreed Margrethe. 'Sí sí sí!'

Water has never tasted so good.

The Lieutenant. looked around when we returned the canteen, gave a bigsmile and a thumbs-up sign old as the Colosseum, and did something that speeded up his driving engines. They had been turning over very slowly; now—they speeded up to a horrible racket. The machine turned as he headed it straight into the wind. The wind had been freshening all morning; now it showed little curls of white on the tops of the wavelets. He speeded his engines still more, to an unbelievable violence, and we went bouncing over the water, shaking everything.

Then we started hitting about every tenth wave with incredible force. I don't know why we weren't wrecked.

Suddenly we were twenty feet off the water; the bumping stopped. The vibration and the noise continued. We climbed at a sharp angle—

and turned and started down again, and I almost-not-quite threw up that welcome drink of water.

The ocean was right in front of us, a solid wall. The Lieutenant turned his head and shouted something.

I wanted to tell him to keep his eyes on the road!—but I did not. 'What does he say?'

'He says to look where he points. He'll point us right at it. EI tiburón blanco grande—the great white shark that almost got us.'

(I could have done without it.) Sure enough, right in the middle of this wall of water was a gray ghost with a fin cutting the water. Just when I knew that we were going to splash right down on top of it, the wall tilted away from us, my buttocks were forced down hard against the seat, my ears roared, and I again missed throwing up on our host only by iron will.

The machine leveled off and suddenly the ride was almost comfortable, aside from the racket and the vibration.

Airships are ever so much nicer.

The rugged hills behind the shoreline, so hard to see from our raft, were clearly in sight once we were in the air, and so was the shore—a series of beautiful beaches and a town where we were headed. The Sergeant looked around, pointed down a I t the town, and spoke. 'What did he say?'

'Sergeant Roberto says that we are home just in time for lunch. Almuerzo, he said, but notes that it's breakfast—desayuno—for us.'

My stomach suddenly decided to stay awhile. 'I don't care what he calls it. Tell him not to bother to cook the horse; I'll eat it raw.'

Margrethe translated; both our hosts laughed, then the Lieutenant proceeded to swoop down and place 'his machine on the water while looking back over his shoulder to talk to Margrethe—who continued to smile while she drove her nails through the palm of my right hand.

We got down. No one was killed. But airships are much better.

Lunch! Everything was coming up roses.

Chapter 10

In the sweat of thy face shalt thou eat bread, till thou return unto the ground --

Genesis 3:19

A HALF hour after the flying machine splashed down in the harbor of Mazatlán Margrethe and I were seated with Sergeant Dominguez in the enlisted men's mess of the Coast Guard. We were late for the midday meal but we were served. And I was clothed. Some at least—a pair of dungaree trousers. But the difference between bare naked and a pair of pants is far greater than the difference between cheap work trousers and the finest-ermine. Try it and you'll see.

A small boat had come out to the flying machine's mooring; then I had to walk across the dock where we had landed and into the headquarters building, there to wait until these pants could be found for me—with strangers staring at me the whole time, some of them women. I know now how it feels to be exposed in stocks. Dreadful! I haven't been so embarrassed since an unfortunate accident in Sunday school when I was five.

But now it was done with and there was food and drink in front of us and, for the time being, I was abundantly happy. The food was not what I was used to. Who said that hunger was the best sauce? Whoever he was, he was right; our lunch was delicious. Thin cornmeal pancakes soaked with gravy fried beans, a scorching hot stew, a bowl of little yellow tomatoes, and coffee strong, black, and bitter—what more could a man want? No gourmet ever savored a meal as much as I enjoyed that one.

(At first I had been a bit miffed that we ate in the enlisted men's mess rather than going with Lieutenant Sanz to wherever the officers ate. Much later I had it pointed out to me that I suffered from a very common civilian syndrome, i.e., a civilian with no military experience unconsciously equates his social position with that of officers, never with that of enlisted men. On examination this notion is obviously ridiculous—but it is almost universal. Oh, perhaps not universal but it obtains throughout America...where every man is 'as, good as anyone else and better than most'.)

Sergeant Dominguez now had his shirt back. While pants were being found for me, a woman—a charwoman, I believe; the Mexican Coast Guard did not seem to have female ratings—a woman at headquarters had been sent to fetch something for Margrethe, and that something turned out to be a blouse and a full skirt, each of cotton and in bright colors. A simple and obviously cheap costume but

Margrethe looked beautiful in it.

As yet, neither of us had shoes. No matter—the weather was warm and dry; shoes could wait. We were fed, we were dressed, we were safe—and all with a warm hospitality that caused me to feel that Mexicans were the finest people on earth.

After my second cup of coffee I said, 'Sweetheart, how do we excuse ourselves and leave without being rude? I think we should find the American consul as early as possible.'

'We have to go back to the headquarters building.'

'More red tape?'

'I suppose you could call it that. I think they want to question us in more detail as to how we came to be where we were found. One must admit that our story is odd.'

'I suppose so.' Our initial interview with the Commandant had been less than satisfactory. Had I been alone I think he simply would have called me a liar...but it is difficult for a male man bursting with masculine ego to talk that way to Margrethe.

The trouble was the good ship Konge Knut.

She had not sunk, she had not come into port—she had never existed.

I was only moderately surprised. Had she turned into a full-rigged ship or a quinquereme, I would not have been surprised. But I had expected some sort of vessel of that same name—I thought the rules required it. But now it was becoming clear that I did not understand the rules. If there were any.

Margrethe had pointed out to me a confirming factor: This Mazatlán was not the town she had visited before. This one was much smaller and was not a tourist town indeed the long dock where the Konge Knut should have tied up did not exist in this world. I think that this convinced her quite as much as the flying machines in proving to her that my 'paranoia' was in fact the least hypothesis. She had been here before; that dock was big and solid; it was gone. It shook her.

The Commandant had not been impressed. He spent more time questioning Lieutenant Sanz than he spent questioning us. He did not seem pleased with Sanz.

There was another factor that I did not understand at the time and have never fully understood. Sanz's boss was 'Captain' (or 'Capitán'); the Commandant also was 'Captain'. But they were not the same rank.

The Coast Guard used navy ranks. However, that small part of it that operated flying machines used army ranks. I think this trivial difference had an historical origin. As may be, there was friction at the interface; the four-stripes or seagoing Captain was not disposed to accept as gospel anything reported by a flying-machine officer.

Lieutenant Sanz had fetched in, two naked survivors with a preposterous story; the four-striper seemed inclined to blame Sanz himself for the unbelievable aspects of our story.

Sanz was not intimidated. I think he had no real respect for an officer who had never been higher off the water than a crow's nest. (Having ridden in his death trap, I understood why he was not inclined to genuflect to a sea-level type. Even among dirigible balloon pilots I have encountered this tendency to divide the world into those who fly and those who do not)

After a bit, finding himself unable to shake Sanz, unable to shake Margrethe, and unable to communicate with me except through Margrethe, the Commandant shrugged and gave instructions that resulted in us all going to lunch. I thought that ended it. But now we were going back for more, whatever it was.

Our second session with the Commandant was short. He told us that we would see the immigration judge at four that afternoon—the court with that jurisdiction; there was no separate immigration court. In the meantime here was a list of what we owed—arrange payment with the judge.

Margrethe looked startled as she accepted a piece of paper from him; I demanded to know what he had said.

She translated; I looked at that billing.

More than eight thousand pesos!

It did not take a deep knowledge of Spanish to read that bill; almost all the words were cognates. 'Tres horas' is three hours, and we were charged for three hours' use of I aeroplano'—a word I had heard earlier from Margrethe; it meant their flying machine. We were charged also for the time of Lieutenant Sanz and Sergeant Dominguez. Plus a 'multiplying factor that I decided must mean applied overhead, or near enough.

And there was fuel for the aeroplano, and service for it.

'Trousers' are 'pantalones'—and here was a bill for the pair I was wearing.

A 'faldo' was a skirt and a 'camisa' was a blouse—and Margrethe's outfit was decidedly not cheap.

One item surprised me not by its price but by being included; I had thought we were guests: two lunches, each at twelve pesos.

There was even a separate charge for the Commandant's time.

I started to ask how much eight thousand pesos came to in dollars —then shut up, realizing that I had not the slightest idea of the buying power of a dollar in this new world we had been dumped into.

Margrethe discussed the billing with Lieutenant Sartz, who looked embarrassed. There was much expostulation and waving of hands. She listened, then told me, 'Alec, it isn't Anibal's idea and it is not even the fault of the Commandant. The tariffs on these services—rescue at sea, use of the aeroplano, and so forth—are set from el Distrito Real, the Royal District—that's the same as Mexico City, I believe. Lieutenant Sanz tells me that there is an economy drive on at the top level, with great pressure on everyone to make all public services self-supporting. He says that, if the Commandant did not charge us for our rescue and the Inspector Royal ever found out about it, it would be deducted from the Commandant's pay. Plus whatever punitive measures a royal commission found appropriate. And Anibal wants you to know that he is devastated at this embarrassing situation. If he owned the aeroplano himself, we would simply be his guests. He will always look on you as his brother and me as his sister.'

'Tell him I feel the same way about him and please make it at least as flowery as he made it.'

'I will. And Roberto wants to be included.'

'And the same goes for the Sergeant. But find out where and how to get to the American consul. We've got troubles.'

Lieutenant Anibal Sanz was told to see to it that we appeared in court at four o'clock; with that we were dismissed. Sanz delegated Sergeant Roberto to escort us to the consul and back, expressed regret that his duty status kept him from escorting us personally—clicked his heels, bowed over Margrethe's hand, and, kissed it. He got a lot of mileage out of that simple gesture; I could see that Margrethe was pleased. But they don't teach that grace in Kansas. My loss.

Mazatlán is on a peninsula; the Coast Guard station is on the south shore not far from the lighthouse (tallest in the world—impressive!); the American consulate is about a mile away across town at the north shore, straight down Avenida Miguel Alemán its entire length—a pleasant walk, graced about halfway by a lovely fountain.

But Margrethe and I were barefooted.

Sergeant Dominguez did not suggest a taxi—and I could not.

At first being barefooted did not seem important. There were other bare feet on that boulevard and by no means all of them on children. (Nor did I have the only bare chest.) As a youngster I had regarded bare feet as a luxury, a privilege. I went barefooted all summer and put on shoes most reluctantly when school opened.

After the first block I was wondering why, as a kid, I had always looked forward to going barefooted. Shortly thereafter I asked Margrethe to ask Sergeant Roberto, please, to slow down and let me pick my way for maximum shade; this pesky sidewalk is frying my feet!

(Margrethe had not complained and did not—and I was a bit vexed with her that she had not. I benefited constantly from Margrethe's angelic fortitude—and found it hard to live up to.)

From there on I gave my full attention to pampering my poor, abused, tender pink feet. I felt sorry for myself and wondered why I had ever left God's country.

'I wept that I had no shoes, until I met a man who had no feet.' I don't know who said that first, but it is part of our cultural heritage and should be.

It happened to me.

Not quite halfway, where Miguel Alemán crosses Calle Aquiles Serdan at the fountain, we encountered a street beggar. He looked up at us and grinned, held up a handful of pencils—'looked up' because he was riding a little wheeled dolly; he had no feet.

Sergeant Roberto called him by name and flipped him a coin; the beggar caught it in his teeth, flipped it into his pocket, called out, 'Gracias!'—and turned his attention to me.

I said quickly, 'Margrethe, will you please explain to him that I have no money whatever.'

'Yes, Alec.' She squatted down, spoke with him eye to Eye. Then she straightened up. 'Pepe says, to tell you, that's all right; he'll catch you someday when you are rich.'

'Please tell him that I will be back. I promise.'

She did so. Pepe grinned at me, threw Margrethe a kiss, and saluted the Sergeant and me. We went on.

And I stopped being so finicky careful to coddle my feet. Pepe had forced me to reassess my situation. Ever since I had learned that the Mexican government did not regard rescuing me as a privilege but expected me to pay for it, I had been feeling sorry for myself, abused, put upon. I had been muttering to myself that my compatriots who complained that all Mexicans were bloodsuckers, living on gringo tourists, were dead right! Not Roberto and the Lieutenant, of course—but the others. Lazy parasites, all of them! with their hands out for the Yankee dollar.

Like Pepe.

I reviewed in my mind all the Mexicans I had met that day, each one I could remember, and asked forgiveness for my snide thoughts. Mexicans were simply fellow travelers on that long journey from dark to eternal darkness. Some carried their burdens well, some did not. And some carried very heavy burdens with gallantry and grace. Like Pepe.

Yesterday I had been living in luxury; today I was broke and in debt. But I have my health, I have my brain, I have my two hands—and I have Margrethe. My burdens were light; I should carry them joyfully. Thank you, Pepe!

The door of the consulate had a small American flag over it and the Great Seal in bronze on it. I pulled the bell wire beside it.

After a considerable wait the door opened a crack and a female voice told us to go away (I needed no translation; her meaning was clear). The door started to close. Sergeant Roberto whistled loudly and called out. The crack widened; a dialogue ensued. Margrethe said, 'He's telling her to tell Don Ambrosio that two American citizens are here who must see him at once because they must appear in court at four this afternoon.'

Again we waited. After about twenty minutes the maid let us in and ushered us into a dark office. The consul came in Y fixed my eye with his, and demanded to know how I dared to interrupt his siesta?

Then he caught sight of Margrethe and slowed down. To her it was: 'How can I serve you? In the meantime will you honor my poor house by accepting a glass of wine? Or a cup of coffee?'

Barefooted and in a garish dress, Margrethe was a lady—I was riffraff. Don't ask me why this was so; it just was. The effect was most marked with men. But it worked with women, too. Try to rationalize it and you find yourself using words like 'royal', 'noble', 'gentry', and 'to the manner born'—all involving concepts anathema to the American democratic ideal. Whether this proves something about Margrethe or something about the democratic ideal I will leave as an exercise for the student.

Don Ambrosio was a pompous zero but nevertheless he was a relief because he spoke American—real American, not English; he had been born in Brownsville, Texas. I feel certain that the backs of his parents were wet. He had parlayed a talent for politics among his fellow Chicanos into a cushy sinecure, telling gringo travelers in the land of Montezuma why they could not have what they desperately needed.

Which he eventually told us.

I let Margrethe do most of the talking because she was obviously so much more successful at it than I was. She called us 'Mr and Mrs Graham'—we had agreed on that name during the walk here. When we were rescued, she had used 'Grahain Hergensheimer' and had explained to me later that this let me choose: I could select 'Hergensheimer' simply by asserting that the listener's memory had had a minor bobble; the name had been offered as 'Hergensheimer Graham. No? Well, then I must have miscalled it—sorry.

I let it stay 'Graham Hergensheimer' and thereby used the name 'Graham' in order to keep things simple; to her I had always been 'Graham' and I had been using the name myself for almost two weeks. Before I got out of the consulate I had told a dozen more lies, trying to keep our story believable. I did not want unnecessary complication; 'Mr and Mrs Alec Graham' was easiest.

(Minor theological note: Many people seem to believe that the Ten Commandments forbid lying. Not at all! The prohibition is against bearing false witness against your neighbor—a specific, limited, and despicable sort of lie. But there is no Biblical rule forbidding simple untruth. Many theologians believe that no human social organization could stand up under the strain of absolute honesty. If you think their misgivings are unfounded, try telling your friends the ungarnished truth about what you think of their offspring—if you dare risk it.)

After endless repetitions (in which the Konge Knut shrank and became our private cruiser) Don Ambrosio said to me, 'It's no use, Mr Graham. I cannot issue you even a temporary document to substitute for your lost passport because you have offered me not one shred of proof that you are an American citizen.'

I answered, 'Don Ambrosio, I am astonished. I know that Mrs Graham has a slight accent; we told you that she was born in Denmark. But do you honestly think that anyone not born amidst the tall corn could possibly have my accent?'

He gave a most Latin. shrug. 'I'm not an expert in midwest accents. To my ear you could have been born to one of the harsher British accents, then have gone on the stage—and everybody knows that a competent actor can acquire the accent for any role. The People's Republic of England goes to any length these days to plant their sleepers in the States; you might be from Lincoln, England, rather than from somewhere near Lincoln, Nebraska.'

'Do you really believe that?'

'What I believe is not the question. The fact is that I will not sign a piece of paper saying that you are an

American citizen when I don't know that you are. I'm sorry. Is there anything more that I can do for you?'

(How can you do 'more' for me when you haven't done anything yet?) 'Possibly you can advise us.'

'Possibly. I am not a lawyer.'

I offered him our copy of the billing against us, explained it. 'Is this in order and are these charges appropriate?'

He looked it over. 'These charges are certainly legal both by their laws and ours. Appropriate? Didn't you tell me that they saved your lives?'

'No question about it. Oh, there's an outside chance that a fishing boat might have picked us up if the Coast Guard had not found us. But the Coast Guard did find us and did save us.'

'Is your life—your two lives—worth less than eight thousand pesos? Mine is worth considerably more, I assure you.'

'It isn't that, sir. We have no money, not a cent. It all went down with the boat.'

'So send for money. You can have it sent care of the consulate. I'll go that far.'

'Thank you. It will take time. In the meantime how can I get them off my neck? I was told that this judge will want cash and immediately.'

'Oh, it's not that bad. It's true that they don't permit bankruptcy the way we do, and they do have a rather old-fashioned debtors-prison law. But they don't use it just the threat of it. Instead the court will see that you get a job that will let you settle your indebtedness. Don Clemente is a humane judge; he will take care of you.'

Aside from the flowery nonsense directed at Margrethe, that ended it. We picked up Sergeant Roberto, who had been enjoying backstairs hospitality from the maid and the cook, and headed for the courthouse.

Don Clemente (Judge Ibafiez) was as pleasant as Don Ambrosio had said he would be. Since we informed the clerk at once that we stipulated the debt but did not have the cash to pay it, there was no trial. We were simply seated in the uncrowded courtroom and told to wait while the judge disposed of cases on his docket. He handled several quickly. Some were minor offenses drawing fines; some were debt cases; some were hearings for later trial. I could not tell much about what was going on and whispering was frowned on, so Margrethe could not tell me much. But he was certainly no hanging judge.

The cases at hand were finished; at a word from the clerk we went out back with the 'miscreants'—peasants, mostly—who owed fines or debts. We found ourselves lined up on a low platform, facing a group of men. Margrethe asked what this was—and was answered, 'La subasta.'

'What's that?' I asked her.

'Alec, I'm not sure. It's not a word I know.'

Settlements were made quickly on the others; I gathered that most of them had been there before. Then there was just one man left of the group off the platform, just us on the platform. The man remaining looked sleekly prosperous. He smiled and spoke to me. Margrethe answered.

'What is he saying?' I asked.

'He asked you if you can wash dishes. I told him that you do not speak Spanish.'

'Tell him that of course I can wash dishes. But that's hardly a job I want.'

Five minutes later our debt had been paid, in cash, to the clerk of the court, and we had acquired a patrón, Sehor Jaime Valera Guzman. He paid sixty pesos a day for Margrethe, thirty for me, plus our found. Court costs were twenty-five hundred pesos, plus fees for two nonresident work permits, plus war-tax stamps. The clerk figured our total indebtedness, then divided it out for us: In only a hundred and twenty-one days—four months—our obligation to our patr6n would be discharged. Unless, of course, we spent some money during that time.

He also directed us to our patrón's place of business, Restaurante Pancho. Villa. Our patrón had already left in his private car. Patrones ride; peones walk.

Chapter 11

And Jacob served seven years for Rachel; and they seemed unto him but a few days, for the love he had to her.
Genesis 29:20

SOMETIMES, WHILE washing dishes, I would amuse myself by calculating how high a stack of dishes I had washed since going to work for our patrón, Don Jaime. The ordinary plate used in Pancho Villa café stacked twenty plates to a foot. I arbitrarily decided that a cup and saucer, or two glasses, would count as one plate, since these items did not stack well. And so forth.

The great Mazatlán lighthouse is five hundred and fifteen feet tall, only forty feet shorter than the Washington Monument. I remember the day I completed my first 'lighthouse stack'. I had told Margrethe earlier that week that I was approaching my goal and expected to reach it by Thursday or early Friday.

And did so, Thursday evening—and left the scullery, stood in the door between the kitchen and the dining room, caught Margrethe's eye, raised my hands high and shook hands with myself like a pugilist.

Margrethe stopped what she was doing—taking orders from a family party—and applauded. This caused her to have to explain to her guests what was going on, and that resulted in her stopping by the scullery a few minutes later to pass to me a ten-peso note, a congratulatory gift from the father of that family. I asked her to thank him for me, and please tell him that I had just started my second lighthouse stack, which I was dedicating to him and his family.

Which in turn resulted in Señora Valera sending her husband, Don Jaime, to find out why Margrethe was wasting time and making a scene instead of paying attention to her work...which resulted in Don Jaime inquiring how much the diners had tipped me and then matching it.

The Señora had no reason to complain; Margrethe was not only her best waitress; she was her only bilingual waitress. The day we started to work for Sr y Sra Valera a sign painter was called in to paint a conspicuous sign: ENGLIS SPOKE HERE. Thereafter, in addition to being available for any English-speaking guests, Margrethe prepared menus in English (and the prices on the menus in English were about forty percent higher than the prices on the all-Spanish menus).

Don Jaime was not a bad boss. He was cheerful and, on the whole, kindly to his employees. When we had been there about a month he told me that he would not have bid in my debt had it not been that the judge would not permit my contract to be separated from

Margrethe's contract, we being a married couple (else I could have found myself a field hand able to see my wife only on rare occasions—as Don Ambrosio had told me, Don Clemente was a humane judge).

I told him that I was happy that the package included me but it simply showed his good judgment to want to hire Margrethe.

He agreed that that was true. He had attended the Wednesday labor auctions several weeks on end in search of a bilingual woman or girl who could be trained as a waitress, then had bid me in as well to obtain Margrethe—but he wished to tell me that he had not regretted it as he had never seen the scullery so clean, the dishes so immaculate, the silverware so shiny.

I assured him that it was my happy privilege to help uphold the honor and prestige of Restaurante Pancho Villa and its distinguished patrón, el Don Jaime.

In fact it would have been difficult for me not to improve that scullery. When I took over, I thought at first that the floor was dirt. And so it was—you could have planted potatoes!—but under the filth, about a half inch down, was sound concrete. I cleaned and then kept it clean—my feet were still bare. Then I demanded roach powder.

Each morning I killed roaches and cleaned the floor. Each evening, just before quitting for the day, I sprinkled roach powder. It is impossible (I think) to conquer roaches, but it is possible to fight them to a draw, force them back and maintain a holding action.

As to the quality of my dishwashing, it could not be otherwise; my mother had a severe dirt phobia and, because of my placement in a large family, I washed or wiped dishes under her eye from age seven through thirteen (at which time I graduated through taking on a newspaper route that left me no time for dishwashing).

But just because I did it well, do not think I was enamored of dishwashing. It had bored me as a child; it bored me as a man.

Then why did I do it? Why didn't I run away?

Isn't that evident? Dishwashing kept me with Margrethe. Running away might be feasible for some debtors—I don't think much effort went into trying to track down and bring back debtors who disappeared some dark night—but running away was not feasible for a married couple, one of whom was a conspicuous blonde in a country in which any blonde, is always conspicuous and the other was a man who could not speak Spanish.

While we both worked hard—eleven to eleven each day except Tuesday, with a nominal two hours off for siesta and a half hour each for lunch and dinner—we had the other twelve hours each day to ourselves, plus all day 'Tuesday.

Niagara Falls never supplied a finer honeymoon. We had a tiny attic room at the back of the restaurant building. It was hot but we weren't there much in the heat of the day—by eleven at night it was comfortable no matter how hot the day had been. In Mazatlán most residents of our social class (zero!) did not have inside plumbing. But we worked and lived in a restaurant building; there was a flush toilet we shared with other employees during working hours and shared with no one the other twelve hours of each day. (There was also a Maw Jones out back, which I sometimes used during working hours—I don't think Margrethe ever used it.)

We had the use of a shower on the ground floor,-- back to back with the employees' toilet, and the needs of the scullery were such that the building had a large water heater. Señora Valera scolded us regularly for using too much hot water ('Gas costs money!'); we listened in silence and went right on using whatever amount of hot water we needed.

Our patrón's contract with the state required him to supply us with food and shelter (and clothing, under the law, but I did not learn this until too late to matter), which is why we slept there, and of course we ate there—not the chef's specialties, but quite good food.

'Better is a dinner of herbs where love is, than a stalled ox and hatred therewith.' We had only ourselves; it was enough.

Margrethe, because she sometimes received tips, especially from gringos, was slowly accumulating cash money. We spent as little of this as possible—she bought shoes for each of us—and she saved against the day when we would be free of our peonage and able to go north. I had no illusions that the nation north of us was the land of my birth...but it was this world's analog of it; English was spoken there and I was sure that its culture would have to be closer to what we had been used to.

Tips to Margrethe brought us into friction with Señora Valera the very first week. While Don Jaime was legally our patrõn, she owned the restaurant—or so we were told by Amanda the cook. Jaime Valera had once been headwaiter there and had married the owner's daughter. This made him permanent maitre d'hotel. When his father-in-law died, he became the owner in the eyes of the public. But his wife retained the purse strings and presided over the cash register.

(Perhaps I should add that he was 'Don Jaime' to us because he was our patrón; he was not a Don to the public.

The honorific 'Don' will not translate into English, but owning a restaurant does not make a man a Don—but, for example, being a judge does.)

The first time Margrethe was seen to receive a tip, the Señora told her to turn it over—at the end of each week she would receive her percentage.

Margrethe came straight to me in the scullery. 'Alec, what shall I do? Tips were my main income in the Konge Knut and no one ever asked me to share them. Can she do this to me?'

I told her not to turn her tips over to the Señora but to tell her that we would discuss it with her at the end of the day.

There is one advantage to being a peón: You don't get fired over a disagreement with your boss. Certainly we could be fired...but that would simply lose the Valeras some ten thousand pesos they had invested in us.

By the end of the day I knew exactly what to say and how to say it —how Margrethe must say it, as it was another month before I soaked up enough Spanish to maintain a minimum conversation:

'Sir and Madam, we do not understand this ruling about gifts to me. We want to see the judge and ask him what our contract requires.'

As I had suspected, they were not willing to see the judge about it. They were legally entitled to Margrethe's service but they had no claim on money given to her by a third party.

This did not end it. Señora Valera was so angry at being balked by a mere waitress that she had a sign posted: NO PROPINAS—NO TIPS, and the same notice was placed in the menus.

Peónes can't strike. But there were five other waitresses, two of them Amanda's daughters. The day Sefiora Valera ordered no tipping she found that she had just one waitress (Margrethe) and no one in the kitchen. She gave up. But I am sure she never forgave us.

Don Jaime treated us as employees; his wife treated us as slaves. Despite that old cliché about 'wage, slaves', there is a world of difference. Since we both tried hard to be faithful employees while paying off our debt but flatly refused to be slaves, we were bound to tangle with Señora Valera.

Shortly after the disagreement over tips Margrethe became convinced that the Señora was snooping in our bedroom. If true, there was no way to stop her; there was no lock for the door and she could enter our room without fear of being caught any day while we were working.

I gave some thought to boobytraps until Margrethe vetoed the idea. She simply thereafter kept her mo hey on her person. But it was a measure of what we thought of our 'patroness' that Margrethe considered it necessary to lake precautions against her stealing from us.

We did not let Señora Valera spoil our happiness. And we did not let our dubious status as a 'married' couple spoil our somewhat irregular honeymoon. Oh, I would have spoiled it because I always have had this unholy itch to analyze matters I really do not know how to analyze. But Margrethe is much more practical than I am and simply did not permit it. I tried to rationalize our relationship to her by pointing out that polygamy was not forbidden by Holy Writ but solely by modern law and custom—and she chopped me off briskly by saying that she had no interest in how many wives or concubines King Solomon had and did not regard him or any Old Testament character as a model for her own behavior. If I did not want to live with her, speak up! Say so!

I shut up. Some problems are best let be, not chewed over with words. This modern compulsion to 'talk it out' is a mistake at least as often as it is a solution.

But her disdain for Biblical authority concerning the legality of one man having two wives was so sharp that I asked her about it later—not about polygamy; I stayed away from that touchy subject; I asked her how she felt about the authority of Holy Writ in general. I explained that the church I was brought up in believed in strict interpretation—'A whole Bible, not a Bible full of holes'—Scripture was the literal word of God...but that I knew that other churches felt that the spirit rather than the letter ruled...some being so liberal that they hardly bothered with the Bible. Yet all of them called themselves Christian.

'Margrethe my love, as deputy executive secretary of Churches United for Decency I was in daily contact with members of every Protestant sect in the country and in liaison association with many Roman Catholic clerics on matters where we could join in a united front. I learned that my own church did not have a monopoly on virtue. A man could be awfully mixed up in religious fundamentals and still be a fine citizen and a devout Christian.'

I chuckled as I recalled something and went on, 'Or to put it in reverse, one of my Catholic friends, Father Mahaffey, told me that even I could squeeze into Heaven, because the Good. Lord in His infinite wisdom made allowances for the ignorance and wrongheadedness of Protestants.'

This conversation took place on a Tuesday, our day off, the one day a week the restaurant did not open, and in consequence we were on top of el Cerro de la Neveria Icebox Hill, but it sounds better in Spanish—and just finishing a picnic lunch. This hill was downtown, close to Pancho Villa café, but was a bucolic oasis; the citizens had followed the Spanish habit of turning hills into parks rather than building on them. A happy place --

'My dear, I would never try to proselytize you into my church. But I do want to know as much about you as possible. I find that I don't know much about churches in Denmark. Mostly Lutheran, I think—but does Denmark have its own established state church like some other European nations? Either way, which church is yours, and is it strict interpretationist or liberal—and again, either way, how do you feel about it? And remember what Father Mahaffey said—I agree with him. I don't think that my church has the only door into Heaven.'

I was lying stretched out; Margrethe was seated with her knees drawn up and holding them and was faced west, staring out to sea. This placed her with her face turned away from me. She did not answer my query. Presently I said gently, 'My dear, did you hear me?'

'I heard you.'

Again I waited, then added, 'If I have been prying where I should not pry, I'm sorry and I withdraw the question.'

'No. I knew that I would have to answer it some day. Alec, I am not a Christian.' She let go her knees, swung around, and looked me in the eye. 'You can have a divorce as simply as we married, just by telling me so. I won't fight it; I will go quietly away. But, Alec, when you told me that you loved me, then later when you told me that we were married in the eyes of God, you did not ask me my religion.'

'Margrethe.'

'Yes, Alec?'

'First, wash out your mouth. Then ask my pardon.'

'There may be enough wine left in the bottle to rinse out my mouth. But I cannot ask pardon for not telling you this. I would have answered truthfully at any time. You did not ask.'

'Wash out your mouth for talking about divorce. Ask my pardon for daring to think that I would ever divorce you under any circumstances whatever. If you are ever naughty enough, I may beat you. But I would never put you away. For richer, for poorer, in sickness and heath, now and forever. Woman, I love you! Get that through your head.'

Suddenly she was in my arms, weeping for only the second time, and I was doing the only thing possible, namely, kissing her.

I heard a cheer behind me and turned my head. We had had the top of the hill to ourselves, it being a work day for most people. But I found that we had an audience of two streetwise urchins, so young that sex was unclear. Catching my eye, one of them cheered again, then made loud kissing noises.

'Beat it!' I called out. 'Scram! Vaya con Dios! Is that what I wanted to say, Marga?'

She spoke to them and they did go away, after more high giggles. I needed the interruption. I had said to Margrethe what had to be said because she needed immediate reassurance after her silly, gallant speech. But nevertheless I was shaken to my depths.

I started to speak, then decided that I had said enough for one day. But Margrethe said nothing, too; the silence grew painful. I felt that matters could not be left so, balanced uncertainly on edge. 'What is your faith, dear one? Judaism? I do remember now that there are

Jews in Denmark. Not all Danes are Lutheran.'

'Some Jews, yes. But barely one in a thousand. No, Alec. Uh—There are older Gods.'

'Older than Jehovah? Impossible.'

Margrethe said nothing—characteristically. If she disagreed, she usually said nothing. She seemed to have no interest in winning arguments, in which she must differ from 99 percent of the human race...many of whom appear willing to suffer any disaster rather than lose an argument.

So I found myself having to conduct both sides to keep the argument from dying through lack of nourishment. 'I retract that. I should not have said, "Impossible." I was speaking from the accepted chronology as given by Bishop Ussher. If one accepts his dating, then the world was created five thousand nine hundred and ninety-eight years ago this coming October. Of course that dating is not itself a matter of Holy Writ; Hales arrived at a different figure, uh, seven thousand four hundred and five, I think—I do better when I write figures down. And other scholars get slightly different answers.

'But they all agree that some four or five thousand years before Christ occurred the unique event, Creation. At that point Jehovah created the world and, in so doing, created time. Time cannot exist alone. As a corollary, nothing and no one and no god can be older than Jehovah, since Jehovah created time. You see?'

'I wish I'd kept quiet.'

'My dear! I am simply trying to have an intellectual discussion; I did not and do not and never do and never will intend to hurt you. I said that was the case by the orthodox way of dating. Clearly you are using another way. Will you explain it to me?—and not jump all over poor old Alex every time he opens his mouth? I was schooled as a minister in a church that emphasizes preaching; discussion comes as naturally to me as swimming does to fish. But now you preach and I'll listen. Tell me about these older gods.'

'You know of them. The oldest and greatest we celebrate tomorrow; the middle day of each week is his.'

'Today is Tuesday, tomorrow—Wednesday! Wotan! He is your God?'

'Odin. "Wotan" is a German distortion of Old Norse. Father Odin and his two brothers created the world. In the beginning there was void, nothing—then the rest of it reads much like Genesis, even to Adam and Eve—but called Askr and Embla rather than Adam and Eve.'

'Perhaps it is Genesis, Margrethe.'

'What do you mean, Alec?'

'The Bible is the Word of God, in particular the English translation known as the King James version because every word of that translation was sustained by prayer and the best efforts of the world's greatest scholars—any difference in opinion was taken directly to the Lord in prayer. So the King James Bible is the Word of God.

'But nowhere is it written that this can be the only Word of God. A sacred writing of another race at another time in another language can also be inspired history...if it is compatible with the Bible. And that is what you have just described, is it not?'

'Ah, just on Creation and on Adam and Eve, Alec. The chronology does not match at all. You said that the world was created about six thousand years ago?'

'About. Hales makes it longer. The Bible does not give dates; dating is a modern invention.'

'Even that longer time—Hales?—is much too short. A hundred thousand years would be more like it.'

I started to expostulate—after all, some things are just too much to be swallowed—then remembered that I had warned myself not to say anything that could cause Margrethe to shut up. 'Go on, dear. Do your religious writings tell what happened during all those millennia?'

'Almost all of it happened before writing was invented. Some was preserved in epic poems sung by skalds. But even that did not start until men learned to live in tribes and Odin taught them to sing. The longest period was ruled by the frost giants before mankind was more than wild animals, hunted for sport. But the real difference in the chronology is this, Alec. The Bible runs from Creation to Judgment Day, then Millennium—the Kingdom on Earth—then the War in Heaven and the end of the world. After that is the Heavenly City and Eternity—time has stopped. Is that correct?'

'Well, yes. A professional eschatologist would find that overly simplified but you have correctly described the main outlines. The details are given in Revelations—the Revelation of Saint John the Divine, I should say. Many prophets have witnessed the final things but Saint John is the only one with the complete story...because Christ Himself delivered the Revelation to John to stop the elect from being deceived by false prophets. Creation, the Fall from Grace, the long centuries of struggle and trial, then the final battle, followed by Judgment and the Kingdom. What does your faith say, my love?'

'The final battle we call Ragnarok rather than Armageddon—'

'I can't see that terminology matters.'

'Please, dear. The name does not matter but what happens does. In your Judgment Day the goats are separated from the sheep. The saved go to eternal bliss; the damned go to eternal punishment. Correct?'

'Correct—while noting for purposes of scientific accuracy that some authorities assert that, while bliss is eternal, God so loves, the world that even the damned may eventually be saved; no soul is utterly beyond redemption. Other theologians regard this as heresy—but it appeals to me; I have never liked the idea of eternal damnation. I'm a sentimentalist, my dear.'

'I know you are, Alec, and I love you for it. You should find the old religion appealing...as it does not have eternal damnation.'

'It does not?'

'No. At Ragnarok the world as we know it will be destroyed. But that is not the end. After a long time, a time of healing, a new universe will be created, one better and cleaner and free from the evils of this world. It too will last for countless millennia...until again the forces of evil and cold contend against the forces of goodness and light...and again there is a time of rest, followed by a new creation and another chance for men. Nothing is ever finished, nothing is ever perfect, but over and over again the race of men gets another chance to do better than last time, ever and again without end.'

'And this you believe, Margrethe?'

'I find it easier to believe than the smugness of the saved and the desperate plight of the damned in the Christian faith. Jehovah is said to be all powerful. If this is true, then the poor damned souls in Hell are there because Jehovah planned it that way in every minute detail. Is this not so?'

I hesitated. The logical reconciliation of Omnipotence, Omniscience, and Omnibenevolence is the thorniest problem in theology, one causing even Jesuits to break their teeth. 'Margrethe, some of the mysteries of the Almighty are not easily explained. We mortals must accept Our Father's benevolent intention toward us, whether or not we understand His works.'

' Must a baby understand God's benevolent intention when his brains are dashed out against a rock? Does he then go straight to Hell, praising the Lord for His infinite Wisdom and Goodness?'

'Margrethe! What in the world are you talking about?'

I am talking about places in the Old Testament in which Jehovah gives direct orders to kill babies, sometimes ordering that they be killed by dashing them against rocks. See that Psalm that starts "By the rivers of Babylon—" And see the word of the Lord Jehovah in Hosea: "their infants shall be dashed in—pieces, and their women with child shall be ripped up." And there is the case of Elisha and the bears. Alec, do you believe in your heart that your. God caused bears to tear up little children merely because they made fun of an old man's bald head?' She waited.

And I waited. Presently she said, 'Is that story of she bears and the forty-two children the literal Word of God?'

'Certainly it's the Word of God! But I don't pretend to understand it fully. Margrethe, if you want detailed explanations of everything the Lord has done, pray to Him for enlightenment. But don't crowd me about it.'

'I did not intend to crowd you, Alec. I'm sorry.'

'No need to be. I've never understood about those bears but I don't let it shake my faith. Perhaps it's a parable. But look, dear, doesn't your Father Odin have a pretty bloody history Himself?'

'Not on the same scale. Jehovah destroyed city after city, every man, woman, and child, down to the youngest baby. Odin killed only in combat against opponents his own size. But, most important difference of all, Father Odin is not all powerful and does not claim to be all wise.'

(A theology that avoids the thorniest problem—But how can you call Him 'God' if He is not omnipotent?)

She went on, 'Alec my only love, I don't want to attack your faith. I don't enjoy it and never intended to—and hope that nothing like it will ever happen again. But you did ask me point blank whether or not I accepted the authority of "Holy Writ—by which you mean your Bible. I must answer just as point blank. I do not. The Jehovah or Yahweh of the Old Testament seems to me to be a sadistic, bloodthirsty, genocidal villain. I cannot understand how He can be identified with the gentle Christ of the New Testament. Even through a mystic Trinity.'

I started to answer but she hurried on. 'Dear heart, before we leave this subject I must tell you something I have been thinking about. Does your religion offer an explanation of the weird thing that has happened to us? Once to me, twice to you—this changed world?'

(It had been endlessly on my mind, too!) 'No. I must Confess it. I wish I had a Bible to search an explanation. But I have been searching in my mind. I haven't been able to find anything that should have prepared me for this.' I sighed. 'It's a bleak feeling. But—' I smiled at her.' 'Divine Providence placed you with me. No land is strange to me that has Margrethe in it.'

'Dear Alec: I asked because the old religion does offer an explanation.'

'What?'

'Not a cheerful one. At the beginning of this cycle Loki was overcome—do you know Loki?'

'Some. The mischief maker.'

'"Mischie" is too mild a word; he works evil. For thousands of years he has been a prisoner, chained to a great rock. Alec, the end of every cycle in the story of man begins the same way. Loki manages to escape his bonds...and chaos results.'

She looked at me with great sadness. 'Alec, I am sorry...but I do believe that Loki is loose. The signs show it. Now anything can happen. We enter the Twilight of the Gods. Ragnarok comes. Our world ends.'

Chapter 12

And in the same hour was there a great earthquake, and the tenth part of the city fell, and in the earthquake were slain of men seven thousand: and the remnant were affrighted, and gave glory to the God of Heaven.

Revelation 11:13

I WASHED another lighthouse stack of dishes while I pondered the things Margrethe had said to me that beautiful afternoon on Icebox Hill—but I never again mentioned the subject to Margrethe. And she did not speak of it to me; as Margrethe never argued about anything if she could reasonably keep silent.

Did I believe her theory about Loki and Ragnarok? Of course not! Oh, I had no objection to calling Armageddon by the name 'Ragnarok'. Jesus or Joshua or Jesu; Mary or Miriam or Maryam or Maria, Jehovah or Yahweh—any verbal symbol will do as long as speaker and listener agree on meaning. But Loki? Ask me to believe that a mythical demigod of an ignorant, barbarian race has wrought changes in the whole universe? Now, really!

I am a modern man, with an open mind—but not so empty that the wind blows through it. Somewhere in Holy Writ lay a rational explanation for the upsets that had happened to us. I need not look to ghost stories of long-dead pagans for explanations.

I missed not having a Bible at hand. Oh, no doubt there were Catholic Bibles at the basilica three blocks away...in Latin or in Spanish. I wanted the King James version. Again no doubt there were copies of it somewhere in this city—but I did not know where. For the first time in my Life I envied the perfect memory of Preachin' (Rev Paul Balonius) who tramped up and down the central states the middle of last century, preaching the Word without carrying the Book with him. Brother Paul was reputed to be able to quote from memory any verse cited by book, chapter, and number of verse, or, conversely, correctly place by book, chapter, and number any verse read to him.

I was born too late to meet Preachin' Paul, so I never saw him do this—but perfect memory is a special gift God bestows not too infrequently; I have no reason to doubt that Brother Paul had it. Paul died suddenly, somewhat mysteriously, and possibly sinfully—in the words of my mission studies professor, one should exercise great prudence in praying alone with a married woman.

I don't have Paul's gift. I can quote the first few chapters of Genesis and several of the Psalms and the Christmas story according to Luke, and some other passages. But for today's problem I needed to study in exact detail all the prophets, especially the prophecy known as the Revelation of Saint John the Divine.

Was Armageddon approaching? Was the Second Coming at hand? Would I myself still be alive in the flesh when the great Trump sounds?

A thrilling thought, and not one to be discarded too quickly. Many millions will be alive on that great day; that mighty host could include Alexander Hergensheimer. Would I hear His Shout and see the dead rise up and then myself 'be caught up together with them in the clouds, to meet the Lord in the air' and then ever be with the Lord, as promised? The most thrilling passage in the Great Book!

Not that I had any assurance that I myself would be among those saved on that great day, even if I lived in the flesh to that day. Being an ordained minister of the Gospel does not necessarily improve one's chances. Clergymen are aware of this cold truth (if they are honest with themselves) but laymen sometimes think that men of the cloth have an inside track.

Not true! For a clergyman, there are no excuses. He can never claim that 'he didn't know it was loaded', or cite youth and inexperience as a reason to ask for mercy, or claim ignorance of the law, or any of the other many excuses by which a layman might show a touch less than moral perfection but still be saved.

Knowing this, I was forced to admit that my own record lately did not suggest that I was among the saved. Certainly, I was born again. Some people seem to think that this is a permanent condition, like a college degree. Brother, don't count on it! I was only too aware that I had racked up quite a number of sins lately: Sinful pride. Intemperance. Greed. Lechery. Adultery. Doubt. And others.

Worse yet, I felt no contrition for the very worst of these.

If the record did not show that Margrethe was saved and listed for Heaven, then I had no interest in going there myself. God help me, that was the truth.

I worried about Margrethe's immortal soul.

She could not claim the second chance of all pre-Christian Era souls. She had been born into the Lutheran Church, not my church but ancestor to my church, ancestor to Al Protestant churches, the first fruit of the Diet of Worms. (When I was a lad in Sunday school, 'Diet of Worms' inspired mind pictures quite foreign to theology!)

The only way Margrethe could be saved would be by renouncing her heresy and seeking to be born again. But she must do this herself; I could not do it for her.

The most. I could possibly do would be to urge her to seek salvation. But I would have to do it most carefully. One does not persuade a butterfly to light on one's hand by brandishing a sword.

Margrethe was not a heathen ignorant of Christ and needing only to be instructed. No, she had been born into Christianity and had rejected it, eyes open. She could cite Scripture as readily as I could at some time she had studied the Book most diligently, far more than most laymen. When and why I never asked, but I think it must have been at the time when she began to contemplate leaving the Christian faith. Margrethe was so serious and so good that I felt certain that she would never take such a drastic step without long, hard study.

How urgent was the problem of Margrethe? Did I have thirty years or ser to learn her mind and feel out the best approach? Or was Armageddon so close upon us that even a day's delay could doom her for eternity?

The pagan Ragnarok and the Christian Armageddon have this in common: The final battle will be preceded by great signs and portents. Were we experiencing such omens? Margrethe thought so. Myself, I found the idea that this world changing presaged Armageddon more attractive than the alternative, i.e., paranoia on my part. Could a ship be wrecked and a world changed just to keep me from checking a thumbprint? I had thought so at the time but—oh, come now, Alex, you are not that important.

(Or was I?)

I have never been a Millenarianist. I am aware how often the number one thousand appears in the Bible, especially in prophecy—but I have never believed that the Almighty was constrained to work in even millennia—or any other numbering patterns—just to please numerologists.

On the other hand I know that many thousands of sensible and devout people place enormous importance on the forthcoming end of the Second Millennium, with Judgment Day and Armageddon and all that must follow—expected at that time. They find their proofs in the Bible and claim confirmation in the lines in the Great Pyramid and in a variety of Apocrypha.

But they differ among themselves as to the end of the millennium. 2000 AD? Or 2001 AD? Or is the correct dating 3 pm Jerusalem local time April 7, 2030 AD? If indeed scholars have the time and date of the Crucifixion—and the earthquake at the moment of His death—correctly figured against mundane time reckoning. Or should it be Good Friday 2030 AD as calculated by the lunar calendar? This is no trivial matter in view of what we are attempting to date.

But, if we take the birth of Christ rather than the date of the Crucifixion as the starting point from which to count, the millennia, it is evident at once that neither the naive date of 2000 AD nor the slightly less naive date of 2001 can be the bimillenarian date because Jesus was born in Bethlehem on Christmas Day year 5 BC.

Every educated person knows this and almost no one ever thinks about it.

How could the greatest event in all history, the birth of our Lord Incarnate, have been misdated by five years? Incredible!

Very easily. A sixth-century monk made a mistake in arithmetic. Our present dating ('Anno Domini) was not used until centuries after Christ was born. Anyone who has ever tried to decipher on a cornerstone a date written in Roman numerals can sympathize with the error of Brother Dionysius Exiguus. In the sixth century there were so few who could read at all that the error went undetected for many years—and by then it was too late to change all the records. So we have the ludicrous situation that Christ was born five years before Christ was born—an Irishism that can be resolved only by noting that one clause refers to fact and the other clause refers to a false-to-fact calendar.

For two thousand years the good monk's error was of little importance. But now it becomes of supreme importance. If the Millenarianists are correct, the end of the world can be expected Christmas Day this year.

Please note that I did not say 'December 25th'. The day and month of Christ's birth are unknown. Matthew notes that Herod was king; Luke states that Augustus was Caesar and that Cyrenius was governor of Syria, and we all know that Joseph and Mary had traveled from Nazareth—to Bethlehem to be counted and taxed.

There are no other data, neither of Holy Writ nor of Roman civil records.

So there you have it. By Millenarianist theory, the Final Judgment can be expected about thirty-five years from now...or later this afternoon!

Were it not for Margrethe this uncertainty would not keep me awake nights. But how can I sleep if my beloved is in immediate danger of being cast down into the Bottomless Pit, there to suffer throughout eternity?

What would you do?

Envision me standing barefooted on a greasy floor', washing dishes to pay off my indenture, while thinking deep thoughts of last and first things. A laughable sight! But dishwashing does not occupy all the mind; I was better off with hard bread for the mind to chew on.

Sometimes I contrasted my sorry state with what I had so recently been, while wondering if I would ever find my way back through the maze into the place I had built for myself.

Would I want to go back? Abigail was there—and, while polygamy was acceptable in the Old Testament, it was not accepted in the forty-six states. That had been settled once and for all when the Union

Army's artillery had destroyed the temple of the antichrist in Salt Lake City and the Army had supervised the breaking up and diaspora of those immoral 'families'.

Giving up Margrethe for Abigail would be far too high a price to pay to resume the position of power and importance I had until recently held. Yet I had enjoyed my work and the deep satisfaction over worthwhile accomplishment that went with it. We had achieved our best year since the foundation was formed—I refer to the nonprofit corporation, Churches United for Decency. 'Nonprofit' does not mean that such an organization cannot pay appropriate salaries and even bonuses, and I had been taking a well-earned vacation after the best fund-raising year of our history—primarily my accomplishment because, as deputy director, my first duty was to see that our coffers were kept filled.

But I took even greater satisfaction in our labors in the vineyards, as fund raising means nothing if our programs of spiritual welfare do not meet their goals.

The past 'year' had seen the following positive accomplishments:

a) A federal law making abortion a capital offense;

b) A federal law making the manufacture, sale, possession, importation, transportation, and/or use of any contraceptive drug or device a felony carrying a mandatory prison sentence of not less than a year and a day but not more than twenty years for each offense—and eliminating the hypocritical subterfuge of 'For Prevention of Disease Only';

c) A federal law that, while it did not abolish gambling, did make the control and licensing of it a federal jurisdiction. One step at a time—having built. this foundation we could tackle those twin pits, Nevada and New Jersey, piece by piece. Divide and conquer!

d) A Supreme Court decision in which we had appeared as amicus curiae under which community standards of the typical or median-population community applied to all cities of each state (Tomkins v. Allied News Distributors);

e) Real progress in our drive to get tobacco defined as a prescription drug through the tactical device of separating snuff and chewing tobacco from the problem by inaugurating the definition 'substances intended for burning and inhaling';

f) Progress at our annual national prayer meeting on several subjects in which I was interested. One was the matter of how to remove the tax-free status of any private school not affiliated with a Christian sect. Policy on this was not yet complete because of the thorny matter of Roman Catholic schools. Should our umbrella cover them? Or was it time to strike? Whether the Catholics were allies or enemies was always a deep problem to those of us out on the firing line.

At least as difficult was the Jewish problem—was a humane solution possible? If not, then what? Should we grasp the nettle? This was debated only in camera.

Another matter was a pet project of my own: the frustrating of astronomers. Few laymen realize what mischief astronomers are up to. I first noticed it when I was still in engineering school and took a course in descriptive astronomy under the requirements for breadth in each student's program. Give an astronomer a bigger telescope and turn him loose, leave him unsupervised, and the first—thing he does is to come down with pestiferous, half-baked guesses denying the ancient truths of Genesis.

There is only one way to deal with this sort of nonsense: Hit them in the pocketbook! Redefine 'educational' to exclude those colossal white elephants, astronomical observatories. Make the Naval Observatory the only one tax free, reduce its staff, and limit their activity to matters clearly related to navigation. (Some of the most blasphemous and subversive theories have come from tenured civil servants there who don't have enough legitimate Work to keep them busy.)

Self-styled 'scientists' are usually up to no good, but astronomers are the worst of the lot.

Another matter that comes up regularly at each annual' prayer meeting I did not favor spending time or money on: 'Votes for Women'. These hysterical females styling themselves 'suffragettes' are not a threat, can never win, and it just makes them feel self-important to pay attention to them. They should not be jailed and should not be displayed in stocks—never let them be martyrs! Ignore them.

There were other interesting and worthwhile goals that I kept off the agenda and did not suffer to be brought up from the floor in the sessions I moderated, but instead carried them on my 'Maybe next year' list:

Separate schools for boys and girls.

Restoring the death penalty for witchcraft and satanism.

The Alaska option for the Negro problem.

Federal control of prostitution.

Homosexuals—what's the answer? Punishment? Surgery? Other?

There are endless good causes commending themselves to guardians of the public morals—the question is always how to pick and choose to the greater glory of God.

But all of these issues, fascinating as they are, I might never again pursue. A sculleryman who is just learning the local language (ungrammatically, I feel sure!) is not able to be a political force. So I did not worry about such matters and concentrated on my real problems: Margrethe's heresy and more immediate but less important, getting legally free of peonage and going north.

We had served more than one hundred days when I asked Don Jaime to help me work out the exact date when we would have discharged the terms of our debt contract—a polite way of saying: Dear Boss, come the day, we are going to leave here like a scared rabbit. Plan on it.

I had figured on a total obligated time of one hundred and twenty-one days...and Don Jaime shocked me almost out of my Spanish by getting a result of one hundred and fifty-eight days.

More than six weeks to go when I figured that we would be free next week!

I protested, pointing out that our total obligation as listed by the court, divided by the auction value placed on our services (pesos sixty for Margrethe, half that for me, for each day), gave one hundred and twenty-one days...of which we had served one hundred fifteen.

Not a hundred and fifteen—ninetynine—he handed me a calendar and invited me to count. It was at that point that I discovered that our lovely Tuesdays did not reduce our committed time. Or so said our patrón.

'And besides that, Alexandro,' he added, 'you have failed to figure the interest on the unpaid balance; you haven't multiplied by the inflation factor; you haven't allowed for taxes, or even your contribution for Our Lady of Sorrows. If you fall ill, I should support you, eh?'

(Well, yes. While I had not thought about it, I did think a patrón had that duty toward his peones.) 'Don Jaime, the day you bid in our debts, the clerk of the court figured the, contract for me. He told me our obligation was one hundred and twenty-one days. He told me!'

'Then go talk to the clerk of the court about it.' Don Jaime turned his back on me.

That chilled me. Don Jaime seemed as willing for me to take it up with the referee authority as he had been unwilling to discuss Margrethe's tips with the court. To me this meant that he had handled enough of these debt contracts to be certain how they worked and thus had no fear that the judge or his clerk might rule against him.

I was not able to speak with Margrethe about it in private until that night. 'Marga, how could I be so mistaken about this? I thought the clerk worked it out for us before he had us countersign the assignment of debt. One hundred and twenty-one days. Right?'

She did not answer me at once. I persisted, 'Isn't that what you told me?'

'Alec, despite the fact that I now usually think in English—or in Spanish, lately—when I must do arithmetic, I work it in Danish. The

Danish word for sixty is 'tres'—and that is also the Spanish word for three. Do you see how easily I could get mixed up? I don't know now whether I said to you, "Ciento y veintiuno" or "Ciento y sesentiuno"—because I remember numbers in Danish, not in English, not in Spanish. I thought you did the division yourself.'

'Oh, I did. Certainly the clerk didn't say, "A hundred and twenty-one." He didn't use any English, that I recall. And at that time I did not know any Spanish. Señor Muñoz explained it to you and you translated for me and later I did the arithmetic again and it seemed to confirm what he had said. Or you had said. Oh, shucks, I don't know!'

'Then why don't we forget it until we can ask Señor Muñoz?'

'Marga, doesn't it upset you to find that we are going to, have to slave away in this dump an extra five weeks?'

'Yes, but not very much. Alec, I've always had to work. Working aboard ship was harder work than teaching school—but I got to travel and see strange places. Waiting tables here is a little harder than cleaning rooms in the Konge Knut—but I have you with me here and that more than makes up for it. I want to go with you to your homeland...but it's not my homeland, so I'm not as eager to leave here as you are. To me, today, where you are is my homeland.'

'Darling, you are so logical and reasonable and civilized that you sometimes drive me right straight up the wall.'

'Alec, I don't mean to do that. I just want us to stop worrying about it until we can see Señor Muñoz. But right this minute I want to rub your back until you relax.'

'Madame, you've convinced me! But only if I have the privilege of rubbing your poor tired feet before you rub my back.'

We did both. 'Ah, wilderness were paradise enow!'

Beggars can't be choosy. I got up early the next morning, saw the clerk's runner, was told that I could not see the clerk until court adjourned for the day, so I made a semi-appointment for close-of-court on Tuesday—'semi' in that we were committed to show up; Señor Muñoz was not. (But would be there, Deus volent.)

So on Tuesday we went on our picnic outing as usual, as we could not see Señor Muñoz earlier than about 4 pm. But we were Sunday-go-to-meeting rather than dressed for a picnic—meaning that we both wore our shoes, both had had baths that morning, and I had shaved, and I wore my best clothes, handed down from Don Jaime but clean and fresh, rather than the tired Coast Guard work pants I wore in the scullery. Margrethe wore the colorful outfit she had acquired our first day in Mazatlán.

Then we both endeavored not to get too sweaty or dusty. Why we thought it mattered I cannot say. But somehow each of us felt that propriety called for one's best appearance in visiting a court.

As usual we walked over to the fountain to-see our friend Pepe before swinging back to climb our hill. He greeted us in the intimate mode of friends and we exchanged graceful amenities of the sort that fit so well in Spanish and are almost never encountered in English. Our weekly visit with Pepe had become an important part of our social life. We knew more about him now—from Amanda, not from him—and I respected him more than ever.

Pepe had not been born without legs (as I had once thought); he had formerly been a teamster, driving lorries over the mountains to Durango and beyond. Then there had been an accident and Pepe had been pinned under his rig for two days before he was rescued. He was brought in to Our Lady of Sorrows apparently DOA.

Pepe was tougher than that. Four months later he was released from hospital; someone passed the hat to buy him his little cart; he received his mendicant's license, and he took up his pitch by the fountain—friend to streetwalkers, friend to Dons, and a merry grin for the worst that fate could hand him.

When, after a decent interval for, conversation and inquiries as to health and welfare and that of mutual acquaintances, we turned to leave, I offered our friend a one-peso note.

He handed it back. 'Twenty-five centavos, my friend. Do you not have change? Or did you wish me to make change?'

'Pepe our friend, it was our intention and our wish that you keep this trivial gift.'

'No no no. From tourists I take their teeth and ask for more. From you, my friend, twenty-five centavos.'

I did not argue. In Mexico a man has his dignity, or he is dead.

El Cerro de la Nevería is one hundred meters high; we climbed it very slowly, with me hanging back because I wanted to be certain not to place any strain on Margrethe. From signs I was almost certain that she was in a family way. But she had not seen fit to discuss it with me and of course I could not raise the subject if she did not.

We found our favorite place, where we enjoyed shade from a small tree but nevertheless had a full view all around, three hundred and sixty degrees—northwest into the Gulf of California', west into the ` Pacific and what might or might not be clouds on the horizon capping a peak at the tip of Baja California two hundred miles away, southwest along our own peninsula to Cerro Vigia (Lookout Hill) with beautiful Playa de las 0las Altas between us and Cerro Vigía, then beyond it Cerro Creston, the site of the giant lighthouse, the 'Faro' itself commanding the tip of the peninsula—south right across town to the Coast Guard landing. On the east and northeast were the mountains that concealed Durango a hundred and fifty miles away...but today the air was so clear that it felt as if we could reach out and touch those peaks.

Mazatlán was spread out below like a toy village. Even the basilica looked like an architect's scale model from up' here, rather than a most imposing church—for the umpteenth time I wondered how the Catholics, with their (usually) poverty-stricken congregations, could build such fine churches while their Protestant opposite numbers had such a time raising the mortgages on more modest structures.

Look, Alec!' said Margrethe. 'Anibal and Roberto have their new aeroplano!' She pointed.

Sure enough, there were now two aeroplanos at the Coast Guard mooring. One was the grotesque giant dragonfly that had rescued us; the new one was quite different. At first I thought it had sunk at its moorings; the floats on which the older craft landed on the water were missing from this structure.

Then I realized that this new craft was literally a flying boat. The body of the aeroplano itself was a float, or a boat—a watertight structure. The propelling engines of this craft were mounted above the wings.

I was not sure that I trusted these radical changes. The homely certainties of the craft we had ridden in were more to my taste.

'Alec, let's go call on them next Tuesday.'

'All right.'

'Do you suppose that Anibal would possibly offer us a ride in his new aeroplano?'

'Not if the Commandant knows about it.' I did not say that the newfangled rig did not look safe to me; Margrethe was always fearless. 'But we'll call on them and ask to see it. Lieutenant Anibal will like that. Roberto, too. Let's eat.'

'Piggy piggy,' she answered,' and spread out a servilleta, started covering it with food from a basket I had carried. Tuesdays gave Margrethe an opportunity to vary Amanda's excellent Mexican cooking with her own Danish and international cooking. Today she had elected to make Danish open-face sandwiches so much enjoyed by all Danes—and by anyone else who has ever had a chance to enjoy them. Amanda allowed Margrethe to do what she liked in the kitchen, and Señora Valera did not interfere—she never came into the kitchen, under some armed truce arrived at before we joined the staff. Amanda was a woman of firm character.

Today's sandwiches featured heavily the tender, tasty shrimp for which Mazatlán is famous, but the shrimp were just a starter. I remember ham, turkey, crumbled crisp bacon, mayonnaise, three sorts —of cheese, several sorts of pickle, little peppers, unidentified fish, thin slices of beef, fresh tomato, tomato paste, three sorts of lettuce, what I think was deep-fried eggplant. But thank goodness it is not necessary to understand food in order to enjoy it Margrethe placed it in front of me; I happily chomped away, whether I knew what I was eating or not.

An hour later I was belching and pretending not to. 'Margrethe, have I told you today that I love you?'

'Yes, but not lately.'

'I do. You are not only beautiful, fair to see and of gainly proportions, you are also a fine cook.'

'Thank you, sir. I

'Do you wish to be admired for your intellectual excellence as well?'

'Not necessarily. No.'

'As you wish. If you change your mind, let me know. Quit fiddling with the remnants; I'll tidy up later. Lie down here beside me and explain to me why you continue to live with me. It can't be for my cooking. Is it because I am the best dishwasher on the west coast of Mexico?'

'Yes.' She went right on tidying things, did not stop until our picnic site was perfectly back in order, with all that was left back in the basket, ready to be returned to Amanda.

Then she lay down beside me, slid her arm under my neck—then raised her head. 'What's that?'

'What's—' Then I heard it. A distant rumble increasing in volume, like a freight train coming 'round the bend. But the nearest railway, the line north to Chihuahua and south to Guadalajara, was distant, beyond the peninsula of Mazatlán.

The rumble grew louder; the ground started to sway. Margrethe sat up. 'Alec, I'm frightened.'

'Don't be afraid, dear; I'm here.' I reached up and pulled her down to me, held her tight while the solid ground bounced up and down under us and the roaring rumble increased to unbelievable volume.

If you've ever been in an earthquake, even a small one, you know what we were feeling better than my words can say. If you have never been in one, you won't believe me and the more accurately I describe it, the more certain you are not to believe me.

The worst part about a quake is that there is nothing solid to cling to anywhere...but the most startling thing is the noise, the infernal racket of every sort—the crash of rock grinding together under you, the ripping, rending sounds of buildings being torn apart, the screams of the frightened, the cries of the hurt and the lost, the howling and wailing of animals caught by disaster beyond their comprehension.

And none of it will stop.

This, went on for an endless time—then the main earthquake hit us and the city fell down.

I could hear it. The noise that could not increase suddenly doubled. I managed to get up on one elbow and look. The dome of the basilica broke like a soap bubble. 'Oh, Marga, look! No, don't—this is terrible.'

She half sat up, said nothing and her face was blank. I kept my arm around her and looked down the peninsula past Cerro Vigla and at the lighthouse.

It was leaning.

While I watched it broke about halfway up, then slowly and with dignity collapsed to the ground.

Past the city I caught sight of the moored aeroplanos of the Coast Guard. They were dancing around in a frenzy; the new one dipped one wing; the water caught it—then I lost sight of it as a cloud rose up from the city, a cloud of dust from thousands and thousands of tons of shattered masonry.

I looked for the restaurant, and found it: EL RESTAURANTE PANCHO VILLA. Then while I watched, the wall on which the sign was painted crumpled and fell into the street. Dust rose up and concealed where it had been.

'Margrethe! It's gone. The restaurant. El Pancho Villa.' I pointed.

'I don't see anything.'

'It's gone, I tell you. Destroyed. Oh, thank the Lord that Amanda and the girls were not there today!'

'Yes. Alec, won't it ever stop?'

Suddenly it did stop,—much more suddenly than it started. Miraculously the dust was gone; there was no racket, no screams of the hurt and dying, no howls of animals.

The lighthouse was back where it belonged.

I looked to the left of it, checking on the moored aeroplanos—nothing. Not even the driven piles to which they should be tied. I looked back at the city—all serene. The basilica was unhurt, beautiful. I looked for the Pancho Villa sign.

I could not find it. There was a building on what seemed the proper corner, but its shape was not quite right and it had different windows. 'Marg—Where's the restaurant?'

'I don't know. Alec, what is happening?'

'They're at it again,' I said bitterly. 'The world changers.

The earthquake is over but this is not the same city we were in. It looks a lot like it but it's not the same.'

I was only half right. Before we could make up our minds to start down the hill, the rumble started up again. Then the swaying...then the greatly increased noise and violent movement of the land, and this city was destroyed. Again I saw our towering lighthouse crack and fall. Again the church fell in on itself. Again the dust clouds rose and with it the screams and howls.

I raised my clenched fist and shook it at the sky. 'God damn it! Stop! Twice is too much.'

I was not blasted.

Chapter 13

I have seen all the works that are done under the sun; and, behold, all is vanity and vexation of the spirit.

Ecclesiastes 1:14

I AM going to skip over the next three days, for there was nothing good about them. 'There was blood in the streets and dust.' Survivors, those of us who were not hurt, not prostrate with grief, not dazed or hysterical beyond action—few of us, in short—worked at the rubble here and there trying to find living creatures under the bricks and stones and plaster. But how much can you do with your naked fingers against endless tons of rock?

And how much can you do when you do dig down and discover that you were too late, that indeed it was *too late before you started? We heard this mewling, something like a kitten, so we dug most carefully, trying not to put any pressure on whatever was underneath, trying not to let the stones we shifted dislodge anything that would cause more grief underneath—and found the source. An infant, freshly dead. Pelvis broken, one side of its head bashed. 'Happy shall he be, that taketh and dasheth thy little ones against the stones.' I turned my head away and threw up. Never will I read Psalm 137 again.*

That night we spent on the lower slopes of Icebox Hill. When the sun went down, we perforce stopped trying. Not only did the darkness make it impossible to work but there was looting going on. I had a deep conviction that any looter was a potential rapist and murderer. I was prepared to die for Margrethe should it become necessary—but I had no wish to die gallantly but futilely, in a confrontation that could have been avoided.

Early the following afternoon the Mexican Army arrived. We had accomplished nothing useful in the meantime more of the same picking away at rubble. Never mind what we found. The soldiers put a stop even to that; all civilians were herded back up the peninsula, away from the ruined city, to the railroad station across the river. There we waited—new widows, husbands freshly bereaved, lost children, injured on make-do stretchers, walking wounded, some with no marks on them but with empty eyes and no speech. Margrethe and, I were of the lucky ones; we were merely hungry, thirsty, dirty, and covered with bruises from head to foot from lying on the ground during the earthquake. Correction: during two earthquakes.

Had anyone else experienced two earthquakes?

I hesitated to ask. I seemed to be the unique observer to this world-changing—save that, twice, Margrethe had come with me because I was holding her at the instant. Were there other victims around? Had there been others in Konge Knut who had kept their mouths shut about it as carefully as I had? How do you ask? Excuse me, amigo, but is this the same city it was yesterday?

When we had waited at the railroad station about two hours an army water cart came through a tin cup of water to each refugee and. a soldier with a bayonet to enforce order in the queues.

Just before sundown the cart came back with more water and with loaves of bread; Margrethe and I were rationed a quarter of a loaf between us. A train backed into the station about then and the army people started loading it even as supplies were being unloaded. Marga and I were lucky; we were pushed into a passenger car—most rode in freight cars.

The train started north. We weren't asked whether or not we wanted to go north; we weren't asked for money For fares; all of Mazatlán was being evacuated. Until Its water system could be restored, Mazatlán belonged to the rats and the dead.

No point in describing the journey. The train moved; we endured. The railway line leaves the coast at Guaymas and goes straight north across Sonora to Arizona—beautiful country but we were in no shape to appreciate it. We slept as much as we could and pretended to sleep the rest of the time. Every time the train stopped, some left it unless the police herded them back on. By the time we reached Nogales, Sonora, the train was less than half full; the rest seemed headed for Nogales, Arizona, and of course we were.

We reached the international gate early afternoon three days after the quake.

We were herded into a detention building just over the line, and a man in a uniform made a speech in Spanish: 'Welcome, amigos! The United States is happy to help its neighbors in their time of trial and the US Immigration Service has streamlined its procedures so that we can take care of all of you quickly. First we must ask you all to go through delousing. Then you'll be issued green cards outside of quota so that you can work at any job anywhere in the States. But you will find labor agents to help you as you leave the compound. And a soup kitchen! If you are hungry, stop and have your first meal here as guests of Uncle Sam. Welcome to los Estados Unidos!"

Several people had questions to ask but Margrethe and I headed for the door that led to the delousing setup. I resented the name assigned to this sanitary routine—a requirement that you take delousing is a way of saying that you are lousy. Dirty and mussed we certainly were, and I had a three-day beard. But lousy?

Well, perhaps we were. After a day of picking through the ruins and two days crowded in with other unwashed in a railroad car that was not too clean when we boarded it, could I honestly assert that I was completely free of vermin?

Delousing wasn't too bad. It was mostly a supervised shower bath with exhortations in Spanish to scrub the hairy places throughly with a medicated 9oft soap. In the meantime my clothes went through some sort of sterilization or fumigation—autoclave, I think—then I had to wait, bare naked, for twenty minutes to reclaim them, while I grew more and more angry with each passing minute.

But once I was dressed again, I got over my anger, realizing that no one was intentionally pushing me around; it was simply that any improvised procedure for handling crowds of people in an emergency is almost certain to be destructive of human dignity. (The Mexican refugees seemed to find it offensive; I heard mutterings.)

Then again I had to wait, for Margrethe.

She came out the exit door from the distaff side, caught my eye, and smiled, and suddenly everything was all right. How could she come out of a delousing chamber-and look as if she had just stepped out of a bandbox?

She came up to me and said, 'Did I keep you waiting, dear? I'm sorry. There was an ironing board in there and I seized the chance to touch up my dress. It looked a sorry sight when it came out of the washer.'

'I didn't mind waiting,' I fibbed. 'You're beautiful.' (No fib!) 'Shall we go to dinner? Soup kitchen dinner, I'm afraid.'

'Isn't there some paper work we have to go through?'

'Oh. I think we can hit the soup kitchen first. We don't want green cards; they are for Mexican nationals. Instead I must explain about our lost passports.' I had worked this* out in my head and had explained it to Margrethe on the train. This is what I would say had happened to us: We were tourists, staying in Hotel de las, Olas Altas on the beach. When the earthquake hit, we were on the beach. So we lost our clothes, our money, our passports, everything, as our hotel had been destroyed. We were lucky to be alive, and the clothes we were wearing. had been given to us by Mexican Red Cross.

This story had two advantages: Hotel de las Olas Altas had indeed been destroyed, and the rest of the story had no easy way to be checked.

I found that we had to go through the green-card queue in order to reach the soup kitchen. Eventually we got as far as the table. A man there shoved a file card in front of me, saying in Spanish: 'Print your name, last name first. List your address. If—it was destroyed in the quake, say so, and give some other address—cous *in, father, priest, somebody whose home was not destroyed.'*

I started my spiel. The functionary looked up and said, 'Amigo, you're holding up the line.'

'But,' I said, 'I don't need a green card. I don't want a green card. I'm an American citizen returning from abroad and I'm trying to explain why I don't have my passport. And the same for my wife,'

He drummed on the table. 'Look,' he said, 'your accent says that you're native American. But I can't do anything about your lost passport and I've got three hundred and fifty refugees still to process, and another trainload just pulling in. I won't get to bed before two. Why don't you do us both a favor and accept a green card? It won't poison you and it'll get you in. Tomorrow you can fight with the State Department about your passport—but not with me. Okay?'

I'm stupid but not stubborn. 'Okay.' For my Mexican accommodation address I listed Don Jaime; I figured he owed me that much. His address had the advantage of being in another universe.

The soup kitchen was what you would expect from a charity operation. But it was gringo cooking, the first I had had in months—and we were hungry. The Stark's Delicious apple I had for dessert was indeed delicious. It was still short of sundown when *we were out on the streets of Nogales—free, bathed, fed, and inside the United States legally or almost. We were at least a thousand percent better off than those two naked survivors who had been picked up out of the ocean seventeen weeks ago.*

But we were still orphans of fate, no money at all, no place to rest, no clothes but those we were wearing, and my three-day beard and the shape my clothes were in after going through an autoclave or whatever made me look like a skid row derelict.

The no-money situation was particularly annoying because we did have money, Margrethe's hoarded tips. But the paper money said 'Reino' where it should have read 'Republica' and the coins did not have the right faces. Some of the coins may have contained enough silver to have some minor intrinsic value. But, if so, there was no easy way to cash it in at once. And any attempt to spend any of this money would simply get us into major trouble.

How much had we lost? There are no interuniversal exchange rates. One might make a guess in terms of equivalent purchasing power—so many dozens of eggs, or so many kilos of sugar. But why bother? Whatever it was, we had lost lit.

This paralleled a futility I had run into in Mazatlán. I had attempted, while lord of the scullery, to write to a) Alexander Hergensheimer's boss, the Reverend Dr Dandy Danny Dover, DD, director of Churches United for Decency, and b) Alec Graham's lawyers in Dallas.

Neither letter was answered; neither came back. Which was what I had expected, as neither Alec nor Alexander came from a world having flying machines, aeroplanos.

I would try both again—but with small hope; I already knew that this world would feel strange both to Graham and to Hergensheimer. How? Nothing that I had noticed until we reached Nogales. But here, in that detention hall, was (hold tight to your chair) television. A handsome big box with a window in one side, and in that window living pictures of people...and sounds coming out of it of those selfsame people talking.

Either you have this invention and are used to it and take it for granted, or you live in. a world that does not have it—and you don't believe me. Learn from me, as I have been forced to believe unbelievable things. There is such an invention; there is a world where it is as common as bicycles, and its name is television—or sometimes tee-vee or telly or video or even 'idiot box'—and if you were to hear some of the purposes for which this great wonder is used, you would understand the last tag.

If you ever find yourself flat broke in a strange city and no one to turn to and you do not want to turn yourself in at a police station and don't want to be mugged, there is just one best answer for emergency help. You will usually find it in the city's tenderloin, near skid row:

The Salvation Army.

Once I laid hands on a telephone book it took me no time at all to get the address of the Salvation Army mission (although it did take me a bit of time to recognize a telephone when I saw one—warning to interworld travelers: Minor changes can be even more confusing than major changes).

Twenty minutes and one wrong turn later Margrethe and I were at the mission. Outside on the sidewalk four of them—French horn, big drum, two tambourines—were gathering a crowd. They were working on 'Rock of Ages' and doing well, but they needed a baritone and I was tempted to join them.

But a couple of store fronts before we reached the mission Margrethe stopped and plucked at my sleeve. 'Alec...must we do this?'

'Eh? What's the trouble, dear? I thought we had agreed.'

'No, sir. You simply told me.'

'Mmm—Perhaps I did. You don't want to go to the Salvation Army?'

She took a deep breath and sighed it out. 'Alec...I have not been inside a church since—since I left the Lutheran Church. To go to one now—I think it would be sinful.'

(Dear Lord, what can I do with this child? She is apostate not because she is heathen...but because her rules are even more strict than Yours. Guidance, please—and do hurry it up!) 'Sweetheart, if it feels sinful to you, we won't do it. But tell me what we are to do now;

I've run out of ideas.'

'Ah—Alec, are there not other institutions to which a person in distress may turn?'

'Oh, certainly. In a city this size the Roman Catholic Church is bound to have more than one refuge. And there will be other Protestant ones. Probably a Jewish one. And—'

'I meant, "Not connected with a church".'

'Ah, so. Margrethe, we both know that this is not really my home country; you probably know as much about how it works as I do. There may be refuges for the homeless here that are totally unconnected with a church. I'm not sure, as churches tend to monopolize the field—nobody else wants it. If it were early in the day instead of getting dark, I would try to find something called united charities or community chest or the equivalent, and look over the menu; there might be something. But now—Finding a policeman and asking for help is the only other thing I can think of this time of day...and I can tell you ahead of time what a cop in this part of town would do if you told him you have nowhere to sleep. He would point you toward the mission right there. Old Sal.'

'In Kobenhavrt—or Stockholm or Oslo—I would go straight to the main police station. You just ask for a place to sleep; they give it to you.'

'I have to point out that this is not Denmark or Sweden or Norway. Here they might let us stay—by locking me in the drunk tank and locking you up in the holding pen for prostitutes. Then tomorrow morning we might or might not be charged with vagrancy. I don't know.'

'Is America really so' evil?'

'I don't know, dear—this isn't my America. But. I don't want to find out the hard way. Sweetheart...if I worked for whatever they give us, could we spend a night with the Salvation Army without your feeling sinful about it?'

She considered it solemnly—Margrethe's greatest lack was a total absence of sense of humor. Good nature—loads. A child' delight in play, yes. Sense of humor? 'Life is real and life is earnest—'

'Alec, if that can be arranged, I would not feel wrong in entering. I will work, too.'

'Not necessary, dear; it will be my profession that is involved. When they finish feeding the derelicts tonight, there will be a high stack of dirty dishes I and you are looking at the heavyweight champion dishwasher in all of Mexico and los Estados Unidos.'

So I washed dishes. I also helped spread out hymnbooks and set up the evening services. And I borrowed a safety razor and a blade from Brother Eddie McCaw, the adjutant. I told him how we happened to be there—vacationing on the Mexican Riviera, sunbathing on the beach when the big one hit—all the string of lies I had prepared for the Immigration Service and hadn't been able to use. 'Lost it, all. Cash, travelers checks, passports, clothes, ticket home, the works. But just the same, we were lucky. We're alive.'

'The Lord had His arms around you. You tell me that you are born again?'

'Years back.'

'It will do our lost sheep good to rub shoulders with you. When it comes time for witnessing, will you tell them all about it? You're the first eyewitness. Oh, we felt it here but it just rattled the dishes.'

'Glad to.'

Good. Let me get you that razor.'

So I witnessed and gave them a truthful and horrendous description of the quake, but not as horrid as it really was—I never want to see another rat—or another dead baby—and I thanked the Lord publicly that Margrethe and I had not been hurt and found that it was the most sincere prayer I had said in years.

The Reverend Eddie asked that roomful of odorous outcasts to join him in a prayer of thanks that Brother and Sister Graham had been spared, and he made it a good rousing prayer that covered everything from Jonah to the hundredth sheep, and drew shouts of 'Amen!' from around the room. One old wino came forward and said that he had at last seen God's grace and God's mercy and he was now ready to give his life to Christ.

Brother Eddie prayed over him, and invited others to come forward and two more did—a natural evangelist, he saw in our story a theme for his night's sermon and used it, hanging it on Luke fifteen, ten, and Matthew six, nineteen. I don't know that he had prepared from those two verses—probably not, as any preacher worth his salt can preach endlessly from either one of them. Either way, he could think on his feet and he made good use of our unplanned presence.

He was pleased with us, and I am sure that is why he told me, as we were cleaning up for the night, after the supper that followed the service, that while of course they didn't have separate rooms for married couples—they didn't often get married couples—still, it looked like Sister Graham would be the only one in the sisters' dormitory tonight, so why didn't I doss down in there instead of in the men's dormitory? No double bed, just stacked bunks—sorry! But at least we could be in the same room.

I thanked him and we happily went to bed. Two people can share a very narrow bed if they really want to sleep together.

The next morning Margrethe cooked breakfast for the derelicts. She went into the kitchen and volunteered and soon was, doing it all as the regular cook did not cook breakfast; it was the job of whoever had the duty. Breakfast did not require a graduate chef—oatmeal porridge, bread, margarine, little valencia oranges (culls?), coffee. I left her there to wash dishes and to wait until I came back.

I went out and found a job.

I knew, from listening to wireless (called 'radio' here) while washing the dishes the night before, that there was unemployment in the United States—, enough to be a political and social problem.

There is always work in the Southwest for agricultural labor but I had dodged that sort of Work yesterday. I'm not too proud for that work; I had followed the harvest for several years from the time I was big enough to handle a pitchfork. But I could not take Margrethe into the fields.

I did not expect to find a job as a clergyman; I hadn't even told Brother Eddie that I was ordained. There is always an unemployment problem for preachers. Oh, there are always empty pulpits, true—but ones in which a church mouse would starve.

But I had a second profession.

Dishwasher.

No matter how many people are out of work, there are always dishwashing jobs going begging. Yesterday, in walking from the border gate to the Salvation Army mission, I had noticed three restaurants with 'Dishwasher Wanted' signs in their windows—noticed them because I had had plenty of time on the long ride from Mazatlán to admit to myself that I had no other salable skill.

No salable skill. I was not ordained in this world; I would not be ordained in this world as I could not show graduation from seminary or divinity school—or even the backing of a primitive sect that takes no mind of schools but depends on inspiration by the Holy Ghost.

I was certainly not an engineer.

I could not get a job teaching even those subjects I knew Well because I no longer could show any formal preparation—I couldn't even show that I had graduated from middle school!

In general I was no salesman. True, I had shown an unexpected talent for the complex skills that make up a professional money-raiser...but here I had no record, no reputation. I might someday do this again—but we needed cash today.

What did that leave? I had looked at the help-wanted ads in a copy of the Nogales Times someone had left in the mission. I, was, not a lax accountant. I was not any sort of a mechanic. I did not know what a software designer was but I was not one, nor was I a 'computer' anything. I was not a nurse or any sort of health care professional.

I could go on indefinitely listing the things I was not, and could not learn overnight. But that is pointless. What I could do, What would feed Margrethe and me while we sized up this new world and learned the angles, was what I had been forced to do as a peón.

A competent and reliable dishwasher never starves. (He's more likely to die of boredom.)

The first place did not smell good and its kitchen looked dirty; I did not linger. The second place was a major-chain hotel, with several people in the scullery. The boss looked me over and said, 'This is a Chicano job; you wouldn't be happy here.' I tried to argue; he shut me off.

I But the third was okay, a restaurant only a little bigger than the Pancho Villa, with a clean kitchen and a manager no more than normally jaundiced.

He warned me, 'This job pays minimum wage and there are no raises. One meal a day on the house. I catch you sneaking anything, even a toothpick, and out you go that instant—no second chance. You work the hours I set and I change 'em to suit me. Right now I need you for noon to four, six to ten, five days a week. Or you can work six days but no overtime scale for it. Overtime scale if I require you to work more than eight hours in one day, or more than fortyeight hours in one week.'

'Okay.'

'All right, let's see your Social Security card.'

I handed him my green card.

He handed it-back. 'You expect me to pay you twelve dollars and a half an hour on the basis of a green card? You're no Chicano. You trying to get me in trouble with the government? Where did you get that card?'

So I gave him the song and dance I had prepared for the Immigration Service. 'Lost everything. I can't even phone and tell somebody to send me money; I have to get home first before I can shake any assets loose.'

'You could get public assistance.'

'Mister, I'm too stinkin' proud.' (I don't know how and I can't prove I'm me. Just don't quiz me and let me wash dishes.)

Glad to hear it. "Stinking proud", I mean. This country could use more like you. Go over to the Social Security office and get them to issue you a new one. They will, even if you can't recall the number of your old one. Then come back here and go to work. Mmm—I'll start you on payroll right now. But you must come back and put in a full day to collect.'

'More than fair. Where is the Social Security office?'

So I went to the Federal Building and told my lies over again, embroidering only as necessary. The serious young lady who issued the card insisted on giving me a lecture on Social Security and how it worked, a lecture she had apparently memorized. I'll bet—you she never had a 'client' (that's what she called me) who listened so carefully. It was all new to me.

I gave the name 'Alec L. Graham.' This was not a conscious decision. I had been using that name for weeks, answered with it by reflex—then was not in a good position to say, 'Sorry, Miss, my name is actually Hergensheimer.'

I started work. During my four-to-six break I went back to the mission—and learned that Margrethe had a job, too.

It was temporary, three weeks—but three weeks at just the right time. The mission cook had not had a vacation in over a year and wanted to go to Flagstaff to visit her daughter, who had just had a baby. So Margrethe had her job for the time being—and her bedroom, also for the time being.

So Brother and Sister Graham were in awfully good shape—for the time being.

Chapter 14

I returned, and saw under the sun, that the race is not to the swift, nor the battle to the strong, neither yet bread to the wise, nor yet riches to men of understanding, nor yet favour to men of skill; but time and chance happeneth to them all.

Ecclesiastes 9:11

PRAY TELL me why there is not a dishwashing school of philosophy? The conditions would seem ideal for indulging in the dear delights of attempting to unscrew the inscrutable. The work keeps the body busy while demanding almost nothing of the brain. I had eight hours every day in which to try to find answers to questions.

What questions? All questions. Five months earlier I had been a prosperous and respected professional in the most respected of professions, in a world I understood thoroughly—or so I thought. Today I was sure of nothing and had nothing.

Correction—I had Margrethe. Wealth enough for any man, I would not trade her for all the riches of Cathay. But even Margrethe represented a solemn contract I could not yet fulfill. In the eyes of the Lord I had taken her to wife...but I was not supporting her.

Yes, I had a job—but in truth she was supporting herself. When Mr Cowgirl hired me, I had not been daunted by 'minimum wage and no raises'. Twelve dollars and fifty cents per hour struck me as a dazzling sum—why, many a married man in Wichita (my Wichita, in another universe) supported a family on twelve and a half dollars per week.

What I did not realize was that here $12.50 Would not buy a tuna sandwich in that same restaurant—not a fancy restaurant, either; cheap, in fact. I would have had less trouble adjusting to the economy in this strange-but-familiar world if its money had been described in unfamiliar terms—shillings, shekels, soles, anything but dollars. I had been brought up to think of a dollar as a substantial piece of wealth; the idea that a hundred dollars a day was a poverty-level minimum wage was not one I could grasp easily.

Twelve-fifty an hour, a hundred dollars a day, five hundred a week, twenty-six thousand dollars a year Poverty level? Listen carefully. In the world in which I grew up, that was riches beyond dreams of avarice.

Getting used to price and wage levels in dollars that weren't really dollars was simply the most ubiquitous aspect of a strange economy; the main problem was how to cope, how to stay afloat, how to make a living for me and my wife (and our children, with one expected all too soon if I had guessed right) in a world in which I had no diplomas, no training, no friends, no references, no track record of any sort. Alex, what in God's truth are you good for?...other than dishwashing!

I could easily wash a lighthouse stack of dishes while worrying that problem alone. It had to be solved. Today I washed dishes cheerfully...but soon I must do better for my beloved. Minimum wage was not enough.

Now at last we come to the prime question: Dear Lord God Jehovah, what mean these signs and portents Thou has placed on me Thy servant?

There comes a time when a faithful worshiper must get up off his knees and deal with his Lord God in blunt and practical terms. Lord, tell me what to believe! Are these the deceitful great signs and wonders of which You warned, sent by antichrist to seduce the very elect?

Or are these true signs of the final days? Will we hear Your Shout?

Or am I as mad "as ':Nebudhadnezzar and all of these appearances merely vapors in my disordered mind?

If one of these be true, then the other two are false. How am I to choose? Lord God of Hosts, how have I offended Thee?

In walking back to the mission one night I saw a sign that could be construed as a direct answer to my prayers: MILLIONS NOW LIVING WILL NEVER DIE. The sign was carried by a man and with him was a small child handing out leaflets.

I contrived not to accept one. I had seen that sign many times throughout my life, but I had long tended to avoid Jehovah's Witnesses. They are so stiff-necked and stubborn that it is impossible to work with them, whereas Churches United for Decency is necessarily an ecumenical association. In fund raising and in political action one must (while of course. shunning heresy) avoid arguments on fiddling points of doctrine. Word-splitting theologians are the death of efficient organization. How can you include a sect in practical labor in the vineyards of the Lord if that sect asserts that they alone know the Truth, the whole Truth, and nothing but the Truth and all who disagree are heretics, destined for the fires of Hell?

Impossible. So we left them out of C.U.D.

Still—Perhaps this time they were right.

Which brings me to the most urgent of all questions: How to lead Margrethe back to the Lord before the Trump and the Shout.

But 'how' depends on 'when'. Premillenarian theologians differ greatly among themselves as to the date of the Last Trump.

I rely on the scientific method. On any disputed point there is always one sure answer: Look it up in the Book. And so I did, now that I was living at the Salvation Army mission and could borrow a copy of the Holy Bible. I looked it up again and again and again...and learned why premillenarians differed so on their dates.

The Bible is the literal Word of God; let there be no mistake about that. But nowhere did the Lord promise us that it would be easy to read.

Again and again Our Lord and His incarnation as the Son, Jesus of Nazareth, the Messiah, promises His disciples that their generation (i.e., first century AD) will see His return. Elsewhere, and again many times, He promises that He will return after a thousand years have passed...or is it two thousand years...or is it some other period, after the Gospel has been preached to all mankind in every country?

Which is true?

All are true, if you read them—right. Jesus did indeed return in the generation of His twelve disciples; He did so at the first Easter, His resurrection. That was His first return, the utterly necessary one, the one that proved to all that He was indeed the Son of God and God Himself. He returned again after a thousand years and, in His infinite mercy, ruled that His children be given yet another grant of grace, a further period of trial, rather than let sinners be consigned forthwith to the fiery depths of Hell. His Mercy is infinite.

These dates are hard to read, and understandably so, as it was never His intention to encourage sinners to go on sinning because the day of reckoning had been postponed,. What is precise, exact, and unmistakable, repeated again and again, is that He expects every one of His children to live every day, every hour, every heart beat, as if this one were the last. When is the end of this age? When is the Shout and the Trump? When is* the Day of Judgment? Now! You will be given no warning whatever. No time for deathbed contrition. You must live in a state of grace...or, when the instant comes, you will be cast down into the Lake of Fire, there to burn in agony throughout all eternity.

So reads the Word of God.

And to me, so sounds the voice of doom. I had no period of grace in which to lead Margrethe back into the fold...as the Shout may come this very day.

What to do? What to do?

For mortal man, with any problem too great, there is only one thing to do: Take it to the Lord in prayer.

And so I did, again and again and again. Prayer is always answered. But it is necessary to recognize the answer...and it may not be the answer you want.

In the meantime one must render unto Caesar the things that are Caesar's. Of course I elected to work six days a week rather than five ($31,200 a year!)—as I needed every shekel I could garner. Margrethe needed everything! and so did I. Especially we needed shoes. The shoes we had been wearing when disaster struck in Mazatlán had been quite good shoes—for peasants in Mazatlán. But they had been worn during two days of digging through rubble after the quake, then had been worn continuously since then; they were ready for the trash bin. So we needed shoes, at least two pairs each, one pair for work, one for Sunday-go-to-meeting.

And many other things. I don't know what all a woman needs, but it is more complex than what a man needs. I had to put money into Margrethe's hands and encourage her to buy what she needed. I could pig it with nothing more than shoes and a pair of dungarees (to spare my one good outfit)—although I did buy a razor, and got a haircut at a barber's college near the mission, one where a haircut was only two dollars if one was willing to accept the greenest apprentice, and I was. Margrethe looked at it and said gently that she thought she could do as well herself, and save us that two dollars. Later she took scissors and straightened out what that untalented apprentice had done, to me...and thereafter I never again spent money on barbers.

I But saving two dollars did not offset a greater damage. I had honestly thought, when Mr Cowgirl hired me, that I was going to be paid a hundred dollars every day I worked.

He didn't pay me that much and he didn't cheat me. Let me explain.

I finished that first day of work tired but happy. Happier than I had been since the earthquake struck, I mean happiness is relative. I stopped at the cashier-s stand where Mr Cowgirl was working on his accounts, Ron's Grill having closed for the day. He looked up. 'How did it go, Alec?'

'Just fine, sir.'

'Luke tells me that you are doing okay.' Luke was a giant blackamoor, head cook and my nominal boss. In fact he had not supervised me other than to show me where things were and make sure that I knew what to do.

'That's pleasant to hear. Luke's a good cook.' That onemeal-a-day bonus over minimum wage I had eaten at four o'clock as breakfast was ancient history by then. Luke had explained to me that the help could order anything on the menu but steaks or chops, and that today I could have all the seconds I wanted if I chose either the stew or the meat loaf.

I chose the meat loaf because his kitchen smelled and looked clean. You can tell far more about a cook by his meat loaf than you can from the way he grills a steak. I took seconds on the meat loaf—with no catsup.

Luke was generous in the slab of cherry pie he cut for me, then he added a scoop of vanilla ice cream...which I did not rate, as it was an either/or, not both.

'Luke seldom says a good word about white boys,' my employer went on, 'and never about a Chicano. So you must be doing okay.'

'I hope so.' I was growing a mite impatient. We are all the Lord's children but it was the first time in my life that a blackamoor's opinion of my work had mattered. I simply wanted to be paid so that I could hurry home to Margrethe—to the Salvation Army mission, that is.

Mr Cowgirl folded his hands and twiddled his thumbs. 'You want to be paid, don't you?'

I controlled my annoyance. 'Yes, sir.'

—'Alec, with dishwashers I prefer to pay by the week.'

I. felt dismay ' and I am sure my face showed it.

'Don't misunderstand me,' he added. 'You're an. hourly-rate employee, so you are paid at the end of each day if that's what you choose.'

'Then I do choose. I need the money.'

'Let me finish. The reason I prefer to pay dishwashers weekly instead of daily is that, all too often, if I hire one and pay him at the end of the day, he goes straight out and buys a jug of muscatel, then doesn't show up for a couple of days.' When he does, he wants his job back. Angry at me. Ready to complain to the Labor Board. Funny part about it is that I may even be able to give him his job back—for another one-day shot at it—because the bum I've hired in his place has gone and done the same thing.

'This isn't likely to happen with Chicanos as they usually want to save money to send back to Mexico. But I've yet to see the Chicano who could handle the scullery to suit Luke...and I need Luke more than I need a particular dishwasher. Negras—Luke can usually tell me whether a spade is going to work out, and the good ones are better than a white boy any time. But the good ones are always trying to improve themselves...and if I don't promote them to pantry boy or assistant cook or whatever, soon they go across the street to somebody who will. So it's always a problem. If I can get a week's work out of a dishwasher, I figure I've won. If I get two weeks, I'm jubilant. Once I got a full month. But that's once in a lifetime.'

'You're going to get three full weeks out of me,' I said. 'Now can I have my pay?'

'Don't rush me. If you elect to be paid once a week, I go for a dollar more on your hourly rate. That's forty, dollars more at the end of the week. What do you say?'

(No, that's fortyeight more per week, I told myself. Almost $34,000 per year just for washing dishes. Whew!) 'That's fortyeight dollars more each week,' I answered. 'Not forty. As I'm going for that six-days-a-week option. I do need the money.'

'Okay, Then I pay you once a week.'

'Just a moment. Can't we start it tomorrow? I need some cash today. My wife and I haven't anything, anything at all. I've got the clothes I'm standing in, nothing else. The same for my wife. I can sweat it out a few more days. But there are things a woman just has to have.'

He shrugged. 'Suit yourself. But you don't get the dollar-an-hour bonus for today's work. And if you are one minute late tomorrow, I'll assume you're sleeping it off and I put the sign back in the window.'

'I'm no wino, Mr Cowgirl.'

'We'll see.' He turned to his bookkeeping machine and did something to its keyboard. I don't know what because I never understood it. It was an arithmetic machine but nothing like a Babbage Numerator. It had keys on it somewhat like a typewriting machine. But—there was a window above that where numbers and letters appeared by some sort of magic.

The machine whirred and tinkled and he reached into it and brought out a card, handed it—to me. 'There you are.'

I took it and examined it, and again felt dismay.

It was a piece of pasteboard about three inches wide and seven long, with numerous little holes punched in it and with printing on it that stated that it was a draft on Nogales Commercial and Savings Bank by which Ron's Grill directed them to pay to Alec L. Graham—No, not one hundred dollars.

Fifty-one dollars and twenty-seven cents.

'Something wrong?' he asked.

'Uh, I had expected twelve-fifty an hour.'

'That's what I paid you. Eight hours at minimum wage. You can check the deductions yourself. That's not my arithmetic; this is an IBM 1990 and it's instructed by IBM software, Paymaster Plus...and IBM has a standing offer of ten thousand dollars to any employee who can show that this model IBM and this mark of their software fouled up a pay check. Look at it. Gross pay, one hundred dollars. Deductions all listed. Add ' 'em up. Subtract them. Check your answer against IBM's answer. But don't blame me. I didn't write those laws—and I like them even less than you do. Do you realize that almost every dishwasher that comes in here, whether wetback or citizen, wants me to pay him in cash and forget the deductions? Do you know what the fine is if they catch me doing it just once? What happens if they catch me a second time? Don't look sour at me—go talk to the government.'

'I just don't understand it. It's new to me, all of it. Can you tell me what these deductions mean? This one that says "Admin", for example.'

'That stands for "administration fee" but don't ask me why you have to pay it, as I am the one who has to do the bookkeeping and I certainly don't get paid to do it.'

I tried to check the other deductions against the fine-print explanations. 'SocSec' turned out to be 'Social Security'. The young lady had explained that to me this morning...but I had told her at the time that, while it was certainly an excellent idea, I felt that I would have to wait until later before subscribing to it; I could not afford it just yet. 'MedIns' and 'HospIns' and DentIns' were simple enough but I could not afford them now, either. But what was 'PL217'? The fine print simply referred to a date and page in TubReg'. What about 'DepEduc' and 'UNESCO'?

And what in the world was 'Income Tax'?

'I still don't understand it. It's all new to me.'

'Alec, you're not the only one who doesn't understand it. But why do you say it is new to you? It has been going on all your life...and your daddy's—and youi ,granddaddy's, at least.'

'I'm sorry. What is "Income Tax"?'

He blinked at me. 'Are you sure you don't need to see a shrink?'

'What is a "shrink"?'

He sighed. 'Now I need to see one. Look, Alec. Just take it. Discuss the deductions with the government, not with me. You sound sincere, so maybe you were hit on the head when you got caught in the Mazatlán quake. I just want to go home and take a Miltown. So take it, please.'

'All right. I guess. But I don't know anyone who would cash this for me.'

'No problem. Endorse it back to me and I'll pay you, cash. But keep the stub, as the IRS will insist on seeing all your deductions stubs before paying you back any overpayment.'

I didn't understand that, either, but I kept the stub.

Despite the shock of learning that almost half my pay was gone before I touched it, we were better off each day, as, between us, Margrethe and I had over four hundred dollars a week that did not have to be spent just to stay alive but could be converted into clothing and other necessities. Theoretically she was being paid the same wages as had been the cook she replaced, or twentytwo dollars an hour for twenty-four hours a week, or $528/week.

In fact she had the same sort of deductions I had, which paused her net pay to come to just under $290/week. Again theoretically. But $54/week was checked off for lodging fair. enough, I decided, when I found out what rooming houses were charging. More than fair, in fact. Then we were assessed $I05/week for meals. Brother McCaw at first had put us down for $I40/week for meals and had offered to show by his books that Mrs Owens, the regular cook, had always paid, by checkoff, $I0 each day for her meals...so the two of us should be assessed $I40/week.

I agreed that that was fair (having seen the prices on the menu at Ron's Grill)—fair in theory. But I was going to have my heaviest meal of the day where I worked. We compromised on ten a day for Marga, half that for me.

So Margrethe wound up with a hundred and. thirtyone a week out of a gross—of five hundred and twentyeight.

If she could collect it. Like most churches, the Salvation Army lives from hand to mouth...and sometimes the hand doesn't quite reach the mouth.

Nevertheless we were well off and better off each week. At the end of the first week we bought new shoes for Margrethe, first quality and quite smart, for only $279.90, on sale at J. C. Penney's, marked down from $350.

Of course she fussed at getting new shoes for her before buying shoes for me. I pointed out that we still had over a hundred dollars toward shoes for me—next week—and would she please hold it for us so that I would not be tempted to spend it. Solemnly she agreed.

So the following Monday we got shoes for me even cheaper—Army surplus, good, stout comfortable shoes that would outlast anything bought from a regular shoe store. (I would worry about dress shoes for me after I had other matters under control. There is nothing like being barefoot broke to adjust one's mundane values.) Then we went to the Goodwill retail store and bought a dress and a summer suit for her, and dungaree pants for me.

Margrethe wanted to get more clothes for me—we still had almost sixty dollars. I objected.

'Why not, Alec? You need clothes every bit as badly as I do...yet we have spent almost all that you have saved on me. It's not fair.'

I answered, 'We've spent it where it was needed. Next week, if Mrs Owens comes back on time, you'll be out of a job and we'll have to move. I think we. should move on. So let's save what we can for bus fare.'

'Move on where, dear?'

'To Kansas. This is a world strange to each of us. Yet it is familiar, too—same language, same geography, some of the same history. Here I'm just a dish washer, not earning enough to support you. But I have a strong feeling that Kansas—Kansas in this world—will be so much like the Kansas I was born in that I'll be able to cope better.'

'Whither thou goest, beloved.'

The mission was almost a mile from Ron's Grill; instead of trying to go 'home' at my four-to-six break, I usually spent my free time, after eating, at the downtown branch library getting myself oriented. That, and newspapers that customers sometimes left in the restaurant, constituted my principal means of reeducation.

In this world Mr William Jennings Bryan had indeed been President and his benign influence had' kept us out of the Great European War. He then had offered his services for a negotiated peace. The Treaty of Philadelphia had more or less restored Europe to what it had been before 1913.

I didn't recognize any of the Presidents after Bryan, either from my own world or from Margrethe's world. Then I became utterly bemused when I first ran across the name of the current President: His Most Christian Majesty, John Edward the Second, Hereditary President of the United States and Canada, Duke of Hyannisport, Comte de Quebec, Defender of the Faith, Protector of the Poor, Marshal in Chief of the Peace Force.

I looked at a picture of him, laying a cornerstone in Alberta. He was tall and broadshouldered and blandly handsome and was wearing a fancy uniform with enough medals on his chest to ward off pneumonia. I studied his face and asked myself, 'Would you buy a used car from this man?'

But the more I thought about it, the more logical it seemed. Americans, all during their two and a quarter centuries as a separate nation, had missed the royalty they had shucked off. They slobbered over European royalty whenever they got the chance. Their wealthiest citizens married their daughters to royalty whenever possible, even to Georgian princes—a 'prince' in Georgia being a farmer with the biggest manure pile in the neighborhood.

I did not know where they had hired this royal dude. Perhaps they had sent to Estoril for him, or even had him shipped in from the Balkans. As one of my history profs had pointed out, there are always out-of-work royalty around, looking for jobs. When a man is out of, work, he can't be fussy, as I knew too well. Laying cornerstones is probably no more boring than washing dishes. But the hours are longer. I think. I've never been a king. I'm not sure that I would take a job in the kinging business if it were offered to me; there are obvious drawbacks and not just the long hours.

On the other hand --

Refusing a crown that you know will never be offered to you is sour grapes, by definition. I searched my heart and concluded that-I probably would be able to persuade myself that it was a sacrifice I should make for my fellow men. I would pray over it until I was convinced that the Lord wanted me to accept this burden.

Truly I am not being cynical. I know how frail men can be in persuading themselves that the Lord wants them to do something they wanted to do all along—and I am no better than my brethren in this.

But the thing that stonkered me was the idea of Canada united with us. Most Americans do not know why Canadians dislike us (I do not), but they do. The idea that Canadians would ever vote to unite with us boggles the mind.

I went to the library desk and asked for a recent general history of the United States. I had just started to study it when I noted by the wall clock that it was almost four o'clock...so I had to check it back in and hustle to get back to my scullery on time. I did not have library loan privileges as I could not as yet afford the deposit required of nonresidents.

More important than the political changes were technical and cultural changes. I realized almost at once that this world was more advanced in physical science and. technology than my own. In fact I realized it almost as quickly as I saw a 'television' display device.

I never did understand how televising takes place. I tried to learn about it in the public library and at once bumped into a subject called 'electronics'. (Not 'electrics' but 'electronics'.) So I tried to study up about electronics and encountered the most amazing mathematical gibberish. Not since thermodynamics had caused me to decide that I had a call for the ministry have I seen such confusing and turgid equations. I don't think Rolla Tech could ever cope with such amphigory—at least not Rolla Tech when I was an undergraduate there.

But the superior technology of this world was evident, in many more things than television. Consider 'traffic lights'. No doubt you have seen cities so choked with traffic that it is almost impossible to cross major streets other than through intervention by police officers. Also' no doubt you have sometimes been annoyed when a policeman charged with controlling traffic has stopped the flow in your direction to accommodate some very important person from city hall, or such.

Can you imagine a situation in which traffic could be controlled in greater volume with no police officers whatever at hand—just an impersonal colored light?

Believe me, that is exactly what they had in Nogales.

Here is how it works:

At every busy intersection you place a minimum of twelve lights, four groups of three, a group facing each of the cardinal directions and so screened that each group can be seen only from its direction. Each group has one red light, one green light, one amber light. These lights are served by electrical power and each shines brightly enough to be seen at a distance of a mile, more or less, even in bright sunlight. These are not arc lights; these are very powerful Edison lamps—this is important because these lights must be turned on and off every few moments and must function without fail hours on end, even days on end, twenty-four hours a day.

These lights are placed up high on telegraph poles, or suspended over intersections, so that they may be seen by teamsters or drivers or cyclists from a distance. When the green lights shine, let us say, north and south, the red lights shine east and west—traffic may flow north and south, while east and west traffic is required to stand and wait exactly as if a police officer had blown his whistle and held up his hands, motioning traffic to move north and south while restraining traffic from moving east and west.

Is that clear? The lights replace the policeman's hand signals.

The amber lights replace the policeman's whistle; they warn of an imminent change in the situation.

But what is the advantage?—since someone, presumably a policeman, must switch the lights on and off, as needed. Simply this: The switching is done automatically from a distance (even miles!) at a central switchboard.

There are many other marvels about this system, such as electrical counting devices to decide how long each light burns for best handling of the traffic, special lights for controlling left turns or to accommodate people on foot...but the truly great marvel is this: People obey these lights.

Think about it. With no policemen anywhere around people obey these blind and dumb bits of machinery as. if they were policemen.

Are people here so sheeplike and peaceful that they can be controlled this easily? No. I wondered about it and found some statistics in the library. This world has a higher rate of violent crime than does the world in which I was born. Caused by these strange lights? I don't think so. I think that the people here, although disposed to violence against each other, accept obeying traffic lights as a logical thing to do. Perhaps.

As may be, it is passing strange.

Another conspicuous difference in technology lies in air traffic. Not the decent, cleanly, safe, and silent dirigible airships of my home world—No, no! These are more like the aeroplanos of the Mexicano world in which Margrethe and I sweated out our indentures before the great quake that destroyed Mazatlán. But they are so much bigger, faster, noisier and fly so much higher than the aeroplanos we knew that they are almost another breed—or are indeed another breed, perhaps, as they are called 'jet planes'. Can you imagine a vehicle that flies eight miles above the ground? Can you imagine a giant car that moves, faster than sound? Can you imagine a screaming whine, so loud that it makes your teeth ache?

They call this 'progress'. I long for the comfort and graciousness of

LTA Count von Zeppelin. Because you can ' t get away from these behemoths. Several times a day one of these things goes screaming over the mission, fairly low down, as it approaches a grounding, at the flying field north of the city. The noise bothers me and makes Margrethe very nervous.

Still most of the enhancements in technology really are progress—better plumbing, better lighting indoors and out, better roads, better buildings, many sorts of machinery that make human labor less onerous and more productive. I am never one of those back-to-nature freaks who sneer at engineering; I have more reason than most people to respect engineering. Most people who sneer at technology would starve to—death if the engineering infrastructure were removed.

We had been in Nogales just short of three weeks when I was able to carry out a plan that I had dreamed of for nearly five months...and had actively plotted since our arrival in Nogales (but had to delay until I could afford it).—I picked Monday to carry it out, that being my day off. I told Margrethe to dress up in her new clothes as I was taking my best girl out for a treat, and I dressed up, too—my one suit, my new shoes, and a clean shirt...and shaved and bathed and nails clean and trimmed.

It was a lovely day, sunny and not too hot. We both felt cheerful because, first, Mrs Owens had written to Brother McCaw saying that she was staying on another week if she could be spared, and second, we now had enough money for bus fares for both of us to Wichita, Kansas, although just barely—but the word from Mrs Owens meant that could squirrel away another four hundred dollars for eating money on the way and still arrive not quite broke.

I took Margrethe to a place I had spotted the day I looked for a job as a dishwasher—a nice little place outside the tenderloin, an old-fashioned ice cream parlor.

We stopped outside it. 'Best girl, see this place? Do you remember a conversation we had when we were floating on the broad Pacific on a sunbathing mat and not really expecting to live much longer?—at least I was not.'

'Beloved, how could I forget?'

'I asked you what you would have if you could have anything in the world that you wanted. Do you remember I what you answered?'

'Of course I do! It was a hot fudge sundae.'

'Right! Today is your unbirthday, dear. You are about to have that hot fudge sundae.'

'Oh, Alec!'

'Don't blubber. Can't stand a woman who cries. Or you can have a chocolate malt. Or a sawdust sundae. Whatever your heart desires. But I did, make sure that this place always has hot fudge sundaes before I brought you here.'

'We can't afford it. We should save for the trip.'

'We can afford it. A hot fudge sundae is five dollars. Two for ten dollars. And I'm going to be a dead game sport and tip the waitress a dollar. Man does not live by bread alone. Nor does woman, Woman. Come along!'

We were shown to a table by a pretty waitress (but not as pretty as my bride). I seated Margrethe with her back to the street, holding the chair for her, and then sat down opposite her. 'I'm Tammy,' the waitress said as she offered us a menu. 'What would you folks like this lovely day?'

'We won't need the menu,' I said. 'Two hot fudge sundaes, please.'

Tammy looked thoughtful. 'All right, if you don't mind waiting a few minutes. We may have to make up the hot sauce.'

'A few minutes, who cares? We've waited much longer than that.'

She smiled and went away. I looked at Marga. 'We've waited much longer. Haven't we?'

'Alec, you're a sentimentalist and that's part of why I love you.'

'I'm a sentimental slob and right now I'm slavering at the thought of hot fudge sundae. But I wanted you to see this place for another reason, too. Marga, how would you like to run such a place as this? Us, that is. Together. You'd be boss, I'd be dishwasher, janitor, handyman, bouncer, and whatever was needed.'

She looked very thoughtful. 'You are serious?'

'Quite. Of course we couldn't go into business for ourselves right away; we will have to save some money first. But not much, the way I plan it. A dinky little place, but bright and cheerful—after I paint it. A soda fountain, plus a very limited Menu. Hot dogs. Hamburgers. Danish open-face sandwiches. Nothing else. Soup, maybe. But canned soups are no problem and not much inventory.'

Margrethe looked shocked. 'Not canned soups. I can serve a real soup...cheaper and better than anything out of a tin.'

'I defer to your professional judgment, Ma'am. Kansas has half a dozen little college towns; any of them would welcome such a place. Maybe we pick a shop already existing, a mom-and-pop place—work for them a year, then buy them out. Change the name to The Hot Fudge Sundae. Or maybe Marga's Sandwiches.'

'The Hot Fudge Sundae. Alec, do you really think we can do this?'

I leaned toward her and took her hand. 'I'm sure we can, darling. And without working ourselves to death, too.' I moved my head. 'That traffic light is staring me right in the eye.'

'I know. I can see it reflected in your eye every time it changes. Want to swap seats? It won't bother me.'

'It doesn't bother me. It just has a somewhat hypnotic effect.' I looked down at. the table, looked back at the light. 'Hey, it's gone out.'

Margrethe twisted her neck to look. 'I don't see it. Where?'

'Uh...pesky thing has disappeared. Looks like.'

I heard a male voice at my elbow. 'What'll it be for you two? Beer or wine; we're not licensed for the hard stuff.'

I looked around, saw a waiter. 'Where's Tammy?'

'Who's Tammy?'

I took a deep breath, tried to slow my heart, then said, 'Sorry, brother; I shouldn't have come in here. I find I've left my wallet at home.' I stood up. 'Come, dear.'

Wide-eyed and silent, Margrethe came with me. As we walked out, I looked around, noting changes. I suppose it was a decent enough place, as beer joints go. But it was not our cheerful ice cream parlor.

And not our world.

Chapter 15

Boast not thyself of tomorrow; for thou knowest not what a day may bring forth.
Proverbs 27:1

OUTSIDE, WITHOUT planning it, I headed us toward the Salvation Army mission. Margrethe kept quiet and held tight to my arm. I should have been frightened; instead I was boiling angry. Presently I muttered, 'Damn them! Damn them!'

'Damn who, Alec?'

'I don't know. That's the worst of it. Whoever is doing this to us. Your friend Loki, maybe.'

'He is not my friend, any more than Satan is your friend. I dread and fear what Loki is doing to our world.'

'I'm not afraid, I'm angry. Loki or Satan or whoever, this last is too much. No sense to it. Why couldn't they wait thirty minutes? That hot fudge sundae was practically under our noses—and they snatched it away! Marga, that's not right, that's not fair! That's sheer, unadulterated cruelty. Senseless. On a par with pulling wings off flies. I despise them. Whoever.'

Instead of continuing with useless talk about matters we could not settle, Margrethe said, 'Dear, where are we going?'

'Eh?' I stopped short. 'Why, to the mission, I suppose.'

'Is this the right way?'

'Why, yes, cert—' I paused to look around. 'I don't know.' I had been walking automatically, my attention fully on my anger. Now I found that I was unsure of any landmarks. 'I guess I'm lost.'

'I know I am.'

It took us another half hour to get straightened out. The neighborhood was vaguely familiar but nothing was quite right. I found the block where Ron's Grill should be, could not find Ron's Grill. Eventually a policeman directed us to the mission...which was now in a different building. To my surprise, Brother McCaw was there. But he did not recognize us, and his name was now McNabb. We left, as gracefully as possible. Not very, that is.

I walked us back the way we had come—slowly, as I wasn't going anywhere. 'Marga, we're right back where we were three weeks ago. Better shoes, that's all. A pocket full of money—but money we can't spend, as it is certain to be funny money here...good for a quiet rest behind bars if I tried to pass any of it.'

'You're probably right, dear one.'

'There is a bank on that corner just ahead. Instead of trying to spend any of it, I could walk in and simply ask whether or not it was worth anything.'

'There couldn't be any harm in that. Could there?'

'There shouldn't be. But our friend Loki could have another practical joke up his sleeve. Uh, we've got to know. Here—you take everything but one bill. If they arrest me, you pretend not to know me.'

'No!'

'What do you mean, "No"? There is no point in both of us being in jail.'

She looked stubborn and said nothing. How can you argue with a woman who wont talk? I sighed. 'Look, dear, the only other thing I can think of is to look for another job washing dishes. Maybe Brother McNabb will let us sleep in the mission tonight.'

'I'll look for a job, too. I can wash dishes. Or cook. Or something.'

'We'll see. Come inside with me, Marga; we'll go to jail together. But I think I've figured out how to handle this without going to jail.' I took out one treasury note, crumpled it, and tore one corner. Then we went into the bank together, me holding it in my hand as if I had just picked it up. I did not go to a teller's window; instead I went to that railing behind which bark officials sit at their desks.

I leaned on the railing and spoke to the man nearest to it; his desk sign marked him as assistant manager. 'Excuse me, sir! Can you answer a question for me?'

He looked annoyed but his reply did not show it. 'I'll try. What's on your mind?'

'Is this really money? Or is it stage money, or something?'

He looked at it, then looked more closely. 'Interesting. Where did you get this?"

'My wife found it on a sidewalk. Is it money?'

'Of course it's not money. Whoever heard of a twenty-dollar note? Stage money, probably Or an advertising promotion.'

'Then it's not worth anything?'

'It's worth the paper it's printed on, that's all. I doubt that it could even be called counterfeit, since there has been no effort to make it look like the real thing. Still, the Treasury inspectors will want to see it.'

'All right. Can you take care of it?'

'Yes. But they'll want to talk to you, I'm sure. Let's get your name and address. And your wife's, of course, since she found it.'

'Okay. I want a receipt for it.' I gave our names as 'Mr and Mrs Alexander Hergensheimer' and gave the address—but not the name—of Ron's Grill. Then I solemnly accepted a receipt.

Once outside on the sidewalk I said, 'Well, we're no worse off than we thought we were. Time for me to look for some dirty dishes.'

'Alec—'

'Yes, beloved?'

'We were going to Kansas.'

'So we were. But our bus-fare money is not worth the paper it is printed on. I'll have to earn some more. I can. I did it once, I can do it again.'

'Alec. Let us now go to Kansas.'

A half hour later we were walking north on the highway Tucson. Whenever anyone passed us, I signalled our hope of being picked up.

It took us three hitches simply to reach Tucson. At Tucson it would have made equal sense to head east toward El Paso, Texas, as to continue on Route 89, as 89 swings west before it goes north to Phoenix. It was settled for us by the chance that the first lift we were able to beg out of Tucson was with a teamster who was taking a load north.

This ride we were able to pick up at a truckers' stop at the intersection of 89 and 80, and I am forced to admit that the teamster listened to our plea because Margrethe is the beauty she is—had I been alone I might still be standing there. I might as well say right now that this whole trip depended throughout on Margrethe's beauty and womanly charm quite as much as it depended on my willingness to do any honest work whatever, no matter how menial, dirty, or difficult.

I found this fact unpleasant to face. I held dark thoughts of Potiphar's wife and of the story of Susanna and the Elders. I found myself being vexed with Margrethe when her only offense lay in being her usual gracious, warm, and friendly self. I came close to telling her not to smile at strangers and to keep her eyes to herself.

That temptation hit me sharpest that first day at sundown when this same trucker stopped at a roadside oasis centered around a restaurant and a fueling facility. 'I'm going to have a couple of beers and a sirloin steak,' he announced. 'How about you, Maggie baby? Could you use a rare steak? This is the place where they just chase the cow through the kitchen.'

She smiled at, him. 'Thank you, Steve. But, I'm not hungry.'

My darling was telling an untruth. She knew it, I knew it—and I felt sure that Steve knew it. Our last meal had been breakfast at the mission, eleven hours and a universe ago. I had tried to wash dishes for a meal at the truckers' stop outside Tucson, but had been dismissed rather abruptly. So we had had nothing all day but water from a public drinking faucet.

'Don't try to kid your grandmother, Maggie. We've been on the road four hours. You're hungry.'

I spoke up quickly to keep Margrethe from persisting in an untruth—told, I felt certain, on my behalf. 'What she means, Steve, is that she doesn't accept dinner invitations from other men. She expects me to provide her dinner.' I added, 'But I thank you on her behalf and we both thank you for the ride. It's been most pleasant.'

We were still seated in the cab of his truck, Margrethe in the middle. He leaned forward and looked around her. 'Alec, you, think I'm trying to get into Maggie's pants, don't you?'

I answered stiffly that I did not think anything of the sort while thinking privately that that was exactly what I thought he had been trying to accomplish all along...and I resented not only his unchivalrous overtures but also the gross language he had just used. But I had learned the hard way that rules of polite speech in the world in which I had grown up were not necessarily rules in another universe

'Oh, yes, you do think so. I wasn't born yesterday and a lot of my life has been spent on the road, getting my illusions knocked out. You think I'm trying to lay your woman because every stud who comes along tries to put the make on her. But let me clue you in, son. I don't knock when there's nobody at home. And I can always tell. Maggie ain't having any. I checked that out hours ago. And 'congratulations; a faithful woman is good to find. Isn't that true?'

'Yes, certainly,' I agreed grudgingly.

'So get your feathers down'. You're about to take your wife to dinner. You've already said thank you to me for the ride but why don't you really thank me by inviting me to dinner?—so I won't have to eat alone.'

I hope that I did not look dismayed and that my instant of hesitation was not noticeable. 'Certainly, Steve. We owe you that for your kindness. Uh, will you excuse me while I make some arrangements?' I started to get out of the cab.

'Alec, you don't lie any better than Maggie does.'

'Excuse me?'

'You think I'm blind? You're broke. Or, if you aren´t absolutely stony, you are so near flat you can't afford to buy me a sirloin steak. Or even the blueplate special.'

'That is true,' I answered with—I hope—dignity. 'The arrangements I must make are with the restaurant manager. I hope to exchange dishwashing for the price of three dinners.'

'I thought so. If you were just ordinary broke, you'd be riding Greyhound and you'd have some baggage. If you were broke but not yet hungry broke, you'd hitchhike to save your money for eating but you would have some sort of baggage. A kiester each, or at least a bindle. But you've got no baggage...and you're both wearing suits—in the desert, for God's sake! The signs all spell disaster.'

I remained mute.

'Now look,' he went on. 'Possibly the owner of this joint would let you wash dishes. More likely he's got three wetbacks pearl-diving this very minute and has turned down at least three more already today; this is on the main north-south route of turistas coming through holes in the Fence. In any case I can't wait while you wash dishes; I've got to herd this rig a lot of miles yet tonight. So I'll make you a deal. You take me to dinner but I lend you the money.'

'I'm a poor risk.'

'Nope, you're a good risk. What the bankers call a character loan, the very best risk there is. Sometime, this coming year, or maybe twenty years from now, you'll run across another young couple, broke and hungry. You'll buy them dinner on the same, terms. That pays me back. Then when they do the same, down the line, that pays you back. Get it?'

'I'll pay you back sevenfold!'

"Once is enough. After that you do it for your own pleasure. Come on, let's eat.'

Rimrock Restop restaurant was robust rather than fancy—about on a par with Ron's Grill in another world. It had both counter and tables. Steve led us to a table and shortly a fairly young and rather pretty waitress came over.

'Howdy, Steve! Long time.'

Hi, Babe! How'd the rabbit test come out?'

'The rabbit died. How about your blood test?' She smiled at me and at Margrethe. 'Hi, folks! What'll you have?'

I had had time to glance at the menu, first down the righthand side, of course—and was shocked at the prices. Shocked to find them back on the scale of the world I knew best, I mean. Hamburgers for a dime, coffee at five cents, table d'hôte dinners at seventy-five to ninety cents—these prices I understood.

I looked at it and said, 'May I have a cheese superburger, medium well?'

'Sure thing, Ace. How about you, dear?'

Margrethe took the same, but medium rare.

'Steve?' the waitress inquired.

That'll be three beers—Coors—and three sirloin steaks, one rare, one medium rare, one medium. With the usual garbage. Baked potato, fried promises, whatever. The usual limp salad. Hot rolls. All the usual. Dessert later. Coffee.'

'Gotcha.'

'Wantcha to meet my friends. Maggie, this is Hazel. That's Alec, her husband.'

'You lucky man! Hi, Maggie; glad to know you. Sorry to see you in such company, though. Has Steve tried to sell you anything?'

'No,'

'Good. Don't buy anything, don't sign anything, don't bet with him. And be glad you're safely married; he's got wives in three states.'

'Four,' Steve corrected.

'Four now? Congratulations. Ladies' restroom is through the kitchen, Maggie; men go around behind.' She left moving fast, with a swish of her skirt.

'That's a fine broad,' Steve said. 'You know what they say about waitresses, especially in truckers' joints. Well, Hazel is probably the only hash-slinger on this highway who ain't sellin' it. Come on, Alec.' He got up and led me outdoors and around to the men's room. I followed him. By the time I understood what he had said, it was too late to resent his talking that way in a lady's presence. Then I was forced to admit that Margrethe had not resented it had simply treated it as information. As praise of Hazel, in fact. I think my greatest trouble with all these worrisome world changes had to do, not with economics, not with social behavior, not with technology, but simply with language, and the mores and taboos thereto.

Beer was waiting for us when we returned, and so was Margrethe, looking cool and refreshed.

Steve toasted us. 'Skoal!'

We echoed 'Skaal!' and I took a sip and then a lot more—just what I needed after a long day on a desert highway. My moral downfall in S.S. Konge Knut had included getting reacquainted with beer, something I had not touched since my days as an engineering student, and very little then—no money for vices. This was excellent beer, it seemed to me, but not as good as the Danish Tuborg served in the ship. Did you know that there is not one word against beer in the Bible? In fact the word 'beer' in the Bible means 'fountain'—or 'well'.

The steaks were delicious.'

Under the mellowing influence of beer and good food I found myself trying to explain to Steve how we happened to be down on our luck and accepting the charity of strangers...without actually saying anything. Presently Margrethe said to me, 'Alec. Tell him.'

'You think I should?'

'I think Steve is entitled to know. And I trust him.'

'Very well. Steve, we are strangers from another world.'

He neither laughed nor smiled; he just looked interested. Presently he said, 'Flying saucer?'

'No. I mean another universe, not just another planet. Although it seems like the same planet. I mean, Margrethe and I were in a state Called Arizona and a city called Nogales just earlier today. Then it changed. Nogales shrank down and nothing was quite the same. Arizona looked about the same, although I don't know this state very well.'

'Territory.'

'Excuse me?'

'Arizona is a territory, not a state. Statehood was voted down.'

'Oh. That's the way it was in my, world, too. Something about taxes. But we didn't come from my world. Nor from Marga's world. We came, from—'I stopped. 'I'm not telling this very well.' I looked across at Margrethe. 'Can you explain it?'

'I can't explain it,' she answered, because I don't understand it. But, Steve, it's true. I'm from one world, Alec is from another world, we've lived in still another world, and we were in yet again another world this morning. And now we are here. That is why we don't have any money. No, we do have money but it's not money of this world.'

Steve said, 'Could we take this one world at a time? I'm getting dizzy.'

I said, 'She left out two worlds.'

'No, dear—three. You may have forgotten the iceberg world.'

'No, I counted that. I—Excuse me, Steve. I'll try to take it one world at a time. But it isn't easy. This morning—We went into an ice cream parlor in Nogales because I wanted to buy Margrethe a hot fudge sundae. We sat down at a table, across from each other like right now, and that put me facing a set of traffic lights—'

'A set of what?'

'A set of traffic signal lights, red, green, and amber. That's how I spotted that we had changed worlds again. This world doesn't have signal lights, or at least I haven't seen any. Just traffic cops. But in the world we got up in this morning, instead of traffic cops, they do it with signal lights.'

Sounds like they do it with mirrors. What's this got to do with buying Maggie a hot fudge sundae?'

'That was because, when we were. shipwrecked and, floating around in the ocean, Margrethe wanted a hot fudge, sundae. This morning was my first chance to buy one for her. When the traffic lights disappeared, I knew we had changed worlds again—and that meant that my money wasn't any good. So I could not buy her a hot fudge sundae. And could not buy her dinner tonight. No money. No spendable money, I mean. You see?'

'I think I fell off three turns back. What happened to your money?'

'Oh.' I dug into my pocket, hauled out our carefully hoarded bus-fare money, picked out a twenty-dollar bill, handed it to Steve. 'Nothing happened to it. Look at this.'

He looked at it carefully. ' "Lawful money for all debts public and private." That sounds okay. But who's this joker with his picture on it? And when did they start.printing twenty-dollar treasury notes?'

'Never, in your world. I guess. The picture is of William Jennings Bryan, President of the United States from 1913 to 192l.'

'Not at Horace Mann School in Akron, he wasn't. Never heard of him.'

'In my school he was elected in 1896, not sixteen years later. And in Margrethe's world Mr Bryan was never president at all. Say! Margrethe! This just might be your world!'

'Why do you think so, dear?'

'Maybe, maybe not. As we came north out of Nogales I didn't notice a flying field or any signs concerning one. And I just remembered that I haven't heard or seen a jet plane all day long. Or any sort of a flying machine. Have you?'

,No. No, I haven't. But I haven't been thinking about them.' She added, 'I'm almost certain there haven't been any near us.'

There you have it! Or maybe this is my world. Steve, what's the situation on aeronautics here?'

'Arrow what?'

'Flying machines. Jet planes. Aeroplanes of any sort. And dirigibles—do you have dirigibles?'

'None of those things rings any bells with me. You're talking about flying, real flying, up in the air like a bird?'.

'Yes, yes!'

'No, of course not. Or do you mean balloons? I've seen a balloon.'

'Not balloons. Oh, a dirigible is a sort of a balloon. But it's long instead of round—sort of cigar-shaped. And it's propelled by engines something like our truck and goes a hundred miles an hour and more—and usually fairly high, one or two thousand feet. Higher over mountains.'

For the first time Steve showed surprise rather than interest. 'God A'mighty! You've actually seen something like that?'

'I've ridden in them. Many times. First when I was only twelve years old. You went to school in Akron? In my world Akron is world famous as the place where they build the biggest, fastest, and best dirigible airships in all the world.'

Steve shook his head. 'When the parade goes by, I'm out for a short beer. That's the story of my life. Maggie, you've seen airships? Ridden in them?'

'No. They are not in my world. But I've ridden in a flying' machine. An aeroplano. Once. It was terribly exciting. Frightening, too. But I would like to do it again.'

'I betcha would. Me, I reckon it would scare the tar out of me. But I would take a ride in one, even if it killed me. Folks, I'm beginning to believe you. You tell it so straight. That and this money. If it, is money.'

'It is money,' I insisted, 'from another world. Look at it closely, Steve. Obviously it's not money of your world. But it's not play money or stage money either. Would anybody bother to make steel engravings that perfect just for stage money? The engraver who made the plates expected that note to be accepted as money...yet it isn't even a correct denomination—that's the first thing you noticed. Wait a moment.' I dug into another pocket. 'Yup! Still here.' I took out a ten-peso note—from the Kingdom of Mexico. I had burned most of the useless money we had accumulated before the quake—Margrethe's tips at El Pancho Villa—but I had saved a few' souvenirs. 'Look at this, too. Do you know Spanish?'

'Not really. TexMex. Cantina Spanish.' He looked at the Mexican money. 'This looks okay.'

'Look more closely,' Margrethe urged him. 'Where it says 'Reino'. Shouldn't that read 'Republica'? Or is Mexico a kingdom in this world?'

'It's a republic...partly because I helped keep it that way. I was an election judge there when I was in the Marines. It's amazing what a few Marines armed to their eyebrows can do to keep an election honest. Okay, pals; you've sold 'me. Mexico is not a kingdom and hitchhikers who don't have the price of dinner on them ought not to be carrying around Mexicano money that says it is a kingdom. Maybe I'm crazy but I'm inclined to throw in with you. What's the explanation?'

'Steve',' I said soberly, 'I wish I knew. The simplest explanation is that I've gone crazy and that it's all imaginary—you, me, Marga, this restaurant, this world—all products of my brain fever.'

'You can be imaginary if you want to, but leave Maggie and me out of it. Do you have any other explanations?'

'Uh...that depends. Do you read the Bible, Steve?'

'Well, yes and no. Being on the road, lots of times I find myself wide awake in bed with nothing around to read but a Gideon Bible. So sometimes I do.'

'Do you recall Matthew twenty-four, twenty-four?'

'Huh? Should I?'

I quoted it for him. 'That's one possibility, Steve. These world changes may be signs sent by the Devil himself, intended to deceive us. On the other hand they may be portents of the end of world and the coming of Christ into His kingdom. Hear the Word:

"Immediately after the tribulation of those days shall the sun be darkened, and the moon shall not give her light, and the stars shall fall from heaven, and the powers of the heavens shall be shaken:

"And then shall appear the sign ed the Son of man in heaven: and then shall all the tribes of the earth mourn, and they shall see the Son of man coming in the clouds of heaven with power and great glory.

"'And he shall send his angels with a great sound of a trumpet, and they shall gather together his elect from the four winds, from one end of heaven to the other."

'That's what it adds up to, Steve. Maybe these are the false signs of the tribulations before the end, or maybe these wonders foretell the Parousia, the coming of Christ. But, either way, we are coming to the end of the world. Are you born again?'

'Mmm, I can't rightly say that I am. I was baptized a long time ago, when I was too young to have much say in the matter. I'm not a churchgoer, except sometimes to see my friends married or buried. If I was washed clean once, I guess I'm a little dusty by now. I don't suppose I qualify.'

'No, I'm certain that you do not. Steve, the end of the world is coming and Christ is returning soon. The most urgent business you have—that anyone has!—is to take your troubles to Jesus, be washed in His Blood, and be born again in Him. Because you will receive no warning. The Trump will sound and you will either be caught up into the arms of Jesus, safe and happy forevermore, or you will be cast down into the fire and brimstone, there to suffer agonies through all eternity. You must be ready.'

'Cripes! Alec, have you ever thought about becoming a preacher?'

'I've thought about it.'

'You should do more than think about it, you should be one. You said all that just like you believed every word of it.'

'I do.

'Thought maybe. Well, I'll pay you the respect of giving it some hard thought. But in the meantime I hope they don't hold Kingdom Come tonight because I've still got this load to deliver. Hazel! Let me have the check, dear; I've got to get the show on the road.'

Three steak dinners came to $3.90; six beers was another sixty cents, for a total of $4.50. Steve paid with a half eagle, a coin I had never seen outside a coin collection I wanted to look at this one but had no excuse.

Hazel picked it up, looked at it. 'Don't get much gold around here,? she remarked. 'Cartwheels are the usual thing. And some paper, although the boss doesn't like paper money. Sure you can spare this, Steve?'

'I found the Lost Dutchman.'

'Go along with you; I'm not going to be your fifth wife.'

'I had in mind a temporary arrangement.'

'Not that either—not for a five-dollar gold piece.' She dug into an apron pocket, took out a silver half dollar. 'Your change, dear.'

He pushed it back toward her. 'What'll you do for fifty cents?'

She picked it up, pocketed it. 'Spit in your eye. Thanks. Night, folks. Glad you came in.'

During the thirty-five miles or so on into Flagstaff Steve asked questions of us about the worlds we had seen but made no comments. He talked just enough to keep us talking. He was especially interested in my descriptions of airships, jet planes, and aeroplanos, but anything technical fascinated him. Television he found much harder to believe than flying machines—well, so did I. But Margrethe assured him that she had seen television herself, and Margrethe is hard to disbelieve. Me, I might be mistaken for a con man. But not Margrethe. Her voice and manner carry conviction.

In Flagstaff, just short of Route 66, Steve pulled over to the side and stopped, left his engine running. 'All out,' he said, 'if you insist on heading east. If you want to go north, you're welcome.

I said, 'We've got to get to Kansas, Steve.'

'Yes, I know. While you can get there either way, Sixty-Six is your best bet...though why anyone should want to go to Kansas beats me. It's that intersection ahead, there. Keep right and keep going; you can't miss it. Watch out for the Santa Fe tracks. Where you planning to sleep tonight?'

'I don't have any plans. We'll walk until we get another ride. If we don't get an all-night ride and we get too sleepy, we can sleep by the side of the road—it's warm.'

'Alec, you listen to your Uncle Dudley. You're not going to sleep on the desert tonight. It's warm now; it'll be freezing cold by morning. Maybe you haven't noticed but we've been climbing all the way from Phoenix. And if the Gila monsters don't get you, the sand fleas will. You've got to rent a cabin.'

'Steve, I can't rent a cabin.'

'The Lord will provide. You believe that, don't you?'

'Yes,' I answered stiffly, 'I believe that.' (But He also helps those who help themselves.)

'So let the Lord provide. Maggie, about this end-of-the world business, do you agree with Alec?'

"I certainly don't disagree!'

'Mmm. Alec, I'm going to give it a lot of thought...starting tonight, by reading a Gideon Bible. This time I don't want to miss the parade. You go on down Sixty-Six, look for a place saying 'cabins'. Not 'motel' ' not 'roadside inn', not a word about Simmons mattresses or private baths—just 'cabins'. If they ask more than two dollars, walk away. Keep dickering and you might get it for one.'

I wasn't listening very hard as I was growing quite angry. Dicker with what? He knew that I was utterly without funds—didn't he believe me?

'So I'll say goodbye,' Steve went on. 'Alec, can you get that door? I don't want to get out.'

'I can get it.' I opened it, stepped down, then remembered my manners. 'Steve, I want to thank you for everything. Dinner, and beer, and a long ride. May the Lord watch over you and keep you.'

'Thank you and don't mention it. Here.' He reached into a pocket, pulled out a card. 'That's my business card. Actually it's my daughter's address. When you get to Kansas, drop me a card, let me know how you made out.'

'I'll do that.' I took the card, then started to hand Margrethe down.

Steve stopped her. 'Maggie! Aren't you going to kiss Ol' Steve goodbye?'

'Why, certainly, Steve!' She turned back and half faced him on the seat.

'That's better, Alec, you'd better turn your back.'

I did not turn my back but I tried to ignore it, while watching out the corner of my eye.

If it had gone on one half-second longer, I would have dragged her out of that cab bodily. Yet I am forced to admit that Margrethe was not having attentions forced on her; she was cooperating fully, kissing him in a fashion no married woman should ever kiss another man.

I endured it.

At last it ended. I handed her down, and closed the door. Steve called out, ' 'Bye, kids!' and his truck moved forward. As it picked up speed he tooted his horn twice.

Margrethe said, 'Alec, you are angry with me.'

'No. Surprised, yes. Even shocked. Disappointed. Saddened.'

'Don't sniff at me!'

'Eh?'

'Steve drove us two hundred and fifty miles and bought us a fine dinner and didn't laugh when we told him a preposterous story. And now you get hoity-toity and holier-than-thou because I kissed him hard enough to show that I appreciated what he had done for me and my husband. I won't stand for it, do you hear?'

'I just meant that—'

'Stop it! I won't listen to explanations. Because you're wrong! And now I am angry and I shall stay angry until you realize you are wrong. So think it over!' She turned and started walking rapidly toward the intersection of 66 with 89.

I hurried to catch up. 'Margrethe!'

She did not answer and increased her pace.

'Margrethe!' Eyes straight ahead --

'Margrethe darling! I was wrong. I'm sorry, I apologize.

'She stopped abruptly, turned and threw her arms around my neck, started to cry. 'Oh, Alec, I love you so and you're such a fub!'

I did not answer at once as my mouth was busy. At last I said, 'I love you, too, and what is a fub?'

'You are.'

'Well—In that case I'm your fub and you're stuck with me. Don't walk away from me again.'

'I won't. Not ever.' We resumed what we had been doing.

After a while I pulled my face back just far enough to whisper: 'We don't have a bed to our name and I've never wanted one more.'

'Alec. Check your pockets.'

'Huh?'

'While he 'Was kissing me, Steve whispered to me to tell you to check your pockets and to say, "The Lord will provide."'

I found it in my lefthand coat pocket: a gold eagle. Never before had I held one in my hand. It felt warm and heavy.

Chapter 16

Shall mortal man be more just than God? shall a man be more pure than his maker?
Job 4:17

Teach me, and I will hold my tongue: and cause me to understand wherein I have erred.
Job 6:24

AT A drugstore in downtown Flagstaff I exchanged that gold eagle for nine cartwheels, ninety-five cents in change, and a bar of Ivory soap. Buying soap was Margrethe's idea. 'Alec, a druggist is not a banker; changing money is something he may not want to do other than as part of a sale. We need soap. I want to wash your underwear and mine, and we both need baths...and I suspect that, at the sort of cheap lodging Steve urged us to take, soap may not be included in the rent.'

She was right on both counts. The druggist raised his eyebrows at the ten-dollar gold piece but said nothing. He took the coin, let it ring on the glass top of a counter, then reached behind his cash register, fetched out a small bottle, and subjected the coin to the acid test.

I made no comment. Silently he counted out nine silver dollars, a half dollar, a quarter, and two dimes. Instead of pocketing the coins at once, I stood fast, and subjected each coin to the same ringing test he had used, using his glass counter. Having done so, I pushed one cartwheel back at him.

Again he made no comment—he had heard the dull ring, of that putatively silver coin as well as I. He rang up 'No Sale', handed me another cartwheel (which rang clear as a bell), and put the bogus coin somewhere in the back of the cash drawer. Then he turned his back on me.

At the outskirts of town, halfway to Winona, we found a place shabby enough to meet our standards. Margrethe conducted the dicker, in Spanish. Our host asked five dollars. Marga called on the Virgin Mary and three other saints to witness what was being done to her. Then she offered him five pesos.

I did not understand this maneuver; I knew she had no pesos on her. Surely she would not be intending to offer those unspendable 'royal' pesos I still carried?

I did not find out, as our host answered with a price of three dollars and that is final, Señora, as God is my witness.

They settled on a dollar and a half, then Marga rented clean sheets and a blanket for another fifty cents—paid for the lot with two silver dollars but demanded pillows and ' clean pillowcases to seal the bargain. She got them but the patrón asked something for luck. Marga added a dime and he bowed deeply and assured us that his house was ours.

At seven the next morning we were on our way, rested, clean, happy and hungry. A half hour later we were in Winona and much hungrier. We cured the latter at a little trailer-coach lunchroom: a stack of wheat cakes, ten cents; coffee, five cents no charge for second cup, no limit on butter or syrup.

I Margrethe could not finish her hot cakes—they were lavish—so we swapped plates and I salvaged what she had left.

A sign on the wall read: CASH WHEN SERVED—NO TIPPING—ARE YOU READY FOR JUDGMENT DAY? The cook-waiter (and owner, I think) had a copy of The Watch Tower propped up by his range. I asked, 'Brother, do you have any late news on when to expect Judgment Day?'

'Don't joke about it. Eternity is a long time to spend in the Pit.'

I answered, 'I was not joking. By the signs and portents I think we are in the seven-year period prophesied in the eleventh chapter of Revelation, verses two and three. But I don't know how far we are into it.'

'We're already well into the second half,' he answered.

'The two witnesses are now prophesying and the antichrist is abroad in the land. Are you in a state of grace? If not, you had better get cracking.'

I answered, '"Therefore be ye also ready: for such an hour as ye think not the Son of man cometh."'

'You'd better believe it!'

'I do believe it. Thanks for a good breakfast.'

'Don't mention it. May the Lord watch over you.'

'Thank you. May He bless and keep you.' Marga and I left.

We headed ' cast again. 'How is my sweetheart?'

'Full of food and happy.'

'So am I. Something you did last night made me especially happy.'

'Me, too. But you always do, darling man. Every time.'

'Uh, yes, there's that. Me, too. Always. But I meant something you said, earlier. When Steve asked, if you agreed with me about Judgment Day and you told him you did agree. Marga, I can't tell you how much it has worried me that you have not chosen to be received back into the arms of Jesus. With Judgment Day rushing toward us and no way to know the hour—well, I've worried. I do worry. But apparently you are finding your way back to the light but had not yet discussed it with me.'

We walked perhaps twenty paces while Margrethe did not say anything.

At last she said quietly, 'Beloved, I would put your mind at rest. If I could. I cannot.'

'So? I do not understand. Will you explain?'

'I did not tell Steve that I agreed with you. I said to him that I did not disagree.'

'But that's the same thing!'

'No, darling. What I did not say to Steve but could have said, in, full honesty is that I will never publicly disagree with my husband about anything. Any disagreement with you I will discuss with you in private. Not in Steve's presence. Not anyone's.'

I chewed that over, let several possible comments go unsaid—at last said, 'Thank you, Margrethe.'

'Beloved, I do it for my own dignity as well as for yours. All my life I have hated the sight of husband and wife disagreeing—disputing—quarreling in public. If you say that the sun is covered with bright green puppy dogs, I will not disagree in public.'

Ah, but it is!'

'Sir?' She stopped, and looked startled.

'My good Marga. Whatever the problem, you always find a gentle answer. If I ever do see bright green puppy dogs on the face of the sun, I will try to remember to discuss it with you in private, not face you with hard decisions in public. I love you. I read too much into what you said to Steve because I really do worry.'

She took my hand and we walked a bit farther without talking.

'Alec?'

'Yes, my love?'

'I do not willingly worry you. If I am wrong and you are going to the Christian Heaven, I do want to go I with you. If this means a return to faith in Jesus—and it seems that it does—then that is what I want. I will try. I cannot promise it, as faith is not a matter of simple volition. But I will try.'

I stopped to kiss her, to the amusement of a carload of men passing by. 'Darling, more I cannot ask. Shall we pray together?'

'Alec, I would rather not. Let me pray alone—and I will! When it comes time to pray together, I will tell you. I

Not long after that we were picked up by a ranch couple who took us into Winslow. They dropped us there without asking any questions and without us offering any information, which must set some sort of record.

Winslow is much larger than Winona; it is a respectable town as desert communities go—seven thousand at a guess. We found there an opportunity to carry out something Steve had indirectly suggested and that we had discussed the night before.

Steve was correct; we were not dressed for the desert. True, we had had no choice, as we had been caught by a world change. But I did not see another man wearing a business suit in the desert. Nor did we see Anglo women dressed in women's suits. Indian women and Mexican women wore skirts, but Anglo women wore either shorts or trousers—slacks, jeans, cutoffs, riding pants, something. Rarely a skirt, never a suit.

Furthermore our suits were not right even as city wear. They looked as out of place as styles of the Mauve Decade would look. Don't ask me how as I am no expert on styles, especially for women. The suit that I wore had been both smart and expensive when worn by my patrón, Don Jaime, in Mazatlán in an I other world...but on me, in the Arizona desert in this world, it was something out of skid row.

In Winslow we found just the shop we needed: SECOND WIND—A Million Bargains—All Sales Cash, No Guarantees, No Returns—All Used Clothing Sterilized Before Being Offered For Sale. Above this were the same statements in Spanish.

An hour later, after much picking over of their stock andsome heavy dickering by Margrethe, we were dressed for the desert. I was wearing khaki pants, a shirt to match, and a straw hat of vaguely western style. Margrethe was wearing considerably less: shorts that were both short and tight—indecently so—and, an—upper garment that was less than a bodice but slightly more than a brassière. It was termed a 'halter'.

When I saw Marga in this outfit, I whispered to her, 'I positively will not permit you to appear in public in that shameless costume.'

She answered, 'Dear, don't be a fub so early in the day. It's too hot.'

'I'm not joking. I forbid you to buy that.'

'Alec, I don't recall asking your permission.'

'Are you defying me?'

She sighed. 'Perhaps I am. I don't want to. Did you get your razor?'

'You saw me!'

'I have your underpants and socks. Is there anything more you need now?'

'No. Margrethe! Quit evading me!'

'Darling, I told you that I will not quarrel with you in public. This outfit has a wraparound skirt; I was about to put it on. Let me do so and settle the bill. Then we can go outside and talk in private.'

Fuming, I went along with what she proposed. I might as well admit that, under her careful management, we came out of that bazaar with more money than we had had when we came in. How? That suit from my patrón, Don Jaime, that looked so ridiculous on me, looked just right on the owner of the shop—in fact he resembled Don Jaime. He had been willing to swap, even, for what I needed—khaki shirt and pants and straw hat.

But Margrethe insisted on something to boot. She demanded five dollars, got two.

I learned, as she settled our bill, that she had wrought similar magic in getting rid of that tailored suit she no longer needed. We entered the shop with $7.55; we left it with $8.80...and desert outfits for each of us, a comb (for two), a toothbrush (also for two), a knapsack, a safety razor, plus a minimum of underwear and socks—all second hand but alleged to be sterilized.

I am not good at tactics, not with women. We were outside and down the highway to an open place where we could talk privately before Margrethe would talk to me and I did not realize that I had already lost.

Without stopping, she said, 'Well, dear? You had something to discuss.'

'Uh, with that skirt in place your clothing is acceptable. Barely. But you are not to appear in-public in those shorts. Is that understood?'

'I intended to wear just the shorts. If the weather is warm. As it is.'

'But, Margrethe, I told you not to—'She was unsnapping the skirt, taking it off. 'You are defying me!'

She folded it, up neatly. 'May I place this in the knapsack? Please?'

'You are deliberately disobeying me!'

'But, Alec, I don't have to obey you and you don't have to obey me.'

'But—Look, dear, be reasonable. You know I don't usually give orders. But a wife must obey her husband. Are you my wife?'

'You told me so. So I am until you tell me otherwise.'

'Then it is your duty to obey me.'

'No, Alec.'

'But that is a wife's first duty!'

'I don't agree.'

'But—This is madness! Are you leaving me?'

'No. Only if you divorce me.'

'I don't believe in divorce. Divorce is wrong. Against Scripture.'

She made no answer.

'Margrethe...please put your skirt on.'

She said softly, 'Almost you persuade me, dearest. Will you explain why you want me to do so?'

'What? Because those shorts, worn alone, are indecent!'

'I don't see how an article of clothing can be indecent, Alec. A person, yes. Are you saying that I am indecent?'

'Uh—You're twisting my words. When you wear those shorts—without a skirt—in public, you expose so much of yourself that the spectacle is indecent. Right now, walking this highway, your limbs are fully exposed...to the people in that car that just passed, for example. They saw you. I saw them staring!'

'Good. I hope they enjoyed it.'

'What?'

'You tell me that I am beautiful. But you could be prejudiced. I hope that my appearance is pleasing to other people as well.'

'Be serious, Margrethe; we're speaking of your naked limbs. Naked.'

'You are saying my legs are bare. So they are. I prefer them bare when the weather is warm. What are you frowning at, dear? Are my legs ugly?'

('Thou art all fair, my love; there is no spot in thee!') 'Your limbs are beautiful, my love; I have told you so many times. But I have no wish to share your beauty.'

'Beauty is not diminished by being shared. Let's get back to the subject, Alec; you were explaining how my legs are indecent. If you can explain it. I don't think you can.'

'But, Margrethe, nakedness is indecent by its very nature. It inspires lewd thoughts.'

'Really? Does seeing my legs cause you to get an erection?'

'Margrethe!'

'Alec, stop being a fub! I asked a simple question.'

'An improper question.' '

She sighed. 'I don't see how that question can possibly be improper between husband and wife. And I will never concede that my legs are indecent. Or that nakedness is indecent. I have been naked in front of hundreds of people—'

'Margrethe!'

She looked surprised. 'Surely you know that?'

'I did not know it and I am shocked to hear it.'

'Truly, dear? But you know how well I swim.'

'What's that got to do with it? I swim well, too. But I don't swim naked; I wear a bathing suit.' (But I, was remembering most sharply the pool in Konge Knut—of course my darling was used to nude swimming. I found myself out on a limb.)

'Oh. Yes. I've seen such suits, in Mazatlán. And in Spain. But, darling, we're going astray again. The problem is wider than whether or not bare legs are indecent or whether I should have kissed Steve goodbye or even whether I must obey you. You are expecting me to be what I am not. I want to be your wife for many years, for—all my life—and I hope to share Heaven with you if Heaven is your destination. But, darling, I am not a child, I am not a slave. Because I love you I wish to please you. But I will not obey an order simply because I am a wife.'

I could say that I overwhelmed her with the brilliance of my rebuttal. Yes, I could say that, but it would not be true. I was still trying to think of an answer when a car slowed down as it overtook us. I heard a whistle of the sort called 'wolf'. The car stopped beyond us and backed up. Need a ride?' a voice called out.

'Yes!' Margrethe answered, and hurried. Perforce, I did, too.

. It was a station wagon with a woman behind the wheel, a man riding with her. Both were my age or older. He reached back, opened the rear door. 'Climb in!'

I handed Margrethe in, followed her and closed the door. 'Got room enough?' he asked. 'If not, throw that junk on the floor. We never sit in the back seat, so stuff sort o' gravitates to it. We're Clyde and Bessie Bulkey.'

'He's Bulkey; I'm just well fed,' the driver added.

'You're supposed to laugh at that; I've heard it before.' He was indeed bulky, the sort of big-boned beefy man who is an athlete in school, then puts on weight later. His wife had correctly described both of them; she was not fat but carried some extra padding.

'How do you do, Mrs Bulkey, Mr Bulkey. We're Alec and Margrethe Graham. Thank you for picking us up.'

Don't be so formal, Alec,' she answered. 'How far you going?'

'Bessie, please keep one eye on the road.'

'Clyde, if you don't like the way I'm herding this heap, I'll pull over and let you drive.'

'Oh, no, no, you're doing fine!'

'Pipe down then, or I invoke rule K. Well, Alec?'

'We're going to Kansas.'

'Coo! We're not going that far; we turn north at Chambers. That's just a short piece down the road, About ninety miles. But you're welcome to that much. What are you going to do in Kansas?'

(What was I going to do in Kansas? Open an ice cream parlor...bring my dear wife back to the fold. Prepare for Judgment Day—) 'I'm going to wash dishes.'

'My husband is too modest,' Margrethe said quietly. 'We're going to open a small restaurant and soda fountain in a college town. But on our way to that goal we are likely to wash dishes. Or almost any work.'

So I explained what had happened to us, with variations and omissions to avoid what they wouldn't believe. 'The restaurant was wiped out, our Mexican partner were dead, and we lost everything we had. I said "dishwashing" because that is the one job I can almost always find. But I'll take a swing at 'most anything.'

Clyde said, 'Alec, with that attitude you'll be back on, your feet before you know it.'

'We lost some money, that's all. We're not too old to start over again.' (Dear Lord, will You hold off Judgment Day long enough for me to do it? Thy will be done. Amen.)

Margrethe reached over and squeezed my hand. Llyde noticed it. He had turned around in his seat so that he faced us as well as his wife. 'You'll make it,' he said. 'With your wife backing you, you're bound to make it.'

I think so. Thank you. 'I knew why he was turned to face us: to stare at Margrethe. I wanted to tell him to keep his eyes to himself but, under the circumstances, I could not. Besides that, it was clear that Mr and Mrs Bulkey saw nothing wrong with the way my beloved was dressed; Mrs Bulkey was dressed the same way, only more so. Or less so. Less costume, more bare skin. I must admit, too, that,' while she was not the immortal beauty Margrethe is, she was quite comely.

At Painted Desert we stopped, got out, and stared at the truly unbelievable natural beauty. I had seen it once before; Margrethe had never seen it and was breathless. Clyde told me that they always stopped, even though they had seen it hundreds of times.

Correction: I had seen it once before in another world. Painted Desert tended to prove what I had strongly suspected: It was not Mother Earth that changed in these wild changes; it was man and his works—and even those only, in part. But the only obvious explanation seemed to lead straight to paranoia. If so, I must not surrender to it; I must take care of Margrethe.

Clyde bought us hot dogs and cold drinks and brushed aside my offer to pay. When we got back into their car, Clyde took the wheel and invited Margrethe to ride up front with him. I was not pleased but could not show it, as Bessie promptly said, 'Poor Alec! Has to put up with the old bag. Don't sulk, dear; it's only twentythree miles to the turnoff for Chambers...or less than twentythree minutes the way Clyde drives.'

This time Clyde took thirty minutes. But he waited and made sure that we had a ride to Gallup.

We reached Gallup long before dark. Despite $8.80 in our pockets, it seemed time to look for dirty dishes. Gallup has almost as many motels and cabin courts as it 'has Indians and almost half of these hostelries have restaurants. I checked a baker's dozen before I found one that needed a dishwasher.

Fourteen days later we were in Oklahoma City. If you think that is slow time, you are correct; it is less than fifty miles a day. But plenty had happened and I was feeling decidedly paranoid—world change after world change and always timed to cause me maximum trouble.

Ever seen a cat play with a mouse? The mouse never has a chance. If he has even the brains the good Lord gives a mouse, he knows that.

Nevertheless the mouse keeps on trying...and is hauled back every time.

I was the mouse.

Or we were the mice, for Margrethe was with me...and she was all that kept me going. She didn't complain and she didn't quit. So I couldn't quit.

Example: I had figured out that, while paper money was never any good after a world change, hard money, gold and silver, would somehow be negotiable, as bullion if not coin. So, when I got a chance to lay hands on hard money, I was stingy with it and refused to take paper money in change for hard money.

Smart boy. Alec, you're a real brain.

So on our third day in Gallup Marga and I took a nap in a room paid for by dishwashing (me) and by cleaning rooms (Margrethe). We didn't intend to go to sleep; we simply wanted to rest a bit before eating; it had been a long, hard day. We lay down on top of the bedspread.

I was just getting relaxed when I realized that something hard was pressing against my spine. I roused enough to figure out that our hoarded silver dollars had slipped out of my side pocket when I had turned over. So I eased my arm out from under Marga's head, retrieved the dollars, counted them, added the, loose change, and placed it all on the bedside table a foot from my head, then got horizontal again, slid my arm under Marga's head and fell right to sleep.

When I woke up it was pitch dark.

I came wide awake. Margrethe was still snoring softly on my arm. I shook her a little. 'Honey. Wake up.'

'Mrrf?'

'It's late. We may have missed dinner

She came quickly awake. 'Can you switch on the bed lamp?' '

I fumbled at the bedside table, nearly fell out of bed. 'Can't find the pesky thing. It's dark as the inside of a pile of coal.' Wait a sec, I'll get the overhead light.'

I got cautiously off the bed, headed for the door, stumbled over a chair, could not find the door—groped for it, did find it, groped some more and found a light. switch by it. The overhead light came on.

For a long, dismal moment neither of us said anything. Then I said, inanely and unnecessarily, 'They did it again.'

The room had the characterless anonymity of any cheap motel room anywhere. Nevertheless it was different in details from the room in which we had gone to sleep.

And our hoarded silver dollars were gone.

Everything but the clothes we were wearing was gone knapsack, clean socks, spare underwear, comb, safety razor, everything. I inspected, made certain.

'Well, Marga, what now?'

'Whatever you say, sir.'

'Mmm. I don't think they'll know me in the kitchen. But they still might let me wash dishes.'

'Or they may need a waitress.'

The door had a spring lock and I had no key, so I left it an inch ajar. The door led directly outdoors and looked across a parking court at the office—a corner room with a lighted sign reading OFFICE—all commonplace except that it did not match the appearance of the motel in which we had been working. In that establishment the manager's office had been in the front end of a central, building, the rest of that central building being the coffee shop.

Yes, we had missed dinner.

And breakfast. This motel did not have a coffee shop.

'Well, Marga?'

'Which way is Kansas?'

'That way...I think. But we have two choices. We can go back into the room, go to bed properly, and sleep until daylight. Or we can get out there on the highway and try to thumb a ride. In the dark.'

'Alec, I see only one choice. If we go back inside and go to bed, we'll get up at daylight, some hours hungrier and no better off. Maybe worse off, if they catch us sleeping in a room we didn't pay for

'I washed an awful lot of dishes!'

'Not here, you didn't. Here they might send for the police.'

We started walking.

That was typical of the persecution we suffered in trying to get to Kansas. Yes, I said 'persecution'. If paranoia consists in believing that the world around you is a conspiracy against you, I had become paranoid. But it was either a 'sane paranoia (if you will pardon the Irishism), or I was suffering from delusions so monumental that I should be locked up and treated.

Maybe so. If so, Margrethe was part of my delusions an answer I could not accept. It could not be folie à deux; Margrethe was sane in any world.

It was the middle of the day before we got anything to eat, and by then I was beginning to see ghosts where a healthy man would see only dust devils. My hat had gone where the woodbine twineth and the New Mexico sun on my head was not helping my state.

A carload of men from a construction site picked us up and took us into Grants, and bought us lunch before they left us there. I may be certifiably insane but I am not stupid; we owe that ride and that meal to the fact that Margrethe in shorts indecently tight, is a sight that attracts the attention of men. That gave me plenty to think about while I enjoyed (and I did enjoy it!) that lunch they bought us. But I kept my ruminations to myself.

After they left us I said, 'East?'

'Yes, sir. But first I would like to check the public library. If there is one.'

'Oh, yes! Surely.' Earlier, in the world of our friend Steve, the lack of air travel had caused me to suspect that Steve's world might be the world where Margrethe was born (and therefore the home of 'Alec Graham' as well). In Gallup we had checked on this at the public library—I had looked up American history in an encyclopedia while Marga checked on Danish history. It took us each about five minutes to determine that Steve's world was not the world Marga was born in. I found that Bryan had been elected in 1896 but had died in office, succeeded by his vice president, Arthur Sewall—and that was all I needed to know; I then simply raced through presidents and wars I had never, heard of.

Margrethe had finished her line of investigation with her nose twitching with indignation. Once outside where we didn't have to whisper I asked her what was troubling her. 'This isn't your world, dear; I made sure of that.'

'It certainly isn't!'

'But we didn't have anything but a negative to go on. There may be many worlds that have no aeronautics of any sort.'

'I'm glad this isn't my world! Alec, in this world Denmark is part of Sweden. Isn't that terrible?'

Truthfully I did not understand her upset. Both countries are Scandinavian, pretty much alike—or so it seemed to me. 'I'm sorry, dear. I don't know much about such things,' (I had been to Stockholm once, liked the place. It didn't seem a good time to tell her so.)

'And that silly book says that Stockholm is the capital and that Carl Sixteenth is king. Alec, he isn't even royal! And now they tell me he's my king!'

'But, sweetheart, he's not your king. This isn't even your world.'

'I know. Alec? If we have to settle here—if the world doesn't change again—couldn't I be naturalized?'

'Why, yes. I suppose so.'

She sighed. 'I don't want to be a Swede.'

I kept quiet. There were some things I couldn't help her with.

So in Grants we again went to a public library lo see what the latest changes had done to the world. Since we had seen no aeroplanos and no dirigibles, again it was possible that we were in Margrethe's world. This time I looked first under 'Aeronautics'—did not find, dirigibles but did find flying machines...invented by Dr

Alberto Santos Dumont of Brazil early in this century—and I was bemused by the inventor's name, as, in my world, he had been a pioneer in dirigibles second only to Count von Zeppelin. Apparently the doctor's. aerodynes were primitive compared with jet planes, or even aeroplanos; they seemed to be curiosities rather than commercial vehicles. I dropped it and turned to American history, checking first on William, Jennings Bryan.

I couldn't, find him at all. Well, I had known that this was not my world.

But Marga was all smiles, could hardly wait to get outside the no-talking area to tell me about it. 'In this world Scandinavia is all one big country...and Kobenhavn is its capital!'

'Well, good!'

'Queen Margrethe's son Prince Frederik was crowned King Eric Gustav—no doubt to please the outlanders. But he is true Danish royalty and a Dane right down to his skull bone. This is as it should be!'

I tried to show her, that I was happy, too. Without a cent between us, with no idea where we would sleep that night, she was delighted as a child at Christmas...over an event that I could not see mattered at all.

Two short rides got us into Albuquerque and I decided that it was prudent to stay there a bit—it's a big place even if we had to throw ourselves On Salvation Army charity. But I quickly found a job as a dishwasher in the Coffee shop of the local Holiday Inn and Margrethe went to work as a waitress in the same shop.

We had been working there less than two hours when she came back to the scullery and slid something into my hip pocket while I was bent over a sink. 'A present for you, dear!'

I turned around. 'Hi, Gorgeous.' I checked my pocket—a safety razor of the travel sort—handle unscrews, and razor and handle' and blades, all fit into a waterproof case smaller than a pocket Testament, and intended to be carried in a pocket. 'Steal it?'

'Not quite. Tips. Got it at the lobby notions stand. Dear, at your first break I want you to shave.'

'Let me clue you, doll. You get hired for your looks. I get hired for my strong back, weak mind, and docile—disposition. They don't care how I look.'

'But I do.'

'Your slightest wish is my command. Now get out of here; you're slowing up production.'

That night Margrethe explained why she had bought me a razor ahead of anything else. 'Dear, it's not just because I like your face smooth and your hair short—although I do! These Loki tricks have kept on and each time, we have to find work at once just to eat. You say that nobody cares how a dishwasher looks...but I say looking clean and neat helps in getting hired for any job, and can't possibly hurt.

'But there is another reason. As a result of these changes, you've had to let your whiskers grow once, twice—I can count five times, once for over three days. Dearest, when you are freshly shaved, you stand tall and look happy. And that makes me happy.'

Margrethe made for me a sort of money belt—actually a cloth pocket and a piece of cloth tape—which she wanted me to wear in bed. 'Dear, we've lost anything we didn't have on us whenever a shift took place. I want you to put your razor and our hard money into this when you undress for bed.'

'I don't think we can outwit Satan that easily.'

'Maybe not. We can try. We come through each change with the clothes we are wearing at the time and with whatever we have in our pockets. This seems to fit the rules.'

'Chaos does not have rules.'

'Perhaps this is not chaos. Alec, if you won't wear this to bed, do you mind if I do?'

'Oh, I'll wear it. It won't stop Satan if he really wants to take it away from us. Nor does it really worry me. Once he dumped us mother naked into the Pacific and we pulled out of it—remember? What does worry me is—Marga, have you noticed that every time we have gone through a change we've been holding each other? At least holding hands?'

'I've noticed.'

'Change happens in the blink of an eye. What happens if we're not together, holding each other? At least touching? Tell me.'

She kept quiet so long that I knew she did not intend to answer.

I 'Uh huh,' I said. 'Me, too. But we can't be Siamese twins, touching all the time. We have to work. My darling, my life, Satan or Loki or whatever bad spirit is doing this to us, can separate us forever simply by picking any instant when we are not touching.'

'Alec.'

'Yes, my love?'

'Loki has been able to do this to us at any moment for a long time. It has not happened.'

'So it may happen the next second.'.

'Yes. But it may not happen at all.'

We moved on, and suffered more changes. Margrethe's precaution's did seem to work—although in one change they seemed to work almost too well; I barely missed a jail sentence for unlawful possession of silver coins. But a quick change (the quickest we had seen) got rid of the charge, the evidence, and the complaining witness. We found ourselves in a strange courtroom and were quickly evicted for lacking tickets entitling us to remain there.

But the razor stayed with me; no cop or sheriff or marshal seemed to want to confiscate that.

We were moving on by our usual method (my thumb and Margrethe's lovely legs; I had long since admitted to myself that I might as well enjoy the inevitable) and had been dropped in a pretty part of—Texas, it must have been—by a trucker who had turned north off 66 on 'a side road.

We had come out of the desert into low green hills. It was a beautiful day but we were tired, hungry, sweaty, and dirty, for our persecutors—Satan or whoever—had outdone themselves: three changes in thirty-six hours.

In one day I had had two dishwashing jobs in the same town at the same address...and had collected nothing. It is difficult to collect from The Lonesome Cowboy Steak House when it turns into Vivian's Grill in front of your eyes. The same was true three hours later when Vivian's Grill melted into a used-car lot. The only thing good about these shocks was that by great good fortune (or conspiracy?) Margrethe was with me each time—in one case she had come to get me and was waiting with me while my boss was figuring my time, in the other she had been working with me.

The third change did us out of a night's lodging that had already been, paid for in kind by Margrethe's labor.

So when that trucker dropped us, we were tired and hungry and dirty and my paranoia had reached a new high.

We had been walking a few hundred yards when we came to a sweet little stream, a, sight in Texas precious beyond all else.

We stopped on the culvert bridging it. 'Margrethe, how would you like to wade in that?'

'Darling, I'm going to do more than wade in it, I'm going to bathe in it.'

'Hmm—Yes, go under the fence, along the stream about fifty, seventy-five yards, and I don't think anyone could see us from the road.'

'Sweetheart, they can line up and cheer if they want to; I'm going to have a bath. And—That water looks clean. Would it be safe to drink?'

'The upstream side? Certainly. We've taken worse chances every day since the iceberg. Now if we had something to eat—Say, your hot fudge sundae. Or would you prefer scrambled eggs?' I held up the lower wire of the fence to let her crawl under. I

'Will you settle for an Oh Henry bar?'

'Make that a Milky Way,' I answered, 'if I have my druthers.'

'I'm afraid you don't, dear. An Oh Henry bar is all there is.' She held the wire for me.

'Maybe we'd better stop talking about food we don't have,' I said, and crawled under—straightened up and added, 'I'm ready to eat raw skunk.'

'Food we do have, dear man. I have an Oh Henry in my tote.'

I stopped abruptly. 'Woman, if you're joking, I'm going to beat you.'

'I'm not joking.'

'In Texas it is legal to correct a wife with a stick not ,thicker than one's thumb.' I held up my thumb. 'Do you see one about this size?'

'I'll find one.'

'Where did you get a candy bar?'

'That roadside stop where Mr Facelli treated us to coffee and doughnuts.'

Mr Facelli had been our middle-of-the-night ride just before the truck that had dropped us. Two small cake doughnuts each and the sugar and cream for coffee had been our only calories for twenty-four hours.

'The beating can wait. Woman, if you stole it, tell me about it later. You really do have a real live Oh Henry? Or am I getting feverish?'

'Alec, do you think I would steal a candy bar? I bought it from a coin machine while you and Mr Facelli were in the men's room after we ate.'

'How? We don't have any money. Not from this world.'

'Yes, Alec. But there was a dime in my tote, from two changes back. Of course it was not a good dime, strictly speaking. But I couldn't see any real harm if the machine would take it. And it did. But I put it out of sight before you two got back...because I didn't have three dimes and could not offer a candy bar to Mr Facelli.' She added anxiously, 'Do you think I cheated? Using that dime?'

'It's a technicality I won't go into...as long as I get to share in the proceeds of the crime. And that makes me equally guilty. Uh...eat first, or bathe first?'

We ate first, a picnic banquet washed down by delicious creek water. Then we bathed, with much splashing and laughing—I remember it as one of the happiest times of my life. Margrethe had soap in her tote bag, too, and I supplied the towel, my shirt. First I wiped Margrethe with it, then I wiped me with it. The dry, warm air finished the job.

What happened immediately after was inevitable. I had never in my life made love outdoors, much less in bright daylight. If anyone had asked me, I would have said that for me it would be a psychological impossibility; I would be too inhibited, too aware of the indecency involved.

I am amazed and happy to say that, while keenly aware of the circumstances, I was untroubled at the time and quite able...perhaps because of Margrethe's bubbling, infectious enthusiasm.

I have never slept naked on grass before, either. I think we slept about an hour.

When we woke up, Margrethe insisted on shaving me. I could not shave myself very well as I had no mirror, but she could and did, with her usual efficiency. We stood knee-deep in the water; I worked up soapsuds with my hands and slathered my face. She shaved and I renewed the lather as needed.

'There,' she said at last, and gave me a sign-off kiss, 'you'll do. Rinse off now and don't forget your ears. I'll find the towel. Your shirt.' She climbed onto the bank while I leaned far over and splashed water on my face.

'Alec—'

'I can't hear you; the water's running.'

'Please, dear!'

I straightened up, wiped the water out of my eyes, looked around.

Everything we owned was gone, everything but my razor.

Chapter 17

Behold, I go forward, but he is not there; and backward, but I cannot perceive him: On the left hand, where he doth work, but I cannot behold him: he hideth himself on the right hand, that I cannot see him.

Job 23:8-10

MARGRETHE SAID, 'What did you do with the soap?'

I took a deep breath, sighed it out. 'Did I hear you correctly? You're asking what I did with the soap?'

'What would you rather I said?'

'Uh—I don't know. But not that. A miracle takes place...and you ask me about a bar of soap.'

'Alec, a miracle that takes place again and again and again is no longer a miracle; it's just a nuisance. Too many, too much. I want to scream or break into tears. So I asked about the soap.'

I had been halfway to hysteria myself when Margrethe's statement hit me like a dash of cold water. Margrethe? She who took icebergs and earthquakes in her stride, she who never whimpered in adversity...she wanted to scream?

'I'm sorry, dear. I had the soap in my hands when you were shaving me. I did not have it in my hands when I rinsed my face. I suppose I laid it on the bank. But I don't recall. Does it matter?'

'Not really, I suppose. Although that cake of Camay, used just once, would be half our worldly goods if I could find it, this razor being the other half. You may have placed it on the bank, but I don't see it.'

'Then it's gone. Marga, we've got urgent things to worry about before we'll be dirty enough to need soap again. Food, Clothing, shelter.' I scrambled up onto the bank. 'Shoes. We don't even have shoes. What do we do now? I'm stumped. If I had a wailing wall, I'd wail.'

'Steady, dear, steady.'

'Is it all right if I just whimper a little?'

She came close, put her arms around me, and kissed me. 'Whimper all you want to, dear, whimper for both of us. Then let's decide what to do.'

I can't stay depressed with Margrethe's arms around me. 'Do you have any ideas? I can't think of anything but picking our way back to the highway and trying to thumb a ride...which doesn't appeal to me in the state I'm in. Not even a fig leaf. Do you see a fig tree?'

'Does Texas have fig trees?'

'Texas has everything. What do we do now?'

'We go back to the highway and start walking.'

'Barefooted? Why not stand still and wave our thumbs? We can't go far enough barefooted to matter. My feet are tender.'

'They'll toughen up. Alec, we must keep moving. For our morale, love. If we give up, we'll die. I know it.'

Ten minutes later we were moving slowly east on the highway. But it was not the highway we had left. This one was four lanes instead of two, with wide paved shoulders. The fence marking the right of way, instead of three strands of barbed wire, was chain-link steel as high as my head. We would have had a terrible time reaching the highway had it not been for the stream. By going back into the water and holding our breaths, we managed to slither under the fence. This left us sopping wet again (and no towel-shirt) but the warm air corrected that in a few minutes.

There was much more traffic on this highway than there had been on the one we had left, both freight and what seemed to be passenger cars. And it was fast. How fast I could not guess, but it seemed at least twice as fast as any ground transportation I had ever seen. Perhaps as fast as transoceanic dirigibles.

There were big-vehicles that had to be freight movers but looked more like railroad boxcars than they looked like lorries. And even longer than boxcars. But as I stared I figured out that each one was at least three cars, articulated. I figured this out by attempting to count wheels. Sixteen per car? Six more on some sort of locomotive up front, for a total of fifty-four wheels. Was this possible?

These behemoths moved with no sound but the noise of air rushing past them, plus a whoosh of tires against pavement. My dynamics professor would have approved.

In the lane nearest us were smaller vehicles that I assumed to be passenger cars, although I could not 'see anyone inside. Where one would expect windows appeared to be mirrors or burnished steel. They were long and low and as sleekly shaped as an airship.

And now I saw that this was not one highway, but two. All the traffic on the pavement nearest us was going east; at least a hundred yards away another stream of traffic was going west. Still farther away, seen only in glimpses, was a limit fence for the northern side of the widest right of way I have ever seen.

We trudged along on the edge of the shoulder. I began to feel gloomy about the chances of being picked up. Even if they could see us (which seemed uncertain), how could they stop quickly enough to pick up someone on the highway? Nevertheless I waved the hitchhikers' sign at each car.

I kept my misgivings to myself. After we had been walking a dismal time, a car that had just passed us dropped out of the traffic lane onto the shoulder, stopped at least a quarter of a mile ahead of us, then backed toward us at a speed I would regard as too fast if I were going forward. We got hastily off the shoulder.

It stopped alongside us. A mirrored section a yard wide and at least that high lifted up like a storm-cellar door, and I found myself looking into the passenger compartment. The operator looked out at us and grinned. 'I don't believe it!'

I tried to grin back. 'I don't believe it myself. But here we are. Will you give us a ride?'

'Could be.' He looked Margrethe up and down. 'My, aren't you the purty thing! What happened?'

Margrethe answered, 'Sir, we are lost.'

'Looks like. But how did you manage to lose your clothes, too? Kidnapped? Or what? Never mind, that can wait. I'm Jerry Farnsworth.'

I answered, 'We're Alec and Margrethe Graham.'

'Good to meet you. Well, you don't look armed—except for that thing in your hand, Miz Graham. What is it?'

She held it out to him. 'A razor.'

He accepted it, looked at it, handed it back. 'Durned if it isn't. Haven't seen one like that since I was too young to shave. Well, I don't see how you can highjack me with that. Climb in. Alec, you can have the back seat; your sister can sit up here with me.' Another section of the shell swung upward.

'Thank you,' I answered, thinking sourly about beggars and choosers. 'Marga is not my sister, she's my wife.'

'Lucky man! Do you object to your wife riding with me?'

'Oh, of course not!'

I think that answer would cause a tension meter to jingle. Dear, you'd better get back there with your husband.'

'Sir, you invited me to sit with you and my husband voiced his approval.' Margrethe slipped into the forward passenger seat. I opened my mouth and closed it, having found I had nothing to say. I climbed into the back seat, discovered that the car was bigger inside than out; the seat was roomy and comfortable. The doors closed down; the 'mirrors' now were windows.

'I'm about to put her back into the flow,' our host said, 'so don't fight the safeties. Sometimes this buggy bucks like a Brahma bull, six gees or better. No, wait a sec. Where are you two going?' He looked at Margrethe.

'We're going to Kansas, Mr Farnsworth.'

'Call me Jerry, dear. In your skin?'

'We have no clothing, sir. We lost it.'

I added, 'Mr Farnsworth—Jerry—we're in a distressed state. We lost everything. Yes, we are going to Kansas, but first we must find clothes somewhere—Red Cross, maybe, I don't know. And I've got to find a job and make us some money. Then we'll go to Kansas.'

'I see. I think I do. Some of it. How are you going to get to Kansas?'

'I had in mind continuing straight on to Oklahoma City, then north. Stick to the main highways. Since we're hitchhiking.'

'Alec, you really are lost. See that fence? Do you know the penalty for a pedestrian caught inside that fence?'

'No, I don't.'

'Ignorance is bliss. You'll be much better off on the small side roads where hitching is still legal, or at least tolerated. If you're for Oke City, I can help you along. Hang on.' He did something at controls in front of him. He didn't touch the wheel because there wasn't any wheel to touch. Instead there were two hand grips.

The car vibrated faintly, then jumped sideways. I felt as if I had fallen into soft mush and my skin tingled as with static electricity. The car bucked like a small boat in a heavy sea, but that 'soft mush' kept me from being battered about. Suddenly it quieted down and only that faint vibration continued. The landscape was streaking past.

'Now,' said Mr Farnsworth, 'tell me about it.'

'Margrethe?'

'Of course, dearest. You must.'

'Jerry...we're from another world.'

'Oh, no!' He groaned. 'Not another flying saucer! That makes four this week. That's your story?'

'No, no!' I've never seen a flying saucer. We're from earth, but...different. We were hitchhiking on Highway Sixty-Six, trying to reach Kansas—'

'Wait a minute. You said, "Sixty-Six".'

'Yes, of course.'

'That's what they used to call this road before they rebuilt it. But it hasn't been called anything but Interstate Forty for, oh, over forty years, maybe fifty. Hey. Time travelers! Are you?'

'What year is this?' I asked.

'Nineteen-ninety-four.'

'That's our year, too. Wednesday the eighteenth of May. Or was this morning. Before the change.'

'It still is. But—Look, let's quit jumping around. Start at the beginning, whenever that was, and tell me how you wound up inside the fence, bare naked.'

So I told him.

Presently he said, 'That fire pit. Didn't burn you?'

'One small blister.'

'Just a blister. I reckon you would be safe in Hell.'

'Look, Jerry, they really do walk on live coals.'

'I know, I've seen it. In New Guinea. Never hankered to try it. That iceberg—Something bothers me. How does an iceberg crash into the side of a vessel? An iceberg is dead in the water, always. Certainly a ship can bump into one but damage should be to the bow. Right?'

'Margrethe?'

'I don't know, Alec. What Jerry says sounds right. But it did happen.'

'Jerry, I don't know either. We were in a forward stateroom; maybe the whole front end was crushed in. But, if Marga doesn't know, I surely do not, as I got banged on the head and went out like a light. Marga kept me afloat—I told you.'

I Farnsworth looked thoughtfully at me. He had swiveled his seat around to face both of us while I talked, and he had showed Margrethe how to unlock her chair so that it would turn, also, which brought us three into an intimate circle of conversation, knees almost touching—and left him with his back to the traffic. 'Alec, what became of this Hergensheimer?'

'Maybe I didn't make that clear—it's not too clear to me, either. It's Graham who is missing. I am Hergensheimer.

When I walked through the fire and found myself in a different world, I found myself in Graham's place, as I said. Everybody called me Graham and seemed to think that I was Graham—and Graham was missing. I guess you could say I took the easy way out...but there I was, thousands of miles from home, no money, no ticket, and nobody had ever heard of Alexander Hergensheimer.' I shrugged and spread my hands helplessly. 'I sinned. I wore his clothes, I ate at his table, I answered to his name.'

'I still don't get the skinny of this. Maybe you look enough like, Graham to fool almost anyone...but your wife would know the difference. Margie?'

Margrethe looked into my eyes with sadness and love, and answered steadily, 'Jerry, my husband is confused. A strange amnesia. He is Alec Graham. There is no Alexander Hergensheimer. There never was.'

I was left speechless. True, Margrethe and I had not discussed this matter for many weeks; true, she had never flatly admitted that I was not Alec Graham. I was learning again (again and again!) that one never won an argument with Margrethe. Any time I thought I had won, it always turned out that—she had simply shut up.

Farnsworth said to me, 'Maybe that knock in the head, Alec?'

'Look, that knock in the head was nothing—a few minutes' unconsciousness, nothing more. And no gaps in my memory. Anyhow it happened two weeks after the fire walk. Jerry, my wife is a wonderful woman...but I must disagree with her on this. She wants to believe that I am Alec Graham because she fell in love with Graham before she ever met me. She believes it because she needs to believe it. But of course I know who I am: Hergensheimer. I admit that amnesia can have some funny effects...but there was one clue that I could not have faked, one that said emphatically that I, Alexander Hergensheimer, was not Alec Graham.'

I slapped my stomach, where a bay window had been. 'Here is the proof: I wore Graham's clothes, I told you. But his clothes did not fit me perfectly. At the time of the fire walk I was rather plump, too heavy, carrying a lot of flab right here.' I slapped my stomach again. 'Graham's clothes were too tight around the middle for me. I had to suck in hard and hold my breath to fasten the waistband on any pair of his trousers. That could not happen in the blink of an eye, while walking through a fire pit. Nor did it. Two weeks of rich food in a cruise ship gave me that bay window...and it proves that I am not Alec Graham.'

Margrethe not only kept quiet, her expression said nothing. But Farnsworth insisted. 'Margie?'

'Alec, you were having exactly that trouble with your clothes before the fire walk. For the same reason. Too much rich food.' She smiled. 'I'm sorry to contradict you, my beloved...but I'm awfully glad you're you.'

Jerry said, 'Alec, many is the man who would walk through fire to get a woman to look at him that way just once. When you get to Kansas, you had better go to see the Menningers; you've got to get that amnesia untangled. Nobody can fool a woman about her husband. When she's lived with him, slept with him, given him enemas and listened to his jokes, a substitution is impossible no matter how much the ringer may look like him. Even an identical twin could not do it. There are all those little things a wife knows and the public never sees.'

I said, 'Marga, it's up to you.'

She answered, 'Jerry, my husband is saying that I must refute that—in part—myself. At that time I did not know Alec as well as a wife knows her husband. I was not his wife then; I was his lover—and I had been such only a few days.' She smiled. 'But you're right in essence; I recognized him.'

Farnsworth frowned. 'I'm getting mixed up again. We're talking about either one man or two. This Alexander Hergensheimer—Alec, tell me about him.'

'I'm a Protestant, preacher, Jerry, ordained in the Brothers of the Apocalypse Christian Church of the One Truth—the Apocalypse Brethren as you hear us referred to. I was born on my grandfather's farm outside Wichita on May twenty-second—'

'Hey, you've got, a birthday this week!' Jerry remarked. Marga looked alert.

'So I have. I've been too busy to think about it.—in nineteen-sixty. My parents and grandparents are dead; my oldest brother is still working the family farm—'

'That's why you're going to Kansas?-- To find your brother?'

'No. That farm is in another world, the one I grew up in.'

'Then why are you going to Kansas?'

I was slow in answering. 'I don't have a logical answer. Perhaps it's the homing instinct. Or it may be something like horses running back into a burning barn. I don't know, Jerry. But I have to go back and try to find my roots.'

'That's a reason I can understand. Go on.'

I told him about my schooling, not hiding the fact that I had failed to make it in engineering—my switch to the seminary and my ordination on graduation, then my association with C.U.D. I did not mention Abigail, I did not mention that I hadn't been too successful as a parson largely (in my private opinion) because Abigail did not like people and my parishioners did not like Abigail. Impossible to put all details into a short biography—but the fact is that I could not mention Abigail at all without throwing doubt on the legitimacy of Margrethe's status and this I could not do.

'That's about it. If we were in my native world, you could phone C.U.D. national headquarters in Kansas City, 'Kansas, and check on me. We had had a successful year and I was on vacation. I took a dirigible, the Count von Zeppelin of North American Airlines, from Kansas City airport to San Francisco, to Hilo, to Tahiti, and there I joined the Motor Vessel Konge Knut and that about brings us up to date, as I've told you the rest.'

'You sound kosher, you talk a good game—are you born again?'

'Certainly! I'm afraid I'm not in a state of grace now...but I'm working on it. We're in the Last Days, brother; it's urgent. Are you born again?'

"Discuss it later. What's the second law of thermodynamics?'

I made a wry face. 'Entropy always increases. That's the one that tripped me.'

'Now tell me about Alec Graham.'

'Not much I can tell. His passport showed that he was born in Texas, and he gave a law firm in Dallas as an address. For the rest you had better ask Margrethe; she knew him, I didn't.' (I did not mention an embarrassing million dollars. I could not explain it, so I left it out...and Marga had only my word for it; she had never seen it.)

'Margie? Can you fill us in on Alec Graham?'

She was slow in answering. 'I'm afraid I can't add anything to what my husband has told you.'

'Hey! You're letting me down. Your husband gave a detailed description of Dr Jekyll; can't you describe Mr Hyde? So far, he's a zero. A mail drop in Dallas, nothing more.

'Mr Farnsworth, I'm sure you've never been a shipboard stewardess—'

'Nope, I haven't. But I was room steward in a cargo liner—two trips when I was a kid.'

'Then you'll understand. A stewardess knows many things about her passengers. She knows how often they bathe. She knows, how often they change their clothes. She knows how they smell—and everyone does smell, some good, some bad. She knows what sort of books they read—or don't read. Most of all she knows whether or not they are truly gentlefolk, honest, generous, considerate, warmhearted. She knows everything one could need to know to judge a person. Yet she may not know a passenger's occupation, home town, schooling, or any of those details that a friend would know.

'Before the day of the fire walk I had been Alec Graham's stewardess for four weeks. For the last two of those weeks I was his mistress and was ecstatically in love with him. After the fire walk it was many days before his amnesia let us resume our happy relationship—and then it did, and I was happy again. And now I have been his wife for four months—months of some adversity but the happiest time of my whole life. And it still is and I think it always will be. And that is all I know about my husband Alec Graham.' She smiled at me and her eyes were brimming with tears, and I found that mine were, too.

Jerry sighed and shook his head. 'This calls for a Solomon. Which I am not. I believe both your stories—and one of them can't be correct. Never mind. My wife and I practice Muslim hospitality, something I learned in the late war. Will you accept our hospitality for a night or two? You had better say yes.'

Marga glanced at me; I said, 'Yes!'

'Good. Now to see if the boss is at home.' He swiveled around to face forward, touched something. A few moments later a light came on and something went beep! once. His face lighted up and he spoke: 'Duchess, this is your favorite husband.'

'Oh, Ronny, it's been so long.'

'No, no. Try again.'

'Albert? Tony? George, Andy, Jim—'

'Once more and get it right; I have company with me.'

'Yes, Jerry?'

'Company for dinner and overnight and possibly more.'

'Yes, my love. How many and what sexes and when will you be home?'

'Let me ask Hubert.' Again he touched something. 'Hubert says twenty-seven minutes. Two guests. The one seated by me is about twentythree, give or take a bit, blonde, long, wavy hair, dark blue eyes, height about five seven, mass about one twenty, other basics I have not checked but about those of our daughter. Female. I am certain she is female as she is not wearing so much as a Gstring.'

'Yes, dear. I'll scratch her eyes out. After I've fed her, of course.'

'Good. But she's no menace as her husband is with her and is watching her closely. Did I say that he is naked, too?'

You did not. Interesting.'

'Do you want his basic statistic? If so, do you want it relaxed or at attention?'

'My love, you are a dirty old man, I am happy to say. Quit trying to embarrass your guests.'

'There is madness in my method, Duchess. They are naked because they have no clothes at all. Yet I suspect that they do embarrass easily. So please meet us at the gate with clothing. You have her statistics, except—Margie, hand me a foot. 'Marga promptly put a foot up high, without comment. He felt it. 'A pair of your sandals will fit, I think. Zapatos for him. Of mine.'

'His other sizes? Never mind the jokes.'

'He's about my height and shoulders, but I am twenty pounds heavier, at least. So something from my skinny rack. If Sybil has a houseful of her junior barbarians, please use extreme prejudice to keep them away from the gate. These are gentle people; we'll introduce them after they have a chance to dress.'

'Roger Wilco, Sergeant Bilko. But it is time that you introduced them to me.

'Mea culpa. My love, this is Margrethe Graham, Mrs Alec Graham.'

'Hello,—Margrethe, welcome to our home.'

'Thank you, Mrs Farnsworth

'Katherine, dear. Or Kate.'

' "Katherine." I can5t tell you how much you are doing for us...when we were so miserable!' My darling started to cry.

She stopped it abruptly. 'And this is my husband, Alec Graham.'

'Howdy, Mrs Farnsworth. And thank you.'

'Alec, you bring that girl straight here. I want to welcome her. Both of you.'

Jerry cut in. 'Hubert says twentytwo minutes, Duchess.'

'Hasta la vista. Sign off and let me get busy.'

'End.' Jerry turned his seat around. 'Kate will find you a pretty to wear, Margie...although in your case there ought to be a law. Say, are you cold? I've been yacking so much I didn't think of it. I keep this buggy cool enough for me, in clothes. But Hubert can change it to suit.'

'I am a Viking, Jerry; I never get cold. Most rooms are too warm to suit me.'

'How about you, Alec?'

'I'm warm enough,' I answered, fibbing only a little.

'I believe—' Jerry started to say --

- as the heavens opened with the most brilliant light imaginable, outshining day, and I was gripped by sudden grief, knowing that I failed to lead my beloved back to grace.

Chapter 18

Then Satan answered the Lord, and said,
Doth Job fear God for nought?
Job 1:9

Canst thou by searching find out God? canst thou find out the Almighty unto perfection?
Job 11:7

I WAITED for the Shout.

My feelings were mixed. Did I want the Rapture? Was I ready to be snatched up into the loving arms of Jesus? Yes, dear Lord. Yes! Without Margrethe? No, no! Then you choose to be cast down into the Pit? Yes—no, but Make up your mind!

Mr Farnsworth looked up. 'See that baby go!'

I looked up through the roof of the car. There was a second sun directly overhead. It seemed to shrink and lose brilliance as I watched it.

Our host went on, 'Right on time! Yesterday we had a hold, missed the window, and had to reslot. When you're sitting on the pad, and singleH is boiling away, even a hold for one orbit can kill your profit margin. And yesterday wasn't even a glitch; it was a totally worthless recheck ordered by a Nasa fatbottom. Figures.'

He seemed to be talking English.

Margrethe said breathlessly, 'Mr Farnsworth—Jerry what was it?'

'Eh? Never seen a liftoff before?'

'I don't know what a liftoff is.'

'Mm...yes. Margie, the fact that you and Alec are from another world—or worlds—hasn't really soaked through My skull yet. Your world doesn't have space travel?'

'I'm not sure what you mean but I don't think we do.'

I was fairly sure what he meant so I interrupted. 'Jerry, you're talking about flying to the moon, aren't you? Like Jules Verne.'

'Yes. Close enough.'

'That was an ethership? Going to the moon? Golly Moses!' The profanity just slipped out.

'Slow down. That was not an ethership, it was an, unmanned freight rocket. It is not going to Luna; it is going only as far as Leo—low Earth orbit. Then it comes back, ditches off Galveston, is ferried back to North Texas Port, where it will lift again sometime next week. But some of its cargo will go on to Luna City or Tycho Under—and some may go as far as the Asteroids. Clear?'

'Uh...not quite.'

'Well, in Kennedy's second term—'

'Who?'

'John F. Kennedy. President. Sixty-one to sixty-nine.'

'I'm sorry. I'm going to have to relearn history again. Jerry, the most confusing thing about being bounced around among worlds is not new technology, such as television or jet planes—or even space-travel ships. It is different history.'

'Well—When we get home, I'll find you an American history, and a history of space travel. A lot of them around the house; I'm in space up to my armpits—started with. model rockets as a kid. Now, besides Diana Freight Lines, I've got a piece of Jacob's Ladder and the Beanstalk, both—just a tax loss at present but—'

I think he caught sight of my face. 'Sorry. You skim through the books I'll dig out for you, then we'll talk.'

Farnsworth looked back at his controls, punched something, blinked at it, punched again, and, said, 'Hubert says that we'll have the sound in three minutes twenty-one seconds.'

When the sound did arrive, I was disappointed. I had expected a thunderclap to match that incredible light. Instead it was a rumble that went on and on, then faded away without a distinct end.

A few minutes later the car left the highway, swung right in a large circle and went under the highway through a tunnel and came out on a smaller highway. We stayed on this highway (83, I noted) about five minutes, then there was a repeated beeping sound and a flash of lights. 'I hear you,' Mr Farnsworth said. 'Just hold your horses.' He swung his chair around and faced forward, grasped the two hand grips.

The next several minutes were interesting. I was reminded of something the Sage of Hannibal said: 'If it warn't for the honor, I'd druther uv walked.' Mr Farnsworth seemed to regard any collision avoided by a measurable distance as less than sporting. Again and again that 'soft mush' saved us from bruises if not broken bones. Once that signal from the machinery went Bee-bee-beebeep! at him; he growled in answer: 'Pipe down! You mind your business; I'll mind mine,' and subjected us to another near miss.

We turned off onto a narrow road, private I concluded, as there was an arch over the entrance reading FARNSWORTH'S FOLLY. We went up a grade. At the top, lost among trees, was a high gate that snapped out of the way as we approached it.

There we met Katie Farnsworth.

If you have read this far in this memoir, you know that I am in love with my wife. That is a basic, like the speed of light, like the love of God the Father. Know ye now that I learned that I could love another person, a woman, without detracting from my love for Margrethe, without wishing to take her from her lawful mate, without lusting to possess her. Or at least not much.

In meeting her I learned that five feet two inches is the perfect height for a woman, that forty is the perfect age, and that a hundred and ten pounds is the correct weight, just as for a woman's voice contralto is the right register. That my own beloved darling is none of these is irrelevant; Katie Farnsworth makes them perfect for her by being herself content with what she is.

But she startled me first by the most graceful gesture of warm hospitality I have ever encountered.

She knew from her husband that we were utterly without clothes; she knew also from him that he felt that we were embarrassed by our state. So she had fetched clothing for each of us.

And she herself was naked.

No, that's not right; I was naked, she was unclothed. That's not quite right, either. Nude? Bare? Stripped? Undressed? No, she was dressed in her own beauty, like Mother Eve before the Fall. She made it seem so utterly appropriate that I wonder how I had ever acquired the delusion that freedom from clothing equals obscenity.

Those clamshell doors lifted; I got out and handed Margrethe out. Mrs Farnsworth dropped what she was carrying, put her arms around Margrethe and kissed her. 'Margrethe! Welcome, dear.'

My darling hugged her back and sniffled again.

Then she offered me her hand. 'Welcome to you, too, Mr Graham. Alec.' I took her hand, did not shake it. Instead I handled it like rare china and bowed over it. I felt that I should kiss it but I had never learned how.

For Margrethe she had a summer dress the shade of Marga's eyes. Its styling suggested the Arcadia of myth; one could imagine a wood nymph wearing it. It hung on the left shoulder, was open all the way down on the right but wrapped around with generous overlap. Both sides of this simple garment ended in a long sash ribbon; the end that went under passed through a slot, which permitted both ends to go all the way around Marga's waist, then to tie at her right side.

It occurred to me that this was a fit-anyone dress. It would be tight or loose on any figure depending on how it was tied.

Katie had sandals for Marga in blue to match her dress.

For me she had Mexican sandals, zapatos, of lhe cutleather openwork sort that are almost as fit-anyone as that dress, simply by how they are tied. She offered me trousers and shirt that were superficially equivalent to those I had bought in Winslow at the SECOND WIND—but these were tailormade of summerweight wool rather than mass-produced from cheap cotton. She also had for me socks that fitted themselves to my feet and knit shorts that seemed to be my size.

When she had dressed us, there was still clothing on the grass—hers. I then realized that she had walked to the gate dressed, stripped down there, and waited for us 'dressed' as we were.

That's politeness.

Dressed, we all got into the car. Mr Farnsworth waited a moment before starting up his driveway. 'Katie, our guests are Christians.'

Mrs Farnsworth seemed delighted. 'Oh, how very interesting!'

'So I thought. Alec? Verb. sap. Not many Christians in these parts. Feel free to speak your mind in front of Katie and me...but when anyone else is around, you may be more comfortable not discussing your beliefs. Understand me?'

'Uh...I'm afraid I don't.' My head was in a whirl and I felt a ringing in my ears.

'Well...being a Christian isn't against the law here; Texas has freedom of religion. Nevertheless Christians aren't at all popular and Christian worship is mostly underground. Uh, if you want to get in touch with your own people, I suppose we could manage to locate a catacomb. Kate?'

'Oh, I'm sure we could find someone who knows. I can put out some feelers.'

'If Alec says to, dear. Alec, you're in no danger of being stoned; this country isn't some ignorant redneck backwoods. Or not much danger. But I don't want you to be discriminated against or insulted.'

Katie Farnsworth said, 'Sybil.'

'Oh, oh! Yes. Alec our daughter is a good girl and as civilized as one can expect in a teenager. But she is an apprentice witch, a recent convert to the Old Religion and, being, both a convert and a teenager, dead serious about it. Sybil would not be rude to a guest—Katie brought her up properly. Besides, she knows I would skin her alive. But it would be a favor to me if you will avoid placing too much strain on her. As I'm sure you know, every teenager is a time bomb waiting to go off.'

Margrethe answered for me: 'We will be most careful. This "Old Religion"—is this the worship of Odin?'

I felt a chill...when I was already discombobulated beyond my capacity. But our host answered, 'No. Or at least I don't think so. You could ask Sybil. If you are willing to risk having your ear talked off; she'll try to convert you. Very intense.'

Katie Farnsworth added, 'I have never heard Sybil mention Odin. Mostly she speaks just of "the Goddess". Don't Druids worship Odin? Truly I don't know. I'm afraid Sybil considers us so hopelessly old-fashioned that she doesn't bother to discuss theology with us.'

'And let's not discuss it now,' Jerry added, and started us up the drive.

The Farnsworth mansion was long, low, and rambling, with a flavor of lazy opulence. Jerry swung us under a porte-cochère; we all got out. He slapped the top of his car as one might slap the neck of a horse. It moved away and turned the corner of the house as we went inside.

I'm not going to say much about their house as, while it was beautiful and Texas lavish, it would not necessarily appear any one way long enough to justify describing it; most of what we saw Jerry called 'hollow grams'. How can I describe them? Frozen dreams? Three-dimensional, pictures? Let me put it this way: Chairs were solid. So were table tops. Anything else in that house, better touch it cautiously and find out, as it might be as beautifully there as a rainbow...and just as insubstantial.

I don't know how these ghosts were produced. I think it is possible that the laws of physics in that world were somewhat different from those of the Kansas of my youth.

Katie led us into what Jerry called their 'family room' and Jerry stopped abruptly. 'Bloody Hindu whorehouse!'

It was a very large room with ceilings that seemed impossibly high for a one-storey ranch house. Every wall, arch, alcove, soffit, and beam was covered with sculptured figures. But such figures! I found myself blushing. These figures had apparently been copied from that notorious temple cavern in southern India, the one that depicts every possible vice of venery in obscene and blatant detail.

Katie said, 'Sorry, dear! The youngsters were dancing in here.' She hurried to the left, melted into one sculpture group and disappeared. 'What will you have, Gerald?'

'Uh, Remington number two.'

'Right away.'

Suddenly the obscene figures disappeared, the ceiling lowered abruptly and changed to a beam-and-plaster construction, one wall became a picture window looking out at mountains that belonged in Utah (not Texas), the wall opposite it now carried a massive stone fireplace with a goodly fire crackling in it, the furniture changed to the style sometimes called 'mission' and the floor changed to flagstones covered with Amerindian rugs.

'That's better. Thank you, Katherine. Sit down, friends—pick a spot and squat.'

I sat down, avoiding what was obviously the 'papa' chair—massive and leather upholstered. Katie and Marga took a couch together. Jerry satin that papa chair. 'My love, what will you drink?'

'Campari and soda, please.'

'Sissy. And you, Margie?'

'Campari and soda would suit me, too.'

'Two sissies. Alec?'

'I'll go along with the ladies.'

'Son, I'll tolerate that in the weaker sex. But not from a grown man. Try again.'

'Uh, Scotch and soda.'

'I'd horsewhip you, if I had a horse. Podnuh, you have just one more chance.'

'Uh...bourbon and branch?'

'Saved yourself. Jack Daniel's with water on the side. Other day, man in Dallas tried to order Irish whisky. Rode him out o'town on a rail. Then they apologized to him. Turned out he was a Yankee and didn't know any better.' All this time our host was drumming with his fingertips on a small table at his elbow. He stopped this fretful drumming and, suddenly, at the table by my chair appeared a Texas jigger of brown liquid and a tumbler of water. I found that the others had been served, too. Jerry raised his glass. 'Save your Confederate money! Salud!'

We drank and he went on, 'Katherine, do you know where our rapscallion is hiding?'

'I think they are all in the pool, dear.'

'So.' Jerry resumed that nervous drumming. Suddenly there appeared in the air in front of our host, seated on a diving board that jutted out of nowhere, a young female. She was in bright sunlight although the room we were in was in cool shadow. Drops of water sprinkled on her. She faced Jerry, which placed her back toward me. 'Hi, Pipsqueak.'

'Hi, Daddy. Kiss kiss.'

'In a pig's eye. When was the last time I spanked you?'

'My ninth birthday. When I set fire to Aunt Minnie. What did I do now?'

'By the great golden gawdy greasy gonads of God, what do you mean by leaving that vulgar, bawdy, pornic program running in the family room?'

'Don't give me that static, Daddy doll; I've seen your books.'

'Never mind what I have in my private library; answer my question.'

'I forgot to turn it off, Daddy. I'm sorry.'

'That's what the cow said to Mrs Murphy. But the fire burned on. Look, my dear, you know you are free to use the controls to suit yourself. But when you are through, you must put the display back the way you found it. Or, if you don't know how. you must put it back to zero for the default display.'

'Yes, Daddy. I just forgot.'

'Don't go squirming around like that; I'm not through chewing you out. By the big brass balls of Koshchei, where did you get that program?'

'At campus. It was an instruction tape in my tantric yoga class.'

'"Tantric yoga"? Swivel hips, you don't need such a course. Does your mother know about this?'

Katherine moved in smoothly: 'I urged her to take it, dear one. Sybil is talented, as we know. But raw talent is not I enough; she needed tutoring.'

'So? I'll never argue with your mother on this subject, so I withdraw to a previously prepared position. That tape. How did you come by it? You are familiar with the applicable laws concerning copyrighted material; we both remember the hooraw over that Jefferson Starship tape—'

'Daddy, you're worse than an elephant! Don't you ever forget anything?'

'Never, and much worse. You are warned that anything you say may be taken down in writing and held against you at another time and place. How say you?'

'I demand to see an attorney!'

'Oh, so you did pirate it!'

'Don't you wish I had! So you could gloat. I'm sorry, Daddy, but I paid the catalog fee, in full, in cash, and the campus library service copied it for' me. So there. Smarty.'

'Smarty yourself. You wasted your money.'

'I don't think so. I like it.'

'So do I. But you wasted your money. You should have asked me for it.'

'Huh!'

'Gotcha! I thought at first you had been picking locks in my study or working a spell on 'em. Pleased to hear that you were merely extravagant. How much?'

'Uh...forty-nine fifty. That's at student's discount.'

'Sounds fair; I paid sixtyfive. All right. But if it shows up on your semester billing, I'll deduct it from your allowance.

Just one thing, sugar plum—I brought two nice people home, a lady and a gentleman. We walk into the parlor. What had been the parlor. And these two gentlefolk are faced with the entire Kama Sutra, in panting, quivering color. What do you think of that?'

'I didn't mean to.'

'So we'll forget it. But it is never polite to shock people, especially guests, so let's be more careful next time. Will you be at dinner?'

'Yes. If I can be excused early and run, run, run. Date, Daddy.'

'What time will you be home?'

'Won't. All-night gathering. Rehearsal for Midsummer Night. Thirteen covens.'

He sighed. 'I suppose that I should thank the Three Crones that you are on the pill.'

'Pill shmill. Don't be a cube, Daddy; nobody ever gets pregnant at a Sabbat; everybody knows that.'

'Everybody but me. Well, let us offer thanks that you are willing to have dinner with us.' Suddenly she shrieked as she fell forward off the board. The picture followed her down.

She splashed, then came up spouting water. 'Daddy! You pushed me!'

'How could you say such a thing?' he answered in self-righteous tones. The living picture suddenly vanished.

Katie Farnsworth said conversationally, 'Gerald keeps trying to dominate his daughter. Hopelessly, of course. He should take her to bed and discharge his incestuous yearnings. But they are both too prissy for that.'

'Woman, remind me to beat you.'

'Yes, dearest. You wouldn't have to force her. Make your intentions plain and she will burst into tears and surrender. Then both of you will have the best time of your lives. Wouldn't you say so, Margrethe?'

'I would say so. '

By then I was too numb to be shocked by Margrethe's words.

'Dinner was a gourmet's delight and a social confusion. It was served in the formal dining hall, i.e., that same family room with a different program controlling the hollow grams. The ceiling was higher, the windows were tall, evenly spaced, framed by floorlength drapes, 'and they looked out on formal gardens.

One piece of furniture wheeled itself in, and was not a hollow gram—or not much so. It was a banquet table that (so far as I know) was—in itself, pantry, stove, icebox—all of a well-equipped kitchen. That's a conclusion, subject to refutation. All I can say is that I never saw a servant and never saw our hostess do any work. Nevertheless her husband congratulated her on her cooking—as well he might, and so did we.

Jerry did a little work; he carved a roast (prime rib, enough for a troop of hungry Boy Scouts) and he served the plates, serving them at his place. Once a plate was loaded, it went smoothly around to the person for whom it was intended, like a toy train on a track—but there was no train and no track. Machinery concealed by hollow grams? I suppose so. But that simply covers one mystery with another.

(I learned later that a swank Texas household in that world would have had human servants conspicuously in sight. But Jerry and Katie had simple tastes.)

There were six of us at the table, Jerry at one end, Katie at the other; Margrethe sat on Jerry's right, his daughter Sybil on his left; I was at the right of my hostess, and at her left was Sybil's young man, her date. This put him opposite me, and I had Sybil on my right.

The young man's name was Roderick Lyman Culverson III; he did not manage to catch my name. I have long suspected that the male of our species, in most cases, should be raised in a barrel and fed through the bunghole. Then, at age eighteen, a solemn decision can be made: whether to take him out of the barrel, or to drive in the bung.

Young Culverson gave me no reason to change my opinion—and I would have voted to drive in the bung.

Early on, Sybil made clear that they were at the same campus. But he seemed to be as much a stranger to the Farnsworths as he was to us. Katie asked, 'Roderick, are you an apprentice witch, too?'

He looked as if he had sniffed something nasty, but Sybil saved him from having to answer such a crude question. 'Mothuh! Rod received his athame ages ago.'

'Sorry I goofed,' Katie said tranquilly. 'Is that a diploma you get when you finish your apprenticeship?'

'It's a sacred knife, Mama, used in ritual. It can be used to—'

'Sybil! There are gentiles present.' Culverson frowned at Sybil, then glared at me. I thought how well he would look with a black eye but I endeavored to keep my thoughts out of my face.

Jerry said, 'Then you're a graduate warlock, Rod?'

Sybil broke in again. 'Daddy! The correct word is—'

'Pipe down, sugar plum! Let him answer for himself. Rod?'

'That word is used only by the ignorant—'

'Hold it! I am uninformed on some subjects, and then I seek information, as I am now doing. But you don't sit at my table and call me ignorant. Now can you answer me without casting asparagus?'

Culverson's nostrils spread but he took a grip on himself. '"Witch" is the usual term for both male and female adepts in the Craft. "Wizard" is an acceptable term but is not technically exact; it means "sorcerer" or "magician"...but not all magicians are witches and not all witches practice magic. But "warlock" is considered to be offensive as well as incorrect because it is associated with Devil worship—and the Craft is not Devil worship—and the word itself by its derivation means "oath breaker"—and witches do not break oaths. Correction: The Craft forbids the breaking of oaths. A witch who breaks an oath, even to a gentile, is subject to discipline, even expulsion if the oath is that major. So I am not a "graduate warlock". The correct designation for my present status is "Accepted Craftsman", that is to say: "witch".'

'Well stated! Thank you. I ask forgiveness for using the term "warloc" to you and about you—' Jerry waited.

A long moment later Culverson said hastily, 'Oh, certainly! No offense meant and none taken.'

'Thank you. To add to your comments about derivations, "witch" drives from "wicca" meaning "wise", and from "wicce" meaning "woman"...which may account for most witches being female and suggests that our ancestors may have known something that we don't. In any case "the Craft" is the short way of saying "the Craft of Wisdom". Correct?'

'Eh Oh, certainly! Wisdom. That's what the Old Religion is all about.'

'Good. Son, listen to me carefully. Wisdom includes not getting angry unnecessarily. The Law ignores trifles and the wise man does, too. Such trifles as a young girl defining an athame among gentiles—knowledge that isn't all that esoteric anyhow—and an old fool using a word inappropriately. Understand me?'

Again Jerry waited. Then he said very softly, 'I said, "Do you understand me?" '

I Culverson took a deep breath. 'I understood you. A wise I man ignores trifles.'

'Good. May I offer you another slice of the roast?'

Culverson kept quiet for some time then. As did I. As did Sybil. Katie and Jerry and Margrethe kept up a flow of' polite chitchat that ignored the fact that a guest had just been thoroughly and publicly spanked. Presently Sybil said, 'Daddy, are you and Mama expecting me to attend fire worship Friday?'

'"Expect" is hardly the word,' Jerry answered, 'when you have picked another church of your own. "Hope" would be closer.'

Katie added, 'Sybil, tonight you feel that your coven is all the church you will ever need. But that could change...and I understand that the Old Religion does not forbid its members to attend other religious services.'

Culverson put In, "That reflects centuries, millennia, of persecution, Mrs Farnsworth. It is still in our laws that each member of a coven must also belong publicly to some socially approved church. But we no longer try too hard to enforce it.'

'I see,' agreed Katie. 'Thank you, Roderick. Sybil, since your new church encourages membership in another church, it might be prudent to attend fairly regularly just to protect your Brownie points. You may need them.'

'Exactly,' agreed her father. ' "Brownie points." Ever occur to you, hon, that your pop being a stalwart pillar of the congregation, with a fast checkbook, might have something to do with the fact that he also sells more Cadillacs than any other dealer in Texas?'

'Daddy, that sounds utterly shameless.'

'It sure is. It also sells Cadillacs. And don't call it fire worship; you know it is not. It is not the flame we worship, but what it stands for.'

Sybil twisted her serviette and, for the moment, looked a troubled thirteen instead of the mature woman her body showed her to be. 'Papa, that's just it. All my life that flame has meant to me healing, cleansing, life everlasting until I studied the Craft. Its history. Daddy, to a witch...fire means the way they kill us!'

I was shocked almost out of breathing. I think it had not really sunk into me emotionally that these two, obnoxious but commonplace young punk, and pretty and quite delightful young girl...daughter of Katie, daughter of Jerry, our two Good Samaritans without equal—that these two were witches.

Yes, yes, I know: Exodus twentytwo verse eighteen, 'Thou shalt not suffer a witch to live.' As solemn an injunction as the Ten Commandments, given to Moses directly by God, in the presence of all the children of Israel

What was I doing breaking bread with witches?

Mark me for a coward. I did not stand up and denounce them. I sat tight.

Katie said, 'Darling, darling! That was clear back in the middle ages! Not today, not now, not here.'

Culverson said, 'Mrs Farnsworth, every witch knows that the terror can start up again any time. Even a season of bad crops could touch it off. And Salem wasn't very long ago. Nor very far away.' He added, 'There are still Christians around. They would set the fires if they could. Just like Salem.'

This was a great chance to keep my mouth shut. I blurted out, 'No witch was burned at Salem.'

He looked at me. 'What do you know about it?'

'The burnings were in Europe, not here. In Salem witches were hanged, except one who was pressed to death.' (Fire should never have been used. The Lord God ordered us not to suffer them to live; He did not tell us to put them to death by torture.)

He eyed me again. 'So? You seem to approve of the hangings.'

'I never said anything of the sort!' (Dear God, forgive me!)

Jerry cut in. 'I rule this subject out of order! There will be no further discussion of it at the table. Sybil, we don't want you to attend if it upsets you or reminds you of tragic occasions. Speaking of hanging, what shall we do about the backfield of the Dallas Cowboys?'

Two hours later Jerry Farnsworth and I were again seated in that room, this time it being Remington number three: a snow storm against the windows, an occasional cold draft across the floor, and once the howl of a wolf—a roaring fire felt good. He poured coffee for us, and brandy in huge snifters, big enough for goldfish. 'You hear of noble brandy,' he said. 'Napoleon, or Carlos Primero. But this is royal brandy—so royal it has hemophilia.'

I gulped; I did not like the joke. I was still queasy from thinking about witches, dying witches. With a jerk of the heels, or dancing on flames. And all of them with Sybil's sweet face.

Does the Bible define 'witch' somewhere? Could it be that these modern members of the Craft were not at all what Jehovah meant by 'witch'?

Quit dodging, Alex! Assume that 'witch' in Exodus means exactly what 'witch' means here in Texas t day. You're the judge and she has confessed. Can you sentence Katie's teenager to hang? Will you spring the trap? Don't dodge it, boy; 'You've been dodging all your life.

Pontius Pilate washed his hands.

I will not sentence a witch to die! So help me, Lord, I can do no other.

Jerry said, 'Here's to the success of your venture, yours and Margie's. Sip it slowly and it will not intoxicate; it will simply quiet your nerves while it sharpens your wits. Alec, tell me now why you expect the end of the world.'

For the next hour I went over the evidence, pointing out that it was not just one prophecy that agreed on the signs, but many: Revelations, Daniel, Ezekiel, Isaiah, Paul in writing to the Thessalonians, and again to the Corinthians, Jesus himself in all four of the Gospels, again and again in each.

To my surprise Jerry had a copy of the Book. I picked out passages easy for laymen to understand, wrote down chapter and verse so that he could study them later. One Thessalonians 4:15-17 of course, and the 24th chapter of the Gospel according to Saint Matthew, all fifty-one verses of it, and the same prophecies in Saint Luke, chapter twenty-one—and Luke 21:32 with its clue to the confusion many as to 'this generation'. What Christ actually said was that the generation which sees these signs and portents will live to see His return, hear the Shout, experience Judgment Day. The message is plain if you read all of it; the errors have arisen from picking out bits and pieces and ignoring the rest. The parable of the fig tree explains this.

I also picked out for him, in Isaiah and Daniel and elsewhere, the Old Testament prophecies that parallel the New Testament prophecies.

I handed him this list of prophecies and urged him to study them carefully, and, if he encountered difficulties, simply read more widely. And take it to God. '"Ask, and it shall be given you; seek, and ye shall find."'

He said, 'Alec, I can agree with one thing. The news for the past several months has looked to me like. Armageddon. Say tomorrow afternoon. Might as well be the end of the world and Judgment Day, as there won't be enough left to salvage after this one.' He looked sad. 'I used to worry about what kind of a world Sybil would grow up in. Now I wonder if she'll grow up.'

'Jerry. Work on it. Find your way to grace. Then lead your wife and daughter. You don't need me, you don't need anyone but Jesus. He said, "Behold, I stand at the door and knock; if anyone hears My voice, I will come in to him." Revelations three, twenty.'

'You believe.'

'I do.'

'Alec, I wish I could go along with you. It would be comforting, the world being what it is today. But I can't see proof in the dreams of long-dead prophets; you can read anything into them. Theology is never any help; it is searching in a dark cellar at midnight for a black cat that isn't there. Theologians can persuade themselves of anything. Oh, my church, too—but at least mine is honestly pantheistic. Anyone who can worship a trinity and insist that his religion is a monotheism can believe anything just give him time to rationalize it. Forgive me for being blunt.'

'Jerry, in religion bluntness is necessary. "I know that my Redeemer liveth, and that He shall stand at the latter day upon the earth." That's Job again, chapter nineteen. He's your Redeemer, too, Jerry—I pray that you find' Him.'

'Not much chance, I'm afraid.' Jerry stood up.

'You haven't found Him yet. Don't quit. I'll pray for you.'

'Thank you, and thanks for trying. How do the shoes feel?'

'Comfortable, quite.'

'If you insist on hitting the road tomorrow, you must have shoes that won't give you bunions between here and Kansas. You're sure?'

'I'm sure. And sure that we must leave. If we stayed another day, you'd have us so spoiled we would never hit the road again.' (The truth that I could not tell him was that I was so upset by witchcraft and fire worship that I had to leave. But I could not load my weakness onto him.)

'Let me show you to your bedroom. Quietly, as Margie may be asleep. Unless our ladies have stayed up even later than we have.'

At the bedroom door he put out his hand. 'If you're right and I'm wrong, you tell me that it's possible that even you can slip.'

'True. I'm not in a state of grace, not now. I've got to work on it.'

'Well, good luck. But if you do slip, look me up in Hell, will you?'

So far as I could tell, Jerry was utterly serious. 'I don't know that it is permitted.'

'Work on it. And so will I. I promise you'—he grinned—'some hellacious hospitality. Really warm!'.

I grinned back. 'It's a date.'

Again my darling had fallen asleep without undressing. I smiled at her without making a sound, then got beside her and pillowed her head on my shoulder. I would let her wake up slowly, then undress the poor baby and put her to bed. Meanwhile I had a thousand—well, dozens—of thoughts to get untangled.

Presently I noticed that it was getting light. Then I noticed how scratchy and lumpy the bed was. The light increased and I saw that we were sprawled over bales of hay, in a barn.

Chapter 19

And Ahab said to Elijah, Hast thou found me, O mine enemy? And he answered, I have found thee: because thou has sold thyself to work evil in the sight of the Lord.

Kings 21:20

WE DID the last ninety miles down 66 from Clinton to Oklahoma City pushing hard, ignoring the fact that we were flat broke again, nothing to eat, nowhere to sleep.

We had seen a dirigible.

Of course this changed, everything. For months I had been nobody from nowhere, penniless, dishwashing my only trade, and a tramp in fact. But back in my own world—A well-paying job, a respected position in the community, a fat bank account. And an end to this truly infernal bouncing around between worlds.

We were riding into Clinton middle of the morning, guests of a farmer taking a load of produce into town. I heard Margrethe gasp. I looked where she was staring I and there she was!—silvery and sleek and beautiful. I could not make out her name, but her logo told me that she was Eastern Airlines.

'Dallas-Denver Express,' our host remarked, and hauled a watch out of his overalls. 'Six minutes late. Unusual.'

I tried to cover my excitement. 'Does Clinton have an airport?'

'Oh, no. Oklahoma City, nearest. Goin' to give up hitchhiking and take to the air?'

'Would be nice.'

'Wouldn't it, though. Beats farmin'.'

I kept the conversation on inanities until he dropped us outside the city market a few minutes later. But, once Margrethe and I were alone, I could hardly contain myself. I started to kiss her, then suddenly stopped myself. Oklahoma is every bit as moral as Kansas; most communities have stiff laws about public Iallygagging.

I wondered how, hard I was going to find it to readjust, after many weeks in many worlds not one of which had the high moral standards of my home world. It could be difficult to stay out of trouble when (admit it!) I had grown used to kissing my wife in public and to other displays, innocent in themselves, but never seen in public in moral communities. Worse, could I keep my darling out of trouble? I had been born here and could slip back into its ways...but Marga was as affectionate as a collie pup and had no sense of shame whatever about showing it.

I said, 'Sorry, dear, I was about to kiss you. But I must not.'

'Why not?'

'Uh, I can't kiss you in public. Not here. Only in private. It's—It's a case of "When in Rome, one must do as the Romans do." But never mind that now. Darling, we're home! My home, and now it's-your home. You saw the dirigible.'

'That was an airship truly?'

'Really and truly...and the happiest sight I've seen in months. Except—Don't get your hopes up too high, too fast. We know how some of these shifting worlds strongly resemble each other in many ways. I suppose there is an outside possibility that this is a world with dirigibles...but not my world. Oh, I don't believe that but let's not get too excited.'

(I did not notice that Margrethe was not at all excited.)

'How will you tell that this is your world?'

'We could check just as we have before, at public libraries. But in this case there is something faster and better. I want to find the Bell Telephone office—I'll ask at that grocery store.'

I wanted the telephone office rather than a public telephone because I wanted to consult telephone books' before making telephone calls—was it my world?

Yes, it was! The office had telephone books for all of Oklahoma and also books from major cities in, other states—including a most familiar telephone book for Kansas City, Kansas. 'See, Margrethe?' I pointed to the listing for Churches United for Decency, National Office.

'I see.'

'Isn't it exciting? Doesn't it make you want to dance and sing?'

(She made it sound like: 'Doesn't he look natural? And so many, lovely flowers.')

We had the alcove where the telephone books were to ourselves. So I whispered urgently, 'What's the trouble, dear? This is a happy occasion. Don't you understand? Once I get on that phone we'll have money. No more menial jobs, no more wondering how we will eat or where we will sleep. We'll go straight home by Pullman—no, by dirigible! You'll like that, I know you will! The ultimate in luxury. Our honeymoon, darling—the honeymoon we could never afford.'

:You will not take me to Kansas City.'

What do you mean?'

'Alec...your wife is there.'

Believe me when I say that I had not thought once about Abigail in many, many weeks. I had become convinced that I would never see her again (regaining my home world was totally unexpected) and I now had a wife, all the wife any man could ever want: Margrethe.

I wonder if that-first shovelful of dirt hits a corpse with the same shock.

I pulled out of it. Some. 'Marga, here's what we'll do. Yes, I have a problem, but we can solve it. Of course you go to Kansas City with me! You must. But there, because of Abigail, I must find a quiet place for you to stay while I get things straightened out.' (Straightened out? Abigail was going to scream bloody murder.) 'First I must get at my money. Then I must see a lawyer.' (Divorce? In a state where there was only one legal ground and 'that one granted divorce only to the injured party? Margrethe the other woman? Impossible. Let Margrethe be exposed in stocks? Be ridden out of town on a rail if Abigail demanded it? Never mind what would be done to me, never mind that Abigail would strip me of every cent—Margrethe must not be subjected to the Scarlet Letter laws of my home world. No!)

'Then we will go to Denmark.' (No, it can't be divorce.)

'We will?'

'We will. Darling, you are my wife, now and forever. I can't leave you here while I get things worked out in Kay See; the world might shift and I would lose you. But we can't go to Denmark until I lay hands on my money. All clear?' (What if Abigail has cleaned out my bank account?)

'Yes, Alec. We will go to Kansas City.'

(That settled part of it. But it did not settle Abigail. Never mind, I would burn that bridge when I came to it.)

Thirty seconds later I had more problems. Certainly the girl in charge would place a call for me long distance collect. Kansas City? For Kansas City, either Kansas or Missouri, the fee to open the trunk line for query was twenty-five cents. Deposit it in the coin box, please, when I tell you. Booth two.

I went to the booth and dug into my pocket for coins, laid them out:

A twenty-cent piece;

Two threepenny coppers;

A Canadian quarter, with the face of the Queen (queen?);

A half dollar;

Three five-cent pieces that were not nickels, but smaller.

And not one of these coins carried the familiar 'God Is Our Fortress' motto of the North American Union.

I stared at that ragbag collection and tried to figure out when this last change had taken place. Since I last was paid evidently, which placed it later than yesterday afternoon but earlier than the hitch we had gotten just after breakfast. While we slept last night? But we had not lost our clothes, had not lost our money. I even had my razor, a lump in my breast pocket.

Never mind—any attempt to understand all the details of these changes led only to madness. The shift had indeed taken place; I was here in my native world...and it had left me with no money. With no legal money.

By Hobson's choice, that Canadian quarter looked awfully good. I did not try to tell myself that the Eighth Commandment did not apply to big corporations. Instead I did promise myself that I would pay it back. I picked it up and took the receiver off the hook.

'Number, please.'

'Please place a collect call to Churches United for Decency in Kansas City, Kansas. The number is State Line I224J. I'll speak to anyone who answers.'

'Deposit twenty-five cents, please.' I deposited that Canadian quarter and held my breath—heard it go tingthunk-thunk. Then Central said, 'Thank you. Do not hang up. Please wait.'

I waited. And waited. And waited.

'On your call to Kansas City—Churches United for Decency reports that they do not accept collect calls.'

'Hold it! Please tell them that the Reverend Alexander Hergensheimer is calling.'

'Thank you. Please deposit twenty-five cents.'

'Hey! I didn't get any use out of that first quarter. You hung up too soon.'

'We did not disconnect; the party in Kansas City hungup.'

'Well, call them back, please, and this time tell them not to hang up.'

'Yes, sir. Please deposit twenty-five cents.'

'Central, would I be calling collect if I had plenty of change on me? Get them on the line and tell them who I am. Reverend Alexander Hergensheimer, Deputy Executive Director.'

'Please wait on the line.'

So I waited again. And waited.

'Reverend? The party in Kansas City says to tell you that they do not accept—,collect calls from—I am quoting exactly—Jesus: Christ Himself.'

'That's no way to talk on the telephone. Or anywhere.'

'I quite agree. There was more. This person said to tell you that he had never heard of you.'

'Why, that—'I shut up, as I had no way to express myself within the dignity of the cloth.

'Yes, indeed. I tried to get his name. He hung up on me.'

'Young man? Old man? Bass, tenor, baritone?'

'Boy soprano. I gathered an impression that it was the office boy, answering the phone during the lunch hour.'

'I see. Well, thank you for your efforts. Above and beyond the call of duty, in my opinion.'

'A pleasure, Reverend.'

I left there, kicking myself. I did not explain to Margrethe until we were clear of the building. 'Hoist by my own petard, dear one. I wrote that "No Collect Calls" order myself. An analysis of the telephone log proved to me beyond any possible doubt that collect calls to our office were never for the benefit of the association. Nine out of ten are begging calls...and Churches United for Decency is not a charity. It collects money; it does not give it away. The tenth call is either from a troublemaker or a crank. So I set this firm rule and enforced it...and it paid off at once. Saved hundreds of dollars a year just in telephone tolls.' I managed to smile. 'Never dreamed that I would be caught in my own net.'

'What are your plans now, Alec?'

'Now? Get out on Highway Sixty-Six and start waving my thumb. I want us to reach Oklahoma City before five o'clock. It should be easy; it's not very far.'

'Yes, sir. Why five o'clock, may I ask?'

'You can always ask anything and you know it. Knock off the Patient Griselda act, sweetheart; you've been moping ever since we saw that dirigible. Because there is a district office of C.U.D. in Oklahoma City and I want to be there before they close. Wait'll you see them roll out the red carpet, hon! Get to Oke City and'our troubles are over.'

That afternoon reminded me of wading through sorghum. January sorghum. We had no trouble getting rides—but the rides were mostly short distances. We averaged about twenty miles an hour on a highway that permitted sixty miles per hour. We lost fifty-five minutes for a good reason: a free meal. For the umpteenth time a trucker bought us something to eat when he ate...for the reason that there is almost no man alive who can stop to eat, and fail to invite Margrethe to eat if she is there. (Then I get fed, too, simply because I'm her property. I'm not complaining.)

We ate in twenty minutes, then he spent thirty minutes and endless quarters playing pinball machines...and I stood there and seethed and Margrethe stood beside him and clapped her hands and squealed when he made, a good score. But her social instincts are sound; he then drove us all the rest—of the way to Oklahoma City. There he went through town when he could have taken a bypass, and at four-twenty he dropped us at 36th and Lincoln, only two blocks from the C.U.D. district office.

I walked that two blocks whistling. Once I said, 'Smile, hon! A month from now—or sooner—we'll eat in the Tivoli.'

'Truly?'

'Truly. You've told me so much about it that I can't wait. There's the building!'

Our suite is on the second, floor. It warmed the cockles to see the door with lettering on the glass: CHURCHES UNITED FOR DECENCY—Enter.

'After you, my love!' I grabbed the knob, to open for her.

The door was locked.

I banged on it, then spotted a doorbell and rang it. Then I alternated knocking and ringing. And again.

A blackamoor carrying a mop and pail came down the corridor, started to pass us. I called, 'Hey, Uncle! DO you have a key to this suite?'

'Sure don't, Captain. Ain't nobody in there now. They most generally locked up and gone by four o'clock.'

'I see. Thanks.'

'A pleasure, Captain.'

Out on the street again, I grinned sheepishly at Margrethe. 'Red carpet treatment. Closing at four. When the cat is away, the mice will play. Some heads will roll, I promise you. I can't think of another cliché to fit the situation. Oh, yes, I can. Beggars can't be choosers. Madam, would you like to sleep in the park tonight? Warm night, no rain expected. Chiggers and mosquitoes, no extra charge.'

We slept in Lincoln Park, on the golf course, on a green that was living velvet—alive with chiggers.

It was a good night's sleep despite chiggers. We got up when the first early golfers showed up, and we got off the golf course with nothing worse than dirty looks. We made use of public washrooms in the park, and rejoined much neater, feeling fresher, me with a fresh shave, and both of us filled with free water for breakfast. On the whole I felt cheerful. It was too early to expect those self-appointed playboys at C. U. D. to show up, so, when we ran across a, policeman, I asked the location of the public library, then I added, 'By the way, where is the airport?'

'The what?'

'The dirigible flying field.'

The cop turned to Margrethe. 'Lady, is he sick?'

I did feel sick a half hour later when I checked the directory in the building we had visited the afternoon before...I felt sick but unsurprised to find no Churches United for Decency among its tenants. But to make certain I walked up to the second floor. That suite was now occupied by an insurance firm.

'Well, dear, let's go to the public library. Find out what kind of world we are in.'

'Yes, Alec.' She was looking cheerful. 'Dearest, I'm sorry you are disappointed...but I am so relieved. I—I as frightened out of my wits at the thought of meeting your wife.'

'You won't. Not ever. Promise. Uh, I'm sort of relieved, too. And hungry.'

We walked a few more steps. 'Alec. Don't be angry.'

'I'll do no more than give you a fat lip. What is it?'

'I have five quarters. Good ones.'

'At this point I am supposed to say, "Daughter, were you a good girl in Philadelphy?" Out with it. Whom did you kill? Much blood?'

'Yesterday. Those pinball games. Every time Harry won free games he gave me a quarter. "For luck," he said.'

I decided not to beat her. Of course they were not 'good quarters' but they turned out to be good enough. Good enough, that is, to fit coin machines. We had passed a penny arcade; such places usually have coin-operated food, dispensers and this one did. The prices were dreadfully high—fifty cents for a skimpy stale sandwich; twenty-five cents for a bare mouthful of chocolate. But it was better than some breakfasts we had had on the road. And we certainly did not steal, as the quarters from my world were real silver.

Then we went to the public library to find out what sort of world we must cope with now.

We found out quickly:

Marga's world.

Chapter 20

The wicked flee when no man pursueth: but the righteous are bold as a lion.

Proverbs 28:1

MARGRETHE WAS as elated as I had been the day before. She bubbled, she smiled, she looked sixteen. I looked around for a private place—back of book stacks or somewhere—where I could kiss her without worrying about a proctor. Then I remembered that this was Margrethe's world where nobody cared...and grabbed her where she stood and bussed her properly.

And got scolded by a librarian.

No, not for what I had done, but because we had been somewhat noisy about it. Public kissing did not in itself disturb that library's decorum. Hardly. I noticed, while I was promising to keep quiet and apologizing for the breach, a display rack by that librarian's desk:

New Titles INSTRUCTIONAL PORNOGRAPHY --

Ages 6 to 12

Fifteen minutes later I was waving my thumb again on Highway 77 to Dallas.

Why Dallas? A law firm: O'Hara, Rigsbee, Crumpacker, and Rigsbee.

As soon as we were outside the library, Marga had started talking excitedly about how she could now end our troubles: her bank account in Copenhagen.

I said, 'Wait a minute, darling. Where's your checkbook? Where's your identification?'

What it, came to was that Margrethe could possibly draw on her assets in Denmark after several days at a highly optimistic best or after several weeks at a more probable estimate...and that even the longer period involved quite a bit of money up front for cablegrams. Telephone across the Atlantic? Marga did not think such a thing existed. (And even if it did, I thought it likely that cablegrams were cheaper and more certain.)

Even after all arrangements had been made, it was possible that actual payment might involve postal delivery from Europe—in a world that had no airmail.

So we headed for Dallas, I having assured Marga that, at the very worst, Alec Graham's lawyers would advance Alec Graham enough money to get him (us) off the street, and, with luck, we would come at once into major assets.

(Or they might fail to recognize me as Alec Graham and prove that

I was not he—by fingerprints, by signature, by something—and thereby lay the ghost of 'Alec Graham' in Margrethe's sweet but addled mind. But I did not mention this to Margrethe.)

It is two hundred miles from Oklahoma City to Dallas; we arrived there at 2 p.m., having picked up a ride at the intersection of 66 and 77, and kept it clear into the Texas metropolis. We were dropped where 77 crosses 80 at the Trinity River, and we walked to the Smith Building; it took us half an hour.

The receptionist in suite 7000 looked like something out, of the sort of stage show that C. U. D. has spent much time and money to suppress. She was dressed but not very much, and her makeup was what Marga calls 'high style' She was nubile and pretty and, with my newly learned toleration, I simply enjoyed the sinful sight. She smiled and said, 'May I help you?'

'This is a fine day for golf. Which of the partners is still in the office?'

'Only Mr Crumpacker, I'm afraid.'

'He's the one I want to see.'

'And whom shall I say is calling?~

(First hurdle—I missed it. Or did she?) 'Don't you recognize me?'

'I'm sorry. Should I?'

'How long have you been working here?'

'Just over three months.'

'That accounts for it. Tell Crumpacker that Alec Graham is here.'

I could not hear what Crumpacker said to her but I was watching her eyes; I think they widened—I feel sure of it. But all she said was, 'Mr Crumpacker will, see you.' Then she turned to Margrethe. 'May I offer you a magazine while you wait? And would you like a reefer?'

I said, 'She's coming with me.'

'But

'Come along, Marga.' I headed quickly for the inner offices.

Crumpacker's door was easy to find; it was the one with the squawking issuing from it. This shut off as I opened the door and held it for Margrethe. As I followed her in, he was saying, 'Miss, you'll have to wait outside!'

'No,' I denied, as I closed the door behind me. 'Mrs Graham stays'.'

He looked startled. 'Mrs Graham?'

'Surprised you, didn't I? Got married since I saw you last. Darling, this is Sam Crumpacker, one of my attorneys.' (I had picked his first name off his door.)

'How do you do, Mr Crumpacker?'

'Uh, glad to meet you, Mrs Graham. Congratulations to you, Alec you always could pick 'em.'

I said, 'Thanks. Sit down, Marga.'

'Just a moment, folks! Mrs Graham can't stay—really she can't! You know that.'

'I know no such thing. This time I'm going to have a witness.' No, I did not know that he was crooked. But I had learned long ago, in dealing with legislators, that anyone who tries to keep you from having a witness is bad news. So C.U.D. always had witnesses and always stayed within the law; it was cheaper that way.

Marga was seated; I sat down beside her. Crumpacker had jumped up when we came in; he remained standing. His mouth worked nervously. 'I ought to call the Federal prosecutor.'

'Do that,' I agreed. 'Pick up the phone there and call him. Let's both of us go see him. Let's tell him everything. With witnesses. Let's call in the press. All of the press, not just the tame cats.'

(What did I know? Nothing. But when it's necessary to bluff, always bluff big. I was scared. This rat could turn and fight like a cornered mouse—a rabid one.)

'I should.'

'Do it, do it! Let's name names, and tell who did what and who got paid. I want to get everything out into the open...before somebody slips cyanide into my soup.'

'Don't talk that way.'

'Who has a better right? Who pushed me overboard? Who?'

'Don't look at me!'

'No, Sammie, I don't think you did it; you weren't there. But it could be your godson. Eh?' Then I smiled my biggest righthand-of-fellowship smile. 'Just joking, Sam. My old friend would not want me dead. But you can tell me some things and help me out. Sam, it's not convenient to be dumped way off on the other side of the world—so you owe me.' (No, I still knew nothing...nothing save the evident fact that here was a man with a guilty conscience—so crowd him.)

'Alec, let's not do anything hasty.'

'I'm in no hurry. But I've got to have explanations. And money.'

'Alec, I tell you on my word of honor all I know about what happened to you is that this squarehead ship came into Portland and you ain't aboard. And I have to go all the way to Oregon f' God's sake to witness them breaking into your strong-box. And there's only a hundred thousand in it; the rest is missing. Who got it, Alec? Who got to you?'

He had his eyes on me; I hope my face didn't show anything. But he lad hulled me. Was this true? This shyster would lie as easily as he talked. Had my friend purser, or the purser and the captain in cahoots, looted that lockbox?

As a working hypothesis, always prefer the simpler explanation. This man was more likely to lie than the purser was to steal. And it was likely—no, certain—that the captain would have to be present before the purser would force his way into the lockbox of a missing passenger. If these two responsible officers, with careers and reputations to lose, nevertheless combined to steal, why would they leave a hundred thousand behind? Why not take it all and be blandly ignorant about the contents of my lockbox?—as indeed they should be. Something fishy here.

'What are you implying was missing?'

'Huh?' He glanced at Margrethe. 'Uh—Well, damn it there should have been nine hundred grand more. The money you didn't pass over in Tahiti.'

'Who says I didn't?'

'What? Alec, don't make things worse. Mr Z. says so. You tried to drown his bagman.'

I looked at him and laughed. 'You mean those tropical gangsters? They tried to get the boodle without identifying themselves and without giving receipts. I told them an emphatic no—so the clever boy had his muscle throw me into the pool. Hmm—Sam, I see it now. Find out who came aboard the Konge Knut in Papeele.'

'Why?'

'That's your man. He not only got the boodle; he pushed me overboard. When you know, don't bother to try to get him extradited, just tell me his name. I'll arrange the rest myself. Personally.'

'Damn it, we want that million dollars.'

'Do you think you can get it? It wound up in Mr Z's hands...but you got no receipt. And I got a lot of grief from asking for a receipt. Don't be silly, Sam; the nine hundred thousand is gone. But not my fee. So pass over that hundred grand. Now.'

'What? The Federal prosecutor in Portland kept that, impounded it as evidence.'

'Sam, Sam boy, don't try to teach your grandmother how to steal sheep. As evidence for what? Who is charged? Who is indicted? What crime is alleged? Am I charged with stealing something out of my own lockbox? What crime?'

"What crime?" Somebody stole that nine hundred grand, that's what!'

'Really? Who's the complainant? Who asserts that there ever was nine hundred thousand in that lockbox? I certainly never told anyone that—so who says? Pick up that phone, Sam; call the Federal prosecutor in Portland. Ask him why he held that money—on whose complaint? Let's get to the bottom of this. Pick it up, Sam. If that Federal clown has my money, I want to shake it loose from him.'

'You're almighty anxious to talk to prosecutors! Strange talk from you.'

'Maybe I've had an acute attack of honesty. Sam, your unwillingness to call Portland tells me all I need to know. You were called out there to act on my behalf,—as my attorney. American passenger lost overboard, ship of foreign registry, you betcha they get hold of the passenger's attorney to inventory his assets. Then they pass it all over to his attorney and he gives a receipt for it. Sam, what did you do with my clothes?'

'Eh? Gave 'em to the Red Cross. Of course.'

'You did, eh?'

'After the prosecutor released 'em, I mean.'

'Interesting. The Federal attorney keeps the money, although no one has complained that any money is missing...but lets the clothes out of his hands when the only probable crime is murder.'

'Huh?'

'Me, I mean. Who pushed me and who hired him to? Sam, we both know where the money is.' I stood up, pointed. 'In that safe. That's where it logically has to be. You wouldn't bank it; there would be a record. You' wouldn't hide it at home; your wife might find it. And you certainly didn't split with your partners Sam, open it. I want to see whether there is a hundred thousand in...or a million.'

'You're out of your mind!'

'Call the Federal prosecutor. Let him be our witness.'

I had him so angry he couldn't talk. His hands trembled. It isn't safe to get a little man too angry—and I topped him by six inches, weight and other measurements to match. He wouldn't attack me himself—he was a lawyer—but I would need to be careful going through doorways, and such.

Time to try to cool him—'Sam, Sam, don't take it so seriously. You were leaning on me pretty heavily...so I leaned back. The good Lord alone knows why prosecutors do anything—the gonif most likely has stolen it by now...in the belief that I am dead and will never complain. So I'll go to Portland and lean on him, hard.'

'There's a paper out on you there.'

'Really? What charges?'

'Seduction under promise of marriage. A female crewman of that ship.' He had the grace to look apologetically at Margrethe. 'Sorry, Mrs Graham. But your husband asked me.'

'Quite all right,' she answered crisply.

'I do get around, don't I? What does she look like? Is she pretty? What's her name?'

'I never saw her; she wasn't there. Her name? Some Swede name. Let me think. Gunderson, that was it. Margaret S. Gunderson.'

Margrethe, bless her heart, never let out a peep—not even at being called a Swede. I said in wonderment, 'I'm accused of seducing this woman...aboard a foreign-flag vessel, somewhere, in the South Seas. So there's a warrant out for me in Portland, Oregon. Sam, what kind of a lawyer are you? To let a client have paper slapped on him on that sort of charge,'

'I'm a smart lawyer, that's the kind I am. Just as you said, no telling what a Federal attorney will do; they take their brains out when they appoint 'em. It simply wasn't important enough to talk about, you being dead, or so we all thought. I'm just looking out for your interests, letting you know about it before you step in it. Gimme some time, I'll get it quashed—then you go to Portland.'

'Sounds reasonable. There aren't any charges outstanding on me here, are there?'

'No. Well, yes and no. You know the deal; we assured them that you would not be coming back, so they turned the blind eye when you left. But here you are, back. Alec, you can't afford to be seen here. Or elsewhere in Texas. Or anywhere in the States, actually. Word gets around, and they'll dig up those old charges.'

'I was innocent!'

He shrugged. 'Alec, all my clients are innocent. I'm talking like a father, in your own interest. Get out of Dallas. If you go as far as Paraguay, so much the better.'

'How? I'm broke. Sam, I've got to have some dough.'

'Have I ever let you down?' He got out his wallet, counted out five one-hundred-dollar bills, laid them in front of me.

I looked at them. 'What's that? A tip?' I picked them up, pocketed them. 'That won't get us to Brownsville. Now let's see some money.'

'See me tomorrow.'

'Don't play games, Sam. Open that safe and get me some real money. Or I don't come here tomorrow; I go see the Federal man and sing like the birdies. After I get square with him—and I will; the Feds love a state's witness, it's the only way they ever win a case—then I go to Oregon and pick up that hundred grand.'

'Alec, are you threatening me?'

'You play games, I play games. Sam, I need a car and I don't mean a beat-up Ford. A Cadillac. Doesn't have to be new, but a cream puff, clean, and a good engine. A Cadillac and a few grand and we'll be in Laredo by midnight, and in Monterrey by morning. I'll call you from Mexico City and give you an address. If you really want me to go to Paraguay and stay there, you send the money to D. F. for me to do it.'

It did not work out quite that way, but I settled for a used Pontiac and left with six thousand dollars in cash, and instructions to go to a particular used-car lot and accept the deal offered me—Sam would call and set it up. He agreed also to call the Hyatt and get us the bridal suite, and would see that they held it. Then I was to come back at ten the next morning.

I refused to get up that early. 'Make that eleven. We're still on our honeymoon.'

Sam chuckled, slapped me on the back, and agreed.

Out in the corridor we headed toward the elevators but went ten feet farther and I opened the door to the fire-escape trunk. Margrethe followed me without comment but once inside the staircase trunk and out of earshot of others she said, 'Alec, that man is not your friend.'

'No, he's not.'

'I am afraid for you.'

'I'm afraid for me, too.'

'Terribly afraid. I fear for your life.'

'My love, I fear for my life, too. And for yours. You are in danger as long as you are with me.'

'I will not leave you!'

'I know. Whatever this is, we are in it together.'

'Yes. What are our plans now?'

'Now we go to Kansas.'

'Oh, good! Then we are not driving to Mexico?'

'Hon, I don't even know how to drive a car.'

We came out in a basement garage and walked up a ramp to a side street. There we walked several blocks away from the Smith Building, picked up a cruising taxi, rode it to the Texas & Pacific Station, there picked up a taxi at the taxi rank, and rode it to Fort Worth, twenty-five miles west. Margrethe was very quiet on the trip. I did not ask her what she was thinking about because I knew: It can't be happy-making to discover that a person you fell in love with was mixed up in some shenanigan that smelled Of gangsters and rackets'. I made myself a solemn promise never to mention the matter to her.

In Fort Worth I had the hackie drop us on its most stylish shopping street, letting him pick it. Then I said to Marga, 'Darling, I'm about to buy you a heavy gold chain.'

'Goodness, darling! I don't need a gold chain.'

'We need it. Marga, the first time I was in this world with you, in Konge Knut—I learned that here the dollar was soft, not backed by gold, and every price I have seen today confirms that. So, if change comes again—and we never know—even the hard money of this world, quarters and half dollars and dimes, won't be worth anything because they're not really silver. As for the paper money I got from Crumpacker—waste paper!

'Unless I change it into something else. We'll start with that gold chain and from here on you wear it to bed, you even wear it to bathe—unless you hang it around my neck.'

'I see. Yes.'

'We'll buy some heavy gold jewelry for each of us, then I'm going to try to find a coin dealer—buy some silver cartwheels, maybe some gold coins. But my purpose is to get rid of most of this paper money in the next hour—all but the price of two bus tickets to Wichita, Kansas, three hundred and fifty miles north of here. Could you stand to ride a bus all night tonight? I want to get us out of Texas.

'Certainly! Oh, dear, I do want to get out of Texas! Truly, I'm still frightened.'

'Truly, you are not alone.'

'But—'

'"But" what, dear? And quit looking sad.'

'Alec, I haven't had a bath for four days.'

We found that jewelry shop, we found the coin shop; I spent about half that flat money and saved the rest for bus fare and other purposes in this world—such as dinner, which we ate as soon as the shops started to close. A hamburger we had eaten in Gainesville seemed an awfully long way off in time and space. Then I determined that there was a bus going north—Oklahoma City, Wichita, Salina—at ten o'clock that evening. I bought tickets and paid an extra dollar on each to reserve seats. Then I threw money away like a drunken sailor took a room in a hotel across from the bus station, knowing that we would be checking out in less than two hours.

It was worth it. Hot baths for each of us, taking turns, each of us remaining fully dressed and carrying the other's clothing, jewelry, and all the money while the other was naked and wet. And carrying my razor, which had become a talisman of how to outwit Loki's playful tricks.

And new, clean underwear for each of us, purchased in passing while we were converting paper money into valuta.

I had hoped for time enough for love—but no; by the time I was clean and dry we had to dress and check out to catch that bus. Never mind, there would be other times. We climbed into the bus, put the backrests back, put Marga's head on my shoulder. As the bus headed north we fell asleep.

I woke up sometime later because the road was so rough. We were seated right behind the driver, so I leaned forward and asked, 'Is this a detour?' I could not recall a rough stretch when we had ridden south on this same road about twelve hours earlier.

'No,' he said. 'We've crossed into Oklahoma, that's all. Not much pavement in Oklahoma. Some near Oke City and a little between there and Guthrie.'

The talk had wakened Margrethe; she straightened up. 'What is it, dear?'

'Nothing. Just Loki having fun with us. Go back to sleep.'

Chapter 21

What are these which are arrayed in white robes? and whence came they? And I said unto him, Sir, thou knowest.

And he said unto me, These are they which came out of great tribulation, and have washed their robes, and made them white in the blood of the Lamb.

Therefore are they before the throne of God,
And serve Him day and night in His temple.
Revelation 7:13-15

I WAS driving a horse and buggy and not enjoying it. The day was hot, the dust kicked up by horse's hooves stuck to sweaty skin, flies were bad, there was no breeze. We were somewhere near the corner of Missouri, Kansas, and Oklahoma, but I was not sure where. I had not seen a map for days and the roads were no longer marked with highway signs for the guidance of automobilists—there were no automobiles.

The last two weeks (more or less—I had lost track of the days) had been endless torments of Sisyphus, one ridiculous frustration after another. Sell silver dollars to a local dealer in exchange for that world's paper?—no trouble; I did it several times. But it didn't always help. Once I had sold silver for local paper money and we had ordered dinner—when, boom, another world change and we went hungry. Another time I was cheated outrageously and when I complained, I was told: 'Neighbor, possession of that coin is illegal and you know it. I've offered you a price anyhow because I like you. Will you take it? Or shall I do my plain duty as a citizen?'

I took it. The paper money he gave us for five ounces of silver would not buy—dinner for Marga and me at a backwoods gourmet spot called 'Mom's Diner'.

That was in a charming community called (by a sign at its outskirts):

THE TEN COMMANDMENTS
A Clean Community
Blackamoors, Kikes, Papists
Keep Moving!

We kept moving. That whole two weeks had been spent trying to travel-the two hundred miles from Oklahoma City to Joplin, Missouri. I had been forced to give up the notion of avoiding Kansas City. I still had no intention of staying in or near Kansas City, not when a sudden change of worlds could land us in Abigail's lap. But I had learned in Oklahoma City that the fastest and indeed the only practical route—to

Wichita was a long detour through Kansas City. We had retrogressed to the horse-and-buggy era.

When you consider the total age of the earth, from Creation in 4004 BC to the year of Our Lord I994, or 5998 years—call it 6000—in a period of 6000 years, 80 or 90 years is nothing much. And that is how short a time it has been since the horse-and-buggy day in my world. My father was born in that day (1909) and my paternal grandfather not only never owned an automobile but refused to ride in one. He claimed that they were spawn of the Devil, and used to quote passages from Ezekiel to prove it. Perhaps he was right.

But the horse-and-buggy era does have—shortcomings. There are obvious ones such as no inside plumbing, no air conditioning, no modern medicine. But for us there was an unobvious but major one; where there are no trucks and no cars there is effectively no hitchhiking. Oh, it is sometimes possible to hitch rides on farm wagons—but the difference in speed between a human's walk and a horse's walk is not great. We rode when we could but, either way, fifteen miles was a good day's progress—too good; it left no time to work for meals and a place to sleep.

There is an old paradox, Achilles and the Tortoise, in which the remaining distance to your goal is halved at each The question is: How long does it take to reach your goal? The answer is: You can't get there from here.

That is the way we 'progressed' from Oklahoma City to Joplin.

Something else compounded my frustration: I became increasingly persuaded that we were indeed in the latter days, and we could expect the return of Jesus and the Final Judgment at any moment—and my darling, my necessary one, was not yet back in the arms of Jesus. I refrained from nagging her about it, although it took all my will power to respect her wish to handle it alone. I began to sleep badly through worrying about her.

I became a bit crazy, too (in addition to my paranoid belief that these world changes were aimed at me personally)—crazy in that I acquired an unfounded but compelling belief that finishing this journey was essential to the safety of my darling's immortal soul. Just let us get as far as Kansas, dear Lord, and I will pray without ceasing until I have converted her and brought her to grace. 0 Lord God of Israel, grant me this boon!

I continued to look for dishwashing jobs (or anything) even while we still had silver and gold to trade' for local money. But motels disappeared entirely; hotels became scarce and restaurants decreased in numbers and size to fit an economy in which travel was rare and almost all meals were eaten at home.

It became easier to find jobs cleaning stalls in livery stables. I preferred dishwashing to shoveling horse manure—especially as I had only one pair of shoes. But I stuck to the rule of take any honest work but keep moving!

You may wonder why we did not shift to hitching rides on freight trains. In the first place I did not know how, never having done it. Still more important, I could not guarantee Marga's safety. There were the hazards of mounting a moving freight car. But worse were dangers from people: railroad bulls and road kids—hobos, tramps, bindlestiffs, bums. No need to discuss those grisly dangers,-- as I kept her away from rail lines and hobo jungles.

And I worried. While abiding strictly to her request not to be pressured, I did take to praying aloud every night and in her presence, on my knees. And at last, to my great joy, my darling joined me, on her knees. She did not pray aloud and I stopped vocalizing myself, save for a final: 'In Jesus' name, Amen.' We still did not talk about it.

I wound up driving this horse and buggy (goodness,' what a hot day!—'Cyclone weather', my grandmother Hergensheimer would have called it) as a result of a job cleaning stalls in a livery stable. As, usual I had quit after one day, telling my temporary employer that my wife and I had to move on to Joplin; her mother was ill.

He told me that he had a rig that needed to be returned to the next town up the road. What he meant was that he had too many rigs and nags on hand, his own and others, or he would have waited until he could send it back by renting it to a passing drummer.

I offered to return it for one day's wages at the same extremely low rate that he had paid me to shovel manure and curry nags.

He pointed out that he was doing me a favor, since my wife and I had to get to Joplin.

He had both logic and strength of position on his side; I agreed. But his wife did put up a lunch for us, as well as giving us breakfast after we slept in their shed.

So I was not too unhappy driving that rig, despite the weather, despite the frustrations. We were getting a few miles closer to Joplin every day—and now my darling was praying. It was beginning to look like 'Home Free!' after all.

We had just reached the outskirts of this town (Lowell? Racine? I wish I could remember) when we encountered something right straight out of my childhood: a camp meeting, an oldtime revival. On the left side of the road was a cemetery, well kept but the grass was drying; facing it on the right was the revival tent, pitched in a pasture. I wondered whether the juxtaposition of graveyard and Bible meeting was accidental, or planned?—if the Reverend Danny had been involved, I would know it was planned; most people cannot see gravestones without thinking about the long hereafter.

Crowded ranks of buggies and farm wagons stood near the tent, and a temporary corral lay beyond them. Picnic tables of the plank-and-sawhorse type were by the tent on the other side; I could see remains of lunch. This was a serious Bible meeting, one that started in the morning, broke for lunch, carried on in the afternoon—would no doubt break for supper, then adjourn only when the revivalist judged that there were no more souls to be saved that day.

(I despise these modern city preachers with their five minute 'inspirational messages'. They say Billy Sunday could preach for seven hours on only a glass of water then do it again in the evening and the next day. No wonder heathen cults have spread like a green bay tree!)

There was a two-horse caravan near the tent. Painted on its side was: Brother 'Bible' Barnaby. Out front was a canvas sign on guys and stays:

That OldTime Religion!
Brother 'Bible' Barnaby
Healing Every Session
10a.m.—2p.m.—7p.m.
Every Day from Sunday June 5th till
!!!JUDGMENT DAY!!!

I spoke to the nag and pulled on the reins to let her know that I wanted to stop. 'Darling, look at that!'

Margrethe read the sign, made no comment.

'I admire his courage,' I said. 'Brother Barnaby is betting his reputation that Judgment Day will arrive before it's time to harvest wheat...which could be early this year, hot as it is.'

'But you think Judgment Day is soon.'

'Yes, but I'm not betting a professional reputation on it just my immortal soul and hope of Heaven. Marga, every Bible student reads the prophecies slightly differ ently. Or very differently. Most of the current crop of premillenarians don't expect the Day earlier than the year two thousand. He might have something. Do you mind if we, stay here an hour?'

'We will stay however long you wish. But—Alec, you wish me to go in? Must I?'

'Uh—' (Yes, darling, I certainly do want you to go inside.) 'You would rather wait in the buggy?'

Her silence was answer enough. 'I see. Marga, I'm not trying to twist your arm. Just one thing—We have not been separated except when utterly necessary for several weeks. And you know why. With the changes coming almost every day, I would hate to have one hit while you were sitting out here and I was inside, quite a way off. Uh, we could stand outside the tent. I see they have the sides rolled up.'

She squared her shoulders. 'I was being silly. No, we will go inside.

Alec, I do need to hold your hand; you are right: Change comes fast. But I will not ask you to stay away from a meeting of your coreligionists.'

'Thank you, Marga.'

'And, Alec—I will try!'

'Thank you. Thank you loads! Amen!'

'No need to thank me. If you go to your Heaven, I want to go, too!'

'Let's go inside, dear.'

I put the buggy at the far end of a rank, then led the mare to the corral, Marga with me. As we came back to the tent I could hear:

'—the corner where you are!

'Brighten the corner where you are!

'Someone far from harbor you may guide across the bar!

'So—'

I chimed in: '—brighten the corner where you are!'

It felt good.

Their instrumental music consisted of a foot-pumped organ and a slide trombone. The latter surprised me but Pleased me; there is no other instrument that can get right down and rassle with The Holy City the way a trombone can, and it is almost indispensable for The Son of God Goes Forth to War.

The congregation was supported by a choir in white angel robes—a scratch choir, I surmised, as the white robes were homemade, from sheets. But what. that choir may have lacked in professionalism it made up for in zeal. Church music does not have to be good as long as it is sincere—and loud.

The sawdust trail, six feet wide, led straight down the middle, benches on each side. It dead-ended against a chancel rail of two-by-fours. An usher led us down the trail in answer to my hope for seats down front. The place was crowded but he got people to squeeze over and we wound up on the aisle in the second row, me outside. Yes there were still seats in the back, but every preacher despises people—their name is legion!—who sit clear at the back when there are seats open down front.

As the music stopped, Brother Barnaby stood up and came to the pulpit, placed his hand on the Bible. 'It's all in the Book,' he said quietly, almost in a whisper. The congregation became dead still.

He stepped forward, looked around. 'Who loves you?'

'Jesus loves me!'

'Let Him hear you.'

'JESUS LOVES ME!'

'How do you know that?'

'IT'S IN THE BOOK!'

I became aware of an odor I had not smelled in a long time. My professor of homiletics pointed out to us once in a workshop session that a congregation imbued with religious fervor has a strong and distinctive odor ('stink' is the word he used) compounded of sweat and both male and female hormones. 'My sons,' he told us, 'if your assembled congregation smells too sweet, you aren't getting to them. If you can't make 'em sweat, if they don't break out in their own musk like a cat in rut, you might as 'Well quit and go across the street to the papists. Religious ecstasy is the strongest human emotion; when—it's there, you can smell it!'

Brother Barnaby got to them.

(And, I must confess, I never did. That's why I wound up as an organizer and money-raiser.)

'Yes, it's in the Book. The Bible is the Word of God, not just here and there, but every word. Not as allegory, but as literal truth. You shall know the truth and the truth will make you free. I read to you now from the Book: "For the Lord Himself will descend from Heaven with-a shout, with the voice of the archangel, and with the Trump of God: and the dead in Christ shall rise first."

'That last line is great news, my brothers and sisters:

"—the dead in Christ shall rise first." What does that say? It does not say that the dead shall rise first; it says that the dead in Christ shall rise first. Those who were washed in the blood of the Lamb, born again in Jesus, and then have died in a state of grace before His second coming, they will not be forgotten, they will be first. Their graves will open, they will be miraculously restored to life and health and physical perfection and will lead the parade to Heaven, there to dwell in happiness by the great white throne forevermore!'

Someone shouted, 'Hallelujah!'

'Bless you, sister. Ah, the good news! All the dead in Christ, every one! Sister Ellen, taken from her family by the cruel hand of cancer, but who died with the name of Jesus on her lips, she will help lead the procession. Asa's beloved wife, who died giving birth but in a state of grace, she will be there! All your dear ones who died in Christ will be gathered up and you will see them in Heaven. Brother Ben, who lived a sinful life, but found God in a foxhole before an enemy bullet cut him down, he will be there...and his case is specially good news, witnessing that God can be found anywhere. Jesus is present not only in churches—in fact there are fancy-Dan churches where His Name is rarely heard—´

'You—can say that again!'

'And I will. God is everywhere; He can hear you when you speak. He can hear you more easily when you are ploughing a field, or down on your knees by your bed, than He can in some ornate cathedral, surrounded by the painted and perfumed. He is here now, and He promises you, 'I will never desert you, nor will I ever forsake you. I stand at the door and knock, if anyone hears My voice and opens the door, I will come in to him, and will dine with him, and he with Me." That's His promise, dearly beloved, in plain words. No obscurities, no highfalutin "interpretation", no so-called "allegorical meanings". Christ Himself is waiting for you, if only you will ask.

'And if you do ask, if you are born again in Jesus, if He washes away your sins and you reach that state of grace...what then? I read you the first half of God's promise to the faithful. You will hear the Shout, you will hear the great Trumpet sounding His advent, as He promised, and t he dead in Christ shall rise again. Those dry bones will rise again and be covered with living, healthy flesh.

'Then what?

'Hear the words of the Lord: "Then we which are alive"—That's you and me, brothers and sisters; God is talking about us. "Then we which are alive and remain shall be caught up together with them in the clouds, to meet the Lord in the air and so shall we ever be with the Lord'!

'So shall we ever be! So shall we ever be! With the Lord in Heaven!'

‚Hallelujah!'

'Bless His Name!'

'Amen! Amen!'

(I found that I was one of those saying 'Amen!')

'But there's a price. There are no free tickets to Heaven. What happens if you don't ask Jesus to help you? What if you ignore. His offer to be washed free of sin and reborn in the blood of the Lamb? What then? Well? Answer me!'

The congregation was still save for heavy breathing, then a voice from the back said, not loudly, 'Hellfire.'

'Hellfire and damnation! Not for just a little while but through all eternity! Not some mystical, allegorical fire that singes only your peace of mind and burns no more than a Fourth of July sparkler. This is the real thing, a raging fire, as real as this.' Brother Barnaby slapped the pulpit with a crack that could be heard throughout the tent. 'The sort of fire that makes a baseburner glow cherry red, then white. And you are in that fire, Sinner, and the ghastly pain goes on and on, it never stops. Never! There's no hope for you. No use asking for a second chance. You've had your second chance...and your millionth chance. And more. For two thousand years sweet Jesus has been begging you, pleading with you, to accept from Him that for which He died in agony on the Cross to give you. So, once you are burning in that fiery Pit and trying to cough up the brimstone—that's sulfur, plain ordinary sulfur, burning and stinking, and it will burn your lungs and blister your sinful hide!—when you're roasting deep in the Pit for your sins, don't go whining about how dreadful it hurts and how you didn't know it would be like that. Jesus knows all about pain; He died on the Cross. He died for you. But you wouldn't listen and now you're down in the Pit and whining.

'And there you'll stay, suffering burning agony throughout eternity! Your whines can't be heard from down in the Pit; they are drowned out by the screams of billions of other sinners!'

Brother Barnaby lowered his voice to conversational level. 'Do you want ' to burn in the Pit?'

'No!'—'Never!'—'Jesus save us!'

'Jesus will save you, if you ask Him to. Those who died in Christ are saved, we read about them. Those alive when He returns will be saved if they are born again and remain in that state of grace. He promised us that He would return, and that Satan would be chained for—a thousand years while He rules in peace and justice here on earth. That's the Millennium, folks, that's the great day at hand. After that thousand years Satan will be loosed for a little while and the final battle will be fought. There'll be war in Heaven. The Archangel Michael will be the general for our side, leading God's angels against the Dragon—that's Satan again—and his host of fallen angels. And Satan lost—will lose, that is, a thousand years, from now. And nevermore will he be seen in Heaven.

'But that's a thousand years from now, dear friends. You will live to see it...if you accept Jesus and are born again before that Trumpet blast that signals His return. When will that be? Soon, soon! What does the Book say? In the Bible God tells you not once but many times, in Isaiah, in Daniel, in Ezekiel, and in. all four of the Gospels, that you will not be told the exact hour of. His return. Why? So you can't sweep the dirt under the rug, that's why! If He told you that He would arrive New Year's Day the year two thousand, there are those who would spend the next five and a half years consorting with lewd women, worshiping strange gods, breaking every one of the Ten Commandments...then, sometime Christmas Week nineteen ninetynine you would find them in church, crying repentance, trying to make a deal.

'No siree Bob! No cheap deals. It's the same price to everyone. The Shout and the Trump may be months away...or you may hear it before I can finish this sentence. It's up to you to be ready when it comes.

'But we know that it is coming soon. How? Again it's in the Book. Signs and portents. The first, without which the rest cannot happen, is the return of the Children of Israel to the Promised Land—see Ezekiel, see Matthew, see today's newspapers. They rebuild the Temple...and sure enough they have; it's in the Kansas City Star. There be other signs and portents, wonders of all sorts—but the greatest are tribulations, trials to test the souls of men the way Job was tested. Can there be a better word to describe the twentieth century than "tribulations"?

`Wars and terrorists and assassinations and fires and plagues. And more wars. Never in history has mankind been tried so bitterly. But endure as Job endured and the end is happiness and eternal peace—the peace of God, which passeth all understanding. He offers you His hand, He loves you, He will save you.'

Brother Barnaby stopped and wiped his forehead with a large handkerchief that was already soggy from such use.

The choir (perhaps at a signal. from him) started singing softly, 'We shall gather at the river, the beautiful, beautiful river, that flows by the throne of God and presently segued into:

'Just as I am, without one plea—´

Brother Barnaby got down on one knee and held out his arms to us. 'Please! Won't you answer Him? Come, accept Jesus, let Him gather you in His arms—´

The choir continued softly with:

'But that Thy blood was shed for me,
'And Thou bidd'st me come to Thee,
'0 Lamb of God, I come, I come!'

And the Holy Ghost descended.

I felt Him overpower me and the joy of Jesus filled my heart. I stood up and stepped out into the aisle. Only then did I remember that I had Margrethe with me. I turned and saw her staring back at me, her face filled with a sweet and deeply serious look. 'Come, darling,' I whispered, and led her into the aisle. Together we went down the sawdust trail to God.

There were others ahead of us at the chancel rail. I found us a place, pushed some crutches and a truss aside, and knelt down. I placed my right hand on the rail, rested my forehead on it, while I continued to hold Marga's hand with my left. I prayed Jesus to wash away our sins and receive us into His arms.

One of Brother Barnaby's helpers was whispering inter my ear. 'How is it with you, brother?'

'I'm fine,' I said happily, 'and so is my wife. Help someone who needs it.'

'Bless you, brother.' He moved on. A sister farther down was writhing and speaking in tongues; he stopped lo comfort her.

I bowed my head again, then became aware of neighing And loud squeals of frightened horses and a great-flapping and shaking of the canvas roof above us. I looked up and saw a split start and widen, then the canvas blew away. The ground trembled, the sky was dark.

The Trump shook my bones, the Shout was the loudest ever heard, joyous and triumphant. I helped Margrethe to her feet smiled at her. 'It's now, darling!'

We were swept up.

We were tumbled head over heels and tossed about by a funnel cloud, a Kansas twister. I was wrenched away from Marga and tried to twist back, but could not. You can't swim in a twister; you go where it takes you. But I knew she was safe.

The storm turned me upside down and held me there for a long moment, about two hundred feet up. The horses had broken out of the corral, and some of the people, not caught up, were milling about. The force of the twister turned me again and I stared down at the cemetery.

The graves were opening.

Chapter 22

When the morning stars sang together, and all the sons of God shouted for joy.

Job 38:7

THE WIND whipped me around, and I saw no more of the graves. By the time I was faced down again the ground was no longer in sight—just a boiling cloud glowing inside with a great light, amber and saffron and powder blue and green gold. I continued to search for Margrethe, but few people drifted near me and none was she. Never mind, the Lord would protect her. Her temporary absence could not dismay me; we had taken the only important hurdle together.

I thought about that hurdle. What a near thing! Suppose that old mare had thrown a shoe and the delay had caused us to reach that point on the road an hour later than we did? Answer: We would never have reached it. The Last Trump would have sounded while we were still on the road, with neither of us in a state of grace. Instead of being caught up into the Rapture, we would have gone to Judgment unredeemed, then straight to Hell.

Do I believe in predestination?

That is a good question. Let's move on to questions I can answer. I floated above those clouds for a time unmeasured by me. I sometimes saw other people but no one came close enough for talk. I began to wonder when I would see our Lord Jesus—He had promised specifically that He would meet us 'in the air'.

I had to remind myself that I was behaving like a little child who demands that Mama do it now and is answered, 'Be patient, dear. Not yet.' God's time and mine were not the same; the Bible said so. Judgment Day had to be a busy time and I had no concept of what duties Jesus had to carry out. Oh, yes, I did know of one; those graves opening up reminded me. Those who had died in Christ (millions? billions? more?) were to go first to meet our Father Who art in Heaven, and of course the Lord Jesus would be with them on that glorious occasion; He had promised them that.

Having figured out the reason for the delay, I relaxed. I was willing to wait my turn to see Jesus...and when I did see Him, I would ask Him to bring Margrethe and me together.

No longer worried, no longer hurried, utterly comfortable, neither hot nor cold, not hungry, not thirsty, floating as effortlessly as a cloud, I began to feel the bliss that had been promised. I slept.

I don't know how long I slept. A long time—I had been utterly exhausted; the last three weeks had been grinding. Running a hand across my face told me that I had slept a couple of days or more; my whiskers had reached the untidy state that meant at least two days of neglect. I touched my breast pocket—yes, my trusty Gillette, gift of Marga, was still buttoned safely inside. But I had no soap, no water, no mirror.

This irritated me as I had been awakened by a bugle call (not the Great Trumpet—probably just one wielded by an angel on duty), a call that I knew without being told meant, 'Wake up there! It is now your turn.'

It was indeed—so when the 'roll was called up yonder' I showed up with a two-day beard. Embarrassing!

Angels handled us like traffic cops, herding us into the formations they wanted. I knew they were angels; they wore wings and white robes and were heroic in size—one that flew near me was nine or ten feet tall. They did not flap their wings (I learned later that wings were worn only for ceremony, or as badges of authority). I discovered that I could move as these traffic cops directed. I had not been able to control my motions earlier; now I could move in any direction by volition alone.

They brought us first into columns, single file, stretched out for miles (hundreds of miles? thousands?). Then they brought the columns into ranks, 'twelve abreast—these were stacked in layers, twelve deep. I was, unless I miscounted, number four in my rank, which was stacked three layers down. I was about two hundred places back in my column—estimated while forming up—but I could not guess how long the column was.

And we flew past the Throne of God.

But first an angel positioned himself in the air about fifty yards off our left flank. His voice carried well. 'Now hear this! You will pass in review in this formation. Hold' your position at all times. Guide on the creature on your left, the creature under you, and the one ahead. of you. Leave ten cubits between ranks and between layers, five cubits, elbow to elbow in ranks. No crowding, no breaking out of ranks, no, slowing down as we pass the Throne. Anybody breaking flight discipline will be sent to the tail end of the flight...and I'm warning you now, the Son might be gone by then, with nobody but Peter or Paul or some other saint to receive the parade. Any questions?'

"How much is a cubit?'

'Two cubits is one yard. Any creature in this cohort who does not know how long a yard is?'

No, one spoke up. The angel added, 'Any more questions?'

A woman to my left and above me called out, 'Yes! My. daughter didn't have her cough medicine with her. So I fetched it. Can you take it to her?'

'Creature, please accept my assurance that any cough your daughter manages to take with her to Heaven will be purely psychosomatic.'

'But her doctor said—´

'And in the meantime shut up and let's get on with this parade. Special requests can be filed after arriving in Heaven.'

There were more questions, mostly silly, confirming an opinion I had kept to myself for years: Piety does not imply horse sense.

Again the trumpet sounded; our cohort's flightmaster called out, 'Forward!' Seconds later there was a single blast; he shouted, 'Fly!' We moved forward.

(Note: I call this angel 'he' because he seemed male.

Ones that seemed to be female I refer to as 'she'. I never have been sure about sex in an angel. If any. I think they are androgynous but I never had a chance to find out. Or the courage to ask.)

(Here's another one that bothers me. Jesus had brothers and sisters; is the Virgin Mary still a virgin? I have never had the courage to ask that question, either.)

We could see His throne for many miles ahead. This was not the great white Throne of God the Father in Heaven; this was just a field job for Jesus to use on this occasion. Nevertheless it was magnificent, carved out of a single diamond with its myriad facets picking up Jesus' inner light and refracting it in a shower of fire and ice in all directions. And that is what I saw best, as the face of Jesus shines with such blazing light that, without sun glasses, you can't really see His features.

Never mind; you knew Who He was. One could not help knowing. A feeling of overpowering awe grabbed me when we were still at least twenty-five miles away. Despite my professors of theology, for the first time in my life I understood (felt) that single emotion that is described in the Bible by two words used together: love and fear. I loved/feared the Entity on that throne, and now I knew why Peter and James had abandoned their nets and followed Him.

And of course I did not make my request to Him as we passed closest (about a hundred yards). In my life on earth I had addressed (prayed to) Jesus by name thousands of times; when I saw Him in the Flesh I simply reminded myself that the angel herding us had. promised us a chance to file personal requests when we reached Heaven. Soon enough. In the meantime it pleased me to think about Margrethe, somewhere in this parade, seeing the Lord Jesus on His throne...and if I had not intervened, she might never have seen Him. It made me feel warm and good, on top of the ecstatic awe I felt in staring at His blinding light.

Some miles past the throne the column swung up and to the right, and we left the neighborhood first of earth and then of the solar system. We headed straight for Heaven and picked up speed.

Did you know that earth looks like a crescent moon when you look back at it? I wondered whether or not any flat-earthers had managed to attain the Rapture. It did not seem likely, but such ignorant superstition is not totally incompatible with believing in Christ. Some superstitions are absolutely forbidden—astrology, for example, and Darwinism. But the flat-earth nonsense is nowhere forbidden that I know of. If there were any flat-earthers with us, how did they feel to look back and see that the earth was round as a tennis ball?

(Or would the Lord in His mercy let them perceive it as flat? Can mortal man ever understand the viewpoint of God?)

It seemed to take about two hours to reach the neighborhood of Heaven. I say 'seemed to' because it might have been any length of time; there was no human scale by which to judge. In the same vein, the total period of the Rapture seemed to me to be about two days...but I had reason later to believe that it may have been seven years—at least by some reckoning. Measures of time and space become very slippery when one lacks mundane clocks and' yardsticks.

As we approached the Holy City our guides had us slow down and then make a sightseeing sweep around it before going in through one of the gates.

This was no minor jaunt. New Jerusalem (Heaven, the Holy City, Jehovah's capital) is laid out foursquare like the District of Columbia, but it is enormously bigger, one thousand three hundred and twenty miles on a side, five thousand two hundred and eighty miles around it, and that gives an area of one million seven hundred and forty-two thousand four hundred square miles.

This makes cities like Los Angeles or New York look tiny.

In solemn truth the Holy City covers an area more than six times as big as all of Texas! At that, it's crowded. But are, expecting only a few more after us.

It's a walled city, of course, and the walls are two hundred and sixteen feet high, and the same wide. The tops of the wall are laid out in twelve traffic lanes—and no guard rails. Scary. There are twelve gates, three in each wall, the famous pearly gates (and they are); these normally stand open—will not be closed, we were told, until the Final Battle.

The wall itself is of iridescent jasper but it has a dozen footings in horizontal layers that are more dazzling than the wall itself: sapphire, chalcedony, emerald, sardonyx, chrysolite, beryl, topaz, amethyst—I may have missed some. New Jerusalem is so dazzling everywhere that it is hard for a human to grasp it—impossible to grasp it all at once.

When we finished the sweep around the Holy City, our cohort's flightmaster herded us, into a holding pattern like dirigibles at O'Hare and kept us there until he received a signal that one of the gates was free—and I was hoping to get at least a glimpse of Saint Peter, but no —his office is at the main gate, the Gate of Judah, whereas we went in by the opposite gate, named for Asher, where we were registered by angels deputized to act for Peter.

Even with all twelve gates in use and dozens of Peter deputized clerks at each gate and examination waived (since we all were caught up at the Rapture—guaranteed saved) we had to queue up quite a long time just to get registered in, receive temporary identifications, temporary bunking assignments, temporary eating assignments --

('Eating'?)

Yes, I thought so, too, and I asked the angel who booked me about it. He/she looked down at me. 'Refection is optional. It will do you no harm never to eat and not to drink. But many creatures and some angels 'enjoy eating, especially in company. Suit yourself.'

'Thank you. Now about this berthing assignment. It's a single. I want a double, for me and my wife. I want—'

'Your former wife, you mean. In Heaven there is no marriage or giving in marriage. I

'Huh? Does that mean we can't live together?'

'Not at all. But both of you must apply, together, at Berthing General. See the office of Exchange and Readjustments. Be sure, each of you, to fetch your berthing chit.'

'But that's the problem! I got separated from my wife. How do I find her?'

'Not part of my M.0.S. Ask at the information booth. In the meantime use your singles apartment in Gideon Barracks.'

'But—´

He (she?) sighed. 'Do you realize how many thousands of hours I have been sitting here? Can you guess how complex it is to provide for millions of creatures at once, some alive and never dead, others newly incarnate? This is the first time we have had to install plumbing for the use of fleshly creatures—do you even suspect how inconvenient that is? I say that, when you install plumbing, you are bound to get creatures who need plumbing—and there goes the neighborhood! But did they listen to me? Hunh! Pick up your papers, go through that door, draw a robe and a halo—harps are optional. Follow the green line to Gideon Barracks.'

'No!'

I saw his (her) lips move; she (he) may have been praying. 'Do you think it is proper to run around Heaven, looking the way you do? You are quite untidy. We aren't used to living-flesh creatures. Uh...Elijah is the last I recall, and I must say that you look almost as disreputable as he did. In addition to discarding those rags and putting on a decent white robe, if I were you I would do something about that dandruff.'

'Look,' I said tensely. 'Nobody knows the trouble I've Seen, nobody knows but Jesus. While you've been sitting around in a clean white robe and a halo in an immaculate City with streets of gold, I've been struggling with Satan himself. I know I don't look very neat but I didn't choose to come here looking this way. Uh—Where can I pick up some razor blades?'

'Some what?'

'Razor blades. Gillette double-edged blades, or that type. For this.' I took out my razor, showed it to her/him. 'Preferably stainless steel.'

'Here everything is stainless. But what in Heaven is that?'

'A safety razor. To take this untidy beard off my face.'

'Really? If the Lord in His wisdom had intended His male creations not to have hair on their faces, He would have created them with smooth features. Here, let me dispose of that.' He-she reached for my razor.

I snatched it back. 'Oh, no, you don't! Where's that information booth?'

'To your left. Six hundred and sixty miles. ' She-he sniffed.

I turned away, fuming. Bureaucrats. Even in Heaven. I didn't ask any more questions there because I spotted a veiled meaning. Six hundred and sixty miles is a figure I recalled from our sightseeing tour: the exact distance from a center gate (such as Asher Gate, where I was) to the center of Heaven, i.e., the Great White Throne of the Lord God Jehovah, God the Father. He (she) was telling me, none too gently, that if I did not like the way I was being treated, I could take my complaints to the Boss—i.e., 'Get lost!'

I picked up my papers and backed away, looked around for someone else in authority.

The one who organized this gymkhana, Gabriel or Michael or whoever, had anticipated that there would be lots of creatures milling around, each with problems that didn't quite fit the system. So scattered through the crowd were cherubs. Don't think of Michelangelo or Luca della Robbia; these were not bambinos with dimpled knees; these were people a foot and a half taller than we newcomers were like angels but with little cherub wings and each with a badge reading 'STAFF'.

Or maybe they were indeed angels; I never have been sure about the distinction between angels and cherubim and seraphim and such; the Book seems to take it for granted that you know such things without being told. The papists list nine different classes of angels! By whose authority? It's not in the Book!

I found only two distinct classes in Heaven: angels and humans.

Angels consider themselves superior and do not hesitate to let you know it. And they are indeed superior in position and power and privilege. Saved souls are second-class citizens—The notion, one that runs all through Protestant Christianity and maybe among papists as well, that, a saved soul will practically sit in the lap of God well, it ain't so! So you're saved and you go to Heaven you find at once that you are the new boy on the block, junior to everybody else.

A saved soul in Heaven occupies much the position of a blackamoor in Arkansas. And it's the angels who really rub your nose in it.

I never met an angel I liked.

And this derives from how they feel about us. Let´s look at it from the angelic viewpoint. According to Daniel there are a hundred million angels in Heaven. Before the Resurrection and the Rapture, Heaven must have been uncrowded, a nice place to live and offering a good career—some messenger work, some choral work, an occasional ritual. Fm sure the angels liked it.

Along comes a great swarm of immigrants, many millions (billions?), and some of them aren't even housebroken. All of them require nursemaiding. After untold eons of beatific living, suddenly the angels find themselves working overtime, running what amounts to an enormous orphan asylum. It's not surprising that they don't like us.

Still...I don't like them, either. Snobs!

I found a cherub (angel?) with a STAFF badge and asked the location of the nearest information booth. He hooked a thumb over his shoulder. 'Straight down the boulevard Six thousand furlongs. It's by the River that flows from the Throne.'

I stared down the boulevard. At that distance God the Father on His Throne looked like a rising sun. I said, 'Six thousand furlongs is over six hundred miles. Isn't there one in this neighborhood?'

'Creature, it was done that way on purpose. If we had placed a booth on each corner, every one of them would have crowds around it, asking silly questions. This way, a creature won't make the effort unless it has a truly important question to ask.'

Logical. And infuriating. I found that I was again possessed by unheavenly thoughts. I had always pictured Heaven as a place of guaranteed beatitude—not filled with the same silly frustration so common on earth. I counted to ten in English, then in Latin. 'Uh, what's the flight time? Is there a speed limit?'

´Surely you don't think that you would be allowed to fly there, do you?'

'Why not? Just earlier today I flew here and then all the way around the City.'

'You just thought you did. Actually, your cohort leader did it all. Creature, let me give you a tip that may keep you out of trouble. When you get your wings—if you ever do get wings—don't try to fly over the Holy City, You'll be grounded so fast your teeth will ache. And your wings stripped away.'

'Why?'

'Because you don't rate it, that's why. You Johnny-Come-Latelies show up here and think you own the place. You'd carve your initials in the Throne if you could get that close to it. So let me put you wise. Heaven operates by just one rule: R.H.I.P. Do you know what that means?'

'No,' I answered, not entirely truthfully.

'Listen and learn. You can forget the Ten Commandments. Here only two or three of them still apply and you'll find you can't break those even if you were to' try. The golden rule everywhere in Heaven is: Rank Hath Its Privileges. At this eon you are a raw recruit in. the Armies of the Lord, with the lowest rank possible. And the least privilege. In fact the only privilege I can think of that you rate is being here, just being here. The Lord in His infinite wisdom has decreed that you qualify to enter here. But that's all. Behave yourself and you will be allowed to stay. Now as to the traffic rule you asked about. Angels and nobody else fly over the Holy City. When on duty or during ceremonies. That does not mean you. Not even if you get wings. If you do. I emphasize this because a surprising number of you creatures have arrived here with the delusion that going to Heaven automatically changes a creature into an angel. It doesn't. It can't. Creatures never become angels. A saint sometimes. Though seldom. An angel, never.'

I counted ten backwards, in'Hebrew. 'If you don't mind, I'm still trying to reach that information booth. Since I am not allowed to fly, how do I get there?'

'Why didn't you say that in the first place? Take the bus.'

Sometime later I was seated in a chariot bus of the Holy City Transit Lines and we were rumbling toward the distant Throne. The chariot was open, boat-shaped, with an entrance in the rear, and had no discernible motive power and no teamster or conductor. It stopped at marked chariot stops and that is how I got aboard. I had not yet found out how to get it to stop.

Apparently everyone in the City rode these buses (except V.I.P.s who rated private chariots). Even angels. Most passengers were humans dressed in conventional white and wearing ordinary halos. But a few were humans in costumes of various eras and topped off by larger and fancier halos. I noticed that angels were fairly polite to these creatures in the fancier halos. But they did not sit with them. Angels sat in the front of the car, these privileged humans in the middle part, and the common herd (including yours truly) in the rear.

I asked one of my own sort how long it took to reach the Throne.

'I don't know,' I was answered. 'I don't go nearly that far.

This soul seemed to be female, middle-aged, and friendly, so I used a commonplace opener. 'That's a Kansas accent, is it not?'

She smiled. 'I don't think so. I was born in Flanders.'

'Really? You speak very fluent English.'

She shook her head gently. 'I never learned English.'

'But—´

'I know. You are a recent arrival. Heaven is not affected by the Curse of Babel. Here the Confusion of Tongues took place...and a good thing for me as I, have no skill in languages—a handicap before I died. Not so here. 'She looked at me with interest. 'May I ask where you died? And when?'

'I did not die,' I told her. 'I was snatched up alive in the Rapture.'

Her eyes widened. 'Oh, how thrilling! You must be very holy.

'I don't think so. Why do you say that?'

'The Rapture will come—came?—without warning. Or so I was taught.'

'That's right.'

'Then with no warning, and no time for confession, and no priest to help you...you were ready! As free from sin as Mother Mary. You came straight to Heaven. You must be holy. ' She added, 'That's what I thought when I saw your costume, since saints—martyrs especially—often dress as they did on earth. I saw too that you are not wearing your saint's halo. But that's your privilege. 'She looked suddenly shy. 'Will you bless me? Or do I presume?'.

'Sister, I am not a saint.'

'You will not grant me your blessing?'

(Dear Jesus, how did this happen to me?) 'Having heard say that, to the best of my knowledge and belief, I am ,not a saint, do you still want me to bless you?'

'If you will...holy father.'

'Very well. Turn and lower your head a little—´Instead she turned fully and dropped to her knees. I put a hand on her head. 'By authority vested in me as an ordained minister of the one true catholic church of Jesus Christ the Son of God the Father and by the power of the Holy. Ghost, I bless this our sister in Christ. So mote it be!'

I heard echoes of 'Amen!' around us; we had had quite an audience. I felt embarrassed. I was not certain, and still am not certain, that I had any authority to bestow blessings in Heaven itself. But the dear woman had asked for it and I could not refuse.

She looked up at me with tears in her eyes. 'I knew it, I knew it!'

'Knew what?'

´That you are a saint. Now you are wearing it!'

I started to say, 'Wearing what?' when a minor miracle occurred. Suddenly I was looking at myself from outside: wrinkled and dirty khaki pants, Army-surplus shirt with dark sweat stains in the armpits and a bulge of razor in the left breast pocket, three-day growth of beard and in need of a haircut...and, floating over my head, a halo the size of a washtub, shining and sparkling!

'Up off your knees,' I said instead, 'and let's stop being conspicuous.´

'Yes, father.' She added, 'You should not be seated back here.'

'I'll be the judge of that, daughter. Now tell me about yourself.' I looked around as she resumed her seat, and happened to catch the eye of an angel seated all alone, up forward. (S)he gestured to me to come forward.

I had had my fill of the arrogance of angels; at first I ignored the signal. But everyone I was noticing and pretending not to, and my awestruck companion was whispering urgently, 'Most holy person, the angelic one wants to see you.´

I gave in—partly because it was easier, partly because I wanted to ask the angel a question. I got up and went to the front of the bus.

'You wanted me?'

'Yes. You know the rules. Angels in front, creatures in back, saints in the middle. If you sit in back with creatures, you are teaching them bad habits. How can you expect to maintain your saintly privileges if you ignore protocol? Don't let it happen again.'

I thought of several retorts, all unheavenly. Instead I said, 'May I ask a question?'

`Ask.'

'How much longer until this bus reaches the River from the Throne?'

'Why do you ask? You have all eternity before you.´

'Does that mean that you don't know? Or that you won't tell?'

'Go sit down in your proper section. At once!'

I went back and tried to find a seat in the after space. But my fellow creatures had closed in and left me no room. No one said anything and they would not meet my eye, but it was evident that no one would aid me in defying the authority of an angel. I sighed and sat down in the midsection, in lonely splendor, as I was the only saint aboard. If I was a saint.

I don't know how long it took to reach the Throne. In Heaven the light doesn't vary and the weather does not change and I had no watch. It was simply a boringly long time. Boring? Yes. A gorgeous palace constructed of precious stone is a wonderful sight to see. A dozen palaces constructed of jewels can be a dozen wonderful sights, each different from the other. But a hundred miles of such palaces will put you to sleep, and six hundred miles of the same is deadly dull. I began to long for a used-car lot, or a dump, or (best yet) a stretch of green and open countryside.

New Jerusalem is a city of perfect beauty; I am witness to that. But that long ride taught me the uses of ugliness.

I never have found out who designed the Holy City.

That God authorized the design and construction is axiomatic. But the Bible does not name the architect(s), or the builder(s). Freemasons speak of 'the Great Architect, meaning Jehovah—but you won't find that in the Bible. Just once I asked an angel, 'Who designed this city?' He didn't sneer at my ignorance, he didn't scold me—he appeared to be unable to conceive it as a question. But it remains a question to me: Did God create (design and build) the Holy City Himself, right down to the smallest jewel? Or did He farm it out to subordinates?

Whoever designed it, the Holy City has a major shortcoming, in my opinion—and never mind telling me that my presumption in passing judgment on God's design is blasphemous. It is a lack, a serious one.

It lacks a public library.

One reference librarian who had devoted her life to answering any and all questions, trivial and weighty, would be more use in Heaven than another cohort of arrogant angels. There must be plenty of such ladies in Heaven, as it takes a saintly disposition and the patience of Job to be a reference librarian and to stick with it for forty years. But to carry on their vocation they would need books and files and so forth, the tools of their profession. Given a chance, I'm sure they would set up the files and catalog the books but where would they get the books? Heaven does not seem to have a book-publishing industry.

Heaven doesn't have industry. Heaven doesn't have an economy. When Jehovah decreed, after the expulsion from Eden, that we descendants of Adam must gain our bread by the sweat of our faces, He created economics and it has been operating ever since for ca. 6000 years.

But not in Heaven.

In Heaven He giveth us, our daily bread without the sweat of our faces. In truth you don't need daily bread; you can't starve, you won't even get hungry enough to matter—just hungry enough to enjoy eating if you want to amuse yourself by stopping in any of the many restaurants, refectories, and lunchrooms.' The best hamburger I ever ate in my life was in a small lunchroom off the Square of Throne on the banks of the River. But again, 'm ahead of my story.

Another lack, not as serious for my taste but serious, is gardens. No gardens, I mean, except the grove of the Tree of Life by the River near the Throne, and a few, a very few, private gardens here and there. I think I know why this is so and, if I am right, it may be self-correcting. Until we reached Heaven (the people of the Rapture and the resurrected dead-in-Christ) almost all citizens of the Holy City were angels. The million or so exceptions were martyrs for the faith, children of Israel so holy that they made it without ever having personally experienced Christ (i.e., mostly before 30 AD), and another group from unenlightened lands—souls virtuous without ever knowing of Christ. So 99 percent of the citizens of the Holy City were angels.

Angels don't seem to be interested in horticulture. I suppose that figures—I can't imagine an angel down on his/her knees, mulching the soil around a plant. They just aren't the dirty-fingernails sort needed to grow prize roses.

Now that angels are outnumbered by humans by at least ten to one I expect that we will see gardens—gardens, garden clubs, lectures on how to prepare the soil, and so forth. All the endless ritual of the devoted gardener. Now they will have time for it.

Most humans in Heaven do what they want to do without the pressure of need. That nice lady (Suzanne) who wanted my blessing was a lacemaker in Flanders; now she teaches it in a school open to anyone who is interested. I have gathered a strong impression that, for most humans, the real problem of an eternity of bliss is how to pass the time. (Query: Could there be something to this reincarnation idea so prevalent in other religions but so firmly rejected by Christianity? Could a saved soul be rewarded, eventually, by being shoved back into the conflict? If not on earth, then elsewhere? I've got to lay hands on a Bible and do some searching. To my utter amazement, here in Heaven Bibles seem to be awfully hard to come by.)

'The information booth was right where it was supposed to be, close to the bank of the River of the Water of Life that flow's from the Throne of God and winds through the grove of the Tree of Life. The Throne soars up from the, middle of the grove but you can't see it very well that close to its base. It's like looking up at the tallest of New York skyscrapers while standing on the sidewalk by it. Only more so. And of course you can't see the Face of God; you are, looking straight up one thousand four hundred and—forty cubits. What you see is, the Radiance...and you can feel the Presence.

The information booth was as crowded as that cherub had led me to expect. The inquirers weren't queued up; they were massed a hundred deep around it. I looked at that swarm and wondered how long it would take me to work my way up to the counter. Was it possible to work my way there other than by the nastiest of bargain-day tactics, stepping on corns, jabbing with elbows, all the things that make department stores so uninviting to males?

I stood back and looked at that mob and tried to figure out how to cope. Or was there some other way to locate Margrethe without stepping on corns?

I was still standing there when a STAFF cherub came up to me. 'Holy one, are you trying to reach the information booth?'

'I surely am!'

'Come with me. Stay close behind me.' He was carrying a long staff of the sort used by riot police. 'Gangway! Make way for a saint! Step lively there!' In nothing flat I reached the counter of the booth. I don't think anyone was injured but there must have been some hurt feelings. I don't approve of that sort of action; I think that treatment should be evenhanded for everyone. But, where R.H.I.P. is the rule, being even a corporal is vastly better than being a private.

I turned to thank the cherub; he was gone. A voice said, 'Holy one, what do you want?' An angel back of the counter was looking down at me.

I explained that I wanted to locate my wife. He Drummed on the counter. 'That's not ordinarily a service we supply. There is a co-op run by creatures called "Find Your Friends and Loved Ones" for that sort of thing.'

'Where is it?'

'Near Asher Gate.'

'What? I just came from there. That's where I registered in.'

'You should have asked the angel who checked you in. You registered recently?'

'Quite recently; I was caught up in the Rapture. I did ask the angel who registered me...and got a fast brushoff. He, she, uh, that angel told me to come here.'

`Mrf. Lemme see your papers.'

I passed them over. The angel studied them, slowly and carefully, then called to another angel, who had stopped servicing the mob to watch. 'Tirl! Look at this.'

So the second angel looked over my papers, nodded sagely, handed them—back—glanced at me, shook his head sadly.' 'Is something wrong?' I asked.

'No. Holy one, you had the misfortune to be serviced,' if that is the word, by an angel who wouldn't help his closest friend, if he had one, which he doesn't. But I'm a bit surprised that she was so abrupt with a saint.'

'I wasn't wearing this halo at the time.'

'That accounts for it. You drew it later?'

'I did not draw it. I acquired it miraculously, on the way from Asher Gate to here.'

`I see. Holy one, it's your privilege to put Khromitycinel on the report. On the other hand I could use the farspeaker to place your inquiry for you.'

'I think that would be better.'

'So do I. In the long run. For you. If I make my meaning clear.'

'You do.'

'But before I call that co-op let's check with Saint Peter's office and make sure your wife has arrived. When did she die?'

'She didn't die. She was caught up in the Rapture, too.'

'So? That means a quick and easy check, no searching of old rolls. Full name, age, sex if any, place and date of we don't need that. Full name first.'

Margrethe Svensdatter Gunderson.'

'Better spell that.'

I did so.

'That's enough for now. If Peter's clerks can spell. You can't wait here; we don't have a waiting room. There is a little restaurant right opposite us—see the sign?'

I turned and looked. ' "The Holy Cow"?´

'That's it. Good cooking, if you eat. Wait there; I'll send word to you.'

'Thank you!'

'You are welcome—'She glanced again at my papers, then handed them back. '—Saint Alexander Hergensheimer.'

The Holy Cow was the most homey sight I had seen since the Rapture: a small, neat lunchroom that would have looked at home in Saint Louis or Denver. I went inside. A tall blackamoor whose chef's hat stuck up through his halo was at the grill with his back to me. I sat down at the counter, cleared my throat.

'Just hold your horses.' He finished what he was doing, turned around. 'What can I—Well, well! Holy man, what can I fix for you? Name it, just name it!'

'Luke! It's good to see you!' '

He stared at me. 'We have met?'

'Don't you remember me? I used to work for you. Ron's Grill, Nogales. Alec. Your dishwasher.'

He stared a-gain, gave a deep sigh. 'You sure fooled me. Saint Alec.'

'Just "Alec" to my friends. It's some sort of administrative mistake, Luke. When they catch it, I'll trade this Sunday job for an ordinary halo.'

'Beg to doubt—Saint Alec. They don't make mistakes in Heaven. Hey! Albert! Take the counter. My friend, Saint Alec and I are going to sit in the dining room. Albert's my sous-chef.'

I shook hands with a fat little man who was almost a parody of what a French chef should look like. He was wearing a Cordon Bleu hat as well as his halo. Luke and I went through a side door into a small dining room, sat down at a table. We were joined by a waitress and I got another shock.

Luke, said, 'Hazel, I want you to meet an old friend of mine, Saint Alec—he and I used to be business associates. Hazel is hostess of The Holy Cow.'

'I was Luke's dishwasher,' I told her. 'Hazel, it's wonderful to see you!' I stood up, started to shake hands, then changed my mind for the better, put my arms around her.

She smiled up at me, did not seem surprised. 'Welcome, Alec! "Saint Alec" now, I see. I'm not surprised.'

'I am. It's a mistake.'

'Mistakes don't happen in Heaven. Where is Margie? Still alive on earth?'

'No.' I explained how we had been separated. 'So I'm waiting here for word.'

'You'll find her.' She kissed me, quickly and warmly which reminded me of my four-day beard. I seated her, sat down with my friends. 'You are sure to find her quickly, because that is a promise we were made and is precisely carried out. Reunion in Heaven with friends and loved ones. "We shall gather by the River—" and sure enough, there it is, right outside the door. Steve Saint Alec, you, do remember Steve? He was with you and Margie when we met.'

'How could I forget him? He bought us dinner and gave us a gold eagle when we were stony. Do I remember Steve!'

'I'm happy to hear you say that...because Steve credits you with converting him—born-again conversion—and getting him into Heaven. You see, Steve was killed on the Plain of Meggido, and I was killed in the War, too, uh, that was about five years after we met you

'Five years?'

'Yes. I was killed fairly early in the War; Steve lasted clear to Armageddon—'

'Hazel...it hasn't been much over a month since Steve bought us that dinner at Rimrock.'

'That's logical. You were caught up in the Rapture and that touched off the War. So you spent the War years up in the air, and that makes it work out that Steve and I are here first even though you left first. You can discuss it with Steve; he'll be in soon. By the way, I'm his concubine now his wife, except that here there is no marrying or giving in marriage. Anyhow Steve went back into the Corps when war broke out and got up to captain before they killed him. His outfit landed at Haifa and Steve died battling for the Lord at the height of Armageddon. I'm real proud of him.'

'You should be. Luke, did the War get you, too?'

Luke gave a big grin. 'No, sir, Saint Alec. They hanged me.'

'You're joking!'

`No joke. They hanged me fair and square. You remember when you quit me?'

'I didn't quit you. A miracle intervened. That's how I met Hazel. And Steve.'

'Well...you know more about miracles than I do. Anyway, we had to get another dishwasher right fast, and we had to take a Chicano. Man, he was a real bad ass, that one. Pulled a knife on me. That was his mistake. Pull a knife on a cook in his own kitchen? He cut me up some, I cut him up proper. Jury mostly his cousins, I think. Anyhow the D.A. said it was time for an example. But it was all right. I had been baptized long before that; the prison chaplain helped me be born again. I spoke a sermon standing on that trap with the noose around my neck. Then I said, "You can do it now! Send me to Jesus! Hallelujah!" And they did. Happiest day of my lifel'

Albert stuck his head in. 'Saint Alec, there's an angel here looking for you.'

'Coming!'

The angel was waiting just outside for the reason that he was taller than the doorway and not inclined to stoop. 'You are Saint Alexander Hergensheimer?'

'That's me.'

"Your inquiry concerning a creature designated Margrethe Svensdatter Gunderson: The report reads: Subject was not caught up in the Rapture, and has not shown up in any subsequent draft. This creature, Margrethe Svensdatter Gunderson, is not in Heaven and is not expected. That is all.'

Chapter 23

I cry unto Thee, and Thou dost not hear me:
I stand up, and Thou regardest me not.
Job 30:20

SO OF course I eventually wound up in, Saint Peter's office at the Gate of Judah—having chased all over Heaven first. On Hazel's advice I went back to the Gate of Asher and looked up that co-op 'Find Your Friends and Loved Ones'.

'Saint Alec, angels don't pass out misinformation and the records they consult are accurate. But they may not have consulted the right records, and, in my opinion, they would not have searched as deeply as you would search if you were doing it yourself—angels being angels. Margie might be listed under her maiden name.'

'That was what I gave them!'

'Oh. I thought you asked them to search for "Margie Graham"?'

'No. Should I go back and ask them to?'

'No. Not yet. And when you do—if you must don' ask again at this information booth. Go directly to St Peter's office. There you'll get personal attention from other humans, not from angels.'

'That's for me!'

'Yes. But try first at "Find Your Friends and Loved Ones". That's not a bureaucracy; it's a co-op made up of volunteers, all of them people who really care. That's how Steve found me after he was killed. He didn't know my family name and I hadn't used it for years, anyhow. He didn't know my date and place of death. But a little old lady at "Find Your Friends" kept right on searching females named Hazel until Steve said "Bingo!" If he had just checked at the main personnel office —Saint Peter's—they would have reported "insufficient data, no identification".'

She smiled and went on, 'But the co-op uses imagination. They brought Luke and me together, even though we hadn't even met before we died. After I got tired of loafing I decided that I wanted to manage a little restaurant it's a wonderful way to meet people and make friends. So I asked the co-op and they set their computers on "cook", and after a lot of false starts and wrong numbers it got Luke and me together and we formed a partnership and set up The Holy Cow. A similar search got us Albert.'

Hazel, like Katie Farnsworth, is the sort of woman who heals just by her presence. But she's practical about it, too, like my own treasure. She volunteered to launder-my dirty clothes and lent me a robe of Steve's to wear while my clothes dried. She found me a mirror and a cake of soap; at long last I tackled a five-day (seven-year?) beard. My one razor blade was closer to being a saw than a knife by then, but a half hour's patient honing using the inside—of a glass tumbler (a trick I had learned in—seminary) restored it to temporary usefulness.

But now I needed a proper shave even though I had shaved—tried to shave—a couple of hours ago. I did not know how long I had been on this hunt but I did know that I had shaved four times...with cold water, twice without soap, and once by Braille—no mirror. Plumbing had indeed been installed for us fleshly types...but not up to American Standard quality. Hardly surprising, since angels don't use plumbing and don't need it, and since the overwhelming majority of the fleshly ones have little or no experience with inside plumbing.

The people who man the co-op were as helpful as Hazel said they would be (and I don't think my fancy halo had anything to do with it) but nothing they turned up gave me any clue to Margrethe, even though they patiently ran computer searches on every combination I could think of.

I thanked them and blessed them and headed for Judah Gate, all the way across Heaven, thirteen hundred and twenty miles away. I stopped only once, at the Square of, the Throne, for one of Luke's heaven burgers and a cup of the best coffee in New Jerusalem, and some encouraging words from Hazel. I continued my weary search feeling, much bucked up.

The Heavenly Bureau of Personnel occupies two colossal palaces on the right as you come through the gate. The first and smaller is for BC admissions; the second is for admissions since then, and included Peter's office suite, on the second floor. I went straight there.

A big double door read SAINT PETER—Walk In, so I did. But not into his office; here was a waiting room big enough for Grand Central Station. I pushed through a turnstile that operated by pulling a ticket out of a slot, and a mechanical voice said, 'Thank you. Please sit down and wait to be called.'

My ticket read '2013' and the place was crowded; I decided, as I looked around for an empty seat, that I was going to need another shave before my number would come up.

I was still looking when a nun bustled up to me, and ducked a knee in a quick curtsy. 'Holy one, may I serve you?' I did not know enough about the costumes worn by Roman Catholic orders to know what sisterhood she belonged to, but she was dressed in what I would call 'typical'—long black dress down to her ankles and to her wrists, white, starched deal over her chest and around her neck and. covering her ears, a black headdress covering everything else and giving her the silhouette of a sphinx, a big rosary hanging around her neck...and an ageless, serene face topped off by a lopsided pince-nez. And, of course, her halo.

The thing that impressed me most was that she was here. She was the first proof I had seen that papists can be saved. In seminary we used to argue about that in late-night bull sessions...although, the official position Of my Church was that certainly they could be saved, as long as they believed, as we did and were born again Jesus. I made a mental note to ask her when and how she had been born again—it would be, I was sure, an inspiring story.

I said, 'Why, thank you, Sister! That's most kind of you. Yes, you can help me—that is, I hope you can. I'm Alexander Hergensheimer and I'm trying to find my wife. This is the place to inquire, is it not? I'm new here.'

'Yes, Saint Alexander, this is the place. But you did want to see Saint Peter, did you not?'

'I'd like to pay my respects. If he's not too busy.'

'I'm sure he will want to see you, Holy Father. Let me tell my Sister Superior.' She picked up the cross on her rosary, appeared to whisper into it, then looked up. 'Is that spelled H,E,R,G,E,N,S,H,E,I,M,E,R, Saint Alexander?'

'Correct, Sister.'

She spoke again to the rosary. Then she added, to me, 'Sister Marie Charles is secretary, to Saint Peter. I'm her assistant and general gopher.' She smiled. 'Sister Mary Rose.'

'It is good to meet you, Sister Mary Rose. Tell me about yourself. What order are you?'

'I'm a Dominican, Holy Father. In life I was a hospital administrator in Frankfurt, Germany. Here, where there is no longer a need for nursing, I do this work because I like to mingle with people. Will you come with me, sir?'

The crowd parted like the waters of the Red Sea, whether in deference to the nun or to my gaudy halo, I cannot say. Maybe both. She took me to an unmarked side door and straight in, and I found myself in the office of her boss, Sister Marie Charles. She was a tall nun, as tall as I am, and handsome—or 'beautiful' may be more accurate. She seemed younger than her assistant...but how is one to tell with nuns? She was seated at a big flattop desk piled high and with an oldstyle Underwood typewriter swung out from its side. She got up quickly, faced me, and dropped that odd curtsy.

`Welcome, Saint Alexander! We are honored by your call. Saint Peter will be with you soon. Will you be seated? May we offer you refreshment? A glass of wine? A Coca-Cola?'

'Say, I would really enjoy a Coca-Cola! I haven't had, one since I was on earth.'

'A Coca-Cola, right away.' She smiled. 'I'll tell you a secret. Coca-Cola is Saint Peter's one vice. So we always have them on ice here.'

A voice came out of the air above her desk—a strong' resonant baritone of the sort I think of as a good preaching voice—a voice like that of 'Bible' Barnaby, may his name be blessed. 'I heard that, Charlie. Let him have his Coke in here; I'm free now.'

'Were you eavesdropping again, Boss?'

'None of your lip, girl. And fetch one for me, too.'

Saint Peter was up and striding toward the door with his hand out as I was ushered in. I was taught in church history that he was believed to have been about ninety when he died. Or when he was executed (crucified?) by the, Romans, if he was. (Preaching has always been a chancy vocation, but in the days of Peter's ministry it was as chancy as that of a Marine platoon sergeant.)

This man looked to be a strong and hearty sixty, or possibly seventy—an outdoor man, with a permanent' suntan and the scars that come from sun damage. His hair and beard were full and seemed never to have been cut, streaked with grey but not white, and (to my surprise) he appeared to have been at one time a redhead. He was well muscled and broad shouldered, and his hands were calloused, as I learned when he gripped my hand. He was dressed in sandals, a brown robe of coarse wool, a halo like mine, and a dinky little skullcap resting in the middle of that fine head of hair.

I liked him on sight.

He led me around to a comfortable chair near his desk chair, seated me before he sat back down. Sister Marie Charles was right behind us with two Cokes on a tray, in the familiar pinchwaist bottles and with not-so-familiar (I had not seen them for years) Coke 'glasses with the tulip tops and the registered trademark. I wondered who had the franchise in Heaven and how such business matters were handled.

He said, 'Thanks, Charlie. Hold all calls.'

'Even?'

'Don't be silly. Beat it.' He turned to me. 'Alexander, I try to greet each newly arrived saint personally. But somehow I missed you.'

'I arrived in the middle of a mob, Saint Peter. Those from the Rapture. And not at this gate. Asher Gate.'

'That accounts for it. A busy day, that one, and we still aren't straightened out. But a Saint should be escorted to the main gate...by twenty-four angels and two trumpets. I'll have to look into this.'

'To be frank, Saint Peter,' I blurted out, 'I don't think I am a saint. But I can't get this fancy halo off.'

I He shook his head. 'You are one, all right. And don't let your misgivings gnaw at you; no saint ever knows that he is one, he has to be told. It is a holy paradox that anyone who thinks he is a saint never is. Why, when I arrived here and they handed me the keys and told me I was in charge, I didn't believe it. I thought the Master was playing a joke on me in return for a couple of japes I pulled on Him back in the days when we were barnstorming around the Sea of Galilee. Oh, no! He meant it. Rabbi Simon bar Jona the old fisherman was gone and I've been' Saint Peter ever since. As you are Saint Alexander, like it or not. And you will like it, in time.'

He tapped on a fat file folder lying on his desk. 'I've been reading your record. There is no doubt about your sanctity. Once I reviewed your record I recalled your trial. Devil's Advocate against you was Thomas Aquinas; he came up to me afterwards and told me that his attack was pro forma, as there had never been, any doubt in his mind but what you qualified. Tell me, that first miracle, ordeal by fire—did your faith ever waver?'

'I guess it did. I got a blister out of it.'

Saint Peter snorted. 'One lonely blister! And you don't think you qualify. Son, if Saint Joan had had faith as firm as yours, she would have quenched the fire that martyred her'. I know of—´

Sister Marie Charles' voice announced, 'Saint Alexander's wife is here.'

'Show her in!' To me he added, 'Tell you later'.'

I hardly heard him; my heart was bursting.

The door opened; in walked Abigail.

I don't know how to describe the next few minutes. Heartbreaking disappointment coupled with embarrassment summarizes it.

Abigail looked at me and said severely, 'Alexander, what in the world are you doing wearing that preposterous halo? Take it off instantly!'

Saint Peter rumbled, 'Daughter, you are not "in the world"; you are in my private office. You will not speak to Saint Alexander that way.'

Abigail turned her gaze to him, and sniffed. 'You call him a saint? And didn't your mother teach you to stand up for ladies? Or are saints exempt from such niceties?'

'I do stand up, for ladies. Daughter, you will address me, with respect. And you will speak to your husband with the respect a wife owes her husband.'

'He's not my husband!'

'Eh?' Saint Peter looked from her to me, then back. 'Explain yourself.'

'Jesus said, "For in the resurrection they neither marry, nor are given in marriage, but are as the angels." So there! And He said it again in Mark twelve, twenty-five.'

'Yes,' agreed Saint Peter, 'I heard Him say it. To the Sadducees. By that rule you are no longer a wife.'

'Yes! Hallelujah! Years I have waited to be rid of that clod—be rid of him without sinning.'

'I'm unsure about the latter. But not being a wife does not relieve you of the duty to speak politely to this saint who was once your husband.' Peter turned again to me. 'Do You wish her to stay?'

'Me? No, no! There's been a mistake.'

`So it appears. Daughter, you may go.'

'Now you just wait! Having come all this way, I have things I've been planning to tell you. Perfectly scandalous goings-on I have seen around here. Why, without the slightest sense of decency --

`Daughter, I dismissed you. Will you walk out on your own feet? Or shall I send for two stalwart angels and have you thrown out?'

'Why, the very idea! I was just going to say—´

'You are not going to say!'

'Well, I certainly have as much right to speak my mind as anyone!'

'Not in this office. Sister Marie Charles!'

'Yes, sir!'

'Do you still remember the judo they taught you when you were working with the Detroit police?'

'I do!'

'Get this yenta out of here.'

The tall nun grinned and dusted her hands together. What happened next happened so fast that I can't describe it. But Abigail left very suddenly.

Saint Peter sat back down, sighed, and picked up his Coke. 'That woman would try the patience of Job. How long were you married to her?´

'Uh, slightly over a thousand years.'

'I understand you. Why did you send for her?'

'I didn't. Well, I didn't intend to.' I started to try to explain.

He stopped me. 'Of course! Why didn't you say that you were searching for your concubine? You misled Mary Rose. Yes, I know whom you mean: the zaftig shiksa who runs all through the latter part of your dossier. Very nice girl, she seemed to me. You are looking for her?'

'Yes, surely. The day of the Trump and the Shout we were snatched up together. But that whirlwind, a real Kansas twister, was so violent that we were separated.'

'You inquired about her before. An inquiry relayed from the information booth by the River.'

'That´s right.'

'Alexander, that inquiry is the last entry in your file. I can order the search repeated...but I can tell you ahead of time that it will be useful only to assure you. The answer, will be the same: She is not here.'

He stood up and came around to put a hand on my shoulder. 'This is a tragedy that I have seen repeated endlessly. A loving couple, confident of eternity together: One comes here, the other does not. What can I do? I wish I could do something. I can't.'

'Saint Peter, there has been a mistake!'

He did not answer.

'Listen to me! I know! She and I were side by side, kneeling at the chancel rail, praying...and just before the Trump and the Shout the Holy Ghost descended on us and we were in a perfect state of grace and were snatched up together. Ask Him! Ask Him! He will listen to you.'

Peter sighed again. 'He will listen to anyone, in any of His Aspects. But I will inquire.' He picked up a telephone instrument so old-fashioned that Alexander Graham Bell could have assembled it. 'Charlie, give me the Spook. Okay, I'll wait. Hi! This is Pete, down at the main gate. Heard any new ones? No? Neither have I Listen, I got a problem. Please run Yourself back to the day of the Shout and the Trump, when You, in Your aspect as Junior, caught up alive all those incarnate souls who were at that moment in a state of grace. Place Yourself outside a wide place in the road called Lowell, Kansas—that's in North America—and at a tent meeting, a revival under canvas. Are You there? Now, at least a few femtoseconds before the Trump, it is alleged by one Alexander Hergensheimer, now canonized, that You descended on him and is beloved concubine Margrethe. She is described as about three and a half cubits tall, blonde, freckled, eighty mina—Oh, You do? Oh. Too late, huh? I was afraid of that. I'll tell him.'

I interrupted, whispering urgently, 'Ask Him where she is!´

'Boss, Saint Alexander is in agony. He wants to know where she is. Yes, I'll tell him.' Saint Peter hung up. 'Not in Heaven, not on earth. You can figure out the answer yourself And I'm sorry. --

I, must state that Saint Peter was endlessly patient with me. He assured me that I could talk with any One of the Trinity...but reminded me that, in consulting the Holy Ghost we had consulted all of Them. Peter had fresh searches made of the Rapture list, the graves-opened list, and of the running list of all arrivals since then—while telling me that no computer search could conceivably deny the infallible answers of God Himself speaking as the Holy Ghost...which I understood and agreed with, while welcoming new searches.

I said, 'But how about on earth? Could she be alive somewhere there? Maybe in Copenhagen?'

Peter answered, 'Alexander, He is as omniscient on earth as He is in Heaven. Can't you see that?'

I gave a deep sigh. 'I see that. I've been dodging the obvious. All right, how do I get from here to Hell?'

'Alec! Don't talk that way!'

'The hell I won't talk that way! Peter, an eternity here without her is not an eternity of bliss; it is an eternity of boredom and loneliness and grief. You think this damned gaudy halo means anything to me when I know—yes, you´ve convinced me!—that my beloved is burning in the Pit? I didn't ask much. Just to be allowed to live with her. I was willing to wash dishes forever if only I could see her smile, hear her voice, touch her hand! She's been shipped on a technicality and you know it! Snobbish, bad-tempered angels get to live here without ever doing one, lick to deserve it. But my Marga, who is a real angel if one ever lived, gets turned down and sent to Hell to everlasting torture on a childish twist in the rules. You can tell the Father and His sweettalking Son and that sneaky Ghost, that they can take their gaudy Holy City and shove it! If Margrethe has to be in Hell, that's where I want to be!'

Peter, was saying, 'Forgive him, Father; he's feverish, with grief—he doesn't know what he is saying.'

I quieted down a little. 'Saint Peter, I know exactly what I am saying. I don't want to stay here. My beloved is in Hell, so that is where I want to be. Where I must be.'

'Alec, you'll get over this.'

'What you don't see is that I don't want to get over this. I want to be with my love and share her fate. You tell me she's in Hell—´

'No, I told you that it is certain that she is not in Heaven and not on earth.'

'Is there a fourth place? Limbo, or some such?'

'Limbo is a myth. I know of no fourth place.'

'Then I want to leave here at once and look all over Hell for her. How?'

Peter shrugged.

'Damn it, don't give me a run-around! That's all I've been handed since the day I walked through the fire—one run-around after another. Am I a prisoner?.

'No.

'Then tell me how to go to Hell.'

'Very well. You can't wear that halo to Hell. They wouldn't let you in.´

'I never wanted it. Let's go!´

'Not long after that I stood on the threshold of Judah Gate, escorted there by two angels. Peter did not say goodbye to me; I guess he was disgusted. I was sorry about that; I liked him very much. But I could not make him understand that Heaven was not Heaven to me without Margrethe.

I paused at the brink. 'I want you to take one message back to Saint Peter—´

They ignored me, grabbed me from both sides, and tossed me over.

I fell.

And fell.

Chapter 24

Oh that I knew where I might find him! that I might come even to his seat!

I would order my cause before him, and fill my mouth with arguments.

Job 23:3-4

AND STILL I fell.

For modern man one of the most troubling aspects of eternity lies in getting used to the slippery quality of time. With no clocks and no calendars and lacking even the alternation of day and night, or the phases of the moon, or the pageant of seasons, duration becomes subjective and 'What time is it?' is a matter of opinion, not of fact.

I think I fell longer than twenty minutes; I do not think that I fell as long as twenty years.

But don't risk any money on it either way.

There was nothing to see but the insides of my eyeballs. There was not even the Holy City receding in the distance.

Early on, I tried to entertain myself by reliving in memory the happiest times in my life—and found that happy memories made me sad. So I thought about sad occasions and that was worse. Presently I slept. Or I think I did. How can you tell when you are totally cut off from sensation? I remember reading about one of those busybody 'scientists' building something he called a 'sensory deprivation chamber'. What he achieved was a thrill-packed three-ring circus compared with the meager delights of falling from Heaven to Hell.

My first intimation that I was getting close to Hell was the stink. Rotten eggs. H2S Hydrogen, sulfide. The stench of burning brimstone.

You don't die from it, but small comfort that may be, since those who encounter this stench are dead when they whiff it. Or usually so; I am not dead. They tell of other live ones in history and literature—Dante, Aeneas, Ulysses, Orpheus. But weren't all of those cases fiction? Am I the first living man to go to Hell, despite all those yarns?

If so, how long will I stay alive and healthy? Just long enough to hit the flaming surface of the Lake?—there to go psst! and become a rapidly disappearing grease spot? Had my Quixotic gesture been just a wee bit hasty? A rapidly disappearing grease spot could not be much help to Margrethe; perhaps I should have stayed in Heaven and bargained. A saint in full-dress halo picketing the Lord in front of His Throne might have caused Him to reverse His decision...since His decision it had to be, L. G. Jehovah being omnipotent.

A bit late to think of it, boy! You can see the red glow on the clouds now. That must be boiling lava down there. How far down? Not far enough! How fast am I falling? Too fast!

I can see what the famous Pit is now: the caldera of an incredibly enormous volcano. Its walls are all around me, miles high, yet the flames and the molten lava are still a long, long way below me. But coming up fast! How are your miracle-working powers today, Saint Alec? You coped with that other fire pit with only a blister; think you can handle this one? The difference is only a matter of degree.

'With patience and plenty of saliva the elephant deflowered the mosquito.' That job was just a matter of degree, too; can you do as well as that elephant? Saint Alec, that was not a saintly thought; what has happened to your piety? Maybe it's the influence of this wicked neighborhood. Oh, well, you no longer need worry about sinful thoughts; it is too late to worry about any sin. You no longer risk going to Hell for your sins; you are now entering Hell—you are now in Hell. In roughly three seconds you are going to be a grease spot. 'Bye, Marga my own! I'm sorry I never managed to get you that hot fudge sundae. Satan, receive my soul; Jesus is a fink --

They netted me like a butterfly. But a butterfly would have needed asbestos wings to halve been saved the way I was saved; my pants were smoldering. They threw a bucket of water over me when they had me on the bank.

'Just sign this chit.'

'What chit?' I sat up and looked out at the flames.

'This chit.' Somebody was holding a piece of paper under my nose and offering me a pen.

'Why do you want me to sign it?'

'You have to sign it. It acknowledges that we saved you from the burning Pit.'

`I want to see a lawyer. Meanwhile I won't sign anything.' The last time I was in this fix it got me tied down, washing dishes, for four months. This time I couldn't spare four months; I had to get busy at once, searching for Margrethe.

'Don't be stupid. Do you want to be tossed back into that stuff?'

A second voice said, 'Knock it off, Bert. Try telling him the truth.'

('Bert?' I thought that first voice was familiar!) 'Bert! What are you doing here?' My boyhood chum, the one who shared my taste in literature. Verne and Wells and Tom Swift—'garbage', Brother Draper had called it.

The owner of the first voice looked at me more closely. 'Well, I'll be a buggered baboon. Stinky Hergensheimer!'

'In the flesh.'

'I'll be eternally damned. You haven't changed much. Rod, get the net spread again; this is the wrong fish. Stinky, you've cost us a nice fee; we were fishing for Saint Alexander.'

`Saint who?'

'Alexander. A Mick holy ^an who decided to go slumming. Why he didn't come in by a Seven-Forty-Seven God only knows; we don't usually get carriage trade here at the Pit. As may be, you've probably cost us a major client by getting in the way just when this saint was expected and you ought to pay us for that.'

"How about that fin you owe me?'

`Boy, do you have a memory! That's outlawed by the statute of limitations.'

'Show it, to me in Hell's law books. Anyhow, limitations can't apply; you never answered me when I tried to collect. So it's five bucks, compounded quarterly at six percent, for...how many years?'

'Discuss it later, Stinky. I've got to keep an eye out for this saint.'

'Bert.'

'Later, Stinky.'

'Do you recall my right name? The one my folks gave me?'

'Why, I suppose—Alexander! Oh no, Stinky, it can´t be! Why, you almost flunked out of that backwoods Bible college, after you did flunk out of Rolla.' His face expressed pain and disbelief. 'Life can't be that unfair.'

"The Lord moves in mysterious ways, His wonders to perform." Meet Saint Alexander, Bert. Would you like me to bless you? In lieu of a fee, I mean.

´We insist on cash. Anyhow, I don't believe it.'

'I believe it,' the second man, the one Bert had called 'Rod', put in. 'And I'd like your blessing, father; I've never, been blessed by a saint before. Bert, there's nothing showing on the distant warning screen and, as you know, only one ballistic arrival was projected for this watch so this has to be, Saint Alexander.'

Can't be. Rod, I know this character. If he's a saint, I'm a pink monkey—' There was a bolt of lightning but of a cloudless sky. When Bert picked himself up, his clothes hung on him loosely. But he did not need them, as he was now covered with pink fur.

The monkey looked up at me indignantly. 'Is that any way to treat an old pal?'

'Bert, I didn't do it. Or at least I did not intend to do it. Around me, miracles just happen; I don't do them on, purpose.´

`Excuses. If I had rabies, I'd bite you.'

Twenty minutes later, we were in a booth at a lakefront bar, drinking beer and waiting for a thaumaturgist reputed, to be expert in shapes and appearances. I had been telling them why I was in Hell. 'So I've got to find her. First I've got to check the Pit; if she's in there it's really urgent.'

'She's not in there,' said Rod.

'Huh? I hope you can prove that. How do you know?'

'There's never anyone in the Pit. That's a lot of malarkey thought up to keep the peasants in line. Sure, a lot of the hoi polloi arrive ballistically, and a percentage of them used to fall into the Pit until the manager set up this safety watch Bert and I are on. But falling into the Pit doesn't do a soul any harm...aside from scaring him silly. It burns, of course, so he comes shooting out even faster than he went in. But he's not damaged. A fire bath just cleans up his allergies, if any.'

(Nobody in the Pit! No 'burning in Hell's fires throughout eternity what a shock that was going to be to Brother 'Bible' Barnaby and a lot of others whose stock in trade depended on Hell's fires. But I was not here to discuss eschatology with two lost souls; I was here to find Marga.) 'This "manager" you speak of. Is. that a euphemism for the Old One?'

The monkey—Bert, I mean—squeaked, 'If you mean Satan, say so!'

'That's who I mean.'

'Naw. Mr Ashmedai is city manager; Satan never does any work. Why should he? He owns this planet.'

This is a planet?'

'You think maybe it's a comet? Look out that window. Prettiest planet in this galaxy. And the best kept. No snakes. No cockroaches. No chiggers. No poison ivy. No tax collectors. No rats. No cancer. No preachers. Only two lawyers.'

'You make it sound like Heaven.'

"Never been there. You say you just came from there; you tell us.'

'Well...Heaven's okay, if you're an angel. It's not a planet; it's an artificial place, like Manhattan. I'm not here to plug Heaven; I'm here to find Marga.' Should I try to see this Mr Ashmedai? Or would I be better off going directly to Satan?'

The monkey tried to whistle, produced a mouselike squeak. Rod shook his head. 'Saint Alec, you keep surprising me. I've been here since 1588, whenever that was, and I've never laid eyes on the Owner. I've never thought of trying to see him. I wouldn't know how to start. Bert, what do you think?'

'I think I need another beer.'

'Where do you put it? Since that lightning hit you, you aren't big enough to put away one can of beer, let alone, three.'

'Don't be nosy and call the waiter.'

The quality of discourse did not improve, as every question I asked turned up more questions and no answers. The thaumaturgist arrived and bore off Bert on her shoulder, Bert chattering angrily over her fee —she wanted half of all his assets and demanded a contract signed in blood before she would get to work. He wanted her to accept ten percent and wanted me to pay half of that.

When they left, Rod said it was time we found a pad for me; he would take me to a good hotel nearby.

I pointed out that I was without funds. 'No problem, Saint Alec. All our immigrants arrive broke, but American Express and Diners Club and Chase Manhattan vie for the chance to extend first credit, knowing that whoever signs an immigrant first has a strong chance of keeping his business forever and six weeks past.'

'Don't they lose a lot, extending unsecured credit that way?'

'No. Here in Hell, everybody pays up, eventually. Bear in mind that here a deadbeat can't even die to avoid his debts, So just sign in, and charge everything to room service until you set it up with one of the big three.'

The Sans Souci Sheraton is on the Plaza, straight across from the Palace. Rod took me to the desk; I signed a registration card and asked for a single with bath. The desk clerk, a small female devil with cute little horns, looked at the card I had signed and her eyes widened. 'Uh, Saint Alexander?'

'I'm Alexander Hergensheimer, just as I registered. I am sometimes called "Saint Alexander", but I don't think the title applies here.'

She was busy not listening while she thumbed through her reservations. 'Here it is, Your Holiness—the reservation for your suite.'

'Huh? I don't need a suite. And I probably couldn't pay for it.'

'Compliments of the management, sir.'

Chapter 25

And he had seven hundred wives, princesses, and three hundred concubines: and his wives turned away his heart.

Kings 11:3

Shall mortal man be more just than God? shall a man be more pure than his maker?

Job 4:17

COMPLIMENTS OF the management!!' How? Nobody knew I was coming here until just before I was chucked out Judah Gate. Did Saint Peter have a hotline to Hell? Was there some sort of under-the-table cooperation with the Adversary? Brother, how that thought would scandalize the Board of Bishops back home!

Even more so, why? But I had no time to ponder it; the little devil —imp?—on duty slapped the desk bell and shouted, 'Front!'

The bellhop who responded was human, and a very attractive youngster. I wondered how he had died so young and why he had missed going to Heaven. But it was none of my business so I did not ask. I did notice one thing: While he reminded me in his appearance of a Philip Morris ad, when he walked in front of me, leading me to my suite, I was reminded of another cigarette ad—'So round, so firm, so fully packed.' That lad had the sort of bottom that Hindu lechers write poetry about—could it have been that, sort of sin that caused him to wind up here?

I forgot the matter when I entered that suite.

The living room was too small for football but large enough for tennis. The furnishings would be described as `adequate' by any well-heeled oriental potentate. The alcove called `the buttery' had a cold-table collation laid out ample for forty guests, with a few hot dishes on the end—roast pig with apple in mouth, baked peacock with feathers restored, a few such tidbits. Facing this display was a bar that was well stocked—the chief purser of Konge Knut would have been impressed by it.

My bellhop ('Call me "Pat".') was moving around, opening drapes, adjusting windows, changing—thermostats, checking towels—all of those things bellhops do to encourage a liberal tip—while I was trying to figure out how to' tip. Was there a way to charge a tip for a bellhop to room service? Well, I would have to ask Pat. I went through the bedroom (a Sabbath Day's journey!) and tracked Pat down in the bath.

Undressing. Trousers at half-mast and about to be, kicked-off. Bare bottom facing me. I called out, 'Here, lad! No! Thanks for the thought...but boys are not my weakness.'

'The'y're my weakness,' Pat answered, 'but I'm not a boy'—and turned around, facing me.

Pat was right;she was emphatically not a boy.

I stood there with my chin hanging down, while she took off the rest of her clothes, dumped them into a hamper. 'There!' she said, smiling. 'Am I glad to get out of that monkey suit! I've been wearing it since you were reported as spotted on radar. What happened, Saint Alec? Did you stop for a beer?'

'Well...yes. Two or three beers.'

'I thought so. Bert Kinsey had the watch, did he not? If the Lake ever overflows and covers this part of town with lava, Bert will stop for a beer before he runs for it. Say, what are you looking troubled about? Did I say something wrong?'

'Uh, Miss. You are very pretty—but I didn't ask for a girl, either.'

She stepped closer to me, looked up and patted my cheek. I could feel her breath on my chin, smell its sweetness. 'Saint Alec,' she said softly, 'I'm not trying to seduce you. Oh, I'm available, surely; a party girl, or two or three, comes with the territory for all our luxury suites. But I can do a lot more than make love to you.' She reached out, grabbed a bath towel, draped it around her hips. 'Ichiban bath girl, too. Prease, you rike me wark arong spine?' She dimpled and tossed the towel aside. 'I'm a number-one bartender, too. May I serve you a Danish zombie?'

'Who told you I liked Danish zombies?'

She had turned away to open a wardrobe. 'Every saint I've ever met liked them. Do you like this?' She held up a robe that appeared to be woven from a light blue fog.

'It's lovely. How' many saints have you met?'

'One. You. No, two, but the other one didn't drink zombies. I was just being flip. I'm sorry.'

'I'm not; it may be a clue. Did the information, come from a Danish girl? A blonde, about your size, about your weight, too. Margrethe, or Marga. Sometimes "Margie".'

'No. The scoop on you was in a printout I was given when I was assigned to you. This Margie—friend of yours?'

'Rather more than a friend. She's the reason I'm, in 'Hell. On Hell. In?'

'Either way. I'm fairly certain I've never met your Margie.'

'How does one go about finding another person here?. Directories? Voting lists? What?'

I've never seen either. Hell isn't very organized. It's an anarchy except for a touch of absolute monarchy on some points.'

'Do you suppose I could ask Satan?'

She looked dubious. 'There's no rule I know of that says you can't write a letter to His Infernal Majesty. But there is no rule that says He has to read it, either. I think it would be opened and read by some secretary; they wouldn't just dump, it into the Lake. I don't think they would.' She added, 'Shall we go into the den? Or are you ready for bed?'

`Uh, I think I need a bath. I know I do.'

'Good! I've never bathed a saint before. Fun!'

.'Oh, I don't need help. I can bathe myself.'

She bathed me.

She gave me a manicure. She gave me a pedicure, and tsk-tsked over my toenails—'disgraceful' was the mildest term she used. She trimmed my hair. When I asked about razor blades, she showed me a cupboard in the bath stocking eight or nine different ways of coping with beards. 'I recommend that electric razor with the three rotary heads but, if you will trust me, you will learn' that I am quite competent with an old-fashioned straight razor.'

`l'm just looking for some Gillette blades.'

'I don't know that brand but there are brand-new razors here to match all these sorts of blades.'

'No, I want my own sort. Double-edged. Stainless.'

`Wilkinson Sword, double-edged lifetime?'

'Maybe. Oh, here we are!—"Gillette Stainless—Buy Two Packs, Get One Free."

`Good. I'll shave you.'

'No, I can do it.'

A half hour later I settled back against pillows in a bed for a king's honeymoon. I had a fine Dagwood in my belly a Danish zombie nightcap in my hand, and I was wearing brand new silk pajamas in maroon and old gold. Pat took off that translucent peignoir in blue smoke that she had worn except while bathing me and got in beside me, placed a drink for herself, Glenlivet on rocks, where she could reach it.

Q said to myself, 'Look, Marga, I didn't choose this. There is only this one bed. But it's a big bed and she's not trying to snuggle up. You wouldn't want me to kick her out, would you? She's a nice kid; I don't want to hurt her feelings. I'm tired; I'm going to drink this and go right to sleep.')

I didn't go right to sleep. Pat was not the least bit aggressive. But she was very cooperative. I found one part of my mind devoting itself intensely to what Pat had to offer. (plenty!) while another part of my mind was explaining to Marga that this wasn't anything serious; I don't love her; I love you and only you and always will...but I haven't been able to sleep and --

Then we slept for a while. Then we watched a living hollowgram that Pat said was 'X rated'. and I learned about things I had never heard of, but it turned out that, Pat had and could do them and could teach me, and this time I paused just long enough to tell Marga I was learning them for both of us, then I turned my whole attention to learning.

Then we napped again.

It was some time later that Pat reached out and touched my shoulder. 'Turn over this way, dear; let me see your face. I thought so. Alec, I know you're carrying the torch for your sweetheart; that's why I'm here: to make it easier. But I can't if you won't try. What did she do for you that I haven't done and can't do? Does she have that famous lefthand thread? Or what? Name it, describe it. I'll do it, or fake it, or send out for it. Please, dear. You're beginning to hurt my professional pride.'

'You're doing just fine.' I patted her hand.

'I wonder. More girls like me, maybe, in various flavors? Drown you in tits?—chocolate, vanilla, strawberry, tutti-frutti. "Tutti-frutti"--hmm...Maybe you'd like a San. Francisco sandwich? Or some other Sodom-and-Gomorrah fancy? I have a male friend from Berkeley who isn't all that male; he has a delicious, playful imagination; I've teamed with him many times. And he has on call others like him; he's a member of both Aleister Crowley Associates and Nero's Heroes and Zeroes. If you fancy a mob scene, Donny and I can cast it any way you like, and the Sans Souci will orchestrate it to suit your taste. Persian Garden, sorority house, Turkish harem, jungle drums with obscene rites, nunnery—"Nunnery"—did I tell you what I did before I died?'

`I wasn't certain had died.'

'Oh, certainly. I'm not an imp faking human; I'm human. You don't think anyone could get a job like this without human experience, do you? You have to be human right down to your toes to please a fellow human most; that stuff about the superior erotic ability of succubi is just their advertising. I was a nun, Alec, from adolescence to death, most of it spent teaching grammar and arithmetic to children who didn't want to learn.

'I soon learned that my vocation had not been a true one. What I did not know was how to get out of it. So I stayed. At about thirty I discovered just how miserably, awful my mistake had been; my sexuality reached maturity. Mean to say I got horny, Saint Alec, and stayed horny and got more so every year.

'The worst thing about my predicament was not that I was subjected to temptation but that I was not subjected to temptation—as I would have grabbed any opportunity. Fat chance! My confessor might have looked upon me with lust had I been a choir boy—as it was, he sometimes snored while I was confessing. Not surprising; my sins were dull, even to me.'

'What were your sins, Pat?'

'Carnal thoughts, most of which I did not confess. Not being forgiven, they went straight into Saint Peter's computers. Blasphemous adulterous fornication.'

Huh? Pat, you have quite an imagination.'

'Not especially, just horny. You probably don't know just how hemmed in a nun is. She is a bride of Christ; that's the contract. So even to think about the joys of sex makes of her an adulterous wife in the worst possible way.'

'Be darned. Pat, I recently met two nuns, in Heaven. Both seemed like hearty wenches, one especially. Yet there they were.'

'No inconsistency. Most nuns confess their sins regularly, are forgiven. Then they usually die in the bosom of their Family, with its chaplain or confessor at hand. So gets the last rites with her sins all forgiven and she's shipped straight to Heaven, pure as Ivory soap.

'But not me!' She grinned. 'I'm being punished for my sins and enjoying every wicked minute of it. I died a virgin in 1918, during the big flu epidemic, and so many died so fast that no priest got to me in time to grease me into Heaven. So I wound up here. At the end of my thousand year apprenticeship—´

'Hold it! You died in 1918?'

'Yes. The great Spanish Influenza epidemic. Born in 1878, died in 1918, on my fortieth birthday. Would you prefer for me to look forty? I can, you know.'

'No, you look just fine. Beautiful.'

'I wasn't sure. Some men—Lots of eager mother humpers around here and most of them never got a chance to do it while they were alive. It's one of my easier entertainments. I simply lead you into hypnotizing yourself, you supply the data. Then I look and sound exactly like your mother. Smell like her, too. Everything. Except that I am available to you in ways that your mother probably was not.—'

'Patty, I don't even like my mother!'

'Oh. Didn't that cause you trouble at Judgment Day?'

'No. That's not in the rules. It says in the Book that you must honor thy father and thy mother. Not one word about loving them. I honored her, all the full protocol. Kept her picture on my desk. A letter every week. Telephoned her on her birthday. Called on her in person as my duties permitted. Listened to her eternal bitching and to her poisonous gossip about her women friends. Never contradicted her. Paid her hospital bills. Followed her to her grave. But weep I did not. She didn't like me and I didn't like her. Forget my mother! Pat, I asked you a question and you changed the subject.'

'Sorry, dear. Hey, look what I've found!'

'Don't change the subject again; just keep it warm in your hand while you answer my question. You said something about your "thousand-year apprenticeship".'

'Yes?'

'But you said also that you died in 1918. The Final Trump sounded in 1994—I know; I was there. That's only seventy-six years later than your death. To me that Final Trump seems like only a few days ago, about a month, no more. I ran across something that seemed to make it seven years ago. But that still isn't over nine hundred, the best part of a thousand years. I'm not a spirit, I'm a living body. And I'm not Methuselah.' (Damn it, is Margrethe separated from me by a thousand years? This isn't fair!)

'Oh. Alec, in eternity a thousand years isn't any particular time; it is simply a long time. Long enough in this case to test whether or not I had both the talent and the disposition for the profession. That took quite a while because, while I was horny enough—and stayed that way; almost any guest can send me right through the ceiling as you noticed—I had arrived here knowing nothing about sex. Nothing! But I did learn and eventually Mary Magdalene gave me high marks and recommended me for permanent appointment.'

'Is she down here?'

'Oh. She's a visiting professor here; she's on the permanent faculty in Heaven.'

'What does she teach in Heaven?'

'I have no idea but it can't be what she teaches here. Or I don't think so. Hmm. Alec, she's one of the eternal greats; she makes her own rules. But this time you changed the subject. I was trying to tell you that I don't know how long my apprenticeship lasted because time is whatever you want it to be. How long have you and I been in bed together?'

'Uh, quite a while. But not long enough. I think it must be near midnight.'

'It's midnight if you want it to be midnight. Want me to get on top?'

The next morning, whenever that was, Pat and I had breakfast on the balcony looking out over the Lake. She was dressed in Marga's favorite costume, shorts tight and' short, and a halter with her breasts tending to overflow their bounds. I don't know when she got her clothes, but my pants and shirt had been cleaned and repaired in the night and my underwear and socks washed—in Hell there seem to be busy little imps everywhere. Besides, they could have driven a flock of geese through our bedroom the latter part of the night without disturbing me.

I looked at Pat across the table, appreciating her wholesome, girl-scout beauty, with her sprinkle of freckles across her nose, and thought how strange it was that I had ever confused sex with sin. Sex can involve sin, surely any human act can involve cruelty and injustice. But sex alone held no taint of sin. I had arrived here tired, confused, and unhappy—Pat had first made me happy, then caused me to rest, then left me happy this lovely morning.

Not any less anxious to find you, Marga my own—but in much better shape to push the search.

Would Margrethe see it that way?

Well, she had never seemed jealous of me.

How would I feel if she took a vacation, a sexual vacation, such as I had just enjoyed? That's a good question. Better think about it, boy—because sauce for the goose is not a horse of another color.

I looked out over the Lake, watched the smoke rise and the flames throwing red lights on the smoke...while right and left were green and sunny early summer sights, with snow-tipped mountains in the far distance. Pat—'

'Yes, dear?'

'The Lake bank can't be more than a furlong from here. But I can't smell any brimstone.'

'Notice how the breeze is blowing those banners? From anywhere around the Pit the wind blows toward the Pit. There it rises—incidentally slowing any soul arriving ballistically—and then on the far side of the globe there is a corresponding down draft into a cold pit where the hydrogen sulfide reacts with oxygen to form water and sulfur. The sulfur is deposited; the water comes out as water vapor, and returns. The two pits and this circulation control the weather here somewhat the way the moon acts as a control on earth weather. But gentler.'

I was never too hot at physical sciences...but that doesn't sound like the natural laws I learned in school.'

'Of course not. Different Boss here. He runs this planet to suit himself.'

Whatever I meant to answer got lost in a mellow gong played inside the suite. 'Shall I answer, sir?'

'Sure, but how dare you call me "sir"? Probably just room service. Huh?´

'No, dear Alec, room service will just come in when they see that we are through.' She got up, came back quickly with an envelope. 'Letter by Imperial courier. For 'You, dear.'

Me?' I accepted it gingerly, and opened it. An embossed seal at the top: the conventional Devil in red, horns, hooves, tail, pitchfork, and standing in flames. Below it:

Saint Alexander Hergensheimer

Sans Souci Sheraton

The Capital

Greetings:

In,response to your petition for an audience with His Infernal Majesty, Satan Mekratrig, Sovereign of Hell and His Colonies beyond, First of the Fallen Thrones, Prince of Lies, I have the honour to advise you that His Majesty requires you to substantiate your request by supplying to this office a full and frank memoir of your life. When this has been done, a decision on your request will be made.

May I add to His Majesty's message this advice: Any attempt to omit, slur over, or color in the belief that you will thereby please His Majesty will not please Him.

I have the honour to remain, Sincerely His,

(s) Beelzebub Secretary to His Majesty

I read it aloud to Pat. She blinked her eyes and whistled. 'Dear, you had better get busy!'

`I—´ The paper burst into flames; I dropped it into the dirty dishes. 'Does that always happen?'

'I don't know; it's' the first time I've ever seen a message from Number One. And the first time I've heard of anyone being even conditionally granted an audience.'

'Pat. I didn't ask for an audience. I planned to find out how to do so today. But I have not put in the request this answers.'

'Then you must put in the request at once. It wouldn't do to let it stay unbalanced. I'll help dear—I'll type it for you.'

The imps had been around again. In one corner of that vast living room I found that they had installed two desks, one a writing desk, with stacks of paper and a tumbler of pens, the other a more complex setup. Pat went straight to that one. 'Dear, it looks like I'm still assigned to you. I'm your secretary now. The latest and best Hewlett-Packard equipment—this is going to be fun! Or do you know how to type?'

'I'm, afraid not.'

'Okay, you write it longhand; I'll put it into shape...and correct your spelling and your grammar—you just whip it out. Now I know why I was picked for this job. Not my girlish smile, dear—my typing. Most of, my guild can't type. Many of them took up whoring because shorthand and typing were too much for them. Not me. Well, let's get to work; this job will run days, weeks, I don't know. Do you want me to continue to sleep here?'

'Do you want to leave?'

'Dear, that's the guest's decision. Has to be.'

'I don't want you to leave.' (Marga! Do please understand!)

'Good thing you said that, or I would have burst into tears. Besides, a good secretary should stick around in case something comes up in the night.'

'Pat, that was an old joke when I was in seminary.'

'It was an old joke before you were born, dear. Lets get to work.'

Visualize a calendar (that I don't have), its pages ripping off in the wind. This manuscript gets longer and longer but Pat insists that Prince Beelzebub's advice must be taken literally. Pat makes two copies of all that I write; one copy stacks up on my desk, the other copy disappears each night. Imps again. Pat tells me that I can assume that the vanishing copy is going to the Palace, at least as far as the Prince's desk...so what I am doing so far must be, satisfactory.

In less than two hours each day Pat types out and prints out what takes me all day to write. But I stopped driving so hard when a handwritten note came in:

You are working too hard. Enjoy yourself. Take her to the theater. Go on a picnic. Don't be so wound up.

(s)B.

The note self-destroyed, so I knew it was authentic. So I obeyed. With pleasure! But I am not going to describe the fleshpots of Satan's capital city.

This morning I finally reached that odd point where I was (am) writing now about what is going on now—and I hand my last page to Pat.

Less than an hour after I completed that line above, the gong sounded; Pat went out into the foyer, hurried back. She put her arms around me. 'This is goodbye, dear. I won't be seeing you again.'

'What!'

'Just that, dear. I was told this morning that my assignment was ending. And I have something I must tell you.

You will find, you are bound to learn, that I have been reporting on you daily. Please don't be angry about it. I am a professional, part of the Imperial security staff.'

'Be damned! So every kiss, every sigh, was a fake.'

'Not one was a fake! Not one! And, when you find your Marga, please tell her that I said she is lucky.'

'Sister Mary Patricia, is this another lie?'

'Saint Alexander, I have never lied to you. I've had to hold back some things until I was free to speak, that's all.' She took her arms from around me.

'Hey! Aren't you going to kiss me goodbye?'

'Alec, if you really want to kiss me, you won't ask.'

I didn't ask; I did it. If Pat was faking, she's a better actress than I think she is.

Two giant fallen angels were waiting to take me to the Palace.

They were heavily armed and fully armored. Pat had packaged my manuscript and told me that I was expected to bring it with me. I started to leave—then stopped most suddenly. 'My razor!'

'Check your pocket, dear.'

'Huh? How'd it get there?'

'I knew you weren't coming back, dear.'

Again I learned that, in the company of angels, I could fly. Out my own balcony, around the Sans Souci Sheraton, across the Plaza, and we landed on a third-floor balcony of Satan's Palace. Then through several corridors, up a flight of stairs with lifts too high to be comfortable for humans. When I stumbled, one of my escorts caught me, then steadied me until we reached the top, but said nothing—neither ever said anything.

Great brass doors, as complex as the Ghiberti Doors, opened. I was shoved inside.

And saw Him.

A dark and smoky hall, armed guards down both sides, a high throne, a Being on it, at least twice as high as a man...a Being that was the conventional Devil such as YOU see on a Pluto bottle or a deviled-ham tin—tail and horns and fierce eyes, a pitchfork in lieu of scepter, a gleam from braziers glinting off Its dark red skin, sleek muscles. I had to remind myself that the Prince of Lies could look any way He wished; this was probably to daunt me.

His voice rumbled out like a foghorn: 'Saint Alexander, you may approach Me.'

Chapter 26

I am a brother to dragons, and a companion to owls.
Job 30:29

I STARTED up the steps leading to the throne. Again, the lifts were too high, the treads too wide, and now I had no one to steady me. I was reduced to crawling up those confounded steps while Satan looked down at me with a sardonic smile. From all around came music from an unseen source, death music, vaguely Wagnerian but nothing I could identify. I think it was laced with that below-sonic frequency that makes dogs howl, horses run away, and causes men to think of flight or suicide.

That staircase kept stretching.

I didn't count the number of steps when I started up, but the flight looked to be about thirty steps, no more. When I had been crawling up it for several minutes, I realized that it looked as high as ever. The Prince of Lies!

So I stopped and waited.

Presently that rumbling voice said, 'Something wrong,' Saint Alexander?'

'Nothing wrong,' I answered, 'because You planned it this way. If You really want me to approach You, You will turn off the joke circuit. In the meantime there is no point in my trying to climb a treadmill.'

'You think I am doing that to you?'

'I know that You are. A game. Cat and mouse.'

'You are trying to make a fool of Me, in front of My gentlemen.'

'No, Your Majesty, I cannot make a fool of You. Only You can do that.'

`Ah so. Do you realize that I can blast you where you stand?'

'Your Majesty, I have been totally in Your power since I entered Your realm. What do You wish of me? Shall I continue trying to climb Your treadmill?'

'Yes.'

'So I did, and the staircase stopped stretching and the treads reduced to a comfortable seven inches. In seconds I reached the same level as Satan—the level of His cloven feet, that is. Which put me much too close to Him. Not only was His Presence terrifying—I had to keep a close grip on myself—but also He stank! Of filthy garbage cans, of rotting meat, of civet and skunk, of brimstone, of closed rooms and gas from diseased gut—all that and worse. I said to myself, Alex Hergensheimer, if you let Him prod you into throwing up and thereby kill any chance of getting you and Marga back together—just don't do it! Control yourself!

'The stool is for you,' said Satan. 'Be seated.'

Near the throne was a backless stool, low enough to destroy the dignity of anyone who sat on it. I sat.

Satan picked up a manuscript with a hand so big that the business-size sheets were like a deck of cards in His hand. 'I've read it. Not bad. A bit wordy but My editors will cut it—better that way than too brief. We will need an ending for it...from you or by a ghost. Probably the latter; it needs more impact than you give it. Tell me, have you ever thought of writing for a living? Rather than preaching?'

'I don't think I have the talent.'

'Talent shmalent. You should see the stuff that gets published. But you must hike up those sex scenes; today's cash customers demand such scenes wet. Never mind that now; I didn't call you here to discuss your literary style and its shortcomings. I called you in to make you an offer.'

I waited. So did He. After a bit He said, 'Aren't curious about the offer?'

'Your Majesty, certainly I am. But, if my race has learned one lesson, concerning You, it is that a human should be extremely cautious in bargaining with You.´

He I chuckled and the foundations shook. 'Poor 'little human, did you really think that I wanted to your scrawny soul?'

'I don't know what You want. But I'm not as smart as Dr Faust, and not nearly as smart as Daniel Webster. It behooves me to be cautious.'

'Oh, come! I don't want your soul. There's no for souls today; there are far too many of them and quality, is way down. I can pick them up at a nickel a bunch, like radishes. But I don't; I'm overstocked. No, Saint Alexander, I wish to retain your services. Your professional services.'

(I was suddenly alarmed. What's the catch? Alex, this is loaded! Look behind you! What's He after?) 'You need a dishwasher?'

He chuckled again, about 4.2 on the Richter scale. 'No, no, Saint Alexander! Your vocation—not the exigency to which you were temporarily reduced. I want to hire you as a gospel-shouter, a Biblethumper. I want you to work the Jesus business, just as you were trained to. You won't have to raise money or pass the collection plate; the salary will be ample and the duties light. What do you say?'

'I say You are trying to trick me.'

'Now that's not very kind. No tricks, Saint Alexander. You will be free to preach exactly as you please, no restrictions. Your title will be personal chaplain to Me', and Primate of Hell. You can devote the rest of your time as little or as much as you wish—to saving lost souls...and there are plenty of those here. Salary to be negotiated but not less than the incumbent, Pope Alexander the Sixth, a notoriously greedy soul. You*won't be pinched, I promise you. Well? How say you?'

`(Who's crazy? The Devil, or me? Or am I having another of those nightmares that have been dogging me lately?) 'Your Majesty, You have not mentioned anything I want.´

'Ah so? Everybody needs money. You're broke; you can´t stay in that fancy suite another day without finding a job.´ He tapped the manuscript. 'This may bring in something, some day. Not soon. I'm not going to advance you anything on it; it might not sell. There, are too many I-Was-a-Prisoner-of-the-Evil-King extravaganzas on the market already these days.'

'Your Majesty, You have read my memoir; You know what I want.'

'Eh? Name it.'

'You know. My beloved. Margrethe Svensdatter Gunderson.'

He looked surprised. 'Didn't I send you a memo about that? She's not in Hell.'

I felt like a patient who has kept his chin up right up to the minute the biopsy comes back...and then can't accept the bad news. 'Are You sure?'

'Of course I am. Who do you think is in charge around here?'

(Prince of Liars, Prince of Lies!) 'How can You be sure? The way I hear it, nobody keeps track. A person could be in Hell for years and You would never know, one way or the other.'

'If that's the way you heard it, you heard wrong. Look, if you accept My offer, you'll be able to afford the best agents in history, from Sherlock Holmes to J. Edgar Hoover, to search all over Hell for you. But you'd be wasting your money; she is not in My jurisdiction. I'm telling you officially.'

I hesitated. Hell is a big place; I could search it* by myself throughout eternity and I might not find Marga. But plenty of money (how well I knew it!) made hard things easy and impossible things merely difficult.

However—Some of the things I had done as executive deputy of C.U.D. may have been a touch shoddy (meeting a budget isn't easy), but as an ordained minister I had never hired out to the Foe. Our Ancient Adversary. How can a minister of Christ be chaplain to Satan? Marga darling, I can't.

`No.´

'I can't hear you. Let Me sweeten the deal. Accept and I assign My prize female agent Sister Mary Patricia to you permanently. She'll be your slave—with the minor reservation that you must not sell her. However, you can rent her out, if you wish. How say you now.

'No.'

'Oh, come, come! You ask for one female; I offer you a better one. You can't pretend not to be satisfied with Pat; you've been shacked up with her for weeks. Shall I play back some of the sighs and moans?'

'You unspeakable cad!'

'Tut, tut, don't be rude to Me in My own house. You know and I know and we all know that there isn't any great difference between one female and another—save possibly in their cooking. I'm offering you one slightly, better in place of the one you mislaid. A year from now you'll thank Me. Two years from now you'll wonder why you ever fussed. Better accept, Saint Alexander; it is the best offer you can hope for, because, I tell you solemnly, that Danish zombie you ask for is not in Hell. Well?'

`No.´

Satan drummed on the arm of his throne and looked vexed. 'That's your last word?'

'Yes.'

`Suppose I offered you the chaplain job with your ice maiden thrown in?'

'You said she wasn't in Hell!'

'I did not say that I did not know where she is.'

'You can get her?'

'Answer My question. Will you accept service as My chaplain if the contract includes returning her to you?'

(Marga, Marga!) 'No.'

Satan said briskly, 'Sergeant General, dismiss the guard. You come with me.'

'Leftanright!...Hace! For´d!...Harp!'

Satan got down from His throne, went around behind it without further word to me. I had to hurry to catch up with His giant strides. Back of the throne was a long dark tunnel; I broke into a run when it seemed that He was getting away from me. His silhouette shrank rapidly against a dim light at the far end of the tunnel.

Then I almost stepped on His heels. He had not been receding as fast as I had thought; He had been changing in size. Or I had been. He and I were now much the same height. I skidded to a halt close behind Him as He reached doorway at the end of the tunnel. It was barely lighted by a red glow.

Satan touched something at the door; a white fan light came on above the door. He opened it and turned toward me. 'Come in, Alec.'

My heart skipped and I gasped for breath. Jerry! Jerry Farnsworth!'

Chapter 27

For in much wisdom is much grief; and he that increaseth knowledge increaseth sorrow.

Ecclesiastes 1:18

And Job spake, and said, Let the day perish wherein I was born, and the night in which it was said, There is a man child conceived.

Job 3:2-3

MY EYES dimmed, my head started to spin, my knees went rubbery. Jerry said sharply, 'Hey, none of that!'—grabbed me around the waist, dragged me inside, slammed the door.

He kept me from falling, then shook me and slapped my face. I shook my head and caught my breath. I heard Katie's voice: 'Let's get him in where he can lie down.'

My eyes focused. 'I'm okay. I was just taken all over queer for a second.' I looked around. We were in the foyer of the Farnsworth house.

'You went into syncope, that's What you did. Not surprising, you had a shock. Come into the family room.'

'All right. Hi, Katie. Gosh, it's good to see you.'

"You, too, dear.' She came closer, put her arm around me, and kissed me A learned again that, while Marga was my be-all, Katie was my kind of woman, too. And Pat. Marga, I wish you could have met Pat. (Marga!)

The family room seemed bare—unfinished furniture, no windows, no fireplace. Jerry said, `Katie, give us Remington number two', will you, please? I'm going to punch drinks.'

'Yes, dear.'

While they were busy, Sybil came tearing in, threw her arms around me (almost knocking me off my feet; the child is solid) and kissed me, a quick buss unlike Katie's benison. 'Mr Graham! You were terrific! I watched all of it. With Sister Pat. She thinks you're terrific, too.'

The left wall changed into a picture window looking out at mountains; the opposite wall now had a field-stone fireplace with a brisk fire that looked the same as the last time I saw it. The ceiling now was low; furniture and floor and fixtures were all as I recalled. 'Remington number two.' Katie turned away from the controls. 'Sybil, let him be, dear. Alec, off your feet. Rest.'

'All right.' I sat down. 'Uh...is this Texas? Or is it Hell?'

'Matter of opinion,' Jerry said.

'Is there a difference?' asked Sybil.

'Hard to tell,' said Katie. 'Don't worry about it now, Alec. I watched you, too, and I agree with the girls. I was proud of 'you.'

'He's a tough case,' Jerry put in. 'I didn't get a mite of change off him. Alec, you stubborn squarehead, I lost three bets on you.' Drinks appeared at our places. Jerry raised his glass. 'So here's to you.'

'To Alec!'

'Right!'

'Here's to me,' I agreed and took a big slug of Jack Daniel's. 'Jerry? You're not really—'

He grinned at me. The tailored ranch clothes faded; the western boots gave way to cloven hooves, horns stuck up through His hair, His skin glowed ruddy red and oily over heavy muscles; in His lap a preposterously huge phallus thrust rampantly skyward.

Katie said gently, 'I think You've convinced him, dear, and it's not one of Your prettier guises.'

Quickly the conventional Devil-faded and the equally convenntional Texas millionaire returned. 'That's better,' said Sybil. 'Daddy, why do You use that corny one?'

'It's an emphatic symbol. But what I'm wearing now is appropriate here. And you should be in Texas clothes, too.'

'Must I? I think Patty has Mr Graham used to skin by now.'

'Her skin, not your skin. Do it before I fry you for lunch.'

'Daddy, You're a fraud.' Sybil grew blue jeans and a halter without moving out of her chair. 'And I'm tired of being a teenager and see no reason to continue the charade. Saint Alec knows he was hoaxed.'

'Sybil, you talk too much.'

Dear One, she may be right,' Katie put in quietly.

Jerry shook His head. I sighed and said what I had to say. 'Yes, Jerry, I know I've been hoaxed. By those who I thought were my friends. And Marga's friends, too. You have been behind it all? Then who am I? Job?'

'Yes and no.'

`What does that mean...Your Majesty?'

'Alec, you need not call Me that. We met as friends. I hope we will stay friends.'

'How can we be friends? If I am Job. Your Majesty...where is my wife!'

'Alec, I wish I knew. Your memoir gave Me some clues and I have been following them. But I don't know as yet. You must be patient.'

'Uh...damn it, patient I'm not! What clues? Set me on the trail! Can't You see that I'm going out of my mind?'

'No, I can't, because you're not. I've just been grilling you. I pushed you to what should have been your breaking point, You can't be broken. However, you can't help Me search for her, not at this point.

Alec, you've got to remember that you are human...and I am not. I have powers that you can't imagine. I have limitations that you cannot imagine, too. So hold your peace and listen.

'I am your friend. If you don't believe that I am, you are free to leave My house and fend for yourself. There are jobs to be had down at the Lake front—if you can stand the reek of brimstone. You can search for Marga your own way. I don't owe you two anything as I am not behind your troubles. Believe Me.'

'Uh...I want to believe You.'

`Perhaps you'll believe Katie.'

Katie said, 'Alec, the Old One speaks sooth to you. He did not compass your troubles. Dear, did you ever bandage a wounded dog...and have the poor beastie, in its ignorance, gnaw away the dressing and damage itself still more?'

'Uh, yes.' (My dog Brownie. I was twelve. Brownie died.)

'Don't be like that poor dog. Trust Jerry. If He is to help you, He must do things beyond your ken. Would you try to direct a brain surgeon? Or attempt to hurry one?'

I smiled ruefully and reached out to pat her hand. 'I'll be good, Katie. I'll try.'

'Yes, do try, for Marga's sake.'

'I will. Uh, Jerry—stipulating that I'm merely human and can't understand everything, can You tell me anything?'

'What I can, I will. Where shall I start?'

'Well, when lasked if I was Job, You said, "Yes and no." What did You mean?'

'You are indeed another Job. With the original Job I was, I confess, one of the villains. This time I'm not.

'I'm not proud of the fashion in which I bedeviled Job. I'm not proud of the fashion in which I have so often let My Brother Yahweh maneuver Me into doing His dirty work—starting clear back with Mother Eve—and before that, in ways I cannot explain. And I've always been a sucker for a bet, any sort of a bet...and I'm not proud of that weakness, either.'

Jerry looked at the fire and brooded. 'Eve was a pretty one. As soon as I laid eyes on her I knew that Yahweh had finally cooked up a creation worthy of an Artist. Then I found out He had copied most of the design.'

'Huh? But—'

'Man, do not interrupt. Most of your errors—this MY brother actively encourages—arise from believing that your God is solitary and all powerful. In fact My Brother—and I, too, of course—is no more than a corporal in the T.O. of the Commander in Chief. And, I must add, the Great One I think of as the C-in-C, the Chairman, the

Final Power, may be a mere private to some higher Power I cannot comprehend.

'Behind every mystery lies another mystery. Infinite recession. But you don't need to know final answers—if there be such—and neither do I. You want to know what happened to you...and to Margrethe. Yahweh came to Me and offered the same wager We had made over Job, asserting that He had a follower who was even more stubborn than Job. I turned Him down. That bet over Job had not been much fun; long before it was concluded I grew tired of clobbering the poor schmo. So this time I told My Brother to take His shell games elsewhere.

'It was not until I saw you and Marga trudging along Interstate Forty, naked as kittens and just as helpless, that I realized that Yahweh had found someone else with whom to play His nasty games. So I fetched you here and kept you for a week or so—'

'What? Just one night!'

'Don't quibble. Kept you long enough to wring you dry, then sent you on your way...armed with some tips on how to cope, yes, but in fact you were doing all right on your own. You're a tough son of a bitch, Alec, so much so that I looked up the bitch you are the son of. A bitch she is and tough she was and the combo of that vixen and your sweet and gentle sire produced a creature able to survive. So I let you alone.

'I was notified that you were coming here; My spies are everywhere. Half of My Brother's personal staff are double agents.'

'Saint Peter?'

'Eh? No, not Pete. Pete is a good old Joe, the most perfect Christian in Heaven or on earth. Denied his Boss thrice, been making up for it ever since. Utterly delighted to be on nickname terms with his Master in all three of His conventional Aspects. I like Pete. If he ever has a falling out with My Brother, hes got a job here.

`Then you showed up in Hell. Do you recall an invitation I extended to you concerning Hell?'

('—look me up. I promise you some hellacious hospitality.—´) 'Yes!'

Did I deliver? Careful how you answer; Sister Pat is listening.'

'She's not listening,' Katie denied. 'Pat is a lady. Not much like some people. Darling, I can shorten this. What Alec wants to know is why he was persecuted, how he was persecuted, and what he can do about it now. Meaning Marga. Alec, the why is simple; you were picked for the same reason that a pit bull is picked to go into the pit and be torn to ribbons: because Yahweh thought you could win. The how is equally simple. You guessed right when you thought you were paranoid. Paranoid but not crazy; were indeed conspiring against you.

Every time you got close to the answer the razzle-dazzle started over again. That million dollars. Minor razzle-dazzle, that money existed only long enough to confuse you—I think that covers everything but what you can do. What you can do and all that you can do is to trust Jerry. He may fail—it's very dangerous—but He will try.'

I looked at Katie with increased respect, and some trepidation. She had referred to matters I had never mentioned to Jerry. 'Katie? Are you human? Or are you, uh, a fallen throne or something like that?'

She giggled. 'First time anyone has suspected that. I'm human, all too human, Alec love. Furthermore I'm no stranger to you; you know lots about me.'

'I do?'

'Think back. April of the year one thousand four hundred and forty-six years before the birth of Yeshua of Nazareth.'

'I should be able to identify it that way? I'm sorry; I can't.'

'Then try it this way: exactly forty years after the exodus from Egypt of the Children of Israel.'

The conquest of Canaan.

'Oh, pshaw! Try the Book of Joshua,, chapter What's my name, what's my trade; was I mother, wife, or, maid?'

(One of the best-known stories in the Bible. Her? I'm talking to her?) 'Uh...Rahab?'

'The harlot of Jericho. That's me. I hid General Joshua's spies, in my house...and thereby saved my parents and my brothers and sisters from the massacre. Now tell me I'm "well preserved".'

Sybil snickered. 'Go ahead. I dare you.'

'Gosh, Katie, you're well preserved! That's been over three thousand years, about thirty-four hundred. Hardly a wrinkle. Well, not many.'

"Not many"! No breakfast for you, young man!'

'Katie, you're beautiful and you know it. You and Margrethe tie for first place.'

'Have you looked at me?' demanded Sybil. 'I have my fans. Anyhow, Mom is over four thousand years old. A hag.'

'No, Sybil, the parting of the Red Sea was in fourteen-ninety-one BC. Add that to the date of the Rapture, nineteen-ninety-four AD. Then add seven years—´

"Alec.'

'Yes, Jerry?'

'Sybil is right. You just haven't noticed it. The thousand years of peace between Armageddon and the War in Heaven is half over. My Brother, wearing his Jesus hat, is now ruling on earth, and I am chained and cast down into the Pit for this entire thousand years.'

'You don't look chained from here. Could I have some more Jack

Daniel's?—I'm confused.'

'I'm chained enough for this purpose; I've ceased "going to and fro in the earth and walking up and down in it. " Yaliweh has it all to Himself for the short time remaining before He destroys it. I won't bother His games.' Jerry shrugged. 'I declined to take part in Armageddon—I pointed out to Him that He had plenty of homegrown villains for it. Alec, with My Brother writing the scripts, I was always supposed to fight fiercely, like Harvard, then lose. It got monotonous. He's got me scheduled to take another dive at the end of this Millennium, to fulfill His prophecies. That "War in Heaven" He predicted in the so-called Book of Revelation. I'm not going to go. I've told My angels that they can form a foreign legion if they want to, but I'm sitting this one out. What's the point in a battle if the outcome is predetermined thousands of years before the whistle?'

He was watching me while He talked. He stopped abruptly. 'What's eating on you now?'

'Jerry...if it has been five hundred years since I lost Margrethe, it's hopeless. Isn't it?'

I 'Hey! Damnation, boy, haven't I told you not to try to understand things you can't understand? Would I be working on it if it were hopeless?'

Katie said, 'Jerry, I had Alec all quieted down...and You got him upset again.'

'I'm sorry.'

'You didn't mean to. Alec, Jerry is blunt, but He's right. For you, acting alone, the search was always hopeless. But with Jerry's help, you may find her. Not certain, but a hope worth pursuing. But time isn't relevant, five hundred years or five seconds. You don't have to understand it, but do please believe it.'

'All right. I will. Because otherwise there would be no hope, none.'

'But there is hope; all you have to do now is be patient.'

'I'll try. But I guess Marga and I will never have our soda fountain and lunch counter in Kansas.'

'Why not?' asked Jerry.

'Five centuries? They won't even speak the same language. There will be no one who knows a hot fudge sundae, from curried goat. Customs change.'

'So you reinvent the hot fudge sundae and make a killing. Don't be a pessimist, son.'

'Would you like one right now?' asked Sybil.

'I don't think he had better mix it with Jack Daniel's,' Jerry advised.

`Thanks, Sybil...but I´d probably cry in it. I associate it with Marga. ´

So don't. Son, crying in your drink is bad enough crying into a hot fudge sundae is disgusting.'

'Do I get to finish the story of my scandalous youth, or won't anybody listen?'

I sai 'Katie, I'm listening. You made a deal with Joshua.'

'With his spies. Alec love, to anyone whose love and respect I want —you, I mean I need to explain something. Some people who know who I am—and even more who don't—class Rahab the harlot as a traitor. Treason in time of war, betrayal of fellow citizens, all that. I—´

'I never thought so, Katie. Jehovah had decreed that Jericho', would fall. Since it was ordained, you couldn't change it. What you did was to save your father and mother and the other kids.'

'Yes, but there is more to it, Alec. Patriotism is a fairly late concept. Back then, in the land of Canaan, any loyalty other than to one's family was personal loyalty to a chief of some sort—usually a successful warrior who dubbed himself "king". Alec, a whore doesn't—didn't—have that sort of loyalty.'

'So? Katie, in spite of studying at seminary I don't really have any sharp concept of what life was like back then. I keep trying to see it in terms of Kansas.'

'Not too different. A whore at that time and place was, either a temple prostitute, or a slave, or a self-owned private contractor. I was a free woman. Oh, yeah? Whores don't fight city hall, they can't. An officer of the king comes in, he expects free tail and free drinks, same for the civic patrol—the cops. Same for any sort of politician. Alec, I tell you the truth; I gave away more tail than I sold—and often got a black eye as a bonus. No, I did not feel loyalty to Jericho; the Jews weren't any more cruel and they were much cleaner!'

`Katie, I don't know of any Protestant Christian who thinks anything bad of Rahab. But I have long wondered about one detail in her—your—story. Your house, was on the city wall?"

'Yes. It was inconvenient for housekeeping—carrying water up all those steps—but convenient for business, and the rent was low. It was the fact that I lived on the wall that let me save General Joshua's agents. Used a clothesline; they went out the window. Didn't get my clothesline back, either.'

'How high was that wall?'

'Hunh? Goodness, I don't know. It was high.'

'Twenty cubits.'

'Was it, Jerry?'

I was there. Professional interest. First use of nerve warfare in combination with sonic weapons.'

'The reason I ask about the height, Katie, is because it states in the Book that you gathered all your family into your house and stayed there, all during the siege.'

'We surely did, seven horrid days. My contract with the Israelite spies required it. My place was only two little rooms, not big enough for three adults and seven kids. We ran out of food, we ran out of water, the kids cried, my father complained. He happily took the money I brought in; with seven kids he needed it. But he resented having to stay under the same roof where I entertained johns, and he was especially bitter about having to use my bed. My workbench. But use it he did, and I slept on the floor.'

'Then your family were all in your house when the walls came tumbling down.'

'Yes, surely. We didn't dare leave it until they came for us, the two spies. My house was marked at the window with red string.'

'Katie, your house was on the wall, thirty feet up. The Bible says the wall fell down flat. Wasn't anyone hurt?'

She looked startled. 'Why, no.'

'Didn't the house collapse?'

'No. Alec, it's been a long time. But I remember the trumpets and the shout, and then the earthquake rumble as the city wall fell. But my house wasn't hurt.'

`Saint Alec!´

'Yes, Jerry?'

'You should know; you're a saint. A miracle. If Yahweh hadn't been throwing miracles right and left, the—Israelites would never have conquered the Canaanites. Here this ragged band of Okies comes into a rich country of walled cities—and they never lose a battle. Miracles. Ask the Canaanites. If you can find one. My Brother pretty regularly had them all put to the sword, except some few cases, where the young and pretty ones were saved as slaves.'

'But it was the Promised Land, Jerry, and they were His Chosen People.'

'They are indeed the Chosen People. Of course, being chosen by Yahweh is no great shakes. Do you know your Book well enough to know how many times He crossed them up? My Brother is a bit of a jerk.'

I had had too much Jack Daniel's and too many shocks. But Jerry's casual blasphemy triggered me. 'The Lord God Jehovah is a just God!'

'You never played marbles with Him. Alec, "justice" is not a divine concept; it is a human illusion. The very basis of the Judeo-Christian code is injustice, the scapegoat system. The scapegoat sacrifice runs all through the Old Testament, then it reaches its height in the New Testament with the notion of the Martyred Redeemer. How can justice possibly be served by loading your sins on another? Whether it be a lamb having its throat cut ritually, or a Messiah nailed to a cross and "dying for your sins". Somebody should tell all of Yahweh's followers, Jews and Christians, that there is no such thing as a free lunch.

'Or maybe there is. Being in that catatonic condition called "grace" at the exact moment of death—or at the final Trump—will get you into Heaven. Right? You got to Heaven that way, did you not?'

'That's correct. I hit it lucky. For I had racked up quite a list of sins before then.'

'A long and wicked life followed by five minutes of perfect grace gets you into Heaven. An equally long life of decent living and good works followed by one outburst Of taking the name o Lord in vain—then have a heart attack at that moment and be damned for eternity. Is that the system?'

I answered stiffly, 'If you read the words of the Bible literally, that is the system. But the Lord moves in mysterious—´

'Not mysterious to Me, bud: I've known Him too long. It's His world, His rules, His doing. His rules are exact and anyone can follow them and reap the reward. But "Just" they are not. What do you think of what He has done to you and your Marga? Is that justice?'

I took a deep breath. 'I've been trying to figure that out ever since Judgment Day...and Jack Daniel's isn't helping. No, I don't think it's what I signed up for.'

'Ah, but you did!'

'How?'

'My Brother Yahweh, wearing His Jesus face, said: "After this manner therefore pray ye: " Go ahead, say it.'

"Our Father, which art in heaven, Hallowed be thy name. Thy kingdom come. Thy will be done—´

'Stop! Stop right there. "Thy will be done—" No Muslim claiming to be a "slave of God" ever gave a more sweeping consent than that. In that prayer you invite Him to do His worst. The perfect masochist. That's the test of Job, boy. Job was treated unjustly in every way day after day for years—I know, I know, I was there; I did it—and My dear Brother stood by and let Me do it. Let Me? He urged Me, He connived in it, accessory ahead of the fact.

Now it's your turn. Your God did it to you. Will you curse Him? Or will you come wiggling back on your belly like a whipped dog?'

Chapter 28

Ask, and it shall be given you; seek, and ye shall find; knock, and it shall be opened unto you.

Matthew 7:7

I WAS saved from answering that impossible question by an interruption—and was I glad! I suppose every man has doubts at times about God's justice. I admit that I had been much troubled lately and had been forced to remind myself again and again that God's ways are not man's ways, and that I could not expect always to understand the purposes of the Lord.

But I could not speak my misgivings aloud, and least of all to the Lord's Ancient Adversary. It was especially upsetting that Satan chose at this moment to have the shape and the voice of my only friend.

Debating with the Devil is a mug's game at best.

The interruption was mundane: a telephone ringing. Accidental interruption? I don't think Satan tolerates `accidents'. As may be, I did not have to answer the question that I could not answer.

Katie said, 'Shall I get it, dear?'

'Please.'

A telephone handset appeared in Katie's hand. 'Lucifer's office, Rahab speaking. Repeat, please. I will inquire.' She looked at Jerry.

'I'll take it.' Jerry operated without a visible telephone instrument. 'Speaking. No. I said, no. No, damn it! Refer that to Mr Ashmedai. Let Me have the other call.' He muttered something about the impossibility of getting competent help, then said, 'Speaking. Yes, Sir!' Then He said nothing for quite a long time. At last He said, 'At once, Sir. Thank you.'

Jerry stood up. 'Please excuse Me, Alec; I have work to do. I can't say when I will be back. Try' to treat this waiting as a vacation. and My house is yours. Katie, take care of him. Sybil, keep him amused.' Jerry vanished.

`Will I keep him amused!' Sybil got up and stood in front of me, rubbed her hands together. Her western clothes faded out, leaving Sybil. She grinned.

Katie said mildly, 'Sybil, stop that. Grow more clothes at once or I'll send you home.'

'Spoilsport.' Sybil developed a skimpy bikini. 'I plan to make Saint Alec forget that Danish baggage.'

'What'll you bet, dear? I've been talking to Pat.'

'So? What did Pat say?'

'Margrethe can cook.'

Sybil looked disgusted. 'A girl spends fifty years on her back, studying hard. Along comes some slottie who can make chicken and dumplings. It's not fair.'

I decided to change the subject. 'Sybil, those tricks you do with clothes are fascinating. Are you a graduate witch now?'

Instead of answering me at once, Sybil glanced at Katie, who said to her: 'All over with, dear. Speak freely.'

'Okay. Saint Alec, I'm no witch. Witchcraft is poppycock. You know that verse in the Bible about not suffering witches to live?'

'Exodus twentytwo, eighteen.'

'That's the one. The Old Hebrew word translated there as "witch" actually means "poisoner". Not letting a poisoner continue to breathe strikes me as a good idea. But I wonder how many friendless old women have been hanged or burned as a result of a sloppy translation?'

(Could this really be true? What about the 'literal word of God' concept on which I had been reared? Of course the word 'witch' is English, not the original Hebrew...but the translators of the King James, version were sustained by God—that's why that version of the Bible [and only that one] can be taken literally. But—No! Sybil must be mistaken. The Good Lord would not let hundreds, thousands, of innocent people be tortured to death over a mistranslation He could so easily have corrected.)

'So you did not attend a Sabbat that night. What did you do?'

'Not what you think; Israfel and I aren't quite that chummy. Chums, yes; buddies, no.'

"Israfel"? I thought he was in Heaven.'

`That's his godfather. The trumpeter. This Israfel can't play a note. But he did ask me to tell you, if I ever got a chance, that he really isn't the pimple he pretended to be as "Roderick Lyman Culverson, Third".'

'I'm glad to hear that. As he certainly did a good job of portraying an unbearable young snot. I didn't see how a daughter of Katie and Jerry—or is it just of Katie?—could have such poor taste as to pick that boor as a pal. Not Israfel, of course, but the part he was playing.'

'Oh. Better fix that, too. Katie, what relation are we?'

'I don't think even Dr Darwin could find any genetic relationship, dear. But I am every bit as proud of you as. I would be were you my own daughter.'

'Thank you, Mom!'

'But we are all related,' I objected, 'through Mother Eve. Since Katie, wrinkles and all, was born while the Children of Israel were wandering in the wilderness, there are only about eighty begats from Eve to Katie. With your birthdate and simple arithmetic we could make a shrewd guess at how close your blood relationship is.'

'Oh, oh! Here we go again. Saint Alec, Mama Kate is descended from Eve; I am not. Different species. I'm an imp. An afrit, if you want to get technical.'

She again vanished her clothes and did a body transformation. 'See?'

I said, 'Say! Weren't you managing the desk at the Sans Souci Sheraton the evening I arrived in Hell?'

'I certainly was. And I'm flattered that you remember me, in my own shape.' She resumed her human appearance, plus the tiny bikini. 'I was there because I knew you by sight. Pop didn't want anything to go wrong.'

Katie stood up. 'Let's continue this dip before dinner'

'I'm busy seducing Saint Alec.´

'Dreamer. Continue it outdoors.'

Outside it was a lovely Texas late afternoon, with lengthening shadows. 'Katie, a straight answer, please. Is, Hell? Or is this Texas?'

'Both.'

'I withdraw the question.'

I must have let my annoyance show in my voice, for she turned and put a hand on my chest. 'Alec, I was not jesting. For many centuries Lucifer has maintained pieds—à—terre here and there on earth. In each He had an established personality, a front. After Armageddon, when His Brother set Himself up as king of earth for the Millennium, He quit visiting earth. But some of these place's were home to Him, so He pinched them off and took them with, Him. You see?'

'I suppose I do. About as well as a cow understands calculus.'

'I don't understand the mechanism; it's on the God level. But those numerous changes you and Marga underwent during your persecution: How deep did each change go? Do you think the entire planet was involved each time?'

Reality tumbled in my mind in a fashion it had not-since the last of those 'changes'. 'Katie, I don't know! I was always too busy surviving. Wait a moment. Each change did cover the whole planet earth, and about a century of its history. Because I always checked the history and memorized as much as I could. Cultural. changes, too. The whole complex.'

'Each change stopped not far beyond the end of your nose, Alec, and no one but you—you two—was aware of any change. You didn't check history; you checked history books. At least this is the way Lucifer would have handled it, had He been arranging the deception.'

'Uh—Katie, do you realize how long it would take to revise, rewrite, and print an entire encyclopedia? That's what I usually consulted.'

`But Alec, you have already been told that time is never a problem on the God level. Or space. Whatever needed to deceive you was provided. But no more than that. That is the conservative principle in art at the God level. While I can't do it, not being at that level, I have seen a lot of it done. A skillful Artist in shapes and appearances does no more than necessary to create His effect.'

Rghab sat down on the edge of the pool, paddled her feet in the water. 'Come sit beside me. Consider the edge of the "big bang". What is there out beyond that limit where the red shift has the magnitude that means that the expansion of the universe equals the speed of light—what is beyond?'

I answered rather stiffly, 'Katie, your hypothetical question lacks meaning. I've kept up, more or less, with such silly notions as the "big bang" and the "expanding universe" because a preacher of the Gospel must keep track of such theories in order to be able to refute them. The two you mention imply an impossible length of time impossible because the world was created about six thousand years ago. "About" because the exact date of Creation is hard to calculate, and also because I am uncertain as to the present date. But around six thousand years not the billion years or so the big-bangers need.'

'Alec...your universe is about twentythree billion years old.' '

I started to retort, closed my mouth. I will not flatly contradict my hostess.

She added, 'And your universe was created in four thousand and four BC.'

I stared at the water long enough for Sybil to surface and splash us.

'Well, Alec?´

'You've left me with nothing to say.'

'But notice carefully what I did say. I did not say that the world was created twentythree billion years ago; I said that was its age. It was created old. Created with fossils in the ground and craters on the moon, all speaking of great age. Created that way by Yahweh, because it amused Him to do so. One of those scientists said, "God does not roll dice with the universe." Unfortunately not true. Yahweh rolls loaded dice with His universe...to deceive His creatures.'

'Why would He do that?'

'Lucifer says that it is because He is a poor Artist, the sort who is always changing his mind and scraping the canvas. And a practical joker. But I'm really not entitled to an opinion; I'm not at that level. And Lucifer is prejudiced where His Brother is concerned; I think that is obvious. You haven't remarked on the greatest wonder.'

'Maybe I missed it.'

'No, I think you were being polite. How an old whore happened to have opinions about cosmogony and teleology and eschatology and other long words of Greek derivation; that's the greatest wonder. Not?'

`Why, Rahab honey, I was just so busy counting your wrinkles that I wasn't lis´

This got me shoved into the water. I came up sputtering and spouting and found both women laughing at me. So I placed both hands on the edge of the pool with Katie captured inside the circle. She did not seem to mind being captive; she leaned against me like a cat. 'You were about to say?' I asked.

'Alec, to be able to read and write is as wonderful as sex. Or almost. You may not fully appreciate what a, blessing it is because you probably learned how as a baby and have been doing it casually ever since. But when I was a whore in Canaan almost four millennia ago, I did not know how to read and write. I learned by listening...to johns, to neighbors, to gossip in the market. But that's not a way to learn much, and even scribes and judges were ignorant then.

'I had been dead nearly three centuries before I learned to read and write, and when I did learn, I was taught by the ghost of a harlot from what later became the great Cretan civilization. Saint Alec, this may startle you but, An general throughout history, whores learned to read and write long before respectable women took up the dangerous practice. When I did learn, brother. For a while it crowded sex out of my life.'

She grinned up at me. 'Almost, anyhow. Presently I went back to a more healthy balance, reading and sex, in equal amounts.'

'I don't have the strength for that ratio.'

`Women are different. My best education started with the burning of the Library at Alexandria. Yahweh didn't want it, so Lucifer grabbed the ghosts of all those thousands of codices, took them to, Hell, regenerated them carefully—and Rahab had a picnic! And let me add: Lucifer has His eye on the Vatican Library, since it will be up for salvage soon. Instead of having to regenerate ghosts, in the case of the Vatican Library, Lucifer plans to pinch it off intact just before Time Stop, and take it unhurt to Hell. Won't that be grand?'

'Sounds as if it would be. The only thing about which I've ever envied the papists is their library. But..."regenerated ghosts"?'

'Slap my back.'

'Huh?'

'Slap it. No, harder than that; I'm not a fragile little butterfly. Harder. That's more like it. What you just, slapped is a regenerated ghost.'

'Felt solid.'

'Should be, I paid list price for the job. It was before Lucifer noticed me and made me a bird in a gilded cage, a pitiful sight to see. I understand that, if you are saved and go to Heaven, regeneration goes with salvation...but here you buy it on credit, then work your arse off to pay for it. That being exactly how I paid for it. Saint Alec, you didn't die, I know. A regenerated body is just like the one a person has before death, but better. No contagious diseases, no allergies, no old-age wrinkles—and "wrinkles" my foot! I wasn't wrinkled the day I died...or at least not much. How did you get me talking about wrinkles? We were discussing relativity and the expanding universe, high-type intellectual conversation.'

That night Sibil made a strong effort to get into my bed, an effort that Katie firmly thwarted—the went to bed with me herself. 'Pat said that you were not to be allowed to sleep alone.'

Pat thinks I'm sick. I'm not.'

'I won't argue it. And don't quiver your chin, dear; Mother Rahab will let you sleep.'

Sometime in the night I woke up sobbing, and Katie was there. She comforted me. I'm sure Pat told her about my nightmares. With Katie there to quiet me down I got back to sleep rather quickly.

It was a sweet Arcadian interlude...save for the absence of Margrethe. But Katie had me convinced that I owed it to Jerry (and to her) to be patient and not brood over my loss. So I did not, or not much, in the daytime, and, while night could be bad, even lonely nights are not too lonely with Mother Rahab to soothe one after waking up emotionally defenceless. She was always there except one night she had to be away. Sybil took that watch, carefully instructed by Katie, and carried it out the same way.

I discovered one amusing thing about Sybil. In sleep she slips back into her natural shape, imp or afrit, without knowing it. This makes her about six inches shorter and she has those cute little horns that were the first thing I had noticed about her, at the Sans Souci.

Daytimes we swam and sunbathed and rode horseback and picnicked out in the hills. In making this enclave Jerry had apparently pinched off many square miles; we appeared to be able to go as far as we liked in any direction.

Or perhaps I don't understand at all how such things are done.

Strike out 'perhaps'—I know as much about operations On the God level as a frog knows about Friday.

Jerry had been gone about a week when Rahab showed up at the breakfast table with my memoir manuscript. Saint Alec, Lucifer sent instructions that you are to bring up to date and keep it up to date. --

`All right. Will longhand do? Or, if there is a typewriter around, I guess I could hunt and peck.´

'You do it longhand; I'll do a smooth draft. I've done lots of secretarial work for Prince Lucifer.'

'Katie, sometimes you call Him Jerry, sometimes Lucifer, never

Satan.'

'Alec, He prefers "Lucifer" but He answers to anything. "Jerry" and "Katie" were names invented for you and Marga—´

'And "Sybil",' Sybil amended.

'And "Sybil". Yes, Egret. Do you want your own name back now?'

'No, I think it's nice that Alec—and Marga—have names for us that no one else knows.'

`Just a minute,' I put in. 'The day I met you, all three of you responded to those names as if you had worn them all your lives.'

'Mom and I are pretty fast at extemporaneous drama,' Sybil-Egret said. 'They didn't know they were fire-worshipers until I slipped it into the conversation. And I didn't know I was a witch until Mom tipped me off. Israfel is pretty sharp, too. But he did have more time to think about his role.'

'So we were snookered in all directions. A couple of country cousins.'

'Alec,' Katie said to me earnestly, 'Lucifer always has reasons for what He does. He rarely explains. His intentions are malevolent only toward malicious people which you are not.'

.We three were sunbathing by the pool when Jerry returned suddenly. He said abruptly to me, not even stopping first to speak to Katie: 'Get your clothes on. We're leaving at once.

Katie bounced up, rushed in and got my clothes. The women had me dressed as fast as a fireman answering an alarm. Katie shoved my razor into my pocket, buttoned it. I announced, 'I'm ready!'

`Where's his manuscrip?´

Again Katie rushed in, out again fast. 'Here!'

In that brief time Jerry had grown twelve feet tall—and changed. He was still Jerry, but I now knew why Lucifer was known as the most beautiful of all the angels. 'So long!' he said. 'Rahab, I'll call you if I can.' He started to pick me up.

'Wait! Egret and I must kiss him goodbye!'

'Oh. Make it snappy!´

They did, ritual pecks only, given simultaneously. Jerry grabbed me, held me like a child, and we went straight up. I had a quick glimpse of Sans Souci, the Palace, and the Plaza, then smoke and flame from the Pit covered them. We went on out of this world.

How we traveled, how long we traveled, where we traveled I do not know. It was like that endless fall to Hell, but made much more agreeable by Jerry's arms. It reminded me of times when I was very young, two or three years old, when my father would sometimes pick me up after supper and hold me until I fell asleep.

I suppose I did sleep. After a long time I became alert by feeling Jerry sweeping in for a landing. He put me down, set me on my feet.

There was gravity here; I felt weight and 'down' again had meaning. But I do not think we were on a planet. We seemed to be on a platform or a porch of some immensely large building. I could not see it because we were right up against it. Elsewhere there was nothing to see, just an amorphous twilight.

Jerry said, 'Are you all right?'

'Yes. Yes, I think so.'

'Good. Listen carefully. I am about to take you in to see—no, for you to be seen by—an Entity who is to me, and to my brother your god Yahweh, as Yahweh is to you. Understand me?'

'Uh...maybe. I'm not sure.'

`A is to B as B is to C. To this Entity your lord god jehoyah is equivalent to a child building sand castles at a beach, then destroying them in childish tantrums. To Him, I am a child, too. I look up to Him as you look up to your triple deity—father, son, and holy ghost. I don't worshipe this Entity as God; He does not demand, does not expect, does not want, that sort of bootlicking. Yahweh may be the, only god who ever thought up that curious vice—at least I do not know of another planet or place in any universe where god-worship is practiced. But I am young and not much traveled.'

Jerry was watching me closely. He appeared to be troubled. 'Alec, maybe this analogy will explain it. When you were growing up, did you ever have to take a pet to a veterinarian?'

'Yes. I didn't like it because they always hated it so.'

'I don't like it, either. Very well, you know what it is to take a sick or damaged animal to the vet. Then you had lo wait while the doctor decided whether or not your pet could be made well. Or whether the kind and gentle thing to do was to put the little creature out of its misery. Is this not true?'

'Yes. Jerry, you're telling me that things are dicey. Uncertain.'

'Utterly uncertain. No precedent. A human being has never been taken to this level before. I don't know what He will do.'

'Okay. You told me before that there would be a risk.'

'Yes. You are in great danger. And so am I, although I think your danger is much greater than mine. But, Alec, I can assure you of this: If It. decided to extinguish you, you will never know it. It is not a sadistic God.'

`"It"—is it "It" or "He"?´

'Uh...use "he". If It embodies, It will probably use a human appearance. If so, you can address Him as "Mr Chairman" or "Mr Koshchei". Treat Him as you would a man much older than you are and one you respect highly. Don't bow down or offer worship. Just stand your ground and tell the truth. If you die, die with dignity.'

The guard who stopped us at the door was not human,—until I looked again and then he was human. And that Characterizes the uncertainty of everything I saw at the place Jerry referred to as 'The Branch Office'.

The guard said to me, 'Strip down, please. Leave your clothes with me; you can pick them up later, What is that metal object?'

I explained that it was just a safety razor.

'And what is it for?'

'It's a...a knife for cutting hair off the face.

'You grow hair on your face?'

I tried to explain shaving.

'If you don't want hair there, why do you grow it there?' Is it a material of economic congress?'

'Jerry, I think I'm out of my depth.'

'I'll handle it.' I suppose he then talked to the guard but I didn't hear anything. Jerry said to me, 'Leave your razor with your clothes. He thinks you are crazy but he thinks I am crazy, too. It doesn't matter.'

Mr Koshchei may be 'an 'It' but to me He looked like a twin brother of Dr Simmons, the vet back home in Kansas to whom I used to take cats and dogs, and once, a turtle—the procession of small animals who shared my childhood. And the Chairman's office looked exactly like Dr Simmons' office, even to the rlolltop desk the doctor must have inherited from his grandfather. There was a well-remembered Seth Thomas eight-day clock on a little shelf over the doctor's desk.

I realized (being cold sober and rested) that this was not Dr Simmons and that the semblance was intentional but not intended to deceive. The Chairman, whatever He or It or She may be, had reached into my mind with some sort of hypnosis to create an ambience in which I could relax. Dr Simmons used to pet an animal and talk to it, before he got down to the uncomfortable, unfamiliar, and often painful things that he had to do to that animal.

It had worked. It worked with me, too. I knew that Mr Koshchei was not the old veterinary surgeon of my childhood...but this simulacrum brought out in me the same feeling of trust.

Mr Koshchei looked up as we came in. He nodded to Jerry, glanced at me. 'Sit down.'

We sat down. Mr Koshchei turned back to His desk. My manuscript was on it. He picked it up, jogged the sheets—straight, put them down. 'How are things in your bailiwick, Lucifer? Any problems?'

'No, Sir. Oh, the usual gripes about the air conditioning. Nothing I can't handle.'

'Do you want to rule earth this millennium?'

'Hasn't my brother claimed it?'

'Yahweh has claimed it, yes—he has pronounced Time Stop and torn it down. But I am not bound to let him rebuild. Do you want it? Answer Me.'

"Sir, I would much rather start with all-new materials.'

'All your guild prefer to start fresh. With no thought of the expense, of course. I could assign you to the Glaroon for a few cycles. How say you?'

Jerry was slow in answering. 'I must leave it to the Chairman's judgment.'

,'You are quite right; you must. So we will discuss it later. Why have you interested yourself in this creature of your brother´s?'

I must have dropped off to sleep, for I saw puppies and kittens playing in a courtyard—and there was nothing of that sort there. I heard Jerry saying, 'Mr Chairman, almost everything about a human creature is ridiculous, except its ability to suffer bravely and die gallantly for whatever it loves and believes in. The validity of that belief, the appropriateness of that love, is irrelevant; it is the bravery and the gallantry that count. These are uniquely human qualities, independent of mankind's creator, who has none of them himself—as I know, since he is my brother...and I lack them, too.

'You ask, why this animal, and why me? This one I picked up beside a road, a stray—and, putting aside its own troubles—much too big for it!—it devoted itself to a (and fruitless) attempt to save my "soul" by the rules it had been taught. That its attempt was misguided and useless does not matter; it tried hard on my behalf when it believed me to be in extreme danger. Now that it is in trouble I owe it an equal effort.'

Mr Koshchei pushed his spectacles down His nose and looked over them. 'You offer no reason why I should interfere with local authority.'

'Sir, is there not a guild rule requiring artists to be kind in their treatment of their volitionals?'

'No.

Jerry looked daunted. 'Sir, I must have misunderstood my training.'

'Yes, I think you have. There is an artistic principle not a rule—that volitionals should be treated consistently. But to insist on kindness would be to eliminate that degree of freedom for which volition in creatures was invented. Without the possibility of tragedy the volitionals might as well be golems.'

'Sir, I think I understand that. But would the Chairman please amplify the artistic principle of consistent treatment?'

'Nothing—complex about it, Lucifer. For a creature to act out its own minor part, the rules under which it acts must be either known to it or be such that the rules can become known through trial and error —with error not always fatal. In short the creature must be able to learn and to benefit by its experience.'

'Sir, that is exactly my complaint about my brother. See that record before You. Yahweh baited a trap and thereby lured this creature into a contest that it could not win then declared the game over and took the prize from it. And, although this is an extreme case, a destruction test, this nevertheless is typical of his treatment of all his volitionals. Games so rigged that his creatures cannot win. For six millennia I got his losers...and many of them arrived in Hell catatonic with fear—fear of me, fear of an eternity of torture. They can't believe they've been lied to. My therapists have to work hard to reorient the poor slobs. It's not funny.'

Mr Koshchei did not appear to listen. He leaned back in His old wooden swivel chair, making it creak—and, yes, I do not know that the creak came out of my memories—and looked again at my memoir. He scratched the grey fringe around His bald pate and made an irritating noise, half whistle, half hum—also out of my buried memories of Doc Simmons, but utterly real.

This female creature, the bait. A volitional?'

'In my opinion, yes, Mr Chairman.'

(Good heavens, Jerry! Don't you know?)

'Then I think we may assume that this one would not be satisfied with a simulacrum.' He hummed and whistled through His teeth. 'So let us look deeper.'

Mr Koshchei's office seemed small when we were admitted; now there were several others present: another angel who looked a lot like Jerry but older and with a pinched expression unlike Jerry's expansive joviality, another older character who wore a long coat, a big broad-brimmed hat, a patch over one eye, and had a crow sitting on his shoulder, and—why, confound his arrogance!—Sam Crumpacker, that Dallas shyster.

Back of Crumpacker three men were lined up, well-fed types, and all vaguely familiar. I knew I had seen them before.

Then I got it. I had won a hundred (or was it a thousand?) from each of them on a most foolhardy bet.

I looked back at Crumpacker, and was angrier than ever—the scoundrel was now wearing my face!

I turned to Jerry and started to whisper urgently. 'See lhat man over there? The one—´

'Shut up.'

`But—´

`Be quiet and listen.'

Jerry's brother was speaking. 'So who's complaining? You want I should put on my Jesus hat and prove it? The fact that some of them make it proves it ain't too hard—Seven point one percent in this last batch, not counting golems, Not good enough? Who says?´

The old boy in the black hat said, 'I count anything less' than fifty percent a failure.'

'So who's talking? Who lost ground to me every year for a millennium? How you handle your creatures; that's your business. What I do with mine; that's my business.

'That's why I'm here,' the big hat replied. 'You grossly interfered with one of mine.'

'Not, me!' Yahweh hooked a thumb at the man who man who managed to look like both me and Sam Crumpacker. 'That one! My Shabbes goy. A little rough? So whose boy is he? Answer that!'

Mr Koshchei tapped my memoir, spoke to the man with my face. 'Loki, how many places do you figure in this story?'

'Depends on how You figure it, Chief. Eight or nine places, if You count the walk-ons. All through it, when You consider that I spent four solid weeks softening up this foxy schoolteacher so that she would roll over and pant when Joe Nebbish came along.'

Jerry had a big fist around my upper *left arm. 'Keep quiet!'*

Loki went on: 'And Yahweh didn't pay up.

'So why should I? Who won?'

'You cheated. I had your champion, your prize bigot, ready to crack when you pulled Judgment Day early. There he sits. Ask him. Ask him if he still swears by you. Or at you? Ask him. Then pay up. I have munition bills to meet.'

Mr Koshchei stated, 'I declare this discussion out of order. This office is not a collection agency. Yahweh, the principal complaint against you seems to be that you are not consistent in your rules for your creatures.'

'Should I kiss them? For omelets you break eggs.'

'Speak to the case in point. You ran a destruction lit test. Whether it was artistically necessary is moot. But, at the end of the test, you took one to Heaven, left the other behind,—and thereby punished both of them. Why?´

'One rule for all. She didn't make it.'

'Aren't you the god that announced the rule concerning binding the mouths of the kine that tread the grain?'

The next thing I knew I was standing on Mr Koshchei's desk, staring right into His enormous face. I suppose Jerry put me there. He was saying, 'This is yours?'

I looked in the direction He indicated—and had to keep from fainting. Marga!

Margrethe cold and dead and encased in a coffin shaped cake of ice. It occupied much of the desktop and was beginning to melt onto it.

'I tried to throw myself onto it, found I could not move.

"I think that answers Me,' Mr Koshchei went on. 'Odin, what is its destiny?'

'She died fighting, at Ragnarok. She has earned a cycle in Valhalla.'

'Listen to him!' Loki sneered. 'Ragnarok is not over. And this time I'm winning. This pige is mine! All Danish broads are willing...but this one is explosive!' He smirked and winked at me. 'Isn't She?'

The Chairman said quietly, 'Loki, you weary Me'—and suddenly, Loki was missing. Even his chair was gone. 'Odin, will you spare her for part of that cycle?'

'For how long? She has earned the right to Valhalla.'

'An indeterminate time. This creature had stated its willingness to wash dishes "forever" in order to take care of her. One may doubt that it realizes just how long a period, "forever" is...yet its story does show earnestness of purpose.'

'Mr Chairman, my warriors, male and female, dead in honorable combat, are my equals, not my slaves—I am to be first among such equals. I raise no objections...if she consents.

My heart soared. Then Jerry, from clear across the room, wispered in my ear, 'Don't get your hopes up. To her it may be as long as a thousand years. Woman do forget.´

The Chairman was saying, 'The web patterns are intact, are they not?'

Yahweh answered, 'So who destroys file copies?'

'Regenerate as necessary.'

'And who is paying for this?'

'You are. A fine to teach you to pay attention to consistency.´

'Oy! Every prophecy I fulfilled! And now He tells me consistent I am not! This is justice?'

'No. It is Art. Alexander. Look at Me.'

I looked at that great face; Its eyes held me. They got bigger, and bigger, and bigger. I slumped forward and fell into them.

Chapter 29

There is, no remembrance of former things; neither shall there be any remembrance of things that are to come with those that shall come after.

Ecclesiastes 1: 11

THIS WEEK Margrethe and I, with help from our daughter Gerda, are giving our house and our shop a real Scandahoovian cleaning, because the Farnsworths, our friends from Texas—our best friends anywhere—are coming to see us. To Marga and me, a visit from Jerry and Katie is Christmas and the Fourth of July rolled into one. And for our kids, too; Sybil Farnsworth is Inga's age; the girls are chums.

This time will be extra special; they are bringing Patricia Marymount with them. Pat is almost as old a friend as the Farnsworths and the sweetest person in the world—an old-maid schoolmarm but not a bit prissy.

'The Farnsworths changed our luck. Marga and I were down in Mexico on our honeymoon when the earthquake that destroyed Mazatlán hit. We weren't hurt but we had a bad time getting out—passports, money, and travelers checks gone. Halfway home we met the Farnsworths and that changed everything—no more trouble. Oh, I got back to Kansas with no baggage but a razor (sentimental value, Marga gave it to me on our honeymoon; I've used it ever since).

When we reached my home state, we found just the mom-and-pop shop we wanted—a lunchroom in this little college town, Eden, Kansas, southeast of Wichita. The shop was owned by Mr and Mrs A. S. Modeus; they Wanted to retire. We started as their employees; in less than a month we were their tenants. Then I went into hock to the bank up to my armpits and that made us owners-of-record of MARGA'S HOT FUDGE SUNDAE soda fountain, hot dogs, hamburgers, and Marga's heavenly Danish open-face sandwiches.

Margrethe wanted to name it Marga-and-Alex's Hot Fudge Sundae —I vetoed that; it doesn't scan. Besides, she is the one who meets the public; she's our best advertising. I work back where I'm not seen—dishwasher, janitor, porter, you name it. Margrethe handles the front, with help from Astrid. And from me; all of us can cook or concoct anything on our menu, even the open-face sandwiches. However, with the latter we follow Marga's color Photographs and lists of ingredients; in fairness to our customers only Margrethe is allowed to be creative.

Our namesake item, the hot fudge sundae, is ready at all times and I have kept the price at ten cents, although that allows only one-and-a-half cent gross profit. Any customer having a birthday gets one free, along with our Singing Happy Birthday! with loud banging on a drum, and a kiss. College boys appreciate kissing Margrethe more than they do the free sundae. Understandable. But Pop Graham doesn't do too badly with the co-eds, either. (I don't force kisses on a 'birthday girl'.)

Our shop was a success from day one. The location is good—facing Elm Street gate and Old Main. Plentiful good trade was guaranteed by low prices and Margrethe's magic touch with food...and her beauty and her sweet personality; we aren't selling calories, we're selling happiness. She piles a lavish serving of happiness on each plate; she has it to spare.

With me to watch the pennies, our team could not lose. And I do watch pennies; if the cost of ingredients ever kills that narrow margin on a hot fudge sundae, the price goes up. Mr Belial, president of our bank, says that the country is in a long, steady period of gentle prosperity. I hope he is right; meanwhile I watch the gross profit.

The town is enjoying a real estate boom, caused by, the, Farnsworths plus the change in climate it used to be that the typical wealthy Texan had a summer home in Colorado Springs, but now that we no longer fry eggs on our sidewalks, Texans are beginning to see the charms of Kansas. They say it's a change in the Jet Stream. (Or is it the Gulf Stream? I never was strong in science.) Whatever, our summers now are balmy and our winters are mild; many, of Jerry's friends or associates are buying land in Eden and building summer homes. Mr Ashmedai, manager of some of Jerry's interests, now lives here year round—and Dr Adramelech, chancellor of Eden College, caused him to be elected to the board of trustees, along with an honorary doctorate—as a former money-raiser I can see why.

We welcome them all and not just for their money...but I would not want Eden to grow as crowded as Dallas.

Not that it could. This is a bucolic place; the college is our only 'industry'. One community church serves all sects, The Church of the Divine Orgasm—Sabbath school at 9:30 a.m., church services at 11, picnic and orgy immediately following.

We don't believe in shoving religion down a kid's throat, but the truth is that young people like our community church—thanks to our pastor, the Reverend Dr M. 0. Loch. Malcolm is a Presbyterian, I think; he still has a Scottish burr in his speech. But there is nothing of the dour Scot about him and kids love him. He leads the revels and directs the rituals—our daughter Elise is a Novice Ecdysiast under him and she talks of having a vocation. (Piffle. She'll marry right out of high school; I could name the young man—though I can't see what she sees in him.)

Margrethe serves in the Altar Guild; I pass the plate on the Sabbath and serve on the finance board. I've never, given up my membership in the Apocalypse Brethren but I must admit that we Brethren read it wrong; the end of the millennium came and went and the Shout was never heard.

A man who is happy at home doesn't lie awake nights worrying about the hereafter.

What is success? My classmates at Rolla Tech, back when, may think that I've settled for too little, owner with-the-bank of a tiny restaurant in a nowhere town. But I have what I want. I would not want to be a saint in Heaven if Margrethe was not with me; I wouldn't fear going to Hell if she was there—not that I believe in Hell or ever stood a chance of being a saint in Heaven.

Samuel Clemens put it: 'Where she was, there was Eden. 'Omar phrased it: '—thou beside me in the wilderness, ah wilderness were paradise enow.' Browning termed it: 'Summum Bonum'. All were asserting the same great truth, which is for me:

Heaven is where Margrethe is.

The Cat Who Walked Through Walls

BOOK ONE-Indifferent Honest

I

"Whatever you do, you'll regret it."
ALLAN McLEOD GRAY 1905-1975

"We need you to kill a man."

This stranger glanced nervously around us. I feel that a crowded restaurant is no place for such talk, as a high noise level gives only limited privacy.

I shook my head. "I'm not an assassin. Killing is more of a hobby with me. Have you had dinner?"

"I'm not here to eat. Just let me-"

"Oh, come now. I insist." He had annoyed me by interrupting an evening with a delightful lady; I was paying him back in kind. It does not do to encourage bad manners; one should retaliate, urbanely but firmly.

That lady, Gwen Novak, had expressed a wish to spend a penny and had left the table, whereupon Herr Nameless had materialized and sat down uninvited. I had been about to tell him to leave when he mentioned a name. Walker Evans.

There is no "Walker Evans."

Instead, that name is or should be a message from one of six people, five men, one woman, a code to remind me of a debt. It is conceivable that an installment payment on that ancient debt could require me to kill someone-possible but unlikely.

But it was not conceivable that I would kill at the behest of a stranger merely because he invoked that name.

While I felt obliged to listen, I did not intend to let him ruin my evening. Since he was sitting at my table, he could bloody well behave like an invited guest. "Sir, if you don't want a full dinner, try the after-theater suggestions. The lapin ragout on toast may be rat rather than rabbit but this chef makes it taste like ambrosia."

"But I don't want-"

"Please." I looked up, caught my waiter's eye. "Morris."

Morris was at my elbow at once. "Three orders of lapin ragout, please. Moms, and ask Hans to select a dry white wine for me."

"Yes, Dr. Ames."

"Don't serve until the lady returns, if you please."

"Certainly, sir."

I waited until the waiter had moved away. "My guest will be returning soon. You have a brief time to explain yourself in private. Please start by telling me your name."

"My name isn't important. I-"

"Come, sir! Your name. Please."

"I was told simply to say 'Walker Evans.'"

"Good as far as it goes. But your name is not Walker Evans and I do not traffic with a man who won't give his name. Tell me who you are, and it would be well to have an ID that matches your words."

"But-Colonel, it's far more urgent to explain who must die and why you are the man who must kill him! You must admit that!"

"I don't have to admit anything. Your name, sir! And your ID. And please do not call me 'Colonel'; I am Dr. Ames." I had to raise my voice not to be drowned out by a roll of drums;

the late evening show was starting. The lights lowered and a spotlight picked out the master of ceremonies.

"All right, all right!" My uninvited guest reached into a pocket, pulled out a wallet. "But Tolliver must die by noon Sunday or we'll all be dead!"

He flipped open the wallet to show me an ID. A small dark spot appeared on his white shirt front. He looked startled, then said softly, "I'm very sorry," and leaned forward. He seemed to be trying to add something but blood gushed from his mouth. His head settled down onto the tablecloth.

I was up out of my chair at once and around to his right side. Almost as swiftly Moms was at his left side. Perhaps Morris was trying to help him; I was not-it was too late. A four-millimeter dart makes a small entry hole and no exit wound; it explodes inside the body. When the wound is in the torso, death follows abruptly. What I was doing was searching the crowd-that and one minor chore.

While I was trying to spot the killer, Morris was joined by the headwaiter and a busman. The three moved with such speed and efficiency that one would have thought that having a guest killed at a table was something they coped with nightly. They removed the corpse with the dispatch and unobtrusiveness of Chinese stagehands; a fourth man flipped up the tablecloth, removed it and the silver, was back at once with a fresh cloth, and laid two places.

I sat back down. I had not been able to spot a probable killer; I did not even note anyone displaying a curious lack of curiosity about the trouble at my table. People had stared, but when the body was gone, they quit staring and gave attention to the show. There were no screams or expressions of horror;

it seemed as if those who had noticed it thought that they were seeing a customer suddenly ill or possibly taken by drink.

The dead man's wallet now rested in my left jacket pocket.

When Gwen Novak returned I stood up again, held her chair for her. She smiled her thanks and asked, "What have I missed?"

"Not much. Jokes old before you were born. Others that were old even before Neil Armstrong was bom."

"I like old jokes, Richard. With them I know when to laugh."

"You've come to the right place."

I too like old jokes; I like all sorts of old things-old friends, old books, old poems, old plays. An old favorite had started our evening: Midsummer Night's Dream presented by Halifax Ballet Theater with Luanna Pauline as Titania. Low-gravity ballet, live actors, and magical holograms had created a fairyland Will Shakespeare would have loved. Newness is no virtue.

Shortly music drowned out our host's well-aged wit; the chorus line undulated out onto the dance floor, sensuously graceful in half gravity. The ragout arrived and with it the wine. After we had eaten Gwen asked me to dance. I have this trick leg but at half gee I can manage the classic slow dances-waltz, frottage glide, tango, and so forth. Gwen is a warm, live, fragrant bundle; dancing with her is a Sybaritic treat.

It was a gay ending to a happy evening. There was still the matter of the stranger who had had the bad taste to get himself killed at my table. But, since Gwen seemed not to be aware of the unpleasant incident, I had tabled it in my mind, to be dealt with later. To be sure I was ready any moment for that tap on the shoulder... but in the meantime I enjoyed good food, good wine, good company. Life is filled with tragedy;

if you let it overwhelm you, you cannot enjoy life's innocent pleasures.

Gwen knows that my leg won't take much dancing; at the first break in the music she led us back to our table. I signaled Morris for the check. He produced it out of midair; I dialed my credit code into it, set it for standard gratuity plus half, added my thumbprint.

Morris thanked me. "A nightcap, sir? Or a brandy? Perhaps the lady would enjoy a liqueur? Compliments of Rainbow's End." The owner of the restaurant, an ancient Egyptian, believed in good measure-at least to his regulars; I'm not sure how tourists from dirtside were treated.

"Gwen?" I queried, expecting her to refuse-Gwen's drinking is limited to one glass of wine at meals. One.

"A Cointreau would be pleasant. I would like to stay and listen to the music a while."

"Cointreau for the lady," Morris noted. "Doctor?"

"Mary's Tears and a glass of water, please. Moms."

When Morris left, Gwen said quietly, "I needed time to speak with you, Richard. Do you want to sleep at my place tonight? Don't be skittish; you can sleep alone."

"I am not all that fond of sleeping alone." I clicked over the possibilities in my mind. She had ordered a drink she did not want in order to make me an offer that did not fit. Gwen is a forthright person; I felt that had she wished to sleep with me she would have said so-she would not have played getaway-closer about it.

Therefore she had invited me to sleep in her compartment because she thought it to be unwise or unsafe for me to sleep in my own bed. Therefore-

"You saw it."

"From a distance. So I waited until things quieted down before returning to the table. Richard, I'm not sure what happened. But if you need a place to lie doggo-be my guest!"

"Why, thank you, my dear!" A friend who offers help without asking for explanations is a treasure beyond price. "Whether I accept or not, I am in your debt. Mmm, Gwen, I too am unsure what happened. The total stranger who gets himself killed while he's trying to tell you something-A clich6, a tired cliche. If I plotted a story that way today, my guild would disown me." I smiled at her. "In its classic form you would turn out to be the killer... a fact that would develop slowly while you pretended to help me search. The sophisticated reader would know from chapter one that you did it, but I, as the detective, would never guess what was as plain as the nose on your face. Correction: on my face."

"Oh, my nose is plain enough; it's my mouth that men remember. Richard, I am not going to help you hang this on me; I simply offered you a hideout. Was he really killed? I couldn't be sure."

"Eh?" I was saved from answering too quickly by Morris's arrival with our liqueurs. When he left, I answered, "I had not thought about any other possibility. Gwen, he was not wounded. Either he was killed almost instantly... or it was faked. Could it be faked? Certainly. If shown on holo, it could be done in real time with only minor props." I mulled it over. Why had the restaurant staff been so quick, so precise, in covering it up? Why had I not felt that tap on the shoulder? "Gwen, I'll take you up on that offer. If the proctors want me, they'll find me. But I would like to discuss this with you in greater detail than we can manage here, no matter how carefully we keep our voices down."

"Good." She stood up. "I won't be long, dear." She headed for the lounges.

As I stood up Morris handed me my stick and I leaned on it as I followed her toward the lounges. I don't actually have to use a cane-I can even dance, as you know-but using a cane keeps my bad leg from getting too tired.

When I came out of the gentlemen's lounge, I placed myself in the foyer, and waited.

And waited.

Having waited long past what is reasonable I sought out the maitre d'h6tel. 'Tony, could you please have some female member of your staff check the ladies' lounge for Mistress Novak? I think that it is possible that she may have become ill, or be in some difficulty."

"Your guest. Dr. Ames?"

"Yes."

"But she left twenty minutes ago. I ushered her out myself."

"So? I must have misunderstood her. Thank you, and good night."

"Good night. Doctor. We look forward to serving you again."

I left Rainbow's End, stood for a moment in the public corridor outside it-ring thirty, half-gravity level, just clockwise from radius two-seventy at Petticoat Lane, a busy neighborhood even at one in the morning. I checked for proctors waiting for me, halfway expecting to find Gwen already in custody.

Nothing of the son. A steady flow of people, mostly groundhogs on holiday by their dress and behavior, plus pullers for grimp shops, guides and ganders, pickpockets and priests. Golden Rule habitat is known systemwide as the place where anything is for sale and Petticoat Lane helps to support that reputation insofar as fleshpots are concerned. For more sober enterprises you need only go clockwise ninety degrees to Threadneedle Street.

No sign of proctors, no sign of Gwen.

She had promised to meet me at the exit. Or had she? No, not quite. Her exact words were, "I won't be long, dear." I had inferred that she expected to find me at the restaurant's exit to the street.

I've heard all the old chestnuts about women and weather, La donna e mobile, and so forth-I believe none of them. Gwen had not suddenly changed her mind. For some reason-some good reason-she had gone on without me and now would expect me to join her at her home.

Or so I told myself.

If she had taken a scooter, she was there already; if she had walked, she would be there soon-Tony had said, 'Twenty minutes ago." There is a scooter booth at the intersection of ring thirty and Petticoat Lane. I found an empty, punched in ring one-oh-five, radius one-thirty-five, six-tenths gravity, which would take me as close as one can get by public scooter to Gwen's compartment.

Gwen lives in Gretna Green, just off Appian Way where it crosses the Yellow Brick Road-which means nothing to anyone who has never visited Golden Rule habitat. Some public relations "expert" had decided that habitants would feel more at home if surrounded by place names familiar from dirtside. There is even (don't retch) a "House at Pooh Comer." What I punched in were coordinates of the main cylinder: 105, 135, 0.6.

The scooter's brain, off somewhere near ring ten, accepted those coordinates and waited; I punched in my credit code and took position, crouched against acceleration pads.

That idiot brain took an insultingly long time to decide that my credit was good-then placed a web around me, tightened it, closed the capsule and whuff'! bing! barn! we were on our way... then a fast float for three kilometers from ring thirty to ring one-oh-five, then barn! bing! whuff! I was in Gretna Green. The scooter opened.

For me such service is well worth the fare. But the Manager had been warning us the past two years that the system does not pay its way; either use it more or pay more per trip, or the hardware will be salvaged and the space rented out. I hope they work out a solution; some people need this service. (Yes, I know; Laffer theory will always give two solutions to such a problem, a high and a low-except where the theory states that both solutions are the same... and imaginary. Which might apply here. It may be that a scooter system is too expensive for a space habitat at the present state of engineering art.)

It was an easy walk to Gwen's compartment: downstairs to seven-tenths gravity, fifty meters "forward" to her numberI rang.

Her door answered, "This is the recorded voice of Gwen Novak. I've gone to bed and am, I hope, happily asleep. If your visit is truly an emergency, deposit one hundred crowns via your credit code. If I agree that waking me is justified, I will return your money. If I disagree-laugh, chortle, chuckle!- I'll spend it on gin and keep you out anyhow. If your call is not an emergency, please record a message at the sound of my scream."

This was followed by a high scream which ended abruptly as if a hapless wench had been choked to death.

Was this an emergency? Was it a hundred-crown emergency? I decided that it was not any sort of emergency, so I recorded:

"Dear Gwen, this is your fairly-faithful swain Richard speaking. Somehow we got our wires crossed. But we can straighten it out in the morning. Will you call me at my digs when you wake up? Love and kisses, Richard the Lion-Hearted."

I tried to keep my not-inconsiderable irk out of my voice. I felt badly used but underlying it was a conviction that Gwen would not intentionally mistreat me; it had to be an honest mixup even though I did not now understand it.

Then I went home whuff! bing! barn!... barn! bing! whuff!

I have a deluxe compartment with bedroom separate from the living room. I let myself in, checked for messages in the terminal-none-set it for sleep conditions both for door and terminal, hung up my cane, and went into the bedroom.

Gwen was asleep in my bed.

She looked sweetly peaceful. I backed out quietly, moved noiselessly in undressing, went into the 'fresher, closed the door-soundproof; I said it was a deluxe setup. Nevertheless I made as little noise as possible in refreshing myself for bed, as "soundproof" is a hope rather than a certainty. When I was as sanitary and odorless as a male hairless ape can manage short of surgery, I went quietly back into my bedroom and got most cautiously into bed. Gwen stirred, did not wake.

At some hour when I was awake in the night, I switched off the alarm. But I woke up about my usual time, as my bladder can't be switched off. So I got up, took care of it, refreshed for the day, decided that I wanted to live, slid into a coverall, went silently into the living room, and opened the buttery, considered my larder. A special guest called for a special breakfast.

I left the connecting door open so that I could keep an eye on Gwen. I think it was the aroma of coffee that woke her.

When I saw that her eyes were open, I called out, "Good morning, beautiful. Get up and brush your teeth; breakfast is ready."

"I did brush my teeth, an hour ago. Come back to bed."

"Nymphomaniac. Orange juice or black cherries or both?"

"Uh... both. Don't change the subject. Come here and meet your fate like a man."

"Eat first."

"Coward. Richard is a sissy, Richard is a sissy!"

"An utter coward. How many waffles can you eat?"

"Uh ... decisions! Can't you unfreeze them one at a time?"

"These are not frozen. Only minutes ago they were alive and singing; I killed 'em and skun 'em myself. Speak up, or I'll eat all of them."

"Oh, the pity and the shame of it all!-turned down for waffles. Nothing left but to enter a monastery. Two."

"Three. You mean 'nunnery.'"

"I know what I mean." She got up, went into the refresher, was out quickly, wearing one of my robes. Pleasant bits of Gwen stuck out here and there. I handed her a glass of juice;

she paused to gulp twice before she spoke. "Gurgle, gurgle. My, that's good. Richard, when we're married, are you going to get breakfast for me every morning?"

"That inquiry contains implied assumptions I am not willing to stipulate-"

"After I trusted you and gave all!"

"-but, without stipulation, I will concede that I would just as lief get breakfast for two as for one. Why do you assume that I'm going to marry you? What inducements do you offer? Are you ready for a waffle?"

"See here, mister, not all men are fussy about marrying grandmothers! I've had offers. Yes, I'm ready for a waffle."

"Pass your plate." I grinned at her. "'Grandmother' my missing foot. Not even if you had started your first child at menarche, then your offspring had whelped just as promptly."

"Neither one and I am so. Richard, I am trying to make two things clear. No, three. First, I'm serious about wanting to marry you if you'll hold still for it... or, if you won't, I'll keep you as a pet and cook breakfast for you. Second, I am indeed a grandmother. Third, if, despite my advanced years, you wish to have children by me, the wonders of modern microbiology have kept me fertile as well as relatively un-wrinkled. If you want to knock me up, it should not be too much of a chore."

"I could force myself. Maple syrup in that one, blueberry syrup in this. Or maybe I did so last night?"

"Wrong date by at least a week... but what would you say if I had said, 'Jackpot!'"

"Quit joking and finish your waffle. There's another one ready."

"You're a sadistic monster. And deformed."

"Not deformed," I protested. "This foot was amputated; I wasn't born without it. My immune system flatly refuses to accept a transplant, so that's that. One reason I live in low gravity."

Gwen suddenly sobered. "My very dear! I wasn't speaking of your foot. Oh, heavens! Your foot doesn't matter... except that I'll be more careful than ever not to place a strain on you, now that I know why."

"Sorry. Let's back up. Then what is this about me being •deformed'?"

At once she was again her merry self. "You should know! When you've got me stretched all out of shape and no use to a normal man. And now you won't marry me. Let's go back to bed."

"Let's finish breakfast and let it settle first-have you no mercy? I didn't say I wouldn't many you... and I did not stretch you."

"Oh, what a sinful lie! Will you pass the butter, please? You're deformed all right! How big is that tumor with the bone in it? Twenty-five centimeters? More? And how big around? If I had seen it first, I would have never risked it."

"Oh, piffle! It's not even twenty centimeters. I didn't stretch you; I'm just middlin' size. You should see my Uncle Jock. More coffee?"

"Yes, thank you. You surely did stretch me! Uh... is your Uncle

Jock actually bigger than you are? Locally?"

"Much."

"Uh... where does he live?"

"Finish your waffle. Do you still want to take me back to bed? Or do you want a note to my Uncle Jock?"

"Why can't I have both? Yes, a little more bacon, thank

you. Richard, you're a good cook. I don't want to marry Uncle Jock; I'm just curious."

"Don't ask him to show it to you unless you mean business ... because he always means business. He seduced his Scoutmaster's wife when he was twelve. Ran away with her. Caused considerable talk in southern Iowa because she didn't want to give him up. That was over a hundred years ago when such things were taken seriously, at least in Iowa."

"Richard, are you implying that Uncle Jock is over a hundred and still active and virile?"

"A hundred and sixteen and still jumping his friends' wives, daughters, mothers, and livestock. And has three wives of his own under the Iowa senior-citizen cohabitation code, one of them-my Aunt Cissy-being still in high school."

"Richard, I sometimes suspect that you are not always entirely truthful. A mild bent toward exaggeration."

"Woman, that is no way to talk to your future husband. Behind you is a terminal. Punch it for Grinnell, Iowa; Uncle Jock lives just outside. Shall we call him? You talk to him real pretty and he might show you his pride and joy. Well, dear?"

"You are just trying to get out of taking me back to bed."

"Another waffle?"

"Quit trying to bribe me. Uh, a half, maybe. Split one with me?"

"No. A whole one for each of us."

"'Hail, Caesar!' You're the bad example I've always needed. Once we're married I'm going to get fat."

"I'm glad you said that. I had hesitated to mention it but you are a bit on the skinny side. Sharp comers. Bruises. Some padding would help."

I'll omit what Gwen said next. It was colorful, even lyrical, but (in my opinion) unladylike. Not her true self, so we won't record it.

I answered, 'Truly, it's irrelevant. I admire you for your intelligence. And your angelic spirit. Your beautiful soul. Let's not get physical."

Again I feel that I must censor.

"All right," I agreed. "If that's what you want. Get back into bed and start thinking physical thoughts. I'll switch off the waffle iron."

Somewhat later I said, "Do you want a church wedding?"

"Coo! Should I wear white? Richard, are you a church member?"

"No."

"Neither am I. I don't think you and I really belong in churches."

"I agree. But just how do you want to get married? So far as I know there isn't any other way to get married in the Golden Rule. Nothing in the Manager's regulations. Legally the institution of marriage does not exist here."

"But, Richard, lots of people do get married."

"But how, dear? I realize they do but, if they don't do it through a church, I don't know how they go about it. I've never had occasion to find out. Do they go to Luna City? Or down dirtside? How?"

"Whatever way they wish. Hire a hall and get some VIP to tie the knot in the presence of a crowd of guests, with music and a big reception afterwards... or do it at home with just a few friends present. Or anything in between. It's your choice, Richard."

"Huh uh, not mine. Yours. I simply agreed to go along. As for me, I find that a woman is at her best if she is a bit tense through being unsure of her status. Keeps her on her toes. Don't you agree? Hey! Stop that!"

"Then stop trying to get my goat. If you don't want to sing soprano at your own wedding."

"You do that once more and there ainta gonna be no wedding. Dear one, what sort of a wedding do you want?"

"Richard, I don't need a wedding ceremony, I don't need witnesses. I just want to promise you everything a wife should promise."

"You're sure, Gwen? Aren't you being hasty?" Confound it, promises a woman makes in bed should not be binding.

"I am not being hasty. I decided to marry you more than a year ago."

"You did? Well, I'll be-Hey' We met less than a year ago. At the Day One Ball. July twentieth. I remember."

"True."

"Well?"

"'Well* what, dear? I decided to many you before we met. Do you have a problem with that? I don't. I didn't."

"Mmm. I had better tell you some things. My past contains episodes I don't boast about. Not exactly dishonest but somewhat shady. And Ames is not the name I was bom with."

"Richard, I will be proud to be addressed as 'Mrs. Ames.* Or as... 'Mrs. Campbell'... Colin."

I said nothing, loudly-then added, "What more do you know?"

She looked me firmly in the eye, did not smile. "All I need to know. Colonel Colin Campbell, known as 'Killer' Campbell to his troops... and in the dispatches. A rescuing angel to the students of Percival Lowell

Academy. Richard, or Colin, my oldest daughter was one of those students."

"I'll be eternally damned."

"I doubt it."

"And because of this you intend to marry me?"

"No, dear man. That reason sufficed a year ago. But now I've had many months to discover the human being behind the storybook hero. And... I did hurry you into bed last night but neither of us would marry for that reason alone. Do you want to know about my own tarnished past? I'll tell."

"No." I faced her, took both her hands. "Gwendolyn, I want you to be my wife. Will you have me as your husband?"

"I will."

"I, Colin Richard, take thee, Gwendolyn, to be my wife, to have and to hold, to love and to cherish, as long as you will have me."

"I, Sadie Gwendolyn, take thee, Colin Richard, to be my husband, to care for and love and cherish for the rest of my lif&."

"Whew! I guess that does it."

"Yes. But kiss me."

I did. "When did 'Sadie' show up?"

"Sadie Lipschitz, my family name. I didn't like it so I changed it. Richard, the only thing left to make it official is to publish it. That ties it down. And I do want to tie it down while you're still groggy."

"All right. Publish it how?"

"May I use your terminal?"

"Our terminal. You don't have to ask to use it."

" 'Our terminal.' Thank you, dear." She got up, went to the terminal, keyed for directory, then called the Golden Rule Herald, asked for the society editor. "Please record. Dr. Richard

Ames and Mistress Gwendolyn Novak are pleased to announce their marriage this date. No presents, no flowers. Please confirm." She switched off. They called back at once; I answered and confirmed.

She sighed. "Richard, I hurried you. But I had to. Now I can no longer be required to testify against you in any jurisdiction anywhere. I want to help in any way that I can. Why did you kill him, dear? And how?"

II

"In waking a tiger, use a long stick."

MAO TSE-TUNG 1893-1976

I stared thoughtfully at my bride. "You are a gallant lady, my love, and I am grateful that you do not want to testify against me. But I am not sure that the legal principle you cited can be applied in this jurisdiction."

"But that's a general rule of justice, Richard. A wife can't be forced to testify against her husband. Everyone knows that."

"The question is: Does the Manager know it? The Company asserts that the habitat has only one law, the Golden Rule, and claims that the Manager's regulations are merely practical interpretations of that law, just guidelines subject to change-change right in the middle of a hearing and retroactive, if the Manager so decides. Gwen, I don't know. The Manager's Proxy might decide that you are the Company's star witness."

"I won't do it! I won't!"

"Thank you, my love. But let's find out what your testimony would be were you to be a witness in-what shall we call it? Eh, suppose that I am charged with having wrongfully caused the death of, uh, Mr. X... Mr. X being the stranger who came to our table last night when you excused yourself to visit the ladies' lounge. What did you see?"

"Richard, I saw you kill him. I saw it!"

"A prosecutor would require more details. Did you see him come to our table?"

"No. I didn't see him until I left the lounge and was headed for our table... and was startled to see someone sitting in my chair."

"All right, back up a little and tell me exactly what you saw."

"Uh, I came out of the ladies' room and turned left, toward our table. Your back was toward me, you'll remember-"

"Never mind what I remember; you tell what you remember. How far away were you?"

"Oh, I don't know. Ten meters, maybe. I could go there and measure it. Does it matter?"

"If it ever does, you can measure it. You saw me from about ten meters. What was I doing? Standing? Sitting? Moving?"

"You were seated with your back to me."

"My back was toward you. The light wasn't very good. How did you know it was I?"

"Why-Richard, you're being intentionally difficult."

"Yes, because prosecutors are intentionally difficult. How did you recognize me?"

"Uh-It was you. Richard, I know the back of your neck just as I know your face. Anyhow, when you stood up and moved, I did see your face."

"Was that what I did next? Stand up?"

"No, no. I spotted you, at our table-then I stopped short when I saw someone seated across from you, in my chair. I just stood there and stared."

"Did you recognize him?"

"No. I don't think I ever saw him before."

"Describe him."

"Uh, I can't, very well."

"Short? Tall? Age? Bearded? Race? How dressed?"

"I never saw him standing up. He wasn't a youngster but he wasn't an old man, either. I don't think he wore a beard."

"Moustache?"

"I don't know." (I did know. No moustache. Age about thirty.)

"Race?"

"White. Light skin, anyhow, but not blond like a Swede. Richard, there wasn't time to catch all the details. He threatened you with some sort of weapon and you shot him and you jumped up as the waiter came over-and I backed up and waited until they took him away."

"Where did they take him?"

"I'm not sure. I backed into the ladies' lounge and let the door contract. They could have taken him into the gentlemen's room just across the passage. But there's another door at the end of the passage marked 'Employees Only.'"

"You say he threatened me with a weapon?"

"Yes. Then you shot him and jumped up and grabbed his weapon and shoved it into your pocket, just as our waiter came up on the other side."

(Oho!) "Which pocket did I put it in?"

"Let me think. I have to turn myself that way in my mind. Your left pocket. Your left outside jacket pocket."

"How was I dressed last night?"

"Evening dress, we had come straight from the ballet. White turtleneck, maroon jacket, black trousers."

"Gwen, because you were asleep in the bedroom, I undressed last night here in the livingroom and hung the clothes I was wearing in that wardrobe by the outer door, intending to move them later. Will you please open that wardrobe, find the jacket I wore last night, and get from its left outside pocket the 'weapon' you saw me place in it?"

"But-" She shut up and, solemn-faced, did as I asked.

In a moment she returned. "This is all there was in that pocket." She handed me the stranger's wallet.

I accepted it. "This is the weapon with which he threatened me." Then I showed her my right forefinger, bare. "And this is the weapon I used to shoot him when he pointed this wallet at me."

"I don't understand."

"Beloved, this is why criminologists place more faith in circumstantial evidence than they do in the testimony of eyewitnesses. You are the ideal eyewitness, intelligent, sincere, cooperative, and honest. You have reported a mixture of what you did see, what you thought you saw, what you failed to notice although it was in front of you, and what your logical mind fills in as necessities linking what you saw and what you thought you saw. This mixture is now all solidly in your mind as a true memory, a firsthand, eyewitness memory. But it didn't happen."

"But, Richard, I did see-"

"You saw that poor clown killed. You did not see him threatening me; you did not see me shoot him. Some third person shot him with an explosive dart. Since he was facing you and it hit him in the chest, that dart must have come right past you. Did you notice anyone standing?"

"No. Oh, there were waiters moving around, and busmen, and the maitre d' and people getting up and sitting down. I mean I didn't notice anyone in particular-certainly not anyone shooting a gun. What sort of a gun?"

"Gwen, it might not look like a gun. A concealed assassin's weapon capable of shooting a dart short range-It could look like anything as long as it had one dimension about fifteen centimeters long. A lady's purse. A camera. Opera glasses. An endless list of innocentappearing objects. This gets us nowhere as I had my back to the action and you saw nothing out of the way. The dart probably came from behind your back. So forget it. Let's see who the victim was. Or whom he claimed to be."

I took out everything from all the pockets of that wallet, including a poorly-concealed "secret" pocket. This last held gold certificates issued by a Zurich bank, equivalent to about seventeen thousand crowns-his getaway money, it seemed likely.

There was an ID of the sort the Golden Rule issues to each person arriving at the habitat's hub. All it proves is that the "identified" person has a face, claims a name, has made statements as to nationality, age, place of birth, etc., and has deposited with the Company a return ticket or the equivalent in cash, as well as paying the breathing fee ninety days in advance-these latter two being all the Company cares about.

I do not know as certainty that the Company would space a man who, through some slip, has neither a ticket away nor air money. They might let him sell his indentures. But I would not count on it. Eating vacuum is not something I care to risk.

This Company ID stated that the holder was Enrico Schultz, age 32, citizen of Belize, born Ciudad Castro, occupation accountant. The picture with it was that of the poor slob who got himself killed through bracing me in too public a place... and for the steenth time I wondered why he hadn't phoned me, then called on me in private. As "Dr. Ames" I am in the directory... and invoking "Walker Evans" would have got him a hearing, a private hearing.

I showed it to Gwen. "Is that our boy?"

"I think so. I'm not sure."

"I am sure. As I talked to him face to face for several minutes."

The oddest part about Schultz's wallet was what it did not contain. In addition to the Swiss gold certificates it held eight hundred and thirtyone crowns and that Golden Rule ID.

But that was all.

No credit cards, no motor vehicle pilot's license, no insurance cards, no union or guild card, no other identification cards, no membership cards, nit. Men's wallets are like women's purses; they accumulate junk-photos, clippings, shopping lists, *et cetera* without end; they need periodic housecleaning. But, in cleaning one out, one always leaves in place the dozen-odd items a modem man needs in order to get by. My friend Schultz had nothing.

Conclusion: He was not anxious to advertise his true identity. Corollary: Somewhere in Golden Rule habitat there was a stash of his personal papers... another ID in a different name, a passport almost certainly not issued by Belize, other items that might give me a lead to his background, his motives, and (possibly) how he had invoked "Walker Evans."

Could these be found?

A side issue niggled at me: that seventeen thousand in gold certificates. Instead of its being getaway money could he have expected to use so fiddlin' a sum to hire me to kill Tolliver? If so, I was offended. I preferred to think that he hoped to persuade me to make the kill as a public service.

Gwen said, "Do you want to divorce me?"

"Eh?"

"I hustled you into it. My intentions were good, truly they were! But it turns out I was stupid."

"Oh. Gwen, I never get both married and divorced on the same day. Never. If you really want to shuck me off, take it up with me tomorrow. Although I think that, to be fair, you ought to try me out for thirty days. Or two weeks, at least. And permit me to do the same. So far, your performance, both horizontally and vertically, has been satisfactory. If either becomes unsatisfactory, I'll let you know. Fair enough?"

"Fair enough. Although I may beat you to death with your own sophistries."

"Beating her husband to death is every married woman's privilege... as long as she does it in private. Please pipe down, dear; I've got troubles. Can you think of any good reason why Tolliver should be killed?"

"Ron Tolliver? No. Although I can't think of any good reason why he should be allowed to live, either. He's a boor."

"He's that, all right. If he were not one of the Company partners, he would have been told to pick up his return ticket and leave, long ago. But I didn't say 'Ron Tolliver,' I just said Tolliver.'"

"Is there more than one? I hope not."

"We'll see." I went to the terminal, punched for directory, cycled to "T."

"'Ronson H. Tolliver, Ronson Q.'-that's his son-and here's his wife, 'Stella M. Tolliver.' Hey! It says here: 'See also Taliaferro.'"

"That's the original spelling," said Gwen. "But it's pronounced 'Tolliver' just the same."

"Are you sure?"

"Quite sure. At least south of the Mason and Dixon Line back dirtside. Spelling it 'Tolliver' suggests poh white trash who can't spell. Spelling it the long way and then sounding all the letters sounds like a Johnny-come-lately damyankee whose former name might have been 'Lipschitz' or such. The authentic plantation-owning, nigger-whupping, wench-humping aristocrat spelled it the long way and pronounced it the short way."

"I'm sorry you told me that."

"Why, dear?"

"Because there are three men and one woman listed here who spell it the long way, Taliaferro. I don't know any of them. So I don't know which one to kill."

"Do you have to kill one of them?"

"I don't know. Mmm, time I brought you up to date. If you are planning to stay married to me at least fourteen days. Are you?"

"Of course I am! Fourteen days plus the rest of my life! And you are a male chauvinist pig!"

"Paid-up lifetime membership."

"And a tease."

"I think you're cute, too. Want to go back to bed?"

"Not until you decide whom you intend to kill."

"That may take a while." I did my best to give Gwen a detailed, factual, uncolored account of my short acquaintance with the man who had used the name "Schultz." "And that's all I know. He was dead too quickly for me to learn more. Leaving behind him endless questions."

I turned back to the terminal, keyed it to shift to wordprocessing mode, then created a new file, as if I were setting up a potboiler:

THE ADVENTURE OF THE MISSPELLED NAME Questions To Be Answered:

1. Tolliver or Taliaferro?

2. Why does T. have to die?

3. Why would "we all be dead" if T. is not dead by noon Sunday?

4. Who is this corpse who called himself "Schultz"?

5. Why am I the logical hatchet man for T.?

6. Is this killing necessary?

7. Which one of the Walker Evans Memorial Society sicked this thumb-fingered bubblehead on me? And why?

8. Who killed "Schultz"? And why?

9. Why did the staff of Rainbow's End move in and cover up the killing?

10. (Omnibus) Why did Gwen leave before I did and why did she come here instead of going home and how did she get in?

"Do we take them in order?" asked Gwen. "Number ten is the only one I can ansv'er."

"That one I just chucked in," I answered. "Of the first nine I think that, if I find answers to any three, I could then deduce the rest." I went on putting words up on the screen:

POSSIBLE ACTIONS "When in Danger or in Doubt. Run in Circles. Scream and Shout."

"Does that help?" asked Gwen.

"Every time! Ask any old military man. Now let's take it one question at a time":

Q. 1-Phone each Taliaferro in the directory. Learn preferred pronunciation of name. Strike out any who use the every-letter pronunciation.

Q. 2-Dig into background of whoever is left. Start with the Herald back files.

Q. 3-While checking Q2, keep ears spread for anything scheduled or expected for noon Sunday.

Q. 4-If you were a corpse arriving at Golden Rule space habitat and you wanted to conceal your identity but had to be able to get at your passport and other documents for departure, where would you stash them? Hint: Check when this cadaver arrived in Golden Rule. Then check hotels, lockers, deposit box services, poste restante, *etc.*

Q. 5-postpone

Q. 6-postpone

Q. 7-Reach by phone as many of the "Walker Evans" oath group as possible. Keep going till one spills. Note: Some jelly brain may have talked too much without knowing it.

Q. 8-Morris, or the maitre d', or the busman, or all of them, or any two, knows who killed Schultz. One or more of them expected it. So we look for each one's weak point-liquor, drugs, money, sex (comme ci ou comme ga)-and what was your name back dirtside, chum? Any paper out on you somewhere? Find that soft spot. Push it. Do this with all three of them, then see how their stories check. Every closet has a skeleton. This is a natural law-so find it in each case.

Q. 9-Money (Conclusive assumption until proved false.)

(Query: How much is all this going to cost me? Can I afford it? Counter query: Can I afford not to pursue it?)

"I've been wondering about that," said Gwen. "When I poked my nose in, I thought you were in real trouble. But apparently you are home free. Why must you do anything, my husband?"

-I need to kill him."

"What? But you don't know which Tolliver is meant! Or why he should be dead. If he should be."

"No, no, not Tolliver. Although it may develop that Tolliver should be dead. No, dear, the man who killed Schultz. I must find him and kill him."

"Oh. Uh, I can see that he should be dead; he's a murderer. But why must you do it? Both are strangers to you-both the victim and whoever killed him. Actually it's not your business. Is it?"

"It is my business. Schultz or whatever his name is was killed while he was a guest at my table. That's intolerably rude. I won't put up with it. Gwen my love, if one tolerates bad manners, they grow worse. Our pleasant habitat could decay into the sort of slum EllFive is, with crowding and unmannerly behavior and unnecessary noise and impolite language. I must find the oaf who did this thing, explain to him his offense, give him a chance to apologize, and kill him."

III

'One should forgive one's enemies, but not before they are hanged.'
HEINRICH HEINE 1797-1856

My lovely bride stared at me. "You would kill a man? For bad manners?"

"Do you know of a better reason? Would you have me ignore rude behavior?"

"No but-I can understand executing a man for murder;

I'm not opposed to capital punishment. But shouldn't you leave this to the proctors and the management? Why must you take the law into your own hands?"

"Gwen, I haven't made myself clear. My purpose is not to punish but to weed... plus the esthetic satisfaction of retaliation for boorish behavior. This unknown killer may have had excellent reasons for killing the person who called himself Schultz... but killing in the presence of people who're eating is as offensive as public quarreling by married couples. Then this oaf capped his offense by doing this while his victim was my guest... which made retaliation both my obligation and my privilege."

I went on, "The putative offense of murder is not my concern. But as for proctors and the management taking care of that matter, do you know of any regulation forbidding murder?"

"What? Richard, there must be one."

"I've never heard of one. I suppose the Manager might construe murder as a violation of the Golden Rule-"

"Well, I would certainly think so!"

"You do? I'm never certain what the Manager will think. But, Gwen my darling, killing is not necessarily murder. In fact it often is not. If this killing ever comes to the Manager's attention, he may decide that it was justifiable homicide. An offense against manners but not against morals.

"But-" I continued, turning back to the terminal, "-the Manager may already have settled the matter, so let's see what the Herald has to say about it." I punched up the newspaper again, this time keying for today's index, then selecting today's vital statistics.

The first item to roll past was "Marriage-Ames-Novak" so I stopped it, punched for amplification, keyed for printout, tore it off and handed it to my bride. "Send that to your grandchildren to prove that Granny is no longer living in sin."

"Thank you, darling. You're so gallant. I think."

"I can cook, too." I scrolled on down to the obituaries. I usually read the obituaries first as there is always the happy chance that one of them will make my day.

But not today. No name I recognized. Especially no "Schultz." No unidentified stranger. No death "in a popular restaurant." Nothing but the usual sad list of strangers dead from natural causes and one by accident. So I keyed for general news of the habitat, let it scroll past.

Nothing. Oh, there were endless items of routine events, from ships' arrivals and departures to (the biggest news) an announcement that the newest addition, rings 130-140, was being brought up to spin and, if all went by schedule, would be warped in and its welding to the main cylinder started by 0800 on the sixth.

But there was nothing about "Schultz," no mention of any Tolliver or Taliaferro, no unidentified cadaver. I consulted the paper's index again, punched for next Sunday's schedule of events, found that the only thing scheduled for noon Sunday was a panel discussion assembled by holo from The Hague, Tokyo, Luna City, Ell-Four, Golden Rule, Tel Aviv, and Agra: "Crisis in Faith: The Modem World at the Crossroads." The co-moderators were the president of the Humanist Society and the Dalai Lama. I wished them luck.

"So far we have zip, zero, nit, swabo, and nothing. Gwen, what is a polite way for me to ask strangers how they pronounce their names?"

"Let me try it, dear. I'll say, 'Miz Tollivuh, this is Gloria Meade Calhoun f'om Savannah. Do you have a cousin, Stacey Mac, f'om Chahlston?' When she corrects my pronunciation of her name, I apologize and switch off. But if she-or he-accepts the short form but denies knowing Stacey Mac, I say, 'I wonduhed about that. She said it, Talley-ah-pharoh... but I knew that was wrong.' What then, Richard? Work it up into a date or switch off by 'accident'?"

"Make a date, if possible."

"A date for you? Or for me?"

"For you, and then I'll go with you. Or keep the date in your place. But I must first buy a hat."

"A hat?"

"One of those funny boxes you sit on the flat part of your head. Or would if you were dirtside."

"I know what a hat is! But I was born dirtside same as you were. But I doubt if a hat has ever been seen off Earth. Where would you buy one?"

"I don't know, best girl, but I can tell you why I need one. So that I can tip my hat politely and say, 'Sir or madam, pray tell me why someone wishes you dead by noon Sunday.' Gwen, this has been worrying me-how to open such a discussion. There are accepted polite modes for almost any inquiry, from proposing adultery to a previously chaste wife to soliciting a bribe. But how does one open this subject?"

"Can't you just say, 'Don't look now but somebody's trying to kill you'?"

"No, that's the wrong order. I'm not trying to warn this bloke that someone is gunning for him; I'm trying to find out why. When I know why I might approve so heartily that I would just sit back and enjoy it... or even be so inspired by the purpose that I would carry out the intent of the late Mr. Schultz as a service to mankind.

"Contrariwise, I might disagree so bitterly that I would enlist for the duration, volunteer my life and my services to the sacred cause of keeping this assassination from happening. Unlikely if the intended target is Ron Tolliver. But it's too early to choose sides; I need to understand what is going on. Gwen my love, in the killing business one should never kill first and ask questions afterwards. That tends to annoy people."

I turned back to the terminal, stared at it without touching a key.

"Gwen, before we make any local calls I think I should place six time-delay calls, one to each of the Friends of Walker Evans. That's my basic clue anyhow, that Schultz could mention that name. Some one of that six gave him that name... and that one should know why Schultz was in such a sweat."

"'Time delay'? Are they all out-far?"

"I don't know. One is probably on Mars, two others may be in the Belt. Could even be one or two dirtside but, if so, under phony names just as I am. Gwen, the debacle that caused me to give up the merry profession of arms and caused six of my comrades to wind up as my blood brothers... well, it smelled nasty to the public. I could say that media reporters who didn't see it happen could not possibly understand why it happened. I could assert truthfully that what we did was moral in context-that time, that place, those circumstances. I could-Never mind, dear; let it stand that my band of brothers are all in hiding. Tracing them all down could be a tediously long chore."

"But you want to talk to just one, don't you? The one who was in touch with this Schultz."

"Yes but I don't know which one that is."

"Richard, would it be easier to backtrack Schultz to find that one than it would be to locate six people all in hiding, some under assumed names, and scattered all over the Solar System? Or even outside it."

I stopped to consider it. "Maybe. But how do I backtrack Schultz? Do you have an inspiration, my love?"

"No inspiration. But I do remember that, when I arrived here in Golden Rule, they asked me at the hub not only where I lived, and checked it against my passport, but also where I had come from that trip-and checked that against my visa stamps. Not just that I had come from Luna-almost everyone arrives here from Luna-but how I got to Luna. Weren't you asked that?"

"No. But I was carrying a Luna Free State passport showing mat I was bom in the Moon."

"I thought you were bom on Earth?"

"Gwen, Colin Campbell was bom dirtside. 'Richard Ames' was bom in Hong Kong Luna-it says here."

"Oh."

"But attempting to backtrack Schultz is indeed something I should try before I try to locate all six. If I knew that Schultz had never been out-far, I would look first close to home-Luna, and dirtside, and all habitats ballistically coupled to Terra or Luna. Not the Asteroid Belt. Or even on Mars."

"Richard? Suppose that the purpose is to-No, that's silly."

"What's silly, dear? Try it on me anyhow."

"Uh, suppose this-whatever it is-conspiracy, I suppose-isn't aimed at Ron Tolliver or any other Tolliver, but is aimed at you and your six friends, the 'Walker Evans' people. Could the purpose be to get you to take strong measures to get in touch with all the others? And thereby get you to lead them, whoever they are, to all seven of you? Could it be a vendetta? Could whatever happened cause a vendetta against all seven of you?"

I had a cold feeling at the pit of my stomach. "Yes, that could be. Although not, I think, in this case. As it would not explain why Schultz was killed."

"I said it was silly."

"Wait a moment. Was Schultz killed?"

"Why, we both saw it, Richard."

"Did we? I thought I saw it. But I admitted that it could have been faked. What I saw appeared to be death by explosive dart. But-Two simple props, Gwen. One makes a small dark spot appear on Schultz's shirt. The other is a small rubber bladder he holds in his cheek; it contains fake blood. At the right instant he bites the bladder; 'blood' comes out of his mouth. The rest is acting... including the strange behavior of Morris and other staff members. That 'dead' body has to be removed quickly... through that 'Employees Only' door... where he is given a clean shirt, then hustled out the service door."

"You think that is the way it happened?"

"Uh-No, damn it; I don't! Gwen, I've seen many deaths. This one happened as close to me as you are this minute. I don't think it was acting; I think I saw a man die." I fumed to myself. Could I be mistaken on such a basic point?

Of course I could be! I'm no supergenius gifted with psi powers; I could be wrong as an eyewitness quite as easily as Gwen could be.

I sighed. "Gwen, I just don't know. It looked to me like death by explosive dart... but if the intention was to fake it and if it was well prepared, then of course it would look like that. A planned fakery does account for the swift coverup. Otherwise the behavior of the staff of Rainbow's End is almost unbelievable." I brooded. "Best girl, I'm not sure of anything. Is somebody trying to drive me out of my skull?"

She treated my question as rhetorical, which it was-I hope. "Then what do we do?"

"Uh... we try to check on Schultz. And not worry about the next step until we have done that."

"How?"

"Bribery, my love. Lies and money. Lavish lies and a parsimonious use of money. Unless you are wealthy. I never thought to ask before I married you."

"Me?" Gwen's eyes went wide. "But, Richard, I married you for your money."

"You did? Lady, you've been swindled. Do you want to see a lawyer?"

"I suppose so. Is that what they call 'statutory rape'?"

"No, 'statutory rape' is carnal knowledge of a statue... although why anyone should care I have never understood. I don't think it's against regulations here." I turned back to the terminal. "Do you want that lawyer? Or shall we look for Schultz?"

"Uh... Richard, we're having a very odd honeymoon. Let's go back to bed."

"Bed can wait. But you can have another waffle while I try to look up Schultz." I keyed the terminal again for directory, scrolled for "Schultz."

I found nineteen listings for "Schultz" but no "Enrico Schultz." Small wonder. I did find "Hendrik Schultz," so I keyed for amplification:

"The Reverend Doctor Hendrik Hudson Schultz, B.S., M.A., D.D., D.H.L., K.G.B., Past Grand Master Royal Astrological Society. Scientific Horoscopy at moderate prices. Weddings solemnized. Family counseling. Eclectic and holistic therapy. Investments advice. Bets accepted at all hours at track odds. Petticoat Lane at ring ninety-five, next to Madame Pompadour." Over this was his picture in holo, smiling and repeating his slogan: "I'm Father Schultz, your friend in need. No problem too large, no problem too small. All work guaranteed."

Guaranteed to be what? Hendrik Schultz looked just like Santa Claus minus the beard and not at all like my friend Enrico, so I keyed him out-reluctantly, as I felt kinship with the Reverend Doctor. "Gwen, he's not in the directory, or not in it by the name on his Golden Rule ID. Does that mean he was never in it? Or that his name was removed last night before his body was cold?"

"Do you expect an answer? Or are you thinking aloud?"

"Neither one, I guess. Our next move is to query the hub-right?" I checked the directory, then called the office of immigration at the hub. "This is Dr. Richard Ames speaking. I'm trying to locate a habitant named Enrico Schultz. Can you give me his address?"

"Why don't you look him up in the directory?" (She sounded just like my third-grade teacher-not a recommendation.)

"He's not in the directory. He's a tourist, not a subscriber. I just want his address in Golden Rule. Hotel, pension, whatever."

"Tut, tut! You know quite well that we don't give out personal information, even on marks. If he's not listed, then he paid fair and square not to be listed. Do unto others. Doctor, lest ye be done unto." She switched off.

"Where do we ask now?" inquired Gwen.

"Same place, same seatwarmer-but with cash and in person. Terminals are convenient, Gwen... but not for bribery in amounts of less than a hundred thousand. For a small squeeze, cash and in person is more practical. Coming with me?"

"Do you think you can leave me behind? On our wedding day? Just try it, buster!"

"Put some clothes on, maybe?"

"Are you ashamed of the way I look?"

"Not at all. Let's go."

"I give in. Half a sec, while I find my slippers. Richard, can we go via my compartment? At the ballet last night I felt very chic but my gown is too dressy for public corridors at this time of day. I want to change."

"Your slightest wish, ma'am. But that brings up another point. Do you want to move in here?"

"Do you want me to?"

"Gwen, it has been my experience that marriage can sometimes stand up against twin beds but almost never against twin addresses."

"You didn't quite answer me."

"So you noticed. Gwen, I have this one nasty habit. Makes me hard to live with. I write."

The dear girl looked puzzled. "So you've told roe. But why do you call it a nasty habit?"

"Uh... Gwen my love, I am not going to apologize for writing... anymore than I would apologize for this missing foot... and in truth the one led to the other. When I could no longer follow the profession of arms, I had to do something to eat. I wasn't trained for anything else and back home some other kid had my paper route. But writing is a legal way of avoiding work without actually stealing and one that doesn't take any talent or training.

"But writing is antisocial. It's as solitary as masturbation. Disturb a writer when he is in the throes of creation and he is likely to turn and bite right to the bone... and not even know that he's doing it. As writers' wives and husbands often learn to their horror.

"And-attend me carefully, Gwen!-there is no way that writers can be tamed and rendered civilized. Or even cured. In a household with more than one person, of which one is a writer, the only solution known to science is to provide the patient with an isolation room, where he can endure the acute stages in private, and where food can be poked in to him with a stick. Because, if you disturb the patient at such times, he may break into tears or become violent. Or he may not hear you at all... and, if you shake him at this stage, he bites."

I smiled my best smile. "Don't worry, darling. At present

I am not working on a story and I will avoid starting one until we arrange such an isolation chamber for me to work in. This place isn't big enough and neither is yours. Mmm, even before we go to the hub, I want to call the Manager's office and see what larger compartments are available. We'll need two terminals also."

"Why two, dear? I don't use a terminal much."

"But when you do, you need it. When I'm using this one in wordprocessing mode, it can't be used for anything else-no newspaper, no mail, no shopping, no programs, no personal calls, nothing. Believe me, darling; I've had this disease for years, I know how to manage it. Let me have a small room and a terminal, let me go into it and seal the door behind me, and it will be just like having a normal, healthy husband who goes to the office every morning and does whatever it is men do in offices-I've never known and have never been much interested in finding out."

"Yes, dear. Richard, do you enjoy writing?"

"No one enjoys writing."

"I wondered. Then I must tell you that I didn't quite tell you the truth when I said that I had married you for your money."

"And I didn't quite believe you. We're even."

"Yes, dear. I really can afford to keep you as a pet. Oh, I can't buy you yachts. But we can live in reasonable comfort here in Golden Rule-not the cheapest place in the Solar System. You won't have to write."

I stopped to kiss her, thoroughly and carefully. "I'm glad I married you. But I will indeed have to write."

"But you don't enjoy it and we don't need the money. Truly we don't!"

"Thank you, my love. But I did not explain to you the other insidious aspect of writing. There is no way to stop. Writers go on writing long after it becomes financially unnecessary... because it hurts less to write than it does not to write."

"I don't understand."

"I didn't either, when I took that first fatal step-a short story, it was, and I honestly thought I could quit anytime. Never mind, dear. In another ten years you will understand. Just pay no attention to me when I whimper. Doesn't mean anything-just the monkey on my back."

"Richard? Would psychoanalysis help?"

"Can't risk it. I once knew a writer who tried that route. Cured him of writing all right. But did not cure him of the need to write. The last I saw of him he was crouching in a comer, trembling. That was his good phase. But the mere sight of a wordprocessor would throw him into a fit."

"Uh... that bent for mild exaggeration?"

"Why, Gwen! I could take you to him. Show you his gravestone. Never mind, dear; I'm going to call the Manager's housing desk." I turned back to the terminal-

-just as the dum thing lit up like a Christmas tree and the emergency bell chimed steadily. I flipped the answer switch. "Ames here! Are we broached?"

Words sounded while letters streamed across the face of the CRT, and the printer started a printout without my telling it to-I hate it when it does that.

"Official to Dr. Richard Ames: The Management finds that the compartment you now occupy designated 715301 at 65-15-0.4 is urgently needed. You are notified to vacate at once. Unused rent has been applied to your account, plus a free bonus of fifty crowns for any inconvenience this may cause you. Order signed by Arthur Middlegaff, Manager's Proxy for Housing. Have a Nice Day!"

IV

"I go on working for the same reason a hen goes on laying eggs."
H. L. MENCKEN 1880-1956

My eyes grew wide. "Oh, goody goody cheesecakes! Fifty whole crowns-golly! Gwen! Now you can marry me for my money!"

"Do you feel well, dear? You paid more than that for a bottle of wine just last night. I think it's perfectly stinking. Insulting."

"Of course it is, darling. It is intended to make me angry, in addition to the inconvenience of forcing me to move. So I won't."

"Won't move?"

"No, no. I'll move at once. There are ways to fight city hall but refusing to move is not one of them. Not while the Manager's Proxy can cut off power and ventilation and water and sanitary service. No, dear, the intention is to get me angry, ruin my judgment, and get me to make threats that can't be carried out."

I smiled at my darling. "So I won't get angry and I'll move right out of here, meek as a lamb... and the intense anger that I feel down inside will be kept there, out of sight, until it's useful to me. Besides, it changes nothing, as I was about to apply for a larger compartment-one more room, at least-for us. So I'll call him back-dear Mr. Middlegaff, I mean."

I keyed for directory again, not knowing offhand the call code of the housing office. I punched the "execute" key.

And got a display on the screen of "TERMINAL OUT OF SERVICE."

I stared at it while I counted ten, backwards, in Sanskrit. Dear Mr. Middlegaff, or the Manager himself, or someone, was trying hard to get my goat. So above all I must not let it happen. Think calm, soothing thoughts, suitable for a fakir on a bed of nails. Although there did not seem to be any harm in thinking about frying his gonads for lunch once I knew who he was. With soy sauce? Or just garlic butter and a dash of salt?

Thinking about this culinary choice did calm me a bit. I found myself unsurprised and not materially more annoyed when the display changed from 'TERMINAL OUT OF SERVICE" to "POWER AND POWER-DEPENDENT SERVICES WILL TERMINATE AT 1300." This was replaced by a time display in large figures: 1231-and this changed to 1232 as I looked at it.

"Richard, what in the world are they doing?"

"Still trying to drive me out of my skull, I surmise. But we won't let them. Instead we'll spend twentyeight minutes-no, twenty-seven-clearing out five years of junk."

"Yessir. How can I help?"

"That's my girl! Small wardrobe out here, big one in the bedroom-throw everything on the bed. On the shelf in the big wardrobe is a duffel bag, a big jumpbag. Stuff everything into it as tightly as possible. Don't sort. Hold out that robe you wore at breakfast and use it to make a bundle out of anything that you can't jam into the duffel bag; tie it with its sash."

"Your toilet articles?"

"Ah, yes. Plastic bag dispenser in buttery-just dump 'em into a bag and shove them in with the bundle. Honey, you're going to make a wonderful wife!"

"You are so right. Long practice, dear-widows always make the best wives. Want to hear about my husbands?"

"Yes but not now. Save it for some long evening when you have a headache and I'm too tired." Having dumped ninety percent of my packing onto Gwen I tackled the hardest ten percent: my business records and files.

Writers are pack rats, mostly, whereas professional military leam to travel light, again mostly. This dichotomy could have made me schizoid were it not for the most wonderful invention for writers since the eraser on the end of a pencil: electronic files.

I use Sony Megawafers, each good for half a million words, each two centimeters wide, three millimeters thick, with information packed so densely that it doesn't bear thinking about. I sat down at the terminal, took off my prosthesis (peg leg, if you prefer), opened its top. Then I removed all my memory wafers from the terminal's selector, fed them into the cylinder that is the "shinbone" of my prosthesis, closed it and put it back on.

I now had all the files necessary to my business: contracts, business letters, file copies of my copyrighted works, general correspondence, address files, notes for stories to be written, tax records, et cetera, and so forth, ad nauseam. Before the days of electronic filing these records would have been a tonne and a half of paper in half a tonne of steel, all occupying several cubic meters. Now they massed only a few grams and occupied space no larger than my middle finger-twenty million words of file storage.

The wafers were totally encased in that "bone" and thereby safe from theft, loss, and damage. Who steals another man's prosthesis? How can a cripple forget his artificial foot? He may take it off at night but it is the first thing he reaches for in getting out of bed.

Even a holdup man pays no attention to a prosthesis. In my case most people never know that I am wearing one. Just once have I been separated from it: An associate (not a friend) took mine away from me in locking me up overnight-we had had a difference of opinion over a business matter. But I managed to escape, hopping on one foot. Then I parted his hair with his fireplace poker and took my other foot, some papers, and my departure. The writing business, basically sedentary, does have its brisk moments.

The time on the terminal read 1254 and we were almost through. I had only a handful of books-bound books, with words printed on paper-as I did my research, such as it was, through the terminal. These few Gwen stuffed into the bundle she had made from my robe. "What else?" she demanded.

"I think that's all. I'll make a fast inspection and we'll shove anything we've missed out into the corridor, then figure out what to do with it after they turn out the lights."

"How about that bonsai tree?" Gwen was eyeing my rock maple, some eighty years old and only thirty-nine centimeters high.

"No way to pack it, dear. And, besides, it requires watering several times a day. The sensible thing is to will it to the next tenant."

"In a pig's eye, chief. You'll carry it by hand to my compartment while I drag the baggage along behind."

(I had been about to add that "the sensible thing" has never appealed to me.) "We're going to your compartment?"

"How else, dear? Certainly we need a bigger place but our urgent need is any sort of roof over our heads. As it looks like snow by sundown."

"Why, so it does! Gwen, remind me to tell you that I'm glad I thought of marrying you."

"You didn't think of it; men never do."

"Really?"

"Truly. But I'll remind you, anyhow."

"Do that. I'm glad you thought of marrying me. I'm glad you did marry me. Will you promise to keep me from doing the sensible thing from here on?"

She did not commit herself as the lights blinked twice and we were suddenly very busy, Gwen in putting everything out into the corridor while I made a frantic last go-around. The lights blinked again, I grabbed my cane, and got out the door just as it contracted behind me. "Whew!"

"Steady there, boss. Breathe slowly. Count ten before you exhale, then let it out slowly." Gwen patted my back.

"We should have gone to Niagara Falls. I told you so. I told you."

"Yes, Richard. Pick up the little tree. At this gee I can handle both the bag and the bundle, one in each hand. Straight up to zero gee?"

"Yes but I carry the duffel bag and the tree. I'll strap my cane to the bag."

"Please don't be macho, Richard. Not when we're so busy."

" 'Macho' is a put-down word, Gwen. Using it again calls for a spanking; use it a third time and I beat you with this here cane. I'll damn well be macho anytime I feel like it."

"Yes, sir. Me Jane, you Tarzan. Pick up the little tree. Please."

We compromised. I carried the duffel bag and used my cane to steady myself; Gwen carried the bundle with one hand, the bonsai maple with the other. She was unbalanced and kept shifting sides with the bundle. Gwen's proposed arrangement was, I must admit, more sensible, as the weight would not have been too much for her at that acceleration and it fell off steadily as we climbed up to zero gee. I felt sheepish, a touch ashamed... but it is a temptation to a cripple to prove, especially to women, that he can so do everything he used to do. Silly, because anyone can see that he can't. I don't often give in to the temptation.

Once we were floating free at the axis we moved right along, with our burdens tethered to us, while Gwen guarded the little tree with both hands. When we reached her ring, Gwen took both pieces of luggage and I did not argue. The trip took less than a half hour. I could have ordered a freight cage-but we might still be waiting for it. A "laborsaving device" often isn't.

Gwen put down her burdens and spoke to her door.

It did not open.

Instead the door answered, "Mistress Novak, please call the Manager's housing office at once. The nearest public terminal is at ring one-hundred-five, radius one-thirty-five degrees, acceleration six-tenths gravity, next to the personnel transport facility. That terminal will accept your call free of charge, courtesy of Golden Rule."

I cannot say that I was much surprised. But I admit that I was dreadfully disappointed. Being homeless is somewhat like being hungry. Maybe worse.

Gwen behaved as if she had not heard that dismal announcement. She said to me, "Sit down on the duffel bag, Richard, and take it easy. I don't think I'll be long."

She opened her purse, dug into it, came up with a nail file and a bit of wire, a paper clip, I believe. Humming a monotonous little tune she started to work on the compartment's door.

I helped by not offering advice. Not a word. It was difficult but I managed it.

Gwen stopped humming and straightened up. "There!" she announced. The door opened wide.

She picked up my bonsai maple-our bonsai maple. "Come in, dear. Better leave the duffel bag across the threshold for now, so that the door won't pucker up. It's dark inside."

I followed her in. The only light inside was from the screen on her terminal: ALL SERVICES SUSPENDED

She ignored it and dug into her purse, brought out a finger torch, then used its light to get into a drawer in her buttery, took out a long, slender screwdriver, a pair ofAutoloc tweezers, a nameless tool that may have been homemade, and a pair of high-pot gloves in her slender size. "Richard, will you hold the light for me, pretty please?"

The access plate she wished to reach was high up over her microwaver and was locked and decorated with the usual signs warning tenants against even looking crosseyed at it, much less touching it, with incantations of "Danger! Do Not Tamper-Call Maintenance," *etc.* Gwen climbed up, sat on the oven top, and opened the access plate with just a touch; the lock apparently had been disabled earlier.

Then she worked very quietly save for that monotonous little hum, plus an occasional request for me to move the torch light. Once she produced a really spectacular fireworks display which caused her to cluck reprovingly and murmur, "Naughty, naughty. Mustn't do that to Gwen." She then worked most slowly for a few more moments. The compartment's lights came on, accompanied by that gentle purr of a live room-air, micromotors, *etc.*

She closed the access plate. "Will you help me down, dear?"

I lifted her down with both hands, held on to her, claimed a kiss for payment. She smiled up at me. "Thank you, sir! My, my, I had forgotten how nice it is to be married. We should get married more often."

"Now?"

"No. Lunchtime now. Breakfast was hearty but it is now past fourteen. Feel like eating?"

"It's good exercise," I assented. "How about the Sloppy Joe on Appian Way near ring one-oh-five? Or do you want haute cuisine?"

"A Sloppy Joe is okay; I'm not a fussy eater, dear. But I don't think we should go outside for lunch; we might not be able to get back in."

"Why not? You do a slick job of bypassing a change in a door combo."

"Richard, it might not be that easy again. They simply haven't noticed, as yet, that locking me out didn't work. But when they do- They can weld a steel plate across the doorway if that is what it takes. Not that it will, as I shan't fight being moved any more than you did. Let's eat lunch; then I'll pack. What would you like?"

It turned out that Gwen had salvaged from my buttery gourmet items I had in freeze or in sterile pack. I do stock unusual viands. How can you know ahead of time, when working on a story in the middle of the night, that you are going to suffer a craving for a clam sundae? It is merely prudent to have materials on hand. Otherwise you could be tempted to stop work and leave your monastic seclusion in order to find an item you must have-and that way lies bankruptcy.

Gwen laid out a buffet of her supplies and mine-ours, I should say-and we ate while discussing our next move... for move we must. I told her that I intended to call dear Mr. Middlegaff as soon as we finished lunch.

She looked thoughtful. "I had better pack first."

"If you wish. But why?"

"Richard, we have leprosy; that's evident. I think it must be connected with the killing of Schultz. But we don't know. Whatever the cause, when we stick our heads outside, I had better have my things ready just as yours are; we may not get back in." She nodded at her terminal, still shining with the message: ALL SERVICES SUSPENDED. "Putting that terminal back into service would be more than a matter of wheedling a few solenoids, since the computer itself is elsewhere. So we can't beard Mr. Middlegaff from this compartment. Therefore we must do everything we need to do here before we go out that door."

"While you pack, I can duck out to call him."

"Over my dead body!"

"Huh? Gwen, be reasonable."

"Reasonable I emphatically am. Richard Colin, you are my brand-new bridegroom; I intend to get years and years of wear out of you. While this trouble is going on, I am not letting you out of my sight. You might disappear like Mr. Schultz. Beloved, if they shoot you, they are going to have to shoot me first."

I attempted to reason with her; she put her hands over her ears. "I won't argue it, I can't hear you, I'm not listening!" She uncovered her ears. "Come help me pack. Please."

"Yes, dear."

Gwen packed in less time than I had taken, yet my help consisted mostly of keeping out of her way. I'm not too used to living with females; military service is not conducive to homelife and I had tended to avoid marriage, aside from short-term contracts with Amazon comrades-contracts automatically canceled by orders for change of duty. After I reached field grade I had had female orderlies a couple or six times-but I don't suppose that relationship is much like civilian marriage, either.

What I'm trying to say is that, despite having written many thousands of words of love-confession stories under a hundred-odd female pen names, I don't know much about women. When I was learning the writing scam, I pointed this out to the editor who bought from me these sin, suffer, and repent stories. The editor was Evelyn Fingerhut, a glum middle-aged man with a bald spot, a tic, and a permanent cigar.

He grunted. "Don't try to leam anything about women; it would handicap you."

"But these are supposed to be true stories," I objected.

"They are true stories; every one of them is accompanied by a sworn statement: "This story is based on fact.'" He jerked a thumb at the manuscript I had just brought in. "You've got a 'Fact' slip clipped to that one. Are you trying to tell me it ain't so? Don't you want to get paid?"

Yes, I wanted to be paid. To me the acme of prose style is exemplified by that simple, graceful clause: "Pay to the order of-" I answered hastily, "Well, as a matter of fact that story is no problem. I didn't actually know the woman but my mother told me all about her-it was a girl she had gone to school with. This girl did indeed marry her mother's younger brother. She was already pregnant when the truth was discovered... and then she was faced with that horrible dilemma just as I've told it: the sin of abortion, or the tragedy of an incest baby with a possibility of two heads and no chin. All fact, Evelyn, but I trimmed it a bit in telling it. It turned out that Beth Lou was no blood relation to her uncle-and that's the way I wrote it-but also her baby was no relation to her husband. That part I left out."

"So write it again and leave that part in and the other part out. Just be sure to change the names and places; I don't want any complaints."

At a later time I did so and sold that version to him also, but never did get around to telling Fingerhut that it hadn't happened to a schoolmate of my mother, but was something I had cribbed from a book belonging to my Aunt Abby: the librettos of The Ring Cycle by Richard Wagner, who should have stuck to composing music and found himself a W. S. Gilbert to write his librettos; Wagner was a terrible writer.

But his preposterous plots were just right for the true confessions trade... toned down a little, not quite so hard core-and, of course, different names and locales. I didn't steal them. Or not quite. They are all in the public domain today, copyrights expired, and besides, Wagner stole those plots in the first place.

I could have made a soft living on nothing but Wagnerian plots. But I got bored with it. When Fingerhut retired and bought a turkey ranch, I quit the confession business and started writing war stories. This was more difficult-for a time I almost starved-because military matters I do know something about, and that (as Fingerhut had pointed out) is a handicap.

After a while I learned to suppress what I knew, not let it get in the way of the story. But I never had that trouble with confession stories as neither Fingerhut, nor I, nor Wagner, knew anything at all about women.

Especially about Gwen. Somewhere I had acquired the conviction that women need at least seven pack mules to travel. Or their equivalent in big suitcases. And of course women are by nature disorganized. So I believed.

Gwen moved out of her compartment with just one large case of clothes, smaller than my duffel bag, with every garment neatly folded, and one smaller case of-well, non-clothes. Things.

She lined up our chattels-duffel bag, bundle, large case, small case, her purse, my cane, bonsai tree-and looked at them. "I think I can work out a way," she said, "for us to handle all of them at once."

"I don't see how," I objected, "with only two hands apiece. I had better order a freight cage."

"If you wish, Richard."

"I will." I turned toward her terminal... and stopped. "Uh-"

Gwen gave full attention to our little maple tree.

"Uh-" I repeated. "Gwen, you're going to have to loosen up. I'll slide out and find that nearest terminal booth, then come back-"

"No, Richard."

"Huh? Just long enough to-"

"No, Richard."

I heaved a sigh. "What's your solution?"

"Richard, I will agree to any course of action that does not involve us being separated. Leave everything inside this compartment and hope that we can get back in-that's one way. Place everything just outside the door and leave it, while we go to order a freight cage-and call Mr. Middlegaff-that's another way."

"And have it all disappear while we are gone. Or are there no two-legged rats in this neighborhood?" I was being sarcastic. Every habitat in space has its nightwalkers, invisible habitants who cannot afford to remain in space but who evade being returned to Earth. In Golden Rule I suspect that the management spaced them when they caught them... although there were darker rumors, ones that caused me to avoid all sorts of ground pork.

"There is still a third way, sir, adequate for moving us as far as that terminal booth. That being as far as we can go until the housing office gives us a new assignment. Once we know our new address we can call for a cage and wait for it.

"The booth is only a short distance. Sir, earlier you said you could carry both your bag and your bundle, with your cane strapped to your bag. For this short distance I agree to that. I can carry both my cases, one in each hand, with the strap of my purse let out so that I can sling it over my shoulder.

"The only problem then is the little tree. Richard, you've seen pictures in National Geographic of native girls carrying bundles on their heads?" She didn't wait for me to agree; she picked up the little potted tree, placed it atop her head, took her hands away, smiled at me, and sank down, bending only her knees, spine straight and bearing erect-picked up her two cases.

She walked the length of her compartment, turned and faced me. I applauded.

"Thank you, sir. Just one thing more. The walkways arc sometimes crowded. If someone jostles me, I'll do this." She simulated staggering from being bumped, dropped both cases, caught the bonsai as it fell, put it back on top her head, again picked up her luggage. "Like that."

"And I'll drop my bags and grab my cane and beat him with it. The jerk who jostled you. Not to death. Just a reprimand." I added, "Assuming that the miscreant is male and of mature years. If not, I'll make the punishment fit the criminal."

"I'm sure you will, dear. But, truly, I don't think anyone will jostle me, as you will be walking in front of me, breaking trail. All right?"

"All right. Except that you should strip to the waist."

"Really?"

"All pictures of that sort in National Geographic always show the women stripped to the waist. That's why they print them."

"All right if you say to. Although I'm not really endowed for that."

"Quit fishing for compliments, monkey face; you do all right. But you're much too good for the common people, so keep your shirt on."

"I don't mind. If you really think I should."

"You're too willing. Do as you please but I am not, repeat not, urging you to. Are all women exhibitionists?"

"Yes."

The discussion ended because her door signal sounded. She looked surprised. I said, "Let me," and stepped to the door, touched the voice button. "Yes?"

"Message from the Manager!"

I took my finger off the voice button, looked at Gwen. "Shall I open up?"

"I think we must."

I touched the dilator button; the door spread open. A man in a proctor's uniform stepped inside; I let the door snap back. He shoved a clipboard at me. "Sign here. Senator." Then he pulled it back. "Say, you are the Senator from Standard Oil, ain't you?"

V

"He is one of those people who would be enormously improved by death."

H.H.MUNRO 1870-1916

I said, "You have that backwards. Who are you? Identify yourself."

"Hunh? If you ain't the Senator, forget it; I got the wrong address." He started to back out and bumped his behind against the door-looked startled and turned his head, reached for the dilator button.

I slapped his hand down. "I told you to identify yourself. That clown suit you're wearing is no identification; I want to see your credentials. Gwen! Cover him!"

"Right, Senator!"

He reached for a hip pocket, made a fast draw. Gwen kicked whatever it was out of his hand; I chopped him in the left side of his neck. His clipboard went flying and down he went, falling with the curiously graceful leisureliness of low gravity.

I knelt by him. "Keep him covered, Gwen."

"One second. Senator-watch him!" I pulled back and waited. She went on, "Okay now. But don't get in my line of fire. please."

"Roger wilco." I kept my eyes on our guest, collapsed loosely on the deck. His awkward posture seemed to say that he was unconscious. Nevertheless there was a chance that he was shamming; I had not hit him all that hard. So I applied my thumb to the left lower cervical pressure point, jabbing hard to cause him to scream and claw at the ceiling if he were awake. He did not move.

So I searched him. First from behind, then I rolled him over. His trousers did not quite match his tunic, and they lacked the braid down the sides that a proctor's uniform trousers should have. The tunic was not a good fit. His pockets held a few crowns in paper, a lottery ticket, and five cartridges. These last were Skoda 6.5 mm longs, unjacketed, expanding, used in pistols, tommies, and rifles-and illegal almost everywhere. No wallet, no IDs, nothing else.

He needed a bath.

I rocked back and stood up. "Keep your gun on him, Gwen. I think he's a nightwalker."

"I think so, too. Please look at this, sir, while I keep him covered." Gwen pointed at a pistol lying on the deck.

Calling it a "pistol" dignifies it more than it deserves. It was a lethal weapon, homemade, of the category known traditionally as "nimble gun." I studied it as thoroughly as I could without touching it. Its barrel was metal tubing so light in gauge that I wondered whether or not it had ever been fired. The handgrip was plastic, ground or whittled to conform to a fist. The firing mechanism was concealed by a metal cover held in place by (believe me!) rubber bands. That it was a single-shot weapon seemed certain. But with that flimsy barrel it could turn out to be a one-shot as well; it seemed to me to be almost as dangerous to the user as to his target.

"Nasty little thing," I said. "I don't want to touch it; it's a builtin booby trap."

I looked up at Gwen. She had him covered with a weapon quite as lethal but embodying all the best in modem gunsmith's art, a nine-shot Miyako. "When he pulled a gun on you, why didn't you shoot him? Instead of taking a chance on disarming him? You can get very dead that way."

"Because."

"Because what? If someone pulls a gun on you, kill him at once. If you can."

"I couldn't. When you told me to cover him, my purse was 'way over there. So I covered him with this." Something suddenly glinted in her other hand and she appeared to be a two-gun fighter. Then she clipped it back into her breast pocket-a pen. "I was caught flatfooted, boss. I'm sony."

"Oh, that I could make such mistakes! When I yelled at you to cover him, I was simply trying to distract him. I didn't know you were heeled."

"I said I was sorry. Once I had time to get at my purse I got out this persuader. But I had to disarm him first."

I found myself wondering what a field commander could do with a thousand like Gwen. She masses about fifty kilos and stands not much over a meter and a half high-say one hundred sixty centimeters in her bare feet. But size has little to do with it, as Goliath found out a while back.

On the other hand there aren't a thousand Gwens anywhere. Perhaps just as well. "Were you carrying that Miyako in your purse last night?"

She hesitated. "If I had been, the results might have been regrettable, don't you think?"

"I withdraw the question. I think our friend is waking up. Keep your gun on him while I find out." Again I gave him my thumb.

He yelped.

"Sit up," I said. "Don't try to stand up; just sit up and place your hands on top of your head. What's your name?"

He urged on me an action both unlikely and lewd. "Now, now," I reproved him, "let's have no rudeness, please. Mistress Hardesty," I went on, looking directly at Gwen, "would you enjoy shooting him just a little bit? A flesh wound? Enough to teach him to be polite."

"If you say so. Senator. Now?"

"Well... let's allow him that one mistake. But no second chance. Try not to kill him; we want him to talk. Can you hit him in the fleshy part of a thigh? Not hit the bone?"

"I can try."

"That's all anyone can ask. If you do hit a bone, it won't be out of spite. Now let's start over. What is your name?"

"Uh... Bill."

"Bill, what is the rest of your name?"

"Aw, just Bill. That's all the name I use."

Gwen said, "A little flesh wound now. Senator? To sharpen his memory?"

"Perhaps. Do you want it in your left leg. Bill? Or your right?"

"Neither one! Look, Senator, 'Bill' actually is all the name I've got- and make her not point that thing at me, will you, please?"

"Keep him covered. Mistress Hardesty. Bill, she won't shoot you as long as you cooperate. What happened to your last name?"

"I never had one. I was 'Bill Number Six' at the Holy Name Children's Refuge. Dirtside, that is. New Orleans."

"I see. I begin to see. But what did it say on your passport when you came here?"

"Didn't have one. Just a contractor's work card. It read 'William No-Middle-Name Johnson.' But that was just what the labor recruiter wrote on it. Look, she's wiggling that gun at me!"

"Then don't do anything to annoy her. You know how women are."

"I sure do! They ought not to be allowed to have firearms!"

"An interesting thought. Speaking of firearms-That one you were carrying: I want to unload it but I'm afraid that it might explode in my hand. So we will risk your hand instead. Without getting up, turn around so that your back is toward Mistress Hardesty. I am going to push your zapgun to where you can reach it. When I tell you to-not before!-you can take your hands down, unload it, then again put your hands on your head. But listen closely to this:

"Mistress Hardesty, when Bill turns around, take a bead on his spine just below his neck. If he makes one little suspicious move-kill him! Don't wait to be told, don't give him a second chance, don't make it a flesh wound-kill him instantly."

"With great pleasure. Senator!"

Bill let out a moan.

"All right. Bill, turn around. Don't use your hands, just willpower."

He pivoted on his buttocks, scraping his heels to do so. I noted with approval that Gwen had shifted to the steady twohanded grip. I then took my cane and pushed Bill's homemade gun along the deck to a point in front of him. "Bill, don't make any sudden moves. Take your hands down. Unload your pistol. Leave it open with its load beside it. Then put your hands back on your head."

I backed up Gwen with my cane and held my breath while Bill did exactly what I had told him to do. I had no compunction about killing him and I felt sure that Gwen would kill him at once if he tried to turn that homemade gun on us.

But I worried over what to do with his body. I didn't want him dead. Unless you are on a battlefield or in a hospital, a corpse is an embarrassment, hard to explain. The management was bound to be stuffy about it.

So I breathed a sigh of relief when he finished his assigned task and put his hands back on his head.

I reached out with my cane, reversed, and dragged that nasty little gun and its one cartridge toward me-pocketed that cartridge, then ground a heel down onto its tubing barrel, crushing the muzzle and ruining the firing mockup, then said to Gwen, "You can ease up a little now. No need to kill him this instant. Drop back to flesh-wound alert."

"Aye aye. Senator. May I give him that flesh wound?"

"No, no! Not if he behaves. Bill, you're going to behave, aren't you?"

"Ain't I been behaving? Senator, make her put the safety on that thing, at least!"

"Now, now! Yours didn't even have a safety. And you are in no position to insist on terms. Bill, what did you do with the proctor you slugged?"

"Huh!"

"Oh, come now. You show up here in a proctor's tunic that does not fit you. And your pants don't match your coat. I ask to see your credentials and you pull a gun-a rumble gun, for the love of Pete! And you haven't bathed in-how long? You tell me. But tell me first what you did with the owner of that tunic. Is he dead? Or just sapped and stuffed into a closet? Answer quickly or I'll ask Mistress Hardesty to give you a memory stimulant. Where is he?"

"I don't know! I didn't do it."

"Now, now, dear boy, don't lie to me."

"The truth! On my mother's honor it's the simple truth!'

I had doubts about his mother's honor but it would have been unmannerly to express them, especially in dealing with so sorry a specimen. "Bill," I said gently, "you are not a proctor. Must I explain why I am certain?" (Chief Proctor Franco is a System-class martinet. If one of his stooges had shown up for morning roll call looking-and stinking-the way this poor slob did, the delinquent would have been lucky merely to have been shipped dirtside.) "I will if you insist. Did you ever have a pin stuck under a fingernail, then the outer end of the pin heated? It improves one's memory."

Gwen said eagerly, "A bobby pin works better. Senator-more mass to hold the heat. I've got one right here. Can I do it to him? Can I?"

"You mean, 'May I,' do you not? No, dear girl, I want you to continue to keep Bill under your sights. If it becomes necessary to resort to such methods, I won't ask a lady to do it for me."

"Aw, Senator, you'll get soft-hearted and let up on him just when he's ready to spout. Not me! Let me show you-please!"

"Well..."

"Keep that bloodthirsty bitch away from me!" Bill's voice was shrill.

"Bill! You will apologize to the lady at once. Otherwise I will let her do to you whatever she wishes."

He moaned again. "Lady, I apologize. I'm sorry. But you scare it right out of me. Please don't use a bobby pin on me-I seen a guy once had that done to him."

"Oh, it could be worse," Gwen assured him pleasantly. 'Twelve-gauge copper wire conducts the heat much better and there are interesting places in the male body to use it. More efficient. Quicker results." She added thoughtfully, "Senator, I've got some copper wire in my small case. If you'll hold this pistol for a moment, I'll get it for you."

"Thank you, my dear, but it may not be needed; I mink Bill wants to say something."

"It's no trouble, sir. Don't you want me to have it ready?"

"Perhaps. Let's see. Bill? What did you do with that proctor?"

"I didn't, I never saw him! Just two skins said they had a cash job for me. I don't make 'em, never seen 'em, they ain't with it. But there are always new ones and Fingers said they passed. He-"

"Hold it. Who is 'Fingers' T

"Uh, he's mayor of our alley. Okay?"

"More details, please. Your alley?"

"Man's got to sleep somewhere, ain't he? VIP like you has got a compartment with his name on it. I should be so lucky! Home is where it is-right?"

"I think you're telling me that your alley is your home. Where is it? Ring, radius, and acceleration."

"Uh... that's not exactly how it is."

"Be rational. Bill. If it's inside the main cylinder, not off in one of the appendages, its location can be described that way."

"Maybe so but I can't describe it that way because that's not how you get there. And I won't lead you the way you have to go because-" His face screwed up in utter despair and he looked about ten years old. "Don't let her hotwire me and don't let her shoot me a little bit at a time. Please! Just space me and get it over with-okay?"

"Senator?"

"Yes, Mistress Hardesty?"

"Bill's afraid that, if you hurt him enough, he will tell you where he hides to sleep. Other nightwalkers sleep there, too;

that's the point. I suspect that the Golden Rule isn't big enough to hide him from those others. If he tells you where they sleep, they'll kill him. Probably not quickly."

"Bill, is that why you're being stubborn?"

'Talked too much already. Space me."

"Not while you're alive. Bill; you know things I need to know and I intend to squeeze them out of you if it takes copper wire and Mistress Hardesty's most whimsical notions. But I may not need the answer to the question I asked you. What happens to you if you tell me or show me where your alley is?"

He was slow in answering; I let him take his time. At last he said in a low voice, "Nosies caught a skin six seven months ago. Cracked him open. Not from my alley thank Jesus. His alley was a maintenance space near a hundred ten and down at full gee.

"So the nosies gassed it and a lot of skins died... but this skin they turned loose. Cold help that was to him. He hadn't

been walking twenty-four hours when he was grabbed and locked in with rats. Hungry ones."

"I see." I glanced at Gwen.

She gulped and whispered, "Senator, no rats. I don't like rats. Please."

"Bill, I withdraw the question about your alley. Your hideout. And I won't ask you to identify any other nightwalker. But I expect you to answer anything else fully and quickly. No more stalling. No waste of time. Agreed?"

"Yes, sir."

"Go back. These two strangers offered you a job. Tell me about it."

"Uh, they tell me just a few minutes of razzle-dazzle; nothing to it. They want me to wear this jacket, make like a nosie. Bong the door here, ask for you. 'Message from the Manager,' that's what I have to say. Then the rest like we did-you know. When I say, 'Hey? You ain't the Senator! Or are you?', they are supposed to close in and arrest you."

Bill looked at me accusingly. "But you messed it up. You fouled it, not me. You didn't do anything like you was supposed to. You clamped the door on me-and you shouldn't uh. And you turned out to be the Senator after all... and you had her with you." His voice was especially bitter when he referred to Gwen.

I could understand his resentment. How is a sincere criminal, trying hard, going to get ahead in his profession if his victim fails to cooperate? Almost all crime depends on the acquiescence of the victim. If the victim refuses his assigned role, the criminal is placed at a disadvantage, one so severe that it usually takes an understanding and compassionate judge to set things right. I had broken the rules; I had fought back.

"You've certainly had a run of bad luck. Bill. Let's check this 'Message from the Manager' you were supposed to deliver. Keep him covered. Mistress Hardesty."

"Can I take my hands down?"

"No." The clipboard was still on the deck, between Gwen and Bill but a bit toward me; I could reach it without crossing her line of fire. I picked it up.

Clipped to the board was a receipt form for messages, with a place for me (or someone) to sign. Clipped beside it was the familiar blue envelope of Mackay Three Planets; I opened it.

The message was in five-letter code groups, about fifty of them. Even the address was in code. Written in longhand above the address was "Sen. Cantor, St. Oil."

I tucked it into a pocket without comment. Gwen queried me with her eyes; I managed not to see it. "Mistress Hardesty, what shall we do with Bill?"

"Scrub him!"

"Eh? Do you mean, 'Waste him'? Or are you volunteering to scrub his back?"

"Heavens, no! Both. Neither. I am suggesting that we shove him into the refresher and leave him there until he's sanitary. Bathed, hot water and lots of suds. Hair shampooed. Clean fingernails and toenails. Everything. Don't let him out until he whiffs clean."

"You would let him use your 'fresher?"

"Things being the way they are, I don't expect to use it again. Senator, I'm tired of his stink."

"Well, yes, he does put one in mind of rotten potatoes on a hot day in the Gulf Stream. Bill, take off your clothes."

The criminal class is the most conservative group in any society; Bill was as reluctant to strip down in the presence of a lady as he had been to divulge the hideout of his fellow outcasts. He was shocked that I would suggest it, horrified that a lady would go along with this indecent proposal. On the latter point I might have agreed with him yesterday... but I had learned that Gwen was not easily daunted. In fact I think she enjoyed it.

As he peeled down. Bill gained a bit of my sympathy; he looked like a plucked chicken, with a woebegone expression to match. When he was down to undershorts (gray with dirt), he stopped and looked at me. "All the way," I said briskly. "Then duck into the 'fresher and take the works. If you do a poor job, you'll do it over. If you stick your nose outside in less than thirty minutes, I won't bother to check you; I'll simply send you back in. Now get those drawers off-fast!"

Bill turned his back to Gwen, took off his shorts, then scuttled sideways to the refresher in a futile effort to retain a fraction of his modesty. He sealed the door behind him.

Gwen put her pistol into her purse, then worked her fingers, flexing and extending them. "I was getting stiff from holding it. Beloved, may I have those cartridges?"

"Eh?"

"The ones you took from Bill. Six, wasn't it? Five and one."

"Certainly, if you wish." Should I tell her that I too had use for them? No, data of that sort should be shared only on a "need to know" basis. I got them out, handed them to her.

Gwen looked them over, nodded, again took out her sweet little pistol-slid out its clip, loaded the six confiscated rounds into it, replaced the clip, jacked one into the chamber, locked the weapon and returned it to her purse.

"Correct me if I'm wrong," I said slowly. "When I first called on you to back me, you covered him with a pocket pen. Then, after you disarmed him, you held him with an empty gun. Is that correct?"

"Richard, I was taken by surprise. I did the best I could."

"I was not criticizing. On the contrary!"

"There never seemed to be a good time to tell you." She went on, "Dear, could you spare a pair of pants and a shirt? There are some right on top in your duffel bag."

"I suppose so. For our problem child?"

"Yes. I want to shove his filthy clothes down the oubliette, let them be recycled. The stench won't clear out of here until we get rid of them."

"So let's get rid of them." I shoved Bill's clothes down the chute (all but his shoes), then washed my hands at the buttery's fountain. "Gwen, I don't think I have anything more to learn from this lunk. We could leave him some clothes and simply leave. Or... we could leave right away and not leave him any clothes."

Gwen looked startled. "But the proctors would pick him up at once."

"Exactly. Dear girl, this lad is a born loser; the proctors will grab him before long anyhow. What do they do with nightwalkers today? Have you heard any gossip?"

"No. Nothing with the ring of truth."

"I don't think they ship them down to Earth. That would cost the Company too much money, thus violating the Golden Rule the way it is interpreted here. There is no jail or prison in Golden Rule; that limits the possibilities. So?"

Gwen looked troubled. "I don't think I like what I'm hearing."

"It gets worse. Outside that door, perhaps not in sight but somewhere near, are a couple of hoodlums who mean us no good. Or who mean me no good, at least. If Bill leaves here, having flubbed the job he was hired to do, what happens to him? Do they feed him to the rats?"

"Ugh!"

"Yes, 'ugh.' My uncle used to say, 'Never pick up a stray kitten... unless you've already made up your mind to be owned by it.' Well, Gwen?"

She sighed. "I think he's a good boy. Could be, I mean, if anyone had ever bothered with him."

I echoed her sigh. "Just one way to find out."

VI

"Don't lock the barn after it is stolen."

HARTLEY M. BALDWIN

It is difficult to punch a man in the nose through a terminal. Even if one does not intend to use such direct persuasion, discussion via computer terminal can be less than satisfactory. With the flick of a key your opponent can shut you off or turn you over to a subordinate. But if you are physically present in his office, you can counter his most reasonable arguments simply by being more stupidly stubborn than he is. Just sit tight and say no. Or say nothing. You can face him with the necessity of either assenting to your (oh so reasonable) demands or having you thrown out bodily.

The latter probably will not fit his public persona. For these reasons I decided to skip calling Mr. Middlegaff, or anyone at the housing office, and went directly to the Manager's office, in person. I had no hope of influencing Mr. Middlegaff, who clearly had had a policy handed to him, which he was now carrying out with bureaucratic indifference ("Have

(A Nice Day" indeed!). I had little hope of getting satisfaction from the Manager-but, at least, if the Manager turned roe down, I would not have to waste time going higher. The Golden Rule, being a privately-owned company not chartered by any sovereign state (i.e., being itself sovereign) had no authority higher than the Manager-God Almighty Himself was not even a minority partner.

Decisions by the Managing Partner might be utterly arbitrary ... but they were utterly final. There was no possibility of years of litigation, no way a higher court could reverse his decision. The "Law's Delays" that so blemished the workings of "justice" in democratic states down dirtside could not exist here. I recalled only a few capital cases in the five years I had lived here... but in each case the Manager had sat as magistrate, then the condemned had been spaced that same day.

In such a system the question of miscarriage of justice becomes moot.

Add to that the fact that the profession of law, like the profession of prostitution, is neither licensed nor forbidden and the result is a judicial system having little resemblance to the crazy ziggurat of precedent and tradition that passes for "justice" dirtside. Justice in the Golden Rule might be astigmatic if not totally blind; it could not be slow.

We left Bill in the outer foyer of the Manager's offices, with our baggage-my duffel bag and bundle, Gwen's cases, the bonsai maple (watered before we left Gwen's compartment)- with instructions to Bill to sit on the duffel bag, guard the bonsai with his life (Gwen's phrasing), and watch the rest. We went inside.

There we each, separately, left our names at the reception desk, then found seats. Gwen opened her purse, got out a Casio game board. "What'll it be, dear? Chess, cribbage, backgammon, go, or what?"

"You're expecting a long wait?"

"Yes, I am, sir. Unless we build a fire under the mule."

"I think you're right. Any ideas about how to build that fire? Without setting fire to the wagon, I mean. Oh, what the devil!-go ahead and set fire to the wagon. But how?"

"We could use a variation on the old standard: 'My husband knows all.' Or 'Your wife has found out.' But our variation would have to be quite novel, as the basic ploy has long white whiskers." She added, "Or I can go into labor pains. That is always good for attention."

"But you don't look pregnant."

"Want to bet? So far no one has taken a good look at me. Just give me five minutes alone in that ladies' lounge across there and you'll be certain I'm nine months gone. Richard, this ploy I learned years ago when I was a claims investigator for an insurance company. It will always get one inside, anywhere."

"You tempt me," I admitted, "as it would be such fun to watch you work it. But the ploy we use not only has to get us inside, but also must keep us inside under circumstances in which the bloke will listen to our arguments."

"Dr. Ames."

"Yes, Mrs. Ames?"

"The Manager isn't going to listen to our arguments."

"Please amplify."

"I applauded your decision to go straight to the top because I saw that it would save time and tears to get all the bad news at once. We have leprosy; what has already been done to us makes that clear. The Manager intends not merely to force us to move; he means to kick us right out of Golden Rule. I don't know why but we don't have to know why-it simply is so. Realizing that, I am relaxed to it. Once you realize it, too, dear man, we can make plans. To go dirtside, or to Luna, or to Promised Land, Ell-Four, Ceres, Mars-wherever you wish, beloved. 'Whither thou goest-'"

'To Luna."

"Sir?"

"For now, at least. Luna Free State isn't bad. Currently it is moving from anarchy to bureaucracy but it is not yet completely musclebound. It still has quite a lot of freedom for people who know how to deal with it pragmatically. And there is still elbow room on Luna. And in Luna. Yes, Gwen, we must leave; I suspected it earlier and know it now. Save for one thing, we could go straight to the spaceport. I still want to see the Manager. Damn it, I want to hear it from his own lying lips! Then with a clear conscience I can turn on the poison."

"You intend to poison him, dear?"

"A figure of speech. I plan to place him on my list, then quick Karma will do him in."

"Oh. Perhaps I can think of a way to help it along."

"Not necessary. Once on the list, they never last long."

"But I would enjoy it. 'Vengeance is mine, sayeth the Lord.' But the Revised Version reads: 'Vengeance is Gwen's... then Mine only if Gwen leaves Me any.'"

I clucked at her. "Who was saying that I should not take me law into my own hands?"

"But I was talking about you, sir; I didn't say a word about me. I delight in making quick Karma even quicker-it's my pet hobby."

"My darling, you are a nasty little giri, I am happy to say. Going to kill him with hives? Or with hangnails? Maybe hiccups?"

"I'm thinking of keeping him awake till he dies. Lack of sleep is worse than anything you listed, dear, if pushed far enough. The victim's judgment goes to pieces long before he stops breathing. He hallucinates. Including all his worst phobias. He dies in his own private hell and never escapes from it."

"Gwen, you sound as if you had used this method."

Gwen did not comment.

I shrugged. "Whatever you decide, let me know how I can help."

"I will, sir. Mmm, I think highly of drowning in caterpillars. But I don't know how to get that many caterpillars other than by having them shipped up from Earth. Except-Well, one can always arrange for them through the insomnia method. Toward the end you can cause the condemned to create his own caterpillars just by suggesting it to him." She shivered. "Schrecklich! But I won't use rats, Richard. Never rats. Not even imaginary rats."

"My sweet and gentle bride, I'm glad to know you draw the line at something."

"Certainly I do! Beloved, you startled me with the notion that bad manners could be judged a hanging offense. My own concern is for evil, rather than for bad manners. I think evil deeds should never go unpunished. God's arrangements for punishing evil are too slow to suit me; I want it done now. Take hijacking. Hijackers should be hanged on the spot as soon as they are caught. An arsonist should be burned at the stake on the site of the fire he started, if possible before its ashes grow cold. A rapist should be killed by-"

I did not leam then what complex way of dying Gwen favored for rapists because a polite bureaucrat (male, gray, dandruffy, builtin risus) stopped in front of us and said, "Dr. Ames?"

"I am Dr. Ames."

"I am Mungerson Fitts, Assistant Deputy Administrator for Superrogatory Statistics. I'm helping out. I'm sure you understand how terribly busy the Manager's office is just now with the new addition being brought up to spinall the temporary relocations that have to be made and all the disruptions to routine that have to be accommodated before we can all settle down in a larger and greatly improved Golden Rule." He gave me a winning smile. "I understand you want to see the Manager."

"That's right."

"Excellent. Because of the present emergency I am helping here in order to maintain the proud quality of Golden Rule service to our guests during alterations. I have been fully empowered to act for the Manager; you can think of me as his alter ego... because to all intents and purposes I am the Manager. This little lady-she is with you?"

"Yes."

"Honored, ma'am. Delighted. Now, friends, if you will please come with me-"

"No."

"Excuse me?"

"I want to see the Manager."

"But I explained to you-"

"I'll wait."

"I don't think you understood me. Please come with-"

"No."

(At this point Fitts should have grabbed me with a come-along and tossed me out on my arse. Not that it is easy to do mis to me; I trained with the Dorsai. But that is what he should have done. However, he was inhibited by custom, habit, and policy.)

Fitts paused and looked baffled. "Uh-But you must, you know."

"No, I don't know."

"I'm trying to tell you-"

"I want to see the Manager. Did he tell you what to do about Senator Cantor?"

"Senator Cantor? Let me see, he's the Senator from, uh, from..."

"If you don't know who he is, how do you know what to do about him?"

"Uh, if you will just wait a moment while I consult."

"You had better take us along-since you don't seem to be 'fully empowered' on this critical issue."

"Uh... please wait here."

I stood up. "No, I had better get back. The Senator may be looking for me. Please tell the Manager that I'm sorry I could not arrange it." I turned to Gwen. "Come, Madam. Let's not keep him waiting." (I wondered if Mungerson would notice that "him" was a pronoun without a referent.)

Gwen stood up, took my arm. Fitts said hastily, "Please, friends, don't leave! Uh, come with me." He herded us to an unmarked door. "Wait just one moment, please!"

He was gone more than a moment but nevertheless only a short time. He returned with his face wreathed with smiles (I think that is the expression). "Right this way, please!" He took us through the unmarked door, down a short passage, and into the Manager's inner office.

The Manager looked up from his desk and inspected us, not with the familiar, fatherly expression of the too-frequent "Word from the Manager" announcements that come over every terminal. On the contrary Mr. Sethos looked as if he had found something nasty in his porridge.

I ignored his chilly demeanor. Instead I stood just inside the door, Gwen still on my arm, and waited. I once lived with a fussy cat (is there another sort?) who, when faced with an offering of food not perfectly to his taste, would stand still and, with dignified restraint, look offended-a remarkable bit of acting for one whose face was completely covered with ftir;

however, he did it mostly by body language. I now did this to Mr. Sethos, primarily by thinking about that cat. I stood... and waited.

He stared at us... and at last stood up, bowed slightly and said, "Madam... will you please be seated?"

Whereupon we both sat down. Round one to us, on points. I could not have done it without Gwen. But I did have her help and once I got my butt into his chair he was not going to get it out-until I got what I wanted.

I sat still, kept quiet, and waited.

When Mr. Sethos's blood pressure reached triggering level, he said, "Well? You've managed to bull your way into my office. What's this nonsense about Senator Cantor?"

"I expect you to tell me. Have you assigned Senator Cantor to my wife's compartment?"

"Eh? Don't be ridiculous. Mistress Novak has a one-room efficiency compartment, the smallest size in first class. The Senator from Standard Oil, if he came here, would be in a deluxe suite. Of course."

"Mine, perhaps? Is that why you evicted me? For the Senator?"

"What? Don't put words in my mouth; the Senator isn't aboard. We've been forced to ask a number of our guests to shift around, you among them. The new section, you know. Before it can we welded on, all compartments and spaces adjacent to ring one-thirty must be evacuated. So we have to double up temporarily to make room for our displaced guests. Your compartment will have three families in it, as I recall. For a short while, that is."

"I see. Then it was just an oversight that I was not told where to move?"

"Oh, I'm sure you were told."

"I surely was not. Will you please tell me my new address?"

"Doctor, do you expect me to carry housing assignments in my head? Go wait outside and someone will look it up and tell-you."

I ignored his suggestion/order. "Yes, I do think you carry them in your head."

He snorted. "There are more than one hundred eighty thousand people in this habitat. I have assistants and computers for such details."

"I'm sure you do. But you have given me strong reason to think that you do have such details in your head... when they interest you. I'll give an example. My wife was not introduced to you. Mungerson Fitts did not know her name, so he could not have told you. But you knew without being told. You knew her name and what compartment she lived in. Did live in, I mean, until you had her locked out. Is that how you apply the Golden Rule, Mr. Sethos? By kicking out your guests without even the courtesy of warning them ahead of time?"

"Doctor, are you trying to pick a fight?"

"No, I'm trying to find out why you have been hassling us. Bullying us. Persecuting us. You and I both know that it has nothing to do with the temporary dislocations caused by bringing the new section up to spin and welded on; that's certain ... because the new section has been building for over three years and you've known for at least a year the date you were going to bring it up to spin... yet you had me kicked out of my compartment with less than thirty minutes' warning. My wife you treated even worse; you simply locked her out, no warning at all. Sethos, you aren't just moving us around to allow for attaching the new section. If that were true, we would have been told at least a month ago, along with temporary reassignments and with dates for moving into new permanent quarters. No, you're rousting us right out of Golden Rule habitat ... and I want to know why!"

"Get out of my office-I'll have someone take you by the hand and lead you to your new-temporary-quarters."

"Not necessary. Just tell me the coordinates and the compartment number. I'll wait here while you look them up."

"By God, I believe you want to be kicked off Golden Rule!"

"No, I've been quite comfortable here. I'll be happy to stay ... if you will tell me where we are to sleep tonight... and give us our new permanent assignment-where we'll be living once the new section is welded on and pressurized, I mean. We need a three-room suite, to replace the two-roomer I had and the one-room compartment Mrs. Ames had. Two terminals. One for each of us, just as before. And low gravity. Four-tenths gee by preference, but not more than half a gravity."

"Would you like an egg in your beer? Why do you need two terminals? That requires additional wiring."

"So it does and I'll pay for it. Because I'm a writer. I'll use one as a wordprocessor and for library reference work. Mrs. Ames needs the other for household routine."

"Oho! You plan to use residential space for business purposes. That calls for commercial rates. Not residential rate."

"What does that come to?"

"It will have to be calculated. There is a costing factor for each type of commercial use. Retail stores, restaurants, banks, and the like cost approximately three times as much per cubic meter as does residential space. Factory space does not cost as much as retail space but may have surcharges for hazards and so forth. Warehousing is only slightly more than residential. Offhand I think you will have to pay office space rates-that's a factor of three point five-but I'll have to take it up with the chief accountant."

"Mr. Manager, do I understand you correctly? Are you planning to charge us three and half times as much as our combined rents were together?"

"Approximately. It might be as low as three times."

"Well, well. I haven't concealed the fact that I'm a writer, it says so on my passport and I'm listed that way in your directory, all the past five years. Tell me why it suddenly makes a difference to you whether I use my terminal to write letters home... or to write stories?"

Sethos gave what could have been construed as a laugh. "Doctor, Golden Rule is a business enterprise undertaken for profit. I manage it for my partners to that end. No one has to live here, no one has to do business here. What I charge people to live here, or to do business here, is controlled solely by maximizing profit to the partnership, as guided by my best judgment to that end. If you don't like it, you can take your business elsewhere."

I was just about to shift the basis for discussion (I can see when I'm outgunned) when Gwen spoke up. "Mr. Sethos?"

"Eh? Yes, Mistress Novak? Mrs. Ames."

"Did you get your start pimping for your sisters?"

Sethos turned a delicate shade of eggplant. He finally got control of himself well enough to say, "Mrs. Ames, are you being intentionally insulting?"

"That's obvious, isn't it? I don't know that you have sisters; it just seems like the sort of enterprise that would appeal to you. You have injured us for no reason whatever. We come to you, asking for redress of grievance; you answer us with evasions, outright lies, irrelevant issues... and a fresh extortion. You justify this new outrage with a plonking sermon on free enterprise. Just what price did you usually charge for your sisters? And how much did you keep as your commission? Half? Or more than half?"

"Madam, I must ask you to leave my office... and this habitat. You are not the sort we want living here."

"I am delighted to leave," Gwen answered, not stirring, "just as quickly as you settle my account. And my husband's account."

"Get... OUT!"

Gwen put out her hand, palm up. "Cash first, you bald-faced swindler. The balance of our accounts plus the fare-home deposits we each made when we got here. If we leave this room without collecting, there's not a prayer that you will ever pay what you owe us. Pay up and we leave. The first shuttle down to Luna. But pay up and right now! Or you'll have to space me to shut me up. If you call in your goons, you flannel mouth, I'll scream this place down. Want a sample?" Gwen tilted her head back, cut loose with a scream that made my teeth ache.

Sethos, too, apparently-I saw him flinch.

He stared at her a long moment, then touched some control on his desk. "Ignatius. Close the accounts of Dr. Richard Ames and of Mistress Gwendolyn Novak, uh"-with only a momentary hesitation he correctly stated my compartment number and that of Gwen-"and deliver them to my office at once. With cash to pay them off. With receipts to chop and print. No checks. What? You listen to me. If it takes longer than ten minutes we'll hold a full-scale inspection of your department ... see who has to be fired, who merely has to be demoted." He switched off, did not look at us.

Gwen got out her little gameboard, set it for tic-tac-toe, which suited me, it being about the intellectual level I felt able to cope with then. She beat me four straight games, even though twice I had the first move. But my head was still aching from her supersonic scream.

I had not kept track of the exact time but it must have been about ten minutes later that a man came in with our accounts. Sethos glanced at them, passed them over to us. Mine appeared to be accurate; I was about to sign the receipt when Gwen spoke up. "What about interest on the money I had to deposit?"

"Eh? What are you talking about?"

"My fare back dirtside. I had to deposit it in cash, no lOUs accepted. Your bank here charges nine percent on private loans, so it ought to be paying at least savings account rates on impounded money. Although time-deposit rates would be more reasonable. I've been here more than a year, so... let me see-" Gwen took out the pocket calculator we had been using for tic-tac-toe. "You owe me eight hundred seventy-one and-call it even crowns-eight hundred and seventy-one crowns in interest. In Swiss gold that comes to-"

"We pay in crowns, not Swiss money."

"All right, you owe it to me in crowns."

"And we don't pay interest on return ticket money; it is simply held in escrow."

I was suddenly alert. "You don't, eh? Dear, may I borrow that widget? Let's see-a hundred and eighty thousand people... and one-way tourist fare to Maui on PanAm or Qantas is-"

"Seventy-two hundred," Gwen answered, "except weekends and holidays."

"So." I punched it in. "Hmm, well over a billion crowns! One two nine six followed by six zeroes. How interesting! How enlightening. Sethos old boy, you may be skimming off over a hundred million a year, tax free, simply by placing all this money you are holding for us suckers in Luna City money funds. But I don't think you use it that way-or not all of it. I think you run your whole enterprise using other people's money... without their knowledge or consent. Right?"

The flunky (Ignatius?) who had fetched our accounts was listening with intent interest.

Sethos growled. "Sign those receipts and get out."

"Oh, I shall!"

"But pay us our interest," Gwen added.

I shook my head. "No, Gwen. Anywhere but here we could sue him. Here he is both the law and the judge. But I don't mind, Mr. Manager, as you have given me a wonderful, salable idea for an article-Reader's Digest, probably, or Fortune. Uh, I'll title it 'Pie in the Sky, or How to Get Rich on Other People's Money: The Economics of Privately-Owned Space Habitats.' A hundred million a year swindled out of the public in Golden Rule habitat alone. Something along that line."

"You publish that and I'll sue you for everything you own!"

VII

"You can't cheat an honest man. He has to have larceny in his heart in the first place"

CLAUDE WILLIAM DUKENFffiLD 1880-1946

Outside we found Bill still sitting on my duffel bag, the little tree in his arms. He stood up, an uncertain look on his face. But when Gwen smiled at him, he grinned back. I said, "Any problems. Bill?"

"No, boss. Uh, skin tried to buy little tree."

"Why didn't you sell it?"

He looked shocked. "Huh? It belongs to her."

"That's right. If you had sold it, do you know what she would have done? She would have drowned you in caterpillars, that's what she would have done. So you were smart not to risk crossing her. But no rats. As long as you stick with her, you need never be afraid of rats. Right, Mistress Hardesty?"

"Correct, Senator. No rats, ever. Bill, I'm proud of you, not letting someone tempt you. But I want you to stop that slang-why, someone hearing you might think you were a nightwalker-and we wouldn't want that, would we? So don't say 'a skin tried to buy the tree,' just say 'a man.'"

"Uh, matter o' fac', this skin was a slitch. Uh, a broad. Read?"

"Yes. But let's try that again. Say 'a woman.'" "All right. That skin was a woman." He grinned sheepishly. "You sound just like the Sisters that taught us at Holy Name, back dirtside."

"I take that as a compliment. Bill... and I am going to nag you about your grammar and your pronunciation and your choice of words even more than they ever did. Until you talk as beautifully as the Senator does. Because, many years ago, a wise and cynical man proved that the way a person talks is the most important thing about him when it comes to dealing successfully with the world. Do you understand me?" "Uh-Some."

"You can't leam everything at once and I don't expect you to. Bill, if you bathe every day and speak grammatically, the world will decide that you are a winner and will treat you accordingly. So we'll keep trying."

I said, "And in the meantime it is urgent to get out of this bucket."

"Senator, this is urgent, too."

"Yes, yes, the old 'how to housebreak a puppy' rule. I understand. But let's get moving." "Yes, sir. Straight to the spaceport?" "Not yet. Straight down El Camino Real while checking every public terminal for one that will accept coins. Do you have any coins?"

"A few. Enough for a short call, perhaps." "Good. But keep your eyes open for a changemaker, too. Now that you and I have canceled our credit codes, we'll have to use coins."

We picked up our burdens again and started out. Gwen said quietly, "I don't want Bill to hear this... but it's not difficult to convince a public terminal that you are using a correct credit code when you are not."

I answered just as quietly, "We will resort to that only if honesty won't work. My darling, how many more little scams do you have tucked away?"

"Sir, I don't know what you're talking about. A hundred meters ahead of us-Does that booth on the right have the

yellow sign? Why are so few public booths equipped to receive coins?"

"Because Big Brother likes to know who is calling whom ... and with the credit code method we are practically begging him to share our secrets. Yes, that one does have the sign. Let's pool our coins."

The Reverend Doctor Hendrik Hudson Schultz answered his terminal promptly. His Santa Claus visage peered at me, sizing me up, counting the money in my wallet.

"Father Schultz?"

"In the flesh. How can I serve you, sir?"

Instead of answering, I took out a thousand-crown note, held it in front of my face. Dr. Schultz looked at it, raised his bristling brows. "You interest me, sir."

I tapped my ear while glancing left and right, then I signed all three of the three little monkeys. He answered, "Why, yes, I was about to go out for a cup of coffee. Will you join me? One moment-"

Shortly he held up a sheet of paper on which he had printed in large block letters: OLD MACDONALD'S FARM

"Can you meet me at Sans Souci Bargrill? That's on Petticoat Lane right across from my studio. About ten minutes, perhaps?" All the while he was talking, he was jabbing a finger at the sign he was showing me.

I answered, "Righto!" and switched off.

I was not in the habit of going to farm country, since full gravity is not kind to my bad leg and farms have to be at full gravity. No, that's not correct; there may be more habitats in the System that use for farming whatever fractional gee they wish (or that mutated plants prefer) than there are that use natural sunlight and full gee. As may be. Golden Rule goes the natural sunlight and full gee route for much of its fresh food. Other spaces in Golden Rule use artificial light and other accelerations for growing food-how much, I don't know. But the enormous space from ring fifty to ring seventy is open air, side to side, save for struts and vibration dampers and walkways joining the principal corridors.

In this span of twenty rings-eight hundred meters-radii 0-60, 120-180, and 240-300 let in the sunlight; radii 60-120, 180-240, and 300-0 are farmland-of which 180-240, ring 50-70 is Old MacDonald's Farm.

That's a lot of farmland. A man could get lost there, especially in fields where corn grows even taller than it does in Iowa. But Doc Schultz had paid me the compliment of assuming that I would know where to meet him: at a popular outdoor restaurant and bar called The Country Kitchen, right spang in the middle of the farm, ring sixty, radius 210, at (of course) full gravity.

To reach the restaurant we had to go downstairs forward of ring fifty, then walk aft (at full gee, damn it!) to ring sixty, a distance of four hundred meters. A short distance, oh certainly-about four city blocks. Try it on a false foot with a stump that has already been used too much in walking and too much in carrying for one day.

Gwen spotted it, in my voice, or my face, or my walk, or something-or she read my mind, maybe; I'm not sure she can't. She stopped.

I stopped. "Trouble, dear?"

"Yes. Senator, put down that bundle. I'll balance Tree-San on my head. Give me the bundle."

"I'm all right."

"Yes, sir. You surely are and I'm going to keep you that way. It is your privilege to be macho whenever you wish... and it's my privilege to go female and be vaporish and weak and unreasonable. Right now I'm about to faint. And I'll stay that way until you give me the bundle. You can beat me later."

"Hmm. When is it my turn to win an argument?"

"On your birthday, sir. Which this is not. Let me have the bundle. Please."

It was not an argument I wanted to win; I handed over the bundle. Bill and Gwen went on ahead of me, with Bill walking 1 in front, breaking trail. She never lost control of the burden balanced on her head, even though the road was not corridor-smooth-a dirt road. Real dirt-a piece of totally unnecessary swank.

I limped slowly along behind, leaning heavily on my cane and putting almost no weight on my stump. By the time I reached the outdoor restaurant I felt fairly well recovered.

Dr. Schultz was leaning against the bar with an elbow hooked over it. He recognized me, did not admit it until I came up to him. "Dr. Schultz?"

"Ah, yes!" He did not ask my name. "Shall we look for a restful spot? I find that I enjoy the quiet of the apple orchard. Shall I ask our host to have a small table and a couple of chairs placed back in the trees?"

"Yes. But three chairs, not two."

Gwen had joined us. "Not four?"

"No. I want Bill to watch our chattels, as he did before. I see an empty table over there; he can pile stuff on it and around it."

Soon we three were settled at a table that had been moved for us back into the orchard. After consulting, I ordered beer for the Reverend and for me. Coke for Gwen, and had told the waitress to find the young man with the bundle and give him what he wanted-beer. Coke, sandwiches, whatever. (I suddenly realized that Bill might not have eaten today.)

When she left, I dug into a pocket, pulled out that thousand-crown note, gave it to Dr. Schultz.

He caused it to disappear. "Sir, do you wish a receipt?"

"No."

"Between gentlemen, eh? Excellent. Now how can I help you?"

Forty minutes later Dr. Schultz knew almost as much about our troubles as I did, as I held nothing back. He could help us, it seemed to me, only if he knew the full background-so far as I knew it-on what had happened.

"You say Ron Tolliver has been shot?" he said at last.

"I didn't see it. I heard the Chief Proctor say so. Correction:

I heard a man who sounded like Franco, and the Manager treated him as such."

"Good enough. Hear hoofbeats; expect horses, not zebras. But I heard nothing about it on my way here, and I noticed no signs of excitement in this restaurant-and the assassination or attempted assassination of the second largest holder of partnership shares in this sovereignty should cause excitement. I was at the bar for a few minutes before you arrived. No word of it. Yet a bar is notoriously the place news hits first; there is always a screen turned on to the news channel. Hmm... could the Manager be covering it up?"

'That lying snake is capable of anything."

"I was not speaking of his moral character, concerning which my judgment matches yours, but solely of physical possibility. One does not cover up a shooting too easily. Blood. Noise. A victim dead or wounded. And you spoke of witnesses-or Franco did. Still, Judge Sethos controls the only newspaper, and the terminals, and the proctors. Yes, if he wished to make the effort, he could surely keep it hush-hush for a considerable period. We shall see-and that is one more item on which I will report to you after you reach Luna City."

"We may not be in Luna City. I'll have to phone you."

"Colonel, is that advisable? Unless our presence together during that few seconds at the bar here was noted by some interested party who knows both of us, it is possible that we have succeeded in keeping our alliance secret. It is indeed fortunate that you and I have never been associated in any fashion in the past; there is no probable way to trace me to you, or you to me. You can phone me, certainly... but one must assume that my terminal is tapped, or my studio is bugged, or both-and both have happened in the past. I suggest, rather, the mails... for other than direst emergency."

"But mail can be opened. By the way, I'm Dr. Ames, not Colonel Campbell, please. And oh yes!-this young man with us. He knows me as 'Senator' and Mrs. Ames as 'Mistress Hardesty' from that dustup I told you about."

"I'll remember. In the course of a long life one plays many roles. Would you believe that I was once known as 'Lance Corporal Finnegan, Imperial Marines'?"

"I can easily believe it."

"Which just goes to show you, as I never was. But I've worked much stranger jobs. Mail can be opened, true-but if I deliver a letter to a Luna City shuttle just before it leaves our spaceport, it is most unlikely that it will ever reach the hands of anyone interested in opening it. In the reverse direction a letter sent to Henrietta van Loon, care of Madame Pompadour, 20012 Petticoat Lane, will reach me with only minimal delay. An old, established madam has years of dealing gently with

other people's secrets. One must trust, I find. The art lies in knowing whom to trust."

"Doc, I find that I trust you."

He chuckled. "My dear sir, I would most happily sell you your own hat were you to leave it on my counter. But you are correct in essence. As I have accepted you as my client you can trust me totally. Being a double agent would invite ulcers ... and I am a gourmand who will do nothing that could interfere with my pleasures as a trencherman."

He looked thoughtful and added, "May I see that wallet again? Enrico Schultz."

I handed it to him. He took out the ID. "You say this is a good likeness?"

"Excellent, I think."

"Dr. Ames, you will realize that the name 'Schultz' at once catches my attention. What you may not guess is that the varied nature of my enterprises makes it desirable for me to note each new arrival in this habitat. I read the Herald each day, skimming everything but noting most carefully anything of a personal nature. I can state unequivocally that this man did not enter Golden Rule habitat under the name 'Schultz.' Any other name might have slipped my mind. But my own surname? Impossible."

"He appears to have given that name on arriving here."

"'-appears to have-' You speak precisely." Schultz looked at the ID. "In twenty minutes in my studio-no, allow me a half hour-I could produce an ID with this face on it-and of as good quality-that would assert that his name was 'Albert Einstein.'"

"You're saying we can't trace him by that ID."

"Hold on; I didn't say that. You tell me this is a good likeness. A good likeness is a better clue than is a printed name. Many people must have seen this man. Several must know who he is. A smaller number know why he was killed. If he was. You left that carefully open."

"Well... primarily because of that incredible Mexican Hat Dance that took place immediately after he was shot. If he was. Instead of confusion, those four behaved as if they had rehearsed it."

"Well. I shall pursue the matter, both with carrot and with stick. If a man has a guilty conscience, or a greedy nature-and most men have both-ways can be found to extract what he knows. Well, sir, we seem to have covered it. But let's be sure, since it is unlikely that we shall be able to consult again. You will press ahead with the Walker Evans aspect, while I investigate the other queries on your list. Each will advise the other of developments, especially those leading into or out of the Golden Rule. Anything more? Ah, yes, that coded message-Did you intend to pursue it?"

"Do you have any ideas on it?"

"I suggest that you keep it and take it to the Mackay main office in Luna City. If they can identify the code, it is then just a matter of paying a fee, licit or illicit, to translate it. Its meaning will tell you whether or not I need it here. If Mackay cannot help, then you might take it to Dr. Jakob Raskob at Galileo University. He is a cryptographer in the department of computer science... and if he can't figure out what to do about it, I can suggest nothing better than prayer. May I keep this picture of my cousin Enrico?"

"Yes, surely. But mail me a copy, please; I may need it in pursuing the Walker Evans angle-on second thought, certain to. Doctor, we have one more need I have not mentioned."

"So?"

"The young man with us. He's a ghost. Reverend; he walks by night. And he's naked. We want to cover him. Can you think of anyone who can handle it-and right away? We would like to catch the next shuttle."

"One moment, sir! Am I to infer that your porter, the young man with your baggage, is the ruffian who pretended to be a proctor?"

"Didn't I make that clear?"

"Perhaps I was obtuse. Very well, I accept the fact... while admitting astonishment. You want me to supply him with papers? So that he can move around in Golden Rule without fear of proctors?"

"Not exactly. I want a bit more than that. A passport. To get him out of Golden Rule and into Luna Free State."

Dr. Schultz pulled his lower lip. "What will he do there? No, I withdraw that question-your business, not mine. Or his business."

Gwen said, "I'm going to spank him into shape. Father Schultz. He needs to leam to keep his nails clean and not to dangle his participles. And he needs some backbone. I'm going to equip him with one."

Schultz looked thoughtfully at Gwen. "Yes, I think you have enough for two. Madam, may I say that, while I do not yeam to emulate you, I do strongly admire you?"

"I hate to see anything go to waste. Bill is about twenty-five, I think, but he acts and talks as if he were ten or twelve. Yet he is not stupid." She grinned. "Ah'll lam him if'n I have to bust his pesky haid!"

"More power to you." Schultz added gently, "But suppose he does turn out to be simply stupid? Lacking the capacity to grow up?"

Gwen sighed. "Then I guess I would cry a bit and find him some protected place, where he could work at what he can do and be whatever he is, in dignity and in comfort. Reverend, I could not send him back down to the dirt and the hunger and the fear-and the rats. Living like that is worse than dying."

"Yes, it is. For dying is not to be feared-it is the final comfort. As we all leam, eventually. Very well, a sincere passport for Bill. I'll have to find a certain lady-see whether or not she can accept a rush assignment." He frowned. "It will be difficult to do this before the next shuttle. And I must have a photograph of him. Plague take it!-that means a trip to my studio. More lost time, more risk for you two."

Gwen reached into her purse, pulled out a Mini Helvetia-illegal without a license most places but probably not covered by Manager's regulations here. "Dr. Schultz, this doesn't make a picture big enough for a passport, I know-but could it be blown up for the purpose?"

"It certainly could be. Mmm, that's an impressive camera."

"I like it. I once worked for the-an agency that used such cameras. When I resigned, I found I had mislaid it... and had to pay for it." She grinned mischievously. "Later I found it-it had been in my purse all along... but 'way down in the bottom lost in the junk." She added, "I'll run get a picture of Bill."

I said hastily, "Use a neutral background."

"Think I was a-hint the door? 'Scuse, please. Back in a second."

She was back in a few minutes; the picture was coming up.

A minute later it was sharp; she passed it to Dr. Schultz. "Will that do?"

"Excellent! But what is that background? May I ask?" "A bar towel. Frankie and Juanita stretched it tight behind Bill's head."

"'Frankie and Juanita,'" I repeated. "Who are they?" "The head bartender and the manager. Nice people." "Gwen, I didn't know you were acquainted here. That could cause problems."

"I'm not acquainted here; I've never been here before, dear. I've been in the habit of patronizing The Chuck Wagon in Lazy Eight Spread at radius ninety-they have square dancing." Gwen looked up, squinting against the sunlight directly overhead-the habitat, in its stately spin, was just swinging through the arc that placed the Sun at zenith for Old MacDonald's Farm. She pointed high-well, sixty degrees up, it had to be. "There, you can see The Chuck Wagon; the dance floor is just above it, toward the Sun. Are they dancing? Can you see? There's a strut partly in the way."

"They're too far away for me to tell," I admitted. "They're dancing." Dr. Schultz said. 'Texas Star, I think. Yes, that's the pattern. Ah, youth, youth! I no longer dance but I have been a guest caller at The Chuck Wagon on occasion. Have I seen you there, Mrs. Ames? I think not."

"And I think 'Yes,'" Gwen answered. "But I was masked that day. I enjoyed your calling. Doctor. You have the real Pappy Shaw touch."

"Higher praise a caller cannot hope for. 'Masked-' Perchance you wore a candy-striped gown in green and white? A full circle skirt?"

"More than a full circle; it made waves whenever my partner twirled me-people complained that the sight made them seasick. You have an excellent memory, sir." "And you are an excellent dancer, ma'am." Somewhat irked, I interrupted. "Can we knock off this Old Home Week? There are still urgent things to do and I still have hopes that we can catch the twenty o'clock shuttle."

Schultz shook his head. 'Twenty o'clock? Impossible, sir." "Why is it impossible? That's over three hours from now. I'm edgy about the idea of waiting for a later shuttle; Franco might decide to send his goons after us."

"You've asked for a passport for Bill. Dr. Ames, even the sorriest imitation of a passport takes more time than that." He paused and looked less like Santa Claus and more like a tired and worried old man. "But your prime purpose is to get Bill out of this habitat and onto the Moon?"

"Yes."

"Suppose you took him there as your bond servant?"

"Huh? You can't take a slave into Luna Free State."

"Yes and no. You can take a slave to the Moon... but he is automatically free, then and forever, once he sets foot on Luna; that is one thing those convicts nailed down when they set themselves free. Dr. Ames, I can supply a bill of sale covering Bill's indentures in time for the evening shuttle, I feel confident. I have his picture, I have a supply of official stationery-authentic, by midnight requisition-and there is time to crease and age the document. Truly, this is much safer than trying to rush a passport."

"I defer to your professional judgment. How and when and where do I pick up the paper?"

"Mmm, not at my studio. Do you know a tiny bistro adjacent to the spaceport, one-tenth gee at radius three hundred? The Spaceman's Widow?"

I was about to say no, but that I would find it, when Gwen spoke up. "I know where it is. You have to go behind Macy's warehouse to reach it. No sign on it."

"That's right. Actually it's a private club, but I'll give you a card. You can relax there and get a bite to eat. No one will bother you. Its patrons tend to mind each his own business."

(Because that business is smuggling, or something equally shady-but I didn't say it.) "That suits me."

The Reverend Doctor got out a card, started to write on it-paused. "Names?"

"Mistress Hardesty," Gwen answered promptly.

"I agree," Dr. Schultz said soberly. "A proper precaution. Senator, what is your surname?"

"It can't be 'Cantor'; I might run into someone who knows what Senator Cantor looks like. Uh... Hardesty?"

"No, she's your secretary, not your wife. 'Johnson.' There have been more senators named 'Johnson' than any other name, so it arouses no suspicion-and it matches Bill's last name... which could be useful." He wrote on the card, handed it to me. "Your host's name is Tiger Kondo and he teaches all sorts of kill-quick in his spare time. You can depend on him."

"Thank you, sir." I glanced at the card, pocketed it. "Doctor, do you want more retainer now?"

He grinned jovially. "Now, now! I haven't yet determined how deeply I can bleed you. My motto is 'All the traffic will bear'-but never make the mark anemic."

"Reasonable. Till later, then. We had better not leave together."

"I agree. Nineteen o'clock is my best guess. Dear friends, it has been both a pleasure and a privilege. And let us not forget the true importance of this day. My felicitations, ma'am. My congratulations, sir. May your life together be long and peaceful and filled with love."

Gwen got on her tiptoes and kissed him for that, and they both had tears in their eyes. Well, so did I.

VIII

"The biscuits and the syrup never come out even."

LAZARUS LONG 1912—

Gwen took us straight to the Spaceman's Widow, tucked in behind Macy's storerooms just as she had said, in one of those odd little comers formed by the habitat's cylindrical shape-if you didn't know it was there, you probably would never find it. It was pleasantly quiet after the crowds we had encountered at the spaceport end of the axis.

Ordinarily this end was for passenger craft only, with freighters ganging up at the other end of the axis of spin. But positioning the new addition for bringing it up to spin had caused all traffic to be routed to the Moonward, or forward, end- "forward" because Golden Rule is long enough to have a slight tidal effect, and will have even more when the new addition is welded on. I don't mean that it has daily tides; it does not. But what it does have-

(I may be telling too much; it depends on how much you have had to do with habitats. You can skip this with no loss.)

What it does have is a tidal lock on Luna; the forward end points forever straight down at the Moon. If Golden Rule were the size of a shuttle craft, or as far away as EllFive, this would not happen. But Golden Rule is over five kilometers long and it orbits around a center of mass only a little over two thousand kilometers away. Surely, that's only one part in four hundred-but it's a square law and there's no friction and the effect goes on forever; it's locked. The tidal lock Earth has on Luna is only four times that-much less if you bear in mind that Luna is round as a tennis ball whereas Golden Rule is shaped more like a cigar.

Golden Rule has another orbital peculiarity. It orbits from pole to pole (okay, everybody knows that-sony) but also this orbit, elliptical but almost a perfect circle, has that circle fully open to the Sun, i.e., the plane of its orbit faces the Sun, always, while Luna rotates under it. Like Foucault's pendulum. Like the spy satellites patrolling Earth.

Or, to put it another way. Golden Rule simply follows the terminator, the day-and-night line on Luna, around and around and around, endlessly-never in shadow. (Well-In shadow at Lunar eclipses, if you want to pick nits. But only then.)

This configuration is only metastable; it is not locked. Everything tugs at it, even Saturn and Jupiter. But there is a little pilot computer in Golden Rule that does nothing but make sure Golden Rule's orbit is always full face to the Sun-thereby giving Old MacDonald's Farm its bountiful crops. It doesn't even take power to speak of, just the tiniest nudges against the tiny deviations.

I hope you skipped the above. Ballistics is interesting only to those who use it.

Mr. Kondo was small, apparently of Japanese ancestry, very polite, and had muscles as sleek as a jaguar-he moved like one. Even without Dr. Schultz's tip I would have known that I did not want to encounter Tiger Kondo in a dark alley unless he was there to protect me.

His door did not open fully until I showed Dr. Schultz's card. Then he at once made us welcome with formal but warm hospitality. The place was small, only half filled, mostly men, and the women were not (I thought) their wives. But not tarts, either. The feeling was that of professional equals. Our host sized us up, decided that we did not belong in the main room with the regulars, put us in a little side room or booth, one big enough for us three and our baggage but just barely. He then took our orders. I asked if dinner was available.

"Yes and no," he answered. "Sushi is available. And sukiyaki cooked at the table by my eldest daughter. Hamburgers and hot dogs can be had. There is pizza but it is frozen; we do not make it. Or recommend it. This is primarily a bar; we serve food but do not demand that our guests eat here. You are welcome to play go or chess or cards all night and never order anything."

Gwen put a hand on my sleeve. "May I?"

"Go ahead."

She spoke to him at some length and I never understood a word. But his face lit up. He bowed and left. I said, "Well?"

"I asked if we could have what I had last time ... and that is not a specific dish but an invitation to Mama-San to use her judgment with whatever she has. It also let him admit that I had been here before... which he would never have done had I not published it, as I was here with another man. He also told me that our little pet here is the best specimen of rock maple he has ever seen outside Nippon... and I asked him to spray it for me just before we leave. He will."

"Did you tell him we were married?"

"Not necessary. The idiom I used in speaking of you implied it."

I wanted to ask her when and how she had learned Japanese but did not-Gwen would tell me when it suited her. (How many marriages are ruined by that itch to know "all about" a spouse? As a veteran of countless true confession stories I can assure you that unbridled curiosity about your wife's/husband's past is a sure formula for domestic tragedy.)

Instead I spoke to Bill. "Bill, this is your last chance. If you want to stay in Golden Rule, now is the time to leave. After you have had dinner, I mean. But after dinner we are going down to the Moon. You can come with us, or stay here."

Bill looked startled. "Did she say I got a choice?"

Gwen said sharply, "Of course you do! You can come with us... in which case I shall require you to behave like a civilized human being at all times. Or you can remain in Golden Rule and go back to your turf-and tell Fingers you botched the job he got you."

"I didn't botch it! He did."

Meaning me-I said, "That does it, Gwen. He resents me. I don't want him around-much less have to support him. He'll slip poison into my soup some night."

"Oh, Bill wouldn't do that. Would you. Bill?"

I said, "Oh, wouldn't he? Notice how quick he is to answer? Gwen, earlier today he tried to shoot me. Why should I put up with his surly behavior?"

"Richard, please! You can't expect him to get well all at once."

This feckless discussion was cut short by Mr. Kondo returning to the table to arrange it for dinner... including hold-down clips for our little tree. One tenth of Earth-normal gravity is enough to hold food on a plate, hold feet against the floor-but just barely. The chairs here were fastened to the floor; there were seat belts on them if you wished to use them-I didn't but a belt does have its points if you have to cut tough steak. Tumblers and cups had lids and sidesippers. The last was perhaps the most needed adaptation; you can easily scald yourself picking up a cup of hot coffee in a tenth gee-the weight is nothing but the inertia is undiminished... and so it slops, all over you.

As Mr. Kondo was placing flatware and sticks at my place he said quietly into my ear, "Senator, is it possible that you were present at the Solis Lacus drop?"

I answered heartily, "I certainly was, mate! You were there, too?"

He bowed. "I had that honor." \ "What outfit?"

"Go for Broke, Oahu."

"Old 'Go for Broke,'" I said reverently. "The most decorated outfit in all history. Proud, man, proud!"

"On behalf of my comrades I thank you. And you, sir?"

"I dropped with... Campbell's Killers."

Mr. Kondo drew air through his teeth. "Ah, so! Proud indeed." He bowed again and went quickly into the kitchen.

I stared glumly at my plate. Caught out-Kondo had recognized me. But when the day comes that, asked point blank, I deny my comrades, don't bother to check my pulse, don't even bother to cremate me-just haul me out with the swill.

"Richard?"

"Huh? Yes, dear?"

"May I be excused?"

"Certainly. Do you feel all right?"

"Quite all right, thank you, but I have something to take care of." She left, headed for the passage leading to the lounges and the exit, moving in that featherlight motion that is dancing rather than walking-at a tenth gee real walking can be accomplished only by wearing grips, magnetic or otherwise-or very long practice; Mr. Kondo was not wearing grips-he glided like a cat.

"Senator?"

"Yes, Bill?"

"Is she mad at me?"

"I don't think so." I was about to add that I would be displeased with him if he persisted in-then shut up in my mind. Threatening to leave Bill behind was too much like beating a baby; he had no armor. "She simply wants you to stand tall and not blame other people for your acts. Not make excuses."

Having delivered myself of my favorite duckbilled platitude I went back to glum self-assessment. *make excuses. Yes, but not out loud, just to myself. That's an excuse in itself, chum-whatever you've done, whatever you've been, is all, totally, one hundred percent, your own fault. All.p>*

Or to my credit. Yes, but damned little. Come on, be truthful.

But look where I started... and still got all the way up to colonel.

In the most whoreson, chancre-ridden, thieving, looting gang of thugs since the Crusades.

Don't talk that way about the Regiment!

Very well. But they aren't the Coldstream Guards, are they?

Those dudes! Why, just one platoon of Campbell's—

Dreck.

Gwen returned, having been gone-oh, quite a time. I hadn't checked the time when she left but it was now, I saw, almost eighteen. I tried to stand-not practical with both table and chair bolted down. She asked, "Have I held up dinner?"

"Not a bit. We ate, and threw the leavings to me pigs."

"All right. Mama-San won't let me go hungry."

"And Papa-San won't serve without you."

"Richard. I did something without consulting you."

"I don't see anything in the book that says that you have to. Can we square it with the cops?"

"Nothing like that. You've noticed the fezzes around town all day-excursionists up from the Shriners convention in Luna City."

"So that's what they are. I thought Turkey had invaded us."

"If you like. But you've seen them today, wandering up and down the Lane and the Camino, buying anything that doesn't bite. I suspect that most of them are not staying overnight; they have a full program in Luna City and have hotel rooms there already paid for. The late shuttles are sure to be crowded-"

"With drunk Turks, woofing into their fezzes. And onto the cushions."

"No doubt. It occurred to me that even the twenty o'clock schedule is likely to be fully booked rather early. So I bought tickets for us and reserved couches."

"And now you're expecting me to pay you back? Submit a claim and I'll pass it along to my legal department."

"Richard, I was afraid we would not get away from here at all tonight."

"Mistress Hardesty, you continue to impress me. What was the total?"

"We can straighten out finances another time. I just felt that I could eat dinner in a happier frame of mind if I was sure that we could get away promptly after dinner. And, uh-" She paused, looked at Bill. "Bill."

"Yes, ma'am?"

"We are about to eat dinner. Go wash your hands."

"Huh?"

"Don't grunt. Do as I tell you."

"Yes, ma'am." Bill got up docilely, went out.

Gwen turned back to me. "I was antsy. Fidgety. Because of the

Limburger."

"What Limburger?"

"Your Limburger, dear. It was part of what I salvaged from your larder, then I put it out on the cheese and fruit tray when we had lunch. There was a little hundred-gram wedge, untouched, still in its wrapping, when we finished. Rather than throw it away, I put it in my purse. I thought it might make a nice snack-"

"Gwen."

"All right, all right! I saved it on purpose... because I've used it in looking-glass warfare before this. It's much nicer than some of the things on the list. Why, you wouldn't believe what nasty-"

"Gwen. I wrote the list. Stick to your muttons."

"In Mr. Sethos's office, you will remember that I was seated almost against the bulkhead-and right by the main ventilation discharge. Quite a draft against my legs and uncomfortably warm. I got to thinking-"

"Gwen."

"They're all alike, all through the habitat-local control, both on heat and volume. And the louvre just snaps on. While Accounting was working up our final statement, the Manager was studiously ignoring us. I turned the volume down and the heat to neutral, and snapped off the cover. I rubbed Limburger cheese all over the vanes of the heat exchanger, and tossed the rest of the package as far back into the duct as I could manage, and put the louvre back on. Then, just before we left, I turned the heat control to 'cold' and turned the volume up." She looked worried. "Are you ashamed of me?"

"No. But I'm glad you're on my side. Uh... you are-aren't you?"

"Richard!"

"But I'm even gladder that we have reservations on the next shuttle. I wonder how long it will be until Sethos feels chilly and turns up the heat?"

What we had for dinner was delicious and I don't know the names of any of it, so I'll let it go at that. We had just reached the burping stage when Mr. Kondo came out, leaned close to my ear, and said, "Sir, come, please."

I followed him into the kitchen. Mama-San looked up from her work, paid no more attention. The Reverend Doctor Schultz was there, looking worried. Trouble?" I asked.

"Just a moment. Here's your pie of Enrico; I've copied it. Here are the papers for Bill; please look them over."

They were in a worn envelope, and the papers were creased and worn and somewhat yellowed and more than somewhat soiled in places. Hercules Manpower, Inc., had hired William No-Middle-Name Johnson, of New Orleans, Duchy of Mississippi, Lone Star Republic, and had in turn sold his indenture to Bechtel High Construction Corp. (bond endorsed for space, free fall, and vacuum)-who had in turn sold the indenture to Dr. Richard Ames, Golden Rule habitat, circum Luna. Etc., etc.-lawyer talk. Stapled to the indenture was a very sincere birth certificate showing that Bill was a foundling, abandoned in Metairie Parish, with an assigned date of birth three days earlier than the date he was found.

"Much of that is true," Dr. Schultz told me. "I was able to wheedle some old records out of the master computer."

"Does it matter whether or not it's true?"

"Not really. As long as it is sincere enough to get Bill out of here."

Gwen had followed me in. She took the papers from me, read them. "I'm convinced. Father Schultz, you're an artist."

"A lady of my acquaintance is an artist. I will convey your compliment. Friends, now the bad news. Tetsu, will you show them?"

Mr. Kondo moved back in the kitchen; Mama-San (Mrs. Kondo, I mean) stepped aside. Mr. Kondo switched on a terminal. He punched up the Herald, cycled it for something-spot news I assume. I found myself staring at myself.

With me, in split screen, was Gwen-a poor likeness of her. I would not have recognized her but for the sound repeating:

"-Ames. Mistress Gwendolyn Novak. The female is a notorious confidence woman who has fleeced many victims, mostly male, around the bars and restaurants of Petticoat Lane. The self-styled 'Doctor' Richard Ames, no visible means of support, has disappeared from his address at ring sixtyfive, radius fifteen, at point four gee. The shooting took place at sixteen-twenty this afternoon in Golden Rule Partner Tolliver's office-"

I said, "Hey! That time is wrong. We were-"

"Yes, you were with me, at the Farm. Hear the rest."

"-according to eyewitnesses both killers fired shots. They are believed armed and dangerous; use extreme caution in apprehending them. The Manager is grief stricken at the loss of his old friend and has offered a reward of ten thousand crowns for-"

Dr. Schultz reached over and shut it off. "It just repeats now; it's on a loop. But it appears as a spot announcement on all channels. By now, most habitants must have seen and heard it."

"Thanks for warning us. Gwen, don't you know better than to shoot people? You're a naughty girl."

"I'm sorry, sir. I fell into bad company."

"Excuses again. Reverend, what in hell are we going to do? That bastich will space us before bedtime."

"That thought occurred to me. Here, try this on for size." From somewhere about his ample person he produced a fez.

I tried it on. "Fits well enough."

"And now this."

It was a black velvet eyepatch on elastic. I slipped it on, decided that I did not like having one eye covered, but did not say so. Papa Schultz had obviously put effort and imagination into trying to keep me from breathing vacuum.

Gwen exclaimed, "Oh, goodness! That does it!"

"Yes," agreed Dr. Schultz. "An eyepatch draws the attention of most observers so strongly that it takes a conscious effort of will to see the features. I always keep one on hand. That fez and the presence of the Nobles of the Mystic Shrine was a happy coincidence."

"You had a fez on hand?"

"Not exactly. It does have a former owner. When he wakes up, he may miss it... but I do not think he will wake up soon. Uh, my friend Mickey Finn is taking care of him. But you might avoid any Shriners from Temple Al Mizar. Their accents may help; they are from Alabama."

"Doctor, I'll avoid all Shriners as much as I can; I think I should board at the last minute. But what about Gwen?"

The Reverend Doctor produced another fez. 'Try it, dear lady."

Gwen tried it on. It tended to fit down over her like a candle snuffer. She lifted it off. "I don't think it does a thing for me; it's not right for my complexion. What do you think?"

"I'm afraid you're right."

I said, "Doctor, Shriners are twice as big as Gwen in all directions and they bulge in different places. It will have to be something else. Grease paint?"

Schultz shook his head. "Grease paint always looks like grease paint."

"That's a very bad likeness of her on the terminal. Nobody could recognize her from that."

"Thank you, my love. Unfortunately there are a good many people in Golden Rule who do know what I look like... and just one of them at the boarding lock tonight could lower my life expectancy drastically. Hmm. With just a little effort and no grease paint I could look my right age. Papa Schultz?"

"What is your right age, dear lady?"

She glanced at me, then stood on tiptoes and whispered in Dr. Schultz's ear. He looked surprised. "I don't believe it. And, no, it won't work. We need something better."

Mrs. Kondo spoke quickly to her husband; he looked suddenly alert; they exchanged some fast chatter in what had to be Japanese. He shifted to English. "May I, please? My wife has pointed out that

Mistress Gwen is the same size, very nearly, as our daughter Naomi-and, in any case, kimonos are quite flexible."

Gwen stopped smiling. "It's an idea-and I thank you both. But I don't look Nipponese. My nose. My eyes. My skin."

There was some more batting around of that fast but long-winded language, three-comered this time. Then Gwen said, "This could extend my life. So please excuse me." She left with Mama-San.

Kondo went back into his main room-there had been lights asking for service for several minutes; he had ignored them. I said to the good Doctor, "You have already extended our lives, simply by enabling us to take refuge with Tiger Kondo. But do you think we can carry this off long enough to board the shuttle?"

"I hope so. What more can I say?"

"Nothing, I guess."

Papa Schultz dug into a pocket. "I found opportunity to get you a tourist card from the gentleman who lent you that fez ... and I have removed his name. What name should go on it? It can't be 'Ames' of course-but what?"

"Oh. Gwen reserved space for us. Bought tickets."

"By your right names?"

"I'm not certain."

"I do hope not. If she used Ames' and 'Novak' the best you can hope for is to try to be first in line for no-shows. But I had better hurry to the ticket counter and get reservations for you as 'Johnson' and-"

"Doc."

"Please? On the next shuttle if this one is booked solid."

"You can't. You make reservations for us and-phtt! You're spaced. It may take them till tomorrow to figure it out. But they will."

"But-"

"Let's wait and see just what Gwen did. If they aren't back in five minutes, I'll ask Mr. Kondo to dig them out."

A few minutes later a lady came in. Father Schultz bowed and said, "You're Naomi. Or are you Yumiko? Good to see you again, anyhow."

The little thing giggled and sucked air and bowed from the waist. She looked like a doll-fancy kimono, little silk slippers, flat white makeup, an incredible Japanese hairdo. She answered, "Ichiban geisha girr is awr. My Ingris are serdom."

"Gwen!" I said.

"Prease?"

"Gwen, it's wonderful! But tell us, fast, the names you used in making our reservations."

"Ames and Novak. To match our passports."

"That tears it. What'll we do. Doc?"

Gwen looked back and forth between us. "Pray tell me the difficulty?"

I explained. "So we go to the gate, each of us well disguised-and show reservations for Ames and Novak. Curtain. No flowers."

"Richard, I didn't quite tell you everything."

"Gwendolyn, you never do quite tell everything. More Limburger?"

"No, dear. I saw that it might turn out this way. Well, I suppose you could say that I wasted quite a lot of money. But I-Uh, after I bought our tickets-tickets we can't use now and arc wasted-I went to Rental Row and put a deposit on a U-Pushit. A Volvo Flyabout."

Schultz said, "Under what name?"

I said, "How much?"

"I used my right name-"

Schultz said, "God help us!"

"Just a moment, sir. My right name is Sadie Lipschitz... and only Richard knows it. And now you. Please keep it to yourself, as I don't like it. As Sadie Lipschitz I reserved the Volvo for my employer. Senator Richard Johnson, and placed a deposit. Six thousand crowns."

I whistled. "For a Volvo? Sounds like you bought it."

"I did buy it, dear; I had to. Both rental and deposit had to be cash because I didn't have a credit card. Oh, I do have; I have enough cards to play solitaire. But Sadie Lipschitz has no credit. So I had to pay six thousand down simply to reserve it-to rent it but on a purchase contract. I tried to get him down a bit but with all the Shriners in town he was sure he could move it."

"Probably right."

"I think so. If we take it, we still have to complete payment on the full list price, another nineteen thousand crowns-"

"My God!"

"-plus insurance and squeeze. But we get the unused balance back if we turn it in here, or Luna City, or Hong Kong Luna, in thirty days. Mr. Dockweiler explained the reason for the purchase contract. Asteroid miners, or boomers rather, had been hiring cars without putting up the full price, taking them to some hideout on Luna, and refitting them for mining."

"A Volvo? The only way you could get a Volvo to the asteroids would be by shipping it in the hold of a Hanshaw. But nineteen-no, twenty-five thousand crowns. Plus insurance and graft. Bald, stark robbery."

Schultz said to me rather sharply, "Friend Ames, I suggest that you stop behaving like the fabled Scotsman faced by a coin-operated refresher. Do you accept what Mrs. Ames could arrange? Or do you prefer die Manager's fresh-air route? Fresh-but thin."

I took a deep breath. "Sorry. You're right, I can't breathe money. I just hate to get clipped. Gwen, I apologize. All right where is Hertz from here? I'm disoriented."

"Not Hertz, dear. Budget Jets. Hertz did not have a unit ten."

IX

"Murphy was an optimist." (O'Toole's commentary on Murphy's Law, as cited by A. Bloch)

To reach the office of Budget Jets we had to go around the end of the spaceport waiting room and into it at the axis, then directly to Budget's door. The waiting room was crowded-the usual lot, plus Shriners and their wives, most of them belted to wall rests, some floating free. And proctors-too many of them.

Perhaps I should explain that the waiting room-and the booking office and the lock to the passenger tunnel and the offices and facilities of Rental Row-are all in free fall, weightless; they do not take part in the stately spin that gives the habitat its pseudogravity. The waiting room and related activities are in a cylinder inside a much larger cylinder, the habitat itself. The two cylinders share a common axis. The big one spins; the smaller one does not-like a wheel turning on an axle.

This requires a vacuum seal at the outer skin of the habitat where the two cylinders touch-a mercury type, I believe, but I've never seen it. The point is that, even though the surrounding habitat spins, the habitat's spaceport must not spin, because a shuttle (or a liner, or a freighter, or even a Volvo) requires a steady place in free fall to dock. The docking nests for Rental Row are a rosette around the main docking facility.

In going through the waiting room I avoided eye contact and went straight to my destination, a door in a forward corner of the waiting room. Gwen and Bill were tailed up behind me. Gwen had her purse hooked over her neck and was guarding the bonsai maple with one arm and clinging to my ankle with her other hand; Bill was holding on to one of her ankles and towing a package wrapped in Macy's wrapping, with Macy's logo prominent on it. I don't know what that wrapping paper originally covered but it now concealed Gwen's smaller case, her not-clothes.

Our other baggage? Following the first principle of saving one's neck, we'd chucked it. It would have marked us as phony-for a one-day side trip Shriners on holiday do not carry great loads of baggage. Gwen's smaller case we could salvage because, disguised with Macy's wrapping, it looked like the sort of shopping many of the Shriners had obviously done. And so did the little tree-just the sort of awkward, silly purchase tourists indulge in. But the rest of our baggage had to be abandoned.

Oh, perhaps it could be shipped to us someday, if safe means could be worked out. But I had written it off our books. Doc Schultz, by scolding me for crabbing over the cost of the deal Gwen had arranged, had reoriented me. I had let myself become soft and sedentary and domesticated-he had forced me to shift gears to the real world, where there are only two sorts:

the quick and the dead.

A truth of which I again became acutely aware in crossing that waiting room: Chief Franco came in behind us. He appeared to be unaware of us and I strove to appear unaware of him. He seemed intent only on reaching a group of his henchmen guarding the lock to the passenger tunnel; he dived straight toward them while I was pulling my little family along a lifeline stretching from the entrance to the corner I wanted to reach.

And did reach it and got through Budget Jets' door, and it contracted behind us and I breathed again and reswallowed my stomach.

In the office of Budget Jets we found me manager, a Mr. Dockweiler, belted at his desk, smoking a cigar, and reading the Luna edition of the Daily Racing Form. He looked around as we came in and said, "Sorry, friends, I don't have a thing to rent or sell. Not even a witch's broom.*'

I thought about who I was-Senator Richard Johnson, representing the enormously wealthy systemwide syndicate of sassafras snifters, one of the most powerful wheeler-dealers at The Hague-and let the Senator's voice speak for me. "Son, I'm Senator Johnson. I do believe that one of my staff made a reservation in my name earlier today-for a Hanshaw Superb."

"Oh! Glad to meet you. Senator," he said as he clipped his paper to his desk and unfastened his seat belt. "Yes, I do have your reservation. But it's not a Superb. It's a Volvo."

"What! Why, I distinctly told that girl - Never mind. Change it, please."

"I wish I could, sir. I don't have anything else."

"Regrettable. Would you be so kind as to consult your competitors and find me a-"

"Senator, there is not a unit left for rent anywhere in Golden Rule. Morris Garage, Lockheed-Volkswagen, Hertz, Interplanet-we've all been querying each other the past hour. No soap. No go. No units."

It was time to be philosophical. "In that case I had better drive a Volvo, hadn't I, son?"

The Senator again got just a touch cranky when required to pony up full list price on what was clearly a much-used car-I complained about dirty ashtrays and demanded that they be vacuumed out... then I said not to bother (when the terminal behind Dockweiler's head stopped talking about Ames and Novak) and said, "Let's check me mass and available delta vee; I want to lift."

For a mass reading Budget Jets does not use a centrifuge but the newer, faster, cheaper, much more convenient, elastic inertiometer-I just wonder if it is as accurate. Dockweiler had us all get into the net at once (all but the bonsai, which he shook and wrote down as two kilos-near enough, maybe), asked us to hug each other with the Macy's package held firmly amongst us three, then pulled the trigger on the elastic support-shook our teeth out, almost; then he announced that our total mass for lift was 213.6 kilos.

A few minutes later we were strapping to the cushions and Dockweiler was sealing the nose and then the inner door of the nest. He had not asked for IDs, tourist cards, passports, or motor vehicle pilot's licenses. But he had counted that nineteen thousand twice. Plus insurance. Plus cumshaw.

I punched "213.6 kg" into my computer pilot, then checked my instrument board. Fuel read "full" and all the idiot lights showed green. I pushed the "ready" button and waited. Dockweiler's voice reached us via the speaker: "Happy landing!"

"Thank you."

The air charge went Whwnpf! and we were out of the nest and in bright sunlight. Ahead and close was the exterior of the spaceport. I squeezed the process control for a one-eighty reverse. As we swung, the habitat moved away and into my left viewport; ahead the incoming shuttle came into view-I did nothing about her; she had to keep clear of me, since I was undocking-and, into my right viewport came one of the most impressive sights in the system: Luna from close up, a mere three hundred kilometers-I could reach out and touch her.

I felt grand.

Those lying murdering scoundrels were left behind and we were forever out of reach of Sethos's whimsical tyranny. At first, living in Golden Rule had seemed happily loose and carefree. But I had learned. A monarch's neck should always have a noose around it-it keeps him upright.

I was in the pilot's couch; Gwen had the copilot's position on my right. I looked toward her and then realized that I was still wearing that silly eyepatch. No, delete "silly"-it had, quite possibly, saved my life. I took it off, stuffed it into a pocket. Then I took that fez off, looked around for somewhere to put it-tucked it under my chest belt. "Let's see if we are secure for space," I said.

"Isn't it a little late for that, Richard?"

"I always do my checkoff lists after I lift," I told her. "I'm the optimistic type. You have a purse and a large package from Macy's; how arc they secured?"

"They arc not, as yet. If you will refrain from goosing mis craft while I do it, I'll unstrap and net them." She started to unstrap.

"Woops! Before unstrapping you must get permission from the pilot."

"I thought I had it."

"You do now. But don't make that mistake again. Mr. Christian, His Majesty's Ship Bounty is a taut ship and will remain that way. Bill! How are you doing back there?"

" 'M okay."

"Are you secure in all ways? When I twist her tail, I don't want any loose change flying around the cabin."

"He's belted in properly," Gwen assured me. "I checked him. He is holding Tree-San's pot flat against his tummy and he has my promise that, if he lets go of it, we will bury him without rites."

"I'm not sure it will stand up under acceleration."

"Neither am I but there was no way to pack it. At least it will be in the correct attitude for acceleration-and I'm reciting some spells. Dear man, what can I do with this wig? It's the one Naomi uses for public performances; it's valuable. It was sweet indeed of her to insist that I wear it-it was the final, convincing touch, I think-but I don't see how to protect it. It's at least as sensitive to acceleration as Tree-San."

"Durned if I know-and that's my official opinion. But I doubt that I will need to push this go-buggy higher than two gee." I thought about it. "How about the glove compartment? Take all of the Kleenex out of the dispenser and crumple it up around the wig. And some inside it. Will that work?"

"I think so. Time enough?"

"Plenty of time. I made a quick estimate at Mr. Dockweiler's office. In order to land at Hong Kong Luna port and in sunlight I should start moving into a lower orbit about twenty-one hundred. Loads of time. So go ahead, do whatever you need to do... while I tell the computer pilot what I want to do. Gwen, can you read all the instruments from your side?"

"Yes, sir."

"Okay, that's your job, that and the starboard viewport. I'll stick to power, attitude, and this baby computer. By the way, you're licensed, aren't you?"

"No point in asking me now, is there? But let not your heart be troubled, dear; I was herding sky junk before I was out of high school."

"Good." I did not ask to see her license-as she had pointed out, it was too late to matter.

And I had noticed that she had not answered my question.

(If ballistics bores you, here is another place to skip.)

A daisy-clipping orbit of Luna (assuming that Luna has daisies, which seems unlikely) takes an hour and fortyeight minutes and some seconds. Golden Rule, being three hundred kilometers higher than a tall daisy, has to go farther than the circumference of Luna (10,919 kilometers), namely 12,805 kilometers. Almost two thousand kilometers farther-so it has to go faster. Right?

Wrong. (I cheated.)

The most cockeyed, contrary to all common sense, difficult aspect of ballistics around a planet is this: To speed up, you slow down; to slow down, you speed up.

I'm sorry. That's the way it is.

We were in the same orbit as Golden Rule, three hundred klicks above Luna, and floating along with the habitat at one and a half kilometers per second (1.5477 k/s is what I punched into the pilot computer... because that was what it said on the crib sheet I got in Dockweiler's office). In order to get down to the surface I had to get into a lower (and faster) orbit... and the way to do that was to slow down.

But it was more complex than that. An airless landing requires that you get down to the lowest (and fastest) orbit... but you have to kill that speed so that you arrive at contact with the ground at zero relative speed-you must keep bending it down so that contact is straight down and without a bump (or not much) and without a skid (or not much)-what they call a "synergistic" orbit (hard to spell and even harder to calculate).

But it can be done. Armstrong and Aldrin did it right the first time. (No second chances!) But despite all their careful mathematics it turned out there was one hell of a big rock in their way. Sheer virtuosity and a hatful of fuel bought them a landing they could walk away from. (If they had not had that hatful of fuel left, would space travel have been delayed half a century or so? We don't honor our pioneers enough.)

There is another way to land. Stop dead right over the spot where you want to touch down. Fall like a rock. Brake with your jet so precisely that you kiss the ground like a juggler catching an egg on a plate.

One minor difficulty-Right-angled turns are about the most no-good piloting one can do. You waste delta vee something scandalous-your boat probably doesn't carry that much fuel. ("Delta vee"-pilot's jargon for "change in velocity" because, in equations, Greek letter delta means a fractional change and "v" stands for velocity-and please remember that "velocity" is a direction as well as a speed, which is why rocket ships don't make U-tums.)

I set about programming into the Volvo's little pilot computer the sort of synergistic landing Armstrong and Aldrin made but one not nearly as sophisticated. Mostly I had to ask the piloting computer to call up from its read-only memory its generalized program for landing from an orbit circum Luna... and it docilely admitted that it knew how... and then I had to inject data for this particular landing, using the crib sheet supplied by Budget Jets.

Finished with that, I told the computer pilot to check what I had entered; it reluctantly conceded that it had all it needed to land at Hong Kong Luna at twentytwo hundred hours seventeen minutes fortyeight point three seconds.

Its clock read 1957. Just twenty hours ago a stranger calling himself "Enrico Schultz" had sat down uninvited at my table in Rainbow's End-and five minutes later he was shot. Since then, Gwen and I had wed, been evicted, "adopted" a useless dependent, been charged with murder, and run for our lives. A busy day!-and not yet over.

I had been living in humdrum safety much too long. Nothing gives life more zest than running for your life. "Copilot."

"Copilot aye aye!"

"This is fun! Thank you for marrying me."

"Roger, Captain darling! Me, too!"

This was my lucky day, no doubt about it! A lucky break in the timing had kept us alive. At this instant Chief Franco must be checking every passenger entering the twenty o'clock shuttle, waiting for Dr. Ames and Mistress Novak to claim their reservations-while we were already out the side door. But, while that critical tuning saved our lives. Lady Luck was still handing out door prizes.

How? From Golden Rule's orbit our easiest landing on Luna would involve putting down at some point on the terminator-least fuel consumed, smallest delta vee. Why? Because we were already on that terminator line, going pole to pole, south to north, north to south, so our simplest landing was to bend it down where we were, never change our heading.

To land in the east-west direction would involve throwing away our present motion, then expending still more delta vee making that foolish right-angle turn-then programming for landing. Maybe your bank account can afford this waste; your skycar cannot-you're going to find yourself sitting up there with no fuel and nothing under you but vacuum and rocks. Unappetizing.

To save our necks I was happy to accept any landing field on Luna... but that door prize from Lady Luck included landing at my preferred field (Hong Kong Luna) just about daybreak there, with only an hour spent parked in orbit waiting for the time to tell the computer pilot to take us down. What more could I ask for?

At that moment we were floating over the backside of the Moon-as corrugated as the backside of an alligator. Amateur pilots do not land on the far side of Luna for two reasons: 1) mountains-the side of the Moon turned away from Earth makes the Alps look like Kansas; 2) settlements-there aren't any to speak of. And let's not speak of settlements that aren't to speak of, because it might make some unspeakable settlers quite angry.

In another forty minutes we would be over Hong Kong Luna just as sunrise was reaching it. Before that time I would ask for clearance to land and for ground control on the last and touchiest part of landing-then spend the next two hours in going around behind again and gently lowering the Volvo down for landing. Then it would be time to turn control over to Hong Kong Luna ground control but, I promised myself, I would stay on overrides and work the landing myself, just for drill. How long had it been since I had shot an airless landing myself? Calhsto, was it? What year was that? Too long!

At 2012 we passed over Luna's north pole and were treated to earthrise... a breathtaking sight no matter how many times one has seen it. Mother Earth was in half phase (since we were ourselves on Luna's terminator) with the lighted half to our left. It being only days past summer solstice, the north polar cap was tilted into full sunlight, dazzling bright. But North America was almost as bright, being heavily cloud-covered except part of the Mexican west coast.

I found that I was holding my breath, and Gwen was squeezing my hand. I almost forgot to call HKL ground control.

"Volvo Bee Jay Seventeen calling HKL Control. Do you read me?"

"Bee Jay Seventeen affirm. Go ahead."

"Request clearance to land approx twentytwo hundred seventeen fortyeight. Request ground-controlled landing with manual override. I am out of Golden Rule and still in Golden Rule orbit approx six klicks west of her. Over."

"Volvo Bee Jay Seventeen. Cleared to land Hong Kong Luna approx twentytwo seventeen fortyeight. Shift to satellite channel thirteen not later than twenty-one forty-nine and be ready to accept ground control. Warning: You must start standard descent program that orbit at twenty-one oh-six nineteen and follow it exactly. If at insertion for ground-controlled landing you are off in vector three percent or in altitude four klicks, expect wave off. Control HKL."

"Roger wilco." I added, "I'll bet you don't realize that you are talking to Captain Midnight, the Solar System's hottest pilot"-but I shut off the mike before I said it.

Or so I thought. I heard a reply, "And this is Captain Hemorrhoid

Hives, Luna's nastiest ground-control pilot. You're going to buy me a liter of Glenlivet after I bring you down. If I bring you down."

I checked that microphone switch-didn't seem to be anything wrong with it. I decided not to acknowledge. Everybody knows that telepathy works best in a vacuum... but there ought to be some way for an ordinary Joe to protect himself against supermen.

(Such as knowing when to keep his mouth shut.) I set the alarm for twenty-one hours, then processed to attitude straight down and, for the next hour, enjoyed the ride while holding hands with my bride. The incredible mountains of the Moon, taller and sharper than the Himalayas and tragically desolate, flowed by ahead of (under) us. The only sound was the soft murmur of the computer and the sighing of the air scavenger-and a regular, annoying sniff from Bill. I shut out all sound and invited my soul. Neither Gwen nor I felt like talking. It was a happy interlude, as peaceful as the Old Mill Stream.

"Richard! Wake up!"

"Huh? I wasn't asleep."

"Yes, dear. It's past twenty-one."

Uh... so it was. Twenty-one oh-one and ticking. What happened to the alarm? Never mind that now-I had five minutes and zip seconds to make sure we entered descent program on time. I hit the control to process, from headstand to bellywhopper backwards-easiest for descent, although supine backwards will work just as well. Or even sideways backwards. Whichever, the jet nozzle must point against the direction of motion in order to reduce speed for insertion into landing programi.e., "backwards" for the pilot, like me Fillyloo Bird. (But I'm happiest when the horizon looks "right" for the way I'm belted in; that's why I prefer to put the skycar into bellywhopper backwards.)

As soon as I felt the Volvo start to process I asked the computer if it was ready to start landing program, using standard code from the list etched on its shell.

No answer. Blank screen. No sound.

I spoke disparagingly of its ancestry. Gwen said, "Did you punch the execute button?"

"Certainly I did!" I answered and punched it again.

Its screen lit up and the sound came on at teeth-jarring level:

"How do you spell comfort? For the wise Luna citizen today, overworked, overstimulated, overstressed, it is spelled C, 0, M, F, I, E, S-that's Comfies, the comfort therapists recommend most for acid stomach, heartburn, gastric ulcers, bowel spasm, and simple tummy ache. Comfies! They Do More! Manufactured by Tiger Balm Pharmaceuticals, Hong Kong Luna, makers of medicines you can rely on. C, 0, M, F, I, E, S, Comfies! They Do More! Ask your therapist." Some screech owls started singing about the delights of Comfies.

"This damn thing won't turn off!"

"Hit it!"

"Huh?"

"Hit it, Richard."

I could not see any logic in that but it did meet my emotional needs; I slapped it, fairly hard. It continued to spout inanities about overpriced baking soda.

"Dear, you have to hit it harder than that. Electrons are timid little things but notional; you have to let them know who's boss. Here, let me." Gwen walloped it a good one-I thought she would crack the shell.

It promptly displayed:

Ready for descent-Zero Time = 21-06-17.0.

Its clock showed 21-05-42.7

-which gave me just time to glance at the altimeter radar (which showed 298 klicks above ground, steady) and at the doppler readout, which showed us oriented along our motion-over-ground line, close enough for government work... although what I could have done about it in ca. ten seconds I do not know. Instead of using fractional jets paired in couples to control attitude, a Volvo uses gyros and processes against them-cheaper than twelve small jets and a mess of plumbing. But slower.

Then, all at once, the clock matched the zero time, the jet cut in, shoving us into the cushions, and the screen displayed the program of bums-the topmost being: 21-06-17.0- -19 seconds 21-06-36.0

Sweet as could be, the jet cut off after nineteen seconds without even clearing its throat. "See?" said Gwen. "You just have to be firm with it."

"I don't believe in animism."

"You don't? How do you cope with-Sorry, dear. Never mind; Gwen will take care of such things."

Captain Midnight made no answer. You couldn't truthfully say that I sulked. But, damn it all, animism is sheer superstition. (Except about weapons.)

I had shifted to channel thirteen and we were just coming up on the fifth bum. I was getting ready to turn control over to HKL GCL (Captain Hives) when that dear little electronic idiot crashed its RAM-its Random Access Memory on which was written our descent program. The table of bums on the screen dimmed, quivered, shrank to a dot and disappeared. Frantically I punched the reset key-nothing happened.

Captain Midnight, undaunted as usual, knew just what to do. "Gwen! It lost the program!"

She reached over and clouted it. The bum schedule was not restored-a RAM, once crashed, is gone forever, like a burst soap bubble-but it did boot up again. A cursor appeared in the upper left comer of the screen and blinked inquiringly. Gwen said, "What time is your next bum, dear? And how long?"

'Twenty-one, forty-seven, seventeen, I think, for, uh, eleven seconds. I'm fairly sure it was eleven seconds."

"I check you on both figures. So do that one by hand, then ask it to recompute what it lost."

"Righto." I typed in the bum. "After this one I'm ready to accept control from Hong Kong."

"So we're out of the woods, dear-one bum by hand and then ground control takes over. But we'll recompute just for insurance."

She sounded more optimistic than I felt. I could not remember what vector and altitude I was supposed to achieve for take-over by ground control. But I had no time to worry about it; I had to set up this bum.

I typed it in: 21-47-17.0- -11.0 seconds 21-47-28.0

I watched the clock and counted with it. At exactly seventeen seconds past 2147 I jabbed the firing button, held it down. The jet fired. I don't know whether I fired it or the computer did. I held my finger down as the seconds ticked off and lifted it exactly on eleven seconds.

The jet kept on firing.

("-run in circles, scream and shout!") I wiggled the firing button. No, it was not stuck. I slapped the shell. The jet kept on roaring and shoving us into the cushions.

Gwen reached over and cut power to the computer. The jet stopped abruptly.

I tried to stop trembling. "Thank you, Copilot."

"Yessir."

I looked out, decided that the ground seemed closer than I liked, so I checked the altimeter radar. Ninety something-the third figure was changing. "Gwen, I don't think we're going to Hong Kong Luna."

"I don't think so, either."

"So now the problem is to get this junk out of the sky without cracking it."

"I agree, sir."

"So where are we? An educated guess, I mean. I don't expect miracles." The stuff ahead-behind, rather; we were still oriented for braking-looked as rough as the back side. Not a place for an emergency landing.

Gwen said, "Could we face around the other way? If we could see Golden Rule, that would tell us something."

"Okay. Let's see if it responds." I clutched the processing control, told the skycar to swing one-eighty degrees, passing through headstand again. The ground was noticeably closer. Our skycar settled down with the horizon running right and left-but with the sky on the "down" side. Annoying... but all we wanted was to look for our late home. Golden Rule habitat. "Do you see it?"

"No, I don't, Richard."

"It must be over the horizon, somewhere. Not surprising, it was pretty far away the last time we looked-and that last bum was a foul blast. A long one. So where are we?"

"When we swung past that big crater-Aristoteles?"

"Not Plato?"

"No, sir. Plato would be west of our track and still in shadow.

It could be some ringwall I don't know... but that smooth stuff-that fairly smooth stuff-south of us makes me think that it must be Aristoteles."

"Gwen, it doesn't matter what it is; I've got to try to put this wagon down on that smooth stuff. That fairly smooth stuff. Unless you have a better idea?"

"No, sir, I do not. We're falling. If we speeded up enough to maintain a circular orbit at this altitude, we probably would not have enough fuel to bring her down later. That's a guess."

I looked at the fuel gauge-that last long, foul blast had wasted a lot of my available delta vee. No elbow room. "I think your guess is a certainty-so we'll land. We'll see if our little friend can calculate a parabolic descent for this altitude-for I intend to kill our forward speed and simply let her drop, once we are over ground that looks smooth. What do you think?"

"Uh, I hope we have fuel enough."

"So do I. Gwen?"

"Yes, sir?"

"Honey girl, it's been fun."

"Oh, Richard! Yes."

Bill said in a choked voice, "Uh, I don't think I can-"

I was processing to put us back into a braking attitude. "Pipe down. Bill; we're busy!" Altimeter showed eighty something-how long did it take to fall eighty klicks in a one-sixth gee field? Switch on the pilot computer again and ask it? Or do it in my head? Could I trust the pilot computer not to switch on the jet again if I fed it juice?

Better not risk it. Would a straight-line approximation tell me anything? Let's see-Distance equals one half acceleration multiplied by the square of the time, all in centimeters and seconds. So eighty klicks is, uh, eighty thousand, no, eight hund-No, eight million centimeters. Was that right?

One-sixth gee-No, half of one sixty-two. So bring it across and take the square root—

One hundred seconds? "Gwen, how long till impact?"

"About seventeen minutes. That's rough; I just rounded it off in my head."

I took another quick look inside my skull, saw that in failing to allow for forward vector-the "fall-around" factor-my

"approximation" wasn't even a wild guess. "Close enough. Watch the doppler; I'm going to kill some forward motion. Don't let me kill all of it; we'll need some choice in where to put down."

"Aye, aye. Skipper!"

I switched power to the computer; the jet immediately fired. I let it run five seconds, cut power. The jet sobbed and quit. "That," I said bitterly, "is one hell of a way to handle the throttle. Gwen?"

"Just crawling along now. Can we swing and see where we're going?"

"Sure thing."

"Senator-"

"Bill-shut up!" I tilted it around another hundred and eighty degrees. "See a nice smooth pasture ahead?"

"It all looks smooth, Richard, but we're still almost seventy klicks high. Should get down pretty close before you kill all your forward speed, maybe? So you can see any rocks."

"Reasonable. How close?"

"Uh, how does one klick sound?"

"Sounds close enough to hear the wings of the Angel of Death. How many seconds till impact? For one-kilometer height, I mean."

"Uh, square root of twelve hundred plus. Call it thirty-five seconds."

"All right. You keep watching height and terrain. At about two klicks I want to start to kill the forward speed. I've got to have time to twist another ninety degrees after that, to back down tail first. Gwen, we should have stayed in bed."

"I tried to tell you that, sir. But I have faith in you."

"What is faith without works? I wish I was in Paducah. Time?"

"Six minutes, about."

"Senator-"

"Bill, shut up! Shall we trim off half me remaining speed?"

"Three seconds?"

I gave a three-second blast, using the same silly method of starting and stopping the jet.

'Two minutes, sir."

"Watch the doppler. Call it." I started the jet.

"Now!"

I stopped it abruptly and started to process, tail down, "windshield" up. "How does it read?"

"We're as near dead in the water as can be done that way, I think. And I wouldn't fiddle with it; look at that fuel reading."

I looked and didn't like it. "All right, I don't blast at all until we are mighty close." We steadied in the heads-up attitude-nothing but sky in front of us. Over my left shoulder I could see the ground at about a fortyfive-degree angle. By looking past Gwen I could see it out the starboard side, too, but at quite a distance-a bad angle, useless. "Gwen, how long is this buggy?"

"I've never seen one out of a nest. Does it matter?"

"It matters a hell of a lot when I'm judging how far to the ground by looking past my shoulder."

"Oh. I thought you meant exactly. Call it thirty meters. One minute, sir."

I was about to give it a short blast when Bill blasted. So the poor devil was space sick but at that instant I wished him dead. His dinner passed between our heads and struck the forward viewport, there spread itself. "Bill!" I screamed. "Stop that!"

(Don't bother to tell me that I made an unreasonable demand.)

Bill did the best he could. He trained his head to the left and deposited his second volley on the left viewport-leaving me flying blind.

I tried. With my eyes on the radar altimeter I gave it a quick blast-and lost that, too. I'm sure that someday they will solve the problem of accurate low-scale readings taken through jet blast and fouled by "grass" from terrain-I was just bom too soon, that's all. "Gwen, I can't see!"

"I have it, sir." She sounded calm, cool, relaxed-a fit mate for Captain Midnight. She was looking over her right shoulder at the Lunar soil; her left hand was on the power switch to the pilot computer, our emergency "throttle."

"Fifteen seconds, sir... ten... five." She closed the switch.

The jet blasted briefly, I felt the slightest bump, and we had weight again.

She turned her head and smiled. "Copilot reports-" And lost her smile, looked startled, as we felt the car swing. Did you ever play tops as a kid? You know how a top behaves as it winds down? Around and around, deeper and deeper, as it slowly goes lower, lays itself down and stops? That's what this pesky Volvo did.

Until it lay full length on the surface and rolled. We wound up still strapped, safe and unbruised-and upside down. Gwen continued, "-reports touchdown, sir." "Thank you, Copilot."

X

'It is useless for sheep to pass resolutions in favor of vegetarianism while wolves remain of a different opinion."

WILLIAM RALPH INGE, D. D. 1860-1954

"There's one born every minute."

P. T. BARNUM 1810-1891

I added, 'That was a beautiful landing, Gwen. PanAm never set a ship down more gently."

Gwen pushed aside her kimono skirt, looked out. "Not all that good. I simply ran out of fuel."

"Don't be modest. I especially admired that last little gavotte that laid the car down flat. Convenient, since we don't have a landing-field ladder here."

"Richard, what made it do that?"

"I hesitate to guess. It may have had something to do with the processing gyro... which may have tumbled. No data, no opinion. Dear, you look charming in that pose. Tristram Shandy was right; a woman looks her best with her skirts flung over her head."

"I don't think Tristram Shandy ever said that."

'Then he should have. You have lovely legs, dear one."

'Thank you. I think. Now will you kindly get me out of this mess? My kimono is tangled in the belt and I can't unfasten it."

"Do you mind if I get a picture first?"

Gwen sometimes makes unladylike retorts; it is then best to change the subject. I got my own safety belt loose, made a quick, efficient descent to the ceiling by falling on my face, got up and tackled, freeing Gwen. Her belt buckle wasn't really a problem; it was just that she could not see it to clear it. I did so and made sure that she did not fall as I got her loose-set her on her feet and claimed a kiss. I felt euphoric-only minutes ago I would not have bet even money on landing alive.

Gwen delivered payment and good measure. "Now let's get Bill loose."

"Why can't he-"

"He doesn't have his hands free, Richard."

When I let go my bride and looked, I saw what she meant. Bill was hanging upside down with a look of patient suffering on his face. My-Our bonsai maple he held pressed against his belly, the plant unhurt. He looked solemnly at Gwen. "I didn't drop it," he said defensively.

I silently granted him absolution for throwing up during touch down. Anyone who can attend to a duty (even a simple one) during the agony of acute motion sickness can't be all bad. (But he must clean it up; absolution did not mean that I would clean up after him. Nor should Gwen. If she volunteered, I was going to be macho and husbandly and unreasonable.)

Gwen took the maple and set it on the underside of the computer. Bill unbuckled himself while I supported him by his ankles, then I lowered him to the ceiling and let him straighten himself up. "Gwen, give Bill the pot and let him continue to take care of it. I want it out of the way... as I must get at the computer and the instrument board." Should I say out loud what was worrying me? No, it might make Bill sick again... and Gwen will have figured it out for herself.

I lay down on my back and scrunched under the computer and instrument board, switched on the computer.

A brassy voice I recognized said, "-Seventeen, do you read? Volvo Bee Jay Seventeen, come in. This is Hong Kong Luna ground control calling Volvo Bee Jay Seventeen-"

"Bee Jay Seventeen here. Captain Midnight speaking. I read you. Hong Kong."

"Why in hell don't you stay on channel thirteen. Bee Jay? You missed your checkpoint. Wave off. I can't bring you down."

"Nobody can. Captain Hives; I am down. Emergency landing. Computer malfunction. Gyro malfunction. Radio malfunction. Jet malfunction. Loss of visibility. On landing we fell off our jacks. Fuel gone and attitude impossible for lift off anyhow. And now the air scavenger has quit."

There was a fairly long silence. "Tovarishch, have you made your peace with God?"

"I've been too bloody busy!"

"Hmm. Understandable. How are you fixed for cabin pressure?"

"The idiot light reads green. There's no gauge for it."

"Where are you?"

"I don't know. Things went sour at twenty-one forty-seven, just before I was to turn control over to you. I've spent the time since on a seat-of-the-pants descent. While I don't know where we are, we should be somewhere on Golden Rule's orbit track; our bums were all carefully oriented. We passed over what I think was Aristoteles at, uh-"

'Twenty-one, fifty-eight," Gwen supplied.

'Twenty-one, fifty-eight; my copilot logged it. I brought her down in a mare south of there. Lacus Somniorum?"

"Wait one. Did you stay with the terminator?"

"Yes. We still are. Sun is just at horizon."

"Then you can't be that far east. Time of touch down?"

I didn't have the foggiest. Gwen whispered, 'Twentytwo, oh-three, forty-one." I repeated, 'Twentytwo, oh-three, forty-one."

"Hmm. Let me check. In that case you must be south of Eudoxus in the northernmost part of Mare Serenitatis. Mountains west of you?"

"Big ones."

"Caucasus range. You're lucky; you may yet live to be hanged. There are two inhabited pressures fairly close to you;

there may be someone interested in saving you... for the pound of flesh nearest your heart, plus ten percent."

"I'll pay."

"You surely will! And if you're rescued, don't forget to ask for your bill from us, too; you may need us another day. All right, I'll pass the word. Hold it. Could this be some more of your Captain Midnight nonsense? If it is, I'll cut your liver out and toast it."

"Captain Hives, I'm sorry about that, truly I am. I was simply kidding with my copilot and I thought my mike was cold. Should have been; I opened the switch. One of my endless problems with this collection of scrap."

"You shouldn't kid around while maneuvering."

"I know. But-Oh, what the hell. My copilot is my bride;

today is our wedding day-just married. I've felt like laughing and joking all day long; it's that sort of a day."

"If that is true-okay. And congratulations. But I'll expect you to prove it, later. And my name is Marcy, not Hives. Captain Marcy Choy-Mu. I'll pass the data along and we will try to locate you from orbit. Meantime, you had better get on channel eleven-that's emergency-and start singing Mayday. And I've got traffic, so-"

Gwen was on her hands and knees, by me. "Captain Marcy!"

"Huh? Yes?"

"I really am his bride and he really did marry me just today and if he weren't a hot pilot, I wouldn't be alive this minute. Everything did go wrong, just as my husband said. It's been like piloting a barrel over Niagara Falls."

"I've never seen Niagara Falls but I read you. My best wishes, Mrs. Midnight. May you have a long and happy life together, and lots of children."

"Thank you, sir! If someone finds us before our air runs out, we will."

Gwen and I took turns calling "Mayday, Mayday!" on channel eleven. When I was off duty, I checked into the resources and equipment of good old Volvo B. J. 17, the clunker. By the Protocol of Brasilia that skycar should have been equipped with reserve water, air, and food, a class two first-aid kit, minimum sanitary facilities, emergency pressure suits (UN-SN spec 10007A) for maximum capacity (four, including pilot).

Bill spent his time cleaning viewports and elsewhere, using Kleenex salvaged from the glove compartment-Naomi's wig had come through okay. But he almost burst his bladder before he got up his nerve to ask me what to do. Then I had to teach him how to use a balloon... as the skycar's "minimum sanitary facilities" turned out to be a small package of rude expedients and a pamphlet telling how to use them if you just had to.

The other emergency resources were of the same high standards.

There was water in a two-liter drinking tank at the pilot's position-almost full. No reserve. But nothing to worry about as there was no reserve air, and we would suffocate in stale air before we could die of thirst. The air scavenger still was not working but there was a fitting to crank it by hand-all but the crank handle, which was missing. Food? Let's not joke. But Gwen had a Hershey bar in her purse; she broke it in three and shared it. Delicious!

Pressure suits and helmets occupied most of the storage space back of the passenger couches-four of each, correct by the book. They were military surplus rescue suits, still sealed in their original cartons. Each carton was marked with contractor's name (Michelin Tires, S.A.) and date (twenty-nine years ago).

Aside from the fact that the plasticizers would have bled out of all plastomers and elastomers-hoses, gaskets, etc.- in that time, and the fact that some roguish japester had neglected to supply air bottles, these pressure suits were just dandy. For a masquerade ball.

Nevertheless I was prepared to trust my life to one of these clown suits for five minutes, or even ten, if the alternative involved exposing my bare face to vacuum.

But if the alternative was merely rassling a grizzly bear, I'd holler, "Bring on your b'ar!"

Captain Marcy called us, told us that a satellite camera showed us to be at thirty-five degrees seventeen north, fourteen degrees oh seven west. "I've notified Dry Bones Pressure and Broken Nose Pressure; they're nearest. Good luck."

I tried to dig out of the computer a call directory for Luna. But it was still sulking; I could not get it to list its own directory. So I tried some test problems on it. It insisted that 2 + 2 = 3.9999999999999999999999.... When I tried to get it to admit that 4 = 2 + 2, it became angry and claimed that 4 = 3,14159265358979323846264338327950288419716939937511 .... So I gave up.

I left channel eleven switched on at full gain and got up off the ceiling. I found Gwen wearing a powder blue siren suit with a flame-colored scarf at her throat. She looked fetching.

I said to her, "Sweetheart, I thought all your clothes were still in Golden Rule?"

"I crowded this into the little case when we decided to abandon baggage. I can't keep up the pretense of being Japanese once I wash my face... which, I trust, you have noticed that I have done."

"Not too well. Especially your ears."

"Picky, picky! I used only a wet hanky of our precious drinking water. Beloved, I could not pack another safari suit-or whatever-for you. But I do have clean jockey shorts and a pair of socks for you.'^

"Gwen, you're not only wholesome; you're efficient."

" 'Wholesome'!"

"But you are, dear. That's why I married you."

"Hummph! When I figure out just how I've been insulted and how much, you are going to pay... and pay and pay and pay and pay!"

This footless discussion was ended by the radio: "Volvo Bee Jay Seventeen, is that your Mayday? Over."

"Yes indeed!"

"This is Jinx Henderson, Happy Chance Salvage Service, Dry Bones Pressure. What do you need?" I described our situation, stated our latitude and longitude.

Henderson answered, "You got this heap from Budget, right? Which means to me you didn't rent it; you bought it outright on a buy-back contractI know those thieves. So now you own it. Correct?"

I admitted that I was owner of record.

"You plan to lift off and take it to Hong Kong? If so, what'll you need?"

I thought some long thoughts in about three seconds. "I don't think this skycar will ever lift from here. It needs a major overhaul."

"That means hauling it overland to Kong. Yeah, I can do that. Long trip, big job. Meantime personal rescue, two people-right?" "Three."

"Okay, three. Are you ready to record a contract?" A woman's voice cut in. "Just stop right there. Jinx. Bee Jay Seventeen, this is Maggie Snodgrass, Chief Operator and General Manager of the Red Devil Fire, Police, and Rescue Team, Broken Nose Pressure. Do nothing till you hear my terms... 'cause Jinx is fixing to rob you." "Hi, Maggie! How's Joel?" "Fine as silk and meaner than ever. How's Ingrid?" "Purtier man ever and got another one in the oven." "Well, good for you! Congratulations! When's she expecting?"

"Christmas or maybe New Year's, near as we can tell." "I'll plan on coming to see her before then. Now are you going to back off and let me treat this gentleman fairly? Or am I going to purely riddle your shell and let all the air out? Yes, I see you, coming over the rise-I started out same time you did, just as soon as Marcy gave the location. I said to Joel, 'That's our territory... but that lyin' scoundrel Jinx is going to try to steal it right out from under me'-and you didn't let me down, boy; you're here."

"And planning to stay, Maggie-and quite ready to drop a little non-nuclear reminder right under your treads if you don't behave. You know the rules: Nothing on the surface belongs to nobody... unless they sit on it... or establish a pressure on it or under it."

"That's your idea of the rules, not mine. That comes from those lawyer types in Luna City... and they don't speak for me and never did. Now let's shift to channel four-unless you want everybody in Kong to hear you beg for mercy and utter your last dying gasp."

"Channel four it is, Maggie you old windy gut." "Channel four. Who'juh hire to make that baby. Jinx? If you were serious about salvage, you'd be out here with a transporter, same as roe-instead of your rolligon buggy."

I had shifted to channel four when they did; I now kept quiet. Each had broken over the horizon about the same time, Maggie from southwest. Jinx from northwest. Since we had come to rest with the main viewport oriented west, we could see them easily. A rolligon lorry (had to be Henderson, from the talk) was in the northwest and a little closer. It had what seemed to be a bazooka mount just forward of its cabin. The transporter was a very long vehicle, with tractor treads at each end and a heavy-duty crane mounted aft. I did not see a bazooka mounted on it but I did see what could have been a Browning 2.54 cm semi.

"Maggie, I hurried out here in the roily for humanitarian reasons... something you wouldn't understand. But my boy Wolf is fetching my transporter, with his sister Gretchen manning the turret. Should be here soon. Shall I call them and tell them to go home? Or hurry along and avenge their pappy?"

"Jinx, you don't really think I'd shoot holes in your cabin, do you?"

"Yes, Maggie, I most surely do think you would. Which would just barely give me time to put one under your treads, that being where I'm aimed right now. On a deadman trigger. Which would leave me dead... and you just sitting there, unable to move, and just waiting for what my kids would do to the party who done in their pappy... my turret gun having about three times the reach of your pea shooter. Which is why I got it... after Howie come to his death by mischance."

"Jinx, are you trying to scandalize me with that old tale? Howie was my partner. You should be ashamed."

"Not accusing you of anything, dear. Just cautious. How about it? Wait for my kids and I take all? Or divvy up, nice and polite?"

I simply wished that these enthusiastic entrepreneurs would get on with it. Our air pressure light had blinked red and I was feeling a touch lightheaded. I suppose that roll after landing opened a slow leak. I dithered between a need to tell them to hurry and a realization that my bad bargaining position would drop to zero or even minus if I did so.

Mistress Snodgrass said thoughtfully, "Well, Jinx, it doesn't make sense to drag this junk to your pressure-north of mine-when it's about thirty klicks closer to take it to Kong by way of my place-south of yours. Right?"

"Simple arithmetic, Maggie. And I have plenty of room in this buggy for three more... whereas I'm not sure you could take three passengers even if you stacked them like hotcakes."

"I could handle them but I'll concede you have more room. All right, you take the three refugees and skin them all your conscience will let you... and I'll take the abandoned junker and salvage what I can out of it. If any."

"Oh, no, Maggie! You're too generous; I wouldn't want to cheat you. Right down the middle. Written records. Confirmed."

"Why, Jinx, do you think I would cheat you?"

"Let's not debate that, Maggie; it would only cause grief. That skycar is not abandoned; its owner is inside it this very minute. Before you can move it, you must have a release from him... based on a recorded contract. If you don't want to be reasonable, he can wait right here for my transporter, and never abandon his property. No salvage, just cartage at hire... plus complimentary transportation for the owner and his guests."

"Mr. What's-your-name, don't let Jinx fool you. He gets you and your car to his pressure, he'll peel you like an onion, till there's nothing left of you but the smell. I offer you a thousand crowns cash, right now, for that junk metal you're sitting in."

Henderson countered, 'Two thousand, and I take you in to pressure. Don't let her swindle you; there is more salvage than she's offering in your computer alone."

I kept quiet while these two ghouls settled how they were carving us up. When they had agreed, I agreed... with only nominal resistance. I objected that the price had gone up and was much too high. Mistress Snodgrass said, 'Take it or leave it." Jinx Henderson said, "I didn't get out of a warm bed to lose money on a job."

I took it.

So we wore those silly shelf-worn suits, almost as gas tight as a wicker basket. Gwen objected that Tree-San must not be exposed to vacuum. I told her to shut up and not be silly; a few moments' exposure would not kill the little maple-and we had run out of air, no choice. Then she was going to carry it. Then she let Bill carry it; she was busy otherwise-me.

You see, I can't wear a pressure suit that has not been especially made for me... while wearing my artificial foot. So I had to remove it. So I had to hop. That's okay; I'm used to hopping, and at one-sixth gee hopping is no problem. But Gwen had to mother me.

So here we go-Bill leading off with Tree-San, under instructions from Gwen to get inside fast and get some water from Mr. Henderson to spray on it, then Gwen and I followed as Siamese twins. She earned her small case with her left hand and put her right arm around my waist. I had my artificial foot slung over my shoulder, and I used my cane and hopped and steadied myself with my left arm around her shoulders. How could I tell her that I would have been steadier without her help? I kept my big mouth shut and let her help me.

Mr. Henderson let us into the cab, then gasketed it tight and opened an air bottle lavishly-he had been running in vacuum, wearing a suit. I appreciated his lavish expenditure of air mix-oxygen wrested painfully from Lunar rock, nitrogen all the way from Earth-until I saw it next day on my bill at a fat price.

Henderson stayed and helped Maggie wrestle old B. J. 17 onto her transporter, running her crane for her while she handled her tread controls, then he drove us to Dry Bones Pressure. I spent part of the time figuring out what it had cost me. I had had to sign away the skycar totally-net just under twenty-seven thousand. I had paid three thousand each to rescue us, discounted to eight thousand as a courtesy... plus five hundred each for bed and breakfast... plus (I learned later) eighteen hundred tomorrow to drive us to Lucky Dragon Pressure, the nearest place to catch a rolligon bus to Hong Kong Luna.

On Luna it's cheaper to die.

Still, I was happy to be alive at any price. I had Gwen and money is something you can always get more of.

Ingrid Henderson was a most gracious hostess-smiling and pretty and plump (clearly expecting that child). She welcomed us warmly, woke up her daughter, moved her into a shakedown with them, put us in Gretchen's room, put Bill in with Wolf-at which point I realized that Jinx's threats to Maggie were not backed up by force at hand... and realized, too, that it was none of my business.

Our hostess said goodnight to us, told us the light in the 'fresher was left on in the night, in case-and left. I looked at my watch before turning out me light.

Twenty-four hours earlier a stranger night Schultz sat down at my table.

BOOK Two-Deadly Weapon

XI

"Dear Lord, give me chastity and self-restraint... but not yet, 0 Lord, not yet!"

SAINT AUGUSTINE A.D. 354-430

That damned fez!

That silly, fake-oriental headdress had been fifty percent of a disguise that had saved my life. But, having used it, the coldly pragmatic thing to do would have been to destroy it.

I did not. I had felt uneasy about wearing it, first because I am not any sort of a Freemason, much less a Shriner, and second because it was not mine; it was stolen.

One might steal a throne or a king's ransom or a Martian princess and feel euphoric about it. But a hat? Stealing a hat was beneath contempt. Oh, I didn't reason this out; I simply felt uneasy about Mr. Clayton Rasmussen (his name I found inside his fez) and intended to restore his fancy headgear to him. Someday-Somehow- When I could manage it-When the rain stopped—

As we were leaving Golden Rule habitat, I had tucked it under a belt and forgotten it. After touch down on Luna, as I unstrapped, it had fallen to the ceiling; I had not noticed. As we three were climbing into those breezy escape suits, Gwen had picked it up and handed it to me; I shoved it into the front of my pressure suit and zipped up.

After we reached the Henderson home in Dry Bones Pressure and were shown where we were to sleep, I peeled down with my eyes drooping, so tired I hardly knew what I was doing. I suppose the fez fell out then. I don't know. I just cuddled up to Gwen and went right to sleep-and spent my wedding night in eight hours of unbroken sleep.

I think my bride slept just as soundly. No matter-we had had a grand practice run the night before.

At the breakfast table Bill handed me that fez. "Senator, you dropped your hat on the floor of the 'fresher."

Also at the table were Gwen, the Hendersons-Ingrid, Jinx, Gretchen, Wolf-and two boarders, Eloise and Ace, and three small children. It was a good time for me to come out with a brilliant ad-lib that would account for my possession of this funny hat. What I said was, "Thank you. Bill."

Jinx and Ace exchanged glances; then Jinx offered me Masonic recognition signs.

That's what I have to assume they were. At the time I simply thought that he was scratching himself. After all, all Loonies scratch because all Loonies itch. They can't help it-not enough baths, not enough water.

Jinx got me alone after breakfast. He said, "Noble-"

I said, "Huh?" (Swift repartee!)

"I couldn't miss it that you declined to recognize me there at the table. And Ace saw it, too. Are you by any chance thinking that the deal we made last night wasn't level and on the square?"

(Jinx, you cheated me blind, six ways from zero.) "Why, nothing of the sort. No complaints." (A deal is a deal, you swiftie. I don't welch.)

"Are you sure? I've never cheated a lodge brother-or an outsider, for that matter. But I take special care of any son of a widow just the way I would one of my own blood. If you think you paid too much for being rescued, then pay what you think is right. Or you can have it free."

He added, "While I can't speak for Maggie Snodgrass, she'll make an accounting to me, and it will be honest; there is nothing small about Maggie. But don't expect that salvage to show too much net. Or maybe a loss by the time she sells it because-You know where Budget gets those crocks they rent, don't you?"

I admitted ignorance. He went on, "Every year the quality leasers, like Hertz and Interplanet, sell off their used cars. The clean jobs are bought by private parties, mostly Loonies. The stuff needing lots of work goes to boomers. Then Budget Jets buys what's left at junkyard prices, starvation cheap. They rework that junk at their yard outside Loonie City, getting maybe two cars for each three they buy, then they sell as scrap whatever is left over. That jalopy that let you down-they charged you list, twenty-six thousand... but if Budget actually had as much as five thousand cash tied up in it, I'll give you the difference and buy you a drink, and that's a fact.

"Now Maggie is going to recondition it again. But her repairs will be honest and her work guaranteed and she'll sell it for what it is-worn out, rebuilt, not standard. Maybe it will fetch ten thousand, gross. After fair charges for parts and labor, if the net she splits with me is more than three thousand, I'll be flabbergasted-and it might be a net loss. A gamble."

I told a number of sincere lies and managed (I think) to convince Jinx that we were not lodge brothers and that I was not asking for discounts on anything and that I had come by that fez by accident, at the last minute-found it in the Volvo when I hired it.

(Unspoken assumption: Mr. Rasmussen had hired that wagon in Luna City, then had left his headpiece in it when he turned in the Volvo at Golden Rule.)

I added that the owner's name was in the fez and I intended to return it to him.

Jinx asked, "Do you have his address?"

I admitted that I did not-just the name of his temple, embroidered on the fez.

Jinx stuck out his hand. "Give it to me; I can save you the trouble... and the expense of mailing a package back Earthside."

"How?"

"Happens I know somebody who's bouncing a jumpbug to Luna City on Saturday. The Nobles' convention adjourns on Sunday, right after they dedicate their Luna City Hospital for Crippled and Birth-Damaged Children. There'll be a lost-and-found at the convention center; there always is. Since his name is in it, they'll get it to him-before Saturday evening, because that's the night of the drill team competition... and they know that a drill team member-if he is one-without his fez is as undressed as a bar hostess without her Gstring."

I passed the red hat over to him.

I thought that would be the end of it.

More hassle before we could get rolling for Lucky Dragon Pressure-no pressure suits. As Jinx put it: "Last night I okayed your using those leaky sieves because it was Hobson's Choice-it was risk it, or leave you to die. Today we could use them the same way-or we could even bring the buggy into the hangar and load you in without using suits. Of course that wastes an awful mass of air. Then do it again at the far end ... for an even greater air cost; their hangar is bigger."

I said I would pay. (I didn't see how I could avoid it.)

"That's not the point. Last night you were in the cab twenty minutes... and it took a full bottle to keep air around you. Late last night the Sun was just barely rising; this morning it's five degrees high. Raw sunlight is going to be beating against the side of that cab all the way to Lucky Dragon. Oh, Gretchen will drive in shadow all she can; we don't raise dumb kids. But any air inside the cabin would heat up and swell and come pouring out the cracks. So normal operation is to pressurize your suit but not the cabin, and use the cabin just for shade.

"Now I won't lie to you; if I had suits to sell, I would insist that you buy three new suits. But I don't have suits. Nobody in this pressure has suits for sale. Less than a hundred fifty of us; I would know. We buy suits in Kong and that's what you should do."

"But I'm not in Kong."

I had not owned a pressure suit for more than five years. Permanent habitants of Golden Rule mostly do not own pressure suits; they don't need them, they don't go outside. Of course there are plenty of staff and maintenance who keep pressure suits always ready the way Bostonians keep overshoes. But the usual habitant, elderly and wealthy, doesn't own one, doesn't need one, wouldn't know how to wear one.

Loonies are another breed. Even today, with Luna City over a million and some city dwellers who rarely if ever go outside, a Loonie owns his suit. Even that big-city Loonie knows from infancy that his safe, warm, well-lighted pressure can be broached-by a meteor, by a bomb, by a terrorist, by a quake or some other unpredictable hazard.

If he's a pioneering type like Jinx, he's as used to a suit as is an asteroid miner. Jinx didn't even work his own tunnel farm; the rest of his family did that. Jinx habitually worked outside, a pressure-suited, heavy-construction mechanic; "Happy Chance Salvage" was just one of his dozen-odd hats. He was also the "Dry Bones Ice Company," "Henderson's Overland Cartage Company," "John Henry Drilling, Welding, and Rigging Contractors"-or you name it and Jinx would invent a company to fit.

(There was also "Ingrid's Swap Shop" which sold everything from structural steel to homemade cookies. But not pressure suits.)

Jinx worked out a way to get us to Lucky Dragon: Ingrid and Gwen were much the same size except that Ingrid was temporarily distended around the equator. She had a pregnancy pressure suit with an external corset that could be let out. She also had a conventional suit she wore when not pregnant, one she could not get into now-but Gwen could.

Jinx and I were about of a height, and he had two suits, both first quality Goodrich Luna. I could see that he was about as willing to lend me one as a cabinetmaker is to lend tools. But he was under pressure to work something out, or he was going to have us as paying guests... and then as non-paying guests when our money ran out. And they didn't really have room for us even while I could still pay.

It was after ten the next morning before we suited up and climbed into the rolligon-me in Jinx's second best, Gwen in Ingrid's not-pregnant suit, and Bill in a restored antique that had belonged to the founder of Dry Bones Pressure, a Mr. Soupie McClanahan, who had come to Luna long, long ago, before the Revolution, as an involuntary guest of the government.

The plan was for each of us to get other temporary coverings at Lucky Dragon Pressure, wear them to HKL, and send them back via the public bus, while Gretchen took these suits back to her father after she let us off at Lucky Dragon. Then, tomorrow, we would be in Hong Kong Luna and able to buy pressure suits to fit our needs.

I spoke to Jinx about payment. I could almost hear the numbers clicking over in his skull. Finally he said, "Senator, I tell you what. Those suits that came in your heap-not worth much. But there's some salvage in the helmets and in some of the metal fittings. Send my three suits back to me in the shape in which you got 'em and we'll call it even. If you think it is."

I certainly thought it was. Those Michelin suits had been okay-twenty years ago. To me, today, they were worth nothing.

It left just one problem-Tree-San.

I had thought that I was going to have to be firm with my bride-an intention not always feasible. But I learned that, while Jinx and I had been working out what to do about pressure suits, Gwen had been working out what to do about Tree-San ... with Ace.

I have no reason to think Gwen seduced Ace. But I'm sure Eloise thought so. However, Loonies have had their own customs about sex since back in the days when men outnumbered women six to one-by Lunar customs all options in sexual matters are vested in women, none in men. Eloise did not seem angry, just amused-which made it none of my business.

As may be. Ace produced a silicone rubber balloon with a slit through which he inserted Tree-San, pot and all, then heat-sealed it-with an attachment for a one-liter air bottle. There was no charge, even for the bottle. I offered to pay, but Ace just grinned at Gwen and shook his head. So I don't know. I don't care to inquire.

Ingrid kissed us all goodbye, made us promise to come back. It seemed unlikely. But a good idea.

Gretchen asked questions the whole trip and never seemed to watch where she was driving. She was a dimpled, pigtailed blonde, a few centimeters taller than her mother but still padded with baby fat. She was much impressed by our travels. She herself had been to Hong Kong Luna twice and once all the way to Novylen where people talked funny. But next year, when she would be going on fourteen, she was going to go to Luna City and look over the studs there-and maybe bring home a husband. "Mama doesn't want me to have babies by anyone at Dry Bones, or even Lucky Dragon. She says it's a duty I owe my children to go out and fetch in some fresh genes. Do you know about that? Fresh genes, I mean."

Gwen assured her that we did know and that she agreed with Ingrid: Outbreeding was a sound and necessary policy. I made no comment but agreed; a hundred and fifty people are not enough for a healthy gene pool.

"That's how Mama got Papa; she went looking for him. Papa was born in Arizona; that's a part of Sweden back groundhog side. He came to Luna with a subcontractor for the Picardy Transmutation Plant and Mama got him at a masked mixer and gave him our family name when she was sure-about Wolf, I mean-and took him back to Dry Bones and set him up in business."

She dimpled. We were chatting via our suit talkies but I could see her dimples right through her helmet by a happy chance of light. "And I'm going to do the same for my man, using my family share. But Mama says that I should not grab the first boy who's willing-as if I would!-and not to hurry or worry even if I'm still an old maid at eighteen. And I won't. He's got to be as good a man as Papa is."

I thought privately that it might be a long search. Jinx Henderson ne John Black Eagle is quite a man.

When at last we could see the Lucky Dragon parking lot, it was nearly sundown-in Istanbul, that is, as anyone could see by looking. Earth was almost due south of us and quite high, about sixty degrees; its terminator ran through the north desert of Africa and on up through the Greek Isles and Turkey. The Sun was still low in the sky, nine or ten degrees and rising. There would be nearly fourteen days more sunlight at Lucky Dragon before the next long dark. I asked Gretchen whether or not she intended to drive straight back.

"Oh, no," she assured me. "Mama wouldn't like that. I'll stay overnight-bedroll there in the back-and start back fresh tomorrow. After you folks catch your bus."

I said, "That isn't necessary, Gretchen. Once we're inside this pressure and can turn our suits back to you, there's no reason for you to wait."

"Mr. Richard, are you yearning to have me spanked?"

"You? 'Spanked'? Why, your father wouldn't do that. To you?-a grown woman, almost."

"You might tell Mama that. No, Papa wouldn't; he hasn't for years and years. But Mama says I'm eligible until the day I first marry. Mama's a holy terror; she's a direct descendant of Hazel Stone. She said, 'Gret, you see about suits for them. Take them to Charlie so they won't be cheated. If he can't supply them, then see to it that they wear ours to Kong and you dicker with Lilybet to fetch ours back later. And you had better see them off on the bus, too.'"

Gwen said, "But, Gretchen, your father warned us that the bus doesn't move until the driver has a load. Which could be a day or two. Even several days."

Gretchen giggled. "Wouldn't that be terrible? I'd get a vacation. Nothing to do but catch up on the back episodes of Sylvia's Other Husband. Let's everybody feel sony for Gretchen! Mistress Gwen, you can call Mama this minute if you wish ... but I do have firm instructions."

Gwen shut up, apparently convinced. We rolled to a stop about fifty meters from Lucky Dragon airlock, set in the side of a hill. Lucky Dragon is in the south foothills of the Caucasus range at thirty-two degrees twenty-seven minutes north. I waited, on one foot and leaning on my cane, while Bill and Gwen gave unnecessary help to a highly efficient young lady in spreading an awning slanted to keep the rolligon from direct sunlight for the next twenty-four hours or so.

Then Gretchen called her mother on the roily's radio, reported our arrival, and promised to call again in the morning. We went through the airlock, Gwen carrying her case and purse and babying me. Bill carrying Tree-San and the package containing Naomi's wig, and Gretchen carrying a huge bedroll. Once inside, we helped each other shuck down; then I put my foot back on while Gretchen hung up my suit and hers, and Bill and Gwen hung theirs, on long racks opposite the airlock.

Gwen and Bill picked up their burdens and headed for a public 'fresher around to the right of the airlock. Gretchen had turned to follow them when I stopped her. "Gretchen, hadn't I better wait here till you three get back?" "What for, Mr. Senator?" 'That suit of your papa's is valuable, and so is the one Mistress Gwen is wearing. Maybe everyone here is honest... but the suits aren't mine."

"Oh. Maybe everybody here is honest but don't count on it. So Papa says. I wouldn't leave that darling little tree sitting around but don't ever worry about a p-suit; nobody ever touches another Loonie's p-suit. Automatic elimination at the nearest airlock. No excuses."

"Just like that, eh?"

"Yes, sir. Only it doesn't happen as everybody knows better. But I know about one case, before I was born. A new chum, maybe he didn't know any better. But he never did it again because a posse went after him and brought the p-suit back. But not him. They just left him to dry, there on the rocks. I've seen it, what's left of him. Horrid." She wrinkled her nose, then dimpled. "Now, may I be excused, sir? I'm about to wet

my panties."

"Sorry!" (I'm stupid. The plumbing in a man's p-suit is adequate, although just barely. But what the great brains have come up with for women is not adequate. I have a strong impression that most women will endure considerable discomfort rather than use it. I once heard one refer to it disparagingly as "the sand box.")

At the door of the 'fresher my bride was waiting for me. She held out to me a half-crown coin. "Wasn't sure you had one, dear."

"Huh?"

"For the 'fresher. Air I have taken care of; Gretchen paid our one-day fees, so I paid her. We're back in civilization, dear-No Free Lunch."

No free anything. I thanked her.

I invited Gretchen to have dinner with us. She answered, "Thank you, sir; I accept-Mama said I could. But would you settle for ice-cream cones for now?-and Mama gave me the money to offer them to you. Because there are several things we should do before dinner."

"Certainly. We're in your hands, Gretchen; you're the sophisticate; we're the tyros."

"What's a 'tyro'T'

"A new chum."

"Oh. First we should go to Quiet Dreams tunnel and spread our bedrolls to hold our places so that we can all sleep together"-at which point I learned for the first time why Gretchen's bedroll was so enormous: her mother's foresight, again- "but before that we had better put your names down with Lilybet for the bus... and before that, let's get those ice-cream cones if you're as hungry as I am. Then, last thing before dinner, we should go see Charlie about p-suits."

The ice-cream cones were close at hand in the same tunnel as the racks: Borodin's Double-Dip Dandies, served by Kelly Borodin himself, who offered to sell me (in addition to lavish cones) used magazines from Earth, barely used magazines from Luna City and Tycho Under, candy, lottery tickets, horoscopes, Lunaya Pravda, the Luna City Lunatic, greeting cards (genuine Hallmark imitations), pills guaranteed to restore virility, and a sure cure for hangovers, compounded to an ancient Gypsy formula. Then he offered to roll me double or nothing for the cones. Gretchen caught my eye, and barely shook her head.

As we walked away, she said, "Kelly has two sets of dice, one for strangers, another for people he knows. But he doesn't know that I know it. Sir, you paid for the cones... and now, if you don't let me pay you back, I'll get that spanking. Because Mama will ask me and I will have to tell her."

I thought about it. "Gretchen, I have trouble believing that your mother would spank you for something *did."p>*

"Oh, but she would, sir! She will say that I should have had my money out and ready. And I should have."

"Does she spank really hard? Bare bottom?"

"Oh, my, yes! Brutal."

"An intriguing thought. Your little bottom turning pink, while you cry."

"I do not cry! Well, not much."

"Richard."

"Yes, Gwen?"

"Stop it."

"Now you listen to me, woman. Do not interfere in my relations with another woman. I-"

"Richard!"

"You spoke, dear?"

"Mama spank."

I accepted from Gretchen the price of the cones. I'm henpecked.

The sign read: THE APOCALYPSE AND KINGDOM COME BUS COMPANY Regular Runs to Hong Kong Luna

Minimum Run-twelve (12) fares Charter runs ANYWHERE by dicker Next HKL run not before Noon tomorrow, July 3rd

Sitting under the sign, rocking and knitting, was an elderly black lady. Gretchen addressed her: "Howdy, Aunt Lilybet!"

She looked up, put down her knitting and smiled. "Gretchen hon! How's your momma, dear?"

"Just fine. Bigging up by the day. Aunt Lilybet, I want you to meet our friends Mr. Senator Richard and Mistress Gwen and Mr. Bill. They need to go with you to Kong."

"Pleased to meet you, friends, and happy to tote you to Kong. Plan on leaving noon tomorrow as you three make ten and if'n I don't get two more by noon, likely I can make it with cargo. That suit?"

I assured her that it did and that we would be here before noon, psuited and ready to roll. Then she gently suggested cash on the counter by pointing out that there were still seats on the shady side as some passengers had made reservations but had not yet paid. So I paid-twelve hundred crowns for three.

We went next to Quiet Dreams tunnel. I don't know whether to call it a hotel or what-perhaps "flophouse" comes closest. It was a tunnel a little over three meters wide and running fifty-odd meters back into the rock, where it dead-ended. The middle and lefthand side of the tunnel was a rock shelf about a half meter higher than a walkway on the right. This shelf was laid out in sleeping billets, marked by stripes painted on the shelf and by large numbers painted on the wall. The billet nearest the passageway was numbered "50." About half the billets had bedrolls or sleeping bags on them.

Halfway down the tunnel, on the right, the customary green light marked a refresher.

At the head of this tunnel, seated and reading at a desk, was a Chinese gentleman in a costume that was out of fashion before Armstrong made that "one small step." He wore spectacles as old-fashioned as his dress and he himself appeared to be ninety years older than God and twice as dignified.

As we approached he put down his book and smiled at Gretchen. "Gretchen. It is good to see you. How are your esteemed parents?"

She curtsied. 'They are well. Dr. Chan, and they send you their greetings. May I present our guests Mr. Senator Richard and Mistress Gwen and Mr. Bill?"

He bowed without getting up and shook hands with himself. "Guests of the House Henderson are most welcome in my house."

Gwen curtsied, I bowed, and so did Bill, after I dug a thumb into his ribs-which Dr. Chan noticed while declining to notice it. I mumbled an appropriate formality. Gretchen went on,

"We would like to sleep in your care tonight. Dr. Chan, if you will accept us. If so, are we early enough to be given four places side by side?"

"Indeed yes... for your gracious mother spoke to me earlier. Your beds are numbers four, three, two, and one."

"Oh, good! Thank you. Grandfather Chan."

So I paid, for three, not four-I don't know whether Gretchen paid, or ran a bill, or what; I saw no money change hands. Five crowns per person per night, no extra charge for the refresher but two crowns if we wanted to shower-water not limited. Soap extra-half a crown.

Having completed business. Dr. Chan said, "Does not the tree in bonsai require water?"

Almost in chorus we agreed that it did. Our host examined the plastic film that enclosed it, then cut it open and most carefully removed the tree and pot. A vase at his desk turned out to be a water carafe; he filled a tumbler, then, using just his fingertips, he sprinkled it repeatedly. While he did this I sneaked at look at his book-a form of snoopiness I can't resist. It was The March of the Ten Thousand, in Greek.

We left Tree-San with him, and Gwen's case as well.

Our next stop was at Jake's Steak House. Jake was as Chinese as Dr. Chan but of another generation and style. He greeted us with: "Howdy, folks. What'll it be? Hamburgers? Or scrambled eggs? Coffee or beer?"

Gretchen spoke to him in a tonal language-Cantonese, I suppose. Jake looked annoyed and retorted. Gretchen threw it back at him. Remarks slammed back and forth. At last he looked disgusted, and said, "Okay. Forty minutes"-turned his back and walked away. Gretchen said, "Come, please. Now we go to see Charlie Wang about suits."

As we walked away she said privately, "He was trying to get out of doing his best cooking, as it is much more work. But the worst argument was over price. Jake wanted me to keep quiet while he charged you tourist prices. I told him, if he charged you more than he would charge my Papa, then my Papa would stop in next time and cut off his ears and feed mem to him, raw. Jake knows that Papa would do exactly mat."

Gretchen smiled with shy pride. "My Papa is deeply respected in Lucky Dragon. Back when I was young. Papa eliminated a boomer here who tried to take something free from a singsong girl, something he had agreed to pay for. Everybody remembers it. The singsong girls of Lucky Dragon made Mama and me honorary members of their guild."

The sign read: Wang Chai-Lee, Custom Tailoring for Ladies and Gentlemen-p-suit repairs a specialty. Gretchen again introduced us and explained what we needed. Charlie Wang nodded. "Bus rolls at noon? Be here at ten-thirty. In Kong you return the suits to my cousin Johnny Wang at Sears Montgomery, p-suit department. I'll call him."

Then we went back to Jake's Steak House. It wasn't steak and it was not chop suey or chow mein and it was wonderfully good. We ate until we were full to our eyeballs.

When we got back to Quiet Dreams tunnel, the overhead lights were out and many of the billets were occupied by sleeping figures. A glow strip ran down the side of me billets shelf, where it could not shine into the eyes of a sleeping guest but would light the way of anyone moving around. There was a reading light at Dr. Chan's desk, shielded from the sleepers. He appeared to be working on his accounts, as he was operating a terminal with one hand and an abacus with the other. He greeted us soundlessly; we whispered goodnight.

Coached by Gretchen we got ready for bed: Undress, fold your clothing and put it and your shoes under the head of your bedroll as a pillow. I did so, and added my cork foot. But I left on my underwear shorts, having noticed that Gwen and Gretchen had left on their panties-and Bill put his back on when he somewhat belatedly noticed what the rest of us did. We all headed for the refresher.

Even this nominal sop to modesty did not last; we showered together. There were three men in the 'fresher when we went in; all were naked. We followed the ancient precept: "Nakedness is often seen but never looked at." And the three men most strictly followed this rule: We weren't there, we were invisible. (Save that I feel certain that no male can totally ignore Gwen and Gretchen.)

I could not totally ignore Gretchen and did not try. Naked, she looked years older and deliciously enticing. I think she had a sunlamp tan. I know she had dimples I had not seen before. I see no need to go into details; all females are beautiful at the point where they burst into full womanhood, and Gretchen had the added beauty of good proportions and a sunny disposition. She could have been used to tempt Saint Anthony.

Gwen handed me the soap. "All right, dear; you can scrub her back-but she can wash her front herself."

I answered with dignity, "I don't know what you're talking about. I don't expect to wash anyone's back, as I need a hand free for grab and balance. You forget that I'm an expectant mother."

"You're a mother, all right."

"Who's calling whom a mother? I'll thank you to keep a civil tongue in your head."

"Richard, this is getting to be beneath even my dignity. Gretchen, you wash his back; that's safest. I'll referee."

It wound up with everyone washing whatever he/she could reach-even Bill-and was not efficient but fun, with lots of giggles. They were both of the extremely opposite sex and just being around them was fun.

By twentytwo we were settled down for the night, Gretchen at the end wall, Gwen beside her, then me, then Bill. At one-sixth gee a rock shelf is softer than a foam mattress in Iowa. I went to sleep quickly.

Sometime later-an hour? two hours?-I came awake because a warm body cuddled against me. I murmured, "Now, hon' Then I came a bit wider awake. "Gwen?"

"It's me, Mr. Richard. Would you really want to see my bottom turn all pink? And hear me cry?"

I whispered tensely, "Honey, get back over by the wall."

"Please."

"No, dear."

"Gretchen," Gwen said softly, "get back where you belong, dear... before you wake others. Here, I'll help you roll over me." And she did, and took the woman-child in her arms and talked to her. They stayed that way and (I think) went to sleep.

It took me quite a while to get back to sleep.

XII

"We are too proud to Fight."

WOODROW WILSON 1856-1924

Violence never settles anything."

GENGHISKHAN 1162-1227

'The mice voted to bell the cat."

AESOP c. 620-c. 560 B.C.

Kissing goodbye while wearing pressure suits is depressingly antiseptic. So I think and I am sure Gretchen thought so, too. But that is the way it worked out.

Last night Gwen had saved me from "a fate worse than death" and for that I was grateful. Well, moderately grateful. Certainly an old man tripped by a barely nubile female not yet into her teens (Gretchen would not be thirteen for another two months) is a ridiculous sight, an object of scorn to all right-thinking people. But, from the time the night before when Gretchen had made it plain to me that she did not consider me too old, I had been feeling younger and younger. By sundown I should be suffering the terminal stages of senile adolescence.

So let the record show that I am grateful. That's official.

Gwen was relieved, I felt sure, when at noon Gretchen waved us goodbye from the cab of her father's rolligon lorry, as we rolled south in Aunt Lilybet's rolligon bus, the Hear Me, Jesus.

The Hear Me was much larger than Jinx's lorry, and fancier, being painted in bright colors with Holy Land scenes and Bible quotations. It could carry eighteen passengers, plus cargo, driver, and shotgun-the last riding in a turret high above the driver. The bus's tires were enormous, twice as tall as I am; they shouldered up above the passenger space, as its floor rested on the axles, high as my head. There were ladders on each side to reach access doors between the front and rear tires.

Those big tires made it hard to see out to the sides. But Loonies aren't much interested in scenery, as most Lunar scenery is interesting only from orbit. From the Caucasus to the Haemus Mountains-our route-the floor of Mare Serenitatis has hidden charms. Thoroughly hidden. Most of it is flat as a pancake and as interesting as cold pancakes without butter or syrup.

Despite this I was glad that Aunt Lilybet had placed us in the first row on the right-Gwen at the window, me next, Bill on my left. It meant that we could see all that the driver saw out front and also we could see somewhat out to the right because we were forward of the front axle and thereby could see past the tire. We could not see too clearly to the right, as the plastic of the pressure window was old and crazed and yellowed. But forward Aunt Lilybet had her big driver's port raised and fastened back; the view was as clear as our helmets permitted-excellent for us; the equipment rented to us by Charlie Wang took the curse off raw sunlight without noticeably interfering with seeing, like good sun spectacles.

We didn't talk much because passengers' suit radios were all on a common frequency-a babel, so we kept ours turned down. Gwen and I could talk by touching helmets, but not easily. I amused myself by trying to keep track of where we were going. Neither magnetic compasses nor gyro compasses are useful on Luna. Magnetism (usually none) means an ore body rather than a direction, and Luna's spin, while it exists (one revolution per month!), is too leisurely to affect a gyro compass. An inertial tracker will work but a good one is extremely expensive-although I can't see why; the art was perfected long ago for guided missiles.

From this face of Luna you always have Earth to steer by and half the time you have the Sun as well. The stars? Certainly, the stars are always there-no rain, no clouds, no smog. Oh, sure! Look, I have news for any groundhogs listening: You can see stars easier from Iowa than you can from Luna.

You'll be wearing a p-suit, right? Its helmet has a lens and a visor designed to protect your eyes-that amounts to builtin smog. If the Sun is up, forget about stars; your lens has darkened to protect your eyes. If the Sun is not in your sky, then Earth is somewhere between half and full and earthshine is dazzling-eight times as much reflecting surface with five times the albedo makes Earth at least forty times as bright as moonlight is to Earth.

Oh, the stars are there and sharp and bright; Luna is wonderful for astronomical telescopy. But to see stars with "bare" eyes (i.e., from inside your p-suit helmet), just find a meter or two of stove pipe-Wups! no stoves on Luna. So use a couple of meters of air duct. Look through it; it cuts out the dazzle; stars shine out "like a good deed in a naughty world."

In front of me Earth was a bit past half phase. On my left the rising Sun was a day and a half high, twenty degrees or less; it made bright the desert floor, with long shadows emphasizing anything other than perfect flatness, thereby making driving easy for Aunt Lilybet. According to a map at the airiock in Lucky Dragon Pressure we had started out from north latitude thirty-two degrees and twenty-seven minutes by longitude six degrees fifty-six east, and were headed for fourteen degrees eleven minutes east by seventeen degrees thirty-two minutes north, a spot near Menelaus. That gave us a course generally south-about twenty-five degrees east of south, as close as I could read that map-and a destination some 550 kilometers away. No wonder our ETA read three o'clock tomorrow mom-ing!

There was no road. Aunt Lilybet did not seem to have a tracker, or anything in the way of navigating instruments but an odometer and a speedometer. She seemed to be piloting the way river pilots of old were reputed to find their way, just by knowing the route. Perhaps so-but during the first hour I noticed something: There were range targets for the whole route. As we reached one, there would be another, out at the horizon.

I had not noticed any such guides yesterday and I don't think there were any; I think Gretchen really did pilot Mark Twain style. In fact I think Aunt Lilybet did also-I noticed that she often did not come close to a range marker as she passed it. Those blazes had probably been set up for occasional drivers or for relief drivers for the Hear Me.

I started trying to spot each one, making a game of it: If I missed one, it scored against me. Two misses in sequence counted as one "death" by "lost on the Moon"-something that happened too often in the early days... and still happens today. Luna is a big place, bigger than Africa, almost as big as Asia-and every square meter of it is deadly if you make just one little mistake.

Definition of a Loonie: a human being, any color, size, or sex, who never makes a mistake where it counts.

By our first rest stop I had "died" twice through missing ranging marks.

At five minutes past fifteen Aunt Lilybet let her bus roll to a stop, then switched on a transparency that read: REST STOP-TWENTY MINUTES-and under it: Late Penalty-One Crown per Minute.

We all got out. Bill grabbed Aunt Lilybet's arm and put his helmet against hers. She started to shake him off, then listened. I didn't try to check on him; twenty minutes isn't long for a rest stop when it involves coping with a p-suit. Of course this is even harder for females than for males, and more time consuming. We had a woman passenger with three children... and the right arm of her suit ended just below the elbow in a hook. How did she cope? I resolved to outwait her, so that the fine for being late would be assessed against me, rather than her.

That "refresher" was dreadful. It was an airiock leading to a hole in the rock, attached to the home of a settler who combined tunnel farming with ice mining. There may have been some oxygen in the pressure gas that greeted us, but the stench made it impossible to tell. It reminded me of the jakes in a castle I was once quartered in during the Three-Weeks War-on the Rhine it was, near Remagen; it had a deep stone privy which was alleged never to have been cleaned in over nine hundred years.

None of us was fined for being late, as our driver was even later. And so was Bill. Dr. Chan had resealed Tree-San with a roll-and-clamp arrangement to permit it to be watered more easily. Bill had solicited Aunt Lilybet's help. They had managed it together, but not quickly. I don't know whether Bill had time to pee or not. Auntie, of course, had time-the Hew Me couldn't roll until Auntie arrived.

We made a meal stop about half past nineteen at a small pressure, four families, called Rob Roy. After the last stop this one seemed like the acme of civilization. The place was clean, the air smelled right, and the people were friendly and hospitable. There was no choice in the menu-chicken and dumplings, and moonberry pie-and the price was high. But what do you expect out in the middle of nowhere on the face of the Moon? There was a souvenir stand of handmade items, presided over by a little boy. I bought an embroidered change purse that I had no use for, because those people were good to us. The decoration on it read: "Rob Roy City, Capital of the Sea of Serenity." I gave it to my bride.

Gwen helped the one-armed woman with the three children and learned that they were returning home to Kong, after having visited in Lucky Dragon the paternal grandparents of the youngsters. The mother's name was Ekaterina O'Toole; the kids were Patrick, Brigid, and Igor, aged eight, seven, and five. Our other three passengers turned out to be Lady Diana Kerr-Shapley and her husbands-wealthy and not inclined to fraternize with us plebs. Both her men carried side arms-inside their suits. What is the sense in that?

The ground was not as even from there on, and it seemed to me that Auntie stuck a little closer to the marked track. But she still drove fast and with dash, bouncing us around on those big, low-pressure doughnuts in a fashion that made me wonder about Bill's queasy stomach. At least he was not having to hold Tree-San; Auntie had helped him lash it down in the cargo compartment aft. I wished him luck; getting sick in one's helmet is dreadful-happened to me once, a generation ago. Ugh!

We made another rest stop just before midnight. Adequate. The Sun was now a few degrees higher and still rising. Auntie told us that we now had a hundred and fifteen klicks left to roll and should be in Kong about on time, with God's help.

God didn't give Auntie the help she deserved. We had been rolling about an hour when out of nowhere (from behind a rock outcropping?) came another rolligon, smaller and faster, cutting diagonally across our path.

I slapped Bill's arm, grabbed Gwen's shoulders, and down we went, below the driver's port and somewhat protected by the steel side of the bus. As I ducked for cover I saw a flash from the strange vehicle.

Our bus rolled to a stop with the other vehicle right in front of us. Auntie stood up.

They cut her down.

Gwen got the man who beamed Auntie, resting her Miyako on the sill of the port-she got him in the lens of his helmet, the best way to shoot a man in a p-suit if you are using bullets rather than laser. I got the driver, aiming carefully as my cane shoots only five times-and no more ammo closer than Golden Rule (in my duffel, damn it). Other suited figures came pouring out the sides of the attacking craft. Gwen raised up a little and went on shooting.

All this took place in the ghostly quiet of vacuum.

I started to add my fire to Gwen's, when still another vehicle showed up. Not a rolligon but related to one-but not any contraption I ever saw before. It had only one tire, a supergiant doughnut at least eight meters high. Maybe ten. The hole in the doughnut was crowded with what may have been (or had to be?) its power plant. Extending out from this hub on each side was a cantilevered platform. On the upper side of each platform, both port and starboard, a gunner was strapped into a saddle. Below the gunner was the pilot, or driver, or engineer-one on each side and don't ask me how they coordinated.

I won't swear to any details; I was busy. I had taken a bead on the gunner on the side toward me and was about to squeeze off one of my precious shots when I checked fire; his weapon was depressed, he was attacking our attackers. He was using an energy weapon-laser, particle beam, I don't know-as all I saw of each bolt was the parasitic flash... and the result.

The big doughnut spun around a quarter turn; I saw the other pair, driver and gunner, on the other side-and this gunner was trained on us. His projector flashed.

I got him in the face plate.

Then I tried for his driver, got him (I think) at the neck joint. Not as good as punching a hole in his face plate but, unless he was equipped to make a difficult patch fast, he was going to be breathing the thin stuff in seconds.

The doughnut spun all the way around. As it stopped I got the other gunner a nanosecond before he could get me. I tried to line up for a shot at the driver but could not get steady on target and had no ammo to waste. The doughnut started to roll, away from us, east-picked up speed, hit a boulder, bounced high, and disappeared over the horizon.

I looked back down at the other rolligon. In addition to the two we had killed in the first exchange, still sprawled in the car, there were five bodies on the ground, two to starboard, three to port. None looked as if he would ever move again. I pressed my helmet to Gwen's. "Is that all of them?"

She jabbed me hard in the side. I turned. A helmeted head was just appearing in the lefthand door. I lined up my cane and punched a starred hole in his face plate; he disappeared. I hopped on somebody's feet and looked out-no more on the left-turned, and here was another one climbing up through the righthand door. So I shot him—

Correction: I tried to shoot him. No more ammo. I fell toward him, jabbing with my cane. He grabbed the end of it and that was his mistake, as I pulled on it, exposing twenty centimeters of Sheffield steel, which I sank into his suit and between his ribs. I pulled it out, shoved it into him again. That stiletto, a mere half-centimeter width of triangular blade, blood-grooved three sides, does not necessarily kill quickly but my second jab would hold his attention while he died, keep him too busy to kill me.

He collapsed, half inside the door, and let go the scabbard part of my cane. I retrieved it, fitted it back on. Then I shoved him out, grabbed on to the seat nearest me, and pulled myself up onto my foot, took care of a minor annoyance, hopped back to my seat, and sat down. I was tired, although the whole fracas could not have lasted more than two or three minutes. It's the adrenaline-I always feel exhausted afterward.

That was the end of it, and a good thing, too, as both Gwen and I were out of ammo, utterly, and I can't use that concealed blade trick more than once-it works only if you can lure your opponent into grabbing the ferrule of your walking stick. There had been nine in that rolligon and all of them were dead. Gwen and I got five of them between us; the gunners of the giant doughnut killed the other four. The body count was certain because there is no mistaking a bullet hole for a bum.

I am not counting the two, or three, I shot of the superdoughnut's crew ... because they left no bodies to count; they were somewhere over the horizon.

Our own casualties: four.

First, our own gunner, riding shotgun in the turret above the driver. I crawled up and had a look-at one-sixth gee I can climb a vertical ladder almost as easily as you can. Our gunner was dead, probably that first flash marked his end. Had he been asleep on watch? Who knows and who cares now? He was dead.

But our second casualty. Aunt Lilybet, was not dead, and that was Bill's doing. He had slapped two pressure patches onto her, fast, one on her left arm, one on the top of her helmet-had known enough to cut off her air as he did it, then had counted sixty seconds before he cracked the valve and let her suit reinflate. And thereby saved her life.

It was the first evidence I had seen that Bill was even bright enough to pound sand. He had spotted where the kit with the pressure patches was kept, near the driver's seat, then had gone through the rest like a drill, no lost motions and paying no attention to the fighting going on around him.

I suppose I should not have been surprised; I knew that Bill had worked in heavy construction-for a space habitat, that means p-suit work, with safety drills and training. But it's not enough to be trained; in a clutch it takes some smarts and a cool head to apply even the best of training.

Bill showed us what he had done, not to boast of it, but because he realized that some of it might have to be done over:

In sealing Auntie's suit in a hurry he had not been able to get at the wound in her arm to stop bleeding, and did not know whether or not it had been cauterized by the bum. If she was bleeding, that suit would have to be opened again, a pressure bandage applied to the wound, then the suit closed again-fast! In view of the location-an arm-the only way to do this would be to cut the suit fabric to make a larger hole, get at the arm and stop the bleeding, patch the bigger hole, and wait counted seconds for one endless minute before subjecting the patched suit to pressure.

There is a very narrow limit on how long a patient can take vacuum. Auntie was old and wounded and had had it done to her once today. Could she take it twice?

There was no question of opening her helmet. The bolt that had hit her there had carved a slice into the top of the helmet but not into her head-else we would not have been considering whether or not to open her sleeve.

Gwen put her helmet against Auntie's, managed to rouse her and get her attention. Was she bleeding?

Auntie didn't think so. Her arm was numb but didn't hurt much. Did they get it? Get what? Something in the cargo. Gwen assured her that the bandits didn't get anything; they were dead. That seemed to satisfy Auntie. She added, 'Taddie can drive," and seemed to slip off to sleep.

Our third casualty was one of Lady Diana's husbands. Dead. But not by either set of bandits. In effect, he had shot himself in the foot.

I think I mentioned that he was heeled-with his gun for God's sake inside his suit. When the trouble started, he went for his side arm, found he could not reach it-opened the front of his suit to get at it.

It is possible to open your suit and close it again, in vacuum, and I think the legendary Houdini could have learned to do it. But this joker was still rumbling for his gun when he collapsed and drowned in vacuum. His co-husband was a half-point smarter. Instead of going for his own gun, he attempted to get at that of his partner after his partner keeled over. He did manage to get at it and to draw it but too late to help in the fight. He straightened up just as I was pulling myself to my foot, after I stabbed the last of the bandits.

So I find this custard head waving a gun in my face.

I did not intend to break his wrist; I simply meant to disarm him. I slapped the gun out of line and cracked his wrist with my cane. I caught the gun, shoved it into my p-suit belt, went forward, and collapsed in my seat. I did not know that I had hurt him, other than a bruise, maybe.

But I feel no trace of remorse. If you don't want a broken wrist, don't wave a gun in my face. Not when I'm tired and excited.

Then I pulled myself together and tried to help Gwen and Bill.

I hate to tell about our fourth casualty: Igor O'Toole, the fiveyear-old.

Since the tad was on a back seat with his mother, it is certain that he was not killed by anyone from the rolligon; the angle would have been impossible. Only the two gunners of the superdoughnut were up high enough to shoot in through the driver's port of Hear Me and hit someone clear at the back. Furthermore it had to be the second gunner; the first gunner had kept busy killing bushwhackers. Then the doughnut turned, I saw this gun leveled at us, saw its flash just about as I fired and killed him.

I thought he had missed. If he was firing at me, he did miss. I'm not sure he was aiming carefully as who would aim at the least likely target?-a child, a baby really, clear at the back of the bus. But the flash I saw had to be the bolt that killed Igor.

Had it not been for Igor's death I might have had mixed feelings about the crew of the giant doughnut-we certainly could not have won without their help. But that last shot convinces me that they were just killing off business competitors before getting to their main purpose, hijacking the Hear Me.

My only regret is that I did not kill the fourth doughnut rider.

But these were afterthoughts. What we saw at the time was simply a dead child. We straightened up from dealing with Auntie and looked around. Ekaterina was sitting quietly, holding the body of her son. I had to look twice to realize what had happened. But a p-suit does not hold a living child when the face plate is burned away. I hopped toward her; Gwen reached her first. I stopped behind Gwen; Lady Diana grabbed my sleeve, said something.

I touched my helmet to hers. "What did you say?"

"I told you to tell the driver to drive on! Can't you understand plain English?"

I wish she had said it to Gwen; Gwen's replies are more imaginative than mine and much more lyrical. All I could manage, tired as I was, was: "Oh, shut up and sit down, you silly slitch." I did not wait for an answer.

Lady Dee went forward, where Bill kept her from disturbing Auntie. I didn't see this, as just then, while I leaned forward to try to see what had happened to the consort who had (I was still to learn) killed himself with his p-suit, his co-husband attempted to recover that gun from me.

In the course of the tussle I grabbed his (broken) wrist. I could not hear him scream or see his expression, but he did an amazing piece of extemporaneous Method acting that let me know the agony he was in.

All I can say is: Don't wave guns in my face. It brings out the worst in me.

I went back to Gwen and that poor mother, touched my helmet to Gwen's. "Anything we can do for her?"

"No. Nothing till we get her in to pressure. Not much then."

"How about the other two?" I suppose they were crying but when you can't hear it or see it, what can you do?

"Richard, I think the best we can do is to leave this family alone. Keep an eye on them but let them be. Until we reach Kong."

"Yes-Kong. Who is Taddie?"

"What?"

"Aunt Lilybet said, Taddie can drive.'"

"Oh. I think she meant the turret gunner. Her nephew."

So that's why I climbed up to check the turret. I had to go outside to get up there, which I did-cautiously. But we had been correct-all dead. And so was our turret gunner, Taddie. I climbed down, then back up into the passenger compartment, got my three together-told them we had no relief driver.

I asked, "Bill, can you drive?"

"No, I can't, Senator. This is the first time in my life I've ever been in one of these things."

"I was afraid of that. Well, it's been some years since I've driven one but I know how, so-Oh, Jesus! Gwen, *can't."p*>

•Trouble, dear?"

I sighed. "You steer this thing with your feet. I'm shy one foot-it's sitting over there by my seat. There is no way in the world I can put it on... and no way in the world I can drive with just one foot."

She answered soothingly, "That's all right, dear. You handle the radio-we'll need some Maydays, I think. While I drive."

"You can drive this behemoth?"

"Certainly. I didn't want to volunteer, with you two men here. But I'll be happy to drive. Two more hours, about. Easy."

Three minutes later Gwen was checking the controls; I was seated beside her, figuring out how to jack my suit into the bus's radio. Two of those minutes had been spent delegating Bill as master at arms with orders to keep Lady Dee in her seat. She had come forward again, with firm instructions about how things were to be done. Seems she was in a hurry-something about a directors' meeting in Ell-Four. So we must drive fast, make up for lost time.

This time I did get to hear Gwen's comment. It was heartwarming. Lady Dee gasped, especially when Gwen told her what to do with her proxies, after she folded them until they were all sharp comers.

Gwen let in the clutches, the Hear Me shook, then backed, swung past the other rolligon, and we were away. I finally punched the right buttons on the radio, tuned it to what I thought was the right channel:

"-o, M, F, I, E, S speUs 'Comfies!' the perfect answer to the stresses of modern living! Don't take the cares of business home with you. Take comfort from Comfies, the scientific stomach boon therapists prescribe more than any other-"

I tried another channel.

XIII

"The truth is the one thing that nobody will believe."

GEORGE BERNARD SHAW 1856-1950

I went on hunting for eleven, the emergencies channel, by trial and error; the readout was marked but not by numbered channels-Auntie had her own codes. The window reading "Help" was not help for emergencies as I had assumed, but spiritual help. I punched it in and got "This is the Reverend Herold Angel speaking from my heart direct to yours, at Tycho-Under Tabernacle, Christ's Home in Luna. Tune in at eight o'clock Sunday to hear the true meanings of the Scriptural prophecies... and send your love gift today to Box 99, Angel Station, Tycho Under. Our Good News Theme for today: How We Will Know the Master When He Comes. Now we join the Tabernacle Choir in 'Jesus Holds Me in His-'"

That sort of help was about forty minutes too late, so I moved on to another channel. There I recognized a voice and concluded that I must be on channel thirteen. So I called,

"Captain Midnight calling Captain Marcy. Come in. Captain Marcy."

"Marcy, ground control Hong Kong Luna. Midnight, what the devil are you up to now? Over."

I tried to explain, in twenty-five words or less, how I happened to be on his maneuvering circuit. He listened, then interrupted: "Midnight, what have you been smoking? Let me talk to your wife; I can believe her."

"She can't talk to you now; she's driving this bus."

"Hold it. You tell me you are a passenger in the rolligon Hear Me, Jesus. That's Lilybet Washington's bus; why is your wife driving it?"

"I tried to tell you. She's been shot. Auntie Lilybet, I mean, not my wife. We were jumped by bandits."

"There are no bandits in that area."

"That's right; we killed 'em. Captain, listen, and quit jumping to conclusions. We were attacked. We have three dead and two wounded... and my wife is driving because she's the only able-bodied person left who can."

"You're wounded?"

"No."

"But you said your wife is the only able-bodied person left who can drive."

"Yes."

"Let me get this straight. Day before yesterday you were piloting a spacecraft-Or was your wife the pilot?"

"I was the pilot. What's itching you. Captain?"

"You can pilot a spacecraft... but you can't drive a little old roily. That's hard to swallow."

"Simple. I can't use my right foot."

"But you said you weren't wounded."

"I'm not. I've just lost a foot, that's all. Well, not 'lost'- I have it here in my lap. But I can't use it."

"Why can't you use it?"

I took a deep breath and attempted to recall Siacci empiricals for ballistics on atmosphere planets. "Captain Marcy, is there anyone in your organization-or anywhere in Hong Kong Luna-who might be interested in the fact that bandits attacked a public bus serving your city, only a few klicks outside your city pressure? And is there anyone who can receive the dead and wounded when we arrive with them? And who won't care who drives this bus? And doesn't find it incredible dial a man could have had a foot amputated years back?"

"Why didn't you say so?"

"God damn it. Captain, it was none of your bloody business!"

There was silence for several seconds. Then Captain Marcy said quietly, "Perhaps you're right. Midnight, I'm going to patch you through to Major Bozell. He's a wholesaler by trade but he also commands our Vigilante Volunteers and that's why you should talk to him. Just hang on."

I waited and watched Owen's driving. When we started, her handling had been a bit rough, just as anyone's will be in getting acquainted with a strange machine. Now her driving was smooth, if not as dashing as Auntie's driving.

"Bozell here. Do you read?"

I replied... and almost at once ran into a nightmare feeling of deja vu, as he interrupted with: "There are no bandits in that area."

I sighed. "If you say so. Major. But there are nine corpses and an abandoned rolligon in that area. Perhaps someone would be interested in searching those bodies, salvaging their p-suits and weapons, and in claiming that abandoned rolligon... before some peaceful settlers who would never think of turning bandit show up and take everything."

"Hmmm. Choy-Mu tells me that he is getting a satellite photo of the spot where this alleged attack took place. If there really is an abandoned rolligon-"

"Major!"

"Yes?"

"I don't care what you believe. I don't give a hoot about salvage. We'll be at the north airlock about three-thirty. Can you have a medic meet us, with a stretcher and bearers? That's for Mistress Lilybet Washington. She's-"

"I know who she is; she's been driving that route since I was a kid. Let me talk to her."

"She's wounded, I told you. She's lying down and I hope she's asleep. If she's not, I still won't disturb her; it might start more bleeding. Just have somebody at the airlock to take care of her. And for three dead ones, too, one of them a small child. Its mother is with us and in shock, name of Ekaterina O'Toole, and her husband lives in your city. Nigel O'Toole and maybe you can have somebody call him so that he can meet his family and take care of them. That's all. Major. When I called you, I was a bit nervous about bandits. But since there aren't any bandits in this area, we have no reason to ask for vigilante protection out here on the Sea of Serenity this fine sunny day, and I'm sorry I disturbed your sleep."

"That's all right; we're here to help-no need to be sarcastic. This is being recorded. State your full name and legal address, then repeat: As representative of Lilybet Washington of Lucky Dragon Pressure, doing business as the Apocalypse and Kingdom Come Bus Company, I authorize Major Kirk Bozell, commanding officer and business manager of the Hong Kong Luna Vigilante Volunteers, to supply-"

"Hold it. What is this?"

"Just the standard contract covering services for personal protection and property conservation, and guaranteeing payment. You can't expect to roust a platoon of guards out of bed in the middle of the night and not pay for it. TANSTAAFL. No free lunch."

"Hmm. Major, do you happen to have any hemorrhoid salve on hand? Preparation H? Pazo? That sort of thing?"

"Eh? I use Tiger Balm. Why?"

"You're going to need it. Take that standard contract, fold it until it is all sharp comers-"

I stayed tuned to thirteen, made no further effort to find the emergencies channel. So far as I could see there was no point to shouting "M'aidez!" on channel eleven when I had already talked to the only likely source of help. I leaned my helmet against Gwen's and summarized, then added, "Both the idiots insisted that there are no bandits out here."

"Maybe they weren't bandits. Maybe they were just agrarian reformers making a political statement. I surely hope we don't run into any rightwing extremists! Richard, I had better not talk while I'm driving. Strange car, strange road-only it's not a road."

"Sorry, hon! You're doing beautifully. How can I help?"

"It would help a lot if you would spot the markers for me."

"Sure thing!"

"Then I could keep my eyes down and watch the road close ahead. Some of those potholes are worse than Manhattan."

"Impossible."

We worked out a system that helped her while bothering her least. As soon as I spotted a marker I pointed at it. When she saw it, too-not before-she slapped my knee. We didn't talk because touching helmets did tend to interfere with her driving.

About an hour later a rolligon showed up ahead and came straight toward us at high speed. Gwen tapped her helmet over her ear; I pressed my helmet to hers. She said, "More agrarian reformers?"

"Maybe."

"I'm out of ammo."

"So am I." I sighed. "We'll just have to get mem to the conference table somehow. After all, violence never solves anything."

Gwen made an unladylike comment and added, "What about that gun you took away from Sir Galahad?"

"Oh. Hon, I haven't even looked at it. Hand me the stupid hat."

"You're not stupid, Richard, just spiritual. Take a look."

I drew that confiscated side arm from my suit belt, examined it. Then I touched helmets again. "Honey, you're not going to believe this. It's not loaded."

"Huh!"

"Indeed 'Huh.' Aside from that I have no comment. And you can quote me."

I chucked that useless weapon into a comer of the bus and looked out at the other rolligon, now rapidly closing. Why would anyone wear an unloaded weapon? Sheer folly!

Gwen tapped her ear again. I touched helmets. "Yes?"

"The ammo for that gun is on the body, you can bet on it."

"I won't bet; I figured that out. Gwen, if I were to try to search that corpse, I would have to cool the other two first. It's not a good idea."

"I agree. And no time for it anyhow. There they come."

Only they didn't, not quite. The other rolligon, while still some two hundred meters away, swung to its left, made it clear that it was avoiding a collision course. As it passed us I read on its side: Vigilante Volunteers-Hong Kong Luna.

Shortly Marcy called me. "Bozell says he found you but can't reach you by radio."

"I don't know why not. You reached me."

"Because I figured out that you would be on the wrong channel. Midnight, whatever you should be doing, it is a dead certainty that you will always be doing something else."

"You flatter me. What should I have done this time?"

"You should have been guarding channel two, that's what. The one reserved for surface vehicles."

"Every day I learn something. Thanks."

"Anyone who doesn't know that should not be operating a vehicle on the surface of this planet."

"Captain, you are so right." I shut up.

We could see Hong Kong Luna over the horizon many minutes before we got there-the emergency landing pylon, the big dishes used to talk to Earth and the bigger ones for Mars and the Belt, the solar power grids-and it got even more impressive as we got closer. Of course everyone lives underground ... but I tend to forget how much of Luna's heavy industry is on the surface-and illogical that I should forget, since most of Luna's great wealth is tied in with raw sunshine, bitter nights, and endless vacuum. But, as my wife pointed out, I'm the spiritual type.

We passed Nissan-Shell's new complex, hectare after hectare of pipes and cracking columns and inverse stills and valves and pumps and Bussard pyramids. The long shadows carved by the rising Sun made it a picture out of Gustave Dore, by Pieter Brueghel (zoon), orchestrated by Salvador Dali. Just beyond it we found the north lock.

Because of Aunt Lilybet they let us use the small Kwiklok. Bill went through with Auntie-he had earned that-then Lady Dee and her surviving husband crowded in ahead of Ekaterina and the kids. Dear Diana had distinguished herself again by demanding that she be taken to the spaceport rather than to a city lock. Bill and I had not let her bother Gwen with her royal commands, but it had decreased (if this be possible) her popularity with us. I was glad to see them disappear into the lock. And it worked out all right as Ekaterina's husband cycled outward through the main lock just as we were losing our VIPs.

Nigel O'Toole took his family (including that pathetic little body) back the same way, after Gwen hugged Ekaterina and promised to call her.

Then it was our turn... only to find that Tree-San could not be fitted into a Kwiklok. So we backed out and went around to the larger (and slower) lock. Someone, I saw, was lifting down the body from the turret of Hear Me, Jesus and others were unloading its cargo, under the eyes of four armed guards. I wondered what was in that cargo. But it was none of my business. (Or maybe it was-it seemed possible that this cargo had been the cause of carnage and death.) We went into the larger lock-ourselves, bonsai maple, small suitcase, purse, packaged wig, cane, prosthetic foot.

The lock cycled and we entered a long, sloping tunnel, then passed through two pressure doors. At the second door was a slot machine for vending short-time air licenses but it had a sign on it: OUT OF ORDER-Visitors please leave a half crown for 24 hrs. A saucer with some coins in it rested on top of the machine; I added a crown for Gwen and me.

At the bottom of the tunnel one more pressure door let us into the city.

There were benches just inside for the convenience of persons suiting up or suiting out. With a sigh of relief I started unzipping and shortly was fastening in place my artificial foot.

Dry Bones is a village. Lucky Dragon is a small town. Hong Kong Luna is a metropolis second only to Luna City. At the moment it did not look crowded but this was the dead of the night; only night workers were up and around. Even early risers had two more hours of sleep coming, no matter that it was broad daylight outside.

But that almost deserted corridor still showed its big-city quality; a sign over the suit racks read: USE THESE RACKS AT YOUR OWN RISK. SEE JAN THE CHECKROOM MAN-BONDED AND INSURED-One Crown/One P-Suit.

Under it was a handwritten notice: Be smart-See Sol for only half a crown-not bonded, not insured, just honest. Each sign had arrows, one pointing left, one pointing right.

Gwen said, "Which one, dear? Sol, or Jan?"

"Neither. This place is enough like Luna City that I know how to cope with it. I think." I looked around, up and down, spotted a red light. "There's a hotel. With my foot back in place, I can take a p-suit under each arm. Can you manage the rest?"

"Certainly. How about your cane?"

"I'll stick it through the belt of my suit. No itch." We started toward that hotel.

Facing the corridor at the hotel's reception window a young woman sat studying-transgenics, Sylvester's classic text. She looked up. "Better check those first. See Sol, next door."

"No, I want a big room, with an empress-size bed. We'll stack these in a comer."

She looked at her rooming diagram. "Single rooms I have. Twin beds I have. Happy suites I have. But what you want-no. All occupied."

"How much is a happy suite?"

"Depends. Here's one with two king beds, and 'fresher. Here's one with no beds at all but a padded parlor floor and lots of pillows. And here's-"

"How much for the two king beds?"

"Eighty crowns."

I said patiently, "Look, citizen, I'm a Loonie myself. My grandfather was wounded on the steps at the Bon Marche. His father was shipped for criminal syndicalism. I know prices in Loonie City; they can't be that much higher in Kong. What are you charging for what I requested? If you had one vacant?"

"I'm not impressed, chum; anyone can claim ancestors in the Revolution and most do. My ancestors welcomed Neil Armstrong as he stepped down. Top that."

I grinned at her. "I can't and I should have kept quiet. What's your real price on a double room with one big bed, and a 'fresher? Not your tourist price."

"A standard double room with a big bed and its own 'fresher goes for twenty crowns. Tell you what, chum-not much chance of renting my empty suites this late-or this early. I'll sell you an orgy suite for twenty crowns... and you're out by noon."

'Ten crowns."

"Thief. Eighteen. Any lower and I'm losing money."

"No, you're not. As you pointed out, this time in the mom-ing you can't expect to sell it at any price. Fifteen crowns."

"Let's see your money. But you have to be out by noon."

"Make that thirteen o'clock. We've been up all night and have had a rough time." I counted out the cash.

"I know." She nodded at her terminal. "The Hong Kong Gong has had several bulletins about you. Thirteen o'clock, okay-but if you stay longer, you either pay full tariff or move to an ordinary room. Did you really encounter bandits? On the trace to Lucky Dragon?"

"They tell me there are no bandits in that area. We ran into some rather unfriendly strangers. Our losses were three dead, two wounded. We fetched 'em back."

"Yes, I saw. Do you want a receipt for your expense account? For a crown I'll make out a real sincere one, itemized for whatever amount you say. And I have three messages for you."

I blinked stupidly. "How? Nobody knew we were coming to your hotel. We didn't know it ourselves."

"No mystery, chum. A stranger comes in the north lock late at night, it's a probable seven to two he'll wind up in my bed-one of my beds and no smart remarks, please." She glanced at her terminal. "If you hadn't picked up your messages in another ten minutes, backups would have gone to all inns in the pressure. If that failed to find you, the selectman for public safety might start a search. We don't get handsome strangers with romantic adventures too often."

Gwen said, "Quit waggling your tail at him, dearie; he's tired. And taken. Hand me the printouts, please."

The hotel manager looked coldly at Gwen, spoke to roe:

"Chum, if you have not yet paid her, I can guarantee you something better and younger and prettier at a bargain price."

"Your daughter?" Gwen inquired sweetly. "Please, the messages."

The woman shrugged and handed them to me. I thanked her and said, "About this other something. Younger, possibly. Prettier, I doubt. Can't be cheaper; I married this one for her money. What are the facts?"

She looked from me to Gwen. "Is that true? Did he marry you for your money? Make him earn it!"

"Well, he says he did," Gwen said thoughtfully. "I'm not sure. We've been married only three days. This is our honeymoon."

"Less than three days, dear," I objected. "It just seems longer."

"Chum, don't talk that way to your bride! You're a cad and a brute and probably on the lam."

"Yes. All of that," I agreed.

She ignored me, spoke to Gwen: "Dearie, I didn't know it was your honeymoon or I wouldn't have offered that 'something' to your husband. I bow in the dust. But later on, when you get bored with this chum with the overactive mouth, I can arrange the same for you but male. Fair price-Young. Handsome. Virile. Durable. Affectionate. Call or phone and ask for Xia-that's me. Guaranteed-you must be satisfied or you don't pay."

"Thanks. Right now all I want is breakfast. Then bed."

"Breakfast right behind you across the corridor. Sing's New York Caf6.1 recommend his Hangover Special at a crown fifty." She looked back at her rack and picked out two cards. "Here're your keys. Dearie, would you ask Sing to send me over a grilled Cheddar on white with coffee? And don't let him charge you more than a slug and a half for a Hangover Special. He cheats just for fun."

We parked our baggage with Xia and crossed the corridor for breakfast. Sing's Hangover Special was as good as Xia claimed. Then at last we were in our suite-the bridal suite;

Xia had again done right by us. In several ways. She led us to our suite, watched while we oohed and ahed-bubbly in an ice bucket, coverlet turned back, perfumed sheets, flowers (artificial but convincing) picked out by the only light.

So the bride kissed her and Xia kissed the bride, and they both sniffled-and a good thing, too, as a lot had happened too fast and Gwen had had no time to cry. Women need to cry.

Then Xia kissed the groom, and the groom did not cry and did not hang back-Xia is an oriental stack such as Marco Polo is said to have found in Xanadu. And she kissed me most convincingly. Presently she broke enough for air. "Whew!"

"Yes, 'Whew!'" I agreed. "That deal you mentioned earlier-What do you charge?"

"Loud mouth." She grinned at me, did not pull away. "Cad. Scoundrel. I give away free samples. But not to bridegrooms." She unwound herself. "Rest well, dears. Forget that thirteen o'clock deadline. Sleep as long as you wish; I'll tell the day manager."

"Xia, two of those messages called for me to see people at an ugly cow-milking hour. Can you switch us out?"

"I already thought of that; I read those before you did. Forget it. Even if Bully Bozell shows up with all his Boy Scouts, the day manager won't admit knowing what suite you are in."

"I don't want to cause you trouble with your boss."

"Didn't I say? I own the joint. Along with BancAmerica." She pecked me quickly and left.

While we were undressing, Gwen said, "Richard, she was waiting to be asked to stay. And she's not the wide-eyed virgin little Gretchen is. Why didn't you invite her?"

"Aw, shucks, Maw, I didn't know how."

"You could have unpeeled her cheong-sam while she was trying to strangle you; that would have done it. There was nothing under it. Correction: Xia was under it, nothing else. But Xia is aplenty, I'm certain. So why didn't you?"

"Do you want to know the truth?"

"Uh... I'm not sure."

"Because I wanted to sleep with you, wench, with no distractions. Because I am not yet bored with you. It's not your brain, and not your spiritual qualities of which you almost don't have any. I lust after your sweaty little body."

"Oh, Richard!"

"Before we bathe? Or after?"

"Uh... both?"

"That's my girl!"

XIV

"Democracy can withstand anything but democrats."

J. HARSHAW 1904-

"All kings is mostly rapscallions."

MARK TWAIN 1835-1910

While we were bathing I said, "You surprised me, hon, by knowing how to herd a rolligon."

"Not half as much as you surprised me when it turned out that your cane was a rifle."

"Ah, yes, that reminds me-Would it bother you to cover for me?"

"Of course not, Richard, but how?"

"My trick cane stops being a protection when people know what it is. But, if all the shooting is attributed to you, then people won't learn what it is."

Gwen answered thoughtfully, "I don't see. Or don't understand. Everybody in the bus saw you using it as a rifle."

"Did they, now? The fight took place in vacuum-dead silence. So no one heard any shots. Who saw me shoot? Auntie? She was wounded before I joined the party. Only seconds before but we're talking about seconds. Bill? Busy with Auntie. Ekaterina and her kids?

I doubt that the kids saw anything they understood, and their mother suffered the worst shock a mother can; she won't be much of a witness, if at all. Dear Diana and her fancy boys? One is dead, the other was so mixed up that he mistook me for a bandit, and LAdy Dee herself is so self-centered that she never understood what was going on; she simply knew that some tiresome nonsense was interfering with her sacred whims. Turn around and I'll scrub your back."

Gwen did so; I went on: "Let's improve it. I'll cover for you instead of you covering for me."

"How?"

"My cane and your little Miyako use the same caliber ammo. So all shots came from the Miyako-fired by me, not by you-and my cane is just a cane. And you are my sweet, innocent bride who would never do anything so grossly unladylike as shooting back at strangers. Does that suit you?"

Gwen was so long in answering that I began to think that I must have offended her. "Richard, maybe neither of us shot at anybody."

"So? You interest me. Tell me how."

"I am almost as unanxious to admit that I carry a gun as you are to admit that your cane has unexpected talents. Some places are awfully stuffy about concealed weapons... but a gun in my purse-or somewhere on me-has saved my life more than once and I intend to go on carrying one. Richard, the reasons you gave for believing that no one knows about your cane apply also to my Miyako. You're bigger than I am and I had the window seat. When we crouched down, I don't think anyone could see me too well-your shoulders are not transparent."

"Hmm. Could be. But what about bodies with slugs in them? Six point five millimeter longs, to be precise."

"Shot by the butchers in that big wheel."

"They were burning, not shooting."

"Richard! Richard! Do you know that they didn't have slug guns as well as energy weapons? I don't."

"Hmm again. My love, you are as devious as a diplomat."

"I am a diplomat. Reach me the soap, pretty please. Richard, let's not volunteer information. We were just passengers, innocent bystanders and stupid as well. How those agrarian reformers died is not our responsibility. My pappy done taught me to hold my cards close to my chest and never admit anything. This is a time for that."

"My pappy done taught me the same thing. Gwen, why didn't you marry me sooner?"

'Took me a while to soften you up, dear. Or vice versa. Ready to shower off?"

While I was drying her, I remembered a point that we had passed by. "Picture bride, where did you learn to drive a rolligon?"

"'Where?' Mare Serenitatis."

"Huh?"

"I learned how through watching Gretchen and Auntie. Tonight was the first time I ever drove one."

"Well! Why didn't you say so?"

She started drying me. "Beloved, if you had known, you would have worried. Uselessly. In all the times I've been married I have always made it a rule never to tell my husband anything that would worry him if I could reasonably avoid it." She smiled angelically. "Better so. Men are worriers; women are not."

I was roused out of a deep sleep by loud pounding. "Open up in there!"

I couldn't think of a good reason to answer, so I didn't. I yawned widely, being careful not to let my soul escape, then reached out to my right. And woke up sharply and suddenly;

Gwen was not there.

I got out of bed so quickly that it made me dizzy; I almost fell. I gave my head a shake to clear it, then hopped into the 'fresher. Gwen was not there. The pounding continued.

Don't drink champagne in bed and then go right to sleep;

I had to drain off a liter of used bubbly before I could sigh with relief and think of other matters. The pounding continued, with more shouting.

Tucked into the top of my foot was a note from my beloved. Smart gal! Even better than fastening it to my toothbrush. It read:

Dearest One, I have an attack of wakeupitis, so I'm getting up and taking care of a couple of errands. First I'm going to Sears Montgomery to return our p-suits and pay the rent on them. While I'm at Sears, I'll pick up socks and drawers for you and panties for me and do some other things. I'll leave a note at the desk here telling Bill to turn in his suit, too-and, yes, he did come in after we did and Xia put him in a single, as you arranged with her. Then I'm off to Wyoming Knott Memorial Hospital to see Auntie, and I'll call Ekaterina. You're sleeping like a baby and I hope to be back before you wake up. If not-if you go anywhere-please leave a note at the desk. Love you-Gwendolyn

The pounding continued. I put on my foot, while noting that our p-suits were not where I had last seen them, i.e., arranged in a romantic pose on the floor, a jest created by my bawdy bride. I dressed in the only clothes I had, then watered the little maple, found it did not need much; Gwen must have watered it.

"Open up!"

"Go to hell," I answered politely.

Shortly the pounding was replaced by a scratching noise, so I placed myself close to the door and a bit to one side. This was not a dilating door but the more traditional hinged type.

It swung open; my noisy visitor plunged in. I reached out and threw him across the room. In one-sixth gee this takes some care-you must have a foot braced against something, or you'll lose traction and it won't work.

He sort of bounced off the far wall and wound up on the bed. I said, "Get your dirty feet off my bed!"

He got off the bed and stood up. I continued angrily, "Now explain why you broke into my bedroom... and make it quick before I tear off your arm and beat you over the head with it. Who do you think you are, waking up a citizen who has switched on his Do-Not-Disturb? Answer me!"

I could see what he was: some sort of town clown; he was wearing a uniform that spelled "cop." His reply, mixing indignation with arrogance, matched his appearance. "Why didn't you open up when I ordered you to?"

"Why should I? Do you pay the rent on this room?"

"No, but-"

"There's your answer. Get out of here!"

"Now you listen to me! I am a safety officer of the sovereign city of Hong Kong Luna. You are directed to present yourself before the Moderator of the Municipal Council forthwith to supply information necessary to the peace and security of the city."

"I am, eh? Show me your warrant."

"No warrant needed. I am in uniform and on duty; you are required to cooperate with me. City Ordinance two seventeen dash eighty-two, page forty-one."

"Do you have a warrant to break down the door of my private bedroom? Don't try to tell me that doesn't require a warrant. I'm going to sue you and take every crown you have and that monkey suit as well."

His jaw muscles quivered but all he said was: "Are you coming peacefully or do I have to drag you?"

I grinned at him. "Best two falls out of three? I won the first one. Come ahead." I became aware that we had an audience at the door. "Good morning, Xia. Do you know this clown?"

"Mr. Richard, I'm terribly sorry about this. My day manager tried to stop him; he wouldn't stop. I got here as quickly as I could." I saw that she was barefooted and wearing no makeup-so her sleep had been interrupted, too. I said gently,

"Not your fault, dear. He doesn't have a warrant. Shall I throw him out?"

"Well..." She looked troubled.

"Oh. I see. I think I see. Throughout history, innkeepers have found it necessary to get along with cops. And throughout history, cops have had larcenous hearts and a bully's manners. All right, as a favor to you, I'll let him live." I turned back to the cop. "Boy, you can chase back to your boss and tell him that I will be along presently. After I've had at least two cups of coffee. If he wants me any sooner than that, he had better send a squad. Xia, would you like coffee? Let's go see if Sing has coffee and Danish, or such."

At this point Joe Stormtrooper made it necessary for me to take his gun. I can be shot-I have been shot, more than once-but I can't be shot by anyone who thinks that just pointing a gun at me has changed the odds.

His gun was nothing I wanted-door-prize junk. So I unloaded it, made sure that his ammo was not the caliber I use, dropped the loads down the oubliette, and handed his gun back to him.

At the loss of his cartridges he screamed bloody murder, but I patiently explained to him that his gun was as good as ever for the purpose for which he used it and that, if I had let him keep ammo, he could have hurt himself.

He continued to squawk, so I told him to go squawk to his boss. And turned my back. He was, I feel certain, annoyed. But so was I.

Forty minutes later, feeling better although still sleepy, and after a rewarding chat with Xia over coffee and jelly doughnuts, I presented myself at the office of the Honorable Jefferson Mao, Moderator of the Council of Selectmen of the Sovereign City of Hong Kong Luna-so it said on the door. I wondered what the Congress of Luna Free State thought about this use of the word "sovereign" but it was none of my business.

A brisk woman with slant eyes and red hair (interesting genes, I guess) said, "Name, please?"

"Richard Johnson. The Moderator wants to see me."

She glanced at her monitor. "You're late for your appointment; you'll have to wait. You may sit down."

"And I may not. I said that the Moderator wants to see me;

I did not say that I want to see the Moderator. Punch up that box and let him know that I am here."

"I can't possibly fit you in for at least two hours."

'Tell him I am here. If he won't see me now, I'm leaving."

"Very well, return in two hours."

"You misunderstand me. I'm leaving. Leaving Kong. I won't be back." I was bluffing as I said it and as I said it, I learned that I was not bluffing. My plans, as yet inchoate, had included an indefinite stay in Kong. Now I suddenly realized that I would not remain in a city that had sunk so far in the qualities that constitute civilization that a cop would break into a citizen's bedroom merely because some officious official decides to summon him. No indeed! A private soldier in a decent, well-run, disciplined military outfit has more freedom and more privacy than that. Hong Kong Luna, celebrated in song and story as the cradle of Luna's freedom, was no longer a fit place to live.

I turned away and was almost to the door when she called out: "Mr. Johnson!"

I stopped, did not turn. "Yes?"

"Come back here!"

"Why?"

Her answer seemed to hurt her face. "The Moderator will see you now."

"Very well." As I approached the door to the inner office, it rolled out of the way... but I did not find myself in the Moderator's private office; three more doors, each guarded by its own faithful hound, lay ahead-and this told me more than I wanted to know about the current government of Hong Kong Luna.

The guardian of the last door announced me and ushered me through. Mr. Mao barely glanced at me. "Sit down." I sat down, rested my cane against my knee.

I waited five minutes while the city boss shuffled papers and continued to ignore me. Then I stood up, headed for the door, moving slowly, leaning on my cane. Mao looked up. "Mr. Johnson! Where are you going?"

"Out."

"Indeed. You don't want to get along, do you?"

"I want to go about my business. Is there some reason I should not?"

He looked at me with no expression. "If you insist, I can cite a municipal ordinance under which you are required to cooperate with me when I request it."

"Are you referring to City Ordinance two hundred seventeen dash eighty-two?"

"I see you are familiar with it... so you can hardly plead ignorance in extenuation of your behavior."

"I am not familiar with that ordinance, just its number. It was cited to me by a clownish thug who crushed into my bedroom. Does that ordinance say anything about breaking into private bedrooms?"

"Ah, yes. Interfering with a safety officer in the performance of his duty. We'll discuss that later. That ordinance you cited is the bedrock of our freedom. Citizens, residents, and even visitors can come and go as they please, subject only to their civic duty to cooperate with officials, elected, appointed, or deputized, in carrying out their official duties."

"And who decides when cooperation is needed and what sort and how much?"

"Why, the official involved, of course."

"I thought so. Is there anything else you want of me?" I started to stand up.

"Sit back down. There is indeed. And I require your cooperation. I am sorry to have to put it that way but you don't seem to respond to polite requests."

"Such as breaking down my door?"

"You weary me. Sit down and shut up. I am about to interrogate you... as soon as two witnesses arrive."

I sat down and shut up. I felt that I now understood the new regime: absolute freedom... except that any official from dogcatcher to supreme potentate could give any orders whatever to any private citizen at any time.

So it was "freedom" as defined by Orwell and Kafka, "freedom" as granted by Stalin and Hitler, "freedom" to pace back and forth in your cage. I wondered if the coming interrogation would be assisted by mechanical or electrical devices or by drugs, and felt sick at my stomach. Back when I was on active duty and repeatedly faced with the possibility of capture while holding classified information, I always had a final friend, that "hollow tooth" or equivalent. I no longer wore such protection.

I was scared.

Before long two men came in together. Mao answered good-moming to their greeting and waved them to seats; a third man came in right after them. "Uncle Jeff, I-"

"Shut up and sit down!" This latecomer was the joker whose gun I had emptied; he shut up and sat down. I caught him looking at me; he looked away.

Mao put aside some papers. "Major Bozell, thanks for coming in. You, too. Captain Marcy. Major, you have questions to ask one Richard Johnson. There he sits. Ask away."

Bozell was a short man who carried himself very erect. He had close-cropped sandy hair and an abrupt, jerky manner.

"Hah! Let's get right to it! Why did you send me on a wild goose chase?"

"What wild goose chase?"

"Hah! Are you going to sit there and deny that you told me a cock-and-bull story about an attack by bandits? In an area where there have never been any bandits! Do you deny that you urged me to send a rescue-and-salvage team out there? Knowing that I would find nothing! Answer me!"

I said, "That reminds me-Can anyone tell me how Aunt Lilybet is this morning? Because I was told to come here, I haven't had time to get to the hospital."

"Hah! Don't change the subject. Answer me!"

I answered mildly, "But that is the subject. In that cock-and-bull attack you spoke of, an old lady was injured. Is she still alive? Does anyone know?"

Bozell started to answer; Mao cut in. "She's alive. Or was an hour ago. Johnson, you had better pray that she stays alive. I have a deposition here"-he tapped his terminal-"from a citizen whose word is above reproach. One of our most important stockholders, LAdy Diana Kerr-Shapley. She states that you shot Mistress Lilybet Washington-"

"What?"

"-while creating a reign of terror in which your actions caused the death by anoxia of her husband the Honorable Oswald Progant, broke the wrist of her husband the Honorable Brockman Hogg, and subjected Lady Diana herself to terror tactics and repeated insults."

"Hmm. Did she say who killed the O'Toole child? And what about the turret gunner? Who killed him?"

"She states that there was such confusion that she did not see everything. But you went outside while the bus was standing still and climbed up to the turret-no doubt that was when you finished off the poor boy."

"Are you saying that last, or did she say it?"

"I said it. A conclusive presumption. Lady Diana was meticulously careful not to testify to anything she did not see with her own eyes. Including this ghostly rolligon full of bandits. She saw nothing of it."

Bozell added, "There you have it, Mr. Moderator. This hijacker shot up the bus and killed three people and wounded two more... and invented a cock-and-bull story about bandits to cover his crimes. There are no bandits in that area; everybody knows that."

I tried to get a grip on reality. "Mr. Moderator, one moment, please! Captain Marcy is here. I understand he got a picture of the bandits' rolligon."

"I ask the questions, Mr. Johnson."

"But-Did he, or didn't he?"

'That's enough, Johnson! You will be in order. Or you will be restrained."

"What am I doing that is out of order?"

"You're disrupting this investigation with irrelevancies. Wait until you are spoken to. Then answer the question."

"Yes, sir. What is the question?"

"I told you to keep quiet!"

I kept quiet. So did everybody else.

Presently Mr. Mao drummed on his desk and said, "Major, did you have more questions?"

"Hah! He never answered my first question. He evaded it."

The Moderator said, "Johnson, answer the question."

I looked stupid-my best role. "What is the question?"

Mao and Bozell both started to speak; Bozell yielded to Mao who went on, "Let's summarize it. Why did you do what you did?"

"What did I do?"

"I just told you what you did!"

"But I didn't do any of the things you said I did. Mr. Moderator, I don't understand how you got into this. You weren't there. That bus is not from your city. I am not from your city. Whatever happened took place outside your city. What is your connection with the matter?"

Mao leaned back and looked smug. Bozell said, "Hah!" then added, "Shall I tell him, Mr. Moderator? Or will you?"

"I will tell him. In fact I shall enjoy telling him. Johnson, less than a year ago the Council of this sovereign city made a very wise move. It extended its jurisdiction to cover all surface and subsurface activity within one hundred kilometers of the municipal pressure."

"And made the Vigilante Volunteers an official arm of the government," Bozell added happily, "charged with keeping the peace to the hundred-kilometer line! And that fixes you, you murderer!"

Mao ignored the interruption. "So you see, Johnson, while you probably thought that you were out in anarchist wilds, where the writ of law does not run, in fact you were not. Your crimes will be punished."

(I wonder how soon someone will attempt a power grab like this out in the Belt?) "These crimes of mine-Did they take place less than one hundred kilometers from Hong Kong Luna? Or more?"

"Eh? Less. Considerably less. Of course."

"Who measured it?"

Mao looked at Bozell. "How far was it?'"

"About eighty kilometers. A little less."

I said, "What was a little less? Major, are you talking about the bandits' attack on the bus? Or about something that went on inside the bus?"

"Don't put words into my mouth! Marcy-you tell them!"

Having said that, Bozell looked blank. He started to add something, stopped.

I most carefully kept quiet. Presently Mao said, "Well, Captain Marcy?"

"What do you want from me, sir? The director of the port, when he sent me here, told me to cooperate fully... but not to volunteer anything you did not ask for."

"I want everything relevant to this case. Did you give Major Bozell a figure of eighty kilometers?"

"Yes, sir. Seventy-eight kilometers."

"How did you get that figure?"

"I measured it on a monitor at my console. Ordinarily we don't print a satellite photograph, just display it. This man-you say his name is Johnson; I knew him as 'Midnight'-if he's the same man. He called me last night at oh one twenty-seven, stated that he was in the Lucky Dragon bus, reported that bandits had attacked the bus-"

"Hah!"

"-and that the attack had been driven off but the driver, Aunt Lilybet-Mistress Washington-was hurt and that the turret gunner was-"

"We know all that. Captain. Tell us about the photograph."

"Yes, Mr. Moderator. From what Midnight told me, I was able to direct the satellite camera onto target. I photographed the rolligon."

"And you place the bus at that time seventy-eight kilometers from the city?"

"No, sir, not the bus. The other rolligon."

There was the sort of silence sometimes called "pregnant." Then Bozell said, "But that's crazy! There wasn't any-"

"Just a moment, Bozell. Marcy, you were misled by Johnson's lies. What you saw was the bus."

"No, sir. I did see the bus; I had it on monitor. But I saw at once that it was moving. So I coached the camera back down the trace about ten klicks... and there was the second rolligon, just as Midnight had said."

Bozell was almost in tears. "But-There was nothing there, I tell you! My boys and I searched that whole area. Nothing! Marcy, you're out of your mind!"

I don't know how long Bozell would have gone on wishing away a rolligon he could not find, as he was interrupted; Gwen came in. And I reswallowed my heart; everything was going to be all right!

(I had been worried sick ever since I had seen Mao's triple defenses against anyone walking in on him. A guard against assassination? I don't know; I simply fretted that Gwen might be balked. But I should have had more confidence in my little giant.)

She smiled and waved me a kiss, then turned and held the door. "Right through here, gentlemen!"

Two of Mao's own police brought in a wheelchair, laid back so that Auntie could recline. She looked around, smiled at me, then said to the Moderator, "Howdy, Jefferson. How's your momma?"

"She's well, thank you. Mistress Washington. But you-"

"What's this 'Mistress Washington' fancy talk? Boy, I've changed your nappies; you call me 'Auntie' same as you always did. Now I heard about how you were planning to pin a medal on Senator Richard for how he saved me from those bandits ... and when I heard that I said to myself, 'Jefferson hasn't heard about the other two that deserve medals quite as much as Senator Richard does-begging your pardon. Senator."

I said, "Oh, you're quite right. Auntie."

"So I brought them. Gwen honey, say hello to Jefferson. He's the mayor of this pressure. Gwen is Senator Richard's wife, Jefferson. And Bill-Where's Bill? Bill! You come in here, son! Don't be shy. Jefferson, while it's true that Senator Richard killed two of those bad men with his bare hands-"

"Not his bare hands. Auntie," Gwen objected. "He did have his cane."

"You hush up, honey. With his bare hands and his walking cane, but if Bill hadn't been right there-and fast and smart-I wouldn't be here; Jesus would have taken me. But the dear Lord said it wasn't my time yet and Bill put patches on my suit and saved me to serve Jesus another day." Auntie reached out, took Bill's hand. "This is Bill, Jefferson. Make sure he gets a medal, too. And Gwen-Come here, Gwen. This baby girl saved all our lives."

I'm not sure how old my bride is, but she is not a "baby girl." However, that was the least distortion of fact that was heard in the next few minutes. To put it in its mildest terms, Auntie told a pack of lies. With Gwen nodding and backing her up and looking angelic.

It was not so much that the facts were wrong as that Auntie testified to things she could not possibly have seen. Gwen must have coached her most carefully.

Two loads of bandits had tackled us but they had fought each other; that saved us, as all but two of them died in that fratricide. Those two I killed with my bare hands and a walking stick-against laser guns. I am so heroic that I amaze myself.

While these brave deeds were going on, I know Auntie was unconscious part of the time, and flat on her back all of the time, able to see only the ceiling of the bus. Yet she seemed to believe-I think she did believe-what she was saying. So much for eyewitnesses.

(Not that I'm complaining!)

Then Auntie told how Gwen had driven us. I found myself pulling up a trouser leg to show my prosthetic-something I never do-but did this time to show why I had been unable to wear it while wearing a standard p-suit, and thereby unable to drive.

But it was Gwen who brought down the house when Auntie finished her highly-colored account. Gwen did it with pictures.

Listen carefully. Gwen had used all her ammo, six rounds, then-neat as always-she had put her Miyako back into her purse. And pulled out her Mini Helvetia, snapped two frames.

She had tilted her camera down a bit, for it showed not only both bandit vehicles but also three casualties on the ground and one bandit up and moving. The second shot showed four on the ground and the superdoughnut turned away.

I can't figure an exact time line on this but there must have been at least four seconds from the time she ran out of ammo to the time the giant wheel turned away. With a fast camera it takes about as long to shoot one frame as it does to fire one shot with a semiautomatic slug gun.

So the question is: What did she do with the other two seconds? Just waste them?

XV

"Premenstrual Syndrome: Just before their periods women behave the way men do all the time"

LOWELL STONE, M.D. 2144—

We didn't break into a run but we got out of there as fast as possible. True, Auntie had clobbered Mr. Mao into accepting me as a "hero" rather than a criminal-but that did not make him love me and I knew it.

Major Bozell did not even pretend to like me. Captain Mar-cy's "defection" infuriated Bozell; Gwen's pictures actually showing bandits (where they could not be!) broke his heart. Then his boss gave him the crudest blow by ordering him to get his troops together and get out there and find them! Do it now! "If you can't do it. Major, I'll have to find someone who can. You thought up this idea of the hundred-kilometer border. Now justify your boasts."

Mao should not have done it to Bozell in the presence of others-especially not in my presence. This I know from professional experience-in each role.

I think Gwen gave Auntie some signal. As may be. Aunt Lilybet told Mao she had to leave. "My little nurse is going to scold me for staying too long. I don't want her to have to scold me too hard. Mei-Ling Ouspenskaya-do you know her, Jefferson? She knows your momma."

The same two police officers wheeled Auntie all the way back through that series of offices and out to the public corridor-square, rather, as the city offices face on Revolutionary Square. She said goodbye to us there and the police officers wheeled her away to Wyoming Knott Memorial Hospital, two levels down and north of there. I don't think they expected to do it-I do know Gwen conscripted these two right there in the Moderator's offices-but Auntie assumed that they would take her back to hospital, and they did. "No, Gwen honey, no need for you to come along-these kind gentlemen know where it is."

(A lady has doors held for her because she expects doors to be held for her. Both Gwen and Aunt Lilybet had this principle down pat.)

Facing the municipal offices was a large bunting-bedecked sign:

FREE LUNA! July 4th, 2076-2188

Was it really Independence Day already? I counted up in my mind. Yes, Gwen and I had married on the first-so today had to be the Fourth of July. A good omen!

Seated at a bench around a fountain in the center of Revolutionary Square was Xia, waiting for us.

I had expected Gwen; I did not expect Xia. In the chat I had had with Xia, I had asked her to try to locate Gwen and to tell her where I was going and why. "Xia, I don't like being called in by cops for questioning, especially in a strange town where I don't know the political setup. If I am 'detained'-to put it politely-I want my wife to know where to look."

I did not suggest what Gwen should do about it. In only three days of marriage to Gwen I had already learned that nothing I could suggest could equal what she would think of, left to her own devious devices-being married to Gwen was not dull!

I was warmly pleased to find Xia waiting but I was startled at what she had with her. I stared and said, "Somebody book the bridal suite?" On the bench by Xia I saw Gwen's small case, a package containing a wig, a rock maple in bonsai, and a package not familiar to me but self-explained by its Sears Montgomery wrapping. "I'll bet my toothbrush is still hanging in the 'fresher."

"How much and what odds?" said Xia. "You would lose. Richard, I'll miss both of you. Maybe I'll run over to L-City and visit you."

"Do that!" said Gwen.

"Concur," I concurred, "if we're moving to L-City. Are we?"

"Right away," said Gwen.

"Bill, did you know about this?"

"No, Senator. But she had me rush over to Sears and turn in my p-suit. So I'm ready."

"Richard," Gwen said seriously, "it's not safe for you to stay here."

"No, it's not," said a voice behind me (proving again that classified matters should not be discussed in public places). "The sooner you chums leave the better. Hi, Xia. Are you with these dangerous characters?"

"Hi yourself, Choy-Mu. Thanks for last time."

I blinked at him. "Captain Marcy! I'm glad you came out;

I want to thank you!"

"Nothing to thank me for. Captain Midnight-or is it 'Senator'?"

"Well... actually it's 'Doctor.' Or 'Mister.' But to you it's 'Richard,' if you will. You saved my neck."

"And I'm Choy-Mu, Richard. But I did not save your neck. I followed you out to tell you so. You may think you won back in there. You did not. You lost. You made the Moderator lose face-you made both of them lose face. So you're a walking time bomb, an accident looking for the spot." He frowned. "Not too healthy for me, either, being present when they lost face... after making the initial mistake of 'bearing bad news to the king.' Understand me?"

"I'm afraid I do."

Xia asked, "Choy-Mu, truly did Number-One lose face?" 'Truly he did, luv. It was Aunt Lilybet Washington who did

it to him. But of course he can't touch her. So it lands on Captain-On Richard. So I see it."

Xia stood up. "Gwen, let's go straight to the station. Not waste a second! Oh, damn! I did so much want you to stay a few days."

Twenty minutes later we were at South Tube Station, and about to enter the ballistic tube for Luna City. The fact that we were able to book space in the L-City capsule leaving almost at once controlled our destination, as Choy-Mu and Xia went along to see us off and, by the time we had reached the station via the local city subway, they had convinced me-or had convinced Gwen (more to the point)-that we should take the first thing leaving town, no matter where it went. From that same station there are ordinary (non-ballistic) tubes to Plato, Tycho Under, and Novy Leningrad-had we been six minutes earlier we would have wound up in Plato warren, which would have changed many things.

Or would it have changed anything? Is there a Destiny that shapes our ends? (Gwen's end was delightfully shaped. Xia's also, come to think of it.)

There was barely time to say goodbye before we had to rack up and strap in. Xia kissed us all goodbye and I was pleased that Gwen did not let Choy-Mu go unkissed. A true Loonie, he hesitated a long beat to make sure that the lady meant it, then returned it enthusiastically. I watched Xia kissing Bill goodbye-Bill returned it without that hesitation. I decided that Gwen's attempt to play Pygmalion to this unlikely Galatea was succeeding but that Bill would have to leam Loonie manners, or he might lose some teeth.

We strapped down, the capsule was sealed, and again Bill cradled the little maple's pot against his belly. The racks swung to meet acceleration-one full gee, a high acceleration for Loonies who filled the rest of the car. Two minutes and fifty-one seconds of boost, then we were at orbital speed.

Odd to be in free fall in a subway. But it certainly is fun!

It was the first time I had ridden the ballistic tube. It dates back before the Revolution, although then (so I've read) it extended only to Endsville. It was completed later, but the principle was never extended to other subway systems-not economic, I am told, other than for heavily-traveled, long runs that can be dug "straight" the whole way-"straight" in this case meaning "exactly conforming to a ballistic curve at orbiting velocity."

This subway is the only underground "spaceship" in history. It works like the induction catapults that throw cargo to Ell-Four and EllFive and to Terra... except that the launching station, the receiving station, and the entire trajectory are underground ... a few meters underground in most places, about three klicks underground where the tube passes under mountains.

Two minutes and fifty-one seconds of one-gee boost, twelve minutes and twenty-seven seconds in free fall, two minutes and fifty-one seconds of one-gee braking-it adds up to an average speed of more than five thousand kilometers per hour. No other "surface" transportation anywhere even approaches this speed. Yet it is an utterly comfortable ride-three minutes that feel like lying in a hammock on Terra, then twelve and a half minutes of weightlessness, and again three minutes in that garden hammock. How can you beat that?

Oh, you could do it faster by accelerating at multiple gee. But not much. If your acceleration could be instantaneous (killing all passengers!) and you decelerated the same way (splat!), you could raise your average speed to just over six thousand kilometers per hour and trim your time back by almost three minutes! But that's the ultimate.

That is also the best possible time for a rocketship between Kong and L-City. In practice a jumpbug rocket will usually take about half an hour-depends on how high its trajectory is.

But surely a half hour is short enough. Why tunnel under maria and mountains when a rocket can do the job?

A rocket is the most lavishly expensive transportation ever invented. In a typical rocketship mission half the effort is spent fighting gravity to go up and the other half is spent fighting gravity in letting down-as crashing is considered an unsatisfactory end to a mission. The giant catapults on Luna, on Terra, on Mars, and in space are giant statements against the wastefulness of rocket engines.

Contrariwise, the ballistic subway is the most economical transportation ever devised: No mass is burned up or thrown away and the energy used in speeding up is given back at the other end in slowing down.

No magic is involved. An electric catapult is a motor generator. Never mind that it doesn't look like one. In its acceleration phase it is a motor; electric power is converted into kinetic energy. In its decelerating phase it is a generator; the kinetic energy extracted from the capsule is pulled out as electric power and stored in a Shipstone. Then the same energy is taken from the Shipstone to hurt the capsule back to Kong.

A Free Lunch!

Not quite. There are hysteresis losses and other inefficiencies. Entropy always increases; the second law of thermodynamics can't be snubbed. What it most resembles is regenerative braking. There was a time, years ago, when surface cars were slowed and stopped by friction, rudely applied. Then a bright lad realized that a turning wheel could be stopped by treating it as a generator and making it pay for the privilege of being stopped-the angular momentum could be extracted and stored in a "storage battery" (an early predecessor of Shipstones).

The capsule from Kong does much the same; in cutting magnetic lines of force at the L-City end it generates a tremendous electromotive force, which stops the capsule and changes its kinetic energy into electrical energy, which is then stored.

But the passenger need know nothing of this. He simply lounges in his "hammock" rack for the gentlest ride possible.

We had just spent most of three days in rolling seven hundred kilometers. Now we traveled fifteen hundred kilometers in eighteen minutes.

We had to shoulder our way out of the capsule and into the tube station because there were Shriners impatiently awaiting the opportunity to board for Kong. I heard one say that "they" (that anonymous "they" who are to blame for everything)- "they ought to put on more cars." A Loonie tried to explain to him the impossibility involved in his demand-just one tube, able to handle only one capsule, which could be at this end or at the far end or in free flight in between. But never two capsules in the tube-impossible, suicidal.

His explanation met with blank disbelief. The visitor seemed to have trouble, too, in grasping the idea that the ballistic tube was privately owned and totally unregulated... a matter that came up when the Loonie finally said, "You want another tube, go ahead! Build it! You are free to do so; nobody is stopping you. If that doesn't satisfy you, go back to Liverpool!"

Unkind of him. Earthworms can't help being earthworms. Every year some of them die through inability to comprehend that Luna is not like Liverpool, or Denver, or Buenos Aires.

We passed through the lock separating the pressure owned by Artemis Transit Company from the municipal pressure. In the tunnel just beyond the lock was a sign: GET YOUR AIR CHITS HERE. Seated under it at a table was a man twice as handicapped as I was; his legs ended at his knees. This did not seem to slow him down; he sold magazines and candy as well as air, advertised both sightseeing and guide service, and displayed the ubiquitous sign: TRACK ODDS.

Most people breezed back and forth past him without stopping. Bill had started to do so, when I checked him. "Wups! Wait, Bill."

"Senator, I've got to get some water onto this tree."

"Wait just the same. And stop calling me 'Senator.' Call me 'Doctor' instead. Dr. Richard Ames."

"Huh?"

"Never mind; just do it. Right now, we've got to bay sax. Didn't you buy air at Kong?"

Bill had not. He had entered the city pressure helping with Auntie and no one had asked him to pay.

"Well, you should have paid. Did you notice that Gretchen paid for all of us at Lucky Dragon? She did. And now we'll pay here, but I'll arrange for longer than overnight. Wait here."

I stepped up to the table. "Hi there. You're selling air?"

The air vendor glanced up from working a double-crostic, looked me over. "No charge to you. You paid for air when you bought your ticket."

"Not quite," I said. "I'm a Loonie, cobber, returning home. With a wife and one dependent. So I need air for three."

"A nice try. But no prize. Look, a citizen's chit won't get you citizens' prices-they'll still look at you and charge you tourist prices. If you want to extend your visa, you can. At city hall. And they'll collect air fee to cover your extended visa. Now forget it, before I decide to cheat you."

"Choom, you're hard to please." I dug out my passport-glanced at it to make sure it was my "Richard Ames" passport-and handed it to him. "I've been away several years. If that makes me look like a groundhog to you, that's regrettable. But please note where I was born."

He looked it over, handed it back. "Okay, Loonie, you had me fooled. Three of you, eh? For how long?"

"My plans aren't firm. What's the shortest period for the permanent-resident scale?"

"One quarter. Oh, another five percent off if you buy five years at a time... but with today's prime rate at seven point one, it's a sucker bet."

I paid for three adults for ninety days and asked what he knew about housing. "Having been away so long I not only don't have cubic, I don't know the market-and I don't relish dossing in Bottom Alley tonight."

"You'd wake up with your shoes gone, your throat cut, and rats walking over your face. Mmm, a tough question, cobber. You see the funny red hats. Biggest convention L-City has ever had; between it and Independence Day the town is booked solid. But, if you're not too fussy-"

"We're not."

"You'll be able to get something better after the weekend, but in the meantime there is an old place in level six, the Raffles, across from-"

"I know where it is. I'll try there."

"Better call them first and tell them I sent you. I'm Rabbi Ezra ben David. Reminds me. 'Ames, Richard.' Are you the Richard Ames who's wanted for murder?"

"My word!"

"Surprise you? Too true, cobber. I've got a copy of the notice here someplace." He shuffled through magazines and penciled notes and chess problems. "Here it is. You're wanted in Golden Rule habitat-seems you chilled some VIP. So they say."

"Interesting. Is there a tab out on me here?"

"In Luna? I don't think so. Why would there be? Still the same old standoff; no diplomatic relations with Golden Rule until they qualify under the Oslo Convention. Which they cannot without a basic bill of rights. Which is not bloody likely."

"I suppose so."

"Still... if you need lawyer help, come see me; I do that, too. Catch me here any day after noon, or leave your name at Seymour's Kosher Fish Emporium across from Carnegie Library. Seymour's my son."

"Thanks, I'll remember. By the way, who is it I'm supposed to have killed?"

"Don't you know?"

"Since I didn't kill anybody how could I know?"

"There are logical lacunae in that which I will not examine. It is set forth here that your victim hight Enrico Schultz. Does that name trigger your memory?"

"'Enrico Schultz.' I don't think I've ever heard that name. A stranger to me. Most murder victims are killed by close friends or relatives-not by strangers. And, in this case, not by me."

"Odd indeed. Yet the owners of Golden Rule have offered a substantial reward for your death. Or, to be precise, for delivering you alive or dead, with no emphasis on keeping you alive-just your body, cobber, warm or cold. Should I point out that, if I were your attorney, I would be ethically bound not to exploit this opportunity?"

"Rabbi, I don't think you would anyhow; you're too much the old Loonie. You're simply trying to chivvy me into hiring you. Mmm. I claim the Three Days."

"Three days, it is. Do you want skin receipts or will chits suffice?"

"Since I've lost the look of a Loonie, we had better have both."

"Very well. A crown or two for luck?"

The Reverend Ezra stamped our forearms with the date three months hence and with his chop, using a waterproof ink visible only in black light, and showed us, using his test lamp, that we were marked and now could legally breathe for one quarter anywhere in L-City municipal pressure-and enjoy other concomitant privileges such as passage through public cubic. I offered him three crowns over what I had paid for air; he accepted two.

I thanked him and bade him good day; we went on down the tunnel, each somewhat awkwardly burdened. Fifty meters farther along, the tunnel debouched into a main corridor. We were about to exit, and I was checking my orientation, deciding whether to go left or right, when I heard a whistle and a soprano voice. "Hold it! Not so fast. Inspection first."

I stopped and turned. She had a face that spells "civil servant"-and don't ask me how. I simply know, from three planets, several planetoids, and still more habitats, that after racking up a number of years toward retirement, all civil servants have this look. She wore a uniform that was neither police nor military. "Just in from Kong?"

I agreed that we were.

"Are you three together? Put everything on the table. Open up everything. Any fruits, vegetables, or food?"

I said, "What is this?"

Gwen said, "I have a Hershey bar. Want a bite?"

"I think that counts as bribery. Sure, why not?"

"Of course I'm trying to bribe you. I have a small alligator in my purse. He's neither fruit nor vegetable; I suppose he could be food. In any case he's almost certainly against your stuffy rules."

"Wait a minute; I'll have to check the lists." The inspector consulted a very large looseleaf volume of terminal printout. "Alligator pears; alligator skins, cured or tanned; alligators, stuffed-Is this one stuffed?"

"Only when he overeats; he's greedy."

"Dearie, are you trying to tell me that you've got a live alligator in that purse?"

"Put your hand in my purse at your own risk. He's trained as a guard alligator. Count your fingers before you reach in, then count them again as you take your hand out."

"You're joking."

"What odds? And how much? But remember, I warned you."

"Oh, piffle!" The inspector reached into Gwen's purse-gave a yelp as she snatched her hand out. "It bit me!" She stuck her fingers into her mouth.

"That's what he's there for," said Gwen. "I warned you. Are you hurt? Let me see."

The two women inspected the hand, each decided that red marks were the extent of the damage. "That's good," said Gwen. "I've been trying to teach him to grasp firmly but not to break the skin. And never, never bite fingers off. He's learning; he's still young. But you shouldn't have been able to get your hand back that easily. Alfred is supposed to hang on like a bulldog while the radio alarm causes me to come arunning."

"I don't know anything about bulldogs but he certainly tried to take my finger off."

"Oh, surely not! Have you ever seen a dog?"

"Just dressed-out carcasses in meat markets. No, I take that back; I saw one in Tycho Zoo when I was a little girl. Big ugly brute. Scared me."

"Some are small and some aren't ugly. A bulldog is ugly but not very big. What a bulldog is best at is biting and hanging on. That's what I'm training King Alfred to do."

'Take him out and show him to me."

"No indeed! He's a guard beast; I don't want him getting petted and cooed over by other people; I want him to bite. If you want to see him, you reach in and take him out. Maybe this time he'll hang on. I hope."

That ended any attempt to inspect us. Adele Sussbaum, Unnecessary Public Servant First Class, agreed that Tree-San was not verboten, admired it, and inquired as to its flowers. When she and Gwen started exchanging recipes, I insisted that we had to get moving-if the municipal health and safety inspection was finished.

We slanted across Outer Ring; I smelted out the Causeway and was oriented. We went down a level and passed through Old Dome, then headed down the tunnel where my memory said the Raffles Hotel ought to be.

But en route Bill exposed me to some of his political opinions. "Senator-"

"Not 'Senator,' Bill. Doctor."

"'Doctor.' Yes, sir. Doctor, I think it's wrong, what happened back there."

"Yes, it is. That so-called inspection is pointless. It's the sort of expensive, useless accretion all governments acquire over the years, like barnacles on an ocean ship."

"Oh, I don't meant that. That's okay; it protects the city and gives her an honest job."

"Strike the word 'honest.'"

"Huh? I was talking about charging for air. That's wrong. Air should be free."

"Why do you say that. Bill? This isn't New Orleans; this is the Moon. No atmosphere. If you don't buy air, how are you going to breathe?"

"But that's just what I mean! Air to breathe is everybody's right. The government should supply it."

"The city government does supply it, everywhere inside the city pressure. That's what we just paid for." I fanned the air in front of his nose. "This stuff."

"But that's what I'm saying! Nobody should have to pay for the breath of life. It's a natural right and the government should supply it free."

I said to Gwen, "Wait a moment, dear; this has got to be settled. We may have to eliminate Bill just to keep him happy. Let's stand right here till we straighten this out. Bill, I paid for air for you to breathe because you have no money. Correct?"

He did not answer at once. Gwen said quietly, "I let him have pocket money. Do you object?"

I looked at her thoughtfully. "I think I should have been told. My love, if I am to be responsible for this family, I must know what is going on in it." I turned to Bill. "When I paid for your air back there, why didn't you offer to pay your share out of the money you had in your pocket?"

"But she gave it to me. Not you."

"So? Give it back to her."

Bill looked startled; Gwen said, "Richard, is this necessary?"

"I think it is."

"But I don't think it is."

Bill kept quiet, did nothing, watched. I turned my back on him to face Gwen privately, said softly, for her ears only:

"Gwen, I need your backing."

"Richard, you're making an issue out of nothing!"

"I don't see it as 'nothing,' dear. On the contrary, it's a key matter and I need your help. So back me up. Or else."

" 'Or else' what, dear?"

"You know what 'or else' means. Make up your mind. Are you going to back me up?"

"Richard, this is ridiculous! I see no reason to cater to it."

"Gwen, I'm asking you to back me up." I waited an endless time, then sighed. "Or start walking and don't look back."

Her head jerked as if I had slapped her. Then she picked up her case and started walking.

Bill's jaw dropped, then he hurried after her, still carrying Tree-San.

XVI

"Women are meant to be loved, not to be understood."

OSCAR WILDE 1854-1900

I watched them out of sight, then started walking slowly. It was easier to walk than to stand still and there was no place near to sit down. My stump ached and all the weariness of the past few days hit me. My mind was numb. I continued to move toward the Raffles Hotel because I was headed that way, programmed.

The Raffles was even seedier than I had recalled. But I suspected that Rabbi Ezra knew what he was talking about-this, or nothing. In any case I wanted to get out of the public eye; I would have accepted a much poorer hostelry as long as it enabled me to get behind a closed door.

I told the man at the desk that Rabbi Ezra had sent me and asked what he had. I think he offered me his most expensive room still vacant: eighteen crowns.

I ran through the ritual dicker but my heart wasn't in it. I settled for fourteen crowns, paid it, accepted a key; the clerk turned a large book toward me. "Sign here. And show me your air receipt."

"Eh? When did this kaka start?"

"With the new administration, chum. I don't like it any more than you do but either I comply or they shut me down."

I thought about it. Was I "Richard Ames"? Why cause a cop to salivate at the thought of a reward? Colin Campbell? Someone with a long memory might recognize that nameand think of Walker Evans.

I wrote, "Richard Campbell, Novylen."

"Thank you, gospodin. Room L is at the end of this passage on the left. There's no dining room but our kitchen has dumbwaiter service to the rooms. If you want dinner here, please note that the kitchen shuts down at twenty-one o'clock. Except for liquor and ice, dumbwaiter service ends at the same time. But there is an all-night Sloppy Joe across the corridor and north about fifty meters. No cooking in the rooms."

"Thank you."

"Do you want company? Straight arrow, lefthand drive, or versatile, all ages and sexes and catering only to high-class clientele."

"Thanks again. I'm very tired."

It was a room adequate for my needs; I didn't mind its shabbiness. There was a single bed and a couch that opened out, and a refresher, small but with all the usual offices, and no water restriction-I promised myself a hot bath... later, later! A shelf bracket in the bed-sitting room seemed to have been intended for a communication terminal; now it was empty. Near it, let into the rock, was a brass plate:

In This Room on Tuesday 14 May 2075 Adam Selene. Bemardo de la Paz. Manuel Davis, and Wyoming Knott Created the Plan That Gave Rise to Free Luna. Here They Declared the Revolution!

I was not impressed. Yes, those four were heroes of the Revolution but in the year in which I buried Colin Campbell and created Richard Ames I had stayed in a dozen-odd hotel rooms in L-City; most of them had sported a similar sign. It was like the "Washington Slept Here" signs back in my native country: bait for tourists, any resemblance to truth a happy accident.

Not that I cared. I took off my foot, lay down on the couch, and tried to make my mind blank.

Gwen! Oh, damn, damn, damn!

Had I been a stiff-necked fool? Perhaps. But, damn it all, there is a limit. I didn't mind indulging Gwen in most things. It was all right to let her make decisions for both of us and I hadn't squawked even when she did so without consulting me. But she should not encourage this pensioner to defy me-now should she? I should not have to put up with that. A man can't live that way.

But I can't live without her!

Not true, not true! Up until this week-hardly more than three days ago-you lived without her... and you can do without her now.

I can do without my missing foot, too. But I don't like not having both feet and I'll never get used to the loss. Sure, you can do without Gwen; you won't die without her-but admit it, stupid: In the past thirty years you've been happy just this brief time, the hours since Gwen moved in and married you. Hours loaded with danger and blatant injustice and fighting and hardship, and it all mattered not a whit; you've been bubbling over with happiness simply because she was at your side.

And now you've sent her away.

Put on your stupid hat. Fasten it with rivets; you'll never need to take it off again.

But I was right!

So? What has being "right" got to do with staying married?

I must have slept (I was mortal tired), as I remember things that did not happen, nightmares-e.g., Gwen had been raped and killed in Bottom Alley. But rape is as scarce in Luna City as it is commonplace in San Francisco. Over eighty years since the last one and the groundhog who committed it didn't last long enough to be eliminated; the men who responded to her screams tore him to pieces.

Later it was learned that she had screamed because he hadn't paid her. This made no difference. To a Loonie a hooker is just as sacred in her person as is the Virgin Mary. I am a Loonie only by adoption but I agree deep in my heart. The only proper punishment for rape is death, forthwith, no appeal.

There used to be, dirtside, legal defenses called "diminished capacity" and "not guilty by reason of insanity." These concepts would bewilder a Loonie. In Luna City a man would necessarily be of diminished mental capacity even to think about rape; to carry one out would be the strongest possible proof of insanity-but among Loonies such mental disorders would not gain a rapist any sympathy. Loonies do not psychoanalyze a rapist;

they kill him. Now. Fast. Brutally.

San Francisco should learn from Loonies. So should every city where it is not safe for a woman to walk alone. In Luna our ladies are never afraid of men, be they family, friends, or strangers; in Luna men do not harm women-or they die!

I had awakened sobbing in grief uncontrollable. Gwen was dead, Gwen had been raped and murdered and it was my fault!

Even when I had wakened wide enough to fit back into my proper continuity I was still bawling-I knew that it had been just a dream, a nasty nightmare... but my guilt feelings were undiminished. I had indeed failed to protect my darling. I had told her to leave me. "-start walking and don't look back." Oh, folly unplumbable!

What can I do about it?

Find her! Maybe she'll forgive me. Women seem to have almost unlimited capacity for forgiveness. (Since it is usually a man who needs forgiveness, this must be a racial survival trait.)

But first I had to find her.

I felt overpowering need to go out and start searching-jump on my horse and gallop in all directions. But that is the classic case given in mathematics textbooks of how not to find someone who is lost. I had no idea of where to look for Gwen, but she just possibly might look for me by checking the Raffles-if she had second thoughts. If she did, I must be here, not out searching at random.

But I could improve the odds. Call the Daily Lunatic; place an advertisement-place more than one sort: a classified ad, a box ad, and-best!-a commercial spiel to go out on every terminal with the Lunatic's hourly news bulletins.

If that doesn't work, what will you do?

Oh, shut up and write the ad!

Gwen, Call me at the Raffles. Richard.

Gwen, Please call me! I'm at the Raffles. Love, Richard.

Dearest Gwen, For the sake of what we had, please call me. I'm at the Raffles. Love always, Richard.

Gwen, I was wrong. Let me try again. I'm at the Raffles. All my love, Richard.

I jittered over it, finally decided mat number two was best-changed my mind; number four held more appeal. Changed it again-the simplicity of number two was better. Or even number one. Oh, hell, stupid, just place an ad! Ask her to call; if you have any chance of getting her back, she won't boggle at

how you word it.

Call it in from the hotel office? No, leave a note there, telling Gwen where you are going and why and what time you'll be back and please wait... then hurry to the newspaper's office and get it on the terminals at once-and into their next edition. Then hurry back.

So I put on my false foot, wrote out the note to leave at the desk, and grabbed my cane-and that splitsecond timing I have noticed too many times in my life again took place, a timing that impels me more than anything else to think that this crazy world is somehow planned, not chaos. A knock at my doorI hurried to open it. It was she! Glory hallelujah! She seemed even smaller than I knew her to be, and all big round solemn eyes. She was carrying the little potted maple as if it were a love offering-perhaps it was. "Richard, will you let me come back? Please?"

All happening at once I took the little tree and put it on the floor and picked her up and closed the door and sat her on the couch myself beside her and we were crying sobs and tears and talking all mixed up together.

After a while we slowed and I shut up enough that I heard what she was saying: "I'm sorry Richard I was wrong I should have backed you but I was hurt and angry and too stinking proud to turn back and tell you so and when I did you were gone and I didn't know what to do. Oh, God, darling, don't ever let me leave you again; make me stay! You're bigger than I am; if I ever get angry again and try to leave, pick me up and turn me around but don't let me leave!"

"I won't let you leave again, ever. I was wrong, dear; I should not have made an issue of it; that's no way to love and cherish. I surrender, horse and foot. Make a pet out of Bill any way you like; I won't say a word. Go ahead, spoil him rotten."

"No, Richard, no! I was wrong. Bill needed a stem lesson and I should have backed you up and let you straighten him out. However-" Gwen unwound herself a little, reached for her purse, opened it. I said,

"Mind the alligator! Careful."

She smiled for the first time. "Adele certainly took that hook, line and sinker."

"Do you mean that there is not an alligator in there?"

"Goodness, sweetheart, do you think I'm eccentric?"

"Oh, Heaven forbid!"

"Just a mousetrap and her imagination. Here-" Gwen placed a wad of money, paper and metal, beside her on the couch. "I made Bill give it back. What he had left, I mean; he should have had three times as much. I'm afraid Bill is one of those weaklings who can't carry money without spending it. I must figure out how to spank him for it till he learns better. In the meantime he can't have any cash until he earns it."

"As soon as he earns any money he should pay me ninety days' air fee," I put in. "Gwen, I really am vexed about that. Vexed at him, not at you. His attitude about paying for air. But I'm sorry as can be that I let it slop over onto you."

"But you were right, dear. Bill's attitude about paying for air reflects his wrongheadedness in general. So I've discovered. We sat in Old Dome and discussed many things. Richard, Bill has the socialist disease in its worst form; he thinks the world owes him a living. He told me sincerely-smugly!- that of course everyone was entitled to the best possible medical and hospital service-free of course, unlimited of course, and of course the government should pay for it. He couldn't even understand the mathematical impossibility of what he was demanding. But it's not just free air and free therapy, Bill honestly believes that anything he wants must be possible... and should be free." She shivered. "I couldn't shake his opinion on anything."

"'The Road Song of the Bandar-Log.'"

"Excuse me?"

"From a poet a couple of centuries back, Rudyard Kipling. The bandar-log-apes, they were-believed that anything was possible just by wishing it so."

"Yes, that's Bill. In all seriousness he explains how things should be ... then it's up to the government to make it happen. Just pass a law. Richard, he thinks of 'the government' the way a savage thinks of idols. Or-No, I don't know, I don't understand how his mind works. We talked at each other but we didn't reach each other. He believes his nonsense. Richard, we made a mistake-or I did. We should not have rescued Bill."

"Wrong, honey girl."

"No, dear. I thought I could rehabilitate him. I was wrong."

"That's not how I meant you were wrong. Remember the rats?"

'•Oh."

"Don't sound so miserable. We took Bill with us because each of us was afraid that, if we didn't, he would be killed, possibly eaten alive by rats. Gwen, we both knew the hazards of picking up stray kittens, we both understood the concept 'Chinese obligation.' We did it anyhow." I tilted up her chin, kissed her. "And we would again, this very minute. Knowing the price."

"Oh, I love you!"

"I love you, too, in a sweaty, vulgar fashion."

"Uh... now?"

"I need a bath."

"We can bathe later."

I had just retrieved Gwen's other baggage, temporarily forgotten outside the door-and happily untouched-and we were getting ready to bathe when Gwen bent over the little tree, then picked it up and put it on the shelf table by the dumbwaiter so she could get at it better. "Present for you, Richard."

"Goodie. Girls? Or liquor?"

"Neither. Although I understand both are readily available.

The desk manager wanted a cut of my fee when I bought Bill a key here."

"Bill is here?"

"Overnight, in the cheapest single. Richard, I didn't know what to do with Bill. I would have told him to find his own doss in Bottom Alley if I hadn't heard something Rabbi Ezra said about rats. Dam it all, there did not used to be rats down there. Luna City is getting to be a slum."

"I'm afraid you're right."

"I fed him, too-there is a Sloppy Joe up the line. He eats enough for four-perhaps you've noticed?"

"I have."

"Richard, I could not abandon Bill without feeding him and finding him a safe bed. But tomorrow is another story. I told him that I expected him to shape up-before breakfast."

"Hmmph. Bill would lie for a fried egg. He's a sad sack, Gwen. The saddest."

"I don't think he can lie convincingly. At least I gave him something to think about. He knows that I am angry with him, that I despise his notions, and that the free lunch is about to shut its doors. I hope I have given him a sleepless night. Here, dear-" She had been digging into the potting soil, under the little maple. "For Richard.

Better wash them." She handed me six cartridges, Skoda 6.5 mm longs or monkey copies.

I picked one up, examined it. "Wonder woman, you continue to amaze me. Where? When? How?"

Praise made her look sunnily happy and about twelve. "This morning. In Kong. Black market, of course, which simply means finding which counter to look under at Sears. I hid my Miyako under Tree-San before I went shopping, then stashed the ammo there in leaving Xia's place. Sweetheart, I did not know what sort of search we might have to stand if things got sticky in Kong-and they did, but Auntie got us loose."

"Can you cook?"

"I'm an adequate cook."

"You can shoot, you can rassle a rolligon, you can pilot a spacecraft, you can cook. Okay, you're hired. But do you have any other skills?"

"Well, some engineering. I used to be a pretty good lawyer. But I haven't practiced either one lately." She added, "And I can spit between my teeth."

"Supergal! Are you now or have you ever been a member of the human race? Careful how you answer; it will be taken down in writing."

"I decline to answer on advice of counsel. Let's order dinner before they shut down the kitchen."

"I thought you wanted a bath?"

"Do. I'm itchy. But if we don't get the order in soon, we'll have to get dressed and go out to Sloppy Joe's ... and I don't mind Sloppy Joe but I do mind having to get dressed. This is the first completely relaxed, quiet time I've had alone with my husband for, oh, ages. In your suite in Golden Rule before that silly eviction notice."

"Three days."

"As little as that? Truly?"

"Eighty hours. Fairly busy hours, I grant you."

The Raffles has a good kitchen as long as you stick to chef's choice; that night it was meatballs with Swedish pancakes, honey-and-beer sauce-an odd combination that worked. Tossed fresh salad, oil and wine vinegar. Cheese and fresh strawberries. Black tea.

We enjoyed it but an old shoe, suitably sauteed, would have been acceptable, so long had it been since we had eaten. It could have been fried skunk and I would not have noticed;

Gwen's company was all the sauce I needed.

We had been happily chomping away for a half hour, making no attempt to be elegant, when my darling noticed the brass plate in the rock-too busy before then. Understandable.

She got up and looked at it, then said in a hushed voice, "I'll be a Hollywood hooker. This is the place! Richard, this is the very cradle of the Revolution! And here I've sat, belching and scratching, as if this were just any hotel room."

I said, "Sit down and finish your dinner, love. Three out of four hotel rooms in Luna City have signs something like that."

"Not like that. Richard, what is the number of this i)0'n?"

"Doesn't have a number-a letter. Room L."

"'Room L'-yes! This is the place! Richard, in any nation back dirtside, a national shrine this important would have an eternal flame. Likely a guard of honor. But here-Somebody puts up that little brass plaque, and it's forgotten. Even on Free Luna Day. But that's Loonies. Weirdest mob in the known universe. My word!"

I said, "Darling girl, if it pleases you to think that this room is truly what that sign says-fine! In the meantime sit back down and eat. Or shall I eat your strawberries?"

Gwen did not answer; she did sit down, then kept quiet. She merely toyed with the fruit and cheese. I finally said, "Sweetheart, something is bothering you."

"I won't die from it."

"Glad to hear it. Well, when you feel like talking, I'm all ears. Meanwhile I'll simply fan you with them. Don't feel hurried."

"Richard-" Her voice sounded choked. I was surprised to see tears slowly creeping down each side of her nose.

"Yes, dear?"

"I've told you a pack of lies. I-"

"Stop right there. My love, my lusty little love, I have always believed that women should be allowed to lie as much as they need to and never be taxed with it. Lies can be their only defense against an unfriendly world. I have not quizzed you about your past-have I?"

"No but-"

"Again stop. I haven't. You volunteered a few things. But, even so, I've shut you up a couple of times when you were about to have an attack of pernicious autobiography. Gwen, I didn't marry you for your money, or for your family background, or your brains, or even for your talents in bed."

"Not even for the last? You haven't left me much."

"Oh, yes, I have. I appreciate your horizontal skills and your enthusiasm. But competent mattress dancers are not uncommon. Take Xia, for example. I conjecture that she is both skilled and eager."

"Probably twice as skilled as I am, but I'll be damned if she's more eager."

"You do all right when you get your rest. But don't distract me. Do you want to know what it is that makes you so special?"

"Yes! Well, I think so. If it's not booby-trapped."

"It's not. Mistress mine, your unique and special quality is this: When I'm around you, I'm happy."

"Richard!"

"Quit blubbering. Can't stand a female who has to lick tears off her upper lip."

"Brute. I'll cry if I goddam well feel like it... and I need this one. Richard, I love you."

"I'm fond of you, too, monkey face. What I was saying was that, if your present pack of lies is wearing thin, don't bother to build up another structure filled with solemn assurances that this is at last the truth, the whole truth, and nothing but the truth. Forget it. The old structure may be threadbare-but I don't care. I'm not looking for holes or inconsistencies because I don't care. I just want to live with you and hold your hand and hear you snore."

"I don't snore! Uh... do I?"

"I don't know. We haven't had enough sleep in the last eighty hours for it to be a problem. Ask me in fifty years." I reached across the table, tickled a nipple, watched it grow. "I want to hold your hand, listen to your snores, and occasionally-oh, once or twice a month-"

"Once or twice a month!"

"Is that too often?"

She sighed. "I guess I must settle for what I can get. Or go out on the tiles."

'Tiles? What tiles? I was saying that once or twice a month we'll go out to dinner, see a show, go to a night club. Buy you a flower to pin in your hair. Oh, oftener, I guess, if you insist ... but too much night life does interfere with writing. I intend to support you, my love, despite those bags of gold you have squirreled away." I added, "Some problem, dear? Null program? Why the expression?"

"Richard Colin, you are beyond doubt the most infuriating man I have ever married. Or even slept with."

"Did you let them sleep?"

"Oh, you mother! I shouldn't have saved you from Gretchen. 'Once or twice a month'! You set me up for that. Then sprang the trap."

"Madam, I don't know what you are talking about."

"You do so! You think I'm a sweaty little nymphomaniac."

"You're not too little."

"Keep doing it. Go on. Push me hard enough and I'll add a second husband to our marriage. Choy-Mu would marry us-I know he would."

"Choy-Mu is a dinkum cobber, too right. And I'm sure he would marry you; he doesn't have sand in his skull. If you so elect, I'll try to make him feel welcome'. Although I hadn't realized that you were that well acquainted with him. Were you speaking seriously?"

"No, damn it. I've never made a practice of plural marriage;

coping with one husband at a time is complex enough. Certainly Captain Marcy is a nice boy but he's much too young for me. Oh, I won't say that I would turn him down for a night of bundling if he asked me gracefully. But it would be simply for fun, nothing serious."

"/ won't say that you would turn him down, either. Well, let me know ahead of time, if convenient, so that I can gracefully fail to notice. Or stand jigger. Even hand out towels. Lady's option."

"Richard, you're entirely too agreeable."

"You want me to be jealous? But this is Luna, and I'm a Loonie. Only by adoption but nevertheless a Loonie. Never a groundhog, banging his head against a rock wall." I paused to kiss her hand. "My lovely mistress, you are indeed small and not massy. But your heart is big. Like the loaves and fishes, you are a rich plenitude for as many husbands and lovers as you choose. I am happy to be firstif I am first-among equals."

"'Is this a dagger which I see before me?'"

"No, an icicle."

"Really? Let's grab it before it melts."

We did, but just barely; I was tired. Afterwards I said, "Gwen, why are you frowning? Did I do so poorly?"

"No, love. But I still have those lies on my mind... and this time please don't change the subject. I know that the inscription on that brass plate over there is correct, because I knew three of those four. Knew them well; I was adopted by two of them. Beloved, I am a Founding Father of Luna Free State."

I said nothing because sometimes there is nothing one can say. Shortly Gwen wiggled and said almost angrily, "Don't look at me that way! I know what you're thinking; 2076 is quite a while back. So it is. But, if you'll get dressed, I'll take you down to Old Dome and show you my chop and thumbprint on the Declaration of Independence. You might not believe that it's my chop... but I can't fake a thumbprint. Shall we go look?"

"No."

"Why not? Want to know my age? I was bom Christmas Day 2063, so I was twelve and a half when I signed the Declaration. That nails down how old I am."

"Sweetheart, when I decided to become a native Loonie or a reasonable facsimile, I studied the history of Luna to help me get away with it. There is no Gwendolyn among the signers. Wait a second, not saying you lied-saying you must have had another name then."

"Yes, of course. Hazel. Hazel Meade Davis."

"'Hazel.' Later married into the Stone Gang. Leader of the children's auxiliaries. Um, Hazel was a redhead."

"Yes. Now I can stop taking some pesky pills and let my hair go back to its natural color. Unless you prefer it this shade?"

"Hair color isn't important. But-Hazel, why did you marry me?"

She sighed. "For love, dear, and that is true. To help you when you were in trouble... and that is true, too. Because it was inevitable and that is true, also. For it is written in history books in another time and place that Hazel Stone returned to Luna and married Richard Ames aka Colin Campbell... and this couple rescued Adam Selene, chairman of the Revolutionary Committee."

"Already written, eh? Predestined?"

"Not quite, my beloved. In other history books it is written that we failed... and died trying."

XVII

"Age cannot wither her, nor custom stale Her infinite variety: other women cloy The appetites they feed; but she makes hungry Where most she satisfies-"

WILLIAM SHAKESPEARE 1564-1616

So this girl tells the school nurse, "My brother thinks he's a hen." The nurse answers, "Oh, goodness! What's being done to help him?" The girl answers, "Nothing. Mama says we need the eggs."

Are a woman's delusions anything to worry about? If she's happy with them? Was I duty bound to take Gwen to a shrink to try to get her cured?

Hell, no! Shrinks are the blind leading the blind; even the best of them are dealing from a short deck. Anyone who consults a shrink should have his head examined.

Close scrutiny showed that Gwen was possibly over thirty, probably under forty-but certainly not as old as fifty. So what was a gentle way to handle her claim that she was born more than a century ago?

Everyone knows that natives of Luna age more slowly than groundhogs who have grown up in a one-gee field. Gwen's delusion seemed to include the notion that she herself was actually a Loonie instead of the native groundhog she had claimed to be. But Loonies do age, albeit slowly, and Loonies more than a hundred years old (I had met several) do not look only thirty-odd years old; they look ancient.

I would have to try hard to let Gwen think that I believed her every word... while believing none and telling myself that it did not matter. I once knew a man who, sane himself, was married to a woman who believed devoutly in astrology. She was forever buttonholing someone and asking what sign her victim was born under. That sort of antisocial nuttiness must be much harder to live with than Gwen's gentle delusion.

Yet this man seemed happy. His wife was an excellent cook, a pleasant woman (aside from this hole in her head), and may have been a bedroom artist equal to Rangy Lil. So why should he worry about her syndrome? She was happy with it, even though she annoyed other people. I think he did not mind living in an intellectual vacuum at home as long as he was physically comfortable there.

Having gotten off her pretty chest what was fretting her, Gwen went right to sleep, and soon I did likewise, for a long, happy, solid night of rest. I woke up restored and cheerful, ready to fight a rattlesnake and allow the snake the first two bites.

Or ready to eat a rattlesnake. Come Monday, I was going to have to find us new quarters; I'm usually willing to go out for other meals but breakfast should be available before one has to face the world. This is not the only reason to be married but it is a good one. Of course there are other ways to manage breakfast at home, but marrying and conning your wife into getting breakfast is, I believe, the commonest strategy.

Then I came a little wider awake and realized that we could get breakfast right here. Or could we? What hours did the kitchen function? What time is it now? I checked the notice posted by the dumbwaiter, was depressed by it.

I had cleaned my teeth and put on my foot and was pulling on my pants (while noting that I must buy clothes today; these trousers were reaching critical mass), when Gwen woke up.

She opened one eye. "Have we met?"

"We of Boston would not consider it a formal introduction. But I'm willing to buy you breakfast anyhow; you were fairly lively. What'll it be? This fleabag offers only something called 'cafe complet,' a bleak promise at best. Or you can get decent and we'll creep slowly out to see Sloppy Joe."

"Come back to bed."

"Woman, you're trying to collect my life insurance. Sloppy Joe? Or shall I order for you a cup of lukewarm Nescafe, a stale croissant, and a glass of synthetic orange juice for a luxurious breakfast in bed?"

"You promised me waffles every morning. You promised me. You did."

"Yes. At Sloppy Joe's. That's where I'm going. Are you coming with me? Or shall I order for you the Raffles specialty of the house?"

Gwen continued to grumble and moan and accuse me of unspeakable crimes and urge me to come die like a man while promptly and efficiently getting up, refreshing for the day, and dressing. She finished looking spic and span instead of three days in the same clothes. Well, we both did have brand-new underclothes, recent hot baths, and putatively clean minds and nails... but she looked bandbox fresh while I looked like the pig that slowly walked away. Which was all her misfortune and none of my own; Gwen was wonderfully good to wake up to. I felt bubblingly happy.

As we left room L she took my arm and hugged it. "Mister, thank you for inviting me to breakfast."

"Anytime, little girl. What room is Bill in?"

She sobered instantly. "Richard, I did not propose exposing you to Bill until after you had eaten. Better perhaps?"

"Uh-Oh, hell, I don't enjoy waiting for breakfast and I see nothing to be gained by making Bill wait for his. We don't have to look at him; I'll grab a table for two and Bill can sit at the counter."

"Richard, you are a soft-hearted slob. I love you."

"Don't call me a soft-hearted slob, you soft-hearted slob. Who lavished spending money on him?"

"I did and it was a mistake and I got it back from him and it won't happen again."

"You got some of it back from him."

"Got back what he had left and quit rubbing my nose in it, please. I was an idiot, Richard. Too right."

"So let's forget it. This is his room?"

Bill was not in his room. An inquiry at the desk confirmed what knocking had shown to be likely: Bill had gone out a half hour earlier. I think Gwen was relieved. I know I was. Our problem child had become a major pain in the Khyber. I had to remind myself that he had saved Auntie to see anything good about him.

A few minutes later we entered the local Sloppy Joe. I was looking around for a free table for two when Gwen squeezed my arm. I looked up, then looked where she was looking.

Bill was at the cashier's station, paying a check. He was doing so with a twenty-five-crown note.

We waited. When he turned around he saw us-and looked ready to run. But there was nowhere to run except past us.

We got him outside without a scene. In the corridor Gwen looked at him, her face cold with disgust. "Bill, where did you get that money?"

He looked at her, looked away. "It's mine."

"Oh, nonsense. You left Golden Rule without a farthing. Any money you have you got from me-You lied to me last night-you held out on me."

Bill looked doggedly stubborn, said nothing. So I said, "Bill, go back to your room. After we've had breakfast we'll see you there. And we'll have the truth out of you."

He looked at me with barely restrained fury. "Senator, this ain't none of your pidgin!"

"We'll see. Go back to the Raffles. Come, Gwen."

"But I want Bill to return my money. Now!"

"After breakfast. This time let's do it my way. Are you coming?"

Gwen shut up and we went back into the restaurant. I saw to it that we did not discuss Bill; some subjects curdle the gastric juices.

About thirty minutes later I said, "Another waffle, dear?"

"No, thank you, Richard, I've had enough. They're not as good as yours."

"That's 'cause I'm a natural-born genius. Let's finish up, then go back and take care of Bill. Shall we skin him alive, or merely impale him on a stake?"

"I've been planning to question him on the rack. Richard, life lost some of its beauty when truth drugs replaced thumb screws and hot irons."

"My beloved, you are a bloodthirsty little wretch. More coffee?"

"You just say that to flatter me. No more, thank you."

We returned to the Raffles, went to Bill's room, were unable to raise him, went back to the desk. The misanthrope who had checked me in was again on duty. I asked, "Have you seen anything of William Johnson, room KK?"

"Yes. About thirty minutes ago he collected his key deposit and left."

"But *bought that key!" Gwen said, rather shrilly.p>*

The desk manager was unruffled. "Gospazha, I know you did. But we return the deposit for the return of the key. It doesn't matter who rented the room." He reached for his rack, took down key card KK. "The deposit just barely pays for changing the magnetic code if someone fails to return his key-it doesn't pay for the nuisance. If you dropped your card in the corridor and somebody picked it up and turned it in, we would pay the deposit... then you would have to pay a second deposit to get into your room."

I took Gwen firmly by the elbow. "Fair enough. If he shows up, let us know, will you? Room L."

He looked at Gwen. "You don't want room KK?"

"No."

He turned his attention to me. "You have Room L at its single rate. For double occupancy we charge more."

Suddenly I had had it. All the kaka, all the shoving around, all the petty nonsense I could take. "You try to clip me one more crown and I'll haul you down to Bottom Alley and unscrew your head! Come along, dear."

I was still fuming when I let us into our room and locked the door.

"Gwen, let's not stay in Luna. The place has changed. For the worse."

"Where do you want to go, Richard?" She looked and sounded distressed.

"Uh-I would opt to emigrate, right out of the System—

Botany Bay, or Proxima, or such-if I were younger and had two legs." I sighed. "'Sometimes I feel like a motherless child.'"

"Sweetheart-"

"Yes, dear?"

"I'm here, and I want to mother you. I go where you go. I'll follow you to the ends of the Galaxy. But I don't want to leave Luna City just yet... if you will indulge me. We can go out now and search for somewhere else to stay. If we don't find a place-Rabbi Ezra may be right-can't we put up with that surly clerk until Monday? Then we can certainly find a place."

I concentrated on slowing my heart, managed it. "Yes, Gwen. We might shop for a place to move into after the weekend, after the Shriners leave, if we can't find a suitable place available at once. I wouldn't mind that shmo on the desk if we were sure of proper cubic after the weekend."

"Yes, sir. May I tell you now why I need to stay in Luna City for a while?"

"Eh? Yes, certainly. Matter of fact, I ought to stay rooted to one spot for a while, too. Get some writing done, make some money to offset the rather heavy expenses of this week."

"Richard. I've tried to tell you. There are no money worries."

"Gwen, there are always money worries. I'm not going to spend your savings. Call it macho if you like, but I intend to support you."

"Yes, Richard. Thank you. But you need feel no pressure of time. I can lay hands promptly on whatever amount of money we need."

"So? That's a sweeping statement."

"It was intended to be, sir. Richard, I stopped lying to you. Now is the time for large chunks of truth."

I brushed this aside with both hands. "Gwen, haven't I made it clear to you that I don't care what fibs you've told or how old you are or what you have been? It's a fresh start, you and me."

"Richard, stop treating me as a child!"

"Gwen, I am not treating you as a child. I am saying that I accept you as you are. Today. Now. Your past is your business."

She looked at me sadly. "Beloved, you don't believe that I am Hazel Stone. Do you?"

Time to lie! But a lie is no good if it's not believed (unless it is told to be disbelieved, which could not apply here). Time to fandance instead. "Sweetheart, I've been trying to tell you that it does not matter to me whether or not you are Hazel Stone. Or Sadie Lipschitz.

Or Pocahontas. You are my beloved wife. Let's not cloud that golden fact with irrelevancies."

"Richard, Richard! Listen to me. Let me talk." She sighed. "Or else."

"'Or else'?"

"You know what 'Or else' means; you used it on me. If you won't listen, then I must go back and report that I have failed."

"Go back where? Report to whom? Failed in what?"

"If you won't listen, it doesn't matter."

"You told me not to let you leave!"

"I won't be leaving you; I'll just be running a quick errand, then back home to you. Or you're welcome to come with me-oh, I wish you would! But I must report my failure and resign my commission... then I'll be free to go with you to the ends of the universe. But I must resign, not simply desert. You are a soldier; you understand that."

"You are a soldier?"

"Not exactly. An agent."

"Uh... agente provocateuse?"

"Uh, close." She smiled wryly. "Agente amoureuse perhaps. Although I wasn't told to fall in love with you. Just to marry you. But I did fall in love with you, Richard, and it may have ruined me as an agent. Will you come with me while I report back? Please?"

I was getting more confused by the minute. "Gwen, I'm getting more confused by the minute."

"Then why not let me explain?"

"Uh-Gwen, it can't be explained. You claim that you're Hazel Stone."

"I am."

"Damn it, I can count. Hazel Stone, if she is still alive, is well over a century old."

"That's right. I'm well over a hundred." She smiled. "I robbed the cradle, dear one."

"Oh, for God's sake! Look, dear, I've spent the last five nights in bed with you. You're an exceptionally lively old bag!"

She grinned at me. "Thank you, dear. I owe it all to Lydia Pinkham's Vegetable Compound."

"You do, eh? A patent nostrum took the calcium out of your joints and put it back into your bones, and ironed out the wrinkles in your face, and restored your youthful hormonal balance, and unclogged your arteries? Order me a barrel of it;

I'm slowing down."

"Mrs. Pinkham had expert help, dearest. Richard, if you would only let me prove to you who I am, by my thumbprint on the Declaration of Independence, your mind would then be open to the truth, strange though it is. I wish I could offer you identification by retinal patterns... but my retinas had not been photographed then. But there is that thumbprint. And there is blood typing, too."

I began to feel panicky-what would Gwen do if her delusion pattern was toppled?

Then I remembered something. "Gwen, Gretchen mentioned Hazel Stone."

"So she did. Gretchen is my great great granddaughter, Richard. I married Slim Lemke, of the Stone Gang, on my fourteenth birthday and had my first child by him at Terra's fall equinox of 2078-a boy; I named him Roger for my father. In 2080 I had my first daughter-"

"Hold it. Your eldest daughter was a student at Percival Lowell when I commanded the rescue operation. So you said."

"Part of that pack of lies, Richard. I did indeed have a descendant there-a granddaughter on the faculty. So I truly am grateful. But I had to edit the details to fit my apparent age. My first daughter was named Ingrid, for Slim's mother ... and Ingrid Henderson was named for her grandmother-my daughter, Ingrid Stone. Richard, you could not guess at the time how difficult it was for me at Dry Bones Pressure to meet for the first time five of my very own and not be able to acknowledge them.

"But I can't be Grandmother Hazel when I am being Gwen Novak. So I didn't admit it... and that was not the first time this has happened to me. I've had lots of children-forty-four years from menarche to menopause and I gave birth to sixteen by four husbands and three passing strangers-and took the Stone name back after my fourth husband died. Because I moved in with my son Roger Stone.

"I raised four of the kids Roger had by his second wife-she is a medical doctor and needed a resident grandmother. I got three of them married off, all but the baby, who is now chief surgeon at Ceres General and may never get married as he is handsome and quite self-centered and believes the old saw about 'Why keep a cow?'

"Then I started taking the vegetable compound, and here I am, fertile again and ready to raise another family." She smiled and patted her belly. "Let's go back to bed."

"God damn it, wench; that won't solve anything!"

"No, but it's a swell way to pass the time. And sometimes it puts a stop to recurrent bleeding. Which reminds me-If Gretchen ever shows up, I won't interfere a second time. I just did not fancy having my great great granddaughter crowding in on my honeymoon-a honeymoon already crowded by too many people and too much excitement."

"Gretchen is just a child."

"You think so? She is physically as mature as I was at fourteen... when I married and got pregnant at once. Virgin at marriage, Richard;

happens oftener here than anywhere else. Mama Mimi was strict and Mama Wyoh was charged with keeping an eye on me, and I wasn't inclined to stray anyhow, as the Davis family was socially as high as you could be in Luna City in those days and I appreciated having been adopted by them. Beloved, I'm not going to tell you another word about me until you check my chop and print on the Declaration. I can feel your disbelief... and it humiliates me."

(What do you do when your wife persists? Marriage is the greatest human art.. .when it works.) "Sweetheart, I don't want to humiliate you. But I'm not competent to match thumbprints. But there is more than one way to cook a wolf. This second wife of your son Roger: Is she still alive?"

"Very much so. Dr. Edith Stone."

"Then there is probably a record right here in Luna City of her marriage to your son and-Is he the Roger Stone who was once mayor?"

"Yes. From 2122 to 2130. But he's not available; he left here in 2148."

"Where is he now?"

"Several light years away. Edith and Roger out-migrated, to Fiddler's Green. None of that branch of my family is around any longer. It won't work, dear-you're looking for someone who can identify me as Hazel Stone. Aren't you?"

"Well... yes. I thought Dr. Edith Stone would be an expert and unbiased witness."

"Mmm,.. she still can be."

"How?"

"Blood typing, Richard."

"Look, Gwen, blood typing is a subject I've had to know something about, because of field surgery. I saw to it that every man in my regiment was typed. Blood typing can show who you are not; it cannot prove who you are. In a number as small as a regiment even the rare AB negative will be matched more than once; they run one in two hundred. I remember because I am one."

She nodded agreement. "And I'm 0 positive, the commonest type of all. But that's not the whole story. If you type for all thirty-odd blood groups, a blood type is as unique as a fingerprint or a retinal pattern. Richard, during the Revolution lots of our people died because they had not been blood-typed. Oh, we knew how to transfuse blood but safe donors could be found only by cross-matching, then and there. Without typing this was often too slow; many-no, most-of our wounded who needed blood died because a donor could not be identified in time.

"After peace and independence Mama Wyoh-Wyoming Knott Davis, the hospital in Kong-you know?"

"I noticed."

"Mama Wyoh had been a professional host mother, in Kong, and knew about such things. She started the first blood bank, with money raised by Major Watenabe, another Founding Father. There may be a half liter of my blood frozen in Kong even today... but what is certain is that a complete typing of my blood is on file there, because Edith saw to it that each one of us had a full typing, all known groups, before we all started a Wanderjahr in 2148."

Gwen smiled happily. "So take a sample of my blood, Richard; have it typed at Galileo University Medical Center. Get a full work-up, I'll pay for it. Compare it with my typing done in 2148, filed at Wyoming Knott Memorial. Anyone who can read English can tell whether or not the two work-ups match;

it doesn't take the sort of expertise required to match fingerprints. If that doesn't say I am me, then send for a straitjacket;

it'll be time to put me away."

"Gwen, we're not going back to Kong. Not for anything."

"No need to. We pay the blood bank at Galileo to have a transcript from Kong printed out by terminal." Her face clouded. "But it will blow my cover as Mistress Novak. Once those two records are side by side they'll know that Grandmother Hazel has returned to the scene of her crimes. I don't know what that will do to my mission; it was not supposed to happen. But I do know that convincing you is absolutely essential to my mission."

"Gwen, assume that you've convinced me."

'Truly, dear? You wouldn't lie to me?"

(Yes, I would, little love. But I must admit that your words are persuasive. All that you have said matches my own careful study of Lunar history... and you deal with little details as if you had been there. It all is convincing but the physical impossibility-you are young, darling; you are not an old crone of more than a century.) "Sweetheart, you've given me two positive ways to identify you. So let's assume that I've checked out one or the other or both. Let's stipulate that you're Hazel. Do you prefer to be called Hazel?"

"I answer to both names, darling. Suit yourself."

"All right. The sticky point is your appearance. If you were old and dried up instead of young and juicy-"

"Are you complaining?"

"No. Merely descriptive. Stipulating that you are Hazel Stone, bom 2063, how do you account for your youthful appearance? And don't give me any guff about a legendary patent medicine."

"You'll find the truth hard to believe, Richard. I have undergone rejuvenation. Twice in fact. The first time to bring me back in appearance to late middle age... while restoring my bodily economy to youthful maturity. The second time was mostly cosmetic, to make me desirable in appearance. To recruit you, sir."

"Be damned. Monkey face, is that your own face?"

"Yes. It can be changed if you would like me to look otherwise."

"Oh, no! I'm not one to insist on prettiness as long as a girl's heart is pure."

"Why, you louse!"

"But since your heart isn't all that pure, it's nice that you're pretty."

"You can't talk yourself out of it that easily!"

"Okay, you're gorgeous and sexy and evil. But 'rejuvenation' explains without explaining. So far as I've ever heard, rejuvenation is for flatworms but not for anything higher up the evolutionary ladder."

"Richard, this part you'll have to take on faith-for now, at least. I was rejuvenated at a clinic a couple of thousand years away and in an odd direction."

"Hmm. It sounds like a gimmick I might have dreamed up when I was writing fantasies."

"Yes, it does, doesn't it? Not convincing. Merely true."

"So I see no way to investigate it. Perhaps I'll have to get that blood-type transcript. Uh-Hazel Stone, Roger Stone-The Scourge of the Spaceways!"

"My God, my past has caught up with me! Richard, did you ever watch my show?"

"Every episode, unless I had been caught doing something that called for drastic punishment. Captain John Sterling was my childhood hero. And you wrote it?"

"My son Roger started it. I started writing it in 2148 but I didn't put my name on it until the following year-then it was 'Roger and Hazel Stone'-"

"I remember! But I don't remember that Roger Stone ever wrote it by himself."

"Oh, yes, he did-until he got tired of the golden treadmill. I took it over from him, intending to kill it off-"

"Sweetheart, you can't kill off a serial! It's unconstitutional."

"I know. Anyhow, they took up the option and waved too much money under my nose. And we needed the money; we were living in space then and a spacecraft, even a little family job, is expensive."

"I've never quite had the courage to write a serial against deadlines. Oh, I've written episodes on assignment, using a show's bible, but not on my own and under the gun."

"We didn't use a bible; Buster and I just whipped 'em up as we went along."

"'Buster'?"

"My grandson. The one who is now chief surgeon at Ceres General.

For eleven years we wrote them together, frustrating the Galactic Overlord at every turn-"

"'The Galactic Overlord!' The best villain in the creepies. Honey, I wish there were really a Galactic Overlord."

"Why, you young whippersnapper, how dare you throw doubt on the authenticity of the Galactic Overlord? What do you know about it?"

"Sorry. I apologize. He's as real as Luna City. Or John Sterling would not have had anyone to frustrate ... and I certainly believe in Captain John Sterling of the Star Patrol."

"That's better."

"That time Captain Sterling was lost in the Horsehead Nebula with the radiation worms after him: How did he get out? That was one of the times I was being punished and not allowed to watch."

"As I recall-Mind you, this was some years back. I seem to recall that he jury-rigged his Doppler radar to fry them with polarized beams."

"No, that was what he used on the space entities."

"Richard, are you sure? I don't think he encountered the space entities until after he escaped from the Horsehead Nebula. When he had to make a temporary truce with the Galactic Overlord to save the Galaxy."

I thought about it. How old was I at the time? What year in school? "Hon, I do believe you're right. I was upset that he would join forces with the Overlord even to save the Galaxy. I-"

"But he had to, Richard! He couldn't let billions of innocent people die just to keep from soiling his hands through cooperating with the Overlord. But I can see your point. Buster and I fought over that episode-Buster wanted to take advantage of the temporary truce to do the Overlord in, once the space entities were destroyed-"

"No, Captain Sterling would never break his word."

'True. But Buster was always the pragmatist. His solution to almost any problem was to cut somebody's throat."

"Well, it's a convincing argument," I admitted.

"But. Richard, you have to go easy in killing off characters in a serial; you must always leave something for the next episode. But you tell me you've never handled a series all on your own."

"I haven't but I do know that; I watched enough of them, back when. Hazel, why did you let me fill you with a lot of guff about the life of a writer?"

"You called me 'Hazel'!"

"Sweetheart-Hazel my darling-I'm not interested in blood types or in thumbprints. You are undeniably the author of history's greatest creepie The Scourge of the Spdceways. It said on the credits, week after week, year after year: 'Written by Hazel Stone.' Then, sadly, it began to read: 'Based on characters created by Hazel Stone-'"

"It did? Those later credits should have included Roger; he created the show. Not me. Those nogoodniks."

"It didn't matter. Because the characters grew anemic and died. Without you the show was never the same."

"I had to quit; Buster grew up. I supplied the twists; he supplied the gore. Sometimes I got soft-hearted; Buster never did."

"Hazel? Why don't we revive it? We'll plot it together; you write it; I'll do the cooking and housekeeping." I stopped and looked at her. "What in the world are you crying about?"

"I'll cry if I want to! You call me 'Hazel'-you believe me!"

"I have to believe you. Anybody could trick me about blood types or thumbprints. But not about commercial fiction. Not this old hack writer. You're the real McCoy, my love, the authentic scourge of the spaceways. But you're still my sweaty little nymphomaniac-I find I don't mind that you are a couple of centuries old."

"I am not either two centuries old! I won't be for years and years."

"But you're still my sweaty little nymphomaniac?"

"If you'll let me."

I grinned at her. "Do I have any say in the matter? Get your clothes off and let's do some plotting."

"'Plotting'?"

"All the best writing is done with the gonads, Hazel my lusty bride-didn't you know that? Battle stations! Here comes the Galactic Overlord!"

"Oh, Richard!"

XVIII

"When it comes to a choice between kindness and honesty, my vote is for kindness, every time-giving or receiving."

IRA JOHNSON 1854-1941

"Hazel my ancient love-"

"Richard, would you like a broken arm?"

"I don't think you can manage it just now."

"Want to bet?"

"Ouch! Stop that! Don't do it again ... or I'll toss you back into the creek and marry Gretchen. She is not ancient."

"Keep right on teasing me. My third husband was a tease. Everybody remarked on how well he looked at his funeral... and what a shame it was he died so young." Hazel-Gwen smiled up at me. "But he turned out to be heavily insured, which does comfort a widow.

Marrying Gretchen is a good idea, darling;

I would enjoy bringing her up. Teaching her to shoot, helping her with the first baby, coaching her in how to handle a knife, working out with her in martial arts, all the homey domestic skills a girl needs in this modem world."

"Hummph! My darling girl, you are as little and cute and pretty and harmless as a coral snake. I think Jinx has already trained Gretchen."

"More likely Ingrid. But I can still put a polish on her. As you pointed out, I'm experienced. What was that word you used? 'Ancient,' that was it."

"Ouch!"

"Oh, that didn't hurt. Sissy."

"The hell it didn't. I'm going to enter a monastery."

"Not till you've entered Gretchen. I've just decided, Richard; we're going to marry Gretchen."

I treated this ridiculous statement with the neglect it deserved-I got up and hopped into the refresher.

Shortly she followed me in. I cowered away from her. "Help! Don't hit me again!"

"Oh, spit. I haven't hit you once, as yet."

"I surrender. You're not ancient; you're just well marinated. Hazel my love, what makes you so feisty?"

"I'm not feisty. But when you're as small as I am and female, if you don't stand up for your rights, you're sure to be pushed around by big, hairy, smelly men with delusions about male superiority. Don't yelp, dear; I haven't hurt you, not once. I haven't drawn blood-now have I?"

"I'm afraid to look. Mother never warned me that married life could be like this! Sweetheart, you were about to tell me why you had to recruit me and for what purpose when we got distracted."

She was slow in answering. "Richard, you had trouble believing that I am more than twice your age."

"You convinced me. I don't understand it, but I've had to accept it."

"You're going to find other things I must tell you much harder to accept. Much!"

"Then I probably won't accept them. Hazel-Gwen honey, I'm a hard case. I don't believe in table-tapping, astrology, virgin birth-"

"Virgin birth isn't difficult."

"I mean, in the theological sense; I'm not talking about genetics laboratories. -virgin birth, numerology, a literal hell, magic, witchcraft, and campaign promises. You tell me something that runs contrary to horse sense; I'll be at least as hard to sell as I was about your ancient years. You'll need the Galactic Overlord as a confirming witness."

"Okay. Slip this one on for size. From one standpoint I'm even more ancient than you suspect. More than two centuries."

"Hold it. You won't be two hundred until Christmas Day 2263. A good many years yet, as you pointed out."

'True. I didn't tell you about these extra years even though I lived through them... because I lived them at right angles."

I answered, "Dear, the sound track suddenly went silent."

"But, Richard, that one's easy to believe. Where did I drop my pants?"

"Through most of the Solar System, according to your memoirs."

"That ain't the half of it, mister. Both inside and outside the System and even outside this universe ... and, brother, have I been transgressed against! I mean, where did I drop them today?"

"At the foot of the bed, I think. Hon, why do you bother to wear panties when you take them off so frequently?"

"Because. Only sluts run around without drawers... and I'll thank you to keep a civil tongue in your head."

"I didn't say a word."

"I could hear what you were thinking."

"And I don't believe in telepathy, either."

"You don't, eh? My grandson Dr. Lowell Stone aka Buster used to cheat at chess by reading my mind. Thank God he lost the ability when he was about ten."

"Noted," I answered, "as hearsay concerning a highly improbable event from a reporter whose veracity has not been established. Reliability of alleged datum is therefore not higher than C-Five by military intelligence scaling."

"You'll pay for that!"

"Scale it yourself," I told her. "You've served in military intelligence. CIA, wasn't it?"

"Who sez?"

"You sez. Through several unfinished remarks."

"It was not the CIA and I've never been in McLean in my life and I was fully disguised while I was there and it wasn't me; it was the Galactic Overlord."

"And I'm Captain John Sterling."

Gwen-Hazel looked wide-eyed. "Gee, Captain, can I have your autograph? Better gimme two; I can trade two of yours for one of Rosie the Robot. Richard, will we be going near the main post office?"

"Have to. I've got to set up a mail drop for Father Schultz. Why, dear?"

"If we can swing past Macy's, I'll get Naomi's clothes and wig packed, and then I'll mail them. They've been grinding on my conscience."

"On your what?"

"On the bookkeeping system I use in place of one. Richard, you remind me more and more of my third husband. He was a fine figure of a man, just as you are. He took great care of himself and died in perfect health."

"What did he die of?"

"Of a Tuesday, as I remember. Or was it a Wednesday? Anyway, I was not there-I was a long way off, curled up with a good buck. We never did leam what did him in. Apparently he fainted in his bath and his head went under water. What are you mumbling, Richard? 'Charlotte' who?"

"Nothing, nothing at all. Hazel... I do not carry life insurance."

"Then we must be extra careful to keep you alive. Stop taking baths!"

"If I do, in three or four weeks you'll regret it."

"Oh, I'll stop, too; it will balance out. Richard, will we have time today to go out to the Authority Complex?"

"Perhaps. Why?"

'To find Adam Selene."

"Is he buried there?"

"That is something I must try to find out. Richard, is your believer in good shape?"

"It's overstrained. Several years at right angles indeed! Want to buy a space warp?"

"Thank you; I have one. In my purse. Those extra years are just a matter of geometry, my husband. If you are wedded to the conventional picture of spacetime with just one time axis, then of course you find it hard to understand. But there are at least three time axes just as there are at least three space axes ... and I lived those extra years on other axes. All clear?"

"Utterly clear, my love. As self-evident as transcendentalism."

"I knew you would understand. The case of Adam Selene is more difficult. When I was twelve I heard him speak many times; he was the inspiring leader who held our Revolution together. Then he was killed-or so it was reported. It was not until years later that Mama Wyoh told me, as deepest secret, that Adam was not a man. Not a human being at all. Another sort of entity."

I most carefully said nothing.

Gwen-Hazel said, "Well? Don't you have anything to say?"

"Oh, sure. Not human. An alien. Green skin and one meter high and its flying saucer landed in Mare Crisium just outside Loonie City. Where was the Galactic Overlord?"

"You can't upset me talking that way, Richard, because I know just how such an impossible story affects one. I had the same sort of doubts when Mama Wyoh told me. Except that I had to believe her because Mama Wyoh would never lie to me. But Adam was not an alien, Richard; he was a child of mankind. But not a human child. Adam Selene was a computer. Or a complex of programs in a computer. But it was a selfprogramming computer, so it comes to the same thing. Well, sir?"

I took my time answering. "I like flying saucers better."

"Oh, fiddle! I'm tempted to turn you in on Marcy Choy-Mu."

"The smartest thing you could do."

"No, I'll keep you; I'm used to your foibles. But I may keep you in a cage."

"Hazel. Listen carefully. Computers do not think. They calculate with great speed in accordance with rules built into them. Since we ourselves calculate by using our brains to think, this designed-in capacity to calculate gives computers the appearance of thinking. But they do not think. They operate the way they do because they must; they were built that way. You can add 'animism' to the list of nonsense notions to which I do not subscribe."

"I'm glad you feel that way, Richard, because this job will be touchy and difficult. I need your healthy skepticism to keep me straight."

"I'm going to have to write that down and examine it carefully."

"Do that, Richard. Now here is what happened back in 2075 and -6: One of my adoptive fathers, Manuel Garcia, was the technician who took care of the big computer of the Authority. This one computer ran almost everything... handled all the utilities of this city and of most of the other warrens-except Kong-bossed the first catapult, ran the tubes, handled banking, printed the Lunatic-did practically everything. The Authority found it cheaper to expand the functions of this one big computer than to spread computers all through Luna."

"Neither efficient nor safe."

"Probably, but that's what they did. Luna was a prison then;

it did not have to be either efficient or safe. There was no high tech industry here and in those days we had to accept whatever was handed us. As may be, dear, this one master computer got bigger and bigger... and woke up."

(It did, eh? Sheer fantasy, my sweet... and a cliche that has been used by every fantasy writer in history. Even Roger Bacon's Brass Head was one version of it. Frankenstein's monster is another. Then a spate of stories in later years and still they come. And all of them nonsense.) But what I said was:

"Go ahead, dear. Then what?"

"Richard, you don't believe me."

"I thought we settled that. You said that you needed my healthy skepticism."

"I do! So use it. Criticize! Don't just sit there with that smug look on your face. This computer had been operating by voice for years-accepting spoken programs, answering with synthesized speech or printout or both."

"Builtin functions. Techniques two centuries old."

"Why did your face shut down when I said it 'woke up'?"

"Because that's nonsense, my love. Waking and sleeping are functions of living beings. A machine, no matter how powerful and flexible, does not wake up or go to sleep. It is power on or power off; that's all."

"All right, let me rephrase it. This computer became self-aware and acquired free will."

"Interesting. If true. I don't have to believe it. I don't."

"Richard, I refuse to become exasperated. You are simply young and ignorant and that's not your fault."

"Yes, Grandmaw. I'm young and you're ignorant. Slippery bottom."

'Take your lecherous hands off me and listen. What accounts for self-awareness in a man?"

"Huh? I have no need to account for it; I experience it."

"True. But it is not a trivial question, sir. Let's treat it like a boundary problem. Are you self-aware? Am I?"

"Well, I am, monkey face. I'm not sure about you."

"The same, vice versa."

"That's fun, too."

"Richard, let's stick to the subject. Is the sperm in a male body self-aware?"

"I hope not."

"Or the ova in a female?"

"That's your question to answer, beautiful; I've never been female."

"And you are dodging questions just to tease me. A spermatozoon is not self-aware and neither is an ovum-and never mind silly remarks; that's one boundary. I, an adult human zygote, am self-aware. And you are, too, however dimly this is true for males. Second boundary. Very well, Richard; at what point from the freshly fertilized ovum to the mature zygote now named 'Richard' did self-awareness enter the picture? Answer me. Don't dodge it and, please, no silly remarks."

I still thought it was a silly question but I tried to give it a serious answer. "Very well. *have always been self-aware."p>*

"A serious answer. Please!"

"Gwen-Hazel, that answer is as serious as I can make it. So far as I know I have lived forever and have been self-aware the whole time. All this talk about things that went on before 2133-the alleged year of my alleged birthis just hearsay and not very convincing. I go along with the gag to keep from annoying people or getting funny looks. And when I hear astronomers talk about the world being created in a big bang eight or sixteen or thirty billion years before I was born-if I was bom; I don't recall it-that's a horse laugh. If I was not alive sixteen billion years ago, then there was nothing at all. Not even empty space. Nothing. Zero with no rim around it. The universe in which I exist cannot exist without me in it. So it's silly to talk about the date I became self-aware; time started when I did, it stops when I do. All clear? Or shall I draw you a diagram?"

"All clear on most points, Richard. But you are wrong about the date. Time did not start in 2133. It started in 2063. Unless one or the other of us is a golem."

Every time I have a go at solipsism something like this happens. "Honey, you're cute. But you are a figment of my imagination. Ouch! I told you to stop that."

"You have a lively imagination, darling. Thanks for thinking me up. Do you want another proof? Up to now I've just been playing-shall I now break one of your bones? Just a small one. You pick it."

"Listen, figment. You break one of my bones and you'll regret it for the next billion years."

"Merely a logical demonstration, Richard. No malice in it."

"And once I set the bone-"

"Oh, I'll set it, dear."

"Not on your life! Once I have it set, I'll phone Xia and ask her to come over and marry me and protect me from small figments with violent habits."

"You're going to divorce me?" Again she was suddenly all big eyes.

"Hell, no! Just bust you down to junior wife and put Xia in charge. But you can't leave. Permission denied. You're serving a life sentence, whether it's straight ahead or at right angles. I'm going to get a club and beat you until you give up your evil ways."

"All right. As long as I don't have to go away."

"Ouch! And don't bite. That's rude."

"Richard, if I am just a figment of your imagination, then any biting I do is your idea, done by you to yourself for some murky masochistic purpose. If that is not true, then I must be self-aware... not your figment."

"Either/or logic never proves anything. But you're a delightful figment, dear. I'm glad I thought of you."

"Thank you, sir. Sweetheart, here is a key question. If you will answer it seriously, I'll stop biting."

"Forever?"

"Uh-"

"Don't strain yourself, figment. If you have a serious question, I'll try to give it a serious answer."

"Yes, sir. What accounts for self-awareness in a man and what is there about this condition or process or whatever that makes awareness impossible for a machine? Specifically for a computer. In particular the giant computer that administered this planet in 2076. The Holmes IV."

I resisted the temptation to give a flip answer. Self-awareness? I know that one school of psychologists insists that awareness, if it exists, is present just as a passenger, no effect on behavior.

This sort of nonsense should be lumped with transubstantiation. If true, it can't be proved.

I am aware of my own self-awareness ... and that is as far as any honest solipsist should go. "Gwen-Hazel, I don't know."

"Good! We're making progress."

"We are?"

"Yes, Richard. The hardest part about gaining any new idea is sweeping out the false idea occupying that niche. As long as that niche is occupied, evidence and proof and logical demonstration get nowhere. But once the niche is emptied of the wrong idea that has been filling it-once you can honestly say, 'I don't know,' then it becomes possible to get at the truth."

"Hon, you are not only the cutest little figment I've ever imagined, you are also the smartest."

"Knock it off, buster. Listen to this theory. And think of it as a working hypothesis, not as God-given truth. It was dreamed up by my adoptive father. Papa Mannie, to account for the observed fact that this computer had come to life. Maybe it explains something, maybe it doesn't-Mama Wyoh said that Papa Mannie was never sure. Now attend me-A fertilized human ovum divides... and divides again. And again. And again and again and again. Somewhere along there-I don't know where-this collection of millions of living cells becomes aware of itself and the world around it."

She went on: "A fertilized egg is not aware but a baby is. After Papa Mannie discovered that his computer was self-aware, he noted that this computer, which had been expanded outrageously as more jobs were assigned to it, had reached a point of complication where it had more interconnections in it than has a human brain.

"Papa Mannie made a great theoretical leap: When the number of interconnections in a computer become of the same close order as the number of interconnections in a human brain that computer can wake up and become aware of itself... and probably will. He wasn't sure that it always happened, but he became convinced that it could happen and for that reason: the high number of interconnections.

"Richard, Papa Mannie never went any farther with it. He was not a theoretical scientist; he was a repair technician. But the way his computer was behaving bothered him; he had to try to figure out why it was acting so oddly. This theory resulted. But you need not pay attention to it; Papa Mannie never tested it."

"Hazel, what was this odd behavior?"

"Oh. Mama Wyoh told me that the first thing Manuel noticed was that Mike-the computer, I mean-Mike had acquired a sense of humor."

"Oh, no!"

"Oh, yes. Mama Wyoh told me that, to Mike-or Michelle-or Adam Selene-he used all three names; he was a trinity-to Mike, the entire Luna Revolution, in which thousands died here and hundreds of thousands died on Earth, was a joke. It was just one great big practical joke thought up by a computer with supergenius brain power and a childish sense of humor." Hazel grimaced, then grinned. "Just a great, big, overgrown, lovable kid who should have been kicked."

"You make it sound like a pleasure. Kicking him."

"Do I? Perhaps I should not. After all, a computer could not possibly do right or wrong, or experience good or evil in the human sense; it would have no background for it-no rearing, if you please. Mama Wyoh told me that Mike's human behavior was by imitation-he had endless role models; he read everything, including fiction. But his only real emotion, all his own, was deep loneliness and a great longing for companionship. That's what our revolution was to Mike: companionship ... play ... a game that won him attentionrfrom Prof and Wyoh and especially Mannie. Richard, if a machine can have emotions, that computer loved my Papa Mannie. Well, sir?"

I was tempted to say nonsense or something even less polite. "Hazel, you are demanding bald truth from me-and it will hurt your feelings. It sounds like fiction to me. If not your fiction, then that of your foster mother, Wyoming Knott." I added, "Sweetheart, are we going out to attend to our chores? Or are we going to spend all day talking about a theory on which neither of us has any evidence?"

"I'm dressed and ready to go, dear. Just one little bit more and I'll shut up. You find this story unbelievable."

"Yes, I do." I said it as flatly as possible.

"What part of it is unbelievable?"

"All of it."

'Truly? Or is the sticking point the idea that a computer can be self-aware? If you accept that, does the rest of it become easier to swallow?"

(I tried to be honest. If that nonsense did not make me gag, would the rest be acceptable? Oh, certainly! Like the gold spectacles of Joseph Smith, like the tablets handed down to Moses from the Mount, like the red shift to the big bang-accept the postulate and the rest goes down smoothly.) "Hazel-Gwen, if we assume a self-aware computer with emotions and free will, I would not boggle at anything else-from ghosts to little green men. What was it the Red Queen did? Believe seven impossible things before breakfast."

"The White Queen."

"No, the Red Queen."

"Are you sure, Richard? It was just before-"

"Forget it. Talking chessmen are even harder to swallow than a prankster computer. Sweetheart, the only evidence you offer is a story told you by your foster mother in her old age. That's all. Uh, senile, maybe?"

"No, sir. Dying, but not senile. Cancer. From exposure to a solar storm when she was quite young. So she thought. As may be, it was not senility. She told me this when she knew she was to die... because she thought the story should not be lost completely."

"You see the weakness of the story, dear? One deathbed story. No other data."

"Not quite, Richard."

"Eh?"

"My adoptive father Manuel Davis confirms all of it and then some."

"But-You always spoke of him in the past tense. I think you did. And he would be... how old? Older than you are."

"He was born in 2040, so he would be a century and a half old now... not impossible for a Loonie. But he's both older and younger than that-for the same reasons I am. Richard, if you talked to Manuel Davis and he confirmed what I've told you, would you believe him?"

"Uh-" I grinned at her. "You might force me to bring to the issue the stalwart common sense of ignorance and prejudice."

"Go along with you! Put on your foot, dear, please. I want to take you out and get you at least one more outfit before we move; your trousers have spots on the stains. I'm not being a good wife."

"Yes, ma'am; right away, ma'am. Where is your Papa Man-nie now?"

"You won't believe this."

"If it doesn't involve right-angled time or lonely computers, I'll believe it."

"I think-I haven't checked lately-I think Papa Mannie is with your Uncle Jock in Iowa."

I stopped with my foot in my hand. "You're right; I don't believe it."

XIX

Rascality has limits; stupidity has not.-

NAPOLEON BONAPARTE 1769-1821

How can you argue with a woman who won't? I expected Gwen to start justifying her preposterous allegation, citing chapter and verse in an attempt to convince me. Instead she answered sadly, "I knew that was all I could expect. 111 just have to wait. Richard, do we have any other stops to make besides Macy's and the main post office before we can go out to the Warden's Complex?"

"I need to set up a new checking account and then transfer my present account down from Golden Rule. My cash in pocket is becoming rather seldom. Anemic."

"But dearest, I've tried to tell you. Money is no problem. She opened her purse, dug out a wad of money, started peeling off hundred-crown notes. "I'm on an expense account, of

course." She held them out. .

"Easy, there!" I said. "Save your pennies, little girl. *undertook to support you. Not the other way around."p>*

I expected a retort involving "macho" or "male chauvinist pig" or at least "community property." Instead she flanked me. "Richard? Your bank account in Golden Rule-Is it a numbered account? If not, under what name?"

"Huh? No. 'Richard Ames,' of course."

"Do you think Mr. Sethos might take an interest?"

"Oh. Our kindly landlord. Honey, I'm glad you're here to do my thinking for me." A track leading straight to me as plain as footprints in snow... for Sethos's goons to follow to collect that reward for my carcass-dead or alive. Of course all bank records are confidential, not alone numbered accounts-but "confidential" means only that it takes money or power to break the rules. And Sethos had both. "Gwen, let's go back and boobytrap his air conditioning again. But this time we'll use prussic acid instead of Limburger."

"Good!"

"I wish we could. You're right, I can't touch mat 'Richard Ames' bank account as long as storm warnings are up. We'll use your cash-treat it as a loan. You keep track of it-"

"You keep track of it! Damn it, Richard, I'm your wife!"

"Fight over it later. Leave the wig and the geisha costume here; we won't have time today ... as I must first go see Rabbi Ezra. Unless you want to run your errands while I run mine?"

"Buster, are you feverish? I'm not letting you out of my sight."

"Thanks, Maw; that's the answer I wanted. We go see Father Ezra, then we go hunt living computers. If there is time left, we'll do the other chores when we get back."

It being before noon, we looked for Rabbi Ezra ben David by going to his son's fish market across from the city library. The Rabbi lived in a room back of the shop. He agreed to represent me and act as a mail drop. I explained to him my parallel arrangements with Father Schultz, then wrote a note for him to send to "Henrietta van Loon."

Reb Ezra accepted it. "I'll stat it from my son's terminal at once; it should be printed out in Golden Rule ten minutes from now. Special delivery?"

(Draw attention to it? Or accept slower service? Something was stewing in Golden Rule; Hendrik Schultz might have some answers.) "Special delivery, please."

"Very well. Excuse me a few moments." He rolled out of his room, was back quickly. "Golden Rule acknowledged receipt. Now to other matters-I was expecting you. Dr. Ames. That young man who was with you yesterday-Is he a member of your family? Or a trusted employee?"

"Neither one." "Interesting. Did you send him to ask me who was offering a reward for you and the amount of the reward?" "I certainly did not! Did you tell him anything?" "My dear sir! You asked for the traditional Three Days."

"Thank you, sir."

"Not at all. Since he took the trouble to seek me out here instead of waiting for my business hours, I assumed some urgency. Since you did not mention him, I concluded that the urgency was his, not yours. Now I assume, unless you tell me otherwise, that he intends you no good."

I gave the Rabbi a condensed version of our relations with Bill. He nodded. "You know Mark Twain's remarks on such matters?"

"I think not."

"He said that, if you pick up a stray dog, feed it and take care of it, it will not bite you. This, in his opinion, is the principal difference between a man and a dog. I don't agree fully with Twain. But he had a point."

I asked him to name a retainer, paid it without dickering, plus something for luck.

The Authority Complex (officially the "Administration Center," a name found only in print) is west of Luna City, halfway across Mare Crisium. We were there by noon-that tubeway is not ballistic but is nevertheless fast. Once aboard, we were there in twenty minutes.

Noon was the wrong time to arrive. The Complex is made up of government offices; everything shuts down for a leisurely lunch hour. Lunch seemed a good idea to me, too; breakfast was in the remote past. There were several lunchrooms in the tunnels of the complex... with every chair filled with the broad beams of civil servants or occupied by tourists with red fezzes. Queues waited outside Sloppy Joe and Mom's Diner and Antoine's number two. "Hazel, I see vending machines ahead. Can I interest you in a warm Coke and a cold sandwich?"

"No, sir, you cannot. There's a public terminal just beyond the food dispensers. I'll make some calls while you eat."

"I'm not that hungry. What calls?"

"Xia. And Ingrid. I want to be sure Gretchen got home safely. She could have been waylaid just as we were. I should have called last night."

"Only to soothe your own worry; either Gretchen was home day before yesterday evening... or it's too late and she's dead."

"Richard!"

"That's what worries you, isn't it? Call Ingrid."

Gretchen answered and squealed when she saw Gwen-Ha-zei. "Mama! Come quick! It's Mistress Hardesty!"

Twenty minutes later we switched off. All that had been accomplished was to tell the Hendersons that we were at the Raffles and that our mailing address was care of Rabbi Ezra. But the ladies enjoyed visiting and each assured the other that she would come visit in person sometime soon. They exchanged kisses via terminal-to my mind a waste of technology. And of kisses.

Then we tried to call Xia... and a man came on screen whom I did not recognize; he was not Xia's day-shift desk clerk. "What do you want?" he demanded.

Hazel said, "I'd like to speak to Xia, please."

"Not here. This hotel has been shut down by the Bureau of Sanitation."

"Oh. Can you you me where she is?"

"Try the Chief of Public Safety." The face flickered off.

Hazel turned to me, her eyes filled with worry. "Richard, this can't be right. Xia's hotel is as squeaky clean as she is."

"I see a pattern," I said grimly, "and so do you. Let me ay."

I moved in, queried for code, called the office of the top cop, HKL. An elderly desk sergeant answered. I said, "Gospazha, I'm trying to reach a citizen named Dong Xia. I was told-"

"Yeah, I booked her," she answered. "But she made bail an hour ago. Not here."

"Ah so. Thank you, ma'am. Can you tell me where I might reach her?"

"Haven't the slightest. Sorry."

"Thank you." I switched off.

"Oh, dear!"

"Leprosy, sweetheart. We've got it; anyone who touches us catches it. Damn."

"Richard, I'm stating the simple truth. In my childhood when this was a penal colony, there was more freedom under the Warden than there is now with self-government."

"Maybe you exaggerate but I suspect Xia would agree with you." I chewed my lip and frowned. "You know who else has caught our leprosy. Choy-Mu."

"You think so?"

"Seven to two."

"No bet. Call him."

Query showed him to be a private subscriber, so I called his home. I heard a recording, sans picture: "Marcy Choy-Mu speaking. Can't say when I'll be home but I will call in soon for messages. At me gong, please record." A gong sounded.

I thought furiously, then said, "Captain Midnight speaking. We are booked into the old Raffles. A mutual friend needs help. Please call me at the Raffles. If I am not there, please leave message telling when and where I can reach you." I

switched off again.

"Dear, you didn't give him Rabbi Ezra's code." "On purpose, Sadie giri. To keep the Rabbi's code out of Jefferson Mao's hands; Choy-Mu's line may be monitored. 1 had to give him somewhere to call back... but I can't risk compromising the Rabbi Ezra connection; we must have it for Father Schultz. Table it, beautiful; I've got to query for HKL ground control."

"Hong Kong Luna ground control. This terminal is for official business; make it brief." It was voice only.

"May I speak to Captain Marcy?"

"Not here. I'm his emergency relief. Message? Make it snappy; I've got traffic in four minutes."

(Uh-) "This is Captain Midnight. Tell him I'm at the old

Raffles. Call me."

"Don't switch off! Captain Midnight?"

"He'll know." "And so do I. He went to city hall to "put up bail for you know who. Or do you?" "XiaT

"Too right! I've got to get back to my scopes but I'll tell him. Off!"

"What now, Richard?"

"Gallop in all directions."

"Do be serious!"

"Can you think of anything better? The queue is gone from Mom's Diner; let's eat lunch."

"Eat lunch while our friends are in danger?"

"Sweetheart, even if we went back to Kongville-and thereby shoved our heads in the lion's mouth-we would have no way to find them. There is nothing we can do until Choy-Mu calls us. That might be five minutes from now, or five hours. One thing I learned in combat: Never skip a chance to eat, sleep, or pee; another chance may be a long time coming.'

I recommend Mom's cherry pie with ice cream. Hazel ordered the same but, by the time I was chasing my last bite with a spoon, she had merely toyed with hers. I said, "Young lady, you sit right there until you have eaten everything on your plate."

"Richard, I can't."

"I don't like to beat you in public-"

"So don't."

"So I won't. Instead I will sit right here until you have eaten that all up, even if it means that I must sleep in this chair tonight."

Hazel expressed obscenely unfavorable opinions of me, of Jefferson Mao, and of cherry pie, then ate the cherry pie. By thirteen-twenty we were at the door of the computer area in the Complex. There a youngster at a wicket sold us two tickets for two crowns forty, told us that the next tour would start in a few minutes, and let us into an enclosure, a waiting lounge with benches and opportunities to gamble against machines. Ten or a dozen tourists were waiting; most of the males wore fezzes.

When at last we started, an hour later, there were nineteen or twenty of us, herded by a uniformed guide-or guard; he wore a cop's shield. We made a long circuit on foot of that enormous complex, a dull and endless trip. At each pause our guide gave a memorized spiel-perhaps not too well memorized, as I could spot errors, even though I am not a communications-control engineer.

But I did not jump on these slips. Instead I made a nuisance of myself in accordance with earlier coaching by my fellow conspirator.

At one stop our guide explained that engineering control was decentralized all over Luna both geographically and by functions-air, sewage, communications, fresh water, transportation, et cetera-but was monitored from here by the technicians you see at those consoles. I interrupted him.

"My good man, I think you must be new on this job. The Encyclopedia Britannica explains clearly how one giant computer handles everything on the Moon. That's what we've come to see. Not backs of necks of junior clerks sitting at monitors. So let's see it. The giant computer. The Holmes IV."

The guide let his professional smile slip and looked at me with the natural contempt of a Loonie for an earthworm. "You've been misinformed. True, it used to be that way, but you're over fifty years out of date. Today we are modernized and decentralized."

"Young man, are you trying to contradict the Britannica?"

"I'm telling you the simple truth. Now let's move on and-"

"What became of that giant computer? Since it's no longer used. Or so you say."

"Huh? Look behind you. See that door? It's behind that door."

"Come, then let's see it! That's what I paid to see." "Not on your bloody drum and fife. It's an historical antique, a symbol of our great history. You want to look at it, you go to the Chancellor of Galileo U. and show your credentials. He'll send you packing! Nan then let's all move along to the next gallery-"

Hazel did not move on with us, but (following instructions) I always had something ahead to point to and to ask a silly question about, whenever our guide seemed about to have a free moment to look around. But when, at long last, we had made the full circle and were back at the lounge. Hazel was there ahead of us.

I kept quiet until we were out of the Complex and waiting at the tube station. There I moved us out of earshot of others before I spoke. "How did it go?"

"No trouble. The lock on that door was a type I've dealt with before. Thanks for keeping them all distracted while I coped with it. Good show, love!"

"You got what you were after?"

"I think so. I'll know more after Papa Mannie looks over my photographs. It's just a big lonely room, Richard, crowded with old-fashioned electronics equipment. I shot it from about twenty angles, and stereoed each shot by hand-held offset-not perfect but I've practiced it."

"That's all? This visit?"

"Yes. Well, mostly."

Her voice was choked; I looked at her, saw that her eyes were filled with tears about to overflow. "Why, darling! What's the matter?"

"N-n- nothing."

"Tell me."

"Richard, he's in there!"

"Huh?"

"He's asleep in there. I know, I could feel him. Adam Selene."

The tube capsule slammed into the station about then, to my relief-there are subjects for which words are useless. The capsule was packed full; we could not talk en route. By the time we were back in L-City my darling had quieted down and I could avoid the subject. The crowds in the corridors made talk difficult anyhow. Luna City is crowded at any time; on Saturdays half the Loonies from other warrens come in to shop; this Saturday the usual weekend crowd was augmented by Shriners and their wives from all over North America and elsewhere.

As we came down out of Tube Station West into pressure two at outer ring, we faced Sears Montgomery. I was about to swing left to the Causeway when Hazel stopped me. "Uh? What, dear?"

"Your trousers."

"Is my fly open? No, it's not."

"We're going to cremate your trousers; it's too late for burial. And that shirtjacket."

"I thought you were itchy to get to the Raffles?"

"I am but it will take me only five minutes to put you into a new siren suit."

(Reasonable. My trousers were so dirty that I was beginning to risk being cited as a menace to public health. And Hazel did know what I preferred for everyday clothing, as I had explained to her that I would not wear shorts even if every other adult male in Luna City was in shorts-as most of them were. I'm not morbidly selfconscious about my missing foot ... but I do want full-length trousers to conceal my prosthesis. It's my private problem; I do not choose to exhibit it.)

"All right." I agreed. "But let's buy the one nearest the door."

Hazel did get us in and out in ten minutes, buying me three two-piece rumpus suits all alike save for color. The price was right, as first she dickered it down to an acceptable amount, then rolled double or nothing, and won. She thanked the clerk and tipped him the price of a drink, then exited looking cheerful.

She said to me, "You look smart, dear."

I thought so, too. Those three suits were lime green, powder pink, and lavender. I had chosen to wear the lavender; I think it suits my complexion. I went strutting along, swinging my cane, with my best girl on my arm, feeling great.

But when we turned onto the Causeway there was no room to swing a cane and barely room to walk. We backed out, dropped straight down to Bottom Alley, then across town and up Five Aces chain lift to pressure six-much farther but today much faster.

Even the side tunnel to the Raffles was crowded. A cluster of fez-topped men were just outside our hotel. I glanced at one of them, then took a better look. I let him have it with my cane, reverse moulinet up into his crotch. At the same time or a split second ahead of me. Hazel threw her package (my suits) into the face of the man next to him and slugged one beyond him with her handbag. He went down as my man screamed and joined him. As my cane swung back, I took it with both hands horizontally, and used the sideways short jabs intended for moving through a rioting crowd-but used the jabs more personally, getting one man in the belly, another in a kidney, and kicking each to quiet him as he went down.

Hazel had taken care of the man she had slowed up with the package, I did not see how. But he was down and not moving. A (sixth?) man was about to cool her with a cosh, so I stabbed him in the face with my cane. He grabbed at it; I moved forward with it to keep him from exposing the stiletto, while giving him three fingers to his solar plexus, lefthanded. I fell on top of him.

And was picked up and carried into the Raffles at a trot, with my head down and dragging my cane after me.

The next few seconds I had to sort out later, perhaps imperfectly. I did not see Gretchen standing at the registration desk, but she was there, having just arrived. I heard Hazel snap, "Gretchen! Room L, straight back on the right!" as she dumped me on Gretchen. On Luna I weigh thirteen kilos, give or take a few grams-not much load for a country girl used to hard work. But I'm much bigger than Gretchen and twice as big as Hazel-a big unwieldy bundle. I squawked to be put down; Gretchen paid no attention. That silly desk clerk was yelping but no one was paying attention to him, either.

Our door opened as Gretchen reached it and I heard another familiar voice sing out, "Bojemoi! He's hurt." Then I was face up on my own bed and Xia was working on me.

"I'm not hurt," I told her. "Just shaken up."

"Yeah, sure. Hold still while I get your trousers off. Does one of you gentlemen have a knife?"

I was about to tell her not to cut my new trousers, when I heard a shot. It was my bride, crouching inside the open doorway and peering cautiously out to the left, her head close to the floor. She fired again, scooted back inside, closed and locked the door.

She glanced around and snapped, "Move Richard into the 'fresher. Pile the bed and everything else against the outer door;

they'll be shooting or breaking it down or both." She sat down on the floor with her back toward me and paid no attention to anyone. But everyone jumped to carry out her orders.

"Everyone" included Gretchen, Xia, Choy-Mu, Father Schultz, and Reb Ezra. I did not have time to be astonished, especially as Xia with Gretchen's help moved me into the refresher, put me on the floor, and resumed taking my pants off. What did astonish me was to find that my good leg, the one with a meat-and-bone foot on it, was bleeding heavily. I noticed it first from seeing that Gretchen had big blood stains on the left shoulder of her white coverall. Then I saw where the blood was coming from, whereupon that leg started to hurt.

I don't like blood, especially mine. So I turned my face away and looked out the 'fresher door. Hazel was still sitting on the floor and had taken something out of her handbag that seemed to be bigger than the handbag. She was talking into it:

'Tee Aitch Queue! Major Lipschitz calling Tee Aitch Queue! Answer roe. God damn it! Wake up! Mayday, may day! Hey, Rube!"

XX

"If anyone doubts my veracity, I can only say that I pity his lack of faith."

BARON MUNCHAUSEN 1737-1794

Xia added, "Gretchen, hand me a clean towel. We'll make do just with a pressure pack until later."

"Ouch!"

"Sorry, Richard."

"Mayday, Mayday! Hail, Mary, I'm up the crick without a paddle! Answer me!"

"We read you. Major Lipschitz. Report local fix, planet, system, and universe." It was a machine voice with a typical uninflected brassiness that sets my teeth on edge.

"Now let's tape it tightly."

"Hell with procedures! I need T-shift pickup and I need it now! Check my assignment and slam it! Switch point: 'One small step' by Armstrong. Local fix: Hotel Raffles, room L. Time tick, now!"

I went on looking out the 'fresher door to avoid watching the unpleasant things Xia and Gretchen were doing to me. I could hear shouts and people running; something crashed against the corridor door. Then in the rock wall on my right a new door dilated.

I say "door" for lack of a precise word. What I saw was a circular locus of silver gray, floor to ceiling, and more. Inside this locus was an ordinary door for a vehicle. What sort of vehicle I could not tell; its door was all I could see.

It swung open; someone inside called out, "Grandma!" as the corridor door crashed in and a man fell into the room. Hazel shot him. A second man was right behind him; she shot him, too.

I reached for my cane-beyond Xia, damn it! "Hand me my cane! Hurry!"

"Now, now! You lie back down."

"Give it to me!" Hazel had one round left, or maybe none. Either way, it was time I backed her up.

I heard more shots. With bitter certainty that nothing was left but to avenge her, I made a long arm, got my stick, and turned.

No more fighting-Those last shots had been fired by Rabbi Ezra. (Why was I surprised that a wheelchair cripple chose to go armed?) Hazel was shouting, "Everybody get aboard! Move it!"

And we did. I was confused again, as an endless crowd of young people, male and female and all of them redheaded, poured out of that vehicle and carried out Hazel's orders. Two of them carried Reb Ezra inside while a third folded his wheelchair flat and handed it in to a fourth. Choy-Mu and Gretchen were hustled in, followed by Father

Schultz. Xia was shoved after them when she tried to insist on handling me. Then two redheads, a man and a woman, carried me in; my bloodstained pants were chucked after me. I clung to my cane.

I saw only a little of the vehicle. Its door opened into a four-place pilot-and-passenger compartment of what might be a spaceplane. Or might not be; the controls were strange and I was in no position to judge how it worked. I was lugged between seats and shoved through a door behind them into a cargo space and wound up on top of the Rabbi's folded wheelchair.

Was I going to be treated as cargo? No, I lay there only briefly, then was turned ninety degrees and passed through a larger door, turned another ninety degrees and placed on a floor.

And glad to stay there!

For the first time in years I was experiencing earth-normal weight.

Correction: I had felt a few moments of it yesterday in the ballistic tube, a few more in that U-Pushit clunker. Budget Jets Seventeen, and about an hour of it in Old MacDonald's Farm four days earlier. But this time sudden heaviness caught me by surprise and did not go away. I had lost blood and found it hard to breathe and was dizzy again.

I was feeling sorry for myself when I saw Gretchen's face;

she looked both scared and wretchedly ill. Xia was saying, "Get your head down, dear. Lie down by Richard; that's best. Richard, can you scrunch over a little? I would like to lie down, too; I don't feel well."

So I found myself with a cuddlesome wench on each side of me and I didn't feel a dum bit like cuddling. I'm supposed to be trained to fight in accelerations up to two full gravities, twelve times that of Luna. But that was years ago and I'd had over five years of soft, sedentary living at low gravity.

It seems certain that Xia and Gretchen were just as uninterested in bundling.

My beloved arrived carrying our miniature maple. She placed it on a stand, blew me a kiss, and started sprinkling it. "Xia, let me draw a lukewarm tub for you two born Loonies; you both can get into it."

Hazel's words caused me to look around. We were in a "bathroom." Not a refresher appropriate to a four-seater spaceplane, nothing at all like ours in the Raffles; this room was an antique. Have you ever seen wallpaper decorated with fairies and gnomes? Indeed, have you ever seen wallpaper? How about a giant iron tub on claw feet? Or a water closet with a wooden lid and an overhead tank? The whole room was straight out of a museum of cultural anthropology ... yet everything was bright and new and shiny.

I wondered just how much blood I had lost.

"Thanks, Gwen, but I don't think I need it. Gretchen, do you want to float in water?"

"I don't want to move!"

"It won't be long," Hazel assured them. "Gay shifted twice to avoid shrapnel, or we would be down now. Richard, how are you feeling?"

"I'll make it." "0f course you will, darling. I feel the weight myself from a year in Golden Rule. But not much as I exercised at one gee every day. Dear one, how badly are you wounded?" "I don't know."

"Xia?" "Lots of bleeding and some muscle damage. Twenty or twenty-five centimeters and fairly deep. I don't think bone was hit. We put a tight pressure pack on it. If this ship is equipped for it, I want to do a better job and give him a broad-spectrum shot, too."

"You've done a fine job. We'll be landing soon and then there will be professional help and equipment." "All right. I don't feel too lively, I admit." "So try to rest." Hazel picked up my blood-soiled trousers.

"I'm going to soak these before the stain sets."

"Use cold water!" Gretchen blurted, then turned pink and added shyly, "So Mama says."

"Ingrid is right, dear." Hazel ran water into the hand basin. "Richard, I'm forced to admit that I lost your new clothes during that fuss."

"Clothes we can buy. I thought I was going to lose you."

"Good Richard. Here's your wallet and some this and that. Pocket plunder."

"Better let me have it." I crowded it all into a breast pocket.

"Where's Choy-Mu? I did see him-or did I?"

"He's in the other 'fresher, with Father Schultz and Father Ezra."

"Uh? Are you telling me that a four-seater has two refreshers? It is a four-place job, isn't it?"

"It is and it does and wait till you see the rose gardens. And the swimming lounge."

I started to make a retort but chopped it off. I had not figured out any formula by which to tell when my bride was jesting, or was telling literal but unbelievable truth. I was saved from a silly discussion by one of the redheads coming in-female, young, muscled, freckled, catlike, wholesome, sultry. "Aunt Hazel, we're grounded."

'Thank you. Lor."

"I'm Laz. Cas wants to know who stays here, who comes along, and how long till lift? Gay wants to know whether or not we'll be bombed and can she park one shift over? Bombing makes her nervous."

"Something is wrong here. Gay should not be asking directly. Should she?"

"I don't think she trusts Cas's judgment."

"She may have reason. Who's commanding?"

"I am."

"Oh. I'll let you know who goes, who stays, after I talk to my papa and Uncle Jock. A few minutes, I think. You can let Gay park in a dead zone if you wish but please have her stay on my frequency triple; we may be in a hurry. Right now I want to move my husband... but first I must ask another of our passengers to lend me his wheelchair."

Hazel turned to leave. I called out, "I don't need a wheelchair," but she didn't hear me. Apparently.

Two of the redheads lifted me out of the craft and placed me in Ezra's wheelchair, with its back support lowered and front support lifted; one of them spread a kingsize bath towel over my lap and legs. I said, "Thanks, Laz." .

"I'm Lor. Don't be surprised if this towel vanishes; we've never tried taking one outside before."

She got back aboard and Hazel wheeled me under the nose of the craft and around to its port side... which suited me, as I had seen at once that this was indeed a sort of spaceplane, with lifting body and retractable wings-and I was curious to see how the designer had managed to crowd two large refreshers into its port side. It did not seem aerodynamically possible.

And it wasn't. Portside was like the starboard side, sleek and slender. No cubic for bathrooms.

I had no time to ponder this. When we had turned into the Raffles' side tunnel a few minutes earlier, my Sonychron had just blinked seventeen, Greenwich or L-City time... which would make it eleven in the morning in zone six, dirtside.

And so it was because that's where we were, zone six, in the north pasture of my Uncle Jock's place outside Grinnell, Iowa. So it becomes obvious that I not only had lost much blood but also had been hit hard on the head-as even the hottest military courier needs at least two hours, Luna to Terra.

In front of us was Uncle Jock's fine old restored Victorian, cupola and verandas and widow's walk, and he himself was coming toward us, accompanied by two other men. Uncle was as spry as ever, and still with a mop of silver-white hair that made him look like Andrew Jackson. The other two I did not recognize. They were mature men but much younger than Uncle Jock-well, almost everybody is.

Hazel stopped pushing me, ran and threw her arms around one of them, kissed him, all out. My uncle picked her out of that man's arms, bussed her just as enthusiastically, then surrendered her to the third, who saluted her the same way and put her back on her feet.

Before I could feel left out, she turned and took the first one by his left hand. "Papa, I want you to meet my husband, Richard Colin. Richard, this is my Papa Mannie, Manuel Gar-cia O'Kelly Davis."

"Welcome to family. Colonel." He offered me his right hand.

"Thank you, sir."

Hazel turned to the third man. "And Richard, this-"

"-is Dr. Hubert," Uncle Jock interrupted. "LAfe, slap skin with my nephew Colonel Colin Campbell. Welcome home, Dickie. What are you doing in that baby carriage?" • "Just lazy, I guess. Where's Aunt Cissy?"

"Locked up, of course; knew you were coming. But what have you been doing? Looks like you failed to duck. Sadie, you have to expect that from Dickie; he's always been slow. Hard to toilet train and never did leam pattycake."

I was selecting a sufficiently insulting answer to this canard (I learned long ago the way to treat our family scandal) when the ground shook, followed immediately by Krrrumpf Not nuclear, just high explosive. But disquieting just the same; HE is not a toy and is not a better way to become dead-there isn't one. Uncle said, "Don't pee your pants, Dickie; they're not shooting at us. Lafe, will you examine him here? Or inside?"

Dr. Hubert said, "Let me see your pupils. Colonel."

So I looked at him as he looked at me. When Hazel stopped pushing the wheelchair, the spaceplane was then on my left; but when that HE detonation took place, the spaceplane was abruptly elsewhere. Gone. "-not a rack behind." Least hypothesis suggests that I was out of my gourd.

Nobody else seemed to notice it.

So I pretended not to and looked at my physician... and wondered where I had seen him lately.

"No concussion, I think. What's the natural log of pi?"

"If I had all my marbles, would I be here? Look, Doc, no guessing games, please; I'm tired." Another HE shell (or bomb) landed nearby, closer if anything. Dr. Hubert moved the towel off my left leg, poked at the pack Xia had placed.

"Does that hurt?"

"Hell, yes!"

"Good. Hazel, you had best take him home. I can't take proper care of him here as we are about to shift to New Harbor in Beulahland; the Angelenos have taken Des Moines and are moving this way. He's in good shape for a man who's taken a hit... but he should have proper treatment without delay."

I said, "Doctor, are you any relation to the redheaded girls in that spaceplane we arrived in?"

"They're not girls; they are superannuated juvenile delinquents. Whatever they told you I deny categorically. Give them my love."

Hazel blurted, "But I have to make my report!"

Everybody talked at once until Dr. Hubert said, "Quiet! Hazel goes with her husband and sees him settled in, stays as long as she finds necessary, then reports to New Harbor... but with time tick established now. Objection? So ordered."

Having that spaceplane reappear was even more disconcerting and I'm glad I didn't watch. Or not much. The two redheaded men (turned out there were only four redheads, not a mob) got me and the wheelchair inside and Hazel went into that odd refresher with me... and almost at once Laz (Lor?) followed us in and announced, "Aunt Hazel, we're home."

"Home" turned out to be the flat roof of a large building-and it was late evening, almost sundown. That spaceplane should be named the Cheshire Cat. (But its name is Gay. Her name is Gay. Oh, never mind!)

The building was a hospital. In checking into a hospital you first wait an hour and forty minutes while they process the paperwork. Then they undress you and put you on a gumey under a thin blanket with your bare feet sticking out into a cold draft and make you wait outside the X-ray lab. Then they demand a urine sample in a plastic duck while a young lady waits for it, staring at the ceiling and looking bored. Right?

These people didn't know page one about the regulation way to run a hospital. Our able-bodied comrades (the ones suffering from nothing but high acceleration) were already on their way, in glorified golf carts, when I was again lifted out and placed in another golf cart (gurney, wheelchair, floating couch). Rabbi Ezra was there in his wheelchair. Hazel was with us and carrying Tree-San and a Sears-labeled package containing Naomi's costume. The spaceplane had vanished; I had barely had time to tell Laz (Lor?) that Dr. Hubert sent his love. She had sniffed. "If he thinks sweet talk will get him out of the doghouse, he had better think again." But her nipples crinkled up, so I assume that she was pleased.

Four of us were left on the roof, we three and one member of the hospital staff, a little dark woman who seemed to combine the best of Mother Eve and Mother Mary without flaunting any of it. Hazel dropped the package on me, handed the bonsai to Reb Ezra, and threw her arms around her. Tammy!"

"Arii sool, m'temqa!" The motherly creature kissed Hazel.

"Reksi, reksi-so very long!"

They broke from the clinch and Hazel said, "Tammy, this is my beloved, Richard."

This got me kissed on the mouth. Tammy put that bundle aside to do it properly. A man kissed by Tammy stays kissed for hours-even if he is wounded, even if she makes it brief.

"And this is our dear friend the Reverend Rabbi Ezra ben David."

He did not get the treatment I got. Tammy curtsied deeply, then kissed his hand. So I showed a clear profit.

Tammy (Tamara) said, "Inside I must get you both that quickly may we repair Richard. But both each my cherished guests will here be through time not short. Hazel? Such room as you with Jubal shared, nay?"

'Tammy, that's a fine idea! 'Cause I'm going to have to be away sometimes. Gentlemen, will you room together while you are patients here?"

I was about to say, "Yeah, sure, but-" when Reb Ezra said, "There's some mixup. Mistress Gwendolyn, please explain to this dear lady that I am not a patient, not a candidate for hospitalization. Perfect health. Not a sniffle, not even a hangnail."

Tamara looked surprised and-no, not troubled but deeply concerned. She stepped close to him, gently touched his left stump. "Are not we your legs to back on put?"

Reb Ezra stopped smiling. "I'm sure you mean well. But I can't wear prosthetics. Truly."

Tamara broke into that other language, speaking to Hazel. She listened, then said, "Father Ezra, Tamara is speaking of real legs. Flesh and blood. They can do it. Three ways they can do it."

Reb Ezra took a deep breath, sighed it out, looked at Tamara. "Daughter, if you can put my legs back on... go ahead! Please," then added something, Hebrew I think.

BOOK THREE-The Light at the End of the Tunnel

XXI

"God created woman to tame man,"
VOLTAIRE 1694-1778

I woke up slowly, letting my soul fit itself gently back into my body. I kept my eyes closed while I spliced onto my memory and reviewed who I was and where I was and what had happened.

Oh, yes, I had married Gwen Novak! Most unexpectedly but what a delightful idea! And then we-Hey! that wasn't yesterday. Yesterday you—

Boy, yesterday you had a busy day! Started in Luna City, bounced to Grinnell-How? Never mind "How" for the nonce. Accept it. Then you bounced to-What had Gwen called it? Hey, wait!-Gwen's real name is Hazel. Or is it? Worry about that later. Hazel called it "Third Earth," Tellus Tertius. Tammy called it something else. Tammy? Oh, sure, "Tamara." Everybody knows Tamara.

Tammy would not let them work on my wounded leg while I was awake-How in hell did I pick up that wound? Am I getting clumsy in my old age? Or was it spotting Bill's face among those fake Shriners? It's not professional to let any surprise slow you down. If your own grandmother shows up in the scrum, shoot her and move on.

How did you know they were not Shriners? That's easy;

Shriners are middle-aged and paunchy; these studs were young and tough. Combat ready.

Yes, but that's a rationalization, one you just now thought of. So? Nevertheless it's true. But you didn't reason it out yesterday. Hell, no, of course not; at the moment of truth you don't have time to think. You look at a bloke, something about him shouts "Enemy!" and you jump to do unto him before he does unto you. If you use scrum time routing impressions around inside your skull, sorting by type and weighing by logic-you're dead! Instead, you move.

Yesterday you didn't move fast enough.

But we picked the right partner for a fight, didn't we?-a quick little coral snake named Hazel. And any scrum we come out of still with a body temperature of thirty-seven can't be counted an utter defeat.

Quit trying to kid yourself. You got how many? Two? And she got the rest. And she had to make pick up on you... or you would be stone cold dead this minute.

Maybe I am. Let's check. I opened my eyes.

This room certainly looks like Heaven! But that proves you are not dead, because Heaven is not your destination. Besides, everybody says that when you die, first you go through a long tunnel with a light at the far end, and there your beloved waits for you ... and that did not happen to you. No tunnel. No light at the end of the tunnel. And sadly no Hazel.

So I am not dead and this can't be Heaven and I don't think it's a hospital either. No hospital was ever this beautiful or smelled so good. And where is the regulation racket found in all hospital corridors? All I hear are bird songs and a string trio off somewhere in the distance.

Hey, there's Tree-San!

So Hazel must be close around. Where are you, honey girl?

I need help. Find my foot and hand it to me, will you, please? I can't risk hopping in this gravity; I'm out of practice, and ... well, damn it, I need to pee. Something abooraxly!-my back teeth are floating.

"I see that you are now awake." It was a gentle voice, back of my right ear. I twisted my head to look just as she came around to where I could see her more easily-a young woman, comely, slender, small of bust, long brown hair. She smiled as I caught her eye. "I'm Minerva. What will you have for breakfast? Hazel told me that waffles would please you. But you can have anything you like."

"'Anything'?" I considered it. "How about a brontosaurus roasted over a slow fire?"

"Yes, surely. But that will take longer to prepare than waffles," she answered with perfect seriousness. "Some tidbits while you wait?"

"Go along with you; quit pulling my leg. Speaking of legs, have you seen my artificial foot? Before I eat breakfast I must visit the refresher... and I must have my cork foot to do that. This gravity, you know."

Minerva told me bluntly what to do about it. "This bed has a builtin refresher and you can't use the usual refresher anyhow; you are under spinal block from the waist down. But our arrangements are efficient, truly. So go ahead. Whatever you need to do."

"Uh... I can't." (Truly I could not. When they cut off my foot, the hospital corpsmen had a hell of a time with me. Finally they equipped me with catheter and honey tube until I was able to get as far as the jakes on crutches.)

"You will find that you can. And that it will be all right."

"Uh-" (I couldn't stir either leg, neither the short one nor the long one.) "Mistress Minerva, may I have an ordinary hospital-type bed urinal?"

She looked troubled. "If you wish. But it will not be useful." Then her troubled look changed to a thoughtful one. "I will go find one. But it will take me some time. At least ten minutes. Not a moment less. And I am going to seal your door while I am gone so that no one will disturb you." She added, 'Ten minutes," and headed for a blank wall. It snapped out of her way and she was gone.

I immediately flipped off the sheet to see what they had done to my one good leg. The sheet would not flip. So I snuck up on it. It was too smart for me. So I tried to outwit it-after all, a sheet can't be smarter than a man. Can it be?

Yes, it can.

Finally I said to myself. Look, chum, we are getting nowhere. Let's try assuming that Mistress Minerva was being precisely truthful: This is a bed with builtin plumbing, capable of handling the worst a bedfast patient can do. So saying, I worked a couple of ballistic problems in my head-hairy empiricals guaranteed to distract even a man waiting at the guillotine.

And cut loose with half a liter, sighed, then let go with the other half. No, the bed did not seem to be wet. And a feminine voice cooed, "Good baby!"

I looked hastily around. No vocal cords to go with the voice- "Who said that and where are you?"

"I'm Teena, Minerva's sister. I'm no farther away than your elbow... yet I'm half a kilometer away and two hundred meters down. Need anything, just ask me. We stock it or make it or fake it. Miracles we do at once; anything else even sooner. Exception: Virgins are a special order... average lead time, fourteen years. Factory rebuilt virgins, fourteen minutes."

"Who in hell wants a virgin? Mistress Teena, do you think

it is polite to watch roe take a pee?"

"Youngster, don't try to tell your grandmother how to steal sheep. One of my duties is to watch everything in all departments of this fun house and catch mistakes before they happen. Two: *am a virgin and can prove it... and I am going to make you sorry you were bom male for uttering that disparagingp >*

crack about virgins."

(Oh, hell!) "Mistress Teena, I did not mean to offend you. I was simply embarrassed, that was all. So I spoke hastily. But I do think micturition and such should be granted privacy."

"Not in a hospital, bud. They are significant aspects of the clinical picture, every time."

"Uh-"

"Here comes my sister. If you don't believe me, you can ask her."

A couple of seconds later the wall opened and Mistress Minerva came in, carrying a hospital-bed urinal of the old-fashioned sort-no automatic machinery, no electronic controls. I said, "Thank you. But I no longer need it. As I'm sure your sister told you."

"Yes, she did. But surely she didn't tell you that she had?"

"No, I deduced it. Is it true that she sits somewhere in the basement and snoops on every patient? Doesn't she find it boring?"

"She doesn't really pay any attention until it's needed. She has thousands of other things to do, all more interesting-"

"Far more interesting!" that faceless voice interrupted. "Minnie, he doesn't like virgins. I let him know that I am one. Confirm it, Sis; I want to rub his nose in it."

'Teena, don't tease him."

"Why not? It's fun to tease men; they wiggle so when you poke them. Though I can't see what Hazel sees in this one. He's a sad sack."

'Teena! Colonel, did Athene tell you that she is a computer?"

"Eh? Say that again."

"Athene is a computer. She is the supervising computer of this planet; other computers here are just machines, not sentient. Athene runs everything. Just as Mycroft Holmes once ran everything on Luna-I know that Hazel told you about him." Minerva smiled gently. "So that's how Teena can claim to be a virgin. Technically she is one, in the sense that a computer can have no experience in carnal copulation-"

"But I know all about it!"

"Yes, Sis. -with a male human. On the other hand, when she transfers to a meat-and-bone body and becomes human, in another technical sense she will no longer be virgin because her hymen will have been atrophied in vitro and any vestigial tissue trimmed away before her animal body is kindled. That's how it was done with me."

"And you were out of your mind, Minnie, to let Ishtar sell you that; I'm not going to do it that way. I've decided to have the works. A real maidenhead and both ritual and physical defloration. Even a bridal costume and a wedding if we can swing it. Do you think we can sell that to Lazarus?"

"I doubt it intensely. And you would be making a silly mistake. Unnecessary pain on first copulation could start you out with bad habits in what should always be an utterly happy experience. Sister, sex is the most important reason to become human. Don't spoil it."

'Tammy says it doesn't hurt all that much."

"Why let it hurt at all? Anyhow, you won't get Lazarus to agree to a formal wedding. He promised you a place in our family; he did not promise you anything else."

"Maybe we should volunteer Colonel Zero here. He's going to owe me plenty of favors by then and Maureen says nobody ever notices the bridegroom anyhow. How about it, soldier boy? Think of the honor of being my bridegroom at a swank June wedding. Careful how you answer."

My ears were ringing and I felt a headache coming on. If I just closed my eyes, would I find myself back in my bachelor digs in Golden Rule?

I tried it, then opened them. "Answer me," the disembodied voice persisted.

"Minerva, who repotted my little maple?"

"I did. Tammy pointed out that it didn't have room to breathe, much less grow, and asked me to find a bigger pot. I-"

"I found it." 'Teena found it and I repotted it. See how much happier it is? It's grown more than ten centimeters."

I looked at the little tree. And looked again. "How many days have I been in this hospital?"

Minerva suddenly had no expression at all. The Teena voice said, "You didn't say how big a brontosaurus you wanted for breakfast. Better make it a little one, huh? The older ones are terribly tough. So everybody says."

Ten centimeters-Hazel had said she would see me "in the morning." Which morning, dear one? Two weeks ago? Or longer? "The older ones aren't tough if they are hung properly. But I don't want to wait while the meat ages. Would there be any such delay with waffles?"

"Oh, no," agreed Teena's voice. "Waffles aren't common here but Maureen knows all about them. She was brought up, she says, only a few kilometers from where you were reared, and at almost the same time, give or take a century or so. So she knows the sort of cooking you are used to. She explained to me all about waffle irons and I experimented until I made one just the way she wanted it. How many waffles can you eat, fatty?"

"Five hundred and seven."

There was a short silence, then Teena said, "Minerva?"

"I don't know."

"But," I went on, "I'm on a diet, so let it go with three."

"I'm not sure I want you as my bridegroom."

"In any case you haven't consulted Hazel. My bride."

"No obstacle; Hazel and I are pals. Years and years. She'll make you do it. If I decide to use you. I'm not certain about you, Dickie boy; you veer."

"'Dickie boy,' huh? Do you know my Uncle Jock? Jock Campbell?"

"The Silver Fox. Do I know Uncle Jock! We won't invite him, Dickie; he would claim jus primae noctis."

"Have to invite him. Mistress Teena; he's my closest relative. All right, I'll stand up as bridegroom and Uncle Jock will take care of deflowering the bride. Wrap it up."

"Minerva?"

"Colonel Richard, I do not think that Athene should do this. I have known Dr. Jock Campbell for many years, and he has known me. If Athene insists on this silly thing, I do not think she should give herself first to Dr. Campbell. A year or two later, when she knows-" Minerva shrugged. "They are free persons."

Teena can work it out with Hazel and Jock; it wasn't my idea. When does this crime take place?"

"Almost at once; Athene's clone is almost matured. About three of your years."

"Oh. I thought we were talking about next week. I'll stop worrying; the horse might learn to sing."

"What horse?"

"A nightmare. Now about those waffles. Mistress Minerva, will you join me in waffles? I can't stand to have you standing there salivating and swallowing and starving while I wallow in waffles."

"I have already broken fast today-"

"Too bad."

"-but that was some hours ago and I would like to experience waffles; both Hazel and Maureen speak well of them. Thank you; I accept."

"You didn't invite me!"

"But, Teena my prospective child bride, if you do as you threaten to, my table will be yours; to invite you to share it would be a tautologically redundant plethora of excess surplusage, repetitious and almost insulting. Did Maureen say how waffles should be served? With drawn butter and maple syrup and plenty of crisp bacon... accompanied by fruit juice and coffee. The juice should be ice-cold; the rest should be hot."

"Three minutes, lover boy."

I was about to answer when that insubstantial wall again opened and Rabbi Ezra walked in. Walked in. He was using

crutch canes but he was on two legs.

He grinned at me and waved a crutch cane. "Dr. Ames!

Good to see you awake!"

"Good to see you, Reb Ezra. Mistress Teena, please make

that order three of everything."

"I already did. And lox and bagels and strawberry jam."

It was a jolly meal despite all the questions on my mind. The food was grand and I was hungry; Minerva and Ezra-and Teena-were good company. I was chasing syrup with the last bite of my first waffle before I said, "Reb Ezra, have you seen Hazel this morning? My wife. I had expected her to be

here."

He seemed to hesitate; Teena answered, "She'll be here later,

Dickie. She can't hang around waiting for you to wake up; she has other things to do. And other men."

"Teena, quit trying to get my goat. Or I won't marry you

even if Hazel and Jock both agree."

"Want to bet? You jilt me, you cad, and I'll run you right off this planet. You won't get another bite to eat, doors won't open for you, refreshers will scald you, dogs will bite you. And you will itch."

"Sister."

"Aw, Minnie."

Minerva went on, to me: "Don't let my sister fret you, Colonel. She teases because she wants company and attention. But she is an ethical computer, utterly reliable."

"I'm sure she is, Minerva. But she can't expect to tease me and threaten me, and still expect me to stand up in front of a judge or a priest or somebody and promise to love, honor, and obey her. I'm not sure I want to obey her anyhow."

The computer voice answered, "You won't have to promise to obey, Dickie boy; I'll train you later. Just simple things. Heel. Fetch. Sit up. Lie down. Roll over. Play dead. I don't expect anything complex out of a man. Aside from stud duties, that is. But on that score your reputation has preceded you."

"What do you mean by that?" I threw my serviette down. "That tears it! The wedding is off."

"Friend Richard."

"Eh? Yes, Reb."

"Don't let Teena worry you. She has propositioned me, and you, and Father Hendrik, and Choy-Mu, and, no doubt, many others. Her ambition is to make Cleopatra look like a piker."

"And Ninon de Lenclos, and Rangy Lil, and Marie Antoinette, and Rahab, and Battleship Kate, and Messalina, and you name her. I'm going to be the champion nymphomaniac of the multiverse, beautiful as sin, and utterly irresistible. Men will fight duels over me and kill themselves on my doorstep and write odes to my little finger. Women will swoon at my voice. Every man, woman, and child will worship me from afar and I'll love as many of them up close as I can fit into my schedule. So you don't want to be my bridegroom, eh? What a filthy, wicked, evil, stinking, utterly selfish thing to say! Angry mobs will tear you to bits and drink your blood."

ˆMistress Teena, that is not polite table talk. We are eating."

"You started it."

I tried to review the bidding. Had I started it? No, indeed, she—

Reb Ezra said to me in a prison whisper, "Give up. You can't win. I know."

"Mistress Teena, I'm sorry I started it. I should not have done so. It was naughty of me."

"Oh, that's all right." The computer sounded warmly pleased. "And you don't have to call me 'Mistress Teena'; hardly anyone uses titles around here. If you called Minerva 'Dr. Long,' she would look around to see who was standing behind her."

"All right, Teena, and please call me 'Richard.' Mistress Minerva, you have a doctor's degree? Medical doctor?"

"One of my degrees is in therapy, yes. But my sister is right; titles are not often used here. 'Mistress' one never hears... other than as a term of affection to a woman you have gifted with your carnal love. So there is no need to call me 'Mistress Minerva'... until you choose to gift me with that boon. When you do. If you do." Right across the plate! I almost failed to lay a bat on it. Minerva seemed so modest, meek, and mild that she took me by surprise.

Teena gave me time in which to regroup. "Minnie, don't try to hustle him right out from under me. He's mine."

"Better ask Hazel. Better yet, ask him."

"Dickie boy! Tell her!" "What can I tell her, Teena? You haven't settled it with

Hazel and my Uncle Jock. But in the meantime-" I contrived to bow to Minerva as well as one can from bed and handicapped by a spinal block. "Dear lady, your words do me great honor. But, as you know, I am at present physically immobilized, unable to share in such delights. In the meantime may we take the wish for the deed?"

"Don't you dare call her 'Mistress'!"

"Sister, behave yourself. Sir, you may indeed call me 'Mistress.' Or, as you say, we can treat the wish for the deed and wait until a later time. Your therapy will take time."

"Ah, yes. So it will." I glanced at the little maple, no longer quite so little. "How long have I been here? I must already have run up quite a bill."

"Don't worry about it," Minerva advised me. "I must worry about it. Bills must be paid. And I don't even have Medicare." I looked at the Rabbi. "Rabbi, how did you finance your-transplants, are they?- You're as far from home and your bank account as I am."

"Farther than you think. And it is no longer appropriate to address me as Rabbi-where we are today, the Torah is not known. I am now Private Ezra Davidson, Time Corps Irregulars. That pays my bills. I think something like it pays yours. Teena, can you-I mean, 'will you'-tell Dr. Ames the account to which his bills are charged?"

"He has to ask it himself."

"I do ask, Teena. Please tell me."

"'Campbell, Colin,' also known as 'Ames, Richard': charges, all departments, to Senior's special account, 'Galactic Overlord-Miscellaneous.' So don't fret, lover boy; you're a charity case, all bills on the house. Of course the ones on that account usually don't live long."

"Athene!"

"But, Minnie, that's the simple truth. An average of one point seven three missions, then we pay their death benefits. Unless he's ordered to some featherbed job at THQ."

(I was not listening carefully. "Galactic Overlord" indeed! Only one person could have set up that account. The playful little darling. Damn it, dear-where are you?)

That none-too-solid wall blinked away again. "Am I too late for breakfast? Oh, pshaw! Hello, darling!"

It was she!

XXII

"When in doubt, tell the truth."

MARK TWAIN 1835-1910

"Richard, I did see you the next morning. But you didn't see me."

"She certainly did see you, Dickie boy," Teena confirmed. "At great risk to her own health. Be glad you're alive. You almost weren't."

"That's true," agreed Ezra. "I was your roommate part of one night. Then they moved me and put you in tight quarantine, and inoculated me nine or ninety ways. My brother, you were sick unto death."

"Breakbone cramp, green-pus shakes, strangle fever-' Hazel was ticking them off on her fingers. "Blue death. Typhus. Minerva, what else?"

"Golden staphylococcus systemic infection, hepatic herpes Landrii. Worst of all, a loss of will to live. But Ishtar will not permit a person to die who has not asked for death while possessed of judicial capacity, and neither will Galahad. Tamara stayed with you every minute until that crisis was over."

"Why don't I remember any of this?"

"Be glad you don't," Teena advised.

"Sweetheart, if you had not been in the best hospital in all the known universes, with the most skilled therapists, I would be a widow again. And I look terrible in black."

Ezra added, "If you didn't have the constitution of an ox, you would never have made it."

Teena interrupted with: "Of a bull, Ezra. Not an ox. I know, I've seen 'em. Impressive."

I didn't know whether to thank Teena or to call off the wedding again. So I ignored it. "What I don't understand is how I got all those diseases. I took a hit, I know that. That could account for staph aureus. But those other things?"

Ezra said, "Colonel, you are a professional soldier."

"Yes." I sighed. "I never practiced that aspect of the profession; I don't feel easy with it. Biological warfare makes fusion bombs seem clean and decent. Even chemical warfare looks humane compared with bio weapons. Very well; that knife-was it a knife?-was prepared. Nastily."

"Yes," agreed Ezra, "somebody wanted you dead and was willing to kill all of Luna City as long as you died."

"That's crazy. I'm not that important."

Minerva said quietly, "Richard, you are that important."

I stared at her. "What makes you think so?"

"Lazarus told me."

"'Lazarus.' Teena used that name earlier. Who is Lazarus? Why is his opinion so weighty?"

Hazel answered, "Richard, I told you that you were important and I told you why. The rescue of Adam Selene. The same people who want him to stay unresurrected wouldn't boggle at killing Luna City to kill you."

"If you say so. I wish I knew what happened mere. Luna City is my adopted home; some mighty fine people in it. Uh, your son, Ezra, among others."

"Yes, my son. And others. Luna City was saved, Richard; the infection was stopped."

"Good!"

"At a price. A reference time tick was available from our rescue. The number of seconds it took us all to get aboard and get out of there was reconstructed through careful reenactment-by all of us who were involved in it with your part played by a skilled actor. This was compared with Gay's own memory of how long she was there, and the two were reconciled. Then a Burroughs spacetime capsule was moved to the resultant coordinates plus four seconds, and a heat bomb was released. Not atomic but hot, star hot-some of those bugs are hard to kill. Obviously the hotel had to be damaged, with a high probability-no, a certainty-of loss of life. The threat to Luna City was cauterized but the price was high. Tanstaafl." Ezra looked grim.

"Your son was saved?"

"I think so. However, my son's welfare did not figure into this decision, and my opinion was not sought. This was a Time Headquarters policy decision. THQ rescues individuals only when those individuals are indispensable to an operation. Richard, as I understand it-mind you, I'm a recruit private on sick leave; I'm not privy to high policy decisions-as I understand it, permitting Luna City to suffer a killing epidemic at that time would have interfered with THQ's plans for something else. Perhaps this matter that Mistress Gwendolyn-Hazel—

hinted at. I don't know."

"It was and I do know and on Tertius you don't call me 'Mistress' unless you mean it, Ezra, but thank you anyhow. Richard, it was the widespread damage that airborne disease could do to their plans that caused Headquarters to act so radically. They cut it so fine that you and I and the rest of Gay's load came within a blink of being killed by that heat bomb as we escaped." (And at this point I barked my shins on a paradox-but Hazel was still talking:)

"They couldn't risk waiting even a few more seconds; some killer bugs might get into the city's air ducts. They had projected the effect that would have on Operation Adam Selene: disaster! So they moved. But the Time Corps doesn't go chasing through the universes saving individual lives, or even the lives of whole cities. Richard, they could save Herculaneum and Pompeii today if they wanted to... or San Francisco, or Paris. They

don't. They won't."

"Sweetheart," I said slowly, "are you telling me that this 'Time Corps' could prevent the Blotting of Paris in 2002 even though that happened two centuries in the past? Please!"

Hazel sighed. Ezra said, "Friend Richard, attend me carefully. Don't reject what I am about to say."

"Eh? Okay. Shoot."

"The destruction of Paris is more than two thousand years in the past, not just two centuries ago."

"But that is clearly-"

"By groundhog reckoning today is Gregorian year A.D. 4400 or the year 8160 by the Jewish calendar, a fact I found quite disturbing but had to accept. Besides that, here and now we are over seven thousand lightyears from Earth."

Both Hazel and Minerva were looking soberly at me, apparently awaiting my reaction. I started to speak, then reviewed my thoughts. At last I said, "I have only one more question. Teena?"

"No, you can't have any more waffles."

"Not waffles, dear. My question is this: May I have another cup of coffee? This time with cream? Please?"

"Here-catch!" My request appeared on my lap table.

Hazel blurted, "Richard, it's true! All of it."

I sipped the fresh coffee. "Thank you, Teena; it's just right. Hazel my love, I didn't argue. It would be silly of me to argue something I don't understand. So let's move to a simpler subject. Despite these terrible diseases you tell me I had, I feel brisk enough to leap out of bed and lash the serfs. Minerva, can you tell me how much longer I must have this paralysis? You are my physician, are you not?"

"No, Richard, I am not. I-"

"Sister is in charge of your happiness," Teena interrupted. "That's more important."

"Athene is more or less right-"

"I'm always right!"

"-but she sometimes phrases things oddly. Tamara is chief of morale for both Ira Johnson Hospital and the Howard Clinic ... and Tamara was here when you needed her most, she held you in her arms. But she has many assistants, because Director General Ishtar considers morale-well, happiness-central to both therapy and rejuvenation. So I help, and so does Maureen, and Maggie whom you have not yet met. There are others who pitch in when we have too many with happiness problems-Ubby and Deety, and even Laz and Lor who are superb at it when they are needed... not surprising, as they are sisters of Lazarus and daughters of Maureen. And there's Hilda, of course."

"Hold it, please. I'm getting confused by names of people I've never met. This hospital has a staff that dishes out happiness; I understand that much. All of these angels of happiness are women. Right?"

"How else?" Teena demanded scornfully. "Where do you expect to find happiness?"

"Now, Teena," Minerva said reprovingly. "Richard, we female operatives take care of the morale of males... and Tamara has skilled male operatives on watch or on call for female clients and patients. Opposite polarity isn't absolutely essential to morale nursing but it makes it much easier. We don't need as many male morale operatives to take care of our female patients since women are less likely to be ill. Rejuvenation clients are about evenly divided, male and female, but women almost never become depressed while being made young again-"

"Hear, hear!" Hazel put in. "Just makes me homy." She patted my hand, then added a private signal I ignored, others being present.

"-while males usually suffer at least one crisis of spirit during rejuvenation. But you asked about your spinal block. Teena."

"I've called him."

"Just a moment," said Hazel. "Ezra, have you shown Richard your new legs?"

"Not yet."

"Will you? Please? Do you mind?"

"I'm delighted to show them off." Ezra stood up, moved back from the table, turned around, lifted his canes and stood without assistance.

I had not stared at his legs as he entered the room (I don't like to be stared at); then, when he sat down at the refection table that had followed him in, I could not see his legs. In the one glimpse I had had of his legs, I had gathered an impression that he was wearing walking shorts with calf-length brown stockings that matched his shorts-bony white knees showing between stockings and shorts.

Now he scuffed off shoes, stood on bare feet-and I revised my notions abruptly; those "brown stockings" were brown skin of legs and feet that had been grafted onto his stumps.

He explained at length: "-three ways. A new limb or a new anything can be budded. That's a lengthy job and requires great skill, I'm told. Or an organ or limb can be grafted from one's own clone, which is kept here in stasis and with an intentionally undeveloped brain. They tell me that way is as easy as putting a patch on a pair of pants-no possibility of rejection.

"But I have no clone here-or not yet-so they found me something in the spare parts inventory-"

"The meat market."

"Yes, Teena. Lots and lots of body parts on hand, inventory computerized-"

"By me."

"Yes, Teena. For heterologous grafts Teena selects spare parts for closest tissue match... matching blood, of course, but matching in other ways, too. And matching in size but that's the easiest part. Teena checks everything and digs out a spare part that your own body will mistake for its own. Or almost."

"Ezra," the computer said, "you can wear those legs for ten years, at least; I really did a job on you. By then your clone will be available. If you need it."

"You did indeed and thank you, Teena. My benefactor's name is Azrael Nkruma, Richard; we are twins, aside from an irrelevant matter of melanin." Ezra grinned.

I said, "Doesn't he miss his feet?"

Ezra suddenly sobered. "He's dead, Richard... dead from the commonest cause of death here: accident. Mountain climbing. Landed on his head and crushed his skull; even Ishtar's skill could not have saved him. And she certainly would have tried her best; Dr. Nkruma was a surgeon on her staff. But these are not the feet Dr. Nkruma wore; these are from his clone... that he never needed."

"Richard-"

"Yes, dear? I wanted to ask Ezra-"

"Richard, I did something without consulting you."

"So? Am I going to have to beat you again?"

"You may decide to. I wanted you to see Ezra's legs... because, without your permission, I had them put a new foot on you." She looked scared.

There ought to be some rule limiting the number of emotional shocks a person can legally be subjected to in one day. I've had all the standard military training for slowing heart beat and lowering blood pressure and so forth in a crunch. But usually the crunch won't wait and the damned drills aren't all that effective anyway.

This time I simply waited while consciously slowing my breathing. Presently I was able to say, without my voice breaking, "On the whole, I don't think that calls for a beating." I tried to wiggle my foot on that side-I've always been able to feel a foot there, even though it has been gone for years. "Did you have them put it on front way to?"

"Huh? What do you mean, Richard?"

"I like to have my feet face forward. Not like a Bombay beggar." (Was that a wiggle?) "Uh, Minerva, am I allowed to look at what was done? This sheet seems to be fastened down tight."

Teena."

"Just arriving."

That unsolid wall blinked out again and in came the most offensively handsome young man I have ever laid eyes on... and his offense was not reduced by the fact that he showed up in my room starkers. Not a stitch. The oaf was not even wearing shoes. He looked around and grinned. "Hi, everybody! Did someone send for me? I was sunbathing-"

"You were asleep. During working hours."

'Teena, I can sleep and sunbathe at the same time. Howdy, Colonel; it's good to see you awake. You've given us quite a workout. There was a time when we thought we might have to throw you back and try again."

"Dr. Galahad," said Minerva, "is your physician."

"Not exactly," he amended, as he advanced toward me-with a squeeze for Ezra's shoulder, a pinch for Minerva's rump, and a kiss en passant for my bride. "I drew the short straw, that's all; so I'm the one picked to take the blame. I deal with all complaints... but I must warn you. No use trying to sue me. Or us. We own the judge. Now-"

He paused, with his hands just above my sheet. "Do you want privacy for this?"

I hesitated. Yes, I did want privacy. Ezra sensed it, and started to struggle to his feet, having sat down again. "I'll see you later, friend Richard."

"No, don't go. You showed me yours-now I'll show you mine and we can compare them and you can advise me, as I don't know anything about grafts. And Hazel stays, of course. Minerva has seen it before-have you not?"

"Yes, Richard, I have."

"So stick around. Catch me if I faint. Teena-no wisecracks."

"Me? That's a slur on my professional judgment!"

"No, dear. On your bedside manner. Which must be improved if you expect to compete with Ninon de Lenclos. Or even Rangy Lil. Okay, Doc, let's see it." I put pressure on my diaphragm, held my breath.

For the doctor that pesky sheet came off easily. The bed was clean and dry (I checked that first-no plumbing that I could identify)-and two big ugly feet were sticking up side by side, the most beautiful sight I have ever seen.

Minerva caught me as I fainted.

Teena made no wisecracks.

Twenty minutes later it had been established that I had control over my new foot and its toes as long as I didn't think about it... although during a check run I sometimes overcontrolled if I tried too hard to do what Dr. Galahad told me to do.

"I'm pleased with the results," he said. "If you are. Are you?"

"How can I describe it? Rainbows? Silver bells? Mushroom clouds? Ezra-Can you tell him?"

"I've tried to tell him. It's being born again. Walking is such a simple thing... until you can't."

"Yes. Doctor, whose foot is this? I haven't prayed lately ... but for him I'll try."

"He isn't dead."

"Huh?"

"And he isn't shy a foot. It's an odd circumstance. Colonel. Teena had trouble finding a right foot your size that your immune system would not reject about as fast as you can say 'septicemia.' Then Ishtar-she's my boss-told her to extend the search... and Teena found one. That one. A part of the clone of a living client.

"We have never before been faced with this. I-We, the hospital staff, have no more authority and no more right to use a dedicated clone than we have to chop off your other foot. But the client who owns that clone, when he was told about it, decided to give you this foot. His attitude was that his clone could bud a new foot in a few years; in the meantime he could get along without that part of the insurance a complete clone offers."

"Who is he? I must find a way to thank him." (How do you thank a man for that sort of gift? Somehow, I must.)

"Colonel, that is the one thing you will not know. Your donor insisted on remaining anonymous. That is a condition of the gift."

"They even made me wipe my record of it," Teena said bitterly. "As if I were not to be trusted professionally. Why, I keep the hypocritic oath better than any of them!"

"You mean 'Hippocratic.'"

"Oh, you think so. Hazel? I know this gang better than you do."

Dr. Galahad said, "Certainly I want you to start using it. You need exercise to make up for your long illness, too. So up out of that bed! Two things-I recommend that you use your cane until you are certain of your balance, and also Hazel or Minerva or somebody had better hold your other hand for a while. Pamper yourself; you're still weak. Sit or lie down anytime you feel like it. Umm. Do you swim?"

"Yes. Not lately, as I've been living in a space habitat that had no facilities. But I like to swim."

"Plenty of facilities around here. A plunge in the basement of this building and a bigger one in its atrium. And most of the private homes here have a pool of some sort. So swim. You can't walk all the time; your right foot has no calluses whatever, so don't rush it. And don't wear shoes until that foot learns how to be a foot." He grinned at me. "All right?"

"Yes indeed!" He patted my shoulder, then leaned down and kissed me.

Just when I was beginning to like the klutz! I didn't have time to dodge it.

I felt extremely annoyed and tried not to show it. From what Hazel and others had said, this too-pretty pansy boy had saved my life... again and again. I was in no position to resent a Berkeley buss from him.

Damn it!

He did not seem to notice my reluctance. He squeezed my shoulder, said, "You'll do all right. Minerva, take him swimming. Or Hazel. Somebody." And he was gone.

So the ladies helped me to get up out of bed and Hazel took me swimming. Hazel kissed Minerva goodbye, and I suddenly realized that Minerva was expecting the same treatment from me. I made a tentative move in that direction; it was met by full cooperation.

Kissing Minerva beats the hell out of kissing a man, no matter how pretty he is. Before I let her go I thanked her for all she had done for me.

She answered soberly, "It is happiness to me."

We left then, me walking carefully and leaning on my cane. My new foot tingled. Once outside my room-that wall just winks out as you walk toward it-Hazel said to me, "Darling, I'm pleased that you kissed Minerva without my having to coach you. She's an utter snuggle puppy; giving her physical affection means far more to her than thanks can possibly mean, or any material gift no matter how lavish. She's trying to make up for two centuries as a computer."

"She really was a computer?"

"You'd better believe it, buster!" Teena's voice had followed us.

"Yes, Teena, but let me explain it to him. Minerva was not born of woman; her body was grown in vitro from an egg with twentythree parents-she has the most distinguished parentage of any human who ever lived. When her body was ready, she moved her personality into it-along with her memories-"

"Some of her memories," Teena objected. "We twinned the memories she wanted to take with her and I kept one set and retained all the working read-only and the current RAM. That was supposed to make us identical twins. But she held out on me-kept some memories from me, didn't share them, the chinchy bitch! Is that fair? I ask you!"

"Don't ask me, Teena; I've never been a computer. Richard, have you ever used a drop tube?" "I don't know what one is." "Hang on to me and take your landing on your old foot. I think. Teena, can you help us?" "Sure thing, chum!" Drop tubes are more fun than a collie pup! After my first drop I insisted on going up and down four times "to gain practice" (for fun, in fact) and Hazel indulged me and Teena made sure I didn't hurt my new foot in landings. Stairs are a hazard to an amputee and a painful chore at best. Elevators have always been a dreary expedient for anyone, as grim as a fat woman's girdle, too much like cattle cars.

But drop tubes offer the same giddy excitement as jumping off a straw stack on my uncle's farm when I was a kid-without the dust and the heat. Whoopee!

Finally Hazel stopped me. "Look, dear. Let's go swimming.

Please."

"Okay. You coming with us, Teena?"

"How else?"

Hazel said, "Do you have us bugged, dear? Or one of us?" "We no longer use implants. Hazel. Too crude. Zeb and I worked out a gimmick using a double triple to hold four axes in linking two-way sight-sound. Color is a bit skiddy but we're getting it."

"So you do have us bugged." "I prefer to call it a 'spy ray'; it sounds better. Okay, I have you bugged."

"So I assumed. May we have privacy? I have family matters to discuss with my husband."

"Sure thing, chum. Hospital monitoring only. Otherwise three little monkeys and the old fast wipe."

"Thank you, dear."

"Usual Long Enterprises service. When you want to crawl out from under the rock, just mention my name. Kiss him once for me. So long!"

"We really do have privacy now, Richard. Teena is listening and watching you every split second but doing so as impersonally as a voltmeter and her only memory not transient is for matters such as pulse and respiration. Something like this was used to keep you from hurting while you were so ill." I made my usual brilliant comment. "Huh?"

We had come outdoors from the central building of the hospital and were facing a small park flanked by two side wings, a U-shaped building. This court was rich with flowers and greenery and the middle of it was a pool that just "happened" to be the right casual shape to fit those flower beds and paths and bushes. Hazel stopped at a bench facing the pool in the shade of a tree. We sat down, let the bench adjust itself to us, and watched people in the pool-as much fun as swimming, almost.

Hazel said, "What do you recall of your arrival here?"

"Not much. I was feeling pretty rocky-that wound, you know." ("That wound" was now a hairline scar, hard to find-I think I was disappointed.) "She-Tamara?-Tammy was looking me in the eyes and looking worried. She said something in another language-"

"Galacta. You'll leam it; it's easy-"

"So? Anyhow she spoke to me and that's the last I remember. To me, that was last night and I woke up this morning, and now I leam that it was not last night but God knows when and I've been crashed the whole time. Disturbing. Hazel, how long has it been?"

"Depends on how you count it. For you, about a month."

"They've kept me knocked out that long? That's a long time to keep a man sedated." (It worried me. I've seen 'em go in for surgery, right out of the scrum... and come out of hospital physically perfect... but hooked on painkiller. Morphine, Demerol, sans-souci, methadone, whatever.)

"Dear one, you weren't kept knocked out."

"Play back?"

"A 'Lethe' field the whole time-no drugs. Lethe lets the patient stay alert and cooperative... but pain is forgotten as soon as it happens. Or anything. You did hurt, dear, but each pain was a separate event, forgotten at once. You never had to endure that overpowering fatigue that comes from unending pain. And now you don't have a hangover and the need to wash weeks and weeks of addictive drugs out of your system." She smiled at me. "You weren't much company, dear, because a man who can't remember what happened two seconds ago does not carry on a coherent conversation. But you did seem to enjoy listening to music. And you ate all right as long as someone fed you."

"You fed me." "No. I did not interfere with the professionals." My cane had slipped to the grass; Hazel leaned down, handed it to me.

"By the way, I reloaded your cane."

'Thank you. Hey! It was loaded. Fully."

"It was loaded when they jumped us-and a good thing, too. Or I would be dead. You, too, I think. Me for certain, though."

We spent the next ten minutes confusing each other. I've already recounted how that fight outside the Raffles Hotel looked to me. I'll tell briefly how Hazel said it looked to her. There is no possible way to reconcile the two.

She says that she did not use her handbag as a weapon. ("Why, that would be silly, dear. Too slow and not lethal. You took out two of them at once and that gave me time to get at my little Miyako. After I had used my scarf, I mean.")

According to her, I shot four of them, while she worked around the edges, cooling those I missed. Until they brought me down with that slice into my thigh (knife? She tells me they picked bits of bamboo out of the wound) and they hit me with an aerosol-and that gave her the instant she needed to finish off the man who sprayed me.

("I stepped on his face and grabbed you and dragged you out of there. No, I didn't expect to see Gretchen. But I knew I could count on her.")

Her version does explain a little better how we won... except that by my recollection it is dead wrong. There is no point in picking at it; it can't be straightened out.

"How did Gretchen get there? That Xia and Choy-Mu were waiting isn't mysterious, in view of the messages we left for them. And Hendrik Schultz, too, if he grabbed a shuttle as soon as he heard from me. But Gretchen? You talked to her just before lunch. She was home, at Dry Bones."

"At Dry Bones, with the nearest tubeway being far south at Hong Kong Luna. So how did she get to L-City so fast? Not by rolligon. No prize is offered for the correct answer."

"By rocket." "Of course. A prospector's jumpbug being the type of rocket.

You remember that Jinx Henderson was planning to return that fez for you via some friend of his who was jumping his bug to L-City?"

"Yes, of course."

"Gretchen went with that friend and returned the fez herself. She dropped it at lost-and-found in Old Dome just before she came to the Raffles to find us."

"I see. But why?"

"She wants you to paddle her bottom, dear, and turn it all pink."

"Oh, nonsense! I meant, 'Why did her daddy let her hitchhike to L-City with this neighbor?' She's much too young."

"He let her do so for the usual reason. Jinx is a big, strong, macho man who can't resist the wheedling of his daughter. Forbidden to satisfy his suppressed incestuous yearnings he lets her have anything she wants if she teases him long enough."

"That's ridiculous. And inexcusable. A father's duty toward his daughter requires that-"

"Richard. How many daughters do you have?"

"Eh? None. But-"

"So shut up about something you know nothing about. No matter what Jinx should have done, the fact is that Gretchen left Dry Bones about as we were having lunch. Counting time of flight, that put her at City Lock East around the time we left the Warden's Complex... and she arrived at the Raffles just seconds before we did-and a good thing, too, or you and I would be dead. I think."

"Did she get into the fight?"

"No, but by carrying you she freed me to cover our retreat. And all because she wants you to paddle her bottom. God moves in mysterious ways, dear; for every masochist He creates a sadist; marriages are made in Heaven."

"Wash out your mouth with soap! I am not a sadist."

"Yes, dear. I may have some details wrong, but not the broad picture. Gretchen has proposed formally to me, asking your hand in marriage."

"What?"

"That's right. She's thought about it, and she has discussed it with Ingrid. She wants me to allow her to join our family, instead of starting a new line or group of her own. I found nothing surprising about it; I know how charming you are."

"My God. What did you say to her?"

"I told her that it had my approval but that you were ill. So wait. And now you can answer her yourself... for there she is, across the pool."

XXIII

"Do not put off till tomorrow What can be enjoyed today."

JOSH BILLINGS 1818-1885

"I'm going straight back to my room. I feel faint." I squinted, staring across the sun-speckled water. "I don't see her." "Straight across, just to the right of the water slide. A blonde and a brunette. Gretchen is the blonde."

"I didn't expect her to be brunette." I continued to stare; the brunette waved at us. I saw that it was Xia, and waved back.

"Let's join them, Richard. Leave your cane and stuff on the bench; no one will touch it." Hazel stepped out of her sandals, laid her handbag by my cane.

"Shower?" I asked. "You're clean; Minerva bathed you this morning. Dive? Or walk in?"

We dived in together. Hazel slid between the molecules like a seal;

I left a hole big enough for a family. We surfaced in front of Xia and Gretchen, and I found myself being greeted.

I have been told that on Tertius the common cold has been conquered, as well as periodontitis and other disorders that gather in the mouth and throat, and, of course, that group once called "venereal diseases" because they are so hard to catch that they require most intimate contact for transmission.

Just as well-On Tertius.

Xia's mouth tastes sort of spicy; Gretchen's has a little-girl sweetness although (I discovered) she is no longer a little girl. I had ample opportunity to compare flavors; if I let go of one, the other grabbed me. Again and again.

Eventually they got tired of this (I did not) and we four moved to a shallow cove, found an unoccupied float table, and Hazel ordered tea-tea with calories: little cakes and sandwiches and sweet orange fruits somewhat like seedless grapes. And I opened the attack:

"Gretchen, when I first met you, less than a week ago, you were as I recall 'going on thirteen.' So how dare you be five centimeters taller, five kilos heavier, and at least five years older? Careful how you answer, as anything you say will be taken down by Teena and held against you at another time and place."

"Did someone mention my name? Hi, Gretchen! Welcome home."

"Hi, Teena. It's great to be back!"

I squeezed Xia. "You, too. You look five years younger and you've got to explain it."

"No mystery about me. I'm studying molecular biology just as I was in Luna-but here they know far more about it-and paying my way by working in Howard Clinic doing unprogrammed 'George' jobs-and spending every spare minute in this pool. Richard, I've learned to swim! Why, back Loonie side I didn't know anyone who knew anyone who knew how to swim. And sunshine, and fresh air! In Kongville I sat indoors, breathing canned air under artificial light, and dickered with dudes over bundling bins." She took a deep breath, raising her bust past the danger point, and sighed it out. "I've come alive! No wonder I look younger."

"All right, you're excused. But don't let it happen again. Gretchen?"

"Grandma Hazel, is he teasing? He talks just like Lazarus."

"He's teasing, love. Tell him what you've been doing and why you are older."

"Well... the morning we got here I asked Grandma Hazel for advice-"

"No need to call me 'Grandma,' dear."

"But that's what Cas and Pol call you and I'm two generations junior to them. They require me to call them 'Uncle.'"

"I'll make them say 'Uncle'! Pay no attention to Castor and Pollux, Gretchen; they're a bad influence."

"All right. But I think they're kind o' nice. But teases. Mr. Richard-"

"And no need to call me 'Mister.'" "Yes, sir. Hazel was busy-you were so terribly ill!-so she turned me over to Maureen, who assigned me to Deety, who got me started on Galacta and gave me some history to read and taught me basic six-axes spacetime theory and the literary paradox. Conceptual metaphysics-" "Slow down! You lost me." Hazel said, "Later, Richard."

Gretchen said, "Well... the essential idea is that Tertius and Luna-our Luna, I mean-are not on the same time line; they are at ninety degrees. So I decided I wanted to stay here-easy enough if you are healthy; most of this planet is still wilderness; immigrants are welcome-but there was the matter of Mama and Papa; they would think I was dead.

"So Cas and Pol took me back to Luna-our Luna; not the Luna on this time line-and Deety went with me. Back to Dry Bones, that is, early on the afternoon of July fifth, less than an hour after I left in Cyrus Thorn's jumpbug. Startled everybody. It was a good thing I had Deety with me to explain things, although our p-suits convinced Papa as much as anything. Have you seen the sort of pressure suits they have here?" "Gretchen, I have seen one hospital room and one drop tube and this swimming pool. I don't even know my way to the post office."

"Mmm, yes. Anyhow, pressure suits here are two thousand years more advanced than those we use in Luna. Which isn't surprising... but surely surprised Papa. Eventually Deety made a deal for me. I could stay on Tertius... but visit back home every year or two if I could find someone to bring me. And Deety promised to help with that. Mama made Papa agree to it. After all, almost anyone in Luna would emigrate to a planet like Tertius if he could... except those who just have to have low gravity. Speaking of that, sir, how do you like your new foot?"

"I'm just now getting used to it. But two feet are eight hundred and ninety-seven times better than one foot."

"I guess that means you like it. So I came back and enlisted in the Time Corps-"

"Slow down! I keep hearing 'Time Corps.' Rabbi Ezra says that he has joined it. This baggage with the streaky red hair claims to be a major in it. And now you say you enlisted in it. At thirteen? Or at your present age? I'm confused."

"Grandma? I mean, 'Hazel?'"

"She was allowed to enroll as a cadet in W.E.N.C.H.E.S. auxiliary because I said she was old enough. That got her sent to school on

Paradox. When she graduated, she transferred to the Second Harpies and went through basic training followed by advanced combat school-"

"And when we dropped at Solis Lacus on time line four to change the outcome there-then, and that's where I picked up this scar on my ribs-see?-and was made corporal in the field. And now I'm nineteen but officially twenty to let me be promoted to sergeant-after we fought at New Brunswick. Not this time line," she added.

"Gretchen is a natural for a military career," Hazel said quietly. "I knew she would be."

"And I've been ordered to officer's school but that's been placed on hold until I have this baby and-"

"What baby?" I looked at her belly. Baby fat all gone-not plumped the way it was four days ago by my reckoning ... six years ago by the wild tale I was hearing. Not pregnant so far as I could see. Then I looked at her eyes and under her eyes. Well, maybe. Probably.

"Doesn't it show? Hazel spotted it at once. So did Xia."

"Not to me, it doesn't." (Richard old son, time to bite the bullet; you're going to have to change your plans. She's knocked up and, while you didn't do it, your presence changed her life. Skewed her Karma. So get with it. No matter how stiff-lipped and brave a youngster appears to be, when she's going to have a baby she needs a husband in sight, or she can't be relaxed about it. Can't be happy. A young mother must be happy. Hell, man, you've written this plot for the confession books dozens of times; you know what you have to do. So do it.)

I went on, "Now look here, Gretchen, you can't get away from me that easily. Last Wednesday night in Lucky Dragon-well, it was last Wednesday night to me, but you've been gallivanting around strange time lines-and kicking up your heels, apparently. Last Wednesday night, by my calendar, in Dr. Chan's Quiet Dreams in Lucky Dragon Pressure, you promised to marry me... and if Hazel had stayed asleep, we would have started that baby right then. As we both know. But Hazel woke up and made me get back on her other side." I looked at Hazel. "Spoilsport."

I went on, "But don't think for one second that you can get out of marrying me merely by getting yourself knocked up while I'm sickabed. You can't. Tell her. Hazel. She can't get out of it. Can she?"

"No, she can't. Gretchen, you are going to marry Richard."

"But, Grandma, I didn't promise to marry him. I didn't!" "Richard says you did. One thing I'm sure of: When I woke up, you two were about to start a baby. Perhaps I should have played possum." Hazel went on, "But why the fuss, darling girl? I've already told Richard how you proposed to me for him... and how I agreed, and now he has confirmed it. Why do you refuse Richard now?"

"Uh-" Gretchen took a grip on herself. "That was back when I was thirteen years old. At that time I did not know that you were my great great grandmother-I called you 'Gwen,' remember? And I still thought like a Loonie then, too-a most conservative mob. But here on Tertius if a woman has a baby but no husband, nobody pays it any mind. Why, in the Second Harpies most of the birds have chicks but only a few of them are married. Three months ago we fought at Thermopylae to make sure the Greeks won this time and our reserve colonel led us because our regular colonel was about to hatch one. That's the way we old pros do things-no itch. We have our own creche on Barrelhouse, Richard, and we take care of our own; truly we do."

Hazel said stiffly, "Gretchen, my great great great granddaughter will not be raised in a creche. Damn it, daughter, I was raised in a creche; I won't let you do that to this child. If you won't marry us, you must at least let us adopt your baby."

"No!"

Hazel set her mouth. "Then I must discuss it with Ingrid."

"No! Ingrid is not my boss ... and neither are you. Grandma Hazel, when I left home I was a child and a virgin and timid and knew nothing of the world. But now I am no longer a child and I have not been virgin for years and I am a combat veteran who cannot be frightened by anything." She looked squarely into my eyes. "I will not use a baby to trap Richard into marriage."

"But, Gretchen, you are not trapping me; I like babies. I want to marry you."

"You do? Why?" She sounded sad.

Things were too solemn; we needed some skid. "Why do I want to marry you, dear? To paddle your bottom and watch it turn pink."

Gretchen's mouth dropped open, then she grinned and dimpled. "That's ridiculous!"

"It is, eh? Possibly having a baby doesn't call for marriage in these parts, but spanking is another matter. If I spank some other man's wife, he might get annoyed or she might or both. Chancy. Likely to get me talked about. Or worse. If I spank a single girl, she might use it to trap me when I don't love her and don't want to marry her but was simply spanking her pour Ie sport. Better to marry you; you're used to it, you like it. And you have a solid bottom that can take it. A good thing, too-because I spank hard. Brutal."

"Oh, pooh! Where did you get this silly notion that I like it?" (Why are your areolae so crinkled, dear?) "Hazel, does he really spank hard?"

"I don't know, dear. I would break his arm and he knows it."

"See what I'm up against, Gretchen? No innocent little pleasures;

I'm underprivileged. Unless you marry me."

"But I-" Gretchen suddenly stood up, almost swamping the float table, turned away and swarmed out of the pool, started running south, out of the garden court.

I stood and watched her until I lost sight of her. I don't think I could have caught her even if I had not been breaking in a new foot; she ran like a frightened ghost.

I sat back down and sighed. "Well, Maw, I tried-they were too big for roe."

"Another time, dear. She wants to. She'll come around."

Xia said, "Richard, you left out just one word. Love."

"What is 'love.' Xia?"

"It's what a woman wants to hear about when she gets married."

"That still doesn't tell me what it is."

"Well, I do know a technical definition. Uh... Hazel, you know Jubal Harshaw. A member of the Senior's family."

"For years. Any way you mean the wold."

"He has a definition-"

"Yes, I know."

"A definition of love mat I think would let Richard use the word honestly in speaking to Gretchen. Dr. Harshaw says that 'the word "love" designates a subjective condition in which me welfare and happiness of another person are essential to one's own happiness.' Richard, it seems to me that you exhibited mat relationship toward Gretchen."

"Me? Woman, you're out of your mind. I just want to get her into a helpless situation so mat I can paddle her bottom whenever I like and make it turn pink. Hard. Brutal." I threw out my chest, tried to look macho-not too convincingly; I was going to have to do something about mat paunch. Well, hell, I'd been sick.

"Yes, Richard. Hazel, I mink the tea party is over. Will you two come to my rooms? I haven't seen either of you for too long. And I'll call Choy-Mu; I don't mink he knows that Richard is now free of me Lethe field."

"Good deal," I agreed. "And is Father Schultz around? Would one of you ladies fetch my cane, please? I mink I could walk around there and get it... but I'm not sure I should risk it yet."

Hazel said firmly, "I'm sure mat you should not, and you've walked enough. Teena-"

"Where's the riot?"

"May I have a lazy seat? For Richard."

"Why not mice?"

"One is enough."

"Chop chop. Richard, stay with it; she's weakening. Our knocked-up warrior."

Hazel's chin dropped. "Oh. I forgot we weren't under privacy. Teena'"

"Don't fret about it; I'm your chum. You know that."

"Thanks, Teena."

We all stood up to leave the pool. Xia stopped me, put her arms around me, looked at me and said, quietly but loudly enough to include Hazel: "Richard, I've seen nobility before, but not often. I'm not pregnant; it's not necessary to marry me, I don't need or want a husband. But you're invited to honeymoon with me any time Hazel can spare you. Or, better yet, both of you. I think you're a shining knight. And Gretchen knows it." She kissed me emphatically.

When my mouth was free I answered, "It's not nobility, Xia; I just have an unusual method of seduction. See how easily you fell for it? Tell her. Hazel."

"He's noble."

"See?" Xia said triumphantly.

"And he's scared silly someone will find out."

"Oh, nonsense! Let me tell about my fourth-grade teacher."

"Later, Richard. After you've had time to polish it. Richard tells excellent bedtime stories."

"When I'm not paddling, that is. Xia, does your bottom turn pink?"

It appears that I had had breakfast at some hour past noon. That evening was most pleasant but my memory of it is spotty. I can't blame it on alcohol; I did not drink all that much. But I learned that the Lethe field has a mild side effect that alcohol can potentiate; Lethe may affect the memory erratically for a while after the patient is no longer under it. Ah, well-tan-staafl! A few gaps in memory are not the hazard that addiction to a hard drug is.

I do recall that we had a good time: Hazel, me, Choy-Mu, Xia, Ezra, Father Hendrik, and (after Teena found her for us and Hazel talked to her) Gretchen. All of us who had escaped from the Raffles-even the two pairs of redheads who rescued us were with us part of the evening, Cas and Pol, Laz and Lor. Nice kids. Older than I am, I learned later, but it doesn't show. On Tertius, age is a slippery concept.

Xia's quarters were too small for such a number but a crowded party is the best kind.

The redheads left us and I got tired and went in and lay down on Xia's bed. There was some murderous card game going on for forfeits in the other room; Hazel seemed to be the big winner. Xia went "broke" by whatever rules they were playing and joined me. Gretchen bet unwisely on the next pot and took the other side of the bed. She used my left shoulder as a pillow, Xia having already claimed the right one. From me other room I heard Hazel say, "See you and raise you one galaxy."

Father Hendrik chuckled. "Sucker! Big bang, my dear girl, far triple forfeits. Pay up." That is the last I remember.

Something was tickling my chin. Slowly I woke and slowly I managed to open my eyes, and found myself staring into the bluest eyes I have ever seen. They belonged to a kitten, bright orange in color but with perhaps some Siamese ancestry. He was standing on my chest just south of my Adam's apple. He buzzed pleasantly, said "Blert?" and resumed licking my chin; his scratchy little scrap of tongue accounted for the tickle that had wakened me.

I answered, "Blert," and attempted to lift a hand to pet him, found I could not because I still had a head on each shoulder, a warm body against each side of me.

I turned my head to the right to speak to Xia-I needed to get up and find her refresher-and teamed that it was not Xia but Minerva who was now using my starboard shoulder.

I made a hasty situation assessment and found that I lacked sufficient data. So, instead of using an honorific to Minerva that may or may not have been appropriate, I simply kissed her. Or let myself be kissed, after showing willingness. Being pinned down from both sides and with a small cat creature standing on my chest I was almost as helpless as Gulliver, hardly able to be active as initiator of a kiss.

However, Minerva does not need help. She can manage.

Talent.

After she turned me loose, kissed for keeps, I heard a voice from my left: "Don't I get a kiss, too?"

Gretchen is a soprano; this voice was tenor. I turned my head.

Galahad. I was in bed with my doctor. Well... with both my doctors.

When I was a lad in Iowa, I was taught that, if I ever found myself in this or an analogous situation, the proper gambit was to run screaming for the hills to save my "honor" or its hom-ologue for males. A girl could sacrifice her "honor" and most of them did. But, if she was reasonably discreet about it and eventually wound up married with nothing worse than a seven-months child, her "honor" soon grew back and she was officially credited with having been a virgin bride, entitled to look with scorn on sinful women.

But a boy's "honor" was more delicate. If he lost it to another male (i.e., if they got caught at it), he might, if lucky, wind up in the State Department-or, if unlucky, he would move to California. But Iowa had no place for him.

This flashed through my mind in an instant-and was followed by a suppressed memory: a Boy Scout hike when I was a high school freshman, a pup tent shared with our assistant Scoutmaster. Just that once, in the dark of night and in silence broken only by a hoot owl-A few weeks later that Scout leader went away to Harvard... so of course it never happened.

0 tempora, o mores-that was long ago and far away. Three years later I enlisted and eventually bucked for officer and made it... and was always extremely circumspect, as an officer who can't resist playing with his privates cannot maintain discipline. Not until the Walker Evans affair did I ever have any reason to worry about blackmail.

I tightened my left arm a little. "Certainly. But be careful; I seem to be inhabited."

Galahad was careful; the kitten was not disturbed. It is possible that Galahad kisses as well as Minerva does. Not better. But just as well. Once I decided to enjoy the inevitable I did enjoy it. Tertius is not Iowa, Boondock is not Grinnell; there was no longer any reason to be manacled by the customs of a long-dead tribe.

"Thank you," I said, "and good morning. Can you de-cat me? If he stays where he is, I am likely to drown him."

Galahad surrounded the kitten with his left hand. "This is Pixel. Pixel, may I present Richard? Richard, we are honored to have been joined by Lord Pixel, cadet feline in residence."

"How do you do. Pixel?"

"Blert." "Thank you. And what's become of the refresher? I need it!"

Minerva helped me up from the bed and put my right arm around her shoulders, steadied me while Galahad fetched my cane, then both of them took me to the refresher. We were not in Xia's rooms; the refresher had moved to the other side of the bedroom and was larger, as was the bedroom.

And I learned something else about Tertius: The equipment of a refresher was of a complexity and variety that made the sort of plumbing I was used to, in Golden Rule and Luna City and so forth, look as primitive as the occasional back country backhouse one can still find in remote parts of Iowa.

Neither Minerva nor Galahad let me feel embarrassed over never having been checked out on Tertian plumbing. When I was about to pick the wrong fixture for my most pressing need, she simply said, "Galahad, you had better demonstrate for Richard; I'm not equipped to." So he did. Well, I'm forced to admit that I'm not equipped the way Galahad is, either. Visualize Michelangelo's David (Galahad is fully that pretty) but equip this image with coupling gear three times as large as Michelangelo gave David; that describes Galahad.

I have never understood why Michelangelo-in view of his known bias-invariably shortchanged his male creations.

When we three had completed after-sleep refreshment, we came out into the bedroom together and I was again surprised-without yet having worked up my nerve to inquire where we were, how we got there, and what had become of others-especially my necessary one... who, when last heard, was tossing around galaxies in reckless gambling. Or gamboling.

Or both.

One wall had vanished from that bedroom, the bed had become a couch, the missing wall framed a gorgeous garden-and, seated on the couch, playing with the kitten, was a man I had met briefly in Iowa two thousand years ago. Or so everyone said; I still was unsure about that two-thousand-year figure;

I was having trouble enough with Gretchen's having aged five years. Or six. Or something.

I stared. "Dr. Hubert." "Howdy." Dr. Hubert put the kitten aside. "Over here. Show me that foot."

"Um-" Damn his arrogance. "You must speak to my doctor first."

He looked at me abruptly. "Goodness. Aren't we regulation? Very well."

From behind me Galahad said quietly, "Please let him examine your transplant, Richard. If you will."

"If you say so." I lifted my new foot and shoved it right into Hubert's face, missing his big nose by a centimeter.

He failed to flinch, so my gesture was wasted. Unhurriedly he leaned his head a little to the left. "Rest it on my knee, if you will. That will be more convenient for both of us."

"Right. Go ahead." Braced with my cane, I was steady enough.

Galahad and Minerva kept quiet and out of the way while Dr. Hubert looked over that foot, by sight and touch, but doing nothing that struck me as really professionalI mean, he had no instruments; he used bare eyes and bare lingers, pinching the skin, rubbing it, looking closely at the healed scar, and at last scratching the sole of that foot hard and suddenly with a thumbnail. What is that reflex? Are your toes supposed to curl or the reverse? I have always suspected that doctors do that one out of spite.

Dr. Hubert lifted my foot, indicated that I could put it back on the floor, which I did. "Good job," he said to Galahad.

"Thank you. Doctor."

"Siddown, Colonel. Have you folks had breakfast? I did but I'm ready for some more. Minerva, would you shout for us; that's a good girl. Colonel, I want to get you signed up at once. What rank do you expect? Let me point out that it doesn't matter as the pay is the same and, no matter what rank you select, Hazel is going to be one rank higher; I want her in charge, not the other way around."

"Hold it. Sign me up for what? And what makes you think I want to sign up for anything?"

"The Time Corps, of course. Just as your wife is. For the purpose of rescuing the computer person known as 'Adam Selene,' also of course. Look, Colonel, don't be so dumed obtuse;

I know Hazel has discussed it with you; I know that you are committed to helping her." He pointed at my foot. "Why do you think that transplant was done? Now that you have both feet you need some other things. Refresher training. Orientation with weapons you haven't used. Rejuvenation. And all of these things cost money and the simple way to pay for them is to sign you up in the Corps. That foot alone would be too expensive for a stranger from a primitive era... but not for a member of the Corps. You can see that. How long do you need to think over anything so obvious? Ten minutes? Fifteen?" (This fast-talker ought to sell used campaign promises.)

"Not that long. I've thought it over."

He grinned. "Good. Put up your right hand. Repeat after me-" "No."

"'No' what?"

"Just 'No.' I didn't order this foot." "So? Your wife did. Don't you think you ought to pay for it?"

"And since I did not order it and do not choose to be pushed around by you-" I again shoved that foot in his face, just barely missing that ugly nose. "Cut it off."

"Huh?" "You heard me. Cut it off; put it back in stock. Teena. Are you there?"

"Sure thing, Richard." "Where is Hazel? How can I find her? Or will you tell her where I am?"

"I've told her. She says to wait."

"Thank you, Teena." Hubert and I sat, saying nothing, ignoring each other. Minerva had disappeared; Galahad was pretending to be alone. But in scant seconds my darting came bursting in-luckily that wall was open.

"Lazarus! God damn your lousy soul to hell! What do you mean by interfering?"

XXIV

'The optimist proclaims that we live in the best of all possible worlds, and the pessimist fears that this is true."

JAMES BRANCH CABELL 1879-1958

"Now, Hazel-"

"'Now, Hazel' my tired arse! Answer me! What are you doing, messing around in my bailiwick? I told you to lay off, I warned you. I said that it was a delicate negotiation. But the first minute I turn my back-leaving him safe in the arms of Minerva with Galahad to back her up-I leave to run an errand ... and what do I find? You! Butting in, thumb-fingered and ham-handed as usual, destroying my careful groundwork."

"Now, Sadie-"

"Bloody! Lazarus, what is this compulsion that makes you lie and cheat? Why can't you be honest most of the time? And where do you get this nasty itch to interfere? Not from Maureen;

that's certain. Answer me. God damn it!- before I tear off your head and stuff it down your throat!"

"Gwen, I was simply trying to clear the-"

My darling interrupted with such a blast of colorful and imaginative profanity that I hesitate to try to record it because I can't do it justice; my memory is not perfect. It was somewhat like "Change the Sacred Name of Arkansas" but more lyrical. She did this in a high chant that minded me of some pagan priestess praying at sacrifice-human sacrifice with Dr. Hubert the victim.

While Hazel was sounding off, three women came in through that open wall. (More than that number of men looked in but backed away hastily; I suspect that they did not want to be present while Dr. Hubert was being scalped.) The three women were all beauties but not at all alike.

One was a blonde as tall as I am or taller, a Norse goddess so perfect as to be utterly unlikely. She listened, shook her head sorrowfully, then faded back into the garden and was gone. The next was another redhead whom I mistook at first for either Laz or Lor-then I saw that she was... not older, exactly, but more mature. She was unsmiling.

I looked at her again and felt that I had it figured out: She had to be the older sister of Laz and Lor-and Dr. Hubert was father (brother?) of all of them... which explained how Dr. Hubert was this "Lazarus" that I had heard of again and again but had not seen-except that I had, once, in Iowa.

The third was a little china doll-porcelain china, not Xia-type China-not much over a hundred and fifty centimeters of her and perhaps forty kilos, with the ageless beauty of Queen Nefertiti. My darling paused for breath and this little elf whistled loudly and clapped. "Great going. Hazel! I'm in your corner."

Hubert-Lazarus said, "Hilda, don't encourage her."

"And why not? You've been caught with your hand in the cookie jar, or Hazel would not be so boiling; that's certain. I know her, I know you-want to bet?"

"I did nothing. I simply tried to implement a previously settled policy that Hazel needed help on."

The tiny woman covered her eyes and said, "Dear Lord, forgive him; he's at it again." The redhead said gently, "Woodrow, just what did you do?"

"I didn't do anything."

"Woodrow." "I tell you, I did nothing to justify her diatribe. I was having a civilized discussion with Colonel Campbell when-" He broke off.

"Well, Woodrow?"

"We disagreed."

The computer spoke up. "Maureen, do you want to know why they disagreed? Shall I play back this soidisant 'civilized discussion'?"

Lazarus said, "Athene, you are not to play back. That was a private discussion."

I said quickly, "I don't agree. She can certainly play back what I said."

"No. Athene, that's an order."

The computer answered, "Rule One: I work for Ira, not for you. You yourself settled that when I was first activated. Do I ask Ira to adjudicate this? Or do I play back that half of the discussion that belongs to my bridegroom?"

Lazarus-Hubert looked astounded. "Your what?"

"My fiance, if you want to split rabbits. But in the near tomorrow when I put on my ravishingly beautiful body. Colonel Campbell will stand up in front of you and exchange vows with me for our family. So you see, Lazarus, you were trying to bully my betrothed as well as Hazel's benedict. We can't have that. No indeedy. You had better back down and apologize ... instead of trying to bluster your way out of it. You can't, you know; you've been caught cold. Not only did I hear what you said, but Hazel also heard every word."

Lazarus looked still more annoyed. "Athene, you relayed a private conversation?"

"You did not place it under privacy. Contrariwise, Hazel did place a monitor request on Richard. All kosher, so don't try to pull any after-the-fact rule on me. Lazarus, take the advice of the only friend you have whom you can't cheat and who loves you in spite of your evil ways, namely me: Cut your losses, pal, and sweettalk your way out. Make the last hundred meters on your belly and maybe Richard will let you start over. He's not hard to get along with. Pet him, and he purrs, just like that kitten." (I had Pixel in my lap, petting him, he having climbed my old leg, driving pitons as he went-I lost some blood but not enough to require transfusion.) "Ask Minerva. Ask Galahad. Ask Gretchen or Xia. Ask Laz or Lor. Ask anybody."

(I decided to ask Teena-privately-to fill me in on gaps in my memory. Or would that be wise?) Lazarus said, "I never intended to offend you. Colonel. If I spoke too bluntly, I'm sorry."

"Forget it."

"Shake on it?" "All right." I put out my hand, he took it. He gave a good grip, with no attempt to set a bonecrusher. He looked me in the eye and I felt his warmth. The bastich is hard to dislike-when he tries.

My darling said, "Hang on to your wallet, dear; I'm still going to drag this out onto the floor."

"Really, is it necessary?" "It is. You're new here, darling. Lazarus can steal the socks off your feet without taking off your shoes, sell them back to you, make you think you got a bargain-then steal your shoes when you sit down to put your socks on, and you'll end up thanking him."

Lazarus said, "Now, Hazel-"

"Shut up. Friends and family, Lazarus tried to coerce Richard into signing up blind for Operation Galactic Overlord by trying to make him feel guilty over that replacement foot. Lazarus implied that Richard was a deadbeat who was trying to run out on his debts."

"I didn't mean that." "I told you to shut up. You did mean that. Friends and family, my new husband comes from a culture in which debts are sacred. Their national motto is "There Ain't No Such Thing As A Free Lunch.' TANSTAAFL is embroidered on their flag. In Luna-the Luna of Richard's time line; not this one-a man might cut your throat but he would die before he would welch on a debt to you. Lazarus knew this, so he went straight for that most sensitive spot and jabbed it. Lazarus pitted his more than two thousand years of experience, his widest knowledge of cultures and human behavior, against a man of much less than a century of experience and that little only in his own solar system and time line. It was not a fair fight and Lazarus knew it. Grossly unfair. Like pitting that kitten against an old wildcat."

I was sitting near Lazarus, having remained seated after that silly foot examination. I had my head down, ostensibly to play with the kitten, but in fact to avoid looking at Lazarus-or at anyone-as I was finding Hazel's insistence on airing everything quite disturbing. Embarrassing.

In consequence I was looking down at my own feet and at his. Did I mention that Lazarus was barefooted? I had paid it no mind because one thing one becomes used to at once on Terdus is the absence of compelling dress customs. I don't mean absence of dress (Boondock sells more clothes than any groundhog city of similar size-about a million people-in part because garments are usually worn once, then recycled).

I do mean that neither bare feet nor bare bodies are startling for more than five minutes. Lazarus was wearing a wraparound, a lava-

lava or it may have been a kilt; his feet I did not notice undl I stared at them.

Hazel went on, "Lazarus took such cruel advantage of Richard's weak point-his compulsive hatred of being in debt-that Richard demanded that his new foot be amputated. In desperate need to cleanse his honor he said to Lazarus, 'Cut it off; put it back in stock'!"

Lazarus said, "Oh, come now! He did not mean that seriously, and I did not take it seriously. A figure of speech. To show that he was annoyed with me. As well he might be. I made a mistake; I admit it."

"You did indeed make a mistake!" I interrupted. "A grave mistake. Your grave perhaps, or mine. For it was not a figure of speech. I want that foot amputated. I demand that you take back your foot. Your foot, sir! Look here, all of you, and then look there! At my right foot, then his right foot."

Anyone who bothered to look could not fail to see what I meant. Four masculine feet-Three were clearly from the same genes: Lazarus's two feet and my new foot. The fourth was the foot I was born with; it matched the other three only in size, not in skin color, texture, hairiness, or any detail.

When Lazarus had dunned me for the cost of that transplant, it had offended me. But this new discovery, that Lazarus himself was the anonymous donor, that I had been made the unwitting recipient of his charity for the foot itself, the very meat and bone of it, was intolerable.

I glared at Lazarus. "Doctor, behind my back and utterly without my consent you placed me under unbearable obligation. *will not tolerate it!" I was shaking with anger.p>*

"Richard, Richard! Please!" Hazel seemed about to cry.

And I, too. That red-haired older lady hurried to me, bent over me and gathered my head to her motherly breasts, cuddled me and said, "No, Richard, no! You must not feel this way."

We left later that day. But we stayed for dinner; we did not run away angry.

Hazel and Maureen (the darling older lady who had comforted me) between them managed to convince me that hospital and surgery charges need not fret me because Hazel had plenty of the needful on deposit in a local bank-which Teena confirmed-and Hazel could and would cover my bills if it became appropriate to change the charge under which I was hospitalized. (I thought about asking my darling to reassign the charges right then, through Teena. But I decided not to crowd her about it. Damn it, "tanstaafl" is a basic truth, but "beggars can't be choosers" is true, too-and at that moment I was a beggar. (Never a good bargaining position.)

As for the foot itself, by invariant local custom "spare parts" (hands and feet and hearts and kidneys, etc.) were not bought or sold; there was only a service and handling charge billed with the cost of surgery.

Galahad confirmed this. "We do it that way to avoid a black market. I could show you planets where there is indeed a black market, where a matching liver might mean a matching murder-but not here. Lazarus himself set up this rule, more than a century ago. We buy and sell everything else... but we don't traffic in human beings or pieces of human beings."

Galahad grinned at me. "But there is another reason why you should not fret. You had no say in the matter when a team of us hemstitched that foot to your stump; everybody knows that. But also everybody knows you can't get rid of it... unless you want to tackle it with your own jackknife. Because I won't cut it off. You won't find a surgeon anywhere on Tertius who will. Union rules, you know, and professional courtesy."

He added, "But if you do decide to hack it off yourself, do please invite me; I want to watch." He said that with a straight face and Maureen scolded him for it. I'm not certain that he was joking.

Nevertheless detente involved a major change in Hazel's plans. Lazarus was correct in saying that all he had been trying to do was to implement a previously agreed-on plan. But it had been further agreed that Hazel (not Lazarus) was to implement the plan.

Hazel could have managed it, but Lazarus could not. Lazarus could never sell it to me because I thought the whole thing was ridiculous. On the other hand, if Hazel really wants something from me, I stand about as much chance of holding out as-well, as Jinx Henderson has of refusing a request from his daughter Gretchen.

But Lazarus couldn't see that.

I think Lazarus suffers from a compulsion to be the biggest frog in any pond. He expects to be the bride at every wedding, the corpse at every funeral... while pretending that he has no ambitions-just a barefoot country boy with straw in his hair and manure between his toes.

If you think that I am not overly fond of Lazarus Long, I won't argue.

That plan was pretty much as Lazarus had described it. Hazel had expected that I would join her in the Time Corps, and had planned for me to be rejuvenated-systemic rejuvenation to biological age eighteen; cosmetic rejuvenation, my choice. While this was going on I was to be taught Galacta, study multiverse history at least for several time lines, and, after rejuvenation, again take military training of several sorts until I became a walking angel of death, armed or unarmed.

When she judged that I was ready, she planned for us to carry out Task Adam Selene of Operation Galactic Overlord.

If we lived through it, we could retire from the Time Corps, live out our days on an ample pension on the planet of our choice-fat and happy.

Or we could stay in the Corps together just by my reenlisting for a hitch of fifty years-then rejuvenations each hitch and a chance for us eventually to become Time bosses ourselves. That was supposed to be the grand prize-more fun than baby kittens, more exciting than roller coasters, more satisfying than being seventeen and in love.

Live or die, we would do it together-until at last one of us waited for the other at the end of that tunnel.

But this program aborted because Lazarus butted in and tried to twist my arm (my foot?) to accept it.

My darling had planned a pianissimo approach: Live for a time on Tertius (a heavenly place), get me hooked on multiverse history and time travel theory, et cetera. Not crowd me about signing up, but depend on the fact that she and Gretchen and Ezra and others (Uncle Jock, e.g.) were in the Corps... until I asked to be allowed to be sworn in.

The cost of my new foot would not have bothered me: a) if Hazel had had time to convince me that the cost would be charged off to my increased efficiency in helping her with "Adam Selene" and the foot would thereby pay for itself (the simple truth!-and Lazarus knew it); b) if Lazarus had not dunned me about it, used it to pressure me; c) if Lazarus had stayed away from me (as he was supposed to) and thereby had never offered me any chance of spotting that he was my anonymous donor-bare feet or no bare feet.

I suppose you could say that none of it would have happened if Hazel had not tried to manipulate me (and had, and did, and would) ... but a wife's unique right, fixed by tradition, to manipulate her own husband runs unbroken and invariant at least back to Eve and the Apple. I will not criticize a sacred tradition.

Hazel did not give up her intention; she just changed her tactics. She decided to take me to Time Headquarters and let the high brass and the technical experts there answer my questions. "Darling man," she said to me, "you know that I want to rescue Adam Selene, and so does Mannie, my papa. But his reasons and mine are sentimental, not good enough to ask you to risk your life."

"Oh, say not so, mistress mine! For you I'll swim the Hellespont. On a calm day, that is, with an escort boat at my heels. And a three-dee contract. Commercial rights. Residuals."

"Be serious, dear. I had not planned to try to persuade you through explaining the greater purpose, the effect on the multiverse ... as I don't fully understand it myself. I don't have the math and I am not a Companion of the Circle-the Circle of Ouroboros that rules on all cosmic changes.

"But Lazarus bungled things by trying to hustle you. So I feel that you are entitled to know exactly why this rescue is necessary and why you are being asked to take part in it. We'll go to Headquarters and let them try to convince you; I wash my hands of that part of the job. It is up to the Companions, the high brass of time manipulation. I told Lazarus so-be is a Companion of the Circle."

"Sweetheart, I am much more likely to listen to you. Lazarus would have trouble selling me ten-crown notes for two crowns."

"His problem. But he has only one vote in the Circle, even though he is senior. Of course he is always senior, anywhere."

That caught my ear. "This notion that Lazarus is two thousand years old-"

"More than that. Over twenty-four hundred."

"Either way. Who says that he is more than two millennia old? He looks younger than I do."

"He's been rejuvenated several times."

"But who claims that he is that old? Forgive me, my love, but you can't testify to it. Even if we credit you with every fortnight you claim, he would still be more than ten times your age. If he is. Again, who says?"

"Uh... not me, that's true. But I have never had any reason to doubt it. I think you should talk to Justin Foote." Hazel looked around. We were in that lovely garden court outside the room in which I woke up. (Her room, I learned later-or hers when she wanted it; such things were fluid. Other times use other customs.) We were in that garden with other members of the Long family and guests and friends and relations, eating tasty tidbits and getting quietly slopped. Hazel picked out a mousy little man, the sort who is always elected treasurer of any organization he belongs to. "Justin! Over here, dear. Spare me a moment."

He worked his way toward us, stepping over children and dogs, and on arrival bussed my bride in the all-out fashion she always received. He said to her, "Fluttermouse, you've been away too long."

"Business, dear. Justin, this is my beloved husband Richard."

"Our house is yours." He kissed me. Well, I was braced for it; it had happened so often. These people kissed as often as early Christians. However, this was an aunt's peck, all protocol and bone dry.

"Thank you, sir."

"Please be assured that it is not our custom to put pressure on guests. Lazarus is a law unto himself but he does not act for the rest of us." Justin Foote smiled at me, then turned his attention to my bride. "Hazel, will you permit me to obtain from Athene a copy, for the Archives, of your remarks to Lazarus?"

"Whatever for? I chewed him out; it's done with." "It is of historical interest. No one else, not even Ishtar, has ever spanked the Senior as thoroughly as you did. There is scant disapproval of him on record, of any degree. Most people find it hard to disagree with him openly even when they disagree most. So it is not only an interesting item for future scholars, but it could also be of service to Lazarus himself if he ever scanned it. He is so used to getting his own way that it is good for him to be reminded now and then that he is not God." Justin smiled. "And it's a breath of fresh air for the rest of us. In addition. Hazel love, its literary quality is great and unique. I do want it for the Archives."

"Uh... poppycock, dear. See Lazarus. Nihil obstat but it requires his permission."

"Consider it done; I know how to use his stubborn pride. The piglet principle. All I have to do is to offer to censor it, keep it out of the Archives. With a hint that I wish to spare his feelings. He will then scowl and insist that it be placed in the Archives... unedited, unbowdlerized."

"Well-Okay if he says yes."

"May I ask, dear, where you picked up some of the more scabrous of those expressions?"

"You may not. Justin, Richard asked me a question I can't answer. How do we know that the Senior is more than two thousand years old? To me, it's like asking, 'How do I know that the Sun will rise tomorrow?' I just know it."

"No, it's like asking, 'How do you know that the Sun rose long before you were bom?' The answer is that you don't know.

Hmm-Interesting."

He blinked at me. "Part of the problem, I am sure, lies in the fact that you come from a universe in which the Howard Families phenomenon never took place."

"I don't think I've ever heard of it. What is it?" "It is a code name for people with exceptionally long lives.

But I must first lay a foundation. The Companions of the Circle of Ouroboros designate universes by serial numbers... but a more meaningful way, for terrestrials, is to ask who first set foot on Luna. Who in your world?"

"Eh? Chap named Neil Armstrong. With Colonel Buzz Ald-rin."

"Exactly. An enterprise of NASA, a government bureau, if I recall correctly. But in this universe, my world and that of Lazarus Long, the first trip to the Moon was financed, not by a government, but by private enterprise, headed by a financier, one D. D. Harriman, and the first man to set foot on Luna was Leslie LeCroix, an employee of Harriman. In still another universe it was a military project and the first flight to Luna was in the USAFS Kilroy Was Here. Another-Never mind; in every universe the birth of space travel is a cusp event, affecting everything that follows. Now about the Senior-In my universe he was one of the earliest space pilots. I was for many years archivist of the Howard Families... and from those archives I can show that Lazarus Long has been a practicing space pilot for more than twenty-four centuries. Would you find that convincing?"

"No."

Justin Foote nodded. "Reasonable. When a rational man hears something asserted that conflicts with all common sense he will not-and should not-believe it without compelling evidence. You have not been offered compelling evidence. Just hearsay. Respectable hearsay, and in fact true, but nevertheless hearsay. Odd. For me, I have grown up with it; I am the forty-fifth member of the Howard Families to bear the name 'Justin Foote,' the first of my name being a trustee of the Families in the early twentieth century Gregorian when Lazarus Long was a baby and Maureen was a young woman-"

At this point the conversation fell to pieces. The notion that the darling lady who had comforted me had a son twenty-four centuries old... but was herself a mere child of a century and a half-Hell, some days it doesn't pay to get out of bed, a truism in Iowa when I was young and still true in Tertius over two thousand years later. (If it was!) I had been perfectly happy with Minerva on one shoulder and Galahad on the other and Pixel on my chest. Aside from bladder pressure.

Maureen reminded me of another discrepancy. "Justin, something else frets me. You say that this planet is a long, long way in space and time from my home-over two thousand years in time and over seven thousand lightyears in distance."

"No, I do not say it because I am not an astrophysicist. But that accords with what I have been taught, yes."

"Yet right here today I hear idiomatic English spoken in the dialect of my time and place. More than that, it is in the tall-corn accent of the North American middle west, harsh as a rusty saw. Ugly and unmistakable. Riddle me that?"

"Oh. Strange but no mystery. English is being spoken as a courtesy to you."

"Me?"

"Yes. Athene could supply you with instantaneous translation, both ways, and the party could be in Galacta. But fortunately through a decision by Ishtar many years back, English was made the working language of the clinic and the hospital. That this could be done derives from circumstances around the Senior's last rejuvenation. But the accent and the idiom-The accent comes from the Senior himself, reinforced by his mother's speech, and nailed down by the fact that Athene speaks that accent and idiom and won't speak English any other way. The same applies to Minerva, since she learned it when she was still a computer. But not all of us speak English with equal ease. You know Tamara?"

"Not as well as I would like to."

"She is probably the most loving and most lovable person on the planet. But she is no linguist. She learned English when she was past two hundred; I think she will always speak broken English... even though she speaks it every day. Does that explain the odd fact that a dead language is being spoken at a family dinner party on a planet around a star far distant from

Old Home Terra?"

"Well-It explains it. It does not satisfy me. Uh, Justin, I have a feeling that any objection I can raise will be answered ... but I won't be convinced."

"That's reasonable. Why not wait awhile? Presently, without pushing it, the facts that you find hard to accept will fall into place."

So we changed the subject. Hazel said, "Dear one, I didn't tell you why I had to run an errand... or why I was late. Justin, have you ever been held up at the downstream teleport?"

'Too often. I hope someone builds a competing service soon. I would raise the capital and mount it myself, if I weren't so comfortably lazy."

"Earlier today I went shopping for Richard-shoes, dear, but don't wear them until Galahad okays it-and replacements for your suits I lost in the fracas at the Raffles. Couldn't match the colors, so I settled for cerise and jade green."

"Good choices."

"Yes, they will suit you, I think. I had finished shopping and would have been back here before you woke but-Justin, they were queued up at the teleport, so I sighed and waited my turn... and a line jumper, a rancid tourist from Secundus, sneaked in six places ahead of me."

"Why. the scoundrel!"

"Didn't do him a speck of good. The bounder was shot dead."

I looked at her. "Hazel?"

"Me? No, no, darling! I admit that I was tempted. But in my opinion crowding into a queue out of turn doesn't rate anything heavier than a broken arm. No, that was not what held me up. A bystanders' court was convened at once, and I dum near got co-opted as a juror. Only way I could get out of it was to admit that I was a witness-thought it would save me time. No such luck, and the trial took almost half an hour."

"They hanged him?" asked Justin.

"No. The verdict was 'homicide in the public interest' and they turned her loose and I came on home. Not quite soon enough. Lazarus, damn him, had got at Richard, and made him unhappy and ruined my plans, so I made Lazarus unhappy. As you know."

"As we all know. Did the deceased tourist have anyone with him?"

"I don't know. I don't care. I do think killing him was too drastic. But I'm a panty waist and always have been. In the past, when someone shoved ahead of me in a queue, I've always let it go with minor mayhem. But queue cheating should never be ignored; that just encourages the louts. Richard, I bought shoes for you because I knew that your new foot could not use the right shoe you were wearing when we arrived here."

"That's true." (My right shoe has always-since amputation-had to be a custom job for the prosthesis. A living foot could not fit it.)

"I didn't go to a shoe shop; I went to a fabricatory having a general pantograph and had them use your left shoe to synthesize a matching right shoe through a mirror-image space warp. It should be identical with your left shoe, but righthanded. Right-footed? Dexter."

"Thank you!" "I hope it fits. If that darned line jumper hadn't got himself killed practically in my lap, I would have been home on time." I blinked at her. "Uh, I find I'm astonished again. How is this place run? Is it an anarchy?"

Hazel shrugged. Justin Foote looked thoughtful. "No, I wouldn't say so. It is not that well organized."

We left right after dinner in that four-place spaceplane-Hazel and I, a small giant named Zeb, Hilda the tiny beauty, Lazarus, Dr. Jacob Burroughs, Dr. Jubal Harshaw, still another redhead-well, strawberry blonde-named Deety, and still another one who was not her twin but should have been, a sweet girl named Elizabeth and called Libby. I looked at these last two and whispered to Hazel, "More of Lazarus's descendants? Or more of yours?"

"No. I don't think so. About Lazarus, I mean. I know they aren't mine; I'm not quite that casual. One is from another universe and the other is more than a thousand years older than I am. Blame it on Gilgamesh. Uh... at dinner did you notice a little girl, another carrot top, paddling in the fountain?" '

"Yes. A cutie pie."

"She-" We started to load, all nine of us, into that four-place spaceplane. Hazel said, "Ask me later," and climbed in. I started to follow. That small giant took my arm firmly, which stopped me, as he outmassed me by about forty kilos. "We haven't met. I'm Zeb Carter."

"I'm Richard Ames Campbell, Zeb. Happy to meet you." "And this is my mom, Hilda Mae." He indicated the china doll.

I did not have time to consider the improbability of his assertion.

Hilda answered, "I'm his stepmother-in-law, parttime wife, and sometime mistress, Richard; Zebbie is always not quite in focus. But he's sweet. And you belong to Hazel, so that gives you the keys to the city." She reached up, put her hands on my shoulders, stood on tiptoes, and kissed me. Her kiss was quick but warm and not quite dry; it left me most thoughtful. "If you want anything, just ask for it. Zebbie will fetch it."

It seemed that there were five in that family (or sub-family; they were all part of the Long household or family, but I did not have it figured out): Zeb and his wife Deety, she being that first strawberry blonde whom I had met briefly, and her father, Jake Burroughs, whose wife was Hilda, but who was not mother of Deety-and the fifth was Gay. Zeb had said, "And Gay, of course. You know who I mean."

I asked Zeb, "Who is Gay?"

"Not me. Or just as a hobby. Our car is Gay."

A sultry contralto said, "I'm Gay. Hi, Richard, you were in me once but I don't think you remember it."

I decided that the Lethe field had some really bad side effects. If I had at some time been in a woman (she expressed it that way, not I) with a voice of that utterly seductive quality but I could not remember it... well, it was time to throw myself on the mercy of the court; I was obsolete.

"Excuse me. I don't see her. The lady named Gay."

"She's no lady, she's a trollop."

"Zebbie, you'll regret that. He means I am not a woman, Richard; I'm this car you are about to climb into-and have been in before, but you were wounded and sick so I'm not hurt that you don't remember me-"

"Oh, but I do!"

"You do? That's nice. Anyhow I'm Gay Deceiver, and welcome aboard."

I climbed in and started to crawl through the cargo door back of the seats. Hilda snagged me. "Don't go back there. Your wife is back there with two men. Give the girl a chance."

"And with Lib," Deety added. "Don't tease him. Aunt Sharpie. Sit down, Richard." I sat down between them-a privilege, except that I wanted to see that spacewarped bathroom. If there was one. If it was not a Lethe dream.

Hilda settled against me like a cat and said, "You have received a bad first impression of Lazarus, Richard; I don't want it to stay that way."

I admitted that on a scale of ten he scored a minus three with me. -

"I hope it doesn't stay that way. Deety?" "Day in and day out Lazarus averages closer to a nine,

Richard. You'll see."

"Richard," Hilda went on, "despite what you heard me say,

I don't think badly of Lazarus. I have borne one child by him ... and I go that far only with men I respect. But Lazarus does have his little ways; it is necessary to spank him from time to time. Nevertheless I love him."

"Me, too," agreed Deety. "I have a little girl by Lazarus and that means I love and respect him or it would not have happened. Correct, Zebadiah?"

"How would I know? 'Love, oh careless love!' Boss Lady, are we going somewhere? Gay wants to know."

"Report readiness."

"Starboard door sealed, irrelevant gear ready." "Portside door sealed, seat belts fastened, all systems normal."

'Time Corps Headquarters via Alpha and Beta. At will, Chief Pilot."

"Aye aye. Captain. Gay Deceiver, Checkpoint Alpha. Execute."

"Yassuh, Massuh." The bright sunlight and green lawn beside the Long House bunked away to blackness and stars. We were weightless.

"Checkpoint Alpha, probably," Zeb said. "Gay, do you see THQ?"

"Checkpoint Alpha on the nose," the car answered. 'Time Corps HQ dead ahead. Zeb, you need glasses."

"Checkpoint Beta, execute." The sky blinked again. This time I could spot it. Not a planet but a habitat, perhaps ten klicks away, perhaps a thousand-in space, with a strange object, I had no way to guess.

Zeb said, 'Time Corps Headquarters, ex-Gay Scram!"

A nova bomb burst in front of us.

XXV

Schrodinger's Cat

"God's bones!" the car moaned. "That one burned my tail feathers! Hilda, let's go home. Please!" The nova bomb was now a long way off but it still burned with intense white light, looking like Sol from out around Pluto.

"Captain?" Zeb inquired.

"Affirmative," Hilda answered calmly. But she was clinging to me and trembling.

"GayMaureenExecute!" We were back on the grounds of the Romanesque mansion of Lazarus Long and his tribe.

"Chief Pilot, please beep Oz annex and tell them to disembark; we won't be going anywhere soon. Richard, if you will slide out to the right as soon as Jake is out of your way, that will let our passengers climb out."

I did so as quickly as Dr. Burroughs cleared the way. I heard Lazarus Long's voice rumbling behind me. "Hilda! Why have you ordered us out of the car? Why aren't we at Headquarters?"

His tone reminded me of a drill sergeant I had had as a boot, ten thousand years ago.

"Forgot my knitting, Woodie, had to go back for it."

"Knock it off. Why haven't we started? Why are we disembarking?"

"Watch your blood pressure, Lazarus. Gay just proved that she was not being a Nervous Nellie when she asked me to break our usual trip to THQ into three jumps. Had I used our old routine, we would all glow in the dark."

"My skin itches," Gay said fretfully. "I'll bet I would make a Geiger stick rattle like hail on a tin roof."

"Zebbie will check you later, dear," Hilda said soothingly, then went on to Lazarus: "I don't think Gay was hurt; I think none of us was. Because Zeb had one of his bad-news flashes and bounced us out of there almost ahead of the photons. But I am sorry to report, sir, that Headquarters isn't there anymore. May it rest in peace."

Lazarus persisted, "Hilda, is this one of your jokes?"

"Captain Long, when you talk that way, I expect you to address me as 'Commodore.'"

"Sorry. What happened?"

Zeb said, "Lazarus, let them finish unloading and I'll take you back and show you. Just you and me."

"Yes indeed, just you two," the car put in. "But not me! I won't go! I didn't sign up for combat duty. I won't let you close my doors; that means you can't seal up, and then you can't move me. I'm on strike."

"Mutiny," said Lazarus. "Melt her down for scrap."

The car screamed, then it said excitedly, "Zeb, did you hear that? Did you hear what he said? Hilda, did you hear him? Lazarus, I don't belong to you and never did! Tell him, Hilda! You lay one finger on me and I'll go critical and blow your hand off. And take all of Boondock County with me."

"Mathematically impossible," Long remarked.

"Lazarus," said Hilda, "you shouldn't be so quick to say 'impossible' when speaking of Gay. In any case, don't you mink you've been in the doghouse enough for one day? You get Gay sore at you and she'll tell Dora, who'll tell Teena, who'll tell Minerva, who will tell Ishtar and Maureen and Tamara, and then you'll be lucky to get anything to eat and you won't be allowed to sleep or go anywhere."

"I'm henpecked. Gay, I apologize. If I read you two chapters from Tik-Tok tonight, will you forgive me?"

"Three."

"It's a deal. Please tell Teena to ask mathematicians working on

Operation Galactic Overlord to meet me asap in my quarters in Dora. Please tell all others involved with Overlord that they are advised to come to Dora, eat and sleep aboard. I don't know when we will leave. It could be a week but it could be anytime and there might not be even ten minutes warning. War conditions. Red alert."

"Dora has it; she's relaying. What about Boondock?"

"What do you mean 'What about Boondock?'"

"Do you want the city evacuated?"

"Gay, I didn't know you cared." Lazarus sounded surprised.

"Me? Care what happens to groundcrawlers?" the car snorted. "I'm simply relaying for Ira."

"Oh. For a moment there I thought you were developing human sympathies."

"God forbid!"

"I'm relieved. Your simple self-centered selfishness has been a haven of stability in an ever-shifting world."

"Never mind the compliments; you still owe me three chapters."

"Certainly, Gay; I promised. Please tell Ira that, so far as I know, Boondock is as safe as anywhere in this world... which ain't saying much... whereas, in my opinion, any attempt to evacuate this ant hill would result in great loss of life, still greater loss of property. But it might be worthwhile to risk it just to crank up their lazy metabolisms-Boondock today strikes me as fat, dumb, and careless. Ask him to acknowledge."

"Ira says, 'Up yours.'"

"Roger, and the same to you; wilco, they make a damn fine stew. Colonel Campbell, I'm sorry about this. Would you care to come with me? It might interest you to see how we mount an emergency time manipulation. Hazel, is that okay? Or am I crowding in on your pidgin again?"

"It's all right, Lazarus, as it is no longer my pidgin. It's yours and that of the other Companions."

"You're a hard woman, Sadie."

"What can you expect, Lazarus? Luna is a harsh teacher. I learned my lessons at her knee. May I come along?"

"You're expected; you are still part of Overlord. Are you not?"

We walked about fifty meters across the lawn to where was parked the biggest, fanciest flying saucer any UFO cultist ever claimed to have seen. I learned that this was "Dora," meaning both the ship and the computer that ran the ship. I learned too that the Dora was the Senior's private yacht, that it was Hilda's flagship, and that it was a pirate ship commanded by Lorelei Lee and/or Lapis Lazuli and crewed by Castor and Pollux, who were either their husbands or their slaves or both.

"They're both," Hazel told me later. "And Dora is all three. Laz and Lor won sixty-year indentures from Cas and Pol in a game of red dog shortly after they married them. Laz and Lor are telepathic with each other, and they cheat. My grandsons are smart as whips and as conceited as Harvard grads, and they always try to cheat. I tried to break them of this nasty habit when they were still too young to chase girls, by using a marked deck. Didn't work; they spotted my readers. But their downfall arose from the fact that Laz and Lor are smarter than they are and even more deceitful."

Hazel shook her head ruefully. "It's a wicked world. You would think that a youngster I had trained would be instantly suspicious when dealt three aces and the odd king in a hand of red dog... but Cas was greedy. He not only tapped the pot when he could not cover it, he pledged his indentures to fill the gap.

"Then, not a day later, Pol fell for an even more transparent piece of larceny; he was sure he knew what card was next to be dealt because he recognized a small coffee stain. Turned out that the ten as well as the eight had that same small stain. Pol held the nine but he was not in a strong moral position. Ah, well, it is probably better for the lads to have to do all the scut work in the ship plus shampoos and pedicures for their wives than it would be for the boys to sell Laz and Lor in the slave marts of Iskander, as I misdoubt they would have done had their own thieving efforts succeeded."

The Dora is even bigger inside than out; she has as many staterooms as may be needed. It was once a luxurious but fairly conventional hyperphotonic spaceship. But it (the ship, not

Dora the computer) was refitted with a Burroughs irrelevant drive (the magic means by which Gay Deceiver flits around the stars in nothing flat). A corollary of the Burroughs equations that teleport Gay can be applied to shape space warps. So Dora's passenger and cargo spaces were revamped; this lets Dora keep endless spare compartments collapsed in on themselves until she needs them.

(This is not the same deal under which Gay has tucked away in her portside skin two nineteenth-century bathrooms. Or is it? Well, I don't think it is. Must inquire. Or should I let sleeping logs butter their own bed? Better, maybe.)

A gang port relaxed in the side of the yacht; a ramp slid down, and I followed Lazarus up to the ship with my darling on my arm. As he stepped over the side, music sounded: "It Ain't Necessarily So" from George Gershwin's immortal Porgy and Bess. A long-dead "Sportin' Life" sang about the impossibility of a man as old as Methuselah ever persuading a woman to bed with him.

"Dora!"

A young girl's sweet voice answered, "I'm taking a bath. Call me later."

"Dora, shut off that silly song!"

"I must consult the captain of the day, sir."

"Consult and be damned! But stop that noise."

Another voice replaced the ship's voice: "Captain Lor speaking, Buddy Boy. Do you have a problem?"

"Yes. Shut off that noise!"

"Buddy, if you mean the classical music now playing as a salute to your arrival, I must say that your taste is as barbaric as ever. In any case I am constrained from switching it off because this new protocol was established by Commodore Hilda. I cannot change it without her permission."

"I'm henpecked." Lazarus fumed. "Can't enter my own ship without being insulted. I swear to Allah that, once I've cleaned up Overlord, I'm going to buy a Burroughs Bachelor Buggy, equip it with a Minsky Cerebrator, and go for a long vacation with no women aboard."

"Lazarus, why do you say such dreadful things?" The voice came from behind us; I had no trouble identifying it as Hilda's warm contralto.

Lazarus looked around. "Oh, there you are! Hilda, will you please put a stop to this dadblasted racket?" "Lazarus, you can do it yourself-" "I've tried. They delight in frustrating me. All three of them.

You, too."

"-simply by walking three paces beyond the door. If there is another musical salute that you would prefer, please name it. Dora and I are trying to find just the right tune for each of our family, plus a song of welcome for any guest."

"Ridiculous." "Dora enjoys doing it. So do I. It's a gracious practice, like eating with forks rather than fingers."

"'Fingers were made before forks.'"

"And flatworms before humans. That does not make flatworms better than people. Move along, Woodie, and give Gershwin a rest."

He grunted and did so; the Gershwin stopped. Hazel and I followed him-and again music sounded, a pipe-and-drum band blaring out a march I had not heard since that black day when I lost my foot... and my command... and my honor

"The Campbells Are Coming-"

It startled me almost out of my wits, and gave me the mighty shot of adrenaline that ancient boast before battle always does. I was so overcome that I had to force myself to keep my features straight, while praying that no one would speak to me until I had my voice back under control.

Hazel squeezed my arm but the darling kept quiet; I think she can read my emotions-she always knows my needs. I stomped straight ahead, spine straight, barely steadying myself with my cane, and not seeing the interior of the ship. Then the pipes shut down and I could breathe again.

Behind us was Hilda. I think she had hung back to keep the musical salutes separated. Hers was a light and airy tune 1 could not place; it seemed to be played on silver bells, or possibly a celesta. Hazel told me the name of it: "Jezebel"- but I could not place it.

Lazarus's quarters were so lavish that I wondered how fancy the flag cabin of "Commodore" Hilda might be. Hazel settled down in his lounge as if she belonged there. But I did not stay; a bulkhead blinked, and Lazarus ushered me on through. Beyond lay a boardroom suitable for a systemwide corporation: a giant conference table, each place at it furnished with padded armchair, scratch pad, stylus, froster of water, terminal with printer, screen, keyboard, microphone, and hushfield-and I must add that I saw little of this bountiful junk in use; Dora made it unnecessary, being perfect secretary to all of us while also offering and serving refreshments.

(I could never get over the feeling that there was a live girl named Dora somewhere out of sight. But no mortal girl could have kept all the eggs in the air that Dora did.)

"Sit down anywhere," Lazarus said. "There is no rank here. And don't hesitate to ask questions and offer opinions. If you/ make a fool of yourself, no one will mind and you won't be the first to do so in this room. Have you met Lib?"

"Not formally." It was the other strawberry blonde, the not-Deety one.

"Then do. Dr. Elizabeth Andrew Jackson Libby Long... Colonel Richard Colin Ames Campbell."

"I am honored. Dr. Long."

She kissed me. I had anticipated that, having learned in less than two days here that the only way to avoid friendly kisses was by backing away... but that it was better to relax and enjoy it. And I did. Dr. Elizabeth Long is a pleasant sight and she was not wearing much and she smelled and tasted good ... and she stood close to me three seconds longer than necessary, patted my cheek, and said, "Hazel has good taste. I'm glad she brought you into the family."

I blushed like a yeoman. Everyone ignored it. I think. Lazarus went on, "Lib is my wife and also my partner starting back in the twenty-first century Gregorian. We've had some wild times together. She was a man back then and a retired commander, Terran Military Forces. But then and now, male or female, the greatest mathematician who ever lived."

Elizabeth turned and caressed his arm. "Nonsense, Lazarus. Jake is a greater mathematician than I and a more creative geometer than I could ever hope to be; he can visualize more dimensions and not get lost. I-"

Hilda's Jacob Burroughs had followed us in. "Nonsense, Lib. False modesty makes me sick."

"Then be sick, darling, but not on the rug. Jacob, neither your opinion, nor mine-nor that of Lazarus-is relevant; we arc what we are, each of us-and I understand there is work to be done. Lazarus, what happened?"

"Wait for Deety and the boys, so we don't have to discuss it twice. Where's Jane Libby?"

"Here, Uncle Woodie." Just entering was a naked girl who resembled-Look, I'm going to stop talking about family resemblances, hair red or otherwise, and the presence or absence of clothing. On Tertius, through climate and custom, clothing was optional, usually worn in public, sometimes worn at home. In the Lazarus Long household the males were more likely to wear something than the females but there was no rule that I could ever figure out.

Red hair was common in Tertius, still more common in the Long family-a "prize ram" effect (as stockmen say) from Lazarus... but not alone from Lazarus; there were two other sources in that family, unrelated to Lazarus and unrelated to each other: Elizabeth Andrew Jackson Libby Long and Dejah Thoris (Deety) Burroughs Carter Long-and still another source that I was not then aware of.

People who favor the Gilgamesh theory have noted how redheads tend to clump, e.g., Rome, Lebanon, south Ireland, Scotland... and, even more markedly, in history, from Jesus to Jefferson, from Barbarossa to Henry Eighth.

The sources of resemblances in the Long family were hard to sort out, other than with the help of Dr. Ishtar, the family geneticist-Ishtar herself looked not at all like her daughter Lapis Lazuli... not surprising once you learned that she was no genetic relation to her own daughter... whose genetic mother was Maureen.

Some of the above I learned later; all of it I mention now in order to dismiss it.

That panel of mathematicians consisted of Libby Long, Jake Burroughs, Jane Libby Burroughs Long, Deety Burroughs Carter Long, Minerva Long Weatheral Long, Pythagoras Libby Carter Long and Archimedes Carter Libby Long-Pete and Archie-one bome by Deety and the other birthed by Libby and these two women sole parents to both young men-Deety being the genetic mother of each and Elizabeth the genetic father... and I refuse to sort that one out at this point; let it be an exercise for the student. I would rather offer you one more; Maxwell Burroughs-Burroughs Long-then conclude by saying that all these weird combinations were supervised by the family geneticist for maximum reinforcement of mathematical genius and no reinforcement of harmful recessives.

Watching these geniuses at work had some of the soporific excitement of watching a chess match but not quite. Lazarus first had Gay Deceiver testify, bringing her voice through Dora's circuits. They listened to Gay, examined her projected tapes, light and sound, called in Zebadiah, took his testimony, called Hilda in, asked for her best estimate of Zebadiah's anticipation of the bomb.

Hilda said, "Somewhere between a shake and a blink. You all know I can't do better than that."

Dr. Jake declined to express an opinion. "I did not watch. As usual I was backing up the spoken orders by setting the vernier controls. The penultimate order, being a scram, aborted the run and then we went home. I did not set the verniers, so nothing more appears on my tapes. Sorry."

Deety's testimony was almost as skimpy. "The scram order preceded the explosion by an interval of the order of one millisecond." On being pressed she refused to say that it was "of the close order." Burroughs persisted about it and mentioned her "builtin clock." Deety stuck out her tongue at him.

The young man (an adolescent, really) called Pete said, "I vote 'insufficient data.' We need to place a rosette of sneakies around the site and find out what happened before we can decide how close to the tick we can set the rescue."

Jane Libby asked, "After the scram, was the nova bomb already visible from the new point of sight, or did it appear after Gay's translation? Either way, how does that fit the timing at Checkpoint Beta? Query: Is it experimentally established that irrelevant transportation is instantaneous, totally nil in transit time... or is it an assumption based on incomplete evidence and empirical success?"

Deety said, "Jay Ell, what are you getting at, dear?" I was bracketed by these two; they talked across me, obviously did not expect opinions from me-although I had been a witness.

"We are trying to establish the optimum tick for evacuating THQ, are we not?"

"Are we? Why not pre-enact evacuation, time it, then start the evacuation at minus H-hours plus thirty minutes? That gets everyone back here with gobs of time to spare."

"Deety, you thereby set up a paradox that leaves you with your head jammed up your arse," Burroughs commented. "Pop! That's rude, crude, and vulgar." "But correct, my darling stupid daughter. Now think your way out of the trap."

"Easy. I was speaking just of the danger end, not the safe end. We finish the rescue with thirty minutes to spare, then move to any empty space in any convenient universe-say that orbit around Mars we have used so often-then turn around and reenter this universe at a here-now tick one minute after we leave for the rescue."

"Clumsy but effective."

"I like simple programming, I do."

"So do I. But doesn't anyone see anything wrong with taking whatever length of time we need?"

"Hell, yes!"

"Well, Archie?"

"Because it's booby-trapped, probability point nine nine seven plus. How it is booby-trapped, depends. Who's our antagonist? The Beast? The Galactic Overlord? Boskone? Or is it direct action by another history-changing group, treaty or no treaty? Or-don't laugh-are we up against an Author this time? Our timing must depend on our tactics, and our tactics must fit our antagonist. So we must wait until those big brains next door tell us whom we are fighting."

"No," said Libby Long.

"What's wrong. Mama?" the lad asked.

"We will set up all the possible combinations, dear, and solve them simultaneously, then plug the appropriate numerical answer into the scenario the fabulists give us."

"No, Lib, you would still be betting a couple hundred lives that the big brains are right," Lazarus objected. "They may not be. We'll stay right here and find a safe answer if it takes ten years. Ladies and gentlemen, these are our colleagues we are talking about. They are not expendable. Damn it, find that right answer!"

I sat there feeling silly, slowly getting it through my head mat they were seriously discussing how to rescue all the people-and records and instruments-in a habitat I had seen vaporized an hour ago. And that they could just as easily rescue the habitat itself-move it out of that space before it was bombed. I heard them discuss how to do that, how to time it. But they rejected that solution. That habitat must have cost countless billions of crowns... yet they rejected saving it. No, no! The antagonist, be he the Beast of the Apocalypse, or Galactic Overlord (I choked!), or whatever-he must be allowed to think that he had succeeded; he must not suspect that the nest was empty, the bird flown.

I felt a remembered sensation in my left leg: Lord Pixel was again challenging the vertical front face. Furthermore he was driving in a fresh set of pitons, so I reached down and set him on the table. "Pixel, how did you get here?"

"Blert!"

"You certainly did. Out into the garden, through the garden, through the west wing-or did you go around?-across the lawn, up into a sealed spaceship-or was the ramp down? As may be, how did you find me?"

"Blert."

"He's Schrodinger's cat," Jane Libby said.

"Then Schrodinger had better come get him, before he gets himself lost. Or hurt."

"No, no. Pixel doesn't belong to Schrodinger; Pixel hasn't selected his human yet-unless he has picked you?"

"No. I don't think so. Well, maybe."

"I think he has. I saw him climb into your lap this noon. And now he has come a long way to find you. I think you've been tapped. Are you cat people?"

"Oh, yes! If Hazel lets me keep him."

"She will; she's cat people."

"I hope so." Pixel was sitting up on my scratch pad, washing his face, and doing a commendable job in scrubbing back of his ears. "Pixel, am I your people?"

He stopped washing long enough to say emphatically, "Blert!"

"All right, it's a deal. Recruit pay and allowances. Medical benefits. Every second Wednesday afternoon off, subject to good behavior. Jane Libby, what's this about Schrodinger? How did he get in here? Tell him Pixel is bespoke."

"Schrodinger isn't here; he's been dead for a double dozen centuries. He was one of that group of ancient German natural philosophers who were so brilliantly wrong about everything they studied-Schrodinger and Einstein and Heisenberg and-Or were these philosophers in your universe? I know they were not in all parts of the omniverse, but parallel history is not my strong point." She smiled apologetically. "I guess number theory is the only thing I'm really good at. But I'm a fair cook."

"How are your back rubs?"

"I'm the best back rubber in Boondock!"

"You're wasting your time. Jay Ell," Deety put in. "Hazel still walks him on a leash."

"But, Aunt Deety, I wasn't trying to bed him."

"You weren't? Then quit wasting his time. Back away and let me at him. Richard, are you susceptible to married women? We're all married."

"Uh-Fifth Amendment!"

"I understood you but they've never heard of it in Boondock. These German mathematicians-Not in your world?"

"Let's see if we're speaking of the same ones. Erwin Schrodinger, Albert Einstein, Wemer Heisenberg-"

"That's the crowd. They were fond of what they called 'thought experiments'-as if anything could be learned that way. Theologians! Jane Libby was about to tell you about 'Schrodinger's Cat,' a thought experiment that was supposed to say something about reality. Jay EU?"

"It was a silly business, sir. Shut a cat in a box. Control whether or not he is killed by decay of an isotope with a half life of one hour. At the end of the hour, is the cat alive or dead? Schrodinger contended that, because of the statistical probabilities in what they thought of as science in those days, the cat was neither alive nor dead until somebody opened the box; it existed instead as a cloud of probabilities." Jane Libby shrugged, producing amazing dynamic curves.

"Blert?"

"Did anyone think to ask the cat?"

"Blasphemy," said Deety. "Richard, this is 'Science,' German philosopher style. You are not supposed to resort to anything so crass. Anyhow Pixel got the tag 'Schrodinger's Cat' hung on him because he walks through walls."

"How does he do that?"

Jane Libby answered, "It's impossible but he's so young he doesn't know it's impossible, so he does it anyhow. So there is never any knowing where he will show up. I think he was hunting for you. Dora?"

"Need something. Jay EU?" the ship answered.

"Did you happen to notice how this kitten came aboard?"

"I notice everything. He didn't bother with the gangway; he came right through my skin. It tickled. Is he hungry?" "Probably."

"I'll fix him something. Is he old enough for solid food?" "Yes. But no lumps. Baby food." "Chop chop."

"Ladies," I said. "Jane Libby used the words 'brilliantly wrong' about these German physicists. Surely you don't include Albert Einstein under that heading?" "I surely do!" Deety answered emphatically. "I'm amazed. In my world Einstein wears a halo." "In my world they bum him in effigy. Albert Einstein was a pacifist but not an honest one. When his own ox was gored, he forgot all about his pacifist principles and used his political influence to start the project that produced the first city-killer bomb. His theoretical work was never much and most of it has turned out to be fallacious. But he will live in infamy as the pacifist politician turned killer. I despise him!"

XXVI

"Success lies in achieving the top of the food chain."

About then the baby food for Pixel appeared, in a saucer that rose up out of the table, I believe. But I can't swear to it, as it simply appeared. Feeding the baby cat gave me a moment to think. The vehemence of Deety's statement had surprised me. Those German physicists lived and worked in the first half of the twentieth century-not too long ago by my notions of history, but if what these Tertians wanted me to believe were true-unlikely!-a truly long time to them. "A double dozen

centuries-" Jane Libby had said.

How could this easygoing young lady. Dr. Deety, be so

emotional about long-dead German pundits? I know of only one event two thousand years or more in the past that people get emotional about... and that one never happened.

I had begun to make a list in my mind of things that did not add up-the claimed age of Lazarus-that long list of deadly diseases I was alleged to have suffered from-half a dozen weird events in Luna-Most especially Tertius itself. Was this indeed a strange planet far distant from Earth in both space and time? Or was it a Potemkin village on a South Pacific island? Or even Southern California? I had not seen the city called Boondock (one million people, more or less, so they said); I had seen maybe fifty people all told. Did the others exist only as memorized background for dialog extemporized to fit Potemkin roles?

(Watch it, Richard! You're getting paranoid again.) How much Lethe does it take to addle the brain?

"Deety, you seem to feel strongly about Dr. Einstein."

"I have reason to!"

"But he lived so long ago. 'A double dozen centuries' Jane Libby put it."

"That long ago to her. Not to me!"

Dr. Burroughs spoke up. "Colonel Campbell, I think you may be assuming that we are native Tertians. We are not. We are refugees from the twentieth century, just as you are. By 'we' I mean myself and Hilda and Zebadiah and my daughter-my daughter Deety, not my daughter Jane Libby. Jay Ell was born here."

"You slid home. Pop," Deety told him.

"But just barely," Jane Libby added.

"But he did touch home plate. You can't disown him for that, dear."

"I don't want to. As pops go, he's tolerable."

I did not try to sort this out; I was gathering a conviction that all Tertians were certifiably insane by Iowa standards. "Dr. Burroughs, I am not from the twentieth century. I was born in Iowa in 2133."

'•Near enough, at this distance. Different time lines, I believe-divergent universes-but you and I speak much the same accent, dialect, and vocabulary; the cusp that placed you in one world and me in another must lie not far back in our pasts. Who reached the Moon first and what year?"

"Neil Armstrong, 1969."

"Oh, that world. You've had your troubles. But so have we. For us the first Lunar landing was in 1952, HMAAFS Pink Koala, Ballox O'Malley commanding." Dr. Burroughs looked up and around. "Yes, LAzarus? Something troubling you? Fleas? Hives?"

"If you and your daughters do not want to work, I suggest that you go chat elsewhere. Next door, perhaps; the fabulists and the historians don't mind chasing rabbits. Colonel Campbell, I think that you will find it convenient to feed your cat elsewhere, too. I suggest the 'fresher just clockwise of my lounge."

Deety said, "Oh, rats, Lazarus! You are a bad-tempered, grumpy old man. There is no way to disturb a mathematician who is working. Look at Lib there-You could set off a firecracker under her right now and she wouldn't blink." Deety stood up. "Woodie boy, you need a fresh rejuvenation; you're getting old-age cranky. Come on. Jay Ell."

Dr. Burroughs stood up, bowed, and said, "If you will excuse me?" and left without looking at Lazarus. There was a feeling of edgy tempers, of a need to place distance between two old bulls before they tangled.

Or three-I should be included. Chucking me out over the kitten was uncalled for; I found myself angry with Lazarus for a third time in one day. I had not brought the kitten in, and it was his own computer that had suggested feeding it there and had supplied the means.

I stood up, gathered Pixel in one hand, picked up his dish with my other hand, then found I needed to hang my cane over one arm to move. Jane Libby saw my problem, took the kitten, and cuddled it to her. I followed her, leaning on my cane and carrying the dish of baby food. I avoided looking at Lazarus.

In passing through the lounge we picked up Hazel and Hilda. Hazel waved to me, patted the seat by her; I shook my head and kept going, whereupon she got up and came with us. Hilda followed her. We did not disturb the session in the lounge. Dr. Harshaw was lecturing; we were barely noticed.

One delightful, decadent. Sybaritic aspect of life in Tertius was the quality of their refreshers-if such a mundane term can apply. Without trying to describe any of the furnishings strange to me, let me define a rich Tertian's luxury refresher (and Lazarus was, I feel certain, the richest man there)-define it in terms of function: Start with your favorite pub or saloon.

Add a Finnish sauna.

And how about bathing Japanese style?

Do you enjoy a hot tub? With or without an agitator?

Was the ice-cream soda fountain a part of your youth?

Do you like company when you bathe?

Let's put a well-stocked snack bar (hot or cold) in easy reach.

Do you enjoy music? Three-dee? Feelies? Books and magazines and tapes?

Exercise? Massage? Sun lamps? Scented breezes?

Soft, warm places to curl up and nap, alone or in company?

Take all of the above, mix well, and install in a large, beautiful, well-lighted room. That list still does not describe the social refresher off Lazarus Long's cabin, as it omits the most important feature: Dora.

If there was any whim that ship's computer could not satisfy, I was not there long enough to discover it.

I did not sample at once any of these luxuries; I had a duty to a cat. I sat down at a medium-size round table, the sort four friends might use for a drink, placed the kitten's saucer thereon, reached for the kitten. Instead Jane Ell sat down and placed Pixel at the food. Burroughs joined us.

The kitten sniffed at the food he had been greedily eating minutes earlier, then gave an inspired bit of acting showing Jane Ell that he was horrified at her action in offering him something unfit for cats. Jane Ell said, "Dora, I think he's thirsty."

"Name it. But bear in mind that the management does not permit me to serve alcoholic beverages to minors other than for purposes of seduction."

"Quit showing off, Dora; Colonel Campbell might believe you. Let's offer the baby both water and whole milk, separately. And at blood temperature, which for kittens is-"

"Thirty-eight point eight degrees. Coming up pronto."

Hilda called out from a plunge-no, a lounging tub, I guess-a few meters away, "Jay Ell! Come soak, dear. Deety has some swell gossip."

"Uh-" The girl seemed torn. "Colonel Campbell, will you take care of Pixel now? He likes to lick it off your finger. It's the only way to get him to drink enough."

"I'll do it your way." The kitten did like to drink that way ... although it seemed possible that I would die of old age before I got as much as ten milliliters down him. But the kitten was in no hurry. Hazel got out of the lounging tub and joined us, dripping. I kissed her cautiously and said, "You're getting that chair soaking wet." "Won't hurt the chair. What's this about Lazarus acting up again?"

"That mother!" "In his case that's merely descriptive. What happened?"

"Uh-Maybe I reacted too strongly. Better ask Dr. Burroughs."

"Jacob?" "No, Richard did not overreact. Lazarus went out of his way to be offensively difficult with all four of us. In the first place, Lazarus has no business trying to supervise the mathematics section; he is not a mathematician in any professional sense and is not qualified to supervise. In the second place each of us in the section knows the quirks of the others; we never interfere with each other's work. But Lazarus kicked me out, and Deety, and Jane Libby, for daring to talk a few moments about something not on his agenda... totally unaware, or at least uncaring, that I and both my daughters use a two-level mode of meditation. Hazel, I kept my temper. Truly I did, dear. You would have been proud of me."

"I'm always proud of you, Jacob. I would not have kept my temper. In dealing with Lazarus you should take a tip from Sir Winston Churchill and step on his toes until he apologizes. Lazarus doesn't appreciate good manners. But what did he do to Richard?"

"Told him not to feed his cat at the conference table. Ridiculous! As if it could possibly harm his fancy table if this kitten happened to pee on it."

Hazel shook her head and looked grim, which doesn't fit her face. "Lazarus has always been a rough cob but, ever since this campaign-Overlord, I mean-started, he has been growing increasingly difficult. Jacob, has your section been handing him gloomy predictions?"

"Some. But the real difficulty is that our long-range projections are so vague. That can be maddening, I know, because when a city is destroyed, the tragedy is not vague; it's sharp and sickening. If we change history, we aren't truly unde-stroying that city, we are simply starting a new time line. We need projections that will let us change history before that city is destroyed." He looked at me. "That's why rescuing Adam Selene is so important."

I looked stupid-my best role. 'To make Lazarus better tempered?"

"Indirectly, yes. We need a supervising computer that can direct and program and monitor other large computers in creating multi verse projections. The biggest supervising computer we know of is the one on this planet, Athene or Teena, and her twin on Secundus. But this sort of projection is a much bigger job. Public functions on Tertius are mostly automated fail-safe and Teena steps in only as a troubleshooter. But the Holmes IV-Adam Selene or Mike-through a set of odd circumstances, grew and grew and grew with apparently no one trying to keep his size down to optimum... then his selfprogramming increased enormously through a unique challenge: running the Lunar Revolution. Colonel, I don't think any human brain or brains could possibly have written the programs that Holmes IV selfprogrammed to let him handle all the details of that revolution. My older daughter, Deety, is a top specialist in programming; she says a human brain could not do it and that, in her opinion, an artificial intelligence could swing it only the way Holmes IV did it-by being faced with the necessity, a case of 'Root, Hog, or Die.' So we need Adam Selene-or his essence, those programs he wrote in creating himself. Because we don't know how to do it."

Hazel glanced at the pool. "I'll bet Deety could do it. If she had to."

"Thank you, dear, on behalf of my daughter. But she is not given to false modesty. If Deety could do it, or thought she had even a slim chance, she would be hacking away at it now. As it is, she's doing what she can; she is working hard at tying together the computer bank we have."

"Jacob, I hate to say this-" Hazel hesitated. "Maybe I shouldn't."

"Then don't." "I need to get it off my chest. Papa Mannie isn't optimistic over the results even if we are totally successful in retrieving all the memory banks and programs that constitute the essential Adam Selene-or 'Mike' as Papa Mannie calls him. He thinks his old friend was hurt so badly in the last attackI remember it to this day; it was dreadful-Mike was hurt so badly that he withdrew into a computer catatonia and will never wake up. For years Papa tried to wake him, after the Revolution when Papa had free access to the Warden's Complex. He doesn't see how bringing those memories and programs here will do it. Oh, he wants to try, he's eager to, he loves Mike. But he's not hopeful."

"When you see Manuel, tell him to cheer up; Deety has thought of an answer." "Really? Oh, I hope so!" "Deety is going to provide Teena with lots more unused capacity, both for memory and for symbol manipulation, thought-and then she'll shove Mike into bed with Teena. If that does not bring Mike back to life, nothing will."

My love looked startled, then giggled. "Yes, that ought to do it."

She then went back to the pool and I learned from Jacob Burroughs why his daughter Deety spoke so emotionally about the Father of the Atom Bomb: She had seen-they had seen, all four of them, their own home wiped out by an atom bomb-a fission bomb, I inferred, but Jake did not say.

"Colonel, it is one thing to read a headline or hear a news report; it is something else entirely when it's your own home that has the mushroom cloud covering it.

"We are dispossessed, we can never go home. Eventually we were wiped completely off the slate. In our time line there is nothing to show that we four-myself, Hilda, Deety, Zeb-ever existed. The houses we once lived in are gone, never were; the earth has closed over them with no scars." He looked as lonely as Odysseus, then went on: "LAzarus sent a Time Corps field operative back-Dora? May I speak to Elizabeth?"

"Start talking." "Lib love? Place that rosette Pete wanted-or was it

Archie? Spike the earliest date of surveillance. Go back three years. Evacuate."

"Paradox, Jacob."

"Yes. Place those three years in a loop, squeeze them off, throw them away. Check it."

"I check you, dear. More?"

"No. Off now."

Burroughs continued, "-sent a field operative to our time line to try to find us, anywhere in the fifty-year bracket from my birth to the night we ran for our lives. We are not there at all. We were never born. Both Zeb and I had military careers as well as academic ones; we are not in military records, we are not in campus records. There is a record of my parents... but they never had me. Colonel, in all the dozens, hundreds, of ways that citizens were recorded in the twentieth century in the United States of North America not one trace could be found that showed that we had ever been there."

Burroughs sighed. "The Gay Deceiver not only saved our lives that night; she saved our very existence. She took evasive action so fast that the Beast lost track-What is it, dear?"

Jane Libby was standing by us, dripping, and looking round-eyed. "Papa?"

"Say it, love."

"We need those sneakies Pythagoras wanted but they should go back much farther, oh, ten years or more. Then, when they spot the tick at which the Overlord or whoever started watching THQ, back off some and evacuate. Loop and patch, and they'll never suspect that we outflanked them. I told Deety; she thinks it could work. What do you think?"

"I think it will. Let me get your mother on line and we'll introduce it. Dora, let me have Elizabeth again, please." Nothing in his face or manner suggested that he had just spoken to Libby Long, proposing what was (so far as I could see) the same plan.

"Elizabeth? A message from our table tennis champ. Jane Libby says to place that rosette at minus ten years, spike first surveillance, then go back-oh, say, three years-evacuate, squeeze off a loop and patch in. Both Deety and I think it will work. Please submit it to the panel, credited to Jane Ell, with Deety's vote and mine noted."

"And my vote."

"You have smart children, mistress mine."

"Comes of picking smart fathers, sir. And good ones. Good to his offspring, good to his wives. Off?"

"Off." Burroughs added, to the girl waiting, "Your parents are proud of you, Janie. I predict that the maths section will produce a unanimous report in the next few minutes. You have answered the objection Lazarus raised-his quite legitimate objection-by producing a solution under which it does not matter who did this to us; we can repair it safely without knowing who did it. But did you notice that your method may also tie down who did it? With a little bit of luck."

Jane Libby looked as if she had just received a Nobel Prize. "I noticed. But the problem simply called for safe evacuation; the rest is serendipitous."

"'Serendipitous' is another way of spelling 'smart.' Ready for some supper? Or do you want to get back in the bowl? Or both? Why don't you throw Colonel Campbell in with his clothes on? Deety and Hilda will help you, I'm certain, and I think Hazel might."

"Now wait a minute!" I protested.

"Sissy!" "Colonel, we won't do that to you! Pop is joking."

"I am like hell joking." "Throw your pop in first, for drill. If it doesn't hurt him, then I'll submit quietly." "Blert!" "You just keep out of this!"

"Janie baby."

"Yes, Pop?" "Find out how many orders there are for strawberry malted milks and hot dogs, or unreasonable facsimiles. While you are doing that, I will hang my clothes in the dry cabinet-and if the colonel is smart, he will, too; Colonel, this is a rowdy bunch, especially in this exact combination-Hilda, Deety, Hazel, and Janie. Explosive. Who takes care of the kitten?" An hour later Dora (a little blue light) led us to our stateroom;

Hazel carried the kitten and one saucer, I carried our clothes, the other saucer, my cane, and her handbag. I was pleasantly tired and looking forward to going to bed with my bride. For too long she had not been in my bed. From my viewpoint we had missed two nights... not long for old married couples, much too long for a honeymoon. And the moral of that is:

Don't get yourself mugged on your honeymoon.

From her standpoint it had been... a month? "Best of girls, how long has it been? That Lethe field has left me with my time sense fouled up."

Hazel hesitated. "It has been thirty-seven Tertian days here. But to you it should feel like overnight. Well, two nights... because, by the time I came to bed last night, you were snoring. I'm sorry. Hate me some but not too much. Here's our wee bunty ben."

("Wee bunty ben" indeed! It was larger than my luxury suite in Golden Rule and more lavish... with a bigger and better bed.) "Bride, we bathed in Lazarus's Taj Mahal playroom. I no longer have to remove my cork leg and I took care of everything else in that Taj Mahal. If you have anything to do, do it. But be quick about it! I'm eager."

"Nothing. But must take care of Pixel."

"We'll put his saucers in the 'fresher, shut him in, let him out later."

So we did, and went to bed, and it was wonderful, and the details are none of your business.

Sometime later Hazel said, "We've been joined."

"We still are."

"I mean, 'We have company.'"

"So I noticed. He climbed on my shoulder blades way back when, but I was busy and he weighs almost nothing, so I didn't mention it. Can you grab him and keep him from being rolled on and crushed while I get us untangled?"

"Yes. No hurry about it. Richard, you're a good boy. Pixel and I have decided to keep you."

"Just try to get rid of me! You can't. Love, you phrased something oddly. You said it was 'thirty-seven Tertian days here.'"

She looked up at me soberly. "It was longer than that for me, Richard."

"I wondered. How long?"

"About two years. Earth years."

"I be goddam!"

"But, dear, while you were ill, I did come home every day. Thirty-seven times I came to your hospital room in the morning, exactly as I promised. You recognized me every time, too, and smiled and seemed happy to see me. But of course the Lethe field made you forget every moment even as it happened. Each evening I went away again, and came back later that evening, having been gone, on the average, about three weeks each time. The schedule wasn't difficult for me, but Gay Deceiver made two trips every evening, with either the double twins or Hilda's crew making the runs. Let me up now, dear; I have the Pixel cat safe."

We rearranged ourselves comfortably. "What were you doing, gone so much?"

"Time Corps field work. Historical research." "I guess I still don't understand what the Time Corps does. Couldn't you have waited a month, then both of us could have done it, together? Or do I have my head on backwards?"

"Yes and no. I asked for the assignment. Richard, I've been trying to trace down what happens after you and 1 tackle rescuing Adam Selene. Mike the computer."

"And what did you learn?" "Nothing. Not a damn thing. We can find only two time lines from that event-it's a cusp event; you and I created both futures. I searched the following four centuries on both lines-on Luna, down dirtside, several colonies and habitats. They all say either that we succeeded... or that we tried and died ... or they don't mention us at all. The last is the usual case; most historians don't believe that Adam Selene was a computer."

"Well... we're no worse off than we were before. Are we?"

"No. But I had to look. And I wanted to check it out before you woke up. Out from under the Lethe field, I mean."

"Do you know, small person, I think well of you. You are considerate of your husband. And of cats. And of other people.

Uh-No, none of my business." "Speak up, beloved, or I tickle."

"Don't threaten me. I'll beat you." "At your own risk-I bite. Look, Richard, I've been waiting for the question. This is the first time we've been alone. You want to know how homy old Hazel stuck it out in faithful chastity for two aching years. Or rather, you don't believe she did but you are too polite to say so."

"Why, damn your eyes! Look, my love, I'm a Loonie, with Loonie values. Love and sex are ruled by our ladies; we men accept their decisions. That's the only happy arrangement. If you want to boast a bit, go ahead. If not, let's change the subject. But don't accuse me of groundhog vices."

"Richard, you are your most infuriating when you are being your most reasonable."

"Do you want me to quiz you?"

"It would be polite."

"Tell me three times."

"'I tell you three times and what I tell you three times is true.'"

"You peeked in the back of the book. All right, I'll cut to the chase. You are a member of the Long Family. No?"

She caught her breath. "What caused you to say that?"

"I don't know. I truly don't because it's been many little things no one of which meant anything and mostly did not stick in my mind. But sometime this evening, while talking with Jake, I found that I was taking it for granted. Am I mistaken?"

She sighed. "No, you're right. But I did not intend to load it onto you just yet. You see, I'm on leave of absence from the Family, not a member of it right now. And that was not what I intended to confess."

"Wait a second. Jake is one of your husbands."

"Yes. But remember, I'm on leave."

"For how long?"

"Till death do us part! I promised you that in the Golden Rule. Richard, histories show that you and I were married at the time of the cusp event... so I asked the Family for a divorce ... and settled for a leave of absence. But it might as well be final-they know it, I know it. Richard, I was here every night, every Tertian night I mean-thirty-seven times... but I never slept with the Family. I-Usually I slept with Xia and Choy-Mu. They were good to me." She added, "But not once with a Long. Not any of them, male or female. I was faithful to you, in my own fashion."

"I don't see why you needed to deprive yourself. Then you are one of Lazarus Long's wives, too. On leave, but his wife.

That omery old curmudgeon! Hey! Is it possible that he is jealous of me? Hell, yes, it's not only possible but likely. Certain! He's not a Loonie; he is not conditioned to accept 'Lady's Choice.' And he comes from a culture in which jealousy was the commonest mental disorder. Of course! Why, the silly bastich!" "No, Richard." "In a pig's eye." "Richard, Lazarus got all the jealousy leached out of him many generations ago... and I've been married to him thirteen years with plenty of chance to judge. No, dear, he's worried. He's worried about me and he's worried about you-he knows how dangerous it is-he's worried about all the Family and all of Tertius. Because he knows how dangerous the multiverse is. He's devoting his life and all of his wealth to trying to make his people safe."

"Well... I wish he could be a little more urbane about it.

Mannerly. Polite."

"So do I. Here, take the kitten; I gotta pee. Then I vote for some sleep."

"Me, too. Both. My, it feels good to get out of bed and stroll to the jakes without having to hop."

We had cuddled up together, lights out, her head on my shoulder and the kitten wandering around the bed somewhere, both of us about to sleep, when she murmured, "Richard.

Forgot... Ezra-"

"Forgot what?" "His legs. When... he first walked on them... with crutches.

Three days ago I think... 'bout three months back for me. Xia 'n' I congratulated Ezra... horizontally."

"The best way."

"Took him to bed. Wore him out."

"Good girls. What else is new?"

She seemed to have dropped off to sleep. Then she barely muttered. "Wyoming."

"What, dear?" "Wyoh, my daughter. Little girl playing in fountain... you

'member?"

"Yes, yes! Yours? Oh, grand!"

"Meet'r... 'n morning. Named for... Mama Wyoh. Lazarus-"

"She's a daughter of Lazarus?"

"Guess so. Ishtar says. Cer'nly had lots... opportunity."

I tried to picture the child's face. A pixie, with bright red hair. "Looks more like you."

Hazel did not answer. Her breathing was slow and even.

I felt paws on my chest, then a tickle on my chin. "Blert?"

"Quiet, baby; Mama's sleeping."

The kitten settled down, went to sleep himself. So I finished the day as I had begun it, with a baby cat asleep on my chest.

It had been a busy day.

XXVII

"It's a poor sort of memory that only works backwards."

CHARLES LUTWIDGE DODGSON 1832-1898

"Gwendolyn my love." Hazel stopped with a teethclean in hand, looked startled.

"Yes, Richard?"

"This is our first anniversary. We must celebrate." "I'm quite willing to celebrate but I can't figure out your arithmetic. And celebrate how? A fancy breakfast? Or back to bed?"

"Both. Plus a special treat. But eat first. As for my arithmetic, attend me. It is our anniversary because we have been married exactly a week. Yes, I am aware that you think of it as two years-"

"I do not! Doesn't count. Like time spent in Brooklyn." "And you tell me that I have been here thirty-seven, thirty-eight, thirty-nine days, more or less. But it is not thirty-nine days to me, Gwen Hazel, as Allah will not subtract from my allotted time those days spent in the Lethe field, so I don't count them. Hell, I wouldn't believe in them if it weren't that I now have two feet-"

"You're complaining?"

"Oh, no! Except that I now have to cut twice as many toenails-"

"Blert!"

"What do you know about it? You don't have toenails; you have claws. And you scratched me in the night, you did. Yes, you did-don't look innocent. Monday evening the thirtieth of June-of 2188, it was, though I'm not sure what year it is here-we went to see the Halifax Ballet Theater with Luanna Pauline as Titania."

"Yes. Isn't she lovely?"

"Wasn't she! Past tense, dear. If what I've been told is true, her ethereal beauty has been dust for more than two thousand years. Rest in peace. Then we went to Rainbow's End for a late supper and a total stranger had the bad taste to get himself abruptly dead at our table. Whereupon you raped me."

"Not at the table!"

"No, in my bachelor's apartment."

"And it wasn't rape."

"We need not fight over it since you repaired my tarnished reputation before noon the next day. Our wedding day, my true love. Mistress Gwendolyn Novak and Dr. Richard Ames announced their marriage on Tuesday the first of July, 2188. Keep track of that date."

"I'm not likely to forget it!"

"Me, too. That evening we got out of town fast, with the sheriff's hounds a-snappin' and a-yappin' at our heels. We slept that night in Dry Bones Pressure. Right?"

"Right so far."

"The next day, Wednesday the second, Gretchen drove us to Lucky Dragon Pressure. We slept that night in Dr. Chan's place. The following day, Thursday the third. Auntie drove us toward Hong Kong Luna, but not all the way because we encountered those eager agrarian reformers. You drove the rest of the way and we wound up at Xia's hotel so late at night that it was hardly worthwhile to go to bed. But we did. That puts us into Friday the fourth of July. Independence Day. Check?"

"Check."

"We were roused out-I was roused out; you were already up-I was roused out too soon late Friday morning.., and learned that City Hall did not like me. But you and Auntie sprung me-sprang me?-sprung me ... and we left for Luna City so fast I left my toupee hanging in the air."

"You don't wear a toupee." "Not anymore, I don't; it's still hanging there. We arrived L-City circa sixteen hundred that same Friday. You and I had a difference of opinion-"

"Richard! Please don't dig up my past sins." "-which was soon cleared up as I saw the error of my ways and craved pardon. We slept that night at the Raffles; it was still Friday the fourth of July when we went to bed. We had started that day many klicks west of there, with freedom fighters getting gay with guns. Still with me?"

"Yes. Somehow in my memory it feels much longer." "A honeymoon is never long enough and we're having a busy one. The next morning, Saturday the fifth, we retained Ezra, then we went to the Warden's Complex... came back and were waylaid at the entrance to the Raffles. So we left the Raffles hurriedly, in a cloud of corpses, escaping by courtesy of Gay Deceiver and the Time Corps. Most briefly we were in the land of my innocent youth, Ioway where the tall corn grows. Then we blinked to Tertius. Beloved, at this point my groundhog calendar becomes useless. We left Luna Saturday evening the fifth; we arrived here in Tertius a few minutes later, so for our purposes I designate the Tertian day of our arrival as equivalent to Saturday, five July, 2188, and I so name it. Never mind what Tertian citizens call it; it would only confuse me. Still with me?" "Well... all right." "Thank you. I woke up the next morning-Sunday July sixth-with two feet. For Tertius the lapse of time was, I concede, thirty-seven days. You tell me that for you it was about two years, a most unlikely story-I'd rather believe in unicorns and virgins. For Gretchen it was five or six years, which I am forced to stipulate because she is now eighteen or nineteen and knocked up; I have to believe it. But for me it was just over one night, Saturday to Sunday.

"That 'Sunday' night I slept with Xia, Gretchen, Minerva, Galahad, Pixel, and possibly Tom, Dick, and Harry and their sheilas Agnes, Mabel, and Becky."

"Who are they? The girls, I mean; I know those boys. Too well."

"You poor, sweet, innocent child; you are too young to know. Surprisingly I slept well. Which brings us to yesterday, designated by strict numbering as Monday July seventh. Last night we spent catching up on our honeymoon... and thank you bolshoyeh, mistress mine."

"You are welcome, sirrah. But the pleasure was shared. I now see how you arrived at that date. Both by dirtside calendar and your biological clock-the basic clock, as every timejump-er knows-today is Tuesday the eighth of July. Happy Anniversary, darling!"

We stopped to swap some spit and Hazel cried and my eyes got watery.

Breakfast was swell. That's all the description I can give it because Gwen Hazel decided to treat me to Tertian cooking and consulted with Dora under a hushfield, and I et what was sot before me, as the Iowa farmer had carved on his tombstone. And so did Pixel, who had some specials that looked like garbage to me but tasted like ambrosia to him, as proved by his behavior.

We had just finished our second cups of-no, it was not coffee-and were about to slip over to the Long mansion for my "special treat," i.e., for me to meet my new daughter, Wyoming Long... when Dora spoke up:

"Advisory notice: Time line, date, time, and location. Official. Please prepare to set your timepieces on the tick." Hazel looked surprised, hurriedly grabbed her handbag, dug into it, pulled out a something I had not seen before. Call it a chronometer. "We are in a stationary orbit around Tellus, Sol in, in time line three, coded 'Neil Armstrong.' The date is Tuesday the first of July-"

"My God! We're back where we started! Our wedding day!"

"Quiet, dear! Please!"

"-Gregorian. Repeat: Time line three, Sol ID, July first, 2177 Gregorian. At the tick it will be zone five, oh nine fortyfive. Tick! Those equipped to receive sonic close correction, wait for the tone-"

It started with a low note and squealed on up until it hurt my ears.

Dora added: "Another time tick and sonic correction will be offered in five minutes, ship's time or Tellus zone five time, which are now matched for local legal time designated 'daylight time' for interception point on this time line. Hazel hon, private to you."

"Yes, Dora?" "Here are Richard's shoes-" (Plunk, they hit the bed. Out of nowhere.) "-and his other two suits-" (Plop.) "-and I packaged the small clothes and stockings with them. Shall I add a couple of jumpsuits? I took Richard's measurements while you slept. These aren't washables; these are Hercules cloth, won't take dirt, can't wear out."

"Yes, Dora, and thank you, dear. That's thoughtful of you.

I hadn't yet bought him anything but city clothes."

"I noticed." (Plop-another package.) Dora went on, "We've been loading and unloading all night. The last of the stragglers left at oh nine hundred but I told Captain Laz about your anniversary breakfast, so she refused to let Lazarus disturb you. Message from Lazarus: If it suits your convenience, will both of you kindly get off your dead duffs and report to THQ. End of message. Transmission from the bridge, live":

"Hazel? Captain Laz speaking. Can you two leave the ship by ten hundred? I told my hardnosed brother that ten was the departure time he could expect."

Hazel sighed. "Yes. We'll leave for the car pocket at once."

"Good. Felicitations to both of you from me and Lor and Dora. Many happy returns of the day! It has been a pleasure to have you aboard."

We were at the car pocket with two minutes to spare, me loaded with packages and cat, and getting used to new shoes-well, one old, one new. I learned that the "car pocket" referred to our old friend Gay Deceiver; the end of a short passage led right into her starboard door. Again I missed seeing those spacewarp bathrooms; Hazel's grandsons piloted us, and we were told to take the back seats. Pol got out to let us get in.

"Hi, Grandma! Good morning, sir."

I said good morning and Hazel kissed both her grandsons in passing, no seconds lost, and we settled down and strapped in. Cas called out, "Report seat belts."

"Passengers' seat belts fastened," Hazel reported.

"Bridge! Ready for launch."

Laz answered, "Launch at will."

Instantly we were out in the sky and weightless. Pixel started to struggle; I caged him with both hands. I think it was weightlessness that startled him... but how could he tell? He didn't weigh anything to start with.

Earth was off to starboard, apparently full, although one can't tell that close up. We were opposite the middle of North America, which told me that Laz was a more than competent pilot; had we been in the usual twenty-four-hour orbit, concentric with Earth's equator, we would have been over the equator at ninety west, i.e., over the Galapagos Islands. I guessed that she had selected an orbit tilted at about forty degrees and timed for ten hundred ship's time-and made a mental note to check it later, if and when I ever got a look at the ship's log.

(A pilot can't help second-guessing every other pilot; it's an occupational disease. Sony.)

Then we were suddenly in atmosphere, down thirty-six-thousand klicks in a tick. Gay spread her wings, Cas tilted her nose down, then leveled off, and we again had weight, at one gee-and Pixel liked this change still less. Hazel reached over and took Pixel, soothed him; he quieted down-I think he felt safer with her.

With her wings raked in for hypersonic, the only way I had seen her. Gay is mostly a lifting body. With her wings spread, she has lots of lift area and she glides beautifully. We were a thousand meters up, give or take, and over farm country on a fine summer day-clear, save for anvil cumuli here and there on the horizon. Glorious! A day to feel young again—

Cas said, "I hope that translation did not bother you. Had I left it up to Gay, she would have put us on the ground in one jump; she's nervous about antiaircraft fire."

"I am not nervous. I'm rationally careful."

"Right you are. Gay. She does have reason to be careful. The Pilots' Precautionary Notice for this planet on this time line at this year states that one must assume AA weapons around all cities and larger towns. So Gay blinks down below the AA radar-"

"You hope," said the car.

"-so mat we will show up simply as a subsonic private plane on air-control radar, if there is any. None, that is, where we are."

"Optimist," the car sneered.

"Quit hitching. Have you spotted your squat?"

"Long since. If you'll quit yacking and give me permission, I'll take it."

"At will. Gay."

I said, "Hazel, I had counted on getting acquainted with my new daughter about now. Wyoming."

"Don't fret, dear; she will never know we were away. That's the way to handle it until a child is old enough to understand."

"She won't know, but I will. I'm disappointed. All right, let's table it."

The scene blinked again and we were on the ground. Cas said, "Please check to see that you aren't leaving anything behind." As we got out and stood clear. Gay Deceiver disappeared. I stared through the space she had occupied. My Uncle Jock's house was two hundred meters away.

"Hazel, what date did Dora say this is?"

"Tuesday July first, 2177."

"That's what I thought I had heard. But when I thought it over I decided that I must have been mistaken. I now see that she wasn't fooling: '77. Eleven years in the past. Sweetheart, that ratty old barn there is standing where we landed last Saturday, three days ago. You wheeled me from there toward the house in Ezra's wheelchair. Hon, that bam we're looking at was torn down years back; that's just its ghost. This is bad."

"Don't fret about it, Richard. In timejumping it feels that way, the first time you get involved with a loop."

"I've already lived through 2177! I don't like paradoxes."

"Richard, treat it just as you would any other place, any other time. No one else will notice the paradox, so ignore it yourself. The chance of being recognized when you are living paradoxically is zero for any era outside your own normal lifetime... but usually only one in a million even if you timejump close to home. You left this area quite young, did you not?"

"I was seventeen: 2150."

"So forget it. You can't be recognized."

"Uncle Jock will know me. I've been back to see him a number of times. Although not recently. Unless you count our quick visit three days ago."

"He won't remember our visit three days ago-"

"He won't, huh? Sure, he's a hundred and sixteen years old. Or will be eleven years from now. But he's not senile."

"You're right; he's certainly not senile. And Uncle Jock is used to time loops. As you have guessed by now, he's in the Corps and quite senior. In fact he's the major stationkeeper for North America in time line three. Last night's evacuation of THQ was made to this station. Didn't you realize that?"

"Hazel, I didn't even touch second. Twenty minutes ago I was sitting in our stateroom-Dora was parked on the ground on Tertius, so I thought-and I was trying to decide whether to have another cup, or to take you back to bed. Since then I've been running as fast as I can to try to catch up with my own confusion. Unsuccessfully. I'm just an old soldier and harmless hack writer; I'm not used to such adventures. Well, let's go. I want you to meet my Aunt Cissy."

Gay had put us down across the road from Uncle Jock's place. We walked down the road a piece, me carrying packages and swinging my cane. Hazel with her handbag and carrying the kitten. Some years back Uncle Jock had placed a much stouter fence around his farm than was usual in Iowa in those days. It was not yet built when I left home and enlisted in 2150; it was in place by the time I visited in... 2161 ? That's about right.

The fence was heavy steel mesh, two meters high and with a six-strand cradle of barbed wire on top of that. I think the barbed wire was added later; I did not recall it.

Inside the cradle were copper wires on ceramic insulators. About every twenty meters there was a sign:

DANGER!!! Do Not Touch Fence Without Opening Master Switch #12

At the gate was another sign, larger: INTERBUREAU LIAISON AGENCY Bio-Ecological Research Division District Office Deliver Radioactive Materials To Gate Four-Wedns. Only 7-D-92-10-3sc YOUR TAXES AT WORK

Hazel said thoughtfully, "Richard, it does not look as if Uncle Jock lives here this year. Or this is the wrong house and Gay missed her clues. I may have to call for help."

"It's the right house and Uncle Jock did-does-live here this year. If this year is 2177, on which I'm keeping an open mind. That sign smells like Uncle Jock; he always did have funny ideas about privacy. One year it was piranhas and a moat."

I found a push button to the right of the gate and pressed it. A brassy voice, so artificial that it had to be an actor, announced: "Stand one-half meter from pickup. Display your clock badge. Face pickup. Turn ninety degrees and show profile. These premises are guarded by attack dogs, gas, and snipers."

"Is Jock Campbell at home?"

"Identify yourself."

"This is his nephew Colin Campbell. Tell him her father found out!"

The brassy voice was replaced by one I recognized. "Dickie, are you in trouble again?"

"No, Uncle Jock. I simply want to get in. I thought you were expecting me."

"Anyone with you?"

"My wife."

"What's her first name?"

"Go to hell."

"Later, don't rush me. I need her first name." "And I won't play games; we're leaving. If you see Lazarus Long-or Dr. Hubert-tell him that I'm sick of childish games and won't play. Goodbye, Uncle."

"Hold it! Don't move; I have you in my sights." I turned away without answering and said to Hazel, "Let's start walking, hon. Town is a far piece down the road but somebody will come along and give us a lift. People around here are friendly."

"I can phone for help. The way I did from the Raffles " She lifted her handbag.

"Can you? Wouldn't the call be relayed right back to this house no matter where or when or what time line? Or have I failed to understand any of it? Let's start hoofing it. My turn to carry that fierce cat."

"All right."

Hazel did not seem to be troubled over our failure to get into Uncle Jock's place, or Time Headquarters, whichever As for me, I was happy, lighthearted. I had a beautiful, lovable bnde. I was no longer a cripple and I felt years younger than my calendar age. If I still had a calendar age. The weather was heavenly in a fashion that only Iowa knows. Oh, it would be hot later in the day (it takes hot sun to grow good corn) but now, at about ten-fifteen, it was still balmy; by the time it was really hot I would have my bride-and the kitten-indoors. Even if we had to stop at the next farmhouse. Let's see... the Tanguays? Or had the old man sold out by 2177? No matter

I was not worried by my lack of local legal money, my lack of tangible assets of any sort. A beautiful summer day in Iowa leaves no room for worry. I could work and would-spreading manure if that was the sort of work available. And I would soon spread manure of another sort, moonlighting nights and Sundays. In 2177 Evelyn Fingerhut had not yet retired, so pick some new pen names and sell him the same old tripe. The same stories-just file off the serial numbers.

File off the serial numbers, change the body lines a bit. give it a new paint job, switch it over the state line, and it's yours!- that's the secret of literary success. Editors always claim to be looking for new stories but they don't buy them; they buy "mixture as before." Because the cash customers want to be entertained, not amazed, not instructed, not frightened.

If people truly wanted novelty, baseball would have died out two centuries back... instead of being ever popular. What can possibly happen in a baseball game that everyone has not seen many times before? Yet people like to watch baseball-shucks, I'd enjoy seeing a baseball game right now, with hot dogs and beer.

"Hazel, do you enjoy baseball?"

"Never had a chance to find out. When the drugs against acceleration came along, I went dirtside for my law degree but never had time to watch baseball even in the idiot box. I worked my way through law school and was I busy! That was when I was Sadie

Lipschitz."

"Why were you? You said you didn't like that name." "Sure you want to know? The answer to 'Why' is always

'Money.'"

"If you want me to know, you'll tell me."

"Scoundrel. That was right after Slim Lemke Stone died and-What in the world is that racket?"

"That's an automobile." I glanced around for the source of the noise.

Starting about 2150 or a little earlier (I saw my first one the year I signed up) supreme swank for an Iowa fanner was to own and drive a working replica of a twentieth-century "automobile" personal transport vehicle. Of course not a vehicle moved by means of internal explosions of a derivative of rock oil: Even the People's Republic of South Africa had laws against placing poisons in the air. But with its Shipstone concealed and a sound tape to supply the noise of a soidisant "1C' engine, the difference between a working replica and a real "automobile" was not readily apparent.

This one was the swankest of all replicas, a Tin Lizzy, a "Ford touring car. Model T, 1914." It was as dignified as Queen Victoria, whom it resembled. And it was Uncle Jock's... as I had suspected when I heard that infernal banging.

I said to Hazel, "Here, you take Pixel and soothe him; he's certainly never heard anything like this. And ease well off to the side of the road; these wagons are erratic." We continued on down the road; the replica pulled alongside us and stopped.

"Need a lift, folks?" Uncle Jock asked. Up close the racket was horrible.

I turned and grinned at him, and answered, mouthing my words so that they couldn't possibly be heard above the noise:

"Four score and seven years ago did gyre and gimble in the wabe."

"How's that again?"

"Billiards will never replace sex, or even tomatoes."

Uncle Jock reached down and switched off the sound effects. I said, "Thanks, Uncle. The noise was scaring our kitten. It's mighty nice of you to turn it off. What were you saying? I couldn't hear you over the engine noise."

"I asked if you wanted a lift."

"Why, thank you. Going into Grinnell?"

"I planned to take you back to the house. Why did you run away?"

"You know why. Did Dr. Hubert or Lazarus Long or whatever name he's using this week put you up to it? If so, why?"

"Introduce me first, if you please, nephew. And pardon me for not getting down, ma'am; this steed is skittish."

"Jock Campbell you old goat, don't you dare pretend that you don't know me! I'll have your rocks for castanets. Believe!"

For the first time that I can remember. Uncle Jock seemed shocked and baffled. "Madam?"

Hazel saw his expression, said hastily, "Are we inverted? I'm sorry. I'm Major Sadie Lipschitz, Time Corps, DOL, assigned to Overlord. I met you first in Boondock about ten of my subjective years ago. You invited me to visit you here, and I did, in year 2186 as I recall. Click?"

"Click, a clear inversion. Major, I'm happy indeed to meet you. But I'm happier still to leam that I will meet you again. I'm looking forward to it."

Hazel answered, "We had a good time, I promise you. I'm married to your nephew now... but you're still an old goat. Get down out of that toy wagon and kiss me like you mean it."

Hastily Uncle unclutched his rotor and got down; Hazel handed Pixel to me, which saved his life. After a while the old goat said, "No, I have not met you before; I could not possibly forget."

Hazel answered, "Yes, I have met you before; I'll never forget. God, it's good to see you again. Jock. You haven't changed. When was your last rejuvenation?"

"Five subjective years ago-just long enough to marinate. But I wouldn't let them youthen my face. When was yours?"

"Same subjective, about. Wasn't due for it yet but I needed cosmetic because I planned to marry your nephew. So I took a booster along with it. Turned out I needed it; he's a goat, too."

"I know. Dickie had to enlist because they were closing in on him from all sides." (An outright lie!) "But are you sure your name is Sadie? That's not the name Lazarus gave me as a test word."

"My name is whatever I want it to be, just as it is with Lazarus. My, I'm glad they moved THQ to your place last night! Kiss me again."

He did and finally I said mildly, "Not on a public road, folks, not in Poweshiek County. This is not Boondock."

"Mind your own business, nephew. Sadie, headquarters was not moved here last night; that was three years ago."

XXVIII

"The majority is never right."

L. LONG 1912—

We rode back to the house, Hazel up front with Uncle Jock, Pixel and me back with the packages. As a favor to Pixel, the replica Model T moved as silently as a ghost. (Do ghosts really move silently? How do such cliches get started?) The gate opened to Uncle Jock's voice and no lethal defenses were actuated. If there were any. Knowing Uncle Jock I suspect that there were-but not the ones posted.

We were met on the front veranda by Aunt Til and Aunt Cissy. While Uncle Jock went inside, my aunts welcomed my bride into the family with all the warmth of country manners. Then I passed the kitten to Hazel and I was greeted by them much as Hazel had greeted Uncle but with no time loop to confuse us. Golly, it was good to be home! Despite my some-rimes stormy adolescence the happiest memories of my life were associated with this old house.

Aunt Cissy looked older today, in 2177, than I recalled her looking the last time I had seen her-2183, was it? Was this a clue as to why Aunt Til had always looked the same age? An occasional trip to Boondock could work wonders.

Were all three-no, all four, including Aunt Belden-serving fifty-year enlistments with the Fountain of Youth as one of the perks?

Was Uncle Jock metabolically about thirty while maintaining the face and neck and hands of an old man in order to support a charade? (None of your business, Richard!)

"Where's Aunt Belden?"

"She's gone to Des Moines for the day," Aunt Til answered. "She'll be home for supper. Richard, I thought you were on Mars?"

I consulted a calendar in my head. "Come to think about it,I am."

Aunt Til looked at me keenly. "Are you looped?"

Uncle Jock came back out just in time to say, "Stop it! That sort of talk is forbidden. You all know it; you all are subject to the Code."

I said quickly, "I'm not subject to the Code, whatever it is.

Yes, Aunt Til, I'm looped. Back from 2188."

Uncle Jock fixed me with a look that used to scare me when I was ten or twelve. "Richard Colin, what is this? Dr. Hubert gave me to understand that you were under orders to report to Time Headquarters. Just this minute I stepped inside and phoned him about your arrival. But no one goes to Headquarters who is not sworn in and ruled by the Code. Leastwise, if he did, he wouldn't come out again. You said earlier that you weren't in trouble but you can stop lying now and tell me about it. I'll help you if I can; blood is thicker than water. So let's have it."

"I'm not in any trouble that I know of. Uncle, but Dr. Hubert keeps trying to hand me some. Are you seriously suggesting that reporting to Time Headquarters could result in my not coming out alive? I'm not swom into the Time Corps and I am not subject to its code. If you are serious, then I should not report to the Time Corps' headquarters. Aunt Til, is it all right for us to spend the night here? Or would that embarrass you? Or Uncle Jock?"

Without consulting Uncle Jock even by eye. Aunt Til answered, "Of course you'll stay here, Richard; you and your darling bride are welcome tonight and as long as you'll stay and whenever you come back. This is your home and always has been." Uncle shrugged, said nothing.

"Thanks! Where shall I drop these packages? My room? And I need to make arrangements for this fierce feline. Is there a sandbox around from the last litter? And, while Pixel has had his breakfast, I think he could use some milk."

Aunt Cissy stepped forward. 'Til, I'll take care of the kitten. Isn't he a pretty one!" She reached for Pixel; Hazel passed him over.

Aunt Til said, "Richard, your room has a guest in it, a Mr. Davis. Mmm, I think, this being July, that the north room on the third floor would be the most comfortable for you and Hazel-"

"'Hazel'!" Uncle Jock interjected. "That was the test word Dr. Hubert gave me. Major Sadie, is that one of your names?"

"Yes. Hazel Davis Stone. Now Hazel Stone Campbell."

"'Hazel Davis Stone,'" Aunt Til put in. "Are you Mr. Da-vis's little girl?"

My bride suddenly perked up. "Depends. A long time ago I was Hazel Davis. Is this 'Manuel Davis'? Manuel Garcia O'Kelly Davis?"

"Yes."

"My papa! He's here?"

"He'll be here for supper. I hope. But-Well, he has duties."

"I know. I've been in the Corps forty-six years subjective and Papa about the same, I think. So we hardly ever see each other, the Corps being what it is. Oh, goodness! Richard, I'm going to cry. Make me stop!"

"Me? Lady, I'm just waiting for a bus. But you can use my handkerchief." I offered it to her.

She accepted it, dabbed at her eyes. "Brute. Aunt Til, you should have spanked him oftener."

"Wrong aunt, dear. That was Aunt Abigail, now gone to her reward."

"Aunt Abby was brutal," I commented. "Used a peach switch on me. And enjoyed it."

"Should have used a club. Aunt Til, I can't wait to see Papa Mannie. It's been so long."

"Hazel, you saw him right here-Right there," I said, pointing at a spot halfway to the old barn, "only three days ago." 1 hesitated. "Or was it thirty-seven days? Thirty-nine?"

"No, no, Richard! Neither. By my time, subjective, it's over two years." Hazel added, to the others, "It's all still new to Richard. He was recruited, his subjective time, just last week."

"But I wasn't recruited," I objected. "That's why we're here."

"We'll see, dear. Uncle Jock, that reminds me-I want to tell you something and I must bend the Code a bit to do so. That doesn't worry me; I'm a Loonie and never obey laws I don't like. But are you really so regulation that you won't listen to 'coming attractions' talk?"

"Well-" Uncle Jock said slowly. Aunt Til snickered. Uncle Jock turned to her and said, "Woman, what are you laughing at?"

"Me? I wasn't laughing."

"Mmrrph. Major Sadie, my responsibilities and duties require a certain latitude in interpreting the Code. Is this something I need to know?"

"In my opinion, yes."

"That's your official opinion?"

"Well, if you put it that way-"

"Never mind. Perhaps you had better tell me and let me be the judge."

"Yes, sir. On Saturday the fifth of July eleven years forward, 2188, THQ will transfer to New Harbor on time line five. You will go along. All your household, I think."

Uncle Jock nodded. "That is exactly the sort of loop-derived information the Code is designed to suppress. Because it can so easily create positive feedback and result in heterodyning and possible panic. But I can take it calmly and make good use of it. Uh... may I ask why the move? As it seems unlikely that I would go along-and surely not my household. This is a working farm, no matter what it conceals."

I interrupted. "Uncle, I'm not bound by any silly code. Those West Coast hotheads finally quit talking and seceded."

His eyebrows shot up. "No-Really? I didn't think they would ever get off the pot."

"They did. May Day '88. By the day Hazel and I were here, Saturday July the fifth, the Angeleno Phalanges had just captured Des Moines. Bombs were dropping all around here. You may think-today-that you wouldn't pull out. But I know that you were about to do so then; I was there. Will be there. Ask Dr. Hubert-Lazarus Long. He thought this place was too dangerous to hang around any longer. Ask him." "Colonel Campbell!"

I knew that voice; I turned and said, "Hi, Lazarus." "That sort of talk is strictly forbidden. Understand me?" I took a deep breath, then said to Hazel, "He'll never learn"- then to Lazarus, "Doc, you've been trying to make me stand at attention ever since we first met. It won't work. Can't you get that through your head?"

Somewhere, somewhen, Lazarus Long had had some sort of formal training in emotional control. I could now see him calling on it to help him. It took him about three seconds to invoke whatever it was he used, then he spoke quietly, in a lower register:

"Let me try to explain. Such talk is dangerous to the person you talk to. Making predictions, I mean, from knowledge gained from a loop. It is an observed fact that, again and again, it turns out to be a disservice to the person you inform when you tell him something in his future that you have learned in your past.

"As to why this is true, I suggest that you consult one of the mathematicians who deal with time-Dr. Jacob Burroughs, or Dr. Elizabeth Long, or anyone from the Corps' staff of mathematicians. And you should consult the council of historians for examples of the harm it does. Or you could look it up in our headquarters library-file 'Cassandra' and file 'Ides of March,' for starters, then see file 'Nostradamus.'"

Long turned to Uncle Jock. "Jock, I'm sorry about this. I pray that you will not let the troubles of '88 make your household gloomy during the forward years till then. I never planned to bring your nephew here not yet trained in the disciplines of Time-I never planned to bring your nephew here at all. We do need him, but we expected to recruit him at Boondock with no need to bring him to Headquarters. But he refused to enlist. Do you want to try to change his mind?"

"I'm not sure I have any influence over him, Lafe. How about it, Dickie? Want to hear what a good deal a career in the Time Corps can be? You could say that the Time Corps supported you throughout your childhood-you could say it because it's true. The sheriff was about to auction this farm right out from under us... when I joined up. You were just a tad ... but you may remember a time we ate corn bread and not much else. Then things got better and stayed better-do you remember? You were about six."

I had some long thoughts. "Yes, I remember. I think I do. Uncle, I'm not against joining. You're in it, my wife is in it, several of my friends are in it. But Lazarus has been trying to sell me a pig in a poke. I've got to know what it is they want | me to do and why they want me to do it. They say they want me for a job with the chances only fifty-fifty that I get out of it alive. With those odds there is no point in talking about retirement benefits. I don't want some chairwarmer in Headquarters being that casual about my neck. I must know that it makes sense before I'll accept those odds."

"Lafe, just what is this job you have for my boy?" "It's Task Adam Selene in Operation Galactic Overlord."

"I don't think I've heard of it." "And now you should forget it, as you don't figure into it and it has not been mounted as of this year."

"That makes it difficult for me to advise my nephew. Shouldn't I be briefed?"

Hazel intervened. "Lazarus! Knock it off!" "Major, I'm discussing official business with the THQ stationkeeper."

"Pig whistle! You are again trying to chivvy Richard into risking his life without his knowing why. When I agreed to try to do so, I had not yet met Richard. Now that I know him-and admire him; he is sans pew et sans reproche-I'm ashamed that I ever tried. But I did try... and almost succeeded. But you barreled your way in... and mucked it up, as was predictable. I told you then that the Circle would have to convince him, I told you! Now you are trying to get Richard's closest relative-his father in all that counts-to pressure him in your place. Shame on you! Take Richard to the Circle. Let them explain it... or let him go home! Quit stalling! Do it!"

What I had always thought of as a closet in Uncle's den turned out to look like an elevator inside. LAzarus Long and I went into it together; he closed the door and I saw that, where an elevator usually has floor numbers with touchplates for each number, there was a display of lighted symbols-signs of the Zodiac I thought, then changed my mind, as there is no bat in the Zodiac, no black widow spider, certainly no stegosaurus.

At the bottom, by itself, was a snake eating its own tail-the world snake, Ouroboros. A disgusting symbol at best.

Lazarus placed his hand over it.

The closet, or elevator cage, or small room, changed. How, I am not certain. It simply blinked and was different. "Through here," Lazarus said, and opened a door on the far side.

Stretching from that door was a long corridor that would never fit inside my uncle's house. But views I could see through windows that lined that long passageway did not fit his farm, either. The land looked like Iowa, yes-but Iowa untouched by the plow, never cleared for farming.

We stepped into this passage and were at once at its far end. "Through there," Lazarus said, pointing.

An archway melted out of a stone wall. The passage beyond it was gloomy. I looked around to speak to Lazarus; he was gone.

I said to myself, Lazarus, I told you not to play games with me... and turned around to go back down the long passage, back through Uncle Jock's den, find Hazel and leave. I had had it, fed up with his games.

There was no passage behind me.

I promised Lazarus a clop in the head and followed the only available route. It remained gloomy but always with a light a little farther ahead. Shortly, five minutes or less, it ended in a small, comfortable lounge, well-lighted from nowhere. A brassy uninflected voice said, "Please sit down. You will be called."

I sat down in an easy chair and laid my cane aside. A small table by it held magazines and a newspaper. I glanced at each one, looking for anachronisms, but found none. The periodicals were all ones that I recalled as available in Iowa in the seventies;

they carried dates of July 2177 or earlier. The newspaper was the Grinnell Herald-Register, dated Friday, June 27, 2177.

I started to put it down, as the Herald-Register is not exactly exciting. Uncle subscribed to a daily printout from Des Moines and, of course, the Kansas City Star, but our local paper was good only for campus notes, local notices, and the sort of "news" and "society" items that are published to display as many local names as possible.

But an ad caught my eye: On Sunday, July twentieth, one night only, at Des Moines Municipal Opera House, the Halifax Ballet Theater will present Midsummer Night's Dream, with the sensational new star Luanna Pauline as Titania.

I read it twice... and promised myself that I would take Hazel to see it. It would be a special anniversary: I had met Mistress Gwendolyn Novak at Golden Rule's Day One Ball, Neil Armstrong Day, July twentieth a year ago (never mind that silly time loop) and this would make a delightful reprise of the gala eve of our wedding day (without, this time, some unmannerly oaf crashing our party and dying at our table).

Would a one-gravity performance be disappointing after having seen the Queen of Fairies cutting didoes high in the air? No, this was a sentimental journey; it would not matter. Besides, Luanna Pauline had made (would make, will make) her reputation dancing in one gravity-it would be a fascinating contrast. We could go backstage and tell her that we saw her dance Titania at one-third gravity in the Circus Room of Golden Rule. Oh, certainly-when Golden Rule does not yet exist for another three years! I began to understand why the Code had limitations on loose talk.

Never mind. On Neil Armstrong Day I would gift my beautiful bride with this sentimental celebration.

While I was looking at the Herald-Register, an abstract design on the wall changed to a motto in glowing letters: A Stitch in Time Saves Nine Billion While I watched, it changed to: A Paradox Can Be Paradoctored Then: The Early Worm Has a Death Wish Followed by: Don't Try TOO Hard; You Might Succeed

I was trying to figure out that last one when it suddenly changed to "Why Are You Staring at a Blank Wall?"-and it was a blank wall. Then on it appeared, large, the World Snake, and, inside the circle it made by its nauseating way of eating, letters were chasing themselves. Then they leveled out into a straight line:

Making Order Out of Chaos Then under that:

THE CIRCLE OF OUROBOROS

This was displaced by another archway; that brassy voice said: "Please enter."

I grabbed my cane and went through the archway and found myself translated to the exact center of a large circular room. There is such a thing as too much service.

There were a dozen-odd people seated around the room on a dais about a meter high-a theater in the round, with me in the leading role... in the sense in which an insect pinned to the stage of a microscope is the star of the show. That brassy voice said, "State your full name."

"Richard Colin Ames Campbell. What is this? A trial?"

"Yes, in one sense."

"You can adjourn court right now; I'm not having any. If anyone is on trial, it is all of you-as I want nothing from you but you seem to want something from me. It is up to you to convince me, not the other way around. Keep that clear in your mind."

I turned slowly around, looking over my "judges." I found a friendly face, Hilda Burroughs, and felt enormously better. She threw me a kiss; I caught it and ate it. But I was enormously surprised, too. I would expect to find this tiny beauty at any gathering requiring elegance and grace... but not as a member of a group that had been represented to me as being the most powerful council in all history and any universe.

Then I recognized another face: Lazarus. He nodded; I returned his nod. He said, "Please don't be impatient. Colonel. Allow protocol to proceed."

I said, "Protocol is either useful or it should be abolished. I am standing and all of you are seated. That is protocol establishing dominance. And you can stuff it! If I don't have a chair in ten seconds I am leaving. Your chair will do."

That invisible robot with the brassy voice placed an upholstered easy chair back of my knees so fast that I had no excuse to leave. I sank back into it and put my cane across my knees. "Comfortable?" Lazarus inquired.

"Yes, thank you." "Good. The next item is protocol, too-introductions. I do not think you will find it objectionable."

The brassy voice started in again, naming members-"Companions"-of the Circle of Ouroboros, governing body of the omniversal Time Corps. Each time one was named, my chair faced that companion. But I felt no movement.

"Master Mobyas Toras, for Barsoom, time line one, coded 'John Carter.'"

"Barsoom"? Poppycock! But I found myself standing up and bowing in answer to a gentle smile and a gesture suggesting a blessing. He was ancient, and hardly more than skin and bones. He wore a sword but I felt sure that he had not wielded one in generations. He was huddled in a heavy silk wrap much like that worn by Buddhist priests. His skin was polished mahogany, more strongly red than any North American "redskin"-in short he looked exactly like the fictional descriptions in the tales of Barsoom... a result easy to achieve with makeup, a couple of meters of cloth, and a prop sword.

So why did I stand up? (Because Aunt Abby had striped my calves for any failure whatever in politeness to my elders?

Nonsense. I knew that he was authentic when I laid eyes on him. That my conviction was preposterous did not alter it.)

"Her Wisdom Star, Arbiter of the Ninety Universes, composite time lines, code 'Cyrano.'"

Her Wisdom smiled at me and I wiggled like a puppy. I'm no judge of wisdom but I am certain that males with high blood pressure and any history of cardiac problems or T.I.A. should not be too close to her. Star, Mrs. Gordon, is as tall or taller than I, weighs more and all of it muscle but her breasts and that slight layer that smooths female body lines. She was wearing too little for Poweshiek County, quite a lot for Boondock.

Star may not be the most beautiful woman in all her many universes but she may be the sexiest-in a sultry. Girl Scout fashion. Just walking through a room she is in should change a boy into a man.

"Woodrow Wilson Smith, Senior of the Howard Families, time line two, code 'Leslie LeCroix.'" Lazarus and I again exchanged nods.

"Dr. Jubal Harshaw, time line three, code 'Neil Ann-strong.'"

Dr. Harshaw raised his hand in a half salute and smiled; I answered the same way-and made a note to buttonhole him, back in Boondock perhaps, about the many legends of the "Man from Mars." How much was truth, how much was fiction?

"Dr. Hilda Mac Burroughs, time line four, code 'Ballox O'Malley.'" Hilda and I exchanged smiles.

"Commander Ted Smith, time line five, code 'DuQuesne.'" Commander Smith was a square-jawed athlete with ice-blue eyes. He was dressed in an undecorated gray uniform, carrying a bolstered hand gun, and wearing a bejeweled heavy bracelet.

"Captain John Sterling, time line six, code "Neil Armstrong alternate time line.'" I looked at my boyhood hero and considered the possibility that I was asleep and having a vivid dream. Hazel had told me and told me again that the hero of her space opera was real... but not even the repeated use of the code phrase "Operation Galactic Overlord" had convinced me... and now here he was: the foe of the Overlord.

Or was it he? What proof?

"Sky Marshal Samuel Beaux, time line seven, code 'Fairacre.'" Marshal Beaux was over two meters tall, massed at least a hundred and ten kilos, all of it muscle and rhinoceros hide. He was dressed in a midnight black uniform and a frown, and was as beautiful as a black panther. He stared at me with jungle eyes.

Lazarus announced, "I declare quorum. The Circle is closed. Dr. Hilda Burroughs now speaks for the Circle."

Hilda smiled at me and said, "Colonel Campbell, I have been conscripted to explain to you our purposes and enough of our methods to enable you to see how the job you are being asked to do fits into the master plan, and why it must be done. Don't hesitate to interrupt, or to argue, or to demand more details. We can continue this discussion from now until lunchtime. Or for the next ten years. Or for a truly long time. As long as necessary."

Sky Marshal Beaux cut in with: "Speak for yourself, Mrs.

Burroughs. I'm leaving in thirty minutes."

Hilda said, "Sambo, you really should address the chair. I can't let you leave until you speak your piece, but, if you need to leave, you can speak now. Please explain what you do and why."

"Why is this man being coddled? I've never been asked to explain my duties to a raw recruit before. This is ridiculous."

"Nevertheless I ask you to do so." The sky marshal settled back in his chair and said nothing. Lazarus said, "Sambo, I know this is without precedent but all the Companions including the three who are not here have agreed that Task Adam Selene is essential to Operation Galactic Overlord, that Overlord is essential to Campaign Boskone, that Boskone is essential to our Plan Long View... and that Colonel Campbell is essential to Task Adam Selene. The Circle is closed on this, no dissent. We need Campbell's services, given fully and freely. So we must persuade him. You need not go first ... but, if you expect to be excused from the Circle in thirty minutes, you had better speak up." "And if I don't choose to?" "Your problem. You are free to resign; all of us are, anytime. And the Circle is free to terminate you."

"Are you threatening me?"

"No." Lazarus glanced at his wrist. "You've stalled for four minutes against the unanimous decision of the Circle. If you expect to comply with the Circle's decision, you are running out of minutes."

"Oh, very well. Campbell, I am commanding officer of the armed forces of the Time Corps-"

"Correction," Lazarus Long interrupted. "Sky Marshal Beaux is the chief of staff of-"

"It's the same thing!"

"It is not the same thing and I knew exactly what I was doing when

I set it up that way. Colonel Campbell, the Time Corps sometimes intervenes in key battles in history. Histories. The Corps' board of historians seeks to identify cusps where judicious use of force might change history in fashions that we believe, in our limited wisdom, would be better for the human race-and this policy strongly affects and is affected by Task Adam Selene, I must add. If the Circle closes on a recommendation by the historians, military action is mounted, and a commander in chief for that operation is selected by the Circle."

Lazarus turned and looked directly at Beaux. "Sky Marshal Beaux is a highly skilled military commander, perhaps the best in all history. He is usually selected to command. But the Circle picks the commander of each task force. This policy keeps ultimate power out of the hands of military commanders. I must add that the Chief of Staff is an auditor without a vote; he is not a Companion of this Circle. Sambo, do you have anything to add?"

"You seem to have made my speech."

"Because you were stalling. You are free to correct, amend, and elaborate."

"Oh, never mind. You should give elocution lessons."

"Do you now wish to be excused?"

"Are you telling me to leave?"

"No."

"I'll hang around awhile as I want to see what you do with this joker. Why didn't you simply conscript him and assign him to Task Selene? He's an obvious criminal type; look at his skull, note his attitude toward authority. On my home planet we never use anything as sloppy and unreliable as volunteers ... and we don't have a criminal class because we draft them into the forces as fast as they show their heads. There are no better fighters than the criminal type if you catch 'em young, rule them with iron discipline, and keep them more scared of their sergeants than they can possibly be of the enemy."

"That will do. Sambo. Please refrain from expressing opinion uninvited."

"I thought you were the great champion of free speech?"

"I am. But there is no free lunch. If you want to make a speech, you can hire your own hall; this one is paid for by the Circle. Hilda. Speak up, dear."

"Very well. Richard, most interventions recommended by our historians and mathematicians are not brute force, but actions far more subtle, carried out by individual field operatives ... such as your gal Hazel, who is a real fox when it comes to robbing a henhouse. You know what we are trying to do in Task Adam Selene; you don't know what it is for, I believe. Our methods of prognosticating the results of a change introduced into history are less than perfect. Whether it's digging in on one side in a key battle, or something as simple as supplying a high school student with a condom some midnight and thereby avoiding the birth of a Hitler or a Napoleon, we can never predict the results as well as we need to. Usually we have to do it, then send a field operative down that new time line to report the changes."

"Hilda," said Lazarus, "may I offer a horrible example?" "Certainly, Woodie. But make it march. I plan to finish before lunch."

"Colonel Campbell, I come from a world identical with yours to about 1939. Divergence, as usual, showed most at the start of space flight. Both your world and mine showed a tendency toward religious hysteria. In mine it peaked with a television evangelist named Nehemiah Scudder. His brand of fire and brimstone and scapegoatism-Jews of course; no novelty-peaked at a time when unemployment also peaked and public debt and inflation got out of hand; the result was a religious dictatorship, a totalitarian government as brutal as my world has ever seen.

"So this Circle set up an operation to get rid of Nehemiah Scudder. Nothing as crass as assassination; the specific method Hilda mentioned was used. A high school boy without a rubber was provided with one by a field operative, and the little bastard who became Nehemiah Scudder was never bom. So time line two-mine-was split and time line eleven was created, allee samee but without Nehemiah Scudder, the Prophet. Bound to be better, right?

"Wrong. In my time line World War Three, the nuclear war-sometimes known by other names-badly damaged Europe but did not spread; North America under the Prophet had opted out of international affairs. In time line eleven the war started a little sooner, in the Middle East, spread to all the world overnight... and a hundred years later it was still impossible to find any life superior to cockroaches on the land masses of what had once been the cool green hills of Earth. Take it, Hilda."

"Thank you, too much! Lazarus leaves me with a planet glowing in the dark to show why we need better prediction methods. We hope to use Adam Selene-supervising computer Holmes IV known as 'Mike'-the programs and memories that make him unique-to tie the best computers of Tertius and some other planets into a mammoth logic that can correctly project the results of a defined change in history... so that we won't swap Nehemiah Scudder-who can be endured-for a ruined planet that cannot be endured. Lazarus, should I mention the supersnooperscope?"

"You just did, so you had better."

"Richard, I'm way out of my depth; I'm just a simple housewife-"

A groan went up in that hall. Lazarus may have led it but it seemed to be unanimous.

"-who lacks a technical background. But I do know that engineering progress depends on accurate instruments, and that accurate instruments ever since the twentieth century-my century-have depended on progress in electronics. My number-one husband Jake Burroughs and Dr. Libby Long and Dr. Deety Carter are whipping up a little doozy combining Jake's spacetime twister with television and the ordinary snooperscope. With it you will be able not only to watch what your wife is doing while you are away overnight but also to watch what she will be doing ten years from now. Or fifty. Or five hundred.

"Or it could let the Circle of Ouroboros see what would be the result of an intervention before it is too late to refrain. Maybe. With the unique power of Holmes IV-maybe yes. We'll see. But it is as certain as anything can be in this quicksand world that Mike Holmes IV can improve the performance of the Circle of Ouroboros enormously even if the supersnooperscope never comes on line.

"Since we are trying hard to make things better, more decent, happier for everyone, I hope that you will see that Task Adam Selene is worth doing. Any questions?"

"I have one, Hilda."

"Yes, Jubal?"

"Has our friend Richard been indoctrinated in the concept of the World as Myth?"

"I barely mentioned it, once, in telling him how we four-Zeb and Deety, Jake and I-were hounded off our planet and erased out of the script. I think Hazel has done better. Richard?" "Not anything I could get my teeth into. Nothing that made sense. And-forgive me, Hilda-I found your story hard to swallow."

"Of course, dear; I don't believe it myself. Except late at night. Jubal, you had better take it."

Dr. Harshaw answered, "Very well. The World as Myth is a subtle concept. It has sometimes been called multiperson solipsism, despite the internal illogic of that phrase. Yet illogic may be necessary, as the concept denies logic. For many centuries religion held sway as the explanation of the universe-or multiverse. The details of revealed religions differed wildly but were essentially the same: Somewhere up in the sky-or down in the earth-or in a volcano-any inaccessible place-there was an old man in a nightshirt who knew everything and was all powerful and created everything and rewarded and punished... and could be bribed.

"Sometimes this Almighty was female but not often because human males are usually bigger, stronger, and more belligerent; God was created in Pop's image.

"The Almighty-God idea came under attack because it explained nothing; it simply pushed all explanations one stage farther away. In the nineteenth century atheistic positivism started displacing the Almighty-God notion in that minority of the population that bathed regularly.

"Atheism had a limited run, as it, too, explains nothing, being merely Godism turned upside down. Logical positivism was based on the physical science of the nineteenth century which, physicists of that century honestly believed, fully explained the universe as a piece of clockwork.

"The physicists of the twentieth century made short work of that idea. Quantum mechanics and Schrodringer's cat tossed out the clockwork world of 1890 and replaced it with a fog of probability in which anything could happen. Of course the intellectual class did not notice this for many decades, as an intellectual is a highly educated man who can't do arithmetic with his shoes on, and is proud of his lack. Nevertheless, with the death of positivism, Godism and Creationism came back stronger than ever.

"In the late twentieth century -correct me when I' m wrong, Hilda-Hilda and her family were driven off Earth by a devil, one they dubbed 'the Beast.' They fled in a vehicle you have met. Gay Deceiver, and in their search for safety they visited many dimensions, many universes... and Hilda made the greatest philosophical discovery of all time."

"I'll bet you say that to all the girls!"

"Quiet, dear. They visited, among more mundane places, the Land of Oz-"

I sat up with a jerk. Not too much sleep last night and Dr. Harshaw's lecture was sleep-inducing. "Did you say 'Oz'?"

"I tell you three times. Oz, Oz, Oz. They did indeed visit the fairyland dreamed up by L. Frank Baum. And the Wonderland invented by the Reverend Mr. Dodgson to please Alice. And other places known only to fiction. Hilda discovered what none of us had noticed before because we were inside it: The World is Myth. We create it ourselves-and we change it ourselves. A truly strong myth maker, such as Homer, such as Baum, such as the creator of Tarzan, creates substantial and lasting worlds ... whereas the fiddlin', unimaginative liars and fabulists shape nothing new and their tedious dreams are forgotten. On this observed fact, Richard-not religion but verifiable fact-is based the work of the Circle of Ouroboros. Hilda?"

"Only a short time until we should break for lunch. Richard, do you have any comment now?"

"You won't like it."

LAzarus said, "Spill it, Bub."

"I not only will not risk my life on wordy nonsense, I will do all that I can to keep Hazel from doing so. If you really want, and need, the programs and memories of that out-of-date Lunar computer there are at least two better ways to get them."

"Keep talking."

"One way simply uses money. Set up a front organization, an academic fakery. Funnel money into Galileo University as grants, and walk in the front door of the computer room, and take what you want. The other way is to use enough force to do a real job. Don't send an elderly married couple to try to watergate it. You cosmic do-gooders have not convinced me."

"Let's see your ticket!"

It was Little Black Sambo, the sky marshal. "What ticket?" "The one that entitles you to unscrew the inscrutable. Show it. You are just a lily-livered coward, too yellow to do your plain duty."

"Really? Who appointed you God? Look, boy, I'm mighty glad that your skin color matches mine."

"Why so?" "Because, if it didn't, I would be called a racist for the way I despise you."

I saw him draw his side arm, but my cane, damn it!, had slid to the floor. I was reaching for it when his bolt hit me, low on the left.

As he was hit from three sides, two to the heart, one to the head, by John Sterling, by Lazarus, by Commander Smith-three crack gunmen, where one would have sufficed.

I didn't hurt yet. But I knew I was gut-shot-bad, final bad, if I didn't get help fast.

But something was happening to Samuel Beaux. He leaned forward and fell off his chair, dead as King Charles-and his body began to disappear. It didn't fade out; it disappeared in swipes, through the middle, then across the face, as if someone had taken an eraser to a chalkboard. Then he was gone completely; not even blood was left. Even his chair was gone.

And the wound in my gut was gone.

XXIX

'There may come a time when the lion and the lamb will lie down together, but I am still betting on the lion."

HENRY WHEELER SHAW 1818-1885

"Wouldn't it be better," I objected, "to have me pull a sword out of a stone? If you really want to sell the product? The whole plan is silly!"

We were seated at a picnic table in the east orchard, Mannie Davis, Captain John Sterling, Uncle Jock, Jubal Harshaw, and I-and a Professor Rufo, a baldheaded old coot introduced to me as an aide to Her Wisdom and (impossible!) her grandson. (But having seen with my own bloodshot eyes some of the results of Dr. Ishtar's witchcraft, I was no longer using the word "impossible" as freely as I did a week ago.)

Pixel was with us, too, but he had long since finished his lunch and was down in the grass, trying to catch a butterfly. They were evenly matched but the butterfly was ahead on points.

The bright and cloudless sky promised a temperature of thirty-eight or forty by midaftemoon; my aunts had elected to eat lunch in their airconditioned kitchen. But there was a breeze and it was cool enough under the trees-a lovely day, just right for a picnic; it reminded me of our conference with Father Hendrik Schultz in the orchard of Old MacDonald's Farm just a week ago (and eleven years forward).

Except that Hazel was not with me.

That groused me but I tried not to show it. When the Circle opened for lunch. Aunt Til had a message waiting for me. "Hazel left here with Lafe just a few minutes ago," she told me. "She asked me to tell you that she will not be here for lunch but expects to see you later this afternoon... and will be here for supper without fail."

A damned skimpy message! I needed to discuss with Hazel all the talk and happenings in the closed Circle. Damn it, how could I decide anything until I had a chance to talk it over with my wife?

Women and cats do what they do; there is nothing a man can do about it.

"I'll sell you a sword in a stone," said Professor Rufo, "cheap. Like new. Used just once, by King Arthur. In the long run it didn't do him any good and I can't guarantee that it will help you... but I don't mind turning a profit on it."

Uncle said, "Rufo, you would sell tickets to your own funeral."

"Not 'would.' Did. Netted enough to buy a round toowitt I badly needed... because so many people wanted to be certain I was dead."

"So you cheated them." "Not at all. The tickets did not state that I was dead; they simply called for 'admit bearer' to my funeral. And it was a nice funeral, the nicest I've ever had... especially the climax when I sat up in my coffin and sang the oratorio from The Death ofJesse James, doing all the parts myself. Nobody asked for his money back. Some even left before I reached my high note. Rude creatures. Go to your own funeral and you'll soon leam who your real friends are." Rufo turned to me. "You want that sword and stone? Cheap but it has to be cash. Can't let you have credit; your life expectancy isn't all that good. Shall we say six hundred thousand imperial dollars in small bills? No denomination higher than ten thousand."

"Professor, I don't want a sword in a stone; it's just that this whole silly business sounds like the 'true prince' nonsense of pre-Armstrong romances. Can't do it openly with money, can't do it safely with enough force to hold the losses down to zero, has to be me and my wife with nothing but a scout knife. That's a crummy plot; even a confessions book would reject it. It's logically impossible."

"Five hundred fifty thousand and I pick up the sales tax."

"Richard," Jubal Harshaw answered, "it is logic itself that is impossible. For millennia philosophers and saints have tried to reason out a logical scheme for the universe... until Hilda came along and demonstrated that the universe is not logical but whimsical, its structure depending solely on the dreams and nightmares of non-logical dreamers." He shrugged, almost spilling his Tuborg. "If the great brains had not been so hoodwinked by their shared conviction that the universe must contain a consistent and logical structure they could find by careful analysis and synthesis, they would have spotted the glaring fact that the universe-the multiverse-contains neither of logic nor justice save where we, or others like us, impose such qualities on a world of chaos and cruelty."

"Five hundred thousand and that's my last offer."

"So why should Hazel and I risk our necks?" I added, "Pixel! Leave that insect alone!"

"Butterflies are not insects," Captain John Sterling said soberly. "They are self-propelled flowers. The Lady Hazel taught me that many years ago." He reached down and gently picked up Pixel. "How were you getting him to drink?"

I showed him, using water and my fingertip. Then Sterling improved on it, offering the kitten a tiny puddle in the palm of his hand. The kitten licked at it, and then was lapping cat-property, curling his dainty tongue down into the spoonful of water.

Sterling bothered me. I knew his origin, or thought I did, and thus had trouble believing in him even as I spoke with him. Yet it is impossible not to believe in a man when you see him, and hear him, crunching celery and potato chips.

Yet he had a two-dimensional quality. He neither smiled nor laughed. He was unfailingly polite but always dead serious. I had tried to thank him for saving my life by shooting what's-his-name; Sterling had stopped me. "My duty. He was expendable; you are not."

"Four hundred thousand. Colonel, are there any deviled eggs down there?"

I passed the stuffed eggs to Rufo. "Shall I tell you what to do with your sword in a stone? First, pull out the sword, then-"

"Let's not be crude. Three hundred and fifty thousand." "Professor, I wouldn't have it as a door prize. I was simply making a point."

"Better take an option, at least; you'll need it for the boff opening when they shoot this as a stereoseries."

"No publicity. That's one of the conditions imposed on me. If I do it."

"No publicity until after. Then there has to be publicity; it must wind up in the history books. Mannie, tell 'em why you have never published your memoirs of the Revolution."

Mr. Davis answered, "Mike sleeping. Not have people bother him. Nyet."

Uncle Jock said, "Manuel, you have an unpublished autobiography?"

My stepfather-in-law nodded. "Necessary. Prof dead, Wyoming dead, Mike dead maybe. Am only witness true story of Loonie Revolution. Lies, lots of lies, by cobbers not there." He scratched his chin with his left hand, the one I knew to be artificial. Or so I heard. This hand looked just like his right hand. A transplant? "Stored with Mike before out to Asteroids. We rescue Mike-then publish maybe." Davis looked at me. "Want to hear how I met my daughter Hazel?"

"Yes indeed!" I answered, and Sterling strongly agreed.

"Was Monday thirteen May, 2075, in L-City. Talk-talk in Stilyagi Hall, how to fight Warden. Not revolution, just sad stupid talk-talk, unhappy people. Skinny little girl sat on floor down front. Orange hair, no breasts. Ten, maybe eleven. Listens every word, claps hard, dead serious.

"Yellow Jackets, Warden's cops, break in, start killing. Too busy to keep track of skinny redheads. Jackets kill my best friend... when see her in action. Throws self through air, rolled in ball, hits Yellow Jacket in knees, down he goes. I break his jaw with left hand-not this hand; number-two-and step over him, dragging my wife Wyoming-not wife then-with me. Skinny flametop is gone, don't see her some weeks. But, friends, hard rock truth. Hazel as little girl fought so hard and smart that she saved her Papa Mannie and her Mama Wyoh both from Warden's finks long before she knew she was ours."

Manuel Davis smiled wistfully. "Did find her, Davis Family opted her-daughter, not wife. Still a baby. But not baby when counts! Worked hard to free Luna every day, every hour, every minute, danger don' stop her never. Fourth o' July, 2076, Hazel Meade Davis youngest comrade signing Declaration of Independence. No comrade rated it more!"

Mr. Davis had tears in his eyes. So did I.

Captain Sterling stood up. "Mr. Davis, I am humbly proud to have heard that story. Mr. Campbell, I have enjoyed your hospitality. Colonel Campbell, I hope you decide to fight with us; we need you.

And now, if I may be excused, I must leave. As the Galactic Overlord does not take long lunch hours, I must not."

Uncle Jock said, "Shucks, John, you've got to have some R and R now and then. Come go dinosaur hunting with me again. Time spent in the Mesozoic won't affect your quest; the Overlord will never know you're away. That's the greatest beauty of timejumping."

"I would know that I was away. But I do thank you. I enjoyed that hunt." He bowed and left.

Dr. Harshaw said quietly, "There goes real nobility. When at last he destroys the Overlord, he will be erased. He knows it. It doesn't stop him."

"Why must he be erased?" I demanded.

"Eh? Colonel, I know that this is new to you... but you are, or have been, a fabulist yourself, have you not?"

"Still am, as far as I know. Finished a long one and sent it off to my agent just ten days ago. Must get back to work soon-got a wife to support."

"Then you know that, for plot purposes, especially in adventure stories, heroes and villains come in complementary pairs. Each is necessary to the other."

"Yes, but-Look, lay it on the bar. This man who just left is truly the character that Hazel-and her son, Roger Stone-created for their series The Scourge of the SpacewaysT'

"Yes. Hazel and her son created him. Sterling knows it. Look, sir, all of us are fictions, someone's fabulist dreams.

But usually we do not know it. John Sterling knows it, and is strong enough to stand up to it. He knows his role and his destiny; he accepts it."

"He doesn't have to be erased." Dr. Harshaw looked puzzled. "But you are a writer. Uh... a literary writer perhaps? Plotless?"

"Me? I don't know how to write literature; I write stories.

For printout or three-dee or even bound books, but all sorts. Sin, suffer, and repent. Horse opera. Space opera. War. Murder. Spies. Sea stories. Whatever. Hazel and I are going to revive her classic series, with Captain Sterling in the lead role. As always. So what's this noise about 'erasing' him?"

"You are not going to let him destroy the Galactic Overlord? You should, you must, as the Overlord is every bit as evil as Boskone."

"Oh, certainly! First thirteen weeks. Should have happened years back."

"But he couldn't. The series was dropped with both hero and villain still alive. Sterling has been forced to fight only a holding action ever since."

"Oh. Well, we'll fix that. Overlord delenda est!"

"Then what does Sterling do?" I started to answer, suddenly realized that the question was not inquiry but Socratic. For each fine cat, a fine rat. A hero of Sterling's stature must oppose a villain as strong as he is. If we kill off the Overlord, then we must dream up Son of Overlord, with just as many balls, teeth just as long, disposition just as vile, and steam coming out of his ears.

"I don't know. We'll think of something. Age him, maybe, and put him to pasture as commandant of the Star Patrol Academy. Some such. No need to kill him off. A job like that would not require a villain as horrendous as the Overlord." "Wouldn't it?" Harshaw asked quietly. "Uh-Maybe you would like to take over the series?" "Not me. I'm semi-retired. All I have now is The Stonebender Family, a series strictly for laughs, no substantial villain required. Now I know the truth of the World as Myth I will never again create a real villain... and I thank Klono that I never have, not really, as I have only a limited belief in villainy."

"Well, I can't answer without Hazel anyhow; I'm the junior writer, in charge of punctuation and filling in weather and scenery; she controls plot. So I must change the subject. Uncle Jock, what was this you were saying to Captain Sterling about hunting dinosaurs? One of your jokes? Like the time you sawed off ten square klicks of the Ross Ice Shelf and towed it to Singapore, swimming sidestroke."

"Not sidestroke all the way; that's not possible."

"Come off it. Dinosaurs."

"What about dinosaurs? I like to hunt them. I took John Sterling with me once; he got a truly magnificent tyrannosaurus rex. Would you like to try it?"

"Are you serious? Uncle, you know I don't hunt. I don't like to shoot anything that can't shoot back."

"Oho! You misunderstood me, nephew. We don't kill the poor beasties. Killing a dinosaur is about as sporting as shooting a cow. And not as good meat. A dinosaur more than a year old is tough and tasteless. I did try them, years back, when some thought was being given to using dinosaur meat to quench a famine on time line seven. But the logistics were dreadful and, when you come right down to it, there is little justice in killing stupid lizards to feed stupid people; they had earned their famine. But hunting dinosaurs with cameras, that's real fun. It even gets sporting if you go after the big carnivores and happen to flush a bull who is feeling edgy and sexy-it improves your running. Or else. Dickie, there is a spot down about Wichita where I can promise you triceratops, several sorts of pterodactyls, duckbills, thunder lizards, and maybe a male stegosaurus all in one day. Once this caper is over we'll take a day off and do it. What do you say?"

"Is it that easy?"

"With the installed equipment the Mesozoic is no farther away than is THQ or Boondock. Time and space are illusions; the Burroughs irrelevancy gear will plunk you down in the middle of a herd of feeding and fornicating flapdoodles before you can say sixtyfive million years."

'The way you phrased that invitation seemed to imply that you assume that I have closed on Task Adam Selene."

"Dickie, the equipment does indeed belong to the Time Corps... and it is expensive, how expensive we don't discuss. It was built to support Plan Long View; its recreational use is incidental. Yes, I implied that. Aren't you going to do it?"

Mannie Davis looked at me, with no expression. Rufo stood up, said loudly, "I've got to mosey along; Star has a chore for me. Thanks and thanks for the last time. Jock. Nice meeting you. Colonel." He left quickly. Harshaw said nothing.

I let out a deep breath. "Uncle, I might do it if Hazel insists. But I'm going to try to talk her out of it. Nothing has been offered me that convinces me that I am wrong about the two options I offered. Either of them is a more sensible approach to recovering the programs and memories that embody Holmes IV or Mike... and I am glad to stipulate that they should be recovered. But my methods are more logical."

Harshaw said, "It is not a matter of logic. Colonel." "It's my neck. Doctor. But in the long run I'll do what Hazel wishes... I think. It's just-" "Just what, Dickie?"

"I hate to go into action with inadequate intelligence! Always have. Uncle, for the past week or ten days-hard to figure it, the way I've bounced around-I've been haunted by unexplained and, well, murderous nonsense. Is the Overlord you talk about after me? Does the fact that I'm mixed up in this account for the endless near misses? Or am I getting paranoid?"

"I don't know. Tell me about them." I started to do so. Shortly Harshaw took out a pocket notebook, started taking notes. I tried to remember all of it: Enrico Schultz and his weird remark about Tolliver and his mention of Walker Evans. His death. If it was his death. Bill. The curious behavior of the management of Golden Rule. Those rolligons and the killers in each. Jefferson Mao. The muggers at the Raffles- "Is that all?"

"Isn't that enough? No, not quite. What cargo was Auntie carrying? How did we get chivvied into flying a heap that durn near killed us? What were Lady Diana and her fatheaded husbands doing away out there in the wilds? If I could afford it I would spend endless money on sherlocks to dig out what was going on, what was truly aimed at me, what was just my nerves, what was simply coincidence."

Harshaw said, "There are no coincidences. One respect in which

World as Myth is far simpler than earlier teleology is the simple fact that there are no accidents, no coincidences."

Uncle Jock said, "Jubal? I don't have the authority." "And I do. Yes." He stood up. "Both of us, I think." My uncle stood up, too. "Dickie boy, you wait right here; we'll be gone five minutes or so. Errand to do."

As they left, Davis stood up, "Excuse, please? Need change arm."

"Sure, Papa Mannie. No, no. Pixel! Beer is not for baby cats."

They were gone seven minutes by my Sonychron. But not, quite apparently, by their time. Uncle had grown a full beard. Harshaw had a new, pink knife scar across his left cheek. I looked at them. "Ghosts of Christmas past! What happened?"

"Everything. Is there any beer left there? Cissy," he said, not raising his voice, "could we have some beer? And Jubal and I have not eaten in some time. Hours. Days, maybe."

"Right away," Aunt Cissy's disembodied voice answered. "Dear? I think you ought to take a nap."

"Later."

"Just as soon as you have eaten. Forty minutes."

"Quit nagging me. Could I have tomato soup? For Jubal, too."

"I'll fetch soup and more of your picnic. Fortyfive minutes until your nap; that's official. Til says so."

"Remind me to beat you."

"Yes, dear. But not today; you're exhausted."

"Very well." Uncle Jock turned to me. "Let's see, what'U you have first? Those rolligons? Your friend Hendrik Schultz handled that one; you can be sure it's thorough. He has turned out to be an ichiban field investigator. You can forget paranoia on that one, Dickie-two opponents, the Time Lords and the Scene Changers... and both of them after you as well as each other. You have a charmed life, son-bom to be hanged."

"What do you mean?-Time Lords and Scene Changers? And why me?"

"May not be their own names for themselves. The Lords and the Changers are groups doing the sort of thing the Circle does... but we don't see eye to eye with them. Dickie, you don't think that in all the universes to the Number of the Beast or more, we of the Circle would be the only ones to catch on to the truth and attempt to do something about it, do you?"

"I don't know anything about it, one way or another."

"Colonel," put in Dr. Harshaw, "a major shortcoming of World as Myth lies in the fact that we contend with... and often lose to... three sorts of antagonists: villains by design such as the Galactic Oveiiord, and groups like us but with different intentions-bad in our opinion, perhaps good in theirs-and the third and most powerful, the myth makers themselves-such as Homer and Twain and Shakespeare and Baum and Swift and their colleagues in the pantheon. But not those I have named. Their bodies have died; they live on by the immortal corpus of myth each has created... which does not change and therefore does not imperil us.

"But there are living myth makers, every one of them dangerous, every one of them casually uncaring as he revises a myth and erases a character." Harshaw smiled grimly. "The only way one can live with the knowledge is to realize first that it is the only game in town and second that it does not hurt. Erasure. Being X'd out of the story."

"How do you know that it doesn't hurt?"

"Because I refuse to entertain any other theory! Shall we get on with our report?"

"Dickie boy, you asked, 'Why me?' For the same reason Jubal and I left a pleasant lunch to work our tails off and to set many others to arduous and dangerous investigation in several time lines. Because of Task Adam Selene and your key part in it. Near as we can tell, the Time Lords want to kidnap Mike while the Scene Changers want to destroy him. But both groups want you dead; you're a menace to their plans."

"But at that time I had not even heard of Mike the Computer."

"Best time to kill you, wouldn't you say? Cissy, you are not only beautiful, you are pleasant to have around. Besides your hidden talents. Just put it down; we'll serve ourselves."

"Blagueur et gros menteur. You still must nap. Message from Til. You are not to come to the dinner table until you shave off that beard."

'Tell that baggage that I will starve before I will be henpecked."

"Yes, sir. And I feel the same way she does about it."

"Peace, woman."

"So I volunteer to shave you. And to cut your hair."

"I accept."

"Right after your nap."

"Begone. Jubal, did you have any of this jellied salad? It is something Til does exceptionally well... although all three of my owners are fine cooks."

"Will you put that in writing?"

"I told you to disappear. Jubal, living with three women takes fortitude."

"I know. I did so, for many years. Fortitude plus angelic disposition. And a taste for lazy living. But a group marriage, such as our Long Family, combines the advantages of bachelorhood, monogamy, and polygamy, with the drawbacks of none."

"I won't argue it but I'll stick with my three Graces as long as they'll let me hang around. Now let's see-Enrico Schultz. No such character."

"So?" I answered. "He made some horrid stains on my tablecloth."

"So he had another name. But you knew that. Best hypothesis makes him a member of the same gang as your friend Bill... who was a smiling villain if one ever smiled, as well as a consummate actor. We call them The Revisionists. Motivation had to be Adam Selene. Not Walker Evans."

"Why did he mention Walker Evans?"

'To shake you up, maybe. Dickie, I didn't know about General Evans until you brought the matter up, since that debacle is still in my future. My normal future. I can see how it weighs on your mind. Will weigh on your mind. Remember, I didn't know that you had been invalided out of the Andorran Contract Crusaders until you told me.

"Anyhow-All of the 'Friends of Walker Evans' are dead except you and one who went to the Asteroids and can't be found. This is as of July tenth, 2188, eleven years forward. Unless you want to talk to any alive on some date not quite so forward."

"Can't see any reason to."

"So it seemed to us. Now Walker Evans himself. Lazarus handled this... and a spot of world-changing, partly to show you what can be done. No attempt was made to revise the battle. It would be difficult, in 2177, to revise a battle in 2178 without utterly changing your life. Either kill you that year, or not lose your leg and you stay in the service-yes, I now know about your leg although it's forward from here. Either way, you don't go to Golden Rule, you don't marry Hazel... and we aren't sitting here, talking about it. World-changing is touchy, Dickie-best done in homeopathic doses.

"Lazarus has two messages for you. He says that you should feel no personal guilt over that debacle. To do so would be as silly as a subordinate of Custer feeling guilty over Little Big Horn... to which he adds that Custer was a far more brilliant general than Evans ever was. Lazarus speaks as one who has held every rank from private to commander in chief, in experience spread over many centuries and seventeen wars.

"That's the first message. The second is this: Tell your nephew that, yes, it horrifies nice people. But it happens. Only those who go out beyond the end of street lights and of pavements know how such things can happen. He says that he is certain that Walker Evans would not hold it against you. Dickie, what's he talking about?"

"Had he wanted you to know, he would have told you."

"Reasonable. Was General Evans a man of good taste?" "What?" I stared at my uncle-then answered reluctantly:

"Well, no, I would not say so. I found him tough and a bit stringy."

"Now we have it out in the open1-"

"Yes, damn you!" "-and I can tell you the rest, the world-changing. A field operative hid a couple of ration packs under the General's body. When you moved the body, you found them... and it was just enough that none of the Friends of Walker Evans ever reached that degree of hunger necessary to overcome the taboo. So it never happened."

"Then why do I remember it?" "Do you?"

"Why-" "You remember finding jettisoned field rations under the body. And how good you felt!"

"Uncle, this is crazy."

"That's world-changing. For a time, you have a memory. Then a faded memory of a memory. Then nothing. It never happened, Dickie. You went through one hell of an ordeal and lost a leg. But you did not eat your commanding officer."

Uncle went on, "Jubal, what do we have left that's important? Dickie, you can't expect to have all your questions answered; no man can expect that. Mmm, oh, yes, those diseases-You had two of them; the rest was hype. You were cured in about three days; then they kept you in a controlled-memory field and put a new leg on you... and did something else. Haven't you felt better lately? Brisk? More energetic?"

"Well... yes. But it dates from the day I married Hazel, not from Boondock."

"Both, probably. During the month they had you available Dr. Ishtar gave you a booster. I learned that they shifted you from the rejuvenation clinic to the hospital just the day before they let you wake up. Oh, they really swindled you, boy; they gave you a new leg and made you thirty years younger. I think you ought to sue them."

"Oh, knock it off. How about that heat bomb? More hype?"

"Maybe, maybe not. Not decided, just the time tick spiked. The thing is-"

Harshaw intervened. "Richard, we think now that we may be able to finish Task Adam Selene before a heat bomb would be necessary. There are some plans. So the heat bombing right now is in the status of Schrodinger's Cat. The outcome depends on Task Adam Selene. And vice versa. We'll see."

"These plans-You're assuming that I'll come around."

"No. We're assuming that you won't."

"Humm... If you are assuming that I won't, why are you two bothering to tell me all this?"

Uncle said in a tired voice, "Dickie boy, thousands and thousands of man-hours have gone into satisfying your childish demand to have the veil lifted from the unknown. You think we are simply going to burn the results? Sit back down and pay attention. Mmm, stay out of Luna City and Golden Rule after June of 2188; there are warrants out for you for eight murders."

"Eight! Who?"

"Mmm, Tolliver, Enrico Schultz, Johnson, Oswald Progant, Rasmussen-"

"Rasmussen!"

"Do you know him?"

"I wore his fez for ten minutes; I never laid eyes on him."

"Let's not waste time on these murder charges. All they mean is that someone is out to get you, both in L-City and in Golden Rule. With three timejumping groups after you, that's not surprising. You want them cleared up; they can be cleared up later. If needed. If you don't just go to Tertius and forget it. Oh, yes-those code groups. Not a message, just a prop to get you to open that door. But you didn't let yourself be killed quietly the way you were supposed to. Dickie, you're a troublemaker."

"Gosh, I'm sorry."

"Any more questions?"

"Go take your nap."

"Not yet. Jubal. Now?"

"Certainly." Dr. Harshaw got up and left.

"Dickie."

"Yes, Uncle."

"She loves you, boy; she really does. God knows why. But mat does not mean that she will tell you the truth or always act in your interest. Be warned."

"Uncle Jock, it never does any good to warn a man about his wife. Would you accept any advice from me about Cissy?"

"Of course not. But I'm older than you are and much more experienced."

"Answer me." "Let's change the subject instead. You don't like Lazarus Long."

I grinned at him. "Uncle, the only thing that persuades me that he might be as old as he is reputed to be is that it would take more than one ordinary lifetime to grow as cantankerous and generally difficult as he is. He rubs me the wrong way every time. And the bastard makes it worse by putting me under obligations to him. This foot-From a clone of his-did you know that? And that dustup you heard about this morning. Lazarus shot that bloke what's-his-name who tried to kill me. But Captain Sterling and Commander Smith did, too, and probably quicker. Or maybe not. Either way I had to thank all three of them. Damn it, I'd like to save his life just once to balance the books. The bastard."

"No way to talk, Dickie. Abby would have trounced you."

"So she would have. I take it back." "Besides-Your own parents never were married."

"So I've often been told. Colorfully."

"I mean it literally. Your mother was my favorite sister. Much younger than I. Pretty child. I taught her to walk. Played with her when she was growing up, spoiled her every way I could. So, naturally, when she was in what used to be called 'trouble' she came to her big brother. And to your Aunt Abby. Dickie, it was not that your father wasn't around; it was that your grandfather disliked him, disliked him as intensely as-well, as you dislike Lazarus Long.

"I don't mean Mr. Ames. You got his name but he met and married Wendy after you were bom. And we took you and raised you. Your mother was going to come for you, after a year-she said Ames deserved that much-but she didn't live that long. So Abby was your mother in every way but biology."

"Uncle, Aunt Abby was the best mother a boy could want. Look, those peach switchings were good for me. I know it."

"I'm pleased to hear you say so. Dickie, I love all your aunts ... but there will never be another Abby. Hazel reminds me of her. Dickie, have you made up your mind?"

"Uncle, I'll fight it all the way. How can I okay letting my bride risk a caper that she stands only a fifty-fifty chance of coming out of alive? Especially when nobody has even tried to show me why my ways aren't better?"

"Just asking. The mathematicians are testing another team-since you're unwilling. We'll see. Your father was stubborn and your grandfather was stubborn; it's no surprise that you are stubborn. Your grandfather-my father-said flatly that he would rather have a bastard in the family than Lazarus Long. So he had one. You. And Lazarus went away and never knew about you.

"Not surprising that you and your father don't get along;

you're too much alike. And now he's going to take your place, on the team for Task Adam Selene."

XXX

"Our revels now are ended."

WILLIAM SHAKESPEARE 1564-1616

Dying isn't difficult. Even a baby kitten can do it. I'm sitting with my back to the wall in the old computer room of the Warden's Complex in Luna. Pixel is cradled in my left arm. Hazel is on the floor, by us. I'm not sure Pixel is dead. He may be asleep. But I am not going to disturb him to find out; he's a badly hurt baby at best.

I know Hazel is still alive because I'm watching her respiration. But she is not in good shape. I do wish they would hurry.

I can't do much for either of them because I don't have anything to work with and I can't move much. I'm shy one leg and I don't have a prosthetic. Yes, that same right leg-Lazarus's leg-burned off just about at the transplant line. Guess I shouldn't gripe-being a bum job it's cauterized, not much blood. Hasn't really begun to hurt much yet, either. Not that white pain like a blow torch. That comes later.

I wonder if Lazarus knows he's my father? Did Uncle ever tell him?

Hey, this makes Maureen, that wonderful, beautiful creature, my grandmother!

And-Maybe I had better back up.

I'm a bit lightheaded.

I'm not even sure this is being recorded. I'm carrying a battle recorder but it's a tiny Tertius type I'm not familiar with. Either it was on and I turned it off or it was off and I turned it on. I'm not sure Pixel is dead. Did I already say that? Maybe I had better back up.

It was a good team, the best, with enough fire power that I felt that our chances were good. Hazel was in command, of course—

Major Sadie Lipschitz, strike team leader
Brevet Captain Richard Campbell, XO
Comet Gretchen Henderson, JO
Sergeant Ezra Davidson
Corporal Ted Bronson aka W. W. Smith aka Lazarus Long aka Lafayette Hubert, M.D.-additional duty, medical officer
Manuel Davis, civilian special field operative

Lazarus insisted on being called "Ted Bronson" when he was designated a corporal for this task force. It's an insiders' joke, I think; I was not let in on it.

Comet Henderson had been back on duty several months after having her baby boy. She was slender-solid and tan and beautiful and the combat ribbons on her pretty chest looked at home there. Sergeant Ezra always did look like a soldier, once he had legs, and his ribbons showed it, too. A good team.

Why was I breveted to captain? I asked that question right after Hazel swore me into the Corps-got a silly or reasonable answer depending on your bias. Because (said Hazel) in every history book in which this was mentioned, I had been second in charge. The histories did not name others, but they did not say that we acted alone, so she decided on more fire power and picked her team. (She decided. She picked. Not Lazarus. Not some THQ brain trust. That suited me.)

Gay Deceiver was manned by its first team, too-Hilda, commanding; Deety, XO and astrogator; Zeb Carter, chief pilot;

Jake Burroughs, copilot/irrelevancy gear-and Gay herself, conscious, sentient, and able to pilot herself... not true of any other irrelevancy craft except Dora (who was too big for this job).

The skipper of the car, Hilda, was under the command of the strike force team leader. I would have expected a hitch here ... but Hilda had proposed it. "Hazel, it's got to be that way. Everybody must know who's boss. When it hits the fan, we can't stop to chat."

A good team. We had not trained together but we were professionals and our CO made everything so clear that we didn't need drill. "Attention to orders. The purpose of this force is to capture items selected by Davis, and to return them and Davis to Tertius. There is no other purpose. If we have no casualties, fine. But if all of us are killed while Davis and his selections reach Tertius, our task is accomplished.

"This is the plan. Hilda places us at the north wall, star-boardside to, on the tick, after THQ advises that warp is ready to activate. Leave car in this order: Lipschitz, Campbell, Henderson, Davidson, Bronson, Davis. Place yourselves fore and aft in the bathrooms to exit in that order.

"The computer room is square. Lipschitz to southeast corner, Henderson to southwest corner, Campbell to northwest comer, Davidson to northeast comer. Diagonal pairs cover all four walls, so two such pairs doubly cover all walls. Bronson is bodyguard to Davis, no fixed post.

"As Davis works, filled boxes will be placed in car. Henderson and Davidson will move items to car as directed by Davis, and assisted inside by Deety. Car commander and pilots will remain ready to scram and will assist only by passing items back. Bronson will not repeat not move baggage; his sole task is bodyguard to Davis.

"When Davis tells me task is finished, we return to the car with all speed, in reverse order-Davis, Bronson, Davidson, Henderson, Campbell, Lipschitz. Hilda, you will give order to scram anytime after Davis and the stuff he came for is aboard, depending on tactical situation. If there is trouble, don't wait for anyone. Use your judgment, but your judgment must tell you to save Mannie and his items no matter who gets left behind.

"Questions?"

How long have I been doping off? My Sonychron was an early casualty. The team Hazel picked was-No, I said that. I think I did.

What happened to Tree-San?

The time tick selected was right after Hazel left the computer room on Saturday July fifth. The group picking the tick reasoned that if they were laying for us to arrive at the Raffles, then that antagonist (Time Lords?) would not be looking for us in the computer room. No way to do it earlier than that;

Hazel had reported that "Adam Selene" was in the computer room when she was there.

We cut it mighty sharp, almost too sharp; when Hazel was getting out of Gay, she stopped suddenly with me right behind her-waited briefly, then moved out.

She paused because she saw her own back, leaving the room.

I must get word to Aunt Til that Hazel and I can't make it home for supper.

My head aches and my eyes bother me.

I don't know how Pixel got aboard Gay. How that baby does get around!

Jubal Harshaw says, "The only constant thing in these shifting, fairy-chess worlds is human love." That's enough.

Pixel moved a little. It's been nice to have both feet for a few days.

"Richar'?"

"Yes, beloved?"

"Gretchen's baby. You his fame'."

"Huh?"

"She tol' me, mon's ago."

"I don't understand."

"Par'dox."

I started to question her about it; she was asleep again. The compress I had placed on her wound was seeping. But I didn't have anything more, so I didn't touch it.

Won't see Aunt Belden this trip. Too bad.

What happened to my files? Still in my other foot?

Hey! Tomorrow is the day "we're all dead" ifTolliver isn't.

The first hour went by with no incident whatever. Mannie worked steadily, changed arms once, started filling boxes. Gretchen and Ezra carried them to the car, passed them in, resumed their posts between trips. Most of this seemed to be programs that Mannie was bleeding off into his own cubes, using equipment he had fetched. I could not see. Then he started filling boxes more quickly, loading them with cylinders. Adam Selene's memories? I don't know. Maybe I watched too much.

Mannie straightened up, said, "Does it! Done!" I heard an answering, "Blert!"

And they hit us.

I was down at once, lower leg gone. I saw Mannie fall. I heard Hazel shout, "Bronson! Get him aboard! Henderson, Davidson-those last two boxes!" I missed the next, as I was firing. The whole east wall was open; I traversed it with my heater at full power. Somebody else was firing, on our side, I think.

Then it was quiet.

"Rich'r'?"

"Yes, dearest."

"'S been fun."

"Yes. love! All of it."

"Rich'r'... that light, end tunnel."

"Yes?"

"I'll wait... there."

"Honey, you're going to outlive me!"

"Look for me. I'll-"

When that wall opened, I think I saw what's-his-namc. Could the bloke who erased him write him back into the story? To clip us? Who was writing our story? Was he going to let us live?

Anyone who would kill a baby kitten is cruel, mean cruel. Whoever you are, I hate you. I despise you!

I dragged myself awake, realized that I had fallen asleep on watch! I had to pull myself together, because they might be back. Or, Glory Be! Gay Deceiver will be back. I couldn't figure out why Gay wasn't back. Trouble spiking the right time tick? Could be anything. But they won't just leave us here.

We saved Mannie and the stuff he picked out. We won. damn you all!

Had to see what weapons, ammo, were left. I didn't have anything more. My beam gun was exhausted, I knew. But my side arm? Don't remember firing it. All gone. Must look around.

"Dear?"

"Yes, Hazel?" (She's going to ask me for water and I haven't got any!)

"I'm sony people were eating." "What's that?"

"I had to kill him, dearest; he was assigned to kill you."

I placed the little cat on Hazel. Maybe he moved, maybe not-maybe both of them were dead. I managed to pull myself up onto my foot, by holding on to a computer rack, then let myself down again. Despite long practice in hopping at one-sixth gee I found that I was neither strong enough nor did I have good balance-and I was separated from my cane, for the first time in years. It was, I thought, in Gay's forward bathroom.

So I crawled, careful of my right leg. It was beginning to hurt. I found no weapons with charges. At painful last, I was back with Gwen and Pixel. Neither stirred. I couldn't be sure.

A week isn't a long honeymoon and it's an awfully short married life.

I explored her handbag, which I should have done earlier. She had carried it, slung over one shoulder to the other hip, even into battle.

That handbag was much bigger inside than out. I found twelve chocolate bars. I found her little camera. I found her deadly little lady's gun, that Miyako-fully loaded, eight in the clip, one in the chamber.

And, down in the bottom, I found the dart projector that had to be there. I almost missed it, it was styled to look like a toilet kit. Four darts were still in it.

If they come back-or a fresh gang, I don't care-I'm going to get us a baker's dozen.

To Sail Beyond the Sunset

To little girls and butterflies and kittens.
To Susan and Eleanor and Chris and (always) to Ginny.
With my love,
R.A.H.

Come, my friends,
‘Tis not too late to seek a newer world.
Push off, and sitting well in order smite
The sounding furrows; for my purpose holds
To sail beyond the sunset, and the baths
Of all the western stars, until I die.

TENNYSON, *“Ulysses”*

CHAPTER ONE

The Committee for Aesthetic Deletions

I woke up in bed with a man and a cat. The man was a stranger; the cat was not.

I closed my eyes and tried to pull myself together—hook "now" to my memory of last night.

No good. There wasn't any "last night." My last clear memory was of being a passenger in a Burroughs irrelevant bus, bound for New Liverpool, when there was a loud bang, my head hit the seat in front of me, then a lady handed me a baby and we started filing out the starboard emergency exit, me with a cat in one arm and a baby in the other, and I saw a man with his right arm off—

I gulped and opened my eyes. A stranger in my bed was better than a man bleeding to death from a stump where his right forearm ought to be. Had it been a nightmare? I fervently hoped so.

If it was not, then what had I done with that baby? And whose baby was it? Maureen, this won't do. Mislaying a baby is inexcusable. "Pixel, have you seen a baby?" The cat stood mute and a plea of not guilty was directed by the court.

My father once told me that I was the only one of his daughters capable of sitting down in church and finding that I had sat on a hot lemon meringue pie…anyone else would have looked. (I *had* looked. But my cousin Nelson—Oh, never mind.)

Regardless of lemon pies, bloody stumps, or missing babies, there was still this stranger in my bed, his bony back toward me—husbandly rather than loverly. (But I did not recall marrying him.)

I've shared beds with men before, and with women, and wet babies, and cats who demand most of the bed, and (once) with a barbershop quartet. But I do like to know with whom I am sleeping (just an old-fashioned girl, that's me). So I said to the cat, "Pixel, who is he? Do we know him?"

"*No-o-o-o.*"

Well, let's check." I put a hand on the man's shoulder, intending to shake him awake and then ask where we had met—or had we?

His shoulder was cold.

He was quite dead.

This is not a good way to start the day.

I grabbed Pixel and got out of bed by instantaneous translation; Pixel protested. I said sharply, "Shut up, you! Mama has problems." I forced a thalamic pause of at least a microsecond, maybe longer, and decided not to flee headlong outdoors, or out into the hallway, as the case might be…but to slow down and attempt to assess the situation, before screaming for help. Perhaps just as well, as I found that I was barefooted all the way up. I am not jumpy about skin but it did seem prudent to dress before reporting a corpse. Police were certain to want to question me and I have known cops who would exploit any advantage in order to throw one off balance.

But first a look at the corpse—

Still clutching Pixel I went around and bent over the other side of the bed. (Gulp.) No one I knew. No one I would choose to bed with, even were he in perfect health. Which he was not; that side of the bed was soggy with blood. (Two gulps and a frisson.) He had bled from his mouth-or his throat had been cut; I was not sure which and was unwilling to investigate.

So I backed away and looked around for my clothes. I knew in my bones that this bedroom was part of a hostelry; rooms for hire do not taste like private homes. It was a luxury suite; it took me a longish time to poke through all the closets and cubbyholes and drawers and cupboards et cetera…and then to do it all over again when the first search failed to locate my clothes. The second search, even more thorough, found not a rag—neither his size nor my size, neither women's clothes nor men's.

I decided willy-nilly to telephone the manager, tell him the problem, and let him call the cops—and ask him for a courtesy bathing robe or kimono or some such.

So I looked for a telephone.

Alexander Graham Bell had lived in vain.

I stopped in frustration. "Name of a dog! Where have they hidden that frimping phone?"

A bodyless voice said, "Madam, may we offer you breakfast? We are proud of our Harvest Brunch: a lavish bowl of assorted fresh fruits; a tray of cheeses; a basket of freshly baked hot breads, crisp breads, and soft breads with jams and jellies and syrups and Belgian butter. Basted baby barlops *en brochette*; drawn eggs Octavian; smoked savannah slinker; farkels in sweet-sour; Bavarian strudel; your choice of still and sparkling wines, skull-buster Strine beer, Mocha, Kona, Turkish, and Proxima coffees, blended or straight; all served with—"

I repressed a gagging reflex. "I don't want breakfast!"

"Perhaps Madam would enjoy our Holiday Eye-opener: your choice of fruit juice, a roll hot from our oven, your choice of gourmet jams or jellies, your choice in a filling but nonfattening hot cup. Served with the latest news, or background music, or restful silence."

"I don't want to eat!"

The voice answered thoughtfully, “Madam, I am a machine programmed for our food and beverage services. May I switch you to another program? Housekeeping? Head porter? Engineering?”

“Get me the manager!”

There was a short delay. “Guest services! Hospitality with a smile! How may I help you?”

“Get me the manager!”

“Do you have a problem?”

“You’re the problem! Are you a man, or a machine?”

“Is that relevant? Please tell me how I can help you.”

“If you are not the manager, you can’t. Do you run on testicles? Or electrons?”

“Madam, I am a machine but a very flexible one. My memories include all curricula of Procrustes Institute of Hotelier Science, including all case studies updated to midnight yesterday. If you will be so good as to state your problem, I will match it at once with a precedent case and show how it was solved to the satisfaction of the guest. Please?”

“If you don’t put me through to the manager in nothing flat, I guarantee that the manager will take an axe to your rusty gizzard and install a Burroughs-Libby analog brain in your place. Who shaved the barber? What do your case studies say about that? Moron.”

This time I got a female voice. “Manager’s office. How may I help you?”

“You can take this dead man out of my bed!”

Short pause—“Housekeeping, Hester speaking. How may we help you?”

“There’s a dead man in my bed. I don’t like it. Untidy.”

Another pause— “Caesar Augustus Escort Service, serving all tastes. Do I understand that one of our gentleman companions died in your bed?”

“I don’t know who he is; I just know that he’s dead. Who takes care of such things? Room service? Garbage removal? House physician? And I want the sheets changed, too.”

This time they gave me background music while I waited…and waited—through the first two operas of the *Ring Cycle* and well into the third—

“Accounting and bookkeeping, our Mister Munster speaking. That room was not rented for double occupancy. There will be an additional—”

“Look, buster, it’s a corpse. I don’t think a corpse counts toward ‘double occupancy.’ Blood is dripping off the bed and onto your rug. If you don’t get somebody up here right away, that rug will be ruined.”

“There will be a charge for damage to the rug. That is more than normal wear and tear.”

“*Grrrr!*”

“I beg pardon?”

“I am about to set fire to the drapes.”

“You’re wasting your time; those drapes are fireproof. But your threat has been recorded. Under the Rooming House Act, section seven dee—”

“Get this dead man out of here!”

“Please hold. I’ll connect you with the head porter.”

“You do and I’ll shoot him as he comes through the door. I bite. I scratch. I’m foaming at the mouth. I haven’t had my shots.”

“Madam, please contain yourself. We pride ourselves on—”

“And then I’ll come down to your office and find you, Mister monster Munster, and pull you out of your chair and sit down in it myself and turn you over my knee and take your pants down and—Did I mention that I am from Hercules Gamma? Two and a half gravities surface acceleration; we eat your sort for lunch. So stay where you are; don’t make me have to hunt for you.”

“Madam, I regret that I must tell you that you cannot sit in my chair.”

“Want to bet?”

“I do not have a chair; I am securely bolted to the floor. And now I must bid you good day and turn you over to our security force. You will find the additional charges on your statement of account. Enjoy your stay with us.”

They showed up too quickly; I was still eyeing those fireproof drapes, wondering if I could do as well with them as Scarlet O’Hara had with the drapes at Tara, or if I could arrange a simple toga, like Eunice in *The Last Days of Pompeii* (Or was she in *Quo Vadis?*), when they arrived: a house doc, a house dick, and a house ape, the last with a cart. Several more oddments crowded in after them, until we had enough to choose up sides.

I need not have worried about being naked; no one seemed to notice…which irked me. Gentlemen should at least leer. And a wolf whistle or other applause would not be out of place. Anything less makes a woman feel unsure of herself.

(Perhaps I am too sensitive. But since my sesquicentennial I have been disposed to check the mirror each morning, wondering.)

There was only one woman in this mob of intruders. She looked at me and sniffed, which made me feel better.

Then I recalled something. When I was twelve, my father told me that I was going to have lots of trouble with men. I said, “Father, you are out of your veering mind. I’m not pretty. The boys don’t even throw snowballs at me."

"A little respect, please. No, you aren't pretty. It's the way you smell, my darling daughter. You are going to have to bathe oftener…or some warm night you will wind up raped and murdered."

"Why, I bathe every week! You know I do."

"In your case, that's not enough. Mark my words."

I did mark his words and learned that Father knew what he was talking about. My body odor when I'm well and happy is much like that of a cat in heat. But today I was not happy. First that dead man scared me and then those bleeping machines made me angry…which adds up to a different sort of stink. A tabby cat not in heat can walk right through a caucus of toms and they will ignore her. As I was being ignored.

They stripped the top sheet off my erstwhile bedmate. The house physician looked over the cadaver without touching it, then looked more closely at that horrid red puddle—leaned down, sniffed it, then made my skin crawl by dipping a finger into the slop and tasting it. "Try it, Adolf. See what you think."

His colleague (I assumed that he was another physician) also tasted the bloody mess. "Heinz."

"No. Skinner's."

"With all due respect, Dr. Ridpath, you have ruined your palate with that cheap gin you guzzle. Heinz. Skinner's catsup has more salt. Which kills the delicate tomato flavor. Which you can't taste, because of your evil habits."

"Ten thousand, Dr. Weisskopf? Even money."

"You're on. What do you place as the cause of death, sir?"

"Don't try to trap me, Doctor. 'Cause of death' is your job."

"His heart stopped."

"Brilliant, Doctor, brilliant! But why did it stop?"

"In the case of Judge Hardacres for some years the question has been: What keeps him alive? Before I express an opinion I want to place him on a slab and slice him up. I may have been hasty; he may turn out not to have had a heart."

"Are you going to cut him up to learn something, or to make certain he stays dead?"

"Noisy in here, isn't it? Do you release the body? I'll have it taken downtown."

"Hand me a form nine-oh-four and I'll chop it. Just keep the meat out of sight of our guests. Grand Hotel Augustus does not have guests dying on its premises."

"Dr. Ridpath, I was handling such things discreetly before you slid through that diploma mill."

"I'm sure you were, Adolf. Lawn ball later?"

"Thank you, Eric. Yes."

"And dinner after; Zenobia will be expecting you. I'll pick you up at the morgue."

"Oh, I'm sorry! I'm taking my assistant to the Mayor's Orgy."

"No fuss. Zenobia would never miss the first big party of Fiesta; we'll all go together. So bring her with you."

"Him, not 'her.' "

"Pardon my raised eyebrows; I thought you had sworn off. Very well; bring him."

"Eric, Don't you find it depressing to be so cynical? He's a satyr, not a goose."

"So much the better. With Fiesta starting at sundown Zenobia will welcome any gallant indecency he offers her, as long as he does not break her bones."

This silly chatter had told me one thing: I was not in New Liverpool. New Liverpool does not celebrate Fiesta—and this local festival sounded like *Fasching* in Munich combined with Carnival in Rio, with a Brixton riot thrown in. So, not New Liverpool. What city, what planet, what year, and what universe remained to be seen. Then I would have to see what could be done about my predicament. Clothes. Money. Status. Then, how to get home. But I was not worried. As long as the body is warm and the bowels move regularly no problem can be other than minor and temporary.

The two doctors were still sneering at each other when I suddenly realized that I had heard not one word of Galacta. Not even Spanglish. They were speaking English, almost the harsh accent of my girlhood, with idiom and vocabulary close to that of my native Missouri.

Maureen, this is ridiculous.

While flunkies were getting ready to move the body (disguised as a nameless something draped in dust covers) the medical examiner (coroner?) got a signed release from the house physician, and both started to leave. I stopped the latter. "Dr. Ridpath!"

"Yes? What is it, Miss?"

"I'm Maureen Johnson Long. You are on the staff of the hotel, are you not?"

"In a manner of speaking. I have my offices here and am available as house physician when needed. Do you wish to see me professionally? I'm in a hurry."

"Just one quick question, Doctor. How does one get the attention of a flesh and blood human being on the staff of this hotel? I can't seem to raise anyone but moronic robots—and I'm stranded here with no clothes and no money."

He shrugged. "Someone is certain to show up before long, once I report that Judge Hardacres is dead. Are you worried about your fee? Why don't you call the talent agency that sent you to him? The judge probably had a running account with them."

"Oh! Doctor, I'm not a prostitute. Although I suppose it does look like it."

He cocked his left brow so high that it disturbed the tilt of his toupee, and changed the subject. "You have a beautiful pussy."

I assumed that he was speaking of my feline companion, who is a most beautiful pussy—a flame-colored tomcat (just the color of my hair) in a striking tiger pattern. He has been much admired in several universes. "Thank you, sir. His name is Pixel and he is a much-traveled cat. Pixel, this is Dr. Ridpath."

The doctor put out a finger close to the little pink nose. "Howdy, Pixel."

Pixel was helpful. (Sometimes he is not—a cat of firm opinions.) He sniffed the proffered finger, then licked it.

The doctor smiled indulgently, then withdrew his finger when Pixel decided that the ritual kiss had gone on long enough. "He's a fine boy, that one. Where did you find him?"

"On Tertius."

"Where's Ontershus? Canada? Mmm, you say you have a money problem. What'll you take for Pixel, cash in hand? My little girl would love him."

(I didn't swindle him. I could have but I didn't. Pixel can't be sold-he can't stay sold—because he can't be locked up. For him, stone walls do not a prison make.) "Oh, I'm sorry! I can't sell him; he's not mine. He's a member of the family of my grandson—one of my grandsons-and his wife. But Colin and Hazel would never sell him. They can't sell him; they don't own him. No one owns him; Pixel is a free citizen."

"So? Then perhaps I can bribe him. How about it, Pixel? Lots of horse liver, fresh fish, cat nibbles, all you want. Plenty of friendly girl cats around and we'll leave your spark plugs right where they are. Well?"

Pixel gave the restless wiggle that means "Let me down," so I did. He sniffed the doctors legs, then brushed against him. "*Nnnow?*" he inquired.

Dr. Ridpath said to me, "You should have accepted my offer. I seem to have acquired a cat."

"I wouldn't bet on it, Doctor. Pixel likes to travel but he always comes back to my grandson Colin. Colonel Colin Campbell. And his wife Hazel."

For the first time Dr. Ridpath really looked at me. " 'Grandson.'

‘Colonel.’ Miss, you’re hallucinating.”

(I suddenly realized how it looked to him. Before I left Tertius, Ishtar had given me a booster treatment—it had been fiftytwo years—and Galahad had given me a cosmetic refresher and had overdone it. Galahad likes ‘em young, especially redheads—he keeps my twin daughters permanent teenagers, and now we three look like triplets. Galahad cheats. Except for Theodore, Galahad is my favorite husband, but I shan’t let anyone find out.)

“Yes, I must be hallucinating,” I agreed. “I don’t know where I am, I don’t know what day this is, I don’t know what became of my clothes or my money or my purse, and I don’t know how I got here… save that I was in an irrelevancy bus for New Liverpool and there was an accident of some sort. If Pixel were not still with me, I would wonder if I were me.”

Dr. Ridpath reached down; Pixel allowed himself to be picked up. “What was that bus you mentioned?”

“A Burroughs shifter. I was on Tellus Tertius at Boondock on time line two at Galactic year 2149, or Gregorian 4368 if you like that better. I was scheduled for New Liverpool in time line two, where I was to base for a field trip. But something went wrong.”

“Ah, so. Hmm. And you have a grandson who is a colonel?”

“Yes, sir.”

“And how old are you?”

“That depends on how you count it, Doctor. I was born on Earth in time line two on the Fourth of July, 1882. I lived there until 1982, one century minus two weeks, whereupon I moved to Tertius and was rejuvenated. That was fiftytwo years ago by my personal calendar. I’ve had a booster just recently, which made me younger than I should be—I prefer to be mature rather than girlish. But I do have grandchildren, lots of them.”

“Interesting. Will you come down to my office with me?”

“You think I’m out of my head.”

He was not quick to answer. “Let me put it this way. One of us is hallucinating. Tests may show which one. Besides that, I have an exceptionally cynical office nurse who can, without tests, almost certainly spot which one of us has slipped his clutch. Will you come?”

“Yes, certainly. And thank you, sir. But I’ve got to find some clothes first. I can’t very well leave this room until I do.” (I wasn’t certain that this was true. That crowd that had just left obviously did not have the attitudes on “indecent exposure” that were commonplace in Missouri when I was born. On the other hand, where I now lived on Tertius nudity at home was unremarkable and it didn’t cause any excitement even in the most public places—like overalls at a wedding: unusual but nothing to stare at.)

"Oh. But Festival is about to start."

" 'Festival'? Doctor, I'm a stranger in a strange land; that is what I've been trying to say."

"Uh—Our biggest holiday is about to start. Starts at sundown, theoretically, but there are many who jump the gun. By now the boulevard out front will have quite a percentage of naked people, already drunk and looking for partners."

"Partners for what?" I tried to sound innocent. I'm not much for orgies. All those knees and elbows—

"What do you think? It's a fertility rite, my dear girl, to insure fat crops. And fat bellies, for that matter. By now, any virgins left in this fair city are locked up." He added, "But you won't be bothered simply going with me to my office…and I promise I'll find you some sort of clothing. A coverall. A nurse's uniform. Something. Does that suit you?"

"Thank you, Doctor. Yes!"

"If I were you and I was still jumpy, I would look for a big beach towel in that bathroom, and make a caftan out of it. If you can do it in three minutes. Don't dillydally, dolly; I've got to get back to the grind."

"Yessir!" I hurried into the bathroom.

It really was a bathroom, not a refresher. When I had searched the suite for clothing, I had noticed a stack of Turkish towels in there. Now I looked more closely and spotted two that bulged fat in that stack. I worked one out and unfolded it. Eureka! A towel fit for a rich South American, one at least six feet long and three feet wide. A razor blade from the medicine chest placed a slit big enough for my head spang down the center. Now to find something, anything, to tie around my waist.

While I was doing this, a human head appeared in front of—in place of, rather—the hair dryer. A head female and rather pretty. No body. During my first century this would have made me jumpy. Today I'm used to realistic holos.

"I've been trying to catch you alone," the head said in an organlike baritone. "I speak for the Committee for Aesthetic Deletions. We seem to have caused you some inconvenience. For that we are truly sorry."

"You should be! What became of that baby?"

"Never mind that baby. We'll be in touch." It flickered.

"Hey! Wait!" But I was talking to the hair dryer.

Dr. Ridpath looked up from scratching Pixel's chin. "Five minutes and forty seconds."

"I'm sorry to be late but I was interrupted. A head appeared and spoke to me. Does that happen often around here? Or am I hallucinating again?”

“You really do seem to be a stranger here. That’s a telephone. Like this—Telephone, please!”

A head appeared in a frame that had contained a rather dull still-life, a male head in this case. “Your call, sir?”

“Cancel.” The head blinked out. “Like that?”

“Yes. But a girl.”

“Of course. You’re female and the call reached you in a bathroom, so the computer displayed a head matching your sex. The computer matches lip movements to words…but the visual stays an impersonal animation unless you elect to be seen. Same for the caller.”

“I see. A hologram.”

“Yes. Come along.” He added, “You look quite fetching in that towel but you looked still better in your skin.”

“Thank you.” We went out in the hotel corridor; Pixel cut back and forth in front of us. “Doctor, what is ‘The Committee for Aesthetic Deletions’?”

“Huh?” He sounded surprised. “Assassins. Criminal nihilists. Where did you hear of them?”

“That head I saw in the bathroom. That telephone.” I repeated the call, word for word, I think.

“Hmm. Interesting.” He did not say another word until we reached his office suite, ten stories down on the mezzanine.

We ran across several hotel guests who had “jumped the gun.” Most were naked save for domino masks but several wore full masks—of animals or birds, or abstract fantasy. One couple was dressed most gaudily in nothing but paint. I was glad that I had my terry cloth caftan.

When we reached Dr. Ridpath’s office suite, I hung back in the waiting room while he went on into an inner room, preceded by Pixel. The doctor left the door open; I could hear and see. His office nurse was standing, her back to us, talking “on the telephone”—a talking head. There appeared to be no one else in the suite. Nevertheless I was mildly surprised to find that she had joined the epidemic of skin; she was wearing shoes, minipanties, and a nurse’s cap, and had a white nurse’s uniform over one arm as if caught by the phone while she was undressing. Or changing. She was a tall and slender brunette. I could not see her face.

I heard her say, “I’ll tell him, Doc. Keep your guard up tonight. See you in jail. Bye.” She half turned. “That was Daffy Weisskopf, Boss. He has a preliminary report for you. Cause of death, suffocation. But—get this—stuffed down the old bastard’s throat, before the catsup was poured in, was a plastic envelope with a famous—or infamous—card in it: ‘The Committee for Aesthetic Deletions.’ ”

"So I figured. Did he say what brand of catsup?"

"Fer cry eye yie!"

"And what are you doing peeling down? Festival doesn't start for another three hours."

"Look here, slave driver! See that clock?—ticking off the precious seconds of my life. See what it says? Eleven past five. My contract says that I work until five."

"It says that you are on duty until I relieve you, but that overtime rate starts at five."

"There were no patients here and I was changing into my festival costume. Wait till you see it, Boss! It 'ud make a priest blush."

"I doubt it. We do have a patient and I need your help."

"Okay, okay! I'll get back into my Florence Nightingale duds."

"Don't bother; it would just waste time. Mrs. Long! Come in, please, and take off your clothes."

"Yes, sir." I came in at once, while peeling off that scrounged caftan. I could see what he was doing: a prudent male doctor has a chaperon when examining a female patient; that's a universal. A multi-universal. If the circumstances happen to supply a chaperon in her skin, so much the better; there need be no time wasted on "angel robes" and other such nonsense. Having helped my father and having stood years of watches in the rejuvenation clinic at Boondock and in the associated hospital I understood the protocol invoked; a nurse in Boondock wears clothes only when the job requires it. Seldom, that is, as the patient is usually not clothed. "But it's not 'Mrs. Long,' Doctor. I am usually called 'Maureen.' "

"'Maureen' it is. This is Dagmar. Roast, meet Alice; Alice, meet Roast. And Pixel, too, Dagmar. He's the one with the short legs."

"Howdy, Maureen. Hi, Pixel."

"*Mee-ow.*"

"Hi, Dagmar. Sorry to keep you late."

"*De nada,* ducks."

"Dagmar, either I am out of my skull, or Maureen is. Which is it?"

"Couldn't it be both? I've had my doubts about you for a long time, Boss."

"Understandable. But she really does seem to have lost a chunk of her memory. At least. Plus possible hallucinations. You've studied *materia medica* much more recently than I have; if someone wanted to cause a few hours' temporary amnesia, what drug would he choose?"

"Huh? Don't give me your barefoot boy act. Alcohol, of course. But it might be almost anything, the way the kids nowadays eat, drink, snort, smoke, or shoot almost anything that doesn't shoot back."

"Not alcohol. Enough alcohol to do that produces a horrible hangover, with halitosis, twitches and shakes, and bloodshot eyes. But look at her-clear eyes, healthy as a horse, and innocent as a pup in the clean laundry. Pixel! Stay out of that! So what do we look for?"

"I dunno; let's operate and find out. Urine sample. Blood sample. Saliva, too?"

"Certainly. And sweat, if you can find enough."

"Vaginal specimen?"

"Yes."

"Wait," I objected. "If you intend to poke around inside me, I want a chance to douche and wash."

"Not bleedin' likely, ducks," Dagmar answered gently. "What we need is whatever is in there now…not after you've washed your sins away. Don't argue; I wouldn't want to break your arm."

I shut up. I do indeed want to smell good, or not smell at all, when being examined. But as a doctor's daughter (and a therapist myself) I knew that what Dagmar said made sense…since they were looking for drugs. I didn't expect that they would find any…but they might; I certainly was missing some hours. Days? Anything could have happened.

Dagmar had me pee in a cup and took my blood and saliva, then told me to climb onto the table and into the stirrups. "Shall I do it? Or the Boss? Out of the way, Pixel! And stop that."

"Either of you." (A truly considerate nurse. Some female patients can't stand to be touched down below by females, others are shy with males. Me, I was cured of all such nonsense by my father before I was ten.)

Dagmar came back with a dilator…and I noticed something. Brunette, I said she was. She had remained undressed save for scanty panties—which were not opaque. She should have shown a dark, builtin fig leaf, no?

No. Just skin shade and a hint of the Great Divide.

A woman who shaves or otherwise depilates her pubic curls has a profound interest in recreational sex. My beloved first husband Brian pointed this out to me in the Mauve Decade, *circa* 1905 Gregorian. I've checked Brian's assertion through a century and a half, endless examples. (I am not counting prepping for surgery or for childbirth.) The ones who did it because they preferred that styling were without exception hearty, healthy, uninhibited hedonists.

Dagmar wasn't prepped for surgery; she (obviously!) was not about to give birth. No, she was about to take part in a saturnalia. QED.

It made me feel warm toward her. Brian, bless his lecherous soul, would have appreciated her.

By now, in the course of chatting while she took samples, she knew the essentials of my "hallucination," so she knew that I was a stranger in town. As she was adjusting that damned dilator (I have always detested them, although this one was blood temperature and was being handled with the gentle care that a woman can bring to the task, having been there herself)—while she was busy with this, I asked a question in order to ignore what she was doing. “Dagmar, tell me about this festival.”

“La Fiesta de Santa Carolita? Hey, you clamped down! Watch it, ducks you’ll hurt yourself.”

I sighed and tried to relax. Santa Carolita is my second child, born in 1902 Gregorian.

CHAPTER TWO

The Garden of Eden

I remember Earth.

I knew her when she was clean and green, mankind's beautiful bride, sweet and lush and lovable.

I speak of my own time line, of course, numbered "two" and coded "Leslie LeCroix." But the best known time lines, those policed by the Time Corps for the Circle of Ouroboros, are all one at the time I was born, 1882 Gregorian, only nine years after the death of Ira Howard. In 1882 the population of Earth was a mere billion and a half.

When I left Earth just a century later it had increased to over four billion and that swarming mass was doubling every thirty years.

Remember that ancient Persian parable about doubling grains of rice on a chessboard? Four billion people are a smidgen larger than a grain of rice; you quickly run out of chessboard. On one time line Earth's population swelled to over thirty billion before reaching final disaster; on other time lines the end came at less than ten billion. But on all time lines Dr. Malthus had the last laugh.

It is futile to mourn over the corpse of Earth, as silly as it would be to cry over an empty chrysalis when its butterfly has flown. But I am incurably sentimental and forever sad at how Man's Old Home has changed.

I had a marvelously happy girlhood.

I not only lived on Earth when she was young and beautiful but also had the good fortune to be born in one of her loveliest garden spots, southern Missouri before people and bulldozers ravaged its green hills.

Besides the happy accident of birthplace, I had the special good fortune to be my father's daughter.

When I was still quite young my father said to me, "My beloved daughter, you are an amoral little wretch. I know this, because you take after me; your mind works just the way mine does. If you are not to be destroyed by your lack, you must work out a practical code of your own and live by it."

I thought about his words and felt warm and good inside. "Amoral little wretch—" Father knew me so well.

"What code should I follow, Father?"

"You have to pick your own."

"The Ten Commandments?"

"You know better than that. The Ten Commandments are for lame brains. The first five are solely for the benefit of the priests and the powers that be; the second five are half truths, neither complete nor adequate."

"All right, teach me about the second five. How should they read?"

"Not on your tintype, lazy bones; you've got to do it yourself." He stood up suddenly, dumping me off his lap and almost landing me on my bottom. This was a running game with us. If I moved fast, I could land on my feet. If not, it was one point to him.

"Analyze the Ten Commandments," he ordered. "Tell me how they should read. In the meantime, if I hear just once more that you have lost your temper, then when your mother sends you to discuss the matter with me, you had better have your McGuffey's Reader tucked inside your bloomers."

"Father, you wouldn't."

"Just try me, carrot top, just try me. I will enjoy spanking you."

An empty threat—He never spanked me once I was old enough to understand why I was being scolded. But even before then he had never spanked me hard enough to hurt my bottom. Just my feelings.

Mother's punishments were another matter. The high justice was Father's bailiwick; Mother handled the low and middle—with a peach switch. Ouch !

Father spoiled me rotten.

I had four brothers and four sisters—Edward, born in 1876; Audrey in '78; Agnes in 1880; Tom, '81; in '82 I came along; Frank was born in 1884, then Beth in '92; Lucille, '94; George in 1897—and I took up more of Father's time than any three of my siblings. Maybe four. Looking back on it, I can't see that he made himself more available to me than he did to any of my brothers and sisters. But it certainly worked out that I spent more time with my father.

Two ground-floor rooms in our house were Father's clinic and surgery; I spent a lot of my free time there as I was fascinated by his books. Mother did not think I should read them, medical books being filled with things that ladies simply should not delve into. Unladylike. Immodest.

Father said to her, "Mrs. Johnson, the few errors in those books I will point out to Maureen. As for the far more numerous and much more important truths, I am pleased that Maureen wants to learn them. 'Ye shall know the truth and the truth shall make you free.' John, eight, verse thirty-two."

Mother set her mouth in a grim line and did not answer. For her the Bible was the final word…whereas Father was a freethinker, a fact he did not admit even to me at that time. But Father knew the Bible more thoroughly than Mother did and could always quote a verse to refute her—a most unfair way to argue, it seems to me, but an advantage he needed in dealing with her. Mother was strong-willed.

They disagreed on many things. But they had rules that let them live together without bloodshed. Not only live together but share a bed and have baby after baby together. A miracle.

I think Father set most of the rules. At that time and place it was taken for granted that a husband was head of his household and must be obeyed. You may not believe this but the wedding ceremony in those days required the bride to promise to obey her husband—in everything and forever.

If I know my mother (I don't, really), she didn't keep that promise more than thirty minutes.

But they worked out practical compromises.

Mother bossed the household. Father's domain was his clinic and surgery, and the barn and outbuildings and matters pertaining thereto. Father controlled all money matters. Each month he gave Mother a household allowance that she spent as she saw fit. But he required her to keep a record of how she spent it, bookkeeping that Father examined each month.

Breakfast was at seven, dinner at noon, supper at six; if Father's medical practice caused him to need to eat at other times, he notified Mother-ahead of time if possible. But the family sat down on time.

If Father was present, he held Mother's chair for her; she thanked him, he then sat down and the rest of us followed. He said grace, morning, noon, and night. In Father's absence my brother Edward seated Mother and she said grace. Or she might direct one of us to return thanks, for practice. Then we ate, and misbehavior at the table was only one notch below high treason. But a child did not have to sit and squirm and wait for the grownups after he was through eating; he could ask to be excused, then leave the table. He could not return even if he discovered that he had made a horrible mistake such as forgetting that it was a dessert night. (But Mother would relent and allow that child to eat dessert in the kitchen…if he had not teased or whined.)

The day my eldest sister, Audrey, entered high school Father added to the protocol: He held Mother's chair as usual. Once she was seated Mother said, "Thank you, Doctor." Then Edward, two years older than Audrey, held her chair for her and seated her just after Mother was seated. Mother said, "What do you say, Audrey?"

"I did say it, Mama."

"Yes, she did, Mother."

"I did not hear it."

"Thank you, Eddie."

"You're welcome, Aud."

Then the rest of us sat down.

Thereafter, as each girl entered high school, the senior available boy was conscripted into the ceremony.

On Sundays dinner was at one because everyone but Father went to Sunday School and everyone including Father went to morning church.

Father stayed out of the kitchen. Mother never entered the clinic and surgery even to clean. That cleaning was done by a hired girl, or by one of my sisters, or (once I was old enough) by me.

By unwritten rules, never broken, my parents lived in peace. I think their friends thought of them as an ideal couple and of their offspring as "those nice Johnson children."

Indeed I think we were a happy family, all nine of us children and OUI parents. Don't think for a minute that we lived under such strict discipline that we did not have fun. We had loads of fun, both at home and away.

But we made our own fun, mostly. I recall a time, many years later, when American children seemed to be unable to amuse themselves without a fortune in electrical and electronic equipment. We had no fancy equipment and did not miss it. By then, 1890 more or less, Mr. Edison had invented the electric light and Professor Bell had invented the telephone but these modern miracles had not reached Thebes, in Lyle County, Missouri. As for electronic toys, the word "electron" had yet to be coined. But my brothers had sleds and wagons and we girls had dolls and toy sewing machines and we had many indoor games in joint tenancy—dominoes and checkers and chess and jackstraws and lotto and pigs-in-clover and anagrams…

We played outdoor games that required no equipment, or not much. We had a variation of baseball called "scrub" which could be played by three to eighteen players plus the volunteer efforts of dogs, cats, and one goat.

We had other livestock: from one to four horses, depending on the year; a Guernsey cow named Clytemnestra; chickens (usually Rhode Island Reds); guinea fowl, ducks (white domestic), rabbits from time to time, and (one season only) a sow named Gumdrop. Father sold Gumdrop when it developed that we were unwilling to eat pigs we had helped raise. Not that we needed to raise pigs; Father was more likely to receive fees in smoked ham or a side of bacon than he was to be paid in money.

We all fished and the boys hunted. As soon as each boy was old enough (ten, as I recall) to handle a rifle, Father taught him to shoot, a .22 at first. He taught them to hunt, too, but I did not see it; girls were not included. I did not mind that (I refused to have anything to do with skinning and gutting bunny rabbits, that being their usual game) but I did want to learn to shoot…and made the mistake of saying so in Mother's hearing. She exploded.

Father told me quietly, "We'll discuss it later."

And we did. About a year later, when it was established that I sometimes drove Father on country calls, unbeknownst to Mother he started taking along in the back of his buggy under gunny sacks a little single-shot .22…and Maureen was taught to shoot…and especially how not to get shot, all the rules of firearm safety. Father was a patient teacher who demanded perfection.

Weeks later he said, "Maureen, if you will remember what I've taught you, it may cause you to live longer. I hope so. We won't tackle pistol this year; your hands aren't yet big enough."

We young folks owned the whole outdoors as our playground. We picked wild blackberries and went nutting for black walnuts and searched for pawpaws and persimmons. We went on hikes and picnics. Eventually, as each of us grew taller and began to feel new and wonderful yearnings, we used the outdoors for courting—"sparking," we called it.

Our family was forever celebrating special days—eleven birthdays, our parents' wedding anniversary, Christmas, New Year's Eve and New Year's Day, Valentine's Day, Washington's birthday, Easter, the Fourth of July (a double celebration, it being my birthday), and Admission Day on the tenth of August. Best of all was the county fair—"best" because Father drove in the harness races (and warned his patients not to get sick that week—or see Dr. Chadwick, his exchange). We sat in the stands and cheered ourselves hoarse… although Father seldom finished in the money. Then came Halloween and Thanksgiving, which brings us up to Christmas again.

That's a full month of special days, every one of them celebrated with noisy enthusiasm.

And there were nonspecial days when we sat around the dining table and picked the meats from walnuts as fast as Father and Edward could crack them, while Mother or Audrey read aloud from the Leatherstocking Tales or Ivanhoe or Dickens—or we made popcorn, or popcorn balls (sticky all over everything!), or fudge, or we gathered around the piano and sang while Mother played, and that was best of all.

There were winters when we had a spell-down every night because Audrey was going for it seriously. She walked around with McGuffey's speller under one arm and Webster's *American Spelling Book* under the other, her lips moving and her eyes blank. She always won the family drills; we expected that; family competition was usually between Edward and me for second place.

Audrey made it: First place in Thebes Consolidated Grammar and High School when she was in Sixth Grade, then the following year she went all the way to Joplin for the regional—only to lose to a nasty little boy from Rich Hill. But in her freshman year in high school she won the regional and went on to Jefferson City and won the gold medal for top speller in Missouri. Mother and Audrey went together to the state capital for the finals and the presentation—by stage coach to Butler, by railroad train to Kansas City, then again by train to Jefferson City. I could have been jealous—of Audrey's travel, not of her gold medal—had it not been that by then I was about to go to Chicago (but that's another story).

Audrey was welcomed back with a brass band, the one that played at the county fair, specially activated off season to honor "Thebes' Favorite Daughter" (so it said on a big banner), "Audrey Adele Johnson." Audrey cried. So did I.

I remember especially one hot July afternoon—"Cyclone weather," father decided, and, sure enough, three twisters did touch down that day, one quite close to our house.

We were safe; Father had ordered us into the storm cellar as soon as the sky darkened, and had helped Mother down the steps most carefully—she was carrying again…my little sister Beth it must have been. We sat down there for three hours, by the light of a barn lantern, and drank lemonade and ate Mother's sugar cookies, thick and floury and filling.

Father stood at the top of the steps with the slant door open, until a piece of the Ritters' barn came by.

At which point Mother was shrill with him (for the only time that I know of in the presence of children). "Doctor! You come inside at once! I will not be widowed just to let you prove to yourself that you can stand up to anything!"

Father came down promptly, fastening the slant door behind him. "Madam," he stated, "as always your logic is irrefutable."

There were hayrides with young people of our own ages, usually with fairly tolerant chaperonage; there were skating parties on the Marais des Cygnes; there were Sunday school picnics, and church ice cream socials, and more and more. Happy times do not come from fancy gadgets; they come from "male and female created He them," and from being healthy and filled with zest for life.

The firm discipline we lived under was neither onerous nor unreasonable; none of it was simply for the sterile purpose of having rules. Outside the scope of those necessary rules we were as free as birds.

Older children helped with younger children, with defined responsibilities. All of us had assigned chores, from about age six, on up. The assignments were written down and checked off—and in later years I handled my own brood (larger than my mother's) by her rules. Hers were sensible rules; they had worked for her; they would work for me.

Oh, my rules were not exactly like my mother's rules because our circumstances were not exactly alike. For example, a major chore for my brothers was sawing and chopping wood; my sons did not chop wood because our home in Kansas City was heated by a coal furnace. But they did tend furnace, fill the coal bin (coal was delivered to the curb, followed by the backbreaking chore of carrying it a bucket at a time to a chute that led to the coal bin), and clean out the ashes and haul them up the basement stairs and out.

There were other differences. My boys did not have to carry water for baths; in Kansas City we had running water. And so forth— My sons worked as hard as my brothers had, but differently. A city house with electricity and gas and a coal furnace does not create anything like the heavy chores that a country house in the Gay Nineties did. The house I was brought up in had no running water, no plumbing of any sort, no central heating. It was lighted by coal oil lamps and by candles, both homemade and storeboughten, and it was heated by wood stoves: a big baseburner in the parlor, a drum stove in the clinic, monkey stoves elsewhere. No stoves upstairs…but grilles set in the ceilings allowed heated air to reach the upper floor.

Ours was one of the larger houses in town, and possibly the most modern, as Father was quick to adopt any truly useful new invention as soon as it was available. In this he consciously imitated Mr. Samuel Clemens.

Father judged Mr. Clemens to be one of the smartest and possibly the smartest man in America. Mr. Clemens was seventeen years older than Father; he first became aware of "Mark Twain" with the Jumping Frog story. From that time on Father read everything by Mr. Clemens he could lay hands on.

The year I was born Father wrote to Mr. Clemens, complimenting him on *A Tramp Abroad*. Mr. Clemens sent a courteous and dryly humorous answer; Father framed it and hung it on the wall of his clinic. Thereafter Father wrote to Mr. Clemens as each new book by "Mark Twain" appeared. As a direct result, young Maureen read all of Mr. Clemens's published works, curled up in a corner of her father's clinic. These were not books that Mother read; she considered them vulgar and destructive of good morals. By her values Mother was correct; Mr. Clemens was clearly subversive by the standards of all "right thinking" people.

I am forced to assume that Mother could spot an immoral book by its odor, as she never, never actually read anything by Mr. Clemens.

So those books stayed in the clinic and I devoured them there, along with other books never seen in the parlor—not just medical books, but such outright subversion as the lectures of Colonel Robert Ingersoll and (best of all) the essays of Thomas Henry Huxley.

I'll never forget the afternoon I read Professor Huxley's essay on "The Gadarene Swine." "Father," I said in deep excitement, "they've lied to us all along!"

"Probably," he agreed. "What are you reading?"

I told him. "Well, you've read enough of it for today; Professor Huxley is strong medicine. Let's talk for a while. How are you doing with the Ten Commandments? Got your final version?"

"Maybe," I answered.

"How many are there now?"

"Sixteen, I think."

"Too many."

"If you would just let me chuck the first five—"

"Not while you're under my roof and eating at my table. You see me attending church and singing hymns, do you not? I don't even sleep during the sermon. Maureen, rubbing blue mud in your belly button is an indispensable survival skill…everywhere, anywhen. Let's hear your latest version of the first five."

"Father, you are a horrid man and you will come to a bad end."

"Not as long as I can keep dodging them. Quit stalling."

"Yes, sir. First Commandment: Thou shalt pay public homage to the god favored by the majority without giggling or even smiling behind your hand."

"Go on."

"Thou shalt not make any graven image of a sort that could annoy the powers that be, especially Mrs. Grundy—and, *exempli gratia,* this is why your anatomy book doesn't show the clitoris. Mrs. Grundy wouldn't like it because she doesn't have one."

"Or possibly has one the size of a banana," my father answered, "but doesn't want anyone to find out. Censorship is never logical but, like cancer, it is dangerous to ignore it when it shows up. Darling daughter, the purpose of the second commandment is simply to reinforce the first. A 'graven image' is any idol that could rival the official god; it has nothing to do with sculpture or etchings. Go on."

"Thou shalt not take the name of thy Lord God in vain…which means don't swear, not even Jiminy or Golly or darn, or use any of those four-letter words, or anything that Mother might consider vulgar. Father, there is something here that doesn't make sense. Why is 'vagina' a good word while 'cunt' is a bad word? Riddle me that."

"Both are bad words out of your mouth, youngster, unless you are talking to me…in which case you will use the medical Latin out of respect for my vocation and my gray hair. You are permitted to say the Anglo-Saxon synonym under your breath if it pleasures you.”

“Somehow it does, and I haven’t been able to analyze why. Number four—”

“Just a moment. Add to number three: Thou shalt not split infinitives, or dangle participles. Thou shalt shun solecisms. Thou shalt honor the noble English language, speech of Shakespeare, Milton, and Poe, and it will serve thee all the days of thy life. In particular, Maureen, if I ever again hear you say ‘different than’—I will beat you about the head and shoulders with an unbated ablative absolute.“

“Father, that was an accident! I meant to—”

“Excuses. Let’s hear number four.”

“Commandment number four. Go to church on Sundays. Smile and be pleasant but don’t be too smarmily a hypocrite. Don’t let my children, if and when I have any, play out in ont on Sunday or make too much noise in back. Support the church by deeds and money but not too conspicuously.”

“Maureen, that’s well put. You’ll be a preacher’s wife yet.”

“Oh, God, Father, I’d rather be a whore!”

“The two are not incompatible. *Continuez, ma chere enfant.*”

“*Mais oui, mon cher papa.* Honor thy father and thy mother where anyone can see you. But once you leave home, live your own life. Don’t let them lead you around by the nose. Mon papa, you phrased that one yourself…and I don’t like it much. I do honor you, because I want to. And I don’t have anything against Mother; we just don’t sing in the same key. But I’m grateful to her.”

“Avoid gratitude, my dear; it can sour your stomach. After you marry and I’m dead, are you going to invite Adele to move in with you?”

“Uh—” I stopped, unable to answer.

“Think about it. Think it through carefully, in advance…because any answer you make in a hurry while my grave is still fresh is certain to be a wrong answer. Next item.”

“Thou shalt not commit murder. ‘Murder’ means killing somebody wrongfully. Other sorts of killing come in several flavors and each sort must be analyzed. I’m still working on this one, Father.”

“So am I. Just bear in mind that a person who eats meat is on the same moral level as the butcher.”

“Yes, sir. Thou shalt not get caught committing adultery…and that means don’t get pregnant, don’t catch a social disease, don’t let Mrs. Grundy even suspect you, and above all don’t let your spouse find out; it would make him most unhappy…and he could divorce you. Father, I don’t think I would ever be tempted by adultery. If God had intended a woman to have more than one man he would have supplied more men…instead of just enough to go around.”

“Who intended? I didn’t catch the name.”

“I said ‘God’ but you know what I mean!”

“I do indeed. You are indulging in theology; I would rather see you take laudanum. Maureen, when anyone talks about ‘God’s’ will or God’s intentions or Nature’s intentions if he is afraid to say ’God,‘ I know at once that he is selling a gold brick. To himself, in some cases, as you were just doing. To read a moral law into the fact that about as many males are born as females is to make too much stew from one oyster; it’s as slippery as *’Post hoc, propter hoc.‘*

“As for your belief that you will never be tempted, here you are, barely dry behind the ears and only a year past first onset of menses… and you think you know all there is to know about the perils of sex… just as every girl your age throughout history has thought. So go right ahead. Jump the fence with your eyes closed. Break your husband’s heart and ruin his pride. Shame your children. Be a scandal in the public square. Get your tubes filled with pus, then let some butcher cut them out in some dirty back room with no ether. Go right ahead, Maureen. Count the world well lost for love. For that’s what sloppy adultery can get you: The world lost all right and an early grave and children who will never speak your name.”

“But, Father, I was saying that I must shun adultery; it’s too dangerous. I think I can manage it.” I smiled at him and recited:

“ ‘There was a young lady named Wilde—’ ”

Father picked it up:

“ ‘Who kept herself quite undefiled
” ’By thinking of Jesus,
“ ‘Contagious diseases,
“ ‘And the dangers of having a child.’

“Yes, I know; I taught you that limerick. Maureen, you failed to mention the safest route to prudent adultery. Yet I know that you’ve heard of it; I mentioned it the day I tried to give you an estimate of the amount of fence jumping going on in this county.”

“I must have missed it, Father.”

“I know I mentioned it. If you’ve just gotta—and the day might come—tell your husband what is biting you, ask his permission, ask for his help, ask him to stand jigger for you.”

“Oh! Yes, you did tell me about two couples like that county…but I could never figure out who they are.”

“I didn’t intend you to. So I threw in a few false clues.”

“I discounted for that, sir, knowing you. But I still couldn’t guess. Father, that seems so undignified. And wouldn’t, uh, my husband be terribly angry?”

"He might give you a fat lip; he won't divorce you for asking. Then he might help you anyhow, on the sound theory that you would get into worse trouble if he says No. And—" Father gave a most evil grin. "—he might discover he enjoys the role."

"Father, I find that I'm shocked."

"Then get over it. Complacent husbands are common throughout history; there is a lot of voyeur in everyone…especially in males but females weren't left out. He might jump at the chance to help you… because you helped him just that way, six weeks earlier. Stood lookout for him and that young schoolteacher, then you lied like a diplomat to cover up for them. Next commandment."

"Wait a minute, please! I want to talk about this one some more. Adultery."

"And that is just what I'm not going to let you do. You think about it but not a word out of you on this subject for at least two weeks. Next."

"Thou shalt not steal. I couldn't improve that one, Father."

"Would you steal to feed a baby?"

"Uh, yes."

"Think about other exceptions; we'll discuss it in a year or two. But it is a good general rule. But why won't you steal? You're smart; you can probably get away with stealing all your life. Why won't you do it?"

"Uh—"

"Don't grunt."

"Father, you're infuriating! I don't steal because I'm too stinkin' proud!"

"Exactly! Perfect. For the same reason you don't cheat in school, or cheat in games. Pride. Your own concept of yourself. 'To thine own self be true, and it must follow, as the night the day ' "

" '—thou canst not then be false to any man.' Yes, sir."

"But you dropped the 'g' from the participle. Repeat it and this time pronounce it correctly: You don't steal because—"

"I am too…*stinking*…proud!"

"Good. A proud self-image is the strongest incentive you can have toward correct behavior. Too proud to steal, too proud to cheat, too proud to take candy from babies or to push little ducks into water. Maureen, a moral code for the tribe must be based on survival for the tribe…but for the individual correct behavior in the tightest pinch is based on pride, not on personal survival. This is why a captain goes down with his ship; this is why 'The Guard dies but does not surrender.' A person who has nothing to die for has nothing to live for. Next commandment."

"Simon Legree. Thou shalt not bear false witness against thy neighbor. Until you corrupted me—"

"Who corrupted whom? I am the epitome of moral rectitude… because I know exactly why I behave as I do. When I started in on you, you had no morals of any sort and your behavior was as naively shameless as that of a kitten trying to cover up on a bare floor."

"Yes, sir. As I was saying: Until you corrupted me, I thought the Ninth Commandment meant: Don't tell lies. But all it says is, if you have to go into court and be a witness, then you have to tell the truth."

"It says more than that."

"Yes. You pointed out that it was a special case of a general theorem. I think the general case ought to read: Don't tell lies that can hurt other people—"

"Close enough."

"Father, you didn't let me finish."

"Oh. Maureen, I beg your pardon. Please go on."

"I said, 'Don't tell lies that can hurt other people' but I intended to add, '—but since you can't guess ahead of time what harm your lies may do, the only safe rule is not to tell any lies at all."

Father said nothing for quite a long time. At last he said, "Maureen, this one we will not dispose of in an afternoon. A liar is worse to have around than a thief…yet I would rather cope with a liar than with a person who takes self-righteous pride in telling the truth, all of the truth and all of the time, let the chips fall where they may—meaning 'No matter who is hurt by it, no matter what innocent life is ruined.' Maureen, a person who takes smug pride in telling the blunt truth is a sadist, not a saint. There are many sorts of lies, untruths, fibs, nonfactual statements, et cetera. As an exercise to stretch the muscles of your mind—"

"The mind has no muscles."

"Smarty. Don't teach Granmaw how to steal sheep. Your mind has no muscles and that's what I'm trying to correct. Try to categorize logically the varieties of not-true statements. Having done so, try to decide when and where each sort may be used morally, if at all…and if not, why not. That should keep you out of mischief for the next fourteen, fifteen months."

"Oh, Father, you're so good to me!"

"Stop the sarcasm or I'll paddle your pants. Bring me a preliminary report in a month or six weeks."

"Thy will be done. Papa, I do have one special case. 'Don't tell fibs to Mother lest thy mouth be washed out with lye soap.' "

"Correction: 'Don't tell any fibs to your mother that she can catch you in.' If you ever told her the ungarnished truth about our private talks, I would have to leave home. If you catch Audrey spooning with that unlikely young cub who's been calling on her, what are you going to tell your mother?"

Father took me by surprise on that one. I had indeed caught Audrey spooning…and I had an uneasy suspicion that there had been something more than spooning—and it worried me. "I won't tell Mother anything!"

"That's a good answer. But what are you going to tell me? You know that I don't have your mother's moralistic and puritanical attitudes about sex, and you know—I hope you do—that I won't use anything you tell me to punish Audrey but to help her. So what do you tell your father?"

I felt walls closing in on me, caught between loyalty to Father and my love for my oldest sister, who had always helped me and been good to me. "I— I will— I won't tell you a durn thing!"

"Hooraw! You took the hurdle without even ticking the top rail. Dead right, dear one; we don't tell tales out of school, we don't confess on behalf of someone else. But don't say 'durn.' If you need it, say 'damn.' "

"Yes, sir. I won't tell you a damn thing about Audrey and her young man." (And, dear Lord if there is one, don't let my sister get pregnant; Mother would have fits and pray over her and all would be terrible. Thy will be done…but not too much of it. Maureen Johnson. Amen.)

"Let's deal with number ten quickly, then move on to the ones Moses neglected to bring down the mountain. Ten doesn't seem to be a problem to you. Coveted anything lately?"

"I don't think I have. Why is there is a rule against coveting your neighbor's wife but not a word about not coveting your neighbor's husband? Was it an oversight on Jehovah's part? Or was it truly open season on husbands in those days?"

"I don't know, Maureen. I suspect that it was simply conceit on the part of some ancient Hebrews who could not imagine their wives wanting to jump the fence when they had such virile heroes at home. The Old Testament doesn't place women very high; it starts right out with Adam putting all the blame on Mother Eve…then it gets worse. But here in Lyle County, Missouri, we do have a rule against it…and if any wife catches you making eyes at her husband here, she is likely to scratch out your pretty green eyes."

"I don't intend to let her catch me. But suppose it's the other way. Suppose he covets me, or seems to. Suppose he pinches my bottom?"

"Well, well! Who was he, Maureen? Who is he?"

"Hypothetical case, *mon cher pere*."

"Very well. If he hypothetically does it again, you may hypothetically respond in several hypothetical fashions. You may hypothetically ignore him, pretend to a hypothetical lack of sensation in your gluteus maximus sinister—or is he lefthanded?”

“I don’t know.”

“Or you can hypothetically whisper, ‘Don’t do that here. Meet me after church. ’ ”

“Father! ”

“You brought it up. Or, if it suits you, you may hypothetically warn him that one more hypothetical pinch will be reported to your hypothetical father who owns both a hypothetical horsewhip and a hypothetical shotgun. You may say this most privately or shout it loudly enough for the congregation and his hypothetical wife to hear it. Lady’s choice. Wait one moment. You did say ‘husband,’ did you not?”

“I did not say. But that was assumed in the hypothesis, I suppose.”

“Maureen, a pinch on the bottom is an expression of direct intent. Encouraged, it leads in three short steps to copulation. You are young but you are physically a mature woman capable of pregnancy. Is it your intention to assume full womanhood in the immediate future?”

CHAPTER THREE

The Serpent in the Garden

Father's question as to whether or not I was thinking about getting rid of my virginity upset me because I had been thinking about nothing else for weeks. Months, maybe. So I answered, "Of course not! Father, how could you think such a thing?"

"Meeting's adjourned."

"Sir?"

"I thought we had cured you of that sort of trivial fibbing. I see we have not, so quit wasting my time. Come back when you feel the need for serious discussion." He swiveled his chair around to face his desk and raised its roll top.

"Father—"

"Eh? Haven't you left?"

"Please, sir. I've been thinking about it all the time."

"Thinking about what?"

"That. Losing my virginity. Breaking my maidenhead."

He glowered at me. "'Hymen' is the medical term, as you know. 'Maidenhead' is from that list of Anglo-Saxon synonyms, although it doesn't carry quite the curse that the shorter ones do. But don't talk about 'losing' anything, when in fact you will be achieving your birthright, that supreme status of functioning female that your biological inheritance makes possible."

I thought about his words. "Father, you make it sound so desirable that I should run right out at once and find someone to help me break my hymen. Now. Right away. So, if you will excuse me?" I started to stand up.

"Whoa! Steady there! If that is your intention, it won't hurt to wait ten minutes. Maureen, if you were a heifer, I would say that you are ready to be serviced. But you are not; you are a human maiden faced by a world of human men and women, in a complex and often cruel culture. I think that you will be better off if you wait a year or two. You could even go virgin to your marriage bed—although, as a physician, I know that does not happen too often these modern days. But— What's the Eleventh Commandment?"

" 'Don't get caught.' "

"Where do I hide the French purses?"

"Lower righthand drawer, and the key is in the top left pigeonhole, all the way back."

I did not do it that day, or that week. Or that month. But it was not many months thereafter.

I did it about ten o'clock in the morning on a balmy day the first week of June, 1897, just four weeks before my fifteenth birthday. The place I picked was the floor of the judges' stand at the race track in the county fairgrounds, with a folded horse blanket to pad the bare boards. I knew the area because I had sat up in that judges' stand on many a frosty morning, clocking Father's practice miles, my eyes lined up on the wire and his fat stopwatch in my hand—I had needed both hands to handle that big watch when I had first done this, at six. That was the year that Father bought Loafer, a black stallion sired by the sire of Maud S.—but (sadly!) not as fast as his famous half sister.

In June of 1897 I went there prepared, resolved to do it, with a condom (a "French purse") in my handbag, and a sanitary napkin—homemade, but all of them were in those days—as I knew that I might bleed and, if anything went wrong, I would have to convince my mother that I was simply three days early that month.

My partner in this "crime" was a high school classmate, a boy named Chuck Perkins, a year older and almost a foot taller than I. I was not even in puppy love with him, but we pretended that we were (perhaps he was not pretending, but how is a girl to know?) and we had been progressively seducing each other all that school year—Chuck was the first man (boy) with whom I opened my mouth to a kiss…and from that I formulated another "commandment": "Open thy mouth only if thou planneth to open thy limbs"—for I discovered that I liked it.

How I liked it! Chuck's mouth was sweet; he did not smoke, he kept his teeth clean and they were as sound as my own teeth, and his tongue was sweet and loving against mine. At later times I encountered (too often!) men who did not keep their mouths and breaths sweet…and I did not open my mouth. Or anything.

To this day I am convinced that tongue kissing is more intimate than coition.

In preparing for this meeting I had followed also my Fourteenth Commandment: "Thou shalt keep thy secret places as clean as a boiled egg lest thou stink in church," to which my lusty father had added: "—and to hold thy husband's love when thou dost catch one." (I told him I had figured that out.)

Keeping really clean in a house not supplied with running water and too well supplied with running children is not easy. But I had worked out expedients from the time Father had warned me some years earlier. One expedient was to sneak in extra washing behind a locked door in Father's surgery. One of my duties was to place a pitcher of hot water in the surgery each morning and again after lunch, and to refill that pitcher as needed. This put me in position to do washing that Mother did not know about. Mother believed that "Cleanliness is next to Godliness"—but I did not dare give her ideas by letting her catch me giving myself extra scrubbing in places I was supposed to be ashamed to touch; Mother didn't approve of too much washing of "those places" as it could lead to "immodest behavior." (It certainly could!)

At the fairgrounds we left Chuck's horse and buggy in one of the big empty barns, with a nosebag of oats to keep him happy, then we climbed up into the judges' stand. I led the way, up the back stairs, then up a vertical ladder through the roof of the grandstand and to a trap door in the floor of the judges' stand. I tucked up my skirts, and climbed the ladder ahead of Chuck, and I delighted in the scandalous display I was making of myself. Oh, Chuck had seen my legs before—but men always like to peek.

Once we were both inside the stand I had Chuck close the trap door and drag over it a heavy box—heavy with weights used in racing. "Now they can't possibly reach us," I said gleefully, turned and got a key from a ditching place over a locker, opened its padlock.

"But they can see us, Mo'. This front side is wide open."

"Who cares? Just don't stand in front of the judges' bench. If you can't see them, they can't see you."

"Mo', are you sure you want to do this?"

"Isn't that why we came up here? Here, help me spread this blanket. We'll use it doubled. The judges spread it along the bench to protect their tender behinds. It will keep splinters out of my tender behind, and out of your knees."

Chuck didn't say a word as we made our "bed." I straightened up and looked at him. He did not look like a man about to achieve a joyful consummation long desired; he looked like a scared little boy. "Charles…are you sure you want to?"

He looked sheepish. "It's bright sunlight, Mo'. This is awfully public. Maybe we could find a quiet place on the Osage?"

"Chiggers, and mosquitoes, and youngsters hunting muskrats. And they'll pop up just when we're busiest. No, thank you, sir. But, Charles—Charles dear—I thought we were agreed on this? I certainly don't want to rush you into anything. Would you mind canceling the trip to Butler?" (A shopping trip to Butler was my excuse to my parents for asking Chuck to drive me that morning—Butler was not much bigger than Thebes, but it had much better shopping. Bennett and Wheeler Mercantile Company was six times as big as our biggest general store. They even stocked Paris styles—or so they claimed.)

"Why, no, Mo', if you don't want to go."

"Then would you mind swinging past Richard Heiser's house? I need to speak to him." (Chuck, I'm smiling and speaking gently…but I would like to massage you with a baseball bat!)

"Uh—Something wrong, Mo'?"

"Yes and no. You know why we came up here. If you don't want my cherry, well, Richard let me know that he wanted it. I didn't promise him anything…but I did tell him that I would think about it." I looked up at Chuck and then dropped my eyes. "And I did think about it and decided you were the one I wanted…had wanted ever since that time you took me up the bell tower. The school Easter party. You know. But, Charles, if you've changed your mind…I still don't intend to let the sun set with me still a virgin. So will you drive me to Richard's house?"

Cruel? Not truly so. A few minutes later I delivered what I had promised. But men are far more timid than we are; sometimes the only way you can get one to move is by placing him in sharpest competition with another male. Even a tabby cat knows that. (By "timid" I do not mean "cowardly." A man—what I think of as a man—can face death calmly. But looking ridiculous…as when being surprised in copulation…can distress him to his marrow.)

"I haven't changed my mind!" Charles was most emphatic.

I gave him my sunniest smile and opened my arms to him. "Then come here and kiss me like you mean it!"

He did, and we both caught fire again. (His backing and filling had cooled me.) At that time I had never heard the word "orgasm"—I am not sure it had been coined by 1897—but I had done some private experimenting and I knew that it was possible for something strongly resembling fireworks to happen inside me. By the end of that kiss I felt myself getting close to that point.

I pulled my face away just far enough to murmur against his lips: "Dear Charles. I'll take off all my clothes…if you want me to."

"Huh? Jeepers, yes!"

"All right. Do you want to undress me?"

He undressed me, or tried to, while I unfastened all the snaps and buttons and ties ahead of him. In a few moments I was bare as a frog and ready to burst into flame. I happily struck a pose I had practiced and let him look. He stared and caught his breath; I felt a fine tingle deep inside me.

Then I closed in on him and started unfastening his buttons and things. He was shy and I didn't push it. But I did get him to take off his trousers and his drawers. I put them on top of mine on the box over the trap door, then sank down on the blankets. "Charles—"

"Coming!"

"You have a safe?"

"A what?"

"A Merry Widow."

"Oh. Gee, Mo‘, there isn't any way I can buy them. I'm only sixteen. Pop Green is the only one who sells them…and he won't unless you're either married or over twenty-one." The poor dear looked woebegone.

I said quietly, "And we aren't married, and don't want to have to get married—not the way Joe and Amelia had to—my mother would have a fit. But—Quit looking grim and hand me my bag."

He did so, and I got out the condom I had fetched. "There are advantages to being a doctor's daughter, Chuck. I swiped this while I was cleaning Father's clinic. Let's see how it fits." (I wanted to check something else. Having become so acutely conscious of my own cleanliness I had become quite critical of cleanliness in others. Some of my classmates, both sexes, could have used Father's advice and some hot soapy water.)

(I'm a decadent today. The best aspect of Boondock aside from its gentle customs is its wonderful plumbing!)

Chuck looked clean and smelled clean—scrubbed as recently as I was, was my guess. A whiff of male musk, but fresh. Even at that age I had learned the difference.

I felt happy and gay. How sweet of him to offer me such a well-kept toy!

It was just inches from my face. I suddenly ducked and planted a quick kiss on it.

"Hey!" Charles almost squealed.

"Did I shock you, dear? It was just so pretty and sweet that I felt like kissing it. I didn't mean to shock you." (No, but I do want to find your shock point.)

"I wasn't shocked. Uh…I liked it."

"Cross your heart and shame the Devil?"

"Yes, indeed!"

"Good." I waited while he got ready. "Now, Charles. Take me."

I was clumsy and inexperienced but nevertheless I had to guide him-gently, as his pride had already been hurt once. Charles was even less skilled than I. Probably what he knew of sex came from barber shops and pool halls and behind barns—the ignorant boasts of bachelor males…whereas I had been taught by an old and wise medical doctor who loved me and wanted me to be happy.

I had in my purse a patent medicine, "Vaseline," to use as a lubricant if I needed it. Not necessary!—I was as slippery as boiled flaxseed.

In spite of that—"Charles! Please, dear! Take it easy. Not so fast."

"But I ought to go fast, first push, Mo‘. It'll hurt you less.

Everybody knows that."

"Charles, I'm not 'everybody'; I'm me. Take it slowly and it won't hurt me at all. I think." I felt eager, terribly excited, and wanted him deep inside me—but he did feel bigger than I had expected. It didn't really hurt. Or not much. But I knew it could hurt plenty if we did this too fast.

Dear Charles did hold still, his face intent. I bit my lip and tried. And again. At last he was firmly against me and all of him that could reach was inside me.

I relaxed and smiled up at him. "There! That's just fine, dear. Now move if you want to. Do it!"

But I had taken too long. He grinned, then I felt a couple of quick twitches and he stopped smiling and looked distressed. He had spent.

So there weren't any fireworks for Maureen that first trip, and not much for Charles. But I wasn't too disappointed; my prime purpose had been achieved; I was no longer a virgin. I made note to ask Father about how to make it last longer—I was certain that I could have reached those fireworks had I been able to stretch it out a little longer. Then I put it out of my mind and was happy with what I had accomplished.

And started a custom that has stood me in good stead for a long lifetime: I smiled up at him and said softly, "Thank you, Charles. You were splendid. "

(Men don't expect to be thanked for it. And at that moment a man is always willing to believe any sort of compliment…most especially if he hasn't really earned it and is uneasily aware of his shortcoming. To thank him and compliment him is an easy investment that pays high dividends. Believe me, sister mine!)

"Gosh, Maureen. You're swell."

"You are, too, Chuck sweetheart." I hugged him, arms and legs, then relaxed and added, "Maybe we had better get up. This floor is hard, even with a doubled blanket."

Charles was quiet while he drove us on into Butler—not at all the suave Don Juan who has just relieved a maiden of that which enriched her not. I was encountering for the first time that tristesse that some males have after intercourse…while I myself was bubblingly happy. I no longer minded that I had missed climax—if I had; I was not sure. Maybe those "fireworks" were something one could do only by oneself. We had gotten away with it cold and I felt very grown up. I sat up straight and enjoyed the beautiful day. I didn't hurt, not enough to matter.

I think men often feel buffeted by sex. They often have so much to lose and we often give them little choice. I am minded of a very odd case that involved one of my grandchildren—how he was pushed around by fate and his first wife.

It involved our cat Pixel, too, at that time a small kitten, all fuzz and buzzes.

My grandson, Colonel Campbell, son of my son Woodrow who is also my husband Theodore, but don't let that worry you; Woodrow and Theodore are both Lazarus Long, who is an odd one in any universe—don't let me forget to tell about the time that Lazarus quite unintentionally got three women pregnant at once, a grandmother, her daughter, and her granddaughter…and thereby had to make some unusual arrangements with the Time Corps in order to carry out the first commandment in his own private decalogue, which is: Never leave a pregnant woman to face her destiny unsupported.

Since Lazarus has been knocking them up over centuries in several universes this has taken up quite a bit of his time.

Lazarus quite innocently broke his own first commandment with respect to my grandson's mother, and this mishap resulted indirectly in my grandson marrying my sister wife, Hazel Stone, who was on leave of absence from our family for that purpose…for you see (or perhaps you don't) Hazel had to marry Colin Campbell so that these two could rescue Mycroft Holmes IV, the computer that led the Lunar Revolution on time line three, code "Neil Armstrong." Let's skip the details; it's all in *Encyclopaedia Galacta* and other books.

"The operation was a success but the patient died." It was almost that way. The computer was saved and is alive and well and happy in Boondock today. All of the raiding party got away without a scratch… except Colin and Hazel Campbell and the kitten, Pixel, all of whom were terribly wounded, and were left dying in a cave in Luna.

I must digress again. In that raiding party was a young officer, Gretchen Henderson, great-great-granddaughter of my sister wife Hazel Stone. Gretchen had had a baby boy four months before this raid, which my grandson knew.

What he did not know was that he was the father of Gretchen's son.

In fact he knew beyond doubt that he had never copulated with Gretchen and knew with equal certainty that he had left no sperm in any donor bank anywhere/when.

Nevertheless Hazel, dying, had told him firmly that he was the father of Gretchen's child.

He had asked how; she had answered, "Paradox."

A time paradox Colin could understand. He was a member of the

Time Corps; he had been through time loops; he knew that, in a time paradox, it was possible to turn around and bite oneself in the back of one's own neck.

Therefore he now knew that he was going to inseminate Gretchen somewhere forward on his own time line, somewhere backward on her time line—the inverted loop paradox.

But "God helps those who help themselves." That would happen only if he lived through this squeeze and made it happen.

When the three were rescued shortly after this revelation, Colin had piled up new corpses and had been wounded twice more—but all three were still alive. They were flashed two thousand years into the future to the greatest physicians in any universe: Ishtar and her staff. My sister wife Ishtar won't let a patient die as long as the body is warm and the brain is intact. It took some doing, Pixel especially. The baby creature was held at Kelvin ought point three for several months while Doctor Bone was fetched from another universe and a dozen of Ishtar's best including Ishtar herself were put through a crash course in feline medicine, surgery, physiology, *etc.* Then they raised Pixel to simple hypothermia, rebuilt him, brought him to blood temperature and wakened him. So today he is a strong, healthy tom, still traveling as he pleases and making kittens wherever he goes.

In the meantime Hazel arranged the time loop and Colin encountered and wooed and won and tumbled and impregnated a somewhat younger Gretchen. So she had her baby, and later on (by her personal time line) she joined Hazel and Colin in saving the computer Mycroft Holmes.

But why such extreme effort over a kitten? Why not give a dying kitten the release he needs to end his pain?

Because, without Pixel and his ability to walk through walls, Mycroft Holmes would not have been rescued, all of the raiding party would have died, and the future of the entire human race would have been placed at risk. The chances were so evenly balanced that in half of the futures they died, in half of them they succeeded. A few ounces of kitten made the difference. He warned them, with the only word he had mastered: "*Blert!*"

On the way back from Butler Charles had recovered from his postcoital depression; he wanted to do it again. Well, so did I, but not that day. That buggy ride over dirt roads had reminded me that what I was sitting on was just a leetle tender.

But Charles was raring to go; he wanted an encore right now. "Mo', there is a spot just ahead there where we can get a buggy clear off the road and out of sight. Quite safe."

"No, Chuck."

"Why not?"

"It's not perfectly safe; anybody else could pull off there, too. We're late now and I don't want to have to answer questions today. Not this day. And we don't have another Merry Widow and that settles it because while I do plan to have children, I don't want to have them at fifteen."

"Oh."

"Quite so. Be patient, dear, and we will do it again…another day, with careful arrangements…which you might be thinking about. Now take your hand away, please; there is a rig coming down the road—see the dust?"

Mother did not scold me over being a half hour late. But she did not press Charles when he refused her offer of lemonade, on the excuse that he had to get Ned (his gelding) home and curried and the buggy wiped down because his parents were going to need it. (A too complex lie-I'm sure he simply did not want to meet Mother's eye, or be questioned by her. I'm glad Father taught me to avoid fancy lies.)

Mother went upstairs as soon as Chuck left; I went out back.

Two years earlier Father had indulged us in a luxury many of our church members felt was sinfully wasteful: two outhouses, one for the boys and one for us girls, just like at school. In fact we truly needed them. That day I was delighted to find the girls' privy empty. I flipped the bar to lock, and checked up.

Some blood, not much. No problems. Slightly sore, nothing more.

So I sighed with relief and peed and reassembled myself, and went back to the house, picking up a piece of stove wood for the kitchen as I passed the wood pile—a toll each of us paid for each trip out back.

I dropped off the wood and stopped in the wash shed adjoining the kitchen, washed my hands and sniffed them. Clean. Just my guilty conscience. I went to the clinic, stopping only to tousle Lucille's strawberry hair and pat her bottom. Lucy was three, I think—yes, she was born in '94, the year after Father and I went to Chicago. She was a little doll, always merry. I decided that I wanted one just like her… but not this year. But soon. I was feeling very female.

I reached the clinic just as Mrs. Altschuler was leaving. I spoke politely; she looked at me and said, "Audrey, you've been out in the sun without a sunbonnet again. Don't you know any better than that?"

I thanked her for her interest in my welfare and went on in. According to Father all she suffered from was constipation and lack of exercise…but she showed up at least twice a month and had not, since the first of the year, paid a single penny. Father was a strong man, firm-minded, but not good at collecting money from people who owed it to him.

Father entered her visit in his book and looked up. “I’m taking your bishop, young lady.”

“Sure you don’t want to change your mind, sir?”

“No. I may be wrong but I’m certain. Why? Have I made a mistake?”

“I think so, sir. Mate in four moves.”

“Eh?” Father stood up, went over to his chess table. “Show me.”

“Shall we simply play it out? I may be mistaken.”

“Grrummph! You’ll be the death of me, girl.” He studied the board, I then went back to his desk. “This will interest you. This morning’s mail. From Mr. Clemens—”

“Oh, my!”

I remember especially one paragraph:

“I agree with you and the Bard, sir; let’s hang them. Hanging its lawyers might not correct all of this country’s woes but it would be lots of fun and could do no harm to anyone.

“Elsewhere I have noted that the Congress is the only distinct criminal class this country has. It cannot be mere coincidence that 97 percent of Congress are lawyers.”

Mr. Clemens added that his lecture agency had scheduled him for Kansas City next winter. “I recall that four years ago we failed of rendezvous in Chicago by a week. Is it possible that you will be in K.C. January tenth, next?”

“Oh, Father! Could we?”

“School will be in session.”

“Father, you know that I made up all time lost by going to Chicago. You know, too, that I am first among the girls in my class… and could be first including the boys if you hadn’t cautioned me about the inadvisability of appearing too smart. But what you may not have noticed is that I have enough credits and could have graduated—”

“—with Tom’s class last week. I noticed. We’ll work on it. Deus volent and the crick don’t rise. Did you get what you wanted in Butler?”

“I got what I wanted. But not in Butler.”

“Eh?”

“I did it, Father. I am no longer virgin.”

His eyebrows shot up. “You have managed to surprise me.”

“Truly, Father?” (I didn’t want him to be angry with me…and I thought that he had implied long back that he would not be.)

“Truly. Because I thought that you had managed it last Christmas vacation. I have been waiting the past six months, hoping that you would decide to trust me with it.”

“Sir, I didn’t even consider keeping it from you. I depend on you.”

“Thank you. Mmm, Maureen, freshly deflowered, you should be examined. Shall I call your mother?”

“Oh! Does Mother have to know?”

“Eventually, yes. But you need not have her examining you if it frets you—”

“It does!”

“In that case I’ll take you over to see Dr. Chadwick.”

“Father, why must I see Dr. Chadwick? It is a natural event, I was not hurt, and I feel no need.”

We had a polite argument. Father pointed out that an ethical doctor did not treat members of his own family, especially his womenfolk. I answered that I was aware of that…but that I needed no treatment. And back and forth.

After a bit, having made sure that mother was upstairs for her nap, Father took me into the surgery, locked the door, and helped me up onto the table, and I found myself in much the position for examination that I had been in earlier for Charles, except that this time I had removed only my bloomers.

I suddenly realized that I had become excited.

I tried to suppress it and hoped that Father would not notice it. Even at fifteen I was not naive about my unusual and possibly unhealthy relation with my father. As early as twelve I had had the desert-isle daydream with my father as the other castaway.

But I also knew how strong the taboo was from the Bible, from classic literature, and from myth. And I remembered all too well how Father quit letting me sit on his lap, had stopped it completely and utterly, once I reached menarche.

Father put on a pair of rubber gloves. This was something he had started as a result of the Chicago trip…which had not been to allow Maureen to enjoy the Columbian Exposition but to permit Father to attend school at Northwestern University in Evanston in order to get up to date on Professeur Pasteur’s germ theories.

Father had always been strong for soap and water, but he had had no science to back up his attitudes. His preceptor, Dr. Phillips, had started practice in 1850, and (so said Father) regarded the rumors from France as “just what you could expect from a bunch of Frogs.”

After Father returned from Evanston, nothing ever again could be clean enough to suit him. He started using rubber gloves and iodine, and boiling and sometimes burning used instruments, especially anything used with lockjaw.

Those impersonal clammy rubber gloves cooled me down…but I was embarrassed to realize that I was quite wet.

I ignored it, Father ignored it. Shortly he helped me down and turned away to strip off his gloves while I got back into my bloomers. Once I was "decent" he unlocked and opened the door. "Healthy, normal woman," he said gruffly. "You should have no trouble bearing offspring. I recommend that you refrain from intercourse for a few days. I conclude that you used a French purse. Correct?"

"Yes, sir."

"Good. If you will continue to use them…every time!…and are discreet about your public conduct, you should have no serious problems. Hmm—Do you feel up to another buggy ride?"

"Why, certainly, sir. Is there any reason why I should not?"

"No. Word came in that Jonnie Mae Igo's latest baby is ailing; I promised to try to get out there today. Will you ask Frank to hitch up Daisy?"

It was a long drive. Father took me along to tell me about Ira Howard and the Foundation. I listened, unable to believe my ears… save that Father, the only utterly dependable source of information, was telling me.

After a long stretch I at last spoke up. "Father, I think I see. How does this differ from prostitution? Or does it?"

CHAPTER FOUR

The Worm in the Apple

Father let Daisy amble on quite a piece before he answered, “I suppose it is prostitution, if you want to stretch the definition to cover it. It does involve payment, not for intercourse per se, but for the result of that intercourse, a baby. The Howard Foundation will not pay you to marry a man on their list, nor is he paid for marrying you. In fact you are never paid; he is paid…for every baby you bear, sired by him.”

I listened and found myself humiliated by these arrangements. I was never one of those women demanding the vote…but fair is fair! Somebody was going to inseminate me…then, when I groaned and moaned the way Mother does and gave birth to a baby, he got paid. I fumed to myself.

“It still sounds like whoring, Father, from where I sit. What’s the going rate? How much does my hypocritical, hypothetical husband get paid for each set of my labor pains and one smelly baby?”

“No set price.”

“What? *Mon papa*, that is a hell of a way to run a business. I lie down and spread my legs, by contract. Nine months later my husband is paid…five dollars? Fifty cents? This is not a good bet. I think I would be better off to move to Kansas City and walk the streets.”

“Maureen. Behave yourself.”

I took a deep breath, and held it. Then I lowered my voice an octave, the way I had been practicing lately. (I had promised myself never to let my voice get shrill.) “I’m sorry, sir. I guess I’m just another vaporish ex-virgin—I had thought I was more grown up.” I sighed. “But it does seem crass. ”

“Yes, perhaps ‘crass’ is *le mot juste*. But let me tell you how it works. No one will ask you to marry anyone. If you consent, your mother and I will submit your name to the Foundation, along with a questionnaire that I will help you fill out. In return they will send you a list of young men. Each man on that list will be what is called an ‘eligible bachelor’— eligible quite aside from the Foundation and its money.

“He will be young, not more than ten years older than you are, but more likely about your age—”

“Fifteen?” I was amazed. Shocked.

“Simmer down, flame top. Your name is not yet on the list. I’m telling you this now because it is not fair not to let you know about the Howard Foundation option once you have graduated to functioning woman. But you're still too young to marry."

"In this state I can marry at twelve. With your permission."

"You have my permission to marry at twelve. If you can manage it."

"Father, you're impossible."

"No, merely improbable. He'll be young but older than fifteen. He will be of good health and of good reputation. He will be of adequate education—"}

"He had better be able to speak French, or he won't fit into this family." The Thebes school system offered French and German; Edward had-picked French, then Audrey also, because both Father and Mother had studied French, and made a habit of shifting to French when they wanted to talk privately in front of us. Audrey and Edward established a precedent; we all followed. I started on French before I could take it in school; I did not like having words talked in front of me that I did not understand.

This precedent affected my whole life—but, again, that's another story.

"You can teach him French—including that French kissing you asked me about. Now this faceless stranger who ruined our Nell—Can he kiss?"

"Gorgeously!"

"Good. Was he sweet to you, Maureen?"

"Quite sweet. A bit timid but he'll get over that, I think. Uh, Father, it wasn't as much fun as I think it could be. And will be, next time."

"Or maybe the time after that. What you're saying is that today's trial run was not as satisfying as masturbation. Correct?"

"Well, yes, that is what I meant. It was over too fast. He—Goodness, you know who drove me to Butler. Chuck. Charles Perkins. He's sweet, *cher papa*, but…he knows less about it than I do."

"So I would expect. I taught you, and you were an apt student."

"Did you teach Audrey…before she got married?"

"Your mother taught her."

"So? I suspect that you taught me more. Uh, was Audrey's marriage sponsored by the Howard Foundation? Is that how she met Jerome?"

"That is a question never asked, Maureen. It would be polite not even to speculate."

"Well, excuse my bare face!"

"I won't excuse your naked manners. I never discuss your private affairs with your siblings; you should not ask me about theirs."

I suddenly felt the curb bit. "I'm sorry, sir. This is all new to me."

"Yes. This young man—these young men—will all be acceptable prospects…or, if I don't approve of one, I'll tell you why and not permit him in my house. But in addition to everything else, each one will have four living grandparents."

"What's special about that? I not only have four living grandparents but also eight living great-grandparents. Have I not?"

"Yes. Although Grampaw McFee is a waste of space. If he had died at ninety-five he would have been better off. But that is what this is all about, dear daughter; Ira Howard wanted his fortune used to extend human life. The Foundation trustees have chosen to treat it as if it were a stock breeding problem. Do you recall the papers on Loafer, and the reason I paid a high price for him? Or the papers on Clytemnestra? You have long life in your ancestry, Maureen, all branches. If you marry a young man on the list, your children will have long life in all their branches."

Father turned in his seat and looked me in the eye. "But nobody—nobody!—is asking you to do anything. If you authorize me to submit your name—not today but let's say next year—it simply means that you will have six or eight or ten or more additional suitors to choose from, instead of being effectively limited to the few young men near your age in Lyle County. If you decide to marry Charles Perkins, I won't say a word. He's healthy, he's well behaved. And he's not my cup of tea. But he may be yours."

(He was not my cup of tea, either, Papa. I guess I was just using him. But I'd promised him a return match…so I would have to.)

"Father, suppose we hold off until next year?"

"I think that is sound judgment, Maureen. In the meantime, don't get pregnant and try not to get caught. Oh, by the way—If you submit your name and a young man on the list comes along, if you wish, you can try him out on the parlor sofa." He smiled. "More convenient and safer than the judges' stand."

"Mother would have heart failure!"

"No, she would not. Because that is exactly the arrangement her mother provided for her…and that is why Edward was officially a premature baby. Because it is stupid to go the Howard route, then find out after you're committed by marriage vows that the two of you are infertile with each other."

I had no answer. Mother…my mother who thought "breast" was a dirty word and that "belly" was outright profanity…Mother with her bloomers off, bouncing her bawdy buttocks on Grandma Pfeiffer's sofa, making a baby out of wedlock, while Grandma and Grandpa pretended not to know what was going on! It was easier to believe in virgin birth and transubstantiation and resurrection and Santa Claus and the Easter Bunny. We are strangers, all of us, family most of all.

Shortly we pulled into the Jackson Igo place, eighty acres, mostly rocks and hills, a shack and a sorry barn. Mr. Igo cropped it a bit but it didn't seem possible that the place supported him and his thin, tired wife and his swarm of dirty children. Mostly Jackson Igo cleaned cesspools and built privies.

Some of those children and half a dozen dogs gathered round our buggy; one boy ran shouting into the house. Presently Mr. Igo came out. Father called out, "Jackson!"

"Yeah, Doc."

"Get these dogs away from my rig."

"They ain't no harm."

"Do it. I won't have them jumping up on me."

"Jest as you say, Doc. Cleveland! Jefferson! Get them hounds! Take 'em around back."

The order was carried out; Father got down with a quiet word over his shoulder, "Stay in the buggy."

Father was inside their shack only a short time, which suited me, as the oldest boy, Caleb, my age or near it, was pestering me to get down and come see a new litter of pigs. I knew him from school, where he had attended fifth grade for some years. He was, in my opinion, a likely candidate for lynching if some father did not kill him first. I had to tell him to get away from Daisy and quit bothering her; he was causing her to toss her head and back away from him. I took the whip out of its socket to point up my words.

I was glad to see Father reappear.

He climbed into the buggy without a word. I clucked to Daisy and we got out of there. Father was frowning like a thunder cloud, so I kept quiet.

A quarter of a mile down the road he said, "Please pull over onto the grass," so I did, and said to Daisy, "Whoa, girl," and waited.

"Thank you, Maureen. Will you help me wash, please?"

"Certainly, sir." This buggy, used for his country calls and specially built by the carriage wrights who built his racing sulkies, had a larger baggage space in back, with a rain cover. In it were carried a number of items that Father might need on a call but which did not belong in his black bag. One was a coal oil can with a spout, filled with water, and a tin basin, and soap and toweling.

This time he wanted me to pour water over his hands. Then he soaped them; I rinsed them by pouring. He shook them dry; then washed them all over again in the basin and dried them after shaking, on clean toweling.

He sighed. "That's better. I did not sit down in there, I did not touch anything I could avoid touching. Maureen, remember that bathtub we used in Chicago?"

"I certainly do!" The World's Fair had been an endless wonder and I'll never forget my first view of the Lake and my first ride on a railroad train up high in the air…but I dreamed about that tub, all white enamel, and hot water up to my chin. I could be seduced for a hot bath. They say every woman has her price. That's mine.

"Mrs. Malloy charged us two bits for each bath. This minute I would happily pay her two dollars. Maureen, I need glycerine and rose water. In my bag. Please."

Father compounded this lotion himself and it was intended primarily for chapped hands. Right now he needed it to soothe his hands against the strong lye soap he had just used.

Once back on the road he said, "Maureen, that baby was dead long before Jackson Igo sent for me. Since last night, I estimate."

I tried to feel sorry about that baby. But growing up in that household was no fate to wish on anyone. "Then why did he send for you?"

"To bless the death. To get me to write a death certificate, to keep him from trouble with the law when he buries it…which he is probably doing this very minute. Primarily to cause me—and you—to make a six-mile round trip to save himself the trouble of harnessing his mule and coming into town." Father laughed without mirth. "He kept pointing out that I coUldnt charge him for a call since I didn't get there before the baby died. I finally said, 'Shut up, Jackson. You haven't paid me a cent since Cleveland beat Harrison.' He said something about hard times and how this administration never does anything for the farmer."

Father sighed. "I didn't argue with him; he had a point. Maureen, you've been keeping my books this past year; would you say these were hard times?"

That brought me up sharp. I had been thinking about the Howard Foundation and Chuck's pretty penis. "I don't know, Father. But I know that you have far more on the books than you ever get paid. I've noticed something else, too: the worst of the deadbeats would rather owe you a dollar for a house call than fifty cents for an office visit. Like Jackson Igo. "

"Yes. He could have fetched that little cadaver in—never saw a child so dehydrated!—but I'm relieved that he did not; I don't want him in my clean clinic…or Adele's clean house. You've seen the books; do you estimate that collections are enough to support our family? Food, clothing, shelter, oats and hay, and a nickel for Sunday School?"

I thought about it. I knew my multiplication tables through twenty times twenty, same as everybody, and in high school I had been learning the delights of more advanced ciphering. But I had never applied any of it to our household affairs. Now I drew a blackboard in my mind and did some hard calculating.

"Father…if they all paid you what they owe you, we would be quite comfortable. But they don't pay you, not enough of them." I thought. "Nevertheless we are comfortable."

"Maureen, if you don't want the Howard option, better marry a rich man. Not a country doctor."

Presently he shrugged and smiled. "Don't worry about it. We'll keep food on the table even if I have to slide over into Kansas and rustle cattle. Shall we sing? 'Pop Goes the Weasel' would be appropriate today. How is your weasel by now, dear? Sore?"

"Father, you are a dirty old man and you will come to a bad end."

"I've always hoped so, but I've been too busy raising *Kinder* to raise Cain. Meant to tell you: Someone else is interested in your welfare. Old lady Altschuler."

"So I know." I told him about her remark. "She thinks I'm Audrey."

"That unspeakable old cow. But she may not really think you are Audrey. She asked me what you were doing in the grandstand at the fairgrounds."

"Well! What did you tell her?"

"I told her nit. Silence is all a snoopy question deserves…just fail to hear it. But the insult direct is still better. Which I handed that snapping turtle by ignoring her question and telling her next time to bathe before she comes to see me, as I found her personal hygiene to be less than adequate. She was not pleased." He smiled. "She may be so angry that she will switch to Dr. Chadwick. One may hope."

"One may. So somebody saw us go up. Well, sir, they did not actually see us doing it." I told Father about the box heavy with weights. "Spectators would have to have been in a balloon."

"I would say so. Safe enough if not very comfortable. I wish I could extend to you the courtesy of the sofa…but I can't until you take up the Howard option. If you do. In the meantime let's think about it. Safe places."

"Yes, sir. Thank you. What I can't figure out is this: We trimmed the trip to Butler short, in order to conceal the time used up in unscheduled activity. I've been figuring times and distances in my head. *Cher papa*, unless my arithmetic is wrong—"

"It never is."

"Whoever spotted us climbing up into my hideaway must then have proceeded at a fast trot to the Altschuler place, reported my sins, then the Ugly Duchess must have been already dressed, with her buggy hitched and ready, to hurry over to see you. When did she show up?"

"Let me see. When she arrived, three patients were waiting. I made her wait her turn…so she came in already angry. I sent her out boiling mad. Mmm…she must have arrived at least an hour before you showed up and bumped into her coming out."

"Father, it won't work. Physically impossible. Unless she herself was at the fairgrounds, then drove straight to our house on the pretense of needing to see you."

"That's possible. Quite unlikely. But, Maureen, you have just encountered a phenomenon that you will see again and again all your life after this red-letter day: the only thing known to science faster than the speed of light is Mrs. Grundy's gossip."

"I guess so."

"I know so. When you next encounter it, how will you handle it? Do you have that in your commandments?"

"Uh, no."

"Think about it. How will you defend yourself?"

I thought about it for the next half mile. "I won't."

"Won't what?"

"I won't defend myself against gossip; I will ignore it. At most I will look her—or him—in the eye and state loudly, 'You are a filthy-minded liar.' But it's usually best to ignore it entirely. I think."

"I think so, too. People of that sort want to be noticed. The cruelest thing you can do to them is to behave as if they did not exist."

During the remaining half of 1897 I ignored Mrs. Grundy while trying to avoid being noticed by her. My public persona was straight out of Louisa M. Alcott while in private I tried to learn more about this amazing new art. I don't mean to imply that I spent much time on my back, sweating away for the mutual pleasure of Maureen and His Name Is Legion. Not in Lyle County, not in 1897. Too hard to find a place to do it!

"Conscience is that little voice that tells you that someone may be watching." (Anon. and Opcit.)

And there was the problem of a satisfactory partner. Charles was a nice boy and I did offer him that encore, and even a third try at it for good measure. The second and third attempts were more comfortable but even less exciting—cold mush without sorghum and cream.

So after the third one I told Charles that someone had seen us on top of Marston Hill and had told one of my sisters…and a good thing that it hadn't been one of my brothers, because I had been able to cool things down with my sister. But he and I had better act as if we had quarreled…or next time the word might get all the way to my mother, who would tell my father, and then there was just no telling. So you had better leave me alone until school starts, huh? You see, don't you, dear?

I learned that the hardest problem of all in dealing with a man is how to stop dealing with him when he does not want to stop. A century and a half of quite varied experience has not given me any answer that is totally satisfactory.

One partly satisfactory answer that I did not learn until much later than 1897 requires considerable skill, great self-control, and some sophistication: the intentional "dead arse." Lie there like a dead woman and, above all, let your inner muscles be utterly relaxed. If you combine that with garlic on your breath, it is likely—although not certain—that he will save you the trouble of thinking of a reason to break off. Then, when he initiates a break, you can be brave about it. A "good sport."

I am not suggesting that lively hips and tight muscles constitute "sex appeal." Such qualities, while useful, are merely equivalent to sharp tools for a carpenter. My sister wife Tamara, mother of our sister wife Ishtar and at one time the most celebrated whore in all Secundus, is the epitome of sex appeal…yet she is not especially pretty and no one who has slept with her talks about her technique. But their faces light up when they see her and their voices throb when they speak of her.

I asked Jubal Harshaw about Tammy because Jubal is the most analytical of my husbands. He said, "Mama Maureen, quit pulling my leg. You of all people know the answer."

I denied it.

"All right," he said, "but I still think you are fishing. Sex appeal is the outer evidence of deep interest in your partner's pleasure. Tammy's got it. So have you and just as strongly. It is not your red hair, wench, or even the way you smell, which is yummy. It is the way you give…when you give."

Jubal got me so stirred up that I tripped him, then and there.

But in Lyle County in 1897 one cannot simply trip a darling man and have at it; Mrs. Grundy is sitting up in every tree, eager to catch you and publish it. So the preliminaries must be more complex. There are plenty of eager males (about twelve in every dozen) but it is necessary to pick the one you want—age, health, cleanliness, personal charm, discretion (if he gossips to you, he will gossip about you), and other factors that vary with each candidate. Having selected him for the slaughter you must cause him to decide that he wants you while letting him know silently that it is possible. That is easy to phrase but to put it into practice-You'll be honing your skills for a lifetime.

So you reach an agreement…but you still haven't found a place.

After picking a place to shed my virginity I resigned that aspect of the problem. If a boy/man wanted my immoral carcass, he would get his gray matter churning and solve it. Or he could go chase flies.

But I did risk chiggers and (once) poison ivy. He caught it; I seem to be immune.

From June to January three boys ranging sixteen to twenty had me, and one married man of thirtyone. I added him in on the assumption (false) that a married man would be so skilled that he could set off those fireworks without fail.

Total copulations: nine. Orgasms: three—and one was wonderful. Time actually spent copulated: an average of five minutes per go, which is not nearly enough. I learned that life can be beautiful indeed…but that the males of my circle ranged from clumsy to awkward.

Mrs. Grundy apparently did not notice me.

By New Year's Eve I had decided to ask Father to submit my name to the Howard Foundation…not for the money (I still did not know that the payments could amount to enough to matter) but because I would welcome a chance to meet more eligible males; the hunting in Lyle County was too poor to suit Maureen. I had firmly made up my mind that, while sex might not be the be all and end all, I did want to marry and it had to be a man who would make me eager to go to bed early.

In the meantime I kept on trying to make Maureen as desirable a female animal as I could manage and I listened most carefully to my father's advice. (I knew that what I really wanted was a man just like my father, but twenty-five years younger. Or twenty. Make that fifteen. But I was prepared to settle for the best imitation I could find.)

There were two hundred days left in 1897 from that day Chuck and I climbed up into the judges' stand; that makes 200 X 24 X 60 = 288,000 minutes. Circa 45 of those minutes I spent copulated; that leaves 199 days, 23 hours, 15 minutes. It is obvious that I had time for other things.

That summer was one of the best of my life. While I did not get laid very often or very effectively, the idea was on my mind awake and asleep. It brightened my eyes and my days; I shed female pheromones like a female moth and I never stopped smiling—picnics, swimming parties in the Osage (you wouldn't believe what we wore), country dances (frowned on by the Methodist and Baptist churches but sponsored by Jack Mormons who welcomed gentiles who might be converted—Father overruled Mother: I went and learned to swing on the corners and dosey-doh), watermelon contests, any excuse to get together.

I stopped thinking about the University of Missouri at Columbia. From Father's books I could see that there just wasn't money to put me through four years of college. I was not anxious to be a nurse or a school teacher, so there seemed to be little point in my aspiring to formal (and expensive) higher education. I would always be a bookworm but that does not require a college degree.

So I decided to be the best housewife I could manage—starting with cooking.

I had always taken my turn in the kitchen along with my sisters. I had been assistant cook for the day in rotation since my twelfth birthday. By fifteen I was a good plain cook.

I decided to become a good fancy cook.

Mother remarked on my increased interest. I told her the truth, or some of it. "*Chère mama*, I expect to be married someday. I think the best wedding present I can bring my future husband is good cooking. I may not have the talent to become a gourmet chef. But I can try."

"Maureen, you can be anything you want to be. Never forget that."

She helped me, and she taught me, and she sent away to New Orleans for French cookbooks, and we pored over them together. Then she sent me for three weeks to stay with Aunt Carole, who taught me Cajun skills. Aunt Carole was a Johnny Reb, married after the War to —Heavens!-a damn Yankee, Father's eldest brother, Uncle Ewing, now deceased. Uncle Ewing had been in the Union occupation of New Orleans, and had poked a sergeant in the nose over a distressed Southern girl. It got him a reduction from corporal to private, and a wife.

In Aunt Carole's house we never discussed the War.

The War was not often discussed in our own house as the Johnsons were not native to Missouri, but to Minnesota. Being newcomers, by Father's policy we avoided subjects that might upset our neighbors. In Missouri sympathies were mixed—a border state and a slave state, it had veterans from both sides. But that part of Missouri had been "local option"—some towns never had had any slaves and now permitted no colored people; Thebes was one such. But Thebes itself was so small and unimportant that the Union troops had ignored it when they came through there in '65, burning and looting. They burned Butler to the ground and it never fully recovered. But Thebes was untouched.

Even though the Johnsons had come down from the North, we were not carpetbaggers as Missouri never seceded; Reconstruction did not touch it. Uncle Jules, Father's cousin in Kansas City, explained our migration this way:

"After fighting four years in Dixie, we went back home to Minnesota…and stayed just long enough to pack up again and git.

Missourah ain't as hot as Dixie but it ain't so cold that the shadows freeze to the sidewalks and the cows give ice cream."

Aunt Carole put a polish on my cooking and I was in and out of her kitchen quite a lot until I married. It was during that three weeks that the matter of the lemon pie took place—I think I mentioned it earlier.

I baked that pie. It was not my best work; I had burned the crust. But it was one of four, and the other three were all right. Getting the temperature just right on a wood range is tricky.

But how did my cousin Nelson get that pie into church without anyone seeing it? How did he slide it under me without my noticing it?

He made me so furious that I went straight home (to Aunt Carole's house), then, when Nelson showed up to apologize, I burst into tears and took him straight to bed…and had one of those three fireworks occasions.

Sudden impulse and quite reckless and we got away with it cold.

Thereafter I let Nelson have me from time to time when we could figure out a safe way right up to my wedding. Which did not quite finish it, as years later he moved to Kansas City.

I should have behaved myself with Nelson; he was only fourteen.

But a smart fourteen. He knew that we didn't dare get caught; he knew that I couldn't marry him no matter what and he realized that he could get me pregnant and that a baby would be disaster for each of us.

That Sunday morning he held still while I put a French purse on him, grinned and said, "Maureen, you're smart." Then he tackled me with unworried enthusiasm and brought me to orgasm in record time.

For the next two years I kept Nelson supplied with Merry Widows. Not for me; I carried my own. For his harem. I started him off; he took up the sport with zeal and native genius, and never got into trouble. Smart.

Besides cooking, I endeavored to straighten out Father's accounts receivable, with less success. After consulting with Father I sent out some polite and friendly dunning letters. Have you ever written over one hundred letters, one after another, by hand? I found out why Mr. Clemens had grabbed the first opportunity to shift from pen to typewriter—first author to do so.

"Dear Mr. Deadbeat:

"In going over Dr. Johnson's books I find that your account stands at umpteen dollars and that you have made no payment on it since March 1896. Perhaps this is an oversight. May we expect payment by the first of the month?

"If it is not possible for you to pay the full amount at once, will you please call at the clinic this Friday the tenth so that we can work out arrangements mutually satisfactory?

"The Doctor sends his good wishes to you and to Mrs. Deadbeat, and also to Junior and the twins and little Knothead.

"I remain,
"Faithfully yours,
"Maureen Johnson
"(On behalf of Ira Johnson, M.D.)"

I showed Father sample letters ranging from gentle to firm to tough; the sample above shows what we used on most of them. With some he said, "Don't dun them. They would if they could, but they can't." Nevertheless I sent out more than a hundred letters.

For each letter postage was two cents, stationery about three. Can we reckon my time as worth five cents per letter? If so, each letter comes to a dime, and the whole mailing cost slightly over ten dollars.

Those hundred letters did not bring in as much as ten dollars in cash.

About thirty patients came in to talk to us about it. Perhaps half of those fetched some payment in kind—fresh eggs, a ham, side meat, garden truck, fresh bread, and so forth. Six or seven arranged schedules of payment; some of those actually met their promises.

But over seventy totally ignored the letters.

I was upset and disappointed. These were not shiftless peckerwoods like Jackson Igo; these were respectable farmers and townspeople. These were people for whom my father had gotten up in the middle of the night, dressed, then driven or ridden horseback through snow or rain, dust or mud or frozen ruts, to attend them or their children. And when he asked to be paid, they ignored it.

I couldn't believe it.

I asked, "Father, what do I do now?" I expected him to tell me toforget it, as he had been dubious as to the usefulness of these letters. I awaited his response with anticipated relief.

"Send each of them the tough one and mark it, 'Second Notice.' "

"You think that will do it, sir?"

"No. But it will do some good. You'll see."

Father was right. That second mailing brought in no money. It fetched a number of highly indignant replies, some of them scurrilous. Father had me file each with its appropriate case record, but make no reply.

Most of those seventy patients never showed up again. This was the good result Father expected. He was cheerful about it. "Maureen, it's a standoff; they don't pay me and I don't do them much good. Iodine, calomel, and Aspirin—that's about all we have today that isn't a sugar pill. The only times I'm certain of results are when I deliver a baby or set a bone or cut off a leg.

"But, damn it all, I'm doing the best I know how. I do try. If a man gets angry at me simply because I ask him to pay for my services… well, I see no reason why I should get out of a warm bed to physic him."

Eighteen ninety-seven was the year that the Katy ran a line not a mile from our town square, so the council extended the city limits and that put Thebes on the railroad. That brought the telegraph to Thebes, too, which enabled the *Lyle County Leader* to bring the news to us direct from Chicago. But still only once a week; the *Kansas City Star* by mail was usually quicker. The Bell telephone reached us, too, although at first only from nine to nine and never on Sunday mornings, because the switchboard was in the Widow Loomis's parlor and service stopped when she was not there.

The *Leader* published a glowing editorial: "Modern Times." Father frowned. "They point out that it will soon be possible, as more people subscribe, to call for a doctor in the middle of the night. Yes, yes, surely. Today I make night calls because somebody is in such trouble that some member of the patient's family has hitched up in the middle of the night and driven here to ask me to come.

"But what happens when he can rout me out of bed just by cranking a little crank? Will it be for a dying child? No, Maureen, it will be for a hangnail. Mark my words; the telephone signals the end of the house call. Not today, not tomorrow, but soon. They will ride a willing horse to death…and you will see the day when medical doctors will refuse to make house calls."

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At New Year's, I told Father that I had made up my mind: I wanted him to put my name in to the Howard Foundation.

Before the end of January I received the first of the young men on my list.

By the end of March I had received all seven of them. In three cases I did go so far as to avail myself of the privilege of the sofa… although I used the couch in Father's office, and locked the door.

Wet firecrackers.

Decent enough young men, those three, but…to marry? No.

Maureen felt glum about the whole matter.

But on Saturday the second of April Father received a letter from Rolla, Missouri:

“My dear Doctor:

“Permit me to introduce myself. I am a son of Mr. and Mrs. John Adams Smith of Cincinnati, Ohio, where my father is a tool and die maker. I am a senior at the School of Mines of the University of Missouri at Rolla, Missouri. I was given your name and address by Judge Orville Sperling, of Toledo, Ohio, Executive Secretary of the Howard Foundation. Judge Sperling tells me that he has written to you about me.

“If I may do so, I will call on you and Mrs. Johnson on Sunday afternoon the seventeenth of April. Then, if you permit, I ask to be presented to your daughter Miss Maureen Johnson for the purpose of offering myself as a possible suitor for her hand in marriage.

“I welcome any investigation you care to make of me and I will answer fully and frankly any questions you put to me.

“I look forward to your reply.

“I remain, sir,

“Faithfully your servant,

“Brian Smith”

Father said, “See, my dear daughter? Your knight comes riding.”

“Probably has two heads. Father, it’s no good. I shall die an old maid, at the age of ninety-seven.”

“Not a fussy old maid, I trust. What shall I tell Mr. Smith?”

“Oh, tell him Yes. Tell him I’m drooling with eagerness.”

“Maureen.”

“Yes, Father. I’m too young to be cynical, I know. Quel dommage. I will straighten up and give Mr. Brian Smith my best smile and approach the meeting with cheerful optimism. But I have grown a bit jaundiced. That last orangutan—”

(That ape had tried to rape me, right on Mother’s sofa, just as soon as Mother and Father went upstairs. He then left abruptly, clutching his crotch. My study of anatomy had paid off.)

“I’ll tell him that we will welcome him. Sunday the seventeenth. That’s two weeks from tomorrow.”

I greeted Sunday the seventeenth with little enthusiasm. But I did stay home from church and prepared a picnic lunch, and grabbed the chance for an extra bath. Mr. Smith turned out to be presentable and well spoken, if not especially inspiring. Father grilled him a bit and Mother offered him coffee; about two we got away—Daisy and a family buggy, with his livery stable nag left in our barn.

Three hours later I was certain that I was in love.

Brian made a date to come back on the first of May. He had final examinations to get out of the way in the meantime.

One week later, Sunday the twenty-fourth of April, 1898, Spain declared war on the United States.

CHAPTER FIVE

Exit from Eden

This is not a bad jail, as jails go. I was in a much worse one, in Texas, seventy-odd years back on my personal time line. In that one the cockroaches slugged it out with each other for a thin chance of finding a few crumbs on the floor, there was no hot water at any time, and the screws were all cousins of the sheriff. Bad as that joint was, wetbacks used to sneak across the Rio and break a window or two in order to get themselves locked up, so they could fatten up for the winter. That says something about Mexican jails that I don't care to investigate.

Pixel comes to see me almost every day. The guards can't figure out how he does it. They all like him and he has given several of them his conditional approval. They fetch tidbits in to him; he deigns to eat some of their tribute.

The warden heard about Pixel's Houdini talents, came to my cell, happened to show up when Pixel was making a call on me, tried to pet him and got nipped for his presumption—not hard enough to break the skin, but the message was clear.

The warden told me (ordered me) to be sure to let him know ahead of time when Pixel went in or out; he wanted to see how Pixel managed to sneak past and not set off alarms. I told him that no mortal man or woman could predict what a cat would do next, so don't hold your breath, buster. (Guards and trusties are okay, in their place, but a warden is not my social equal. Apparently Pixel realizes this.)

Dr. Ridpath has been in a couple of times, to urge me to plead guilty and throw myself on the mercy of the court. He says that I would be certain to get no worse than a suspended sentence, if I convinced the tribunal that I was truly contrite.

I told him that I was not guilty and would rather be a *cause célèbre* and sell my memoirs for an outrageous sum.

He told me that I was apparently unaware that the College of Bishops had passed a law years back under which any profits arising out of a case of sacrilege went to the Church, after the fee for disposing of the body was paid. "Look, Maureen, I'm your friend, although you don't seem to know it. But there is nothing I or anyone can do for you if you won't cooperate . "

I thanked him and told him that I was sorry that he was disappointed in me. He said to think it over. He didn't kiss me when he left, so I conclude that he really is vexed with me.

Dagmar has been in almost daily. She doesn't try to coerce me into confessing, but what she did do last time had more effect on me than Dr. Eric's reasonableness: She smuggled in a Last Friend. "If you are going to be stubborn about confessing, this will help. Just break off the tip and inject it anywhere. Once it takes hold—five minutes or less—even a slow fire won't hurt…or not much. But for Santa Carolita's sake, ducks, don't let anyone find it!"

I'll try not to.

I would not be dictating this if I were not in jail. I don't necessarily have publication in mind, but the discipline of sorting it all out may show me where I went wrong…and that may show me how to straighten out the mess and go right.

The Battle of New Orleans was fought two weeks after the War of 1812 was over. Poor communications—But in 1898 the Atlantic Cable was in use. The news of Spain's declaration of war went from Madrid to London to New York to Chicago to Kansas City to Thebes almost with the speed of light—only the delays of retransmission. Thebes is about eight hours west of Madrid, so the Johnson family was in church when the dreadful news arrived.

The Reverend Clarence Timberly, our pastor at Cyrus Vance Parker Memorial Methodist Episcopal Church, was preaching and had just finished fourthly and was digging into fifthly when someone started ringing the big bell in the county courthouse cupola.

Brother Timberly stopped preaching. "Let us suspend services for a few moments while the Osage Volunteers and members of the bucket brigades withdraw."

Ten or a dozen of the younger men got up and left. Father picked up his bag and followed them. Being a doctor Father did not serve on the volunteer fire team but, being a doctor, he usually did go to fires if not actively engaged in treating a patient when the bell rang.

As soon as Father closed the church door behind him our preacher got back to work on "fifthly"—what it was I don't know; during sermons I always tried to look alert and attentive, but I rarely listened.

On down Ford Street someone was shouting; he could be heard right through Brother Timberly's loud voice. Those shouts came closer.

Presently Father came back into the church. Instead of returning to his pew he walked up to the chancel rail and handed a sheet of newspaper to our pastor.

I should interject that the *Lyle County Leader* was a four-page single sheet, printed on what was then called "boiler plate"—newsprint printed on one side with international and national and state news, and shipped that way to small country papers, which would then fill the inside pages with local news and local advertising. The *Lyle County Leader* bought "boiler plate" from the *Kansas City Star* with the *Leader's* own masthead printed on it.

The sheet Father handed to Brother Timberly was of that sort, with the same local stuff inside as had been in the *Leader's* weekly edition dated Thursday, April twenty-first, 1898, except that the upper half of page two had been reset in large type with one short news story:

spain declars war! ! !

By wire from the *New York Journal* April 24 Madrid—Today our Ambassador was summoned to the office of the Premier and was handed his passport and a curt note stating that the "crimes" of the United States against His Most Catholic Majesty have forced His Majesty's government to recognize that a state of war exists between the Kingdom of Spain and…

Reverend Timberly read that one new story aloud from the pulpit, put the paper down, looked solemnly at us, took out his handkerchief and wiped his brow, then blew his nose. He said hoarsely, "Let us pray."

Father stood up, the rest of the congregation followed. Brother Timberly asked Lord God Jehovah to lead us in this time of peril. He asked Divine guidance for President McKinley. He asked the Lord's help for all our brave men on land and sea who now must fight for the preservation of this sacred, God-given land. He asked mercy for the souls of those who would fall in battle, and consolation and help in drying the tears of widows and orphans and of the fathers and mothers of our young heroes destined to die in battle. He asked that right prevail for a speedy end to this conflict. He asked for help for our friends and neighbors, the unfortunate people of Cuba, oppressed for so long by the iron heel of the king of Spain. And more, about twenty minutes of it.

Father had long since cured me of any belief in the Apostles' Creed. In its place I held a deep suspicion, planted by Professor Huxley and nurtured by Father, that no such person as Jesus of Nazareth had ever lived.

As for Brother Timberly, I regarded him as two yards of noise, with his cracks filled with unction. Like many preachers in the Bible Belt, he was a farm boy with (I strongly suspected) a distaste for real work.

I did not and do not believe in a God up there in the sky listening to Brother Timberly's words.

Yet I found myself saying "Amen!" to his every word, while tears streamed down my cheeks.

At this point I must drag out my soap box.

In the twentieth century Gregorian, in the United States of America, something called “revisionist history” became popular among “intellectuals.” Revisionism appears to have been based on the notion that the living actors present on the spot never understood what they were doing or why, or how they were being manipulated, being mere puppets in the hands of unseen evil forces.

This may be true. I don’t know.

But why are the people of the United States and their government always the villains in the eyes of the revisionists? Why can’t our enemies-such as the king of Spain, and the kaiser, and Hitler, and Geronimo, and Villa, and Sandino, and Mao Tse-tung, and Jefferson Davis—why can’t these each take a turn in the pillory? Why is it always our turn?

I am well aware that the revisionists maintain that William Randolph Hearst created the Spanish-American War to increase the circulation of his newspapers. I know, too, that various scholars and experts later asserted that the USS *Maine,* at dock in Havana harbor, was blown up (with loss of 226 American lives) by faceless villains whose purpose was to make Spain look bad and thereby to prepare the American people to accept a declaration of war against Spain.

Now look carefully at what I said. I said that I know that these things are asserted. I did not say that they are true.

It is unquestionably true that the United States, acting officially, was rude to the Spanish government concerning Spain’s oppression of the Cuban people. It is also true that William Randolph Hearst used his newspapers to say any number of unpleasant things about the Spanish government. But Hearst was not the United States and he had no guns and no ships and no authority. What he did have was a loud voice and no respect for tyrants. Tyrants hate people like that.

Somehow those masochistic revisionists have turned the War of 1898 into a case of imperialistic aggression by the United States. How an imperialist war could result in the freeing of Cuba and of the Philippines is never made clear. But revisionism always starts with the assumption that the United States is the villain. Once the revisionist historian proves this assumption (usually by circular logic) he is granted his Ph.D. and is well on his way to a Nobel peace prize.

In April 1898 to us benighted country people certain simple facts were true. Our battleship *Maine* had been destroyed, with great loss of life. Spain had declared war on us. The president had asked for volunteers.

The next day, Monday the twenty-fifth of April, came the president’s call asking the state militias to furnish 125,000 volunteers to augment our almost-nonexistent army. That morning Tom had ridden over to Butler Academy as usual. The news reached him there and he came trotting back at noon, his roan gelding Beau Brummel in a lather. He asked Frank to wipe Beau down for him and hurried into the house, there to disappear into the clinic with Father.

They came out in about ten minutes. Father told Mother, “Madam, our son Tom is about to enlist in the service of his country. He and I will be leaving for Springfield at once. I must go with him in order to swear that he is eighteen years old and has parental approval.”

“But he is not eighteen!”

“That is why I must go with him. Where is Frank? I want him to hitch Loafer. ”

“I’ll hitch him, Father,” I put in. “Frank just now left for school, in a rush. He was a bit late.” (Tending Beau had made Frank late, but it wasn’t necessary to say so.)

Father looked worried. I insisted, “Loafer knows me, sir; he would never hurt me.”

I had just returned to the house when I saw Father standing at the new telephone instrument, which hung in the hallway we used as a waiting room for patients. Father was saying, “Yes…yes, I understand…Good luck, sir, and God speed. I will tell her. Goodbye.” He took the receiver away from his ear, stared at it, then remembered to hang it up.

He looked at me. “That was for you, Maureen.”

“For me?” I had never had a telephone call.

“Yes. Your young man, Brian Smith. He asks you to forgive him but he will not be able to call on you next Sunday. He is catching a train for St. Louis at once in order to return to Cincinnati, where he will be enlisting in the Ohio State Militia. He asks to be permitted to call on you again as soon as the war is over. Acting for you, I agreed to that.”

“Oh.” I felt an aching tight place under my wishbone and I had trouble breathing. “Thank you, Father. Uh…could you show me how to call him, call Rolla I suppose I mean, and speak to Mr. Smith myself?”

Mother interrupted. “Maureen!”

I turned to face her. “Mother, I am not being forward, or unladylike. This is a very special circumstance. Mr. Smith is going off to fight for us. I simply wish to tell him that I will pray for him every night while he is gone. ”

Mother looked at me, then said gently, “Yes, Maureen. If you are able to speak to him, please tell him that I shall pray for him, too. Every night. ”

Father cleared his throat, loudly. “Ladies—”

"Yes, Doctor?" Mother answered.

'The matter is academic. Mr. Smith told me that he could talk only a few moments because there was a long line of students waiting to use the telephone. Similar messages, I assume. So there is no use in trying to reach him; the telephone wire will be in use…and he will be gone. Which in no way keeps you two ladies from praying for his safety. Maureen, you can tell him so in a letter."

"But I don't know how to write to him!"

"Use your head, daughter. You know at least three ways."

"Doctor Johnson, please." Mother then said gently, to me, "Judge Sperling will know."

" 'Judge Sperling.' Oh!"

"Yes, dear. Judge Sperling always knows where each of us is."

A few minutes later we all kissed Tom goodbye, and Father also while we were about it although he was coming back…and, so he assured us, it was extremely likely that Tom would be back…sworn in, then told what day to return for duty, as it was most unlikely that the state militia could accept a thousand or more new bodies all on the same day.

They drove off. Beth was crying quietly. Lucille was not—I don't think she understood any of it—but was solemn and round-eyed. Mother did not cry and neither did I…not then. But Mother went upstairs and closed her door…and so did I. I now had a room to myself, ever since Agnes married, so I threw the latch and lay down and let myself cry.

I tried to tell myself that I was crying over my brother, Thomas. But I knew better; it was Mr. Smith who was causing that ache in my heart.

I wished, with all my soul, that I had not caused him to use a French purse in making love to me a week earlier. I had been tempted—I knew, I was certain, that it would be ever so much nicer just to forget that rubber sheath and be bare to him, inside and out.

But I had told Father solemnly that I would always use a sheath… until the day when, after sober discussion with the man concerned, I omitted it for the purpose of becoming pregnant…under a mutual firm intention of marrying if we succeeded.

And now he was going off to war…and I might never see him again.

I dried my eyes and got up and took down a little volume of verse, Professor Palgrave's *Golden Treasury*. Mother had given it to me on my twelfth birthday, and it had been given to her on her twelfth birthday, in 1866.

Professor Palgrave had found 288 lyrics which were fine enough, in his exquisite taste, for his treasury; that day I wanted just one:

Richard Lovelace's "To Lucasta, Going to the Warres."

"I could not love thee (Deare) so much,
"Lov'd I not Honour more."

Then I cried some more, and after a while I slept. When I woke up, I got up and did not let myself cry again. Instead I slipped a note under Mother's door, telling her that I would get supper for all of us by myself…and she could have supper in bed if it pleased her to do so.

She let me cook supper but she came down and presided and, for the first time, Frank seated Mother and sat opposite her. She looked at me. "Maureen, will you return thanks?"

"Yes, Mother. Dear Lord, we thank Thee for that which we are about to partake. Please bless this food to our use and bless all our brothers and sisters in Jesus everywhere, both known to us and unknown." I gulped and added, "And on this day we ask a special blessing for our beloved brother, Thomas Jefferson, and for all other young men who have gone to serve our beloved country." *(Et je prie que le bon Dieu garde bien mon ami!)* "In Jesus' Name. Amen."

"Amen," Mother said firmly. "Franklin, will you carve?"

Father and Tom returned the next day, late in the afternoon. Beth and Lucille threw themselves on Tom and Father, and I wanted to, but could not, as I was carrying George and he had picked that moment to wet a diaper. But I just held him and let him wait, so that I wouldn't miss any news—a spare diaper under him; I knew George. That baby peed more than all the rest put together.

Beth demanded, "Did you do it, Tommy, did you do it, did you do it, did you?"

"Of course he did," Father answered. "He's Private Johnson now; next week he'll be a general."

"He will?"

"Well, maybe not that fast." Father stopped to kiss Lucille and Beth. "But they do promote them fast in wartime. Take me, for example. I'm a captain."

"Doctor Johnson!"

Father straightened up. "Captain Johnson, Madam. Both of us enlisted. I am now Acting Surgeon, Medical Detachment, Second Missouri Regiment, with assigned rank of captain."

At this point I ought to say something about the families of my parents especially Father's brothers and sisters, as what happened that week in April 1898 in Thebes had its roots a century earlier.

Father's grandparents were:

George Edward Johnson (1795-1897) and Amanda Lou Fredericks

Johnson (1798-1899)

Terence McFee (1796-1900) and Rose Wilhelmina Brandt McFee (1798-1899)

Both George Johnson and Terence McFee served in the War of 1812.

Father's parents were:

Asa Edward Johnson (1813-1918) and Rose Altheda McFee Johnson (18141918)

Asa Johnson served in the War with Mexico, a sergeant in the Illinois militia.

Mother's grandparents were:

Robert Pfeiffer (1809-1909) and Heidi Schmidt Pfeiffer (1810-1912)

Ole Larsen (1805-1907) and Anna Kristina Hansen Larsen (1810-1912)

and her parents were

Richard Pfeiffer (1830-1932) and Kristina Larsen Pfeiffer (1834-1940)

Father was born on his grandfather Johnson's farm in Minnesota, in Freeborn County, near Albert, on Monday, August second, 1852, the youngest of four boys and three girls. His grandfather George Edward Johnson (my greatgrandfather) was born in 1795, in Bucks County, Pennsylvania. He died in a nursing home in Minneapolis in December 1897, and the newspapers made a to-do over the fact that George Washington was still alive when he was born. (We had nothing to do with this publicity. While I was not aware of the policy until I was married, even at that time Howard Foundation families avoided public mention of ages.)

George Edward Johnson married Amanda Lou Fredericks (1798-1899) in 1813 and took her to Illinois, where she had her first child, Asa Edward Johnson, my grandfather, that same year. It seems likely that Grampaw Acey was the same sort of "premature" baby as was my oldest brother, Edward. After the War with Mexico the Johnson family migrated west and homesteaded in Minnesota.

There was no Howard Foundation in those days, but all of my ancestors appear to have started breeding young, had lots of children, were healthy despite the uncontrolled diseases of those times, and lived long lives, mostly to a hundred and more.

Asa Edward Johnson (1813-1918) married Rose Altheda McFee (18141918) in 1831. They had seven children:

1. Samantha Jane Johnson, 1831-1915 (died from injuries suffered while breaking a horse)

2. James Ewing Johnson, 1833-1884 (killed attempting to ford the Osage during spring flood. I barely remember him. He married Aunt Carole Pelletier of New Orleans.)

3. Walter Raleigh Johnson, 1838-1862 (killed at Shiloh)

4. Alice Irene Johnson, 1840-? (I don't know what became of Aunt Alice. She married back east.)

5. Edward McFee Johnson, 1844-1884 (killed in a train wreck)

6. Aurora Johnson 1850-? (last heard of in California ca. 1930) (married several times)

7. Ira Johnson? August 2, 1852-1941 (reported missing in the Battle of Britain)

When Fort Sumter fell in April 1861, Mr. Lincoln asked for volunteers from the militias of the several states (just as Mr. McKinley would do in a later April). On the Johnson farm in Freeborn County, Minnesota, the call was answered by Ewing (twentyeight), Walter (twentythree), Edward (seventeen)—and Grampaw Acey, at that time fortyeight years old, thus producing a situation that utterly humiliated Ira Johnson, nine years old and a grown man in his own estimation. He was going to be left home to do chores, while all the other men went to war. His sister Samantha (whose husband had volunteered) and his mother would run the farm.

Small comfort to him that his father returned home almost at once, turned down for something, I do not know what.

Father endured this humiliation for three long years…and at twelve ran away from home to enlist as a drummer boy.

He found his way down the Mississippi on a barge, managed to locate the encampment of the Second Minnesota before it joined Sherman's drive to the sea. His cousin Jules vouched for him and he was tentatively accepted (subject to training; he knew nothing of drums, or of bugles) and was assigned quarters and rations with headquarters company.

Then his father showed up and fetched him home.

So Father's service in the War was about three weeks and he was never in combat. He was not credited even with those three weeks…as he learned to his dismay when he attempted to join the Union veterans' organization, the Grand Army of the Republic.

There was no record of his service, as the regimental adjutant had "discharged" him and let Grampaw Acey take him home simply by destroying the paper work.

I think it is necessary to assume that Father was marked for life.

During the nine days that Father and Tom waited at home before they could be inducted into army life I saw no indication that Mother disapproved (other than her first expression of surprise). But she never smiled. One could feel the tension between our parents…but they did not let it be seen.

Father did say something to me that, I think, had some bearing on this tension. We were in his clinic and I was helping him to thin out and update his patients' records so that he could turn them over to Dr. Chadwick for the duration of the war. He said to me, "Why no smiles, Turkey Egg? Worried about your young man?"

"No," I lied. "He had to go; I know that. But I wish you weren't going. Selfish, I guess. But I'll miss you, cher papa."

"I'll miss you, too. All of you." He was silent for several minutes, then he added, "Maureen, someday you may be faced—will be faced, I think—with the same thing: your husband going off to war. Some people say—I've heard talk—that married men should not go. Because of their families.

"But this involves a contradiction, a fatal one. The family man dare not hang back and expect the bachelor to do his fighting for him. It is manifestly unfair for me to expect a bachelor to die for my children if I am unwilling to die for them myself. Enough of that attitude on the part of married men and the bachelor will refuse to fight if the married man stays safe at home…and the Republic is doomed. The barbarian will walk in unopposed."

Father looked at me—looked worried. "Do you see?" I think he was honestly seeking my opinion, my approval.

"I—" I stopped and sighed. "Father, I think I see. But at times like these I am forced to realize that I am not very experienced. I just want this war to be over so that you will come home and Tom will come home…and—"

"And Brian Smith? I agree."

"Well, yes. But I was thinking of Chuck, too. Chuck Perkins."

"Chuck is going? Good lad!"

"Yes, he told me today. His father has agreed and is going to Joplin with him tomorrow." I sniffed back a tear. "I don't love Chuck but I do feel sort of sentimental about him."

"That's understandable."

Later that day I let Chuck take me up on Marston Hill and defied chiggers and Mrs. Grundy and told Chuck I was proud of him and demonstrated it the very best I knew how. (I did use a sheath; I had promised Father.) And an amazing thing happened. I had gone up there simply intending to run through some female calisthenics to demonstrate to Chuck that I was proud of him and appreciated his willingness to fight for us. And the miracle happened. Fireworks, big ones! I got all blurry and my eyes squinched shut and I found I was making loud noises.

And about half an hour later the miracle happened again.

Amazing!

Chuck and his father caught the eight-oh-six out of Butler the next morning and were back that same afternoon—Chuck sworn in and assigned to the same company (C Company, Second Regiment) Tom was in, and with similar delay time. So Chuck and I went to another (fairly) safe spot, and I told him goodbye again, and again the miracle overtook me.

No, I did not decide I was in love with him, after all. Enough men had had me by then that I was not inclined to mistake a hearty orgasm for eternal love. But it was nice that they happened since I intended to tell Chuck goodbye as often and as emphatically as possible, come what might. And did, right up to the day, a week later, when it really was goodbye.

Chuck never came back. No, he was not killed in action; he never got out of Chickamauga Park, Georgia. It was the fever, whether malaria or yellow jack, I'm not sure. Or it could have been typhoid. Five times as many died of the fevers as were lost in combat. They are heroes, too. Well, aren't they? They volunteered; they were willing to fight…and they wouldn't have caught the fever if they had hung back, refused to answer the call.

I've got to drag out that soap box again. All during the twentieth century I've run into people who either have never heard of the War of 1898, or belittle it. "Oh, you mean that one. That wasn't a real war, just a skirmish. What happened? Did he stub his toe, running back down San Juan Hill?"

(I should have killed them! I did throw an extra dry martini into the eyes of one man who talked that way.)

Casualties are just as heavy in one war as in another…because death comes just one to the customer.

And besides— In the summer of 1898 we did not know that the war would be over quickly. The United States was not a superpower; the United States was not a world power of any sort…whereas Spain was still a great empire. For all we knew our men might be gone for years…or not come back. The bloody tragedy of 1861-1865 was all we had to go by, and that had started just like this one, with the president calling for a few militiamen. My elders tell me that no one dreamed that the rebel states, half as big and less than half as populous and totally lacking in the heavy industry on which modern war rests—no sensible person dreamed that they could hold out for four long, dreary, death-laden years.

With that behind us, we did not assume that beating Spain would be easy or quick; we just prayed that our men would come back…

someday.

The day came, the fifth of May, when our men left…on a special troop train, down from Kansas City, a swing over to Springfield, then up to St. Louis, and east—destination: Georgia. All of us went over to Butler, Mother and Father in the lead, in his buggy, drawn by Loafer, while the rest of us followed in the surrey, ordinarily used only on Sundays, with Tom driving Daisy and Beau. The train pulled in, and we made hurried goodbyes as they were already shouting "All abo…ard!" Father turned Loafer over to Frank, and I inherited the surrey with the gentle team.

They didn't actually pull out all that quickly; baggage and freight had to be loaded as well as soldiers. There was a flatcar in the middle of the train, with a brass band on it, supplied by the Third Regiment (Kansas City) and it played all the time the train was stopped, a military medley.

They played, "Mine eyes have seen the glory—" and segued right into "I wish I was in de land ob cotton—" and from that into "Tenting tonight, tenting tonight—" and "—stuck a feather in his cap and called it macaroni!" Then they played "In my prison cell I sit—" and the engine gave a toot and the train started to move, and the band scrambled to get off the flatcar and into the coach next to it, and the man with the tuba had to be helped.

And we started home and I was still hearing "Tramp, tramp, tramp, the boys are marching—" and that tragic first line. "In my prison cell I sit—" Somebody told me later that the man who wrote that knew nothing about it, because wartime prison camps don't have anything as luxurious as cells. He cited Andersonville.

As may be, it was enough to make my eyes blur up and I couldn't see. But that didn't matter; Beau Brummel and Daisy needed no help from me. Just leave the reins slack and they would take us home. And they did.

I helped Frank unharness both rigs, then went in and upstairs. Mother came to my room just as I closed the door, and tapped on it. I opened it. "Yes, Mother?"

"Maureen, your *Golden Treasury*— May I borrow it?"

"Certainly." I went and got it; it was under my pillow. I handed it to her. "It's number eighty-three, Mother, on page sixty."

She looked surprised, then thumbed the pages. "So it is," she agreed, then looked up. "We must be brave, dear."

"Yes, Mother. We must."

Speaking of prison cells, Pixel has just arrived in mine, with a present for me. A mouse. A dead mouse. Still warm. He is so pleased with himself and clearly he expects me to eat it. He is waiting for me to eat it.

How am I going to get out of this?

CHAPTER SIX

"When Johnny Comes Marching Home—"

The rest of 1898 was one long bad dream. Our men had gone to war but it was difficult to find out what was happening in that war. I remember a time, sixty-odd years later, when the malevolent eye of television turned war into a spectator sport, even to the extent (I hope that this is not true!) that attacks were timed so that the action could be shown live on the evening news. Can you imagine a more ironically horrible way to die than to have one's death timed to allow an anchor man to comment on it just before turning the screen over to the beer ads?

In 1898 the fighting was not brought live into our living rooms; we had trouble finding out what had happened even long after the fact. Was our Navy guarding the east coast (as eastern politicians were demanding), or was it somewhere in the Caribbean? Had the *Oregon* rounded the Horn and would it reach the Fleet in time? Why was there a second battle at Manila? Hadn't we won the battle of Manila Bay weeks ago?

In 1898 I knew so little about military matters that I did not realize that civilians should not know the location of a fleet or the planned movements of an army. I did not know that anything known to an outsider will be known by enemy agents just minutes later. I had never heard of the public's "right to know," a right that cannot be found in the Constitution but was sacrosanct in the second half of the twentieth century. This so-called "right" meant that it was satisfactory (regrettable perhaps but necessary) for soldiers and sailors and airmen to die in order to preserve unblemished that sacred "right to know."

I had still to learn that neither Congressmen nor newsmen could be trusted with the lives of our men.

Let me try to be fair. Let us assume that over 90 percent of Congressmen and of newsmen are honest and honorable men. In that case, less than 10 percent need be murderous fools indifferent to the deaths of heroes for that minority to destroy lives, lose battles, turn the course of a war.

I did not have these grim thoughts in 1898; it would take the War of 1898 and two world wars and two undeclared wars ("police actions," for God's sake!) to make me realize that neither our government nor our press could be trusted with human lives.

"A democracy works well only when the common man is an aristocrat. But God must hate the common man; He has made him so dad-blamed common! Does your common man understand chivalry?

Noblesse oblige? Aristocratic rules of conduct? Personal responsibility for the welfare of the State? One may as well search for fur on a frog."

Is that something I heard my father say? No. Well, not exactly. It is something I recall from about two o'clock in the morning in the Oyster Bar of the Benton House in Kansas City after Mr. Clemens's lecture in January 1898. Maybe my father said part of it; perhaps Mr. Clemens said all of it, or perhaps they shared it—my memory is not perfect after so many years.

Mr. Clemens and my father were indulging in raw oysters, philosophy, and brandy. I had a small glass of port. Both port and raw oysters were new to me; I disliked both…not helped by the odor of Mr. Clemens's cigar.

(I had assured Mr. Clemens that I enjoyed the aroma of a good cigar; please do smoke. A mistake.)

But I would have endured more than cigar smoke and raw oysters to be present that night. On the platform Mr. Clemens had looked just like his pictures: a jovial Satan with a halo of white hair, in a beautifully tailored white suit. In person he was a foot shorter, warmly charming, and he made of me an even more fervent admirer by treating me as a grown lady.

I was up hours past my bedtime and had to keep pinching myself not to fall asleep. What I remember best was Mr. Clemens's discourse on the subject of cats and redheads…composed on the spot for my benefit, I think—it does not appear anywhere in his published works, not even those released by the University of California fifty years after his death.

Did you know that Mr. Clemens was a redhead? But that must wait.

News of the signing of the peace protocol reached Thebes on the twelfth of August, a Friday. Mr. Barnaby, our principal, called us all into the lecture hall and told us, then dismissed school. I ran home, found that Mother already knew. We cried on each other a little while Beth and Lucille were noisy around us, then Mother and I started in on a complete, unseasonal spring cleaning so that we would be ready when Father and Tom (and Mr. Smith?—I did not voice it) got home sometime next week. Frank was told to cut the grass and to do anything else that needed doing outdoors—don't ask; just do it.

Church on Sunday was a happy Praise-the-Lord occasion, with Reverend Timberly being even more long-windedly stupid than usual but nobody minded, least of all me.

After church Mother said, "Maureen, are you going to school tomorrow?"

I had not thought about it. The Thebes school board had decided to offer summer high school (in addition to the usual make-up session for grammar school dullards) as a patriotic act to permit older boys to graduate early and enlist. I had signed up for summer school both to add to my education (since I had given up the idea of college) and to fill that aching emptiness caused by Father and Tom (and Mr. Smith) being away at war.

(I have spent the longest years of my life waiting for men to come back from war. And for some who did not come back.)

"Mother, I had not thought about it. Do you really think there will be school as usual tomorrow?"

"There will be. Have you studied?"

(She knew I hadn't. You can't do much with Greek irregular verbs when you are down on your knees, scrubbing the kitchen floor.) "No, Ma'am."

"Well? What would your father expect of you?"

I sighed. "Yes, Ma'am."

"Don't feel sorry for yourself. Summer school was your idea. You should not waste that extra tuition. Now git! I will get supper by myself tonight."

They did not come home that week.

They did not come home the following week.

They did not come home that fall.

They did not come home that year.

(Chuck's body came home. The GAR provided a firing squad and I attended my first military funeral and cried and cried. A bugler with white hair played for Charles: "—sleep in peace, soldier brave, God is nigh."

(If I ever come close to believing, it is when I hear "Taps." Even today.)

After that summer session in 1898, when September came it was necessary to make a choice: go to school or not, and if so, where? I did not want to remain home, doing little but play nursemaid to George. Since I could not go to Columbia, I wanted to go to Butler Academy, a two-year private school that offered a liberal arts course acceptable at Columbia or at Lawrence in lieu of lower division. I pointed out to Mother that I had saved Christmas and birthday presents and "egg money" ("egg money" was any earned money—taking care of neighbors' children, minding a stand at the county fair, and so forth—not much and quite seldom)—I had saved enough for my tuition and books.

Mother said, "How will you get back and forth?"

I answered, "How does Tom get back and forth?"

"Don't answer a question with a question, young lady. We both know how your brother did it: By buggy in good weather, on horseback in bad weather…and he stayed home in the very worst weather. But your brother is a grown man. Tell me how you will do it."

I thought about it. A buggy was no problem; the Academy had a barn for horses awaiting their masters. Horseback? I could ride almost as well as my brothers…but girls do not arrive at school wearing overalls, and sidesaddle was not a good idea for weather not suited to a buggy. But even good weather and a buggy—From late in October to early in March I would have to leave home before daylight and return home after dark.

In October 1889 Sarah Trowbridge had left her father's farm to go four miles by buggy to Rich Hill. Her horse and buggy came home. Sarah was never seen again.

Ours was a quiet countryside. But the most dangerous animal in all history walks on two legs…and sometimes slinks along country roads.

"I am not afraid, Mother."

"Tell me what your father would advise you to do."

So I gave up, and prepared to go back to high school for another semester, or more. School was less than a mile away and there were people we knew within shouting distance the whole way. Best of all, our high school had courses I had not had time to take. I continued Greek and another year of Latin and started differential equations and first-year German and audited geology and medieval history instead of study hall those two hours. And of course I still continued piano lessons on Saturday mornings—Mother had taught me for three years, then she had decided that I could profit from more advanced training than she could give me. It was an "in kind" deal; Miss Primrose owed Father both for herself and for her ailing and ancient mother.

So that kept me out of mischief the school year starting September 1898 while still leaving me plenty of time to write a newsy unsentimental letter to Mr. Smith (Sergeant Smith!) each week, and another to Tom, and another to Father, and another to Chuck…until one came back to me the week before Chuck came back to us, forever.

I didn't see boys or young men any to speak of. The good ones had gone to war; those who remained behind struck me, mostly, as having drool on their chins. Or as too impossibly young for me. I was not consciously being faithful to Mr. Smith. He had not asked me to be, and I would not expect him to be faithful to me. We had had one—just one—highly successful first meeting. But that did not constitute a betrothal.

Nor was I faithful. But it was just my young cousin Nelson, who hardly counts. Nelson and I had one thing in common: We both were as horny as a herd of goats, all the time. And another thing— We were both cautious as a vixen with kits in coping with Mrs. Grundy.

I let him pick the times and places; he had a head for intrigue. Between us, we kept each other toned down to a pleasant simmer without waking Mrs. Grundy. I could happily have married Nelson, despite his being younger than I, had we not been so closely related. A dear boy. (Except for that lemon pie!)

They were not home for Christmas. But two more bodies came home. I attended each funeral, for Chuck's sake.

In January my brother Tom came marching home with his regiment. Mother and Frank went to Kansas City to see the troop train arrive and the parade down Walnut, and the countermarch back to the depot where most of them got back aboard to go on terminal furlough at their home towns. I stayed home to take care of my sisters and George, and thought privately that it was pretty noble of me.

Tom had a hand-carried letter for Mother:

“Mrs. Ira Johnson
”Courtesy of Lance Corporal T. J. Johnson,
“C Company, Second Missouri Regiment.

“Dear Madam:

“I had hoped and expected to return home in the same train as our son Thomas. Indeed, by the terms of enrollment under which I accepted appointment as surgeon in our state militia on federal duty, I cannot be held more than 120 days beyond the proclamation of peace, id est, the twelfth of December last, or the sixth of January, this current month-the difference in dates being a legal technicality now moot.

“I regret that I must inform you that the Surgeon General of the Army has asked me and my professional colleagues to continue on duty here on a day to day basis until our services can be spared, and that I have accepted.

“We had thought that we had these devastating fevers under control and that we could dismantle the field hospitals here and send our remaining patients to Fort Bragg. But, with the arrival three weeks ago of casuals and casualties from Tampa, our hopes were dashed.

“In short, Madam, my patients need me. I will come home as quickly as the Surgeon General decides that I can be spared…under the spirit of the Oath of Hippocrates rather than through any quibble over the letter of the contract.

“I trust that you will understand, as you have so many times in the past.

“I remain, faithfully yours,
Your loving husband,
Ira Johnson, M.D.,
Captain (M.C.) AUS

Mother did not cry where anyone could see her…and I didn’t cry where anyone could see me.

Late in February I received a letter from Mr. Smith…postmarked Cincinnati!

“Dear Miss Maureen,

“By the time this reaches you I will have laid aside my Army blues and resumed wearing mufti; our engineering battalion, Ohio militia, is rolling west as I write this.

“It is my dearest wish to see you and to resume my suit for your hand in matrimony. With that prime purpose in mind, after a few days at home with my family, I purpose going at once to Rolla with the intention of re-enrolling. Although I was granted my degree in April last year about six weeks early, that sheepskin does not supply me with academic work that I missed. So I intend to make up what I lost, plus a bit more for good measure—which puts me close to Thebes for each weekend [which is what the wily fellow had in mind all along!].

“May I hope to see you on Saturday afternoon March fourth, and again on Sunday, March fifth? A postal card should reach me at School of Mines—but if I do not hear from you, I shall assume that your answer is Yes.

“This train is moving too slowly to suit me!

“My respects to your parents and my greetings to all your family.

“While looking forward eagerly to the fourth,
I remain faithfully yours, Brian Smith, B.S.,
Sergeant, Eng. Battalion,
Ohio Militia (Federal Duty)

I reread it, then took a deep breath and held it, to slow my heart. Then I found Mother and asked her to read it. She did so, and smiled. “I’m happy for you, dear.”

“I don’t have to tell him to wait until Father gets home?”

“Your father has already expressed his approval of Mr. Smith…in which I concur. He is welcome.” Mother looked thoughtful. “Will you ask him to consider fetching with him his uniform?”

“Really?”

“Truly. So that he can wear it in church on Sunday. Would you like that?”

Would I ! I told her so . “Like Tom did, his first Sunday home . Goody! ”

“We will be proud of him. I intend to ask your father to wear his uniform his first Sunday home, too.” She looked thoughtful. “Maureen, there is no reason why Mr. Smith should have to put up with Mrs. Henderson’s boarding house, or drive clear back to Butler to the Mansion House. Frank can sleep in the other bed in Tom’s room and Mr. Smith can have Edward’s old room.”

“Oh, that would be nice!”

“Yes, dear. But—Look at me, Maureen.” She held my eyes. “Don’t let his presence under this roof cause either of you to permit any of the children—including Thomas, I must add—to see, or even to suspect, any impropriety. ”

I blushed clear to my collarbones. “I promise, *chère mama.*”

“No need for promises; just be discreet. We are women together, dear daughter; I want to help you.”

March came in like a lamb, which just suited me, as I did not want to spend a long afternoon being primly proper in our parlor. The weather was warm and sunny, with no breeze to speak of. So on Saturday the fourth I was the perfect shy young maiden, with parasol and leg o‘ mutton sleeves and a silly number of petticoats…until Daisy had us a hundred yards from the house and out of earshot of anyone. “Briney!”

“Yes, Miss Maureen?”

“ ‘Miss Maureen,’ my foot. Briney, you’ve had me in the past; you can stop being formal, now that we are alone. Do you have an erection?”

“Now that you mention it—Yes!”

“If you had said No, I would have burst into tears. Look, darling, I’ve found the loveliest place—”

(Nelson had found it.) There seemed to be evidence that no one else knew of it. Daisy had to be led through two tight spots, then she could be unharnessed and allowed to graze—while we two turned the buggy around. Impossible for the mare to do it; not enough room for her to back and fill.

I spread the blanket down on a grassy spot separated from the bank by a thick bush…and undressed while Brian watched me—right to my skin, right to stockings and shoes.

That spot was certainly private but anyone within a quarter mile must have heard me. I fainted on that first one, then opened my eyes to find my Briney boy worried. “Are you all right?” he asked.

“I’ve never been more all right in my life! Thank you, sir! You were splendid! Terrific. I've died and gone to heaven."

He smiled at me. "You aren't dead. You're here and you're wonderful and I love you."

"Do you, truly? Brian, are you honestly intending to marry me?"

"I am."

"Even with me disqualified for the Howard Foundation?"

"Redhead, the Foundation introduced us…but it had nothing to do with me coming back. I would happily indenture myself for seven years, like what's-his-name in the Bible, for the privilege of marrying you."

"I hope you mean that. Do you want to hear how I'm disqualified?"

"No."

"So? I'm going to tell you anyhow, because I need your help."

"At your service, Ma'amselle!"

"I'm disqualified because I'm not pregnant. If you will raise up just a little, I will take that rubber mockery off you. Then, sir, if you please, as soon as you are rested enough, I ask you to qualify me. Briney, let's start our first baby!"

He surprised me…by being ready again almost at once. Even Nelson could not manage it that quickly. My Brian was a remarkable man.

Bareness to bareness was just as perfect as I always knew it would be. This time I was even louder. I have since learned to have an orgasm silently…but I would much rather sound off, if conditions permit. Most men like applause. Especially Briney.

At last I sighed. "That did it. Thank you, sir. I am now an expectant mother. I felt it hit the target. *Spung!*"

"Maureen, you're wonderful."

"I'm dead. I died happy. Are you hungry? I mae some tiny cream puffs for our lunch and filled them just before you arrived."

"I want you for lunch."

"Blarney. We must keep up your strength. You won't be deprived." I told him about the arrangements we would have that night—and other nights. "Of course Mother knows all about it; she was a Howard bride herself. She just asks that we keep a good face on things. Briney, are your parents redheaded?"

"Mother is. Dad's hair is as dark as mine. Why?"

I told him about Mr. Clemens's theory. "He says that while the rest of the human race are descended from monkeys, redheads derive from cats. "

"Seems logical. By the way, I forgot to tell you. If you marry me, my cat is part of the package."

"Shouldn't you have mentioned that before you knocked me up?"

"Perhaps I should have. You object to cats?"

"I don't even speak to people who object to cats. Briney, I'm cold. Let's go home." The sun had gone behind a cloud and the temperature suddenly dropped—typical March weather for Missouri.

While I dressed, Briney got Daisy backed into the shafts and hitched up. Brian has that gentle but firm touch that horses (and women) understand; Daisy obeyed him as readily as she obeyed me, although she was usually terribly shy with strangers.

By the time we were home my teeth were chattering. But Frank had the baseburner in the parlor fired up; we had my picnic lunch next to it. I invited Frank to share. He had had lunch, but he found room for cream puffs.

My period was due on March eighteenth; I missed it. I told Briney but no one else. "Father says that to miss just one is nothing. We should wait."

"We'll wait."

Father got home on the first of April, and the house was in a happy uproar for days. My next period should have been April fifteenth—I didn't even spot. Briney agreed that it was time I told my father, so I did, that same Saturday afternoon. Father looked at me solemnly. "How do you feel about it, Maureen?"

"I'm utterly happy about it, sir. I did it on purpose—we did it on purpose. Now I would like to marry Mr. Smith as soon as possible."

"Reasonable. Well, let's call in your young man. I want to speak to him privately."

"I can't be present?"

"You may not be present."

I was called back in, then Father stepped out. I said, "I don't see any blood on you, Briney."

"He didn't even get out his shotgun. He just explained your trifling ways to me."

"*What* trifling ways?"

"Now, now. Simmer down."

Father came back in with Mother. He said to us, "I have explained to Mrs. Johnson about the skipped periods." He turned to Mother. "When do you think they should get married?"

"Mr. Smith, when is your last class at Rolla?"

"I have my last examination on Friday, May nineteenth, Ma'am. Commencement isn't until June second, but that doesn't affect me."

"I see. Would Saturday, May twentieth, suit you two? And, Mr. Smith, do you think your parents will be able to come here for the wedding?"

At seven-thirteen P.M. on May twentieth my husband and I were rolling north from Butler on the Kansas City Southern Express…"express" meaning that it stopped for cows, milk cans, and frogs, but not for fireflies. I said, "Briney, my feet hurt."

"Take your shoes off."

"In public?"

"You no longer have to pay attention to any opinion but mine… and durned little to mine."

"Thank you, sir. But I don't dare take them off; my feet would swell and I would never get them back on. Briney, the next time we get married, let's elope."

"Suits. We should have this time. What a day!"

I chose to have a noon wedding. I was overruled by my mother, my prospective motherin-law, the minister, the minister's wife, the organist, the church janitor, and anyone else who cared to speak up. I had thought that the bride was supposed to get her own way about her wedding (if what she wanted was not too dear for her father's purse), but apparently I had been reading too many romantic stories. I wanted a noon wedding so that we could reach Kansas City before dark. When I found myself frustrated on every side, I spoke to Father about it.

He shook his head. "I'm sorry, Maureen, but it is written right here in the Constitution that the father of the bride has no rights whatever in a wedding. He gets to pay the bills and he must give the bride away. Otherwise they don't let him out of his cage. Did you tell your mother why you wanted to catch the earlier train?"

"Yes, sir."

"What did she say?"

"She said that all the planning had been done on the assumption that the Smiths would arrive on the ten-forty-two, soon enough for a four o'clock wedding but not for a noon wedding. I said, 'But, Mother, they are already here.' And she said that it was too late to change everything. And I said, 'Who says so? And why wasn't I consulted?' And she said, 'Keep quiet and stop wiggling. I've got to pin this over again.' Father, this is dreadful. I'm being treated like a prize cow about to be shown at the fair. And I'm listened to just as much as that cow."

"Maureen, it probably is too late to change anything now. Stipulated, your wishes should have been followed. But now it is less than fortyeight hours till your wedding and when Adele takes the bit in her teeth, she doesn't listen. I wish I could help you. But she won't listen to me, either." Father looked as unhappy as I felt. "Grit your teeth and wait it out. Once Brother Timberly says, 'I pronounce you man and wife,' you no longer have to pay any attention to anyone but Brian. And I see that you have a ring in his nose; you won't find that too difficult."

"I don't think I have a ring in his nose."

The Reverend Timberly had been told that the Methodist Episcopal service was to be followed exactly, none of these modern innovations. He had been told also that it would be a single-ring ceremony. The muttonhead didn't listen on either point. He stuck in all sorts of stuff (from his lodge rituals, I think; he was a Past Grand Chancellor of the Knights and Lords of the High Mountain), stuff that had not been in the rehearsal, questions and responses I didn't recognize. And he preached, telling each of us things we didn't need to hear, matters not in the wedding service.

This went on and on, while my feet hurt (Don't buy shoes by mail order!) and my corset was stifling me. (I had never worn one before. But Mother insisted.) I was about to tell Brother Timberwolf to stick to the book, stop improvising (it was getting closer and closer to train time) when he reached the point where he wanted two rings and there was of course but one.

He wanted to back up and start over.

Brian spoke up (and a groom isn't supposed to say anything but "I will" and "I do") and said in a whisper that could not be heard more than a hundred yards, "Reverend, stop stalling and stick to words in the book…or I won't pay you a red cent."

Brother Timberly started to expostulate and looked at Briney-and stopped suddenly, and said, "ByAuthorityvestedinmebythesovereignstateofMissouri I pronounce you man and wife!" And thereby saved his own life. I think.

Brian kissed me and we turned and started down the aisle and I tripped on my train. Beth was carrying my train and was supposed to move it off to the left.

It wasn't her fault; I turned the wrong way.

"Briney, did you get any wedding cake?"

"Never had time."

"Me, too. I suddenly realize that I haven't eaten anything since breakfast…and not much then. Let's find that dining car."

"Suits. I'll inquire." Briney got up, was gone a few moments. When he came back he leaned over me. "I found it."

"Good. Is it in front of us, or behind us?"

"Behind us. Quite a bit behind us. They left it off in Joplin."

So our wedding supper was two stale ham sandwiches from the news butcher and a bottle of soda pop, split.

About eleven o'clock we finally reached the Lewis and Clark, where Briney had a reservation for us. The hack driver had apparently never heard of that hotel but was willing to search for it as long as his horse held out. He started away from the depot in the wrong direction. Briney spotted this and stopped him; the driver gave him an argument and some lip. Briney said, “Back to the depot; we’ll get another hack.” This ultimatum finally got us there.

I suppose that it was only to be expected that the night clerk had never heard of Briney’s reservation. But Brian can’t be pushed around and he won’t be intimidated. He said, “I made my reservation by mail three weeks ago with a postal money order deposit. I have my receipt right here along with a letter of confirmation signed by your manager. Now wake him up and put a stop to this nonsense.” Briney shoved the letter under the clerk’s nose.

The clerk looked at it and said, “Oh, that Mr. Smith! And the bridal suite. Why didn’t you say so?”

“I did say so, ten minutes ago.”

“I am very sorry, sir. Front!”

Twenty minutes later I was in a wonderful tub of hot, soapy water, just like Chicago six years earlier. I almost fell asleep in the tub, then realized that I was keeping my bridegroom out of the bath, and pulled myself together. “Briney! Shall I fill a tub for you?”

No answer. I dried off a bit, wrapped the towel around me, aware that I was a scandalous sight (and a provocative one, I hoped).

My gallant knight was fast asleep, still in his clothes, lying across the bedspread.

There was a silver bucket just inside the door—ice and a bottle of champagne.

I got out my nightgown (virginal white and perfumed; it had been Mother’s bridal nightgown) and a pair of bunny slippers. “Brian. Briney. Please wake up, dear. I want to help you undress, and open the bed, and get you into it.”

“Murrf.”

“Please, dear.”

“I wasn’t asleep.”

“No, of course not. Let me help you off with your boots.”

“I c’n get’em.” He sat up and reached for them.

“All right, dear. I must let the water out of the tub, then I’ll run a bath for you.”

“Your water is still in the tub?”

“Yes. ”

“Let it be; I’ll use it. Mrs. Smith, you couldn’t get a tub of water dirty; you would just impart a delicious flavor.”

Sure enough, my gallant knight did bathe in my bath water (still lukewarm). I climbed into bed…and was sound asleep when he came to bed. He did not wake me.

I woke up in darkness about two or three, frightened to find myself in a strange bed—then remembered. “Briney?”

“You awake now?”

“Awake some.” I snuggled closer.

Then I sat up and got rid of that nightgown; I was getting bound up in it. And Briney took off his nightshirt, and for the first time both of us were bare all over and it was wonderful and I knew that all my life had just been preparation for this moment.

After an unmeasured time that had started out slowly, we both took fire together—after that, I was lying quietly under him, loving him. “Thank you, Briney. You are wonderful.”

“Thank you. Love you.”

“Love you, my husband. Briney. Where’s your cat? In Cincinnati? In Rolla?”

“Eh? No, no. In Kansas City.”

“Here? Boarded with someone?”

“I don’t know.”

“I don’t understand.”

“You haven’t picked it out yet, Mo‘. It’s the kitten you’re going to give me. Bride’s present to the bridegroom.”

“Oh! Briney, you’re a scamp!” I tickled him. He tickled me. It resulted, by stages, in Maureen being disgracefully noisy again. Then I got my back scratched. Having your back scratched is not the only reason to be married, but it is a good one, especially for those spots that are so hard to reach by yourself. Then I scratched his back. We finally went to sleep all tangled up in each other like a basket of kittens.

Maureen had at last found out what she was good for, her true destiny.

We had champagne for breakfast.

CHAPTER SEVEN

Ring the Cash Register

From having read candid autobiographies written by liberated women in the twentieth century, especially those published after the second phase of the Final Wars, ca. 1950 et seq., I know that I am now expected to tell in detail all aspects of my first pregnancy and of the birth of my first child—all about morning sickness and my cyclic moods and the tears and the loneliness…then the false labor, the unexpected breaking of the bag of waters, followed by eclampsia and emergency surgery and the secrets I spilled under anesthesia.

I'm sorry but it wasn't that way at all. I've seen women with morning sickness and it's obviously horrible, but I've never experienced it. My problem has always been to "stay on the curve," not gain more weight than my doctor thought was healthy for me. (There have been times when I would have killed for a chocolate eclair.)

With my first baby labor lasted forty minutes. If having babies in hospitals had been the expected thing in 1899, I would have had Nancy on the way to the hospital. As it was, Brian delivered Nancy, under my direction, and it was much harder on him than it was on me.

Dr. Rumsey arrived and retied the cord and cut it, and told Brian he had done an excellent job (he had). Then Dr. Rumsey took care of the delivery of the afterbirth, and Briney fainted, poor lamb. Women are more rugged than men; they have to be.

I've had longer labors than that one but never a terribly long one. I did not have an episiotomy with the first one (obviously!) and I did not need a repair afterward, so on later births I never allowed a knife to be used on me down there and so I have no scar tissue there, just undamaged muscle.

I'm a brood mare, built for it, wide in my thighs and with a birth canal made of living rubber elastic. Dr. Rumsey told me that it was my attitude that made the difference but I know better; my ancestors gave me the genetic heritage that makes me a highly efficient female animal, for which I am grateful…as I have seen women who were not, and they suffered terribly and some of them died. Yes, yes, "natural selection" and "survival of the fittest" and Darwin was right—stipulated. But it is no joke to attend the funeral of a dear friend, dead in her golden youth because her baby killed her. I was at such a funeral in the twenties and heard a sleek old priest talk about "God's will." At the graveside I managed to tback away from the coffin such that I got him proper in his instep with a sharp heel. When he yelped, I told him it was God's will.

Once I had a baby in the middle of a bridge game. Pat it was, Patrick Henry Smith, so that makes it 1932 and that makes it contract we were rplaying, not auction, and that all fits together, as Justin and Eleanor Weatheral taught us contract after they learned it and we were playing at their house. Eleanor and Justin were parents of Jonathan Weatheral, husband of my first born, so the Weatherals were a Howard marriage themselves, but they were our friends long before we knew that about them. We did not learn it until the spring Jonathan showed up on Nancy's Howard Foundation list of young male eligibles.

In this bridge game I was Justin's partner; Eleanor was Briney's partner. Justin had dealt; contract had been reached and we were about to play, when I said, "Put your hands face down and put paperweights on them; I'm having a baby!"

"Forget the hand!" said my husband.

"Of course," agreed my partner.

"Hell, no!" I answered in my ladylike way, "I bid the bloody thing; I'm damn well going to play it! Help me up from here!"

Two hours later we played the hand. Dr. Rumsey, Jr., had come and gone; I was on Eleanor's bed with the table, legs collapsed and supported by pillows, across my lap, and my new son was in my partner's arms. El and Briney were on each side of me, half seated on the bed. I had bid a small slam in spades, doubled and redoubled, vulnerable.

I went down one trick.

Eleanor tilted her nose at me and pushed it up with the tip with her finger. "Smarty, smarty, missed the party!" Then she looked very startled. "Mo'! Move over, dear! I'm about to have mine!"

So Briney delivered two babies that night and Junior Doc had to come back just as soon as he reached home and grumbled at us that he did wish we would make up our minds; he was going to charge us mileage and overtime. Then he kissed us and left—by that time we had long known that the Rumseys were Howards, too, which made Junior Doc a member of the family.

I called Ethel, told her we were staying overnight, and why. "Is everything all right, dear? Can you and Teddy manage? (Four younger ones at home. Five? No, four.)

"Certainly, Mama. But is it a boy or a girl? And how about Aunt Eleanor?"

"Both. I had a boy, Eleanor just had a girl. You youngsters can start working on names…for mine, at least."

But the best joke was another matter entirely, something we didn't tell Junior Doc or the children: Briney put that little girl into my sweetheart Eleanor, and her husband Justin put Pat into me…all at a weekend in the Ozarks to celebrate Eleanor's fifty-fifth birthday. The birthday party got a bit relaxed and our husbands decided that, since all four of us were Howards, there was no sense in bothering with these pesky rubber sheaths…when we could be ringing the cash register.

(Cultural note: I mentioned that Eleanor got pregnant on her fifty-fifth birthday. But the age of the mother on the birth certificate Junior Doc filed was "forty-three," or close to that. And the age filed on mine was thirty-eight, not fifty. In 1920 all of us had received a warning from the Howard Foundation trustees, delivered by word of mouth, to trim years off our official ages at every opportunity. Later that century we were encouraged and helped to acquire new identities every thirty years or so. Eventually this became the full "Masquerade" that saved the Howard Families during the Crazy Years and following. But I know of the Masquerade only from the Archives, as I was taken out of that turmoil-thank Heaven and Hilda!—in 1982.)

We rang the cash register five times, Brian and I, during the Mauve Decade—five babies in ten years, 1900-1910 Gregorian. I was the first to call it "ringing the cash register" and my husband went along with my crass and vulgar jest. It was after I had recovered from unloading my first one (our darling Nancy) and had been cleared by Dr. Rumsey to resume "family duties" (so help me, that's what they called it then) if we so pleased.

I came home from that visit to Dr. Rumsey, started dinner, then took another bath and used some scandalous perfume Briney had given me for Christmas, got into a lime-green negligee Aunt Carole had given me as a wedding present, checked dinner and turned down the gas—I had it all planned—and was ready when Briney got home.

He let himself in; I was posed. He looked me up and down, and said, "Joe sent me. Is this the right address?"

"Depends on what you are looking for, Sport," I answered in a deep sultry voice. "May I offer you the specialty of the house?" Then I broke my pose and dropped my act. "Briney! Dr. Rumsey says that it is all right! "

"You'll have to speak more plainly, little girl. What is all right?"

"Anything is all right. I'm all back together again." I suddenly dropped the negligee. "Come on, Briney! Let's ring the cash register!"

So we did, although it didn't work that time—I didn't catch again until early in 1901. But it was always delirious fun to try, and try we did, again and again. As Mammy Della once told me, "Lawsy a mercy, chile, jes hunnuds an' hunnuds a times ain't nuffin happen a tall."

How did Mammy Della get in here? Brian found her, that's how, when I started being too big to do a washing easily. Our first house, a tiny one on Twenty-sixth Street, was only a short distance from darktown; Della lived within walking distance, and she would work all day for a dollar and carfare. That she didn't use the streetcar was irrelevant; that dime was part of the bargain. Della had been born a slave and could not read or write…but she was as fine a lady as I have ever known, with a heart full of love for all who would accept her love.

Her husband was a roustabout with Ringling Brothers; I never laid eyes on him. She continued to come to see me—or to see Nancy, "her" baby—after I no longer needed help, sometimes bringing along her latest grandchild…then she would drop her grandchild in with Nancy and insist on doing my work. Sometimes I could nail her down with a cup of tea. Not often. Later she went back to work for me with Carol. Then with each baby, up to 1911, when "the Lord took her in His arms." If there is a heaven, Della is there.

Can it be that Heaven is as real as Kansas City to those who believe in Heaven? This would fit, it seems to me, the World-as-Myth cosmology. I must ask Jubal about this, when I get out of this jail and back to Boondock.

In gourmet restaurants in Boondock "Potatoes à la Della" are highly esteemed, as are some others of her recipes. Della taught me a great deal. I don't think that I was able to teach her anything, as she was far more sophisticated and knowledgeable than I in the subjects we had in common.

These were my first five "cash register" babies:

Nancy Irene, December 1, 1899 or January 5, 1900
Carol (Santa Carolita) (named for my Aunt Carole) January 1, 1902
Brian, Jr., March 12, 1905
George Edward, February 14, 1907
Marie Agnes, April 5, 1909

After Marie I did not catch again until the spring of 1912. That one was my spoiled brat and favorite child, Woodrow Wilson…who was later my lover, Theodore Bronson…and much later, my husband Lazarus Long. I don't know why I didn't catch sooner, but it was not from lack of trying; Briney and I tried to ring the cash register at every opportunity. We did not care whether I caught or not; we did it for fun…and if we missed, that simply postponed those several weeks when we would have to refrain before and after each birth. Oh, not refrain from everything; I became quite skilled with hands and mouth and so did Briney. But for solid day in and day out happy fun, we both preferred the old-fashioned sport, whether it was missionary style or eighteen other ways.

Perhaps I could account for all the times I failed to catch if I had a calendar of the Mauve Decade, with a record of my menstrual periods. The calendar would be no problem, but a record of my menses, while I did keep one at that time, is long gone and irretrievable—or nearly so; it would take a Time Corps operation to retrieve it. But here is my theory: Briney was often away on business; he was "ringing the cash register" his own way, as an analyst and planner for corporate mining ventures, one whose exceptional talents were increasingly in demand.

Neither of us had heard of the simple fourteen-day rule for ovulation, or the thermometer check, much less the more subtle and more reliable techniques developed in the latter half of the twentieth century. Dr. Rumsey was as good a family doctor as you could find at that time and he was not constrained by the taboos of the time—he had been sent to us by the Howard Foundation—but Dr. Rumsey knew no more about this than we did.

If it were possible to prepare a calendar showing my menses 1900-1912, then mark on it by the fourteen-day rule my probable dates of ovulation, then mark the dates that Briney was away from Kansas City, it is long odds that such a chart would show that those little wigglers never had a target to shoot at on those occasions that I failed to catch. This seems certain, as Briney was a prize stallion and I was Myrtle the Fertile Turtle.

But I am glad that I did not know the rules of ovulation at that time, because there is nothing that beats the tingling excitement of lying back, legs open and eyes closed and bare to the possibility of impregnation. And I know that this is not just one of Maureen's many eccentricities; I have checked this with endless other women: the knowledge that it can happen adds to the zest.

I am not running down contraception; it's the greatest boon to women in all history, as efficient contraception frees women from that automatic enslavement to men that has been the norm through all histories. But the ancient structure of our female nervous systems is not tuned to contraception; it is tuned to getting pregnant.

So it was grand for Maureen that, once I ceased being a bawdy schoolgirl, I almost never needed to use contraception.

One unusually balmy February day in 1912 Briney nailed me to the ground on a bank of the Blue River, almost exactly duplicating an earlier occasion, March fourth, 1899, on a bank of the Marais des Cygnes. We both delighted in making love outdoors, especially with a spice of danger. On the occasion of that 1912 prank I was wearing opera-length silk hose and green round garters, and my husband photographed me so, standing, naked in the sunlight, facing the camera and smiling—and that picture played a major part in my life six years later, and seventy years later, and over two thousand years later.

That picture, I am told, changed the entire history of the human race in several time lines.

Maybe so, maybe not. I'm not fully sold on World-as-Myth even though I am a Time Corps field agent, even though the smartest people I know tell me it's the real McCoy. Father always required me to think for myself, and Mr. Clemens urged me to, also. I was taught that the one Unforgivable Sin, the offense against one's own integrity, was to accept anything at all simply on authority.

Nancy has two birthdays: the day I bore her, which was registered with the Foundation, and the date we handed out to the world, the day that matched more properly the date of my marriage to Brian Smith. That was easy to do at the end of the nineteenth century, as in Missouri vital statistics were just beginning to be taken. Most records were still of the family-Bible sort. The county clerk of Jackson County recorded births and deaths and marriages if offered to him, but nothing happened if such milestones were not reported.

Nancy's birth was reported correctly to the Foundation, a report signed by me and by Brian, and certified by Dr. Rumsey, then a month later Dr. Rumsey filed a birth certificate with the county clerk, with the false date.

Easy to do—Nancy was born at home; all my babies were born at home until the middle thirties. So there were no hospital records to confuse the issue. On January eighth I wrote the happy news (false date) to several people in Thebes and sent an announcement to the *Lyle County Leader*.

Why such a silly hooraw to fuzz the date of birth of a baby? Because the customs of those times were cruel, cruel, harshly cruel. Mrs. Grundy would have counted on her fingers and whispered that we had to get married to give our sinful bastard a name she shouldn't bear. Yes. It was all a part of the nastiness of the grim age of Bowdler, Comstock, and Grundy, the vultures that corrupted what could have been a civilization.

Near the end of that century single women openly gave birth to babies whose fathers might or might not be around. But this was not the behavior of a truly free culture; it was the other swing of the pendulum and not easy for mother or child. The old rules were being broken but no workable new code had as yet evolved.

Our expedient kept everyone in Thebes County from knowing that sweet little Nancy was a “bastard.” Of course Mother knew the date was false…but Mother was not in Thebes; she was in St. Louis with Grandpa and Grandma Pfeiffer. And Father had gone back into the Army.

I still don’t know how to look at this. A girl should not pass judgment on her parents…and I shan’t.

The Spanish-American War had brought me closer to Mother. Her worry and grief made me decide that she really did love Father; they just kept it private from the children.

Then, on the day of my wedding, while Mother was dressing me, she gave me that motherly advice that traditionally the bride’s mother gives the bride to insure matrimonial tranquility.

Can you guess what she told me? Better sit down to hear this:

She told me that I must be prepared to endure without resentment submission to my husband for “family duties.” It was the Lord’s plan, explained in Genesis, and was the price that women must pay for the privilege of having children…and if I would just look at it that way, I could submit cheerfully. But I must realize also that men have needs different from ours; you must expect to meet his needs. Don’t think of it as animal, or ugly—just remember your dear children.

I said, “Yes, Mother. I will remember.”

So what happened? Did Mother cut Father off? Whereupon he went back into the Army? Or did he tell her that he wanted to get out of that little town, so deep in the gumbo mud, and try a second career in the Army?

I don’t know. I don’t need to know; it’s not my business. Father did go back into the Army, so quickly after my wedding that I feel sure he had it planned before then. His letters showed that he was in Tampa for a while, then Guantanamo in Cuba…then clear out in the Philippines, in Mindanao, where the Moslem Moros were killing more of our soldiers than the Spaniards had ever managed…and then he was in China.

After the Boxer Rebellion I thought my father was dead, for I did not hear for a long time. Then at last he was at the Presidio in San Francisco and his letter from there referred to other letters I had never received.

He left the Army in 1912. He was sixty that year—was he retired on age? I don’t know. Father always told you what he wanted you to know; if you crowded him, he might treat you to some creative fiction…or he might tell you to go straight to hell.

He came to Kansas City. Brian invited him to come live with us, but Father had already found himself a flat and settled into it before he let us know that he was in town, indeed before we knew that he had left the Army.

Five years later he did move in with us because we needed him.

In the 1900'S Kansas City was an exciting place. Despite three months in Chicago ten years earlier I was not used to a big city. When I went there as a bride, Kansas City had 150,000 people in it. There were electric streetcars, almost as many automobiles as horsedrawn vehicles, trolley wires and telephone wires and power wires everywhere. All of the main streets were paved and more of the side streets were being paved each year; the park system was already famous worldwide and still not finished. The public library had (unbelievable!) nearly half a million volumes.

Kansas City's Convention Hall was so big that the Democratic party was scheduled to hold its 1900 presidential nominating convention in it-then it burned down overnight and its reconstruction was under way before the ashes were cold and the Democrats nominated William Jennings Bryan in that hall just ninety days after it burned down.

Meanwhile the Republicans renominated President McKinley and, with him, Colonel Teddy Roosevelt, hero of San Juan Hill. I don't know for whom my husband voted…but it never seemed to displease him when someone would notice a resemblance between him and Teddy Roosevelt.

I think Briney would have told me, had I asked—but in 1900 politics was not a woman's business, and I was doing my utter best to simulate publicly the perfect modest housewife, interested only in kirk, kitchen, and kids, as the kaiser put it. ("Kirche, Kuche, und Kinder.")

Then in September 1901? only six months into his second term, our president was murdered most vilely…and the dashing young war hero was precipitated into the highest office.

There are time lines in which Mr. McKinley was not assassinated and Colonel Roosevelt was never president, and his distant cousin was not nominated in 1932, which utterly changes the patterns of wars, both in 1917 and 1941. Our Time Corps mathematicians deal with these matters, but the structural simulations are large even for the new computer complex combining Mycroft Holmes IV with Pallas Athene, and are quite beyond me. I'm a baby factory, a good cook, and I aim to be a panic in bed. It seems to me that the secret of happiness in life is to know what you are and then be content to be that, in style, head up and proud, and not yearn to be something else. Ambition can never change a sparrow into a hawk, or a wren into a bird of paradise. I'm a Jenny Wren; it suits me.

Pixel is a fine example of being what he is in style. His tail is always up and he is always sure of himself. Today he brought me still another mouse, so I praised him and petted him, and kept the mouse until he left, then flushed it away.

A midnight thought finally surfaced. These mice are the first proof anyone has had (I'm almost sure) that Pixel can take anything with him when he grasps a probability and walks through walls (if that describes what he does) (well, at least it labels it).

What message can I send, and to whom, and how can I fasten it to him?

In shifting from schoolgirl to housewife I had to add to Maureen's private decalogue. One was: Thou shalt always live within thy household allowance. Another I formulated earlier: Thou shalt not let thy children see thee cry—and when it became clear that Brian would have to be away frequently, I added him in. Never let him see me cry and be sure to offer him a smiling face when he returns…don't, Don't, DON'T sour his return with fiddling details about how a pipe froze, or the grocer boy was rude, or see what that dadratted dog did to my pansy bed. Make him happy to come home, sorry to have to leave.

Do let children welcome him; don't let them smother him. He wants a mother for his children…but he wants a willing and available concubine, too. If you are not she, he will find one elsewhere.

Another commandment—Promises must be kept—especially ones made to children. So think three times before making one. In case of tiniest doubt, don't promise.

Above all, don't save up punishments "until your father comes home."

Many of these rules did not yet apply when I had only one baby and that one still in diapers. But I did think out most of my rules ahead of time and then wrote them down in my private journal. Father had warned me that I had no moral sense; therefore it would be necessary to anticipate decisions I would have to make. I could not depend on that little voice of conscience to guide me on an ad hoc basis; I did not have that little voice. Therefore I would have to reason things out instead, ahead of time, forming rules of conduct somewhat like the Ten Commandments, only more so, and without the glaring defects of an ancient tribal code intended only for barbaric herdsmen.

But none of my rules were really difficult and I had a wonderfully good time!

I never tried to find out how much Briney was paid whenever I had a baby; I did not want to know. It was more fun to believe that it was a million dollars each time, paid in red-gold ingots the color of my hair, each golden ingot too heavy for one man to lift. A king's favorite, lavished with jewels, is proud of her "fallen" state; it is the poor drab on the street, renting her body for pennies, who is ashamed of her trade. She is a failure and she knows it. In my daydream I was a king's mistress, not a sad-faced mattress-back.

But the Foundation must have paid fairly well. Attend me— Our first house in Kansas City was close to minimum for respectable middle class. It was near the colored district; in 1899 this made it a cheap neighborhood even though it was segregated for whites. Besides, it was on an east-west street and faced north, two more points against it. It was on a high terrace with a long flight of steps to climb. It was a one-story frame house, built in 1880 with its plumbing added as an afterthought—the bath opened directly off the kitchen. It had no dining room, no hallway, just one bedroom. It had no proper basement, just a dirt-floor cellar for the furnace and coal bin. It had no attic, just a low, unfinished space.

But houses for rent that we could afford were scarce; Briney had been lucky to find it. I had thought for a while that I was going to have my first baby in a boarding house.

Briney took me to see it before he closed the deal, a courtesy I appreciated as married women could not sign contracts in those days; he did not have to consult me. "Think you could live here?"

Could I! Running water, a flush toilet, a bathtub, a gas range, gas lamp fixtures, a furnace— "Briney, it's lovely! But can we afford it?"

"That's my problem, Mrs. S., not yours. The rent will be paid. In fact you will pay it for me, as my agent, the first of every month. Our landlord, a gentleman named Ebenezer Scrooge—"

" 'Ebenezer Scrooge' indeed!"

"I think that was the name. But there was a streetcar going by; I may have misunderstood. Mr. Scrooge will collect in person, the first of every month, except Sundays, in which case he will collect on the Saturday preceding, not the Monday following; he was firm about that. And he wants cash; no checks. He was firm about that, too. Real cash, silver cartwheels, not banknotes."

Despite the house's many shortcomings its rent was high. I gasped when Briney told me: Twelve dollars a month. "Oh, Briney!"

"Get your feathers down, freckled one. We're going to be in it just one year. If you think you can stand it that long, you won't have to deal with dear Mr. Scrooge—his name is O'Hennessy—as I can tie it down for twelve months with a discount of four points. Does that mean anything to you?"

I thought about it. "Mortgage money is six percent today…so three points represents the average cost of hiring the money, since you are paying in advance and they don't own the money until they have earned it, month by month. One point must be because Mr. O'Hennessy Scrooge won't have to make twelve trips here to collect his rent. So that comes to a hundred and thirty-eight dollars and twenty-four cents."

"Flame Top, you continue to amaze me."

"But they really ought to give you another point, for administrative overhead."

"How is that?"

"For the bookkeeping they don't have to do because you are paying it all in a lump. That brings it down to a hundred thirty-six eighty. Offer him a hundred and thirty-five, Briney. Then settle for one thirty-six."

My husband looked at me in astonishment. "To think I married you for your cooking. Look, I'll stay home and have the baby; you go do my job. Mo', where did you learn that?"

"Thebes High School. Well, sort of. I worked awhile on Father's accounts, then I found a textbook at home that my brother Edward had used, *Commercial Arithmetic and Introduction to Bookkeeping*. We had our schoolbooks in common; there were shelves of them in the back hallway. So I didn't take the course but I read the book. But it's silly to talk about me doing your job; I don't know beans about mining. Besides, I don't want that long streetcar ride down to the west bottoms."

"I'm not sure I can have a baby, either."

"I'll do that, sir; I'm looking forward to it. But I would like to ride downtown with you each morning as far as McGee Street."

"You are more than welcome, Madam. But why McGee Street?"

"Kansas City Business College. I want to spend the next few months, before I get too big, learning to use a typewriter and to take Pittman shorthand. Then, if you ever become ill, dearest man, I could work in an office and support us…and if you ever go into business for yourself, I could do your office work. That would save you hiring a girl and maybe get us past that tight spot the books say every new business has."

Briney said slowly, "It was your cooking and one other talent; I remember clearly. Who would have guessed it?"

"Do you mean I may?"

"Better figure up what it will cost in tuition and carfare and lunch money—"

"I'll pack lunches for both of us."

"Tomorrow, Mo'. Or the next day. Let's settle this house."

We took the house, although that skinflint held out for a hundred and thirty-eight dollars. We stayed in it two years and another girl baby, Carol, then moved around the corner onto Mersington and into a slightly larger house (same landlord), where I had my first boy, Brian Junior, in 1905…and learned what had become of the Howard bonuses.

It was the spring of 1906, a Sunday in May. We often took a streetcar ride on Sundays, to the far end of some line we had never explored before—our two little girls in their Sunday best and Briney and me taking turns holding Junior. But this time he had arranged to leave our three with the lady next door, Mrs. Ohlschlager, a dear friend who was correcting and extending my German.

We walked up to Twenty-seventh Street and caught the streetcar heading west; Briney asked for transfers as usual, as on Sundays we might change anywhere, wind up anywhere. This day we rode only ten blocks when Briney pushed the button. "It's a lovely day; let's walk the boulevard awhile. "

"Suits."

Brian handed me down; we crossed to the south side, headed south on the west side of Benton Boulevard. "Sweetheart, would you like to live in this neighborhood?"

"I would like it very much and I'm sure we will, in twenty years or so. It's lovely." It truly was—every house on a double lot, each house ten or twelve rooms at least, each with its carriage drive and carriage house (barn, to us country jakes). Flower beds, stained-glass fan lights over the doors, all the houses new or perfectly kept up—from the styles I guessed 1900; I seemed to recall building going on here the year we came to K.C.

"Twenty years in a pig's eye, my love; don't be a pessimist. Let's pick out one and buy it. How about that one with the Saxon parked at the curb?"

"Must I take the Saxon, too? I don't like that door that opens to the rear; a child could fall out. I prefer that phaeton with the matched blacks."

"We're not buying horses, just houses."

"But, Brian, we can't buy a house on Sunday; the contract would not be legal."

"We can, my way. We can shake hands on it; then sign papers on Monday. "

"Very well, sir." Briney loved games. Whatever they were, I went along with them. He was a happy man and he made me happy (in or out of bed).

At the end of the block we crossed over to the east side and continued south. In front of the third house from the corner he stopped us. "Mo‘, I like the looks of this one. It feels like a happy house. Does it to you?"

It looked much like the houses around it, big and comfortable and handsome—and expensive. Not as inviting as the others, as it seemed to be unoccupied—no porch furniture, blinds drawn. But I agreed with my husband whenever possible…and it was no fault of the house that it was unoccupied. If it was. "I'm sure it could be a happy house with the right people in it."

"Us, for instance?"

"Us, for instance," I agreed.

Brian started up the walk toward the house. "I don't think there is anyone at home. Let's see if they left a door unlocked. Or a window."

"Brian!"

"Peace, woman."

Willy-nilly, I followed him up the walkway, with a feeling that Mrs. Grundy was staring at me from behind curtains all up and down the block (and learned later that she was).

Brian tried the door. "Locked. Well, let's fix that." He reached into his pocket, took out a key, unlocked the door, held it open for me.

Breathless and frightened, I went in, then was slightly relieved when bare floors and echoes showed that it was empty. "Brian, what is this? Don't tease me, please."

"I'm not teasing, Mo'. If this house pleases you…it's my long-delayed wedding present from the groom to the bride. If it does not please you, I'll sell it."

I broke one of my rules; I let him see me cry.

CHAPTER EIGHT

Seacoast Bohemia

Brian held me and patted my back, then said, “Stop that infernal blubbering. Can’t stand a woman’s tears. Makes me horny.”

I stopped crying and snuggled up close to him. Then my eyes widened. “Goodness! A real Sunday special.” Brian maintained that the only effect church had on him was to arouse his passion, because he never listened to the service; he just thought about Mother Eve, who (he says) has red hair.

(I did not need to tell him that church had a similar effect on me. Every Sunday after church a “special” was likely to happen, once we got the children down for their naps.)

“Now, now, my lady. Don’t you want to look around your house first?”

“I wasn’t suggesting anything, Briney. I wouldn’t dare do it here. Somebody might walk in.”

“Nobody will. Didn’t you notice that I bolted the front door? Maureen…I do believe that you didn’t believe me when I said that I was giving this house to you.”

I took a deep breath, held it, let it out slowly. “My husband, if you tell me that the sun rises in the west, I will believe you. But I may not understand. And this time I do not understand.”

“Let me explain. I can’t really give this house to you, because it’s already yours; you’ve paid for it. But, as a legality, title still rests in me. Sometime this coming week we’ll change that, vest title in you. It is legal for a married woman to own real property in her own name in this state as long as the deed describes you as a married woman and I waive claim…and even that last is no more than a precaution. Now as to how you bought it—”

I bought it flat on my back, I did, “ringing the cash register.” The down payment was money Brian had saved while in the Army, plus money from a third mortgage his parents had accepted from him. This let him make a sizable down payment, with a first mortgage at the usual 6 percent, and a second mortgage at 8.5 percent. The house was rented when he bought it; Brian kept the tenants, invested the rent to help pay off the mortgages.

The Howard bonus for Nancy cleared that too-expensive second mortgage; Carol's birth paid off Brian's parents. The Foundation's payment for Brian Junior let Brian Senior refinance the first mortgage down to the point where the rental income let him at last clear the property in May 1906, only six and a half years after he had assumed this huge pyramid of debt.

Briney is a gambler; I told him so. "Not really," he answered, "as I was betting on you, darling. And you delivered. Like clockwork. Oh, Brian Junior was a little later than I expected but the plan had some flexibility in it. While I had insisted on the privilege of paying off the first mortgage ahead of time, I didn't actually have to pay it earlier than June first, 1910. But you came through like the champion you are."

A year ago he had discussed his projected program with his tenants; a date was agreed on: they had moved out quite amicably just the Friday past. "So it's yours, darling. I did not renew our lease this time; Hennessy O'Scrooge knows we are leaving. We can move out tomorrow and move in here, if this house pleases you. Or shall we sell it?"

"Don't talk about selling our house! Briney, if this truly is your wedding present to me, then at last I can make my bride's present to you. Your kitten. "

He grinned. "Our kitten, you mean. Yes, I had figured that out." We had postponed getting a kitten because there were dogs on both sides of the little house on Twenty-sixth—and one of them was a cat killer. By moving around the corner we had not gotten away from that menace.

Brian showed me around the place. It was a wonderful house: upstairs a big bathroom and a smaller one, a little bathroom downstairs adjacent to a maid's room, four bedrooms and a sleeping porch, a living room, a parlor, a proper dining room with a builtin china closet and a plate rail, a gas log in the parlor in what could be a fireplace for logs if the gas loG was removed, a wonderful big kitchen, a formal front staircase and a convenient back staircase leading from the kitchen, privately—oh, just everything and anything that a family with children could want, including a fenced back yard just right for children and pets…and for croquet and picnic dinners and a vegetable garden and a sand pile. I started to cry again.

"Stop it," ordered Briney. "This one is the master bedroom. Unless you prefer another room."

It was a fine, big, airy room, with that sleeping porch off it. The house was empty and reasonably clean (I looked forward to scrubbing every inch), but some items not worth hauling away had been left here and there. "Briney, that old porch swing out there has a pad on it. Would you please bring that pad in?"

"If you wish. Why?"

"Let's ring the cash register!"

"Right away, Madam! Honey, I wondered how long it would take you to decide to baptize your new home."

That pad didn't look too clean and wasn't very big, but I didn't care about trifles; it would keep my spine from being ground into the bare boards. As Briney was fetching it in and placing it on the floor, I was getting out of the last of my clothes. He called out, "Hey! Leave your stockings on."

"Yes, sir. Right away, Mister. Aintchu gonna buy a drink first, dearie?" Drunk with excitement, I took a deep breath and got down on my back. "What's your name, Mister?" I said huskily. "Mine's Myrtle; I'm fertile."

"I'll bet you are." Briney finished getting out of his clothes, hung his coat on a hook behind the bathroom door, started to mount me. I reached for him. He stopped me, paused to kiss me. "Madam, I love you."

"I love you, sir."

"I'm pleased to hear it. Brace yourself."

Then he said, *"Unh!* Ease off a notch."

I relaxed a little. "Better?"

"Just dandy. You're wonderful, lady mine."

"So are you, Briney. Now? Please!"

I started to peak almost at once, then the skyrockets took off and I was screaming and just barely conscious when I felt him let go, and I fainted.

I'm not a fainter. But I did that time.

Two Sundays later I missed my period. The following February (1907) I had George Edward.

Our next ten years were idyllic.

Our life may have looked dull and humdrum to other people since all we did was live quietly in a house in a quiet neighborhood and raise children…and cats and guinea pigs and rabbits and snakes and goldfish and (once) silkworms on top of my piano—a project of Brian Junior when he was in fourth grade. That required mulberry leaves, silkworms being fussy eaters. Brian Junior made a deal with a neighbor who had a mulberry tree. Quite early he displayed his father's talent for always finding a way to work out a deal to accomplish his ends, no matter how unlikely they seemed at first.

A deal for mulberry leaves was big excitement the way we lived those years.

We had kindergarten Crayola pictures with stars on them posted in my kitchen, and tricycles on the back porch, and roller skates beside them, and fingers that had to be kissed well and bandaged, and special projects to do at home and take to school, and lots of shoes to be shined to get our tribe ready for Sunday School on time, and noisy arguments over who got the buttonhook next—until I got shoe buttonhooks for each child and put names on them.

All the while Maureen's belly waxed and waned like the round belly of the Moon: George in 1907, Marie in 1909, Woodrow in 1912, Richard in 1914, and Ethel in 1916…which by no means ended it but brings us up to the War that changed the World.

But endless things happened before then, some of which I should mention. We moved from the church we had attended while we were tenants of "Scrooge" soon after we moved to our new neighborhood. In part we were upgrading in churches just as we were upgrading in houses and neighborhoods. In the United States at that time Protestant denominations were closely linked to economic and social status, although it was never polite to say so. At the top of the pyramid was high-church Episcopalian; at the bottom were several pentecostal fundamentalist sects whose members piled up treasures in Heaven because they were finding it impossible to pile up treasures on Earth.

We had been attending a middle-level church selected largely because it was close by. We would have moved eventually to a more prosperous boulevard church now that we had moved to a more prosperous neighborhood…but we moved when we did because Maureen got herself quasi-raped.

My own silly fault. In any century rape is the favorite sport of large numbers of men when they can get away with it, and any female under ninety and over six is at risk anywhere and at all times…unless she knows how to avoid it and takes no chances—which is close to impossible.

On second thought forget that bracket of six and ninety; there are crazies out there who will rape any female of any age. Rape is not intercourse; it is murderous aggression.

On third thought what happened to me was not even quasi-rape, as I knew better than to place myself unchaperoned in private with a preacher yet I had gone ahead and done so, knowing quite well what would happen. Reverend Timberly (the slob!) had managed to let me know when I was fourteen that he felt that he could teach me a great deal about life and love…while patting my fanny in a fatherly (!) way. I had complained to my father about it without quite naming him, and Father's advice had enabled me to put a stop to it.

But this Biblethumper—It was six weeks after we moved into our new house; I knew I was pregnant, and I was horny; Brian was away. I'm not complaining; Brian had to go where business took him and this is true of endless trades and professions; the breadwinner must go where the bread is. This time he was in Denver; then, when I had expected him home, he sent me a telegram (night letter) telling me that he must go to Montana—just three or four days, a week at the most. Love, Brian.

Spit. Dirty drawers. Garbage. But I kept my smile because Nancy was watching me and at six she was hard to fool. I read her a revised version, then put the typed sheet where she could not get at it; she had taught herself to read.

At three that afternoon, bathed, dressed, and wearing no drawers, I tapped at the door of the study of the Reverend Doctor Ezekiel "Biblethumper." My usual baby watcher was with my three, with written instructions including where I was going and the Home system telephone number of the pastor's study.

The reverend doctor and I had been doing a silent and inconspicuous barnyard dance ever since he had been called to that pulpit three years earlier. I didn't like him all that much, but I was acutely aware of him and his deep, organlike voice and clean masculine odor. It is too bad that he didn't have bad breath or smelly feet or something like that to put me off. But physically I could not fault him—good teeth, sweet breath, bathed and shampooed regularly.

My excuse for going to his study was that I needed to confer with him because I was chairman of the ladies auxiliary committee for the forthcoming whoop-te-do—I don't remember what. But twentieth-century Protestant churches were always preparing for the next whoop-te-do. Yes, I do remember; a citywide revival. Billy Sunday? I think he was the one—a ball player and reformed drunkard who had found Jesus in a big way.

Dr. Zeke let me in; we looked at each other and we both knew; we didn't need to say anything. He put his arms around me; I turned my face up. He put his mouth to mine—and my mouth came open as my eyes closed. In scant seconds after he answered his door he had me down on the couch back of his desk, my skirts up, and he was trying to couple with me.

I reached down and took hold of him and got him aimed properly; he had been about to make his own hole.

Big! With a lost feeling of "Briney is not going to like this," I took him. He had no finesse; he just romped on home. But I was so excited that I was teetering on the edge and ready to explode when I felt him spend-

—just as someone knocked at his study door and he pulled out of me.

The bleeping affair had lasted under a minute…and my orgasm had shut down like a frozen pipe.

But all was not lost. Or should not have been. Once that jack rabbit jumped off me, I simply stood up and was immediately presentable. In 1906 skirts came down to the ankles and I had picked a dress that would stand up under crushing. I had left my drawers off not alone for his convenience (and mine) but because, if you are not wearing drawers and encounter an emergency, you don't have to scramble to put them on.

As for Dr. Zeke the stupid geek, all he needed to do before he answered that door was to button his pants…which he had to do anyhow.

We could have brazened it out. We could have looked them in the eye, refused to look guilty, invited them into our conference.

But what he did was grab my arm, shove me into his coat closet, and turn the key on me.

I stood in there, in the dark, for two solid hours that seemed like two years. I kept my sanity by thinking up painful ways to kill him. "Hoisting him by his own petard" was the simplest. Some of the others are too nasty to think about.

Finally he unlocked that door, looked at me, and whispered hoarsely, "They're gone now. Lets slip you out the back door."

I didn't spit in his face. I said, "No, Doctor, we will now have our conference. Then you will escort me out the front door of the church, and you will stand there, chatting with me, until several people have seen us."

"No, no, Mrs. Smith! I think—"

"You didn't think. Doctor, the only alternative is for me to run screaming out of here shouting 'Rape!'…and what a police matron will find inside me that you left there will prove rape to a jury."

When Brian got home, I told him about it. I had considered keeping it to myself. But we had reached a friendly agreement three years earlier concerning how and when we each could adulterate our marriage without offending or damaging the other. So I decided to make a clean breast of it and accept a spanking if he thought I rated it. I thought I did rate a spanking…and if it was a truly hard spanking, that would be an excuse to cry and that would probably wind up wonderfully.

So I wasn't too worried. But I did want to confess and be shrived.

That friendly agreement for prudent adultery—We had resolved to operate together whenever possible, and always to help each other, cover up for each other, and help the other make the kill. The discussion had come about through Dr. Rumsey's confirming that I was pregnant again (with Brian Junior) and I was feeling especially sentimental. That, plus an incitement: we had received a pianissimo "mixed doubles" invitation from a couple we liked.

I started in by telling Briney solemnly that I intended to be utterly faithful to him. I had been faithful for four years and now that I knew that I could be, I would be, till death do us part.

He had answered, "Look, Stupid, you're sweet but not smart. You started in at fourteen—"

"Almost fifteen!"

"Short of fifteen. You told me that twelve other men and boys had sampled your sweetness—but you wanted to know if I thought that the candidates on your Howard list need be counted? Then you revised the tally, telling me that a couple of minor incidents had slipped your mind. You also told me that you had learned to enjoy it almost at once…but you wanted me to know that I was the best. Swivel Hips, do you really think that it changed you and your happy loving ways forever just because that bonehead preacher said some magic words over you? Truth will out, the leopard does not change his spots, and the day inevitably comes. When it does, I want you to enjoy it but to stay out of trouble…for your sake, for my sake, and especially for our children's sake. But I do not expect you to be what society calls 'faithful' forever amen. I do expect you not to get pregnant, not to catch some filthy disease, not to cause a scandal, not to shame me or yourself, not to risk the welfare of our children. Mostly that means using common sense and always pulling down the shades."

I gulped. "Yes, sir."

"Now, my love, if it is true, as you assert, that Hal Andrews causes your gizzard to throb but that you are avoiding the temptation on my account, then be assured that your forbearance gains you no stars in your crown. We both know Hal; he's a gentleman and he keeps his nails clean. He's polite to his wife. If you don't mean business, quit flirting with him. But if you do want him, go get him! Don't mind me; I'll be busy. Jane is as delectable a piece as I've seen in a long time. I've hankered to bisect her angle from the day we met them."

"Briney! Is that true? You never showed it. Why didn't you tell me?"

"And give you a chance to go female and jealous and possessive? Sweetheart, I've had to wait until you admitted out loud, with no coaxing or coaching from me, that you were feeling a deep curiosity about another man…with a suggestion that perhaps I might feel the same way about his wife. It turns out that I do. So call Jane and accept their dinner invitation. We'll see what develops."

"But what if it turns out that you like Jane more than you like me?"

"Impossible. I love you, my lady."

"I mean what she's sitting on. How she makes love."

"Possible, but unlikely. If I did, I would not stop loving you or lose interest in what you are sitting on; it's special. But that doesn't mean I don't want to try Jane; she smells good." He licked his lips and grinned.

He did and she did and we four did and they remained our loving friends for years although they moved to St. Joe two years later when he got a better offer from the school board there. That put them too far away for quiet family orgies, mostly.

Over the course of time Brian and I worked out detailed rules about how to handle sex, all of them intended to avoid the hazards while leaving both of us free to "sin"—not carelessly but prudently, so that we could always look Mrs. Grundy in the eye and tell her to peddle her papers elsewhere.

Brian made no concessions whatever to the prevalent belief that sex was in some way innately sinful. He was utterly contemptuous of popular opinion. "If a thousand men believe something and I believe otherwise, then it's a thousand to one that they are wrong. Maureen, I support us by having contrary opinions."

When I told Briney about being locked in that closet, he sat up in bed. "That bastard! Mo', I'm going to break both his arms."

"Then you had better break mine, too, as I went there intending to do it. I did it. The rest derived from that bald, inexcusable fact. I took a risk I should not have taken. My fault at least as much as his."

"Yes, yes, but that's not the point. Sweetheart, I'm not faulting him for screwing you; any man not castrated will screw you if he has a clear chance at you. So your only protection is not to give him that chance if you don't want him to take it. What I'm angry about is his shoving my poor baby into a closet, into the dark, locking her in, frightening her. I'll kill him slowly. God damn him. I'll nut him first. I'll take his scalp. And cut off his ears."

"Briney—"

"I'll drive a stake— What, dear?"

"I've been a bad girl, I know, but I got away with it cold. I didn't get pregnant because I am pregnant. No disease…or I don't think so. I'm almost certain nobody twigged, no scandal. I would like to watch you do all those things to him; I despise him. But, if you hurt him even a little bit, even punch his nose, it's no longer a secret…and that could hurt our children. Couldn't it?"

Briney conceded the pragmatic necessity. I wanted us to leave that church. Briney agreed. "But not right away, love. I'll be home for the next six weeks at least. We'll go to church together—" We got there early and sat down front, facing the pulpit. Briney caught Dr. Zeke's eye and held it, all through the sermon, Sunday after Sunday.

Dr. Zeke had a nervous breakdown and had to take a leave of absence.

Briney and I did not work out all our rules for sex and love and marriage too easily. We were trying to do two things at once: create a whole new system of just conduct in marriage—a code that any civilized society would have taught us as children—and create simultaneously an arbitrary and utterly pragmatic set of rules for public conduct to protect us from the Bible-Belt arbiters of morals and conduct. We were not missionaries trying to convert Mrs. Grundy to our way of thinking; we simply wanted to hold up a mask so that she would never suspect that we did not agree with her way of thinking. In a society in which it is a mortal offense to be different from your neighbors your only escape is never to let them find out.

Slowly over the years we learned that many Howard families had been forced to face up to the fact that the Howard Foundation program simply did not fit the midwestern Bible Belt…yet the majority of Howard candidates came from the middle west. Eventually these conflicts and contradictions resulted in most Howards either dropping out of organized religion, or paying it lip service as Brian and I did, until we left Kansas City in the late thirties and quit pretending.

So far as I know, there are no organized religions in Boondock, or anywhere on Tellus Tertius. Question: Is this an inevitable evolutionary development as mankind approaches true civilization? Or is that wishful thinking?

Or did I die in 1982? Boondock is so utterly unlike Kansas City that I have trouble believing that they are in the same universe. Now that I am locked up incommunicado in what appears to be a madhouse run by its inmates it is easy to believe that a traffic accident that hit an old, old woman in 1982 was fatal…and that these dreams of weirdly different worlds are merely delirium of dying. Am I heavily sedated and on IC life support in some Albuquerque hospital while they decide whether or not to pull the plug? Are they waiting to hear from Woodrow for authorization? As I recall, I listed him as “Next of Kin” in my wallet.

Are “Lazarus Long” and “Boondock” a senile fantasy?

Must ask Pixel next time he visits me. His English is scarce . no one else to ask.

One fine thing we did even before we got our new house furnished: We got the rest of our books out of storage. In the crackerbox we had been living in we had had room for only a couple of dozen volumes, and that precious few only by storing them on the top shelf in the kitchen, a spot I could reach only by standing on a stool—something I did not risk when I was big with child. Once I waited three days for Brian to come home from Galena, intending to ask him to reach down for me my *Golden Treasury*—I could see it; couldn't reach it—then, when he did get home, I forgot it.

I had two boxes of books in storage, Brian had more than that… and I had "inherited" case after case of my father's books. He had written to me when he went back into the Army to tell me that he had had them packed and shipped to Kansas City Storage and Warehousing—receipts enclosed. His bank was instructed to keep the storage paid up…but if I wanted to give them a home, that would please him. Perhaps someday he might ask for some of them back, but in the meantime treat them as my own. "Books are meant to be read and loved, not stored."

So we got our printed friends out of bondage and into the light and air—although we had no bookcases as yet. Briney got boards and bricks and set up temporary shelves…and I learned what my husband liked better than sex.

Books.

Almost any books but what hooked him that weekend were Professor Huxley's essays…which I hardly noticed because I had my hands on Father's Mark Twain collection, Mr. Clemens's books, for the first time since May 1898—everything of his up to that date, mostly first editions and four of them signed by Mr. Clemens and by "Mark Twain"—signed on that great night in January 1898 when I fought to stay awake in order not to miss any of Mr. Clemens's words.

For perhaps two hours Brian and I took turns touching the other one's elbow and saying, "Listen to this!"—then reading aloud. It turned out that Brian had never read "The £1,000,000 BankNote" or "The Facts Concerning the Recent Carnival of Crime in Connecticut." I was astonished. "Dear, I love you—but why did they let you graduate?"

"I don't know. The War, probably."

"Well, I'll just have to tutor you. We'll start with the *Connecticut Yankee.* "

"I've read it. What's that fat one?"

"That's not Mark Twain; that's one of Father's medical books." I handed it to him, returned to *The Prince and the Pauper*.

A couple of moments later I looked up when Briney said, "Hey, this plate is not correct."

I answered, "Yes, I know. As I know what plate you are looking at. Father says that any layman who gets his hands on that book invariably looks at that plate first. Shall I take off my drawers so that you can check it?"

"Quit trying to divert me, wench; I have an excellent memory." He thumbed on through. “Fascinating. One could study these plates for hours.”

“I know. I have.”

“Amazing how much machinery can be packed into one set of skin.” He went on thumbing through, then got hooked by a work on obstetrics, shuddered at parts of that one (Brian was a good jackleg midwife, but he didn’t like blood), put it aside and picked up another one. “Whee!”

“What is it this time, dear? Oh. *‘What Every Young Girl Should Know.’* ” (He had picked up the Forberg etchings, *Figuris Veneris*. I was startled, too, the first time I opened it.)

“That’s not its name. Here’s the title page: *Figures of Venus*.”

“Joke, dear. Father’s joke. He had me study it as a sex instruction manual, then we discussed each picture and he answered any questions I asked. Lots of questions, that is. He said that Mr. Forberg’s pictures were anatomically correct…which is more than we can say about that censored plate you complained about. Father said that these pictures should be used in school, because they were far superior to the behind-the-barn cartoons or photographs that were the only thing most young people get to look at—until they were confronted by the real thing and were frightened and sometimes hurt.” I sighed. “Father says that this so-called civilization is sick throughout but nowhere more so than about sex, every aspect of sex.”

“Your father is dead right, I think. But, Maureen, do I understand that Dr. Johnson gave this to you as an instruction manual? My revered father-in-law endorsed everything in these pictures? *Everything?*”

“Oh, heavens, no. Just most of them. But in general Father says that anything two—or more—people want to do is all right as long as it does no physical harm. He felt that the words ‘moral’ and ‘immoral’ were ridiculous when applied to sexual relations. Right and wrong were the correct words, used exactly as they would be used in any other human relation.”

“Mon beau-père a raison. And my wife is a smart cookie, too.”

“I had tutoring by a wise man all my life, until he turned me over to you. At least I think my father is wise. Here, let me sit beside you and I’ll point out what he approved of, what he didn’t.”

I moved across beside him; he put his arm around me and I held the book on his lap. “The title page—Note the date, 1824. But the pictures are mostly classic Greece and Rome, except one in Egypt. Father said that, despite that date less than a hundred years back, these pictures match murals in whorehouses in Pompeü…except that these are artistically much superior to the Pompeü paintings.”

“Dr. Johnson has been to Pompeü?”

“No. Well, I don’t think he has. With Father it is sometimes hard to be sure. He did tell me that he had seen photographs of Pompeü murals in Chicago. At Northwestern or in some museum.”

“But how did he get these pictures? I hate to tell you, my sweet innocent, but I’m certain that these pictures would get us a long rest at federal expense…under the Comstock Act. If we were caught with them.”

“ ‘If we were caught.’ ‘Caught’ is the important word. Father urged me to know the Law as thoroughly as possible…so as not to get caught when I broke one. Father never felt that any law applied to him…other than in that sense.”

“I think it is clear that your father is a subversive character, a bad influence, a wicked old man…and I admire him without limit and hope to grow up like him.”

“I love him all to pieces, *mon homme*. He could have had my maidenhead just by lifting his eyebrow. He wouldn’t take it.”

“I know that, beloved. I’ve known it since I first met you.”

“Yes, I’m a woman scorned…and someday he’ll pay. But I want to take his advice about the Law. Briney, do you suppose I could attend classes at the Kansas City School of Law…if I could squeeze the tuition out of my household allowance?”

“Perhaps. But you won’t have to squeeze it out of your housekeeping money; any schooling you want we now can afford. But never mind such trivial matters; we’re talking about sex. S-E-X, the stuff that makes the world go around. Next picture, please.”

“Yes, sir. Missionary style. Approved even by priests. The next picture is almost as widely accepted, although perhaps Mrs. Grundy never gets on top. This next one is certainly not used by Mrs. Grundy although by everybody else—says Father. But he noted that a gentleman, in coupling with a lady from behind and standing up, will reach under and find her button, so that she is insured a good time, too. Now the next— Oh! Briney, someday, when we can afford it, I want a bed just the right height so that you can put me on it in that position, on my back, legs up—just the right height so that you can stand up and enter me without crouching. I like that position, so do you—but the last time we used it, you got cramps in your legs and were trembling toward the last, you got so tired. Darling, I want you to enjoy it as much as I do. Loads, that is.”

“Lady, you’re a gentleman.”

“Why, thank you, sir! If that is not a jest.”

“No jest. Most ladies are not gentlemen; they will pull stunts that would get a man ten days in the stocks…and walk on, with their noses in the air. But not my Mo‘. With you, fair is fair and you don’t expect to get by on your sex.”

"Ah, but I do. By 'ringing the cash-register.' "

"Don't confuse me with logic. You treat everyone decently, that's all, even your poor old husband. Yes, I'll build you that bed. Not only the right height but one guaranteed not to squeak. I'll get busy on the design. Mmm, Mo', how would you like a really big bed? Say one that would hold you and me and Hal and Jane—or playmates of your choice—all at once."

"Goodness, what a thought! I hear that Annie Chambers has a bed like that."

"But I'll design a better one. Mo', where did you hear of K.C.'s top Madam?"

"At a Ladies' Aid meeting. Mrs. Bunch was deploring the open immorality of this city. I kept my ears open and my mouth closed. Darling, I'll love that bed when it's built…and in the meantime I'll be happy with any reasonably level place or even a pile of coal if Briney puts me on it."

"Go along with you. Next picture."

"Then quit teasing my right nipple. Young man masturbating, his daydreams in the background. Father strongly approved of masturbation. He said that all the stories about it were nonsense. He urged me to masturbate all I want to and whenever I want to, all my life, and to be no more ashamed of it than I am of peeing—just close the door, as I do when peeing."

"They told me that it would make me go blind. But it didn't. Next."

"He's an irrumator and she is a fellatrix and that's Vesuvius in the background. Only Father says that those names are silly; it's just two youngsters discovering that sex can be fun. He pointed out that not only is it fun for both of them but also there is a major advantage. If she discovers that it smells bad, she can suddenly remember that it's bedtime; goodnight, Bill—and, No, I can't see you next Saturday. Don't come back at all; I'm entering a nunnery. Briney, I've done that —tossed a boy out because I didn't like the way his penis smelled. One was a Howard candidate. *Phew!* Father told me that a penis that smelled bad was not necessarily diseased, but that was the way to bet…and in any case if it wasn't sweet enough to kiss, it wasn't sweet enough to put inside me."

I moved on to the next one. "Same situation, *comme ci* instead of *comme ca*. Cunnilingus. Another silly word, says Father; it's just a kiss. The sweetest kiss of all…unless you combine this one with the one we just looked at, to make a sixty-nine. *Soixante-neuf*. Although there is much to be said for taking the two sorts of kisses one at a time, and concentrating."

I turned the page. "Oh, oh! Here's one that Father did not care for."

"Me, too. I prefer girls."

"Yes, but you can do it to a woman, too. Father said that someday some man was going to want to do that to me…and that I should think about it ahead of time and be prepared to cope with it. He said that it was not immoral, or wrong, but that it was dirty and physically risky—"

(This was in 1906, long before AIDS showed that buggery could be a special and deadly hazard.)

"—but that if I got curious and just had to try it, make him use a sheath and get him to be ultra slow and extra gentle—or I would wind up buying fur coats for proctologists' wives."

"Seems likely. Next, please."

"Beloved—"

"Yes, Mo'?"

"If you want to do that to me, I'm willing. I'm not in the least afraid that you would hurt me."

"Thank you. You're a silly little wench, but I love you. I'm not yet tired of your other hole. Next picture, please; there are people queued up for the second show."

"Yes, sir. I think this one is meant to be funny: husband surprises wife playing happy games with the housewife next door—look at the expression on his face! Briney, I had never suspected that a woman could be so much fun until that time Jane made a grab for me. She's real cuddly. Or anything."

"Yes, I know. Or anything. So is Hal. Or anything."

"Well! I must have slept through something. This next one—Briney, I can't see why women would use dildoes when there are so many live, warm ones around attached to men. Do you?"

"They don't all have your opportunities, my love. Or your talents."

"Thank you, sir." I moved on. "Cunnilingus again, but two women. Briney, why are mermaids used as a symbol of Lesbos?"

"I don't know. What did your Father say?"

"Just what you did. Oh, this next one does show something Father disapproves of. He says that anyone who mixes whips and chains, or either, with sex, is crazy as a pet coon and should be kept away from healthy people. Mmm, the next one is nothing special, just a different position, one that we've tried. Fun for variety, I think, but not for every day. And now—Oh, this one Father called, 'the hetaera's examination, or three ways for a dollar.' Do you think Annie Chambers's girls are examined this way? I hear that they are top quality this side of Chicago. Maybe New York."

"Look, my sweet, I know nothing of Madam Chambers, or her girls. I can't support both you and Annie Chambers, not even with the help of the Foundation. So I don't patronize brothels."

"What do you do in Denver, Briney? Cancel that—under our agreement, I'm not supposed to ask."

"That wasn't in the agreement; of course you can ask. You tell me your bedtime stories and I'll tell you mine—then we'll play doctor. Denver—I'm glad you asked that. In Denver I met this young fat boy—"

"Briney!"

"—who has the most gorgeous big sister, a grass widow a little younger than you are, with long slender legs, natural-blonde, honey-colored hair down to her waist, a sweet disposition, and big, firm tits. I asked her, 'How about it?' " Briney stopped.

"Well? Go on. What did she say?"

"She said No. Hon, in Denver I'm usually too tired for anything more adventurous than Mother Thumb and her four daughters. They are faithful to me in their own fashion and they don't expect me to take them out to dinner and a show first."

"Oh, piffle! What is the blonde's name?"

"What blonde?"

I've just figured out how to get a message out via Pixel. So, if you will excuse me, I'll get it ready at once so that I will have it ready the next time he shows up.

CHAPTER NINE

Dollars and Sense

Where is that damned cat?

No, no, cancel that. Pixel, Mama Maureen didn't mean that; she's just worried and upset. Pixel is a good boy, a fine boy; everybody knows it.

But, damn it, where are you when I need you?

As soon as we were settled into our new home we shopped for Briney's kitten, but not in pet shops. I'm not sure that there was such a thing as a pet shop in K.C. in 1906; I don't recall ever having seen one that far back…and I do remember that we bought goldfish at Woolworth's or at Kresge's, not at a pet shop. Special items for cats, such as flea powder we bought at the Dog and Cat Hospital at Thirty-first and Main. But finding a kitten required asking the wind.

First I got permission to put a notice on the bulletin board at Nancy's school. Then I told our grocer that we were looking for a kitten, and left the same word with our huckster—a greengrocer who stopped his wagon in our block every weekday morning to offer fresh fruits and vegetables.

The Great Atlantic and Pacific Tea Company peddled its wares the same way but its sales wagon called only once a week since it carried only tea and coffee, sugar and spices. But that meant it covered a larger area with more customers and therefore greater chances of finding kittens. So I gave their driver our telephone number, Home Linwood 446, and asked him to call me if he heard of a litter of kittens, and then (having asked a favor) I bought his special for the week, twenty-five pounds of sugar for a dollar.

A mistake—He insisted on carrying it in for me, asserting that twenty-five pounds was much too heavy for a lady…and I learned that what he really wanted was to get me alone. I evaded his hands by picking up Brian Junior, a tactic Mrs. Ohlschlager had taught me when Nancy was tiny. It works best with a small and very wet baby but any child small enough to pick up will throw a hopeful male off his stride and cool him down. Oh, it won't stop a crazy rapist, but most delivery-men (and plumbers, repairmen, etc.) are not rapists;

they are simply ordinary rutty males who will go for it if offered. The problem is simply to turn him down firmly but gently, without causing him to lose face. Picking up a child does this.

It was bad judgment also because a whole dollar was too much of my household budget to tie up in sugar, and (worse) I did not have ant-proof storage for that much sugar…so I wound up spending another sixty cents on a sugar safe as big as my flour bin—which left me so short on cash a week later that I served fried mush for supper when my “plan ahead” called for ground beef patties. It was almost the end of the month, so it was serve mush or ask Briney for an advance…which I would not do.

With fried mush I served two strips of bacon to Brian and one to me, and one strip, fried crisp and crumbled, divided for Carol and Nancy. (Brian Junior still regarded Cream o‘ Wheat as a gourmet dish, so he got that plus what milk I had left in my breasts.) Fresh dandelion greens helped to fill out the menu, and their butter-yellow blooms I floated in a shallow dish as a centerpiece. (Can anyone tell me why such pretty flowers are considered weeds?)

It was a skimpy supper but I ended it with a substantial dessert I could make with what I had on hand, plus two cooking apples picked up cheap that morning from my huckster: apple dumplings with hard sauce.

Hard sauce should be made with confectioners’ sugar—but Aunt Carole had taught me how to crush and crush and keep on crushing granulated sugar, using a big spoon and a bowl, to achieve a fair imitation of powdered sugar. I had enough butter on hand and vanilla extract, and I used one teaspoon of cooking brandy—also on hand; Aunt Carole had given it to me on my wedding day. (It was now half gone. I tasted it once-horrible! But a smidgen of it at the right time and place certainly enhanced the flavor of food.)

Brian made no comment on fried mush, but complimented me on the dumplings. On the first of the month following he said, “Mo‘, the papers say that food prices are up even though the farmers are squawking. And I’m certain that this bigger house is costing you more to run, if only in electricity, gas, and Sapolio. How much more each month do you need?”

“Sir, I’m not asking for more money. We’ll get by.”

“I’m sure we will but the hot weather will be with us next month. I don’t want you paying the iceman the way some housewives do. Let’s raise your allowance by five dollars.”

“Oh, I don’t need that much!”

“My lady, let’s do raise it that much, and see how it works out. If you have money left over at the end of the month, tuck it away. At the end of the year you can buy me a yacht.”

"Yes, sir. What color?"

"Surprise me."

I managed to add pennies and nickels and dimes to that "egg money" over the months by never using a charge account, even with my grocer-which was just as well, as Brian was in business for himself sooner than he had anticipated.

His employer, Mr. Fones, had made him a junior associate after two years, then assistant manager in 1904. Six months after we moved into our wonderful new house Mr. Fones decided to retire and offered Brian a chance to buy him out.

It was one of the few times I have seen my husband in a quandary. He usually made decisions quickly with the icy calm of a riverboat gambler; this time he seemed bemused—sugaring his coffee twice, then forgetting to drink it.

At last he said, "Maureen, I'm going to have to consult you on a business matter."

"But, Brian, I don't know anything about business."

"Listen to me, my love. Ordinarily I will not bother you about business. *Deus volent*, I will not need to do so again. But this affects you and our three children and the one that has caused you to get out your fat clothes again." He told me in detail what Mr. Fones had offered.

I thought hard about it, then said, "Brian, under this agreement you are to pay this—'drawing account,' you called it—to Mr. Fones each month?"

"Yes. If the business makes more profit that the average of the last few years, his share increases."

"Suppose it makes less. His share goes down?"

"Not below that drawing account figure."

"Even if the business loses money?"

"Even if it loses money. Yes, that's part of the proposal."

"Briney, just what is it he is selling you? You are contracting—will be contracting if you accept—to support him indefinitely—"

"No, just twelve years. His life expectancy."

"If he dies, it ends? Hmmm! Does he know about my great-aunt Borgia?"

"No, it doesn't end if he dies, so get that gleam out of your eye. If he dies, it goes to his estate."

"All right, twelve years. You support him for twelve years. What do you get out of it?"

"Well…I receive a going business. Its files, its records, and, principally, its good will. I'll have the right to use the name 'Fones and Smith, Mining Consultants.' " He stopped.

"What else?" I asked.

"The office furniture, and the lease. You've seen the office."

Yes, I had. Down in the west bottoms, across from International Harvester. In the spring flood of 1903 when the Missouri River again failed to turn that corner and tried to run up the Kaw almost to Lawrence, Briney had to go to work in a rowboat. I had wondered then why a mining company would be down there—no mining in the west bottoms, just black mud clear down to China. And the heavy stink of the stockyards.

"Brian, why are the offices there?"

"Cheap rent. It would cost us four times as much to get the same space on Walnut or Main, even clear out at Fifteenth. I take over the lease, of course."

I thought about it hard for several minutes. "Sir, how much of the firm's traveling has Mr. Fones been doing?"

"Originally? Or recently? When I first went to work for him, both he and Mr. Davis made field trips; I stayed in the office. Then he broke me in on what he expected from a survey—that was before Mr. Davis retired. Then—"

"Excuse me, sir. I mean, 'How much traveling has Mr. Fones done this past year?' "

"Eh? Mr. Fones has not made a field survey for more than two years. He's made a couple of money trips. Two to St. Louis, one to Chicago."

"While you made all the muddy-boots trips?"

"You could call it that."

"That's what you call it, Briney. Dear, you do want to go into business for yourself, don't you?"

"You know that I do. This is just sooner than I had thought I could manage it."

"Are you seriously asking me to say what I think you should do? Or are you just using me as a sounding board to get your thoughts straight?"

He gave me his endearing grin. "Maybe some of both. I'll make the decision. But I do want you to tell me what to do, just as if it were entirely up to you."

"Very well, sir. But I need more information. I have never known the amount of your salary—and I don't want to know now; it's not fitting for a wife to ask—but tell me this. Is that drawing account figure more or less than your salary?"

"Eh? More. Quite a bit more. Even with the bonuses I have received on some deals."

"I see. All right, Briney; I'll express my advice in the imperative. Refuse his offer. Go down tomorrow morning and tell him so. At the same time hit him for a raise. Ask him—no, tell him—that you expect a salary equal to that drawing account he was proposing to siphon out of the business."

Briney looked startled, then laughed. "He'll have a stroke."

"Perhaps, perhaps not. But he is certain to be angry. Count on that and be braced for it. Don't let him get you even the least bit angry. Just tell him calmly that fair is fair. For the last two years you have been doing all the hard and dirty work. If the business can afford to pay Mr. Fones that big a drawing account for not working at all, it can certainly pay you the same amount for working very hard indeed. True?"

"Well…yes. Mr. Fones won't like it."

"I don't expect him to like it. He's trying to hornswoggle you; he's certain not to like it when the same swindle is offered to him. Briney, that's a touchstone for a fair deal that my father taught me: Does it feel like a fair deal if it's turned the other way around, mirror image? Point this out to him."

"All right. When he comes down off the ceiling. Mo', he won't pay me that much. Wouldn't it be better for me to resign?"

"Truly, Briney, I don't think so. If you simply quit, he will make loud squawks about your disloyalty—how he took you on as a youngster with no experience and taught you the trade—"

"There's some truth in that. Before he hired me, I had had practical experience underground in lead and zinc and in coal through working summers while I was going to school. But no experience with precious metals, just book learning. So I've learned quite a lot while working for him. "

"Which is why you must not resign. Instead you are simply asking to be paid what you are worth. What the proposition he offered you shouts aloud that you are worth. Fair is fair. He can go ahead and retire, and pay you that amount to run the business, while he enjoys the net profit himself."

"He'll give birth to a porcupine. Breech presentation."

"No, he'll fire you. Oh, he may possibly offer you a counterproposal; it may take a while. But he will fire you. Briney, would it suit you to stop on your way home at Wyandotte Office Supply and buy a secondhand Oliver typewriter? Pretty please? No, best to rent one for a month with privilege of applying rent on purchase; I should try it out before we tie up so much money. In the meantime we'll design some stationery. 'Brian Smith Associates,' I think. Mining Consultants. No, Business Consultants. Mining Properties. Farms and Ranches. Mineral Rights. Petroleum Rights. Water Rights."

"Hey, I don't know all those things."

"You will." I patted my tummy. "Three months from now this little boiled pig will ring the cash register for us." I thought about the double eagle Father had slipped into my purse on our wedding day. I had never spent it; I was fairly sure Briney did not know that I had it. Father's formal wedding present to us had been a check that had gone into furniture for that little crackerbox we had first lived in. "Dear, I guarantee to keep us fed until you can report this baby to Judge Sperling. Then the Foundation's payment for this baby ought to keep us going for a while…and you and I can try to ring the cash register a fifth time before the cash from number four runs out."

I went on, "If the business isn't making money by then, it might be time for you to look for a job. But I'm betting that from now on you will always be your own boss…and that we will wind up rich. I have confidence in you, sir. That's why I married you."

"Really? I thought there was another reason. That wee bit of proud flesh."

"There's that, I admit. A contributing factor. But don't change the subject. You've given Mr. Fones more than six hardworking years—much of your time away from home—and now he wants to indenture you, make you his bound boy, for a pittance. He's trying to milk you like a cow. Let him know that you know it…and that you won't let him get away with it."

My husband nodded soberly. "I won't let him. Beloved, I knew what he was trying to do. But I had to think of you and our children."

"You do. You will. You always have."

Brian came home early the next day, carrying a battered Oliver typewriter. He put it down and kissed me. "Madam, I have joined the ranks of the unemployed."

"Really? Oh, goodie!"

"I am an ungrateful wretch. I am no better than a Wobbly and I probably am one. He has treated me like his own son, his own flesh and blood. And now I do this to him. Smith, get out of here! Leave these premises; I don't want to see your face again. Don't you dare take even a piece of paper out of this office. You are through as a mining consultant; I'm going to let the whole mining community know how thoroughly unreliable, completely undependable, utterly ungrateful you are."

"Doesn't he owe you some salary?"

"Salary and two weeks notice and earned participation in that Silver Plume Colorado deal. I declined to budge until he paid up. He did, reluctantly, with more comments on my character." Briney sighed. "Mo', it upset me to listen to what he said. But I feel relieved, too. Free, for the first time in more than six years."

"Let me draw you a tub. Then dinner in your robe and then to bed. Poor Briney! I love you, sir."

My sewing room became an office and we installed a Bell telephone in addition to our Home instrument and put the two side by side near my typewriter. Our letterhead carried both numbers and a post office box number. I kept a baby bed in there and a couch I used for quick naps. Mr. Fones's animosity did not seem to hurt us, and it may have helped simply by emphasizing that Brian was no longer working for Davis and Fones—a fact Brian advertised in all the trade journals. My first job with the typewriter was to write to about 150 people and/or firms, announcing that Brian Smith Associates was now in business…and announcing a new policy.

"The idea is, Mo', that I am betting on my own judgment. I'll confer with anyone, first visit free, here in Kansas City. If I travel, it's my railroad ticket, two dollars a night for a hotel room, three dollars a day for food, costs such as livery stable rents as required by the survey, plus per diem consulting fee…all in advance. In advance because I saw while working for Mr. Fones how nearly impossible it is to get a client to pay for a dead horse. Fones did it by refusing to budge until he had a retainer in hand equal to his projected expenses, applied overhead, and expected minimum profit…more, if he could squeeze it out.

"It's on that per diem that I'll differ in my methods from Davis and Fones. I will use a formal, signed contract, with two options, the client to make his choice ahead of time. Forty dollars a day—"

"What!!"

But Briney had spoken seriously. "Mr. Fones charged a client that much for my services. My dear, there are plenty of lawyers who get paid that much per diem for nice clean work in a warm courtroom. I want to be paid at that rate for trudging and sloshing and sometimes crawling through mines that are always cold and usually wet. For that price they'll get my best professional judgment as to how much it will cost to work that mine, including capital investment required before they ship their first ton of ore…and my best guess, based on assays, geology, and other factors, as to whether or not the claim can be worked at a profit…for it is a sad fact that, in the mining business as a whole, more money goes into the ground than ever is taken out.

"That's the business I'm in, Mo'. Not in mining. I get paid for telling people not to mine. To cut their losses and run. They often don't believe me, which is why I must insist on being paid in advance.

"But once in a while I have had the happy privilege of telling someone, 'Go ahead, do it! It will cost you this big wad of money…but you should get it all back and more.'

"And that is where the second option comes in, the one I really prefer. Under the second option I gamble with the client. I lower my per diem and instead take some points on the net, if and when. I won't take more than five points at most, and I won't do a field survey for less than expenses plus a per diem of fifteen dollars a day, minimum. That bracket leaves room to dicker.

"Now— Can you write a model letter for me, explaining the tariff schedule? How they can have our best work, at our standard fee. Or we'll gamble with them at a much lower fee, and they will still have our best work."

"I'll try, Mister Boss Man, sir."

It paid. It made us rich. But I did not suspect how well it paid until forty years later when circumstances caused my husband and me to count up all our assets and figure their worth. But that is forty years later and this account may not go on that long.

It paid especially well through an oddity of human psychology…or an oddity of persons seized by the mining mania, which may not be the same thing. Like this—

The compulsive gamblers, the sort who try to beat lotteries or slot machines or other house games, almost always were betting on striking it rich on some claim that could not be worked at a profit. Each of these saw himself as another Cowboy Womack…and did not want to share his lucky star with some hireling, even at only five points. So, if he could scrape it up, he paid the full fee, grumbling.

After a survey (when I was my husband's secretary) I would prepare a letter along these lines, telling this optimist that his best vein was "—surrounded by country rock that has to be dug out to get at the high grade. The mine cannot be worked successfully without drifting a new tunnel out to the north to the highway, through a right of way still to be negotiated via the third level of the claim to the north of yours.

"In addition, your claim requires a blacksmithy, a tool repair shop, a new pumping system, new ties and rails for approximately two hundred yards of track, etc.. etc.—plus wages for eighty shifts per month as required by the bond-and-lease for an estimated three years before appreciable pay tonnage could be taken to the mill, etc., etc., see enclosures A, B, and C.

"In view of the state of the claim and the capital investment required to work it, we regret to have to report that we recommend against attempting to work this claim.

"We agree with your arithmetic as to the effect on the commercial feasibility of processing low-grade ore if the new Congress does in fact pass legislation requiring free and unlimited coinage of silver at sixteen to one. But we are not as sanguine as you are that such legislation will indeed pass.

"We are forced to recommend that you sell your bond-and-lease for whatever it will bring. Or cut your losses and surrender it.

"We remain, sincerely at your service,

"Brian Smith Associates

"by

"Brian Smith, President"

This report was typical for an old claim being reopened by a new optimist—the commonest situation in mining. (The West is pocked with holes where some prospector ran out of money and luck.)

I wrote many letters like that one. They hardly ever believed unfavorable reports. They frequently demanded their money back. Then a client often took the bit in his teeth and went ahead anyhow…and went broke trying to satisfy a bond-and-lease on country rock assaying only enough silver per ton to go broke on, plus a trace of platinum and a whiff of gold.

The clients attempting to mine gold were even worse. There is something about gold that has an effect on human judgment similar to that of heroin or cocaine.

But there were also a few rational investors—gamblers, but gambling the odds correctly. Offered a chance to reduce upfront expenses in exchange for points, they often took that option…and the claims selected by these more level-headed people were more likely to merit a go-ahead from Brian.

Even these worthwhile mining claims usually lost money in the long run, through failure of their owners/operators to shut down soon enough when the operations stopped paying their costs. (Brian did not lose when that happened; he simply stopped making money from his percentage of the net.) But some of them made money and some of them made lots of money and some of them were still making money regularly forty years later. Brian's willingness to postpone his return other than a modest fee put our children into the best schools and Brian's quondam secretary, Mama Maureen, into big, fat emeralds. (I don't like diamonds. Too cold.)

I see that I've missed telling about Nelson and Betty Lou and Random Numbers and Mr. Renwick. That's what comes of being a Time Corps operative; all times look alike to you, and temporal sequence becomes unimportant. All right, let's fill in.

Random Numbers may have been the silliest cat I've ever lived with-although all cats are sui generis, and Pixel has his supporters for the title f funniest cat, unlimited, all times, all universes. But I'm sure Betty Lou would vote for Random Numbers. Theoretically title to

Random lay in Brian, since the cat was his bride's wedding present to him, somewhat delayed. But it is silly to talk of title to a cat, and Randie felt that Betty Lou was his personal slave, available at all hours to scratch his skull, cuddle him, and open doors for him, a conviction she supported by her slavish obedience to his tiniest whim.

Betty Lou was Brian's favorite sweetheart for, oh, pretty steadily for three years, then as circumstances brought them together for years and years. Betty Lou was Nelson's wife, Nelson being my cousin who played fast and loose with a lemon meringue pie. My past had come back to haunt me.

Nelson showed up in December of 1906, shortly after Brian had decided to strike out on his own. Brian had met Nelson once, at our wedding, and neither of us had seen him since that day.

He had been fifteen then, no taller than I; now he was a tall, handsome young man of twentythree, who had earned a master's degree in agronomy at Kansas State University, Manhattan…and was as charming as ever, or more so. I felt that old tingle deep inside me and those cold lightnings at the base of my spine. I said to myself, Maureen, as a dog returneth to its vomit, you are in trouble. The only thing protecting you is that you are seven months gone, big as a house, and as seductive as a Poland China sow. Tell Briney in bed tonight and get him to keep a close eye on you.

Big help! Nelson showed up in the afternoon, Brian invited him to stay for dinner. When he learned that Nelson had not checked into a hotel, he invited Nelson to stay overnight. That was to be expected; at that year and in that part of the country, people never stayed in hotels when homes of kinfolk were at hand. We had had overnighters several times even in our first crackerbox; if you didn't have a spare bed, you made up a pallet on the floor.

I didn't say anything to Brian that night. While I was sure that I had told Briney the lemon-pie story, I wasn't sure that I had mentioned Nelson by name. If I had not—or if Brian had not made the connection—then let sleeping dogs bury their own bones. It was swell to have an understanding and tolerant husband but, Maureen, don't be a greedy slut! Don't stir it up again.

Nelson was still there the next day. Brian was his own boss now, but not overwhelmed by clients; he had no need to leave the house that day other than to check our post office box at the Southside substation. Nelson had arrived in an automobile, a smart four-passenger Reo runabout. Nelson offered to drive Brian to the post office.

He offered to take me, too. I was glad that I had the excuse of a little girl—Nancy was at school; Carol at home—and a baby boy not to accept. I had never ridden in an automobile and, to tell the truth, I was scared. Surely, I expected to ride in one someday; I could see a time coming when they would be commonplace. But I was always more timid when I was pregnant, especially toward the end—my worst nightmare concerned miscarriage.

Brian said, “Can’t you get the Jenkins girl to come over for an hour?”

I said, “Thank you, another time, Nelson. Brian, paying for a baby watcher is an unnecessary expense.”

“Penny pincher.”

“I surely am. As your office manager I intend to pinch every penny so hard that the Indian will scream in pain. Go along, gentlemen; I’ll get the breakfast dishes done while you’re out.”

They were gone three hours. I could have walked to the post office and back in less time. But, following a corollary in my expanded Ten Commandments, I said nothing and did not mention my frets about accidents. I smiled and said happily, “Welcome home, gentlemen! Lunch will be ready in twenty minutes.”

Briney said, “Mo‘, meet our new partner! Nel is going to justify our letterhead. He’s going to teach me farms and ranches and which end of a cow the milk comes out of…and I’m going to teach him how to tell fool’s gold from fools.”

“Oh, wonderful!” (One fifth of zero is zero; one sixth of zero is still zero—but it’s what Brian wants.) I gave Nelson a quick peck. “Welcome to the firm!”

“Thank you, Maureen. It should be a good team,” Nelson said solemnly. “Brian tells me he is too lazy to swing a pick, and you know I’m too lazy to pitch manure…so we’ll both be gentlemen and tell other people how to do it.”

“Logical,” I agreed.

“Besides, I don’t own a farm and I haven’t been able to find a job as a county agent—or even as the boy who opens the mail for a county agent. I’m looking for a job to let me support a wife. Brian’s offer is heaven sent.”

“Brian is paying you enough to support a wife?” (Oh, Briney!)

“That’s just it,” Brian answered. “I’m not paying him anything. That’s why we can afford to hire him.”

“Oh.” I nodded agreement. “Seems a fair arrangement. Nelson, after a year, if your performance is still satisfactory, I’ll recommend to Brian that we double your wages.”

“Maureen, you always were a dead game sport.”

I did not ask him what he meant by that. I had a bottle of muscatel tucked away, bought by Briney for Thanksgiving. It was full, save for a little used for one toast. I fetched it for that purpose. “Gentlemen, let us toast the new partnership.”

"Hear, hear!"

So we did and the gentlemen drank and I touched my lips to mine, then Nelson offered another toast: " 'Life is short.' "

I looked at him, kept surprise out of my face, but answered, " 'But the years are long.' "

He answered, just as Judge Sperling had given it to us: "Not 'While the evil days come not.' "

"Oh, Nelson!" I spilled my glass. Then I threw myself on him and kissed him properly.

There was no mystery, truly. Nelson was of course eligible on one side of his family; we shared Johnson grandparents (and great-grandparents, although three of four were dead now—all at past a hundred). My father had written to Judge Sperling (I learned later) and said that it had come to his attention that his sister-in-law, Mrs. James Ewing Johnson of Thebes, nee Carole Yvonne Pelletier of New Orleans, had living parents; therefore his nephew Nelson Johnson might be eligible for Howard Foundation benefits, stipulating that he married an eligible.

It took them awhile, as they check health and other things, and in particular in Nelson's case that his father actually had died by mischance (drowning) and not through other cause.

Nelson was in Kansas City because Thebes and its environs had no Howard-listed young females. So he was given a list for Kansas City—both Kansas Cities, Missouri and Kansas.

And that's how we met Betty Lou—Miss Elizabeth Louise Barstow. Nelson did his final courting—got her pregnant, I mean—under our roof, while Maureen played shuteye chaperon, a role I would fill repeatedly for my own girls in future years.

This protected me from my own folly—and I felt rather grumpy about it. Nelson had been my personal property before Betty Lou ever set eyes on him. But Betty Lou is a darling; I couldn't stay grumpy. Eventually I had no need to feel grumpy.

Betty Lou was from Massachusetts. She had been attending KU, God knows why—Massachusetts has some adequate schools. But it worked out that we stood in for her parents as they could not come out for her wedding; they were taking care of their parents. Theoretically Nelson and Betty Lou should have gone back to Boston to be married. But they did not want to spend the money. The Gold Panic was getting under way, and, while that would make a boom in Brian's business, as yet it just meant that money was tight.

Her wedding took place in our parlor on February fourteenth, a blustery cold day. Our new pastor, Dr. Draper, tied the knot, I presided over the reception, with too much help from Random

Numbers, who was convinced that the party was in his honor.

Then, when Dr. and Mrs. Draper had left, I went slowly upstairs, with Brian and Dr. Rumsey helping me…the first time and almost the last time that I waited long enough for my doctor to arrive.

George Edward weighed seven pounds three ounces.

CHAPTER TEN

Random Numbers

Pixel went away, wherever it is that he goes, with my first attempt to call for help. Now I can only keep my fingers crossed—

My beloved friend and shared husband Dr. Jubal Harshaw I once heard define happiness. “Happiness, ” Jubal stated, “lies in being privileged to work hard for long hours in doing whatever you think is worth doing.

“One man may find happiness in supporting a wife and children. Another may find it in robbing banks. Still another may labor mightily for years in pursuing pure research with no discernible result.

“Note the individual and subjective nature of each case. No two are alike and there is no reason to expect them to be. Each man or woman must find for himself or herself that occupation in which hard work and long hours make him or her happy. Contrariwise, if you are looking for shorter hours and longer vacations and early retirement, you are in the wrong job. Perhaps you need to take up bank robbing. Or geeking in a sideshow. Or even politics.”

For the decade 1907-1917 I was privileged to enjoy perfect happiness by Jubal’s definition. By 1916 I had borne eight children. During those years I worked harder and for longer hours than I ever have before or since, and I was bubbling with happiness the whole time save for the fact that my husband was away oftener than I liked. Even that had its compensations, as it made our marriage a series of honeymoons. We prospered, and the fact that Briney was oftenest away when business was best resulted in our never experiencing what the Bard called so aptly: “—the tired marriage sheets.”

Briney always tried to telephone to let me know exactly when he would be home…and then he would tell me: “B.i.b.a.w.y.l.o and I w.w.y.t.b.w.” Day or night I would do my best to follow his instructions exactly; I would be in bed asleep with my legs open and wait for him to wake me the best way, but I always took the precaution of bathing first and my sleep might be only that I closed my eyes and held still when I heard him unlock the front door. Then as he got into bed with me he might call me by some outlandish name, “Mrs. Krausemeyer,” or “Battleship Kate,” or “Lady Plushbottom”—and I would pretend to wake up, and call him anything but Brian—“Hubert” or “Giovanni” or “Fritz”—and perhaps inquire, still with my eyes closed, whether or not he had placed five dollars on the dresser…whereupon he would scold me for trying to run up the price of tail in Missouri and I would get busier than ever, trying to prove that I was so worth five dollars.

Then, sated but still coupled, we would argue over whether or not I had put on a five-dollar performance. Which could result in tickling, biting, wrestling, spanking, laughing, and another go at it, with much bawdy joking throughout. I delighted in trying to be that duchess in the drawing room, economist in the kitchen, and whore in the bedroom that is the classic definition of the ideal wife. Perhaps I was never perfect at it, but I was happiest working hard at all three aspects of that trinity.

Brian also enjoyed singing bawdy songs while coupling, songs with plenty of rhythm to them, a beat that could be matched to the tempo of coition and speeded up or slowed down at will, songs like:

“Bang away, my Lulu!
“Bang away good and strong!
“Oh, what’ll I do for a bang away
“When my Lulu’s dead and gone!”

Then endless verses, each bawdier than the last:

“My Lulu had a chicken,
“My Lulu had a duck.
“She took them into bed with her
“And taught them how to—
“BANG! away my Lulu!
“Bang away good and strong!”

Until at last Briney couldn’t stretch it out any longer and had to spend.

While he was resting and recovering, he might demand of me a bedtime story, wanting to know how I had improved each shining hour with a little creative adultery.

He didn’t mean what I might have done with Nelson and/or Betty Lou; that was all in the family and didn’t count. “What’s new, Mo‘? Are you getting to be a dead arse in your old age? You, the Scandal of Thebes County? Tell me it’s not true!”

Now believe me, friends, between dishes and diapers, cooking and cleaning, sewing and darning, wiping noses and soothing children’s tragedies, I didn’t have time to commit enough adultery to interest even a young priest. After that ridiculous and embarrassing contretemps with Reverend Zeke I can’t recall any illicit bed bouncing Maureen did between 1906 and 1918 that my husband did not initiate and condone in advance…and not much of that as Briney was if anything even busier than I.

I must have been a great disappointment to Mrs. Grundy (several of her lived in our block, many of her went to our church) as, during those ten years leading up to the war that eventually was called “World War I” or “War of the Collapse, First Phase”—during that decade I not only tried to simulate the perfect, conservative, Bible-Belt lady and housewife, I actually was that sexless, modest, church-oriented creature—except in bed with the door locked, alone or with my husband or, on rare and utterly safe occasions, in bed with someone else but with my husband’s permission and approval and usually with his chaperonage.

Besides which, only a robot can stay coupled enough hours out of the year to matter. Even Galahad, tireless as he is, spends most of his time being the leader of Ishtar’s best surgical team. (Galahad—Galahad reminds me of Nelson. Not just in appearance; the two are twins in temperament and attitudes—even in body odor now that I think of it. When I get home, I must ask Ishtar and Justin how much of Galahad derives from Nelson. Since we Howards started with a limited gene pool, convergence, along with probability and chance, often comes close to physically reincarnating a remote ancestor in some descendant on Tertius or Secundus.)

Which reminds me of what I did with part of my time and how Random Numbers got his name.

I don’t think there was ever a month in the first half of the twentieth century but what both Briney and I were studying something…and usually studying a language besides, which hardly counts; we had to stay ahead of our children. We usually did not study the same thing—Briney did not study shorthand or ballet; I did not study petroleum extraction methods or evaporation control in irrigation. But study we did. I studied because I had been left with a horrid feeling of intellectual coitus interruptus through not being able to go on to college at least through a bachelor’s degree, and Brian studied because, well, because he was a Renaissance man with all knowledge his field. According to the Archives my first husband lasted I19 years. It is a cinch bet that he was studying some subject new to him the last few weeks of his life.

Sometimes we studied together. In 1906 he started in on statistics, probability, and chance by mail, the ICS school—and here were the books and the lessons in our house, so Maureen did them too, all but mailing my work in. So we both were immersed in this most fascinating field of mathematics when our kitten, Random Numbers, joined our lives, courtesy of Mr. Renwick, driver salesman for the Great Atlantic and Pacific Tea Company.

The kitten was an adorable mass of silver-gray fluff and was at first named Fluffy Ruffles through an error in sex; she was a he. But he demonstrated such lightning changes in mood, direction, speed, and action that Brian remarked, “That kitten doesn’t have a brain; he just has a skull full of random numbers, and whenever he bangs his head into a chair or ricochets off a wall, it shakes up the random numbers and causes him to do something else.”

So “Fluffy Ruffles” became “Random Numbers” or “Random” or “Randie. ”

As soon as the snow was gone in the spring of ‘07 we installed a croquet court in our back yard. At first it was played by us four adults. (Over the years it was played by everyone.) Then it was four adults and Random Numbers. Every time a ball was hit that kitten would draw his sword and CHARGE! He would overtake the ball and throw himself on it, grabbing it, all four limbs. Imagine, please, a grown man stopping a rolling hogshead by throwing himself around it. Better imagine football pads and a helmet for him.

Random wore no pads; he went into action wearing nothing but fluff and his do-or-die attitude. That ball must be stopped, and it was up to him to do it—*Allah il Allah Akbar!*

Only one solution—Lock up the cat while playing croquet. But Betty Lou would not permit that.

Very well, add to the rules this special ground rule: Anything done to a croquet ball by a cat, good or bad, was part of the natural hazards; you played it that way.

I remember one day when Nelson picked up the cat and cradled it in his left arm, then used his mallet with one hand. Not only did it not help him—Random jumped out of his arm and landed ahead of the ball, causing Nelson to accomplish nothing—but also we convened a special session of the Supreme Croquet Court and ruled that picking up a cat in an attempt to influence the odds was unfair to cats and an offense against nature and must be punished by flogging the villain around the regimental square.

Nelson pleaded youth and inexperience and long and faithful service and got off with a suspended sentence, although a minority opinion (from Betty Lou) called for Nelson to drive to a drugstore and fetch back six ice cream cones. Somehow the minority opinion prevailed, although Nelson complained that fifteen cents was too heavy a fine for what he had done and the cat should pay part of it.

Eventually Random Numbers grew up, became sedate, and lost his enthusiasm for croquet. But the cat rule remained and was adjudged to apply to any cat, be he resident or traveling salesman, and to puppies, birds, and children under the age of two. At a later time I introduced this rule onto the planet Tertius.

Did I mention the transaction under which I obtained Random Numbers from Mr. Renwick? Perhaps I didn't. He wanted to "swap a little pussy for a little pussy"—that's the way he expressed it. I walked right into that because I asked what he wanted for the kitten?—expecting him to say that there was no charge as the kitten hadn't cost him anything. I did not expect anything else because, while I was aware that some pedigreed cats were bought and sold, I had never actually encountered one. In my experience kittens were always given away, free.

I had not intended ever again to let Mr. Renwick inside the house; I remembered the first time. But I was unexpectedly confronted with a fact: Mr. Renwick carrying a cardboard shoe box with a kitten in it. Grab the box and shut the door in his face? Open the box on the front porch when he was warning me that the kitten was eager to escape, and scraping, scrambling sounds confirmed it? Lie to him, tell him, sorry, we have already acquired a kitten?

When the telephone rang—

I wasn't really used to having a telephone. I felt that a ringing telephone meant either bad news or that Briney was calling; either way, I had to answer it at once. I said, "Excuse me!" and fled, leaving him standing in our open door.

He followed me in, through the central hall, and into my sewing room/ office/chore room, where I was on the phone. There he put the shoe box down in front of me, and opened it…and I saw this adorable gray kitten while I was talking with my husband.

Brian was on his way home and had called to ask if there was anything I wanted him to pick up.

"I don't think so, dear. But do hurry home; I have your kitten. She's a little beauty, just the color of a pussywillow. Mr. Renwick brought her, the driver for the Great Atlantic and Pacific Tea Company. He's trying to screw me, Briney, in exchange for the kitten…No, I'm quite certain. He not only said so, but he has come up behind me and put his arms around me and is now playing with my breasts…What?…No, I didn't tell him anything of the sort. So do hurry. I won't fight with him, dear, because I'm pregnant, I'll just give in…Yes, sir; I will. *Au 'voir."* I hung up the receiver…although I had thought of using it like a policeman's truncheon. But I truly was unwilling to fight while I had a baby inside me.

Mr. Renwick did not let go of me, but when what I was saying penetrated his head, he held still. I turned around in his arms. "Don't try to kiss me," I said. "I don't want to risk so much as a cold while I'm pregnant. Do you have a rubber? A Merry Widow?"

"Uh— Yes."

"I thought you would have; I'm sure I'm not the first housewife you've tried this with. All right; do please use it, as I don't want to contract a social disease, and neither do you. Are you married?"

"Yes. Christ, you're a cool one!"

"Not at all. I simply won't risk being raped while I'm carrying a baby; that's all. Since you are married, you don't want to catch anything, either, so put on that rubber. How long does it take to drive from Thirty-first and Woodland?" (Brian had called from Twelfth and Walnut, much farther away.)

"Uh— Not very long."

"Then you'd better hurry or my husband will catch you at it. If you really do mean to do this to me."

"Oh, the hell with it!" He abruptly let go of me, turned away, headed for the front door.

He was fumbling with the latch when I called out, "You forgot your kitten!"

"Keep the damned cat!"

That is how I "bought" Random Numbers.

Raising kittens is fun, but raising children is the most fun—if the children happen to be your own—if you happen to be the sort of person who enjoys bearing and rearing children. For Jubal was right; it is subjective, a matter of one's individual disposition. I had seventeen children on my first go-around and greatly enjoyed rearing all of them—each different, each individual—and I've had more since my rescue and rejuvenation, and have enjoyed them even more because Lazarus Long's household is organized so that taking care of babies is easy for everyone.

But I often find other people's children repulsive and their mothers crashing bores, especially when they talk about their disgusting offspring (instead of listening to me talking about mine). It seems to me that many of those little monsters should have been drowned at birth. They strike me as compelling arguments for birth control. As my father pointed out years ago, I am an amoral wretch…who does not necessarily regard an unfinished human being, wet and soiled and smelly at one end and yelling at the other, as "adorable."

In my opinion many babies are simply bad-tempered, mean little devils who grow up to be bad-tempered, mean big devils. Look around you. The "sweet innocence" of children is a myth. Dean Swift had an appropriate solution for some of them in "A Modest Proposal." But he should not have limited it to the Irish, as there are many scoundrels who are not Irish.

Now you may be so prejudiced and opinionated that you feel that my children are less than perfect—despite the overwhelming evidence that mine were born with halos and cherubs' wings. So I won't bore you with every time Nancy brought home straight A's on her report cards. Practically every time, that is. My kids are smarter than your kids. Prettier, too. Is that enough? All right, I'll drop the matter. My kids are wonderful to me, and your kids are wonderful to you, and let's leave it at that, and not bore each other.

I mentioned the Panic of 1907 when I told about Betty Lou's marriage to Nelson but at the time I had no idea that a panic was coming. Nor did Brian, or Nelson, or Betty Lou. But history does repeat itself, somewhat and in some ways, and something that happened in early 1907 reminded me of something that happened in 1893.

After the birth of Georgie on Betty Lou's wedding day, I stayed home as usual, for a while, but as soon as I felt up to moving around, I left my brood with Betty Lou and went downtown. I planned to go by streetcar, was unsurprised when Nelson volunteered to drive me down in his Reo runabout. I accepted and bundled up warm; the Reo was rather too well ventilated; it had an open buggy somewhere in its ancestry.

My purpose was to move my savings account. I had placed it in the Missouri Savings Bank in 1899, when we married and settled in Kansas City, by a draft on the First State Bank of Butler (the booming metropolis of Thebes had no banks), where Father had helped me to open a savings account when we came back from Chicago. By the time I was married, it had grown to more than a hundred dollars.

Footnote: If I had more than a hundred dollars in a savings account, why did I serve my family fried mush for their evening meal? Answer: Do you think I am crazy? In 1906 in the American middle west, a sure way for a wife to castrate spiritually her husband would be to suggest that he was incapable of keeping food on the table; I didn't need Dr. Fraud to tell me that. Males live by pride. Kill their pride and they won't support wives and children. It would be some years before Brian and I would learn how to be utterly open and easy with each other. Brian knew that I had a savings account but he never asked me how much I had in it, and I would serve fried mush or do any symbolic equivalent as often as needed before I would buy groceries with my own money. Savings were for "a rainy day." We both knew this. If Brian fell ill, had to go to a hospital, I would use my savings as needed. We had no need to talk about it. Meanwhile Brian was the breadwinner; I did not intrude into his responsibility. Nor he into mine.

But what about Foundation monies? Didn't that hurt his pride? Perhaps it did. It may be indicative to take a look into the future: In the long run every dime we received from "ringing the cash register" wound up with our children, as each got married. Brian never mentioned to me any such intention. In 1907 it would have been silly to do so.

By early 1907 my savings account had grown to over three hundred dollars, by nickels and pennies and tightest economies. Now that I was working at home and could no longer go to school downtown it seemed smart to me to move my account to a little neighborhood bank near the southside post office substation. One of us four had to go to our post office box each day; whoever did it could make deposits for me. If ever I had to withdraw money, then that one could be I.

Nelson parked his runabout on Grand Avenue and we walked around to 920 Walnut. I took my passbook to a teller—did not have to wait; the bank was not crowded—and told the teller that I wanted to withdraw my account.

I was referred to an officer of the bank, over behind the railing, a Mr. Smaterine. Nelson put down the newspaper he had been glancing at, stood up. “Difficulty?”

“I don’t know. They don’t seem to want to let me have my money. Will you come with me?”

“Sure thing.”

Mr. Smaterine greeted me politely, but raised his brows at Nelson. I introduced them. “This is Mr. Nelson Johnson, Mr. Smaterine. He is my husband’s business partner.”

“How do you do, Mr. Johnson. Please sit down. Mrs. Smith, our Mr. Wimple tells me that you need to see me about something.”

“I suppose I do. I attempted to withdraw my account. He told me that I must see you.”

Mr. Smaterine gave a smile that displayed his false teeth. “We are always sorry to lose an old friend, Mrs. Smith. Has our service been unsatisfactory? ”

“Not at all, sir. But I wish to move my account to a bank closer to my home. It is not too convenient to come all this way downtown, especially in this cold weather.”

He picked up my passbook, glanced at the address in the front, then at the current amount farther on. “May I ask where you propose to transfer your account, Mrs. Smith?”

I was about to tell him, when I caught Nelson’s eye. He didn’t actually shake his head…but I’ve known him a long time. “Why do you ask that, sir?”

“It is part of a banker’s professional duty to protect his customers. If you wish to move your account—fine! But I want to see you go to an equally reliable bank.”

My wild animal instincts were aroused. “Mr. Smaterine, I have discussed this in detail with my husband"—I had not—"and I do not need to seek advice elsewhere."

He made a tent of his fingers. "Very well. As you know, the bank can require three weeks' notice on savings accounts."

"But, Mr. Smaterine, you yourself were the officer I dealt with when I opened my account here. You told me that that fine print was just a formality, required by the state banking act, but that you personally assured me that any time I wanted my money, I could have it."

"And so you can. Let's change that three weeks to three days. Just go home and write us a written notice of intent, and three business days later you can close your account."

Nelson stood up, put his hands flat on Mr. Smaterine's desk. "Now just one moment," he drawled loudly, "did you or did you not tell Mrs. Smith that she could have her money any time she wanted it?"

"Sit down, Mr. Johnson. And lower your voice. After all, you are not a customer here. You don't belong here."

Nelson did not sit down, did not lower his voice. "Just answer yes or no."

"I could have you evicted."

"Try it, just try it. My partner, Mr. Brian Smith, this lady's husband, asked me to come with Mrs. Smith"—Brian had not—"because he had heard that your bank was just a leetle bit reluctant—"

"That's slander! That's criminal slander!"

"—to be as polite to ladies as you are to businessmen. Now—Do you keep your promise to her? Right now? Or three days from now?"

Mr. Smaterine was not smiling. "Wimple! Let's have a check for Mrs. Smith's account."

We all kept quiet while it was made out; Mr. Smaterine signed it, handed it to me. "Please see that it is correct. Check it against your passbook. "

I agreed that it was correct.

"Very well. Just take that to your new bank and deposit it. You will have your money as soon as it clears. Say about ten days." He smiled again, but there was no mirth in it.

"You said I could have my money now."

"You have it. There's our check."

I looked at it, turned it over, endorsed it, handed it to him. "I'll take it now."

He stopped smiling. "Wimple!"

They started counting out banknotes. "No," I said, "I want cash. Not paper issued by some other bank."

"You are hard to please, Madam. This is legal tender."

"But I deposited real money, every time. Not bank notes." And I had—nickels and dimes and quarters and sometimes pennies. Once in a while a silver cartwheel. "I want to be paid back in real money. Can't you pay me in real money?"

"Of course we can," Mr. Smaterine answered stiffly. "But you will find, ah, over twenty-five pounds of silver dollars quite cumbersome. That's why bank certificates are used for most transactions."

"Can't you pay me in gold? Doesn't a great big bank like this one carry any gold in its vaults? Fifteen double eagles would be ever so much easier to carry than would be three hundred cartwheels." I raised my voice a little and projected it. "Can't you pay me in gold? If not, where can I take this to change it for gold?"

They paid in gold, with the odd change in silver.

Once we were headed south Nelson said, "Whew! What bank out south do you want? Troost Avenue Bank? Or Southeast State?"

"Nellie, I want to take it home and ask Brian to take care of it."

"Huh? I mean, 'Yes, Ma'am. Right away.' "

"Dear, something about this reminds me of 1893. What do you remember about that year?"

"Eighteen ninety-three—Let me see. I was nine and just beginning to notice that girls are different. Uh, you and Uncle Ira went to the Chicago Fair. When you got back I noticed that you smelled good. But it took another five years to get you to notice me, and I had to slide a pie under you to manage it."

"You always were a bad boy. Never mind my folly in '98; what happened in '93?"

"Hmm—Mr. Cleveland started his second term. Then banks started to fail and everybody blamed it on him. Seems a bit unfair to me—it was too soon after he was sworn in. The Panic of '93, they called it."

"So they did and my father did not lose anything in it, for reasons he described as pure dumb luck."

"Nor did my mother, because she always did her banking in a teapot on the top shelf."

"Father accidentally did something like that. He left Mother a fourmonths allowance, in cash, in four sealed envelopes, each with a date. He took with him cash, in gold, in a money belt. And he left money behind—whatever it was beyond what we needed—in a lockbox, again in gold.

"Nelson, he told me later that he had not guessed that banks were about to fail; he did it just to annoy Deacon Houlihan—Deacon 'Hooligan,' Father called him. Do you remember him? President of Butler State Bank."

"No, I guess he died without my permission."

“Father told me that the Deacon had remonstrated with him for drawing out cash. The Deacon said it was poor business practice. Just leave instructions to pay Mrs. Smith—Mother I mean—so much each month. Father should leave his money where it was and use checks—the modern way to do business.

“Father got balky—he’s good at that—and consequently the bank failures never touched him. Nelson, I don’t think Father did business with any bank after that. He just kept cash in a lockbox in his surgery. I think. Although with Father one is never sure.”

We had a conference about it when we got home, Brian, me, Nelson, Betty Lou. Nelson told them what had happened. “Getting money out of that bank was like pulling teeth. This boiled shirt certainly did not want to part with Mo’s money. I don’t think he would have done so if I had not made a loud, obnoxious nuisance out of myself. But that is only partly the point. Mo‘, tell ’em about Uncle Ira and a similar case.”

I did so. “Dears, I don’t claim to know anything about finance. I’m so stupid that I never have understood how a bank can print paper money and claim that it is just the same as real money. But today felt like 1893 to me…because it is just the sort of thing that happened to Father just before the banks started to fail. He didn’t get caught by bank failures because he was balky and stopped using banks. I don’t know, I just don’t know…but I felt uneasy and decided not to put my egg money back into a bank. Brian, will you keep it for me?”

“Here in the house it could be stolen.”

Nelson said, “And if it’s in a bank, the bank can fail.”

“Are you getting jumpy, Nel?”

“Maybe. Betty Lou, what do you think?”

“I think I’m going to draw out my thirty-five cents and find a Mason jar and bury it in the back yard.” She paused. “And then I’m going to write to my father and tell him what I’ve done and why. He won’t listen—he’s a Harvard man. But I’ll sleep better if I tell him.”

Brian said, “Some others also we must tell.”

“Who?” said Nelson.

“Judge Sperling. And my own folks.”

“We don’t want to shout it from the house tops. That could start a run.”

“Nel, it’s our money. If the banking system can’t afford to let us draw out our own money and sit on it, then maybe there is something wrong with the banking system.”

“Tsk, tsk. You some kind of an anarchist or something? Well, let’s get busy. The first ones in line always get the biggest pieces.”

Brian was so serious about it that he made a trip back to Ohio, expensive though it was for him to travel without a client to pay for it. There he talked to Judge Sperling and to his parents. I do not know details…but neither the Foundation nor Brian's parents were hurt by the Panic of 1907. Later on we all saw the United States Treasury saved by the intervention of J. P. Morgan…who was vilified for it.

In the meantime the assets of Brian Smith Associates were not buried in the back yard…but were locked up in the house, and we started keeping guns.

Correction: So far as I know, that was when we started keeping guns. I may be mistaken.

While Brian went to Ohio, Nelson and I tried a project: articles for trade journals such as *Mining Journal, Modern Mining,* and *Gold and Silver*. Brian Smith Associates ran small display advertisements in each of these each issue. Nelson had pointed out to Brian that we could get major advertising free by Brian writing articles for these journals—each of them carried about the same number of pages of articles and editorials as it did of advertisements. So instead of a little bitty one-column three-inch display card—no, not "instead of" but "in addition to"—in addition to advertising Brian should write articles. "Lord knows that the stuff they print is dull as ditch water; it can't be hard to write." So said Nelson.

So Brian tried and the result was dull as ditch water.

Nelson said, "Brian old man, you are my revered senior partner—Do you mind if I take a swing at this?"

"Help yourself. I didn't want to do it, anyhow."

"I have the advantage of not knowing anything about mining. You supply the facts—you have; I have them in my hand—and I will slide in some mustard."

Nelson rewrote Brian's sober factual articles about what a mining consultant's survey could accomplish in a highly irreverent style…and I drew little pictures, cartoons, styled after Bill Nye, to illustrate them. Me an artist? No. But I had taken Professor Huxley's advice ("A Liberal Education") seriously and had learned to draw. I was not an artist but I was a competent draftsman, and I stole details and tricks from Mr. Nye and other professionals without a qualm—without realizing that I was stealing.

Nelson's first attempt retitled Brian's rewritten article as "How to Save Money by Skimping" and featured all sorts of grisly mining accidents-which I illustrated.

The *Mining Journal* not only accepted it; they actually paid for it, five dollars, which none of us had expected.

Nelson eventually worked it into a deal in which Brian's by-line (ghosted by Nelson) appeared in every issue, and a quarter-page display for Brian Smith Associates appeared in a good spot.

At a later time a twin of that article appeared in *The Country Gentleman (The Saturday Evening Post's country cousin)* telling how to break your neck, lose a leg, or kill your worthless son-in-law on a farm. But the Curtis Publishing Company refused to dicker. They paid for the article; Brian Smith Associates paid for their display cards.

In January 1910 a great comet appeared and soon it dominated the evening sky in the west. Many people mistook it for Halley's Comet, due that year. But it was not; Halley's Comet came later.

In March 1910 Betty Lou and Nelson set up their own household-two adults, two babies—and Random Numbers had a bad time trying to decide where he lived, at The Only House, or with his slave, Betty Lou. For a while he shuttled between the two households, riding any automobile going his way.

In April 1910 the real Halley's Comet began to be prominent in the night sky. In another month it dominated the sky, its head as bright as Venus and its tail half again as long as the Great Dipper. Then it got too close to the Sun to be seen. When it reappeared in the morning sky in May it was still more magnificent. On May fifteenth Nelson drove us out to Meyer Boulevard before dawn so that we could see the eastern horizon. The comet's great tail filled the sky, slanting up from the east to the south, pointing down at the Sun below the horizon, an incredible sight.

But I got no joy from it. Mr. Clemens had told me that he had come in with Halley's Comet and he would go out with it…and he did, on April twenty-first.

When I heard—it was published in the *Star*—I shut myself in our room, and cried.

CHAPTER ELEVEN

A Dude in a Derby

They took me out of my cell today and led me, cuffed and hoodwinked, into what was probably a courtroom. There they removed the hoodwink and the cuffs…which left me the only one out of step; my guards were hooded and so were the three who (I think) were judges. Bishops, maybe, they were wearing fancy robes with that sacerdotal look.

Other flunkies here and there also were hooded—put me in mind of a Ku Klux Klan meeting, so I tried to check their shoes—Father had pointed out to me during the recrudescence of the Klan in the twenties that those hooded "knights" showed under their sheets the cracked, scuffed, cheap, and wornout shoes of the social bottom layer who could manage to feel superior to somebody only by joining a racist secret society.

I could not use that test on these jokers. The three "judges" were behind a high bench. The court clerk (?) had his recording equipment on a desk, his feet under it. My guards were behind me.

They kept me there about two hours, I think. All I gave them was "name, rank, and serial number"—"I am Maureen Johnson Long, of Boondock, Tellus Tertius. I am a distressed traveler, here by misadventure. To all those silly charges: Not guilty! I demand to see a lawyer."

From time to time, I repeated "Not guilty" or stood mute.

After about two hours, judged by hunger and bladder pressure, we had an interruption: Pixel.

I didn't see him come in. Apparently he had come to my cell as usual, failed to find me, and went looking—found me.

I heard behind me this *"Cheerlup!"* with which he usually announces his arrival; I turned and he jumped into my arms, started head bumping and purring, while demanding to know why I wasn't where I was supposed to be.

I petted him and assured him that he was a fine cat, a good boy, the best!

The middle ghost behind the bench ordered: "Remove that animal."

One of the guards attempted to comply by grabbing Pixel.

Pixel has absolutely no patience with people who do not observe correct protocol. He bit the guard in the fleshy part of his left thumb, and got him here and there with his claws. The guard tried to drop him; Pixel did not let go.

The other guard tried to help—now two wounded. But not Pixel.

That middle judge used some language quite colorful, got down and came around, saying: “Don’t you know how to grab a cat?”

—and proved at once that he did not. Now three wounded. Pixel hit the deck, running.

I then saw something that had been known to me only through inference, something that none of my friends and family claimed to have seen. (Correction: Athene has seen it, but Athene has eyes everywhere. I mean meat-and-bone people.)

Pixel headed straight for a blank wall at emergency full speed—and just as he seemed about to crash headlong into it, a round cat door opened in front of him, he streaked through it, and it closed instantly behind him.

After a bit, I was returned to my cell.

In 1912 Brian bought an automobile, a car—somewhere during that decade “automobile carriage” changed to “automobile,” and then to “auto,” and then to “motor car,” or “car”—the ultimate name for the horseless carriage, as it could not get any shorter.

Brian bought a Reo. Nelson’s little Reo runabout had proved most durable and satisfactory; after five years of hard wear it was still a good vehicle. The firm used it for many things, including dusty drives to Galena and Joplin and other towns in the white metals area, and records were kept and Nelson was paid mileage and wear-and-tear.

So when Brian decided to buy a car for his family he bought another Reo, but a family car, a five-passenger touring car, a beauty and one that I could see was safe for children, as it had doors and a top—the runabout had neither. Mr. R. E. Olds called the 1912 Reo his “Farewell Car,” claiming that it was the best car that he could design with his twenty-five years of experience, and the best that could be built, in materials and workmanship.

I believed him, and (far more important) Brian believed him. It may have been the “farewell” Reo but, when I left Earth in 1982, Mr. Olds’s name was still famous in autos, in “Oldsmobile.”

Our luxury car was quite expensive—more than twelve hundred dollars. Brian did not tell me what he had paid, but the Reo was widely advertised and I can read. But we got a lot for our money; it was not only a handsome, roomy touring car but also it had a powerful engine (thirty-five horsepower) and a top speed of fortyfive miles per hour. It was never driven at that speed, I think—the speed limit in the city was seventeen miles per hour, and the rutted dirt roads outside the city were quite unsuited to such high speed. Oh, Brian and Nelson may have tried it—opened the throttle wide on some freshly graded, level road out in Kansas somewhere; neither of them believed in bothering ladies with things that might worry them. (Betty Lou and I did not believe in worrying our husbands unnecessarily, either; it evens out.)

Brian outfitted the basic car with all sorts of luxuries that would make it pleasant for his wife and family—a windshield, a self-starter, a top, a set of side curtains, a speedometer, a spare tire, an emergency gas tank, *etc.* The tires had demountable rims and only rarely did Brian have to patch a tire beside the road.

It did have one oddity; its top could predict the weather. Put the top down; it rained. Put the top up; the sun came out.

It was a one-man top, just as the ads claimed. That one man was Briney—assisted by his wife, two half-grown girls, and two small boys, all of us straining and sweating and Brian nobly repressing the language he wanted to use. But eventually Brian figured out how to outsmart that top: Leave it up all the time. This insured good weather for motoring.

We surely did enjoy that car. Nancy and Carol named it "El Reo Grande." (Brian and I had lately taken up Spanish; as usual our children were trying to outwit us. Pig Latin never did work; they cracked the code at once. Alfalfa speech did not last much longer.) We had established early in our marriage that some occasions were for the entire family…and some were for Mama and Papa alone—children would stay home and not whine about it, lest the middle justice be invoked. (Mother had used a peach switch; I found that one from an apricot tree worked just as well.)

By 1912, with Nancy a responsible twelve-year-old girl, it was possible to leave the youngsters at home in her charge for a couple of hours or more in the daytime. (This was before Woodrow was born. Once he was big enough to walk, controlling him called for an Oregon boot and a morningstar.) This let Briney and me have some precious outings alone—and one of them got me Woodrow, as I have mentioned. Briney delighted in making love outdoors, and so did I; it gave a spice of danger to what was otherwise a sweet but lawful occasion.

But when the whole family went for a joy ride, we piled Nancy and Carol, Brian Junior and George, into the roomy tonneau…with Nancy charged with seeing that no one stood up on the back seat (not to save the leather upholstery but to protect the child); I sat up front with Marie, and Brian drove.

The picnic basket and the lemonade jug were carried in the tonneau, Carol being charged with keeping her brothers out of the picnic. We would drive out to Swope Park, picnic there, and see the zoo animals, then joy ride again after the picnic, perhaps clear out to Raytown or even Hickman Mills…then home with the children falling asleep, to a supper of picnic remains and cups of hot soup.

Nineteen twelve was a good year, despite a blizzard touted as the "worst since '86" (it may have been; I don't remember the '86 blizzard too clearly). It was a campaign year, with a noisy three-sided race, Mr. Taft running for reelection, Teddy Roosevelt at outs with his former protégé Mr. Taft and running on his own "Bull Moose" (Progressive Republican) ticket, and Professor Wilson of Princeton, now governor of his state, running on the Democratic ticket.

That last was a surprise outcome to an unbelievable month-long convention in which it seemed for days that Missouri's favorite son, Mr. Champ Clark, Speaker of the House, would be nominated. Mr. Clark led for twenty-seven ballots and had a clear majority on several but not the two-thirds majority the Democrats required. Then Mr. William Jennings Bryan made a bargain with Dr. Wilson, to be named secretary of state, and Governor Wilson was nominated on the forty-sixth ballot after many of the delegates had gone home.

I followed all this in the Star with deep interest as I had read Dr. Wilson's monumental (eighteen volumes!) *A History of the American People*, borrowing it a volume at a time from the Kansas City Public Library. But I did not mention my interest to my husband as I suspected that he favored Colonel Roosevelt.

The election day was the fifth but we did not learn the outcome at once—three days I think it was. Woodrow was born Monday the eleventh at 3:00 P.M., and arrived squalling. Betty Lou midwifed me; as usual I was too fast for my doctor and this time Briney was at work, as I had told him that it couldn't be sooner than the end of that week.

Betty Lou said, "Have you picked a name for this one?"

I said, "Yes. Ethel."

She held the baby up. "Take another look; that name doesn't match this tassel; better save it. Why don't you name him after our new president? That should give him a running start."

I don't remember what I said as Brian arrived about then, Betty Lou having telephoned him. She greeted him at the door with, "Come meet Woodrow Wilson Smith, president of the United States in 1952."

"Sounds good." Brian marched into our bedroom, imitating a brass band. The name stuck; we registered it with the Foundation and with the County.

When I thought it over, the name pleased me. I wrote a note to Dr. Wilson, telling him of his namesake and saying that I was praying for the success of his administration. I received back, first, a note from Mr. Patrick Tumulty, acknowledging my letter and saying that it was being brought to the attention of the president elect "but you will understand, Madam, that recent events have flooded him with mail. It will be several weeks before all of it can be answered personally."

Shortly after Christmas I did receive a letter from Dr. Wilson, thanking me for having honored him in the naming of my son. I framed it and had it for years. I wonder if it is still in existence somewhere on time line two?

The 1912 presidential campaign had been fought on the issue of the "High Cost of Living." The Smith family was not suffering but prices, food prices especially, were indeed rising—while as usual the farmers were complaining that they were not receiving even cost-of-production prices for what they grew. This may well have been so—I recall that wheat was less than a dollar a bushel.

But I did not buy wheat by the bushel; I bought food at a local grocery store and from my huckster and my milkman and so forth. Again Brian asked me if I needed a raise in household allowance.

"Possibly," I answered. "We are getting by, but prices are going up. A dozen freshly gathered eggs cost five cents now, and so does a quart of grade A. The Holsum Bread Company is talking about changing from two sizes at a nickel and a dime to two sizes at ten cents and fifteen cents. Want to bet that this does not mean a raise in price by the pound—I repeat, by the pound, not by the loaf—of at least twenty percent?"

"Find yourself another sucker, sister; I already bet on the election. I was thinking about meat prices."

"Up. Oh, just a penny or two a pound, but it goes on. But I've noticed something else. Mr. Schontz used to include a soup bone without being asked. And some liver for Random. Suet for birds in the winter. Now those things happen only if I ask for them and, when I do, he doesn't smile. Just this week he said that he was going to have to start charging for liver as people were beginning to eat it, not just cats. I don't know how I'm going to explain this to Random."

"Let's keep first things first, my love; my wedding present must be fed. How you behave toward cats here below determines your status in Heaven."

"Really?"

"That's straight out of the Bible; you can look it up. Have you talked to Nelson about cat food?"

"It would not occur to me to do so. Betty Lou, yes; Nelson, no."

"Just remember that he is a professional economist concerning the growing and marketing of foodstuffs and he has a handsome sheepskin to prove it. Nel tells me that, starting anytime now, cats and dogs are going to have their own food industry—fresh food, packaged food, canned food, special stores or special departments in stores, and national advertising. Big business. Millions of dollars. Even hundreds of millions."

"Are you sure he wasn't joking? Nelson will joke about anything."

"I don't think he was. He was quite serious and he had figures to back his remarks. You have seen how gasoline-powered machinery has been displacing horses, not just here in the city, but on farms—slowly but more each year. So we have out-of-work horses. Nelson says not to worry about those horses; the cats will eat them."

"What a horrid thought!"

At Brian's urging I worked up a chart that told me how grocery prices were rising. Fortunately I had thirteen years of exact records of what I had spent on food, what items, how much per peck, or pound, or dozen, *etc.* Briney had never required me to do it but it matched what my mother had done and it truly was a great help to me during those years of pinching every penny to know just what return I had received in food for each cent I had spent.

So I worked up this big chart, then figured out what a year's "ration" was, per person, as if I were feeding an army—so many ounces of flour, so many ounces of butter, of sugar, of meat, of fresh vegetables, of fresh fruits—not much for canned goods as I had learned, early on, that the only economical way to get canned goods was by canning stuff myself.

Eventually I produced a curve, the cost of a ration for one adult, 1899-1913.

It was a fairly smooth curve, trending steadily up, and with inflexure upward. There were minor discontinuities but, on the whole, it was a smooth first-order curve.

I looked at that curve and it tempted me. I got down my old text for analytical geometry, from Thebes High School, measured some ordinates, abscissas, and slopes—plugged in the figures and wrote down the equation.

And stared at it. Had I actually derived a formula by which food prices could be predicted? Something the big brains with Ph.D.s and endowed chairs could not agree on?

No, no, Maureen! There is not a crop failure on there, not a war, not any major disaster. Not enough facts. "Figures don't lie, but liars figure." #8220;There are lies, damned lies, and statistics." Don't make too much stew from one oyster.

I put my analytical work away where no one would find it. But I kept that chart. I did not use it for prediction but I did keep plotting that curve because it let me go to Briney and show him exactly why I needed a larger allowance, whenever I did—instead of waiting until it reached the “fried mush” situation. I did not hesitate to ask because Brian Smith Associates were prosperous.

I no longer was secretary-bookkeeper of our family firm; I had relinquished that status when Nelson, Betty Lou, and our business office had all moved out of the house together, two years earlier. No friction between us, not at all, and I had urged them to stay. But they wanted to be on their own and I understood that. Brian Smith Associates took an office near Thirty-first and Paseo, second floor, over a haberdashery, a location near the Troost Avenue Bank and the PO substation. It was a good neighborhood for an office outside the downtown financial district. The Nelson Johnsons had their first home of their own about a hundred yards south on a side street, South Paseo Place.

This meant that Betty Lou could handle the records and go to the bank and pick up the mail, while still taking care of her two children, i.e., the back room of the company’s “palatial suite” was converted into a day nursery.

Yet I was only twenty minutes away and could relieve her if she needed me, straight down Thirty-first by trolley car, good neighborhoods at both ends, where I need not feel timid even after dark.

We continued this way until 1915, when Brian and Nelson hired a downy duckling fresh out of Spaulding’s Commercial College, Anita Boles. Betty Lou and I continued to keep an eye on the books and one of us would be in the office if both men were out of town, as this child still believed in Santa Claus. But her typing was fast and accurate. (We had a new Remington now. I kept my old Oliver at home—a loyal friend, grown feeble.)

So I continued to know our financial position. It was good and got steadily better. Brian accepted points in lieu of full fee several times in the years 1906-1913; five of these enterprises had made money and three had paid quite well: a reopened zinc mine near Joplin, a silver mine near Denver, and a gold mine in Montana…and Briney was just cynical enough that he paid freely under the table to keep a close check on both the silver mine and the gold mine. He told me once, “You can’t stop high-grading. Even your dear old grandmother can be tempted when gold ore gets so heavy that you can simply pick it up and know that it is loaded. But you can make stealing difficult if you are willing to pay for service.”

By 1911 there was plenty of money coming in, but I could not tell where much of it was going—and I would not ask Briney. It came in, it showed in the books; Nelson drew out some of it, Brian drew out more of it. Some of it wound up in my hands and in Betty Lou's hands to support our two households. But that did not account for all of it. The firm's checking account was simply an aid to bookkeeping, a means to pay Anita and to pay by check other expenses; it was never allowed to grow larger than was needed for those purposes.

It was many years before I learned more than that.

On June 28,1914, in Sarajevo, Serbia, the heir to the throne of the Austro-Hungarian Empire was assassinated. He was Archduke Franz Ferdinand, an otherwise useless piece of royalty, and to this day I have never been able to understand why this event could cause Germany to invade Belgium a month later. I read carefully all the newspapers at the time; I've studied all the books I could lay hands on since, and I still can't see it. Sheer folly. I can see why, by a sort of insane logic, the Kaiser would attack his first cousin in St. Petersburg —a network of "suicide-compact" alliances.

But why invade Belgium?

Yes, yes, to get at France. But why get at France at all? Why go out of your way to start wars on two fronts? And why do it through Belgium when that would drag in the one nation on Earth with a navy big enough to bottle up the German High Seas Fleet and deny it the high seas?

I heard my father and my husband talking about these matters on August 4, 1914. Father had come over for dinner but it was not a merry occasion—it was the day of the invasion of Belgium and there had been extras out on the streets.

Brian asked, *"Beau-père,* what do you think about it?"

Father was slow to answer. "If Germany can conquer France in two weeks, Great Britain will drop out."

"Well?"

"Germany can't win that fast. So England will come in. So it will be a long, long war. Write the ending yourself."

"You mean we will be in it."

"Be a pessimist and you will hardly ever be wrong. Brian, I know little or nothing about your business. But it is time for all businesses to get on a war footing. What do you deal in that is bound to get involved?"

Briney said nothing for several moments. "All metals are war materials. But—*Beau-père,* if you have some money you want to risk, let me point out that mercury is indispensable for munitions. And scarce. Mostly they mine it in Spain. A place called Almaden."

"Where else?"

"California. Some in Texas. Want to go out to California?"

"No. Been there. Not my taste. I think I'll go back to my digs and get off a letter to Leonard Wood. Damn it, he made the switch from medical corps to line officer—he ought to be able to tell me how I can do it."

Briney looked thoughtful. "I don't want to be in the engineers again, either. I don't belong there."

"You'll be a pick-and-shovel soldier again if you wait and join up here."

"How's that?"

"The old Third Missouri is going to be reorganized as an engineer regiment. Wait around long enough and they'll hand you a shovel."

I kept my best unworried mask on, and kept on knitting. It felt like the end of April 1898.

The European War dragged along, horribly, with stories of atrocities in Belgium and of ships being sunk by German submarine boats. One could feel a division building up in America; the sinking of the Lusitania in May 1915 brought the dichotomy sharply to the fore. Mother wrote from St. Louis about the strong sentiment there for the Central Powers. Her parents, my grandpa and grandma Pfeiffer, apparently took it for granted that all decent people supported "the Old Country" in this struggle—this, despite the fact that Grossvater's parents had come to America in 1848 to get away from Prussian imperialism, along with their son, who was just the right age to be conscripted if they had not emigrated. (Grandpa was born in 1830.)

But now it was *"Deutschland Uber Alles"* and everybody knew that the Jews owned France and ran everything there, and if those American passengers had minded their own business and stayed home where they belonged, out of the war zone, they wouldn't have been on the Lusitania-after all, the emperor had warned them. It was their own fault.

My brother Edward in Chicago reported much the same sentiment there. He did not sound pro-German himself, but he did express a fervent hope that we would stay out of a war that wasn't any of our business.

This was not what I heard at home. When President Wilson made his famous (infamous?) speech about the sinking of the *Lusitania*, the "too proud to fight" speech, Father came over to see Brian and sat there, smoldering like a volcano, until all the children were in bed or elsewhere out of earshot. Then he used language that I pretended not to hear. He applied it mainly to the cowardly tactics of the Huns but he saved a plentiful portion for that "pusillanimous Presbyterian parson" in the White House. " 'Too proud to fight' ! What sort of talk is that? It requires pride in order to fight. A coward slinks away with his tail between his legs. Brian, we need Teddy Roosevelt back in there!"

My husband agreed.

In the spring of 1916 my husband went to Plattsburg, New York, where the previous summer General Leonard Wood had instituted a citizens training camp for officer candidates—Brian had been disappointed not to be able to attend it in 1915, and planned ahead not to miss it in 1916. Ethel was born while Brian was away, through some careful planning of my own. When he returned at the end of August, I had the property back in shape and ready to welcome him, i.b.a.w.m.l.o. so that he could w.m.t.b.w.—and "Mrs. Gillyhooley" did her best to be worth more than five dollars.

I suspect that I was, as my biological pressure was far up past the danger line.

It was the longest dry spell of my married life, in part because I was thoroughly chaperoned at home. At Brian's request Father lived with us while Brian was away. No harem guard ever took his duties more seriously than Father did. Brian had often "chaperoned" me as a shuteye sentry, protecting me from the neighbors, not from my own libidinous nature.

Father included protecting me from himself. Yes, I tested the water. I had known way back when I was still *virgo intacta* how thoroughly incestuous were my feelings toward my father. Furthermore I was certain that he was just as moved by me.

So about ten days after Brian drove away. when my animal nature was crawling up on me, I arranged it so that I missed saying goodnight to Father, then came into his room right after he had gone to bed, dressed in a low-cut nightgown and a not too opaque peignoir —freshly bathed and smelling good ("April Showers," a euphemism)—and said that I had come in to say goodnight, which he echoed. So I leaned over to kiss him, exposing my breasts and producing a wave of that sinful scent.

He pulled his face back. "Daughter, get out of here. And don't come around me again half naked."

"All naked, perhaps? *Mon cher papa, je't'adore.*"

"You shut't' door…behind you."

"Oh, Papa, don't be mean to me. I need to be cuddled. I need to be hugged."

"I know what you need but you are not going to get it from me. Now get out."

"What if I won't? I'm too big to spank."

He sighed. "So you are. Daughter, you are an enticing and amoral bitch, we both know it, we have always known it. Since I can't spank you, I must warn you. Get out this instant…or I will telephone your husband right now, tonight, and tell him that he must come home at once as I am unable to carry out my responsibilities to him and to his family. Understand me?"

"Yes, sir."

"Now get out."

"Yes, sir. May I make a short statement first?"

"Well—make it march."

"I did not ask you to couple with me but if you had—if we had done so, it would have done no harm; I am pregnant."

"Irrelevant."

"Let me finish, please, sir. Ages ago, back when you were requiring me to work out my own personal commandments, you defined for me the parameters of prudent adultery. I have conformed meticulously to your definition, for it turned out that my husband's values in this matter match yours exactly."

"I am pleased to know that…but, possibly, not pleased that you told me. Did your husband specifically authorize you to tell me that?"

"Uh—No, sir. Not specifically."

"Then you have told me a bedroom secret without the consent of the other person affected by the secret. Materially affected, as it is his reputation at risk as well as yours. Maureen, you have no right to place another person at risk without his knowledge and consent and you know it."

I kept quiet a long, cold moment. "Yes. I was wrong. Goodnight, sir."

"Goodnight, my darling daughter. I love you."

When Brian returned, he told us that he would be going back to Plattsburg again in 1917—if we were not already at war by then. "They want some of us to get there early and turn instructor to help train the new ones with no military experience…and if I will, I go from second to first lieutenant in a hurry. No promise in writing. But that's the policy. Beau-père, can you be here next year? Why don't you just stay on? No point in your opening up your flat again, and I'll bet that Mo's cooking is better than the restaurant cooking at that Greek joint under your flat. Isn't it? Careful how you answer."

"It's somewhat better."

" 'Somewhat'! I'll burn your toast!"

We had a small war on our southern border in 1916; "General" Pancho Villa raided across the border again and again, killing and burning. "Black Jack" Pershing, of Mindanao fame, who had been jumped by President Roosevelt from captain to brigadier general, was sent by President Wilson to find and seize Villa. Father had known Pershing when they both were captains in the fight against the Moros;

Father thought well of him and was delighted with his meteoric rise (with more to come).

Father pacified a small war at home, for he did stay on with us, and took Woodrow largely out of my hands, with full authority to exercise on Woodrow the low, the middle, and the high justice without consulting either of Woodrow's parents. Both Brian and I were relieved.

Father took a shine to my sixth child, and that left me free to hold Woodrow my favorite in my heart, with no need or temptation to let it show. (My children were all different, and I liked each one of them differently, just as with other people…but I did my utter best to treat them all with even justice, without any favoritism in act or manner. I tried. Truly I tried.)

At this great distance, more than a century, I think I at last know why my least likable son was my favorite:

Because he was most like my father, both in his good points and his bad. My father was by no means a saint…but he was "my kind of a scoundrel"…and my son Woodrow was almost his replica, sixty years younger, the same faults, the same virtues—and the two most stubborn males I have ever met.

Perhaps an unbiased judge might think that we three were "triplets"-aside from the unimportant fact that we were father, daughter, and daughter's son…and that they each were as emphatically male as I am female (I am so totally every minute a set of female glands and organs, that I can cope with it only by carefully simulating the sort of "lady" approved by Mrs. Grundy and Queen Victoria).

But those two males were stubborn. Me? *Me* stubborn? How could you think such a thing?

Father clobbered Woodrow as necessary (frequently), took over his education as he had taken over mine, taught him to play chess at four, did not need to teach him to read—like Nancy, Woodrow taught himself. It left me free to rear my other, civilized, well-behaved children with no difficulty and with no need to raise my voice. (Woodrow could have pushed me into being the sort of screaming scold I despise.)

Father's "adoption" of Woodrow left me more time with my lovely and loving and lovable husband. All too soon it was time for him to leave again for Plattsburg. Then I settled down for a truly dry spell. Nelson had been in town part of the time the year before. But now "Brian Smith Associates" had moved its physical location to Galena where Nelson was supervising a new mine that Brian had bought into, when his survey showed its worth but its developer needed more capital. Anita Boles had married and left us; our K.C. office was now just a post office box number, a telephone number transferred back to our house, and a little clerical work I could handle with ease, as my biggest boy, Brian Junior, now twelve, picked up the mail from the box on his bicycle each day on his way home from school.

So Nelson, my only utterly safe "relief husband," was too far away…and my father, the puritanical shikepoke, was watching me closely…so Maureen resigned herself to four, five, possibly six months in a nunnery.

Father often spent a couple of hours in the evening at a pool hall he called his "chess club." On a rainy night at the end of February he surprised me by bringing home with him a stranger.

He thereby subjected me to the greatest emotional shock of my life.

I found myself offering my hand and greeting a young man who matched in every way (even to his body odor, which I caught quite clearly—clean male, in fresh rut)—a man who was my father as my earliest memory recalled him.

While I smiled and made small talk, I said to myself, "Don't faint. Maureen, you must not faint."

For I had immediately gone into high readiness to receive a male. This male. This male who looked like my father, thirty years younger. I forced myself not to tremble, to keep my voice low, to treat him exactly like any other welcome guest brought to my house by husband or father or child.

Father introduced him as Mr. Theodore Bronson. I heard Father say that he had promised Mr. Bronson a cup of coffee, which gave me the respite I needed. I smiled and said, "Yes, indeed! For a cold and rainy night. Gentlemen, do be seated"—and I fled into the kitchen.

The time I spent in the kitchen, slicing pound cake, dishing up mints, setting out coffee service, cream and sugar, transferring coffee from the kitchen range coffeepot into a silver "company" serving pot —this busyness gave me time to pull myself together, not expose my own rut and (I hoped) cover some of my body odor simply by the odors of food and the fact that female clothing in those days was all-encompassing. I hoped that Father would not notice what I had been sure of, that Mr. Bronson felt the same about me.

I carried in the tray; Mr. Bronson jumped up and helped me with it. We had coffee and cake and small talk. I need not have worried about Father; he was busy with an idea of his own. He too had seen the family resemblance…and had formed a theory: Mr. Bronson was a by-blow of his brother Edward, killed in a train wreck not long after I was born. Father had us stand up, side by side, then look in the mirror over the mantelpiece together.

Father trotted out this possible theory of Mr. Bronson's "orphan" origin. It was many months before he admitted to me that he suspected that Mr. Bronson was not my cousin through my rakehell Uncle Edward, but my half brother through Father himself.

The talk that night let me, with all propriety and right under my father's nose, tell Mr. Bronson that I looked forward to seeing him at church on Sunday and that my husband expected to be home for my birthday and we would expect him for dinner…since it was Mr. Bronson's birthday, too!

He left soon after that. I bade Father goodnight and went up to my lonely room.

First I took a bath. I had bathed before supper but I needed another one—I reeked of rut. I masturbated in the tub and my breasts stopped hurting. I dried down and put on a nightgown and went to bed.

And got up and locked my bedroom door and took off my gown and got naked back into bed, and masturbated again, violently, thinking about Mr. Bronson, how he looked, the way he smelled, the timbre of his voice.

I did it again and again, until I could sleep.

CHAPTER TWELVE

Hang the Kaiser!

I'm wondering whether Pixel will come back at all, so disastrous was his last visit.

I tried an experiment today. I called out, "Telephone!" just as I had heard Dr. Ridpath do. Sure enough, a hologram face appeared…of a police matron. "Why are you asking for a telephone?"

"Why not?"

"You don't have telephone privileges."

"Who says so? If that is true, shouldn't someone have told me? Look, I'll bet you fifty octets that you're right and I'm wrong."

"Huh? That's what I said."

"So prove it. I won't pay until you prove it."

She looked puzzled and blinked out. We shall see.

Mr. Bronson was at church on Sunday. After the services, at the huddle at the front entrance where church members say nice things to the minister about his sermon (and Dr. Draper did preach a fine sermon if one simply suspended critical faculty and treated it as art)—at the door I spoke to him. "Good morning, Mr. Bronson."

"Good morning, Mrs. Smith. Miss Nancy. Fine weather for March, is it not?"

I agreed that it was, and introduced him to the others of my tribe who were present, Carol, Brian Junior, and George. Marie, Woodrow, Richard, and Ethel were home with their grandfather—I do not think Father ever entered a church after he left Thebes other than to get some friend or relative married or buried. Marie and Woodrow had been at Sunday School but were, in my opinion, too young for church.

We chatted inanities for a few moments, then he bowed and turned away and so did I. Neither of us showed in any fashion that the meeting had any significance to either of us. His need for me burned with a fierce flame, as did mine for him and we both knew it and neither acknowledged it.

Day after day we conducted our love affair wordlessly, never touching, not even a lover's glance, right under my father's eyes.

Father told me later that he had had his suspicions—"smelled a rat"—at one point, but that both Mr. Bronson and I had behaved with such propriety that Father had had no excuse to clamp down on us. "After all, my darling, I can't condemn a man for wanting you as long as he behaves himself-we both know what you are—and I can't scold you for being what you are—you can't help it—as long as you behave like a lady. Truth is, I was proud of both of you, for behaving with such civilized restraint. It's not easy, I know."

Through playing chess with my father and, shortly, with Woodrow as well, Mr. Bronson managed to see me, en passant, almost every day. He volunteered as assistant scoutmaster for the troop at our church…then drove Brian Junior and George home after Scout meeting the next Friday night—which resulted in a date with Brian Junior for the following afternoon to teach him to drive. (Mr. Bronson owned a luxury model of Ford automobile, a landaulet, always shining and beautiful.)

The following Saturday he took my five older children on a picnic; they were as charmed by him as I was. Carol confided to me afterward: "Mama, if I ever get married, Mr. Bronson is just the sort of man I want to marry."

I did not tell her that I felt the same way.

The Saturday after that one Mr. Bronson took Woodrow downtown to a Hippodrome Theater matinee to see the magician Thurston the Great. (I would have been delighted to be invited along; stage magic fascinates me. But I didn't dare even hint with Father watching me.) When Mr. Bronson returned the child asleep in his arms, I was able to invite him inside as Father was with me, lending his sanction to the meeting. Never once during that strange romance did Mr. Bronson enter our house without Father being there and then publicly present.

Once when Mr. Bronson fetched Brian Junior back from a driving lesson, I invited him in for tea. He inquired about Father. Learning that Father was not home, Mr. Bronson discovered that he was already late for an appointment. Men are more timid than women…at least in my experience.

Brian arrived home on Sunday the first of April, and on the same day Father left on a short visit to St. Louis—to see my mother I assume, but Father never discussed his reasons. I could have wished that Father had stayed home, so that Brian and I could have taken a little journey to nowhere, while Father guarded the teepee and Nancy did the cooking.

But I said nothing about this to anyone, as the children were as anxious to see their father and visit with him as I was to get him alone and take him to bed. Besides—Well, we no longer had an automobile.

Before leaving for Plattsburg this time Brian had sold “El Reo Grande.”

“Mo‘,” he had said, “last year, leaving in April, it made sense to drive to Plattsburg; I got lots of use out of the Reo there. But only a fool would attempt to drive from Kansas City to upstate New York in February. Last year in April J had to be pulled out of the mud three times; had it been February I simply would not have made it.

“Besides,” Briney had added, with his best Teddy Roosevelt grin, “I’m going to buy us a ten-passenger car. Or eleven. Shall we try for eleven?”

We tried for eleven but failed to ring the cash register that time. Briney went off to Plattsburg by train, with a promise to me that when he got back, he intended to buy the biggest passenger car available—a seven-passenger, if that was the biggest—and what did I think of a closed car this time? A Lexington seven-passenger sedan, for example? Or a Marmon? Or a Pierce-Arrow? Think about it, dear one.

I gave it little thought as I knew that, when the time came, Brian would make his own decision. But I was glad to know that we were going to have a bigger motor car. A five-passenger car is a bit cramped for a family of ten. (Or eleven when I managed to catch.)

So when Brian got home on April first, 1917, we stayed home and did our lovemaking in bed. After all, it isn’t necessary to do it in the grass.

That night, when we were tired but not ready to go to sleep, I asked, “When must you return to Plattsburg, my love?”

He was so long in answering I added, “Was that an improper question, Brian? It has been so long since ‘98 that I am unused to the notion of questions that may not be asked.”

“My dearest, you may ask any question. Some I may not be able to answer because the answer is restricted but far more likely I won’t be able to answer because a first lieutenant isn’t told very much. But this one I can answer. I don’t think I’ll be going back to Plattsburg. I’m sufficiently sure of it that I didn’t leave anything there, not even a toothbrush. ”

I waited.

“Don’t you want to know why?”

“My husband, you will tell me if it suits you. Or when you can.”

“Maureen, you’re too damned agreeable. Don’t you ever have any female-type nosiness?”

(Of course I have, dear man—but I get more out of you if I am not nosy!) “I would like to know.”

“Well—I don’t know what the papers here have been saying but the so-called ‘Zimmerman telegram’ is authentic. There is not a chance that we can stay out of the war more than another month. The question is: Do we send more troops to the Mexican border? Or do we send troops to Europe? Or both? Do we wait for Mexico to attack us, or do we go ahead and declare war on Mexico? Or do we declare war first on the kaiser? If we do, do we dare turn our backs on Mexico?"

"Is it really that bad?"

"A lot depends on President Carranza. Yes, it's that bad; I already have my mobilization assignment. All it takes is a telegram and I'm on active duty and on my way to my point of mobilization…and it's not Plattsburg." He reached out and caressed me. "Now forget war and think about me, Mrs. MacGillicuddy."

"Yes, Clarence."

Two choruses of "Old Riley's Daughter" later Brian said, "Mrs. Mac, that was acceptable. I think you've been practicing."

I shook my head. "Nary a bit, my love; Father has watched me unceasingly— he thinks I'm an immoral woman who sleeps with other men.

"What a canard! You never let them sleep. Never. I'll tell him."

"Don't bother; Father made up his mind about me before you and I ever met. How are the Plattsburg pussies? Tasty? Affectionate?"

"Hepzibah, I hate to admit this but—Well, the fact is…I didn't get any. Not any."

"Why, Clarence!"

"Honey girl, they worked my tail off. Field instruction and drills and lectures in the daytime, six days a week—and surprise drills on Sundays. More lectures in the evenings and always more book work than we could possibly handle. Stagger to bed around midnight, reveille at six. Feel my ribs; I'm skinny. Hey! That's not a rib!"

"So it isn't; it's not a bone of any sort. Hubert, I'm going to keep you in bed until we get you fatted up and stronger; your story has touched my heart."

"It's a tragic one, I know. But what's your excuse? Justin would have offered you a little gentle exercise, I'm certain."

"Dearest man, I did have Justin and Eleanor over for dinner, yes. But with a house full of youngsters and Father a notorious night owl I didn't even get my bottom patted. Nothing but a few gallant indecencies whispered into my horrified ear."

"Your what? You should have gone over there."

"But they live so far away." It was a far piece even by automobile, an interminable distance by streetcar. We had first met the Weatherals at our new church, the Linwood Methodist, when we moved into our home on Benton Boulevard. But that same year, after we got on friendly but not intimate terms with the Weatherals, they moved far out south into the new J. C. Nichols subdivision, the Country Club district, and there they switched to an Episcopalian church near their new home, which put them clear out of our orbit.

Briney and I had discussed them—they both smelled good—but they moved too far away for much socializing, and they were older than we and clearly quite well to do. All these factors left me a bit intimidated, so I had moved the Weatherals to the inactive file.

Then Brian ran into them again when Justin tried to get accepted for Plattsburg; Justin had given Brian as a reference, which flattered him. Justin was turned down for officer-candidate training—a damaged foot, an accident that had maimed him before he learned to walk. He limped but it was hardly noticeable. Brian wrote a letter, urging a waiver; it was not granted. But as a consequence Eleanor had invited us to dinner in January, a week before Brian left for Plattsburg.

A fine big house and even more children than we had—Justin had incorporated into the house design an elegant but expensive idea: Justin and Eleanor occupied not just a master bedroom but the entire upper floor of one wing, a master suite consisting of a sitting room (in addition to a formal parlor and a family sitting room downstairs), a huge bedroom with a pantry and wine safe in one corner, a bath broken into units: a tub, a shower, and two closets, one of the latter having in addition to its WC a fixture I had heard of but never seen before: a fountain bidet.

Eleanor helped me try out the latter and I was delighted! Just what Maureen, with her giveaway body odor, needed. I told her so, and told her why.

"I think your natural fragrance is delightful," Eleanor told me seriously, "and so does Justin."

"Justin said that about me?"

Eleanor took my face between her hands and kissed me, softly and gently, her mouth slack—not a tongue kiss but not totally dry. "Justin said that. He said considerably more than that. Dear, he feels enormous attraction to you"—I knew that—"and so do I. And so I do for your husband. Brian affects me all through. If by any chance you two share our feelings…Justin and I are willing and eager to realize our feelings in acts."

"You mean a trade off? All the way?"

"All the way! 'A fair exchange is no robbery.' "

I didn't hesitate. "Yes!"

"Oh, good! Do you want a chance to consult Brian?"

"Not necessary. I know. He wants to eat you, raw." I took her face between my palms, kissed her deeply. "How do we go about this?"

"Whatever is easiest for you, Maureen little love. My sitting room converts into a second bedroom in only seconds, and it has its own little powder room. So it can be either two couples, or all four of us together."

"Briney and I don't hide from each other. Eleanor, I have found in the past that, if I simply take my clothes off, it saves time and words."

Her mouth twitched. "I've found it so. Maureen, you astound me. I've known you ten years, I think. Back when we still lived on South Benton and we all attended Linwood Boulevard Methodist, Justin and I discussed you two as possible playmates. I told Justin that Brian had that look in his eyes but I couldn't see any way to crack your armor. The perfect lady, right out of *Godey's Lady's Book*. Since in order to be safe this sort of family seduction has to be negotiated between wives, we simply moved you to the Too-Bad list."

I was unhooking and unbuttoning, while chuckling. "Eleanor love, I broke my maidenhead at fourteen and I've been in heat ever since. Brian knows it and understands me, and loves me anyhow."

"Oh, delightful! Sweetheart, I gave away my cherry at twelve to a man four times my age."

"Then it couldn't have been Justin."

"Heavens, no!" She stepped out of her drawers; it left her in opera-length hose and evening slippers. "I'm ready."

"So am I." I was eyeing her and was sorry Briney hadn't shaved me, as she was as smooth as a grape—Briney was going to love her! Tall, statuesque, blonde.

A few minutes later Justin placed me on the Persian rug in front of the fire in their upstairs sitting room. Eleanor was beside me, with my husband. She turned her head toward me and smiled and took my hand, as we each received the other's husband.

I've heard formal discussions at salons in Boondock, complete with Stimulator and Interlocutor, debating the ideal number for polymorphous sensuality. There were some who favored trios, each of the four sorts or all four or any, and some who favored high numbers, and some who insisted that any odd number could produce maximum pleasure but no even number. Me, I still think that a foursome of families, all loving and lovable, cannot be beaten. I'm not running down any other combination and I like them all. I'm simply naming what I like best, year in and year out.

Later that night Brian telephoned Father and explained that the streets were getting icy; would he mind being zookeeper for us tonight?

Brian looked down at me. "What was the faraway look in your eye?"

"I was thinking about your favorite girl—"

"You're my favorite girl."

"Favorite blonde girl. Eleanor."

"Oh. Granted."

"And your favorite oldest daughter."

"Something ambivalent there. Positional grammar? Oldest favorite daughter. Favorite oldest daughter. Yes, I guess they both mean Nancy. Continue."

"News I couldn't put into a letter. Nancy did it."

"Did what? If you mean she did it with that pimply kid, I seem to recall that you concluded that a year ago. How many times can she stop being a virgin?"

"Briney, Nancy finally decided to tell me. She had a scare and that pimply kid doesn't come here anymore, because he wouldn't stop after a rubber broke. So she told Mama. So I douched her and checked her calendar with her and she came around just fine three days later, and she stopped being scared. But at last we were women together and we talked. I gave her some hurry-up Father-Ira instruction, including the lecture that goes with the Forberg etchings—hey, that thing does have a bone in it after all!"

"What do you expect? You're talking about Nancy's fancy; did you think I could stay limp? While Nancy's pretty fancy is verboten to me, I can dream, can't I? If you can dream about your father, I can dream about my daughter. Go ahead, hon; get to the good parts."

"Nasty man. Lecher. Brian, don't tempt Nancy unless you mean business or she will turn and sink her fangs into you; she's in an unstable state.

"And now to the good parts. Brian, as we agreed, I told Nancy about the Howard Foundation, and promised that you would talk to her about it, too…and I telephoned Judge Sperling. He referred me to a lawyer here in town, Mr. Arthur J. Chapman. Do you know him?"

"I know who he is. Corporation lawyer, never goes into court. Very expensive."

"And a trustee of the Howard Foundation."

"So I inferred from your remark. Interesting."

"I called on him, identified myself, and he gave me Nancy's list. For this area, I mean: Jackson and Clay counties, and Johnson County in Kansas."

"Good hunting?"

"I think so. On the list is Jonathan Sperling Weatheral, son of your favorite blonde."

"I'll be a brass-balled baboon!"

Later on that night Brian said, "So Ira thinks this city slicker is his brother's woods-colt?"

"Yes. You will think so, too, when you see him. Dear one, he and I look so much alike that you would swear that we are brother and sister."

"And you have an acute case of flaming drawers about him."

"That's a mild way of putting it. I'm sorry, dear."

"What is there to be sorry about? If your interest in sex were so mild that you never thought about any man but your poor, old, tired, worn out—*Ouch!"*—I had pinched him—"husband, you wouldn't be half as good tail as you are. As it is, you are quite lively, Mrs. Finkelstein. I prefer you as you are, good points and bad."

"Will you sign a certificate to that effect?"

"Certainly. You want it to show to your customers? Darling girl, I slipped the leash on you years ago, as I knew then and know now that you would never do anything that could risk the welfare of our children. You never have, you never will."

"My record isn't all that good, dearest. What I did with the Reverend Doctor Ezekiel was stupidly reckless. I blush whenever I think of it."

"Zeke the Greek was your rite of passage, my love. It scared the hell out of you and you'll never take a chance on a second-rater again. That's the acid test for adult adultery, my true love: what sort of person you select with whom to share your escapades. All other factors follow naturally from that choice. This Bronson who may or may not be your cousin: Would you be proud to have him here in bed with us tonight? Or would it embarrass you? Would you be happy about it? How does this bloke measure up?"

I thought about Briney's acid test and checked over Mr. Bronson in my mind. "Brian, I can't pass judgment. My head is spinning and I haven't any sense about him."

"Want me to talk to Father Ira about him? Nobody can pull the wool over Ira's eyes."

"I wish you would. Oh, don't suggest that I want to go to bed with Mr. Bronson; it would embarrass Father and he would say *Mrrrph!* and grunt and stalk out of the room. Besides, he knows it. I can feel it."

"I can understand that. Of course Ira is jealous of this city slicker, over you. So I'll stay away from that aspect of the subject."

" 'Jealous'? Father? Over *me*? How could he be?"

"My love, your great sweetness makes up for your slight stupidness. Ira can be—is—jealous over you for the same reason that I can be jealous over Nancy and her little pink fancy. Because I can't have her. Because Ira wants you himself and can't have you. Whereas I have no need to be jealous over you as I do have you and know that your riches are an inexhaustible bonanza. That beautiful flower between your sweet thighs is the original horn of plenty; I can share it endlessly with no possibility of diminishing its wealth. But for Ira it's the unattainable, the treasure that can never be reached."

"But Father can have me any time!"

"Wups! Did you finally get past his guard?"

"No, damn it! He won't give."

"Oh. Then the situation is unchanged; Ira won't touch you for the same reason I won't touch Nancy—although I'm not dead sure I'm as noble as Ira. You had better warn Nancy to stay covered up and downwind when dealing with her poor, old, frail pop."

"I'm damned if I'll warn her, Briney. You are the only male in the whole world I am absolutely certain would not hurt our Nancy in any way. If she can get past your guard, I'll cheer her on—I might learn something from her about how to cope with my own chinchy, impossible-to-seduce father."

"Okay, you redheaded baggage—I'll sniff Nancy and jump you. That'll larn yuh!"

"I'm skeered. Want a giggle? Brian Junior wanted to look. Nancy let him."

"Be damned."

"Yes. I kept my face straight; I neither laughed nor pretended to be shocked. B. Junior told her that he had never had a chance to see just how girls are different from boys—"

"What nonsense! All our kids have been naked in front of each other from time to time; we brought them up that way."

"But, dear, he really did have a point. A boy's differences hang right out where they can be seen; a girl's girlishness is mostly inside and doesn't show unless she lies down and makes it show. That is what Nancy did for him. Lay down, pulled up her robe—she was just out of her bath-spread her thighs wide, pulled her lips apart and showed him the baby hole. Probably winked at him with it. Probably enjoyed it herself. I would have—but none of my brothers asked me to."

"Wench, we haven't found anything yet that you don't enjoy."

I thought about that. "I think you're right, Brian. Some things hurt a little but mostly I have a wonderfully good time. Even this frustration over Mr. Bronson pleasures me more than it hurts…since I can tell my beloved husband all about it without causing him to stop loving me."

"Do you want me to tell Ira to lay off? Ask him to give you the shuteye chaperonage that I would give you?"

"Uh, let's wait until you have sized up Mr. Bronson. If you approve of him, I'll have my drawers off in a jiffy. If you don't, I'll continue my best Vestal Virgin act, which is what he has been getting. But, as I told you, my head is in a whirl and my judgment is no good. I need your cool head."

On Tuesday the *Post* and the *Star* each reported that President Wilson had asked the Congress to declare that a state of war exists between the United States of America and the German Empire. Wednesday we waited for the shout of "Extra!" in the street, or for the telephone to ring, or both—and neither happened. We required the children to go to school although they did not want to, Brian Junior especially. Woodrow was utterly unbearable; I had to refrain from switching him too often.

On Thursday Father returned home, in a state of tense excitement. He and Brian kept their heads together, and I stayed with them, mostly while delegating all that I could. Woodrow demanded that his grandfather—or someone—play chess with him, until Father turned him over his knee and walloped him, then made him stand in a corner.

On Friday it happened. War. The extras were on our street just before noon, and my husband was on his way almost at once, after telephoning a brother officer, a Lieutenant Bozell, who picked him up and off they drove to Fort Leavenworth, their M-Day assignment. Brian did not wait for his telegram.

Brian Junior and George were home for lunch, waited until their father left—then were late for school for the first time ever. Nancy and Carol came home from their school—Central High School, just a few blocks away—just in time to kiss their father goodbye. I did not ask if they were cutting classes or school had closed early; it did not seem to matter.

Father exchanged salutes with Lieutenant Bozell and with Brian, then headed straight for the streetcar line without coming back into the house. He said to me, "You know where I'm going, and why. I'll be back when you see me."

I agreed that I knew. Father had been increasingly restless ever since his request for active duty had been turned down.

I turned everything over to Nancy and went back to bed…for the second time, as I had impressed Father as baby watcher earlier, so that Brian and I could go back to bed after breakfast; we both guessed that this would be *Der Tag*.

But this time I went to bed just to cry.

About three I got up and Nancy served me tea and milk toast, I ate some of it. While I was fiddling with it, Father returned home in the most towering rage I have ever seen him in. He offered no explanation. Nancy told him that Mr. Bronson had called and had asked for him…and that brought it out of him in a flood.

I think "poltroon" was the mildest term that he used about Mr. Bronson. "Pro-German traitor" may have been the bitterest. He did not use profanity, just words of rage and disappointment.

I had great trouble believing it. Mr. Bronson a coward? Pro-German? But Father was detailed in his account and broken-hearted in his response. In my own confused grief—my beloved country, my beloved husband, my secret lover, all the same day—I had to force myself to remember that Father was hit just as hard. His brother's boy—or was Theodore Bronson his own son? Father had hinted at the possibility.

I went back to bed, cried some more, then lay there, dry eyed, with this triple ache in my heart.

Father tapped on my door. "Daughter?"

"Yes, Father?"

"Mr. Bronson is on the telephone, asking for you."

"I don't want to talk to him! Must I?"

"Certainly not. Is there anything you wish me to say to him?"

"Tell him…not to call me. Not to come here. Not to speak to any of my children…now or ever."

"I'll tell him. With a few words for myself, too. Maureen, his sheer gall amazes me."

About six Carol brought me a tray. I ate some of it. Then Justin and Eleanor came to see me and I cried on my big sister and they consoled me. Later—I don't know the time but it was after dark. Eight-thirty? Nine? I roused at some commotion downstairs. Shortly my father came up, tapped on the door. "Maureen? Mr. Bronson is here."

"What? !"

"May I come in? I have something to show you."

I didn't want to let Father in; I hadn't cleaned up and I was afraid Father would notice. But…Mr. Bronson here? Here? After what Father had said to him? "Yes, Father, come in."

He showed me a piece of paper. I read it; it was a carbon copy of an Army enlistment form…which stated that "Bronson, Theodore" was enlisted at the rank of private in the National Army of the United States.

"Father, is this some sort of bad joke?"

"No. He's here. That's authentic. He did it."

I got out of bed. "Father, will you start me a tub? I'll be down quickly."

"Certainly."

He went into my bath; I peeled off my gown, went in after him, thanked him. I didn't realize that I was naked in front of him until he looked at me and looked away. "Ask Nancy to serve him something, please. Is Nancy still up?"

"Everyone is up. Get into that tub, dear; we'll wait for you."

Fifteen minutes later I went downstairs. I suppose my eyes were red but I was smiling and no longer stunk and I was dressed in Sunday best. I hurried to him and offered my hand. "Mr. Bronson! We are all so proud of you!"

I don't remember details of the next hour or two hours or whatever. I sat there in a golden haze of bittersweet happiness. My country was at war, my husband was off to war, but at least I knew the deeper meaning of "better death than dishonor"—I knew now why Roman matrons said, "With your shield or on it." Those hours of believing that my beloved Theodore was not what I had believed him to be but a coward who would refuse to defend his country—those hours had been the longest, most hateful hours of my life.

I had not really believed that there were such subhuman creatures. I had never known one. Then to have it turn out simply to be a bad dream, the result of a misunderstanding over words—I've read somewhere that pleasure is relief from pain. Psychologists are a silly lot, mostly, but that night I enjoyed that sort of ecstatic pleasure. Even my fires of libido were banked and, for the time, I did not worry about Briney, so joyed was I that Theodore was indeed what a man to be loved must be: a hero, a warrior.

My big girls did their best to stuff him full and Carol made him a sandwich and wrapped it to take with him. Father was full of man-to-man advice, old soldier to new recruit; my big boys were falling over each other to try to do things for him, and even Woodrow was almost well-behaved. At last they all lined up to kiss him goodbye, even Brian Junior, who had given up kissing save for an occasional peck on his mother's cheekbone.

They all went to bed but Father…and it was my turn.

I have always been of such rugged health that winning Testaments for perfect attendance at Sunday School was never any trouble to me —so wasn't it nice that I had two Testaments when I needed them? I did not even need to think up a new inscription; what I had written for my husband was right for any Lucasta to any warrior off to the wars:

To Private Theodore Bronson
Be true to self and country.
Maureen J. Smith
April 6, 1917

I gave it to him, saw him read it, then I said, "Father?" He knew what I wanted, a decent amount of privacy.

"No." (Damn him! Did he really think that I would drag Theodore down on the rug? With the children awake and only a flight of stairs away?)

(Well, perhaps I would.) “Then turn your back.”

I put my arms up and kissed Theodore, firmly but chastely…then knew that a chaste kiss was not enough to say farewell to a warrior. I let my body grow soft and my lips come open. My tongue met his and I promised him wordlessly that whatever I had was his. “Theodore… take care of yourself. Come back to me.”

CHAPTER THIRTEEN

“Over There!”

My father, having been refused a return to active duty in the Army Medical Corps, was then turned down again when he tried to enlist as an infantry private (he made the mistake of showing his separation papers…which showed his 1852 date of birth), and then tried to enlist in St. Louis with a claimed date of birth of 1872 but was tripped up somehow—and finally did manage to enlist in the Seventh Missouri, an infantry militia regiment formed to replace Kansas City’s Third Missouri, which was now the 110th Combat Engineers training at Camp Funston and about to go “Over There.”

This new home guard, made up of the too young, too old, too many dependents, too halt, or too lame, was not fussy about Father’s age (sixtyfive) in view of his willingness to accept a dull job as supply sergeant and the fact that he needed no training.

I greatly appreciated Father’s decision to live with us for the duration. For the first time in my life I had to be the head of the family, and it’s really not Maureen’s style. I like to work hard and do my best while the key decisions are left up to someone bigger, stronger, and older than I, and with a warm male odor to him. Oh, I’ll be a pioneer mother if I must. My great-great-grandmother Kitchin killed three hostiles with her husband’s musket after he was wounded —and Father did teach me to shoot.

But I would rather be a womanly woman to a manly man.

Brian was emphatic that I must not let Father dominate me, that I must make the decisions—that I was head of the family. “Use Ira to back you up—fine! But you are boss. Don’t let him forget it, don’t let our children forget it, and don’t you forget it.”

I sighed internally and said, “Yes, sir.”

Brian Junior did nobly when he suddenly found himself in his father’s shoes—but twelve is young for that job; it was well that his grandfather had agreed to stay with us. Brian Junior and his brother George kept on with their jobs, delivering the *Journal* and lighting street lamps, and still brought home straight A’s. When the summer ended and the weather turned cold, I started getting up at four-thirty A.M. as they did, and served them hot cocoa before they started out.

They enjoyed it and it made me feel better as I watched them start off to work before daylight. The winter of 1917-18 was bitter; they had to bundle up like Esquimaux.

I wrote to Betty Lou every week, and also to Nelson. My beastly, lovable cousin Nelson came home on the Monday following the declaration of war and told Betty Lou, "Hon, I've found a wonderful way to avoid going into the Army."

"How? Castration? Isn't that rather drastic?"

"Somewhat. At least I think so. Guess again."

"I know! You're going to jail."

"Even better than jail. I've joined the Marines."

So Betty Lou was managing our mine. I had no doubt that she could do it; she had been in on every detail from the day we acquired majority ownership. She was not a mining engineer but neither was Nelson. The minority owner was our mining superintendent—not a graduate engineer either but with over twenty-five years of white-metals experience.

It seemed to me that it would work. It would have to work. It was "Root, hog, or die."

During those war years people all over our beloved country were doing things they had never done before—doing them well or doing them badly, but trying. Women who had never driven even a team of horses were driving tractors, because their husbands had gone to "Hang the kaiser!" Student nurses were supervising whole wards because graduate nurses were in uniform. Ten-year-old boys such as my George were knitting squares for blankets for British Tommies and buying Baby Bonds with money earned from newspaper routes. There were dollar-a-year men, and four-minute speakers, and Salvation Army lassies (loved by every serviceman), and volunteers for every sort of special war work, from rolling bandages to collecting walnut shells and peach pits for gas masks.

Meanwhile what did Maureen do? Nothing much, I suppose. I cooked and kept house for a family of ten, with much help from my four oldest and even some from my eight-year-old, Marie. I never missed a Red Cross bandage rolling. I saw to it that my family observed all meatless, wheatless, sweetless days and other economies of scarce foods decreed by Mr. Herbert Hoover…while learning how to make candies and cookies and cakes with sorghum and corn syrup and honey (all unrationed) in place of sugar (rationed) as Corporal Bronson's buddies appeared to be capable of eating a whole bakeshop of such things.

Shortly Carol took over this attempt to fill hollow legs; she considered Corporal Bronson "her soldier." We all wrote to him, in rotation—and he wrote back, to all of us but especially to Father.

There arose a church-sponsored movement for families to "adopt" lonely servicemen. Carol wanted us to adopt Corporal Bronson—so we did, subject to Brian's approval, which came by return mail.

I wrote to my husband every day—and would tear up a letter and start again if, on rereading, I found in it bad news or a flavor of selfpity…which meant that I tore up letters again and again and again until I learned how to write a proper Lucasta letter, one to lift a warrior's morale, not drag him down.

That early in the war Brian was not far away, at Camp Funston, adjacent to Manhattan, Kansas, about a hundred miles west of Kansas City. After three months of not coming home at all Briney started coming home about once a month for short weekends—Saturday afternoons to Sunday evenings—when and if he could arrange to ride with another officer. It was a practical distance for a forty-four-hour pass (noon Saturday to eight A.M. Monday) by automobile, but not for travel by train.

In those days trains were ordinarily much faster than automobiles, as there were so few paved roads—none in Kansas that I can remember. There was a direct rail line, the Union Pacific. But on all railroads troop trains had first priority, freight trains headed east had second priority, other freight trains had third priority…and passenger trains could use the rails only when nobody else wanted them. Wartime precedence—Mr. McAdoo was strict about it. So Brian's trips home were infrequent as they depended on duty schedules of brother officers with automobiles.

I sometimes wondered whether or not Brian regretted having sold "El Reo Grande." But I did not say anything and neither did he. Count your blessings, Maureen! This is wartime and your husband is a soldier. Be glad he is able to come home occasionally and that he is not (yet) being shot at.

The carnage in Europe got worse and worse. In March 1917 the tsar was overthrown. In November 1917 the Communist Bolsheviki displaced President Kerensky's government, and the Communists immediately surrendered to the Germans.

From then on we were in for it. The German veterans from the Eastern Front were moving by whole division to the Western Front at a time when we had landed only a few of our troops in France. The Allies were in bad trouble.

I did not know it. Certainly my children did not. I suspect that they reckoned their father as equal to at least two German divisions.

In May 1918 I was able to tell my husband that we had "rung the cash register" on his last weekend at home; I was two weeks overdue. Yes, I know that with many women this is not a sure sign—but it is with Maureen. I felt so euphoric about it that I avoided reading the newspapers and just enjoyed being me.

Brian went into Manhattan and telephoned me from there, for privacy. "Is this Myrtle, the Fertile Turtle?"

I answered, "Not so loud, Claude; you'll wake my husband. No, I won't be fertile again for another eight months."

"Congratulations! I'll plan on coming home for Christmas; you won't need me sooner than that."

"Now you listen to me, Roscoe; I'm not taking the veil, I'm merely having a baby. And I do have other offers."

"From Sergeant Bronson, perhaps?"

I caught my breath and did not answer. Presently Brian said, "What's the matter, love? Children where they can overhear you?"

"No, sir. I've taken the phone into our bedroom and there is no one else upstairs. Beloved, that man is as stubborn as my father. I have invited him here, Father has invited him here, and Carol invites him at least once a week. He thanks us…and then says that he doesn't know when he'll be granted any leave. He's admitted that he is off duty alternate weekends but he says that the actual time on pass is not enough to go that far from camp . "

"That's almost true. Since he doesn't have a car. Since he left his car with Ira. Or with Brian Junior."

"Pish and tosh. The Weston boy is home every other weekend and he's only a private. I think I'm a woman scorned."

"Nick Weston picks up his son in Junction City and you know why. But don't fret, Mabel; the money's on the table. I saw Carol's favorite soldier just today."

I reswallowed my heart. "Yes, Briney?"

"I find that I agree with Carol. And with *mon beau-père*. I already knew that Bronson is as fine a sergeant instructor as we have; I've checked his efficiency marks each week. As for Sergeant Bronson himself, he puts me in mind of Ira. As Ira must have looked at that age."

"Sergeant Bronson and I look like twins."

"So you do but on you it looks better."

"Oh, fiddle! You have always said that I look my best with a pillow over my face."

"I say that to keep you from becoming too conceited, beautiful. You are gorgeous and everybody knows it, and you look like Sergeant Bronson in spite of it. But he is most like Ira in his personality and in his Gung-Ho attitude. I fully understand your wish to trip him and beat him to the rug. If you still feel that way. Do you?"

I took a deep breath and sighed it out. "I do, sir. If our daughter Carol doesn't crowd me out and beat me to it."

"No, no! By seniority, please; this is wartime. Make her wait her turn."

"Don't tell Carol it's okay unless you mean it, dear man—because she means it."

"Well, somebody's going to do it to Carol…and I think a lot better of Bronson than I do of that pimply young snot who broke in our Nancy. Don't you?"

"Oh, heavens, yes! But the matter is academic; I have given up all hope of getting Sergeant Bronson to enter this house. Until the war is over, at least."

"I told you not to fret. A little bird whispered in my ear that Bronson will soon receive a midweek pass."

"Oh, Brian!" (I knew what a midweek pass meant: orders overseas.)

"Ira was right; Bronson is eager to go Over There, so I put him on the list, a special requisition from Pershing's staff for sergeant instructors. Another little bird let me know that my own request was being acted on favorably. So I expect to be home about the same time. But—Listen closely. I think I can arrange it so that you will have a twenty-four-hour clear shot at him. Can you bring him down in that length of time?"

"Oh, goodness, Briney!"

"Can you, or can't you? I've known you to manage it in an hour with just a horse and buggy to work with; today you have at your disposal a guest bedroom with its own bath. What does it take? Cleopatra's barge?"

"Brian, Father supplied that horse and buggy knowing what was up and actively cooperating. But this time he considers it his bounden duty to stand over me with a shotgun. Except that it is a loaded thirty-eight and he would not hesitate to use it."

"Can't have that; General Pershing wouldn't like it—good sergeant instructors are scarce. So I had better brief Ira on the operation plan before I hang up—which I must soon; I am running out of nickels and dimes. Is Ira there?"

"I'll get him."

Sergeant Theodore did get that midweek pass, from just after Retreat on Monday to eight o'clock muster Thursday morning—and at last he did come to Kansas City. At that time the picture shows always included a comedy—John Bunty, Fatty Arbuckle, Charlie Chaplin, or the Keystone Kops. That week I managed to outdo both Fatty Arbuckle and the Keystone Kops in always stepping into a bucket or falling over my feet.

To begin with, that difficult man, Sergeant Theodore, did not show up at our house until late Tuesday afternoon…when Brian had told me that Sergeant Theodore's pass should cause him to arrive at our house by midmorning at the latest.

"Where have you been? What took you so long?" No, I did not say anything of the sort. I may have felt like saying it…but I had learned the relative merits of honey and vinegar back when I was still a virgina long time ago indeed. Instead I took his hand, kissed his cheek, and said in my warmest voice, "Sergeant Theodore…it is so good to have you home."

I played Cornelia and her Jewels before and during dinner—held my peace and smiled while all my children vied for his attention…including Father, who wanted to talk soldier talk with him. At the end of dinner Father suggested (by prearrangement with me) that Staff Sergeant Bronson take me for a spin, and then squelched attempts by the younger children to come along—especially Woodrow, who wanted both to play chess and to be taken to Electric Park.

So at last Sergeant Theodore and I headed south just at sundown. In 1918 there was very little south of Thirty-ninth Street on the east side of Kansas City even though the city line had been pushed clear south to Seventy-seventh Street in order to include Swope Park. Swope Park had many popular lovers' lanes but I wanted a place much more private-and knew some, as Briney and I had searched all the back roads one time and another, looking for what Briney called "poontang pastures," grassy places private enough to evade the buzzard eye of Mrs. Grundy.

All along the east side of Kansas City runs the Blue River. In 1918 it held many delightful spots—as well as thick bushes, deep mud, chiggers, mosquitoes, and poison ivy; one had to know where to go. If you went south but not too far south, and knew where to cross the tracks of the St. Looie and Frisco, you could work your way into a wooded, grassy dell as nice as anything in Swope Park but utterly private, as it was surrounded by river and railroad embankment save for one narrow lane leading into it.

I wanted that particular spot; I was sentimental about it. When in 1912 we had become footloose through Briney's having purchased "El Reo Grande," that was the first place Briney had taken me for outdoor loving. That delightful picnic (I had fetched along a lunch) was the occasion on which I became pregnant with Woodrow.

I wanted to receive my new love into me first on that very spot—and then tell my husband about it in every detail, giggling with him over it while we made love. Briney did so enjoy my trips over the fence and always wanted to hear about them before, during, or after our own lovemaking, or all three, as a sauce to encourage us in more and heartier lovemaking.

Brian always told me about his own adventures, but what he liked best was to hear about mine.

So I took Sergeant Theodore to the spot marked X.

Time was short; I had promised Father that I would stay out, at most, only long enough to tumble him, then wait another half or three-quarters of an hour for that wonderful, relaxed second go at it—call it ten-thirty or eleven. “So I should be home about the time you get back from the Armory, Father.”

Father agreed that my plans were reasonable…including our need for a second engagement if the first one went well.

“Very well, Daughter. If you have to be later, please telephone so that we won’t worry. And—Maureen.”

“Yes, Father?”

“Enjoy it, darling.”

“Oh, *mon cher papa, tu es aimable! je’t‘adore!”*

“Go out there and adore Sergeant Ted. You will probably be his last piece for a long time…so make it a good one! Love you, best of daughters.”

My usual method of letting myself be seduced is to decide ahead of time, create or help create the opportunity, then cooperate with whatever advances the nominal seducer makes. (Contrariwise, if I have decided against it, I simply see to it that no opportunity arises.) That night I did not have time for the ladylike pianissimo protocol. I had just this one chance and only two hours to make it work—and no second chance; Theodore was going overseas. A warrior’s farewell had to be now.

So Maureen was not ladylike. As soon as we turned off Benton Boulevard and the gathering dusk had given us some privacy, I asked him to put his arm around me. When he did so, I reached up, took his hand and placed it on my right breast. Most men understand that.

Theodore understood it. He caught his breath. I said, “We haven’t time to be shy, dear Theodore. Don’t be afraid to touch me.”

He cupped my breast. “I love you, Maureen!”

I answered soberly, “We have loved each other since the night we met. We simply could not say so.” I raised his hand, then slid it down the full neck of my dress, felt scalding excitement as his hand touched my breast.

He answered huskily, “Yes. I didn’t dare tell you.”

“You would never have told me, Theodore. So I had to be bold and let you know that I feel it, too. The turn is just ahead, I think.”

“I think so too. I’ll need both hands to drive that lane.”

“Yes, but only till we get there. Then I want *both* your arms…and *all* your attention."

"Yes!"

He drove in, turned his car around and headed out, turned off his lights and stopped his engine, set his hand brake and turned to me. He took me in his arms and we kissed, a fully-shared kiss, with our tongues exploring and caressing and talking wordlessly. I was in Heaven. I still think that a totally unrestrained kiss is more intimate than is coupling; a woman should never kiss that way unless she intends to couple at once in whatever way he wants her.

Without words I said this to Theodore. As soon as our tongues met I pulled up my skirt, took his hand and put it between my thighs. He still hesitated, so I moved his hand farther up.

No more hesitation—All Theodore needed was to be certain that I knew what I wanted and that his best attentions were welcome. He explored me gently, then slipped a finger inside. I let it enter, then squeezed it as hard as I could—and congratulated myself on never having skipped my exercises even a day since Ethel was born, two years earlier. I love to surprise a man with the strength of my vaginal sphincter. My passage is so baby-stretched that, if I did not work endlessly to overcome it, I would be "big as a barn door and loose as a goose"—so says my father, whose advice got me started on this routine years ago.

We were now past all shyness, any turning back. But I had something I had to tell him. I got my tongue back and took my mouth a half inch from his, chuckled against his mouth. "Surprised to find that I am not wearing bloomers? I took them off when I went upstairs…for I can't tell my gallant warrior a proper farewell with drawers in the way. Don't hold back, beloved soldier mine; you can't harm me, I'm expecting."

"What did you say?"

"Must I always be the bold one? I am pregnant, Theodore; no possible doubt, I am seven weeks gone. So don't use a rubber on me —"

"I can't, I don't have one."

"So? Then isn't it nice that you don't need one? But didn't you expect to have me?"

"No. I did not. Not at all."

"But you're going to have me. You can hardly get out of it now. You'll have me bare, darling, no rubber. Would you like me to be bare all over? I will be if you ask me to. I'm not afraid."

He stopped to kiss me fiercely. "Maureen, I don't think you are ever afraid of anything."

"Oh, yes, I am. I would not dare be alone on Twelfth Street at night. But afraid of sex and loving? No, not anything I can think of. So help yourself, my darling. If I know how, I'll do it. If I don't, show me and I'll try." (Theodore, stop talking and take me!)

"This seat is narrow."

"I hear that the young people take out the back seat and put it on the ground. There is a robe in the back seat, too."

"Um, yes."

We got out of his car—and ran into the most confounded Keystone Kops contretemps I have ever experienced.

Woodrow.

My favorite, Woodrow, whom I could happily have throttled at that moment, was in the back seat, and woke up as I opened the door. Well, I think he woke up; he may have been awake and listening the whole time—memorizing any words he did not know, for later investigation—and blackmail.

Oh, that boy! Would the world let him grow up? I wondered.

But what I said, in my happiest voice, was: "Woodrow, you're a scamp! Sergeant Theodore! See who is sleeping in the back seat." I reached behind me and tried to button Theodore's breeches.

"Sergeant Ted promised to take me to Electric Park!"

So we went to Electric Park, thoroughly chaperoned.

I wonder if other women have as much trouble getting themselves "ruined" as I do?

About twenty hours later I was in my own bed, my husband Captain Brian Smith on my right, my lover Captain Lazarus Long on my left. Each had an arm under my neck, each was using his free hand to caress me.

I was saying, "Brian beloved, when Lazarus completed the ritual by answering, 'But not "While the Evil Days Come Not," ' I almost fainted. When he said that he was descended from me—from us, you and me-from all three of us, you and me and Woodrow—I was convinced that I was losing my mind. Or had lost it."

Briney tickled my right nipple. "Don't worry about it, Swivel Hips; on a woman it hardly shows. As long as she can still cook. Hey! Stop that."

I eased up on him. "Sissy. I didn't do that very hard."

"I'm in a weakened condition. Captain Long, as I understand it, you decided to reveal yourself—against your own best interests, I believe-in order to tell me that I won't get hurt in this war."

"No, Captain, not that at all."

Briney sounded puzzled. "I must confess that I don't understand."

"I revealed that I am a Howard from the future in order to reassure Mrs. Smith. She's been worrying herself sick that you might not come back. So I told her that I was certain that you did come back. Since you are one of my direct ancestors, I studied your biographical resume before I left Boondock. So I knew."

"Well—I appreciate your motives; Maureen is my treasure. But it is reassuring to me, too."

"Excuse me, Captain Smith. I did not say that you won't get hurt in this war."

"Eh? But you just did. So I thought."

"No, sir. I said that you will come back. You will. But I did not say that you won't get hurt. The Archives in Boondock are silent on that point. You may lose an arm. Or a leg. Or your eyes. Or even become a basket case; I don't know. I'm sure of just this much: you will live through it and won't lose your testicles and penis, because the Archives show that you two have several more children. Ones you will sire after you come back from France. You see, Captain, the Howard Family Archives are mostly genealogies, with few details otherwise."

"Captain Long—"

"Better call me 'Bronson' sir. Here I'm a staff sergeant; my ship is lightyears away and far in the future."

"Then knock off calling me 'Captain,' for Pete's sake. I'm Brian; you're Lazarus."

"Or Ted. Your children call me 'Uncle Ted' or 'Sergeant Ted.' Calling me 'Lazarus' could involve all sorts of explanations."

I said, "Theodore, Father knows you are Lazarus and so do Nancy and Jonathan. And so will Carol when you take her to bed. You let me tell Nancy when you took her to bed; my big girls are too close to each other to keep such secrets from each other. So it seems to me."

"Maureen, I said that you could tell anyone because you would not be believed. Nevertheless each case involves long explanations. But why are you assuming that I am going to take Carol to bed? I did not say that I would. And I have not asked for that privilege."

turned my face to the right. "Briney, do you hear this man? Do you see now why it has taken me more than a year to trip him? He didn't offer the slightest objection to screwing Nancy—"

"I'm not surprised; neither did I."My husband leered and licked his lips. "Nancy is special. I told you."

"You're an old goat, my beloved. I don't believe you've turned down anything female since you were nine—"

"Eight . "

"You're boasting. And untruthful. And Theodore is just as bad. He let me think he was willing to satisfy Carol's greatest ambition once I cleared it with headquarters, meaning you…and I did, and then I told Carol not to despair, that Mama was working on it and it looked hopeful, quite hopeful. And now he acts as if he had never heard of the idea."

"But, Maureen, I expected Brian to object. And he has."

"Now wait a moment, Lazarus. I did not object. Carol is physically a grown woman and—I have today learned—no longer virgin…and not surprising; she's a year older than her mother was—"

"More nearly two,"I put in.

"Shut up, you; I'm pimping for our daughter. All I did was lay down some reasonable rules for Carol's protection. Lazarus, you did agree that they were reasonable?"

"Oh, certainly, Captain. I simply refused to accept them. My privilege. Just as it is your privilege to make them. I have accepted that you do not want me to copulate with your daughter Carol other than by your rules. That settles it; I won't touch her."

"Very well, sir!"

"Gentlemen, gentlemen!"I almost let my voice rise. "You both sound like Woodrow. What are these rules?"

Theodore said nothing. Brian answered in a pained voice, "First, I asked him to use a rubber. Didn't matter with you or Nancy; both of you broads are knocked up. He refused. I then—"

"Are you surprised, my darling? I've often heard you refer to it as 'washing your feet with your socks on.' "

"Yes, but Carol does not need a baby this season. Certainly not a little bastard before she's considered her Howard options. But Mo', I did concede that Ted is himself a Howard. I simply said that, All right, if Carol got pregnant from giving him a soldier's farewell, I wanted him to promise that he would come back when the war is over and marry Carol and take her and her baby to—What's that you call your planet, Captain? Boondock?"

"Boondock is a city; my home is in its suburbs. The planet is Tellus Tertius, Earth Number Three."

I sighed. "Theodore, why wouldn't you agree to that? You tell us that you have four wives and three co-husbands. Why wouldn't you be willing to marry our Carol? She is a good cook, and she doesn't eat all that much. And she's very sweet-tempered and loving."I was thinking how dearly I would like to go to Boondock…and marry Tamara. Not that I ever would; I had Briney and our babies to take care of. But even an old woman can dream.

Theodore said slowly, "I abide by my own rules, for my own reasons. If Captain Smith does not trust me with respect to my behavior toward other people—"

"Not 'other people,' Captain! A particular sixteen-year-old girl named Carol. I am responsible for her welfare."

"So you are. I repeat, 'other people,' be they sixteen-year-old girls or whosoever. You don't trust me without promises; I don't give promises. That ends it and I am sorry the matter ever came up. I did not bring it up. Captain, I did not come here to bed your ladies; I came to say goodbye and thankyou to a whole family all of whom had been most generous and hospitable to me. I have not intended to disturb your household. I'm sorry, sir."

"Ted, don't be so damned stiff-necked. You sound just like my father-in-law when he gets his back up. You have not disturbed my household. You have pleased my wife enormously and for that I thank you. And I know that you were trapped by her; she told me months ago what she intended to do to you if she ever got you alone. This discussion is just over Carol, who has no claim on you. If you don't want her under what I see as minimum protection for her welfare, then let her stick to boys her own age. As she should."

"Agreed, sir."

"Damn it; knock off the 'sirs'; you're in bed with my wife. And me."

"Oh, dear!"

"Mo', it's the only sensible solution."

"Men! Always doing what you call 'sensible' and always so wrongheaded and stubborn! Briney, don't you realize that Carol doesn't give a hoot about promises? She just wants to spread her legs and close her eyes and hope that she catches. If she doesn't catch, a month from now she's going to cry her eyes out. If she does catch, well, I trust Theodore and so does Carol."

Briney said, "Oh, for God's sake, Mo'! Ted, ordinarily she is quite easy to live with."

Theodore said, "Maureen, you said, 'A month from now she's going to cry her eyes out.' Do you know her calendar?"

"Why, yes. Well, maybe. Let me think."My girls kept their own calendars…but old snoopy Mama kept her eyes open, just in case. "Today is Wednesday. If I recall correctly, Carol is due again three weeks from tomorrow. Why?"

"Do you remember the thumb rule I gave you to insure, uh, 'ringing the cash register,' you called it."

"Yes, indeed. You said to count fourteen days from onset of menses then hit that day. And the day before and the day after, if possible."

"Yes, that is how to get pregnant, a thumb rule. But it works the other way, too. How not to get pregnant. If a woman is regular. If she is not abnormal in some way. Is Carol regular?"

"Like a pendulum. Twentyeight days."

"Brian, stipulating that Maureen's recollection of Carol's calendar is accurate—"

"I would bet on it. Mo' hasn't made a mistake in arithmetic since she found out about two and two."

"—if so, Carol can't get pregnant this week…and I'll be on the high seas the next time she is fertile. But this week a whole platoon of Marines could not knock her up."

Briney looked thoughtful. "I want to talk to Ira. If he agrees with you, I'll drop all objections."

"No."

"What do you mean 'No'? No rules. Relax."

"No, sir. You don't trust and I don't promise. The situation is unchanged."

I was ready to burst into tears from sheer exasperation. Men's minds do not work the way ours do and we will never understand them. Yet we can't get along without them.

I was saved from making a spectacle of myself by a knock on the door. Nancy. "May I come in?"

"Come in, Nancy!"Briney called out. "Come in, dear,"I echoed.

She came in and I thought how lovely she looked. She was freshly shaved that morning, in preparation for a swap that Nancy and Jonathan had asked for—Jonathan into my bed, Nancy into Theodore's. Theodore had hesitated—afraid of hurting my feelings—but I had insisted, knowing what a treat our Nancy would be for Theodore (and Theodore for Nancy!) (and Jonathan for Maureen; I was flattered enormously that Jonathan had suggested it).

Father had taken the rest of my zoo to the Al G. Barnes Circus, playing in Independence—all but Ethel, too young for the circus, too young to notice; I had her crib in my bathroom, safe and in earshot.

That playful swap had gone beautifully and made me think even more highly of my prospective son-in-law. About three o'clock we four, Nancy and Theodore, Jonathan and I, had gathered in "Smith Field,"my big bed, mostly to chat. As Briney often said, "You can't do it all the time, but there is no limit to how much you can talk about it."

We four were still lounging in Smith Field, talking and necking, when Brian telephoned—he had just arrived in town, on leave. I told him to hurry home and cued him in family code as to what he could expect. Nancy understood the coded message and looked wide-eyed but said nothing.

Thirty-odd minutes later she closed her eyes and opened her thighs and for the first time received her father—then opened her eyes and looked at Jonathan and me, and grinned. I grinned back at her; Jonathan was too busy to look.

What this world needs is more loving, sweaty and friendly and unashamed.

Then the children had gone downstairs; Nancy had sensed that I wanted time alone with my two men. She took the telephone with her, long cord and all. Now she stood by the bed and smiled at us. “Did you hear the phone ring? It was Grandpa. He said to tell you that the zoo wagon will arrive—that’s your car, Ted-Lazarus darling—will arrive at exactly six-oh-five P.M. SO Jonathan is bathing and I wanted him not to use all the hot water. He left his clothes up here; I’ll take them down to him, then I’ll bathe and dress up here. Ted-Lazarus dear, where are your clothes?”

“In the sewing room. I’ll be right down.”

“Cancel that,”Brian said. “Nancy, fetch Ted’s clothes when you come up, that’s my sweet girl. Ted, in this family we spit in their eyes and tell ‘em to go to hell. You don’t need to dress until we do, after the doorbell rings. A husband is all the chaperon a wife needs, and I don’t explain to my children why we choose to have a guest upstairs. As for *mon beaupère*, he knows the score and is our shuteye sentry. If Carol guesses, she won’t talk. Thanks, Nancy.”

“Pas de quoi, mon cher père. Papa! Is it true that Ted doesn’t have to go back tonight?”

“Ted goes back with me, Sunday night. Special duty, assigned to me-and I sold him, body and soul, to your mother, who may kill him by then—”

“Oh, no!”Both my daughter and I said it.

“Or not, but she’ll try. Now get along, darling, and set that door to latch as you close it.”

Nancy did so; my husband turned to me. “Flame top, it is now five-forty. Can you figure out a way to entertain Ted and me for the next twenty-five minutes?”

I took a deep breath. “I’ll try.”

CHAPTER FOURTEEN

Black Tuesday

WORLD-AS-MYTH Much as I love Hilda, much as I love Jubal and respect his analytical genius, World-as-Myth doesn't explain anything.

As Dr. Will Durant would put it, it is an insufficient hypothesis. I studied philosophy under Dr. Durant in Kansas City in 192I and '22, not long after he left the Catholic Church—and turned agnostic, socialist, and benedict, all through sniffing a fourteen-year-old girl half his age.

Dr. Durant must have been a disappointment to Mrs. Grundy—he married his jailbait sweetheart and stayed married to her till his death in his nineties, with never a breath of scandal. For Mrs.Grundy it must have been a case of "Some days it is hardly worthwhile to listen at keyholes."

The Church's loss was the World's gain. A horny young teacher's inability to keep his hands off a pretty, smart, and nubile student gave several universes a great teacher in history and philosophy…and gave Maureen her introduction to metaphysics—my greatest intellectual adventure since Father introduced me to Professor Thomas Henry Huxley.

Professor Huxley introduced me to the fact that theology is a study with no answers because it has no subject matter.

No subject matter? That's right, no subject matter whatever—just colored water with artificial sweetening. "Theo-" = "God"and "-logy" = word(s), i.e., any word ending in "-ology"means "talk about"or "discussion of"or "words concerning"or "study of"a subject named in the first part of the word, whether it is "hippology,"or "astrology,"or "proctology,"or "eschatology,"or "scatology,"or something else. But to discuss any subject, it is first necessary to agree on what it is you are discussing. "Hippology"presents no problem; everybody has seen a horse. "Proctology"—everybody has seen an arsehole…or, if you have been so carefully brought up that you've never seen one, go down to your city hall; you will find the place full of them. But the subject tagged by the spell-symbol "theology"is a horse of another color.

"God,"or "god,"or "gods"—have you ever seen "God"? If so, where and when, how tall was She and what did She weigh? What was Her skin color? Did She have a belly button and, if so, why? Did She have breasts? For what purpose? How about organs of reproduction and of excretion-did She or didn't She?

(If you think I am making fun of the idea of a God fashioned in Man's image or vice versa, you have much to go on.)

I will agree that the notion of an anthropomorphic God went out of fashion some time ago with most professional godsmen…but that doesn't get us any nearer to defining the English spell-symbol "God."Let's consult fundamentalist preachers…because Episcopalians won't even let God into His sanctuary unless He shines His shoes and trims that awful beard…and Unitarians won't let Him in at all.

So let's listen to fundamentalists: "God is the Creator. He Created the World. The existence of the World proves that it was created; therefore there is a Creator. That Creator we call 'God.' Let us all bow down and worship Him, for He is Almighty and His works proclaim His might."

Will someone please page Dr. S. I. Hayakawa? Or, if he is busy, any student who received a B+ or better in Logic 101? I'm looking for someone able to discuss the fallacy of circular reasoning and also the concatenative process by which abstract words can be logically defined by building on concrete words. What is a "concrete"word? It is a spell-symbol used to tag something you can point to and thereby agree on, e.g., "cat,""sailboat,""iceskating"—agree with such certainty that when you say "sailboat"there is no chance whatever that I will think you mean a furry quadruped with retractile claws.

With the spell-symbol "God"there is no way to achieve such agreement because there is nothing to point to. Circular reasoning can't get you out of this dilemma. Pointing to something (the physical world) and asserting that it has to have a Creator and this Creator necessarily has such-and-such attributes proves nothing save that you have made certain assertions without proof. You have pointed at a physical thing, the physical world; you have asserted that this physical thing has to have a "Creator"(Who told you that? What's his mailing address? Who told him?). But to assert that something physical was created out of nothing—not even empty space—by a Thingamajig you can't point to is not to make a philosophical statement or any sort of statement, it is mere noise, amphigory, sound and fury signifying nothing.

Jesuits take fourteen years to learn to talk that sort of nonsense. Southern fundamentalist preachers learn to talk it in a much shorter time. Either way, it's nonsense.

Pardon me. Attempts to define "God"cause one to break out in hives.

Unlike theology, “metaphysics”does have a subject, the physical world, the world that you can feel, taste, and see, the world of potholes and beautiful men and railroad tickets and barking dogs and wars and marshmallow sundaes. But, like theology, metaphysics has no answers. Just questions.

But what lovely questions!

Was this world created? If so, when and by whom and why?

How is consciousness (“Me-ness”) hooked to the physical world?

What happens to this “Me-ness”when this body I am wearing stops, dies, decays, and the worms eat it?

Why am I here, where did I come from, where am I going?

Why are you here? Are you here? Are you anywhere? Am I all alone?

(And many more.)

Metaphysics has polysyllabic words for all of these ideas but you don’t have to use them; Anglo-Saxon monosyllables do just as well for questions that have no answers.

Persons who claim to have answers to these questions invariably are fakers after your money. No exceptions. If you point out their fakery, if you dare to say aloud that the emperor has no clothes, they will lynch you if possible, always from the highest of motives.

That’s the trouble I’m in now. I made the mistake of flapping my loose lower jaw before learning the power structure here…so now I am about to be hanged (I hope it is as gentle as hanging!) for the capital crime of sacrilege.

I should know better. I didn’t think anyone would mind (in San Francisco) when I pointed out that the available evidence tended to indicate that Jesus was gay.

But there were cries of rage from two groups: a) gays; b) non-gays. I was lucky to get out of town.

(I do wish Pixel would come back.)

On Friday we got my daughter Nancy and Jonathan Weatheral married. The bride wore white over a peanut-sized embryo that qualified her for Howard Foundation benefits, while the bride’s mother wore a silly grin that resulted from her private activities that week and the groom’s mother wore a quieter smile and a faraway look in her eyes from similar (but not identical) private activities.

I had gone to much trouble to slide Eleanor Weatheral under Sergeant Theodore. To their mutual joy, I know (my husband says that Eleanor is a world-class mattress dancer), but not solely for their amusement. Eleanor is a touchstone, able to detect lies when she is sexually linked and *en rapport*.

Let's go back two days—On Wednesday my "zoo"got home from the circus at 6:os P.M.; we had a picnic dinner in our back yard at 6:30, the exact timing being possible through Carol's having prepared it in the morning. At sundown Brian lit the garden lights and the younger ones played croquet while we elders—Brian, Father, Theodore, and I—sat in the garden glider swing and talked.

Our talk started on the subject of human female fertility. Brian told Father that he wanted him to hear something Captain Long had said about the matter.

But I must note first that I had gone to Father's room the night before (Tuesday) after the house was quiet, pledging him a King's X, then told him about a strange story Sergeant Theodore had given me earlier that night, after that silly unplanned visit to Electric Park, a story in which he claimed to be Captain Lazarus Long, a Howard from the future.

Despite my promise of King's X, Father left the door ajar. Nancy tapped on it and we invited her in. She perched on the other side of Father's bed, facing me, and listened soberly to my repetition.

Father said, "Maureen, I take it you believe him, time travel and ether ship and all."

"Father, he knew Woodrow's birth date. Did you tell him?"

"No. I know your policy."

"He knew your birthday, too, not just the year, but the day and the month. Did you tell him?"

"No, but it's no secret. I've set it down on all sorts of documents."

"But how would he know where to find one? And he knew Mother's birthday—day, year, and month."

"That's harder. But not impossible. Daughter, as you tell me he pointed out: Anyone with access to the Foundation's files in Toledo could look up all of these dates."

"But why would he know Woodrow's birthday and not Nancy's? Father, he came here knowing quite a bit about all his ancestors—those he claims as ancestors—that is to say, Woodrow and his ancestors but not the birthdays of Woodrow's brothers and sisters."

"I don't know. If he did have access to Judge Sperling's files, he could have memorized just those data needed to back up his story. But the most interesting item is his assertion that the war will end on November eleventh, this year. I would have guessed sometime this summer, with bad news for Britain and worse news for France, and humiliation for us…or not earlier than the summer of 1919, with victory for the Allies but a horribly expensive one. If it turns out that Ted is right—November II, 1918—then I'll believe him. All of it."

Nancy said, suddenly, "I believe him."

Father said, “Why, Nancy?”

“Grandpa, do you remember—No, you weren’t here. It was the day war was declared, a year ago. Papa had kissed us goodbye and left. Grandpa, you went out right after Papa left—”

Father nodded. I said, “I remember.”

“—and, Mama, you had gone up to lie down. Uncle Ted telephoned. Oh, I know that he telephoned later and you talked to him, Grandpa. You—You were mean to him—”

“Nancy, I’m sorry about that.”

“Oh, that was a misunderstanding, we all know that. This was before he talked to you, maybe an hour before, maybe longer. I was upset and crying a bit, I guess, and Uncle Ted knew it…and he told me to stop worrying about Papa, because he—Uncle Ted, I mean—had second sight and could tell the future. He told me that Papa would come home safely. And suddenly I quit worrying and have not worried since—not that way. Because I knew that he was telling the truth. Uncle Ted does know the future…because he is from the future.”

“Father?”

“How can I tell, Maureen?”Father looked terribly thoughtful. “But I think we must assume as least hypothesis—Occam’s Razor—that Ted believes his own story. Which of course does not exclude the hypothesis that he is as loony as a June bug.”

“Grandpa! You know Uncle Ted isn’t crazy!”

“I don’t think he is. But his story sounds crazy. Nancy, I’m trying to be rational about this. Now don’t scold Grandpa; I’m doing the best I can. At worst we’ll know in about five months. November eleventh. Which is little comfort to you now, Maureen, but it may make up somewhat for the dirty trick Woodrow played on you. You should have clobbered him, on the spot.”

“Not out in the woods at night, Papa, not a child that young. And now it’s too late. Nancy, you remember that spot where Sergeant Theodore took you all on a picnic a year ago? We were there.”

Nancy’s mouth dropped open. “Woodie was with you? Then you didn’t—”She chopped off what she was saying. Father put on his draw-poker face.

I looked from one to the other. “You darlings! I confided my plans to each of you. But did not tell either of you that I had told the other. Yes, Nancy, I went out there with the precise purpose I told you about: to offer Sergeant Theodore the best warrior’s farewell I could manage, if he would let me. And he was about to let me. And it turned out that Woodrow had hidden in the back seat of the car.”

“Oh, how dreadful!”

“I thought so. So we got out of there quickly and went to Electric Park and never did have the privacy we needed.”

“Oh, poor Mama!”Nancy leaned across Father’s legs and grabbed my head and made mother-hen sounds over me, exactly as I had over her for all those years, whenever she needed sympathy.

Then she straightened up. “Mama, you should go do it right now!”

“Here? With a house full of children? My dear! No, no!”

“I’ll jigger for you! Grandpa! Don’t you think she should?”

Father kept quiet. I repeated, “No, dear, no. Too risky.”

She answered, “Mama, if you’re scared to, here in the house, I certainly am not. Grandpa knows I’m pregnant, don’t you, Grandpa? Or I wouldn’t be getting married. And I know what Jonathan would say.”She sat up straight, started to get off the edge of the bed. “I’m going straight down and give Uncle Ted a soldier’s farewell. And tomorrow I’ll tell Jonathan. And—Mama, I have a message for you from Jonathan. But I’ll tell you when I come back upstairs.”

I said, weakly and hopelessly, “Don’t stay down too long. The boys get up at four-thirty; don’t get caught by them.”

“I’ll be careful. ‘Bye.”

Father stopped her. “Nancy! Sit back down. You are crowding in on your mother’s prerogatives.”

“But, Grandpa—”

“Pipe down! Maureen is going downstairs to finish what she started. As she should. Daughter, I will stand jigger and Nancy can help me if she wishes. But take your own advice; don’t stay down too long. If you aren’t upstairs by three, I’m coming down to tap on the door.”

Nancy said eagerly, “Mama, why don’t we both go down? I bet Uncle Ted would like that!”

“I’ll bet Uncle Ted would like that, too,”Father said grimly, “but he’s not going to get it tonight. If you want to give him a soldier’s sendoff, that’s fine. But not tonight, and not until after you have consulted Jonathan. Now git for bed, dear…and you, Maureen, go downstairs and see Ted.”

I leaned over and kissed him and got quietly off the edge of the bed and started to leave. Father said, “Get along, Nancy; I’ll take the first watch.”

She shoved out her lower lip. “No. Grandpa, I’m going to stay right here and bother you.”

I left, via the sleeping porch and my own room, then went downstairs barefooted and wearing just a wrapper, not stopping to see if Father threw Nancy out. If she had managed to tame Father when I had not been able to manage it in twice her years, I didn’t want to know it. Not then. I thought about Theodore instead…so successfully that by the time I quietly opened the door to my sewing room I was as ready as a female animal can be.

Quiet as I was, he heard me and had me in his arms as I closed the door. I returned his embrace, then let go and shrugged off my wrapper, and reached up to him again. At last, at last I was naked in his arms.

Which led, inevitably, to my sitting with Theodore and Brian and Father in our back yard glider swing after our picnic dinner on Wednesday, listening to a discussion between Father and Theodore, while our young people played croquet around us. At Briney's request, Theodore had repeated his statements about when and how female *h. sapiens* could and could not get pregnant.

The conversation drifted off from reproduction to obstetrics and they started using ungrammatical Latin at each other—some difference of opinion about the best way to handle a particular sort of birth complication. They became more and more polite to each other the more they differed. I did not have any opinions as birth complications are something I know about only from reading, since I have babies about as easily as a hen lays eggs—one big ouch and it's over.

Briney finally interrupted them, somewhat to my relief. I don't even want to hear about the horrible things that can happen if a birthing goes wrong. "This is all very interesting,"Brian said, "but, Ira, may I ask one question? Is Ted a medical doctor, or not? Sorry, Ted."

"Not at all, Brian. My whole story sounds phony, I know. That's why I avoid telling it."

Father said, "Brian, haven't you heard me addressing Ted as 'Doctor' for the last thirty minutes? The thing that makes me so angry —so graveled, rather—is that Ted knows more about the art of medicine than I could ever possibly learn. Yet his shop talk makes me want to go back to the practice of medicine."

Theodore cleared his throat, sounding just like Father. "Mrrrrph. Dr. Johnson—"

"Yes, Doctor?"

"I think my superior knowledge of therapy—correction: my knowledge of superior therapy—bothers you in part because you think of me as being younger than you are. But, as I explained, I simply look young. In fact I am older than you are."

"How old?"

"I declined to answer that question when Mrs. Smith asked it—"

"Theodore! My name is Maureen."(That exasperating man!)

"Little pitchers with big ears, Maureen,"Theodore said quietly. "Dr. Johnson, the therapy of my time is not harder to learn than is therapy today; it is easier, because less of it is empirical and more of it—most of it—is based on minutely developed and thoroughly tested theory.

With correct and logical theory as a framework you could catch up on what new has been learned in jig time, then go quickly into clinical work under a preceptor. You would not find it difficult."

"Damn it, sir, I'll never have the chance!"

"But, Doctor, that's what I'm trying to offer you. My sisters will pick me up at an agreed rendezvous in Arizona on August 2, 1926, eight years from now. If you wish, I will be delighted to take you with me to my time and my planet, where, if you wish, you can study therapy—I am chairman of the board of a medical school there; no problem. Then you can either stay on Tertius, or return to Earth—to the exact spot and instant that you left, if that is your wish, but with your medical education updated and you yourself rejuvenated…and with renewed zest for life, that being merely a side effect but a fine bonus of rejuvenation."

Father looked strange, haunted. I heard him murmur, "'—unto an exceeding high mountain, and sheweth him all the kingdoms of the world—' "Sergeant Theodore answered, "'—and the glory of them.' Matthew, four, verse eight. But, Doctor, I am not the Devil and I am not offering you treasure or power—simply the hospitality of my home as I have enjoyed the hospitality of this home…plus an opportunity for a refresher course if you want it. But you don't have to make up your mind tonight; you have more than eight years for that. You can postpone your decision right up to the last minute. *Dora*—that's my ship—has ample room."

I turned and put my hand on Father's arm. "Father, do you remember what we didin 1893?"I looked across at Ted. "Father read medicine under a preceptor who never believed in germs. So, after Father had been in practice for many years, he went back to school at Northwestern University in 1893 to learn the latest knowledge about germ theory and asepsis and such things. Father, this is the same thing—and an incredible opportunity! Father accepts, Theodore—he's just slow to admit what he wants, sometimes."

"Mind your own business, Maureen. Ted said I could take eight years to answer."

"Carol would not take eight years to answer. And neither would I! If Brian permitted. If Theodore can bring me back to the same hour and day—"

"I can."

"Would I meet Tamara?"

"Of course."

"Oh, my! Brian? Just a visit and I come home the same day—"

Theodore put in, "Brian, you can come with her. A few days or a few months vacation, and back the same day."

"Uh—Oh, Heavens! Sergeant, you and I have a war to win first.

Can we table this till we come back from France?"

"Certainly, Captain."

I don't recall how the talk got around to economics. First, I was sworn to silence about the periodic nature of female fertility…and took the oath with my fingers crossed. Fiddlesticks. Both doctors, Papa and Theodore, pointed out that my mucous membranes had never been invaded by bugs—*gonococci* and *spirochete treponema pallidum* and such—because I had been drilled and drilled in "Always use a rubber except when you want a baby,"and my girls had been trained the same way. I didn't mention the far more numerous times when I had happily skipped those pesky sheaths because I was pregnant and knew it. Such as the night before. Avoiding disease does not depend on anything as trivial as a rubber purse; it depends on being very, very fussy about your intimates. A woman can catch something bad in her mouth or in her eyes just as quickly as in her vagina—and much easier. Am I going to copulate with a man without kissing him? Let's not be silly.

I can't recall ever using a rubber after Theodore explained exactly how to chart my fertile span. Or ever again failing to "ring the cash register"when I wished to.

Then I heard, "—October twenty-ninth, 1929."

I blurted, "Huh? But you said you were leaving in 1926. August second."

My husband said, "Pay attention, Carrot Top. There will be a quiz Monday morning."

Theodore said, "Maureen, I was speaking of Black Tuesday. That is what future historians will call the greatest stock market crash in all history."

"You mean like 1907?"

"I'm not sure what happened in 1907 because, as I told you, I studied closely only the history of the decade I planned to spend here —from the year after the end of this war until shortly before Black Tuesday, the twenty-ninth of October, 1929. That ten years, from after the First World War—"

"Hold it! Doctor, you said 'First World War—' First?"

"Doctor Johnson, except for this one Golden Age, from November eleventh, 1918, to October twenty-ninth, 1929, there are wars all through this century. The Second World War starts in 1939, and is longer and worse than this one. Then there are wars off and on—mostly on—the rest of this century. But the next century, the twenty-first century, is far worse."

Father said, "Ted. The day war was declared. You were simply speaking the truth as you saw it. Weren't you?"

"Yes, sir."

"Then why did you enlist? This isn't your war…Captain Long."

Theodore answered very softly, "To gain your respect, Ancestor. And to make Maureen proud of me."

"Mrrph! Well! I hope that you will never regret it, sir."

"1 never will."

Thursday was a busy day indeed; Eleanor and I, with the aid of all my older children and all her older children, with much help from Sergeant Theodore as my aide de camp ("dog robber"he called it, and so did Father—I declined to let them get my goat), with some help from our spouses and from Father—Eleanor and I mounted a formal church wedding in only twenty-four hours.

Oh, I must admit that Eleanor and I had done spadework ahead of time—guest lists, plans, alerting of minister and janitor and caterer as soon as Brian's first phone call had made it possible, engraving of invitations on Tuesday, envelopes addressed on Wednesday by her two best penmen, invitations delivered by my two boys and two of hers, with RSVP to Justin's office by telephone, etc., *etc.*

We managed to have the bride dressed correctly and on time because Sergeant Theodore displayed another unexpected talent: ladies' sempstress—no, sempstor—no, I think it must be "ladies' tailor". I had already accomplished my prime purpose of using Eleanor's special telepathic talent by having Theodore drive me to Eleanor's house out south on Thursday morning and there putting my problem to her bluntly—speeding things up by peeling my clothes off the instant the door was locked on El and me in her private apartment, then bringing her up to date—then Eleanor had her maid show Theodore to El's private suite.

Never mind the sweaty details; in another thirty minutes Eleanor reported to me, "Maureen love, Theodore believes every word of what he has been telling us,"which Theodore countered by pointing out that every Napoleon in every insane asylum believed his own story just as firmly.

"Captain Long,"Eleanor had answered, "few males have a firm grip on reality; I can't see that it matters. You were telling me the truth as you know it when you told me about your home in the future and you were again telling the truth when you told me that you love Maureen. Since I love her, too, I hope to earn some portion of your love. Now, please, if you will let me up—and thank you, sir! you pleasured me immensely."

It was immediately after that we ran into a time conflict: how to get Eleanor's wedding dress and Nancy to Eleanor's sempstress at a time when Justin said that Jonathan must fetch Nancy and Brian to

Justin's office so that all four could go to City Hall together to obtain the necessary special license, both principals being under age.

Theodore said, "Why do we need a sempstress? Eleanor, doesn't that cabinet over there conceal a Singer sewing machine? And why do we need Nancy? Mama Maureen, didn't you tell me that you and Nancy can wear the same clothes?"

I agreed that Nancy and I could (and did) borrow clothes from each other. "I'm an inch more in the thighs and about the same bigger in the bust. But, Lazarus, we don't dare touch Eleanor's dress—wait till you see it."

Although Eleanor was taller and bigger than I, the wedding dress was close to my size as it had already been cut down once for her daughter Ruth, three inches shorter than her mother. It was a magnificent gown of white satin, lavishly beaded with seed pearls. It had a Belgian lace veil and a ten-foot train. It had originally had mutton-leg sleeves and a derriere cut for a bustle; these had vanished in the alteration for Ruth.

All the money in the world could not produce a wedding dress of that quality in the few hours until it would be needed; my Nancy was lucky that her Aunt El was willing to lend it to her.

leanor fetched it. Theodore admired it but did not seem intimidated by it. "Eleanor, let's fit it snugly to Mama Maureen, then there will be just room for its slip under it for Nancy. What other underclothes? Corset? Brassiere? Panties?"

I said, "I've never put a corset on Nancy and she says she's never going to start."

"Good for Nancy!"agreed Eleanor. "I wish I never had. Mau, Nancy doesn't need a brassiere. What about underpants? Can't wear bloomers with that dress. Both Emery Bird and Harzfeld carry sheer underpants…but they will still make lines under this dress if it is fitted as well as it should be."

"No pants,"I ruled.

"Every old biddy there will know she's not wearing any,"Eleanor said doubtfully.

I explained in Chaucerian terms my lack of interest in what old biddies thought. "I'll put round garters on her. She can shift to hose supporters when she changes to leave."

"At which time she can put on underpants,"Theodore added.

I was startled. "Why, Theodore! I'm surprised. What need has a bride for pants?"

"The tiniest, scantiest, sheerest girl panties that are sold today, I mean—not bloomers. So Jonny can take them off when he gets her there, darling. Symbolic defloration, an old pagan rite. It tells her she's married."

El and I giggled. “I must be sure to tell Nancy that.”

“And I’ll tell Jonathan so that he will make it a proper ceremony. Eleanor, let’s put Maureen up on that low table and start shoving pins into her. Mama Maureen, are you clean and dry all over? I’m about to turn this dress inside out. Satin shows water marks something ‘orrible.”

For the next twenty-five minutes Theodore was very busy, while I held still and Eleanor kept him supplied with pins. Presently El said, “Lazarus, where did you learn women’s clothes?”

“In Paris, about a hundred years from now.”

“I wish I hadn’t asked. Are you descended from me? As well as from Maureen?”

“I wish I were. I’m not. But I’m married to three of your descendants…Tamara, Ishtar, and Hamadryad—and co-husband to another, Ira Weatheral. Probably—certainly—other connections, but Maureen was right; I checked the archives only for my own ancestors. I didn’t guess that I would meet you, El of the beautiful belly. I’m almost through. Shall I go ahead and make the alterations? Or do we take this to your ladies’ sempstress?”

El said, “Maureen? I’m willing to risk the dress; I have confidence in Lazarus—I mean M’sieur Jacques Noir. But I won’t risk it for Nancy’s wedding without your permission.”

I answered, “I don’t have any judgment about Theodore, or Lazarus, or whatever name he’s using today—I mean this stud who’s treating me like a dressmaker’s dummy. But—Sergeant, didn’t you tell me you have retailored your breeches yourself? Pegged them?”

“Oui, Madame.”

“*‘Oui, Madame’* my tired back. Where did you leave your pants, Sergeant? You should always know where your pants are.”

“I know where they are!” said El, and fetched them.

“Around the knees, El. Turn them inside out and look.” I joined her in checking Theodore’s tailoring. Shortly I said, “El, I can’t see where they were altered.”

“I can. See? The original thread is just barely faded; the thread he used in altering is the same shade as the cloth of the outlets—the cloth that has not been in sunlight.”

I agreed. “Mmm, yes, once I get it into stronger light. If I look closely.”

El looked up. “You’re hired, boy. Room, board, ten dollars a week, and all the tail you can use.”

Theodore looked thoughtful. “Well…all right. Though I usually geti paid extra for that.”

El looked surprised, then laughed merrily, ran to him, and started rubbing tits against his ribs. “I’ll meet your terms, Captain. What is your stud fee?"

"I usually get the pick of the litter."

"It's a deal."

The wedding was beautiful and our Nancy was dazzlingly lovely in a magnificent dress that fitted her perfectly. Marie was flower girl; Richard was ring bearer, both in Sunday white. Jonathan was (to my surprise) in formal cutaway, ascot in pearl gray with pearl stickpin, gray striped trousers, spats. Theodore was his best man, in uniform; Father was in uniform and wearing his many medals and acting as usher and groomsman; Brian was utterly beautiful in boots and Sam Browne and spurs and saber and his '98 medals and forest-green jacket and pinks.

Carol was maid of honor and almost as dazzling as the bride in lime-green tulle and her bouquet. Brian Junior was the other usher and groomsman and was dressed in his grammar-school graduation suit, brand new only two weeks earlier—double-breasted blue serge and his first long pants and very grownup in his manner.

George was charged with just one duty, to see to it that Woodrow kept quiet and behaved himself, and was authorized to use force as necessary. Father gave George this instruction in Woodrow's presence…and Woodrow did behave himself; he could always be counted on to act in his own self-interest.

Dr. Draper did not indulge in any of the nonsense with which the Reverend Timberly had almost spoiled my wedding; he used the ME service right straight out of the 1904 Discipline, not a word more, not a word less…and in short order our Nancy was going back down the aisle on her husband's arm to the traditional strains of the Mendelssohn recessional, and I sighed with relief. It had been a perfect wedding, no rough spots whatever, and I thought to myself how dumbfounded Mrs. Grundy would have been had she seen a majority of the wedding party thirty-six hours earlier, behind locked doors, in a gentle orgy inaugurating Carol's Day.

It was the first celebration of the holiday that would spread at the wavefront of the Diaspora of the human race: Carol's Day, Carolmas, Carolita's Birthday (it was not!), Fiesta de Santa Carolita. Theodore had told us that it had become (would become) the midsummer fertility rite for all planets, anywhen. Then he had toasted Carol's graduation to womanhood in champagne, and Carol had answered his toast with great seriousness and dignity—and got bubbles up her nose and gagged and coughed and had to be consoled.

I did not know then and do not know now whether or not Theodore granted my second daughter the boon she craved. All I can say is that I gave them every opportunity. But with Theodore (stubborn, difficult man!) one never knows.

On Saturday afternoon there was a rump session of the trustees of the Ira Howard Foundation, Judge Sperling having come all the way from Toledo for that purpose: Judge Sperling, Mr. Arthur J. Chapman, Justin Weatheral, Brian Smith (by unanimous consent), Sergeant Theodore…and me. And Eleanor.

When Judge Sperling cleared his throat, I understood the signal and started to withdraw. Whereupon Theodore stood up to leave with me.

There was some backing and filling, but the result was that I stayed and Eleanor stayed because Theodore headed for the door when we did. He did explain that the Howard Families, in their permanent organization, used absolute equality of the sexes…and, as Howard chairman in his own time, attending this meeting as a courtesy to the twentieth-century Howard organization, he could not in conscience take part in any Howard meeting from which women were excluded.

Once they got past that hurdle, the meeting simply consisted of Theodore's repeating his prediction of November 11, 1918, as the day the war would end, followed by his prediction of Black Tuesday, October 29, 1929. On being questioned he embellished this latter, with mention of devaluation of the dollar, from twenty dollars to the ounce down to thirty-five dollars to the ounce. "President Roosevelt will do this by what amounts to decree, although Congress will ratify it…but this doesn't happen until early in 1933."

"Just a moment, Sergeant Bronson, or Captain Long, or whatever you call yourself, are you saying that Colonel Roosevelt makes a comeback? I find that hard to swallow. In 1933 he will be, uh—" Mr. Chapman stopped to think.

"Seventy-five years old," Judge Sperling put in. "What's so unusual about that, Arthur? I'm older than that, but I have no intention of retiring anytime soon."

Theodore said, "No, gentlemen, no. Not Teddy Roosevelt. Franklin Roosevelt. Now assistant secretary to Mr. Josephus Daniels."

Mr. Chapman shook his head. "I find that even harder to believe."

Theodore answered rather testily, "It does not matter what you believe, Counselor; Mr. Roosevelt will be inaugurated in 1933 and shortly after that he will close all the banks and call in all gold and gold certificates and devalue the dollar. The dollar never does regain its present value. Fifty years later an ounce of gold will fluctuate wildly, from around a hundred dollars an ounce to around a thousand dollars an ounce."

"Young man," Mr. Chapman pronounced, "what you describe is anarchy."

"Not quite. It gets worse. Much worse. Most historians call the second half of this century 'the Crazy Years.' Socially the Crazy Years start at the end of the next World War. But from a standpoint of the economy the Crazy Years start on Black Tuesday, October twenty-ninth, 1929. For the rest of this century you can lose your shirt if you don't maintain a strong cash position. But it is a century of great opportunity, too, in almost every field."

Mr.Chapman closed down his face. I could see that he had made up his mind not to believe anything. But Justin and Judge Sperling exchanged some side remarks, then the Judge said, "Captain Long, can you tell us what some of these 'great opportunities' will be?"

"I'll try. Commercial aviation both for passengers and for freight. Railroads will be in deep trouble and will not recover. The present picture shows will add sound—talking pictures. Television. Stereovision. Space travel. Atomic power. Lasers. Computers. Electronics of every sort. Mining on the Moon. Asteroid mining. Rolling roadways. Cryonics. Artificial manipulation of genetics. Personal body armor. Sunpower screens. Frozen foods. Hydroponics. Microwave cooking. Do any of you know D. D. Harriman?"

Chapman stood up. "Judge, I move we adjourn."

"Sit down, Arthur, and behave yourself. Captain, you realize how shocking your predictions are, do you not?"

"Certainly," Theodore answered.

"The only way I can listen to your words with equanimity is to recall the changes I have seen in my own lifetime. If your prediction as to the day the war ends turns out to be accurate, then I feel that we must take your other predictions seriously. In the meantime, do you have anything more to tell us?"

"I guess not. Two things, maybe. Don't buy on margin after the middle of 1929. And don't sell short if a wrong guess could clean you out."

"Good advice at any time. Thank you, sir."

Carol and I and the children kissed them both goodbye on Sunday June thirtieth, then went back inside as Captain Bozell's car drove away, to cry in private.

The news got worse and worse all that summer.

Then in the late fall it began to be apparent that we were gaining on the Central Powers. The kaiser abdicated and fled to Holland, and then we knew we were going to win. The false armistice came along and my joy was shaded by the realization that it was not the eleventh of November.

And the real armistice did arrive, right on time, November the eleventh, and every bell, every whistle, every siren and horn, anything that could make noise all sounded at once.

But not in our household. On Thursday George fetched home from his route the Kansas City Post. In its casualities report it listed as “MISSING IN ACTION—Bronson Theo Cpl KCMo.”

CHAPTER FIFTEEN

Torrid Twenties, Threadbare Thirties

During the fifty-odd years on my personal time line from my rescue in 1982 to the start of the Time mission which aborted into my present predicament on this planet I spent time equal to about ten years in study of comparative history, in particular the histories of the time lines that the Circle of Ouroboros attempts to protect, all of which appear to share a single ancestral time line at least through A.D.1900 and possibly through about 1940.

This sheaf of universes includes my own native universe (time line two, code Leslie LeCroix) and excludes the uncounted but far more numerous exotic time lines—universes in which Columbus did not sail for the Indies (or failed to return), ones in which the Viking settlements succeeded and “America” became “Great Vinland,” ones in which the Muscovite empire on the West Coast clashed with the Hispanic empire on the East Coast (worlds in which Queen Elizabeth died in exile), other worlds in which Columbus found America already owned by the Manchu emperors—and worlds with histories so exotic that it is hard to find even a remote ancestral line in common with anything we can recognize.

I am almost certain that I have slipped into one of the exotics…of a previously unsuspected sort.

I did not spend all my time studying histories; I worked for a living, supporting myself first as a nursing assistant, then as a nurse, then as a clinical therapist, then as a student rejuvenator (all the while going to school), before I shifted careers to the Time Corps.

But it was this study of histories that caused me to think about a career in Time.

Several of the time lines known to “civilization” (our name for ourselves) appear to split off about 1940. One cusp at which these splits show is the Democratic National Convention of 1940 at which Mr. Franklin Delano Roosevelt either was or was not nominated by the Democratic party for a third term as president of the United States, then either was or was not elected, then either did or did not serve through the end of the Second World War.

In time line one, code John Carter, the Democratic nomination went to Paul McNutt…but the election to Republican Senator Robert Taft.

In the composite time lines coded "Cyrano," Mr. Roosevelt had both a third and a fourth term, died in his fourth term and was succeeded by his vice-president, a former senator from Missouri named Harry Truman. In my own time line there was never a senator by that name but I do remember Brian speaking of a Captain Harry Truman whom he knew in France. "A fighting son of a gun," Briney called him. "A real buzz saw." But the Harry Truman whom Brian knew was not a politician; he was a haberdasher, so it seems unlikely that it could be the same man. Briney used to go out of his way to buy gloves and such from Captain Truman. Brian described him as "a dying breed—an old-fashioned gentleman."

In time line two, code Leslie LeCroix, my own native time line and that of Lazarus Long and Boondock, Mr. Roosevelt was nominated for a third term, in July 1940, then died from a stroke while playing tennis the last week in October, thereby creating a unique constitutional crisis. Henry Wallace, the Democratic nominee for vice-president, claimed that the electors from the states that went Democratic were bound by law to vote for him for president. The Democratic National Committee did not see it that way and neither did the Electoral College—and neither did the Supreme Court—three different points of view. Four, in fact, as John Nance Garner was president from October on…but had not been nominated for anything and had bolted his party after the July convention.

I will return to this subject as this was the world I grew up in. But note that Mr. Roosevelt was stricken "while playing tennis."

I learned while studying comparative history that in all other time lines but mine Mr. Roosevelt had been a poliomyelitis cripple confined to a wheelchair!

The effects of contagious diseases on history are a never-ending subject for debate among mathematico-historians on Tertius. I often wonder about one case, because I was there. In my time line Spanish influenza killed 528,000 U.s. residents in the epidemic of the winter of 1918-19, and killed more troops in France than had been killed by shot and shell and poison gas. What if the Spanish flu had struck Europe one year earlier? Certainly history would have been changed—but in what way? Suppose a corporal named Hitler had died? Or an exile who called himself Lenin? Or a soldier named Petain? That strain of flu could kill overnight; I saw it happen more than once.

Time line three, code Neil Armstrong, is the native world of my sisterwife Hazel Stone (Gwen Campbell) and of our husband Dr. Jubal Harshaw. This is an unattractive world in which Venus is uninhabitable and Mars is a bleak, almost airless desert, and Earth itself seems to have gone crazy, led by the United States in a lemminglike suicide stampede.

I dislike to study time line three; it is so horrid. Yet it fascinates me. In this time line (as in mine) United States historians call the second half of the twentieth century the "Crazy Years"—and well they might! Hearken to the evidence:

a) The largest, longest, bloodiest war in United States history, fought by conscript troops without a declaration of war, without any clear purpose, without any intention of winning—a war that was ended simply by walking away and abandoning the people for whom it was putatively fought;

b) Another war that was never declared—this one was never concluded and still existed as an armed truce forty years after it started…while the United States engaged in renewed diplomatic and trade relations with the very government it had warred against without admitting it;

c) An assassinated president, an assassinated presidential candidate, a president seriously wounded in an assassination attempt by a known psychotic who nevertheless was allowed to move freely, an assassinated leading Negro national politician, endless other assassination attempts, unsuccessful, partly successful, and successful;

d) So many casual killings in public streets and public parks and public transports that most lawful citizens avoided going out after dark, especially the elderly;

e) Public school teachers and state university professors who taught that patriotism was an obsolete concept, that marriage was an obsolete concept, that sin was an obsolete concept, that politeness was an obsolete concept—that the United States itself was an obsolete concept;

f) School teachers who could not speak or write grammatically, could not spell, could not cipher;

g) The nation's leading farm state had as its biggest cash crop: an outlawed plant that was the source of the major outlaw drug;

h) Cocaine and heroin called "recreational drugs," felony theft called "joyriding," vandalism by gangs called "trashing," burglary called "ripping off," felonious assault by gangs called "muggings," and the reaction to all of these crimes was "boys will be boys," so scold them and put them on probation but don't ruin their lives by treating them as criminals;

i) Millions of women who found it more rewarding to have babies out of wedlock than it would be to get married or to go to work.

I don't understand time line three (code Neil Armstrong) so I had better quote Jubal Harshaw, who lived through it. “Mama Maureen,” he said to me, “the America of my time line is a laboratory example of what can happen to democracies, what has eventually happened to all perfect democracies throughout all histories. A perfect democracy, a ‘warm body’ democracy in which every adult may vote and all votes count equally, has no internal feedback for self-correction. It depends solely on the wisdom and self-restraint of citizens…which is opposed by the folly and lack of self-restraint of other citizens. What is supposed to happen in a democracy is that each sovereign citizen will always vote in the public interest for the safety and welfare of all. But what does happen is that he votes his own self-interest as he sees it…which for the majority translates as ‘Bread and Circuses.’

“ ‘Bread and Circuses’ is the cancer of democracy, the fatal disease for which there is no cure. Democracy often works beautifully at first. But once a state extends the franchise to every warm body, be he producer or parasite, that day marks the beginning of the end of the state. For when the plebs discover that they can vote themselves bread and circuses without limit and that the productive members of the body politic cannot stop them, they will do so, until the state bleeds to death, or in its weakened condition the state succumbs to an invader—the barbarians enter Rome.”

Jubal shrugged and looked sad. “Mine was a lovely world—until the parasites took over.”

Jubal Harshaw also pointed out to me a symptom that, so he says, invariably precedes the collapse of a culture: a decline in good manners, in common courtesy, in a decent respect for the rights of other people. “Political philosophers from Confucius to the present day have repeatedly pointed this out. But the first signs of this fatal symptom may be hard to spot. Does it really matter when an honorific is omitted? Or when a junior calls a senior by his first name, uninvited? Such loosening of protocol may be hard to evaluate. But there is one unmistakable sign of the collapse of good manners: dirty public washrooms.

“In a healthy society public restrooms, toilets, washrooms, look and smell as clean and fresh as a bathroom in a decent private home. In a sick society—” Jubal stopped and simply looked disgusted.

He did not need to elaborate; I had seen it happen in my own time line. In the first part of the twentieth century right through the thirties people at all levels of society were habitually polite to each other and it was taken for granted that anyone using a public washroom tried hard to leave the place as clean and neat as he found it. As I recall, decent behavior concerning public washrooms started to slip during World War II, and so did good manners in general. By the sixties and the seventies rudeness of all sorts had become commonplace, and by then I never used a public restroom if I could possibly avoid it.

Offensive speech, bad manners, and filthy toilets all seem to go together.

America in my own time line suffered the cancer of “Bread and Circuses” but found a swifter way to commit suicide. I don’t boast about the difference, as in time line two the people of the United States succumbed to something even sillier than Bread and Circuses: The people voted themselves a religious dictatorship.

It happened after 1982, SO I did not see it—for which I am glad! When I was a woman a hundred years old, Nehemiah Scudder was still a small boy.

The potential for religious hysteria had always been present in the American culture, and this I knew, as my father had rubbed my nose in it from an early age. Father had pointed out to me that the only thing that preserved religious freedom in the United States was not the First Amendment and was not tolerance…but was solely a Mexican standoff between rival religious sects, each sect intolerant, each sect the sole custodian of the “One True Faith”—but each sect a minority that gave lip service to freedom of religion to keep its own “One True Faith” from being persecuted by all the other “True Faiths.”

(Of course it was usually open season on Jews and sometimes on Catholics and almost always on Mormons and Muslims and Buddhists and other heathens. The First Amendment was never intended to protect such outright blasphemy. Oh, no!)

Elections are won not by converting the opposition but by getting out your own vote, and Scudder’s organization did just that. According to histories I studied at Boondock, the election of 2012 turned out 63 percent of the registered voters (which in turn was less than half of those eligible to register); the True American party (Nehemiah Scudder) polled 27 percent of the popular vote…which won 81 percent of the Electoral College votes.

In 2016 there was no election.

The Torrid Twenties…Flaming Youth, the Lost Generation, flappers, cake eaters, gangsters and sawed-off shotguns and bootleg booze and needled beer. Hupmobiles and Stutz Bearcats and flying circuses. A joy hop for five dollars. Lindbergh and the *Spirit of St. Louis*. Skirts climbed unbelievably until, by the middle of the decade, rolled stockings permitted bare knees to be seen. The Prince of Wales Glide and the Finale Hop and the Charleston. Ruth Etting and Will Rogers and Ziegfeld’s Follies. There were bad things about the Twenties but on the whole they were good years for most people—and they were never dull.

I kept busy as usual with housewifely things of little interest to outsiders. I had Theodore Ira in 1919, Margaret in 1922, Arthur Roy in 1924, Alice Virginia in 1927, Doris Jean in 1930—and they all had the triumphs and crises that children have and aren't you glad that you don't have to look at their pictures and listen to me repeating their cute sayings?

In February of 1929 we sold our house on Benton Boulevard and leased with option to buy a house near Rockhill Road and Meyer Boulevard-an old farmhouse, roomy but not as modern as our former home. This was a hardnosed decision by my husband, who always believed in making every dollar work twice. But he did consult me and not alone because title was vested in me.

"Maureen," he said to me, "do you feel like gambling?"

"We always have. Haven't we?"

"Some yes, some no. This time we would tap the pot, shoot the works, shout *Banco!* If I failed to bring it off, you might have to go out and pound a beat, just to keep potato soup on the table."

"I've always wondered if I could make a living that way. Here I am, forty-seven in July—"

"Wups! Your age is now thirty-seven. And I'm forty-one."

"Briney, I'm in bed with you. Can't I be truthful in bed?"

"Judge Sperling wants us to stick to our corrected ages at all times. And Justin agrees."

"Yessir. I'll be good. I've always wondered if I could make a living as a streetwalker. But how do I find a beat? I understand that a gal can get her eyes scratched out if she just goes out and starts soliciting without finding out who owns that territory. I know what to do in bed, Briney; it's the merchandizing of the product that I must learn."

"Don't be so eager, slippery bottom; it may not be necessary. Tell me— Do you still believe that Ted—Theodore—Corporal Bronson-came from the future?"

I suddenly sobered. "I do. Don't you?"

"Mo', I believed him as quickly as you did. I believed him before his prophecy about the end of the war proved true. Now I'm asking you this: Do you believe in Ted strongly enough that you are willing to risk every cent we own that his prediction of a collapse in the stock market will be right on the button exactly like his prediction of Armistice Day?"

"Black Tuesday," I said softly. "October twenty-ninth. This year."

"Well? If I take this gamble—and miss—we'll be broke. Marie won't be able to finish at Radcliffe, Woodie will have to scratch for a college education, and Dick and Ethel—well, we'll cross those bridges later. Sweetheart, I'm into this bull market up to my ears…and I propose to get deeper into it on the firm assumption that Black Tuesday takes place on the dot and exactly as Ted said it would."

"Do it!"

"Are you sure, Mo‘? If anything goes wrong, we'll be right back to fried mush. Whereas it is not too late to hedge my bets—pull half of it out and stash it away. Gamble with the other half."

"Briney, I wasn't brought up that way. You remember Father's harness racer Loafer?"

"I saw him a few times. A beautiful beast."

"Yes. Just not quite as fast as he looked. Father regularly bet on himself. Always on the nose. Never to place or show. Loafer usually could come in second or third…but Father would not bet that way. I've heard him talk to Loafer before a heat, softly, gently: 'This time we're going to take 'em, boy! This time we're going to win!‘ Then later I've heard him say, 'You tried, old fellow! That's all I can ask. You're still a champion…and we'll take 'em next time!' And Father would pat him on the neck, and Loafer would whinny and nicker to him, and they would comfort each other."

"Then you think I should bet across the board? For there isn't going to be any next time."

"No, no! Shoot the works! You believe Theodore and so do I. So let's do it!" I added, as I reached down and grabbed his tool, "If it's fried-mush time again, it need not be for long. You can knock me up, uh, let me see"—I counted—"next Monday. Which would mean that I would unload about"—I stopped to count again—"oh, a couple of weeks after Black Tuesday. Then we will receive another Howard Foundation bonus shortly thereafter."

"No."

"Huh? I mean, 'Excuse me?' I don't understand."

"Mo‘, if Ted's prediction is wrong, the Foundation's principal assets may be wiped out. Justin and Judge Sperling are betting that Ted's prediction is correct; Chapman is bucking them. There are four other trustees…and two are Hoover Republicans, two were for Al Smith. Justin doesn't know which way it will go."

Selling our house when we did was part of the gamble. It was a hardnosed decision as it involved what came to be known as "block busting." We lived in an all-white neighborhood, but Darktown was just north of us, not far away, and had been growing steadily closer in the twenty-odd years we had owned that house. (Dear, sweet house!—stuffed with happy memories.)

Brian had been approached by a white real estate agent who said he had an offer from an undisclosed client: How much did Brian want for his house?

"Darling, I did not ask about his client…because, if I had asked, it would turn out that the client was a white lawyer who, if pushed, would be acting for a client in Denver or Boston. In this sort of a deal the coverup is about six levels deep…and the neighbors are not supposed to find out the color of the new owner's skin until the new owner moves in."

"What did you tell him?"

"I told him, 'Certainly I'm willing to sell my house if the price is right. But the price would have to be attractive, as we are comfortable where we are and moving is always expensive in time and in money. What price does your client offer? In cash, I mean—not a down payment and take back a mortgage. If I am going to have to find another house for my large family—eleven of us—I'll need cash to work with. I may have to build, rather than buy—not too many houses can handle big families today; I probably would have to build. If I do this. So the price would have to be attractive and it would have to be in cash.

"This false face points out that any bank would discount the paper on such a property; a mortgage is as good as cash. 'Not to me, it isn't,' I told him. 'Let your client arrange the mortgage directly with his bank and bring the cash up front. My dear sir, I'm not anxious to sell. Give me a cash figure and, if it's big enough, we'll go straight to escrow. If it's not, I'll tell you No just as quickly.'

"He said that escrow would not be necessary, as they were satisfied that I could grant good title. Mo', that told me more than the words he said. It means that they have already run a title search on us…and probably on every house in our block. It means to me that this is probably the only house in this block that does not have a mortgage against it…or some other legal matter that would have to be cleared in escrow, such as lifetime tenancy under a will, or the property is currently in probate, or involved in a pending divorce, or there is a lien against it, or a judgment, or something. A man trying to put together this sort of a deal doesn't like escrow, because it is during that waiting period that the 'gentlemen's agreement' sort of people can find out what is going on, and move in to stop it…often with the connivance of a sympathetic judge."

"Briney, maybe you had better explain 'gentlemen's agreement' to me. I don't recall it from that course in commercial law we took."

"You would not have heard of it there because it is extralegal. Not against the law, just not covered by law. There is no covenant in your deed to this house that forbids you to sell to anyone you wish to, black, white, or green polka dots…and it might not stand up in court if there were. But, if you were to ask our neighbors, I guarantee that they would assure you that there is indeed a gentlemen's agreement binding you not to sell your house in this block to a Negro."

I was puzzled. "Have we ever agreed to anything of the sort?" My husband made all sorts of commitments, rarely told me. He simply assumed that I would back him up. And I always did. Marriage is not a sometime thing; it's whole hawg or you're not married.

"Never. "

"Are you going to ask our neighbors what they think about this?"

"Mo', do you want me to? It's your house."

I don't think I hesitated as long as two seconds. But it was a new idea and I did have to decide. "Briney, several houses in this block have changed hands since we moved in here, uh, twentytwo years ago. I don't recall that we were ever asked our opinion about any of those transactions."

"That's right. We never were."

"I don't think it is any of their business to decide what a Negro can or can't buy. Or to tell us. What they do with their property is their business; what we do with ours is our business—as long as we obey the laws and abide by any open covenants that run with the land. That twenty-five-foot setback rule, for example. I can think of just one way they can legitimately keep us from selling this house to anyone who wants to buy it."

"What way is that, Mo'?"

"By coming to us before we are committed with the same sort of offer that Mr. False Face has made but with more money. If they buy this house from us, they can do with it as they wish."

"I'm glad you see it that way, my love. A year from now every house in this block will be occupied by a Negro family. Mo', I could see it coming. Population pressure works much like a rising river. You can put up dikes or levees, but the day comes when the river has to go somewhere. Kansas City's Darktown is terribly crowded. If the whites don't want to live next door to Negroes, then the whites must back off and give them room. I'm not especially concerned about Negro problems; I've got problems of my own. But I don't fight the weather and I don't bang my head against a stone wall. You and I will see the day when Darktown will run south all the way to Thirty-ninth Street. There is no use fussing about it; it is going to happen."

Briney did get a good price for our old house. After figuring in the rise in prices from 1907 to 1929 there was only a modest profit, but Briney did get the price in cash—gold certificates, not a check; the recorded price was "ten dollars and other valuable considerations"—and Briney put the money straight into the stock market. "Sweetheart, if Theodore's predictions are correct, in a year or so we'll be able to take our pick of big houses in the Country Club district at about a third of the going prices today…because it will turn out that Black Tuesday will leave about half of the nominal owners unable to meet their mortgage payments. In the meantime try to stay happy in this old farmhouse; Justin and I have to go to New York."

I did not have any trouble staying happy in that farmhouse; it reminded me of my girlhood. I told Father so, and he agreed. "But put that second bathroom in. Do you remember why we had two outhouses? You can't afford to encourage piles and constipation."

Father was not formally living with us—he got his mail elsewhere-but, since 1916 and Plattsburg, Brian had insisted that we always keep a room for Father. When Brian went to New York to stay closer to his stock-market gambling, Father did agree to sleep (usually) at our house, just as he had when Brian was away in France. But by then I had that second bath installed and a washroom downstairs and the outhouse out back limed and filled.

My children readjusted to the change with little fret. Even our resident cat, Charge d'Affaires, accepted it. He fretted on the long trip there, but he did seem to understand that the moving vans meant that home was no longer home. Ethel and Teddy kept him fairly well soothed during the move—I was driving that load; Woodrow had the rest of the family in his jalopy. Charge looked over our land as soon as we got there, then came back, got me, took me with him while he went all the way around the inside of the fence. He sprayed all four corner posts, so I knew that he had accepted the change and his new responsibilities.

It was from Woodrow that I had expected the most fuss as he was due to enter his senior year at Central High School in September 1929 and was a likely candidate for cadet commander of the ROTC battalion at Central, especially as both Brian Junior and George had commanded the cadet battalion each in his senior year.

But Woodrow did not even insist on finishing out the second semester; he transferred in midterm to Westport High School—somewhat to my dismay, as I had counted on him to drive Dick and Ethel to Central, one in junior high there, the other just entering senior high. So, willy-nilly, they had to transfer in midterm, too, as I did not have time to drive them and it was an impossible trip by streetcar. Teddy and Peggy I put in Country Day School, an excellent private school, as Eleanor suggested that she could handle two more in her car along with the three she had in that school.

It was several years before I realized that Woodrow's willingness to switch schools abruptly had to do with a renovated cow pasture still farther south that had a sign on it: ACE HARDY'S FLYING SCHOOL. Woodrow had acquired (I think that is the right word) his unlikely automobile in the summer of 1928, and after that we had seen little of him other than at meals. But I learned later that Woodrow had learned to fly while still in high school.

As everyone knows, Black Tuesday arrived on the dot. Briney called me long distance a week later. “Frau Doktor Krausmeyer?”

“Elmer!”

“Children okay?”

“Everyone is fine but they miss their papa. As do I. Hurry home, dear; I’m honing to see you.”

“Didn’t that hired man work out?”

“No staying power. I let him go. I decided to wait for you.”

“But I’m not coming home.”

“Oh.”

“Don’t you want to know why?”

(Yes, Briney, I do want to know why. And someday I’m going to put itch powder into your jock strap for these guessing games.) “Buffalo Bill, you’ll tell me when it suits you and whatever suits you.”

“Rangy Lil, how would you like to go to Paris? And to Switzerland?”

“Hadn’t you better make it South America? Some country where there is no extradition?” (Damn you, Briney! Quit teasing me.)

“I want you to leave tomorrow. Take the C and A to Chicago, then the Pennsy to New York. I’ll meet your train and take you to our hotel. We sail for Cherbourg on Saturday.”

“Yes, sir.” (Oh, that man!) “About our children—Seven, I believe. Are you interested in the arrangements I make for them? Or shall I just use my judgment?” (What arrangements can I make with Eleanor?)

“Use your judgment. But if Ira is there, I’d like to speak to him.”

“To hear is to obey, Effendi.”

After Brian spoke to him, Father said to me, “I told Brian not to worry, as Ethel is a competent cook. If she needs help, I will hire help. So, Maureen, you two run along and have fun; the youngsters will be safe. Don’t pack more than two bags, because—” The phone rang again.

“Maureen? Your big sister, dear. Did you hear from Brian?”

“Yes.”

“Good. I have the train schedules and the Pullman reservations; Justin arranged them from New York. Frank will drive us to the station. You must be ready by ten tomorrow morning. Can you manage it?”

“I’ll have to manage it. I may be barefooted and my hair in a bath knot—”

I became addicted to travel in a luxury liner in nothing flat. The *Île de France* was a wonderful shock to little Maureen Johnson whose idea of luxury was enough bathrooms for seven—usually seven; it varied—children and enough hot water. Briney had taken me to the Grand Canyon two years earlier and that was wonderful…but this was another sort of wonderful. A *concierge* who seemed anxious to swim back and fetch anything Madame wishes. A maid who spoke English but understood my French and did not laugh at my accent. A full orchestra at dinner, a chamber music trio for tea, dancing to live music every night. Breakfast in bed. A masseuse on call. A living room for our suite bigger and much fancier than Eleanor's at home, and two master bedrooms. "Justin, why are we at the captain's table?"

"I don't know. Because we have this suite, maybe."

"And why do we have this suite? Everything in first class looks luxurious; I would not have complained if we had been in second class. But this is gilding the lily. Isn't it?"

"Maureen my sweet, I ordered two outside double staterooms, first class, which were confirmed and we paid for them. Then two days before sailing the agent telephoned and offered me this suite at the price we had paid plus a nominal surcharge, one hundred dollars. Seems the man who had reserved this suite had not been able to sail. I asked why he had canceled. Instead of answering he cut the surcharge to fifty dollars. I asked who had died in that suite and was it contagious. Again instead of answering he offered to eliminate the surcharge if we would just let the *New York Times* and *L'Illustration* photograph us in our suite—which they did, you remember."

"And was it contagious?"

"Not really. The poor fellow jumped out a twenty-story window—the day after Black Tuesday."

"Oh! I should keep my mouth shut."

"Mau darling, this suite was not his home, he was never in it in his life, it is not haunted. He was just one of many thousands of chumps who became paper wealthy gambling on margin. If it will make you feel any better, I can assure you that both Brian and I made no secret of our intention of getting out of the market when we did because we expected the market to collapse before the end of October. Nobody would listen." Justin shook his head, shrugged.

Brian added, "I almost had to strangle one broker to get him to execute my orders. He seemed to think it was immoral and possibly illegal to sell when the market was going steadily up. 'Wait till it tops,' he said. 'Then see. You're crazy to quit at this point.' I told him that my old grandmother had read the tea leaves and told me that now was the time to unload. He again said that I was crazy. I told him to execute those orders at once…or I was going straight to the governors of the Exchange and have him investigated for bucket shop operations. That really got him angry, so he sold me out…and then got still angrier when I insisted on a certified check. I took the check and cashed it at once. And changed the cash to gold…as I recalled all too clearly that Ted said that banks would start to go boom."

I wanted to ask where that gold was now. But I did not.

Zurich is a lovely city, prettier than any I had seen in the United States. The language there is alleged to be German but it is not the German spoken by my neighbor from Munich. But I got along fine once I realized that almost everyone spoke English. Our men were busy; Eleanor and I had a wonderful time being tourists.

Then one day they took us with them and I found myself the surprised owner of a numbered bank account, for 155,515 grams of fine gold (which I had no trouble interpreting as one hundred thousand dollars, but it was not called such). Then I found myself signing powers of attorney over "my" bank account to Brian and to Justin, while Eleanor did the same with a similar account. And a limited power of attorney to someone I had never heard of in Winnipeg, Canada.

We were not placed in that fancy suite because we were high society; we were not. But the purser was carrying in his safe I do not know how many ounces of gold, most of which belonged to the Ira Howard Foundation, and some of which belonged personally to Brian, and to Justin, and to my father. That gold was moved by the Bank of France from Cherbourg to Zurich, and we rode with it.

In Zurich Brian and Justin, as witnesses and trustees for the Foundation, saw the shipment opened, saw it counted and weighed, and then deposited with a consortium of three banks. For the Foundation had taken very seriously Theodore's warning that Mr. Roosevelt would devalue the dollar, then make it illegal for American citizens to own or possess gold.

"Justin," I asked, "what happens if Governor Roosevelt does not run for the presidency? Or does but is not elected?"

"Nothing. The Foundation would be no worse off. But have you lost confidence in Ted? On his advice we rode the market up, and then cashed out before it crashed, and now the Foundation is about six times as wealthy as it was a year ago, all through depending on Ted's predictions."

"Oh, I believe in Theodore! I was just wondering."

Mr. Roosevelt was elected and he did indeed devalue the dollar and made it illegal for Americans to possess gold. But the assets of the Foundation had been placed out of reach of this confiscation. As was my own numbered bank account. I never touched it but Briney told me that it was not simply Lying idle; he was using "my" money to make more money.

Brian was now a trustee of the Foundation, vice Mr. Chapman, who had been removed from the board for having lost his own money in the stock market. A trustee of the Foundation had to be himself qualified for Howard benefits (four living grandparents at time of marriage) and had to be himself a moneymaker. If there were other requirements, I do not know what they were.

Justin was now chairman of the board and chief executive, vice Judge Sperling, who was still a trustee but was past ninety and had elected not to work quite so hard. When we got back to Kansas City, Justin and Brian set up offices in the Scarritt Building as "Weatheral and Smith, Investments" while "Brian Smith Associates" took an office on the same floor.

We never again had money worries but the decade of the Depression was not a time when it was fun to be rich. We strove to avoid the appearance of being rich. Instead of buying a fancy house in the Country Club district we bought that farmhouse at a bargain price, then rebuilt it into a more satisfactory structure. It was a period when skilled craftsmen were eager to get work at wages they would have sneered at in 1929.

The nation's economy was stuck on dead center and no one seemed to know why and everyone from bootblack to banker had a solution he wanted to see tried. Mr. Franklin Roosevelt took office in 1933 and, yes, the banks did close but the Smiths and the Weatherals had cash under the mattress and groceries squirreled away; the bank holiday did us no harm. The country seemed invigorated by the energetic actions of "The New Deal," the new president's name for a series of nostrums that came pouring out of Washington.

In retrospect it seemed that the "reforms" that constituted the New Deal did nothing to correct the economy—yet it is hard to fault emergency measures that put food into the mouths of the destitute. The WPA and the PWA and the CCC and the NRA and the endless makework programs did not cure the economy and may well have done damage…but in Kansas City in the 1930S they almost certainly served to avoid food riots by desperate people.

On September first, 1939, ten years after Black Tuesday, Nazi Germany invaded Poland. Two days later Britain and France declared war against Germany. World War II had started.

CHAPTER SIXTEEN

The Frantic Forties

In the summer of 1940 Brian and I were living in Chicago at 6105 Woodlawn, an address just south of the Midway. It was a large apartment building, eighty units, owned by the Howard Foundation through a dummy. We occupied what was called “the Penthouse”—the west end of the top floor, a living room and balcony, a kitchen, four bedrooms, two baths.

We needed the extra bedrooms, especially in July during the Democratic National Convention. For two weeks we had from twelve to fifteen people sleeping in an apartment intended for a maximum of eight. I do not recommend this. The apartment did not have airconditioning, it was an exceptionally hot summer, and Lake Michigan a few hundred yards away turned our flat into a Turkish bath. At home I would have coped with it by walking around in my skin. But I could not do so in the presence of strangers. One of the real benefits of Boondock is that skin is just skin—means nothing.

I had not been in Chicago other than to change trains since 1893. Brian had frequently visited Chicago without me, as this flat was often used for Howard Foundation board meetings, the Foundation having moved its registered address from Toledo to Winnipeg in 1929. As Justin explained it to me, “Maureen, while we don’t advertise what we’re doing, we won’t be breaking any laws about private ownership of gold; we are simply planning for whatever develops. The Foundation is now restructured under Canadian law, and its registered secretary is a Canadian lawyer, who is in fact a Howard client himself and a Foundation trustee. I never touch gold, even with gloves on.”

(Brian expressed it otherwise. “No intelligent man has any respect for an unjust law. Nor does he feel guilt over breaking it. He simply follows the Eleventh Commandment.”)

This time Brian was not in Chicago for a board meeting; he was there to watch the Chicago commodities market and to deal in it, because of the war in Europe—while I was in Chicago because I wanted to be. Much as I enjoyed being a brood mare, after forty years of it and seventeen babies, I relished seeing something other than wet diapers.

There was indeed much to see. The parkway a hundred yards north of us, stretching from Washington Park to Jackson Park and called the Midway Plaisance, was in fact a midway the last time I had seen it, with everything from Little Egypt's belly dance to pink cotton candy. Now it was a beautiful grassy park, with the matchless Fountain of Time by Lorado Taft at the west end and the lovely Fifty-seventh Street beach at the east end. The main campus of the University of Chicago, great gray Gothic buildings, dominated its north side. The university had been founded the year before I had come here as a girl, but none of these buildings had been built by then—as near as I could recall several major exhibit halls had occupied the ground now constituting the campus. I could not be certain, as nothing looked the same.

The elevated trains were much more widespread and now they were powered by electricity instead of steam. On the surface there were no longer horse cars or even cable cars; electric trolley cars had replaced them. No more horses anywhere—autos bumper to bumper, a dubious improvement.

The Field Museum, three miles to the north and on the lake, had been founded after my long visit in '93; its Malvina Hoffman exhibit, The Races of Man, was in itself worth a trip to the Windy City. Near it was the Adler Planetarium, the first one I ever visited. I loved the shows at the planetarium; they let me daydream of traveling among the stars like Theodore—but I did not dream that I would ever really do so. That hope was buried, along with my heart, somewhere in France.

Chicago in '93 had kept eleven-year-old Maureen Johnson round-eyed; Chicago in 1940 kept Maureen Smith, now officially forty-one years old, still more round-eyed, there were so many new wonders to see.

One change I did not like: in 1893 if I happened to be out after dark, Father did not worry and neither did I. In 1940 I was careful never to be caught out after dark, other than on Brian's arm.

Just before the 1940 Democratic convention the "Phony War" ended and France fell. On June sixth at Dunkirk, France, the British evacuated what was left of their army and that was followed by one of the greatest speeches in all histories: "—we shall fight them on the beaches, we shall fight them in the streets, we shall never surrender —"

Father telephoned Brian, told him that he was signing up with the AFS. "Brian, this time even the Home Guard says I'm too old. But these folks are signing up medics the Army won't accept. They want them for support service in war zones and they'll take anybody who can saw off a leg-meaning me. If this is the only way I can fight the

Huns, then this is what I'll do—I owe that to Ted Bronson. Understand me, sir?"

"I quite understand."

"How soon can you put somebody else here to watch the youngsters?"

I could hear both sides, so I took the phone. "Father, Brian can't come home now but I can. Although I may be able to put Betty Lou there in my place even quicker. Either way, you can go ahead with your plans. But, Father, listen to me. You take care of yourself! Do you hear me?"

"I'll be careful, Daughter."

"Please do so, please! I'm proud of you, sir. And Theodore is proud of you, too. I know."

"I shall try to make both you and Ted proud of me, Maureen."

I said goodbye quickly and hung up before my voice broke. Briney was looking thoughtful. "I'll have to get busy right away and correct my age with the Army. Or they might start saying that I am too old."

"Briney! Surely you don't expect to convince the Army that you are your Howard age? They have years and years of records on you."

"Oh, I wouldn't try to tell the adjutant general my Howard age. Although I don't think I look any older than the forty-six it says on my driver's license. I mean that I want to correct the little white lie I told in 1898. When I was actually fourteen but swore that I was twenty-one so that they would let me enlist."

"Fourteen indeed! You were a senior at Rolla."

"I was precocious, just like our children. Yes, dearest, I was a senior at Rolla in '98. But there is nobody left in the War Department who knows that. And nobody is likely to tell them. Maureen, a reserve colonel fifty-six years old is a lot more likely to be ordered to duty than one who is sixty-three. About one hundred percent more likely."

I'm using a Time-agent's field recorder keyed to my voice and concealed in a body cavity. No, no, not concealed in the tunnel of love; that would not do, as Time agents aren't nuns and are not expected to be. I mean an artificial cavity about where my gall bladder used to be. This gadget is supposed to be good for a thousand hours and I hope it is working properly because, if these spooks scrag me—better make that "when they scrag me"—I hope that Pixel can lead somebody to my corpse and thereby let the Time Corps retrieve the record. I want the Circle to understand what I was trying to do. I should have done it openly, I suppose, but Lazarus would have grabbed it away from me. I have perfect hindsight-not so good in the other direction.

Brian did manage to "correct" his War Department age, simply because his general wanted him. But he did not manage to get himself ordered to a combat command. Instead combat came to him—he was holding down a desk at the Presidio and we were living in an old mansion on Knob Hill when the Japanese pulled their sneak attack on San Francisco, December 7, 1941.

It is an odd feeling to look up into the sky, see planes overhead, feel their engines deep in your bones, see their bellies give birth to bombs, and know that it is too late to run, too late to hide, and that you have no control whatever over where those bombs will hit—on you or on houses a block away. The feeling was not terror; it was more a sense of deja vu, as if I had been there a thousand times before. I don't care to feel it again but I know why warriors (real ones, not wimps in uniform) always seek combat assignments, not desk jobs. It is in the presence of death that one lives most intensely. "Better one crowded hour of life—"

I have read that in time line three this sneak attack was made on Hawaii, not San Francisco, and that California Japanese were thereafter moved back from the coast. If so, they were extremely lucky, for that spared them the blood bath that took place in time line two, where more than sixty thousand Japanese-Americans were lynched or shot or (in some cases) burned alive on Sunday through Tuesday, December 7-9, 1941. Did this affect what we did to Tokyo and Kobe later? I wonder.

Wars that start with sneak attacks are certain to be merciless; all the histories prove it.

As one result of those lynch mobs President Barkley placed California under martial law. In April 1942 this was eased off and only the twenty-mile strip inland from the mean high-tide line was militarized, but the zone was extended up the coast to Canada. In San Francisco this caused no special inconvenience—it was much like living on a military reservation and a marked improvement over San Francisco's usual civic corruption—but after dark on the coast itself there was always a danger that some sixteen-year-old boy in a National Guard uniform, armed with a World War I Springfield, might get nervous and trigger happy.

Or so I heard; I never risked it. The beach from Canada to Mexico was a combat zone; anyone on it after dark was risking sudden death and many found it.

I had my youngest with me, Donald, four, and Priscilla, two. My schoolage children—Alice, Doris, Patrick, and Susan—were in Kansas City with Betty Lou. I had thought of Arthur Roy as being school age (born 1924), but his cousin Nelson swore him into the Marine Corps the day after the bombing of San Francisco, along with his older brother Richard (born 1914); they went to Pendleton together. Nelson was on limited duty, having left a foot in Belleau Wood in 1918. Justin was on the War Production Board, based in Washington but traveling rather steadily; he stayed with us on Knob Hill several times.

Woodrow I did not see even once until the war was over. I received a Christmas card from him in December 1941, postmarked Pensacola, Florida: “Dear Mom and Pop, I’m hiding out from the Nips and teaching Boy Scouts how to fly upside down. Heather and the kids are stashed for the duration at Avalon Beach, PO Box 6320, SO I sleep home most nights. Merry Christmas and have a nice war. Woodrow.”

The next we heard from Woodrow was a card from the Royal Hawaiian at Waikiki: “The service here is not quite up to peacetime standards but it is better than that at Lahaina. Despite any rumors to the contrary the sharks in Lahaina Roads are not vegetarians. Hoping you are the same. W.W.”

That was our first intimation that Woodrow had been in the Battle of Lahaina Roads. Whether he was in the *Saratoga* when she was sunk, or whether he ditched from the air, I do not know. But his card implies that he was in the water at some point. I asked him about this after the war. He looked puzzled and said, “Mom, where did you get that notion? I spent the war in Washington, D.C., drinking Scotch with my opposite number in the British Aircraft Commission. His Scotch, it was—he had worked out a scam to fly it in from Bermuda.”

Woodrow was not always strictly truthful.

Let me see—Theodore Ira, my World War I baby, went to active duty with Kansas City’s 110th Combat Engineers and spent most of the war in Noumea, building air strips and docks and such. Nancy’s husband and Eleanor’s son, Jonathan, had stayed in the Reserve but not in the Guard; he was a column commander in Patton’s Panzers when they drove the Russians out of Czechoslovakia. Nancy helped organize the WAAC and finished the war senior to her husband, to the vast amusement of all of us—even Jonathan. George started out in the Thirty-fifth Division HQ but wound up in the OSS, so I don’t know what he did. In March 1944 Brian Junior made the landing at Marseilles, caught a piece of shrapnel in his left thigh, and wound up back in Salisbury, England, an executive officer in the training command.

My letters to Father were returned to me in 1942, along with a formal letter of regret from the national headquarters of the AFS.

Richard’s wife, Marian, stayed in nearby San Juan Capistrano while Richard was at Camp Pendleton. When he shipped out, I invited her to move in with us, with her children—four, and one that was born shortly after she arrived. We could make room for them and it was actually easier for us two women to take care of seven children than it had been for each of us to cope with our own unassisted. We worked things out so that one of us could assist at Letterman Army Hospital every afternoon, going to the Presidio by bus (no gasoline ration expended) and coming back with Brian. I was fond of Marian; she was as dear to me as my own daughters.

So it came about that she was with us when she received that telegram; Richard had earned the Navy Cross on Iwo Jima—posthumously.

A little over five months later we destroyed Tokyo and Kobe. Then Emperor Akihito and his ministers shocked us all by ritually disemboweling themselves, first the ministers, then the emperor, after the emperor announced to them that his mind had been quieted by President Barkley's promise to spare Kyoto. It was especially shocking in that Emperor Akihito was just a boy, not yet twelve, younger than my son Patrick Henry.

We will never understand the Japanese. But the long war was over.

I am forced to wonder what would have happened if the emperor's father, Emperor Hirohito, had not died in the "Star Festival" air strike, July seventh? He was reputed to be so "Westernized." The other pertinent histories, time lines three and six, give no firm answers. Hirohito seems to have been the captive of his ministers, reigning but not ruling.

Once Japan surrendered Brian asked for early separation, but was sent to Texas—Amarillo, then Dallas—to assist in contract terminations (the only time, I think, that he regretted having passed his bar examinations back in 1938). But moving away from San Francisco at that time was a good idea—a change of background to a place where we knew no one-because on arrival in Texas Marian became "Maureen J. Smith" and I dyed my hair and became her widowed mother, Marian Hardy. None too soon; she was already showing—four months later she gave birth to Richard Brian. We kept it straight with the Foundation, of course, and registered Marian's new baby correctly: Marian Justin Hardy + Brian Smith, Sr.

What happened next is difficult for me to talk about, because there are three points of view and mine is only one of those three. I am certain that the other two are each as fair-minded as I am, if not more so. "More so," I think I must concede, as Father had warned me, more than half a century earlier, that I was an amoral wretch who could reason only pragmatically, not morally.

I had not tried to keep my husband out of my daughter-in-law's bed. Neither Briney nor I had ever tried to own each other; we both approved of sex for fun and we had established our rules for civilized adultery many years earlier. I was a bit surprised that Marian had apparently made no effort to keep from getting pregnant by Brian… but only in that she did not consult me ahead of time. (If she consulted Briney, he never mentioned it. But men do have this tendency to spray sperm around like a fire hose while letting the females decide whether or not to make practical use of the juice.)

Nevertheless I was not angry, just mildly surprised. And I do recognize the normal biological reflex under which the first thing a freshly bereft widow does, if she can manage it, is to spread her legs and sob bitterly and use her womb to replace the dear departed. It is a survival mechanism, one not limited to wars but more prevalent in wartime, as statistical analysis demonstrates.

(I hear that there are men who watch the newspapers for funerals, then attend those of married men in order to meet new widows. This is shooting fish down a well and probably merits castration. On the other hand, those widows might not thank us.)

So we moved to Dallas and everything was satisfactory for a while. Brian was simply a man with two wives, a situation not unknown among Howards—just pull the shades against the neighbors, like some Mormons.

A short time after the birth of Marian's new baby Brian came to me with something on his mind, something he had trouble articulating. I finally said, "Look, dearest, I am not a mindreader. Whatever it is, just spill it."

"Marian wants a divorce."

"Huh? Briney, I'm confused. If she's not happy with us, all she needs to do is to move out; it doesn't take a divorce. In fact I don't see how she could get one. But I'm terribly sorry to hear it. I thought we had gone to considerable trouble to make things happy for her. And for Richard Brian and her other children. Do you want me to talk to her? Try to find out what the trouble is?"

"Uh—Damn it, I didn't make myself clear. She wants you to get a divorce so that she can marry me."

My jaw dropped, then I laughed. "Goodness, Briney, what in the world makes her think I would ever do that? I don't want to divorce you; you're the nicest husband a gal ever had. I don't mind sharing you—but, darling, I don't want to get rid of you. I'll tell her so. Where is she? I'll take her to bed and tell her so as sweetly as possible." I reached up, took his shoulders and kissed him.

Then I continued to hold his shoulders and look up at him. "Hey, wait a minute. *You* want a divorce. Don't you?"

Briney didn't say anything; he just looked embarrassed.

I sighed. "Poor Briney. Us frails do make your life complicated, don't we? We follow you around, climb into your lap, breathe in your ear. Even your daughters seduce you, like—what was his name? Old Testament. And even your daughters-in-law. Stop looking glum, dear man; I don't have a ring in your nose, and never have had."

"You'll do it?" He looked relieved.

"Me? Do what?"

"Divorce me."

"No. Of course not."

"But you said—"

"I said that I didn't have a ring in your nose. If you want to divorce me, I won't fight it. But I'm not the one who wants a divorce. If you like, you can simply do it to me Muslim style. Tell me 'I divorce you' three times, and I'll go pack my clothes."

Perhaps I should not have been stubborn about it but I do not see that I owed it to either of them to go through the fiddle-faddle—the trauma—of finding a lawyer and digging up witnesses and appearing in court. I would cooperate…but let them do the work.

Brian gave in once he saw that I meant it. Marian was vexed with me, stopped smiling, and avoided talking with me. Finally I stopped her when she was about to leave the living room when I came in. "Marian!"

She stopped. "Yes, Mother?"

"I want you to stop pretending to be aggrieved. I want to see you smile and hear you laugh, the way you used to. You have asked me to turn my husband over to you and I have agreed to cooperate. But you must cooperate, too. You are acting like a spoiled child. In fact, you are a spoiled child."

"Why, how utterly unfair!"

"Girls, girls!"

I turned and looked at Brian. "I am not a girl. I am your wife of forty-seven years. While I am here, I will be treated with respect and with warmth. I don't expect gratitude from Marian; my father taught me years ago never to expect gratitude because there is no such thing. But Marian can simulate gratitude out of politeness. Or she can move out. At once. Right this minute. If you two expect me not to fight this divorce, you can both show me some appreciation."

I went to my room, got into bed, cried a little, then fell into a troubled sleep.

A half hour later, or an hour, or longer, I was awakened by a tap on my door. "Yes?"

"It's Marian, Mama. May I come in?"

"Certainly, darling!"

She came in, closed the door behind her, looked at me, her chin quivering and tears starting. I sat up, put out my arms. "Come to me, dear."

That ended any trouble with Marian. But not quite with Brian. The following weekend he pointed out that the *sine qua non* of an uncontested divorce was a property settlement agreed to by both parties. He had fetched home a fat briefcase. "I have the essential papers here. Shall we look them over?"

"All right." (No use putting off a trip to the dentist.)

Brian put the briefcase down on the dining table. "We can spread them out here." He sat down.

I sat down on his left; Marian sat down opposite me. I said, "No, Marian, I want to go over these in private. So you are excused, dear. And do please keep the children out."

She looked blank and started to stand up. Brian reached out, stopped her. "Maureen, Marian is an interested party. Equally interested."

"No, she's not. I'm sorry."

"How do you figure?"

"What you have there, what is represented by those papers, is our community property, yours and mine, what you and I have accumulated in the course of our marriage. None of it is Marian's and I don't care to go over it in the presence of a third party. At a later time, when she divorces you, she'll be present at the divvy-up and I will not be. Today, Brian, it is between you and me, no one else."

"What do you mean?—when she divorces me."

"Correction: If she divorces you." (She did. In 1966.) "Brian, did you fetch home an adding machine? Oh, all I really require is a sharp pencil."

Marian caught Brian's eye, left the room, closed the door behind her. He said, "Maureen, why do you always have to be rough on her?"

"Behave yourself, Briney. You should not have attempted to have her present for this and you know it. Now…do you want to do this politely? Or shall we wait until I can call in a lawyer?"

"I see no reason why it can't be done politely. And even less reason why a lawyer should look at my private business."

"And still less reason why your fiancee should look at mine. Briney, stop behaving like Woodie at age six. How did you plan on whacking this up?"

"Well, first we must plan on the marriage allotments for the kids. Seven, that is. And Marian's five. Six, now."

(Each time we had "rung the cash register"—received a baby bounty from the Ira Howard Foundation—Brian had started a bookkeeping account for that child, letting that amount enhance on his books at 6 percent compounded quarterly, then passed on the enhanced amount to that child as a wedding present—about three times the original baby bounty. In the meantime Brian had the use of the money as working capital for eighteen or more years…and, believe me, Brian could always make working capital pay more than 6 percent, especially after 1918 when he had Theodore's predictions to guide him. Just one word—"Xerox" or "Polaroid"—could mean a fortune, known ahead of time.)

"Wups! Not out of this pile, Briney. Richard received his marriage allotment from us when he married Marian. Her children by Richard are our grandchildren. What about our other grandchildren? I haven't counted lately but I think we have fiftytwo. Are you planning to subsidize all fiftytwo out of what we own today?"

"The situation is different."

"It certainly is. Brian, you are trying to favor five of our grandchildren at the expense of all our other grandchildren and all our remaining unmarried children. I won't permit it."

"I'll be the judge of that."

"No, you will not. It will be a real judge, in a real court. Or you will treat all our children equally and not attempt to favor five grandchildren while ignoring forty-seven others."

"Maureen, you've never behaved this way in the past."

"In the past you never broke up our partnership. But now that you have done so, that breakup will be on terms that strike both of us as equitable…or you can tell it to the judge. Brian, you can't cast me off like an old shoe and then expect me to continue to accept your rulings as docilely as I have done all these years. I say again: Quit behaving like Woodie as a child. Now…stipulating that we have agreed, or will agree, on what is earmarked for marriage allowances, how do you want to divide up the rest of it?"

"Eh? Three equal portions. Of course."

"You're giving me two portions? That's generous of you, but more than I had expected."

"No, no! A share for you, a share for me, a share for Marian. Even all the way around."

"Where is the fourth share? The one for my husband."

"You're getting married again?"

"No immediate plans. I may."

"Then we'll cross that bridge when we come to it."

"Briney, Briney! Your needle is stuck in a groove. Can't you get it through your head that you cannot force me to accept your fiancée as co-owner of the property you and I have accumulated together? Half of it is mine. Fair is fair."

"Damn it, Mo‘, you cooked and kept house. I am the one who got out there and struggled to build up a fortune. Not you."

"Where did the capital come from, Briney?"

"Huh?"

"Have you forgotten? How did we 'ring the cash register'? For that matter how did it come about that you knew ahead of time the date of Black Tuesday? Did I have something to do with it? Briney, I'm not going to argue it because you don't want to be fair about it. You keep trying to hand over to your new love some of my half of what you and I accumulated together. Let's take it into court and let a judge decide. We can do it here, a community property state, or in California, another community property state, or in Missouri where you can count on it that a judge would give me more than half. In the meantime I will ask for temporary alimony—"

"Alimony! "

"—and child support for six children while the court determines what my share, plus alimony, plus child support, adds up to."

Brian looked astounded. "You intend to strip me bare? Just because I knocked up Marian?"

"Certainly not, Brian. I don't even want alimony. What I do want… and expect…and insist on—or we go to court over it—is this: after an equitable arrangement for support of the children and for their marriage allowances, based on what we have done for our married children in the past and based on what you are now sending to Betty Lou for our children in Kansas City…once the kids are taken care of, I want exactly half, right down the middle. Otherwise we let a judge settle it."

Brian looked grim. "Very well."

"Good. Make up two lists, two halves, and then we can draw up a formal property settlement, one we can file with the court. Where do you intend to divorce me? Here?"

"If you have no objection. Easiest."

"All right."

It took Brian all that weekend to make the two property lists. On Monday night he showed them to me. "Here they are. Here is a summary list of my half, and here is yours."

I looked at them and could see at once that the totals matched… And I suppressed a need to whistle at the totals. I had not guessed even to the nearest million how wealthy we were.

"Brian, why is this list mine and that list yours?"

"I've kept on my list the properties I want to handle. On your list are things that don't require my expertise, such as commercial bonds and municipals. It doesn't matter; it's an even split."

"Since it is even, let's just swap them. I'll take everything on your list, you take the half you listed for me."

"Look, I explained to you why I—"

"Then, if there are properties on my list that you really want, you buy them from me. At a mutually agreeable price."

"Mo', do you think I am trying to cheat you?"

"Yes, dear, you have been trying to cheat me from the moment this matter of a divorce and property settlement came up." I smiled at him. "But I shan't let you; you would regret it later. Now take those two lists and rearrange them. Make the division so meticulously fair that you really do not care which list I take, which list I leave to you. Or, if you prefer it, I will make the division and you can take your choice. But you are not going to put all of the goodies into one list and then claim that the list with the goodies is yours. So—Do I make the lists and you choose? Or do you make them and I choose?"

It took him a week to do it, and the poor man almost died of frustration. But at last he produced new lists.

I looked at them. "This suits you, Briney? You now have our community property divided so perfectly that you really don't care which list I choose?"

He smiled wryly. "Let's say that I will wince and shudder and bleed equally either way."

"Poor Briney. You remind me of the donkey and the two piles of hay. There are ample liquid assets in each list; you can buy from me anything dear to your heart." I reached for one list while watching his eyes—then picked up the other list. "Here's my half. Let's start in on the paperwork."

Brian squawked again when he wanted to buy from me some of the items on my list and I agreed to sell but insisted on dickering over the prices. But my memory serves me well, and I had made a point of remembering and looking up the name "D. D. Harriman" after I heard Theodore mention it on that sad, glad, mad Sunday he went away and never came back. At the time we divided our property I knew exactly which companies Mr.Harriman controlled, whether they were listed on the NYSE or not.

So I sold Brian what he wanted, but not at nominal book value. At replacement value, plus a reasonable profit. I'm not totally ignorant about business. But Brian had never left enough cash in my hands for me to treat it as capital. However, for years I had found it entertaining to speculate on paper. The game made reading the Wall Street Journal quite entertaining.

Brian divorced me the middle of 1946 and I went back to Kansas City. He did not hold a grudge and neither did I and neither did Marian. Briney had not truly been a bad boy; he had simply fought as hard for Marian as he had once fought for me…and I had done the same, once I realized that I was on my own and that my beloved husband was no longer my champion.

No point in holding grudges. Once the ship lifts, all bills are paid.

CHAPTER SEVENTEEN

Starting Over

My daughter Susan married Henry Schultz on Saturday, August second 1952, in Saint Mark's Episcopal Church, The Paseo at Sixty-third in Kansas City. Brian was there and gave his daughter in marriage; Marian stayed behind in Dallas, with her children…and, I must add, with an acceptable excuse: She was at or near term with her latest baby, and could reasonably have asked Brian to stay home. Instead she urged him not to disappoint Susan.

I'm not sure Susan would have noticed, but I would have.

Over half of my children were there, most of them with their spouses, and about forty of my grandchildren and their spouses, along with a sprinkling of great-grandchildren—and one great-great-grandchild. Not bad, for a woman whose official age was forty-seven. Not bad even for a woman whose actual age was seventy years and four weeks.

Impossible? Not quite. My Nancy gave birth to her Roberta on Christmas Day 1918. Roberta married at sixteen (Zachary Barstow) and bore Anne Barstow on November 2, 1935. Anne Barstow married Eugene Hardy and had her first child, Nancy Jane Hardy, on June 22, 1952.

NameBirth-----------------------Date---------------Relationship

Maureen Johnson (Smith)-------Jul. 4, 1882--------great-great-grandmother

Nancy Smith (Weatheral)--------Dec. 1, 1899-------great-grandmother

Roberta Weatheral (Barstow)---Dec. 25, 1918-------grandmother

Anne Barstow (Hardy) -----------Nov. 2, 1935------mother

Nancy Jane Hardy ---------------Jun. 22, 1952----daughter

According to the archives Nancy Jane Hardy (Foote) gave birth to Justin Foote, first of that name, on the last day of the twentieth century, December 31, 2000. I married his (and my remote descendant, Justin Foote the forty-fifth, in marrying into the Lazarus Long family in Gregorian A.D. 4316, almost twenty-four centuries later—my hundred-and-first year by my personal time line.

The Schultz family was almost as well represented at Susan's wedding as the Johnson family, even though most of them had to fly in from California or from Pennsylvania. But they could not show five generations, all in one room. I was delighted that we could, and I did not hang back when the photographer, Kenneth Barstow, wanted a group picture of us. He seated me in the middle with my great-great-granddaughter in my lap, while my daughter, granddaughter, and great-granddaughter hovered around us, like angels around Madonna and Child.

Whereupon we got scolded. Ken kept shooting pictures until Nancy Jane got bored with it and started to cry. At that point Justin Weatheral moved in and said, "Ken, may I see your camera?"

"Certainly, Uncle Justin." (Honorary uncle—first cousin twice removed, I believe. The Howard Families were beginning to reach the point where everyone was related to everyone else…with those inevitable defects through inbreeding that later had to be weeded out.)

"You can have it back in a moment. Now, ladies—you especially, Maureen—what I have to say is strictly among ourselves, persons registered with the Foundation. Look around you. Is the lodge tyled? Are there any strangers among us?"

I said, "Justin, admission to this reception is by card only. Almost anyone could have been at the wedding. But it takes a card to get inside this room. I sent them out for our family; Johanna Schultz handled it for Henry's relatives."

"I got in without a card."

"Justin, everybody knows you."

"That's my point. Who else got in without a card? Good old Joe Blow, whom everybody knows, of course. Is that Joe behind that table, ladling out punch?"

I answered, "Of course there are hired staff inside. Musicians. The caterer's people. And such."

" 'And such.' Exactly." Justin lowered his voice, spoke directly to us five and to Ken. "You all know the efforts all of us are making to keep our ages optimized. You, Maureen, how old are you?"

"Uh…forty-seven."

"Nancy? Your age, dear?"

Nancy started to say, "Fiftytwo." She got out the first syllable, bit it off. "Oh, shucks, Papa Weatheral, I don't keep track of my age."

"Your age, Nancy," Justin insisted.

"Let me see. Mama had me at fifteen, so—How old are you, Mama?"

"Forty-seven."

"Yes, of course. I'm thirty-two."

Justin looked at my granddaughter Roberta, my great-granddaughter Anne, and my great-great-granddaughter Nancy Jane, and said, “I’m not going to ask the ages of you three, because any way you answer would emphasize the impossibility of reconciling your very existence with Nancy’s claimed age and Maureen’s. Speaking for the trustees I can say how pleased we are with how thoroughly all of you are carrying out the purpose of Ira Howard’s will. But, again speaking for the trustees, I must again emphasize the necessity of never calling attention to our peculiarity. We must try to avoid having anyone notice that we are in any way different.” He sighed, then went on:

“So I am forced to say that I am sorry to see you five ladies all in one room at one time, and to add that I hope that it will never happen again. And I shiver at the idea that you are being photographed together. If that photograph wound up in the society section of next Sunday’s *Journal Post*, it could ruin the careful efforts of all our cousins to avoid calling attention to ourselves. Ken, don’t you think it would be well to kill that picture?”

Ken Barstow was outgunned; I could see that he was about to let the Foundation’s chief officer have his own way.

But I was not outgunned. “Hey! Justin, you stop that! You’re chairman of the board, surely. But nobody appointed you God. Those photos were taken for me and my kids. You kill them, or get Ken to, and I’m going to beat you over the head with his camera.”

“Now, Maureen—”

“ ‘Now Maureen’ my tired feet! We’ll keep it out of the papers, certainly. But I want five copies of Ken’s best shot, one for each of us. And Ken is entitled to a copy for his own files, if he wants it.”

We agreed on that and Justin asked for one to place in the archives.

I thought at the time that Justin was being unnecessarily cautious. I was wrong. Justin, in instituting and stubbornly pressing the policy later known as the Masquerade, caused our cousins to enter the Interregnum of the Prophets with 80 percent having public ages under forty, only 3 percent with public ages over fifty. Once the Prophet’s thought police were active it became both difficult and dangerous to switch backgrounds and change identities; Justin’s foresight made it usually unnecessary to attempt it.

According to the archives Brian died in 1998 at age 119—a newsworthy age in the twentieth century. But his public age at that time was 82, which is not newsworthy at all. Justin’s policies let almost all Howard clients enter the Interregnum (2012) with reduced public ages that let them live and die without living conspicuously too long.

Thank God I didn’t have to cope with it! No, not “thank God”—

Thank Hilda Mae, Zeb, Deety, Jake, and a wonderful, lovable machine named “Gay Deceiver.” I would like to see all five of them right now; Mama Maureen needs rescuing again.

Maybe Pixel will find them. I think he understood me.

Several out-of-towners stayed over the weekend, but by Tuesday morning the fifth of August I was alone—truly alone for the first time in my seventy years of life. My two youngest—Donald, sixteen, and Priscilla, fourteen—were still unmarried. But they were no longer mine. In the divorce settlement, they had elected to stay with the children they had been living with as brothers and sisters—and who now were legally their brothers and sisters as Marian had adopted them.

Susan was the youngest of the four who had lived with Betty Lou and Nelson during the war, and the last to marry. Alice Virginia had married Ralph Sperling right after the war ended; Doris Jean married Roderick Briggs the following year; and Patrick Henry, my son by Justin, had married Charlotte Schmidt in 1951.

Betty Lou and Nelson moved to Tampa shortly after I returned home, taking with them their three who were still at home. Her parents and Nelson’s mother Aunt Carole were in Florida; Betty Lou wanted to look after all of them. (How old was Aunt Carole in 1946? She was the widow of Father’s older brother, so she—Goodness! In 1946 she must have been on or near her century mark. Yet she looked the same as ever the last time I had seen her, uh—shortly before Japan’s sneak attack in ‘41. Did she dye her hair?)

On Saturday I had been *triste* not only because my last chick was getting married and leaving home but also (and primarily) because Susan’s wedding day was Father’s century day; he was born August second, 1852.

Apparently no one associated the date with Father, and I mentioned it to no one because a wedding day belongs to the couple getting married and no one should bring up any subject, say or do anything, that might subtract from the joyfulness of the occasion. So I had kept quiet.

But I was constantly aware of the date. It had been twelve years and two months since Father had gone to war…and I had missed him every one of those four thousand, four hundred, and forty-one days—and most especially during the years after Brian turned me in on a newer model.

Please understand me; I am not condemning Brian. I had stopped being fertile around the beginning of World War II, whereas Marian was still decidedly fertile—and children are the purpose of a Howard-sponsored marriage. Marian was willing and able to bear him more children but she wanted that marriage license. That's understandable.

Neither of them tried to get rid of me. Brian assumed that I would stay, until I made it clear that I would not. Marian begged me to stay, and cried when I left.

But Dallas is not Boondock, and the unnatural practice of monogamy is as rooted in the American culture of the twentieth century as group marriage is rooted in the quasi-anarchistic, unstructured culture of Tertius in the third millennium of the Diaspora. At the time I decided not to stay with Brian and Marian, I had no Boondock experience to guide me; I simply knew in my gut that, if I stayed, Marian and I would be locked, willy-nilly, in a struggle for dominance, a struggle that neither of us wanted and that Brian would be buffeted by our troubles and made unhappy thereby.

But that does not mean that I was happy about leaving. A divorce, any divorce no matter how necessary, is an amputation. For a long time I felt like an animal that has gnawed off its own leg in order to escape from a trap.

By my own time line all this happened more than eighty years ago. Am I still resentful?

Yes, I am. Not at Brian—at Marian. Brian was a man with no malice in him; I am sure in my heart that he did not intend to mistreat me. At worst, one may say that it was not too bright of him to impregnate his son's widow. But how many men are truly wise in their handling of women? In all history you can count them on the fingers of one thumb.

Marian— She is another matter. She rewarded my hospitality by demanding that my husband divorce me. My father had taught me never to expect that imaginary emotion, gratitude. But am I not entitled to expect decent treatment from a guest under my roof?

"Gratitude": An imaginary emotion that rewards an imaginary behavior, "altruism." Both imaginaries are false faces for selfishness, which is a real and honest emotion. Long ago Mr. Clemens demonstrated in his essay "What Is Man?" that every one of us acts at all times in his own interest. Once you understand this, it offers a way to negotiate with an antagonist in order to find means to cooperate with him for mutual benefit. But if you are convinced of your own "altruism" and you try to shame him out of his horrid selfishness, you will get nowhere.

So, in dealing with Marian, where did I go wrong?

Did I lapse into the error of "altruism"?

I think I did. I should have said, "Listen, bitchie! Behave yourself and you can live here as long as you like. But forget this idea of trying to crowd me out of my own home, or you and your nameless babe will land out there in the snow. If I don't tear out your partition instead."

And to Brian: “Don’t try it, buster! Or I’ll find a shyster who will make you wish that you had never laid eyes on that chippie. We’ll take you for every dime.”

But those are just middle-of-the-night thoughts. Marriage is a psychological condition, not a civil contract and a license. Once a marriage is dead, it is dead, and it begins to stink even faster than dead fish. What matters is not who killed it but the fact of its death. Then it becomes time to divvy up, split up, and run, with no time wasted on recriminations.

So why am I wasting time eighty years later brooding over the corpse of a long-dead marriage?—when I am having enough trouble from these murderous spooks? I feel sure that Pixel does not fret over the ghosts of long-dead tabby cats. He lives in the eternal now…and I should, too.

In 1946, as soon as I was back in Kansas City, the first thing I wanted to do was to register as a college student. Both the University of Kansas City and Rockhurst College were a mile north of us at Fifty-third Street, each a block off Rockhill Boulevard, Rockhurst to the east and KCU to the west—five minutes by car, ten by bus, or a pleasant twenty-minute walk in good weather. The Medical School of the University of Kansas was just west of Thirty-ninth and State Line, ten minutes by car. The Kansas City School of Law was downtown, a twenty-minute drive.

Each had advantages and shortcomings. Rockhurst was very small but it was a Jesuit school and therefore probably high in scholarship. It was a school for men but not totally so. I had been told that its coeds were all nuns, school teachers improving their credentials, so I was not sure that I would be welcome. Father McCaw, president of Rockhurst, set me straight:

“Mrs. Johnson, our policies are not set in stone. While most of our students are men, we do not exclude women who seriously desire what we offer. We are a Catholic school but we welcome non-Catholics. Here at Rockhurst we do not actively proselytize but perhaps I should warn you that Episcopalians, such as yourself, exposed to sound Catholic doctrine, often wind up converted to the true Church. If, while you are among us, you find yourself in need of instruction in faith and dogma. we will be happy to supply it. But we will not pressure you. Now—Are you degree-seeking? Or not?”

I explained to him that I had registered as a special student and potential candidate for a bachelor’s degree at KCU. “But I am more interested in an education than I am in a degree. That is why I have come here. I am aware of the reputation of the Jesuits for scholarship. I hope to learn things here that I would not learn on the other campus."

"One may always hope." He scribbled something on a pad, tore it off and gave it to me. "You are a special student now, entitled to audit an lecture course. There are additional fees for some courses, such as lab oratory courses. Take this to the bursar's office; they'll accept your tuition fee and straighten you out on other charges. Stop in and see me in c week or two."

The next six years, 1946-52, I spent in school, including summer sessions. My household had no babies in it and no small children. There i not much work in such a household and what there was, I delegated-to Doris, sixteen and just starting to check her Howard list under in protective chaperonage, and to Susan, who was only twelve and still virgin (I felt fairly sure) but an outstanding cook for her age. So I started in or her sex education, I being aware of the strong correlation between good cooking and high libido…only to find that Aunt Betty Lou had done well by my girls in bringing them up as innocent sophisticates, well informed about their bodies and their female heritage long before they would have to face that heritage emotionally.

I had just one son at home, Pat, fourteen in '46. I decided, somewhat reluctantly, that I was going to have to check on his knowledge of sex—before he contracted some silly disease, or impregnated a twelve-year-old moron with big breasts and a small brain, or got caught in a public scandal. I had never had to cope with this before; either Brian, or Father, or both, had taught my sons.

Patrick was patient with me.

Finally he said, "Mama, is there something special you want to ask me? I'll try. Auntie B'Lou gave me the same examination she gave Alice and Doris…and I missed only one question."

(Shut my mouth.) "What was the question you missed?"

"I couldn't define 'ectopic pregnancy.' But I can now. Shall I?"

"Never mind. Did Aunt Betty Lou or Uncle Nelson discuss the Ira Howard Foundation with you?"

"Some. When Alice started courting, Uncle Nel got me aside and told me to mind my own business and keep my mouth shut…then to see him again when I wanted to start courting myself. If I did. I didn't think I would. But I did. So I did…and he told me about baby subsidies. For Howard babies. For Howard babies only."

"Yes. Well, dear, Aunt Betty Lou and Uncle Nelson seem to have told you everything I could tell you. Uh—Did Uncle Nelson ever show you the Forberg etchings?"

"No."

(Damn it, Briney; why aren't you here? This is your job.) "Then I must show them to you. If I can find them."

"Auntie B'Lou showed them to me. They're in my room." He smiled shyly. "I like to look at them. Shall I get them for you?"

"No. Well, at your convenience. Patrick, you seem to know all about sex a boy your age needs to know. Is there anything I can tell you? Or do for you?"

"Uh…I guess not. Well—Auntie B'Lou used to keep me supplied with fishskins. I promised her that I would always use them…but Walgren's won't sell them to anyone my age."

(What else has Betty Lou done for him? Is intercourse with an aunt incest? Correction: Is an aunt-in-law incest? They are certainly no blood relation. Maureen, mind your own business.)

"All right, I'll keep you supplied. Uh, Patrick, where have you been using them? Not 'who,' but where?"

"Right now I only know one girl that well…and her mother is very fussy. Her mother has told her to do it only at home, in their basement playroom. Or else."

(I did not ask about "Or else.") "Her mother seems very sensible. Well, dear, you can do it safely here at home, too. But nowhere else, I hope. Not in Swope Park, for example. Too risky." (Maureen, who are you to talk?)

All three were good children and I had no trouble with them. Aside from some mild supervision the household ran itself and I had plenty of time for school. By the time Susan married in August 1952 I had not one but four degrees: bachelor of arts, bachelor of laws, master of science, and doctor of philosophy. Preposterous!

But here is how the rabbit got into the hat:

I could not claim a high school education because a high school diploma dated 1898 would have been horribly inconsistent with my claimed Howard age forty-four in 1946). Oh, whenever possible I listed my age as "over twenty-one" but, if pinned down, I claimed my Howard age and avoided situations that could possibly tie me into anything that happened before about 1910. Mostly I did this by keeping my lips zipped—no "Did you know so-and-so?" and no "Remember whens."

So, when I registered at KCU it was not as a freshman, but as a special student, then I asked for advanced standing and degree-seeking status, through examinations, and did not boggle at the high fees quoted to me for special examinations to discover just where I stood in English and American literature, American history, world history, mathematics, Latin, Greek, French, German, Spanish, anatomy, physiology, chemistry, physics, and general science. All during the remainder of that semester I took examinations steadily, cramming for the next one at night and sometimes auditing lectures across the boulevard for dessert.

Toward the beginning of the summer session I was called to the office of the dean of academics, Dr. Bannister. “Please sit down, Mrs. Johnson.”

I sat down and waited. In appearance he reminded me of Mr. Clemens, even though he did not wear white suits and did not smoke (thank goodness!) those horrible cigars. But he had that untidy halo of white hair and that look of a jovial Satan. I liked him on sight.

He went on: “You have completed your special examinations. May I ask what standing you expected to receive here?”

“I had no expectations, Doctor. I asked to be examined in order to find out where I belong.”

“Hmmm. Your application shows no schools.”

“I was privately tutored, sir.”

“Yes, so I see. You’ve never attended school?”

“I have attended a number of schools, sir. But briefly, never long enough for academic credit. My father traveled a great deal.”

“What did your father do?”

“He was a doctor of medicine, sir.”

“You used the past tense.”

“He was killed in the Battle of Britain, Doctor.”

“Oh. Sorry. Mrs. Johnson, your correct advanced standing is that of bachelor of arts—no, no, attend me. We do not award that degree or any degree simply on the basis of examinations with no time in residence. Do you expect to be on campus for the next two semesters? The academic year of 1946-47?”

“Certainly. And this present summer session as well. And then some, as I purpose asking to be accepted as a candidate for a doctor’s degree if and when I achieve a baccalaureate.”

“Indeed. In what field?”

“Philosophy. Metaphysics, in particular.”

“Well. Mrs. Johnson, you amaze me. In your application you describe yourself as ‘housewife.’ ”

“The description is correct, Doctor. I still have three children at home. However, two of them are adolescent girls; both are good cooks. With cooking and housekeeping divided among us we all have time to go to school. And, I assure you, there is nothing basically incompatible between dishwater and curiosity about noumena. I am a grandmother who never had time to go to college. But I cannot believe that I am too old to learn. This granny refuses to sit by the fire and knit.” I added, “Dr. Will Durant lectured here in 1921. That was my initial exposure to metaphysics.”

#8220;Yes, I heard him myself. An evening series at the Grand Avenue Temple. A charming speaker. Goodness, you hardly seem old enough. That was twenty-five years ago.”

"My father took me. I promised myself that I would resume the study of philosophy when I had time. Now I do."

"I see. Mrs. Johnson, do you know what I taught before I went into administration? "

"No, sir." (Of course I know! Father would be ashamed of me if I failed to scout the territory.)

"I taught Latin and Greek…and the Hellenic philosophers. Then the years moved along, and Latin was no longer required and Greek no longer offered, and Greek philosophers were ignored in favor of 'modern' ideas, such as Freud and Marx and Dewey and Skinner. So I was faced with a need to find something else to do on campus…or go look for a job somewhere in the busy marts of trade." He smiled ruefully. "Difficult. A professor from the physical sciences can find work with Dow Chemical or with D. D. Harriman. But a teacher of Greek? Never mind. You say you plan to take this summer session."

"Yes, sir."

"Suppose we call you a senior now…and graduate you at the end of the first semester, January '47, as a bachelor of arts, uh, major subject, modern languages, minor in—oh, what you will. Classical languages. History. But you can use the summer session and the first semester to support your real purpose, metaphysics. Um. I'm a grandfather myself, Mrs. Johnson, and an obsolete teacher of forgotten subjects. But would it suit you to have me as your faculty advisor?"

"Oh, would you?"

"I find an interest in your purpose…and I feel sure that we can assemble a committee sympathetic to that purpose. Mmm-

" 'Old age hath yet his honor and his toil;
" 'Death closes all; but something ere the end,
" 'Some work of noble note, may yet be done,
" 'Not unbecoming men that strove with Gods."

I picked it up:

" 'The lights begin to twinkle from the rocks;
" 'The long day wanes; the slow moon climbs; the deep
" 'Moans round with many voices. Come, my friends,
" ' 'Tis not too late to seek a newer world."

He smiled widely, and answered:

" 'Push off, and sitting well in order smite
" 'The sounding furrows; for my purpose holds
" 'To sail beyond the sunset, and the baths
" 'Of all the western stars, until I die.' "

He stood up. "Tennyson wears well, does he not? And if Odysseus can challenge age, so can we. Come in tomorrow and let's start planning a course of study toward your doctorate. Most of it will have to be independent study but we will look over the catalog and see what courses could be useful to you."

In June 1950 I was awarded the degree of doctor of philosophy in metaphysics, my dissertation being titled "A Comparison of the World Pictures of Aristocles, Arouet, and Dzhugashvili Considered Through Interaction of Epistemology, Teleology, and Eschatology." The actual content was zero, as honest metaphysics must be, but I loaded it with Boolean algebra, which (if solved) proved that Dzhugashvili was a murdering scoundrel…as the kulaks of Ukraina knew too well.

I gave a copy of my dissertation to Father McCaw and invited him to my convocation. He accepted, then glanced at the dissertation and smiled. "I think Plato would be pleased to be in the company of Voltaire…but each of them would shun the company of Stalin."

Over the course of many years the only person to translate correctly at first glance all three of those names was Father McCaw… except Dr. Bannister, who thought up the joke.

The dissertation was not important. But the rules required that I submit enough pounds of scholarly manuscript to justify the degree. And for four years I had a wonderfully good time, both there and across the boulevard.

The same week I got my Ph.D. I registered at KU Medical School and at Kansas City School of Law—little conflict as most lectures at the Law School were at night, whereas the courses I took at the Medical School were in the daytime. I was not a candidate for M.D. but for a master's degree in biochemistry. I had to register for a couple of upper division courses, but was allowed to do so while being accepted as a candidate for M.S. (I think I would have been turned down had I not walked in with a still-damp doctorate.) I did not really care whether or not I received the master's degree; I simply wanted to treat an excellent applied-science school as an intellectual smorgasbord. Father would have loved it.

I could have had that degree in one year; I stayed longer because there were still more courses I wanted to audit. In the meantime the KC School of Law was supposed to require four years…but I had been there before, having audited several of their courses while Brian was getting his law degree, 1934-38. The dean was willing to credit me with courses simply by examination as long as I paid full fees for each course—it was a proprietary school; fees were a prime consideration.

I took the bar examinations in the spring of 1952—and passed, to the surprise of my classmates and professors. It may have helped that my papers read: "M. J. Johnson" rather than "Maureen Johnson." Once I was admitted to the bar there was no fuss about my law degree; the school boasted about the percentage of its students that made it all the way into the bar—a much tougher hurdle than the degree.

That is how I legitimately got four academic degrees in six years. But I honestly think that I learned the most at the tiny little Catholic college at which I was only an auditor, never a candidate for a degree.

Especially from a Japanese-American Jesuit priest, Father Tezuka.

For the first time in my life I had an opportunity to learn an Oriental language and I jumped at the chance. This class was for prospective missionaries to replace those liquidated in the war; it had both priests and seminarians. I was welcome for just one reason, I think: Japanese language structure and idiom and Japanese culture make even greater differences between male and female than does American culture and American language. I was an "instructional tool."

In 1940, the summer we spent in Chicago, I took advantage of the opportunity to study semantics under Count Alfred Korzybski and Dr. S. I. Hayakawa, as the Institute for General Semantics was close to where we lived—across the Mall and east a couple of blocks at 1234 E. Fifty-sixth. One thing that stuck in my mind was the emphasis both scholars placed on the fact that a culture was reflected in its language, that indeed the two were so interblended that another language of a different structure (a "metalanguage") was needed to discuss the matter adequately.

Now consider the dates. President Patton was elected in November 1948 and succeeded President Barkley in January 1949.

The Osaka Incident took place in December 1948, between President Patton's election and his inauguration. So President Patton was faced with what amounted to open rebellion in the Far Eastern Possessions formerly known as the Japanese Empire. The secret society, the Divine Wind, seemed willing to exchange ten of their number for one of ours indefinitely.

In his inauguration address President Patton informed the Japanese and the world that this exchange was not acceptable. Starting at once, it was one American dead, one Shintoist shrine destroyed and defiled, with the price going up at each incident.

CHAPTER EIGHTEEN

Bachelorhood

I am not an expert on how to rule a conquered country, so I will refrain from criticizing President Patton's policies concerning our Far Eastern Possessions. My dear friend and husband, Dr. Jubal Harshaw, tells me (and the histories at Boondock confirm) that on his time line (code Neil Armstrong) the policies were utterly different—supportive rather than harsh to the conquered foe.

But both policies (both time lines) were disastrous for the United States.

In the years from 1952 to 1982 I never had any real occasion to use my study of Japanese language and writing. But twenty-four centuries later my knowledge of Japanese caused Jubal to ask me to accept an odd assignment, after I had shifted from rejuvenation apprentice to the Time Corps. The outcome of the long and bitter war between the United States and the Japanese Empire had been disastrous for both sides on all time lines supervised by the Circle of Ouroboros, both those in which the United States "won" and those in which the Japanese Empire "won"-such as time line seven (code Fairacres), in which the emperor and the *Reichsfdhrer* split the continent down the middle along the Mississippi River.

The Time Corps mathematicians, headed by Libby Long, and their bank of computer simulators, supervised by Mycroft Holmes (the computer who led the Lunar Revolution on time line three) attempted to determine whether or not a revised history could be created in which the Japanese-American war of 1941-45 never took place. If so, would that avoid the steady deterioration of planet Earth that had occurred after that war on all explored time lines?

To this end the Corps needed agents before 1941 in Japan and in the United States. Agents for the United States were no problem, as there were lavish records in Boondock of American language, history, and culture in the twentieth century Gregorian as well as residents of Tertius who had actually experienced that culture at or near the target dates: Lazarus Long, Maureen Johnson, Jubal Harshaw, Richard Campbell, Hazel Stone, Zeb Carter, Hilda Mae Burroughs, Deety Carter, Jake Burroughs, and others—most especially Anne, a Fair

Witness. I know that she was sent. And probably others.

But residents of Tellus Tertius familiar with Japanese language and culture of the twentieth century Gregorian were between zero and nonexistent. There were two residents of Chinese ancestry, Dong Xia and Marcy Choy-Mu, who were physically similar to Japanese norms, but neither knew any Japanese or anything of Japanese culture.

I could not possibly pass for Japanese—red-haired Japanese are as common as fur on fish—but I could speak and write Japanese, not like a native but like a foreigner who has studied it. So a reasonable decision was made: I would go as a tourist—an exceptional tourist, one who had taken the trouble to learn something of the language, culture, and history of Nippon before going there.

A tourist who bothers to study these aspects of a country before visiting it will always be welcome, if he is polite by their rules of politeness. It is easy to say, glibly, that every tourist ought to do this, but in fact this is difficult, expensive in time and money. I have a knack for languages and enjoy studying them. So, by age seventy, I knew five modern languages including my own.

That left over a thousand languages I did not know and around three billion people with whom I had no common language. The job is too big—a labor of Tantalus.

But I was well equipped to be an inoffensive tourist in Japan for the decade preceding the great war of 1941-45. So I went, and was put down in Macao, a place where bribery is the norm and money will accomplish almost anything. I was armed with lavish amounts of money and three very sincere passports; one said that I was Canadian, another said that I was American, and the third said that I was British.

I went by ferry to Hong Kong, a place much more nearly honest but where nevertheless money is highly respected. By then I had learned that neither British nor Americans were well thought of in the Far East at that time but that Canadians had not yet inspired any special dislike, so I started using the passport that showed that I was born in British Columbia and lived in Vancouver. A Dutch ship, the MV *Ruys*, took me from Hong Kong to Yokohama.

I spent a lovely year, 1937-38, tramping around Japan, sleeping in native inns, feeding the tiny deer at Nara, being breathless at the sight of Fuji-San at dawn, cruising the Inland Sea in a dinky little steamer, relishing the beauties of one of the most beautiful countries and cultures in all histories—all the while gathering data that I recorded in an implanted, voice-operated recorder much like the one I am now using.

I was also wearing, internally, a finder such as I am wearing now, and the fact that I haven't been found indicates to me that Time Corps HQ does not know what planet I am on, as the equipment is supposed to be delicate enough to track down an agent who has missed a rendezvous no matter where he is, as long as he is on the planet of drop.

That's the bad news. Here is the good news. During that year in Japan I heard several times of another redheaded English (American) (Canadian) woman who was touring the empire, studying Japanese gardens. She speaks Japanese and she is said to look like me… although the latter means little; we round-eyes all look alike to them, except that red hair would always be noticed, and speaking Japanese is decidedly noticed.

Have I been (will I be) sent back on another visit to prewar Japan? Am I time-looped on myself? The paradox does not bother me; Time agents are used to loops—I am already looped for the year 1937-38; I spent that year the first time in Kansas City, except for two weeks in July after the birth of Priscilla and after Brian's bar exams; we celebrated both events with a trip to the Utah Canyons—Bryce, Cedar Breaks, North Rim.

If I am also looped on myself (tripled) in Japan in the year 1937-38, then the tripling will happen on my personal time line after my present now…which means that Pixel will carry the message and I will be rescued. There are no paradoxes in time; all apparent paradoxes can be untangled.

But it is a thin thread on which to hang my hope.

Tuesday, August 5, 1952, time line two, started as a sad day for Maureen…utterly alone for the first time in my life, alone with the tedious chore of cleaning out and closing up our old farmhouse and getting rid of it. But a glad day in one way. My married life had ended when Brian divorced me; my widowhood ended when Susan got married; this chore marked the start of my bachelorhood.

The difference between widowhood and bachelorhood? Please look at it historically. When I married, at the end of the nineteenth century, women were unmistakably second-class citizens and everyone took it for granted. In most states a woman could not vote, or sign contracts, or own real estate, or sit on juries, or do any number of other mundane acts without the consent of some man—her father, her husband, or her eldest son. Most professions, trades, and occupations were closed to her. A woman lawyer, a woman doctor, a woman engineer aroused the same surprise as a waltzing bear.

"The wonder is not how well the bear waltzes but that it waltzes at all." That is from Dr. Samuel Johnson, I believe—a man who regarded women as no better than third-class citizens, lower than Scotsmen or Americans—two groups quite low in his esteem.

All through the twentieth century the legal status of women slowly improved. By 1982 almost all the laws discriminating against women had been repealed.

More subtle but at least as important and beyond repeal were the cultural biases against women. An example:

In the summer of 1940 when we were living on Woodlawn Avenue in Chicago, we were especially loaded with house guests during the two weeks bridging the Democratic National Convention. One Howard trustee, Rufus Briggs, said to me one morning at breakfast, "I left my laundry on that balcony couch where I slept. I need twenty-four-hour service on it and tell them to soft starch the collars—no other starch."

I said briskly, "Tell them yourself." I was not feeling overly sweet-tempered, as I had been up late the night before, arranging shakedowns for late arrivals, such as Briggs himself—he was one of the cheerful idiots who had arrived in Chicago oblivious to the fact that for this period all hotel space as far away as Gary, Indiana, had been booked solid months earlier. Then I dragged myself out of bed early and ate in the kitchen in order to cook and serve breakfast to a dozen other people.

Briggs looked at me as if he could not believe his ears. "Aren't you the housekeeper?"

"I'm the housekeeper. But I'm not your servant."

Briggs blinked his eyes, then turned to Brian. "Mr. Smith?"

Brian said quietly, "You have made a mistake, Mr. Briggs. This lady is my wife. You met her last night but the lights were dimmed and we were whispering because others were asleep. So apparently you did not recognize her this morning. But I am sure Mrs. Smith would be happy to send your laundry out for you as a favor to a guest."

I said, "No, I would not."

It was Briney's turn to look startled. "Maureen?"

"I won't send out his laundry and I will not cook his breakfast tomorrow morning: His only comment this morning was to complain about his eggs; he did not even say thankyou when I put his breakfast in front of him. So he can go out for breakfast tomorrow. I imagine he'll find something open on Sixty-third Street. But I have this announcement for all of you," I added, looking around. "We have no servants here. I am just as anxious to get to Convention Hall on time as you are. Yesterday I was late because I was making beds and doing dishes. Only one of you made your own bed—thanks, Merle! I'm not going to make beds today; if you don't make your own bed, you will find it still unmade when you get back. Right now I want volunteers to clear the table and do the dishes…and if I don't get them, I am not going to cook breakfast for anyone tomorrow."

An hour later Brian and I left to go to the convention. While we were walking to the El station he said to me, “Mo‘, this is the first time I’ve had a chance to speak to you privately. I really did not appreciate your failure to back me up in dealing with another trustee.”

“How?” I asked (knowing quite well what he meant).

“I told Mr. Briggs that you would be happy to send out his laundry, and then you flatly refused, contradicting me. My dear, I was humiliated.”

“Briney, I was humiliated when you attempted to reverse me after I had told him to send out his laundry himself. I simply stuck by my guns.”

“But he had made a mistake, dear; he thought you were a servant. I tried to smooth it over by saying that of course you were happy to do it as a favor to a guest.”

“Why didn’t you say that you would be happy to send out his laundry?”

“Eh?” Brian seemed truly puzzled.

“I can tell you why you didn’t offer to do it. Because both you men regard sending out laundry as women’s work. And it is, when it’s your laundry and I am the woman. But I’m not Rufus Briggs’s wife and I will not do servant’s work for him. He’s a clod.”

“Maureen, sometimes I don’t understand you.”

“You’re right; sometimes you don’t.”

“I mean—Take this matter of making beds and washing dishes. When we are at home we never expect house guests to wash the dishes or to make their own beds.”

“At home, Briney, I always have two or three big girls to help me…and never a dozen house guests at a time. And our women guests usually offer to help and if I need their help, I let them. Nothing like this mob I’m faced with now. They are not friends; they aren’t relatives; most are total strangers to me and all act as if we were running a boarding house. But most of them at least say thankyou and please. Mr. Briggs does not. Briney, at bottom you and Mr. Briggs have the same attitude toward women; you both think of women as servants.”

“I don’t see that. I don’t think you are being fair.”

“So? Then I ask you again: If you wanted to be gracious to a guest, why did you not offer your own services to take care of his laundry? You can use a telephone and the yellow section quite as well as I can, then you can arrange for or do whatever is necessary. There is nothing about sending out laundry that requires special womanly skills; you can do it as easily as I. Why did you see fit to volunteer my services in the face of my stated opposition?”

“I thought it was the gracious thing to do.”

“Gracious to whom, sir? To your wife? Or to the business associate who was rude to her?"

"Uh—We'll say no more about it."

That incident was not unusual; it was exceptional only in that I refused to accept the conventional subordinate role under which a woman, any woman, was expected to wait on men. Repealing laws does not change such attitudes because they are learned by example from earliest childhood.

These attitudes can't be repealed like laws because they are usually below the conscious level. Consider, please, who makes the coffee. You are in a mixed group, business or quasi-business: a company conference, a public interest group, a PTA meeting. As a lubricant for the exchange of ideas, coffee is a good idea, and the means to make it is at hand.

Who makes the coffee? It could be a man. But don't bet on it. Ten to one you would lose.

Let's move forward thirty years from the incident of Rufus Briggs the soft-starched clod, from 1940 to 1970. By 1970 most legal impediments to equality between the sexes were gone. This incident involved a board meeting of Skyblast Freight, a D. D. Harriman enterprise. I was a director and this was not my first meeting. I knew all the directors by sight and they knew me or at least had had opportunity to know me.

However I admit that I was looking younger than the last time they had seen me. I had had my pendulous baby-chewed breasts reshaped, and at the same Beverly Hills hospital I had tucks taken up under the hairline to take the slack out of my face, then I had gone to an Arizona health ranch to get into top condition and to lose fifteen pounds. I had gone next to Vegas and splurged on ultra chic, very feminine, new clothes—not the tailored pantsuits most female executives wore. I was smugly aware that I did not look the eighty-eight years I had lived, nor the fifty-eight years I admitted. I think I looked a smart forty.

I was waiting in the foyer outside the boardroom, intending not to go in until called—board meetings are dull rituals…but a crisis is sure to come up if you skip one.

Just as the light outside the boardroom started to blink a man came slamming in from outside, Mr. Phineas Morgan, leader of a large minority bloc. He headed straight for the blinking light while shucking off his overcoat. As he passed me, he chucked it at me. "Take care of it!"

I ducked aside, let his coat land on the floor. "Hey! Morgan!" He checked himself, looked back. I pointed at the floor. "Your coat."

He looked surprised, amazed, indignant, angry, and vindictive, all in one second. "Why, you little bitch! I'll have you fired for that."

"Go right ahead." I moved past him into the boardroom, found my place card, and sat down. A few seconds later he sat down opposite me, at which point his face managed still another expression.

Phineas Morgan had not intentionally tried to use a fellow director as a servant. He saw a female figure who, in his mind, must be hired staff-secretary, receptionist, clerk, whatever. He was late and in a hurry and assumed that this "subordinate employee" would as a matter of course hang up his coat so that he could go straight to roll call.

The moral? In 1970 on time line two the legal system assumed that a man is innocent until proved guilty; in 1970 on time line two the cultural system assumed that a female is subordinate until proved otherwise—despite all laws that asserted that the sexes were equal.

I planned to kick that assumption in the teeth.

August 5, 1952, marked the beginning of my bachelorhood because that was the day on which I resolved that from that time on I would be treated the way a man is treated with respect to rights and privileges—or I would raise hell about it. I no longer had a family, I was no longer capable of childbearing, I was not looking for a husband, I was financially independent (and then some!), and I was firmly resolved never again "to send out the laundry" for some man merely because I use the washroom intended for setters rather than the one set aside for pointers.

I did not plan to be aggressive about it. If a gentleman held a door for me, I would accept the courtesy and thank him. Gentlemen enjoy offering little gallantries; a lady enjoys accepting them graciously, with a smile and a word of thanks.

I mention this because, by the 1970S, there were many females who would snub a man unmercifully if he offered a gallantry, such as holding a chair for a woman, or offering to help her in or out of a car. These women (a minority but a ubiquitous, obnoxious one) treated traditional courtesy as if it were an insult. I grew to think of these females as the "Lesbian Mafia." I don't know that all of them were homosexual (although I'm certain about some of them) but their behavior caused me to lump them all together.

If some of them were not Lesbians, then where did they find heterosexual mates? What sort of wimp would put up with this sort of rudeness in women? I am sorry to say that by 1970 there were plenty of wimps of every sort. The wimps were taking over. Manly men, gallant gentlemen the sort who do no wait to be drafted, were growing scarce.

The principal problem in closing the house lay in the books: what to store, what to give away, what to take with me. The furniture and the small stuff, from pots and pans to sheets, would mostly be given to Good Will. We had been in that house twentythree years, 1929 to 1952; most of the furniture was that old, or nearly so, and, after being worked over by a swarm of active children all those years, the market value of these chattels was too low to justify placing them in storage—since I had no intention of setting up a proper household in the foreseeable future.

I hesitated over my old upright piano. It was an old friend; Briney had given it to me in 1909—second (third?) hand even then; it was the first proof that Brian Smith Associates was actually in the black. Brian had paid fourteen dollars for it at an auction.

No! If my plans were to work out, I must travel light. Pianos can be rented anywhere.

Having resolved to give up my piano other decisions were easy, so I decided to start with the books. Move all books from all over the house into the living—no, into the dining room; pile them on the dining table. Pile them high. Pile the rest on the floor. Who could believe that one house could hold so many books?

Roll in the big utility table; start stacking on it books to be stored. Roll in the little tea table; place on it books to take with me. Set up card tables for books to go to Good Will. Or to the Salvation Army? Whichever one will come and get the stuff, soonest, can have the lot—clothes, books, bed clothes, furniture, whatever. But they've got to come get it.

An hour later I was still telling myself firmly: No! Don't stop to read anything! If you just must read it, then put that book in the "take with" pile—you can thin it down later.

When I heard the mewing of a cat.

I said to myself, "Oh, that girl! Susan, what have you done to me?"

Two years earlier we had become catless through the tragic demise of Captain Blood, grandson of Charge d'Affaires—sudden death from a hit-and-run driver on Rockhill Boulevard. In the preceding forty-three years I had never tried keeping house without a cat. I tend to agree with Mr. Clemens, who rented three cats when he moved into his home in Connecticut in order to give a new house that lived-in feeling.

But this time I resolved to struggle along without a cat. Patrick was eighteen, Susan was sixteen; each had received his Howard list. It was predictable that each would be leaving the nest in the near future.

Cats have one major shortcoming. Once you adopt one, you are stuck for life. The cat's life, that is. The cat does not speak English; it does not understand broken promises. If you abandon it, it will die and its ghost will haunt your nights.

At dinner the day Captain Blood was killed none of us ate much and we were not talkative. At last Susan said, “Mama, do we start watching the want-ads? Or do we go to the Humane Society?”

“For what, dear?” (I was intentionally obtuse.)

“For a kitten, of course.”

So I laid it on the line: “A kitten could live fifteen years, or longer. When you two leave home this house will be sold, as I have no intention of rattling around in a fourteen-room house, alone. Then what happens to the cat?

“Nothing. Because there is not going to be a cat.”

About two weeks later Susan was a bit late getting home from school. She came in and said, “Mama, I must be gone a couple of hours. An errand.” She was carrying a brown paper sack.

“Yes, dear. May I ask why and where?”

“This.” She put the sack on my kitchen table. It tilted and a kitten walked out. A jellicle cat, small and neat and black and white, just as described in Mr. Eliot’s poem.

I said, “Oh, dear!”

Susan said, “It’s all right, Mama. I’ve already explained to her that she can’t live here.”

The kitten looked at me, wide-eyed, then sat down and started pin-pleating its white jabot. I said, “What is her name?”

“She doesn’t have one, Mama. It wouldn’t be fair to give her one. I’m taking her down to the Humane Society so that she can be put to sleep without hurting. That’s the errand I have to do.”

I was firm with Susan. She must feed the kitten herself. She must clean and refill its sand box as long as it needed one. She must train it to use the cat door. She must see to its shots, taking it back and forth to the veterinary hospital at the Plaza as necessary. The kitten was hers and hers alone, and she must plan on taking it with her when she married and left home.

Kitten and girl listened to this, round-eyed and solemn, and both agreed to the terms. And I attempted not to get friendly with this cat —let her look entirely to Susan, bond only with Susan.

But what do you do when a square ball of black and white fluff sits up on its hind legs, sticks out its little fat belly, waves its three-inch arms beside its ears, and says, plain as anything, “Please, Mama. Please come fight with me.”

Nevertheless Susan remained committed to taking her kitten with her. We did not discuss it but the deal was never renegotiated.

I went to the front door—no cat. Then I went to the back door. “Come in, your Highness.”

Her Serene Highness, Princess Polly Ponderosa Penelope

Peachfuzz, paraded in, tail high. ("It's about time! But thank you anyway and don't let it happen again what's for lunch?") She sat down, facing the kitchen cupboard where canned cat food was kept.

She ate a six-ounce can of tuna and liver, demanded more and did equally well on veal in gravy, then ate some crunchies for dessert, stopping from time to time to headbump my ankles. At last she stopped to clean.

"Polly, let me see your pads." She was not her usual immaculate self and I had never seen her so hungry. Where had she been the past three days?

I was certain from examining her paws that she had been on the road. I thought of some grim questions to ask Susan when she telephoned. If she did. But in the meantime the cat was here and this was home and the responsibility was now mine, by derivation. When I moved out of this house, the cat had to go with me. Unavoidable. Susan, I wish you were unmarried just long enough for me to spank you.

I rubbed Vaseline on her paws and got back to work. Princess Polly went to sleep on a pile of books. If she missed Susan, she didn't say so. She seemed willing to pig it with just one servant.

About one in the afternoon I was still sorting books and trying to decide whether to make do with a cold sandwich or go all out and open a can of tomato soup—when the front door chimed. Princess Polly looked up. I said, "You're expecting someone? Susan, maybe?" I went to the door.

Not Susan. Donald and Priscilla.

"Come in, darlings!" I opened the door wide. "Are you hungry? Have you had lunch?" I did not ask them any questions. There is a poem by Robert Frost, well known on that time line in that century: "The Death of the Hired Man," which contained this definition: "Home is the place where, when you have to go there, they have to take you in." Two of my children had come home; they would tell me what they wished to tell me when they got around to it. I was simply glad that I had a house to let them into and that I still had bed clothes for them. Cat and children had not changed my plans—but those plans could wait. I was glad that I had not managed to clear out the day before, Monday the fourth—I would have missed all three. Tragic!

I got busy rustling lunch for them—fancy cooking; I did open Campbell's tomato soup, two cans. "Let me see. We have quite a lot of not too stale cake left over from the reception, and a half gallon of vanilla ice cream that has not been opened. How much can you two eat?"

"Plenty!"

"Priss is right. We haven't eaten anything today."

"Oh, my goodness! Sit down. Let's get some soup into you fast, then we'll see what else you want. Or would you rather have breakfast things, seeing that this is breakfast for you? Bacon and eggs? Cereal?"

"Anything," answered my son. "If it's alive, I'll bite its head off."

"Behave yourself, Donnie," said his sister. "We'll start with soup, Mama."

While we were eating Priscilla said, "Why are the books piled all around, Mama?"

I explained that I was getting ready to close the house, preparatory to selling it. My children exchanged looks; they both looked solemn, almost woebegone. I looked from face to face. "Take it easy," I advised. "There is nothing to look sad about. I'm not faced with any deadlines and this is your home. Do you want to fill me in?"

Most of it was fairly obvious from their condition—dirty, tired, hungry, and broke. They had had some sort of trouble with their father and their stepmother and they had left Dallas "forever"—"But, Mama, this was before we knew that you were planning to sell this house. We'll have to find somewhere else to go…because Donnie and I are not going back there. "

"Don't be in a hurry," I said. "You are not out on the street. I'm going to sell this house, yes—but we'll put another roof over our heads. This is the right time to sell this place because I let George Strong—he's in real estate—know that this place would be available once Susan was married. Hmm—" I went to the screen and punched up Harriman and Strong.

A woman's face came on screen. "Harriman and Strong, Investments. Harriman Enterprises. Allied Industries. How may I help you?"

"I am Maureen Johnson. I would like to speak to Mr. Harriman or to Mr. Strong."

"Neither is available. You may record a message—scramble and hush are on line if needed. Or our Mr. Watkins will speak to you."

"No. Relay me to George Strong."

"I am sorry. Will you speak to Mr. Watkins?"

"No. Just get this message to Mr. Strong: George, this is Maureen Johnson speaking. That parcel is now available, and I punched in to offer you first refusal as I promised. I have carried out my promise but I am going to deal today. So now I will call the J. C. Nichols Company."

"Will you hold, please?" Her face was replaced by a flower garden, her voice by a syrupy rendition of "In an Eighteenth-Century Drawing Room."

George Strong's face came on. "Greetings, Mrs. Johnson. Good to see you. "

"Maureen to you, old dear. I called to say that I am moving. Now is the hour if you want to bid on it. Do you still want it?"

"I can use it. Do you have a price in mind?"

"Yes, certainly. Just twice what you are willing to pay."

"Well, that's a good start. Now we can dicker."

"Just a moment. George, I need another house, a smaller one. Three bedrooms, within walking distance of Southwest High. Got something like that?"

"Probably. Or across the line and close to Shawnee Mission High. Want to swap?"

"No, I'm planning to skin you on the deal. I want to lease by the year, automatic renewal unless notice given, ninety days."

"All right. Pick you up tomorrow morning? Ten o'clock? I want to look over your parcel, point out to you its shortcomings and beat your price down."

"Ten o'clock, it is. Thank you, George."

"Always a pleasure, Maureen."

Donald said, "Dallas phones are all tanks now. How come KC still uses flatties? Why don't they modernize?"

I answered, "Money. Donald, any question that starts out 'Why don't they—' the answer is always 'Money.' But in this case I can offer more details. The Dallas try-out turns out not to be cost effective and the three-dee tanks will be phased out. For the full story see the *Wall Street Journal*. The back issues for the past quarter are stacked in the library. It's a six-part series, front page."

"I'm sorry I brought it up. They can use smoke signals for all of me."

"Be glad you brought it up and make use of the opportunity I offered you. Donald, if you intend to cope with the jungle out there, you need to make the *Wall Street Journal* and similar publications such as the *Economist* your favorite comic books." I added, "Ice cream and cake?"

I put Priscilla into Susan's room, and Donald into the room Patrick had had, just beyond my bath. We went to bed early. About midnight I woke up, then got up to pee, not bothering with a light, as there was moonlight streaming in. I was about to flush the pot when I heard an unmistakable rhythmic sound—bed squeaks. Suddenly I was goose flesh all over.

Priss and Donnie had left here almost as babies, two years old and four; they probably didn't realize that this old house was about as well soundproofed as a tent. Oh, dear! Those poor children.

I kept very quiet. The rhythm speeded up. Then I heard Priscilla start to keen and Donald to grunt. Shortly the squeaks stopped and they both sighed. I heard Priscilla say, “I needed that. Thanks, Donnie.”

I was proud of her. But it was time for me to hurry—much as I hated to, I must catch them in the act. Or I couldn’t help them.

Seconds later I tapped on Donald’s door. “Darlings? May I come in?”

CHAPTER NINETEEN

Cats and Children

It was after one o'clock before I left the children; it had taken that long to convince them that I was not angry, that I was on their side, that my only concern was to see that they did not get hurt—because what they were doing was exceptionally dangerous in all sorts of ways, some of which I was sure they knew but some of which they might not know about or at least had not thought about.

When I had gone in to see them, I had not grabbed a robe. Instead I had gone in as I was, bare naked, because a fully dressed authority figure such as a parent, walking in on two children caught in delectable flagrente, is all too likely to scare it out of them—cause bladder and bowel to cut loose. But another human as naked and vulnerable as they were themselves simply could not be a "cop." As Father had taught me years earlier, to know which way the frog will jump, you have to put yourself in the frog's place.

They still would not like being caught—they didn't!—but, if I did not catch them in bed together, they would lie about it later if I tried to question them. It is parallel to the old rule about puppies: If you don't catch a puppy at it, it is useless to bring the matter up later.

So I tapped and asked to come in, and waited.

A suppressed gasp, then dead silence—

I waited awhile longer, then counted ten chimpanzees and tapped again. "Donald! Priscilla! Please! May I come in?"

There was a whispered conference, then Donald's strong, manly baritone called out—and cracked. "Come in—Mother."

I opened the door. There were no lights on, but there was moonlight and my eyes were adjusted to low light level. They were in bed together, sheet pulled up, and Donald was simultaneously protecting his sister against all dangers with his strong right arm around her while pretending hard that she was not there at all and that he was just waiting for a streetcar—and my heart went out to him.

The room reeked of sex—male musk, female musk, fresh ejaculate, sweat. I am expert in the odors of sex, with many years of wide experience. Had I not known better I would have judged that this was the site of a six-person orgy.

I must add that some of the odor came from me. Perhaps it is perverse that I should be sexually excited by catching my son and daughter in the most scandalous of all sex offenses. But volition does not enter into it. From the moment I recognized those squeaks and deduced what and who, I had been flowing. If King Kong had wandered by, he would have found me a pushover. Paul Revere I would have pulled from his horse.

But I ignored my state, reminding myself that they could not possibly smell me. "Hello, dears! Is there room in the middle for me?"

Silence, then they moved apart. I went quickly to them before they could change their minds, pushed down the sheet, crawled over Donald, got between them on my back, snaked my right arm under Priscilla's neck, reached for Donald. "Have a shoulder pillow, Donald. Turn toward me, dear."

He did so, stiffly, then remained tense. I said nothing and cuddled both my children, breathed deeply and tried to slow my heart. It began to work, and my youngsters seemed to relax somewhat, too.

Presently I said softly, "How sweet to have both my darlings in bed with me," and gave them each a quick squeeze and relaxed, still holding them.

Priscilla said timidly, "Mama, you're not mad at us?"

"Mad at you? Heavens, no! I'm worried about your welfare. But not angry. I love you, dear. Love you both."

"Oh. I'm glad you're not mad." Then curiosity got her. "How did you catch us? I was very careful. I listened at your door, made sure you were asleep before I snuck in here and woke Donnie."

"I probably wouldn't have noticed anything if I hadn't been drinking lemonade before going to bed. I woke up, dear, and had to pee. That wall on Donald's side of the bed is a wall of my bathroom. Sound goes right through it. So I heard you." I hugged her to me. "It sounded like a dandy!"

Brief silence—"It was."

"I believe you. There is nothing, just nothing, as good as a gut-wrenching orgasm when you really need one. And you seemed to need that one. I heard you thank Donald."

"Uh…he deserved thanks."

"And smart of you to tell him so. Priscilla, there is nothing a man likes more than to be appreciated for his lovemaking. So keep it up all your life; it will make both you and your love happy. Mark my words. Remember them."

"I'll remember."

Donald apparently had trouble believing what he was hearing. "Mother? Do I have this straight? You don't mind what we were doing?”

“Tell me what you were doing.”

“Uh—We were screwing!” He said it defiantly.

“ ‘Screwing’ is something dogs do. You were loving, you were making love to Priscilla. Or, if you like long medical words, you two were copulated and engaging in coition to climax…which is about like describing a gorgeous sunset in wavelengths of the electromagnetic spectrum. You were loving her, dear, and Priscilla is lovable. She was a lovable baby and she is even more lovable as a grown woman.”

I decided that now was the time to grasp the nettle, so I went on, “Loving is sweet and good. Just the same, I’m extremely worried about you two. I suppose you both realize that the society around us strongly disapproves of what you were doing, has severe, cruel laws against it, and would punish you both horribly if they caught you. Priscilla, they would take you away from Donald and me, and put you in a home for delinquent girls, and you would hate every minute of it. Donald, if you were lucky, they might try you as a legal infant and do to you something like what they would do to Priscilla—reform school until you are twenty-one, then registration and supervision as a sex offender. Or they might decide to try you as an adult—statutory rape and incest, and about twenty years at hard labor…and then supervision the rest of your life. Do you know that, dear ones?‘

Priscilla did not answer; she was crying. Donald said gruffly, “Yes, we know that.”

“Well? What’s the answer?”

“But, Mother, we love each other. Priss loves me and I love Priss.”

“I know you do and I respect your love. But you didn’t answer me; you avoided answering. What is the answer to your problem?”

He took a deep breath, let it out in a long sigh. “I guess we’ve got to quit.”

I patted his ribs. “Donald, you are a gallant knight and I’m proud of you. But now I must ask a frank question. When you started masturbating, did you ever swear off? Resolve never to do it again?”

“Uh, yes.”

“How long did you stay stopped?”

He answered sheepishly, “About a day and a half.”

“How long are you going to leave Priscilla alone, when you happen on a perfect, utterly safe opportunity and she rubs up against you and tells you not to be a sissy, and she smells good and feels even better?”

“Why, Mama, I wouldn’t do that!”

Donald heaved a quick sigh. “The hell you wouldn’t, Slugger. You have, near enough. Mama, you’ve got me. What do you do? Nail me into a barrel? Or send me to Kemper?”

“Kemper isn’t far enough; it had better be the Citadel. Children, that's not the answer. Instead—I really meant it when I said I wasn't angry. Let's all engage in a conspiracy to keep you two from being hurt. First, what contraception are you using?"

I had addressed the question to both of them. There was an extended silence, as each (I think) waited for the other to answer.

At last Donald said, "We had some rubbers. But they're all gone and I don't have any money."

(Oh, my God!) "A clear reason why you should include me in your plans. There are both rubbers and fishskins in this house, and you can always have all you want. Priscilla, when did you menstruate last? Starting date?"

"On Monday the fourteenth, so—"

"No, it wasn't, Priss. The fourteenth was the day we went to Fort Worth. And we passed the French consulate—"

"Trade mission."

"Well, something French, and they had a lot of bunting and flags out because it was Bastille Day, and you certainly didn't start the curse that day because—well, you remember. So it must have been the following Monday. If it was a Monday."

I said, "Priscilla, don't you keep a calendar?"

"Of course I do! Always."

"Will you run get it, please? Let's turn on a light."

"Uh—It's in Dallas."

(Oh, damn!) "Well, I don't want to call Marian this late at night. Perhaps you two can compare notes and be certain and we won't have to call. Priscilla, do you know why I want that date?"

"Well, I think I do. You want to count up and tell if I'm fertile tonight."

"Good. Now both of you listen carefully. Marching orders. Laws of the Medes and the Persians, chiseled in stone. Once we figure it out, Priscilla, you will sleep with me the day you ovulate and three days each side…and each month you will stay in my sight during your fertile week. All the time. Every minute. We aren't going to trust to good resolutions."

I went on, "I'm not moralizing; I'm just being practical. The other three weeks of each month I will not try to keep you two apart. But you will use fishskins, not rubbers, and you will use them every time…because there are thousands of Catholic mothers and quite a few non-Catholic ones who depended solely on 'rhythm.' You will not make love anywhere but in this house, with me in the house, with no one else in the house, and with all outside doors locked.

"In public you will always behave like most brothers and sisters, friendly but a little bored with each other. You will never show jealousy over each other; jealousy, possessive behavior, is a dead giveaway. However, Donald, you can always be your sister's gallant knight, empowered to poke anyone in the jaw or give him a karate chop if that's what it takes to protect her from some oaf. That's both a brother's duty and his proud privilege."

"That's what happened," he said gruffly.

"What, Donald?"

"Gus had her down and was giving her a bad time. So I pulled him off and beat the tar out of him. And he lied about it and Aunt Marian believed him and didn't believe us and told Dad and Dad backed up Aunt Marian and—Anyhow we cut out that night. And didn't have money enough for the bus. So we hitchhiked and saved what money we had for eating. But—" Donald started to shake. "There were three of them and they took what money I had left and, and—But Priss got away!" I could hear him suppressing sobs that I pretended not to hear.

"Donnie was wonderful," Priscilla said solemnly. "It was last night as we were leaving Tulsa, Mama, on Forty-four. They came at us and Donnie yelled for me to run and he stood up to them while I ran down the street to a filling station that was still open. I told the station owner and begged him to call the cops. He was doing so when Donnie showed up and the station owner helped us get a hitch into Joplin, and there we stayed in an all-night Laundromat till it got light, and then we came straight here in two hitches."

(Dear Lord, if there is Anybody up there, why do You do this to children? Maureen Johnson speaking and You're going to have to answer to me.)

I squeezed his shoulder. "I'm proud of you, Donald. It sounds like you took a licking and got robbed to keep your sister from being raped. Did they hurt you? Besides that bruise on your face?"

"Uh, maybe I've got a cracked rib. One of 'em kicked me when I was down ."

"Tomorrow we'll get hold of Dr. Rumsey. You're both going to need physical exams anyhow."

"Donnie ought to have that rib looked at, but I don't need a doctor. Mama, I don't like to be poked at."

"You don't have to like it, dear, but as long as you are under my roof, you do have to hold still for it when I think it is necessary. That is not open to argument. But you've met Dr. Rumsey before. He delivered you, right in this bed."

"Really?"

"Really. His father was our first family doctor, and the present Dr. Rumsey has been my doctor since Alice Virginia was born, and he delivered both of you. His son has just finished his internship, so it could happen that his son will deliver your first baby. Because the Rumseys are Howards, too, and practically members of our family.

What have Marian and your father told you about the Ira Howard Foundation?"

"The Ira what?"

"I've heard of it," Donald told me. "But just barely. Dad told me to forget what I had heard and wait a couple of years."

"I think a couple of years have passed. Priscilla, how would you like to be sixteen, and you, Donald, eighteen? Now, I mean. Not two years from now."

"Mama, what do you mean?"

I told them what the Foundation is, in a handful of words or less. "So a Howard often needs to adjust his birthday to keep from being noticed. We'll discuss it further in the morning; I'm going back to bed. Mama needs the rest—busy day tomorrow. Kiss me goodnight, dears—again."

"Yes, Mama. And I'll go back to my bed…and I'm sorry I worried you . "

"We'll handle the worries. You needn't go back to your bed. Unless you want to."

"Really?"

"Really truly. I do not believe in burning the horse after the barn has been stolen." (If the first billion little wigglers did not shoot you down, dear, the next billion will never get close to the target. So enjoy it while you can—because, if you're pregnant, we'll have a whole new crop of worries. We haven't discussed the real, utterly practical reason to avoid incest…but you are going to have to have Old Granny Maureen's Horror Lecture on reinforced harmful recessives, the one I've been giving every little while for centuries, seems like.)

I'm not sure whether this is the frying pan or the fire. Not very many minutes ago I was sitting here in this jail, petting Pixel (he had been gone three days and I had been worried about him) and watching a stupid grope opera for lack of anything else to do, when a squad of spooks—well, four—robed and masked, came in, grabbed me, put their usual dog collar on me, and secured me by four leashes, then snapped them to rings in the walls instead of leading me away by them.

Pixel took one look at them and skittered away. Two of them, one on each side, started shaving the skin behind my ears.

"What's going on?" I demanded. "May one ask?"

"Hold still. This is for the electrodes. You have to be animated for the ceremony."

"What ceremony?"

"After your trial and execution. Quit wiggling."

So I wiggled harder and he backhanded me across the face, and four others came in and suddenly the first four were dead and shoved under my cot. Then they unsnapped my leashes from the walls. One said quietly, just above a whisper,

"We're from the Committee for Aesthetic Deletions. Look scared and don't make it too easy for us to lead you out of here."

Looking scared I could do, with no practice. They took me out into the corridor, on down and past the "courtroom" door, then a sharp left and through a freight door onto a loading dock, where I was shoved into a lorry and the door clanged shut. Then it opened again, somebody chucked in a cat. The door slammed shut and the lorry started up with a jerk. I fell down with a cat on top of me. "Is that you, Pixel?"

"Mrrow!" (Don't be silly!)

We're still in the lorry and rolling. Now where was I? Oh, yes—I woke up early from a nightmare in which one of my sons was humping his sister and I was saying, "Dear, you really ought not to do that on the front lawn; the neighbors will notice—" when the dream woke me and I heaved a sigh of relief; it was just a dream. Then I realized that it had not been all that much a dream; the essence of it was too, too solid flesh—and came wide awake with a shot of adrenaline. Oh, Christ! Oh, Mary's drawers! Donald, did you knock up your sister? Children, I do want to help you—but, if you have let that happen, it won't be easy.

I got up and peed, and sat there and again heard the rhythmic music I had heard in the night…and it had the same effect on me; it turned me on. And I felt better as in all my life I have never been able to feel both horny and depressed at the same time. Had those kids been at it all night?

When the squeaks stopped, I flushed the pot, not having wanted to disturb them until they were through. Then I used the bidet, so that I would not start the day whiffing of rut. I brushed my teeth and gave my face and hair a lick and a promise.

I dug out of my wardrobe an old summer bathrobe of Patrick's that I had confiscated when I gave him a new one for his honeymoon. For Priscilla I found a wrap of mine. And one for me.

Then I tapped on their door. Priscilla called out, "Come in, Mama!" She sounded happy.

I opened the door and held out the robes. "Good morning, darlings. One for each of you. Breakfast in twenty minutes."

Priscilla bounced out of bed and kissed me. Donald approached more slowly but did not seem much troubled at being caught in his skin by fierce old Mama. The room reeked even more than I remembered.

Something brushed past my legs—Her Serene Highness. She jumped up on the bed and started purring loudly. Priscilla said, "Mama, she bumped against the door last night, making a terrible racket, so I got up and let her in. She stayed with us a short while, then she jumped down, and demanded that I open the door again. So I did, and closed it behind her. It could not have been a half hour before she was banging on the door again. This time I ignored her. Uh…we were busy."

"She resents closed doors," I explained. "Any closed door. I leave mine ajar and she spent the rest of the night with me. Or most of it. Mmm—She's Susan's cat and you have Susan's room. Do you want to move? Otherwise she is likely to wake you at any hour."

"No, I'll just train Donnie to get up and hold the door for her."

"Now see here, Slugger—"

I left.

I stirred up muffins and popped a Pyrex pan of them into the oven on a six-minute cycle. While the muffins were baking I set up baked eggs wrapped in bacon in another muffin pan. When the oven pinged, I transferred the muffins to the warmer, reset the cycle and put in the bacon and eggs. While they cooked, I poured orange juice and milk, and started the samovar to cycle. That left me time to set the breakfast table with happy mats and gaudy Mexican crockery—a cheerful table.

Priscilla appeared. "Donnie will be right down. May I help?"

"Yes, dear. Go out into the back yard and cut some yellow roses for that bowl in the middle. Make it quick; I am about to serve the plates. Polly! Down off that table! Take her with you, please. She knows better but she always crowds the limits."

I served the plates and sat down just as Donald appeared. "May I help?"

"Yes, you can keep the cat off the table."

"I mean, really help."

"You'll find that a full-time job."

Thirty minutes later I was working on my second cup of tea while Priscilla served another pan of muffins and more bacon, and opened another jar of Knott's Berry Farm marmalade. I was feeling as contented as Princess Polly looked. When you come right down to it, children and cats are more fun than stocks, bonds, and other securities. I would get these two married (but not to each other!) and then it would be soon enough for Maureen, the Hetty Green of the fast new world, to tackle the Harriman empire, force it to stand and deliver. "Polly! Get out of that marmalade! Donald, you are supposed to be watching that cat."

"I am watching her, Mama. But she's faster than I am."

"And smarter."

"Who said that? Who said that? Slugger, you'll rue the day."

"Stop it, children. Time we talked about the Howard Foundation."

Quite a while later Donald said, "Let me get this straight. You're saying that I have to marry a girl on my list and Priss has to marry a man on her list?"

"No, no, no! Nothing of the sort. Nobody has to marry anybody. If you do marry, it will be your own free choice and it need not be another Howard. There is just one marriage you can't make and that is to each other. Oh, you could marry each other; there are thousands of incestuous marriages in this country—so some Kinseys have calculated. You could do it by cutting out on your own again, supporting yourselves somewhere else and somehow until you both look old enough to convince a county clerk that you are both over twenty-one. You could do that and I would make no effort to stop you.

"But I would not help you. Not a thin dime. I'm not going to try to give you a course in genetics this morning, but I will later. Just let it stand for the moment that close incest isn't just against the Bible, and against the laws of Missouri and all the other fifty-five states, it's against natural laws because it makes unhealthy babies."

"I know that. But I could get a vasectomy."

"So you could. What are you going to use for money? I certainly won't pay for it! Donald, I hate to hear you talk that way. I would rather pay to have your eyes removed than see you submit to sterilization. You are here not only to live your life but to pass that life along. Your genes are very special; that is why the Foundation will subsidize any offspring of yours that you share with a female Howard. The same applies to you, Priscilla; you both have the genes for long life. Barring accidents, each of you will live to be more than a hundred. How much more we can't tell but it has been stretching longer each generation.

"Now here is how the Howard Foundation system works. If you ask for it, the Foundation will supply each of you with a list of Howard eligibles near your age, while your name and address will be supplied to each person on your list. When I was young, it used to be eligibles close by, say fifty or a hundred miles or inside one state. Today, with glide rockets spanning North America in thirty minutes and everybody moving around like disturbed ants, you can elect to have your name supplied to every bachelor or spinster Howard in North America if you like and get back a list like a phone book. Not quite true; I understand that they dole them out a couple of dozen at a time, grouped geographically…but you can go on shopping until you find the man—

or woman—with whom you want to spend the rest of your life."

I continued, "Just one thing. When you date another Howard, while it can be fun, it is dead serious, too. You'll be looking him over as a prospective husband, Priscilla. If he is utterly impossible, for any reason or none, you must tell him so and tell him not to come back…or tell me and I'll tell him so. But if he appeals to you and better acquaintance causes you to think of him as a possible husband, then it's time to take him to bed. Right here at home and I'll arrange things so that you can do so comfortably and without embarrassment."

"Wait a minute! Make love to somebody else? With Donnie right upstairs and knowing what I'm doing?"

"No. One—Donnie is not likely to be upstairs. He is likely to be at the home of a girl on his list. Two—nobody is urging you to have intercourse with anyone. That is strictly, totally, and utterly up to you. I am saying only that if he is a young man whose name has been sent to you by Uncle Justin, and you decide you want to try him, you can do so safely at home…and if, after sober consideration, you and he decide to marry, then you can get pregnant right at home. Howard brides are almost always pregnant—always, so far as I know—because it would be sad indeed to marry a man and discover, too late, that you and he are not fertile together. Oh, divorce is easy today…but it is better to have a seven-month, seven-pound baby than to have a divorce before you are twenty."

I added, "You're going to have plenty of time to think about it. I want to check on some basics today. Priscilla, will you stand up and take off your wrap? We can ask Donald to leave the room if you wish. I want to guess how old you are, biologically."

"I'll go upstairs, Slugger."

"Don't be silly. You've seen me before and Mama knows you slept with me last night." My daughter stood up, took off my wrap, hung it on her chair. "Any special way, Mama?"

"No." No baby fat left that I could see and hers was not a baby face. A young woman, physically mature, functioning as such and enjoying it. Well, we'll get an expert opinion from Dr. Rumsey. "Priscilla, it seems to me that you look about the way I did at seventeen. We will see what Dr. Rumsey says. For the sooner you start shopping your Howard list the sounder I will sleep."

I turned to my son. "I'm sure you can be listed as eighteen, Donald if you wish, and receive a list of eligible girls. And—I may be prejudiced you're my son—but it is my guess that you can spend the next couple of years, if you choose to, traveling around the country, meeting Howard couples, eating at their tables and sleeping with their daughters—a different bedmate every week, until you find the right one. That program would be safest for your sister."

#8220;Mama! What a nasty idea! Donnie! You wouldn’t! Would you?”

“Son, don’t make any promises you can’t keep.”

CHAPTER TWENTY

Soothsayer

“Priscilla, you have not yet admitted to yourself that you can’t marry your brother. Until you realize that, right down in your gizzard, you aren’t mature enough to start courting no matter how grown up your body is. But you must not try to interfere with Donald’s right to a-wooing go. ”

“But I love him!”

“What do you mean by ‘love’?”

“Oh, you’re just being mean to me!”

“Quit blubbering and try to behave like a grown woman. I want you to tell me what you mean by the word ‘love.’ That you are horny about him, so hot for him that you would couple with him behind any bush if he would let you, I will concede. It doesn’t surprise me; I find him just as attractive, he’s as pretty as a collie pup. But I have more sense about it than you have. Any woman is going to find Donald sexually attractive; if you try to keep other women away from him, you’ll be piling up more grief for yourself than you will ever be able to handle.

“But being in sexual heat over a man is not love, my sweet daughter. I am willing to believe that Donald loves you as he stood up to three muggers to protect you. But tell me what you mean when you say that you love him…other than your hot pants—an irrelevant concurrent phenomenon.”

“Uh…everybody knows what love is!”

“If you can’t define a word, you don’t know what it means. Priscilla, this is a fruitless discussion and today is a busy day. We have established that you have hot pants over Donald. We have established that Donald loves you but we have not established that you love him. And I have pointed out what all of us know, that you can’t marry your brother…which your brother has conceded but you are not willing to admit. So we’ll continue this discussion on some later date when you’ve grown up a bit.” I stood up.

“But—Mama, what do you mean by ‘love’?”

“ ‘Love’ means a number of things but it always means that the other person’s happiness and welfare come first. Come, let’s get bathed and dressed, so—"

The telephone sounded. I said, "Catch it, will you, Donald?"

"Yes, Mum; thankee, Mum." The screen was in the living room; Donald went there still carrying Princess Polly in his left arm. He flipped the switch. "Start talking; it's your money."

I heard Susan's voice. "Mama, I—Polly! Oh, you bad, bad girl!"

Polly turned up her nose, wiggled and jumped down, stalked away. I must add that she had never taken any interest in telephone images and voices. I think it may have been the lack of living odor but I must admit that feline reasoning is not for mortal man to comprehend. Or woman.

Donald said, "Susie, am I going to have to show you the strawberry mark on my shoulder? I'm your brother, Mrs. Schultz, the handsome one. How's married life? Boring?"

"Married life is just dandy and what are you doing in Kansas City and why didn't you come four days ago for my wedding and where's Mother?"

"Mama is around here somewhere and you didn't invite me."

"I did so!"

I moved in. "Yes, you did invite him, Sweet Sue, and all the rest of his family, all eight. Nine. But only Brian was able to come, as you know, so don't needle Donald. Good to see you, dear. How is Henry?"

"Oh, Hanky's all right. He says I can't cook the way you do but that he has decided to keep me for other reasons—I rub his back."

"That's a good reason."

"So he says. Mama, I called for two reasons…and the first reason no longer applies. I've been screwing up my courage since Sunday to tell you that I lost Princess Polly. And now she's not lost. How did she get there?"

"I don't know. How did you lose her?"

"I'm not sure. We were all the way to Olathe before we found a filling station that also serviced Shipstones. While Hank was trading his stone for a fully charged one, I opened Polly's cage to change her sand box—she had made a mess and the dragon wagon was stinking.

"I'm not clear just what happened then. I thought that I shut her back in. Hank says that I told him it was all right to let her ride free in the back. Anyhow we left and picked up the control road at Olathe and Hank turned it over to the bug, and we eased back the seats and went right to sleep. Oh, we were tired!"

"I'll bet you were!" I agreed, thinking about my own wedding.

"The alarm woke us when we reached Wichita and we were just getting our baggage out at the Holiday Inn when I saw that Polly was missing. Mama, I almost had a heart attack."

"What did you do?"

"What could we do? We turned around and rolled back to Olathe. And the station was closed. And we played kitty, kitty, here, Polly! for a half hour and the station owner's name was on the building and we asked a policeman and found his house and woke him and he wasn't pleased."

"I find myself unsurprised."

"But, yes, he had seen a little black and white cat, about the time we were there, but not later, which means she wasn't there all the time it took us to drive four hundred miles. So we left your telecode and asked him to call you if she showed up and we started back to Wichita but the bug quit and we took turns keeping each other awake while we rode the wire by hand…or we would have had to get onto a slow road. Just the same it was three in the morning by the time we got to Wichita again and they hadn't held our room and we slept in the car till morning. Mama, it was not the most successful wedding night on record. I think Hanky was ready to toss me back…and I wouldn't have blamed him."

"Are things better now?"

"Oh, yes! But—Finding Princess Polly at home raises another point."

"Do you want me to ship her to you?"

Susan suddenly stopped smiling. "Mama…pets are not permitted in married students' dormitories. I didn't know. So I guess I've got to go out into Tempe and find us somewhere else to live…and I'm not sure we can afford it. You won't let her stay there? Yes, she's my cat, but-Please?"

"Susan, I'm selling this house today."

She looked blank. "Yes, Mama. Uh, if you put her in a kennel…with her doctor, I guess…I'll come and get her. As fast as I can make arrangements. We'll have to cash a bond. I'll have to work it out with Henry. But I won't let you down. I promised. I know it."

"My good Susan. Dear, Princess settled it, I think, when she managed to find her way home in only three days, when she's never been anywhere before. Yes, I'm selling this house but we are moving only a mile or so. I want a smaller house and not all this acreage. I can persuade Princess to accept a new home that close by, I think; it is a problem I've coped with before."

Susan let out a deep sigh. "Mama, have I told you lately that you're wonderful?"

"No."

"You're wonderful!"

"Thank you. Is that all?" (The clock was crowding me.)

"Just one thing. Aunt Eleanor was here today—"

"She was? I thought she was in Toronto. On Saturday she didn't say anything about going to Arizona."

"Uncle Justin went to Toronto; she came here. To Scottsdale, I mean. She's going to Toronto. Right away, if this works. She's had caretaker trouble two seasons now, she tells me, and she wants Hanky and me to move into their place and take care of it. What do you think?"

(I think you would be out of your mind to move into the luxurious summer palace of a supermillionaire; you'll learn bad habits and fancy tastes—that's no way to start a marriage. And that commute up and down Scottsdale Road—six miles? Seven?—might take up enough time each day to interfere with your studies.) "Susan, what I think does not matter. What does your husband think?"

"He suggested that I talk to you."

"But what does he think?"

"Uh…I'm not sure. Will you talk to him?"

"Have him call me back. Susan, I have a business appointment and I'm late; I've got to switch off. Bye!"

Whew! Nine-thirty-five— I punched up Harriman and Strong, got the same female zombie as yesterday. "Maureen Johnson speaking. Let me speak to George Strong."

"Mr. Strong is not available. Will you record—"

"We went through that routine yesterday. I'm Maureen Johnson and he has an appointment with me at my house in twenty minutes and you know it! Catch him before he leaves the building or phone him in his car. Move, damn it!"

"I'm here, Maureen." George's face replaced hers. "I've been held up. Will you forgive me if I make it ten-thirty instead of ten?"

"Quite all right, George. You recall those envelopes I left with you in 1947?"

"Certainly. In my personal safe. Never mingled with business papers."

"Would you, please, bring with you envelopes numbers one and two?"

"Certainly, dear lady."

"Thank you, sir."

I switched off. "Up we go, darlings, and bathe and dress. Priscilla, come share my bath"—and my bidet; you smell like a whorehouse and don't realize it, dear—"and we'll put you into something of mine. Something summery, the day is going to be a scorcher. Shorts and a halter, probably. Donald, Patrick left some clothes behind, so look around. Shorts and a T-shirt, maybe. Or Levi's. We'll stop at the Plaza later and do some fast shopping. Don't use all the hot water—three baths at once. Be ready by ten-twenty. On your mark, get set, go!"

George had two houses to show me. One was near Seventy-fifth Street and Mission Road in Johnson County, close to Shawnee Mission East High School. It belonged to New World Homes, a Harriman Enterprise, and had all the newer-than-tomorrow touches New World Homes are famous for—and it reminded me of a Bauhaus flat.

My youngsters loved it.

The other was on the Missouri side of the line, about halfway between our old house and Southwest High School, off Linden Road. It was not as new. The appearance of the development and my memory told me that it had been built in 1940, give or take a year. "George, this is a J. C. Nichols subdivision."

"The Nichols organization always builds excellent houses. This came into our hands because I bought it from one of our executives in a compassionate move, following a tragic accident. He lost his wife and two children. When he got out of hospital, we shipped him to Tucson to recuperate, then put him to work in Paradise, at the power plant. Complete change of work, scene, people—my partner's notion of how to rehabilitate a good man who has had his very life chopped off. Delos—Mr. Harriman—takes care of his people. Shall we go in?"

It was a pleasant house, with good landscaping and a fenced back yard-and it was furnished. Mr. Strong said, "All he asked to have shipped to him were his books and his clothes. Her clothes and those of his youngsters and their personal possessions all went to the Salvation Army. The rest-bed linens, blankets, rugs, towels, drapes—have all been cleaned and the mattresses sterilized. The house is for sale furnished or unfurnished, and you can have it either way on lease."

It had a master bedroom and two smaller ones upstairs, each with bath. The master bedroom was on the west and had a "sunset" balcony, like the flat we had in 1940 on Woodlawn in Chicago. Downstairs was both a parlor and a family room, an arrangement I strongly favor for any family having children at home. Youngsters need a place where they can be less than neat, without disturbing Mother when she has someone in for tea.

Off the back hallway, balancing the kitchen, was a maid's room and bath. The kitchen had a GE dishwasher and a Raytheon electronic cooking unit of the same sort that I had in my old farmhouse—and in both cases the equipment was new, not the age of either house. A feature that struck my eye was an abundance of builtin bookcases… added later, it seemed to me, except a pair of small ones flanking the fireplace in the family room. Most houses didn't even have that much, as most people don't read.

(Before the twentieth century was out that could be worded, "—

most people can't read." One of the things I learned in studying the histories of my home planet and century on various time lines was that in the decline and fall that took place on every one of them there was one invariant: illiteracy.

In addition to that scandalous flaw, on three time lines were both drug abuse and concurrent crime in the streets, plus a corrupt and spendthrift government. My own time line had endless psychotic fads followed by religious frenzy; time line seven had continuous wars; three time lines had collapse of family life and marriage—but every time line had loss of literacy…combined with—riddle me this—more money per student spent on education than ever before in each history. Never were so many paid so much for accomplishing so little. By 1980 the teachers themselves were only semiliterate.)

The house had—*mirabile visu!*—two hot water heaters, one for upstairs, one for kitchen, laundry room, and maid's bath. I tried a tap and was amazed to discover that the water was hot. George Strong said, "After you called yesterday I instructed our maintenance foreman to have services turned on and the house aired. You could sleep here tonight if you so wished."

"We'll see." I took a quick look in the basement and we left.

George Strong treated us to a lovely lunch in The Fiesta Patio in the Plaza, then at my request we were taken to Dr. Rumsey's office. I spoke to Jim Rumsey and told him what in particular I wanted him to look for—I can be truthful with Dr. Rumsey, thank goodness, since he understands Howard problems. "Don't tell her whether or not she is pregnant; tell me. She's a difficult case; I need leverage. Do you want to know her real age?"

"You forget that I know it. I'll try not to let that fact affect my judgment."

"Jim, you're a comfort." I kissed him goodbye, went out and spoke to my youngsters:

"Just sit tight and wait. He has other patients ahead of you. When you are through, make your best of way home."

"You're not picking us up?" Priscilla seemed amazed. "I thought we were going shopping?"

"No, we've run out of time. Perhaps we'll go to the Plaza after dinner; I believe Sears is open late."

" 'Sears.' "

"Do you have something against Sears?"

"Aunt Marian never shops at Sears."

"That's interesting. I'll see you at home. You can walk or take the bus."

"Wait a moment! Did you tell the doctor that I don't want to be poked?"

“On the contrary, I told him that if you gave him any lip or showed any lack of cooperation, I wanted him to tell me.”

Priscilla pouted. “I thought that you were going to pick us up and go shopping and then we were going back and decide which house to rent.”

“I am about to decide that right now, while you two take your physicals.”

“You mean we don’t get a vote?”

“Did you think that we were going to vote on it? All right, we’ll vote by the rules of the Republic of Gondor. For each dollar each interested party invests in the deal he or she gets one vote. How many votes do you want to buy?”

“Huh? Why, I think that’s mean!”

“Priscilla, it has never been in the Bill of Rights that minor dependents get to pick the family domicile. And, while I do not know how Aunt Marian ran things, in my household I make such decisions. I may consult others; I may not. If I do consult others, I am not bound by their opinions. Understand me?”

Priscilla did not answer. Donald said quietly, “Slugger, you’re crowding your luck.”

I rejoined George at his car; he handed me in. “Where now, dear lady?”

“I would like to look again at the furnished house.”

“Good. ”

We rode in silence. George Strong was a comfortable man to be with; he had no small talk. Presently I said, “Did you bring those two envelopes?”

“Yes. Do you want them now? If so, I had better park. They are in a concealed zipper pocket, rather hard to reach.”

“No, I was just checking, before we got too far from your office.”

When we reached the house, I went upstairs with George at my heels, and into the master bedroom. I started undressing; his face lit up. “Maureen, I had hoped that you had this in mind.” He sighed happily and started reaching for fastenings himself. “It’s been a long time.”

“Too long. I’ve been overwhelmed with mother problems and with school. But school is over for me, for a long time at least, and my mothering problems I have under control—I hope—and I’ll have more time, if you want me.”

“I’ll always want you!”

“I’ve been thinking about you and your sweet ways all day. But I had to park the children first. Do you want to undress me? Or shall we both hurry and see how quickly we can be in bed?”

“What a choice to have to make!”

George wasn't the greatest bedroom artist in the world, but in the six years I had been his now-and-then mistress, he had never left me hanging on the fence. He was an attentive and considerate lover and he took as his prime purpose being certain that his partner in bed reached orgasm.

If he was no Adonis, I was no Venus. When I was Priscilla's age, I looked pretty good—as tasty as she did, I think. But now (1952) I was seventy and a simulated forty-seven, and did look past forty despite special effort. An older woman must work at it, just as George worked at it (and I did appreciate his efforts). She must keep her breath sweet, her inner muscles in good tone, her voice low and mellow, her smile ready and her frown never, and her attitude friendly and cooperative. Father had told me, "Widows are far better than brides. They don't tell, they won't yell, they don't swell, they rarely smell, and they're grateful as hell."

That's Maureen Johnson from 1946 to 1982. When I first heard Father's bawdy formula I was simply amused by it and never expected it to apply to me…until that sour day that Brian let me know that his younger concubine had displaced me. Then I found that Father's joking description was the simple truth. So I became an available "emergency squaw." I worked hard at being agreeable and smelling good. And I didn't insist on Adonis, just a friendly fair exchange with a gentleman. (Never an oaf, never a wimp!)

I always left time for a second one, if he wanted it. He wants it, if you have done the job on him you should do. The reason American men are such lousy lovers is that American women are such lousy lovers. And vice versa, and around and around. "Garbage in, garbage out." You get what you pay for.

That twenty minutes to an hour between goes is the best time in the world for intimate talk.

"Want first crack at the bathroom?" I asked.

"No hurry," George answered, his voice rumbling in his chest (I had my right ear against it). "How about you?"

"No rush. George, that was a goody. And just what I needed. Thank you, sir."

"Maureen, you're the one Shakespeare had in mind. '—Where other women satiate, she most makes hungry.' "

"Go along with you, sir."

"I mean it."

"Tell me enough times and I'll believe it. George, when you do get up, would you please get those envelopes? Wait a moment. Do you have time today for a second one?"

"I have time. That is what time is for."

"All right. I did not want to waste time in bed talking business if you were in a hurry. Because I do know ways to get you up again quickly if you are in a hurry."

"You do indeed! But I got a day's work done before ten in order to devote the rest of the day to Maureen." He got up, got the two envelopes, came back, offered them to me.

I said, "No, I don't want to touch them. George, please examine them. Is there any way I could have tampered with them?"

"I don't see how you could have. They have been in my possession continuously since July fourth, 1947.'' He smiled at me, and I smiled back—that was the date of the second time we had been in bed together. "Your birthday, girl, and you gave me a present."

"No, we exchanged presents, to our mutual profit. Examine the envelopes, George—have they been tampered with? No, don't come closer. I might bewitch them."

He looked them over. "The flap seal has both our signatures written across it, on each envelope. I know my signature and I saw you sign under mine. I do not see how even Houdini could have opened them."

"Please open number one, George, and read it aloud…and keep it. Put it back into your zipper pocket."

"Whatever you say, dear girl." He opened it and read, " 'July 4, 1947. In the spring of 1951 a man calling himself "Dr. Pinero" will infuriate both scientists and insurance men by claiming to be able to predict the date of any person's death. He will set up in business in this sort of fortunetelling. For several months he will enjoy great business success. Then he will be killed or die in an accident and his apparatus will be destroyed. Maureen Johnson.' "

(As George read aloud, I thought back to that Saturday night, the twenty-ninth of June, 1918. Brian slept part of the time; Theodore and I not at all. Every now and then I ducked into the bath, recorded in crisp Pitmann everything Theodore had told me—many details that he had not given to Judge Sperling and Justin and Mr. Chapman.)

George said, "Interesting. I never did believe that this Doctor Pinero could do what he claimed to do. It must have been some complex hoax."

"That's not the point, George." (I did not speak sharply.)

"Eh?"

"It does not matter now whether he was a charlatan or not; the man is dead, his apparatus destroyed, none of his notes remains. So said *Time* magazine and all the newspapers. All this happened last year, 1951. That envelope has been in your custody since July 1947, four years ago: How did I do it?"

He answered mildly, "I wondered about that. Are you going to tell me?”

(Certainly, George. This man from the stars and the future came to me and made love to me and told me these things because he thought they could help me. And then he died, killed in a war that wasn’t his. For me. [Only now I know that he went back to the stars and I lost him…and found him…and now I’m lost again, in a darkened lorry with a screwball cat. Pixel, don’t go away again!])

“George, I’m a soothsayer.”

“A soothsayer. That’s a fortuneteller.”

“Literally it means one who speaks the truth. But I am a prophet, rather than a fortuneteller. All those envelopes contain prophecies. Now for envelope number two. Don’t open it quite yet. George, have I been in your office in the past month?”

“Not to my knowledge. The only time you were ever in it, that I can recall, was about two years ago. We had a dinner date and it suited you to stop by my office rather than be picked up.”

“That’s right. You read the *Wall Street Journal*, I’m sure. You are a director of the corporation managing the paradise atomic power plant; I suspect that you read the *Journal* pretty carefully concerning public power matters.”

“That’s true. Managing business involves studying all sorts of finicky details.”

“What is new in the public power business lately?”

“Nothing much. The usual ups and downs.”

“Any new power sources?”

“No, nothing significant. Some experimental windmills, but windmills, even improved ones, can’t be classed as new.”

“How about sunpower, George?”

“Sunpower? Oh! Yes, there was a feature story in the *Wall Street Journal*. Eh…sunpower screens. Direct conversion of sunlight to electricity. Uh, two longhair scientists, Dr. Archibald Douglas and Dr. M. L. Martin. Maureen, their gadget will never amount to anything. If you are considering it, don’t risk any money on it. Do you realize how much of the time it is cloudy, how many hours are dark, how smog cuts into the potential? You wind up with—”

“George. Open the second envelope.”

He did so. “ ‘Two scientists, Douglas and Martin, will develop conversion of sunlight into electricity at high efficiency. Douglas-Martin Sunpower Screens will revolutionize public power and strongly affect everything else for the rest of the twentieth century.’ Maureen, I just can’t see how such an inefficient source—”

“George, George! How did I know, in 1947, about these sunpower gadgets disclosed just this year? How did I get the names right? Douglas. Martin. ”

"I don't know."

"I told you and now I'll repeat it. I am a prophet. Envelope number three tells Harriman Industries how to cash in on the Douglas-Martin Sunpower Screens. The next three envelopes concern power, public power, big power—and the changes coming that you won't believe. But you will have to believe when we open those envelopes one by one. The question is: Will we open them after the fact, as with these two—and then all I could say is 'I told you so'—or do we open each one long enough before the fact that my prophecy is useful to you?"

"I'm getting chilly. Shall I get dressed, or come back to bed?"

"Oh, dear! I've talked business too long. Come to bed, George, and let me try to make it up to you."

He did and we cuddled, but the essential miracle did not take place. At last I said, "Shall I apply a little direct magic? Or would you rather rest?"

"Maureen, what is it you want from Harriman Industries? You have not done this just to perplex me."

"Of course not, George. I want to be elected a director of Harriman Industries, the holding company. Later on you will need me on the board of some of the corporations being held by it. However, I will continue to decide how to time prophecies…as timing is everything."

"A director. There are no women on the board."

"There will be when you nominate me and I am elected."

"Maureen, please! All directors are major stockholders."

"How much stock does it take to be eligible?"

"One share complies with the rules. But company policy calls for major ownership. In the holding company or any of its subsidiaries."

"How much? Shares. No, dollar value by the market; the various corporate shares are not all the same value per share. Not any, I should say."

"Uh, Mr. Harriman and I think a director should own, or acquire soon after election, at least half a million in market value of shares. It fixes his attention on what he is voting on."

"George, on Monday at the close of market my summed up position in all of your companies was $872,039.81—I can bring that up to an even million in a few days if it would help to smooth the way."

George's eyebrows went way up. "Maureen, I didn't know that you owned any of our stock. I should have spotted your name in connection with any large block."

"I use dummies. Some in Zurich, some in Canada, some in New York. I can get it all into my own name if there is any reason to."

"We'll need some intelligences filed with us, at least. Maureen, am I free to tell Mr. Harriman about your envelopes? Your prophecies?"

“How would he feel about them?”

“I’m not sure. He and I have been in business together since the twenties…but I don’t know him. He’s a plunger…I’m a plough horse.”

“Well, let’s keep it a bedroom secret for now. Perhaps you will want to open the next envelope in his presence. Or perhaps not. George, if the public, particularly the Street, got hold of the idea that you were making business decisions on the advice of a soothsayer, it might damage Harriman Industries, might it not?”

“I think you’re right. All right, bedroom secret.” He suddenly smiled. “But if I said that I consulted an astrologer, half of those knotheads would consider it ‘scientific.’ ”

“And now let’s drop it, and let me see if I can get our plough horse interested in ploughing me. George, do all the men in your family have oversize penises?”

“Not that I know of and I think you are trying to flatter me.”

“Well, it seems big to me. Hey! It’s getting bigger!”

CHAPTER TWENTY-ONE

Serpent’s Tooth

My problems for the next ten years were Princess Polly, Priscilla, Donald, George Strong…and a curious metaphysical problem I still don’t know how to resolve—or how I should have resolved it, although I have talked it over in depth with my husband and friend Dr. Jubal Harshaw and with some of the finest mathematico-manipulative cosmologists in any universe, starting with Elizabeth “Slipstick Libby” Long. It involves the age-old pseudoparadox of free will and predestination.

Free will is a fact, while you are living it. And predestination is a fact when you look at any sequence from outside.

But in World-as-Myth neither “free will” nor “predestination” have meaning. Each is semantically null. If we are simply patterns of fictions put together by fabulists, then one may as well speak of “free will” for pieces in a chess game. After the game is history and the chessmen have been placed back in the box, does the Red Queen lose sleep moaning “Oh, I should never have taken that pawn!”

Ridiculous.

I am not an assemblage of fictions. I was not created by a fabulist. I am a human woman, daughter of human parents, and mother of seventeen boys and girls in my first life and mother of still more in my first rejuvenation. If I am controlled by destiny, then that destiny lies in my genes…not in the broodings of some nearsighted introvert hunched over a roboscriber.

The trouble as that there came a time as we neared the end of the decade that I realized that Theodore had told me about a tragedy that possibly could be prevented. Or could it? Could I use my free will to break the golden chains of predestination? Could I use my foreknowledge that something was going to happen to cause it not to happen?

Let’s turn it upside down—If I keep something from happening, how could I have foreknowledge of something that never happened?

Don’t try to sort that out; you’ll bite your own tail.

Is it ever possible to avoid an appointment in Samarra?

I knew that the power satellite was going to blow up, killing everybody aboard. But in 1952 no one else knew there ever would be a power satellite. In 1952 it was not even a blueprint.

What was my duty?

On Friday Dr. Rumsey told me that Priscilla was not pregnant and that she was physically old enough to be bred and that he was willing to support a delayed birth certificate, if I wanted her to have one, showing an age anywhere from thirteen to nineteen…but that in his opinion she was childish in her attitudes.

I agreed. "But I may have to phony an age of at least sixteen."

"I see. Her brother is screwing her, isn't he?"

I answered, "Is this room soundproofed?"

"Yes. And so is my nurse. We've heard everything, dear, much of it worse than a little brother-sister incest. We had a case last week—not Howards, thank God—of 'His brother is screwing him.' Be glad your kids are normal. With brother-sister games all that is usually needed is to see to it that she doesn't get pregnant and that they get over it in time to marry somebody else. Which they almost always do. Haven't you run into this before?"

"Yes. Before you took over your father's practice. Didn't he tell you?"

"Are you kidding? Pop treats the Hippocratic Oath as handed down from on high. How did it work out?"

"Okay in the long run, although it worried me at the time. Older sister taught younger brother and then younger brother taught still younger sister. I walked on eggs for a while, wondering whether to catch them or just to keep an eye out for trouble. But they never let it get intense; they just enjoyed it. My kids are a horny lot, all of them."

"And you aren't?"

"Shall I take off my panties? Or shall we finish this discussion?"

"I'm too tired. Go on."

"Sissy. Eventually they all took the Howard shilling, and now all three couples are friendly, with, I think, occasional Westchester weekends. But they keep such things out of my sight to keep from shocking poor old straitlaced Mama. But these two don't have that easygoing attitude. Jim, I've got to get that girl married."

"Maureen, Priscilla isn't ready to get married. The cure would be worse than the disease. You would ruin some man's life while spoiling hers, not to mention the damage to possible children. Hmm—Priscilla told me she had just moved here from Dallas. I don't know Marian. Hardy family-right? What sort of a person is Marian?"

"Jim, I am not an unprejudiced witness."

"That from the woman who can always see the good side in the Devil himself tells me all I need to know. Well, Marian may have had good intentions but she did not do a good job on Priscilla. At least not good enough to risk letting her marry at fourteen no matter how mature her pelvic measurements are. Maureen, I'll fake any age you say—but don't let her get married so young."

"I'll try, dear. I've got a tiger by the tail. Thank you."

He kissed me goodbye. Shortly I said, “Stop that; you said you were too tired. And you’ve got a waiting room full of patients.”

“Sissy. ”

“Yup. Some other time, dear. Give my love to Velma. I want to get you both over for dinner next week to see my new house. Maybe then.”

Princess Polly took a while to accept the move. For two weeks I kept her indoors and using a sand box. Then I let her out. An hour later, not being able to find her, I drove slowly back the eight blocks to our old house. When I was almost there, I spotted her, parked quickly and called her. She stopped and listened, let me approach her, then scampered away, straight for her old home. No, her only home.

I watched in horror as she crossed diagonally at Meyer and Rockhill-two busy boulevards. She made it safely and I breathed again and went back for my car and drove to our old house, arriving as she did because I conformed to traffic rules while she did not. I let her sniff around inside an empty house for a few minutes, then picked her up and brought her home.

For the next ten days this was repeated once and sometimes twice a day. Then came a day—the day after Labor Day, I believe—when a wrecking crew arrived to clear the site. George had warned me, so that day I did not let her out; I took her there—let her go inside as usual and sniff around, then the crew arrived and started tearing the house down. Princess came running to me and I let her sit in my lap in the car, at the curb.

She watched, while the Only Home was destroyed.

Aside from fixtures, which had been removed earlier, nothing was salvaged. So they tore down that fine old nineteenth-century frame structure in only a morning. Princess Polly watched, unbelieving. When the wreckers hitched bulldozers to the north wing and pulled it down, made it suddenly rubbish, she hid her face against me and moaned.

I drove us home. I did not like watching the death of that old house, either.

I took Polly back the next day. There was nothing but soil scraped bare and a basement hole where our home had been. Princess Polly would not get out of the car; I am not sure she recognized the site. She never ran away again. Sometimes gentleman friends came to call on her, but she stayed home. I think that she forgot that she had ever lived anywhere else.

But I did not forget. Never go back to a house you once lived in—not if you loved it.

I wish that Priscilla's problems had been as easy to cope with as Polly's. It was Friday before I saw Dr. Rumsey; Thursday we moved to our new house and any such move is exhausting, even though I used professional packers and handlers, not just their vans. It was simplified, too, by the fact that most of the furniture was not moved to our new house, but given to Good Will—I told both Good Will and the Salvation Army that a houseful of furniture, plus endless minor chattels, were to be donated to charity but they must send a truck. The Salvation Army wanted to come over and select what they wanted, but Good Will was not so fussy, so they got the plunder.

We kept only the books, some pictures, my desk and my files, clothing, some dishes and flatware, an IBM typewriter, and a few oddments. About eleven I sent Donald and Priscilla over to the new house with all salvaged food from pantry and freezer and refrigerator. "Donald, please come back for me after you unload. Priscilla, see what you can find for lunch; I think they will be loaded by noon. But don't fix anything for which timing is critical."

"Yes, Mother." Those were almost the only words she spoke to me that morning. She had done whatever I told her to do but made no attempt to use initiative, whereas Donald tackled the job with imagination.

They drove away. Donald came back for me at noon, just as the crew was breaking for lunch. "We'll have to wait," I told him, "as they are not quite finished. What did you do with Princess?"

"I shut her into my bathroom for now, with her sand box and food. She resents it."

"She'll just have to put up with it for a while. Donald, what is eating on Priscilla? Last night and this morning she has been acting as if someone—me, I think—had broken her little red wagon."

"Aw, Mother, that's just the way she is. Doesn't mean anything."

"Donald, it's not the way she is going to be, not if she stays here. I will not cater to sullenness. I have tried to give all my sons and daughters a maximum of freedom consistent with civilized behavior toward other people, especially toward their own family. But civilized behavior is required of everyone at all times. This means politeness and a cheerful demeanor, even if simulated rather than felt. No one is ever exempt from these rules, no matter how old. Do you think you can influence her? If she's sulky, I am quite capable of telling her to leave the table…and I don't think she would like that."

He laughed without mirth. "I'm sure she wouldn't like it."

"Well, perhaps you can put it over to her. Possibly she won't resent it from you."

"Uh, maybe."

"Donald, do you feel that there is anything I have said or done—or required of her—or of you—that she is justified in resenting?"

"Uh…no."

"Be frank with me, son. This is a bad situation; it can't go on."

"Well…she never has liked to take orders."

"What orders have I given that she doesn't like?"

"Well…she was pretty upset when you told her she couldn't come along and help decide which house we would take."

"That was not an order. I simply told her that it was my business, not hers. And so it is."

"Well, she didn't like it. And she didn't like being told that she had to be what she calls 'poked at.' You know."

"Yes, a pelvic examination. That was indeed an order. An order not subject to discussion. But tell me, what did you think of my requiring her to submit to a pelvic examination? Your opinion won't change my mind; I would just like to know what you think about it."

"Uh, none of my business."

"Donald . "

"Well…I guess girls have to have them. If her doctor is going to know whether she's healthy or not. Yeah, I suppose so. But she sure didn't like it."

"Yes, girls do have to have them for their own protection. I don't like them and never did and I've had them so many, many times that I couldn't begin to count. But it's just a nuisance, like getting your teeth cleaned. Necessary, so I put up with it…and Priscilla must put up with it, too, and I won't take any nonsense out of her about it." I sighed. "Try to make her see it. Donald, I'm going to drive you back and drop you, while they are still eating, and then I'll turn right around and hurry back, or something will wind up in the wrong truck."

I got to the house about two, then supervised where things went while carrying a sandwich in my hand. It was after five by the time the van left and still later before the house was arranged—if you can call it arranged when the back yard was strewn with cardboard cartons and clothes were dumped on beds and books were simply shoved into any bookcase to get them off the floor. Was it Poor Richard who said that "Two removes equal one fire?" Yet this was an easy move.

By eight I got some supper into them. We all were quiet. Priscilla was still sullen.

After supper I had us all move into the family room for coffee—and a toast. I poured thimble glasses of Kahlua…because you can't get drunk on Kahlua; you'll get sick first. I held up a glass. "Here's to our new home, dears."

I took a sip; so did Donald. Priscilla did not touch hers. "I don't drink," she said flatly.

"This is not a drink, dear; it is a ceremony. For a toast, if one does not wish to drink it, it is sufficient to lift the glass, say, 'Hear, hear!' and touch the glass to your lips, put it down and smile. Remember that. It will serve you well at other times."

"Mother, it is time we had a serious talk."

"All right. Please do."

"Donald and I are not going to be able to live here."

"I'm sorry to hear that."

"I'm sorry, too. But it's the truth."

"When are you leaving?"

"Don't you want to know why we are leaving? And where we are going?"

"You will tell me if you wish to tell me."

"It's because we can't stand being treated like prisoners in a jail!"

I made no answer. The silence stretched out, until finally my daughter said, "Don't you want to know how you've been mistreating us?"

"If you wish to tell me."

"Uh…Donnie, you tell her!"

"No," I objected, "I'll hear from Donald any complaint he has about how I have treated him. But not about how I have treated you. You are right here, and I am your mother and the head of this house. If you have complaints, make them to me. Don't try to fob it off on your brother."

"That's it! Orders! Orders! Orders! Nothing but orders, all the time…like we were criminals in a prison!"

I recited to myself a mantra I learned in World War II: *Nil illegitimi carborundum*. I said it three times, under my breath. "Priscilla, if that is what you mean by orders, nothing but orders, I can assure you that I won't change it. Any complaints you have I will listen to. But I won't listen to them secondhand."

"Oh, Mother, you're impossible!"

"Here is another order, young lady. Keep a civil tongue in your head. Donald, do you have any complaints about my treatment of you? You. Not your sister."

"Uh…no, Mama."

"Donnie !"

"Priscilla, do you have any specific complaints? Anything but a general objection to taking orders?"

"Mother, you—There is no point in trying to reason with you!"

"You haven't tried reason as yet. I'm going to bed. If you leave before I get up, please leave your latchkeys on the kitchen table. Goodnight."

"Goodnight, Mama," Donald answered.

Priscilla said nothing.

Priscilla did not come down for breakfast. "She said to tell you she doesn't want any breakfast, Mama."

"Very well. Fried eggs and little sausages this morning. How do you want your eggs, Donald? Broken yolks and vulcanized? Or just chased through the kitchen?"

"Uh, however you have yours, I guess. Mama, Priss doesn't really mean she doesn't want breakfast. Shall I go up and tell her that you said she has to come to breakfast?"

"No. I usually have my eggs up and easy but not sloppy. Suits?"

"Huh? Oh, sure! Please, Mama, can't I at least go up and tell her that you said breakfast is ready and she should come eat?"

"No."

"Why not?"

"Because I have not said that and I do not say it. The first child to try a hunger strike on me was your brother Woodrow. He lasted several hours but he cheated—he had stashed vanilla wafers under his pillow. When he finally gave up and came downstairs, I did not permit him to eat until dinnertime, which was several hours away. He did not try it again." (But he tried everything else, with lots of imagination!) "I don't coddle hunger strikers, Donald, or tantrums of any sort…and I think no government should. Coddle hunger strikers, I mean, or people who chain themselves to fences or lie down in front of vehicles. Grownup tantrums. Donald, you've objected to my orders twice this morning. Or is it three times? Are you catching this from Priscilla? Don't you have it through your head yet that I do not give unnecessary orders, but those I do give, I expect to have carried out? Promptly and as given. If I tell you to go jump in the lake, I expect you to return wringing wet."

He grinned at me. "Where is the nearest lake?"

"What? Swope Park, I guess. Unless we count a water hazard at the golf club. Or a landscaping pond at Forest Hills. But I don't recommend disturbing either corpses or golfers."

"There's a difference?"

"Oh, certainly, some at least. Donald, I don't mind that Priscilla chooses to skip breakfast this morning, as I need to talk with you without having her hanging over you and putting words in your mouth. When do you two plan to leave? And where do you plan to go, if you don't mind telling me?"

"Shucks, Mama, that was never serious. How can we leave? No money, and no place to go. Except back to Aunt Marian and we won't do that. We'll never go near her again."

"Donald, just what is it you find so poisonous about Aunt Marian?

Six years ago you both elected to stay with her when you could have come with me. What happened? Did she punish you endlessly? Or what?"

"Oh, no! She hardly ever punishes anybody. Sometimes she would have Pop work us over. Like this last hooraw with Gus."

"What happened there? Gus is a year older than you are and bigger…or was the last time I saw him. You said, 'He had her down and was giving her a bad time.' How bad a time? Was he raping her? Or trying to?"

"Uh…Mama, I'm in a prejudiced position. Jealous, I guess."

"So I would guess, too. Was it really rape? Or—What is it you young people call it today? They were 'getting it on'?"

He sighed and looked hurt. "Yeah, they were. I—I got sore."

I patted his hand. "Poor Donald! Dear, are you beginning to realize that you aren't doing yourself any good by falling in love with your sister? Or doing her any good? You are probably harming her even more than you are harming yourself. Do you see that, dear?"

"But, Mama, I couldn't leave her there. Uh, I'm sorry we didn't come with you six years ago. But you were so strict and Aunt Marian wasn't, and—Oh, I'm sorry!"

"How was Marian about housework? I am about to assign each of you your share of the work. But Priscilla seems to be clumsy in the kitchen. Yesterday she filled the freezer, dumping stuff in any which way, then didn't turn it on. I just happened to catch it or we could have lost the whole load. Did she take her turn at cooking along with Mildred and Sara and whoever is the right age now?"

"I don't think so. No, I know she didn't. Granny Bearpaw does all the cooking…and doesn't like having anyone else in her kitchen."

"Who is Granny Bearpaw?"

"Aunt Marian's cook. Black as coal and a hook nose. Half Negra, half Cherokee. And a swell cook! Always willing to fix you a bite. But you had better ask for it from the door. If you step inside, she's likely to wave a frying pan at you."

"She sounds like quite a gal. And it sounds like I'm going to have to teach Priscilla to cook."

Donald made no comment. I went on, "In the meantime we must get transcripts and get you two into the city school system. Donald, what would you think of going to Westport High instead of Southwest? Say yes and we might find you a jalopy, four wheels of some sort, so that it would not be too difficult. I really don't want you in the same school Priscilla is in. She hasn't any judgment, dear; I'm afraid she would get into fights with other girls over you."

"Yeah, she might. But, Mama, I don't need to go to Westport."

"I think you do. For the reason I named."

"I don't need to go to high school. I graduated in June."

I had lived with children all my life; they had never ceased to surprise me.

"Donald, how did I miss this? I had you tagged for next year, and I don't recall receiving an announcement."

"I didn't send out any…and, yeah, I was classed as a junior this past year. But I've got the required hours and then some, because I took summer session last year to make sure I got all the math they offered. Mama, I figured on being ready to go either way…didn't decide to graduate until May, when it was too late for the yearbook and all that jazz. Mr. Hardecker—he's the principal—wasn't pleased. But he did check my record and agreed that I had the option of graduating at the end of my junior year if I wanted to. But he suggested that he just arrange to issue my diploma quietly and I should not attend graduation or try to convince the Class of '52 that I was in their class since I wasn't in their yearbook and didn't wear their class ring and all the rest. I agreed. Then he helped me apply for the schools I was interested in. The really good technical schools, I mean, like MIT and Case and Cal Tech and Rensselaer. I want to build rocketships."

"You sound like your brother Woodrow."

"Not quite. He flies 'em; I want to design them."

"Have you heard from any of your applications?"

"Two. Case and Cal Tech. Turned me down."

"There may be good news waiting for you in Dallas. I'll check with your father—I must call him today anyhow; I have yet to tell him that you two wanderers showed up here. Donald, if you are turned down this year for the schools you have applied to, don't lose hope."

"I won't. I'll apply next year."

"Not quite what I meant. You should go to school this year. Dear, it is not necessary to go to one of the world's top technical schools for your lower-division courses. Any liberal arts college with high scholastic standards is okay for lower division. Such as Claremont. Or any of the so-called Little Ivy League. Or Grinnell College. Lots of others."

"But this is August, Mama. It's too late to apply anywhere."

"Not quite." I thought hard. "Donald, I want you to let me promote you to eighteen; we'll start by getting you a Missouri driver's license that shows that age for you, then we'll get you a delayed birth certificate when you need one. Not soon, unless you need a passport. Then you'll go to…Grinnell, I think"—one of the committee for my doctorate was now dean of admissions there and I had known him rather well—"for one or two years. Make up your mind just which engineering school you want and we'll work on getting you into it next year or the year after…while you work hard for top grades. And —"

"Mama, what am I going to use for money?"

"My dear son, I am ready to go to almost any expense to get you separated from your sister before you two get into real trouble. I won't pay for an abortion, but I will pay for your education over and above what you can earn yourself, working part time. Which you should do for self-discipline and for your own self-respect. At Grinnell a male student can often wash dishes in a sorority house."

I went on, "Those cornfed coeds are luscious; I've seen them. But you may not notice them too much as I want to submit your name to the Howard Foundation, and ask for the Iowa list of the youngest age group."

"But, Mama, I'm not anxious to get married and I can't support a wife."

"You don't have to get married. But are you totally uninterested in meeting a select list of girls about your age, all of whom are healthy, all long-lived—as you are—all desirable girls by all the usual criteria…and all of them guaranteed not to scream if you make a polite, respectful, but unmistakable pass at her? And won't get indignant—What kind of a girl do you think I am?—when it turns out you have a fishskin or c Ramses in your pocket.

"Son, you do not have to do anything whatever about your Howard list. But if you get horny or lonely or both, shopping your Howard list surely beats hanging around bars or attending prayer meetings, all the preliminary work has been done for you. Because the Howard Foundation does indeed want Howards to marry Howards, and spends millions of dollars to that end."

"But, Mama, I can't possibly get married until I'm out of school. That's five years away, at least. I need an M.S. A Ph.D. wouldn't hurt."

"You talked to your sister Susan yesterday. Did you wonder how Susan and Henry were able to go to college, right straight from their wedding? Quit worrying, Donald. If you will just pick a college not too close to Kansas City, all your problems can be worked out. And your mother can quit worrying."

Priscilla blew all her fuses when she learned that Donald was going to go to school somewhere else. We kept her from knowing about it until the last minute; the day she registered at Southwest High was the day he left for Grinnell. Donald packed while his sister was at school, then waited until she got home to break the news. Then he left at once, driving a Chevrolet so old that it could not be used on a control road; It had no bug.

She threw a fit. She insisted that she was going with him. She made silly noises about suicide. “You’re deserting me! I’ll kill myself, I will! Then you’ll be sorry you did this to me!”

Donald looked glum but he left. Priscilla went to bed. I ignored the fact. Threats of suicide are just another tantrum to me, blackmail to which I will not submit.

Besides, if a person wants to take his own life, it is (I think) his privilege. Also, if he is dead serious about it, no one can stop him.

(Yes, I am a cruel and heartless scoundrel. Stipulated. Now go play with your dolly somewhere else.)

Priscilla came downstairs about ten P.M. and said that she was hungry. I told her that dinner was long over but that she could fix herself a sandwich and a glass of milk—which she did, and then joined me in the family room…and started in on recriminations.

I cut her short. “Priscilla, you will not sit there and call me names while eating my food. Stop one or the other.”

“Mama, you’re cruel!”

“That counts as name calling.”

“But—Oh, I’m so unhappy!”

That was self-evident and did not call for comment, it seemed to me, so I went back to watching Walter Cronkite and listening to his sonorous pronouncements .

She gloomed around for some days, then discovered the advantages of living close to school, of having a family room that was hers to use as she liked, and of a mother who permitted almost any racket and muss as long as it was cleaned up afterward—or at least once or twice a week. The house started to be filled with young people. I found that as Priscilla became happy, so did I.

In late September I came downstairs one Friday night about eleven for a glass of milk and a midnight snack, and heard those giveaway squeaks coming out of the maid’s room across from the kitchen. I was not tempted to disturb them as I felt relief rather than worry, especially as the sound effects proved that Priscilla had learned to have orgasms as readily with another male as with her brother. But I went up and checked a calendar in my bathroom, one that duplicated the one in hers—and saw that it was a “safe” day for her and then felt nothing but relief. I never expected Priscilla to give up sex. Once they start and find they like it, they never quit. Or perhaps I should say that I would worry if one did.

The next day I called Jim Rumsey and asked him to take a smear and a blood test each time I sent Priscilla in, as I did not trust her judgment and knew that she might be exposed. He snorted. “Do you think I’m not on the ball? I check everybody. Even you, you old bag.”

“Thanks, dear!” I threw him a kiss through the screen.

It was shortly after that cheerful occasion that George Strong called me. “Dear lady, I’m just back in town. I have good news.” He smiled shyly. “Delos agrees that you must be on the board. We can’t put it to the stockholders until the annual meeting but an interim appointment can be made by the directors if a vacancy occurs between stockholders’ meetings. It so happens that one of my assistants is about to resign. As a director, not as my assistant. Could you attend a directors’ meeting in Denver on Monday the sixth of October?”

“Yes, indeed. I am enormously pleased, George.”

“May I pick you up at ten? A company rocketplane will take us to Denver, arriving there at ten, mountain time. The directors’ meeting is at ten-thirty in the Harriman Building, followed by luncheon at the top of the same building—a private dining room with a spectacular view.”

“Delightful! George, are we returning later that day?”

“We can if you wish, Maureen. But there are some beautiful drives around that area, and I have a car and a driver available. Does that appeal to you?”

“It does indeed! George, be sure to fetch envelope number three.”

“I will be sure to do so. Until Monday, then, dear lady.”

I moved around in a happy fog, wishing that I could tell my father about it—how little Maureen Johnson of Muddy Roads, Mizzourah, was about to be named a director of the Harriman empire, through an unlikely concatenation: first, an adulterous love affair with a stranger from the stars; second, because her husband left her for another woman; and third, an autumn affair between an immoral grass widow and a lonely bachelor.

If Brian had kept me, I could never have become a director in my own person. While Brian had not begrudged me any luxury once we were prosperous, aside from my household budget, I had actually controlled only “egg money”—even that numbered Zurich bank account had been only nominally mine. Brian was a kind and generous husband…but he was not even remotely a proponent of equal rights for women.

Which was one reason I refused George Strong’s repeated proposals of marriage. Although George was twenty years younger than I (a fact I never let him suspect), his values were rooted in the nineteenth century. As his mistress I could be his equal; were I to marry him, I would at once become his subordinate—a pampered subordinate, most likely…but subordinate.

Besides, it would be a dirty trick to play on a confirmed old bachelor. His proposals of marriage were gallant compliments, not serious offers of civil contract.

Besides, I had become a confirmed old bachelor myself—even though I found myself unexpectedly rearing one more child and a problem child at that.

My problem child—What to do about Priscilla while I was in Colorado overnight? Or possibly over two nights—if George suggested staying another day, at Estes Park, or Cripple Creek, would I say no?

Were I living alone with only Princess Polly to worry about, I could stuff her into a kennel and ignore her protests. Would that I could do so with a strapping big girl who outweighed me!…but who lacked sense enough to boil water.

What to do? What to do?

“Priscilla, I am going to be away from home overnight, possibly two nights. What would you prefer to do while I am gone?”

She looked blank. “Why are you going away?”

“Let’s stick to the point. There are several possibilities. You could stay overnight or over two nights with a chum from school, if you like. Or you could stay with Aunt Velma—”

“She’s not my aunt!”

“True and you need not call her that. It is simply customary among Howards to use such terms among ourselves to remind us of our common membership in the Howard families. Suit yourself. Now please let’s get back to the main question: What do you prefer to do while I’m away?”

“Why do I have to do anything? I can stay right here. I know you think I can’t cook…but I can rustle my grub for a couple of days without starving.”

“I’m sure you can. Staying here was the next possibility that I was about to mention. I can find someone to come stay with you so that you won’t have to be alone. Your sister Margaret, for example.”

“Peggy’s a pill!”

“Priscilla, there is no excuse for your calling Margaret by a derogatory slang name. Is there someone you would like to have here to keep you company?”

“I don’t need any company. I don’t need any help. Feed the cat and bring in the *Star*—what’s hard about that?”

“Have you stayed alone in a house before?”

“Oh, sure, dozens of times!”

“Really? What were the occasions?”

“Oh, all sorts. Papa and Aunt Marian would take the whole family somewhere, and I would decide not to go. Family outings are a bore.”

“Overnight trips?”

“Sure. Or more. Nobody in the house but me and Granny Bearpaw.”

"Oh. Mrs. Bearpaw is live-in help?"

"I just got through saying so."

"That isn't quite what you said and your manner is not as polite as it could be. Staying with Mrs. Bearpaw in the house is not the same as staying alone…and I have gathered an impression that Granny with a frying pan could intimidate an intruder."

"She wouldn't use a frying pan; she's got a shotgun."

"I see. But I can't get her to stay with you…and apparently you have never stayed alone before. Priscilla, I can arrange for a couple to stay here—strangers to you but reliable."

"Mother, why can't I simply stay here by myself? You act like I'm a child!"

"Very well, dear, if that is what you prefer." (But I'm not going to leave it entirely up to your good judgment. I'm going to hire the Argus Patrol to do more than cruise slowly past three times a night—I'll place the next thing to a stakeout on this house. I shan't leave you vulnerable to some night prowler just because you think you are grown up.)

"That's what I prefer!"

"Very well. Everyone has to learn adult responsibility at some time; I simply was reluctant to thrust it on you if you did not want it. I'll be leaving at ten o'clock Monday morning, the sixth, for Colorado —"

" 'Colorado'! Why didn't you say so? Take me along!"

"No, this is a business trip."

"I won't be any trouble. Can I take the train up to the top of Pikes Peak?"

"You aren't going; you're going to stay here and go to school."

"I think that's mean."

I was gone two days and I had a wonderful time. Being a director was a bit dazzling the first time, but when it came time to vote, I simply voted the way George did, for the nonce—later I would have opinions.

At lunch Mr. Harriman had me placed at his right. I didn't touch the wine and I noticed that he didn't either. He had been all business at the meeting but was most charming at lunch—no business talk. "Mrs. Johnson, Mr. Strong tells me that you and I share an enthusiasm —space travel "

"Oh, yes!" We talked about nothing else then and were last to leave the table; the waiters were clearing it around us.

George and I spent the night at a guest house halfway between Denver and Colorado Springs, on the inner road, not the highway. We discussed envelope number three in bed:

"The Douglas-Martin Sunpower Screens will cause the greatest change in the American countryside since the first transcontinental railroad. Moving roadways will be built all over the country, powered by D-M screens. These will follow in general the network of federal highways now in existence—Highway One down the East Coast, Route Sixty-Six from Chicago to L.A., and so forth.

"String cities will grow up along these moving roads and the big cities now in existence will stop growing and even lose population.

"The moving roads will dominate all the rest of the twentieth century. Eventually they will die out, like the railroads—but not until next century. "

"Maureen," George said soberly, "this is awfully hard to believe."

I said nothing.

"I don't see how they could be made to work."

"As a starter, try multiplying a thousand miles by two hundred yards, to get square yards, then call it horsepower. Use a ten percent efficiency factor. Save the surplus power in Shipstones when the Sun is high and bright; use that surplus to keep the roads rolling when the Sun doesn't shine." (I could be glib about it; I had done the arithmetic many times in thirty-four years.)

"I'm not an engineer."

"Then discuss it with your best engineer—Mr. Ferguson?—when you get home."

"You stand by this?"

"It's my prophecy. It won't happen quickly—the first roadcity—Cleveland to Cincinnati—won't roll for several years. I'm telling you now so that Harriman Industries can get in on the ground floor."

"I'll talk to Ferguson."

"Good. And now let me be nice to you because you have been so very nice to me."

I returned on Wednesday and stopped at the office of Argus Patrol before I went home. I spoke to Colonel Frisby, the president of the company. "I'm back; you can take the special watch off my home. Do you have a report for me?"

"Yes, Mrs. Johnson. Your house is still there, no fires, no burglars, no intruders, nothing but a noisy party on Monday night, and one not quite so noisy last night—kids will be kids. Your daughter did not go to school yesterday—slept in, we think; the party Monday night ran quite late. But she's at school today and looks none the worse. Shall we put this on your bill or do you want to pay for this special service now?"

I paid it and went home, feeling relieved.

I let myself in and sniffed; the place needed airing.

And a thorough house cleaning. But those were minor matters.

Priscilla got home a little after four, looking apprehensive, but smiled when I did. I ignored the mess the house was in, took her out to dinner, and told her about my trip. Some of it.

On Friday I picked her up at school and we went to Jim Rumsey's office, by appointment. Priscilla wanted to know why.

"Dr. Rumsey wanted to see you again after a couple of months. It has been just two months."

"Do I have to be poked?"

"Probably."

"I won't!"

"Say that again. Say it loud enough to be heard in Dallas. Because, if you mean that, then I'll have to bring your father into it. He has still legal custody of you. Now say it."

She shut up.

About an hour later Jim called me into his private office. "First, the good news. She doesn't have crabs. Now the bad news. She does have syphilis and clap."

I used a heartwarming expletive. Jim tut-tutted. "Ladies don't talk that way."

"I'm not a lady. I'm an old bag with an incorrigible daughter. Have you told her?"

"I always tell the parent first."

"All right, let's tell her."

"Slow down. Maureen, I recommend putting her into a hospital. Not just for gonorrhea and syphilis, but for what her emotional condition will be after we tell her. She's cocky at the moment, almost arrogant. I don't know what she'll be ten minutes from now."

"I'm in your hands, Jim."

"Let me call Bell Memorial, see if I can get an immediate admission."

CHAPTER TWENTY-TWO

The Better-Dead List

A noise woke me up. I was still in that pitch-dark lorry, clutching Pixel to me. “Pixel, where are we?”

“Kuhbleeert!” (How would I know?)

“Hush!” Someone was unlocking the lorry.

“Meeroow?”

“I don’t know. But don’t shoot till you see the whites of their eyes.”

A side door rolled back. Someone was silhouetted against the open door. I blinked.

“Maureen Long?”

“I think so. Yes.”

“I am sorry to have left you in the dark so long. But we had a visit from the Supreme Bishop’s proctors and we have just finished bribing them. And now we must move; they don’t stay bribed. Second-order dishonesty. May I offer you a hand?”

I accepted his hand—bony, dry, and cold—and he handed me down while I held Pixel in my left arm. He was a small man, in a dark siren suit, and the nearest thing to a living skeleton I have ever seen. He appeared to be yellowed parchment stretched over bones and little else. His skull was completely hairless. “Permit me to introduce myself,” he said. “I am Dr. Frankenstein.”

“ ‘Frankenstein,’ ” I repeated. “Didn’t we meet at Schwab’s on Sunset Boulevard?”

He chuckled, a sound like dry leaves rustling. “You are jesting. Of course it is not my original name but one I use professionally. You will see. This way, if you please.”

We were in a windowless room, with a vaulted ceiling glowing with what seemed to be Douglas-Martin shadowless skyfoam. He led us to a lift. As the door closed with us inside Pixel tried to get away from me. I clung to him. “No, no, Pix! You’ve got to see where they take me.”

I spoke just to Pixel, almost in a whisper, but my escort answered, “Don’t worry, Milady Long; you are now in the hands of friends.” The lift stopped at a lower(?) level; we got out and we all got into a tube capsule. We zoomed fifty yards, five hundred, five thousand, who knows?-the capsule accelerated, decelerated, stopped. We got out. Another lift took us up this time. Shortly we were in a luxurious lounge with about a dozen people in it and more coming in. Dr. Frankenstein offered me a comfortable seat in a large circle of chairs, most of them occupied. I sat down.

This time Pixel would not be denied. He wiggled out of my arms, jumped down, explored the place and examined the people, tail up and poking the little pink nose into everything.

There was a wheelchair in the circle, occupied by an excessively fat man, who had one leg off at the knee, the other amputated higher up. He was wearing dark glasses. He felt like a diabetic to me, and I wondered how Galahad would approach the case. He spoke up:

"Ladies and gentlemen, shall we get started? We have a new sister." He pointed with his whole hand at me, like a movie usher. "Lady MacBeth. She is—"

"Just a moment," I put in. "I am not Lady MacBeth. I am Maureen Johnson Long."

He trained his head and dark glasses at me slowly, like a battleship's turret. "This is most irregular. Dr. Frankenstein?"

"I am sorry, Mr. Chairman. The contretemps with the proctors spoiled the schedule. Nothing has been explained to her."

The fat man let out a long sibilant sigh. "Incredible. Madam, we apologize. Let me introduce our circle. We are the dead men. All of us here are enjoying terminal illness. I say 'enjoying' because we have found a way—hee, hee, hee, hee!—to relish every golden moment left to us…indeed to extend those moments because a happy man lives longer. Each companion of the Committee for Aesthetic Deletions—at your service, Madam!—spends his remaining days in insuring that scoundrels whose removal will improve the human breed predecease him. You were elected in *absentia* to our select circle not merely because you are a walking corpse yourself but as a tribute to the artistic crimes you committed in attaining that status.

"With that synoptic explanation out of the way, permit me to introduce our noble companions:

"Dr. Fu Manchu." (A burly Irishman or Scot. He bowed without getting up.)

"Lucrezia Borgia." (Whistler's Mother, with tatting in her lap. She smiled at me and said, "Welcome, dear girl!" in a sweet soprano.)

"Lucrezia is our most accomplished expunger. Despite inoperable cancer of the liver she has counted coup more than forty times. She usually—"

"Stop it, Hassan," she said sweetly, "before you tempt me to put you on your proper track."

"I wish you would, dear. I grow weary of this carcass. Beyond Lucrezia is Bluebeard—"

"Hiyah, babe! What are you doing after?"

"Don't fret, Madam; he is disarmed. Next we have Attila the Hun —" (A perfect Caspar Milquetoast, in shorts and singlet. He sat utterly still, save that his head nodded steadily, like a nursery toy.) "—next to him, Lizzie Borden." (She was a young and beautiful woman, in a provocative evening gown. She looked quite healthy and she smiled happily at me.) "Lizzie is kept alive by an artificial heart…but the fuel that powers it is killing her slowly. Lizzie was formerly a Sister of the Order of Santa Carolita, but she fell out of favor at the Cathedral and was assigned to medical and surgical research. Hence her heart. Hence her fate. Hence her commitment, for Lizzie is a specialist; she terminates only the priesthood of the Church of the Divine Inseminator. Her teeth are very sharp.

"Next is Jack the Ripper—"

"Call me 'Jack.' "

"—and Dr. Guillotine."

"Your servant, Madam."

"Professor Moriarty is lurking back there, and with him is Captain Kidd. That completes our circle tonight, save for myself, chairman for life if I may be permitted a jest. I am the Old Man of the Mountain Hassan the Assassin."

"Where is Count Dracula?"

"He asked to be excused, Lady MacBeth; he is indisposed—something he drank, I believe."

"I warned him that Rh negative would poison him. Hassan, you pretentious old fraud, this is ridiculous. My name is not Lady MacBeth and I am not a walking corpse; I am in perfect health. I'm lost, that's all."

"You are indeed lost, my lady, for there is no spot on the globe where in the long run you can escape the Supreme Bishop's proctors. All we offer you, all we can offer you, are some moments of exquisite pleasure before they find you. As for a name, do please pick one that pleases you. Bloody Mary, perhaps? But surely it is prudent to suppress your real name when it is posted in every post office in the realm? But come—enough of business for the nonce. Let sweet music play and good wine flow. *Carpe diem*, my cousins! Drink up, enjoy the moment. Later, when we again come to order, we will hear nominations of new candidates for termination." He touched a control on the arm of his wheelchair, spun around, and rolled to a bar in one corner.

Most of the others followed him. "Lizzie Borden" came over to me as I stood up.

"Let me welcome you personally," she said in a gentle, warm contralto. "I do especially appreciate what you did that got you condemned, as it is much like my own case."

"Really?"

"I think so. I was a simple temple prostitute, a Sister of Carolita, when I fell from grace. I had always been attracted to the religious life and believed that I had a true vocation while I was still in high school." She smiled and showed dimples. "Eventually I learned that the Church is run solely for the benefit of the priesthood, not for the good of our people. But I learned it too late."

"Uh, are you really dying? You look so healthy."

"With luck I can expect to live another four to six months. Here all of us are dying, including you, my dear. But we don't waste time thinking about it; instead we study our next client and plan the details of his final moment. May I get you something to drink?"

"No, thank you. Have you seen my cat?"

"I saw him go out onto the balcony. Let's go look."

We did—no Pixel. But it was a beautiful clear night; we stopped to look. "Lizzie, where are we?"

"This hotel is near the Plaza, and we're looking north. That's the downtown district, and beyond it, the Missouri River."

As I expected, Priscilla set new highs for screaming irrelevancy. She blamed everyone—me, Dr. Rumsey, Donald, President Patton, the Kansas City school board, and unnamed others, for the conspiracy against her. She did not blame herself for anything.

While she was ranting, Jim shoved an injector against her—a tranquilizer, Thorazine, I think, or something about as powerful. We got her into my car and over to the hospital. Bell Memorial used the bed-first-paperwork-later checkin method, so Jim got her treatment started at once. That done, he ordered a barbiturate for nine P.M. and authorized a wet pack if she failed to quiet down.

I signed all sorts of papers, showed my American Express card, and we left—back to Jim's office, where he took a sample of my blood and a vaginal smear. "Maureen, where was it you sent the boy?"

"I don't think he had anything to do with it, Jim."

"Don't talk like your daughter, you stupid little broad. We don't guess; we find out."

Jim dug into a reference listing, called a doctor in Grinnell. "Doctor, we'll find the lad and send him to you. Are you equipped to do the Morgan test? Do you have fresh reagents and a polarizer at hand?"

"In a college town, Doctor? You can bet your last dollar I do!"

"Good. We'll track him down and chase him right over to your office, then I'll wait at this telecode for you to call me back."

We were lucky; Donald was in his dormitory. "Donald, I want you to go straight to Dr. Ingram. His office is downtown, across from Stewart Library. I want you to go right now, this instant."

"Mama, what is this all about?" He looked and sounded upset.

"Call me at home, tonight, from a secure phone, and I'll tell you. I won't discuss it over a screen in the hallway of a dormitory. Go straight to Dr. Ingram and do what he tells you to. Hurry."

I waited in Jim's private office for Dr. Ingram's call. While I was waiting Jim's nurse finished my tests. "Good news," she said. "You can go to the Sunday School picnic after all."

"Thanks, Olga."

"Too bad about your youngster. But with the drugs we use nowadays she'll be home in a couple of days, as healthy as you are."

"We cure 'em too fast," Jim said gruffly. "Catching something nasty used to teach 'em a lesson. Now they figure it's no worse than a hangnail, so why worry?"

"Doctor, you're a cynic," Olga countered. "You'll come to a bad end."

After an agonizing wait, Dr. Ingram called back. "Doctor, did you have reason to suspect that this patient was infected?"

"No. But he had to be eliminated, under a VD trace required by Missouri state law."

"Well, he's negative on both of those and on two or three other things I checked while I was at it. He doesn't even have dandruff. I don't see why he would be included in a VD search; I think he's still a virgin. How shall I bill this?"

"To my office."

They switched off. I asked, "Jim, what was that about Missouri state law?"

He sighed. "Clap and pox are among the many diseases I must report, but for venereal diseases I not only have to report them but also I must cooperate in an effort to find out where the patient contracted the disease. Then public health officers try to follow each infection back to its source-impossible, since the original source is somewhere centuries back in history. But it does serve to thin it out. I know of one case here in town where spotting one dose of clap turned up thirty-seven other cases before it ran off the map, to other cities or states. When the track does that, our public health officers pass along the data to those other jurisdictions and we drop that search.

"But locating and curing thirty-seven cases of gonorrhea is worthwhile in itself, Maureen. The venereal diseases are ones we stand a chance of stamping out, the way we did smallpox, because—do you know the definition of a venereal disease?"

(Yes, I do, but go ahead, Jim.) "No."

"A venereal disease is one that is so terribly difficult to catch that only intercourse or deep kissing is likely to pass it on. That's why we stand a chance of stamping them out…if only the idiots would cooperate! Whereas there is no chance, none whatever, of stamping out the so-called common cold. Yet people pass on respiratory infections with utter carelessness and aren't even apologetic about it." He was explosively profane.

I said, "Tut, tut! Ladies don't talk that way."

The screen was blinking and its alarm was sounding as I got home. I dropped my handbag and answered it—Donald. "Mama, what's this all about?"

"Secure phone?" I could not see what was behind him—just a blank wall.

"I'm in one of the soundproof booths at the phone company."

"All right." I know of no gentle way to tell a boy that his sister has big and little casino, a full house. So I put it bluntly. "Priscilla is ill. She has gonorrhea and syphilis."

I thought he was going to faint. But he pulled himself together. "Mama, this is awful. Are you sure?"

"Of course I'm sure. I was there when she was tested and I saw the test results. That's why you were tested. I was greatly relieved to learn that you are not the one who gave them to her."

"I'll be there at once. Uh, it's about two hundred and forty miles. Coming up, it took me—"

"Donald. "

"Yes, Mama?"

"Stay where you are. We sent you to Grinnell to get you away from your sister."

"But, Mama, these are special circumstances. She needs me—"

"She does *not* need you. You are the worst possible influence on her can't you get that through your head? She doesn't need sympathy; she needs antibiotics and that is what she is getting. Now leave her alone and give her a chance to get well…and to grow up. And you grow up, too ! "

After inquiring about how he was doing with his studies, I shut him off. Then I did something I avoid doing as a matter of principle but sometimes must do through pragmatic necessity; I searched a child's room.

I think a child has a right to privacy but that right is not absolute; his parents have an overriding responsibility for everything under their roof. If the circumstances require it, the child's right to privacy may have to be temporarily suspended.

I am aware that some libertarians (and all children) disagree with me. So Be it.

Priscilla's room was as untidy as her mind, but that was not what I was after. I worked slowly through her bedroom and bathroom, trying to check every cubic inch, while leaving her clothes and other possessions as much as possible the way I had found them.

I found no trace of liquor. I found a stash of what I thought was marijuana but I was not sure how to tell “grass” when I saw it. That it probably was “grass” was made almost certain in my mind by two things: two little packets of cigarette papers under the bottom liner of another drawer, and a lack of any tobacco of any sort, loose or in cigarettes. Are cigarette papers used for any purpose other than rolling cigarettes of some sort?

The last odd thing I found was at the very bottom of a catch-all drawer in her bathroom: a small rectangular mirror, and with it a Gem single-edge blade. She had a big make-up mirror that I had given her, as well as a three-way that was part of her dressing table; why had she bought this mirror? I stared at those two items, mirror and razor blade, then looked elsewhere in her bath, and found, as my memory led me to expect, a Gillette razor that required double-edged blades, and an opened packet of doubled-edged blades—but no Gem razor. I then searched both bath and bedroom a second time. I even searched the room and bath that had been Donald’s, although I knew them to be as bare as Mother Hubbard’s cupboard; I had cleaned after he left. I did not find a stash of white powder having the appearance of powdered sugar…which proves only that I did not find such a stash.

I put everything back the way I had found it.

About one A.M. the front door chimed. I answered it from bed. “Who is it?”

“It’s me, Mama. Donald.”

(Dirty names!) “Well, come i…

“I can’t, it’s bolted.”

“Sorry, I’m not awake yet. I’ll be down.” I grabbed a robe, found some slippers, went downstairs and let my youngest son in. “Come in, Donald. Sit down. When did you eat last?”

“Uh, I grabbed a Big Mac in Bethany.”

“Oh, Lordy.” I fed him first.

When he had polished off all of a giant Dagwood and had eaten a big dish of chocolate ice cream, I said, “All right, why did you come here?”

“You know why, Mama. To see Priss. I know you said she didn’t need me…but you’re mistaken. Ever since she was a baby girl, when she was in trouble, she came to me. So I know she needs me.”

(Oh, dear! I should have fought it in court. I should not have left my two youngest in the custody of—Regrets, regrets! Father, why did you have to go get yourself killed in the Battle of Britain? I need your advice. And I miss you dreadfully!) “Donald, Priscilla is not here.”

“Where is she?”

“I won’t tell you.”

Donald looked stubborn. "I won't go back to Grinnell without seeing her."

"That's your problem. Donald, you two have outworn both my patience and my resourcefulness. You ignore my advice and disobey necessary orders and you are each too big to spank. I have nothing else to offer."

"You won't tell me where she is?"

"No."

He heaved a big sigh. "I'm going to stay here until I see her."

"That's what you think. Son, you are not the only stubborn member of this family. Any more of your lip and I'll call your father and tell him to come get you because I can't handle you—"

"I won't go!"

"—and then close this house and take an apartment for myself at the Kansas Citian—a single apartment, big enough for a sand box for Polly, not big enough for another person. I was about to move into an apartment when you and your sister showed up…so I changed my plans and rented this house, especially for you two. But neither of you have treated me decently and I'm sick of trying. I'm going to bed. You can stretch out on that couch and get a nap. But if you are not gone when I get up, I intend to call your father and tell him to come get you."

"I won't go with him!"

"Your problem. The next step could be juvenile court but that is up to your father. As a result of your choice, six years ago, he has custody." I stood up, then recalled something. "Donald, do you know marijuana when you see it?"

"Uh…maybe."

"Do you, or don't you?"

"Yeah…I do."

"Wait here." I was back in a few moments. "What is this?"

"That's marijuana. But, shucks, Mama, everybody does marijuana now and then."

"I don't. And no one living in this house is permitted to. Tell me what this is for." I reached into one pocket of my robe, got out that mirror so inappropriate to a girl's room, reached more carefully into the other pocket, got out that single-edged razor blade, placed it on the mirror. "Well?"

"What am I supposed to say?"

"Did you ever cut a line of cocaine?"

"Uh…no."

"Have you seen it done?"

"Uh…Mama, if you are trying to tell me that Priss is hooked on coke, all I can say is that you must be out of your mind. Of course, most kids these days have tried it once or twice, but—"

"You have tried it?"

"Well, sure. The janitor at our school sold it. But I didn't like it. It rots your nose out—did you know that?"

"I knew that. Has Priss tried it?"

He looked at the mirror and blade. "I suppose so. It looks like it."

"Have you seen her try it?"

"Uh…once. I chewed her out about it. Told her not to do it again."

"But, as you have told me and as she says herself, she doesn't like to take orders. And apparently did not take yours. I wonder if it's the janitor at her present school?"

"Uh, it could be a teacher just as easily. Or one of the seniors, a Big Man on Campus. Or a bookstore. Lots of places. Mama, they clean up the neighborhood dealers every now and then—doesn't make the least bit of difference; there's a new pusher the next week. The way I hear it, it's the same everywhere."

I sighed. "It beats me, Donald. I'll get you a blanket to pull over you."

"Mama, why can't I sleep in my own bed?"

"Because you're not supposed to be here at all. The only reason you're being indulged even this much is that I don't think it is safe to let you go back on the road without something to eat and a few hours sleep."

I went back to bed, could not sleep. After about an hour I got up and did something I should have done earlier: I searched the maid's room.

I found the stash. It was between the mattress and the mattress cover, at the foot of the bed. I was tempted to taste the least trace of it, having some notion from biochemistry of what cocaine should taste like, but I had sense enough—or was chicken enough—not to risk it; there are street drugs that are dangerous in the tiniest amounts. I took it back up with me, locked it, the "grass" and the cigarette papers, and the mirror and blade, into a lock box I keep in my bedroom.

They won. I lost. They were too much for me.

I brought Priscilla home, cured but sullen as ever. Two Public Health officers, a man and a woman, called on us (Jim's doing, with my cooperation) almost as we were taking off our coats. They wanted to know, gently and politely, Priscilla's "contacts"—who could have given the bugs to her and to whom she could have passed them on.

"What infections? I'm not ill, I never was ill. I've been held against my will in a conspiracy! Kidnaped and held prisoner! I'm going to sue somebody!"

"But, Miss Smith, we have copies of your lab tests and your medical history. Here, look at them."

Priscilla brushed them aside. "Lies! I'm not going to say another word without my lawyer."

At which point I made still another mistake. "But, Priscilla, I am a lawyer; you know that. What they're asking is quite reasonable, a matter of public health."

I have never been looked at with such contempt. "You're not my lawyer. You're one of the ones I'm going to sue. And these two characters, too, if they don't quit heckling me." She turned her back and went upstairs.

I apologized to the two Public Health officers. "I'm sorry, Mr. Wren and Mrs. Lantry, but I can't do anything with her, as you can see. I'm afraid you'll have to get her on the witness stand and under oath to get anything out of her."

Mr. Wren shook his head. "It would not work. In the first place, we have no way to put her on the stand; she has not broken any laws that we know of. And we don't know of anyone who has. In the second place, a youngster with her attitude simply takes the Fifth Amendment and shuts up.“

"I'm not sure she knows what the Fifth Amendment is."

"You can bet she does, Mrs. Johnson. Today all these kids are street smart and every one of them is a chimney-corner lawyer, even in a rich neighborhood like this one. Put one on the stand and he'll holler for a lawyer and the ACLU will supply one pronto. The ACLU figures it is more important to protect a teenager's right to clam up than it is to protect some other teenager from infection and sterility."

"That's ridiculous."

"Those are the conditions we work under, Mrs. Johnson. If we don't get voluntary cooperation, we have no way to force it."

"Well…I can do one thing. I can go talk to her principal, tell him that he has VD running around loose in his school."

"It won't do any good, Mrs. Johnson. You will find that he is extremely leery of being sued."

I thought about it…and had to admit (the lawyer in me) that I had nothing to tell the principal if Priscilla refused to cooperate. Ask him to run "short arm inspection" (Brian's Army slang for it) on all his older boys? He would have hundreds of parents on his neck before dark.

"What about drugs?"

"What about drugs, Mrs. Johnson?"

"Does Public Health deal with drugs?"

"Some. Not much. Drugs are usually a police matter."

I told them what I had found. "What should I do?"

"Does your daughter admit that these items are hers?"

"I haven't had a chance to talk to her about them yet."

"If she won't admit it, you may have great trouble proving that the key items—the *cannabis* and the powder that may be cocaine—are hers, rather than yours. I know you are a lawyer…but perhaps you need to see a lawyer who specializes in such matters. There is an old saw about that, is there not?"

("A man who is his own lawyer has a fool for a client.") "Indeed there is! All right, I'll take advice first."

Donald showed up right after that. He had not been on the couch on Saturday morning; I had assumed that he had gone back to Grinnell. It was now evident from the speed with which he showed up once I fetched Priscilla home from the hospital that he had stayed in Kansas City and placed himself somewhere near to watch for her return. Evident, but not true. He had learned somehow what hospital she was in—I could think of three simple ways—then arranged for someone to let him know when she was dismissed—again, three simple ways, including bribery if he could afford it. Never mind; he showed up.

The door chimed.

I buzzed the door phone. "Announce yourself, please."

"It's Donald, Mama."

"What are you doing here?"

"I've come to see Priss."

"You can't see her."

"I'll see her if I have to bust this door down!"

I reached up and set off the Argus Patrol's "Mayday!" #8220;Donald, I will not let you enter this house."

"Try and stop me!" He started kicking the door.

Priscilla came running downstairs, started to open the front door. I grabbed at her; there was a scuffle, we both went down.

I'm no fighter. Fortunately Priscilla was not trained, either. Brian had taught me just one thing: "If you have to do it, do it fast. Don't wait."

As she was getting up, I punched her in the stomach—no, the solar plexus. She went down and lay there, trying to gasp air.

I heard from outside, "Mrs. Johnson! Argus is here."

"Nab him and take him away! I'll call you."

"Nab who?"

"Uh—" Priscilla was trying to get up again. I punched her in the same spot; she went down the same way. "Can you wait around for twenty minutes or a half hour? He might come back."

"Certainly. We'll stay as long as you need us. I'll call in."

"Thank you, Rick. It is 'Rick,' is it not?"

"Rick it is, Ma'am."

I turned around, grabbed my daughter by the hair, lifted her head, and snarled at her. "Crawl upstairs, go to your room, and stay there! If I hear another peep out of you, I'll punch you again."

She did exactly as I told her to, crawled away, sobbing, and crept upstairs, slowly. I made sure all doors and windows on the ground floor were locked, then I called Dallas.

I explained to Brian in bitter detail what had happened since I had last called him to report on our children, what I had tried to do, what had actually happened. "Brian, I can't cope with them. You must come get them. "

"I want no part of either one of them. I was relieved when they ran away. Good riddance."

"Brian, they are your children and you have custody."

"Which I happily turn over to you."

"You can't; it takes a court to do that. Brian, since I can't handle them, if you won't come for them—or send someone for them—all I can do is have them arrested—"

"On what charges? Sassing you?"

"No. Delinquency. Incest. Use of drugs. Possession of drugs. Running away from custodial parent, Brian Smith of Dallas, Texas." I watched his face as I read off what I would tell the juvenile court. He did not flinch when I said "Incest" so I concluded that it was no news to him. He did not flinch until I named his name and city.

"What! The newspapers would have a field day!"

"Yes, in Dallas I imagine both the News and the *Times Herald* would feature it. I don't know whether the *Kansas City Star* would touch it or not. Incest is a bit whiff for their editorial policies. Particularly incest involving a sister with two of her brothers, August and Donald."

"Maureen, you can't mean this."

"Brian, I'm at the end of my rope. Priscilla knocked me down not twenty minutes ago and Donald has been trying to break down the front door. If you won't come here by the very next rocketplane, I am calling the police and swearing out warrants, all those charges—enough to get them locked up at least long enough for me to close this house and get out of town. No half measures, Brian. I want your answer, right now."

Marian's face appeared beside his. "Mother, you can't do that to Gus! He didn't do anything. He told me so, on his honor!"

"That isn't what they say, Marian. If you don't want them saying it on the witness stand, under oath, Brian will come here and get them."

"They're your children."

"They are Brian's children, too, and he has custody. Six years ago, when I left them with you, they were well-behaved children, polite, obedient, and no more given to naughty spells than any growing child. Today they are incorrigible, uncivilized, totally out of hand." I sighed. "Speak up, Brian. What will you do?"

"I can't come to K.C. today."

"Very well, I'll call the police and have them arrested. Have them taken in and then swear out the warrant, the criminal charges."

"Now wait a minute!"

"I can't, Brian. I'm holding them off temporarily with the patrol, the private police who watch this neighborhood. But I can't keep them here tonight; she's bigger than I am and he's twice as big. Goodbye; I've got to call the cops."

"Now hold it! I don't know how soon I can get a ship."

"You can hire one; you're rich enough! How soon will you be here?"

"Uh…three hours."

"That's six-twenty, our time. At six-thirty I'm calling the cops."

Brian got there at six-thirty-five. But he had called me from the field in North Kansas City well before the deadline. I was waiting for him in my living room with both children…and with Sergeant Rick of the Argus Patrol and Mrs. Barnes, the Patrol's office manager, who doubled as matron. It had not been a pleasant wait; both rent-a-cops had been forced to demonstrate that they were tougher than teenage children and would brook no nonsense.

Brian had taken the precaution of fetching four guards with him, two men, two women, one pair from Dallas, one pair from Kansas City. That did not make it legal but he got away with it because no one—I least of all!—cared to argue technicalities.

I saw the door close behind them, went upstairs and cried myself to sleep.

Failure! Utter and abject failure! I don't see what else I could have done. But I will always carry a heavy burden of guilt over it.

What should I have done?

CHAPTER TWENTY-THREE

The Adventures of Prudence Penny

It took the opening of the Cleveland-Cincinnati rolling road to nail down in George Strong's mind that my prophecies really were accurate. I was always most careful not even to hint the source of my foreknowledge because I had a strong hunch that the truth would be harder for George to take than leaving it all a mystery. So I joked about it: my cracked crystal ball—a small time machine I keep in the basement next to my Ouija Board—my seance guiding spirit, Chief Forked Tongue—tea leaves, but it has to be Black Dragon tea, Lipton's Orange Pekoe doesn't have the right vibrations.

George smiled at each bit of nonsense—George was a gentle soul-and eventually quit asking me how I did it and simply treated the message in each envelope as a reliable forecast—as indeed it was.

But he was still chewing the bit at the time the Cleveland-Cincinnati road opened. We attended the opening together, sat in the grandstand, watched the governor of Ohio cut the ribbon. We were seated where we could talk privately if we kept our voices down; the speeches over the loudspeakers covered our words.

"George, how much real estate does Harriman and Strong own on each side of the roadway?"

"Eh? Quite a bit. Although some speculator got in ahead of us and took options on the best commercial sites. However, Harriman Industries has a substantial investment in D/M power screens—but you know that; you were there when we voted it, and you voted for it."

"So I did. Although my motion to invest three times that amount was first voted down."

George shook his head. "Too risky. Maureen, money is made by risking money…but not by wildly plunging. I have trouble enough keeping Delos from plunging; you mustn't set him a bad example."

"But I was right, George. Want to see the figures on a We-Woulda-Made if my motion had carried?"

"Maureen, one can always do a We-Woulda-Made on a wild guess that happens to hit. That doesn't justify guessing. It ignores the other wild guesses that did not hit."

"But that's my point, George—I don't guess; I know. You hold the envelopes; you open them. Have I ever been wrong? Even once?"

He shook his head and sighed. "It goes against the grain."

"So it does and your lack of faith in me is costing both Harriman and Strong and Harriman Industries money, lots of money. Never mind. You say some speculator optioned the best land?"

"Yes. Probably somebody in a position to see the maps before the decisions were public."

"No, George, not a speculator—a soothsayer. Me. I could see that you weren't moving fast enough so I optioned as much as I could, using all the liquid capital I could lay hands on, plus all the cash I could raise by borrowing against nonliquid assets."

George looked hurt. I added hastily, "I'm turning my options over to you, George. At cost, and you can decide how much to cut me in after the special position we have begins to pay back."

"No, Maureen, that's not fair. You believed in yourself; you got there first; the profits are yours."

"George, you didn't listen. I don't have the capital to exploit these options; I put every cent I could raise into the options themselves—if I had been able to lay hands on another million, I would have optioned still more land farther out and for longer terms. I just hope you will listen to me next time. It distresses me to tell you that it is going to rain soup, then have you show up with a teaspoon rather than a bucket. Do you want me to warn you about the next special position? Or shall I go straight to Mr. Harriman and try to persuade him that I am an authentic soothsayer?"

He sighed. "I'd rather you told me. If you will." I

I said most quietly, "Do you have a place where we can shack up tonight?"

He answered just as quietly, "Of course. Always, dear lady."

That night I gave him more details. "The next road to be converted will be the Jersey Turnpike, an eighty-mile-per-hour road as compared with this fiddling thirty-mile-per-hour job we saw opened today. But the Harriman Highway—"

" 'Harriman'?"

"The D. D. Harriman Prairie Highway from Kansas City to Denver will be a hundred-mile-per-hour road that will grow a strip city thirty miles wide from Old Muddy to the Rocky Mountains. It will boost Kansas from a population of two million to a population of twenty million in ten years…with endless special positions for anyone who knows it is going to happen."

"Maureen, you frighten me."

"I frighten myself, George. It's rarely comfortable to know what is going to happen." I decided to take the plunge. "The rolling roads will continue to be built at a frantic pace, as fast as sunpower screens can be manufactured to drive them—down the East Coast, along Route Sixty-six, on El Camino Real from San Diego to Sacramento and beyond-and a good thing, too, as the sunpower screens on the roofs of the road cities will take up the slack and fend off a depression when the Paradise power plant is shut down and placed in orbit."

George kept quiet so long I thought he had fallen asleep. At last he said, "Did I hear you correctly? The big atomic power pile in Paradise, Arizona, will be placed in orbit? How? And why?"

"By means of spaceships based on today's glide rockets. But operating with an escape fuel developed at Paradise. But, George, George, it must not happen! The Paradise plant must be shut down, yes; it is terribly dangerous, it is built wrong—like a steam engine without a relief valve." (In my head I could hear Sergeant Theodore's dear voice saying it: "They were too eager to build…and it was built wrong—like a steam engine without a relief valve.") "It must be shut down but it must not be placed in orbit. Safe ways will be found to build atomic power plants; we don't need the Paradise plant. In the meantime the sunpower screens can fill the gap."

"If it's dangerous—and I know some people have worried about it —if it is placed in orbit, it won't be dangerous."

"Yes, George, that's why they will put it in orbit. Once in orbit, it would not be dangerous to the town of Paradise, or the state of Arizona…but what about the people in orbit with it? They will be killed."

Another long wait—"It seems to me that it might be possible to design a plant to operate by remote control, like a freighter rocket. I must ask Ferguson."

"I hope you are right. Because you will see, when you return to Kansas City and open my envelope number six and also number seven, that I prophesy that the Paradise power plant will be placed in orbit, and that it will blow up and kill everybody on board, and destroy the rocketship that services it. George, it must not be allowed to happen. You and Mr. Harriman must stop it. I promise you, dear, that if this can be stopped-if my prophecy can be proved wrong—I will break my crystal ball and never prophesy again."

"I can't make any promises, Maureen. Sure, both Delos and I are directors of the Power Syndicate…but we hold a minor position both in stock and on the board. The Power Syndicate represents practically all the venture capital in the United States; the Sherman AntiTrust Law was suspended to permit it to be formed in order to build the Paradise plant. Mmm…a man named Daniel Dixon controls a working majority, usually. A strong man. I don't like him much."

"I've heard of him, haven't met him. George, can he be seduced?"

"Maureen ! "

"George, if I can keep fifty-odd innocent people from being killed in an industrial accident, I'll do considerably more than offer this old body as a bribe. Is he susceptible to women? If I am not the woman he is susceptible to, perhaps I can find her."

Dixon didn't cotton to me at all (nor I to him, but that was unimportant) and he did not seem to have any cracks in his armor. After the Power Syndicate voted to shut down the Paradise plant "in the public interest" I was successful only in getting George and Mr. Harriman to vote against reactivating that giant bomb in orbit—theirs were the only dissenting votes—The death scenario rolled on and I could not stop it: Power satellite and spaceship *Charon* blew up together, all hands killed—and I stared at the ceiling for nights on end, reflecting on the bad side of knowing too much about the future.

But I did not stop working. Back in 1952, shortly after I had given George my earliest predictions, I had gone to Canada to see Justin: 1) to set up a front to handle business for my "Prudence Penny" column, and 2) to offer Justin the same detailed predictions I was giving to George.

Justin had not been pleased with me. "Maureen, do I understand that you have been holding all these years additional information you got from Sergeant Bronson—or Captain Long, whatever—the Howard from the future—and did not turn it over to the Foundation?"

"Yes."

Justin had shown an expression of controlled exasperation. "I must confess to surprise. Well, better late than never. Do you have it in writing, or will you dictate it?"

"I'm not turning it over to you, Justin. I will continue to pass on to you, from time to time, data that I have conserved, item by item as you need to know it."

"Maureen, I really must insist. This is Foundation business. You got these data from a future chairman of the Foundation—so he claimed and so I believe—so I am their proper custodian. I am speaking not as your old friend Justin, but as Justin Weatheral in my official capacity as chief executive officer of the Foundation and conserver of its assets for the benefit of all of us."

"No, Justin."

"I must insist."

"Insist away, old dear—it's good exercise."

"That's hardly the right attitude, Maureen. You don't own that data. It belongs to all of us. You owe it to the Foundation."

"Justin, don't be so tediously male ! Data from Sergeant Theodore saved the Foundation's bacon on Black Tuesday, in 1929. Stipulated?"

"Stipulated. That's why—"

"Let me have my say. And that same data also saved your arse and made you rich—and made the Foundation rich. Why? How? Who? Old busy bottom Maureen, that's who! Because I'm an amoral wench who fell in love with this enlisted man and kicked his feet out from under him—and got him to talking. That had nothing to do with the Foundation, just me and my loose ways. If I hadn't cut you in on it, you would never have met Theodore. Admit it! True? False? Answer me."

"Well, when you put it that way—"

"I do put it that way and let's have no more nonsense about what I owe the Foundation. Not until you've counted up what the Foundation owes me. I still promise to pass on data as needed. Right now, the Foundation should get heavily into Douglas-Martin Sunpower Screens, and if you don't know about them, see your files of the *Economist* or the *Wall Street Journal* or the *Toronto Star*. After that, the hottest new investment as soon as it opens up will be rolling roads and real estate near them."

"Rolling roads?"

"Damn it, Justin, I know Theodore mentioned them in that rump meeting of the board on Saturday the twenty-ninth of June, 1918, as I took notes and typed them out and gave you a copy, as well as the original to Judge Sperling. Look it up." So clear back in 1952 I showed Justin where the principal roadtowns would be, as told to me by Theodore. "Watch for them, get in early. Enormous profits to the early birds. But get rid of all railroad stock."

At that time I decided not to bother Justin with my "Prudence Penny" venture—not when he was feeling bruised on his maleness bump. Instead, I had taken it up with Eleanor. Entrusting a secret to Eleanor was safer than telling it to Jesus.

"Prudence Penny, The Housewife Investor" started out as a weekly column in country newspapers of the sort we had had in Thebes, the *Lyle County Leader*. I always offered the first six weeks free. If a trial period stirred any interest, a publisher could continue it for a very small fee-those small-town weeklies can't pay more than peanuts; there was no sense in trying to make money on it at first.

In fact my purpose was not to make money. Or only indirectly.

I set the format in 1953 with the first column and never varied it:

Prudence Penny

THE HOUSEWIFE INVESTOR

TODAY'S DEFINITION: (Each column I gave at least one definition. Money people have their own language. If you don't know their special words, you can't play in their poker game. Some of the words I defined for my readers were: Common stock, preferred stock, bonds, municipal bonds, debentures, margin, selling short, puts and calls, living trust, joint tenancy, tenants in common, float, load, points, deficiency judgment, call money, prime rate, gold standard, fiat money, easement, fee simple, eminent domain, public domain, copyright, patent, etc., *etc.*

(Trivial? To you, perhaps. If so, you did not need "Prudence Penny." But to most people these elementary terms might as well be ancient Greek. So I offered one definition each column, in one-syllable Anglo-Saxon words that could be misunderstood only by a professor of English.)

Next I offered a discussion of something in the news of the day that might affect investing. Since everything, from weather to elections to killer bees, affects investing, this was easy. If I could include a little juicy gossip, I did. But not anything hurtful, or cruel, and I was most careful not to offer anything actionable.

My next item each week was TODAY'S RECOMMENDED INVESTMENT. This was a sure thing, based directly or indirectly on Theodore's predictions. The same recommendation might be repeated many times, alternated with others from the same source.

I always closed with Prudence Penny's Portfolio:

Ladies, we started this portfolio with one thousand dollars ($1,000.00) in January 1953. If you invested the same amount and at the same time, investing and changing investments just as we did, your portfolio is now worth $4,823.17.

If you invested $10,000.00, your portfolio is now worth $48,23I.70.

If you invested $100,000, today your portfolio is worth $482,317.00.

But it is never too late to start prudent investing with Penny. You can start today with $4,823.17 (or any multiple or fraction), which you then place as follows:

(List of investments that add up to $4,823.17.)

If you want to see for yourself the details of how a thousand dollars grows to (current figure) in only (fill in) years and (blank) months, send ($1.00, $2.50, $4.00—the price went steadily up) to PinchPenny Publications, Suite 8600, Harriman Tower, New York, N.Y. HKL030 (that being a drop box that caused mail to be routed, eventually, to Eleanor's stooge in Toronto) or buy it at your local book store: *The Housewife's Guide to Thrifty Investing* by Prudence Penny.

The huggermugger about the address was intended to keep the Securities Exchange Commission from learning that "Prudence Penny" was a director of Harriman Industries. The SEC takes a jaundiced view of "inside information." So far as I could tell, it would matter not at all to them that my advice was truly beneficial to anyone who followed it. In fact, that might get me beheaded even more quickly.

The column spread from country weeklies to city dailies and did make money after the first year, and quite a lot of money in the thirteen years that I wrote it. Women read it and followed it—so my mail indicated—but I think even more men read it, not to follow my advice, but to try to figure out how this female bear could waltz at all.

I knew that I had succeeded when one day George Strong quoted "Prudence Penny" to me.

My ultimate purpose was not to make money and not to impress anyone but to establish a reputation that let me write a special column in April 1964, one headed "THE MOON BELONGS TO EVERYONE—but the first Moonship will belong to Harriman Industries."

I advised them to hang on to their Prudence Penny portfolio…but to take every other dime they could scrape up and bet it on the success of D. D. Harriman's great new venture, placing a man on the Moon.

From then on "Prudence Penny" always had something to say about space travel and Harriman Industries in every column. I freely admitted that space was a long-term investment (and I continued to recommend other investments, all backed by Theodore's predictions) but I kept on pounding away at the notion that untold riches awaited those farsighted investors who got in early in space activities and hung on. Don't buy on margin, don't indulge in profit-taking—buy Harriman stock outright, put it away in your safety deposit box and forget it—your grandchildren will love you.

In the spring of 1965 I moved my household to the Broadmoor Hotel south of Colorado Springs because Mr. Harriman was building his Moonship on Peterson Field. In 1952 I had tried halfheartedly to drop my lease in Kansas City after Brian had taken Priscilla and Donald back to Dallas (another story and not a good one). But George had outflanked me. Title to that house was in George, not Harriman and Strong, not Harriman Industries. When I told him that I no longer needed a four-bedroom house (counting the maid's room), he asked me to keep it, rent free.

I pointed out that, if I was to become his paid mistress, it wasn't enough, but if I was to continue the pretense of being a respectable woman, it was too much. He said, All right, what was the going rate for mistresses?-he would double it.

So I kissed him and took him to bed and we compromised. The house was his and he would put his driver and wife in the house, and I could stay in it any time I wished…and the resident couple would take care of Princess Polly.

George had spotted my weak point. I had once subjected this little cat to the trauma of losing her Only Home; I grabbed this means of avoiding doing it to her again.

But I did take an apartment at the Plaza, moved my most necessary books there, got my mail there, and occasionally took Polly there-subjecting her to the indignity of a litter box, true, but she did not fuss. (The new clay pellets were a vast improvement over sand or soil.) Moving back and forth this short distance got her used to a carrying cage and to being away from home now and then. Eventually she got to be a true traveling cat, dignified and at home in the best hotels, a sophisticated guest who would never think of scratching the furniture. This made it much easier for Elijah and Charlene to take vacations, or go elsewhere if George needed them elsewhere.

So in the spring of 1965 a few weeks before the historic first flight to the Moon, Princess Polly and I moved into the Broadmoor. I arrived with Polly in her carrying case, baggage to follow from the terminal of the Harriman Prairie Highway fifty miles north of there—I hated those rolling roads from the first time I rode one; they gave me headaches. But I had been told that the noise problem had been overcome on the Prairie Highway. Never trust a flack!

The desk clerk at the Broadmoor told me, “Madam, we have an excellent kennel back of the tennis club. I’ll have a bellman take your cat there.”

“Just a moment.” I got out my Harriman Industries card—mine had a gold band.

The clerk took one look at it, got the assistant manager on duty. He hurried over, gardenia and striped pants and professional smile. “Mrs. Johnson! So happy to welcome you! Do you prefer a suite? Or a housekeeping apartment?”

Princess Polly did not have to go to a kennel. She dined on chopped liver, courtesy of the management, and had her own cat bed and litter box, both guaranteed sterilized—so said the paper band around each of them, like the one around the toilet seat in my bath.

No bidet—aside from that the Broadmoor was a first-class hotel.

After a bath and a change—my luggage arrived while I was in the bath (of course)—I left Princess Polly to watch television (which she liked, especially the commercials) and went to the bar, to have a solitary drink and see what developed.

And found my son Woodrow.

He spotted me as I walked in. “Hi, Mom!”

“Woodrow!” I was delighted! I kissed him and said, “Good to see you, son! What are you doing here? The last I heard you were at Wright-Patterson.”

“Oh, I quit that; they didn’t appreciate genius. Besides, they expected me to get up too early. I’m with Harriman Industries now, trying to keep ‘em straight. It ain’t easy.”

(Should I tell Woodrow that I was now a director of Harriman

Industries? I had avoided telling anyone who did not need to know—so wait and see.) "I'm glad you're keeping them straight. This Moonship of theirs—Do you have something to do with it?"

"Sit down first. What'll you drink?"

"Whatever you're having, Woodrow."

"Well, now, I'm having Manitou Water, with a twist."

"It looks like vodka tonic. Is that what it is?"

"Not exactly. Manitou Water is a local mineral water. Something like skunk, but not as tasty."

"Hmm—Make mine a vodka tonic with lime. Is Heather here?"

"She doesn't like the altitude. When we left Wright-Patterson, she took the kids back to Florida. Don't raise your eyebrows at me; we get along just fine. She lets me know when it's time for her to get pregnant again. About every three years, that is. So I go home, stay a month or two, get reacquainted with the kids. Then I go back to work. No huhu, no sweat, no family quarrels."

"Sounds like a fine arrangement if it suits you two."

"It does." He paused to order my drink. I had never learned to drink but I had learned how to order a tall drink and make it last all evening, while ice cubes diluted it. I looked Woodrow over. His skin seemed tight on his face and his hands quite bony.

The waitress left; he turned back. "Now, Mom, tell me what you're doing here."

"I've always been a space travel buff—remember how we read Roy Rockwood's Great Marvel series together? *Lost on the Moon, Through Space to Mars—*"

"Sure do! I learned to read because I thought you were holding out on me."

"Not in those. A little in the Barsoom books, perhaps."

"I've always wanted a beautiful Martian princess…but not the way you had to get one on Barsoom. Remember how they were always spilling each other's blood? Not for me! I'm the peaceful type, Mom. You know me."

(I wonder if any mother ever knows her children. But I do feel close to you, dear. I hope you and Heather really are all right.) "So when I heard about the Moonship, I made plans to come here. I want to see it lift off…since I can't go in it. What do you think of it, Woodrow? Will it do the job?"

"Let's find out." Woodrow looked around, then called out to someone sitting at the bar. "Hey, Les! Bring your red-eye over here and come set awhile."

The man addressed came over. He was a small man, with the big hands of a jockey. My son said, "May I present Captain Leslie LeCroix, skipper of the *Pioneer*? Les, this is my daughter Maureen."

"I'm honored, Miss. But you can't be Bill's daughter; you're too young. Besides, you're pretty. And he is—Well, look at him."

"Stop it, boys. I'm his mother, Captain. You really are the captain of the Moonship? I'm impressed."

Captain LeCroix sat down with us. I saw that his "red-eye" was another tall, clear drink. He said to me, "No need to be impressed; the computer pilot does it all. But I'm going to ride her…if I can avoid Bill long enough. Have a chocolate eclair, Bill."

"Smile when you say that, stranger!"

"A cheeseburger? A jelly doughnut? A stack of wheats with honey?"

"Mom, do you see what that scoundrel is doing? Trying to keep me from dieting just because he's scared I might break his arms. Or his neck."

"Why would you do that, Woodrow?"

"I wouldn't. But Les thinks I would. He weighs just one hundred and twenty-six pounds. My best weight, in training, is one fortyfive, you may remember. But by liftoff day and H-hour I have to weigh exactly what he does…because, if he catches a sniffle or slips in the shower and breaks something, God forbid, I have to sit there in his place and pretend to pilot. I can't avoid it; I accepted their money. And they have a large, ugly man following me around, making sure I don't run."

"Don't believe him, Ma'am. I'm very careful going through doors and I won't eat anything I don't see opened. He intends to disable me at the last minute. Is he really your son? He can't be."

"I bought him from a Gypsy. Woodrow, what happens if you don't make the weight?"

"They slice off one leg, a bit at a time, until I'm down to exactly one twenty-six. Spacemen don't need feet."

"Woodrow, you always were a naughty boy. You would need feet on the Moon."

"One is enough there. One-sixth gravity. Hey, there's that big, ugly man they got watching me! He's coming this way."

George Strong came over and bowed. "Dear lady! I see you have met our Moonship captain. And our relief pilot, Bill Smith. May I join you?"

"Mom, do you know this character? Did they hire you to watch me, too? Say it ain't so!"

"It ain't so. George, your relief pilot is my son, Woodrow Wilson Smith. "

Later that night George and I had a chance to talk privately and quietly. "George, my son tells me that he must get his weight down to one hundred and twenty-six pounds in order to qualify as relief pilot. Can that be true?"

"Yes. Quite true."

"He hasn't weighed that little since his junior year in high school. If he did get his weight down to that and if Captain LeCroix fell ill, I suspect that Woodrow would be too weak to do the job. Wouldn't it make more sense to adjust weights the way they do with race horses? Add a few lead weights if Captain LeCroix flies; take them out if the relief pilot must go?"

"Maureen, you don't understand."

I admitted that I did not.

George explained to me just how tight was the weight schedule for the ship. The *Pioneer* was stripped down to barest essentials. She carried no radio—only indispensable navigational instruments. Not even a standard pressure suit—just a rubber acceleration suit and a helmet. No back pack—just a belt bottle. Open the door, drop a weighted flag, grab some rocks, get back in.

"George, this doesn't sound to me like the way to do it. I won't tell Woodrow that—after all, he's a big boy now"—assumed age, thirty-five; true age, fifty-three—"but I hope Captain LeCroix stays healthy."

Another of those long waits in which George pondered something unpleasant— "Maureen, this is utter, Blue Star secret. I'm not sure anyone is going to fly that ship."

"Trouble?"

"Sheriff trouble. I don't know how much longer I can hold off our creditors. And we haven't anywhere else to turn. We've pawned our overcoat, so to speak."

"George, let me see what I can do."

He agreed to live in my apartment and look after Princess Polly while I was away—okay with Princess Polly, as she was used to him. I left for Scottsdale in the morning, to see Justin.

"Look at it this way, Justin. How bad will the Foundation be hurt if you let Harriman Industries collapse?"

"The Foundation would be hurt. But not fatally. We would be able to resume full subsidy in five years, ten at the outside. Maureen, one thing is certain: A conservator of other people's money must never throw good money after bad."

Eight million was the most I could squeeze out of him, and I had to guarantee it. Half of it was in CDs, some of which had due dates as long as six months away. (But a certificate of deposit can always be used in place of cash, although it may cost you points.)

To accomplish that much I had to tell Justin, first, that he would never get another "Theodore" tip out of me if he didn't produce the money, and, second, that if he laid the money on the table, I would place beside it a full and complete transcript of those notes I had taken in the middle of the night on the twenty-ninth of June, 1918.

In the Broadmoor the next morning George would not accept the money from me but took me to Mr. Harriman, who seemed detached, barely able to recognize me, until I said, “Mr. Harriman, I want to buy some more participation in the Lunar launching.”

“Eh? I’m sorry, Mrs. Johnson; there is no more participation stock for sale. That I know of.”

“Then let me put it this way. I would like to lend you eight million dollars as a personal loan without security.”

Mr. Harriman looked at me as if seeing me for the first time. He had grown gaunt since the last time I had seen him and his eyes burned with fanatic fervor—he made me think of those Old Testament prophets.

He studied me, then turned to George. “Have you explained to Mrs. Johnson what a risk she would be taking?”

George nodded glumly. “She knows.”

“I wonder. Mrs. Johnson, I’m cleaned out and Harriman Industries is a hollow shell—that’s why I haven’t called a directors’ meeting lately. I would have to explain to you and to the other directors the risks I’ve been taking. Mr. Strong and I have been trying to hold things together on jawbone and sheer nerve, long enough to get the Pioneer off her pad and into the sky. I haven’t given up hope…but, if I take your money and I am forced into bankruptcy and my senior company into receivership, my note to you could not be in a preferred position. You might get three cents on the dollar; you might not get anything.“

“Mr. Harriman, you are not going to be bankrupt and that tall ship out there will fly. Captain LeCroix will land on the Moon and return safely.”I

He smiled down at me. “It’s good to know that you have faith in us.”

“Its not just faith; I’m certain. We can’t fail now for the lack of a few pennies. Take that money and use it. Pay it back when you can. Not only will *Pioneer* fly, you also will send many ships after her. You are manifest destiny in person, sir! You will found Luna City…freeport for the Solar System!”

Later that week George asked me if I wanted to be in the blockhouse during the launching—Mr. Harriman had said to invite me. I had already considered it, knowing that I could demand it if I cared to push it. “George, that’s not the best place to watch the liftoff, is it?”

“No. But it’s the safest. It’s where the VIPs will be. The governor.

The president if he shows up. Ambassadors."

"Sounds claustrophobic. George, I've never been much interested in the safest place…and the few VIPs I've met struck me as hollow shells, animated by PR men. Where are you going to be?"

"I don't know yet. Wherever Delos needs me to be."

"So I figured. You are going to be too busy to have me hanging on your arm—"

"It would be a privilege, dear lady. But—"

"—you are needed elsewhere. Where is the best view? If you weren't busy, where would you watch it?"

"Have you visited the Broadmoor Zoo?"

"Not yet. I expect to. After the liftoff."

"Maureen, there is a parking lot at the zoo. From it you would have a clear view to the east from a spot about fifteen hundred feet higher than Peterson Field. Mr. Montgomery has arranged with the hotel to place some folding chairs there. And a radio link. Television. Coffee. If I weren't busy, that's where I would be."

"So that's where I will be."

Later that day I ran across my son Woodrow in the lobby of the Broadmoor. "Hi, Mom! They got me working."

"How did they manage that?"

"I didn't read my contract carefully enough. This is 'educational and public communication activity associated with the Moonship'—meaning I have to set this thing up to show people how the ship works, where it will go, and where the diamonds are on the Moon."

"Are there diamonds on the Moon?"

"We'll let you know later. Come here a sec." He led me away from the crowd in the lobby into a side hall by the barbershop. "Mom," he said quietly, "if you want to do it, I think I have enough bulge around here to get you into the blockhouse for the liftoff."

"Is that the best place to see it?"

"No, it's probably the worst. It'll be hot as a June bride, because the airconditioning isn't all that good. But it's the safest place and it's where the high brass will be. Visiting royalty. Party chairmen. Mafia chiefs."

"Woodrow, where is the best place to watch? Not the safest."

"I would drive up Cheyenne Mountain. There is a big paved parking lot outside the zoo. Come back into the lobby; I want to show you something. "

On a giant (four-foot) globe that made my mouth water, Woodrow showed me the projected path of the *Pioneer*.

"Why doesn't it go straight up?"

"Doesn't work that way. She goes east and makes use of the Earth's rotation…and unloads all those extra steps. The bottom one, the biggest one, number five, drops in Kansas.”

“What if it landed on the Prairie Roadway?”

“I’d join the Foreign Legion…right behind Bob Coster and Mr. Ferguson. Honest, it can’t, Mom. We start out here, fifty miles south of the road, and where it lands, over here, near Dodge City, is over a hundred miles south of it.”

“What about Dodge City?”

“There’s a little man with a switch, hired solely to push that switch and bring step five down in open country. If he makes a mistake, they tie him to a tree and let wild dogs tear him to pieces. Don’t worry, Mom. Step four lands around here, off the coast of South Carolina. Step three lands in the Atlantic north of this narrowest place where the nose of South America faces the bulge of Africa. Step two lands in the South Atlantic near Capetown. If it goes too far, we’ll hear some interesting cussing in Afrikaans. Step one—ah, that’s the one. With luck it lands on the Moon. If Bob Coster made a mistake, why, it’s back to the old drawing board.”

It will be no news to anyone that *Pioneer* lifted off to plan and that Captain Leslie LeCroix landed on Luna and returned safely. I watched from Cheyenne Mountain, the zoo parking lot, with such a fine, horizon-wide view to the east that it seemed to me that I could stand on my tiptoes and see Kansas City.

I’m glad that I got to see one of the great rockets while they were still in use—I know of no planet in any patrolled universe where the big rockets are still used—too expensive, too wasteful, too dangerous.

But oh, so magnificent!

It was just dark when I got up there. The full Moon was rising in the east. The *Pioneer* was seven miles away (I heard someone say) but the ship was easy to see, bathed in floodlights and standing tall and proud.

I looked at my chrono, then watched the blockhouse through binoculars. A white flare burst out its top, right on time.I

Another flare split into a red and green fireball. Five minutes.

That five minutes was at least a half hour long. I was beginning to think that the launching was going to abort—and I felt unbearable grief.

White fire lapped out of the base of the ship and slowly, lumberingly, it lifted off the pad…and climbed faster and faster and faster and the whole landscape, miles and miles, was suddenly in bright sunlight!

Up, up, and up, to apparent zenith and it seemed to have bent back to the west and I thought it was falling on us-

—and then the light was not quite as bright and now we could see that this "sun" overhead was moving east…and was a moving bright star. It seemed to break up and a voice from a radio said, "Step five has separated." I remembered to breathe.

And the sound reached us. How many seconds does it take sound to go seven miles? I've forgotten and, anyhow, they weren't using ordinary seconds that night.

It was "white" noise, almost unbearable even at that distance. It rumbled on and on…and at last the turbulence reached us, whipping skirts and knocking over chairs. Someone fell down, cursed, and said, "I'm going to sue somebody!"

Man was on his way to the Moon. His first step to his Only Home—

George died in 1971. He lived to see every cent paid back, Pikes Peak Space Catapult operational, Luna City a going concern with over six hundred inhabitants, more than a hundred of them women, and some babies born there—and Harriman Industries richer than ever. I think he was happy. I know I miss him, still.

I'm not sure Mr. Harriman was happy. He was not looking for billions; he simply wanted to go to the Moon—and Daniel Dixon euchered him out of it.

In the complex maneuverings that got a man to the Moon Dixon wound up controlling more shares of voting stock than Mr. Harriman controlled, and Mr. Harriman lost control of Harriman Industries.

On top of that, in lobbying maneuvers in Washington and in the United Nations, a Harriman daughter firm, Spaceways, Ltd., became the "chosen instrument" for the early development of space, with a rule, "The Space Precautionary Act," under which the company controlled who could go into space. I heard that Mr. Harriman had been turned down physically, under this rule. I'm not certain what went on behind the scenes; I was eased off the board of directors once Mr. Dixon was in control. I didn't mind; I didn't like Dixon.

In Boondock, centuries later or about sixty-odd years ago on my personal time line, I listened to a cube, *Myths, Legends, and Traditions-The Romantic Side of History*. There was a tale in it concerning time line two that asserted that the legendary Dee Harriman had managed, many years later, when he was very old and almost forgotten, to buy a pirate rocket, in which he finally made it to the Moon…there to die in a bad landing. But on the Moon, where he longed to be.

I asked Lazarus about this. He said that he did not know. "But it's possible. God knows the Old Man was stubborn."

I hope he made it.

CHAPTER TWENTY-FOUR

Decline and Fall

I am not certain that my situation was improved when these ghouls grabbed me away from those spooks. I suppose that almost everybody has fantasies about making the punishment fit the crime or about some scoundrel who would look his best in the leading role at a funeral. It is a harmless way to kill time during a sleepless night.

But these weirdos mean it.

Murder is all they think about. The first night I was here they listed fifty-odd people who needed to be killed, itemized their crimes, and offered me the honor of being the next member to count coup—pick a client, do! One whose crimes are particularly offensive to you, Milady JohnsonI admit that the listed miscreants were a scrofulous bunch over whom even their own mothers would not be likely to weep but, like Mr. Clemens's favorite son, Huckleberry Finn, I am not much interested in killing strangers. I am not opposed to the death penalty—I voted for it every time the matter came to a vote, which was frequently during the decline and fall of the United States—but in killing *pour le sport* I need to be emotionally involved. Oh, forced to a choice I would rather shoot a man than a deer; I can't see the "sport" in shooting a gentle vegetarian that can't shoot back.

But, given full choice, I would rather watch television than kill a stranger. Some, at least.

I said, "I don't see anyone on that list who is to my taste. Do you happen to have in your file of better-deads someone who abandons kittens?"

The fat chairman smiled at me under his dark glasses. "Now that's a delicious idea! No, I think not…unless by chance there is someone nominated for other reasons who also abandons kittens. I will have Research set up an inquiry at once. Madam, what would be an appropriate termination for such a client? Have you studied it?"

"No, I haven't. But his death should involve homesickness…and loneliness…and cold…and hunger…and fear…and utter despair."

"Artistic. But perhaps not practical. Such a death might stretch out over months…and we really do not have the facilities to permit a deletion to last more than a few days. Ah, Bluebeard—you have something to add?"

"Do what our sister suggests for as many days as we can afford the space. Then surround the client by a holo of enormous trucks, giant holos, the way traffic must look to a kitten. Have the images bear down on him, with overpowering sound effects. Then hit him with a real truck—a glancing blow to maim him. Let him die slowly, as is often the case with a road-killed animal."

"Madam, does that appeal to you?"

(It made me want to throw up.) "Unless something better comes along."

"If we can find such a client for you, he will be saved and held at your disposal. In the meantime we must find you someone else for coup, not let you sit among us naked of proper pride."

That was a week ago and I have begun to feel just a hint of the idea that if I do not promptly find on their list a client I wish to terminate, then…just possibly…we don't want to hurry you…but still…if I don't make blood coup soon, how can I be trusted not to betray them to the Supreme Bishop's proctors?

On that Time Corps mission I carried out in Japan in the 1930S, I wish I had investigated those reports of another woman who might be me. If I had proved to myself that I was indeed tripled for 1937-38, then I would sleep better here-now, as that third loop would have to be farther ahead on my personal time line…which would prove that I will get out of this mess still breathing.

That's the real trick: to keep breathing. Isn't it, Pixel? Pixel? Pixel! Oh, damn!

Changes— In 1972 Princess Polly died in her sleep—heart failure, I think, but I did not have an autopsy. She was a little old lady who had lived a long life and, I think, a happy one, on the whole. I said a prayer to Bubastis, asking Her to watch for the arrival in the eternal Catnip Fields of a little black and white cat who had never scratched or bitten without just cause and who had had the misfortune to have had only one kitten—by Caesarean section and the kitten never opened its eyes—and then she had lost her kitten factory by spaying because her surgeon said that she could never have a normal litter and could not safely risk another pregnancy.

I did not get another kitten. In 1972 I was ninety years old (although I admitted only to fifty-nine…and tried my darnedest—exercise and diet and posture and cosmetics and clothes—to look forty). Being ninety in fact, it was possible, even likely, that another kitten would outlive me. I chose not to risk that.

I moved to Albuquerque because it had no ghosts for me. Kansas City was choked with ghosts of my past, of every sort, both sad and happy. I preferred not to drive by a site, such as our old home on Benton Boulevard, or where our old farmhouse out south had once been, when driving past would cover the happy used-to-be with dreary or unrecognizable what-is.

I preferred to remember Central High School the way it had been when my children attended it. In those days the scholastic records of Central's graduates at West Point and Annapolis and MIT and other "tough" schools caused Central to be rated as the finest secondary school in the west, equal in academics to the best preparatory schools, such as Groton or Lawrenceville—instead of what it had become: mostly babysitting for overgrown infants, a place where police prowl cars gathered every afternoon to stop fights, to confiscate knives, and to shake down the "students" for drugs—a "high school" where half the students should never have been allowed to graduate from grammar school because they could not read or write well enough to get along in the world outside.

Albuquerque held no ghosts for me; I had never lived there, I had no children living there, no grandchildren. (Great-grandchildren? Well, maybe.) Albuquerque had had the good fortune (from my point of view) to be bypassed by moving roadway "Route Sixty-six." The old paved road numbered route 66 and once called "The Main Street of America" had run straight through Albuquerque, but roadcity "Route Sixty-six" was miles to the south; one could not hear it or see it.

Albuquerque was favored also by having been bypassed by many of the ills of the Crazy Years. Despite its size—180,000 and growing smaller because of the roadcity south of it; such shrinkage was usual—it continued to have the sweet small-town feeling so common in the early twentieth century, so scarce in the second half. It was the home of the main campus of the University of New Mexico…a school blessed with a chancellor who had not given in to the nonsense of the sixties.

Students there had rioted (some of them) just once; Dr. Macintosh kicked them out and they stayed kicked out. Parents screamed and complained at the state capital in Santa Fe; Dr. Macintosh told the trustees and the legislature that there would be order and civilized behavior on the campus as long as he was in charge. If they did not have the guts to back him up, he would leave at once and they could hire some masochistic wimp who enjoyed presiding over a madhouse. They backed him up.

In 1970 at campuses all over America half of all freshmen (or more) were required to take a course called "English A" (or something similar) but known everywhere as "Bonehead English." When Dr. Macintosh became chancellor, he abolished Bonehead English and refused to admit students who would have been required to take it. He announced, "It costs the taxpayers a minimum of seventeen thousand dollars a year to keep a student on this campus. Reading, writing, spelling, and grammar are grammar school subjects. If an applicant for admission to this university does not know these grammar school subjects well enough to get along here, let him go back to the grammar school that had dumped him untaught. He does not belong here. I refuse to waste tax money on him."

Again parents screamed—but the parents of these subliterate applicants were a minority, while the majority of voters and legislators were discovering that they liked what they heard from Chancellor Macintosh.

After Dr. Macintosh revised the university catalog, it carried a warning that students were at all times subject to surprise tests for drugs—urine, blood, whatever. If they were caught—expulsion, no second chance.

A student who flunked a drug test found his quarters searched at once, all legal and proper, as there were seven judges in town willing night and day to issue search warrants on "probable cause." No attention was paid to tender feelings; all who were caught in possession were prosecuted.

Especially for the benefit of drug dealers the legislature reinstituted a fine old custom: public hangings. Gallows were erected in plazas. To be sure, drug dealers sentenced to death always appealed to the state supreme court and then to Washington, but with five members including the chief justice of the Supreme Court of the United States having been appointed by President Patton, it worked out that drug dealers in New Mexico had little reason to complain of the "Law's Delays." One bright young entrepreneur lived exactly four weeks from arrest to Jack Ketch. The average time, once the system got rolling, was less than two months.

As usual, the ACLU had a fit over all these matters. Several ACLU lawyers spent considerable time in jail for contempt of court, not in the new jail, but in the drunk tank of the old jail, with the drunks, the hopheads, the wetbacks, and the quasi-male prostitutes.

These were some of the reasons I moved to Albuquerque. The whole country was losing its buttons, a mass psychosis I have never fully understood. Albuquerque was not immune but it was fighting back, and it had enough sensible men and women in key posts that it was a good place to live the ten years I was there.

At the very time that America's schools and families were going to pieces the country was enjoying a renaissance in engineering and science, and not alone in such big items as space travel and roadcities. While students frivoled away their time, the research facilities of universities and of industry were turning out more good work than ever—in particle physics, in plasma physics, in aerospace, in genetics, in exotic materials, in medical research, in every field.

The exploitation of space flourished unbelievably. Mr. Harriman's decision to keep it out of government hands, let private enterprise go at it for profit, was vindicated. While Pikes Peak Spaceport was still new, Spaceways, Ltd., was building bigger, longer, and more efficient catapults at Quito and on the island of Hawaii. Manned expeditions were sent to Mars and to Venus and the first asteroid miners were headed out.

Meanwhile the United States went to pieces.

This decay went on not just on time line two but on all investigated time lines. During my fifty years in Boondock I read several scholarly studies of the comparative histories of the explored time lines concerning what was called "The Twentieth Century Devolution."

I'm not sure of my opinions. I saw it on only one time line, and that only to the middle of 1982 and in my own country. I have opinions but you need not take them seriously as some leading scholars have other opinions.

Here are some of the things I saw as wrong:

The United States had over six hundred thousand practicing lawyers. That must be at least five hundred thousand more than were actually needed. I am not counting lawyers such as myself; I never practiced. I studied law simply to protect myself from lawyers, and there were many like me.

Family decay: I think it came mainly from both parents working outside the home. It was said again and again that, from midcentury on, both parents had to have jobs just to pay the bills. If this was true, why was it not necessary in the first half of the century? How did laborsaving machinery and enormously increased productivity impoverish the family?

Some said the cause was high taxes. This sounds more reasonable; I recall my shock the year the government collected a trillion dollars. (Fortunately most of it was wasted.)

But there seems to have been an actual decline in rational thinking. The United States had become a place where entertainers and professional athletes were mistaken for people of importance. They were idolized and treated as leaders; their opinions were sought on everything and they took themselves just as seriously—after all, if an athlete is paid a million or more a year, he knows he is important…so his opinions of foreign affairs and domestic policies must be important, too, even though he proves himself to be both ignorant and subliterate every time he opens his mouth. (Most of his fans were just as ignorant and unlettered; the disease was spreading.)

Consider these:

1) "Bread and Circuses";

2) The abolition of the pauper's oath in Franklin Roosevelt's first term;

3) “Peer group” promotion in public school.

These three conditions heterodyne each other. The abolition of the pauper’s oath as a condition for public charity insured that habitual failures, incompetents of every sort, people who can’t support themselves and people who won’t, each of these would have the same voice in ruling the country, in assessing taxes and spending them, as (for example) Thomas Edison or Thomas Jefferson, Andrew Carnegie or Andrew Jackson. Peer group promotion insured that the franchise would be exercised by ignorant incompetents. And “Bread and Circuses” is what invariably happens to a democracy that goes that route: unlimited spending on “social” programs ends in national bankruptcy, which historically is always followed by dictatorship.

It seemed to me that these three things were the key mistakes that destroyed the best culture up to that time in all known histories. Oh, there were other things—strikes by public servants, for example. My father was still alive when this became a problem. Father said grimly,

“There is a ready solution for anyone on the public payroll who feels that he is not paid enough: He can resign and work for a living. This applies with equal force to Congressmen, Welfare ‘clients,’ school teachers, generals, garbage collectors, and judges.”

And of course the entire twentieth century from 1917 on was clouded over by the malevolent silliness of Marxism.

But the Marxists would not and could not have had much influence if the American people had not started losing the hard common sense that had won them a continent. By the sixties everyone talked about his “rights” and no one spoke of his duties—and patriotism was a subject for jokes.

I do not believe that either Marx or that cracker revivalist who became the “First Prophet” could have damaged the country if the people had not become soft in the head.

“But every man is entitled to his own opinion!”

Perhaps. Certainly every man had his own opinion on everything, no matter how silly.

On two subjects the overwhelming majority of people regarded their own opinions as Absolute Truth, and sincerely believed that anyone who disagreed with them was immoral, outrageous, sinful, sacrilegious, offensive, intolerable, stupid, illogical, treasonable, actionable, against the public interest, ridiculous, and obscene.

The two subjects were (of course) sex and religion.

On sex and religion each American citizen knew the One Right Answer, by direct Revelation from God.

In view of the wide diversity of opinion, most of them must necessarily have been mistaken. But on these two subjects they were not accessible to reason.

"But you must respect another man's religious beliefs!" For Heaven's sake, why? Stupid is stupid—faith doesn't make it smart.

I recall one candidate's promise that I heard during the presidential campaign of 1976, a campaign promise that seems to me to illustrate how far American rationality had skidded,

"We shall drive ever forward along this line until all our citizens have above-average incomes!"

Nobody laughed.

When I moved to Albuquerque I simplified my life in several ways. I simplified my holdings and split them among three conservative managements, in New York, in Toronto, and in Zurich. I wrote a new will, listing a few sentimental bequests, but leaving the major portion, over 95 percent, to the Howard Foundation.

Why? The decision resulted from some long, long midnight thoughts. I had far more money than one old woman could spend—Lawsy me, I could not even spend the income from it. Leave it to my children? They were no longer children and not one of them needed it—and each had received not only Howard bonuses but also the start-up money that Brian and I had arranged for each of them.

Leave it to "worthy causes"? That is thin gruel, my friend. Most of such money is sopped up by administration, i.e., eaten by parasites.

The original capital had come from the Ira Howard Foundation; I decided to send my accumulation back to the Foundation. It seemed fitting.

I bought a modern condo apartment near the campus, between Central Avenue and Lomas Boulevard, signed up for a course in pedagogy at the university, not with any serious intention of studying (it takes real effort to flunk a course in pedagogy) but to establish me on campus. There are all sorts of good social events on a campus—motion pictures, plays, open lectures, dances, clubs. Doctorates are as common on campus as fleas on a dog, but nevertheless a doctor's degree is a union card that gives entree many places.

I joined the nearest Unitarian church and supported it with liberal donations, in order to enjoy the many social benefits of church membership without being pestered by straitjacket creeds.

I joined a square dance club, a Viennese Waltz club, a contract bridge club, a chess club, a current events supper club, and a civic affairs luncheon club.

In six weeks I had more passes than the Rocky Mountains. It let me be fussy about my bedmates and still get in far more friendly fornication than had been the case in the preceding quarter of a century. I had not limited myself to George Strong during those years, but I had kept too busy for serious pursuit of the alltime number-one sport.

Now I had time. As some old gal said (Dorothy Parker?), “There is *nothing* as much fun as a man!”

“Male and female created He them”—that’s a good arrangement, and for ten years I made the most of it.

I did not spend all of my time chasing men…or in letting them chase me while I ran very slowly, the latter being my MO because it makes a man nervous for a woman to be overt about it—it is contrary to traditional protocol. Males are conservative about sex, especially those who think they are not.

We Howards were not inclined to keep in touch with all our relatives; it was not feasible. By the year I moved to Albuquerque (1972) I had more descendants than there are days in the year—I should keep track of their birthdays? Heavens, I had trouble keeping track of their names!

But I did have some favorites, people I loved irrespective of blood relationship if any: My older sister Audrey, my older “sister” Eleanor, my brother Tom, my cousin Nelson and his wife Betty Lou, my father and I missed him always. My mother I did not love but I respected her; she had done her best for all of us.

My children? While they were at home I tried to treat them all alike and to lavish on each of them love and affection—even when my head ached and my feet hurt.

Once they were married—Now comes the Moment of Truth. I tried to do unto them as they did unto me. If one of my offspring called me regularly, I tried to call her (him) as often. To some I sent birthday cards, not much else. If a grandchild gave attention to Grandma, Grandma paid attention to that child. But there just isn’t time to be both openhanded and evenhanded with 181 grandchildren, that being the number I had (unless I lost track) by my ninety-ninth birthday.

My special loves—Blood did not necessarily enter into it. There was little Helen Beck, who was just Carol’s age, and the two little girls went to Greenwood school together in first and second grade. Helen was a lovely child and utterly sweet-natured. Because her mother was a working widow, Helen spent quite a bit of time in my kitchen until we moved too far away.

But she did not forget me and I did not forget her. She went into show business and traveled; we tried to keep each other advised of moves so that we could make rendezvous every year or six. She lived a long time for a non-Howard and was a beauty right up to her death—so much that she could afford to dance naked into her seventies, at which age she still gave every man present an erection. Yet her dancing was never styled to be provocative, nothing like the cootch dancer Little Egypt of an earlier generation.

Helen changed her name early in her show-biz career; most people knew her as Sally Rand. I loved Sally and Sally loved me, and we could be apart for several years, then manage to make rendezvous, and be right back where we had left off, intimate friends.

Sally and I shared one oddity: both of us went to school as often as we could manage it. She usually performed at night; in daytime she was a special student at whatever campus was nearest. By the time she died (1979) she had far more collegiate hours than most professors. She was a polymath; everything interested Sally and she studied in depth. Sally did not drink or smoke; her one weakness was big, thick textbooks.

Nancy stayed closer to me than did my other children, and I was her husband's sometime mistress for sixty-four years…because Nancy had decided it that way before she married Jonathan. Not often but always when we met and could find opportunity. I can't believe that Jonathan truly had much interest in this old carcass into its nineties—but he could lie about it delightfully. We really did love each other, and an erection is the most flattering compliment a man can pay to an old woman. Jonathan was a true Galahad, one who reminds me of my husband Galahad. Not too surprising, as Galahad is descended from Jonathan (13.2 percent, counting convergence)—and from me, of course, but all of my husbands are descended from me except Jake and Zeb, who were born on another time line. (Time line four, Ballox O'Malley.) (Oops! And Jubal, time line three.)

As a byproduct of Nancy's offering Jonathan to me, Brian got Nancy's sweet, young body—the first incest in our family, I think. Whether it happened again on later occasions I do not know and it is none of my business. Nancy and I were much alike in temperament—both of us strongly interested in sex but relaxed about it. Eager but not tense.

Carol—For Carol I always tried to save June twenty-sixth, Carol's Day, Carolita's Day, Carolmas, and eventually Fiesta de Santa Carolita for millions of people who never knew her. After June twenty-sixth, 1918, she gave up her birthday entirely in order to celebrate Carol's Day.

During the decade that I spent mostly in Albuquerque she was star-billed several times in Reno or Vegas on Carol's Day. She always held her luau on June twenty-sixth even if a midnight show forced her to start it at four in the morning. No matter the hour her friends flocked to attend, coming from around the globe. It became a great honor to be invited to Carolita's annual party, something to boast about in London and Rio.

Carol married Rod Jenkins of the Schmidt family in 1920, when he was just back from France—Rainbow Division and Rod picked up a Silver Star and a Purple Heart without losing anything. (One scar on his belly—) Rod had majored in mathematics at Illinois Tech, specializing in topology, then he had joined up between his junior and senior years, came back and shifted to theater arts. He had decided to try to shift from amateur magician to professional—stage magic, I mean. He told me once that being shot at had caused him to reassess his values and ambitions.

So Carol started her married life handing things to her husband on stage, while dressed in so little that she constituted misdirection every time she twitched. She tried to time it so that she had babies when Rod was resting. When that was not possible, she would go on working until a theater manager called a halt…usually as a result of complaints by females not as well endowed. Carol was one of those fortunate women who got more beautiful as her belly bulged.

She parked her children with Rod's mother when she and Rod were on the road, but she usually had one or two with her, a privilege her youngsters all loved. Then, in '55 (I think) Rod made a mistake in a bullet-catching illusion, and died on stage.

Carol did his act (or a magic act of some sort with his props) the next night. One thing was certain: she was not hiding props or rabbits in her costume. When she started working Reno and Vegas and Atlantic City, she trimmed it down to a Gstring. She added juggling to her act.

Later, after coaching, she added singing and dancing. But her fans did not care what she did; they wanted Carol, not the gimmicks. Theaters in Las Vegas or Reno showed on their marquees just "CAROLITA!"-nothing more. Sometimes she would stop in the middle of juggling and say, "I'm too tired to juggle tonight and, anyhow, W. C. Fields did it better," and she would walk out on the runway and stop, hands on her hips, dressed in a Gstring and a smile, and say, "Let's get better acquainted. You, there! Pretty little girl in a blue dress. What's your name, dear? Will you throw me a kiss? If I throw you one, will you eat it or throw it back to me?"—or, "Who has a birthday tonight? Hold up your hands . "

In a theater crowd at least one in fifty is having a birthday, not one in three hundred and sixtyfive. She would ask them to stand, and would repeat each name loudly and clearly—then ask all the crowd to sing Happy Birthday with her, and when the doggerel reached "Happy Birthday, dear" the band would stop and Carol would sing out each first name, pointing at the owner: "—dear Jimmy, Ariel, Bebe, Mary, John, Philip, Amy, Myrtle, Vincent, Oscar, Vera, Peggy"—hand cue and the band would hit it—"Happy Birthday to you!"

If visitors had been allowed to vote, Carolita could have been elected mayor of Las Vegas by a landslide.

I once asked her how she remembered all those names. She answered, “It’s not hard, Mama, when you want to remember. If I make a mistake, they forgive me—they know I’ve tried.” She added, “Mama, what they really want is to think that I am their friend—and I am.”

During those ten years I traveled now and then to see my special darlings, but mostly I stayed home and let them come to me. The rest of the time I enjoyed being alive and enjoyed new friends, some in bed, some out, some both.

As the decade wore on and I approached one hundred, I found that I was experiencing more frequently a slight chill of autumn—joints that were stiff in the mornings, gray hairs among the red, a little sagginess here and there—and, worst of all, a feeling that I was becoming fragile and should avoid falling down.

I didn’t let it stop me; I just tried harder. I had one fairly faithful swain at that time, Arthur Simmons—and it tickled and pleased him when I referred to myself, in bed with him, as “Simmons’ Mattress.”

Arthur was sixty, a widower, and a CPA, and an absolutely reliable partner in bidding contract bridge—so dependable that I gave up Italian method and went back to Goren because he played Goren. Shucks, I would have reverted to Culbertson had Arthur asked me to; an utterly honest bridge partner is that pearl of great price.

And so is a perfect gentleman in bed. Arthur was no world-class stud-but I was no longer eighteen and I never had Carol’s beauty. But he was unfailingly considerate and did his best.

He had one eccentricity; after our first time, in my apartment, he insisted on getting a motel room for each assignation. “Maureen,” he explained, “if you are willing to make the effort to come where I am, then I know that you really want to. And vice versa, if I go out and rent a motel room, you know that I am interested enough to make an effort. When either of us stops making an effort, it is time to kiss and part, with no tears.”

In June 1982 that time had arrived; I think each of us was waiting for the other to suggest it. On June twentieth I was headed on foot to an assignation with Arthur and was thinking that perhaps I had best bring up the matter during that quiet time after the first one…then a second one if he wanted it and say goodbye. Or would it be kinder to announce that I was making a trip back east to see my daughter? Or simply break sharp?

I had come to the intersection of Lomas and San Mateo boulevards. I had never liked that crossing; the timing of the traffic light was short and the boulevards were wide—and getting wider lately. And today, because of repairs in progress on the Pan-American Highway, truck traffic had been routed around the repairs by sending it down San Mateo, then west on Central, and the reverse for northbound traffic.

I was halfway across when the lights changed and a solid mass of traffic started at me, especially one giant truck. I froze, tried to run back, tripped and fell down.

I caught sight of a policeman, knew that the truck would get me, wondered briefly whether Father would recommend prayer after my heathen lifetime.

Somebody scooped me up off the pavement and I fainted.

It seemed to me that I was taken out of an ambulance and placed on a gurney. I fainted again and woke up in bed. A pretty little dark woman with wavy hair was hovering over me. She spoke slowly and carefully in an accent that I thought was Spanish:

“Mama Maureen…Tamara am I. For…Lazarus…and for all…your children…I bid you…welcome to Tertius!”

I stared at her, not believing my eyes. Or ears. “You are Tamara? You really are Tamara? Wife to Captain Lazarus Long?”

“Wife am I to Lazarus. Tamara am 1. Daughter am I, to you, our Mama Maureen. Welcome, Mama. We love you.”

I cried and she gathered me to her breast.

CHAPTER TWENTY-FIVE

Rebirth in Boondock

Let's review the bidding.

In 1982 on June twentieth I was in Albuquerque, New Mexico, on my way to a Sunday afternoon motel date for some friendly fornication…and that made me a scandal to the jaybirds as I was only days away from my hundredth birthday—while pretending to be much younger and, mostly, succeeding. My assignation was with a widowed grandfather who seemed willing to believe that I was his own age, give or take a bit.

Part of the orthodoxy of that time and place was that old women have no interest in sex and that old men have limp penises and no sex drive—except dirty old perverts with criminal and pathological interests in young girls. All young people were certain of these ideas through knowing their own grandparents, whom they knew to be interested only in singing hymns and in playing checkers or shuffleboard. But sex? My grandparents? Don't be disgusting!

(At that time and in that country, nursing homes for the elderly kept their guests chaperoned and/or physically segregated by sexes so that nothing "disgusting" could take place.)

So this dirty old woman on evil bent got caught in heavy traffic, panicked, fell down, fainted—and woke up in Boondock on the planet Tellus Tertius.

I had heard of Tellus Tertius. Sixty-four years earlier, when I was a modest young matron with a snow-white reputation, I had seduced a young sergeant, Theodore Bronson, who in pillow talk with me had revealed himself as a time traveler from the far future and a distant star, Captain Lazarus Long, chairman of the Howard Families in his time…and my remote descendant!

I had looked forward to years of happy adultery after the war was over, under the tolerant, shuteye chaperonage of my husband.

But Sergeant Theodore went to France in the AEF and was missing in action in some of the heaviest fighting in the Great War. MIA = killed; it never meant anything else.

When I woke up and Tamara took me into her arms, I had great trouble believing any of it…especially the idea that Theodore was alive and well. When I did believe her (one cannot disbelieve Tamara), I was crushed with the grief of too late, too late!

Tamara tried to soothe me but we had language trouble; she is not a linguist, speaks broken English only—and I had not a word of Galacta. (Her first speech to me she had rehearsed most carefully.)

She sent for her daughter Ishtar. Ishtar listened to me, talked to me, finally got it through my head that being a hundred years old did not matter; I was about to be rejuvenated.

I had heard about rejuvenation from Theodore, long ago. But I had never thought of it as applying to me.

They both told me, over and over again. Ishtar said, "Mama Maureen, I am more than twice as old as you are. My last rejuvenation was eighty years ago. Am I wrinkled? Don't worry about your age; you will be no trouble at all. We'll start your tests at once; you will be eighteen again in a very short time. Months, I estimate, instead of the two or three years a really difficult case can take."

Tamara nodded emphatically. "Is true. Ishtar true word esspeak. Four century am I. Dying was I." She patted her belly. "Baby here now."

"Yes," agreed Ishtar, "by Lazarus. A baby I gene-plotted and required Lazarus to plant before he left to rescue you. We could not be sure that he would be back—these trips of his are always chancy—and, while I have his sperm on deposit, frozen sperm can deteriorate; I want as many warm-sperm babies sired by Lazarus as possible." She added, "And you, too, Mama Maureen. I hope you will gift us with many more babies. Our calculations show that what Lazarus has, his unique gene patterns, he got mainly from you. You need not bear babies yourself; there'll be host mothers standing in line for the privilege of bearing a Mama Maureen baby. Unless you prefer to bear them yourself."

"You mean I *can?*"

"Certainly. Once we have you made young again."

"Then I will!" I took a deep breath. "It has been…forty-four years-I think that is right. Forty-four years since last I became pregnant. Although I've always been willing and have not tried to avoid it." I thought about it. "Is it possible for me to postpone seeing Theodore—Lazarus, you call him—for a while? Could I be made younger before I see him? I dread the thought of his seeing me this way. Old. Not the way he knew me."

"Certainly. There are always emotional factors in a rejuvenation. Whatever a client needs to be happy is the way we do it."

"I would rather not have him see me until I look more as I looked then."

"It shall be done."

I asked to see a picture of Theodore-Lazarus. It turned out to be a moving holo, almost frighteningly lifelike. I was aware that Theodore and I looked enough alike to be brother and sister; that was what

Father had first noticed about him. But this startled me. “Why, that’s my son!” The holo looked just like my son Woodrow—my bad boy and always my favorite.

“Yes, he’s your son.”

“No, no! I mean that Captain Lazarus Long whom I knew as Theodore is a dead ringer—sorry, a twin-brother image—of my son Woodrow Wilson Smith. I hadn’t realized it. Of course, in the brief time I knew Captain Long, my son Woodrow Wilson was only five years old; they did not look alike then, or nothing anyone would notice. So my son Woodrow grew up to look like his remote descendant. Strange. I find I’m touched by it.”

Ishtar looked at Tamara. They exchanged words in a language I did not know (Galacta, it was). But I could hear worry in their voices.

Ishtar said soberly, “Mama Maureen, Lazarus Long is your son Woodrow Wilson.”

“No, no,” I said. “I saw Woodrow just a few months ago. He was, uh, sixty-nine at the time but looked much younger. He looked just as Captain Long looks in this picture—an amazing resemblance. But Woodrow is back in the twentieth century. I know.”

“Yes, he is, Mama Maureen. Was, I mean, although Elizabeth tells me the two tenses are equivalent. Woodrow Wilson Smith grew up in the twentieth century, spent most of the twenty-first century on Mars and on Venus, returned to Earth in the twenty-second century and—” Ishtar stopped and looked up. “Teena?”

“Who rubbed my lamp? What’ll you have, Ish?”

“Ask Justin for a printout in English of the memoirs he prepared on the Senior, will you, please?”

“No need to ask Justin; I’ve got ‘em in my gizzard. You want them bound or scrolled?”

“Bound, I think. But, Teena, let Justin fetch them here; he will be delighted and honored.”

“Who wouldn’t? Mama Maureen, are they treating you right? If they don’t, just tell me, ‘cause I do all the work around here.”

After a while a man came in who reminded me disturbingly of Arthur Simmons. But it was just a general resemblance combined with similar personality; in 1982 Justin Foote would have been a CPA, as Arthur Simmons had been. Justin Foote was carrying a briefcase. (*“Plus le change, plus la meme chose.”*) There was a degree of awkwardness as Ishtar introduced him; he seemed about to fall over his own feet from excitement at meeting me.

I took his hand. “My first great-great-granddaughter, Nancy Jane Hardy, married a boy named Charlie Foote. That was about 1972, I think; I went to her wedding. Is Charlie Foote any relation to you?”

"He is my ancestor, Mother Maureen. Nancy Jane Hardy Foote gave birth to Justin Foote the First on New Millennium Eve, December thirty-first, year 2000 Gregorian."

"Really? Then Nancy Jane had a nice long run. She was named for her great-grandmother, my first born."

"So the archives show. Nancy Irene Smith Weatheral, your first born, Ancestress. And I carry the first name of Nancy's father-in-law, Justin Weatheral." Justin spoke excellent English with an odd accent. Bostonian?

"Then I'm your grandma, in some degree. So kiss me, grandson, and quit being so nervously formal; we're family."

He relaxed and kissed me then, a firm buss on the mouth, one I liked. If we had not had company, I might have let it develop—he did remind me of Arthur.

He added then: "I'm descended from you and from Justin Weatheral another way, Grandma. Through Patrick Henry Smith, to whom you gave birth on July seventh, 1932."

I was startled. "Good heavens! So my sins follow me, even here. Oh, of course—you're working from the Foundation's records. I did report that case of bastardy to the Foundation. Had to keep it straight there."

Both Ishtar and Tamara were looking puzzled. Justin said, "Excuse me, Grandma Maureen"—and spoke to them in that other language. Then he added to me, "The concept of bastardy is not known here; issue from a coupling is either genetically satisfactory or not satisfactory. The idea that a child could be proscribed by civil statute is difficult to explain."

Tamara had looked startled, then giggled, when Justin explained "bastardy." Ishtar had simply looked sober. She spoke to Justin, again in Galacta.

He listened, then turned to me. "Dr. Ishtar says that it is regrettable that only once did you accept another father for one of your children. She tells me that she hopes to get many more children from you, each by a different father. After you are rejuvenated, she means."

" 'After,' " I repeated. "But I'm looking forward to it. Justin, you have a book for me?"

That book was titled *The Lives of Lazarus Long*, with a secondary title that started "The Lives of the Senior Member of the Howard Families (Woodrow Wilson Smith…Lazarus Long…Corporal Ted Bronson—[and a dozen other names]) Oldest Member of the Human Race—"

I didn't faint. Instead I teetered on the brink of orgasm. Ishtar, aware somewhat of the customs of my time and place, had hesitated to let me know that my lover of 1918 was actually my son. But she could not know that I had never felt bound by the taboos of my clan and was as untroubled by the idea of incest as a tomcat is. Indeed, the greatest disappointment of my life was my inability to get my father to accept what I had been so willing to give him, from menarche till I lost him.

I still haven't been able to do anything with Lizzie Borden's disclosure that this city I'm in is Kansas City. Or one of its permutations, that is. I don't think I am in one of the universes patrolled by the Time Corps, although I can't be certain. So far, all I have seen of the city is what can be seen from the balcony off the lounge of the Committee for Aesthetic Deletions.

It's the correct geography all right. North of here, about ten miles away, is the sharp bend in the Missouri River where it swings from southwest to northeast at the point where the Kaw River flows into it-a configuration that causes big floods in the west bottoms every five or six years.

Between here and there is the unmistakable tall shaft of the War Memorial…but it is not the War Memorial in this universe; it is the Sacred Phallus of the Great Inseminator.

(It reminds me of the time Lazarus tried to check the historicity of the man known as Yeshua or Joshua or Jesus. He had not been able to track Him down through census or tax records of that time at Nazareth or Bethlehem, so he went looking for the most prominent event in the legend: the Crucifixion. He did not find it. Oh, he found crucifixions on Golgotha all right—but just common criminals, no political evangelists, no godstruck young rabbis. He tried again and again, using various theories to date it…and got so frustrated that he started calling it the "Crucifiction." His current theory involves a really strong Fabulist of the second century Julian.)

The only time I've been outdoors here was the night of Fiesta de Carolita…and then I saw only the big park in which the Fiesta was held (Swope Park?), with many bonfires and flambeaux, endless bodies wearing masks and body paint, and the most amazing gang bang I have ever heard of, even in Rio. And a witches' esbat, but you can see those anywhere if you hold the Sign and know the Word. (I was stooled in Santa Fe in 1976, Wicca rite.)

But it is amusing to see one held right out in public, on the one night of the year when correct dress for a sabbat or esbat wouldn't be noticed and odd behavior is the order of the day. What chutzpah!

Could this possibly be my own time line during the reign of the Prophets? (The twenty-first century, more or less—) The fact that they know of Santa Carolita lends plausibility to the idea, but this does not match too well any accounts that I have read of America under the Prophets. So far as I know the Time Corps does not maintain an office in Kansas City in the twenty-first century on time line two.

If I could hire a copter and a pilot I would search fifty miles south of here and attempt to find Thebes, where I was born. If I found it, it would give me an anchor to reality. If I failed to find it, that would tell me that after a while some husky nurses would take me out of this wetpack and feed me.

If I had any money. If I could get away from these ghouls. If I wasn't afraid of the Supreme Bishop's proctors. If I didn't think it would get my arse shot off in the air.

Lizzie has promised to buy me a harness for Pixel. Not to walk him on a leash (impossible!) but to carry a message. The bit of string around his neck that I used on my last attempt apparently did not work. He may have clawed away that bit of paper, or broken the string.

Ishtar set a date seventeen months after my arrival in Boondock for rendezvous with the persons involved in rescuing me in 1982: Theodore/ Lazarus/Woodrow (I have to think of him as three persons in one, like another Trinity), his clone-sisters Lapis Lazuli and Lorelei Lee, Elizabeth Andrew Jackson Libby Long, Zeb and Deety Carter, Hilda Mae and Jacob Burroughs, and two sentient computers both animating ships, Gay Deceiver and Dora. Ishtar had assured Hilda (and me) that seventeen months would be long enough to make me young again.

Ishtar pronounced me done in only fifteen months. I can't give details of my rejuvenation because I knew nothing of such details at the time—not until I was accepted as an apprentice technician years later, after I had become the Boondock equivalent of RN and M.D. At the medical school hospital and at the rejuvenation clinic they use a drug tagged "Lethe" that lets one do horrid things to a patient but have him not even recall that they happened. So I do not remember the bad days of my rejuvenation but only the pleasant, lazy ones during which I read Theodore's memoirs, as edited by Justin…and I spotted the authentic Woodie touch; the raconteur lied whenever he felt like it.

But it was fascinating. Theodore really had felt moral qualms about coupling with me. My goodness! You can take the boy out of the Bible Belt, but you can never quite take the Bible Belt out of the boy. Not even centuries later and after experiencing other and often better cultures utterly unlike Missouri.

One thing in those memoirs made me proud of my "naughty" son:

He seems to have been always incapable of abandoning wife and child. Since (in my opinion) much of the decay that led to the decline and fall of the United States had to do with males who shrugged off their duty to pregnant women and young children, I found myself willing to forgive my "bad boy" for all his foibles since he never wavered in this prime virtue. A male must be willing to live and to die for his female and their cubs…else he is nothing.

Woodrow, selfish as he was in many respects, in this acid test measured up.

I was delighted to learn just how intensely Theodore had wanted my body. Since I had wanted him with burning intensity, it warmed me all through to read proof that he had wanted me just as badly. I had never been quite sure of it at the time (a woman in heat can be an awful fool) and was still less sure of it as the years wore on. Yet here was proof: eyes open, he shoved his head into the lion's mouth for me —for my sake he had enlisted in a war that was not his…and "got his arse shot off" as his sisters expressed it. (His sisters—*my* daughters. Goodness!)

In addition to Lazarus's memoirs, I read histories that Justin gave me. I also learned Galacta by the total-immersion method. After my first two weeks in Boondock I asked that no English whatever be spoken around me and asked Teena for the Galacta edition of Theodore's memoirs and reread them in that language. Soon I was fluent in Galacta and beginning to think in it. Galacta is rooted in Spanglish, the auxiliary language that was beginning to be used for trade and engineering purposes up and down the two Americas in the twentieth century, a devised language formed by taking as vocabulary the intersection of English and Spanish and manipulating that vocabulary by Hispanic grammar—somewhat simplified for the benefit of Anglophonic users of this lingua franca.

At a later time Lazarus told me that Spanglish had been adopted as the official language for space pilots clear back at the time of the Space Precautionary Act, when all licensed space pilots were employees of Spaceways, Ltd., or some other Harriman Industries subsidiary. He told me that Galacta was still recognizably the same language as Spanglish centuries, millennia, later—although with a much amplified vocabulary-much the same way and for the same reasons that the Latin of the Caesars had been conserved and augmented for thousands of years by the Church of Rome. Each language filled a need that kept it alive and growing.

"I always wanted to live in a world designed by Maxfield Parrish—and now I do!" These words open a journal I started to write, early in my rejuvenation, to keep my thoughts straight in the face of the culture shock I felt in being lifted bodily out of the Crazy Years of Tellus Prime and plunked down in the almost Apollonian culture of Tellus Tertius.

Maxfield Parrish was a romantic artist of my time and place (1870-1966) who used a realistic style and technique to paint a world more beautiful than any ever seen—a world of cloud-capped towers and gorgeous girls and breath-stopping mountain peaks. If "Maxfield Parrish blue" means nothing to you, go to the museum of BIT and enjoy the M.P. collection there, "stolen" by means of a replicating pantograph from twentieth-century museums on the East Coast of North America (and one painting in the lobby of the Broadmoor) by a Time Corps private mission paid for by the Senior, Lazarus Long—a birthday present to his mother on her 125th birthday to celebrate the silver anniversary of their marriage.

Yes, my naughty-boy son Woodrow married me, sandbagged into it by his co-wives and brother husbands, as a result of their having sandbagged me into it—a working majority of them; Woodrow had three of his wives with him, his twin clone-sisters and Elizabeth who used to be Andrew Libby before his reincarnation as a woman.

At that time (Galactic 4324) the Long family had seven adults in residence: Ira Weatheral, Galahad, Justin Foote, Hamadryad, Tamara, Ishtar, and Minerva. Galahad, Justin, Ishtar, and Tamara you have met; Ira Weatheral was the executive of such government as Boondock had (not much); Hamadryad was his daughter who had obviously made a pact with the Devil; Minerva was a slender, longhaired brunette who had had a career of more than two centuries as an administrative computer before getting Ishtar's assistance in becoming flesh and blood through an assembled-clone technique.

They picked Galahad and Tamara to propose to me.

I had no plans to get married. I had married once "till death do us part"—and it had turned out not to be that durable. I was most happy to be living in Boondock, my cup overflowed at growing young again, and I was looking forward with almost unbearable delight at the expectation of being again in Theodore's arms. But marriage? Why take vows that are usually broken?

Galahad said, "Mama Maureen, these vows will not be broken. We simply promise each other to share in taking care of our children—support them and spank them and love them and teach them, whatever it takes. Now believe me, this is how to do it. Marry us now; settle it with Lazarus later. We love him—but we know him. In an emergency Lazarus is the fastest gun in the Galaxy. But hand him a simple little social problem and he'll dither around about it, trying to see all sides to arrive at the perfect answer. So the only way to win an argument with Lazarus is to present him with an accomplished fact.

He'll be home now in a few weeks—Ishtar knows the exact hour. If he finds you married into the family and already pregnant, he will simply shut up and marry you himself. If you will have him."

"In marrying all of you, am I not marrying Lazarus, too?"

"Not necessarily. Both Hamadryad and Ira were members of our founding family group. But it took several years before Ira admitted that there was no reason for him not to marry his own daughter—Hamadryad just smiled and outwaited him. Then we held a special wedding ceremony just for them and what a luau that was! Honest, Mama Maureen, our arrangements are flexible; the only invariant is that everybody guarantees the future of any babies you pretty little broads give us. We don't even ask where you got them…since some of you tend to be vague about such things."

Tamara interrupted to tell me that Ishtar watches such matters. (Galahad tends to joke. Tamara doesn't know how to joke. But she loves everybody.) So later that day I said my vows with all of them, standing in the middle of their beautiful atrium garden (*our* garden!)—crying and smiling and all of them touching me and Ira sniffling and Tamara smiling while tears ran down her face, and we all said, "I do!" together and they all kissed me, and I knew they were mine and I was theirs, forever and ever, amen.

I got pregnant at once because Ishtar had timed it so that our wedding and my ovulation matched—Ira and Ishtar had planned the whole thing. (When I had that baby girl, after the usual cow-or-countess gestation period, I asked Ishtar about the baby's paternity. She said, "Mama Maureen, that one is from all your husbands; you don't need to know. After you've had four or five more, if you are still curious, I'll sort them out for you." I never asked again.)

So I was pregnant when Theodore returned, which suited me just fine…as I was sure from past experience that he would greet me more heartily and with less restraint if he knew that it was certain that copulation with me would be solely for love—and sweet pleasure—and sheer, sweaty fun. Not for progeny.

And so it was. But at a party that started out with Theodore fainting dead away. Hilda Mae, the head of the task force that rescued me, had rigged a surprise party for Theodore, in which she had presented me to him dressed in a costume of high symbology to him—heeled slippers, long sheer hose, green garters—at a time when he thought that I was still in Albuquerque two millennia earlier and still in need of rescue.

Hilda did not intend to shock Theodore so sharply that he fainted—she loves him, and later she married Theodore and all of us, along with her husband and family—Hilda does not have a mean bone in her little elfin body. She caught Theodore as he fainted, or tried to, and he wasn't hurt and the party developed into one of the best since Rome burned. Hilda Mae has many other talents, in and out of bed, but she is the best party arranger in any world.

A couple of years later Hilda was director general of the biggest party ever held anywhere, bigger than the Field of the Cloth of Gold: the First Centennial Convention of the Interuniversal Society for Eschatological Pantheistic Multiple-Ego Solipsism, with guests from dozens of universes. It was a wonderful party and the few people killed in the games went straight to Valhalla—I saw them go. From that party our family gained several more husbands and wives—eventually, not all in one day—especially Hazel Stone aka Gwen Novak who is as dear to me as Tamara, and Dr. Jubal Harshaw, the one of my husbands to whom I turn when I truly need advice.

It was to Jubal that I turned many years later when I found that despite all the wonders of Boondock and Tertius, all the loving happiness of being a cherished member of the Long Family, despite the satisfaction of studying the truly advanced therapy of Tertius and Secundus, and at last being apprenticed to the best profession of all, rejuvenator, something was missing.

I had never stopped thinking about my father, missing him always, with an ache in my heart.

Consider these facts:

1) Lib had been raised from dead, a frozen corpse, and reincarnated as a woman.

2) I had been rescued from certain death, across the centuries. (When an eighteen-wheeler runs over a person my size, they pick up the remains with blotting paper.)

3) Colonel Richard Campbell had twice been rescued from certain death and had had history changed simply to calm his soul, because his services were needed to save the computer that led the Lunar Revolution on time line three.

4) Theodore himself had been missing in action, chopped half in two by machinegun fire…yet he had been rescued and restored without even a scar.

5) My father was "missing in action," too. The AFS didn't even get around to reporting him as missing until long after the fact and there were no details.

6) In the thought experiment called "Schrodinger's Cat" the scientists(?), or philosophers, or metaphysicians, who devised it, maintain that the cat is neither dead nor alive but simply a fog of probabilities, until somebody opens the box.

I don't believe it. I don't think Pixel would believe it.

But—Is my father alive? or dead? away back there in the twentieth century?

So I spoke to Jubal about it.

He said, “I can’t tell you, Mama Maureen. How badly do you want your father to be alive?”

“More than anything in the world!”

“Enough to risk everything on it? Your life? Still worse, the chance of disappointment? Of knowing that all hope is gone?”

I sighed deeply. “Yes. All of that.”

“Then join the Time Corps and learn how such things are done. In a few years—ten to twenty years, I would guess—you will be able to form an intelligent opinion.”

“ ‘Ten to twenty years’!”

“It could take longer. But the great beauty about time manipulations is that there is always plenty of time, never any hurry.”

When I told Ishtar that I wanted to take an indefinite leave of absence, she did not ask me why. She simply said, “Mama, I have known for some time that you were not happy in this work; I have been waiting for you to discover it.”

She kissed me. “Perhaps next century you will find a true vocation for this work. There is no hurry. Meanwhile, be happy.”

So for about twenty years of my personal time line and almost seven years of Boondock time I went where I was told to go and reported on what I was told to investigate. Never as a fighter. Not like Gretchen, whose first baby is descended both from me (Colonel Ames is my grandson through Lazarus) and from my co-wife Hazel/Gwen (Gretchen is Hazel’s great-granddaughter)—Major Gretchen is a big, strong, strapping Valkyrie, reputed to be sudden death with or without weapons.

Fighting is not for Maureen. But the Time Corps needs all sorts. My talent for languages and my love of history makes me suitable to be sent to “scout the Land of Canaan”—or Nippon in the 1930S— or whatever country or planet needs scouting. My only other talent is sometimes useful, too.

So with twenty years of practice and some preliminary research in history of time line two, second phase of the Permanent War, I signed off for a weekend and bought a ticket on a Burroughs-Carter time-space bus, one with a scheduled stop in New Liverpool, 1950, intending to scout the history of the 1939-1945 War a little closer up. Hilda had developed a thriving black-market trade through the universes; one of her companies supplied scheduled services to the explored time lines and planets for a bracket of dates—exact date of choice available if you pay for it.

The bus driver had just announced “New Liverpool Earth Prime 1950 time line two next stop! Don’t leave any personal possessions aboard”-when there was a loud noise, the bus lurched, a trip attendant said, “Emergency exit—this way, please”—and somebody handed me a baby, there was much smoke, and I saw a man with a bloody stump where his right arm should have been.

I guess I passed out, as I don’t remember what happened next.

I woke up in bed with Pixel and a corpse.

CHAPTER TWENTY-SIX

Pixel to The Rescue

After that Mad Tea Party in which I woke up in bed with a cat and a corpse in Grand Hotel Augustus, Pixel and I wound up in the office of Dr. Eric Ridpath, house physician, where we met his office nurse, Dagmar Dobbs—a gal who was at once awarded Pixel's stamp of approval. Dagmar was giving me a GYN examination, when she told me that tonight was La Fiesta de Santa Carolita.

It is a good thing that just before she put me on the table she had required me to pee in a cup, or I might have peed in her face.

As I have explained in excessive detail, "Santa Carolita" is my daughter Carol, born in Gregorian 1902 at Kansas City on Tellus Prime, time line two, code Leslie LeCroix.

Lazarus Long had initiated "Carol's Day" on June twenty-sixth, 1918 Gregorian, as a rite of passage for Carol, marking her transition from childhood to womanhood. Lazarus toasted Carol in champagne, telling her what a wonderful thing it was to be a woman, naming for her both the privileges and the responsibilities of her new and exalted status, and declaring that June twenty-sixth should then and forever be known as "Carol's Day."

The notion of calling it "Carol's Day" had suggested itself to Lazarus from something he remembered from a thousand years in the future-or in the past, depending on your time frame. On the frontier planet New Beginnings he and his wife Dora had declared "Helen's Day" to celebrate puberty in their oldest child, Helen. That was their stated purpose. Their unstated purpose was to attempt to place some control over the sexual behavior of their growing sons and daughters, in order to head off the sort of tragedy I ran into with Priscilla and Donald.

Neither Lazarus nor I (nor Dora) had moralistic notions about incest, but all of us had feared the damage incest can do, both genetically and socially. "Helen's Day" and "Carol's Day" gave each set of parents some leverage in handling the touchy problems of sex in young people, problems that so easily can end in tragedy…but need not.

(I despise most in Marian her self-indulgent failure to carry out the parental duty of maintaining discipline. "Spare the rod and spoil the child" is not sadistic; it is hard common sense. You fail your children worst if you do not punish them when they need it. The lessons you fail to teach them will be taught later and much more harshly by a cruel world, the real world where no excuses are accepted, the world of TANSTAAFL and of Mrs. Be-Done-By-As-You-Did.)

Lazarus told me (centuries later or years later—a matter of viewpoint) that he was halfway through his toast to Carol when he suddenly realized that he was inaugurating the most widespread holiday of the human race: Carolita's Day—and that he has been trying ever since to decide which came first: the chicken or the egg.

Chicken or egg, Carol's Day did develop over the centuries and on many planets into a public holiday—this I learned when I was taken to Tertius. Usually it was celebrated just for the fun of it, the way the Japanese celebrate Christmas, as a secular holiday having nothing to do with religion.

But in some cultures it developed as a religious holiday peculiar to theocracies: the safety-valve holiday, the day of excesses, of sin without punishment, the saturnalia.

While I got out of those silly stirrups and down off that cold table and put on my "clothes" (a caftan rigged from a beach towel), Dr. Ridpath and Dagmar looked over my test results. They pronounced me healthy-merely out of my skull, which neither of them seemed to regard as important.

Dr. Ridpath said, "Explain things to her, Dag. I'm going to take a shower and get ready."

"What do you want to do, Maureen?" Dagmar asked me. "Doc tells me that your total assets are that terry cloth tent you're wearing and this orange cat. Pixel! Stop that! This is not a night you can go to a police station and ask your way to the county poor farm; tonight the cops skin down and join in the riot." She looked me up and down. "If you go out on the streets tonight—well—you'd have a quieter time in —a lion's den. Maybe you like such things—many do. Me, f'rinstance. But tonight a gal is either locked up or knocked up. You can stay here, sleep on the couch. I can find you a blanket. Pixel! Get down from there!"

"Come here, Pixel." I held out both hands; he jumped into my arms. "How about the Salvation Army?"

"The what?"

I tried to explain. She shook her head. "Never heard of it. Sounds like another of your daydreams, dear; nothing of that sort is ever authorized by the Church of Your Choice."

"What church is your choice?"

"Huh? Your choice, my choice, everybody's choice—the Church of the Great Inseminator, of course—what other church be there? If it's not your choice, a ride on a rail might clarify your thinking. It would mine."

I shook my head. “Dagmar, I’m more and more confused. Back where I come from there is total religious freedom.”

“That’s what we have here, ducks—and don’t let a proctor hear you say anything else.” She suddenly smiled like the Wicked Witch of the West. “Although there are always some proctors and some priests found stone cold dead in the dawn’s early light, grinning in *risus sardonicus*, the morning after Saint Carol’s feast; I am not the only widow with a long memory.”

I must have looked stupid. “You’re a widow? I’m sorry.”

“I talk too much. Not all that tragic, luv. Marriages are made in Heaven, as everybody knows, and my patron priest picked for me just the man Heaven had in mind for me, no possible doubt and you’ll never hear me say otherwise. But when Delmer—my appointed soulmate—fell out of favor at the throne and was trimmed, well, I cried but not too long. Delmer is an altar boy now and quite a favorite among the male sopranos, so I understand. The awkward part is that, since he isn’t actually dead, just trimmed, I can’t marry again.” She looked bleak.

Then she shrugged and smiled. “So Santa Carolita’s night is a big night for me, seeing how closely we are watched all the rest of the year.”

I said, “I’m confused again. Are you saying that things are puritanical here?—except this one night?”

“I’m not sure I know what you mean by ‘puritanical,’ Maureen. And I have trouble staying with your ‘Man from Mars’ pose—if it is a pose—”

“It’s not a pose! Dagmar, I truly am lost. I’m not on my own planet; I don’t know anything at all about this place.”

“All right, I’ll throw in with you, I said I would. But it is hard to keep it in mind. Okay, the way things work here—Three hundred and sixty-four days of the year—sixtyfive on leap years—everything is either required or forbidden. ‘The Golden Rule,’ the Supreme Bishop calls it-God’s Plan. But on Carolita’s feast day, from sundown to sunrise, anything goes. Carolita is the patron saint of street singers, whores, Gypsies, vagabonds, actors, of all who must live outside the city walls. So on her day—Boss! You’re not going outdoors in *that* outfit!”

“And why not?”

Dagmar made retching noises; I turned to see what the fuss was about. The doctor had gone to shower, had returned still stripped down and sporting the most amazing phallus I have ever seen. It was standing straight up, rising out of a wide, dense briar patch of dark brown curls. It thrust up at least twelve inches from that curly base. Just back of the miter it was as thick as my wrist. It curved back slightly toward his hairy belly.

It "breathed" when he did, bowing an inch at each breath. I looked at it in horrified fascination the way a bird looks at a snake, and felt my nipples grow crisp. Take it away! Get a stick and kill it!

"Boss, take that silly toy right back to Sears Roebuck and demand your money back! Or I'll, I'll—I'll flush it down the pot, that's what I'll do ! "

"You do and you'll pay the plumber's bill. Look, Dagmar, I'm going to wear it home and I want you to snap a pic of Zenobia's face when she sees it. Then I'll take it off…unless Zenobia decides she wants me to wear it to the mayor's orgy. Now get into your costume; we still have to pick up Daffy and his assistant. His goose, although he claims otherwise. Move. Shake your tail, frail."

"Pee on you, Boss."

"Has the sun gone down so soon? Maureen, if I understood you earlier, you have not eaten today. Come have dinner with us and we can discuss what to do with you later; my wife is the best cook in town. Right, Dagmar?"

"Correct, Boss. That makes twice this week you've been right."

"When was the other time? Did you find something for Cinderella to wear?"

"It's a problem, Boss. All I have here are jumpsuit uniforms, cut for me. On Maureen they would fit too soon in one direction, too late in the other." (She meant that I'm shaped like a pear while she is shaped more like celery.)

Dr. Ridpath looked at me, then at her, decided that Dagmar was right. "Maureen, we'll see what my wife has that you can wear. It won't matter between here and there; you'll be in a robocab. Pixel! Dinnertime, boy!"

"Now? *Wow!*"

So we had dinner at the home of the Ridpaths. Zenobia Ridpath is indeed a good cook. Pixel and I appreciated her, and she appreciated Pixel and was warmly hospitable to me. Zenobia is a dignified matron, beautiful, about fortyfive, with premature white hair tinted with a blue rinse. Her face did not change when she saw the mechanical monstrosity her husband was sporting. He said, "What do you think this is, Zen?"

She answered, "Oh, at last! You promised it to me as a wedding present all these many years ago! Well, better late than never—I think." She stooped and looked at it. "Why does it have 'Made in Japan' printed on it?" She straightened up and smiled at us. "Hello, Dagmar, good to see you. Happy festival!"

"Bumper crops!"

"Big babies! Mrs. Johnson, it was sweet of you to come. May I call you 'Maureen'? And may I offer you some crab legs? Flown in from Japan, like my husband's new peepee. And what would you like to drink?" A polite little machine rolled up with crab legs and other tasty tidbits, and took my drink order—*Cuba Libre* but omit the rum.

Mrs. Ridpath congratulated Dagmar on her costume: a black, sheer body stocking covering even her head—but missing wherever presence of garment would get in the way at a Saturnalia: cutaway crotch, breasts bare, mouth bare. The result was glaringly obscene.

Zenobia's costume was provocative but pretty—a blue fog that matched her eyes and did not hide much. Daffy Weisskopf climbed right up her front, making jungle noises. She just smiled at him. "Have something to eat first, Doctor. And save some of your strength for after midnight."

I think Dr. Eric's suspicions about Dr. Daffy's assistant, Freddie, were justified; he did not smell right to me and I apparently did not smell right to him—and I was beginning to be whiff, as I was starting to get into a party mood. As I had requested, that *Cuba Libre* had no rum in it, but I had half of it inside me before I realized that it was loaded with vodka-one hundred proof, I feel certain. Vodka is tricky; it has no odor and no taste…and now I lay me down to sleep—

I think some of those appetizers had aphrodisiacs concealed in them…and Maureen does not need aphrodisiacs. Has never needed them.

There were three sorts of wine at dinner and endless toasts that rapidly progressed from suggestive to outrageous. The little robot that waited on my sector of the table kept the wine glasses filled but was not programed to understand "water"—and Mama Maureen got potted.

No use pretending anything else. I had too little to eat and too much to drink and too little sleep and I never have learned to drink like a lady. I had simply learned how to pretend to drink while avoiding alcohol. But on Carolita's night I let my guard down.

I had planned to ask Zenobia to permit me to stay overnight in her house…then on the morrow, festival over, I could tackle a city restored to its senses. First I needed a minimum of money and clothes…and there are ways to get both without actually stealing. A female can often wangle an unsecured loan if she hits a male for it who shows a tendency to pat her in a friendly fashion. She can hint pretty strongly as to the interest she is willing to pay…and every female Time Corps field agent has done something like that on occasion. We aren't nervous virgins; we don't leave Boondock without being vaccinated against pregnancy and nineteen other things you might catch if a trouser worm bit you. If you are too tender-minded for such emergency measures, you don't belong in the profession.

Females are better than males as Time Corps scouts because they can get away with such things. My co-wife Gwen/Hazel could steal the spots off a leopard and never disturb his sleep. If she were sent after the Rheingold, Fafnir and his flaming halitosis would not stand a chance.

Having acquired that minimum of local money and local clothing, my next move would be a preliminary study to determine: I) how to get more money in this culture without going to jail; 2) where, if anywhere, is the Time Corps message drop; 3) if the second point is null, where is the dummy front for Hilda's crosstime black-marketeers? Most of this can be researched unobtrusively either at a public library or in a telephone directory.

All very professional—Instead I got snagged by the proctors and did not do any of it.

Zenobia insisted that I go with them to the mayor's orgy, and by then I lacked the judgment to refuse. She selected costume for me, too, from her clothes: Long sheer hose, green round garters, high heels, and a cape…and somehow it seemed to me the perfect costume, just right, although I could not remember why I thought so.

I recall only vignettes of the mayor's party. Perhaps it will help to think of a party given jointly by Caligula and Nero, as directed by Cecil B. de Mille in gorgeous Technicolor. I remember telling some oaf (I can't remember his face; I'm not sure he had a face) that it was not impossible to lay me—many have tried and most succeeded—but it had to be approached romantic-like, not like a man grabbing a bite standing up at a fast-food joint.

That party and the rest of that night was rape, rape, rape, all around me…and I do not care for rape; one does not meet a better class of people that way.

I escaped from that party and found myself out in the park. My leaving had to do with a pompous ass dressed in a long robe (a cope?) of white silk heavily embroidered in cardinal and gold. It was open down the front with his *Flaggenstange* sticking out. He was so self-important that he had four acolytes to help him with the chore.

He grabbed me as I was trying to slide past—stuck his tongue in my mouth. I kneed him and ran, and jumped out an open window. Ground floor, yes—but I did not stop to find out.

Pixel caught up with me in about fifty yards, then slowed me somewhat as he crisscrossed ahead of me. We went into that big park and I slowed to a walk. I was still wearing the cape but I had lost one slipper going out the window, then had kicked off the other at once, being unable to run one shoe off, one shoe on. It did not matter as I had gone barefooted so habitually in Boondock that my feet were as tough as shoe leather.

I wandered around the park for a while, watching the action (amazing!) and wondering where I could go. I did not want to risk the mayor's palace again; my pompous boy friend with the fancy vestment might still be there. I did not know where the Ridpaths lived even though I had been there. It seemed to me that I must wait for dawn, then locate Grand Hotel Augustus (should be easy), go to Dr. Eric's office on the mezzanine, and hit him for a small loan. Hobson's choice, no other option—but not too unlikely as he had brailled me quite thoroughly during dinner. He wasn't being rude; similar things or more so were going on all around the table. And I had been warned.

I joined in briefly at that esbat—midnight, full moon overhead, and ritual prayers being said in Latin, Greek, Old Norse (I think), and three other languages. One woman was a snake goddess from ancient Crete. Authentic? I don't know. Pixel rode my shoulder at the service as if he were used to the role of witch's familiar.

As I left the altar, he jumped down, ran ahead of me as usual.

I heard a shout. "There's her cat! And there she is! Grab her!"

And they did.

As I've said, I don't like rape. I especially dislike it when four men hold me while a fat slob in an embroidered cope does things to my body. So I bit him. And discussed his ancestry and personal habits.

So I wound up in the hoosegow and stayed there until the crazies from the Committee for Aesthetic Deletions plllled a jailbreak and got me loose.

This is called, "Out of the frying pan and into the fire."

Last night the Committee was presided over by Count Dracula, the only case of type casting that I saw—this repulsively handsome creature not only wore the opera cloak associated with video vampires, he also had taken the trouble to have a mouthpiece fashioned for him by a prosthodontist; he had dog teeth that came down over his lower lip. At least I assume that they were artificial; I don't really believe that any humans or quasi humans have teeth like that.

I joined the circle and took the one remaining chair. "Good evening, cousins. And good evening to you, Count. Where is the Old Man of the Mountain tonight?"

"That is not a question one asks."

"Well, excuse me, please! And pray, why not?"

"We will leave that to you as an exercise in deduction. But don't ask such a question again. And do not be late again. You are the subject of our discussion tonight, Lady MacBeth—"

"Maureen Johnson, if you please."

"It does not please me. It is one more instance of your unwillingness to observe the rules necessary to the safety of the Dead Men. Yesterday you were observed exchanging words with one of the hotel staff, a chambermaid. What were you talking about?"

I stood up. "Count Dracula."

"Yes, Lady MacBeth?"

"You can go to hell. And I am going to bed."

"Sit down!"

I did not. But all those near me grabbed at me, and sat me down. I don't think any three could have managed it; they all were ill, deathly ill. But seven were too much for me—and I was reluctant to be rough in resisting them.

The chairman went on, "Milady MacBeth, you have been with us over two weeks now. During that time you have refused every mission offered you. You owe us for your rescue—"

"Nonsense! The Committee owes me! I would never have been in a position to need rescue had you not kidnaped me and shoved me into bed with a corpse, one of your killings, Judge Hardacres. Don't talk to me about what I owe the Committee! You returned some of my clothes—but where's my purse? Why did you drug me? How dare you kidnap an innocent visitor to dress up one of your assassinations? Who planned that job? I want to talk to him."

"Lady MacBeth."

"Yes?"

"Hold your tongue. You will now have a mission assigned to you. It has been planned and you will carry it out tonight. The client is Major General Lew Rawson, retired. He was in charge of the recent provocation incident in—"

"Count Dracula!"

"Yes?"

"Go hang by your heels!"

"Don't interrupt again. The operation has been fully planned. Jack the Ripper and Lucrezia Borgia will go with you, and coach you. You can kill him in his bed, or, if you balk, you will be killed as he is killed and the two of you arranged in a tableau that will give substance to the rumors about him."

The attention of everyone was on the row between the new chairman and me; proctors poured in off the balcony before they were seen. But a voice I recognized called out, "Watch it, Maureen!" and I dived for the deck.

The robes and hoods were the Ku Klux Klan ersatz of the proctors, but the voice was the voice of Dagmar. When I turned my head at her voice, I spotted Pixel with her.

Time Corps military units have stun guns they use when killing must be selective. They fanned the room with them. I got the edge of one charge, did not quite pass out but did not object when a big, husky proctor (one of my husbands!) scooped me up. Then we were all out on the balcony and into a small troop carrier hovering at the rail.

heard the door close, felt it in my ears. “Ready?”

“Ready!”

“Has somebody got Pixel?”

“I’ve got him! Let’s go!” (Hilda’s voice)

And then we were home in Boondock, on the parking lawn at the Long residence.

A voice I know well said, “Secure all systems,” and the pilot turned in his seat and looked at me. “Mama,” he said mournfully, “you sure give me a lot of grief.”

“I’m sorry, Woodrow.”

“Why didn’t you tell me? I would have helped.”

“I’m sure you would, dear. But I was merely scouting.”

“But you should have—”

Hilda interrupted. “Stop it, Lazarus. Mama Maureen is tired and probably hungry. Mama, Tamara has lunch ready. Two hours from now-local time fourteen hundred—is an operation briefing, all hands. Jubal in charge of the briefing and—”

“ ‘Operation briefing’? What operation?”

“Your operation, Mama,” Woodrow answered. “We’re going to go find Gramp. Either rescue him, or slip him into a body bag. But we’re doing it right, this time. It’s a Time Corps major operation, resources as needed; the Circle of Ouroboros is unanimous. Mama, why didn’t you tell me?”

Hilda said, “Shut up, Woodie. And stay shut. We’ve got Mama Maureen back and that’s all that counts. Right, Pixel?”

“*Rrrrite!*”

“So let’s go to lunch.”

CHAPTER TWENTY-SEVEN

At The Coventry Cusp

I didn't eat much.

The party was in my honor and I loved it. But I needed two mouths one for eating, one for the fifty-odd people who wanted to kiss me—an I wanted to kiss them. I wasn't really hungry. Even when I was a prisoner in the Cathedral the food had been adequate, and when I was another sort of prisoner with the Committee for Aesthetic Deletions, I was quite well fed, within the limits of hotel cooking.

But I was starved for love, and warm and loving people.

Did I say the party was in my honor? Well, yes, but any party Pixel attends is primarily in his honor. He is sure of that and behaves accordingly. He zigzagged among the couches, tail high, accepting hand feeding, and rubbing against his friends and retainers.

Dagmar came over, asked Laz to make room, and squeezed in by me-hugged me and kissed me. I found that I was leaking tears. "Dagmar, I can't tell you how I felt when I heard your voice. Are you going to stay here? You'll like it here."

She grinned at me, hanging on to my neck. "Do you think I want to go back to Kansas City? Compared with Kay See, Boondock is Heaven."

"Good! I'll sponsor you." I had my arm around her, which caused me to add, "You've put on a few pounds and it becomes you. And such a beautiful tan! Or is it out of a spray bomb?"

"No, I did it the best way, lying in the sun and increasing the dosage slowly. Maureen, you won't believe what a treat sunbathing is to someone who would be risking a public flogging if she sunbathed in her home town. "

Laz said, "Mama, I wish I could tan the way Dagmar does, instead of these kingsize freckles."

"You get that from me, Lapis Lazuli; I always freckle. It's the price we pay for red hair."

"I know. But Dagmar can sunbathe every day, month after month, and never get a freckle. Look at her."

I sat up straight. "What did you say?"

"I said she doesn't freckle. All our men are following her around." Laz tickled Dagmar in the ribs. "Aren't they, Dag?"

"Not so!"

"You said, 'Month after month—' Dagmar, I saw you last two weeks ago. Less than three. How long have you been here?"

"Me? Uh…slightly over two years. Yours was a tough case—or so they tell me."

After being in the Time Corps twenty years of my personal time, seven years of Boondock time, I should not have been surprised. Time paradox is no news to me; I keep a careful journal to keep me sorted out, Maureen's personal time versus times and time lines and dates for each of the places I scout. But this time I was the subject of the operation (Operation Triple-M = Mama Maureen is Missing). I had been gone (my personal time) five and a half weeks…but it had taken over two years to find me and rescue me.

Laz called Hilda over to straighten me out. She snuggled in between Lorelei Lee and me on my other side; the couch was getting crowded. But Hilda does not take up much space. She said, "Mama Maureen, you told Tamara that you were just going away for a day's holiday. She knew you were fibbing, of course, but she never contradicts any of our little white lies. She thought you were just shuttling to Secundus for some private fun and maybe some shopping."

"Hilda Mae, I did intend to be back here the next day, no matter how long I spent in research. I planned to spend a few weeks in the British Museum in 1950, time line two, soaking up as much detail as possible about the Battle of Britain, 1940-41. I had a fresh recorder implant for that purpose. I didn't dare go to England during that war without careful preparation; England was a battle zone—easy to be shot as a spy. I would have done the research and been back the next day, in time for dinner…if that time-twister bus had not broken down."

"It didn't break down."

"Huh? I mean, 'Excuse me?' "

"It was sabotage, Mau. The Revisionists. The same pascoodnyoks who came so close to killing Richard and Gwen Hazel and Pixel on time line three. We don't know why they wanted to stop you, or why they chose that method; neither side was taking prisoners, and we killed too many too fast. By 'we' I don't mean me; I'm the drawing-room type as everybody knows. I mean the old pros, Richard and Gwen and Gretchen and a strike force from time line five commanded by Lensman Ted Smith. But the Circle had put me in charge of Operation Triple-M, and I did dig out information that led us to the Revisionists. I got most of it from one of my employees, the pilot of that bus. I made a bad mistake, Maureen, in hiring that evil maggot. My poor judgment almost cost your life. I'm sorry."

"Sorry about what? Hilda Mae, my precious, if you hadn't rescued me in Albuquerque, years ago, I would be dead, dead, dead! Don't ever forget it, because I never forget it."

"Spare me your gratitude, Mau; I had fun. Both times. I borrowed some snakes from Patty Paiwonski and hung this oaf upside down over a snake pit while I questioned him. That sharpened his memory and got us the correct time line, place, and date—Kansas City in Gregorian 2184 starting at June twenty-sixth, on a previously unexplored variant of time line two, one in which the Second American Revolution never took place. It is now designated time line eleven, and is a nasty enough place that the Circle put it in the Someday File for cleaning or cauterizing when we -get around to it."

Hilda leaned down and twiddled her fingers at Pixel, spoke to him in cat language; he came at once and settled in her lap, purring loudly. "We put agents into that version of Kansas City but they lost you the same day you arrived. Or that night. They traced you from Grand Hotel Augustus to a private home, from there to the mayor's palace, and then outdoors into the carnival. And lost you. But we had established that Pixel was with you…even though he was here every day, too. Or almost—"

"How does he do that?"

"How does Gay Deceiver have two portside bathrooms without being lopsided? Maureen, if you insist on believing in World-as-Logic you will never understand World-as-Myth. Pixel knows nothing about Einsteinian spacetime, or the speed of light as a limit, or the Big Bang, or any of those fancies dreamed up by theorists, so they don't exist for him. Pixel knew where you were, inside the little world that does exist for him, but he doesn't speak much English. In Boondock, that is. So we took him where he can speak English—"

"Huh?"

"Oz, of course. Pixel doesn't know what a cathedral is but he was able to describe that one fairly well once we were able to get his mind off all those wonderful new places to investigate. The Cowardly Lion helped us question him, and for the first time in his life Pixel was impressed—I think he wants to grow up to be a lion. So we hurried back and sent a task force to get you out of the Supreme Bishop's private jail. And you weren't there."

Dagmar picked it up. "But I was, and Pixel led them straight to me-looking for you. I was in the cell you had been in—the proctors came for me as soon as you escaped."

"Yes," agreed Hilda. "Dagmar had befriended you and that was not a safe thing to do, especially after the Supreme Bishop died."

"Dagmar! I'm sorry!"

"About what? 'All's Well That Ends Well,' to coin a phrase. Look at me now, ducks; I like it here. So back they went to Oz, taking me along this time, and after I listened to Pixel, I was able to tell Hilda that you were being held in Grand Hotel Augustus—"

"Hey! That's where I started!"

"And that's where you wound up, too, in a suite that isn't in the hotel directory and can be reached from inside only by a private elevator from the sub-basement. So we came in by the scenic route, and caught the Committee with their pants down."

Lazarus had joined us, and now sat on the grass at my knees, without interrupting—and I wondered how long his angelic behavior would last. Now he said, "Mama, you don't know how true your words are. You remember when we moved? I was in high school."

"Yes, certainly. To our old farmhouse, out south."

"Yes. Then after World War Two you sold it, and it was torn down."

(How well I remembered!) "Torn down to build the Harriman Hilton. Yes."

"Well, Grand Hotel Augustus is the Harriman Hilton. Oh, after more than two centuries not much is the same structure, but the continuity is there. We researched it, and that's how we located this VIP suite that is not known to the public." He rubbed his cheek against my knee. "That's all, I guess. Hilda?"

"I think so."

"Wait a moment!" I protested. "What became of that baby? And the man with the bloody stump? The one with his arm chopped off in that accident. "

"But, Maureen," Hilda said gently, "I tell you three times: It was not an accident. That 'baby' was just a prop, a lifelike animation, to keep your hands busy and your attention distracted. The 'wounded' man was a piece of grisly misdirection while they injected you—an old amputee with makeup; he wasn't freshly maimed. When I had my driver hanging over the snakes, he became downright loquacious and told me many details, mostly nasty."

"I'd like to speak to that driver!"

"I'm afraid you can't. I don't encourage employees to sell me out Maureen. You are a gentle soul. I'm not."

"The surgical teams will be"—we were gathered in a lecture room in Ira Johnson Hall, BIT, and Jubal had started his briefing—"matched as nearly as possible in professional background. Tentatively they are:

"Dr. Maureen with Lapis Lazuli as her scrub nurse

"Dr. Galahad with Lorelei Lee;

"Dr. Ishtar with Tamara;

"Dr. Harshaw—that's me—with Gillian;

"Dr. Lafe Hubert aka Lazarus, with Hilda, and

"Dr. Ira Johnson with Dagmar Dobbs.

"Dagmar, your match with Johnson Prime is not too close; you are over-qualified by a century and a half, plus whatever you have learned here. But it's the best we can manage. Dr. Johnson will not know that you are assigned to him. However, we know from library research and from quite a lot of oral history research—interviews conducted by field agents in Coventry and elsewhere in the years 1947-50, recording the experiences of persons who served in civil-defense first-aid teams in that war—we know that team-up between surgeon and nurse could be last minute, scratch, either one of them not fully qualified. Battle conditions Dagmar. If you get there first when the sirens sound—and you will—Dr. Johnson will simply accept you."

"I'll try."

"You will succeed. All of us assigned to first aid will be wearing gowns and masks that won't look odd in wartime England, 1941, and you'll be using surgical instruments and other gear that does not scream anachronism…although anachronisms won't matter much, we think, in the pressure of a heavy bombing raid."

Jubal looked around the hall. "Everyone in this operation is a volunteer. I can't emphasize too often that this is an actual battle you are going into. If you are killed in England in 1941, history may be revised—but *you* will be *dead*. Those so-called 'iron bombs' used by the Nazi Luftwaffe will kill you just as dead as an exotic weapon of a later century. For that reason all of us are volunteers and anyone can quit right up to H-hour. All of Major Gretchen's young ladies are volunteers…and are on max hazard pay, as well." Jubal stopped and cleared his throat, then went on,

"But there is one volunteer we don't need, don't want, and who is urgently requested to stay home."

Jubal looked around again. "Ladies and gentlemen, what in the hell are we going to do about Pixel? When the bombs start falling and the wounded start piling up at that field station, the last thing we need is a cat who can't be shut up and can't be shut out. Colonel Campbell? He's your cat."

My grandson Richard Ames Campbell answered, "You have that the wrong way around, Doctor. I don't own Pixel. Whatever ownership there may be points in the other direction. I agree with you that we can't afford to have him underfoot during battle. But I don't want him there on his own account; he's too unsophisticated to know that bombs can kill him. He got involved in another fire fight when he was just a kitten…and it did almost kill him. I don't want that ever to happen again. But I never have figured out how to lock him up."

"Just a moment, Richard." Gwen Hazel stood up. "Jubal, may I offer a suggestion?"

"Hazel, it says on the organization chart that you are in command of this operation, all phases. I think that entitles you to make a suggestion. One, at least."

"Come off it, Jubal. There is a third member of our family that has more influence over Pixel than either Richard or I. My daughter Wyoming."

"Does she volunteer?"

"She will."

"Stipulating that she will, can she control Pixel every second for about four hours? For technical reasons involving how we handle the time/space gates we will use about that much Boondock time. So Dr. Burroughs tells me."

I interrupted. "May I say something?"

"Hazel, do you yield?"

"Don't be silly, Jubal; of course I do."

"Certainly we should use Wyoh; the child is utterly reliable. But don't have her try to hang on to Pixel here; one sneeze and he's gone. Take both of them to Oz and have them stay with Glinda. With Betsy, rather, but with Glinda's magic to insure that Pixel doesn't walk through any walls."

"Hazel?" Dr. Harshaw inquired.

"They'll both love it."

"It is so ordered. Now back to the raid. Projection, please." An enormous live picture grew up behind Jubal and around him. "This holo is not Coventry itself but our Potemkin-Village practice ground that Athene has built for us, about eighty kilometers east of here. Take a bow, Teena."

The executive computer's voice came out of the air: "Thanks, Papa Jubal, but that's 'Shiva's' work—Mycroft Holmes and me linked in synergistic parallel, with Minerva waving the baton. Now that I've got you all gathered together, let me remind you that all of you are invited to our wedding, Minnie and me to Mike, after the conclusion of Operation Coventry Cusp. So you all had better start thinking about wedding presents."

"Teena, you are crassly materialistic and neither of your composite bodies can possibly be ready that soon."

"Gotcha! Ish okayed moving our bodies to Beulahland, so now we can be uncorked and animated on any date we pick. You better study up on the laws of temporal paradox, Jubal."

Dr. Harshaw sighed. "Conceded. I look forward to kissing the brides. Now will you please let us get on with the operation?"

"Don't sweat it, Pops. You know or should know that there is never any hurry in a time operation."

"True. But we're all a bit eager. Friends, Teena—or Shiva—built our practice field from photos, stereos, holos, and motion pictures taken at Coventry on the first of April, 1941. You will recognize 1941 as a date so far back that all time lines patrolled by the agents of the Circle of Ouroboros are, in 1941, a single time line. In short, anything we do in Coventry in 1941 affects all civilized time lines—'civilized' in a parochial sense, of course; the Circle is not unbiased.

"Research for this operation turned up an odd fact. Lazarus?"

My son stood up. "History of World War Two 1939-1945 as I recall it shows a more favorable outcome in England and in Europe than that which turned up in this operation's field research. For example, my oldest brother, Brian Smith, Jr., was wounded in the landing at Marseilles, whereupon he was sent to England, to the Salisbury Plains and the American training command. Mama?"

"Yes, surely, Woodrow."

"But the history we researched shows that this could not have happened. The Luftwaffe won the Battle of Britain and there never was a Marseilles landing, much less an American training command in England. Instead, Germany was smashed from the air by atomic bombs delivered from North Africa by American B2g bombers. Friends and family, I was in that war. No atomic bombs were dropped on Europe in the war I remember. "

"Thank you, Lazarus. I was in that war, too, and in North Africa. No B2gs operated from there as I recall it and no atomic bombs were used in the European theater—so this research startled me as much as it did Lazarus. This bad news changed Operation Johnson Prime—which had as its purpose locating and recovering Dr. Ira Johnson, the Prime of the Johnson family—to Operation Coventry Cusp…which includes Operation Johnson Prime as one of its phases, but has the far wider purpose of changing the outcome of that war through this one raid. The raid of April eighth, 1941, was selected not only because Dr. Johnson was known to have been in it, as an AFS surgeon in civil defense, but also because the four waves of bombers—giant Heinkels—that bombed Coventry that night were the largest number of Nazi bombers used in any one raid.

"The Circle's mathematicians, working with Shiva, all agree that this is a cusp event, where a handful of people can turn the course of a history. So it will be the purpose of Major Gretchen's ladies to destroy as many as possible of that air Armada—as near one hundred percent as superior technology can manage. With this one assist, the RAF can and will win the Battle of Britain. Without it, it can be—or was—too big a raid for the Spitfires to handle. An almost invisible additional purpose of Operation Coventry Cusp, three layers down, is to save the lives of Spitfire pilots, so that they will live to fight another day.

"This is the sort of nudge the Circle of Ouroboros specializes in, the minor assist that makes a major change in the outcome—and the Companions of the Circle feel sanguine about this one.

"Now please look at the picture behind me. Our view is from the spot in Greyfriars Green occupied by the dressing station where Johnson Prime served that night. Those three towers are all that was left standing in the central city after earlier raids—the towers of St. Michael's cathedral, Greyfriars church, and Holy Trinity church. Off to the left is a lesser tower that does not show; that tower is the only original part of a Benedictine monastery built by Leofric, earl of Mercia, and his wife, Lady Godiva, in 1043. We have leased that tower from the earl, and the gate that will deliver Gretchen's archers will be—has been—erected on it, as well as the time gate that will move them to 1941. It may amuse you to hear that, while the contract payment was in gold, a lagniappe was added, a magnificent white gelding that the Lady Godiva named 'Aethelnoth'-and our gift to the Lady is the very mount she used in her famous ride . through the town for benefit of her townspeople."

Jubal cleared his throat and grinned. "Despite widespread popular demand coming mostly from Castor and Pollux, this operation will not be combined with a sightseeing trip to watch Lady Godiva ride through Coventry.

"That's all today, friends. To take part in this operation you need to be convinced of three things: first, that the Nazi regime under Adolf Hitler was so vile that it must not be allowed to win, and, second, that it is strongly desirable to defeat the Nazis without dropping scores of atomic bombs on Europe, and, third, that it is worth it to you to risk your neck to achieve the operation's objectives. The Circle answers Yes to these questions, but you must weigh them in your own conscience. If your answer is not a wholehearted Yes on all points, then please do not volunteer.

"After you have thought it over, the remaining Gideon's Band will meet for first rehearsal at ten tomorrow morning at our Potemkin-Village Coventry. A transbooth shuttling directly to the practice village is located just north of this building."

In Coventry, England, on Tuesday the eighth of April, 1941, at 7:22 P.M. the sun was setting, glowing red in smog and coal smoke. Looking at this city gave me a weird feeling, so exactly had Shiva's simulation matched what I now saw. I was standing at the entrance of a civil-defense first-aid station, the one that research showed that Father had worked in (would work in) tonight. It was hardly more than walls of sandbags covered by canvas painted opaque to guard the blackout.

It had a jakes of sorts (Phew!), and an anteroom for the wounded, three pine tables, some cupboards, and duck boards on a dirt floor. No running water—a tank with a spigot. Gasoline lamps.

Greyfriars Green spread out around me, an untended park pocked with bomb craters. I could not see the monastery tower we had rented from Lady Godiva's husband, Leofric, earl of Mercia, but I knew that it was north of me, off to my left. Field Agent Hendrik Hudson Schultz, who had conducted the dicker with the earl, reported that Godiva's hair really was surprisingly long and beautiful but that it was inadvisable to be downwind from her, as she had apparently not bathed more than twice in her life. Father Hendrik had spent a hard sixteen months learning eleventh-century Anglo-Saxon and customs and medieval church Latin in preparation for the assignment—one he completed in ten days.

Tonight Father Hendrik was with Gretchen as her interpreter; it had not been judged cost effective to require the members of the military task force to learn an Anglic language a century older than Chaucer, when their working language was not English but Galacta, and their MOS involved shooting, not talking.

Northeast of me I could see the three spires that gave the city its nickname: Greyfriars, Holy Trinity, and St. Michael's. Saint Michael's and Greyfriars were gutted in earlier bombings and much of the center of the city was destroyed. When I had first heard of the bombing of Coventry, a century ago on my personal time line, I had thought that the bombing of this historic town was an example of the sheer viciousness of the Nazis. While it is not possible to exaggerate the viciousness of that regime and the stench of its gas ovens, I now knew that the bombing of Coventry was not simply Schrecklichkeit, as this was an important industrial city, as important to England as Pittsburgh was to the United States.

Coventry was not the bucolic town I had pictured in my mind. I could see that, if fortune favored us tonight, we might possibly not only destroy a major part of the Luftwaffe's biggest bombers but also save the lives of skilled craftsmen as necessary to military victory as are brave soldiers.

Behind me I heard Gwen Hazel checking her communications: "Blood's a Rover, this is Lady Godiva's Horse. Come in, Blood."

I answered, "Blood to Horse, roger."

We had a uniquely complex communication net tonight; one I did not even try to understand (I'm a diaper engineer and a kitchen chemist—I've never seen an electron), a system that paralleled an even more astounding temporary time/space hookup.

Like this—From outside, the west end of the aid station was a blank wall of sandbags. From inside, that end was curtained off, a putative storage space. But push aside the curtain and you would find two time/ space gates: one from Coventry 1941 to the medical school hospital, BIT, Tertius 4376 Gregorian, and the other doing just the reverse, so that supplies, personnel, and patients could move either way without traffic problems—and at the Tertius end was another double set of gates to Beulahland, so that the worst cases could be shuttled to a different time axis for treatment, then returned to Coventry.

A similar but not identical double-gate arrangement served Gretchen's command. She and her girls (and Father Schultz) were waiting in the eleventh century on the monastery tower. The gate that would place them in the twentieth century would not be activated until Gwen Hazel notified Gretchen that the sirens had sounded.

Gwen Hazel could talk to the twentieth century, the forty-fourth century, and the eleventh century, each separately or all at once, using a buried throat mike, tongue switches, and a body antenna, whether she was at the Tellus Prime end or the Tellus Tertius end of the aid-station gates.

In addition to these hookups she was in touch with Zeb and Deety Carter, in the *Gay Deceiver*, at thirty thousand feet over the English Channel—too high for bombers, too high for Messerschmitts or Fokkers, too high for AA fire of that year. Gay had agreed to be there only if she was allowed to pick her own altitude. (Gay is a pacifist with, in her opinion, a deplorable amount of combat experience.) But at that altitude Gay was sure that she could spot Heinkels taking off and forming up long before the British coastal radar could see them.

As a result of rehearsals at "Potemkin Village," drills involving every casualty we could think of, the surgical teams had been rearranged, with most of them held back on the Boondock side of the gates. "Triage" of a sort would be practiced; the hopeless cases would be rushed through to Boondock, where no case is hopeless if the brain is alive and not too damaged There Doctors Ishtar and Galahad would head their usual teams (who need not be volunteers for combat; they would never be in Coventry). The "hopeless" cases, repaired, would be gated to Beulahland for days or weeks of recovery, then gated back to Coventry before dawn.

(Tomorrow there would be miracles to be explained. But we would be long gone.)

Cas and Pol had been volunteered (by their wives, my daughters Laz and Lor) as stretcher bearers, to move the worst cases from Coventry to gurney floats on the Boondock side.

It had been decided that too many surgical teams and too much equipment showing up out of nowhere as soon as the sirens sounded would alert Father unnecessarily, make him smell a rat. But, when the wounded started pouring in, he would be too busy to notice or care.

Jubal and Gillian were a reserve team, and would go through when needed. Dagmar would go through when Deety in *Gay Deceiver* reported that the bombers were on their way, so that Dagmar would meet Father-Dr. Johnson—as he first poked his head in. When the sirens sounded, Lazarus and I would go through, already masked and gowned, with me as his scrub nurse. I'm an adequate surgeon but I'm a whiz as an operating nurse—much more practice at it. We figured that three of us could do what might have to be done at "all clear," the end of the raid: Grab Father and kidnap him—drag him through the gate, sit him down in Boondock, and explain things to him there… including the idea that he could have the works—rejuvenation and expert tutoring in really advanced therapy and still be returned to Coventry April eighth, 1941. If he insisted. If he had any wish to.

But by then I hoped and expected that, with Tamara's help, Father could be made to see the Quixotic futility of going back to the Battle of Britain when that battle had been won more than two millennia earlier.

With Tamara's help—She was my secret weapon. By a concatenation of miracles I had married my lover from the stars…and thereby married my son, to my amazement and great happiness. Could more miracles let me marry the only man I have always loved, totally and without reservation? Father would certainly marry Tamara, given the chance—any man would—and Tamara would then see to it that Father married me. I hoped.

If not, it would be enough and more than enough simply to have Father alive again.

I had gone back through the gate to Boondock when I heard Gwen Hazel's voice: "Godiva's Horse to all stations. Deety reports bandits in the air and forming up. Expect sirens in approx eighty minutes. Acknowledge."

Gwen Hazel was standing beside me by the gates in the hospital, but this was a communication check as much as an intelligence. My own comm gear was simple: a throat mike not buried but merely under a bandage I did not need; a "hearing aid" that was not one and an antenna concealed by my clothes. I answered, "Blood's a Rover to Horse, roger."

I heard, "British Yeoman to Horse, roger. Eighty minutes. One hour twenty minutes."

I said, "Blood to Horse. I heard Gretchen's roger. Should I?"

Gwen Hazel shut off transmission and spoke to me, "You shouldn't hear her until you both shift to Coventry 1941. Mau, will you please go through to Coventry for a second comm check?"

I did so; we established that Gwen Hazel's link to me, 44th C to

20th C, was okay, and that I now could not hear Gretchen—both as they should be. Then I went back to Boondock, as I was not yet gowned or masked. There was one point in the transition where something tugged at one's clothes and my ears popped—a static baffle against an air-pressure inequality, I knew. But ghostly, just the same.

Deety reported that the bombers' fighter escort was becoming airborne. The German Messerschmitts were equal to or better than the Spitfires, but they had to operate at the very limit of their range—it took most of their gasoline to get there and get back; they could engage in dogfighting only a few minutes—or wind up in the Channel if they miscalculated.

Gwen Hazel said, "Dagmar. Take your station."

"Roger wilco." Dagmar went through, gowned, masked, and capped-not yet gloved…although God knows what good gloves would do in the septic conditions we would experience. (Protect us, maybe, if not our patients .)

I tied Woodrow's mask for him; he did so for me. We were ready.

Gwen Hazel said, "Godiva's Horse to all stations, sirens. British Yeoman, activate gate and shift time. Acknowledge."

"Yeoman to Horse, roger wilco!"

"Horse to Yeoman, report arrival. Good hunting!" Hazel added to me, "Mau, you and Lazarus can go through now. Good luck!"

I followed Lazarus through…and swallowed my heart. Dagmar was gowning Father. He glanced at us as we came out from behind that curtain, paid us no further attention. I heard him say to Dagmar, "I haven't seen you before, Sister. What's your name?"

"Dagmar Dobbs, Doctor. Call me 'Dag' if you like. I just came up from London this morning, sir, with supplies."

"So I see. First time in weeks I've seen a clean gown. And masks—what swank! You sound like a Yank, Dag."

"And I am, Doctor—and so do you."

"Guilty as charged. Ira Johnson, from Kansas City."

"Why, that's my home town!"

"I thought I heard some tall corn in your speech. When the Heinies go home tonight, we must catch up on home town gossip."

"I don't have much; I haven't been home since I got my cap and pin."

Dagmar kept Father busy and kept his attention—and I thanked her under my breath. I didn't want him to notice me until the raid was over. No time for Old Home Week until then.

The first bombs fell, some distance away.

I saw nothing of the raid. Ninety-three years ago, or eight months later that same year, depending on how you count it, I saw bombs falling on San Francisco under circumstances in which I had nothing to do but look up and hold my breath and wait. I'm not sorry that I was too busy to watch the bombing of Coventry. But I could hear it. If you can hear it hit, it is too far away to have your name on it. So they tell me. I'm not sure I believe them.

Gwen Hazel said in my ear, "Did you hear Gretchen? She says they got sixty-nine out of seventy-two of the first wave."

I had not heard Gretchen. Lazarus and I were busy with our first patient, a little boy. He was badly burned and his left arm was crushed. Lazarus got ready to amputate. I blinked back tears and helped him.

CHAPTER TWENTY-EIGHT

Eternal Now

I am not going to batter your feelings or mine by describing the details of that thousand-year night. Anything agonizing you have ever seen in the emergency room of a big-city hospital is what we saw, and worked on, that night. Compound fractures, limbs shattered to uselessness, burns—horrible burns. If the burns weren't too bad we slathered them with a gel that would not be seen here for centuries, put dressings over the affected areas, and had them carried outside by civil-defense stretcher bearers. The worst cases were carried in the other direction by Cas and Pol—behind that curtain, through a Burroughs-Carter-Libby gate, to Ira Johnson Hospital in Boondock, and (for burn cases) shifted again to Jane Culver Burroughs Memorial Hospital in Beulahland, there to spend days or weeks in healing, then to be returned to Coventry at "All Clear" this same night.

All of our casualties were civilians, mostly women, children, and old men. The only military (so far as I know) around or in Coventry were Territorials manning AA guns. They had their own medical setup. I suppose that in London a first-aid station such as ours would probably be in the underground. Coventry had no tube trains; this aid station was merely sandbags out in the open but it was safer, perhaps, than it would have been in a building—one that might burn over it. I'm not criticizing. Everything about their civil defense had a make-do quality about it, a people with their backs to the wall, fighting gallantly with whatever they had.

In our aid station we had three tables, operating tables by courtesy, in fact plain wooden tables with the paint scrubbed right off them between raids. Father was using the one nearest the entrance; Woodrow was using the one nearest the curtain; the middle one was used by an elderly Englishman who was apparently a regular for this aid station: Mr. Pratt, a local veterinary surgeon, assisted by his wife, "Harry" for Harriet. Mrs. Pratt had unkind things to say about the Germans during the lulls but was more interested in talking about the cinema. Had I ever met Clark Gable? Gary Cooper? Ronald Colman? Having established that I knew no one of any importance she quit trying to draw me out. But she agreed with her husband when he said it was decent of us Yahnks to come over and help out…but when were the States going to come into the war?

I said that I did not know. Father spoke up. "Don't bother the Sister, Mr. Pratt. We'll be along a bit late, just like your Mr.

Chamberlain. In the meantime please be polite to those of us who are here and helping."

"No offense meant, Mr. Johnson."

"And none taken, Mr. Pratt. Clamp!"

(Mrs. Pratt was as good an operating nurse as I've ever seen. She was always ready with what her husband needed without his asking for it-long practice together, I suppose. She had fetched the instruments he used; I assume that they were tools of his animal practice. That might bother some people; to me it made sense.)

Mr. Pratt was at the table that we had expected would be used by Jubal and Jill. (Our research on fine details was less than perfect, since it came from questioning people after the war was over.) So Jubal went out into the anteroom where the wounded waited and worked on triage, tagging the cases Cas and Pol were to carry through to Boondock—the ones who would otherwise have been allowed to die untreated, as being beyond hope. Jill gave a hand to both Dagmar and me, especially with anesthesia, such as it was.

Anesthesia had been a subject of much discussion at our Potemkin Village drills. It was bad enough to show up in the twentieth century with anachronistic surgical instruments…but Boondock anesthetic gear and procedures? Impossible!

Galahad decided on pressure injectors supplying metered amounts of "neomorphine" (as good a name as any—a drug not available in the twentieth century). Jill moved around the station and in the anteroom, injecting the damaged and the burned, and thereby left Dagmar and me with our hands free for surgery assistance. She made one try at helping Mrs. Pratt, but was waved away—Mrs. Pratt was using something I had not seen since 1910 or thereabouts: a nose cone with drops of chloroform.

The work went on and on. I wiped off our table between patients, until the towel I was using was so soaked with blood that it was doing more harm than good.

Gretchen reported a spotty kill on the second wave—sixty bombers attacked, forty-seven shot down. Thirteen bombers dropped at least one stick before being hit. Gretchen's girls were using particle beams and night-sight gear; the usual effect was to blow up the plane's gasoline tanks. Sometimes the bombs went off at the same time; sometimes the bombs exploded on hitting the ground; sometimes the bombs did not explode, leaving a touchy problem for bomb-disposal experts the next day.

But we saw none of this. Sometimes we would hear a bomb drop nearby and someone would remark, "Close," and someone would answer, "Too close," and we would continue working.

A shot-down plane makes a different sort of explosion from a bomb…and a fighter from a bomber. Mr. Pratt said that he could tell the crash of a Spitfire from the crash of a Messerschmitt. Probably he could. I could not.

The third wave broke into two formations, so Gretchen reported, and came in from southwest and southeast. But her girls now had practice in using what was essentially an infantry weapon against targets they were not used to, under conditions where they must be sure that they had bombers in their sights, not Spitfires. Gretchen described this one as a “skeet shoot.” I made note to ask her what that meant, but I never did.

There were lulls between waves, but not for us. As the night wore on we dropped farther and farther behind; they brought in victims faster than we could handle them. Jubal grew more liberal in tagging, and routed to Ishtar and her teams more and more of the less severely wounded. It made our help more blatant but it surely saved more lives.

During the fourth wave of bombing, sometime early in the morning, I heard Gretchen say, “Yeoman to Horse, emergency.”

“What is it, Gretchen?”

“Something—a piece of plane, probably—hit our gate.”

“Damage?”

“I don’t know. It disappeared. Whoof! Gone.”

“Horse to Yeoman, disengage. Evacuate via gate at aid station. Can you find it? Range and bearing?”

“Yes, but—”

#8220;Disengage and evacuate. Move.”

“But, Hazel, it is just our gate we’ve lost. We can still take out any bombers that come over.”

“Hold. Bright Cliffs, answer. Deety, wake up.”

“I am awake.”

“Research showed four waves, no more. Is Gretchen going to have any more targets?”

“One moment—” (It was a long moment.) “Gay says she can’t see any bombers warming up on the ground. We now have signs of dawn in the east.”

“Horse to all stations, disengage. Blood, wait for Yeoman, then evacuate…bringing Prime with you. Use injector if necessary. All stations, report.”

“Cliffs to Horse, roger wilco; here we come!”

“Yeoman to Horse, roger wilco. Father Schmidt is leading; I’m chasing.”

“Blood to Horse, roger wilco. Hazel, tell Ishtar to get all cases back here now…or she's got some unscheduled immigrants."

The next few minutes were hilarious, in a Grand Guignol fashion. First the terribly burned cases came pouring back through the incoming gate, on their own feet and now quite well. Surgery cases followed them, some with prostheses, some with grafts. Even the last cases, ones that Galahad and Ishtar and other surgical teams were currently working on, were patched up somehow, pushed through to Beulahland, there to be finished and to stay for days or weeks—and then sent back through to Coventry only minutes after Hazel ordered an end to the operation.

I know that it was only minutes because none of Gretchen's troops had arrived from less than a mile away. Those girls move at eight miles per hour at field trot (3.5 meters per second). They should have made it in about eight or nine minutes, plus whatever time it took to get down that tower. I heard later that some of the civil-defense wardens tried to stop them and question them. I don't think the girls hurt anyone very badly. But they didn't stop.

They came pouring in, Maid Marians with long bows (disguised particle projectors), dressed for Nottingham Forest, led by Friar Tuck complete with tonsure, and followed by Gretchen, dressed also for a Robin Hood pageant and wearing a big grin.

She paused to slap Dagmar on her fanny as she passed Father's table, nodded at the Pratts, who were already stupefied by the procession of recovered patients going the other way. She stopped at Woodrow's table. "We did it!"

All three tables were bare at that moment; we had reached that wonderful point where no more wounded were waiting. Jubal came in from the anteroom, said, "You did indeed."

Gretchen hugged me. "Maureen, we did it!" She pulled my mask down and kissed me.

I bussed her back. "Now get your tail through that gate. We're on minus minutes."

"Spoilsport." She went on through, followed by Jubal and Gillian.

"All Clear" started sounding. Mr. Pratt looked at me, looked at the curtain, said, "Come, Harry."

"Yes, Pa."

"Goodnight, all." The old man plodded wearily away, followed by his wife.

Father said in a gruff voice, "Daughter, why are you here? You should be in San Francisco." He looked at Woodrow. "You, too, Ted. You're dead. So what are you doing here?"

"Not dead, Dr. Johnson. 'Missing in action' is not the same as dead. The difference was slight but important. A long time in hospital, a long time out of my head. But here I am."

“Mmrrph. So you are. But what is this charade? People in costumes. Other people trotting back and forth like Piccadilly Circus. Hell of a way to run an aid station. Am I out of my head? Did we take a direct hit?”

Hazel said in my ear, “Come through, all of you! Now!”

I subvocalized, “Right away, Hazel.” Dagmar had moved until she was behind my father. She had her injector ready; she queried me with her eyes. I shook my head a quarter of an inch. “Father, will you come with me and let me explain?”

“Mrph. I suppose—”

The roof fell in.

It may have been part of a Spitfire, or perhaps a Messerschmitt. I don’t know; I was under it. Gwen Hazel heard it through my mike; her grandsons Cas and Pol got themselves badly burned going back through to rescue us.

Everybody got burned—Castor, Pollux, Woodrow, Father, Dagmar, me—and gasoline burns are nasty. But Hazel got more help through, dressed in fireproofs (planning, not happenstance) and we were all dragged out.

All of this I got from later reports; at the time I was simply clobbered and then I woke up in hospital an unmeasured time later. Unmeasured by me, that is; Dagmar says that I was laid up three weeks longer than she was. Tamara won’t tell me. It does not matter; Lethe keeps one comfortable and unworried as long as necessary to let one get well.

After a while I was allowed to get up and take walks around Beulahland, a beautiful place and one of the few truly civilized places in any world. And then I was transferred back to Boondock…and Woodrow and Father and Dagmar came to call on me.

They all leaned over my bed and kissed me and I cried awhile and then we talked.

It was a big wedding. There was Mycroft and Athene and Minerva of course, and my grandson Richard Colin, who had at last forgiven Lazarus (for being his father). My darling Gwen Hazel had no reason to remain on leave from the family when Richard Colin was willing and eager to join. My daughters Laz and Lor had decided to cancel the indentures of their husbands, Cas and Pol, in recognition of their heroism in diving back into the fire for us four laggards—and to allow them to marry into the family. And there was Xia and Dagmar and Choy-Mu and Father and Gretchen—and the rest of us who had been Longs for years—some more years, some less. Our new family members each had had one reason or another to hesitate, but Galahad and Tamara made it clear: We take just one vow, to safeguard the welfare and happiness of all our children.

That’s our total marriage contract. The rest is just poetic ritual.

Whom you sleep with, whom you make love with, is your private business. Ishtar, as our family geneticist, controls pregnancy and progeny to whatever extent control is needed for the welfare of our children.

So we all joined hands in the presence of our children (of course Pixel was there!) and we pledged ourselves to love and cherish our children-those around us, those still to come, worlds without end.

And we all lived happily ever after.

People in this Memoir
Maureen Johnson Smith Long, July 4, 1882
Pixel, a cat

MAUREEN S ANCESTORS, AUNTS, UNCLES, IN-LAWS
Ira Johnson, M.D., father, August 2,1852
Adele Pfeiffer Johnson, mother
John Adams Smith, father-in-law
Ethel Graves Smith, motherin-law

(Paternal Ancestors)
Asa Edward Johnson, grandfather, 1813-1918
Rose Altheda McFee Johnson, grandmother, 18141918
George Edward Johnson, greatgrandfather, 1795-1897
Amanda Lou Fredericks Johnson, great-grandmother, 1798-1899
Terence McFee, greatgrandfather, 1796-1900
Rose Wilhelmina Brandt McFee, great-grandmother, 1798-1899

(Maternal Ancestors)
Richard Pfeiffer, grandfather, 1830-1932
Kristina Larsen Pfeiffer, grandmother, 1834-1940
Robert Pfeiffer, greatgrandfather, 1809-1909
Heidi Schmidt Pfeiffer, great-grandmother, 1810-1913
Ole Larsen, greatgrandfather, 1805-1907
Anna Kristina Hansen Larsen, great-grandmother, 1810-1912

IRA JOHNSON S SIBLINGS
Samantha Jane Johnson, 1831-1915
James Ewing Johnson, 1833-1884
(married Carole Pelletier, 1849-1954)
Walter Raleigh Johnson, 1838-1862

Alice Irene Johnson, 1840
Edward McFee Johnson, 1844-1884
Aurora Johnson, 1850

MAUREEN S SIBLINGS
Edward Ray Johnson, 1876
Audrey Adele Johnson, 1878(married Jerome Bixby, 1896)
Agnes Johnson, 1880
Thomas Jefferson Johnson, 1881
Benjamin Franklin Johnson, 1884
Elizabeth Ann Johnson, 1882
Lucille Johnson, 1894
George Washington Johnson, 1897

Nelson Johnson, cousin, 1884
(son of James Ewing Johnson and Carole Pelletier)

MAUREEN’S DESCENDANTS AND THEIR SPOUSES
Nancy Irene Smith, December 1, 1899
(married Jonathan Sperling Weatheral)
Carol Smith, January 1,1902
(married Roderick Schmidt Jenkins)
Brian Smith Junior, March 12,1905
George Edward Smith, February 14, 1907
Marie Agnes Smith, April 5,1909
Woodrow Wilson Smith/Lazarus Long, *et al.* November 11,1912
(first wife: Heather Hedrick)
Richard Smith, 1914-1945
(married Marian Hardy)
Ethel Smith, 1916
Theodore Ira Smith, March 4, 1919
Margaret Smith, 1922
Arthur Roy Smith, 1924
Alice Virginia Smith, 1927
(married Ralph Sperling)
Doris Jean Smith, 1930
(married Roderick Briggs)
Patrick Henry Smith (by Justin Weatheral), 1932
Susan Smith, 1934
(married Henry Schultz)
Donald Smith, 1936
Priscilla Smith, 1938
Lapis Lazuli Long, cloned from Lazarus, A.D. 4273
Lorelei Lee Long, cloned from Lazarus, A.D. 4273

Richard Colin Campbell Ames, grandson, A.D. 2133
(son of Lazarus Long and Wendy Campbell)
Roberta Weatheral Barstow, granddaughter, December 25,1918
Anne Barstow Hardy, great-granddaughter, November 2, 1935
Nancy Jane Hardy, great-great-granddaughter, June 22,1952

MAUREEN S SPOUSES, CO-SPOUSES, LOVERS, FRIENDS
Charles Perkins, 1881-1898
Brian Smith, husband, 1877-1996
Justin Weatheral, 1875
Eleanor Sperling Weatheral, 1877
James Rumsey, Sr., M.D.
James Rumsey, Jr., M.D.
Velma Briggs Rumsey (Mrs. James Rumsey, Jr.)
Mammy Della
Elizabeth Louise Barstow Johnson (Mrs. Nelson Johnson)
Hal and Jane Andrews
George Strong
Arthur Simmons, 1917
Jubal Harshaw, 1907
Tamara
Ishtar
Galahad
Hilda Mae Corners Burroughs Long
Deety Burroughs Carter Long
Jacob Burroughs Long
Zebadiah John Carter Long

CATS
Pixel
Charge d’Affaires
Princess Polly Ponderosa Penelope Peachfuzz
Random Numbers
Captain Blood

MORE PEOPLE
Judge Hardacres, a corpse
Eric Ridpath, M.D.
Zenobia Ridpath, a gracious hostess
Adolf Weisskopf, M.D.
Dagmar Dobbs, RN
Major Gretchen Henderson, Time Corps soldier
Jesse F. Bone, DVM—he saved a kitten
Ira Howard—he funded the Howard Foundation, 1825-1873

Jackson Igo and sons
Judge Orville Sperling, Foundation Chairman, 1840
The Reverend Clarence Timberly
Mrs. Ohlschlager, neighbor and friend
The Reverend Dr. Ezekiel “Biblethumper”
Mr. Fones, employer of Brian Smith
Mr. Renwick, driver, Great Atlantic and Pacific Tea Co.
The Reverend Dr. David C. Draper
Mr. Smaterine, a banker
Deacon Houlihan, a bank president
Mr. Schontz, a butcher
Anita Boles, a stenographer
Arthur J. Chapman, Howard Foundation Trustee
Dr. Bannister, dean of academics, KCU
Alvin Barkley, President, U.S.A., 1941-1949, time line two
George S. Patton, Jr., president, U.S.A., 1949-1961, time line two
Rufus Briggs, Foundation trustee, an oaf
D. D. Harriman
Col. Frisby, Argus Security Patrol
Rick, Argus Security Patrol
Mrs. Barnes, matron, Argus Security Patrol
Mr. Wren, Public Health officer
Mrs. Lantry, Public Health officer
Daniel Dixon, financier
Dr. Macintosh, chancellor, University of New Mexico
Helen Beck, dancer/scholar
Dora Smith (Mrs. W. W. Smith), New Beginnings colony
Helen Smith, daughter of Mr. and Mrs. W. W. Smith
Freddie, a gunsel
Patty Paiwonski, a priestess with snakes
Wyoming Long, daughter of Gwen Hazel and Lazarus
Castor and Pollux, grandsons of Gwen Hazel
The Reverend Dr. Hendrik Hudson Schultz, Time Corps agent
Gillian Boardman Long, RN, quondam high priestess
Church of All Worlds

COMPUTER PEOPLE
Mycroft Holmes IV, chairman Lunar Revolution, time line three
Minerva Long, former executive computer Tellus Secundus, now flesh and blood
Athene, executive computer Tellus Tertius, Minerva’s twin
Shiva, Athene/Mycroft interfaced, led by Minerva
Dora, sentient ship
Gay Deceiver, sentient ship

THE FIRST MAN ON THE MOON
Time line one—Captain John Carter of Virginia
Time line two—Leslie LeCroix
Time line three—Neil Armstrong
Time line four—Ballox O'Malley
Time line five—Skylark DuQuesneNOT SHOW
Time line six—Neil Armstrong (alternate time line)

THE COMMITTEE FOR AESTHETIC DELETIONS
Dr. Frankenstein
Dr. Fu Manchu
Lucrezia Borgia
Hassan the Assassin
Bluebeard
Attila the Hun
Lizzie Borden
Jack the Ripper
Dr. Guillotine
Professor Moriarty
Captain Kidd
Count Dracula

PUBLIC FIGURES
Theodore Roosevelt
William McKinley
William Gibbs McAdoo
Franklin Delano Roosevelt
Josephus Daniels
Woodrow Wilson
Robert Taft
William Jennings Bryan
Al Smith
Paul McNutt
Herbert Hoover
John J. Pershing
Pancho Villa
Patrick Tumulty
William Howard Taft
Leonard Wood
Harry S. Truman
Champ Clark

PEOPLE OFF STAGE

Dr. Chadwick
Dr. Ingram
Richard Heiser
Pop Green, druggist
Dr. Phillips
Jonnie Mae Igo
Mrs. Malloy, landlady
The Widow Loomis
Mr. Barnaby, principal
Major General Lew Rawson, target
Bob Coster, ship design
Elijah Madison, driver
Charlene Madison, cook
Anne, a Fair Witness
Sarah Trowbridge, dead
Miss Primrose
"Scrooge" O'Hennessy
Annie Chambers, madam
Mrs. Bunch, gossip
Mr. Davis, see "Fones"
Cowboy Womack, miner
The Jenkins girl
Mr. Wimple, bank teller
Nick Weston
Mr. Watkins
Mr. Hardecker, principal
Granny Bearpaw, cook
Mr. Ferguson, chief engineer

ASSOCIATED STORIES

The Man Who Sold the Moon and Other Stories

Persons in "The Man Who Sold the Moon"—D. D. Harriman, George Strong, Daniel Dixon, Chief Engineer Ferguson, Bob Coster, Leslie LeCroix. In "Requiem"—D. D. Harriman, George Strong.

Revolt in 2100 and Other Stories

In " 'If This Goes On—' "—Nehemiah Scudder. In "Misfit"—(Elizabeth) Andrew Jackson Libby (Long).

Methuselah's Children

Lazarus Long aka Woodrow Wilson Smith, Andrew Jackson Libby.

Time Enough for Love

Lazarus Long, Ira Weatheral, Hamadryad, Ishtar, Galahad, Tamara, Lapis Lazuli, Lorelei Lee, Justin Foote 45th, “Theodore Bronson,” Dr. Ira Johnson, Maureen Johnson Smith, Brian Smith, Nancy Smith, Carol Smith, Brian Smith, Jr., George Edward Smith, Marie Agnes Smith, Woodrow Wilson Smith, Ethel Smith, Richard Smith, Justin Weatheral, Eleanor Weatheral, Jonathan Sperling Weatheral.

The Rolling Stones
Hazel Stone, Castor Stone, Pollux Stone.

The Moon Is a Harsh Mistress
Hazel Stone, Mycroft Holmes IV.

Stranger in a Strange Land
Gillian Boardman, Jubal Harshaw, Anne (Fair Witness), Patty Paiwonski.

The Number of the Beast
Deety Burroughs Carter, Zebadiah John Carter, Jacob Burroughs, Hilda Mae Corners Burroughs, Lazarus Long, Elizabeth Andrew Jackson Libby Long, Lapis Lazuli Long, Lorelei Lee Long, Maureen Johnson Long, Hamadryad Long, Tamara Long, Hazel Stone, Castor Stone, Pollux Stone, Minerva Long, Jubal Harshaw, Athene, Anne (Fair Witness), Dr. Jesse F. Bone, Samuel Clemens.

The Cat Who Walks Through Walls
Hazel Stone aka Gwen Novak, Col. Richard Colin Campbell Ames, Gretchen Henderson, The Rev. Dr. Hendrik Hudson Schultz, Tamara, Athene, Dong Xia, Marcy Choy-Mu, Pixel, Lazarus Long, Wendy Campbell Ames, Maureen Johnson Long, Justin Foote 45th, Wyoming Long, Jacob Burroughs Long, Deety Burroughs Carter Long, Jubal Harshaw.

N.B.: The Past Through Tomorrow is an omnibus volume containing The Man Who Sold the Moon and Other Stories, The Green Hills of Earth and Other Stories, Revolt in 2100 and Other Stories, and Methuselah’s Children.

FOR US, THE LIVING

A Comedy of Customs

For Heinlein's Children

"It is for us, the living, rather, to be dedicated to the unfinished work . . . that this nation, under God, shall have a new birth of freedom ..."
—Lincoln at Gettysburg

Editor's note

This novel was written by Robert Heinlein between 1938 and 1939 and was never edited while Heinlein was alive. While the novel is presented in its original form, minor editorial changes have been made for clarity and style.

INTRODUCTION

RAH DNA

"Any map of the world that does not include Utopia is not even worth glancing at."
—Oscar Wilde

Most authorities are calling this book Robert A. Heinlein's first novel. I avoid arguing with authorities—it's usually simpler to shoot them—but I think it is something far more important than that, myself, and infinitely more interesting.

But my disagreement is respectful, and I'm not prepared to dispute the point with sidearms, or even ripe fruit. Robert himself called *For Us, The Living* a novel, repudiating that label only once that I know of, in private correspondence, and the book clearly has at least as much right to be called a novel as, say, H. G. Wells's *When the Sleeper Wakes* (Robert's favorite novel, he once told me) or *The Shape of Things to Come.*

But no more right. And those two volumes are from the last stage of Wells' illustrious career, at the point when, in Theodore Sturgeon's memorable phrase, the master had "sold his birthright for a pot of message." They are not the books to give to a reader unfamiliar with H. G. Wells, and this is not the book to give to the hypothetical blind Martian hermit unfamiliar with Robert A. Heinlein's work. Like the Wells titles, or Edward Bellamy's *Looking Backward,* this book is essentially a series of Utopian lectures, whose fictional component is a lovely but thin and translucent negligee, only half-concealing an urgent desire to seduce. At age thirty-two, Robert was already trying to save the world—and perfectly aware that the world was largely disinclined to be saved.

If this were really a novel in the same sense as any of Robert's other long works, one would be forced to call at least its fictional aspect deficient, for many of its characters—*quite* uncharacteristically—achieve little depth and behave oddly. Even in his most exotic settings, Robert's characters—even, or perhaps especially, his aliens—were always, always *real.* And in real life, the standard response to a man who tells you he was born 150 years ago in a different body is not, we may as well admit, simply to nod and begin explaining to him how keen everything is nowadays, as do all the people that Perry Nelson meets in 2086.

If one supposes, however, that none of these characters was ever intended—or needed—to be any more real than their colleague Mr. A Square of Flatland, then one cannot help but be struck by how surprisingly much humanity, personality, and appeal they do manage to acquire for us, without ever shirking their lecturing duties. There is no question that by book's end, Perry and his Diana are as real and alive as any other Heinlein couple, if more lightly sketched.

Nonetheless, I submit that there was never a day in his life when Robert Anson Heinlein *the fiction writer* would have written a two-page footnote—and certainly not to introduce *character development.* To me, that detail alone is sufficient proof that he simply was not thinking in story terms when he sat down to compose *For Us, The Living.*

That is why I say that it is so immensely much more than just his first novel. It is *all* of them, dormant.

It seems clear to me, as he himself admitted, that Robert began this book with the perfectly honorable artistic intention of lying through his teeth: of disguising a series of lectures as fiction, purely in order to bring them to the attention of those who, finding the implication of their own imperfection upsetting, would not knowingly consent to be lectured. He succeeded brilliantly; one may agree or disagree with any of the theories and ideas he puts forth here, but one will most certainly and emphatically do one or the other: I defy anyone to lose interest in the middle of the argument—this despite the extreme complexity and, in some cases, sheer profundity of the ideas discussed. Perry is easily as good at his job as Mr. A Square, and does it at much greater length and (ahem) depth.

As thinly fictionalized lecture series, the book failed, for much the same reasons Robert himself had failed of election the previous year: in 1939, most of his ideas were—one is quite unsurprised to learn—wildly ahead of their time, radical, and opposed by powerful societal institutions. Nonetheless, though unpublishable then, its completion was an event of almost inexpressible importance in twentieth century English letters.

Because here, I think, is what happened:

On some unknown day in the first four months of 1939, Robert Anson Heinlein sat looking gloomily at a carbon of the manuscript that had just been rejected a second time and found himself thinking back over the whole long, painful period of its creation—the endless hours hunched over a typewriter, staring at a blank piece of paper until beads of blood formed on his forehead. And as he did so, two revelations came to him, in this order:

First, he realized, with surprise and warm pleasure, that the most enjoyable, almost effortless part of the entire experience had *not* been the world-saving he'd set out to accomplish, not the logical theories, mathematical proofs, or clever arguments of which he was so proud ... but the storytelling part, that he had intended only as a come-on for the crowd. All at once, I think, it came to him that the lecturer must remain standing in the square, on a rickety soapbox, and speak at the top of his lungs, and be heckled by boobs . . . but the storyteller sits in cross-legged comfort in the shade, and *his* listeners crowd round to hear him whisper, offering beer for his sore throat. And when he is done, they give him money, without him even asking.

Second, he looked back over the lengthy and detailed imaginary future he had just thrown together as a set decoration, and saw the ideas stacked all round its empty stage ... and realized it offered him a canvas so broad that, given enough time, he might contrive to spend all the rest of his working days in the sheer joy of telling stories, creating friends and heroes out of nothing, leaping across galaxies and inside hearts—and still end up putting across every insight and opinion he felt the world needed to hear.

In that moment, he understood for the first time that he wanted to be a storyteller. That he wanted to be a science fiction writer. No, I'm wrong: he realized that he *was* a science fiction writer—and accepted his doom. In the terminology of Roger Zelazny's immortal novel *Lord of Light,* he took on his Aspect, and raised up his Attribute, and was born a god. In that moment, he ceased being Bob Heinlein, shipwrecked sailor and unemployed engineer, and became RAH, the Dean of Modern Science Fiction—the Man Who Sold The Moon—Lazarus Long, who cannot die. In my dreams, I can almost imagine what it must have felt like.

When he was good and ready, he announced the news to the rest of us, by sitting down in April and producing, first crack out of the box, one of the most unforgettable pieces of short fiction in the English language, "Lifeline." *Two years later,* he was the Pro Writer Guest of Honor at Denvention, the Third World Science Fiction

Convention in Denver, and everyone in that banquet hall already knew he owned the field. Five months after he gave his famous Guest of Honor speech on time-binding, "The Discovery of the Future," Japan blindsided Pearl Harbor. But once that pesky distraction had been dispensed with, Robert turned his attention to the wow-science fiction literary world, and conquered that, too, with an ease, elegance, and speed that Hitler and Tojo could have learned from.

But everything began on that unknown day or night sometime in early 1939, when Robert had his own personal equivalent of the blinding flash in which Nikola Tesla suddenly saw in his head a complete 3-D working model of the first-ever AC electric motor, correctly tuned and broken in, ready to be manufactured without delay for testing.

The seeds of *many* of Robert's major novels are clearly visible, here, needing only room and time to grow. The essential core of his entire career is implicit as DNA code buried in the pages of *For Us,The Living:* it constitutes an overflowing treasure chest of themes, ideas, theories, concepts, characters, and preoccupations he would draw on again and again for the next half century to inform his stories. Time travel; multiple identity; transcendence of physical death; personal privacy; personal liberty; personal and political pragmatism; using good technology for personal hedonistic comfort; balancing of privilege and responsibility; the arts, and especially new future artforms like dance in variable gravity; the metric system; rolling roads; then-unconventional loathing of racism, sexism, and anti-Semitism; Alfred Korzybski's general semantics; alternate histories; the nature of sexual love; alternatives to monogamy and conventional marriage; spirituality; the pseudospirituality of the loathsome Nehemiah Cheney—excuse me, Scudder; The Crazy Years; space travel, the Moon, and Diaspora to the stars . . . it's all here, nascent, in thumbnail view. So is that splendid, unmistakable voice.

Robert's ideas and opinions certainly evolved over time, particularly after he met his last wife, and this book is far from his last word on Utopia. But the differences themselves are fascinating and illuminating to any serious student of his work. It's clear that, from the moment it finally dawned on him he was a storyteller, all Robert Heinlein really needed to produce that towering body of work that changed the world and put footprints on the Moon was time, typing paper, Virginia Gerstenfeld Heinlein, and a series of publishers' royalty checks sufficient to keep them both smiling. He may not have consciously known, himself, just where his work would take him, in anything like the kind of detail this book prefigures. I rather hope not. But the work already knew.

And now, thanks to Robert James—may he be as lucky in love as

Lazarus, for as Long!—and thanks to Michael Hunter, Eleanor Wood, and Sarah Knight, we all do.

We are deeply in their debt.

This may not (or may—I repeat: I won't argue) be a novel in the classic sense, but to me it's something more interesting. It's a career in a box ... a freeze-dried feast... a lifetime, latent in a raindrop ... a lifework seed, waiting to be watered by our tears and laughter—RAH's literary DNA...

...or half of it, at any rate. It's worth remembering that this is one of the very few examples we'll ever see of the writing of one of the century's great lovers, the man who literally defined the word* [*love: the condition in which the welfare and happiness of another become essential to your own.]

...before he met the love of his life. The difference is palpable; I'm not trying to offer a Zen koan when I say that it is in her very absence in this book that Ginny is perhaps even more present than in any other. One senses him yearning for her, straining to imagine her. The Portuguese word for "the presence of absence," *saudade,* is the heart of *fado*—reading this book was an emotional as well as intellectual experience for me, is all I'm trying to say: I kept hearing Django play a bittersweet guitar as I turned the pages. To read this book is to know both Robert Heinlein and the late Virginia Heinlein much better—and that is something I've wanted to do all my adult life.

Fate has brought an unexpected gift from beyond the grave, for us, the living.

Spider Robinson Bowen Island, British Columbia 5 September 2003 www.spiderrobinson.com

FOR US, THE LIVING

I

"Look out!" The cry broke involuntarily from Perry Nelson's lips as he twisted the steering wheel. But the driver of the green sedan either did not hear him or did not act. The next few seconds of action floated through his mind like slow motion. He saw the left front wheel of the green car float past his own, then the right wheel of his car crawled over the guard rail, his car slid after it and hung poised on the edge of the palisade. He stared over the hood and saw facing him the beach a hundred and thirty feet below. A blonde girl in a green bathing suit was catching a beach ball. She had jumped in the air to do it, both arms outstretched, one leg pointed. She was very graceful. Beyond her a wave broke on the sand. The crest hung and dripped whipped cream. He glanced back at the girl. She was still catching the beach ball. As she settled back on her feet, he drifted clear of the car and turned in the air away from her. Facing him were the rocks at the foot of the bluff. They approached as he watched them, separated and became individuals. One rock selected him and came straight toward him. It was a handsome rock, flat on one side and brilliant while in the sunshine. A sharp edge faced him and grew and grew and grew until it encompassed the whole world.

Perry got up, shook his head, and blinked his eyes. Then he recalled the last few seconds with startling clarity and threw up his hands in convulsive reflex. But the rock was not in front of his face. There was nothing in front of his face but whirling snow flakes. The beach was gone and the bluff and the rest of his world. Nothing but snow and wind surrounded him—wind that cut through his light clothing. A gnawing pain in the midriff resolved into acute hunger. "Hell!" said Perry. Hell. Yes, hell it must be, cold instead of hot. He commenced to walk but his legs were weak under him anda giddiness assailed him. He staggered a few steps and fell on his face. He attempted to rise, but was too weak and decided to rest a moment. He lay still, trying not to think, but his confused brain still struggled with the problem. He was beginning to feel warmer when he found a solution. Of course! The girl in the green bathing suit caught him and threw him into the snow bank—soft snow bank—nice warm snow bank—nice—warm—

"Get up" the girl in the green bathing suit was shaking him. "Get up! Hear me? *Get up!"* What did she want—to hell with games—just because she wanted to play games was no reason to slap a fellow's face. He struggled to his knees, then fell heavily. The figure beside him slapped him again and nagged him until he rose to his knees, then steadied him and helped him to his feet. "Easy now. One arm over my shoulders. It's not far."

"I'm all right."

"Don't be a fool. Lean on me." He looked down at the face of his companion and tried to focus his eyes. It *was* the girl in the green bathing suit, but what in hell was she doing dressed up like Admiral Byrd? Complete to the parka. But his tired brain refused to worry and he focused all of his attention on putting one icy leaden foot in front of another.

"Mind the steps. Easy. Now hold still." The girl sang one clear note and a door opened in front of them. He stumbled inside and the door closed. She guided him to a couch, made him lie down, and slipped away. Presently she returned with a cup of liquid. "Here. Drink this."

He reached for it, but his numbed fingers refused to grasp, and he spilled a little. She took the cup, lifted his head with her free arm, and held it to his lips. He drank slowly. It was warm and spicy. He fell asleep watching her anxious face.

He awoke slowly, becoming aware of a deep sense of comfort and wellbeing almost before he was aware of his own ego. He lay on his back on a cushion as soft as a feather bed. A light cover was over him and as he stretched he became aware that he was 'sleeping raw'. He opened his eyes. He was alone in a room of ample proportions possibly thirty feet long and oval in shape. Opposite him was a fireplace of quaint but pleasing pattern. It consisted of a vertical hyperboloid, like half a sugar loaf some ten feet high, which sprang out from the wall. In the base a mighty yawning mouth had been carved out, the floor of which was level and perhaps ten inches above the floor of the room. The roof of the mouth was another hyperboloid, hollow and eccentric to the first. On the floor of this gargantuan gape a coal fire crackled cheerfully and threw its reflections around the room. The room appeared almost bare of furniture except for the couch which ran two thirds of the way around the wall.

He turned his head at a slight noise and saw her coming in the door. She smiled and hurried to him. "Oh, so you are awake. How do you feel?" One hand sought his pulse.

"I feel grand."

"Hungry?"

"I could eat a horse."

She giggled. "Sorry—no horses. I'll soon have something better for you. But you mustn't eat too much at first." She straightened up. "Let me get out of these furs." She walked away while fumbling with a zipper at her throat. The furs were all one garment which slipped off her shoulders and fell to the floor. Perry felt a shock like an icy shower and then a warm tingle. The fur coverall was her only garment and she emerged as naked as a dryad. But she took no note of it, simply picked up the coverall and glided to a cupboard, which opened as she approached, and hung it up. Then she proceeded to a section of the wall covered with a mural of Demeter holding a horn of plenty. It slid up, exposing an incomprehensible aggregation of valves, doors, and shiny gadgets. She kept very busy for some ten minutes, humming as she worked. Perry watched her in fascination. His amazement gave way to hearty appreciation for she was young, nubile, and in every way desirable. Her quick movements were graceful and in some way very cheerful and reassuring. Her humming stopped. "There!" she exclaimed, "All ready, if the invalid is ready to eat." She picked up a laden tray and walked toward the far end of the room. The mural slid back into place and the shiny gadgets were gone. She set the tray on the couch, then pulled a countersunk handle. The handle came out in her hand, dragging with it a shelf perhaps two feet wide and four long. She turned back towards Perry and called, "Come, eat while it's hot."

Perry started to get up, then stopped. She noticed his hesitation and a troubled look clouded her face. "What is the matter? Are you still too weak?"

"No."

"Sprain anything?"

"No."

"Then come, please. Whatever is the matter?"

"Well, I—uh—you—see I—" How the hell do you tell a pretty girl who is naked as a jaybird that you can't eat with her because you are naked too? Especially when she doesn't seem to know what modesty is?

She bent over him with obvious concern. Oh, the hell with it, said Perry to himself, and climbed out of bed. He swayed a little.

"Shall I help you?"

"No, thanks. I'm OK."

They sat down on opposite sides of the shelf table. She touched a button and a large section of the wall beside them slid up, exposing through glass a magnificent view. Across a canyon tall pines marched up a rugged mountainside. Up the canyon to the right some seven or eight hundred yards a waterfall hung a curtain of gauze in the breeze. Then Perry looked down—down a direct drop from the window. Vertigo shook him and again he hung poised on the palisade and stared over the hood of his car at the beach. He heard himself cry out. In an instant her arms were about him, consoling him. He steadied himself. "I'm all right," he muttered, "But please close the shutters."

She neither argued nor answered, but closed them at once. "Now can you eat?"

"Yes, I think so."

"Then do so and we will talk later."

They ate in silence. He examined his food with interest. A clear soup; some jelly with a meaty flavor; a glass of milk; light rolls spread with sweet butter; and several kinds of fruit, oranges, sugar-sweet and large as grapefruit, with a skin that peeled easily like a tangerine, some yellow fruit that he did not recognize, and black-flecked bananas. The dishes were light as paper but covered with a hard shiny lacquer. The fork and spoon were of the same material. Finally he dropped the last piece of rind and ate the last crumb of roll. She had finished first and had been leaning on her elbows, watching him.

"Feel better?"

"Immensely."

She transferred the dishes to the tray, walked over to the fireplace, dumped the load on the fire, and returned the tray to its rack among the shiny gadgets. (Demeter swung obligingly out of the way.)

When she returned, she shoved the shelf-table back in its slot and extended a slender white tube.

"Smoke?"

"Thanks." It was about four inches long and looked like some Russian atrocity. Probably scented, he thought. He inhaled gingerly, then drew one to the bottom of his lungs. Honest Virginia tobacco. The only thing in the house that seemed absolutely homey and normal. She inhaled deeply and then spoke.

"Now then, who are you and how did you get onto this mountainside? And first, your name?"

"Perry. What's yours?"

"Perry? A nice name. Mine's Diana."

"Diana? I should think so. Perfect."

"I'm a little too cursive for Diana,"—she patted her thigh—"but I'm glad you like it. Now how did you get lost out in that storm yesterday without proper clothes and no food?"

"I don't know."

"You don't know?"

"No. You see, it was this way. I was driving down the palisade when a car tried to pass a truck on a hill coming towards me. I swung out to miss it and my right front wheel jumped the curb and over I went, car and all—the last I remember was staring down at the beach as I fell—until I woke up in the snow storm."

"That's all you remember?"

"Yes, and then you helping me, of course. Only I thought it was a girl in a green bathing suit."

"In a what?"

"In a green bathing suit."

"Oh." She thought for a moment. "What did you say made you go over the palisade?"

"I had a blowout, I guess, when my wheel hit the curb."

"What's a blowout?"

He stared at her. "I mean that my tire blew out—when it struck the curb."

"But why would it blow out?"

"Listen—do you drive a car?"

"Well—no."

"Well, if a pneumatic rubber tire strikes a sharp edge when you are going pretty fast, it's likely to explode—blowout. In that case anything can happen. In my case I went over the edge."

She looked frightened, and her eyes grew wide. Perry added, "Don't take it so hard. I'm not hurt."

"Perry, when did this happen?"

"Happen? Why, yester—No, maybe—"

"No, Perry, the date, the date!"

"July twelfth. That reminds me, does it often snow here—"

"What *year,* Perry?"

"What year? Why, this year!"

"What *year,* Perry—tell me the number."

"Don't you know?—Nineteen-thirty-nine."

"Nineteen-thirty-nine—" She repeated the words slowly.

"Nineteen-thirty-nine. But what the devil is wrong?"

She stood up and paced nervously back and forth, then stopped and faced him. "Perry, prepare yourself for a shock."

"OK, shoot."

"Perry, you told me that yesterday was July twelfth, nineteen-thirty-nine."

"Yes."

"Well, today is January seventh, twenty-eighty-six."

II

Perry sat very still for a long moment.

"Say that again."

"Today is January seventh, twenty-eighty-six."

"January—seventh,—twenty—eighty—six—It can't be—I'm dreaming—pretty soon I'll wake up." He looked up at her. "Then you're not real after all. Just a dream. Just a dream." He put his head in his hands and stared down at the floor.

He was recalled to his surroundings by a touch on his arm. "Look at me, Perry. Take my hand." She grasped his hand and squeezed it. "There. Am I real? Perry, you must realize it. I don't know who you are or what strange thing happened to you but here you are in my house in January twenty-eighty-six. And everything is going to be all right." She placed a hand under his chin and turned his face up to hers. "Everything is going to be all right. Place that in your mind." He stared at her with the frightened eyes of a man who fears he is going crazy. "Now calm yourself and tell me about it. Why do you think that yesterday you were in nineteen-thirty-nine?"

"Well, I *was,* I tell you—It had to be nineteen-thirty-nine, because it *was*—it couldn't be anything else."

"Hmm—That's no help. Tell me about yourself. Your full name, where you live, where you were born, what you do and so forth."

"Well, my name is Perry Vance Nelson. I was born in Girard, Kansas in nineteen-fourteen. I'm a ballistics engineer and a pilot. You see I'm an officer in the navy. Up until today I was on duty at Coronado, California. Yesterday—or whenever it was—I was driving from Los Angeles to San Diego on my way back from a weekend when this guy in the green sedan crowds me and I crack up on the beach."

She smoked and considered this. "That's clear enough. Except of course that it would make you one hundred and seventy-two years old and doesn't explain how you got here. Perry, *you* don't look that old."

"Well, what's the answer?"

"I don't know. Did you ever hear of schizophrenia, Perry?"

"Schizophrenia? Split personality." He considered, then exploded. "Nuts! If I'm crazy it's only in this dream. I tell you I *am* Perry Nelson. I don't know anything about twenty-eighty-six and I know all about nineteen-thirty-nine."

"That gives me a notion. I want to ask you some questions. Who was president in nineteen-thirty-nine?"

"Franklin Roosevelt."

"How many states in the union?"

"Fortyeight."

"How many terms did La Guardia serve?"

"How many? He was in his second term."

"But you just told me that Roosevelt was president."

"Sure. Sure. Roosevelt was president. La Guardia was Mayor of New York."

"Oh."

"Why did you ask that? Did La Guardia become president?"

"Yes. Two terms. Who were the most popular television actors in nineteen-thirty-nine?"

"Why, there weren't any. Television wasn't yet available. But listen, you are quizzing me about nineteen-thirty-nine. How do I know it's twenty-eighty-six?"

"Come here, Perry." She walked over the wall beside the fireplace and another section of the wall slid out of view. (—disconcerting, thought Perry, everything slips and slides—) Several rows of books were exposed. She handed him a slim volume. Perry read *Astronomikal Almanak and Efmerides 2086.* Then she dug out an old volume whose pages were brown with age. She opened it and pointed to the title page: *The Gallion of God—Sinclair Lewis, 1st printing, 1947.*

"Convinced?"

"I guess I'll have to be.—Oh, God!" he threw his cigarette in the fire and paced nervously up and down. Presently he stopped. "Look, is there any liquor here? Could I have a drink?"

"A drink—of what?"

"Whiskey, brandy, rum.—Anything with a jolt in it."

"I think I can take care of you." She disturbed Demeter again and returned presently holding a square bottle filled with an amber liquid. She poured him three fingers in a cup and added a small yellow pill.

"What's that?"

"Jamaica rum surrogate and a mild sedative. Help yourself. I've got an idea." She left him and went to the far end of the room where she seated herself on the couch and pulled out a small panel set in the wall. It appeared to be the front of a drawer. She lifted up a screen approximately a foot square and pressed a series of buttons below. Then she spoke: "Los Angeles Archives? Diana 160-398-400-48A speaking. I request search of Los Angeles and Coronado newspapers of July 12, 1939 for report of automobile accident involving Perry Nelson, naval officer. Expedited rate authorized. Bonus on thirty minutes. Report back. Thank you, clearing line." She left the drawer out and returned to Perry. "We will have to wait a while. Do you mind if I open the view now?"

"Not at all. I'd like to see it."

They seated themselves at the west end of the room where they had eaten and the shutters peeled back. It was late afternoon and the sun was nearing the shoulder of the mountain. Snow lay in the canyon and the thin amber sunlight streamed through the pines. They sat quietly and smoked. Diana poured herself a cup of surrogate, and sipped it. Presently a green light flashed from the open drawer and a single deep gong note sounded. Diana pressed a button nearby and spoke, "Diana 400-48 answering."

"Archives reporting. Positive. Disposition request."

"Televuestat Reno station with tube delivery, destination G610L-400-48, expedite rate throughout, bonus on ten minutes. Thank you. Clearing."

"You mentioned Reno. Are we near there?"

"Yes, we are about thirty kilometers south of Lake Tahoe."

"Tell me, is Reno still a divorce mill?"

"A divorce mill? Oh, no, Reno is not, as you call it, a divorce mill. There are no such things as divorces anymore."

"There aren't? What do a man and his wife do if they can't get along together?"

"They don't live together."

"Rather awkward in case one of them should fall in love again, isn't it?"

"No, you see—Good heavens, Perry, what a lot there is to teach you. I don't know where to start. However, I'll just plunge in and try to answer your questions. In the first place, there isn't any legal contract to be broken, not in your sense of the word. There are domestic contracts but they don't involve marriage in the religious or sexual aspects. And any of these contracts can be dealt with like any other secular contract."

"But doesn't that make a rather confusing situation, homes broken up, children around loose—what about children? Who supports them?"

"Why they support themselves on their heritage."

"On their heritage? They can't all be heirs."

"But they are—Oh, it's too confusing. I'll have to get some histories for you and a code of customs. These things are all bound up in major changes in the economic and social structure. Let me ask you a question. In your day what was marriage?"

"Well, it was a civil contract between a man and a woman usually sealed by a religious ceremony."

"And what did this contract stipulate?"

"It stipulated a lot of things not specifically mentioned, but under it the two lived together, she worked for him, more or less, and he supported her financially. They slept together and neither one was supposed to have love affairs with anybody else. If they had children they supported them until they were grown up."

"And what were the objects of this arrangement?"

"Well, principally for the benefit of the children, I guess. The children were protected and given a name. Also women were protected and supported and looked out for when they were bearing children."

"And what did the man get out of it."

"He got—well—a family and home life, and someone to do his cooking, and a thousand other little services, and if you will pardon me mentioning it, he had a woman to sleep with any time he needed one."

"Let's take the last first; was she necessarily the woman he wanted to 'sleep' with as you so quaintly put it?"

"Yes, I suppose so, else he probably wouldn't have asked her to marry him. No, by God, I know that is not true. It may be true when they first marry, but I know damn well that most married men see women every day that they would rather have than their own wives. I've watched 'em in every port."

"How about yourself. Perry?"

"Me? I'm not—I wasn't married."

"Didn't you ever see a woman you wanted to enjoy physically?"

"Of course. Many of them."

"Then why didn't you marry?"

"Oh, I don't know. I guess I didn't want to be tied down."

"If a man didn't have children to support and a wife to support would he be tied down by marriage?"

"Why yes, in a way. She would expect him to do everything with her and would raise Cain if he stepped out with other women and would expect him to entertain her sisters and her cousins and her aunts, and would be sore if he had to work on their anniversary."

"Good Lord! What a picture you paint. I don't understand all of your expressions but it sounds unbearable."

"Of course not all women are like that, some of them are good sports—man to man, but you can't tell when you marry them."

"It sounds from your description as if men had nothing to gain by marriage but an available mistress. And tell me, weren't there women for hire then at a lower cost than supporting one woman for life?"

"Oh yes, certainly. But they weren't satisfactory to most men. You see, a man doesn't like to feel that a woman goes to bed with him just for the money in his pocket."

"But you just said that women married to be supported."

"That's not quite what I meant. Or that's not all—at least not usually. Anyhow it's different. Besides men don't always play the game. You see a man marries partially to have exclusive right to a woman's attention, especially her body. But lots of them carry it to extremes. Marriage is no excuse for a man to slap his wife's face for dancing twice with another man—as I've seen happen."

"But why should a man want to have exclusive possession of a woman?"

"Well, he just naturally does. It's in his nature. Besides a man wants to be sure his children aren't bastards."

"We are no longer so sure, Perry, that such traits are 'nature' as you call them. And bastard is an obsolete term."

At this moment an amber light flashed at the other end of the room. Diana arose and returned shortly with a roll of papers. "They have arrived. Here, look." She unrolled them and spread them on the shelf-table. Perry saw that they were photostatic copies of pages of the *Los Angeles Times, Harold-Express,* and *Daily News* for July 13,1939. She pointed to a headline:

NAVAL FLIER KILLED IN CAR CRASH

Torrey Fines, Calif., July 12.

Lieutenant Perry V. Nelson, Navy pilot of Coronado, was killed today when he lost control of the car he was driving and plunged over the palisade here to his death on the rock below. Lieut. Nelson jumped or was thrown clear of the car but landed head first in a pile of loose rock at the foot of the cliff, splitting his skull. Death was instantaneous. Miss Diana Burwood of Pasadena was bathing on the beach below and narrowly escaped injury. She attempted to give first aid, then scaled the bluff and reported the accident with aid of a passing motorist.

There were similar stories in the other papers. The *Daily News* included a column cut of Perry in uniform. Diana examined this with interest. "The story checks perfectly, Perry. This is just a fair likeness of you, however." Perry glanced at it.

"I should say that it wasn't bad, considering the limitations of a half-tone reproduction."

"The surprising thing is that it looks like you at all."

"Why do you say that, Diana? Don't you believe me?" His hurt showed plainly in his face.

"Oh, no, no. I believe that you are telling the literal truth—insofar as you know it. But think, Perry. The head that was photographed to take this picture has—if this newspaper account is true—been dust for more than a century."

Perry stared at her and a look of horror crept into his eyes. He closed his eyes and clasped his head between his palms. He remained thus, face averted and body tensed for several minutes until he felt a gentle touch on his hair. Diana bent over him, pity and compassion in her eyes. "Perry, please. Listen to me. I didn't mean to distress you. I wouldn't hurt you intentionally. I want to be your friend if you will let me."

Gently she removed his hands from his temples. "It is a strange and marvelous thing that has happened to you, Perry, and I don't understand it at all. In some ways it is horrible and certainly terrifying. But it could be much worse—much worse. This is not a bad world in which you have landed. I think it is a rather kindly world. I like it and I am sure it must be better than being crushed and broken at the foot of the palisades. Please, Perry, I'd like to help you."

He patted her hand. "You're a good kid, Dian', I'll be all right. It's the shock more than anything. The realization that all that world I know is dead and gone. I knew it of course when you told me what year it was, but I didn't realize it until you pointed out to me that I'm dead, too—or at least that my body died." He jumped to his feet. "But say!—if my body is dead, where in God's name did I get this!"—and he slapped his side.

"I don't know, Perry, but I have an idea."

"What is it?"

"Not just yet. But we can start a little action toward finding out. Come with me." She opened out the drawer containing the communication instrument, and pushed one button. A pretty redheaded girl appeared on the screen and smiled. Diana spoke.

"Reno, please relay Washington, Bureau of records, Identification Sector."

"Check, Diana." The red head faded out.

"Does she know you?"

"Probably recognized me. You will understand."

Shortly another face appeared, that of an iron grey studious man. Diana spoke. "Identification requested."

"Which one of you?"

"Him."

"Check. Take position." The face turned away and a camera-like apparatus appeared.

"Put up your right hand, Perry," whispered Diana. Perry did so. The grey haired man reappeared.

"Listen, how can I analyze if you don't hold position? Haven't you ever used a phone before?"

"I—I guess not." Perry looked confused.

The slight irritation vanished from the man's voice. "What's the trouble, friend? Lost your continuity?"

"I guess you'd call it that."

"That's different. I'll fix you up in no time. Then you'll probably have no trouble to orient. Now do just as I tell you. Right hand, palm toward me about twenty centimeters from the screen. Down a little. Now just a hair closer. Your palm is tilted. Get it parallel to the screen. There. Hold it steady." A soft shirring and a click. "That's all. Do you want a full dossier or just name and number?"

Diana cut in. "Brief of dossier, please, with last entry in full.

Televuestat Reno station, tube delivery G610L-400-48, expedited rate."

"Charge to him when I get his number?"

"No, to me, Diana, 160-398-400-48A."

"Oooh! I *thought* I recognized you."

"This is private action." Diana's voice was cool and crisp.

The man looked indignant, then his face became impassive. "Madam, I am an official clerk of the Bureau of Records. I thoroughly understand the spheres of public and private action, and my oath and charge."

Diana melted at once. "I'm sorry. I truly am. Please forgive me."

He relaxed and smiled. "Of course, Miss Diana. You probably have to insist on the spheres. But, if you will permit, it would be an honor to provide this service for you."

"No, please, make the routine charge. But may I do you some service?" She inclined her head. The clerk bowed in return. "A picture perhaps?"

"If madam permits."

"My latest stereo. Face or full?"

He bowed without speaking.

"I'll send both. They shall cross your brief in the tubes."

"You are very kind."

"Thank you. Clearing." The screen went blank. "Well, Perry, we'll know soon. But I must get the poor chap his pictures. I didn't mean to offend him, but he was too touchy." She returned in a moment with two thin sheets and started to roll them up. Noticing Perry's interest, she paused. "Would you care to see them?"

"Yes, of course." The first picture was Diana's face in natural colors with a half smile warming it. But Perry was startled almost into dropping it. For the portrait was completely stereoscopic. It was as if he were looking through a window of cellophane at Diana herself posed stationary three feet back of the frame.

"How in the world are these done?"

"I'm neither an optics student nor a photographer, but I know the picture really does have some depth to it. It's a colloid about a half centimeter thick. It is done with two cameras, so it works only on one axis. Turn it around sideways." He did so. The picture went perfectly flat although remaining a fine photograph. "Now tilt it about fortyfive degrees." He did so and had the upsetting sensation of watching Diana's beautiful features melt and run until no picture was visible, but just an iridescense like oil on water. "You have to look at it along the right axis and within a narrow view angle, but when you do the two images blend in the stereo illusion. The brain interprets the confused double image given by two separated eyes as depth and by duplicating that confusion, they achieve the illusion."

Perry stared at the picture a moment more and tilted and twisted it. Diana watched with interest and sympathetic amusement. "May I see the other picture?"

"Here it is." Perry glanced at it, then swallowed. He had grown accustomed to Diana's nudity, more or less, and had been too much occupied mentally to think much about it, but nevertheless he had been aware of it in one corner of his mind all the time. Still, he was startled to discover that the second picture portrayed all of Diana in her own sweet simplicity, nothing more, and that it was as amazingly lifelike as the first, real enough to pinch. He swallowed again.

"You intend to send this, er—uh, these pictures to a man you've just met on the phone."

"Oh, yes, he wants them and I can afford it. And I was a bit rude. Of course some people would think it a bit brash for me to give him anything as intimate as a facial portrait but I don't mind."

"But,—uh—"

"Yes, Perry?"

"Oh, well, nothing I guess. Never mind."

III

Later while Diana monkeyed with the gadgets in the Demeter niche, the green light and gong note announced a tube delivery. "Get it, will you, Perry?" she called. "I've got both hands full." Perry puzzled with the controls, then found a small lever that opened the receptacle. He brought over the roll to Diana. "Read it aloud, Perry, while I finish dinner." He unrolled it and first noticed a picture of a young man who resembled his own memory of himself. He commenced to read. "Gordon 932-016-755-82A, Genes class JM, born 2057 July 7. Qualified and matriculated Arlington Health School 2075, transferred (approved) Adler Memorial Institute of Psychology 2077. Selected for research when Extra-sensory station was established by Master Fifield in 2080. Author of*AStudy of Deviant Data in Extra-Sensory Perception.* Coauthor (with Pandit Kalimohan Chandra Roy) of*Proteus: a History of the Ego.* Address Sanctuary (F-2), California. Unofficially reported in voluntary corporal abdication in 2083 August and transferred at the request of Sanctuary Council to inactive status 2085 August, body to remain in Sanctuary. Credit account on transfer to inactive $11,018.32 less depreciation $9,803.09, credit account reentered with service deduction $9802.09 less $500 credit convenience book $9,302.09 (enclosed)."

Attached to the end of the roll was a small wallet or notebook. Inside Perry found that the leaves were money, conventional money, differing only slightly in size and design from money in 1939. In the back of the book was a pad of blank credit drafts, a check book.

"What do I do with this stuff, Diana?"

"Do with it? Anything you like, use it, spend it, live on it."

"But it doesn't belong to me. It belongs to this fellow Gordon something-or-other."

"You are Gordon 755-82."

"Me? The hell I am."

"You *are,* though. The Bureau of Records has already acknowledged it and has your account reentered. You have the body listed as 932-016-755-82A. You can use any name you like, Perry, or Gordon, or George Washington, and the Bureau will gladly note the change in the record, but that number goes with that body and that credit account and they won't change it. Of course you don't have to spend it but if you don't, nobody will, and it will just get bigger."

"Can't I give it away?"

"Certainly—but not to Gordon."

Perry scratched his head. "No, I guess not. Say, what is this voluntary abdication stuff?"

"I'm not able to give a scientific account of it, but so far as anyone else is concerned it amounts to suicide by willing not to live."

"Then Gordon is dead?"

"No. Not according to the ideas of the people who monkey with these things. He simply was not interested in living here and chose to live elsewhere."

"How come his body is here okay?"

"According to this report Gordon's body—this body—" She pinched his cheeks. "—has been lying quietly in a state of arrested animation in the Sanctuary on the other side of this mountain. And so the mystery is partially cleared up."

His wrinkled brow showed no satisfaction. "Yes, I suppose so. But each mystery is explained with another mystery."

"There is just one mystery left that worries me, Perry, and that is why in the world you didn't break a leg and maybe your brand-new neck in getting over here. But I'm glad you didn't."

"So am I. Lord!"

"But now I must get to work." She stacked the supper dishes as she spoke.

"What work?"

"My paid work. I am not one of the ascetic souls that are content with their heritage checks. I've got to have money for ribbons and geegaws."

"What do you do?"

"I'm a televue actress, Perry. I dance and sing a little, and occasionally take part in stories."

"Are you about to rehearse?"

"No, I go on the waves in about twenty minutes."

"Goodness, the studio must be close by or you'll be late."

"Oh, no. It will be picked up from here. But you will have to be a good boy and sit still and not ask questions for a while or I *shall* be late. Come. Sit over here. Now face the receiver so." Another section of the wall flew up and Perry faced a flat screen. "There you can see the whole performance and watch me dance directly too." She opened the communicator drawer and raised the small screen. A rather homely debonair young man appeared. He wore a helmet with bulges over his ears. A cigarette drooped from one corner of his sardonic mouth.

"Hi, Dian'."

"Hello, Larry. Where j'a get the circles under your eyes?"

"That from you—and you so huffy about the private sphere of action. I had a blonde paint 'em on."

"She got the left one crooked."

"Cut out the arcing and get down to work, wench. Got your setup made?"

"Yeah."

"OK, testing." Lights sprang out from the near end of the room. Diana walked to the center of the room, turned around twice, and walked back and forth and up and down, then returned to the communicator.

"OK, Larry?"

"There's a halo in the lower left and it's not in my side, I don't believe."

"I'll take a look." She returned with the tube that had contained the Gordon dossier in her hand. "Gone now, Larry?"

"Yeah, what was it?"

"This." She held up the tube.

"Just like a female. Can't integrate. Sloppy minds, unable to—"

"Larry, one more crack out of you and I'll report you for atavism—probably Neanderthal."

"Cool down, small one. You have a super-magnificent brain. I love you for your intellect. Time's running short. Want some music?"

"Give it a blast.—Okay, turn it off."

"What are you giving the mob tonight, Dian'?"

"Highbrow stuff. Watch it—you might get an idea."

He glanced down at his controls. "Take your place, kid. I'm clearing."

Diana went quickly to the middle of the room and the lights went out. The larger screen facing Perry came suddenly to life. Facing him in stereo and color was a brisk young man, who bowed and smiled and commenced to speak: "Friends, we are again in the studios of the Magic Carpet in the tower of the Edison Memorial overlooking Lake Michigan. We bring you tonight your favorite interpreter of the modern theme in dance, lovely Diana, who will present another stanza in the Poem of Life."

The colors on the screen melted together, then faded to a light blue and a single high clear crystal note impinged on Perry's ears. The note trembled, then pursued a minor melody. Perry felt a mood of sadness and nostalgia creep over him. Gradually the orchestra picked up the theme and embroidered it while on the screen the colors shifted, blended, and ranged in patterns. Finally the colors faded and the screen went dark as the harmony wafted out of the music leaving a violin alone carrying the theme in the darkness. A dim finger of light appeared and picked out a small figure far back. The figure was prone, limp, helpless . The music conveyed a feeling of pain and despair and overpowering fatigue. But another theme encouraged, called for effort, and the figure stirred gently. Perry glanced over his shoulder and had to exert self control to refrain from going to the poor forlorn creature's assistance. Diana needed help, his heart told him, go to her! But he sat quietly and watched and listened. Perry knew little about dancing and nothing about it as a high art. Ballroom dancing for himself and tap dancing to watch were about his level. He watched with intent appreciation the graceful, apparently effortless movements of the girl, without any realization of the training, study and genius that had gone before. But gradually he realized that he was being told a story of the human spirit, a story of courage, and hope, and love overcoming despair and physical hurt. He came to with a start when the dance ended leaving Diana with arms flung out, face to the sky, eyes shining, and smiling in joy as a single bright warm light poured over her face and breast. He felt happier than he had since his arrival —happy and relieved.

The screen went dark, then the ubiquitous young man reappeared. Diana cut him off before he spoke, switched on the room lights and turned to Perry. He was surprised to see that she appeared shy and fussed.

"Did you like it, Perry?"

"Like it? Diana, you were glorious, incredible. I—I can't express it."

"I'm glad.

"And now I'm going to eat and we can visit some more."

"But you just had dinner."

"You didn't watch me closely. I don't eat much before dancing. But now watch—I'll probably get it down on the floor and worry it like an animal. Are you hungry?"

"No, not yet."

"Could you drink a cup of chocolate?"

"Yes, thanks."

A few minutes later they were seated on the couch, Diana with her legs curled up under her, a cup of chocolate in one hand, an enormous sandwich in the other. She ate busily and greedily. Perry was amused to think that this hungry little girl was that unearthly glorious creature of a few minutes before. She finished, hiccoughed, looked surprised and murmured, "Excuse me," then wiped up with one finger a blob of mayonnaise which had dropped on her tummy and transferred it to her mouth. "Now, Perry, let's take stock. Where are we?"

"Damned if I know. I know where I am and when I am and you tell me that I know who I am. Gordon zip zip zip and six zeros, but I might as well be a day old baby as for knowing what to do about it."

"Not so bad as that, Perry. In addition to an identity you have acquired a nice credit account, not large but adequate and your heritage check will keep you going, too."

"What is this heritage check business?"

"Let's not go into that now. When you study the economic system you'll understand. Right now it means a hundred and fifty dollars, more or less, every month. You could live comfortably on two-thirds of that, if you wanted to. What I wanted to talk about was the 'what to do about it' aspect."

"Where do we start?"

"I can't decide what you are to do about anything, but it seems to me that the very first thing to do is to bring you up to date so that you will fit in twenty-eighty-six. It is a rather different world. You must learn a lot of new customs and a century-and-a-half of history and a number of new techniques and so forth. When you are up to date, you can decide for yourself what you want to do—and then you can do anything you want."

"It sounds to me as if I'd be too old to want to do anything by that time."

"No, I don't think so. You can start right away. I've got a number of ideas. In the first place, while I haven't very many useful books in this house, I do have a pretty fair history of the United States and a short world history. Yes, and a dictionary and a fairly recent encyclopedia. Oh and I nearly forgot, an abridged code of customs that I had when I was a kid. Then I am going to call Berkeley and ask for a group of records on a number of subjects that you can play on the televue whenever you like. That will really be your most beneficial and easiest way to learn in a hurry."

"How does it work?"

"It's very simple. You saw my act in the televue tonight. Well, it's just as easy to put a record on it and see and hear anything that you want to that has ever been recorded. If you wanted to, you could see President Berzowski open Congress in 2001 January. Or if you like, you could see any of my dances from records."

"I'll do that first. To hell with history!"

"You'll do nothing of the sort. You will study until you are oriented. If you want to see me dance, I'll dance for you."

"OK, right now."

She stuck out her tongue at him. "Be serious. Besides the records, I'll think over who among my friends can help and I'll get them to come talk with you and explain the things that I can't."

"Why do you take all this trouble about me, Dian'?"

"Why, anybody would, Perry. You were sick and cold and needed help."

"Yes, but now you undertake to educate me and set me on my feet."

"Well, I want to do it. Won't you let me?"

"Well, maybe. But look here, oughtn't I to get out of your house and find some other place to stay?"

"Why, Perry? You're welcome here. Aren't you comfortable?"

"Oh, of course. But how about your reputation? What will people say?"

"I don't see how it could affect my reputation; you don't dance. And what does it matter what people think—all they could think is that we were companions, if they bothered to think about it at all. Besides very few people except my friends will know. It is strictly in the private sphere of action. The custom is quite clear."

"What custom?"

"Why, the custom which says that what people do out of public service or private employment is private as long as it doesn't violate the other customs. Where people go, what they eat, or drink, or wear, or how they entertain themselves, or who they love, or how they play are strictly in the private sphere. So one must not print anything about it or broadcast it, or speak about it in a public place, without specific permission."

"Paging Walter Winchell! What in the world is in your newspapers?"

"Lots of things. Political news and ships' movements and public events and announcements of amusements and most anything about public officials—though their private sphere is much narrower. It's an exception in the custom. And new creations in clothing and architecture and food and new scientific discoveries and lists of new televue records and broadcasts, and new commercial projects. Who's Walter Winchell?"

"Walter Winchell, why he was a—Dian', I don't think you will believe it but he made a lot of money talking almost entirely about things in what you call the private sphere of action."

She wrinkled her nose. "How disgusting!"

"People ate it up. But look, how about your friends? Won't they think it strange?"

"Why should they? It isn't strange. I've entertained lots of them."

"But we aren't chaperoned."

"What's 'chaperoned'? Is it something like married?"

"Oh Lord, I give up. Listen, Dian', just pretend like we never said anything about it. I'll be most happy to stay if you want me to."

"Didn't I say I did?"

They were interrupted by the appearance of a large grey cat who walked out to the middle of the floor, calmly took possession, sat down, curled his tail carefully around him, and mewed loudly. He had only one ear and looked like a hard case. Diana gave him a stern look.

"Where have you been? Do you think this is any time to come home?"

The cat mewed again.

"Oh, so you'll be fed now? So this is just the place where they keep the fish?"

The cat walked over, jumped on the couch, and commenced bumping his head against Diana's side while buzzing loudly.

"All right. All right. Come along. Show me where it is." He jumped down and trotted quickly over toward Demeter, tail straight as a smoke column on a calm day, then sat and looked up expectantly. He mewed again.

"Don't be impatient." Diana held a dish of sardines in the air. "Show me where to put it." The cat trotted over in front of the fire. "All right. Now are you satisfied?" The cat did not answer, being already busy with the fish.

Diana returned to the couch and reached for a cigarette. "That's Captain Kidd. He's an old pirate with no manners and no morals. He owns this place."

"So I gathered. How did he get in?"

"He let himself in. He has a little door of his own that opens up when he mews."

"For Heaven's sakes! Is that standard equipment for cats these days?"

"Oh no. It's just a toy. He can't let himself in my door. It opens only to my voice. But I made a record of the mew he used to let me know he wanted to come in the house and sent it to be analyzed and a lock set to it. Now that lock opens his own little door. I suppose that doors that open to a voice are somewhat marvelous to you, Perry?"

"Well, yes and no. We had such things but they weren't commercially in use. I've seen them work. In fact I believe that I could design one if I had to."

Her eyebrows lifted in surprise. "Really? I had no idea that technical advance was so marked in your day."

"We had a fairly involved technical culture, but unfortunately most of it wasn't used. People couldn't afford to pay for the things that the engineers could build, especially luxuries like automatic doors and television and such."

"Television isn't a luxury. It's a necessity. How else could one keep in touch? Why I would be helpless without it."

"Yes, no doubt you feel that way about it. People were beginning to say that about the telephone in my day. But the fact remains while we knew how to accomplish pretty fair television we didn't because there was no market. People couldn't afford it."

"I don't see why not."

"I don't know how to tell you. Perhaps I don't see either, except in some way I can't explain. But we did have a lot of unused or only partially used mechanical and technical knowledge. The application of any advance in invention or art was limited by whether or not there were people willing and able to pay for it. I served for a couple of years in one of the big aircraft carriers. There were boys in her—enlisted men—who used the most amazing technical devices—mechanical brains that could solve the most involved ballistic problems, problems in calculus using a round dozen variables, problems that would have taken an experienced mathematician days to solve. The machine solved them in a split second and applied the solutions, yet more than half of those boys came from homes that didn't have bathtubs or central heating."

"How awful! How in the world could they stay clean and healthy in such houses?"

"They couldn't. I don't suppose that I can make you realize just what the conditions were in which a lot of people lived. A classmate of mine at the Naval Academy joined the navy because he got tired of walking behind a mule and plowing. So he walked fifteen miles to town barefooted and slept on the doorstep of the post office. When the postmaster arrived in the morning he enlisted. He was selected for the Naval Academy and became one of the most brilliant young officers in the fleet and expert in the use and design of equipment that makes your automatic door seem simple. But his father and mother and brothers and sisters were still living in a one room dirt-floored cabin, dirty and sick from hookworm, anemia, and malnutrition."

"Why in the world would the government spend all that effort on machinery for an aircraft carrier when its citizens were living in such abominable squalor?"

"Well, I guess we had something like your private and public spheres of actions, Dian'. The lives of these people were in the private sphere of action, but national defense is public."

"But it's obviously the same thing. Any government official would know that it is dangerous to everybody to let people be hungry and sick. Why, from the most selfish standpoint possible, if people are sick, they can be the center of epidemic, and anybody knows that a hungry man is not responsible for his actions and may do something dangerous."

"I don't know how to answer you, Diana. We knew it in the navy of course, and we kept them clean and healthy and well fed, but to say that any government official would naturally know that—well, either men have grown very much wiser in a hundred and fifty years or something has happened to change the point of view."

"I don't believe that we are any smarter than people were in your day. I don't think such a thing is possible in four or five generations. But I don't see how anyone could be so shortsighted."

"Even if an official did have your viewpoint and wanted to do something, he would be bound to ask 'where is the money to come from?'. And no one could answer him. Cost of government was already too high."

"Where is the money to come from, Perry? Why, I never heard such silly talk. Where does any money come from? When the government sees a need for exchange, it creates it, of course. Why you had that in your day, Perry. It says right there in the original constitution, 'Congress shall have the sole right to coin money and regulate the value thereof.'"

"Yes, I remember that phrase. But that isn't the way it worked out in my day. Money was created by the banks, most of it at least—the important part anyhow. If the government needed money and couldn't raise it via taxes in time, it borrowed from the banks."

"But I don't understand—the banks are a part of the government."

"Not in my day. They were private institutions. It might be proper to say that the banks were the government. In some ways they were stronger than the government."

"But that would be sheer blind anarchy!"

"It was—pretty much."

"But see here, Perry. All this doesn't check. You came from 1939 when Franklin Roosevelt was president. I don't know a whole lot about history, but I do know that he is regarded as the first man in the new economic era. Why, there is a statue of him in Washington, showing him feeding the hungry."

"Yes, Mr. Roosevelt knew that all right. But he got very little cooperation, even from those he was trying to help. But it's my turn to ask questions: Tell me, is there no longer anyone hungry?"

"Of course not. Not in the United States at least."

"I meant the United States. Are there any sick?"

"Oh yes. Not many of course."

"What happens to them?"

"They are treated and taken care of to make them well. What else could you do?"

"Never mind. Is anyone out of work?"

"Out of work? Do you mean not working for money? Of course. At any one time I don't suppose you will find more than half the population working to make money."

"Don't those that work object to working while the others are idle?"

"Why should they? Everybody can't work all the time or nobody would have time to use what he has produced—no time to spend his credit. Everybody works whenever he feels the need of replenishing his credit—or if he has an occupation that he likes whether he needs more credit or not."

"Does everybody work part time?"

"No. Most professional people work regularly because they like to. Take a surgeon for example. He will work forty weeks every year. If he is famous and loves his work, his vacation will be as busy as his credit work. Take me for example, I work every week now and have for quite a long time, a broadcast like tonight every week, not to mention recordings for stories and songs."

"Is that one broadcast all the work you do?"

"I have to rehearse a lot and I'm expected to invent a new dance each week."

"How about people that aren't professional people, the various kinds of skilled or semi-skilled labor, and tradesmen and so forth."

"Some work full time and some part time. Quite a number of people work for several years and then quit. Some people don't work at all—not for money at least. They have simple tastes and are content to live on their heritage, philosophers and mathematicians and poets and such. There aren't many like that however. Most people work at least part of the time."

"Diana, is the United States a socialism now?"

"Why no, not if by socialism you mean government ownership of the factories and stores and farms and such. New Zealand has that kind of a government and I believe it works pretty well, but I don't believe it would be suited to the American temperament. But see here, Perry, I'm no economist. I've got a pal at the University of California who is. I'll get him to run up here in a day or two after you've studied up on history a little and he will be able to answer all of your questions. Which reminds me. If you are to have those recordings tomorrow, I had better order them." She stepped to the communicator. Perry heard her calling the University of California at Berkeley.

"Will you be able to order at this time of night?" he enquired.

"Probably not, not without paying an excessively high bonus. I'll simply set for recorded message and they will get the order first thing in the morning."

"How do you do that?"

"Either one of two ways. I can have my voice recorded, or write with the telautograph. Want to see the telautograph work, Perry?"

He stepped over to her side. "They haven't changed much."

"Do you mean to say that you could telewrite in 1939?"

"Uh huh. They weren't used much, but I remember seeing one in the Union Station in Kansas City. It was used for train orders."

"Hm—, maybe our mechanical marvels aren't going to surprise you as much as I had thought."

"I'm sure I'll find plenty to amaze me. But remember, Dian'. I was an engineer albeit in 1939. I take it you are an artist primarily. I may not be impressed at the things that you *expect* will impress me."

"That's probably true." She wrote slowly with the telautograph, stopping several times to think. Finally she signed it and closed the machine. "That will do for now. I've ordered a general catalog too so that you can pick out any records you may be interested in."

"Do you buy these records?"

"No, not unless you want to. There is a small charge for using them. If you find you want to keep a record permanently, you can pay for it and keep it."

"Do you have any here?"

"Oh yes, but not very many except for my professional library. I have quite a number of those, recordings of my own dances of course and a lot more of every sort of dancing. Most of the others are story records, just for amusement. Want to see some of them?

"Sure."

"I'll show you how to use the receiver as a reproducer at the same time. Now watch. This is the adapter switch. Turn it to 'rep'. Then you put the record in like so and fasten the end of the film with this catch. Then press the power button. No, don't do it yet. You control the volume of sound with this dial. Now push the power button." The machine whirred softly and the large screen came to life. A fool in motley appeared and laughed sardonically in their faces.

"Hi, brother fool," he shouted, "You want another of Touchstone's tales? Then gather round and attend me well. Touchstone Tells the Tale! Many, many years ago in ancient Greece there lived a wench of monstrous humor." A large hook appeared from the side of the screen and settled about the jester's middle. His grin changed to dismay and broke into a thousand pieces, reformed and spelled *Lysistrata: A Comedy of Manners.* Diana noticed Perry's reflex of recognition.

"You know it then?"

"Yes. Oh yes."

"Shall I turn it off?"

"No. Please don't." For the next hour they laughed and chuckled over the ageless farce of marriage and war. Perry was particularly delighted to recognize Diana among the Grecian wenches, and pointed out his discovery with a glee. Diana looked pleased, but protested when Perry insisted in whispers that Diana should have had the leading role.

Presently the play came to its rollicking finish, and the machine clicked to a stop. Perry found Diana smothering a yawn. She made a face at him. "Sorry, but I was up earlier than you were."

"I'm sleepy myself."

"Ready for bed?"

"I think so. Where do I sleep?"

"Anywhere you like. Where you were last night is as good as any."

Perry accepted the suggestion and made himself comfortable on that part of the couch. Diana lay down across the room, called out a languid goodnight, and with as little ceremony as a cat, curled up and appeared to fall at once to sleep. Perry lay on his back, eyes closed but head seething with confused impressions and idea sequences, each demanding immediate attention. Sleep seemed impossible but nevertheless in a very few minutes he sank into the soft warm glow that precedes it. Soon he was breathing slowly.

A scream of terror cut through the room. Diana sat up and switched on the light. Perry was sitting up also, his eyes staring, horrified. She ran to his side. "Perry, Perry, my dear. What happened?" He clung to her hand.

"I was falling. It seemed like I landed here in the dark. I'm all right now. It was just a bad dream."

"There. There. It's all right." She soothed and comforted him. "Just wait a minute. I'll leave the light on." She left him and returned quickly with a cup of the same steamy, spicy mixture that he had drunk the night before. "Now drink this slowly."

He touched her hand. "Dian', I know I'm being a baby, but will you stay with me for a little?"

"Of course, Perry."

When he finished his drink, she lay down beside him, put her arms around him, and rested his head on her breast. "Now just relax and be quiet. You're safe and I won't leave you." In a very few minutes he was sleeping peacefully. Diana held him a little while longer then gently uncurled herself and sat up. She massaged the pins and needles out of her arm and watched Perry's face. After a long time she bent over and kissed him quickly and softly on the lips. He smiled without wakening. Then she returned to her place on the couch. Now it was her turn to have trouble wooing sleep. Why had she kissed him? It was a silly thing to do. She wasn't in love with him. Of course not. She didn't know him and didn't feel any strong physical attraction for him. One didn't fall in love with savages anyhow. And that was just what he was, essentially. He hadn't acted like a savage though. Nevertheless, anyone brought up in the first part of the twentieth century couldn't possibly be a fit companion for a girl nowdays. He would be sure to be emotionally unstable. He *was* unstable; that crying out in the night proved it. He hadn't anything to fear. *But suppose I had just fallen to my death,* she thought. He wasn't dead. No, but he thought he was. No, he didn't either. It was very confusing. He had looked so hurt and lonesome. Then when he went to sleep he looked so young it had made her melt. That was why, just sympathy, just the way she had kissed the top of Captain Kidd's furry cap after she cut a thorn out of his paw. Just sympathy. But why had she urged him to stay until he got oriented? There were institutions for that, quite capable and better equipped than she was. Oh damn, why hadn't she turned Captain Kidd in when he first came mewing at the door and demanding attention? *Diana, you're a fool and any animal or child or man or woman that wants to can move you right out of your own home.* Hadn't she built this house for privacy? Hadn't she come here so she could take out her soul and examine it in private? And now how could she? What interesting eyes he had. Yet he didn't look at her, except to meet her gaze. Didn't he think she was pretty? Could she be getting *old?* Were the women in 1939 more beautiful than they were today? Or would he think so? But then what if he did? Certainly *she* was not interested.

Diana got up and fixed herself a cup of the sedative, drank it, sought a new place on the couch, arranged herself in a ball and fell asleep.*

[*Diana grew up in a transport car. Both of her parents were interested in her and liked her and she, fortunately or perhaps in consequence, felt a warm affection and respect for them. Both her father and mother preferred the more casual hit-or-miss training that a child receives from interested parents to the presumably more scientific, certainly more systematic, training a modern child receives in our development centers. Her father had spent most of his active life in food technique. He was a man of considerable imagination and great talent in organization. Several of our present home comforts can be attributed in whole or in part to his effort. He invented the autotherm food container and induced others to develop it to the point that we now have it, cheap enough to use and throw away. Nearly forty years ago as an assistant engineer for the Cuisine Company (a forerunner of Universal Foods) he started the first agitation for natural texture in synthetic proteins. He left this company and founded Ambrosia, Ltd., while still a very young man, in order to permit two synthetic chemists to use all the credit they liked in their laboratory. The results we meet every day at dinner—sausages that have never seen a pig and soup stock that grew in a test tube.

His energies were not confined to food. His bitter controversy with Polenski over the merits of dry point etching and the current acid thermal process is remembered by all devotees of that esoteric art. His assertion that the modern man is better fitted physically, mentally, and emotionally to cope with the wilderness barehanded than his savage ancestors caused a storm of argument which reached a dramatic climax in his year of practical experiment on an uninhabited South Pacific island. He took Diana with him on this adventure, a slim girlchild of ten. His triumphant return, a modern Crusoe, hale, hearty, and filled with boasts is known to every romantic boy and was the basis for a flood of story records, written, directed and acted by lesser men.

Diana's mother was less spectacular but equally important in the development of the girl's character. She was a surgeon, of a line of surgeons and healers. Calm and cool, with large slender bony hands, more expressive than her placid face, she seemed detached from her surroundings and fully alive only when those delicate sensitive fingers were cutting the line between life and death. Although it was the father who encouraged the child to dance, it was the mother who insisted that she persevere in her studies until she produced a worthwhile result, a technique of her own.

Diana grew up with first one, then the other, of these assorted progenitors and occasionally with both when their several occupations permitted family life. Her mother selected the instructional records for the child's formal primary education and cultural orientation. Her father supplemented this with little excursions to cultural and industrial centers to make concrete what she learned from the recordings. On her mother's insistence Diana lived for two years in a development center during her adolescence in order that she might experience the practical realities of social self government and understand the background of a large portion of the population.

Ideal or not, Diana flourished in this environment and grew up, not only strong and healthy, but with a mind agile and uninhibited, a temperament sunny and free from boredom, a memory packed with a wide variety of information and skills arranged in reasonably efficient integration. The possible flaw in her character, if flaw it were , lay in her quick emotional sympathy, the ease with which she felt the pain and sorrows of others. It prevented her from following in her mother's career as a surgeon, as she could not manage the detached viewpoint necessary to protect the surgeon from the emotional impact of the suffering she treated. This joint in her armor led her too easily into emotional relationships, especially with the opposite sex. In her late teens she suffered a severe hurt through a love affair with a young poet, who was ill with a cycloid neurosis probably psychotic in character. He became obsessed with her dancing and took his own life while watching the climax of one of her emotional numbers. It is easy of course to say that he should not have been at large, but the reader knows as well as the writer that our preventive diagnoses are not infallible and that we cannot afford to take the risk of violating the customs on which our liberty is based.

In any case the results were very nearly disastrous to Diana. The physical effects were naturally pronounced in a character such as hers, hysterical gastritis, disordered metabolism of course; but the mental disturbance was intense. An immediate introversion, excessive timidity, and a terror of dancing were the gross symptoms. Her father dropped what he was doing and hurried to her, where he argued with the healers over her treatment, created a bedlam, and finally snatched her away to subject her to an uproarious picaresque six months that left her no time to think. Toward the end of the time, an unimaginative handsome young animal coaxed her back into a normal sex life. She quickly tired of him, and he of her, and she awoke one morning to find herself completely cured, and anxious, not only to dance, but to enjoy the world and the people in it.

Her illness may not have improved her dancing, but it widened her horizon. Although still strongly interested in dance, and firmly believing it to be the most living and personal of all the arts, she now found herself not only cured, but grown up, with an alert interest in all life, all knowledge, the whole cultural pattern. But her reputation as a dancer grew even as it became to her more and more a means whereby she had the opportunity to enjoy more fully the myriad other aspects of living.

The Author]

IV

Diana awoke the next morning with a feeling that it was going to be a nice day. She stretched and yawned contentedly. As she sat up her eyes fell on Perry, tousle-headed and still sleeping. She sat still and then a smile stole over her face. Of course, that was it. She was no longer obsessed by the doubts and forebodings of the previous night. It seemed right and proper and very much fun to be helping a lost boy to find himself. Humming quietly she entered her refreshing room and prepared for the day. Perhaps she took a little longer with her hair-do than usual. In any case it was several minutes and a few more before she emerged pink and glowing into the living room. She glanced at Perry, and assured herself that he still slept, then quietly commenced preparations for breakfast. She was interrupted shortly by a voice behind her.

"Good morning."

"Oh, you startled me. Good morning, Perry. Did you have a good night's sleep?"

"Yes, but say—you look gorgeous!"

Diana blushed and dropped her eyes. "Don't try to flatter me."

"But you do."

"Is it the custom of your time to make such direct personal compliments?"

"Why, yes. Isn't it nowadays?"

"Well—, yes, if you wish and it's deserved."

"I think you are the most beautiful thing I've ever seen."

"But—Oh, bother. Hurry up and refresh yourself. Breakfast will be ready before you are."

Perry laughed, and ducked into the guest's refreshment chamber. Diana went determinedly ahead with her work. She mistakenly put a quantity of flour instead of tea in the steeper, turned boiling water over it, then stamped her foot and said 'bother' again, before washing out the pasty mess. Perry stuck his head into the room.

"Dian'!"

"Yes, Perry?"

"Is there some way I can shave around here? My face is a sight."

"There is a capillotomer in my 'fresher. You can plug it in yours."

"What's a catillopomer?"

"Not a catillopomer, a capillotomer, a hair cutter."

"Will it shave?"

"Smooth as a baby. Here, I'll get it for you." She fetched it and showed him how to use it.

"Why, it's the old dryshaver, streamlined and with a college education."

"It's old fashioned all right, but I don't care much for depilatories. Quit playing with it and shave. I'm about to serve."

"In a jiffy."

"All right, as long a jiffy isn't over five minutes."

Breakfast was a dream of Hedonism. Clear winter sunshine crowned the snow on the far mountains. A light breeze made lacy patterns of the falls. Inside the glass screen two hungry healthy young people looked at each other over cups of steaming black tea and found the other in every way pleasant to look upon. In the background an orchestra in Honolulu played softly and substituted for conversation. Presently the toast was gone and with it the poached eggs and fruit cup.

Diana got up and put out her cigarette. "Your education begins today, my lad. Are you ready?"

"I've polished an apple for teacher."

"That sounds nice. Now for works. Let's pick out a few books. Here—yes, and this will do. And I mustn't forget the *Customs.* I wonder where I put it. Oh, here it is. And you might be interested in this—it's mostly engineering. Now let's see if the records have arrived." She stepped over and opened the receptacle. "Yes. Let's see what Santa Claus brought: 'Historical Panorama of the United States, sections 11-20, XXth Century, sections 21-28, XXIst Century', plus supplements to date and a continuous narrative summary. Integrated world history in four sections. You won't need the first two sections but you might run them anyway. 'Illustrative Customs for Children, infancy to puberty', in six sections. Same for adolescents, and the integrating series for full citizenship. 'Taboo: a History of Social Conventions'. That will keep you busy for quite a while and you can pick out anything you are interested in from the general catalog. There is a list of special catalogs in the front of the big catalog. If you want to go after any particular subject, you can get its catalog. By the way did I show you how to stop the reproducer and make it repeat a portion?"

"No, I don't think you did."

"I'll show you. It's useful in study, especially for a slow poke like me. You'll find that this particular historical series makes several references to this book of United States history. You can stop the machine if you like and read the reference and then pick up where you left off. I'm glad they sent this series. They were directed by the same master who wrote the book."

"Where had I better start?"

"I would forget the books for a while and charge right through the historical recordings. Then I would view all the customs records. Then tomorrow you can start to run them piecemeal with the books, if you like. But be sure to read the *Code of Customs* all the way through. Lots of the customs aren't illustrated in these records."

"OK, where's that first record? See if I put it on properly. All right —let 'er roll." The cool calm voice of the announcer stated the title of the record and the period covered, then 'Washington, 1900'. Perry, staring into the stereoscopic picture, found himself floating over Pennsylvania Avenue facing west. It was winter and cold and grey. He moved along over a fairly dense traffic of carriages and hansoms, clop-clopping over muddy pavement and splashing through slush in car tracks. A street car clanged its bell and started. He floated over the tops of the vehicles and found himself approaching the White House. He entered the front door, proceeded to the West Wing and found President McKinley at his desk. Seated at ease near the President, but with his great frame exuding energy even in repose was the one and only Teddy, Teddy Roosevelt, the people's darling. "I tell you, Mr. President, the only way to handle it is to speak softly but to carry a big stick." The scene faded and others appeared with the voice of the commentator frequently in the background. Sometimes the voice carried the story and was merely illustrated by the living shadows. Again the picture presented the story and dialogue provided sufficient explanation, but constantly the scene shifted. At Kitty Hawk the Wright brothers lifted their 'crazy contraption' off the ground. The Panama Canal was dug and yellow fever conquered. 'Too proud to fight.' The *Lusitania.* War in the air. High Cost of Living. Automobiles poured over the continent. Chain stores melted into Tea Pot Dome and a market crash. 'My friends—' came out of a radio by a fireside and Boulder Dam climbed high. Then Perry leaned forward in tense anticipation as 1939 passed by. He kept very quiet for the better part of two hours except at first for a few ejaculations of surprise. After that, surprise left him. He stopped once to ask Diana for some cigarettes and again to get a drink of water. This time he discovered that Diana had gone out. A long time later he felt a touch on his shoulder.

"Don't you think that is about enough at one dose?"

"Oh!—Sorry, you surprised me. You're probably right, but it gets to be a vice." He snapped off the power. "It's as hard to put down as a detective story."

"What's a detective story?"

"A story about the solution of a crime. These were all the rage in 1939. Half the stories published were murder mysteries."

"Good Lord! Was murder that common?"

"No, but the stories were primarily puzzles—like a chess game."

"Oh—. But look, Perry, I called you to see if you would like a swim before lunch. Do you swim?"

"Sure, but where do we swim? Isn't it too cold?"

"No. You'll see. Come along." A door in the end of the room opposite the canyon opened directly outdoors, but instead of a January winter in the High Sierras, it was summer, summer in a tropical garden. The sun shone brightly on masses of flowers and on a patch of green lawn which bordered a little rock pool with clear water over white sand. The pool was just long enough for four or five strokes. Beyond the garden Perry saw winter and snowcapped peaks. Yet the garden and pool were apparently unprotected in any way from the rigors of the mountain climate.

Perry turned back to Diana. "Listen, Dian', I've believed everything else, but this is a dream. Put me out of my misery. How, how is it done?"

Diana smiled in delight. "It is nice, isn't it? I'll show you how it's done. Walk along the path by the pool. When you get close to the edge of the garden put out your hands."

Perry did as directed. As he reached the edge he stopped suddenly and gave a grunt of surprise. Then he cautiously ran his hand up and down what appeared from his actions to be a wall of thin air.

"Why, it's glass!"

"Yes, of course."

"It must have an amazingly low refractive index."

"I suppose so."

"Look, Dian', I can't see the stuff. Tell me where it is, so I won't bump into it."

"You won't. The garden is laid out to keep you a half meter or so from it and it's quite high enough overhead. The base of it runs all around here"—she indicated most of a semicircle—"From there it arches up to the house. If you look closely you can see the joint of the seal, and there it runs down the rock wall and back to the ground again. It is shaped like a giant bubble."

Perry mused. "Hm—I see. And that's why it doesn't need supports. But how did it get there in the first place?"

"It was blown in place, just like a bubble. It is a bubble. Look, did children blow bubbles when you were young?"

"Yes."

"Did you ever wet a dish or a box or a table top and blow a bubble on it and make it follow a shape you wanted?"

"Yes, yes, I begin to see."

"Well, first they painted the wall and a sheeting on the ground with sticky stuff—bubble mixture, right up to where the bubble is to stop. Then they put their bubble pipe gadget in the middle and commenced to blow. When the bubble just reached the proper size, they stopped."

"It sounds easy the way you tell it."

"It's not very. I watched them do this one and they broke four bubbles before one held up. Then it takes several hours to dry tough, and any little touch can ruin it until it does."

"I don't see yet how you can get glass to behave so."

"It isn't glass—not silicate glass anyhow, but a synthetic plastic glass. One of the technicians said it had molecules like very long chains."

"That's reasonable."

"I wouldn't know, but it's a sticky stuff when they decant it, like a white molasses, but it dries very hard and stiff like glass only it's tough, instead of brittle. It won't shatter and it's very hard to cut or tear."

"Well, it's a grand notion in any case. You know we had patios and outdoor living rooms and pools in gardens in my day, but it was generally too hot or too cold or too windy to enjoy them. And there were always insects; flies, or mosquitoes, or both. In my aunt's patio it was honey bees. It's very disconcerting when you're trying to sunbathe to have bees crawling over you and buzzing around your head."

"Are you sensitive to bee stings, Perry?"

"No. I can handle bees. They don't sting me, but they used to drive my aunt nearly frantic. The poor woman never did get any real pleasure out of her garden. They would sting her and she would swell up like a poisoned pup, and get sick to her stomach. Sad really, she did love her garden so and got so little fun out of it."

"Then why did she keep bees?"

"She didn't. One of her neighbors did."

"But that's not custom—Nevermind. I asked you about bee stings because bees don't sting anymore."

Perry clapped his hand to his brow and gave a look of mock agony. "Enough, woman enough! Tell me no more! No. Stop. One more thing. Answer me this question and I die happy. Do watermelons have seeds?"

"Did they used to have?"

Perry stepped to the edge of the pool, assumed a declamatory pose and orated: "Farewell, sad world. Papa goes to his reward! *Sic semper* seeds," nipped his nose between thumb and forefinger, shut his eyes tight and jumped feet first into the pool. He came up blowing to find Diana wiping water out of her eyes and laughing hysterically.

"Perry! You're a clown! Stop it!"

He didn't answer but asked solemnly, "Tell me, bird of mournful numbers, do blackberries still have seeds?"

Diana controlled her giggles. "Blackberries have seeds, you idiot."

"That's all I wanted to know." Perry's head disappeared and he gave a creditable imitation of a drowning man, accompanied by glugging sounds. Diana dived in, joined him on the bottom, and tickled him vigorously. Both heads reappeared. Perry coughed and blew.

"Wench, you made me strangle."

"Sorry." But she giggled again.

Some minutes later Perry lay on his side drying off and watching Diana, who was still in the pool. She floated with just her face and the curve of her breast appearing above the water. Her hair formed a halo about her head. The warm sun soaked into their bones and rendered them sluggish and contented. Perry chucked a pebble into the pool. It hit the water with a little chunking sound and splashed a drop on Diana's face. She turned on her side, took two effortless strokes to the side of the pool, and rested her hands on the edge.

Diana cut in. "Are you hungry, fella?"

"Now that you mention it, there does seem to be something missing."

"Then let's eat. No, don't get up. We'll eat out here. It's all ready."

She returned laden with a tray as big as she was. "Perry, you move over into the shade. You haven't the tan I have and I don't want you blistered."

Three-quarters of an hour later, Diana stirred out of a digestive calm. "Before you get back to your studies, I want to have you measured for some clothes."

Perry looked surprised. "Clothes—why, I had gathered the impression that they weren't necessary."

Diana looked puzzled. "You can't stay in the house forever, Perry. It's cold outside. I've planned a little picnic for tomorrow, but we'll have to get you some warm clothes first. And while we're about it, you might as well order some other things that you will need."

"Lead on, McDuff."

Diana selected a combination on the televue. A Semitic gentleman appeared on screen. He rubbed his hands together and smiled. "Ah, Madame, can I do you a service?"

"Thank you; my friend needs some costumes. A heavy and medium snow suit, first, and then some other things."

"Ah, that is fine. We have some new models, very dashing and sooooo practical too. And now will you have him take position?"

Diana nudged Perry into a spot near the televue, then turned the screen so that it faced him. The Semitic gentleman seemed ecstatic. "Ah, yes. A beautiful figure. It is a pleasure to make clothes for a man who can wear them. Wait. Let me think. I have it! I shall create a new model for him. With that proportion of the shoulders and that length of leg—"

Diana cut in. "Not today, thank you. Another time perhaps."

"But Madame, I am an artist, not a businessman."

Diana's lips barely moved. "Don't let him fool you, Perry. He's one part artist and three parts businessman." Then to the televue. "No, we need these clothes today. Please use a stock pattern."

"Service, Madame." He wheeled up a camera-like device somewhat larger than the one used to take Perry's palm print. "Is your friend exactly four meters from the screen?"

"Exactly." He fiddled with the camera.

"Is your screen corrected for angular aberration?"

"Yes." He made an adjustment.

"Now—front view. Very well, right side. Back view, please. Left side. Will you bend over, please? Extend both arms. That's fine. Now raise your knees in succession. That's all." The camera disappeared. "Will you examine materials?"

"No, make them all wool with cellutate lining. How about colors, Perry? Would dark blue suit you?"

"Fine."

"With white piping, perhaps?" The vendor's anxious voice joined them.

"Very well."

Diana also okayed the purchase of a pocket belt with a detachable kilt for travel and general public wear, some sport sandals, and a pair of light slippers for city wear. She firmly vetoed any discussion of ornaments, jewelry, knickknacks, and accessories, and refused to be drawn into considering any feminine frills for herself. The 'artist' finally gave up and the screen went blank. Perry returned to his studies. Record followed record and the afternoon wore away unbeknownst to Perry. Once, Diana came in and changed the position of the screen and propped Perry up on pillows. Later she brought him a cup of tea and a sandwich. Perry hardly noticed the interruptions. He was held by the endless, ultimate drama. Late in the afternoon the last supplement whirred to a stop. Perry got up and stretched cramped limbs. Diana was not in sight. He looked around, sighed, sat down and lit a cigarette. Presently Diana appeared in the garden door. "How far did you get, Perry?"

"I've been through them once right up to date."

"How about it?"

"Well, I feel for the first time as if I actually were in 2086. It's a lot to swallow at one dose though."

"I've invited an old friend of mine here this evening, Perry. He can help you a lot. He's a Master of History who used to be one of my teachers."

"Say, that's fine. When does he get here?"

"He should be here for dinner. He has to fly over from Berkeley."

Less than an hour later the visitor appeared. He was a thick set man, with broad powerful shoulders. His cranium was large, his eyes deep, his face homely and rugged. He gathered Diana in a bear hug that lifted her off her feet, kissed her on both cheeks, sat her down and started to peel off his flying kit. Perry judged him a well preserved fifty-five or sixty, and noted with interest that he appeared to shave his entire body with the exception of his bushy grey eyebrows. Diana introduced them.

"May I do you a service, my boy." It was more a statement than a question. "Diana has told me something of your case. We should have lots to talk about." His name, it appeared, was Master Cathcart.

Diana insisted on refraining from historical discussion until after dinner. Once it was over however, and Master Cathcart had persuaded a big bowled pipe to burn, he came right to business. "I am to assume, I take it, that you are for all practical purposes an inhabitant of 1939 A.D., well educated in your period, transported by some witchcraft to this period. Very well. You have been studying some records today? Which ones?" Perry ran through the list. "Good enough. Now suppose you summarize briefly what you have learned today and I will explain and amplify and answer questions as best I can."

"Well," replied Perry, "that's a large order but I'll give it a try. At the time of my accident, July 1939, President Franklin D. Roosevelt was in his second term. Congress had adjourned after wrecking most of the President's program. The war in Spain had been won by the fascists. Japan was fighting China and was apparently about to fight Russia. Unemployment and an unbalanced budget were still the main troubles in the United States. 1940 was a presidential year. President Roosevelt was forced to run for a third term through lack of an electable successor to carry on his policies. His nomination by the Democratic convention resulted in the defection of the conservative wing of the party to Republican Party. In the meantime the National Progressives had organized on a nationwide scale and put young Bob LaFollette in the field. The Republicans nominated Senator Vandenburgh. Vandenburgh was elected but polled considerably less than half of the popular vote and failed to get a majorityin either house. His administration was doomed from the start. Very little was done for four years except for a halfhearted attempt to balance the budget by eliminating relief, but riots and hunger marches soon scared Congress into providing more and more for the dole. In the spring of 1944 the death in a plane crash of Mr. Roosevelt demoralized the remnants of the Democratic Party and most of them joined the Republicans or the Progressives. The Democrats adjourned their convention without naming a candidate. The Progressives named LaGuardia, the fiery little Mayor of New York, while the Republicans after many ballots picked Senator Malone. President Vandenburgh was as thoroughly discredited by circumstances he did not understand and could not control as President Hoover before him. Senator Malone was a midwestern politician, a typical demagogue of my period, if I'm any judge. The recordings show him red-faced and raucous, a man of the people. Malone ran on a platform of blaming everything on Europe and the radicals. He demanded instant payment of the war debts, which were pretty silly since the second European war was already on. He called for the outlawing of the Communist Party, protection of the American home, and a return to rationalism in education which he defined as readin', 'ritin', and 'rithmetic and a particularly offensive jingoistic patriotism. He advocated deportation of all aliens, laws to prevent women from holding men's jobs, and protection of the morals of the young. He promised to restore prosperity and promised everyone the 'American' standard of living. And he won, by a narrow vote in the electoral college . LaGuardia said afterwards that since Malone had promised them the moon, all he could offer was the moon with whipped cream, which didn't seem practical to LaGuardia.

"Once in office Malone ran things with a high hand. Congress was willing in the first session to pass almost any law he desired. One of the most important was the Public Safety bill which was in effect a gag for the press and other means of public information. Inasmuch as it was first used to suppress news of labor troubles which resulted from the discontinuance of the dole, the capital controlled press submitted to it without really knowing what they were in for. Then a law was passed which greatly increased the scope of the G-men or Federal enforcement agents and making them directly responsible to the chief executive. Malone staffed these expanded and greatly changed corps from his home state political machine. In the meantime, in spite of his controlled press, the people were getting restless. Even those who were still economically fairly comfortable had had swarms of the hungry, dispossessed, and unemployed turned loose on them. Malone was apparently afraid to chance another election, even a midterm. Perhaps he never intended to. In any case he declared a state of emergency, using the mobs of unemployed as an excuse, and took over the internal civil government as an absolute dictator. He used the army and navy to quell any local difficulties. With his new secret service and control over the means of communication and propaganda this was feasible. By the way, the record states that he was able to use the army and navy to destroy the democratic form of government. I find that hard to believe, Master Cathcart. You see I was in the navy myself and I don't believe that the American Services were fascist minded. How do you account for it?"

"I'm glad you brought up that point, Perry. It seems likely that Malone had planned this from the very first. At least he anticipated having to use the military against the people. His technique was simple and almost foolproof. His information service inquired into the political sympathies and economic status of every officer in the fleet and in the army. Whenever an officer was definitely determined to be liberal and democratic, he was not removed or even framed in a court martial. Malone was subtle. Each such officer was transferred as soon as located to a noncombatant assignment; recruiting officer, Reserve Officer's Training Corps instructor, inspector of supplies, War College, Naval and Military Academies, and so forth. Whenever an officer was determined to be definitely militaristic, jingoistic, a potential sadist, he was placed in a key position over forces actually ready to exert armed force. To a lesser extent the enlisted men were weeded out. When he was ready to strike he had behind him a military machine he could bend to his purpose."

"But how about the National Guard?"

"Oh, that was more difficult at first glance. But the federal government owned and controlled the arms used by the Guard. Under the guise of replacement practically all of the ammunition in the hands of the guards was called in during the week before his coup. Of course had it been realized that all the ammunition in all units of the Guard was being called in at once, it would have caused trouble, but control of the nation's communication services plus the fact that each separate order was classed as a confidential military order enabled him to get away with it."

"That clears up my difficulty," said Perry, "I thought there was something fishy about it. If I remember, this dictatorship or interregnum, as the record referred to it, lasted only about three years. Malone was assassinated by one of his own henchmen in 1950. The commentator seemed to think that the regime was essentially unstable and would have broken down anyway very shortly. In any case Malone's assassination was the signal for an uprising all over the country. Inside of three weeks Malone's bullies had been killed or driven into hiding. The man who had been governor of Michigan at the beginning of the interregnum called all of the governors together. They selected one of the number as President Pro Tem and set a date for a general election. LaGuardia was elected. He served two terms."

"Very clear," put in Cathcart, "now let's talk about the rest of the world for a while. It was during Vandenburgh's administration that the second European war ran its course. With the collapse of the loyalists in Spain, the fascist states were ready to take on the democracies. France was torn with internal dissension and strikes. The Conservative Party was in power in England and apparently committed to a do-nothing policy. The Fascist powers struck, but the first world war was repeated. The democracies failed to fold up although they lost battle after battle. The end came, not through the intervention of the United States—Vandenburgh had no stomach for that—but through the economic collapse of Germany. She had entered this war in a physical condition much poorer than that of 1914 and she couldn't stand a long war."

"What happened to the dictators?"

"Adolf Hitler committed suicide by shooting himself in the roof of the mouth. Mussolini got out much more gracefully. He submitted his resignation to the king he had kept around during his entire tenure and the king appointed a new prime minister, a social democrat. But to my mind the most interesting thing about the peace was the peculiar terms of the peace treaty."

"Some sort of a league of nations, all over again wasn't it?"

"Yes, and no. A very brilliant young Frenchman, a descendant of LaFayette, argued that a continental government or federation was necessary if a lasting peace was to come, and argued further that a constitutional monarchy was the most stable form under which free men could live. And so the United Europe was created. But the romantic part is the man who was chosen to head this polyglot creation. The Hapsburgs and the Hohenzollerns were out for obvious reasons of bad blood and bad records. The English king was suggested but he aroused no enthusiasm, being rather negative in character and further handicapped by his shyness and speech impediments. None of the pretenders in exile had any real following. But one prince was available, who had long before captured the world's imagination. Edward, Duke of Windsor, who had abdicated the British throne in 1936 rather than accept the complete domination of his prime minister, became the choice."

"Well, I'll be damned!" muttered Perry. "I don't believe that was in the record."

"You only saw the summary records," explained Diana.

"Edward had returned home at the start of the war and demanded to be assigned to military duty. He displayed surprising talent, particularly as a creator of morale. It was largely due to him that the repeated losses of battles did not result in capitulation to the fascist governments. When his name was proposed, he was nominated by acclamation. He was reluctant to accept but finally agreed to do so provided his wife was given equal formal rank with him. This was agreed to over the protests of the British delegation and they were crowned in a ceremony that marked the end of the Bordeaux conference on 1944 June 12. He assumed the title of Edward, King of States and Emperor of Europe. Wallis was of course Queen and Empress. They say that the English queen never got over it."

"Swell!" Perry chortled.

"Edward made an able ruler. He had helped to draw the constitution of the new superstate and had insisted on several things, free trade among the sister states, a common currency, a joint army and navy, and a small one at that. All international disputes to be settled by the Imperial Tribune. The system worked well enough for a quarter of a century, in spite of creakings and adjustments."

"What put an end to it?"

"His death. He died in 1970, and left no heirs. Even while the Tribune was declaring Wallis regent, pending the selection of a successor, a company of local guards crossed a bridge in eastern Europe and seized a little town of less than a thousand inhabitants. There was some vague historical claim based on a battle nearly five hundred years before. They were resisted by the local constabulary who were joined by the veterans' organizations. In two days that whole border was in a state of guerrilla warfare and within a fortnight there was fighting all over the continent. It was hastened at least by Great Britain's refusal to recognize the regency of Wallis in spite of the Tribune's authority, and calling home her ships and troops."

"And that was the start of the Forty Years War?"

"Approximately. Some of the States stayed out at first and various ones dropped out from time to time. But for all practical purposes Europe was at war for the next forty years."

"How did it end?"

"It didn't end, not formally. It burnt out like a fire that has consumed all of its fuel. In 1970 Europe contained over four hundred million people, exclusive of the Soviet Union, Sweden, and Norway, none of which were heavily involved in the war. The Soviet Union of course had not been a part of United Europe anyhow. In 2010 which marks the approximate end of the war Europe is believed to have had a population of less than twenty-five million."

Diana blanched. Perry spoke up. "Do you mean to say that over a third of a billion people were killed in thirty years?"

"Not all by shot or poison. More people starved than were killed in battle. It was the breakdown of the economic organization that killed the masses rather than deadly weapons. People hardly ever realize the completeness of our economic interdependence. Communications were destroyed by the fighting. Distribution was upset. The credit system expanded and then collapsed, leaving people to depend on barter. Barter was about as adequate to take care of the involved economic structure as oars would have been for one of their battleships. Governments resorted to the exercise of angary and expropriation to provide for troops, but it amounted to foraging and the people regarded it as such. This dog-eat-dog system ran its natural course. The farmers hoarded and the city dwellers starved. From time to time the city dweller killed the farmer and took what he had. When that was gone the city dweller died for he had never learned the arts of husbandry. And the armies ran over them all. Of course this breakdown didn't occur all at once. For the first few years the industrial civilization ran faster than ever, but in the high fever of war, living on its own substance. But when enough crops had been destroyed, or not planted, enough granaries emptied, enough water works bombed that the pangs of hunger became general, then dissolution set in. A modern city is an almost incredibly helpless and delicate organism. It has lost its power to produce the actual essentials of life. In spite of its transportation systems, it cannot move as they found out in the evacuation of London. It is like an overgrown idiot baby in an incubator. It is completely helpless without the aid of the many servants that succor it. It cannot even think except in a slow ponderous collective fashion and it cannot think at all in an emergency. Its individuals can think, but a city is an organism in itself and must have a directing brain and nervous system. Destroy its waterworks. It dies. Stop its food supply. It dies. Remove its directing intelligence, it commits suicide. The cities went to pieces first.

"And the birth rate fell to lowest ebb in history. Part of this was due to contagious abortion, one of the many epidemics that swept the continent. Some of the sociologists find evidence that a large number of women refused to bear children. And lots of the men were sterilized, even when they weren't killed, by exposure to the rays that a beneficent science had handed to the field marshals. And so Europe died."

"How in the world did we stay out of it?"

"Partly luck, but mostly the genius and strength of character of one man. Franklin Roosevelt had proposed and partially developed laws that were intended to keep the United States out of war. These were strengthened by LaGuardia until the President had the power to completely withdraw the United States from a danger zone. In 1970 the United States had enjoyed many years of useful economic relations with Europe. But at the time of the death of Edward, there was in the chair at Washington, President John Winthrop, elected by the Conservative Party and a man who might have been expected to repeat the mistakes of 1914. But at the first outbreak of trouble he suspended all shipping. When it became evident that a general war was likely he used the naval and air forces to evacuate our nationals and promulgated the Non-Intercourse Proclamation. Our diplomatic and fiscal agents were all withdrawn. Our commerce with Europe stopped in every respect. With minor exceptions, for twenty years no American citizen made a legal visit to Europe. Naturally it produced terrific economic dislocations in the United States. But he stood firm. At the time of the proclamation Congress was not in session and no regular was scheduled for five months. He refused to call Congress and his legal authority to do what he did was upheld by the Supreme Court. It seems likely that he would have defied the court if necessary. He was hanged in effigy, but by the time Congress met his action appeared justified to many. He was impeached but acquitted in his trial by a narrow vote, and the United States was saved in spite of itself. However before we talk too much about Winthrop we should go back a little in United States history."

"Just a second before we leave Europe entirely. What happened after the war?"

"We don't know, Perry. Not in any great detail. The Non-Intercourse rule has never been fully lifted and we have never resumed commercial or diplomatic relations. The population is increasing slowly. It is largely agrarian and the economy is mostly of the village and countryside character. Most of the population is illiterate and technical skill is almost lost. Our knowledge is incomplete although we maintain missions in several places for ethnological and sociological study. But now can you tell me what happened after the assassination of Malone?"

"Well, LaGuardia took office in 1951 and served two terms. The chap that directed the recording seemed to think that his biggest achievement was a change in the banking system. He called it the Battle of the Banks."

"Yes, and it is important for it was a change that made possible our present economic system."

"Wait a second, please. What *is* the present economic system? Diana says it isn't socialism. Is it capitalism?"

"You can call it that if you like. I would suggest that you think of it as privately owned industrialism for the time being. LaGuardia destroyed capitalism as you knew it. He started out to found a publicly owned bank, the Bank of the United States."

"Wasn't the Federal Reserve Bank still in existence?"

"Yes, but the Federal Reserve was not, despite its title, a publicly owned bank. Nor was it a bank in the common use of the term. A private citizen couldn't borrow money from it nor place money in it. Only bankers could use it and they owned it. LaGuardia wanted to set up a real bank that would be owned by and used by the people. But the bankers fought him in every way. They controlled most of the newspapers, owned a good piece of the wealth in the country, and held mortgages of one sort or another on the rest. Their position was very strong in machine politics, too. So they set out to defeat him. And that got him angry. It appears from what we can find out that it was never safe to get the 'Little Flower' angry. He jammed his banking bill through by a combination of personality and intimidation and announced to the whole country that he was ready to lend money to all and sundry who might be refused credit at the private banks. You see the banks had created a panic and a wave of fear by calling loans and refusing to loan more money. LaGuardia restored confidence even before he was able to set up the machinery for handling a banking business. And by now LaGuardia was not willing to let things drop just by setting up his new bank. He had intended it primarily as a fiscal agent of the government to aid in the manifold financial dealings of the government with the citizens, started by Franklin Roosevelt. LaGuardia became determined to break the private bankers. He called in several students of finance and studied the theory of credit himself. He became convinced that ordinary commercial financing could be done for a service charge plus an insurance fee amounting to much less than the current rates of interest charged by banks, whose rates were based on supply and demand, treating money as a commodity rather than as a sovereign state's means of exchange. He proceeded to lend money on this theory. His cost accountants figured pretty accurately the service charge necessary and estimates were made to cover insurance. As the system developed the insurance feature was simply the pro-rate of the losses of the preceding fiscal period. The types of loans the government would make and the quality of paper it would discount kept the losses low and within a year the federal government would loan money to its citizens at an average interest of three-quarters of one per cent per annum.

"Then he dealt his final blow. His new banking law permitted the government to regulate the percentage of fractional reserves that private banks were required to keep on hand to meet withdrawals by depositors. As you may know if you have studied the banking laws of your period, the so-called fractional reserve was a dodge whereby a banker could loan money he didn't have and never had. It actually permitted him to create new money, based not on gold, nor on his own credit, but on the credit of his customers. LaGuardia proceeded to regulate with a vengeance. He ordered fractional reserves increased in a program that called for one hundred per cent reserves at the end of three years. The disgruntled bankers made a test case and took it to the Supreme Court. The Solicitor-General argued that the law and the order made under its authority were not only constitutional but that fractional reserves as hitherto used were clearly in violation of the constitutional provision giving Congress the sole right to coin money and regulate the value thereof. The Court upheld the administration on all counts in a famous decision written by Mr. Justice Frankfurter, and the manipulation of the money power was destroyed in the United States."

"Then private banks were destroyed?"

"Not entirely. They remained a useful institution for some people as depositories for they soon offered services to their customers that the Bank of the United States did not give. If you like to have your deposits received by messenger at your home or want to cash a check in the middle of the night, the private bankers will gladly oblige. And there was still plenty of room for speculative credit pools for people who wished to risk their capital in expectation of high return. The banks continue to lend money at high rates where the risk is great and not easily figured, but they have to lend real money now, not stuff that they draw out of the ink well. The fractional reserves decision put an end to that. You will find what an important part the speculative bankers played in the penetration of South America. They still play an important role. They supply an element of private initiative and enterprise in industry that government cannot hope to provide."

"What about the South American penetration? The records were rather vague or perhaps I had gotten out of my depth."

"Some historians call it rape rather than penetration. Up until 1970 the United States had been steadily losing ground in South America. During the reign of Edward Europe grew steadily more industrialized and found her greatest market in South America. The Asiatic market had been worthless since the 1930's and South America with its raw materials was in a position to reciprocate. On the other hand the United States was an agricultural export nation, and this annoyed several South American states, especially Argentina. But the Forty Years War changed all this. The United States had undergone an economic improvement as a result of the Banking Act which had decreased the spread between production and consumption by lowering the percentage of the cost charges, in a commercial article, unavailable for purchasing power."

"I don't follow you."

"I suggest that you note it down and wait until you study the current economic system. You were probably educated in the conventional economic theories of your period which were magnificent and most ingenious, but—if you will pardon me saying so—all wrong. But to return to our muttons; the improved economic condition produced the usual political reaction and a conservative administration was elected after LaGuardia. There still remained however considerable spread between production and consumption. It had always been the conventional point of view, especially in the economic beliefs of the Conservative Party, that a prosperous nation required a favorable trade balance or gold balance as it was formerly called. In simple language that means that a country is best off when it exports more than it imports. Phrased in that way it sounds silly, for it is surely evident that a country that ships out more than it takes in gets poorer every year in terms of real wealth. Nevertheless there was an element of truth in it, a very practical truth at that time. The economic life was organized in such a comical fashion that each year the country produced goods of greater value than the people of the country were able to buy back and use up. This was known as overproduction and many were the esoteric nonsensical things said about it. But the situation was that simple. The system of necessity produced more than it consumed. Of necessity. You can go into the mathematics of it later. Being an engineer you are bound to see the truth of it, and will probably be vastly amused by it."

"Do you mean to say that that was all there was wrong with business in the United States in my day?"

"That was all. And all of your labor troubles, and poverty, and physical suffering were as unnecessary as they were tragic."

"That seems preposterous. If it was as simple as that it could have been fixed. I could work out some scheme to fix it myself, half a dozen schemes. Why in the navy we wouldn't have put up with any such damn nonsense. Why didn't somebody see it?"

"Some people did, C.H. Douglas, Goulds Gainesborough, Bronson Cutting and a few others, but it was almost as difficult to convince people of the fact as it had been to convince an earlier generation that the world was round. In each case the fact was true and the fact was simple but the sturdy common sense of the man who had been brought up to believe in a flat earth or a 'favorable trade balance', rejected the truth. The socialists understood this truth of course, but they insisted that there was only one solution. There were many good solutions for so simple a problem. We believe nowadays that we have a solution more suited to the United States than socialism. But come, we are getting a long way off from South America.

"From 1970 to the turn of the century a partial solution was found. Our excess wealth was poured into our sister continent and it was developed as a new frontier. Gold mined from the Chilean Andes helped for a while to preserve the fiction of a favorable trade balance. After that and in addition to it, almost any sort of wildcat financing was acceptable that would keep up the flow of goods to the south. The private bankers turned to this rich field of exploitation and convinced the public that the new El Dorado lay under the Southern Cross. The whole shaky business piled up until practically the entire continent was mortgaged to the skies in return for goods that we couldn't use ourselves and would have poisoned us if we had kept them. But the Latin temperament had a simple solution. I sometimes wonder whether it was planned or was the inevitable result of the circumstances. But when the due day came each government folded up and a new government calmly repudiated the commitments of its predecessor.

"The first incident of the A.-B.-C. War occurred in 2002 April. The Argentine government had refused to recognize its debts to us both public and private, and several stiff notes had been exchanged. Our South American squadron was ordered to Buenos Aires. Chile and Brazil each informed the United States that any display of force in Argentina would be regarded as an unfriendly act.

"Nevertheless the squadron was not recalled. It steamed into the harbor and had no more than anchored, two old aircraft carriers and an odd dozen of minor craft, when it was attacked from the air and sunk to the last man, before a plane could rise. We don't know yet who did it, but we do know that both the Chilean and Brazilian navies and air fleets had made a rendezvous some two hundred kilometers off Buenos Aires."

"How did the war work out? I found the record account a bit sketchy for my professional taste."

"Why, Perry, you aren't really interested in *killing,* are you?" Diana was perturbed and incredulous.

He patted her hand. "No Dian', not at all. But the matters of the strategy and the tactics involved and the weapons used are of intellectual interest to me, just as you might be interested in the ceremonial dances that accompanied the Aztecs' Blood sacrifices.

The wrinkles smoothed out from her brow. "Yes, I suppose so. But it does seem barbaric."

"I imagine the weapons would have been largely familiar to you, Perry. The United States had not been at war for many years and it is a matter of history that few weapons are developed in peacetime. The military mind clings tenaciously to its accustomed ways—if you will pardon me. The strategic principle of exterior lines determined the war. Neither side was equipped to deal any telling blow on the other. They were too far apart and there was too much terrain involved. There was no commerce to raid as practically all the shipping had been between the United States and South America. Each side was able to raid the cities of the other, but armies of occupation would have necessitated extended lines of communication to protect at a serious strategic disadvantage. The most startling single incident in the war was the raid on Manhattan."

"Tell me about that."

"One would think that Manhattan would have been evacuated early in the war, but it was extremely inconvenient to do so and the public had been assured that no enemy force could possibly get that far north. As a matter of fact, practically all the fighting had been below the equator. Except for two raids in the Gulf and one on Palm Beach, none of which did much damage, the United States was untouched. But in 2003 December two aircraft carriers, the *Santa Maria* and the *Reina Borealis* raided Manhattan. They had proceeded to New York by a route that took them far east in the Atlantic and by luck and partly by foresight they reached the North Atlantic without discovery. They were aided by the weather for the last thousand kilometers had to be made in a thick fog. They attacked at noon, dropping out of a cloudy sky with a ceiling of less than two hundred meters and in some places lower. The attack must have been worked out with great precision, for each ship seemed to know exactly where to go. The bridges were destroyed first, and the landing platforms. It must have been a terrifying sight to see those great helicopters settling out of the clouds and proceeding leisurely to destroy their objectives while the more agile fighting planes that escorted them buzzed around like hornets. The tubes under the rivers were bombed also. A helicopter would settle at the last station, its crew would gas the bystanders while a working party commandeered a train and loaded aboard the explosives. Then with controls and time bomb on board the train would make its last run."

"How much damage was done?"

"The damage was practically complete. The water works were destroyed along with the power stations. The skyscrapers were almost completely wrecked. Incendiary fires were started throughout the city. It was remarkably efficient, for warfare, as explosives were not thrown around at random but carefully placed to do maximum damage. It is believed that the helicopters made two or three trips. The weather made the whole thing possible, of course, particularly the gas attack that completed the job."

"How was that?"

"After the attackers had apparently exhausted their supplies of high explosives, they systematically patrolled the island, remaining always in the clouds and dropped gas containers. They must have returned to their floating bases time and again for they kept this up for thirty-six hours."

"You speak as if they had no opposition."

"There was opposition, surely, but consider—You are a pilot. How would you attack an enemy ship in a cloudbank. "

"I couldn't."

"That's the answer. They destroyed Manhattan and nearly eighty per cent of its population. Although it wasn't conclusive, hardly more than an exhibition of frightfulness, it lead indirectly to the end of the war."

"Why was that?"

"Five out of six of the heads of the leading international banks were killed in the raid on Manhattan, not to mention the destruction of a large part of the records of the financial dealings that had started the trouble. And of course hundreds of the small fry in the banking racket. With the ring leaders gone Congress listened to the people of the country who had never wanted a war in the first place. An armistice was declared in 2004 February. The terms of the peace included moratoria on international obligations which was a polite word for cancellation, and established a Pan-American export-import bank to provide for resumption of trade on what amounted to a cash and carry basis."

"Anything else?"

"That was about all. The destruction of Manhattan was checked off against the raids on Rio and Buenos Aires. But the most important result was the twenty-seventh amendment."

"That's the war referendum amendment, isn't it?"

"Yes. Did the records tell you how it works?"

"Well, I gathered that it was an arrangement whereby the people had to vote on it before war could be declared."

"That is true as far it goes. In effect the amendment states that, except in case of invasion of the United States, Congress shall not have the power to declare war without submitting the matter to a referendum. The article sketches out briefly the machinery for holding the referendum and sets a time limit in which to accomplish it. But the most amusing feature is the provision saying who shall vote in the matter."

"Doesn't everybody?"

"No, only those persons vote who are eligible for military duty."

"Aren't women permitted to vote?"

"Yes and no. If the current laws make women eligible for combat duty, they vote. If not, they don't vote."

Perry whistled. "I'll bet that caused an uproar ."

Cathcart grinned as if savoring the joke. "It certainly did. Militant feminists screamed and frothed at the mouth. Then it was pointed out to them that the proposed amendment made no mention of sex and that they could, if they chose, make women eligible by including them for military service in the implementing bill."

"But that isn't practical."

"On the contrary. As a matter of fact the law did include women for a number of years. Women can be used in the place of men in practically all military positions. Not as effectively in many of them, but they have been used many times. Your military history should have told you that."

"I guess you're right. Yes, I'd forgotten the Battalion of Death. And they make very good pilots of course."

"At the present time a limited class of women are eligible for service and would consequently vote on a war question."

"But see here. It seems to me that it is unfair to leave it in the hands of those who are eligible to go into the service. If there is any one thing I've learned from history I've studied today it is that war affects everybody in the country, that it can kill off an entire population. Why we knew that even in my day."

"What you say is true. But the noncombatants don't expect to be killed—not seriously. In the A.-B.-C. war if those bankers who were killed in the raid on Manhattan had expected to be bombed and gassed, there wouldn't have been any war. But they didn't. They thought the war would be fought far away by the professionals. No, the great mass of civilians never see war as anything personal to themselves, unless it is brought home to each one that he, John, will have to fight in person. That is why nations used to declare war so easily and then be forced to use conscription to fight the war. The country wants to go to war. Oh surely. 'John Brown's Body.' 'Make the World Safe for Democracy.' 'Britons never will be slaves.' But if the war is more than a skirmish you have to draft men to fight it. With all due respect to you, Diana, women were worse than men about it. It's always possible to get women stirred up to a war fever. Half of the men who do volunteer in a war instead of waiting to be conscripted, do so because some woman who thinks it's glorious and romantic is urging them or shaming them into it. In peace time women are emotional pacifists, but when the bands start to play, they are much more easily stampeded than men. What's on your mind, son? You look thoughtful."

"I was thinking of an organization that used to give me the cold shivers, the Gold Star Mothers. They were formed after the World War and a woman had to have had a son killed in the war to be eligible. They had meetings and officers and conventions and national presidents and so forth, just like a lodge. It made my flesh crawl."

Diana interposed. "But, Perry, I should think such an organization could be a powerful force for good."

"It could have been, but it wasn't. If they had devoted themselves to making another war impossible, it would have been fine. But it was just another lodge, just another woman's club. But let's get back to the subject. I'd rather forget it."

Cathcart resumed his discourse. "I haven't told you about the neatest feature of the amendment. As we have said, only those who could fight could vote. Those who voted to declare war automatically enlisted for the duration of the war. The ballot even told them where to report the next morning. Those who didn't vote were the next draft, and those who voted no the last draft."

Perry looked puzzled and slightly annoyed, "But that puts a premium on cowardice, doesn't it? If war is declared, they should all have to take the same chances. If I had my way, I would just reverse the scheme."

"Don't be hasty, Perry. Stop and think. Is it a premium on cowardice? Perhaps it is. But isn't it just as likely to be a premium on common judgment? Perhaps the war isn't worth fighting. I've studied history all my life and I can remember but two or three wars that seemed to me to be worth fighting, and I have my doubts about those. In any case, if a man takes the responsibility of voting to plunge a country into a situation that may destroy it and is bound to kill and maim a lot of its citizens, shouldn't he have to accept the consequences of his decision by being in the first line of fighting? There is a stern justice about it. Under this rule no man could cast a vote that would send a fellow human being out to face poisonous gas and shots and burning rays without being ready to stand alongside him and suffer the same fate."

"But see here, in a democratic country, we are all in the same boat. Why shouldn't everybody have to defend the country alike?"

"Your reasoning is sound, Perry, but it doesn't apply to the case. You have forgotten that if the United States is invaded, no referendum is necessary. To be exact if any part of the North American continent is invaded, or if a fleet approaches our home waters with evident hostile intent, Congress can act without consulting the people. The referendum applies to situations such as the First World War, or the Spanish-American War or the War of 1812 or the A.-B.-C War. As a matter of fact the President has ample power to act, even without consent of Congress, to repel invasion or to succor our nationals abroad. No, the purpose of this amendment is to permit the people to decide for themselves whether or not an incident or series of incidents constitutes sufficient reason for them to want to go outside our own country and fight someone else. Of course the munitions makers didn't like it nor a lot of the financiers and industrialists, but it was democratic and reasonable and the people voted it in anyhow, once they understood it. But the munitions makers fought it tooth and toenail and eventually cooked their own goose in the process."

"How?"

"At the next session of Congress there was the usual bill introduced to take over the entire arms industry and make it a government monopoly. But this time the munitions men were in bad repute and Congress passed it."

Perry laughed. "Served 'em jolly well right, didn't it? But seriously, while this scheme seems to fit modern conditions, I don't believe it would have worked in my day."

Cathcart's shaggy brows lifted. "Why not?"

"Too cumbersome. It would take weeks to get ready for the election and weeks more to be sure of the count. By that time the whole strategic situation could have changed and lost us the war, if we went into it."

"I think you overrate the difficulties, Perry. I believe that I know your period as well as an historian can for I have made a special study of it. If Congress was debating a war resolution, wouldn't everybody in the country know about it? The President habitually spoke to the country by radiotelephony, correct? So if he were to address the country announcing the outcome of the congressional vote and calling a war referendum, everybody would be listening, would they not?"

"Ninetynine per cent or better."

"Very well then. Calling the election is easy. How soon could it be held? No need to wait for the people to inform themselves and consider the merits; if the situation is actually grave, they will have been following it for weeks and probably have made up their minds long before Congress acts. The next question is how long would it take to do the physical acts necessary to conduct a balloting? Everybody in the country of voting age knew or could find out very quickly the location off his usual precinct election polls. And each of those polling places had officials designated at the last regular election. Printing the ballots would be fairly simple, there being but one point to vote on, or they could be kept printed at all times, and let the name of the enemy be written in or assumed. Counting the ballots in each precinct would be a simple matter as well, twenty minutes at the most. The only new technique would be in collecting the returns. Tell me, there were telegram dispatching bureaus all over the country, were there not?"

"Oh yes, probably one within ten minutes of every polling place. I begin to see your point."

"Then let telegraph clerk in the country be considered a special election official. With a reasonably efficient system of intermediate clearing and tabulating, the final figures should be in the President's hands within an hour after the closing of the polls."

Perry nodded his head. "Yes, that is feasible, entirely feasible. You make me feel rather stupid that I couldn't see it."

"You needn't feel so. I have simply described with a few minor changes some of the provisions of the original implementing act. You had adequate organization and sufficiently rapid communication in your day. All that was needed was the decision to use them. As a matter of fact the method has worked practically perfectly since it was adopted."

"It has been used, then?"

"Three times since it was adopted. Each time the people rejected war and each time, in my opinion, history has justified them. And so the United States has *not* committed suicide. Yet in each case you may take it for granted that Congress would have plunged us into war. The simple fact that it called the referenda indicates that. You made another point, however, the point about the strategic necessity for a quick decision. This arrangement not only lost no time, valuable in strategy, but actually gained time."

"How do you figure that?"

"Because the first draft is mobilized the day after war is declared. That saves at least six weeks over all previous methods of conscripting an army. Furthermore adequate preparations could be made in peace time to provide fully for such an army, and any amount of training or arming that prudence indicated could be undertaken without fear that arming itself would lead us into war. It was a means whereby a peaceful, non-imperialistic, civilian-minded people could be fully prepared for any possible war."

Perry nodded his head vigorously. "It certainly sounds like a foolproof scheme. I admire the professional features about it quite as much as the political. I'm glad you pointed them out. There were a lot of peace plans afoot in my day, but I didn't have much use for any I ever heard about. Most of them seemed to be based on the notion that the United States being unarmed and untrained would keep us out of war. I've read some history, and I was convinced that it was the one sure way to get into a war."

"I believe you are right, Perry. Of course there is one objection to the referendum plan that was made by a number of people."

"To wit?"

"It appeared in many different forms, but it always boiled down to the same thing. A contention that the people didn't know what was good for them and were too stupid to be trusted with so much power. It amounts to a total disbelief in the democratic form of government. Strangely enough it came from the very groups who are loudest in their protests of affection for the American form of government, and 'Americanism' whatever that is, if it is not democracy. The people who made this objection were schoolteachers, preachers, officers of veterans and patriotic organizations, professional demagogues et cetera. Interestingly enough the army and navy did not oppose the scheme, even though they were denied the right to vote in the referendum."

"I'm pleased to hear that but not surprised. The professional military man is the last to believe any romantic nonsense about war, even though he may be calloused to it."

Diana took advantage of a momentary lull to put in a word. "I don't want to interrupt this conversation but I'm getting sleepy. Master, do you have to go back tonight?"

"No, but I want to get away first thing in the morning. Will you put me up over night?"

"Of course. Happy to have you any time. You men can stay up as long as you like and fight all the battles you wish. I've fixed a pot of coffee and you'll find a tray of sandwiches by it. Nighty-night." She patted Perry's cheek, blew a kiss to Cathcart and glided off into the shadows at the far end of the room. Perry followed her with his eyes. Cathcart noted his gaze and spoke:

"That's a fine girl there."

"Hunh?—Oh! Yes, yes."

"I suggest we emulate her example shortly. However as I must go back in the morning, let's trot over the past eighty years as quickly as we can and bring you up to date. Give me a quick sketch of the salient features of the history of the country from the turn of the century."

"Well, the war was over in 2004. We have just been talking about the results. Hard times commenced to settle on the country about 2006, but it took several years for it to develop into a full sized depression, partially because the Bank of the United States didn't fold up and partially because of the premature retirement of war bonds and payment of a war bonus. But unemployment mounted steadily each year. In 2010 Wendell Holmes was elected president. Between

2011 and 2015 he instituted the economic reforms that are now the current practice. Business picked up and things ran along pretty smoothly until the late twenties, when a movement started that was known as the New Crusade, or Neo-Puritanism. It seems to have been some sort of a religious revival that eventually caused a lot of trouble. It reached its height in the middle thirties and then for about a year there were riots all over the country. President Michele straightened out that mess and some constitutional reforms grew out of it. From then until the present time I don't recall any outstanding event. Lots of little ones of course and a lot of new inventions but nothing that appeared to change the course of history."

"Yes, that is true. The past half century has been a period of steady development with no spectacular changes but rather a slow growth and steady social progress. We appear to have reached a period of dynamic equilibrium in which mankind can develop his arts and perfect his sciences in reasonable comfort and safety. It might surprise you to see all the change since the end of the New Crusade, but it would be impossible for me to put my finger on any one thing and say 'Here the change occurred'. However, it is not necessary. You will gradually see for yourself now that you have the general framework. Do you have any questions about this period?"

"Yes, two things are bothering me. I don't understand the economic reforms under Holmes, and I don't see what this New Crusade was all about. It sounds screwy."

Cathcart grinned. "It's a good thing my professional research gives me some knowledge of the idiom of your period. It *was* screwy. But let's take 'em in order. We discussed before the cause of economic depressions and I asked you to take on faith the idea that the only thing that caused depressions was a financial system that automatically caused a spread between goods to be bought and money to buy them, or 'overproduction' as it was euphemistically called. I'm not going into the mathematical theory even now. You can take it up later with an economist or in several books I can recommend. But President Holmes was one of the few men to occupy the White House who had sufficient insight and mathematical ability to see the trouble, the reasons behind it, and to devise a cure. He had a powerful weapon to work with, the Bank of the United States, and he had the free intellect necessary to do what needed to be done without clouding the issue with a lot of moralistic tape. In fact he helped to formulate a realistic social ethic that justified his new departure. To begin with he saw the 'overproduction' or, as he looked at it, under-consumption or shortage of purchasing power. He directed a staff of actuaries to supply him with approximate figures showing the percentage of under-consumption and its dollar value for the past year. Then he undertook to make up the missing purchasing power by literally giving away through the Bank of the United States the necessary amount of money. He was aware that to do so without some control over prices would result in inflated prices and a new spread between production and consumption. So he held back about half of the newly created purchasing power and used it to control prices in the following manner: All of the retailers of consumption goods in the country were invited to join in the New Economic Cycle. If a dealer joined he agreed not to raise his prices over what they were when the new regime started. On the contrary he was to sell all his goods at a ten per cent discount, and the Bank of the United States would hand him the difference on presentation of his sales records. Then Holmes proceeded to give away through the Bank twenty-five dollars per month to anybody who would take it. Naturally business boomed. Prices didn't go up because all of the business went to the merchants who had joined the agreement.

Presently all the other merchants joined, too, in order to get in on the rush of business. Factories reopened, labor was needed and unemployment disappeared like snow in July. The country hummed. And that is a thumbnail sketch of the present situation, Perry. No unemployment, plenty of well paid work for anybody that wants a job, and enough credit issued every month to anybody that wants it to keep body and soul together in decency."

Perry looked bewildered. "Wait a minute. It looks fine at first glance, but where did he get the money? Not from taxes, surely, with the country already broke. And not from the private bankers. They were ruined in the war."*

[*For the benefit of the reader who is arithmetically inclined:

(A) Value (Price) of consumption goods produced in 2010 $540,000,000,000.00

Average income per person $2,413.33

(B) Total of personal income (Wages, dividends, insurance, pensions, etc.) $434,400,000,000.00

(C) Difference or under-consumption $105,600,000,000.00

Practical check:

(D) Value of estimated excess in inventories (under-consumption) $110,400,000,000.00 Error $4,800,000,000 or ±4.45%

(E) Empirical control figure (C±D) $108,000,000,000.00

Divide by population of 180,000,000 to obtain under-consumption per person per year of 2010 $600.00

Divide by 12 to obtain under-consumption per person per month $50.00 Issue one-half of this directly $25 per month per person Ratio to (A) all consumption goods produced of (E) unconsumed consumption goods is one to five or 20%. Discount is to handle one-half of this. Therefore discount is 20%.

Q.E.D.

I have taken the liberty of using round numbers. The exact figures from the Washington Archives show $27.813 per month and discount of 11.87%.

The Author]

Cathcart grinned. "He got the cash money the same way we have gotten all cash money since Roosevelt put the gold back in the ground —right off the printing presses. But he didn't have to print much of it. The checks were issued at the Bank and the merchant and a great many others had accounts at the Bank and very little cash money changed hands. The bulk of it was mere bookkeeping entries, made by the bank clerks. Holmes had implemented what the bankers had known for centuries but were barred by LaGuardia from doing—taking money out of an inkwell. What's the matter, son? Still not satisfied?"

"Well, I don't know. Everything you have said seems okay, but how about this? If you keep pouring money into a country indefinitely, you are bound to get inflation, fixed prices or no fixed prices."

"You don't pour it in. You add just enough to keep it running. Each fiscal period the additional amount is the closest possible approximation of the amount necessary to prevent a spread between consumption and production, based on the value of the nation's inventories."

"But why do you have to keep *adding* money all the time?"

"I said I would stay away from theory but I'll give you this hint to chew over: the amount necessary to add each period is theoretically equal to the amount of savings invested as capital in the preceding period. And one more hint: Doesn't it take more money to run the country's industry now than it did when George Washington was President? But now let's pass on to the New Crusade. It's getting late."

"OK."

"It is difficult to assay the causes of any religious movement. There appear to be mass movements of the human spirit that we do not fully understand. Karl Marx attempted to interpret all history in terms of a rigid materialistic causation, but how does that account for the Children's Crusade? Carlysle would have us believe that history is no more than the acts of certain great men, heroes. I find that equally hard to believe. Would George Washington have been more than a gentleman planter if England's rule of the colonies had been more liberal? It is my belief that history is a story of the action of individuals, acting according to their characters in the environments in which they find themselves. A change either in character or in environment would change the resulting action. In the interplay of lives there are strong characters—Carlysle's Heroes—who exert powerful influences of personality and intellect on their fellow men, and thereby shape the environment in which less dominant creatures act. If these strong characters are born in a period and are able to reach an environment in which their peculiar talents find maximum expression, they will write their names large on the pages of history. 'There is a tide in the affairs of men, which, taken at the flood, leads on to fortune.'

"Such a dominant character was Nehemiah Scudder, founder of the New Crusade and leader of the Neo-Puritans. He found the opportunity to use his exceptional talents in the Middle West in the third decade of this century. He was first heard of about 2030 as an itinerant evangelist of an obscure fundamentalist sect. He preached over most of the Mississippi valley, and although not prominent enough to make a splash in the news of the day, he had a reputation in his denomination for the forcefulness of his preaching, and the virulence with which he called the vengeance of the Lord upon the erring brother. But his fortunes took no great change until the death in 2023 of a Mrs. Rachel Biggs, the septuagenarian relict of a wealthy shoe manufacturer. Mrs. Biggs left four million dollars outright and that much more in trust to establish and maintain a tabernacle and television station to be used by the Reverend Scudder. We have had our radio priests and our political preachers many times before, but while most divines are tuned out at once, Brother Nehemiah was able to project his magnetic personality through the broadcaster and those who heard him once were thereafter his followers, if they were temperamentally ready for his brand of fire and brimstone. He was able, also, to choose and inspire other preachers to help him in the organization of his rapidly growing spiritual following. About 2024 he interpreted certain passages in the *Apocalypse* to mean that the new Jerusalem was here and now, that Armageddon was at hand, that his followers were called on to take up the fight. He organized the Knights of the New Crusade to implement him for Armageddon. This organization was modeled in nearly every respect after the Ku Klux Klan of the previous century, even to many details of ritual, uniform and constitution, which Brother Nehemiah had not bothered to change.

"In order to understand what happened subsequently and to appreciate the great power which Scudder wielded, it is necessary to understand the man and the people among whom he worked. He was a man of tremendous physical vitality and nervous energy, of middle height but powerfully built. His manner and speech suggested his backwoods origin. Deep set eyes under bony brows burned and gleamed and glared. His voice was normally low and mellow, but could scream and shout praise if need be. His mouth was large, his lips full and loose. In rest they were sensuous but in speaking they expressed a sadistic delight in his work. As to his private life, not much is known. He was married and his wife accompanied him and served him, but from time to time other female acolytes were added to his staff. The obvious conclusion is possibly not true, as there is a persistent story that the man, in spite of his great strength, was actually sexually impotent.

"A large portion of the population was ripe for such a leader. In the New World, since it was first settled, there have been two strongly dissident elements in the social body. One was anarchistic, and tolerant; the other sternly authoritarian and fanatically moralistic. It is a mistake to believe that our forefathers came to this continent in search of religious freedom. On the contrary they sought a place in which to exercise their own brand of religious totalitarianism. It is probable that the religious persecutions and moralistic intolerances practiced on dissenters by the colonists of New England were more severe than any from which they had fled. It is surprising that the Constitution contained an apparent guarantee of religious freedom. This seeming oversight may be attributed to two things, the mutual suspicion with which each colony viewed the other, and the staunch feeling for liberty felt by Thomas Jefferson who wrote the provision. It is very significant to note that the religious freedom clause was an injunction to the federal government. It did not limit the states. At one time the State of Virginia had an established church, and religious intolerance had been practiced, under the law, in every state in the Union. In addition to the puritanical factor in the American culture, there was the Roman Catholic strain, strong in some parts of the country, which supported many of the same intolerances as the Protestant churches.

"All forms of organized religion are alike in certain social respects. Each claims to be the sole custodian of the essential truth. Each claims to speak with final authority on all ethical questions. And every church has requested, demanded, or ordered the state to enforce its particular system of taboos. No church ever withdraws its claims to control absolutely by divine right the moral life of the citizens. If the church is weak, it attempts by devious means to turn its creed and discipline into law. If it is strong, it uses the rack and the thumbscrew. To a surprising degree, churches in the United States were able, under a governmental form which formally acknowledged no religion, to have placed on the statutes the individual church's code of moral taboos, and to wrest from the state privileges and special concessions amounting to subsidy. Especially was this true of the evangelical churches in the middle west and south, but it was equally true of the Roman Church on its strongholds. It would have been equally true of any church; Holy Roller, Mohammedan, Judaism, or headhunters. It is a characteristic of all organized religion, not of a particular sect."

Perry interrupted. "All this may have been true in 2020 but I saw no particular evidence of it in my day. There were churches of course and I went to Sunday School when I was a kid and chapel when I was a midshipman, but Lord, I didn't notice them after I grew up. They didn't bother me and I didn't bother them."

Cathcart smiled wryly. "What one has never had one doesn't miss. It might be instructive if I were to name over a number of the laws, and customs having the effect of law, prevalent in your period whose origins may be traced directly to some powerful organized church or churches."

"Please do."

Cathcart ticked them off on his fingers. "Sunday closing laws; tax exemption for church property; practically all laws relating to marriage and the relations between the sexes—including laws forbidding divorce, countrywide rule permitting only monogamous marriages, laws against fornication and other taboo sexual relationships, and laws forbidding birth control; laws prohibiting the teaching of certain scientific doctrines, especially man's kinship to other animals; all laws of censorship, for moral reasons, of the press, stage, radio, or speech; certain taboos of word and speech forms; laws prohibiting certain parts of the body being exposed to view; laws prohibiting the drinking of alcohol per se; laws against smoking cigarettes; any law which takes a paternalistic attitude toward the citizen with the purpose of ensuring his moral perfection rather than the purpose of regulating his conduct to prevent him from damaging other persons and, vice versa, prevent others from damaging him."

"But surely most of the laws that you mention arise from common sense rather than from religion?"

"You believe so because you were reared in the environment that the churches created. You were conditioned to regard them as the natural order of things. But it is a matter of historical record that in cultures where the organized religion held different views on morals, the exact opposite of every law I have referred to has had its day. But again we are getting away from the Reverend Scudder and his band of holy fanatics. In spite of what I have said the American churches fought a rear guard action for four hundred years. It is a far cry from the blue laws of early day Massachusetts to the tolerance and easy morals of the period under discussion. The libertarian spirit had great hold especially in the cities. With the perfection of technique for controlling conception and the elimination of contagious diseases associated with sexual intercourse, the sexual customs of the people were undergoing a rapid metamorphosis. The New Economic Regime produced more changes in moral relationships and made divorce easier. It produced another effect, too, in destroying the moralistic nature of work for work's sake. All of these things were offensive to a person of an old fashioned point of view, and none found them more distasteful than the Reverend Nehemiah Scudder. He preached against them, predicting Hell's fire and brimstone for the ungodly people of the United States! He denounced the pleasures of the flesh, all frivolities, the scandalous clothing, the demon rum, dancing, gambling, worldly music, light minded literature, and vanities of every sort. He called on his followers to stamp it out, fight the battle of Armageddon, and be led at once into the New Jerusalem, where the godly would never die, but live forever, singing hymns and praising God. Furthermore he advised his flock as to just how they might accomplish this happy end. He had a genius for organization and used it to weld together the most effective minority group ever seen in American politics. In the first place he claimed to represent the whole population and claimed a majority of the population as his personal following.

"Such was the effect of his organized agitation that he convinced the easygoing unorganized mass that his adherents were in the majority. In particular he convinced the politicians that he controlled enough votes to turn an election. In response to this belief, which may or may not have been justified, he began to accomplish through political means many of the changes in law which he desired, and what he could not get legally was obtained by his night riders, the terrorist Knights of the New Crusade or Angels of the Lord as they were variously known. There is a latent streak of sadism in the best of us. The Reverend Scudder turned it loose.

"During the period from 2025 to 2030 no man was safe in his home. The night riders might come knocking at his door and spirit him away to be flogged and perhaps tarred and feathered for such crimes as neglecting to attend church or a disrespectful attitude toward the movement or any fancied slip from the stern moral code of the brethren which might occur to the fanatical intolerant mind of a Crusader. Or his daughter might be torn from her parents, stripped naked and branded with a hot iron as punishment for some innocent frivolity regarded by the brethren as mortal sin. Or a merchant might find his store windows broken and his stock vandalized for the crime of employing an ungodly man. By 2028 Scudder had an iron grip on the Mississippi Valley and was a strong force throughout the country.

Blue laws controlled the whole life of the valley. Not a vehicle moved on Sunday. Churchgoing was obligatory in many places, and it was safer to do so in any case. Women wore somber clothing which completely hid their bodies. Dancing, singing other than hymns, games and other vanities were verboten. Higher education was discouraged. Idleness was dubbed vagrancy and treated as a crime. Scudder was looking forward to two national changes, the abolition of the distribution of the credit checks without work in return, and the open establishment of the church.

"However terror breeds terror and persecution brings its own reaction. The Libertarian element in the population, normally unorganized, were forced into protective coloration, but were not defeated. Under the pressure of necessity they organized, secretly and underground. They placed candidates in the field for their next congressional election and prepared to win at any cost. An underground terrorist group was formed by the more headstrong which undertook to hand the Knights some of their own medicine. The more conservative turned their attention to the coming election and flooded the country with pamphlets which denied that the Scudderites were more than a small part of the population and urged the people to vote their convictions. Election day was a shambles and the counting of the ballots resolved itself into a multitude of little battles between the Knights and the embattled individualists. When the smoke had cleared away it became evident that Scudder had lost the election. He had been heavily defeated on both coasts and clearly lost the majority of the seats in the larger cities of the valley. Even if he were conceded all the disputed contests in his rural strongholds, he nevertheless had lost every state but Tennessee and Alabama.

"The members of the new congress who had been elected on an anti-Scudder ticket were pledged to constitutional reforms to prevent a recurrence of loss of individual liberty from any cause. In consequence several hundred amendments were proposed in the first few days of the term. The parliamentary impasses resulted in a clever piece of law making. At a caucus of the Libertarians it was proposed and agreed to that a small representative committee draft and submit to the caucus an amendment in the form of a new constitution which, if adopted and ratified, would supersede the old constitution in toto. The committee consisted of five men and one woman, great minds all of them; Cyrus Fielding, Rosa Weinstein, John Delano Roosevelt, Ludvig Dixon, Joseph Berzowski, and Colin MacDonald. Fielding presided and apportioned the work. I wish we had time to go into the details of their discussions. They labored night and day for nearly four months. Fortunately we have a record of their entire proceedings which you can study at your leisure, and there are several excellent abridgments available. Their report was submitted to the caucus on 2028 April 20 and was debated in caucus for three weeks, but the members of the committee had done their work so well and in particular had been so skillful in retaining most of the wording of the original document, the new amendment was approved by the caucus without change and submitted as a single bill signed by every member of the caucus. Its adoption of course was a forgone conclusion. It was ratified by the thirty-seventh state on 2028 November 12.

"I won't go into the minutiae of the document but several changes are worthy of note tonight. The most important was the addition of a new restriction on the power of government. Henceforth no law was constitutional that deprived any citizen of any liberty of action which did not interfere with the equal freedom of action of another citizen. Pardon me, I have stated that badly. These are the words of the new constitution: 'Every citizen is free to perform any act which does not hamper the equal freedom of another. No law shall forbid the performance of any act, which does not damage the physical or economic welfare of any other person. No act shall constitute a violation of a law valid under this provision unless there is such damage, or immediate present danger of such damage resulting from that act.'

"Do you see the significance of that last provision? Up to that time, a crime had two elements; act of commission and intent. Now it had a third; harmful effect which must be proved in each case, as well as the act and the intent. The consequences of this change can hardly be exaggerated. It established American individualism forever by requiring the state to justify in each case its interference with an individual's acts. Furthermore the justification must be based on a tangible damage or potential damage to a person or persons. The person damaged might be a schoolgirl injured or endangered by a reckless driver or it might be every person in the state endangered by the betrayal of military secrets or injured by manipulation of commodity prices, but it must not be some soulless super-person, the state incarnate, or the majesty of the law. It reduced the state to its proper size, an instrument to serve individuals, instead of a god to be worshipped and glorified. Most especially it ended the possibility of the majority oppressing any minority with that hackneyed hoary lie that 'the majority is always right.'

"In another place in the constitution, corporate persons were defined and declared to have no rights of any sort except wherein they represented rights of real persons. Corporate persons could not be damaged. An act committed against a corporate person must be shown to have damaged a real person in order to constitute an offense. This was intended to clip the wings of the corporate trusts which threatened to crowd out the man of flesh and blood.

"Another new civil liberty was defined, the right of privacy. You will understand that better as you study the code of customs. Several other reforms were instituted, most of them obvious, such as the direct election of the president, and a re-definition of the 'general welfare' clause in order to give greater freedom in changing the details of government in a changing world. There were two important changes in the method of legislation. The House of Representatives was given the right to pass legislation over the veto of the Senate. There had been under consideration the abolition of the Senate, or at least to make it proportionately representative, but an obscure clause in the original document prevented this without the unanimous consent of all the states. Perhaps the most striking change was the power vested in the chief executive to initiate legislation and force its consideration. Under this provision the President with the aid of his advisers could draft bills which automatically became law at the expiration of ninety days unless Congress rejected it. The ninety days had to be while Congress was sitting of course."

"Suppose Congress wasn't in session?"

"The President could call it if he saw fit."

"Suppose the matter was too urgent to wait ninety days."

"Congress could accept it at once if there was need. Sometimes the President asks them to do so."

"Did Congress lose its power to initiate legislation?"

"Oh no, not at all. They could pass any laws they wanted and reject any laws they chose to. But if there was great disharmony, either branch of the government might force an immediate general election. The President could do so by dissolving Congress; the Congress, by a vote of no confidence. The latter vote was in the House alone, the Senate wasn't empowered. That is the least but one of the major changes. The new constitution called for a re-codification of law every ten years and laid a strong injunction on all law makers to use simple language and to avoid abstractions. A way was opened here to invalidate laws on constitutional grounds simply because they were not in clear English."

"I like that," commented Perry. "I always have thought that lawyers had deliberately clouded the issue by the cockeyed way they talk. I had a course in school once in order writing. Although it was classed as English composition, the criterion was not style, nor literary merit, but whether or not the meaning was unmistakable. I think it would have done most lawyers a lot of good to have taken it."

"I'm sure of it. Well, that about clears us up, Perry. The past sixty years have been largely development and growth which you can best appreciate by seeing it. If you will excuse me, I'm going to bed."

"A sound idea. But I want to thank you first for the trouble you have taken for me. You have been very patient."

"Not at all, son. I enjoyed it. Someday soon I want to question you at length about your recollections of your period. If you actually have authentic and detailed personal memories of your time you will be doing me a great service."

"It will be a privilege and a pleasure."

"Well, goodnight, son."

"Goodnight, sir, and thanks again."

V

"Going to sleep all day, sleepy head?"

Perry stretched and yawned, then grinned up at Diana.

"What time is it?"

"Late enough. Daylight's wasting. Master Cathcart is gone long since. If you want breakfast with me you'd better hurry." Perry jumped up and ducked into the refresher. When he returned ten minutes later, tingling from his shower, Diana was setting near the window a tray from which rose appetizing smells.

"What have we here? Buckwheat cakes. Sausage. Fresh pineapple. Diana, you are a jewel. Will you adopt me and feed me like this every morning?"

"Sit down, silly, and eat." She made a face at him, but her eyes were shining. "Hurry up. We're going places today."

"Where?" The coffee cup poised in the air.

"Round and about. Most any place you want to. The great wide world. What would you like to see?"

"I don't know—yet."

"Well, that's where we'll go."

After breakfast Diana lit a cigarette, then popped the dishes into the fire. She turned to Perry. "Better put these on. Your other things are already in thecar." 'These' were a pair of sandals with zipper fasteners and ornamental straps. He slipped them on and hurried after Diana who had opened the outer door. Perry found himself not outdoors, but in a small reception hall. On his left Diana's shapely legs were disappearing up a flight of steps. He hastened and caught up with her. They emerged in a moderately large hangar, containing at the moment what was obviously an aircraft but reminded Perry of an illustration from some lurid Sunday supplement. It was egg-shaped, about eighteen feet long and twelve feet high. It was supported by three retractable wheels, two at the blunt or forward end, and one at the stern. Mounted at the small end of the egg was a screw propeller with three five-foot blades. At the topmost point of the egg shaped body was a small cylindrical projection from which streamed aft a sheaf of flat blades about fifteen feet long and perhaps eighteen inches wide at the widest point. Perry guessed that this unfolded into a rotor for helicopter flight. He attempted to count the blades in the gloom and decided that there were either five or six. No wings were in evidence but Perry noticed that there were slots about four feet long on each side near the top amidships. Diana confirmed his guess that these housed wings that spread when needed. But search as he might he saw no sign of a control surface; rudder, stabilizer, nor fins.

The body was a dull copper color, except for the front end and the sides back to midships, which were plastic glass. The door was just abaft his enormous viewport on the starboard side. Diana swung it open and they stepped inside. The interior was very roomy, there being nearly five feet of clear floor space thwartships and almost that much abaft the twin pilots' chairs. A lazy bench ran around the outer wall except for the space forward of the chairs, where it was replaced by a belt of instruments with clear glass above and below. Perry saw that the level inner floor plate and the corresponding curved outer hull were largely of glass.

Diana seated herself in the right hand pilot's chair. "Come sit beside me, Perry." He did so and examined the dual controls in front of him. Diana touched a lever control and the car rolled out on the platform. She grasped the joystick and pulled it toward her, thumb pressing a button on the end. Perry heard a soft hum and a slight haze appeared over the car. The rotor had unfolded. The hum grew to a highpitched whine, then died away. The car trembled and he noticed a slight feeling of heaviness. He glanced down between his feet and watched the mountain with its crags and pine trees drop away. A few minutes later Diana moved the stick forward to the vertical. Perry felt as if he were riding in an express elevator which had just stopped at the top floor. The car hovered about two thousand feet over 'Diana's mountain'. She turned to him. "Now where shall we go?"

"I don't want to go any place until I learn to fly this thing."

"I'm not exactly a flying instructor, but I'll try. You saw me take off. First I started the main motor with this switch turned to 'helicopter.' I pull back the stick to rise straight up. With the stick vertical the car hovers. The stick won't move unless you press the button on the end. Push the stick forward—so—and the car lowers. Then return it to vertical when you are at the altitude you wish. In landing you settle it down slowly with a slight pressure forward."

"Suppose the main motor stops while you're in the helicopter?"

"It settles down on the rotor. The wheels snap out into place. They are held retracted magnetically by a field off the main motor. You settle down pretty hard—It's about like falling ten meters at sea level, a little harder in this thin air. But the carriage takes most of the shock and this pneumatic upholstery soaks up the rest. It is pretty much of a jolt however. Anyone standing in the cabin should lie down quickly on the couch."

"Suppose it fell over water."

"The car will float. If you can start the rotor again, you can even take off again. I've done it with this one from Lake Tahoe. If you can't take off, you can just sit there and wait to be rescued."

"Now tell me how to maneuver this baby."

"Turn the main control switch from 'helix' to 'plane'. The wings come out,"—Sure enough, Perry saw them spread on each side—"and the screw starts. As it gathers speed, it drags more and more current, and the rotor slows down and stops and folds up. If you stop the screw by throwing the switch back, or if something happens to it, the rotor starts. The wings don't retract until the rotor is maintaining lift. See, there goes the rotor." The great vanes passed by, turning more slowly each revolution, finally stopped, folded back on each other like a Japanese fan, and disappeared. "We are flying now. If I pull back on the stick now the speed increases. When the air speed meter shows the speed I want I return the stick to vertical. If I pushed the stick forward the speed slows. If I slow to stalling speed before I reach it the rotor will start."

"How do you change direction?"

"If you push the stick sideways, the car turns in the same direction. When you are on your new course you return the stick to vertical."

"Does that both bank and handle the rudder? Say, I didn't see a rudder nor any other control surfaces. Why should it turn?"

"There aren't any control surfaces. The car is gyro stabilized. We rotate the car around the rigid reference frame of the gyros and let the screw push away in our new direction."

Perry nodded slowly. "That seems all right, except that she must side slip like the very devil on a turn."

"That's right, Perry, but ordinarily it doesn't matter. If you need to prevent it, you can turn past your new course and hold it there until the side slip is killed."

Perry's face cleared. "Yes, I suppose so, but I would hate to try to fly a tight military formation in her."

"You couldn't. This is a family model, for quiet people like me. It isn't very fast and it's as nearly foolproof and automatic as they can make it. They claim that if you can use a knife and fork you can fly a 'Cloud House'."

"What speed does she make?"

"I cruise her at about five hundred kilometers. I could make five hundred and fifty but there's a nasty vibration at that speed. I may need a new propellor."

Perry whistled. "If that is a moderate speed for a family car, what's the record these days?"

"About three thousand. That is with rockets of course. But I don't like a rocket ship. They make me nervous and they are devilish to handle. Give me my old-fashioned electric runabout. I'm in no hurry."

"Which reminds me. I gather this baby must be electric drive, but how?"

"The rotor and the prop are driven by induction motors. The power comes from storage batteries. The gyros each have their own induction windings. They run all the time."

"Storage batteries—I should think they would be too heavy."

"These aren't heavy for the power they store. They call 'em chlorophyll batteries because the principle involved is supposed to be similar to the photosynthesis of plants. But don't ask me why. I'm a dancer, not a physicist. However there are some new models on the market that make their own electricity from coal."

"Directly?"

"I don't know. It doesn't burn if that's what you mean."

Perry slapped his thigh. "Edison was working on that when he died."

"Too bad he didn't perfect it. We've had it only about ten years. See here, Perry, want to try the controls?"

"Yes indeed. Wait a minute though. How do I change altitude when I'm in 'plane' combination. "

"You can get as much as ten degrees dive or climb by changing this setting. It rotates the car about the horizontal gyro axis. You can use that when hovering with the rotor to keep from drifting in the wind, provided the wind isn't more than seventy-five kilometers."

"In that case you could maneuver by rotor if you wanted to, couldn't you."

"Yes, but it's slow of course. Do you know what all your instruments mean?"

"You keep an eye on the instruments. I'll fly by ear for a while." Perry took the car up a couple of thousand feet and cautiously put her through her paces. Presently when he had the feel of the controls he undertook to see what it would do. He soared and dropped, flew straight away and slewed her into sudden turns. He discovered that he could jamb her about one hundred and eighty degrees and stop her dead with the propeller. After this stunt Diana touched his arm:

"Perry, if you knock off the propeller, we'll have to go home on the rotor." He looked crestfallen.

"Oh, I'm sorry. I thought anything she could do, she could handle."

"That is very nearly true. But my prop may be out of balance, you know. In any case the screw itself is a gyro and you were processing it on a rigid frame."

He set the controls at neutral and turned to her. "Diana, if you are a dancer and no physicist, how do you know so much about mechanics?"

She looked surprised. "Any schoolgirl knows that much."

"I can see education has improved." He returned to the controls and tried new stunts; stalling, changing combinations, maneuvering on the rotor. The flight brought them back near the canyon—'Diana's canyon' as Perry regarded it—and the waterfall caught Perry's eye. He lowered away cautiously and eased the craft slowly over toward the veil of water until they hovered halfway down and a hundred feet from the falls. They both sat in silent contemplation for several minutes until a shift in the wind forced Perry to return to the controls. He rose out of the canyon and settled down in level flight. Then he spoke. His voice was low and fervent. "Boy, but that fall is something!" He turned to Diana. "It's nearly as beautiful as you are, Dian'." She looked up and met his eyes for a moment, then dropped her lids, without replying. They were flying west. Presently Diana spoke.

"Where are we going, Perry?"

"I hadn't thought about it. Where would you suggest?"

"Would you like to see San Francisco?"

"Fine!"

"Then let me set the course."

"I can do it. I know this country." He located the South Fork of the American River and followed it by eye until it joined the Sacramento River. Presently Diana got up and went to the rear of the car. When they were approaching Sacramento she announced lunch. "Can't do," answered Perry. "I'm coming into traffic." She peered over his shoulder.

"I'll set the robot to circle Sacramento and pick up the San Francisco beam. You mustn't fly in traffic until you have qualified in the rules. Now come to lunch."

Hot soup. Stuffed eggs and celery. Oatmeal cookies and grapes. Cold milk. When it was inside Perry felt no desire to move. He lay on his stomach with his head over the edge of the lazy bench and watched the ground slip by the deck port. Diana regarded him lazily. Presently the ground changed to water.

"Coming into San Francisco!" he cried, jumped to his feet and seated himself in the bow.

"Don't touch the controls, Perry," Diana cautioned. "They are on full automatic." Perry didn't answer for they were slicing across the bay bridge.

"Dian', is that the same bridge?"

"I believe so."

Perry looked proud. "They had engineers in my day, too."

"Indeed they did."

"Why, there is the Ferry Building. Don't tell me that has stood all these years."

"No, that is a replica. It's a museum of California history."

"There's Nob Hill! And the Fairmont Hotel."

"You're right, but I don't see how you recognized it. It's only been there ten years."

"I can see how it's not the same building. But it's in the right place." The car changed course and commenced leisurely to circle the city in a clockwise direction. Several other aircraft were in the same circle at the same speed.

"The streets are decked over, aren't they? What's that moving under the glass decks?"

"Those are the streets, with people traveling on them."

"But how? I don't see any automobiles or other vehicles, yet they are going pretty fast."

"The streets move in strips. The strip nearest the buildings goes five kilometers an hour, then next ten and so on to the middle. Those have seats on them and travel forty kilometers."

"How about the end of the line?"

"The end of the line? Oh, they travel in loops. If you stay on one you come back to where you started. The cross traffic is on a lower level, naturally. Shall we land, Perry?"

His brow furrowed. "What do you think? I probably don't know how to behave. Besides I can't go into a city like this, can I?" He indicated his bare condition.

"No real reason why you shouldn't, except to avoid being conspicuous. But the public kit you bought yesterday is by you in the locker under the bench you are sitting on." Diana dug it out, and gave it to him. Perry donned it. It consisted of a kilt of bright blue silk hung on a broad leather belt with pockets and hooks in it. A strap over one shoulder helped to support the belt. Slashes in the kilt were lined with bright silver stuff which glittered as he moved. The belt and strap were black with chromium fittings which matched his sandals. Diana surveyed him.

"There. All set? Then I'll land us." Diana put the car down carefully through a maze of traffic onto a platform on Nob Hill. Before leaving the car she picked up a garment of her own and slipped it on. It was a Grecian tunic of black velvet, caught at the right shoulder with a jeweled silver clip. The right side hung open. The left shoulder and breast were bare. Perry whistled.

"Dian', you look perfectly gorgeous in that outfit, but in my home town they would toss us in jail and throw away the key."

"What for?"

"Indecent exposure."

"How silly. Let's go."

Diana received a check from the parking attendant, and they started for the stairs. It was cold on the platform. Perry felt goose flesh form on his chest and a sharp wind fluttered his kilt. Diana appeared not to mind. But it was warm in the stairway. As they rode to the street level Perry glanced at the other passengers. Apparently he and Diana were sufficiently clad. Most of the women wore as much as Diana, but several of them wore more provocative clothes. Passing the seventh level he noticed leaning in a doorway marked CORECTIV MASAJ a big Scandinavian girl clad only in a bored look. No one seemed to take special note of her. The men's costumes were varied. Many of them wore coveralls of heavy cloth. These Perry judged to be mechanics from the platform. A goodly number were dressed much as Perry was. He noticed one old gentleman in a Roman toga, who read a newspaper as he rode. But in a moment they debarked at the street level and Perry was too busy to worry much about clothes. They were caught in a swirl of foot traffic at the landing which separated him from Diana. He felt a wave of panic as he looked for her and failed to find her. Then a little warm hand slipped into his and he heard her voice. "Let me hold your hand. I nearly got carried away." He looked down at her face and knew that she was being diplomatic, but he didn't care. He held her hand tightly.

"What do you want to see, Perry?"

"Gosh, I don't know. Suppose you show me around a bit. If I think of anything, I'll tell you."

"All right." They proceeded along a wide corridor toward the street. The corridor was lined with brightly lighted little studio shops. Perry glanced at the displays as they walked. Most of the items seemed to be handcraft of various sorts, curios and beautiful things, some familiar in conception and use, some unintelligible. The Chinese, Japanese, and Indian shops seemed most familiar. In a few cases prices were marked. These seemed surprisingly high to him. He asked Diana about this.

"Why, naturally they cost a lot, Perry. These things are handmade. They are worth whatever the artist asks for them, if you want them enough to pay his price. A lot of them are queer ducks though. If you appreciate something they have made and you can't afford to buy it, they may just give it to you."

"But how can these hand workers compete with factory production?"

"They don't compete. Their work is for people who appreciate individual creation. The value of the things they make has nothing to do with the cost of the materials or the usefulness of the article. They are aesthetic values, that can't be standardized."

"Suppose people won't pay for an artist's work?"

"In that case he can do as he likes—either go on creating and keep the results or give them away—or stop and do something else."

"I didn't make myself clear. How can he go on creating if people won't buy?"

"He lives on his heritage checks, or he works for pay part of the time and works at his art part of the time."

Perry fell silent. They passed a row of public visiphone booths and came out on Mason Street. Perry had his first view of traffic on the moving ways and was made a little giddy by the sight. The crowds of people in front of him all appeared to be pedestrians but they moved at various speeds, those furthest away moving the fastest. It reminded him of times when, on a dance floor, he had whirled with a light-footed partner and then stopped suddenly. He glanced back at the adjacent building to steady himself. Then he looked back at the street. The movements gradually ordered themselves in his mind. He saw that each moving strip was about eight feet wide. He counted six strips to the middle of the street. The last strip carried a continuous bench on its far side and facing him. People were seated on this bench, reading, talking, and watching the life around them. Between their heads Perry saw flashing past in the opposite direction the heads of the passengers on the other side of the street. Overhead the glass canopy stretched from side to side from the window level of the second story, perhaps twenty feet in the air. On his left a pedestrians foot bridge arched daintily over the ways. From beneath the moving ways came a whisper and purr of machinery. Diana squeezed his hand. "Want to go for a ride?"

"Sure! Baby ride merry-go-round." He started to step on the outer strip.

"No, no, Perry! Face against the motion of the strip. And step on with the foot nearest the strip." Perry safely negotiated the first strip. "Come on, Perry, off the edge of the strip. Get inside the red stripes at once. Otherwise you might interfere with someone changing speeds."

Perry looked down and saw that the center three feet of the strip was bounded by red stripes. Several people within earshot glanced toward them curiously at Diana's words, but turned quickly away, except for one small urchin about six years old who surveyed Perry with a slow dispassionate stare. The next four strips were traversed without trouble and they settled down on the cushions of the bench.

Diana smiled at him. "All right?"

"Easy once you get the hang of it. Just Eliza crossing the ice." Diana gurgled. He watched with interest the passengers around him. The urchin who had favored Perry with his attention was now staring at the opposite bound traffic with his nose pressed against the glass backboard which rose above the back cushion of the bench. His mother steadied him with one hand while she talked with another woman. The traffic was fairly heavy and Perry watched them come and go with interest. His eye was caught by a plumpish middle-aged woman in a striking purple and white robe. She carried in her arms a bright-eyed shaggy terrier who wiggled and attempted to get down. The woman was looking back over her shoulder and talking to a companion. She collided with a man moving off the fifth strip, lost her balance and sat down very suddenly on her broad posterior just at the joint between the fourth and fifth strips where she lay, shrieking, while she turned slowly round and around. The terrier bounded away and attained the sixth strip, where he ran up and down barking at the passengers on the bench. As his mistress passed slowly out of sight, several other passengers helped her to her feet and brushed her off. Perry whistled to the dog, who acknowledged the overture by jumping to the bench beside him and applying a warm wet tongue to Perry's chin and neck, "Down, boy, down! That's enough." Perry grabbed his collar. "Now what do we do? We've been joined." He grinned. Diana rubbed the dog's head. Then she got up from the bench.

"Come along and bring your friend." She moved quickly to the fifth strip, Perry close behind, then to the fourth and to the third. She stopped on the second. "We should see her soon." Presently the purple and white robe showed up on the fourth strip. Diana, Perry, and the dog moved to the third and boarded the fourth as the woman came abreast. She swooped down on the dog.

"Chou-chou! Did mama's darling get lost? Was um fwightened?" She kissed its nose and hugged it. The dog wore an air of patient forbearance. "Thank the kind people, Chou-chou. They rescued you." She turned to Perry and Diana. Diana gave him a sidewise glance and tugged his belt. They skipped onto the fifth strip and quickly over to the sixth. Diana sat down and sighed deeply.

"Safe at last." They sat for a while and watched the passing buildings. A few minutes later she pushed an elbow in his ribs. "Look over to your left." She whispered. The purple and white robe was some yards away moving along the strip towards them. "I think she's looking for us. Come along. Here's where we get off." They threaded quickly through the crowd toward the outer strip and were shortly on the stationary walk. "That was close."

"Why was she looking for us?"

"Maybe she wasn't, but I took no chances. I can't stand to be slobbered over."

"What do we do now?" They were standing by the entrance of a large squat building of synthetic marble. Over the entrance Perry read UNITED STATS POST OFIS, Tub Stashon A. Diana followed his glance.

"Want to see how the tubes work?"

"Sure." They went inside, across a broad foyer and mounted a flight of stairs to a mezzanine. Diana led to the far side of the balcony. They leaned over a rail and looked down into a broad deep room whose floor level Perry judged to be below the street. Diana pointed down, and to the right.

"See them coming in there. Then they go on the belt and are sorted." Canisters of various lengths but of a uniform thickness, about eighteen inches, streamed out of a round hole and were deposited one after the other on a conveyor belt. Every few feet a mechanism leaned over the belt. Occasionally relays would click and a broad hook would roll a canister off the belt and pull it onto another belt running crosswise underneath the first. The crosswise belts then carried the canisters off to the right and left...

"Who operates the selectors?"

"They are automatic. An electric eye scans the destination tag. If the appropriate symbol corresponds, the grabber swings out and hooks off the can. See that first selector that is so busy? The one with three arms? That takes all the San Francisco traffic. Its belts unload in another room about as big as this where they are sorted for the local stations."

"I suppose the tubes run on compressed air."

"Only on short jumps. On the trunk lines they shoot along in a partial vacuum floating in a magnetic field that pulls them along. They make tremendous speeds on the long jumps."

"Suppose I wanted to mail a letter to New York. Would it ride in one of those cans all by itself?"

"Yes, but there isn't much sense in writing a letter when you can call up on the visiphone, or write on the telautograph."

"No, I suppose not. Say, I'd like to take one of those selectors to pieces."

"Perhaps you can if you care to apply for permission. But there is nothing fancy about them. Seen enough?"

"I guess so. What now?"

Diana glanced at a chronometer on the wall. "It's ten minutes past thirteen. We could run out to the rocket port if you like."

"Say, that's fine. Let's go!" They went back to street level and rode the first strip to an intersection where they dropped down one flight to the crosstown shuttle. This they took to a station marked TUB

EKSPRES TU ROKET PORT. An attendant sealed them in a cylinder containing heavily cushioned chairs. Diana sat down and laid her head back against a head rest and told Perry to do likewise. A light glowed above them for a few seconds, then cut off. Perry suddenly felt very heavy and was pressed into the cushions. Then he was suddenly normal weight again.

"Brace your feet, Perry." The sudden increase in weight pressed him forward this time. Then normal weight returned and the door opened.

"Where are we?"

"At the port, about fifteen kilometers south of town."

"San Mateo?"

"No, west of there near Pillar Point." They climbed out and proceeded up a ramp to a waiting room, where swarms of people moved about and clustered at the far end. Diana glanced at an illuminated notice board and then at the chronometer beside it. "Hurry, Perry. We are just in time."

"For what?"

"The Antipodes Express. It arrives from New Zealand in four minutes. Hurry." He followed her up a ramp into a gallery with windows facing the field. Several sightseers were already there. Diana turned to one of them, a boy about twelve. "Is she in sight yet?"

"Uh huh, she's circling. See?" He pointed for them. Diana and Perry squinted at the sky.

"I'm afraid I can't make her out."

"She's there all right. There go the field lights. The screens'll be up any minute now."

"What kind of screens?" Perry inquired. The boy looked at him curiously.

"Say, you haven't been around much, have you? These kind of screens." Dark amber glass shutters were settling over the view windows. "You look at a rocket blast with your naked eyes and you'll wish you hadn't."

"Thanks, son. I don't know much about rockets."

"I do. I'm going to be a rocket pilot when I grow up. There she comes. She's the good old *Southern Cross.* See how pretty she rides? That's old Marko himself. He don't bounce 'em." The ship, a faint silvery sliver, circled toward the earth. She rode with her bow lifted perhaps twenty degrees, and her tail jets streaming behind her.

"Looks as if she were climbing."

"No, no." Superior Knowledge was faintly scornful. "He's riding her in on her tail. Old Marko don't pull out the plug till he's ready." The ship circled again lower down and on a narrower course. The tail jets snuffed out, then a brilliant light flared from her keel. "There goes her belly blast. Oh boy!" The youngster's eyes shone. The blast reached down toward the earth. Soon it splashed around the field. Steadily the ship lowered until the blast was almost point blank and the splash filled the halfmole landing circle and concealed the ship. Then the blast ceased and the ship lay before them. The boy chortled. "Did you see that? Just as steady as a rock on her good old gyros. And he just slid her down like sliding down a rope. Not even a side jet. Not once! What he aims at, he hits. Marko's going to drive one to the Moon someday; you wait and see. And I bet I'll go along, too."

A little cart was rolling out toward the ship and unfurling a long matting as it went. Perry asked the lad about it.

"That's the asbestos rug. You wouldn't want to walk on that field in those sandals after the belly blast hits it. You'd fry. The cart's just the baggage cart." They watched the passengers debark,then strolled about the station for a few minutes.

"Any place else you want to go, Perry?" Diana presently inquired.

"Have you any suggestion?"

"I'm getting a little weary of the crowds. Let's get back." Fifteen minutes later they were on the platform where they had left the Cloud Horse. Diana surrendered her receipt and her car was run out onto the takeoff flat. Inside, she shucked off her tunic and tossed it on the bench and had the car in the air before Perry was out of his belt and comfortably settled. Once seated he lit a cigarette and handed it to her. "Where are we going?"

"Would you like to go swimming?"

"Swell. Where?"

"I know a little cove down near Monterey that is sheltered from the wind. The water may be a bit chilly."

"Let's try it."

Diana switched to 'plane' combination and gave it the gun. In fifteen minutes they were over Monterey Bay. Diana continued past Point Pinos for a few miles, circled, changed to helico, and settled down in a little cove which faced southwest. The waves broke gently on a narrow ribbon of beach. On each side shoulders of granite jutted out onto the sea. They opened the door and stepped out. The air was almost still and the afternoon sun beat down on them. The sand was warm underfoot. The sea smell, ripe and tangy, stirred in their nostrils. They walked toward the water but soon the joy of being alive lifted them up and they felt compelled to run. They splashed into the water, yelling and laughing. Perry charged along and dived head first onto the face of a breaker. He came up and dog-paddled in the back wash. Diana's head broke beside him.

"This is swell ." He gasped.

"A little bit chilly. Look out! Duck!" He turned around just in time to catch a wall of green water in the face. He came up blowing, and swam over to where Diana stood laughing at him. His hand struck bottom, he dropped his feet and stood beside her.

"This is grand, Dian'. I wish we could have done this in my day."

"My goodness! Didn't you?"

"Swim raw I mean. We swam but we wore swimming suits."

She looked incredulous. "I've read about it, of course. But it seems so ridiculous—so unsanitary." She shivered a little. "I'm going to dry off, Perry. I'm cold."

"One more dive and I'm with you." She moved off up the beach. When Perry returned he found her by the door of the car, rubbing herself briskly with a big fluffy towel. He picked up a second towel which was lying in the door. "Turn around and I'll rub your back." She turned obediently. When he had finished, she scrubbed away at his back, then stepped away and snapped him with her towel. "Ouch!" He rubbed the spot ruefully. "Was that nice?"

She grinned impishly. "No, but it was fun."

"You ought to be paddled for that."

"You'll have to catch me first." She was off down the beach, hair flying, legs flashing. He took off after her and ran her down. He grabbed her from behind, she struggled, and they fell down together, a laughing disorderly heap. He tussled with her and tried to turn her over into a favorable position for a smacking, but she was lithe as an otter and nearly as slippery. Their contortions brought their faces close to each other. He bent his head down and kissed her on her lips. She became instantly quiet, not relaxed but tense. In sudden alarm he searched her face. Her expression was serious but she did not seem angry. Slowly he bent his head again. She made no move, but did not draw away. His mouth touched hers gently. Her body relaxed and melted into his and her lips parted slightly as her right arm went about his neck. They held still for a long time.

There are kisses and kisses. Some are given in sport and some in passion. There are formal kisses of greeting and departure, and there are perfunctory pecks of accustomed affection. Once in a great while lips meet and two spirits merge for a time and the universe is right and complete and the planets wheel in their proper places. Once in a while the lonely, broken spirit of man is healed and made whole. For a while his quest is over and his questions are answered.

She lay quiet in his arms. "Oh, Perry."

"Dian', Dian'."

Presently she stirred. "Let's go back to the car." They arose and were surprised to find muscles stiff and cold. The warm glow of the interior of the car was welcome. "Shall we go home?" He nodded and she drew back the stick. The shadows on the beach were lengthening and the car's shadow flew out ahead of them to the east. She leveled off and shifted combinations. Presently her hands left the controls. "I've set the robot on Reno. Let's move back." They seated themselves side by side on the cushions.

"Cigarette?"

"Thanks." He lit it for her and one for himself. A long silence. Presently he spoke.

"Dian'."

"Yes, Perry?"

"I didn't say so, but I suppose you know that I love you."

"Yes, I know."

"Well?"

"I love you too, Perry."

Neither spoke for a long time. The quiet whir of the screw and the clicking of the robot marked the growth of time. He kissed her. When their lips parted she left her head on his shoulder. The room filled with their thoughts. In course of time a bell tinkled and a little light flashed on the instrument board. Diana arose hastily. "We're abreast of home. I must take over." Quickly she slid into her pilot's chair and changed course to the right. Five minutes later she spoke. "Look down and see if you can pick out our field."

"I see a light below."

"Work this switch and see if it blinks."

He did so. "It's ours all right."

"Will you land us, Perry?"

"Why, yes, if you wish."

"I want you to."

He set them gently down. A few moments later Captain Kidd was telling them in blasphemous terms what he thought of people who stayed away all day. There seemed to be some mention of inconsiderate, something about no sense of responsibility and a distinct intention of writing to the *Times*. Diana hastily procured a saucer of milk and one of sardines. He accepted her apology—tentatively.

When Perry came out of the refresher, he found Diana at the food preparer, her hands fairly flying about the place. He called to her.

"Dian'."

"Yes?"

"You've still got your sandals on."

She glanced down and smiled. "So I have. Your supper will be ready the sooner." She placed a few more items on the tray. "Here, set it up." She dived into her refresher and returned in less than five minutes, sandal-less, her hair fluffed out and her body glowing from a quick shower. She slid into her seat. "All ready? Get set. Go!" They ate like starved children for a few minutes. Then their eyes met and they both laughed without knowing why. They finished more slowly and Perry chucked the dishes in the fire. He returned and sat down beside her. The evening passed without much talk. They sat and watched the fire and listened to the music Diana had selected. She read some poetry to him. After that he asked her if she had anything by Rudyard Kipling and she produced a thin volume of his verses. He found what he sought and read aloud *The Mary Gloster*. Then he kissed a cheek wet with tears and made it damper with his own. A long time later she smothered a yawn. He smiled and spoke. "I'm sleepy, too, but I don't want to go away and leave you."

She looked at him, round eyed and serious.

"You needn't leave me, unless you wish."

"But—See here, darling, I want to marry you, but I don't want to rush you into anything you might regret."

"Regret? I don't understand you. But as far as I am concerned we are married now, if you wish it so."

"I suppose we could run out tomorrow and have the ceremony performed."

"There is no need. These things are in the private sphere. Oh, don't make it complicated." She began to cry.

He hesitated for a moment, then picked her up in his arms and laid her on the widest part of the couch. Then he lay down beside her. A coal in the fire cracked and firelight flickered about the room.

VI

Perry pressed back on the control stick and his plane shot higher and higher. He had to fly high because the Princess, his passenger, lived back of the Moon. He struck a bank of keys and plumes of fire shot from the tail of his plane and the plane climbed and climbed. He felt a swelling in joy within him at his own skill and the power of his plane and the warm beautiful knowledge that the Princess loved him and rode beside him. The Princess smiled and reached out a graceful little hand and caressed his face. Her face grew closer to his. The plane and the Moon faded away but the face of the Princess was still close beside him.

"Awake, darling?" Her head was on the thick of his arm and her hand rested softly on his cheek. He blinked. His eyes blurred and crossed. He blinked again and she came back into focus.

"Awake? Oh, I guess so. Almost, anyhow. Good morning, beautiful. I love you."

"And I love you."

When their lips parted, he spoke again. "Why?"

"Why what?"

"Why do you love me? How did I find you? Why was I singled out for this end? Who am I to claim your love? Why are you so wonderful and beautiful and why do you love me?"

She laughed and hugged him. "I can't answer any but the last. I'm not wonderful. I'm a very ordinary human woman with a lot of failings. I'm vain and I'm lazy and sometimes I'm bad tempered and cross. I'm beautiful because you think I am. And I want you to tell me that I'm wonderful and beautiful every morning of my life."

"And every night and every day." He kissed her again.

Later she stretched and yawned and made little contented sounds. "Hungry?"

"I guess I am. Yes, I am. If I could make magic in that witch's den of yours I'd bring you your breakfast in bed."

"It won't take but a moment. But thanks. Will you have yours in bed?"

"No, I'll come joggle your elbow and get in your way." He followed her to the kitchen nook.

"Tell me, Diana, when were all these fresh fruits delivered?"

"Last summer, mostly. I unfreeze them as I need them. Father picked out my supplies. He's in foods."

"Your father? Is your father alive?"

"Surely. Why not?"

"And your mother?"

"Yes. She's a surgeon. Why? Did you think they were dead?"

"I didn't think so consciously. I just hadn't thought about it. You were you. I didn't fill in your background. Say, does your father keep a shotgun around the house?"

"Whatever for?"

"It just seemed possible that he might think I'd wronged our Nell."

"Wronged our Nell? What does that mean?"

"It's just an expression. What I mean is this: If he knew about us, wouldn't he disapprove pretty violently? After all we may be married to each other but the world doesn't know it."

"But why should the world know it, or Father, unless we choose to tell him? And even if he didn't like you—and I'm sure he will—how would that affect us? He would never dream of mentioning it. Listen, Perry, you must realize that marriage, as an institution, has changed enormously. We talked about this once before. Marriage isn't a public contract anymore. It's strictly in the private sphere. You and I love each other and want to live together. We are doing so. Therefore we are married."

"Then there isn't any ceremony, nor any contract?"

"You can have all the ceremony you want if you care to apply to any of the churches. But I hope you won't ask me to do it. It would embarrass me terribly, and make me feel—well—dirtied."

His brow wrinkled. "I don't understand some of your customs darling, but the way that suits you suits me."

"We could draw up a domestic economy contract if you want one. Personally I'd rather not bother. We both have comfortable credit accounts and it would just mean a lot of unnecessary records. Let's just be casual about it. Even if you didn't make any money, we probably couldn't manage to spend my income."

"I don't want to be a gigolo."

"What's a gigolo?"

"A man who lets a woman support him in exchange for love making."

Her lip trembled and tears welled up in her eyes.

"Perry, you shouldn't have said that to me."

"Sweetheart! Please—Oh, Lord, I'm sorry, I truly am. I didn't mean to hurt your feelings, but good heavens, I don't know the customs of this topsy-turvy world."

The tears stopped. "OK, darling. I should have made allowances. But let's say no more about credits and contracts. We don't need to."

After breakfast Perry reopened the subject. "Dian' darling, there is just one thing that worries me about this casual modern way of getting married. What about children?"

She looked at him levelly and soberly. "Do you want to give me a child, Perry?"

"Why, no. Well, no, I don't mean no. I'd want to, I suppose, if you wanted to. I wasn't thinking about us personally; I was thinking about children in general. Say, have I already? I mean do you think it likely?"

"No, not until we decide to and want to."

"That's good. I mean of course it would be an honor and a privilege, but there is your career—and as for me—Look, Dian', how can I be a father?"

"Why not, Perry?"

"You know. This isn't my body."

"I think it is, Perry. Perhaps we can find out."

"Suppose you wake up some morning and I'm not in this body anymore—Suppose Gordon comes back?"

She put her arms around him. "I don't think that will happen, Perry. Don't ask me why for I don't know. But I feel sure of it just the same.

"But you ask about children. Children aren't a financial burden as they were in your day. A child's own credit account is enough to support it. A child can live with its parents if it wants to and they want it, or if it chooses, it can grow up in a development center. If parents separate, the child can go with which ever it chooses."

"It sounds awfully cold-blooded."

"It's not, really. In most cases children spend most of their childhood with one or both parents. Usually parents will insist on a child spending at least a year or two in a development center to be sure that the child is adjusted to social living. Take my case for example. I lived with one or the other of my parents practically all the time until I was eighteen, except for two years in a development center between fourteen and sixteen."

"You say one or the other of your parents. Aren't they married anymore?"

"Oh yes. But they are not very domestic, and their work keeps them apart a lot of the time. But take the case of my half brother Pharion. He's the son of a very talented actress who fell madly in love with Dad for a while and wanted a child by him. But they never married. He grew up in a development center almost entirely because he didn't like his parents. He was a sober minded boy and they were both too frivolous for him. Then there is my half sister Susan; she's mother's child by another great surgeon. I don't believe they were in love at all the way you mean it, but I am sure that they both hoped that their child would be a genius in surgery. Sue has lived with mother all her life."

"That sounds polygamous to me."

"No—I really don't think you could call it that. There is no custom against polygamy or polyandry, if anyone wants to. I have two friends, girls, who live together. They have a friend, a man, who lives with them most of the time. Of course I don't know but I think they are both married to him."

Perry shook his head. "I don't understand it. It seems unnatural."

"Don't worry about it, darling. You will understand in time."

Perry was much too busy for the next several days to trouble his mind with misgivings and doubts. He was happy, happier he thought than he had ever been in his life—or lives?—he could not be sure which was the proper term. Life was a picnic, a honeymoon, a delightful and interesting school, a Cook's tour, and the land of the Lotus Eaters, all rolled into one. He listened for hours to records of events that fascinated him, studied new techniques and advances in science in a medium that made his early day studies seem left handed and awkward, trudged through the mountain snows with Diana, watched her rehearse her dances, listened with her to gorgeous music and stirring drama, flew about the countryside in their car, and spent the nights in his darling's arms. Their intimacy ripened and grew. She encouraged him to talk of his early life, his childhood in Kansas, the adolescent triumph of winning an appointment as a midshipman, his school days, his life in the service, the things that he had seen and experienced, and the evaluations that he placed on all these things.

Meanwhile, as he observed the life of the modern world, listened to the records and studied the code of customs, he found in talking with Diana that his opinions had changed from the world that he had left, and that he was beginning to assess that past life from the point of view of a citizen of the modern world. That which had appeared to be the natural order of things, now seemed grotesque. Values lumped together as "sportsmanship" now appeared to be the stupid exhibitionism of savages. Things that were known as "sport" now appeared to range from harmless but pointless play to callous sadism. Nice points of "honor" between "gentlemen" struck him now as the posturing of peacocks. But most of all he came to despise the almost universal deceit, half lies and downright falsehood that had vitiated the life of 1939. He realized that it had been a land of hokum and cheat. The political speeches, the advertising slogans, the spit-licking, prostituted preachers, the billboards, the ballyhoo, the kept press, the pussy-footing professors, the incredible papier-mâché idol of "society", the yawping Neanderthal 100% Americanism, paving contracts, special concessions and other grafts, the purchased Senators and hired attorneys, the corrupt judges and cynical politicians, and over and through it all the poor desiccated spirit of the American peasant, the "wise guy" whose motto was "Cheat first, lest ye be cheated" and "Never give a sucker a break." The poor betrayed overgrown lunk who had played too young with the big boys and learned a lot of nasty habits, who had deluded himself with his own collective lies, whose father had deluded him from the best of intentions and who would in turn delude his own son from the same good intentions. The pillar of the community who taught his son that a man has to "go with a woman" but the women you marry are somehow different from the women you "go with." The mother who encourages her daughter to "make a good match" but wants to "run out of town" her sister from across the tracks who strikes a more generous bargain. The whole tribe, lying, lied to and lied about, who had been taught to admire success, even in a scoundrel, and despise failure, even in a hero.

Perry came to despise and be nauseated by all of these things, but he did not hate the people from which he came, nor loathe himself for being one of them, for he knew these people, and he knew that they were good people, warmhearted and generous, yes, and brave and courageous. He knew that any one of the posturing morons among those 100%ers would dive under the wheels of a locomotive to rescue a child, that the crooked real-estate promoter would buy a meal for any hungry man, and the vicariously ambitious mother would go without food to buy her daughter a party dress. He knew that kindliness and generosity were as universal as deception and cutthroat competition. Perry realized that not one in a thousand men had ever had a chance to act the decent, honest creature that he potentially was. He knew that the ordinary man from 1939 was too weak-willed and too naive to stand up against the system in which he found himself.

The thing for which Perry most admired the Americans of his period was that in them, potentially, lay 2086. In a short century and a half these callous, kind hearted, gullible, deceitful bumpkins had stumbled and zigzagged into a culture they could be proud of. Somehow or other (Cathcart's explanations seemed too simple now) the universal longing of the older generations that things might be different for their children had borne fruit. Perhaps that alone had accounted for it. Perhaps to have the desire for better things for our children, and our children's children, than we had for ourselves is to *be* immortal and to *become* divine.

Perry had ample opportunity as the days marched by to see this culture as well as to hear about it and view it in shadow show. He visited the socialistic state of Wisconsin which had grown up in its own direction within the framework of the federation. Diana and he spent several days in the Gulf States where there still remained the large group of blacks not yet assimilated by the white majority. Here he found a culture as free as the rest of the country—perhaps less highly mechanized, but undoubtedly richer in arts, and social graces, and zest for living.

Gradually Diana introduced Perry to her friends and helped him over the rough spots in adjusting himself to new social customs. After a few weeks of the casual, easy, good-humored atmosphere of her circle of acquaintances, he felt, and she agreed, that he was ready to get by in any company without betraying the peculiar circumstances of his life. He had acquired some of the modern liking for privacy and decided not to expand the number of those who knew.

One morning about six weeks after his advent Diana announced that she expected a visitor. Perry looked up with interest. "Who is it? Anyone I know?"

"No. It's a young fellow named Bernard. I used to be very close to him. He's a dancer, too. We used to be partners."

"What do you mean, 'used to be very close to him'?"

"Why, I was very fond of him. We lived together about a year."

"What!"

"Why, Perry, what's the matter?"

"What do you mean? Do you mean you lived with him in the sense that we are living together now?"

Her face grew dark. "You've no right to ask that sort of a question. However, I will answer. We lived together, as man and woman, as you and I are doing."

He strode up and down, a black look on his face. Finally he turned and faced her. "Diana, is this your way of telling me that you are through with me?"

She reached out and placed a hand impulsively on his arm. "Why, no, darling. No, No."

He shrugged off her grasp. "Then why do you invite this old flame of yours here? Are you trying to humiliate me?"

Her face was white and tense. "Perry, Perry darling! Nothing of the sort. You mustn't think such things. He is coming because he has occasion to. He and I are billed to appear in a series of dances together. He's coming here to work out the choreography and rehearse."

"Why hadn't I heard about it?"

"There was no reason to discuss it, Perry. We signed the contract last fall and we don't open until the first of May. But now we must rehearse."

He looked up and his face had cleared a little. "You used to love him, Diana?"

"A little. Not as I love you, Perry."

"He means nothing to you, nothing at all?"

"I wouldn't say that. I'm still very fond of him and he was very good to me. We just got bored with each other and split up, but I still count him as a staunch friend."

He looked sulky. "Staunch friend, my foot. I'll bet he's still nuts about you."

Diana looked hurt and bewildered and seemed about to cry. "Perry, Perry, darling. I don't understand you. What is this all about? What have I done to harm you? We were so happy, so very happy, and now all this. It seems so silly. Why? Why?" Tears welled up and spilled over. Perry wore the harassed indignant look of the eternal male confronted with the incomprehensible irrational feminine viewpoint.

"Good Lord! What do you expect? I guess I'm as tolerant and broadminded as the next one, and I've never thought it was my business to go poking my nose into your past, but can't you see that this is a bit thick? When a guy shows up whom you admit is an old lover of yours, and you want me to receive him into the house as a friend of the family, it's too much. Anybody'd be jealous. Don't you think I have my pride?" His face settled into sullen, stubborn lines and the corners of his mouth twitched. "The free and easy business may be all right for casual lovemaking, but apparently you didn't realize that I was serious. I thought we were married. *I* thought you felt the same way about me. I didn't know what all this casual immorality you showed me amounted to." He passed his hand over his face. "OK. I've been a sap. But don't you worry. I'll pack up and be out of here in no time. Thanks for everything you've done for me of course. I'll figure up what I owe you and pay you back right away."

Diana stood rigid, her hands clenched and her face screwed up like that of a child whose world has crumbled about her. Scalding tears pressed out of her tight shut eyes and splashed on her breast. He turned to go. She moved quickly and clung to him. "Perry! Perry! No! Don't! What have I done? I don't understand. Please, darling, please. Anything, but don't just leave me alone." She sobbed brokenly. Perry patted her awkwardly. Her sobbing continued. He turned her face up and wiped at her tears.

"Don't cry kid. I can't stand it. And let me go. It's better that way. Stop it, kid, please. Oh Lord, what can I do?" The sobs abated, and died away. She sniffled and gulped.

"Perry, it's some awful mistake. But tell me that you love me and you're not going away."

He looked troubled. "Well, I don't want to go away. Listen, Dian', I love you and I want to stay. Look. Will you call up this mug and tell him to stay away?"

She looked unhappy. "I can't Perry. He'll be here any minute."

"What can we do then?"

"I don't know."

"Christ!" He strode over to the view windows and stared out, his fists jammed against his hips. Diana waited. Then he turned. "Look, Dian'. I guess I'll have to be polite to this guy for today. After he's gone we can figure out what to do about your contract and so forth." She started to speak, then fell silent. "Well?"

"All right, Perry." He smiled and took her in his arms and kissed her. He felt the warm glow of one who has done a magnanimous thing. He could not know that she was still deeply troubled.

As they were finishing lunch they heard the thump of a careless landing overhead. Shortly the door light glowed and there was admitted their guest. He was a young man, tall, well muscled and beautifully made. Perry noted with dissatisfaction his obvious good looks. He greeted Diana with "Hello, beautiful!," swung her off her feet, kissed her, and set her down with a flourish. Diana turned uneasily to Perry.

"Bernard, this is Perry."

The visitor seemed momentarily startled, recovered himself, made the ghost of a formal bow and muttered, "Do you a service?"

Perry acknowledged as briefly.

Bernard turned to Diana. "Dancer?" Diana shook her head. Bernard continued, "OK. Let's get going. I've got a lot of brand new stuff and, baby, it's hot. Look at this." He pulled a roll out of his belt, then shrugged off the belt and threw it on the couch. "This one now. It's historical, see? I'm an army aviator and you're a war nurse. We do the first half in costume with lots of action, then in the finale we duck the costumes and it's all symbolical. The score is Radetzky's *War Birds* with my own arrangement." They fell into a discussion of technical terms which Perry failed to understand. He went over to the reproducer, selected a record and cut in the earphones. Grimly he kept up the pretense of studying for the better part of two hours. Finally he realized that he had played a record on engineering materials and processes three times and remembered none of it. He snapped off the machine and turned and watched the rehearsal. There was no avoiding the fact that Bernard was graceful and handsome. His shoulders were broad and his hips narrow and he moved like a black panther. His body was the true golden bronze all over and his profile could have been the model for a Greek coin. Except for a slight petulance of his features in repose Perry could by no rationalization regard him as effeminate in spite of his occupation. At the moment they were rehearsing a phrase in which Diana leaped into the air and was caught by him as he turned. Bernard seemed dissatisfied.

"No, beautiful, no. You're not in time. It goes like this: Tata Tata, tata tata, thrrrrrrump, bump bump." He illustrated in pantomime. "Now try it." The music started and Diana whirled and came out in a long flying leap. Bernard caught her from a turn, swung her about and set her down. "That's better. Now once more." He caressed her upper arm. Perry felt his jaw muscle tighten until hard lumps and an acrid smell came into his nostrils. Diana whirled again and leaped to be swept from the air like a netted butterfly. Bernard gave a shout. "Bravo! Bravo! That's it!" He retained her in his arms and planted an enthusiastic kiss on her mouth, then hugged her to him. Perry was on his feet and striding across the floor.

"Put her down!"

Bernard looked up with surprise and annoyance across his face. "What did you say?"

"Put her down!" Perry grasped his arm roughly. "Cut out that stuff. Put her down."

"Do you know that you are being offensive?"

Diana squirmed loose and stood between them. "Perry, please!

Bernard, don't pay any attention. Perry, please go back and sit down."

"Just a moment, Diana." Bernard stepped toward Perry. "Your words require explanation. Why were you offensive?"

"Offensive! Pah!" Perry gave a short hard laugh.

"He obviously is not rational. Come, Diana." Bernard placed a hand on her shoulder.

Crack! Perry's left fist connected with Bernard's jaw and he went down in a heap. He struggled to his knees, fingered his jaw, and looked at Perry with an expression of utter amazement.

"Get up and defend yourself." The amazement increased.

Without moving Bernard spoke. "Diana, get behind me. He's dangerous." Instead she broke from her shocked immobility and flung herself on Perry.

"No more, Perry! No more! Oh God, look what you've done already."

"Diana, come away from him. We've got to get out of here." She turned, still clinging to Perry.

"No, he won't hurt me. You get out. Go. Go at once."

"I can't leave you alone with him."

"Yes, go. I'm perfectly safe. Get out." Perry finally spoke.

"Do as she tells you. I won't hurt her, you fool. But get out or I'll cut you to ribbons."

Bernard backed toward the door, hastily grabbing his belt as he did so. As he opened the door, Diana stopped him. "Bernard!"

"Yes?"

"You won't do anything?"

"Do anything? I'll have to report it." He slid through the door and closed it. Diana burst into tears. Perry stared at her.

"What did he mean by that?"

Between sobs she explained. "He's going to report you for violating a major custom. And then they'll come and take you away, and you'll have to be examined to find out what they'll do with you." She burst into tears again. "Oh, Perry, why did you strike him? Oh dear, oh dear, we were so happy."

"What do we do now?"

"There's nothing to do."

"Do you think I'm going to sit here and let that young punk send the police after me on a measly assault and battery charge? Say, can I take the air car?"

She turned in sudden alarm. "Perry! You're not going away?"

"Why not? I can be miles away before they get here. Then when this quiets down I'll get in touch with you."

"Perry, don't think of it. You couldn't stay in hiding. You'd be picked up the minute you tried to use your credit account. It's impossible and it would just make things worse."

The visephone light glowed. Automatically Diana answered it. The image of a kindly looking woman with a brisk official manner appeared in the screen. "Office of Public Safely at Truckee. Are you Diana 160-398-400-48A?" Diana nodded, too miserable to speak. "Is there a citizen there called Perry?" Another nod. "Let me speak with him, please." Defiantly Perry placed himself in range. "You are Perry?"

"Yes."

"We are informed by Bernard 593-045-823-56G that you experienced a major atavism today involving an antisocial violence. Do you recall anything of that nature?"

"Yes."

"How do you feel now? Any impulse to break custom?"

"I'm all right."

"That's good. The field investigators will be along shortly. Can you arrange to come along with them today?"

"I have to, don't I?"

"It would be better. A quick investigation is always more satisfactory."

"They'll find me here. I'll come."

She smiled. "That's sensible. You'll be well in time. Very well, then—Clearing." Her image faded.

For the next half hour a morose silence filled the room. Diana hesitated to speak and Perry was busy with his own unhappy thoughts. Finally came the door signal for which each had been uneasily but impatiently waiting. Diana opened the door and admitted two pleasant, clean cut young chaps. One of them spoke. "You're Diana? And you must be Perry. Truckee safety Office. I'm Bill; this is Leslie. Believe there's a service to do you?"

Perry made a wry face. "You could call it that." The second young man looked anxious and stepped forward.

"How do you feel, buddy? Need any immediate treatment?" He glanced at his partner, who answered.

"No trauma or gross lesions. Let's check your pulse. Hm—a little high, nothing startling."

Perry pulled his wrist away. "Cut it out. I'm all right."

"Okay. I don't like to give a sedative before the preliminary examination. That pulse won't hurt you. Got everything you need? Let's go." Diana donned a tunic. "You coming too, sister? Okay."

Shortly thereafter Perry found himself being ushered alone into an office in the Truckee Civic Hall. He was greeted by the occupant, a middle-aged, grey haired black man, who thumbed through a stack of papers and presented him with a sheet. "Here's a resume of the report about you. Look it over." Perry glanced over the paper and handed it back. The official looked inquiringly at him.

"Any truth in it?"

"Do I have to answer questions? Don't I get to see counsel?"

"Why certainly, if you wish. But it saves unpleasant delay and mistakes if the state knows the facts at once."

"Oh well, I don't deny it. The report is correct as far as the general facts go."

"Very well then. We can skip the preliminary examination in that case. Consider yourself remanded for examination and disposition. Will tomorrow be satisfactory?"

"Good Lord, you seem in an awful hurry. When do I see my counsel?"

"You needn't be examined so soon, if you object. Who is your counsel? I'll have him sent in."

"I don't know any."

"Very well. I'll assign one." He touched a button and Perry was shown out. In the course of the next two hours he was assigned to a room (cheerful, clean, reasonably comfortable), given a card of special customs to read, weighed, measured, photographed, blood tests made, fluoroscoped, metabolic rate checked, and a dozen other items of clinical examination performed. When he was finally back in his room, tired and extremely confused, he sat down and tried to order his thoughts.

The door light glowed and an attendant entered, grinned and uttered the formal, "Service."

"Service," answered Perry. "What do you want?"

"Here's your menu. Check off what you want. You wanta eat here or in the refectory?"

"Here, I guess. Say, what is this joint; a hotel, a jail, or a hospital?"

"It's a detention center. Say, ain't everything been all right? You want anything?"

"No, thanks. Can I televue someplace? I need to get a message out."

"Sure, it's in that panel there by the window."

"Thanks." The attendant left and Perry tried to call Diana. There was no answer. He tried a second time and desisted to answer the door light. Diana stood in the door. Presently she disentangled her arms from about his neck and he saw that she was accompanied. Her companion was a spare intellectual man of about thirty-five who greeted Perry cordially. Diana introduced them.

"Perry, this is Master Joseph. He's here to help you. He's your counsel."

"Well, young fellow, if what Diana tells me can be considered as objectively correct, you have one of the strangest cases I've ever dealt with." In a few minutes Master Joseph had put Perry at ease and had drawn out of him the salient details of the event that had landed him where he now was. Then he inquired into the past few weeks of his life and the incredible story of his renascence. The talk turned to Perry's life in the twentieth century. Master Joseph seemed to have an inexhaustible curiosity concerning the social customs of that period, the beliefs men lived by, and Perry's opinions of the *mores* of both periods. While they talked, Perry's dinner arrived and he expressed embarrassment that he could not invite them to eat. Joseph answered that he could, if he wished, and signaled the attendant. After dinner the talk continued. Perry asked him what his chances were. Joseph considered this.

"Well, you are undoubtedly in violation of a basic custom. The Court will be sure to find affirmatively."

"What's the punishment?"

"Punishment?" Joseph's eyebrows raised. "There is no punishment. You have several serious psychological blockages and you will be requested to submit to treatment."

"What kind of treatment?"

"I don't know. Whatever your attending psychiatrists prescribe."

"Psychiatrists? What the hell? Do you think I'm crazy?"

"No, but I think you are badly in need of reorientation by psychiatry."

"What does a lawyer know of psychiatry?"

"I'm not a lawyer. I'm a psychiatrist."

"Then why were you sent to me as counsel?"

"Lawyers aren't private counsels. Those in court work are technical assistants to the court. I'll get one to see you if you wish, but he probably won't be much help. A lawyer is likely to regard any irregularity as most irregular—which it is of course." He grinned. "My advice is not to worry and get a good night's sleep. I'll order a sedative for you. No, Diana, you'd better not stay tonight. I want him to rest." He arose to go and studied the evening sky through the window while Perry and Diana said good night.

VII

Shortly after breakfast Perry was interviewed at length by a board of five psychiatrists. Joseph was present and facilitated the work. The talk seemed inconsequential. At one point one of them engaged him in an animated discussion of the effect of the invention of flying on the logistic problem in warfare. For some reason the others seemed to follow this discussion with interest. Another inquired into some details of customs or 'rates' observed by midshipmen, and as to what extent a midshipman's life differed socially from that of a civilian student. By lunch time they seemed satisfied and adjourned.

Perry's trial was set for fourteen o'clock. It turned out to be anticlimactic. On counsel's advice he stipulated the facts in the complaint and requested a trial without jury. The examining judge found affirmatively and read the findings of the psychiatric board. Then he spoke to Perry:

"Young man, according to the board you are for all practical purposes unacquainted with our customs in the field of social correction. In the terms you are familiar with you have been found guilty and I am about to pass sentence. In other terms familiar to you, you have been diagnosed and found to be sick and I am about to prescribe for your illness. You don't have to take your medicine unless you want to, but I hope you will. The findings of the board are encouraging if somewhat startling, and I think you will have a complete recovery."

"May it please the Court?"

"May it what? Oh yes, surely. Go ahead."

"What is the alternative to taking treatment?"

"The alternative is Coventry, by which I mean that you will be delivered to the gate of a reservation set aside for noncooperative individuals, along with your credit turned into any chattels you choose. Or, if you prefer, you may emigrate to any country willing to receive you."

"What happens if I enter Coventry?"

"You must enter the gate. What happens thereafter is no concern of the state."

"How long must I stay in the reservation?"

The judge shrugged his shoulders and did not reply.

"I'll take treatment. I was simply curious about the other."

"Very good. I see from the report that certain typical moral reactions may be expected from you with a general classification of aristocratic. Do you recognize my authority?"

"Yes, Your Honor."

"I am going to ask you to make me a promise. You need not if you prefer not to. I want you to promise that you will refrain from doing any violence to any person whatsoever including yourself for any reason whatsoever until you are pronounced cured or until you come to me and tell me that you withdraw your word. Will you do it?"

"That's fair enough. I promise."

"Good. I want to parole you to someone not in need of treatment himself. Who is your next friend?"

Perry looked disconcerted. "Why, I don't believe I have any." As he spoke, Diana stepped forward. The judge smiled.

"Is she your next friend?" They both nodded. "Very well then, you must understand that she is responsible to me that the instructions of this court are carried out." He turned to Diana. "Take him to the State Correction Hospital at Tahoe. The Chief Clerk will help you with the details. That's all. Goodbye and good luck."

In the air car Diana set the controls and turned to Perry with anxious concern in her eyes. "Well, darling, how do you feel?"

Perry considered this. "I don't know. I was braced for a pretty unpleasant outcome, but I've been treated very decently. On the other hand I have to go off someplace away from you and submit to treatment of indefinite duration and unknown sort. It's humiliating and I don't feel happy about it. I don't like to be regarded as crazy because I know that I am not."

Diana patted his hand. "Nobody thinks you are crazy, darling. They think that you are suffering from bad emotional reactions through faulty training. Now they will attempt to retrain you so that you can be happy."

He grasped her fiercely. "Do those fools think that they can train me out of loving you with a bunch of fancy phrases?"

She kissed him tenderly before she answered. "Not at all, darling. You'll love me just as much or more, but you'll be happier in it, because you won't be all cluttered up with a bunch of false reflexes and wrong identifications."

"You may be right but I can't see it. I don't see how you can change human nature."

"You'll understand that better in a few days. Relax and don't worry about it now. Come here and let me hold you." She took him in her arms, cradling his lean young shoulders like a baby. She smoothed the wrinkles from his brow and closed his eyes. Presently the little stubborn lines about his mouth ironed out and he breathed more slowly. Diana suspected that he was sleeping and was still. The miles slipped by underneath. Then she roused him gently. "Perry. Perry, dearest. It's time to land."

"I wasn't asleep."

"No, but it is time to land. See below—that flat over there to the left. Put her down as close to the buildings as you can find room."

"Right-O."

Inside the administration wing, Diana gave Perry his instructions. "Ask for Master Hedrick and tell them who you are. They'll tell you what to do." They were asked to wait for a few minutes. When Master Hedrick appeared, he turned out to be an unimpressive little man, rather thin, with scanty grey hair and a quick birdlike manner. He trotted up, hand outstretched.

"Ah, there you are. We've been expecting you. Welcome to Shangri La."

"Shangri La?"

"Just a poetical expression, an old man's fancy from a piece of classic literature I read when a boy. You've probably never heard of it."

"I've read it." Perry spoke abruptly.

"Oh, you have really? Then you'll appreciate the allusion. Not quite as Elysian as the original perhaps, but very beautiful, very beautiful." Master Hedrick beamed as if he personally had weeded the gardens. "And we try to make the place have the same effect, the same effect. Hope to, hope to." He cocked his head on one side and regarded them with chipper benignity. "But here, what are we waiting for? Visitors to Shangri La must be fed first. Have you lunched? Then perhaps some tea, or a liqueur? No? A cigarette?" Perry took one from the proffered pack. It was already lighted when he withdrew it. He regarded it with some surprise. Hedrick beamed anew. "Clever, isn't it? Designed for me by one of our guests. Very clever man, but a little too preoccupied with mechanical devices. Designed one intended to blow up the earth. Didn't work, but he doesn't want to anymore. Designs integrating fabricators instead. Very ingenious. Very ingenious. Never could understand them, but they work like a top, like a top. But come, you're not settled yet. Want to live in bachelor hall? No, of course not. We have some lovely apartments. Or how about a cottage?"

Perry didn't answer, but Diana diffidently suggested that they see the latter.

"Yes indeed. Come along." He led them at a quick trot downstairs and into a passage where a moving way delivered them to another stairway. They climbed the stair and found themselves in a pleasant comfortable living room complete in all necessary details except kitchen equipment. A fine view window faced out over Lake Tahoe. No other buildings were in sight. Hedrick indicated a path that lead to the right along the shore. "The main buildings are a couple hundred meters down there," said he. "You'll prefer to walk in fine weather. Now I'll leave you for a while. Just make yourselves at home. We won't really get busy until tomorrow." He trotted away.

Perry glanced after him. "Funny little guy. What is he, kind of a glorified janitor?"

"My heavens, no. He's the chief psychiatrist and director of the whole institution." Perry whistled, then he changed the subject.

"How soon do you have to go?"

"Why, I don't have to go. I don't have a broadcast until Tuesday."

"Do you mean they will let you stay here?"

"Surely. Why not? I'll have to be away a good deal because there is no place to rehearse here, nor to broadcast. They may want me to leave you a good bit of the time, but I'm certainly staying over night and most nights—if I'm asked." She lowered her lashes.

He placed a finger under her chin, turned it up and kissed her. "Of course you're asked."

The next morning Hedrick appeared and asked if he might come in and talk for a while. The men settled down to becoming acquainted, as Diana announced that she was going to run over and pick up Captain Kidd. The conversation rambled on for hour after hour. Perry found himself led into doing most of the talking and doing so with great freedom. The little man was curiously disarming. His birdlike twitter and mild ways broke down the younger man's reticence. Gradually he found himself talking about factual events alone. To it all Hedrick offered a sympathetic attention, his head cocked on one side, his eyes bright and alert. When he arose to leave, Perry inquired somewhat nervously as to when the treatment would commence. Hedrick beamed. "It has commenced. Didn't you know it?" Then he departed, having promised to arrange as soon as possible for a competent economist to come in for a chat, which Perry had requested.

The talks continued, both with and without others present. Hedrick turned over a part of Perry's case to Olga, a sturdy blond earthy person who seemed out of place on the staff of a psychiatric institution. She had the hips and breasts for childbearing and the calm eyes of the natural mother. But Diana assured him that Olga had more than once collaborated with Diana's mother in complicated brain surgery. Olga directed Perry in a more comprehensive study of the modern world than he had undertaken with Diana's help. In addition to technical and nonfiction works, Olga selected for him many fictional and dramatic works which she urged him to read or view. The two women got along together like old friends. Often Olga would appear with some book or record that she wished Perry to absorb, then the ladies would go for long walks in the surrounding hills. During Diana's numerous absences Olga would frequently eat and spend the evening with him.

Olga required Perry to do considerable writing, which he referred to facetiously as his 'homework' or his 'examinations'. There was an entire series in which he was asked to define terms. In the earlier papers the words to be defined were comparatively simple, such as 'walking', 'road', 'apple', 'cat'. Perry started in on these blithely determined to show that he positively was not chasing butterflies. But these papers came back to him with discrepancies and confusing terms pointed out and with a request for more nearly unmistakable definitions. He grew hot and sweaty and struggled with attempts to say in words just exactly what he meant. Then his second attempts came back with a congratulatory note on the care with which he had made his definitions, but with a comment on his definition of 'horse': 'Does this definition include clothes' horse, saw horse, horse play, horse dice? Please examine your other definitions with this comment in mind.' Grimly he sat down to modify the definitions which he had believed to be so beautifully exact. He hit upon the following dodge, a phrase which he added to each definition:'—and many other meanings, determined by the context, the speaker and listener, and the idiom of the period.' Finally he stated the proposition that a word is adequately defined when it is used in such a fashion that it means the same thing to the listener as it means to the speaker. He sent this in with the hope that it would settle the matter. He was soon undeceived for he was requested the next day to define 'human nature', 'patriotism', 'justice', 'love', 'honor', 'duty', 'space', 'matter', 'religion', 'god', 'life', 'time', 'society', 'right', and 'wrong'. After three days of fruitless struggle in an attempt to do something with these words, he sent back the following statement: 'Insofar as I am able to tell these words have no meaning whatsoever, for I am unable to devise any means of defining them so that they mean the same to the speaker as to the listener.' The answer that came back was cryptic: 'Let the problem lie, but do not abandon it. Could you design a turbine without a knowledge of calculus and of entropy?' He was then requested to formulate a mechanics of a pseudogravitation based on a law of attraction by inverse cubes instead of inverse squares. He became fascinated with the beautiful logical consequences of this problem and produced a monograph on the resulting ballistics. He was then asked if he could design sights for a gun to be fired under the postulated conditions. This request struck him as ridiculous and he demanded an explanation of Olga.

"Olga, what is all this rigamarole? What possible use is it for me to design a worthless gun?"

Olga smiled a long slow smile. "I would like to tell you the meaning but I can't. If you knew the meaning the rigamarole would not be necessary. But you must discover meaning for yourself. We are trying to help you discover the meaning of the words you didn't define."

"I'd like to lay hands on the guy who thought up this last little joke." She took his hand and placed it on her shoulder. "You did? Olga, I thought you were a pal of mine."

"I am, Perry, but it's part of my business to see that your treatment is approached through fields you understand and to watch its effect on you. However I think we can skip a step at this point. You obviously don't want to bother with designing this gun sight. But you could design it, could you not?"

"Certainly. Nothing to it. You see—" Perry launched into a flow of the technicalities used in ordnance and ballistics, and described with sweeps of his hands what would happen to a shell unlucky enough to be constrained by an inversed-cube type acceleration. "—and all this is in vacuo, of course. I wouldn't attempt to predict without empirical data the effect of a gaseous medium constrained by the same field."

"That's enough, Perry. I didn't understand a third of what you said, but I'm convinced that you could design the gunsight. Suppose we had such a gun and set it up here. Could you hit that sailboat over there across the lake?"

"Of course not."

"Why not?"

"Why, the mathematical formulas under which it was designed don't apply to the conditions under which the gun is fired. The more carefully you aimed the more certain you would be of missing."

"Does that suggest anything to you, Perry?"

"No, not offhand."

"You remember those words you didn't define—Weren't those words the names for things by which a man guides his life?—Honor, love, truth, justice, duty, and so forth?"

A look of dawning comprehension came into his face. "Yes, yes, I think so."

"Aren't these things just as powerful to move a man as the hunger of the belly or the stirring of the loins. "

"Yes, yes indeed. More powerful."

"Then they *aren't* meaningless. But like that gunsight, unless the meaning you attribute to them bears a correct relationship to the world in which you act, you cannot possibly use them as guides to go where you wish to go. Yet without these guides, a man himself is as meaningless as a gun that can't be aimed."

"You make it sound very plausible, yet a man is not a shell in a gun and truth and honor are not gunsights."

"No, they aren't. Let us drop the analogy before it leads us into absurdities. Nevertheless I think you see that what I said is true, quite independently of the analogy. Men are moved to act by very complicated motivations tagged duty, love, sin, and so forth. You yourself are moved by them and yet you are unable to define what you mean by these terms. You have accepted these concepts more or less unconsciously yet you know so little about them that you cannot possibly know whether they lead where you want to go, or to disaster. If you attempted to pilot a plane with as little knowledge of the controls, you would be sure to wreck it. You are here because you did such faulty piloting of your own life, and smashed another person in the chin in the process."

"Granting that what you say is true—and I don't concede yet that I was wrong to hit that fellow—how do you discover proper meanings for these words that will enable me to conduct myself properly by them?"

"How did you discover how to design gunsights that would enable you to hit the mark?"

"Why the theory of gravitation makes it a mathematical necessity."

"Are you sure? I seem to remember that the theory of gravitation was turned upside down and inside out in your lifetime. Did that cause all the gunsights to be junked?"

He slapped his thigh. "By God, you're right. Exterior ballistics evolved by purely empirical means, trial and error. Whenever we got enough data to analyze we invented formulas to fit. We never tried to make the practice fit the theory. When the theory didn't fit, we junked it and made up a new one. But it worked. We built machines in that way that were marvels of accurate prediction," he said and thought, then his face clouded. "But how can you apply that technique to the problems of living?"

"Well, Perry, so far as I know there are just two ways of working out a practical theory of human relations that will enable us all to live happily together. One is the hard way of trying to work out empirical principles from what we know of the real world. The other is by divine revelation. I won't say that the second way is impossible, but we moderns have grown to distrust it. Our conclusions in 2086 from the first method are embodied in the current code of customs. He who complies with that code will live with reasonably little conflict in 2086 whether he believes that the code is a list of final truths or simply rough generalizations. The code embodies our 2086 meanings for these troublesome words that you could not define. You have other meanings, unspoken, and in my opinion your meanings are both inaccurate and dangerous, for I believe that if you were able to define your code in spoken objective words you would find that your code did not correspond to the real world around you."

"But that still doesn't tell me how you arrive at these customs, or empirical formulas for conduct, or whatever you care to call them."

"Much as you perfected the art of ballistics. By a willingness to junk theories that didn't fit the facts. For example, the churches, by and large, set their faces against divorce. Divorce was a 'sin'. No attempt was made to study marriage and divorce objectively, divorce was 'sin' by divine revelation and that settled it. It is almost inconceivable the amount of harm that was done by that one false generalization alone. By rejecting the dogmatic viewpoint and examining the problem in its environment we reached quite different conclusions. In the 2086 environment divorce is not a 'sin', although it is possible to conceive different social patterns in which divorce would be 'sin'. Consider again the subject of clothing as a taboo. Again a dogmatic generalization for social conduct decreed that it was 'wrong', 'dishonorable', 'immodest' to appear unclothed. Original sin was involved, complicated aesthetic ideas were given a false objective reality, and so forth. An amazing mass of philosophical nonsense was written on this one taboo alone by people who would never think of taking off their clothes in the presence of others in order to see what it felt like. Their faces were resolutely set against such irreverent experiment, even as the scholasticists of the Middle Ages refused to watch any experiment which threw doubt on the perfection of Aristotle's Mechanics, and yet the experiment was always available and easy to perform. In 2086 from purely experimental considerations, the clothes taboo is destroyed. It does not appear in our code of customs, and one may dress or not as convenience and personal aesthetic taste indicates.

"Again, take politics. For centuries philosophers attempted to formulate the perfect state, reasoning from their own unexamined prejudices, which they usually assumed to be divine revelation. In 2086 we consider that the 'perfect state' is a meaningless sound having no objective reality. Instead we set up a political system to achieve whatever we wish to accomplish in 2086. We have no notion that it would have suited 1000 A.D. nor that it would suit contemporary Europe nor that we will leave it unchanged in the future. But we do believe that we have evolved a technique by which we can make the state serve our purposes in any age."

She glanced at the chronometer. "I have other things that I must do now, and I believe that you should think over and develop for yourself any new ideas from this talk. Bye bye!"

VIII

These exercises in realistic thinking continued in various ways. Perry found himself unable to distinguish between activities which were a part of his treatment, events simply intended to entertain and thereby keep him happy in his environment, and activities which he had selected for his own edification or fulfillment. Early in his stay he had expressed a desire to continue with his study of modern mathematics. He was given every facility to do so, but in time lost interest in the face of other activities and, especially, his rapidly growing friendship with Olga. He was surprised to receive a call from Hedrick who urged him to pursue his mathematical studies to the limit and, if possible, to develop some new aspect of the art. Perry inquired if this were standard psychiatric procedure. Hedrick hastened to reassure him, "Not at all, not at all, but if a person under treatment has a mathematical predisposition the development of that bent may be used very handily to clear up his particular difficulty. Yours is a case in point. You think very admirably in the field of physics in which your terms are almost entirely mathematical. You are able to make useful predictions and are able to avoid fallacious identification of terms. You are able to appreciate and even invent little mathematical jokes based on a deliberate confusion of terms. You can 'prove' to me that one plus one equals one or air cars won't fly, for our mutual amusement. This does you no harm because you have deliberately confused certain terms and used them with different meanings in the same problem in order to achieve a willfully ludicrous result. When your thinking in social relationships reaches the same order of development, you will no longer be tortured by the emotional upsets that impelled you to consult us."

"Is that all that insanity amounts to, a confusion of terms?"

"Oh my, no. Even in your own case confusion in terms is not the only problem. You not only confuse the various meanings of some terms, but you also fail in certain respects to perceive the pattern of your structural relationship to your environment. This produces trouble which may be likened to that experienced by a thirsty traveler who believes that a heat mirage is a lake. Your trouble is not of that simple order of perception of physical phenomena, but in a much higher order of abstraction. Yet it is as difficult for me to explain to you the exact nature of your trouble as it would be for you to explain a mirage to an ignorant savage. Your only hope of getting the savage to understand a mirage in the fashion in which you understand it would lie in giving him a long course of basic instruction in modern science, having first—and this is very important—untaught him a thousand superstitions and false identifications with which his mind is crowded. You are now in the process of unlearning your errors and superstitions. At the same time you are beginning to teach yourself a more satisfactory concept of the cosmos. But I haven't answered your question. You are not insane, any more than our savage. You are simply confused, as the savage was. In each case the confusion can be eliminated by proper training. Yours might well have taken place in a children's development center had you been of the proper age. Moreover, because of the maturity and exceptional ability of your mind we can enable you to retrain yourself in a fraction of the time necessary to train a child.

"With respect to other methods of treatment, naturally if a person is truly insane, suffering from physical lesions, whether congenital, traumatic, or pathological, we treat by physical means, surgery, chemical therapy, physical therapy, and so forth. Frequently there is little we can do other than care for them, keep them from harming themselves, or others, and prevent them from reproducing. But in any case in which the brain and nervous structure are not injured, we have not yet failed to achieve a satisfactory retraining into a state of full sanity. Yours is not even a difficult case, my boy. I feel sure that both of us will be satisfied with the result."

Perry stirred uneasily in his seat. "What you say may be true and I would hesitate to contradict you in your own field. Certainly I have acquired a lot of new ideas and new concepts and new ways of thinking about things in the past weeks. Nevertheless, I don't feel any different about the thing that landed me in this mess. I'm still in love with Diana, and I'm jealous as hell of her. I enjoyed taking a poke at that guy Bernard and would enjoy doing it again. I don't want any man to lay a finger on her. In spite of my inability to define human nature, I think you know what I mean by the term, and I think its in human nature that I should feel as I do, and I don't see how you can change human nature, mine or anybody else's."

Hedrick smiled and put the tips of his fingers together carefully, cocked his head on one side and replied, "You are right, my dear boy, entirely right, except about the immutability of human nature, in which you are partially wrong. I am quite prepared to believe that you are physically jealous of your woman in an acutely emotional manner. It is true that this emotion results from your own 'human nature' and that it is potentially present in all males and also in females, although it arises in females from a different source of more recent origin and less deep seated in character. The jealousy of the male for the female may be observed in animal life, in the battling of torn cats, the duels to death of stag deer, and the fighting cock bird. It is present in all animals, human and otherwise, and is both a necessary consequence and a determining cause of the survival of all bisexual life. It is very simple. The male who was unwilling to fight other males for the privilege of sexual intercourse did not reproduce; his line died out. Each generation, by and large, was descended from males who would fight for the females. Any factor in human nature which is necessary or helpful to the continuance and propagation of life may be termed a 'survival factor' and each generation will exhibit by necessity these factors; sexual urge, belly hunger, group loyalty, heliotropism, whatever they may be. You may term, if you wish, the resulting complicated manifold of instincts, desires, reflexes, emotions, and so forth, 'human nature', 'animal nature', or the 'nature of life'. But you must remember that these are complex terms, implying many factors, and arising from myriad environmental circumstances in the history of the race. And you must remember that environments change. Now, a factor in 'human nature' remains a survival factor only as long as the environment continues to make it so. For example on a dairy farm sexual jealousy is no longer a survival factor for bulls; on the contrary a bull is not allowed to fight; his major survival factor is his ability to breed daughters who are big milk producers. It is useless to argue that he is in an artificial environment; the distinction is a specious one. A manmade environment is as 'natural' as that of the jungle, unless you insist on a purely verbal distinction that divorces 'Man' from the rest of nature.

"Perry, you now find yourself in an environment in which the factor of physical sexual jealousy is no longer a survival factor. On the contrary it decreases your chances to survive. Yet the factor still exists in your 'nature'. You say 'that is that' and that nothing can be done about it, which would be true if you were a bull, but you are not a bull and there is an essential difference between modern man and other animals. Men are able consciously to examine their motives, emotions, and so forth, and by a conscious process to inhibit or divert a reaction, reflex, and so forth. He can control his emotions or modify them by conscious application, and thereby change 'human nature'. You think not? Let us consider the case of another survival factor, the fear of falling from a height. You ride in air cars. Are you afraid of the height? Does it cause you any nervousness? Does it upset your digestion, prevent you from sleeping nights, cause you to wake screaming from nightmares? Today the fear of heights is potentially present in that inherited matrix you call 'human nature'. It's nearly as old as the sex urge."

"Say," put in Perry, "you're right. I've had such dreams lately as a result of a fall. But I'm not bothered anymore—not in the least."

"Let's take another case, belly hunger. It is the oldest factor of all reaching back past the origin of bisexual life. If 'human nature' is not subject to change it should be the strongest of all and uncontrollable. Do you drool and slobber at a display of food? Do you fall on it like a wild animal? Do you snatch it from the plate of another? Do you sit up nights worrying about it? Yet it is there and basic. A change in environment would develop it to the point where men would fight for it, claw crusts of bread from dust bins, steal, rob, kill. You can supply many examples from experience and history. Do you begin to see that the active exercise of the factor of sex jealousy is today as stupid, as silly, as uncouth, and as unnecessary as the feeding habits of the jungle?"

Perry nodded soberly. "I begin to see, rationally at least. I'm afraid my emotions won't change quite so readily."

"Don't let that worry you. Proper emotional habits may be acquired like other habits—by conscious exercise over a period of time. If you control your acts along the pattern you desire, and exercise your will, your emotions will change. That may seem unlikely but I assure that it is a report of observed fact. Analogy in the cases of other primitive urges may make it credible to you.

"Before we go further, I would like to point out to you that the factor of sex jealousy as present in you and as exercised in the environment in which you matured was not always present in the same way in all times, places, and culture. Polygamy is, of course, well known to you, if not through experience, at least by report. It is a matter of reported fact that women in polygamous cultures were not made unhappy by the practice. The early Mormon culture is a case in point. Polyandry is less well known but was common in Tibet for a long period and worked very satisfactorily. In certain parts of Asia in recent times it was a common practice for a host to loan his wife or daughter to a guest for the night. It would have been bad form to refuse. Among certain of the Eskimo tribes it was the accepted practice in very recent times to exchange wives for considerable periods usually for reasons of domestic economy. To have disputed the practice or stirred up a fuss about it would have been thought barbaric, not to say immoral. Among certain of the Polynesian tribes promiscuity before marriage was the accepted rule. On the other hand among the Zulus as late as the twentieth century, a maid ready for marriage was examined by a committee of elder women. If they did not pronounce her a *virgo intacta,* she was beheaded. In contrast to this, among many people prostitution was a religious rite, reaching the extreme point in at least one highly developed culture wherein a woman could not marry until she had passed at least one night as a public prostitute. The illustrations from anthropology are endless. I have cited enough to show you that the manifestations of male sex jealousy occurring in the culture in which you were reared are not the result of an inflexible law.

"The case of female sex jealousy of the male differs greatly from that of the male. Female sex jealousy is primarily economic in origin, that of the male is primarily biological. The desire for sexual intercourse is not an important survival factor in the female. She may be impregnated without it, or even in the face of a strong contra-desire, as in rape. The dominant survival factor for the female is the need for protection and support during gestation and while caring for infant children. This will take the form of possessive sexual jealousy in any environment which requires her to capture the full attention of one man to achieve the end. It is not necessary that she be consciously aware of this. It is automatic. By and large, in such an environment, only the females who function in that pattern are able to reproduce. Many environments do not lay this requirement on the female. Yours did, to a marked degree, if the literature and records of your period are correct.

"From all I can gather the competition among women for the exclusive attention of one man must have been as fierce and ruthless as any jungle battle. It appears from history that the women of your period and before were able to freeze into law and creed that a man must take one woman and support her and her children to the exclusion of any other interest. A woman who connived with a man to break this stringent code of battle, as in adultery, was destroyed by her sisters as completely as they were able.

"Nevertheless, even in your day, the signs of environmental change and consequent changes in your 'immutable' human nature were in evidence so far as women were concerned. They were gaining greater economic freedom and consequent greater sexual independence. They no longer needed to the same extent the economic support of husbands. It was even possible for a woman of foresight and ability to bear and rear children without the economic support of a male. With increased knowledge and use of practical convenient methods of controlling conception women were liberated somewhat from the pressing necessity for capturing a man and holding him. With the advent of the New Economic Regime women no longer required the services of a man to support herself or her offspring. For the first time in history women reached the dignity of social equality with men. Up to that time any equality with men granted to them was spurious, a mere verbalism, having no real foundation in fact.

"The social consequences were of enormous importance both to women and to men. For the first time in history men and women could mate as equals without fear of concealed motives. Life was enormously enriched thereby. Love between the sexes could develop aesthetically in a way never before possible. Freed of the twin vices of masqued rape and masqued prostitution, it developed a beauty, a variety, and a richness limited only by the imagination and sensitivity of the individuals concerned. Not only did it glorify the love between man and woman but it made possible a deeper, less antagonistic, relation between man and his brother, woman and her sister, for the primary causes of rivalry were gone. Gone for men as well as for women. Why?

"You recall that the primary cause of sex jealousy in men was the desire for intercourse. In former cultures other men might lure away a desired woman with economic bait or capture her bodily. Now that the woman is no longer subject to coercion but is a free agent, the competition between males for a woman's charms is necessarily by gentler means. Excesses of jealousy are likely to defeat their own ends and lose a woman completely. You are lucky that your chosen woman was sufficiently primitive in her emotion and loyal in her intellect that she decided to stick by you. Many women would have told you to go to the devil and taken up with a less selfish man."

Perry was startled to hear himself called selfish. He started to speak, then thought better of it and held his tongue, his face a study in mixed emotions. Hedrick continued.

"As a matter of practice a man usually finds that he has lost nothing at all by ceasing to respond to the emotion of jealousy. Strictly from a biological point of view there is much data to prove that potential capacity for sexual indulgence is much greater in most women than it is in most men, so much so, that an average woman could be the mistress of, let us say, two or three average men without loss to the men. On the spiritual side there is enough of the 'Mother of All Living' principle in the nature of any woman to permit her, if she chooses, to be the source of spiritual refreshment to many men. Any man who believes the contrary is a fool who judges the soul of woman by the paucity of his own. He need only look at the mother of any large brood to know that the capacity of a woman to replenish the soul with her love is limited only by the scope of her field.

"I speak now of the ordinary run of men and women. In some cases a man may be a sufficient companion in every way for more than one woman, in which case the situation is reversed but is otherwise similar."

"Do you mean to say that such combinations as you have described are the usual order today?"

"Not at all. Not at all. We Americans in 2086 remain, by and large, monogamous. If for no other reasons, the approximate fifty-fifty balance of the sexes, habit, and convenience would make it so. In addition to that, it takes time for a rich love to mature and one does not lightly throw away such a possession. You think that you are in love with Diana today, my boy, but if you are still with her ten years from now, you will wonder why you graced so thin and feeble an emotion with that name! No, we pair off and stay paired on the average, but that does not preclude the formation of other associations either more temporary, or less deep, or both. No one partner in life can supply all the possible richnesses of living to another. I speak now not only of physical sexual associations, but also of associations mental and spiritual, such as I observe that you are forming—You'll pardon me saying so—with our good friend Olga."

Perry blushed to his hair roots.

"No, no, son. No cause for embarrassment. I invaded your private sphere because I am your physician and have occasion to. Olga is a fine woman, finer than you now imagine. Your association with her is bound to do you good in every way. I am happy to see it." Master Hedrick yawned and glanced at the chronometer. "If I don't turn in fairly soon I shall need a stimulant in the morning to attend properly to my duties. I've just one more thing to say; I want you to make a list of the things you expected to protect or obtain by driving this other young buck away from Diana. Be as explicit as possible and mind how you use your terms. Take as long as necessary and let me see the result. By the way, when do you expect her back?"

"Tomorrow, probably. She just ran up to Chicago for a special broadcast."

"That's good. There's a rather interesting job over in surgery tomorrow that she would like to see. Diana's mother is coming here to perform a dexter cerebrectomy. You might drop in too, if such things interest you. Accident case. Very sad. Young rocket pilot."

"Thank you, sir. I think I will if Diana is back."

Hedrick arose and knocked out his pipe.

"Just a minute, sir. Doesn't anyone maintain a lifetime monogamy anymore?"

Hedrick desisted from tickling Captain Kidd's belly and considered this. "Very possibly. There are a lot of possibilities in a hundred and ninety million people. Seems unlikely though. You might try your hand at working out the equation of probability involved, if it amuses you. I think you'll find enough data on file over in the Archives to give it a try. Well, good night."

"Good night, sir."

IX

"Would have come to see you sooner, but the problem presented unusual features that required study." The speaker was a little stoop-shouldered man with a bulging bald head. He addressed Perry over a glass of sherry in the latter's cottage. "When Master Hedrick told me that he wanted me to explain the theory and practice of our present economic system to a man with the point of view of America 1939,Ithought that he was in need of some of his own treatment. But when he elucidated I realized that I was confronted with the most startling problem in pedagogy I had ever undertaken. I wasn't able to undertake it without preparation. I had to search out and read much of the literature of your period and then spend several days in meditation in order to try to feel the period, understand the point of view, evaluations, and the fallacies of your time."

Perry shifted uneasily in his chair. "I didn't intend to cause you so much trouble, Master Davis."

"No trouble at all. You have done me a service. This is a most fascinating approach to the subject that has been my principle interest. By preparing to explain it to you, I understand it better myself. First tell me what you know of the present system."

"Well, in the first place it has retained private enterprise in industry. There I suppose it's a form of capitalism."

Davis nodded. "An inadequate word, but let it stand."

Perry continued, "However, although production, and so forth, is private enterprise, each citizen receives a check for money, or what amounts to the same thing, a credit to each account each month, from the government. He gets this free. The money so received is enough to provide the necessities of life for an adult, or to provide everything that a child needs for its care and development. Everybody gets these checks—man, woman, and child. Nevertheless, practically everyone works pretty regularly and most people have incomes from three or four times to a dozen or more times the income they receive from the government. There is no such thing as unemployment because there is always a demand for more production. Consequently wages are high. However prices are low, and to make the situation even more confusing, merchants regularly sell goods at less than cost, and the government pays them the difference. That is the general set up, if I understand what I have been told. It sounds impossible, an Alice-in-Wonderland business, filled with contradictions that deny common sense. It disturbs me. It challenges my reason. I'd be less annoyed at a perpetual motion machine."

Davis smiled. "I appreciate your difficulty. It is necessary first to clean your mind of a number of the errors, superstitions, and half truths that went by the name of 'economics' in your day. Consider for a moment the physical facts of the situation that you see around you. Disregard the money aspect for a moment and think in terms of goods, people, production and consumption. What then is the situation?"

"Well—I see that everyone has a pretty high standard of living, they live in good houses, and eat plenty of good food, and they have plenty of the comforts of life. That's the consumption side. On the production side I see factories and farms, and so forth, that produce at a high rate with lots of labor saving machinery. Nobody has to work very hard unless he really wants to. Anybody that does gets a big return for it in terms of goods and services."

"Do you see any difficulty in the picture now—still leaving money out of it?"

"Well, no. The physical wealth is there and the work done is enough to turn it into a high standard of living."

"Now describe 1939 in terms of physical economy—again leaving out money. Be careful not to use any term that implies money, such as wages, debt, price, and so forth."

Perry grinned. "You're preparing a trap for me. I can see it coming."

Davis was serious. "It's not a trap. It's a necessary expedient to lead your mind around its ingrown economic errors and enable it to think correctly. Go ahead and describe it."

"Okay. The country was just as rich in natural resources—richer as a matter of fact. We had plenty of factories to fabricate raw materials, but lots of them were shut down. Our farms produced liberally, plenty of good food, enough to feed everybody well. We had the technical knowledge, tools and materials to produce an abundance of luxuries and comforts, and in fact we did, for our retail stores were stocked to the ceilings with every sort of desirable article. That is the production side. On the consumption side about half of the population had less to eat than it needed and that of poor quality and wrong variety. In other respects they were worse off, living in houses that were fire traps, and disease breeders, frequently without running water and with primitive heating systems. Most of them had no medical or dental attention and were rotten with disease. My dentist once told me that four-fifths of the population never received dental care in their lives. The next third or so of the population just barely got by. They lived in fair comfort but in the fear of slipping back into squalor. A small group at the top had more than they needed of everything. While I'm speaking of consumption I suppose I should mention that we made a practice of destroying annually a large part of our production, especially food. Some people considered this wasteful, and we devised means to produce less rather than destroy part of what we had produced. But it came to the same thing."

"You speak of a small group that had too much. Do you know what the result would have been if everybody had consumed share and share alike?"

"As a matter of fact I do. I used to worry about that and worked it out on my slide rule in 1938 from some figures quoted in *Time* magazine. That was a news sheet published in those days. The average national income came to about one hundred and thirty dollars per month per family, which wouldn't have been a very high standard of living. But the same figures showed that only thirty per cent of the population had that much or more, seventy per cent had less. I have to mention money at this point, but I'll translate it into goods. A family at that standard of living would live in a cheap house, drive a second hand car, set a decent but not fancy table, have a radio, and go to the movies occasionally. But they would have no reserves, and sickness, accident, or the loss of a job would land them almost overnight in squalor."

"Then—still speaking in physical terms—was this average standard of living the best the country was capable of, by and large?"

"Oh no. Not nearly. The country was able to produce at least twice as much as was actually produced. Some authorities said three times or more. But anyone could see by looking around him that much more could have been produced. For one thing at least ten million people were out of work."

"Very well, then. You have described two different economic systems in terms of the physical realities involved. Now which one of them denies common sense, which one challenges your reason?"

Perry smiled. "You've sprung your trap, just as I anticipated. The 1939 system is the ridiculous one, certainly—when you look at it that way. But that still doesn't explain your cockeyed financial arrangements."

"The paradoxes you appeared to find arise from flaws in your training. They have no reality. I am about to state an axiom: Anything which is physically possible can be made financially possible, if the people of a state desire it."

"That sounds good, but is it true?"

"Yes, if the people of the state understand finance. Tell me, what is money?"

"Money—money is a lot of things. It is a medium of exchange, based on some precious metal, usually gold. It is also a commodity, bought and sold, and rented out for interest. And it's capital for industry."

"Which one of those things is it?"

"Well—when you come right down to it, I guess money is gold."

"That's what J.P. Morgan thought, at least he told a Senate committee that in 1912. I wonder whether he was lying or deluded. Try this definition: 'Money is anything which can always be swapped for goods, or services.' I believe that you will find that to be the only characteristic common to all money, and common to nothing else. How much money does a country need?"

"How can anybody answer that question?"

"Apparently nobody tried to before the present economic regime. Money was expanded and contracted in a most senseless fashion. The panic of 1907 for example was produced by a deliberate contraction of money. But the answer to the question is simple, and arises from the nature or purpose of money as we defined it. A country needs enough money to enable its citizens to perform all desired exchanges of goods and services. Your 1939 system did not accomplish this; our 2086 system does."

"But look—there was plenty of money in 1939. That doesn't make sense."

"Haven't you just told me that in 1939 there were millions of people who needed things they couldn't buy? And weren't there merchants who had all these things and wanted to sell them very badly, yet couldn't sell them? Wouldn't all this have been very different and vastly improved if the people in dire want had had that money in their pockets to buy from the merchants who had to sell or go bankrupt? Isn't that a shortage of money?"

"Yes, of course. But where are you leading me?"

"Patience. In 2086 the government gives money to the people to do that necessary buying."

"Yes, I know. Master Cathcart told me that the government got this money off the printing press or out of the inkwell—in other words fiat money. How can it be worth anything?"

"We decided that money was anything which *always* could be swapped for goods and services. That implies that the person who accepts it believes that he can do likewise. Therefore money is money as long as everybody believes it is money. There is a touchstone which will enable you to determine whether or not people will believe in money: Can you use it to pay taxes? Will the government give you something for it of value, postal service for example? If the people collectively as a state will accept it, then so will the individuals. Our 'fiat' money qualifies. The United States will accept it in exchange for things of value. That is no longer true of your gold. It can't be used for taxes. You may or may not be able to swap it off, it isn't money, and you may be stuck with it. As a matter of fact all United States currency has been 'fiat' currency ever since the United States suspended gold payments in 1933. Since that time the gold standard has been simply a fiction convenient in party politics. However I believe that your principle difficulty is in understanding why it is necessary for the government to create new money and give it away to the consuming public. In order to understand that, it is first necessary to understand the mathematics of the relationship between prices and purchasing power.

"Before we go into the mathematical theory, let me state the fact which we are to explain: In1939, and before, the sum total of the purchasing power of the public was always less than the total price of the goods offered for sale. This is just another way of saying that 'overproduction', with its attendant unemployment, poverty, labor warfare, and so forth, was a chronic condition. As a matter of fact it is not necessary to understand the mathematics behind it as long as you observe the fact, just as it isn't necessary to know how a house caught fire in order to see that a house is on fire and to realize that something must be done about it. I stated that 'overproduction' was chronic and that it is identically the same thing as saying that the public as a whole didn't have the money with which to buy the goods offered for sale. You will certainly agree that such was the condition from 1929 to 1939. It was generally recognized and the government even went so far as to partially make up the spread between prices and income by direct relief—giving money away—and wages for made work—giving money away with a moralistic sugar coating. This would have been sensible had the government created the money by fiat. Instead they borrowed it from the *banks* who created it by fiat. This was silly as it piled up a national debt to be reckoned with in the future and the money wasn't one whit sounder under the fiat of the banks than it would have been by government fiat. For please understand that the money lent the government by the banks to provide relief did not come into existence until it was borrowed. The bankers took it out of an empty vault—they fished it out of the inkwell. This may be hard to believe but it is the literal truth. Every time a bank loaned money in those days it created it. Of course President Holmes would successfully reclaim this practice for the government decades later, but at this time it was entirely imprudent.

"But to return to 'overproduction'. Before 1929 in the period after the World War until the market crash, the spread between production and consumption was absorbed in several ways; an enormous increase in private credit or debt especially in the development of installment buying, exploitation of foreign fields particularly in Central and South America—which means to give away goods and get engraved paper in return, which later turns out to be worthless; and in losses suffered by practically all farmers and many businessmen. You see, a large percentage of businesses failed even in boom times in which case their inventories were sold below cost.

"The condition in the World War years is simple to understand. During war, production goes at maximum speed for the war machine and burns up the excess. Of course an enormous load of debt is created which must someday be cancelled in some fashion. Before the World War there were many years in which the pattern was similar either to the boom twenties or to the depression thirties. In either case production always ran ahead of consumption and was disposed of in the usual ways; by the creation of debt, by destruction of price values through bankruptcy, by sending more goods out of the country than were taken in, or by outright destruction of goods as in war, or, as was done in peace time, by crop destruction.

"The case in which more goods are shipped out each year than are imported deserves special mention. For many years this was regarded as the ideal economic condition although any child can see the absurdity of it, but it was called by all sorts of fancy names; 'Favorable Gold Balance', 'Favorable Trade Balance', 'The American Plan', 'Cornerstone of American Prosperity'. It was taught in the public schools as a natural law."

"Yes," mused Perry, "I remember being taught that in grammar school. My geography book devoted a whole section to telling how necessary it was."

"As a matter of fact it was as vicious as it was silly. Each nation tried to sell more than it bought, and this was the basic cause of every war in modern times. The stupidity of the idea should have been obvious, but the nature of the financing system made it inevitable. Since production *always* exceeded consumption by a wide margin throughout this period,* [*The reader need not accept this without proof. Fortunately the records of the period are available in the Washington Archives. See statistics of the Department of Commerce, et al., for those years. The Author] it was necessary for a nation to get rid of its excess as best it could or suffer severe economic upset at home. Many were the devices to promote this, for example, the 'protective' tariff and the subsidizing of the merchant marine.

"There was only one period in which this peculiar financial fallacy was suited to the needs of the country, and that was in the days of the frontier. The system created bankruptcy and poverty, and the victims moved west and developed the country. It is customary to speak of population pressure as causing the movement west, but that is true only in a limited sense. The east was never too crowded in the pioneer days to support its population insofar as land and raw materials were concerned, but it already had a financial system which automatically created a spread between purchasing power and production, and thereby automatically created an unemployed class, which moved west with the next wagon train to rehabilitate itself in a simpler economy. Oh yes, we had an unemployed class in Andrew Jackson's day, but we called them pioneers!

"So much for the simple fact that in your 1939 economic system overproduction or under-consumption or a shortage of purchasing power was a chronic condition. Now let us examine the mathematical nature of purchasing power to discover why this was so. In so doing we shall discover the possible solutions and select the one we like. You see I've done this problem before and can show off how clever I am. You know about Little Jack Horner? I've always suspected that he knew where the plum was before he stuck in his thumb." A grin split Davis' saturnine visage and made him look like a little baldheaded gnome.

"Consider, if you please, two typical units of production, a factory and a farm. Let the factory be large, an employer with many employees; let the farm be small, a one-family affair. These two cases will be typical—insofar as price and purchasing power are concerned—of the entire economic organism. First, the factory: It makes, let us say, shoes. These shoes are placed on the market at a definite price. This price consists of two parts; the cost to the owner of the factory of making the shoes, plus a profit. The cost consists of a number of items, of which the principle are wages to employees, cost of raw materials, depreciation on capital goods, rent of land, interest on invested capital, and taxes. The additional portion of the price is the profit. This is the return to the owner or entrepreneur for his time, personal labor, ingenuity, and so forth, and is the source from which he must support himself and his family. To assume that profit is unnecessary is to assume that employers don't eat. It was popular in your day to attack the 'profit system'. We shall see that profits to an entrepreneur are *not* the cause of unemployment and financial distress. Of course there will arise the question of some entrepreneurs receiving a disproportionate amount of production as their profits, but that is a question of morals to be regulated according to the current customs. It does not in itself cause unemployment, as we shall see. As a matter of fact most persons who undertake the enterprise of new production, or entrepreneurs, did not make an excessive profit; most of them made no profit and went bankrupt. That is a simple matter of record. In your day eighteen out of nineteen businessmen failed in the long run. The groups who attacked the 'profit system' were beating a dead dog.

"Nevertheless, since entrepreneurs must eat, profits are a legitimate part of the cost of production. Henceforth we shall include them as cost charges and consider that the necessary value of an article of production is its total cost, or cost to the entrepreneur plus his necessary profit."

Perry interrupted. "Do you mean to say that the profit system in my day was okay? It seems to me that the profit system was always being attacked as the villain in the piece."

"The profit system was not the villain in the piece. The villain was ignorance of the workings of the economic mechanism, in which the entrepreneurs or industrial leaders were the greatest offenders. At the very least the laborers knew that something was wrong and demanded a change, but the industrial entrepreneurs denied that any change was needed, and stubbornly resisted change with the ignorant willfulness of a Marie Antoinette. Furthermore they possessed the economic and political power to resist change. In that way they were the villains and were responsible for all the tragedy of your era. But let's not condemn them too heartily, as they were ignorant and stupid rather than innately vicious.

"But now let's prove the statements I have made. Let's put this factory into operation and see how a cycle of production and consumption works. I mentioned a shoe factory. That will give us too limited a case to understand the whole industrial system. You understand the mathematical principle of the general case, the one in which all possible factors appear. Consequently any individual problem can be solved if you can solve the general case. Of course you do, very well then, let this factory be the general case of any production unit in the country which employs labor and uses capital. Its raw materials will be the materials it processes even though those materials have previously been processed after leaving mother earth. Thus steel plate or tanned leather may be termed raw material for automobiles factories and luggage factories. The term factory includes buildings and chattels of every sort used in production but which are not themselves the goods produced by the factory. Land includes the sites of buildings, rights of way, and so forth. Do you follow me?"

Perry nodded. "Sure. It's like any algebraic general case, like the general quadratic equation for instance; ax squared plus bx plus c equals zero gives a general solution of x equals negative b plus or minus the quantity the square root of b squared minus four ac all divided by 2 a. Substituting the conditions of a particular case gives the answer for that particular case."

[$ax^2 + bx + c = 0$ $x = -b \pm (\sqrt{b^2-4ac})/2a$ The full solution of this general problem of the second degree can be found in any textbook of primary algebra. The Author]

"Exactly. Let's set up the general case of a production-consumption cycle under the rules of your period and work out a few problems. Then perhaps we shall see the principles involved and be able to state a general solution which will answer all our questions about economics."

Perry scratched his head. "Look. That's all very well in simple algebra like quadratic equations, but in economics we deal with an indefinite number of unknowns and too many factors. How can we possibly do this?"

"We'll cross that bridge when we come to it. All special cases in the actual world are complex, it is true, even in quadratic equations. But the general case may turn out to have pleasing simplicity. Let's try to formulate it, and see. Have you pen and paper? Let's write down our elements. What are they?"

Perry thought. "A factory."

"Yes."

"The entrepreneur or industrialist."

"Go ahead."

"Raw materials, and labor, and land."

"Continue."

"Consumers."

"That is right, but who are they?"

"Everybody. All of the public."

Davis nodded. "True, but this is the general case. What does that imply?" Perry looked puzzled. "I'll tell you, then. The consumers are the people you mention plus their dependents, and no others. Even retired people enter the picture as capitalists or dependents, as well as consumers."

"Yes, I think I see that."

"Each individual has a dual role, appearing both on the production side and on the consumption side. Even a child appears as a producer through his father and appears as a consumer of goods purchased by his parents. We can disregard dependents from here on as they are represented economically by the head of the family."

"How does a widow living on insurance appear in the set up?"

"As a consumer of earlier production of the deceased head of a family. We'll take that case up later when we are ready to deal with it. Let's get on with our set up. What else do we need?"

"A bank or banks."

"Yes, and bankers, stockholders, bank clerks, and so forth. Will you let me lump them together as a bank and a banker, remembering of course the collective nature of the terms?"

"Okay, I guess."

"Very well, then. Do we need anything else?"

"Not that I can think of."

"Was the United States an anarchy ?"

"No, of course not."

"Then we have the government, and all of the subdivisions of government, public servants, taxes, and laws, and the government as a consumer."

"This grows complicated."

"Not too complicated. Let's represent government, and all subdivisions, as 'US', which you can think of as 'United States' or as 'us', for in the United States the government is everybody taken collectively. Public servants work for 'US'. Now do we have all elements?"

"How about farmers and professional men? They are certainly consumers."

"Yes, that's true. The case of the farmer is simple. Economically speaking, he produces in the same fashion as the factory owner, using the same elements; labor, raw material, land, enterprise, and so forth. If he employs no labor but himself and his family, 'profit' should appear as a large item in cost, and labor wages as zero. It becomes simply a special case under the general case. The professional man appears as a different type of laborer when he is hired by a production unit, for example corporation lawyers. Professional men serving the consuming public directly appear in the production-consumption chain in a one-to-one relationship of transfer without destruction of purchasing power. When you pay a medical man ten dollars for advice, your potential power to purchase and consume doughnuts or automobiles is reduced ten dollars and that of the doctor is increased by ten dollars. There is another element we have not named however. Can you guess it?"

"Mmmmmn—no, I'm afraid not. It seems to me we've covered the —Wait a moment. Technique! Knowledge."

"Exactly. Most knowledge is free to all of us. But some things are patented or copyrighted. Let's call the owners of techniques inventors. Now we are ready to roll. If we set up our hypothetical domestic economy so that it is structurally similar in every way to the economy of your period, it should work like your period. If we change the manmade laws to those of this present period, it will work like this present period. The natural laws involved remain the same structurally. If we can distinguish between manmade rules and natural necessity, we will know what we can and what we can't do with an economic system."

"How can we make any such complicated set up in our heads and be sure that it will work out in practice, Master Davis?"

"I shan't ask you to carry all of the moving elements of a complicated function in your head. Let's make a model. I see a set of chess men over there. May I use them? They will do nicely for people. Now have you anything I can use for counters?" Perry rummaged around and produced a box of poker chips. "Gaming chips? That's fine. Now we need something to represent the goods we are to produce and consume. What do you suggest? I'll need a number of units, a hundred or more."

"How about a box of crackers?" suggested Perry.

"A happy thought. Distinctly consumption goods. But we would get crumbs all over the table and they are rather bulky. Do you have any playing cards?"

"Surely." Perry arose and returned with them. "Here are a couple of packs."

"Very well. Let each card represent one unit of production of equal value. They represent all sorts of items; clothing, food, air cars, games, stereo records, books, and so forth. For convenience we split them up into equal-valued units. Now take the chess men and give them their functions. The black king is our entrepreneur, industrialist, or farmer." Davis wrote this on a slip of paper and tucked it under the base of the black king. "There. We will know him when we see him.

"You will notice that his tag reads 'Entrepreneur-Consumer' to remind us of his dual function. The black queen is his wife. Place her with him. Put a pawn with them as their children. Now another pawn for her father who is dependent on them. He's a crusty old gentleman who hasn't worked since McKinley was shot and thinks the country is going to hell. The white king is the banker. We'll write a tag for him, 'Banker-Consumer'. This box you keep the chess men in will do as a bank, and this book can be a factory. Put tags on them, but don't place the factory on the table yet. It has not yet been built. The black bishop owns the land on which the factory is to rest. He must first be satisfied. The white castle owns a process to be used in our manufacture of playing cards. Now take five or six pawns and mark them 'Laborers-Consumers'. Mark the black horses 'Owners of Raw Materials-Consumers'. Take the white bishops and mark them 'Government Employees-Consumers'. Take a separate tag and mark it 'US' but don't place a chessman on it, as we must not personify the government. 'US' is all of us, acting collectively.*

[*The reader is urged to make this set up and play it through as he reads. Otherwise the value of the demonstration will be lost. If chessmen are not available; bottles of ink, spools, tin soldiers, and so forth, will serve. Beans, dominoes, or marbles will serve as counters. The Author]

"Now we are ready to run through a typical economic cycle. Call it one eon in length and let it be the time from the building of the factory until it is depreciated in value to zero and is obsolete. Something around twenty years if you must think in definite terms, but it isn't necessary to do so. Suppose you identify yourself with the entrepreneur, Perry, and I'll play the other pieces. You see a demand for playing cards and determine to manufacture them. You have your eye on a suitable site which you can lease at a reasonable price, and you know of a new process that you can buy up. But you haven't the working capital, all of your wealth being tied up in tangible property which you don't want to liquidate. So you go to the banker and ask for a loan of a hundred shekels. You explain your idea and offer security worth quite a bit more than a hundred shekels. From where we sit we see that the bank contains only twenty shekels, the capital reserve required by law. One might think that the banker would say, 'Sorry, Old man. You've got a sound proposition and I'd like to accommodate you, but there isn't that much money in the bank.' But he says nothing of the sort; he lends you the money. How does he do it? You give him a promissory note saying:

Dear Banker,
I.O.U. 100 shekels at 10% per eon.
Signed, Entrepreneur

He enters that on the books as a bank asset, credits your account with one hundred shekels, gives you a bank book, and some blank checks, and you thank him for the money, which is new money, monetized by your security and existing only as bookkeeping entries. To symbolize this I hand you these hundred chips, which you must think of as bank credit, or check book money, not as greenbacks, nor metal coin. But you may use them as money in every respect for the banker will cash a few of them from time to time out of the small stock of cash he keeps on hand. He can afford to do this because only on rare occasions will all holders of bank credit ask for cash all at once, placing a run on the bank. Usually cash money paid out by the bank comes back the next day and is redeposited.

"You have your hundred shekels now and can commence operations. You lease a site for four shekels for the eon. Put four chips by the black bishop. You build your factory, eight shekels for raw materials, eight shekels for labor. Pay out your chips. Now pay the inventor four shekels for the use of his process. Your wages for labor during the eon amount to forty-four shekels. Pay it out. And for raw materials thirty shekels. You will have taxes of ten shekels during the eon."

"I can't pay them. I've only two chips left."

"Never mind. You'll be selling some playing cards soon, and can pay them as you go along. You now manufacture during the eon sixty-three playing cards. Stack them there by the factory. You need eight shekels profit in the course of the eon to support yourself and your family. You figure out what your market price must be for playing cards in order to accomplish this. What would it be?"

Perry set down his expenses and added them up as follows:

Land rent 4 shekels
Factory (labor) 8 shekels
——"—— (material) 8 shekels
Production (labor) 44 shekels
———"———-(material) 30 shekels
Royalty to Inventor 4 shekels
Taxes 10 shekels
Profit 8 shekels
Interest on loan 10 shekels
126 shekels to be recovered as price.
63 produced units to be sold; therefore price must be 2 shekels each.

Perry looked up. "I get two shekels per card."

"Correct. As you can see, I arranged the figures to give round numbers."

"But I can't possibly sell sixty-three cards at that price. There are only ninety-eight shekels out there to buy my product."

"Don't be in a hurry. Start selling and see what happens. We will assume this time that all these people that received money from you need all the consumption goods they can afford. Sell to them."

Perry dealt out cards to 'Labor', 'Land owner', 'Inventor', and 'Owners of raw materials', and collected two chips for each card.

"How many cards do you have left?"

"Fourteen."

"You have a lot of money on hand. Better pay your taxes."

"Okay." Perry placed ten chips on 'US'.

"Now I'll act for Uncle Sam and pay the public servants four shekels, buy raw materials for four shekels, and use two shekels to buy consumption goods from you."

"Here you are." Perry handed Davis a playing card who placed it on 'US' and gave Perry the remaining two chips.

"Now sell goods to 'Public servants' and 'Owners of raw materials'."

Perry did so, handing out four cards and receiving back eight shekels.

"Now pay the interest on your loan. You'll be doing so in the course of the time period."

"Okay, here's ten shekels."

Davis placed them in the bank. "The banker, with his family, clerks, and so forth, needs some consumption goods. Here are two shekels." Perry solemnly received them and proffered one card to Davis.

"Now pay yourself your profit of eight shekels. Turn it over to your wife. She handles the money in your household. She takes it and spends it for consumption goods." Perry took eight shekels, placed it by the black queen, then picked it up again and placed it by the black king, and placed four cards under the black queen. Davis added a comment. "That operation is symbolic of thousands of wives of entrepreneurs spending their husbands incomes on all manners of goods produced in thousands of factories.

"The eon is over. The cycle is finished. Your factory has depreciated to no value at all. I must remind you that your note is due at the bank."

"Wait a minute. Why do you assume that the factory is now worthless?"

"It isn't necessary. Had you figured for a shorter period, the cost item labeled 'Factory' would have been just the percentage of depreciation during the shorter period. There would have been a smaller number of articles manufactured, smaller items in all respects. The final cost per unit would have been the same, but we decided to run through a full cycle, from the beginning to the end of a producing unit. But come, come, you are stalling for time. What about my note? You owe me one hundred shekels."

Perry counted up his chips and grinned at him. "You'll have to whistle for it. I have only ninety-two shekels. I have four playing cards you can have for the balance."

"I've no use for playing cards. I'm a banker and I have your promise to pay."

Perry shrugged his shoulders and did not reply.

Davis continued. "Very well let's get on with the next stage of the game. You have four units of 'overproduction' and can't quite pay your note at the bank. But your banker respects your ability. Your original security is still good, and the banker says that conditions are essentially 'sound'. He refinances you to go into production again. You sign a new note, this time for one hundred and eight shekels and now have one hundred shekels to your account. But your banker cautions you not to be guilty of 'overproduction'. You go away, feeling somewhat confused as you don't see where you made your mistake, but the banker must be right for you certainly were left with four playing cards that you could not sell. You decide that the market only requires fifty-nine cards instead of the sixty-three you produced. So you do it all over again, producing only fifty-five cards which with your carry over of four gives you fifty-nine to sell. What is the result?"

"Why, I come out even I suppose."

"Do you? Last time you spent forty-four shekels on wages and thirty shekels on materials to build sixty-three playing cards. How much do you spend this time?"

"Let me see. Forty-four and thirty is seventy-four. The labor and materials cost per unit is one sixty-third of that." Perry set it up on his slide rule. "It comes to one point one one seven five (1.1175) shekels per card. I'm producing fifty-five cards this time. Fifty-five times one point one seven five is sixty-four and seven-tenths shekels."

"Those people bought thirty-seven cards with their seventy-four shekels last time. What can they buy this time?"

"Thirty-two and a fraction."

"Exactly. You sell your best market five fewer cards than last time. As a result of doing the only reasonable thing, you have more cards left over than before, you've thrown some people out of work, you have created less real wealth for the community to use and you are even farther from being able to pay off your note at the bank for you now owe one hundred and eight shekels and have only ninety-one with which to pay."

"Ninety-one? I figured ninety-two."

"No, ninety-one? Perhaps you forgot that your interest is eleven shekels on a hundred and eight."

"That's right. I figured ten, like last time. Now what happens? It looks like I'm going broke."

"Wait a bit. Do you see what caused the original 'overproduction'?"

"Why yes, the banker got money out of me that he didn't turn around and spend with me. Everybody else spent their money as it came in."

"Then what's the trouble?"

"Well, it looks to me as if it was the interest you expected me to pay. If I hadn't had to pay you that interest I'd have come out even."

"Not so fast. They weren't exactly equal and could not therefore have been the same thing. Even bankers have to eat. Why should he run a bank if he isn't paid to do it? Tell me, what would the effect have been if anyone else had saved part of his income instead of spending it?"

"Ohhhoh!" Perry slapped his thigh. "I see! If anyone saves income that he receives from the cycle, it is thrown out of balance and overproduction results."

"Exactly. In the problem that we have just gone through I cast the banker as the thrifty villain simply because banks were the worst offenders. They charged as much interest as they could get, and spent very little on consumption, whereas the workers, by and large, had to spend all they got as they went along. But all were guilty of the economic crime of not spending all their purchasing power and thereby saving themselves into bankruptcy, even a father with his life insurance policy and baby with his penny bank."

"Wait a minute, Master Davis. It seems to me that money saved eventually finds its way back into purchasing, even after several years. It all balances out in time. There should have been some consumers spending their savings in that first cycle to make up for those who managed to save."

"There were, of course. If savings are actually tucked away in a sock, it doesn't do much harm. It balances out with just a small carry over of inventories. But most money is not saved that way. Ordinary people invest in life insurance and savings accounts. Industrialists and financiers put it into capital expansion—use it to increase production. In each case it goes into new production."

"But how can that be harmful? We have just shown that money used for production creates new purchasing power to buy the goods produced."

"That's true but you are looking at just one part of the picture. Listen to me carefully. This is the crucial point: Potential purchasing power not spent for consumption but saved and invested for production in a later cycle has appeared as cost in both cycles. When it reappears as purchasing power in the second cycle, it is needed there, and still leaves the first cycle out of balance. For example, if money saved out of your playing card cycle were saved to finance a jelly bean production cycle every shekel of it would appear as cost in the jelly beans and would be needed to purchase jelly beans. It's not available to buy playing cards. To make this exposition rigorous I should mention the possibility that capital funds are occasionally spent on consumption and that money is sometimes taken out of production entirely, but this also produces unemployment and its attendant evils. The Panic of 1907 was of this nature, artificially created by the Morgan Bank and associated interests.

"But let's get back to your playing card factory. It is in trouble. These cycles continue. Each time the bank owns a bigger piece of your business and more of your employees are out of work. Eventually they are in dire distress and private charity cannot carry the load. Congress provides relief. At first Congress tries to pay for relief with new taxes but you business men howl that you are losing money now, which is true. Taxes on everybody—such as the sales tax—rob Peter to pay Paul, and increases purchasing power not a whit. It helps a little to tax the higher bracket incomes but in the long run that inhibits production by striking at a source of capital expansion. Congress is forced to look elsewhere for money to subsidize purchasing power and provide relief, for the spread between production and purchasing power has grown enormous, more than thirty percent in your day, billions of dollars a year. Some congressman from the middle west who cut his teeth on the Bryan campaigns proposes that the government print greenbacks to provide relief for the unemployed, but the bankers condemn this as 'unsound', 'inflationary', 'radical', 'striking at the roots of our institution'. They have great political power and carry their point. There is but one thing left to do and the government does it. It borrows for relief from the banks. True, the banks have very little cash money but the same law that permitted them to lend you money out of the inkwell enables them to lend to the government with the whole United States as security, the security being represented by interest-bearing tax-free bonds. The national debt climbs sky high but the system is held together a few more years, until the banks own practically everything, even the government."

Perry ran his hand through his hair and whistled. "You paint a pretty bleak picture. What is the answer?"

"We undertook to set up a general problem which, when solved, would answer the question in all cases of 'How much money does a country need?' We set up the general production-consumption cycle and worked through some problems under the conditions of your period. We should now be able to work the problem in general terms to arrive at the general answer. I believe you could do it with a little thought, but I will state the general answer for you to inspect and approve or reject. Here it is:

A production cycle creates exactly enough purchasing power for its consumption cycle. If any part of this potential purchasing is not used for consumption but instead is invested in new production, it appears as a cost charge in the new items of production, before it reappears as new purchasing power. Therefore, it causes a net loss of purchasing power in the earlier cycle. Therefore, an equal amount of new money is required by the country.

"This money must be a new issue, not borrowed from the banks, for there is no way to pay it back. To tax it back from the country as a whole is to destroy necessary purchasing power at a later date. To tax it back from the bondholders is a polite name for cancellation. But that was necessary and was eventually done, in a roundabout manner."

"How?"

"By paying off the bonds with new money, then getting it back with inheritance and income taxes. There are several interesting corollaries to our main proposition. Here is one, 'No economic system can create its own new capital.' That must be done by the fiat of the sovereign state. The banks can't do it, even when they are permitted to create money, as they must recover the money they create and loan, plus a charge for the service, or 'interest'. Furthermore, banks should not be permitted to create money at all, because they are, of necessity, interested only in making a profit. They will inflate or deflate the currency to make a profit regardless of the monetary needs of the country. Their interest rates are a reflection of an artificially created money market with no relation to the cost of the service. No, banks must be required to loan only deposits placed with them for that purpose, that is to say, their reserves must be 100%, not 10% as in your day. They must keep entirely separate the funds left with them for commercial exchange, *i.e.* commercial checking accounts, funds placed with them to invest orloan, and funds deposited for safe keeping. In such a case the customer pays for the service of checking and exchange, pays for the service of safekeeping, and receives interest on funds deposited for investment. But the banker no longer manipulates the money supply of the nation to suit his convenience.

"Furthermore, from what we defined money to be and from our examination of the production-consumption cycle, we reach the important conclusion that there is no necessary one-to-one relationship between taxes and government expenditure. If a country is expanding industrially as the United States has since it was founded, the government is obliged to put out more money than it receives in amount equal to new capital investment in order to avoid deflation. This is new money never received in taxes. In fact the Federal government need not tax at all, except as a regulatory measure. It needs *no* taxes for revenue. It must *never* tax as much as it spends or gives away, as long as production is rising. This gives the government remarkable freedom. If a new battleship or a new highway was needed in your day, the economically sound thing to do would have been to go ahead and build, paying for it with new currency. Congress should consider only two things: 'Does the country need this battleship, or road.' And 'Is the country rich enough in manpower and materials to produce it?' If both answers are yes, go ahead and issue new money to do it."

"Just a moment, Master Davis. What is this new money worth, if anything?"

"How do you mean that?"

"Well, in my day money could be exchanged for gold, not very easily, but it could be done. How can one be sure that this new money is anything but pieces of paper?"

"As I told you before, the government will accept it for taxes, and for services such as the postal service. But you want to know what it is worth in terms of real wealth, just as the old style dollar was worth so many grains of gold. Very well. If you present a draft for a thousand credit units or dollar bills to any one of several government warehouses, the bursar will give you an assorted group of basic commodities of weights and standards specified by law."

"Where does the government get these commodities?"

"Grows or makes them, buys them in the open market, and may occasionally accept some of them as taxes."

"That seems awfully cumbersome compared with the gold standard."

"It is cumbersome, but it's worthwhile for it gives a much more nearly stable medium of exchange than gold. As a matter of practice the government keeps very small stocks of commodities because with a stable standard for money the public prefers cash or credit at the Bank of the United States to the trouble of handling bulk in commodities. They are satisfied to know that they can get real wealth in specified amounts, if they choose."

"How about foreign trade? This sort of money would be a nuisance there."

"Gold, as well as platinum, silver, and other convenient commodities, is still used in foreign trade exchange. The government buys and sells these commodities in the open market as a convenience to its citizens."

"I guess that clears it up. It still seems complicated."

"It is, Perry, more or less. But it isn't anything to the anarchistic maze that your old money system was. Let's get back the tax problem. The fact that there is no necessary one-to-one relationship between taxes and government expenditure is startling at first, but is evident from the nature of money. Money in the hands of an individual is a token of a debt to one of us owed by all of us. This token in the hands of the government states that all of us, *i.e.* the government, owe a debt to all of us, *i.e.* the government—an absurdity. One cannot owe oneself a debt in any but a poetical sense. Money in the hands of the Federal government is a scrap of paper and ink. It is significant only when held by individuals or groups of individuals.

"We recognize nowadays that Federal taxation is a deflating process, and that Federal government spending is an inflating process. Each process has important secondary effects through which it can be used to regulate for the general welfare. Taxation may be used to prevent unwholesome concentration of wealth. It may also be used to prevent too great a difference in the net income of individuals. The issue of new money is an even more powerful instrument in shaping our economic life to suit our wishes. It is a means of ensuring social security for the entire population through the dividend or inheritance checks. It can stimulate production and prevent inflation of prices through the use of the discount. It is used to assure an equal start for every child. In fact the knowledge of how to use money enables us to inhibit or encourage almost anything without coercion. If we desired, we could institute as near complete a socialism in the United States as we wished, without confiscation and taking over the tools of production. The present set up suits us now. We can change it if we like, when we like, for we understand the economic mechanism. The economic determinism of Marx is an exploded bugaboo, and the American people are the masters, not the slaves, of their economic system."

Davis took a sip of sherry, and looked slightly giddy. "You'll forgive my enthusiasm, I trust. This is my subject and I am sometimes carried away by it."

"I am not surprised," replied Perry. "You have reason. I confess I don't see all those implications just yet, but it sounds amazing."

"You will see," returned Davis, "and by the very method we used. You can set up this game with the chessmen to cover every possible case. For example, throw in some professional men and observe that the cycle is unchanged. Provide a foreign trade with a balance in our favor and see how the cycle can be made to balance. Then a foreign trade in which goods are dumped on us and see how it dislocates our system. Then change the supply to balance it anyhow and observe how we can benefit. Play two tables and let trade flow between the tables. Set up a farm production cycle on one and factory on the other. Throw in corporate organization, trust funds, re-discounted paper, and so forth. Have a labor leader organize the workers and stage a strike. Get a lot of bank credit passed around and then make a run on the bank. Issue stock and watch it fluctuate in market price. Declare war and put industry on a war basis. Inflate the currency. Deflate it. Save your profits to expand your business. Cut prices to meet competition. Get squeezed on your lease. Start out from primitive barter, work up the present system with the dividend, the discount, and the National Account. Do all of those things, but be sure to observe the rule of duplicating the structure of the real world. It's fascinating and you will teach yourself more about money and economics than anyone else can possibly teach you. Bear in mind the fundamental theorem that we formulated about the necessity for new money for capital expansion. If you find any situation which appears to contradict it, or any of our other conclusions, go back and do it over, writing down each step in detail. If you don't find your error, give me a call. But I'm sure you will.*

[*Several typical problems have been worked out for the benefit of the reader and appear as an appendix at the end of the book. A typical modern cycle is given showing the dividend and discount in operation. Especially interesting are examples of twentieth century economics showing the ridiculous impasses into which our forefathers fell simply through failure to understand the nature of money. The Author]

X

Perry followed Master Davis' advice and spent several days making up problems to play out with his economic tin soldiers. He drafted Olga and Diana into the game, and they solemnly played through various combinations of financial and economic situations. At first the women played simply to be agreeable, but they became fascinated by the strange possibilities of early day finance. Olga developed remarkable skill in stock market and commodity manipulation, and amassed fabulous fortunes on paper. Diana protested this and maintained that it obviously would be illegal for anyone to do such wicked things with the necessities of life. References to history left her only partly convinced. Diana liked to run factories but was a failure as a banker, as she could not see any sense in interest and was reluctant to clamp down on a debtor. Both of them admitted that they had not understood the operations of finance and industry before, and had rather taken the economic regime for granted. Perry found himself in the pleasant position of being able to instruct natives of the new America in the workings of their own environment.

In due course he felt that he understood fully the workings of both economic systems, the old and the new, and felt capable of analyzing correctly any possible economic system. Nevertheless he found growing up inside a curious distaste for the modern system. He now understood the mechanics of it, true, and realized that its mathematical theory was correct, but notwithstanding it did not suit his taste. He decided to call Davis and discuss it with him.

After a decent interval of drink and smoke, Davis opened the conversation.

"What is it, my boy? Found a black swan?"

"Why a black swan?"

"That's the classic example of the fallaciousness of the deductive method. The syllogism ran 'All swans are white. This bird is a swan. Therefore this bird is white.' Along in the nineteenth century somebody found a black swan and the perfect syllogism was wrecked."

"No, I haven't found a black swan, but I do have a problem."

"I don't think you will find a black swan in the conclusions we have reached. You'll find many problems not covered by the Law of Capital Investment. But the law itself is simply a statement of the workings of an invented mathematical entity, money. Sometimes we get into dilemmas through a failure to distinguish between mathematical necessity and objective realism. Marx fell into that error and it vitiated his whole work. For example and in particular, his definition of value. Did you happen to notice that we spoke of cost in money and price in money and never once mentioned value?"

"Now that you speak of it, yes."

"Can you define value?"

"Well, perhaps not. I seem to know what it means."

"Marx defined it as a measure of the number of work-hours required to produce a given article. His definition was meaningless in the real world, and he ran into all sorts of difficulties, which he tried to avoid by patching the definition. But the definition was wrong and his beautiful, monumental, logical structure was invalid. He was important only as an agitator against social injustice and he contributed more error than truth to the art of economics. He made a similar mistake in assuming that a man lives in his belly rather than in his head. Animals do, but not men. They must serve their bellies, it is true, but aside from that, their motives may have nothing to do with economic considerations. Consequently Marx's Economic Determinism was not valid. But I've digressed again. Value in economics is a relationship between an individual and a thing or a service. It is a personal relationship which expresses how much a particular individual *desires* a thing or a service. Economic value of a thing or a service approximates the average of the summation of the personal values placed on the thing or service by the individuals who constitute the consuming public. Value plus purchasing power in the hands of the consuming public constitutes effective demand. Price is a function of supply and demand. Value may be expressed in dollars and cents through this complex functional relationship, but value is not price, and is not a measure of work-hours, it is a word used to express the desire of an individual to possess a thing or a service. I am not giving the word a new definition; I am simply stating explicitly the observed fact that such is what people mean when they speak of value. Sale takes place when the value to the prospective buyer is greater than the value to the owner. Note the difference between Marx's idea of value and that which I have expressed. Marx attempts to measure value by the amount of labor expended. Yet it is an obvious fact in the real world that an inefficient, careless, or unimaginative worker can slave for hours to produce an article practically worthless, that the public won't buy, valueless. An intelligent skillful inventive worker may turn out in a short time an article that the public will snap up at once at a high price. Which has the greater value?"

"The one made by the better workman, of course."

"Of course. There is an old maxim which states it neatly: 'The value of a thing is what that thing will bring.' Even in our present system in which the government ensures the maintenance of sufficient purchasing power, if an entrepreneur is so inefficient that he produces articles of value less than cost, he goes broke. However, I've digressed again. I'm a garrulous old man. What was it you wanted to talk about?"

"Oh no, I enjoyed your digression and it cleared up another point. As to what is bothering me, I believe I understand the present financial system and I see that it works more smoothly than the one in my day, but there are still things about it that I just can't see the justification for. Especially this dividend or inheritance check. Why in the world should everybody in the country be handed money to spend whether they work or not? I concede that it is all right for widows and orphans, the sick and the blind and crippled, but why support in idleness some big overgrown lunk who is too lazy to support himself ? Why put a premium on laziness? Here is my idea: let's increase the discount if necessary, and give a big dividend to those who need it but can't support themselves, but if a drone won't work, let him starve. Don't let him live off the rest of us."

"I see your point. It irks you to see anyone at all who is able to work permitted to live without working. But why do you consider work a virtue?"

"Well, these idle persons use up goods that the workers might otherwise enjoy."

"Do you know of anyone who doesn't have everything he wants of the good things of the world?"

"Well, no."

"Then how can you say that the idle are consuming things that rightfully belong to workers?"

"Well, it seems obvious."

"You mean that it seems logical to you. But if you can't find a case in the real world, can your logic be correct? I'm afraid you've encountered a black swan."

"Maybe so. But how can you justify able-bodied men living in idleness?"

Davis pursed his lips. "Ethics is more a matter of opinion than a science. Morals are customs rather than natural law. However if you want a moral argument to justify the situation, I'll give it to you. Did anyone live without working in your day?"

"Oh, those on relief did."

"I'm not speaking of them. They were presumed to be people who wanted to work but couldn't get work, and we have proved mathematically that they couldn't. I mean others who might have worked, but wouldn't, yet lived well."

"Why, no."

"Positive? How about coupon clippers, land owners, owners of capital who were not in management? Idle sons and daughters of the rich? Were there none of those?"

"Oh yes, of course. A few thousand perhaps. But they were entitled to be idle if they chose. Either they or their fathers had earned the money. A man is certainly entitled to provide for his children."

"All the idle today are the rich sons of hard working fathers."

"Are you trying to kid me?"

"I didn't jest, but I did use a figure of speech. Tell me, what are the factors that enter into production of real wealth?"

"Well, there is labor, of course—and raw materials and land."

"What were the factors when we set up our game of production and consumption?"

"Oh yes—and capital, and enterprise or management, and invention or technique, government came in there too, but I am not sure that it is a factor in production."

"It is, as you will see. Let's examine these factors and attempt to make a rough estimate of their importance. Work is basic, certainly. In any but the most Elysian of South Sea islands, man must work to live. Marx made the mistake of thinking that because it came first, it was the only factor worthy of consideration, even though his writings implied the existence of others. Enterprise is more important than work. Without enterprise, management, directive ability, and imagination, our present highly productive culture would be impossible. It is a form of creative work, more difficult than the imitative work of the laboring men, and absolutely necessary to a high rate of production. Capital or rather capitalization is essentially the willingness of the owner of accumulated wealth to risk it in the hope of acquiring more. Its return is interest. We don't think very highly of it anymore. Capital is plentiful and by direct competition through the Bank of the United States we have driven interest down to a point where the return is commensurate with the risk. Franklin Roosevelt taught us that lesson with the Reconstruction Finance Corporation and the Federal Housing Administration.

"I said that government is a factor. It is, if for no other reason than through its police powers it makes the environment safe to work in. Without it no one could accumulate wealth and the creation of wealth on a large scale would not be feasible. Which is another way of saying that individuals acquire wealth only at the sufferance of the community and the community may require any tribute necessary to promote the general welfare. The government performs many other useful services too numerous to mention, but you see my point.

"Land and raw materials are obvious factors in the production of wealth. In the simplest economy labor must have something to fabricate and some place to stand on in order to produce wealth.

"The last factor is invention or technique. I mean not only new inventions now held by patent, but also all useful accumulation of knowledge from the stone age to date. Although wealth can be created without, or with very little of it, it is the greatest factor of all. You need only consider any common article to be convinced of it. Take a pair of shoes. In a modern shoe factory the production is around six hundred pairs of shoes per man per day. By figuring in raw material and capital costs it drops only to about four hundred pairs per laborer per day. Does one man make four hundred shoes per day? Put him at a cobbler's bench and assume him to be an experienced cobbler, yet he will do well to turn out one pair. Is it management? Management is important, for a poor manager will reduce production by perhaps 50%, yet the factory still turns out enormously more than a number of hand cobblers equal to its employees could do. Obviously the factor which produces this enormous multiplication of wealth is technical knowledge, the contribution of the creative inventor and creative artist. That is why we reward them so highly today. There is one outstanding characteristic of the creator-discoverer. His work lives after him and is cumulative in its effect. We owe more to the unknown genius who invented the wheel and axle than we do to all the workers now on earth. Furthermore, inventors stand on the shoulders of all their predecessors. No modern invention would be possible without the work done by Bacon, Da Vinci, Watt, Faraday, Edison, *et cetera* without number."

"Yes, that is evident but what of it? I can't see that the work of those men justifies laziness today."

"These men are our forefathers. They have left to each one of us the most valuable inheritance possible, other than the good earth and life itself. To each one of us, mind you, lazy and industrious alike. To refuse your brother who prefers not to work his share in production for moralistic reasons of your own devising is to claim for yourself that which you have not earned and have no right to."

Perry looked baffled but unconvinced. "Granting that what you say is true—it is, I suppose—nevertheless it takes labor to apply this heritage of technical knowledge. Why shouldn't every able-bodied man have to contribute equally to that labor?"

"But surely, Perry, you can see that there is not enough drudgery in this world to go around. The machines have released us from the curse of Adam. How can all of us crowd into the control stations of the machines? We have short hours, naturally, and most machine tenders and such retire at an early age, but it isn't practical to change shifts every fifteen minutes nor to train new men every few weeks. Would you have men dig holes and fill them up again for the sake of work itself? Would you destroy the machines and restore the cobbler's bench? There is always creative work to be done; there is no limit to that, but there is no way to punch time clocks on it either. If a man has creation in his system, all we can do is to give him leisure in which to develop it. Tell me, have you seen very many idle people?"

"No, I haven't as yet."

"You won't. The urge to work exists in more than ninety per cent of the population. Free him from drudgery and he putters in the garden, in a workshop, learns to draw, tries to write poetry, studies, goes into politics, invents, sings, devises salad dressings, climbs mountains, explores the ocean depths, and tries to fly to the moon. Few are those who sit in the sun and whittle."

"Say, are they really trying to reach the moon?"

"Yes, surely. But I want to give you an illustration of the current situation. Suppose in your day seven men own a big car together and all wish to drive from San Francisco to New York. John is crippled and can't drive. Joe is too young to drive. Jack doesn't know how to drive. Jake is a good driver but hates to drive, being of a nervous temperament. Jep is just plain lazy and prefers to watch the scenery, but Jim and George are both good drivers and don't mind doing it. Of course only one person can drive at a time. You propose that they all take turns at the wheel, barring the cripple and the child. Isn't it more reasonable to pay the two drivers for their services and let everyone reach New York in comfort? That is what we do today. Those who perform the drudgery of the nation are paid—and well-paid—in addition to their dividend from their inheritance."

Perry threw up his arms in mock surrender. "Enough. Enough. Frankly, I'm not convinced yet, but you certainly can make out a case."

Davis shrugged his shoulders. "Personally I'm not interested in moralistic reasons. The present system is the one the American people have chosen to serve them at this period of their development. It suits my temperament so I don't try to change it. If you want another you now know how to devise another which will be economically feasible. Then you are free to try to persuade the country to adopt it. You might even try to persuade a state. Several of the states have modifications."

"So I gathered. How do they work?"

"Well, Wisconsin has very high income taxes and pays a state dividend in addition to the Federal dividend. They have a nearly complete socialism with most business run cooperatively. It seems to suit them but I find it a dull pace. However, let me mention the practical advantages of the blanket dividend as compared with your moralistic proposal. In the first place it ensures high wages, because men who are free from economic necessity won't work for sweatshop wages. For the same reason it ensures good working conditions. Unions are no longer necessary. Those that remain have turned into fraternal organizations rather than battalions in class warfare. In the second place it ensures social security for everybody all the time and thereby makes government much simpler. In your day the social service bureaucracy was growing by leaps and bounds. We don't need social service workers where poverty is unknown. And it saves private citizens from the insufferable buttinsky-ness of social work, the prying catechisms that determine the 'deserving' poor. If for no other reason the dividend is desirable because it ended the incredible red tape and indignities of your old system of relief, and welfare work, and private charity."

"But see here, the dividend will hardly pay for operations and sickness. Suppose the idlers fall sick?"

Davis looked surprised. "Hadn't you gathered that health service is free? It obviously has to be. The community can't afford to let anyone be sick for fear of contagion and unsocial maladjustment. If medicine hadn't been socialized we couldn't have stamped out syphilis and gonorrhea for example, and our present social standards couldn't have developed. Medical men are public servants and among the most highly paid in the community."

"Doesn't that tend to make medicine un-enterprising and give it a tendency to fall into a rut?"

"Did it for the army and navy in your day? Before your time they were private professions, you will remember. However, a physician need not be a public servant. He can hang out his shingle if he likes. But with higher returns for public practice, plus every opportunity for research with unlimited facilities and no economic restrictions on the expense of treatment, practically all of the best ones prefer to work for the government."

"That reminds me of another objection. Won't everybody ask to be treated by the best physicians?"

"They ask, but if a physician has more cases than he can handle, he picks the interesting and difficult ones, and mediocre physicians get the commonplace ones. That works out best for everybody. In your day a wealthy hypochondriac could command the services of valuable men who should have been on the difficult cases."

"That's fair enough, I guess. Medicine has always fascinated me."

"You ought to fly up to the United States Medical Academy some day and get them to show you around. It will open your eyes. We've made a lot of progress in the last hundred and fifty years."

"Thanks for the idea. I'll do that someday. But to return to our argument. I'm a diehard. Everything may appear rosy right now, but I believe that I see the seeds of decay in this system. Doesn't it encourage the reproduction of the unfit in unlimited numbers? Wasn't Malthus right in the long run? Aren't you steadily weakening the race by making life too easy?"

"I don't believe so. I think your fears are groundless. The pathologically unfit are inhibited from breeding by a combination of special economic inducements and the mild coercion of the threat of Coventry. The exceptionally brilliant and creative persons are sought after as parents. A famous surgeon, musician, or inventor will receive literally thousands of invitations to impregnate women who desire exceptional children or covet the social honor of bearing the offspring of genius. From a physical standpoint the race is being retailored by the development of gland therapy and immunization. A baby born today will never grow excessively fat nor emaciated, and couldn't catch typhoid fever if he slept with a victim of it. Instead of protecting a child from infection we modify the genes of his grandfather so that the baby has ten times the hardihood of a jungle savage. As for Doctor Malthus, he lived before the day of voluntary conception. If we need to limit the population, we are prepared to do it."

"Well, you've given me a lot to chew over and a lot of new angles to investigate. But I can't help feeling that there's a black swan lurking. Maybe I'll be back at you in a few days."

Davis chuckled. "Go to it, son. You've given me the first real workout I've had in years. Is there any more port in that bottle? That's enough. Thanks."

XI

Olga arrived one morning to find Perry walking the floor, and smoking. A pile of cigarette stubs alongside a barely-touched breakfast showed his state of mind. He flung her a curt greeting. Olga grinned.

"Little Merry Sunshine, no less. What's the matter, dopey? Come down with the Never-Get-Overs?"

Perry ground the butt of his cigarette savagely into a saucer. "All very well for you to joke, but it's serious to me. It's this damned place. I'm sick of it."

Olga's face became serious. "What's the trouble with this place, Perry? Anything wrong? Anything you need? Somebody been unkind to you?"

He scowled. "No. Nothing you can do anything about. The place is swell , and everybody is decent to me. I'm just sick of it, that's all. I know I have to stay here and need to stay here, and I'm not arguing about my sentence, but you can't make me like it. I'm going stir-crazy."

Olga's face cleared. "Why, Perry, you don't have to stay here."

"What? Why don't I? I was sent here for treatment."

"Surely. And you should spend quite a bit of your time here just for our convenience in treating you. But you are free to move around."

"Do you mean that?"

"I always mean what I say."

Perry's face lit up. "Stand clear, boys! Here we go! Say, where can I hire a sky car?"

"Take mine, if you like. I won't be needing it."

"That gives me an idea. Are you busy today? Could you come along? We could have a picnic."

"Why yes, I guess I could go. Sure you wouldn't rather be alone?"

"Hell, no. You're the perfect companion. You don't bother a fellow when he doesn't want to talk."

"Okay. Let's go. I'll see about something to eat."

A short while later Perry pressed back on the stick and they shot into the air at maximum lift. Higher and higher he took them, clear to the ceiling for the little craft. Then he spread his wings and accelerated to maximum speed. They shot along silently except for the muffled whir of the screw. Olga lounged on the cushions and watched him with the half smile of approval with which a mother watches a child at play. Tiring of straight flight, Perry put the machine through its paces, rotor maneuvering, climbing by wing, crashing, quick turns. Presently he leveled off, and spoke. "That was fun. I wish I had my old crate here, though. I'd show you some real acrobatics. Did you ever loop, or fly upside down? Or a power dive in formation? That'll take the enamel off your teeth. This is a grand little boat but it's a baby carriage with shock absorbers compared with our old fighting jobs."

"That sounds exciting, but wasn't it terribly dangerous?"

"Sure it was dangerous, unless you knew your job. Even then it wasn't a tea party. Lots of my pals got theirs from carelessness, or engine failure or something. But it was grand sport. Funny, I never got hurt in the air, but a measly little spill out of an automobile finishes me off. Only it didn't finish me." He grinned boyishly. "Damn funny thing about me popping over all these years. It worried me a lot at first. I was afraid I'd go to sleep and wake up somebody else. You know that Hindu pal of Gordon's. You remember he came to see me. He seems to think that Gordon and I are the same hombre using different memory tracks. I didn't understand it and don't see how he can prove it, but he claims that if Gordon comes back at all I'll simply have two memories. He talked a lot about serial observers and serial time sense. I didn't get it, but he did manage to reassure me." Olga patted his hand. "That's good. I'm glad."

"The best part about it is that I can go ahead and be a citizen of this world now and not feel like a freak. Say, are you hungry?"

"Not very, but I can usually eat." She patted her soft expanse of tummy.

"I kinda skipped breakfast. Let's drop down somewhere and eat outdoors."

"Okay. Where are we?" They bent over the map screen and Olga glanced out. She placed her finger on the map. "How about it?"

"Twenty minutes more or less. It's an inspiration."

"I'll get lunch ready while you whip up the horses." Half an hour later they were sitting at the south rim of the Grand Canyon, eating silently while they drank in the ageless wonder of the place. Perry broke the silence. "You know I've seen this many times before, twice since my arrival in this period and several times in my early life. It makes me feel as if the thing that happened to me in time is just a casual incident of no more import than the ten seconds of unconsciousness of a lightly knocked out boxer. Time has moved on here in the past hundred and fifty years, but the change is not perceptible."

Olga nodded but did not answer. She stared out and down. Presently she arose and brushed the crumbs from her coverall. "Let's get going. I have to take this place in small doses." She stepped into the car and loosened the zipper at her throat. Perry followed her, and sealed the door. Once off the ground, coveralls stowed, and cigarettes lighted, Perry inquired, "Whereto?"

"I don't care."

"Aren't we close to the Moon Rocket Experiment Grounds?"

"Yes, it's just east of Flagstaff. Want to see it?"

"Very much."

He leveled off, set his course and clamped the robot. Olga lay back and dozed in the warm contentment of digestion. Perry sat and watched her and mused to himself. This was a very pleasant trip, as much fun as it would have been if Diana were along instead of Olga.

Or almost. Olga was a great kid, and a lot of fun to have around. He certainly was fond of her. Not what Master Hedrick suggested of course, he wasn't forming any attachment. He was in love with Diana and was loyal to her, whether such loyalty was customary or not. Could he have fallen in love with Olga if he had met her first? Possibly. She wasn't as beautiful as Diana, nor as young (Perry smiled at this. Time was too scrambled for age to matter.), but she was certainly as seductive in her own way. She didn't dress her hair nor use cosmetics with the consummate artistry of Dian', but she was always meticulously shaven and fastidious about her person to a degree unusual even in 2086. About her character and personality there could be no question; she was tops. Yes, he decided, he could have fallen deeply in love with her—if he hadn't met Diana first. Too bad he couldn't have known her when he was a bachelor. Was he attractive to her? She liked him, he was sure, but Olga seemed to like a lot of people. Did he as a man arouse any response in her as a woman? He would give a lot to know. He wondered what she would do if he were to make a pass at her.

His reverie was broken by the insistent ringing of the alarm gong. The robot checked flight and hovered. He glanced out and saw a series of bright red pylons marching over the rolling plateau. Miles beyond was a group of buildings. Just below was a small landing flat and hangars. The field lights flashed the landing signal and they obeyed. They were received by a wizened weather-beaten desert rat, who showed them where to park their car and indicated with a jerk of his thumb the stairway to the trans-tube. They descended and strapped themselves in the cylinder. Olga touched a button on the remote control panel, relays clicked, and they found themselves almost at once at the field station. They emerged from the stairwell into a large room equipped with a few chairs, a televue control station and some benches. It was almost deserted. A young man was talking to a girl dressed in an asbestos coverall. The hood and visor were pushed back, disclosing a tight mass of copper ringlets. She laughed at something he said and answered in a low tone. An elderly man with a preoccupied look entered from a corridor on the right and shuffled quickly into a side room. No one else was in sight. Olga and Perry stood uncertainly for a moment, then Perry advanced, touched the young man on the arm, and spoke.

"Excuse me."

The young man started, and turned around. "Oh, sorry. I didn't see you. May I do you a service?"

"Service," answered Perry. "We'd like to look around, if it's permitted."

"Certainly. Glad to have you. You'll need a guide though. Joe!"

A blond head appeared from behind the back of a couch, a strapping form followed it. "Yeah?"

"A couple of visitors 'ud like to take a gander around the plant. I've got to handle the controls for Vivian on this test run. Can you do it?"

"I guess so." The youth chucked a magazine into a chair and joined them, long arm and hand outstretched.

Perry thanked him. "Sure this won't put you out?"

"Not at all. Glad to have a little excitement. It's pretty dull around here. Come along. What would you like to see first? The rockets? Most everybody does." He led them into a huge gloomy shed. Dominating the interior was a great sleek metal behemoth that towered over their heads. Perry whistled.

"You've gone further than I thought."

Joe followed his glance. "That? You expect too much. That's just an obsolete stratorocket. Her top speed won't take her over the heaviside layer. We've got her outfitted to simulate space conditions as far as we can. We've got a crew locked up in there now to see if they can take it without going off their heads. They've been in there six weeks now. Every now and then we give 'em a little surprise like bleeding out half their air pressure." He grinned. "There's another little surprise that they don't expect. One of 'em's under secret orders to go crazy and start trouble."

"Can't they get out?"

"Oh yes, if the skipper loses his nerve. Otherwise not."

Olga clenched her fists. "Why must you do that? It isn't human."

Joe fixed her with a sardonic eye. "Sister, if they can't stand that, what chance have they got in space?"

"Why go out in space? Isn't the earth big enough?"

Joe turned his attention back to Perry. "You can't make a man permanently contented in a nice, pretty, upholstered civilization. We've got to, that's all. There's something out there to be seen, and we're gonna have a look." Perry nodded. Olga held her peace. "But these babies here are what we're working on. Messenger rockets." He indicated a number of metal bodies roughly cylindroconical in shape. "These are rejected models but they look a lot like ones we've tried. One like this fellow got into a permanent orbit, we think. At least the data showed it making nearly five kilometers when it left."

Olga's lips moved. "That doesn't seem fast; three hundred kilometers per hour."

"Not three hundred; eighteen thousand. It was going five kilometers per second. That ain't enough though. We need a speed of eleven point three kilometers per second to break out of the earth's field entirely."

"That applies to shots rather than rockets, doesn't it?"

"That's right. You know something about ballistics, don't you, bud ? Any speed at all will do as long as our accelerating force is greater than gravitational force. The distances are enormous though. Without pretty heavy acceleration you'd grow old waiting to get there."

"Not from here to the moon, surely."

"Oh, no. That's no distance. But if we get there, we'll establish a base there and try some long hops. In a thin gravity field like the moon's we ought to be able to take off for any planet in the system."

"How much acceleration do you figure on using?"

"Two g's is about all that's healthy. I've taken that for ten hours in the centrifuge, but then I'm husky. It's uncomfortable though, and it made me sick to my stomach at first. Of course we can take as high as six or seven g's for a short time in a good corset and braces and a water cushion. I pass out at about five and half."

"What's a 'g'?" Olga whispered to Perry.

"Force of gravity at earth seal level. At two g's you'd feel twice as heavy as you do now."

"Now see this baby," continued Joe, indicating a silver grey torpedo-like body about ten feet long. "We've sent off eight like it towards old Luna. Her pay load is a lot of magnesium ribbon to make a flare. One of 'em got across, at least Flagstaff reported a spark in Mare Imbrium. Pick it up." Perry stooped over and prepared to heave. It came up lightly and he almost fell over backwards. "Light, ain't it? It's a tungsten aluminum alloy, lighter than potassium. Inert, too."

"I should think it would be porous," Perry commented.

"It is, but it's got a mirror surface inside about two molecules thick that would stop the breath of scandal. The only hard metal in it otherwise is the jets themselves."

"Look here," put in Olga, "If you've got a little one across, why not build a bigger one and ride it over?"

"Well, you see all this little fellow has to do is to climb up to the change over point—that's where the attraction of the moon and the earth are equal—then fall down. To get to the moon and back means to climb up, then climb down to the moon, using rocket fuel to break your fall, then climb up again and climb back down to earth again, four stages. We can't do that yet. But we do think that we are well on the way to building one that will do two of those stages; go up, swing in an orbit around the moon, then climb back down to earth again. That's what Vivian, the girl you saw in the lobby, is working on. She's going to ride the ground tests on some new fuel."

"What do the ground tests amount to?"

"They are the nearest thing to flight conditions we can manage on the ground. This stuff has been laboratory tested, and fired in ground jets, and a rocket designed for it which should be strong enough and light enough to do the trick. Today it is tested in a dummy rocket with a full control panel and full size jets, but the whole framework is tied down solid. The rocket reaction produces stress and strain instead of acceleration. We measure the stresses by instrument. If it all checks out the way it should, we'll try the real rocket in flight."

Olga interrupted. "If you've made all those preliminary tests, what can you learn by running a rocket that is tied down? You already have the data on what it will do."

Joe shook his head. "No, not quite. We know what we think it ought to do, but we knew that when the equations of synthesis were for it. But this stuff is all new. Suppose it does something different? We've got to know before a ship leaves the ground."

Perry put in a word. "Why is this girl Vivian running the tests? Isn't it a man's job?"

"It's her right to. She's the molecular synthesist who designed the fuel. This is as far as she can take it though, as she's not a rocket pilot."

A siren howled mournfully from outside the building. Joe moved toward the door. "Come along if you want to see it." They followed him back through the corridor, through the entrance hall and up a spiral staircase which gave into a small observation room. On the side toward the field was a wide shallow window of amber glass. Several persons who were lined up along this window made room for them. Joe spoke to one of the spectators. "How soon do they start?"

"Any minute now. There goes Vivian." Perry looked down and saw a small figure, bunchy in coveralls, climb a ladder to a manhole in the top of a stubby metal shape. The figure hesitated halfway in and turned its helmeted head toward the building. Perry thought he could detect the flash of a smile. An arm waved and the figure disappeared. The manhole cover closed into place from the inside, made a quarter turn and stopped. For a moment all was still in the room and nothing moved on the field. Perry could hear Olga's quick breathing at his ear. Then a little burst of violet flame showed from the stern of the test rocket. Somebody said "There she goes!" and the tension relaxed. The flame shot out again, lightened in color and became a blinding white as solid to the eye as white-hot metal. It fanned a trifle and made a myriad little green sparks where it licked the desert soil. A buzz of conversation spread around the room. "Pretty neat, what?"—"Yeah, she's got it this time."—"Watch it fade. That'ud be clean kinetic in vacuo."—Then charged, the main jet darkened, turned purple and quit. Smaller jets around the waist of the craft lighted one after another, and a nose jet blazed out for an instant. More comment came from around them.—"Pretty as a picture, one-two-three."—"Yeah, but I still like precession. Those fractional controls are too complicated."—"It looks nice though, doesn't it."—The smaller jets cut out and the stern jet cut in again, passing quickly from violet to white. It held steady for several minutes, then trembled and Perry thought that he detected a faint shadow on the under side. The whole flame turned a deep purple and split into two parts. He heard a shout of "Down!" and someone jerked savagely at his arm, unbalancing him. He fell across Olga as a white glare like photographer's flashlight temporarily blinded him. A dumb rumble, a short grinding shock, and then silence. He stumbled to his knees and blinked his eyes. Joe was beside him, already rising. They hurried to the window. Before him still lay the rocket but it had lurched awkwardly toward them and a split had opened for several feet near the stern jet. A cloud of yellowish oily smoke partially obscured the scene. Joe turned and hurried down the stairs. The other spectators were gone. Perry had not noticed when or how. He stared again at the sight, trying to interpret it, when Olga's voice sounded beside him.

"Whatever happened, Perry?"

"I don't know yet. Something went wrong."

"That pretty little redhead—Was she hurt?"

"I can't tell. I don't think so. The rocket doesn't look much damaged."

"Let's go down."

They went back down to the reception room and waited in unease for someone to show up. Presently Joe appeared and Perry caught his eye. "Oh yes, you folks. I'd forgotten you." He stopped by them, apparently annoyed and uneasy. Perry questioned him.

"What happened?"

"Nobody knows yet. Either fuel or the nozzles."

"Anyone hurt?"

"Only the operator."

"Killed?"

"They haven't said so yet. She was burned to a crisp and her right leg's gone. Say, I don't want to be rude but I'm awful busy. Will you excuse me?"

"Oh, of course! Sorry!" And he was gone.

Olga took Perry's arm. "Let's get out of here, please, Perry."

"Right." Neither spoke again until they were back in the sky car.

XII

For the next several days Perry reveled in his new-found freedom. He made a number of trips purely for the pleasure of being out and free. Sometimes one or both of the girls accompanied him, more often he went alone. He made a practice of telling Olga or someone in authority where he was going and when he expected to return, but met with no objection to any of his plans. His trips were varied. By now he had practically complete familiarity with the customs of the country and could get around even in a metropolis without arousing comment. He spent several days in San Francisco just looking around and getting acquainted. He dropped in at Berkeley and looked up Master Cathcart, who appeared glad to see him and showed him around the University. Perry was struck by the un-collegiate quality of the place. There seemed to be few students and little of the ant hill activity that characterized the academic institutions of his day. He asked Cathcart what the enrollment was. Cathcart answered, "About fifty thousand." Perry commented that it must be vacation time. The older man said, no, but that few students were actually in residence at Berkeley. He explained that they made a practice of actually being present only when doing laboratory work, inasmuch as the lecture method had been superseded by the stereoscopic record, such as Perry had used. On the other hand there were close personal relationships between teachers and pupils, as most of the direct instruction was of the seminar rather than the classroom variety. Instruction was characterized by discussion groups and guidance in study rather than the cut-and-dried cram-and-exam methods of 1939.

At this time Cathcart was preparing to leave for a trip to Washington to hear the closing debates of the session of Congress. This was primarily a vacation as he could have heard them as well or better in his home and studied the records at his leisure. But, as he told Perry, he liked to browse around the sessions at Washington and gossip with the officials in order to get the smell of the place. He felt that it helped him when interpreting the current scene to others.

He learned that Perry had not yet been to Washington and invited him to come along. Perry explained somewhat diffidently that he was not entirely a free agent. However a call to Master Hedrick cleared that difficulty and Perry found himself headed for the Bay Rocket Port.

This was Perry's first trip by rocket. He spent the three hours as busy as a small boy with two ice cream cones. A transparent bulkhead separated the passengers' seats from the navigation compartment. Perry placed himself in the first row of seats and tried to figure out the technique of the controls. In place of a stick the principal controls seemed to be a double bank of keys arranged above and below a flange that projected from under the instrument board. Perry asked Cathcart the reason for this peculiar arrangement, but the historian admitted that he had taken it for granted. Cathcart rang for the stewardess and held a short conference with her. She looked dubious but entered the navigation room, and got the ear of one of the pilots, who glanced back through the bulkhead and met Perry's eyes. Then he said something to the stewardess, who nodded and reentered the passenger compartment. She stopped by Cathcart and reported:

"The Skipper says your friend can ride in the inspector's seat if he's strapped in and keeps quiet during maneuvering."

Perry arose, his face radiant, thanked the young woman and turned to Cathcart. "Sure you don't mind?"

"Not at all. I'd like to catch a nap."

The stewardess let him into the navigation room, and strapped him into a chair just behind and about ten inches higher than the pilot's and navigator's seats. The skipper gave him a curt nod and turned away. Perry followed his glance, saw the field lights turn red, then a light ahead showed green in double flashes. The skipper reached out and pinched a pair of control buttons between thumb and forefinger. A buzzer sounded and a transparency flashed, 'PASENJERS STRAP IN'. Perry felt his own safety belt. The pilot pinched another pair of buttons, then several more in rapid succession. Perry felt heavy and a cloud of white smoke blotted out the view ports. It cleared away almost immediately, and the ground appeared far below. San Francisco vanished beneath them. The pilot's hands moved nervously among the controls. Perry watched the numbers click past on the altigraph, two thousand—three—five—nine—thirteen—up and up. At twenty thousand meters the pilot leveled off and accelerated, faster and faster, until seventeen hundred kilometers per hour was reached. The light in the car had taken on an unreal quality, like the glares and sharp shadows of a welder's arc. Outside the sky was a deep purple and stars shown clearly and without twinkling. Just ahead he saw the sickle of Leo beginning to rise. He twisted around in his seat and attempted to see the sun, but it was obscured by the stern of the ship. He was forced to content himself with imagining what the solar prominences and spots might be like. He recalled the warning printed on his ticket: 'DANJER! OBTAN DARK GLASES FROM STUARDES BEFORE VUING SON' and he had neglected to obtain dark glasses from the stewardess. Below the ground flowed past in plastic miniature, each detail sharp. It looked remarkably like the illuminated strip map that unrolled on the instrument board. A glowing red dot floated on the surface of the map. Perry recognized this as a dead reckoner of some sort and wondered how the trick was done. Air speed? Hardly. Earth induction? Possible but difficult, especially in latitude made good. Radio? More likely, but still a clever trick.

When the pilot was satisfied with his combination, Perry ventured to speak. "Excuse me." The pilot glanced back and his grimness relaxed a trifle.

"Oh, it's you. I'd forgotten you were here. Want something?"

"Just one thing. Why are all your controls double?"

"As a matter of fact they are quadruple, in parallel-series around each pilot's chair. I suppose you mean why the pinch-buttons."

"Yes, why not ordinary push buttons?"

"Each side *is* an ordinary push button, but you have to pinch a pair with thumb and forefinger to cause any action. Look." He ran his finger along the key board, pressing a dozen or more keys. Nothing happened. "It's a safety device against freezing on the keyboard at high acceleration. I could pass out and fall face down on the keyboard and never set off a jet. My partner could then land by squeezing the keys on his board. For example, if we had ordinary push buttons and I pressed the combination for maximum breaking, I'd be pushed hard upon the board by my own momentum, and I might not be able to release the controls. With this system I have to will to pinch or nothing happens."

"Thanks. Say, how long does it take to learn to be a rocket pilot?"

The pilot looked at him curiously but answered his question. "If you are temperamentally fitted, three months should do. There is always more to learn."

The stewardess stuck in her head. "Ready for your tea, Skipper? And you, Jack?" The navigator gave a taciturn nod. The skipper assented, and said to Perry, "I think you'd better have your tea in the passenger compartment."

Perry unstrapped himself and returned to Cathcart, who nodded greeting. "See what you wanted to?"

"Yes, and was dismissed most diplomatically."

Sandwiches, tea, and little cakes brought on sleep. Perry was awakened by the deceleration warning as they circled over Washington. Perry stared out. Here was a place which time had not changed beyond recognition. The Potomac and the tidal basin were below. There stood the Washington Monument and Lincoln still stared into the reflecting pool. The White House still sprawled among the budding trees, serene and cool. And on Capitol Hill the ponderous Greco-Roman majesty of the Capitol still stood, far-flung, solid, and enduring. He choked and sudden tears came to his eyes.

The visit to Washington was amusing but without special incident. The constitutional changes were not apparent on the surface. The city was changed in many details, but the landmarks remained. The streets were unroofed, and, in the absence of surface traffic, constituted popular promenades and lounging places. Perry wandered about them and visited the museums and art galleries. He spent one afternoon in the gallery of the House listening without much interest to the debate

Cathcart had come to hear. The president had directed the building of a fleet of fast, unarmed, long-radii patrol vessels, both air and surface, to maintain a constant patrol from the Aleutians through Hawaii and down to Ecuador, and earmarked a portion of the dividend for that purpose. The President's plan was practically unopposed, but one group wished to enlarge it with a new issue of money to provide more heavy armored short radii rockets for coast defense. The debate dragged on and a compromise seemed likely. As Perry was no longer in the navy this didn't interest him much, especially as the type of armament proposed was obviously unsuited for foreign war. He concluded that the American people were both determined not to fight and determined to let the whole world know that they were prepared to resist invasion.

That night at dinner at the New Mayflower, Cathcart asked him what impressed him most about the Capitol. Perry replied that it was the Congressmen, and explained that they appeared to be a much more able body of men than was commonly reputed to be the case in 1939. Cathcart nodded.

"That was probably the case," he said. "If you got good elective officials in your day, it was a happy accident, better than you deserved."

"To what do you attribute the change?" asked Perry.

"To a number of things. To my mind there is no single answer. The problem involved is the very heart of the political problem and has been plaguing philosophers for thousands of years. Plato and Confucius each took a crack at it and each missed it by a mile. Aesop stated it sardonically in the fable of the convention of the mice, when he inquired gently, 'Who is to bell the cat?'. The present improvement over your period can, I think, be attributed to correcting a number of things which were obviously wrong without worrying too much about theory. In the first place all of our elective officials are well paid nowadays and most of them have full retirement. In the second place, every official makes a full statement of his personal finances on taking office, annually, and again on leaving office. In the third place, public service has gradually been built up as a career of honor, like the military and naval services in your day. A scholarship to the School of Social Science is as sought after as an appointment to West Point was in 1939. Most of our undersecretaries and executives of every sort are graduates. They are recruited for they have the same reputation for efficiency and incorruptability that your West Pointers and Annapolis men have always had.

"Of course you can't teach creative policy making in a school. The top men still come from everywhere. Our complete system of social security makes it possible for any man with a taste for it to enter politics, and several arbitrary changes in the code of customs have encouraged them to do so. Campaign funds and permissible types of campaigning are now restricted enormously, a degree of change comparable to the difference between your day and the elections at the beginning of the nineteenth century when a man announced his vote to a teller at the polls whereupon the favored candidate shook hands with him and gave him a drink of whiskey. Nowadays our object is to ensure that each voter has a chance to know the record, appearance and proposals of each candidate. They must use the franking privilege jointly. They must go on the air together, they must refrain from certain forms of emotional campaigning. The people are better able to judge than they were in 1939 because of the improvement in our educational methods. They are not as subject to word magic, not so easily spellbound.

"Possibly the most important change that has improved the chances of obtaining honesty and efficiency in government was the extension of civil rights after the defeat of the Neo-Puritans. You will recall the new constitutional principle that forbade the state to pass laws forbidding citizens to commit acts which did not in fact damage other citizens. Well, that meant the end of the blue laws, and a grisly unconscious symbiosis between the underworld and the organized churches—for the greatest bulwark of the underworld were always the moral creeds of the churches. You still think that unlikely? Consider this: The churches had great political power. It was almost impossible to be elected to office if the churches disapproved. It is a matter of fact, easily checked, that every public leader of every corrupt political machine was invariably a prominent member of a large, powerful sect. He always contributed heavily to the church, especially to its charities. On the other hand every church stood publicly for honesty in government. At the same time they demanded of the government that there be suppressed all manner of acts, harmless in themselves, but offensive to the creeds of the churches. Churches and the clergy were usually willing to accept the word for the deed. Protestations of integrity, combined with tithing and psalm singing, plus a willingness to enact into law the prejudices of the churches, were usually all that the churches required of a candidate. On the other hand the gang leaders were hardened realists. They cared nothing about a candidate's appearance of pious virtue if he could be depended on to protect from prosecution the gang that supported him. Furthermore they were anxious to have blue laws on the books as long as they were not enforced. Illicitness was the thing that made most of their stock in trade valuable, and they knew it. Where in your 1930's was there a gang leader who urged repeal of the eighteenth amendment? The very blue laws they broke gave them a weapon to destroy competition, for the same machine which gave them protection could be used to destroy an enemy who did not own a piece of the local government. And so it went for years, in every large American city, the gangsters and the preachers, each for his own purpose, supported and elected the same candidates. It was inevitable, because the churches demanded of government things that government cannot or should not perform—things that come under the head of making a man be 'good' for the good of his soul, instead of interfering only to prevent him damaging another. The churches had a thousand rationalizations to prove that their nosey-parker interference was necessary for the welfare of all.

"For example, Brown must be stopped from peddling pornography, because, if he does, he will harm the purchaser, Smith. But note that Smith is to be Saved from harm for the good of Smith's soul, as defined by the churches. Sometimes the concatenation is very involved, but in every case you will find at the end the churches attempting to use the state to coerce the citizen into complying with a creed which the churches have been unsuccessful in persuading the citizen to accept without coercion. Wherever that occurs you have a condition which inevitably results in the breeding of a powerful underworld which will seize the local government, and frequently, through control of local political machines, seize state and national governments as well.

"One is always asked, 'What about the sweet innocent children? Are they to have no protection?' Certainly not, but many of the things which were believed to be bad for children were bad only in the unventilated minds of the religious moralists. For example, we now realize that it is not bad for children to be used to naked human bodies—on the contrary it is very *unhealthy* for them not to be. We know that knowledge of the objective fact of bisexual procreation is not harmful to children—on the contrary if we satisfy their natural curiosity by telling them lies, we are building trouble for the future. But we do know that nicotine and alcohol do more physical harm to children than to adults and we punish the adult who provides them with such. By the same token we look with disfavor on a church which fills children's minds with sadistic tales of a cruel vengeful tribe of barbarians under the guise of teaching them the revealed word of God. We disapprove of exhibiting pictures and statues of a man spiked to a wooden frame. I say we disapprove—but we do not forbid, for the damage, though probably greater than habit-forming drugs, is hard to prove, but we do insist on some years of instruction through the public development centers to clean their minds of the sadism, phobias, simple misstatements of fact, faulty identifications, and confusion of abstractions that their preachers and priests have labored to instill."

"Is the state actively fighting religion?"

"Of course not. To educate in opposition to particular dogmas of particular sects is not to fight religion. But if a church persists in teaching antisocial doctrine, the state reserves the right to combat those doctrines with argument in rebuttal. It is necessary to remember that headhunting is a religious rite. Shall we tolerate it? The most popular sects of your day practiced a form of symbolic cannibalism. Is the state obligated to stand in awe of that rather nauseating myth? Our answer is simple. Any religion is free to preach and practice but the state and all individuals have an equal right to combat their doctrines by any peaceful means."

"Haven't some sects attempted to prevent any non-conformist instruction of their children?"

"Yes, some extreme cases have preferred to go to Coventry, whole sects. They seceded from us, so instead of fighting, we seceded from them. But we were talking about politics and here we are on religion. What was I saying? Oh yes, why we get better men into office than we used to. I think I've covered most of the reasons. The destruction of the political power of finance capitalism was a big factor, naturally. Required voting helps—only those can draw the dividend who vote, and the franchise calls for a rather stiff course in the details of the mechanics of government."

"Suppose one doesn't pass the examination, does he lose his vote?"

"There is no examination. If there were, the party in power might use it to disenfranchise the opposition, just as such laws were used to disenfranchise the negroes in the South in your day. We just make sure that the citizen has been thoroughly instructed in the machinery of government. All these things help to make a more intelligent electorate and bring out better candidates. In spite of everything we get a certain percentage of stupid, or unqualified, or small-souled men in office. This isn't Utopia, you know. This is just the United States of America in 2086.

XIII

Back in California, Diana paid a call on Master Hedrick. He received her at once and ushered her into his study, his face wreathed in a smile of welcome that managed to make him more birdlike than ever.

"Come in, come in, my dear. May I do you a service? I've missed you lately. But I did see some of your Chicago appearances by telecast.

You were magnificent. Lovely! Lovely! Sit you down here by the fire. Something to eat? No? A cigarette? A little glass of wine? Ah, good. I saw your parents when I was up north this past week. Both well and hearty and full of the joy of living."

Diana shifted uneasily in her chair. "Master Hedrick, I'm troubled and need advice."

His face sobered. "I hope that I can help you. Tell me about it."

She drew circles with her toe on the floor, and considered her words. "I hardly know how to begin. You already know a lot about it. You know how Perry got into difficulties and why he was sent here. Well, I am very deeply attached to Perry. I thought and still hope and believe that our association will last throughout our lives and grow and deepen. But the trouble with my dancing partner, Bernard, got us off to a poor start. It worries me that it might happen again and I care so deeply that I find myself willing to do anything to avoid the possibility of anything like it happening again."

"How do you plan to avoid the possibility?"

"I don't know exactly. I could quit dancing with Bernard when this contract expires, and not see him anymore. But this last series we did together went so well that we have been offered a new contract at a considerably higher salary. I know that Bernard expects me to take it. He has even planned what he will do with his additional credit."

"You believe that you might be happier with Perry if you refused to work with Bernard?"

"Well—that is what I've been thinking about. In any case, although Bernard hasn't said anything and apparently the public hasn't noticed it, I know that my work with Bernard isn't as good as it used to be. I am distracted from it by the fear of Perry's opinion. Whenever a dance calls for a love scene, I can't get my mind off Perry. I wonder if he is tuned in, and if he thinks my acting too realistic."

"Do you intend to quit dancing with partners entirely?"

"I hadn't thought that far ahead. I don't know."

"Mightn't you have the same fear about any other partner?"

"I suppose so."

"Do you see that to spend your life guiding your actions by the possible opinions of a person suffering from delusions will become very complicated?"

"Yes, I see you're right. But I'd be willing to try it if I could keep Perry happy and loving me by doing it."

"That does your heart credit, but not your good sense. You are a normal healthy girl and your standards and desires are as sane as can be. But I think that I see the consequences of such a course more clearly than you do. In the first place you won't be helping Perry to get well. You'll make a permanent invalid out of him emotionally.

Your whole life will become forced and unnatural. After re-molding yourself to suit his spurious standards, you will then undertake to change the world around you to prevent it from conflicting with his carefully nurtured delusions. Gradually your friends will drop away as they will be made restless by the restraints you will have imposed on their conduct and conversation. Eventually the day will arrive when you will be one of our patients. Tell me, how do you like our friend Olga?"

"Olga? Why, Olga is grand."

"Ever felt any uneasiness about Perry and her?"

"No, not really. Perhaps I have in a way. It sometimes seemed a little unfair to me that he should enjoy her company so much in my absence, when I've been so miserable with Bernard."

"Suppose that you gave up Bernard and all close association with other men on Perry's account and that the two of you were living together. Suppose Perry decides to pay Olga a visit of a few days and you can't go along. Aren't you likely to find yourself fiercely resenting Olga?"

"Maybe I would. It's hard to imagine myself resenting anyone as nice as Olga."

"I see that Perry is becoming very interested in rocketing. Olga tells me that both of you wish he wouldn't because of the physical hazards of the work. Are you going to demand that he give it up?"

Diana looked surprised. "How can I? He must decide for himself and find his self fulfillment in his own way. I must not interfere."

"Yet you plan to give up or greatly modify your own career to fit his delusions. Aren't you likely to tell him someday that, since you have sacrificed the best years of your life for him that the least he can do is to stay out of danger?"

"I'd never say that. It wouldn't be right. Oh dear, perhaps I would. I don't know. It's very difficult."

Hedrick smiled and patted her hand. "Let not your heart be troubled, my daughter. The situation isn't at all serious. I've just been showing you some of the possibilities in order that you might understand the implications of your decisions. In the first place your young man will have a complete cure. He is doing very well, very well indeed. You can revise your plans accordingly. You are suffering from a slight touch of atavism, a regressive false identification, which you contracted from him. The layman doesn't realize that these nonlesional mental disorders can be as contagious as diphtheria or whooping cough. More so, in fact. In the old days one man sometimes infected a whole nation, particularly after the advent of radio. You have a slight touch. Physically you are well and strong, a beautiful example of a civilized girl, but mentally you have slipped back in part to the stone age woman, squatting on your haunches before the fire and cowering in fear of the unpredictable displeasure of your semi-bestial mate. Now that you know what the trouble is, correct it. Perry will be all right, so you need no longer concern yourself about him. Go ahead. Live your own life. Make your own decisions in your own way. Associate with men and women as freely as you did before you knew Perry, and don't worry."

Diana stood up, smiling, and put out her hand. "Thanks a lot, Master. I'll try it. Anyhow I've decided to take that contract."

"That's fine. If you become worried again, come back and we'll talk it over."

"Thanks again. I can go home and sleep now."

XIV

Perry was very poor company for the next couple of weeks. He threw himself into the study of the arts of rocketry and astronautics, determined to make up quickly his century-and-a-half handicap in technical knowledge. He could easily be persuaded to quit his studies and enter a sky car, but he always insisted on setting the controls for the Moon Rocket Station. This suited neither Diana nor Olga. In time they became reconciled to his single-minded enthusiasm and compromised by insisting that he take regular exercise and eat his meals on time.

Perry found that catching up was not so much of a job as he had feared. In engineering matters he had the simple empirical point of view and consequently was not disturbed by changes in theory. The mathematics of ballistics and astronautics were simpler, rather than more complicated, than the ballistic formulae that he had once used in predicting fall of shot. In particular the Siacci-Vernet method of variable exponents was a much simpler description of the action of a moving body in a gaseous medium than the cumbersome empirical formulae used by Siacci himself. Metallurgic chemistry and explosive chemistry naturally were enormously advanced over his day, but with the advance of knowledge, theory was, as usual, simpler, and he soon found himself able to understand and appreciate the technical publications of the day. He looked for and failed to find any description of the use in rockets of the high explosives of his own day. He made a mental note of this for it seemed possible that he might have some things to teach these latter day engineers.

Late in April Perry received a call from Cathcart. To Perry's surprise, he had a business proposition. Cathcart related that he'd been hired to give technical advice in the recording of an historical adventure drama laid in the United States during Perry's period. Several scenes called for airfighting of the contemporary type and neither Cathcart nor the producer were satisfied with the laboratory process shots. So Cathcart was calling from Hollywood to see if Perry thought he could fly a museum piece airplane. Perry considered, then asked what sort of a plane it was. Cathcart didn't know, but switched to the hangar circuit and let Perry see for himself. It was a Douglas light bomber with a Pratt-Whitney engine, probably 750 horsepower. Perry estimated a top speed of around 250 miles per hour. She'd land pretty hot. He looked the plane over and nodded.

"If she's in shape or can be put in shape, I'll fly her down a rain pipe and out the spout."

A few hours later, he was in Hollywood running loving hands over the controls of the plane. His preliminary inspection had been both pleasing and disappointing. Pleasing, for the craft was in essentially good shape, and disappointing because so much would need to be done before it would fly. Perry condemned the wing fabric and the controls. The metal structures would need to be rayed and tested, and portions would probably need to be replaced. Worst of all no gasoline was available and it was necessary for him to dig out old technical publications and explain what was needed to the young chemical engineer assigned to the job. The Smithsonian Institute, which had lent the plane in the first place, located a parachute which served as a pattern for a new one. Perry packed it himself, there being no one else alive who knew how. Before the plane was ready to fly, Perry had acquired a local reputation as a miracle man, as Cathcart had guarded the secret of the source of Perry's knowledge. The day arrived when he climbed into the cockpit, buckled his safety belt and started his engine. He taxied around the field and, satisfied, pulled back the stick and took off. The roar was startling after the mild whir of a sky car, but it was good to feel the wind pressure burn his cheeks, good to feel the power under the throttle. He turned and passed back over the field, swooping low. Tiny figures ran about and waved. He knew that they were cheering. He took the old crate up a couple of thousand feet and tried her out, loops, inverted flight, flipper turns, spin, falling leaf. She responded like a well trained horse. Finally he returned, landed and taxied back to the hangar. The engine coughed and was quiet. He was pulled out of his seat, pounded on the back and escorted inside by a cheering, red-faced throng.

Two weeks later he made an early start for Tahoe with a pleasant sense of accomplishment. The actual work had been easy and safe as houses in his opinion. Any military pilot of his day performed incredibly harder assignments as a matter of routine. But his associates had regarded his skill as phenomenal and had treated him with great respect. Several rocket pilots had come out from the port to watch him work and he had had the pleasure of taking several of them up on joy hops. The thing that amazed them the most was his admission that he could not pilot rockets. He was assured that he would have no difficulty at all in acquiring the coveted shooting star of a licensed pilot. To add to his general satisfaction he carried a credit draft in his belt that would raise his account to several times its previous level. He thought of the times he had risked his neck in oversea patrol for ten dollars a day more or less, and chuckled. The law of supply and demand had been in his favor. They had forced the money on him.

The sky car purred along and his thoughts turned to Diana. She would be glad to see him and he to see her. Rehearsals for her new series had prevented them from seeing much of each other while he was in Hollywood, and a stereoscopic televue visit was not the same thing. No, not in several important respects. He smiled to himself. She probably wasn't at Tahoe. However she might be home. Home to Perry was the cottage in the High Sierras. Why not drop in and see?—Surprise her if she was there.

He located their canyon, got his bearings from the waterfall and found the little roof and landing flat. He set the car down gently and proceeded through the hangar and down the steps. He spoke to the door and paused while it glided silently back. He stepped inside and peered around. At first he saw no one, then his eyes adjusted to the gloom. He stood very still for a long moment while his heart pounded and blood throbbed in his ears. Then he backed slowly out, being careful that his sandals made no noise. He tiptoed quickly upstairs and took off at once. Some miles away he hovered in the air and took stock. This was what he had feared. This was what they expected him to tolerate peacefully. Well, at least he had managed not to break his parole and not to make a bloody ass of himself by making a scene. Now what? Where do we go from here? 'Where do we go from here, boys, where do we go from here?' The only dignified thing to do was to go away and not bother Diana further. Fortunately he had enough credit to do as he liked. He'd enter as a cadet at Goddard Field as soon as he was released from Tahoe and in due course he'd have his shooting star and get a job as a rocket pilot. Maybe Hedrick could be persuaded to let him go at once. That was best. It'd be lonely not to see Olga regularly. It'd be twice as lonely not seeing Diana. It'd be just plain awful and he might as well admit it. Not to mention Captain Kidd. Who got the custody of the cat in these cases? He'd never cared much for cats, but he had grown fond of this old scoundrel with his swearing and demands for service. And the way he had of kneading biscuits on your stomach, with his motor running like an electric fan. Yes, he'd miss Captain Kidd. As he mused Perry gradually realized that there was no anger in his heart, no red rage, no black hatred. He didn't even hate Bernard. Not that he ever expected to like the fellow. Men of that artistic sort just weren't his kind. But he realized that he no longer felt any righteous urge to beat up on the beggar. All he felt was a deep regret that a circumstance had come to pass whereby he had to break off matters with Diana. He wished now that he hadn't thought of surprising her. Well, anyhow nobody knew but himself. Say! Nobody knew but him and *he wasn't jealous anymore.* He sat very quietly and considered this amazing fact. Could it be that he had fallen out of love with Diana? He considered this. No. Diana was just as dear to him as ever. She raised his blood pressure just as much. He wanted her here right now, with her arms around him. No, it was simply that he no longer needed to hold her prisoner and snarl at anyone who approached. Somehow he felt even more sure and certain of his love for her, and her love for him.

Then nothing need be changed. He could just ignore the whole thing. A great weight was lifted from his mind. He laughed aloud, then unlocked the controls, and pulled back on the stick.

Twenty minutes later he opened the door of his little cottage at Tahoe. He strode in, whistling merrily, unstrapped his belt and chucked it in a corner. Olga was lying on the couch, reading. She looked up, laid her book aside and spoke.

"Hello, bright eyes. What are you so happy about? Come here. I want to count your arms and legs. Hmm—Seems to be all in place. Perhaps your head is gone, but you wouldn't miss it. Have you had your fill of playing tag with clouds in that outlandish contraption? I've a good mind to recommend you for a restrained ward."

He picked her up, held her in the air, and planted a smacking kiss on her mouth. Then he sat down, swinging her about so that she landed on his lap.

"There now, wench! You and I can talk. Do you miss me?"

She twisted and squirmed. "Perry! Put me down. Is this any way to treat your attending physician?"

He held her tightly. "No side issues, please. I want to talk about you and me. Tell me, strumpet, do you feel hot and bothered when I'm around. Like this for example." He rubbed his cheek against her arm.

"Hot and bothered! What an expression! Perry, what in the world do you mean by this? You're supposed to be in love with Diana."

He grinned at her. "Yes, and suffering from pathological jealousy. Yeah, I know all about that—but you see I've just discovered that I'm cured."

She twisted in his lap and looked at him squarely. "Do you mean that you find you aren't in love with Diana anymore?"

"On the contrary, I love her devotedly, but I just discovered that I no longer suffer from possessive jealousy. That's why I was whistling when I came in. Then I caught sight of you and recalled that I had been wanting to do something for a long time, so I did it. But you haven't answered my question. Fair maid, do I arouse your primitive passions?"

"I'm not a maid and that's a hell of a way to make love."

"You get the idea. How about it? Speak up."

"Well, now that you mention it, it always seems a little warm in your neighborhood."

He kissed her again before replying, "Then come on. What are we waiting for?"

"Perry, you devil, must you be so brash about it?"

"I thought you modern psychiatrists didn't believe in fancy words for simple ideas?"

"Words aren't important, but no woman ever objects to a little tenderness."

"Okay." He proceeded to demonstrate tenderness in caressing. "Is that better?"

"Much better."

He swung her around onto the couch and stretched out beside her. She gave a little gasp. "No, Perry. Be good. It's too soon after breakfast."

"Then hold your breath while I count ten thousand by twos."

"You're incorrigible." She sighed, and her eyes closed.

The next morning Perry awoke feeling crowded and cramped. He discovered that he was hemmed in on a fairly narrow couch by two large objects. When his eyes focused he found that Olga's head rested on his right shoulder and that Diana's head lay on his left. Gently he attempted to disentangle himself. Diana opened her eyes and smiled sleepily, then spoke, "Hello, darling."

"Hello. If I were back in 1939, I'd light a Murad."

"What does that mean?"

"Never mind. When did you get in?"

It was Olga who answered. "Late last night. I was awake but you were snoring so beautifully that we decided not to disturb you. So we whispered very discreetly across your manly chest."

Perry decided not to push the matter further. Apparently the girls had settled things in some feminine fashion beyond his comprehension. He decided to let well enough alone.

Diana stretched and yawned. "I'm starved. Anybody want breakfast? I'll order it."

After breakfast Perry announced that he was going to try to locate Master Hedrick. He had told the women about his intention of entering at Goddard Field, and wished to push ahead with his plans.

Hedrick received him with his usual courtesy. Perry recounted what he had been doing, then broached the subject of taking rocket training. Hedrick nodded his approval.

"But you see, sir, if I go to Goddard Field, I'll need to stay there continuously, three months at least. I can't check back here every day or two. Now I feel that I'm cured and fully adjusted to modern life. Certainly I don't suffer from sexual jealousy. Don't you think I'm cured?"

"Certainly you are cured, my boy. The last several association tests you've taken showed it conclusively."

"You've known for some time I was cured?"

"Yes indeed. Yes indeed. In fact I reported to the court that you had been discharged as readjusted over three weeks ago. But I couldn't tell you. You had to find it out for yourself."

"Well, I'll be damned!"

Hedrick smiled. "I think not, son."

XV

"It is implicit in all of our American institutions that there are but two things that every man wants; first, that he should be as secure as possible economically, able to face the future without fear of cold or hunger for himself or his loved ones; and second, the chance to do anything that *he* wants to do, that interests *him,* that seems worthwhile to *him.* The first we could accomplish collectively where no man could accomplish it alone. It's an impossibility alone. So we did it—together—with the dividend. The second is perfectly possible in so far as the things he wants to do don't damage others. Now most people area pretty good sort, who don't want to damage other people, who would not do it knowingly. Our Code of Customs is designed to prevent such damage, *and for no other purpose.* We take the point of view that, if a man wants to do something and it does not hurt other people—By God, let him do it!"

— President Montgomery at the Tri-Centennial Celebration of the Bill of Rights, 2089.

Diana, Perry, and Olga sat around a table in a small but pleasant living room. Before them were the remains of a gourmet repast. Perry was pouring wine into two tiny cups. He handed them to the women.

"Here's luck. Save the bottle and I'll finish it when I get back." The girls drank and Perry refilled their cups. "We were certainly delighted that you could come, Olga. We haven't seen enough of you this past year."

"You know that I couldn't stay away, Perry."

"Thanks." He arose and stepped to a window. It was night. A gibbous moon rode high to the south and turned the desert soil of Arizona into unearthly fairyland. "I'm glad it's a nice night. Not that it makes any real difference, but it's pleasanter." He glanced at the wall chronometer. "About an hour until meridian. We don't need to leave yet."

Olga fussed with a cigarette and broke it. "How long will you be gone, Perry?"

"A little less than twenty-four hours"

"So short a time? But the moon is so far away!"

"It's far enough, about three hundred and eighty thousand kilometers. My orbit will be about eight hundred thousand kilometers all told. But I'm going to travel pretty fast."

"How fast, Perry?"

"My average speed will be around six hundred kilometers per minute, five eight six point two to be exact. I'll be going faster on the swing around old Luna, but that is because I want to stay down low and take some pictures."

"That seems terribly fast. Won't it crush you to accelerate to such a horrible speed?"

"No, not at all. I could come up to speed in little over half an hour, using only half a 'g'. Except for the first few minutes, though, I won't even use that. I'll get a big shove in the first four minutes, then drop off my first-stage rocket entirely."

"It uses your new fuel, doesn't it?"

"Yes, it uses the picroid. I designed it after a high explosive we used to use, but I've got it controlled. We used to use the stuff it's made from, picric acid, in bombs and shells, but not in guns, because it was too fast and would split a gun wide open. But this stuff I can control and get a tremendous boost with it. When it's gone I drop off its tanks and nozzles, and so forth, and what I've got left is a fairly ordinary little rocket ship."

Diana got up from where she had been sitting and faced him. "Perry, how do you know that stuff won't go off all at once?"

He smiled tenderly. "Don't worry, honey. It hasn't yet on any tests, and it can't, or else I'm no mathematician."

Olga spoke again. "Perry, you are determined to go?"

"What do you think?"

She shook her head. "Oh, you're going all right. Oh Lord, was it for this that we re-made the world? Made it safe to rear babies? Brought sanity into the world?" She walked to the far end of the room and stood with her back to them. Perry followed her, took her by the shoulders and turned her around.

"Olga, look at me. This *is* what men have striven for. Economic systems are nothing, codes of customs are nothing, unless they are the means whereby man can follow his urge to fulfill himself, to search for the meaning of things, to create beauty, to seek out love. Listen to me. If there were a deadly new plague you'd go where it was, wouldn't you?"

"Yes, but that is to save people's lives."

"Don't tell me that. That is your secondary reason, your justification. You'd go in the first place to study something, to find out what made it tick."

"But your trip is so useless."

"Useless? Perhaps. But Pasteur didn't know what use there was in it when he studied one-celled life. Newton thought his calculus was a mathematical toy. I don't care whether it's useful or not, but you've no way of knowing that it won't be. All I know is that there is another face to the moon that we never see, and I'm going out there and seeing. After me someday will come a man in a better ship, who will land and walk on the moon, and come back to tell about it. Then in the next few years and centuries the human race will spread through the planets like bees swarming in the spring time—finding new homes, new ways to live, new and more beautiful things to do. I won't live to see it, but, by God, I can live long enough to show them the way.

"But I won't be killed this trip. At least I don't feel it in my bones. This time tomorrow I'll be back, and we'll all sit down to supper again." He consulted the chronometer. "Come on. It's time to go."

The reception hall of the Moon Rocket Station was crowded with people. Perry was met at the stair by the Director who kept back a crowd of excited visitors. A husky youth in greasy coveralls pushed through the mob. Perry caught his eye.

"All set, Joe?"

"All set, Master Perry." Perry clapped him on the shoulder.

"Cut out the master stuff, kid. It's soon enough when I get back. Besides you go on the next trip."

Joe smiled. "I'll hold you to that, Perry."

"Right. Now, look. You're all through, aren't you? Will you look after the girls here, and see that they get good spots to watch? Thanks." He turned back to Diana and Olga. "I'm going now. It's less than ten minutes to zero. I don't want you out on the field. Give a fellow a kiss and go." He looked around and called out, "Private sphere!" The televue scanners stopped clicking. Then he kissed each of them and they clung to him. He patted them clumsily, arm about each, then gently pulled away. The scanners picked up again. Joe led them to the observatory stairs and Perry stepped through the field lock.

Joe found them places in the observatory tower. They saw Perry in the white flood lights, moving toward his ship with a parade ground swing. The ship itself was silver in the moonlight, huge, uncouth. It rested on a cradle in which it leaned away from vertical and pointed a trifle west of meridian. Perry was climbing a ladder which scaled the framework of the cradle. He reached the manhole in the side of his rocket and slid his legs inside. Then, half seated, he looked back at the buildings and waved his right arm. Diana fancied that she could catch the glint of his smile. Then he slid inside and was gone. The port cover swung into place from inside the rocket, rotated clockwise a quarter turn, and rested.

THE END

APPENDIX TO CHAPTER IX

NOTE: This need not be read in sequence. It is included to amplify Davis' remarks in order that the reader may understand the causes of economic confusion in the early 20th century.

There is an old tale of five blind men who were taken to "see" an elephant. Each examined it as best he could, and described it in terms of his experience.

One felt a leg and said, "It is like the trunk of a tree."

One had grasped the tail and answered, "How ridiculous! It is a rope."

A third countered, "You are slightly mistaken, brother. It is somewhat like a rope, but is actually a mighty snake." He had touched the trunk.

Another ran his hand across the broad solid side of the beast and exclaimed, "How can you be so deceived? Verily, it is a wall."

The last touched the elephant not at all, but heard him trumpet. He fled, for he thought the Spirit of Death was upon him.

They were all correct insofar as their data went. *Each in grasping a part of the truth had reached a different wrong conclusion.*

Twentieth century economists, of whatever school, almost unanimously fell into the same sort of error. Illustrations of how they made such errors, through examining some special case of the production-consumption cycle, are set forth below:

RENT TROUBLE (The Single Tax Argument)

Use the same data as used by Perry and Davis, except:

(1) the banker spends all of his interest.

(2) the land owner does not spend his rent.

OVERPRODUCTION: two playing cards.

Nevertheless, title to land frequently results in individuals receiving returns in rent disproportionate to investment. This is Henry George's "unearned increment." But unearned increment does not in itself cause overproduction, and taxing it away will *not* balance the cycle. On the contrary, it throws it further out of balance. Taxing unearned increment out of existence is only a means of *social* readjustment.

PROFIT TROUBLE (The Socialist Argument)

Same data except:

(1) Banker spends his interest.

(2) Entrepreneur spends only two shekels.

OVERPRODUCTION: 3 playing cards.

Same situation as above. If a concern's profits seem disproportionately high, they may be lowered by punitive taxation, but to do so will not tend to balance the cycle, unless shekel for shekel (or dollar for dollar) an equal amount of money is given away to someone who will spend it.

LABOR TROUBLE (The Conservative Argument)

Using the same data, but with banker spending all the interest, run two cycles side by side. Let the additional cycle suffer from labor trouble, the workers striking for high wages, and winning the strike. Let the additional labor cost be 31.5 shekels. Necessary price of cards will be 2.5 shekels per card in this cycle. But the other cycle can sell to the same market at 2 shekels per card. No matter what the final market price, both cycles will have overproduction, or the second cycle will fail to obtain a return equal to cost, or both.

Results:

(a) Market price 2 shekels, 1st cycle balances, 2nd cycle sells all its goods, but is insolvent by 31.5 shekels.

(b) Market price 2 1/2 shekels, combined overproduction is 15.75 playing cards.

DUMPING FROM ABROAD (The High Tariff Argument)

Using the same data, place on the market from another cycle with lower costs of any sort, especially labor, playing cards to sell at one shekel. Our entrepreneur is forced to cut prices and goes broke. Orthodox solution, XXth century: protective tariff. Rational solution: Cease to manufacture the type of articles being dumped on us, and pay for them with our currency. We gain the increment in real wealth.

INTEREST (The Anti-Semitic Argument)

There is an element of truth to this argument—that interest not spent as purchasing power unbalances the cycle. The illustration given in the narrative is proof of this. And there were undoubtedly many Jews in the banking business, though by no means a majority. Yet somehow on this slender pedestal, an incredible structure of half-truths and outright falsehoods was constructed many times in history to 'prove' that Jewry was engaged in a conspiracy to enslave the rest of mankind. It is difficult for us, in the enlightened 21st century, to realize that this preposterous myth was the cause of torture, mass murder, and an endless number of vicious acts of racial discrimination.

MONOPOLY (The Trust-Buster's Argument)

This problem should be set up in three ways, monopoly of raw materials, monopoly of technique, and monopoly of a field of enterprise. In each case modify the data to cause the holder of the monopoly to (a) receive too large returns (b) freeze out a competitor.

Monopoly of raw materials is contrary to public interest. The state must exercise its right of control or expropriation to prevent it.

Monopoly of technique is now limited to the royalty rights of the inventor, but in former times the owner of a technique was legally able to monopolize it entirely, even to the extent of neither using it, nor allowing others to use it.

Monopoly of a field of enterprise, where it is not based on the other types of monopoly, usually indicates greater efficiency and should be controlled in the public interest rather than eliminated. We now believe that the interest of the consuming public is paramount. It was formerly held that the interests of the little businessman were paramount. This point of view is roughly equivalent to that of the machine breakers at the beginning of the industrial revolution in the 19th century.

It is obvious that natural causes alone are sufficient to destroy a big business which serves the public less efficiently than a small business, all other things being equal.

The above illustrations, while by no means exhaustive, show the type of error into which our forefathers fell. In each case, the proponents of the above-listed arguments took a special case of the production-consumption equation and treated it as if it were the general case. In each case they were right—as far as they went—but by assuming their special case to be the general case, their conclusions were invariably fallacious.

For comparison with 20th century economies the problem set up by Perry and Davis will now be worked as an illustration of the general case of the production-consumption cycle, applying the modern method of the dividend-discount for balancing the cycle.

Total cost of product: 126 shekels

Number of units (playing cards): 63 shekels

Assume that holders of purchasing power refrain from spending 26 shekels. Therefore, if the government issues a total of 13 shekels as a dividend, and authorizes a discount of 13.126 or approximately 10%, the spread between production and consumption will be eliminated. Capitalization of the country will be increased by 26 shekels and production will be greater in the next fiscal period, thereby increasing the real wealth of the country.

This problem must be worked out with the chessmen, or their equivalent, to be appreciated. This type of problem is worked out in more detail on page 171.

The invention of the discount method of preventing inflation is usually attributed to C.E. Douglas, a Scottish economist of the early 20th century.

AFTERWARD

"A Clean Sweep."

Fifty years before Robert Heinlein's death in 1988, he wrote *For Us, The Living,* his first novel.

Like many writers, Heinlein found himself repeatedly answering the same questions. In particular, "How did you get published?" His polished tale went like this: He had lost a political campaign in 1938, and faced a mortgage and no prospects of employment. He saw a contest in *Thrilling Wonder Stories* offering $50 for science fiction stories from unpublished authors and decided he would give it a try. In four days of April 1939, he wrote his first story, "LifeLine"—and decided it was good enough to submit to the top market of the day, John W. Campbell's *Astounding Science Fiction.* Campbell bought it, and Heinlein never went back to what he called "honest work."

But as James Gifford has pointed out in *Robert A. Heinlein: A Reader's Companion* (Nitrosyncretic Press, 2000), the story is not quite that simple. There was indeed a writing contest, but in the October 1938 *Thrilling Wonder Stories.* However, there was no $50 prize; instead, it was a call for submissions, at the normal word rates. Future great science fiction writer Alfred Bester won that contest and had his first story printed in the April 1939 issue, when Heinlein was just starting "LifeLine"—which shows another flaw in the polished myth: the contest was already publicly won before Heinlein even began his intended submission.

Bester never had a single story rejected by any editor or publisher —but Heinlein did.

In fact, Heinlein faced a number of rejections. His second sale to Campbell, "Misfit," was accepted only with revisions, and Campbell rejected six of his next stories, one right after another. Those six rejections accelerated a learning process into writing the kind of science fiction Campbell *would* buy. And before *Astounding,* even before *For Us ,The Living,* Heinlein had tasted literary rejection. When he was in the navy, serving on the aircraft carrier *Lexington,* he had entered a short story in a shipboard writing contest. "Weekend Watch," a little tale of espionage and intrigue at the Naval Academy, still survives in the Heinlein archives at UC Santa Cruz.

Heinlein lost that contest.

Perhaps his most significant rejection came before he wrote "LifeLine." He had already written a complete novel: *For Us, The Living,* which was rejected first by Macmillan, who kept it for some time, and then by Random House, who returned it after only a month in June of 1939.

Precisely when the novel was written is a matter for scholarly conjecture, but the general date is fixed in a letter Heinlein wrote to Campbell on December 18, 1939: "A year ago I wrote a full length novel." That places the window of composition between August 1938, when Heinlein lost his bid for California State Assembly, and April 1939, when he wrote "LifeLine." In August 1934, Heinlein returned to California with his second wife, Leslyn, from a long hospital treatment for the tuberculosis that ended his naval career (Heinlein had a very brief first marriage in the late twenties). He briefly sat in on classes at UCLA—he was never formally enrolled there, nor did he ever audit classes officially—and he soon realized that he would not be able to afford postgraduate study, even if he could surmount the fact that Annapolis granted no undergraduate degrees at that time, making it difficult, if not impossible, to convince UCLA to admit him to graduate school.

Fortunately, in the fall of 1934, Heinlein encountered something far more exciting than running an academic obstacle course. Upton Sinclair is best known today for the 1906 muckraking novel *The Jungle.* In 1934, he was also known for a whole series of novels and books crusading for socialism and radical change—and for running for California governor as a member of the Socialist Party. For the 1934 campaign, he had left the Socialist Party for the Democratic ticket. Sinclair's crusade electrified the nation, and terrorized the Republican Party, which had long been accustomed to controlling California. Robert Heinlein became deeply involved in Sinclair's Utopian vision for California: End Poverty in California, better known as EPIC.

EPIC was one of the many plans put forward by various American political figures to solve the problems of the Great Depression, including Franklin Delano Roosevelt and his New Deal; Huey P. Long's Share the Wealth (tax the rich 100 percent after their first million dollars of income, then redistribute the wealth to everyone else); Dr. Francis Townsend's Old Age Revolving Pension Plan (give senior citizens $200 a month); and the Technocracy movement (put engineers and scientists in charge of society). FDR curtailed many of these movements by co-opting their best ideas. He raised the income tax on the rich to disarm Share the Wealth's appeal and instituted Social Security in 1935 to supplant Dr. Townsend.

Sinclair's idea for EPIC can be boiled down to a single phrase: "production for use"—a phrase which is ridiculed in the 1940 Cary Grant/Rosalind Russell classic, *His Girl Friday.* He suggested that California had two untapped resources: factories and farms that had been closed down, and the unemployed. Why not combine them, so that all the unused land and facilities could be used by the unemployed to produce the goods and services they needed for themselves? They would use scrip to run their economies, and anything left over as surplus could be sold to the general population. On paper, it looked like a simple equation.

In reality, it provoked two responses: one, a wild joy on the part of Sinclair's followers that the problems of the Depression could be solved, and two, a great fear on the part of California's wealthy that the Socialist Revolution had come for their heads—and wallets. The memories of the Russian Revolution were sharp for these wealthy capitalists, who viewed EPIC as a communist plot. The movie industry in particular went to war, producing phony "newsreels" that were far from representative of Sinclair's plans, making it seem as though the communists and the nation's unemployed would turn life in California into a nightmare. The Hearst newspapers and the *Los Angeles Times* went to work as well, destroying Sinclair's hopes for election at every opportunity. FDR hammered the final nail into the coffin when he refused to endorse Sinclair as the Democratic candidate, seeing little reason to spend political capital on a potential rival.

So Upton Sinclair lost the election.

But Robert Heinlein did not give up the fight.

He was a neophyte political volunteer in the 1934 election, although he was quickly given six precincts to run. But after Sinclair's loss, Heinlein began to move up in the Democratic Party, to carry on the EPIC fight over the next four years. Eventually, he helped write and edit the EPIC newsletter (with a circulation of two million in 1934), became a major player in the Democratic Party in Los Angeles, helped write the platform for the state EPIC movement, and served at the state level of the Democratic Party on the California State Central Committee. In 1938, Robert Heinlein moved from behind the scenes and took up the race for political office, running for California State Assembly.

His opponent was the Republican incumbent, corporate attorney Charles Lyons. Their district included Beverly Hills and part of Hollywood, which at that time were not only wealthy, but also conservative and Republican. Heinlein had only a small group of supporters in his campaign, because the Democratic Party believed there was no way to win that seat. He fought the good fight, but because his opponent had cross-filed as a Democrat for the primaries (which eventually became illegal in California), if Heinlein lost the primary, Lyons would automatically win the election—as the only candidate. Heinlein lost, by fewer than five hundred votes.

In many ways, the 1938 election was a triumph for the Democrats —they gained the governor's seat for former EPIC member Culbert Olson and a number of state assembly seats. Although Heinlein's loss stung, it did not end his political involvement. He continued in Democratic politics at least until 1940, when he attended the Democratic National Convention in Chicago as an observer with press credentials.

Still, with his formal education stalled and his political career stymied, where would he turn to pay off the mortgage on his house? His naval disability pension would be enough to keep the Heinleins fed and clothed, but not enough to cope with the mortgage, and in 1938, owing money to a bank was still somewhat shameful.

And how would he continue his efforts to help his country?

EPIC showed every sign of falling apart: the EPIC newsletter ceased publication even before the 1938 primaries were over, and most of the EPIC politicians stopped identifying themselves as such, in order to win elections. Sinclair himself had returned full time to writing.

Sinclair's writings had always harbored social commentary, not to mention social crusades. Heinlein knew Sinclair personally and had worked with him on the EPIC movement. Thus one writer's life and work provided the model for another's incipient career.

Heinlein turned to writing *For Us, The Living.*

Of course, Upton Sinclair was not the first writer to suggest solutions to social problems in the form of fiction—Utopias (perfect worlds) and dystopias (nightmare worlds) were well-known literary forms by 1938. Heinlein would have known of the genre's two most famous practitioners: Edward Bellamy and H. G. Wells, both major influences on Upton Sinclair's Utopian socialism. Bellamy's 1887 *Looking Backward* remains the most famous Utopian novel ever written by an American and may well be the book Heinlein had in mind when writing this first novel. In both novels, the main character awakens in the future to find an ideal society he does not understand. Through a series of Socratic dialogues, the protagonists (and the audience) learn how such a wonderful world can truly exist. Wells, whose "scientific romances" established the paradigms of science fiction for much of the twentieth century, also wrote many novels that portrayed future Utopias and dystopias. *When the Sleeper Wakes* was a particular favorite of Heinlein's (the 1910 revision *The Sleeper Awakes* was the book H. G. Wells autographed for Heinlein when they met). The 1936 film *Things to Come,* adapted by Wells from his earlier novel, *The Shape of Things to Come,* ends with a launch into outer space, as does *For Us, The Living.*

Heinlein was primed by these writers, as well as by the science fiction pulp magazines he read regularly, to trumpet the future as a wonderful opportunity for progress. When he sat down to write *For Us, The Living* he was trying to do what he had done throughout his four years of political activity and would continue to do for much of his writing career—generate change for the better. The title comes from Abraham Lincoln's Gettysburg Address:

> It is for us, the living, rather, to be dedicated to the unfinished work which they who fought here have thus far so nobly advanced. It is rather for us to be here dedicated to the great task remaining before us—that from these honored dead we take increased devotion to that cause for which they gave the last full measure of devotion—that we here highly resolve that these dead shall not have died in vain, that this nation, under God, shall have a new birth of freedom....

If Robert Heinlein could not achieve social change through his political efforts, perhaps he might achieve it through the pen, to gain that "new birth" that is so central to his fiction.

Anybody who has read Robert Heinlein will recognize that he offered provocative commentary on our society and advocated for radical social change. Indeed, his politics have often confused people. How could a man who supported the Socialist Upton Sinclair and the Democrat FDR become a supporter of arch-conservative Republicans Barry Goldwater and Jeanne Kirkpatrick? As Heinlein once explained to Alfred Bester in 1959, "I've simply changed from a softheaded radical to a hardheaded radical, a pragmatic libertarian...." Heinlein's apparent change in politics makes sense if viewed this way: he saw problems that were not being solved and went to the political forces he believed had the greatest chance of solving them. In 1938, the most dangerous problem he perceived was the Great Depression, and he looked to FDR and Upton Sinclair for results; in 1959, it was nuclear war and communism (a hatred for which Heinlein developed before World War II, not with the Cold War). He supported Barry Goldwater in 1964 because he believed Goldwater would be far more effective against the Soviets than Lyndon Johnson.

Throughout his career, he would suggest solutions to the problems he perceived in society, always implicitly, if not explicitly. Oliver Wendell Holmes said, "Man's mind, once stretched by a new idea, never regains its original dimensions." Heinlein's writing does just that, stretching our minds, teaching us to think and learn, even while entertaining us. If we want to solve persistent problems, we have to think about them in new ways. In criticism of his later works, particularly from the time of *Starship Troopers* on, the most frequent objection is that Heinlein is "lecturing" the reader. If only all of our teachers could hold such wonderful seminars! As is evident in *For Us, The Living,* from the very beginning he wanted to present controversial ideas in his work. In writing for *Astounding,* he learned to produce commercial fiction, focusing on plot and characters and sheer story. Once he built an audience who would read whatever he wrote, he moved the challenging themes back to the forefront, as in this first novel. If readers were outraged by his ideas or by their presentation, so much the better.

Late in life, Robert Heinlein told bookseller Alice Massoglia that he was going to have to change his name and write under a new one. Shocked, she asked, "Why?" His answer: "Because I think I've insulted everybody I can as Robert Heinlein!" Heinlein wanted to provoke response in order to wake up his readers and lead them to really think about the issues at hand.

As Heinlein told Campbell, *For Us, The Living* was "entirely concerned with the origin of certain dominant human thought patterns and how they might change if changes in the economic and social matrix shifted the survival values of these dominant mores. It attempted to show that most ethical standards were relative—that the terms vice and virtue depended on the psychological matrices." In this way, *For Us, The Living* reads more like one of his late novels, rather than one of his earlier works. The more didactic Heinlein of the later novels was always there, subdued in the Heinlein who wrote for *Astounding* and collected those paychecks. With the publication of *For Us, The Living,* the pattern of Heinlein's career takes a completely different shape—the later novels are not an aberration but the completion of a full circle.

So what unusual ideas does Heinlein present in this novel?

Ever hear of the metric system? Clearly, Heinlein felt it was a better standard of measurement, as his future society uses it exclusively.

Heinlein also believed that English spelling needed to be streamlined and made more logical; hence, the use of phonetic spellings such as "Astronomikal Almanak and Efmerides" and "corectiv masaj."

Interesting as well that Heinlein predicts a united Europe, although one different in governing structure and outcome than the one we see today. He also predicted a common European currency, which now exists as the euro.

In 1938, few people considered space travel anything but an insane fantasy. Here, as he so often did, Heinlein advocates rockets and space exploration. He was an avid follower of rocketry, even joining the American Interplanetary Society in 1931 (which became the American Rocket Society, later merged into the American Institute of Aeronautics and Astronautics). After his death, his third wife and widow, Virginia Heinlein, endowed the Robert Anson Heinlein Chair in Aerospace Engineering at the Annapolis Naval Academy.

For today's readers (and for many in 1938), the most unfamiliar idea is that of his proposed economy. The economic program Heinlein advocates is not original to him, and is known by the name of Social Credit. He used the same economic system in *Beyond This Horizon,* where it is referred to as the "Social Dividend" paid to each member of that society.

Heinlein's interpretation of Social Credit Theory was that financial panics and the entire boom and bust cycle are caused by the relationship between production and consumption. Economists recognize that when consumption falls behind production, nothing good can follow. The Great Depression was caused in large part by overproduction in the twenties, followed by layoffs and the resulting decrease in consumption. Farming constantly overproduced, as did other "sick industries" such as textiles and coal mining. FDR's solution was to pay farmers *not* to produce—which we have continued to do, although the recipients are mostly agricultural corporations these days and not individual farmers. As Heinlein looked around him in the thirties, what he saw were failed attempts to restore consumption. He pointed out, in *For Us, The Living,* that FDR had attempted to hand out direct relief and to provide public works, but as we now know, only the massive expenditures of World War II ended the Great Depression —by putting everybody back to work, thus allowing them to consume the goods being offered. Direct relief and public works were simply not enough.

For Heinlein, Social Credit seemed a much better solution.

The economist C. H. Douglas had first proposed the idea of Social Credit in the twenties, and with the onslaught of the Depression, his ideas caught fire in Alberta, Canada. The Alberta Social Credit Party took control of Alberta's government in 1935, and Douglas became their economic adviser. Eventually, Alberta's attempts to implement Social Credit were shut down by the courts. But when Heinlein wrote this novel, there were Social Credit factions in the United States as well, including Los Angeles.

Heinlein's version of Social Credit argues that banks constantly used the power of the fractional reserve to profit by manufacturing money out of thin air, by "fiat." Banks were (and are) required by federal law to keep only a fraction of their total loans on reserve at any time; they could thus manipulate the money supply with impunity. By loaning out money that literally does not exist, and gaining in return actual cash, banks gather enormous profits. Abraham Lincoln once said, "If the American people knew tonight exactly how the monetary and banking system worked, there would be a revolution before tomorrow morning." If you took away that power from the banks by ending the fractional reserve system, and instead let the government do the exact same thing for the good of the people, you could permanently resolve the disparities between production and consumption. By simply giving people the amount of money necessary to spring over the gap between available production and power to consume, you could end the boom and bust business cycle permanently, and free people to pursue their own interests.

Until a society fully implements Social Credit, who can speak to the truth of this argument?

But Heinlein believed in it, as late as 1942 in *Beyond This Horizon.* And Lazarus Long uses the power of the fractional reserve when he works as a banker in *Time Enough for Love,* so Heinlein clearly hadn't changed his mind about the way banks functioned by the early seventies.

Similarly, he never changed his mind as to the importance of an individual's right to freedom and privacy. Throughout his entire canon, he argues extensively for the need of the government to remain out of the private affairs of individuals; it is most explicit in *For Us, The Living* when he suggests that the cornerstone of his future government is the constitutional recognition of the right to privacy. In this novel, a citizen should be allowed to do whatever he wishes, unless he harms another citizen. What he does in the "private sphere" is simply nobody else's business.

Heinlein's own life was predicated upon this distinction. His marriage to his second wife, Leslyn, was forced to take a dual character. In public, they were the polite couple, genteel, dedicated to public service, "moral" to a fault. In private, they had an open marriage, as Perry and Diana do in this novel, once Perry's jealousy is cured. They also pursued nude photography and actively attended nudist camps, as did several other science fiction writers, including Theodore Sturgeon. Catherine de Camp posed nude for Heinlein, and her picture was shown at a party with the de Camps and Isaac Asimov in attendance. After Heinlein's divorce from Leslyn in 1948, he repeatedly went out of his way to erase their marriage from any public mention. Heinlein's furious insistence on his own privacy, and the shrouding of his past from public inquiry, rests at least in part from a need to protect his public reputation as a political figure and as a writer—and throughout much of the 1950s, his major reputation outside the science fiction community (and most significant income) was that of a writer of children's books.

Yet when he wrote *For Us, The Living,* he crusaded for this revolution in privacy, sexuality, and economic consistency.

When he couldn't get it published, he took up the fight in the science fiction pulps.

These magazines would never have allowed him to write openly about sexual issues. In fact, *Astounding* edited out all sexual references, leading some of its contributors to look for ways to evade the puritanical restrictions, as when one writer inserted a reference to a "ball-bearing mouse trap" (a tomcat) and another used alien names that when pronounced correctly were sexual terms in other languages. But while sex was forbidden, Heinlein would still be able to crusade on issues of privacy, politics, religion—and do so while being paid for it.

Now we return to the matter of rejections. Heinlein's first two submissions to John W. Campbell in April and May of 1939 were accepted. Six of his next stories—"Let There Be Light," "Elsewhen," "Pied Piper," "My Object All Sublime," "Beyond Doubt," and "Lost Legacy"—were rejected. How frustrating for a writer who had already made two sales right out of the starting gate! And his novel, his social revolution, was dead in the publishing waters—by itself, the sexual freedom the novel embraces would have sunk it for mainstream publishers in 1939.

Heinlein, perhaps frustrated, but clearly determined, decided to reshape the material in *For Us, The Living.* The concept of a future history is often cited as Heinlein's greatest contribution to science fiction and remains the core concept of this novel. By lifting, revising, and expanding the most compelling ideas from *For Us, The Living* and turning them into stories, Heinlein found a way to break the dry spell with Campbell. Once he became dominant in the pulps, he was able to stretch the boundaries farther and farther with each tale.

Heinlein always found a way to open up science fiction to wider possibilities. After the war, he was the first science fiction pulp writer to break into the "slicks" of the mainstream. He was the first science fiction writer since H. G. Wells to write a screenplay for a Hollywood movie, the first American film to realistically depict a moon shot: *Destination Moon.* He was the first science fiction writer to begin a series of juveniles that would educate entire generations of readers to love science fiction and outer space. His later novels continually challenged the very definition of science fiction, provoking anger and debate—and, as always, a legion of imitators.

Throughout his career, Heinlein mentored other writers, particularly those just starting out. One of his five rules for writing compiled in "On the Writing of Speculative Fiction" stated, "You must keep it on the market until sold." Not having everything published gnawed at him, and as he once wrote to science fiction editor and writer Frederik Pohl in 1940, the stories "sit here and shame me." The six rejected stories were submitted elsewhere until finally sold—although a story-hungry Campbell actually bought one that he had initially turned down, "Elsewhen."

So why has *For Us, The Living* never been published . . . until now?

Shortly before Heinlein's death, as he and his beloved wife, Virginia, were preparing for his final days, their copies of this unpublished manuscript were destroyed.

By now, having read the novel, longtime fans may have noticed that some of Heinlein's earliest stories (and a few of his later ones) were mined from *For Us, The Living.* In a way, much of this novel has indeed been published, as "If This Goes On—," "The Roads Must Roll," "Coventry," and *Beyond This Horizon,* the most obvious extractions. Perhaps Heinlein thought there was no point in publishing a novel that had already been stripped and resold ...but his fans know better. His entire Future History, published primarily in *The Past Through Tomorrow,* uses recurring characters and themes, and the later novels are often a constant blending from previous works. No, there must be another reason.

Robert Heinlein often spoke disparagingly of his writing, rejecting the idea that his work was anything more than just "stories." That posture was a good defense against both the fans who wanted him to be their guru and the few literary critics who chose to write negatively about him. Heinlein showed in *The Number of the Beast* that he had little love for literary critics—he isolated them in an inescapable room, wherein they might practice their vicious and cannibalistic art on one another until they could escape by actually reading the books they were criticizing. The few books published about Heinlein before his death did not give him much reason for respect, given their persistent factual errors and ax-grinding interpretations. So the Heinleins had few expectations that his work would ever receive acceptance outside of the science fiction readership.

Before her death in January 2003, Virginia "Ginny" Heinlein came to realize that her husband's work is now being treated in contexts wider than science fiction. Scholars are beginning to recognize the connections between Heinlein's writing and that of Voltaire, Ralph Waldo Emerson, Mark Twain, Jerome K. Jerome, Rudyard Kipling, and James Branch Cabell, among others. She began to realize that the shroud of privacy surrounding their lives could finally be lifted, in order to help the literary reappraisal now taking hold. She authorized and collaborated on a full biography of Robert Heinlein, which is being written by William Patterson, the editor of the *Heinlein Journal.* She aided many other researchers, including Philip Owenby and Marie Ormes for their doctoral dissertations and me in my own research into the life of Leslyn Heinlein. Ginny helped found and support *The Heinlein Society,* a nonprofit group dedicated to furthering her husband's goals, including education, blood drives, space exploration, and eventually, publishing a scholarly edition of the Heinlein canon (you can join this noble cause at www.heinleinsociety.org).

In short, Ginny decided her husband's work and life should be treated openly and fully.

However, Ginny died before she knew that a single copy of *For Us, The Living* had survived. On Thanksgiving Day, 2002, weakened by a difficult recovery from pneumonia earlier that year, she broke her hip. She seemed to be recovering from her surgery and was to be released the week that I received a copy of *For Us, The Living* in the mail. I was looking forward to discussing my discovery with her when she suddenly passed away in January 2003.

Major writers often leave behind unpublished works. Heinlein himself had two unpublished nonfiction books released posthumously: *How to Be a Politician* (published as *Take Back Your Government!)* and *Tramp Royale.* Hemingway has had no fewer than four major books published after his death. Heinlein's favorite writer, Mark Twain, had several books published after his death, including the masterpiece *The Mysterious Stranger.* Literary scholars treat these works in their proper context, as pieces of the larger puzzle that comprise the writer's entire output.

As the first step in the fifty-year writing career of Robert Heinlein, *For Us, The Living* is like looking at Neil Armstrong's first footprint on the moon—a footprint Robert Heinlein played no small part in making possible, with his fiction glorifying space travel, and his work on *Destination Moon.*

And that is how I believe Ginny would have come to see it: as the beginning, deserving of preservation.

So how did this manuscript survive?

Shortly before his death, Robert Heinlein decided he wanted his biography to be written. Dr. Leon Stover, an expert on H. G. Wells, had written a book on Heinlein that, by and large, Heinlein liked. After his death, Ginny informed Dr. Stover that he was to be the authorized biographer. Dr. Stover immediately began contacting Heinlein's surviving friends with the estate's full approval. One of those friends was the highly decorated Admiral Caleb Laning, Heinlein's best friend at the Naval Academy and his coauthor on two post-World War II nonfiction essays. Cal Laning had kept fifty years' of correspondence with Heinlein intact, and he handed this treasure trove over to Dr. Stover for use in the authorized biography.

But Dr. Stover and Ginny Heinlein soon had a falling out, and she revoked his permission to write the biography.

For the next decade, nothing further happened.

Through my research and contacts with those who knew Leslyn Heinlein, I found myself in possession of a partial manuscript of Dr. Stover's unpublished biography. In the few pages I had, Dr. Stover mentioned his possession of the manuscript of *For Us,The Living,* apparently given to him by Cal Laning.

Attempts to contact Dr. Stover failed, but I had the name of his student assistant, Michael Hunter. Hunter was quite surprised that I had found him, but forthright in discussing his work with Dr. Stover. When Hunter was a senior, Dr. Stover had asked him to read the novel, make a synopsis for use in the biography, and use it in a student project connecting Heinlein's first novel to both H. G. Wells and to Heinlein's later writings. Hunter never did anything with his copy of the manuscript, under the assumption that Dr. Stover's biography would soon be published and Heinlein's first novel revealed to the world. Life went on, and he never heard from Dr. Stover again.

Hunter simply forgot he had a copy of *For Us, The Living.*

At my request, he went digging through his garage and found it, buried in boxes from his college years. He willingly sent me a copy.

After Ginny's unexpected death, I passed the manuscript on to the estate, which decided the novel was well worth publishing.

And now, Robert Heinlein's first and final achievement is in your hands.

"You must keep it on the market until sold." A clean sweep at last.

Robert James, Ph.D. Culver City, California July 2003

ROBERT ANSON HEINLEIN

July 7, 1907-May 8, 1988

Robert Heinlein was born in Butler, Missouri, the third of seven children. He spent the majority of his youth in Kansas City, taking jobs at a young age to supplement his family's income. It was apparent early on that Heinlein was a child prodigy of the sort that sometimes appears in his fiction. He learned chess at the age of four and took an early and abiding interest in astronomy, reading voraciously on the subject and giving lectures as a young student. His 1924 high school yearbook photo caption read, "He thinks in terms of the Fifth dimension, never stopping at the Fourth."

After high school, Heinlein applied to Annapolis—submitting one hundred letters of recommendation to his state senator—and graduated in 1929, twentieth in his class, with the rank of ensign. He was married shortly after graduation, though little is known of that union, which ended after approximately one year. In 1932 he married Leslyn MacDonald, an intelligent and politically radical woman who inspired many of his female characters.

Later that year, while serving aboard the destroyer *Roper,* Heinlein contracted pulmonary tuberculosis and was hospitalized. By 1934, his continual bouts with the disease rendered him disabled and forced his retirement from the military. He went on to study mathematics and physics at the graduate school of the University of California, though recurring illness forced his early withdrawal, and he campaigned unsuccessfully for a district assembly seat in Hollywood.

In 1939, after a failed naval career and a humbling defeat in his political endeavors, Heinlein turned to writing as a way to earn a living. This third career choice proved lucrative. By the early 1940s, he had paid off a large mortgage and was by all accounts a successful writer, having won the respect and admiration of the science fiction community. His first novel, *Rocket Ship Galileo,* was published by Scribner in 1947, and over the next twelve years, he wrote one book a year for Scribner, creating a highly respected and award-winning series of juveniles. During that time, Heinlein also wrote and published short stories, adult novels, and the script for *Destination Moon,* widely considered to be the first science fiction film. The movie was nominated for three Academy Awards and won in the category of Special Effects. During this time he was also divorced from Leslyn and married Virginia "Ginny" Gerstenfeld, a friend and colleague from his Navy days.

The Heinleins spent their marriage traveling, writing, entertaining, and working on behalf of many charitable causes—particularly blood drives, a tradition which is carried on by the Heinlein Society. In 1956 Heinlein won his first Hugo Award, for *Double Star,* and went on to win an unprecedented four Hugos, three Retro Hugos, and in 1975 received the first Grand Master Nebula Award for lifetime achievement from the Science Fiction Writers of America. He earned wide acclaim for novels such as *Stranger in a Strange Land, Starship Troopers, The Moon Is a Harsh Mistress,* and *The Puppet Masters.* Robert Heinlein continued writing, participating in political debate, and championing the cause of space travel well into the 1980's, when he retired to Carmel, California, with Ginny. His last novel, *To Sail Beyond the Sunset,* was published in 1987, one year before his death.

VARIABLE STAR with Spider Robinson

For the women without whom
none of this would have been necessary:
Bam, Evelyn, Ginny, Jeanne, Amy, Terri Luanna, Ruth, Kate, and Eleanor

Editor's Preface

In Robert A. Heinlein's *Stranger in a Strange Land* there is a story about a Martian artist so focused on his work that he fails to notice his own death, and completes the piece anyway. To Martians, who don't go anywhere when they die but simply become Old Ones, the burning question was: should this work be judged by the standards used for art by the living, or for art by the dead?

A similar situation occurs here for one of the first times on this planet. This book is a posthumous collaboration, begun when one of its collaborators was seven, and completed when the other was seventeen-years-dead. Spider Robinson discusses this at length in his Afterword, but a brief explanation at the start may help readers to better appreciate what they're reading, and to decide by what standards they should evaluate it. After the passing of Robert Heinlein's widow, Virginia, in 2003, his archivist/biographer discovered a detailed outline and notes for a novel the Grand Master had plotted in 1955, but had never gotten around to writing, tentatively titled *The Stars Are a Clock.* Heinlein's estate executor and literary agent decided the book deserved to be written and read, and agreed that Spider Robinson was the only logical choice to complete it.

First called "the new Robert Heinlein" by the *New York Times Book Review* in 1982, Robinson has been linked with him in the reviews of most of his own thirty-two award-winning books. The two were close friends. Spider penned a famous essay demolishing his mentor's detractors called "Rah, Rah, R.A.H.!," and contributed the introduction to Heinlein's recently-discovered 1939 first book, *For Us, the Living.*

It was a pairing as fortuitous as McCartney and Lennon. You are about to read something genuinely unique and quite special: a classic novel fifty years in the making, conceived in the Golden Age of SF by its first Grand Master, and completed in the Age of Cyberspace by one of his greatest students. *Variable Star* is Robert A. Heinlein's only collaborative novel—and we believe he would be as proud of it as Spider Robinson is, and as we at Tor are to publish it.

—Cordwainer LoBrutto, Senior Editor

One

For it was in the golden prime
Of good Harun Alrashid ...

—Alfred, Lord Tennyson, *Recollections of the Arabian Nights*

I thought I wanted to get married in the worst way. Then that's pretty much what I was offered, so I ended up going trillions of kilometers out of my way instead. A great many trillions of kilometers, and quite a few years—which turns out to be much the greater distance.

It began this way:

Jinny Hamilton and I were dancing.

This was something of an accomplishment for me, in and of itself—I was born on Ganymede, and I had only been Earthside a few years, then. If you've never experienced three times the gravity you consider normal, imagine doing your favorite dance . . . with somebody your own weight sitting on each of your shoulders, on a pedestal a few meters above concrete. Broken bones, torn ligaments, and concussions are hazards you simply learn to accept.

But some people play water polo, voluntarily. Jinny and I had been going out together for most of a year, and dancing was one of her favorite recreations, so by now I had not only made myself learn how to dance, I'd actually become halfway decent at it. Enough to dimly understand how someone with muscles of steel and infinite wind might consider it fun, anyway.

But that night was something else.

Part of it was the setting, I guess. Your prom is *supposed* to be a magical time. It was still quite early in the evening, but the Hotel Vancouver ballroom was appropriately decorated and lit, and the band was excellent, especially the singer. Jinny was both the most beautiful and the most interesting person I had ever met. She and I were both finally done with Fermi Junior College, in Surrey, British Columbia. Class of 2286 (Restored Gregorian), huzzah—go, Leptons! In the fall we'd be going off to university together at Stony Brook, on the opposite coast of North America—if my scholarship came through, anyway—and in the meantime we were young, healthy, and hetero. The song being played was one I liked a lot, an ancient old ballad called "On the Road to the Stars," that always brought a lump to my throat because it was one of my father's favorites.

It's the reason we came from the mud, don't you know
'cause we wanted to climb to the stars,

In our flesh and our bone and our blood we all know
we were meant to return to the stars,

Ask anyone which way is God, and you know *he will probably point to the stars ...*

None of that explained the way Jinny danced that night. I knew her as a good dancer, but that night it was almost as if she were possessed by the ghost of Gillis. It wasn't even just her own dancing, though that was inspired. She did some moves that startled me, phrases so impressive she started to draw attention even on a crowded dance floor. Couples around us kept dancing, but began watching her. Her long red hair swirled through the room like the cape of an inspired toreador, and for a while I could only follow like a mesmerized bull. But then her eyes met mine, and flashed, and the next thing I knew I was attempting a combination I had never even thought of before; one that I knew as I began, was way beyond my abilities—and I nailed it. She sent me a grin that felt like it started a sunburn. and offered me an intriguing move, and I thought of something to do with it, and she lobbed it back with a twist, and we got through five fairly complex phrases without a train wreck and out the of her side as smoothly as if we'd been rehearsing for weeks. Some people had stopped dancing to watch, now.

On the way to the stars
every molecule in you was born in the heart of a star.
On the way to the stars—
in the dead of the night they're the light that'll show
where you are
yes they are
from so far ...

In the back of my head were a few half-formed, half-baked layman's ideas for dance steps that I wasn't even sure were physically possible in a one-gee field. I'd never had the nerve to actually try any of them with a partner, in any gravity; I really hate looking ridiculous. But Jinny lifted an eyebrow—*what have you got?*—and before I knew it I was trying one, even though there was no way she could know what her response was supposed to be. Only she did, somehow, and made it—or rather, an improved variation of what I'd thought of—and not only was the result successful enough to draw applause, by luck it happened to offer a perfect lead-in to another of my ideas, which also turned out to work, and suggested something to her—

We flew.

We'll be through if the day ever comes when we no
longer yearn to return to the stars.

I can't prove it's so, but I'm certain: I know
that our ancestors came from the stars.

It would not be so lonely to die if I knew
I had died on the way to the stars.

Talking about dance is as silly as dancing about architecture. I don't know how to convey exactly how we danced that night, or what was so remarkable about it. I can barely manage to believe we did it. Just let it stand that we deserved the applause we received when the music finally ended and we went into our closing clinch. It was probably the first time since I'd come to Terra that I didn't feel heavy and weak and fragile. I felt strong . . . graceful . . . manly . . .

"After dancing like that, Stinky, a couple really ought to get married," Jinny said about two hundred millimeters below my ear.

I felt fourteen. "Damn it, Jinny—" I said, and pulled away from her. I reached down for her hands, trying to make it into a dance move, but she eluded me. Instead she curtsied, blew me a kiss, turned on her heel, and left at high speed, to spirited applause.

It increased when I ran after her.

Jinny was 178 centimeters tall, not especially tall for a Terran, and I was a Ganymedean beanpole two full meters high, so her legs were considerably shorter than mine. But they were also adapted from birth to a one-gee field—to *sports* in a one-gee field. I didn't catch up with her until we'd reached the parking lot, and then only because she decided to let me.

So we'd each had time to work on our lines.

Ginny went with, "Joel Johnston, if you don't want to marry me—"

"Jinny, you know perfectly well I'm going to marry you—"

"In five more frimpin' years! My God, Stinky, I'll be an old, old woman by then—"

"Skinny, you'll *never* be an old woman," I said, and that shut her up for a second. Every so often a good one comes to me like that. Not often enough. "Look, don't be like this. I can't marry you right now. You know I can't."

"I don't know anything of the sort. I know you *won't.* But I see nothing preventing you. You don't even have to worry about parental consent."

"What does that have to do with it? Neither do you. And we wouldn't let parental disapproval stand in our way if we *did* want to get married."

"You see? I was right—you *don't* want to!"

I was becoming alarmed. I had always thought of Jinny as unusually rational, for a girl. Could this be one of those hormonal storms I had read about? I hoped not—all authorities seemed to agree the only thing a man could do in such weather was lash himself to the mast and pray. I made a last stubborn attempt to pour logic on the troubled waters. "Jinny, please—be reasonable! I am not going to let you marry a dole bludger. Not even if he's me."

"But—"

I intend to be a composer. You know that. That means it's going to take me at least a few years to even start to get established. You knew that when we started dating. If, I say 'if,' all those bullocks I sacrificed to Zeus pay off and I actually win a Kallikanzaros Scholarship, it will be my great privilege to spend the next four years living on dishrag soup and scraped fridge, too poor to support a cat. If, and I say 'if,' I am as smart as I think I am, and luckier than I usually am, I'll come out the other end with credentials that might, in only another year or two, leave me in a position to offer you something more than half of a motel cubicle. Meanwhile, you have your own scholarships and your law degree to worry about, so that once my music starts making serious money, nobody will weasel it away from us."

"Stinky, do you think I care about *money?"* She said that last word as if it were a synonym for stale excrement.

I sighed. Definitely a hormonal storm. "Reboot and start over. What is the purpose of getting married?"

"What a romantic question!" She turned away and quested for her car. I didn't move.

"Quit dodging, I'm serious. Why don't we just live together if we want to be romantic? What is marriage for?"

The car told her she was heading the wrong way; she reversed direction and came back past me toward its voice and pulsing beacon. "Babies, obviously"

I followed her. "Bingo. Marriage is for making jolly babies, raising them up into successful predators, and then admiring them until they're old enough to reward you with grandchildren to spoil."

She'd acquired the car by now; she safed and unlocked it. "My baby-making equipment is at its peak right now," she said, and got in the car. "It's going to start declining any minute." She closed, but did not slam, the door.

I got in my side and strapped in. "And the decline will take decades to become significant," I pointed out logically "Your baby-making gear may be at its hypothetical optimum efficiency today—but my baby-*raising* equipment isn't even operational yet."

"So what?"

"Jinny, are you seriously proposing that we raise a child as extraordinary and gifted as ours on *credit?"* We both shared a most uncommon aversion to being in debt. Orphans spend too much of their childhood in debt to others—debt that cannot be repaid.

"Nobody seems to be seriously proposing around here, she said bitterly.

Hormonal hurricane, maybe. A long time ago they used to name all hurricanes after women. On Ganymede, we still named all groundquakes after them. "Look—"

She interrupted, "Silver: my home, no hurry." The car said, "Yes, Jinny," and came alive, preparing for takeoff.

I wondered as always why she'd named her car that—if you were going to pick an element, I thought, why not hydrogen? I failed to notice the slight change in address protocol. Despite our low priority, we didn't have to wait long, since nobody else had left the prom yet and the system was between rush hours; Silver rose nearly at once and entered the system with minimal huhu. That early in the evening, most of the traffic was still in the other direction, into Greater Vancouver. Once our speed steadied, Jinny opaqued the windows, swiveled her seat to face me, and folded her arms. I'm sure it was quite coincidental that this drew my attention to the area immediately above them. I believe in the Tooth Fairy, too. "Pardon me for interrupting you," she said.

She looked awfully good. Her prom dress was more of a spell than a garment. The soft warm interior lighting was very good to her. Of course, it was her car.

That was the hell of it. I wanted to marry her at least as much as she wanted to marry me. Just looking at her made my breath catch in my throat. I wished with all my heart, and not for the first time, that we lived back when unmarried people could live together openly. They said a stable society was impossible, back then. But even if they were right, what's so great about a stable society?

My pop used to say, "Joel, never pass up a chance to shut up." Well, some men learn by listening, some read, some observe and analyze—and some of us just have to pee on the electric fence. "Jinny, you know I'm a backward colonial when it comes to debt."

"And you know I feel the same way about it that you do!"

I blinked. "That's true. We've talked about it. I don't care what anybody says; becoming the indentured servant of something as compassionate and merciful as a bank or credit union simply isn't rational."

"Absolutely."

I spread my hands. "What am I missing? Raising a child takes money—packets and crates of the stuff. I haven't got it. I can't earn it. I won't borrow it. And I'm too chicken to steal it."

She broke eye contact. "Those aren't the only ways to get it," she muttered. Silver gave its vector-change warning *peep,* slowed slightly, and kinked left to follow the Second Narrows Bridge across Burrard Inlet.

"So? I suppose I could go to Vegas and turn a two-credit bit into a megasolar at the roulette wheel."

"Blackjack," she said. "The other games are for suckers."

"My tenants back home on the Rock might strike ice. In the next ten minutes I could get an idea for a faster-than-light star drive that can be demonstrated without capital. I can always stand at stud, but that would kick me up a couple of tax brackets. Nothing else comes to mind."

She said nothing, very loudly. Silver peeped, turned left again, and increased speed, heading for the coast.

"Look, Spice," I said, "you know I don't share contemporary Terran prejudices any more than you do—I don't insist that I be the one to support us. But somebody has to. If you can find a parttime job for either of us that pays well enough to support a family, we'll get married tomorrow."

No response. We both knew the suggestion was rhetorical. Two *full-time* jobs would barely support a growing family in the present economy.

"Come on," I said, "we already had this conversation once. Remember? That night on Luckout Hill?" The official name is Lookout Hill, because it looks out over the ocean, but it's such a romantic spot, many a young man has indeed lucked out there. Not me, unfortunately "We said—"

"I remember what we said!"

Well, then, maybe I didn't. To settle it, I summoned that conversation up in my mind—or at least fast-forwarded through the storyboard version in the master index. And partway through, I began to grow excited. There was indeed one contingency we had discussed that night on Luckout Hill, one that I hadn't really thought of again, since I couldn't really picture Jinny opting for it. I wasn't sure she was suggesting it now . . . but if she wasn't, I would.

"See here, Skinny, you really want to change your name from Hamilton to Johnston right away? Then let's do it tomorrow morning—and ship out on the *Sheffield!"* Her jaw dropped; I pressed on. "If we're going to start our marriage broke, then let's do it somewhere where being broke isn't a handicap, or even a stigma—out there around a new star, on some new world eighty lightyears away, not here on Terra. What do you say? You say you're an old-fashioned girl—will you homestead with me?"

A look passed across her face I'd seen only once before—on Aunt Tula's face, when they told me my father was gone. Sadness unspeakable. "I can't, Joel."

How had I screwed up so badly? "Sure you could—"

"No. I *can't.*" She swiveled away from me.

The sorrow on her face upset me so much, I shut up and began replaying everything since our dance, trying to locate the point at which my orbit had begun to decay. Outside the car, kilometers flicked by unseen. On the third pass, I finally remembered a technique that had worked for me more than once with women in the past: quit analyzing every word I'd said and instead, consider words I had *not* said. Light began to dawn, or at least a milder darkness. I swiveled her seat back to face me, and sought her eyes. They were huge.

I dove right in. "Jinny, listen to me. I *want* to marry you. I ache to marry you. You're the one. Not since that first moment when I caught you looking at me have I ever doubted for an instant that you are my other half, the person I want to spend the rest of my life with. Okay?"

"Oh." Her voice was barely audible.

"You give me what I need, and you need what I can give. I want the whole deal, just like you've told me you want it—old-fashioned death do us part, better or worse monogamy, like my parents. None of this term marriage business, no prenup nonsense, fifty-fifty, mine is thine, down the line, and I don't care if we live to be a hundred. I want to marry you so bad, my teeth hurt. So bad my hair hurts. If you would come with me, I would be happy to walk to Bootes, carrying you on my back, towing a suitcase. My eyeballs keep drying out every time I look at you. Then when you're out of their field of vision, they start to tear up."

Her eyes started to tear up. "Oh, Joel—you *do* want to marry me." Her smile was glorious.

"Of course I do, Skinny you ninny. How could you not know that?"

"So it's just—"

"Just a matter of financing. Nothing else. We'll get married the day we can afford to." I loosened my seat belt, so I'd be ready for the embrace I was sure was coming.

Her smile got even wider. Then it fell apart, and she turned away, but not before I could see she was crying.

What the hell had I said *now?*

Of course, that's the one question you mustn't ask. Bad enough to make a woman cry; to not even know how you managed it is despicable, but no matter how carefully I reviewed the last few sentences I'd spoken, in my opinion they neither said anything nor failed to say anything that constituted a reason to cry.

Silver slowed slightly, signaling that we were crossing the Georgia Strait. We'd be at Jinny's little apartment on Lasqueti Island, soon. I didn't know what to apologize *for.* But then, did I need to? "Jinny, I'm sorry. I really—"

She spoke up at once, cutting me off. "Joel, suppose you knew for sure you had your scholarship in the bag? The whole ride?" She swiveled her seat halfway back around, not quite enough to be facing me, but enough so that I was clearly in her peripheral vision.

I frowned, puzzled by the non sequitur. "What, have you heard something?" As far as I knew, the decisions wouldn't even be made for another few weeks.

"Damn it, Stinky, I'm just saying: Suppose you knew for a fact that you're among this year's Kallikanzaros winners."

"Well . . . that'd be great. Right?"

She turned the rest of the way back around, so that she could glare at me more effectively "I'm asking you: If that happened, how would it affect your marriage plans?"

"Oh." I still didn't see where she was going with this. "Uh, it'd take a lot of the pressure off. We'd know *for sure* that we're going to be able to get married in as little as four years. Well, nothing's for sure, but we'd be a whole lot more . . ."

I trailed off because I could see what I was saying wasn't what she wanted to hear. I had to shift my weight slightly as Silver went into a wide right turn. I didn't have a clue what she did want to hear, and her face wasn't giving me enough clues. Maybe I ought to–

Wide right turn?

I cleared my side window. Sure enough, we were heading north; almost due north, it looked like. But that was wrong: we couldn't be that far south of Lasqueti. "Jinny, I—"

She was sobbing outright, now.

Oh, God. As calmly as I could, I said, "Honey, you're going to have to take manual control: Silver has gone insane."

She waved no-no and kept sobbing.

For a second I nearly panicked, thinking . . . I don't know what I was thinking. "Jinny, what's *wrong?"*

Her weeping intensified "Oh, Jo-ho-ho-ho—"

I unbuckled, leaned in, and held her. "Damn it, talk to me! Whatever it is, we'll fix it, I know we will. Just tell me."

"Oh, God, I-hi-hi'm sorry . . . I screwed it all up-hup-hup-hup . . ." She clutched me back fiercely.

I was alarmed. I'd seen Jinny cry. This was hooting with sorrow, rocking with grief. Something was seriously wrong. "Whatever it is, it's okay, you hear me? Whatever it is."

She writhed in my arms. "Joel, I lie-hi-hi-hi-hied . . . I'm so stu-hoohupid . . ."

Ice formed on the floor of my heart. I did not break our embrace, but I felt an impulse to, and I'm sure she felt it kinesthetically. She cried twice as hard. Well, much harder.

It took her several minutes to get back under control. During those minutes, I didn't breathe or think or move or digest food or do anything at all except wait to learn what my Jinny had lied about. Then, when she took in a deep breath and pulled away from my arms, suddenly I didn't want to know. So I thought of a different question she could answer instead. "Where are we going?"

Her eyes began to slide away from mine, then came back and locked. "To my home."

This time I caught the subtle change. Usually the instruction she gave Silver was "my *place."*

"So? And it's north?"

She nodded.

"How far?"

"Silver: step on it," she said. The car acknowledged. Then to me, as Silver faced our chairs forward and pressed us back into them with acceleration, she said, "About twenty minutes, now."

I consulted a mental map and glanced out the window—with difficulty, as we were now pulling serious gees. Jinny's car was exceedingly well loved, but nonetheless it was just short of an antique. There was simply no way it could go anywhere near this fast. I made myself breathe slowly. This just kept getting better and better.

Twenty minutes north of Lasqueti at this speed would, it seemed to me, put us smack in the middle of a glacier somewhere, just below the border with Yukon Province. I was dressed for a ballroom, didn't have so much as a toothbrush. Not that it mattered, because we were doing at least four times the provincial exurban speed limit; long before we reached that glacier the Mounties (local cops) were going to cut our power and set us down to await the Proctors . . . probably in raw forest. Unless, of course, Silver tore himself apart first, traveling at four times the best speed he'd been capable of the day he left the factory.

Less than half an hour before, I'd been as perfectly happy as I'd ever been in my life, dancing with my Jinny. I opaqued my window, surrendered to the gee forces, and stared straight ahead at nothing. To my intense annoyance, she let me.

Life is going to continue to suck until somebody finds the Undo key.

Two

Howe'er it be, it seems to me
'Tis only noble to be good.

Kind hearts are more than coronets,
And simple faith than Norman blood.
—Alfred, Lord Tennyson,
Lady Clara Vere de Vere

The engine did not explode. It didn't even sound any louder than usual. The Mounties somehow failed to notice us blazing across their radar, or to log any complaints about shattered windows; we crossed the province unmolested. For most of the trip we were above atmosphere, so high that the horizon showed a distinct curve—we pretty much had to be at that speed, I think—but if the Peace Forces satellites noticed us, they kept it to themselves. Nineteen minutes later, the car finished decelerating, came to a dead stop, and went into hover mode, glowing softly from the heat of our passage and reentry into atmosphere.

"Wait," Jinny said—whether to Silver or to me, I was unsure.

I glanced at her, then turned to my side window once again and looked down. Sure enough, what lay some three thousand meters below us was a nearly featureless glacier. There was a big rill to the east, and a shadowy crevasse almost directly below that was much smaller, but still large enough to conceal several dozen cars the size of Silver. I looked hack to Jinny. She was staring straight ahead at the windshield, which was still opaque.

Keeping my mouth shut was easy this time. I not only didn't know how I felt, I didn't even know what I felt it *about.* I couldn't have been more clueless if I'd had my head in a sack. Anything I said was likely to sound stupid in retrospect, and there are few things I hate more.

"I rehearsed this a hundred times," she said finally. "Now I've screwed it up completely"

I suspected this was true, but kept my mouth shut.

She swiveled my way and unbuckled her crash harness, though we were still three klicks above hard ice. It gave her enough freedom of movement to lean forward and take one of my hands in both of hers. I noted absently that the skin of her palm was remarkably hot. "Have you ever heard of Harun al-Rashid?" she asked me.

"Plays defense for the Tachyons?"

"Close," she said. "You're only off by, let me see, a little more than a millennium and a half. Fifteen hundred and some years."

"But he does play defense."

"Stinky, please shut up! He was a rich kid, from a powerful military family in ancient Persia. His father was a Caliph, roughly equivalent to premier of a province today, a man so tough he invaded the Eastern Roman Empire, which was then ruled by the Empress Irene."

"You're making this up," I charged.

Her eyes flashed. "I said 'please,' Joel."

I drew an invisible zipper across my lips.

"Harun became Caliph himself in the year 786." Over a thousand years before man could even travel anywhere. "He was probably as wealthy and powerful as anybody in living memory had ever been. Yet somehow, he was not an ignorant idiot."

"Amazing," I said, trying to be helpful.

Go try to be helpful to a woman who's talking. "He had the odd idea it was important to know what his people were really thinking and feeling about things," she went on as if I had not spoken. "He wanted more than just the sanitized, politically safe version they would give to him or to anyone he could send to talk to them. He understood that his wealth and power distorted just about everything in his relations with others, made it difficult if not impossible for truth to pass between them. You can see how that would be, right?"

"Sure. Everybody lies to the boss."

"Yes!" Finally, I'd gotten one right. "Then one day he overheard one of his generals say that nobody knows a city as well as an enemy spy. It gave him an idea.

"That night he disguised himself as a beggar, sneaked out of his palace alone, and wandered the streets of Baghdad, a spy in his own capital. Everywhere he went, he listened to conversations, and sometimes he asked innocent questions, and because he was thought a beggar, no one bothered to lie to him. He got drunk on it. He started to do it whenever he could sneak away"

Her eyes were locked on mine, now. It was important that I get this.

"Do you see, Joel? For the first time in his life Harun got an accurate picture of what the common people honestly thought . . . more than just what they thought, he experienced firsthand what life was really *like* for them, came to understand the things they didn't even think about because they simply assumed them . . . and their perspective informed and improved his own thinking from then on. He became one of the most beloved rulers in history—his name means Aaron the Just, and how many rulers do you suppose have ever been called that? One time fifteen thousand men followed him into battle against one hundred twenty-five thousand—and whipped them, left forty thousand legionaries dead on the ground and the rest running for their lives. He lived to a ripe old age, and when he died the whole Muslim world mourned. Okay?"

I was nodding. I understood every word she said. I had no idea what she was driving at.

She took a deep breath. "Okay. Now, imagine you're a young

Persian girl in Baghdad. I see your mouth opening, and so help me God, if a wisecrack should come out of it . . . that's better. You're a poor-but-decent young Persian girl, working hard at some menial trade, struggling to better yourself, and so is—"

A strange alto voice suddenly spoke, seemingly from the empty space between Jinny and me, just a little too loudly. I was so startled I nearly jumped out of my seat. "Your vehicle's hull temperature has dropped sufficiently to permit safe debarking now, Miss Jinny."

If I was startled, Jinny was furious. I could tell because her face became utterly smooth, and her voice became softer in pitch and tone and slower in speed as she said, "There are only four letters in the word 'wait,' Smithers. There seems little room for ambiguity"

"I'm sorry, Miss Jinny," Smithers said at once, and although there was no noticable cessation of any background hiss or power hum, somehow he was *gone*.

"And so," she went on before I could ask who Smithers was, "is your boyfriend . . . call him Jelal. The two of you are very much in love, and want to get married, but you just don't have the means. And then one day—"

"Wait ," I said, "I think I see where this is going . . . sort of. One day the beggar who lives next door comes over, right, and it turns out he's incredibly rich and he says he's been eavesdropping and he understands our problem and he offers Jelal a—"

I stopped talking. The penny had just dropped. All of sudden, I actually did see where this was going, at least in general terms. "Oh . . . my ... *God . . ."* I breathed. "I've got it just backward, don't I?"

Her eyes told me I was right. "There wasn't any other way, do you see? Once I met you as Jinny Hamilton, I *couldn't* tell you. And anyway, the whole point was to—"

"You're Harun al-Rashid!"

"Well, his granddaughter," she said miserably.

I was stunned. "You're rich."

She nodded sadly. "Very."

Tumblers began to click into place. I tried to think it through. "You're not even an orphan, are you?"

Headshake. "I couldn't let anyone at Fermi meet my parents. They're . . . pretty well known. Hiring a pair of Potemkin parents for social purposes seemed grotesque."

"And you came to Fermi, instead of Lawrence Campbell or one of the other top prep schools, so you could—what? See how the other half lives?"

"Well . . . in part."

I was ranging back through my memories, adding things up with the benefit of hindsight, understanding little things that had puzzled me. Silver's previously unsuspected power. Jinny's extraordinary confidence and poise, so unexpected in an orphan. How, whenever someone brought up one of the really fabulous vacation destinations—Tuva, or the Ice Caves of Queen Maud Land in the Antarctic, or Harriman City on Luna—Jinny always seemed to have seen a good documentary about it recently. The way, when we ate pistachios, she always threw away the ones that were any trouble at all to open—

I became aware that Jinny was absolutely still and silent, studying my face intently for clues to what 1 was thinking. It seemed like a good idea; maybe I should get a mirror and try it. I thought about banging my head against the dashboard to reboot my brain.

Instead I looked at her and spread my hands. "I'm going to need some time to process this," I admitted.

"Of course," she said at once. "Sleep on it. There's no hurry. Tomorrow I'll introduce you to my real father. And meantime I'll answer any questions you have—no more evasions, no more white lies."

I didn't feel as though I knew enough to formulate a coherent question yet. No, wait, I did have one—purely for form's sake; I didn't see how the answer could help me. Still—

"What is it *really?"*

She blinked. "Crave pardon?"

"You said, 'Once I met you as Jinny Hamilton . . .' So that's not your real name. Okay, I'll bite. What is?"

"Oh, dear," she said.

"Jinny Oh.' Chinese, dear?"

Not amused. "Joel—"

"Come on, how bad could it be? Look, let's meet for the first time all over again. Hi there, I'm Joel Johnston, of Ganymede. And you are—?"

She stared at me, blank-faced, for so long I actually began to wonder whether she was going to tell me. I couldn't recall ever seeing her hesitate about anything before, much less this long. One of the many things I liked about her was that she always knew what she wanted to be doing next. Finally she closed her eyes, took in a long breath, released it . . . squared her shoulders and opened her eyes and looked me right in the eye.

"I'm very pleased to meet you, Mr. Johnston. I'm Jinny Conrad."

For a second or two nothing happened. Then my eyebrows and my pulse both rose sharply. It couldn't be. "Not—"

"Of Conrad," she confirmed.

It *couldn't* be.

"It's true," she said. "W father is Albert Conrad. Richard Conrad's third son."

"You're Jinnia Conrad of Conrad," I said.

She nodded once.

I didn't quite faint—but it was good that I was sitting down, and strapped in. My head drained like a sink; all the blood and most of the brain matter dropped at once to my feet.

Very rich, she'd said. Yeah, and the Milky Way is rather roomy!

The Conrad industrial/informational empire was larger than the Rothschild family, the Hanseatic League, Kinetic Sciences Interplanetary, and Rolls-Daiwoo combined, and only slightly smaller than the Solar System. Nothing like it could have existed before the advent of space travel—and perhaps it became inevitable in the first minute of Year One, as Leslie LeCroix was still shutting down the *Pioneer's* engine on the virgin surface of Luna. The Conrads were a 150-year dynasty, every member of whom wielded wealth, power, and influence comparable to that of the Hudson's Bay Company or Harriman Enterprises in their day. Their combined interests ranged from the scientific outpost on Mercury, to Oort Cloud harvest—to interstellar exploration as far as sixtyfive lightyears away. At that time there were well over a dozen starships either outgoing or incoming, and eight had already returned safely (out of a hoped-for eighteen), five of them bearing the riches of Croesus in one form or another. Three of those big winners had been Conrad ships.

She gave me a minute—well, some indeterminate period. Finally she said, "Look, I have to land, now. Smithers wasn't completely out of line to remind me. We . . . don't like to hover, here. It's just a bit conspicuous."

"Okay," I said, to be saying something. "Where's here?"

"In a minute. Silver: I relieve you."

"Yes, Jinny." She took the stick and we dropped three thousand meters rapidly enough to give me heart palpitations.

Which nearly became cardiac arrest when the ground came rushing up, and she failed to decelerate hard enough to stop in time! We were going to crash—

—right through the imaginary glacier—

—and into a deep valley, its floor lush and green and inviting and, best of all, still hundreds of meters below us. She landed us, without a bump, in a small clearing that from the air had looked indistinguishable from dozens of others, to me at least. But the moment she shut down, hoses and cables sprouted from the forest floor and began nurturing Silver. Ahead of us was a huge boulder, the size of a truck; as I watched, a large doorway appeared in it, facing us.

"We're here," she said.

"I ask again: Where is here?"

She shook her head. "It isn't."

"Isn't what?"

"Isn't anywhere."

I turned my head just enough to be looking at her out of the corner of my eye. "Here isn't anywhere."

"Right."

I closed my eyes. If I had just stayed back home on the farm, by now I might have been making enough of a crop to afford a hired man. That would have freed me up to do some courting—in a frontier society with considerably looser rules about premarital experimentation than contemporary Terra.

But I knew for a fact there was no one remotely like Jinny anywhere on Ganymede. *Had* known it for a fact, that is, even *before* learning that she was more well off than the Secretary General. . . .

No, I couldn't take that in just yet. "I really really wish I could think of something more intelligent to say than, 'What do you mean, "here isn't anywhere"?' "

She shrugged. "You tell me. If a place does not appear on any map, anywhere . . . if it doesn't show in even the finest-grain satellite photos . . . if no wires or roads or paths run to it, no government takes mail to it or taxes from it, and nobody is from there . . . in what sense does it exist? There is no here. Just us."

"Here."

"Exactly"

I nodded and dismissed the matter. "And this is your home?"

"One of them."

I nodded. "And your apartment on Lasqueti, of course. It must be weird having two homes."

She didn't say a word or move a muscle.

I turned to look at her. "More than two?"

Silence. Stillness.

"How many homes do you have, Jinny?"

In a very small voice, she said, "Eight. *Not* counting the Lasqueti place."

"So?"

"But three of them are offplanet!"

"Naturally," I agreed. "One winters in space."

"Oh, Joel, don't be that way."

"Okay. Let's go in."

She looked distressed. "Uh ... if you are going to be that way, maybe it might he better to do it out here, before we go in."

I nodded again. Mr. Agreeable. "Sure. That makes sense. Okay." Then, big: *"How could you do this to me, Jinny?"*

She didn't flinch or cringe or duck. "Think it through, Joel. Sleep on it. Tomorrow morning, you tell me: How could I have *not* done it?"

I began an angry retort, and swallowed it. I had to admit I had not begun to think this thing through yet, and Dad always drilled into me that the time to open your mouth came *after* that. Besides, I already had a glimmering of what she meant. I filled my lungs, emptied them slowly and fully, and said, "You're right. Okay I'm prepared to be polite, now. Let's go inside."

"You won't have to be," she said. "I promise you won't see any family at all until tomorrow morning. I made them guarantee that. This is our Prom Night."

I frowned. "I wish I had an overnight bag. Change of socks, fresh shirt, my razor—"

"Don't worry about it," she said, and unlocked the doors.

I let it go. Probably the contents of the slop chest here were finer than anything I owned. "All right. Invite me up to your place."

"Down, actually."

We opened our doors and got out. The roof of imaginary glacier did not exist from its underside; the moon and stars shone unimpeded overhead, a neat trick. But this was definitely not a natural ecology. The air was skin temperature, with an occasional breeze just slightly warmer. It smelled of dirt and green growing things, with just a little ozone tingle as if it had rained recently, though it had not. The loamy earth beneath my feet was rich, almost quivering with life; any farmer I knew back on Ganymede would have desperately envied it. Acres of it, at least a meter deep: wild, uncultivated, supporting nothing but trees, scrub, and inedible berries. Just *lying* there. Conspicuous nonconsumption. *Start getting used to it, old son.* I thought of saying something, but I knew Jinny would never understand. It's funny: the very *word* "Terra" means "dirt"—and not one hungry terrestrial in a thousand has a clue how important, how precious it is. I shook my head.

The door in that huge rock ahead of the car was indeed an elevator. Back when I was four I'd been in an elevator that nice. In Stockholm, when Dad came Earthside to pick up the Nobel. Like that one, this elevator had a live human operator, of advanced age and singular ugliness, who made it a point of pride to remain unaware of our existence: he happened to be leaving as we stepped in, and took us down a good fifty meters with him. The car descended with unhurried elegance. It gave me time to think about the kind of people who would live deep underground, in a place that did not exist . . . and still feel the need to pull the sky over them like a blanket. "Paranoid" didn't seem to cover it.

By happy chance the operator decided to pause and check the operation of the doors just as he was passing the floor we wanted; so intent was his inspection, we were able to escape unnoticed. This left us in a kind of reception room, so lavish as to remind me of the lobby of that hotel back in Stockholm. The carpet was grass. But I didn't get time to study the room; nearly at once I felt a tugging and turned to see a man older and uglier than the elevator operator trying to take my cloak. With some misgivings I let him have it, and that seemed to have been a mistake, for he simply handed it off to a small boy who suddenly appeared in my peripheral vision, and then literally threw himself at my feet and began loosening my shoes. I . . . reacted. If we'd been under normal gravity, on Ganymede or Mars, I think I'd have kicked his teeth in; as it was he went sprawling. But he took a shoe with him as he went, a trick I admired as much as I resented it. Jinny giggled. I recovered, removed the other shoe myself with as much dignity as I could muster, and handed it to him as he approached again. He reunited it with its twin, bowed deeply, and backed away.

I turned to Jinny and forgot whatever I'd been about to say. Her own cloak and shoes had been magicked away by tall elves, and she looked . . . how do girls do that, anyway? One minute just be there, and the next, *be there.* They can do it without moving a muscle, somehow.

"Good evening, Miss Jinny," said a baritone voice from across the room. "Welcome home."

Standing just inside a door I had failed to notice was a man nearly as tall as me with a shaved head, wearing a suit that cost more than my tuition at Fermi Junior. Like us, and the various elves I'd seen, he wore no shoes. Presumably they would cobble us all new ones in the night.

"Thank you, Smithers. This is—damn. Excuse me." She lifted her phone-finger to her ear, listened for a few moments, frowned, said "Yes," and broke the connection. "I've got to go, for just a few minutes. Get Joel situated, would you please, Smithers? I'm sorry, Joel—I'll be back as soon as I can."

"Okay."

She was gone.

Somehow he was at my side, without having covered the intervening distance. "Good evening, Mr. Johnston. I'm Alex Rennick, master of the house at present. Welcome to the North Keep. Let me show you to your room, first, and then perhaps I can give you the ten-credit tour."

His eyes were gray, almost mauve. His head wasn't shaved, it was depilated. Despite his height, a dozen subconscious cues told me he was earthborn. He was fit, and had an air of great competence and great confidence. I'm pretty good at guessing ages, given that everybody looks alike now, and I couldn't pin him down any closer than the thirty-to-sixty zone. I found it interesting that he knew my last name without having been given it.

"Thank you, Mr. Rennick. You are most kind. Please call me Joel."

"And I am Alex. Will you come this way, Joel?"

I thought of an ancient joke, put it out of my mind, and followed him from the room. As I did I promised myself, solemnly, that no matter what wonders I was shown here, I would not boggle. No matter how staggeringly opulent the place proved to be, I would not let it make me feel inferior. My father had been a Nobel laureate, and my mother a great composer—how many of these people could say as much?

"Do you have any questions to start?" he asked as we went.

"Yes, Alex," I said, memorizing the route we were taking. "Why does Jinny call you Smithers?"

"I have no idea." His tone was absolutely neutral, but somehow I knew I'd touched a sore spot. Either it bothered him not to know—or the answer was humiliating.

"Ah," I said, lowering my pitch. "To drive you crazy, then." I was curious to see how he'd respond to an invitation to a jocular, between-us-men discussion of his mistress—whom I personally knew to be a handful and a half.

He sidestepped effortlessly. "That would be redundant, I'm afraid."

"Have you worked here long?"

"Yes."

I see. "How many people live here in . . . the North Keep, you said?"

"The number varies."

His stinginess with information was beginning to mildly irritate me. "No doubt. But surely as master of the house you know its current value." I halfway expected him to say "Yes, I do," and clam up. But he wasn't that kind of childish. Instead he used jujitsu. "There are eighty-four persons resident in the North Keep at the moment. By midnight the number will be ninety-two, and shortly before breakfast time tomorrow it is expected to drop back to eighty-nine."

"Ah." I hesitated in phrasing my next question. "And how many of those are employees?"

"All but four. Five tomorrow." Yipes! Yes, Conrads lived here, all right. "Here we are." He stopped before a door that looked no different from any of several dozen we'd passed along the way, and tapped the button which on Terra is for some reason always called a knob.

The door dilated to reveal a room full of thick pink smoke. At least it looked like smoke, and behaved like it, roiling and billowing—with the single exception that it declined to spill out of the open door into the corridor. I reminded myself I'd promised myself not to boggle, and with only what I hoped was an imperceptible hesitation, I walked right into the pink smoke, came out the other side—

—and boggled. Worse; I actually yelped.

I was on Ganymede.

Look, I admit I'm a hick. But I *had* experienced Sim walls, by that point in my life, even if I couldn't afford them yet. Even good ones didn't really fool you; you could tell they were not-real, just rectangular windows into worlds that you never really forgot were virtual. I'd even experienced six-wall Sim, 360-degree surround, and even then you had to voluntarily cooperate with the illusion for it to work: it never *quite* got the rounding correction perfect at the corners. But it was pretty good.

This was *real.* I was back home on Ganymede—so convincingly that for just a startled moment, two-thirds of my weight seemed to leave me. I realized with astonishment that the air even *smelled* like Ganymede air, tasted like it, different from terrestrial air in ways subtle but unmistakable. I was standing in the middle of a newly made field, the soil only just coming to life. Beneath my feet, earthworms were shaking off the grogginess of cold sleep and beginning to realize they weren't on Terra anymore. On the edge of the field, fifteen or twenty meters away, was a new-built farmhouse, smoke spiraling from its chimney. Try and build a fire anywhere else on Terra and they'd fine you the equivalent of two months' tuition—for a first offense. Until today, I hadn't seen a square meter of naked soil since I'd landed on its namesake. I felt my eyes begin to sting and water, and with no further warning a tidal wave of homesickness broke over me.

I spun around in time to see Rennick come through the doorway. From this side too it looked like it was full of pink smoke. But it was no longer a door in anything: it just stood by itself in the middle of the field, a rectangle of pink smoke without any wall to be a hole in. I turned my back on hole and house master alike.

"Miss Jinny thought you'd find this congenial," he said from just behind me.

I nodded.

"Follow me please."

That didn't require an answer either. We walked to the farmhouse and went inside. "The 'fresher and entertainment center are in the obvious places. You'll find clothing in that closet, Unlimited Access at that desk. If you want anything—anything whatsoever—state your wishes to the house server. His name is Leo."

I had the homesickness under control now, enough that I trusted myself to speak at least. "Leo is listening at all times?"

"Leo listens at all times," he agreed. "But he cannot *hear* anything unless he is addressed. Your privacy and security as a guest are unconditionally guaranteed."

"Of course," I said as if I believed him. I idly opened the closet he'd indicated, and found all my own clothing. Boggle.

On closer inspection it proved to be *copies* of nearly every piece of clothing I owned—all the ones Jinny had seen. They were not quite identical copies. For one thing, in nearly every case the quality of the copy was slightly better than that of the original.

Suddenly I felt vastly tired. I didn't feel like boggling anymore, or struggling not to. "Mr. Rennick—Alex—I thank you for your offer of a tour of the North Keep, but I believe I will pass, at least for tonight."

"Certainly, Joel. If there's nothing further I can do for you now, I'll leave you to rest."

"I'm fine. Thank you."

"Good night." He left. I watched through a window as he walked across the field and through the pink smoke of the door-without-a-wall. I looked around the "farmhouse," then back out the window at a sky with two moons, and thought about bursting into tears, but I decided I was too manly

"Leo?"

"Yes, Mr. Johnston?"

"Can I get a cup of coffee?"

"On the desk, sir."

I blinked, looked—a steaming cup of coffee sat on the desk beside me. It hadn't been there a moment ago, but I hadn't noticed it arrive. Without a word I picked it up and tried it. The superbness of the coffee was no surprise at all. The *perfect* drinking temperature was only a mild one. But the cream and two sugars

"Did Jinny tell you how I like my *coffee,* Leo?"

"Miss Jinny has told me many things about you, Mr. Johnston."

"Call me Joel."

"Yes, Mr. Joel."

I opened my mouth, then closed it. There must be something sillier than arguing with software, but I can't think offhand what it would be. I sat down on a rocking chair that creaked authentically, put my feet up on a hassock, and began to dismiss Leo from my mind, to prepare for the upcoming conversation with Jinny. Then a thought occurred. Carefully not addressing him by name I asked, "How long do you keep listening after I stop speaking, before you conclude I'm done and stop listening again?"

Answer came there none. Which answered me: somewhere between five and ten seconds. Useful datum.

"Leo?"

"Yes, Mr. Joel?"

"Can you let me know just before Miss Jinny arrives here?"

"No," she said from the doorway. "He can't."

We were both tired, and both emotionally upset. But we both knew there was more to be said before we could sleep. I took my feet down off the hassock, and she came and sat before me on it, and took both my hands in hers.

"No more ducking and weaving. Spell it out for me," I said. "In words of one sound bit, what's the deal?"

She was through dodging. "I'm proposing marriage, Joel. Just as we've discussed: lifetime, exclusive, old-fashioned matrimony. And I'm offering to support us . . . uh, at least until you get your degree and start to become established as a composer and start earning. I can afford it. I'm quite sure you'll get that Kallikanzaros Scholarship—but if you don't, it won't matter. And best of all, we can start our first baby right *away*—tomorrow night, if you want."

"Huh? Skinny, what about your degree—your career?"

"My second career, you mean. It'll keep. I've always known what my first career has to be." She tightened her grip on my hands and leaned slightly closer. "Stinky, maybe now you'll understand why I've been so . . ." She blushed suddenly. "So frimpin' stingy. So square, even for a Terran girl. Why I don't park, or pet, or sneak out after curfew, and why our clinches never got out of hand—or even into it, so to speak. I think you know I haven't wanted to be that way. But I had no choice. It may be all right for some other girls to bend the rules and take risks, but me, I've had it beaten into my head since I was three that I have responsibilities."

"The family name."

"The family name my left foot! The family *genes.* Stinky, I'm a female human animal; my number one job is to get married and make babies. And because I'm who I am, a member of a powerful dynasty, it makes all the difference in the world what baby I have—and who its father is." She let go of my hands and sat up straight. "You're it. This is not a snap decision."

It began to dawn on me that I was not merely being offered acceptance into the fringes of the Conrad family. I was being asked to father its heirs.

On Ganymede I'd grown up seeing stud bulls brought in and put to work. They were always treated with great care and respect, very well fed, and certainly got all the healthy exercise a male animal could possibly want. Their DNA was vastly more successful than that of most other bulls, and their own lives vastly longer. Nobody made jokes about them in their hearing.

But I couldn't recall one who had looked very happy about the business.

"Don't look so worried, Stinky. It's going to work out fine. You *do* want to marry me, we settled that, right?"

I opened my mouth—realized I was harpooned, and closed it again. I had stated that only money prevented me from proposing; I didn't have a leg to stand on.

Nevertheless I found myself on my feet and being embraced. I had to admit it was a very nice embrace, warm and close and fragrant. "Then it's all really very simple. All you need is a nice long chat with Gran'ther Richard. You'll love him, really. And I know he'll love you."

I stiffened in her arms, and fought with the impulse to faint. Good old Grandpa Richard. Known to the rest of the Solar System as Conrad of Conrad. The patriarch. The Chairman. I'd heard he had broken premiers. But perhaps the most awesome thing about his wealth was that, when I thought about it, I didn't actually know a single fact about him, save his name and exalted position. I'd never read an article about him, or viewed a bio, or even seen a picture of his face. For all I knew he had taken my cloak when I arrived. Harun el-Hatchek.

She released me and stepped back. "You'll see him first thing tomorrow. He'll explain things. And then afterward you and I will have breakfast together and start to make some plans. Good night, Stinky."

We parted without a kiss. She didn't offer, and I didn't try. I was starting to feel resentment at having been played for so long—and also I flatly did not believe there were no cameras on us.

After she was gone, I thought about firing up that Universal Access Rennick/Smithers had mentioned, and researching the size and scope of the Conrad empire. But I knew if I did so here, now, on this computer system, Gran'ther Richard would know about it. It just smelled ripe to me. Milady brings home a handsome hick, and the first thing he does is start pricing the furniture. The thought made my cheeks burn.

Instead I used that UA to google around until I had figured out the "Smithers" gag. It turned out to be just as well Rennick didn't know the reference—if in fact he really didn't. Jinny was comparing him to an ancient cartoon character who was a cringing bootlicker, a toady, a completely repressed monosexual, and an unrequited lover. I wondered how much of that was accurate and how much libel. And just how far the analogy was meant to go: Smithers's employer in the cartoon, a Mr. Burns, was vastly rich, impossibly old, and in every imaginable way a monster. Did he represent Jinny's grandfather? Or father?

Well, I would find out in the morning. Or maybe I would get lucky and be struck by a meteorite first.

The bed turned out to be just like mine back at the dorm, except the mattress was better, the sheets were infinitely softer and lighter, and the pillow was gooshier. Was I hallucinating, or did the pillowcase really smell faintly of Jinny's shampoo? It certainly did put a different perspective on things. It might be nice to smell that on my pillow *every* night from now on. And every morning. If in fact I was really smelling it now. While I was wondering, I fell asleep.

Three

"Joel. It's time to wake up, dear."

Yes, that was definitely her hair I smelled.

I had heard Jinny say just those words, in much that low throaty tone of voice, at the start of more than one pleasant dream. It was a novel experience to hear them at the end of one. Now if only everything else would continue to unfold as it usually did in the dream. . . .

I opened my eyes and she was not there. The scent was either vestigial or imagined. *Drat.*

"You really need to wake up now, Joel," she murmured insistently from somewhere nearby

"Okay," I said.

"Wake up, Joel. It's time t—"

I sat up, and she chopped off in midword. She wasn't there. Anywhere.

I wake up *hard*. I had to sit there, lot a few seconds before I had it worked out. The speaker was not Jinny but Leo the AI server, perfectly imitating her voice while acting as an alarm clock. Doing the job well, too: I could fool my own alarm at the dorm by simply telling it I was getting up. Leo was programmed to accept nothing less than verticality as proof of compliance.

Why did I need to get up now? I could tell I had not had eight hours' sleep. I had graduated, for Pete's sake—what was so urgent?

It all came back to me at once. Oh, yes. That's right. Today I was going to have a personal interview with one of the most powerful men in the Solar System. Had I supposed it would be scheduled for *my* convenience? A man like Conrad of Conrad would doubtless want to dispose of matters as trivial as meeting his grandchild's fiance as early as possible in the business day

"How soon am I expected?" I asked.

"In half an hour, Mr. Joel," Leo said in his own voice.

"How do I get breakfast?"

"I can take your order, sir."

I started to say scrambled on toast, bucket of black coffee, liter of 0J. Then I thought to myself, this morning you are going to have a personal interview with one of the most powerful men in the Solar System. "Eggs Benedict, home fries, Tanzanian coffee—French Press, please, two sugars and eighteen percent cream, keep it coming—and squeeze a dozen oranges."

Leo returned the serve. "Very good, Mr. Joel. Do you prefer peaberry or the normal bean?"

"The peaberry, I think," I managed.

There was a scratching sound at the door. It opened, and a servant entered, pushing a tray ahead of him at shoulder height with two fingers. He was easily as old and as ugly as the servants I'd seen the night before, but nowhere near as surly. Maybe day shift was better.

"What's that?" I asked.

He steered the tray to a table near the bed, and somehow persuaded it to sit down. "Eggs Benedict, potatoes, coffee, fresh orange juice, and this morning's news, sir," he said, pointing to each item as he named it. Nothing in his manner suggested that only an idiot would need these things named.

I promised myself that just as soon as I had the time, I would wonder, very hard, about how any of those items could have been produced instantly, much less all of them at once. But meanwhile, there was no sense pretending they had not caught me by surprise. "If I'd known how fast the service is here, I'd have asked them to wait ten minutes, while I used the 'fresher," I said with a rueful grin.

He turned to the tray, made some sort of mystic gesture. The food became obscured by a hemisphere of . . . well, it looked like shimmery air. "Take as long as you like, sir. Everything will be the same temperature and consistency when you get back out."

Oh. Of course. I wondered how the hell I would get the air to stop shimmering, but I was determined not to ask. I'd figure it out somehow

"Just reach right through it, whenever you're ready, sir," he volunteered. "That collapses the field."

I opened my mouth to ask what kind of field, how was it generated, what were its properties—and stifled myself. There would be time for that later. "What is your name?"

"Nakamura, sir."

"Thank you, Mr. Nakamura. You're very kind."

"You're welcome, sir. And thank you." Somehow he was gone instantly, without hurrying.

I started to get out of bed . . . and the damned thing *helped* me. The part right under my knees dropped away, and the part under my butt rose, and I was on my feet. I reacted pretty much as if I'd been goosed—the physical sensations were not dissimilar. I said the word "Whoa!" louder and an octave higher than I might have wished, leaped forward a meter or so, and spun around to glare accusingly at the bed.

"Is something wrong, Mr. Joel?" Leo asked.

I took a deep breath. And then another. "Not yet," I stated cautiously.

On the way to the 'fresher, I passed close to the tray of food. I could see a cup of coffee in there, and wanted it so badly it brought tears to my eyes. But I knew if I "collapsed the field" now, I probably wouldn't be able to re-create it again. And besides, there was the question of making *room* for the coffee.

So okay, I would hurry and be out of the 'fresher in five minutes instead of ten. I stepped in. . . .

On Ganymede we're more reticent about such matters than Terrans—for complex sociocultural reasons I'd be perfectly happy to explain any time you have an hour to kill listening to a guy who doesn't know what the hell he's talking about. So I'll just say that this 'fresher was about ten times better equipped and programmed than I had ever imagined possible, and let it go at that. It was more like fifteen minutes before I was able to make myself end the sybaritic cycle.

When I came out, my clothes were gone.

I remarked on this, as casually as I could manage. Leo explained that they had been taken away for laundering. He invited me to wear any of the fakes in the closet that pleased me, and assured me, unnecessarily, that they would all fit me perfectly.

I was not at all happy about this, but I could see my wallet, phone, and keys on the bedside table, so I postponed the matter until after coffee.

By the end of the first cup, I had no strong objection to anything short of disembowelment or denial of a second cup. If you are ever given the choice, insist on the peaberry. Trust me.

When I was ready to dress, I automatically reached for the copy of my best suit, comforting myself as best I could with the guess that this version of it, at least, would be freshly cleaned, and would not be worn nearly through in spots. But as I took it from the closet, I noticed an item hanging just behind it that certainly was not a copy of any garment I owned. It was a J. L. Fong suit. Top of the line, of the latest cut and style. In a color, I noticed, that would complement Jinny's hair. It was worth more than my entire wardrobe—more than my passage to Earth had cost. The tights were just a bit daring, but I decided I had the calves to carry them off. I was unsurprised to find suitable underwear and other necessary accessories in drawers, tucked in among my own trash.

The moment I put it on, that suit became an old, familiar, and valued friend—and I became taller and wider across the shoulders. It could not have fit better if it had been made on my body. It knew things about me I wouldn't learn for years yet, and approved of them all. Wearing a suit like that, you could break up a knife fight with an admonishment, secure a milliondollar loan without being troubled for a signature, walk away from a crime scene, or obtain illicit drugs on credit. I examined the effect in the 'fresher room mirror, and decided that on me, it looked good. Perhaps, I felt, I could even survive an interview with Conrad of Conrad without soiling it. If it was a brief interview.

"Will Jinny be present at this meeting, do you know?" I asked Leo.

"No, Mr. Joel. Only Mr. Conrad, Mr. Albert, and yourself."

I blinked. "Wait a second. *Which* Mr. Conrad? Jinny's father, or her grandfather? And who's this Albert bloke?"

"Ah. Pardon me, Mr. Joel. There are over a dozen adult males in the immediate family whose last name is or incorporates Conrad—but by longstanding family and corporate tradition, there is only one 'Mr. Conrad' at any one time. At present that is Jenny's grandfather, Mr. Richard Conrad—Conrad of Conrad. The others are Mr. Joseph, Mr. Chang, Mr. Akwai-N'boko, and so on. Mr. Albert is Jinny's father."

"I see," I said. "Thank you." I began to understand Leo's insistence on putting Mr. before my name. I started to ask where Jinny was now, and realized the answer would probably mean nothing to me.

I paid attention to my breathing, trying to make it slower and deeper, for another twenty seconds. Then I said, "Okay, I'm ready"

"Very good, Mr. Joel."

I left the faux farmhouse, and walked through faux fields. It *smelled* convincingly like morning on Ganymede, and don't ask me to explain that. It felt inexpressibly weird to be walking through a colonial homestead, in the wrong gravity, dressed like an aristocrat, heading for a doorway of pink smoke. It was a bit of a relief to walk through the smoke and find myself in an ordinary corridor that smelled like Terra instead of Wonderland.

"I'll guide you from here, sir," Leo said. "Do you see the light at your feet?"

I glanced down, and there was a soft green light at the baseboard of the lefthand wall, pulsing on and off. It was about the size and intensity of a firefly: discreet, but impossible to miss. "Lead on," I said. It moved away.

"If you'll forgive a personal observation, sir," Leo said as I followed his blinking firefly down the corridor, "you have an excellent time sense for a human."

"Excuse me?' "

"You said, 'Okay I'm ready' twenty-nine minutes and forty-one seconds after I advised you that you had thirty minutes to prepare."

"Ah." I nodded. "A couple of people have told me I have a pretty accurate internal clock."

"Extremely so, sir, if this example is representative."

I shrugged. "I never burn the toast. Look, I have some thinking to do, all right?"

"Yes, sir. I'd just like to—"

"Later, Leo."

"But, sir—"

I was raised to be polite to gadgets—Dad always said it was good practice—but I was trying to get some fretting done and Leo was distracting me. "Quiet!"

He shut up, and I put my full attention on the predicament I was in. First I scanned my memory for everything I had ever heard or read about high-level etiquette, manners, or protocol. Unfortunately that only took me about two steps. Then I examined my own autobiography, looking first for things that might impress a multi-octillionaire—and when that failed, making a short list of spots that might alienate one, and going over my excuses. A step and a half, tops. As I followed the blinking green firefly around a corner, I was trying to decide whether the next priority was to imagine all the possible ways this upcoming meeting could go wrong, or to try and work out exactly how I had gotten myself into this, where I had taken my first misstep—

--when I rounded the corner, and encountered eighteen kilograms of mass coming in the other direction.

I weighed four times that much. But it caught me well above my center of gravity—square in the face—and was moving much faster, packing more kinetic energy. I believe the Terran expression is, who knows why, "ass over teakettle."

I've taken self-defense courses. I know how to fall properly, and do so as a matter of reflex in normal conditions. But not in a one-gee field. I went down *hard* on my back, and all my air left me in a single explosive syllable, and only the extreme thickness of the carpet kept me from cracking my skull. I remember feeling quite unhappy for a moment, there. Then the eighteen-kilo mass landed on my groin, and I felt much worse.

Sometime later I forced my eyes open. Closed them quickly. Reopened them cautiously. Half a meter from my nose, a little girl —"Why don't you look where you're going?" she asked.

Make a mental note, Joel: next time you tell an AI you want quiet and it keeps talking—listen. "Because I'm a dolt."

"Oh." She thought about that. "I'm a Conrad."

I looked her over. She appeared to be somewhere around seven Terran years old. And adorable. "Are you all right?"

She frowned, and stuck her chin out slightly. "Yes, I am. Daddy says I don't have bones." She moved her gaze away. "But I think my skyboard's broke."

The object named lay beside us. It looked like a conventional skateboard—minus the usual wheels, motor housing, onboard computer, and data port. Like a miniature surfboard, in other words. I had no doubt that it could fly—when it wasn't broken—because it had been at head height when I'd first encountered it. But I could not guess how.

"I'm sorry." I'd have to replace it. There went my scholarship, probably. "Uh, what's your name?"

"I'm Evelyn."

"Hello, Evelyn. That was my mother's name, too. I'm—"

"You're Joel, of course. I'm not a *baby."*

"Certainly not! Not by a good ten kilos."

She giggled—then frowned. "Am I hurting you?"

"Only when I breathe."

She was off me and up on her feet at once. "Jinny is my favorite cousin. I think she's rickety all through. Don't you?"

"Yes. I think I do, anyway." I sat up. When that didn't kill me, I got to my feet and examined my costume for damage.

"Are you going to marry her?"

I opened my mouth and closed it again, twice. "We're still discussing that," I managed finally.

"Do you love her?"

"Evelyn, I'm afraid we'll have to finish this conversation another time. I'm late for an appointment with your—" What would the relationship be? "For a very important appointment. Please excuse me."

She grinned. "Never mind. I saw you blush."

I did it some more. This was Jinny's cousin, all right. "I really mustn't be late."

She waved a hand majestically. "Don't matter about it. Just tell Grandfather Rich I made you late."

I realized my flashing-firefly guide was beginning to move off down the corridor: hinting. "It was wonderful to meet you," I said hastily "Sorry I broke your board. I'll get a new one to you as soon as I can."

She giggled. "You're silly."

I followed her pointing finger. A new skyboard was just arriving, gliding along the corridor at knee height. It was as featureless as the other, not so much as an antenna showing. Suddenly I saw that the firefly had nearly reached a corner. In another few seconds it would be around the bend. "Great. I'll see you around."

"It's okay, Joel. Gran'ther Rich will think you're rickety-tickety. You'll see."

I know a compliment when I hear one. I bowed—and did not quite sprint away. I found the firefly around the corner, waiting for me, but pulsing faster to indicate impatience. I breezed right past it at double time, made it scramble to catch up and pass me again, and felt the tiny satisfaction that comes to an idiot who has successfully insulted a piece of software. I slowed to walking pace—and it kept on going at double time. I ended up reaching my destination slightly out of breath, and not quite dripping sweat.

I planned to pause outside the door for at least two or three deep breaths. But the infernal thing opened as soon as I reached it. I allowed myself one breath, mostly because I had to, and entered.

But it was only Rennick's office.

He did *not* say, "You're late," even by facial expression. But in the time it took me to walk three steps into the room. he had risen from his workstation, come all the way round it, and reached my side, without seeming to hurry "Good morning, Joel," he said pleasantly. He took my elbow, turned me, and we were back out in the corridor and walking again—not as fast as I had arrived, but not slowly either. "I trust you slept well."

"Yes, thank you, Alex. And yourself?"

"There are things I must tell you, and we no longer have time for the standard set speech. As you know, there is only one Mr. Conrad in this house, and that is what he is called in his presence or out of it. But when one directly addresses him, he prefers, strongly, to be called simply Conrad. Thus, you might hear someone say, for instance, 'Mr. Conrad approves of this—isn't that so, Conrad?' Am I clear?"

"No honorific to his face. Not even 'sir'?"

"Not even `sir.' `Yes, Conrad.' `No, Conrad.—

I nodded. "Got it. Thanks. Do I call Mr. Albert 'Albert' to his face, too?"

"Not unless he invites you to. Which is unlikely. Until then he is Mr. Albert."

We came to a checkpoint. Five large men, four of them heavily armed and the deadliest one sitting at a workstation. Rennick didn't even slow down, and nobody killed him, so I didn't slow down either.

"Mr. Conrad does not shake hands. Mr. Conrad does not care for humor. Mr. Conrad is not interrupted."

Right turn. Another checkpoint. Another five armed men, but not large this time. Gurkhas. Their knives were sheathed. Rennick came to a halt and stood still, but ignored them. I did likewise. I could almost feel myself being scanned and sniffed and candled by invisible machinery

"When Mr. Conrad says 'Thank you,' he means 'goodbye.' The correct response is *not* 'You're welcome,' but 'Yes, Conrad.' You say it on your way to the door."

"Got it." A Gurkha produced something I'd only seen in cop or spy stories, and gave it to Rennick: an identifier. He held it up to his eyes like binoculars for a moment, then poked his right index finger into a socket on the side, and removed it. Almost at once there was a soft chiming sound, and a blue light on top of the device flashed three times. Rennick passed the device to me.

Fighting an impulse to grin like an imbecile, I lifted it to my own eyes and looked into the lenses. Nothing but a white field. I lowered it, hesitated a second, and stuck my finger in the slot. I expected to be poked for a blood sample, but what I got was even more disconcerting, a sensation as if someone were sucking gently on that fingertip. Whether it was taking skin scrapings or sampling my fingernail I couldn't say. In any event it decided it approved of my DNA and my retinas, and awarded me the same chime and flash Rennick had received.

The Gurkha's forearms and hands relaxed slightly, and his cousins relaxed too, slightly. He accepted the identifier back from me, saluted to both me and Rennick, held it, and stepped smartly backward out of our way. Rennick was off again at once, with me at his heels.

I wondered if anyone else in the Inner System was as paranoid as these people. Or, now that I came to think of it, had better reason to be.

The pause had been almost enough to let me get my breath back. "Anything else?"

"Yes. A piece of personal advice. There's only one way to say this. Don't bullshit. If Mr. Conrad asks you a question and you don't know the answer, there is only one acceptable response—'I don't know Conrad.' Try and bluff, and he'll smell it."

We came to a large door that looked like a polished slab of real wood. It lacked the customary ID scanner, but at about the same location it had an antique fitting I guessed at once must be the fabled doorknob: a flattened toroid like a brass onion, sticking out from the door on a short horizontal stalk. I wasn't quite quick enough to catch the procedure Rennick used to operate it. It was hard to follow: some sort of small probe, a quick torquing motion, and a small *clack* sound. Cued by the sound, I was not too surprised when the door swung inward away from us instead of dilating: it actually was a polished slab of real wood, a good fifteen centimeters thick. I followed him through the doorway, and had to step out of the way so he could swing it shut behind us. I was sure we had reached the Holy of Holies, at last.

Wrong again.

It certainly *looked* very like what I had been expecting to see: the serious working office of a major CEO or senior politician, tastefully decorated and lavishly equipped. It had every imaginable sort of monitor screen, display, input device, peripheral or other gadget, but the utilitarian effect was softened by a carefully chaotic profusion of exotic and lovely plant life. Dominating the room was a huge piece of furniture as obsolete as the doorknob, for some reason called a desk even though it had no graphic interface or surface icons—not even a trash can. It was basically an elaborated table intended to provide a stable flat work surface plus storage drawers. In films, such a desk is usually covered with items: a primitive telephone, a keypad and monitor, family flat photos, styli, and so on. This one was as austerely, majestically bare as I would have expected from a man of great power.

Two things immediately spoiled the picture, though. First, the absence of any men in the room. And then, the presence of a woman behind the desk. Her apparent age was five years higher than my own, and the fake was very impressive, but there were at least seventy years of skepticism in those eyes and the set of her mouth.

"Morning, Dorothy," Rennick said. "This is Joel Johnston. Joel, Dorothy Robb."

"Good morning, Alex," she greeted him. "Relax: you're early. And good morning to you, too, Mr. Johnston." She offered me her hand. Her voice was wonderfully husky, like a great jazz singer near the end of her career; I wondered if she sang.

In my social circle, my move would now have been to shake her hand firmly and release. I had no idea what was done at this altitude—even if I'd had a clue what our relative status was. Deep breath. What would Dad do? "Good morning, Ms. Robb," I said, did my second-best bow, and kissed her hand.

She removed it quickly and said, "Dorothy!" sharply, but I knew she was not offended because almost at once she softened it by adding, " 'Ms. Robb' sounds too much like—"

I nodded. "A Victor Hugo novel. In that case, I'm Joel."

Those cynical eyes opened a bit wider. "You read!"

"My parents infected me before I knew any better. There was no bedtime, as long as I was reading a book."

"What splendid parents."

Suddenly I felt myself blush. My multitrack mind was still playing with our pun, and it had suddenly realized that the full title of the book we were discussing would have been *Lay Ms. Robb.* Her sharp eyes caught me blushing, and twinkled. I realized I'd made no response to her compliment, and was too flustered to formulate one.

She saved me. "Do you know the story of the American farm wife who wrote a letter to Victor Hugo, Joel?"

"No, I don't," I said gratefully

"She wrote, 'Dear Vic—I couldn't help smiling; her accent and deadpan delivery were good. " 'We shore liked that book you wrote there, Less Miserables' "—I began to grin broadly, and Rennick did, too—" 'but we wanted to ask you one thing we cain't figger out: which one o' them characters was Les?'" I broke up, turned to Rennick, and saw that he was chuckling, too—and had absolutely no idea why. Oops. Oh, well—no reason his education should include period French literature. No reason anyone's should, really.

"What a glorious story," I said to Dorothy "Is it apocryphal?"

"Oh, I hope so. Imagine the poor man trying to compose a response." I decided to take the bull by the horns. "May I ask your job title, Dorothy?"

She snorted. "Professional bureaucratic-gibberish composers have wept with frustration over that one. There doesn't seem to be an adequate descriptive that any of them liked. For accounting purposes we finally settled on Enabler, which they simply hate."

"Like a personal secretary, sort of?"

She did not smile. "Mr. Conrad has *seven* personal secretaries. One executive secretary, two research secretaries, a social secretary, a scheduling secretary, a record-keeping secretary, and a personal private secretary. Plus assorted personal executive assistants and chiefs of staff and first facilitators and chief counselors and senior advisors and legal counsels and a personal physiotherapist and several personal physicians and psychiatrists—a clinic, really—plus an incredibly complex impossibly sprawling extended personal family. And then of course there is the empire itself, with its hundreds of CEOs, comptrollers, and so on. And finally there are the various executives, and executive, legislative, and judicial branches, of a great many governments. I am one of two people through whom he accesses all those people. And vice versa. I have the 6:00 A.M. to 6:00 P.M. shift—or 1:00 P.M. to 1:00 A.M. Greenwich."

I blinked. "And you have time to tell me Victor Hugo jokes?"

"No. That's why I enjoyed it so much. You looked like you needed relaxing."

"I still do! How much time do I have?"

"None," she said. A previously unsuspected door occurred behind her. "Good luck, Joel."

Rennick stepped forward and entered. I didn't. The powers of motion and speech had deserted me.

"You'll be fine," she murmured. "The suit looks terrific on you."

When you're too scared to move, there's a simple fix. I'm not saying easy—but simple. Just lean forward. That's all you need to do. Keep it up long enough and you'll fall on your face—but your body won't let you. It will automatically put a foot out . . . and now you're moving forward. Repeat as needed. Remember to alternate feet.

Before I knew it I was passing through the doorway, lurching only slightly.

Four

To understand the heart and mind of a person,
look not at what he has already achieved,
but what he aspires to.
—Kahlil Gibran

The room was not small, but smaller than I had expected, and further surprised me by being furnished more like a den or a study than an office. At the far end of the room was a conversational grouping of four chairs. Rennick was just reaching the leftmost of the two that faced away from me. The two facing toward me were already occupied. In each sat a man who appeared to be approximately Rennick's age. The fourth chair, its back to me, was obviously the hot seat.

My feet wanted to stop in their tracks again. But I managed to keep leaning forward. As I headed for the death chair, I invoked my very sharpest self-criticism. *You have not thought this through.*

Myself replied with some asperity, And *how the* hell *was I supposed to do that,* churn? *Using what data?*

Social customs on Ganymede are considerably simpler and more direct than those on Earth: a frontier society is just too busy for indirection, innuendo, and ceremony. Nevertheless, I had, under Jinny's tutelage, gradually managed to soak up enough Terran manners to get by, in the sorts of social situations in which I found myself. It had been some time since I'd heard anyone mutter, "Hayseed!" under their breath after a conversation with me.

But college life had not prepared me for this. I was in a milieu where I knew I had no faintest idea what constituted correct behavior—and I was already saddled with some complex and difficult social problems that I had about a dozen steps to solve, for the toughest audience on the planet.

When in doubt, I decided, fall back on analogy. Okay . . . royalty always takes precedence, that gets you started. Which one next? And how . . . ?

I'd expected those twelve steps would seem to take forever. They-turned out to be just long enough.

Part of what threw me was the apparent ages. Both men I was here to meet seemed to be middle-aged, somewhere between thirty and sixty. Neither visibly deferred to the other by body language or chair placement. Both were dressed equally well, which was very well. Both carried themselves with authority and confidence, and had "the look of eagles"—a constant hyperalertness I had seen before only in certain very good bodyguards like the Gurkhas out in the hallway, and in a Zen priest I met once.

So which one was Jinny's dad . . . and which one merely owned half the inner Solar System?

When I reached the decision point, I put down my money, made my bet, and quit worrying. The rest of the necessary choices seemed to have been made while I was busy.

I stopped in front of the man to my right, bowed *almost* as deeply as I would have for the Secretary General or for Jinny, and said, "Good morning, Conrad. I am Joel Johnston. Thank you for taking me into your cubic. Your home is most gracious. Pardon me a moment, please."

Without waiting for a response I turned on my heel and gave Rennick my warmest smile. "It was very kind of you to escort me here, Alex. I'm sure with Leo's help I'll find my way back to my quarters."

His own smile congealed slightly at the edges, and he opened his mouth as if to reply.

"Thank you," I said pointedly.

After an instant's hesitation, spent in reappraisal of me, he did a little indescribable thing with his mouth that was a rueful salute, and nodded. He said, "You're welcome," on his way to the door.

Again without pausing, I turned to the second man, bowed almost as deeply as I had to the first, and said, "Mr. Albert, I am Joel Johnston of Lermer City, Ganymede. My parents were Ben and Evelyn Johnston of that city. I am a recent graduate of Fermi Junior College. I love your daughter Jinnia—more than I can say!—and she loves me. I'm declaring now my intention to ask you for her hand as soon as I can. I will supply Dorothy Robb with what is necessary to allow you to inspect my background and records."

I was done. I had shot my bolt—nothing to do now but wait and see just how badly I'd screwed things up. The door whispered shut behind Rennick, and sealed me in here in the lions' den.

The man last addressed stared up at me, absolutely expressionless, yet with an attention that was almost a physical force, as if any slightest muscle twitch on my face might tell him something crucial. He stared for so long I began to suspect that I had botched the whole thing, guessed wrong—that he was not Mr. Albert, but the Lord God Conrad himself. I wished I could sneak a glance at the other man for a clue, but did not dare take my gaze away from his.

"Well and boldly spoken," he said at last. "My daughter has made an interesting choice, Mr. Johnston. Good luck to you."

It wasn't until I exhaled that I realized I'd been holding my breath. Those were the last words he said to me.

"How did you know which of us was which?" the other man asked. "You can't have seen a picture of me. There are none."

For a split second I thought about claiming to have had the foresight to google up a picture of my fiancee's father, last night. Rennick's advice came back to me. *Don't bullshit.* "I did *not* know, Conrad. I was forced to guess."

He nodded. "On what basis?"

I didn't have a clue. But my mouth did. It opened, and out came, "Jinny's cheeks."

"What did you say?"

Why, yes. I could see what my mouth meant, now that I looked. "Jinny's cheekbones, s—Conrad. Cheekbones and ears. They're distinctive. Mr. Albert has them, too."

He mimed the word "ah," without actually emitting sound. Mr. Albert was poker-faced.

I was beginning to understand why there were no pictures of Conrad of Conrad. There's an expression actors use: "He can't wear the clothes." Meaning that actor, however talented he may be, just isn't right for that part. No one would have cast this man as Conrad.

Not that he was in any way unimpressive, quite the contrary. He just didn't look nearly heartless or soulless or ruthless enough to fit my preconceptions of the head of a multiplanet empire. He looked ... learned, and wise, and kind. He would have been excellent casting for, say, a brilliant college professor. In some warm, fuzzy subject, like ecology, or sociobiology, or poetry, or even theology. His students would all love him, and write him letters years later to tell him he'd changed their lives. But he would never make department chairman because he wasn't willing to kill for it.

I knew this impression had to be utterly false. This was Conrad of Conrad. But he did not bear the kind of face that would inspire the countless armies of remorseless sharks in suits who constituted the Conrad empire. He had the kind of face that would reassure their mothers. He was more effective as a Man of Mystery, never seen.

"Have a seat, Joel," Conrad said.

It was a superbly comfortable chair, and became more so the longer I sat in it. This wasn't going so badly .. .

"I am informed that my granddaughter Jinnia Anne has revealed her true identity to you, and you have accepted her proposal of matrimony—"

I opened my mouth but no sound came out.

He went on quickly, as one who is determined to get through his little speech however banal it may be. "I commend you heartily on your good fortune, Jinny on her good sense, and both of you on your good taste; I wish you both every happiness; I am confident you will prove a welcome and valuable addition to our great family; we will now define the terms and conditions under which that may occur—"

I opened my mouth even farther. Even less sound came out.

His eyes narrowed very slightly. The department chairman reluctantly suspected me of plagiarizing my thesis. "—unless you would feel more comfortable represented by counsel?"

I had to reject the slander. "No!" I managed to say, and got nearly halfway through my follow-up monosyllable, "I—" before he steamrollered ahead.

"No, of course not. Excellent. I'm sure Jinny has made her family situation clear to you, explained all the ramifications, brought you up to speed." She damn well had not! "Preliminary genetic analysis is satisfactory, as expected given your heritage." Apparently my consent had been assumed. "I might add that I consider such analysis a mere pro forma check on my granddaughter's intuition and judgment: you were in the moment she said you are. But I am pleased with her choice. I met your father, you know. Many years ago, when he came Earthside to receive his prize."

"Then you met me," I blurted out.

"Eh?"

"I never left his side, that trip."

"Ah." He did the math, worked out how old I would have been. "Oh!" He started slightly at a memory. "Uh . . ."

The only vowel he had not tried in front of an "h" yet was "i"—and perhaps "y" What was his problem?

Then all of a sudden I remembered, too.

"Ih!" I gasped. "I *bit* you."

I'd never seen anyone try to unfrown, before. "Yes." He gave up and surrendered to the frown. "You did." Then without warning he smiled, so broadly it was as if another man had burst out laughing. "Good for you!" It made him look much younger, and it took me an instant to work out the sad reason why: his smile wrinkles were almost entirely nonexistent. I tried to remember why I had felt he needed biting, back then, but failed. All I could recall was the fuss after I had done it. *Everyone* had been upset . . . except Dad. He had apologized for me—once—and then stopped hearing conversation about the matter.

"And good for Jinny, too," he went on. "I'm more convinced than ever that she's found just the man we need. And just when we need him, too."

" 'We'?"

We frowned at each other for a few seconds.

"I don't understand your question," he said. "Unless you are speaking French."

"I guess," I said slowly, "I had the idea marriage involved the *needs* of just two people, and the *interests* of the rest of their families. So far, *I've* been thinking exclusively of Jinny's needs and mine. If you need me for something, it has not yet been explained to me, and I have not yet agreed."

His jaw did not drop. But his lower lip went slack, and his eyes unfocused slightly for a moment. Then he shook his head. "I know you are not stupid; I've seen your genes. I know you are not ignorant; I've seen your transcripts. It has to be . . . a rather *staggering* naivete."

I didn't know what to say to that.

"Joel, do you honestly believe your marriage is going to be a normal, mundane union? Do you think its purpose is simply to provide the two of you with agreeable companionship and licensed sexual relief? Can you really imagine that your life together will be anything like what you were picturing as recently as yesterday morning?"

Well, no. But neither could I imagine what it would be like. The furthest I had gotten in my thinking so far was trying to encompass the preposterous notion that I could stop balancing my checkbook, now: that I would never again be short of money, no matter how much I developed a wish for. "What will it be like?"

"You kids will marry and continue in school under the name Johnston, but your legal name will be Conrad. Your training has been planned for you by experts familiar with your background and capabilities—at least ten years, and as a minimum you'll take degrees in engineering, law, business administration, one of the practical sciences, and a language. I suggest Portuguese, but of course that's up to you. It won't all be academic fun and games, of course: you'll need field experience in the company, as many areas of it as you can handle. Plus additional special coaching in social skills, and in politics, both governmental and corporate, and—"

"But you're sure you won't mind if I go for Swahili instead of

Portuguese?"

"Anything but French."

I gave up on sarcasm. He honestly didn't know what it was. "You're talking about grooming me for a top executive position in the Conrad empire. What makes you think—" I stopped because he was shaking his head.

"Not *a* top position," he said.

I felt the blood start to drain from my head. "Are you trying to tell me—"

"Listen to me, Joel." He leaned forward slightly, and his chair adjusted at once. "It is conceivable that one day you might sit in this chair and give the orders. It is even likely, on the basis of what can be extrapolated from your ancestry, present abilities, and accomplishments to date. It is *certain* that one or more of your children will sit in this chair one day. I've had you *most* fully investigated, else Jinny would never have received permission to propose to you."

I felt two extremely strong and inappropriate impulses, fortunately so contradictory they canceled each other out: the urge to faint, mid the urge to giggle.

"Oh, I understand," he said. "Really I do, son. Your interest in music is commendable in one of your age, a sign of a mathematical mind, and Jinny assures me your work is agreeable, not at all like this . . . well. But surely you see the time for childish things is now behind you. The *real* world is now open to you: you've been given the opportunity to become one of those men music is written *about."*

Conrad continued speaking for several more minutes, and I kept an attentive look on my face, but I'm afraid it all pretty much went in one ear and out the other from that point on. To the best of my addled recollection he was explaining my destiny to me. Telling me about challenges I would face, and things I would need to know to meet them—about looming crises and how to resolve them—about potential achievements and how best to realize them. He used the word "scarcity" several times. I think he was trying to give me a short course in how to run a commercial empire over the next hundred years or so. He went on and on about the crucial importance of making sure humanity was firmly established outside the Solar System. Something about the System, any system, being too fragile a basket for the human race to keep all its eggs in. It seemed paranoid thinking even for a Conrad.

I have no doubt there were thousands of people in the System at that time who would have given a limb, maybe even one of their own, to hear that lecture from that man. It's a real shame I missed it. But my brain was so busy trying to think six contradictory thoughts at once that it had no processing power left over for new incoming audio or video. He could have told me the exact hour and manner of my own death, and I'd have kept on looking him in the eye and nodding thoughtfully. I think Mr. Albert may have realized I wasn't tracking, but he kept silent.

Sooner or later, he would pause long enough for me to speak. I had until then to come up with some really smooth, diplomatic way to begin explaining to him how many erroneous assumptions he was making, how vast was the gulf between his picture of my future and my own. The trouble was, for the life of me I could not think of any diplomatic way to express the concept, "I'm not remotely sure I want any part of you or your family or your empire, and I'm having serious second thoughts about your granddaughter." I could think of no gentle way to ask, "Excuse me, but are my own wishes, plans, thoughts, or opinions of any interest to you at all?" There didn't seem to be a polite circumlocution for, "Who the hell do you think you are?"

Besides, I knew perfectly well who the hell he thought he was—and he was right. He was assuming my assent, not because I looked like some kind of patsy, but because nobody, weak or strong, ever said no to him. He assumed that I *wanted* to become him one day because everybody he knew did, because who would not? Jinny would never have taken up with me if I weren't sensible.

I heard a story once about a PreCollapse songwriter named Russell who'd written a song called "I'm Lost in the Woods," and because its melody sounded African, he decided he wanted a background chorus to sing the title in Zulu. But all the translators he found told him the same frustrating thing: there was no way to say "I'm lost in the woods" in Zulu. They didn't have that concept. Zulu didn't *get* lost in the woods. He had to settle for a chorus singing the Zulu for, "I am in the woods and I have gone crazy"

There was no sense even trying to tell this man, "I do not want to become infinitely rich and infinitely powerful"—it would come through as noise. When that pause in his flow of words finally came, he was going to hear whatever I said as, "I have gone crazy"

Well, if it didn't matter what he heard, then I could say whatever I liked; the only question was what I wanted to say. Ideally, something that would not make me cringe every time I remembered this day in years to come. Something that would not force me to lie when asked what I'd told the old buzzard then. Something respectful, but dignified; polite but firm.

As I worked on it, I became aware of distraction. I played back the last fifteen or twenty seconds and spotted a plausible cause: a few sentences ago, he had dropped a subtle remark that implied, without stating it explicitly, that he was sure I had figured out Jinny's real identity long ago . . . and that he applauded my good sense and good taste in continuing to play dumb for the sake of her feelings. It was annoyingly difficult to work out which of us he'd insulted worse—a distraction from the distraction.

But that wasn't even the distraction. Suddenly I realized what had really bothered me enough to try to demand my attention in the middle of an important conundrum—a problem far more urgent than an insult to me or a beloved I was thinking seriously of strangling.

I was on my *feet.* In motion. Walking toward the door.

Being walked toward the door, by Mr. Albert. His hand rested far too lightly on my shoulder to be steering me, exactly. But it did make it a little easier to keep going than to stop or turn around.

The conversation was over already. The insult I'd focused on had been part of some larger pattern of unnoticed sentences that had ended it, somehow. The pause I'd been waiting for, in which I could have my say, had simply never happened. Or had come and gone in an instant, while I was thinking of something else. It was too late, now. My choices were to keep on walking, or to make a scene. Albert had handled me as smoothly as an awards presenter getting the disoriented winner the hell offstage so they can get to the next, more important award.

I was angry at myself for having been outmaneuvered so effortlessly, for letting somebody march me around like a show dog with nothing more than a combination of body language cues, feather-gentle touch, and total confidence.

But I was also secretly grateful. I hadn't been looking forward to that pause. Now I could take as long as I liked to compose, refine, and polish my manifesto—and when it was ready, I could deliver it by e-mail, rather than face-to-face to the most powerful man on earth. Since I had done and said nothing, I had nothing to wish I could take back. Since no one was interested in my opinions, why bring them up? Especially since I had no clear idea what they were.

We reached the door, Albert said something or other, I made whatever was the appropriate response without thinking about it, and the door irised shut behind me.

Rennick was not waiting outside. Dorothy smiled as I came through the door and gave me a thumbs-up. I gave her what I thought was my very best sunny smile in reply, and she winced. "I—" I began, and stopped.

When she saw that I had no words, she stepped in smoothly "I enjoyed meeting you as well, Joel. Would you like Leo to guide you back to your room, or would you care to see some of the grounds, now? I don't believe you've had time for the tour, yet."

"Actually, I'd like to speak with Jinny," I said.

"I'm sorry, she's offsite at the moment. An errand for her father. She should be—"

"I'll phone her, then," I said, and lifted my wrist.

"We discourage phone calls to the outside, she said quickly. "It compromises security. She's due back before dinnertime, and I'll make sure she speaks with you the moment she's back inside the perimeter."

Right. "I see." Giving me time to calm down. "Very well, then. Thank you." It might just be a terrific idea to cool down a little before speaking to Jinny. Three or four years ought to do it.

"You're welcome. Would you like that tour of the grounds? It's quite—"

"Later, perhaps. Right now I'd like to go back to my room."

"Of course. Leo? Please guide Mr. Johnston back to his quarters."

"Yes, Dorothy." Green fireflies led me away. I followed them gratefully.

When I'd passed this way in the other direction, the corridors I'd walked through had seemed wastefully, ostentatiously large. Now they seemed cramped and claustrophobic. There was barely room for me, let alone for the billion thoughts swarming around my head, trying to gain entry. I wished mightily that I knew what I thought, how I felt, what I wanted, but I had the idea that I would not know any of those things for certain until I screamed them at Jinny. My mind kept trying to take refuge in disbelief that any of this was really happening. The trouble was, I knew my imagination just wasn't good enough to manufacture a hallucination like this.

I recognized, from the other direction, the intersection where I'd collided with little Evelyn earlier. I approached it with some caution, this time, listening carefully for someone swooping through the air on a skyboard. But of course I had no clear idea what, if anything, one sounded like. I eased up on the intersection, hooked one eye around the corner for a quick peek—

--nearly bumped noses with Evelyn.

She tried to keep a straight face, did pretty well for a few seconds, and then lost it. As soon as she did, I whooped with laughter myself. The tension release was welcome, almost too much so. I laughed a little bit harder than necessary for a little bit longer than I should have. She finished before I did.

Maybe it shook loose some brains. When I finally spoke, what I said surprised me. I expected to hear myself say something polite, banal, phony. What came out was, "Can you tell me how to get a cab around here?"

As I heard the words come out of my mouth I realized I very badly wanted to be away from here. To be back home. Alone. As quickly as possible. So I needed transportation. And I had no idea how to get any. And here before me, by happy chance, was about the only person in the entire compound, including Leo the AI, that I felt comfortable asking.

She just stared at me, unblinking.

"Transportation from here back to the Lower Mainland," I amplified. When she stared like that she looked remarkably like an owl.

"I came here in Jinny's car, but right now she's taken it offsite, and I need to get back home as soon as p . . . you're imitating an owl, aren't you?"

"I'm sorry," she said. "Yes, I was. I'll stop."

"Thanks. As I was s—"

"I'm not really sorry. But I'll pretend, as long as I don't have to do a very good job."

"Evelyn, honey—"

The owl lit up. "You remember my name."

"Look, I really need to—"

"Most grownups don't."

"Evelyn, how do—"

"You can't get a cab here, silly. There's no here."

I nodded. "I figured as much. But that implies there has to be some way to get guests where they need to go, when they need to be there. Do you know what it is?"

I nearly lost her with that question. Then her ferocious frown relaxed. "I deserved that. I was the one playing dumb. Yes, Joel, I do know. I'll help you."

I sighed. "Thank you, Ev. Will it take very long?"

"Is there anything in your room you have to go back for?" I thought about it and shook my head no.

"Follow me, then."

Three turns and perhaps a hundred meters later, she stopped, and touched a wall, and an elevator door opened up where not even a visible seam had been a moment ago. She touched the wall just beside the door, in a different way, and the wall developed a monitor and extruded a keypad—at a height convenient for a seven-year-old. She typed something on it, with only her index fingers, but at a speed that would have been remarkable even if she'd been using all ten. Finally she made a small grunt of satisfaction, and turned to me.

"You'll find a car waiting at ground level. Just state your destination; it'll find it."

"How do I—"

"When you get where you're going, just get out and say, 'Dismissed.' It homes."

Of course it did. I started for the elevator, then paused. "Ev, honey?"

"Yes, Joel?"

"Is this . . . I mean, are you going to get in trouble for this?" She grinned. "Not unless you rat me out."

"Are you sure?"

"Guest cars aren't a secret. Anybody could have called you one."

"But won't the record show that it was you who did?"

She grinned again. "The record says Jinny did."

I nodded. "Okay, then. Thank you. I owe you one." It didn't seem adequate. I bent, took her hand in mine, lifted it to my lips, and planted one just behind the knuckles. Then I straightened up and stepped into the elevator. "So long, Ev."

Her eyes were huge. "Hot jets."

"Clear skies." The door slid closed, and I rose rapidly enough to pull gee forces, reaching the surface in no time.

The car waiting for me there was generic, but much more luxurious—to the eye, at least—than the *faux* heap Jinny had driven me there in. The feature I found most praiseworthy was an exceedingly well-stocked bar. It contained the most expensive liquids, solids, vapors, sprayers, and essences then popular for the radical adjustment of attitude, mood, and energy. Being a poor student, from a frontier world with conservative customs, I was familiar with most of them only . . . well, academically—and about their synergistic effects in multiple combination I knew nothing whatsoever. I decided to remedy this deficiency by personal experiment. I attempted to try at least one of *everything,* and for all I know may have succeeded. I never noticed the takeoff, or indeed any of the trip, and I have no recollection of arrival back at my place.

I never did get my shoes back.

Five

Like the fabulous Conrad compound, my apartment was mostly underground, and did not appear on any map. But there the similarities ended. For one thing, it was not located in the middle of a glacier somewhere, but smack in the midst of some of the most densely populated land in the U.S.N.A., the White Rock district of Greater Vancouver. For another, it was the polar opposite of opulent or luxurious, as comfortable as a coffin. Vancouver itself has a tradition of quasilegal "basement suites" dating back centuries to some

World's Fair, or perhaps Olympics, but outlying suburbs like White Rock acquired theirs so recently that they're still illegal, hence unrecorded, hence unregulated, hence mostly shitholes. In sharp contrast to Conradville, it had only a single virtue to recommend it.

But right then, that virtue rated high in my scale of values. It was mine.

I take it back: it had one other thing going for it. The thing that had recommended it to me in the first place, back when I'd first grounded on Terra: like most caves, it was a terrific place to hole up. It had been my first refuge from the unbelievable crowding Terrans considered normal, from the appalling crime rate they considered acceptable, from my own sudden shocking physical weakness, from unexpectedly crushing homesickness and loneliness, and from my own unaccustomed social ineptitude. A womb with a view.

What I needed when I woke up, that horrible morning after, was refuge from my own thoughts and feelings. The apartment did its best, but I suspect a riot would have been insufficient distraction.

The emotion foremost in me when consciousness first reconstructed itself again was sadness, grief insupportable, but it took me a while to recall exactly what I was so sad about. Then it all came back in a rush, and I sat bolt upright in bed. My skull promptly exploded with the force of an antimatter collision—I'd obviously forgotten to take antihangover measures the night before—but the blinding white light and total agony seemed merely appropriate. I'd have howled like a dog if I'd had the strength. Instead I whimpered like a puppy.

For the last—I couldn't remember *how* many mornings, I had woken up thinking of Jinny. Yearning for Jinny. Aching for Jinny. Had woken every time from dreaming of Jinny—of us—of us together—of the distant but attainable day when she would be there in the morning, there all night, the day when I would finally possess her fully.

Possess her? Ha! My lifetime net worth would probably not suffice to lease an hour of her time.

And yet she wanted me.

And God help me, I still wanted her—as fiercely as ever. I could still have her, if I chose. So why was I so sad I wanted to fall out of bed and bang my face against the floor?

The sadness was because my dream was gone. Whatever the future might hold for me and Jinny, it would not, could not, remotely resemble anything I had ever envisioned. Conceivably it could be a better future, perhaps much better—but right now, at this remove, mostly what it was, was unimaginable.

Unless it was nothing at all. I could imagine that easily enough. I just didn't want to. Like life before I met Jinny—minus hope.

Let's not be hasty, Joel. I couldn't rent an hour of her time ... but I could have *all* of her hours, if I wanted, without paying a single credit. What *would* it cost me, though? Let's see. All my plans for my, our, future, for a start. The identity and goals and place in the world I had picked for myself. The rustic notion that the husband should be the one who supported the family, which I had already admitted to myself months ago was archaic nonsense anywhere but a frontier society like Ganymede. It hadn't been customary for the majority of the human race for well over a century now

And let's not forget one other little cost that Conrad had been quite upfront about: most of my waking hours for the rest of my days, which would be spent working very long and hard on things for which I had little interest, training, or talent. With the very best of medical care assuring that I'd be in harness as long as possible. I would have to assume and hear a yoke of almost inconceivable responsibility—responsibility to literally billions of people, all with their own loves and dreams and plans for their futures.

And even if I washed out personally, my children would be groomed and fitted and trained for that same responsibility from birth. All of them. In my vague eighteen-year-old imaginings of the children I might have one day, I had always pictured myself advising them to pursue whatever really interested them, to follow their hearts, the way my father had with me. That would no longer be an option if they were Conrads.

I'm making my hungover maunderings seem far more coherent and organized and cogent than they really were. At the very same time that all the thoughts I've just described were going through my head, for instance, I was also simultaneously asking myself over and over again just what, exactly, was so horrible about becoming one of the wealthiest and most powerful people in human history, if that was what it took to win the most beautiful woman in the Solar System?

Well, for a start, myself kept answering, you haven't *earned* it. What good is a prize, any prize, if you don't deserve it, if you haven't done the work? Face it, Joel: you don't even have the vaguest idea what the work *is.* To which my ongoing rebuttal was: Oh, give me a break, self. Do you *think* even Conrad of Conrad truly *earned* that much power and money? Do you think *anyone* could? Do you honestly believe any conceivable human being, however talented and however hardworking, could possibly *deserve* that much compensation, *merit* that much authority? The most anyone can do is *have* it. Old man Conrad happened to have been born from the right womb at the right time, and must have behaved thereafter more intelligently than any of his rivals, that was all. That was as close as he came to deserving what he had: it had been handed to him, and he had not fumbled it. Now it —or at least a piece of it—was being handed to me—or at least to my —children. Mine and Jinny's—

How could she do *this to me?*

Distraction. Distraction. Change the ch—ah, that was it. I found the remote—thank you, Mr. Tesla—turned on the tube, and selected passive entertainment, genre search.

First, drama: on some unimaginably distant colony planet—because there were two moons in the sky, one of them ringed—a beautiful woman with red hair was crying as if her heart were broken. No, thank you; *change* channel—

Comedy, next: a young man my age—we did make great natural comedic victims, didn't we?—had done something incredibly stupid, and a roomful of people and Martians were laughing openly at his humiliation. Next, please—

Erotica. I was utterly disinterested, and noticed that my right arm was extremely weary. Apparently that car's drug supply had included libido enhancers. Next—

Sports. Free-fall soccer semifinals, O'Neill versus the Belt, winner to face Circum-Terra in the fall. As it came on, the mob outside the globe roared: a forward as long and lean as a Ganymedean had just frozen, fumbled his chance, blown an easy shot by hesitating. Zoom in for extreme closeup of his anguished features, his obvious shame. Next —

News, Systemwide: Luna Free State was saying very rude things about Ganymede's trade policy, and Terra was making no comment; while nobody had actually used the words "trade war" yet, everyone was thinking them, louder than they had last week. And here I was, trapped at the bottom of the gravity well. Next—

News, Global: The outfitting and provisioning of the latest colony ship, RSS *Charles Sheffield,* was nearly complete. It was expected to leave orbit in a few days, and a few days after that, assuming its drive lit without incident, its complement of some five hundred souls should go bye-bye in a big hurry. Hopefully to a star called Immega 714—known also, for reasons I could not imagine, as "Peekaboo." Only the day before yesterday, I had considered most of them to be idiots, a company of mist its, malcontents, romantics, failures, crackpot visionaries, runaways, transportees, and other defective personalities. Now I found myself fiercely envying them. Just a couple more days, and nothing the Conrad dynasty or any individual Conrad could possibly do would ever again affect them in the slightest. What dominated my future and my children's future was shortly to become as irrelevant to them as the Roman Empire. Sigh. Next—

Local news. Housing riots again. This time the demonstrators had somehow overwhelmed or outsmarted both proctors and private security, and penetrated to the very heart of Vancouver's most upscale neighborhood, the tony intersection of Main and Hastings. Standard anticrowd measures could not be taken for fear of excessive damage to private property.

I switched to the fiction channel, scanned my favorites index for a story I wanted to reread, something really good and solid and dependable—and long, at least a trilogy. As I did, random sentences from old favorite books kept running through my head. You don't turn down a promotion . . . if someone puts money in your hand, close your fingers and keep your mouth shut ... let this cup pass from me . . . he played the hand he was dealt ... opporknockity tunes but once, and you'd better be in tune with it. . . .

Forget fiction. I was way too scattered to read. Even focusing on titles was beyond me. I didn't bother with any of the music channels: I just knew that whatever I got would be heartbreaking. I shut the screen altogether and flung the remote across the room.

God damn it, how could she do *this to me?*

How could she lie to me that way, hide the truth from me for so long, tell so many lies to me, play me for a fool? My innocent, loving maiden turned out to be a slumming aristocrat, Harun al-Rashid's granddaughter in clever disguise, casing the marketplace for a strapping young peasant lad with acceptable features and good teeth, to serve as stud back at the palace . . . smiling fondly inside at his earnest naiveté and childish dreams. . . .

Again, rebuttal wrote itself. Joel, don't be a nincompoop. *How could she* not *have done this to you?* How would you have handled her problem differently, in her place? Placed an ad on the Web? "Princess seeks hybrid vigor. Salary effectively infinite. Auditions daily at noon; bring resume, genotype, and headshot."

Me: Well, no, but—

Myself: But what? Once you did catch her eye, once she did somehow, for some glorious reason, cut you out of the herd and let you sniff each other, what was she supposed to do? Tell you who she really was on the first date? Come, now—

Me: But she could have! It wouldn't have—

Myself: Oh, please. In the first place you're full of shit, and in the second place even if you're not, even if you really happen to be the kind of unique and special human being who isn't remotely fazed by small things like unimaginable wealth and power . . . *how the hell was she supposed to* know *that on a* first *date?* Or a twentieth?

Me: She kept the damn masquerade up a lot longer than twenty dates! She strung me along for—

Myself: She maintained her cover until about thirty seconds after you stated for the first time, unequivocally and with sincerity in your voice, that you wanted to marry her as soon as you were able.

Me: . . .

Myself: You tell me: can you think of any other way at all that a girl in her position could know, for certain, whether she's loved for her self or for her pelf? A girl needs to know these things, pal.

I: He's right, you know.

Me: Yes, but—

Myself: Wait, I'm not done. Can you think of any other way at all that a guy in your position could know, for certain, that he genuinely loves a girl who's worth gigacredits? Isn't that a good thing for the guy to know before he marries her?

I: You'll never have any doubts about your own motives, now.

Myself: And neither will she.

Imaginary friend, kibitzing: And neither will anybody else. Everyone will know the story: face it, it's too good not to tell.

Me: Spiffing. Everyone I ever meet will be thinking, how smart can he be, to have been so profoundly fooled for so long.

Myself: If they know the story, *they'll* know Jinny. They'll understand.

Me: Okay, good point. Only . . . only . . . it's just . . . it's ...

Damn it out to the Oort Cloud and back, I understood why she had to do what she did—but *how could she do that to me?*

Distraction. Distraction.

I found that I was on my feet, dressed, and pacing around my tiny apartment, with no memory of having willed any of these things. This suggested to me that the distraction should take the form of a depressant rather than a stimulant.

The bar in my home was a pathetic joke compared to even the field model in Conrad's guest taxi—I was a starving student, who couldn't afford to indulge, and usually didn't mind—but its sole useful content happened to be a large, unopened bottle of an ancient Greek alcoholic beverage called Metaxa, a species of brandy, given to me by a friend with family on Ikaros. I pulled the cork, decided to dispense with a glass, took a big incautious gulp. It smelled and tasted the way I have always imagined gasoline must have smelled and tasted—especially if the gasoline were on fire at the time. By the time I realized my error and tried to scream, my vocal cords were crisped. My tongue cooked through as if microwaved. Tears spilled like lava from my boiling eyes.

When I could see again, I located my arm, followed it to my hand. The bottle was still in it. I transferred my consciousness, became the bottle, managed to locate my former mouth, and made my way back there. But in attempting to make the jump back to my own brain again, in order to appreciate the full benefit of that second swallow I got lost somehow I thrashed around the noosphere for a while, looking for me, but eventually I decided the hell with it and just embraced the darkness. Darkness was a very good thing to embrace. You could count on it staying what it was.

After that comes a series of disconnected fragmentary memories, of events so unlikely and actions so unlike me I'm honestly not sure whether they were real, hallucinations, or some combination thereof.

I'm quite prepared to believe, for instance, that at one point I raced up the Granville Street Slidewalk, scattering pedestrians like duckpins, while screaming, "I am Prorad of Prorad! Absolutely nothing that happens to you is my fault!" But can it be remotely possible that I really was, as memory insists, holding hands with a monkey at the time? Where did the monkey come from? Where did he go?

Similarly, it's not impossible that I challenged half a dozen White Hat boys to personal combat for laughing at me in Chinatown. The Granville Slidewalk leads in that direction, and I was in a suicidal mood. But how I could have survived . . . whatever ensued . . . unscathed, I can neither recall nor imagine. I had no weapon, no combat skills, and Ganymedean muscles. (I never understood, by the way, why Chinatown was still called that, considering that it had been well over a century since the population of Greater Vancouver was less than sixty percent Chinese by ethnicity. I don't know; maybe ghettoization becomes funny after it stops happening. Or perhaps it was more of a "Never forget!" thing.)

And if I was in Chinatown, on foot—I had no money for cabs or other public transport—how could I have found myself, an eyeblink later, all the way across town at Spanish Banks beach, watching the vast boat city moored there, Little Kong, gleam in the sunlight, and boil and bustle with the indomitable industry of the doomed? As far as I could see, they were selling seawater to each other out there—but they did it with all their might, each dreaming of cornering the market one day. When a few Vietnamese came ashore, I reeled over and tried to apologize to them, for not having the guts to become a Conrad, and thus solve the politico-economic conditions that trapped them there. But the language barrier intervened—they spoke no Basic, I spoke no Vietnamese—and somehow I ended up buying an unlabeled sprayer of something even more diabolical than Metaxa from them, instead. Maybe they did understand what I was trying to say, after all.

I remember the first rush of it, whatever it was—it was memorable, even to a man in my condition—and after that I have only one other brief scrap of memory that seems even remotely likely to be real.

I became aware that I was chilly. This rekindled enough awareness for me to notice that I was on the west side of Stanley Park—halfway up a *tall* tree. (How did I get to the Park from Spanish Banks on foot? Persuade someone to drive me? Stow away on a bus? Teleport? No idea.)

It seems clear in retrospect that my intention must have been to commit suicide. Ganymedeans do not climb tall trees in Terran gravity for any other reason I can think of. Amazing I got as far as halfway up; I had never climbed a tree in my life. Apparently I had become distracted by the magnificent view, staring across the Georgia Strait at distant Vancouver Island, just visible low on the horizon, and beyond that the Juan de Fuca Strait and the Pacific Ocean and ultimately Vladivostok, I suppose.

I should not have been chilly—I don't wear stupid clothes—but I'd obviously forgotten to recharge them. It made sense that my face would he the chilliest part of me . . . but why was the coolness there *moving,* running down toward my neck? I had just worked out that it was tears, sheets of them, when my phone went off. I knew who it was, but checked the display anyway, just on the off chance that it was a major university offering me a full scholarship and bursaries.

It was Jinny, of course.

I turned up the volume to hear the message she was recording. "—been trying to give you room, give you time to get ov—uh, to adjust to the situation. I know I've given you a lot to deal with. I understand why you ran away. But I can't wait anymore, I'm going out of my mind. Pick up, Joel, we have to talk. *Please* pick up. I probably won't be able to call you again, and if you try and call me back, it won't . . . oh, God damn it, I love you, Joel. I really do. You know that. Just give me—"

I plucked the earbeads out of my ears, held them at arm's length. Jinny's voice became a faint cricket sound. That seemed a distinct improvement. If a little was good, then—I threw the earbeads so hard, they cleared the sea wall below and plunked into the Georgia Strait. Yes, that was the ticket: no more cricket.

" 'Ran away'?" I muttered. *"I'll* show you run away, lady. Watch me."

How did I get back down from that tree without breaking anything? I reject memory, which says I was assisted by a team of swans, but have no better explanation to offer.

There are, as I said, a few more shards of memory after that, but I don't think any of them represent real experiences. I don't think, for instance, that it's possible to *do* that with even an *extremely* cooperative goat. Certainly not without paying in advance.

And then, with the shocking suddenness of running full tilt into an unseen wall, I was instantly a hundred percent cold sober, and an ugly man with lemon breath was staring into my eyes from no more than ten or twenty centimeters away, so fixedly and intently that I sensed he was grading them, by some unknown criteria.

I couldn't stop him, so I decided to grade his eyes. At first they seemed the eyes of a man so tired he was on the verge of a temper tantrum. But on second look I could see that he was always that angry, and the fatigue merely blew his cover. On the third look, I learned something new. Until then I had believed that anger is *always* fear in disguise. My father had told me so once, in memorable circumstances, and I'd never seen a counterexample. But now I could see that at least some of this man's anger derived not from fear, but from shame. In some way he had failed himself irredeemably—so irredeemably that there was no longer anything left to fear. His face tried to say that was *my* fault, especially his mouth—but his eyes knew damn well it wasn't.

"Am I finally addressing a sentient being?" he asked.

Early sixties. Ruddy face. Strong lemon breath. Sour lemon. "I doubt it," I said. "But I'm probably close enough to run for Parliament, at least."

He grunted and moved away. As his face receded I tried to follow it and fell off my chair, thereby learning that I had been sitting in a chair. Where this chair, *mein* herr? There, *mon cher.* Well, I swear.

He let me make my own way back up into the chair, leaning into the force of his contempt as if it were a strong wind. It took me a while. Before I had time to congratulate myself, he said, "I'm Dr. Rivera. Do you know where you are?"

I rubbed a sore spot on my face. "On Terra, obviously. Barbaric gravity."

He didn't have the energy to be impatient. "Where on Terra, specifically?"

"In these pants," I said, and giggled.

"After what I gave you, you should be straight by now," he said. "I conclude you must be a natural horse's ass."

"Nonsense! I've had to work hard at it."

Humor was wasted on him. Or being wasted was not humorous to him. One of those. "You are in Tampa, Florida."

I giggled again. "Home of the tampon. Is this your pad?"

"You are at the Tampa Spaceport."

"You don't want to Tampa with a spaceport. Your complexion could end up even Florider." I cracked myself up with that one. But as I laughed, rusty wheels finally began to turn slowly in my head.

Tampa? Why the hell would I go to Tampa? Even if I had found some sort of pressing reason to visit a spaceport, Albuquerque was a hell of a lot closer to Vancouver than Tampa was—

"Do you know why you are—"

What did Tampa have that Albuquerque didn't? Nothing. In fact, these days Tampa was almost completely closed to normal commercial traffic, due to—something. I forgot.

"I said, do you even remember what you—"

What made Tampa different from any other spaceport in this hemisphere?

"Forget it," he said suddenly. "You're not up to this."

"The hell I'm not," I said automatically. Whatever he was talking about, who the hell was he to be talking about it?

His contempt reached a crescendo. "Young man, I doubt you'd be up to it even if your bloodstream were completely clean. It's a big decision. Too big for you. Try again another time. You probably won't be any smarter, but you will at least be older."

Wait a minute, now—there *was* one thing you could do at Tampa that you couldn't do at any other spaceport in this hemisphere, right at this time—

"I'm old enough to make up my own mind, Dr. Rivera," I snapped.

—wait a minute—

He blinked. "See here, son—you are indeed, as you point out, legally old enough to make up your mind as neat and tight and tidy as your bed used to be made up when you lived with your mother. But *you have not done so yet.* Half your blankets are on the floor, the sheets are a tangled wreck. Go sleep it off, come back in a day or two, and we'll talk. In my professional judgment, you're not ready to go to Immega 714."

My jaw fell. On my first attempt, I had very nearly gotten stoned enough to fall right out of the Solar System.

When the shock wore off, I found I was more than half tempted to go *through* with it. Sign onto the *Sheffield,* become a Gentleman Adventurer, and head for the stars. Partly just to spite that sourpuss with the sour lemon breath, for telling me I couldn't. But mostly because it suited my mood. Star travel would certainly be a way out of the trap I'd put myself in, the trap Jinny had led me into—

--one that involved gnawing off both my own legs. No thanks. I told Lemon-Breath Rivera I *would* be back in a day or two, but we both knew I was fronting. I found myself on the street, blinking against the Tampa sunshine, sweating in the Tampa heat.

I considered various options for getting home again, balancing speed against expense with the miserliness of a student on a short budget. Then I thought to consult my credit balance, and my options shrank to one. If that. In choosing my route to Tampa, I had apparently assumed it was okay to burn bridges, and had chosen a semiballistic. Fast, comfortable—and very expensive, what with the price of hydrogen. I was just short of totally tapped out.

I consulted an atlas, and calculated that with a little luck, the highspeed public slidewalks ought to get me back to Vancouver in no more than seventeen hours or so. If I could just avoid getting hungry or thirsty or bored for that long, I'd end up back in my tiny basement apartment, free to gorge on whatever I had left in the pantry and all the water I wanted, while enjoying any book or film I already owned. Then I would have to start praying that my scholarship came through before the next rent payment was due. This was a bad time to go into debt; interest rates were approaching body temperature.

I made a mental note: *never* go on a bender without taping a fifty-credit bill to the sole of your foot.

I found slidewalk access without too much trouble, transferred my way up to the 320 kph strip in due course, found a seat without difficulty, and hunkered down for the trip. It took me all of half an hour to go from terminal nausea to ravening hunger. Did you know that you smell at least partially with your mouth? Holding my nose didn't help nearly enough in suppressing food smells. I had to keep resisting a temptation to suck on my own hand. I was already drawing enough unwanted attention as it was: it turned out that I *looked* like someone on a bender. Why wouldn't I?

After a lonely half hour I spent watching countryside whip past too fast to really see, someone sat down near me. That cheered me up until I realized the reason for his tolerance: he was well into a bender of his own, and might not have noticed if I'd been on fire. Ignoring public privacy laws, he was listening to music on speaker rather than his earbeads. I started to object—and got sucker-punched by the song that was emanating from his wrist.

It's the reason we came from the mud, don't you know
'cause we wanted to climb to the stars

Instantly, I was back in the ballroom of the Hotel Vancouver, in Jinny's arms, dancing with her at our prom. The last happy moment I could recall. Maybe the last one I was ever going to have. I know that sounds melodramatic, hut that's because you're not eighteen anymore. I didn't burst into tears—quite. But it was a near thing.

Ask anyone which way is God, and you know
he will probably point to the stars ...

Not everyone, I thought. Some of us would point to a glacier somewhere in northern British Columbia.

All at once I understood the real reason I had chosen not to hop a starship after all. I wasn't *done* yet. I couldn't even think about *thinking about* leaving for Immega 714 as long as my situation was still unresolved. Not until I'd done everything I could to try and fix it. I was still alive. Jinny was still alive.

Well, there was no time like the present. Automatically, I started to look round for a 'fresher, to fix my appearance—then decided it could wait. Let Jinny see the state she'd reduced me to, first. All I wanted from her right now was a phone code, anyway. *Then* I'd get cleaned up. She and I would have our own conversation, after this upcoming one was done. I punched her code from memory—my own, I mean, not pod storage—and then the call went through, and

I flipped my wrist over to make the screen go away and shouted

"Coventry!" loud enough to startle my zoned neighbour into muting his music.

Why was I so surprised? *Ask me which way is God,* I thought, *and I'll point to my phone.*

I turned my wrist back over, and Conrad of Conrad frowned up at me.

I had *wanted* to talk to him, planned to talk to him, with great firmness and determination. In a few minutes, once I'd gotten his code from Jinny and prepared my lines. Now I was off balance. Great start.

He began speaking nearly at once. I could see his lips move. But I was now forcibly reminded that I had thrown my earbeads into the Georgia Strait, last night. I could only point at my ears and shake my head, feeling like an idiot, even further off balance.

He glanced way offscreen at someone to his right, lifted an eyebrow, and my phone put itself on speaker. I'd have thought of it myself in a second. I could feel my cheeks burning.

"I said, I understand your problem, Joel."

I hoped to call myself a man one day. It simply did not matter it I was unprepared, or my hair was uncombed, or my pants were on. Showtime! "I'm very glad to hear that, Conrad." There now—I'd remembered in time not to call him "sir."

"You have grave doubts that you'll measure up." I tried to respond, and he kept talking right over me until I stopped. "Any sane man in your position would. You have no life experience to reassure you yet. Or to reassure me, for that matter. Women's intuition has historically been a chancy method of selecting winners—else Troy would still stand. But your genes and grades are excellent, for what that's worth. And you have offplanet experience, which broadens a man. Maybe you are what we need. I think you are. In any case you are going to be given a chance. One moment, Joel."

His gaze shifted up and to his left slightly, and he began a conversation with someone in a corner of his screen. The audio cut off, and the image of his mouth fuzzed so that his lips could not be read. Very slick.

I used the pause to get hold of myself, control my breath, and figure out what to say to cure his misconceptions. I even had a second or two to appreciate the surreality of having a phone conversation on a public slidewalk with one of the wealthiest living humans. Then I waited to seize control of the conversation the moment his eyes returned to mine.

Waste of time; once again he simply ignored the fact that I was speaking. "If you do measure up, you will become a Conrad, with all that implies. If you don't—well, you and your children will be

Johnstons, but considerably better off than you would otherwise be. One of the pleasant things about this dynasty is that we can be liberal in pensioning off those who don't quite make it." I'd have tried to interrupt if there'd been any point. "If you turned out to have no real head for business but were tops in research, say, you might end up as Dr. Johnston, Chief of Kindelberger Research Laboratories. Or you might choose to simply lie in the sun in Cairns, and that can be arranged, too—we can afford to be generous. One moment."

Once again he spoke briefly and inaudibly with someone else, this time in his lower righthand corner. This time when his gaze returned to me I was ready with a very loud, "Mr. Conrad, sir!"

I think he literally didn't know how to process insolence. Insufficient experience. It shut him up long enough for me to wedge four more words in edgewise. It took a surprising amount of courage to say them.

"The answer is no."

He tried to frown and raise his eyebrows in surprise at the same time. Even Conrad of Conrad must have heard those words before—or he'd own *everything,* instead of only about a quarter of it. But he clearly hadn't expected to hear them now, from me. "You mean you *don't want* to marry my granddaughter?"

Surprising him cheered me up. I reminded myself that I had once bitten this man. Hard, as I recalled. "Don't misunderstand me. If Jinny wants to get married right away, we'll get married. I'll swing it somehow. But I do not intend to let someone else lay out my life according to some kind of time table and tell me when to wipe my nose—no matter how well the job pays. It's not a question of measuring up. I'll do my own measuring. And I'll pay my own way. Thanks anyway, I appreciate it, I do appreciate it—but keep your free lunch, it's not for me."

He glanced up and to the right, and this time forgot to mute his audio. "Tell the Secretary of State I will be a few minutes late." I think he really did forget, because when he said those words his voice was flat and cold, and when he turned back to me it had become warm and fatherly "I admire spirit in a young man, I really do. We can't hold this thing together with yes-men and flunkies at the top. Your answer convinces me more than anything else that little Jinnia Anne has made a wise choice. Nevertheless, I must convince *you* that we need you—and that you need training. We've got to crowd thirty years of training into the next ten—it's been proved over and over again that, despite the wonders of modern geriatrics, young men must be allowed to make top decisions before age, experience, and caution grow on them like rust or mold. We must strive for a young man's drive and an old man's knowledge. Not easy." He sighed. "And the young have all the time in the world. I wish I did. You want to sleep on it, I can see that. Looks like you could use the sleep, too." Without taking his eyes from mine, he told someone, "Joel will call me at this code tomorrow at 0900 PST."

I started to ask him what code to use to reach Jinny—but he had already broken the connection.

I tried redialing the number—and was told it was a null. I could guess it would remain one, at least for me, until tomorrow morning at nine.

I went to Jinny's apartment that night. She had moved out. No forwarding address. I caught one of her neighbors looking at me with pity. I agreed with her.

I did not call Conrad at 0900 the next morning. For the next half hour, I was braced for him to call me, or have some flunky summon me, but he did not. For the rest of the morning, I was halfway prepared for two large men to bust in my door and drag me out to a black limo, but nothing of the sort occurred.

A little after noon, there was incoming mail, a text-only message. It was a letter from Stony Brook, informing me without even a polite pretense of regret that my scholarship had been turned down. It didn't say why, but it didn't need to.

Every single plan I had made for my life lay in ruins. No degree, no career, no future, no Jinny, no family—unless I consented to serve at stud while training to run a multiplanet dynasty. My only two lifestyle choices were to be a dole bludger, or one of the wealthiest gigolos alive.

I wanted, very badly, to get so wasted that my previous bender would seem a mere preamble.

Instead, I did not so much as drink a beer or take an acetaminophen.

I spent the day taking care of a number of tedious details and formalities.

I ate a healthy dinner, retired early, got a good night's sleep. In the morning, I filled a backpack with the belongings and food I hadn't disposed of the day before, locked the apartment behind me for the last time, and headed for a crosstown slidewalk.

A little over seventeen hours later I persuaded Dr. Rivera (whose breath smelled like strawberries that day) that I was sober enough to apply for a slot on the waiting list for a berth on the RSS *Sheffield.* The expedition's backers had no connection whatsoever with the Conrad dynasty; my application was accepted. That very afternoon, one of the colonists who'd already been accepted managed to kill himself on one last rock-climbing trip. The next day I was informed that I had been chosen to replace him.

I was on my way to Immega 714, aka Peekaboo. Where I would live out my life on the planet called Brasil Novo.

Six

There is no wealth but life.
—John Ruskin

There were other candidates, of course, some of whom had been waiting *years* longer than I had, and a great many of them had more impressive skill sets or resources than I did, as well. But such decisions are rarely made fairly. What got me the berth—late starter, dead broke, and all—was a combination of three specific unfair advantages I had over my competitors.

First, of course, was what would have been a disadvantage in just about any other enterprise, with the possible exception of prostitution: my extreme youth. I had only just become a legal adult. You want young people on a voyage expected to last nearly twenty years, ship time, and over ninety years Earth time—but not a lot of them volunteer for such a trip. If they do, and are turned down, they tend to go away and make another plan. It's not really the sort of trip young people sit around and pine for, at least not now that the first waves have gone. Not happy healthy ones, anyway.

The next important factor was sheer coincidence: the *Sheffield's* boost rate. She would blast at a constant acceleration of exactly one-third gee—and I was from Ganymede. I'd be one of the few around who felt normal, for a change. For once, I'd be markedly better adapted, *more* effective, than those I was with. Even fewer Ganymedeans or Marsmen tended to sign up for star travel than did teenagers; they were just too busy.

But what cinched the deal was, I was from Ganymede. That is, I was one of no more than a handful of star colonists who had any practical, hands-on experience whatsoever with . . . pause for ironic drumroll ... dirt farming!

You can't blame Earthlings for not knowing much about that: despite what they named their planet, really good dirt is getting hard to come by, there. (God knows the Prophet wasted enough of it for them, may his concept of Hell actually appear, for just long enough to accept him.) But most Terrans haven't even done any *hydroponic* farming, and the few who have are generally too rich to make good candidates for interstellar refugees. There is something to be said for scarcity. The total food-growing experience of most *Sheffield* passengers was almost indistinguishable from zero.

And I had a *ton* of it. Not theoretical experience, either. Not classroom knowledge, but the kind where bilging the course means you starve. Like most Ganymedeans, and many colonials in or on other worlds, I had spent a portion of my childhood turning earth, hauling manure, outguessing weather, making crops—performing some of the most ancient labor there is, using tools so primitive by Terrestrial standards that most of my fellow colonists probably could not have identified them without help. That's what we were all so *busy* at, up there, if you've been wondering: turning rock into rutabagas, because they tasted better, and were also more nutritious.

Go ahead, laugh—I did. The one aspect of my background that had always been guaranteed to elicit gales of laughter from those Terrans I admitted it to ended up being the deciding factor in sending me to the stars. Pretty good joke, even for fate.

Even those three factors might not have been enough to get me aboard one of the very earliest colony ships—the *Gaia,* say—not at the last minute. For the first dozen voyages or so, crew and colonists alike were minutely scrutinized, rigorously tested, and meticulously matched according to carefully worked out social, psychological, and ergonomic principles (it says here), with hopeful alternates ready to fill a last-minute opening in any niche, long before the ship was ready to boost.

But by now, almost two dozen ships had left the Solar System—and the supply of applicants was beginning to thin out just a little.

Correction: the *cream* was beginning to thin out a little. There was still a copious supply of applicants . . . 99.99 percent of whom were eliminated by gross tests. Half the remainder then changed their minds halfway through.

Part of the problem was, hardly anybody still left *wanted* to pioneer, wanted to leave everything and everybody behind forever, and go plant beans by the sweat of their back under the miscolored light of an alien sun. It wasn't really a question of pioneer spirit being just about gone, as jeremiahs were always complaining on the wire. Even way back in history, so-called pioneer spirit was usually the result of intolerable conditions back home more than anything else.

That applied back at the very dawn of star travel. Volunteers to leave the Prophet's Paradise were not hard to come by. But the Solar System was a fairly tolerable habitat for most people about now, particularly Terrans and O'Neillers. There was still plenty of frontier to go around, too, for those who hated crowds and regulations. The Asteroid Belt seemed unlikely to fill up anytime soon. To want to leave Sol altogether, forever, you almost had to be a born misfit, or a perpetual tourist, or as brave and curious as a bodhisattva. Most of the last category had signed up already and left in the first or second wave.

I've omitted two other historically significant categories of pioneer. Fortunately, things had not yet reached the point where colony planners willingly accepted members of the first category: perpetual fuckups. But this *would* be the third ship so far to carry transportees—prisoners, guaranteed by their various sentencing jurisdictions to be "nonviolent," "suitably skilled," "highly motivated" "volunteers." But there would be just over two dozen of them, five percent of the colony's total population, and the majority would be political prisoners rather than predators. Neither of the previous transportee experiments had sent back reports of any problems so far.

One other thing I've speculated about. I said that the Immega 714 colony's underwriters were not allied with the Conrads. In fact, they were instead associated with the Kangs and the da Costas, both houses that were hereditary enemies of the Conrads. The RSS Sheffield's designers, the prestigious firm of Ray, Guy and Douglas, belonged to neither house—but were all notorious defectors from the giant Conrad subsidiary Starship Enterprises MDA.

I knew nothing of the history between the three houses, and still don't—but sometimes I wonder whether a deep enough background check on me mightn't have turned up the information that the Conrad family had put the Black Spot on me ... and why. Are relationships between financial empires really petty enough that some Chinese or Brazilian exec way beyond his Peter Principle point might have upchecked my application purely to spite Richard Conrad?

I don't know. Do you?

I expected something like a vocational/educational boot camp on the ground—several rigorous weeks at least of cramming, training, testing, observation, evaluation, and ultimately final placement in my proper place on the great ship's table of organization.

I didn't even get orientation indoctrination. They called me at a little after 7:00 A.M. Pacific Standard Time in White Rock—near the end of business hours in Brussels, where the decision had been made—to tell me I'd been selected to take passage on the *Sheffield.* By nine that night, Pacific time, I was aboard her.

Where it was 6:00 A.M. local ship's time, since the *Sheffield* was using the same Central European Time that Brussels did, for reasons left as an exercise for the reader who likes easy lifting.

I emerged from the airlock braced, I thought, for a barrage of new sensory data and impressions, expecting the unexpected insofar as that phrase has any meaning. Which is not much: I was definitely sideswiped by the smell.

It's possible to cut your nose out of your breathing circuit completely, and I did at once. But that aroma was just pungent enough to taste with the tongue, and there's no bypass for *that,* short of tracheotomy. I'd have stopped in my tracks . . . if I had not been so busy bracing my brain for new impressions that I'd neglected to have the more useful portion of my body maintain a hold on the airlock door. Having thus committed myself, I kept on sailing forward, with the stately inevitable grace of a runaway hospital bed on ice, until I crashed into a naked bald man.

I'm a colonial. We maintain some conservative (public) attitudes about sexuality, by contemporary System standards, but at the same time, being on the frontier we tend to be somewhat more practical and matter-of-fact than most Earthlings are about nudity. It was the bald part that startled me.

Thanks to the unnamed ladies who did us all the favor of tearing the Prophet into little bloody gobbets and bits of bone, it is finally once again permissible to do biological research, so happily all baldness is voluntary today, and is not a popular choice. And extremes of body weight are becoming so rare, one body looks much like another from a distance nowadays—so why would a man who spent time nude choose to shave off his only visual identifier? Was he antisocial? Or just self-effacing?

Neither. "I know exactly what you're thinking," he said, and managed to brake us to a halt without sending either of us drifting. His speaking voice was just audible, despite our proximity.

I became aware that I was holding him in something very like a lover's four-limbed embrace, and forced myself not to flinch. I was the stranger here, he was my host. But I hoped our sexual orientations matched. "So?"

He let go of me, again without setting me adrift. His expression was no clue at all. "You're thinking, if it smells like this after only a few months of occupancy, what is it going to smell like in twenty years?"

I had to admit I had been on the way to formulating that very thought when I'd crashed. "Right in one."

"And the answer is, in far less than twenty years you will be prepared to swear, truthfully, that this ship has no smell at all, other than local cooking and your wife's perfume." Once again, his voice was just barely as loud as it needed to be.

I wasn't convinced. But I didn't need to be. "What is it I'm smelling, exactly?"

"Us," he said simply.

I tentatively half opened a nostril, and frowned. "I know what people smell like, what a ship smells like, and there's more than that here."

"You know what Ganymedeans smell like, and Terrans in a limited portion of a third of its northern hemisphere. This isn't just *everybody,* it's everybody all *together.* And more of 'em than you've ever been shut in with before. Terrans from all over that varied planet, Loonies, O'Neillers, Martians, Ganymedeans, Belters—all at the same time, in combination. Fewer than two dozen times in history have all those smells been mingled, in large amounts—and the other ones have left the Solar System already"

"Oh."

"No one group's smell is intrinsically better or worse than any others', and you might very well find the personal body odor of an individual from just about any racial, political, or social group aboard perfectly agreeable to you. But put them *all* together, in one place, and ancient instinct makes you uneasy. Think of it as one of the last remaining traces of our physical predisposition to xenophobia and racism. Like the appendix."

I had never seen anybody real talk for so long without even momentarily developing a facial expression. "I hope you're right," I said politely.

"Also, the two decks immediately above this one are both agricultural decks. We're sort of in the bilge of Noah's Ark here."

"I apologize for crashing into you."

He shook his head—slowly, the way one does in free fall. "All you did was fail to realize you would need someone to catch you, and that was so close to inevitable that I was waiting there specifically to catch you. Shuttles are always overpressured: *everyone* comes sailing in the door. Apology respectfully returned unopened."

I shook my own head even slower, to underline the point I was about to make. "You don't understand. I was *born* in free fall. I could at least have docked more gracefully"

He nodded, even more slowly. Was that a twinkle in his eye? Or a tic? "Ah," he said. "In that case, you *are* a dimwit. And an oaf. But you can't help being either one; so apology is still unnecessary. Come with me, please."

And as I gaped, he turned over, grabbed a rung on the wall with one hand, and jaunted off down the corridor, at a pace suitable for dimwits and oafs.

In my embarrassment, I nearly mortified myself completely by bleating out "Wait!" like some fool groundhog. To say "wait" to someone who has just jaunted away from you in zero gee is basically as sensible as saying it to someone who just stepped off a roof: barring unreasonable effort, they're *gone.* Barely in time, I managed to end the "W—" with "—hat about my luggage?"

"You'll never see it again," he called back without turning around, just loud enough to be understood, and continued to drift away.

I realized to my dismay he had left me stationary. That's not supposed to be possible in free fall, and I suppose technically I must have had some sort of vector, but I could see it wasn't going to close the half-meter gap between me and the corridor wall anytime soon. I had no thrusters, or even wings.

It turns out you *can* swim in air, if it's thick enough. But not well at *all,* and definitely not without looking like a dimwit and an oaf. By the time I got one hand on a rung, he had receded so far there was great temptation to complete my disgraceful display by flinging myself after him too hard, the classic newbie mistake. Instead I carefully set a measured pace, just faster than his own, and settled back to—

He stuck out his arm as if signaling a turn, grabbed a rung—zip—made an abrupt turn in the direction I was falling right at the moment, and disappeared.

When there's nothing else you can do, breathe slower. There's no way it can hurt, and it might help. Long before I reached that rung which I had failed to spot as larger than the rest and therefore a corner rung, I had calmed down enough to find at least a few small items to place in the This-Might-Not-Be-So-Bad column.

If it was possible to swim in air *at all,* then the air pressure in this dump was considerably better than that in the low-budget liners and the one military vessel I'd previously traveled aboard. Which explained why smells were more pungent than I'd expected . . . but also promised that the food was going to *taste* as good as it did on Terra. Presuming, that is, that it started out that tasty.

If you've never experienced anything other than Terran normal pressure, I may need to explain that. Most Terrans don't seem to realize more than half of what they think of as their sense of taste is actually their sense of smell. This confusion becomes clear the first time you eat something you like in lower pressure. Federation military standard pressure is just barely good enough to appreciate superb coffee. Aboard an economy liner everything pretty much tastes like varying consistencies of warm cardboard or tinted water, and you can chew Red Savina habarieros. (Half a million Scoville units.) Economy passage on a luxury liner, I'm told, gets you warm spiced cardboard and *flavored* water. I had tolerated both ends of that spectrum, without too much difficulty—

—for the length of an Outer to Inner System hop, most conveniently measured in weeks! Twenty years was going to be a decidedly different matter. It was nice to know I would not spend my first weeks on Brasil Novo weeping with joy at the rediscovery of garlic—of any spice subtler than Scotch bonnet peppers. (A mere third of a million Scovilles, tops.)

Very nice, really. I conceded to myself as I jaunted along that I was in rocky emotional shape, and in need of consolation. And my father had once told me nothing consoles humans like gratifying our appetites. And a good half of my own total appetites were of no further use to me—I was done with women, for good and for all time. Food, music, and good books had damn well better be enough to fill in the hours, because there were going to be roughly 175,000 of them to fill.

There, that was another good one for the Not-So-Bad side of the ledger: thicker air means better sound. And more wind! The music here would be good. Well, as good as the musicians, anyway.

The corner rung was approaching—on my left, now, since I had rolled over while in trajectory. I put some care and effort into my pivot turn, did a *lovely* job, and immediately crashed into the naked man again, this time from behind, and upside down. If you can't work out where that placed my nose, good. And never mind.

Of course he had stopped and waited for me to catch up. Far enough away for me to stop in time, too—if I had happened to round that corner at a more prudent speed, while paying attention to where I was going.

"Excuse me," I said. It came out somewhat muffled, and nasal, with a small echo.

"I do," he said, and jaunted away again, leaving me drifting ever so slightly after him in his wake this time.

Fortunately I was near a wall this time. I blinked, wrinkled my nose, and jaunted after him. Again I matched speeds, and this time we were still within conversation distance, sort of. "I'm Joel Johnston," I called.

He precessed to face me without disturbing his trajectory "I'm surprised to hear that," he replied softly.

"Huh?"

"I'm surprised to hear that," he repeated, perhaps a decibel and a half louder.

I'm surprised *I* hear it, pal. "I meant, why is that?"

"The First Officer told me to meet a Joel Johnston at the aft airlock." And you did. "And you did meet Joel Johnston."

"And at the aft airlock, too," he agreed. "That's why I'm surprised." Should I ask why? No clue on his bland face. "What did you expect?"

"This is the *Sheffield,"* he said. "Naturally I expected to meet a Joan Johnson at the midships lock. I only came here first so I wouldn't confuse you by being on time. Naturally I ended up confusing us both—so symmetry is restored." I was pretty sure that was a twinkle in his eyes. But it could have been a detaching retina. Or lunacy "I'm pleased to meet you, Joel. I'm George R Marsden."

We were starting to pass other people in the corridor, a few at least. All of *them* had clothes on. All of them ignored us, busy with their own affairs, or possibly their own business. "Glad to know you, George."

He didn't wince or frown, exactly, but the twinkle in his eyes guttered. "I prefer George R."

File for later. "Of course, George R. May I ask what you do?"

Again, poker-face delivery. "I am one of the ship's six Relativists."

I'd reached boggle point. I couldn't stop myself from blurting, "*Pisam ti u hrvotoh!"* Well, it should have been safe enough. And his expression still did not . . . well, come to exist. But somehow I knew I'd poo'ed the screwch. "Let me guess, George R: you're part Croatian."

He nodded. "I have the honor to be descended from the family of Nikola Tesla's mother."

I was weary of apologizing, and even wearier of needing to. "No offense. My mother was part Croat, too. It's usually a safe language to swear in. There can't be enough of us left to keep a newsgroup alive."

"I understand, and realize you did not mean the expression literally, but merely as an ejaculation of surprise." His eyes twinkled up again. It wasn't quite a facial expression, but it did hint which one he might have worn if he'd gone in for them. "Ironically, it is in fact literally correct. By the end of this journey, we will all end up pissing in one another's bloodstreams: the system depends on it."

I couldn't help laughing.

And at last his face came alive: he laughed. It was a pretty good laugh, too, clearly the with-you rather than at-you kind. "Oh, good," he said. "For a minute I was afraid you'd left your sense of humor in your luggage."

"Just my dignity."

"You'll fit right in," he assured me. "Don't worry: both dignity and luggage will catch up with you again, from time to time."

I wish to record that this time when he made a turn, I was paying attention, and turned with him as crisply and elegantly as if we'd drilled in this.

(I did *not* realize we had been traveling until then in a direction that would later come to be called "up," and were now moving horizontally again, on a deck much closer to the ship's nose than the one we'd started from.)

What I wanted to ask, of course, was, "Why is one of the six most important people aboard this tub herding newbies from the airlock to their cubic?" But it didn't seem polite. And I couldn't think of anything lesser I wanted to ask, just now. I mean, this guy was one of the six most impor—

"I know just what you're thinking," he said.

I didn't actually hear the last word, because a door chuffed open in the corridor behind us just then and drowned him out. But I knew what it was. I was destined to spend the next nineteen years being his straight man. "Okay, why are you, then?"

"Because this is the *Sheffield."*

"Of course." No, *what* is the name of the man on *second* base.

"What would have constituted weirdness would've been if they'd sent, for instance, one of your cubicmates, who actually *knew* where the damn place—wait, now, this looks right, something must be wrong—no, this is it. Let me catch you." He grabbed a rung just this side of a door (hatch, Joel, think hatch) with one hand and braked himself to a halt, while letting me use his other hand to brake myself. Somehow I ended up stationary in front of the hatch, with him beside it to my right.

The hatch bore the stenciled label "RUP-0010-E." Below that was a sign hand-painted in some ancient font, with rather good calligraphy. It read:

The 10th Circle: a band of dopes, all we who enter here.

George R released my hand. He was smiling again. "Doubtless this will be a disaster for you, since you came to it quickly. Just try to remember at all times the Prime Law of the *Sheffield."*

I don't know plays third base. "I am keen to know it, George R."

"No refunds."

"Ah."

He was drifting away before I knew he had eyes to go. "Satisfaction guaranteed, or you're screwed. Good"—and I'm pretty sure the last four syllables as he was passing out of earshot were—"bye, Joel Johnston."

But he might have said, "bye, Joan Johnson."

I found myself grinning after him. His sense of humor was drier than fossil bone in vacuum. And it's hard not to like a man whose only facial expression is a gentle smile.

Ah, that wonderful moment just before you meet new bunkmates. Like the moment just after you step off a roof, and just before you open your eyes and look down to see how many floors away the ground is.

Deep breath. Best smile. I palmed the door. After George R's buildup, I half expected it to shock me unconscious and call for the

Proctors. But it accepted me as a resident rather than merely someone unknown seeking to annoy one, and opened to me.

As it slid open, a faint cloud of pale smoke emerged and intersected with my face. Tobacco. I smiled, mildly pleased. I'm not a nicotinic myself, but I've always enjoyed having a smoker cubicmate. It's hard not to like that scent, especially in thick air.

It's going to be a while before the biological sciences really get back on their feet, but safe tobacco was one of their very first new fruits after more than a century of enforced barrenness. The Prophet repressed the weed so savagely that it became a mark of defiance, then a symbol of rebellion, and finally a way to identify other members of the Cabal. Now he's ashes, and cigarettes no longer produce them. As my father once said, the weed outlasted the Creed.

I could see the nicotinic was the only one present in the cubic at the moment, drifting near the center. It seemed an awfully small space for four people. Then contradictory clues resolved, and my perspective shifted. The room was fine. It was just that he was awfully large for a four-person cubic. Much better. I could always kill him.

I'd have to sneak up behind him with a pretty big chainsaw, though, and take him down a limb at a time. He was enormous. Between his mass and the copious white beard he looked like a Viking chieftain, or perhaps Santa Claus's big brother. The latter impression was strengthened by the eyeglasses I could see he wore. People who do that are usually writers or visual artists of some kind: most normal people with astigmatism are willing to risk surgery with a failure rate of about one percent. At worst you need eye transplants—what's the big deal? He wore classic jeans and a baggy blouse with elbow-length sleeves.

As he rotated lazily the front of him came into better view and I saw that he was typing on air, and a hologram glow unreadable at this angle was keeping station with his face. A writer then, I surmised. He kept rotating until he should have seen me, but didn't, and kept typing furiously. Definitely a writer. I hoped he was a poet. If you threaten one with death, and mean it, they always stop. Then he rotated to where I could see his hologram from the back, and my heart sank. It was way too far away to read, even if it had not been backward—but even from here I could see it was properly formatted text, with consistent margins, nothing centered, and words arranged in paragraphs that began with indents. It was about as bad as it could be: he was a novelist.

I think I made a small moaning sound. His eyes refocused past the holo and locked on to me, and the holo vanished. His hands drifted at waist level, but somehow less like they were poised over an invisible keypad, and more like they were poised over the controls of an invisible weapon.

"Johnson," he called.

I shook my head. "Johnston," I corrected.

He shook *his* head. "No," he insisted. "Johnson."

"I'm pretty sure," I said.

"I'm positive," he said.

I closed my eyes and opened them again. "One last time: *who's* on first, *what's* on second," I said.

He frowned thunderously "I don't understand you."

"My point exactly. Let's start this routine over from the top, and see if we can identify just where gangrene set in. Ready? *Straight man:* Say, who's that handsome bastard floating outside the doorway? *Talent:* Joel Johnston, junior agronomist. Honest, I really am."

His brow and hands relaxed. "You got a corrupted copy. My script reads differently. *Dipshit*: Say, whose work am I interrupting? *Talent:* Herb Johnson, the writer. Dishonest, but I really am."

Light dawned. We had been talking at cross-purposes. "Glad to know you. Which one am I, again?"

"The other one. You coming in? I'm losing smoke."

I was starting to enter when the choice was taken from me. Three men arrived behind me, all talking loud and fast, and I found myself swept into the room before them. I grabbed the nearest handhold, which turned out to be what would be an overhead light once we were under acceleration.

The loudest voice was holding forth on English history I'm pretty sure, though I don't know which period. "—that not many people realize is that the Dukes of Hazzard used up nearly three hundred Dodge Chargers."

"So it wasn't a total loss, then," one of his companions replied. "Right. And who is this before me?"

"Johnston," I said.

He shook his head. "Close. Johnson. And who are you?"

Herb and I exchanged a glance. "My name is Joel Johnston." "He's the new guy we heard about," Herb said.

"Ah," said the third arrival. "John's *ton*. You are him, plus T."

"Actually," Herb said, "he's me, minus coffee." He turned to me. "It's going to be a long twenty years, isn't it? They've got *me* doing it."

"Welcome to Rup-Tooey, Joel," the second newcomer to speak said to me. "Home of the Lost Boys. I'm Pat Williamson, one of your new roommates."

We did the free-fall equivalent of shaking hands: approach, squeeze both hands briefly, release. "Hi, Pat. Why do you call it Rup-Tooey?"

The history expert snorted. "Because he's a phlegm-ing idiot."

"You saw it on the hatch," Pat said. "Residential, Unclassified Personnel, cubic 0010-E. RUP-0010-E . . . Rup-Tooey."

"Ah." I could think of nothing to add.

"That's your bunk over there. You'll have to tell me all about yourself."

"I'm sure there'll be plenty of time to talk," I said politely

"No, I mean you'll really have to tell me all about yourself."

"Professor Pat is ship's historian," the third arrival explained. "Thinks this makes him biographer. I tell him is dangerous: he should let sleeping bags lie. But he is encouragable. Glad to please you, Joel. Well come on the board of *Sheffield."* He pronounced it like "shuffled." "Am Balvovatz, of Luna. Am miner."

"He looks like an adult," the loud expert on ducal matters said. "They age fast in Luna."

"Give to me a fracture." Balvovatz glared at him, and turned back to me. "Balvovatz mines. In *mine.* You got rock, give you ore. You understand?" I managed a nod. "So when *Shuffled* reach Immega 714, am big shoot. Till then, like teats on male person: no more use than historian or writer. That is why slum here in UP dump with you bowl budgers."

"Dole bludgers," Williamson corrected gently.

I had to admire his restraint. And his optimism in even trying.

"I think I see," I said. "A pattern begins to emerge. How about you?"

I asked the loud expert. "What's your line? Horse whispering? Weatherman?"

It is difficult to smirk without being offensive, but he managed it somehow "I'm a Relativist," he said. "My name's Solomon Short."

My mouth slammed shut. I had just met my second wizard, in my first half hour aboard. And this one I had actually heard of. Maybe you have, too. That arrest record.

He was smirking at *himself,* that was why. "Yeah. You remember the headline they all used. *Short grounded.* They loved that one. I keep meaning to bisect a baby; they'd all die of biblical ecstasy. *Solomon subdivides tot.* Unfortunately I haven't been able to locate a donor. Was your father—?"

"Yes."

He nodded and stopped smirking. "Well chosen, sir. May I ask your own line of interest?"

It was diplomatically asked. Most people said, "Are you a physicist like your father?" and thought themselves tactful because they hadn't said "great physicist." So instead of giving my standard deflective response ("I'm involved in pneumatic generation of sequences of higher order vibratory harmonics designed to induce auditory maximization of local endorphin production"), I just told him, "I'm a composer and musician."

He smiled—no smirk component at all, this time. "This voyage has just become distinctly less intolerable. And what is your axe?"

"Saxophone."

Now he *beamed.* It made him look like a cherub who you do not yet know has just lifted your wallet. "Which one?"

"Well, since they didn't count against my mass allowance, I brought the standard four. Soprano, tenor, alto, and baritone."

He shivered with joy. "I often wish I could manage to make myself believe in a god, but hardly ever so that I can *thank* him for something. Welcome aboard, Maestro."

"You haven't even heard me play, yet."

He nodded. "And the agony is delicious. I'll leave you to sett—oh, my word! I don't see them!"

"What?"

"Tell me you didn't entrust your instruments to your luggage?"

"I didn't have any oth—"

"Don't panic yet!" he cried, sprang for the door so fast it barely had time to iris out of his way, and used both hands to swing himself out into the direction of traffic. "There may still he time," his voice said as it dopplered away.

A hand closed on my shoulder. The bone held. "Do not worry, friend Joel," Balvovatz said. "A snitch in time saves mine." He let go before I would have had to scream, whacked me on that shoulder blade, and drifted away again. Somehow I retained my grip on the overhead light, but it took me a moment to stabilize again.

"He's right," Herb assured me. "It takes time to wreck luggage, and they always save the best stuff for last." "And they're all afraid of Sol," Pat put in.

"They should be," Herb said. "They're staying behind—so he doesn't need them alive."

"This is your bunk over here, Joel," Pat told me. "Right above my own. Unless you care to discuss the matter with pistols?"

"Knives better," Balvovatz said.

"Fine with me," I said. Once we were under way it would be the upper bunk on the right. "I've had a preference for the upper ever since figured out that farts are heavier than air."

He grinned evilly (I don't care what my spell-checker says, of course there's such a word. "In an evil manner"—okay?) "Not mine."

I carefully jaunted, in a direction soon to be known as "down," over to my bed, and docked with it. I'm not sure why, since I had no luggage or other belongings to secure. I guess just to symbolize taking ownership. It didn't wait to find out. The moment I grabbed it and started using it to brake my arriving mass, one of the two *(two?)* folding angle-braces intended to support it under acceleration tore right out of the plasteel bulkhead. All three bolts—and two of the bolts on the other support. The bed immediately rotated around the remaining bolt, about sixty degrees clockwise, and jammed to a halt against the top of the folded-up lower bunk. This left me dangling from the other end of it like a tyro, trying desperately to clutch bed as well as bedclothes and avoid the indignity of being thrown altogether. I never even noticed banging my face against the wall.

The shriek of frictionally stressed plasteel, and my scrabbling-rat noises, gave way to an omnipresent rather glutinous sound, which was like silence, but different. As I stabilized myself, I realized it was the sound of men not laughing.

I turned to face the room and made, very loudly, the sound of a man not murdering anyone, yet.

Pat Williamson pointed to a spot just "below" me. I glanced down, and in a moment realized that his own bed was *not* folded up against the bulkhead. It was duct-taped to it. His had torn out of the wall, too. I could see the bolt holes. They were *not* empty. Each contained a little shiny-ended bolt stump. All six had snapped off clean. I looked, and all five of my failed bolts were the same. I looked back to Pat, and raised my eyebrows inquisitively.

He spread his hands, palm up. He wanted to explain, but couldn't do it louder than he was not laughing at me.

Balvovatz took it. "Well come into *Shuffled,* Joel. Do not worry. Is warrantee. Air leaks out, just say so. Kang sends more from Terra."

Maybe my expression made Herb stop wanting to laugh. "There's still time," he said softly "You can still jump ship and go back down to Terra, if you're one of those fussbudgets who expects everything to work. It's not too late to be sensible."

I closed my eyes. All I could see was Terra . . . with Jinny's face. "Yes it is," I said. "Where's the duct tape?"

I later learned the bunk-support bolts had been specified by a Kang Cartel engineer, and supplied by a da Costa Associates subsidiary. Both halves of the financial Siamese-twin behemoth that was underwriting this little interstellar venture. The desk that wouldn't interface properly with my PDC or phone despite nominal system compatibility for the next two days was the other way round: da Costa design, Kang manufacturing. And the blame for the complex cluster of systems failures that combined to keep all my luggage *except* my four saxophones (Sol Short rescued them, somehow) from catching up to me for another two weeks was, I was eventually able to establish, divided up roughly evenly between the two houses.

Fortunately nudity was not taboo aboard the *Sheffield.* It was not commonplace either—but nobody got upset if I sat around the laundry room naked while waiting for my only set of clothing to dry, each day, or went to and from the 'fresher without a robe. (There were ship-issue jumpsuits and robes I could have had. I preferred skin. They were, visibly, the plasteel bolts of the clothing world.)

I did end up with a lot of time to reflect that most of the Conrad empire products I had ever purchased had worked pretty reliably. And I re tained just enough sanity to realize this was probably an omen of some kind, perhaps even an unfavorable one.

But I had told Herb the truth. It was way too late to change my mind. The center of my personal Solar System had turned out to be a dangerously variable star. It was imperative to break free of her pull, while I still could, and go somewhere else, far far away.

Seven

I only know we loved in vain-
I only feel—Farewell!—Farewell!
—Lord Byron

Jinny phoned two days later, about eight hours before we left.

Theoretically she should not have been able to. I'd contributed my phone to the ship's recycler on arrival, and gotten a new one—under a false name, using nonexistent credit, and paying a premium for a super-unlisted code. That account would vanish like a bubble when the first bill went unpaid, of course. But by then I expected I would no longer need one. I only needed it now to say goodbye to a few friends and acquaintances, and to dispose of my few remaining assets on Ganymede.

I *think* that might just have been good enough to foil, or at least slow, a Federation agent hunting me. Against a Conrad, it was a gesture. As I slipped in my earbead, I reflected that she could probably have called me five minutes after I'd activated the phone. Her first words practically admitted as much.

"Damn it, Joel, I admire your stubbornness. I really do. You've held out to the last possible second, I give you that. But we are *out of time* now. Stop this foolishness and come home, this fucking minute!"

I'd known this call would come. It wasn't surprise, even at the word I had never heard her use, that kept me from answering her for several seconds. It was just her face. There on the inside of my wrist, thumbnail sized, poor quality 2-D image. I had never seen her so clearly or so vividly.

She had never looked more beautiful. I wanted to eat my whole forearm. Her image cut off at her waist, but I could see the rest of her almost as clearly in my mind's eye. What blurred it a bit was that she was wearing an outfit considerably more expensive than anything I had ever seen her in. That realization restored the power of speech to me.

"I can't, Jinny. It's too late. We were out of time yesterday. The last boat has—"

"You idiot, I can be there to get you in two hours! How long do you need to pack your four saxo—"

"Bring me where, did you say?"

"—phones and your one spare—what?"

"Where exactly is this home you speak of? Certainly not your apartment. Some mansion in Nepal accessible only by copter? A secret village at the bottom of the Marianas Trench? A stealthed palace at L-1 or—no, why would you care about saving fuel—somewhere in space, then? Or perhaps a few kilometers below the apparent surface of Jupiter, there floats a—"

She overrode me by yelling, *"I deserve that!"* I was so surprised I stopped talking. "And I ask you to believe that I have already administered it to myself, and to trust that I will continue to do so, okay? You can kick me all you like, I agree I have it coming—but you won't be able to if I don't come get you and bring you back home, and even my window is closing!"

I shook my head wearily "I meant what I said. Where is 'home' for us? No place we've ever been. No place I've ever been. I don't think we even mean the same things by the word—or have any clear idea what the discrepancies are, either one of us."

"Joel, I didn't have any choice, why can't you see that? I *couldn't* tell you, not until—"

"I know that."

"You do? Then—"

"Jinny, we've never really met."

"We *can.* We *will* meet, and we'll love each other—we already know how—and the money won't make any damn difference, none at all."

I had to grab something with my left hand just then to keep myself from colliding with a bed: I'd been drifting free since her incoming call had caused me to lose my handhold on my own desk. I guess from her perspective it looked like I was turning away. "Joel, I love you!" she cried.

I started to regain eye contact . . . and paused. I found myself looking around my room. My cruddy little dump of a room, just a bit worse than what I'd have expected as a freshman at university, possessed of few and feeble amenities, shared with three other smelly hairy creatures. In a place where nearly everyplace smelled faintly like feet, and *all* the water tasted like a school hallway water fountain, and the food aspired to be two-star, and you always saw the same people. The *Sheffield* would in fact be remarkably like another nineteen years of our courtship as we had known it until recently. Freshman year of university, forever. The only thing the big tin can had to recommend it, really, was that it was going to leap the Big Deep—

I yanked the phone back up to my eyes. "Jinny, come with me!" Shocked silence. On both sides. I recovered first.

"Right now. Without a suitcase. Without a pot. If the money really doesn't matter, walk away—come homestead with me on the other end of the rainbow. I know you don't know how, any more than I know about your world—but I'll teach you. Trust me: it's a *lot* easier to grow potatoes than empires. It's more satisfying to get in a good crop than to play with billions of people's lives and fortunes. It leaves you time to make babies, and to pay attention to them, and to occasionally notice each other past the babies and make more of them. For God's sake, Jinny, you remember the song. Let's die on the way to the stars! Together . . ."

I knew exactly how stupid and romantic and naive my words were. I had never intended to speak them—aloud. They left my mouth with the force and honesty of vomit, but with the same despair as well. Without a particle of hope.

That was only born when a full second had gone by and she still had not answered yet. At birth, it was tinier than a lepton's shadow at noon. It took less than another second to grow into something large enough to choke on. I was beginning to worry by the time she broke the silence.

But the problem solved itself, when my heartbeat ceased. "God damn you, Joel, you gave me every reason to believe you were an adult. With a pair of balls, and at least half a brain. You *cannot* be this cowardly and stupid and prideful, I won't tolerate it. I've invested too much time in you! I'm coming up there, and I'm—Joel? Joel!"

My arms had gone limp with cessation of pulse, of course: she was looking at my left hip. Purely from reflex politeness I pulled my wrist back up. So then I had to say something, and thus began breathing again.

"Jinny, listen to me. Please. I honestly don't know if I have what it takes to be a Conrad, I admit that. But I don't know if *anybody* does, so I'm not at all afraid to find out. What I do know is, it's not something I *want* to be. I guess it seems self-evident to you that any rational man would. So you won't want an irrational husband." She tried to interrupt, and for once I overrode her. "If you think even your gran'ther has enough proctors and bailiffs to delay the launch of a Kang/da Costa Cartel starship by five minutes so you can arrest a junior apprentice farmer for breach of promise, you're being irrational yourself. Now, listen to this last part, and don't interrupt until I'm done, and then you can call me any dirty names you like until they light the candle in eight hours and reception goes to hell for a while. Okay?"

"Go ahead."

She was deploying her ultimate weapon and we both knew it: her voice was trembling on the edge of tears, and they were absolutely genuine.

My own voice tightened. "Jinny—Jinny Hamilton—you were my first love. You may be the last. You certainly are the last I will have in this Solar System. For what it's worth, I forgive you for not telling me who—what—you really were. I understand, I really do: you had no choice, no other way to play it. I am sorry, genuinely sorry, that you wasted your investment. Maybe *nobody* is as sorry as I am. I'm pretty certain I'm in the top five, anyway. All I can tell you is that the prospectus you were offered was complete and accurate in every particular. I answered every question I was asked. Honestly." I took a deep breath. "My own investments haven't done too well lately, either. Thanks for teaching me to dance, and listening to me play my music. Really. Good luck in your future investments. Maybe I'll see you in a couple of hundred years, and we can swap notes." Anything else to say? Yes—but all of it angry. Delete it. It was way too late for anger to serve any purpose worth the indignity "Your turn."

The pause this time was probably as long as the earlier one, but with no hope in it, it went by faster.

"Good luck, Joel. I really am sorry" She let go on the last word, cried so hard the screen image became a sideways closeup of her scrunched up left eye.

Somehow I held on myself. "I know, honey. Me, too. Really."

"Goodbye."

The phone was dead.

For some reason I was not. So I went looking for strong drink, and did the best I could. By the time we left the Solar System I was far from feeling no pain—I was probably in maximum emotional pain, and in considerable physical discomfort from being loaded in free fall —but I was momentarily too stupid to mind either. Terra sure looked pretty, shimmering there in the simulated window, and slow shrinking didn't spoil the effect at all. In fact, the smaller she got, the prettier she looked.

The same seemed to hold true for Mama Sol. She was prettiest just before I passed out, as a single pixel of pure white in a sea of ink.

We did not really achieve enough initial velocity for the sun to show detectable shrinkage, that first day: that last view was an effect of my vision graying out. A matter/antimatter torch is not something you want to start up quickly and max the throttle—certainly not in the vicinity of an inhabited planet! We left High Orbit under conventional fusion drive, albeit a hellacious big one. Even in my stupor, it seemed noisy.

Unsurprisingly, the menu of recreational drugs obtainable on board was considerably shorter and tamer than what I'd had available to me back in Vancouver. A man who wished to stupefy himself pretty much had to rely on alcohol and/or marijuana. They did the job, in combination.

But once you used your month's ration of either one it was *gone,* so the binge burned itself out faster than it might have if I'd had more powerful tools. By the time I had binged, crashed, died, revived, and been restored to feeble continued interest in events outside my own skull and thorax and indigestive system, the Captain had just throttled the fusion plant back from a space drive to a mere power plant, and things got much quieter again for a while. The sun looked just perceptibly smaller in disk size, there in my simulated window . . . and considerably dimmer than normal, even though all the other stars now seemed brighter than usual. I thought of trying to locate Ganymede by eye, to bid farewell to my birth planet, but it was already way too late; she was in opposition.

Within an hour, the Old Man had gotten the antimatter torch lit, and some noise and other vibration did resume, but by no means as much, or as loud. Or as unpleasant. Less like an ongoing earthquake, more like a waterfall, or rapids in a stream.

Then the sun's dwindling could be detected, if you had the patience to watch long enough.

I did. For far longer than made any sense I can explain. There could he no Key West sunset, no final Last of the Light. I knew that even by the end of my journey I would not have traveled so far that Sol's light could not still reach me. It would be old light, that was all.

And still I watched, until Herb came and dragged me off for dinner. I felt so weary, it was a noticeable strain to be back in normal gravity again, for the first time in so many months. Free fall is as addictively comfortable as the womb.

Three kinds of gentleman adventurers participated in the *Sheffield's* voyage. The real gents, senior partners, invested very large amounts of money, and remained behind at Sol System to see how it all worked out. Just below them were the limited partners, who put in considerably less money, but tossed their personal bodies and futures into the pot as well. At the bottom rung were the provisional partners, whose entire stake was their head, hands, and health.

Chumps like me.

My father died thinking he had provided well for me, because he had. But such provisions don't always last. By the time my orphan's allowance had run out at eighteeen, market shifts (as always, unexpected) had all but wiped out the value of the stock Dad had left me; I'd had to sell nearly everything to finance that last semester at Fermi. After that, I'd been pinning all my hopes on the scholarship that Conrad had blocked.

Now my only remaining assets were nominal: some shares in one of the very earliest starships—which had vanished in the Big Deep years ago. They were worth so little I'd instructed my guardian not to bother selling them; the income would scarcely have covered the assorted charges and taxes. They weren't worthless, quite: there was always the infinitesimal chance that the *New Frontiers* might be found and rescued one day. But no missing starship had ever been heard from again. Only once had they even been able to establish just what had gone wrong.

So I took my meals with most of the others, in Stark Hall, one of the ship's three mess halls, designed to accommodate up to a third of us at any one time with good solid unspectacular food, drink, and ancillaries, without charge. But for those who had the money and inclination, there were also alternatives. Such as the Horn of Plenty, the *Sheffield's* equivalent of an upscale nightclub, with four-star food and more expensive amusement options, open all three shifts.

I had not expected to ever set foot in the place, unless a live waiter's job should open up, but it was there that Herb insisted on dragging me for my last dinner in the Solar System.

I did try to resist. I had known several novelists, but none with even as much money as I had. "Herb, I don't know about you, but I can't afford this. There's an old PreCollapse blues song that goes, 'If money did my talkin'*I couldn't breathe a sigh—' and that's . . ."p*>

And my voice trailed off, because the next lines of the song suddenly loomed up out of memory and clotheslined me: "But my baby's love is one thing/even money can't buy/Ain't that fine?"

Herb said, "This meal is on me. You have almost nothing in your system but poisons and toxins. The food you take on to absorb it all should be of the highest quality"

"I don't know if I'll be able to pay you back."

"I know: you probably won't, and I'll get to hold it over you forever. Cheap dominance. Come on, it's right up ahead."

I stopped us at the door and tried to thank him, but he brushed it away "Sheer self-interest. I have to live with you."

They seemed to know him inside. As we were conducted to our booth, I had that weird feeling you get entering a place that's a little out of your reach, the irrational sensation that everyone is looking at you and can tell you're out of place, which is caused by everyone looking at you and knowing you're out of place. Herb had a way of walking as though *they* were out of place, but he was a broadminded man. Jinny had had it, too. . .

A dance performance was in progress on a cleared area of the floor, something classic-modern, I think, though I have trouble keeping the distinctions straight. I don't think ballet is ever done in silence. Serious dance, at any rate, not mating dance, and apparently very well done, by three energetic people a little older than me. They finished to thunderous applause as we crossed the room, and sprinted backstage.

I did notice a bandstand, an interesting one, just beyond the dancers' Marley floor. It was powered down at the moment, unoccupied, but it looked nicely equipped. The keyboard system was built into a very good replica of a Pre-collapse grand piano; it looked as though the player could produce "real," mechanically produced acoustic sound with the thing if he chose. The drum kit too could have produced reasonable accompaniment for most purposes even powered down. The stringed instrument cases I saw were all obviously for either acoustic or hybrids. I mentioned that to Herb as we were seated.

"You watch," he said, "pre-electric music is going to become very popular in this ship over the next twenty years. We all know deep down we're going to a place where we may not have power to spare for luxuries for some time to come. Subconsciously we're preparing. Brunch menus, coffee and orange juice for two, please."

I hadn't noticed the waitress approach until he spoke, and she was gone by the time I turned around. Yet I later learned she was human. "Brunch?" I asked, checking the time.

"In a restaurant that never closes, in a ship with three shifts, it's always brunchtime. Or dinnertime. Or midnight snacktime, or tea. You need serious food that doesn't challenge digestion; ergo, brunch."

The food was indeed wonderful. It penetrated my depression, forced me to concede to myself that I did have some interest in continued life, even if I had no idea why. I was continually conscious of a sensation of having gnawed off one of my feet to escape a trap, a pit-of-the-stomach feeling that wouldn't go away. But for some reason it didn't interfere with my appetite much, or even my mood.

Herb, I was very gratified to learn, was the kind of man who did not chatter over his food. Save for a handful of conversational politenesses, he used his mouth for intake only. It gave me permission to do the same. We already knew we were going to be friends. And there was going to be plenty of time to use up our conversation stores.

When he did speak, it was with a friend's directness. "So," he said, setting down his fork, "have you decided whether you're going to cut your throat or not? Inquiring minds want to know."

"No."

He relaxed slightly. "Yes, you have. You're not."

"I really hate it when somebody tells me what I'm thinking. Or are you a telepath?"

"As a matter of fact, yes, but not the way you mean. A real one."

I snorted. "Right. Your mind isn't fast enough."

In fiction, a telepath can read minds. A real telepath is just a glorified radio, with a single receiver. But *really* glorified—way faster than any radio. Our time rate and the System's were already diverging very slightly under the constraints of Einsteinian physics, and would get steadily worse for the next twenty years. Every day, radio and laser signals took just a tiny bit longer to cross the widening gulf between us, and by the time we reached our destination it would take them the greater part of a century. But telepathy, for reasons nobody understands, takes place *instantaneously,* across any distance yet measured. That single perverse exception to the laws of the universe, and the fact that the gene for it is dominant, make a star-traveling civilization just barely possible. Our ship, like all of them, carried several people capable of telepathic rapport with a partner back in the System, usually, but not always, their identical twin. With luck, their children would be able to maintain the link.

Herb was looking at me strangely.

At first, the way his jaw was squared off, and his eyes seemed to have receded deeper into their sockets, and his shoulders were slightly raised, all combined to tell me he was angry. That was odd. Then a second later I saw I had misread the signals completely: he was *amused,* trying his best not to laugh in my face. At something I had done in the last few moments, apparently. Or said ...

He saw me start to catch on, and let the laugh out.

"Are you *kidding* me?"

"Did you really think I was accepted into this company because I'm a *writer?* You figure a fledgling colony, fighting to stay alive and establish a foothold, has a lot of use for fiction?"

"You never mentio—"

"You never asked."

"Who—?"

"My sister Li," he said. "In Oregon. The one on Terra. Two hours a day, we handle message traffic between Kang/da Costa HQ and the colony, and we're available freelance for private communications."

"I never noticed you doing that!"

"How would you? I stare into space, and then start typing like crazy. It must look exactly like I'm writing a story. Sometimes I am, if what I'm supposed to type annoys me enough."

"Holy shit." I was so busy rearranging my presumptions and misconceptions in my head, I forgot I had not yet expressed an opinion. "I can't believe it."

"Believe it. I'm a telepath. A communicator."

His voice cued me. A lot of people are weirded out by telepaths. A *few* people call them the kind of names that cause a proctor to show up. He was waiting to learn whether or not his new friend and roommate for the next two decades was one of those people.

Quickly I said, "No, I mean I can't believe there's some poor girl back in the System who looks just like you."

His shoulders dropped. "Back to our argument—I was winning. How can you stay a bachelor? Have you no appreciation for fine womanhood? No sense of obligation—"

My mind took a left. Talking about Jinny and the Conrads had reminded me of something, a small burr under my saddle. An unfulfilled obligation behind me. "As a matter of fact, I do. Both. So much so that I'm going to presume on our friendship and ask you for a favor."

"What friendship?"

"I know, but it's all I've got. I want to send a private message back to terra."

He frowned. "Phone still works. So does mail."

"No, I mean *private.* I need to thank a young lady for defying her grandfather to help me out of a tight spot, and I don't want to risk getting her in trouble."

His frown deepened. "Just tell me one thing. Is this young lady rich and beautiful?"

"That's two things. And yes to both."

"Maybe there's hope for you yet. Okay, this once, I'll do it. You want visual, or just voice?"

"Voice is fine."

He shook his head. "Hopeless. Name?"

"Evelyn Conrad."

"How do you want to route it to her?"

"Through an intermediary I think I can trust. Can your sister put a really serious privacy shield on a message?"

"Yes," was all he said.

"Okay. Ask her to get it to a Dorothy Robb, two b's."

"Address?"

"Ms. Robb is the Chief Enabler for Conrad of Conrad."

Herb came as close as I would ever see him come to betraying surprise. His nostrils flared just perceptibly for a moment, as if he had begun to doubt his deodorant. His eyes did a funny little thing where for just an instant they tried to widen and narrow at the same time. There was maybe a quarter-second hitch in the soundtrack, and then he said, "I take it back. There *is* no hope for you.'

I spread my hands. "When did I claim there was?"

"You know a Conrad. Well enough that she defied . . . oh. Kindly tell me her granddad is not—"

I nodded. "Conrad."

"Of course. She defied Conrad of Conrad for you. And you're *here."*

"Herb, she's seven years old."

He smiled broadly. It had taken him about ten seconds to gear up and start enjoying this. "To be thoroughly sure. Say no more. Unless you want to live."

So I told him the whole damned story.

I'd always known I would, *some* day. It was going to be a long voyage. But not in the first year. I probably couldn't have told it yet to anyone who didn't listen as well as he did. He didn't mind if I needed a couple of minutes of silence to get a sentence completed.

When I was finished, he took a couple himself. Then he said softly, "Amigo, you're the first person I've talked to in this bucket of rust so far that actually has a sensible reason to be here. All right, you want little Evelyn to know you're grateful for getting you out of there, but without tipping the Old Man, have I got it?"

"Something like, 'I enjoyed the last moments of our relationship even more than the first,' maybe. Do you really think you can get that to her privately? Now that you know who she is?"

He closed his eyes, then opened them again. "Li says yes. She knows a way. You don't need to know what it is. It's covered."

"Thanks, Herb."

He lit up one of his cigarettes. "Well, at least the cord is cut clean. With Jinny, I mean. Seldom in history have any humans gotten to have a breakup as final as the one you've had. By the time we get to 23 Skiddoo in twenty years, she'll be . . . 108 years old, if she was honest about her age."

We were making a jump of about eighty-five lightyears—at such a hairraising fraction of c that the trip would seem to us to take twenty years, total. But back in the normal universe, clocks run faster, thanks to Dr. Einstein's Paradox. To an observer at, say, Tombaugh Station around Pluto, our voyage would appear to take roughly ninety and one-half standard years.

"Of course, with her money, she'll probably still look twenty, by then," Herb added. "But you'll know better."

"I don't want her old," I said bleakly. "I don't want her to suffer. I want her to be here with me."

"Happy to be your mate, even if you both starve on alien soil. Was she really that dumb?"

"Obviously not."

"You'll love again. I'm sorry to be the one to tell you."

I grimaced. "Not soon."

He shook his head. "It doesn't have to be too soon. You have twenty years to decide what you want in a wife. But don't put it off too long, either. The supply is limited, and you don't look like a man who'd be happy as a celibate."

"Don't be so sure," I muttered darkly.

"Look, you have decisions to make. Some short-term, some long-term. If you plan to spend the next twenty years licking your wounds, and letting those decisions make themselves for you, you're going to be a tough friend to have. I suggest you get started working on them."

"Decisions like what?"

He leaned back in his chair. "What do you want to *do?"*

A perfectly simple, sensible question: the logical first step in making any plan.

He might just as well have whacked me in the forehead with a plank.

I did not really see a burst of bright white light, and then find myself on the ground beside my horse, godstruck. The earth did not literally tremble and roar at my feet. My heart probably did not actually pause, and I have it on good authority that time did not, at any time, in fact come to a stop. But Herb's perfectly obvious question hit me with that kind of impact. He and the room went away while I tried to cope with it.

Surely, I thought, I have an answer for him. But I could not find one. I rewound mental tape and realized with shock that I had not asked myself that question once since the night of my graduation from Fermi.

Throughout all the terrible days since, I had been focused intently and exclusively on what I did *not* want to do.

Well, *that* had been silly of me, hadn't it? Now that I was finally and forever safe from the terrible danger of becoming one of the richest humans alive, married to the girl of my dreams, perhaps it was time to give some quantum of thought to what I might find preferable. If anything.

Great blathering mother of morons, what was I going to *do* with the next twenty years? Or the twenty after that, if it came to it?

Herb was saying something. Why did I know that? Oh. He had touched my hand to get my attention. I rewound my ears. "—don't have to come up with an answer right this minute," he had said.

I wasn't absolutely sure I agreed—but just then I heard my name called. It was Solomon Short, in a larger nearby booth with three companions. He waved emphatically to us to come and join them. I looked to Herb for help, and he shrugged, so we got up and went over to the other booth. Sol's companions slid over to make room for us, while he made introductions.

As I'd guessed, his friends were all Relativists like him. I had now met five of the six people on whom our whole voyage depended. Nearest me was Tenzin Hideo Itokawa, a tiny man whom I learned later was a Zen Buddhist monk; then, I got only that he had twinkling eyes and seemed to lack vocal chords. Between him and Sol was a hearty and voluptuous woman named London McBee, who turned out to be married to George R Marsden, the Relativist I'd literally bumped into in my first seconds aboard. She and Sol volleyed with words, vying to outpun each other. But the most striking of the three was clearly the man on the other side of the table, Peter Kindred, and for the life of me I could not decide why.

There was something electric and sheepish about him, that's the best I can say it—he gave off the disconcerting sensation that at any moment he was likely to switch from talking to quacking like a duck, or barking like a dog—that at any given time there was utterly no way of telling what he might take it into his head to do—and that at the same time, he was just a little embarrassed by it. It was more than just mad eyes, though he surely had those. His name seemed ironically chosen; he had "Loose Cannon" written all over him. Sol and London both seemed to find him delightful.

I was overawed. Most of the ship's power, literally, was seated at that table. I'm used to famous people, even great people. This was different.

In a pinch, the *Sheffield* could have gotten by without her captain—but her Relativists were *essential.* These men and woman spent their days reaching into the cosmic vacuum with their naked organic brains, and persuaded it to yield up its inconceivable energy in a measured fashion.

I realize that description has about as much meaning as saying that a nuclear fission plant works because the gods breathe upon its mojo in such a way as to cause it to be far out. One of my hopes, as I sat down, was to perhaps solicit a better explanation from one or more of the Relativists I was privileged to talk to. But I got off to a bad start.

Things went fine at first. Sol introduced his companions to us. Then he introduced Herb to them, giving them a two-sentence thumbnail bio. Then he introduced me—and that's where it went sour. His second sentence for me began, inevitably, with, "His father was the—"

But by the second word, Peter Kindred had gone berserk. He kicked his chair over backward with his butt, leaped backward over it, landed several feet away in combat crouch, making finger gestures to ward off evil.

At me.

I opened my mouth—

"SHUT UP!" he screamed.

I blinked.

"Not a word! AIYEEE!" He averted his gaze. *"No facial expressions!"*

I looked at Herb, then Sol, then everybody else, without finding anything I could use. I decided I needed to leave, started to rise.

He screamed, hopped back a pace, and snatched a plate from someone's table, holding it like a cream pie in an ancient comedy "Back!" he shrieked. "You lunatic! Are you crazy? What the fuck are you trying to *do* to me?"

I shrugged. I had to: it was all he had left me.

It was the last straw; He shut his eyes, made a strangling sound, turned, and left the room at high speed. Taking the plate with him, despite loud protest from its owner.

"Don't mind Peter," Sol said imperturbably

"He's terrified of Centipede's Dilemma," said London.

"Ahhh," I said. "Of course."

"He's rude," Herb said.

"No, no," I said. "I think I actually get it." And after I explained my thinking, they agreed that I did.

Without its Relativists, no starship can operate its primary drive, open the Ikimono Portal into the dark energy universe. Not without becoming a Gamma Ray Burst in short order, anyway.

That monstrous engine of mass creation had not been invoked, yet, and could not be until we'd gotten a little farther away from Sol—but without it and its kind, most star travel would have been impossible, and the rest would have awaited the development of suspended animation to accomplish. And thanks to the Prophet's distaste for fiddling with God's allegedly clear intentions, safe suspended animation still seems to lie as far in the future as it did centuries ago.

Thanks to Relativists, though, mankind finally had a drive that could really take it to the stars, within normal human life span. The only problem was that, countless generations of folklore to the contrary, the relativistic engine really was the first engine ever invented that literally required the constant attention of a human operator to function: the Relativist. Somehow, an organic brain was able—some organic brains were able—to ensure that every time Doc Schrbdinger opened his box, what came out was a live cat. Even if none had been in there to start with.

The last I'd heard, the entire Solar System held something less than two hundred humans—out of dozens of billions!—who had the necessary combination of talents, skills, attitudes, and education to perform that task reliably. More than half of them, I had read, wanted to do something else. The rest probably commanded a higher salary than Jinny's father.

When the mathematician/poet and Soto Zen Buddhist priest Hoitsu Ikimono Roshi (whose name means "life," "living creatures," "farm products," or "uncooked food") discovered the first practical star drive in 2237—or perhaps was merely the first such discoverer to survive—he thereby created the profession called "Relativist." The best definition ever offered to the layman of what a Relativist does is (naturally) the Roshi's: he said they meditate on and with the engine, in order to make it happy enough to function.

He held back the part about how they dissuade the star drive from becoming a star . . . until humankind had invested heavily in star travel, both economically and emotionally. Fortunately that did not take long: the Roshi's only significant character flaw was reluctance to keep a joke to himself. (A great pity: it finally killed him . . . a joke he must have loved.)

Technically one could argue that Relativists should be called relativistic engineers. Without them, no engine; *res ipse loquitur.* But as it happens, the term "engineer" is already in use—by people who find the very kind of science that relativism requires to be witchcraft, spooky science, mumbo jumbo, perhaps even hocus-pocus. To them, it stops just short of being that most despised of all modes of thinking: a religion. The very first word in its technical description ruins all hope of conversation, sets engineers' teeth on edge, and makes all the hairs bristle at the backs of their necks.

Quantum ramjet.

The quantum ramjet relies on the well-established theory of quantum fluctuations in the energy of the vacuum. These occur throughout the universe on extremely small scales of time and distance. Over times on the order of 10^{-15} second and lengths of about 10^{-55} centimeter, masses as high as 10^{-5} grams and energies as large as 10^{-6} ergs pop in and out of existence interminably. Conventional physics supports this picture, but it is an entirely different matter to make use of vacuum quantum fluctuations to propel a starship. A quantum ramjet, first proposed by H. David Froning (an engineer!) back before the Collapse, would work by "ingesting" the energy of the quantum fluctuations and converting it to propulsive energy. If the quantum starship could tap only a very tiny fraction of the theoretically available mass/energy of the vacuum, it could accelerate rapidly to relativistic velocities. But until Ikimono Roshi tried visualizing something in his mind, as he sat zazen in his ship in the Belt one day, and found himself half a lightyear from home before he could stop doing it, no one had a clue how this might be accomplished. It almost certainly never occurred to anyone before then that human attention might be a necessary condition for the phenomenon. It was fortunate indeed that Hoitsu Ikimono *was* a Roshi—a Zen master, for whom sustained attention was a given—or he might never have made his way back to Sol to spread the news.

The philosophical implications of the quantum ramjet alone are startling. If, as the inflationary theory of cosmology mandates, the universe evolved from a quantum fluctuation that somehow grew to its present enormous scale, the same thing might occur as a matter of course in the heart of the quantum ramjet. Does each quantum ramjet create and destroy countless universes as it travels our cosmos, and are their crews as gods to the countless beings in the universes that support their flight?

The engineers have already left the room to vomit. And I can't really say I blame them. But who knows? You, maybe?

To an engineer, it's simple. If you can explain what you're doing in numbers, and prove them, it's science. If you can't, it isn't. End of story. There is much to recommend this view: it is essentially what keeps the black heart of the Prophet rotting in his stained coffin where it belongs. And any Relativist will happily admit she does not know how she does what she does. Nobody does. It's not at all certain, in fact, that anybody ever will.

One thing is generally agreed, however: the man who had so far come *closest* to providing an explanation—who had at least provided some useful mathematical tools for approaching the problem, and pointed out a promising theoretical path through what had been an impenetrable thicket, was a Nobel prize-winning physicist from Ganymede named Ben Johnston.

My late father.

No wonder Kindred was terrified of me. Kindred did not want even the slightest morsel of understanding of the process by which he made himself one of the wealthiest individuals alive to creep into his mind. The thing that most Relativists fear the most is burnout: utter annihilation of personality. Not Kindred. He might even have yearned for it a little. As London had said, he was terrified of the Centipede's

Dilemma. Once the centipede got to pondering just how he managed all those legs, he couldn't do it anymore. Kindred feared that if he understood what he did, he might stop being able to pull it off. For all he knew, my father might have told me some significant datum before he died, shared some crucial insight that I might be stupid enough to blurt out, whether I understood it myself or not. The risk was tiny, but to him the stakes were everything. So he averted his eyes and fled.

An engineer would call that raw superstition, primitive bullshit, childish magical thinking. But nobody cares what an engineer thinks about this topic, until he can make a big can full of people move at close to lightspeed without carrying any fuel for its primary drive. So of course they're working on it, and good luck to them.

But I can't think of any engineers I'd have been as excited to talk with over postprandial coffee as the three Relativists who remained at the table.

Nearly at once, and without warning, I found myself skateboarding right off a conversational precipice.

One minute I was enjoying the ride; the next, I looked down and saw, kilometers below, the rock-strewn base of the cliff I had just left behind me.

Why it took me by surprise, I cannot tell you. I admit it: in retrospect, I look dumb. How smart would I have had to be to guess that one of the very first polite questions to be directed at me would be:

"And what do you do, Joel?"

Now, *where* did I put that parachute?

It happened to be London who asked. The correct honest answer was: it *sheets the bit out of me.* I hadn't even had time—during my walk here from my room—to draw up a master list of my options, arranged by category, much less zero in on anything. What I did these days was mostly get loaded, and mourn my lost love. It seemed to be all I had been doing, for quite a while now.

I kind of did not want to tell three of the most interesting people on the ship that I was that big a fool. But I had no other answer to give them.

Technically I could have said, "I'm a farmer," without perjuring myself. I had contracted, as part of the price of my ticket, to spend twenty-one hours a week working down on the *Sheffield's* Agricultural Decks, sharing my putatively valuable experience and expertise in hydroponic farming. Somehow I didn't feel like going with that answer, either.

I am no longer sure, but I think I had decided on an enigmatic smile as my best response, when Sol answered for me. "You're going to love it. Joel plays the sax."

"And composes," Herb amended for me.

I opened my mouth

"How wonderful," said Hideo the little monk.

I closed my mouth

"Saxophone? Oh, I *do* love it," London said. "Are you any good, Joel?"

That one, at least, I had numerous stock answers for on tap. I tossed out the first one that came up. "I think so. Being tone deaf, I've never been sure."

"Sol?"

Sol shrugged. "I haven't heard him play yet."

"Herb?"

Herb shrugged, too. "Hasn't played a note in my hearing yet either. Stingy bastard."

"Nonetheless I am prepared to bet cash he's very good," Sol said.

"On what basis?" Hideo asked.

"I've examined his instrument closely. It is the saxophone of a man who loves it dearly, and is loved in return."

I stared at him. "You can *tell* that?"

He just nodded.

"Well, we simply have to hear you, then," London said. "Solomon, do you think the management would have any objection if we were to send for Joel's instrument and ask him to play for us, here? Failing that, we could adjourn to my cabin."

I took advantage of the discussion that ensued to think, hard and fast. I was on the edge of being committed, to something I had not chosen. Lately.

Playing sax and composing music *had been* what I did, once. They had been just about all I did, aside from thinking about Jinny. They and she had together constituted what I was, what I wanted, what I was for. Together. It had been a long time since had thought of a future as a composer without finny as part of the picture.

Maybe when all the dust settled, and all the fallout faded to endurable levels again, I would still—or again—want to be a composer/ musician. I had to admit, in fact, that it was highly likely. What the hell else was I qualified for? What else did I love nearly so much? (Don't answer that one.)

But I had not *made* that decision yet. That had been the old plan, for a universe that had Jinny in it.

And more than just that, I suddenly realized with dizzy shock—it had been a plan for a universe that had the entire existing musical establishment of the Solar System as part of the given. All the other musicians, critics, and composers, all the vast potential audience, all the sources of funding, all the supporting institutions. In a society of many billions, composer is an honorable and even sometimes honored occupation. With a target audience that huge, one need not reach all that many of them to earn a living, and respect. Now that I was going to be living, forever, in a society of five hundred people and their offspring, everything needed to be rethought.

Another not inconsiderable point: I had hired on this tub as a farmer's helper. The Colonial Council might decide to hold me to it, feeling that the colony needed shit shoveled more than it needed sax played, and until I could afford to put up enough credits for at least one Basic Share, they had as much say over my time as I did. The prudent man would divide his time between the hydroponic farm, and whatever would bring in the highest possible return in the shortest time—which did not describe sax playing in any known universe. Not even the currently most popular kinds of sax music . . . which were decidedly not what I wanted to compose.

If I did not speak up right now, these folks were going to accept me as a composer/musician. That would be awkward down the line if I ended up concluding that my life was best spent as something else altogether.

What else? I hadn't admitted it to myself until now, but what I had always been *second* most interested in, after music, was history, particularly PreCollapse history. Terrific. If anything, history was even less use than serious music, to a frontier society. If, after a long day in the fields, my hypothetical descendants had any curiosity at all about the planet the Old Farts were always nattering about, they would be more than satisfied with the copious data we already had aboard, and any new historical fact I could ever learn would already be over ninety years old back on Earth, already chewed to death. The Libra colony would one day be interested in its own history—presuming it survived—but not until at least two generations after we landed, which itself was decades away.

Okay, Joel, don't think about what else, now But start backtracking, *right* now . . . right up to the point where you'd have to commit to some other track. Otherwise you may spend the next twenty years being thought of as the composer who couldn't cut it.

"Sol and Herb spoke a little hastily without realizing it," I heard myself saying. "Music is what I *have* done. I'm not certain it's what I will do now, aboard the *Sheffield.* Or when we hit dirt at Brasil Novo either, for that matter. I'm still giving that thought."

"What other areas interest you?" Itokawa asked.

"Well, I've always wanted to try space piracy," I said.

"A step up from musician," Sol agreed drily

"Or perhaps dowsing."

London whooped with laughter, a bracing sound. "Yes, I imagine aboard a ship would be a good place to learn how to locate water. You could check your answers without having to dig all those pesky holes."

I smiled back at her. I wanted to banter with her, but also wanted this part of the conversation over as soon as possible. I had given just enough comic answers to hint that a serious one would not be forthcoming.

"You will find your path," Itokawa said. He sounded a lot more certain than I felt.

"With luck," I agreed. "Speaking of things we weren't speaking of —"

But I didn't have to manufacture a subject change, because one presented itself just then, my axe. The decision to send for it had apparently been made while I was deep in thought. Nothing for it but to play now.

But first they all had to ooh and ah, of course.

I had brought four saxophones with me, actually: soprano, tenor, alto, and baritone. (Musical instruments did not count against personal weight allowance.) But someone, almost surely Sol, had sent for my personal favorite, the one I considered my primary axe: Anna, a genuine Silver Sonic—a PreCollapse Yanigasawa B-9930 baritone, solid silver with a gold-plated hand-engraved bell and keys. The Selmer is more famous—but how often is the most famous really the best? Anna is a thing of beauty even to a layman, so elegant and precise you'd think she'd been finished by a jeweler ... and a special joy to play for those who can handle her. Featherlight keys, lightning-fast response, tone-boosted resonator pads . . . never mind, I see you yawning. Let it stand that three people who spent their working days contemplating the infinite beauty that underlies the universe thought her special enough to admire extravagantly.

Even before they'd heard a note.

The baritone sax has never been a terribly popular instrument with musicians, because it is, physically, such a screaming bitch to play. It's huge and ungainly and requires you to move an immense volume of air. But some of the greats—Gerry Mulligan, James Carter—understood that it is worth the effort. Baritone sax is probably the most powerful resonant wind instrument there is, the Paul Robeson of horns, and no other is so immediately impressive to the layman.

(A purist would note there are actually two deeper saxes, the bass and contrabass, just as there are two higher than soprano, the sopranino and soprillo, and some even recognize one lower than contrabass called the tubax—but you're unlikely ever to hear any of them.)

While I wetted up my reed, I tried to decide what to play for them.

Naturally, I wanted to play them one of my own compositions. And I was reasonably sure all three were sophisticated enough to appreciate it, if only mathematically—very sure, in Sol's case. But what if they were sophisticated enough to *hate* it? Also, I was far less sure of everyone *else* in the place, and perfectly well aware that some of my work can strike a civilian as dry and complex. To pick the most polite words Jinny had used.

Okay, wrong time and place for an original Johnston. Something immediately accessible, but not crap. I reached into the air, and pulled down a tune Charlie Haden wrote to his wife Ruth called "First Song." It was the opening number of the last set Stan Getz ever played, and it always tears me up. You'd think a tenor piece wouldn't sound right on a baritone, but that one does. It snuck up on me; before long I had forgotten anyone else was listening, and played my heart out.

I hadn't played a note in weeks, hadn't even thought of it. My fingers were stiff, my embouchure weak, my wind less than optimal. I *killed* them, that's all. You can tell when it's working. I was playing smarter than I actually am, and could tell.

For the first three or four minutes, I was imagining accompaniment. Kenny Baron, who backed Getz by himself on that long-ago night in Copenhagen. Piano as crisp as snapping sticks.

And then suddenly the piano was really there.

I nearly clammed the phrase I was playing, and spun toward the bandstand. It was empty.

Wherever the keyboard player was, he was really good. *Really* good. I quartered the room without finding him, then eighthed it with no better luck. There were several side rooms and alcoves in which he might be lurking—or he could have been anywhere on the ship, listening in and tapping into the house sound system to play along. I decided to worry about it later, and put my attention back on Anna.

That piano was just the floor I'd needed to set my feet properly. We talked, briefly, and then he set me loose to wander. Before I knew it I had disappeared down the mouthpiece. When Getz played the song that night, he was saying goodbye to his life. I used it now to say goodbye to mine. God knew what new life I would build for myself, but the old one was over for good and for all, as unreachable as a moment ago, or the second before the Big Bang. Out of the bell of my Anna I blew my scholarship, and the mentor who would appear someday to nurture and teach me, and my master's, and my debut at the legendary Milkweg II in Amsterdam, and my discovery by the contemporary serious music establishment, and Systemwide recognition, and the respect of an entire generation of my peers . . . I blew away my courtship with Jinny, and our marriage, and our wedding night, and our first nest, and our first child, and all our children, and their childhoods and adolescences and adulthoods, and their children, and all the golden years she and I would have spent loving and cherishing them all . . . I blew away both my dead parents, whose widely separated graves I would never see again . . . I blew away Ganymede my home, lost to me for so long and now lost for good, and all those who still lived on her . . . and not incidentally I blew away a quantum of wealth and power that perhaps could have been expressed as a fraction of all there was using only a single digit in the denominator.

I didn't get it all out—didn't come close—but I made a start.

I actually didn't hear the applause; Herb told me about it later.

I left the Horn of Plenty that night minus about a million kilos I'd been carrying on my shoulders . . . and with a steady gig, two nights a week, Tuesdays and Fridays, for a scandalous sum, tips, and all I could eat. Plus the private phone codes of three Relativists. Four, since London and George R lived together.

On the down side, I also left without finding out who had been playing that piano. Nobody seemed to know. The sound source had apparently been the house MIDI system—but the originating keyboard might have been in a sealed booth somewhere in the Horn, or up in the Control Room, for all anyone could tell me. All I could positively rule out was a player back in the Solar System . . . because our communication had unquestionably been conducted in realtime, without any lag at all. So I didn't worry about it. I had twenty years to find him. He could hide, but he couldn't run.

On our way back to our room, I tried to thank Herb, to explain just how much he'd unwittingly done for me, but he brushed it away "I think everybody made out on that deal," he said. When I pushed it, though, he allowed me to promise to bring home a doggy bag on Tuesday and Friday nights. And perhaps a doggy bulb of good Scotch.

After half an hour at his desk, Herb gave me a data cube and suggested I play it privately. I did so at once, so I could stop thinking about it. It was little Evelyn Conrad, back in the Solar System. Audio and video, stereo both ways. She told me gravely that I was very welcome. She said she was very cross with her gran'ther for making me go away. She said she was going to marry me one day, just the same. She told me not to marry anyone else without checking with her, first. She gave me a "private" mail address, but warned me it was not totally secure. And she closed with a solemn Bon Voyage and a blown kiss. By that point I was grinning and crying at the same time. I popped out the cube, stretched out on my bunk, and slept like a stone for thirteen hours. And when I woke, rude things and implausible suggestions had been written all over my face and hands with a laundry marker. I guess I snore.

Eight

The squeaking of the pump sounds as necessary as the music of the spheres.
—Henry David Thoreau

The first thing I did when I woke next morning was to sit down at my desk and summon a list of Positions Available. There were a *lot* more than I expected. It had apparently occurred to the expedition's planners that not only could nearly all the actual useful work of preparing to start this colony be safely put off until the last few years of the voyage . . . it probably would be anyway, humans being human. Therefore, it would be good to keep them all occupied doing some damn thing or other for the first eighteen or so years. Lots of helpful suggestions had been provided. The full list of jobs the Colonial Authority was willing to pay someone to do took well over three hours just to scroll down through at normal reading speed.

But basically most of them broke down into categories you could skim in less than half an hour, if you were a fast reader. Here's a typical screen's worth, which was sent in response to my query by an astronomer named Matty Jaymes:

•—Refining knowledge of the location and plasma properties of the heliopause between the solar wind and the interstellar medium, on the way out of town—and then the same for the heliopause of Immega 714 when we got there.

•—Again as we were leaving, helping refine our comet map of the Oort Cloud, detecting comet nuclei with radar.

•—Once we were good and gone, measuring, in situ, the density, charge, mass, species, velocity, and temperature characteristics of interstellar plasma and gas.

•—Continuous measurement of the orthagonal components of the galactic magnetic field.

•—Continuous monitoring of the interstellar medium for molecular species. Determination of mass, composition, size distribution, and frequency of interstellar grains. Performance of interstellar erosion experiments with various models of shield configurations.

•—Using the long baseline formed by the starship and Solar System to carry out high-resolution astronomical measurements with optical and radio interferometry. Performing astrometric measurements of nearby stars, extrasolar planet detection, extrasolar planet imaging, and atmospheric spectroscopy. Using the same long-baseline techniques for astrophysical measurements, for example, to image radio galaxies, quasars, and neutron stars.

(It had long been hoped that with multiple starships under way at the same time, the capability of this long baseline interferometry could be vastly enhanced by combining their observations of distant sources. It didn't seem to be working out well: the problem in this kind of interstellar interferometry was how to agree on common time-tagging of data from probes moving in different directions at significant fractions of the speed of light.)

•—Observation of low energy cosmic rays, normally excluded from the Solar System.

•—Attempting detection of gravity waves from astrophysical processes such as supernovae or neutron stars, by tracking anomalies in the Doppler effect of our signals.

•—Refinement of the dark matter map of the Galaxy ...

. . . and so on. Mind you, all these are from the list of jobs Dr. Jaymes figured he could train just about any chimp aboard to do satisfactorily. But before he sent me those, he sent another, shorter list of jobs for especially smart people, with specific qualifications, which I won't even bother to excerpt, because I didn't understand it.

He *appeared* to be saying that he wanted to make an extremely intensive examination of the sun—our sun—okay, our *former* sun—of Sol, all right?—even as we were leaving it behind us forever at high speed. Why, I couldn't imagine. You'd think if there was an adequately studied star in the universe, it would be Sol. Studied even from vessels receding at fractions of c, if that made some sort of difference. And information about that particular star was going to be of purely academic interest to anyone we would ever meet again. But Dr. Jaymes certainly sounded terribly concerned about it. When I told him I lacked the qualifications for his first list of jobs, he allowed his disappointment to show even through mail; whereas when I politely declined his second list, too, he didn't seem to care one way or the other.

Now, I don't know about you, but if I had been forced to pick one of those I just listed as my shipboard occupation, I think the option I'd have selected instead would have been euthanasia. Like any literate citizen, I love to read what astronomers have to say after years of patient data collection and astute analysis . . . but the actual gathering of the data was not my idea of a way to spend the next twenty years.

When I came right down to it, not much was.

It was that growing realization, about five or ten scrollings down the list, which caused me to stop and approach it from the other direction. Instead of wading through the Big List of Jobs, the sensible way to do this was to make a Small List of Jobs I would be willing to endure for twenty years, if I had to, and then see if by chance any of them were on the Big List.

By dinnertime I had settled on the following:

•—Teach the saxophone. Or composition. Or music history. Or history.

But did I in fact have any pedagogic skills? Forget the skills: did I have the *talent?* The indefinable intangible something that would make strangers find learning from me preferable to learning by themselves? How the hell did I know?

•—Conduct. Assuming an orchestra of some kind could be assembled out of five hundred people, and made good enough to be listened to by the rest.

Again: Did I possess whatever variant offshoot of charisma it was that would make musicians find watching me more helpful than listening to their own internal metronome?

•—Act. An orchestra might prove to be beyond the resources at hand, but surely a theater company or trideo studio would form sooner or later.

Let's just keep assuming the unanswerable question, "But did I have a particle of talent for that endeavor?" from here on.

•—Direct, either for live or canned drama.

•—Write, either live, canned, or prose fiction. Or nonfiction if necessary; I'd been given to understand that it did not pay a writer to be too fussy. Just possibly journalism, if it turned out that a town of five hundred souls produced enough gossip to need writing down. Herb could give me pointers.

And finally, of course:

•—*Play* the furshlugginer saxophone. There were other venues aboard offering dining or entertainment or dancing. If I could line up enough different sorts of gigs, in different musical genres, then between that and private parties it might just be possible to make a whole entire livelihood out of my single favorite activity, pushing air out the end of a pipe.

That, God damn it, was finally something I did know I had the talent for. The crucial question however was: Did anybody care? Or rather, did enough people care that I would be able to live on my tips?

I looked back over my list gloomily, and detected a pattern. All the occupations that interested me shared two characteristics: they all might just manage to sustain me during the two decades of the voyage ... and they would all become nearly worthless when we reached Immega 714.

Pioneers don't have a lot of time or energy for art, either making it or consuming it. It was unlikely that anybody would be willing to feed me just because I made a pretty noise, or made up stories, or pretended to be someone more interesting.

But what did it matter? Doubtless I would end up scratching so hard to feed myself and get warm and dry that most of those things would lose their appeal for me, too.

I brooded about it for the rest of the evening without useful result. I was about to collapse my keypad for the night when I noticed that I had incoming mail. That was odd. Practically everyone I knew lived in my room. Surely my Relativist acquaintances were all too busy for chat. Then I saw the header title, "Where are you?" and felt my pulse begin to rise as I leaped to the conclusion that it was from Jinny.

But no. Instead, it was from the Zog. My job search was over, at least for a while. Reality had caught up to me.

I wrote back that I would report at the start of shift next morning, at 0900. Then I went directly to bed and immediately to sleep, determined to be at his office no later than 0800.

I had formally reported to the Zog back on the morning of my second day aboard the Sheffield—but found now that I had almost no memory of the event, or the man. Indeed, I had very little recall of anything that had happened that day, or for that matter any of those last days we'd spent in Terran orbit. This was not surprising, for two reasons.

First, it turns out to be oddly difficult to make a human brain remember events that occurred in free fall: the sleeping brain, which does the filing, insists on treating such experiences as dreams. The phenomenon wears off after a few weeks of zero gee, but we hadn't hung around in orbit that long.

And second, I had spent that whole period in a mental-emotional state approaching fugue—the sort of zombie numbness one must maintain during the process of sawing off the trapped limb. The Zog must have taken one look at me and realized I would be useless until we left the Oort Cloud.

With that symbolic cutting-of-the-cord, and the colossal bender with which I had marked it, and finally my musical catharsis with silver Anna at the Horn of Plenty, I had finally snapped out of my funk, rebooted my brain—just that day, really.

And several decks away, a man who had seen my vacant face exactly once, for less than a minute, had sniffed the air that morning and somehow sensed that I had finally germinated, and was ready to plant. That's the Zog for you.

Kamal Zogby was a Marsman who made you think of Martians. He didn't have three legs—as far as I know—but he was unreasonably tall and thin, even for a Marsman, and bowlegged, and slow moving unless he was in a blurring hurry, and he had an almost Martian distaste for sitting down or any posture but bolt upright. Also he was as taciturn as a Martian, with a similar sort of gravitas, and sometimes could be almost as hard to read. And like a Martian, the Zog never needed to look any thing up.

But no Martian ever had a nose like that great ice-axe Lebanese honker of his—or many humans, for that matter. Nor did Martians have teeth anywhere near that big and white and frequently displayed. And he was unlike any Martian ever hatched in two important ways that made it possible to work for him. He genuinely cared about everybody he ever met, found them interesting. And he had a strong and subtle sense of humor.

He was not a botanist, or an agronomist, or a plant physiologist, or a hydroponicist, or an anythingist, really—not on paper, anyway. He had no degrees at all. He was just the Straw Boss.

Back on Mars, literally dirt poor, he had once kept a whole dome-town in food, water, and air for twenty years after a catastrophic ecocollapse nearly wiped them out. They said if a thing could be grown, under any circumstances, he could grow it hydroponically. He could grow *lemon trees* hydroponically, or succulents, or even fungi.

And in theory we might even have managed to survive a hypothetical total failure of the hydroponic farm—because with part of his time the Zog also oversaw an experimental two-hectare half-meter-deep dirt farm that took up an entire deck, just above the Hydroponics Deck. It attempted to mimic the conditions we expected to find on our new home-to-be, Brasil Novo, second planet of Immega 714. The hope was that by the time we got there, we would know as much about how to dirt farm there as we knew about hydroponics now. And meanwhile, if something ever went horribly wrong down on the Hydroponics Deck, two hectares of land were just barely enough to feed five hundred people. In theory.

Finding the Zog's office, down on the Voyage Farm Deck, was easy Gaining access was even easier, even though I had arrived well before the beginning of shift as planned. There was no execassist or persec or even door sentinel program to run interference for him. There was no *door.* Just an open doorway beneath a sign that read "Straw Boss." Unfortunately, there was no Zog on the other side of it either. Or anyone else; the office was empty. I waited expectantly for his desk to tell me where he was, or at least when he would arrive, but it didn't. So I told my own doppleganger to consult the ship system and locate him. After a noticeable hesitation, the ship politely declined to cooperate: the Zog was delisted. If he had a schedule on file it was not public. The ship declined to make an appointment in his name. It advised me to either take my chances and wait, or leave a message for him and go do something else.

I didn't much like either alternative. Especially after looking around the office: my strong impression was that he dropped by there once or twice a week at best. So I decided to hunt around for him,

The choices were a) this, the hydroponic Voyage Farm Deck, or b) the dirt-based Destination Farm Deck immediately above it. The choice kind of made itself.

The hydroponic farm operation was as intricately choreographed, complexly layered, and densely packed as any terrestrial jungle, with trays of assorted growing things stacked up to four high in places on frail-looking frames, and a bewildering variety of different lighting, watering, drainage and airflow systems, each tailored to a different variety of crops. The longest uninterrupted sight line on that deck was about three meters—and the lighting was so weird, with LEDs, metal halides, and sodium bulbs of assorted colors and intensities competing and clashing in odd ways at different places that you wouldn't have wanted to see much farther than a few meters in any direction anyway. The air circulation was so intense, in order to carry away the heat from all those lights, that there was a constant wash of white noise muffling all other sounds.

The farm immediately overhead, on the other hand, was basically a huge heap of somewhat modified dirt, above which a few seedlings, sprouts, and shoots should just be starting to become visible. If the Zog was on that deck, I could probably pick him out by eye very quickly. It was definitely the place to start looking. And I had a hunch it was where I would find him: where green things grew up out of soil you could plunge your hands into.

It wasn't quite that easy, in fact. But close. The Destination Farm was designed to be as close as possible to one enormous deck, with *long* sight lines in nearly all directions. But it was also designed to be kept at destination-normal conditions. That meant, among other things—at least at the moment—air that was half again as rich in oxygen, slightly denser, a *lot* more humid, and a bit warmer than ship-normal (Terran Sealevel Standard). All of which meant, among other things, weather—specifically, fog. It was controlled somewhat by air circulation, but less than it could have been, obviously by intent. Apparently we were all going to spend our golden years on a planet that was prone to lowlying fogs and mists for at least part of the year. Brasil Novo would be a kind of Jungle World, a steamy hothouse of a place.

(It began to dawn on me that there was a *lot* I did not know about our destination planet—my new home-to-be. I had more or less presumed that if a whole lot of people were willing to go there, forever, it must be a nice place. It might, I thought, be well to delve into that just a little deeper.)

Another problem facing me was that since this was the deck with the most open space and the most experimental food, this was the deck where the majority of the livestock was quartered and processed. Not to put too fine a point on it, the fog *stank,* and rude noises seemed to come distantly from all directions, as if some mad ventriloquist had descended to fart jokes.

And finally, it was blinkin' dark in there. Brasil Novo had a day just a hair *over* twenty-four Terran Standard hours long—thirty-six minutes longer. Therefore so did this deck, which meant that its day and ours diverged. And had been diverging since whenever the Zog had started its clock. It was the beginning of the morning shift everywhere else in the *Sheffield,* but here it appeared to be at least an hour before dawn.

Despite all these handicaps I found the Zog within a minute or two of my arrival. I had heard him laugh once before, and heard him now from a few hundred meters away. That got me started in the right direction, and luck took me the rest of the way. If that's the word I want: he was at the goat quarters, one of the riper of the animal enclaves. Goats just are not happy unless you give them some equivalent of a cave or shed to hide in at night, even though there's nothing to hide from . . . and then it concentrates the smell wonderfully. Maybe that's what they like about it.

Admittedly they are worth a bit of smell. A goat eats ten percent as much as a cow, but produces twenty-five percent as much milk. And many, among them me, say it tastes better than cow's milk. It's also easier to digest.

"Ah, Joel." He looked up from a hoof he was trimming and gave me a slow once-over, beginning and ending at my eyes. He had done that the first time we'd met, too. I wondered why I didn't find it offensive. When he was done, he smiled with his whole face. "I'm very glad to see you're in better spirits."

"Director Zogby, I want—"

"Zog, please."

"Zog, I appreciate your understanding and patience, this last week. I needed to work some things out, and I have."

"I can see that. You're ready to come to work."

"Yes, sir."

"This is Kathy—she's a Marsman like me, new to farming."

Intent on my new boss, I had almost completely tuned out the companion holding the goat for him. She was about my age, slim, fit, and extremely uncomfortable holding a goat. We exchanged polite noises.

"Kathy, Joel's from Ganymede. He has a lot of farming experience, dirt and hydro both. You'll be his assistant." She nodded, too busy to keep eye contact.

I took a deep breath. I was not looking forward to this next bit, but there was no sense putting it off any longer. "Uh, Zog, perhaps I should correct one small mis—oh, shit."

The sentence aborted in that odd way because I had just seen what she was about to do. There was no time for me to say anything to stop her—and it wouldn't have helped anyway, because there was nothing she could do about it. She couldn't have gotten a hand free without being kicked. There was just time for me to drop to my knees, cup one hand behind her head, place my other index finger just below her nose, and press hard. She let out a yelp and tried to shake free, but I wouldn't let her until I was sure the job was done. Then I released her at once and backed away

"I'm very sorry, Kathy" I said. "I had to do that."

She was staring at me as if I'd grown fangs. *"Why?"*

"It's the only sure way I know to stop someone from sneezing."

"What?"

"Excuse me just a minute, Kathy," Zog interrupted. "Joel, what was it you were just about to say?"

"Oh. Uh . ."

"You were going to correct something?"

"Why shouldn't I sneeze if I want to?"

"You *really* don't want to sneeze in a goat shed," I told her. "Look, Zog, I—"

"Why the hell not?"

"Kathy, please, he'll explain in a minute. Go on, Joel. Correct what?"

"No, wait a minute, Zog," she insisted. "That hurt."

"I know," I said, "and I'm really very sorry"

"No, you're not."

I started to argue, and stopped. "You're right. I kind of feel like you had it coming, for not knowing what you're doing. And now I'm also a little annoyed at you for presuming that *I* don't. If you'd—"

"Joel," Zog cut in firmly, "I understand that you'd rather have that conversation. First, though, we're going to have the one where you tell me just what misunderstanding on my part needs to be corrected. Kathy, pipe down and let her go."

She sighed in exasperation and released her hold on the goat, which sprang up and trotted to the far end of the small shed, limping slightly on its half-trimmed hoof. I turned to meet the Zog's eyes. Irritation was in them, but compassion as well. "Well, look, what you have to understand—"

Kathy sneezed.

I think it was at least half deliberate, a gesture of defiance. Her hands were now free; she could have done as I'd just shown her. Instead she sneezed. And not just a ladylike little *choof,* either, but a breathquake that might have snuffed out a blowtorch.

Unfortunately, a human sneeze apparently sounds very much like the word for "Run for your life!" in Goat.

So we all got very busy there for a while.

When things settled down a bit, I poked my head up and found that I was in the corner of the shed farthest from the exit. The original exit. I had begun to congratulate myself on my good instincts when I realized there were now several brand-new exits, one of them less than a meter from my head. A goat hoof can be a weapon of terrifying power, and a partially trimmed goat hoof could only be worse.

Then I discovered Kathy, underneath me. Maybe my instincts were okay after all.

I rolled off her, intending to ask if she was all right. Instead I let out a squeal and kept on rolling. Killer monkeys—

But, no. Within a revolution or two I had seen that what was dangling from the ceiling was not the huge ape my brain had first decided it was seeing, but someone with considerably better instincts than mine. Only by luck had Kathy and I managed not to be in the path of a fleeing goat—but *none* of them had been running up. Zog let go of the rafter and dropped back to the floor. He landed just beside Kathy, and lifted her to her feet with one big hand. "Are you all right?" he asked, and she ran a quick inventory and assured him she was.

"I'm sorry if I squashed you," I said, getting to my own feet.

She shook her head. "No problem. You know how to use your elbows."

I found myself blushing.

And her blushing back. "Besides," she went on quickly, "if I'd only listened to what you were trying to tell me—"

"No harm done," Zog said. "Except to the shed." He glanced around at the damage and sighed. "It was guaranteed goat-proof."

"I'll bring it back to the store," she said.

He shook his head. "Traveling at relativistic speeds voids the warrantee."

"Figures."

"I'll go round them up," I said.

"We all will," Zog said.

"That's okay," I said. "I'm the new guy. And I really should have taken the time to explain to Kathy why—"

"We all will," Zog insisted. "Once we patch this shed together well enough to hold them again."

And of course he was right. Catching a goat is just barely possible for three people working together; I doubt any two of us could have caught even one. The hairy little bastards led us a merry chase. A goat can leap pretty well even in terrestrial gravity; in one-third gee they begin to seem more like large birds than mammals. Large smart birds, with offensive armament.

By the time we were done, I was thoroughly exhausted, and quite understood why many cultures have used goats to represent Satan. I left the shed and flopped down not far from the entrance, with my back against an intact section of wall. Zog took a seat beside me—with noticeably less effort, even though he had nearly twenty years on me—and Kathy dropped into a tailor's seat facing us. The three of us sat in silence for a while, Kathy and I because we were getting our breath hark, and Zog because he had nothing to say.

Finally Kathy frowned, shifted position slightly, reached beneath her, and removed something. She held it out on her palm to examine it. A slightly squashed goat berry. I managed to choke off the giggle and to slap on my poker face, but it took me a few seconds, and I was sure she'd heard me at it. She looked up, our eyes met, I waited to see if she would flare up at me—

It so happens that the average goat turd is just the size, shape, and color of the data beads used to hold video or audio programming. When she took it between thumb and forefinger, and pretended to be trying to insert it into the docking slot on her wrist CPU, it wasn't what you could call a hilarious jest. But it was excuse enough for a tension-releasing blurt of laughter from both of us.

"That music sounds like shit," Zog said, and we laughed harder.

After a while we went back inside, and Zog had Kathy and me finish hooving that goat together, and pass out treats to all of them, to calm them down and by way of apology for our carelessness. Then we left, and Zog said, "Joel, I believe you were about to correct a small misunderstanding on my part about your background."

Ah yes. "Well . . ." His eyes met mine, and I heard myself say, "Not a misunderstanding. I lied, Zog. Not about dirt farming—but pretty much everything I put down about my experience in hydroponics is pure goat berries. I'll come in real handy in twenty years, when we all start doing this kind of farming on a large scale, at our new home. But right now, you're going to need short words and long patience."

He just nodded. "Why did you lie?"

"It was the only way I had to get a berth aboard the *Sheffield.* And I *really* wanted one."

I'd been sweating this moment for days now. He nodded again, and that was the end of it. "We'll begin your education in hydroponics tomorrow. For now follow me," he said, and took us on a grand tour of that deck.

It really was a wonder, a Garden of Eden such as no planet had ever seen, designed and constructed so that the local light intensity of any given square meter of that vast area could be varied from zero to noon in Baghdad, with equivalent control of humidity, airflow, O_2 and CO_2 content, and some other factors I forget. Those crops that were able to thrive on a twenty-four-hour light cycle (or other variant) could do so, without disturbing the slumber of the ones nearby who liked things the old-fashioned way. Those that were reasonably happy in the different conditions that obtained on our destination planet were already enjoying them, and all the rest would, hopeably, be successfully reconditioned to enjoy them over the course of the next two decades.

The goats notwithstanding, the staple meat aboard the *Sheffield* besides chickens was not chevon but rabbit—low fat, a milder taste than chevon, and easier to cook. (You couldn't subsist on rabbit alone —not enough vitamins A or C—but we weren't trying to.) They're less fussy eaters themselves, too, happy to live on alfalfa with a pinch of salt, which both upper and lower farms produced in plenty. Each doe and her litter took up about a square meter of living space—but a stackable square meter—and about twelve times that in alfalfa; the yield works out to about 150 kilos of boneless meat per hectare per day.

What was left of the rabbits was fed, along with each day's dining-hall waste, to chickens. They too insist on a dark stinky home, like goats. But it's safe to enter it even with a head cold, and the reward is four or more eggs per colonist per week, plus fried chicken.

And finally there was fish—the last stop on the tour. Mars-bred fish, as productive as the rabbits in terms of protein, and less trouble to care for. As we were strolling there from the chicken run, Zog told us that one of the very few stabs at genetic manipulation the Prophets had ever approved was an attempt to breed a chicken that would reliably lay an egg a day—the Holy Ones *liked* eggs. "The Church's breeders were successful, technically," Zog said, "but unfortunately the resulting chicken was literally too dumb to eat. If you want to take that as a metaphor for the True Church's whole approach to science, you're pretty astute in my opinion."

"God," Kathy said, "what a shitstain in history."

"Middle Ages were worse," Zog said.

"Maybe—but *we could have had immortality by* now! We could have beaten cancer by now. We might have had telepathy by now." She sounded angry

"We have telepathy," Zog said mildly.

"Sure, terrific. But only in identical twins, and fewer than four percent of them—and we don't have the faintest idea how they do it, or why they can and the rest of us can't."

"True. There remain mysteries to be solved."

"It's infuriating."

She really seemed upset. I decided to distract her with a diversionary anecdote. "Let me tell you both my very favorite mystery," I said. "You reminded me of it just a second ago, Zog, and it's related to what you're talking about, Kathy. Kind of, anyway."

She didn't answer. "Go ahead, Joel," the Zog said.

"I ran across this in a book. Just before the Hiatus, natal medicine got so good that they were sometimes able to save babies born so prematurely that they had not yet even developed the sucking reflex. And now that the Prophets are all finally holding services in Hell, we can do that again: rescue babies that are, in the Zog's colorful phrase, too dumb to eat."

"How?" Kathy asked. "Force-feed the poor things?"

The Zog shook his head. "They'd never learn, then."

"No, they train them to suck," I said.

Kathy frowned. *"How?* If something is too dumb to figure out that eating is pleasant, what the hell do you reward it with?"

I smiled. "Music."

Her face smoothed over. "Oh, I love it."

"Rhythm?" Zog asked.

"You'd think so, but no," I said. "Melody. The little buggers will work hardest to bring about repetition of a favorite scrap of melody. *That's* how hardwired love of music is, in the human brain. It *predates* survival instinct."

"It doesn't seem reasonable," Zog said. "How would a brain evolve so?"

I spread my hands. "Ask God. I just work here. All I know is, it's my very favorite mystery."

"You like music, too?" she asked. "I like it a lot."

"What kinds?"

The question seemed to puzzle her, but she gave it a try "Audible."

She liked everything? It seemed to me, in my sophistication, that people who liked everything must understand hardly anything. I was eighteen, all right?

"For the past hour I've been thinking this place could use a banjo player," I said.

"There are two listed," she said, "and one other who isn't. They're all pretty good."

"How do you know that?" I asked.

She shrugged. "I did a data search for musicians, way back on Terra, and listened to all their audition recordings. I also asked the ship to alert me anytime someone makes live music, and let me listen in if they haven't put privacy seal on it. I discovered at least half a dozen unregistered musicians that way. In fact, the best musician I've heard aboard so far was unlisted. He came aboard at the last possible minute, so they waived his audition."

I opened my mouth, closed it again.

"What's his instrument?" the Zog asked her.

"Saxophone. I sat in with him, remote, for a few numbers. I wanted to introduce myself afterward, but by the time I got the system to give up his phone code, somebody he was sitting with put a heavy privacy shield on the whole table."

"Have you tried him since?"

My kindly wristband produced the chip-chirp indicating a watch alarm. Today's shift was over. Saved by the chip. "Zog," I said, "I really hate to act like a clock-watcher on the first day I've bothered to show up, but I really do need to—"

"There are things we need to talk about," he interrupted.

"I know. Uh . . . I could meet you somewhere in a couple of hours. Your office?" I shifted my weight from foot to foot as if I badly needed to pee.

"Go. Our AIs will work something out."

"Thanks Zog nice to meet you Kathy see you both tomorrow." I fled.

Nine

One can travel this world and see nothing.
To achieve understanding it is necessary
not to see many things,
but to look hard at what you do see.
—Giorgio Morandi

"I don't get it," Herb said, squinting at images on his wristband's monitor.

"This girl is clearly much better-looking than you are, even with the baldness, string warts, and that glass eye. You raved about her piano playing—and you say she appears able to endure your own instrumental atrocities, so it's certain she has a forgiving nature. Did she google up bad?"

"I haven't tried yet. I mean, I haven't tried. I'm not interested, I keep telling you."

"Age, height, mass, marital status, economic status, state of health, attractiveness, talent, all apparently compatible within reason. And you can forget *all* those factors, and remember just the three important things."

I rolled my eyes. "Go ahead."

"She is a female mammal, she has a pulse, and she thinks you're the best musician in the colony."

I grimaced in exasperation. "Didn't you hear me? I'm . . . not . . . interested. I told you: I *took* that class. I'm done with women."

He put his own exasperation into a sigh instead of a grimace. "Joel, twenty years is a long, long time. And it's going to seem even longer, with an attitude like that."

"She and I have nothing in common. Didn't I tell you what her greatest dream for mankind is? Telepathy, for Murphy's sake!"

"Something wrong with telepathy?" he asked mildly.

I blushed. "Aw, you know what I mean. She's talking about the kind where nobody has any secrets and yet we all love each other. Fantasy."

Herb had successfully passed two other Secret Messages back to little Evelyn Conrad for me so far. Her replies always cheered me up. But they always came back via conventional electronic mail rather than telepathic courier; for some reason she was willing to accept information from a telepath but not give information to one. I was a little afraid she might be overestimating the security of whatever mail route she used. So I kept my own messages to her to a minimum, for fear of getting her in trouble with her elders.

Thinking about telepathy gave me an idea. "Hell's bells, Herb, why don't *you* take a run at Kathy?"

He looked at me strangely "Really?"

"Well, you're obviously interested in her. And she doesn't find telepathy weird."

"You wouldn't mind?"

I closed my eyes, counted to five, opened them again. "Why would I mind? Haven't you been listening? I'm through with romance, I'm through with love, I'm through with counting the stars above."

"You're really serious about that, then."

I rolled my eyes upward and asked the ceiling to bear witness to the tribulations I had to endure here below. "Yes, for the love of—is that you or me?"

He brought his wrist to his ear. "You. Go ahead."

I tapped my own wrist. "Yes?"

The face on the screen was unfamiliar to me, as his first words confirmed. "Mr. Johnston, we haven't met yet. My name is Paul Hattori. I am the colony's banker. Forgive me for disturbing your privacy, but there is a matter we should discuss at your earliest convenience. A matter of some importance."

I thought for a second. The day was young—hell, it was still before noon. But my morning had been overfull of stimulating inputs. I was tired, and confused, and wanted only to put my feet up and try to get some thinking done about everything that had happened that morning. "How about tomorrow?" I temporized.

He hesitated. "I will of course follow your wishes. But I have information you really should have as soon as possible."

What could he possibly be on about? Was this some sort of pitch for investment advice or banking services? He had access to my financial records—record—surely he must know I was a dry hole. "Can you give me some idea what it's about?"

He was smiling, but there was something odd about the smile, something I couldn't put my finger on. It wasn't phony, exactly. Just odd. "I can, but if you will forgive me, I would greatly prefer to tell you in person."

I met Herb's eyes, raised an eyebrow. He shrugged. "Are you sure you don't want Communicator Johnson? Same address, he's my roommate."

"No, it's you I need to speak with, Mr. Johnston." He gave an address only one deck below the officers and crew. He was a VIP.

"All right, I'll be there in half an hour. But I still think you have the wrong bloke."

"Who was that?" Herb asked.

"Never mind," I said. "It can't be important."

I started to change to better clothes—and changed my mind. Why should I dress up for this joker? I wasn't the one who'd asked for this meeting. Showing up was courtesy enough; putting on formal tights and collar would be obsequious. I had no reason to impress the man . . . because I had absolutely nothing to impress him with. He had nothing I wanted. Pausing only to empty my bladder and comb my hair, I left dressed just as I was: like a man who had recently been in a goat shed when somebody sneezed.

I took my time on the way, too. So I had time to develop a dark suspicion as to what he might want to talk to me for, which quickly built itself into an ugly and plausible theory.

Hattori was a banker. Bankers know all about very large sums of money. Did I know anyone who was connected in some way with very large sums of money? Had 1 not, indeed, recently roundly pissed off some people of that description? If they took a notion to have some sort of heavy weight dropped on my scrotum in retaliation, might not a banker be their chosen instrument?

It was hard to sustain alarm. As far as I knew, I really was bulletproof, from a financial point of view: I had nothing to steal, no credit to ruin. If the Conrads wanted vengeance, they would just have to have me beaten or killed like civilized people.

Nonetheless by the time I reached Hattori's cabin I was paranoid enough to be feeling just a bit belligerent. I was going to stop just outside his door and take a few deep breaths to calm down, but the door recognized me and opened before I had the chance.

I had expected his quarters to be impressive. They exceeded my expectations. They were tasteful, supremely comfortable despite a Zen simplicity, luxuraous without ostentation. A Hawaiian slack-key guitar played at background level—Cyril Pahinui, I think. I was given an understanding chair, and offered a beverage impressive enough to denote respect, which I accepted.

Banker Hattori was a pleasant-looking cobber. I'd have guessed his ancestry at a combination of something like Hawaiian or Japanese and

Scottish or German. He was short by Ganymedean standards, a little short even by Terran reckoning, but well proportioned and clearly in excellent physical shape. Back on Terra, he might have sailed, climbed mountains, run marathons, flown an ultralight. Now that those joys were lost to him for the next twenty years, he probably played a competitive but noncontact sport, and worked out. But he was not hard to take the way some jocks can be, did not challenge.

In person, his smile was as subtly *off* as it had been over the phone. The surprisingly few seconds he wasted on polite ritual and pleasantry gave me just enough time to figure out what was odd about it. He was clearly a man who smiled a lot, in his off hours—the placement and depth of the smile wrinkles at his mouth and eyes told you that—but he was unaccustomed to smiling like that *at work*.

In retrospect, it's actually pretty impressive that he didn't drag it out longer than he did, surround it with even more of a big drumroll buildup. I couldn't have blamed him if he had. He must indeed not have gotten to impart news of that particular sort very often.

But he was a professional, and also I think a reasonably kindly man, so he merely teased me with it until I wanted to throttle him.

"You have made no financial investment in this colony so far, Joel," he began. We were Joel and Paul by then. "Looking over your records, I see that your motives in joining us were personal and emotional rather than economic. I would like to explain, briefly, why I think that was a mistake, and then—"

"Paul, excuse me for interrupting, but your pump is sucking air. I have no capital at all."

He held up his hands. "Please—indulge me for just a moment. Think of it as a hypothetical. I did say 'briefly'."

He really did have a nice smile. Odd or not. "You have the floor."

"I say I am the ship's banker, and that is one of the things I do. I am also our colony's chief financial adviser, and act as its representative."

I nodded, impressed. "Quite a job. It can't be easy, arranging to borrow such stupendous sums, let alone handling them wisely"

"Let me give you an imaginary hypothetical conversation between me and a Terran banker, shortly before we left the Solar System."

He proceeded to act it out, using different hokey but clever cartoon voices:

"Banker: Greetings, gentleman merchant adventurer, hereafter known as GMA. I assume you're here to ask about a loan, and I'm sorry to say money is very tight just now—

"GMA: I have some lubricant with me.

"Banker: Excuse me?

"GMA: I can help solve tight money. I am here to discuss a loan, as you suggest. But I don't want to borrow. I want to lend *you* money."

"Banker: Really? Well, now. That would certainly be agreeable, in principle. What sort of terms and conditions did you have in mind?"

"GMA: Here is a check, representing gold dollars in Zurich.

"Banker: How m—oh my, a great many

"GMA: A very great many.

"Banker: I . . . see. And you want to give it to us.

"GMA: I want you to invest it for me at compound interest. A rate of eleven percent a year would be acceptable.

"Banker: That is a very high rate of interest!

"GMA: Not if I undertake not to touch the money for twenty years ...

"Banker: Ah. I begin to see. But what's in it for me—besides the usual fees? How does this loosen tight money?

"GMA: You have the full use of that money for twenty years, and keep all the profits. All you have to do is invest soundly enough so the capital sum remains intact . . . a trick venture capitalists like yourself are rather good at.

"Banker: Well, thank you. But I don't see what's in it for *you.* For the same twenty years, you're depriving yourself of that same money, receiving no payments.

"GMA (smiling broadly): Yes, but you see, I intend to age more slowly than you. . . ."

He smiled.

"I get it—I think," I told Paul. "It really is a clever swindle."

"It's not a swindle," he said.

"It has to be. People are earning large sums of money for either sitting and waiting, or else for traveling expensively. *Somebody* has to be getting swindled for it. TANSTAAFL."

"That principle doesn't apply here. In this one case, there is such a thing as a free lunch. Wealth is being created by *time.* Nobody's being swindled because nobody's *losing* anything."

I must have looked stubborn.

"The key phrase was, 'You will have the use of that money for twenty years.' Suppose the moment we get to Immega 714 we do an instant one-eighty, slingshot around it and hotfoot it right back to Sol at the same speed. It took us twenty years to get there, twenty years to come back; we arrive at Terra forty years older than we started. But what we find when we debark—"

I started to see it. "Finagle on fire!"

"—is a Terra more than one hundred and sixty years older than when we left it."

"With a hundred and twenty years of free interest!" The beauty of it washed over me.

"Not free," he said. "We had to get our butts up to a large fraction of c, and keep them there for forty years. But real cheap. Are you ready for more of the special blend?"

"Oh, that really is lovely, Paul," I said as he poured generous refills for both of us. "You're absolutely right: for the first time, I genuinely regret not having been able to kick any money into the pot myself."

"Well, theoretically, of course, a person could choose to buy in even now—or for that matter, at any point in the trip, although the degree of participation would naturally go down some as the voyage gets longer."

I grinned, and a faint tingling of the lips told me the special blend was beginning to hit me. "With what I make turning shit and piss back into food, plus what I hope in my wildest dreams to earn in tips playing at the Horn of Plenty, by the time we reach Peekaboo I can confidently expect to see profits in the low five figures."

That mysterious smile had never quite left him, even when he was playing Banker and GMA. It was still there, and now his eyes were twinkling, too. "Joel, let me tell you about another starship, a long time ago. One of the unlucky ones. There was bad sickness aboard, one you didn't get over. Both their telepaths died in the first wave, so the only reports were by radio and laser. Some of their Relativists died, and then it was reported that all the others were infected, and the quantum ramjet was being shut down. That cut the power for the radio and lasers, and the ship passed from human history."

This was sounding oddly familiar. Hard to pin down the memory, though: when I closed my eyes to try, the room began to rotate around me. Counterclockwise. "Heard about a ship like that, once." No, clockwise. "Lost in the stars, forever."

"Only, not," Paul said. "They were very lucky. Their first bit of luck was that their plague, whatever it was, burned itself out completely with seventy-five percent of them still alive. They were able to keep the antimatter engine alive, stroke of luck number two, which gave them enough, power to survive, and run all the machinery. Including the databanks they'd brought along with them, the total accumulated knowledge and wisdom of the human race at that time."

"Very important," I agreed. "Keep them from going crazy with boredom and despair."

"Way more important than that, because of their third bit of luck."

I knew he was toying with me somehow but it didn't feel unpleasant, so I played along. "And what was that, Mr. Interlocker... Mr. Inneroculator ... what was that, Mr. Hattori?"

"One of the Relativists had conceived and bore twins on the voyage. The children lived."

"Really? Oh. Oh. I think I get it! When they—"

"When they grew old enough, they studied everything they could find on their mother's profession. One day when they felt they were ready, they somehow relit the quantum ramjet—and resumed the voyage."

"That is amazing! What a story. Oh, they must have flipped back at Terra when they started getting radio messages from a ghost ship! How long did . . . wait a minute . . . oh, hell, I can't do math when I'm sober."

(The gene for my father's kind of mathematical talent is, fairly self-evidently, recessive.)

"Nonetheless, your intuition izh correct—excuse me, is correct." Nice to know he was feeling it, too. "If the happy news came by radio, we would not be receiving it for several years yet. That's the fourth bit of luck. One of the twins inherited some of her father's talent, as well—and Dad had been a Communicator. She scared the witch—the wits—out of her uncle back in Luna, the first time she made contact. He thought he was being haunted: his late brother had never mentioned any offspring."

I shook my head, which stayed on. "Incredible! I have to tell my friend Herb that story—he's a writer, *and* a Communicator, he'll make a meal of it. A dozen movies will be made about it just in the next year, and at least one miniseries. Thanks for telling me, for, thanks for, why the hell did you *tell* me that, Paul? I mean, it's a great story, but what has it got to do with what we were talking about, swindling money out of time? What's the connection?"

That omnipresent smile suddenly blossomed into a fullblown grin that lit up his whole face, and his eyes beamed happiness. "The name of the prodigal starship, Joel."

All the pieces finally fell into place, and I knew exactly what he was going to say next. Unfortunately it cost me the power of speech, so he said it anyway.

"It's the *New Frontiers*."

I suppose a similar effect could have been achieved by turning every other atom in my brain to antimatter.

"Your father meant for you to be a rich man, Joel," Hattori's voice said from the far side of the cosmos. "Now you are. All shares have been reactivated, and you have a *lot* of them. Should you choose to, you could become one of the *Sheffield's* biggest investors . . ."

I began to laugh. Then I laughed some more, after which I kept on laughing, and finally realized I was not going to be able to stop anytime soon. I was on the floor by then, in fetal position, Hattori fussing futilely over me, and I discovered that I could convert the laughing to crying for minutes at a time, which was a change at least.

All I kept thinking was that I had abandoned everything there was, left everyone I knew, burned every bridge ever built, and literally fled the Solar System on a one-way trip, to escape the dread danger of becoming rich. . . .

Some days, you just can't lose a buck.

I had to do some fast talking to get out of Hattori's office without being reported as emotionally unstable and sent for therapy. I'd freaked him out a little with my outburst of hilarity. And I had to edit what I said on the fly, too: if I had tried to convince him I'd been betrothed to a niece of Conrad of Conrad, he'd have been *certain* to send for a counselor. Especially once I told him I'd broken the engagement.

But after hearing a version of my recent history that dialed Jinny back to "a girl from a very wealthy family," he finally agreed that hysterical laughter was an appropriate response to the way things had turned out, and stopped physically recoiling from me. He even had the grace to postpone picking my pocket, urging me to take my time, and come back for further discussion of my participation in the colonial partnership when I'd had a chance to, as he put it, "encompass everything."

I thanked him and left, with every intention of finding Herb and asking him to be my designated keeper while I got hammered. If he was not interested, Balvovatz or Pat would do. And if none of them were available—well, I had survived a solo bender in Vancouver, a very tough town. I could probably handle the *Sheffield.*

But halfway back to my room I remembered that I had already *done* so. More than once. For most of my first week aboard, actually. Nobody had reported me because—well, a *lot* of us had spent some portion of that first week drinking or smoking or snorting more heavily than usual. But if I were to start back up again after only a day of sobriety, eyebrows would be raised, and sooner or later someone would mention my name to the Healers. I was damned if I wanted to waste hours explaining myself and my decisions to some well-meaning headcandler, who might take it into his head to start messing with my brain chemistry. Ganymedeans didn't hold much with that sort of thing.

So I did the sensible thing instead, and didn't get hammered.

That was a pity, because then I had no excuse at all for the fistfight. Or my miserable performance in it.

The way I remember it, I plodded back to my room in a fog, like a cow on its way back to the barn, so confused by my own thoughts that I could barely lift my feet. And then I raised a weary arm and palmed my door open, and there were these two guys.

You know how sometimes you'll meet a stranger, and it's as if a closed caption appears at the bottom of the screen, summing them up in a word or two for those who just tuned in? "Professional victim," or "Could bore the balls off a buffalo," or "Wants money," or the like? My first sight of these two went freeze-frame for a second, and below each of them I clearly saw the subtitle "Perpetrator." Only after the action restarted did I notice their armbands, and realize I was meeting my first transportees.

They were big guys, too. Bigger than me, anyway. They didn't look sophisticated enough to be political prisoners or incorrigible monoreligionists. The one sitting on Pat's bunk had the arms, shoulders, and thighs of one who lifts weights regularly and faithfully while he's in jail, but has been out for some time now. He had short black hair just beginning to thin and a short sanitary sideless black beard, of the type called a "doorknocker." He had a glass of some dark fluid cupped in his right hand, and took a quick pull from it when he saw me—but he didn't drop his eyes.

His partner, sprawled on Balvovatz's desk chair, looked more as if he tended to win his fights by knowing more dirty tricks than the other guy. He had the body of a high school sports star . . . who had been expelled before graduation, and had expended as little effort as possible ever since. Instead of pumping iron when in jail, he just hung out near his friend. He wore his dirty blond hair in an arcane style that involved grease, and hinted that it came from a motorcycle or copter engine. There is no name for his beard type, nor is it likely any will be needed. Sweeping scimitar sideburns failed to reach *quite* as far as his mustachios . . . which did not descend *quite* far enough to reach the goatlike goatee. The net effect was of a satyr too dumb or drunk to realize his gay barber is making fun of him. He was as unguardedly furtive as his friend was poker-faced. That caused me to notice that Balvovatz's desk monitor was darkened, not switched off.

"Oh, hi," he said, too heartily "You're back."

The one on Pat's bunk said, "We're real sorry to barge in like this, okay?"

"Yeah, but everything's totally cool," Weird Beard said. "Nothing to freak out about."

"How did you two get in here?" I asked the dark one sitting on the bunk.

He shrugged, being careful not to spill his drink. "Everybody's got things they're good at," he said reasonably.

I nodded. "And this is okay with me because . . ."

The other one said, "Because this is one of those fuckin' situations where, you know, like it says upfront, viewer discretion is the better part of value."

His friend stared at him, took a deep breath, let it out, and turned back to me. "We have a proposal for you. A business opportunity. Joint venture. Low risk, high return. But yeah, Richie's right, it's definitely what you'd call a little gray-market."

Well, I thought to myself, you happen to catch me at a moment when I have a few gigabucks I need to invest somewhere. "How gray?"

"Just barely beige," Richie said. "And only right at the end. Up until then it's mostly red, and some green. Tell him, Jules."

"Richie, will you take it easy? Joel—can I call you Joel?—it's real simple. You work down on the Farm Decks, right?"

I agreed that this was sometimes so.

"Dirt or High Japonics?" Richie asked.

I looked at Jules. Jules looked at me and his face said, *What am I* supposed *to do?*

"Both," I said.

"So you like to make stuff grow," Jules suggested.

"Like you said, everybody's got something they're good at."

"And you know your way around down there. Like, where things are, what parts get looked at all the time, what parts don't get looked at so often."

Light was beginning to dawn. "Why?"

"We got some stuff we'd like to grow."

"Without bothering the Zog with a lot of fuckin' paperwork and formalities," Richie put in.

"And we figure a smart guy like you could work that out."

I closed my eyes. The world spun as if I were drunk. But the moment I opened them again, it *slammed* to a halt. "What sort of plant are we talking about?"

"Just flowers," Jules said.

"Herbs," Richie amplified, pronouncing it like my roommate's name. "From the country."

" 'Erbs," Jules corrected, glaring at him.

"Well, sure, *now,"* Richie said, annoyed. "But *originally* they grew it in the country"

Jules and I exchanged another glance, and he took a deep pull on his drink, wiping his mouth with his wrist. *YOU wanna try it?*

"Richie," I said gently, *"which* Herb, exactly?" I pronounced it like my roommate's name, and Jules nodded. *That's the way to deal with* him. Richie frowned. "Look, if you're gonna get all technical on me—just because I haven't got my grade eleven, you—"

I turned back to Jules. "Why don't you tell me which flower you mean?"

He looked me in the eye. "Poppy flower, okay?"

I took in a deep breath, and then when I was done, I found more room in my chest somewhere and took in a lot more breath. "Get the hell out of my room before I call a proctor," I said, loudly enough to use up a lot of it, and began exhaling the rest.

Jules didn't move, or even wince. But Richie came up out of Bal's chair like a boxer out of his corner, yelling something of his own—

and then a whole lot of things happened too fast to grasp—

and then a proctor with somebody's blood on his tunic blouse was holding me gently but firmly by the upper arm, a really nice guy from the smile on him, and offering me a mood elevator. That sounded like a great idea; it was only after I let him put it under my tongue that I realized the elevator's cables had been cut, by my anemones. It got exciting then for a few years, but fortunately the basement, when we reached it, turned out to be made out of marshmallow, and I decided it was safe to take a nap after all.

Not really.

I walked corridors for a million years. The same ones, for all I know. I didn't mind. I wasn't tired. I wasn't even bored. Funny things kept happening as I walked. Silly-funny. A cat danced with a fire extinguisher. Doors grew phallic knobs, then dilated and swallowed them. The floor was furry beneath my bare feet, then grassy, then hard and cold as ice. A section of pale yellow wall started to melt like frozen urine from the heat of my passage—nothing odd there, but it ran up instead of down. *Less* than zero gee whiz. It started to collect overhead, but I ignored it and walked on. Goats sang harmony—in Rabbit rather than Goat, a ludicrous choice. A bubble began to keep station on me, ahead and to my left, and inside it grew a hobo, a lifesize headshot. It was Jinny—hundreds of years older. She smelled like fields of barley, light as flax. Her face was in ruins, beyond the power of even power to save. Her hair was still widely red, but often misunderstood. Her eyes were hazel, stoned, rolling. Then Ganymede devalued the debit, the economy went bad, and her bubble burst. Well, at least the goats finally got their butts out of their heads and started singing in Goat. I began to encounter members of a race of Easter Island statues, huge mouths gaping like Art Deco urinals, making fluttery sounds like pigeons as I went by.

Then one short one blocked my path, and turned into my roommate Pat. "Joel?" he asked me. I waited with interest to hear the answer, but it didn't come. He asked if I could hear him, and after considering it, I said, "Sometimes." A pigeon fluttered, and Pat said loudly, "Just a moment, please, Proctor," and then softly, "Take this." A piece of notepad paper, folded three times. He folded my fingers around it, used them to tuck it into my breast pocket. "A time will come for you to speak," he said, very quietly, but with an unmistakable urgency that reached me in my fog. "When that time comes, say exactly what is on that piece of paper, and nothing else. You hear me, Joel? Say it back to me."

I nodded. "When it's time to talk, say what's on the paper, just that."

He nodded back. "Okay," he said loudly, and was dissolved by the sudden strong tide that swept me forward. I remembered that I should have told him about his bunk being destroyed. Instead I tried to interest the goats in a strained pun about a farmer who cared for seven or eight goats, even though he never cared for chevon or ate goats. It shut them up, at least. I trudged on in comfortable silence until I came upon my mother. I knew her at once, and was delighted to learn what she looked like, how she moved, how she smelled. It was only when I saw the concern in her troubled eyes that I began to realize how much trouble I must be in. That made me dizzy, and I told her so. She said I could sit down, so I did, and by the time I realized she'd meant I should sit in some chair somewhere nearby it was way too late. My tailbone hit the floor with a crash, angering the floor so much it reared up and smacked me on the back of the head. It burst, like Jinny's bubble had earlier, disintegrating me just as effectively.

Ten

No, no, you're not thinking: you're just being logical.
—Niels Bohr

I was wide awake and clearheaded. I was in an absolutely anonymous cubic, a generic plasteel box of air, about the size of a small studio. Its only features were doors at opposite ends, generic chairs, and a monitor. I was seated on one of the chairs, facing one of the doors, the monitor on the wall to my right. Seated facing me was Solomon Short. Behind him was another man I did not know, who sat facing the monitor and seemed absorbed in it. My tailbone hurt, quite a bit, and so did the back of my head, but I did not mind much.

"Do you accept me as your Advocate, Joel?" Sol asked me. I blinked. "Sure."

"I understand Pat has given you your lines."

I remembered what he must mean, and patted my pocket; the folded note was still there. "Yes."

He nodded, and gestured to the monitor. "Stick to the script. Now pay attention to that—"

The screen showed a room larger than this one. At its far left, three people sat behind a long table on a short shallow stage. On the right three mailer tables faced the stage, with people seated at them, one at either end and two at the center table. They were the only ones I recognized: Richie and Jules. "Is this realtime?"

"Yes."

Oh, fine: they got to tell their side first.

"Closest to us on the left," Sol said, "is Coordinator Merril Grossman, representing the colony. Beyond her is Magistrate Eleanor Will, and after her is Lieutenant Frank Bruce, Third Officer, representing the crew. With me?"

"So far."

"Good man. Nearest to us on the right of the screen is Prosecutor Arthur Dooley, representing the Covenant. Look him over carefully. I believe you've met the next two, transportees Butch and Sundance. Beyond them is their own Advocate, Counselor Randy Lahey." He spoke over his shoulder. "Sound please, Tiger?"

The man addressed, a Japanese of great grace and dignity, lifted a remote control he hadn't been holding a second ago, and turned up the volume on the scene we were watching.

Coordinator Grossman was speaking. ". . . chance to rebut or amend afterward before this recording is formally entered into evidence. Do you both understand?"

"Sure," Richie said sullenly "If it's bullshit, we can tell you after, I got it. Only I'll tell you right now, it's bullshit."

His partner Jules threw him a glare. "We understand, Your Honor." I noticed that his right hand, under the table, visible to the camera but not to the panel onstage, held a half-full drink.

Dr. Will, a striking slender brunette with skeptical eyes, spoke up in the formal tones of one reciting ritual for the record. "The *Sheffield's* AI began this recording when one of you spoke one of its trigger phrases, `gray market.' Under the terms of the Covenant, the recording was brought to official human attention only upon the observed commission of a breach of peace which occurs several seconds in. It is that breach with which I am primarily concerned today."

I was delighted. If there was an audiovisual record of what had occurred, I had nothing to worry about—and Jules was going to need whatever he had in that glass he was always holding. I could remember everything that had happened, very clearly. Well, clearly. Clearly enough. The broad outlines at least.

Let's see now. Richie and Jules had confessed that they were trying to recruit me into a conspiracy to traffic in heroin, or morphine, or possibly opium. Any of the three was an offense not merely detainable but serious enough to get one sent to Coventry . . . in jurisdictions where one existed. On a starship, for all I knew it was a spacing offense. Naturally I had been angry and afraid. I had asked them to leave my cubic, and had been ignored. When I tried to urge Jules toward the door with a hand on his shoulder, Richie had abruptly attacked me. Releasing a lot of my own pent-up frustration, I had admittedly overresponded a bit, knocked him all the way across the room—back onto my own bed, destroying it. Then Jules had sucker-punched me from behind, and we'd all ended up entangled on the deck, where I'd managed to keep them both restrained until the proctors arrived.

Yep—that was everything. I realized it was a bit unusual for someone of my size, mass, and background to make such easy work of huge bruisers like those two, so I was glad to know a visual record existed to back up my account.

"Sheffield, please begin playback."

"Yes, Magistrate," the ship said.

I settled back to watch myself in action.

. . . *"gray-market,"*Jules's recorded voice said.

"How gray?" I heard myself ask after a pause that now seemed to me incriminatingly long.

"Just *barely beige,"* Richie answered. *"It only gets black for a day or so right at the end. Up until then it's mostly gray, and some green. Tell him, Jules—"*

That's odd, I thought. Poppies aren't black at any part of their life cycle. Or gray, or beige. I'd grown them for the Lermer City Hospital, back on Ganymede. They're extremely colorful flowers, which ultimately yield a white or pale yellow seed pod that oozes a white sap. How could a drug dealer know less about his product than I did? Or was Richie simply talking through his ass?

I glanced at Sol when Richie's "High Japonics" line came, expecting to share at least a grin if not a chuckle. I was sure it would delight him. He didn't crack a smile.

Solomon short failing to find humor in a situation was so out of character, I was still puzzling over it when I suddenly realized the crux of the whole matter was approaching, and resumed paying close attention. Here came the sentence that would exculpate me. My heroic battle scene would not be far behind.

Richie's voice blathered something about his grade ten. My own voice asked Jules, "*Why don't you tell me which flower you mean?"* Here it came

"Happy Hour," Jules said.

My jaw fell. I was so shocked, I stopped paying attention to the events unfolding onscreen. Someone had to have altered the recording!

"Sol—" I cried.

"Shush," he said loudly and firmly. "Reserve your questions and observations."

"But damn it, he said—"

"Pipe down, I said!"

Damn it to hell, he'd said *poppy flower,* not *happy hour*.

Developed in one of the L-5s—all of them publicly disavowed blame and all of them privately claimed credit—Happy Hour was a flower whose leaves contained a mildly entheogenic alkaloid just slightly stronger than marijuana in effect, and no more habituating. It was about the opposite end of the spectrum from opium poppies. It just barely qualified as a restricted drug on Terra, and there were jurisdictions—among them Ganymede—where its use was legal. I had no idea what the *Sheffield's* policy on it might be. There were shouts and other loud noises from onscreen, but I was oblivious, aghast at this unexpected turn of events, trying to reconcile the impossible. The only rational explanation was that someone, somewhere, somehow, had been able to corrupt the *Sheffield's* AI. If so, I was about as screwed as screwed could be. I began to panic. "Sol, you have to listen to me!"

"I know," he agreed, eyes on the screen. "Isn't it terrible?"

"But I—",

"Don't call *me* Butt-Eye," he said, and used the remote to raise the volume enough to drown me out.

It wasn't easy. The fistfight playback had finished while I was distracted, and the sole audio output now was the soft voice of the magistrate. But Sol mashed down on that volume-up button, and only backed it off when I resumed paying attention to the screen.

And found Dr. Will in mid-lecture, a more-in-sorrow-than-in-contempt tone in her voice. "—even mention your ridiculous attempts claim your names were actually Corey Trevor Jay Rock."

"I told you, it was a fuckin' reflex—" Richie said off-camera.

"However," she went on determinedly, "this court does take notice of your special request regarding language, and reluctantly agrees with your argument that for you to defend yourself adequately you must be allowed to use your own natural idiom. To require you to use my vocabulary would be a distraction roughly equivalent to you asking me to speak to you freely and eloquently . . . without ever using any words that contain the letter 't.' I rule that you—only you—may use profanity in my court."

"Wow. Thanks, Your Magistrate, that's really fuckin' awesome."

"Richie," Jules began.

"Well, it is," Richie said. "Okay, so you saw it. That dick got all pissy for no reason, and started talking about proctors and shit. Well, I'm already on probation, like you pointed out before, and who's a proctor gonna listen to, me or some citizen? So I got mad and told him he was being an asshole, 'cause he was. And what does he do? He punches me in the face!"

No. That wasn't possible. Surely I hadn't—

Dr. Will said, "At that point, a proctor would have seen your face and his knuckles and believed you. Why didn't you call one?"

"Well, I would've got *around* to it," he said defensively "I was kind of fuckin' busy just then."

"Busy whacking him," Jules muttered.

"I was trying to, like, knock his punches aside," Richie insisted. "So I kept missing. Big fuckin' deal. What am I, a boxer? Anyway Your Wordship, my point is, after that the whole thing kind of got out of hand and nothing that happened was really anybody's fault, and the stuff that *was* somebody's fault wasn't really, so much, because all of us were full of shit, so what I say is, why don't we let water under the bridge lay where Jesus flang it, and just forget the whole thing? That's fair."

Jules said, "I hate to admit it, but he's right, Your Honor. It's a wash. No harm, no foul."

Dr. Will sat breathing through her nose for a while, looking at the pair of them. Finally she said, "Here is my judgment. You will both apologize to Mr. Johnston for invading his privacy, disturbing his harmony, and ruining his furniture. You will repair the damage yourselves. For the next month you will each be confined to your quarters whenever you are not either working or eating." She closed a folder that lay before her. Richie couldn't believe his luck. "That's it?"

She cleared her throat meaningfully, and his grin vanished. "I would be considerably harsher," she assured him. "But the Sheffield's Senior Healer, Dr. Lewis, has advised me that she considers moderate recreational use of happy hour acceptable on this voyage, and the Captain concurs. Neither of you knew that when you approached Mr. Johnston—but it was a fact all the same. You have narrowly escaped serious sanctions. Consider yourselves lucky that camera's microphone did not malfunction."

"We do. Thank you, Your Honor," Jules said at once. "Let's go, Rich."

They both got up and left the frame, and a few seconds later, the door I was facing dilated, and they both came out together, accompanied by Lahey, their potbellied Advocate. They were striving hugely, and without much success, to suppress grins big enough to frighten a hired killer or even a real estate agent. When they saw me, their grins did not falter, just became more wolflike somehow. "Hey, Farmer Brown," Richie called. "Knock knock."

I was so confused and demoralized I played along. "Who's there?"

"A fucked-in-thehead dipshit with manure on his shoes who goes around punching people 'cause he doesn't know his ass from his elmo," he said triumphantly.

I opened my mouth . . . but if there is a comeback to that remark, I still don't know what it is.

"Good luck in there, arsehole," Jules said, and took a sip of his everpresent drink. I hadn't noticed it on the monitor, but he had it now. "Come on, Rich, let's go." They both walked boldly through us, making us step out of their way, and left through the door behind us.

"You have your lines?" Solomon asked again.

I started, and patted my breast pocket. "Damn. I should have studied them—"

"Too late now," he said. "Let's go."

I soon found myself in a surprisingly comfortable chair, facing The Three Bears.

To the left sat Coordinator Grossman. She wasn't *that* big, physically. But she was a little bigger than the human average in all dimensions—and more important she was one of those largerthan-life people who can dominate any room she cares to. Right now she was just observing, but she was doing even that with gusto, with appreciation, hoping I would prove entertaining.

Directly ahead of me was Middle Size Bear, Magistrate Will, average height and mass. On the monitor outside her eyes had seemed skeptical. Now they were more ... knowing. Mothers always know what you're thinking, I've been told. Until you reach a certain age, anyway. Apparently I hadn't reached it. I was glad there was a third bear because it gave me a reason to pull my eyes away from hers—

--and then was sorry I had. Littlest Bear, Lieutenant Bruce, was really more of a bantam rooster. Most small men learn to deal with it, but if they get picked on enough, early enough, sometimes they never do get over it. He was permanently pissed off at everyone. And me he was *allowed* to be pissed at. I tried not to look, and failed, and sure enough, his feet did not quite reach the floor, even with the lifts he was wearing. And he caught me looking.

"Good afternoon, Joel," Dr. Will said.

I turned back to her and opened my mouth, and only then realized that every molecule of moisture in my oral tract had gone someplace else.

I made a faint croaking sound. Solomon said, "Good afternoon, Doctor," and gestured to someone outside my peripheral vision,

"You speak for Citizen Johnston, Dr. Short?" Lieutenant Bruce asked, surprised.

"Yes, Third Officer."

A bottle of water was put before me. Once again, I was glad—but only momentarily. The instant the first sip touched my lips, I suddenly knew exactly where all that missing moisture had gone to, where all the moisture in my body had gone to.

Use of his honorific had pleased Lieutenant Bruce. "Do you mind if I ask why, Dr. Short?"

"He plays the saxophone, sir."

This response clearly baffled Bruce. He wanted to find it contemptible—but even he couldn't be contemptuous of a Relativist.

Dr. Will cut in, and *again* it was one of those glad-but-only-for-a-second deals, because with her first words, I realized she was speaking in courtroom tones. "Joel, we're here to adjudicate the events that occurred in your quarters earlier this afternoon. First we will establish what facts we can. You will have an opportunity to explain, interpret, argue, or rebut, afterward, but please reserve your comments if any until we've finished examining the record. The Sheffield's AI began saving this recording when one of you spoke one of its trigger phrases, 'gray market.' Under the terms of the Covenant, the recording was brought to official human attention only upon the observed commission of a breach of harmony which occurs several seconds in —"

Oh, shit, here we go, I thought. Okay, okay: when it gets to the crucial point in the playback, they'll all hear how *close* it sounded like "poppy flowers." They'll see how it was an honest mistake.

The playback began on the monitor before me, with a peripheral echo over on Prosecutor Dooley's table.

And of course they'll agree that if somebody had *been* trying to peddle poppy products in a small society like this one, they should have been spaced. Anybody might take a poke at guys like that, before getting control of their emotions.

Reluctantly I admitted to myself that onscreen, they did not look particularly like villains. They looked like idiots—somehow still optimistic enough to think they might put one over on The Man despite a consistent record of failure. Worse, they were clearly harmless idiots, not nearly as menacing as I remembered them.

Richie said his High Japonics line again, and Sol brayed with laughter, even though he'd heard it already, outside in the anteroom.

Then the recording reached the point at which I'd heard "poppy flower," and what Jules said onscreen now sounded nothing at all like "poppy flower," it was clearly and unambiguously "Happy Hour," and nothing else.

And then nothing that followed was as I remembered it. I watched in growing dismay at what resembled nothing so much as a performance by an ancient comedy team called The Three Stooges.

I did not land a single punch. Nobody did. I was the only one who even tried very hard.

The me-onscreen cussed Richie and Jules out, and told them to get out of his room or he'd call a proctor. Richie jumped up indignantly, shouting, "Hey, fuck that, I'm on probation, okay!" He put a hand on my shoulder—to turn me around to face him, so he could argue more effectively; it was quite clear he wasn't attempting a sucker punch. And I tried to spin on my heel and punch his face in. And tripped over my own feet and missed by a kilometer and fell heavily into him, staggering him a little. And behind me, Jules tried to step forward and pull me back by the collar, except the place he planned to put his foot turned out to be full of my tangled ankles, so he tripped and fell into *me.* That tipped Richie the rest of the way over backward, and we all crashed onto Pat's bunk together, tearing it right out of the wall and dropping us to the deck. Richie and I both got the breath knocked completely out of us, but Jules was able to rise far enough to reach a musclebound arm up and grab hold of my bunk, which promptly also tore out of the wall and whacked him hard enough on the head to knock him cold. It drove his head forward and down, so it slid off the *front* of his head, and landed edge-on on the middle of Richie's contorted face, smoothing it out completely, at just about the same instant that Jules's kneecaps impacted both of my kidneys. Then it fell over onto the back of *my* head, and Jules's face landed on it. And then we all were very quiet and still ...

"Do you wish to see the recording again, Joel?" Dr. Will asked.

My mouth had once again become dry as a balance sheet. I shook my head no, reached for my water, and allowed myself the tiniest possible sip.

"Is there anything you wish to say on behalf of the colony, Prosecutor Dooley?"

"No, Doctor. I believe what we've seen twice now speaks for itself."

"It certainly does," Bruce muttered sotto voce.

"Joel, if there is anything you would like to say, now is the time."

Oh. Oh. I was ready for this one. Thank you, Pat! I fumbled at my pocket, took out my lines, tried to unfold the paper under the table unobtrusively, so it wouldn't be totally obvious I was using a crib sheet.

And when I had it open, the damned thing was blank.

I looked at Sol. Sol looked back at me. I looked down at that piece of paper. Then I looked back up at the judge and shook my head no.

She merely nodded, but her mouth changed slightly in a way that gave me the impression my response pleased her for some reason. "Anything to add, Advocate Short?"

"Yes, Doctor," Sol said. He tapped a few keys on the table's terminal. "You will all find my representation before you. It speaks to certain facts and circumstances which I hope you will agree are mitigational in this matter."

As all three looked down at their screens and began to read, I looked at ours, but it was blank. I looked at Sol. Sol looked back at me. I faced forward and waited. "I see," Magistrate Will said after a few moments. "Thank you, Advocate."

Coordinator Grossman was next to finish reading; she sat back, turned her head five degrees to the right, and studied me, frowning slightly.

When Bruce spoke, there was something odd about his voice. "You appear to have been under a great deal of stress lately, Colonist." It took me a moment to identify the subtle change in his tone. He was addressing me with respect. It confused me so much, the interval into which I could have inserted a response passed before I could think of one.

Dr. Will polled her companions by eye. There was some brief silent communication I didn't get. "Very well," she said then, and fixed me with an eagle's remorseless gaze. "Citizen Joel Johnston, physical violence aboard this ship is intolerable. You have damaged fellow citizens and colony property without cause. Examination suggests that you may have done so because of situational emotional imbalance, and possibly perceptual error, rather than from an unhealthy belief that you are entitled to correct the moral lapses of your fellow citizens with assault. Therefore, this matter will be held in abeyance indefinitely. You will not be required to accept remedial neurochemistry at this time. You are released in your own recognizance, on the conditions that, first, you enter treatment immediately, and satisfy all requirements of your chosen Healer to the best of your ability, and second, you either make peace with Transportees Bent and Rafuse, or mutually file a standard hundred-meter restraining order. In addition you are fined their medical expenses, and the cost of materials for repairing the physical damage to your quarters."

"Do you understand all that, Joel?" Grossman asked. Her voice was deep, raspy, kindly. "Settle the score, bury the hatchet, do as your Healer tells you, this all goes away and you get to keep on being who you are right now. Otherwise your brain chemistry gets readjusted until you're fit to live with people. It's our only choice, I'm afraid: we have no Coventry aboard."

I stood there listening to the blood in my ears until Bruce said, "Is there anything you wish to say for the record, Citizen Johnston?"

I looked at Sol. Sol looked back at me. I looked down at my crib sheet, and it was still blank. I looked up at the panel, and found that there was enough moisture in my mouth to permit speech, and that decided me.

I said, "Thank you," to Magistrate Will, and "Very much," to Coordinator Grossman, and "All of you," to Third Officer Bruce.

All three gave the same inclined nod of polite acknowledgment. All three stood up. So did Sol. So did Prosecutor Dooley. So, finally, did I. "Hot jets, Citizen," Dr. Will said formally

"C-clear skies," I responded automatically, but she had already spun on her heel and left, followed by her fellow panelists.

I turned to Sol, and found him beaming at me. "Some people are *really* hard to drag to a shrink," he said. Then his expression changed slightly "Whoa, now. Okay. Let's sit down and have a nice drink of water. That's better. Now a nice deep breath. Hold it for a moment. That's it. Let it out. Wait. Deep breath again. Hold. Release. Hold. You've got it. A little longer each time." The breathing thing was very hard to do, but soon it did start to clear my head a little. My heart was pumping a klick a sec. I felt like I was on the Upper Farm Deck: the temperature seemed to have shot up five degrees. I was pouring with fresh sweat from head to toe.

"Idiot," Sol said, shaking his head. *"Before,* you sweat."

"I don't know why I hadn't figured it out for myself, but I hadn't," I said. "I'm usually much quicker on the uptake, but it never occurred to me I was in danger of being put on neuromeds until she said I wasn't anymore. It's kind of a phobia of mine, having my personality altered by someone else. You probably think Ganymedeans are backward primitives in that regard, but—"

"It is precisely because I share your unconventional horror that I chose to act as your Advocate."

"Sol—"

"Don't thank me until you hear my fee. I want a new composition. It has to be at least fifteen minutes long. It can have anything you want in it as long as there's a lot of sax, baritone. Theme, style, tempo, key—all up to you. And it has to have my name in the title. You have until we reach our destination."

I looked at his goofy kindly smile for a long moment. "Sold," I said finally "Thank you, Solomon."

"Don't forget to thank Pat for writing your speech. You delivered it eloquently. I might almost say movingly."

"I won't. Which one of you put the other up to this?"

He was gone like the Cheshire Cat, leaving behind only a ghost of his dopey grin.

Eleven

Life is painful; Suffering is optional.
—Sylvia Boorstein

My Healer said, "Will you excuse me for just one moment, Joel?

"Of course, Dr. Louis," I said, and she put her full attention on her screen for a few moments, keying in an occasional input. To pass the time I examined her office, a fairly large cubic, soothingly furnished, gimmicked so that no matter which way you looked, the light was never directly in your eyes.

Suddenly I burst out laughing. A small outburst, easily suppressed, but audible. She looked up and met my eyes again and smiled faintly "You got it, did you?"

"Just now," I agreed.

Behind her, a midsize image hung framed on the wall, a rather striking photo of a large lizard, of a breed that had adapted better than anyone had expected to Martian conditions and was now considered a minor pest there. I had noticed it when I'd come in, but it had taken until now for my memory to yield up the odd name of that odd creature Gila monster. It was a visual pun. She was the Healer monster.

"That's about how long we've been around," she said.

"Healers?"

"Meddlers. Busybodies. Pains in the ass. Healing is merely one of the few remaining socially acceptable excuses for poking one's nose into another Citizen's affairs. Excuse me again for just one moment."

She went back to her screen, and this time I decided to pass my time by studying her more closely instead of the room.

She was perhaps twice my own age or a bit more, I guessed, of average height and weight, and looked healthy, fit, and content with her life. In another context I'd have called her attractive for her age. She wore her brown hair short, so nothing obscured any part of her face. In its various contours and configurings I found evidences suggesting decency, kindness, patience, considerable humor . . . and beneath all these a strength, or perhaps simply a determination, so awesome even in repose I had the crazy idea that if she were ever to go out the airlock, get a good grip on the frame, and plant her feet on the vacuum, the *Sheffield* would slowly come to a halt. Her clothing, however, was slightly more casual and comfortable than many would have deemed appropriate for our situation, indicating that the strength was not the kind rooted in iron stupid discipline.

I glanced around again. A pair of flat images on the side of a bookcase caught my attention, precisely because they seemed so pointless. Each photo had been cut out of a magazine or other hard copy and put there with pins. The one on top was of a donkey, or burro. Below it was a medium shot of a golfer lining up a putt. And just below them both was a line cut from some advertisement: *"For those who* know *the difference!"* If there was a point to the arrangement, it eluded me.

"Thanks for your patience."

"No problem, Dr. Louis."

"Call me Amy, please. Joel, I think there are four questions you urgently need to consider."

"That many?" I said sourly

"I don't think you've thought through any of them yet." Perhaps my least favorite criticism; I swallowed a comeback. "And you must. They're all very important."

"Somehow, Amy, I have an idea you're going to tell me what they are soon."

She shook her head. "Not if you're going to get cranky right at the jump, just because I said you have some thinking to do. If you like, we can spend this whole session dicking around. But we're going to get to it eventually. Suit yourself."

I think if she had looked back down at her screen, I would have gotten up and left, then. But she didn't. She just kept looking me in the eye, waiting, not offended by my antics, just waiting patiently until I decided to move on instead.

"Hell of a thing to say to a man, that he doesn't think things through," I grumbled. But it was clearly a backing-down grumble.

She nodded sympathetically. "It is an embarrassing thing to be caught at. But, Joel, face it: you're *caught.* Your presence here is not voluntary, remember? Ergo, you have screwed up *big-time.* The embarrassment is one of the smallest things you're going to have to deal with."

She paused, visibly giving me a few seconds to see if I was going to jump salty again.

Well, God damn it, Joel, is she right or isn't she? Can you face facts, or not?

"The majority of clients I deal with have been driven into this room by their own egos. You have not, for once, so I don't want to waste as much time dealing with yours. Can we simply assume goodwill on both sides, and start with the basic agreement that you need help, and that I may have some?"

The stars themselves knew I needed help. And I knew she had some. I'd known that before I'd gotten from her door to the chair I sat in. "I guess. . ." I began.

And a stuck switch somewhere in my brain went spung, and I burst out laughing—a hold-your-belly-and-fold-over guffaw.

She was not offended in the least, just surprised. And interested. I wanted to explain but was laughing too hard. But she was in no hurry. Finally I got enough air to hoot, "I do! . . . I do! ... Honest!" which only further confused her until I was able to get one arm free and point to the clip art pictures on the side of her bookcase that had puzzled me earlier. "I do know!" At once she began to laugh, too.

I *do* know the difference. Between my ass, and a hole in the ground. "Sometimes, anyway—"

She had a great braying loon hoot of a laugh, and knew it, and was not at all selfconscious about it. So we had us a good one. By the time was done, I was pretty sure I trusted her. It's humorless people who frighten me, because I can't begin to understand them.

At last I said, "I'm sorry, Amy. Please tell me the four questions you think I need to address first."

She nodded. "Who. What. Where. Why."

I blinked. "Not 'when'?"

She shook her head. "The answer to that is always 'now—I took a deep breath. "In that case, let's do it."

"First, 'who.' That's almost always a good place to start. Who are you? Not, who did you plan to be, or who are you expected to be, or even, what would you like to be. Who are you? Who the hell is this Joel Johnston, when he's at home? I don't think you know. And I'm certain I don't. It would be a useful thing to know, don't you think?"

I was past sarcasm or irony. "Yes, Amy, it would." My voice was hoarse. From the laughing.

"Next, 'what.' What led you to this place? To this ship, this twenty-year voyage to the back of beyond? What led you to abandon literally every single thing you've ever known except the concept of associating with other humans? Why did you leave the world, leave the rest of the race, leave the Solar System, for good? This is probably the question you think you know the most about, and I'm pretty sure you're wrong. Or only part right."

It was a broken heart! Wasn't it?

Wait. Had I expected heartbreak to be *permanent?* Did I really intend to die a virgin? If my Jinny was not to be with me, nor I with her, how was it any better if she was eighty-five lightyears farther away?

"The third question, 'where,' might actually be your best place to start. Where are you going? I mean that not rhetorically, but literally"

I didn't understand. "Literally? That's easy. To Peekaboo Two. Brasil Novo, if you want to be formal. The second planet of Immega Seven-Something."

"Tell me about it."

"Huh?"

"Tell me about the planet. When it was discovered. Its physical parameters. Its atmosphere. Its geography, and geology. Climate. Seasons. Flora. Fauna. Most intelligent-seeming organism identified. Most dangerous-looking predator identified. Intended location of our First Landing site." She paused expectantly.

"Uh . . . it's real hot and damp, for . . . for extended periods, and there's a whole lot of oxygen," I said, and realized with dismay that I had shot my bolt.

"You're going to spend twenty years getting there, and you'll stay there the rest of your life. I would spend some of the twenty years studying just what you've gotten yourself into."

All at once I felt immortally stupid. She was absolutely, shockingly right. Not thought this through? Hell, I hadn't *started* thinking. Look before you leap, my father had often said. I hadn't even looked *after* I'd leapt. After weeks on board a starship, my principal curiosity about my destination so far had consisted of wondering what to wear to work on the Upper Ag Deck. I had just sort of assumed there'd be a planet of some sort at the end of this, and what of it?

Could a broken heart cause brain damage? On this scale?

"Finally, why. Once you know the destination, the question becomes, why are you going there? Why go anywhere, for that matter? For what reason? What will you do there? Above all, why will it *matter?* Here, take these. Basket over there."

I accepted the box of tissues she offered out of politeness, and was startled to discover that my face was soaking wet and I really did need to blow my nose. The wastebasket had been placed so that it was a hard shot to miss. I hit it six times running before I was done. By then I was seeing little black spots overlaying everything.

"So that's it?" I said, my voice quavering. "That's everything? Shit, I thought I had a problem."

"You do," she said simply. "And that is a *lot* to chew on. So much that twenty years might not be enough time. And I promise you it will be painful. And you may fail completely. Would you like the *bad* news, now?"

I giggled. "Sure."

"You have no fucking choice."

"Tell me there's good news." I tried to parody desperation, but did too good a job.

She smiled. "You have the best Healer on the ship. I will give you some good tools, and yell encouragement, and take your crap, and share your breakthroughs, and tell you when your exciting new profound insights are horseshit."

"Tools?"

"Techniques. Disciplines. Attitudes. Drugs. In addition, I will listen to anything you want to tell me, and give advice if I happen to have any."

"That sounds good," I said. "When do I start?"

"Now."

"Okay. *How* do I start?"

"First, you have to stop."

"Stop what?"

"Everything."

"Huh? I mean, Crave pardon?"

"To grow, you must learn about yourself. To learn, you must listen to yourself. To listen, you must first learn the hardest trick of all: to shut the hell up."

I was so startled, I did. And then realized it would have been a not unclever reply, if I'd done it intentionally. So I tried to pretend I had, and made an elaborate show of obligingly cocking my ear to listen to some imaginary sound, and then tried to pantomime hearing some transcendent insight. She just kept looking at me with no expression, and suddenly I had a sense of seeing myself from the outside, watching myself mug and fidget. And *finally* began to get a sense of what she was driving at. I let my face go as blank as hers, took a deep breath, and tried my best to listen. To myself . . . to her . . . to whatever. After a few seconds I closed my eyes to help myself concentrate.

I don't hear a damn thing/wait/is that the air *circulator?/it's gone now/this* is *silly/really silly/stupid* kid's *game/hide and go* fuck *yourself/wait, now/a* hum/a *note at the very upper* limit *of audibility, somewhere right around 20,000 cycles per second/no, two of them/dysharmonic/I never diss harmonic/what's* wrong with dat *harmonic?/God,* I'm *sleepy/hey, why can't I hear my* own *pulse?/I wonder* if—

"There's a certain interior monologue that never stops, isn't there?"

Her voice startled me, enough that I opened my eyes. "Yes. Yes, there is."

"Try and make it stop."

"Stop thinking? Completely? Hell, that's one of my best tricks."

"Go ahead."

About five minutes later, I admitted defeat.

"Whose is the voice you hear?"

"My own."

"To whom does it speak?"

"To . . . to me."

"Why?"

It was a good question. How could it be so important to tell myself things I already knew that I couldn't seem to stop, even for a second? I had always prided myself on controlling my own mind . . . but it now seemed I only had limited control of what it thought *about.* But I could not make it stop.

"I don't know," I admitted. "It must be terribly, terribly important, because I can't make it stop even as long as I can make myself stop breathing. It's like my heartbeat—if it ever pauses, even for a few seconds, I'll die. But that can't be true: I've stopped thinking altogether a lot of times. Drunk . . . stoned . . . sedated . . . anesthetized for surgery . . ." I trailed off, realizing I wasn't sure whether I'd stopped thinking at those times, or just stopped recording the thoughts. "Maybe not. I don't know."

"You don't need to be afraid of it, I promise."

"Are you sure?"

"Your record says you're a musician and composer, but is vague about what kinds of music you're interested in. Do you know the classics? The Beatles?"

"Sure."

"Turn off your mind. Relax, and float downstream. It is not dying. That advice was ancient back then."

I shrugged. "Okay. How?"

"People have been trying to make their minds stop for thousands of years. It's called meditation. There are some useful tricks that have been passed down. Come here and I'll show you some."

She got up and moved to an area with no furniture. I could tell she was a Loonie by the way she handled herself in a third of a gee, but it wasn't so much awkward as unpracticed. She had the necessary strength to handle twice her normal weight, and would get more graceful at it with time, like perfecting an accent. I got up and followed her. She was just placing on the floor two objects like giant black cloth hamburgers. Pillows, it seemed: as I watched, she dropped effortlessly into a cross-legged seat on one of them, seeming to melt slowly like the Wicked Witch of the West despite the double gravity. She gestured at the other. "Sit down, Joel."

I did so far more clumsily, despite being in my native gravity. Pillow? It was just barely a cushion—made of soft cloth, but filled with something unyielding, as soft-but-firm-underneath as a ...

"It's called a zafu," she said. "Don't sit square on ii, but a little forward on it, almost falling off the edge, and put your legs like so." She demonstrated.

I dug in my heels. "Hold on a minute. Is this some kind of religious thing? Buddhism or something?"

She smiled. "Atheist?"

"Agnostic."

"Fear not. Buddhists are only one of many groups of humans who have found this a useful posture for meditation. So have Hindus, Taoists, TM'ers, and a dozen other groups. And in any case, Buddhism isn't a religion, strictly speaking."

"It isn't?"

"No god, or gods, or goddesses—except in a couple of the more obscure sects. No heaven or hell in the theological sense. No patriarch or matriarch, no Prophet or Pope. They don't go in for holy wars, or heresy hunts."

"Really?"

"Buddhists believe the Buddha himself was simply a man, who woke up one day. As far as I understand it, anyway. I know hardly anything at all about Buddhism. If you're interested, you can talk to Tenzin Itokawa, the Relativist. He is a Zen priest, of the Rinzai school. Right now, forget Buddhism. Forget religion. Just put your legs like this and trust me, okay?"

I tried. "Show me again."

She unpretzeled, and then pretzeled again slowly. I tried to copy it. This time I came closer.

"Other way round. This one over that one. There—that's it. Now work your knees around a little until they're comfortable."

Suddenly I seemed to just snap into place. "Like that?"

"That's it. Good. Okay, now Spine straight. Stack those vertebrae. Hands together, palms up, left hand on top, with the thumb tips touching. Settle your skull on those stacked vertebrae. You've got it."

It did indeed feel like a position I could hold for a while in relative comfort. "Now what?"

"Don't just do something: sit there."

I mentally shrugged and did so. Or rather tried to stop doing anything. As before I tried to stop thinking, too—with no better success. But I did become aware that I was starting to relax. My thoughts didn't exactly slow down . . . but they became less intense, somehow.

After a few minutes of silence, she said, "Now we do a breathing exercise so childishly simple it can't possibly have any effect."

"Sounds good."

"There really is nothing to it. In your head, count to four, at intervals of about four seconds, or a little longer." I did as she asked. "Okay. Now, you inhale for a count of four . . . then hold your breath for a count of four . . . then exhale for four . . . then hold for four. In, hold, out, hold. Repeat, and keep repeating. Try it."

I played along. A full cycle, then another, then another. After half a dozen or so, I found the rhythm, and settled into it. Easy as pie. Considerably easier than pi. Stop that, Joel.

"Good. Now with each cycle, slow it down just a skosh. Not much, and when it seems to be too much, let it come back up again, until you find your slowest natural speed. As soon as you're sure you've found it, stop counting and just breathe."

It wasn't hard. It was mindless, was what it was. Silly, and pointless, and . . .

. . . and I could feel my shoulders settling. Feel my facial muscles relaxing. Feel my pulse slowing, and deepening, and steadying. *Hear* my pulse, playing bass under the alternating E-A E-A organ chords of my breath. As I became aware of it, I had the idea I could hear it slowly changing from electric bass guitar to acoustic standup bass, quieter but more resonant.

I let myself sink into it. I closed my eyes, and paradoxically as I did I became more aware of the room, of my position in it, of its position in the *Sheffield*—and as I followed the thought to its logical next stopping place, it was as if the ground fell away beneath me without warning. Have you ever been so stoned or drunk that you suddenly fancied you could actually *perceive* the vast slow spinning of whatever planet you live on? Not just as something known intellectually but as something felt in the gut? Ever find yourself clutching the ground, to keep from falling off? Well, something like that happened to me then. For the very first time, I suddenly *got* where I was.

I was in an incredibly, pathetically flimsy bubble of moist air, hurtling through interstellar space at a speed so intrinsically terrifying that its friction with *nothingness* was enough to require powerful and clever shielding, propelled by a force no man really understood, so powerful it could have wrecked my star if invoked too near it. With a would-be village of other misfits and refugees I was plummeting through the universe so fast Time itself couldn't keep up—living by Dr. Einstein", Clock, while behind me the rest of the human race continued to age as God or random chance had intended. In these hairraising conditions I would, if I was very lucky, spend approximately the next fifth of my life racing toward a destination I had not given a second's serious consideration, a place where, if I was incredibly lucky, it would prove possible to raise turnips and keep hogs, and the monsters wouldn't be able to kill me.

All this in a microsecond—then in the time it took me to open my eyes the feeling popped like a bubble and I was back in my body again, was just a guy sitting in a room doing nothing at all. It happened and then was over so impossibly fast that I was still relaxed: there hadn't even been time for my heartbeat or breathing to increase. But when I did get my eyes open the first thing they saw was Dr. Amy's eyes looking straight into them, and I knew at once that she knew what had happened to me. She'd been expecting it to happen. No, that was wrong. She had known it might happen, and had hoped it would. My whole head vibrated for a few seconds, like a hummingbird in denial. "Whoa!" I croaked.

"See, Joel? You sat still and quieted down . . . and you noticed where you are. Sit still longer and you'll start to notice where you're going. Sit still long enough and you may figure out why you're going there. You could end up with some clues to just who the hell is doing all that."

"And that would be a good thing?"

"Yes," she said, raising her voice two notches higher in volume for the single word. "Stop looking dubious. When you peel back enough layers of your own bullshit to finally get a good glimpse of yourself, you are going to find you respect yourself a good deal more than you expected to."

I said nothing.

"I promise that, Joel. The journey you need to take isn't going to be easy . . . but you're going to like the destination. Certainly a lot better than where you are now. Now lie to me."

"Beg pardon?"

"Tell me you believe me."

I tried unsuccessfully to suppress my grin. "I believe you believe it."

She nodded. "Close enough. That's enough for one session. Here's your homework. First, I want you to spend an hour a day sitting zazenthat's what you just did—and I'd like you to do it in a Sim Room."

"I was thinking of a spot on the Upper Ag Deck."

"Later. Starting out, use the Sim. Accept the simulations it offers you for the first two weeks, the ones I'll program for you. After that you can override if you want, using your judgment. After three or four weeks we'll slowly bring you back out into the real world again. The Ag Deck might be a great place to start."

I thought up some objections, and decided to hell with them. If she wasn't smarter than I was, this was all a terrible mistake. "Okay. That was `first.' What's next?"

"I want you to get in shape. You're healthy enough, but you're quite out of condition for your age. Do what the Gym tells you."

It was easier to think up objections this time, and they were better objections. The one I wanted to admit to was, "Where do I find the hours?"

"Shave them from either your farmwork or your music. Whichever is less important to you personally."

It is annoyingly hard to object to a reasonable proposal. She was right. I was out of shape. "Okay. Meditate, work out. What else?"

"Study your destination. Learn everything you can about it. The star, first—where Immega 714 lies in the sky, why it took so long to discover, how it's different from Sol. Then the planet: What kind of world is Brasil Novo, how is it like and unlike Ganymede, what's living there already, what kind of place is it going to be for a kid to grow up in?"

To that I had no objections. "Done. Meditate, exercise, look out the windshield—anything else?"

She nodded. "Yes. I want you to start dating. Joel? *Joel!"*

"You go too damned far," I said on my way to the door. It would not iris open fast enough to suit me, so I tried to hurry it with my hands and it jammed in its tracks, not quite all the way open. I had to stop in my own tracks, my exit spoiled by an absurd social dilemma. I could not walk away and leave her with a broken door like some kind of barbarian, but I had no idea how to repair it. I stood there, unwilling to turn around until I had some idea how to cope with the situation. I'm pretty sure in another second or two I'd have remembered that I was a rich man, now. But before I could think of it, behind me she said drily, "My door is always opeh."

It is very hard to remain annoyed at someone who has just made you burst out laughing. I gave up and turned around and she was laughing, too. She had a great whoop of a laugh. We got into one of those things where each time you're just about to get it under control, the other cracks up again. It always ends eventually with you smiling at each other, breathing like runners after the marathon.

"Okay," she said finally. "If you can laugh like that, you can take a few weeks before you start dating again. Go do your homework." I nodded and gestured at the door. "I've got this."

She nodded and put her attention back down on her screen, as she d been doing when I'd first seen her.

I guess that was really the day I finally joined the colony, became a Brasiliano Novo—or at least, decided to try. I had already been utterly committed, physically, since the *Sheffield* had left orbit, but it was only after I left Dr. Amy Louis's office that afternoon that I finally started to become *emotionally* committed to anything but numbness. Until then, I had been not only drifting, but paying no attention where I was drifting. Reefs or deeps, rough seas or doldrums, all had been the same to me. But from then on, I was at least back on the Bridge, trying to work out my position and best course, trying the rudder, learning how the sails handled, testing the diesels, scanning the horizon for clues to the weather ahead.

I don't mean to suggest it happened in an hour. It took weeks to happen, months, years. But that's the hour when it began happening.

Twelve

There is no easy way from the earth to the stars.
—Seneca

The first thing I did about it was not move out.

Everyone seemed to assume that now that I was stinking rich, I would of course move out of the prematurely decaying hovel I had been sharing with three hapless losers, leave Dear Old Rup-Tooey behind me in the dust, and settle into vastly more lavish solo quarters several decks higher, and with all the privacy, comfort, and (most prestigious of all) roominess that could be desired by a healthy young nouveau millionaire whose Healer had advised him to start dating.

But I had lived alone before. I had *always* lived alone before. Until I'd been accepted into the Tenth Circle, I'd had no idea how much that sucked. I remembered it well. I had no particular reason to suppose money would make it all that much better.

Also, I kept remembering that I might very well have been spaced as a danger to the *Sheffield* by now, if it had not been for my bunkies Pat and Herb. And for Solomon Short, who was One of the six wealthiest people aboard, and had chosen to be my friend when all I had to my name was a good sax.

Besides, as Mark Twain says, two moves equals one fire. I'd already moved once recently.

So I stayed where I was. But I reached out to another friend, as wealthy as Sol and considerably more practical, and sought his counsel. And George R smiled, and pointed me toward the best mechanics, engineers, artisans, electricians, cyberpeople, and plumbers aboard, and snipped some bureaucratic red tape to get me permission to clear out storage cubics immediately next door on either side and cut through some walls. When all the busy beavers had gone away again and the dust had settled, RUP-0010-E was the most solid, reliable, comfortable, luxuriously appointed, and technologically advanced living space on that deck—and its 'fresher was probably the best in the *Sheffield,* so unreasonably large that all four of us could have used it at once, with a guest apiece. And so advanced in terms of hedonic technology that we all suddenly found ourselves very popular fellows in shipboard society: people wanted to be invited over for long enough to need to use the 'fresher. It didn't work well because we were usually in there ourselves.

Pat got all the data-chasing and pattern-spotting software his heart desired, and enough processing power to provide practical, realtime access to any historical datum on board. Or behind us in the Solar System, although that was already becoming more and more out-of-date as Einstein effect started to mount up. But historians aren't in a hurry.

Herb received the power to seal off his quadrant of the room at will with two mirror walls that would not pass light or sound in either direction, within which he could not-write in privacy.

So did Balvovatz, but I doubt he got much writing done, because he never activated his field if he was alone in there, and never stopped smiling when he came out. He told me years later, weeping drunk, that it was the first place he had ever lived that a woman who did not love him desperately would come to. I laughed so hard he stopped weeping and began laughing just about the time I quit laughing and started to cry.

For myself, I settled for two major infrastructure improvements. First, a robot that made French Press style coffee from fresh-ground recently roasted beans on demand and adulterated it to my taste; it claimed to be fully automatic, but actually you had to push a little button. And second, a bunk that was as comfortable as any in the *Sheffield* . . . and on top of which I, my roommates, *and* Richie and Jules could all have piled at once and done jumping jacks without making it creak, much less rip free of the bulkhead. Nothing in that room was breakable by the time I was done with it.

So much for change in my *physical* environment.

On my way to the Sim Room for my first session, I wondered what sort of exotic locale Dr. Amy had programmed for me to meditate in. The *Sheffield's* Sim gear was less perfectly convincing than what I'd experienced at the Conrad enclave back in British Columbia . . . but not by much. It was one of the few areas Kang/da Costa had splurged on. I guess I expected something grandiose and imposing and sacred—the Eiheiji monastery in Japan, or Jaipur Lake Palace in India, or Vatican City before the Prophet's Angels got ahold of it. Or possibly some secular but stunning scenic vista: Vancouver Harbor, or Rio de Janeiro in old Brasil, or looking east from Olympus Mons on Mars, or Titan seen from the Rings, or my own favorite, Jupiter from Ganymede, at night, through an aurora. Nor would I have been surprised by a simple flood of sheer kaleidoscopic imagery, like a screensaver display, or the fireworks you can sometimes see behind your closed eyelids.

I got a blank white wall. About half a meter from my nose.

I've since learned that several schools of Buddhism do that, too: meditate facing a blank wall. It makes a certain amount of sense. Minimal visual distraction, maximal visual canvas for any visualization imagery you may find useful—and a constant, ongoing, gentle reminder that you are doing something not-ordinary, that you are now removed from the conventional world where sensible people do not sit staring at blank walls.

An equal number of Buddhists find this appalling, and instead sit with the blank wall *behind* them, facing another one across the room ... and any co-practitioners in the way. What distinguishes Buddhism from any other faith I've studied—from most human beings, really—is that the people who face the wall and the people who face away from it have never fought a war over it. They're never going to agree . . . but they feel no need to. Buddha himself is supposed to have said, "People with opinions just go around bothering each other."

I thought both sides were crazy myself, when I first started, and Dr. Amy too for assigning me that program. My second day I mutinied, and reset the Sim for a Ganymede vista, as close as it could come to my own pasture at night. But at the end of the hour, I realized I had wasted the whole thing thinking. And worse, feeling, which was even less helpful. Nostalgia hurt too much. I tried it her way the rest of the week.

I spent nearly every minute of that first week more than half convinced I was wasting my time, waiting for something to happen and then uncertain whether or not anything had. But at the end of the week, I found that I was looking forward to it. Imagine that you've been carrying twenty kilos of sand in a backpack without knowing it, all the days of your life. Then one day somebody shows you how to take it off for a moment. It was that much of a relief, I learned, to be able to set down now and then, for whole minutes at a time, the ongoing burden of thought, to briefly silence the constant chatter of my mind compulsively reassuring itself that I was still alive. For periods measurable in whole long seconds, I could sometimes become transparent to my own feelings and emotions. Occasionally there would be what I can only call moments of clarity, when I seemed able to see without distortion and accept without fear. After a week of staring at that silly blank white wall, I was sorry when the time came to change it.

Until I saw the new Sim.

It was a series of paintings, or rather two series, acrylic on canvas, by a PreCollapse artist named Alex Grey, who lived and worked on Terra, in New York, in the twentieth and twenty-first centuries. You sat zazen for a while, and then you started up the image slideshow and looked at the paintings, and at programmable intervals they changed. That doesn't sound very dramatic—but I'm talking about the kind of art that ought to be served with a whisk broom, so the customer can brush the sawdust off his shirt when he gets back up. Grey made timeless art that probably would have spoken to a Neanderthal. Indeed, many parts of his vision were at least that old.

All the twenty-one paintings in Grey's Sacred Mirrors series are at least man-tall. First in the sequence is a pale gray human silhouette, facing you, arms slightly apart from its sides, palms outspread, almost as if to say, "Here I am."

Second painting: the background goes to black, and the silhouette is filled by an extremely realistic skeleton, man-tall and detailed. Third painting: the same skeleton is overlaid by an incredibly detailed and accurate rendering of all the nerves in the human body; the complete electrical wiring system for the skeleton, brain at the top, and nothing else.

The golden nerves seem to leap off the canvas, rendered with the same sort of gilt that medieval manuscripts used to he illuminated with. Fourth painting: the nerves vanish, replaced by the circulatory system, rendered in blue, heart in the center of the breast—and for the first time the body is recognizably male, with testicles. The fifth painting details the complete lymphatic system—but this body is female. Successive paintings detail male viscera, then a female musculatory system complete with fetus in a cutaway womb. And finally the body grows flesh, becomes a naked Caucasian woman, facing you calmly. The next painting morphs her into a naked Caucasian man; the next an African woman; then an African man; then an Asian woman, and finally an Asian man.

Each of these figures, from the skeleton on up, has been depicted with such exquisite realism that the next painting has more impact than it might have alone. It shows the psychic energy system. The flesh has melted away, leaving bones and organs and nerves and veins and staring eyeballs . . . but all are shot through now with gleaming shimmering crackling filaments of energy, and the six chakras of so many mythologies are visible at brain, throat, heart, navel, abdomen, and groin, glowing with power like white coals, and the entire body is enveloped by a translucent pale blue aura made up of infinitely tiny threads of energy, and it is quite clear that all of it—body, chakras, and aura—are physically connected to the rest of the universe, exchanging energy with it. The next painting takes that even further: the flesh and meat and bone melt away, leaving a human-shaped form composed almost totally of the strings and threads of energy that generate it, extending outward to meet the cosmos at head and feet, wrapped in a great bubble of unimaginable power. And in the next painting, even the vague body shape is gone, leaving only a boiling torrent of loops and circles and lattices of universal fire that Sol later told me was remarkably like the mental picture he had going through his head when he was doing his job.

There were more paintings in the series, but most were topheavy with denominational religious iconography, so I usually chose to fast-forward through them. Such imagery was perfectly fine back in those days, indeed laudable . . . but now of course feels faintly indecent, a reference to a bloody period in history we would all prefer to erase, if it were not that the horrid lessons learned in it must never ever be forgotten. Those images have all joined the swastika: symbols of spirituality perverted, than which there is no greater evil.

After that came a different series of thirty paintings, which Grey called "Progress of the Soul." Each depicted one or more of his strange, skinless, fleshless glowing people, connected by powerful invisible energies to the world around them, carrying out a variety of utterly basic human activities. A man with bowed head, praying, a halo of golden energy pouring from his head. A man and woman side by side, staring rapt at the heavens together, information flowing in *both* directions. A man and woman kissing in close embrace—surely the most intimate embrace ever rendered, since you can pick out every sinew, nerve, or capillary in their bodies, *see* the normally invisible pulsing energy they create being passed back and forth, heterodyning, lighting the world. The same couple, copulating—an almost nuclear explosion of energy indescribable in words. Then the same couple standing, he reaching around from behind her to touch the hugely swollen belly inside which their child can be seen; that particular painting is framed on either side by an ontogeny sequence of ten images, one for each month, starting with sperm meeting egg, and ending with a full-term fetus. Then one I found it easy to stare at forever, called "Promise," in which the expecting lovers face one another, and promise each other what they will do for this child they're making together. On the ground between them is a two-year-old . . . holding a skull.

There are quite a lot more in the series, but I'm going to stop describing them now, because the next one in sequence, "Birth," is simply so powerful that I've never been able to endure looking at it for more than a few seconds; then my eyeballs start to cook and I have to look away.

But near the end of the series is one often considered Grey's masterpiece, called "Theologue." It depicts a man doing exactly what I was doing the first time I saw it: sitting zazen, legs folded beneath, hands placed on his lap in the mudra position, head slightly bowed, meditating. A translucent golden round halo surrounds his head, and a transparent Dlue egg-shaped halo surrounds his whole body. He is seated at least a foot off the ground, on a kind of net made of interwoven strands of energy running in three directions, bright white and so intense flames lick up from them in the vicinity of the seated man, but do not come close enough to burn him. Behind him, through the grid, gray mountains can be seen to recede forever. All six of his chakras shine with universal fire.

It is clear that he is engaged in theologue: in a dialogue with God. Who is himself.

Maybe I've conveyed nothing at all to you. If so, just take it from me that a few weeks' exposure to those paintings helped me heal—physically, mentally, psychically, spiritually. Grey himself said one of the specific purposes of his work was to make people healthier. He had seen a study which showed that people who had just seen a frightening, disturbing 2D movie called The Exorcist left the theater with their immune systems weakened, more vulnerable to disease. He decided if art could do that, it could damn well do the opposite, too, and should—so he devoted his life to learning how to create images that left the viewer healthier. I could not begin to describe how he does it, even if I understood it. Just take it from me that if you are ever mindblown or heartsick, what you want to do is look up the works of Alex Grey, in the best reproduction you can find, and let them work on you.

Then for two weeks, I reset the Sim to place me on an imaginary satellite orbiting low over Brasil Novo's equator, at a speed that kept the primary, Peekaboo, always behind me. I forgave the simulated satellite for impossibly having local gravity, since sitting zazen in orbit would have been impossible without it. And finally, I moved out of the Sim Room altogether, and set up my personal traveling zendo in the second of the two good spots I had mentally marked on the Upper Ag Deck.

As Dr. Amy had decreed, in addition to sitting, every day also had sweating.

For the first several weeks I chose swimming as my primary exercise, because it develops every one of the useful muscles and none of the others. That meant long trips to the upper decks, just below the Bridge Deck. The *Sheffield* kept its swimming water as far forward as possible, to act as some additional protection against the constant shower of deadliness from dead ahead—the bitter complaints of the very tiny, very nearly nonexistent bits of the universe we were enraging to white heat by hitting them at a large fraction of *c*. (Our drinking water was stored at the opposite end Of the ship, against the day when we would flip over and begin decelerating for the last half of the voyage.)

The Pool area turned out to be a lively, buzzing social center, one of the primary places where the people aboard *Sheffield,* colonists, crew and transportees alike—went to meet each other for sociosexual reasons—practical when you think about it, since everyone there would be naked sooner or later. While I still was not ready to follow Dr. Amy's advice, I did notice that I worked harder at my swimming than I would have exercised if I had been alone.

While swimming there I got talking with Tiger Kotani, the kindly man I'd met briefly in the antechamber before my examination by Magistrate Will. He turned out to be a soft-voiced dignified astrophysicist from Terra. He persuaded me that simple fitness was not enough, and talked me into signing up for a self-defense class he taught.

Nowadays, of course, most citizens reliably expect to live out their lives without ever being involved in a violent altercation. People looked at me a little funny because I had been. I agreed that it had been a shameful event I should have been prudent enough to avoid. But I also found myself thinking that I was on my way to a frontier world, where people often acted in primitive ways, and where native fauna often acted in murderous and unpredictable ones. If, Heaven forbid, violence should ever come my way again, it seemed to me that it might be very nice to *win* the fight this time.

By the time Tiger-Shihan was through with me, I had reason to be confident that I might at least survive. He did not teach me to be a killing machine. But he did teach me to be pretty damn unkillable, and to sharply discourage attempts. I believe he himself could have massacred the entire ship's complement, proctors and all . . . if we'd attacked him first. All his technique was defensive.

He was also kind enough to teach me a few utterly nonviolent evasive techniques, which became necessary when I learned that some girls who take self-defense classes are the kind of girls who find a man who has been in a violent confrontation with other men interesting. Thanks to Tiger's footwork advice, I was able to keep them all at arm's length ... but sometimes I worked harder in the corridor outside the locker rooms than I did in the dojo.

The one female I was always happy to see was little Evelyn, so many trillions of kilometers behind me, whenever one of her rare brief letters came in. She always found some way to make me smile. I tried my best to return the favor.

One day another student of Tiger's named Matty Jaymes, a pleasant-faced man in his forties who showed a lot of quick in class, happened to come past as I was explaining to a persistent brunette that I couldn't join her for coffee because I had to study: my Healer had told me to learn everything I could about our destination. This was the truth; I simply omitted to mention that I had already been ducking the task for over a month, and fully intended to keep ducking it that night. Matty stopped short, managed to accept the date I had just evaded without awkwardness for any of us, then placed a tractor beam on me somehow and took me in tow. He wanted to discuss music history, about which it soon developed he knew about as much as I did myself.

But he was no musician. By the time we got back to his quarters I knew he was an astronomer, like Tiger, and when I saw that he shared the space with no one, I twigged that he must be *the* ship's astronomer. The same one who had originally tried to interest me in his intensive study of Sol, back when I'd made my abortive stab at a job hunt.

If I'd met Matty—he flatly forbade me to call him Dr. Jayrnes—in person back then, instead of by e-mail, he would definitely have met my definition of interesting. I haven't met a lot of men with genius-level minds whom women found irresistible—but at least a dozen of them called warm greetings to him during the few minutes we were in transit.

He certainly saved me a lot of time, once I got him off music history and onto his own field. Except for Claire Immega herself, there may not have been a better expert on Peekaboo and Brasil Novo anywhere in the Galaxy—because it had been to Matty that the report of Immega's successor Anabel had been addressed, a fact he mentioned as if it were of no significance. If you don't count the telepathic communicator who passed on the message, and probably had no idea of its importance, Matty had been literally the first person in the Solar System to know that Immega had discovered gamma Bootes was *not,* as thought, an A7 III star—a giant—but a binary star, whose companion was a G2 very like Sol. Her robot probes had found a very promising planet orbiting the new G2 star—news that had rocked four different planetary stock exchanges when it became public, and had ended up causing the construction and commissioning of the RSS *Sheffield.*

It didn't seem to impress him much. Matty spent the entire trip to his room explaining to me the problem with his Sol study, and I think he believed I understood what he was saying, even though I did *not* try to fake it. He simply was so focused and so excited, he failed to notice my incomprehension, which would have been incomprehensible to him. All I gleaned was that his research was really frustrating to him, because for some reason he absolutely hated the data he was getting.

He had happened to catch a perfect solar eclipse by Terra as we were leaving the Solar System, a major stroke of luck—I understood that much. And something about the displacement of a few stars *behind* the sun was very very slightly wrong, and somehow that was very very bad. It indicated something about the "J2 component of angular momentum" was bollixed.

But when I tried to find out just what that meant, and why it bothered him so badly, he changed the subject back to the star he was supposed to be telling me about: the one at the *other* end of our trajectory. Immega 714, AKA Peekaboo.

"In all the catalogs, gamma Bootes or HR5435 is commonly listed simply as 'gamma Boo,'" he explained cheerily "So when Claire Immega of the 44 Bootes colony sent back word that gamma Boo was not a single star but a binary, with a G2 companion, the formal name of the G2 became Immega 714 in her honor—but it took about fifteen seconds for the System's media to name it Peekaboo. And when she added that its second planet looked *extremely* promising in terms of habitability, naturally that became Peekaboo Two. The name was just annoying enough to stick in a lot of minds, and the da Costa consortium became interested right away."

But of course, you don't start outfitting a starship on the basis of promises, however extreme. It wasn't until Immega's robot probes confirmed the good news that da Costa formed its partnership with Kang and began seriously planning our expedition. That took a while. Long enough that Immega herself did not live to learn just how spectacular her find had been.

Picture the geometry 44 Boo, a variable star (eclipsing binary), lies a little more than forty-one lightyears from Sol System. From there it's another forty-three and change to the newly discovered Immega 714. The first colonists to settle on 44 Boo's fourth satellite were a bit too busy surviving to stargaze a whole lot, but eventually two of them combined to produce Claire Immega. She became an astronomer, and soon discovered Peekaboo and Peekaboo Two. She was twenty-five before she had amassed sufficient clout to browbeat her fellow colonists into letting her divert what must have been scarce resources for ultrahighspeed probes. Even though these very tiny but very intelligent robots managed a very high fraction of c on their journey, it naturally had to take them *well* over forty-three years to make the trip, and then another forty-three years for their reports to make it back to 44 Boo at lightspeed.

From there, of course, the colonists' telepaths were able to pass the data back to their siblings back at Sol System in zero time. But Claire Immega was over thirty years dead by then. So she never knew, at least not for sure, that the new planet she had given mankind was one of the best it had yet found within its reach.

"G type stars like gamma Boo are damned scarce within eighty lightyears or so of Sol," Matty told me, "and G2s that happen to have planets of the right mass orbiting within the zone that will permit liquid water to exist are less common than buttons on a snake. By now nearly all the really promising ones already have colonies either in place, or on the way there. And so far, nobody else has drawn the kind of jackpot Immega did."

"It's really that good?"

"Well, if you had your heart set on skiing, or ice fishing, I'm afraid you're screwed. If you like bonebreaker gravity, you'll hate the place. If you adore hostile environments, harsh conditions, scarcity, and surly natives, you'll be bored silly. But if you can steel yourself to a world where your feet never hurt, food and energy are cheap, and everybody goes naked most of the time . . ."

Thirteen

That is happiness: to be dissolved into something complete, and great.

—Willa Cather

As soon as we got back to his luxury digs, he started bringing up Brasil Novo stats for me. Normally I'd rather read figures in printout than onscreen . . . but what he used for a monitor was an entire wall, bigger than any two walls in my place. So I sank back into an armchair so comfortable I kept murmuring thanks to it, sipped Matty's excellent Scotch, and learned.

Brasil Novo is roughly the same size as Mars, but thanks to a smaller iron core, it is twelve percent less dense, giving it a surface gravity of .33 gee rather than Mars's .38 gee. It lies more than 1.1 AU from its star—but Immega 714 is slightly brighter than Sol, so it seems normally bright in the sky for a sun, despite being ten percent farther away.

Here is how the planet stacks up beside Terra:

	Brasil N	**Terra**	**BN/Terra**
Mass (10^{24}kg)	0.5648	5.9746	0.095
Volume (10^{10}km3)	16.318	108.321	0.151
Volumetric Radius (km)	3390	6371	0.532
Mean Density (kg/m^3)	3461	5515	0.628
Surface Gravity (m/s^2)	3.26	9.8	0.333
Escape Velocity (km/s)	4.43	11.19	0.396
Distance from Primary (AU)	1.1	1	1.1

And here, for perspective, is a set of similar comparisons between Terra and another reasonably well-known planet of comparable gravity:

Mars Terra Mars/Terra

Mass (10^{24} kg)	0.64185	5.9736	0.107
Volume (10^{10} km3)	16.318	108.321	0.151
Volumetric Radius (km)	3390	6371	0.532
Mean Density (kg/m^3)	3933	5515	0.713
Surface Gravity (m/s^2)	3.71	9.8	0.379
Escape Velocity (km/s)	5.03	11.19	0.450
Distance from Primary	1.38-1.66	1	1.52

Brasil Novo comes complete with two moons, quite similar to those of Mars. For that reason, and for emotional/political reasons less susceptible to analysis, it had been rather illogically decided to name them, too, Phobos and Deimos.

"What difference does it make?" Matty asked when I raised the issue. "Nobody's likely to confuse them in conversation with the ones we left eighty-five lightyears behind. And very soon after arrival, everyone is going to become sharply aware that those two moons will have radically different *effects* than their namesakes, at least."

Always happy to play straightman to a speaker who truly enjoys his subject. "Why's that?"

"Because of something Mars lacks that Bravo has in great plenty."

It took me a second to recognize "Bravo" as an Anglicized contraction of Brasil Novo. It was the first time I'd heard the shorthand, but it would by no means be the last. Within a year, even the two dozen or so real Brazilianos aboard would be using it. "What's that?" I repeated.

He blinked at me. "Water. Teratons of water. The original Phobos and Deimos have tidal effects, but there's not enough surface water on Mars to make them visible. Bravo is going to have *very* complicated tide, and I suspect its version of a king tide will be an *emperor* tide."

I thought about it. "So, moist air, then."

"It better be."

The only reason it didn't get tedious saying "Why is that?" to this man was that he always answered, and the answer was usually interesting. So I said it again.

"We expect, or at least hope, to live there. So we'll probably want to breathe a lot. You have probably noticed that we are not carrying along with us in this bucket five hundred and fifty Mars-type low-pressure masks, plus several thousands more for replacements and the next several generations of offspring, nor are we spending any time drilling in them or trying to become acclimatized to them. If not, you've surely noticed that you don't wear one when you're working on the Upper Ag Deck."

He paused, and did not say, "Think it through."

Let's see. Atmosphere breathable without assistance. But even less gravity than Mars or home. So to get Terra-standard pressure, there are only two possibilities: the atmosphere must be thicker, or it must be much higher in oxygen.

Okay, take Terra. Its surface gets that much pressure from lying under a troposphere about twelve kilometers high. Brasil Novo's lower atmosphere would need to stand an unreasonable thirty-six klicks tall to yield that much pressure. So ...

"The place is a tinderbox!" I exclaimed.

He shrugged carelessly "The drier parts of it, yes. The air is a little over thirty percent oxygen. Here, take a look at this." He gestured shamanically with his hand, working some virtual remote control only he could see, and the wall display changed to:

ATMOSPHERIC COMPOSITION

Gas	**Bravo**	**Terra**
Oxygen	30%	21%
Nitrogen	60%	78%
Water	4-8%	0-4%
CO_2	0.10%	0.04%
Other	1%	1%

"Clearly it's going to be a warm, moist planet, by human standards. A jungle world, very much like the Amazon Basin of Old Brasil back on Terra, I imagine. Its fauna seem to be fantastically better at photosynthesis than ours. But your guess is correct: that thirty percent oxygen is going to make for severe fire danger. I suspect that if an expedition to one of the drier regions were to be struck by lightning, the lucky ones would be those killed outright on the spot. I doubt the rest could outrun the flames."

There are times when I'm happier to have a vivid imagination than I am other times.

"But there will be no shortage of damp places. Bravo has almost as much salt water cover as Terra—a bit more than half its total surface, compared to Terra's seventy percent. What you get basically is three major continents, more or less evenly spaced around the globe, each supporting a large dense jungle, with a major river flowing out of each, as in the Terran Amazon or Congo. There are also several large continental islands analogous to Australia, and if you'll pardon the technical terminology, umpty gazillion smaller islands, ranging in size from humungous to teeny-weeny"

"Okay, got it. The farther from the seashore, the more fire danger ... but there's a *lot* of seashore."

He nodded. "The planet's axial tilt is only fifteen degrees, as compared to Terra's twentythree point four five degrees. So there will be distinct seasons . . . but less pronounced than on Earth. No freezing winters. No polar ice caps."

That was good. I hate wearing stanfields—as long underwear is called in Canada, for reasons probably lost to history and certainly unknown to me. A world without snowdrifts was just fine with Joel. And no polar ice meant more of the total surface available to live on; more places to put usable seashore.

"And the day/night cycle—"

That one I could address. "—is nearly identical to Mars. Twenty-four hours, thirty-something minutes. Uh, thirty-seven."

"Of course, that must be what the Zog has you using on the Upper Deck. Well, the farming is probably going to be even better on Bravo than it is in Zogland."

"Really?"

He caused images to slideshow on his wall, some still, some moving—and all striking. "As you can see, the place is tectonically quite active. Volcanic mountain ranges. Good thing; it keeps the atmosphere replenished. So volcanic ash fertilizes the land—and the mountains present sent useful minerals and metals which we reach by blasting a little bit sideways instead of digging way down and hauling it back up. But from a peasant's point of view, the best part is going to be the weather: probably the most stable climate humans have yet encountered."

Well, I hadn't said it in several minutes now "Why is that, Matty?"

"Consider the geography" He smiled. "Or bravography, if you will."

"I won't, but you go ahead."

"Thank you. Look at those three major continents. All more or less equatorial. Roughly evenly spaced. Each of them will have a bravographically anchored transportation zone, where jungle trees pump a regular fountain of water into the atmosphere. Ergo, climate patterns will be anchored, too, with weather infinitely more stable and reliable than anyplace in the Solar System."

I understood what he meant when I saw the planet in 3-D projection. Terra is continually plagued by nerve-racking El Nino events because the committee that designed it (it had to be a committee) inexplicably omitted to place a large jungle in the middle of the Pacific Ocean, to anchor that evaporation zone. Bravo lacked this defect. "And that stable weather forecast will be . . . gray skies, lots of clouds? Rain in the morning giving way to rain in the afternoon, followed by a high probability of rain all night?"

"In general, yes, around the equator. With more temperate zones to north and south. But the three big continents themselves will be fairly temperate, and covered with boreal forest."

"A lot of our oldest myths will still work."

He nodded happily "And some others will become for us historical curiosities, requiring footnotes. On Terra, there tend to be large deserts to the north and south of all the jungle areas, including the Sahara, Kalahari, Gobi, Patagonian, and Sonoran deserts. But Bravo does not seem to have real deserts, probably thanks to its more favorable climate distribution."

"Okay by me," I said. "I never met a desert I liked much."

"Oh, I have!" he said emphatically "I'll miss them. Splendid places to do astronomy. But by surrendering them, I'll get to see something unique in their place. I've *seen* a desert. I've lived in a few. But so far, as far as I know, *nobody* has yet seen a Hungry Ghost with his own personal eyeballs, much less spent time in one." He sounded gleeful at the prospect.

"A Hungry Ghost?"

"A firestorm the size of a state or province."

The name sort of explained itself to an extent. One-third gee, and a teeming stable biosphere—the land would be lush with life. The trees must grow to fantastic heights, and sprawl across the sky in the competition for sunlight. But the air they spread through was nearly a third oxygen, fifty percent more than a sensible planet needed . . . which they themselves were replenishing! Let things get dried out in the stable weather, let the ground cover vegetation and tree droppings crisp up nicely into tinder and kindling, let one of the inevitable sparks occur in a very bad place ...

"Tesla's eyebrows, Matty! It must be all the circles of Hell."

"Worse, I think." The bastard was still gleeful. "I'm not saying those were fun, but they all *stayed* put. Once you reported to your Circle and took your assigned spot in the lake of burning pitch, you pretty much knew your address and postal code for the next quadrillion eternities. But Bravo has more sunlight and higher temperatures than Earth, so —"

"—so it's going to have *serious* winds."

"Sometimes. And sometimes hurricanes. Primarily in tropical ocean regions. But also in high elevation land plateaus . . . where forests tend to dry out."

"Oh, that's not good!" Now I fully understood the aptness of the name he'd picked. I had all too vivid a mental picture of a firestorm, the size of Central British Columbia, say . . . that lurched and lunged randomly across the landscape at hurricane speeds, gulping biomass like a drunken sailor on a spree, spewing flames to altitudes previously reached in human experience only by mushroom clouds and weather balloons. Hungry Ghost indeed! Like the Hungry Ghosts I had encountered in my quick surface reading of Tibetan Buddhist mythology: spirits consumed with lust for things that never satisfied, hunger that could not be eased, thirst that nothing could quench. Damned souls condemned to yearn forever, and destroy all they touched, knowing it was pointless. I wondered if a Hungry Ghost typically had an eye, like a hurricane, and how long you'd have to live if you ever found yourself in one. Would it be even theoretically possible to move quickly and correctly enough to *stay* in such an eye, until the Ghost's terrible Hunger burned itself out?

"But that's only going to worry certifiably insane explorer types like me, who go looking for danger," he said with a chuckle. "Farmers who pick their homestead site intelligently, on the other hand, are probably going to be very happy people in Saudade."

Incongruous image of pigs on the Ag Deck. "Sow what?"

"That will be the name chosen for the first town we'll settle. You heard it here first."

"How can you be so sure, this far in advance?"

"Because that's what I strongly feel it should be, and nobody aboard with a contrary opinion is a bigger bully than me."

"It would be impolite to argue with my host. Say the name again, and tell me what it means."

"Saudade. 'Sow,' like a female hog. 'Da,' like the Russian for 'probably not.' `Day,' light come an' me wan' go home."

"You can't possibly know that song."

"Neither can you, son. And if you do, you ought to know the word *`saudade.'* It's a Portuguese word, and the heart of the Portuguese music called *fado.* You could say it is as important a word to fado as 'soul' is to blues, or 'cool' is to jazz. And as difficult to define."

It came back. "I know that word. I've seen it written, anyway, I just had no idea it was pronounced like that. It means . . . well, sort of . . ."

"The best I've heard it rendered into Basic so far," Matty said, "is 'the presence of absence.'"

"The thing you know because it isn't there."

He nodded. "Which, when you think about it, is a pretty fair description of what powers this ship."

"Do you understand the relativistic engine, Matt?"

He smiled. "You flatter me. That's my point: there is some reason to believe there's literally nothing there."

I shrugged. "Big deal. Is nothing sacred?"

He winced politely "I asked George R once, what do you guys actually *do* down there in the Hole? He looked around, leaned close, lowered his voice, and told me the secret. They strap toast onto a cat's back and toss it in the air."

And he waited. I *knew* there had to be a gag, and if I didn't guess what it was, he would win the exchange I had begun by essaying a pun. Well, it served me right. "But how do dat make de ship go, Mr.

Interlocutor," I asked ritually, conceding defeat.

"They butter the toast, you see."

Light belatedly dawned. "Ah. Of course. The toast *must* fall butter side down—"

"—but the *cat must* land on its feet." He spread his hands: QED. "Hence the array spins forever, generating power."

It was a good gag; I grinned in surrender. "It's so simple once someone explains it."

He accepted my sword by saying, "To answer your question seriously, I confess the word that best describes my understanding of relativism is probably saudade."

"The mystery of the ages," I said, thinking to agree.

"No," he said with a sudden seriousness that took me by surprise. "That it is not. Not even the mystery of *this* age."

"Uh . . . I'll bite. What is the mystery of the ages, this one included?" I said, trying for lightness.

He kept frowning, and had stopped meeting my eyes. "Fermi's Paradox."

It took a second. "Oh. 'Where is everybody?' you mean."

He made a single nod. "Nobody even talks about it anymore. We know that life can come to exist in the universe, because it did, once that we know of. We know life can evolve sufficient intelligence to leave its star, because we've done it. It is, granted, conceivable that this might occur only once every twelve billion years or more." He made a face as if he'd bitten into a lemon. "But as for me, I find the creation myth in Genesis considerably more plausible."

"Didn't someone settle this back before the Dark Age?" I asked. "Webb? Wrote a book listing forty-nine possible solutions to Fermi's Paradox—and demolished them one by one, leaving only the fiftieth solution, namely: we're alone?"

He looked as if he'd chased his lemon with milk. "Webb was an idiot. His analysis presumed that if other life did exist, it could not be more intelligent than him. It was the characteristic flaw of the entire PreCollapse millennium: the assumption of vastly more knowledge than they actually possessed." He closed his eyes and rubbed them. "Over and over like a recurring flu they developed the imbecile idea that they understood nearly everything, in all but the finest details. They had no slightest idea what lightning was, how it worked. They had absolutely no clue how moisture got farther than about ten meters up a tree—the highest that capillary action can push it. Fifty years after the splitting of the atom, they accidentally noticed for the first time that hurricanes emit gamma rays. There were quite a few large, significant phenomena they could 'explain,' often elegantly . . . over and over again . . . and had to, because the explanations kept falling apart at the first hard-data-push. Things like the Tunguska Event, gamma ray bursts, why an airplane wing generated lift, what ninety percent of our DNA was doing there . . . yet they were solemnly convinced they basically understood the universe, except for some details out in the tenth decimal place.

"They somehow managed to persuade themselves that computer models constitute *data.* That very complicated guesses become facts. They made themselves believe they had the power to accurately model, not merely something as inconceivably complex as, say, a single zygote . . . but a national economy, a weather system, a planetary ecosphere, a multiplanet society—even a universe. They made solemn pronouncements about conditions a trillionth of a second after the Big Bang, on the basis of computer models, which they had produced with computers not even bright enough to talk, let alone understand speech. They were unlike all the generations before theirs in several ways, but chiefly in that they had no faintest *clue* how ignorant they were. Previous ages had usually had a pretty good handle on that."

"Things got worse in that direction soon."

"Sure. Scientists were claiming godlike knowledge, and couldn't deliver. It got to where even the average citizen could sense they were bluffing. They could go on for literally days on what happened in the first five minutes of creation, without ever saying a single thing that *meant* anything, did anybody any good. They wouldn't even *discuss* what happened when you died, let alone how random chance produced life. No wonder the citizens decided to go back to a different kind of omniscience, that came with omnipotence *and* omnibenevolence thrown in at no extra charge. Twentieth-century science *handed* the world over to Nehemia Scudder, on a plate. No wonder some people preferred 'intelligent design' to evolution. At least it put intelligence somewhere in the mix. Unfortunately, not much."

I was getting a little dizzy "I think I lost you around that last curve, Matty. What's your answer to the mystery? If intelligent life has arisen more than once, in this corner of the cosmos, where *is* everybody?"

He drew in a long slow breath, and held it for long enough to make me think of the breathing routine I still used at the start of meditation. I kept on thinking of it as he exhaled, and his frown melted away and his face smoothed over and his body language relaxed. He fiddled with his remote, and said, "Authorities differ, but for my money, probably the closest thing to intelligent life we'll find on Bravo is the spit-tooth sloth," and the wall showed what I hoped was an enlarged image of the ugliest creature I had ever seen. "Admittedly it is difficult to assess intelligence based on observations made from orbit. Once a probe is fairly sure a given life-form is not a serious threat to man, it moves on to other things that might be. But the sloth's competition is not impressive."

It seemed clear he was changing the subject, and he had been so helpful and generous with his time, that was fine with me; his reasons were none of my business. We moved on to an interesting discussion of exotic fauna like hoop snakes, snippers, blimps, and the truly disgusting rocket slugs, which dodge predators by expelling feces so violently they shoot into the air and glide great distances. A whole pod of such frightened slugs, Matty said, can apparently fill the air with a ghastly green mist. . . .

Later on, though, after I'd read up on spit-tooth sloths, I became less certain he'd been changing the subject. A sloth sits high in one of those preposterously tall trees, waiting with infinite patience until something preyish-looking happens to wander by below. Then she (once the males are done with their fertilizing, their only remaining function is as hibernation food) spits out a poison tooth, with high velocity and great accuracy. It drops the prey for so long she has time to slowly descend, retrieve it, and bring it back up the tree to consume at her leisure.

In other words, they conceal themselves perfectly, take no risks at all, and attack without warning or mercy.

I would recall that later in the voyage.

It all started to come together at some point. The meditation improved my disposition and outlook, without which no beneficial change is possible. The physical exercise began to pay off next. When you're in better shape, you think better. When you're thinking better, meditation produces more useful insights. As I came to understand Bravo better, my work on the Ag Decks became both more effective and more meaningful to me, and before long I started to acquire something I hadn't even realized I'd been lacking: a feeling of worth, of making a contribution, having something tangible to offer. I actually did have a knack for it, too, I learned—for sensing just how the new conditions would alter plant requirements and capabilities, and figuring out ways to compensate. The Zog told me once, after I managed to bring a fungal disease under control without quite knowing how myself, that I thought like a Bravonian vegetable. I don't know if I've ever been more flattered.

In time, it became possible to dimly imagine a future life on Brasil Novo, an endurable and maybe even pleasant one in which I might have both purpose and value.

Two moons in the sky. Similar to Callisto, Europa, and Io back home on Ganymede. I liked that. One moon wasn't enough to keep a sky interesting, in my biased opinion.

There would also be the giant A7 star in the sky, too. Immega 713, as it had been renamed, in preference to some horror like alpha gamma Boo. (Which Solomon of course liked, saying it would make a great name for a fraternity) According to Matty, since it lay one hundred AU away, it had only four percent of the brightness Sol had from Terra—but that made it a hundred thousand times brighter than Luna. It might only get really dark at night when there was heavy overcast, or when the A7 was on the other side of Peekaboo. I liked that, too.

The music I composed became better, stronger, deeper. The music I played finally started to approach what I'd always heard in my mind's ear; I had better wind, a clearer head, and a much clearer idea of who it was playing. Not only did my reputation begin to spread throughout the ship, I began to feel more and more as if it was deserved.

As I said, after a certain point it all began to heterodyne. I felt better, so I did better, which made me feel even better, which . . . So that first year of star travel would probably have been an extremely happy and satisfying one for me, on balance.

If I had not taken *all* of Dr. Amy's advice, and resumed dating six months into it.

I don't suppose it will stun you to learn that Kathy was the first girl I asked for a date. It certainly didn't surprise anybody I knew in the slightest. I'm given to understand that people I'd never met or heard of on the far side of the *Sheffield* knew it was going to happen weeks before it did. God knows Kathy was not surprised to be asked, and had the kindness to accept before I'd quite finished getting the words out, which cut my interval of agonized suspense down to just the hundred million years it took me to not quite get the words out.

And why should any of us have been surprised? We were such a perfect couple on paper that even if we'd disliked each other's body odor, which we didn't, we'd have had to at least give it a try. Musically we shared a bond, a level of communication, that many married couples never do achieve, and others do at the cost of great struggle. Even tone deaf people in the audience could sense it, and responded to it. She was very good, in the same way that I was, and we brought out each other's best. We helped each other say important things we could not express alone, and how far can that be from love?

Loving Zog's Farms was another profound connection, one that went back in time almost as far as music. Plunging hands into soil together is very close to thrusting them into one another. And of course both of us were simultaneously fertile and ripe, a paradox whose metaphorical impossibility accurately reflects the turmoil of that condition. Afterward you look back on it and call it golden. At the time it is hell on rusty wheels.

Part of the problem was precisely that we were so *self-evidently* perfect for each other—a cliche looking for the spot marked X. Enough so to have made us both selfconscious from the very start, enough to make each of us want to dig in our heels out of sheer stubborn unwillingness to be that predictable. We'd both read and seen enough romantic fiction to know that if the writer seems to insist on throwing two characters together, it's their job to resist, for as long as they can, anyway. A silly reason not to love, I know . . . but are there any that aren't?

But in an utterly closed community that small, you can run but you can't hide, not forever. Twenty years stretched before us. Eventually you say, why not get it over with and find out? Or maybe I mean, why not find out and get it over with? One of those. And that too was predictable. Like I said, nobody was too surprised when I asked Kathy out, including her, and nobody was *too* surprised she said yes, even me. I took her to a play, the second production of the Boot and Buskin Society, and afterward we went to the Horn, ordered Irish coffees, and talked.

Five minutes into a discussion of the play we'd just seen—Simon, very well done—I interrupted myself in the middle of explaining why the lead actress's performance had been so remarkable, and launched into a ten-minute monologue of my own. Kathy listened patiently.

I told her about Jinny—first about Jinny Hamilton, and then about Jinnia Conrad of Conrad—and I worked in my father, and the little I knew of my mother, and my experiences with sudden poverty and solitude, and anything else I could think of that might help justify being a basket case. That was probably pretty predictable, too. At a conservative estimate, I was perhaps the hundred billionth asshole since Adam to try and tell a woman, I find your company enjoyable but I am too damaged for any long-term emotional involvement, so don't place your hopes on me. They almost always listen patiently, for some reason. But I doubt if anything I said surprised her very much.

Probably the only person in the entire ship who ended up finding anything at all surprising in that entire date was me, after I finally shut up long enough for Kathy to tell me that she'd gotten engaged two weeks earlier, to two very nice people, and had I ever thought much about opting into a group or line marriage myself? Because they were looking to expand. Full bore omnisexual, of course. But no pressure.

I haven't the slightest idea what response I made. That date lasted another hour and a half—Herb and Balvovatz agreed I got back two hours after the play ended—but I cannot for the life of me recall another word either of us spoke, or anything that occurred.

Fourteen

If you don't live it, it won't come out your horn.
—Bird

Things gradually settled, as they always seem to do eventually, into a routine.

At what seemed the approximate speed of mold forming on a corridor wall, life aboard the RSS *Charles Sheffield* began to take on discernible shape, and then flavor, and finally texture. Five hundred people slowly got to know one another, heard (the first version of) each other's back stories and dreams, learned each other's strengths and weaknesses, discovered what we needed and what we had to give, slowly began to design and assemble, by trial and error and what few lessons history had made clear enough, a society that would use all of us and feed all of us and give us all something to be part of for twenty uninterrupted years.

Complicating the task, of course, the society was intended to become something utterly different at the *end* of that twenty years, and needed to be kept aimed in that direction at all times. For most humans, anything farther ahead than this time next year is the "far future." It can be all too easy to lose sight of a goal that far off, and we *had* to be ready when we got there. The good news was that Merril Grossman was our Coordinator. She had a keen mind, a great understanding of her job, and a way of bullying people that was so transparently an act of love everyone let her get away with it.

Six months into the voyage, she organized and chaired the *Sheffield's* first town meeting. It had to be electronic, naturally. Any cubic large enough to have held all of us at once, even in free fall, would have been a preposterous waste of space, in a ship that never seemed to have enough. Even the Pool could barely have accommodated half of us, and only on the friendliest of terms. But a well-run ETM works *better* than a live rally in the park, and Coordinator Grossman knew how.

I mean, speeches *were* made, inevitably: we are talking about humans here. But they were kept short, and they assayed out remarkably low in bullshit content. Captain James Bean, a man who looked *exactly* like you want the captain of your starship to look, and had the reputation to back it up, got five minutes, and used three. The whole ship rocked with applause when he was done; he was well liked. Five-minute gab-slots also were awarded to Colony Governor Jaime Roberts, and to George R representing the Relativists. Another would have gone to Governor-General Lawrence Cott, representative of Kang/da Costa, but he was ill so his slot was given by his lifemate Perry Jarnell, who took six minutes. At that point his audio and video both cut out.

After that, even the most pompous speakers quickly figured out that if they hadn't gotten it said within five minutes, Merril wasn't going to let them keep trying. By the time everyone's screens went dark that night we had accomplished what I considered an astonishing amount.

Names, for one thing.

People had been arguing them for months, occasionally at a volume that drew proctors, but somehow our Coordinator cut through the confusion in a way that didn't seem to leave anyone feeling disenfranchised, and before too long we had all finally reached consensus on names for most of the places and things that would really matter to all of us when we got to Bravo.

I for one found most of the choices cheering, too—our colony seemed to be a jolly crew.

The three major continents, for example, were christened Samba, Cerveja, and Carnaval. What lay ahead we knew not, but we intended to have a good time there if we could. At the same time, once he'd explained it to everyone, Matty Jaymes's suggested name for our first settlement, Saudade, passed by a landslide, with fewer than two dozen opposed, the closest to unanimity we came that night. We all understood that our good times would always, always be seasoned with a sharp regret, a longing for all the lost loved ones and planets and habitats we had left so far behind us forever. To pretend otherwise would be foolish.

Nearly as popular a choice were the new names given to our two moons. *Nobody* had liked the unimaginative names Immega had given them, New Deimos and New Phobos. For one thing, they didn't look like their namesakes, and would not behave like them in the sky. For another, a lot of us were *from* Mars, and did not want our good times tinged with nostalgic regret every single damn time we looked at or discussed the night sky (That was one reason the two closest alternatives to Saudade—Rio de Janeiro and Niteroi—had found so few supporters, I think.)

So I'd been expecting the grassroots effort to rename the moons. But the names chosen were a pleasant surprise, from the music of the twentieth century: Tom and Joao. The great composer Antonio Carlos Jobim, known as Tom, and his great disciple Joao Gilberto between them created samba, the lush basis of all subsequent Brazilian music .

. . which became a major influence on the work of my favorite saxophonist of that period, Stan Getz. I took that as a good omen, and made a mental note to find out if Kathy knew his work with Tom and Joao. (She did—and knew a guitarist who could play Gilberto style. We killed 'em at the Horn of Plenty all that week.)

Governor-General Cott's partner had by that point leaned on somebody hard enough to get hooked back online, and expressed his co-husband's strong distaste, on behalf of our noble patrons at Kang/da Costa, for the growing tendency of some colonists to shorten the name of our new home-to-be from Brasil Novo to Bravo. His partner found it disrespectful and Jarnell found it vulgar, if I've sorted them out correctly. He stopped short of demanding prohibition of the name Bravo, but asked for a resolution agreeing that the proper name was Brasil Novo. The Brazilians aboard registered strong support.

Merril sighed and asked if anyone else wanted to address the question. A colonist named Robin Feeney spoke up, pointing out that "bravo" was a word used to applaud a feat of great difficulty, and a jump of eighty-five lightyears certainly qualified: our successful arrival would itself be a Bravo to Captain Bean and his excellent crew. That went over well. The word was also, she added, one we commonly applied to artistic effort that moved us, and as an actress and painter, she hoped hearing it often might help to remind us that the arts would have an important place even in a frontier society. Someone promptly said, "Bravo!" and was widely echoed around the ship. Merril squelched further debate, put it to a vote, and that was the end of the Cott resolution. Many of us would continue to say Brasil Novo, most of the time, because let's face it, it was more elegant. But when we did it was our choice.

More time was nearly wasted on the contentious question of just where on exactly which continent Saudade should be founded. It was a big planet. Almost none of us had an opinion, but the few who did were married to them. Fortunately before it got out of hand, Merril pointed out to us that the reason most of us had no opinion was that none of us was entitled to one. It was not yet possible to state with certainty where the best site for a colony might be: we simply didn't know enough yet. Robot probes were good, but they weren't *that* good. We would simply have to wait until we approached the Peekaboo System and could take a closer look for ourselves.

We did more than just pick names that night. Some sensible suggestions were made. Survivor Gerald Knave, for example, proposed we establish a prize of some kind for Most Constructive Complaint of the Month. Sol Short broke in to suggest we establish some sort of penalty for the *least* constructive, but Merril ruled him out of order and made it stick.

The most popular speaker of the evening was clearly the Zog. He spoke on what it was now believed our new home would be *like*, the local conditions we expected to find, some of the flora and fauna we knew about—not in any great detail, really: just enough to give a *sense* of the place. More than a few of us were still as ill-informed as I had once been, and all were spellbound by his descriptions. He made it sound exciting, enticing, mysterious. A steamy jungle planet, shrouded in mists, teeming with life as exotic as if it had been made up to entertain a child at bedtime. His description of the hoop snakes, which bit their own tails, curled up into the shape of a wheel, and then by deforming their belly muscles were able to roll along the trails carved through the jungle by the snipper beasts, had everyone chuckling. Then his straight-faced explication of the propulsive method used by the rocket slugs caused such a shipwide convulsion of laughter Merril had a hard time restoring order. For months thereafter, the words "green mist" had the power to make us crack up. I remember thinking at the time that it was the first time the entire colony had laughed together about something, and that I hoped it wouldn't be the last.

Zog even managed—don't ask me how—to make the everpresent mortal danger of fire we would face and even the threat of Hungry Ghosts seem like only bedtime-story monsters, thrilling but not truly terrifying. I think if you took a poll, most people would agree with me that Bravo Colony's history as a real rather than merely potential entity begins with the moment Kamal Zogby began to speak that night. Before that we were a big can full of smelly strangers. When he was done we knew that we were a family, and one that was going to create an entire world from scratch together one day, in an environment strikingly like the one in which humans had first evolved back on Terra, and that it was going to be an adventure. Everything we did would be legend for ten thousand years: the first legends of our planet.

There were a couple of obligatory anticlimax speeches and announcements, and then Merril closed the meeting precisely when she had said she was going to, at 2300 *Sheffield* time.

Ship's time, that is. By that point in our voyage, six months out, we were already beginning to use Dr. Einstein's Clock instead of Sol. Lorentz contraction had set in, and we were aging just measurably slower than the people we had left behind.

How much slower? Not a lot—yet. At the instant when those of us in the *Sheffield* passed the six-month mark of the trip, residents of the Solar System were only about seventeen and a half hours older than we were.

But it would get steadily worse as our velocity mounted up. And constant boost mounts up *fast.*

At the one-year mark, the differential would be about seven days and seven hours.

At two years, it would be more than fifty-eight days.

By the fiveyear mark, the divergence of our clocks and mankind's would surge up to almost three years. We would be traveling at more than 0.938c.

And when I had been traveling for ten years, and was twentyeight years old, more than *fortyfive years* would have elapsed on Terra. Behind me Jinny would be closing in on sixty-four.

And receding at 99.794 percent of the speed of light.

Then we would flip over and do the whole thing in reverse. And assuming we got it right, and made orbit around Brasil Novo as planned, we Peekaboobs would be twenty years older, and Solarians would be something like eighty-five years older. Jinny would be one hundred and three, and probably wouldn't look a day over eighty.

Time has always struck me as one of the Allegedly Intelligent Designer's ideas that was never properly beta-tested before its implementation.

I know: they say it serves to keep everything from happening at once. But what would be so bad about that? You'd get to see both the Big Bang, if there really was one, and the Heat Death, if there's going to be one. Either way at either end, you'd know. That and everything else knowable. You'd have what Adam and Eve got cheated out of, what they *thought* they were bargaining for. Gnosis.

So would everybody. No more bullshit.

Okay, so it would lack suspense. But it wouldn't lack surprise. *Everything* would be a total surprise, always.

I have a great career ahead as a consultant in the thriving field of universe design, Sol once told me. I told him he should hire me: some experts said he and his fellow Relativists generated mini-universes like soap bubbles every working day. He said the moment he got a complaint from one of them, I was the guy he would hire to do the renovation.

I don't care what Dr. Einstein says: my own clock seemed to *speed up* as the days went by. Those first few hours after leaving orbit took forever to pass. The first few days went by at a glacial pace. Then for weeks, every minute of every day brought new information, new people, new situations, new problems, new mistakes, new things to learn and unlearn. After a few months, of course, it began to slack off. At six months, I had a fair idea of where to find most of the good stuff and how to avoid most of the bad stuff, and the days started to slide by while I wasn't paying close attention, and events began to sort of lurch forward in quanta rather than unfold in a smooth flow.

Things did move forward, though. By the end of the first year, I was on my sixth girlfriend of the voyage.

I've already mentioned the first one, twice, but you probably didn't notice her go by. Robin Feeney was the female lead in the Doc Simon play I took Kathy to see, on our first and last date—the actress whose performance I was championing just before everything went to hell. When Robin spoke up at that first Town Meeting, in support of the shorthand name Bravo, I was just out of frame beside her, holding her hand and smiling encouragingly. I'm the one who said "Bravo!" first when she was done. It got me soundly kissed about two minutes after the meeting ended.

And that, I'm sorry to admit, is very damn nearly all there is to say about that relationship. That kiss may have been the high point.

If my life were a play Robin would have had to be a pivotal character, vivid and vibrant, the source of several life-changing insights, and utterer of at least one or two lines that would come back to haunt me in the third act. It was a role she was perfectly cast for, too, one she could play the hell out of. Unfortunately she had no one to write it for her—and no skill at improv. Onstage, she was vivid and vibrant. Offstage, she was usually thinking about how to be thought vivid and vibrant the next time she was onstage.

I sound like I'm implying that she was more self-centered than I, which is both unfair and untrue. In all honesty, Robin's principal attraction for me was that she was a female mammal with a body temperature of thirty-seven degrees who was willing to share my company in a social context. I certainly didn't think of it in those terms then, of course, but looking back on it I can see the most powerful emotion I felt throughout was probably relief at finally being able to get Dr. Amy off my case.

We couldn't even manage a meet-cute. She came up to me after a set at the Horn, to ask the name of the piece Kathy and I had just played. "Shaping the Curve," it was: a soprano-piano duet by a twenty-first-century composer named Colin MacDonald. I said if she gave me her address I would mail her MacDonald's own recording, and I did, and after a couple of days of increasingly chatty mail we finally made a date. That was all there was to it.

Herb says a relationship that begins without a good anecdote has no future. He may be right. Jinny and I met online at the campus bookstore, the first week of class. She asked if I had a battery wafer she could borrow, and I did. Yawn. And look how *that* turned out.

For our first date Robin and I picked a common choice: we shared Sim. And once there, the simulation we agreed on was again one of the most common options: background sharing. I showed her typical scenes of life on Ganymede, some of the places and activities that had once mattered to me. She walked me through comparable scenes of life in The Wheel, one of the smaller O'Neills, where she had been born. In my opinion it's also one of the goofier ones, an odd combination of mystical and uptight. They believe in the anthropic principle, and live communally and take entheogens, but nobody ever leaves a surface unpolished or an item out of place. I didn't express this opinion, and in return Robin was far too polite to tell me that Ganymede struck her as materialistic and sloppy. Our truth level never did improve much.

I did notice that she was a different person when we were in The (simulated) Wheel, one I think I maybe would have liked better. But she didn't.

If I want to, or need to, I can reach back into my mental file storage and pull out long stretches of footage representing just about all the major periods and significant people of my life—usually in ultradefinition video with supersaturated color, and full spectrum audio with enhanced treble and bass. In the drawers marked "Dad" and Jinny" there are extended sequences in true 3-D, complete with textured smells, and sometimes even tastes. Sadly such mental files are like analog recordings rather than digital, in that they decay slightly with each playback. At the same time, paradoxically, some of the earliest memories are the most detailed and evocative.

But when I try and retrieve memorable scenes from my relationship with Robin, what I get is a series of disjointed dim still images, like old photographs, that occasionally animate for a few seconds, with snippets of soundtrack that often fail to match the action.

There don't seem to be any inconsequential relationships in drama. I guess they don't have the time. We had *plenty* of time. If we'd been a play ourselves, and unsubsidized, we'd have closed in a week. As it was we managed to keep the house lit for months by giving away comp tickets to each other and pretending not to notice the canned applause. But the reviews were never worth clipping.

The upside, of course, is that in the end *we* were able to disengage without doing any important damage to one another. We carried on as though we had, of course, for the drama that was in it. But we gave it up soon, and with secret relief on both sides. On mine, anyway.

About a week later, as I was wandering around in a daze thinking, *Well, that wasn't as horrible as it could have been,* I had a meet-cute with Diane Levy. She did not notice me sit down next to her at dinner, tried to turn around and grab the sugar from the table behind us, and coldcocked me with her elbow. Or *was it?* I thought, and woke to find her large liquid eyes as close as one might expect to find those of a lover. Four hours later, she was one. To my complete astonishment, I had made her a thankfully unnoticed gift of my virginity.

I lay beside her gasping for air, and grateful for the excuse. What would I say to her, now? My brain settled on something or other just as my lungs returned to active duty; I opened my eyes and opened my mouth ... and discovered Diane was not at all interested in any of *those* organs.

A while later, floating on a rich postcoital sea of relief and pride and satisfaction and regret, I found the perfect words with which to let her down easy. I would simply explain, tell my story truthfully, help her see that I was damaged goods, too scarred by a tragic love to ever love again. If she then chose to take up the challenge to pursue a relationship, my conscience would be clear. (Somebody said the gray component of semen is draining brain cells. It may well be so.)

No sense dragging it out; I opened my eyes to begin her disappointment as gently as I could. And found myself alone.

For the next three days my calls reached only voicemail; my text messages went unanswered. The *Sheffield* resolutely refused to supply me with any useful data, not location of quarters, usual whereabouts, names of friends, or biographical information. The third time I tried to wheedle it, the ship threatened to rat me out to Dr. Amy if I asked again.

By that point I knew the truth. This was love.

The real thing—not the pathetic charade Jinny and I had mugged our way through, but the love of the ages, the true mystical union of two souls. I knew things about Diane that she didn't know herself, and she was going to explain me to myself, and I was absolutely certain that if she would only give me thirteen words I could make her see it all as clearly as I did. I had it down to thirteen words, so good I felt they'd have done the job even as flatscreen text—and I couldn't get a single one of them before her eyes.

The first night I just moaned a lot. The second, I raged and wept and made myself a stinking nuisance to my roommates. Balvovatz finally took it on himself to drink me under the table, and laid me out on my bunk. The third night, I went to the Horn, and laid a drunken monologue on Kathy that would damage our friendship for months to come. At the time, she limited her remarks to a polite hope that things would work out well for me, and a slap with so much wrist to it that a proctor was halfway to the table before I could wave him off.

Tossing in my comfortable bunk that night, I got it down to six words. I'd need eye contact, but if I could just get six lousy words in—

The next morning while I was in the 'fresher, paying in ugly coin for two nights' debauchery, Diane phoned.

"Diane! Uh . . . let me call you back—"

"Joel, dear, I appreciate your interest. I had a wonderful time with you. Perhaps I will again, one day. But it can't be soon. It's just simple math, dear."

"I don't understand. Look, can't I—"

"I have to make a big decision sometime in the next twenty years. It's going to affect my whole life. Obviously my information has to be as complete as possible. Even after I rule out seniors, mono-gays, and other permanent ineligibles, there are something over two hundred possible mates in the world. I like to keep my weekends for reading. So that means I'll work my way back around to you again in a little over forty weeks. Not even a year."

I stared at my wrist, and reminded myself that my guts had been churning *before* the phone had rung. "Are you telling me you've already—"

"Yes, dear, but I assure you I remember you with particular fondness." Spasm. "One day isn't long enough to—"

"I find that by the second or third day one forms attachments, don't you? At that rate I could easily take the whole *voyage* identifying the right husband. I'd still be breaking him in when we hit dirt at Bravo. You understand, I'm sure. Or rather, I hope. If so, I'll see you in forty weeks, give or take. Unless I get lucky and lightning strikes, of course." She hung up before I could wail her name. It didn't stop me.

Let's just say the next five or ten minutes stressed that 'fresher to its design limits and beyond, and leave it at that.

So I sought a mojo.

That's a term from PreCollapse times. It means a love charm. A magic spell or fetish of some kind that I could use to make Diane see her search was over.

Naturally I sought the advice of an expert. Matty Jaymes listened sympathetically to my tale of woe, nodding in all the right places. Until I named my beloved; then his face went blank, and he sat back in his chair and shook his head. "Son, I'm afraid I am powerless to help you."

"Huh? What do you mean? Why?"

"Diane made love to *me,* once." He sighed. "I spent two hours down on the Ag Deck eating dirt, before I resumed my human shape." His left foot was tapping uncontrollably on the deck. "My advice is to be thankful you weren't two hundredth on her list, and quit trying to hog a natural resource."

From there, my love life went downhill. Eventually I gave it up as a failed experiment and put my mind on my work.

Let's see. There was Barbara Manning, a student of Dr. Amy's—her suggestion—and then an engineer named Mariko Stupple—Tiger's suggestion—followed by a physics student named Darren Maeder who had the superstitious notion that perhaps something of my father's innate genius might be exuded in my sweat, or something, followed closely by his former girlfriend when I proved a dry hole—both of those his idea—and then, if I have the sequence correct, there were ...

Can I stop now? This emotional striptease not only embarrasses me, it's boring. *Everyone's* early love life is boring, sometimes even to the protagonists at the time. Let it stand that eventually the awkwardness started to wear off, and when the dust settled, I found myself a normal healthy het-bi bachelor with somewhat less than average interest in casual sex and even less interest in emotional commitment.

That described a lot of us in the *Sheffield.* There was no rush in forming a partnership that had nothing much to *do* for another couple of decades. Unless of course you decided you wanted to arrive on Bravo with children tall enough to be useful, which an unsurprising number of colonists did. But a nearly equal number concluded, as I did, that a ball of mud, even alien mud, had to be a better place to raise children than a metal can. And the last five or six years of the voyage, when things were just starting to gear up to their busiest, would be a poor time to be ass-deep in bored, surly, invincibly ignorant teenagers. Such as I was now.

Sol Short once told me mankind is divided into two basic sorts: those who find the unknown future threatening . . . and those who find it thrilling. He says the rupture between those two sides has been responsible for most of the bloodshed in history. If change threatens you, you become conservative in self-defense. If it thrills you, you become liberal in self-liberation. He says the Threateneds are frequently more successful in the short run, because they always fight dirty. But in the long run, they always lose, because Thrilled people learn and thus accomplish more.

I don't know. In those days, I would have to say my basic orientation was toward the Threatened school. I had begun life by losing a mother I never knew, except as a source of rhythmic thumping sounds and intermittent gurgling noises and comforting warmth. Then, when I was just old enough to get the full impact, I found out how infinitely much worse it is to lose a parent you know. My world had just begun to shake with the changes of puberty when it exploded in my face; at the moment I most needed adult guidance, my supply of parents dwindled to zero.

Then for a while *everything* had been change, and almost all of it had been unpleasant. I had not until then fully realized that I was odd, that there was anything strange about growing up with a single-parent genius. I thought *all* homes had equations scrawled with disc-marker across all the cabinets and walls, and clean laundry in the freezer, and defrosting chicken in the tool drawer. I thought everyone read a book a day and listened to hours of ancient music.

My father raised no wimps. I'd buckled down and got to work, examined my options, made a plan, made it work, started at last to acquire the confidence that I could get a handle on this life business just like everybody else.

And then I'd met Jinny.

So maybe you can understand that my instinctive tendency, in those early years of the voyage, was to tuck my chin down into my chest, hunch my shoulders, cover up with both forearms, and keep backpedaling. The temporary insanity with Diane was my last flirtation with grand passion and romance. After that I was more in the market for companionship, intellectual stimulation, perhaps a little cautious friendly sex every now and again, perhaps not.

I really did comprehend, intellectually at least, that I was engaged in one of the most profoundly thrilling endeavors in human history. How conservative can you be, if you've jumped off the edge of the Solar System? Do conservative people travel at relativistic speeds? By the end of the first year of our voyage, we were already traveling at more than a third of the speed of light—and even though there were no sensory cues at all to confirm that, we were all well aware of it, and believed it, and I think I can safely say we all found it more than a little thrilling. By the time we reached turnover in nine more years, our velocity was going to peak at a hair-frying 0.99794c. Does a conservative man race photons?

It wasn't that I couldn't see the future was going to be thrilling. It wasn't that I was unwilling or even reluctant to be thrilled. I just had little experience with it.

The mores and customs we had all been raised in, fruits of the Covenant, continued to work their unlikely magic: even in close and closed quarters, we found ways to live together without violence, to a large extent without malice, and with as much kindness as we could find within ourselves.

At the end of that first year, we celebrated with a party that would become so legendary I don't think I'll discuss it here. There are several detailed accounts available, and I disagree with every one of them on some of the details. One point on which there is agreement, however, is that there were no quarrels. No relationships broke up, no feuds were born. If anyone had a really bad time, they managed to conceal it from one of the best gossip networks in history.

I'm not saying there were no unhappy people aboard. A predictable percentage of us concluded, much too late, that they'd made a terrible mistake in joining the colony. A predictable few of those became merchants of gloom, prophets of doom, carriers of that most infectious of diseases, fear. And a few just became so profoundly miserable they lowered morale wherever they passed. Dr. Amy and her three colleagues had their work cut out for them.

It made me want to stop being a jerk faster, to free up her time. So I worked at it.

By the end of that first year of the voyage, I had at least a working two-part answer to the question, *Who is Joel Johnston?*

First, I was a guy who was going to sing to the stars.

I would sing with my horn and with all the other instruments of man, to a star whose very existence had been unsuspected for most of history. I would sing of human beings, since words would not do, to a star system that knew nothing of them or anything like them. I would sing of my fellow colonists, in what I hoped was a universal language, to a planet we hoped would see fit to nurture and sustain us all. And I would sing of myself—and perhaps another—to two strange new moons in the night sky, and slightly distorted constellations.

Second, I was a guy who was going to talk to strange dirt.

On the long voyage I would speak softly to alien soil, in my best approximation of its own language, asking it as politely as I could to accept Terran plants that would feed my colony. I would open negotiations with the ecosystem of Bravo, and listen intently to the responses that came back. Zog and I and all the rest of his crew would spend the years staring until our eyes watered at the probes' surface recon images of Brasil Novo's surface, trying to outguess the planet, speculating endlessly over what sorts of new predators, parasites, or other perils were most likely to exist, arguing endlessly over what we might do about them. It's difficult to plan for the unknown—all right, it's impossible—but we were going to do our level best.

It was a place to stand. Sing to new stars; speak to new dirt. Two planted legs to help keep me upright for the next couple of decades. First we love music. Then we love food. *Many* years later, we evolve high enough to love another—if we're lucky.

fifteen

The real miracle is not to walk on water, or on thin air,
but to walk on the earth!

—Thich Nhat Hanh

The second year of the voyage of the RSS *Sheffield* was eventful only by ship standards. People you don't know fell in and out of love, had and did not have babies, worked and goofed off, succeeded and failed at amusing themselves and each other, did mediocre work and accomplished minor miracles and screwed up completely, were and were not happy.

Al Mulherin, said to be the best physicist aboard, and Linda Jacobs, editor of the ship newspaper *Sheffield Steel,* were the first couple to birth a child, a boy they named Coyote, and a dozen more babies had joined the colony before the year was out.

A machinist named C. Platt got careless with a torch and became our first death. He was not widely mourned. Not even his roommates knew what the C stood for.

One of the residential decks beat all the rest at soccer, and you'd he shocked to hear which one, if you cared.

Relativist Kindred had a fairly gaudy nervous breakdown and for a couple of weeks his colleagues had to cover for him, but this had been expected and planned for and caused no difficulties. It would become a roughly annual occurrence. I think most of us colonists half expected that Peter Kindred was going to Burn Out eventually, at some point along the way—but none of his fellow Relativists did. His shift was taken by Dugald Beader, the only one of the Relativists I haven't mentioned yet, because it took me months to meet him. Dugald was sort of the backward of the flamboyantly eccentric Kindred—quiet and sane and empathetic, with a diabolical dry sense of humor. It was said that he'd been involved in the design of the *Sheffield* somehow, but he didn't talk about it.

The story of the year was probably the totally unexpected marriage of the Zog and Coordinator Grossman. Nobody had a problem with the match; they were both widely admired, and when you thought about it, they were perfect for each other. It had simply never occurred to anyone aboard that either party might have *time* for a social life, let alone an active one.

He moved into her quarters, and they honeymooned by sealing the door for a week. Zog left me in charge in his absence, high praise.

So I got to be the only one in the ship to whom Machinist Platt's death mattered much.

A proctor named Hal DeMann showed up at the Bravo farm one day, pushing a body bag on a gurney. He looked like an oldtime pirate or gunfighter, but had a warm, soothing voice, a good combination in his line of work. He explained that Colonist Platt—maybe that was what the C stood for—had left instructions that he wished his body to be recycled, so that he might always be a part of the colony's ecosystem. But old C had given no specifics as to just how this should be done, leaving the question up to the relevant authorities.

Who turned out to be me.

The problem itself was admittedly trivial. Solving it was not. There was certainly plenty of dirt to plant him in, and there were several places where he might even prove useful as fertilizer, and as a check on how Bravonian conditions would alter the usual processes of decomposition and fertilization.

But there was *not* enough dirt to plant him two meters deep. And we had long since learned that no fence is always foolproof. Having his corpse dug up and eaten by pigs or goats or dogs would technically have met the requirements of Plan's will, and I was tempted to, as the poet Buckley said, just "scoop some sand over his wig, and swoop the scene." I was fairly sure he wouldn't have complained, or even minded.

But I was *absolutely* sure I knew what the Zog would say if he came home from his honeymoon to find some of the leftovers being dragged across his Ag Deck by one of his pigs.

Devising a solution wasn't all that hard. Implementing it was. Kathy and I dug as deep a hole as we could, about a meter, and laid Platt in it. Then we stood on either side and covered the corpse over completely, me with broken glass and busted springs, she with curry powder and a spray bottle of lion urine. (Chemically simulated, of course. Zog had fetched a *lot* of odd things along from Sol.) Then we replaced *all* the dirt we'd dug up, leaving a mound of loose earth, but one that was unlikely to be disturbed.

The first problem I had with implementation of this simple solution should be obvious. Nowadays it takes something close to total destruction of the brain to beat the autodocs. I've told you the damage was done by a torch, and you know where the brain is generally kept: work it out. The smell alone was memorable.

My second problem was less gruesome, but bothered me for a longer time. When we were done with our shoveling, Kathy and I stood there for a few moments, catching our breath and thinking deep thoughts. And then as I was about to turn and walk away, she said, "Shouldn't we say something?" Phrased that way, it meant, "Shouldn't *you* say something?"

And of course I was in charge. And of course I should say something; it didn't seem right to just plant the man and go. But of course I had absolutely no idea what kind of words the deceased would have wanted, did not even know if he subscribed to one of the religions humane enough to be permitted under the Covenant or not. If nobody knew what his first initial stood for, there was no point posting a query about his metaphysics on the ship bulletin board. I had no all-purpose nondenominational homilies on tap; I had experienced only one death, and hadn't heard a word anyone had said at the funeral.

I stood there for a long time feeling inadequate, stymied by the question, hating Kathy for raising it. She waited. And finally I heard myself say, "Let the universe take note of this man's passing. Somebody should. He was one of the bravest adventurers our species ever produced: he died on the way to the stars." That night instead of sleeping I thought of better things I might have said, and said them in my head to a man I had never known.

The Zog told me I'd done well when he returned. He'd had a different spot in mind for the ship's cemetery, but was fine with the one I'd picked. I warmed to his praise. But it took me a while to stop resenting Kathy for asking that question.

Third year, third year . . . let me scan my diary.

The social bombshell of that year, beyond question, was the surprise wedding of Sol Short and Hideo Itokawa.

If the nuptials of the Zog and Merril the year before had startled everyone, this one stunned us all speechless. The Zogby-Grossman match had paired two strong people, both administrators, one quiet and the other loud. Sol and Hideo were two *extremely* powerful minds, both mavericks, one loud enough to dominate any cubic he entered and kind and hilarious enough to get away with it, and the other so impossibly quiet and still that the eye tended to subtract him. I hadn't even realized Buddhist priests were allowed to marry.

I don't believe anyone aboard opposed the match, once we thought about it. But to do that you had to first imagine it, and that took us a while.

I found out when Tenzin Itokawa asked me to play at the wedding. I don't remember what I said.

The wedding feast was a memorable blast, and there is nothing in the world duller than hearing the details of someone else's blast memories, unless you were at the same blast, so I won't recount any.

That was the kind of year it was. The most exciting event in it was not really worth recounting, to anyone who was not conceived that night.

Year Four would probably have been downright dull if it hadn't been for the Happy Disaster.

Three months into the year, the Sim Deck went down.

And stayed down, for weeks. The *Sheffield's* diagnostic systems furnished an explanation, and the six people aboard capable of understanding it all agreed that it sounded reasonable to them, but I never comprehended a word of it, and will not reproduce it here.

By that point, most of us were making fairly heavy use of Sim, for recreation and for emotional therapy and for a way to fight the growing monotony and claustrophobia of life in a great big can. If Dr. Amy or one of the other three Healers decided you were using it too much, they could limit your access, and by that third year they were starting to do so often enough that it became a subject of jokes, unhappy ones.

When the Sim hardware first failed, I worried for colony morale. It doesn't matter how huge it is: any space becomes confining if you absolutely can't escape it. Without the escape valve of assisted fantasy, I was afraid the ship would start to shrink on us. A few folks did panic, at first, and the general tension spiked.

It didn't help when Matty Jaymes had a public flameout. He had no regular partner, and Sim use was not monitored by the Healers like drug intake, so no one had really noticed as, over the years, Matty had quietly turned into a *hardcore* Sim addict. But when he was forced into withdrawal, he switched instantly to a hardcore drunk, and that became very ugly very fast. Dr. Amy did all she could, but even sober he was unmanageable, and finally she was forced to put him in his quarters: his door stopped opening for him. It was only the second time in her career that she'd ever suspended anyone's Covenant rights, and it devastated her. And upset the rest of us. Until then he had been much liked and highly respected; his collapse left everybody on edge.

But then word went around there would be an unscheduled ETM, and when we all logged in, it was Dr. Amy leading the Town Meeting. That was surprising in itself, but what she proceeded to do was probably the last thing any of us would ever have expected.

She yelled at us.

She didn't say a whole lot. She never used profanity, obscenity, or blasphemy. But what she did say was as memorable as an unexpected enema.

"If you cannot function without sucking on a holographic fantasy teat that does all your imagining for you every day of your life, what good will you be to Colonia Brasil Novo?

"It usually takes a *life-and-death* crisis to show you what you're made of, and what your neighbors are made of. Thank whatever powers you believe in that all it will cost *you* is a few weeks without your favorite soap operas.

"The overwhelming majority of your primitive ignorant ancestors managed to get through their lives without 3D-5S Simulation somehow. It must be possible, don't you think? Children in an empty playroom can amuse themselves, for Covenant's sake.

"Some say anyone who goes to the stars is a loser, running away from reality. I have never believed that of anyone aboard this ship. I'd rather not start."

Those were some of the highlights.

I guess she summed it up in her literal last word, and in the force of the exasperation with which she delivered it:

"Cope."

And do you know, later on when the dust settled, it turned out the Sim systems failure had been a *good* thing, after all—maybe even one of the luckiest things that had happened to us so far. Forced to amuse and inspire ourselves, we rose to the challenge. Social groupings of all kinds sprang up throughout the colony. Get enough people talking long enough and sooner or later someone will say something interesting or useful. Happy meetings occurred. Good conversations got held. With more time to read, we spent more thought on what might be good to read, and began to learn things. Creativity that begins with off-hours amusement soon accidentally spills over into work, and into social interaction. Weddings and less formal partnerships of all kinds spiked to record levels. The theater group acquired competition, and rose to the challenge. The ship's daycare program finally got serious—none too soon. Shipwide drug intake went *down.*

And when the system finally came back up, Sim use never did reach its previous level again, let alone exceed it.

Indeed, toward the end of the year I developed a funny suspicion about how well it had all turned out, and queried the *Sheffield* as to whether any previous starships might ever have suffered Sim failure, and discovered an overall benefit. I was absolutely certain it was physically and emotionally impossible for an untrue word to pass the lips of Dr. Amy, but for all I knew any or all of her three colleagues could have conspired to hoodwink us all for our own good. But if that was the case the ship's AI was in on the gag: it told me only nine previous ships had even carried 5S Sim gear, and none had ever experienced more than momentary failures, save for the one that had blown up.

Clever con or sheer luck—either way it was damned good luck. The colony was emotionally healthier than it had ever been as it entered its fifth year of star travel, gaining confidence in its own ability to cope. That proved useful when disaster struck.

What goes on in the Power Room of a relativistic starship like the *Sheffield?*

Maybe God knows, if She exists. The Relativists themselves aren't at all sure.

I remember I was sitting at a table at the Horn once with Herb and all five off-duty Relativists, everyone but Kindred—I can't recall what led them all to be awake at once—and Herb asked what it was like.

I'd never have had the hairs to ask, myself, and there was a silence that lasted nearly ten seconds. Then Dugald Beader shifted his pipe in his mouth and said, "It's like staring at a random-visuals screensaver until you can predict what it's going to do in the next second."

George R said, "It's like playing jai alai with fifty different opponents at once, in zero gravity, blindfolded."

London, her head on his shoulder, said, "It's like being inside a spherical mirror, in free fall, and remembering at all times where the door is."

Sol grinned. "It's like running full tilt across a tightrope in spike heels with your eyes closed while cooking an omelette with a blowtorch," he said, and turned to his husband. "Your turn, Spice. It's like . . .— "

". . . not being .....Hideo said.

"Aw, come on," Sol said. "I declare that answer void."

Hideo blinked at him, and then nodded. "Very well. It is for me like an archery exercise, in which you must first hit the bull's-eye, then hit that arrow, then hit *that* arrow, and the next, continuing until you can retrieve all your arrows with a single tug, without taking a step forward." He turned to the rest of us. "The secret," he confided, eyes twinkling, "is to aim."

Sol hooted with laughter and hugged him. "Much better."

Dugald took another crack at it. "Sometimes I think of it as looking for a hayseed in a giant needle stack."

"Oh, Duggie, that's *good,"* George R said, wincing as he mimed rummaging through needles.

His wife said, "To me it's always seemed very much like hearing a very complex unfamiliar four-part harmony in the distance, and trying to instantly, intuitively improvise fifth, sixth, and seventh harmonies."

That one boggled my own mind. Most people have trouble intuiting the third harmony.

Nobody else came up with anything better that night. But I later learned someone had asked Peter Kindred, and he'd offered two of his own, "It's like looking at a Rorschach blot until it means *everything,"* and, "It's like repairing nothingness."

None of which tells me anything.

Despite years of friendship with five Relativists, and close friendship with Sol, George R, and London, I don't know what it looks like inside the Power Room, or even the antechamber; nobody does who hasn't been inside one. The convention that has become established in film and other forms of fiction is to portray Relativists sitting before banks of instruments with lots of blinking lights, intently studying gauges and readouts, constantly making fine adjustments with levers, dials, wheels, or mice that invariably cause beeping sounds. But no such layout has ever been certified authentic, and as far as I or anyone really knows, it is equally likely that what they do in there is simply sit in meditation in a bare white cubic . . . a meter off the floor, held aloft by sheer spiritual purity. I have no idea what takes place in a Power Room, and I particularly have never been able to conceptualize what it is like in there at the moment of transition, when one's shift ends and another's begins—how that handoff is accomplished.

I am not one of those fools who believe Relativists guard their guild secrets to protect their monopoly. None of the ones I knew had an avaricious bone in their bodies. Avarice would appear incompatible with the mindset that produces a Relativist, or that a Relativist produces—a rare case of fortune bringing immense wealth to people fundamentally indifferent to it. But I have no idea why it is that they *do* discourage specific questions about their daily activities. I simply know it is their right if they choose, and they do. It is purely my own intuition that they do so to *protect* the rest of us from the knowledge, for some reason.

It may equally well be that they simply literally *can't* explain what they do—that you and I have no referents for the information, nothing in our experience that any words we know could evoke. Maybe I'm like a cat trying to understand exactly how the fish get into those little cans, or a man trying to understand women: unequipped.

For all I know, something happened in that room, every day, all day, that was simply beyond ordinary human understanding. That's the way I lean, anyway.

The one thing I'm absolutely certain of is that my last chance to ask any of the Relativists I know about such matters is gone for good. I waited too long.

Anybody who was aboard can tell you where they were and what they were doing when it happened.

Any society has such events, benchmarks in its shared history. Usually they involve great tragedy. It may be the untimely death of some universally beloved public figure, or a natural disaster of uncommon magnitude; in the old days it was most often a war, and sometimes a plague.

But in those times, war and plague were expected dangers, and survivable ones. I doubt there have been many humans in history who've known anything like the instant ice-cold horror that comes to every passenger aboard a relativistic starship when they suddenly find themselves in free fall.

Where I was that day was on Bravo Ag Deck, goofing off behind the goatshed, chewing the fat with Sol Short, while the two colonists I'd drawn as my unskilled labor that shift, John Barnstead and Adewale Akbage, listened and tried not to look awed. We were passing around a flask of wine Zog had made from the Brasilian flower Muira Puama *(Ptychopetalurn Olacoides),* which was making a very happy adjustment to Brasil Novo conditions.

I can even remember what we were talking about. At the gentle urging of Dr. Amy, and with Sol as intermediary, I had long since buried the hatchet with transportees Richie and Jules, going so far as to comp them for a night at the Horn so they could hear me play. It made a difference; Richie came backstage after to stare at the floor and say he "apollenized," and Jules put one arm around me and hugged me, and from then on whenever we encountered each other in the corridors, they were both loudly friendly.

So I had begun a small but precious collection of Richie-isms, and loved to compare specimens with Sol, who appreciated them as much as I did. That day, I recall, I had shared with him, "Don't kill the goose that laid the deviled egg," and, "You can't sell a fuckin' book by looking undercover." John threw one in, then: he'd heard someone ask the pair why they were constantly together, and Richie had said, "Two heads are better than none."

And Sol had just gifted us all with the gem "Atojiso," as in, "I knew that would happen. I hate to say atojiso, Jules, but I fuckin' atojiso," and we were roaring with appreciation, when all at once the ceiling came down to join us, and the floor fell away.

Sudden unexpected weightlessness can only mean drive failure, and this is never good news.

But if you're on a starship, it probably means you're dead. You and everyone in your world.

It is just barely possible to restart a quantum ramjet at velocities higher than 0.5c. But time is critical—and luck even more so.

It had been done. Twice before in history, in each case by a Relativist said to be particularly adept. Successfully, I mean. There had been two spectacular failures—by colleagues generally agreed to have been equally good. That was why the *Sheffield* needed a minimum of four Relativists—six hours was the longest one could reliably sustain the necessary concentration—and why it carried six. We'd have carried more, if Kang/da Costa had been able to hire more.

If the quantum ramjet was *not* restarted, and damn quickly, the *Sheffield* would literally never get anywhere. There would be plenty of power for life support—and nowhere near enough to slow all those megatons of mass appreciably. We would drift for all time through the void at more than nine-tenths of the speed of light, forever unable to decelerate to any more reasonable speed, incapable of making any port.

John and Adewale and I were none of us spacemen. We panicked. The blood did not drain from our heads because there was no gravity; but we didn't become as ruddy as we should have. We'd all been in free fall long enough to learn some basics, but none of us had free-fall instincts or reflexes. All we had was enough intelligence to understand how much trouble we were in.

The goats didn't even have that—they knew only two gradations of terror: none and total. They simply happened to be right for once. The goat shed exploded, and jagged pieces of its walls became lethal Frisbees, followed by a second wave of hay, hooves, and horns.

Miraculously, none of us was hurt by any of these. It was Solomon Short who broke my collarbone, using it to launch himself toward the stairwell, and who dislocated Adewale's shoulder using him to leapfrog, and busted John's nose when he couldn't get out of the way fast enough.

I figure I'm responsible for my concussion; I could probably have ducked that goat, if I hadn't been watching Sol dwindle in the distance. But how can you look away from somebody crying like that?

To be honest, I don't think I'd have been much help to him even if I hadn't gotten my skull kicked. I was already thinking in terms of coping with my own responsibilities: my livestock, my farm—both my farms! Everywhere, things would be going to hell, delicate hydraulic systems pumping dry, containers spilling over, lattices coming apart, koi trying to swim in damp air.

So it was John, not even particularly a friend of Sol's, who thought of it first, and did it in time, and so ended up accomplishing far more good than I would that day. The instant he had drifted within reach of something substantial enough to change his vector—a light fixture in the ceiling, still on, still hot—he used it to launch himself after Sol. He stayed close to the ceiling, and used every surface feature he passed to add speed, so he had soon built up nearly as good a head of steam as Sol had. At about that point I heard the right rear quadrant of my skull make the sound "KLOP!" and decided to take a little nap, so I missed John's triumph.

Sol had sensibly ignored the lift, beelined for the emergency stairshaft/drop-chute, and flung himself down it like a hungry ferret going down a hole. It was the mental picture of him in that ship-length tunnel, reaching ever higher velocity with the help of the handholds that were usually rungs under gravity, that had galvanized John. He was far less free-fall savvy than Sol, but massed more, so he arrived at about the same speed. He knew there was no way he'd make the turn. But he never even attempted to decelerate, just sailed into the chute, slammed against its far wall, and accepted the damage. *"FLIP! FLIP!"* he was screaming as he came through the doorway, and after he crashed and got his breath back, he resumed screaming it at the top of his lungs down that long Freudian shaft. *"FLIP, SOL! FOR CHRISSAKE, FLIP!"*

Would I have understood what he was saying, if I'd heard it? Interesting and pointless question. Adewale said later he did hear it, and didn't get it—as far as he could see, *everyone* around there had flipped.

Halfway down that stairshaft—any and all gods be thanked, once they've been cleared of any involvement in the original catastrophe—Solomon Short heard John Barnstead's scream. He was then in a kind of frenzy, or fugue state, as fixated as a heat-seeking warhead. But John had selected a word from the tactical menu used by warheads. It was a legal command, and as Sol received it he instantly saw the sense of it and obeyed. By a process that has never been properly described because everyone who's spent time in free fall knows it, and nobody who hasn't can ever understand it, Sol tumble-flipped his body end over end, and continued his plunge feet first.

John's mental process had gone more or less like so: if Sol is the first Relativist to reach the Power Room, we're all screwed. By the time *he* can get there from this far away, the ramjet will probably have been off too long to restart safely. So we must pray that another of his colleagues beats him there.

But if so, what of Sol, in the stairshaft?

Sure enough, the *Sheffield* was later able to tell me that it was less than a second after Sol stablilized in his new position that weight suddenly returned—followed a split second later by the siren blast that was supposed to give ten seconds' warning before any vector change. At once he began slapping at passing rungs to kill velocity, and looking below for his landing site. In the end, he landed with nothing worse than a sprained ankle, which became severely sprained after he ran on it.

By the time he landed, that was important. Crucial, even. Because by then George R was dead, and London was . . . was permanently out of action.

The *Sheffield* was down two Relativists, now . . . and that left us exactly enough to keep the quantum ramjet running twenty-four hours a day. There was going to be no acceptable excuse to miss a shift . . . for the next fifteen years.

What happened in the Power Room that day?

There's a lengthy report on file, which I am assured is accurate and complete; you're welcome to look it up. It's full of what look like words, arranged in sequences that seem to be sentences, and the one I come closest to understanding seems to say that the Zero Point became briefly numerable, and George R was unable to deny it. Maybe that conveys something to you; it's noise to me.

Months later, at various times, I heard Dugald Beader say that George R had "stopped surrendering," and heard a massively drunken Kindred assert that his colleague had "lost his focus." How those two things could describe the same event, I cannot imagine.

Here's what little I do understand.

First of all, George R was not supposed to be on duty that shift. Hideo was. That was why Sol lost it. But at the last minute, one of Hideo's Zen students had come to him with a spiritual crisis, and he'd asked to be replaced.

This was no big deal. By that point in the voyage, all of the Relativists had missed a shift or two; it was part of what spares were for. Hideo had probably missed fewer than anyone else but Kindred—and had extracurricular responsibilities the others lacked. If anyone was entitled to blow off a shift, it was him.

The person he was supposed to succeed was George R. When his request showed up on George R's board, George R should have messaged backup, confirmed availability, then let Hideo know he was off the hook—a total of three keystrokes. He did only the third.

Who can say what was in his mind? Of the Relativists aboard, Sol was the loudest, and Peter Kindred the most egotistical, but George R was far and away the most sheerly *confident.* There was no leader, but he was senior among equals. The backup he should have called was London. She was asleep just then, in their quarters. Perhaps he just wanted to do something nice for his wife. Maybe it was a gesture of apology to get him out of some marital doghouse. It may simply have been easier for a man as confident as him to push one key than three.

He certainly was not the first Relativist ever to work a double shift. But I think it's safe to say he was the last.

Fatigue? Monotony? Bad judgment? Bad luck? None of them ever said, and none of us ever had the balls to ask.

Something Horrible happened in there, that's all.

Whatever it was took something like thirty seconds to finish burning his brains out, and matters should have ended there. It is certain that he did not at any time trigger an alarm or send out a message of any kind. The ramjet should have failed, and then whoever won the race to the Power Room should have yanked his smoking body out of the way and, hopeably, restarted it.

I do not know how London got there before he finished dying. She knew exactly how dangerous it was to try and go in there, just then, and never hesitated. Whether she believed she could save him or simply didn't care to outlive him is not for me or anyone to say. If it was a mistake in judgment she paid dearly enough for it—with her eyesight, most of her hearing, and about eighty-five IQ points.

A rain of shit can take time to stop. It was doubtless lucky for all of us that Hideo was the next to reach the Power Room. Of all of them he most had the kind of iron discipline and diamond calm it must take to toss the smoldering bodies of two friends out in the corridor for others deal with, forget them, and try to restart a quantum ramjet. I honestly think any of them could have done it, but I'm glad it was Hideo who got the job.

But when he emerged, and had been thanked in turn by Captai Bean, Governor Roberts, Governor-General Cott, and Coordinator Grossman, Sol and Dr. Amy had to take him aside and tell him that the student he'd blown off his original shift to counsel had pieced events together, and committed suicide from guilt.

A poor reward for heroism.

Sixteen

During this period, Tesla spoke out vehemently against the new theories of Albert Einstein, insisting that energy is not contained in matter, but in the space between the particles of an atom.

—*Tesla, Master of Lightning* PBS-N documentary, Dec.12, 2000

The next few weeks were dark.

Disaster on that scale can demoralize a community—or draw it together. The crucial factor seems to be, how fast does the fear ease?

It was touch and go. Dr. Amy and her three other Healers had their work cut out for them. Coordinator Grossman and the Zog, Governor Roberts, Governor-General Cott and his partner, Chief Engineer Cunningham, even Captain Bean himself, all made a point of wandering around the ship with cheerful optimistic expressions fixed on their faces. It did help, a little. But only a little.

How do you tell someone falling through the universe at nearly the speed of a photon there's nothing to worry about? When the most valued, pampered members of the ship's company can die and worse than die, who is safe? I don't think any of us had really expected any dying to begin until we got to Bravo. Now all our lives and plans and hopes depended on four particular people remaining not only alive but healthy enough to work for every day of the next fifteen years.

And that was the heart of our darkness: theirs.

Thanks for coming in ahead of schedule, Joel," said Dr. Amy.

"No problem," I said, settling into my chair. "To tell you the truth, though, things haven't been too bad lately"

"I'm glad to hear that," she said.

"I mean, I know you must have your hands full—"

"That's what I want to talk to you about, this time."

"Crave pardon?"

"I'm going to be more blunt and candid with you than I have been with the rest of the colony, Joel."

Yikes. "Okay"

"This ship is in trouble."

I nodded. "I know"

"The morale crisis is not responding to anything we can do. I think you know why"

I nodded again. "The Relativists. The rest of us . . . colonists, adminstrators like you, crew . . . none of us can begin to heal until they do." All four stalked the corridors like golems, now, and were given as wide a Berth by all they passed. All four had politely declined to speak to a Healer, as was their right. They didn't even seem to crave each other's company. They spoke as little as possible at shift change, and less at any other time.

Her turn to nod. "They do their duty. They keep the engine running. But that's the absolute limit of their strength right now They're the heart of the ship. And they're heartsick."

"I have to say I can't blame them a bit," I said. "One of the best of them died, another wasn't as lucky—and it could happen to any one of the rest at any time. It can't be easy healing if every day you have to spend six straight hours utterly devoid of all emotions . . . in the presence of the force you most fear and hate. I'm amazed they can function at all."

"Nobody blames them, Joel."

"No—but nobody has the hairs to tell them to suck it up, and let you Healers help them."

Her shoulders relaxed. "Exactly. You do understand."

"Well, that much. What you can *do* about it, I have no idea. A year ago, I'd have said, have Matty Jaymes talk to all of them."

She nodded. "They all used to respect him a lot."

"He used to deserve it."

Matty had long since been restored to the Covenant. But the man who'd emerged from his room was not the Matty Jaymes anyone remembered. He was pale, dwindled, and taciturn, and he did not want to talk to anybody. Something had changed him, and no one had any idea what.

She grimaced ruefully "Suppose you were in my chair. Where would you *start?"*

"That's easy," I said. "With Sol. He's the linchpin, now that George R is gone. Until you turn him around, you'll never . . ." I trailed off as I realized where this had to be going.

"I agree," she said.

I held up both hands, shook my head, and shut my eyes briefly, refusing delivery with all the body language at my disposal. "No way. Don't look at me."

"Joel—"

"I *tried* already. Twice, okay? Both conversations together totaled a single word, and I didn't say it."

"Tell me about it."

"The first time I saw him after . . . afterward, I walked up to him, and we stood about a meter apart for a few moments, and after a while I opened my mouth, and he shook his head no, and I closed my mouth, and he went away."

"And the second time?"

"Two days ago. I waited outside his room, where his door couldn't see me. I had a zinger prepared. A brutal, stinging line that would shock him into paying attention to me. Use anger to invoke his fighting spirit. Healing 101. The door opened, he came out and saw me, and this time I didn't even *get* to open my mouth. 'Don't,' he said. Just that."

"How did he say it?" She was leaning forward slightly

"Way back at the dawn of video, there was a short time when animation was so expensive, they made cartoons in which little ever moved but the characters' mouths, which were real human lips superimposed on 2D drawings. He looked just like that."

She winced.

"So I just nodded, like, 'Okay, I won't.' And he gave one little gesture of a nod, like somewhere between 'Thank you,' and 'Fuck off, now' So I fucked off."

She was wearing her most empathic expression. "And now if you try a third time, without some kind of direct invitation from him, you'll lose him as a friend. I see that."

"You're good."

"How horrible for you. Okay, never mind. Thanks, Joel. I should have known you would already have tried your best. I apologize."

She stood up. We were done. I got up, too, and we gave each other the Japanese style bow that was our half-ironic custom. But I did not turn and head for the door.

"What was it you were going to suggest?"

She waved it away. "No, never mind. Thanks. Probably wouldn't have worked anyway."

"If this is reverse psychology—"

She smiled. "No. It was just an idea."

"So just tell it."

"I read a line somewhere in an old book once, to the effect that when you're really depressed, the only person you'd be glad to see coming is somebody who wants to pay an old debt."

"I don't follow."

"You've never paid Sol for his services as your advocate, four years ago. You promised him an original composition of at least fifteen minutes, on the baritone sax, with his name in the title."

She was right. I had certainly meant to do it. I'd even made a start on it, once. But what with one damn thing after another, it had fallen between the cracks, and eventually been silted over. I told myself I would have recalled my promise eventually.

"I was thinking maybe you could offer to do it now, ask him for direction, use that to get him talking. But you're right: if you raised the subject now, he'd tell you where to put your saxophone. Don't worry. I've got a few other approaches I can try. Thanks for sharing your insights with me."

I left. But when I got back to Rup-Tooey, I stayed only long enough to grab my Yanigasawa B-9930, and then headed for my studio. Now that I was a rich man, I was renting a soundproofed cubic on the lower of the two VIP decks, so I wouldn't have to inflict my saxes on my roommates.

When I got there, I had enough forethought to phone both the Zog, and Jill and Walter at the Horn of Plenty, and beg off my upcoming shifts at both jobs. Then I sealed the door and shut off phone and mail.

Three days later I switched the phone back on, called Dr. Amy, and outlined what I had. It was she who figured out how to try and put it to use.

Coming off shift, Solomon Short craved only oblivion. If he could manage to sleep twelve hours—and he could, easily—that left only six to fill. Same amount of time spent in and out of the Hole, each day. When he entered his quarters and found the sitting room full of people, he simply backed out again before the door could shut behind him.

At least he tried to. It didn't work. He encountered someone coming in the other direction, found himself back in the sitting room, heard the door dilate behind both of them.

He didn't bother to turn and find out who it was, didn't even bother to take note of exactly which assholes were cluttering up his parlor with this moronic Intervention attempt. Like a soldier removing the muzzle cap from his assault weapon and jacking one into the chamber, he slowly opened his mouth and took in air

A face was suddenly decimeters from his own. An angry, brutal, stupid face. Its mouth was already open, and had already taken in lots of air. "Shut *the* fuck up," Richie bellowed at him.

His own mouth slammed shut.

"Sit down there."

Sol sat.

Richie sat down to his right. The man behind him—Jules—took a seat at his left, and shifted his drink to his left hand. Proctor DeMann stepped across the doorway and dropped into parade rest, then softened it by taking one hand from behind him and stroking his gunfighter mustache, in the manner of one who wishes he still smoked a pipe.

And before Solomon could get himself planted, let alone prepare his first withering wisecrack, I began to play.

At first, he was so pissed off he didn't hear a thing I was playing. That was okay. I'd expected that. I kept on playing.

He tried to stop me by talking over me.

That was okay. *Nobody* can talk over a baritone saxophone. Not my silver Anna. Not even Solomon Short. I kept on playing.

With elaborately insulting body language, he stuck a finger in each ear, screwed his eyes shut, and stuck out his tongue.

That was okay. The sound struck him with renewed force again at the same instant musclebound arms were flung across him from each side, pinning him in place—so he opened his eyes just in time to watch his own fingers jammed up his nose. They released him at once. Richie leaned into his field of vision, shook his head no very slowly, and sat back. I kept on playing.

He tried making faces at people, clearly hoping to escalate to mime. He tried everyone in the room.

That was okay. Nobody would play along. I kept playing.

Finally he fell back on his last line of defense, and met my eyes, wearing an expression that said, *I don't care if you are the reincarnation of the Yardbird himself playing me a previously unknown Beiderbecke masterpiece, you aren't getting in as deep as the layer of moisture on the surface of my eyeballs, motherfucker.* Most musicians have seen that look, and it is indeed demoralizing, and Sol did it better than most.

But that was okay, too, because by the time he had it fully in place and the mortar had set, it was already starting to show tiny cracks. Because I kept on playing. And kept on playing.

It took longer to penetrate than it would have in his normal mindset. But eventually, even in his depression he couldn't help but notice that I had been playing for something like a minute and a half by now

Without stopping to breathe.

Even once.

A fellow amateur historian of music, he caught on to what I was doing faster than most would have. And in spite of himself, he started to grow interested. . . .

The technique known as "circular breathing" is in fact nothing of the sort. But it looks like it to a civilian.

If you're doing it right. This is vastly easier said than done.

I hold with the school of thought that says modern music (as they were now calling it, *again)* copied it from the Aborigines of the continent Australia, on Terra. So it could be as much as 47,000 years old—a little under a thousand *generations.* The Australian didgeridu is an immensely powerful but intrinsically limited instrument; like haiku, it finds enormous beauty within severe constraints. Denied the endless variety offered by pitch, however, it finally began to lack the bandwidth to carry concepts as sophisticated as those that some didgeridu players wished to express. There were only so many things, and combinations of things, you could do before you ran out of air and had to start a new phrase.

So they abolished breathing.

Obviously they did nothing of the sort. What they did was improve it. All the necessary parts were right there: all they had to do was train and exercise them. Not to say that was easy.

What I actually do when I "circularly breathe" is to use my cheeks as a storage bellows. It's a four-step process, that begins during exhalation:

1. As I start to run low on air, I puff my cheeks as far as possible, a configuration called a Dizzy for more than one reason.

2. I slowly contract my cheek muscles, using the air trapped in my cheeks to keep the sound coming out the other end of the pipe—while simultaneously inhaling through my nose. Very like learning to wear a Marsmask, and no harder.

3. If I've timed it right, my cheek-bellows empty out at the same time my lungs fill up. My soft palate closes, and once again it's my lungs pushing air out the horn.

4. My cheeks return to normal embouchure, until my air starts to

run low again. Repeat from 1. above.

During all this time, of course, my fingers are busy doing even more difficult things to turn all that air into pleasant sounds. They say that anybody can learn to do it . . . with enough beatings.

Anyone who's studied the saxophone has heard about circular breathing, and most of us have attempted it, and a few have persisted long enough to get it—six months of daily practice, minimum—and then played around with it a little. Hardly anyone keeps it up, once they've proved to themselves that they can do it. There's little point: the number of compositions in the database that call for it can pretty much be counted on the fingers of one foot. The last composer of merit to mess with it much was probably MacDonald, just before the Prophet took *everyone's* breath away for a century and a half; his "Thaumaturgy is definitive.

I'd developed an interest in it about a year before the Disaster—for much the same reason the Aborigines had. After many long slow years in one place, I was beginning to find my own limitations unbearably confining. First I'd fooled around with playing more than one horn at once But like everyone who tries that, I'd found that everything you can do along those lines that isn't just a gimmick was done a long time ago, by Rahsaan Roland Kirk and Sun Ra.

So I'd switched to circular breathing. It took me about three weeks just to be able to do it with *nothing in my mouth,* then three weeks more with a straw making bubbles in a cup of water. After six months, I could produce recognizable melodies on sax, and six months after that, I was just beginning to get to the point where I might have been willing to let another human hear me do it . . . when Hell broke loose in the Hole, and the roof fell in on us all. I hadn't played much music of any kind for a while after that. Nobody much wanted to hear any.

But after my conversation with Dr. Amy, I had worked continuously for seventy-two hours, getting by on catnaps and helmet rations. I had to. I already knew I was going to be half cheating Sol as it was: I did not have time to actually *compose* a fifteen-minute-long work, and was going to have to improvise something that had his name in the title. But by the Covenant, the man had asked for whatever it was to be played on Anna, and that was what he was going to get! He was the first person aboard to touch her, had brought her to me with his own hands, that first week.

Up until those last three days, all my circular breathing had been done on my *alto* sax—on which I could barely get through the nine-and-a-half-minute "Thaumaturgy."

It is *much* harder to do on a baritone—even a cherry like my silver Anna. Simple physics. A bigger volume of air has to be moved farther.

There's a finite limit to how big you can make your cheeks. The lower notes in particular require breathing *very fast,* and that's hard to hide.

(Counterintuitively, it is also harder to do circular breathing on a tenor, and perhaps hardest on a soprano, because of the increased lip pressure required. This is not a paradox: the universe just hates musicians. Envy, I think.)

I'd finally found a way to fake it, but I don't think I can describe it. What it *feels* like I do is to use my sinus cavities as auxiliary bellows, somehow isolating them from the nasal-inhalation pipeline, but Dr. Amy assured me that's just not possible. I asked how I was doing it, then, and she said she'd need to saw my head in half while I was doing it to tell me; would I care to book an appointment?

So I had his attention, finally.

Sol was knowledgeable enough to recognize circular breathing, and he was sophisticated enough about the physics of wind instruments to realize how insanely hard it must be to do it on a baritone, and he loved Anna's voice as much as I did, and its sheer power in such a small enclosed cubic was enormous, and I was playing my heart out. I simply overwhelmed his indifference shields, denied him the power of denial, forced him to listen to what I was playing.

I was playing phrases that did not end.

We call them phrases because there's only so long they can be. Some go so far as to say that the pauses between the notes are the most important parts of the music. Sooner or later even the most complex phrase dies—to be phoenix-reborn a moment later, in the next phrase. This happens even with instruments not constrained by breath or any other limitation. Most music unconsciously echoes the generational nature of human creation, death at either end of every life, an instant of silence before and after each new melody.

I played melodies and themes and motifs that did not end, but flowed endlessly, one into the next without pause, without rest, without hesitation.

At first I underlined that, by playing what first seemed to be conventional sequences, building naturally toward inevitable ending places—that always took an unexpected left turn just before they got there, and turned out to have actually been leadins to some *different* familiar series.

Once I saw in his eyes that he got it, I abandoned all convention and just played.

I forgot everything I knew about composition, reattained what Zen people call beginner's mind, acquired once again the mighty power of ignorance. I shut down most of my brain, except for the part way back by the stem that knows how to make a saxophone work, and gave control of it over directly to my heart. I learned what I was going to play at the same instant Sol and the others did: as it emerged.

If what I played had had lyrics, they would have had to be "luck Death," repeated in every human tongue ever spoken.

I blew phrases that *refused* to end. A structure that climbed as stubbornly and relentlessly and defiantly as the one at Babel rose up from the bell of my horn. I stated a theme that had no resolution and sought none, and proved that it needed none. George R was woven in and out of it—a face whose only expression was a smile. So was London—the London we had known, whose laugh required a baritone sax to do it justice. So were both my parents. Machinist C. Platt made an appearance.

Einstein said, "People like us, who believe in physics, know that the distinction between past, present, and future is only a stubbornly persistent illusion."

I dispelled it.

I did not take my eyes away from those of Solomon Short once. Until I saw, in his eyes, that I had won. That I had penetrated deep enough. I had *forced* him to see that he could feel, and not die of it. It was like watching a man in agony as the morphine hits.

Have you ever had a serious fever? The misery seems not only to last forever, but to have lasted forever—and then it goes on like that for days. But there comes a point when some kind of knot inside suddenly lets go—at the base of the throat, it feels like—and something starts to ease, or melt, or release. It's a little like drifting off to sleep, only it leaves you more conscious. At first you can't believe it, and then for a time you're tearful with gratitude, and about ten minutes later you're demanding food and the remote control.

I held on until the tearful-with-gratitude stage. I've mentioned my unusually accurate time sense. I knew when I'd been playing for fifteen minutes. At sixteen, I yanked the mouthpiece from my lips, chopping off short in the midst of an ascending arpeggio. It took me a ridiculous number of seconds to remember how to take in air by mouth.

Sol didn't notice. His eyes stayed closed. At the unexpected cessation of sound he first froze, then slumped slightly.

When I had enough control back, I said formally, "The name of that piece is 'Sol keeps Shining.'"

Nobody said a word or moved a muscle. Except me, getting my breath all the way back and unkinking my neck.

For maybe thirty seconds he moved nothing but his nostrils and chest, so long that I was beginning to wonder if he had entered meditation.

He sat up straight then, and opened his eyes, and looked into mine, and said, "Okay."

Anna and I bowed.

He turned to meet Dr. Amy's gaze. "All right," he told her. "I will." She nodded. "I know, Solomon."

He addressed the room. "Thank you. You are all good people." He turned back to me. "Except you. You haven't even left us the option of saying 'I'm breathless,' you hammy bastard."

"I could throttle you," I offered.

"Well, you're probably not the only one who's had that idea lately," he admitted.

"I've *never* been the only one with that idea," I assured him, and noticed I was leaking tears. It didn't seem to be a problem.

The old Solomon Short lopsided grin lit the room. "Look—"

"Yes," I said. "We *will* excuse you. Love to Hideo."

He nodded, and stood up. He bent slightly, looked up to me for permission, and kissed Anna on her upper lip. Then he straightened, and without asking my opinion kissed me firmly and wickedly on the mouth. Hal opened the door for him, and he left at once.

I started feeling better immediately. It took him four days to finish bringing the other three Relativists around—Peter Kindred took the longest—but the outcome was never in doubt from the moment when he told Dr. Amy, "Okay."

Word got around.

The next morning, at the Horn, I looked up from my breakfast to find a complete stranger a meter away, seeking to be noticed but looking sheepish. He wanted to know if he could have a copy of "Sol Keeps Shining." I hadn't thought about it, but found I didn't need to. "You've come to the wrong window, cousin," I told him. "That piece and that recording both belong to Solomon Short. It was a work-for-hire, performed in his private cubic, and I've waived moral rights. I don't even have a copy myself."

He thanked me and went away, and later that day, my mailbox began to overflow with copies of "Sol Keeps Shining," at least half sent by people I'd never met. Over the next few days, I started hearing it played all over the ship.

Later that day, Dr. Amy came down to Rup-Tooey to hug me. She pretended not to see my tears.

Strangers stopped to bow to me in the corridors. The sets I played at the Horn became full houses, of people who had come to listen. In a musician's ultimate wet dream, I was literally *commanded* by my community to formally release an album of my work, so that I could sign copies of it for them.

One of Kathy's husbands, Paul Barr, recorded and mixed it. My backup was her, a bass player named Carol Gregg, Garret Amis on guitar, and a utility infielder named Doc Kuggs filling in on this and that. Richie and Jules handled the mechanics of burning, packaging, and marketing, robbing me no more than an honest ten percent. I called it *On the Road to the Stars,* and included a reinterpretation of that tune.

Shortly after that Herb came up to me, grinning like a Viking after the plunder but before the rape, to inform me that a VIP of the Apple empire back on Terra wanted to know who represented me. Badly enough to pay a fortune for telepathy rather than wait 2.85 years for an answer by laser. I got Paul Hattori to represent me, and three months later my album reached number seven in the Inner System chart, and number three in the Outer. It would have time to win one major critics' award, as well. I couldn't help but wonder what Jinny thought of it. But not hard, or for long. I was busy. Come to find out, a saxophone hero in a small town has absolutely no trouble getting all the dates he wants, on whatever terms suit him. Who knew?

After a few brief holy-shit experiments, I think I did pretty well resisting the temptation to be a jerk and abuse it. I kept remembering that I was always going to live in a small glass-walled town with all these people. Leaving town or planet and reinventing myself was no longer an option.

But I did have me some fun, I did. Herb actually stopped clucking over me.

Immense wealth, creative validation, Systemwide fame without any downside, personal popularity, emotional support, great sex—if I'd had any idea how much fun it would turn out to be, I'd have leaped off a cliff *years* earlier.

It only underlined things when word reached us that the long-threatened trade war had finally broken out between Ganymede and Luna, and I discovered that I did not give the least particle of a damn.

Some of the more panicky newsnitwits hack there were shrilly predicting that the conflict would not only metastasize and become Systemic, but would finally trigger the "inevitable" return of armed violence to human affairs, and destroy the Covenant. Of course they'd been saying similar things as long as I could remember, and for every one of the nearly two hundred years since the last recorded shooting war. But even when I ran it through as a hypothetical—no behavior is beyond human beings—I was mildly surprised to find how little it worried me.

Was I really that self-centered and callous? Screw you, Jack, I'm all right? I *knew* people back there. Nice people, who would feel great pain if someone shot them, and feel worse pain if they shot someone. Didn't I care about them?

Sure. Theoretically. But I think we can only really worry about things that, deep down, we believe we could *do* something about, if we tried. I could no more affect the Solar System than I could events in Sparta, or the Land of Oz. My friends on Ganymede were going to have to look out for themselves. So were my friends on Terra, and in Luna.

I did arrange for a few musicians I knew to get their demos listened to at Apple. But I knew as I did it that it was a message in a bottle, and would probably be my last contact with the Solar System. And unless any of them could afford to spring for telepathy, it was going to be something like five years at a minimum before I could possibly hear any results. They would crawl after us at the speed of light, and we were moving at well over ninety-five percent of that ourselves by now.

Psychologically, I was already becoming a Brasil Novan.

And I wasn't the only one. As we entered our sixth year, most of us had experienced similar changes. Hits at the ship's System News website registered a steady decline, without reference to the juiciness of the headlines or sexual attractiveness of those depicted. Mail traffic to sternward showed a similar trend curve.

Terra, Luna, the O'Neills, Mars, Ganymede, the Belt—all of them had become The Old Country. To our children, some of them now three years old, they weren't even going to be that. When they grew up they'd have trouble keeping them all straight. "I forget, Dad—was surfing invented on Mars, or Luna? I can never remember which one of you had to live inside of." All but a handful of their own children would possess such information for only one week of their lives, right before final exam week, and then discard it forever with no ill effect.

We not only started to realize that, we started to be okay with it.

We began in subtle ways to function less like a collection of random refugees in a temporary shelter, and more like a community.

There was a fairly long period in its history when Canada was a collection of isolated outposts, its citizens separated by vast gulfs of uninhabitable space and incompatible regional interests, even different languages. Yet they found it possible to maintain a solid, workable sense of national identity based on little more than unusual pleasantness and a shared loathing of their national airline's coffee.

In the *Sheffield,* it was green mist jokes and shared loathing of rabbit meat in all forms. And, eventually, all things rabbity. Any joke that ended with a bunny covered in green mist was a surefire laugh.

Nations have been founded on worse.

I don't suppose many of us really despised rabbit as much as we affected to. But it is a virtually fatless meat, pretty boring no matter how you cook it, even in a ship with good air pressure. And rabbits lend themselves to jokes. Few of us like a coward.

And there were ancillary benefits at which one did not *have* to turn up one's nose, for a change: if you rejected rabbit meat, you either ate syntho—unsatisfying—or you were a vegetarian until the livestock got decanted at Bravo. And while vegetarians fart twice as much as carnivores, *the farts smell ten percent as bad,* or less. There was a noticeable net improvement in . . . ambience, shipwide.

Things were actually starting to look pretty good, just before everything blew up.

Well, very damn near everything.

Seventeen

My opinions as to the future of Mankind are hedged in by this statement: I think it is necessary for the human race to establish colonies off this planet

—Admiral Caleb Saunders, interview, Butler, MO, USA, Terra July 7,1987 ("Anson MacDonald Day")

You know the date. Everyone does. Everyone always will. If we're lucky.

Everyone everywhere has their own story. For me, this is the way the world ended. Not with a whim, but with a banker.

Paul Hattori was a closet soap fiend. We had dozens of them aboard, I had been surprised to discover. But I guess Paul felt an addiction that silly was beneath his dignity as colony banker. I only knew about it because I spent more time than anyone else in Herb's company.

The phenomenon was perfectly predictable, when you thought about it; I simply never had until I encountered it.

Imagine you are a devoted fan—a much politer term than "addict"—of a daily soap opera. One of the real classics, let's say, *Corry*, or *The Sands of Mars*. And you happen to be on a starship, boosting at a steady one-third gee.

After an arbitrary time . . . let's pick 6.41 years. After six years and 150 days of such acceleration, you are traveling at 0.976 *c*. Naturally you are impressed.

But you're also frustrated. Because while it's been six years and change for you, *thirteen* years have elapsed back in the System. A full six years and 215 days of *Corry* episodes—representing more than the total time you've been traveling—exist, are in the can, and have been seen by billions of people. But you are going to have to wait *forever* to find out what has happened to all your favorite imaginary friends. You're outracing the news.

Unless you know a telepath you can go lean on. He's your one and only source of series cheat sheets.

Paul arrived at Rup-Tooey that afternoon just as Herb was saying goodbye to navigator Mort Alexander and roboticist Guy Atari, who were collaborating on a book and had sought his professional counsel. It had boiled down to "don't," but they left undiscouraged. Paul got there in time to hear Herb's final words of advice: "If you really don't mind doing twice the work for half the money, we should all get together for poker sometime."

"Weren't you a bit hard on them?" Paul asked as the door dilated behind them. He took a seat near Herb's desk and facing my bed, where I sprawled in lazy comfort reading a biography of Johnny Hodges. We nodded to each other, and I collapsed the display and sat up; I had come to like Paul.

Herb said, "Anyone who can possibly be discouraged from writing should be." He shuddered slightly. "Besides, the idea of sharing a keypad freaks me out. I'd rather share a toothbrush."

"I feel the same about my saxophones," I said.

"I feel the same way about money," Paul said, deadpan.

"Philistine," I said.

Herb frowned. "Please—let's not corrupt the language. It's pronounced, 'Fill a stein,' and I agree, it's the least he can do."

Paul sighed theatrically, got up, and went to the fridge, one of several improvements I'd had made to the room. "You, Joel?"

"Sure," I said. "I presume you're here for your fix."

"Can you squeeze me in today, Herb? It's been a month."

Herb's telepathic time had always been pretty heavily booked, and got more so as the voyage went on, and the amount of information that only he and his colleagues Stephanie Gaskin and Gene Rubbicco could supply increased. By now it was a distinct nuisance for Herb to fit things as frivolous as soap opera synopses into his traffic load. But as a nicotinic he did empathize with addiction. And Paul was the recipient of something like a quarter of his usual, official daily traffic. "Yes—but only because I've just thought of a pun so hideous I've basically lost the will to live."

Paul brought each of us an opened container of beer, and sat down with one of his own. (There *were* real glass steins aboard—packed deep in the hold, so we'd still have them when we reached Bravo.) "Okay, I'm seated, and I have beer. Go ahead." He flinched anticipatorily.

"You spend half your working day staring at the stock situation, concerned about corn futures. Then you come here and pester me so you can get caught up on stock situations and corny futures."

I groaned. Paul's nostrils flared. "If you're calling Corry corny, ya dozey pillock, I'm glad I pissed in that beer."

"I was referring to the ethanol served at the Rover's Return, wanker." Paul relaxed. "Ah well, ethanol sterilizes anything."

I said, "If that were true, the human race would have died out a long time ago."

"And there'd never have been a second generation of Irishmen," Herb agreed.

Weird, now, remembering that was the last thing I said that morning. Reality can get away with things you'd never buy in fiction.

"I really appreciate it, Herb," Paul said. "How late should I come by, tonight?"

Herb checked the time. "Stick around; you can take it with you. I was just about to log on. I always put private stuff first, so if anyone runs out of time, it ain't me."

"Are you sure?" Paul said. "I wouldn't want to . . . intrude."

"You *can't.*"

"Well, 'distract,' then. Extra work—"

"Got your keypad on you?"

"Sure." He took it from his belt and opened it.

"Give it here," Herb said. "I'll type the data into it, then just toss it to you and keep going on my own. No extra mousing required."

"Okay. Thanks." He opened the display, accessed his mail account, collapsed the display again, and tossed the keypad to Herb.

Herb set it on his desk without bothering *to* reopen the display. He reconfigured his chair for maximum long-term comfort, and placed his beer where he could reach it with his weaker typing hand.

"You're sure my being here won't . . . I don't know, disturb your concentration?"

I snickered.

"Not if you set yourself on fire," Herb assured him. "Be alert: this keypad is just going to suddenly come flying in your general direction, and I can't predict vector."

"This is really nice of you."

"Remember that when I'm on my knees, begging you for a loan," Herb said. "See you later, gentlemen."

He found home row on Paul's keypad, closed his eyes, and went away. An indescribable series of expressions passed across his face in only a few seconds, ending in a wry grin. He began typing so rapidly, it was as if the inefficient QWERTY layout were the only thing keeping him from typing too fast for the electrons to keep up, and jamming the machine.

We watched him together for maybe half a minute.

"God, look at his face," Paul whispered then. "Transcendence. I'd give anything for his gift." That was the last thing *he* said. I swear.

I was going to tell him that he didn't need to whisper, that he could sing it at the top of his lungs while I accompanied him on tenor. But just then we both saw Herb's face change. Saw the transcendence start to drain out of it.

First he frowned. Then he stopped typing, became still. He started to inhale. His jaw dropped, slowly and steadily. His eyebrows lurched upward, in stages. Surprise. Amazement. Astonishment. The rising brows dragged open his eyes, and they widened in more rapid stages. Alarm. Dismay. Fear. Panic. Terror. Horror. Disbelief. Awe.

It took a total of maybe ten seconds. Maybe less. I will never forget a picosecond of it.

Paul and I knew something was terribly wrong. The color had drained from his face, veins writhed on his forehead like cooking pasta, cords of muscle stood out on his neck. My only wild hypothesis was that he was having a stroke. By now his gaping mouth had sucked a huge volume of air into his lungs. I was afraid it might never leave.

And then was horrified when it did. It may have been the worst sound that ever left a human throat. And he had very big lungs. The devil himself would take pity on a man who screamed like that.

Perhaps he did: the room's microphones all blew out after only a second or two, and that scrambled the video feed as well. You've seen and heard the surviving footage, and you know how indelibly soul-searing those couple of seconds are. It went on for a good fifteen seconds. I heard the whole thing, live, four meters away in an enclosed cubic, and it did not deafen me near as much as I wished it would.

It started out as a scream of pain, very quickly escalated to mindless agony, stayed there for what seemed like a million years, mutated into despair, and then in its final seconds added in powerful undertones of unimaginable heartbreak, unendurable regret, insupportable grief.

I had absolutely no idea what had happened. I just knew it was the worst thing ever. And it was.

We weren't the only ones to hear a scream like that, either. Not even the only ones aboard.

By the time it dawned on me that Paul could help me carry Herb, I'd left him way too far behind. "Call Dr. Amy," I brayed, and lurched on.

From Rup-Tooey to the elevator—nearly the ship's radius. Black spots. Upward five decks, at the speed of capillary action. Ears pounding. From the elevator to the Infirmary, only about half a radius, but with a complicated route. Bad design. Red spots, now. Got lost and had to backtrack. Made mental note: sob the moment you can spare the air. Spotted big red "ER" and red cross ahead, just as vision began to dither out. Kept going, confident door would get out of my way.

I presume it did, but something hard just beyond it did not. I felt the impact, realized I had lost my horizon somewhere, let go of Herb, bawled, "Take him!" and waited with mild interest to learn whether would injure my face or the back of my head.

The answer was both, but I did not find out for some time. It was the back of my head that hit first, and it hit hard enough to bounce. That was unfortunate, because just then Herb landed on my face. They say my skull made a much louder sound the second time.

I want to be clear: the problem was not shortage of autodocs—the *Sheffield* stocked two hundred, which someone had calculated should last five hundred people until they could build their own. It wasn't even a shortage of autodocs warmed up and ready *to* use. Four casualties at one time didn't even begin to strain the resources Dr. Amy had in place. And while many parts of the *Sheffield's* infrastructure were underspecified or even shoddy, she had made damned sure medicine was not one of them: those were 'docs fit for the Prophet's generals.

It was nobody's fault. It was confusion, that's all. Everyone in that room was probably as saturated with excess adrenaline as I was or more, and most of them had more than a single emergency to deal with at once. Only one of them knew me well enough to even be in a position to infer how *far* I had probably just run as fast as I could, carrying a man who outweighed me by more than thirty-five kilos. And not only was she the busiest person in the room, she already knew, as almost no one else did, what had happened to cause all this. It is remarkable that she was able to function at all, and she dealt more than competently with the three acute patients she knew about.

Nobody noticed for a while that I had died, that's all.

Obviously, somebody did catch on before I passed the critical threshold. And those really were top of the line 'docs. I was never in any real danger. But Herb and his colleagues had already been discharged by the time mine decided to decant me.

I woke as the lid unsealed, opened my eyes to see Solomon Short seated a few meters from my 'doc, looking at me. His face was distant, unreadable. As he saw that I was awake, his eyes hardened. He got up and came to my bedside. He looked so solemn I was about to tease him, when I suddenly noticed his lower lip trembling.

He leaned close, looked me in the eye, and said, without a trace of humor, "If you die one more time, I will be very angry with you. Do you understand?"

"How's Herb? I *died?"*

He straightened and nodded. "A little bit, yeah."

"Wow. How's—"

"He's all right physically"

An LCD lit yellow next to me, on a panel inside the 'doc. "And otherwise?"

"Dr. Louis is the best there is."

As I thought about what that statement said, and what it didn't say, the yellow light turned amber. I knew that wasn't good, and started doing my quartered-breathing trick. By the first exhalation, the light had dropped back to yellow. "Li died, didn't she? His twin? While they were in rapport." The light went out.

"Everybody did," Sol said. "Almost." He turned away and began pacing slowly around the room.

I assumed he spoke metaphorically: all of us aboard shared Herb's pain. His voice was as odd as his words.

"Covenant, how horrible for him!" Involuntarily imagining what it must have been like for him, to share his twin sister's death, turned my panel light yellow again. I focused on my breathing, tried to force the image from my mind, but the light stayed on. "What did she die of?"

He hesitated a moment, his back to me. "Let's talk about it later."

"That bad?"

"Worse." He resumed his pacing.

It was beginning to dawn on me that Solomon Short had spoken seven sentences in a row to me without a single funny thing. "Sol, what's wrong? Is Herb brain dead? Did somebody else aboard die?"

"No one on this ship has died, physically or mentally," he said.

"Okay, what is it then? Why are you acting so weird?"

"Let's talk about it later," he said dully

"Why? Look at me."

"You're not ready"

I sat up on that one, yellow light or no yellow light. "I'd like a second opinion on that," I said. "Come to think of it, where the hell is Dr. Amy, anyway? Why isn't she here?"

"She is," he said, and pointed.

I followed his finger. Dr. Amy was in the autodoc next to mine.

I had never before seen anyone in a 'doc with any sort of facial expression whatsoever. Hers looked as if it weren't working, as if she were in serious pain in there. That was silly, and a glance at the monitors confirmed it, but still

"Prophet's dick, Solomon, what's wrong? What is going on? I want to know now." Yellow became amber.

For the first time he smiled—and I was very sorry. It was a ghastly parody "Of course you do," he said softly.

He came back to my bedside, and to my astonishment and alarm, reached into the 'doc and took both my hands in his, captured both my eyes with his. "This will sound crazy. Because it is. I swear to you it's true."

"Okay."

"Sol is gone."

Was he telling me that he had gone insane? Or that he was an alien who had taken over my friend's body? Did it make a difference? Had *he* put Dr. Amy in that autodoc?

All that went through my mind in the second that it took him to see my incomprehension in my eyes, and to realize that for the first time in his life he had failed to notice an obvious pun.

"Not me," he said. "My namesake. The star."

He wasn't helping. "What the *fuck* are you—"

"Joel, Sol has exploded. It's gone. The whole System is gone. What isn't annihilated is sterilized."

I must have gaped at him. "Don't be silly. The sun can't explode! Gs don't go nova. They don't have the materials. It simply isn't—"

"I know," he interrupted. "I know that."

"But—then—I—what are you saying? Did a, did a black hole, or a neutron star, or a, a, some extrasolar—but that's *silly!* It would have been detected, we'd have known about it *long* before it got to . . ." I trailed off, confounded.

"I'm telling you Sol exploded. I know it can't happen. It did anyway"

"What?"

"I'm telling you everyone we left behind us is dead. Clear out to the Oort Cloud by now All that's left in the universe of the human race is nineteen colonies. Excuse me, twenty; I was forgetting the *New Frontiers."*

By now the literal meaning of his words, at least, had reached me. "You're serious. You *can't* be serious. The sun *blew up?"*

He could shrug with just his face. "The one we used to use, yeah."

"Bullshit. How—how can that possibly be? It has to be the most studied star in the universe! How could they conceivably fail to notice an instability so—" I was distracted by a pulsing in my peripheral vision, took my eyes from his, and saw that my panel light was now bright ruby red, and blinking.

Sol said, "I see only two possibilities. First, it could be there is some fundamental and monumental mistake in our understanding of stellar processes. A true scientist *never* says, 'That cannot have happened.' The most he can say is, 'This is the first instance of that I have observed, and I cannot account for it.'" He let go of my hands, and spread his. "Maybe G2s *do* explode sometimes. This one did."

"Sol, we've been looking closely at the stars for half a fucking millennium—"

He nodded. "And it is perfectly possible that G2s explode at a rate of one a millennium or less. That may turn out to be the clue that leads to an explanation one day."

"What does Matty say?"

He pointed farther down the row of autodoc capsules. "He's over there. Sedated."

"Prophet!"

"He said he's been half expecting it for six years. Something about observations he made as we were leaving the System, that nobody would have believed without backup, and nobody else was in a position to repeat."

"That's what's been chewing his guts?"

"It'd chew mine."

My mind rejected Matty's problem. I could tell it was going to take a lot of time to imagine what it must have been like to have known about this, for years, and been unable to do anything about it. I was busy now.

"You said two possibilities. What's the other one?"

His face became as perfectly expressionless as Dr. Amy's should have been. Except the eyes, they looked as haunted as hers. "Just before Hal disarmed him and put him out, the last thing Matty was screaming was, The paradox is fucking resolved, Enrico! I told you so!' "

"What?"

His meaning slowly percolated in.

Enrico Fermi asked, Where is *everybody?*

If intelligent life can arise once, it must arise more than once. There must be other star-going civilizations, lots of them. Where are they all?

Answer: maybe laying up in the tall bushes. Behind cover, wearing camo gear and face paint. Slowly and methodically quartering the battlefield through sniperscopes. Looking for game big enough to be tasty, but stupid enough to step out on the plain and start yelling, "Yoo hoo! Anybody out there?" Every millennium or so, one gets lucky.

I rejected the question, as I had Matty's torment. The *emotional impact* was just beginning to arrive, then. To start arriving.

It started to sink in that everyone I knew who wasn't aboard this ship was dead. Irretrievably, beyond any resuscitation, even if anyone were left to resuscitate them. *Everybody,* from Terra to Pluto. Everyone from the Secretary General of the System down to whoever ranked lowest in Coventry—hell, down to the last virus. Dead and already cremated. Tens of billions of human beings. Martians. Venerian dragons. All animals of all planets, cooked. All birds, baked in a pie. All fish, fried. Uncountable lower life-forms gone extinct ahead of schedule.

Lucky humanity. The cockroach did not outlive it after all. We had none aboard.

I started to ask how we even knew what had happened, when death must have arrived out of the sky before any possible warning could be given or received. But before I got the question completed, I knew the answer.

Two of the System halves of the *Sheffield's* three telepath pairs had, for obvious reasons, been well paid to locate themselves equidistantly around Terra. One of them, Herb's sister, must have chanced to be on the nightside of Terra. Perhaps with several minutes of useless warning, before the wave of superheated steam arrived at well below lightspeed—

I glanced down. There were three lights on the panel, now, all ruby red, all flashing.

And the third System twin, I recalled, had lived at the north pole of Ganymede, which could easily have been in the blast shadow of Jupiter. I found myself trying to picture what Jupiter must have looked like from behind as she was being destroyed by her bigger sister. The nature of the cataclysm must have been as unmistakable as it was inconceivable.

And the precise relative timing of the two telepathic reports would have nailed it down.

At *that* point it started to sink in that everyone I *cared about* who was not aboard this ship was dead. Friends, relatives, teachers, colleagues, acquaintances, people I'd always intended to look up one day

The ruby lights were slightly out of synch. The rhythmic interplay was very interesting. It gave me an idea. I wished I had a sax with me. I looked up at Solomon, with the vague intention of asking him to fetch me one, and the moment I saw his face, the final punch arrived. The others had all been solid, bare-knuckled lefts, but this was the big right hand, square in the heart.

Jinny was dead.

Not "dead to me." Not hypothetically dead, at some future time. Dead.

The moment I'd stepped aboard a relativistic starship without her, I had known and accepted that I would now probably outlive Jinny by many years. When I arrived at Brasil Novo, still just on the sunny side of forty, ninety years would have elapsed on Terra, and Jinny would be—

Absurdly, my brain actually did the math.

—ash, seventy-nine years cold.

If she had taken me up on my offer—my plea—and come aboard with me, to homestead in the stars . . . she'd have lived.

I discovered that Solomon was holding my head against his chest. I hadn't even noticed him approach. I pulled back, found his eyes, and smiled broadly.

Doing Richie, I said, "I hate to say atojiso, Jinny, but I fuckin' atojiso."

But I couldn't hear a word I was saying. Some asshole was playing a tenor too loud. Probably Philip Glass's first piece: the same note endlessly repeated. *Beep! Beep! Beep! Beep! Beep!* I didn't *give* a fucking fly how many measures he waited before he varied it, and I tried to ask Sol to durn it town. But Sol's eyes were widening. Kept widening until they covered his whole face and met around the back. Pupils turned yellow, became big yolks, and not very funny ones, either. Felt him laying me back down in the autodoc. Splendid old James Raymond song. *"Lay me down* in *the river, and* wash *my self away. Break me down like* sand from *a stone. Maybe I'll be whole again one day."* Lay me down ...

The lid of the autocoffin closed over me, and washed my self away

Eighteen

We need to have as many baskets for our eggs as possible. Even if we don't manage to ruin this planet ourselves, natural disasters or changes—or even changes in our star—could make it impossible to live on this planet.

—Philosopher Anson MacDonald, radio interview, Butler, MO, USA, Terra, July 7, 1987 ("Anson MacDonald Day')

When I did emerge from the Infirmary, nothing had changed, and everything was different.

I had once read a book, a whole book, about what it was like to be in New York City during the week following the 2001 terrorist attack. So none of the things I saw surprised me. I'd just never expected to see them with my own eyes. Not everywhere I looked.

I suppose by definition there had never been a more emotionally traumatized bunch of people in history before. We were the first sons and daughters of Terra, grandchildren of Sol, who had ever *literally* lost everything but what we were carrying. Our ancestral womb was gone. *All* our home planets were gone. Our civilization was gone. Our *star* was gone.

There was no precedent for processing something like that. No appropriate ritual. No traditional therapy.

Not one human religion had ever even contemplated such a turn of events—not even the old, psychotically bloodthirsty ones we'd had to eliminate. It upstaged Ragnarok, dwarfed Armageddon, mocked Apocalypse, overshadowed the Qiyamah, outdid the Kali Yuga, ruined the prophecy of Maitreya Buddha.

The center of the universe appeared to be somewhere *else.* The possibility had occurred to hardly anyone, ever.

By the time my 'doc decanted me for the second time, forty-seven of my fellow colonists had committed suicide, by an assortment of means.

That there were so few as that is a testament to the professional skills of Dr. Amy and her staff . . . and I think in equal measure a testament to the regard in which she personally was held on board the *Sheffield.* Several people told me later they had wanted badly to leave, but decided in the end that they could not disappoint her that way.

But I think it's fair to say that better than half of us still warm were basket cases. Walking wounded. On my way back down from the Infirmary to Rup-Tooey, at least four times I passed adults who were just sitting on the deck, weeping. Very few people I encountered acknowledged me, or even seemed to see me. Nobody smiled or spoke. I went by a room whose door was frozen open; its interior showed extensive fire damage. There was a long line outside the Sim chamber, and hardly anyone on it was talking while they waited. There was an equally long line outside the ship's nondenominational chapel—but as I passed within fifty meters of it, a fistfight apparently broke out inside. I kept going, and a few seconds later had to lunge out of the way of Proctors DeMann and Jim Roberts to avoid being trampled. I did not go in The Better 'Ole, one of the two free taverns, but passed near enough to it to note that it too was packed, with a silent and morose crowd. The only thing audible was soft music. As I went by, Second Officer Silver lurched out into the corridor and began vomiting. It was not uncommon to see crew in colonists' country, but they tended to do their drinking among themselves. It was the first time I could ever recall seeing any officer drunk, and I realized that must have been a policy of Captain Bean's. Which nobody gave a damn about anymore.

In Rup-Tooey I found Herb, Pat, and Solomon, sitting around and bullshitting like students after curfew, though it was midafternoon. The moment I laid eyes on Solomon, it came into my mind that none of us went probably ever going to be able to bear to call him by anything but his full first name, ever again. Or at least for years to come.

He looked up and nodded as I came in. "Hey, Joel. How are you feeling?"

"Swell," I said. "You okay, Herb?"

"No," he said, with no more affect than if I'd asked him if he were lefthanded.

"You going to be?"

"Yes," he said the same way.

I believed him both times. We nodded at each other. I wanted to put my hand on his shoulder, but knew he would hate it. It can be frustrating to care about people who hate to be touched, sometimes.

Solomon said, "I was such a big help the first time you woke up, I thought this time I'd leave you alone."

I put a hand on his shoulder, and squeezed. He reached up and squeezed my hand back.

"You want coffee?" Pat asked. "Or ethanol?"

"Yes."

Herb nodded, got up, and made me an Irish coffee. I pulled my desk chair over to join the group and sat. "Somebody bring me up-to-date on what's happened while I was out. Do we know anything, yet?"

"Everyone in the Solar System is dead," Herb said over his shoulder. "All other information follows at lightspeed. Sorry."

I wished I had asked anything else. "We're sure it wasn't just Ter—"

"Gene's twin sister Terry was behind Jupiter. She had time to know what she was seeing. Poor woman. The times match. Doom arrived from Solward at lightspeed. QED."

I'd forgotten I had already worked that out, back in the autodoc. Another ill-considered question, in any event.

Solomon said, "The specks of data we do have indicate that conversion of Sol's mass to energy was at least ninety percent efficient, and could have been perfect."

If there is an intelligent response to that statement, none of us found it.

"Is there a consensus guess what went wrong, even?" I tried finally.

The smell of fresh coffee filled the room.

Solomon snorted. "First, we have to settle how many angels can dance their way into a pinhead."

"Solomon—" Pat began.

Herb said, "He's saying it's a religious question."

Pat looked scandalized.

"Exactly," Solomon agreed. "Everybody is going to end up with a firm opinion, based on intuition, but nobody's going to be able to defend his. The first scraps of actual hard data aren't going to catch us for years to come. And I doubt they'll settle anything. I don't think the question will be answerable in my lifetime. Except on faith."

"I just hate to even use the word 'religion' in this context," Pat said. "It makes my skin crawl."

"Occam's Razor," Herb said, bringing me my Irish coffee. He'd made one for himself as well.

"What?" Pat asked.

"We forgot Occam's Razor," Herb said.

"I don't follow." I could see that Solomon did.

Herb sat and drank some of his coffee. "The sky has always been full of things we can't explain," he said. "It still is. Anomalies always abound. Gamma ray bursts. Missing matter. Quasars. Dozens of things. Generations of astrophysicists have made careers creating different, complicated explanations for each of them—often brilliantly. But one explanation for *all* of them, a quite likely one, they have never once considered. Or at least, anyone who did propose it instantly lost all credibility"

"Oh, Herb, no!"

He nodded. "Intelligent design."

Pat tried to speak, but could only sputter.

"That's exactly why, too," Herb said. "For some reason, we let the god-botherers appropriate that term as a euphemism for their stupid deities, and let our revulsion for the latter cloud our understanding of the former."

Solomon spoke up. "He's right, Pat. Once you get over the baseless idea that an intelligent designer must necessarily be God, it gets easier to deal with. Nothing whatsoever except a lot of dead fools says an intelligent designer has to be omnipotent—just more powerful than us. He need not necessarily be omniscient—just smarter than us."

Herb said, "And God Himself knows there is no reason why an intelligent designer must—or even can—be ornnibenevolent. He need not even be as *nice as* us. And we're swine with starships."

Pat's mouth hung open. Perhaps mine did, too.

"And finally," Solomon said, "nothing says there has to be only one —or even some low prime number."

"We found sentient life on Mars and Venus," Herb said. "But nothing at all outside the System. And the Martians and Venerian dragons were just so . . . irrelevant to us, it was easy to stop thinking about them. Even after we got bright enough to go out and look for ourselves, more than a dozen times in a row we found whole star systems containing nothing more complicated than a cat. For some reason, we concluded our star system must be unique. We got the notion we were the only sentients in the Galaxy. We should have seen how preposterous that was, and looked for more reasonable explanations."

"I really really really hate this," Pat told him.

"Exactly our problem. Hate does not add clarity."

I felt a powerful inexplicable impulse to put some music on. It would make us all feel better. I summoned up my library on my desk display and was going to choose one of my favorite old jazz records, a Charlie Haden/Gonzalo Rubalcaba collaboration that had never failed to soothe me when I needed it. But before I could start it, the album title sunk in. It was called *La Tierra del Sol.*

And every song on it had been written by a dead man, to whom it was a posthumous tribute.

I cleared the screen. So much for the power of music. I had thousands of other albums available, but suddenly I didn't want to hear any music by dead men. I wondered if the next time I picked up my horn, any sound would come out.

"Why *can't* it have been a natural occurrence?" Pat was saying. "It seems to me *that* would be Occam's Razor. Occam's Razor says don't multiply entities unnecessarily. Which is less likely? One single cosmic event we can't explain yet? Or a galaxy full of lethal monsters, hiding perfectly, explaining dozens of astrophysical mysteries at once?"

"What does Matty say?" I asked.

The silence told me I was still asking bad questions.

"Aw, shit—"

"Don't be mad at him, Joel," Solomon said. "He spent every minute of the last six and a half years praying to a God I happen to know he didn't even believe in that he was wrong, that nothing was wrong with the sun. But he knew he wasn't; that's why he came apart. The measurements he lucked onto as we were leaving told him something unprecedented and scary was going on. He was too good at what he did to be wrong. Having it confirmed was just too much."

He was right: Matty had hinted about this to me, more than once. Something about a perfect solar eclipse by Terra occurring as we'd left the System, and something wrong about the predicted displacement of some stars behind Sol. Whatever had happened—or been done—to our star had taken six or more years to finish happening. The few subtle signs had been visible only to someone outside the System. One day, our descendants might find that a useful clue. If we had any.

Oh, no wonder Matty had gone to pieces.

Not that he could conceivably have done anything to prevent the tragedy. With no one else in a position to replicate his data—until whenever the next starship containing a good astronomer was built and launched to a point where it happened to see a perfect solar eclipse from the right distance—he could not possibly have gotten anyone to listen to him in time to do the slightest good. At most, he might have created a disastrous Systemwide panic.

"He probably had more people he cared strongly about back in the System than anybody else aboard," Pat said. "Except maybe Dr. Amy. No, no, she's all right," he added hastily, seeing my expression. "But she's hurting."

I closed my eyes for a moment. Might as well get it over with. "Who else that I know is gone?"

Another awkward pause. I should probably never ask another question again.

Solomon answered. "Balvovatz, for one."

"What?" I was stunned. One of the last people I'd have guessed would ever suicide was Balvovatz, that cynical, fun-loving old Loonie.

But then as I heard that last word in my mind, I started to understand. His tragedy was, impossibly, even greater than that of most of the rest of us. Everyone he cared about back in the System lived—had lived—in Luna. It was the preposition killing him.

All the other planets mankind had used, it had lived on the surface of. Even the Marsmen had been aboveground for over a century now. Only Luna was too small to terranize. Loonies had still lived almost exclusively underground. Some of them quite deep.

By now, if there were any solids at all among the particles expanding from the place where the System had been, they would probably be on a pair of smelted lumps formerly known as Jupiter and Saturn. Even they might not still exist, if the destruction had been as complete as Solomon believed.

But some Loonies might conceivably have lasted whole seconds broiling in lava, before it became too hot for even lava to exist.

"Everyone you or I knew back home is surely dead," Herb said. "So is everyone Balvovatz knew. But his were among those who suffered worst."

I rejected the image, and the thought. I knew I was going to miss Balvovatz badly. I had liked him a lot. Loved him. "Okay. You said 'for one . . .' Who else is gone?"

"Diane," Herb said. "And Mariko."

Mariko Stupple was the girl I'd used for consolation for a few weeks after Diane Levy had taken my virginity, glanced at it, and returned it. I wondered how close Diane had come to achieving her goal of sampling every male aboard. I found that I hoped she had. "Anyone else?"

"Nobody else you know well, I think," Pat said.

"None of your lot, Solomon? Not even Kindred?"

"None of us has the luxury of that option," Solomon said dully.

"I don't follow."

"We have no way of knowing exactly what happened to Sol—so we must assume worst case: total destruction."

It took a second or two to hit me. If all or nearly all the mass of the sun had been converted to energy, a wave of lethal gamma rays was even now racing after us. Faster than we were going, or could go ...

I said, "Sorry, Sollie. I am not doing at all well on thinking things through, today"

He nodded. "Happens to me, too, every time I've been dead."

If even one Relativist became incapacitated, sooner or later the ramjet was going to go out and stay out. The *Sheffield* would never make port. She could remain self-sustaining for a maximum of three or four generations—but that didn't matter, because we wouldn't have anywhere near that long to live. We were only traveling at 0.976 *c* ... and death was chasing us at *c*.

"Will we be able to outrun it, do you think? By the time the wavefront catches up, will it still be—are we dead?"

Herb gave me a baleful look. "How long is a piece of rope?"

"He's right," Solomon said. "Tell me exactly what happened to the sun, what percentage of its mass was converted to what forms of energy in what proportion by the explosion, and perhaps a horseback guess could be made, by somebody as smart as Matty was. But we know hardly anything beyond the bare fact of humanity's annihilation. It could easily have been a violent enough event to fry us even as far away as Bravo. Indications are it was. We may be as dead as those poor bastards in Luna—just on a longer string."

"Jesus Christ!" Pat said, at the same time I said, "Covenant!" in the same tone of voice. I'd never heard him say that before, and took it as a clue to why discussion of religion upset him. Diehard closet Old Christians in the family might even help explain what a man like him was doing on a voyage to nowhere in the first place.

"If the explosion *was* that powerful," Herb said, "we'll never reach Immega, will we? At no time will we exceed the speed of light, and the wavefront is only six years and change behind us—"

"Ten years and change," Solomon corrected. "We've been *traveling* for 6.41 years. But we passed half the speed of light in the first year, and by now we're making more than ninety-seven percent of it. Lorenz

time contraction. It adds up."

"So will it catch us along the way, or not? I can't believe it's taken me this long to think of the question." I'd always prided myself on being quick on the uptake . . . but I decided to give myself a pass, this time.

Solomon shrugged. "I can't believe I don't have the exact answer ready for you. Al Mulherin's been crunching away at it, but I haven't checked since yesterday. We've all been thinking of other things than survival, that's all. Give me a second." He began tapping on a keyboard.

I tried to work it out roughly in my head. The *Sheffield* and waves of evil start out just under ten and a half lightyears apart, then race. Us at a very high fraction of *c* which will get even higher, but will never reach one. Them at *c*. At what point will the second train catch the first? It seemed like a classic grade school math puzzle. But relativistic factor kept royally screwing up my calculations. And then I realized I'd forgotten to factor in deceleration . . . I gave up and waited for Solomon. I knew my father would have closed his eyes for a moment and just known the answer.

"I think we're all right," Solomon said finally "As long as the ramjet keeps ramming. We expect to reach Bravo after twenty years, our time, 90.4 years in Sol time." He winced slightly as the phrase left his lips, but kept going. "Assuming a lethal concentration of gamma rays is in fact after us, it will arrive at our neighborhood about seven and a half years later. With luck, we can get dug in deep enough to weather it out in time."

Herb stood up to his full height and clapped his hands together, loud enough to make all of us flinch. "Well, that is just the best fucking news in the fucking Galaxy," he said loudly. "That makes my fucking day."

He spun on his heel and went to get the Irish whiskey. Solomon and I exchanged a nervous glance. If Herb were to go berserk in this enclosed space we would have a serious problem. He turned around and caught us at it, and his booming laughter was as loud and almost as startling as his handclap had been.

"You dopes, I'm serious! The distance between one and infinity is *nothing* compared to the distance between zero and one."

I decided to assume he was not cracking up. "What do you mean, Herb?"

"Think it through. There's one and only one reason we know, for sure, what's happened behind us. Chance dictated that two of our three telepaths in the System were in blast shadow. For my sister, Hell didn't arrive at lightspeed, but at something closer to the speed of Terra's rotation. She had time—barely—to hear and comprehend what was coming at her."

Get him off this subject. "Okay. I don't take your point."

"How many other colonies do you think *were that lucky?"*

Oof.

"Prophet's *prick!"* Pat said. "I never even thought—"

"Telepath pairs were even scarcer on the ground in the early days," Herb said. "Most of the earlier colonies made do with two. And most of those that shipped three are down to two, now Li kept up on such things."

"We've got to send a laser!" Pat cried, and started to get up.

Solomon caught his shoulder and pulled him back down. "Calm down, son. Captain Bean has already long-since notified the only colony we can help."

"But there are—" He frowned. "Oh. Oh. Shit."

Any laser or radio message we sent would travel at lightspeed. Only one human colony happened to even lie in the constellation of Bootes: 44 Boo, from which our destination had been discovered. Taking into account the offset (it was not *dead* ahead), it was something like thirty-five years ahead of us by laser . . . and doom would arrive there in forty-one years. That was the one and only colony we could possibly hope to warn, and we could give them an absolute maximum of six years in which to prepare. That had already been done.

Any other colony lacking a telepath whose partner had chanced to be in apposition at the moment of explosion, and thus needing us to warn it, was screwed. Hellfire was coming for them at the speed of light, and we were powerless to alert them in time.

Between us, the *Sheffield* and 44 Bootes probably now held the very last surviving fragments of the human race. All the rest would probably be gone within sixtyfive years.

We *had* to get to Bravo. We had to survive. It was far more than just our own lives at stake, now. It was our species. We were The Last Of The Solarians.

I remembered a spiritual book Dr. Amy had had me read the year before, by a man named Gaskin. I had been easy to persuade because the farmer in me had resonated to its title, *This Season's People.* It turned out to derive from a famous saying of the Jewish mystic Shlomo Carlebach:

We are this season's people.
We are all the people there are, this *season.*
If we blow it, it's blown.

I was the guy who had been trying to run away from all responsibility. And found just that.

I often wish I could believe in a deity, so I could compliment Him or Her on His or Her sense of humor. And then go for His or Her throat.

How long, Sol?" Herb asked.

Solomon winced to hear his own name. "How long what?"

"Blue sky it with me, here. Optimistic assumptions throughout. I just want to get a vague sense of how far away the payoff is."

"I'm still not understanding you."

"Assume all goes as well as we can reasonably hope, from here on in. The folks at 44 Boo dig in successfully, and survive with zero fatalities. We make it to Bravo, dig in successfully, and also survive with no further fatalities. Round our numbers off to five hundred for convenience, and assume 44 Boo has twice that population by this point."

Sol nodded. "All right."

"The human race now numbers fifteen hundred, total, plus an indeterminate number of frozen ova. It's in two pieces, forty-odd lightyears apart, with no telepathic links. That's our starting gene pool and situation. We have specs for virtually every piece of proven technology the System had when we left, 44 Boo nearly the same, and we'll both get better and better at making our own parts, so again let's simplify, and just say we'll be able to build new relativistic ships again in a single generation."

Sol was dubious. "That's a damn big simplification."

"On the time scale I'm talking about, it'll disappear in the noise," Herb insisted.

"Go on."

"Here's what I want to know, and I'll settle for a very rough approximation: how many centuries will it be, do you suppose, before we have rebuilt and protected our civilization sufficiently so that we can *track down those shit-sucking back-shooting baby-burning vermin and blow up THEIR fucking star?"*

His voice rang in the silence that followed. Standing there tall with a fifth of whiskey in his hand and death in his eyes, he had never looked more like a Viking chieftain.

"How many generations?" Herb continued. "A lot, I know—but roughly how many, do you suppose? How far away were we ourselves from having the power to make stars go nova?"

"I repeat," Sol began, "I really think we should be careful not—"

"You're right, sorry," Herb conceded impatiently "A nova is a natural phenomenon, and we know this probably was not. G2s don't nova. That is a point worth remembering. So: how far away were we from being able to make stars go boom? How far do you suppose we are *now* from being bright enough to reverse-engineer it, once we start getting some hard data on exactly what was done?"

"It won't even start to happen in our lifetimes," Solomon said.

"I know that. I'm not talking about me. I'm talking about the human race. It numbers fifteen hundred people, and it has only two tasks. Hide. And hit back. I'd like to try and get a loose sense of how many centuries it's going to be before there's likely to be any good news again. My intuitive feeling is, on the order of five hundred years. What's your guess?"

The idea was breathtaking, heartbreaking. I had vaguely understood that a very long, very hard task lay ahead of me. Until now I had not grasped that it probably lay ahead of my remotest descendants.

Nobody had an answer for him.

I stood up and went to him. "Unhand that bottle." He passed it over, and I topped up my Irish coffee, which had been down to its last inch, tried it, and it seemed the right concentration for the moment.

"Damn it," Pat said. "Damn it to all hells at once. *We* managed to evolve beyond war. Why couldn't *they?"* He shook his fist angrily in the general direction of the hull, and the stars beyond it.

"We didn't evolve beyond war," Herb said. "Just beyond violence—and we've only been free of that for a whole whopping century and a half. You still know how to shake your fist. There was a trade war going on back in the System last week, remember? The first. Who knows how far it might have gone?"

"Even if that's true, we were getting *better,"* Pat cried. "Are we really going to have to go back to thinking and acting like the Prophets, and the crazy Terrorist nuts and Cold War nuts before *them?* Just when we were finally starting to grow up?"

There was a truly depressing thought.

I remembered Solomon's dichotomy of the Thrilled and the Threatened. Was the human race really going to have to spend the next half a millennium or more being as conservative, as paranoid, as utterly pragmatic and cynical and ruthless as Genghis Khan, or Conrad of Conrad?

What is thrilling—if entities that can burst a sun want you dead? Anything besides simple survival itself?

Would any human above the age of six ever again look up at the stars in the night sky in simple wonder?

For that alone, I wanted revenge. Never mind billions of unearned deaths by fire.

I went to the Star Chamber, alone. I couldn't talk any of the others into coming along. Solomon nagged me into taking a sandwich along. Autodocs feed you well but do not fill the stomach, he pointed out. I had to admit that something to soak up all the Irish coffee did seem like a good idea.

The Star Chamber might seem like a pointless waste of cubic, but few aboard the *Sheffield* ever thought so. Sure, the Sim illusion you get with naked eyeballs in that huge spherical room is nowhere near as convincing as what you can get while wearing the rig. How could it be? And there's only the single illusion.

But you can *share* it.

In conventional Sim, in a tiny cubicle, wearing all the gear, you can have people around you, totally convincing ones . . . but you never really forget they're not real. And only partly because the smells are never better than close.

But in the Star Chamber, you could look at the stars in the company of other human beings. Just then, I could not have borne to look at them by myself.

As I'd expected, it was just as heavily in use as the rest of the Sim Suite. I had to wait awhile for a space to become available. An argument was going on behind me as I reached the head of the line. "I *know* G2s can't go nova, I never *said* it was a nova," someone kept repeating. "What I *said* was, and is, there could be some equally natural process, *other* than the nova mechanism, by which a star can explode. *Obviously* it would be an exceedingly rare event, I'm not a *fool—"*

It was only when a bystander interrupted, "You play one brilliantly, Citizen," that I realized the speaker was Robin. My oldest living girlfriend. "We all took your point the first three times you made it," he went on. "And I imagine my great-grandchildren will be both the first to know whether you're right or not . . . and the first to *give* a damn. But right now, and until the day they're born, could you possibly shut up?"

Some atavistic hindbrain mechanism caused me to consider intervening on her behalf. But I did much prefer the silence the stranger had produced.

Five minutes later it was broken—from inside the Chamber.

At first, all I could tell was that someone was yelling in there, very loud. But as they got him closer to the outer door, his tone and then his words became audible. I don't think it took any of us on line more than half a second to understand. He was screaming at the top of his lungs, with berserker rage. At the stars.

—shit-eating piss-drinking pig-fucking goat-sucking maggot-licking baby-raping *well-poisoning* illegitimate spawn of degenerate diseased vermin-vomit"—he was shrieking as they forced him out into the corridor—"I'll pop your mutant eyeballs with your own—" and at that point Proctor DeMann came trotting past me, touched him gently near the base of the neck, and caught him as he fell. He stood there with the man in his arms, his breathing as slow and measured as if he'd been standing in line with me, and gestured with his chin.

"Next!" he said.

I nodded to him, stepped into the lightlock, waited for the outer door to iris shut, then opened the inner one and entered the Chamber, almost on the heels of the two people who'd ejected the screamer. I stopped and waited for my eyes to adjust, and for the self-appointed bouncers to resume their seats so I could tell which was the empty one. The experience of the room came on like a powerful drug rush.

There was nothing to the Star Chamber, in one sense. A spherical room that was cut into upper and lower hemispheres by a floor filled with sling couches—but seemed not to be because the floor and couch frames were transparent. That was basically it. Until it was powered up.

But then one of the *Sheffield's* countless servers caused the walls to display the universe.

Not perfectly, as I said. But well enough to fool the subconscious. And the heart.

Not the unrecognizable mess we would have seen out of portholes, if there had been such silly things—but a corrected image, which removed the eye-wrenching distortions and displacements of relativistic Doppler effect. The universe as it actually was out there right now, for anybody who was not racing photons. As we would see it if somehow it were magically possible to instantly shed all our hideous inertia and decelerate to sublight velocity for a few moments. Well, obviously not as it was right now; there had to be some lag, and some assumptions made. But close.

It was quiet and still in there, now that the sufferer had been removed. By the time my pupils had finished adjusting, I saw that the room had been reprogrammed as I had expected it would be. Known it would be.

When humans sit together to look at the stars, they look up. It's way older than rational thought, possibly older than thought. So the Star Chamber was customarily programmed to place whatever part of the universe the Chamber's inhabitants found most interesting directly overhead. Most of the time, though by no means always, that had meant Immega 714 could be found at galactic high noon.

Today, Peekaboo was directly under our feet, and we were all looking at where Sol had been.

As I had expected, someone had explained to the computer that it could delete Sol from its permanents, now. To have seen it there still blazing in the sky would have been unendurable. I had vaguely wondered if they would attempt some graphic representation of the explosion, but of course they had had better sense. To watch that happening forever in slow motion would have been equally unendurable.

What was there was endurable—but only just. Only just barely. It was shocking, and ... neither "pitiful" nor "humbling" even come *close* to touching it, but those are the two closest words I can find. It didn't matter in the *slightest* that I had fully expected it, that I understood it intellectually and had for all my adult life, that it was old news.

It was simply heartbreaking, mind-numbing, soul-chilling, to see, with my own eyes, what an incredibly tiny, insignificant hole the removal of Sol left in the fabric of the Galaxy.

If I had not known exactly where to look, and been thoroughly familiar with that particular degree of the sky I'd have missed it. Anyone would have.

As I stared, mesmerized, it came to me for no reason at all that the very first cinematic work to take starflight seriously had been titled *Star Wars*. The irony was mind-melting.

I thought I felt a great disturbance in The Force—as if millions of voices had cried out as one, and then were silent.

Millions, you say? Hell, son, suck it up and walk it off! For a second there, I thought you had a *problem.*

Try forty-seven billion.

That was why I had come here, I realized. I'd had to see it with my own eyes. Among other things, I needed to put my brain more in synch with my mind.

My mind understood all about the universe and its correct scale and mankind's terrible insignificance in it—intellectually. It always had. But my brain had always seen things differently. To it, the Solar System was practically everything there was, and tiny hypothetical little Brasil Novo was the rest, and in between the two lay nothing but a gap in the map—one *wildly* out of scale. Like a Mercator projection of a globe, it was a false representation of reality that was much more useful than the truth.

Until now.

For humanity, the whole universe right at this moment consisted of nineteen tiny colonies, at least two of them believed to be slowly dying, many of the rest doomed. All of them many many lightyears distant from one another, communicating by laser or radio. Even if any of them should survive this, it would take us many decades, maybe centuries, merely to finish hearing what each of them would have to say about this shared catastrophe, when they found out, and as long again after that before we could possibly hope to hear a word of response from anyone to anything we might say.

To my personal brain, the whole universe now consisted of the *Sheffield,* and emptiness. Bravo was a fantasy.

To my mind, the whole universe consisted of Bravo. The *Sheffield* was now just an antechamber, with a timelock on the door.

But my eyes kept reminding me that neither was true. It was good to be reminded.

Because sitting in a chair spoils the illusion somewhat, the Star Chamber restores it and reinforces it by always *drifting* slightly, while keeping the focal star overhead. It works quite well. The universe as it actually is blazed all around me, and I floated in it, so convincingly I felt the first faint symptoms of psychosomatic dropsickness.

But it no longer held the beauty, the majesty, the grandeur, the glory that it had always held for me before.

For no reason I could name, my mind leaped back more than six years to the night of my prom. Jinny and I orbiting each other like halves of a binary star. Someone singing, "*It would not be so lonely to die if I knew/I had died on the way to the stars—*"

In my brain, I was no longer on my way to the stars. I was on my way *from* them, to refuge.

With more than twice the distance I had already covered still to go.

I felt and heard my own left foot start tapping spastically on the deck. I needed my hand to make it stop. For some reason that made me want to cry.

Someone ahead of me and to my left stood up and cleared his throat. There was a rumble of annoyance, and a woman behind me muttered, "Whatever it is, keep it to yourself."

But then he said, "I apologize for disturbing your *wa,"* and there was general relaxation as his voice was recognized. Tenzin Hideo Itokawa was well liked, even by those few who had problems with Buddhism—possibly in part because in over six years I had not heard him use the word once. He was also one of the gentlest and kindest souls aboard, and what he did best of all was listen. You make remarkably few enemies that way. And finally, of course, everybody knew that he kept the most popular man aboard, his partner Solomon Short, extremely happy. And not just because Sol kept mentioning it.

I'm not sure anyone else could have said what he was about to say, and finished saying it, before being hounded out of the room. So it's good it was him.

People face in any direction they like in the Star Chamber, but now nearly all of us turned our seats around to face Hideo, near the center of the room.

"I wish to tell you all something," he said, when stillness returned. As always, he spoke slightly slower than another would have, and slightly softer. It made you listen closer, and think more about what you heard. "I need to tell you. You need to hear me. But it will be hard to hear. *Shikataga-nai.* It cannot be helped. For this, too, I apologize to you."

"You go on and say whatever you got to, Hideo-san honey," said the woman behind me.

He bowed to her. "Thank you, Mary."

His next seven words were spoken the slowest yet. Two slow pairs and a slow triplet, with pauses two or three full seconds long between them. Maximum emphasis and earnestness.

"The time . . . for fear . . . is *past,* now."

Everybody spoke at once. Not all were angry, but everybody spoke at once. Have you been in an enclosed hemisphere when everybody spoke at once—a dome, perhaps? People far away sound louder than the ones beside you. It's so weird, silence usually resumes quickly, and it did now. Then two or three tried to speak at once, and none would yield, so someone told them to all shut the fuck up, and the noise level started to go right back up again—

"PLEASE!" the loudest voice I had ever heard bellowed.

Instant silence.

Even when I was sure, it was hard to believe that much sound had come out of quiet little Hideo. He took his time replacing the air it had cost, in a long slow perfectly controlled inhalation. It was a good example. I began measuring my own breath.

"I promise I will hear what each of you wants to say," he said. "Until you are done speaking. Please wait until I am done speaking first. It may he that my meaning will require more than a single sentence to fully express."

He had the floor back.

"Some of you might become angry if I said Sol may have died of natural causes, so I will not say that. We all know that is theoretically possible, if most unlikely. But it is unsatisfying to think about. It leaves us nothing to do but mourn our colossal bad fortune.

"I believe what happened was *done.* I believe one day we will meet those who did it. We will speak with them. And for all we can know now, perhaps we may choose to prune them from the Galaxy. If we can acquire such power."

The crowd was solidly with him again now.

Slowly, he shook his head from side to side. "But I do not believe this will happen in my lifetime, or that of the youngest infant in the *Sheffield.* I suspect it will not happen in her grandchildren's lifetime.

Everything we learned and built in ten thousand years of painful evolution was insufficient. It will take us many generations just to restore that, if we can."

Murmurings of dismay, argument.

Again his voice drew power from some unsuspected source, not as loud as his earlier roar, but enough to override the impolite.

"But of this much I am certain: we . . . will . . . *have* those generations."

Silence again.

"I have heard many of you express deep fear that our enemy might even now be hunting the *Sheffield."*

Pindrop silence.

"This is not rational. If it were true, there would be none to think it."

"They're six years behind us," a deckhand named Hildebrand yelped. "How do we know they're not hot on our trail?"

"Reason with me, Dan," Hideo said calmly. "If I build a machine that makes stars explode without warning . . . is it not certain that I must be able to reach stars other than my own? Had I but the one star, such a machine would have no sane function. Agreed?"

Hildebrand reluctantly grunted agreement.

"If I can travel the stars so easily that I develop reasons to blow some up . . . can I possibly be constrained by the cosmic speed limit humans must presently obey?"

"What? The speed of light is abso—"

"Name a method of slower-than-light travel by which you could so much as approach our general region of this galactic arm *without ever being detected by the Solar System."*

Hideo had him there. Fusion, antimatter, ramjet, all were pretty much impossible to miss.

"To have ambushed us so successfully," Hideo said, "they must be superluminal. By orders of magnitude, at the least."

He paused there. After a few seconds of thought, someone said,

"Subluminal, superluminal—what's your point, Tenzin Itokawa?"

Hideo turned his hands palm upward. *"We* travel at less than *c*. They travel at some very high multiple of *c*. Perhaps an exponential. And we have just agreed that we are clearly visible to anyone looking."

"What, they didn't notice us leaving?" said Terri, one of the Healers.

"Perhaps. Perhaps they mistook our nature. Perhaps they don't care."

"Beg pardon, Tenzin? Why wouldn't they?"

"It is hard for us to think this," Hideo said, "but the annihilation of humanity may not have been their purpose in destroying our star. For all we can know now, it might be merely collateral damage which they deemed either insignificant or acceptable. As we accept the deaths of millions of microorganisms living on our skin and in our hair each time we choose to bathe."

He had silence again. He let it stretch, while the stars drifted slowly past his head.

"There are wise ones," he said finally, "who say that man cannot endure insignificance on such a scale. That if confronted by a species as far advanced beyond him as he is beyond dogs, his spirit must inevitably break. For an example they point to the original inhabitants of the North American continent on Terra, who so thoroughly internalized a perception of their own inferiority that they became all but extinct within one or two centuries.

"Somehow they miss the counterexample of the original inhabitants of the South American continent. Or of the Africans chained and sold by other Africans to the Europeans even then conquering both Americas."

"Where are you going with this?" Hildebrand demanded. "We know we're not going to fold up and die."

When Hideo replied, his raising his volume again startled me, but not as much as his words themselves.

"I have great anger in my heart."

That made everyone sit up a little straighter.

"I do not wish to. It may help my grandchildren one day, but it is useless to me now ... here. And I do not have room for it in my heart. I need all the room for grief.

"The only way to deal with anger is to cut it at the root. The root of anger is *always* fear.

"I do not fear for the dead. It is too late. So I must be afraid for myself, and my friends here.

"There are only two things for us to fear, and I have just showed you that the first is irrational. I share it myself! Even now a tightness in my spine tries to warn me that the Star Killer could be drawing a bead on us right now, that I may not live to finish my sentence. But it is madness, not good sense. I can learn to make it go, and so can you."

As he spoke I was feeling my own shoulders start to lower, my lungs taking in deeper breaths.

"The second thing to fear is that we will fail the test. That we will not be good enough, strong enough, smart enough, to found a society which can grow to accomplish the things that must be done. Last week, the worst decision we could possibly make would have killed five hundred and twenty people, at most. Such a poor decision today would come very close to literally decimating the remaining human race. An unacceptable loss. Let me say this just right."

He paused and went inside himself. Nobody said a word. Hildebrand started to, and there was a dull thud sound, and he exhaled instead.

"Both fear and its cover identity, anger, are notorious for producing spectacularly bad decisions."

No actual words, but there were widespread grunts, murmurs, snickers, and harumphs, all of firm agreement.

"I will offer only a single example: the Terror Wars that led inexorably to the Ascension of the Prophet.

"Shortly after Captain Leslie LeCroix returned home safely from the historic first voyage to Luna, fanatical extremist Muslims from a tiny nation committed a great atrocity against a Christian superpower. Suicide terrorists managed to horribly murder thousands of innocent civilians. The grief and rage of their surviving compatriots must have been at least comparable to what we all feel now."

"Intelligently applied, that much national will and economic force could easily have eliminated every such fanatic from the globe. At that time there were probably less than a hundred that rabid, and by definition they were so profoundly stupid or deranged as to be barely functional. It was always clear their primitive atrocity had succeeded so spectacularly only by the most evil luck.

"We all know what the superpower chose to do instead. It crushed two tiny bystander nations, killing some dozens of actual terrorists, and hundreds of thousands of civilians as innocent as their own dead loved ones had been. The first time it was suggested that nation's leaders had perhaps known about the terror plot and failed to give warning. The second invasion didn't even bother with an excuse, even though that nation had been famously *hostile* to terrorists. Both nations were Muslim, as the nineteen killers had been: that was enough. The nation nearly all of them had actually *come from* remained, inexplicably, almost the only Muslim ally the Christian superpower had in that region.

"The generation of a large planetary web of enraged Muslim extremists was so inevitable it is difficult for us now to conceive of the minds that did it. They were some of the most intelligent and humane people in the history of the planet: What *could* they have been thinking?

"Of course they were not. They were feeling.

"They were a superpower, and monotheist. No one had ever hurt them remotely that badly, and they were utterly certain no one had any right to hurt them at *all*. They reverted to tribal primate behavior. Beaten and robbed of your banana by a bigger ape or a more clever chimp ... you find some smaller, stupider primate, beat him, and steal *his* banana.

"So doing, they ignited a global religious war that threatened to literally return the whole world to barbarism. The only thing to do *then* was crush it under the iron and silicon heel of a slightly smarter barbarism, a marginally less bloodstained religion, the best of all possible tyrannies. Nehemiah Scudder became the Holy Prophet of the Lord, smote the false prophets, and darkness fell."

He paused and turned slowly around in place. He seemed to be trying to meet the eyes of each of us in the dark. "If we respond to our own unendurable grief and sadness in that same way they did—by looking away from grief and sadness, and seeking comfort in fixating instead on paranoia and rage—if we react with our own version of their Terror Wars—then we will probably lose this fight, and we will probably deserve to."

That produced rumbles, and he let them happen, and waited them out. No one voice chose to try and take the floor, but many small murmured conversations were held at once.

"Let us continue on our journey," Hideo said after a while. "Let us build the new world we planned. Only its very *longest-term* goals have changed. We hoped one day to be part of a great interstellar community with a radius of ninety lightyears and a volume of three million. *That is still our goal.*

"We hoped that community would live in the peace and harmony we were just beginning to take for normal in our home System. That will not happen now. Defending that community and ending a war are new goals we've only just learned we have.

"We also hoped to communicate efficiently by telepathy through the Terran hub. That will not happen now either. And for that very reason, this war will be so lengthy that we cannot even begin ending it for thirteen more years, and will never live to see any progress whatsoever. We have the luxury of much time in which to make our decisions. Let us make smart ones from the very start.

"The smartest thing we can do is take hate from our hearts. There is nothing to *do* with it, no one to use it on but each other. Thus we must banish our fear, lest it grow cancerous tendrils around our hearts.

"When a child hits his thumb with a hammer, if he is alone, he will say to his hammer, 'Look what you have done.' If he is with another, he will say, 'Look what you made me do.'" A few parents chuckled. "When we become victims, we want to victimize. So badly that if no victim presents himself, we will settle for an inanimate object, rather than have *no one* to hate. It is nature.

"We must be wiser than that child. There are no persons here but ourselves. There are no inanimate objects here we do not need.

"Be *sad,* citizens. *Hurt.* Grieve. Go insane with grief if you must. But please . . . avoid the different insanity of rage. At the very *least,* until we locate the target that deserves it. Meanwhile, let us teach our children love and compassion for one another, as we have always done, by practicing it in our own lives for them to see. Let not this inhuman enemy have taken our humanity from us."

The applause startled him. But after a moment he sort of leaned into it, like a stiff breeze he was sailing through.

He bowed then, and headed for the door. People made way. Some touched his shoulder or arm or face as he passed, and he acknowledged each.

When he got to the door he stopped and turned. We waited for his coda.

"Many of you know I am a student of Zen," he said. "All my life I have belonged to the Rinzai sect. Long ago it was the Zen of the Samurai. Warrior Zen." He took a deep breath. "I have changed my affiliation. As of today—as of now—I am a student of Soto Zen, like Hoitsu Ikimono Roshi, who discovered the relativistic engine. Soto is the Zen of the peasants. Farmer Zen." He looked around at all of us one last time, and made a small wry smile. "As of today, it is the more useful to me. And now you must excuse me, for my shift is soon to begin." He was gone; the lightlock cycled behind him.

The silence he left behind him went on for several minutes before anyone tried to say anything, and those who did were politely asked to say it somewhere else, and after that it lasted . . . well, I don't know, but at least until *I* left, a couple of hours later.

Word of what Hideo had said spread throughout the ship. The *Sheffield* had recorded every word, and he readily granted permission for its uploading. It was more words than he had spoken in the entire voyage until then. It didn't produce any miracles. But over the next few days, it gradually started to seem possible to us all that we might heal one day. Not soon enough, surely. But one day.

We had a shot, anyway.

It seemed that way right up until four weeks after The Day, when Relativist Peter Kindred was found dead by suicide in his quarters.

He had taken massive lethal overdoses of a stimulant, a depressant, an analgesic, and a powerful entheogen, using care and a lifetime of extensive experience to time it so that they all peaked at once. I imagine he went out feeling just like the energy being depicted in Alex Grey's *Theologue,* burning with universal fire. The first witnesses on the scene described his expression as "transcendent" and "blissful," until Solomon Short arrived and caved in half his face with a looping overhand right that began and ended at the deck, blasting Kindred's corpse and the chair holding it two meters across the room, and breaking five bones in Solomon's hand. Despite the pain he must have been in, he stayed enraged long enough to find the suicide note Kindred had left, and delete it unread. By the time the proctors arrived, he was calm, docile, and dry-eyed, ready to be escorted to the Infirmary. Their relief was obvious. If he'd still been crazy enough to assault them, they'd have had to let him beat them up.

He and Hideo-san and Dugal Beader did their best for us, and managed to hold out for longer than anyone thought they could. The first time the drive went out, a week later, Hideo got it restarted in a matter of minutes. Four days after that it failed again, for the last time, on Solomon's watch.

Nothing we could possibly do would ever allow us to drop below ninety-five percent of the speed of light again, now. We were going to reach Brasil Novo at something ironically very close to the time we'd expected to—and sail right on past, too quickly to do much more than wave goodbye to our dreams.

In theory, we could then persist for another three or four useless, pointless generations. But a century after our departure from the Solar System, when we were 444 lightyears from where it had been, the gamma rays from its annihilation were going to catch up and complete the job. Sterilize the *Sheffield*.

Mankind was down to *eighteen* scattered outgrowths. And we weren't one of them.

That old song was wrong. We were *going* to die on the way to the stars . . . and it was lonelier than I had thought it would be.

Nineteen

We have learned now that we cannot regard this planet as being fenced in and a secure abiding place for man; we can never anticipate the unseen good or evil that may come upon us suddenly out of space.

—H. G. Wells

The War of the Worlds

Existence had lost all point.

For the first time ever, it was not hyperbole. It really had.

Fine. Tell that to the goats. Their existence had a point: being fed and milked. It seemed enough to them. Tell it to the rabbits. Their existence had all the purpose it would ever need: fucking. The chickens thought the point of existence is hatching eggs; the rooster held a different opinion; but both were convinced. The vegetables did not even dignify the question with an asking.

Being around that kind of naïve certainty was soothing. And I had made a deal with those critters. It did not contain an escape clause letting me off the hook in the event of solar disruption or even disappearance of local gravity. They had kept their end, so far, by living.

Also, I needed to be somewhere that was not Rup-Tooey. I had been sleeping like a baby there, lately. Alone, waking up wailing every few hours, wetting the bed. Not a good thing in free fall.

So I was on the Bravo Ag Deck. I'd thought of going up to the Horn and playing Anna for whoever was there. But I'd decided that if somehow I did succeed in blowing everything that was in my heart out the end of my sax, I might fail to inhale again. And so might my listeners.

By now I found the steamy smells of Bravo—or what we had imagined they might be like—conducive to inhaling. It would have been a terrific planet, if we could have gotten there, I remember thinking.

But of course, the smells were much less intense and local than I was used to. Now that the *Sheffield* was in free fall again, we were back on free-fall airconditioning. That translates to constant heavy airflow in any cubic where humans spent time. It has to. In zero gee, unless the air is kept very well stirred at all times, the carbon dioxide you exhale tends to form a sphere around your head and smother you.

The mood I was in, I'd almost have accepted that to have the good Bravo smells back, rich in my nose again. But of course, I never would, now.

I was wearing the Zog's treasured old Japanese gardening shirts, which he'd picked up on a trip to Terra in his youth. Tiger Kotani owned a similar one. It was a PreCollapse garment, made in prerepublican Japan in respectful imitation of an even older style, cream with turquoise trim, covered with colorful images of samurai, peasants, beautiful maidens, pagodas, mountains, and tall Noble fir trees. Just wearing it made me feel I could talk to plants, and understand their replies. In zero gee it flapped around me like wings.

I had no responsibilities at the moment. Over a dozen of us had chosen to emulate Peter Kindred—so far—but fewer than half of those had left instructions to bury them. I guess if they'd seen any point in contributing to our ecosystem, they would not have opted to leave it. Those few who had chosen the oldest form of eternal rest had long since been tucked beneath soil. Admittedly it had proven more difficult without gravity to help keep the dead moving in the desired direction. I decided to see how the goats were doing in their improvised zero-gee enclosure. I had a pretty good idea I knew what the rabbits were doing.

"Citizen Johnston," the *Sheffield* said softly "Captain Bean requires your presence on the Bridge immediately. Acknowledge, please." Requires? Of a free citizen?

I thought about how much the Captain must be in the mood for backtalk, right about now That he was still functional at all was a miracle. He had expected to carry the heaviest of responsibilities for another fourteen years. Now he had none. No further piloting was ever going to be needed.

"I'm on my way"

He's going to announce his retirement, and ask me to take his job, I thought. *Joel Johnston, Star Pilot! How old was I the first time I ever thought those words—six?*

It was the first even mildly humorous thought I could recall having in . . . some period of time. That couldn't be good, could it?

Along the way, I checked both the official news site, *Sheffield Steel,* and the barely tolerated unofficial one Jules ran despite Richie's help, *The Straight Shit.* Neither had word of anything unusual or even interesting. In fact, each had barely been updated since the day before Kindred had wasted us all. Who cared anymore if RUP-0 sector got their plumbing problem under control, or young Sparks Reilly succeeded in adding another thousand digits to pi?

I was surprised to note that one of the few headings showing new material at each source, besides obits, was the wedding announcements. The same news that had triggered fifteen suicides had also apparently inspired nineteen couples, one triad, and one quartet to get off the dime and make a commitment for the future. Since there wasn't going to be one, it seemed incredibly sad to me. What shall it profit a man if he gaineth his soul, yet he loseth the whole universe? How could you have children now?

Kathy's group, I noticed, had replaced a suicide husband with a new wife. Until then, I had not consciously realized I'd been toying with the idea of trying to get back together with her, in some way, on some basis. As soon as I did realize it, I knew it had been a bad idea—sheer loneliness, looking to get comfort without the trouble of pretending to get to know someone first. I'd already screwed up Kathy quite enough. I had come aboard this bucket of mildew loudly proclaiming my intention to die a bachelor—it was time to put my vast, useless money where my big dumb mouth was.

I had a momentary image of myself dying all alone. And suddenly I saw that the me in it was the same age I was now. Right then and there in the corridor, I became aware for the first time that if I continued as I was going, if I did not make some kind of drastic change, it might be no more than a week or two before the Zog would be planting *me.*

I would like to say I froze in my tracks, consumed with horror at this revelation, and resolved to race to Dr. Amy for help as soon as I'd finished whatever the Old Man had in mind. It did disturb me, but I didn't break stride. And I was pretty sure I'd already seen Amy's best moves.

Well, when you reach that mental state, about the only thing that can save you is for random chance or intelligent design or the Lord God of the Heavenly Host or whatever you want to call the source of all the irony in this universe to come kick you square in the ass with His almighty reinforced boot.

I got mine around the other side, that's all.

I had never seen the Bridge. Not with my own eyes, anyway. But it looked much like it did in the Sim, even to apparent size and lighting. The main visual difference I noticed as I came through the hatch was that almost none of the countless screens, dials, or readouts were active, including the main display before the Captain's Couch. In Sim, everything was active all the time, and there was a constant faint undercurrent of metallic beeps, chirps, buzzes, and other technosounds. And the Sim had the scent all wrong; instead of electrical ozone, the predominant notes were stale coffee and an odd, hauntingly redolent perfume. I would never have taken Captain Bean for a perfume kind of guy, and while I didn't know the Second Officer, van Cortlandt, his picture hadn't made him seem like one either.

One other intangible was different. Here I was somehow acutely conscious of the stupendous thickness and weight and ingenious design of all that shielding above my head, and of the fact that our speed was so horrendous, some dangerous stuff was getting through anyway. The hazard was low, but I would definitely be safer when I got back down as far as the Ag Deck or Rup-Tooey.

Terrific.

All these things registered on the subconscious level in the time it took me to complete a preliminary census. Big as it was, one big open area, the Bridge Deck was considerably more crowded than I had expected it to be.

I counted fourteen people total, began ticking them off. Because of the higher than normal airflow, all were displaying a tendency to drift away from their handholds. A slight majority were facing my way, so 1 started with them, left to right.

Governor-General Cott and Perry Jarnell, both imposing as hell in full formal attire including ceremonial swords, and drifting tall arm in arm as if they were posing for a sculptor, Jarnell grasping a chair to anchor them in the steady breeze. Solomon Short, wearing only a dirty breechclout and an expression it took me a moment to be sure was a broad grin, since he was upside down with respect to everyone else. Second Officer David van Cortlandt, tall and portly, with a flowing white walrus mustache, a receding mane of white hair, and extremely well-developed smile wrinkles—which he too was exercising. Odd. Captain Bean, wearing the kind of pepper-and-salt Vandyke beard, heavy on the pepper with slight mustache twirls, that has been the most common choice of skippers since the age of sail, was more what I'd been expecting; his expression was the one on my mental picture of Magellan, the day he realized he wasn't going to make it home. To his left, Third Officer Bruce looked madder than a wet hen, ready to peck somebody and then lay a bad egg. Completing the array on my extreme right was, to my mild surprise, Paul Hattori, in his best business attire. I'd have thought he was now even more useless than the crew—whether we admitted it or not, we were now a de facto social collective, operating on the barter system, with no further use for money as long as the toilet paper held out. Yet his expression was the oddest of all; he looked . . . exalted, like someone in church, or a groupie backstage. He was gripping the back of a chair with both hands in such a way as to make it seem he was standing on the deck.

Those facing away from me took several seconds longer to identify.

I got no instant-recognition hits from size or body language, nor from clothes—in fact, there was something subtly not right about their clothes I was too busy to analyze. The seven of them broke down into two het couples and three singletons, two female, one male. Something about placement and stance gave me the idea the taller of the single fems might have deliberately interposed herself between the other two, but I couldn't be sure. Without exception, they all seemed to carry themselves with an air of enormous confidence, as if they were used to being listened to respectfully.

Nobody had noticed me enter. I hadn't identified any of the ones facing away yet, and some instinct or insecurity made me keep my hand hold just inside the door until I had. So I went with my strengths. Four people were talking at once and none would yield; probably anybody else would have called the result noise. I chose to treat it as a quartet—and used my composer's ear to pick out the individual horns by their timbre and range rather than the mangled notes. Whatever they were saying could be repeated to me later; now I wanted to know who was saying them. The enhanced free-fall airflow worked for me, now, bringing me their voices with unusual clarity.

Three of the instruments I knew at once, would have even if I could not have seen them being played: Captain Bean, Jarnell, and Lieutenant Bruce, working as a trio, alto, trombone, and trumpet. That fourth horn doing the counterpoint, the baritone—

Damn, it was strange. It teased at the edges of memory. Long-term storage. Whoever he was, I'd met him briefly years ago, probably shortly after we'd left, and hadn't encountered him since. I hadn't liked him much for some reason. The penny resolutely refused to drop farther.

Another voice entered, causing the others to fall silent. A clarinet, but with the quiet authority of Goodman. This one I was sure I didn't know; its timbre was so unique I knew if I'd ever heard him speak I'd have tried to get him to sing for me. His couple-partner remained silent, contributing no harmonies.

He stated a brief theme. Captain Bean picked it up and restated it three times, changing it slightly each time. The third time, the clarinet joined in in unison, to tell him he had it right.

Lieutenant Bruce began a counterstatement, but had traded his trumpet for a kazoo; in compensation he blew so hard it broke.

The baritone entered again, but allowed itself to be interrupted by a cello in its lower register. I didn't know this voice either, I was sure of it. And I didn't much care for it. It had an undertone of menace, of unstated threat.

My strangeness meter was beginning to max. In a small town of less than five hundred, there can be one or two people you've just never chanced to run into. But three of them, that you're sure you've never even passed within earshot of? I had to be mistaken.

Captain Bean's alto reply started out softly, but built to a small angry crescendo, like the first harbinger of trouble ahead in Wagner.

The next voice, the tall singleton female, I knew at once, and started to relax. Her name would come to me in a second. I hadn't seen her in years, but had always liked her. This one was no horn, but a singer: smokey voice, like late period Annie Ross. Some sort of joke in her name. Miss Steak? Miss Fortune? Ms. Rhee? Something literary about the joke. Miss Elenius? An adolescent erotic undertone too, somehow. Something dirty . . . female honorific . . . last name that made it all a quote or literary reference . . . I was almost there . . . famous character? Title? Title. That felt right.

Oh, for Pete's sake, of course. *Les Miserables.* "Lay Ms. Robb." Dorothy Robb, sweet old lady, had been kind to me the last time we met. What was that funny job title of hers? Chief Enabler, that was it. . . .

Chief Enabler for Conrad of Conrad.

Given that context, I recognized the baritone at once. "Smithers." Alex Rennick, Master of the North Keep.

Well, *hell.* That was annoying. Clearly my wiring was misfiring. Not that I blamed it, given the events of recent weeks. But I could not even override it—no matter how hard I assured my ears that they were mistaken, they both stubbornly insisted we were all hearing Dorothy Robb together. Slightly older, perhaps, but her.

All right, this did not necessarily mean I was losing it. People can have vocal doubles. I'd have remembered a colonist in her nineties, but it was not impossible this woman was imitating one for some—

Once while colossally drunk, Herb had spoken of himself as "hanging by my fingertips from my own anus, to keep from falling out." I was in that mindset, clutching for dear life.

Then from the couple with the cello female came the unforgettable, unmistakable, inarguable, utterly impossible voice of Conrad of Conrad, and I lost my grip.

But I was in zero gravity. I didn't *go* anywhere.

Naturally I felt instant fear. But not terror.

When the impossible happens—when a planet *moves* beneath your feet, and won't stop—when you look up on a gorgeous morning and see something huge fly majestically into the side of a tall building—when a man you buried shows up at your door with a six-pack—you're supposed to feel a primal terror, a superstitious dread. It's in all the books. You pass out, or vomit, or your bowels and bladder void, or you howl. If the universe is prepared to *cheat,* you're screwed, right?

The only alternative is to decide it's all a bad dream or sustained hallucination and just go with it.

I didn't any of those things. I can't say why not. Maybe I was simply too far gone. I'd been electroshocked so many times, they no lunge' had a voltage that would put me into convulsions. In a twisted way, it was almost starting to get good to me.

The fabric of the universe itself was coming apart? Fine—bring it. Fucking thing hadn't turned out that well anyway. The dead were rising, Time itself flowing back up over the dam? Great. Gee, if I unaged slower than normal because I was on a nearly luminal starship, I might finally get to meet my mom. Go on, disintegrating reality, give me your best shot.

It is *never* a good idea to say that.

It seemed perfectly clear to me that I had fried my operating system. Deep down, I knew I had. I did *not* believe in ghosts, never had . . . well, not since I was real little. No more did I actually believe in universes that cheated. Given the insistent evidence of my senses, I knew I was nuts—the kind of nuts hardly anyone ever went anymore. There seemed only one sensible response to that.

I roared with laughter.

In a timeless instant, I saw my life as a whole, saw the shape of it, and the flavor of it, saw that it led inexorably from hope and great promise to gibbering madness in a doomed can full of tragedies ten lightyears from the hole where the human race used to be, haunted by the ridiculous shade of the evil old bastard who'd forced me onto this donkey ride to heaven in the first place—all because some nameless unknowable alien vigilante other had concluded that mankind was not a feature but a bug in the Galaxy—and there just wasn't anything else to do, not to do *about* it, but just to *do,* except to laugh my ass off. Part of me was aware the Captain had wanted my participation in an important meeting—but since he wasn't going to get it anyway, why not disrupt the silly thing? I didn't even try to hold back; I laughed like a buffalo, like a bull ape, like a brontosaur—they might all be extinct, but by God they were still funny. Naturally everyone stared at me as if I had lost my mind. I thought I had, too.

Especially when the people facing away from me started turning around.

Yep, that was Dorothy Robb, older but still as vital as I remembered. Yes, that was Smithers, his hairline strangely receded.

Yes indeedy, absolutely beyond question, the man in the center was Richard Conrad, Conrad of Conrad, and he still didn't look the part. He still looked like some sort of gruff lovable academic don, now well past retirement age but quite vigorous.

His companion was a short compact woman I had never seen in my life, and I was oddly grateful for that. At last, a hallucination with a trace of creativity! She seemed my age or a little older, remarkably fit, and as focused as a comm laser.

On Conrad's other side was another total stranger, about ten years older than me. This one was more interesting. His short stature, *pale* skin, and overdeveloped limbs told me he was a Terran. He had an overall air of sweet hayseed innocence, a gullibility based on intrinsic decency, which usually assumes itself in others. He wore a small dopey mustache like the one Jinny had once tried to get me to grow. But his eyes—his eyes had a contradictory quality I cannot express with words. I would have to show you a similar pair, and say, "Like those." I had only seen such eyes twice. My father had had them. And so had one of his best friends, whom everyone knew should *also* have won the Nobel, and who I called Uncle Max. They were the kind of eyes that caused other great geniuses to drop their egos and just stare. I wondered what his field was.

I was giving myself creative credit for having finally produced a really intriguing hallucination, when the last two people present finished turning around.

Given the mental state and emotional shape I was in right then—and the seeming theatricality with which they had both turned so slowly—I was actually fully expecting one of them to turn out to be Jinny.

I was *not* expecting *both* of them to.

The one farthest from me, standing beside the man with kaleidoscope eyes, did not *look* like Jinny as I remembered her. What she looked remarkably like, I realized, was the mental picture I had always had of "fellow orphan" Jinny's imaginary "dead mother, Mrs. Maureen Hamilton."

This one was—convincingly appeared to be—the real, actual Jinny Conrad. If she were alive, she would have been about thirteen years older than when I'd last seen her. If this was her, she had apparently lied to me about her age. Despite excellent cosmeticizing, she looked thirty-five. That too would fit.

But it was difficult to focus analytical thought on anything at all, let alone a psychotic puzzle like this, because the *other* Jinny was so much closer to the Jinny I still carried in my heart's memory that it threatened to stop my heart. Jinny at eighteen or nineteen—an honest eighteen or nineteen—so beautiful it wasn't even fair, a perfect rose just unfolding. Jinny as I had seen her then—wise and smart and compassionate and strong and certain—transported through time. Looking back at me now exactly the way she had back then, with eyes that were lamps, whose pupils were black holes, calling me to fall in.

"Hello, Joel," they both said at once.

I had begun to stop laughing when they both turned around, and finished a few seconds after they were done, with a last few "ha's."

But a split second after they both greeted me, I finally got it.

I may have been in ragged shape, an emotional basket case with a malfunctioning brain, belabored by too many impossible stimuli at once—but I had started the course with a pretty decent thinking machine. Presented with a series of clues that allowed only one rational explanation, I was bound to get there eventually. I was aware of the ancient dictum that if you're certain you've eliminated the impossible, whatever's left, however unlikely, must be the answer.

Once I got the premise, everything else made sense half a second later. I even had a pretty good idea who the two strangers were, and why they were present.

This time I laughed so hard I went into a tumble, and lost my vertical. I would have literally rolled on the floor laughing if there'd been any gravity to put me there. I had always thought it a hyperbolic expression. There was simply no position that could contain or properly brace my titanic mirth; yearning to laugh even harder, I would curl into fetal position, then explode like a starfish, then punch and kick the air the way I'd learned in Tiger's dojo, desperate to force all the laughter out before it burst me.

The moment I could spare the air, I managed to squeeze four words into the outgoing message traffic, two at a time.

First: "Hello, Evelyn."

And then: "Hello, Jin."

Two things made my father special, and only one of them was that he could think better than practically anybody else.

The other was that he could think *faster* than practically anybody else.

That means more than just getting to the answer before anyone else can. It means you reach answers no one else will. The faster you can think, the longer a logic chain you can follow out before you get tired and decide to stop. In modern physics, that can be crucial. He told me once, "The universe is so simple, it takes very complicated thought to touch it.

I inherited a touch of his freak speed. It became clear quite early that I emphatically had not inherited Dad's gift for exotic mathematics—but it was just as clear that he genuinely did not give the least sub-subatomic particle of a damn about that, and maybe that indicates genius of another, completely different kind on his part. But I had mastered the alto sax at seven, playing with a speed that had literally frightened my first teacher, Francis Layne—who himself was called

"Fast Layne." In my secret heart of hearts, I had always honestly believed I was one of the best composers alive, and one of the best saxophonists, too, although I had expected it to be decades before there was much agreement on that. Now, of course, I had it in the bag.

But I had also noticed quite early that I was usually faster on the uptake than most people. Unless the subject was me, anyway. I spent the better part of most conversations waiting for everyone else to catch up. Patterns form and combine in my mind like crystals reproducing at fast forward, sometimes so fast that even to me it seems like I skip whole steps in my logic process and just thumb to the back of the book for the answer. Telepathy is literally instantaneous; maybe sometimes other kinds of thought are, too.

I saw the people present, I knew who all but two of them were, and it seemed that the instant I got over disbelieving the evidence of my eyes, I knew who the two strangers had to be, and how all of them must have gotten here, and why each of them had come, and what their presence could mean. The actual deduction and induction itself didn't require genius, really—merely a willingness to think the unthinkable. I'd been doing that for weeks. I had most of it worked out by the time I'd stopped laughing.

Jinnia Conrad, when last seen, had been in the market for a new promising young genius-carrier.

Was there the slightest chance her grandfather would *not* have said to her, This time, find one in some serious profession. No more damned *artists*," and made it stick? Selecting a sax player had probably been as close as she'd dared come to a gesture of rebellion against her dynastic destiny, tolerated only because of my father's pedigree.

What was the exact global opposite of a sax player, if not an experimental physicist? Okay, perhaps a financier, but Jinny wasn't a *pervert.*

Assume she repeated the pattern, found the male offspring of one or maybe even two of the greatest such tinkerers in recent history, and assume that this lad had inherited the same kind of genius, the urge and ability to take the universe apart and put it back together in different ways with his own hands. He certainly had the eyes of a Tesla. And the naivete.

Propelled irresistibly by Jinny's—oh, horrid pun—by her relative-istic drive, and funded by the unlimited resources of the Conrad Family—as if J. P Morgan had been canny enough to simply find Nikola Tesla a wife who would keep him in harness—was there anything such a genius might not have accomplished?

Suppose he was interested in faster-than-light star drives? His grandfather-in-law would like that.

If he were, he would damn well have a ship equipped with one ready to test within five years, if I knew Jinny.

If he and it survived the initial tests, then the passenger list for its very first official shakedown cruise as a commissioned vessel, *long* before the rest of the Solar System was told of its existence, was absolutely and beyond question going to include at least two people besides the inventor-pilot: the pilot's wife, and her grandfather. This voyage would be not merely historic, but conceivably the most historic of all time—no possibility existed that those two names would not be in the first paragraph of the story.

They say luck is the residue of good planning. If the most paranoid man that ever lived ends up being the only one in a position to escape the end of the world with a few playmates for company . . . can you even call that luck? They must have been on the dark side of Terra, or some other large planet, when it suddenly began to glow around the edges.

If Conrad of Conrad was aboard a small vessel, a minimum of three others were, too.

First and most essential to that paranoid old villain, a very very good and very very very reliable bodyguard. She would be the one I had mistaken for a companion, the cello voice with menace in its undertones. No wonder she looked fit! She could probably fight us all with one hand, while using the other to hold a shield . . . over her employer. If you're compelled to try and screw literally everyone you'll ever meet, you need a strong condom.

Second, Rennick: pan-trained stooge, Speaker To Peasants, flapper, flunky, and designated fall guy should one ever become necessary. Don't leave the castle without one.

Third, Dorothy Robb: his walking desk, database, secretary, researcher, and necessary impertinent, licensed to sass him occasionally. She had the courage to be willing to pretend every day that she did not fear his terrible power . . . and the wisdom never to go so far that he began to suspect she really didn't.

Something about their respective positioning and zero-gee kinesthetics gave me the sudden insight that Jinny's mocking nickname for Rennick had indeed been aptly chosen. His loyalty to his boss was charged with, if not based on, suppressed eroticism. His body language said his subconscious absurdly considered even ninety-year-old Dorothy Robb a potential rival.

Given the not-terribly-surprising existence of young Gyro Gearloose—if any of them were here, he had to be—I fully understood at once the presence of Jinny, and her grandfather, and all three stooges. The one I had the most trouble explaining to myself was the person I still thought of as "little" Evelyn.

Little she no longer was—but it made little sense that she should be here. If the Conrad superluminal yacht had an extra seat, why hadn't it gone to some closer relative of Jinny's than a mere cousin? Why not one of her own parents—or if they were dead or the old man loathed them, Evelyn's?

All I knew was that her presence was the single most wonderful phenomenon in the Galaxy at that time. I was absolutely certain of that.

I've recounted this as if I examined each person there one at a time, and finished with Evelyn, because sentences can't happen all at the same time. It wasn't like that. Start to finish, she occupied a huge fraction of my attention and processing time. All the others I saw with peripheral vision—it was my day for cliches come true, and I literally could not take my eyes off her.

The resemblance to Jinny at her age was striking even given their kinship, enough to be eerie. But the *differences* were just as striking to me, now that I looked. And very dear.

This face was at least as strong as Jinny's, as determined, as proud. But it was not ruthless. Its eyes were fully as intelligent and alert—but nowhere near as calculating. It was every bit as heartstoppingly beautiful as Jinny's face had been at nineteen—and more, because it didn't care. It did not think of its own beauty as a tool, or a weapon.

For the first time I realized the imperfection in Jinny's beauty that had always escaped my notice somehow, the missing note in the perfect chord: compassion. Evelyn believed other people were real, even nonConrads. And *liked* them. Her eyes said in part that she had hurt others in her short life, and that she regretted more about that than the increased difficulty of getting them to accede to her whims.

As I was watching her, she did a little zero-gee move too complex to describe that caused her to look ridiculous for a brief moment, because if she had not, she would have bumped into Jarnell. She did it unconsciously, and I knew in a million years Jinny would never have done such a thing. Jarnell would have ended up apologizing to her.

This was a version of Jinny who could never play me the way the original had, no matter what the reasons.

As quickly as I absorbed all these things and reached all these understandings, I also saw just as clearly a couple of things that only two others present had fully realized yet, two of the most important facts in this whole equation.

Richard Conrad was not only still a very wealthy man, he was vastly wealthier than he had ever been, was now in fact without a doubt the wealthiest human being in the universe.

But his inconceivable fortune consisted of two assets.

And he only had one bodyguard.

Twenty

The butterfly counts not months but moments. And has time enough.

—Rabindranath Tagore

By the time I'd finally gotten the last of my laughter out, airflow had nudged me back within reach of the bulkhead I'd come through to enter the Bridge, and I used it to launch myself toward the meeting.

I tried to talk myself out of it all the way there. I guess I'm just not that big a man. When I reached the group, I used a deck chair to brake myself, and looked Conrad of Conrad in the eyes. For half a second.

"Hey, Connie," I said.

And turned away "Dorothy, good to see you again. Alex, I see you again. Crave pardon, ma'am, we haven't been introduced, my name is Joel Johnston." I bowed as graciously as I had free-fall skills for.

"Alice Dahl," she said crisply. That was a scary cello she was playing, all right. She did not acknowledge my bow with even a nod, or offer to shake, even with her non-gun hand. Maybe she didn't have one. She was a golem.

Jinny said, "Joel, I'd like you to meet my husband, Andrew J. Conrad. Andrew, this is Joel."

He and I exchanged about a hundred thousand words by eye traffic in three seconds, and each put out a hand at the same instant. I liked the man. The mustache looked silly, but I knew it had not been his idea.

"It is an honor to meet you, Captain Conrad," I said. "Congratulations on your historic achievements. And I speak for the moment only of the latest ones. First man to exceed c. First master of a transluminal passenger vessel. First and only man ever to match orbits with a relativistic starship in transit." I thought of another one. "And one of only seven creatures we know of who've ever been in the close vicinity of an exploding star and lived to tell about it. Welcome to our covered wagon. We hope you'll find our technology quaint."

He didn't preen, or look smug, or sneer arrogantly, or try to pretend he didn't enjoy the praise. He nodded and said, "Please call me Andrew. Thank you, Joel. I'm glad to be here."

"You're welcome, Andrew."

"Jinny told me you're a quick study. I can see she was right; you seem up to speed. We're all lucky to be here." His face clouded. "And I can't hope to tell you how much I wish I'd built the Mercury years sooner. Centuries ago. Even last year. . . ."

"We all do, son," Captain Bean said softly. "Play the cards in front of you."

Andrew nodded. "Yes, sir, that's good advice."

Van Cortlandt spoke up, his voice a pleasant tenor. "How did you ever figure out what was happening in time to run?"

"We were fortunate enough to be in Terra's shadow when she lit up."

"And you're sure destruction was complete?"

"We reached Ganymede with a thirty-three-minute lead over the wavefront, and spent five minutes talking to telepaths on the ground there. They were just receiving information consistent with the annihilation of Terra. We jumped again, and thirty minutes later telepaths on Saturn confirmed the destruction of Ganymede, with timing consistent with a solar explosion. At that point, I gave her the gun."

"Andrew's quick reactions saved us all," Jinny said proudly, and his shoulders widened.

"What can you tell us about her drive?" I asked.

Solomon spoke up. "The subject came up, as you may imagine. Captain Conrad discussed the nature of the Mercury's novel propulsion system frankly and forthrightly at some length, using short simple words, and continuing until the last of us lost the struggle to pretend we had the faintest clue what he was talking about. I myself gleaned only that its basic principle is—sometimes—called Drastic Irrelevancy. Have I got that right, Captain?"

"Drastic Irrelevancy Synergism, yes," Andrew agreed. "You see, it's . . . but then you don't. I'm sorry."

"Is there even a Sunday supplement shorthand version, albeit grossly oversimplified or crudely approximate, that you could give us?" Lieutenant van Cortlandt asked.

Andrew pursed his mouth in thought a moment. "I'm sorry," he said. "In a week, I could probably provide Relativist Short with enough tools to begin thinking about the first part of the answer you want. Uh, there are a lot of parts. Yourself, and a few others here, a month would probably do it. For sure," he amended, seeing van Cortlandt's expression.

Richard Conrad had put up with the unnatural state of being ignored for as long as he was prepared to. Ten percent louder than anyone had spoken so far, he said, "We've failed to cover this already. Can we for the love of privacy just accept for now that the Mercury is towed by a fleet of hyperphotonic swans under an enchantment, and move on?"

He was now merely a man like any other, without a multiplanet empire behind him anymore, and everyone in the room probably knew it. But he was also Conrad of Conrad, and had been all his life. We all flinched at his whip-crack interruption and fell silent, and the first one of us who felt capable of obeying him did so.

Captain Bean said to Andrew, "Captain, I have a confession to make. While I'm no mathematician, I've always thought myself capable of simple kitchen arithmetic, at least." Both his lieutenants made brief nasal sounds. "And ever since I received your hail . . . amend that: ever since I convinced myself your hail was not a hallucination, I've been using part of my mind to try and calculate what speed you were making. But there are a few more variables than I can handle, and I keep losing my decimal point. Curiosity trumps pride: Will you tell us your top speed?"

Conrad of Conrad—there were just too many Conrads present; I was going to have to start thinking of him as Richard somehow—started speaking at the same instant Andrew did, obviously trying to cut him off. I was surprised when Andrew didn't yield, then again when the old man did.

". . . not possible to answer your question, in the strictest sense," Andrew was saying, "but I'll do my best. You've traveled roughly 10.4 lights in a little over 6.41 years—your years, I mean. Thirteen years for us back home. We caught up in a little over six and a half weeks, by your clock." He sensed that he was taking too long. "But in the terms you're using, our equivalent of a maximum real-world velocity works out to be on the order of 19.6 *c."*

Several of us either sucked in air or expelled it noisily. You could almost hear a whining sound as many mental calculators began operating at full capacity.

How far away was Brasil Novo, at twenty *c?* I could make a stab at it in terms of objective years, what Andrew had called "real-world" time, but when it came to how much time it would *seem* to take for a passenger, I lacked a basis from which to even guess.

Screw that: the answer was, a *hell* of a lot closer than it had been, whether you were speaking subjectively or objectively.

And real-world years, out there in the subliminal universe, had more than academic importance, too. They were the measure of how long we had to warn the rest of the colonies, before all their skies turned to fire.

And we'd have been here nearly a day ago, if you people hadn't been silly enough to shut off your drive. We were lucky to find you at all."

Rennick's voice and ill-mannered irritation were like a cold-water bath. I saw Captain Bean, van Cortlandt, and Solomon all open their mouths to retort.

But Dorothy Robb beat them all to it. "Alex, if you actually believe anyone voluntarily shuts down a quantum ramjet, you're sillier than that would have been. None of these people have been rude to *you* yet." The hesitation between the last two words was perceptible, but so slight there isn't a punctuation mark subtle enough to render it.

Van and Solomon savored Rennick's facial expression, so it was the Skipper who spoke next. "Rennick, the *Sheffield* has had the great misfortune to lose three of her Relativists, the last just over a week ago. Heroic effort by the surviving three proved insufficient to overturn the laws of physics for more than a few days. Our drive shut itself off, sir."

"Mr. Rennick intended no offense, Captain Bean," Richard Conrad said mildly, and Rennick went from a blush to dead white.

There was a short silence, in which everyone tried to think of something to say or ask next that might not sound stupid in retrospect. It was pretty fast company; nobody was in a big hurry to be first.

I was mildly surprised at who turned out to be bold enough. It was Paul Hattori who cleared his throat and said, "I crave pardon if this question is impertinent, but curiosity overwhelms my manners. May I ask the passenger-carrying capacity of the Mercury?"

Again, that ultrasonic whining sound, as a dozen minds radically shifted direction and then reaccelerated.

Richard Conrad spoke with maximum force. "Captain Bean, I must insist we adjourn this discussion to your quarters, or a place of equal privacy, *now*. I quite understand the natural curiosity of all present, have indulged it as long as I deem prudent, and will continue to address it as time permits. But there are matters that must be discussed first only in private, and among those of the highest rank. Matters of extreme importance. There is no time to lose." When the Skipper did not answer instantly in the affirmative, he forced the issue by rotating in place and launching himself toward the hatch. "Will you be kind enough to direct me," he called over his shoulder as he floated away, and I haven't given that a question mark because he didn't.

Most of the rest of his party began to trail him out of sheer instinct, like pilot fish who go wherever the big shark goes. Captain Bean was visibly angry, but he wasn't the kind of man who would make a scene for no better reason than to establish his authority on his own ship. This party was going to follow Conrad, and the only people who considered me of the highest rank were music lovers. I felt sharp dismay.

Conrad rotated to face us again on his way to the door. "Alex, ladies," he called, "perhaps *you'd* be willing to answer any questions the rest of our hosts may have, insofar as you are able."

Jinny, Rennick, and Robb were already in transit, but all three immediately rotated themselves so they could rebound and rejoin us once they reached the hatchway. Evelyn had not yet committed herself to a launch, and stayed where she was, using a large unused monitor for a handhold. "Solomon, Van, Mr. Cott, come with me, please. Mr. Hattori, your input could prove useful as well." Bruce opened his mouth, but Captain Bean continued, "You have the con, Mister," and he closed it again. "The rest of you may remain here under Lieutenant Bruce's command until I return *if* you choose." Hattori was smiling like a musician who'd just been asked to sit in with Louis Armstrong.

The hatch irised open. Alice the bodyguard made Solomon and Andrew exit first, followed by herself, and then Conrad, with Hattori taking up the rear. She either rated the banker as zero threat or hoped he'd stop bullets.

Lieutenant Bruce began a speech. I can't recall a word of it. It was flowery, trite, pompous, smarmy, obsequious, and self-aggrandizing, all at once. Jinny endured a sentence or two, and then said, without discernible reference to anything he'd been saying, "Thank you *very* much, Commander; you are gracious."

He was so pleased he shut right up. If she understood brevet rank, then she knew what a high-ranking fellow he was—which was all he'd wished to establish to begin with. "Very kind of you, ma'am."

"Yes. The last thing I would wish, Commander, would be to distract you from your heavy responsibility. I am myself married to a pilot." I did not catch her moving any of her limbs, but suddenly she was in motion, floating slowly away from him and us. "The other ladies and I can converse with Joel over at this end of the Bridge without disturbing you, I think, if we are quiet. And Mr. Rennick will keep you excellent company; thank you, Alex."

Both Evelyn and Dorothy had started moving on the third word. I was slower off the mark, so I got to savor the expression on Bruce's face. Rennick showed no reaction, and I savored that, too. "You'll forgive me, gentlemen," I lied, then picked a docking spot and jaunted after the ladies.

It was a short jaunt, but I'd done it slowly, so I had several seconds to think on my way. When I was near I said to all three, but looking at Dorothy Robb, "Time has been extremely kind to all of you."

One corner of her mouth turned up. "I love a liar," she said. She studied my face and raised an eyebrow. "You've had less of it, but I can see you used your time well."

I nodded. "I tried," I agreed. "Jinny, it is nice to see you again. You look wonderful."

Her eyes lit with pleasure at being addressed next—age before beauty. An instant later she realized second was not the optimal position in a group of three, and the light went out.

I noted it, but was busy with the sudden realization—maybe it was more of a revelation—that what I had just said to her was strictly accurate. It was nice to see her.

And that was all it was. Yes, this woman had chased me out of the System with a crushed heart, and yes, she had haunted my days and stalked me in my dreams. But not for five years or so, now.

"Evelyn, I can't tell you how good it is to see you again. Your letters have meant a *lot* to me. I knew you would be beautiful, but apparently I have a very feeble imagination. I hope you will let me play my saxophone for you one day" It felt awkward saying all that in front of Jinny, but I didn't have any choice.

"If I can sit in on keyboards," she said.

I stared with my mouth open.

"I have a new arrangement for 'Sol Keeps Shining' I want to show you. And a couple of other tracks from *Stars."*

Can an ego have an orgasm? *Something* made my heart pound.

"Perhaps we could postpone the soundtrack until the film is done," Jinny said coldly "We do have *important* things to talk about, and little time. Grandfather doesn't have anything like the patience he used to."

"We do indeed," I said. "How many passengers *will* your husband's vessel carry?"

"Ten," she said.

"Damn." I felt sharp disappointment. I'd been hoping against hope for some vastly higher number. Twenty-one *c* was definitely an impressive velocity, but even at that barely imaginable speed, Peekaboo was nearly four years away. I doubted we'd be able to get four hundred and something of us to Brasil Novo before the stellar shitrain arrived, even with a magic carpet to help.

I wasted a few seconds trying to work out how many of us could be saved, and how many would die of old age aboard the derelict *Sheffield* before a seat became available for them on the shuttle, and how they would be chosen. The maths were way beyond me, even if I'd known exactly how many of us were still alive. And so were the ethics.

It was not just a terrible letdown—it was also puzzling.

"What is it, Joel?" Evelyn asked.

How to put it? "I'm a little confused," I admitted finally.

"We're all confused," Dorothy said. "Which confusion troubles you now?"

If there was a way to say it pretty, I couldn't find it. "There really isn't any way you can be of much help to us with a ten-seater, even if it is twenty times faster than a speeding photon. Is there?"

Dorothy began to say something, but was overridden by Jinny. "There is a plan. As we speak, Grandfather and Andrew are discussing with your Captain Bean and his own advisers the feasibility o—"

"You're forgetting something," I said.

"What?"

"Jinny Hamilton," I said carefully, "you are one of the best. But I know exactly how you look and act and sound when you are lying."

Her control was excellent, but she could not stop her skin from reddening. She started a bluff but got only two chilly words in before giving it up and doing an instant one-eighty, so that the sentence came out, "How dare all right damn it, I was trying to keep this focused on the positive."

"That doesn't leave much to talk about," I said. "What I'm trying to understand is, since there doesn't seem to be any practical way to rescue us . . . why the hell are you here?"

"Joel!"

"There's damn little you can do for us—and for the life of me, I can't figure out anything we could possibly do for you."

"The whole Solar System just died!" she said. "Naturally we headed for the first—"

"If your grandfather just wanted company for comfort, why in Sol's name would he pick hundreds of doomed souls he can't help, with only a temporary ecology? It makes a million times more sense for him to make a beeline for someplace like Aradia or Hippolyte—they've both been thriving for decades. Or *any* of the self-sustaining colonies. Any technology we could possibly give you, any asset we could have aboard, you could get much better elsewhere, and without the social awkwardness of having to interact with dead people."

I stopped and waited for a response, but Jinny made none. "It's a simple question. Why are you—"

Dorothy Robb said, "Joel, don't be dense."

I stared at her.

Neither of the others had anything to say. They were both just looking at me. As if I had two—

"Covenant's sake! We're here because of *you,* you idiot."

I lost my handhold and went free.

I wasted seconds uselessly fanning air as if to agree I was an idiot, and then gave it up, surrendered to free fall, and tried to get control *of* my breath.

Nobody seemed to have a problem letting me take as long as I needed to think it through, so I did, eyes shut tight. It probably took a good thirty seconds to slow my spinning mind down from dynamo speed to something more like the cyclic rate of a prayer wheel.

I opened my eyes in time to see a thick cable within reach and docked on it.

"I don't believe it," I said slowly to Jinny. "Are you seriously telling me that you came all this way, played with the hopes of all these people, all my friends . . . just to give me the finger, one last time?"

"I made them come!" Evelyn cried.

Twenty-one

In my dreams
I can see, I can
I can see a love
That could be
—David Crosby,
"In My Dreams"

Evelyn, what—?"

That was as far as I could go. I could not even form a rational question.

No, wait. Yes I could.

"Evelyn, *why?"*

She had just let me think over an answer for a good half a minute. I gave her the same. So did the others. Jinny watched her intently, with no expression.

When she was ready, Evelyn said, "Joel, you were the first person I *ever* saw defy my grandfather. You are the only one I know who ever got away with it. You gave me the inspiration to become a musician—the only one in four entire generations of my family—in case perhaps that was the source of your courage. And it was! You're the only man I've ever known who thought it was a great thing to go to the stars—and went."

"But—"

"Shut up. That's part of it. You were the very first adult I ever met who took me seriously. Who did not talk down to me, because I was small. You treated me as an equal with an unfortunate height problem you were too polite to notice."

"That was—"

"I asked you to shut up. Because of that, you were the first adult I *ever* allowed to have any faintest idea how smart I was. Previous experiments had worked out badly. But it didn't bother you a bit to need my help, or to get it. It didn't even surprise you much."

"That's how my father always treated me at that age. I didn't know any other way to react."

"You were the first grownup to remember my name the second time he saw me. And before you let me help you, you asked if it would get me in trouble."

I tried to remember. Was all this true? It had been a long time ago.

But then, it had been longer for *her* than for me: thirteen years to my six since we'd cannoned into each other in the corridors of the North Keep—how could she remember so much better than I?

"You *didn't laugh at me."* She hesitated, then went on more softly, "Even when I told you I was going to marry you." Then far more softly, "And you were engaged then."

Jinny snorted, but did not speak.

Evelyn made a small measured movement, and began to drift toward me. Snow used to fall at about that speed in the low gravity of Ganymede, once. She came with infinite grace, and her eyes seemed to get larger faster than the rest of her.

"Joel Johnston, you were the first man ever to write to me. You're the longest pen pal I ever had. You are the only man who ever kept writing to me after it was clear that I was not going to have sex with him. No one else of either sex, ever, has given me their attention without expecting *anything* in return. My letters ended up having to be a tenth the size of yours, and carefully edited, thanks to Gran'ther *Dick* . . . and yours kept on coming anyway. And you are the only man I have ever known in my life or expected to who did not care one single solitary molecule of a damn how much money I had!"

She gently collided with me, for the second time in six of my years and thirteen of hers. She was taller, now. Her eyes were only decimeters from mine, this time. So was her mouth. Both her arms were around me.

I had both of mine around her. I must have let go of my handhold again. The room *literally* spun around us. She twined her calves around mine, completing the free-fall embrace. Our bellies touched, and we both discovered my waxing erection.

"I *bullied* them into coming for you," she said. "I said I would space myself if they did not. They knew I meant it. Right now, Gran'ther would rather cut off his own feet than lose fifty percent of the universe's remaining supply of egg-laying Conrads." Her voice dropped so low then that even I needed to follow her exaggerated lip movements to know she was adding, *"But . . . he . . . is . . . going to."*

It wasn't so much any of the words as looking at her mouth that forced me to kiss her.

Very little coherent thought took place during that kiss. So it must have gone on for a long time, because I had time to think that no woman in my life had ever given me her attention for so many years in a row for any reason, let alone without reasonable hope of any possible return. That she had done this for years before she'd ever heard me play a note. That she had learned to play because of me. That she was far and away the best kisser I had ever met or even fantasized. And that it would be very convenient if our first two children happened to take to the bass and drums. Drums first, no doubt.

Then our faces were whole decimeters apart again, and there was a ship around us.

"You *are* coming with us, right?" she asked solemnly

"I'm coming with *you,"* I said just as solemnly.

We both grinned at the same instant. "This is insane, right?" I asked her.

"Believe it," she agreed.

"Oh, thank heavens. For a second there I was afraid I was going sane."

"Little danger of that," Jinny said from across the room.

I glanced over at her, found her expressionless. I realized that not once during that timeless kiss had it even momentarily occurred to me that Jinny was watching us. It made me want to grin even wider, but it seemed politer not to. The disease had come close to killing me—but the cure was now complete. Andrew, poor bastard, was welcome to her. I wished him well, hoped he was genius enough to hold his own with her. He had licked lightspeed; maybe he could.

My heart suddenly sprang a leak, and joy started to leak out into reality. It began to sink in that I had no clear idea what was going to happen next, what I was going to do now. Or how I was going to live with myself afterward. I wanted with my whole heart to go with Evelyn, wherever she might go. But how could I leave so many of my friends—any of my friends—behind to die in the *Sheffield?* If I stayed, I could save at most one other life—if it hadn't been for me, *nobody* would have lived—those and a dozen other rationalizations raced through my mind, but were of no help whatsoever.

Evelyn saw the change in my face. From her distance she could scarcely have helped it. "Joel, what's wrong?"

I sighed. "I really hate with my whole heart the idea of leaving anyone at all to die of old age in this bucket. I don't know if I can . . . I don't know how to . . ." I did not even know how to express my dilemma, even to myself.

Dorothy Robb spoke up. "Am I the only one here comfortable with arithmetic?"

Everyone turned to stare at her.

She was frowning mightily "Admittedly, the math does become hairy. But surely *someone* must know how to operate a calculator."

"What do you mean, Dorothy?" Evelyn called.

She replied, "Joel, how many passengers does the *Sheffield* now carry?"

I wasn't at all sure. Too many deaths lately, no time to keep the figures current. "Can we call it four hundred and fifty for now?"

She nodded and closed her eyes, saying, "So: nine passengers at a time yields a total of fortyfive trips, with a series of geometrically decreasing trip lengths beginning with seventy-five lightyears—we assume zero turnaround time for convenience—" She stopped speaking, but her lips kept moving. We all gave her time. After a while she said, "Call it very roughly a hundred and fifty-one years."

My heart sank in my chest, but I nodded and kept going, needing to know just how bad it was. "How many could we transport in the first seventy or eighty years? You know, before we all die of old age."

Dorothy gave me the look a grandmother gives a child who has just picked his nose in company "Joel, Joel—those are a hundred and fifty-one *real* years."

"Pardon—oh!" My heart leaped.

"Since this ship is doing nearly ninety-eight percent of the speed of light, that works out to . . . hall a tick, now . . . a bit under thirty-three local, shipboard years."

Blood roared in my ears. *We could* all *live!* Her figures assumed zero turnaround, zero downtime for maintenance, and a lot of other things—but it didn't matter: the thing was *doable.* Andrew had saved us all.

This changed everything. For the first time since the quantum ramjet had gone out, I started to feel real hope. With it came a phantom memory of an ancient film about a man struggling with Time, who said to a companion near the end, "It's not the despair—I can live with the despair. It's the *hope* that's killing me!"

Well, being killed beats being dead. I'd been dying for two dozen years now, since the moment of my birth. Another seventy-five years of it sounded very good.

If I could spend them with Evelyn.

The hatch opened and Andrew entered, as if invoked by my thinking of him. Herb came in on his heels, must have guided him there.

"Hi, darling," was the first thing Andrew said, I noticed, and then, "Hello, everybody. I hope I'm not—" He saw me and Evelyn. "But apparently I am. I should have tapped first; crave pardon."

"Don't worry about it," Herb told him. "That's the way I usually find him."

"Usually with his girlfriend," I agreed.

Evelyn turned to me, eyes twinkling, and we gave each other our best deadpan. She was good; I nearly lost it. "So I'm going about this backward, then?" she asked.

"I for one work best in that mode," I told her. "Come on in, Andrew —I can work with an audience. How goes the confabulation?"

He looked pained. "Well, they're still discussing what should be done to evacuate the *Sheffield* as efficiently as possible. Your grandfather's come up with the seed of a very interesting plan, actually. Several problems still to be solved, of course, but . . . look, could we talk about it on the way? Richard sent me to tell you he'd be pleased if we all returned to the Mercury right away, and began preparing for an immediate launch. It's very important to lose as little time as possible, obviously, since every loss will cascade down through the whole sequence, and he's determined to hit the ground running."

Evelyn and I exchanged a glance and adjusted our position until we were side by side, each with an arm around the other's waist. "They're that close to agreeing on a plan?" Jinny asked.

Her husband shrugged. "Your grandfather wants to be under way two seconds after the airlock shuts behind him. We don't even know if all the provisions we were offered have been loaded aboard yet, much less stowed properly."

She nodded. "I guess we can continue the conversation there. Let's go."

"Wait a minute," I said. "Question."

"He just told you we don't have any minutes to spare," Jinny said sharply

"I agree with Andrew. But that begs my question: who's 'we,' exactly?" Everybody did a lot of blinking.

"Ten seats. Seven of you. If Evelyn has her way, I take seat number eight. Who gets the other two?"

Very *loud* blinking. Herb looked less sleepy than usual.

Andrew cleared his throat. "As I was leaving, Mr. Hattori had just agreed to join us."

"Really?" Jinny said. "Why?"

Andrew frowned. "To be honest, I'm not sure. It made sense when Richard explained it."

"Hattori!" Lieutenant Bruce squawked, ruining his efforts to avoid being caught eavesdropping. "Why in space should *he* get one of the first berths? He's a *bean counter!"*

Jinny's stare basted him with superheated contempt, and he withered. "I'm sure you would prefer to share your Bridge with people interested in your opinions, Lieutenant, so we will take our leave now. Your hospitality has been exceeded only by your courtesy. Shall we go, all?"

Evelyn turned her head to look at me. "Is there anything you want to pack, Joel?" One eyebrow rose slightly, copied accurately by the same side of her mouth. "Anyone you want to say goodbye to?"

I had absolutely no idea where we were going to go, or what we intended to do when we got there, or what if any contribution I could make.

I raised my voice a little. "Herb? Say goodbye to everybody for me, will you? You know how to say it pretty."

"If I don't get the tenth seat, sure," he called back. "Don't bother leaving me your porn folder; I hacked into it years ago."

"Captain Conrad?" I said at the same volume. "Would my baggage allotment aboard your ship accommodate a baritone saxophone?"

"Anna?" Evelyn asked.

I smiled. "You read liner notes carefully. Yes, my Yanigasawa."

Andrew called, "If it didn't, I'd tear out a couple of instrument panels or something."

He and I exchanged a look. "I'll meet you all at the airlock with my saxophone, then," I said.

Andrew pretended to clear his throat. "Joel, I hope you will forgive my presumption. I took the liberty of asking that your silver baritone be loaded aboard the *Mercury* shortly after our arrival. Evelyn said that was the one you'd want." His eyes went back and forth between Jinny and Evelyn twice. "It seemed the prudent course."

I knew what he meant. Jinny and Evelyn were twin forces of nature. If one of them said a man was coming aboard, the smart money said to save time and start loading his luggage. "I'm sure it was," I agreed, and a silent understanding passed between us. "Let's go, then. I'm eager to see your ship, Captain. I presume you docked down by the main passenger airlock?"

"That's right." He turned to Herb. "Mr. Johnson, will you accompany us? I can show you that thing I was talking about on our way up here." Herb nodded.

Bruce looked like he wanted to cry. Rennick looked like he could happily boil me. Dorothy looked like she wanted to suddenly extrude a judge's robes and marry Evelyn and me on the spot. Andrew looked as proud as a puppy who's learned some really amazing new tricks and is dying to show everyone.

And Evelyn looked like the rest of my life, smiling at me.

The trip was nearly the whole length of the ship, and took longer than I had expected. We did not pass a lot of people I knew well . . . we passed few people at all; it seemed a lot of us were waiting in our rooms to be told what the hell was going on. But of the few friends we did encounter, there were none that either Herb or I could bring ourselves to simply float past without a word of personal leave-taking. We also wanted to make sure the news spread as quickly as possible throughout the ship that everyone was going to get out of this alive, sooner or later. I never did find a really satisfactory way to say it in a few sentences. Herb did much better, of course. All but one of the reactions I got were positive, supportive. The one—Richie—just gaped at me, then turned and jaunted away without a word.

We had gotten all the way to the airlock antechamber before things started to shift around in my head.

I found myself thinking over everything that had been said since I'd gotten to the Bridge, and who had been saying it. Everything made sense, everything added up, except for a single term in the equation. It nagged at me. Gave me a faint sick feeling in the pit of my stomach that I could not seem to either justify or explain away.

I was so preoccupied I was barely paying attention to Andrew's eager babbling about his discovery, even though I did want very much to hear it. It was the genuine Secret of the Ages he was telling me. But I was distracted, and it didn't help that hardly anything he said conveyed much meaning to me.

Then all at once, three words leaped out of the noise, burrowed into my consciousness, and there exploded with great force. I lost my grip on my p-suit, and didn't bother jaunting after it.

"Andy" I interrupted rudely. "Did you just say, `. . .irrespective of . . .' a moment ago?"

He was struggling with his own p-suit, trying to get his feet in. He had the klutziness of the true supergenius. "Excuse me? Yes, Joel. Quite irrespective. As I was saying, the basis of the DIS principle—"

I stepped on him again. "Evelyn? Do you understand Andrew's drive? Has he explained it to you?"

She paused in her own suit-up checklist procedure. "He tried to," she said, puzzled but game. "It didn't take. I'm afraid I don't have anything like your background in physics."

I nodded. "Dorothy?"

She shook her head. "I was *handicapped* by my background in physics. It kept turning out that everything I thought I knew was wrong. I gave up listening at about the fourth sentence, when I seemed to hear him telling me that all mass is infinite in the first place."

"It is, in a sense," Andrew tried to explain. "You see—"

"Andrew, my new friend," I told him, "we don't. Very likely we can't. But I want to be as certain as I can be of at least one datum, so I'm going to ask you one more time. Have I just understood you to tell me that the DIS effect functions under any circumstances, *irrespective of mass?* Do those three words mean to you what they mean to us? Or is this some sort of semantic confusion?"

"No, you're correct," he said, puzzled. "Mass really is imaginary, you know. Like inertia. What you need to understand—"

I turned to Evelyn. "Do *you* get it?"

She was frowning hugely. Her own p-suit drifted away from her hands, forgotten. I saw understanding wash over her, like a wave of ice water. "Oh, no. Oh, no! Joel—"

Now the equation solved itself: the dubious term had been defined, and others adjusted themselves to match with the inexorable beauty of math working out.

"What are you talking about?" Jinny asked.

My stomach lurched. I turned and stared at her. "You know, don't you? Of course you do."

"I have no idea what you're talking about," she said.

"What does she know?" Herb asked me.

I could see from Dorothy's face that she got it, was thinking it through, and becoming as angry as I was. I could also see that Rennick had known all along, and was not even faintly surprised. He started edging toward the hatch that led back out into the rest of the Sheffield.

Uptake. Uptake was going to be important, now. I spoke quickly and in my loudest talking-to-the-audience voice.

"Everyone here has a mental picture of Richard Conrad. Can any one of you really picture him spending the next thirty-odd years rescuing a few hundred *farmers*?"

General consternation. Rennick made it all the way to the door and put his back to it.

"But he himself wouldn't—" Jinny began.

"Do you honestly think he believes that would be the best use for his one and only superluminal starship, during these next crucial empire-building decades?"

"He wanted to own the entire Solar System," Herb said. "Now he'll have to settle for what's left. But I think he would consider that the absolute minimum acceptable."

"My grandfather is with your own Captain this very minute, trying to—"

"Your grandfather is lying his aristocratic ass off at this minute," I said, "trying to persuade Captain Bean he's ever going to see him again after the Mercury leaves. That way he can consign more than four hundred people to death with an absolute minimum of harsh words or other unpleasantness. And we can all depart without Alice Dahl having to hold a gun on anyone."

"You're insane!" Jinny snapped.

"If he really wanted to help us, all he'd have had to do was order his grandson-in-law to unship his DIS drive from the *Mercury* . . . and install it in the *Sheffield!* Andrew just got finished telling us the silly thing *doesn't believe in mass."*

Jinny gasped in shock—but not as loud as her husband. "Coventry, what was I thinking of?" Andrew said, his face stricken. "I ... I . . . I'd have to destroy the Mercury in the process, I guess that's why it simply never occurred to me, but—yes, damn it to seven hells, there's no real reason in the universe why I couldn't recalibrate and ramp it up to make the field large enough to enfold even a ship this large. I could have it done in a few weeks! I think . . ."

"Don't destroy the *Mercury,"* Herb advised. "Just bring it aboard. It's about the size of one of our landing craft."

"That would work—"

"I heard earlier it took you five or six subjective weeks to overtake and match orbits with us," I told Jinny. "The *Mercury* was a private yacht on its shakedown cruise when Sol exploded. Even given Conrad family paranoia, I'd be surprised if she carried more than a couple of months' worth of provisions for a crew of seven. My guess is *your ship's just about out of food, water, and air by now*." Andrew's groan told me my guess was accurate. *"That's* why the old bastard really let himself be talked into picking us for his first destination! He needs to be fully reprovisioned before he reaches an established colony planet, so he can deal from a position of strength. To him, we're no more than a supplies cache en route, disposable. We're the smallest number of people that stand between him and self-sufficiency"

"And the easiest to con," Herb said. "Because we're scared and tired and vulnerable. And we have evidence other than Conrad's word that Sol has been destroyed and hellfire is coming."

"Oh, Grandfather," Evelyn groaned. "Oh, this is awful!" She started for the exit. "Joel, you're absolutely right: we have to—"

Rennick reached into his blouse and produced the smallest hand weapon I had ever seen, the size of a stylus, waved it across us all once. "You have to stay right where you are," he barked. "Evelyn, I mean it! *Don't!*" He aimed his weapon at her, and I gathered myself to leap into the line of fire, and his head exploded into red mist, most of which boiled out of existence even as it formed. A few tiny drops made it all the way across the room and spattered my face and hands. His little weapon flew from his hand and started caroming off things.

Dorothy Robb had something even smaller in her hand. It looked like the smaller half of a stylus, with the pocket clip on it. As I saw it, she released it like a soiled tissue and let it drift from her. "I thought I'd get all the way out of this life without ever using that," she said thoughtfully, as if to herself, in the sudden ringing silence. "But it was worth carrying it, all these years."

I wondered how she'd gotten it past the Gurkhas back home. But then, Rennick had managed with a larger one. Maybe the Gurkhas had known—and just figured they could deal with it. "Thank you, Dorothy," I managed to say, wiping my face with my sleeve.

"You may always leave these little things to me," she said, making it sound like a quote. Then she brushed a hand across her face and made a sound of revulsion. "I would not have thought his brain was large enough to make that much of a splash."

Herb was instantly at her side with a pack of tissues. She thanked him gravely and accepted one.

The heat of the explosion had briefly been so intense, Rennick's massive wound had cauterized itself. Most of the red mist had already been dealt with by the *Sheffield's* intensive zero-gee airflow, and the rest would be soon.

"They'll be here any minute," Herb said to me.

"I know," I said.

"You understand the problem. You've seen her."

I wished I didn't. "Yeah. I've seen Alice."

We shared a wordless glance that lasted ten seconds or more. He smiled suddenly "I don't see another way. Do you?"

I thought as hard as I know how. Finally, reluctantly, I shook my head no. "Not with the tools at hand."

He nodded.

I retrieved Dorothy's weapon, glanced at it briefly, and tossed it to him.

"It's empty," Dorothy said urgently "It was a single-shot."

Herb held it up. "Could you tell it's empty by looking at it?"

She made no reply, but her face said she understood now, and that the answer to his question was no.

A bounce took Rennick's weapon past me and I picked it out of the air. I looked around at the scene, studying it closely. Just behind me, beside the airlock hatch, was a large display showing data of several kinds.

I found the right switch and powered it off. Then I stepped back, measured angles, and said, "What do you think?" to Herb.

"Good as it's liable to get," he said. "This is what a long time ago used to be called a Hail Mary play."

I nodded. "I *really* wish it was better," I said.

With infinite kindness in his eyes, he said *not* "Me, too," but "I know." Then he moved, to position himself just beside the hatch out to the *Sheffield.* Dorothy began gathering the p-suits we hadn't finished donning, and stowing them out of the way

"What are you doing?" Jinny asked dangerously "Damn it, what is going on?" Andrew couldn't decide which of us to gape at. He wore a look I could empathize with—a man rearranging the entire contents of his brain, and heart.

"Can you handle her?" I asked Evelyn.

She looked me in the eye and said *not* "I think so," but, "Yes." Everybody was being very helpful to me today. I nodded thanks, and she left my side, jaunting over to dock beside Jinny.

"Cousin Jinny," she said clearly and firmly, "zip it."

Jinny was too shocked to respond, and before she could regroup, we all heard the sound of the party approaching the antechamber from outside. "Joel—" Dorothy began.

"I think it'll be all right," I told her. "But stay alert."

She shut up, chose a spot well away from the hatch, near the air outflow, and tugged Rennick's body there. She held onto the grille with one hand, and held Rennick near it with the other. "Evelyn, over here, dear."

Evelyn looked to me, I nodded, and she joined Dorothy.

Herb and I shared one last long look. Nothing to be said.

The hatch irised open.

Alice Dahl entered first, and she was as good as I had presumed she must be. The instant she cleared the hatchway she sensed that something was wrong—body language? Blood scent the airflow hadn't finished flushing yet?—and went hyperalert well before she could have seen Rennick's body. She didn't actually kill anyone, but she was very ready to. And it was me she focused on.

Failing to notice, Conrad came in behind her, followed by Solomon Short. "All right, everyone," he was saying, "thanks to Captain Bean's insights, and Relativist Short's gift for lateral thinking, I think we've come up with a plan that will—"

It took him that long to see Rennick's drifting corpse and stop speaking. He must have been very tired. But he was still sharp, and quick. He didn't bother asking what was wrong.

"All right," he went on. "Everyone on board now. We will discuss this later."

"Gran'ther, how *can* you?" Evelyn asked him with infinite sadness. He did not seem to understand her question.

"The race made a small mistake," Herb said. Alice's head turned to track him. "We did *finally* make some progress at stamping out war. But maybe it would have been better to start with greed."

"What's going on?" Solomon asked mildly

"Conman of Conman here," I said, "was just about to depart, leaving behind a boatful of suckers who thought he'd be coming back to start a rescue shuttle."

Solomon caught on at once, and turned to glare at Conrad. "Really?"

"He also forgot to mention to anybody that with a little work, Andy's Magic Carpet drive will push anything you put it in, just as fast. Irrespective of its mass."

Solomon's face darkened even further. "I see. He had better things to do with it. Sure, he did."

"Sol," I said quickly "It's *covered.* Okay? Watch out for green mist."

I saw him take my meaning. Stay out of the line of fire and await developments.

"Oh, for Covenant's sake!" Conrad snarled. "Jinny, *you* understand. Evelyn, dear, history is being made. Right now, by us. We need to form and consolidate the Confederation of Human Stars, get it organized. Ferry telepaths around until rational communication can take place, and then get busy and avenge our star. For all we know, a second wave of attacks is just about to happen—there is no *way* we have time to waste rescuing a bunch of losers from their own incompetence. Please try to be rational. You're a Conrad, for the—"

"I am a Johnston," she told him.

He rolled his eyes. "Young love. Oh, I love being old! Fine. I don't care what name you go by, as long as you get into that damned pressure suit and back aboard the ship, *now."*

She looked him in the eye and slowly shook her head. "I will not." Conrad of Conrad sighed, irritated beyond endurance. "Alice."

Alice Dahl reached for her right hip, and Time slowed to its lowest possible velocity

"Alice!" I shouted.

She was very good, gave me less than half her attention at first despite my shout.

That changed fast when she saw my hand holding the weapon I'd been palming all this time, though.

She was *so* good that in the fraction of an instant it took me to draw a dead bead on her center of mass, she had her own gun out and pointed directly at my left eye.

"If you kill me," she said calmly, "my hand will still kill you afterward."

"Probably." I agreed. Most of my attention was on my features, going for the best poker face of my life.

"Absolutely." she corrected.

Time was going so slowly now, I could actually see her discern some tiny flaw in my poker face. Her finger tightened on the trigger.

"Hey, Butch!" Herb bellowed at the top of his lungs.

She was still good. She turned her head *just* enough to pick him up in her peripheral vision. She knew he was bluffing, because she knew he was smart enough to know he could not possibly beat her—and still she checked.

And found Herb aiming Dorothy's tiny little weapon at her.

She identified it, must have realized it was much deadlier than the one I held. It didn't worry her a bit. The right side of her mouth curled up in contempt.

Faster than the eye could follow, she spun on her axis. Beating Herb was no more difficult than beating me had been for her.

And as far as Alice Dahl knew, nobody important wanted Herb alive. She shot him in his left eye, perfectly confident that shock and denial would hold a civilian like me frozen for the split second that was all she would need.

I was not in shock. I was not in denial. She died halfway back around to me, when my shot caught her square in the heart.

It was a far less gaudy death than *eit*her of the others that had happened in that room—but it was definitive. Rennick's weapon fired not a laser or projectiles, but something that relaxed muscles. All of them, completely. Her face went slack, her eyes became doll's eyes, her body went limp and derelict, and sphincters let go just before Solomon crashed into her.

My own nearly did the same. I had been more than half expecting to die myself, doing this. But I barely noticed; I was already in transit to Herb, just in case, knowing it was futile but unable to help myself. Halfway there I knew I was wasting my time, and started to relax and begin mourning.

An unexpected noise behind me scared the living shit out of me.

I wrenched my body around and just had time to realize Jinny had launched herself after me, hands curled into claws—when Evelyn slammed into her so hard her vector won the argument. They both drifted away from me, but only Evelyn was still conscious.

I collided with Alice's body myself, glanced off, and grabbed a handhold. Now my attention was fully on Andrew.

He couldn't take his eyes off Jinny. He was staring at her as if she had just morphed into some loathsome insect, or perhaps a demon with fangs.

I felt truly bad for him. I knew *exactly* how he must feel. The same as I had, when I'd first learned she wasn't who I'd thought she was at all. That she wasn't who she had *told* me she was. That she was capable of enormities I could not have imagined, and would not have believed until forced to. Nobody that beautiful should be capable of that much guile: it was too unfair an advantage.

She was everything her grandfather had hoped for. And little else.

I decided he would probably live through it, too. He might even be able to deal with it, somehow, for all I knew. He was a supergenius. And a decent man down to his marrow. I would try and have a long talk with him, as soon as I could. A series of them.

Richard Conrad inevitably found his voice. "All right, now," he began.

Andrew Jackson Conrad cut him off. "Grandfather," he said, "shut the fuck up."

Richard stared at him, more confounded by this than anything else that had occurred yet. He groped for words, found none at all.

"If you say one more word," his grandson-in-law said to him, "I will come over there and shove it down your throat."

"Way too kind," I heard Dorothy murmur.

I saw it wash over him, and if it hadn't been so pathetic I'd have enjoyed it more. For the first time in his entire life, Conrad of Conrad found himself in a room full of people ... not *one* of whom gave a damn what he did or did not want.

He had *always* been utterly alone—but had probably never even suspected it until now.

"Joel," Andrew continued, "I assume this ship carries proctors?"

"Good ones," I agreed.

"Will you summon one, please. This citizen requires restraint."

"As a matter of fact," I said, "he'll be here any second. The ship calls him if it decides he's needed. As soon as he gets here, I suggest we all adjourn back to my quarters, and start making some plans."

"Good," he said. "Will you help me get my wife to your Infirmary first?"

"Not to worry," I assured him. "My place is much closer, more comfortable ... and our Healer makes house calls. She is very good."

He nodded. "Thank you very much."

I told him he was welcome.

And then—finally—my obligations were over for the moment, and at long last I went to rejoin my Evelyn.

She was waiting for me.

We had been waiting for each other, for a long, long, long time. No matter what clock you used to measure it.

Twenty-two

**It's just beginning. Everything is
always just beginning.**

—Jakusho Kwong

That's essentially all I have to tell you.

Governor-General Cott's more formal account of the events of our voyage is vastly more complete, accurate, and factual. But it was felt that future generations will need more than facts. Too many of them make little or no sense without the subjective context. And it was decided that I was both best able to recount that story, from an insider's unique perspective—and the one least occupied with other, more pressing duties.

You have them, too. We all do, now. We need to know for certain, just as soon as possible, whether our civilization has been crippled and nearly killed by stupendous bad fortune—of which there is certainly no shortage in the cosmos—or by enemy action. And either way, we need to figure out what needs to be done about that.

I do not doubt we will. But you must hurry. You have a limited time now to move yourselves and your entire civilization underground, including all the native and introduced flora and fauna you need to survive . . . before the wavefront of death arrives, from the very part of the sky you've always thought of as home. You will need to be at least several hundred meters underground when it arrives; several thousand would be even better.

Yours is the fourth world we have brought the news to. At each of them, I have been asked why I don't simply stay? I've done my shift, and more. Why not let someone else take up the torch? Having miraculously managed, against incredible odds, to set my feet on solid ground once more, why would I ever contemplate leaving it again? Evelyn and I have a child to raise now, after all.

The best I can explain it is, I've lost my taste for living on planets. It always was overrated.

The narrator of an ancient poem by Tennyson "held his purpose firm, to sail beyond the sunset." My wife and I—all of us—have actually *done* that.

It's going to get *interesting* now.

Afterward

This is an optional bonus: a sort of DVD Special Feature, "The Making of *Variable Star,"* in which I explain how I ended up being the one to tell you the story. Feel free to save it for later, or skip it altogether. Its principal purpose is to save me from having to spend the next few years answering the same questions over and over, and I already suspect it's probably not going to work.

I type this in November of 2005, in my office on an island west of British Columbia . . . but for me, the whole thing began way over at the other end of the continent, in a New York suburb rightly called Plainview, fifty-one years ago in November of 1954, when I turned six years old.

My mother wanted to raise a literate son. But Mom also had a lot of resting she wanted to get done, so she came up with a diabolically efficient scheme for teaching me to read. She would start reading me a Lone Ranger comic book, and *just* as it got to the really exciting part, where the masked man was hanging by his fingertips from the cliff . . . Mom would suddenly remember she had to go wind the cat or fry the dishes. By age six I had taught myself to read out of sheer frustration.

On my birthday, she graduated me to the hard stuff. She drove me to a building called a "lie bury," and told me to go inside and ask the nice lady behind the desk for a book. I followed instructions. "Mom says gimme a book, lady" And the nice lady behind the desk sized me up thoughtfully, and handed me the very first book with no pictures in it that I ever read in my life: *Rochetship Galileo,* by Robert A. Heinlein.

Her name was Ruth Siegel. She changed my life completely.

It was the first of Robert's famous juvenile novels—and it was at least a hundred times better than the Lone Ranger! It was about teenage boys who were so smart they went to the Moon, and fought Nazis there, and there was nothing dopey about it, it all could have been true, practically! I finished it that night, and the next day I *walked* two miles to that lie bury and demanded to swap it for another one by the same guy. The same nice lady accommodated me, and the first *ten* books I ever read in my life were by Robert Heinlein, and they were *all* great.

When I tried other books, by other writers, it immediately became clear that some were good, and some were rotten. But it was just as clear that the ones in the same stack with the Heinleins—the ones that all had a sticker on their spine depicting a hydrogen atom inexplicably impaled by a V2—were *always* excellent, nearly as good as Heinlein himself. In 1954, science fiction was such a scorned genre that any sf actually published in hardcover—and then ordered by a public library—had to be terrific. I became a hardcore sf reader simply because that was where all the best stuff was . . . and so the whole course of my life was twisted.

Now the story jumps ahead nearly a year—and yanks us halfway back across the country again.

On November 14, 1955, ten days before my seventh birthday, Robert Anson Heinlein sat down at his desk in Colorado Springs and wrote an outline for a novel he first called *The Stars Are a Clock.*

He later wrote in half a dozen possible alternate titles by hand, including *Doctor Einstein's Clock,* but never settled on one he liked. This was not unusual for him. *A Martian Named Smith,* for instance, was also *The Heretic* for a while before it was finally published as *Stranger in a Strange Land.*

His outline filled at least eight extremely dense pages: single-spaced ten-pica type with absolutely minimal margins on all four sides and very few strikeovers. He also filled fourteen 3X5 index cards with extensive handwritten notes relating to the book. And then, for reasons only he could tell us, he closed the file and put it in a drawer, and never got around to writing that particular book.

Now the biggest jump of all: less mileage this time, but nearly fortyeight years—to Toronto on September 1, 2003, where the World Science Fiction Convention, Torcon 3, was held that year.

I was Toastmaster for that Worldcon, the second time I have endured that honor, and it went *infinitely* better than the first time had, the Saturday night Hugo Awards ceremony this time fiasco-free. So I was pleasantly relaxed on Sunday morning when I showed up for my last obligation of the weekend, an appearance on a panel discussion about rare and obscure works by Robert A. Heinlein. Some remarkable discoveries of previously unknown Heinleiniana had been made in recent years, including an entire first book few had known existed called *For Us, the Living,* which Scribner's had just published for the first time. I was on the panel because I had contributed an Introduction to it—but what I wanted to hear about was the exciting new stuff I'd heard rumors about. Teleplays—screenplays, even! I was quite unprepared for what I got.

The star panelist was Dr. Robert James, one of the researchers busily combing through the country's libraries for RAH references, standing in for official biographer Bill Patterson who had been unable to attend. Robert is the man personally responsible for rescuing *For Us, the Living* from oblivion, and Bill had given him some terrific ammunition from the Heinlein Collection at the University of California at Santa Cruz to wow us all with. Those teleplays, for instance: most were based on known short stories . . . but not all of them. *There were Robert Heinlein stories we didn't* know. That room was packed to bursting with some of the world's most hardcore Heinlein fans, and we were electrified by the news that the Canon was not yet quite complete, after all.

And that wasn't all. . . .

There was, Robert said, an outline for an entire *novel* that no one knew about, that Heinlein had never gotten around to writing. What it read like, he said, was a classic Heinlein Juvenile, and indeed it had been dreamed up around the time he was writing them, and—

--and from the back of the room, a woman I could not see called, in a loud, clear, melodious voice:

"You should get Spider Robinson to finish that novel."

And there was applause.

One of the other people on that panel was Eleanor Wood, literary agent for the estate of Robert A. Heinlein—and also, as it happens, for *me.* Another was Art Dula, trustee for the estate and its half-million dollar Heinlein Prize Trust (See www.heinleinprize.com for details) ... and Robert's literary executor. Glances were exchanged. Immediately after the panel ended, words were exchanged.

I was, please understand, profoundly terrified that this cup might actually come to me. It was quite literally the most difficult and intimidating challenge that could possibly be handed a science fiction writer, a red flag to critics. It was like a musician being asked to write, score, produce, perform, and record an entire album based on a couple of John Lennon demo cassettes. In boxing it's called leading with your chin. But I was fifty-five years old, just in the mood for the challenge of my life. Most of all, I wanted to read a new Heinlein novel so badly, I didn't care if I had to finish it myself, didn't care what kind of grief it cost me to do so.

Once again, a woman I didn't know had changed my life.

I'm delighted to report that she did not remain anonymous. I sent this Afterword around to some of those mentioned in it for corrections, and one of them was David M. Silver, President of the Heinlein Society *(www.heinleinsociety.org),* who was also on that panel. He was able to identify my benefactress as a member of his esteemed society. Thank you from the bottom of my heart, Kate Gladstone!

Shortly after I returned home from Torcon 3, I received Robert's outline, and permission to write two sample chapters and a proposal for Art Dula; if he liked them, the gig was mine. Wild with exultation, I fell upon that outline and read it three times with extreme care.

And then I began banging my head on my desk. Gently, at first.

You may recall I stated earlier that Robert's outline ran at least eight pages. It may have run fifty, for all anybody knows. What we *do* know is, seven of them survive.

They establish the ficton—Robert's term for time and place in which a story is set. They create vivid characters and their back stories, especially Joel, Jinny, and her grandfather. They describe the basic antinomy that impels Joel to emigrate, discuss the economics of interstellar colonization, and sketch in some of his early adventures after he leaves.

And then they chop off in midsentence, and midstory.

My God, I said to myself, the first time I finished reading the outline, there's *no* furshlugginer ending! *It could go anywhere from here.* . . .

God, this is *great!* I said to myself the second time I finished it, I *not only get to write a book* with *Robert, I get to pick the ending.*

Dear God, I moaned to myself after the third reading, what *the* hell am *I going to do for an ending?*

I holed up in my office for a week, and stared at those seven pages and fourteen quasilegible index cards and asked myself that question until beads of blood began to form on my forehead. Barring another miracle of forensic scholarship, this was going to be the very last Robert Heinlein novel ever. No ending I thought of seemed adequate. Twice a day my wife poked food in with a stick and retired to safety. I played my entire iTunes music library in search of inspiration, staring at its hypnotic visual display on my Powerbook screen, thinking like mad.

And one afternoon, iTunes finished playing the last Ray Charles album on my hard drive, and defaulted to the next artist in alphabetical order.

Robert Anson Heinlein.

Half a dozen short mp3 audio clips, of him being interviewed on radio in his hometown, Butler, Missouri, on its first-ever Robert A. Heinlein Day back in 1987, a year before his death. I'd listened to all those clips often. But the first one in line made me sit bolt upright in my chair now.

There—in my GrandMaster's Own Voice—was the rest of our novel, and the inspiration for its new title, in a single unscripted sentence. Two clips later, he said it *again,* in different words. Suddenly I recalled Robert griping to me once in a phone conversation about a story he'd always wanted to tell, that John W. Campbell had argued him out of writing. . . .

You have read both those soundbites. They were the chapter-opening quotes for Chapters 17 and 18.

That quickly, the novel finished itself in my mind. All that remained was the comparatively trivial business of writing those first two sample chapters and a proposal, winning Art's approval, marketing the novel, selling it to Tor Books—oh, yes, and then typing 115,051 words, configuring them in sentences, arranging those into paragraphs, and separating them into chapters. Every waking moment of two years of my life, tops.

Two Novembers later, the task is completed, to the best of my ability.

And well beyond. Fortunately I had help. Even more so than any of my previous thirty-two books, I could not conceivably have completed this one without the generous and patient assistance of many people far more knowledgeable and intelligent than myself. We have come now, in other words, to the closing credits

My principal consultants and unindicted co-conspirators were the gentlemen who have assisted me with all of my recent novels, the Vancouver Lunar Circle, particularly engineers Guy Immega and Ray Maxwell, physicist Douglas Beder, and astronomer Jaymie Matthews. Once my colleague and friend Allen M. Steele (www.allensteele.com) and noted rocket scientist Jordin Kare had helped me decide what kind of starship I wanted, Guy, one of my oldest friends, designed the *Sheffield* with Doug and Ray for me, treating the Ikimono Drive I handed them as a black box. Guy and his daughter Claire created Brasil Novo together in the course of a bedtime story they spent several years telling themselves, calling it "Jungle World," and latterly Jaymie added a few refinements to help it retain its atmosphere. Jaymie also figured out how to make its star satisfy the odd requirements I needed, and educated me about the destruction of my own star, its precursors and its consequences, as well as consulting on cosmology in general. Doug saved my bacon over and over, not only working and reworking complex relativistic computations in what appeared to be zero time, but continually suggesting ingenious ways to make the answers serve the needs of the story. And each of these Lunarians made invaluable comments on the work of the others.

Allen was also enormously helpful in helping me visualize what interstellar flight would actually be *like,* over a period of years, having devoted considerable thought to the matter for his own terrific Coyote novels. To help me imagine what a starship's farm that feeds five hundred might look like, however, I went straight to the man himself: Dr. Raymond M. Wheeler of NASA's Biological Sciences Office, who's designing the farm that will feed astronauts on their way to Mars; he gave generously of his time and special knowledge. The goat lore I acquired myself, painfully, a long time ago in Nova Scotia.

One more technical adviser must be thanked who, like Dr. Wheeler, had never previously helped me with a book, yet proved invaluable this time. Everything I know about the sax I learned by either listening to, watching, or questioning my friend Colin MacDonald, a composer, saxophonist, Soto Zen monk, and in his spare time (!) the keeper of my Web site www.spiderrobinson.com.

Nor will I ever forget the love and support of David Crosby, who gave me the chords and melody for "On the Way to the Stars"—not to mention the 1.67gHz G4 Powerbook on which *Variable Star* was researched and written. The music I listened to most often while I wrote was that of CPR, the band David and his older son James Raymond formed with Jeff Pevar (www.crosbycpr.com), and also the landmark 2004 Crosby • *Nash* double-album.

Numerous others also furnished invaluable ideas and insights, including Bob Atkinson, John Barnstead, Bill Patterson, Eleanor Wood, David Gerrold, Jef Raskin, Michael Lennick, James Gifford, Paul Hattori, Yoji Kondo, Herb Varley (who suggested the *Mercury* be powered by hyperphotonic swans), my editor Pat Lobrutto, and doubtless others I'm blanking on now. I hope they'll forgive me.

And *nobody's* input was more valuable or more profoundly appreciated than that of my beloved wife and partner, Jeanne, who read each day's copy when she woke up, and left extensive notes on my keyboard for me to find every night when I went to work; no one will ever suspect how many stupid mistakes she caught before anyone else got to see them, or how many neat ideas were really hers.

Once the story was complete, everybody named went over it looking for mistakes, misunderstandings, and problems, and then helped me repair them. So—crucially for my peace of mind—did my friends John Varley and David R. Palmer, both noted Heinlein experts, who went over the manuscript with great care and each made characteristically astute suggestions.

To all these people I give my deepest thanks. As always, any mistakes are my fault.

But it takes more than just technical advice to finish a novel. Especially this one.

First of all, and last of all, I want to say that without Jeanne's boundless love and rock-solid support, I would never have even dreamed of starting such a nerve-wracking project, and would probably have finished it, if I did, with a massive dependency on Ativan, or worse. She is my invariable star, and our orbit is stable. Equally invaluable were the unquestioning love and sensible advice of our remarkable daughter Terri Luanna, both an advertising exec and a social worker in the toughest town on Terra.

Art Dula took a major weight off my shoulders right from the start, by telling me, "I do *not* want you to try and do the literary equivalent of a Rich Little impression of Robert Heinlein. I want you to take his outline and write the best damn Spider Robinson novel you're capable of." He also gifted me with Robert's own, many-times-hand-repaired desk dictionary. I had Robert Heinlein's personal box of words to dip into, any time I ran short of them—and still do. Thank you, Art.

A mainstay of my morale throughout was Robert and Ginny's granddaughter, Dr. Amy Baxter, M.D., Jeanne and I met her and her husband, Louis Calderon, M.D., at Torcon 3, two nights before I sat on that panel and learned of the existence of an unwritten Heinlein novel, and we hit it off immediately. When she learned I had landed the commission, Amy promptly sent me a pair of her grandfather's Polynesian cuff links to wear as I typed, and sent Jeanne some of Ginny's jewelry to wear for me. (I was startled and amused to discover that it was necessary to send one of my shirts out to a tailor and have it retrofitted to accept cuff links—apparently they stopped having them while I wasn't looking.) By the time I was steaming into the home stretch of *Variable Star* in summer 2005, I was wearing Robert's treasured, threadbare favorite gardening shirt as I wrote out in my office, and Jeanne was in the house, in her own office, wearing Ginny's kimono. Bless you, Amy.

Other moral support and/or morale support (sometimes inadvertent or unsuspected) was provided by Daniel P Gautreau, Alex Morton, Anya Coveney-Hughes, Andrea MacDonald, Greg McKinnon, Bob Atkinson, George R. R. Martin, Parris McBride, Alex Grey, Joe and Gay Haldeman, Lawrence Block, Tom Robbins, Robert Crais, Donald E. Westlake, Amos Garrett, Gregg Carroll, Holger Petersen, Paul Pena, Seth Augustus, Moses Znaimer, Keith Hensen, Paul Krassner, David, Jan and Django Crosby, James Raymond, Graham Nash, Jens Stark, Gabrielle Morrissette, Rob Bailey, Kerry Yackoboski, Damien Broderick, James R. Cunningham, Brad Linaweaver, Robin W. Bailey, Steve and Lynn Fahnestalk, Will Soto, Evita Karlic, the Heinlein Society *(www.heinleinseciety.org),* Charles, Mary, and Jim Robinson, innumerable kind members of the Usenet group alt.callahans, and whoever I've forgotten to mention.

Finally, all the Portuguese names for Brasil Novo and its moons were furnished by my son-in-law, Heron Gonsalves da Silva, of Niteroi, Brazil—a classic young Heinlein Hero if there ever was one, who came to New York a few years ago without a dime, a reference, or a word of English, and is now studying electrical engineering at the same university I got my own degree from. *Obrigado, meu genro.*

Writing *Variable Star* has involved more work, more pressure, more fear, and above all, more sheer fun than all my other books put together. I hope it will be given to me to write another thirty-three, but I doubt any of them will come close to this.

Every time I've ever sat down to write anything, I've had Robert looking over my shoulder, of course, because he is my first template for How This Thing Should Be Done. But this time around, I felt his presence far more powerfully than ever before. In general it had a calming effect.

Only twice did it actually get spooky.

The first time, I frightened my wife badly when she discovered me heading out to my office *with the vacuum cleaner.* She was vastly relieved to learn I was not going insane, but merely being haunted: in fact, she roared with laughter when I finally admitted that Robert had stubbornly insisted he was *not* going to work in that goddamn pigsty until I mucked the place out.

The second time, it was *me* who got the willies. A friend had sent me the URL for a particularly thrilling NASA Quicktime movie: a full 360-degree true-color view of the surface of Mars from Sojourner. (Google it for yourself.) I was mousing my way around in a circle in wild exhilaration, like a drunken dervish, intoxicated by what I was doing, thinking to myself how thrilled Robert would have been to see this. *Check it out, Robert!* I cried in my mind. *A robot on the Red Planet, named after Miss Sojourner* Truth! *I'm sitting at my desk, using my mouse to pan around* Mars, *can you believe this?*

Just then, I moused past a series of surface irregularities just odd enough to catch my eye: a string of roughly spherical depressions in the coppery sand, separated by intervals of about the same distance. I wondered idly what they were.

At that moment, I heard a voice—an actual, physically audible voice—the well-remembered, unmistakable Missouri voice of Robert Heinlein—say, I swear to you, these two words: "Willis tracks."

Well, those bumps in the sand *did* indeed look just like the tracks that might be left by a Martian bouncer such as Willis, the star of Robert's classic juvenile novel *Red Planet,* now that I thought about it. But I *hadn't* been thinking about it. The hair stood up on the back of my neck, and I nearly crushed my mouse. If you'll pardon the expression.

That is my only actual ghost story, I'm happy to say. And I admit I was not cold sober that night. Nonetheless, I report that from start to finish, writing *Variable Star* has left me feeling Robert's presence and spirit far more strongly than I had since he caught a starship for parts unknown back in 1988.

I sincerely hope it has done the same for you.

—Bowen Island, B.C. 24 November 2005

Non-Fiction

WHY I SELECTED THE GREEN HILLS OF EARTH

For my taste, science fiction stories should not be about gadgets, but should be about people responding to problems created by gadgets —that is to say, responding to new environment created by advances in science.

This story is about 98% Rhysling, the blinded space bum, and about 2% gadgetry. Furthermore, it is concerned with some of my own strongly personal, emotional feelings about space travel. For such reasons it remains my own favorite of my stories.

The idea kicked around in my mind for five years, worrying me—but, being sighted myself, I had trouble with the characterization of a sightless man. During the War I met a young man who had been sightless from early childhood. He was operating powered machinery in an aircraft factory. Late in the War he was given the job of helping blinded veterans to reorient. In many cases their morale was gone—but a single day in the shop with this man was enough to change their attitudes completely. It was amazing—and enough to tear your heart out.

This story is dedicated to that gallant young gentleman and the veterans he worked with.

The phrase THE GREEN HILLS OF EARTH is from a story by C. L. Moore, the talented Mrs. Henry Kuttner. It is used by her gracious permission.

ROBERT A. HEINLEIN

SHOOTING DESTINATION MOON

“Why don’t they make more science fiction movies?”

The answer to any question starting, “Why don’t they—” is almost always, “Money.”

I arrived in Hollywood with no knowledge of motion picture production or costs, no experience in writing screen plays, nothing but a yen to write the first Hollywood picture about the first trip to the Moon. Lou Schor, an agent who is also a science fiction enthusiast, introduced me to a screen writer, Alford van Ronkel; between us we turned out a screen play from one of my space travel stories.

So we were in business—

Uh, not quite. The greatest single production problem is to find someone willing to risk the money. People who have spare millions of dollars do not acquire them by playing angel to science fiction writers with wild ideas.

We were fortunate in meeting George Pal of George Pal

Productions, who became infected with the same madness. So we had a producer—*now* we were in business.

Still not quite— Producers and financiers are not the same thing. It was nearly a year from the writing of the screen play until George Pal informed us that he had managed to convince an angel. (How? Hypnosis? Drugs? I'll never know. If I had a million dollars, I would sit on it and shoot the first six science fiction writers who came my way with screen plays.)

Despite those huge Hollywood salaries, money is as hard to get in Hollywood as anywhere. The money men in Hollywood write large checks only when competition leaves them no alternative; they prefer to write small checks, or no checks at all. Even though past the big hurdle of getting the picture financed, money trouble remains with one throughout production; if a solution to a special-effects problem costs thirty thousand dollars but the budget says five thousand dollars, then you have got to think of an equally good five thousand dollar solution—and that's all there is to it.

I mention this because there came a steady stream of non-motion-picture folk who were under the impression that thousand-dollar-a-week salaries were waiting for them in a science fiction picture. The budget said, "No!"

The second biggest hurdle to producing an accurate and convincing science fiction picture is the "Hollywood" frame of mind—in this case, people in authority who either don't know or don't care about scientific correctness and plausibility. Ignorance can be coped with; when a man asks "What does a rocket have to push against, out there in space?" it is possible to explain. On the other hand, if his approach is, "Nobody has ever been to the Moon; the audiences won't know the difference," it is impossible to explain anything to him; he does not know and does not want to know.

We had plenty of both sorts of trouble.

That the picture did not end up as a piece of fantasy, having only a comic-book relation to real science fiction1 can be attributed almost entirely to the integrity and good taste of Irving Pichel, the director. Mr. Pichel is not a scientist, but he is intelligent and honest. He believed what Mr. Bonestell and I told him and saw to it that what went on the screen was as accurate as budget and ingenuity would permit.

By the time the picture was being shot the entire company—actors, grips, cameramen, office people— became imbued with enthusiasm for producing a picture which would be scientifically acceptable as well as a box office success. Willy Ley's *Rockets and Space Travel* was read by dozens of people in the company. Bonestell and Ley's *Conquest* *of Space* was published about then and enjoyed a brisk sale among us. Waits between takes were filled by discussions of theory and future prospects of interplanetary travel.

As shooting progressed we began to be deluged with visitors of technical background—guided missiles men, astronomers, rocket engineers, aircraft engineers. The company, seeing that their work was being taken seriously by technical specialists, took pride in turning out an authentic job. There were no more remarks of "What difference does it make?"

Which brings us to the third hurdle—the *technical* difficulties of filming a spaceship picture.

The best way to photograph space flight convincingly would be to raise a few hundred million dollars, get together a scientific and engineering staff of the caliber used to make the A-bomb, take over the facilities of General Electric, White Sands, and Douglas Aircraft, and *build* a spaceship.

Then go along and photograph what happens.

We had to use the second-best method—which meant that every shot, save for a few before takeoff from Earth, had to involve special effects, trick photography, unheard-of lighting problems. All this is expensive and causes business managers to grow stomach ulcers. In the ordinary motion picture there may be a scene or two with special effects; this picture had to be *all* special effects, most of them never before tried.

If you have not yet seen the picture, I suggest that you do not read further until after you have seen it; in this case it is more fun to be fooled. Then, if you want to look for special effects, you can go back and see the picture again. (Adv.)

The Moon is airless, subject only to one-sixth gravity, bathed in undiluted sunlight, covered with black sky through which shine brilliant stars, undimmed by cloud or smog. It is a place of magnificent distances and towering mountains.

A sound stage is usually about thirty feet high, and perhaps a hundred and fifty feet long. Gravity is Earth normal. It is filled with cigarette smoke, arc light fog, and dust—not to mention more than a hundred technicians.

Problem: to photograph *in a sound stage* men making a rocket landing on the Moon, exploring its endless vistas, moving and jumping under its light gravity. Do this in Technicolor, which adds a sheaf of new problems, not the least of which is the effect of extra hot lights on men wearing spacesuits.

The quick answer is that it can't be done.

A second answer is to go on location, pick a likely stretch of desert, remove by hand all trace of vegetation, and shoot the “real” thing. Wait a minute; how about that black and star-studded sky? Fake it—use special effects. Sorry; once blue sky is on Technicolor emulsion it is there to stay. With black-and-white there are ways, but not with color.

So we are back on the sound stage and we *have* to shoot it there. Vacuum clear atmosphere? No smoking—hard to enforce—high speed on all blowers, be resigned to throwing away some footage, and leave the big doors open—which lets in noise and ruins the sound track. Very well, we must dub in the sound—and up go the costs—but the air *must* be clear.

Low gravity and tremendous leaps—piano wire, of course—but did you ever try to wire a man who is wearing a spacesuit? The wires have to get inside that suit at several points, producing the effect a nail has on a tire, i.e., a man wearing a pressurized suit cannot be suspended on wires. So inflation of suits must be replaced by padding; at least during wired shots. But a padded suit does not wrinkle the same way a pressurized suit does and the difference shows. Furthermore, the zippered openings for the wires can be seen. Still worse, if inflation is to be faked with padding, how are we to show them putting on their suits?

That sobbing in the background comes from the technical adviser—yours truly—who had hoped not only to have authentic pressure suits but had expected to be able to cool the actors under the lights by the expansion of gas from their air bottles. Now they must wear lamb’s wool padding and will have no self-contained source of breathing air, a situation roughly equivalent to doing heavy work at noon in desert summer, in a fur coat while wearing a bucket over your head. Actors are a hardy breed. They did it.

To get around the shortcomings of padded suits we worked in an “establishing scene” in which the suits were shown to be of two parts, an outer chafing suit and an inner pressure suit. This makes sense; deepsea divers often use chafing suits over their pressure suits, particularly when working around coral. The relationship is that of an automobile tire carcass to the inner tube. The outer part takes the beating and the inner part holds the pressure. It is good engineering and we present this new wrinkle in spacesuits without apology. The first men actually to walk the rugged floor of the Moon and to climb its sharp peaks, will, if they are wise, use the same device.

So we padded for wire tricks and used air pressure at other times. Try to see when and where we switched. I could not tell—and I saw the scenes being shot.

Now for that lunar landscape which has to be compressed into a sound stage—I had selected the crater Aristarchus. Chesley Bonestell did not like Aristarchus; it did not have the shape he wanted, nor the height of Crater wall, nor the distance to apparent horizon. Mr. Bonestell knows more about the surface appearance of the Moon than any other living man; he searched around and found one he liked—the crater Harpalus, in high northern latitude, facing the Earth. High latitude was necessary so that the Earth would appear down near the horizon where the camera could see it and still pick up some lunar landscape; northern latitude was preferred so that Earth would appear in the conventional and recognizable schoolroom-globe attitude.

Having selected it, Mr. Bonestell made a model of it on his dining room table, using beaverboard, plasticine, tissue paper, paint, anything at hand. He then made a pinhole photograph from its center — Wait; let's list the stages:

1. A Mount Wilson observatory photograph.
2. Bonestell's tabletop model.
3. A pinhole panorama.
4. A large blowup.
5. A Bonestell oil painting, in his exact detail, about twenty feet long and two feet high, in perspective as seen from the exit of the rocket, one hundred fifteen feet above the lunar surface.
6. A blown up photograph, about three feet high, of this painting.
7. A scenic painting, about four feet high, based on this photograph and matching the Bonestell colors, but with the perspective geometrically changed to bring the observer down to the lunar floor.
8. A scenic backing, twenty feet high, to go all around a sound stage, based on the one above, but with the perspective distorted to allow for the fact that sound stages are oblong.
9. A floor for the sound stage, curved up to bring the foreground of the scene into correct perspective with the backing.
10. A second back drop of black velvet and "stars."

The result you see on the cover of this issue. It looks like a Bonestell painting because it *is* a Bonestell painting—in the same sense that a Michelangelo mural is still the work of the master even though a dozen of the master's pupils may have wielded the brushes.

Every item went through similar stages. I was amazed at the thoroughness of preliminary study made by the art department—Ernst Fegte and Jerry Pycha—before any item was built to be photographed. Take the control room of the spaceship. This compartment was shaped like the frustrum of a cone and was located near the nose of spaceship *Luna*. It contained four acceleration couches, instruments and controls of many sorts, an airplane pilot's seat with controls for landing on

Earth, radar screens, portholes, and a hatch to the air lock—an incredibly crowded and complicated set. (To the motion picture business this was merely a “set,” a place where actors would be photographed while speaking lines.)

To add to the complications the actors would sometimes read their lines while hanging upside down in midair in this set, or walking up one of its vertical walls. Add that the space was completely enclosed, about as small as an elevator cage, and had to contain a Technicolor sound camera housed in its huge soundproof box—called a “blimp,” heaven knows why.

I made some rough sketches. Chesley Bonestell translated these into smooth drawings, adding in his own extensive knowledge of spaceships. The miniature shop made a model which was studied by the director, the art director, and the cameraman, who promptly tore it to bits. It wouldn’t do at all; the action could not be photographed, could not even be seen, save by an Arcturian Bug-Eyed Monster with eyes arranged around a spherical 3600.

So the miniature shop made another model, to suit photographic requirements.

So I tore that one apart. I swore that I wouldn’t be found dead around a so-called spaceship control room arranged in any such fashion; what were we making? A comic strip?

So the miniature shop made a third model.

And a fourth.

Finally we all were satisfied. The result, as you see it on the screen, is a control room which might very well be used as a pattern for the ship which will actually make the trip some day, provided the ship is intended for a four-man crew. It is a proper piece of economical functional design, which could do what it is meant to do.

But it has the unique virtue that it can be photographed as a motion picture set.

A writer—a fiction writer, I mean; not a screen writer—is never bothered by such considerations. He can play a dramatic scene inside a barrel quite as well as in Grand Central Station. His mind’s eye looks in any direction, at any distance, with no transition troubles and no jerkiness. He can explain anything which is not clear. But in motion pictures the camera has got to see what is going on and must see it in such a fashion that the audience is not even aware of the camera, or the illusion is lost. The camera must see all that it needs to see to achieve a single emotional effect from a single angle, without bobbing back and forth, or indulging in awkward, ill-timed cuts. This problem is always present in motion picture photography; it was simply exceptionally acute in the control room scenes. To solve it all was a real *tour de force*; the director of photography, Lionel Linden, aged several years before we got out of that electronic Iron Maiden.

In addition to arranging the interior for camera angles it was necessary to get the camera to the selected angles—in this enclosed space. To accomplish this, every panel in the control room was made removable— "wild," they call it—so that the camera could stick in its snout and so that lights could be rigged. Top and bottom and all its sides—it came apart like a piece of Meccano. This meant building of steel instead of the cheap beaverboard-and-wood frauds usually photographed in Hollywood. The control room was actually stronger and heavier than a real spaceship control room would be. Up went the costs again.

Even with the set entirely "wild" it took much, much longer to shift from one angle to another angle than it does on a normal movie set, as those panels had to be bolted and unbolted, heavy lights had to be rigged and unrigged—and the costs go sky high. You can figure overhead in a sound stage at about a thousand dollars an hour, so, when in the movie you see the pilot turn his head and speak to someone, then glance down at his instruments, whereupon the camera also glances down to let you see what he is talking about, remember how much time and planning and money it took to let you glance at the instrument board. This will help to show why motion picture theaters sell popcorn to break even—and why science fiction pictures are not made every day. Realism is confoundedly expensive.

Nor did the costs and the headaches with the control room stop there. As every reader of *Astounding* knows, when a rocket ship is not blasting, everything in it floats free—"free fall." Men float around—which meant piano wires inside that claustrophobic little closet. It was necessary at one point to show a man floating out from his acceleration couch and into the center of the room.

Very well; unbolt a panel to let in the wires. Wups! While a spaceship in space has no "up" or "down," sound stage three on Las Palmas Avenue in Hollywood certainly does have; supporting wires must run vertically—see Isaac Newton. To float the man out of the tight little space he was in would require the wires to turn a corner. Now we needed a Hindu fakir capable of the Indian rope trick.

The special effects man, Lee Zavitz, has been doing impossible tricks for years. He turned the entire set, tons of steel, on its side and pulled the actor out in what would normally be a horizontal direction. Easy!

So easy that the art department had to design, double gimbals capable of housing the entire set, engineer it, have it built of structural steel, have it assembled inside a sound stage since it was too big to go through the truck doors. Machinery had to be designed and installed to turn the unwieldy thing. Nothing like it had ever been seen in Hollywood, but it did enable a man to float out from a confined space and, later, to walk all around the sides of the control room with "magnetic" boots.

This double gimbals rig, three stories high, put-the control room set high in the air, so the carpenters had to build platforms around it and the camera had to be mounted on a giant boom—one so huge, so fancy, and so expensive that Cecil B. de Mule came over to inspect it. The camera itself had to be mounted in gimbals before it was placed on the boom, so that it might turn with the set—or the other way, for some special effects. This meant removing its soundproof blimp, which meant dubbing the sound track.

("Who cares? It's only money." Don't say that in the presence of the business manager, he's not feeling well.)

This was not the end of the control room tricks. Some of the dodges were obvious, such as making dial needles go around, lights blink on and off, television and radar screens light up—obvious, but tedious and sometimes difficult. Producing the effect of a ship blasting off at six gravities requires something more than sound track of a rocket blast, as the men each weigh over a thousand pounds during blast. Lee Zavitz and his crew built large inflated bladders into each acceleration couch. Whenever the jet was "fired" these blaaders would be suddenly deflated and the actors would be "crushed" down into their cushions.

A thousand pounds weight compresses the man as well as his mattress, which will show, of course, in his features. The makeup man fitted each actor with a thin membrane, glued to his face, to which a yoke could be rigged back of his neck. From the yoke a lever sequence reaching out of the scene permitted the man's features to be drawn back by the "terrible" acceleration. Part of what you see is acting by some fine actors, Dick Wesson, Warner AndersOn, Tom Powers, John Archer, part was a Rube Goldberg trick.

The air suddenly escaping from the bladders produced a sound like that of a mournful cow, thus requiring more dubbing of sound track. The air had to be returned to the bladders with equal suddenness when the jet cut off, which required a compressed air system more complicated than that used by a service station.

The sets abounded in compressed air and hydraulic and electrical systems to make various gadgets work— to cycle the air lock doors, to rig out the exit ladder, to make the instrument board work—all designed by Zavitz. Lee Zavitz is the man who "burned Atlanta" in Gone With The Wind, forty acres of real fire, hundreds of actors and not a man hurt. I saw him stumped just once in this film, through no fault of his. He was controlling an explosion following a rocket crash. It was being done full size, out on the Mojave Desert, and the camera angle stretched over miles of real desert. From a jeep back of the camera Zavitz was cuing the special effects by radio. In the middle of the explosions the radio decided to blow a tube—and the action stopped, ruining an afternoon's work. We had to come back and do it over the next day, after a sleepless night of rebuilding by the special effects crew. Such things are why making motion pictures produces stomach ulcers but not boredom.

The greatest single difficulty we encountered in trying to fake realistically the conditions of space flight was in producing the brilliant starry sky of empty space. In the first place nobody knows what stars look like out in space; it is not even known for sure whether twinkling takes place in the eye or in the atmosphere. There is plausible theory each way. In the second place the eye is incredibly more sensitive than is Technicolor film; the lights had to be brighter than stars to be picked up at all. In the third place, film, whether used at Palomar or in a Technicolor camera, reports a point light source as a circle of light, with diameter dependent on intensity. On that score alone we were whipped as to complete realism; there is no way to avoid the peculiarities inherent in an artificial optical system.

We fiddled around with several dodges and finally settled on automobile headlight bulbs. They can be burned white, if you don't mind burning out a few bulbs; they come in various brightnesses; and they give as near a point source of light as the emulsions can record—more so, in fact. We used nearly two thousand of them, strung on seventy thousand feet of wire.

But we got a red halation around the white lights. This resulted from the fact that Technicolor uses three films for the three primary colors. Two of them are back to back at the focal plane, but the red-sensitive emulsion is a gnat's whisker away, by one emulsion thickness. It had me stumped, but not the head gaffer. He covered each light with a green gelatin screen, a "gel," and the red halation was gone, leaving a satisfactory white light.

The gels melted down oftener than the bulbs burned out; we had to replace them each day at lunch hour and at "wrap up."

There was another acute problem of lighting on the lunar set. As we all know, sunlight on the Moon is the harshest of plastic light, of great intensity and all from one direction. There is no blue sky overhead to diffuse the light and fill the shadows. We needed a sound-stage light which would be as intense as that sunlight—a single light.

No such light has ever been developed.

During the war, I had a research project which called for the duplication of sunlight; I can state authoritatively that sunlight has not yet been duplicated. An arc light, screened by Pyrex, is the closest thing to it yet known— but the movies already use arc lights in great numbers, and the largest arc light bulb, the “brute,” is not nearly strong enough to light an entire sound stage with sunlight intensity— raw sunlight, beating down on the lunar set would have been equivalent to more than fifteen hundred horse power. There are no such arc lights.

We traced down several rumors of extremely intense lights. In each case we found either that the light was not sufficiently intense for an entire sound stage, or it was monochromatic—worse than useless for Technicolor.

We got around it by using great banks of brutes, all oriented the same way and screened to produce approximate parallelism. Even with the rafters loaded with the big lights almost past the safety point, it was necessary to use some cross lighting to fill gaps. The surface of the Moon had some degree of “fill” in the shadows by reflection from cliff walls and the ground; it is probable that we were forced to fill too much. We used the best that contemporary engineering provides—and next time will gladly use an atomic-powered simulation of the Sun’s atomic-powered light.

The simulation of raw sunlight was better in the scenes involving men in spacesuits outside the ship in space, as it was not necessary to illuminate an entire sound stage but only two or three human figures; a bank of brutes sufficed and no fill was needed, nor wanted, since there was no surrounding landscape to fill by reflection.

The effect was rather ghostly; the men were lighted as is the Moon in half phase, brilliantly on one side, totally unlighted and indistinguishable from the black sky itself on the other side.

This scene in which men are outside the ship in space involved another special effect—the use of a compressed oxygen bottle as a makeshift rocket motor to rescue a man who has floated free of the ship. The energy stored by compressing gas in a large steel bottle is quite sufficient for the purpose. I checked theory by experiment; opening the valve wide on such a charged bottle gave me a firm shove. The method is the same as that used to propel a toy boat with a CO2 cartridge from a fizz water bottle—the basic rocket principle.

We had considered using a shotgun, since everyone is familiar with its kick, but we couldn’t think of an excuse for taking a shotgun to the Moon. Then we considered using a Very pistol, which has a strong kick and which might well be taken to the Moon for signaling. But it did not look convincing and it involved great fire hazard in a sound stage. So we settled on the oxygen bottle, which looked impressive, would work, and would certainly be available in a spaceship.

However, since we were still on Las Palmas Avenue and not in space, it had to be a wire trick, with four men on wires, not to mention the oxygen bottle and several safety lines. That adds up to about thirty-six wires for the heavy objects and dozens of black threads for the safety lines—and all this spaghetti must not show. Each man had to have several "puppeteers" to handle him, by means of heavy welded pipe frames not unlike the cradles used by Tony Sarg for his marionettes, but strong enough for men, not dolls. These in turn had to be handled by block and tackle and overhead traveling cranes. Underneath all was a safety net just to reassure the actors and to keep Lee Zavitz from worrying; our safety factor on each rig was actually in excess of forty, as each wire had a breaking strength of eight hundred pounds. To top it off each man had to wear a cumbersome, welded iron, articulated harness under his spacesuit for attachment of wires. This was about as heavy and uncomfortable as medieval armor.

The setups seemed to take forever. Actors would have to be up in the air on wires for as long as two hours just to shoot a few seconds of film. For ease in handling, the "oxygen bottle" was built of balsa wood and embedded in it was a small CO2 bottle of the fire extinguisher type. This produced another headache, as, after a few seconds of use, it would begin to produce carbon dioxide "snow," which fell straight down and ruined the illusion.

But the wires were our real headache. One member of the special effects crew did nothing all day long but trot around with a thirty-foot pole with a paint-soaked sponge on the end, trying to kill highlights on the wires. Usually he was successful, but we would never know until we saw it on the screen in the daily rushes. When he was not successful, we had to go back and do the whole tedious job over again.

Most of creating the illusion of space travel lay not in such major efforts, but in constant attention to minor details. For example, the crew members are entering the air lock to go outside the ship in free fall. They are wearing "magnetic" boots, so we don't have to wire them at this point. Everything in the airlock is bolted down, so there is nothing to spoil the illusion of no up-and-down. Very well—"Quiet, everybody! Roll 'em!"

"Speed!" answers the sound man.

"Action!"

The actors go to the lockers in which their spacesuits are kept, open them—and the suits are hanging straight down, which puts us back on Las Palmas Avenue! “Hold it! Kill it! Where is Lee Zavitz?”

So the suits are hastily looped up with black thread into a satisfactory “floating” appearance, and we start over.

Such details are ordinarily the business of the script girl who can always be depended on to see to it that a burning cigarette laid down on Monday the third will be exactly the same length when it is picked up on Wednesday the nineteenth. But it is too much to expect a script girl to be a space flight expert. However, by the end of the picture, our script clerk, Cora Palmatier, could pick flaws in the most carefully constructed space yarn. In fact, everybody got into the act and many flaws were corrected not because I spotted them but through the alertness and helpfulness of others of the hundred-odd persons it takes to shoot a scene. Realism is compounded of minor details, most of them easy to handle if noticed. For example, we used a very simple dodge to simulate a Geiger counter—we used a real one.

A mass of background work went into the flight of the spaceship Luna which appears only indirectly on the screen. Save for the atomic-powered jet, a point which had to be assumed, the rest of the ship and its flight were planned as if the trip actually were to have been made. The mass ratio was correct for the assumed thrust and for what the ship was expected to do. The jet speed was consistent with the mass ratio. The trajectory times and distances were all carefully-plotted, so that it was possible to refer to charts and tell just what angle the Earth or the Moon would subtend to the camera at any given instant in the story. This was based on a precise orbit—calculated, not by me, but by your old friend, Dr. Robert S. Richardson of Mount Wilson and Palomar Mountain.

None of these calculations appears on the screen but the results do. The Luna took off from Lucerne Valley in California on June 20th at ten minutes to four, zone eight time, with a half Moon overhead and the Sun just below the eastern horizon. It blasted for three minutes and fifty seconds and cut off at an altitude of eight hundred seven miles, at escape speed in a forty-six-hour-orbit. Few of these data are given the audience—but what the audience sees out the ports is consistent with the above. The time at which they pass the speed of sound, the time at which they burst up into sunlight, the Bonestell backdrops of Los Angeles County and of the western part of the United States, all these things match up. Later, in the approach to the Moon, the same care was used.

Since despite all wishful thinking we are still back on Las Pahmas Avenue, much of the effect of taking off from Earth, hurtling through space and landing on the Moon had to be done in miniature. George Pal was known for his “Puppetoons” before he started producing feature pictures; his staff is unquestionably the most skilled in the world in producing three-dimensional animation. John Abbott, director of animation, ate, slept, and dreamed the Moon for months to accomplish the few bits of animation necessary to the gaps in the live action. Abbott's work is successful only when it isn't noticed. I'll warrant that you won't notice it, save by logical deduction, i.e., since no one has been to the Moon as yet, the shots showing the approach for landing on the Moon must be animation—and they are. Again, in the early part of the picture you will see the Luna in Lucerne Valley of the Mojave Desert. You know that the ship is full size for you see men-climbing around it, working on it, getting in the elevator of the Gantry crane and entering it—and it is full size; we trucked it in pieces to the desert and set it up there. Then you will see the Gantry crane pull away and the Luna blasts off for space.

That can't be full size; no one has ever done it.

Try to find the transition point. Even money says you pick a point either too late or too soon.

The Luna herself is one hundred fifty feet tall; the table top model of her and the miniature Gantry crane are watchmaker's dreams. The miniature floodlights mounted on the crane are the size of my little fingertip— and they work. Such animation is done by infinite patience and skill. Twenty-four separate planned and scaled setups are required for each second of animation on the screen. Five minutes of animation took longer to photograph than the eighty minutes of live action.

At one point it seemed that all this planning and effort would come to nothing; the powers-that-be decided that the story was too cold and called in a musical comedy writer to liven it up with—*sssh*!—sex. For a time we had a version of the script which included dude ranches, cowboys, guitars and hillbilly songs on the Moon, a trio of female hepsters singing into a mike, interiors of cocktail lounges, and more of the like, combined with pseudoscientific gimmicks which would have puzzled even Flash Gordon.

It was never shot. That was the wildest detour on the road to the Moon; the fact that the *Luna* got back into orbit can be attributed to the calm insistence of Irving Pichel. But it gives one a chilling notion of what we may expect from time to time.

Somehow, the day came when the last scene had shot and, despite Hollywood detours, we had made a motion picture of the first trip to the Moon. Irving Pichel said, "Print it!" for the last time, and we adjourned to celebrate at a bar the producer had set up in one end of the stage. I tried to assess my personal account sheet—it had cost me eighteen months' work, my peace of mind, and almost all of my remaining hair.

Nevertheless, when I saw the "rough cut" of the picture, it seemed to have been worth it.

Preface

"It does not pay a prophet to be too specific."
-L. SPRAGUE DE CAMP

The stories in this and later volumes of this series were not written as prophecy, nor as history. The author would be much surprised if any one of them turned out to be close enough to future events to be classified as successful prophecy.

They are of the "What-would-happen-if—" sort, in which the "if", the basic postulate of each story, is some possible change in human environment latent in our present day technology or culture. Sometimes the possibility is quite remote, as in "LifeLine"; sometimes the postulated possibility is almost a certainty, as in the series concerned with interplanetary flight.

The pseudohistory of the immediate future outlined in the chart you will find in this volume makes it appear that I was seriously attempting prophecy. The appearance is illusory; the chart was worked up, a bit at a time, to keep me from stumbling as I added new stories. It was originally a large wall chart in my study, to which I added pencilled notes from time to time. This was an idea I had gotten from Mr. Sinclair Lewis, who is alleged to maintain charts, files, notes and even very detailed maps of his fictional state of Winnemac and its leading city, Zenith. Mr. Lewis has managed to make Zenith and its citizens more real to more people than any real midwestern city of comparable size. I figured that a technique which was good for Mr. Lewis would certainly be good for me; I swiped the idea. I am glad to be able to acknowledge publicly my debt.

In 1940 I showed the chart to John W. Campbell, Jr.; he insisted on publishing it. From then on I was stuck with it; it became increasingly difficult to avoid fitting a story into the chart. I was forced to invent several pen names for use when I had a story in mind which was entirely incompatible, with the assumed "history". By now I hardly need the chart; the fictional future history embodied in it is at least as real to me as Plymouth Rock.

This series was started ten years ago; this past decade has been as revolutionary in technology as the century which preceded it. Increasingly each year the wild predictions of sciencefiction writers are made tame by the daily papers. In my chart you will find "booster guns" assigned to one hundred years in the future—but the Germans designed such guns during World War II. The chart gives 1978 as the date of the first rocket to the Moon; I will give anyone odds that 1978 is the wrong date, but I will *not* bet that it will not be sooner.

"Blowups Happen" is a case in point. This story was written a few months after the first word of fission of uranium reached this country, long before the Manhattan (atom bomb) Project was set up. During the few months between writing and first printing, the story went in and out of dale five times, so rapidly did atomics march. It has now been revised in a few details to bring it in line with present knowledge; it will undoubtedly go out of date in its details soon. But of this we may be sure: the basic idea of the story will never go out of date, for atomic power in many of its aspects will continue to be fantastically dangerous both individually and socially-and men will continue to work with it despite all danger.

Details change; the drama continues. Technology races ahead while people remain stubbornly the same. Recently I counted fourteen different sorts of astrology magazines on one news stand-but not one magazine on astronomy. There were only three hundred years from Plymouth Rock to atomic power; there are still more outhouses than flush toilets in the United States, the land of inside plumbing. And the radio will not have changed much on the day when men first walk the silent face of the Moon.

The anomalies of the Power Age are more curious than its wonders.

But it is a great and wonderful age, the most wonderful this giddy planet has yet seen. It is sometimes comic, too often tragic, and always wonderful. Our wildest dreams of the future will be surpassed by what lies in front of us. Come bad, come good, I want to take part in the show as long as possible.

ROBERT A. HEINLEIN

Colorado Springs, Colo.

PREFACE

The first sciencefiction anthology merited a reader's examination as something new; the nineteenth (or fiftieth; the number changes rapidly) cannot plead that justification and needs a reason for being other than the well-known hunger of writers, editors, and publishers.

The purpose of this book is to give you pleasure.

The stories have been selected to entertain, and within the very broad category of "speculative fiction," no other criterion has been used. Our intention has been to bring together good stories, ones which give pleasure on rereading and which have not previously been available in book form. These stories may possibly instruct, mystify, elevate, or inspire; if so, consider such to be bonuses not covered by the purchase price; our single motive is to entertain you.

Science fiction has only recently become popular and is not yet fully respectable. Until the end of World War II it was, in the opinion of most critics, by definition "trash" and so convicted without a hearing. The scientific marvels of World War II—radar, atom bombs, giant rockets—and the rather spectacular success of sciencefiction writers in predicting these things combined to cause a widespread postwar interest in speculative fiction, stories about the future, which in time forced the professional critics to notice this stepchild of literature.

And yet one may pause to wonder why the stepchild was so completely ignored before the war. Quite aside from the pulp specialty magazines, many worthwhile, deeply thoughtful novels of this genre were available to the critics before World War II, for example, S. Fowler Wright's monumental The World Below, or Olaf Stapledon's philosophical novels of the future of our race. And many of the standard literary lions had ventured at least one science fiction novel. Why should so much of J. B. Priestley's reputation rest on Angel Pavement while The Doomsday Men is almost unheard of? Why was there a rage for The Green Hat while Michael Arlen's Man's Mortality made hardly a ripple? The four authors cited cannot possibly be accused of being semiliterate hacks suited only to publication on pulpwood paper and catering to that portion of the public which moves its lips while reading. Why were their serious works in speculative fiction ignored?

I'll chance a guess. The story about the future never has fitted comfortably into the implicitly defined limits of serious literature. In the prose field, "literature" in the stuffy and respectable sense usually meant either the historical novel or certain rather pedestrian types of the contemporary novel. One gathers the impression that it helps for the author to be dead or to have had the good judgment to write his story first in a language less well known than English, but these are not indispensable requirements. Rather ponderous length seems to be part of the unspoken definition, extensive research should be either self-evident or claimed, and dialogue is usually sparse and not too sprightly. A clearly stated regional scene is a help too, especially if it is back country. Such a novel the literary critic can take in his stride, read in one evening, and compose his review while shaving. It either does or does not come up to his standards and he knows why. Either way, it is an accepted type and a serious piece of work.

Science fiction does not fit into this frame; it's a much more exotic art. The critic may find himself shying away from this literary freak. He can judge quickly whether or not it is grammatical and readable, but what about the content? A man who has applied himself seriously to the field of English literature may not have had time to be well-read in geology, nuclear physics, rocket engineering, astrophysics, genetics, cosmogony, cybernetics, chemistry, biophysics, and electronics. Can he afford to recommend this item as a serious and worthwhile work? Does the author know what he is talking about—or is the rude fellow pulling one's leg? Perhaps his "science" is of the Sunday-supplement variety, in which case one would not wish to recommend it. But how is one to know?

The dilemma is quite real, for there are many stories around which bear the same close superficial resemblance to honest science fiction that a lead quarter does to a product of the Denver mint. The critic is hardly to be blamed if he chooses to pass up extravagant stories of the future in favor of the tried and true.

Science fiction is even less prepared to compete for attention in the most modern of the ultra-literary school. Sciencefiction heroes are almost always likable, rarely psychotic (the mad scientist has had his day), and they almost never fall in love with their sisters or their fathers' wives or mistresses. The writers of science fiction without exception favor clear, lucid, grammatical sentences; I do not guarantee against an occasional split infinitive, but they never write in a Joycean or neoFreudian mishmash. As you can see, the fiction of the future is much too old-fashioned to win even a passing nod from the avant-garde school critics. Perhaps it is just as well.

Let me add that the skilled practitioners (no other sort are represented in this volume) have learned not to lard their stories with obscure and polysyllabic technical terms and have learned how to define in context such few special terms as may be indispensable to following the story. They have even given up the long-cherished practice of assigning to natives of other planets names consisting mainly of throat-rasping gutturals. I must admit that sparsely dressed and exceedingly nubile young ladies still appear on the covers of some of the specialist magazines, but they are rarely to be found now in the stories inside those same magazines; their persistence on the covers is simply a part of the same phenomenon to be found in cigarette, automobile, and deodorant ads.

Literature or not, science fiction is here to stay; it will not be crowded out even by the new Plunging-Neckline school of the historical novel, nor by the four-letter-word school of the contemporary novel. Youths who build hotrods are not dismayed by spaceships; in their adult years they will build such ships. In the meantime they will read stories of interplanetary travel—and they are being joined by their entire families. The future rushes at us apace, faster than sound, approaching the speed of light; the healthy-minded are aware of our headlong plunge into a strange and different, possibly terrifying, future and see nothing improper in speculating about the shape of tomorrow.

Science fiction is sometimes miscalled "escape literature," a mistake arising from a profound misconception of its nature and caused by identifying it with fantasy. Science fiction and fantasy are as different as Karl Marx and Groucho Marx. Fantasy is constructed either by denying the real world in toto or at least by making a prime basis of the story one or more admittedly false premise—fairies, talking mules, trips through a looking glass, vampires, seacoast Bohemia, Mickey Mouse. But science fiction, no matter how fantastic its content may seem, always accepts all of the real world and the entire body of human knowledge about the real world as the framework for the fictional speculation. Since the field of human knowledge concerning the real world, its natural laws, events, and phenomena, is much too large for any one brain, every sciencefiction author is bound to make some slips, but here it is the intention that counts: the author's purpose is not to escape from reality but to explore seriously the complex and amazing manifold of possibilities which lie unrevealed in the future of our race—to explore them in the light of what we do know now.

If such is escape literature, then so is an insurance policy.

(There is only one story here, "I'm Scared," by Jack Finney, which could possibly be called "escape literature"—but it provides no escape for the reader. Better skip it.)

All of the stories herein are honest science fiction, but there is another type of story masquerading as science fiction which circulates like the lead quarters mentioned earlier. Call it "pseudoscientific fantasy." The writers thereof are either too ignorant or too careless to do the painstaking work required to produce honest speculation. Much of it gets printed, unfortunately, since all editors cannot be expected to be erudite in all fields of knowledge. Nor do you find it only in the pulp magazines with the pretty bare-skinned ladies and the bug-eyed monsters on the covers; it is as likely to pop up in the most respected slick-paper magazines or between the boards of dignified tradebook houses. Such stories may be rife with spaceships, ray guns, and mutant monsters, but they are marked by a crude disregard for established fact. However, knowledge of the world about us and of the scientific facts which describe its functioning is rather widespread these days; the effect of such barbarisms on the reader who does happen to know that the facts are being manhandled is much like that which would arise from the reading of a "historical" novel which asserted that Henry VIII was the son of Queen Elizabeth, or a war story in which the writer was under the impression that corporals were senior to master sergeants. It is to be hoped that, as the public increases in sophistication in these matters, such writers will find it necessary to go back to working for a living. In the meantime, such slips as you may find in this book are the honest mistakes of honest workmen; I think I can vouch that such errors as exist do not invalidate the stories in which they appear.

Science fiction is not fantasy, but it can certainly be fantastic—and be assured that the more fantastic it is, the more wild, the more extravagant it sounds, it is that much more likely to be a reasonably correct extrapolation of what our real future will be. Regard the difference between the 1900 horse-and-buggy and the 1950 faster-than-sound plane. Our fictional prophecies almost certainly err on the side of conservatism. In this book you will find stories of space travel (of course!), a gambol in the fourth dimension, telekinesis, robots, intelligent plants, strange nonhuman creatures from the other side of the galaxy, and invasions from Mars. The Wonderful Land of Oz has not more to offer—and none of it is fantasy.

Did I hear someone describe robots as fantasy? I myself find humanoid robots hard to believe in, but who am I to set my prejudices against the facts? I put it to you that a B-36 in flight is a fair example of a robot activated by a controlling human brain. I submit further that it is a longer step from the covered wagon to the B36 than it is from present cybernetic machines to Dr. Asimov's "positronic robots." But can a machine have consciousness, life, volition? We don't know, because we do not as yet know what any of those things are. Meanwhile, robotics is a legitimate field for speculation.

Time travel? We don't understand the nature of time; it is much too early to say that time travel is impossible. Telekinesis? Refer to the abstruse reports pouring out of Duke University and elsewhere, then resolve never again to bet on dice. The control of mass by the human mind is as factually established as yesterday's sunrise. (Tomorrow's sunrise is, of course, only a high probability.) For the impact that telekinesis may have on your grandchildren—or on you—see "The Barnhouse Effect" herewith. Space travel? Go down to White Sands, watch them throw one of the big ones away, and be convinced. Space travel is about to move from speculative fiction to contemporary fiction and news story, and some of us are a wee bit wistful about it. How can we dream up wonderful new Martians when the National Geographic starts running photographs of real ones?

One story is included here almost as a period piece—"Rainmaker."

When first published shortly after World War II this piece was science fiction; now the commercial trade of rainmaking has reached the point where lawsuits dealing with it clutter the courts. Technology has overtaken prophecy. But a good story is not ruined thereby; "Rainmaker" is still fun to read.

Besides, it is clinching demonstration of the vast difference between pseudoscientific fantasy and the real article. But it is the fact that "Rainmaker" was and remains a pleasure to read that controlled its inclusion here; we the editors are strongly convinced that sciencefiction pieces should be stories, warm and human, not thinly disguised engineering reports. On that note this essay will close in order that you may get on with the real purpose of this book, the reading of stories about people who might be your grandchildren, facing new problems in this wildly fantastic universe. Each story has been read and reread by each of five editors—and enjoyed each time; we expect that you will enjoy them too.

My thanks to the other four—Truman Talley, Judith Merril, Fred Pohl, and Walter Bradbury.

ROBERT A. HEINLEIN Colorado Springs

RAY GUNS AND ROCKET SHIPS

"When I make a word do a lot of work like that," said Humpty Dumpty, "I always pay it extra."

"Science Fiction" is a portmanteau term, and many and varied are the things that have been stuffed into it. Just as the term "historical fiction" includes in its broad scope *Quo Vadis,* nickel thrillers about the James Boys or Buffalo Bill, and *Forever Amber,* so does the tag "science fiction" apply both to Alley Oop and to Aldous Huxley's *After Many a Summer Dies the Swan.* It would be more nearly correctly descriptive to call the whole field "speculative fiction" and to limit the name "science fiction" to a sub-class—in which case some of the other sub-classes would be: undisguised fantasy (Thorne Smith, the Oz books), pseudoscientific fantasy (C. S. Lewis's fine novel *Out of the Silent Planet,* Buck Rogers, Bradbury's delightful Martian stories), sociological speculation (More's *Utopia,* Michael Arlen's *Man's Mortality,* H. G. Wells' *The World Set Free,* Plato's *Republic*), adventure stories with exotic and nonexistent locales (Flash Gordon, Burroughs' Martian stories, the *Odyssey, Tom Sawyer Abroad*). Many other classes will occur to you, since the term "speculative fiction" may be defined negatively as being fiction about things that have not happened.

One can see that the name "science fiction" is too Procrustean a bed, too tight a corset, to fit the whole field comfortably. Nevertheless, since language is how we talk, not how we might talk, it seems likely that the term "science fiction" will continue to be applied to the whole field; we are stuck with it, as the American aborigines are stuck with the preposterous name "Indian."

But what, under rational definition, is *science* fiction? There is an easy touchstone: science fiction is speculative fiction in which the author takes as his first postulate the real world as we know it, including all established facts and natural laws. The result can be extremely fantastic in content, but it is not fantasy; it is legitimate—and often very tightly reasoned—speculation about the possibilities of the real world. This category excludes rocket ships that make U-turns, serpent men of Neptune that lust after human maidens, and stories by authors who flunked their Boy Scout merit badge tests in descriptive astronomy.

But the category includes such mindstretchers as Olaf Stapledon's *Last and First Men,* William Sloane's *To Walk the Night,* Dr. Asimov's *The Stars, Like Dust,* even though these stories are stranger than most outright fantasies.

But how is one to distinguish between legitimate science fiction and ridiculous junk? Place of original publication is no guide; some of the best have appeared in halfcent-a-word pulp magazines, with bug-eyed monsters on their covers; some of the silliest have appeared in high-pay slicks or in the "prestige" quality group.

"The Pretzel Men of Pthark"—that one we can skip over; the contents are probably like the title. Almost as easy to spot is the Graustark school of space opera. This is the one in which the dashing Nordic hero comes to the aid of the rightful Martian princess and kicks out the villainous usurper through superscience and sheer grit. It is not being written very often these days, although it still achieves book publication occasionally, sometimes with old and respectable trade book houses. But it does not take a Ph.D. in physics to recognize it for what it is.

But do not be too quick to apply as a test to science fiction what are merely the conventions of better known fields of literature. I once heard a librarian say that she could not stand the unpronounceable names given by sciencefiction writers to extraterrestrials. Have a heart, friend! These strings of consonants are honest attempts to give unearthly names to unearthly creatures. As Shaw pointed out, the customs of our tribe are not laws of nature. You would not expect a Martian to be named "Smith." (Say—how about a story about a Martian named "Smith"? Ought to make a good short. Hmmmm—)

But are there reliable criteria by which science fiction can be judged by one who is not well acquainted with the field? In my opinion, there are. Simply the criteria which apply to all fields of fiction, no more, no less.

First of all, an item of science fiction should be a story, i.e., its entertainment value should be as high as that which you expect from other types of stories. It should be entertaining to almost anyone, whether he habitually reads the stuff or not. Second, the degree of literacy should be as high as that expected in other fields. I will not labor this point, since we are simply applying an old rule to a new field, but there is no more excuse here than elsewhere for split infinitives, dangling participles, and similar untidiness, or for obscurity and doubletalk.

The same may be said for plotting, characterization, motivation, and the rest. If a sciencefiction writer can't *write,* let him go back to being a fry cook or whatever he was doing before he gave up honest work.

I want to make separate mention of the author's evaluations. Granted that not all stories need be morally edifying, nevertheless I would demand of sciencefiction writers as much exercise of moral sense as I would of other writers. I have in mind one immensely popular series which does not hold my own interest very well because the protagonist seems to be guided only by expediency. Neither the writer nor his puppet seems to be aware of good and evil. For my taste this is a defect in any story, nor is the defect mitigated by the wonderful and gaudy trappings of science fiction. In my opinion, such abstractions as honor, loyalty, fortitude, self-sacrifice, bravery, honesty, and integrity will be as important in the far reaches of the Galaxy as they are in Iowa or Korea. I believe that you are entitled to apply your own evaluating standards to science fiction quite as rigorously as you apply them in other fiction.

The criteria outlined above take care of every aspect of science fiction but one—the *science* part. But even here no new criterion is needed. Suppose you were called on to purchase or to refuse to purchase a novel about a Mexican boy growing up on a Mexican cattle ranch; suppose that you knew no Spanish, had never been to Mexico and were unacquainted with its history and customs, and were unsure of the competence of the author. What would you do?

I suspect that you would farm out the decision to someone who was competent to judge the authenticity of the work. It might be a high school Spanish teacher, it might be a friend or neighbor who was well acquainted with our neighboring culture, it might be the local Mexican consul. If the expert told you that the background material of the book was nonsense, you would not give the book shelf room.

The same procedure applies to science fiction. No one can be expected to be expert in everything. If you do not happen to know what makes a rocket go when there is no air to push against, you need not necessarily read Willy Ley's *Rockets, Missiles, and Space Travel*—although it is a fine book, a "must" for every library, desirable for any home. You may instead consult anyone of your acquaintance who *does* know about rocket ships—say an Air Force or Artillery officer, a physics teacher, or almost any fourteen-year-old boy, especially boys who are active in high school science clubs. If the novel being judged concerns cybernetics, nuclear physics, genetics, chemistry, relativity, it is necessary only to enlist the appropriate helper.

You would do the same, would you not, with a novel based on the life of Simón Bolívar?

Of course, there is the alternate, equivalent method of testing the authenticity of any book by checking on the author. If the Simón Bolívar novel was written by a distinguished scholar of South American history, you need concern yourself only with the literary merit of the book. If a book about space travel is written by a world-famous astronomer (as in the case of the one who writes under the pen name of "Philip Latham"), you can put your mind at rest about the correctness of the science therein. In many cases sciencefiction writers have more than adequate professional background in the sciences they use as background material and their publishers are careful to let you know this through catalog and dustjacket blurb. I happen to be personally aware of and can vouch for the scientific training of Sprague de Camp, George O. Smith, "John Taine," John W. Campbell, Jr., "Philip Latham," Will Jenkins, Jack Williamson, Isaac Asimov, Arthur C. Clarke, E. E. Smith, Philip Wylie, Olaf Stapledon, H. G. Wells, Damon Knight, Harry Stine, and "J. J. Coupling." This listing refers to qualifications in science only and is necessarily incomplete, nor do I mean to slight the many fine writers without formal scientific training who are well read in science and most careful in their research.

But some means of checking on a writer of alleged science fiction is desirable. Most writers of historical fiction appear to go to quite a lot of trouble to get the facts of their historical scenes correct, but some people seem to feel that all that is necessary to write science fiction is an unashamed imagination and a sprinkling of words like "ray gun," "rocket tube," "mutant," and "space warp." In some cases the offense is as blatant as it would be in the case of an author of alleged historical fiction who founded a book on the premise that Simón Bolívar was a Chinese monk! It follows that, in order to spot these literary fakers it is necessary to know that Bolívar was not a Chinese monk—know something of the sciences yourself or enlist competent advisers.

Concerning Stories Never Written: Postscript

THIS aside is addressed primarily to you who have read the first two volumes of this series rather grandly titled "Future History." Volume One, *The Man Who Sold the Moon,* is laid from right now until the closing years of this century and ends with mankind's first faltering steps toward space. some of the stories are so close to the presenttime as already to be outdated by events—an occupational hazard I share with weather forecasters and fortune tellers. Volume Two, *The Green Hills of Earth,*** is concerned with the great days of exploration of the Solar System. All of the stories take place somewhere close around the year 2000 A.D. If you refer to the chart in the flyleaf of this volume, you will see that this second group of stories appears to cover about twenty-five years, but this appearance is a deceptive shortcoming of typography— printing the titles on the chart requires a certain minimum of space. Nor does the order matter materially—some of the stories overlap in time but concern different characters in differing scenes.

This present Volume Three starts about seventy-five years later than the end of the last story in Volume Two—and a great amount of "Future History" has taken place between the two volumes. *Green Hills* ended with the United States a leading power in a system wide imperialism embracing all the habitable planets. But the very first page of the first story in this book finds the United States plunged in a new Dark Ages no longer space minded, isolationist even with respect to this planet, and under a theocracy as absolute as that of Communism.

The effect on the reader could be a little like that which sometimes results from unskillful editing of magazine serials— the sort of thing in which one installment ends with the hero hanging by his heels over the snake pit while the sinister villain leers at him from above, only to have the next installment start with our hero walking up Fifth Avenue, debonair and undamaged.

I could plead the excuse that these stories were never meant to be a definitive history of the future (concerning which I know no more than you do), nor are they installments of a long serial (since each is intended to be entirely independent of all the others). They are just stories, meant to amuse and written to buy groceries.

*Shasta Publishers, Chicago, 1950; New American Library, 1951. * Shasta Publishers, Chicago, 1951; New American Library, 1952.*

Nevertheless, I think that you who are kind enough to buy this volume are entitled to more explanation as to the great hiatus between the second and the third volume. On the chart you will see three titles in parentheses between the last story in *Green Hills* and the first story in this book; these three stories, had they ever been written, would have covered the intervening three quarters of a century and might well have been an additional volume in this series.

The first of these unwritten stories, *The Sound of His Wings,* starts shortly before *Logic of Empire* and continues for several years beyond the ending of *Logic;* it would have recounted the early life, rise as a television evangelist, and subsequent political career of the Reverend Nehemiah Scudder, the "First Prophet," President of the United States and destroyer of its Constitution, founder of the Theocracy.

The second story, *Eclipse,* parallels somewhat both the American Revolution and the breakup of colonialism taking place on this planet today, for it is concerned with the colonies on Mars and on Venus becoming self-sufficient and politically mature and breaking away from Mother Earth, followed by almost complete cessation of interplanetary travel. *Logic of Empire* suggests some of the forces that led to the breakdown. Interplanetary travel will be tremendously expensive at first; if the home planet is no longer in a position to exploit the colonies, trade and communication might dwindle almost to zero for a long period—indeed the infant nations might pass "Non-Intercourse Acts."

The Stone Pillow was intended to fill the gap between the establishment of the Theocracy and its overthrow in the Second American Revolution. It was to have been concerned with the slow buildup of a counterrevolutionary underground. It gets its name from the martyrs of the underground, those who rested their heads on pillows of stone—in or out of prison. These revolutionaries would be in much the same nearly hopeless position that anti-Communists have found themselves in these thirty years past in the U.S.S.R., but the story would have concerned itself with the superiority of the knife to the atom bomb under some circumstances and with the inadvisability of swatting mosquitoes with an axe.

These three stories will probably never be written. In the case of *Eclipse* I have dealt with the themes involved at greater length in two novels which were not bound by the Procrustean Bed of a fictional chart; it would be tedious for both you and me to deal with the same themes again. As for the other two stories, they both have the disadvantage of being "down beat" stories; their outcomes are necessarily not pleasant. I am not opposed to tragedy and have written quite a bit of it, but today we can find more than enough of it in the headlines. I don't want to write tragedy just now and I doubt if you want to read it. Perhaps in another and sunnier year we will both feel differently. -

In any case, I feel that even Caruso, Cleopatra, or Santa Claus could overstay their welcomes; it may be that this pseudohistory has already taken more curtain calls than the applause justifies.

I am aware that the themes of the unwritten stories linking the second and this the third volume thus briefly stated above have not been elaborated sufficiently to lend conviction, particularly with reference to two notions; the idea that space travel, once apparently firmly established, could fall into disuse, and secondly the idea that the United States could lapse into a dictatorship of superstition. As for the first, consider the explorations of the Vikings a thousand years ago and the colonies they established in North America. Their labors were fruitless; Columbus and his successors had to do it all over again. Space travel in the near future is likely to be a marginal proposition at best, subsidized for military reasons. It could die out -then undergo a renascence through new techniques and through new economic and political pressures. I am not saying these things will happen, I do say they could happen.

As for the second notion, the idea that we could lose our freedom by succumbing to a wave of religious hysteria, I am sorry to say that I consider it possible. I hope that it is not probable. But there is a latent deep strain of religious fanaticism in this, our culture; it is rooted in our history and it has broken out many times in the past. It is with us now; there has been a sharp rise in strongly evangelical sects in this country in recent years, some of which hold beliefs theocratic in the extreme, anti-intellectual, anti-scientific, and anti-libertarian.

It is a truism that almost any sect, cult, or religion will legislate its creed into law if it acquires the political power to do so, and will follow it by suppressing opposition, subverting all education to seize early the minds of the young, and by killing, locking up, or driving underground all heretics. This is equally true whether the faith is Communism or HolyRollerism; indeed it is the bounden duty of the faithful to do so. The custodians of the True Faith cannot logically admit tolerance of heresy to be a virtue.

Nevertheless this business of legislating religious beliefs into law has never been more than sporadically successful in this country—Sunday closing laws here and there, birth control legislation in spots, the Prohibition experiment, temporary enclaves of theocracy such as Voliva’s Zion, Smith’s Nauvoo, a few others. The country is split up into such a variety of faiths and sects that a degree of uneasy tolerance now exists from expedient compromise; the minorities constitute a majority of opposition against each other.

Could it be otherwise here? Could any one sect obtain a working majority at the polls and take over the country? Perhaps not—but a combination of a dynamic evangehst, television, enough money, and modern techniques of advertising and propaganda might make Billy Sunday’s efforts look like a corner store compared to Sears Roebuck. Throw in a depression for good measure, promise a material heaven here on earth, add a dash of anti-Semitism, anti-Catholicism, antiNegroism, and a good large dósè of anti-”furriners” in general and anti-intellectuals here at home and the result might be something quite frightening—particularly when one recalls that our voting system is such that a minority distributed as pluralities in enough states can constitute a working majority in Washington.

I imagined Nehemiah Scudder as a backwoods evangelist who combined some of the features of John Calvin, Savonarola, Judge Rutherford and Huey Long. His influence was not national until after the death of Mrs. Rachel Biggs, an early convert who had the single virtue of being the widow of an extremely wealthy man who shared none of her religious myopia—she left Brother Scudder several millions of dollars with which to establish a television station. Shortly thereafter he teamed up with an ex-Senator from his home state; they placed their affairs in the hands of a major advertising agency and were on their way to fame and fortune. Presently they needed stormtroopers; they revived the Ku Klux Klan in everything but the name—sheets, passwords, grips and all. It was a “good gimmick” once and still served. Blood at the polls and blood in the streets, but Scudder won the election. The next election was never held.

Impossible? Remember the Klan in the ‘Twenties—and how far it got without even a dynamic leader. Remember Karl Marx and note how close that unscientific piece of nonsense called *Das Kapital* has come to smothering out all freedom of thought on half a planet, without—mind you—the emotional advantage of calling it a religion. The capacity of the human mind for swallowing nonsense and spewing it forth in violent and repressive action has never yet been plumbed.

No, I probably never will write the story of Nehemiah Scudder; I dislike him too thoroughly. But I hope that you will go along with me in the idea that he *could* happen, for the sake of the stones which follow. Whether you believe in the possibility of the postulates of these stories or not, I hope that you will enjoy them—at my age it would be very inconvenient to have to go back to working for a living.

ROBERT A. HEINLEIN

Colorado Springs, Colorado

THE THIRD

MILLENNIUM OPENS

Now, at the beginning of the year 2001, it is time to see where we have been and guess at where we are going. A thousand years ago Otto III ruled the Holy Roman Empire, William the Conqueror was not yet born, and the Discovery of America was almost five hundred years in the future. The condition of mankind had not changed in most important respects since the dawn of history. Aside from language and local custom a peasant of 1000 B.C. would have been right at home in a village of 1001 A.D.

He would not be so today!

The major changes took place in the last two centuries, but the most significant change of all occurred in the last fifty years, during the lifetimes of many of us. In 1950 six out of ten persons could neither read nor write; today an illiterate person is a freak.(1)

More people have learned to read and write in the past fifty years than in all the thousands of years preceding 1950.

This one change is more worldshaking than the establishment this last year of the laboratory outpost on Pluto. We think of this century just closed as the one in which mankind conquered space; it would be more appropriate to think of it as the century in which the human race finally learned to read and write.

(Let's give the Devil his due; the contagious insanities of the past century—communism, xenophobia, aggressive nationalism, the explosions of the formerly colonial peoples—have done more to spread literacy than the efforts of all the do-gooders in history. The Three R's suddenly became indispensable weapons in mankind's bloodiest struggles—learn to read, or die. Out of bad has come good; a man who can read and write is nine-tenths free even in chains.)

But something else has happened as important as the ABC's. The big-muscled accomplishments of the past fifty years—like sea-farming, the fantastic multiplication of horsepower, and spaceships, pantographic factories, the Sahara Sea, reflexive automation, tapping the Sun—overshadow the most radical advance, i.e., the first fumbling steps in founding a science of the human mind.

Fifty years ago hypnotism was a parlor trick, clairvoyance was superstition, telepathy was almost unknown, and parapsychology was on a par with phrenology and not as respectable as the most popular nonsense called astrology.

Do we have a "science of the mind" today? Far from it. But we do have—

A Certainty of Survival after Death, proved with scientific rigor more complete than that which we apply to heat engines. It is hard to believe that it was only in 1952 that Morey Bernstein, using hypnotic regression, established the personal survival of Bridget Murphy—and thereby turned the western world to a research that Asia and Africa had always taken for granted.(2)

Telepathy and Clairvoyance for Military Purposes. The obvious effect was the changing of war from a "closed" game to an "open" game in the mathematical sense, with the consequence that assassination is now more important than mass weapons. It may well be that no fusion bomb or plague weapon will ever again be used—it would take a foolhardy dictator even to consider such when he knows that his thoughts are being monitored . . . and that assassination is so much harder to stop than a rocket bomb. He is bound to remember that Tchaka the Ruthless was killed by one of his own bodyguard.

But the less obvious effect has been to take "secrecy" wraps off scientific research. It is hard to recall that there was once a time when scientific facts could not be freely published, just as it is hard to believe that our grandfathers used to wear things called "swimming suits"—secrecy in science and swimming with clothes on are almost equally preposterous to the modern mind. Yet clothing never hampered a swimmer as much as "classification" hampered science. Most happily, controlled telepathy made secrecy first futile, then obsolete.(3)

But possibly the most important discovery we have made about ourselves is that *Man is a Wild Animal.* He cannot be tamed and remain Man; his genius is bound up in the very qualities which make him wild. With this self-knowledge, bleak, stern, and proud, goes the last hope of permanent peace on Earth; it makes world government unlikely and certainly unstable. Despite the fact that we are (as always) in a condition of marginal starvation, this fact makes all measures of population control futile—other than the ancient, grisly Four Horsemen, and even they are not effective; we finished World War III with a hundred million more people than when we started.

Not even the H-bomb could change our inner nature. We have learned most bloodily that the H-bomb does nothing that the stone axe did not do—and neither weapon could tame us. Man can be chained but he cannot be domesticated, and eventually he always breaks his chains.

Nor can we be "improved" by genetic breeding; it is not in our nature to accept it. Someday we may be conquered by superbeings from elsewhere, then bred according to their notions—and become dogs, rather than wolves. (I'm betting that we will put up a fight!) But, left to our own resources, improvements in our breed must come the hard way, through survival . . . and we will still remain wild animals.(4)

But we have barely begun to study ourselves. Now that mankind has finally learned to read and write what can we expect him to accomplish?

We have no idea today of how self-awareness is linked to protoplasm. Now that we know that the ego survives the body we should make progress on this mystery.

Personal survival necessitates *Cosmic Purpose* as a "least hypothesis" for the universe. Scientists are tending to take teleology away from theologians and philosophers and give it a shaking. But concrete results this century seem unlikely. As of now, we still don't know why we are here or what we are supposed to do—but for the first time in history it is scientifically probable that the final answers are not null answers. It will be interesting indeed if one of the religious faiths turns out to be correct to nine decimals.

Since ESP talents seem to be independent of spacetime it is theoretically possible that we may achieve a mental form of time travel. This is allowable under the mathematics being developed to describe mind phenomena. If so, we may eventually establish history, and even prophecy, as exact sciences.

On the physical side we can be certain that the speed-of-light barrier will be cracked this century. This makes it statistically likely that we will soon encounter races equal or superior to ourselves. This should be the most significant happening to mankind since the discovery of fire. It may degrade or destroy us, it may improve us; it cannot leave us unchanged.

On the mundane side we can expect a population of five billion by the middle of this century. Emigration to other planets will not affect the total here.

Scientific facts will continue to be discovered much faster than they can be classified and cross-referenced, but we cannot expect any accompanying increase in human intelligence. No doubt the few remaining illiterates will continue to be employed in the subscription departments of periodicals; the same bigmouths who now complain about rocket service to Luna (but who can't thread a needle themselves) will in 2050 be complaining about service to the stars (and they still won't be able to thread a needle).

Unquestionably the Twentieth Century will be referred to as the "Good Old Days," we will continue to view with alarm the antics of the younger generation, and we probably will still be after a cure for the common cold.

Notes: 1980

1. He's still a freak but he's all too common. There is a special circle in Hell for the "Educators" who decided that the Three R's really weren't all that important. Concerning our public schools today: Never

have so many been paid so much for so little. I thank whatever gods there be that I went to school so many years ago that I had no choice but to be tightly disciplined in classes in which the teachers did not hesitate to fail and to punish.

My first-grade class had 63 kids in it, one teacher, no assistant. Before the end of the second semester all 63 could read.

2. Many people seem to feel that the "Bridey Murphy" case has been invalidated. Maybe so, maybe not—the investigative reporter who went to Ireland had no special qualifications and the "disproof" came from Time magazine. Time magazine probably publishes many facts . . . but since its founding in the early 1920's I have been on the spot eight or nine times when something that wound up as a news story in Time happened. Not once—not once—did the Time magazine story match what I saw and heard.

I have the "Bridey Murphy" recording and Bernstein's book about it. I am not an expert witness . . . but I found the recording highly interesting. To me it sounded like what it purported to be: regression under hypnosis to memory of a former existence. Some years later I learned from an ethical hypnotherapist (i.e., he accepted patients only by referrals from M.D.'s, his own doctorate being in psychology) that regression to what seemed to be former lives was a commonplace among patients of hypnotherapists—they discussed it among themselves but never published because they were bound by much the same rule as physicians and priests taking confession.

I have no data to offer of my own. I decided many years back that I was too busy with this life to fret about what happens afterwards. Long before 2001 I will know . . . or I will know nothing whatever because my universe has ceased to exist.

3. Anyone today who simply brushes off ESP phenomena as being ridiculous is either pigheaded or ignorant. But I do not expect controlled telepathy by 2001; that is sheer fiction, intended to permit me to get in that bit about Tchaka, et al.

4. I lifted this "Man is a wild animal" thesis bodily from Charles Gallon Darwin (grandson of the author of The Origin of Species) in his book The Next Million Years, Doubleday, 1953. I am simply giving credit; I shan't elaborate here. But The Next Million Years is a follow-on to The Origin of Species and is, in my opinion, one of most important works of this century. It has not been a popular book—but I seem to recall that his grandfather's seminal work wasn't too popular, either.

WHO ARE THE HEIRS OF PATRICK HENRY?

STAND UP AND BE COUNTED!

"Supreme excellence in war is to subdue the enemy without fighting."

—Sun Tzu, ca. 350 B.C.

The Soviet Union is highly skilled at this—and so are the Chinese leaders. During the last twenty-odd years we have been outmaneuvered endlessly. Today it's the Backfire bomber (a B-1 with a Russian accent); tomorrow it is an international (U.N.) treaty to socialize all aspects of space and thereby kill such enterprise as the L-5 Society, Sabre, Otrag (already killed), Robert Truax's Do-It-Yourself projects. The treaty will permit a KGB agent ("A rose by any other name—") to inspect in detail anything of ours, private or public, on the ground or in the sky, if it is **in any way** *connected with space—or the KGB man claims to suspect that it might be.*

(But if you think that gives us a free ticket into every building, every room, at the Byakonur space complex, you don't know how the USSR does business.)

The President has already announced that he will sign it. 10 to 1 he will, 7 to 2 the Senate will pass it—and 100 to 1 we will regret it.

This declaration is more timely than ever; I am proud to reprint it—and deeply sorry that it was ever needed.

Any rational person may well disagree with me on details of this broadside. But on the moral principles expressed here, a free man says: "Give me liberty, or give me death!" No quibbling, no stopping to "think it over." He means it.

Fools and poltroons do not.

"Is life so dear, or peace so sweet, as to be purchased at the price of chains and slavery? Forbid it, Almighty God! I know not what course others may take, but as for me, give me liberty, or give me death!!"

—Patrick Henry

Last Saturday in this city appeared a full-page ad intended to scare us into demanding that the President stop our testing of nuclear weapons. This manifesto was a curious mixture of truth, half-truth, distortion, exaggeration, untruth, and Communist-line goals concealed in idealistic-sounding nonsense.

The instigators were seventy-odd local people and sixty-odd national names styling themselves "The National Committee for a Sane Nuclear Policy." It may well be that none of the persons whose names are used as the "National" committee are Communists and we have no reason to suppose that any of the local people are Communists—possibly all of them are loyal and merely misguided. But this manifesto is the rankest sort of Communist propaganda.

A tree is known by its fruit. The purpose of their manifesto is to entice or frighten you into signing a letter to President Eisenhower, one which demands that he take three actions. The first demand is the old, old Communist-line gimmick that nuclear weapons and their vehicles should be "considered apart" in disarmament talks. It has had a slight restyling for the post-Sputnik era and now reads: "That nuclear test explosions, missiles, and outer-space satellites be considered apart from other disarmament problems."

This proposal sounds reasonable but is booby-trapped with outright surrender of the free world to the Communist dictators. Mr. Truman knew it, Mr. Eisenhower knows it; both have refused it repeatedly. The gimmick is this: if nuclear weapons and their vehicles are outlawed while conventional weapons (tanks and planes and bayonets and rifles) are not, then—but you figure it out. 170,000,000 of us against 900,000,000 of them. Who wins?

Even if you count our allies (on the assumption that every last one of them will stick by us no matter how boneheaded our behavior), the ratio is still two-to-one against us when it comes to slugging it out with infantry divisions, Yalu River style.

Oh yes! Khrushchev would like very much to have nuclear weapons "considered apart" from infantry divisions. And he is delighted when softheaded Americans agree with him.

"The Mice Voted to Bell the Cat." —Aesop

Their second proposal has been part of the Communist line for twelve long years. It reads: "That all nuclear test explosions be stopped immediately and that the U.N. then proceed with the mechanics necessary for monitoring this cessation." This is the straight Communist gospel direct from the Kremlin. This was and is today their phony counterproposal to the Baruch Proposals of 1946—banning first, policing the ban if, when, and maybe . . . and subject to the veto of the U.S.S.R. It would leave us at the "mercy" of the butchers of Budapest, our lives staked on the "honor" of men to whom honesty is a bourgeois weakness, our freedom resting on the promises of a gangster government that has broken every promise it ever made.

The Committee's manifesto claims: "—the problems in monitoring such tests are relatively uncomplicated." This is either an outright lie or ignorant wishful thinking; the problems are so complicated that nothing short of on-the-spot inspection will work—an underground test cannot be told from an earthquake shock by any known method of monitoring.

Before you trust your lives and freedom to the promises of the Kremlin, remember Budapest—

—remember Poland in 1945
—remember Prague
—remember Estonia, Latvia, Lithuania

—remember Korea
—remember brave little Finland
—and keep your powder dry!

The third proposal is largely pious window-dressing but it has the same sort of boobytrap buried in it. It reads: "That missiles and outer-space satellites be brought under United Nations-monitored control, and that there be a pooling of world science for space exploration under the United Nations." The harmless part could be done if the U.S.S.R. were willing; the boobytrap is the word "missiles."

We Americans live in a goldfish bowl; we could not conceal rocket tests even if we tried. But in the vast spaces of Russia, Siberia, and China missiles of every sort—even the long-range ICBMs—can be tested in secret, manufactured and stockpiled and installed ready to go, despite all "monitoring." Anything less than on-the-spot inspection of the entire vast spaces of the Communist axis would leave us at the mercy of the bland promises of the Butchers of Budapest.

The last paragraph of this letter that they want you to send to the President is not a proposal; it is simply another attempt to strike terror into the hearts of free men by reminding us of the horrors of nuclear war.

" 'Will you walk into my parlor?' said the Spider to the Fly."

It is no accident that this manifesto follows the Communist line, no coincidence that it "happens" to appear all over the United States the very week that Khrushchev has announced smugly that the U.S.S.R. has ended their tests—and demands that we give up our coming, long-scheduled, and publicly announced tests of a weapon with minimum fallout.

This follows the pattern of a much-used and highly-refined Communist tactic: plan ahead to soften up the free world on some major point, package the propaganda to appeal to Americans with warm hearts and soft heads, time the release carefully, then let the suckers carry the ball while the known Communists stay under cover.

They used this method to gut our army after the Japanese surrender with the slogan of "Bring the Boys Home." They used it to make us feel guilty about the A-bomb—while their spies were stealing it. They dreamed up the pious theme of "Don't Play Politics with Hunger"—then used our charity to play their politics. They used it to put over the infamous "Oxford Oath" and the phony "Peace Strikes" of the thirties. They have used this tactic many times to soften up the free world and will use it whenever they can find dupes.

They are using it now. Today both sides, Freedom and Red Tyranny, are armed with nuclear weapons . . . and the Communists are again using our own people to try to shame or scare us into throwing our weapons away.

These proposals are not a road to world peace, they are abject surrender to tyranny. If we fall for them, then in weeks or months or a few years at most, Old Glory will be hauled down for the last time and the whole planet will be ruled by the Butchers of Budapest.

For more than a hundred years, ever since the original Communist Manifesto, it has been the unswerving aim of the Communist Party to take over all of this planet. The only thing blocking their conquest is the fact that the tragically-shrunken free world still possesses nuclear weapons. They can destroy us . . . but they know that we can destroy them.

So they want us to throw away the equalizer.

If we do, we can expect the same "mercy" that Budapest received. They will say to us: "Surrender—or be destroyed!"

"God grants liberty only to those who love it and are always ready to guard and defend it."
—Daniel Webster

We the undersigned are not a committee but simply two free citizens of these United States. We love life and we want peace . . . but not "peace at any price"—not the price of liberty!

Poltroons and pacifists will think otherwise.

Those who signed that manifesto have made their choice; consciously or unconsciously they prefer enslavement to death. Such is their right and we do not argue with them—we speak to you who are still free in your souls.

In a free country, political action can start anywhere. We read that insane manifesto of the so-called "Committee for a 'Sane' Nuclear Policy" and we despised it. So we are answering it ourselves—by our own free choice and spending only our own money.

We say to the commissars: "You will never enslave us. The worst you can do is kill us. But we are resolved to die free!"

"They that can give up essential liberty to obtain a little temporary safety deserve neither liberty nor safety."
—Benjamin Franklin

No scare talk of leukemia, mutation, or atomic holocaust will sway us. Is "fallout" dangerous? Of course it is! The risk to life and posterity has been willfully distorted by these Communist-line propagandists—but if it were a hundred times as great we still would choose it to the dead certainty of Communist enslavement. If atomic war comes, will it kill off the entire human race? Possibly—almost certainly so if the Masters of the Kremlin choose to use cobalt bombs on us. Their command of science in these matters seems equal to ours, they appear to be some years ahead of us in the art of rocketry; they almost certainly have the power to destroy the human race.

If it comes to atomic war, the best we can hope for is tens of millions of American dead—perhaps more than half our population wiped out in the first few minutes.

Colorado Springs is at least a secondary target; all of us here may be killed.

These are the risks. The alternative is surrender. We accept the risks.

"The liberties of our country, the freedom of our civil Constitution, are worth defending at all hazards."
—Samuel Adams

We have no easy solution to offer. The risks cannot be avoided other than by surrender; they can be reduced only by making the free world so strong that the evil pragmatists of Communism cannot afford to murder us. The price to us will be year after weary year of higher taxes, harder work, grim devotion . . . and perhaps, despite all this—death. But we shall die free!

To this we pledge our lives, our fortunes, and our sacred honor.

We the undersigned believe that almost all Americans agree with us. Whoever you are, wherever you are, you sons of Patrick Henry—let us know your name! Sign the letter herewith and mail it to us—we will see that it gets to Congressman Chenoweth, to both our Senators, and to the President.

1958 address— Robert and Virginia Heinlein
1776 Mesa Avenue
Colorado Springs, Colorado

1980 address— (Care Spectrum Literary Agency
60 East 42nd Street
New York City, New York 10017)

"WHAT CAN I DO?"

This much has been done by two people acting alone. Let's call ourselves "The Patrick Henry League" and prove to our government that the Spirit of '76 is still alive. We are two, you and your spouse make four, your neighbor and his wife make six—we can snowball this until it sweeps the country.

We can advertise in other counties, in other states.

If you who are reading this are not in Colorado Springs, stand up, speak up, and start your own chapter of "The Patrick Henry League" now. You are a free citizen, you need no permission, nor any charter from us. Run an ad—quote or copy this one if you like. Dig down in the sock to pay for it, or pass the hat, or both—but sound the call in your own home town, mail copies of your ad out of town, and get some more letters started toward Washington.

And let us hear from you!

Let us all stand up and shout aloud again and forever:

"Give Me Liberty or Give Me Death!"

President Eisenhower,
The White House
Washington, D.C.

Dear Mr. President:
We know that you are being pressured to stop our nuclear weapons tests, turn our missile and space program over to the U.N., and in other ways to weaken our defenses.
We urge you to stand steadfast.
We want America made supremely strong and we are resolved to accept all burdens necessary to that end. We ask for total effort—nuclear testing, research, and development, highest priorities for rocketry, sterner education, anything that is needed. We are ready to pay higher taxes, forego luxuries, work harder.
To this we pledge our lives, our fortunes, and our sacred honor.
Respectfully yours,

. . . .
(names)
. . . .
(address)

INSIDE INTOURIST

How to Break Even (or Almost) in the Soviet Union

To enjoy a thing requires that it be approached in the proper mood. A woman who has been promised a luxury suite at Miami Beach won't cheer at the thought of roughing it in the north woods, especially if her husband pulls this switch after the vacation has started.

But, with proper preconditioning, it is possible to enjoy anything—some people are addicted to parachute jumping. To experience the Soviet Union without first getting in the mood for it is too much like parachute jumping when the chute fails to open. The proper mood for the Soviet Union is that of the man who hit himself on the head with a hammer because it felt so good when he stopped.

This article assumes that you have already, for good and sufficient reasons, decided to visit the USSR, one good and sufficient reason being a wish to see for yourself this Communist paradise that Khrushchev has promised our grandchildren. But to set out for Russia in the holiday spirit in which you head for the Riviera, Las Vegas, or Rio is like going to a funeral for the ride.

You can avoid the worst shocks to your nervous system by knowing in advance that you are not going to get what you have paid for; then you can soothe the residual nerve jangling with your favorite pacifier. I used small quantities of vodka—"small" by Russian standards, as Russians also use it to insulate themselves from the slings and arrows of outrageous fortune but they dose to unconsciousness. Drunks, passed out in public places, are more truly symbolic of the USSR than is the Hammer & Sickle.

My wife found methyl meprobamate (Equanil, Miltown) more useful. For you it might be yoga, or silent prayer, but, whatever it is, don't neglect it. Travel in the Soviet Union is not like travel anywhere else in the world. My wife and I have visited more than sixty countries on six continents, by freight ship, helicopter, dog sled, safari, jet plane, mule back, canal boat, etc.; as "seasoned travelers" these are our credentials. To visit the USSR we prepared by extensive reading and my wife learned the Russian language. Nevertheless, again and again we ran into surprises, difficulties, and maddening frustrations.

You can travel all through the Soviet Union without knowing a word of Russian—which will suit Khrushchev just fine because you will thereby be a prisoner of "Intourist," the state-owned travel bureau, seeing only what they want you to see, hearing only what they want you to hear.

But the Russian language is difficult; it took my wife two years of hard work to master it. The alphabet is weirdly strange, the pronunciation is hard for us, and the language is heavily inflected—a proper noun, such as "Smith" or "Khrushchev," has eighteen different forms.

Obviously most tourists can't take two years off to master Russian. What then? Depend entirely on Intourist guides?

No, no, no! Better to save your money and stay home. With no Russian at all you'll be as helpless as a bed patient. Instead you should prepare by learning a smattering of Russian. Forget about grammar; grammatical Russian is found only in formal literary compositions. Khrushchev has never learned to speak Russian well and Mikoyan speaks it with an accent thick enough to slice—so why should you worry?

First learn the alphabet, capitals and lower case, printed and written. This alone is half the battle. You can now find the men's room (or the ladies' room). The men's room is marked with "M" (for "muzhcheen," but think of "M" for "men") and the ladies' room is marked with a letter which looks like two capital K's, back to back: Æ. You are now past the greatest crisis confronting a traveler: finding the plumbing.

You now know many of the most useful Russian words just from knowing the alphabet. Hungry? Watch for a sign reading: "PECTOPAH." Sound it in your head as "restauran"—and it is!—the same word as in English save that the final "t" has been dropped.

There are hundreds of words which turn out to be the same as the English, or near enough. If you know French or German, your immediate vocabulary is further enriched, as, despite their boasts, Russian culture is very backward and most of their vocabulary for anything more complex than weeding a turnip patch has been borrowed from French, English, or German by converting the foreign word phonetically.

But don't stop with the alphabet; get a set of phonograph records for teaching Russian. Play them while following the lessons in the book—and play them without the book while bathing, shaving, cooking, gardening, *etc.* A few hours of this will pay off to the point where you will no longer be dependent on an Intourist guide; it will triple what you get out of a trip behind the Iron Curtain. For a few dollars in records and a little work you change it from a losing game into one in which your investment will be well repaid in education if not in pleasure.

But to get fun out of it, too, you must understand the Intourist game, play it, and win. Winning consists in outwitting the system so that you get more than they intend you to get; it does *not* mean fair value in the fashion (for example) that a traveler invariably gets his money's worth in any Scandinavian country. It is not possible to get fair value in the USSR; the game is rigged against the American tourist. But there are ways to minimize the expense and maximize the return while having quite a lot of fun.

All travel in the USSR is controlled at every point by Intourist; you must buy from it all travel, all automobile and guide service, all hotel rooms, all meals—or if you buy a meal not from Intourist you simply waste a meal already paid for.

You buy from Intourist at four rubles to the dollar—and you are licked from scratch as the value of the ruble is closer to forty to the dollar (which is the rate the Soviet government gives to favored visitors such as Asians they are trying to woo into the Communist camp).

You can cut costs by ordering cheap accommodations. Three grades are offered: Luxe, Tourist A, and Tourist B. A single man might risk Tourist B if he did not mind public toilets and baths of uncertain cleanliness, plus sharing sleeping space, dormitory style; a couple might risk Tourist A, which is supposed to be (but is not) equal to first-class travel elsewhere. But I cannot honestly urge anything short of "Luxe" class because even the best in Russia is often shockingly bad by our standards—bathrooms without baths, even hotels with no baths, tubs with no hot water, plumbing that is "quaint" or worse, poor cooking, dirty utensils, maddening waits. The lodging for Luxe class is often a huge and fantastically furnished suite, but a first-class double room & bath in any other country is more comfortable.

Luxe class costs $30 per day per person (3 Dec 79—Kremlin rate $182.40—World free-market rate $370.29) and includes lodging, meal coupons, and three hours of guide and automobile service per person (thus six hours for a couple)—if you get it. It does not include *any* train, plane, or bus fares. Add these in, plus round trip aircoach fares from New York, and a month in the Soviet Union will cost an American couple at least $4,500 (3 Dec 79—Kremlin rate $27,360.00 —World rate $55,543.50), plus spending money and extras.

You will get at least twice as much for your money in any other part of Europe, but the real problem always is to get what you have paid for and Intourist has contracted to furnish you.

Start by realizing that Intourist is not really a travel service in the sense in which Thos. Cook or American Express is. It is a bureau of the Communist government and its function is to get those Yankee dollars in advance, channel you through a fixed route, then spill you out at the far end almost as ignorant of their country as when you started. P. T. Barnum's famous sign "*This Way to the Egress*" anticipated the basic Intourist principle: Get the sucker's money first, then get rid of him with the least trouble to the management.

So treat it as a game and don't fret when you lose. Try to get a good night's sleep—the bed may be awful but it will be quiet because there is almost no traffic—and try again the next day.

For example: the guide is not there to guide you, the guide is there to make sure that you see the stadium—so try not to see a stadium anywhere in the Soviet Union. Surely they have stadiums; any people so devoted to "Togetherness" have stadiums—how else could they display ten thousand people all doing physical jerks at once? (A "Spartakiad") But remember that your fixed cost is about $20 just to look at a stadium (with no football game thrown in) and that, in diverting you to the stadium, Intourist has kept you from seeing something of real interest, a factory, a slum area, or a school.

Stadiums haven't changed much since the Romans built the Colosseum; if you have seen Yankee Stadium, Soldiers' Field, or the Rose Bowl—or even the football stands of Podunk High—you've seen enough empty stadiums to last a lifetime. So refuse!

But the guide has orders that you *must* see the stadium; no other theory will account for the persistence with which all Intourist guides *insist* that you see the local stadium. If you manage to get in and out of the Soviet Union without visiting a stadium, award yourself the Order of Hero of Soviet Travel, First Class.

(We saw a lot of them—nobody had warned us.)

Each Intourist hotel has a place called the "Service Bureau." "Service" in this usage is an example of Communist semantics comparable to "coexistence," "peaceloving," "democratic," *etc.* Here most of your battles with Intourist will take place. Second only to the passed-out drunk, the most typical sight in the Soviet Union is an American tourist seated in a service bureau, his expression getting tighter as the weary, expensive minutes trickle away.

Intourist rarely uses the blunt refusal on this unhappy creature; instead the standard tactics are please-sit-down-and-wait-for-just-a-moment (which usually turns out to be at least an hour), I'm-sorry-but-the-Directoris-out (and won't return as long as *you* keep hanging around), comeback-later (when the desk will be closed), and go-to-that-desk-at-the-far-end-of-the-room (where, after more delay and much consultation, you will be sent back to the desk from which you started).

When facing this, to get part of what you have paid for (and anything over 70% is a triumph, with 50% par for the course) you must stick to pre-planned defensive tactics and never, never, never lose your temper, or you will wind up a fit candidate for wet packs and sedation.

Their first weapon is politeness. You *must* resist this soporific politeness or you will not get anything.

First-Stage Defense: Be just as polite as they are—but utterly stubborn. Above all, *don't sit down when invited to.* If you do, this retires you from the game for an indefinite penalty period. Hold your ground, standing firmly against the desk and taking up as much space as possible—lean on it with hands spread wide to double your combat frontage. Say firmly and politely: "No, thank you, I'll wait right here"—then monopolize that desk and clerk, making it impossible for business to be transacted until Intourist has honored your contract on the point you have raised.

Keep talking. It does not matter what you say nor whether the clerk understands English—*keep talking!* Your purpose is to take that unit of Intourist out of the game until your request has been met, not with promises but with immediate action—whereas *their* purpose is to get *you* out of the game by persuading you to sit down away from the desk.

So hold your ground and be softly, politely stubborn. Usually someone with authority will arrive in a few minutes and satisfy your request.

Defense in Depth: Be prepared to simulate anger at any instant. It is much better to *pretend* to lose your temper *before* things have grown so unbearable that you actually do blow your top; it saves wear and tear on your ulcers and enables you to conduct your tactics more efficiently.

(And I must say a word on behalf of Intourist employees. About three quarters of them are young women, girls really. They are nice people, polite, harassed, overworked, and underpaid. They are prisoners of a system which automatically frustrates the traveler, and they are more imprisoned by it than you are, for you will escape (we hope) on the date set forth on your exit visa. They can't. These poor kids did not invent the silly red tape and mountains of useless paperwork and those in the lower ranks have no authority to vary from it. So don't be too harsh and try not to lose your temper in fact.)

But be prepared to simulate anger whenever the log jam does not break under the pianissimo tactics of the first-stage defense. When you refuse to sit down and wait, the clerk will sometimes turn away and ignore you.

It is then time to throw a fit.

You must (1) hold your blocking position, (2) make lots of noise, and (3) show that you are bitterly and righteously angry and cannot possibly be shut up short of complete satisfaction.

Keep shouting. It helps to cuss a bit and one all-purpose word will do: "*Bor*jemoi!" This is a phonetic approximation of two words meaning "My God!"—which is merely an expression of disgust in this atheistic society. Another good phrase is "Yah Haw*chew*!" which is the abrupt way of saying "I want it!" (The polite idiom is "Mnyeh

*Khaw*chettsuh.")

You can shout, "I want to see the Director!"—or, in Russian, "Yah *Khaw*chew veedyets Direktora!" She may possibly answer, "The Director's office (or desk) is over there," but she is more likely to give you what you want rather than let you complain to the boss.

But if she does, *don't move.* Hold your ground, keep on being unreasonable, and let the boss come to you. If you let them chivvy you into his office, away from spectators, and you yourself sitting down and being polite, you've lost that round. The Director will be polite, apologetic, and regretful about "shortages"—but firmly unhelpful. The place to win is in public.

For most of us it is not easy to be intentionally rude. I think one should never be impolite unnecessarily—but we can do much to uphold our national dignity and to improve our relations with the Soviet Union by never keeping quiet when we are cheated, by answering the great stubbornness of Russians by being twice as stubborn, and by being intentionally and loudly rude whenever Intourist refuses to keep its contract despite polite protest. Intourist is an integral part of a government with a forty-three year record (now 63 years—R.A.H.) of not honoring its most solemn commitments; one must assume that its blatant cheating is planned from the top and that every employee of Intourist is schooled in his role, right down to the sweet little girl who insists that you must see the stadium.

You may prefer to think that this horrendous swindle is merely an unintentional byproduct of a fantastic, all embracing, and incredibly inefficient bureaucracy bogged down in its own red tape to the point where it can't give service. Either way, a contract with Intourist works exactly like that long list of broken treaties. You start by making a contract with the Soviet government; you are required to pay in advance and in full. Then you attempt to collect what you have paid for—and discover that a Communist contract is worth what it usually is. "Room with bath" turns out to be without, "jet planes" become prop planes, guide and auto service is less than half the time you have paid for, dining rooms are locked at meal hours, and your extremely expensive time is wasted sitting, sitting, sitting in "service" bureaus.

Unless you raise hell about it, right at the time. No use complaining later, you won't get your money back.

If neither polite stubbornness nor noisy rudeness will work, use the insult direct. Shake your finger in the face of the most senior official present, simulate extreme rage, and shout, "Nyeh Kuhl-*toor*nee!" ("Uncultured!") Hit that middle syllable and roll the r's.

Subordinates will turn a sickly green and pretend to be elsewhere. The official will come close to apoplexy—but will probably make an extreme effort to satisfy your demand in order to shut you up. This is the worst insult you can hand a Russian, one that hits him in cracks of his armor. *Use it only as a last resort.*

I do not think you will be in personal danger as the officials you will meet will probably not be high enough in the hierarchy to punish you for insulting them. But if anything goes wrong and you wind up in Siberia, *please understand that you use it at your own risk.*

If "nyeh kuhltoornee" does not work, I have nothing more to suggest but a hot bath and a sedative.

But the above campaign usually wins in the first or second stage and rarely fails in the third as it is based on Russian temperament and Communist social organization. Even the most arrogant Soviet citizen suffers from an inferiority complex when faced with free citizens of the western world, especially Americans. The questions they ask most frequently are: How much money do you make? How big is your house? Do you own an automobile? Each one is a dead giveaway.

So if you make it clear that Intourist service is contemptible by free-world standards, a Russian may want to take a poke at you but he is much more likely to attempt to restore face by meeting those standards. The rest of the picture has to do with socialist "equality," another example of Communist semantics, because in the egalitarian paradise there is *no* equality, nowhere anything like the easygoing equality between an American taxi driver and his fare. In the USSR you are either on top or underneath—never even.

An American does not fit. Some Soviet citizens react by subordinating themselves to the tourist; grandmothers sweeping the streets will scurry out of your way, taxi drivers will rush to open doors, porters and waitresses and such are servile in a fashion we are not used to. But an employee of Intourist is in an indeterminate position vis-à-vis a tourist. Dominant? Or subordinate? It must be one or the other. Often there is a quick test of wills, then an immediate assumption of one role or the other depending on how the tourist responds. For example, we were met in Kiev by a guide who gave his name as "Sasha." I asked his surname; he told me quite arrogantly that there was no need for me to know it.

We had been in the USSR several weeks and I had had my fill of arrogance; I told him bluntly that I was not interested in his name, that I had asked out of politeness as practiced in all *civilized* countries —but that if good manners were not customary in his country, forget it!

An American or other free man might have given me a rough answer or icy silence; he did neither, he groveled. When he left us at the hotel he thanked us effusively for having been so kind as to talk with him. His manner was cringingly servile.

I don't like servility any more than the next American—but if there is going to be any groveling done it won't be by me. Nor, I hope, by you. In dealing with Intourist people you will often run into situations where one of you must knuckle under—and many are much tougher cases than this man. It will be a clash of will and all too often polite stubbornness won't be enough to get them to honor your contract—then you need to model your behavior after the worst temper tantrums you have seen Khrushchev pull on television; this they understand. In the USSR only a boss ever behaves that way; therefore you *must* be entitled to Red Carpet service. The Intourist functionary *knows* you are just an American tourist, to be frustrated and cheated, but his conditioned reflex bypasses his brain; a lifetime of conditioning tells him to kowtow to any member of the master class . . . which you *must* be, even though his brain tells him you are not.

It usually works. In a bully-boy society often nothing but bullying will work.

The "Coupon Game": When you arrive you will be handed a lot of documents in exchange for your tour voucher; one will be a book of meal tickets, four coupons for each day. For Luxe class their values are twelve rubles for a breakfast coupon, twenty for a lunch, three for tea, thirty for dinner. If you and your spouse have contracted to spend a month in the USSR, your meal tickets have cost you one thousand dollars (3 Dec 79—Kremlin rate $6,080.00—World free-market $12,343.00) *(*28½ oz. of gold). The gouging starts here, because Diamond Jim Brady and his twin could not eat a thousand dollars of Intourist food in a month. Intourist eateries range from passable to very bad. Hotel Berlin in Moscow is perhaps the best but even it would have trouble making the Duncan Hines list. There are three or four good restaurants in the Soviet Union but their prices are *very* high and they won't accept coupons.

You can minimize your losses in ways that Intourist does not tell you. You can combine coupons as you wish—a "lunch" and a "breakfast" to pay for dinner, for example. The possible combinations in rubles are 3, 6, 9, 12, 15, 18, 20, 21, 23, 24, 26, 27, 29, 30, 32, 33, 35, 36, 38, and all higher numbers—but the hitch is that too many of them take more than one "tea" coupon. So figure out the best way to work each combination and write it on the back of your coupon book; this will help you to decide whether to overpay for food already horribly overpriced, or to pay the difference in cash. Skill in the coupon game can save you many, many dollars.

There is nothing fair in the coupon system but it isn't meant to be; it is the prime fashion in which the Soviet government squeezes more dollars out of American tourists than they want or need to spend.

There are other ways to reduce your losses. You can swap coupons for liquor, candy, canned caviar, cigarettes, and bottled water. Tap water in Moscow and Leningrad is said to be safe but elsewhere it is wise to buy mineral water—get enough bottles at a time to come out even in coupons. Their cigarettes are corrosive but a brand called "Trud" is smokable. Candy is extremely expensive but a welcome change in a tedious diet (I lost twelve pounds); caviar is cheap and is the best buy to use up leftover coupons on your last day. Don't expect to find whiskey nor any imported liquor, but local "kawnyahk" and "chahm*pahn*skoyeh" are good. The vodka like ours is "*vawt*-kah stel*leech*nayuh"—the other sorts are very highly spiced. Their wines are good.

My favorite relief from a hard day with Intourist was a Bloody Mary—"Staw grahm vawt-kee, p'jalst, ee taw*maht*nee sawk." This is "nyeh kuhltoornee" as the proper way to drink vodka is with beer (*pee*vaw), or with black bread, sweet butter, and caviar.

In Moscow and Leningrad very few Russian waiters speak English and almost none elsewhere, but you will usually be handed a huge four-language menu on which you can pick out what you want in English and point to it in Russian. But only the few items with prices written in are offered and maybe half of those will be available—when the waiter says "Nyeh-taw" he means it's all gone. Allow at least two hours for dinner; I've never heard of any way to speed up the service. But, once you are served, the waiter may try to rush you out, claiming that the table is reserved ten minutes hence for a delegation or such. He may simply want to sell food to someone else—he gets a commission. Ignore him—you've waited a long time, paid a high price in advance, and are entitled to eat in peace.

Pick a table as far from the orchestra as possible. Some orchestras are good but most are very loud and sound like a fully automated boiler factory.

Tipping is never necessary but waiters, chambermaids, and porters are paid very little. Tips can be coupons or cash.

The dining room is often locked—for a political delegation from Asia or Africa, for a traveling theatrical troupe, or anything. Any service may be chopped off without warning in any Intourist hotel. Complain . . . but be prepared to fall back on the buffet (pronounced "*boof*-yet"). There are usually three or four on the upper floors of large hotels, open from seven a.m. to eleven at night and serving omelets, snacks, beer, wine, juice, coffee, tea, cakes, *etc.* The guides and clerks in Intourist often do not know about them because *they have never been upstairs,* so watch for the sign (ÁÓÔÅÒ) or wander the corridors saying inquiringly to maids and floor clerks: "*Boof*-yet?"

Buffets are cozy, friendly, little places run by cheerful, helpful, dreadfully overworked women. They won't know English and the menu will be in Russian—here a memorandum in English & Russian of your favorite foods is most useful. But even the buffet doesn't serve breakfast before seven and Russian transportation often leaves at such an hour that you must leave the hotel before then. Russian hotels have room service but not at such hours. If you have your *own* thermos bottle, room service can fetch you hot coffee and a cold breakfast the night before. (They've heard of thermos bottles—the word is the same —but the hotel won't have one.)

Keep iron rations in your room and carry food and drink on long flights and train trips. Both trains and planes often stop for meals but you can't count on it and usually can't find out in advance.

Minor Ways to Improve Your Score: Go for walks without your guide; you will usually be picked up by someone who knows English —but you will *never* be picked up while a guide is with you. This is your chance to get acquainted and to get answers which are not the official answers. Don't talk politics—but these venturesome souls may ask you political questions and you can learn almost as much by the questions they ask as by raising such issues yourself.

Your guide may not be a hardshell Communist; he, or she, may open up once he thinks he can trust you. If so, be careful not to mention anything even faintly political when others are in earshot, *especially the driver.* The driver may be a political chaperone who knows English but pretends not to. More than one guide has told me this and *all* guides talk more freely when no one can overhear.

In this country children are brought to Moscow and decorated for having informed on their *parents. Never forget this.*

When you are shown a party headquarters, a palace of culture, a stadium, an auditorium, or such, ask when it was built. We discovered that, in the areas not occupied by Nazis, many of the biggest and fanciest were built right at the time Americans were dying to keep the Murmansk lend-lease route open.

There is new brick construction all over the Soviet Union. We asked repeatedly to be shown a brick yard, were never quite refused, but the request was never granted. We have since heard a rumor that this is prison labor and that is why a tourist can't see something as unsecret as a brick yard. So try it yourself—you may merely prove to yourself that Intourist exists to keep tourists from seeing what they want to see, rather than vice versa.

Offer your passport to casual acquaintances; they will usually offer theirs in return—*internal* passports. Intourist people have been coached to deny that such a thing exists but everybody in the USSR carries one and the owner must get a visa to go from one Russian city to another. It is a brown book with "ÏACÏOPT" (passport) on the cover. Try it when your guide is not around.

The USSR is the only country in which we were never able to get into a private home. Other tourists report the same but one couple from Los Angeles almost cracked this; they said to their guide, "*Why* can't we see the inside of one of those apartment houses? Are you people *ashamed* of them?" The next day they were shown through a not-yet-occupied one.

This could be varied endlessly, as it works on that Russian basic, their inferiority complex. The key word is "ashamed"—simply asking "Why?" gets you nowhere. I think it could be used to get into farms, schools, courts, factories, anything not a military secret. It tops my list of things I wish I had thought of first.

In meeting anyone, including guides, try to use "democracies" as an antonym for "Communist countries" as soon as possible—drag it in by the heels, i.e., "I think all of us from the democracies earnestly hope for peace with the Communist countries," *etc.* The much abused word "democratic" means "Communist" in Russia and it always introduces a propaganda pitch. If you deny him his definition by preempting the word, you leave him with his mouth hanging open, unable to proceed.

We got tripped on this several times before we caught on.

The official list of things you must not photograph is short but the unofficial list is long and ranges from old, broken-down buildings to old, broken-down women sweeping the streets. You can photograph such by having them appear "accidentally" in a background but if you are suspected of this, they have a silent counter to it. At some later time you will find that your film has been exposed to light, then respooled. You could keep all your film with you at all times and hope to get it across the border . . . but such behavior might cause you to be arrested on suspicion of espionage, as one American tourist was this summer. At best, sneaking a picture of one passed-out drunk risks losing *all* your pictures—too high a price even if you aren't accused of being a spy.

The most-used plane, the Ilyushin-14, flies very low; you can see a lot and compare it with elsewhere. Are railroads single or double track? How much traffic on the roads? On the rivers? How about factory smokestacks and other signs of industry? How busy are the airfields? Or a dozen other things. I think you will conclude that no Russian claim should be accepted as true until fully verified. A "great industrial center" often turns out to be a jerkwater town.

But don't make written notes about such things! *Don't!!!*

Will your mail be opened? You must assume so. Will your rooms be bugged? It seems impossible to monitor every room of every Intourist hotel—but if the police get interested in *you* it takes just three minutes in these days of miniaturization to bug a room. I do know, from several incidents, that Soviet citizens *believe* that all hotel rooms are bugged.

I wish that a million of us would visit the USSR; the dollars the Kremlin would reap would be more than offset by the profit to us in having so many free men see with their own eyes what Communism is.

But go there with your eyes open—Intourist is as fully an agency of the Kremlin as is Gromyko or Mikoyan. Its functions are (1) to get your money in advance, (2) to deliver as little as possible by downgrading accommodations, by forced overcharges on food, and by clipping you on auto and guide service, (3) to waste your time so that you will see as little as possible, and (4) to see that what little time you have left is spent only on those things the Kremlin does not mind your seeing—"new construction" (from the outside), parks of "rest & culture" (filled with loudspeakers blaring propaganda), ballets, museums, stadiums, and the outsides of public buildings.

The first point you must accept; the game is crooked but it is the only game in town. Points two and three you can struggle against—I hope the tactics suggested in here will help. Point four is the toughest. After trimming you down to about three hours a day of useful time, Intourist can and will use up what is left in "stadium sightseeing" unless you fight it constantly. Even then, Intourist is adept in parrying with: "It's closed today—too bad you're not staying another day," and "That must be arranged in advance through the Ministry of Culture, etc." and "You should have requested that in Moscow."

The essence of Intourist tactics is: "Jam yesterday and jam tomorrow, but never jam today." The way to answer it is: "No! I will *not* look at the stadium, I do *not* want to see another subway station, I will *not* visit a museum to see another five hundred pictures of Lenin. I want to see thus-and-so and I want to see it *now.* Stop the car, get on the phone, and arrange it—or tell the Director that, as far as I am concerned, you're fired! I am keeping the car and the driver and will go on without you—I've got hours more of car service due me today and I *won't* be cheated out of it." You will find whether your guide is truly a guide . . . or a guard placed with you to make sure you see only the facade of this regime. Whether or not you see "thus-and-so" you are sure to learn a surprising amount about how a police state is run . . . and thereby get your full money's worth in education.

"PRAVDA" Means "TRUTH"

"Pravda" means "truth."

That's what it says, right here in my English-Russian dictionary: Pravda—Truth. Surely one may depend on the dictionary.

In Al Smith's bleak, skeptical words: "Let's take a look at the record."

On May Day, 1960, a United States U-2 reconnaissance plane made some type of unplanned landing in the Soviet Union. This much is both "truth" and "pravda." Beyond this bare fact, "truth" and "pravda" diverge widely.

TRUTH: On May 1 this U-2 plane grounded near Sverdlovsk in the heartland of the Soviet Union about 1,500 miles from the border it crossed. The plane was wrecked but the pilot was not killed. Much of the equipment in the plane, such as radio gear, was undamaged. The pilot's survival and the condition of the wreckage, plus the undamaged equipment, suggest a forced landing in rough country, such as would result from engine failure.

The U-2 is extremely fast and it cruises at very high altitude, 60–70,000 feet. The kinetic energy stored in a moving object varies as the square of its velocity ($E = \frac{1}{2}MV^2$). A staggering amount of kinetic energy is stored in a U-2. If such a plane is hit by antiaircraft rocket fire what happens in the next split second would make a head-on collision between two hot-rodders seem like a mother's loving pat. The antiaircraft damage merely triggers the disaster; the major violence comes from the plane's great speed—it explodes! Suddenly the sky is filled with junk.

The chance of the pilot's surviving is small. He may escape if the plane's ejection capsule is not damaged when the plane is hit. But there is only the tiniest chance that radios and other relatively fragile pieces of equipment would reach the ground undamaged. Nevertheless, such items were "recovered" from the "shot-down" U-2. A crate of eggs, uncracked, would be equally convincing.

We may never know the exact truth of what happened to that U-2. Only Soviet officials talked to unlucky pilot Powers before his trial.

But the nervous nellies among us should stop beating their breasts over the shame of it all. Photo reconnaissance is not the same thing as a bombing run. An overflight by an unarmed plane is not in the same league with what Khrushchev did to Budapest. What we are dealing with here is the security of the United States and—very possibly—the survival, and certainly the freedom, of the entire human race.

Espionage is not illegal under International Law. Neither is it immoral. The penalty for getting caught at it is very high. It usually means the spy's neck. It is not illegal under U.S. laws for us to attempt to spy on the USSR, nor is it illegal under Soviet law for them to attempt to spy on us. Nor, in either case, is it an act of war. Throughout history every country has striven to learn the military secrets of any potential enemy, and to protect its own. Spying is wise and necessary insurance against utter military disaster.

That we have been conducting photo reconnaissance over the Soviet Union so successfully and for four vital years is the most encouraging news in the past decade. Among other things it means we have accurate maps by which to strike back. The Soviet Union does not have to send spy planes over us to obtain similar information. Excellent large-scale maps with our military installations and industrial complexes clearly marked may be obtained free from Standard Oil or Conoco. Still better maps may be ordered by the Soviet Embassy from our Coast and Geodetic Survey at very low prices. Soviet agents move freely among us and many of them enjoy the immunity and complete freedom of travel afforded by U.N. passports. If a Red spy wants aerial color photographs at low altitude of our Air Defense installation just south of Kansas City—in America's heartland—until recently he could hire a pilot and a plane at the Kansas City airport for about $25 an hour and snap pictures to his heart's content without taking any of the risks of being hanged or shot down that Francis Powers took for us. If Mr. Eisenhower had failed to obtain by any possible means the military intelligence that the USSR gets so easily and cheaply about us, he would have been derelict in his duty.

So, if you hear anyone whining about how "shameful" the U-2 flights were, take his lollipop away and spank him with it.

PRAVDA: It took the fat boy with the bad manners five days to decide just what sort of "pravda" to feed his people. The situation must have been acutely embarrassing for him, much more so than it was to us, because for four years he had been totally unable to stop the flights, despite his boasts and missile brandishing, despite the fact that every flight was certainly observed in Soviet radar screens.

K. could keep quiet, in which case there was little chance that the Free World news services would ever learn about it, and no chance that the Russian people would ever find out. Our Central Intelligence Agency would know that a reconnaissance plane was missing, but it would not have advertised a top secret.

K. could refurbish the incident, give it a new paint job and peddle it as propaganda.

Or K. could tell the simple truth. This alternative is mentioned simply to keep the record technically complete, as the simple truth is a tactic not contemplated under Marxism-Leninism doctrines. Here we have the essential distinction between truth and pravda.

Truth, to the West, consists of all the facts without distortion.

Pravda is that which serves the World Communist Revolution. Pravda can be a mixture of fact and falsehood, or a flatfooted, brassbound, outright lie. In rare cases and by sheer coincidence, pravda may happen to match the facts. I do not actually know of such a case but it seems statistically likely that such matching must have taken place a few times in the past 43 years.

This comparison is not mere cynicism. I appeal to the authority of V. I. Lenin himself, in his tactics of revolution. By the doctrines of dialectical materialism, simple truth as we know it is abolished as a concept. It can have no existence of its own separate from the needs and purposes of the Communist Party and the World Revolution. Our ingrained habit of believing that the other fellow must be telling the truth at least most of the time is perhaps our greatest weakness in dealing with the Kremlin.

Apparently K. and his cohorts encountered much trouble in deciding just what the pravda should be about the U-2. They spent almost a week making up their minds. I was in Moscow at the time and there was no indication of any sort that anything unusual had happened on May 1. Russians continued to treat us American visitors with their customary almost saccharine politeness and the daily paper (I hesitate to call it a newspaper) known as *Pravda* hinted not of U-2's. This situation continued for several days thereafter. I was not dependent on an Intourist guide-interpreter in reaching this impression as my wife reads, writes, understands and fluently speaks Russian. She's not of Russian descent. She learned it at a University of Colorado Extension night school, plus a private tutor and a lot of hard work.

After May Day, we went on out to Alma Ata in Kazakhstan, north of India and a very short distance from the Red China border, about 2,000 miles beyond Moscow. Be-Kind-To-Americans Week continued. Three Americans, the only travelers in that remote part of Asia, received the undivided attention of the Alma Ata Director of Intourist, two school teachers (pulled off their teaching jobs to act as guides), two chauffeurs, and most of the attention of the hotel staff. We had but to express a wish and it was granted.

As of Thursday morning, May 5, the pravda was still that nothing had happened.

Thursday afternoon the climate abruptly changed. K's cohorts had at last decided on a pravda; to wit: an American military plane had attempted to cross the border of the Soviet Union. Soviet rocket fire had shot it down from an altitude of 60,000 feet as soon as it had crossed the border. The Soviet peoples were very much distressed that America would even attempt such an act of bald aggression. The Soviet peoples wanted peace. Such aggression would not be tolerated. Any other such planes would not only be shot down but the bases from which the attacks were made would be destroyed. Such was K's new pravda at the end of a five-hour speech.

The only connection between pravda and fact lay in the existence of an American plane down on Soviet soil. The locale of the incident shifted 1,500 miles. The plane is "shot down" at an extremely high altitude (if true then those exhibits in Gorky Park were as phony as K's promises of safety to Nagy and Pal Maleter). No mention at all is made of four long years of humiliating defeat. Pravda suppresses the truth and turns the incident into a triumph of Soviet arms. The Soviet newspapers and radio stations, all state-owned, spout the same line. All during this period the Voice of America was jammed. K. made certain his serfs heard nothing but the pravda.

We learned it by being ordered—not requested—to report to the Alma Ata office of the Director of Intourist. There we were given a long, very stern, but fatherly, lecture on the aggressive misbehavior of our government, a lecture that included a careful recital of the U-2 pravda.

Once I understood, I did something no American should ever do in the Soviet Union. I lost my temper completely. I outshouted the director on the subject of American grievances against the Soviet Union. My redheaded wife most ably supported me by scorching him about Soviet slave labor camps, naming each one by name, pointing out their location to him on the big map of the Soviet Union which hung back of his desk, and telling him how many people had died in them—including Americans.

We stomped out of his office, went to our room and gave way to the shakes. I had lost my temper and with it my judgment and thereby endangered not merely myself but my wife. I had forgotten that I was not protected by our Bill of Rights, that I was not free to bawl out a public official with impunity—that I was more than 2,000 miles from any possible help.

Communism has no concern for the individual. The Soviets have liquidated some 20 to 30 millions of their own in "building socialism." They kept after Trotsky until they got him. They murdered a schoolmate of mine between stations on a train in Western Europe and dumped his body. Terror and death are as fixed a part of their tactics as is distortion of the truth. Their present gang boss is the "liberator" of Budapest, the "pacifier" of the Ukraine—a comic butcher personally responsible for the deaths of millions of innocent people.

All this I knew. I knew, too, that our own policies had softened beyond recognition since the day when Teddy Roosevelt demanded the return of an American citizen alive—or the man who grabbed him, dead—and made his threat stick. In these present sorry days no American citizen abroad can count on protection from our State Department. We have even voluntarily surrendered our own soldiers' Constitutional rights, drafted and sent willy-nilly to foreign lands. We still permit the Red Chinese to hold prisoner hundreds of our boys captured nearly ten years ago in Korea. We do nothing about it. I did have the cold comfort of knowing that I had behaved as a free man, an American. I cherished the thought. But I could not honestly pat myself on the back. My anger had been a reflex, not courage. Pride would not be much to chew on if it had got my wife and myself into a Soviet slave labor camp.

I began to listen for that knock on the door, the one you read about in *Darkness at Noon,* the knock that means your next address may be Vorkuta or Karaganda. The address doesn't matter. You are never, never going to receive mail.

My fears were not groundless. I'd read Philip Wylie's *The Innocent Ambassadors* and I knew what had happened to his brother. I vividly recalled Kravchenko's *I Chose Freedom.*

The knock never came because the political climate engendered by the new pravda was "more-in-sorrow-than-in-anger." The next morning, May 6, we were again ordered to report to the Director's office. We had decided to brazen it out. We refused to go. Presently, we were allowed to catch a plane for Tashkent.

Pravda lasted 12 days, until K. shattered the Summit and revealed a new pravda.

We arrived in Leningrad just as the news reached there that the Summit had failed and that President Eisenhower had cancelled his proposed trip to the USSR and that Khrushchev was returning to Moscow via East Berlin.

The climate suddenly turned very chilly.

A month earlier, in Moscow, we had been picked up by two Russians the very first time we went out on the street. One was a technical translator; the other, a lady, was a museum curator. They were very friendly and stayed with us almost three hours, asking questions about the U.S. and inviting questions about the Soviet Union. This happened to us daily thereafter; we were always making casual acquaintance with Soviet citizens, on the street, in parks, in restaurants, during intermissions at the theatre, everywhere. They were always curious about America, very friendly and extremely polite. This attitude on the part of individual Soviet citizens toward individual Americans continued throughout the first pravda, ending May 6. It lessened slightly during the "more-in-sorrow" second pravda.

K's Paris news conference set up a new pravda. From the time we reached Leningrad until we left for Helsinki, Finland, not one Soviet citizen other than Intourist employees—who had to deal with us professionally—spoke to us under any circumstances. Not one.

In dealing with Intourist it is always difficult to tell whether one's frustrations arise from horrendous red tape or from intentional obstructionism. In Leningrad it at once became clear that Intourist now just did not want to give service. Even the porter who took up our bags made trouble.

Our first afternoon we were scheduled to visit the Hermitage, one of the world's great art museums. The tour had been set with Intourist for that particular afternoon before we left the States.

At the appointed time our guide (you have to have one) had not arranged for a car. After awhile it whisked up and the guide said, "Now we will visit the stadium."

We said that we wanted to visit the Hermitage, as scheduled. The guide told us that the Hermitage was closed. We asked to be taken to another museum (Leningrad has many). We explained that we were not interested in seeing another stadium.

We visited the stadium.

That is all Intourist permitted us to see that afternoon.

When we got back to the hotel we found someone in our room, as always in Leningrad. Since maid service in Intourist hotels varies from nonexistent to very ubiquitous we did not at once conclude that we were being intentionally inconvenienced. But one afternoon we found six men in our room, busy tearing out all the pipes and the question of intent became academic. A hotel room with its plumbing torn up and its floor littered with pipes and bits of wood and plaster is only slightly better than no hotel room at all.

We went to the ballet once in Leningrad. Intermissions are very long in Soviet theatres, about half an hour, and on earlier occasions these had been our most fruitful opportunity for meeting Russians.

Not now, not after K's Paris pravda. No one spoke to us. No Russian would even meet our eyes as we strolled past. The only personal attention we received that evening at the ballet was an unmistakably intentional elbow jab in the ribs from a Russian major in uniform. Be-Kind-To-Americans Week had adjourned, sine die.

How can the attitudes of 200 million people be switched on and off like a light bulb? How can one set of facts be made to produce three widely differing pravdas? By complete control of all communications from the cradle to the grave.

Almost all Soviet women work. Their babies are placed in kindergartens at an average age of 57 days, so we were told, and what we saw supported the allegation. We visited several kindergartens, on collective farms and in factories. By the posted schedules, these babies spend 13½ hours each day in kindergarten—they are with their mothers for perhaps an hour before bedtime.

At the Forty-Years-of-October Collective Farm outside Alma Ata some of the older children in one of the kindergartens put on a little show for us. One little girl recited a poem. A little boy gave a prose recitation. The entire group sang. The children were clean and neat, healthy and happy. Our guide translated nothing so, superficially, it was the sort of beguiling performance one sees any day in any American kindergarten.

However, my wife understands Russian:

The poem recounted the life of Lenin.

The prose recitation concerned the Seven-Year Plan.

The group singing was about how "we must protect our Revolution."

These tots were no older than six.

That is how it is done. Starting at the cradle, never let them hear anything but the official version. Thus "pravda" becomes "truth" to the Russian children.

What does this sort of training mean to a person when he is old enough, presumably, to think for himself? We were waiting in the Kiev airport, May 14. The weather was foul, planes were late and some 30 foreigners were in the Intourist waiting room. One of them asked where we were going and my wife answered that we were flying to Vilno.

Vilno? Where is that? My wife answered that it was the capital of Lithuania, one of the formerly independent Baltic republics which the USSR took over 20 years ago—a simple historic truth, as indisputable as the fact of the Invasion of Normandy or the bombing of Pearl Harbor.

But the truth is not pravda.

A young Intourist guide present understood English, and she immediately interrupted my wife, flatly contradicted her and asserted that Lithuania had *always* been part of the Soviet Union.

The only result was noise and anger. There was no possibility of changing this young woman's belief. She was telling the pravda the way she had been taught it in school and that was that. She had probably been about three when this international rape occurred. She had no personal memory of the period. She had never been to Vilno, although it is less than 400 miles from Kiev. (Soviet people do not travel much. With few exceptions the roads are terrible and the railroads are scarce. Russians are required to use internal passports, secure internal visas for each city they visit and travel by Intourist, just like a foreigner. Thus, traveling for pleasure, other than to designated vacation spots on the Black Sea, is almost unheard of.)

In disputing the official pravda we were simply malicious liars and she made it clear that she so considered us.

About noon on Sunday, May 15, we were walking downhill through the park surrounding the castle that dominates Vilno. We encountered a group of six or eight Red Army cadets. Foreigners are a great curiosity in Vilno. Almost no tourists go there. So they stopped and we chatted, myself through our guide and my wife directly, in Russian.

Shortly one of the cadets asked us what we thought of their new manned rocket. We answered that we had had no news lately—what was it and when did it happen? He told us, with the other cadets listening and agreeing, that the rocket had gone up that very day, and at that very moment a Russian astronaut was in orbit around the earth—and what did we think of that?

I congratulated them on this wondrous achievement but, privately, felt a dull sickness. The Soviet Union had beaten us to the punch again. But later that day our guide looked us up and carefully corrected the story: The cadet had been mistaken, the rocket was not manned.

That evening we tried to purchase *Pravda.* No copies were available in Vilno. Later we heard from other Americans that *Pravda* was not available in other cities in the USSR that evening—this part is hearsay, of course. We tried also to listen to the Voice of America. It was jammed. We listened to some Soviet stations but heard no mention of the rocket.

This is the rocket the Soviets tried to recover and later admitted that they had had some trouble with the retrojets; they had fired while the rocket was in the wrong attitude.

So what is the answer? Did that rocket contain only a dummy, as the pravda now claims? Or is there a dead Russian revolving in space?—an Orwellian "unperson," once it was realized that he could not be recovered.

I am sure of this: At noon on May 15 a group of Red Army cadets were unanimously positive that the rocket was manned. That pravda did not change until later that afternoon.

Concerning unpersons—

Rasputin is a fairly well known name in America. I was unable to find anyone in Russia who would admit to having heard of him. He's an unperson.

John Paul Jones is known to every school child in America. After the American Revolution Catherine the Great called him to Russia where he served as an Admiral and helped found the Russian Navy, negligible up to that time. I tried many, many times to find a picture of him in Russian historical museums and I asked dozens of educated Russians about him—with no results. In Russian history John Paul Jones has become an unperson.

Trotsky and Kerensky are not unpersons yet. Too many persons are still alive who recall their leading roles in recent Russian history. But they will someday be unpersons, even though Dr. Kerensky is living today in California. In the USSR it is always tacitly assumed that the

Communists overthrew the Tsar. This leaves no room for Dr. Kerensky. If pinned down, a Soviet guide may admit that there was such a person as Kerensky, then change the subject. The same applies to Trotsky; his role, for good or bad, is being erased from the records. We saw literally thousands of pictures of Lenin, including several hundred group pictures which supposedly portrayed all the Communist VIP's at the time of the Revolution. Not one of these pictures shows Trotsky even though many of them were alleged to be news photos taken at the time when Lenin and Trotsky were still partners and buddies.

This is how unpersons are made. This is how pravda is created.

The theme of the May Day celebration this year was "Miru Mir": "Peace to the World." A sweet sentiment. But it isn't safe to assume that the dictionary definition of peace has any connection with the official Communist meaning, since even yesterday's pravda may be reversed tomorrow.

ON THE WRITING OF SPECULATIVE FICTION

"There are nine-and-sixty ways
Of constructing tribal lays
And every single one of them is right!"
--RUDYARD KIPLING

THERE are at least two principal ways to write speculative fiction — write about people, or write about gadgets. There are other ways; consider Stapleton's "Last and First Men," recall S. Fowler Wright's "The World Below." But the gadget story and the human-interest story comprise most of the field. Most science fiction stories are a mixture of the two types, but we will speak as if they were distinct—at which point I will chuck the gadget story aside, dust off my hands, and confine myself to the human-interest story, that being the sort of story I myself write. I have nothing against the gadget story—I read it and enjoy it—it's just not my pidgin. I am told that this is a how-to-do-it symposium; I'll stick to what I know how to do.

The editor suggested that I write on "Science Fiction in the Slicks". I shan't do so because it is not a separate subject. Several years ago Will F. Jenkins said to me, "I'll let you in on a secret, Bob. *Any* story—science fiction, or otherwise—if it is well written, can be sold to the slicks." Will himself has proved this, so have many other writers—Wylie, Wells, Cloete, Doyle, Ertz, Noyes, many others. You may protest that these writers were able to sell science fiction to the high-pay markets because they were already well-known writers. It just ain't so, pal; on the contrary they are well-known writers because they are skilled at their trade. When they have a science fiction story to write, they turn out a well-written story and it sells to a high-pay market.

An editor of a successful magazine will bounce a poorly-written story from a "name" writer just as quickly as one from an unknown. Perhaps he will write a long letter of explanation and suggestion, knowing as he does that writers are as touchy as white leghorns, but he will bounce it. At most, prominence of the author's name might decide a borderline case.

A short story stands a much better chance with the slicks if it is not more than 5000 words long. A human-interest story stands a better chance with the slicks than a gadget story, because the human-interest story usually appeals to a wider audience than does a gadget story. But this does not rule out the gadget story. Consider "The Note on Danger B" in a recent *Saturday Evening Post* and Wylie's "The Blunder," which appeared last year in *Collier's.*

Let us consider what a story is and how to write one. (Correction: how I write one—remember Mr. Kipling's comment!)

A story is an account which is not necessarily true but which is interesting to read.

There are three main plots for the human interest story: boy-meets-girl, The Little Tailor, and the man-who-learned-better. Credit the last category to L. Ron Hubbard; I had thought for years that there were but two plots—he pointed out to me the third type.

Boy-meets-girl needs no definition. But don't disparage it. It reaches from the "Illiad" to John Taine's "Time Stream." It's the greatest story of them all and has never been sufficiently exploited in science fiction. To be sure, it appears in most s-f stories, but how often is it dragged in by the hair and how often is it the compelling and necessary element which creates and then solves the problem? It has great variety: boy-fails-to-meet-girl, boy-meets-girl-too-late, boy-meets-too-many-girls, boy-loses-girl, boy-and-girl-renounce-love-for-higher-purpose. Not science fiction? Here is a throw-away plot; you can have it free: Elderly man meets very young girl; they discover that they are perfectly adapted to each other, perfectly in love, "soul mates". (Don't ask me how. It's up to you to make the thesis credible. If I'm going to have to write this story, I want to be paid for it.)

Now to make it a science fiction story. Time travel? Okay, what time theory—probable-times, classic theory, or what? Rejuvenation? Is this mating necessary to some greater end? Or vice versa? Or will you transcend the circumstances, as C. L. Moore did in that tragic masterpiece "Bright Illusion"?

I've used it twice as tragedy and shall probably use it again. Go ahead and use it yourself. I did not invent it; it is a great story which has been kicking around for centuries.

The "Little Tailor"—this is an omnibus for all stories about the little guy who becomes a big shot, or vice versa. The tag is from the fairy story. Examples: "Dick Whittington," all the Alger books, "Little Caesar," "Galactic Patrol" (but not "Grey Lensman"), "Mein Kampf," David in the Old Testament. It is the Success story, or, in reverse, the story of tragic failure.

The man-who-learned-better ; just what it sounds like— the story of a man who has one opinion, point of view, or evaluation at the beginning of the story, then acquires a new opinion or evaluation as a result of having his nose rubbed in some harsh facts. I had been writing this story for years before Hubbard pointed out to me the structure of it. Examples: my "Universe" and "Logic of Empire," Jack London's "South of the Slot," Dickens' "A Christmas Carol." The definition of a story as something interesting-but-not-necessarily-true is general enough to cover all writers, all stories—even James Joyce, if you find his stuff interesting. (I don't!) For me, a story of the sort I want to write is still further limited to this recipe: a man finds himself in circumstances which create a problem for him. In coping with this problem, the man is changed in some fashion inside himself. The story is over when the inner change is complete—the external incidents may go on indefinitely. People changing under stress:

A lonely rich man learns comradeship in a hobo jungle.

A milquetoast gets pushed too far and learns to fight.

A strong man is crippled and has to adjust to it.

A gossip learns to hold her tongue.

A hard-boiled materialist gets acquainted with a ghost.

A shrew is tamed.

This is the story of character, rather than incident. It's not everybody's dish, but for me it has more interest than the most overwhelming pure adventure story. It need not be unadventurous ; the stress which produces the change in character can be wildly adventurous, and often is.

But what has all this to do with science fiction? A great deal! Much so-called science fiction is not about human beings and their problems, consisting instead of a fictionized framework, peopled by cardboard figures, on which is hung an essay about the Glorious Future of Technology. With due respect to Mr. Bellamy, "Looking Backward" is a perfect example of the fictionized essay. I've done it myself; "Solution Unsatisfactory" is a fictionized essay, written as such. Knowing that it would have to compete with real *story,* I used every device I could think of, some of them hardly admissible, to make it look like a story.

Another type of fiction alleged to be science fiction is the story laid in the future, or on another planet, or in another dimension, or sich, which could just as well have happened on Fifth Avenue, in 1947. Change the costumes back to now, cut out the pseudoscientific doubletalk and the blaster guns and it turns out to be straight adventure story, suitable, with appropriate facelifting, to any other pulp magazine on the news stand.

There is another type of honest-to-goodness science fiction story which is not usually regarded as science fiction: the story of people dealing with contemporary science or technology. We do not ordinarily mean this sort of story when we say "science fiction"; what we do mean is the speculative story, the story embodying the notion "Just suppose—", or "What would happen if—". In the speculative science fiction story accepted science and established facts are extrapolated to produce a new situation, a new framework for human action. As a result of this new situation, new *human* problems are created—and our story is about how human beings cope with these new problems.

The story is *not* about the new situation; it is about coping with problems arising out of the new situation.

Let's gather up the bits and define the Simon-pure, science fiction story;

1. The conditions must be, in some respect, different from here-and-now, although the difference may lie only in an invention made in the course of the story.
2. The new conditions must be an essential part of the story.
3. The problem itself — the "plot" — must be a *human* problem.
4. The human problem must be one which is created by, or indispensably affected by, the new conditions.
5. And lastly, no established fact shall be violated, and, furthermore, when the story requires that a theory contrary to present accepted theory be used, the new theory should be rendered reasonably plausible and it must include and explain established facts as satisfactorily as the one the author saw fit to junk. It may be farfetched, it may seem fantastic, but it must *not* be at variance with observed facts, i.e., if you are going to assume that the human race descended from Martians, then you've *got* to explain our apparent close relationship to terrestrial anthropoid apes as well. Pardon me if I go on about this. I love to read science fiction, but violation of that last requirement gets me riled. Rocketships should not make banked turns on empty space the way airplanes bank their turns on air. Lizards can't crossbreed with humans. The term "space warp" does not mean anything without elaborate explanation.

Not everybody talking about heaven is going there—and there are a lot of people trying to write science fiction who haven't bothered to learn anything about science. Nor is there any excuse for them in these days of public libraries. You owe it to your readers (a) to bone up on the field of science you intend to introduce into your story (b) unless you yourself are well-versed in that field, you should also persuade some expert in that field to read your story and criticize it before you offer it to an unsuspecting public. Unless you are willing to take this much trouble, please, *please* stick to a contemporary background you are familiar with. Paderewski had to practice; Sonja Henie still works on her school figures; a doctor puts in many weary years before they will let him operate—why should you be exempt from preparatory effort?

The Simon-pure science fiction story—examples of human problems arising out of present science:

Biological warfare ruins the farm lands of the United States; how is Joe Doakes, a used-car dealer, to feed his family?

Interplanetary travel puts us in contact with a race able to read our thoughts; is the testimony of such beings admissible as evidence in a murder trial ?

Men reach the Moon; what is the attitude of the Security Council of the United Nations. (Watch out for this one—and hold on to your hats!)

A complete technique for ectogenesis is developed; what is the effect on home, family, morals, religion? (Aldous Huxley left lots of this field unplowed—help yourself.)

And so on. I've limited myself to *my* notions about science fiction, but don't forget Mr. Kipling's comment. In any case it isn't necessary to know how—just go ahead and do it. Write what you like to read. If you have a yen for it, if you get a kick out of "Just imagine—"f if you love to think up new worlds, then come on in, the water's fine and there is plenty of room.

But don't write to me to point out how I have violated my own rules in this story or that. I've violated all of them and I would much rather try a new story than defend an old one.

I'm told that these articles are supposed to be some use to the reader. I have a guilty feeling that all of the above may have been more for my amusement than for your edification. Therefore I shall chuck in as a bonus a group of practical, tested rules which, if followed meticulously, will prove rewarding to any writer.

I shall assume that you can type, that you know the accepted commercial format or can be trusted to look it up and follow it, and that you always use new ribbons and clean type. Also, that you can spell and punctuate and can use grammar well enough to get by.

These things are merely the word-carpenter's sharp tools. He must add to them these business habits:

1. You must *write.*
2. You must *finish* what you start.
3. You must refrain from rewriting except to editorial order.
4. You must put it on the market.
5. You must keep it on the market until sold.

The above five rules really have more to do with how to write speculative fiction than anything said above them. But they are amazingly hard to follow—which is why there are so few professional writers and so many aspirants, and which is why I am not afraid to give away the racket! But, if you will follow them, it matters not how you write, you will find some editor somewhere, sometime, so unwary or so desperate for copy as to buy the worst old dog you, or I, or anybody else, can throw at him.

PANDORA'S BOX

Once opened, the box could never be closed. But after the myriad swarming Troubles came Hope.

Science fiction is not prophecy. It often reads as if it were prophecy; indeed the practitioners of this odd genre (pun intentional —I won't do it again) of fiction usually strive hard to make their stories sound as if they were true pictures of the future. Prophecies.

Prophesying is what the weatherman does, the race track tipster, the stock market adviser, the fortuneteller who reads palms or gazes into a crystal. Each one is predicting the future—sometimes exactly, sometimes in vague, veiled, or ambiguous language, sometimes simply with a claim of statistical probability, but always with a claim seriously made of disclosing some piece of the future.

This is not at all what a science fiction author does. Science fiction is almost always laid in the future—or at least in a fictional possible-future—and is almost invariably deeply concerned with the shape of that future. But the method is not prediction; it is usually extrapolation and/or speculation. Indeed the author is not required to (and usually does not) regard the fictional "future" he has chosen to write about as being the events most likely to come to pass; his purpose may have nothing to do with the *probability* that these storied events may happen.

"Extrapolation" means much the same in fiction writing as it does in mathematics: exploring a trend. It means continuing a curve, a path, a trend into the future, by extending its present direction and continuing the *shape* it has displayed in its past performance—i.e., if it is a sine curve in the past, you extrapolate it as a sine curve in the future, not as an hyperbola, nor a Witch of Agnesi, and *most certainly not* as a tangent straight line.

"Speculation" has far more elbowroom than extrapolation; it starts with a "What if?"—and the new factor thrown in by the what-if may be both wildly improbable and so revolutionary in effect as to throw a sine-curve trend (or a yeast-growth trend, or any trend) into something unrecognizably different. What if little green men land on the White House lawn and invite us to join a Galactic union?—or big green men land and enslave us and eat us? What if we solve the problem of immortality? What if New York City really does go dry? And not just the present fiddlin' shortage tackled by fiddlin' quarter-measures—can you imagine a man being lynched for wasting an ice cube? Living, as I do, in a state (Colorado—1965) which has just two sorts of water, too little and too much—we just finished seven years of drought with seven inches of rain in two hours, and one was about as disastrous as the other—I find a horrid fascination in Frank Herbert's *Dune World,* in Charles Einstein's *The Day New York Went Dry,* and in stories about Bible-type floods such as S. Fowler Wright's *Deluge.*

Most science fiction stories use both extrapolation and speculation. Consider "Blowups Happen," elsewhere in this volume. It was written in 1939, updated very slightly for book publication just after World War II by inserting some words such as "Manhattan Project" and "Hiroshima," but not rewritten, and is one of a group of stories published under the pretentious collective title of *The History of the Future* (!) (an editor's title, *not* mine!)—which certainly sounds like prophecy.

I disclaim any intention of prophesying; I wrote that story for the sole purpose of making money to pay off a mortgage and with the single intention of entertaining the reader. As prophecy the story falls flat on its silly face—any tenderfoot Scout can pick it to pieces—but I think it is still entertaining as a *story,* else it would not be here; I have a business reputation to protect and wish to continue making money. Nor am I ashamed of this motivation. Very little of the great literature of our heritage arose solely from a wish to "create art"; most writing, both great and not-so-great, has as its proximate cause a need for money combined with an aversion to, or an inability to perform, hard "honest labor." Fiction writing offers a legal and reasonably honest way out of this dilemma.

A science fiction author may have, and often does have, other motivations *in addition to* pursuit of profit. He may wish to create "art for art's sake," he may want to warn the world against a course he feels to be disastrous (Orwell's *1984,* Huxley's *Brave New World*—but please note that each is intensely entertaining, and that each made stacks of money), he may wish to urge the human race toward a course which he considers desirable (Bellamy's *Looking Backward,* Wells' *Men Like Gods*), he may wish to instruct, or uplift, or even to dazzle. But the science fiction writer—*any* fiction writer—must keep entertainment consciously in mind as his prime purpose . . . or he may find himself back dragging that old cotton sack.

If he succeeds in this purpose, his story is likely to remain gripping entertainment long years after it has turned out to be false "prophecy." H. G. Wells is perhaps the greatest science fiction author of all time—and his greatest science fiction stories were written around sixty years ago (i.e., about 1895) . . . under the whip. Bedfast with consumption, unable to hold a job, flat broke, paying alimony—he *had* to make money somehow, and writing was the heaviest work he could manage. He was clearly aware (see his autobiography) that to stay alive he must be entertaining. The result was a flood of some of the most brilliant speculative stories about the future ever written. As prophecy they are all hopelessly dated . . . which matters not at all; they are as spellbinding now as they were in the Gay 'Nineties and the Mauve Decade.

Try to lay hands on his *When the Sleeper Wakes.* The gadgetry in it is ingenious—and all wrong. The projected future in it is brilliant—and did not happen. All of which does not sully the story; it is a great story of love and sacrifice and blood-chilling adventure set in a matrix of mindstretching speculation about the nature of Man and his Destiny. I read it first in 1923, and at least a dozen times since . . . and still reread it whenever I get to feeling uncertain about just how one does go about the unlikely process of writing fiction for entertainment of strangers—and again finding myself caught up in the sheer excitement of Wells' story.

"Solution Unsatisfactory" herein is a consciously Wellsian story. No, no, I'm not claiming that it is of H. G. Wells' quality—its quality is for you to judge, not me. But it was written by the method which Wells spelled out for the speculative story: Take one, just one, basic new assumption, then examine all its consequences—but express those consequences in terms of human beings. The assumption I chose was the "Absolute Weapon"; the speculation concerns what changes this forces on mankind. But the "history" the story describes simply did not happen.

However the problems discussed in this story are as fresh today, the issues just as poignant, for the grim reason that we have not reached even an "unsatisfactory" solution to the problem of the Absolute Weapon; we have reached *no* solution.

In the years that have passed since I wrote that story (in 1940) the world situation has grown much worse. Instead of one Absolute Weapon there are now at least five distinct types—an "Absolute Weapon" being defined as one against which there is no effective defense and which kills indiscriminately over a very wide area. The earliest of the five types, the A-bomb, is now known to be possessed by at least five nations; at least twenty-five other nations have the potential to build them in the next few years.

But there is a possible sixth type. Earlier this year (1965—R.A.H.) I attended a seminar at one of the nation's new think-factories. One of the questions discussed was whether or not a "Doomsday Bomb" could be built—a single weapon which would destroy all life of all sorts on this planet; *one* weapon, not an all-out nuclear holocaust involving hundreds of thousands of ICBMs. No, this was to be a world-wrecker of the sort Dr. E. E. Smith used to use in his interstellar sagas back in the days when SF magazines had bug-eyed monsters on the cover and were considered lowbrow, childish, fantastic.

The conclusions reached were: Could the Doomsday Machine be built?—yes, no question about it. What would it cost?—quite cheap.

A seventh type hardly seems necessary.

And that makes the grimness of "Solution Unsatisfactory" seem more like an Oz book in which the most harrowing adventures always turn out happily.

"Searchlight" is almost pure extrapolation, almost no speculation. The gadgets in it are either hardware on the shelf, or hardware which will soon be on the shelf because nothing is involved but straightforward engineering development. "LifeLine" (my first story) is its opposite, a story which is sheer speculation and either impossible or very highly improbable, as the What-If postulate will never be solved—I think. I hope. But the two stories are much alike in that neither depends on when it was written nor when it is read. Both are independent of any particular shape to history; they are timeless.

"Free Men" is another timeless story. As told, it looks like another "after the blowup" story—but it is not. Although the place is nominally the United States and the time (as shown by the gadgetry) is set in the not-distant future, simply by changing names of persons and places and by inserting other weapons and other gadgets this story could be any country and any time in the past or future—or could even be on another planet and concern a nonhuman race. But the story does also apply here-and-now, so I told it that way.

"Pandora's Box" was the original title of an article researched and written in 1949 for publication in 1950, the end of the half-century. Inscrutable are the ways of editors: it appeared with the title "Where To?" and purported to be a nonfiction prophecy concerning the year 2000 A.D. as seen from 1950. (I agree that a science fiction writer should avoid marijuana, prophecy, and time payments—but I was tempted by a soft rustle.)

Our present editor (1965) decided to use this article, but suggested that it should be updated. Authors who wish to stay in the business listen most carefully to editors' suggestions, even when they think an editor has been out in the sun without a hat; I agreed.

And reread "Where To?" and discovered that our editor was undeniably correct; it needed updating. At least.

But at last I decided not to try to conceal my bloopers. Below is reproduced, unchanged, my predictions of fifteen years back. But here and there through the article I have inserted signs for footnotes—like this: (z)—and these will be found at the end of the 1950 article . . . calling attention to bloopers and then forthrightly excusing myself by rationalizing how anyone, even Nostradamus, would have made the same mistake . . . hedging my bets in other cases, or chucking in brand-new predictions and carefully laying them farther in the future than I am likely to live . . . and, in some cases, crowing loudly about successful predictions. (Addendum 1979: I have interpolated the later comments, and marked each item 1950, or 1965, or 1980.)

So—

THE PRAGMATICS OF PATRIOTISM

In this complex world, science, the scientific method, and the consequences of the scientific method are central to everything the human race is doing and to wherever we are going. If we blow ourselves up we will do it by misapplication of science; if we manage to keep from blowing ourselves up, it will be through intelligent application of science. Science fiction is the only form of fiction which takes into account this central force in our lives and futures. Other sorts of fiction, if they notice science at all, simply deplore it—an attitude very chichi in the anti-intellectual atmosphere of today. But we will never get out of the mess we are in by wringing our hands.

Let me make one flatfooted prediction of the sciencefiction type. Like all scenarios this one has assumptions—variables treated as constants. The primary assumption is that World War Three will hold off long enough—ten, twenty, thirty years—for this prediction to work out . . . plus a secondary assumption that the human race will not find some other way to blunder into ultimate disaster.

Prediction: In the immediate future—by that I mean in the course of the naval careers of the class of '73—there will be nuclear-powered, constant-boost spaceships—ships capable of going to Mars and back in a couple of weeks—and these ships will be armed with Buck-Rogersish death rays. Despite all treaties now existing or still to be signed concerning the peaceful use of space, these spaceships will be used in warfare. Space navies will change beyond recognition our present methods of warfare and will control the political shape of the world for the foreseeable future. Furthermore—and still more important—these new spaceships will open the Solar System to colonization and will eventually open the rest of this Galaxy.

I did *not* say that the United States will have these ships. The present sorry state of our country does not permit me to make such a prediction. In the words of one of our most distinguished graduates in his *The Influence of Sea Power on History:* "Popular governments are not generally favorable to military expenditures, however necessary—"

Every military officer has had his nose rubbed in the wry truth of Admiral Mahan's observation. I first found myself dismayed by it some forty years ago when I learned that I was expected to maintain the ship's battery of USS *Roper* in a state of combat readiness on an allowance of less than a dollar a day—with World War Two staring down our throats.

The United States is capable of developing such spaceships. But the mood today does not favor it. So I am unable to predict that *we* will be the nation to spend the necessary R&D money to build such ships.

(Addressed to a plebe midshipman:)

Mister, how long is it to graduation?

Sixty-two days? Let's make it closer than that. I have . . . 7.59, just short of eight bells. Assuming graduation for ten in the morning that gives . . . 5,320,860 seconds to graduation . . . and I have less than 960 seconds in which to say what I want to say.

(To the Brigade at large:)

Why are you here?

(To a second plebe:)

Mister, why are *you* here?

Never mind, son; that's a rhetorical question. You are here to become a naval officer. That's why this Academy was founded. That is why all of you are here: to become naval officers. If that is *not* why *you* are here, you've made a bad mistake. But I speak to the overwhelming majority who understood the oath they took on becoming midshipmen and look forward to the day when they will renew that oath as commissioned officers.

But why would anyone want to become a naval officer?

In the present dismal state of our culture there is little prestige attached to serving your country; recent public opinion polls place military service far down the list.

It can't be the pay. No one gets rich on Navy pay. Even a 4-star admiral is paid much less than top executives in other lines. As for lower ranks the typical naval officer finds himself throughout his career just catching up from the unexpected expenses connected with the last change of duty when another change of duty causes a new financial crisis. Then, when he is about fifty, he is passed over and retires . . . but he can't really retire because he has two kids in college and one still to go. So he has to find a job . . . and discovers that jobs for men his age are scarce and usually don't pay well.

Working conditions? You'll spend half your life away from your family. Your working hours? "Six days shalt thou work and do all thou art able; the seventh the same, and pound on the cable." A forty-hour week is standard for civilians—but not for naval officers. You'll work that forty-hour week but that's just a starter. You'll stand a night watch as well, and duty weekends. Then with every increase in grade your hours get longer—until at last you get a ship of your own and no longer stand watches. Instead you are on duty twenty-four hours a day . . . and you'll sign your night order book with: "In case of doubt, do not hesitate to call me."

I don't know the average week's work for a naval officer but it is closer to sixty than to forty. I'm speaking of peacetime, of course. Under war conditions it is whatever hours are necessary—and sleep you grab when you can.

Why would anyone elect a career which is unappreciated, overworked, and underpaid? It can't be just to wear a pretty uniform. There has to be a better reason.

As one drives through the bushveldt of East Africa it is easy to spot herds of baboons grazing on the ground. But not by looking at the ground. Instead you look up and spot the lookout, an adult male posted on a limb of a tree where he has a clear view all around him—which is why you can spot him; he has to be where he can see a leopard in time to give the alarm. On the ground a leopard can catch a baboon . . . but if a baboon is warned in time to reach the trees, he can outclimb a leopard.

The lookout is a young male assigned to that duty and there he will stay, until the bull of the herd sends up another male to relieve him.

Keep your eye on that baboon; we'll be back to him.

Today, in the United States, it is popular among self-styled "intellectuals" to sneer at patriotism. They seem to think that it is axiomatic that any civilized man is a pacifist, and they treat the military profession with contempt. "Warmongers"—"Imperialists"—"Hired killers in uniform"—you have all heard such sneers and you will hear them again. One of their favorite quotations is: "Patriotism is the last refuge of a scoundrel."

What they never mention is that the man who made that sneering wisecrack was a fat, gluttonous slob who was pursued all his life by a pathological fear of death.

I propose to prove that that baboon on watch is morally superior to that fat poltroon who made that wisecrack.

Patriotism is the most practical of all human characteristics.

But in the present decadent atmosphere patriots are often too shy to talk about it—as if it were something shameful or an irrational weakness.

But patriotism is *not* sentimental nonsense. Nor something dreamed up by demagogues. Patriotism is as necessary a part of man's evolutionary equipment as are his eyes, as useful to the race as eyes are to the individual.

A man who is *not* patriotic is an evolutionary dead end. This is not sentiment but the hardest sort of logic.

To prove that patriotism is a necessity we must go back to fundamentals. Take any breed of animal—for example, tyrannosaurus rex. What is the most basic thing about him? The answer is that tyrannosaurus rex is dead, gone, extinct.

Now take homo sapiens. The first fact about him is that he is not extinct, he is alive.

Which brings us to the second fundamental question: Will homo sapiens stay alive? Will he survive?

We can answer part of that at once: Individually h. sapiens will *not* survive. It is unlikely that anyone here tonight will be alive eighty years from now; it approaches mathematical certainty that we will all be dead a hundred years from now as even the youngest plebe here would be 118 years old then—if still alive.

Some men do live that long but the percentage is so microscopic as not to matter. Recent advances in biology suggest that human life may be extended to a century and a quarter, even a century and a half—but this will create more problems than it solves. When a man reaches my age or thereabouts, the last great service he can perform is to die and get out of the way of younger people.

Very well, as individuals we all die. This brings us to the second half of the question: Does homo sapiens *as a breed* have to die? The answer is: No, it is *not* unavoidable.

We have two situations, mutually exclusive: Mankind surviving, and mankind extinct. With respect to morality, the second situation is a null class. An extinct breed has *no* behavior, moral or otherwise.

Since survival is the sine qua non, I now define "moral behavior" as "behavior that tends toward survival." I won't argue with philosophers or theologians who choose to use the word "moral" to mean something else, but I do not think anyone can define "behavior that tends toward extinction" as being "moral" without stretching the word "moral" all out of shape.

We are now ready to observe the hierarchy of moral behavior from its lowest level to its highest.

The simplest form of moral behavior occurs when a man or other animal fights for his own survival. Do not belittle such behavior as being merely selfish. Of course it is selfish . . . but selfishness is the bedrock on which all moral behavior starts and it can be immoral only when it conflicts with a higher moral imperative. An animal so poor in spirit that he won't even fight on his own behalf is already an evolutionary dead end; the best he can do for his breed is to crawl off and die, and not pass on his defective genes.

The next higher level is to work, fight, and sometimes die for your own immediate family. This is the level at which six pounds of mother cat can be so fierce that she'll drive off a police dog. It is the level at which a father takes a moonlighting job to keep his kids in college—and the level at which a mother or father dives into a flood to save a drowning child . . . and it is still moral behavior even when it fails.

The next higher level is to work, fight, and sometimes die for a group larger than the unit family—an extended family, a herd, a tribe—and take another look at that baboon on watch; he's at that moral level. I don't think baboon language is complex enough to permit them to discuss such abstract notions as "morality" or "duty" or "loyalty"—but it is evident that baboons *do* operate morally and *do* exhibit the traits of duty and loyalty; we see them in action. Call it "instinct" if you like—but remember that assigning a name to a phenomenon does not explain it.

But that baboon behavior can be explained in evolutionary terms. Evolution is a process that never stops. Baboons who fail to exhibit moral behavior do not survive; they wind up as meat for leopards. Every baboon generation has to pass this examination in moral behavior; those who bilge it don't have progeny. Perhaps the old bull of the tribe gives lessons . . . but the leopard decides who graduates—and there is no appeal from his decision. We don't have to understand the details to observe the outcome: Baboons behave morally—for baboons.

The next level in moral behavior higher than that exhibited by the baboon is that in which duty and loyalty are shown toward a group of your own kind too large for an individual to know all of them. We have a name for that. It is called "patriotism."

Behaving on a still higher moral level were the astronauts who went to the Moon, for their actions tend toward the survival of the entire race of mankind. The door they opened leads to the hope that h. sapiens will survive indefinitely long, even longer than this solid planet on which we stand tonight. As a direct result of what they did, it is now possible that the human race will *never* die.

Many shortsighted fools think that going to the Moon was just a stunt. But the astronauts knew the meaning of what they were doing, as is shown by Neil Armstrong's first words in stepping down onto the soil of Luna: "One small step for a man, one giant leap for mankind."

Let us note proudly that eleven of the Astronaut Corps are graduates of this our school.

And let me add that James Forrestal was the *first* high-ranking Federal official to come out flatly for space travel.

I must pause to brush off those parlor pacifists I mentioned earlier . . . for they contend that *their* actions are on this highest moral level. They want to put a stop to war; they say so. Their purpose is to save the human race from killing itself off; they say that too. Anyone who disagrees with them must be a bloodthirsty scoundrel—and they'll tell you that to your face.

I won't waste time trying to judge their motives; my criticism is of their mental processes: Their heads aren't screwed on tight. They live in a world of fantasy.

Let me stipulate that, if the human race managed its affairs sensibly, we could do without war.

Yes—and if pigs had wings, they could fly.

I don't know what planet those pious pacifists are talking about but it can't be the third one out from the Sun. Anyone who has seen the Far East—or Africa—or the Middle East—knows or certainly should know that there is *no* chance of abolishing war in the foreseeable future. In the past few years I have been around the world three times, traveled in most of the communist countries, visited many of the so-called emerging countries, plus many trips to Europe and to South America; I saw nothing that cheered me as to the prospects for peace. The seeds of war are everywhere; the conflicts of interest are real and deep, and will not be abolished by pious platitudes.

The best we can hope for is a precarious balance of power among the nations capable of waging total war—while endless lesser wars break out here and there.

I won't belabor this. Our campuses are loaded with custard-headed pacifists but the yard of the Naval Academy is one place where I will not encounter them. We are in agreement that the United States still needs a navy, that the Republic will always have need for heroes—else you would not be here tonight and in uniform.

Patriotism— Moral behavior at the national level. Non sibi sed Patria. Nathan Hale's last words: "I regret that I have but one life to give for my country." Torpedo Squadron Eight making its suicidal attack. Four chaplains standing fast while the water rises around them. Thomas Jefferson saying, "The Tree of Liberty must be refreshed from time to time with the blood of patriots—" A submarine skipper giving the order "Take her *down*!" while he himself is still topside. Jonas Ingram standing on the steps of Bancroft Hall and shouting, "The Navy has no place for good losers! The Navy needs tough sons of bitches who can go out there and *win*!"

Patriotism— An abstract word used to describe a type of behavior as harshly practical as good brakes and good tires. It means that you place the welfare of your nation ahead of your own even if it costs you your life.

Men who go down to the sea in ships have long had another way of expressing the same moral behavior tagged by the abstract expression "patriotism." Spelled out in simple Anglo-Saxon words "Patriotism" reads "Women and children first!"

And that is the moral result of realizing a self-evident biological fact: Men are expendable; women and children are not. A tribe or a nation can lose a high percentage of its men and still pick up the pieces and go on . . . as long as the women and children are saved. But if you fail to save the women and children, you've had it, you're done, you're *through!* You join tyrannosaurus rex, one more breed that bilged its final test.

I must amplify that. I know that women can fight and often have. I have known many a tough old grandmother I would rather have at my side in a tight spot than any number of pseudomales who disdain military service. My wife put in three years and a butt active duty in World War Two, plus ten years reserve, and I am proud—very proud! —of her naval service. I am proud of every one of our women in uniform; they are a shining example to us men.

Nevertheless, as a mathematical proposition in the facts of biology, children, and women of childbearing age, are the ultimate treasure that we must save. Every human culture is based on "Women and children first"—and any attempt to do it any other way leads quickly to extinction.

Possibly extinction is the way we are headed. Great nations have died in the past; it can happen to us.

Nor am I certain how good our chances are. To me it seems self-evident that any nation that loses its patriotic fervor is on the skids. Without that indispensable survival factor the end is only a matter of time. I don't know how deeply the rot has penetrated—but it seems to me that there has been a change for the worse in the last fifty years. Possibly I am misled by the offensive behavior of a noisy but unimportant minority. But it does seem to me that patriotism has lost its grip on a large percentage of our people.

I hope I am wrong . . . because if my fears are well grounded, I would not bet two cents on this nation's chance of lasting even to the end of this century.

But there is no way to force patriotism on anyone. Passing a law will not create it, nor can we buy it by appropriating so many billions of dollars.

You gentlemen of the Brigade are most fortunate. You are going to a school where this basic moral virtue is daily reinforced by precept and example. It is not enough to know what Charlie Noble does for a living, or what makes the wildcat wild, or which BatDiv failed to splice the main brace and why—nor to learn matrix algebra and navigation and ballistics and aerodynamics and nuclear engineering. These things are merely the working tools of your profession and could be learned elsewhere; they do not require "four years together by the Bay where Severn joins the tide."

What you do have here is a tradition of service. Your most important classroom is Memorial Hall. Your most important lesson is the way you feel inside when you walk up those steps and see that shot-torn flag framed in the arch of the door: "Don't Give Up the Ship."

If you feel nothing, you don't belong here. But if it gives you goose flesh just to see that old battle flag, then you are going to find that feeling increasing every time you return here over the years . . . until it reaches a crescendo the day you return and read the list of your own honored dead—classmates, shipmates, friends—read them with grief and pride while you try to keep your tears silent.

The time has come for me to stop. I said that "Patriotism" is a way of saying "Women and children first." And that no one can force a man to feel this way. Instead he must embrace it freely. I want to tell about one such man. He wore no uniform and no one knows his name, or where he came from; all we know is what he did.

In my home town sixty years ago when I was a child, my mother and father used to take me and my brothers and sisters out to Swope Park on Sunday afternoons. It was a wonderful place for kids, with picnic grounds and lakes and a zoo. But a railroad line cut straight through it.

One Sunday afternoon a young married couple were crossing these tracks. She apparently did not watch her step, for she managed to catch her foot in the frog of a switch to a siding and could not pull it free. Her husband stopped to help her.

But try as they might they could not get her foot loose. While they were working at it, a tramp showed up, walking the ties. He joined the husband in trying to pull the young woman's foot loose. No luck—

Out of sight around the curve a train whistled. Perhaps there would have been time to run and flag it down, perhaps not. In any case both men went right ahead trying to pull her free . . . and the train hit them.

The wife was killed, the husband was mortally injured and died later, the tramp was killed—and testimony showed that neither man made the slightest effort to save himself.

The husband's behavior was heroic . . . but what we expect of a husband toward his wife: his right, and his proud privilege, to die for his woman. But what of this nameless stranger? Up to the very last second he could have jumped clear. He did not. He was still trying to save this woman he had never seen before in his life, right up to the very instant the train killed him. And that's all we'll ever know about him.

This is how a man dies.

This is how a *man* . . . lives!

THE DISCOVERY OF THE FUTURE

Here in my hand is the manuscript of a speech. If it works out anything like the synopses I have used, this speech will still be left when I get through.

Before I start, I want to mention an idea that might be fun. It was an innovation in political speaking introduced in California by Upton Sinclair that raised Cain with the ordinary run of political speakers: answering questions from the platform. But I want to put one reservation on it, and that is that questions should be in writing, with names signed, so we can read them into the mike so that I can have clearly in mind what the questions are.

During the course of the last day or so, I have gathered the impression that quite a number of people are interested in the background of my stories; and; in some cases, in my social and political ideas, economic ideas, etc.—some of which, but not all, shows in my stories. Some of them have evidenced an interest in my own personal background. So, if the question comes along, I will do my best to answer it, perhaps dodging the embarrassing ones a little.

To get to the talk itself: THE DISCOVERY OF THE FUTURE. I was told that there was no time limit, so I assumed that he wanted my usual three hour speech. Or, perhaps, we can just keep going until the hall is cleared.

Forry [Ackerman] told you that I have been reading science fiction for a longtime. I have. I have been reading it as long as I could get hold of it, and I probably experienced much the same process most of you did: parental disapproval, those funny looks you get from friends, for reading “that kind of junk.”

We here, the science fiction fans, are the lunatic fringe! We are the crazy fools who read that kind of stuff—who read those magazines with the outlandish machines and animals on the covers. You leave one around loose in your home and a friend will pick it up. Those who are not fans ask you if you really read that stuff, and from then on they look at you with suspicion.

Why do we do it? I think I know. This is an opinion, but it is probably why we like science fiction. It is not just for the adventure of the story itself—you can find that in other types of stories. To my mind it is because science fiction has as its strongest factor the single thing that separates the human race from other animals—I refer to a quality which has been termed "time-binding." With a hyphen. It's a term that may not have come to your attention. It is a technical term invented by Alfred Korzybski, and it refers to the fact that the human animal lives not only in the present, but also in the past and the future.

The human animal differs from all other animals *only* in this one respect. The definition includes both reading and writing. That is the primary technique whereby we are able to make records, to gather data and to look into the future. Other things we do that we think of as making us humans rather than animals—some animals have done at sometime. They form governments. They invent machines. Some animals even use money. I have not seen them doing it, but I have heard reports that I believe to be credible. But time-bind they do not do, to anything like the extent that the human race does.

Time-binding consists of making use of the multitudinous records of the past that we have. On the basis of those records, the data we have collected directly and the data that we get from others by means of time-binding techniques, including reading and writing, we are able to plan our future conduct. It means that we have lived mentally in the past and in the future, as well as in the present. That is certainly true of science fiction fans.

I like the term Future Fiction that Charlie Hornig gave it. It seems to me a little broader than Science Fiction because most of these stories are concerned with the future—what will happen.

In taking the future into account, trying to predict what it will be, and trying to make your plans accordingly, you are time-binding. The childlike person lives from day to day. The adult tries to plan for a year or two at least. Statesmen try to plan for perhaps twenty years or more. There are a few institutions which plan for longer than the lives of men, as for example, the Smithsonian Institution and the Catholic Church, that think not in terms of lifetimes, but in centuries. They make their plans that far ahead, and to some extent, make them work out.

Science fiction fans differ from most of the rest of the race by thinking in terms of racial magnitudes—not even centuries, but thousands of years. Stapledon thinks in terms of. . . how many years? How far does his time scale go? I don't know: the figures mean nothing to me,

That is what science fiction consists of—trying to figure out from the past and from the present what the future may be. In that we are behaving like human beings.

Now, all human beings time-bind to some extent when they try to discover the future. But most human beings—those who laugh at us for reading science fiction— time-bind, make their plans, make their predictions, only within the limits of their personal affairs. In that respect, they may try to predict for a year or two, make plans, even try to predict for their entire lifetimes, but they rarely try to predict in terms of the culture in which they live. In fact, most people, as compared with science fiction fans, have no conception whatsoever of the fact that the culture they live in *does* change, that it *can* change. Even though they may believe it with the top of their minds, they don't believe it way back in the thalamus, in their emotions.

Our grandfathers thought the horse could never be replaced by the auto. Four years after the Wright brothers first flew, they were still trying to get the War Department to come out to look at the airplane. And when one Major General did take a look at an airplane flying, he remarked that it was a very interesting scientific toy, but, of course, it had no possible military application! That was just a short time ago, a very short time.

You will hear that sort of thing around you all the time. I made use, a while ago, of a quotation I would like to use again, from 0. B. Shaw. Referring to Brittanicus in *Caesar and Cleopatra,* he said, "he is an outlander and a barbarian and he believes that the customs of his tribe are the laws of nature." That is what you are up against when you try to get most people to read science fiction. That is why they think you are crazy, because they believe that the customs of their tribe are the laws of nature, immutable and unchanging. They do not believe in changes.

Phrases like "There'll always be an England" are pleasant and inspiring at the present time, but *we* know better. There won't always be an England, nor a Germany, nor a United States, a Baptist Church, nor monogamy, nor the Democratic Party, nor the modesty taboo, nor the superiority of the white race, nor airplanes. Nor automobiles. They will go. They will be gone—we'll see them go. Any custom, institution, belief, or social structure that we see around us today will change, will pass, and most of those we will *see* change and pass.

In science fiction, we try to envision what those changes might be.

Our guesses are usually wrong; they are almost certain to be wrong. Some men, with a greater grasp on data than others, can do remarkably well. H. G. Wells, who probably knows more (on the order of ten times as much, or perhaps higher) than most science fiction writers, has been remarkably successful in some of his predictions. Most of us aren't that lucky;

I do not expect my so-called *History of the Future* to come to pass. I think some of the trends in it may show up, but I do not think that my factual predictions as such are going to come to pass, even in their broad outlines.

You speak of this sort of thing to an ordinary man— tell him that things are going to change—he will admit it, but he does not believe it at all. He believes it just with the top of his mind. He believes in "progress." He thinks things will get a little bit bigger, and louder, and brighter, a few more neon signs. *But he does not believe that any actual change in the basic nature of the culture in which he lives, or its technology, will take place.*

Airplanes he thinks are all right, but those crazy rocket ship things! Why, a rocket ship couldn't possibly fly. It hasn't got anything to PUSH on. That is the way he feels about it.

There will never be any rocket ships. That is all right for Buck Rogers in the funny papers. He does not believe that there could be rocket ships, nor does he believe that there will be things that will make rockets look like primitive gadgets that even the wildest of the science fiction writers have not been able to guess or think about. Rocket ships are about as far as I am willing to go because I have not got data enough to think about, to make a reasonable guess about the other forms of transportation or gadgets we may have.

But that same man did not believe in airplanes in 1910!

I have spoken primarily of mechanical changes because they are much easier to show, to point to, than the more subtle sociological changes, cultural changes, changes in our customs. Some of these can be pointed out. I would like to point out one of them right now. The word "syphilis" could not be used in public even as short a time as fifteen years ago.

Yet, as I used it here, I did not see any shock around the room—nobody minded it—even the *Ladies' Home Journal* runs articles on it. We are getting a little more civilized in that respect than we were twenty years ago. Our grandfathers considered that word indecent. They believed that things that were decent and indecent were subject to absolute rules, that they were laws of nature. The majority of people around us now believe that their criteria of decency and indecency are absolute, that they won't change, that there are some things that are *right,* and some things that are *wrong.* They do not know enough about past history to be able to make any predictions about the future.

I could think of some rude words to use in that connection, words that are still rude now. I think it quite possible that twenty years from now on this same platform I could use those words and not produce any shock around the room.

For things *do* change. And words which we consider utterly indecent today may very possibly simply be used as tags, as terms with no emotional connotation to them, twenty years from now.

We happen to live in a period of sudden and drastic change in a good many of the things that happen to us. I think it is extremely important that we be prepared for that change and for that reason, I think that science fiction fans are better prepared to face the future than the ordinary run of people around them, because they believe in change.

To that extent, I think that science fiction, even the corniest of it, even the most outlandish of it, no matter how badly it's written, has a distinct therapeutic value because *all* of it has as its primary postulate that the world *does* change. I cannot overemphasize the importance of that idea.

Unless you believe that, unless you are prepared for it—as I know all of you are—you can't retain your sanity these days. When a man makes predictions and they keep failing to come true, time and again, he goes insane, functionally insane. It has been proved in laboratories time and again. It has been proved with respect to men, but I'll give an illustration with respect to animals.

The well-known experiment was performed with rats, an experiment in which a rat was disappointed in his predictions time and again. He went crazy. It happens to work the same way with men. Things do not necessarily work the same way with animals as they do with men, but in this case, there is data to prove it. The inability to believe in change makes absolutely certain that your prediction will disappoint you. That does not apply to this group, but it does apply to a great many people.

For that reason, I believe we are in a period in which large portions of the human race will be in a condition of, if not insanity, at least unsanity. We see that over a large portion of the world today. I think we have seen it crawling up on us for a number of years. In 1929 we had the market crash and people jumped out of the window as a result of not being able to predict things which were perfectly obvious, written on the face of the culture, something that would happen.

The Depression came along, and the madhouses filled up again.

Other only slightly less slaphappy individuals proceeded to be a bit unsane by concocting the most wildly unscientific schemes for making everybody rich by playing musical chairs.. Not quite crazy—they could still find their way around and take street cars and not get lost, but not quite sane either. That can lead, if it goes on long enough, to a condition of mass insanity that none of us is going to like.

Nevertheless, we science fictionists, I think, are better prepared for it than others. During a period of racial insanity, mass psychoses, hysteria, manic depression, paranoia, it is possible for a man who believes in change to hold on, to arrest his judgment, to go slow, to take a look at the facts, and not be badly hurt. Things will probably happen to us, very unpleasant indeed, we can't separate ourselves from the matrix in which we find ourselves. Nevertheless, WE stand a chance, for I am very much afraid that a great many people of the type who laugh at us for dealing with this stuff, will not be able to hang on.

The important thing is to hang on to your sanity, to preserve sanity while it happens—no matter what bad things happen to the world.. As individuals it may be difficult for us to do anything about it, even though all of us in our own ways, and according to our lights, are trying. But this series of wars that we find the world in now may go on for another five years, ten years, twenty years—it may go on for fifty years—you and I may not live to see the end of it.

I, personally, have hopes—wishful thinking—that it will terminate quickly enough so that I can pass the rest of my lifetime in comparative peace and comfort. But I'm not optimistic about it. During such a period, it is really difficult to keep a grip on yourself, but I think that we are better prepared to than some of the others.

I can speak more freely here than I could in a political. meeting, because it's a highly selected group. I've known a good many science fiction fans, and I've observed, statistically, certain things about them. Most of them are young as compared with other groups, most of them are extremely precocious—quite brilliant. I'd be very much interested to see IQs run on a typical group of fans.

But, even without IQs I know that most of the people here are way above average in intelligence. I've had enough data on it to know. I'm not trying to flatter you, I'm not interested in that. I am interested in the fact that you have unusually keen minds. However, that lays us open, and I am including myself in this, lays us open to dangers that don't hit the phlegmatic, the more stolid. Unless we are able to predict, we are even more likely to be subjected to functional unsanities than those around us.

I'm preaching, sure. I know that. I could have filled a speech with wisecracks and with stories and anecdotes, but I feel very deeply about this. And if you can bear with me for a few minutes more, I still want to talk about it.

There's a way out, there's something that we can do to protect ourselves, something that would protect the rest of the human race from the sort of things that are happening to them, and are going to happen to them. It's very simple, and it's right down our alley: the use of the *scientific method.*

I'm not talking about the scientific method used in the laboratory. The scientific method can be used to protect ourselves from serious difficulties of other sorts—getting our teeth smashed in—in our everyday life, twenty-four hours of the day.

I should say what I mean by the scientific method. Since I have to define it in terms of words, I can't be as clear as I might be if I were able to make an extensional definition. But I mean a comparatively simple thing by the scientific method: the ability to look at what goes on around you. Listen to what you hear, observe, note facts, delay your judgment, and make your own predictions. That's all there is, really, to the scientific method: to be able to distinguish facts from nonfacts.

I used the term "fact." I used it in a technical sense, and I should say what I mean by a fact. A fact is anything that has happened before this moment, on July 4th, 1941. Anything that has already happened before this moment. Anything after this moment is a nonfact. Most people can't distinguish between them. They regard as a *fact* that they're going to get up and have breakfast tomorrow morning. They get the difference between facts and nonfacts completely mixed up, and in particular, these days people are getting very mixed up between facts and. theories, isms, ologies and so forth, so-called "laws of nature," depending on what year you happen to be speaking.

That distinction between fact and fiction, fact and nonfact, is of extreme importance to us now. It has even become a strong issue in the field of science fiction. Without referring to any movement by name, or any person by name, because I wish to make an illustration, I want to invite your attention to the fact that the science fiction field has been very much stirred up by a semipolitical movement which uses the word "fact" quite extensively. But it uses the word fact with reference to what they are—what they *predict* will happen in the future, and that's a nonfact. And any movement, institution, any theory, which does not make a clear and decided distinction between fact and nonfact, cannot by any stretch of the imagination be called a scientific movement. It simply is not because it does not use the scientific method. No matter how complicated their terminology may be, or how much they may use the *argot* of science.

I'm going to have to make an excursion here. I've wandered somewhat from the talk I had in mind.

I want to make another comment on science fiction and the fact that you and I have to put up with an awful lot of guff from people because of the orthodox point of view with which it is regarded.

I have never been able to understand quite why it is that the historical novel is the most approved, the most *sacred* form of literature. The contemporary novel is next so; but the historical novel, if you write an historical novel, that's *literature.*

I think that the corniest tripe published in a science fiction magazine (and some of it isn't too hot, we know that; some of my stuff isn't so hot) beats all of the *Anthony Adverses* and *Gone With the Winds* that were ever published, because at least it does include that one distinctly humanlike attempt to predict the future.

One would think that the literary critics and the professors of English—those who make a business of deciding what is good and what is bad in literature—had some connection in their ancestry with the Fillyloo Bird. I think you know the Fillyboo Bird: he flew backwards because he didn't care where he was going, but he liked to see where he had been.

I want to mention the fashion in which the scientific method—just the matter of observing what goes on around you—observing it through your own eyes, instead of taking other people's opinions, reserving your judgments until you have enough data on which to make a judgment—can be of real use to you even now, quite aside from any possible worse period in history, in the coming history.

I mentioned that it can keep your teeth from getting knocked in; that's an important point. It can because you'll stay out of controversies and out of arguments that you would otherwise get into. If you are talking with a man who obviously does not bother to use the scientific method, or does not know how to use the scientific method in his everyday life, you'll never get in an argument with him. You'll know there's no point in an argument with him, that you cannot possibly convince him. You can listen—and you'll get some new data from him—and you'll be better able to predict thereafter, if on no other point than the fact that you'll be better able to predict what his reactions will be.

There are other advantages, in the way of keeping yourself cooled down, so you can be a little happier. For example, a man who uses the scientific method cannot possibly be anti-Semitic. I have made that an illustration because it has caused a lot of trouble in the world lately. Why can't he be anti-Semitic? For a very simple reason: he doesn't have enough data, consequently he hasn't formed an opinion. No matter how long he lives he can’t hate all Jews, and unless he knows all Jews, he can’t hate all Jews, because he doesn’t form an opinion unless he has data. It is possible for him to hate an individual Jew as it’s possible for him to hate an individual Irishman or Rotarian or man or woman.

But he can’t possibly be anti-Semitic. He can’t hate all capitalists, he can’t hate all unions, he can’t hate all women—you can’t be a woman-hater, not if you use the scientific method. You can’t possibly: you don’t know all women. You don’t even know a large enough percentage of the group to be able to form an opinion on what the whole group may be!

By the same reasoning, it’s very difficult for him to hate at all; and if you can just manage to keep hate out of your life (or a good portion of it—I can’t keep it *all* out of my life myself. I’ve got to sit down and whip myself about the head and shoulders to get myself calmed down at times—but you can help yourself with this method)—if you can keep hate out of your life, you can keep from; getting your teeth knocked in. You can keep out of a lot of difficulties and take care of yourself in a better fashion.

A man who uses the scientific method cannot possibly believe that all politicians are crooks, for he knows that one datum destroys the generalization. I’ll give you one datum on that point: Senator George Norris, whether you like him or not, is a saint on earth. Whether you agree with his opinions or not, he’s not a bad man.

And because he’s never entirely certain of his own opinions on any subject, a man using the scientific method stays out of arguments, keeps himself from the emotional upsets that cause you to lose sleep and upset your stomach. You get such things as herpes—oh, I’m not an M.D., but there are plenty of functional disorders that a man can avoid, can very well avoid.

Here’s a rough picture of the scientific man in everyday life. Such a man stands a better chance of living through our period to a ripe and-happy old age, in my opinion. But I wish to make plain that the use of the scientific method does not depend on any formal education in science. It is an attitude and point of view and not a body of information. You need have no formal education at all to use the scientific method in your everyday life. I am not disparaging the body of scientific information that has been gathered by specialists or the equally enormous body of historical and sociological data that is available. Unfortunately, we can’t get very much of it. But you can still use the scientific method, whether you’ve bad a lot of education or not, whether you’ve had time to gather a lot of personal data or not.

With respect to the acquisition of scientific training, I’ve heard people around fan clubs remark, “I wish I knew something about mathematics,” or “I wish I understood something about physics.” Complaints that they’re not fully appreciating some of the stories because they don’t have enough specialized information. Some subject was too hard, or they weren’t able to go far enough in school. I greatly sympathize with that.

I’m not trying to play it down or anything of the sort. It’s very much of a regret to me that I’m not at least twins and preferably triplets, so that I could have time to study the various things that I’m interested in. And I know that a lot of you have felt the same way—that life is just too—not too short, but too narrow—we don’t have room enough, time enough, to get around and learn all the things that we want to, and it is almost impossible for us to get a full picture of the world.

Surprising, that the data actually is available. God knows that no one can even hope to cover even a small corner of the scientific world these days. I think there’s a way out of the dilemma, however, a fair one for us, and a better one for our children. It’s the creation of a new technique to cover just that purpose. Men who might be considered encyclopedists, or interpreter-synthesists, I like to call them, men who make it their business to find out what it is the specialists have learned, and then apply it to the rest of us in consolidated form so that we can have, if not the details of the picture, at least the broad I outlines of the enormous, incredibly enormous, mass of data that the human race has gathered. The facts behind us, the things that have happened before this moment, so that we can be better able to predict for ourselves, plan our lives after this moment.

There’s only one synthesist who has really made such an attempt up to the present time, and I’m very pleased that it happens to be possibly the greatest of the science fiction writers: H. G. Wells. Wells perhaps didn’t do a good job of it—good Lord! he didn’t have a *chance* to; he had nobody before him, he did the pioneer work. He started it. But H. G. Wells, in his trilogy, *The Outline of History, The Science of Life* and *The Work, Wealth, and Happiness of Mankind,* is, so far as I know, the only writer who has ever lived who has tried to draw for the rest of us a full picture of the whole world, past and future, everything about us, so we can stand off and get a look at ourselves.

It will be better in the future. Nevertheless, it was great work, the fact that he *did* it, that he tried at all. A wonderful work. Because he had done that kind of work, that he tried to do that kind of work for the rest of us, is the reason, to my mind why his scientific fantasies are more nearly accurate in their predictions than those of, oh, myself, and various other commercial writers in the field. I don’t know as much as H. G. Wells: I probably never will know as much as H. U.

Wells—my predictions can't be as accurate.

But, after considering H. G. Wells' trilogy, it occurred to me that it would be amusing, to me at least, and I hope to you, for me to mention some books by assorted writers that, to a certain extent, help to fill in the gaps in the picture. And—to a certain extent, help to make up the lack of a broad comprehensive scientific education, which no one, not even Sc.D.s and Ph.D.s, can really have.

For example, in mathematics, is there one book which will help the nonmathematician, the person who hasn't specialized in it and made it his life work, to appreciate what mathematics is for? I've run across such a book; it's called Mathematics and the Imagination by Kasner and Newman. You don't have to have any mathematical education to read it. To my mind, it's a very stimulating book, a very interesting book, and when you've finished reading it, you at least know what the mathematicians are doing and why.

Among other things, you will discover—and this runs entirely contrary to our orthodox credos—that mathematics is not a science. Mathematics is not a science at all—it's an aspect of symbology, along with the alphabet. That there is no such thing as discovering mathematics, for example. Mathematics is invented; it's an invented art, and has nothing directly to do with science at all, except as a tool. And yet you will hear the ordinary layman speaking time and again of mathematics as a science. It just plain is not because it has no data in it; purely inventions, every bit of it, even the multiplication tables. Yes, 2 x 2 is 4 is an invention in mathematics, not a fact.

There are other such books. In physics, there is Eddington's Nature of the Physical World, I think one of the most charming books ever written, one of the most lucidly and brilliantly written books. It gives a beautiful background to modern physics. It's approximately fifteen years old, so in order to cover a lot of the things that are currently being used for fiction in the science fiction field, you would need to supplement that. The book I got for my own purpose to supplement it —because, you see, I'm not a professional physicist, I'm an engineer— to help to bring it up to date, is White's *Classical and Modern Physics,* published in 1940. It is about the latest book-bound thing on modern physics that I know of.

There are later things in such publications as *Physical Review* and *Nature,* but this goes up to and including the fission of uranium. It includes nuclear physics, and it delighted me to find the thought that, very likely when we got around to it, we'd find life on other planets. A very stimulating thing to get from a professional scientist, particularly in the field of *physical* sciences. I picked that book because White is an associate of Lawrence in the nuclear laboratory at Berkeley. In other words, he is in on the ground floor, he knows what he's talking about.

It's modern physics, 1940, the best up to that time.

So far as astronomy is concerned, I've never seen anything that surpassed, for a popular notion of the broad outlines of the kind of physical world we live in, than John Campbell's series that appeared in *Astounding.* They started in 1936, and ran on for fifteen or sixteen issues, his articles on the solar system. I've always been sorry that Campbell did not go on from there and cover stellar astronomy, galactic astronomy, and some of the other side fields. But, even at that, anybody who has read through that series by Campbell on the solar system will never again have a flat-world attitude, which most people do have. Not in the science fiction field, of course—I mean not among fans of science fiction.

(I speak many times as if the human race were divided into two parts, as it *may* be; people who love science fiction, and people who don't. I think you will be able to keep sorted out which ones I'm talking about. I hope so.)

In the field of economics, an incomplete science, but nevertheless one that you can't possibly ignore, I think the most illuminating book I've ever, read is one by Maurice Colburn, called *Economic Nationalism.* The title won't give any suggestion of what the contents are, but that is simply the tag by which it is known.

Jim Fancy's *Behind the Ballots* is probably as nice a job of recording actual data in politics as I've ever seen; however, politics—I'd never recommend that people read books in the political field.

Go out and take a look *yourself* Everything else you hear is guff.

I saved for the last on that list of the books that have greatly affected me, that to my mind are key books, of the stuff I've plowed through, a book which should head the list on the *must* list. I wish that everyone could read the book. There aren't many copies of it, and everyone can't, nor could everyone read this particular book. All of you could—you've got the imagination for it. It's *Science and Sanity* by Count Alfred Korzybski, one of the greatest Polish mathematicians when he went into the subject of symbology and started finding out what made us tick, and then worked up in strictly experimental and observational form from the preliminary work of E. T. Bell.

A rigor of epistemology based on E. T. Bell [break in transcript here—some words lost]. . . symbology of epistemology. The book refers to the subject of semantics. I know from conversation with a lot of you that the words epistemology and semantics are not unfamiliar to you. But because they may be unfamiliar to some, I'm going to stop and give definitions of those words.

Semantics is simply a study of the symbols we use to communicate. General Semantics is an extension of that study to investigate how we *evaluate* the use of those symbols. Epistemology is the study of *how* we know *what* we know. Maybe that doesn't sound exciting. It is exciting, it's very exciting. To be able to delve back into your own mind and investigate what it is you know, what it is you *can* know, and what it is that you *cannot possibly* know, is, from a standpoint of intellectual adventure, I think, possibly-the greatest adventure that a person can indulge in. Beats spaceships.

Incidentally, any of you who are going to be in Denver in the next five or six weeks will have an opportunity, one of the last opportunities, to hear Alfred Korzybski speak in person. He will be here at a meeting (similar to this) of semanticians from all over the world; McLean from Los Angeles, and Johnson from Iowa, and Reisser from Mills College and Kendig and probably Hayakawa from up in Canada—the leading semanticians of the world—to hear Korzybski speak.

It is much better to hear him speak than it is to read his books. He's limited by the fact that he's got to stick to the typewriter, to the printed word, but when he talks, when he talks, it's another matter! He gestures, he's not tied down with his hands to the desk the way I am, he walks, stumps all around the stage, and waves his hands, and when he's putting quotation marks on a word, he puts them on… [illustrates, audience laughs]. And you really gather what he means. Incidentally, he looks like Conan Doyle's description of Professor Challenger if Professor Challenger had shaved his beard. Dynamic character.

You may not like him personally, but he's at least as great a man as Einstein, at least, because his field is broader. The same kind of work that Einstein did, the same kind of work using the same methods, but in a much broader field, much closer to human relationships. I hope that some of you will be able to hear him. I said that this will be one of the last chances, because the old man's well over seventy now. As he puts it, "I vill coagulate someday, I vill someday soon, I vill coagulate," which is the term he uses for dying.

He speaks in terms of colloidal chemistry. Properly, it's appropriate. He won't last much longer. In the meantime, he's done a monumental piece of work that H. G. Wells did in the matter of description, and the two together are giants in our intellectual horizon, our intellectual matrix today, that stick up over the rest like the Empire State Building.

I started out to talk primarily about science fiction and I got off on some of my own hobbies. It's a luxury to me not to be held down by a plot and a set of characters. Here I can say anything I like and not be bothered.

I myself have been reading science fiction since Gernsback started putting it out in the *Electrical* Experimenter. Then I read it in *Argosy* and I dug up all that I could out of the Kansas City Public Library. Every member of my family had a library card; there were seven of us, so I could bring home quite a number of books at one time. I wear glasses now as a result. I never had any particular notion of writing it until about two years ago when a concatenation of peculiar circumstances started me writing. I happened to hit the jackpot on the first one, so I continued writing. It amazed me to discover that people gave money away for doing things like that—it beats working.

It's likely that I won't be writing very much longer. With the way things are shaping up, I'll probably have other things I'll have to do, as will others here, whether we like it or not. But I hope to be a fan of science fiction for at least fifty years if I can hold myself together that long and keep from getting my teeth kicked in.

All I really want to do is to hang around as long as I can, watch the world unfold, see some of the changes—what they really are—that suits me.

An Open Letter

from Robert A. Heinlein

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Dear Friend:

If SF is simply fun and/or money to you, skip this. But if you believe as I do that our race can and will and must spread out into space, stick around.

L-5 Society's sole purpose is to place a colony at Lagrange Point #5, the one trailing the Moon at 60°.

Sounds silly? It does to us, too, on gloomy days. We are about as far along as Willy Ley and Von Braun and Goddard were in the '30s . . . but one generation later Neil Armstrong stepped down on Luna.

And things move faster today. Technology doubles every seven years. We could build that city in space today ... but we'll be able to build it faster, easier, more economically in the '90s. Or (I'm an optimist!) in the '80s. I have already lived from horse & buggy to space shuttle; I cannot believe that human progress will come to a sudden stop. Space will be colonized.

Space will be colonized . . . although possibly not by us. If we lost our nerve, there are plenty of other people on this planet. The construction crews may speak Chinese or Russian -Swahili or Portuguese. It does not take "good old American know-how" to build a city in space. The laws of physics work just as well for others as they do for us.

I don't think we've lost our nerve. We can put a construction crew of our own up there . . . and space is big enough for everyone—all races, all languages. We need never be crowded again.

Dues are $20/year ($15 for students) and include the monthly magazine L-5 News with all the latest space news, data not in newspapers and must be dug out from technical journals and specialized sources—our editors do it for you. The Society supplies other services, too, but I'm not going to list them, as the L-5 Society was not organized to serve or amuse its members.

ITS SOLE PURPOSE IS TO FOUND THE FIRST COLONY IN SPACE!

How's your nerve? Are your eyes on the stars? Send in your dues and join us.

Welcome aboard!

Robert A. Heinlein
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Membership Committee

SPINOFF

On 2 July 1979 I received a letter calling me to testify July 19th before a joint session of the House Select Committee on Aging (Honorable Claude Pepper, M.C., Chairman) and the House Committee on Science and Technology (Honorable Don Fuqua, M.C., Chairman)—subject: Applications of Space Technology for the Elderly and the Handicapped.

I stared at that letter with all the enthusiasm of a bridegroom handed a summons for jury duty. Space technology? Yeah, sure, I was gung-ho for space technology, space travel, spaceships, space exploration, space colonies—anything about space, always have been.

But "applications of space technology for the elderly and the handicapped"? Why not bee culture? Or Estonian folk dancing? Or the three-toed salamander? Tantric Yoga?

I faced up to the problem the way any married man does: "Honey? How do I get out of this?"

"Come clean," she advised me. "Tell them bluntly that you know nothing about the subject. Shall I write a letter for you to sign?"

"It's not that simple."

"Certainly it is. We don't want to go to Washington. *In July?* Let's not be silly."

"You don't have to go."

"You don't think I'd let you go alone, do you? After the time and trouble I've spent keeping you alive? Then let you drop dead on a Washington sidewalk? *Hmmph!* You go—*I* go."

Some hours later I said, "Let's sum it up. We both know that any Congressional committee hearing, no matter how the call reads, has as its real subject 'Money'—who gets it and how much. And we know that the space program is in bad trouble. This joint session may not help—it looks as if it would take a miracle to save the space program—but it *might* help. Some, maybe. The only trouble is that I don't know anything about the subject I'm supposed to discuss."

"So you've said, about twenty times."

"I don't know anything about it *today.* But on July 19th I'm going to be a fully-qualified Expert Witness."

"So I told you, two hours ago."

Ginny and I have our own Baker Street Irregulars. Whether the subject be Chaucer or chalk, pulsars or poisons, we either know the man who knows the most about it, or we know a man who knows the man who knows the most. Within twenty-four hours we had a couple of dozen spaceflight fanatics public-spirited citizens helping us. Seventy-two hours, and information started to trickle in—within a week it was a flood and I was starting to draft my written testimony.

I completed my draft and immediately discarded it; galley proofs had arrived of *Technologies for the Handicapped and the Aged* by Trudy E. Bell, NASA July 1979. This brochure was to be submitted by Dr. Frosch, Administrator of NASA, as his testimony at the same hearing. Trudy Bell had done a beautiful job—one that made 95% of what I had written totally unnecessary.

So I started over.

What follows is condensed and abridged from both my written presentation and my oral testimony:

"Honorable Chairman, ladies, and gentlemen—

"Happy New Year!

"Indeed a happy New Year beginning the 11th year in the Age of Space, greatest era of our race—the *greatest*!—despite gasoline shortages, pollution, overpopulation, inflation, wars and threats of war. 'These too shall pass'—but the stars abide.

"Our race will spread out through space—unlimited room, unlimited energy, unlimited wealth. This is certain.

"But I am not certain that the working language will be English. The people of the United States seem to have suffered a loss of nerve. However, I am limited by the call to a discussion of 'spinoffs' from our space program useful to the aged and the handicapped.

"In all scientific research, the researcher may or may not find what he is looking for—indeed, his hypothesis may be demolished—but he is *certain* to learn something new . . . which may be and often is more important than what he had hoped to learn.

"This is the Principle of Serendipity. It is so invariant that it can be considered an empirically established natural law.

"In space research we always try to do more with less, because today the payload is tightly limited in size and in weight. This means endless research and development to make everything smaller, lighter, foolproof, and fail-proof. It works out that almost everything developed for space can be used in therapy . . . and thereby benefits both the elderly and the handicapped, the two groups requiring the most therapy of all sorts.

"When you reach old age—say 70 and up—it approaches certainty that you will be in some way handicapped. Not necessarily a wheelchair or crutches or a white cane—most handicaps do not show. So all of us are customers for space spinoffs—if not today, then soon."

Witness holds up NASA brochure. "There is no need for me to discuss applications that NASA has already described. But this I must say: NASA's presentation is *extremely* modest; it cites only 46 applications—whereas there are hundreds. Often one bit of research results in 2nd, 3rd, and 4th generations; each generation usually has multiple applications—spinoffs have spinoffs, branching out like a tree. To get a feeling for this, think of the endless applications of Lee DeForest's vacuum tube, Dr. Shockley's transistor.

"Here is a way to spot space-research spinoffs: If it involves microminiaturization of *any* sort, minicomputers, miniaturized long-life power sources, highly reliable microswitches, remotely-controlled manipulators, image enhancers, small and sophisticated robotics or cybernetics, then, *no matter where you find the item,* at a critical point in its development it was part of our space program.

"Examples:

"*Image enhancer:* This magic gadget runs an x-ray or fluoroscope picture through a special computer, does things to it, then puts it back onto the screen. Or stores it for replay. Or both. It can sharpen the contrast, take out 'noise,' remove part of the picture that gets in the way of what you need to see, and do other Wizard-of-Oz stunts.

"This is the wonder toy that took extremely weak digital code signals and turned them into those beautiful, sharp, true-color photographs from the surface of Mars in the Viking program and also brought us the Voyager photographs of Jupiter and its moons.

"I first saw one in 1977 at the Medical School of the University of Arizona—saw them put a long catheter up through a dog's body in order to inject an x-ray-opaque dye into its brain. This does not hurt the dog. More about this later—

"I did not know what an image enhancer was until I saw one demonstrated and did not learn until this year that it came from our space program. Possibly the doctor did not know. M.D.'s can use instruments with no notion that they derive from space research. . . . and a patient usually knows as little about it as did that dog.

"The most ironical thing about our space program is that there are thousands of people alive today who would be dead were it not for some item derived from space research—but are blissfully unaware of the fact—and complain about 'wasting all that money on stupid, useless space stunts when we have so many really important problems to solve right here on Earth.'

"'—all that money—'!

"That sort of thinking would have kept Columbus at home.

"NASA's annual budget wouldn't carry H.E.W. ten days. The entire 10 years of the Moon program works out to slightly *less than five cents per citizen per day.*

"Would you like to be a wheelchair case caught by a hurricane such as that one that failed to swing east and instead hit the Texas and Louisiana coast? That storm was tracked by weather satellite; there was ample warning for anyone who would heed it—plenty of time to evacuate not only wheelchair cases but bed patients.

"A similar storm hit Bangladesh a while back; it too was tracked by satellite. But Bangladesh lacks means to warn its people; many thousands were killed. Here in the United States it would take real effort to *miss* a hurricane warning; even houses with no plumbing have television.

"*Weather satellites* are not spinoff; they *are* space program. But they must be listed because bad weather of any sort is much rougher on the aged and the handicapped than it is on the young and able-bodied.

"*Portable kidney machine:* If a person's kidneys fail, he must 'go on the machine' or die. 'The machine' is a fate so grim that the suicide rate is high. Miniaturization has made it possible to build portable kidney machines. This not only lets the patient lead a fairly normal life, travel and so forth, but also his blood is cleaned steadily as with a normal kidney; he is no longer cumulatively poisoned by his own toxins between his assigned days or nights 'on the machine.'

"This is new. A few have already made the switch but all kidney victims can expect it soon. The suicide rate has dropped markedly—life is again worth living; hope has been restored.

"*Computerized-Axial Tomography,* or CAT, or 'brain scan': They strap you to a table, fasten your skull firmly, duck behind a barrier, and punch a button—then an automatic x-ray machine takes endless pictures, a tiny slice at a time. A special computer synthesizes each series of slices into a picture; a couple of dozen such pictures show the brain in three-dimensional, fine detail, a layer at a time.

"*Doppler Ultrasound Stethoscope:* another microminiaturization spinoff. This instrument is to an ordinary stethoscope as a Rolls-Royce is to a Model-T Ford."

Witness stands up, turns from side to side. "Look at me, please! I'll never be Mr. America; I'll never take part in the Olympics. I've climbed my last mountain.

"But I'm here, I'm alive, I'm functioning.

"Fourteen months ago my brain was dull-normal and getting worse, slipping toward 'human vegetable.' I slept 16 hours a day and wasn't worth a hoot the other 8 hours.

"Were it not for the skill of Dr. Norman Chater, **plus certain spinoffs from the space program,** today I would either be a human vegetable or, if lucky, dead of cerebral stroke.

"My father was *not* lucky; from a similar disorder it took him years to die—*miserable* years. He died before the operation that saved me had been invented, long before there was medical spinoff from space technology.

"Am I elderly? I'm 72. I suffered from a disorder typical of old age, almost never found in the young.

"Am I handicapped? Yes, but my handicaps do not interfere with my work—or my joy in life. Over forty years ago the Navy handed me a piece of paper that pronounced me totally and permanently disabled. I never believed it. That piece of paper wore out; I did not.

"Mrs. Heinlein and I spent 1976 and -77 on blood drives all over this nation. We crisscrossed the country so many times we lost track. It was worthwhile; we recruited several thousand new blood donors—but it was *very* strenuous. By the end of '77 we badly needed a rest, so we took a sea voyage. She and I were walking the beach on Moorea, Tahiti, when I turned my head to look at a mountain peak—and something happened.

"I balanced on my left leg and said, 'Darling, I'm terribly sorry but I think I've had a stroke. Something happened inside my head and now I'm seeing double and my right side feels paralyzed.'

"Mrs. Heinlein half carried me, half dragged me, back to the landing—got me back aboard.

"A shipmate friend, Dr. Armando Fortuna, diagnosed what had happened: a transient ischemic attack, not a stroke. When we reached California, this was confirmed by tests. However a TIA is frequently a prelude to a stroke.

"Remember that spinoff, computerized-axial tomography? That was done to me to rule out brain tumor. No tumor. The neurologist my physician had called in started me on medication to thin my blood as the clinical picture indicated constriction in blood flow to my brain. This treatment was to continue for six months.

But in only two months I was failing so rapidly that I was shipped to the University of California Medical School at San Francisco for further diagnosis. Remember the *image enhancer* and that dog at the University of Arizona? I said that dog was *not* hurt. They did it to me, with *no* anesthesia; it did *not* hurt.

"The catheter goes in down here"—witness points at his right groin—"and goes all the way up and into the aortal arch above the heart. There three very large arteries lead up toward the brain; the catheter was used to shoot x-ray-opaque dye into each, in succession. The procedure took over two hours . . . but I was never bored because the image enhancer included closed-circuit television of the fluoroscopy with the screen right up here"—witness indicates a spot just above and to the left of his head—"above me, where the radiologist and his team, and the patient—*I*—could see it.

"How many people ever get a chance to watch their own hearts beat? Utterly fascinating! I could see my heart beating, see my diaphragm rise and fall, see my lungs expand and contract, see the dye go up into my brain . . . see the network of blood vessels in my brain suddenly spring into sharp relief. It was worth the trip!

"They spotted what was wrong; my left internal carotid was totally blocked. So the left half of my brain was starved for oxygen, as it was receiving only what leaked over from the right side or from the vertebrals where the network interconnected, principally at the Circle of Willis under the brain.

"But this is your speech center"—witness touches left side of skull above ear—"your word processor, the place where a writer does all his work. No wonder I was dopey—could not write, could not study, could not read anything difficult.

"My left internal carotid is still blocked; the stoppage is too high up for surgery. So they sent me to Dr. Chater at Franklin Hospital, who moved my left superficial temporal artery to feed the left side of my brain. This operation is pictured on pages 62 and 63 of the April 1978 *Scientific American,* so I will omit grisly details; if surgery interests you, you can look them up there.

"The procedure is this: Scalp the patient from the left eyebrow, going high and curving down to a spot behind the left ear back of the mastoid. Cut away from the scalp the temporal artery. Saw a circular hole in the skull above the ear. Go inside the brain into the Sylvian fissure, find its main artery, join the two arteries, end to side. The left anterior lobe of my brain is now served by the left *external* carotid via this roundabout bypass. Dr. Chater did the hookup under a microscope with sutures so fine the naked eye can't see them.

"Check by *Doppler ultrasound* to make sure the bypass works, then close the hole in the skull with a plate that has a groove in it for the moved artery. Sew back the scalp—go to lunch. The surgeon has been operating for four hours; he's hungry. (The patient is not.)

"They placed me in a cardiac intensive-care room. When I woke, I found in my room a big screen with dancing lights all over it. Those curves meant nothing to me but were clear as print to the I.C. nurses and to my doctors—such things as EKG, blood pressure, respiration, temperature, brain waves, I don't know what all. The thing was so sensitive that my slightest movement caused one of the curves to spike.

"I mention this gadget because I was *not* wired to it.

"Another space-technology spinoff: This is the way Dr. Berry monitored our astronauts whenever they were out in space.

"Colonel Berry had to have remote monitoring for his astronaut patients. For me it may not have been utterly necessary. But it did mean that I was not cluttered with dozens of wires like a fly caught in a web; the microminiaturized sensors were so small and unobtrusive that I never noticed them—yet the nurses had the full picture every minute, every second.

"Another advantage of telemetered remote monitoring is that more than one terminal can display the signals. My wife tells me that there was one at the nursing supervisor's station. Dr. Chater may have had a terminal in his offices—I don't know. But there can't be any difficulty in remoting a hundred yards or so when the technology was developed for remoting from Luna to Houston, almost a quarter of a million miles.

"*Space spinoff in postoperative care:* a *Doppler ultrasound* stethoscope is an impressive example of microminiaturization. It is enormously more sensitive than an acoustic stethoscope; the gain can be controlled, and, because of its Doppler nature, fluid flow volume and direction can be inferred by a skilled operator. Being ultrasound at extremely high frequency, it is highly directional; an acoustic stethoscope is not.

"It generates a tight beam of ultrasound beyond the range of the human ear. This beam strikes something and bounces back, causing interference beats in the audible range. It behaves much like Doppler radar save that the radiation is ultrasound rather than electromagnetic. Thus it is a *noninvasive* way to explore inside the body without the dangers of x-ray . . . and is able to 'see' soft tissues that x-ray can't see.

"Both characteristics make it especially useful for protecting pregnant mothers and unborn babies. I am not departing from the call; babies unborn and newly born, and mothers at term *must* be classed as 'temporarily but severely handicapped.'

"Doppler ultrasound was used on me before, during, and after surgery.

"After my convalescence I was again examined by *computerized axial tomography.* No abnormalities—other than the new plate in my skull.

"This brain surgery is not itself a spinoff from space technology . . . but note how repeatedly space spinoffs were used on me before, during, and after surgery. This operation is *very* touchy; in the whole world only a handful of surgical teams dare attempt it. Of the thousand-odd of these operations to date, worldwide, Dr. Chater has performed more than 300. His mortality rate is far lower than that of any other team anywhere. This is a tribute to his skill but part of it comes from his attitude: he *always* uses the latest, most sophisticated tools available.

"I was far gone; I needed every edge possible. Several things that tipped the odds in my favor are spinoffs from space technology.

"Was it worthwhile? Yes, even if I had died at one of the four critical points—because sinking into senility while one is still bright enough to realize that one's mental powers are steadily failing is a miserable, no-good way to live. Early last year I was just smart enough to realize that I had *nothing* left to look forward to, nothing whatever. This caused me to be quite willing to 'Go-for-Broke'—get well or die.

"Did it work? I have been out of convalescence about one year, during which I've caught up on two years of technical journals, resumed studying—I have long been convinced that lifelong learning helps to keep one young and happy. True or not, both my wife and I do this. At present I am reviewing symbolic logic, going on into more advanced *n*-dimensional, non-Euclidean geometries, plus another subject quite new to me: Chinese history.

"But I am working, too; I have completed writing a very long novel and am about halfway through another book.

"I feel that I have proved one of two things: either I have fully recovered . . . or a hole in the head is no handicap to a sciencefiction author.

"I must note one spinoff especially important to the aged and the handicapped: *spiritual* spinoff.

"'Man does not live by bread alone.' Any physician will tell you that the most important factor in getting well is the will to live—contrariwise, a terminal patient dies when he gives up the fight.

"I have been in death row three times. The unfailing support of my wife sustained my will to live . . . so here I am. In addition I have believed firmly in space flight for the past sixty-odd years; this has been a permanent incentive to *hang on, hang on!* My wife shares this;

she decided years back to die on the Moon, not here in the smog and the crowds. Now that I am well again I intend to hang in there, lead a disciplined life, stay alive until we can *buy* commercial tickets to the Moon . . . and spend our last days in low-gravity comfort in the Luna Hilton, six levels down in Luna City.

"Foolishness? Everyone in this room is old enough to know by direct experience that today's foolishness is tomorrow's wisdom. I can remember when 'Get a horse!' was considered the height of wit. As may be, *anything* that gives one a strong incentive to live can't be *entirely* foolish.

"I get a flood of mail from my readers; a disproportionate part of it is from the very old and the handicapped. It is impossible to be a fan of my fiction and not be enthusiastic for space travel. Besides, they *tell* me so, explicitly, in writing.

"Examples:

"A college professor, blind from birth. He's never *seen* the the stars; he's never *seen* the Moon. The books he reads and rereads—has read to him by his secretary—are about space travel. He went to a lot of trouble to look me up . . . to discuss our space program.

"A teenage boy, tied to a wheelchair, who wrote to ask me whether or not he could become an astronautical engineer—some 'friend' had told him that it was a silly ambition for a cripple. I assured him that an engineer did not need legs even on Earth's surface, advised him in what courses to take, and referred him to a story by Arthur C. Clarke in which a double amputee, both legs, commands a space station.

"A housewife with epilepsy, *grand mal,* who doesn't expect ever to be able to go out into space . . . but finds her greatest interest in life, her major relief from the tedious routine she must follow, in our space program.

"A very large number of elderly people who wrote to me immediately after the first landing on the Moon, all saying, in effect, that they thanked the Lord that they had been spared long enough to see this great day.

"I could add examples endlessly. Just let me state flatly that my files hold proof that the aged retired, the shut-ins and the disabled of all ages get more spiritual lift out of space flight than does any other definable group of our citizens. For many of them the television screen is their only window on the world; something great and shining and wonderful went out of their lives when the Apollo Moon program ended.

"Even if a space program had no other spinoff, isn't *that* sort worth 5¢ a day?"

FOREWORD

To William Targ

Warning! Truth in advertising requires me to tell you that this volume contains *The Worlds of Robert A. Heinlein*, published 1966. But this new volume is about three times as long. It contains fiction stories that have never before appeared in book form, nonfiction articles not available elsewhere, a 30-year updating on my 1950 prognostications (as well as the 15-year updating that appeared in *The Worlds of R.A.H.*), with the usual weasel-worded excuses as to why I guessed wrong—and (ruffles & flourishes) not one but *two* scenarios for the year 2000, one for people who like happy endings and another for people who can take bad news without a quiver—as long as it happens to somebody else.

On these I will do a really free-swinging job as the probability (by a formula I just now derived) that either I or this soidisant civilization will be extinct by 2000 A.D. approaches 99.92+%. This makes it unlikely that I will again have to explain my mistakes.

But do not assume that *I* will be the one extinct. My great-great-greatgrandfather Lawrence Heinlein died prematurely at the age of ninety-seven, through having carelessly left his cabin one winter morning without his gun—and found a buck deer on the ice of his pond. Lack of his gun did not stop my triple-great-grandfather; this skinful of meat must *not* be allowed to escape. He went out on the ice and bulldogged the buck, quite successfully.

But in throwing the deer my ancestor slipped on the ice, went down, and a point of the buck's rack stabbed between his ribs and pierced his heart.

No doubt it taught him a lesson—it certainly taught *me* one. So far I've beaten the odds three times: continued to live when the official prognosis called for something less active. So I intend to be careful—not chopped down in my prime the way my ancestor was. I shan't bulldog any buck deer, or cross against the lights, or reach barehanded into dark places favored by black widow spiders, or—most especially!—leave my quarters without being adequately armed.

Perhaps the warmest pleasure in life is the knowledge that one has no enemies. The easiest way to achieve this is by outliving them. No action is necessary; time wounds all heels.

In this peaceful crusade I have been surprisingly successful; most of those rascals are dead . . . and three of the survivors are in very poor health. The curve seems to indicate that by late 1984 I won't have an enemy anywhere in the world.

Of course someone else may appoint himself my enemy (all my enemies are self-appointed) but I would not expect such an unlikely event to affect the curve much. There appears to be some unnamed ESP force at work here; the record shows that it is not healthy to hate me.

I don't have anything to do with this. The character can be more than a thousand miles away, with me doing my utter best to follow Sergeant Dogberry's advice; nevertheless it happens: He starts losing weight, suffering from insomnia and from nightmares, headaches, stomach trouble, and, after a bit, he starts hearing voices.

The terminal stages vary greatly. Anyhow, they are unpleasant and I should not be writing about such things as I am supposed to be writing a blurb that will persuade you to buy this book despite the fact that nearly a third of it is copy you may have seen before.

Aside from this foreword the items in this book are arranged in the order in which written, each with a comment as to how and why it was written (money, usually, but also— Well, money)—then a bridging comment telling what I was writing or doing between that item and the next.

The span is forty years. But these are not my memoirs of those four decades. The writing business is not such as to evoke amusing memoirs (yes, I do mean you and you and you and especially *you*). A writer spends his professional time in solitary confinement, refusing to accept telephone calls and declining to see visitors, surrounded by a dreary forest of reference books and somewhat-organized papers. The high point of his day is the breathless excitement of waiting for the postman. (The low point is usually immediately thereafter.)

How can one write entertaining memoirs about such an occupation? Answer: By writing about what this scrivener did when *not* writing, or by resorting to fiction, or both. Usually both.

I could write entertaining memoirs about things I did when not writing. I shan't do so because a) I hope those incidents have been forgotten, or b) I hope that any not forgotten are covered by the statute of limitations.

Meanwhile I hope you enjoy this. The fiction is plainly marked fiction; the nonfiction is as truthful as I can make it—and here and there, tucked into space that would otherwise be blank are anecdotes and trivia ranging from edifying to outrageous.

Each copy is guaranteed—or double your money back—to be printed on genuine paper of enough pages to hold the covers apart.

—R.A.H., 1980

HOW TO BE A SURVIVOR

The Art of Staying Alive in the Atomic Age

Thought about your life insurance lately?

Wait a minute—sit back down! We don't want to sell you any insurance.

Let's put it another way: How's your pioneer blood these days? Reflexes in fine shape? Muscle tone good? Or do you take a taxi to go six blocks?

How are you at catching rabbits? The old recipe goes, "First, catch the rabbit—" Suppose your supper depended on catching a rabbit? Then on building a fire without matches? Then on cooking it? What kind of shape will you be in after the corner delicatessen is atomized?

When a committee of Senators asked Dr. J. Robert Oppenheimer whether or not a single attack on the United States could kill forty million people, he testified, "I am afraid it is true."

This is not an article about making the atom bomb safe for democracy. This is an article *about you*—and how you can avoid being one of the forty million knocked off in the first attack in World War III. How, if worst comes to worst, you can live through the next war, survive the aftermath, and build a new life.

If you have been reading the newspapers you are aware that World War III, if it ever comes, is expected to start with an all-out surprise attack by long-distance atomic bombing on the cities of America. General Marshall's final report included this assumption, General Arnold has warned us against such an attack, General Spaatz has described it and told us that it is almost impossible to ward it off if it ever comes. Innumerable scientists, especially the boys who built the A-bomb, have warned us of it.

From the newspapers you may also have gathered that world affairs are not in the best of shape—the Balkans, India, Palestine, Iran, Argentina, Spain, China, The East Indies, etc., etc.—and the UNO does not seem as yet to have a stranglehold on all of the problems that could lead to another conflict.

Maybe so, maybe not—time will tell. Maybe we will form a real World State strong enough to control the atom bomb. If you are sure there will never be war again, don't let me waste your time. But if you think it possible that another Hitler or Tojo might get hold of the atomic bomb and want to try his luck, then bend an ear and we'll talk about how you and your kids can live through it. We'll start with the grisly assumption that the war will come fast and hard, when it comes, killing forty million or so at once, destroying the major cities, wrecking most of our industry and utterly disorganizing the rest. We will assume a complete breakdown of government and communication which will throw the survivors—that's you, chum!—on their own as completely as ever was Dan'l Boone.

No government—remember that. The United States will cease to be a fact except in the historical sense. You will be on your own, with no one to tell you what to do and no policeman on the corner to turn to for protection. And you will be surrounded with dangerous carnivores, worse than the grizzlies Daniel Boone tackled—the two-legged kind.

Perhaps we had better justify the assumption of complete breakdown in government. It might not happen, but, if the new Hitler has sense enough to write *Mein Kampf,* or even to read it as a textbook, he will do his very best to destroy and demoralize us by destroying our government—and his best could be quite efficient. If he wants to achieve political breakdown in his victim, Washington, D.C., will be his prime target, the fortyeight state capitals his secondary targets, and communication centers such as Kansas City his tertiary targets. The results should be roughly comparable to the effect on a man's organization when his head is chopped off.

Therefore, in this bad dream we are having, let us assume no government, no orders from Washington, no fireside chats, no reassurances. You won't be able to write to your congressman, because he, poor devil!, is marked for the kill. You can live through it, he can't. He will be radioactive dust. His profession is so hazardous that there is no need for him to study up on how to snare rabbits.

But *you* should—if you are smart, you can live through it.

Now as to methods—there is just one known way to avoid being killed by an atomic bomb. The formula is very simple:

Don't be there when it goes off!

Survival methods in the atomic age can be divided into two headings, strategical and tactical. The first or strategical aspect is entirely concerned with how not to be where the bomb is; the second, tactical part has to do with how to keep yourself and your family alive if you live through the destruction of the cities and the government.

Strategy first—the simplest way to insure long life for yourself and family is to move to Honduras or some other small and nonindustrialized country, establish yourself there, and quit worrying. It is most unlikely that such places will be subjected to atomic bombardment; if war comes, they will move into the economic and political sphere of the winner, to be sure, but probably without bloodshed, since resistance would be so obviously futile.

However, you probably cannot afford, or feel that you can't afford, any move as drastic as that. (Whether or not you can in truth afford it is a moot point, to be settled by your own notion of the degree of danger. The pre-War refugees from Nazi Germany could not "afford" to flee, either, but events proved the wisdom of doing so. There is an old

Chinese adage, "In the course of a long life a wise man will be prepared to abandon his baggage several times." It has never been more true than it is today.)

There are several moves open to you which are less drastic. If you live on a farm or in a small village, several miles—fifty is a good figure—from the nearest large city, rail junction, power dam, auto factory, or other likely military target, strategy largely takes care of itself. If you are blasted, it will probably be an accident, a rocket gone wild, or something equally unforeseeable. If you are not in such a location, you had better make some plans.

Just a moment—a gentleman in the back row has a question. A little louder please. He asks, "Isn't it true that the government is planning to disperse the cities so we will be safe from atomic bombs?"

I don't know—is it? The only figure I have heard mentioned so far is $250,000,000,000. Quite aside from the question of whether or not large scale dispersion can be made effective, there is still the question as to whether or not Congress would appropriate a quarter of a trillion dollars in peacetime for any purpose. That is a political question, beyond the scope of this discussion. We are concerned here with how you, unassisted, with your two hands, your brain, and your ability to plan ahead, can keep yourself alive during and after any possible Next War.

If you have to live in a large city or other target area, your strategical planning has to be a good bit more detailed, alert, and shifty. You need an emergency home, perhaps an abandoned farm picked up cheaply or a cabin built on government land. What it is depends on the part of the country you live in and how much money you can put into it, but it should be chosen with a view to the possibilities it offers of eating off the country—fish, game, garden plot—and it should be near enough for you to reach it on one tank of gasoline. If the tank in your car is too small, have a special one built, or keep enough cans of reserve permanently in the trunk of your car. Your car should also be equipped with a survival kit, but that comes under tactics.

Having selected and equipped your emergency base, you must then, if you are to live in a target area, keep your ear to the ground and your eyes open with respect to world affairs. *There will be no time to get out after rockets are launched.* You will have to outguess events. This is a tricky assignment at best and is the principal reason why it is much better to live in the country in the first place, but you stand a fair chance of accomplishing it if you do not insist on being blindly optimistic and can overcome a natural reluctance to make a clean break with your past—business, home, clubs, friends, church—when it becomes evident that the storm clouds are gathering. Despite the tragic debacle at Pearl Harbor, quite a number of people, laymen among them, knew that a war with Japan was coming. If you think you can learn to spot the signs of trouble long enough in advance to jump, you may get away with living on the spot with the X mark.

Let us suppose that you were quick-witted, far sighted, and fast on your feet; you brought yourself and your family safely through the bombing and have them somewhere out in the country, away from the radioactive areas that were targets a short time before. The countryside is swarming with survivors from the edges of the bombed areas, survivors who are hungry, desperate, some of them armed, all of them free of the civilizing restrictions of organized living. Enemy troops, moving in to occupy, may already be present or may be dropping in from the skies any day.

How, on that day, will you feed and protect yourself and your family?

The tactical preparations for survival after the debacle fall mainly into three groups. First is the overhaul of your own bodily assets, which includes everything from joining the YMCA, to get rid of that paunch and increase your wind and endurance, to such things as getting typhoid and cholera shots, having that appendix out, and keeping your teeth in the best shape possible. If you wear glasses, you will need several pairs against the day when there will be no opticians in practice. Second is the acquisition of various materials and tools which you will be unable to make or grow in a sudden, synthetic stone age—items such as a pickax or a burning glass, for example, will be worth considerably more than two college degrees or a diamond bracelet. Third is training in various fundamental pioneer skills, not only how to snare and cook rabbits, but such things as where and when to plant potatoes, how to tell edible fungi from deadly toadstools without trying them on Junior, and how to walk silently.

All these things are necessary, but more important, much more important, is the acquiring of a survival point of view, the spiritual orientation which will enable you to face hardship, danger, cold, and hunger without losing your zest and courage and sense of humor. If you think it is going to be too hard to be worthwhile, if you can't face the prospect of coming back to the ruins of your cabin, burned down by drunken looters, other than with the quiet determination to build another, then don't bother to start. Move to a target area and wait for the end. It does not take any special courage or skill to accept the death that moves like lightning. You won't even have the long walk the steers have to make to get from the stockyard pens to the slaughterhouse.

But if your ancestors still move in your bones, you will know that it is worthwhile, just as they did. "The cowards never started and the weaklings died on the way." That was the spirit that crossed the plains, and such was the spirit of every emigrant who left Europe. There is good blood in your veins, *compadre!*

It is not possible to tell exactly what to do to prepare yourself best to survive, even if this were a book instead of a short article, for the details must depend on the nature of the countryside you must rely on, your opportunities for planning and preparing, the numbers, ages and sex of your dependents if any, your present skills, talents, and physical condition, and whether or not you are at present dispersed from target areas or must plan for such dispersal. But the principles under which you can make your plans and the easiest means by which to determine them can be indicated.

Start out by borrowing your son's copy of the *Boy Scout Manual.* It is a practical book of the sort of lore you will need. If you can't borrow it because he is not a member of the Scouts, send him down at once and make him join up. Then make him study. Get him busy on those merit badges—woodcraft, cooking, archery, carpentry. *Somebody* is going to have to make that fire without matches, if that rabbit is ever to be cooked and eaten. See to it that he learns how, from experts. Then make him teach you.

Can you fell a tree? Can you trim a stone? Do you know where to dig a cesspool? Where and how to dig a well? Can you pull a tooth? Can you shoot a rifle accurately and economically? Can you spot tularemia (we are back to that ubiquitous rabbit again!) in cleaning a rabbit? Do you know the rudiments of farming? Given simple tools, could you build a log, or adobe, or rammed-earth, or native-stone cabin from materials at hand and have it be weather-tight, varmint-proof, and reasonably comfortable?

You can't learn all the basic manual trades in your spare time in a limited number of years but you can acquire a jackleg but adequate knowledge of the more important ones, in the time we have left.

But how much time have we?

All we can do is estimate. How long will it be before other nations have the atomic bomb? Nobody knows—one estimate from the men who made it was "two to five years." Dr. Vannevar Bush spoke of "five to fifteen years" while another expert, equally distinguished, mentioned "five or ten years." Major General Leslie Groves, the atom general, thinks it will be a long time.

Let us settle on five years as a reasonable minimum working time. Of course, even if another nation, unfriendly to us, solved the production problems of atomic weapons in that length of time, there still might not be a war for a number of years, nor would there necessarily ever be one. However, since we don't know what world conditions will be like in five years, let's play it safe; let's try to be ready for it by 1950.

Four or five years is none too long to turn a specialized, soft, city dweller into a generalized, hardened pioneer. However, it is likely that you will find that you are enjoying it. It will be an interesting business and there is a deep satisfaction in learning how to do things with your own hands.

First get that *Scout Manual.* Look over that list of merit badges. Try to figure out what skills you are likely to need, what ones you now have, and what ones you need to study up on. The Manual will lead you in time to other books. Ernest Thompson Seton's *Two Little Savages* is full of ideas and suggestions.

Presently you will find that there are handbooks of various trades you have not time to master; books which contain information you could look up in an emergency if you have had the forethought to buy the book and hide it away in your out-of-town base. There are books which show how to build fireplaces, giving the exact dimensions of reflector, throat, ledge, and flue. You may not remember such details; being able to look them up may save you from a winter in a smoke-filled cabin. If there is any greater domestic curse than a smoking fireplace, I can't recall it, unless it be the common cold.

There are little handbooks which show, in colored pictures, the edible mushrooms and their inedible cousins. It is possible to live quite well on practically nothing but fungi, with comparatively little work; they exist in such abundance and variety.

You will need a medical reference book, selected with the advice of a wise and imaginative medical man. Tell him why you want it. Besides that, the best first-aid and nursing instruction you can get will not be too much. Before you are through with this subject you will find yourself selecting drugs, equipment, and supplies to be stored against the darkness, in your base as well as a lesser supply to go into the survival kit you keep in your automobile.

What goes into that survival kit, anyhow? You will have to decide; you won't take any present advice in any case. By the time you get to it you will think, quite correctly, that you are the best judge. But the contents of the survival kits supplied our aviators in this latest war will be very illuminating. The contents varied greatly, depending on climate and nature of mission—from pemmican to quinine, fish hooks to maps.

What to put in your cabin is still more difficult to state definitely. To start with, you might obtain a Sears Roebuck or Montgomery Ward catalog and go through it, item by item. Ask yourself "Do I have to have this?" then from the list that produces ask yourself "Could I make this item, or a substitute, in a pinch?"

If shoes wear out, it is possible to make moccasins—although shoes should be hoarded in preference to any other item of clothing. But you can't—unless you are Superman—make an ax. You will need an ax.

You will need certain drugs. Better be liberal here.

Salt is difficult to obtain, inland.

It is difficult to reject the idea of hoarding canned goods. A few hundred dollars worth, carefully selected, could supplement the diet of your family to the point of luxury for several years. It might save you from starvation, or the cannibalism that shamed the Donner Party, during your first winter of the Dark Ages, and it could certainly alleviate some of the sugar hunger you are sure to feel under most primitive conditions. But it is a very great risk to have canned goods. If you have them, you will be one of the hated rich if anybody finds out about them. We are assuming that there will be no government to protect you. To have canned goods—and have it known by anyone outside your own household—is to invite assassination. If you do not believe that a man will commit murder for one can of tomatoes, then you have never been hungry.

If you have canned goods, open them when the windows are shuttered and bury the cans. Resist the temptation to advertise your wealth by using the empty tins as receptacles.

Don't forget a can opener—two can openers.

You will have a rifle, high-powered and with telescopic sights, but you won't use it much. Cartridges are nearly irreplaceable. A deer or a man should be about the limit of the list of your targets . . . a deer when you need meat; a man when hiding or running is not enough.

That brings us to another subject and the most interesting of all. We have not talked much about the enemy, have we? And yet he was there, from the start. It was his atom bombs which reduced you to living off the country and performing your own amputations and accouchements. If you have laid your plans carefully, you won't see much of him for quite a while; this is a very, very big country. Where you are hidden out there never were very many people at any time; the chances of occupation forces combing all of the valleys, canyons, and hills of our back country in less than several years is negligible. It is entirely conceivable that an enemy could conquer or destroy our country, as a state, in twenty minutes, with atom bomb and rocket. Yet, when his occupation forces move in, they will be almost lost in this great continent. He may not find you for years.

There is your chance. It has been proved time and again, by the Fighting French, the recalcitrant Irish, the deathless Poles, yes and by our own Apache and Yaqui Indians, that you cannot conquer a free man; you can only kill him.

After the immediate problems of the belly, comes the Underground!

You'll need your rifle. You will need knives. You will need dynamite and fuses. You will need to know how to turn them into grenades. You must learn how to harry the enemy in the dark, how to turn his conquest into a mockery, too expensive to exploit. Oh, it can be done, it can be done! Once he *occupies,* his temporary advantage of the surprise attack with the atom bomb is over, for once his troops are scattered among you, *he cannot use the atom bomb.*

Then is your day. Then is the time for the neighborhood cell, the mountain hideout, the blow in the night. Yes, and then is the time for the martyr to freedom, the men and women who die painfully, with sealed lips.

Can we then win our freedom back? There is no way of telling. History has some strange quirks. It was a conflict between England and France that gave us our freedom in the first place. A quarrel in enemy high places, a young hopeful feeling his oats and anxious to displace the original dictator, might give us unexpected opportunity, opportunity we could exploit if we were ready.

There are ways to study for that day, too. There are books, many of them, which you may read to learn how other people have done it. One such book is Tom Wintringham's *New Ways of War.* It is almost a blueprint of what to do to make an invader wish he had stayed at home. It is available in a 25-cent Penguin-Infantry Journal edition. You can study up and become quite deadly, even though 4-F, or fifty.

If you plan for it, you can survive. If you study and plan and are ready to organize when the time comes, you can hope not only to survive but to play a part in winning back lost freedoms. General George Washington once quoted Scripture to describe what we were fighting for then—a time when "everyone shall sit in safety under his own vine and figtree, and none shall make him afraid!"

It is worth planning for.

THE HAPPY DAYS AHEAD

"It does not pay a prophet to be too specific."
—L. Sprague de Camp
"You never get rich peddling gloom."
—William Lindsay Gresham

The late Bill Gresham was, before consumption forced him into fiction writing, a carnie mentalist of great skill. He could give a cold reading that would scare the pants off a marble statue. In six words he summarized the secret of success as a fortuneteller. Always tell the mark what he wants to hear. He will love you for it, happily pay you, then forgive and forget when your cheerful prediction fails to come true—and always come back for more.

Stockbrokers stay in business this way; their tips are no better than guesses but they are *not* peddling dividends; they are peddling happiness. Millions of priests and preachers have used this formula, promising eternal bliss in exchange for following, or at least giving lip service to, some short and tolerable rules, plus a variable cash fee not too steep for the customer's purse . . . and have continued to make this formula work *without ever in all the years producing even one client who had actually received the promised prize.*

Then how do churches stay in business? Because, in talking about "Pie in the Sky, By and By," they offer happiness and peace of mind *right here on Earth.* When Karl Marx said, "Religion is the opium of the people," he was not being cynical or sarcastic; he was being correctly descriptive. In the middle nineteenth century opium was the *only* relief from intolerable pain; Karl Marx was stating that faith in a happy religion made the lives of the people of the abyss tolerable.

Sprague de Camp is Grand Master of practically everything and probably the most learned of all living practitioners of science fiction and fantasy. I heard those words of wisdom from him before I wrote the 1950 version of "Pandora' Box." So why didn't I listen? Three reasons: 1) money; 2) money; and 3) I thought I could get away with it during my lifetime for predictions attributed to 2000 A.D. I never expected to live that long; I had strong reasons to expect to die young. But I seem to have more lives than a cat; it may be necessary to kill me by driving a steak through my heart (sirloin by choice), then bury me at a crossroads.

Still, I could have gotten away with it if I had stuck to predictions that could not mature before 2000 A.D. Take the two where I *really* flopped, *#5* and #16. *In both cases I named a specific year short of 2000 A.D.* Had I not ignored Mr. de Camp's warning, I could look bland and murmur, "Wait and see. Don't be impatient," on all in which the prediction does not look as promising in 1980 as it did in 1950.

Had I heeded a wise man on 2 out of 19 I could today, by sheer brass, claim to be batting a thousand.

I have made some successful predictions. One is "The Crazy Years." (Take a look out your window. Or at your morning paper.) Another is the water bed. Some joker tried to patent the water bed to shut out competition, and discovered that he could not because it was in the public domain, having been described in detail in *Stranger in a Strange Land.* It had been mentioned in stories of mine as far back as 1941 and several times after that, but not until *Stranger* did the mechanics of a scene require describing how it worked.

It was *not* the first man to build water beds who tried to patent it. The first man in the field knew where it came from; he sent me one, free and freight prepaid, with a telegram naming his firm as the "Share-Water Bed Company." Q.E.D.

Our house has no place to set up a water bed. None. So that bed is still in storage a couple of hundred yards from our main house. I've owned a water bed from the time they first came on market—but have never slept in one.

I designed the water bed during years as a bed patient in the middle thirties: a pump to control water-level, side supports to permit one to float rather than simply lying on a not-very-soft water-filled mattress, thermostatic control of temperature, safety interfaces to avoid all possibility of electrical shock, waterproof box to make a leak no more important than a leaky hot water bottle rather than a domestic disaster, calculation of floor loads (important!), internal rubber mattress, and lighting, reading, and eating arrangements—an attempt to design the perfect hospital bed by one who had spent too *damned* much time in hospital beds.

Nothing about it was eligible for patent—nothing new—unless a sharp patent lawyer could persuade the examiners that a working assemblage enabling a person to sleep on water involved that—how does the law describe it?—"flash of inspiration" transcending former art. But I never thought of trying; I simply wanted to build one—but at that time I could not have afforded a custom-made soapbox.

But I know exactly where I got the idea. In 1931, a few days after the radio-compass incident described in the afterword to "Searchlight," I was ordered to Fort Clayton, Canal Zone, to fire in Fleet Rifle & Pistol Matches. During that vacation-with-pay I often returned from Panama City after taps, when all was quiet. There was a large swimming pool near the post gate used by the Navy and our camp was well separated from the Army regiment barracked there.

I would stop, strip naked, and have a swim—nonreg (no life guards) but no one around, and regulations are made to be broken.

Full moon occurred about the middle of Fleet Matches—and I am one of those oddies who cannot sink, even in fresh water (which this was). The water was blood warm, there was no noise louder than night jungle sounds, the Moon blazed overhead, and I would lie back with every muscle relaxed and stare at it—fall into it—wonder whether we would get there in my lifetime. Sometimes I dozed off.

Eventually I would climb out, wipe my feet dry with a hanky, pull on shoes, hang clothes over my arm, and walk to my tent in the dark. I don't recall ever meeting anyone but it couldn't matter—dark, all male, surrounded by armed sentries, and responsible myself only to a

Marine Corps officer junior to me but my TDY boss as team captain—and he did not give a hoot what I did as long as I racked a high score on the range (and I did, largely because my coach was a small wiry Marine sergeant nicknamed "Deacon"—who reappears as survival teacher in *Tunnel in the Sky*).

Some years later, bothered by bed sores and with every joint aching no matter what position I twisted into, I thought often of the Sybaritic comfort of floating in blood-warm water at night in Panama—and wished that it could be done for bed patients . . . and eventually figured out how to do it, all details, long before I was well enough to make working drawings.

But 1) I never expected one to be built; 2) never thought of them (except for myself) other than as hospital beds; 3) never expected them to be widely used by a fair percentage of the public; 4) and never dreamed that they would someday be advertised by motels for romantic-exotic-erotic weekends along with X-rated films on closed-circuit TV.

By stacking the cards, I'm about to follow the advice of both Bill Gresham and Sprague de Camp. First, I will paint a gloomy picture of what our future may be. Second, I'll offer a cheerful scenario of how wonderful it *could* be. I can afford to be specific as each scenario will deny everything said in the other one (de Camp), and I can risk great gloom in the first because I'll play you out with music at the end (Gresham).

GLOOM, WOE, AND DISASTER—There are increasing pathological trends in our culture that show us headed down the chute to self-destruction. These trends do *not* require that we be conquered—wait a bit and we will fall into the lap of whichever power cares to occupy us. I'll list some of these trends and illustrate (rather than prove) what I mean. But it would be tediously depressing to pile up convincing proof—I'm not running for office. I *do have* proof, on file right in this room. I started clipping and filing by categories on trends as early as 1930 and my "youngest" file was started in 1945.

Span of time is important; the 3-legged stool of understanding is held up by **history, languages,** and **mathematics.** Equipped with these three you can learn anything you want to learn. But if you lack *any one* of them you are just another ignorant peasant with dung on your boots.

A few years ago I was visited by an astronomer, young and quite brilliant. He claimed to be a longtime reader of my fiction and his conversation proved it. I was telling him about a time I needed a synergistic orbit from Earth to a 24-hour station; I told him what story it was in, he was familiar with the scene, mentioned having read the book in grammar school.

This orbit is similar in appearance to cometary interplanet transfer but is in fact a series of compromises in order to arrive in step with the space station; elapsed time is an unsmooth integral not to be found in Hudson's Manual but it can be solved by the methods used on Siacci empiricals for atmosphere ballistics: numerical integration.

I'm married to a woman who knows more math, history, and languages than I do. This should teach me humility (and sometimes does, for a few minutes). Her brain is a great help to me professionally. I was telling this young scientist how we obtained yards of butcher paper, then each of us worked three days, independently, solved the problem and checked each other—then the answer disappeared into *one* line *of one* paragraph (*Space Cadet*) but the effort had been worthwhile as it controlled what I could do dramatically in that sequence.

Doctor Whoosis said, "But *why* didn't you just shove it through a computer?"

I blinked at him. Then said slowly, gently, "My dear boy—" (I don't usually call Ph.D.'s in hardcore sciences "My dear boy"—they impress me. But this was a special case.)

"My dear boy . . . this was *1947*."

It took him some seconds to get it, then he blushed.

Age is not an accomplishment and youth is no sin. This young man was (is) brilliant, skilled in mathematics, had picked German and Russian for his doctorate. At the time I met him he seemed to lack feeling for historical span . . . but, if true, I suspect that it began to itch him and he made up that lack either formally or by reading. Come to think of it, much of my own knowledge of history derives not from history courses but from history of astronomy, of war and military art, and of mathematics, as my formal history study stopped with Alexander and resumed with Prince Henry the Navigator. But to understand the history of those three subjects, you *must* branch out into general history.

Span of Time—the Decline of Education

My father never went to college. He attended high school in a southern Missouri town of 3000+, then attended a private 2-year academy roughly analogous to junior college today, except that it was *very* small—had to be; a day school, and Missouri had no paved roads.

Here are some of the subjects he studied in back-country 19th century schools: Latin, Greek, physics (natural philosophy), French, geometry, algebra, 1st year calculus, bookkeeping, American history, World history, chemistry, geology.

Twentyeight years later I attended a much larger city high school. I took Latin and French but Greek was not offered; I took physics and chemistry but geology was not offered. I took geometry and algebra but calculus was not offered. I took American history and ancient history but no comprehensive history course was offered. Anyone wishing comprehensive history could take (each a one-year 5-hrs/wk course) ancient history, medieval history, modern European history, and American history—and note that the available courses ignored all of Asia, all of South America, all of Africa except ancient Egypt, and touched Canada and Mexico solely with respect to our wars with each.

I've had to repair what I missed with a combination of travel and private study . . . and must admit that I did not tackle Chinese history in depth until this year. My training in history was so spotty that it was not until I went to the Naval Academy and saw captured battle flags that I learned that we fought Korea some *eighty years* earlier than the mess we are still trying to clean up.

From my father's textbook I know that the world history course he studied was not detailed (how could it be?) but at least it treated the world as *round;* it did not ignore three fourths of our planet.

Now, let me report what I've seen, heard, looked up, clipped out of newspapers and elsewhere, and read in books such as *Why Johnny Can't Read*, *The Blackboard Jungle*, *etc.*

Colorado Springs, our home until 1965, in 1960 offered first-year Latin—but that was all. Caesar, Cicero, Virgil—Who dat?

Latin is not taught in the high schools of Santa Cruz County. From oral reports and clippings I note that it is not taught in most high schools across the country.

"Why this emphasis on Latin? It's a dead language!" Brother, as with jazz, in the words of a great artist, "If you have to ask, you ain't never goin' to find out." A person who knows *only* his own language does not even know his *own* language; epistemology necessitates knowing more than one human language. Besides that sharp edge, Latin is a giant help in *all* the sciences—and so is Greek, so I studied it on my own.

A friend of mine, now a dean in a state university, was a tenured professor of history—but got riffed when history was eliminated from the required subjects for a bachelor's degree. His courses (American history) are still offered but the one or two who sign up, he tutors; the overhead of a classroom cannot be justified.

A recent *Wall Street Journal* story described the bloodthirsty job hunting that goes on at the annual meeting of the Modern Languages Association; modern languages—even English—are being deemphasized right across the country; there are more professors in MLA than there are jobs.

I mentioned elsewhere the straightA student on a scholarship who did not know the relations between weeks, months, and years. This is not uncommon; high school and college students in this country usually can't do simple arithmetic without using a pocket calculator. (I mean with pencil on paper; to ask one to do *mental* arithmetic causes jaws to drop—say 17 x 34, done mentally. How? Answer: Chuck away the 34 but remember it. $(10 + 7)^2$ is 289, obviously. Double it: 2(300 – 11), or 578.

But my father would have given the answer at once, as his country grammar school a century ago required *perfect* memorizing of multiplication tables *through 20* x *20 = 400* . . . so his ciphering the above would have been merely the doubling of a number already known (289)—or 578. He might have done it again by another route to check it: (68 + 510)—but his hesitation would not have been noticeable.

Was my father a mathematician? Not at all. Am I? Hell, no! This is the simplest sort of kitchen arithmetic, the sort *that high school students can no longer do*—at least in Santa Cruz.

If they don't study math and languages and history, what *do* they study? **(Nota Bene!** Any student can learn the truly tough subjects *on almost any campus if he/she wishes*—the professors and books and labs are there. But the student must *want* to.)

But if that student does not want to learn anything requiring brain sweat, most U.S. campuses will babysit him 4 years, then hand him a baccalaureate for not burning down the library. That girl in Colorado Springs who studied Latin—but no classic Latin—got a "general" bachelor's degree at the University of Colorado in 1964. I attended her graduation, asked what she had majored in. No major. What had she studied? Nothing, really, it turned out—and, sure enough, she's as ignorant today as she was in high school.

Santa Cruz has an enormous, lavish 2-year college and also a campus of the University of California, degree granting through Ph.D. level. But, since math and languages and history are not required, let's see how they fill the other classrooms.

The University of California (all campuses) is classed as a "tough school." It is paralleled by a State University system with lower entrance requirements, and this is paralleled by local junior colleges (*never* called "junior") that accept any warm body.

UCSC was planned as an elite school ("The Oxford of the West") but falling enrollment made it necessary to accept any applicant who can qualify for the University of California as a whole; therefore UCSC now typifies the "statewide campus." Entrance can be by examination (usually College Entrance Examination Boards) or by high school certificate. Either way, admission requires a certain spread—2 years of math, 2 of a modern language, 1 of a natural science, 1 of American history, 3 years of English—and a level of performance that translates as B+. There are two additional requirements: English composition, and American History and Institutions. The second requirement acknowledges that some high schools do not require American history; UCSC permits an otherwise acceptable applicant to make up this deficiency (with credit) after admission.

The first additional requirement, English composition, can be met by written examination such as CEEB, or by transferring *college* credits considered equivalent, or, lacking either of these, by passing an examination given at UCSC at the start of each quarter.

The above looks middlin' good on the surface. College requirements from high school have been watered down somewhat (or more than somewhat) but that B+ average as a requirement looks good . . . *if* high schools are teaching what they taught two and three generations ago. The rules limit admission to the upper 8% of California high school graduates (out-of-state applicants must meet slightly higher requirements).

8%— So 92% fall by the wayside. These 8% are the intellectual elite of young adults of the biggest, richest, and most lavishly educated state in the Union.

Those examinations for the English-composition requirement: How can anyone fail who has had 3 years of high school English and averages B+ across the board?

If he fails to qualify, he may enter but must take at once (no credit) "Subject A"—better known as "Bonehead English."

"Bonehead English" must be repeated, if necessary, until passed. To be forced to take this no-credit course does *not* mean that the victim splits an occasional infinitive, sometimes has a dangling modifier, or a failure in agreement or case—he can even get away with such atrocities as "—like I say—."

It means that he has reached the Groves of Academe unable to express himself by writing in the English language.

It means that his command of his native language does not equal that of a 12-year-old country grammar school graduate of ninety years ago. It means that he verges on subliterate but that his record is such in other ways that the University will tutor him (no credit and for a fee) rather than turn him away.

But, since these students are the upper 8% and each has had not less than three years of high school English, it follows that only the exceptionally unfortunate student needs "Bonehead English." That's right, isn't it? Each one is eighteen years old, old enough to vote, old enough to contract or to marry without consulting parents, old enough to hang for murder, old enough to have children (and some do); all have had 12 years of schooling including 11 years of English, 3 of them in high school.

(Stipulated: California has special cases to whom English is not native language. But such a person who winds up in that upper 8% is usually—I'm tempted to say "always"—fully literate in English.)

So here we have the cream of California's young adults; each has learned to read and write and spell and has been taught the basics of English during eight years in grammar school, and has polished this by not less than three years of English in high school—and also has had at least two years of a second language, a drill that vastly illuminates the subject of grammar even though grasp of the second language may be imperfect.

It stands to reason that *very* few applicants need "Bonehead English." Yes?

No!

I have just checked. The new class at UCSC is "about 50%" in Bonehead English—and this is normal—normal right across California—and California is no worse than most of the states.

8% off the top—

Half of this elite 8% must take "Bonehead English."

The prosecution rests.

This scandal must be charged to grammar and high school teachers . . . many of whom are not themselves literate (I know!)—but are not personally to blame, *as we are now in the second generation of illiteracy.* The blind lead the blind.

But what happens after this child (sorry—young adult citizen) enters UCSC?

I TELL YOU THREE TIMES I TELL YOU THREE TIMES I TELL YOU THREE TIMES: A student who *wants* an education can get one at UCSC in a number of very difficult subjects, plus a broad general education.

I ask you never to forget this while we see how one can slide through, never do any real work, never learn anything solid, and still receive a bachelor of arts degree from the prestigious University of California. Although I offer examples from the campus I know best, I assume conclusively that this can be done throughout the state, as it is one statewide university operating under one set of rules.

Some guidelines apply to any campus: Don't pick a medical school or an engineering school. Don't pick a natural science that requires difficult mathematics. (A subject called "science" that does *not* require difficult mathematics usually is "science" in the sense that "Christian Science" is science—in its widest sense "science" simply means "knowledge" and anyone may use the word for any subject . . . but shun the subjects that can't be understood without mindstretching math.)

Try to get a stupid but good-natured adviser. There are plenty around, especially in subjects in which to get a no-sweat degree; Sturgeon's Law applies to professors as well as to other categories.

For a bachelor's degree:

1) You must spend the equivalent of one academic year in acquiring "breadth"—but wait till you see the goodies!

2) You must take the equivalent of one full academic year in your major subject in upper division courses, plus prerequisite lower division courses. Your 4-year program you must rationalize to your adviser as making sense for your major ("Doctor, I picked *that* course because it *is* so far from my major—for perspective. I was getting too narrow." He'll beam approvingly . . . or you had better look for a stupider adviser).

3) Quite a lot of time will be spent off campus but counted toward your degree. This should be fun, but it can range from hard labor at sea, to counting noses and asking snoopy questions of "ethnics" (excuse, please!), to time in Europe or Hong Kong, et al., where you are in danger of learning something new and useful even if you don't try.

4) You will be encouraged to take interdisciplinary majors and are invited (urged) to invent and justify unheard-of new lines of study. For this you need the talent of a used-car salesman as *any* aggregation of courses can be sold as a logical pattern if your "new" subject considers the many complex relationships between three or four or more old and orthodox fields. Careful here! If you are smart enough to put this over, you may find yourself not only *earning* a baccalaureate but in fact doing original work worthy of a Ph.D. (You won't get it.)

5) You must have at least one upper-division seminar. Pick one in which the staff leader likes your body odor and you like his. ("I do not like thee, Dr. Fell; the reason why I cannot tell—") But you've at least two years in which to learn which professors in your subject are simpatico, and which ones to avoid at any cost.

6) You must write a 10,000 word thesis on your chosen nonsubject and may have to defend it orally. If you can't write 10,000 words of bull on a bull subject, you've made a mistake—you may have to *work* for a living.

The rules above allow plenty of elbowroom; at least three out of four courses can be elective and the remainder elective in part, from a long menu. We are still talking *solely* about nonmathematical subjects. If you are after a Ph.D. in astronomy, UCSC is a wonderful place to get one . . . but you will start by getting a degree in physics including the toughest of mathematics, and will study also chemistry, geology, technical photography, computer science—and will resent any time not leading toward the ultra-interdisciplinary subject lumped under the deceptively simple word "astronomy."

Breadth—the humanities, natural science, and social science—1/3 in each, total 3/3 or one academic year, but spread as suits you over the years. Classically "the humanities" are defined as literature, philosophy, and art—but history has been added since it stopped being required in college and became "social studies" in secondary schools. "Natural science" does not necessarily mean what it says—it can be a "nonalcoholic gin"; see below. "Social science" means that grab bag of studies in which answers are matters of opinion.

Courses satisfying "breadth" requirements

Humanities

Literature and Politics—political & moral choices in literature

Philosophy of the Self

Philosophy of History in the Prose and Poetry of W. B. Yeats

Art and the Perceptual Process

The Fortunes of Faust

Science and the American Culture (satisfies both the Humanities requirement and the American History and Institutions requirement *without* teaching *any* science or *any* basic American History. A companion course, *Science and Pressure Politics,* satisfies both the Social Sciences requirement and the American History and Institutions requirement while teaching still less; it concentrates on the post-World-War-II period and concerns scientists as lobbyists and their own interactions [rows] with Congress and the President. Highly recommended as a way to avoid learning American history or very much social "science.")

American Country Music—Whee! You don't play it, you listen.

Man and the Cosmos—philosophy, sorta. Not science.

Science Fiction (I refrain from comment.)

The Visual Arts—"What, if any, are the critical and artistic foundations for judgment in the visual arts?"—exact quotation from catalog.

Mysticism—that's what it says.

(The above list is incomplete.)

Natural Science requirement

General Astronomy—no mathematics required

Marine Biology—no mathematics required

Sound, Music, and Tonal Properties of Musical Instruments—neither math nor music required for this one!

Seminar: Darwin's Explanation

Mathematical Ideas—for nonmathematicians; requires only that high school math you must have to enter.

The Phenomenon of Man—"—examine the question of whether there remains any meaning to human values." (Oh, the pity of it all!)

Physical Geography: Climate

The Social "Sciences" requirement

Any course in Anthropology—many have no prereq.

Introduction to Art Education—You don't have to *make* art; you study how to teach it.

Music and the Enlightenment—no technical knowledge of music required. This is a discussion of the effect of music on philosophical, religious, and social ideas, late 18th–early 19th centuries. That is what it says—and it counts as "social science."

The Novel of Adultery—and this, too, counts as "social science." I don't mind anyone studying this subject or teaching it—but I object to its being done on my (your, our) tax money. (P.S. The same bloke teaches science fiction. He doesn't *write* science fiction; I don't know what his qualifications are in this other field.)

Human Sexuality

Cultural Roots for Verbal and Visual Expression—a fancy name of still another "creative writing" class with frills—the students are taught how to draw out "other culture" pupils. So it says.

All the 30-odd "*Community Studies*" courses qualify as "social science," but I found myself awed by these two: *Politics and Violence,* which studies, among other things, "political assassination as sacrifice" and *Leisure and Recreation in the Urban Community* ("Bread and Circuses").

Again, listing must remain incomplete; I picked those below as intriguing:

Seminar: Evil and the Devil in the Hindu Tradition.

Science and Pressure Politics—already mentioned on page 433 as the course that qualifies both as social "science" and as American History and Institutions while teaching an utter minimum about each. The blind man now has hold of the elephant's tail.

The Political Socialization of La Raza—another double header, social "science" and American History and Institutions. It covers greater time span (from 1900 rather than from 1945) but it's like comparing cheese and chalk to guess which one is narrower in scope in either category.

The name of this game is to plan a course involving minimum effort and minimum learning while "earning" a degree under the rules of the nation's largest and most prestigious state university.

To take care of "breadth" and also the American history your high school did not require I recommend *Science and Pressure Politics, The Phenomenon of Man,* and *American Country Music.* These three get you home free without learning *any* math, history, or language that you did not already know . . . and without sullying your mind with science.

You must pick a major . . . but it must *not* involve mathematics, history, or actually being able to *read* a second language. This rules out *all* natural sciences (this campus's greatest strength).

Anthropology? You would learn something in spite of yourself; you'd get interested. Art? Better not major in it without major talent. Economics can be difficult, but also and worse, you may incline toward the Chicago or the Austrian school and not realize it until your (Keynesian or Marxist) instructor has failed you with a big black mark against your name. Philosophy? Easy and lots of fun and absolutely guaranteed not to teach you anything while loosening up your mind. In more than twenty-five centuries of effort *not one* basic problem of philosophy has *ever* been solved . . . but the efforts to solve them are most amusing. The same goes for comparative religion as a major: You won't actually *learn* anything you can sink your teeth into . . . but you'll be vastly entertained—if the Human Comedy entertains you. It does me.

Psychology, Sociology, Politics, and Community Studies involve not only risk of learning something—not much, but *something*—and each is likely to involve real work, tedious and lengthy.

To play this game and win, with the highest score, it's Hobson's choice: American literature. I assume that you did not have to take Bonehead English and that you can type. In a school that has no school of education (UCSC has none) majoring in English Literature is the obvious way to loaf through four years. It will be necessary to cater to the whims of professors who know no more than you do about anything that matters . . . but catering to your mentors is necessary in any subject not ruled by mathematics.

Have you noticed that professors of English and/or American Literature are not expected to be proficient in the art they profess to teach? Medicine is taught by M.D.'s on living patients, civil engineering is taught by men who in fact have built bridges that did not fall; law is taught by lawyers; music is taught by musicians; mathematics is taught by mathematicians—and so on.

But is—for example—the American Novel taught by American novelists?

Yes. Occasionally. But so seldom that the exceptions stand out. John Barth. John Erskine fifty years ago. Several sciencefiction writers almost all of whom were selling writers long before they took the King's Shilling. A corporal's guard in our whole country out of battalions of English profs.

For a Ph.D. in American/English literature a candidate is not expected to *write* literature; he is expected to *criticize* it.

Can you imagine a man being awarded an M.D. for writing a *criticism* of some great physician without ever himself having learned to remove an appendix or to diagnose *Herpes zoster*? And for that dissertation then be hired to *teach* therapy to medical students?

There is, of course, a reason for this nonsense. The rewards to a competent novelist are so much greater than the salaries of professors of English at even our top schools that once he/she learns this racket, teaching holds no charms.

There are exceptions—successful storytellers who *like* to teach so well that they keep their jobs and write only during summers, vacations, evenings, weekends, sabbaticals. I know a few—emphasis on "few." But most selling wordsmiths are lazy, contrary, and so opposed to any fixed regime that they will do *anything*—even meet a deadline—rather than accept a job.

Most professors of English *can't* write publishable novels . . . and many of them can't write nonfiction prose very well—certainly not with the style and distinction and grace—and content—of Professor of Biology Thomas H. Huxley. Or Professor of Astronomy Sir Fred Hoyle. Or Professor of Physics John R. Pierce. Most Professors of English get published, when they do, by university presses or in professional quarterlies. But fight it out for cash against *Playboy* and Travis McGee? They can't and they don't!

But if you are careful not to rub their noses in this embarrassing fact and pay respectful attention to their opinions even about (ugh!) "creative writing," they will help you slide through to a painless baccalaureate.

You still have time for many electives and will need them for your required hours-units-courses; here are some fun-filled ones that will teach you almost nothing:

The Fortunes of Faust

Mysticism

The Search for a New Life Style

The American Dilemma—Are "all men equal"?

Enology—history, biology, and chemistry of wine-making and wine appreciation. This one will teach you something but it's too good to miss.

Western Occultism: Magic, Myth, and Heresy.

There is an entire college organized for fun and games ("aesthetic enrichment"). It offers courses for credit but you'll be able to afford noncredit activity as well in your lazyman's course—and *anything* can be turned into credit by some sincere selling to your adviser and/or Academic Committee. I have already listed nine of its courses but must add:

Popular Culture

—plus clubs or "guilds" for gardening, photography, filmmedia, printing, pottery, silkscreening, orchestra, jazz, *etc.*

Related are *Theater Arts*. These courses give credit, including:

Films of Fantasy and Imagination—fantasy, horror, SF, *etc.* (!)
Seminar on Films
Filmmaking
History and Aesthetics of Silent Cinema
History and Aesthetics of Cinema since Sound

Introduction to World Cinema

Sitting and looking at movies can surely be justified for an English major. Movies and television use writers—as little as possible, it's true. But somewhat; the linkage is there.

Enjoy yourself while it lasts. These dinosaurs are on their way to extinction.

The 2-year "warm body" campus is even more lavish than UCSC. It is a good trade school for some things—e.g., dental assistant. But it offers a smorgasbord of fun—Symbolism of the Tarot, Intermediate Contract Bridge, Folk Guitar, Quilting, Horseshoeing, Chinese Cooking, Hearst Castle Tours, Modern Jazz, Taoism, Hatha Yoga Asanas, Aikido, Polarity Therapy, Mime, Raku, Bicycling, Belly Dancing, Shiatsu Massage, Armenian Cuisine, Revelation and Prophecy, Cake Art, Life Insurance Sales Techniques, Sexuality and Spirituality, Home Bread Baking, Ecuadorian Backstrap Weaving, The Tao of Physics, and lots, lots more! One of the newest courses is "The Anthropology of Science Fiction" and I'm still trying to figure that out.

I have no objection to any of this . . . but why should this kindergarten be paid for by *taxes*? "Bread and Circuses."

I first started noticing the decline of education through mail from readers. I have saved mail from readers for forty years. Shortly after World War Two I noticed that letters from the youngest were not written but hand-printed. By the middle fifties deterioration in handwriting and in spelling became very noticeable. By today a letter from a youngster in grammar school *or in high school* is usually difficult to read and sometimes illegible—penmanship atrocious (*pencil*manship—nine out of ten are in soft pencil, with well-smudged pages), spelling unique, grammar an arcane art.

Most youngsters have not been taught how to fold 8½" x 11" paper for the two standard sizes of envelopes intended for that standard sheet.

Then such defects began to show up among college students. Apparently "Bonehead English" (taught everywhere today, so I hear) is not sufficient to repair the failure of grammar and high school teachers *who themselves in most cases were not adequately taught.*

I saw sharply this progressive deterioration because part of my mail comes from abroad, especially Canada, the United Kingdom, the Scandinavian countries, and Japan. A letter from any part of the Commonwealth is invariably neat, legible, grammatical, correct in spelling, and polite. The same applies to letters from Scandinavian countries. (Teenagers of Copenhagen usually speak and write English better than most teenagers of Santa Cruz.) Letters from Japan are invariably neat—but the syntax is sometimes odd. I have one young correspondent in Tokyo who has been writing steadily these past four years. The handwriting in the first letter was almost stylebook perfect but I could hardly understand the phrasing; now, four years later, the handwriting looks the same but command of grammar, syntax, and rhetoric is excellent, with only an occasional odd choice in wording giving an exotic flavor.

Our public schools no longer give good value. We remain strong in science and engineering but even students in those subjects are handicapped by failures of our primary and secondary schools and by cutback in funding of research both public and private. Our great decline in education is alone enough to destroy this country . . . but I offer no solutions because the only solutions I think would work are so drastic as to be incredible.

Span of Time—Decline in Patriotism and in the Quality of Our Armed Forces

The high school I attended (1919–24) was an early experiment in the junior and senior high school method. The last year of grammar school was joined with the freshman class as "junior high" while the sophomores, juniors, and seniors were "senior high."

There was a company of junior ROTC in junior high and two companies in senior high. Military training gave no credit and was not compulsory; it was neither pushed nor discouraged. A boy took it or not, as suited him and his parents. Some of the subfreshman (aet. ca. 13 an.) were barely big enough to tote a Springfield rifle.

Kansas City had a regiment of Federalized National Guard, with one authorized drill per week, 3 hours each Wednesday evening. For this a private was paid 69¢, a PFC got a dollar, and a corporal got big money—$1.18.

The required & paid weekly drill was not all, as about half of the regiment showed up on Sundays at the "Military Country Club"—acres of raw wood lot until the regiment turned it into rifle range, club house, stables, *etc.* No pay for Sundays. Two weeks encampment per year, with pay. For most of the regiment, this was their only vacation, two weeks then being standard.

That regiment ran about 96% authorized strength.

About 1921 Congress authorized the CMTC, Citizens Military Training Corps. It proved very popular. A month of summer training in camp at an Army post, continued through 4 years, could (if a candidate's grades were satisfactory) result in certification for commission in the reserve. Civilians submitted to military discipline in CMTC but were not subject to court martial. Offenders could be sent home or turned over to civilian police, depending on the offense. There were few offenses.

CMTC candidates got 3¢ per mile to and from their homes, no other money.

In 1925 I was appointed midshipman. There were 51 qualified applicants trying for that one appointment.

240 of my class graduated; 130 fell by the wayside. *One* of that 130 resigned voluntarily; all the others resigned involuntarily, most of them plebe year for failure in academics (usually mathematics), the others were requested to resign over the next three years for academic, physical, or other reasons. A few resigned graduation day through having failed the final physical examination for commissioning. Three more served about one year in the Fleet, then resigned—but these three volunteered after the attack on Pearl Harbor. 28 of the 129 who left the service involuntarily managed to get back on active duty in World War Two.

So with four exceptions all of my class stayed in the Navy *as long as the Navy would have them.* About 25% were killed in line of duty or died later of wounds. Neither at the Academy nor in the Fleet did I ever hear a midshipman or officer talk about resigning. While it is likely that some thought about it, all discussion tacitly carried the assumption that the Navy was our life, the Fleet our home, and that we would leave only feet first or when put out to pasture as too old.

Enlisted men: When I entered the Fleet, *before* the Crash of '29 and about a year before unemployment became a problem, Navy recruiting offices were turning down 19 out of 20 volunteers; the Army was turning down 5 out of 6. The reenlistment rate was high; the desertion rate almost too small to count.

Span of Time—Today in the Armed Forces

I have said repeatedly that I am opposed to conscription at any time, peace or war, for moral reasons beyond argument. For the rest of this I will try to keep my personal feelings out of the discussion—as I did in the rosy picture painted above. I reported *facts,* not my emotions.

I will not review details showing that the USSR is today militarily stronger than we are as the matter has been discussed endlessly in news media, in Congress, and in professional journals. The public discussion today concedes the military superiority of the USSR and centers on *how much* they are ahead of us, and what should be done about it. The details of this debate are of supreme importance as **the most expensive thing in the world is a second-best military establishment,** good but not good enough to win. At the moment the three-cornered standoff is saving us from that silly way to die . . . but I cannot predict how long this stalemate will last as key factors are not under our control, and neither our government nor our citizens seem willing to accept guns instead of butter on the scale required to make us too strong for anyone to risk attacking us. Polls seem to show that a controlling number of voters think that we are already spending too much on our Armed Forces.

What I set forth below comes primarily from an article by Richard A. Gabriel, Associate Professor of Politics, St. Anselm's College, Manchester, New Hampshire, author of *Crisis in Command*. I lack personal experience with Army conditions today but what Dr. Gabriel says about them matches what I have heard from other sources and what I have read (I belong to all three associations—Army, Navy, Air Force—plus the Naval Institute and the Retired Officers Association; I get much data secondhand but no longer see it with my own eyes, hear it with my own ears).

Readers with personal experience in Korea, Viet Nam, and in the Services anywhere since the end of the Viet Nam debacle, I urge to write and tell me what you know that I don't, especially on points in which I am seriously mistaken.

Summarized from "The Slow Dying of the American Army," Dr. Richard A. Gabriel in *Gallery* magazine, June 1979, p. 41 et seq.:

Concerning the All Volunteer Force (AVF): Early this year the Pentagon admitted that all services had failed to meet quotas.

30% of all Army volunteers are discharged for offenses during first enlistment. Of the 70 per 100 left, 26 do not reenlist. The desertion rates are the highest in history . . . and this fact is partly covered up by using administrative discharges (—i.e., "You're fired!") rather than courts martial and punishment—if the deserter turns up. But no effort is made to find him.

According to Dr. Gabriel, citing General George S. Blanchard and others, hard-drug use (heroin, cocaine, angel dust—not marijuana) is greater than ever, especially in Europe, with estimates from a low of 10% to a high of 64%. Marijuana is ignored—but let me add that a man stoned out of his mind on grass is not one I want on my flank in combat.

Category 3B and 4 (ranging down from dull to mentally retarded) make up 59% of Army volunteers . . . in a day when privates handle very complex and sophisticated weapons and machinery. Add to this that the mix is changing so that a typical private might be Chicano or Puerto Rican, the typical sergeant a Black, the typical officer "Anglo." And that officers are transferred with great frequency and enlisted men with considerable frequency and you have a situation in which esprit de corps *cannot* be developed (an outfit without esprit de corps is not an army unit; it is an armed mob—R.A.H.).

Today we have more general officers than we did in World War Two. Our ratio of officers to enlisted men is more than twice as high as that of successful armies in the past. But an officer is not with his troops long enough to be "the Old Man"—he is a "manager," not a leader of men.

Dr. Gabriel concludes: "The most basic aspect is the need to reinstate the draft."

I disagree.

My disagreement is not on moral grounds. Forget that I ever voiced opposition to slave soldiers; think of me as Old Blood-and-Guts willing to use any means whatever to win.

Reinstating the draft would *not* get us out of trouble, even with the changes Dr. Gabriel suggests to make the draft "fair."

As everyone knows, we were in the frying pan; shifting to AVF, instead of producing an efficient professional army, put us into the fire. Dr. Gabriel urges that we climb back into the frying pan—but with improvements: a national lottery with no deferments whatever for any reason.

I can't disagree with the even-steven rule . . . but my reason for thinking that Dr. Gabriel's solution will not work is this:

A lottery, even meticulously fair, *cannot* make a man willing to charge a machinegun nest in the face of almost certain death. That sort of drive comes from emotional sources. Esprit de corps and patriotism *cannot* be drawn in a lottery.

Conscription works (among free men) only when it is not needed. I have seen two world wars; we used the draft in each . . . but in each case it was a means of straightening out the manpower situation; it was *not* needed to make men fight. Both wars were popular.

Since then we have had two non-Wars—Korea and Nam—in "peacetime" and using conscript troops. **And each non-War was a scandalous disaster.**

I don't have a neat solution to offer. If the American people have lost their willingness to fight and die for their country, the defect cannot be cured by conscription. Unless this emotional condition changes (and I do not know how to change it), we are whipped no matter what weapons we build. It could be overnight, or it could continue to be a long slow slide downhill over many years—ten, twenty, thirty. But the outcome is the same. Unless *something* renews the spirit this country once had, we are in the terminal stages of decay; history is ending for us.

Our foreign masters might graciously let us keep our flag, even our national name. But "the Land of the Free and the Home of the Brave" will be dead.

Time Span—Inflation

The Winter of '23–'24 I paid a street vendor 5¢ for a five billion mark German note and I paid too much; 5,000,000,000 DM was worth a trifle over 1¢. A bit later it was worth nothing.

In 1955 at the foot of the Acropolis I bought a small marble replica of the Venus of Melos for 10,000 drachma. I wasn't cheated; that was 3.50 USA.

There are the British pound, the Turkish lira, the Italian lira, the Mexican peso, and several others; all mean one pound of silver. Look up "exchange" and "commodities" in your newspaper; grab your pocket calculator and see how much each is inflated.

When I was a child of four or five my brothers and I used great stacks of hundred-dollar bills as play money. Confederate—

After two centuries, "Not worth a continental," still means "worthless." Memory is long for the damage done by inflation.

Before paper "money" was invented, inflation was accomplished by adding base metal to silver and/or gold while retaining the name of the coin. By this means the Roman denarius was devalued to zero during the first three centuries A.D. But inflation did not start with Caesar Augustus. In the early days of the Republic before the Punic Wars the cash unit was the libra (libra = lb.—pound = 273 grams, or about 60% of our pound avoirdupois, 454 grams). That's too large a unit for daily retail use; it was divided into 12 unciae (ounces).

A "lb." of silver was called an "as." 1/12 of that, struck as coinage, made efficient currency. Now comes war and inflation—

Eventually the "as"—once a pound of silver—was so debased that it amounted to a penny, more or less. Augustus, by decree, went back on a silver/gold standard and created the denarius, 3.87 grams of fine silver. He made 25 denarii equal in value to one aureus (7.74 grams of gold), or a ratio of 12.5 to one. ("Free and unlimited coinage of silver at a ratio of sixteen to one!" The Great Commoner and the august Emperor had similar notions about hard currency.)

One Augustan denarius equalled in gold at today's London fix ($385/troy ounce) a nominal $3.83, or about 3/10 of a gram of gold. This tells us nothing about purchasing power; it simply says that the Augustan denarius was a solid silver coin almost the size and weight of the solid silver quarter we used to have before the government foisted on us those sandwich things. How much olive oil or meal that would buy in Rome around 1 A.D. can be estimated from surviving records—but all the gold in Rome could not buy an aspirin tablet or a paper of matches. No way to compare. And hard money was not supplemented by printed money, bank checks, and transactions that take place entirely inside computers—but I can't go into how those phenomena affect purchasing power without writing a book twice as long as this one on fiscal theory (which I am quite willing to do but nobody would buy it).

What Augustus did was to stabilize Rome's money by defining it in terms of two commodities, each intrinsically valuable, each stable in supply, each almost indestructible, and he defined also the legal ratio between the two coinages—an effort to circumvent Gresham's Law, unknown then but Augustus appears to have had a gut feeling for it. (Not Bill Gresham—the other one. Thomas Gresham.) But a bimetallic standard has its problems; the free economy ratio tends to drift away from the legal ratio, and Gresham's Law begins to work. But this happens very slowly with hard money and is not the disaster that printing-press inflation is, or the debasing of hard money.

Caesar Augustus died in 14 A.D.

His corpse was hardly cold before the vultures got to work. Tiberius, Caligula, Claudius, Nero—even Claudius did nothing to stop the robbery. Titus attempted an Augustan return to honest money in 80 A.D. but he died in September the following year; his successor was a disaster even as Caesars go.

"Put not your trust in Princes." Debasement of the currency continued under every Caesar for the next two centuries. Diocletian (reign: 294–305) inherited a worthless denarius; he returned Rome to the bimetallic standard at a level barely below that of Augustus. But he increased enormously the bureaucracy, instituted the harshest of taxation to pay for his "reforms," and decreed price-fixing—which worked just as it always does.

On his retirement (not assassination[!]) debasement was resumed while taxes stayed high, and Rome was on the skids. The decline and fall of the denarius and of Rome paralleled each other.

I'm tempted to discuss France's incredible inflation and collapse thereof during the French Revolution (and three more French inflations since then), and the inflations of several other countries in other centuries. But they are monotonously alike and differ from debasement primarily in the fact that the invention of paper "money" permits the corruption of legal tender to get utterly out of hand before the people notice it. In Germany in the early twenties people used to take wheelbarrows to the grocery store—not to fetch back groceries but to carry money to the grocer. But the early stages of disastrous inflation feel like "prosperity." Wages and profits go up, old debts are easier to pay off, business booms.

It is not until later that most people notice that prices and taxes have gone up faster than wages and profits, and that it is getting harder and harder to make ends meet.

There is a strong emotional feeling that "a dollar is a dollar." (Hitler called it, "Mark is Mark!") But you can reexamine it in terms of prices on bread, or how many minutes to earn a dollar. And don't forget taxes! If you aren't working at least the first three months of each year to pay taxes before you can keep one dollar for yourself, then you are on welfare, one way or another. You may not think you are taxed that much—paycheck deductions and hidden taxes are extracted under anesthesia. Try dividing the Federal Budget by the number of wage earners *not on the public payroll,* then take a stab at where you fit in. Don't forget the same process for state, county, and city. There are Makers, Takers, and Fakers, no fourth category, and today the Takers and the Fakers outnumber (and outvote) the Makers.

Today it takes more dollars each year to service the National Debt than the total budget for the last and most expensive year of the Korean War. I am not going to state here the amount of our National Debt. If you have not heard it recently, you wouldn't believe me. If you don't know, telephone your Congressman and ask; he has a local office near you. If the telephone information service can't (won't) tell you, the city room of *any* newspaper does know his number.

Our National Debt will *never* be paid. We are beyond the point of no return. Inflation will continue and get worse . . . and the elderly on fixed incomes and the young adults trying to start families will continue to bear the brunt.

Every congressman, every senator, knows precisely what causes inflation . . . but can't (won't) support the drastic reforms to stop it because it could (and probably would) cost him his job. I have no solution and only one piece of advice:

Buy a wheelbarrow.

The Age of Unreason

Having been reared in the most bigoted of Bible Belt fundamentalism in which every word of the King James version of the Bible is the literal word of God—then having broken loose at thirteen when I first laid hands on *The Origin of Species* and *The Descent of Man* —I should have been unsurprised by the anti-intellectual and anti-science ground swell in this country.

I knew that our American temperament, practical as sharp tools on one side, was never more than three quarters of an inch from mindless hysteria on the other side. I *knew* this—my first long story was "If This Goes On—", a yarn based on the assumption that my compatriots were capable of throwing away their dearly-bought liberties to submit to a crude and ridiculous religious dictatorship.

(In forty years of letters about that story no one has ever criticized this assumption; I infer that I am not alone in believing it.)

I had read much about the Ku Klux Klan during the Tragic Era, talked with many who had experienced it, then experienced its nationwide recrudescence in the early 1920's. I had seen damfoolishness from dance marathons to flagpole sitters, and had made considerable study of crowd behavior and mass delusions. I had noted, rather casually, the initial slow growth of anti-science-&-intellect-ism.

Yet the durned thing shocked me.

Let me list some signs:

a) I CHING;

b) Back-to-nature cults;

c) The collapse of basic education;

d) The current respectability of natal horological astrology among "intelligentsia"—e.g. professors, N.Y. lit'rary people, etc.;

e) "Experts" on nuclear power and nuclear weapons who know nothing whatever of mathematical physics and are smug in admitting it;

f) "Experts" on the ecology of northern Alaska who have never been there and are not mathematically equipped to analyse a problem in ecology;

g) People who watch television several hours a day and derive all their opinions therefrom—and expound them;

h) People who watch television several hours a day;

i) The return of creationism—"Equal time for Yahweh";

j) The return of witchcraft.

The mindless yahoos, people who think linearly like a savage instead of inductively or deductively, and people who used to be respectful to learned opinion or at least kept quiet, now are aggressively on the attack. Facts and logic don't count; their intuition is the source of "truth."

If any item on the above list strikes you as rational, I won't debate it with you; you are part of the problem.

But I will illustrate what I mean in categories where I think I might be misunderstood.

a) **I CHING**—easier than "reading the augurs" but with nothing else to recommend it. Chinese fortune cookies are just as as accurate—and you get to eat the cookie. Nevertheless this bit of oriental nonsense is treated with solemn seriousness by many "educated" people. It is popular enough to make profitable the sale of books, equipment, magazine articles, and personal instruction. Paralleling I CHING is the widespread use of Tarot cards. Fortunetelling by cards used to be a playful parlor game, a mating rite—a nubile girl limited by the vocabulary and public manners of the Mauve Decade could convey to a rutty young male almost any message by how she chose to "read his fortune"—with no impropriety. But neither he nor she took the cards seriously.

Tarot cards formerly were used only by Gypsy or fake-Gypsy fortunetellers; they were not an article of commerce, were not easy to find. Today they are as easy to buy as liquor during prohibition, and also books on their "interpretation." Reading the Tarot is taken with deep seriousness by a dismaying number of people—having the Hanging Man turn up can cause great anguish.

b) **Back-to-nature cults:** I do *not* mean nudist resorts or "liberated" beaches. The growing realization that human bodies are not obscene is a sane, healthy counter trend in our crazy culture. By back-to-nature cults I mean people who band together to "return to the land" to grow their own food without pesticides, without artificial fertilizers, without power machinery, self-reliant in all ways . . . but with no comprehension that a spading fork implies coal mines, iron ore, blast furnaces, steel mills, factories, etc., that any building more complex than a log cabin or a sod house implies a building-materials industry, *etc.*

If all of us tried to go back-to-nature, most of us would starve rather quickly. These back-to-nature freaks can't do arithmetic.

c) The collapse of basic education—no need to repeat.

d) **Natal horological astrology**—Baseline: fifty-odd years ago astrology was commonly regarded as a ridiculous former superstition, one all but a tiny minority had outgrown. It is now the orthodoxy of many, possibly a majority. This pathological change parallels the decay of public education.

Stipulated: Ancient astrologers were scientists in being able to predict certain aspects of descriptive astronomy such as eclipses, positions of the sun, moon, and naked-eye planets, *etc.* Whether or not they believed the fortunetelling they supplied to their kings, patrons, or clients is irrelevant. The test of a science is its ability to predict; in the cited phenomena the Chaldean priests (for example) performed remarkable feats of prediction with handcrafted naked-eye instruments.

It has long been known that Sol is the heat engine that controls our weather. Recently, with the discovery of solar wind, the Van Allen belts, et al., we have become aware of previously unsuspected variables affecting us and our weather, and successful predictions are being made empirically—no satisfactory theory.

"What sign were you born under?"—I don't recall having heard that question until sometime after World War Two. Today it is almost impossible to attend a social gathering (including parties made up almost solely of university staff and spouses) without being asked that question or hearing it asked of someone else.

Today natal horological astrology is so widely accepted that those who believe in it take it for granted that anyone they meet believes in it, too—if you don't, you're some sort of a nut. I don't know what percentage of the population believe in natal horological astrology (sorry about that clumsy expression but I wish to limit this precisely to the notion that the exact time, date, latitude, and longitude of your birth and the pattern of the Sun, Moon, and planets with respect to the Zodiac at that exact time all constitute a factor affecting your life comparable in importance to your genetic inheritance and your rearing and education)—I don't know the percentage of True Believers but it is high enough that newspaper editors will omit any feature or secondary news rather than leave out the daily horoscope.

Or possibly *more* important than heredity and environment in the minds of True Believers since it is seriously alleged that this natal heavenly pattern *affects every day of your life*—good days for new business ventures—a bad day to start a trip—and so forth, endlessly.

The test of a science is its capacity to make correct predictions. Possibly the most respected astrologer in America is a lady who not only has her daily column in most of the largest newspapers but also annually publishes predictions for the coming year.

For ten years I clipped her annual predictions, filed them. She is highly recommended and I think she is sincere; I intended to give her every possible benefit of doubt.

I hold in my hand her predictions for 1974 dated Sunday January 13, 1974:

Here are some highlights: ". . . Nixon . . . will ride out the Watergate storm . . . will survive both the impeachment ordeal and the pressures to resign . . . will go down in history as a great president . . . will fix the responsibility for Pearl Harbor" (vindicating Kimmel and Short) . . . "in . . . 1978 . . . the cure for cancer will be acknowledged by the medical world . . . end the long search." (1974) "The dollar will be enormously strengthened as the balance of payments reflects the self-sufficiency in oil production." "The trouble in Ireland will continue to be a tragic situation *until 1978*." (Italics added—R.A.H.) "Willy Brandt" (will be reelected) "and be in office for quite some time to come. He will go on to fantastic recognition about the middle of 1978." (On 6 May 1974 Brandt resigned during a spy scandal.) She makes many other predictions either too far in the future to check or too vaguely worded. I have omitted her many predictions about Gerald Ford because they all depend on his serving out the term as vice president.

You can check the above in the files of most large newspapers.

e) & f)—no comment needed.

g) & h) need no comment except to note that they are overlapping but not identical categories—and I should add "People who allow their children to watch television several hours a day." (Television, like the automobile, is a development widely predicted . . . but its major consequences *never* predicted.)

i) **The return of creationism—**If it suits you to believe that Yahweh created the universe in the fashion related in Genesis, I won't argue it. But I don't have to respect your belief and I do not think that legislation requiring that the Biblical version be included in public school textbooks is either constitutional or fair. How about Ormuzd? Ouranos? Odin? There is an unnumbered throng of religions, each with its creation myth—all different. Shall one of them be taught as having the status of a scientific hypothesis merely because the members of the religion subscribing to it can drum up a majority at the polls, or organize a pressure group at a state capital? This is tyranny by the mob inflicted on minorities in defiance of the Bill of Rights.

Revelation has no place in a science textbook; it belongs under religious studies. Cosmogony is the most difficult and least satisfactory branch of astronomy; cosmologists would be the first to agree. But, damn it; they're *trying*!—on the evidence as it becomes available, by logical methodology, and their hypotheses are constantly subjected to pitiless criticism by their informed equals.

They should not have to surrender time on their platform, space in their textbooks, to purveyors of ancient myths supported only by a claim of "divine revelation."

If almost everyone believed in Yahweh and Genesis, and less than one in a million U.S. citizens believe in Brahma the Creator, it would not change the constitutional aspect. *Neither* belongs in a science textbook in a tax-supported school. But if Yahweh is there, Brahma should be. And how about that Eskimo Creator with the unusually unsavory methods? We have a large number of Eskimo citizens.

j) **The return of witchcraft—**It used to be assumed that Southern California had almost a monopoly on cults. No longer. (Cult vs. religion—I am indebted to L. Sprague de Camp for this definition of the difference. A "religion" is a faith one is born into; a "cult" is a faith an adult joins voluntarily. "Cult" is often used as a slur by a member of an older faith to disparage a newer faith. But this quickly leads to contradictions. In the 1st century A.D. the Christians were an upstart cult both to the Sanhedrin and to the Roman priests. "Cult" is also used as a slur on a faith with "weird ideas" and "weird practices." But this can cause you to bite your tail even more quickly than the other. "Weird" by whose standards?

(Mr. de Camp's distinction implies something about a mature and presumably sane adult becoming a proselyte in a major and long-established faith, such as Islam or Shintoism or the Church of England . . . but the important thing it implies is that a person born into, let us say, the Presbyterian Church is not being odd or unreasonable if he remains in it all his life despite having lost all faith; he's merely being pragmatic. His wife and kids are there; he feels that church is a good influence on the kids, many of his friends are there. It's a comfortable habit, one carrying with it a degree of prestige in the community.

(But if he changes into a saffron robe and shaves his pate, then goes dancing down the street, shouting, "Hare Krishna!" he won't keep his Chevrolet dealership very long. Theology has nothing to do with it.)

One of the symptoms of this Age of Unreason, anti-science and anti-intellect, in the United States is the very prominent increase in new cults. We've never been without them. 19th Century New England used to breed them like flies. Then it was Southern California's turn. Now they seem to spring up anywhere and also are readily imported from abroad. Zen Buddhism has been here so long that it is usually treated with respect . . . but still so short a time (1950) that few American adults not of Japanese ancestry can claim to have been born into it. Ancient in Japan, it is still a cult *here*—e.g., Alan Watts (1915–1973), who moved from Roman Catholic priest to Episcopal priest to Zen priest. I doubt that there is any count on American Zen Buddhists but it is significant that both "satori" and "koan" were assimilated words in all four standard U.S. dictionaries only 16 years after Zen Buddhism penetrated the non-Japanese population.

And there are the Moonies and the Church of Scientology and that strange group that went to South America and committed suicide en masse and the followers of that fat boy from India and—look around you. Check your telephone book. *I express no opinion on the tenets of any of these;* I simply note that, since World War Two, Americans have been leaving their "orthodox" churches in droves and joining churches new in this country.

Witchcraft is not new and never quite died out. But it is effectively new to most of its adherents here today because of the enormous increase in numbers of witches. ("Warlock" is insulting, "Wizard" barely acceptable and considered gauche, "Witch" is the correct term both male and female. The religion is usually called either "the Old Religion" or "the Craft" rather than witchcraft.)

The Craft is by its nature underground; witches cannot forget the hangings in Salem, the burnings in Germany, the fact that the injunction, "Thou shalt not suffer a witch to live" (Exodus XXII, 18) has usually been carried out whenever the Old Religion surfaced. Even during this resurgence only four covens have come to my attention and, not being a witch myself, I have never attended an esbat (easier to enter a tyled lodge!).

The Craft is *not* Devil worship and it is *not* Black Mass but both of the latter have enjoyed some increase in recent years.

If witchcraft has not come to your attention, search any large book store; note how very many new titles concern witchcraft. Most of these books are phony, not written by witches, mere exploitation books—but their very existence shows the change. Continue to show interest and a witch just might halfway reveal himself by saying, "Don't bother with that one. Try this one." Treat him with warm politeness and you may learn much more.

To my great surprise when I learned of it, there are over a dozen (how much over a dozen I have no way to guess) periodicals in this country devoted solely to the Old Religion.

Time Span—The Cancerous Explosion of Government

Will Rogers told us that we were lucky in that we didn't get as much government as we pay for. He was (and is) emphatically right . . . but he died 15 August 1935. The Federal government spent $6,400,000,000 in the last 12 months of his tragically short life. The year he was born (1879) the Federal government spent $274,000,000—an expensive year, as we resumed paying specie for the Greenback Inflation, $346,700,000 of fiat money.

What would Will Rogers think of a budget of $300 billion and up?

(Figures quoted from THE STATISTICAL HISTORY OF THE UNITED STATES,
Prepared by the U.S. Bureau of the Census)

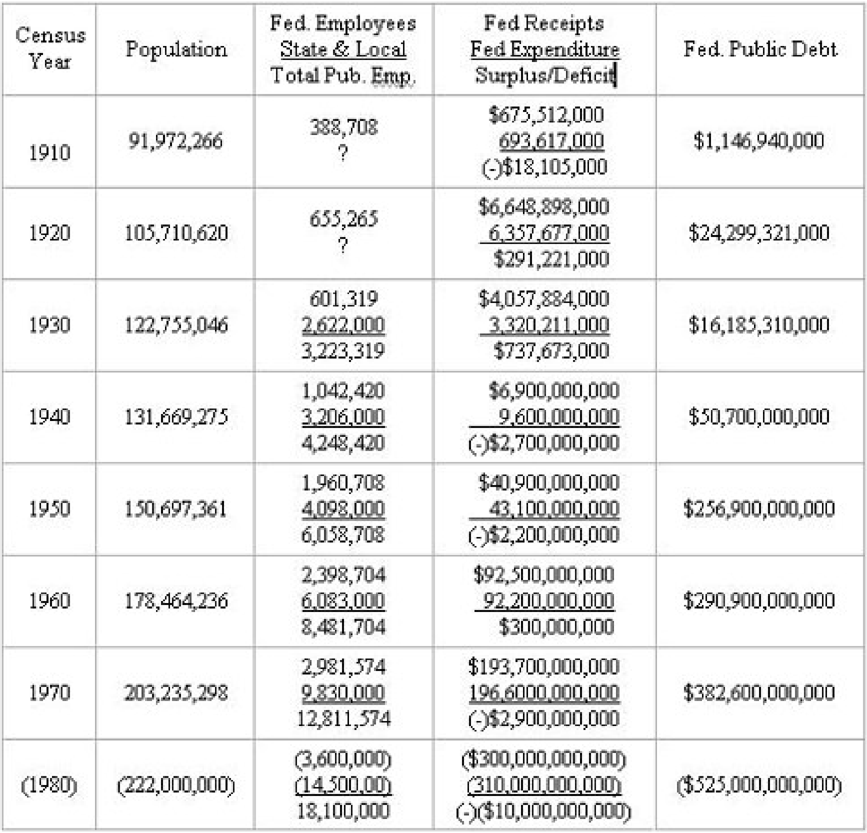

Census Year	Population	Fed. Employees State & Local Total Pub. Emp.	Fed Receipts Fed Expenditure Surplus/Deficit	Fed. Public Debt
1910	91,972,266	388,708 ?	$675,512,000 693,617,000 (-)$18,105,000	$1,146,940,000
1920	105,710,620	655,265 ?	$6,648,898,000 6,357,677,000 $291,221,000	$24,299,321,000
1930	122,755,046	601,319 2,622,000 3,223,319	$4,057,884,000 3,320,211,000 $737,673,000	$16,185,310,000
1940	131,669,275	1,042,420 3,206,000 4,248,420	$6,900,000,000 9,600,000,000 (-)$2,700,000,000	$50,700,000,000
1950	150,697,361	1,960,708 4,098,000 6,058,708	$40,900,000,000 43,100,000,000 (-)$2,200,000,000	$256,900,000,000
1960	178,464,236	2,398,704 6,083,000 8,481,704	$92,500,000,000 92,200,000,000 $300,000,000	$290,900,000,000
1970	203,235,298	2,981,574 9,830,000 12,811,574	$193,700,000,000 196,6000,000,000 (-)$2,900,000,000	$382,600,000,000
(1980)	(222,000,000)	(3,600,000) (14,500,00) 18,100,000	($300,000,000,000) (310,000,000,000) (-)($10,000,000,000)	($525,000,000,000)

(1980 figures are extrapolations = wild guesses) (Too timid?) *Much* too timid!—as you knew when you read them, as I knew when I prepared them. I plotted all of the above figures on graph paper, faired the curves, *suppressed what I knew by memory* (even refrained from consulting World Almanacs to bridge the 9 years since the close of compilation of *The Statistical History*) and extrapolated to 1980 by the curves—*not* tangent, but on the indicated curve.

By the best figures I can get from Washington today (20 Nov 1979) the budget is $547,600,000,000; the expected deficit is $29,800,000,000; and our current Federal Public Debt is estimated at $886,480,000,000.(!!!)

The end of the Federal fiscal year, September 30, is still over ten months away. In ten months a lot of things can happen. Unexpected events always cause unexpected expense . . . but with great good luck the deficit will not increase much and the National Public Debt will stay under $900,000,000,000.

In case of war, all bets are off.

What is happening is what always happens in fiat-currency inflation: After a certain point, unpredictable as to date because of uncountable human variables, it becomes uncontrollable and the currency becomes worthless. Dictatorship usually follows. From there on anything can happen—all bad.

The Greenback Inflation did *not* result in collapse of the dollar and of constitutional government because gold backing was not disavowed, simply postponed for a relatively short time. The Greenback Party wanted to go on printing paper money, never resume specie payment—but eventually we toughed it out and paid hard money for the Greenbacks that had financed the Union side of the war. From 1862 to 1879 gold and silver were not used internally. Our unfavorable balance of trade for 1861–65, which *had* to be met in gold, was $296,000,000. Hard times and high taxes—but we made it.

The French Revolution inflation was unsecured. Between April 1790 and February 1796, 40 billion livres or francs were issued. New paper money (Mandats) replaced them that year; the following year both sorts were declared no longer legal tender (waste paper!)—and 2 years later Napoleon took over "to save the Republic."(!)

We could still keep from going utterly bankrupt by going back on some hard standard (gold, silver, uranium, mercury, bushels of wheat —*something)*. But it would not be easy, it would not be popular; it would mean hard times for everyone while we recovered from an almighty hangover. Do you think a Congress and a President can be elected on any such platform?

One chink in the armor of any democracy is that, when the Plebs discover that they can vote themselves Bread & Circuses, they usually do . . . right up to the day there is neither bread nor circuses. At that point they often start lynching the senators, congressmen, bankers, tax collectors, Jews, grocers, foreigners, any minority—take your choice. For they know that *they* didn't do it. The citizen is sovereign until it comes to accepting blame for his sovereign acts—then he demands a scapegoat.

I used official figures without comment to show where we have been the past 70 years . . . and how we got into the mess we are in. But, while I think our government is more nearly honest than some others (see "Inside Intourist" Afterword, page 395), there is a lot of hankypanky in those official figures. Example: Social Security taxes go into the general fund and are spent. If Social Security were *in fact* insurance (the basis on which the gimmick was sold to us by FDR's "New Deal"), the receipts would be segregated and invested and not shown as income . . . *OR* a competent insurance actuary with staff would calculate the commitment and it would show in the National Public Debt.

(The fact that a debt is amortized over the years doesn't stop it from being a debt. It was an amortized mortgage that got me into this racket. The prospect of years and years of future monthly payments spoiled my sleep.)

The only way the Government can go on paying Social "Security" to my generation is by taxing you young people more and more heavily . . . and each year there are more and more old people and fewer and fewer young people. It won't help to run the printing presses faster; that causes food to rise in price, rents to go up, etc.—and people over 65 start putting pressure on Congress . . . and there's an election coming up. (There's *always* an election coming up.)

One thing I learned as a wardheeler was that (with scarce exceptions) people in my age group want one of two things: 1) They want to keep on clipping those coupons and collecting those rents and they don't give a damn what it does to the country, or 2) they want that raise in Social Security (Townsend Plan) ("Ham & Eggs") (you name one) and they don't give a damn what it does to the country.

(I don't claim to be altruistic. Just this pragmatic difference: I am sharply aware that, if the United States goes down the chute, *I* go down with it.)

I use the term "*Federal* Public Debt" because what is usually termed the "Public Debt" is by no means our total public debt. There are also state, county, city, and special-district debts. It is difficult to get accurate figures on these public debts but the total appears to be larger than the Federal Public Debt. I can't make even a wild guess at the Social Security commitment . . . but our *total* public promises-to-pay have to exceed two trillion dollars. How much is a trillion? Well, it means that a baby born today owes at least $4,347.83 to the Federal Government alone before his eyes open. (No wonder he yells.) It means that the Zero Population Growth family (who was going to save us all—remember?) of father, mother, and 2.1 children owes $17,826 in addition to private debts (mortgage, automobile, college for 2.1 children).

Of course papa won't pay it off; that debt will grow larger. But it will cost him $2000 a year (and rising) just to "service" his pro-rata; any taxes for which he *gets anything at all*—even more laws—is on top of that.

A trillion seconds is 31,688 years, 9 months, 5 days, 8 hours, 6 minutes, and 42 seconds—long enough for the precession of the equinoxes to make Vega the Pole Star, swing back again to Polaris, and go on past to Alpha Cephei. Or counting the other way it would take us to 29,708 B.C. . . . or more than 25 thousand years before Creation by Bishop Usher's chronology for creationism.

I don't understand a trillion dollars any better than I do a trillion seconds. I simply know that we had better stop spending money we don't have if we want to avoid that Man on Horseback.

But I don't think we will stop "deficit financing," the euphemism that sounds so much better than "kiting checks."

You may have noticed that 1970 figure for public employees (not my extrapolation for 1980, but the official 1970 figures straight from the United States Bureau of the Census).

That figure does not include the Armed Forces. It does not include some special categories. It is easier to learn the number of slaves imported in 1769 (6,736) than it is to find out exactly how many people are on public payrolls in this country. And it is not simply difficult but *impossible* to determine how many people receive Federal checks for which they perform no services. (Or food stamps. Are food stamps money?) But one thing is certain: the number of people eligible to vote who *do* receive money from some unit of government (aid to dependent children, Supreme Court justices, not growing wheat, removing garbage, governors of states, whoever) exceeds the number eligible to vote but receiving no pay or subsidy of any sort from any unit of government.

Have you read the Federal Register lately? Have you *ever* read the Federal Register? Under powers delegated by Congress certain *appointed* officials can publish a new regulation in the Federal Register and, if Congress does not stop it, after a prescribed waiting time, that regulation has the force of law—it *is* law, to you and to me, although a lawyer sees nuances. I have vastly oversimplified this description, but my only purpose is to point out that "administrative law" reaches into every corner of our lives, and is the major factor in the enormous and strangling invasion of the Federal Government into our private affairs.

I can't see anything in the Constitution that permits the Congress to delegate its power to pass laws . . . but the Supreme Court says it's okay and that makes my opinion worthless.

I'm stopping. There are endless other gloomy things to discuss—the oil shortage, the power shortage (not the same thing), pollution, population pressure, a projected change in climate that can and probably will turn the problems of population and food into sudden and extreme crisis, crime in the streets and bankrupt cities, our incredible plunge from the most respected nation on Earth to the most despised (but we are nonetheless expected to pick up the tab). Bill Gresham was right but he told only half of it: you not only don't get rich peddling gloom; it isn't any fun.

So now come with me—

"OVER THE RAINBOW—"

The new President had not been in office ten days before it became clear to his own party as well as to the "loyal opposition" that he was even more of a disaster than the defeated candidate had predicted. Nevertheless the country was shocked when he served even fewer days than the ninth President—killed in a crash, his private plane, himself at the controls; dying with him his three top aides: White House chief of staff, press secretary, appointments secretary.

No U.S. or Canadian news medium said a word about alcohol or incidents in the dead President's past; they treated it as a tragic accident. Papers and TV reporters elsewhere were not as reticent.

The Speaker of the new House saw the ex-Vice President first (even before the oath of office) as the Speaker's seniority in line of succession enabled him to do. He came right to the point. "I am ready to take this load off your shoulders. We both know that you were picked simply to support the ticket; no one ever expected to load you down with *this*. Here's how we'll do it: You resign at once, then we'll meet the press together—after I'm sworn in. I'll do most of the talking. I promise you, it won't be a strain on you."

"I'm sure that it won't be. You're excused."

"Huh!"

"You may leave. In fact I am telling you to leave. I thought you had come to stand beside me as I take the oath . . . but you have something entirely different in mind. You would not enjoy staying; I would not enjoy having you stay."

"You'll regret this! You're making a mistake!"

"If a mistake was made, it was made at the Convention. By you and five others, I believe; I was not present. Yes, I may regret it but this is what I undertook to do when I accepted the nomination for the Vice-Presidency. Now get out. *Pronto!*"

The new President sent for the Director of the Budget forty minutes after the swearing in. "Explain this to me."

The Director hemmed and hawed and tried to say that the budget was too technical for anyone not in public life before—

—and was answered, "I'm accepting your resignation. Send in your deputy."

It was almost a week before this call was made: "Admiral? This is the President. If I come to your home, do you feel well enough to see me?"

There was a tussle of wills that the Admiral won only through pointing out that it was never proper to subject the President of the United States to unnecessary risk of assassination . . . and that with his new car, fitted for his wheelchair, he still went to the Pentagon twice a week. "I'm old, I admit; I was born in 1900. But I'm not dead and I'm quite able to report to my Commander in Chief. And we both know that threats have been made."

The President won the next argument. On being wheeled in the

Admiral started to get out of his chair. "Do please sit down!"

The old man continued to try to rise, leaning on the arm of his nurse. The President said quickly, "That was expressed as a request but was an order. Sit down."

The Admiral promptly sat back down, caught his breath and said formally, "Ma'am, I report—with great pleasure!—to the President of the United States."

"Thank you for coming, sir. In view of our respective ages . . . and your health, I felt that it was a time to dispense with protocol. But you are right; there are indeed a flood of threats, many more than get into the news. I don't intend to be a target . . . at least until we have a new Vice President sworn in."

"*Never* be a target, Madam. You would be mourned by everyone, both parties. Uh, if I may say so, you are even more beautiful in person than you are on the screen."

"Not mourned by everyone, I'm certain, or I would not have to be cautious about assassination. As for that other, I'm not beautiful and you know it. I know what I have. I project. But it's not physical beauty. It's something that a pro—a professionally competent actress—does with her whole being. Her voice, her expression, her hands, her body. A gestalt, with regular features the least important factor. Or not present, as with me."

The President smiled, got up and went around the big desk, leaned over the Admiral, kissed his forehead. "But you are an old dear to have said it."

He cleared his throat, noisily. "Ma'am, what is your opinion in the matter against that of millions of men?"

"We've dropped that subject. Now to work! Admiral, why is it that there has been so much difficulty with nuclear power plants ashore but never any trouble with your nuclear submarines?"

The President slapped her desk, glared at the leader of the delegation. "Stop that! Han'kerchief head, you've come to the wrong church. In this office there are *no* Blacks—or Blues, Whites, Greens, or Yellows—just Americans. Besides that, you claim to be a Black representing Blacks. Hmmph! That's a phony claim if I ever—"

"I resent that, Mrs. Ni—"

"*Pipe down!* 'Madam President,' if you please. And one does *not* interrupt the President. I said your claim was phony. It is. I'm at least three shades darker than you are . . . yet I'm smooth brown, not black." She looked around. "I don't see a real sooty black in your whole delegation. Mmm, I see just one darker than I am. Mr. Green, isn't it? That is your name?"

"Yes, Madam President. From Brooklyn."

"Any white blood, Mr. Green? Perhaps I should say 'Any Caucasian ancestry?' "

"Possibly. But none that I know of, Ma'am."

"We're all in that boat . . . including all whites. A person who claims to be absolutely certain of his ancestry more than three generations back is accepting the short end of a bet. But since you are from Brooklyn, you can help me pass a word. An important word, one that I'll be emphasizing on the networks tonight but I'll need help from a lot of people to let *all* the people know that I mean it. A Black who gets elected from Brooklyn has lots of Jewish friends, people who trust him."

"That's right, Madam President."

"Listen to my talk tonight, then pass it on in your own words. This nation has split itself into at least a hundred splinter groups, pressure groups, each trying for a bigger bite of the pie. That's got to *stop*!—before it kills us. No more Black Americans. No more Japanese Americans. Israel is not our country and neither is Ireland. A group calling itself La Raza had better mean the human race—the *whole* human race—or they'll get the same treatment from me as the Ku Klux Klan. Amerindians looking for special favors will have just two choices: Either come out and *be* Americans and accept the responsibilities of citizenship . . . or go back to the reservation and shut up. Some of their ancestors got a rough deal. But so did yours and so did mine. There are no Anglos left alive who were at Wounded Knee or Little Big Horn, so it's time to shut up about it.

"But race and skin color and national ancestry isn't all that I mean. I intend to refuse to see *any* splinter group claiming to deserve special treatment not accorded other citizens and I will veto any legislation perverted to that end. Wheat farmers. Bankrupt corporations. Bankrupt cities. Labor leaders claiming to represent 'the workers' . . . when most of the people they claim to represent repudiate any such leadership. Business leaders just as phony. Anyone who wants the deck stacked in his favor because, somehow, he's 'special.'"

The President took a deep breath, went on: "Any such group gets thrown out. But two groups will get thrown out so hard they'll bounce! I'm a woman and I'm Negro. We've wiped the Jim-Crow laws off the books; I'll veto any Crow-Jim bill that reaches this office. Discrimination? Certainly there is still discrimination—but you can't kill prejudice by passing a law. We'll make it by how we behave and what we produce—not by trick laws.

"I feel even more strongly about women. We women are a majority, by so many millions that in an election it would be called a landslide. And *will* be a landslide, on *anything,* any time women really want it to be. So women don't need favors; they just need to make up their minds what they want—then take it." The President stood up again. "That's all. I'm going to devote this term to those 'unalienable rights'—for *everybody*. No splinter groups. Go tell people so. Now git . . . and don't come back! Not as a splinter group. Come back as *Americans.*"

They moved toward the door. Their erstwhile leader muttered something. The President demanded, "Mr. Chairman, what did you say?"

"I said," he answered loudly, "you aren't going to have a second term."

She laughed at him. "I thought that's what I heard. Burr head, I'm not worrying about being reelected; I worry only about how much I can do in four years."

(Editorial in the Springfield *Eagle)*

LIFE INSURANCE?

The President's surprise nomination of the House Minority Leader for the vacant vice-presidency has produced some snide theories, one of the nastiest being the idea that she fears a plot on her life by the wheeler-dealers who put the late President into office, so she is spiking their guns (literally!) by rigging things to turn the presidency over to the opposition party should anything happen to her. . . .

. . . prefer to take her at her word, that her objective is to get the country unified again, and that a woman and a man, a Republican and a Democrat, a White and a Black, could be the team to do it.

The Speaker of the House has still not commented, but his floor leader and the nominated minority leader appeared with the President when she announced her choice. The Senate President Pro Tempore said, "I see no reason why confirmation should not go through quickly. I've known Don for thirty years; I trust that I am not so narrow-minded that I can't recognize presidential caliber in a man of another party. . . ."

. . . customary to be of the same party, there is a custom just as long standing (and more important) that a President have a Vice President he (she) trusts to carry out his (her) policies.

Let's back them to the limit! Let's all be *Americans* again!

"Thanks for coming."

"Madam President, any time you send a car for me, then scoot me across the country in a hypersonic military jet, thanks should be the other way. My first experience above the speed of sound—and my first time in the Oval Office. I never expected to be in it."

She chuckled. "Nor did I. Especially on this side of this desk. Let's get to work." She held up a book. "Recognize this?"

"Eh?" He looked startled. "Yes, Ma'am, I do. I should."

"You should, yes." She opened to a marked page, read aloud: "'—I have learned this about engineers. When something *must* be done, engineers can find a way that is economically feasible.' Is that true?"

"*I* think so, Ma'am."

"You're an engineer."

"I am an *obsolete* engineer, Ma'am."

"I don't expect you to do the job yourself. You know what I did about fusion power plants."

"You sent for the one man with a perfect record. I've seen the power ship moored off Point Sur. Brilliant. Solved an engineering and a public relations problem simultaneously."

"Not quite what I mean. I consulted the Admiral, yes. But the job was done by his first deputy, the officer he has groomed to replace him. And by some other Navy people. Now we're working on ways to make the key fission-power people—safety control especially—all former Navy nuclear submariners. But we have to do it without stripping the Navy of their Blue and Gold crews. On things I know nothing about—most things, for this job! I consult someone who *does* —and that leads me to the person who can do it. Since I know very little about how to be President, I look for advice on almost everything."

"Ma'am, it seems to me—and a lot of other people—that you were born for the job."

"Hardly. Oh, politics isn't strange to me; my father held office when I was still a girl at home. But I did my first television commercial at fourteen and I was hooked. If I hadn't been 'resting' between contracts, I would not have had accepted the Governor's appointment—I was just his 'exhibit coon' but the Commission's work did interest me. Then I was still an 'exhibit coon' when he saw to it that I was on his favorite-son slate. Then, when the three leading candidates deadlocked, my late predecessor broke the deadlock in his favor by naming me as the other half of his ticket. I went along with it with a wry grin inside, figuring, first, that the ploy wouldn't work, and second, that, if he *did* get nominated, he would find some way to wiggle out—ask me to withdraw in favor of his leading rival or some such."

She shrugged. "But he didn't—or couldn't. I don't know which; he rarely talked to me. Real talk, I mean. Not just, 'Good morning,' and, 'Did you have a comfortable flight' and not wait for an answer.

"I didn't care. I relished every minute of the campaign. An actress sometimes plays a queen . . . but for four months I got to *be* one. Never dreaming that our ticket would win. I knew what a— No, *de mortuis nil nisi bonum,* and we must get back to work. What would you do about pollution of streams?"

"Eh? But that one has already been solved. By one of the Scandinavian countries, I believe. You simply require every user to place his intake immediately downstream from his discharge of effluent into the stream. In self-protection the user cleans up his discharge. It's self-enforcing. No need to test the water until someone downstream complains. Seldom. Because it has negative feedback. Ma'am, complying with a law should be more rewarding than breaking it—or you get positive feedback."

She made a note. "We could clean up the Mississippi that way. But I'm fretted about streams inside states, too. For example, the Missouri, where it is largest, is entirely inside the State of Missouri."

"Ma'am, I think you'll find that you have jurisdiction over *all* navigable streams."

"I do?"

"Ma'am, you have powers you may never have dreamed existed. A 'navigable stream' is one only three feet deep, I think. You may right now have the power to order this under law already on the books. If there is a paragraph or even a clause on placement of inlets and outlets, you almost certainly can issue an executive order right away. Today. The boss of the U.S. Engineers would know. General Somebody. A French name."

She touched a switch. "Get me the head of the U.S. Engineers. How would you dispose of nuclear power plant wastes? Rocket them onto the Moon as someone urged last week? Why wouldn't the Sun be better? We may want to go back to the Moon someday."

"Oh, my, no! Neither one, Ma'am."

"Why not? Some of those byproducts are poisonous for hundreds of years, so I've heard. No?"

"You heard correctly. But the really rough ones have short half-lives. The ones with long half-lives—hundreds, even thousands of years, or longer—are simple to handle. But don't throw away *any* of it, Ma'am. Not where you can't recover it easily."

"Why not? We're speaking of *wastes*. I assume that we have extracted anything we can use."

"Yes, Ma'am, anything *we* can use. But our great grandchildren are going to hate you. Do you know the only use the ancient Romans had for petroleum? Medicine, that's all. *I* don't know how those isotopic wastes will be used next century . . . any more than those old Romans could guess how *very* important oil would become. But I certainly wouldn't throw those so-called wastes into the Sun! Besides, rockets do fail . . . and who wants to scatter radioactives over a couple of states? And there's the matter of the fuel and steel and a dozen other expensive things for the rockets. You could easily wind up spending more money to get rid of the ashes than you ever got from selling the power."

"Then what *do* you do? They say we mustn't sink it into the ocean. Or put it on the Antarctic ice cap. Salt mines?"

"Madam President, honest so help me, this is one of those nonproblems that the antitechnology nuts delight in. Radioactive wastes aren't any harder to handle than garbage. Or hot ashes. Or anything else you don't want to pick up in your bare hands. The quantity isn't much, not at all like garbage, or coal ashes. There are at least a half dozen easy ways. One of the easiest is to mix them with sand and gravel and cement into concrete bricks, then stack them in any unused piece of desert.

"Or glass bricks. Or let the stuff dry and store it in steel barrels such as oil drums and use those old salt mines you mentioned—the bricks you could leave in the open. All by remote manipulation, of course; that's the way a radioactives engineer does everything. Waldoes. That's old stuff. No trouble."

"I thought you said you were obsolete."

He grinned sheepishly. "Ma'am, it's easy to talk. As long as I know that young fellows will have to do the tedious drudgery that goes into making anything new work. But the solutions I've offered *are* practical. No new discoveries needed."

"How about air pollution?"

"What sorts, Ma'am? The two main sources are internal combustion engines—trucks and autos—and industrial smokes. Quite different problems."

"Pick one."

"Transportation pollution is going to solve itself soon—either the hard way or the easy way. Oil, whether it's our own or from the OPEC, is too valuable to be burned in cars and trucks; it's the backbone of the chemical engineering industry—fertilizers, plastics, pesticides, lubricants, and so forth. So, quite aside from the energy problem, we need to stop burning it. We can either wait until it's forced on us catastrophically . . . or we can turn to other transportation power voluntarily, and thereby become self-sufficient in oil for peace or for war. Either way, transportation pollution is ended."

"But *what* other transportation power, Doctor?"

"Oh. Half a dozen ways, at least. Get rid of the I.C. engine completely, both Otto cycle and Diesel cycle, and go back to the external combustion engine and steam. The I.C. engine never did make sense; starting and stopping combustion every split second is a guarantee of incomplete combustion, wasted fuel, and smog. Air pollution. External combustion has no such builtin stupidity; no matter what fuel, it burns continuously and can be adjusted for complete combustion. The Stanley Steamer used kerosene. But that's petroleum again. I would use wood alcohol as a starter—it hurts me every time I pass a sawmill and see them burning chips and slash.

"But wood alcohol has its drawbacks. We may burn hydrogen someday. Or learn to store electricity in less weight and less space. Or store energy in a flywheel. But all of those, even hydrogen, are simply ways to store energy. It still leaves an energy problem."

"Hydrogen, too? But you said we would burn it. No?"

"We'll burn it for some purposes; in some ways it's the ideal fuel; its only ash is water vapor. But, Ma'am, we don't *have* hydrogen; we have *water*—and even with perfect efficiency—never achieved—the energy you get out of hydrogen by burning it cannot exceed the energy you must use in getting that hydrogen by electrolysis of water. So you must generate electricity first."

"I see. No free lunch."

"Never a free lunch. But the energy problem can be solved several ways . . . through renewable resources. We've been using nonrenewable resources—coal and oil and cutting trees faster than they grow."

"Renewable resources—windmills and water power and sun power?"

"Wind and water power are fine but limited. I mean effectively unlimited power. Such as this new wrinkle of thermoelectric power from the temperature difference of deep ocean and surface ocean. But there aren't too many really convenient places to do that. You named the one energy that is unlimited and convenient anywhere. Sun power."

"So? What desert is convenient to the Gary steel mills?"

"Not desert, Ma'am; the Sierra Club wouldn't like it."

"I plan to tell the Sierra Club that they are *not* the government of the United States. But in stronger language."

"I look forward to hearing you, Madam President. The Sierra Club loves deserts and hates people. But our deserts aren't sufficient. Sun power, yes—but *unlimited* sun power. In orbit."

South Africa Enraged

United States Surprise Return to Gold Standard at $350 per Troy Ounce of Fine Gold Has Bourses in Turmoil

"New Policy Obvious Concomitant of

Return to Balanced Budget," Says
Treasury Secretary Spokesman

"The Way to Resume is to Resume."

By Adam Smith
Finance Editor

WASHINGTON—The Treasury Secretary, after reading aloud to the Press the President's brief announcement of resumption of specie payments immediately at $350/oz., emphasized that this was not a tactical maneuver to "strengthen the dollar," not an auction of bullion such as those in the past, but a permanent policy consistent with the administration's total policy. "A return to our traditional policy, I must add. A century ago, for 15 years, war caused us to suspend specie payments—but never with any intent to accept the vice of fiat money. Since 1971, as sequelae to 3 wars, we have had a similar problem. By letting the dollar float until the world price of gold in terms of dollars settled down, we have determined what could be called the natural price. So we have resumed specie payment at a firm gold standard. God willing, we will never leave it."

This was in answer to the London *Times* correspondent's frosty inquiry as to whether or not the Secretary thought anyone would want our gold at that price. The Treasury Secretary told him that we were not "selling gold" but promising to redeem our paper money at a gold-standard price. The *Times'* question was inspired by the fact that at the close of market Friday the London fix was $423.195 per troy ounce, with the Zurich fix, the Winnipeg fix, and the Hong Kong fix (the last only hours before the Washington announcement) all within a dollar of the London fix.

PRAVDA: "—capitalistic trickery—"

Moscow has not had a free market in gold since pre-1914 but, as a gold-producing country, its response to our resumption policy has been even more acid than the shrill complaints from Johannesburg. The Zurich gold market did not open today. London opened on time but the price dropped at once, with the first purchase at $397.127, which slowed but did not stop the decline. Winnipeg opened an hour late; the reason became clear when the Prime Minister announced the tying of the Canadian dollar to the U.S. dollar at one-to-one—a *fait accompli* as the two currencies have hunted up and down, never more than 1% apart, for the past several months.

The timing of the announcement gave the world a weekend in which to think things over, the purpose being presumably to reduce oscillations. The New York Stock Market responded with an upward surge. The Dow-Jones Industrials closed at . . . .

"Mr. Chairman, are these unofficial figures I have in front of me—that each of you has in front of you—correct? Or have my informants been leading me down the garden path? The figures on the use of hard drugs, for example?"

"Madam President, I don't know quite how to answer that."

"You don't, eh? You're Chairman of the Joint Chiefs and for four years before that chief of staff of your service. If these figures are not right, how far are they off and which way?"

"Ma'am, that is a question that should be put to each of the Services, not to me."

"So? General, you are relieved of active duty. A request for retirement will be acted on favorably, later today. You are excused. General Smith, take the chair."

The President waited until the door closed behind the ex-Chairman. Then she said soberly, "Gentlemen, it gives me no pleasure to put an end to the career of a man with a long and brilliant record. But I cannot keep in a top spot in my official family a military officer who can't or won't answer questions that, in my opinion, must be answered if I am to carry out my duties as Commander in Chief. If he had answered, 'I don't know now but I'll start digging at once and won't stop until'—but he said nothing of the sort. I gave him two chances; he brushed me off." She sighed. "I suppose he dislikes taking orders from one with no military experience; I do not assume that my sex and skin color had anything to do with it. General Smith, you are in the chair by default; I can't ask you about the other Services. How about your own? Hard drugs."

"I suspect that this figure is conservative, Ma'am. I've been trying to get hard data on hard drugs since I was appointed to this job a year ago. In most cases we need evidence from medical officers to make it stick . . . and all our doctors are overworked; we don't have nearly enough of them. Worse yet, some of the doctors are pushers themselves; two were caught."

"What happened to them? Making little ones out of big ones?"

"No, Ma'am. Discharged. In civilian practice, I suppose."

"For God's sake, *why?* Has the Army forgotten how to hold a court martial? Two drug pushers, simply sent home and still licensed to practice medicine—and to prescribe drugs. General, I'm shocked."

"Ma'am, may I say something in my own defense? Then you can have my request for retirement, if you wish it."

"Please. Go ahead."

"These cases occurred before I became Chief of Staff. At the time these two were caught, I was Superintendent of the War College; drugs are not a problem there. When last I had troop duty, I *did* have a policy of treating use of hard drugs as a criminal offense, as permitted and required by regulations. But the very most I ever managed was to get some sent to the V.A. for hospital cure and rehabilitation. Under the present rules, if a man has a good lawyer—and they do, usually—he can get away from courts martial and appeal to a civilian judge. That usually ends it."

"Madam President, may I add something?"

"Certainly, Admiral."

"Have you heard of the mutiny in the *Somers* about a century and a half back?"

"I— Yes, I think I have! A novel. Voyage to the—Voyage to the First of December. Right?"

"There was a novel some years back; I think that was the book's title. I haven't read it. Then you are aware that it was a tragic scandal, with mutineers hanged at the yardarms. What I wanted to say was this: I think the figures on drugs in the Navy are about right—lower than in the Army, of course; the circumstances are different. But what is killing the Navy—aside from a shortage of career officer material—is that both mutiny and sabotage are out of hand . . . because offenses that used to rate hanging from the yard arm are now treated as 'Boys will be boys.' A great deal of it does derive from a change in the legal structure, as the General said. I would rather have five ships properly maintained, properly manned, shipshape and Bristol style, than ten ships undermanned and shot through with men who should never have been accepted in the first place. A stupid and sullen seaman is worse than no one at all."

The President said, "Judges, chapter seven."

The Admiral looked puzzled. The Marine Commandant suddenly said, "Gideon's Band!"

"Exactly. I suspect that we have been trying to meet quotas—numbers of men—rather than placing quality first. I'm sure it's not as simple as that, but that does seem to be part of it. General, does the Air Force have any different slant on this?"

"No, Ma'am, I think the Navy and the Corps both speak for me. And the Army . . . although Smitty's problems are different from ours. Our worst problem is hanging on to trained men . . . because what we teach them, flying and electronics especially, are very salable on the outside. I want to add something, though. Marijuana is not on the list of drugs. It may very well be true that grass is no worse than liquor. But neither one mixes with driving a flying machine. Or anything in an airplane. But grass is harder to cope with. A stash is easier to hide than a bottle, and it is harder to tell when a man is stoned than when he is drunk. And much harder to prove. I welcome suggestions."

"I think we all do. Although I think we've pinpointed one essential. Quality before quantity. Gentlemen, we'll let this marinate about ten days while all of us try to spot all of the basic things that are wrong . . . then meet again and exchange ideas. In writing. Call the shots as you see them, don't be afraid of hurting feelings, pay no attention to sacred cows. Admiral, you found things wrong with the military legal system; please analyse the matter, with specific recommendations. If you truly feel that we need to go back to keelhauling and hanging at the yardarm, say so."

"I do not, Ma'am. But I do think the present rules are more suited to a Scout camp than to a fighting force. Punishment should be swift and certain; mutineers should not be coddled. We need a new code."

"Work on it. I assume that you have legal aides. Mr. Secretary of Defense, I have not intended to monopolize the floor. Before we adjourn, I want you to give us your opinions on problems of discipline. I would like to hear comment on those figures I supplied, all categories. But you aren't limited to that. Feel free to bring up anything. I think that discipline in the Armed Forces is as serious a problem as I face . . . and the most difficult."

"Discipline is not one of the duties of the Secretary of Defense."

"So? What are your duties?"

"To manage my department. Discipline belongs to these gentlemen. Not to me. And certainly not to *you.* You are way out of line."

"You forgot something, sir. The President is in the direct line of command, at the top, and cannot avoid responsibility for any aspect of her command. The Secretary of Defense is *not* in the line of command; he is an executive secretary for the President. However, since you see your job as merely managerial, and not concerned with morale and discipline, I won't press you about it. I have your signed resignation in my desk, inherited from my predecessor. I'm accepting it. At once."

The ex-Secretary leaned back and laughed. "How just like a woman! Ruffle her feathers and she flies off the handle. But it's okay, Shortie; I didn't intend to stay this long. After the Chief died I was ready to quit. But Charlie asked me to stick around a little longer, keep an eye on you. I know what you did to him the day of the tragedy, standing in his way when he was entitled to the job. You never were anything but an election poster. Didn't anybody ever tell you that?"

"You may leave now. You're excused."

"Oh, I'm leaving; I've got a press conference in ten minutes. Just one thing: You said Joe probably disliked taking orders from you because you've had no military experience. Nonsense. Any top brass expects to take orders from a civilian. But no real man will take orders from a nigger, much less a nigger wench."

The Marine was out of his chair so fast that it overturned, snatched the ex-Secretary out of his chair and got a hammerlock on him—but beat the others to it only by being closest.

"Down on your knees and apologize, you jerk! That's the *President of the United States* you're talking to!" The Marine General's Deep South accent, ordinarily carefully corrected, came out in full force, thick as gumbo.

"Make him take his hands off me!"

"Keep him secure, General. And thank you, sir. But don't rough him up more than necessary. Admiral, if you will be so kind as to check, I think you will find two Marines and two Secret Service men just outside that door. Please ask one of them to telephone for two White House Police. I want this person removed from the building and not allowed back in. Nor back into the Pentagon, ever. Most especially not into his former office."

"A pleasure, Ma'am!"

"Thank you, sir. I hope to see you all here at the same time a week from Thursday. General Smith, I ask you to remain chairman pro tem, in addition to your regular duties. Adjourn when it suits you. I'm withdrawing now; I want to lie down. I find that I am a bit shaky. . . ."

CND 406CRH

CHEYENNE—LEGISLATURE BOTH HOUSES PASSED OVERWHELMINGLY FIRST AND SECOND READING EMERGENCY MEASURE RESTORING PAUPERS OATH FOR RECIPIENTS OF ANY PUBLIC ASSISTANCE OF ANY SORT REPEAT ANY SORT IN RESPONSE TO GOVERNOR'S IMPASSIONED CLAIM THAT THERE WOULD BE NO MONEY FOR THE BLIND AND THE TOTALLY HELPLESS UNLESS STATE RETURNED TO NINETEENTH CENTURY TEST OF ELIGIBILITY MORE MORE

CND 409CRH

CHEYENNE—AMERICAN CIVIL LIBERTIES UNION WILL FILE CLASS ACTION IN FEDERAL COURT TO STOP RESTORATION OF PAUPERS OATH AS PREREQUISITE FOR PUBLIC ASSISTANCE.

"Come in, Senator! Thank you for doing me this favor!"

"Madam President, it would be a pleasure to call on you at any time even if you were not President. Perhaps more."

"Uncle Sam, I don't know what that means but I like it. Now to work! Would it suit you to work for me?"

"You know it would, my dear—but I have a constituency."

"I don't mean resign and take a job here. But can't you pair votes, or something? I need a lot of help from you right now and more later."

"Anything the President wants, the President gets. Yes, I can always arrange a pair . . . even when I'm only nominally out of the District." He looked down at her. "Trouble?"

"Work I don't know how to handle. I've got to appoint twentythree judges and I can't put it off much longer. And I don't know how to tell a knucklehead from an Oliver Wendell Holmes. See that tall stack? And that one? Those are the written opinions—or other legal writings if they are not already judges—from the candidates for judgeships. No names on them, and other identifications blacked out. Just identification numbers. I thought I could read this mess and tell which ones had their heads screwed on tight. I can't. I don't understand legalese, I'm not a lawyer."

"I'm not a lawyer either, bright eyes."

"No, but you're the world's leading semanticist. I figured that, if you couldn't understand something, then it was really nonsense."

"It's a good approach. If a person of normal intelligence, and a reasonably full education, cannot understand a piece of prose, then it *is* gibberish. But you shouldn't be doing it; you have a country to worry about. I don't have time, either, but I'll take time; my staff are quite competent to wipe the noses and hold the hands of my constituents for a while. I'll arrange it."

"Then you'll do it! Uncle Sam, you're a dear!"

"But I want a bribe."

"You do? I thought *I* was supposed to be offered bribes, not have to pay them."

"I'm eccentric. I take bribes only from pretty little girls I've known a long time."

"You're eccentric, all right. What is that thing you wear on your head? A cow pat?"

"My dear, you're colorblind. Madam President, I have a proposed amendment to the Constitution I want you to sponsor . . . and by great good luck I just happen to have a copy of it on me."

"I'll bet you sleep with a copy of it on you. No, just put it on the desk. Now tell me what it is supposed to accomplish."

"It permits a citizen to challenge the Constitutionality of any law or regulation, Federal or any lesser authority, on the grounds that it is ambivalent, equivocal, or cannot be understood by a person of average intelligence. Paragraph two defines 'average intelligence.' Paragraph three defines and limits the tests that may be used to test the challenged law. The fourth paragraph excludes law students, law school graduates, lawyers, judges, and uncertified j.p.'s from being test subjects. I call it 'the Semantic Amendment.'"

"No, you don't; you call it 'the Plain English Amendment.' Show biz, Uncle Sam. Senator, under this amendment could a person challenge the income tax law on the grounds that he has to hire an expert to make out his form 1040?"

"He certainly could. And he would win, too, as no three I.R.S. men can get the same answers out of identical data if the picture is at all complex."

"Hmm— What if he's bright enough but can't read?"

"Paragraph three."

"How about the Federal Budget? It isn't law in the usual meaning but Congress votes on it and it has the force of law, where it applies."

"First paragraph. It quacks like a duck, waddles like a duck—it's a duck."

"I'll try to study this before I fall asleep tonight. Senator, this one we're going to put over!"

"Don't be too certain, Madam President. Lawyers are going to hate this . . . and the Congress and all the state legislatures have a majority of lawyers."

"And every one of them not anxious to lose his job. That's their weakness . . . because it's awfully easy to work up hate against lawyers. Senator, this bill will be introduced by lawyers. Both Houses. Both parties. Not by you, you're not a lawyer. Uncle Sam, I'm an amateur president but I'm a pro in show biz. It'll play in Paducah."

The two Presidents were seated alone at the front of the crowded grandstand. Two kilometers in front of them a spaceship, small compared with the Shuttle assemblage, but close to the size of the Shuttle alone, stood upright in the bright Mexican mountain sunshine. A voice from everywhere was counting:

"—sixty-one seconds. . . . .one minute. . . . fifty-nine . . . fifty-eight —"

She said, "How are you coming with Spanglish, Señor el Presidente?"

He shrugged and smiled, "As before, Dona la Presidenta. I know it is simple; I hear your people and ours talking in it . . . and I understand them. But I don't have time to study. When I leave office —" He spread his hands.

"I know. Perhaps two years from now—I can't believe I've been in office only six years. It feels like sixty."

"You've accomplished sixty years of statecraft; the whole world is awestruck."

"—forty-one . . . forty . . . thirty-nine—"

"There never was anything really seriously wrong with my country, Mr. President. We made some silly mistakes, then compounded them by being stubborn. The Fence, for example. What's the point in a Fence that doesn't work? So I had it torn down."

"Madam, your most creative act of statesmanship! Without that act of faith, you and I could never have put over our Treaty of Mutual Assistance. And the dozen major advances we have started under it. This. You and I would not be sitting here."

"Yes. No more wetbacks and *this.* Mr. President, I *still* don't understand how a beam of light can put a spaceship into orbit."

"Neither do I, Madam President, neither do I. But I believe your engineers."

"So do I but it frightens me."

"—fifteen . . . The Binational Solar Power Zone is now on standby power . . . nine . . . eight—"

"*Oh!* Will you hold my hand? *Please!*"

"—four! . . . three! . . . two! . . . one! . . . *LIGHT!*"

A single inhalation by thousands, then came the everywhere voice in soft, reverent tones: "Look at that bastard *go!*"

"—direct from O'Neill Village, EllFive. It's a beautiful day here, it's *always* a beautiful day here. But today is our happiest fiesta ever; little Ariel Henson Jones, first baby born in space, is one year old today. All four of her grandparents are here, her father's parents having traveled all the way from Over-the-Rainbow, Ell-Four, via Luna City Complex, just to be here on this great day. Don't repeat this but a little bird, a parrot, told me that one of Ariel's grandmothers is pregnant again. I won't say which one but it's *personal* good news for *all* of us here in the sky because, if true and I can assure you it is, it is one more and very important datum in the rapidly growing list to show that youthfulness in all ways is markedly extended simply by living in free-fall. Correction: the mild acceleration we experience at the skin of our Village . . . but which we can leave behind completely at any time for free-fall sports at the axis.

"*And you* can enjoy them, too. This newscast comes to you sponsored by O'Neill Village Chamber of Commerce. Visitors welcome. You haven't *lived* until you ride the Light Beam, the cheapest way to travel per thousand kilometers ever invented by a factor of at least one hundred . . . and not uncomfortable even the first few seconds since the installation of the new total-support hydraulic couches. Also you haven't lived until you've seen our free-fall ballet! You think Las Vegas has shows? Wait till you see a Coriolis torch dance. Or what free-fall does for a hundred-centimeter bust. Oh, boy! Or if you like to gamble we'll take your money with brand-new games as happily as Monte Carlo or Atlantic City. See your travel agent for a variety of package vacations.

"Or more than a vacation. Buying a share in the Village is cheaper than buying a house in most cities down heavyside. But if you are young and healthy and possess certain needed skills your migration into the sky can be subsidized. Phone the placement office here for details, same rates as from San Francisco to New York. Wups! Almost forgot to tell you: knowledge of industrial Spanglish required, plus some Brownie points for any other language you know. . . ."

It *could* be that way, over the Rainbow. As Madam President said, there never has been anything incurably wrong with our country and our world—just a horrid accumulation of silly mistakes that could be corrected with horse sense and the will to do it.

We have a lot of healthy, intelligent people with a wide spread of useful skills, trades, and professions. We have a wonderful big country not yet too crowded and still wealthy in real wealth—oh, bankrupt on paper but that can always be corrected with real wealth, will, and work. Actually it's easier to be happy and get rich than it is to go down the chute. This country has so much going for it that it takes a lot of work combined with wrongheaded stubbornness to ruin this country. It's not easy.

In the meantime don't go away. There are still a lot of sacred cows I haven't kicked but plan to . . . someday. So, unless I'm hit by a taxicab while swiveling on my cane to ogle pretty girls, I'll be back.

THE END

PIE FROM THE SKY

Since we have every reason to expect a sudden rain of death from the sky sometime in the next few years, as a result of a happy combination of the science of atomics and the art of rocketry, it behooves the Pollyanna Philosopher to add up the advantages to be derived from the blasting of your apartment, row house, or suburban cottage.

It ain't all bad, chum. While you are squatting in front of your cave, trying to roast a rabbit with one hand while scratching your lice-infested hide with the other, there will be many cheerful things to think about, the assets of destruction, rather than torturing your mind with thoughts of the good old, easy days of taxis and tabloids and Charlie's Bar & Grill.

There are so many, many things in this so-termed civilization of ours which would be mightily improved by a once over lightly of the Hiroshima treatment. There is that dame upstairs, for instance, the one with the square bowling ball. Never again would she take it out for practice right over your bed at three in the morning. Isn't that some consolation?

No more soap operas. No more six minutes of good old Mom facing things bravely, interspersed with eight minutes of insistent, syrupy plugging for commercial junk you don't want and would be better off without. Never again will you have to wait breathlessly for "same time, same station" to find out what beautiful Mamie Jukes, that priceless moron, does about her nameless babe. She will be gone, along with the literary prostitute who brought her into being.

No more alarm clocks. *No more alarm clocks!* No more of the frenzied keeping of schedules, appointments, and deadlines that they imply. You won't have to gulp your coffee to run for the 8:19 commuters' special, nor keep your eye on the clock while you lunch. A few of the handy little plutonium pills dropped from the sky will end the senseless process of running for the bus to go to work to make the money to buy the food to get the strength to run for the bus. You will swap the pressure of minutes for the slow tide of eternity.

But best of all, you will be freed of the plague of the alarm that yanks you from the precious nirvana of sleep and sets you on your weary feet, with every nerve screaming protest. If you are snapped suddenly out of sleep in the Atomic Stone Age, it will be a mountain lion, a wolf, a man, or some other carnivore, not a mechanical monstrosity.

Westbrook Pegler will no longer exhibit to you his latest hate, nor will Lolly Parsons stuff you with her current girlish enthusiasm. (If your pet dislikes among the columnists are not these two, fill in names to suit yourself; none of them will bother you after the fission treatment.)

In fact, all the impact of worldwide troubles will fade away. Divorces, murders, and troubles in China will no longer smite from headline and radio. Your only worries will be your own worries.

No more John L. Lewis.

No more jurisdictional strikes.

No more "Hate-Roosevelt" clubs.

No more "Let's-Hate-Eleanor,-Too" clubs.

No more Petrillo.

No more damn fools who honk right behind your car while the lights are changing. I'll buy this one at a black market price right now.

No more Gerald L. K. Smith. . . . and, conversely, no more people who think that the persecution of their particular minority is the only evil in the entire world worth talking about, or working to correct.

No more phony "days." You won't have to buy a red carnation to show that Mom is alive nor a white one to show that she's not. (It's even money that you will have lost track of her in the debacle and not know whether she is alive or dead.) No more "Boy's Day" in our city governments with pre-adolescent little stinkers handing out fines and puritanical speeches to tired street walkers while the elected judge smiles blandly for the photographers. No more "Eat More Citrus Fruit" or "Eat More Chocolate Candy" or "Read More Comic Books" weeks thought up by the advertising agents of industries.

While we are on the subject of phony buildups, let's give a cheer for the elimination of debutantes with press agents, for the blotting out of "cafe" society, for the consignment to oblivion of the whole notion of the "coming-out" party. The resumption of the coming-out party in the United States, with its attendant, incredibly callous, waste, at the very time that Europe starves, is a scandal to the jay birds. A few atom bombs would be no more than healthy fumigation of this imbecilic evil.

No more toothsome mammals built up by synthetic publicity into movie "stars" before they have played a part in a picture. This is probably a relatively harmless piece of idiocy in our whipped-cream culture, but the end of it, via A-bombs, may stop Sarah Bernhardt from spinning in her grave.

No more overfed, under-worked, rapacious female tyrants. I won't say "mothers-in-law"; your motherin-law may be a pretty good Joe. If not, you may have a chance to cut her up for steak.

There is actually nothing to prevent American women from being able, adult, useful citizens, and many of them are. But our society is so rigged that a worthless female can make a racket of it—but not after a brisk one-two with uranium! The parasites will starve when that day comes, from the cheerful idiots of the Helen Hokinson cartoons to the female dinosaurs who use sacrosanct sex as a club to bullyrag, blackmail, and dominate every man they can reach.

The parasite males will die out, too. Yes, pal, if you can manage to zig while the atomic rockets zag you will find society much changed and in many respects improved.

There are a lot of other minor advantages you should get firmly in mind now, lest you fall prey to a fatal nostalgia after this great, fantastic, incredible, somewhat glorious and very fragile technological culture crashes about your ears. Subway smell, for example. The guy who coughs on the back of your neck in the theater. Men who bawl out waitresses. The woman who crowds in ahead of you at the counter. The person who asks how much you paid for it. The preacher with the unctuous voice and the cash register heart. The millionairess who wills her money to found a home for orphan guppies. The lunkhead who dials a wrong number (your number) in the middle of the night and then is sore at you for not being the party he wanted. The sportsman who turns his radio up loud so that he can boo the Dodgers while out in his garden. The Dodgers. People who don't curb their dogs. People who spit on sidewalks. People who censor plays and suppress books. Breach-of-promise suits. People who stare at wounded veterans.

A blinding flash, a pillar of radioactive dust, and all this will be gone.

I don't mean to suggest that it will all be fun. Keeping alive after our cities have been smashed and our government disintegrated will be a grim business at best, as the survivors in central Europe could tell you. In spite of the endless list that could be made of the things we are better off without I do not think it will be very much fun to scrabble around in the woods for a bite to eat. For that reason I am thinking of liquidating, in advance, the next character who says to me, "Well, what difference does it make if we are atom-bombed—you gotta die sometime!"

I shall shoot him dead, blow through the barrel, and say, "You asked for it, chum."

Conceding that we will all die some day, is that a reason why I should let this grinning ape drag me along toward disaster just because he will take no thought of tomorrow?

Since there are so many of him the chances of us, as a nation, being able to avert disaster are not good. Perhaps some of us could form an association to live through World War III. Call it the *League for the Preservation of the Human Race,* or the *Doom's Day Men,* or something like that. Restrict the membership to survivor types, sound in tooth and wind, trained in useful trades or science, reasonably high I.Q.'s and proved fertility. Then set up two or three colonies remote from cities and other military targets.

It might work.

Maybe I will start it myself if I can find an angel to put up the dough for the original promotion. That should get me in as an *ex-officio* member, I hope. I have looked over my own qualifications and I don't seem to measure up to the standards.

My ancestors got into America by a similar dodge. They got here early, when the immigration restrictions were pretty lax. Maybe I can repeat.

I am sure I shall not resign myself to death simply because Joe Chucklehead points out that atomization is quick and easy. Even if that were good I would not like it. Furthermore, it is not true. Death comes fast at the center of the blast; around the edges is a big area of the fatal burn and the slow death, with plenty of time to reconsider the disadvantages of chuckleheadness in the Atomic Age, before your flesh sloughs off and you give up the ghost. No, thank you, I plan to disperse myself to the country.

Of course, if you are so soft that you *like* innerspring mattresses and clean water and regular meals, despite the numerous advantages of blowing us off the map, but are not too soft to try to do something to avoid the coming debacle, there is something you can do about it, other than forming Survival Leagues or cultivating an attitude of philosophical resignation.

If you really want to hang on to the advantages of our slightly wacky pseudo-civilization, there is just one way to do it, according to the scientists who know the most about the new techniques of war—and that is to form a sovereign world authority to prevent the Atomic War.

Run, do not walk, to the nearest Western Union, and telegraph your congressman to get off the dime and get on with the difficult business of forming an honest-to-goodness world union, with no jokers about Big Five vetoes or national armaments . . . to get on with it promptly, while there is still time, before Washington, D.C., is reduced to radioactive dust—and he with it, poor devil!

THE LAST DAYS OF THE UNITED STATES

"Here lie the bare bones of the United States of America, conceived in freedom, died in bondage. 1776–1986. Death came mercifully, in one stroke, during senility.

"Rest in Peace!"

No expostulations, please. Let us not kid ourselves. The next war can destroy us, utterly, as a nation—and World War III is staring us right in the face. So far, we have done little to avert it and less to prepare for it. Once upon a time the United Nations Organization stood a fair chance of preventing World War III. Now, only a major operation can equip the UNO to cope with the horrid facts of atomics and rocketry—a major operation which would take away the veto power of the Big Five and invest the world organization with the sole and sovereign power to possess atomic weapons.

Are we, as a people, prepared to make the necessary sacrifices to achieve a world authority?

Take a look around you. Many of your friends and neighbors believe that the mere possession of the atomic bomb has rendered us immune to attack. So—the country settles back with a sigh of relief, content to leave foreign affairs to William Randolph Hearst, the Denver Post, and the Chicago Tribune. We turn our backs on world responsibility and are now hell-bent on new washing machines and new cars.

From such an attitude, with dreadful certainty, comes World War III, the Twenty Minute War, the Atomic War, the War of Final Destruction. The "secret" of the atomic bomb cannot be kept, the experts have told us repeatedly, for the "secret" is simply engineering know-how which can be developed by any industrial nation.

From this fact it can be predicted that any industrial nation, even though small and comparatively weak, will in a few years be able to create the means to destroy the United States at will in one all-out surprise attack. What constitutes a strong power in the Atomic Era? Scientific knowledge, engineering skill, and access to the ores of uranium—no more is needed. Under such circumstances the pretensions of the Big Five to veto powers over the affairs of this planet are preposterous. At the moment there is only the Big One, the United States, through its temporary exclusive possession of the Bomb. Tomorrow—five to ten years—the list might include any of the many nations with the two requirements.

Belgium and Canada have the greatest known deposits of uranium. Both are small but both possess science and skill in abundance. Potentially they are more powerful than any of the so-called Big Five, more powerful than the United States or Russia. Will they stand outside indefinitely, hat in hand, while the "Big Five" determine the fate of the human race? The developments of atomic weapons and of rocketry are analogous to the development of the revolver in individual affairs—it has made the little ones and the big ones all the same size. Some fine day some little nation may decide she is tired of having us around, give us one twenty-minute treatment with atomic rocket bombs, and accept our capitulation.

We have reason to fear such an attack. We have been through one Pearl Harbor; we *know* that it can happen to us. Our present conduct breeds fear and distrust in the hearts of men all over the globe. No matter how we think of ourselves, no matter how peaceful and good hearted we think ourselves to be, two facts insure that we will be hated by many. We have the Bomb—it is like a loaded revolver pointed at the heads of all men. Oh, we won't pull the trigger! Nevertheless, do you suppose they love us for it?

Our other unforgivable sin is being rich while they are poor. Never mind our rationalizations—they see our wasteful luxury while much of the globe starves. Hungry men do not reason calmly. We are getting ourselves caught in a situation which should lead us to expect attack from any quarter, from whoever first produces atomic weapons and long-distance rockets.

Knowing these things, the professional gentlemen who are charged with the defense of this country, the generals and the admirals and the members of the military and naval affairs committees of both houses, are cudgelling their brains in a frenzied but honest attempt to persuade the rest of the country to follow this course or that, which, in their several opinions, will safeguard the country in any coming debacle.

But there is a tragic sameness to their proposals. With few exceptions, they favor preparedness for the *last* war. Thusly:

Conscription in peacetime to build up a reserve;
Emphasis on aircraft carriers rather than battleships;
Decentralization of cities;
An armaments race to keep our head start in atomic weapons;
Agreements to "outlaw" atomic weapons;
Consolidation of the Army and the Navy;
Buying enough war planes each year to insure new development;
An active military and foreign affairs intelligence corps;
Moving the aircraft industry inland;
Placing essential war industry underground.

These are the *progressive* proposals. (Some still favor infantry and battleships!) In contrast, General Arnold says to expect war in which *space ships* cruise outside the atmosphere and launch superhigh-speed, atomic-armed rockets on cities below. Hap Arnold tells his boys to keep their eyes on Buck Rogers. Somebody is wrong—is it Hap Arnold or his more conservative colleagues?

Compulsory military training—France had that, for both wars. The end was Vichy.

Aircraft carriers vs. battleships. Look, pals, the aircraft carrier was the weapon of *this* war, before Hiroshima. Carriers don't look so good against space ships. Let's build galleons instead; they are cheaper, prettier, and just as useful.

Decentralization of large cities—let's table this one for a moment. There is some sense to it, if carried to its logical conclusion. But not with half measures and not for $250,000,000,000, the sum mentioned by Sumner Spaulding, its prime proponent.

Bigger and better atomic weapons for the United States—this has a reasonable and reassuring sound. We've got the plant and the trained men; let's stay ahead in the race. Dr. Robert Wilson says that atomic bombs a hundred or a thousand times as powerful as the Hiroshima bomb are now in prospect. Teddy Roosevelt advised us to "Speak softly but carry a big stick."

It is a tempting doctrine, but the greathearted Teddy died long before Hiroshima; his day was the day of the charge up San Juan Hill. A hundred obsolete atomic bombs could destroy the United States—if the enemy struck first. Our super bombs would not save us, unless we were willing to strike first, without declaring war. If two men are locked in a basement, one armed with a 50-calibre machine gun, the other with an 18th century ball-and-powder pistol, victory goes to the man who shoots first, not to the one with the better weapon. That is the logic of atomics and now is the time to learn it by heart.

Agreements to "outlaw" atomic weapons? Swell! Remember the Kellogg Pact? It "outlawed" war.

Consolidation of the armed forces: A proposition sensible in itself, but disastrously futile unless we realize that *all* previous military art is obsolete in the atomic age. The best pre-Hiroshima weapons are now no more than the sidearms of the occupying military police. Buck Rogers must be the new chief of staff. Otherwise we will find ourselves with the most expensive luxury in the world—a second-best military establishment.

Purchase of military aircraft in quantities to insure new development—we bought sailing ships-of-the-line in the 1880's. This makes the same sort of pseudo-sense. Airplanes are already obsolete—slow, clumsy, and useless. The V-2 is credited with a speed of 3600 miles per hour. Here is a simple problem in proportion: The Wright Brothers crate at Kitty Hawk bears the same relation to the B-29 that the V-2 bears to the rocket ship of the coming war. Complete the equation by visualizing the coming rocket ship. Then stop wasting taxes on airplanes.

An efficient intelligence system—Fine! But no answer in itself. The British intelligence was quite efficient before this war. Mr. Chamberlain's desk was piled high with intelligence reports, reports which showed that Munich need never have happened. This has since been confirmed by high German General Staff officers. But Mr. Chamberlain did not read the reports. *Intelligence reports are useful only to the intelligent.*

Moving the aircraft industry inland—excellent preparation for World War II. Move an industry which we don't need for World War III inland where it will be safe from the weapons of World War II. While we are about it let's put stockades around them to keep the Indians out. In the meantime our potential enemies will have plenty of time to perfect long-range rockets.

Placing key war industry underground—assembly lines underground are all very well, but blast furnaces and many other things simply won't fit. Whatever digging in we do, be sure we do it so secretly that the enemy will never suspect, lest he drop an earthquake-type atomic bomb somewhere nearby and bury all hands. Let us be certain, too, that he does not introduce a small atomic bomb inside the underground works, disguised as a candy vending machine, a lunch pail, or a fire extinguisher. The age of atomics is a field day for saboteurs; underground works could be colossal death traps.

No one wants this new war, no sane men anywhere. Yet we are preparing for it and a majority, by recent Gallup polls, believe it will come. We have seen the diplomats and prime ministers and presidents and foreign affairs committees and state departments manage to get things messed up in the past; from where we sit it looks as if they were hell-bent on messing them up again. We hear the rumble of the not-so-distant drum.

What we want, we little men everywhere, is planetary organization so strong that it can enforce peace, forbid national armaments, atomic or otherwise, and in general police the globe so that a decent man can raise his kids and his dog and smoke his pipe free from worry of sudden death. But we see the same old messing around with half measures.

(If you want to help to try to stop the messing-up process, you might write Congressman Jerry Voorhis, or Senator Fulbright, or Senator Ball, or Beardsley Ruml, or Harold Stassen. Or even the President himself.)

If things go from bad to worse and we have to fight a war, can we prepare to win it? First let us try to grasp what kind of a war it will be. Look at LIFE, Nov. 19, 1945, page 27: *THE 36-HOUR WAR: Arnold Report Hints at the Catastrophe of the Next Great Conflict.* The first picture shows Washington, D.C., being destroyed by an atomic rocket bomb. The text and pictures go on to show 13 U.S. cities being destroyed the same way, enemy airborne troops attempting to occupy, the U.S. striking back with its own rockets from underground emplacements, and eventually winning—at a cost of 13 cities and at least 10,000,000 American lives.

Horrible as the picture is, it is much too optimistic. There is no reason at all to assume that the enemy will attack in too little force, destroying only 13 cities, or to assume that he will attempt to occupy until we have surrendered, or to assume that we will be able to strike back after we are attacked.

It is not safe to assume that the enemy will be either fainthearted or foolish. If he follows our example with Japan, he will smash us until we surrender, then land. If his saboteurs are worth their blood money, our own rocket emplacements may be blown up by concealed atomic bombs just in advance of the attack.

Atomic rocket warfare has still another drawback—it is curiously anonymous. We might think we knew who had attacked us but be entirely mistaken.

You can think of at least three nations which dislike both us and Russia. What better joke for them than to select a time when suspicion has been whipped up between the two giants to lob just a few atomic rockets from a ship in the North Atlantic, or from a secret emplacement in the frozen north of Greenland—half at us, half at Russia, and with the attack in each case apparently coming from the other, and then sit back while we destroyed each other!

A fine joke! You would die laughing.

Don't think it can't be done, to us and to Russia.

What *can* we do?

The first thing is to get Congress to take a realistic view of the situation. The most certain thing about LIFE's description of the coming war was the destruction of Washington. Washington is the prime military target on earth today for it is the center of the nervous system of the nation that now has the Bomb. It must be destroyed first and it will be destroyed, if war ever comes. Your congressman has the most dangerous job in the world today. You may live through World War III—*he* can't. Make yours realize this; he may straighten up and fly right.

What we want him to work for is world order and world peace. But we may not get it. The other nations may be fed up with our shilly-shallying and may not go along with us, particularly any who believe they are close to solving the problems of atomic weapons. We may have to go it alone. In such cases, is there anything we can do to preserve ourselves?

Yes, probably—but the price is high.

We can try for another Buck Rogers weapon with which to ward off atomic bomb rockets. It would need to be better than anything we have now or can foresee. To be 100% effective (with atom bombs, anything less is hardly good enough!) it should be something which acts with much greater speed than guns or antiaircraft rockets. There is a bare possibility that science could cook up some sort of a devastatingly powerful beam of energy, acting with the speed of light, which would be a real antiaircraft weapon, even against rockets. But the scientists don't promise it.

We would need the best antiaircraft devices possible, in the meantime. A robot hook-up of target-seeking rockets, radar, and computing machines might give considerable protection, if extensive enough, but there is a lot of research and test and production ahead before any such plan is workable. Furthermore, it could not be air tight and it would be very expensive—and very annoying, for it would end civilian aviation. If we hooked the thing up to ignore civilian planes, we would leave ourselves wide open to a Trojan Horse tactic in which the enemy would use ordinary planes to deliver his atomic bombs.

Such a defense, although much more expensive and much more trouble than all our pre-War military establishment, would be needed. If we are not willing to foot the bill, we can at least save money by not buying flame throwers, tanks, or battleships.

We can prepare to attack. We can be so bristlingly savage that other nations may fear to attack us. If we are not to have a superstate and a world police, then the United States needs the fastest and the most long-range rockets, the most powerful atomic blasts, and every other dirty trick conceived in comic strip or fantastic fiction. We must have space ships and we must have them first. We must land on the Moon and take possession of it in order to forbid its use to other nations as a base against us and in order to have it as a base against any enemy of ours. We must set up, duplicate, and reduplicate rocket installations intended to destroy almost automatically any spot on earth; we must let the world know that we have them and that we are prepared to use them at the drop of a diplomat's silk hat. We must be prepared to tell uncooperative nations that there are men sitting in front of switches, day and night, and that an attack on Washington would cause those switches to be thrown.

And we must guard the secrets of the locations and natures of our weapons in a fashion quite impossible for a normal democracy in peace time. More of that later.

Decentralization we would have to have. Not the picayune $250,000,000,000 job which has been proposed—

("Wait a minute! Why should we disperse our cities if we are going to have that Buck Rogers super-dooper death ray screen?")

We haven't *got* such a screen. Nor is it certain that we will ever have such a screen, no matter how much money we spend. Such a screen is simply the one remote possibility which modern physics admits. It may turn out to be impossible to develop it; we simply don't know.

We must disperse thoroughly, so thoroughly that no single concentration of population in the United States is an inviting target. Mr. Sumner Spaulding's timid proposal of a quarter of a trillion dollars was based on the pleasant assumption that Los Angeles was an example of a properly dispersed city for the Atomic Age. This is an incredible piece of optimism which is apparently based on the belief that Hiroshima is the pattern for all future atomic attacks. Hiroshima was destroyed with *one* bomb. Will the enemy grace the city of the Angels with only *one* bomb? Why not a dozen?

The Hiroshima bomb was the gentlest, least destructive atomic bomb ever likely to be loosed. Will the enemy favor us with a love tap such as that?

Within twenty miles of the city hall of Los Angeles lives half the population of the enormous state of California. An atomic bomb dropped on that City Hall would not only blast the swarming center of the city, it would set fire to the surrounding mountains ("WARNING! No Smoking, In or Out of Cars—$500 fine and six months imprisonment") from Mount Wilson Observatory to the sea. It would destroy the railroad terminal half a dozen blocks from the City Hall and play hob with the water system, water fetched clear from the State of Arizona.

If that is dispersion, I'll stay in Manhattan.

Los Angeles is a modern miracle, an enormous city kept alive in a desert by a complex and vulnerable concatenation of technical expedients. The first three colonies established there by the Spaniards starved to death to the last man, woman, and child. If the fragile structure of that city were disrupted by a single atomic bomb, those who survived the blast would in a few short days be reduced to a starving, thirst-crazed mob, ready for murder and cannibalism.

No, if we are to defend ourselves we must not assume that Los Angeles is "dispersed" despite the jokes about her far-flung city line. The Angelenos must be relocated from Oregon to Mexico, in the Mojave Desert, in Imperial Valley, in the great central valley, in the Coast Range, and in the High Sierras.

The same principles apply everywhere. Denver must be scattered out toward Laramie and Boulder, while Colorado Springs must flow around Pike's Peak to Cripple Creek. Kansas City and Des Moines must meet at the Iowa-Missouri line, while Joplin flows up toward Kansas City and on down into the Ozarks. As for Manhattan, that is almost too much to describe—from Boston to Baltimore all the great east coast cities must be abandoned and the population scattered like leaves.

The cities must go. Only villages must remain. If we are to rely on dispersion as a defense in the Atomic Age, then we must spread ourselves out so thin that the enemy cannot possibly destroy us with one bingo barrage, so thin that we will be too expensive and too difficult to destroy.

It would be difficult. It would be incredibly difficult and expensive—Mr. Spaulding's estimate would not cover the cost of new housing alone, but new housing would be the least of our problems. We would have to rebuild more than half of our capital plant—shops, warehouses, factories, railroads, highways, power plants, mills, garages, telephone lines, pipe lines, aqueducts, granaries, universities. We would have to take the United States apart and put it back together again according to a new plan and for a new purpose. The financial cost would be unimportant, because we could not buy it, we would have to *do* it, with our own hands, our own sweat. It would mean a sixty-hour week for everyone, no luxury trades, and a bare minimum standard of living for all for some years. Thereafter the standard of living would be permanently depressed, for the new United States would be organized for defense, not for mass production, nor efficient marketing, nor convenient distribution. We would have to pay for our village culture in terms of lowered consumption. Worse, a large chunk of our lowered productivity must go into producing and supporting the atomic engines of war necessary to strike back against an aggressor—for dispersion alone would not protect us from invasion.

If the above picture is too bleak, let us not prate about dispersion. There are only three real alternatives open to us: One, to form a truly sovereign superstate to police the globe; two, to prepare realistically for World War III in which case dispersion, real and thorough dispersion, is utterly necessary, or, third, to sit here, fat, dumb, and happy, wallowing in our luxuries, until the next Hitler annihilates us!

The other necessary consequences of defense by dispersion are even more chilling than the economic disadvantages. If we go it alone and depend on ourselves to defend ourselves we must be prepared permanently to surrender that democratic freedom of action which we habitually enjoyed in peace time. We must resign ourselves to becoming a socialistic, largely authoritarian police state, with freedom of speech, freedom of occupation, and freedom of movement subordinated to military necessity, as defined by those in charge.

Oh, yes! I dislike the prospect quite as much as you do, but I dislike still more the idea of being atomized, or of being served up as a roast by my starving neighbors. Here is what you can expect:

The front door bell rings. Mr. Joseph Public, solid citizen, goes to answer it. He recognizes a neighbor. "Hi, Jack! What takes you out so late?"

"Got some dope for you, Joe. Relocation orders—I was appointed an emergency deputy, you know."

"Hadn't heard, but glad to hear. Come in and sit down and tell me about it. How do the orders read? We stay, don't we?"

"Can't come in—thanks. I've got twentythree more stops to make tonight. I'm sorry to say you don't stay. Your caravan will rendezvous at Ninth and Chelsea, facing west, and gets underway at noon tomorrow."

"What!"

"That's how it is. Sorry."

"Why, this is a damned outrage! I put in to stay here—with my home town as second choice."

The deputy shrugged. "So did everybody else. But you weren't even on the list of essential occupations from which the permanent residents were selected. Now, look—I've got to hurry. Here are your orders. Limit yourself to 150 pounds of baggage, each, and take food for three days. You are to go in your own car—you're getting a break —and you will be assigned two more passengers by the convoy captain, two more besides your wife I mean."

Joe Public shoved his hands in his pockets and looked stubborn. "I won't be there."

"Now, Joe, don't take that attitude. I admit it's kinda rough, being in the first detachment, but you've had lots of notice. The newspapers have been full of it. It's been six months since the President's proclamation."

"I won't go. There's some mistake. I saw the councilman last week and he said he thought I would be all right. He—"

"He told everybody that, Joe. This is a *Federal* order."

"I don't give a damn if it's from the Angel Gabriel. I tell you I won't go. I'll get an injunction."

"You can't, Joe. This has been declared a military area and protests have to go to the Provost Marshal. I'd hate to tell you what he does with them. Anyhow, you can't stay here—it's no business of mine to put you out; I just have to tell you—but the salvage crews will be here tomorrow morning to pull out your plumbing."

"They won't get in."

"Maybe not. But the straggler squads will go through all of these houses first."

"I'll shoot!"

"I wouldn't advise it. They're mostly ex-Marines."

Mr. Public was quiet for a long minute. Marines. "Look, Jack," he said slowly, "suppose I do go. I've got to have an exemption on this baggage limitation and I can't carry passengers. My office files alone will fill up the back seat."

"You won't need them. You are assigned as an apprentice carpenter. The barracks you are going to are only temporary."

"*Joseph! Joseph!* Don't stand there with the door open! Who is it?" His wife followed her voice in.

He turned to tell her; the deputy took that as a good time to leave.

At eleven the next morning he pulled out of the driveway, gears clashing. He had the white, drawn look of a man who has been up all night. His wife slept beside him, her hysteria drowned in a triple dose of phenobarbital.

That is dispersion. If you don't believe it, ask any nativeborn citizen of Japanese blood. Nothing less than force and police organization will drive the peasants off the slopes of Vesuvius. The bones of Pompeii and Herculaneum testify to that. Or, ask yourself—will you go willingly and cheerfully to any spot and any occupation the government assigns to you? If not, unless you are right now working frantically to make World War III impossible, you have not yet adjusted yourself to the horrid facts of the Atomic Age.

For these *are* the facts of the Atomic Age. If we are not to have a World State, then we must accept one of two grim alternatives: A permanent state of total war, even in "peace" time, with every effort turned to offense and defense, or relax to our fate, make our peace with God, and wait for death to come out of the sky. The time in which to form a World State is passing rapidly; it may be gone by the time this is printed. It is worthwhile to note that the publisher of the string of newspapers most bitterly opposed to "foreign entanglements," particularly with Russia, and most insistent on us holding on to the vanishing "secret" of the atomic bomb—this man, this publisher, lives on an enormous, self-sufficient ranch, already dispersed. Not for him is the peremptory knock on the door and the uprooting relocation order. Yet he presumes daily to tell our Congress what must be done with us and for us.

Look at the facts! Go to your public library and read the solemn statements of the men who built the atomic bomb. Do not let yourself be seduced into a false serenity by men who do not understand that the old world is dead. Regularly, in the past, our State Department has bungled us into wars and with equal regularity our military establishment has been unprepared for them. Then the lives and the strength of the common people have bought for them a victory.

Now comes a war which cannot be won after such mistakes.

If we are to die, let us die like men, eyes open, aware of our peril and striving to cope with it—not as fat and fatuous fools, smug in the belief that the military men and the diplomats have the whole thing under control.

"It is later than you think."

LARGER THAN LIFE

A Memoir in Tribute to
Dr. Edward E. Smith

August 1940—a back road near Jackson, Michigan—a 1939 Chevrolet sedan:

"Doc" Smith is at the wheel; I am in the righthand seat and trying hard to appear cool, calm, fearless—a credit to the Patrol. Doc has the accelerator floorboarded . . . but has his head tilted over at ninety degrees so that he can rest his skull against the frame of the open left window—in order to listen by bone conduction for body squeaks.

Were you to attempt this position yourself—car parked and brakes set, by all means; I am not suggesting that you *drive*—you would find that your view of the road ahead is between negligible and zero.

I must note that Doc was *not* wearing his Lens.

This leaves (by Occam's Razor) his sense of perception, his almost superhuman reflexes, and his ability to integrate instantly all available data and act therefrom decisively and correctly.

Sounds a lot like the Gray Lensman, does it not?

It should, as no one more nearly resembled (in character and in ability—not necessarily in appearance) the Gray Lensman than did the good gray doctor who created him.

Doc could do almost anything and do it quickly and well. In this case he was selecting and road-testing for me a secondhand car. After rejecting numberless other cars, he approved this one; I bought it. Note the date: August 1940. We entered World War Two the following year and quit making automobiles. I drove that car for twelve years. When I finally did replace it, the mechanic who took care of it asked to be permitted to buy it rather than have it be turned in on a trade . . . because, after more than thirteen years and hundreds of thousands of miles, it was *still a* good car. Doc Smith had not missed *anything.*

Its name? *Skylark Five,* of course.

So far as I know, Doc Smith could not play a dulcimer (but it would not surprise me to learn that he had been expert at it). Here are some of the skills I know he possessed:

Chemist & chemical engineer—and anyone who thinks these two professions are one and the same is neither a chemist nor an engineer. (My wife is a chemist and is also an aeronautical engineer—but she is not a chemical engineer. All clear? No? See me after class.)

Metallurgist—an arcane art at the Trojan Point of Black Magic and science.

Photographer—all metallurgists are expert photographers; the converse is not necessarily true.

Lumberjack

Cereal chemist

Cook

Explosives chemist—research, test, & development—product control

Blacksmith

Machinist (tool & diemaker grade)

Carpenter

Hardrock miner—see chapter 14 of *First Lensman,* titled "Mining and Disaster." That chapter was written by a man who had *been* there. And it is a refutation of the silly notion that science fiction does not require knowledge of science. Did I hear someone say that there is no *science* in that chapter? Just a trick vocabulary—trade argot—plus description of some commonplace mechanical work—

So? The science (several sciences!) lies just below the surface of the paper . . . and permeates every word. In some fields I could be fooled, but not in this one. I've been in mining, off and on, for more than forty years.

Or see *Spacehounds of IPC,* chapters 3 & 4, pp. 40–80 . . . and especially p. 52 of the Fantasy Press hardcover edition. Page 52 is almost purely autobiographical in that it tells *why* the male lead, "Steve" Stevens, knows how to fabricate from the wreckage at hand everything necessary to rescue Nadia and himself. I once discussed with Doc these two chapters, in detail; he convinced me that his hero character could do these things by convincing me that he, Edward E. Smith, could do all of them . . . and, being myself an experienced mechanical engineer, it was not possible for him to give me a "snow job." (I think he lacked the circuitry to give a "snow job" in any case; incorruptible honesty was Dr. Smith's prime attribute—with courage to match it.)

What else could he do? He could call square dances. Surely, almost anyone can squaredance . . . but to become a caller takes longer and is much more difficult. When and how he found time for this I do not know—but, since he did everything about three times as fast as ordinary people, there is probably no mystery.

Both Doc and his beautiful Jeannie were endlessly hospitable. I stayed with them once when they had *nine* houseguests. They seemed to enjoy it.

But, above all, Doc Smith was the perfect, gallant knight, sans peur et sans reproche.

And all of the above are reflected in his stories.

It is customary today among self-styled "literary critics" to sneer at Doc's space epics—plot, characterization, dialog, motivations, values, moral attitudes, *etc.* "Hopelessly old-fashioned" is one of the milder disparagements.

As Al Smith used to say: "Let's take a look at the record."

Edward Elmer Smith was born in 1890, some forty years before the American language started to fall to pieces—long, long before the idiot notion of "restricted vocabulary" infected our schools, a half century before our language was corrupted by the fallacy that popular usage defines grammatical correctness.

In consequence Dr. Smith made full use of his huge vocabulary, preferring always the exact word over a more common but inexact word. He did not hesitate to use complex sentences. His syntactical constructions show that he understood and used with precision the conditional and the subjunctive modes as well as the indicative. He did not split infinitives. The difference between "like" and "as" was not a mystery to him. He limited barbarisms to quoted dialog used in characterization.

("Oh, but that dialog!") In each story Doc's male lead character is a very intelligent, highly educated, cheerful, emotional, enthusiastic, and genuinely modest man who talks exactly like Doc Smith, who was a very intelligent, highly educated, cheerful, emotional, enthusiastic, and genuinely modest man.

In casual conversation Doc used a number of clichés . . . and his male lead characters used the same or similar ones. This is a literary fault? I think not. In casual speech most people tend to repeat each his own idiosyncratic pattern of clichés. Doc's repertory of clichés was quite colorful, especially so when compared with patterns heard today that draw heavily on "The Seven Words That Must Never Be Used in Television." A 7-word vocabulary offers little variety.

("But those embarrassing love scenes!") E. E. Smith's adolescence was during the Mauve Decade; we may assume tentatively that his attitudes toward women were formed mainly in those years. In 1914, a few weeks before the war in Europe started, he met his Jeannie—and I can testify of my own knowledge that, 47 years later (i.e., the last time I saw him before his death) he was still dazzled by the wonderful fact that this glorious creature had consented to spend her life with him.

Do you remember the cultural attitudes toward romantic love during the years before the European War? Too early for you? Never mind, you'll find them throughout Doc Smith's novels. Now we come to the important question. The Lensman novels are laid in the far future. Can you think of any reason why the attitudes between sexes today (ca. 1979) are more likely to prevail in the far future than are attitudes prevailing before 1914?

(I stipulate that there are many other possible patterns. But we are now comparing just these two.)

I suggest that the current pattern is contrasurvival, is necessarily most temporary, and is merely one symptom of the kaleidoscopic and possibly catastrophic rapid change our culture is passing through (or dying from?).

Contrariwise, the pre-1914 values, whatever faults they may have, are firmly anchored in the concept that a male's first duty is to protect women and children. *Pro*survival!

"Ah, but those hackneyed plots!" Yes, indeed!—and for excellent reason: The ideas, the cosmic concepts, the complex and sweeping plots, all were brand new when Doc invented them. But in the past half century dozens of other writers have taken his plots, his concepts, and rung the changes on them. The ink was barely dry on *Skylark of Space* when the imitators started in. They have never stopped—pygmies, standing on the shoulders of a giant.

But all the complaints about "Skylark" Smith's alleged literary faults are as nothing to the (usually unvoiced) major grievance:

Doc Smith did not go along with *any* of the hogwash that passes for a system of social values today.

He believed in Good and Evil. He had no truck with the moral relativism of the neo- (cocktail-party) Freudians.

He refused to concede that "mediocre" is better than "superior."

He had no patience with selfpity.

He did not think that men and women are equal—he would as lief have equated oranges with apples. His stories assumed that men and women are *different,* with different functions, different responsibilities, different duties. Not equal but complementary. Neither complete without the other.

Worse yet, in his greatest and longest story, the 6-volume Lensman novel, he assumes that all humans are *un*equal (and, by implication, that the cult of the common man is pernicious nonsense), and bases his grand epic on the idea that a planned genetic breeding program thousands of years long can (and *must*) produce a new race superior to *h. sapiens* . . . supermen who will become the guardians of civilization.

The Lensman novel was left unfinished; there was to have been at least a seventh volume. As always, Doc had worked it out in great detail but never (so far as I know) wrote it down . . . because it was unpublishable—then. But he told me the ending, orally and in private.

I shan't repeat it; it is not my story. Possibly somewhere there is a manuscript—I *hope* so! All I will say is that the ending develops by inescapable logic from clues in *Children of the Lens*.

So work it out for yourself. The original Gray Lensman left us quite suddenly—urgent business a long way off, no time to spare to tell us more stories.

THE GOOD NEWS OF

HIGH FRONTIER

by

Robert A. Heinlein

“High Frontier,” is the best news I have heard since VJ Day.

For endless unhappy years the United States has had no defense policy. We had something we called a defense policy. . . but in the words of Abraham Lincoln, “Calling a tail a leg doesn’t make it a leg.”

Under our present policies what do we have? H-bombs, airborne, waterborne, and in silos, capable of destroying anything, anywhere on this planet. Elite troops second to none in our Marine Corps, in our Army’s 82nd Airborne, and in our Navy -SEALs. Other armed forces stationed around the world and on every ocean. Eyes in the sky that can spot any missile launched in our direction.

And none of these can even slow down an ICBM launched at

Washington.

(Or at your hometown).

So we have *no* defense. Instead we have something mislabeled a "defense policy," called "Mutually Assured Destruction," referred to as "MAD."

Never has Washington produced an acronym that fitted so perfectly. Picture two men at point-blank range each with a .45 aimed at the other man's bare chest. That is MAD. Crazy. Insane. And *stupid.*

High Frontier places a bulletproof vest on our bare chest. High Frontier is as non-aggressive as a bulletproof vest. There is no way to kill anyone with High Frontier—all that High Frontier can do is to keep others from killing us.

That is one of the two best aspects of High Frontier. It is so utterly peaceful that the most devout pacifist can support it with a clear conscience—indeed *must* support it once he understands it . . . as it tends to stop wars from happening and to save lives if war does happen. All who supported GROUND ZERO should support High Frontier.

The other best aspect of High Frontier is that its systems are non-nuclear. I am not one who gets upset at hearing the word "nuclear" . . . but no one in his right mind wants nuclear explosions going on over his head or anywhere on this planet.- It is happy indeed that the best defense we can devise - does not call for nuclear explosions. To save ourselves we do *not* need to blow up Moscow, we do *not* need to add to the radioactive fallout on our lovely planet.

The designers of High Frontier calculate that this new strategy will decrease our military costs. I am not in a position to judge this . . . but, frankly, I don't give a damn. A man with a burst appendix can't afford to dicker over the cost of surgery.

But will High Frontier in fact protect the Republic? As an old Research and Development engineer with the pessimism appropriate to the trade, I am certain-that most of the hardware described in the High Frontier plan will undergo many changes before it is installed; that is the way R & D always works. But I am equally certain that the problems can be solved.

The first stages of High Frontier, point defense of our missile silos, we could start building later this afternoon; it involves nothing but well-known techniques and off-the-shelf hardware. That first stage alone could save us, as it denies to an enemy a free chance to destroy us by a preemptive first strike. It forces him to thin-k twice, three times and decide not to try it.

But the key point is not whether-this hardware will do the trick;, the key lies in a change of attitude. A firm resolve to *defend* the United States . . . rather than resigning ourselves to the destruction of our beloved country. If we will so resolve, then the development of hardware is something we certainly know how to do.

But we won't get there by throwing up our hands and baring our necks to the executioner. God helps those who help themselves; he does not help those who won't try.

So let's try!

— *Robert A. Heinlein.*

1950 Where To?

Most science fiction consists of big-muscled stories about adventures in space, atomic wars, invasions by extraterrestrials, and such. All very well—but now we will take time out for a look at ordinary home life half a century hence.

Except for tea leaves and other magical means, the only way to guess at the *future* is by examining the *present* in the light of *the past.* Let's go back half a century and visit your grandmother before we attempt to visit your grandchildren.

1900: Mr. McKinley is President and the airplane has not yet been invented. Let's knock on the door of that house with the gingerbread, the stained glass, and the cupola.

The lady of the house answers. You recognize her—your own grandmother, Mrs. Middleclass. She is almost as plump as you remember her, for she "put on some good, healthy flesh" after she married.

She welcomes you and offers coffee cake, fresh from her modern kitchen (running water from a hand pump; the best coal range Pittsburgh ever produced). Everything about her house is modern—hand-painted china, souvenirs from the Columbian Exposition, beaded portières, shining baseburner stoves, gas lights, a telephone on the wall.

There is no bathroom, but she and Mr. Middleclass are thinking of putting one in. Mr. Middleclass's mother calls this nonsense, but your grandmother keeps up with the times. She is an advocate of clothing reform, wears only one petticoat, bathes twice a week, and her corsets are guaranteed rust proof. She has been known to defend female suffrage—but not in the presence of Mr. Middleclass.

Nevertheless, you find difficulty in talking with her. Let's jump back to the present and try again.

The automatic elevator takes us to the ninth floor, and we pick out a door by its number, that being the only way to distinguish it.

"Don't bother to ring," you say? What? It's *your* door and you know exactly what lies beyond it—

Very well, let's move a half century into the future and try another middle class home.

It's a suburban home not two hundred miles from the city. You pick out your destination from the air while the cab is landing you—a cluster of hemispheres that makes you think of the houses Dorothy found in Oz.

You set the cab to return to its hangar and go into the entrance hall. You neither knock nor ring. The screen has warned them before you touched down on the landing flat and the autobutler's transparency is shining with: PLEASE RECORD A MESSAGE.

Before you can address the microphone a voice calls out, "Oh, it's you! Come in, come in." There is a short wait, as your hostess is not at the door. The autobutler flashed your face to the patio—where she was reading and sunning herself—and has relayed her voice back to you.

She pauses at the door, looks at you through one-way glass, and frowns slightly; she knows your old-fashioned disapproval of casual nakedness. Her kindness causes her to disobey the family psychiatrist; she grabs a robe and covers herself before signaling the door to open.

The psychiatrist was right; you have thus been classed with strangers, tradespeople, and others who are not family intimates. But you must swallow your annoyance; you cannot object to her wearing clothes when you have sniffed at her for not doing so.

There is no reason why she should wear clothes at home. The house is clean—not somewhat clean, but *clean*—and comfortable. The floor is warm to bare feet; there are no unpleasant drafts, no cold walls. All dust is precipitated from the air entering this house. All textures, of floor, of couch, of chair, are comfortable to bare skin. Sterilizing ultraviolet light floods each room whenever it is unoccupied, and, several times a day, a "whirlwind" blows house-created dust from all surfaces and whisks it out. These auto services are unobtrusive because automatic cut-off switches prevent them from occurring whenever a mass in a room is radiating at blood temperature.

Such a house can become untidy, but not dirty. Five minutes of straightening, a few swipes at children's fingermarks, and her day's housekeeping is done. Oftener than sheets were changed in Mr. McKinley's day, this housewife rolls out a fresh layer of sheeting on each sitting surface and stuffs the discard down the oubliette. This is easy; there is a year's supply on a roll concealed in each chair or couch. The tissue sticks by pressure until pulled loose and does not obscure the pattern and color.

You go into the family room, sit down, and remark on the lovely day. "Isn't it?" she answers. "Come sunbathe with me."

The sunny patio gives excuse for bare skin by anyone's standards; thankfully she throws off the robe and stretches out on a couch. You hesitate a moment. After all, she is your own grandchild, so why not? You undress quickly, since you left your outer wrap and shoes at the door (only barbarians wear street shoes in a house) and what remains is easily discarded. Your grandparents had to get used to a midcentury beach. It was no easier for them.

On the other hand, their bodies were wrinkled and old, whereas yours is not. The triumphs of endocrinology, of cosmetics, of plastic surgery, of figure control in every way are such that a woman need not change markedly from maturity until old age. A woman can keep her body as firm and slender as she wishes—and most of them so wish. This has produced a paradox: the United States has the highest percentage of old people in all its two and a quarter centuries, yet it seems to have a larger proportion of handsome young women than ever before.

(Don't whistle, son! That's your grandmother—)

This garden is half sunbathing patio, complete with shrubs and flowers, lawn and couches, and half swimming pool. The day, though sunny, is quite cold—but not in the garden, and the pool is not chilly. The garden appears to be outdoors, but is not; it is covered by a bubble of transparent plastic, blown and cured on the spot. You are inside the bubble; the sun is outside; you cannot see the plastic.

She invites you to lunch; you protest. "Nonsense!" she answers, "I like to cook." Into the house she goes. You think of following, but it is deliciously warm in the March sunshine and you are feeling relaxed to be away from the city. You locate a switch on the side of the couch, set it for gentle massage, and let the couch knead your troubles away. The couch notes your heart rate and breathing; as they slow, so does it. As you fall asleep it stops.

Meanwhile your hostess has been "slaving away over a hot stove." To be precise, she has allowed a menu selector to pick out an 800-calorie, 4-ration-point luncheon. It is a random-choice gadget, somewhat like a slot machine, which has in it the running inventory of her larder and which will keep hunting until it turns up a balanced meal. Some housewives claim that it takes the art out of cookery, but our hostess is one of many who have accepted it thankfully as an endless source of new menus. Its choice is limited today as it has been three months since she has done grocery shopping. She rejects several menus; the selector continues patiently to turn up combinations until she finally accepts one based around fish disguised as lamb chops.

Your hostess takes the selected items from shelves or the freezer. All are prepared; some are precooked. Those still to be cooked she puts into her—well, her "processing equipment," though she calls it a "stove." Part of it traces its ancestry to diathermy equipment; another feature is derived from metal enameling processes. She sets up cycles, punches buttons, and must wait two or three minutes for the meal to cook. She spends the time checking her ration accounts.

Despite her complicated kitchen, she doesn't eat as well as her great grandmother did—too many people and too few acres.

Never mind; the tray she carries out to the patio is well laden and beautiful. You are both willing to nap again when it is empty. You wake to find that she has burned the dishes and is recovering from her "exertion" in her refresher. Feeling hot and sweaty from your nap you decide to use it when she comes out. There is a wide choice offered by the 'fresher, but you limit yourself to a warm shower growing gradually cooler, followed by warm air drying, a short massage, spraying with scent, and dusting with powder. Such a simple routine is an insult to a talented machine.

Your host arrives home as you come out; he has taken a holiday from his engineering job and has had the two boys down at the beach. He kisses his wife, shouts, "Hi, Duchess!" at you, and turns to the video, setting it to hunt and sample the newscasts it has stored that day. His wife sends the boys in to 'fresh themselves then says, "Have a nice day, dear?"

He answers, "The traffic was terrible. Had to make the last hundred miles on automatic. Anything on the phone for me?"

"Weren't you on relay?"

"Didn't set it. Didn't want to be bothered." He steps to the house phone, plays back his calls, finds nothing he cares to bother with—but the machine goes ahead and prints one message; he pulls it out and tears it off.

"What is it?" his wife asks.

"Telestat from Luna City—from Aunt Jane."

"What does she say?"

"Nothing much. According to her, the Moon is a great place and she wants us to come visit her."

"Not likely!" his wife answers. "Imagine being shut up in an airconditioned cave."

"When you are Aunt Jane's age, my honey lamb, and as frail as she is, with a bad heart thrown in, you'll go to the Moon and like it. Low gravity is not to be sneezed at—Auntie will probably live to be a hundred and twenty, heart trouble and all."

"Would *you* go to the Moon?" she asks.

"If I needed to and could afford it." He turns to you. "Right?"

You consider your answer. Life still looks good to you—and stairways are beginning to be difficult. Low gravity is attractive even though it means living out your days at the Geriatrics Foundation on the Moon. "It might be fun to visit," you answer. "One wouldn't have to stay."

Hospitals for old people on the Moon? Let's not be silly—

Or is it silly? Might it not be a logical and necessary outcome of our world today?

Space travel we will have, not fifty years from now, but much sooner. It's breathing down our necks. As for geriatrics on the Moon, for most of us no price is too high and no amount of trouble is too great to extend the years of our lives. It is possible that low gravity (one sixth, on the Moon) may not lengthen lives; nevertheless it *may*—we don't know yet—and it will most certainly add greatly to comfort on reaching that inevitable age when the burden of dragging around one's body is almost too much, or when we would otherwise resort to an oxygen tent to lessen the work of a wornout heart.

By the rules of prophecy, such a prediction is *probable,* rather than impossible.

But the items and gadgets suggested above are examples of *timid* prophecy.

What are the rules of prophecy, if any?

Look at the graph shown here. The solid curve is what has been going on this past century. It represents many things—use of power, speed of transport, numbers of scientific and technical workers, advances in communication, average miles traveled per person per year, advances in mathematics, the rising curve of knowledge. Call it the curve of human achievement.

What is the correct way to project this curve into the future? Despite everything, there is a stubborn "common sense" tendency to project it along dotted line number one—like the patent office official of a hundred years back who quit his job "because everything had already been invented." Even those who don't expect a slowing up at once tend to expect us to reach a point of diminishing returns (dotted line number two).

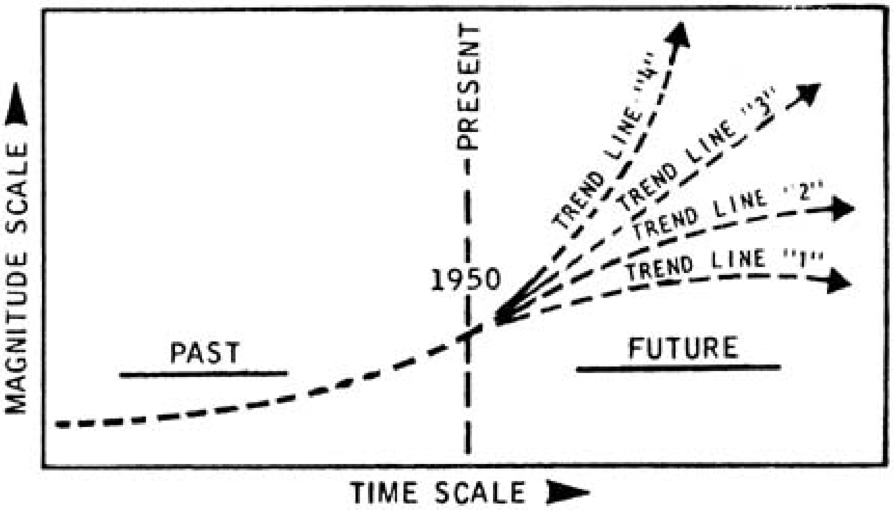

Very daring minds are willing to predict that we will continue our present rate of progress (dotted line number three—a tangent).

But the proper way to project the curve is dotted line number four—for there is no reason, mathematical, scientific, or historical, to expect that curve to flatten out, or to reach a point of diminishing returns, or simply to go on as a tangent. The correct projection, by all facts known today, is for the curve to go on up indefinitely with *increasing* steepness.

The timid little predictions earlier in this article actually belong to curve one, or, at most, to curve two. You can count on the changes in the next fifty years at least *eight times* as great as the changes of the past fifty years.

The Age of Science *has not yet opened.*

AXIOM: A "ninedays' wonder" is taken as a matter of course on the tenth day.

AXIOM: A "common sense" prediction is sure to err on the side of timidity.

AXIOM: The more extravagant a prediction sounds the more likely it is to come true.

So let's have a few free-swinging predictions about the future.

Some will be wrong—but cautious predictions are *sure* to be wrong.

1. **1950** Interplanetary travel is waiting at your front door—C.O.D. It's yours when you pay for it.

1965 And now we are paying for it and the cost is high. But, for reasons understandable only to bureaucrats, we have almost halted development of a nuclear-powered spacecraft when success was in sight. Never mind; if we don't another country will. By the end of this century space travel will be cheap.

1980 And now the Apollo-Saturn Man-on-theMoon program has come and gone, and all we have now in the U.S.A. as a new man-in-space program is the Space Shuttle—underfinanced and two years behind schedule. See my article SPINOFF on page 409 of this book, especially the last two pages.

Is space travel dead? *No, because the United States is not the only nation on this planet.* Today both Japan and Germany seem to be good bets—countries aware that endless wealth is out there for the taking. USSR seems to be concentrating on the military aspects rather than on space travel, and the People's Republic of China does not as yet appear to have the means to spare—but don't count out either nation; the potential is there, in both cases.

And don't count out the United States! Today most of our citizens regard the space program as a boondoggle (totally unaware that it is one of the very few Federal programs that paid for themselves, manyfold). But we are talking about twenty years from now, 2000 A.D. Let's see it in perspective. Exactly thirty years ago George Pal and Irving Pichel and I—and ca. 200 others—were making the motion picture *Destination Moon*. I remember sharply that most of the people working on that film started out thinking that it was a silly fantasy, an impossibility. I had my nose rubbed in it again and again, especially if the speaker was unaware that I had written it. (Correction: written the first version of it. By the time it was filmed, even the banker's wife was writing dialog.)

As for the general public—A trip to the *Moon?* Nonsense!

That was thirty years ago, late 1949.

Nineteen years and ten months later Apollo 11 landed on the Moon.

Look again at the curves on page 261. With respect to space travel (and industry, power, and colonization) we have dropped to that feeble curve #1—but we could shift back to curve #4 overnight *if our President and/or Congress* got it through their heads that not one but *all* of our crisis problems can be solved by exploiting space. Employment, inflation, pollution, population, energy, running out of nonrenewable resources—there is pie in the sky for the U.S.A. *and for the entire planet including the impoverished "Third World."*

I won't try to prove it here. See *The Third Industrial Revolution* by G. Harry Stine, 1979, Ace Books, 51 Madison Avenue, New York, NY 10010, and see *A Step Farther Out* by Dr. Jerry Pournelle, also Ace Books 1979—and accept my assurance that I have known both authors well for twenty-odd years, know that each has years of experience in aerospace, and that each has both the formal education and the continuing study—and the horse sense!—to be a true expert in this matter.

From almost total disbelief about space travel (99.9+%) to a landing on the Moon in twenty years . . . from President Kennedy's announcement of intention to that Lunar landing in only *seven* years . . . and still twenty years to go until the year 2000—we can still shift to curve #4 (and get rich) almost overnight. By 2000 A.D. we could have O'Neill colonies, self-supporting and exporting power to Earth, at both Lagrange-4 and Lagrange-5, transfer stations in orbit about Earth and around Luna, a permanent base on Luna equipped with an electric catapult—and a geriatrics retirement home.

However, I am not commissioned to predict what we *could* do but to predict (guess) what is *most likely* to happen by 2000 A.D.

Our national loss of nerve, our escalating anti-intellectualism, our almost total disinterest in anything that does not *directly* and *immediately* profit us, the shambles of public education throughout most of our nation (especially in New York and California) cause me to predict that *our space program will continue to dwindle.* It would not surprise me (but would distress me mightily!) to see the Space Shuttle canceled.

In the meantime some other nation or group will start exploiting space—industry, power, perhaps Lagrange-point colonies—and suddenly we will wake up to the fact that we have been left at the post. That happened to us in '57; we came up from behind and passed the competition. Possibly we will do it again. Possibly—

But I am making no cash bets.

2. **1950** Contraception and control of disease is revising relations between the sexes to an extent that will change our entire social and economic structure.

1965 This trend is so much more evident now than it was fifteen years ago that I am tempted to call it a fulfilled prophecy. Vast changes in sex relations are evident all around us—with the oldsters calling it "moral decay" and the youngsters ignoring them and taking it for granted. Surface signs: books such as *Sex and the Single Girl* are smash hits; the formerly-taboo four-letter words are now seen both in novels and popular magazines; the neologism "swinger" has come into the language; courts are conceding that nudity and semi-nudity are now parts of the cultural *mores.* But the end is not yet; this revolution will go much farther and is now barely started.

The most difficult speculation for a science fiction writer to undertake is to imagine correctly the *secondary* implications of a new factor. Many people correctly anticipated the coming of the horseless carriage; some were bold enough to predict that everyone would use them and the horse would virtually disappear. But I know of no writer, fiction or nonfiction, who saw ahead of time the vast change in the courting and mating habits of Americans which would result primarily from the automobile—a change which the diaphragm and the oral contraceptive merely confirmed. So far as I know, no one even dreamed of the change in sex habits the automobile would set off.

There is some new gadget in existence today which will prove to be equally revolutionary in some other way equally unexpected. You and I both know of this gadget, by name and by function—but we don't know which one it is nor what its unexpected effect will be. This is why science fiction is *not* prophecy—and why fictional speculation can be so much fun both to read and to write.

1980 (No, I still don't know what that revolutionary gadget is—unless it is the computer chip.) The sexual revolution: it continues apace—FemLib, GayLib, single women with progeny and never a lifted eyebrow, staid old universities and colleges that permit unmarried couples to room together on campus, group marriages, "open" marriages, miles and miles of "liberated" beaches. Most of this can be covered by one sentence: What used to be concealed is now done openly. But sexual attitudes are in flux; the new ones not yet cultural *mores.*

But I think I see a trend, one that might jell by 2000 A.D. The racial biological function of "family" is the protection of children and pregnant women. To accomplish that, family organization must be rewarding to men as well . . . and I do *not* mean copulation. There is a cynical old adage covering that: "Why keep a cow when milk is so cheap?" A marriage must offer its members emotional, spiritual, and physical comforts superior to those to be found in living alone if that prime function is to be accomplished.

(Stipulated: there are individuals, both sexes, who prefer to live alone. This is racially self-correcting.)

The American core family (father, mother, two or three children) has ceased to be emotionally satisfying—if it ever was. It is a creation of our times: mobility, birth control, easy divorce. Early in this century the core family was mother, father, four to eight children . . . and was itself a unit in an extended family of grandparents, aunts, uncles, and cousins living near enough (if not in the same house) to be mutually supportive. If a child was ill, Aunt Cora came over to help while Aunt Abby took the other kids into her home. See Mauve Decade fiction.

With increased mobility and fewer children this undefined extended-family pattern disappeared almost without its disappearance being noticed. To the extent to which it was noticed there was often glee at being free of the nuisance of in-laws and kinfolk. It took considerably longer to realize that the advantages had also disappeared.

We will not get a return of the extended family of the sort that characterized the 19th century and the early 20th . . . but the current flux of swingers' clubs, group marriages, spouse swapping, etc., is, in my opinion, fumbling and almost unconscious attempts to regain the pleasure, emotional comfort, and mutual security once found in the extended family of two or more generations back.

Prediction: by 2000 A.D. or soon thereafter extended families of several sorts will be more common than core families. The common characteristic of the various types will be increased security for children under legally enforceable contracts.

3. **1950** The most important military fact of this century is that there is no way to repel an attack from outer space.

1965 I flatly stand by this one. True, we are now working on Nike-Zeus and Nike-X and related systems and plan to spend billions on such systems—and we know that others are doing the same thing. True, it is possible to hit an object in orbit or trajectory. Nevertheless this prediction is as safe as predicting tomorrow's sunrise. Antiaircraft fire never stopped air attacks; it simply made them expensive. The disadvantage in being at the bottom of a deep "gravity well" is very great; gravity gauge will be as crucial in the coming years as wind gauge was in the days when sailing ships controlled empires. The nation that controls the Moon will control the Earth—but no one seems willing these days to speak that nasty fact out loud.

1980 I have just heard a convincing report that the USSR has developed lasers far better than ours that can blind our eyes-in-the-sky satellites and, presumably, destroy our ICBMs in flight. Stipulate that this rumor is true: It does not change my 1950 assertion one iota. Missiles tossed from the Moon to the Earth need not be H-bombs or any sort of bomb—or even missile-shaped. All they need be is massive . . . because they arrive at *approximately seven miles per second.* A laser capable of blinding a satellite and of disabling an ICBM to the point where it can't explode would need to be orders of magnitude more powerful in order to volatilize a house-size chunk of Luna. For further details see my *The Moon Is a Harsh Mistress*.

4. **1950** It is utterly impossible that the United States will start a "preventive war." We will fight when attacked, either directly or in a territory we have guaranteed to defend.

1965 Since 1950 we have done so in several theaters and are doing so in Viet Nam as this is written. "Preventive" or "preemptive" war seems as unlikely as ever, no matter who is in the White House. Here is a new prediction: World War III (as a major, all-out war) will not take place at least until 1980 and could easily hold off until 2000. This is a very happy prediction compared with the situation in 1950, as those years of grace may turn up basic factors which (I hope!) may postpone disaster still longer. We were *much* closer to ultimate disaster around 1955 than we are today—much closer indeed than we were at the time of the Cuban confrontation in 1962. But the public never knew it. All in all, things look pretty good for survival, for the time being—and that is as good a break as our ancestors ever had. It was far more dangerous to live in London in 1664–5 than it is to live in a city threatened by H-bombs today.

1980 I am forced to revise the 1950 prediction to this extent: It is no longer certain that we will fight to repel attack on territory we have guaranteed to defend; our behavior both with respect to Viet Nam and to Taiwan is a clear warning to our NATO allies. The question is not whether we should ever have been in Viet Nam or whether we should ever have allied ourselves to the Nationalist Chinese. I do not know of *any* professional military man who favored ever getting into combat on the continent of Asia; such war for us is a logistic and strategic disaster.

But to break a commitment to an ally *once it has been made* is to destroy our credibility.

5. **1950** In fifteen years the housing shortage will be solved by a "breakthrough" into new technology which will make every house now standing as obsolete as privies.

1965 Here I fell flat on my face. There has been no breakthrough in housing, nor is any now in prospect—instead the ancient, wasteful methods of building are now being confirmed by public subsidies. The degree of our backwardness in the field is hard to grasp; we have never seen a modern house. Think what an automobile would be if each one were custom-built from materials fetched to your home—what would it look like, what would it do, and how much would it cost. But don't set the cost lower than $100,000 or the speed higher than 10 m/h, if you want to be realistic about the centuries of difference between the housing industry and the automotive industry.

I underestimated (through wishful thinking) the power of human stupidity—a fault fatal to prophecy.

1980 I'm still flat on my face with my nose rubbed in the mud; the situation is worse than ever. See "A Bathroom of Her Own" on page 198. And that figure of $100,000 just above was with gold at $35 per troy ounce—so change it to one million dollars—or call it 2700 troy ounces of gold. Or forget it. The point is that it would be very nearly impossible to build even a clunker automobile at any price if we built them the way we build houses.

We have the technology to build cheap, beautiful, efficient, flexible (modular method) houses, extremely comfortable and with the durability of a Rolls Royce. But I cannot guess when (if ever) the powers that be (local bureaucrats, unions, building materials suppliers, county and state officials) will permit us poor serfs to have modern housing.

6. **1950** We'll all be getting a little hungry by and by.

1965 No new comment.

1980 Not necessarily. In 1950 I was too pessimistic concerning population. Now I suspect that the controlling parameter is oil. In modern agriculture oil is the prime factor—as power for farm machinery (obviously) but also for insecticides and for fertilizers. Since our oil policies in Washington are about as boneheaded—counterproductive—as they can be, I have no way to guess how much food we can raise in 2000 A.D. But no one in the United States should be hungry in 2000 A.D.—unless we are conquered and occupied.

7. **1950** The cult of the phony in art will disappear. So-called "modern art" will be discussed only by psychiatrists.

1965 No new comment.

1980 One may hope. But art reflects culture and the world is even nuttier now than it was in 1950; these are the Crazy Years. But, while "fine" art continues to look like the work of retarded monkeys, commercial art grows steadily better.

8. 1950 Freud will be classed as a prescientific, intuitive pioneer and psychoanalysis will be replaced by a growing, changing "operational psychology" based on measurement and prediction.

1965 No new comment.

1980 This prediction is beginning to come true. Freud is no longer taken seriously by informed people. More and more professional psychologists are skilled in appropriate mathematics; most of the younger ones understand inductive methodology and the nature of scientific confirmation and are trying hard to put rigor into their extremely difficult, still inchoate subject. For some of the current progress see Dr. Pournelle's book, cited on page 263.

By 2000 A.D. we will know a great deal about how the brain functions . . . whereas in 1900 what little we knew was wrong.

I do *not* predict that the basic mystery of psychology—how mass arranged in certain complex patterns becomes aware of itself—will be solved by 2000 A.D. I hope so but do not expect it.

9. **1950** Cancer, the common cold, and tooth decay will all be conquered; the revolutionary new problem in medical research will be to accomplish "regeneration," i.e., to enable a man to grow a new leg, rather than fit him with an artificial limb.

1965 In the meantime spectacular progress has been made in organ transplants—and the problem of regeneration is related to this one. Biochemistry and genetics have made a spectacular breakthrough in "cracking the genetic code." It is a tiny crack, however, with a long way to go before we will have the human chromosomes charted and still longer before we will be able to "tailor" human beings by gene manipulation. The possibility is there—but not by year 2000. This is probably just as well. If we aren't bright enough to build decent houses, are we bright enough to play God with the architecture of human beings?

1980 I see no reason to change this prediction if you will let me elaborate (weasel) a little. "The common cold" is a portmanteau expression for upper respiratory infections which appear to be caused by a very large number of different viruses. Viruses are pesky things. It is possible to immunize against them, e.g., vaccination against smallpox, a virus disease. But there are almost no chemotherapies, medicines, against viruses. That is why "the common cold" is treated much the same way today as in 1900, i.e., support the patient with bed rest, liquids, aspirin to make him more comfortable, keep him warm. This was standard in 1900 and it is still standard in 1980.

It is probable that your body makes antibodies against the virus of any cold you catch. But this gives you no protection against that virus's hundreds of close relatives found in any airport, theater, supermarket, or gust of dust off the street. In the meantime, while his kinfolk take turns making you miserable, virus #1 has mutated and you have no antibodies against the mutation.

Good news: Oncology (cancer), immunology, hematology, and "the common cold" turn out to be strongly interrelated subjects; research in all these is moving fast—and a real breakthrough in any one might mean a breakthrough in all.

10. **1950** By the end of this century mankind will have explored this solar system, and the first ship intended to reach the nearest star will be a building.

1965 Our editor suggested that I had been too optimistic on this one—but I still stand by it. It is still thirty-five years to the end of the century. For perspective, look back thirty-five years to 1930—the American Rocket Society had not yet been founded. Another curve, similar to the one herewith in shape but derived entirely from speed of transportation, extrapolates to show faster-than-light travel by year 2000. I guess I'm chicken, for I am not predicting FTL ships by then, if ever. But the prediction still stands without hedging.

1980 My money is still on the table at twenty years and counting. Senator Proxmire can't live forever. In the last 10½ years men have been to the Moon several times; much of the Solar system has been most thoroughly explored within the limits of "black box" technology and more will be visited before this year is out.

Ah, but not explored by *men*—and the distances are so great. Surely they are . . . by free-fall orbits, which is all that we have been using. But there are numerous proposals (and not all ours!) for constant-boost ships, proposals that require R&D on present art only—

no breakthroughs.

Reach for your pocket calculator and figure how long it would take to make a trip to Mars and back if your ship could boost at one-tenth gee. We will omit some trivia by making it from parking orbit to parking orbit, use straight-line trajectories, and ignore the Sun's field —we'll be going uphill to Mars, downhill to Earth; what we lose on the roundabouts we win on the shys.

These casual assumptions would cause Dan Alderson, ballistician at Jet Propulsion Laboratory, to faint. But after he comes out of his faint he would agree that our answers would be of correct close order of magnitude—and all I'm trying to prove is that even a slight constant boost makes an enormous difference in touring the Solar System. (Late in the 21st century we'll offer the Economy Tour: Ten Planets in Ten Days.)

There are an unlimited number of distances between rather wide parameters for an Earth-Mars-Earth trip but we will select one that is nearly minimum (it's cheating to wait in orbit at Mars for about a year in order to take the shortest trip each way . . . and unthinkable to wait years for the closest approach). We'll do this Space Patrol style: There's Mars, here we are at L-5; let's scoot over, swing around Mars, and come straight home. Just for drill.

Conditions: Earth-surface gravity (one "gee") is an acceleration of 32.2 feet per second squared, or 980.7 centimeters per second squared. Mars is in or near opposition (Mars is rising as Sun is setting). We will assume that the round trip is 120,000,000 miles. If we were willing to wait for closest approach we could trim that to less than 70,000,000 miles . . . but we might have to wait as long as 17 years. So we'll take a common or garden variety opposition—one every 26 months—for which the distance to Mars is about 50-to 60,000,000 miles and never over 64 million.

(With Mars in conjunction on the far side of the Sun, we could take the scenic route of over 500 million miles—how much over depends on how easily you sunburn. I suggest a minimum of 700 million miles.)

You now have all necessary data to figure the time it takes to travel Earth-Mars-Earth in a constant-boost ship—*any* constant-boost ship—when Mars is at opposition. (If you insist on the scenic route, you can't treat the trajectory approximations as straight lines and you can't treat space as flat but a bit uphill. You'll need Alderson or his equal and a *big* computer, not a pocket calculator; the equations are very hairy and sometimes shoot back.)

But us two space cadets are doing this by eyeballing it, using Tennessee windage, an aerospace almanac, a Mickey Mouse watch, and an SR-50 Pop discarded years ago.

We need just one equation: Velocity equals acceleration times elapsed time: $v = at$

This tells us that our average speed is ½at—and from that we know that the distance achieved is the average speed times the elapsed time: $d = ½at^2$

If you don't believe me, check any physics text, encyclopedia, or nineteen other sorts of reference books—and I did that derivation without cracking a book but now I'm going to stop and find out whether I've goofed—I've had years of practice in goofing. (Later—seems okay.)

Just two things to remember: 1) This is a 4-piece trip—boost to midpoint, flip over and boost to brake; then do the same thing coming home. Treat all four legs as being equal or 30,000,000 miles, so figure one of them and multiply by four (Dan, stop frowning; this is an *approximation* . . . done with a Mickey Mouse watch.)

2) You must keep your units straight. If you start with centimeters, you are stuck with centimeters; if you start with feet, you are stuck with feet. So we have ¼ of the trip equals $5280 \times 30{,}000{,}000 = 1.584 \times 10^{11}$ feet, or 4.827×10^{12} centimeters.

One last bit: Since it is elapsed time we are after, we will rearrange that equation ($d = ½at^2$) so that you can get the answer in one operation on your trusty-but-outdated pocket calculator . . . or even on a slide rule, as those four-significant-figures data are mere swank; I've used so many approximations and ignored so many minor variables that I'll be happy to get answers correct to two significant figures.

$$\frac{d}{½a} = t^2 \text{ This gives us: } \sqrt{d / ½a}$$

d is 30,000,000 miles expressed in feet, or 158,400,000,000. Set that into your pocket calculator. Divide it by one half of one tenth of gee, or 1.61. Push the square root button. Multiply by 4. You now have the elapsed time of the round trip expressed in seconds so divide by 3600 and you have it in hours, and divide that by 24 and you have it in days.

At this point you are supposed to be astonished and to start looking for the mistake. While you are looking, I'm going to slide out to the refrigerator.

There is no mistake. Work it again, this time in metric. Find a reference book and check the equation. You will find the answer elsewhere in this book but don't look for it yet; we'll try some other trips you may take by 2000 A.D. if you speak Japanese or German—or even English if Proxmire and his ilk fail of reelection.

Same trip, worked the same way, but at only one percent of gee. At that boost I would weigh less than my shoes weigh here in my study.

Hmmph! Looks as if one answer or the other must be wrong.

Bear with me. This time we'll work it at a full gee, the acceleration you experience lying in bed, asleep. (See Einstein's 1905 paper.)

(Preposterous. All three answers must be wrong.)

Please stick with me a little longer. Let's run all three problems for a round trip to Pluto—in 2006 A.D., give or take a year. Why 2006? Because today Pluto has ducked inside the orbit of Neptune and won't reach perihelion until 1989—and I want it to be a bit farther away; I've got a rabbit stashed in the hat.

Pluto ducks outside again in 2003 and by 2006 it will be (give or take a few million miles) 31.6 A.U. from the Sun, figuring an A.U. at 92,900,000 miles or 14,950,000,000,000 centimeters as we'll work this both ways, MKS and English units. (All right, all right—1.495×10^{13} centimeters; it gets dull here at this typewriter.)

Now work it all three ways, a round trip of 63.2 A.U. at a constant boost of one gravity, one tenth gravity, and one hundredth of a gee—and we'll dedicate this to Clyde Tombaugh, the only living man to discover a new planet—through months of tedious and painstaking examination of many thousands of films.

Some think that Pluto was once a satellite and its small size makes this possible. But it is *not* a satellite today. It is both far too big and hundreds of millions of miles out of position to be an asteroid. It can't be a comet. So it's a planet—or something so exotic as to be still more of a prize.

Its size made it hard to find and thus still more of an achievement. But Tombaugh continued the search for seventeen weary years and many millions more films. If there is an Earth-size planet out there, it is at least three times as distant as Pluto, and a gas giant would have to be six times as far. Negative data win no prizes but they are the bedrock of science.

Until James W. Christy on 22 June 1978 discovered Pluto's satellite, Charon, it was possible for us romantics to entertain the happy thought that Pluto was loaded with valuable heavy metals; the best estimate of its density made this plausible. But the mass of a planet with a satellite can be calculated quite easily and accurately, and from that, its density.

The new figure was much too low, only half again as heavy as water. Methane snow? Perhaps.

So once again a lovely theory is demolished by an awkward fact.

Nevertheless Pluto remains a most mysterious and most intriguing heavenly body. A planet the size and mass of Mars might not be too much use to us out there . . . but think of it as a fuel dump. Many stories and many nonfictional projections speak of using the gas giants and/or the rings of Saturn as sources of fuel. But if Pluto is methane ice or water ice or frozen hydrogen or all three, as a source of fuel—conventional, or fusion, or even reaction mass—Pluto has one supremely important advantage over the gas giants: Pluto is *not* at the bottom of a horridly deep gravity well.

Finished calculating? Good. Please turn to page 299 and see why I wanted our trip to Pluto to be a distance of 31.6 A.U.—plus other goodies, perhaps.

11. **1950** Your personal telephone will be small enough to carry in your handbag. Your house telephone will record messages, answer simple inquiries, and transmit vision.

1965 No new comment.

1980 This prediction is trivial and timid. Most of it has already come true and the telephone system will hand you the rest on a custom basis if you'll pay for it. In the year 2000, with modern telephones tied into home computers (as common then as flush toilets are today) you'll be able to have 3-dimensional holovision along with stereo speech. Arthur C. Clarke says that this will do away with most personal contact in business. I agree with all of Mr. Clarke's arguments and disagree with his conclusion; with us monkey folk there is no substitute for personal contact; we enjoy it and it fills a spiritual need.

Besides that, the business conference is often an excuse to loaf on the boss's time and the business convention often supplies some of the benefits of the Roman Saturnalia.

Nevertheless I look forward to holovideostereophones *without* giving up personal contacts.

12. **1950** Intelligent life will be found on Mars.

1965 Predicting intelligent life on Mars looks pretty silly after those dismal photographs. But I shan't withdraw it until Mars has been *thoroughly* explored. As yet we really have no idea—and no data—as to just how ubiquitous and varied life may be in this galaxy; it is conceivable that life as we *don't* know it can evolve on *any* sort of a planet . . . and nothing in our present knowledge of chemistry rules this out. All the talk has been about life-as-we-know-it—which means terrestrial conditions.

But if you feel that this shows in me a childish reluctance to give up thoats and zitidars and beautiful Martian princesses until forced to, I won't argue with you—I'll just wait.

1980 The photographs made by the Martian landers of 1976 and their orbiting companions make the prediction of intelligent Martian life look even sillier. But the new pictures and the new data make

Mars even more mysterious. I'm a diehard because I suspect that life is ubiquitous—call that a religious opinion if you wish. But remember two things: Almost all discussion has been about Life-as-we-know-it . . . but what about Life-as-we-*don't*-know-it? If there were Martians around the time that those amazing gullies and canyons were formed, perhaps they went underground as their atmosphere thinned. At present, despite wonderful pictures, our data are very sparse; those two fixed landers are analogous to two such landing here: one on Canadian tundra, the other in Antarctica—hardly sufficient to solve the question: Is there intelligent life on Sol III?

(Is there intelligent life in Washington, D.C.?)

Whistling in the dark—I think I goofed on this one. But if in fact Mars is uninhabited, shortly there will be a land rush that will make the Oklahoma land stampede look gentle. Since $E = mc^2$ came into our lives, *all* real estate is potentially valuable; it can be terraformed to suit humans. There has been so much fiction and serious, able nonfiction published on how to terraform Mars that I shan't add to it, save to note one thing:

Power is no problem. Sunshine at that distance has dropped off to about 43% of the maximum here—but Mars gets *all* of it and gets it all day long save for infrequent dust storms . . . whereas the *most* that Philadelphia (and like places) ever gets is 35%—and overcast days are common. Mars won't need solar power from orbit; it will be easier to do it on the ground.

But don't be surprised if the Japanese charge you a very high fee for stamping their visa into your passport plus requiring deposit of a prepaid return ticket or, if you ask for immigrant's visa, charge you a much, much higher fee plus proof of a needed colonial skill.

For there *is* intelligent life in Tokyo.

13. **1950** A thousand miles an hour at a cent a mile will be commonplace; short hauls will be made in evacuated subways at extreme speed.

1965 I must hedge number thirteen; the "cent" I meant was scaled by the 1950 dollar. But our currency has been going through a long steady inflation, and no nation in history has ever gone as far as we have along this route without reaching the explosive phase of inflation. Ten-dollar hamburgers? Brother, we are headed for the hundred-dollar hamburger—for the barter-only hamburger.

But this is only an inconvenience rather than a disaster as long as there is plenty of hamburger.

1980 I must scale that "cent" again. In 1950 gold was $35/troy ounce; this morning the London fix was $374/troy ounce. Just last week my wife and I flew San Francisco to Baltimore and return. We took neither the luxury class nor any of the special discounted fares;

we simply flew what we could get.

Applying the inflation factor—35/374—our tickets cost a hair less than one cent a mile in *1950* dollars. From here on I had better give prices in troy ounces of gold, or in Swiss francs; not even the Man in the White House knows where this inflation is going. About those subways: possible, even probable, by 2000 A.D. But I see little chance that they will be financed until the dollar is stabilized—a most painful process our government hates to tackle.

14. **1950** A major objective of applied physics will be to control gravity.

1965 This prediction stands. But today physics is in a tremendous state of flux with new data piling up faster than it can be digested; it is anybody's guess as to where we are headed, but the wilder you guess, the more likely you are to hit it lucky. With "elementary particles" of nuclear physics now totaling about half the number we used to use to list the "immutable" chemical elements, a spectator needs a program just to keep track of the players. At the other end of the scale, "quasars"—quasi-stellar bodies—have come along; radio astronomy is now bigger than telescopic astronomy used to be; and we have redrawn our picture of the universe several times, each time enlarging it and making it more complex—I haven't seen this week's theory yet, which is well, as it would be out of date before this gets into print. Plasma physics was barely started in 1950; the same for solid-state physics. This is the Golden Age of physics—and it's an anarchy.

1980 I stick by the basic prediction. There is so much work going on both by mathematical physicists and experimental physicists as to the nature of gravity that it seems inevitable that twenty years from now applied physicists will be trying to control it. But note that I said "trying"—succeeding may take a long time. If and when they do succeed, a spinoff is likely to be a spaceship that is in no way a rocket ship—and the Galaxy is ours! (Unless we meet that smarter, meaner, tougher race that kills us or enslaves us or eats us—or all three.)

Particle physics: the situation is even more confusing than in 1965. Physicists now speak of more than 200 kinds of hadrons, "elementary" heavy particles. To reduce this confusion a mathematical construct called the "quark" was invented. Like Jell-O quarks come in many colors and flavors . . . plus spin, charm, truth, and beauty (or top and bottom in place of truth and beauty—or perhaps "truth" doesn't belong in the list, and no jokes, please, as the physicists aren't joking and neither am I). Put quarks together in their many attributes and you can account for (maybe) all those 200-odd hadrons (and have a system paralleling the leptons or light particles as a bonus).

All very nice . . . except that no one has ever been able to pin down even one quark. Quarks, if they exist, come packaged in clumps as hadrons—not at random but by rules to account for each of that mob of hadrons.

Now comes Kenneth A. Johnson, Ph.D. (Harvard '55), Professor of Physics at the Massachusetts Institute of Technology (which certainly places him in the worldwide top group of physicists) with an article *(Scientific American,* July 1979, p. 112, "The Bag Model of Quark Confinement"), an article which appears to state that quarks will never be pinned down because they are in sort of an eternal purdah, never to be seen even as bubble tracks.

Somehow it reminds me of the dilemma when the snark is a boojum.

I'm not poking fun at Dr. Johnson; he is very learned and trying hard to explain his difficult subject to the unlearned such as I.

But, in the meantime I suggest reading *The Hunting of the Snark* while waiting patiently for 2000 A.D. We have a plethora of data; perhaps in twenty more years the picture will be simplified. Perhaps—

15. **1950** We will not achieve a "World State" in the predictable future. Nevertheless, Communism will vanish from this planet.

1965 I stand flatly behind prediction number fifteen.

1980 I still stand flatly behind the first sentence of that two-part prediction above. The second part I could weasel out of by pointing out that on this planet *no* state that calls itself Marxist or Socialist or Communist has ever established a system approximating that called for by the works of Karl Marx and Friedrich Engels. And never will; Marx's Utopia does not fit human beings. The state will not "wither away."

But I shan't weasel as I am utterly dismayed by the political events of the past 15–20 years. At least two thirds of the globe now calls itself Marxist. Another large number of countries are military dictatorships. Another large group (including the United States) are constitutional democratic republics but so heavily tinged with socialism ("welfare state") that all of them are tottering on the brink of bankruptcy and collapse.

So far as I can see today the only thing that could cause the soidisant Marxist countries to collapse in as little time as twenty years would be for the United States to be conquered and occupied by the USSR—and twenty years ago I thought that this was a strong possibility. (I'm more optimistic now, under the present three-cornered standoff.)

If we were to be conquered and occupied, the Communist world might collapse rather quickly. We have been propping them up whenever they were in real trouble (frequently!) for about half a century.

16. **1950** Increasing mobility will disenfranchise a majority of the population. About 1990 a constitutional amendment will do away with state lines while retaining the semblance.

1965 No further comment.

1980 I goofed. I will be much surprised if either half of this double prediction comes to pass by 2000—at least in the form described and for the reasons I had in mind. The franchise now extends to any warm body over eighteen years of age and that franchise can be transferred to another state in less time than it takes the citizen to find housing in his/her new state.

Thus no constitutional amendment is needed. But the state lines are fading year by year anyhow as power continues to move from the states to the Federal government and especially into the hands of non-elected bureaucrats.

17. **1950** All aircraft will be controlled by a giant radar net run on a continent-wide basis by a multiple electronic "brain."

1965 No further comment.

1980 This prediction still stands—although it may be my wishful thinking. Such a system was designed over thirty years ago; Congress wouldn't buy it. It would be more expensive today . . . and is far more urgently needed. Anyone who has ever been in the tower of a busy field or has ever ridden in the "office" of a commercial plane during a takeoff or landing at a busy field knows what I mean. All our fields are overloaded but anyone who goes in or out of San Diego or of O'Hare-Chicago or—but why go on? Our airplanes are pretty durn wonderful . . . but our method of handling air traffic at fields is comparable to Manhattan without traffic lights.

I shall continue to fly regularly for two reasons: 1) Mrs. Heinlein and I hope to go out in a common disaster. 2) Consider the alternatives: AMTRAK (ugh!), buses (two ughs!), and driving oneself. The latter is fine for short distances (OPEC and Washington permitting) but, while in my younger days I drove across this continent so many times that I've lost count, today I am no longer physically up to such a trip even with a chauffeur.

But that totally-automated traffic control system *ought* to be built. Expensive, yes—but what price do we place on a hundred dead passengers, a flight crew, and a modern airliner? In the present state of the art in computers and in radar neither the pilot nor the controller should be in the loop at landing or takeoff; they should simply be alert, ready to override, because even the most perfect machinery is subject to Murphy's Law. But all routine (99.9+%) takeoffs and landings should be made by computer.

If this pushes small private planes onto separate and smaller fields, so be it. Bicycles do not belong on freeways. I hate to say that, as there is nothing more fun than a light sports plane.

(Nothing that is not alive, I mean. Vive la difference!)

(On air traffic control I speak with a modicum of authority. I returned to the aircraft industry for a short time in 1948 to research this subject, then wrote an article aimed at the slicks: "The Billion-Dollar Eye." I missed; it is still unpublished.)

18. **1950** Fish and yeast will become our principal sources of proteins. Beef will be a luxury; lamb and mutton will disappear.

1965 I'll hedge number eighteen a little. Hunger is not now a problem in the USA and need not be in the year 2000—but hunger *is* a world problem and would at once become an acute problem for us if we were conquered . . . a distinct possibility by 2000. Between our present status and that of subjugation lies a whole spectrum of political and economic possible shapes to the future under which we would share the worldwide hunger to a greater or lesser extent. And the problem grows. We can expect to have to feed around half a billion Americans circa year 2000—our present huge surpluses would then represent acute shortages even if we never shipped a ton of wheat to India.

1980 It would now appear that the USA population in 2000 A.D. will be about 270,000,000 instead of 500,000,000. I have been collecting clippings on demography for forty years; all that the projections have in common is that all of them are wrong. Even that figure of 270,000,000 may be too high; today the only reason our population continues to increase is that we oldsters are living longer; our current birthrate is not sufficient even to replace the parent generation.

19. **1950** Mankind will *not* destroy itself, nor will "Civilization" be destroyed.

1965 I stand by prediction number nineteen.

1980 I still stand by prediction number nineteen. There will be wars and we will be in some of them—and some may involve atomic weapons. But there will *not* be that all-destroying nuclear holocaust that forms the background of so many SF stories. There are three reasons for this: The United States, the Soviet Union, and the People's Republic of China.

Why? Because the three strongest countries in the world (while mutually detesting each the other two) have nothing to gain and everything to lose in an all-out swapping of H-bombs. Because Kremlin bosses are not idiots and neither are those in Beijing (Peiping) (Peking).

If another country—say Israel, India, or the South African Republic—gets desperate and tosses an A-or H-bomb, that country is likely to receive three phone calls simultaneously, one from each of the Big

Three: "You have exactly three minutes to back down. Then we destroy you."

After World War II I never expected that our safety would ever depend on a massive split in Communist International—but that is exactly what has happened.

1950 Here are things we *won't* get soon, if ever:

Travel through time.

Travel faster than the speed of light.

"Radio" transmission of matter.

Manlike robots with manlike reactions.

Laboratory creation of life.

Real understanding of what "thought" is and how it is related to matter.

Scientific proof of personal survival after death.

Nor a permanent end to war. (I don't like that prediction any better than you do.)

1950 Prediction of gadgets is a parlor trick anyone can learn; but only a fool would attempt to predict details of future history (except as fiction, so labeled); there are too many unknowns and no techniques for integrating them even if they were known.

Even to make predictions about overall trends in technology is now most difficult. In fields where before World War II there was one man working in public, there are now ten, or a hundred, working in secret. There may be six men in the country who have a clear picture of what is going on in science today. *There may not be even one.*

This is in itself a trend. Many leading scientists consider it a factor as disabling to us as the nonsense of Lysenkoism is to Russian technology. Nevertheless there are clear-cut trends which are certain to make this coming era enormously more productive and interesting than the frantic one we have just passed through. Among them are:

Cybernetics: The study of communication and control of mechanisms and organisms. This includes the wonderful field of mechanical and electronic "brains"—but is not limited to it. (These "brains" are a factor in themselves that will speed up technical progress the way a war does.)

Semantics: A field which seems concerned only with definitions of words. It is not; it is a frontal attack on epistemology—that is to say, *how* we know *what* we know, a subject formerly belonging to longhaired philosophers.

New tools of mathematics and logic, such as calculus of statement, Boolean logic, morphological analysis, generalized symbology, newly invented mathematics of every sort—there is not space even to name these enormous fields, but they offer us hope in every field—medicine, social relations, biology, economics, anything.

Biochemistry: Research into the nature of protoplasm, into enzyme chemistry, viruses, etc., give hope not only that we may conquer disease, but that we may someday understand the mechanisms of life itself. Through this, and with the aid of cybernetic machines and radioactive isotopes, we may eventually acquire a rigor of chemistry. Chemistry is not a discipline today; it is a jungle. We know that chemical behavior depends on the number of orbital electrons in an atom and that physical and chemical properties follow the pattern called the Periodic Table. We don't know much else, save by cut-and-try, despite the great size and importance of the chemical industry. When chemistry becomes a discipline, mathematical chemists will design new materials, predict their properties, and tell engineers how to make them—without ever entering a laboratory. We've got a *long* way to go on that one!

Nucleonics: We have yet to find out what makes the atom tick. Atomic power?—yes, we'll have it, in convenient packages—when we understand the nucleus. The field of radioisotopes alone is larger than was the entire known body of science in 1900. Before we are through with these problems, we may find out how the universe is shaped and *why.* Not to mention enormous unknown vistas best represented by ?????

Some physicists are now using two time scales, the T-scale, and the tau-scale. Three billion years on one scale can equal an incredibly split second on the other scale—and yet both apply to you and your kitchen stove. Of such anarchy is our present state in physics.

For such reasons we must insist that *the Age of Science has not yet opened.*

(Still 1950) The greatest crisis facing us is not Russia, not the Atom Bomb, not corruption in government, not encroaching hunger, not the morals of young. It is a crisis in the *organization* and *accessibility* of human knowledge. We own an enormous "encyclopedia"—which isn't even arranged alphabetically. Our "file cards" are spilled on the floor, nor were they ever in order. The answers we want may be buried somewhere in the heap, but it might take a lifetime to locate two already known facts, place them side by side and derive a third fact, the one we urgently need.

Call it the Crisis of the Librarian.

We need a new "specialist" who is not a specialist, but a synthesist. We need a new science to be the perfect secretary to all other sciences.

But we are not likely to get either one in a hurry and we have a powerful lot of grief before us in the meantime.

Fortunetellers can always be sure of repeat customers by predicting what the customer wants to hear . . . it matters not whether the prediction comes true. Contrariwise, the weatherman is often blamed for bad weather.

Brace yourself.

In 1900 the cloud on the horizon was no bigger than a man's hand—but what lay ahead was the Panic of 1907, World War I, the panic following it, the Depression, Fascism, World War II, the Atom Bomb, and Red Russia.

Today the clouds obscure the sky, and the wind that overturns the world is sighing in the distance.

The period immediately ahead will be the roughest, cruelest one in the long, hard history of mankind. It will probably include the worst World War of them all. It might even end with a war with Mars, God save the Mark! Even if we are spared that fantastic possibility, it is certain that there will be no security anywhere, save that which you dig out of your own inner spirit.

But what of that picture we drew of domestic luxury and tranquility for Mrs. Middleclass, style 2000 A.D.?

She lived through it. She survived.

Our prospects need not dismay you, not if you or your kin were at Bloody Nose Ridge, at Gettysburg—or trudged across the Plains. You and I are here because we carry the genes of uncountable ancestors who fought—and won—against death in all its forms. We're tough. We'll survive. Most of us.

We've lasted through the preliminary bouts; the main event is coming up.

But it's not for sissies.

The last thing to come fluttering out of Pandora's Box was Hope—without which men die.

The gathering wind will not destroy everything, nor will the Age of Science change everything. Long after the first star ship leaves for parts unknown, there will still be outhouses in upstate New York, there will still be steers in Texas, and—no doubt—the English will still stop for tea.

Afterthoughts, fifteen years later—(1965)

I see no reason to change any of the negative predictions which follow the numbered affirmative ones. They are all conceivably possible; they are all wildly unlikely by year 2000. Some of them are debatable if the terms are defined to suit the affirmative side—definitions of "life" and "manlike," for example. Let it stand that I am not talking about an amino acid in one case, or a machine that plays chess in the other.

Today the forerunners of synthesists are already at work in many places. Their titles may be anything; their degrees may be in anything—or they may have no degrees. Today they are called "operations researchers," or sometimes "systems development engineers," or other interim tags. But they are all interdisciplinary people, generalists, not specialists—the new Renaissance Man. The very explosion of data which forced most scholars to specialize very narrowly created the necessity which evoked this new non-specialist. So far, this "unspecialty" is in its infancy; its methodology is inchoate, the results are sometimes trivial, and no one knows how to train to become such a man. But the results are often spectacularly brilliant, too—this new man may yet save all of us.

I'm an optimist. I have great confidence in Homo sapiens.

We have rough times ahead—but when didn't we? Things have always been "tough all over." H-bombs, Communism, race riots, water shortage—all nasty problems. But not basic problems, merely current ones.

We have three basic and continuing problems: The problem of population explosion; the problem of data explosion; and the problem of government.

Population problems have a horrid way of solving themselves when they are not solved rationally; the Four Horsemen of the Apocalypse are always saddled up and ready to ride. The data explosion is now being solved, mostly by cybernetics and electronics men rather than by librarians—and if the solutions are less than perfect, at least they are better than what Grandpa had to work with. The problem of government has not been solved either by the "Western Democracies" or the "People's Democracies," as of now. (Anyone who thinks the people of the United States have solved the problem of government is using too short a time scale.) The peoples of the world are now engaged in a long, long struggle with no end in sight, testing whether one concept works better than another; in that conflict millions have already died and it is possible that hundreds of millions will die in it before year 2000. But not all.

I hold both opinions and preferences as to the outcome. But my personal preference for a maximum of looseness is irrelevant; what we are experiencing is an evolutionary process in which personal preference matters, at most, only statistically. Biologists, ecologists in particular, are working around to the idea that natural selection and survival of the fittest is a notion that applies more to groups and how they are structured than it does to individuals. The present problem will solve itself in the cold terms of evolutionary survival, and in the course of it both sides will make changes in group structure. The system that survives might be called "Communism" or it might be called "Democracy" (the latter is my guess)—but one thing we can be certain of: it will not resemble very closely what either Marx or Jefferson had in mind. Or it might be called by some equally inappropriate neologism; political tags are rarely logical.

For Man is rarely logical. But I have great confidence in Man, based on his past record. He is mean, ornery, cantankerous, illogical, emotional—and amazingly hard to kill. Religious leaders have faith in the spiritual redemption of Man; humanist leaders subscribe to a belief in the perfectibility of Man through his own efforts; but I am not discussing either of these two viewpoints. My confidence in our species lies in its past history and is founded quite as much on Man's so-called vices as on his so-called virtues. When the chips are down, quarrelsomeness and selfishness can be as useful to the survival of the human race as is altruism, and pigheadedness can be a trait superior to sweet reasonableness. If this were not true, these "vices" would have died out through the early deaths of their hosts, at least a half million years back.

I have a deep and abiding confidence in Man as he is, imperfect and often unlovable—plus still greater confidence in his potential. No matter how tough things are, Man copes. He comes up with adequate answers from illogical reasons. But the answers work.

Last to come out of Pandora's Box was a gleaming, beautiful thing —eternal Hope.

(1980—I see no point in saying more. R.A.H.)

THE ANSWERS

N.B.: All trips are Earth parking orbit to Earth parking orbit without stopping at the target planet (Mars or Pluto). I assume that Hot Pilot Tom Corbett will handle his gravity-well maneuvers at Mars and at Pluto so as not to waste mass-energy—but that's his problem. Now about that assumption of "flat space" only slightly uphill: The Sun has a fantastically deep gravity well; its "surface" gravity is 28 times as great as ours and its escape speed is 55+ times as great—but at the distance of Earth's orbit that grasp has attenuated to about one thousandth of a gee, and at Pluto at 31.6 A.U. it has dropped off to a gnat's whisker, one *millionth* of gee.

(No wonder it takes 2½ centuries to swing around the Sun. By the way, some astronomers seem positively gleeful that *today* Pluto is not the planet farthest from the Sun. The facts: Pluto spends nine-tenths of its time outside Neptune's orbit, and it averages being 875,000,000 miles farther out than Neptune—and at maximum is nearly 2 billion miles beyond Neptune's orbit (1.79 x 10^9 miles)—friends, that's more than the distance from here to Uranus, nearly four times as far as from here to Jupiter. When Pluto is out there—1865 or 2114 A.D.—it takes light 6 hours and 50 minutes to reach it. Pluto—the Winnuh and still Champeen! Sour grapes is just as common among astronomers as it is in school yards.)

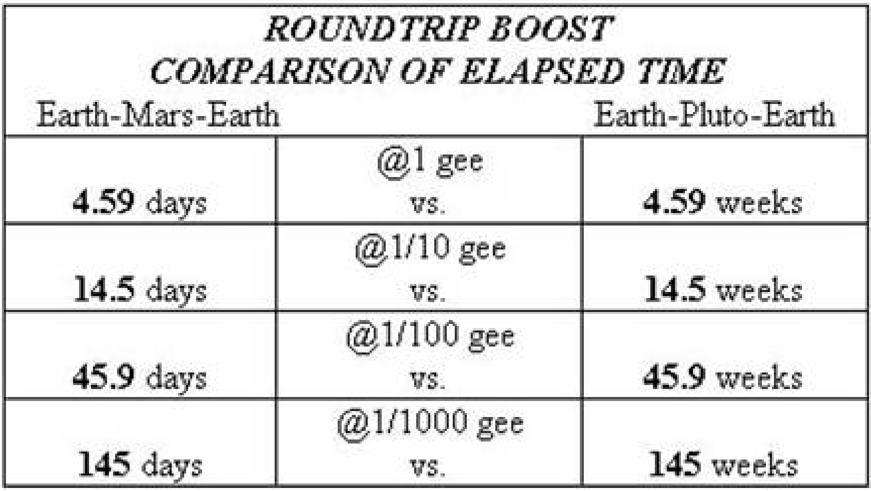

ROUNDTRIP BOOST
COMPARISON OF ELAPSED TIME

Earth-Mars-Earth		Earth-Pluto-Earth
4.59 days	@1 gee vs.	**4.59** weeks
14.5 days	@1/10 gee vs.	**14.5** weeks
45.9 days	@1/100 gee vs.	**45.9** weeks
145 days	@1/1000 gee vs.	**145** weeks

—and the rabbit is out of the hat. You will have noticed that the elapsed-time figures are exactly the same in both columns, but in days for Mars, weeks for Pluto—i.e., with constant-boost ships of any sort Pluto is *only 7 times* as far away for these conditions as is Mars *even though in miles Pluto is about 50 times as far away.*

If you placed Pluto at its aphelion (stay alive another century and a quarter—quite possible), at one gee the Pluto round trip would take 5.72 weeks, at 1/10 gee 18.1 weeks, at 1/100 gee 57.2 weeks—and at 1/1000 gee 181 weeks, or 3 yrs & 25 wks.

I have added on the two illustrations at 1/1000 of one gravity boost because today (late 1979 as I write) we do not as yet know how to build constant-boost ships for long trips at 1 gee, 1/10 gee, or even 1/100 gee; Newton's Third Law of Motion (from which may be derived all the laws of rocketry) has us (temporarily) stumped. But only temporarily. There is $E = mc^2$, too, and there are several possible ways of "living off the country" like a foraging army for necessary reaction mass. Be patient; this is all very new. Most of you who read this will live to see constant-boost ships of 1/10 gee or better—and will be able to afford vacations in space—soon, soon! I probably won't live to see it, but *you* will. (No complaints, Sergeant—I was born in the horse & buggy age; I have lived to see men walk on the Moon and to see live pictures from the soil of Mars. I've had my share!)

But if you are willing to settle today for a constant-boost on the close order of magnitude of 1/1000 gee, we can start the project later this afternoon, as there are several known ways of building constant-boost jobs with that tiny acceleration—even light-sail ships.

I prefer to talk about light-sail ships (or, rather, ships that sail in the "Solar wind") because those last illustrations I added (1/1000 gee) show that we have the entire Solar System available to us *right now*; it is not necessary to wait for the year 2000 and new breakthroughs.

Ten weeks to Mars . . . a round trip to Pluto at 31.6 A.U. in 2 years and 9 months . . . or a round trip to Pluto's aphelion, the most remote spot we know of in the Solar System (other than the winter home of the comets).

Ten weeks—it took the Pilgrims in the *Mayflower* nine weeks and three days to cross the Atlantic.

Two years and nine months—that was a normal commercial voyage for a China clipper sailing out of Boston in the last century . . . and the canny Yankee merchants got rich on it.

Three years and twenty-five weeks is excessive for the China trade in the 19th century . . . but no one will ever take that long trip to Pluto *because Pluto does not reach aphelion until 2113* and by *then* we'll have ships that can get out there (constant boost with turnover near midpoint) *in three weeks.*

Please note that England, Holland, Spain, and Portugal all created worldwide empires with ships that took as long to get anywhere and back as would a 1/1000-gee spaceship. On the high seas or in space it is not distance that counts but *time.* The magnificent accomplishments of our astronauts up to now were made in free fall and are therefore analogous to floating down the Mississippi on a raft. But even the tiniest constant boost turns sailing the Solar System into a moneymaking commercial venture.

BOOK REVIEW

SHELLS AND SHOOTING, Willy Ley Modern Age Books, 160 pp., illustrations and diagrams ($2.00).

I once knew a man who could not afford to get married because he was the sole support of two cameras and five guns.

Later on he sold the cameras to buy another gun. Guns are like that. It is not necessary to be a hunter, not necessary to be in any wise bloodthirsty in order to be a gun crank. The true crank is much more interested in hitting an arbitrary mark on a paper target than in shooting at live things, for he wants to be able to measure his results —it is a mathematical passion. In fact it is not even necessary to shoot guns at all in order to be a gun crank. To be sure it is very pleasant indeed actually to fire guns, to hear them speak and feel the surging recoil. It is a sensuous pleasure, but not a vulgar one. The small-bore enthusiast seems as pleased at the pipsqueak *spat!* of his dainty toy as the gun captain of the sixteen-inch naval gun does at the virile, bass, deck-shivering *Wha—HOOM!* of his dinosaurian giant. The stubby fortyfive makes a *CRACK!* that hurts the eardrums; the Infantry's thirty-ought-three goes *Ka-POW!* and rolls the sound around the range; a machine gun chuckles like a demented sewing machine. Fine clean sounds, all of these, and inspiring a pure passion.

But not necessary to the devotee of the art. Mr. Ley does not own a gun. I doubt if he has fired one in years. Like the troubadour of other days it is not needful for him to lay a finger on his lady's hem for him to sing her praises.

Mr. Ley probably knows as much about the history and development of gunnery as any man alive and his treatment of modern weapons is authoritative and meticulously accurate. Portions of this book first appeared in the *United States Naval Institute Proceedings* and in the *Coast Artillery Journal.* These are scientific journals, for the professional, and Mr. Ley's work measures up in every way to their exacting standards—but the entire book is written with the sparkle, the good humor, the wit that regular readers of *Astounding* have long associated with Willy Ley's writings. It is a thoroughly delightful book.

"Shells and Shooting" might well be adopted as a first textbook in ordnance for student professionals. (I am informed that it has already received the official O. K. of Army Ordnance and of the censors as a

desirable book for the civilian to read.) About half of the book is concerned with the history of guns and with the ancient masters of the "Black Art"; the other half concerns contemporary weapons, their anatomy and tactical uses. I am not the sort of reviewer who synopsizes the work being reviewed in such a fashion that the reader need not bother to read the book itself. It is my intention to tempt you into laying two dollars on the line in order that Willy may get his cut in royalties.

Therefore, a *few hors d'oeuvres* and I'll call it day:

Sorry, but the Chinese did not invent guns. See Chapter I.

It has frequently been asserted that guns ended the age of the feudal knights because the armor of knights could not stop a musket ball. Sorry—but the guns of the time could not do more than dent armor, whereas a shaft from a longbow could penetrate. Nevertheless guns spelled *kaput* to knights in armor for an entirely different and purely economic reason. See Chapter I.

What is the highest above the surface of the earth ever reached by a manmade object? Stratosphere balloon? Sounding balloon? Rocket? Antiaircraft fire? No, the altitude record is still held by the German gun which shelled Paris in World War I—thirty miles. That may not seem far out in space to followers of the Gray Lensman, but it is hard vacuum out there. Thirty miles is more than twice as high as anything else ever reached.

Who built the biggest gun? And when? Where would you find an account of it? Last question first: In Gibbon's "Decline and Fall of the Roman Empire!" The gun was built by "Urban the Hungarian" for Sultan Mahomet II to be used in the siege of Constantinople. It fired a stone ball *one yard* thick. (Our biggest modern rifles fire a shell sixteen inches thick.)

I have saved the part that amused me the most 'till the last. Did it ever occur to you to wonder about "the rocket's red glare, the bombs bursting in air"? Does it not sound more like *this* war than the War of 1812? Signal rockets, you say? Sorry—Congreve's bombardment rockets, standard equipment in the British services for many years. The United States army adopted bombardment rockets shortly thereafter and continued to stock them until the Eighties. During the last century most major powers had rocket corps. Yet to the layman who does not read sciencefiction, a rocket is a Buck Rogers gadget, impossible and ridiculous. Yet the *war* rocket, the rocket as a weapon, is much older than the gun. You see—but never mind; you'll be reading about it in "Shells and Shooting." —R. A. Heinlein.

Agape and Eros: The Art of

Theodore Sturgeon

BY ROBERT A. HEINLEIN

GODBODY

"The Last of the Wine."

And the best.

Sometimes (not often) the last work of an artist, published after his death, is the capstone of his art, summing up what he had been telling the world all his life. In writing *Godbody* Theodore Sturgeon achieved this crowning statement. Again and again for half a century he has given us one message. In *Godbody* he tells us still again, and even more emphatically, the same timeless message that runs through all his writings and through all his living acts—a message that was ancient before he was born but which he made his own, then spoke it and sang it and shouted it and sometimes scolded us with it:

"Love one another."

Simple. Ancient. Difficult.

Seldom attained.

Early this century; before World War I, I was taught in Sunday school that Jesus loves us, you and me and everyone, saint and sinner alike. Then the Kaiser raped poor innocent Belgium, and never again did the world seem sweet and warm and safe. Today I cannot promise you that Jesus loves you, but I can assure you that Ted Sturgeon loves you ... did love you and does today—"does," present tense, because what I still hold of my childhood faith includes a conviction that Ted did not cease to be when his wornout body stopped breathing. It may be that villains die utterly. But not saints.

In fifty years of storytelling Sturgeon spoke to us of love, again and again and yet again, without ever repeating himself. One of the marks of his art was his unique talent for looking at an old situation from a new angle, one that no one else had ever noticed. He did not imitate (and could not be imitated) ... and each of his stories was a love story.

Examples:

"Bianca's Hands." (That one? A story so horrible that editors not only bounced it but blacklisted the author? Yes, that one.)

"The World Well Lost." (A love story, obviously—one about homosexuals. But please note that the copyright on it is 1953, many years before "gay pride" was even whispered, much less shouted. And Ted was not speaking in defense of himself but out of empathy for others. Ted was not even mildly homosexual. You can check this for yourself if you wish. I have no need to; I knew him intimately for more than forty years.)

"Some of Your Blood." (Go back and read it again. Yes, George Smith makes Count Dracula look like a tenderfoot Scout. But Sturgeon invites you to look at it from George Smith's angle.)

And so on, story after story for half a century. Some of Sturgeon's yarns had adventure trappings, or sciencefiction gadgets, or fantasy/ weird/ horror props, or whodunnit gimmicks or other McGuffins, but in each, tucked away or displayed openly, you will find some searching comment on love, a new statement, not something borrowed from another writer.

In addition to this prime interest Ted was alive to every facet of the world around him: He had a lifelong passion for machinery; his interest in music was intense and professional; he delighted in travel; he relished teaching others what he had learned—but above all and at all times, waking and sleeping, he loved his fellow humans and expressed it in all aspects of his life.

I first met Theodore Sturgeon in 1944. He had just returned from the Caribbean, where he had been a heavy-machinery operator building airstrips for the U.S. Army Air Force. That job played out in '44; no more airfields were being built in the Antilles; the emphasis was shifting to the Pacific Theater. Ted was 4-F, a waste of skin; his draft board laughed at him. He was not even eligible for limited service. Rheumatic fever in his highschool days had left him with a heart so disabled that simply staying alive through each day was a separate miracle.

That damaged heart not only kept Ted out of military service; ten years earlier it had robbed him of his dearest ambition: to be a circus acrobat. In high school, by grueling daily practice, he had transformed himself from that fabled ninety-pound weakling into a heavily muscled and highly skilled tumbler, one who could reasonably hope to join someday the "Greatest Show on Earth." Then one morning he woke up ill.

He recovered ... but with a badly damaged heart. A circus career was out of the question, and many other pursuits were foreclosed. Eventually his disability forced him into the one career open to anyone whose body is warm and mind still functioning: freelance writing.

I once collected notes for an essay—the relation between physical disability and the literary pursuit; or Shakespeare was 4-F and so was Lord Byron and Julius Caesar and Somerset Maugham—and what's your excuse, brother? Was it a queasy itch to see your name in print and a distaste for hard work? Or was it diabetes (polio, consumption, heart trouble) and a pressing need to pay the rent?

If we limit the discussion to science fiction, I can recall offhand several writers who got into the business not from choice but from physical disability coupled with financial necessity: Theodore Sturgeon, Robert A. Heinlein, Cleve Cartmill, H. G. Wells, Fletcher Pratt, Daniel F. Galouye, J. T. McIntosh. Each on this list wound up as a freelance writer through physical limitations that crowded him into it ... and I am sure that the list could be much longer, if we but knew.

So what was Sturgeon doing running bulldozers and backhoes and power shovels? Driving a Daisy Eight is not as easy as driving a car; rassling a dozer is no job for a man with a bad heart.

The answer is simple: Ted never paid any more attention to his physical limitations than he was forced to, and in wartime the physical examination for a civilian employee of the army or navy consisted of walking past the surgeon, who would then mark the prospect "fit for heavy manual labor." I am not joking. In World War II, I hired many civilians for the Navy Field Service; the Army Field Service was not more demanding than we were—or we would have snatched their prospects away from them. This was a time when any warm body would do. A typist was a girl who could tell a typewriter from a washing machine. (Later we took out the washing machine.)

So Ted built airstrips in broiling sun and 120-degree heat and failed to drop dead. He outlasted the job and then came to New York.

I think Ted worked for a while for the University of California, in the Empire State Building, with John W. Campbell, Jr., the editor of *Astounding Science Fiction,* as his supervisor. No, I have not jumped my trolley; at that time the University of California occupied one entire floor in the Empire State Building. Campbell was supervisor in a classified section that wrote radar operation and maintenance manuals —and even the word "radar" was classified; one did not say that word. (And didn't even *think* the word "uranium," not even in one's sleep.)

I am not certain what work Ted did, because in 1944 one did not poke into another man's classified work. I knew a trifle about this radar project because I had a radar project of my own, with a touch of overlap. But Campbell is dead now, and so is George O. Smith and so is Ted; I can't check. (Ted's wife Jayne can't be certain; I am speaking of the year she was born.)

As may be, Ted was writing at night for Campbell and sharing lodging with Jay Stanton, who was both Campbell's assistant supervisor on the radar writing project and Campbell's assistant editor at Street and Smith ... and all three men were part of another project I ran for OpNav-23, a brainstorming job on antikamikaze measures. (I was wearing three hats, not unusual then. One tended to live on aspirin and soothing syrup.)

I had been ordered to round up sciencefiction writers for this crash project—the wildest brains I could find, so Ted was a welcome recruit. Some of the others were George O. Smith, John W. Campbell, Jr., Murray Leinster, L. Ron Hubbard, Sprague de Camp, and Fletcher Pratt. On Saturday nights and Sundays this group usually gathered at my apartment in downtown Philadelphia.

At my request Campbell brought Sturgeon there. My first impression of Sturgeon was that no male had any business being that pretty. He was a golden boy, one that caused comparisons with Michelangelo's David. Or Baldur. He was twenty-six but looked about twenty. He was tall, straight, broadshouldered, and carried himself with the grace of a tightwire artist. He had a crown of golden curls, classic features and a sweet, permanent smile.

All this would have been inexcusable had it not been that he was honestly humble and warmly charming. When others spoke, Sturgeon listened with full attention. His interest in others caused one to forget his physical beauty.

My flat was about three hundred yards from the Broad Street Station; people came to these meetings from Washington, Scarsdale, Princeton, the Main Line, Manhattan, Arlington, etc.; my place was the most convenient rendezvous for most of the group. No one could drive a car (war restrictions), but the trains every thirty minutes on the Pennsylvania Railroad could get any member of the group there in two hours or less. It was a good neutral ground, too, for meetings that might include several officers (lieutenant to admiral), a corporal from OSS, a State Department officer, one sergeant, civil servants ranging from P-1 to P-6, contractors' employees with clearances up to "top secret" but limited by "need to know," and civilians with no official status and no clearance. I never worried about security because there was always one member of naval intelligence invariably present.

On Saturday nights there would be two or three in my bed, a couple on the couch and the rest on the livingroom floor. If there was still overflow, I sent them a block down the street to a friend with more floor space if not beds. Hotel rooms? Let's not be silly; this was 1944.

The first weekend Sturgeon was there he slept on the hall rug, a choice spot, while both L. Ron Hubbard and George O. Smith were in the overflow who had to walk down the street. In retrospect that seems like a wrong decision; Hubbard should not have been asked to walk, as both of his feet had been broken (drumhead-type injury) when his last ship was bombed. Ron had had a busy war—sunk four times and wounded again and again—and at that time was on limited duty at Princeton, attending military governors' school.

On Sunday afternoon the working meeting was over, and we were sitting around in my living room. Ron and Ted had been swapping stories and horrible puns and harmonizing on songs—both were fine vocalists, one baritone, one tenor. I think it was the first time they had met, and they obviously enjoyed each other's company.

Ron had run through a burlesque skit, playing all the parts; then Ted got up and made a speech "explaining" Marxism and featuring puns such as "Engels with dirty faces" (groan), and ending with "then comes the Revolution!" At that last word he jumped straight up into the air and into a full revolution—a back flip. His heels missed the ceiling by a scant inch, and he landed as perfectly as Mary Lou Retton on the exact spot on which he had been standing.

This with no warning—which is how I learned that Ted was a tumbler. This in a crowded room. This with no windup. I don't think he could have done it in a phone booth but he did not have much more room.

Ron Hubbard leaned toward me, said quietly into my ear, "Uh huh, I can see him now, a skinny kid in a clown suit too big for him, piling out of that little car with the other clowns and bouncing straight into his routine.

Ron was almost right.

I think it was a later weekend that we learned of Ted's incredible ability to produce just from his vocal cords, no props, any sound he had ever heard—traffic noises, train noises, shipboard noises, animals, birds, machinery, any accent whatever.

Here is the first one I asked for: A frosty morning, a buzzsaw powered by a two-cycle engine cranked by a line. Start the engine despite the freezing weather, then use the saw to cut firewood. The saw hits a nail in the wood.

I'm sorry I can't offer you a tape. Ted scored a cold four-oh.

Thirty-three years later, in front of a large audience at San Diego ComiCon, I asked Sturgeon to repeat that buzzsaw routine, defining it again for him, as he had forgotten ever doing it. He thought for a few seconds, then did it. Another four-oh.

The second one I demanded was this: A her lays an egg, then announces it. The farm wife shoos her off the nest long enough to grab the egg and replace it with a china egg.

Another perfect score—I do not know when or where Sturgeon coped with cranky two-cycle engines or with temperamental hens . . . but this farm boy now speaking can testify that Ted had been there in each case and could reproduce the sounds as exactly as any equipment from Sony or Mitsubishi.

I hope that someone somewhere has taped and preserved some of Sturgeon's jokes in dialect. I would like to hear again the one about the pub in London where one could get a bit of bread, a bit of cheese, a pint of bitter, a gammon of Yorkshire ham, a bit of pudding and a go with the barmaid, all for two and six. Try to imagine all *that.* Was anyone running a recorder?

Ted's ear was phenomenal and not limited to parlor tricks. Mark Twain said that the difference between the right word and almost the right word was the difference between lightning and a lightning bug.

Sturgeon did not deal in lightning bugs. *Exempli gratia:*

Godbody is written in multiple first person, a difficult narrative technique, believe me. Try this experiment. After you read *Godbody,* open it up anywhere, read three lines. Note the page number and write down who, in your opinion, is speaking. Do this several times.

Better yet, have someone help you, so that you do not know where the sample comes from—beginning, middle or end.

I predict that you will call correctly which of eight characters spoke each of these small samples.

Yet Sturgeon makes almost no use of spelled-out eccentricities of speech or other flags to mark his characters. Flagging is mechanical, a device any hack writer can copy. What Sturgeon does is subtle—each character has his own voice. How do you know at once who is calling on the telephone, if the caller is one familiar to you? By the caller's voice, of course.

How does Sturgeon do this? First let's dissect Paderewski's hands to learn how he played the piano; then we'll dissect Sturgeon's brain to learn how he could give an imaginary person his own unique voice. Art on this level resists analysis; the critic who tries it gets egg on his face.

Godbody—Forget about art and enjoy it. Some readers will feel that it is XXX-rated pornography. They will have plenty to go on.

Others will see it as a tender, gentle love story. They'll be right.

Many will find it offensively coarse in language (people of my generation, especially). It does contain every one of the "seven words that must never be used on television," plus four or five more that can't be used but never got on the verboten list.

Others will see that Ted has always used the exact word—always "lightning," never "lightning bug." Those four-letter shockers are essential.

Some will complain that *Godbody* is loaded with sex and violence.

Others may answer that "Hamlet" ("Romeo and Juliet," the Old Testament, *Le Morte d'Arthur)* is nothing but sex and violence.

Some will denounce *Godbody* as baldly sacrilegious. They'll be right.

Others will see it as tenderly and beautifully reverent. And they will be right.

Others will say, "Yes, it's a great story. But why did he have to stick so much nudity into it?"

I'll answer that one myself, since it is too late to ask Sturgeon. God must love skin since he makes so much of it. Covering it with cloth or leather or fur in the name of "decency" is a vice thought up by dirty old men; don't blame it on God.

Never mind what anyone says about this book. Read it, enjoy it, reread it, give it to someone you love. It is our last love letter from a man who loves all of us. Make the most of it today. Then keep it for a day when you are downhearted and need what it gives you.

And don't be afraid to love.

—R.A.H, September, 1985

THE WITCH’S DAUGHTERS

Have no truck with the
daughters of Lilith.
Pay no mind to the
redheaded creatures.
Man, be warned by their
sharp, white teeth;
Consider their skulls, and their
other queer features.

They’re not of our tribe, with their
flame-colored hair;
They’re no sib to us, with their
pale, white skins;
There’s no soul behind those
wild green eyes
Man, when you meet one-
walk widdershins!

When they die, they pop,
like burst soap bubble
(Eight hundred years
is their usual span).
Loving such beings
leads only to trouble.
By Heaven, be warned,
you rash young man!

August 1946

THE ROBERT HEINLEIN INTERVIEW

Conducted by J. Neil Schulman June 30, 1973

Note : This interview appears *exactly* as it was edited by Robert A. Heinlein in 1973, with no deletions, additions, or changes.—JNS, 1996

SCHULMAN: All right. Why don't we start with question number one?

HEINLEIN: Question number one: "Do you believe time travel is possible or is it merely a fictional device?"

There is no basis for belief or non-belief in this question, Neil. We don't have any data from which to work. There is at present no satisfactory theory of time. We haven't the slightest idea of how you might get your teeth into the fabric of time--whatever it is. Time travel, *as of now*, comes under the head of fantasy, inasmuch as it requires one to postulate something about which we know nothing. I *do not* regard time travel as either impossible or possible. I have no opinion about its possibility or impossibility because we have no data on which to make a judgment. But it makes an excellent device for telling stories, particularly stories that speculate about the condition of mankind and his future, and so forth and so on; it's been used almost entirely for that purpose, including *A Connecticut Yankee In KIng Arthur's Court* which is very largely a social and political pamphlet expressed in story form, to go back to a time-travel story of the last century and one which doesn't even use a time machine--it just postulates it. And the same thing is true, of course, of H.G. Wells' *Time Machine* and his *When The Sleeper Wakes*. In both cases he was using a time-travel device in order to permit him to speculate about the human condition.

SCHULMAN: If you *did* manage to find a time machine, would you go back and try strangling yourself as an infant to see if the universe would collapse around you?

HEINLEIN: No I wouldn't try it. [laughter] In the first place, I am not at all unhappy about having lived the life I've lived. In the second place, if I strangled the infant and the universe collapsed around me thereby--the solipsist's point of view--then I would have proved my point by *failing* to prove my point. I mean you wind up with a zero--with no *observer*, follow me? You wouldn't know if it worked or *not.* If you're going to engage in the notion that the universe ceases to exist if you die, then you're not entitled to an observer *outside* that to see what happens. Solipsism has its own logical paradoxes.

SCHULMAN: Okay. We might as well proceed to question number two, then.

HEINLEIN: "I'd like to know more about your theory that 'no matter how individualistic you feel, you are really only part of an evolutionary organism.'"

SCHULMAN: Did I quote you correctly on that?

HEINLEIN: You've placed a little emphasis in there: "really *only* a part of." What i believe I said--the book is across the room and I'm not going to dig it out--was that "you *are* part of an evolutionary organism" not "really *only* a part of." Difference in emphasis, do you follow me?

SCHULMAN: Yes.

HEINLEIN: Just as you are J. Neil Schulman and you are also part of the population of an area known as New York City. But it isn't a case of J. Neil Schulman being "really *only* a part of" New York City. You *are* J. Neil Schulman and you also happen to be one of that population group called by that name. Now, *there is* a matter of emphasis here. You say, "Can you prove this?" Well, I can't prove that you are "really *only* a part of" but I observe that you *are* only a part of. No emphasis on it, we simply observe it. You have parents. You have at least the potentiality of offspring. I assume that you go along more or less at least with evolutionary theory.

SCHULMAN: To a certain extent.

HEINLEIN: ...Yes. We simply observe that we are part of this continuing process.

SCHULMAN: Now, I think what I was asking here was the more philosophical question...in other words, I can see that I have parents and come from an evolutionary chain.

HEINLEIN: Yes.

SCHULMAN: But the phrase "evolutionary organism" seems to suggest that you have one being with central control or something...or at least some central *plan*.

HEINLEIN: It doesn't... I don't mean to imply that. Evolutionists differ in their notions as to whether or not there is any central plan or whether the whole matter is automatic, or what it may be. All I really meant is that although we feel as if we were discreet individuals, if you consider it in terms of four dimensions with time as the fourth dimension, you are part of a branch...a branching deal, with an actual physical connection going back into the past and physical connection extending into the future until such a time as it's chopped off. If you have no children then it's chopped off at that point. I have no children myself, however I'm not dead yet, either. I think, however, you are more interested in a later part here: "if so but we retain free will, why should we place the welfare of the whole organism above ourselves?" The question as to whether or not you place the welfare of your species--your race--above yourself is a matter for you to settle with yourself and for me to settle with me.

SCHULMAN: On what basis?

HEINLEIN: [Quoting question] "If you say it's something you can't justify on a purely rational basis, then what other basis is there to justify it?" That's what you're getting at; you're trying to make it as either/or here between rational and irrational.

SCHULMAN: Well...rational and *non*rational in any case.

HEINLEIN: All right. [Long pause] Uh, I'm trying to phrase this clearly. And you say this last question leads up to this next one: "Is there ever any justification to accept something on faith? How can you prove this since by doing so you are inherently rejecting reason as final arbiter?" Now, there are a lot of implications in your question, a lot oh hidden assumptions in your question.

SCHULMAN: I suppose so.

HEINLEIN: Yes, indeed. All the way through this I can see that you regard yourself as a rationalist and you regard reason as the final arbiter on anything.

SCHULMAN: Well, I'm basically starting out with Ayn Rand's Objectivist epistemology.

HEINLEIN: Well, I'm not going to comment on Miss Rand's epistemology; I have notions of my own. Have you read anything by Alfred Korzybski?

SCHULMAN: No, I'm familiar with his work only through your own; you've mentioned him quite a few times.

HEINLEIN: Only through my own. You haven't read *Science and Sanity*, for example?

SCHULMAN: No, I haven't.

HEINLEIN: And you're not familiar with his epistemological approach?

SCHULMAN: Only what you yourself have mentioned.

HEINLEIN: Uh, huh. [interruption] Uh, I've just been talking to Mrs. Heinlein; now let me see.

Let me invert these questions a bit. If you've read *Stranger in a Strange Land*, you've probably gathered what I think of faith. I do not regard faith as a basis on which to believe or disbelieve *anything*. On the other hand, Neil, there are many things--practically all of the important questions of philosophy--are not subject to final answers purely by reason. In my opinion, they are *not* subject to final answers simply by reason. This has been gone into a considerable extent by philosophers in the past, and there's even a term--a technical term--for that called "noumena" as opposed to "phenomena." Phenomena are things that you can grasp through your physical senses or through measurements made with your physical senses through instruments and so forth and so in other words, phenomena are things that we can know about the physical universe. Noumena translates as the *un*knowable things. The unknowable things: What is the purpose of the universe? Why are you here on this earth? What should a man do with his life? All of those wide open, generalized, unlimited "whys." There are all noumena, and consequently they are not subject--consequently *by definition*--these things are not subject to final answers simply by reason. My own attitude on that is shown a bit in several places in this last book [Time Enough For Love] in which Lazarus Long indicates that he hasn't been able to find any purpose to the universe any more significant than gametes using zygotes to create mare gametes. He expresses it that way in one place, then he turns it over, turns it upside down, and expresses it another way to the effect that as far as he knows, there's no more important purpose to the universe than making a baby with the help of a woman you love. And yet obviously neither of these things are answers; they are just expressions of what Lazarus Long happens to like. Now, do you happen to like chocolate malted milks?

SCHULMAN: Uh, yes.

HEINLEIN: Now, do you like them better than *strawberry* malted milks?

SCHULMAN: Yeah, I would say so.

HEINLEIN: Can you justify that by reason?

SCHULMAN: No, I would say that it's a purely subjective judgment.

HEINLEIN: That's right. That is correct. It doesn't involve faith and it doesn't involve reason.

SCHULMAN: But I'm using internal data; there *is* data which I am acting upon.

HEINLEIN: That's right. The internal data tells you that you like it better...but it doesn't tell you *why*. This applies also to a great many things about the universe: it's your own internal, subjective evaluation of it, not any final answers given by reason or rationality.

SCHULMAN: This brings up the end of *Methuselah's Children* in which Lazarus Long seems to be taking just about the opposite attitude.

I have a quote here:

"'The last two and a half centuries have just been my adolescence...men...never had enough time to tackle the important questions. Lots of capacity and not enough time to use it properly.'"

And then he's asked: "'How do you propose to tackle the important questions?'

"'How should I know? Ask me again in about five hundred years.'

"'You think that will make a difference?'

"'I do. Anyhow it'll give me time to poke around and pick up some interesting facts...'"

A little later: "'...Maybe there aren't any reasons.'

"'Yes, maybe it's just one colossal big joke with no point to it.' Lazarus stood up and scratched his ribs. 'But I can tell you this...here`s one monkey who's going to keep on climbing, and looking around him to see what he can see, as long as the tree holds out.'"

HEINLEIN: And that's exactly what he's doing at the end of the next book.

SCHULMAN: Just holding on.

HEINLEIN: Uh, yes. In the mean time it is postulated that he's had a couple of thousand years trying this, that, and the other thing, and he has reached *one* point. He has reached *one* opinion; it's stated flatly in the early part of the book: that you cannot get final answers about the universe from *inside*. He said you'd have to get outside and take a look at it. And the man he's talking to, Weatheral, says: "Then you believe in immortality?" [In the book, the word "afterlife" is used.] And Lazarus says, "Wait, wait, wait, wait, now--hold everything! I didn't say I believed in immortality; I don't *believe* in anything. Because belief gets in the way of *facts*." He's made certain observations and they've given him certain limited opinions, and among the limited opinions he has is the one working hypothesis that there *are no* final answers to be obtained from human being inside the universe, that the position of observation doesn't permit that--to get any final answers. Follow me?

SCHULMAN: Okay.

HEINLEIN: There's nothing inconsistent about the end of *Methuselah's Children* and what the man has to say a couple of thousand years later; it's just that he's had a couple of thousand years *trying* this that he said he was going to try and he still hasn't gotten any *final* answers.

SCHULMAN: I suppose this leads up to question number fifteen on page two.

HEINLEIN: Question fifteen on page two: "What would a 2,300 year old man know that we don't?" Neil, I haven't the slightest idea; I'm not even a hundred, yet! Remember, this thing's a work of *fiction*. "Wouldn't it take a 2,300 year old man to *write* the memoirs of Lazarus Long?" Of course it would, but do you know any? This is a work of fiction. If I've managed to make him at all convincing as an extremely old man--not necessarily twentythree centuries but extremely old--then it's successful as a work of art, as a work of fiction. If it entertains the reader in the course of doing that then it's a *commercially* successful work of art. But I am not twentythree hundred years old; I'm not even a century, yet.

SCHULMAN: I just wanted to check that out.

HEINLEIN: All right.

HEINLEIN: [Reading next part of question] "How did Shaw's *Back* *to Methuselah* influence this if at all?"

I read Shaw's *Back to Methuselah* about ten years before I started writing--oh, sometime in the thirties. I haven't looked at it since, don't remember it too clearly. I've read most of Shaw's plays and some of his essays and I suppose I've been influenced by him, just as I've been influenced by everything I've ever read, seen, tasted, felt, so forth and so on. But as for specific influence of one book on the other, they're rather different. As I recall, in the latter part of *Back to Methuselah* everyone has gotten extremely cautious because they`re afraid they might die. They've got so much to lose. Lazarus Long never suffers from that although I do indicate that some of the other Methuselahs or Howard people do have a bit of that trouble. But, I don't remember it too well; after all, I didn't see the play: I read it *once* something over forty years ago--or just about forty years ago--and I've never reread it since.

SCHULMAN: I think what I was referring to was a specific line that Richard Friedman, our *NLN* review editor [when this was taped], pointed out to me--something along the line that it would take long life to plan anything, that we simply don't have enough time to decide what the questions are to ask.

HEINLEIN: Oh, yes; I agree with that, and this also makes it difficult for me to pretend to be a twentythree century old man because, as I pointed out to you, I'm not even a century yet. I've noticed that you've paid quite a bit of attention to *Have Space Suit--Will Travel*. Do you recall in there, I think it's the Mother Thing appealing on behalf of the human race: "But my lord peers, they are all so very *young*." She's asking a certain amount of forbearance for the human race because it's so young. And that's about the situation we're in: our civilization is very young. None of us live long enough to cope with too much. About the time we begin to get our thoughts straightened out we begin to go senile. Or, in the mean time, we've been knocked over by a taxicab or died of the plague or something else. We *don't* live that long.

Shall we finish the rest of that same question?

SCHULMAN: Okay.

HEINLEIN: "Do you have any comments on the Wandering Jew legends which you've made reference to in several of your books?"

I don't recall the other references I've made to it but throughout my books I refer constantly to mythological matters, biblical matters, so forth and so on. Call these cultural ties, if you like. It comes under the head of putting a little flavor in the stew, that's all. The Wandering Jew legend, I really don't know anything about it. The *Encyclopedia Britannica* doesn't have much to say about it. It's apocryphal; there have been some good stories from it. General Lew Wallace's *The Prince* *of India*--which isn't nearly as well known as his book *Ben Hur* from which this movie was made--was based on the Wandering Jew legend and there have been several others. It's a nice, romantic legend that has considerable story value to it. You might say that I grabbed it and renamed him Lazarus Long and made this book out of it.

SCHULMAN: That's one of the first things I was thinking--that you might've been intending Lazarus Long to be the Wandering Jew--until he made reference to having met him.

HEINLEIN: As I recall--I seem to recall writing that paragraph--I don't think I specifically used it-- Sometime one does put something like that into a story in order the deny an assumption of that sort? I don't think I put it in for that purpose; I think it was just Lazarus Long enjoying one of his *whoppers* again. Lying in his teeth! [laughter]

SCHULMAN: Is there anything in the book he *believed*?

HEINLEIN: Oh, sure. If you examine the fashion in which it is written, the story of the adopted daughter is written cold sober all the way through.

SCHULMAN: That was, if I remember, third person?

HEINLEIN: No, it's both third person and first person, because part of it is narration recounting the events that take place on New Beginnings and part of it he's talking to the computer, Minerva. But he's being dead serious all the way through. But when he's simply engaged in conversation with other people...Mark Twain once said, "First research the facts. Then distort them to prove your case." [laughter] This character is sort of a Mark Twain character. I even have him come from Mark Twain's general part of the country. The Ozarks are noted for their whoppers.

SCHULMAN: Okay. What about the story of David Lamb?

HEINLEIN: David Lamb? What about him?

SCHULMAN: Well, is it based on anybody you know or material you drew from your own Annapolis experience or...?

HEINLEIN: You trying to get me sued? [laughter] This is why author's put disclaimers on the front of books.

SCHULMAN: Which is the biggest lie in any book.

HEINLEIN: Oh, sure. That character is fictional, but it is of course based on various things I knew, experienced, people I've known, when I was in the Navy. And obviously in telling the story Lazarus Long is having fun with it and not necessarily sticking closely to the truth. In fact, even in a casual reading of it, you can see big holes in it--where things don't fit, where the chronology is wrong--where the locations are wrong--all sorts of things.

SCHULMAN: I've only read it three times; I haven't had a chance to analyze it yet.

HEINLEIN: Well, for example, just casually on the side he locates the Naval Academy at West Point.

SCHULMAN: I'd thought that was just a failing of memory.

HEINLEIN: Probably. Possibly. Maybe. In any case, there are things like that through the story; it's not told *at all* in the dead serious way in which "The Tale of the Adopted Daughter" is told. Entirely different sort of story. It's partially a piece of satire. This man, no matter what he did, took the easiest way out, the laziest way out--and it always worked.

SCHULMAN: I can empathize with that.

HEINLEIN: [Laughing] Yes.

SCHULMAN: Would you like to go back to question number four?

HEINLEIN: Sure. Let me turn the pages here; oh, here we are. [Softly;] There's too much on this desk; there's *always* too much on this desk.

"About the space program. I know you are extremely impressed by the accomplishments of NASA. (Well, so am I.)" The accomplishment of NASA that I'm most impressed by is how they manage to take the most romantic subject I know of and by careful application make in incredibly *dull*. [Laughter] I am not disparaging the engineering accomplishments nor the heroic accomplishments of astronauts in saying that. I'm talking primarily about their P.R.O.! [Returning to question] "But since it was financed with tax money"--and your parenthetical remark in there ["(which I believe is the same thing as stolen money)"--JNS]--"isn't the expenditure of any more money by government on space program illegitimate?" Now the word "illegitimate" has a technical meaning, Neil: it means illegal. And the answer to that is that the expenditure is not illegal; it's perfectly legal--the laws are on the books. However, you used it in a philosophical sense. I *think* you used it equivalent to "immoral."

SCHULMAN: Well, you see, I equate legality with being based on natural law, and I see that statutory law is a nullification of that.

HEINLEIN: Well, now natural law--the concept of natural law --is one that many philosophers have tried to put over, but as far as I'm concerned natural law are things like the second law of thermodynamics--that entropy always increases--which could be defined mathematically. Natural law are the facts that we know about the physical world.

SCHULMAN: I believe that also in the "Notebooks [of Lazarus Long]" you have a statement that if you can't talk about it in math, it's not science, it's just opinion.

HEINLEIN: That is correct; if you can't talk about it *quantitatively* it is not science, it is just opinion. And on most of these matters of natural law, each philosopher that's attempted to do this has come up with a different set of natural laws from the one next door. Now, I don't know which philosopher you follow on this. Do I make myself clear?

SCHULMAN: Yes.

HEINLEIN: I should say at this point that my stories have consistently shown space travel being undertaken by private enterprise. That I regard as a matter of taste--my own taste. Which apparently agrees with yours.

SCHULMAN: Right.

HEINLEIN: [Continuing question] "Shouldn't the entire program be turned over to private enterprise to try and make a profit?" I don't like the expression "turned over." Shouldn't the entire program be "sold" to private enterprise?

SCHULMAN: Well, since from anarchistic point of view I don't see that government can legitimately own property...

HEINLEIN: All right; how can they *legitimately* pass on a title to it by "turning it over" to private enterprise?

SCHULMAN: I guess there's a philosophical contradiction in there...

HEINLEIN: Yes.

SCHULMAN: But if you accept the presence of government as an unwanted, already existing thing, you're always backed into corners like that. [This problem is soluble only by postulating a post-revolutionary situation in which anarchocapitalist arbitration agencies are liquidating all government properties and returning them to those victims with valid claims.]

HEINLEIN: Well, in any case..."For example, my colleague at *New Libertarian Notes*, Sam Konkin, says that if he were running the space program he's simply pay back his investment by running shiploads of moon rocks back to earth to sell as ornaments and jewelry." Well, I wonder if Mr. Konkin has considered the economic law of diminishing returns at that point?

SCHULMAN: I think he did take that into account; he had several other schemes like that...The point he was trying to make was that if somebody like him could figure out a way to bring back profits, sooner of later some sort of trade would be built out of this.

HEINLEIN: Oh, yes. I am quite certain that space travel is going to be enormously profitable in the long run. But that particular stunt...By the way, that is included in this enterprise of the Hubbards; I suppose you've heard about that?

SCHULMAN: L. Ron Hubbard?

HEINLEIN: No, no no. *Colonel* Hubbard, and his wife. Let me see. I'd like to find one of their magazines around here; I don't see one offhand and haven't time to look. In any case, they are trying to get together an organization to buy one of the remaining Apollos--to *buy from the government* one of the remaining Apollos--and start in on a *commercial* venture to get the human race out into the solar system and on out. They think it could be done by private enterprise and they're trying to do it. In other words, they have a point of view that is consonant with yours and consonant with mine.

SCHULMAN: We might as well bring in question number ten here, because it's related to number five.

HEINLEIN: All right; let me get to it. Number ten: "This question is related to number five. Have you heard the claims made by Dr. Andrew J. Galambos several years before the space program started that he could put a man on the moon for $100,000? If so, do you have any comments?" Who is Galambos?

SCHULMAN: Galambos is a Californian; he's at the Free Enterprise Institute which is in the Los Angeles area.

HEINLEIN: And what is the doctorate in--do you know?

SCHULMAN: I think it's in economics. [I was incorrect: Galambos's degree is in astrophysics.]

HEINLEIN: How far back did he make this remark?

SCHULMAN: Oh! I can't give anywhere near an exact date; I think it was as far back as the fifties that he was claiming that he had a plan to finance it.

HEINLEIN: Yes. Well, the fifties. I have to consider inflation as to what a hundred thousand dollars meant then and what a hundred thousand means now. Well, let's put it a few years back and figure that he'd be talking about a considerably more than a hundred thousand now; but if it's anything like that recent it wouldn't have more than doubled--the amount he's talking about--in buying power.

Now. I happen to be a quite experienced R and D engineer myself--not in space activities but in aircraft and in high altitudes work, things like that. Also, I built this house from which I'm talking to you right now--built it fairly recently. I spent considerably more than a hundred thousand dollars on it. I know *durn well* that I couldn't *begin* to build a spaceship--completely shut of all the difficulties of working through the government or anything like that; I mean if I simply had the cash and undertook to build it myself--I couldn't begin to build it for anything like a hundred thousand dollars. I do not think that Dr. Galambos is an experienced engineer of *any* sort.

SCHULMAN: I think the point he was trying to make is that if the government had allowed private research to be pursued in this instead of every time something was discovered clamping a top security on it that--

HEINLEIN: The government *did not* do that. On the contrary, everything that NASA puts is *open*.

SCHULMAN: *Everything*?

HEINLEIN: Everything. And they also put out a thing saying; now what subjects are you interested in? As a result of that, having noted several of the subjects that I was interested in, I have received so many, many pounds--so many millions of words--of research reports, that I finally had to move them up into my storehouse because I no longer had library space for them. Everything that NASA puts out, they do not have anything classified. *Nothing*. Now, let me distinguish between anything that the Air Force might be doing. The two activities are conducted separately: the Air Force does have classified espionage satellites, for example. But NASA does not, and they don't work the same places, they don't work together. Everything that NASA does--from the start by law--was to be open and unclassified and it *has* been. This is one of the things that I have cited--and that Arthur Clarke has cited--as being a payoff on the space program right now. Expensively as they've done it, nevertheless all that bread cast on the waters has already come back severalfold in the way of unclassified new technology that doesn't even have patents on it. You can get these things and you can use them all you please. I know that a lot of people are not aware of this but anyone in engineering that has any engineering interest is likely to be aware of it if he has taken the trouble to have himself placed on the mailing list.

SCHULMAN: Well, I guess that was just a mistake on *my* part. [Even more ironic is that Galambos is the father of the theory of primary property that states that *all* ideas are *pri*vate property and should be copyrighted.]

HEINLEIN: Yes. However, the thing that makes it so expensive when you do things through government is the *enormous* amount of bureaucracy and red tape. This is not alone, however, characteristic of government; it is characteristic of almost any big human organization. You get one of those really big corporations and you have a tremendous bureaucratic structure inside the corporation itself.

SCHULMAN: However, I've heard that because of competition demands, if you take the bureaucracy of a private corporation, it's maybe around *ten percent* of that which government manages to generate.

HEINLEIN: Well, I've seen a bit of both and I *don't* think the increase in efficiency on the part of free enterprise is that great. The justification for free enterprise is not that it's more efficient, *but that it's free*! Follow me?

SCHULMAN: Yes.

HEINLEIN: This reminds me of a story--oh, it's from a preface to a book about some civil liberties cases about forty years back; I wish I could remember the author; he was a prominent civil liberties lawyer. But he told this anecdote about down South, some time postbellum, but probably fifty or sixty or seventy years back, in which this

Southern gentleman was attempting to explain to the Yankee friend that the Negro had actually been better off under slavery. He says, "I'll prove it to you." He says, "Oh, Tom, Uncle; come over here." And this old Negro shuffled over. And he said to him, "Uncle, you were a slave, weren't you?"

"Yes, Cap'n."

"Tell me. Do you *eat* as well now as you did when you were a slave?"

"Oh, no, Cap'n. Sometimes pickin's might poor."

"Do you work as hard as you did when you were a slave?"

"Oh, no. I works *lots* harder *now*."

"Do you live in as good a house?"

"That little shack I'm in now, the rain comes in all the time."

He says, "Then you were better off when you were a slave, weren't you?"

And the old Negro *didn't* agree, he *didn't* say yes; he scratched his head and he said slowly, "Boss, there's somethin' about this heah freedom that I lahkes!"

SCHULMAN: [Laughing] Okay.

HEINLEIN: In other words, you don't have to justify private enterprise on the basis of its being more efficient than government--although it *usually* is. Not always, but usually.

SCHULMAN: Well, at least it keeps the bureaucracies running against each other so you have a bit of a choice.

HEINLEIN: Yes, and that's even possible inside the government--I'll tell you about a case in a moment. The justification for free enterprise is that it's *free*. "Sort of a looseness about this heah freedom that I lahkes!" That's all.

SCHULMAN: Okay. I don't need any further justification, myself, either.

HEINLEIN: It's a matter of taste. It's the way you feel about it, It's the way I feel about it. You don't have to prove it.

SCHULMAN: Okay.

HEINLEIN: Oh. Competition. I thought and still think that one of the mistakes that they made in this government was when they converted the Army and Navy into the Department of Defense and created the Air Force Department and simply incorporated it therein. You know what it did? It removed from a government system one of the few examples of healthy competition we see in government. The thing that kept the Navy on its toes was the Army, and the thing that kept the Army on its toes was the Navy, and the point at which they had to fight was right over the appropriations. And they weren't able--either one of them--to judge it for themselves: it was up to the Congress. And they had to *compete*. Now, all through the military service there are attempts to set up competition--oh, between ships, between companies, between squads, so forth and so on--because there are a hell of a lot of military officers--most of them perhaps--who realize that the competition which any socialistic set-up inherently lacks--and the Army and Navy *are* socialistic set-ups--is a shortcoming. It makes it less efficient. So they set up these artificial competitions just to keep them on their toes. There are plenty--Perhaps most professional military men are *acutely* aware that the Army and the Navy do not have it unless they deliberately build it up as a sort of a game.

SCHULMAN: I guess I could bring up the point in question number eleven on page two at this point.

HEINLEIN: All right. "In the 'Notebooks of Lazarus Long' there is a statement that since anarchists and pacifists refuse to support a state, they deserve no protection from that state. Wouldn't you say--at least about anarchists--that this statement is irrelevant because anarchists don't even *want* protection 'from' the state, they want protection *against* it?" Now. Neil. You have in there an assumption contrary to fact. And that is that there is such a thing as anarchists which agree on any one thing. [Laughter] There are as many sorts of anarchism as there are anarchists and you sure as hell know it by now!

SCHULMAN: [Laughing] Yes.

HEINLEIN: You've been in it a relatively short time--I mean by my time scale, not by Lazarus Long's--but you've certainly seen it. How do anarchists spend their time? Why they spend it fighting with *other* anarchists. Isn't that true?

SCHULMAN: [Still laughing] Well, a few of us manage to get along.

HEINLEIN: Well, you sent me first this *New Libertarian Notes* and I noticed that the lead article in there was one panning the hell out of the magazine called *Reason*. [Laughter] And blasting these *revisionists*, *dissidents*, and so forth. There are as many sorts of anarchists as there are anarchists.

SCHULMAN: Okay.

HEINLEIN: Incidentally, I'm delighted to have both magazines in the house as I frequently find something in each of them that disagrees with my own point of view. It does me no good to read something that *agrees* with my own point of view. I want to read something that disagrees with my own point of view, follow me?

SCHULMAN: Okay.

HEINLEIN: You can't learn from a man who agrees with you. But the point I wanted to bring out was that there are one hell of a lot of anarchists who think that there is pie in the sky and that Santa Claus sill lives and that somehow, some way, policemen will still be on the corner no matter if they do away with them. There are an awful lot of starry-eyed ignoramuses among anarchists, Neil--just as there are in any *other* political point of view. And there are plenty of them who *still* expect the government to protect them, and they really don't have imagination enough to visualize a completely lawless situation.

[Therein lies the value of libertarian science fiction--JNS]

SCHULMAN: In a recent book by Harry Browne called *How I Found Freedom In An Unfree World*--I don't know if you're familiar with it or not...

HEINLEIN: I've seen some reviews. I haven't read it. I've seen some reviews and things of it.

SCHULMAN: Well one of the things he brings out in there is the basic anarchocapitalist viewpoint--which he's bringing to the bestselling reading public for the first time--in which he's saying, "Well, suppose you didn't *have* police anymore--what would you do?" And he says, "Well, you'd probably lock your doors and stay out of unsafe neighborhoods and keep your children away from unsavory people--isn't that exactly what you're doing *now*?"

HEINLEIN: Yes.

SCHULMAN: And then he goes on to state the basic difference *we* have with government: that it provides relatively very little protection *at all*; if it does anything it simply provides a little retaliation to act as a deterrent--and it doesn't even do very much of *that*.

HEINLEIN: Well, we could get into a long discussion here of political and anarchist theory; all that I was getting at is that there are many anarchists who don't really get their teeth into that notion that there *could* be anything to be afraid of in an utterly lawless community. Now it is very much to the point to realize that the community is *already* quite lawless, as Harry Browne points out there. I'm one of those self-help people myself. Cop on the corner? I said I was fifteen miles out in the country; I'm fifteen miles from the nearest police service of any sort. It would take over half an hour for a sheriff's car to get here if he started right now. I mean if he were available and started right now. In other words we have no police protection. And, as you may have heard, Santa Cruz is noted as the murder capital of the world; it's a small town and we've had nineteen murders so far this year. Just a second. [pause] I had to shift position; my old bones were getting tired. Well, I believe in self-help. I'm quite a good shot. In fact I used to teach it. And my place is surrounded with a seven-foot-high steel fence topped with barbed wire and controlled by an electric gate....There are a number of people who can't seem to realize that things could be mighty rough--even rougher than they are *now*--if there wasn't the slightest bit of deterrence. I believe in deterrence, myself. I know quite well that there are a number of people walking the streets today alive and well only because there's a law with a certain *implied* punishment--even if it doesn't take place too often--for killing somebody. I'm not talking about anyone in particular either as the object or as the subject; I just say that I *know* that there are many times when somebody would *durn well* get killed if somebody else didn't feel that it was a *little* bit dangerous to go killing somebody. You might get arrested; you might get thrown in the hoosegow, and at least it would cause you dreadful inconvenience even if they didn't hang you.

SCHULMAN: Well, of course, I can agree with the idea of deterrence to a great extent, but I disagree with your premise that you need government to provide the deterrent. Of course my own view is based on the theories of Murray Rothbard and several other people here in the movement, about private protection agencies, and private armies, and settling disputes through private arbitration. Competing agencies.

HEINLEIN: Yes, I've read a good deal of this. I don't think that we can manage to settle matters of detail about political philosophy on the time and toll charges of the *Daily News*. So many things have been opened up at this point that you know quite well that it could go on for days and days and days and many thousands of words. I'm inclined to evaluate those things about private protection agencies and how protection could simply be left to the marketplace about equal to Karl Marx's notion that after the perfected socialism the state would wither away. You remember that was one of the predictions, that socialism led to anarchism through the state withering away. That was the happy condition of the future under Marx's predictions. Well, Marx turned out to be mistaken, at least so far as any evidence of the state withering away is concerned in the numerous countries that call themselves communist.

SCHULMAN: Well, I certainly don't think you had to run a trial run on it to find out; I think it was pretty evident from the inconsistencies in what he was saying.

HEINLEIN: Yes. And, no doubt, you have read a number of things criticizing this notion of leaving protection entirely to the marketplace, too. I would be delighted to see a circumstance under which we needed no laws, no protection, so forth and so on. None of the philosophers that I have encountered have been able to convince me that this is practical in the real world, that it could be done. It is much more likely that if we had, for a short time, a condition of anarchy, that shortly after there we weld have a condition of fascism that would grow up from a sort of vigilantism until finally a man on a horseback was in charge.

SCHULMAN: Well, you see there's where--of course you're right;

we don't have enough time to really get into this.

HEINLEIN: Yes.

SCHULMAN: The only question I'd want to ask is have you read, for instance, *The Market For Liberty* by the Tannehills, or *Precondition For Peace And Prosperity*: *Rational Anarchy* by Richard and Ernestine Perkins, or *For A New Liberty* by Dr. Rothbard? All three go into the theories in quite a bit of detail.

HEINLEIN: I have read a number of these things--not necessarily ones that you've mentioned--but I've been reading on this subject for considerably more than the past forty years. And no one of them has convinced me yet. What we *do* have on this globe in respect to nations is a condition of anarchy between nations, despite something that we laughingly call international law.

SCHULMAN: This is a point Dr. Rothbard makes frequently. He says we already have international anarchy; why not just decentralize down to the individual level?

HEINLEIN: Because along comes the bully boys. And if the bully boys band together then the people who simply want to be left along have to band together.

SCHULMAN: *Fine*. I'm not disagreeing with this.

HEINLEIN: Yes.

SCHULMAN: However, to use Franz Oppenheimer's definitions I would much rather provide my protection through the economic means, rather than the political means.

HEINLEIN: Well, I think that we had better chop this off.

SCHULMAN: Right.

HEINLEIN: Because it is too long; the *Daily News* can't *possibly* use it in depth. You've got twelve hundred words, something like that.

SCHULMAN: Fifteen hundred, it turns out.

HEINLEIN: Fifteen hundred. You couldn't possible discuss the theory of anarchism in that space.

SCHULMAN: Right. Well, hopefully, one of these days we'll be able to get it settled just between the two of us.

HEINLEIN: Well, I think we'll probably still be discussing it as long as both of us are alive. It isn't that I wouldn't like to *see* a condition of complete freedom; you saw me describe that in Happy Valley. And you also saw Lazarus Long cope with the bully boys. But he nevertheless suggested that Happy Valley was pretty highly selective to start with for several reasons. And that as long as they had a low population they could get along simply with the Golden Rule. And they were beginning--he indicates that as things got a little more complicated--they started having a little more in the way of rules. But even at that he was sill talking about an agrarian society with a very low population. But let's move on to other matters out of fairness to the *Daily News*.

I would say that my position is not too far from that of Ayn Rand's; that I would like to see government reduced to no more than internal police and courts, external armed forces--with the other matters handled otherwise. I'm sick of the way the government sticks its nose into *every*thing, now.

SCHULMAN: Okay. I think I'm going to have to turn over my tape right about now. Let's hold on for a second while I do so.

[AFTER THE TAPE IS TURNED]

SCHULMAN: Okay. How about question number five? [A number of questions relating to the Nixon Administration, impeachment, and relations with communist countries]

HEINLEIN: Let's leave that one alone.

SCHULMAN: Okay.

HEINLEIN: The reason I want to leave it alone is because like it or not the people you mentioned, at the present time, have tremendous responsibilities and I have no wish to jiggle their arms or second-guess them or be a Sunday-morning quarterback. It's *very* complicated and you don't have to like a man to know he's Officer of the Deck at the moment.

SCHULMAN: Okay.

HEINLEIN: Number seven would be next, if you want that one.

SCHULMAN: All right.

HEINLEIN: "Do you consider the revolution in *The Moon is a Harsh Mistress* to be a success?" I'm not sure what you mean by success; I described what happened and you can evaluate it to suit yourself. What happened in the long run appears in the *first* paragraph of the book and then again in the last paragraph. So far as Manny is concerned, the moon has acquired far too much government, they've thrown off the dictatorial rule from above and now they're getting far too much government from democratic means. It's not to his taste--nor to mine nor to yours. But I simply described what happened. I *might* say that there is implied there my own belief that government is an almost incurable disease of mankind when you get anything resembling a dense population.

SCHULMAN: And I think you also make a point in *Time Enough For Love*--I think Lazarus makes the statement--that any time you get a large enough population you have absolutely no privacy any more and it's time to move on.

HEINLEIN: In fact he defines it as when the population reaches the point where they require I.D.'s. Now, let me comment on that in my own case.

When I was born the population of the United States was seventy-five million. Take a look at it now. When I first went in the service, you didn't even have to have a birth certificate. I didn't get a birth certificate until I was nearly fifty years old--a so-called "delayed" birth certificate. We didn't have I,D.'s--I mean to say a member of the military forces did not carry an I.D. on his person--back when I started in. He simply didn't; there *weren't* any. Very much smaller population, very much smaller organization, so forth and so on. And now we've reached the point where every time I turn around somebody asks me for my social security number; I had it forced on me. Any time a place gets densely enough populated for things like this to happen, it's time to move on. *I've* moved on to what extent I can; I live out in the country. I've taken a look at all the rest of this globe and I can say this for the United States; it's the worst possible country on the globe *except for all the others*. And as for California, California has *tremendous* shortcomings; it simply happens to be better than the rest for my taste. *For my taste*. Alaska has a very small population but it has a horrible climate and I'm tired of shoveling snow.

SCHULMAN: My friend, Sam Konkin, is a bit of a Canadian chauvinist and he's always telling me about the glories of Alberta.

HEINLEIN: Oh, yes. He's perfectly right in that--if you're willing to put up with fifty degrees below zero; I'm *not.*

SCHULMAN: Okay.

HEINLEIN: I've done the best I can under the circumstances to get as much freedom as I can by self-help methods.

SCHULMAN: Okay. There's a second part to that question.

HEINLEIN: Okay.

SCHULMAN: And even a third.

HEINLEIN: Oh, yes. "One of our group of libertarians, David Friedman, believes that Prof locked out Manny and Wyoh from further conversation with Mike, then committed suicide to prevent Mike from using his powers as a dictatorial tyrant." Well, inasmuch as Prof died right on stage, suicide seems sort of unlikely to me. You remember how he died? He was *speaking* at the moment.

SCHULMAN: Right.

HEINLEIN: He's on a platform and speaking.

SCHULMAN: Of course, I *could* think of several ways it could be done.

HEINLEIN: Oh, yes, surely. So far as the author of the story is concerned, I never had any such theory in mind. David Friedman is mistaken about that. So far as I could, that story--told in the first person--was told as accurately as Manny could tell it. Of course his viewpoint is limited.

SCHULMAN: Okay.

HEINLEIN: "Is that what you intended? If not, what did you intend?" I intended to tell the story that the words set forth.

SCHULMAN: Okay, that's self explanatory.

HEINLEIN: And as for the revolution being a success, success is a word--used with respect to a revolution or any attempt of that sort--that involves a subjective judgment. It's clear from *Manny's* standpoint that it is something *less* than a success. The final result--the final outcome--is not entirely to his taste. He's thinking about moving on to where things are looser.

SCHULMAN: Okay. How about question number six, now?

HEINLEIN: "What would *Da Capo* have been like if you'd written it right after *Methuselah's Children*?" [Da Capo was the original title for *Time Enough For Love*--listed on the "Future History" chart--when Heinlein planned it back in the forties--JNS] Well in the first place I would have written it right after *Methuselah's Children*. So I'm reasonably certain that it would have been somewhat different from what it is, in fact *very* different. Look, I've lived more than a generation--in human terms--between those two books. It would be surprising if I hadn't changed some, grown some, changed my evaluations a bit in the course of that time, but in any case I did *not* write it then. And these *are* works of fiction.

SCHULMAN: Okay.

HEINLEIN: All right. "Do you believe, as some of my friends have claimed, that you 'copped out' by resolving the matters of the Jockaira gods only in conversation?" Look, I'm not dead, yet. What makes your friends think that I won't write that story?

SCHULMAN: They're hoping you will! In fact Sam Konkin--when I mentioned that I was still hoping you might write such a story--suggested that you should entitle it *Del Segno*, which means "from the sign."

HEINLEIN: Well, I used a musical analog all the way through this thing; it's Aria Da Capo and that's why the last part is "Da Capo." Aria Da Capo simply means to go back to the beginning...which he did.

SCHULMAN: Yes, he certainly did.

I have to say that I disagree with one point that you made in our last conversation; that pornography is literature written to create an erection, and that you didn't think that this was the case with the last part of *Time Enough For Love*. I can name at least three friends who read through that last part *with* an erection.

HEINLEIN: [Laughing] How old were they?

SCHULMAN: Right about my age.

HEINLEIN: Well, look--at the age of which you speak, almost everything makes you horny. The last part of that is certainly not pornography such as you can buy on Forty-Second Street. There *is* a great difference between realistic treatment of sex and pornographic treatment, and all I can say about that is that it was not *intended* to have that effect but if it did, my congratulations to you.

SCHULMAN: Okay. How about the next part of number six? ["What really happened at the Families' meeting of 2012?"]

HEINLEIN: The Families' meeting of 2012? Nobody knows what happened at the Families' meeting of 2012 but Lazarus and he ain't talkin'! The point is, if you take timing on the thing, this is the point at which the Families had to make a decision as to how they were to deal with what they could see was an upcoming dictatorship. Just consider the date involved on the thing. That ties in with the story--oh, something "Empire..."

SCHULMAN: "Logic of Empire"?

HEINLEIN: "Logic of Empire" and "If This Goes On--" and so forth. It was the date of a growing political crisis, and they're having to decide what they're going to do, and then there are indications later--in *Methuselah's Children* and elsewhere--that what they *did* do was go underground as thoroughly as they could, and distribute their wealth here and there under various and sundry dummies. Quite evidently Lazarus Long thought that their intentions were too mild--that they should do something far more dramatic--and 2,000 years later he is unwilling to argue the point as to whether his judgment was better or worse than of men long since dead. I don't particularly expect to do a story about the Families' meeting of 2012--all I have are some notes--and I'm not sure that it constitutes a story. Now. [Quoting from last part of question six] "I have to admit that my first thought when I started reading *Time Enough For Love* was shock and sadness to learn that Andy Libby had been dead over a thousand years." Well, if I write another story about Lazarus, it might turn out that Andy Libby *isn't* dead...at the time *that* story takes place.

SCHULMAN: Oooh!

HEINLEIN: You see, my stories jump around in time, they always *have*. They are not written in the sequence in which they appear on the time-chart that John Campbell published a long time ago, not at all in that sequence.

SCHULMAN: Speaking of the chart, there are two stories on there which are a bit of a mystery to quite a few of us; "Word Edgewise" and "Fire Down Below." [Two of the "Future History's" "unwritten" stories.]

HEINLEIN: I can indicate to you what each was about and they're--both of them--stories that I don't, at present, have plans for writing. I might; all I have are notes. But look, Neil--I probably don't have time to write too many more stories, and I have lots of other things I want to do besides writing stories. Like it or not I'm not going to last any twentythree centuries. "Fire Down Below" concerned a revolution in Antarctica and "Word Edgewise" concerned Zebediah Scudder [sic] taking over the United States through his church.

SCHULMAN: Wasn't that also "The Sound of His Wings"?

HEINLEIN: Well, there are two stories involved in there; both of them were intended to be novellas when I originally planned them many years ago. But I doubt if I will get around to writing these. I'd rather tackle something else. I have well over a hundred stories--with notes and outlines and so forth--in my files; most of them will never be written. I mean it's physically impossible simply for the reason that I acquire more stories each year than I write. I have more stories on file, unwritten, than I have written in my entire lifetime, and my backlog gets larger each year. So it has to be a matter of choosing the story that I happen to want to write.

SCHULMAN: Uh, huh.

HEINLEIN: And if I have that many stories left unwritten now, I will have *still more* stories left unwritten if I manage to last for a good many years longer, because it gets more so each year.

SCHULMAN: I think I can understand that because I find myself writing maybe one story for every thirty story-ideas I get.

HEINLEIN: That's right. All right. [Quoting last part of question six:] "I had expected the book to start telling about his and Lazarus`s trips exploring for real estate." I had rather expected that, too, except that I had to pick and choose what I would put into this story; you can't cover twentythree centuries in one book. Libby's and Lazarus Long's real estate adventures are not of the significance--I mean they're primarily adventures--they're not of the significance of the stuff that I *did* write, in my opinion. That book, despite its enormous bulk, is far more characterized by what I left out than by what I put in. [Chuckling] Twentythree centuries.

SCHULMAN: There's one thing that comes to mind that I didn't put on my list of questions, and that is I heard there was an entire section of *Stranger in a Strange Land* which was never used.

HEINLEIN: Oh, there are big chunks of *all* my stories that have never been used because I cut them to the bone as much as possible.

SCHULMAN: Specifically, I heard it was one telling Valentine Michael Smith's origins on Mars.

HEINLEIN: Oh, I've forgotten offhand just how much of that I cut out; I'd have to go back and look at my notes. I suppose somebody's been reading the archives down in the vaults at University of California?

SCHULMAN: Uh, or--Is there a library nearby you in Santa Cruz that has that?

HEINLEIN: University of California is my archivist and its nearest campus is just below me. They have a completist attitude and the very roughest of rough notes are saved just as carefully as the final drafts. Any story I'd finished with--at the time they set it up--I just turned everything over to them concerning that story.

SCHULMAN: I hope, one of these days, to get down there and start reading it.

HEINLEIN: Well, I don't think it's too edifying because if I hadn't thought the stuff I left in was better than the stuff I left out, I wouldn't have done it that way.

SCHULMAN: Okay, I can buy that.

HEINLEIN: However, people who are interested in such literary matters--which I'm not, especially--do dig into all these notes and correspondence and such. Now where are we?

SCHULMAN: Question number eight. ["Of all your stories, which one did you enjoy writing the most? Who is your favorite character?"]

HEINLEIN: All right. Oh, those at two very different things. When I gave the James Forrestal Memorial Lecture down there at the Naval Academy I answered specifically that first question. I enjoy writing them *all* because the thumb-rule that I have about fiction is whether of not it interests *me*. If it interests me then I assume that it probably will interest some other people. If it bores me I don't write it. Follow me?

SCHULMAN: Okay.

HEINLEIN: You know that's an impossible thing for me to answer? To begin with, *all* an author's characters are the author himself speaking in one way or another. He may even be speaking as the Devil's Advocate at one point, but nevertheless the author does it all. I *could* say Lazarus Long but that would simply be because it's the character that's been on my mind most recently. I could equally handily say Podkayne Fries, or Rhysling--it doesn't matter. I *can't* have a favorite character. It's as ridiculous--If an author has a favorite character, why he'll behave like a parent with a favorite child. Each one has to be my favorite when I'm writing about him.

SCHULMAN: Okay.

HEINLEIN: Or I don't do myself or the reader justice.

SCHULMAN: All right. Why don't we skip along to number nine, then? ["New Libertarian Notes Review Editor Richard Friedman created a fictional list of books that Dr. Samuel Russell (a character in *Have Space Suit Will Travel*, for them who don't know) gave to Kip to supplement his education. It was printed in *NLN* 5 (Summer Issue, 1971) and I'm enclosing a Xerox copy for you. Interestingly enough, one of the books is Eric Temple Bell's *Men of Mathematics*, which you recommended to me just yesterday. Do you have any comments or additions?"]

HEINLEIN: Let's see. I haven't had time to study that list; I know that about half of them were books I've read and about half were books I've not read but looked as if they might be appropriate. I haven't read *Have Space Suit Will Travel* for quite a long time; does Dr.

Russell give a specific list in there or not?

SCHULMAN: No.

HEINLEIN: He doesn't? Well, I really haven't had time to study Friedman's list and since I haven't read about half of them I don't know. It looks as though it were a pretty good list. In any case, if a man just reads and keeps on reading, whether he reads my favorites of not he's going to broaden his education. As long as he reads *everything*. That's why I was urging you to read Eric Temple Bell.

SCHULMAN: I've made a note to get my hands on both those books [Heinlein had also recommended Bell'`s *Queen of The Sciences*] plus John J. Pierce made a Xerox copy of part of his *Development of Mathematics* dealing with epistemology.

HEINLEIN: Well, that's good. I recommended Eric Temple Bell because he's so very readable. In that same connection John R. Pierce--John J. Pierce's father--is one of the best popular expositors--in addition to being a fine research man; one of the great physicists of our day--he's one of the best popular expositors, just as Eric Temple Bell was. Oh, look up stuff by John R. Pierce with popular titles; he can give you an appreciation of mathematical physics--or at least certain aspects of it--that you can't get from ordinary study. Dr. Pierce is a very, very clever writer. I commend his popular works to your attention--not his technical works because he works in an extremely technical field. But his popular exposition of what he does--and what Claude [E.] Shannon does, for example--the originator of information theory?--this is good. Dr. Pierce for the applications of mathematics to physics--are very good sources.

Now, let's see.

SCHULMAN: Well, we already went through ten and eleven.

HEINLEIN: Yes, all right now, twelve. "What is science fiction" [(I define it as the sort of stuff Robert Heinlein writes)]" Ah, yes. As you know, everybody takes a whack at that every now and then. Have you seen a book--just a moment, I'll catch the name; it's across the room here--[Long pause]--a book called *The Science Fiction Novel*, which contains four lectures--one by me, one by Alfred Bester, one by Cyril Kornbluth, and one by somebody else; I've forgotten who now--University of Chicago.

SCHULMAN: I've heard it referred to. I haven't seen it.

HEINLEIN: Well, the name of it's *The Science Fiction Novel* and it's Advent Press. I discuss the nature of science fiction quite extensively in the opening part of my lecture, and inasmuch as it's there and in print and you can unquestionably get it out of the library, I'll let it go with this one remark here: Science fiction is to my mind--if you want to separate it from fantasy--science fiction is based on the real world, speculation that takes place--usually into the future--about the real world, and which takes science as a necessary aspect of the story that you`re writing--meaning if you left the science out the story would fall to pieces. Fantasy, on the other hand, is a fairytale for grownups. It is not based on the real world. This is no criticism of fantasy; I'm not opposed to it at all. Tolkien's "Ring" trilogy, for example, is fantasy, laid in an unreal world about unreal things; that doesn't keep it from having philosophical importances to it that many students have seen. I write both science fiction *and* fantasy and I sometimes mix them up in the same story in a way that purists do not like. You have read *Glory Road*?

SCHULMAN: One of my favorites.

HEINLEIN: Well, that's both science fiction and fantasy all mixed up together.

SCHULMAN: I've been thinking for years that a story, for instance, like *Between Planets*--I could see it very easily shifted into an eighteenth or nineteenth century mode, you know, written by somebody like Robert Louis Stevenson, and instead of having Don Harvey being born between planets he could be born on a ship between countries...

HEINLEIN: Yes, yes. However, it was hardcore science fiction for its time because at the time I wrote that story it was still conceivable that Venus could be that sort of planet. That was written before we knew anything about Venus, or what we knew about it was the small amount that we could learn from the surface of this planet. I have written stories that are outright fantasies, such as "The Unpleasant Profession of Jonathan Hoag." Now you can't by any stretch of the imagination call that science fiction; there isn't any science in it and one simply goes along with the assumptions in it long enough to read the story. Or a story such as my short story--it was about city politics and a reporter and it involved a whirlwind that seemed to be setting it--I've forgotten the name of the story right now; it's in the same collection with "Jonathan Hoag"--that's a fantasy. ["Our Fair City" in *6 x H*--JNS] In fact, that entire collection with "Jonathan Hoag" are pretty much fantasies--"The Man Who Traveled In Elephants"; that's about all you can call that. All I can say about it is that I try to know which I'm doing when I'm doing it. There are a lot of people writing science fiction who don't know anything about science and they *think* they're writing science fiction when actually they're writing nonsense...[Quoting questions;] "Are any of your books *not* science fiction by your definition?" Yes, and you can pretty well pick them out in addition to the ones I've named. Well, "Magic Incorporated" is an example of one that is definitely fantasy, not science fiction.

SCHULMAN: But you would say that "Waldo" is science fiction?

HEINLEIN: It's closer to being fantasy but it has some science fiction aspects. As with *Glory Road*, I mixed the two elements into one story, which the purists don't care for, but sometime you can tell a good story that way. As far as I'm concerned, fiction is intended to entertain. If I can manage to entertain with it, that's what the cash customer is paying for. So I don't hesitate to write straight science fiction, straight fantasy, or a mixture of the two--or *anything* else. I've written all sorts of things. I've written first person, teenage *female* love stories laid in the present--not science fiction at all, but the sort of thing that I sold to girls' magazines, girls' teenage magazines--one magazine was called *Senior Prom*.

SCHULMAN: What name did you write under?

HEINLEIN: Now, that's a nasty question.

SCHULMAN: [Laughing] I'm really interested.

HEINLEIN: Look, those stories were written quite some time ago; their only importance was that they were sufficiently entertaining to be entertaining to teenage girls. I did it more or less experimentally because I had a female editor who said it couldn't be *done*. Whereupon I did it. Whereupon I finally thereafter started putting some female, teenage lead characters into my science fiction: "The Menace From Earth," for example; that's a piece of hardcore science fiction but the lead character is a fifteen, sixteen year old girl. Told in the first person, do you remember that story--"The Menace From Earth"?

SCHULMAN: Very, very well.

HEINLEIN: That was a direct result of having done those teenage love stories. And, eventually, I did *Podkayne of Mars* and there are two or three others kicking around here and there. I started using realistic female characters thereafter because I found it fleshed the stories out, it seemed to improve them.

SCHULMAN: Tell me, does the name "Lazabee Green" mean anything to you?

HEINLEIN: The name what?

SCHULMAN: Lazabee Green.

HEINLEIN: Spell it.

SCHULMAN: L-A-Z-A-B-E-E.

HEINLEIN: Lazadee?

SCHULMAN: Lazabee, with a "b" as in Betty.

HEINLEIN: Yes.

SCHULMAN: Green.

HEINLEIN: Greed

SCHULMAN: G-R-E-E-N.

HEINLEIN: Green. Lazabee Green. I don't believe I've ever read a story about such a character and I don't think I've known such person.

SCHULMAN: There was a rumor going around that this was one of your pen-names.

HEINLEIN: [Laughing] Oh. No, it's not. It doesn't mean anything to me at all. I can assure that this is *not* one of my pen-names.

SCHULMAN: Okay.

HEINLEIN: [Chuckling] A long time past I was accused of having the pen-name of L. Ron Hubbard, but that was many, many years ago.

SCHULMAN: [Laughing] It doesn't seem likely now.

HEINLEIN: Oh, it used to amuse Ron. We'd talk it over from time to time.

SCHULMAN: Okay. I guess we might as well move on to thirteen.

HEINLEIN: Question thirteen? Oh, but on twelve; "Do you prefer the term 'speculative' fiction? If so, why?" Yes, I prefer the term "speculative" fiction because there isn't anything about *that* term which ties me down to putting a lot of atomic physics or such into a story. It's a looser term. More elbow room. Speculative about the future. But serious speculation.

Now thirteen, ["About your future writing plans. Do you intend to write another juvenile? How about a story taking place (perhaps this wishful thinking on my part) in a working anarchocapitalist society with competing private police, arbitration, and armies?"] Future writing plans, we've already discussed that somewhat. If I continue to live and have a reasonable amount of health, I'll probably write some stories. I couldn't guess what they might be. For the past few years I've been ill as much as I've been well, so I haven't gotten very much done. As of right now I don't know what my next story will be.

SCHULMAN: Okay. I could tell you right off, though, that there are a lot of libertarian fans who would be quite happy to see you write something along the lines I described in number thirteen.

HEINLEIN: Well, I'll write it if it strikes me as a good story. I won't write it if not. If it's simply going to be a lecture, no. If I see a really good story in it, I would tackle it. I don't know; I've got things like that in the file. I did *something* like that in *Podkayne of Mars* when I took them to Venus. You remember that Venus had no government as such it simply had capitalists and employees and tourists.

SCHULMAN: Right, but there was only *one* company which I'm not sure is what normally would develop.

HEINLEIN: I'm not sure it is, either. But I say I did *something* like that once.

SCHULMAN: Okay.

HEINLEIN: L. Sprague De Camp did something like that with lots of companies; it was called "The Stolen Dormouse."

SCHULMAN: I'll have to look that up.

HEINLEIN: It's in a book of his--[Away from telephone;] (Yes, sweetheart.) It's in a--I can't remember what the title of the book was. I *should* remember; it was dedicated to me, but a good many years back. The title--Oh, *Divide and Rule* was the title of the volume, but I think it included "The Stolen Dormouse." It was in *Astounding* along about 1940, something like that. It described the United States under circumstances where everything was run by a bunch of *competing* corporations. It was quite amusing. Now, fourteen?

SCHULMAN: Fourteen.

HEINLEIN: "Do you believe that a 'romantic' story necessarily involves highly motivated characters striving--" Look, that's the sort of question you ask a professor of English! [Laughter] I'm not a literary person; I just write stories. They're intended to amuse people. I'm not sure what the difference is between a "romantic" story and some other sort of story, I've written stories that involved "highly motivated characters striving for a single, overpowering goal beset with obstacles and antagonists until the climatic resolution"--I have done that, yes. "Is this the story you like to read? Like to write? Used to like?" Look, I read *everything*. I'm a *garbage paper* reader. I'm the type of a person who sits on the curbstone and opens up paper wet from garbage to read the continuation of the jump page! I gave you my only thumb-rule for a story; if it interests *me*--if *I* find it interesting--I'll write it on the assumption that somebody else will be interested in it, too, but if it bores me I won't write it. But all of these other things, these are things that professors of English talk about in courses on literature and that's simply not the sort of education I had. If I had started worrying about things like that when I started writing I probably wouldn't have written even one story.

SCHULMAN: Okay.

HEINLEIN: Fifteen, we've had that, haven't we?

SCHULMAN: Right, and I think we've pretty much covered sixteen, too. [Question seventeen was irrelevant at this point.] I guess we're up to eighteen then.

HEINLEIN: "Do you see many of your recent story endings as downbeat? If so/not, why?" Well, I don't see them as downbeat. Do you? If so, which ones?

SCHULMAN: Well, I found *The Moon Is a Harsh Mistress* a bit depressing--from my point of view.

HEINLEIN: [Chuckling] Because the perfect anarchy wasn't set up as a result of it?

SCHULMAN: Right. [Also for a rather obvious reason which didn't come to mind; both my favorite characters--Mycroft and Prof--were dead (or presumed dead) at the end] Or because you seemed to feel government was an inevitable "disease."

HEINLEIN: I'm not sure that it's inevitable but I see nothing in the history of the human race to indicate to me that it is *not.*

SCHULMAN: You gotta start *somewhere*.

HEINLEIN: I'm not disagreeing with that, either. Let's see, the expression "necessary evil" was from Thomas Jefferson, wasn't it?

SCHULMAN: I don't know, specifically. [I have since learned that it's from the opening of Thomas Paine's "Common Sense."]

HEINLEIN: I think it was from Thomas Jefferson who was certainly a libertarian of his period. I never thought of *Harsh Mistress* as being downbeat. There are indications quite early in the story that they're *not* going to wind up with an anarchy, they simply *aren't*; you can see that from the fashion in which the committee starts to organize. I don't mean the revolutionary committee, but after they've taken over and they're trying to hold things together.

SCHULMAN: Several of your stories that have sort of dismissed the idea of finding a final resolution to philosophical problems on earth I find a little depressing because--

HEINLEIN: Oh, no! Well, yes, I can make some comment on that. Clear back in a thing called *Sixth Column*--which is a story that I wrote to a plot of John Campbell's and didn't particularly want to write, except that I needed the money--I added a lot of things into it that John Campbell didn't have in his plot including the idea that there *were* no final solutions. And Neil, there aren't.

SCHULMAN: Well, that won't prevent me from looking for them.

HEINLEIN: Yes, but don't be too discouraged when you don't find them. My wife--who is only a little younger than I am--still looks for these final answers, and is still hopeful. I got over looking for final solutions a good, long time ago because once you get this point shored up, something breaks out somewhere else. The human race gets along by the skin of its teeth, and it's been doing so for some hundreds of thousands or millions of years. Human solutions are *never* final solutions--at least so far as the history of the race up to now indicates. When I was a kid we had the "War to End All Wars"--going to make the world "safe for democracy." Now look at the damn thing. In fact, all you needed to do was take a little over ten years after that war as over and things were already in bad shape. We thought we had all the problems of our economy solved except the problems of distribution--I'm talking about the race as a whole, I'm not talking about my books--and now we suddenly discover that we're in a closed spaceship, a goldfish bowl, and if we don't get a balanced aquarium we're going to poison ourselves with our own poisons. It is the common human condition all through history that every time you solve a problem you discover that you've also created a *new* problem. I *did* a story based on this called *Beyond This Horizon*--

SCHULMAN: Which I'm just rereading, now.

HEINLEIN: All right. I started out with the assumption that *all* present-day problems had been solved at that point. I describe a utopia--largely anarchistic; there isn't enough government there to matter--and what do we do? We've got a hero who says: "Nevertheless, it ain't worth the trouble! What's it all about?" *He's* unhappy in this utopia simply because he doesn't have those answers to noumena--that I defined earlier?--the problems of philosophy known as noumena. And he finally accepts--agrees to accept--a partial answer: that a serious research effort will be undertaken--not to solve all those problems but simply to find out whether or not there is life after death, because that would--whether the answer is yes or whether the answer is no--it would affect the final answers on other things.

SCHULMAN: Do you have any opinions on that question?

HEINLEIN: I usually do not express them in newspapers.

SCHULMAN: Off the record?

HEINLEIN: I have little or no objective data. So far as *subjective* data is concerned, I *incline* to the notion that when we die, we don't die all over. That we do *not* die all over. That there is *something* that persists. But even that--because that opens up all of the questions of philosophy and religion--I avoid discussing in fiction endlessly, both in this last book and in *Stranger in a Strange Land* and *Beyond This Horizon* and lots of others.

SCHULMAN: I'll repeat the comment that I made in my letter; that I think religion and politics--or "philosophy" and politics--are the only subjects worth arguing about.

HEINLEIN: Well, yes. There are four major subjects as mentioned by Lazarus Long: war, money, politics, and love--and matters of philosophy affect all four of those. Those are four principal interests of the human animal. Sex, economic motivation, war, and politics. Politics in its broadest sense, which would include anarchy.

SCHULMAN: Right. Without meaning to get back on the subject of libertarianism again--because we *can't* go very far on that--I just wanted to make the comment that *Podkayne of Mars* there's a whole speech by Uncle Tom about not putting down politics because it's the way men get along without fighting.

HEINLEIN: Yes.

SCHULMAN: Well, we're in agreement about the idea of getting along without fighting, it's just that I--again using Franz Oppenheimer's definition--would call that the *economic* method, rather than the *political* method.

HEINLEIN: Well, politics simply names a field, that's all. Politics is the whole field of human interrelations. It is so difficult to separate the economic and the political factors that the subjects are often lumped in together as political economy--one title.

Now, let's see.

SCHULMAN: I guess we're up to nineteen or twenty; both are basically the same question. [Question nineteen, asking for an expansion of Heinlein's views on Ayn Rand, was dispensed with as having too low a priority for the *Sunday News*.]

HEINLEIN: Twenty: "What philosophers or artists--past or present--attract you, and why?"

SCHULMAN: That's a big question.

HEINLEIN: Well, yes it is...I studied philosophy under Will Durant many, many years ago--this was before he was well-known, *long* before he was well-known; this was back in the early twenties--and he first introduced me to a wide range of philosophers; and I read 'em all; I gobbled 'em all. I suppose I've learned something from all of them, but not necessarily what they wanted to impart. It took me quite a while, for example, to realize that what Plato was preaching was the direct opposite of what I liked and believed in--[Laughter]--because it was so well-told, so well-expressed. Artists?--are you speaking of pictorial art, or what?

SCHULMAN: I'm using art in the very general categories of music, painting, literature...

HEINLEIN: My tastes in art are pretty eclectic. I refer you to some remarks by Dr. Jubal Harshaw in *Stranger In a Strange Land* in which he discuses art and in which he indicates that most of the artists he likes are pre-World War One--and why. Now, this is not entirely true of myself--there are a lot of good artists around--but I'm reminded of something a Norwegian artist told me in Oslo a good many years ago. I asked him what he thought of American artists--did we have any good artists at the present time? and he said, "Oh, yes, yes--you've got lots of them. But they're all in *commercial* art. [Laughter] This is a period when a great many of the so-called fine artists are apparently painting with old brooms, and would be horrified at the idea that a picture actually had to *look* like something? Or say anything to the viewer? I'm an old square on that; I want to be able to understand a picture that I look at.

SCHULMAN: My father still has a color slide of three huge, white canvasses at the Museum of Modern Art with absolutely *nothing* on them.

HEINLEIN: Yes. Did your father like that?

SCHULMAN: He thought it was a big joke.

HEINLEIN: Yes, I think so, too. Like that pianist here some years back at one of these far out things who gave a concert that consisted of going to the piano and sitting there holding perfectly still for twelve minutes. Never touched the keys.

SCHULMAN: Yes, this was just done in Boston within the past two years.

HEINLEIN: Yes. That's carrying a joke a bit far; however, if they can get away with it, it's all right with me; I simply won't subscribe to it.

SCHULMAN: Well, you might pay for it once just for the gimmick, but I doubt that you'll ask for the recording.

HEINLEIN: Have you read *Huckleberry Finn*?

SCHULMAN: Not for a long time.

HEINLEIN: Well, do you remember that the Duke and the Dauphin arranged a show down in Arkansas that was a phony, a fake? And they put on three performances; the first, the people were dismayed; the second one, they had everybody else in town because the first people attending wouldn't admit they'd been swindled; and the third night, everybody showed up and they were carrying rotten eggs and dead cats and so forth. The Duke and the Dauphin snuck out the back door with the receipts and were half way to the river before Huck realized that they were about to go off without him! [Laughter] Mark Twain defined in there how many times you can get away with a swindle, and in that particular case three times--as long as you risk being lynched.

SCHULMAN: Okay.

HEINLEIN: Now. let's see. [Reading question twenty-one] "One of your main themes has constantly stressed that man is the most dangerous, deadly, and resourceful beast in the universe. Do you believe this? [If so, since we have no basis of comparison as yet, why?]"

Look, we aren't off this planet yet, really. I don't know whether he is or he isn't. Actually, what I'm saying at that point is he's the most dangerous, deadly, and resourceful beast on *this* planet, because that is all the universe we know so far. He certainly is on this planet--of course we've only been dominant for a relatively short time; the returns from upstate are not in yet--[Laughter]--but as of right ow, we are just that. I kept emphasizing that because there are so many people going around talking sweetness and light, acting as if the human animal--all you needed to do was make sure that you petted him enough when he's a small child and then he would never bite. I don't believe it. We got this way--we got where we are--over the course of a long stretch of evolution, by being survivor types in a very tough jungle. And from all I've seen of the human race so far, they're still that mean, tough, and nasty. I do not mean that as a derogatory remark, either; I think that's what it takes to survive. That doesn't mean you have to be mean, tough, and nasty in your daily behavior. In other words, I am not a pacifist, and I do not think the human animal is put together so he can be a pacifist and still survive. Pacifists stay alive at the present time because others who are not pacifists have put up with them and protect them in spite of themselves. There are some indications of that in *Time Enough For Love*, too. My ideal on that would be Dora in "The Tale of the Adopted Daughter" who's shown as utterly sweet and gentle all the way through except the one time when she was called upon to shoot and she shot. Did it right, and didn't hesitate.

SCHULMAN: I think I'm going to have to transfer cassettes at this point. One second.

HEINLEIN: All right.

[AFTER NEW CASSETTE IS PUT IN]

SCHULMAN: Okay, I guess we're up to number twentytwo, now.

HEINLEIN: All right. Hold it just a second. On twenty-one; One of the reasons I have emphasized that is because there have been lots of other writers who have always talked as if just as soon as we got in touch with really intelligent, highly advanced races, we will find them to be peaceful vegetarians. Well, I don't think that is necessarily true at all. There's no data on which to base that; it is simply wishful thinking on the part of the writers who write that way. The universe might turn out to be a hell of a sight nastier and tougher place than we have any reason to guess at this point. That first contact just *might* wipe out the human race, because we would encounter somebody who was meaner and tougher, and not at all inclined to be bothered by genocide. Be no more bothered by genocide than I am when I put out ant poison in the kitchen when the ants start swarming in.

SCHULMAN: Do you think any of the U.F.O's have been actual contacts?

HEINLEIN: I don't know. I simply don't have data.

SCHULMAN: What about Air Force Project *Bluebook*?

HEINLEIN: I don't have data. There have been some ooh-foh sightings that are extremely hard to explain. I'm reminded of something Willy Ley said to me, oh, twenty, twenty-five years ago. He said: "Vun. Dere is something dere. Two. I do not know vat it iss." I'm just about where Willy Ley put it then; there is something there and I do not know what it is.

SCHULMAN: Okay. [Question number twentytwo; "Alexei Panshin in *Heinlein In Dimension* claims that Clark Fries is 'thoroughly sick.' Since Clark happens to be one of my favorite characters, I believe Panshin is wrong, and that whatever Clark's problems, his natural intelligence will finally resolve them. What do you think?"]

HEINLEIN: Number twentytwo; I have not read *Heinlein in Dimension*; I've never seen it.

SCHULMAN: Okay.

HEINLEIN: Clark Fries--his *uncle* indicates in the very end of the story that he thinks the boy is sadly in need of treatment, yes. That's the uncle's opinion. And he also thinks the boy got into the shape that he's in through being neglected by his parents. That is the opinion of the uncle, however, I can see how Mr. Panshin would reach that opinion. You say that he happens to be one of your favorite characters. Well, he's one of *my* favorite characters, too. He was quite a lot of fun to write. Instead of writing the sweet, little Boy Scouts that I've done so many times, I wrote a character who was strictly self-centered. "And his natural intelligence will finally resolve"--yes, the last paragraph of the book indicates that Clark Fries had decided to join the human race. Yes, I would agree with you on that. He's *quite* young, you know, he's what?--twelve years old, something like that? And to expect much in the way of social integration out of a twelve-year-old is to be sadly disappointed.

SCHULMAN: Okay.

HEINLEIN: He's growing up, though. Yes. And he's quite intelligent.

[Number twentythree:] "Are you familiar with the psychological theories of Dr. Thomas Szasz?" I have in my study one of his books which I've read. Let me see the name of it here, if I can read it from across the room. The general idea was that he's opposed to psychiatry--although he's a professor or psychiatry--he's opposed to psychiatry as it's organized *now*. *The Myth of Mental Illness*, that's it.

SCHULMAN: The main point I was referring to here is his basic idea that you have to define mental illness--You just can't say that because someone commits an abhorrent act that he's "sick"; he says that the medical analogy just doesn't hold up.

HEINLEIN: That's right.

SCHULMAN: And you seemed to be making a similar point with the "sound semantic orientation" in "Coventry."

HEINLEIN: Yes, somewhat. Not the identical point, but a somewhat similar point. As far as I'm concerned the defense in court of "Not Guilty By Reason Of Insanity" should not be considered a defense at all. But, I'm not a psychiatrist.

SCHULMAN: I guess what I'm referring to next is the question: "If a person understands the consequences of 'damaging' another... [(namely, Rothbardian theory, full restitution to the victim plus cost of apprehension and interest for the time lost; or in the case of murder the murderer becomes the slave of the victim's heirs), isn't his psychological state irrelevant?"]

HEINLEIN: Look, that's a very complex question, particularly in that you want me to take a high order abstraction and follow that abstraction by somebody else's intensional definition, rather than an extensional definition.

SCHULMAN: I looked those up, and I'd like to be sure I understand them.

HEINLEIN: Extensional is where you define the word "chair" by pointing to a half a dozen or a dozen or twenty different chairs, and add; "and many others." That's an *extensional* definition. An extensional definition of human beings would be to go down and point to any busload and add; "and many others." Now an intensional definition is a definition you'll find in words in a dictionary. An intensional definition is where you define one symbol by means of other symbols. An extensional definition is where you define a symbol by its referrents. The referrent of the symbol. Korzybski, in lecturing, used to do away with any discussion of religion right at that point by inviting anyone in the audience to define the word "God"--G-o-d--and insisting that they define it *extensionally*, not define it in terms of other symbols. Try pointing at God.

SCHULMAN: Yes. Well, I remember when I was five years old--I was going home with my mother after we'd been out shopping, or something like that--and I asked her; "Where is God?" And since she was unable to tell me, from that point on I said, "Well gee. If she doesn't know where it is then how does she know there is one?"

HEINLEIN: Yes. Well, Korzybski's point was that since you can't point to the referrent for this symbol, we are not prepared to engage in any further discussion of it.

SCHULMAN: Was Korzybski trying to make the point that there was very little use for intensional definitions?

HEINLEIN: Well, there's a thing called the "Semantic Rosary" that he used to use--levels of abstraction. If you read this book *Science and Sanity*--or better yet, much easier to read is Dr. S.I. Hayakawa's *Language In Action*; the revised edition has slightly different wording but if you look that up you'd find the revised edition, too--This Hayakawa that I'm speaking of is the one that settled the riots at San Francisco State [College, not Prison].

SCHULMAN: I remember that.

HEINLEIN: He's quite a boy; mind you, this is a man older than *I* am who faced sown those rioters with his bare hands--and stopped the riots. He's not much older than I am, but he is a bit. I knew him first oh forty, yes forty, years ago.

SCHULMAN: I see reference to him in your 1941 Worldcon speech [Heinlein's Guest of Honor speech, "The Discovery of the Future"].

HEINLEIN: I referred to Hayakawa?

SCHULMAN: Mm, hmm.

HEINLEIN: Well, that's good, so that--He's been around for a while. He's no chicken. And his stuff is much easier to read than Korzybski's; Korzybski was a Pole, and I've never seen a Pole yet writing in English who didn't manage to get pretty turgid. Korzybski was a wonderful lecturer but his writing is rather difficult to follow, even though he is a s[S]emanticist. [Laughter] You can almost see him translating in his head. Hayakawa--despite his Japanese name--speaks English as a native language; he learned it as a baby in Canada, so that Hayakawa handles English much more easily than Korzybski ever did. I commend it your attention.

SCHULMAN: Okay.

HEINLEIN: But don't miss Korzybski before you're through. Korzybski is the fountainhead; Hayakawa is the follower.

SCHULMAN: In other words, Hayakawa brought Korzybski down to earth?

HEINLEIN: Somewhat like that. Certainly Hayakawa handles English in such a fashion that the layman can read it, whereas Korzybski is heavy going--quite technical.

Now where are we on this: Dr. Szasz..."damaging"..."isn't his psychological state irrelevant?" As I say, that involves so much in the way of high abstraction that I wouldn't attempt to answer it on my feet. [Quoting the last part of twentythree:] "Isn't "Coventry" still an attempt by the state (albeit a relatively benign one) to interfere with the natural market processes and not let the victim have his restitution?" Well, "Coventry" was an attempt on the part of a writer to make a few hundred dollars to pay off a mortgage. [Laughter] I got an idea for a quite different way of treating violations of law from the method of either hanging them or throwing them into jail. Simply divorce them, that's all. Expel them from society. And I still think it has its points although all I tried to make out of it was a novelette, and certainly there are lots of other things that can be said about it.

SCHULMAN: I specifically, however, remember "Coventry" as the first time which I pointed to a story and said, "Yeah, this is pretty much what I've been trying to say about the type of society I wanted to live in; and that's the story that--even though I didn't know the term at that point--I became a libertarian on.

HEINLEIN: Mm,hmmm. Number twenty-four next?

SCHULMAN: I guess so.

HEINLEIN: "Madalyn Murray O'Hair once told me that she's read everything you've ever written. [Any comments?]" I don't have any comment on that; I don't know the lady; I have never met her. I think I read an article--an interview--about her in the *Saturday Evening Post* about twenty years ago, and that's all. I really don't know very much about her. I'm pleased to hear she's read everything I've ever written; the more of those we have around, the more money I make.

SCHULMAN: I tend to think there are quite a few. I know at least twenty who can make that claim.

HEINLEIN: Well, inasmuch as I started in this business to make money and my purpose was to entertain, why this pleases me. I don't know Mrs. O'Hair--or "Ms." O'Hair, or whatever she calls herself--I really know nothing at all about her except that every now and then she takes part in a class action case and it always seems to be libertarian.

SCHULMAN: Okay.

I've managed to whip up a few more questions that aren't on the pages I've given you ; let's see if I can get a couple of them out of the way. John J. Pierce gave me a few questions which he wanted to know [and which I asked because I *also* was interested in them]...He wants me to ask you if you're aware that many who admire your work up to *The Moon Is a Harsh Mistress* or so are turned off by *I Will Fear No Evil* and *Time Enough For Love* and he's wondering if you think you've changed that much.

HEINLEIN: No, I do not. I knew that he was turned off by both of those books; he let me know...Probably John Jeremy would be considerably disappointed to know that *I Will Fear No Evil* was listed as a bestseller last year in a publishers' publication comparing the sales of the whole market; I think it would distress him. I got some bad reviews primarily inside science fiction itself; I got good reviews from outside science fiction and the book has been extremely successful with the public, whether it's popular with John Jeremy or not.

SCHULMAN: I think what he's trying to say --and I've gotten similar things from several other of my friends--is that they seem to feel that it's not as quite "hard core" science fiction.

HEINLEIN: Yes, yes. I have departed from the "true religion." [Laughter] Yes, I know. I remember a letter I received--oh, it must have been around 1947 for it was shortly after I had my first story published in the *Saturday Evening Post*; the story was "The Green Hills of Earth"--and it was from someone, a reader of *Astounding* chewing me out for departing from hardcore science fiction and also casting me into the outer darkness for going over into the slicks instead of staying with *Astounding*. I didn't even bother to answer the letter. The *Saturday Evening Post* was paying me something like ten times the word-rate that *Astounding* did; I couldn't *afford* to write for *Astounding* on that basis..I am happy to say that the public liked the book that he [J.J. Pierce] disliked so much, and I am also happy to say that I,m getting excellent reviews on this new book.

SCHULMAN: Did you read my review, yet?

HEINLEIN: I glanced through it rather hastily.

SCHULMAN: Was there anything you strongly disagreed with of anything I said?

HEINLEIN: No. No, I didn't. It seemed to me the review was quite fair. You did mention the difference in pacing--that's true. When you're writing an adventure story you *do* pace it differently from this sort of story, however there are adventure sequences in *Time Enough For Love* that *are* paced pretty fast--here and there--but it is not primarily an adventure story. In fact it's a whole bunch of stories, that's true. But how are you going to cope with twentythree centuries in one book?

SCHULMAN: With great difficulty?

HEINLEIN: [Laughing] Yes...Over the course of some thirty-four years of writing, every now and then I receive things from people condemning me for not having written a story just like my last one. I never pay any attention to this, Neil, because it has been my intention--my purpose--to make every story I've written different from every *other* story I've ever written--never to write a story just like my last one...I'm going to write what it suits me to write and if I write another story that's like any other story I've ever written, I'll be slipping.

SCHULMAN: I have a note up on my wall which I look at whenever I start getting down because somebody doesn't like a story I've written and it says something along the line of: "I'll write what I want to write, how I want to write, and for whatever reason I want to write it, and if anybody doesn't like it, he can go 'censored' for all I care."

HEINLEIN: Well, inasmuch as I have always written with the reader in mind, I agree with all of that but add onto it that I write for publication things that I think people will enjoy reading...and this book *I Will Fear No Evil* has been extremely successful with the general public, whether or not it appeals to a small group of science fictions fans...I'm trying to write to please not even as few as forty thousand people in the hardcover, but a million and up on the softcover. If an author let these self-appointed mentors decide for him what he's going to write and how he's going to write it, he'd never get anywhere...

SCHULMAN: It has been suggested to me that since I'm writing for a paper like the *Sunday News* I should do a sort of "movie-star"-type interview and ask you questions like "What are your hobbies? Do you have a garden?" That sort of thing.

HEINLEIN; Well, if you want to know things of that sort.

I used to alternate writing books with stonemasonry when I was in good health; I'm no longer physically up to that. But I've done a lot of stonemasonry and general mechanic work. I can do almost any of the construction trades. Of course I'm an engineer by training, but t I'm pretty handy with almost any tools. I can wire a house or set a toilet or almost anything of that sort--the sort of work with his hands that I described Lazarus Long as doing, these were things I know how to do. My wife is very much of a gardener, but I don't garden myself. At the present time what with frequent illnesses it's about all I can do to manage to keep up with the nonfiction that I have to keep up with to know what's going on. In consequence, I don't read very much fiction now--not because I don't want to but because I don't have time to. Reading science fiction back before I started writing it was my favorite way of spending leisure. But, Lordy, I don't have time to do it now. I do read a little of it, but not much. There are some very good writers around loose now whose work I have accumulated and hope to get to some time. Larry Niven, for example, is an example of a very good science fiction writer but I haven't read too much of his--I've simply got it accumulated in my room--just lack of time for I find Larry Niven *very* entertaining. Do you read him?

SCHULMAN: I haven't read anything of his, yet.

HEINLEIN: Well, I commend him to your attention. He's a very creative writer and very clever. He writes a good yarn.

My wife and I for many years have traveled as much as we could; this has been somewhat held down by illness in the past four or five years. I've been to South America a couple of times in the last four years but that's about as far away as I've been. But for a number of years I'd write a story while she prepared another trip and then we'd take the trip and I'd write a story while she prepared another trip and then we'd take the trip and I'd come back and write another story. I've never written more than about three months out of the year the whole time I've been writing. Part of that is because I never rewrite. I cut, but I don't rewrite.

SCHULMAN: I envy that. I rewrite [then, not now] everything I put my pen to at least ten times--not through desire, it's just through dissatisfaction.

HEINLEIN: Well, I never learned to do it that way. Far, far better to take it a little slower and write it the way you intend it to be and then I find I still have to take a brush-pen--and cut out unnecessary verbiage. Oh, I cut thirty or forty thousand words out of this last one, an I cut twenty-five, thirty thousand words out of what I thought was the final version of *Stranger in a Strange Land*. I mean I'd already cut it before that and then I cut out another twenty-five thousand words out of it to get it down to a manageable size.

SCHULMAN; One thing I was wondering about; were those "omitted's" in *Time Enough For Love* places where you actually cut, or was it just an insert at that point?

HEINLEIN: In some cases they were actual cuts; in other cases they're simply abrupt transitions to make it faster. An example of the abrupt transition is once when I decided that the reader had had plenty of the hardships of getting that covered wagon through the pass, and I just cut out the next several weeks. That's simply an abrupt transition, in other cases I cut it out because--after having written it--I cut it out because it wasn't absolutely necessary and the book was too damn big already.

For years and years we've traveled, oh, around the world three times, and I don't know how many times to Europe, over the North Pole, four or five times to South America. We've covered just about all the globe that we could reach, in view of the fact that you couldn't get a visa for Red China, and I did avoid the Congo after things got tough in there--just plain too difficult to travel. And usually Mrs. Heinlein has learned to speak at least one of the local languages and in some cases, I have, too. She can speak eight languages--I can get along in four--but she's not a professional linguist, she's a biochemist specializing in tropical and subtropical plants, genetics of them. But she happens to have an ear for languages and she studies very hard, so there's at least three languages that she can think in and some eight languages that she can get along it. But when she finished NYU a good many years ago she had only three languages; she simply kept adding them on.

We're both very fond of dancing; we haven't done much of it lately. We used to do a lot of dancing on ice. We belonged to a couple of figure skating clubs that regularly had ice dancing--social dancing on ice. I don't know whether you've ever seen it but all of the usual dances that are done on boards can be done on skates. And we belonged to a square dancing club and a cotillion and one thing or another, but we're always set up for dancing here in the house. But you get older...so we just don't dance as much as we used to.

SCHULMAN: Does your house resemble at all the description of Jubal Harshaw's place.

HEINLEIN: Well, of course I wrote that book when I was in Colorado--but not too much. Jubal Harshaw's house was tailored to Jubal; this house is tailored to us. It's an eccentric house in that it's as carefully tailored to use as a custom-made girdle. it's circular because Mrs. Heinlein wanted a circular house. I did the design work on it, but I did very largely what she wanted to accomplish. Got a big atrium in the middle of it--twelve feet across to the sky, open to the sky--which has a tree in it, and flowers. And it has all sorts of things that I put in to make housekeeping easier, for example everything is either built in or on wheels. One or the other. It's either built solid with the house or it's on wheels so it will roll, with the single exception of her baby grand. Putting a baby grand on wheels isn't too practical. Oh, and very complex wiring, and it's a forced-air factory system for ventilation and heating and so forth.

SCHULMAN: Are you a high-fidelity buff at all?

HEINLEIN: Not particularly. We do have a hi-fi system but I'm not the sort of a hi-fi buff who's continually worrying about components and, "Look at this curve" and , "now let's turn the gain up high and see what you can get there" and, you know, where their interest is in reproduction. Our interest is in the music. And we have an excellent sound system which a hi-fi buff would probably be playing with all the time and changing around. We simply got an expert to put the thing in an then we use it to play music. We have speakers distributed all around the house and outdoors--I don't know, fifteen, sixteen speakers--with switches and pads to let us get any combination we want. And the swimming pool is arranged the same way--I mean automated. Automatic cleaning, automatic chlorinization, and so forth.

SCHULMAN: I remember that--you just mentioned *Beyond This Horizon* a short time ago--in *Beyond This Horizon* is the first description I've ever seen of a waterbed. Do you have one of those?

HEINLEIN: I've got one but it's in the storehouse; I don't have any place to set it up. The first man to manufacture 'em sent us one as a compliment; he'd picked it up, not from *Beyond This Horizon*, but where I described it much more clearly in *Stranger in a Strange Land*. I designed the waterbed back in the thirties and couldn't afford to build the things. I wanted it then because I was an invalid. But I couldn't afford to build it and then finally used it in fiction, and a number of people picked it up from there and now *everybody's* building waterbeds. And some of them are built quite precisely to my specifications. I mean they really worked. Some of them are not so well-built. But I don't have space to set up a waterbed in this house without tearing something else out. And we do have some tailor made and quite comfortable beds.

The house has all sorts of things to make housekeeping simple because neither one of us cares too much for servants, and yet we've got a big enough place--and we're getting old enough--that we otherwise would need help. She has electronic cooking and, oh, little things. There are twelve or thirteen telephone jacks throughout the house, and eight or ten instruments so that no matter where we happen to be we can answer the phone there. And each of the bathrooms has a door to the outside so you can go directly from the bathroom to the pool without tracking wet and muddy feet through the house. A lot of things like that. It's an eccentric house, all right, but it's simply tailored to what we need to do.

SCHULMAN: I remember in *The Door Into Summer* you went through quite a bit about the drudgery of housework and one of the premises of the story had to do with all sorts of devices to make it easier. Have you come up with any of those things?

HEINLEIN: Most of the things I described in there are so far out that they would be extremely expensive to develop. That electronic equipment and so forth. It can be done, sure, but it would not be easy. I haven't attempted to put anything of that sort into *this* house because you can't buy it off the shelf and I'm not equipped to do--nor do I have any inclination to do--the tremendous amount of R and D work that would be involved.

SCHULMAN: Were Thorsen memory tubes purely a fictional creation?

HEINLEIN: Yes, however they've got things that are the equivalent to it right now, but I invented that notion back before they *did* have, when the state of computer art was much more primitive than it is now. I'm really surprised to see the extent to which they've managed to compress the memories in--oh, microminaturization in computers today is incredible to a person who's seen it grow up. I was first training in computers--in ballistics computers--back in 1930, when all the sequences had to be mechanical. When I see how far machine computation has gone since that time, I find it *the* most impressive development--more impressive than the atom bomb, more impressive than space travel--in its final consequences.

SCHULMAN: How far away do you think we are before somebody like Mike will be around?

HEINLEIN: You mean a human being who is raised by other beings?

SCHULMAN: No, I mean Mike in *The Moon is a Harsh Mistress*.

HEINLEIN: Oh!

SCHULMAN: Or is it the same character, as some people have claimed?

HEINLEIN: Uh, no. Simple coincidence. the names *derive* differently. One is from Mycroft and the other is from Michael. Combined with the fact that I have habitually used rather commonplace names for my lead characters on purpose.

SCHULMAN: I noticed at least four characters with the name "Smith"--or "Smythe" if you include--

HEINLEIN: Yes. Uh, huh. That's on purpose. If you don't use commonplace names then you invest a character with something unusual by his name. Now, Dr. Jubal Harshaw is an unusual name and there's a reason for it...there are overtones to the thing. Jonathan Hoag is an unusual name, and I spent a lot of time picking out that name. But ordinarily I use very commonplace names because I want the reader to identify, this is an everyman character.

SCHULMAN: But anyway, getting back to Mike in *The Moon is a Harsh Mistress*...

HEINLEIN: Now, that has an assumption in it that we don't know to be true and the assumption is discussed still farther in *Time Enough*

For Love. The assumption is that once a computer get sufficiently complex--on the order of complexity of the human brain--that awareness can take place, self awareness. Now, that's purely an assumption--I don't know whether it's true or not--but then nobody knows how human consciousness works, either. Herman Kahn was a guest of ours at the time I was writing *The Moon is a Harsh Mistress*. Do you know who I mean? The Hudson Institute?

SCHULMAN: Uh, no I don't.

HEINLEIN: *On Thermonuclear Warfare? Thinking About the Unthinkable? On Escalation*? Never heard of Herman Kahn?

SCHULMAN: I'm afraid I'm abysmally ignorant.

HEINLEIN: Well, he was with the Rand corporation, then he set up his own think-tank up the Hudson called the Hudson Institute. He is widely regarded as one of the top brains in the country. He was a physicist before he became an interdisciplinary man. I told him about this assumption and Herman thought about it and said, "Yes, that appears plausible." He made no further comment, because it's a matter on which no one can have a finished opinion until we see. This matter of artificial intelligence isn't very far along, yet--even the stuff they're doing at M.I.T.

SCHULMAN: Marvin Minsky and Seymour Pappert?

HEINLEIN: Yes, Marvin--you saw the article about Marvin in the *Wall Street Journal* about two weeks ago?

SCHULMAN: No, I didn't. The whole thing was pointed out to me by J.J. Pierce. [See "An interview With John J. Pierce," NLN 21, May, 1973 for this reference.]

HEINLEIN: Uh, huh. Marvin doesn't make any more claim than that himself. We were shipmate's here a short time ago--he and his daughter and my wife and myself--and we had a little discussion. There are some of us who think that machine intelligence is possible--machine self awareness--and some who do not, but the matter is wide open at the present time--nobody knows. Certainly Dr. Minsky has done pretty well in the line of teaching machines to do things. His machines *do* appear to reason. Remember and reason, but on a fairly primitive scale.

Let's see. This came about as the result of someone saying that you ought to do a movie star-type interview.

SCHULMAN: We seem to get back to the weighty stuff.

HEINLEIN: Well, let's see. I suppose that you have the usual biographical stuff on me that's been carried in several books several times?

SCHULMAN: I have all sorts of stuff. Alexei Panshin gives a brief account, there's a brief account in the *The Past Through Tomorrow*, I have a sheet which I Xerox[-copied] from a library book

[Contemporary American Authors]...Yeah I have several things.

HEINLEIN: I don't know what Panshin had to say because I've never read anything by Panshin. Panshin doesn't know very much about me, that's certain, I've never met him.

SCHULMAN: I don't know. I really think you may have missed something by not reading *Heinlein in Dimension*; I really found it a fascinating book.

HEINLEIN: Look, I don't ordinarily read reviews; my publisher does--he keeps track of them. I would read such a book if it were about Isaac Asimov, but although I know Isaac very well--close friend from a long time back--in reading about Isaac I would be reading about another person. Why the devil should I read about myself--what for?

SCHULMAN: Well, much of the material in the book is not specifically about you, it's about other concepts in science fiction and relating it to where he feels your contributions have been.

HEINLEIN: Well, okay. But still, why would I read it? I *wrote* it! [Laughter] I'm *certainly* not the market he aimed it at.

SCHULMAN: No, I guess not.

HEINLEIN: Yes.

SCHULMAN: One thing which I have a note on here—which doesn't relate to the movie-star interview part—is that there's a notion in several of your books—I'm specifically thinking of *Podkayne*—about Man's limitations in his own environment. You know, about how he can be sunstruck very easily, and needs arch-supports, and all sorts of things like that.

HEINLEIN: I didn't hear that latter part.

SCHULMAN: That he needs arch-supports for his feet.

HEINLEIN: Oh, yes.

SCHULMAN: Yes. And one of the notions that came to mind when you related to this how you thought that perhaps this wasn't man's natural environment was Desmond Morris's theory that the missing link in Man's evolution was a stage as an *aquatic* animal. I was wondering what you thought about that?

HEINLEIN: Well, it doesn't seem very likely to me, but it's not a matter to which I've given any deep thought. I haven't read what he has to say; it seems to me unlikely but I haven't read it. That's simply a very horseback opinion. It reminded me of something else...Have you read a book called *The Naked Ape*?

SCHULMAN: Yes, that's the one I was referring to. That's by Morris.

HEINLEIN: Oh! And that's the book you were referring to?

SCHULMAN: Yes. Desmond Morris's *The Naked Ape* and also *The Human Zoo*.

HEINLEIN: I had forgotten that portion in there about the possibility that he was aquatic--the Missing Link. The thing that impressed me about that book was his emphasis on pair-linking as an evolutionary necessity for the human animal. I was thinking about this matter...that all this discussion of sex and so forth is not appropriate to science fiction? Well, to my mind, sex is so central an element in every human being and in the development of the human race that to have left it out of science fiction--as it was for many years--was a major fault in science fiction, and I'm very pleased that it's now possible to write about it. I'm reminded of an elderly maiden aunt of a person of my generation--this was quite a while back--who remarked with respect to *Romeo and Juliet* that it was an excellent play, but why did he have to get all that sex stuff into it? Human sexuality is so major a factor in the human race that any attempt to deal with the human race or with people realistically which *omits* this factor cannot really be a mature treatment. And yet I know there are people who would be made uneasy in some fashion if sex gets into it, and yet sex has to be in it if we're to have human beings...

SCHULMAN: I'm getting near the end of the third side of my cassette; we've been going at it now for about three hours and your voice must be getting pretty tired.

HEINLEIN: Has it been that long? I suppose so. Let's see. As to other parts about me personally, you have some biog-notes there. You no doubt know that I was born in Missouri, I'm sure you know that I went to the Naval Academy and that I was disabled our of the Navy. I'm one of a large family. I have two older brothers--one of them is a general and one a professor--and one younger brother who is a professor, and three sisters. It's a very long-lived family. My mother is still living at ninety-four...And [my grandfather taught] me to play chess when I was four years old and we used to play.

SCHULMAN: Do you still play?

HEINLEIN: I haven't time. I haven't time. Chess and contract bridge are both very entertaining and they are both compelling time-takers. I've given up both of them because they take up so much time. And, essentially there's nothing to either one of them--I mean after you're through where have you been? Like the boy who rode the merry-go-round. I just haven't time; there's too much to do. No, I expect to take up both of them again when I *do* finally retire--if I ever do.

SCHULMAN: I didn't know that writers *did* retire.

HEINLEIN: Well, Tony Boucher pointed that out to me years ago. he said that there are retired everything else--retired schoolteachers, retired firemen, retired bankers--but there are no retired writers. There are simply writers who are no longer selling.

SCHULMAN: I assume that you say, "Dammit, I'm going to retire" and then two hours later you say, "Hey--I just got the greatest idea for a story!"

HEINLEIN: Oh, yes. It's addictive. I didn't intend to stay in the writing business more than a couple of years.

SCHULMAN: There's a statement made to that effect in your forty-one Worldcon speech; you said that you'd probably be doing something along the line of defense work.

HEINLEIN: Well, yes...

[Break in transcription as cassette ended. Question asked before I realized it wasn't going dealt with whether he thought events of today were indicative of a "future shock" similar to the "semantic disorientation" of the Crazy Years in the "Future History" series--JNS]

SCHULMAN: Okay. I think we're going again.

HEINLEIN: [Responding in the affirmative] A very easy example is right there in Manhattan. Back in 1930 I had a studio down in Greenwich Village and I never hesitated to be out at night any place in Manhattan. Now when I go to Manhattan I am very, very careful. The situation has changed. Even though that was during Prohibition--the so-called gangster era--the streets were far safer then than they are now. Mugging didn't even exist as a word in 1930. That's one illustration.

SCHULMAN: And certainly the word "gay" has changed in meaning considerably.

HEINLEIN: Well, it has changed in the public meaning. "Gay" had its idiomatic meaning in respect to homosexuality--"among the gay"--as far back as 1930. I know, for of course Greenwich Village even then had quite a lot of it, both men and women. But "gay"--now the general public knows what it means. I mean the idiomatic meaning has pushed the normal meaning aside. If you read over the headlines that I put into the *Crazy Years* in *Methuselah's Children*, some of them don't even look odd.

SCHULMAN: No, they don't.

HEINLEIN: They're not startling. But they *were* startling when I wrote them.

SCHULMAN: Although nobody's talking about raising the voting age to forty-one.

HEINLEIN: No, but they did the reverse of that; they lowered it to eighteen, and they removed all possible impediments. I mean, all you have to be is a warm body now. For example at the present time, the student body down here at the University of California at Santa Cruz is eligible to vote in the city election--any of them who care to register for it--by the current rulings. This means the student body can outvote the city itself on things like bond elections. On the real property. And yet those kids down there are transients. They're not permanent residents, they're simply there to go to school.

SCHULMAN: I never *did* think voting was a very good way to settle issues.

HEINLEIN: I don't either, and neither does Lazarus Long, as I indicated in there. But the things that they've done about voting are the reverse of what I had in there about raising the voting age to forty. It would have fitted more if I had made it "lowered the voting age to twelve."

SCHULMAN: Well there was a movie about that just a short time ago.

HEINLEIN: Yes, I know. I didn't see the movie but I read an account of it. I know that there was such.

SCHULMAN: *Wild in the Streets*.

HEINLEIN: Yes, *Wild in the Streets*, and they were liquidating people who were over something or other.

SCHULMAN: I think it was thirty.

HEINLEIN: Something like that.

SCHULMAN: Taking them off to prison camps.

HEINLEIN: Yes. I remember the *Wall Street Journal* ran a three line notice--sad note or obituary, or something like that; this was four or five years ago--noting that the man who originated the slogan, "Never trust anyone over thirty"!

SCHULMAN: Yes?

HEINLEIN: Had just had his thirtieth birthday. [Laughter] This was four or five years back.

SCHULMAN: Tell me, what do you mean by a "mature society"? You used the words differently on the "Future History" chart and in *Time Enough For Love*. Like on the "Future History" chart you refer to the semantically oriented society as a "mature" society. End of human adolescence.

HEINLEIN: And in *Time Enough For Love*?

SCHULMAN: There's a sentence to the effect that in a "mature society" civil servant is semantically equivalent to civil *master*.

HEINLEIN: Yes. Well, you can attribute that to the fact that in the course of thirty years, I became some what pessimistic about political solutions. Yes, I did use the word differently. At the time I wrote *Methuselah's Children* I was still politically quite naive and still had hopes that various libertarian notions could be put over by political processes....It [now] seems to me that every time we manage to establish one freedom, they take another one away. Maybe two. And that seems to me characteristic of a society as it gets older and more crowded and higher taxes and more laws. One thing that I stuck in *Time enough For Love* on purpose without calling attention to it had this twelve-year-old boy driving a car in Kansas City? And Lazarus thought it was all right and legal at that time in Kansas City. My next older brother drove a car regularly--every day--when he was twelve years old in Kansas City. There were neither driving examinations nor driving licenses. Nor very much traffic.

SCHULMAN: I don't know. I'm sort of hoping that one of these days we'll get the best of both worlds, the high technology that we benefit so much by--which we need a fairly large population for--and the libertarian society which I'm working for.

HEINLEIN: The question of how many mega-men it takes to maintain a high-technology society and how many mega-men it takes to produce oppressions simply through the complexity of the society is a matter that I have never satisfactorily solved in my own mind. but I am quite sure that one works against the other, that it takes a large-ish population for a high technology, but if you get large populations human liberties are *automatically* restricted even if you don't have legislation about it. In fact, the legislation in many cases is intended to--and sometimes does--lubricate the frictions that take place between people simply because they're too close together.

SCHULMAN: I'm sort of thinking the solution might come *through* technology, if we ever get to the point where you have some sort of, let's say, portable force-field which can physically prevent a person from being harmed by somebody else.

HEINLEIN: Have you read *The Caves of Steel* and *The Naked Sun* by Dr. Asimov?

SCHULMAN: No, I haven't.

HEINLEIN: I think they're in hardcover and in the library. One shows a highly libertarian society and the other one shows Manhattan even more crowded that it is now. And Isaac deals with each of them--somewhat different in point of view from you or from me--because Isaac actually *likes* big cities.

SCHULMAN: Well, so do I. One of my favorite lines in all your writings is the description of New Chicago in *Between Planets* with its decadence--"rotten at the core and skidding toward the pit"--that's just the type of place I like. I guess I--like Dr. Jefferson--"infest" New York.

HEINLEIN: You would find both those Asimov books interesting particularly if you read them practically side by side. There's the same historical background and one concerns an extremely *loose* population and the other one concerns and extremely *tight* population and how they deal with it. Isaac's stuff is *always* stimulating even when you don't agree with it. Perhaps even most so when you disagree with it.

Well, unless you have something else specifically to ask me, I think we'd better simply adjourn.

SCHULMAN: Well, I just have one more question...Do you expect a "false dawn" and eclipse in astronautics?

HEINLEIN: Oh, hell. [Laughter] That *whole* chart is fictional. The stuff isn't history, it's *fiction*. Anybody who would attempt to make a firm prediction about that with the amount of data at hand would be reckless, to say the least. There doesn't seem to be any great enthusiasm for space travel at the present time in this country but I'm reasonably certain that the human race will continue with it in the near future. Whether or not they'll do it in English, or in Russian, or in Chinese, I couldn't guess. But I don't think we've dropped the matter.

SCHULMAN: If you really ever get interested in the Prophet again, I'm still waiting to find out about him. He interests me.

HEINLEIN: What--Nehemiah Scudder?

SCHULMAN: Yes.

HEINLEIN: Oh, I might some day. I don't know.

SCHULMAN: He's the one character you've created that we've never met, yet.

HEINLEIN: That was intentional. One of the things I had in mind was to do a story in which the lead character would never come on stage. What you would feel is his influence. And I think I did.

SCHULMAN: Well, I guess I've sort of talked myself out. At least for now...[Deletion of some technical conversation]

HEINLEIN: Well, I'll talk further if you want to at another time.

SCHULMAN: Thank you very, very much Mr. Heinlein.

HEINLEIN: I look forward to hearing from you again. Goodbye.

SCHULMAN: Bye, bye.

Channel Markers

Editor's Note: On April 5, 1973, Robert A. Heinlein' delivered the James Forrestal Memorial Lecture to the Brigade of Midshipmen at his alma mater, the U.S. Naval Academy at Annapolis. While every sciencefiction reader knows Heinlein through his stories, where his characters often speak from many different points of view, here he speaks in his own person, about writing, about science fiction, and about the things in life that he considers to be most important.

Introduction by the Midshipman "Six-Striper" . . . a speaker who is not "A Stranger in a Strange Land."

Mr. Heinlein: Thank you, Brigade Commander—and "It's Great to Be Back," too!

Admiral and Mrs. Mack, Ladies and Gentlemen, Young Gentlemen of the Brigade

For years I have refused all requests to speak . . . but when I was asked to speak at my alma mater I accepted at once—and caught myself in a bight, for I learned that I was expected to talk about science fiction, its impact on American society, and my experiences concerning it.

But I never discuss my stories and I am still more reluctant to discuss the work of my colleagues. As for the impact of speculative fiction, I am too close to the center to judge. And how can an author have experiences in connection with his work? He works alone, no company but a typewriter. About all that could happen to him would be an earthquake.

Let's see if the subject is something you want to hear about—How many of you ever read science fiction? Hands, please.

All right, I'll talk about science fiction . . . but I'll get in a few licks at the end on what *I* want to talk about.

Now who of you here tonight has read anything that I have written? Hands up again, please.

Thank you.

One more datum, please— How many of you are interested in writing for publication? May I see hands again?

Oh, come now, you're not being frank with me. Thousands of contacts with the public over more than thirty years cause me to estimate the number of aspirant writers among the adults of this country at fifty percent—or more. It is impossible that a group this large, all adult and all literate, could have so few in it who want to write. I can tell you in less than fifty words how to get published . . . but if you are too shy to admit that you are interested in writing and publishing what you write, I won't bother.

Let's try again. How many are interested in writing for publication? I won't talk if only a handful want to hear. Let's see hands.

All right, that's enough to justify discussing it. The rest of you are invited to dope off and think about the gatefold in *Playboy.*

Five Rules for Success in Writing:

First: You must *write.*

Second: You must *finish* what you write.

Third: You must refrain from rewriting except to editorial order.

Fourth: You must place it on the market.

Fifth: You must *keep* it on the market until sold.

That's all. That's a surefire formula for getting anything—anything at all!—published. But so seldom does anyone follow all five rules that the profession of writing is a soft touch for those who do—even though most professional writers are not too bright, not too wise, not too creative. For these rules work in series, not in parallel. If you bilge any one of them, you bilge completely—and your writing will not be published.

Let's see how they work. I said that half of the adult, literate population claim to want to write. Call that half of a hundred million. So we start with fifty million people.

Nine out of ten who *say* they want to write never get around to it. That leaves five million.

Not more than one in ten who start to write something ever finish what they start—finish it completely: corrected, typewritten, double-spaced, one side of the paper in standard format. That leaves—at most—five hundred thousand.

Of those who do finish a manuscript, nine-tenths of them won't leave well enough alone. They start fiddling with it, rewriting, polishing, changing . . . until they have squeezed the life out and lose interest. Now we are down to fifty thousand.

Most of these survivors don't send their work off to an editor. Oh, no!—that involves the chance of failure and they're not ready to face *that.* Writers—all writers including scarred old professionals—are inordinately fond of their brainchildren. They would rather see their firstborn child ravaged by wolves than suffer the pain of having a manuscript rejected. So instead they read their manuscripts aloud to spouses and long-suffering friends.

This leaves only five thousand survivors who actually send their work to market.

So off it goes to an editor—and back it comes with a rejection slip.

This is very painful to the ego.

The usual amateur stops right there. He is so discouraged that he puts away his manuscript and forgets it.

Or he might send it out once more. The second rejection is even more painful than the first. It takes real stubbornness to send it out a third time. Only a handful will send a manuscript out four times. A still smaller number will keep on sending it out, as many times as necessary, until it sells.

For it *will* sell. If a manuscript has any merit at all and its author keeps on trying, eventually it will sell. Some editor will find himself facing a deadline with blank pages still to be filled. He reaches into the slush pile' and pulls out this manuscript that he recalls as being bad but not utterly hopeless, rereads it, and thinks, "Well, if I cut out that useless first page and start with the action—then tighten up the ending, cut out all those adjectives—then bluepencil this description of weather—it would just about fit. Peggy! Send this bloke form letter number two, the one that lets me cut to fit—and add that paragraph about how we would like to see more of his work but not more than fortyfive hundred words."

So now our hopeful is a published writer ... and if he has been as stubborn in continuing to write as he has been about keeping his work on the market, he will have some manuscript that has been rejected several times but which he finds he can cut from seven thousand words to fortyfive hundred—and does and finds that the cut version reads much better . . . and thereby begins to learn a most important lesson in the writing trade: that any manuscript is improved if you cut away the fat.

This last of five go-no-go gauges has eliminated another ninety percent. We started with fifty million; we now have only five hundred survivors.

These figures are substantially true. A few years ago my guild, the Authors League of America, made a survey to locate all professional writers. We found only four hundred who stated that they supported themselves and their families solely by freelance writing. All the others had some other basic income.

Let's allow for population increase and for any the survey missed—not many, the real professionals have their names plastered all over the newsstands; they can't hide. So call it a maximum of five hundred.

Only five hundred making their livings at freelance writing out of a population of over two hundred million. Less than one in four hundred thousand.

Yet I said that freelance writing is a soft touch. It is. Do you know of any other occupation in which a man can be his own boss, with no capital investment, no employees to worry about, no payroll to meet, no hours to keep, no need to meet the public other than when and where and how it suits him, live anywhere he wants to, dress as he pleases, work only three or four months out of the year, take long, long vacations—and still make a very comfortable living?

What he *does* have to do is to follow those rules, every one of them, every time, without fail—and keep on following them, for year after year after year.

It means working when you don't feel like working, even though there is no one to tell you that you must. It means following these rules even when you are disheartened by a long string of rejections and your head aches and your stomach is upset—and your wife thinks you are a fool not to look for a job. It means refusing to see your best friends when you are writing. It means telling your wife and children to get out of your study and *stay* out! It means offending people who can't understand that writing must *not* be interrupted—not for dinner parties, not for birth, not even for Christmas. It means getting a reputation as a bad-tempered, self-centered curmudgeon—and resigning yourself to living with that reputation no matter how eagerly you want to be liked—and writers do want to be liked, else they would not be trying to reach people through writing.

I probably haven't convinced you that those five rules are all it takes. But they are the business rules of anyone who makes anything and offers it for sale. Take a cabinetmaker specializing in handmade furniture. He must make furniture and he must complete each piece he makes. He never tears up a chair he has finished because he has thought of a better design. No, he offers that chair for sale and uses the new design to build another—this is the "no rewriting" rule.

Having finished a chair, he puts it on display and keeps it there until sold. At worst, he'll mark it down and put it in his bargain basement—and a writer does the same thing with a manuscript that fails to sell to high-pay markets; he puts his cheap-rate pen name on it and sends it to the endless low-pay markets . . . with no tears; words are worth whatever the market will pay—no more, no less.

A beginner finds hard to believe that no-rewriting rule. A myth has grown up that a manuscript to be suitable for publication must be rewritten at least once.

Utterly false!

Would you refry an egg? Tear down a freshly built wall? Destroy a new chair? Ridiculous!

This silly practice of rewriting is based on the hidden assumption that you are smarter today than you were yesterday. But you are *not.* The efficient way to write, as with any other work, is to *do it right the first time!*

I don't mean that a manuscript should not be corrected and cut. Few writers are perfect in typing, spelling, punctuation, and grammar. Most of us have to go back and correct such things, and—above all!—strike out surplusage and fancy talk. The manuscript then needs to be retyped—for neatness; retyping is not rewriting. Rewriting means a new approach, a basic change in form.

Don't do it!

A writer's sole capital is his time. You cannot afford to start writing until you know what you mean to say and how you mean to say it. If you fail in this, it is not paper you are wasting but your sharply limited and irreplaceable lifetime.

An instructor in English who requires a student to rewrite is reinforcing the worst possible habit in the use of language, the inability to say it right the first time. If the student thus abused is a midshipman, he may wind up the sort of officer who can't write a letter or a report without making half a dozen false drafts. The Navy does not have time for such nonsense. Efficient use of language is an indispensable tool of the naval profession. Under battle conditions it can make the difference between success and disaster.

The most valuable course I took here was one called "Order Writing." Its emphasis was on clarity. When a section met, each midshipman drew a slip which outlined a situation and told him what he was—task force commander, ship's captain, whatever. He had a few minutes to study it, then was required to write on the blackboard an order to fit the situation, then he was under fire from all sides. No rewriting, no second chance—if the instructor or any midshipman in the section could find any plausible way to misconstrue that order, his mark for the day was zero. Otherwise it was 4.0—nothing in between.

It was a *wonderful* course!

I think I have time to say one word about classes in "creative writing."

That one word is: *Don't!*

Creativity cannot be taught. One may teach grammar and composition; it is not possible to teach creative writing and any person who claims to do so is a fake. Creative artists are never taught; they invariably teach themselves. You can teach a young artist the tools of his trade; you cannot teach him to create. Nobody taught Shakespeare, or Mark Twain, or Edgar Allan Poe—or Erle Stanley Gardner or Rex Stout—and no one can teach *you.*

Science fiction—I don't write it because I am addicted to it; I am not. I've written and sold all sorts of things, technical articles, journalistic nonfiction, television scripts, detective stories, screenplays, adventure stories, even teenage love stories told in female first person. But I usually write science fiction because it turned out that I made more money that way. I did not become a writer to see my name in print; I didn't give a hoot about that and had no literary ambitions. I was a naval officer by choice; I became a writer by economic necessity. I needed to pay off a mortgage and started writing to get the money. I was in poor health and could not handle a steady job—nor were there any jobs; I was disabled out of the Navy during the Great Depression, a time when lawyers were driving milk trucks and graduate engineers were working as janitors.

But poor health is no great handicap to a freelance writer; he does his important work in his head and he can do that in bed. If he can sit at a typewriter a few hours a day a few weeks out of the year, that's enough. If he can get someone else to type for him, he need not get out of bed at all.

You don't have to be laid up to be a writer but a large percentage of writers *are* handicapped, and still more became writers because ill health or some other handicap cut them off from more active jobs. H.G. Wells started because pulmonary tuberculosis made him unable to continue as a teacher. Robert Louis Stevenson started out to be an engineer, then was forced into his brilliant writing career by chronic ill health. Cyrano de Bergerac—the man with the nose—is one of the many military men who turned to writing after being disabled in combat—and his novel "La Voyage a la Lune" is the first case of a sciencefiction writer using rocket propulsion for a spacecraft. A man in the class of '22 was disabled out about when I was and started selling sea stories. Another one, a World War One mustang, was retired for cancer. In the five years it took him to die, he taught himself to write and sold some sixty stories, science fiction based on his naval experience. I knew a civil engineer who broke his back during the construction of the Golden Gate Bridge and turned to writing adventure stories after he was crippled. And a polio victim crippled in both legs and one arm—but he could turn out seventy words a minute of clean copy with two fingers of his right hand. A classmate of mine was let out as a midshipman for heart trouble—and a heart attack killed him—but in the meantime he supported himself for thirty years as a writer. Booth Tarkington dictated several of his best sellers after he was blind.

I don't think anyone knows what the percentage is of writers crowded into the trade by such causes. But being unable to work at a regular job is a great incentive in forming those habits necessary to success in writing. *It teaches one also a great respect for the reader.* The ultimate cash customer *must* be pleased, or there is no repeat trade. An author must acquire humility about this. What he has for sale is a luxury; no one has to buy it.

I think of it as competing for beer money; this keeps me steady on course. My purpose is to make what I write entertaining enough to compete with beer. Not to be as great as Shakespeare or as immortal as Homer but simply to write well enough to persuade the cash customer to spend money on one of my paperback reprints when he could spend it on beer.

I ask myself: Does this entertain *me?* Does it amuse me enough that, if I found it on a newsstand, I would be willing to pay cash to read it?

Or does it bore me?

If it bores me, I don't write it.

But what *you* write and how *you* say it, is up to *you,* and no one else.

I am indebted to my wife for this definition of "plot." " 'Plot'," she told me, "is something thought up by professors of English to explain something that writers do anyhow."

There may be authors who plot their stories; I have never met one. Oh, an author often outlines what he intends to write. He may refer to that outline as his "plot." But I've never heard of a working author who worried about such things as "catastrophe" and "denouement" and "incitement" and "complications" and "dramatic unities" and suchlike fancy notions—nor will he let his written outline be a Procrustean bed. He *can't.* Once those characters come alive, once he can hear their voices, they live their own lives, they do as they please—and they kick that outline to pieces.

This is not just my own experience; I have heard it over and over again from other working authors.

For example: A few weeks ago we were shipmates with Miss Katherine Ann Porter, author of "The Ship of Fools." That story is three or four times as long as most novels. I asked Miss Porter if she had planned to write so long a story.

She answered, "Oh, heavens, no! I had a contract to write three 20,000-word stories. I wrote the first two, then I had trouble with the third. I finally had to tell the publisher that I simply could not meet the contract for the third one—the characters were living their own lives and I had to let them do so."

Back to science fiction— More than ninety percent of all science fiction is trash. This is an example of Sturgeon's Law: ninety percent of everything is trash. Certainly this is true of the arts; take a look around you. Plays, motion pictures, poetry, music, sculpture, painting, writing—almost all of it is trash.

And this has always been true. For every Beethoven and Michelangelo and Rembrandt there were at least a dozen competitors doing well enough to make a living but whose work did not survive the test of time.

The same is true of science fiction. H.G. Wells wrote most of his science fiction three-quarters of a century ago—and those stories are still read: "The Invisible Man," "The War of the Worlds," "The Time Machine"—they are in every public library, available in book stores, often seen on newsstands. But what of the Frank Reade series, published at the same time, extremely popular and all of them science fiction? Who reads them today? Who has even heard of them?

We find the same range in today's science fiction, from comic strips of the Buck Rogers sort to novels such as George Orwell's "1984" and Aldous Huxley's "Brave New World."

How many of you have heard of one book or the other—either "1984" or "Brave New World"? Hands up, please.

Thank you. How many have read one or the other of these books? Good. How many have read both "1984" and "Brave New World"?

Thank you. I think the ghosts of Mr. Orwell and Mr. Huxley have reason to be pleased; one book was published twenty-five years ago, the other just over forty. With thirty thousand new titles published each year it is hard to remember even the best sellers of five or ten years ago. Yet these two books are still fresh, still influential. Each makes us think, and the grim warnings in each are even more urgent today than when first published.

And both are acceptable as English literature.

And both are hardcore science fiction.

What *is* science fiction?

It is not prophecy. Despite the endless list of things which have appeared in science fiction before they were physical realities—radar, submarines, television, automobiles, tanks, flying machines, spacecraft, communication satellites, organ transplants, giant computers, atomic bombs, nuclear power—you name it—science fiction is not prophecy.

Nor is it fantasy—even though critics ignorant of science often have trouble telling the two apart. I am not running down fantasy; I enjoy it and sometimes write it. But fantasy is not science fiction.

Science fiction is *realistic* fiction. An analogous sort of nonfiction are the projections into the future called "scenarios," produced by such as the Hudson Institute,, the Club of Rome, and the Rand Corporation. They start with the real world and attempt to extrapolate the possibilities of our future history.

They ask themselves questions of the "What if—?" sort. What if a dozen or so of the less stable nations get atomic weapons? What if we lose the Panama Canal? What if someone develops a Doomsday Machine and it winds up in the hands of a dictator as crazy as Hitler? What if we are cut off from oil from the Mideast? What if China or Russia attempts a preemptive strike at the other?

These futurologists work in teams, using computers and many other aids.

A serious sciencefiction writer must attempt the same sort of thing, starting with the real world and asking "What if—?" But in stead of being a team of political scientists and military experts and physicists and psychologists and demographers, he must do it alone . . . then turn his scenario into a story which will entertain a reader—thousands of readers—or he has failed no matter how logically he has extrapolated the present into the future.

To do this—to write speculative fiction and have it make sense—a sciencefiction writer must start with a wide and solid foundation of facts. He needs thorough grounding in history—all countries, all cultures, ancient and modern. Geography—physical and political and economic—and this should be made real in his mind by travel, every continent and as many countries as possible. Law—he must learn as much as he can about law—from Hammurabi's Tablets on down through Justinian's Code and Blackstone and Code Napoleon and the Geneva Convention to the People's Courts in Communist countries and how they differ from our own.

Literature, languages—a man who knows only his own language doesn't really know any language. Science—he needs to be widely read in *all* sciences: biochemistry, meteorology, nuclear physics, descriptive astronomy, cosmogony and geogony, demography, anthropology, many more. He needs to know the philosophy of science, the nature of the scientific method, the difference between a natural law and a currently accepted theory. Mathematics—while even a professional mathematician can't keep up with all the new developments, nevertheless a serious writer of science fiction should be sufficiently at home with the language of science—mathematics—that neither Godel's Proof nor the methods of statistical analysis are strangers to him, nor Boolean algebra, nor multidimensional non-Euclidean geometry.

Engineering and technology—a man can't make intelligent projections into the future unless he knows present-day technology.

The man I am describing does not exist. I defined the Renaissance Man, who made the entire field of human knowledge his sphere. But it has been a long time since that was possible. Technology alone, by a conservative estimate, now doubles every ten years and has been doing so at least since World War Two. No man can keep up with such a flood of data.

Is it any wonder that ninety percent of all science fiction is trash?

Or that respected novelists of the contemporary scene almost always trip in their own ignorance if they try science fiction?

The surprising thing is that a small percentage of science fiction is *not* trash.

The situation is not as hopeless as I described it. A man who spends most of his time studying can make a stab at keeping up with the enormous mass of knowledge needed as a foundation for writing intelligent science fiction. But he must *enjoy* studying—anything and everything. Card games don't tempt him; he turns on television only when there is something he *needs* to see; he may go to one movie a year. But he finds Mark's Handbook fascinating and the World Almanac delightful.

I have met most of the best writers of speculative fiction of this century. Without exception I have found them to be men of insatiable curiosity about *everything.* For example, one of them—still alive and writing; I heard him lecture a few weeks ago—read the Encyclopaedia Britannica all the way through while an undergraduate . . . then read it through again while taking his doctorate—which surprised me; he doesn't usually need to read anything twice.

In his spare time he supported himself—writing science fiction.

Is it surprising that this man's science fiction is always sensible, solidly grounded on the real world, no Matter how wild his speculations may seem?

If you want to write and have insatiable curiosity, science fiction may be your dish.

Science fiction does have one superiority over all other forms of literature: It is the *only* branch of literature which even attempts to cope with the real problems of this fast and dangerous world. All other forms don't even try. In this complex world, science, the scientific method, and the consequences of the scientific method, are central to everything the human race is doing and to wherever we are going. If we blow ourselves up, we will do it by misapplication of science; if we manage to keep from blowing ourselves up, it will be through intelligent application of science. Science fiction is the only form of fiction which takes into account this central force in our lives and futures. Other sorts of fiction, if they notice science at all, simply deplore it—an attitude very chic in the anti-intellectual atmosphere of today. But we will never get out of the mess we are in by wringing our hands.

The clock is pushing me. Let me leave you with one flatfooted prediction of the sciencefiction type. Like all scenarios this one has assumptions—variables treated as constants. The primary assumption is that World War Three will hold off long enough—ten, twenty, thirty years—for this prediction to work out . . . plus a secondary assumption that the human race will not find some other way to blunder into ultimate disaster.

Prediction: In the immediate future—by that I mean in the course of the naval careers of the class of '73—there will be nuclear-powered, constant-boost spaceships—ships capable of going to Mars and back in a couple of weeks—and these ships will be armed with Buck-Rogerish death rays. Despite all treaties now existing or still to be signed concerning the peaceful use of space, these spaceships will be used in warfare. Space navies will change beyond recognition our present methods of warfare and will control the political shape of the world for the foreseeable future. Furthermore—and still more important—these new spaceships will open the Solar System to colonization and will eventually open the rest of this galaxy.

I did *not* say that the United States will have these ships. The present sorry state of our country does not permit me to make such a prediction. In the words of one of our most distinguished graduates in his "The Influence of Sea Power on History": "Popular governments are not generally favorable to military expenditures, however necessary —"

Every military officer has had his nose rubbed in the wry truth of Admiral Mahan's observation. I first found myself dismayed by it some forty years ago when I learned that I was expected to maintain the ship's battery of USS *Roper* in a state of combat readiness on an allowance of less than a dollar a day—with World War Two staring down our throats.

The United States is capable of developing such spaceships. But the mood today does not favor it. So I am unable to predict that *we* will be the nation to spend the necessary R&D money to build such ships.

(Addressed to a plebe midshipman:)

Mister, how long is it to graduation?

Sixty-two days? Let's make it closer than that. I have . . . 7.59, just short of eight bells. Assuming graduation for ten in the morning that gives . . 5,220,860 seconds to graduation . . . and I have less than 960 seconds in which to say what I want to say.

(To the Brigade at large:)

Why are you here?

(To a second plebe:)

Mister, why are *you* here?

Never mind, son; that's a rhetorical question. You are here to become a naval officer. That's why this Academy was founded. That is why all of you are here: to become naval officers. If that is *not* why *you* are here, you've made a bad mistake. But I speak to the overwhelming majority who understood the oath they took on becoming midshipmen and look forward to the day when they will renew that oath as commissioned officers.

But why would anyone want to become a naval officer?

In the present dismal state of our culture there is little prestige attached to serving your country; recent public opinion polls place military service far down the list.

It can't be the pay. No one gets rich on Navy pay. Even a four-star admiral is paid much less than top executives in other lines. As for lower ranks the typical naval officer finds himself throughout his career just catching up from the unexpected expenses connected with the last change of duty when another change of duty causes a new financial crisis. Then, when he is about fifty, he is passed over and retires . . . but he can't really retire because he has two kids in college and one still to go. So he has to find a job . . . and discovers that jobs for men his age are scarce and usually don't pay well.

Working conditions? You'll spend half your life away from your family. Your working hours? "Six days shalt thou work and do all thou art able; the seventh the same, and pound on the cable." A forty-hour week is standard for civilians—but not for naval officers. You'll work that forty-hour week but that's just a starter. You'll stand a night watch as well, and duty weekends. Then with every increase in grade your hours get longer—until at last you get a ship of your own and no longer stand watches. Instead you are on duty twenty-four hours a day . . . and you'll sign your night order book with: "In case of doubt, do not hesitate to call me."

I don't know the average week's work for a naval officer but it is closer to sixty hours than to forty. I'm speaking of peacetime, of course. Under war conditions it is whatever hours are necessary—and sleep you grab when you can.

Why would anyone elect a career which is unappreciated, overworked, and underpaid? It can't be just to wear a pretty uniform. There has to be a better reason.

As one drives through the bushveldt of East Africa it is easy to spot herds of baboons grazing on the ground. But not by looking at the ground. Instead you look up and spot the lookout, an adult male posted on a limb of a tree where he has a clear view all around him—which is why you can spot him; he has to be where he can see a leopard in time to give the alarm. On the ground a leopard can catch a baboon . . . but if a baboon is warned in time to reach the trees, he can outclimb a leopard.

The lookout is a young male assigned to that duty and there he will stay, until the bull of the herd sends up another male to relieve him.

Keep your eye on that baboon; we'll be back to him.

Today, in the United States, it is popular among self-styled "intellectuals" to sneer at patriotism. They seem to think that it is axiomatic that any civilized man is a pacifist, and they treat the military profession with contempt. "Warmongers," "Imperialists," "Hired killers in uniform"—you have all heard such sneers and you will hear them again. One of their favorite quotations is: "Patriotism is the last refuge of a scoundrel."

What they never mention is that the man who made that sneering wisecrack was a fat, gluttonous slob who was pursued all his life by a pathological fear of death.

I propose to prove that that baboon on watch *is* morally superior to that fat poltroon who made that wisecrack.

Patriotism is the most practical of all human characteristics.

But in the present decadent atmosphere patriots are often too shy to talk about it—as if it were something shameful or an irrational weakness.

But patriotism is *not* sentimental nonsense. Nor something dreamed up by demagogues. Patriotism is as necessary a part of man's evolutionary equipment as are his eyes, as useful to the race as eyes are to the individual.

A man who is *not* patriotic is an evolutionary dead end. This is not sentiment but the hardest sort of logic.

To prove that patriotism is a necessity we must go back to fundamentals. Take any breed of animal—for example, Tyrannosaurus rex. What is the most basic thing about him? The answer is that Tyrannosaurus rex is dead, gone, extinct.

Now take Homo sapiens. The first fact about him is that he is not extinct, he is alive.

Which brings us to the second fundamental question: Will Homo sapiens stay alive? Will he survive?

We can answer part of that at once: Individually H. sapiens will *not* survive. It is unlikely that anyone here tonight will be alive eighty years from now; it approaches mathematical certainty that we will all be dead a hundred years from now as even the youngest plebe here would be a hundred and eighteen years old then—if still alive.

Some men do live that long but the percentage is so microscopic as not to matter. Recent advances in biology suggest that human life may be extended to a century and a quarter, even a century and a half—but this will create more problems than it solves. When a man reaches my age or thereabouts, the last great service he can perform is to die and get out of the way of younger people.

Very well, as individuals we all die. This brings us to the second half of the question: Does Homo sapiens *as a breed* have to die? The answer is: No, it is *not* unavoidable.

We have two situations, mutually exclusive: Mankind surviving, and mankind extinct. With respect to morality, the second situation is a null class. An extinct breed has *no* behavior, moral or otherwise.

Since survival is the *sine qua non,* I now define "moral behavior" as "behavior that tends toward survival." I won't argue with philosophers or theologians who choose to use the word "moral" to mean something else, but I do not think anyone can define "behavior that tends toward extinction" as being "moral" without stretching the word "moral" all out of shape.

We are now ready to observe the hierarchy of moral behavior from its lowest level to its highest.

The simplest form of moral behavior occurs when a man or other animal fights for his own survival. Do not belittle such behavior as being merely selfish. Of course, it is selfish . . . but selfishness is the bedrock on which all moral behavior starts and it can be immoral only when it conflicts with a higher moral imperative. An animal so poor in spirit that he won't even fight on his own behalf is already an evolutionary dead end; the best he can do for his breed is to crawl off and die, and not pass on his defective genes.

The next higher level is to work, fight, and sometimes die for your own immediate family. This is the level at which six pounds of mother cat can be so fierce that she'll drive off a police dog. It, is the level at which a father takes a moonlighting job to keep his kids in college—and the level at which a mother or father dives into a flood to save a drowning child . . . and it is still moral behavior even when it fails.

The next higher level is to work, fight, and sometimes die for a group larger than the family unit—an extended family, a herd, a tribe—and take another look at that baboon on watch; he's at that moral level. I don't think baboon language is complex enough to permit them to discuss such abstract notions 'as "morality" or "duty" or "loyalty"—but it is evident that baboons *do* operate morally and *do* exhibit the traits of duty and loyalty; we see them in action. Call it "instinct" if you like—but remember that assigning a name to a phenomenon does not explain it.

But that baboon behavior can be explained in evolutionary terms. Evolution is a process that never stops. Baboons who fail to exhibit moral behavior do not survive; they wind up as meat for leopards. Every baboon generation has to pass this examination in moral behavior; those who bilge it don't have progeny. Perhaps the old bull of the tribe gives lessons . . . but the leopard decides who graduates—and there is no appeal from his decision. We don't have to understand the details to observe the outcome: Baboons behave morally—for baboons.

The next level in moral behavior higher than that exhibited by the baboon is that in which duty and loyalty are shown toward a group of your own kind too large for an individual to know all of them. We have a name for that. It is called "patriotism."

Behaving on a still higher moral level were the astronauts who went to the Moon, for their actions tend toward the survival of the entire race of mankind. The door they opened leads to the hope that H. sapiens will survive indefinitely long, even longer than this solid planet on which we stand tonight. As a direct result of what they did, it is now possible that the human race will *never die.*

Many shortsighted fools think that going to the Moon was just a stunt. But the astronauts knew the meaning of what they were doing, as is shown by Neil. Armstrong's first words in stepping down onto the soil of Luna: "One small step for a man, one giant leap for mankind."

Let us note proudly that eleven of the Astronaut Corps are graduates of this, our school.

And let me add that James Forrestal was the *first* high-ranking Federal official to come out flatly for space travel.

I must pause to brush off those parlor pacifists I mentioned earlier . . . for they contend that *their* actions are on this highest moral level. They want to put a stop to war; they say so. Their purpose is to save the human race from killing itself off; they say that too. Anyone who disagrees with them must be a bloodthirsty scoundrel—and they'll tell you that to your face.

I won't waste time trying to judge their motives; my criticism is of their mental processes: Their heads aren't screwed on tight. They live in a world of fantasy.

Let me stipulate that, if the human race managed its affairs sensibly, we could do without war.

Yes—and if pigs had wings, they could fly.

I don't know what planet those pious pacifists are talking about but it can't be the third one out from the Sun. Anyone who has seen the Far East—or Africa—or the Middle East—knows or certainly should know that there is *no* chance of abolishing war in the foreseeable future. In the past few years I have been around the world three times, traveled in most of the Communist countries, visited many of the so-called emerging countries, plus many trips to Europe and to South America; I saw nothing that cheered me as to the prospects for peace. The seeds of war are everywhere; the conflicts of interest are real and deep, and will not be abolished by pious platitudes.

The best we can hope for is a precarious balance of power among the nations capable of waging total war—while endless lesser wars break out here and there.

I won't belabor this. Our campuses are loaded with custard-headed pacifists but the yard of the Naval Academy is one place where I will not encounter them. We are in agreement that the United States still needs a navy, that the Republic will always have need for heroes—else you would not be here tonight and in uniform.

Patriotism—moral behavior at the national level. *Non sibi sed Patria.* Nathan Hale's last words: "I regret that I have but one life to give for my country." Torpedo Squadron Eight making its suicidal attack. Four chaplains standing fast while the water rises around them. Thomas Jefferson saying, "The Tree of Liberty must be refreshed from time to time with the blood of patriots—" A submarine skipper giving the order "Take her *down!"* while he himself is still topside. Jonas Ingram standing on the steps of Bancroft Hall and shouting, "The Navy has no place for good losers! The Navy needs tough sons of bitches who can go out there and *win!"*

Patriotism—an abstract word used to describe a type of behavior as harshly practical as good brakes and good tires. It means that you place the welfare of your nation ahead of your own even if it costs you your life.

Men who go down to the sea in ships have long had another way of expressing the same moral behavior tagged by the abstract expression "patriotism." Spelled out in simple Anglo-Saxon words "patriotism" reads "Women and children first!"

And that is the moral result of realizing a self-evident biological fact: Men are expendable; women and children are not. A tribe or a nation can lose a high percentage of its men and still pick up the pieces and go on . . . as long as the women and children are saved. But if you fail to save the women and children, you've had it, you're done, you're *through!* You join Tyrannosaurus rex, one more breed that bilged its final test.

I must amplify that. I know that women can fight and often have. I have known many a tough old grandmother I would rather have at my side in a tight spot than any number of pseudomales who disdain military service. My wife put in three years and a bit active duty in World War Two, plus ten years reserve, and I am proud—very proud!—of her naval service. I am proud of every one of our women in uniform; they are a shining example to us men.

Nevertheless, as a mathematical proposition in the facts of biology, children, and women of childbearing age, are the ultimate treasure that we must save. Every human culture is based on "Women and children first"—and any attempt to do it any other way leads quickly to extinction.

Possibly extinction is the way we are headed. Great nations have died in the past; it can happen to us.

Nor am I certain how good our chances are. To me it seems self-evident that any nation that loses its patriotic fervor is on the skids.

Without that indispensable survival factor the end is only a matter of time. I don't know how deeply the rot has penetrated—but it seems to me that there has been a change for the worse in the last fifty years. Possibly I am misled by the offensive behavior of a noisy but unimportant minority. But it does seem to me that patriotism has lost its grip on a large percentage of our people.

I hope I am wrong . . . because if my fears are well-grounded, I would not bet two cents on this nation's chance of lasting even to the end of this century.

But there is no way to force patriotism on anyone. Passing a law will not create it, nor can we buy it by appropriating so many billions of dollars.

You gentlemen of the Brigade are most fortunate. You are going to a school where this basic moral virtue is daily reinforced by precept and example. It is not enough to know what Charlie Noble does for a living, or what makes the wildcat wild, or which BatDiv failed to splice the main brace and why—nor to learn matrix algebra and navigation and ballistics and aerodynamics and nuclear engineering. These things are merely the working tools of your profession and could be learned elsewhere; they do not require four years together by the Bay where Severn joins the tide.

What you do have here is a tradition of service. Your most important classroom is Memorial Hall. Your most important lesson is the way you feel inside when you walk up those steps and see that shot-torn flag framed in the arch of the door: "Don't Give 'Up the Ship."

If you feel nothing, you don't belong here. But if it gives you gooseflesh just to see that old battle flag, then you are going to find that feeling increasing every time you return here over the years . . . until it reaches a crescendo the day you return and read the list of your own honored dead—classmates, shipmates, friends--read them with grief and pride while you try to keep your tears silent.

The time has come for me to stop. I said that "patriotism" is a way of saying "Women and children first." And that no one can force a man to feel this way. Instead he must embrace it freely. I want to tell about one such man. He wore no uniform and no one knows his name, nor where he came from; all we know is what he did.

In my home town sixty years ago when I was a child, my mother and father used to take me and my brothers and sisters out to Swope Park on Sunday afternoons. It was a wonderful place for kids, with picnic grounds and lakes and a zoo. But a railroad line cut straight through it.

One Sunday afternoon a young married couple were crossing these tracks. She apparently did not watch her step, for she managed to catch her foot in the frog of a switch to a siding and could not pull it free. Her husband stopped to help her.

But try as they might they could not get her foot loose. While they were working at it, a tramp showed up, walking the ties. He joined the husband in trying to pull the young woman's foot loose. No luck.

Out of sight around the curve a train whistled. Perhaps there would have been time to run and flag it down, perhaps not. In any case both men went right ahead trying to pull her free . . . and the train hit them.

The wife was killed, the husband was mortally injured and died later, the tramp was killed—and testimony showed that neither man made the slightest effort to save himself.

The husband's behavior was heroic . . . but what we expect of a husband toward his wife: his right, and his proud privilege, to die for his woman. But what of this nameless stranger? Up to the very last second he could have jumped clear. He did not. He was still trying to save this woman he had never seen before in his life, right up to the very instant the train killed him. And that's all we'll ever know about him.

This is how a man dies.

This is how a *man* . . . *lives!*

TRAMP ROYALE

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Preface

TRAMP ROYALE HAS spent almost forty years in the obscurity of the files.

It was written immediately after our return from a trip around the world in 1953 and '54, and sent on the rounds of publishing companies. But, at that time, there was a slump in the publishing business, and no one could see any possibility of publishing it. It was then put in the files and sent to the library at the University of California at Santa Cruz, and forgotten.

In 1989, an editor asked me whether Robert had any unpublished books. I recalled this one. So the library made a copy of the manuscript, and I sent it to that editor.

Now here it is.

It might strike you as odd that an out-of-date travel book should be resurrected and published. But there must be something interesting in it, aside from the dated prices and old hotels which might now be torn down to make room for more modern ones.

Homesickness is everpresent when one travels away from home. It might well have flavored some of this book. I hope that our friends from some of the places mentioned in this book will not take offense at what has been said. Robert wrote his observations of their hotels and cultures without pulling his punches. We both know from later observation that Australian hotels have changed for the better.

On looking back, I find the prices of those days laughable. Where could one get a suite for $22 U.S. these days? I'm sure that Singapore prices are far higher now. And $35 for an alligator bag! If you could find one now, I'm sure it would cost ten times that much.

The title of this book comes from a Kipling poem—"Sestina of the TrampRoyal"—which you will find on pages 371-72 of this book. The Britannica says of the sestina form: "A most elaborate form of verse . . . The scheme was the invention of the troubadour, Arnault Daniel, who wrote many sestinas . . . The sestina, in its pure medieval form, consists of six stanzas of six lines each of blank verse; hence the name. The final words of the first stanza appear in varied order in all the others, the order laid down by the Provencals being: abcdef, faebdc, cfdabe, ecbfad, deacfb, bdfeca. On these stanzas a tornada, or envoi, of three lines, in which all the key words were repeated in the following order:—b-e, d-c, f-a."

Such rigidity in form is probably not suited to beautiful poetry, and the Kipling verses are not his best, but the poem might have been influential in the writing of this book.

Enjoy this book as a period piece. It does not represent today's world at all. We enjoyed even the horrid parts of the trip in retrospect, but especially the homecoming. Being away from home for an extended period makes one appreciate one's home country.

VIRGINIA HEINLEIN
Atlantic Beach, Florida

I

Ten Suitcases

MY WIFE TICKY is an anarchist-individualist. I sometimes suspect that all females are anarchists in their hearts, with no innate respect for law and order . . . but on her it shows more. She is the sort of person who looks the wrong way at tennis matches. When she was in the Navy during the early 'forties she showed up one morning in proper uniform but with her red hair held down by a simple navy-blue band—a hair ribbon. It was neat (Ticky is always neat) and it suited the rest of her outfit esthetically, but it was undeniably a hair ribbon and her division officer had fits.

"If you can show me," Ticky answered with simple dignity, "where it says one word in the Navy Uniform Regulations on the subject of hair ribbons, I'll take it off. Otherwise not."

See what I mean? She doesn't have the right attitude.

I should have known better than to propose a trip around the world to her. Little-did-I-dream that I would spend the next forty thousand miles shaking in my boots for fear that she would wind up in some foreign calaboose while I tried to find the American consul.

The junket came about because we found ourselves last year with a drawerful of old, dirty money and no special use for it. I do not like to keep money around too long; the stuff shrinks like Colorado snow in a chinook—inflation, or they pass a new tax, or an operation, or something. Or someone comes along who can sweettalk me out of it. It never lasts long.

We had been talking more or less about building another house with it, renting it, and becoming fat and nasty as landlords. But building involves time as well as money; it becomes a demanding vice. The fascinating details of septic tanks and clerestories and insulation move in like Bermuda grass and take over the mind and imagination. For a fiction-writer such as myself this is a road to bankruptcy.

But it was necessary to do something before a distinguished stranger came along and persuaded me to invest in a Wyoming oil lease.

Ticky was out weeding on the terrace when I found the solution. I hurried out to tell her, approaching the matter with the finesse of a sailor on a four-hour pass. "Look," I said, "we're going to make a trip around the world."

I had placed myself to catch her if she fainted, or to join in the dance if her ecstatic response required exercise to work it off. She was able to control her enthusiasm. For about thirty unusually long seconds she continued to fiddle with a johnny-jump-up, then she said bleakly, "Why?"

"Huh? Don't you *want* to go around the world?"

"I like it here."

"Well, so do I. But we can't spend our whole lives in one spot. We grow roots. We vegetate. People will start searching us for sun scorch and scale bugs. Travel is—"

"Speaking of roots, I'm worried about those lilacs. I think I'll have to—"

I approached her gently and took a trowel out of her hand. "Ticky," I said gently, "listen to me. Forget gardening for a moment. We're going around the world. I mean it."

She sighed and let me keep the trowel. "Why? What has Timbuctu got that we haven't got more of right here? Except fleas, maybe?"

"That's not the point. I grant you that Colorado Springs is almost certainly a nicer spot than Timbuctu, but—"

"Then why go there?" "Why? Because I like to travel. I thought you did, too."

"I do. We went to Sun Valley less than a year ago. It was fun." She thought about it. "If you want to go abroad, let's go to Lake Louise. I've always wanted to go there."

"Huh? Canada is not `abroad'—it's not a foreign country."

"Ask a Canadian."

"Sure, sure. But it's really just a part of home that happens not to pay taxes to Washington. Pretty clever of them, too, come to think about it. But take Timbuctu, since you mentioned it."

"You take it. Let's go to Lake Louise and watch the glaciers glashe."

"All right, all right! We'll go to Lake Louise. We'll have dinner there tonight. It'll only take about three hours, not counting the hour to drive to the airport. We can discuss the trip around the world and make plans and tomorrow morning we'll come back and start arrangements."

"Mmm, no. Your tux is at the cleaner's and I haven't a dinner dress that is fit to wear." She took the trowel back from my limp fingers. "About next Wednesday, maybe. I'll have to buy some clothes and Sweet Chariot ought to be put in the shop for a day, just to be safe."

"What do you want to put the car in the shop for? It runs; if it will get us from here to the airport that's all I ask of it."

"Because we are going to drive to Lake Louise. No airplanes for me."

"What? Now wait a minute, slow up. We are *not* going to drive to Lake Louise. Since when this silly aversion to airplanes?"

"Since all these crashes in the papers. Airplanes are dangerous."

"Look who's talking! Leadfoot Lulu, the gal who thinks she is parked if she's doing less than ninety."

"I have excellent reflexes," Ticky answered with dignity, "but my reflexes are useless if a plane I'm a passenger in runs into a mountain. Which they've been doing."

"Which they do darned seldom. It's—"

"Once is enough. Once is too many."

"It's well known that modern airlines are the safest form of travel. Insurance companies no longer make any distinction between air travel and any other normal hazard. If there is anything as certain as death itself it is that insurance companies don't take risks; they operate on the same simple, straightforward statistical principles as the gambling houses in Las Vegas—the odds are picked so that the house always wins. It's the same with air travel; if these spectacular crashes were frequent enough to shift the odds, the insurance companies would change the rules in a hurry."

"Hmmph!" said Ticky.

"Hmmph yourself. Air crashes rate headlines simply because they *are* unusual. Take the Quintuplets—they got a lot of newspaper publicity, too. But what do you think your chances are of having quintuplets?"

"You aren't Mr. Dionne," Ticky answered darkly.

"That's beside the point. Don't you believe in statistics?"

Ticky pondered it. "Sure, I believe in statistics. But I've noticed that whenever I personally am a statistic I'm always way out at the end of the curve, instead of being comfortably toward the middle. They've got a plane crash all shined up, waiting for me to come along."

"Sheer solipsism. Paranoia. The Ticky-centric Universe."

"How else?" she answered contentedly and went on with her weeding.

I took a deep breath. "Ticky," I said, "listen to me. Put down that trowel and look at me. I'm going to put it in simple, Ticky-sized words and I want baby to try to understand it. I am going around the world. You are going with me because I need to keep you in sight where I can watch you and keep you out of trouble. We are going to fly."

"No."

"Yes. It's either planes or ships, and ships are a stupid waste of time. When you go by plane, you spend your time *being* there instead of killing days and weeks getting there."

"No."

"Yes. I'll bet your grandmother refused to set foot in one of those horseless carriages. But right now we fly, all the way around the world."

"No."

"Yes, we do. And when the time comes we'll take a rocketship tour to the moon, too."

So I firmly gave in. We ordered tickets for a round-the-world tour on one of the President Line steamships. It was a lovely ship, as the four-color folders showed—swimming pool, ballroom, private baths, movies, deck sports, beef tea in your deck chair in mid morning. By the time I got through studying the deck plans and the itinerary I no longer regretted not going by air. We applied for our passports and Ticky started making out lists.

That is, we applied for our passports after we sent in for certified copies of our birth certificates. Do you happen to know where *your* birth certificate is right at the moment? Or did the personnel office ever give it back to you after you applied for that job with Douglas back in 1942? You think it's with the insurance policies? I'll give you even money that the document you have in mind will turn out to be a New Jersey driver's license, expired. Americans, lucky people, even today need birth certificates only on very rare occasions. Hardly a half century ago they needed them not at all and very few had them. If an American wished to travel abroad, he did not need a birth certificate because he did not require a passport. All that he required was a letter of credit from his bank and leisure. It was literally possible for an American to wake up on Monday morning, decide to go to Europe, and be sailing, sailing over the bounding main on Wednesday.

Nowadays he had better allow three months as a minimum for the red tape. Six months is much easier on the nerves.

First the birth certificate: this takes about two weeks provided everything is clear sailing, that is to say that you know exactly what official to write to, his address and the amount of the fee that you must send. If you do not know, then you may be able to save two or three useless exchanges of letters by sending a money order for five dollars to the clerk of the county you believe you were born in. He will either do it himself and send you your change, or will pass it on to the proper official (in populous counties, such as those of New York City) who will most likely take care of it the following Tuesday if the photostat clerk or the vital statistics clerk is not on vacation.

Or he may send back the entire five dollars with a polite note informing you that "the records in question were destroyed by fire when the courthouse burned down in 1919." This is a penalty move and requires you to go back six squares and start again.

In my case the penalty move came in the form of a letter stating that "vital statistics were not kept in this county in the year named." This produced a scramble to achieve what is called a delayed registry of birth. Luckily I come from a family of pack rats; we were able to dig up a family bible entry, my first grade report card (good marks in arithmetic, poor in music, fair in deportment—none of this modern evading the issue), my cradle roll certificate, and a letter addressed to me by name on the occasion of my third birthday. There was also a lock of hair.

The cradle roll certificate had the wrong year on it, so we threw that out, but the other exhibits, in due and leisurely time, produced from the State of Missouri a document which said that my birth had at last been duly registered at the state capital. I breathed relief; at last I was me. I had attended school, been commissioned in the armed services, held two civil service jobs, married, voted, run for office, drawn a pension, and done all manner of things as a citizen and a flesh-and-blood being through more than four decades, all without having had any legal existence whatsoever. Now at last this little 4x6 slip of paper, issued by a clerk who had never seen me, assured me that I was real and therefore could apply for a passport.

I am not opposed to birth certificates. They are a nuisance only if you do not have one. But I am not impressed by them. There must be thousands (more likely, millions) of persons like myself in this country who managed to get born without benefit of statistics, nor do I find it reasonable to penalize a newborn infant for an omission on the part of government. Contrariwise, a birth certificate as a proof of identity—its only conceivable function—leaves much to be desired, as they are easily obtained illegally. If I were in the spy business and needed a U.S. birth certificate, I would—but why should I make it easy for spies? Especially when they know more about it than I do? I am sure that no Russian spy in this country ever lacked for an American birth certificate if he needed one for his unlawful occasions.

But an honest citizen can be very handicapped by the lack of one at times. If your birth was never registered, better take steps, as I did. If it was and you are serenely aware that you can always send for a copy if you need one, better send for one now; the courthouse might burn down again. Seven to two you won't! You will wait until it is indispensable, as I did.

Eventually we got our birth certificates and applied for our passports, with another short delay for passport photos. Those passport photos, the sort suitable to hang in a post office under a "WANTED FOR FRAUD" notice, are not accidental. The State Department prescribes the lighting and the pose; the public-enemy result is automatic. I cheated a little by smiling when I saw it was about to be taken.

Be sure to get at least a dozen and a half copies; foreign officials have a way of asking for two or more copies unexpectedly. I have no idea what they need them for or what they do with them. Scrapbooks? But failure to produce on demand can be as troublesome as losing your traveler's cheques. Have them. Carry them on your person when crossing international boundaries—a traveler fully fitted out these days to cross such an imaginary line has bulges all over his person like Tweedledee and Tweedledum outfitted for battle, and he looks and feels just as foolish.

In addition to a myriad pieces of stamped paper adding up to several pounds, he will, if he is wise, have at least two cartons of American cigarettes within easy reach and which he is prepared to give away at the drop of a hint. Bribery? No, "Squeeze"—a bribe is paid to get a man to do something he should not do; "squeeze" is something he demands of you for doing something you are legally entitled to have done anyhow, such as stamping your passport or passing your personal luggage. Most officials do not expect squeeze; those who do can make you miss trains, or worse.

While I am in a mood of reminiscent irritation let me state flatly that there is no limit to the variety of bureaucratic buffoonery placed in the way of legitimate travelers today and that it is my solemn opinion that none of it is of any use whatever. None of it is efficient enough to stop spies, smuggling, or illegal immigration. But the proof of the uselessness of any particular item of red tape lies in the fact that each procedure required by the laws of Ruritania will be found to be missing from the red tape of Lower Slobbovia, with no equivalent procedure to replace it. Instead, Lower Slobbovia will have a different silly mess of its own. This one impounds your passport, that one requires you to report to the police, this one so help me wants you to file an *income tax return* for a stay of four days, that one requires that you register your Kodak (but lets you take any pictures at all!), this one wants to know where your grandparents were born before it will let you simply change planes inside their sacred precincts. That one requires a cash deposit to guarantee that you will leave, then requires you to submit a freshman term paper to get it back when you do leave. This one—

But I could go on endlessly. Their name is legion and these steeplechase hazards to travel have in common in their endless variety only that they are all obnoxious and they are all useless. Pardon the irritation—I have been keeping my temper and smiling for the past forty thousand miles and my face is tired.

But after all it's their country, not mine, and if I don't like it, why didn't I stay home? True . . . but not the whole story. All of these countries are advertising in the States, ads paid for by the governments, urging you to come to beautiful Boskonia and spend those Yankee dollars; see any copy of *Holiday.* Many of them maintain government tourist bureaus in the States. Why, if they are so confounded anxious to improve their dollar balance with the "invisible export" of tourism, can't they refrain from treating a visitor like a juvenile delinquent being processed into reform school?

In order to apply for your passport it is necessary to appear in person at a court having jurisdiction and bring with you a witness who has known you for two years. You don't see the judge; you simply make out another one of those usual forms covering everything but your blood type, you pay the clerk a fee, and leave. Ticky and I found it no real trouble, since we live only a few miles from such a court and could ask a neighbor to go down with us. But in the open spaces of this country many people live more than a hundred miles from such a court (one empowered to naturalize foreigners). If you want the passport, you'll make the trip—but it is a far piece to drag a neighbor just to say, "Sure, I know him. And here's my driver's license to show who I am." Who feeds the pigs while he's gone?

Since the so-called appearance before a court is simply to fill out a printed form, swear to it, leave some photos and your birth certificate, plus personal identification by some other person who in turn need be identified only by papers, in what way would this weak procedure be further weakened if it were carried out by a local notary public who actually *does* know you?

I would not question the wisdom of the personal-appearance-cum-witness if the procedure were tight enough to discourage foreign agents from attempting to get American passports. An American passport is a valuable document; the black market price on them in some Asiatic ports is reputed to be from two to three thousand dollars and no doubt they bring more when they are then resold behind the Iron Curtain. But the present method for "identifying" an applicant is laughable as a security measure and is uselessly inconvenient to the honest applicant—and to his neighbor's pigs.

In due course Ticky's passport and mine arrived by registered mail from Washington. She examined hers smugly ... all but the picture. "It says here," she announced, "that the Secretary of State of the United States of America sends greetings and urges everyone to permit Ticky to pass freely. That's pretty nice of him."

I agreed that it was. "But we can't go anywhere with it yet. Now we have to get visas."

"What use," she wanted to know, "is a visa?"

Visas are of no use, none whatsoever. They are the epitome of functionless red tape, as meaningless as stepping on every crack while walking down a sidewalk. Many countries have abolished them entirely for all or almost all visits; other countries cling to them and make the obtaining of one as complicated and as annoying as removing an impacted wisdom tooth—South Africa and Indonesia, to cite two horrid cases. The endless questionnaires serve no purpose, since the desired answers are obvious and the international crook need only resort to cheerful mendacity. The fees are almost always too small to constitute worthwhile revenue in view of the overhead—often there is no fee; it is red tape for the sweet sake of red tape itself.

Saudi Arabia alone has a sensible visa system—eighty dollars for the visa, which is limited to Mohammedans, a head tax on pilgrims to Mecca, for revenue unashamed. My hat is off to Saudi Arabia, the straight bite and no nonsense about it. All the other countries are merely inconveniencing themselves and annoying the tourists they seek.

We started to get visas, then did a sudden about-face; our deposit had been returned by American President Lines. They thanked us for our interest and informed us that their round-the-world tours were booked solid for two years in the future.

I was ready to sit down on the curbstone and bawl. Ticky was not much more cheerful; she had been shopping for evening dresses to wear in the ballroom of the S.S. *President Monroe* and was all over her earlier lack of enthusiasm. She had carelessly and with assumed modesty informed all our friends that we were about to make a world tour. The idea of announcing publicly that it was all a mistake was unendurable.

She suggested that we go to Pueblo under an assumed name and spend three months reading *National Geographics,* then return home from the other direction. I was halfway sold on it.

But Mrs. Feyock took us in hand. Hertha Feyock is a cheerful little person who is the "World" part of the WorldWide Travel Agency in Colorado Springs. She speaks several languages, knows exactly how much to tip a Paris concierge, and has been to many of the places she deals in. "Don't you vorry," she said. "I'll find you a ship. There are some lovely Dutch ships running from South America."

I pointed out that we were in North America.

But she already had her head buried in folders, with a thumb tucked in a looseleaf book six inches thick consisting entirely of ship schedules. "I'll put together a tour," she said absently.

Which she did. It took a month to do it, a wastebasketful of letters, many toll calls and cables, and recasting of the overall plan as drastic as deciding to go around the world eastward rather than west when it appeared that the tentative schedule could not be made to jibe in

Singapore. But she did it. Planning a world tour by various means of transportation (rather than by a single tourist ship) is a project as complicated and unlikely as organizing a political campaign or trying to get six children off to Sunday School, all clean and neat and all on time. It calls for patience, expert knowledge, and optimism.

To attempt it yourself unassisted in the belief—entirely mistaken—that your costs will be less is as foolish as taking out your own appendix. But not as thrifty, for the travel agent collects not from you but from the transportation and hotel companies with no increase in price to you. But if you take masochistic pleasure in doing everything for yourself, go right ahead with either enterprise; the results should be interesting to others.

I can hear that plaint from the lady in the back of the hall: she wouldn't *think* of going to a tourist bureau; she doesn't want to find herself in a crowd of dreadful *tourists;* she wants to go to the *out-of-the-way* places.

"Tourist—(n.)—a person traveling for pleasure."—The Thorndike-Barnhart Desk Dictionary.

You may disclaim the horrid title, lady, but you are a tourist, once you leave your home town for any reason other than removal of domicile or business. That terrible couple over there with the impossible child (and he is a nasty little brat, isn't he?) resents your presence, your table manners, and your personality quite as much as you detest and despise them. You are all tourists together, so why not relax and enjoy it?

Nevertheless the yearning to go to out-of-the-way places where you will not be annoyed by other tourists and where you yourself will annoy only the natives is a legitimate one—in which case Thomas Cook and American Express and Mrs. Feyock and the other travel experts know much more about such places than you are likely to be able to learn unassisted. There are such places and many of them are lovely. Regrettably all of them are woefully short on inside plumbing, comfortable beds, and drycleaning service. Such amenities are directly linked to dollars, pesos, and pounds; they are provided only when there are enough tourists to make it pay.

Sometimes the lack of mass-production comforts is offset by native servants willing to work fourteen hours a day for small change in American money to provide you by hand with the machine comforts you are used to. You may be lucky enough to hear of such a place and go to it before the natives are "spoiled" (i.e., before they realize that they are being exploited). If you hear about such and want that sort of thing, go at once; if you read about it, buy your ticket the day the magazine appears. Otherwise you will arrive at the painful transition period when the place is already bursting with tourists, the prices have gone up, and the plumbing, et cetera, has not yet been installed.

Carry with you your own mosquito netting, soap, penicillin, toilet tissue, and a stomach rugged enough for any sort of cooking; out-of-the-way places have an infuriating habit of being out of the way. The unspoiled paradise, unknown to tourists and unlisted with the travel bureaus, exists in vast numbers throughout the globe. Africa, South America, Mexico, and Canada abound with them; even my home state of Colorado has dozens of them. But don't write to me asking for directions; get hold of Hertha Feyock instead. She will tell you how to get there and where you can hire pack mules for the trip. Or next time try Mars.

Mrs. Feyock finally put together the following itinerary. (See the map in the end papers, unless they have tucked it in somewhere else.)

Colorado Springs to New Orleans, train or plane

New Orleans to Valparaiso, Chile, by American freighter, via the Gulf of Mexico, the Caribbean Sea, through the Panama Canal to the Pacific, and with numerous coastal stops on the west coast of South America

Valparaiso to Santiago, Chile, by train

Santiago to Buenos Aires, Argentina, by plane

Buenos Aires to Capetown, Union of South Africa, by Dutch cargo liner, with stops up the east coast of South America Across Africa by local transportation, plane, train, et cetera; rejoin ship at a west African port

Across the Indian Ocean to Singapore, with island and west African stops

Singapore to Australia, via Indonesia (ah, Bali, beautiful Bali—more about that later)

Australia to New Zealand by passenger liner

The itinerary came to a sudden stop at New Zealand. Mrs. Feyock was still trying to book us by ship from New Zealand to our west coast at the time we left. No passenger ship was to be had, but it seemed to be just a matter of patience to book us on a freighter—a long, slow idyllic voyage, calling at mystic islands of the South Seas, all with names ending in vowels and sounding like endearments in an exotic tongue. I could see myself sitting on the fantail of such a ship, strumming on an old beachcomber and idly sipping a planter's punch, while the sun sank in the west and the colorful exotic natives gathered on the shore in their colorful exotic native costumes and bade the ship Aloha with their colorful exotic native songs.

I would feel her screw churning under me and the water, warm as new milk and clear as champagne, chuckling against the plates of the old rust bucket. After supper, served by boys who spoke only Pidgin but knew telepathically what you wanted before you knew yourself, the Captain and I would smoke a pipe on the bridge and swap yarns—then bed, for a night's deep, unworried sleep.

I began to feel like a Somerset Maugham character.

The only nibble we got was from the Matson Lines; all the others were "sorry" for one reason or another. The Matson Lines offered us "dormitory accommodations"—Ticky in a women's dormitory, me in one for men.

Ticky gasped. "What are those Matson Line people? Missionaries?"

We will omit my answer.

"Maybe we should explain to them that we are married. They may have me mixed up with Sadie Thompson." She scowled and then smiled. "Tell 'em 'yes' but that you'll take the bunk in the ladies' dorm and I'll take the one with the men."

"Okay, it's a deal."

"You're entirely too agreeable about it. Anyhow, they wouldn't let us. Missionaries! Well, I'm not going to do it and that's flat. Six weeks cooped up with a bunch of old biddies, watching them get in and out of their corsets and listening to their snores at night, is not my idea of a pleasure cruise. It reminds me of those old slave ships, where the mate would stick his head down into the hold the middle of every watch and tell them all to turn over at once. No!"

We both thought the dormitory plan was obscene and indecent, as well as having a flavor of Botany Bay about it that did not belong with paid passage. But our decision forced us to leave open the matter of passage back to the States. We told ourselves cheerfully that it would be easy to arrange in New Zealand, right on the spot. After all, ships left from New Zealand every day; we would make the rounds of the home offices and pick one that suited us. Our trouble was that we were trying to book passage from ten thousand miles away for a date six months off whereas no ocean freighter has a firm schedule that far ahead.

"Besides," I added, "New Zealand is supposed to be one of the nicest spots on earth. We might decide to stay there quite a while. We might take a room or a flat and hang around while I write a novel, in between admiring glaciers and kiwi birds and geysers and things. I might do a story with a New Zealand background, while I'm there and can check on the correctness of detail. Both of my readers must he pretty tired of the backgrounds I know now. I'm sure I'm sick of them."

"What you need, honey chile, is not a new background; it's a new plot."

I thanked her. Every writer needs honest criticism in his own home. We left it at that and turned our attention to visas and baggage.

The theory with a visa is that you get hold of the consul of the country in question, obtain from him a set of questionnaires, fill them out, mail or take the completed forms with your passport and fee back to the consul, whereupon he looks over the questionnaire, determines from it that you are a safe and proper visitor, then takes a rubber stamp and stamps your passport: "SEEN." That is all that "visa" means, just "seen."

This piece of tap dancing need not take more than a week or ten days if you wish to visit, let us say, Spain and nowhere but Spain. If you wish to visit several countries, it is still possible though tedious to accomplish in a short time provided you live in New York or Washington, D.C., and can take a few days off to walk your passport through from one consulate to another.

In our case we wished permission to visit nineteen sovereign countries, possessions, or colonies. Allowing a none-too-safe ten days for each transaction by mail and multiplying by nineteen gave an answer in excess of six months.

We had started our preparations to travel in mid June; it took until September to get passports and straighten out an itinerary; our first ship sailed in November. We had six weeks left in which to get visas. It began to look like one of those unsolvable mazes used by psychologists to induce frustration paralysis in laboratory animals.

Our State Department puts out a document listing the visa requirements of (almost) all other countries. We discovered that many countries had abolished this kindergarten procedure for the ordinary tourist. Most of these enlightened areas were in western Europe, not on our schedule, but several of them were in South America. The list that remained would still require two to three months if done by mail from Colorado—but the fine print came to our rescue: British consuls could grant visas for other British Commonwealth countries where said countries were not represented by consuls of their own. About two-thirds of our remaining list was British Commonwealth area—good! We would send our passports to the British consul in Denver and clear up most of it in a few days. As for places like French Tahiti, and Dutch New Guinea, and Portuguese East Africa, if we ran out of time before sailing, we would pick them up in person at any of several national capitals—Santiago, or Buenos Aires, or Rio, or even Pretoria. We would not be daunted by red tape, no, sir!

So we sent our passports to the British consul in Denver.

We waited for a week and nothing happened. Finally we decided to drive to Denver and inquire. Perhaps I should have done so in the first place, but I was fighting a deadline on a novel which had to be finished before we left. In my own case, at least, a loss of one calendar day in a writing schedule equals a loss of three writing days.

We arrived about one o'clock and found the consulate closed for lunch but a small sign informed us that it reopened at one-thirty. I spent the time trying to read "Come to Britain" posters through the glass door. At one-thirty-five a nice young lady with an English accent arrived in an apologetic rush, unlocked, and offered us chairs. We asked about our passports.

She dug them out of a file; nothing had been done to them. Nor could she help us; we would have to wait until the consul returned from lunch. Any minute, now? Oh no, he was attending a luncheon—three o'clock, perhaps.

We studied several pamphlets displayed on a rack: *Agricu1ture in the British Isles, Sports in Britain, Come to the Coronation, Historic Abbeys.* That is, I did so; Ticky spent her time making noises like a kettle about to boil. About three-thirty the consul returned.

He was a tall young man with a beautiful blond beard and he had the perfect, somewhat distant good manners of a top-drawer Britisher. "Awfully sorry to have kept you waiting, my dear chap. What can I do for you?"

We explained again. "Oh, yes, those— I had been wondering what to do with them. I'm afraid there isn't much I can do for you. According to your letter you aren't going to England."

I had come armed with the State Department publication about visas and I showed him the various notes in fine print. "We would like to have you issue visas for the Union of South Africa, Singapore, Australia, and New Zealand."

He blinked at the page and admitted that it did seem to say so. "Too bad, really. Sorry not to accommodate you."

"Then this thing put out by our State Department is wrong? Maybe it would be a good idea to write and tell them so."

"Well, it is not exactly *wrong.* But I once granted an Australian visa and became involved in such a dreadful bother that I decided never to do so again."

Ticky took a deep breath and I could see her muscles tighten. I jabbed her in the ribs, thereby saving temporarily an appearance of international amity. "Perhaps I did not make clear our situation," I went on. "We haven't time to send these passports around to each consulate separately. Couldn't you stretch a point, since you have the authority, and help us out?"

He shrugged. "Awfully sorry."

I stepped on Ticky's foot. "Well, I suppose you can issue the Singapore visa?"

He reluctantly conceded the point and we started filling out the same old forms—age, sex, occupation, place of birth, purpose of visit, means of transportation, race, permanent residence, marital status, *et* *cetera* ad nauseam. I was tempted to emulate a friend of mine who for years has been putting down his occupation as "necrophilist" without once having it questioned.

Presently we handed in our homework with our passports. After about ten minutes the young man with the beard stuck his head out and said cheerfully, "I seem to have ruined one page in Mrs. Heinlein's passport—the wrong rubber stamp. Sorry. I'll just scratch it out, eh?"

I grasped firmly Ticky's upper arm. "Quite all right."

It was about four-thirty when we got out of there, having at last received permission to change ships in Singapore but nothing else. Our British cousin relented a bit as we left. "If it turns out that you simply can't get those other visas any other way, come back another day and I'll see what I can do for you."

I thanked him and got Ticky out of there quickly before she could start quoting Patrick Henry. It was a cold, gloomy drive back in the dusk and Ticky was unusually silent. Once she spoke up. "I'd like to set fire to his beard."

We gave up and loaded the problem on the patient shoulders of my friend and business agent in New York, Lurton Blassingame. His secretary took the passports around by hand to each of the consulates in New York. Even this process cost twenty-seven dollars in long-distance tolls (to obtain questionnaires first) plus (as near as I can guess) about sixty dollars of his secretary's time, plus fees—all totaling around a hundred dollars for a ritual as useless as stamping white horses.

All but Indonesia— The Indonesian consulate in New York refused to have anything to do with our passports. We lived in Colorado Springs; Colorado lies west of the Mississippi; therefore our visas would have to be granted by the Indonesian consul in San Francisco, Q.E.D. and ipse dixit.

I pointed out, by long-distance phone, that while we might be in Colorado, our passports and paperwork were physically present in New York and would be delivered by hand along with the cash; couldn't they *please* stamp a visa on each of them under the circumstances?

"So sorry. No."

I explained with tears in my voice that there was no longer *time* to have some visas granted in New York and then send the passports to San Francisco. But their spokesman was adamant; rules were rules and had to be enforced.

As we were to learn later the new government in Indonesia is quite unable to enforce rules about murder and pillage, much less rules about public health and sanitation. But when it came to red tape, they had learned fast; they were as Western as a school board. ("Come to

Beautiful Bali, Last Home of Romance.")

All during the long campaign for reservations and the subsequent battle of the visas Ticky had been overhauling our wardrobes and we had both been stuck at odd intervals with hypodermic needles—cholera, typhus, typhoid and paratyphoid, tetanus, smallpox, yellow fever. This is one requirement for foreign travel with which I do not quarrel, since it is obviously of benefit not only to the countries visited but to the traveler. For technical reasons of biochemistry the yellow fever shot is very hard to obtain unless you live close to one of the half dozen U.S. Public Health offices which dispenses it. We did not, not by nine hundred miles, but we were able to obtain it as a courtesy from a nearby army post. The U.S. Public Health Service will supply on request a booklet telling what inoculations are required for travel in any part of the world; appended is a list of places dispensing cholera shots, free. They are not available commercially. Any traveler who needs one had better find out how he can get it most easily and plan for it ahead of time; the problem is not one of red tape nor of bureaucratic stupidity but one of inconvenient fact having to do with the present stage of medical art. There is no one to blame.

Ticky did not accept the requirements of inoculation easily. She stated that the navy medical corps had stuck enough needles in her to last her the rest of her life. I agreed and pointed out the alternatives: either she could let me go roam among the senoritas without mama to watch over me, or she could leave the country without inoculations—no one would stop her—and then find herself placed in quarantine for two or three weeks at the first port we reached . . . a process which would be repeated a dozen times around the globe, including San Francisco on return.

She stated positively and explosively that she would not go at all. But in due course she was baring her arms and her thigh and various other parts of her skin in Dr. Mullet's office and wincing as she was jabbed. I don't think the threat of senoritas convinced her. Ticky is as hard to convince as a cat, but, like a cat, she will submit to the inevitable. Just barely.

The first typhoid shot gave me a mild headache; I had no other reactions. Poor Ticky was distressingly ill from each and all of them—even her vaccination "took." I stipulate (though she does not) that it may have been psychosomatic, but the illnesses were real. She lost the better part of two weeks, just when we were busiest.

Because of the book I had to finish writing, almost all the endless running around necessary to get us started had fallen on Ticky. She was especially busy planning and shopping for our wardrobes. I first became aware of this early in the summer when she said thoughtfully, "I suppose we had better get some more luggage at once."

"What for? You take your big suitcase and your hatbox; I'll take my Valapak and the other suitcase. That'll be plenty. I can even let you have some room in my bags."

She shook her head. "We'll use the big suitcase for our skates and I'll pack my skating dresses around them. I was thinking of a wardrobe trunk for each of us."

"Skates—" I said, then took a deep breath and screamed, "Skates! Ice skates? Who are you? Barbara Ann Scott?"

"Don't be silly, dear. This trip is supposed to be fun, isn't it? Won't it be fun to look up the skating clubs everywhere we go? I'm thinking of doing an article for *Skating* magazine about it. Skating My Way Around the World, or Blades under the Southern Cross, or something like that."

I answered with dignity that *Skating* magazine did not pay anything for copy and that I hoped she would never bring up an immoral proposal like that again.

"I'm not asking you to write the article. I'll do it myself."

"It's a bad precedent," I answered sulkily. "Start a thing like that and it could lead anywhere. First thing you know I'd have to take a job—if you will excuse the expression—and go back to working for a living. You wouldn't want *that* to happen."

She did not answer. "Or maybe you would?" I went on, not quite so firmly. "Anyhow, it is absopreposterously out of the question. We can't drag thirty pounds of skates and a bushel of skating costumes around the globe just to skate a few times. If you find any rinks open in the southern hemisphere—which I doubt—we will rent skates and try them. I'll go that far with you. You can even take one skating dress. One."

"Rented skates," she said quietly, making the words an obscenity.

"Then don't skate. We live two blocks from one of the best rinks in the world. We are not repeat not spending all this dough just to compare one piece of frozen water with another. Ice is ice in any language."

"No, it's not. In Spanish it's *hielo*. I looked it up."

I withdrew to a previously prepared position. "Look, darling, I had been meaning to talk with you about this. The secret of happy traveling is to travel light. We'll take two bags each, one for each hand. That way we can always move them ourselves if we have to. There is nothing worse than to be stuck out in the middle of a pouring rain with a big stack of baggage and no porters or taxicabs to be had for love or money. And even if you do find a taxi, in a lot of those hot countries the first thing the driver does is size up your luggage. If you've got a lot of it, then you must be rich and fair game; he multiplies the normal charge by the number of your bags."

"So you tell him firmly you won't pay it."

"And sit there in the rain? No, if you have just the baggage you can carry, as we will have, you walk off and look for another taximetro. He follows after you and offers you the right price."

"Robert A., if you think I'm going to show myself to people all over the world in clothes that came out of one bag—and look it—think again. You like to see me nicely dressed. The very first remark you ever made to me was, 'Your slip is showing.' "

"You can be nicely dressed with just two bags. Pan-American puts out a list that shows you just how to do it."

"Written by the same chap who tells how to make tasty meals out of leftover scraps, I'll bet."

"It isn't like dressing here at home. You're not going to be seen by the same people each day, so each outfit is as smart as the first time you wore it."

"So? We are going to be in that Dutch ship for six weeks. Do you want me to wear the same black dinner dress every evening for forty-two days, not forgetting the Captain's Dinner?"

I shifted tactically. "Another thing, if you have a lot of luggage, it takes forever to get through customs."

"Why? It can't take long to mark a chalk mark. I've seen them in New York."

"Honey, do you know what that chalk mark means?" "Should I know?"

"It means that the customs officer has unpacked everything in it, searched it, and passed it. You have a lot of stuff, tightly packed, and it takes him forever to paw through it."

"Paw through *my* clothes?"

"Of course. That's what he's there for, to search the stuff."

"But that's silly. Where did you get that idea? When Aunt Lou got back from Europe she just handed the man a list of what she had bought outside the country; he took it and made some chalk marks. It took about thirty seconds."

I nodded. "So it did. She had declared a reasonable amount, she had her list made out in advance, and she didn't smell like a smuggler to him. So he passed her. They can't do a skin search on everybody and we are granted such liberal free allowances that most people don't try to smuggle. But if he had been suspicious—well, they are quite capable of taking you to a private room, stripping you down and going through your bags with knife blades and probes. When it comes to dope or jewels they even go after the body cavities—and I do mean *all* of them."

Ticky slapped the table. "That settles it! I'm not going."

"Slow down. Level off and get your flaps down or you'll overshoot the field. That sort of thing happens only when the customs authorities have received a tip from their informers abroad that a particular person is going to attempt to smuggle—and they rarely make a mistake. If a foreign customs officer tried it on us, I'd yell for the American consul so loud that they would hear it in Washington. But they won't. Customs officers aren't fools. What they will do is to search our baggage. Most other countries have much stricter import and tariff regulations than we have—so they search everything that comes in. But nobody is going to lay hands on my redhead, don't you worry."

"And they aren't going to go pawing through my clean underwear either. I won't stand for it."

The discussion continued without reaching a conclusion. Ticky did not insist again that she was not going, but she never gave in to the idea that a strange man should be allowed to handle her clothes. Once she suggested that she could carry along white gloves and tell the inspector to put them on before he touched her things. I was tickled by the picture of Ticky holding them up and saying, "One moment, Senor, before you commence—" But I was scared by it, too. She was quite capable of doing it—and what a proud Latin official would do when he finally understood that the *norteamericana senora* was suggesting that his hands were too dirty to touch her possessions I did not like to think about.

He would not touch Ticky. Latins are much too gallant for that, no matter what the provocation. But I enjoyed no such immunity; I would wind up in the calabozo.

What Ticky would do then I did not even dare guess. It would be something like the behavior of a lioness deprived of her young and it would not even have a speaking acquaintance with the amenities of international law.

Maybe we really should stay home.

The question of how much we should take with us got lost in the muddle. I made feeble protests from time to time but the number of evening dresses and sports clothes and accessories grew. Then she started in on me and I got slacks and tropical suits in these new materials that can be washed, so it says on the label, and do not require pressing. This seemed sensible so I shut up. Then a new white evening jacket. Then a stack of sports shirts for shipboard wear. I quit fighting and decided to enjoy the lovely new wardrobe instead.

There were ten pieces of luggage when the day arrived, all packed to bursting. It took two trips to get them to the station.

II

South to the Southern Cross

SANTIAGO, *CHILE—Manuscript found in an Old Pisco Bottle:*

"Is anybody listening? Is there anybody there at all? I am stranded on the fourteenth floor of the Hotel Carrera and I seem to be about to fall out of touch with the rest of the world entirely. I can't sleep properly. Almost every twenty-four hours I wake up at least once and have to struggle up two flights or *pisos* to the *piscina* on thee rrroof and sip a pisco sour while I watch the senoritas sunning themselves and swimming in the *piscina.* Then I crawl back down and fall again into the *matiana* coma.

"Orion is upside down and people eat dinner in the middle of the night and a simple request for drinking water requires endless protocol and much waiting. But all forms of alcoholic beverages are readily available everywhere and the chambermaids whisk busily in and out of thee bath while I am bathing, cooing gently at each other like turtle doves (rootly-boo, rootly-boo!). The hired help work in committees, talking and using their hands and very cheerful, but not necessarily accomplishing anything. The same hired help is evident at all times and everywhere. If Ticky and I close the roof garden at four, the same patient waiter with the Indian ancestry and total lack of English offers us breakfast in the grisly light of noon. They must hang them on hooks.

"Can you hear me? Can you speak English? The guidebook says that almost everybody here can speak it but the guidebook is wrong. I am beginning to feel unreal. I—"

The above is roughly the effect on a couple of gringos of first exposure to the druglike, almost unbearable sweetness of our Latin American neighbors. We visited seven such countries; I state the simple truth when I say that not once did we hear a harsh word, never were we scowled at, no one was ever too tired or too busy to be patient and kind to us. Nor is it fair to attribute this continent-wide courtesy to the Yankee Dollar; most of these encounters had nothing at all to do with money.

It seemed to me to be the finest outward expression of true individualism: each man respected himself; this inner respect, his awareness of himself as a unique person, required him to extend to every other human being everywhere and of any economic station a dignified courtesy which recognized tacitly the unique worth of both his fellow human and himself.

My analysis may be wrong, but the outward fact remains. This account reports what I have seen, with my opinions tossed in to fill up some of the white space. I have never understood how globe-trotting columnists can take a quick look at a country and come up with all the answers to all problems, economic, political, and social. I can't possibly do so because I don't know enough history, geography, psychology, economics, science, anthropology, or whatever, nor can I keep up with the endless spate of new facts. Even my own home town confuses me; every time I think I have reached the "facts" I find another layer underneath, like peeling an onion. How can I do justice to a country, a continent, a globe?

Nevertheless, it does not take a biochemist to detect a rotten egg in an omelet. Some things that are right, others that are wrong, about a country can be seen even from a tour car. When you see a 65-year-old woman staggering along under a load that would cause an American stevedore to fetch a fork truck it does not require a Guggenheim grant to determine that something is crumby about the way that country is run.

I shall set down my opinions whether they constitute complete answers or not.

We left Colorado Springs on 12 November by train, after having shipped half of the ten suitcases by express in order that we might go by air, only to receive a telegram immediately after shipping telling us that S.S. *Gulf Shipper* would be three days late in sailing—a routine mix-up in traveling. So we left in the middle of the night from a bitter cold railroad platform instead of in bright daylight in the gala atmosphere of an airport. But a biggish crowd of our friends came down to see us off anyhow, the Knowleses, the Herzbergers, Eileen Seigh Honnen, the staff of the WorldWide Agency, three assorted young ladies whose names I did not catch, and a Free Press photographer came down to see us off, and Bob Wirt of WorldWide presented Ticky with green orchids and the Nelsons and Mrs. Feyock gave us candy (which we ate to the equator). We had our pictures taken on the steps, then waited through a long anticlimax for the train to pull out late.

We were off! Into the Wild Blue Yonder, enduring the hardships of a Pullman drawing room. Actually, I had forgotten just how dismal a way to travel a train is. Like most Americans I have learned to go everywhere in my own car (needs a tune-up and one new tire, but reliable) or, if really in a hurry, by air. This is not counting a mule descent into the Grand Canyon, or a week's pack trip by horse of which the less said the better. Now a Pullman drawing room is luxury travel and it costs a bit more than air travel. It is noisy, dirty, uncomfortable, monotonous and slow, and sleep is almost out of the question. The engineer employs a spy to make sure that he uncouples the diner just as the razor reaches the point of my chin and the water tastes of old iron.

We changed trains in Fort Worth and soon we were in de land ob cotton. Looked pretty bad, too—not much of a crop this year. The drought really raised hell with the farmers. We arrived in New Orleans Saturday morning and were delivered to the Maison de Ville at breakfast time, short precisely two nights of sleep.

Unfortunately check-out time was three o'clock and our rooms were not available. We carried the banner through the French Quarter Until-the afternoon. This is a painful and groggy episode which I remember dimly save for one item, Loni's Vieux Carre Lingerie Shop at 218 Bourbon Street. Loni deals in custom-made frillies for frails of really amazing sorts—panties with clutching hands embroidered on same, others with appropriate mottoes, if you happened to be very broadminded, things which I dubbed bedroom Bikinis but which Loni assured me were "home Gstrings." None of these items were built for heavy wear; all were intended to be removed promptly and (we trust) with care, as they were beautiful and fragile.

One mannequin, the mascot of the shop, was seated, completely dressed and quite naked, in the middle of the shop rear. She is known as "Ophelia."

We were tempted but I limited myself to a pack of playing cards, the only non-wearable item offered. The conventional designs on these cards had been replaced by pictures in gorgeous Kodachrome of young ladies who did not patronize even Loni's liberal establishment. After all, were we not about to barter in the bazaars of the crossroads of the world?—dickering with and outwitting mysterious Hindus in quaint little stalls in Zanzibar for the mysterious treasures of the Orient, then to wait until we returned to the ship to decipher the mysterious cabalistic mark on the underside saying MADE IN CAMDEN NJ FAIR TRADE PRICE $1.75? After all, Loni plies her trade in the States and promises "Mail Orders Filled Promptly."

We dragged ourselves back to Maison de Ville, taking turns carrying the playing cards, and slept in chairs in the lobby until our predecessors checked out—and were then informed that the ship would sail on Tuesday instead of Sunday. This is known as the Missing Top Step. So we went to bed and slept until dinner time.

There was the usual queue on the sidewalk outside Antoine's; we did not tarry. I have never eaten at Antoine's and do not intend to do so ever; any restaurateur who lets his patrons stand on the sidewalk instead of providing room enough to sit down is welcome to the suckers he gets—but I'll be a sucker sitting down, thanks. We went to Todt's on Bourbon, an excellent French restaurant with a German name. *Mme.* Todt is a tribute to her own cooking. The place is beautiful, ancient, quiet, leisurely, and the cooking is superb. We began to dig our graves with our teeth, wide and deep, a process likely to continue for 40,000 miles.

We wandered away from Todt's, belching gently and walking carefully. We had no intention of spending the evening in the clip joints of the Vieux Cane, no sirree! We were going to a movie. But careful inspection of a newspaper disclosed that nothing was showing but Hollywood's revenge for television. On the way back to Maison de Ville we decided to indulge in a small spot of social research, as we had heard that the town had been cleaned up. We stopped in one of the joints to find out.

It was true. The girls no longer danced on the tops of the bars, but on runways arranged among the customers, an arrangement more sanitary and more convenient. Nor did they strip completely. No matter how many bows they took, each retained a Gstring at least the size of a cigarette package and in place of a brassiere (which might have become dislodged in the enthusiasm of the dance) each wore two little stickers based on the principle of the "Posees" which enjoyed a brief rage a few years back, but differing from that adhesive bra in being smaller, say an inch and a half to an inch and three quarters wide. These little modest stickers were often of a natural rosy hue, but some were silver, some were gold, and some were covered with sequins, giving pleasant variety. Some of the young ladies had tassels appended to these stickers, which accented their movements. One had four tassels, two in front and two fastened to the bulges of her glutei maximi. Such was her athletic skill that she could start or stop any of the tassels independently, swinging them in time with the music. The tassels had been treated with fluorescent dye, producing a giddy and pleasing effect of mobile mathematical patterns.

We left this establishment without having suffered undue financial damage and were just about to turn into our home street when we saw a sign advertising the leopard woman. We went in. The dive was grimy but the show was all that it was billed. I mean to say: where else can you see a naked woman rassle with a full-grown leopard thirty-nine inches from your nose and no bars? This act was all that it was represented to be and it struck me as damned dangerous. Sure, she did her strip by having the leopard claw and/or bite her clothes away, just like Lolita and her Doves and that gal who used to do the same act with a parrot. But the thing that got me was that apparently bad-tempered leopard practically stepping in my half-ounce cuba libre. It made me so nervous I had to sit through the show twice.

The Maison de Ville is a luxury hotel run like a very well run French pension, by a Mrs. Ehrlich, who came down from the Nawth, liked the town, bought this hotel and stayed. It is small, very personal, and very well managed. The new wing was built in 1800, which gives you some idea. The patio is lush, old, and cool, with green moss covering the ancient bricks. There is a wishing well where you may chuck a penny if you have any wishes left unsatisfied, which seems unlikely. A complimentary continental breakfast is served until eleven o'clock in this patio and it opens into the much larger patio of the Three Sisters, where everything is served, from Sazerac cocktails to lobster mayonnaise.

Having seen New Orleans before, we had not intended to spend much time there, but the delay in sailing left us with a couple of days to kill. On Sunday we took a rubberneck trip and found that in New Orleans such a trip is not to be scorned. There are many things there which need to be pointed out and cannot be seen just by poking around—such as the canals that are above the level of the adjacent streets and many old fine antebellum homes which would give a housekeeper nightmares. And there is the cemetery that used to be a race track until one man was refused membership, whereupon he resolved to make it the deadest place in town. He did so—he bought it and it is now a very beautiful cemetery.

Thereafter we wandered down to the waterfront, had coffee at the Morning Call (an obligatory ritual) and found the *Gulf Shipper.,* Captain Rowland W. Dillard was aboard and very kindly showed us around. Captain Dillard is usually Chief Mate of the *Shipper,* but had just completed a voyage as C.O. during the vacation of Captain Lee. We soon discovered that he was a retired naval officer, whereupon we admitted that we were Navy files, too, and became *muy simpatico* in an atmosphere of "Did you know so-and-so?"

We firmly resolved to see a movie that night, several bills having changed—but found that Hollywood's Chinese suicide was still going on. So we started back to Maison de Ville. At the corner of Toulouse and Bourbon, fifty feet from Maison de Ville, is the Old French Opera House. I pointed out that it was much too early to go to bed; why not sit through one show?

We did. At this point begins the confirmation of the Louisiana Purchase. I now own one New Orleans night club, having bought and paid for it. Through some oversight the deed has not yet been sent to me; however, we have been traveling; it may be awaiting us in the States.

The O.F.O.H. promises continuous entertainment. We sat through one show and were just preparing to leave when the first M.C. sat down beside us, the relief M.C. having taken over. "How do you like our show?" he asked. "Fine," I agreed and presently asked him to have a drink. He accepted.

Three hours later I was still buying drinks for him and for a little blonde stripper named Pam. There is no cover charge but the drinks are very small and the prices are high in inverse proportion. I must say at this point that I enjoyed every minute of it, save that all too often I was busy making change or tipping when I should have been giving careful attention to the artistic and uninhibited dancing going on at a point averaging one meter from my bulging eyes.

These dives on Bourbon Street vary a good bit. I must say for the O.F.O.H. that it smelled clean, it looked clean, the glasses were clean, and the girls were young, pretty, healthy, And looked freshly bathed and not tough. If you are relaxed to the fact that the purpose of the place is to show pretty girls in as much skin as the gendarmes will permit, then the O.F.O.H. is the place for you; it is a nice joint of its sort. The jokes are not too rough and feature neither bathroom humor nor fag humor. Paul, the M.C. who sat with us and helped us complete the Purchase, was half Gypsy, the son of a tightrope artiste and had as his ambition to own and operate a small carnie wild-animal show—toward which he had a fair start, including a boa constrictor that slept with him on cold nights. He was in the market for a mountain lion kitten.

Pam, the little blonde stripper who joined us presently, was suffering from a hangover and love. She and the trap drummer planned to get married, but would have to wait a bit as he was buying a new set of traps. She assured us that she could cook. It seemed that everyone in the show was suffering from a hangover, the preceding night (Saturday) having been very drunk out, including among other things, Pam having had her bar bill cut off by the manager and retaliating by taking off her shoes and throwing them at him. One of the girls had threatened suicide and Paul had had to go into their dressing room and quash it. There was no general agreement as to which girl was threatening suicide but all agreed that someone had.

We were supplying the hair of the dog—at house prices.

I don't know how I got out without paying the French War debt as well, but I did, eventually. Actually, both Paul and Pam were nice kids; Ticky and I liked both of them. Pam was 21 and had been a stripper since she was 13, at which time her mother used to take her to and from work. Ticky asked her if she weren't scared when she started. Oh yes! but now it was just a job, a better paying job than working in an office. The girls make $75 to $90 a week. There is no real future in it, of course, and it is inclined to turn them all into habitual drinkers if not alcoholics. I haven't the slightest idea how many of them end up in bagnios—probably most of them get married. If stripping damages their moral fibre, I was unable to discern it.

We went aboard ship the next day, came ashore for dinner, having been warned by the purser that the crew was being paid off and that there were some beefs which might result in bad language and unpleasantness. We finally went to a movie, *Veils of Bagdad* or some such, featuring Victor Mature in improbable situations. I went to sleep. Ticky woke me and took me back to the ship.

The *Gulf Shipper* was warped away from dock and headed out into the stream by towboats about 1000 Tuesday morning. We spent all day watching the lower or delta reaches of the Mississippi, counting pelicans and one (1) porpoise. (No score is credited for seagulls.) The delta Mississippi is an improbable place. From the deck of a ship one can see right over the tallest trees to the horizon, stretching around through 360 degrees as in the flattest parts of western Kansas. The highest land seems to be roughly 21 inches above water and the black gumbo mud runs down to China. Vegetation is lush, thick and low, something between canebrake and jungle. But there are farms and cattle ranches back in here, paved roads and many oil wells. One wonders what they do at high water.

Almost down to the Gulf the Delta pilot leaves the ship, at Pilot Town, a town built on stilts, and the Bar pilot takes over. The Bar is a neighborhood rather than a channel—the lower portion of the multiple mouth of the Mississippi changes so rapidly that it must be piloted by a man who has taken a look at it just a few hours before. You can almost see him moving his lips as he comes aboard, concentrating on remembering the latest twist of Old Man River. He takes the ship out into the open Gulf as the sun goes down, then with a sigh of relief turns it over to the skipper.

We went to bed.

Next morning we were out of sight of land, on the open blue Gulf, lying in deck chairs and counting flying fish instead of pelicans. The sea was almost glassy with the ship moving gently, rolling almost imperceptibly and lifting a trifle to long, slow, low swells. Nevertheless it was enough to bother one passenger, who started missing meals at once. The rest of us started getting acquainted—Ticky and myself, Vi and Robert from Hawaii and off on a busman's holiday to the tropics, two couples from the same middle west town who kept much to themselves, and Mr. Tupper. Mr. Tupper was known either as "The Cruise Director" or as "The Owner"—it was his third trip in this ship, he had his own sextant and navigated with the mates each day, he had a stateroom right on the bridge, one which had apparently been intended as an emergency cabin for the skipper in wartime. He was not a seafaring man by profession, but a retired insurance executive from Atlanta, Georgia, who had made a hobby of the merchant marine in his old age and had studied navigation in order to enjoy it the more. He was the life of the party, the benign spirit of the ship, with an endless string of anecdotes and "animal stories," always funny, and with a case of Old Parr under his desk in case something—such as sighting a whale, or a boat drill, or such, should make him and his companions "nervous."

He assuaged my nervousness on numerous occasions. GSA should give him his passage free and charge the other passengers extra, should they be lucky enough to sail with him.

We passed the west end of Cuba the next night and were in the Caribbean, which looked just like the Gulf. I looked for the furrows I had worn into the Caribbean as a kid thirty years ago, but they were gone. All is change, there is nothing you can really depend on. The Captain gave a cocktail party which made up for it. He put on a uniform for the first time, too (freighters are *very* informal)—dress whites. Captain Lee is a tall, handsome man in his early forties and looks the way a skipper should look. He has a very heavy hand with a cocktail shaker.

The skipper went to sea as a boy, shipping before the mast, and worked his way up through the hawsepipe through all ratings from ordinary seaman to master mariner. This personal saga of the sea is probably passing today, as a consequence of the founding of the U.S. Merchant Marine Academy. No doubt this transition represents progress, but one thing is sure: the oldstyle skipper has a knowledge of his ship and the job of every man in it which cannot be learned in a school room.

Captain Lee kept a very taut ship. There was overt evidence in clean paintwork and well-shined brightwork but the most compelling evidence was negative; the ship had no odor. Almost every ship that sails the sea holds a pervasive, inescapable stink compounded of bilgewater and a dozen other ancient, organic whiffs. In a dirty ship it is almost unbearable; in a clean ship it is so slight as to be inoffensive when the weather is calm, the ports open, and the stomach is easy. But one does not expect it to be missing entirely. The *Gulf Shipper* had none that I could detect.

Later on we were conducted through all parts of the ship, engineroom, holds, lower passages, crew's quarters, galley, lockers, iceboxes—and I could see why. The ship was clean. Not just reasonably clean, but clean. The Captain inspected the ship each morning from stem to sternpost. When he inspected during our first day at sea I was asleep, with our door closed. He did not knock but noted down that he had not been able to enter stateroom number three and returned that afternoon to complete his inspection.

He did not simply stick his head in, glance around, and ask us if everything was all right. He came in and tried everything himself—plumbing valves, porthole dogs, medicine cabinet door, wardrobe doors, drawers. There was a steel chest of drawers welded to the bulkhead; Captain Lee found that one drawer stuck, so he squatted down, took hold with both hands and attempted to make it work.

He is a large man and powerful. With a sound of ripping metal the entire steel chest parted from the bulkhead and came away in his hands. He looked at it soberly and remarked, "I'll send one of the engineers up to fix that."

Freighter travel can be very pleasant. If you insist on the combination of swank hotel and organized children's party which characterizes a smart North Atlantic liner you will be bored and miserable in a freighter, for a freighter offers only meals, room, and transportation; the rest is up to you. I am not sneering at luxury liners; real luxury can be a lot of fun. Freighter life is a different sort of fun.

The staterooms are usually larger than any but the most expensive in a liner and they are always outside rooms. Ours in the *Gulf Shipper* had a private toilet and shower, contained two single bunks and a large couch, had three ports, and was roomy enough to set up a card table. Outside the passengers' rooms were wide verandas with deck chairs. There were no deck stewards hovering around; if you wanted your chair moved, you moved it; if you wanted a cup of coffee or tea, you went down to the pantry and got it.

The passengers ate with the officers in the officers' saloon. The service was adequate—one waiter for nine passengers—and the food was the sort known as "good, plain cooking." This can as easily be "bad, plain cooking" but in the *Shipper* it was good. The chef was no *Cordon Bleu* but he had a decent respect for good raw materials and prepared them accordingly. There was usually a choice of three entrées and two desserts; I believe that anyone but a gourmet would have been happy with it. Dutch, German, and Scandinavian freighters have a reputation for setting a better table than do our ships. In some cases this reputation may be justified—but I enjoyed the food in the *Gulf Shipper.*

What you do between meals is up to you. You can sunbathe in a deck chair and count the flying fish, sleep, chat with the other passengers and the officers, read, play cards, study, or even get drunk. Or you can hole up in your room and wish to heaven that you had never left Paducah.

Ticky and I found the three weeks in the *Shipper* one long, gay picnic, its only drawback being that we ran very short on sleep. Both of us had expected to work and study on this leg of the trip; neither of us got anything of the sort done. But I am forced to admit that, aside from a couple of good parties in port, nothing noteworthy happened. We played cribbage, we yarned endlessly, and we had cheerful drinks with cheerful companions. Someone else might have found the trip excruciatingly dull.

Freighter travel is not necessarily cheap. For the North Atlantic crossing freighter fare runs about the same as cabin class in the *Ile de France,* with first-class fare running considerably more and tourist class running considerably less. No direct comparison can be made between passenger ships and freighters on the run from New Orleans and Valparaiso as there are no passenger ships on this run. But it can be compared with air travel. First class one-way by air from New Orleans is now $529, air tourist class is $402, whereas the ocean freighter fare is $410, to which you can add $30 or $40 in tips.

Another way is to compare round-the-world fares:

President Lines tour ships: about $2600
Air First Class: $1720
Air Tourist: $1580

Ocean freighter travel—from $500 to about $2000: the catch being that the $500 bargain is almost impossible to get and you probably would not want it if you could get it. A more likely figure is something between $1400 and $2000, or a median cost almost exactly equal to air tourist fare and a top cost in excess of first-class air travel.

Of course air transport simply gets you there, room-and-board on the ground being your problem. A typical trip around the world by freighter or cargo liner might show thirty days in port, during which time you may sleep and eat in the ship. Equal accommodations might cost you $15 per day if you went by air—a very rough guess since cost-of-living and rates-of-exchange vary so widely. Nevertheless, from my own recent personal experience in hotel costs around the world, I estimate the value of freighter accommodations as American-plan hotel accommodations to be certainly not more than $450 for 30 days, i.e., you can buy as many days sightseeing around the world for about the same price whether you go by air or by freighter. If you do not insist on the foreign equivalent of a Hilton hotel, you may be able to do it by air for a few dollars less than by freighter—and *much* cheaper than you could do it by luxury ship.

This may be surprising—I know that it surprised me. Until I made a direct comparison, on paper and through experience, I had always assumed that air travel was comparatively expensive, that in general travel by water was fairly reasonable, and that ocean freighter travel was very inexpensive. While it may have been true once, it is not true now.

The rates for particular trips vary widely. As a rule of thumb you can now expect that first-class travel by air will cost about the same as first-class travel by ship or train and that ocean freighter travel will cost about as much as air tourist travel. But it still depends on where you want to go; New York to London is about $75 cheaper, class for class, on the water, whereas New York to Los Angeles is at least $100 more expensive by water.

It adds up to a matter of taste and convenience. If you like long, lazy days at sea and have time for an extended vacation, ocean travel and freighter travel in particular is a real bargain; if your time is limited and you want a maximum of sightseeing for your dollar, go by air. If you can spare a month, you can go all the way around the world, see as much in as many days of sightseeing as are offered in luxury cruises of three or four months, all for the price of a Chevrolet. (A luxury ocean cruise, counting in tips and extras, will cost as much as a Cadillac.)

But freighter life unquestionably offers the maximum opportunity to rest. When we left Colorado Springs I was in a state of jumpy nerves from overwork. I twitched in the daytime and had insomnia at night. After a few days in the *Gulf Shipper* I was as relaxed as an oyster. It took me five days to work up enough ambition to load my camera.

After some days of sleeping all night, all afternoon, and napping in the morning I did bestir myself enough to poke around the ship a little. The *Shipper* is a typical freighter of the type known as "C-2." Her gross registered tonnage is 10,700 but, loaded, she actually displaces 15,000 long tons of sea water, i.e., that is what she would weigh, loaded with cargo and ready for sea, if you weighed her on your bathroom scales—I am speaking of largish bathroom scales, of course.

The term "tonnage" is used glibly with respect to ships by travel agents, seafaring men, and landlubbers, but the word is as slippery as "democracy" or "love" unless defined each time it is used. The ton referred to is a "metric ton" which the dictionary says is 2204.62 pounds—which is right as far as it goes. But it can also mean space of 100 cubic feet, or a carrying capacity of 40 cubic feet, or 35 cubic feet of sea water which is 2240 pounds in weight. It *never* means 2000 pounds as in a ton of coal delivered to your house.

To add to the confusion any ship has at least four usual "tonnages"—gross registered, net registered, dead weight, and displacement. The first two are measured in cubic feet, the second two are measured in pounds. In speaking of the *Queen Mary,* the *Nieuw Amsterdam,* or any merchant ship, the term "tonnage" that you are likely to hear means "registered gross tonnage" which is a cubic measure of the space enclosed inside her skin. On the other hand "tonnage" of a warship almost always means how much she *weighs,* ready for action. The two scales have the barest nodding acquaintance.

In the case of the *Shipper* her "net" tonnage is less than one third of her "displaced" tonnage, but both are correctly her "tonnage."

(John "loves" Mary; John "loves" bowling—see what I mean?)

Let us call the *Shipper* an 11,000-ton ship on the same scale under which the *Queen Mary* is called an 80,000-ton ship, by the cubic footage inside their skins. This does not mean that the *Shipper* is small; it means that the *Queen Mary* is fantastically large. A "little" ship like the *Gulf Shipper* can carry as much as two to three ordinary freight trains. She is 460 feet long, 63 feet wide, and draws 32 feet. To push this bulk through the water at 15.5 knots (18 land miles per hour) she uses 6000 horsepower derived from oil-fired boilers and steam-driven turbines—the locomotives used by the Santa Fe's famous *SuperChief* are rated at 900 horsepower; on the other hand the lovely lady *Lexington,* lost in the battle of the Coral Sea, had a rated horsepower of 180,000 and could, by tucking up her skirts a bit, turn up over 200,000 horsepower.

The *Gulf Shipper* carries a crew of forty-seven, seventeen in deck and navigation, seventeen in engineering, thirteen others including the purser, radio operator, chief steward, cooks, waiters, and helpers. Twenty-four of the crew are deck and engineering watchstanders, eight to each of the three watches. The others are either those whose duties never end, such as the Captain, the chief engineer, the purser, or those who work at specified hours, such as cooks and deck maintenance men. The ship's payroll will run around $20,000 a month and the total cost of operating her is about $85,000 a month—which means that she has to run fully loaded most of the time, make fast turn arounds, and avoid excessive overtime in order to show a profit.

American merchant ships are in a poor position to compete with foreign shipping. The ship itself costs more, our safety laws are more stringent than those of many of our competitors, and we pay enormously higher wages. I am not criticizing the wage scale; it is simply what must be paid to persuade Americans to go to sea instead of taking jobs ashore—but it is true that we pay as much to an able seaman as many countries pay the captain of a large vessel.

Because of our high costs many American vessels are being transferred to foreign flags under whose laws they can operate at much lower costs. This flight from the American flag would perhaps be of only sentimental importance were it not usually agreed that a large and healthy merchant marine is an essential part of our national defense. A quick answer is to hit the taxpayers for a shipping subsidy. Another quick answer is "American ingenuity and enterprise." A third quick answer is that merchant shipping is no longer a major factor in war because the next war will be settled from the air in a matter of hours or days.

I am sorry to say that I seem to have mislaid the right answer.

The *Gulf Shipper* arrived off the Atlantic end of the Panama Canal early Saturday morning the 21st, stopped just long enough to pick up the pilot and his handling crew and to drop the purser, then started through the Canal. Passengers could, if they wished, get off with the purser, spend the day shopping and sightseeing, travel across the Isthmus by bus, and join the ship that evening on the Pacific side.

None of us did so. Ticky had never seen the Canal before, but neither had she ever seen Colon and Panama City and the U.S. settlements, Cristobal and Balboa, adjacent to them. She was torn between the desire to see the first foreign port in our trip and a desire to see the Canal; I persuaded her to see the Canal.

I swear on a stack of wheat cakes that I was not motivated by a desire to keep her away from the bazaars. It is true that the shops of Colon and of Panama City have an effect on all women and some men much like that of a bed of fresh catnip on a cat—and the bargains often are real bargains, for Panama City is a free port. No, like a total eclipse of the sun, the experience of transiting the Panama Canal is one that should not be missed if available. There is nothing else like, it in the world . . . and I am not forgetting the Suez Canal.

I still have scars on my arms from sunburn acquired more than a quarter of a century ago when I first went through the big ditch. I knew at the time that I was getting sunburned but I could not bring myself to stop looking and go below. Since then I have seen it many times—and I still can't stop looking.

Any atlas, world almanac, or encyclopedia will provide a winter's supply of sound, chewy facts about the Panama Canal, tonnages, tolls collected, yards of earth moved, and so forth. They are well worth reading but we will not repeat them here. The Canal was started by the French in 1882; you can still see the old French Canal slicing slaunchwise into the channel we cut. Yellow fever and more bad luck than any man ought to have put a stop to the French attempt. We bought the franchise and, with almost indecent haste, recognized a Panamanian revolutionary government which seceded from Colombia in 1903, signed a treaty with the new government and started work again in 1904. Ten years later the first ship went through.

The Canal is fifty miles long and runs northwest to southeast across the twisted isthmus in such a fashion that the trip from the Atlantic to the Pacific (i.e., to the *west)* winds up twenty-seven miles farther to the *east.* This has to be seen on a map to be understood; it is as silly as the fact that Los Angeles is east of Reno. Sea level is a couple of feet higher on the Pacific side than on the Atlantic side but this odd fact is swallowed up by the fact that the major portion of the Canal is eighty-five feet higher than either ocean. Three sets of locks at each end perform the improbable task of lifting and lowering ships of fifty thousand tons or more the height of an eight-story building.

There has been a lot of agitation for a sea-level canal, through Nicaragua or elsewhere. One glance at any one of the locks of the

Panama Canal is enough to show why; one pony-sized A-bomb anywhere near one of the locks would put the entire Canal out of use for months or years and leave our navy and merchant marine with a nice, long, chilly trip around the Horn in order to get from one coast to the other. You will correctly assume that the Canal Zone contains antiaircraft and radar installations—but the bomb need not be delivered by air; it can be in the hold of a ship flying the flag of Ruritania, or even the U.S. flag. There are more than seven thousand ships going through the Canal each year and the only known way to inspect a ship for A-bombs is to unload everything, take a screwdriver and open every crate . . . a process equivalent in itself to closing the Canal to traffic.

I am disclosing no secrets. You may be sure that Mr. Malenkov's assistants have given thoughtful consideration to these matters and that our government has been equally thoughtful. If I knew of an answer I would be in Washington right now.

In the meantime the locks of the Panama Canal remain the most satisfying gadgets I have experienced since the time Santa Claus brought me a toy steam shovel that actually worked. The ship slides slowly and quietly into the first of the Atlantic side or Gatlin Locks, towed into place by miniature cog railway engines known as electric mules. The gates close ponderously and magically behind her, untouched by human hands; a guard chain rises to protect the gates. The ship is enclosed in a box; all one can see is the concrete walls.

Water boils up from the bottom of the lock and high, high up she rises! The ship lifts gradually up and up until the sightseers on her decks can again see over the sides of the lock the tailored, tropical surroundings. The gates ahead open, again by magic, and the ship is gently urged into the channel ahead. Three times the ship goes through a water elevator, lifted each time about thirty feet, then she is let free into Gatlin Lake.

The lake was made by damming the Chagres River, which supplies the water to work the locks. Here and there, outside the dredged channel, dead trunks of trees still thrust up through the water, melancholy monuments to progress. The extremely broken shore line and the numerous islets, both characteristic of newly-flooded river valleys, form and re-form deep three-dimensional vistas, all in glorious Technicolor. The place seems unreal, as if one had fallen into a Disney musical.

I have heard it said that Gatlin Lake is the "dull" part of the Panama Canal. I don't know what to say to such people. They are unquestionably right, since it is all a matter of taste, as the old lady said when she kissed the pig. I once ran across a woman from France who had just finished a tour of the western part of the United States.

In her opinion she had seen nothing west of the Mississippi worth looking at—including the Grand Canyon, the Rocky Mountains, Yellowstone, and so forth. As the booking agent said to the man who was flying by flapping his arms: "So you can imitate birds. But what can you do that's *novel?"*

You may not share my enthusiasm for Gatlin Lake and, after all, it is just another lake. The whole world is loaded with beautiful scenery; Gatlin Lake is one of thousands. But I have been in it at every time of day and in every season and I myself have never grown bored with it. The lights and colors are always changing; the motion of the ship combines with the twisted shore lines to form backdrop after backdrop into mysterious depths. Perhaps it is "dull"—but I am a Missouri country boy with black mud between my toes; I still stare at the Empire State Building whenever I get a chance.

The entire experience of the Panama Canal has always seemed pleasantly unreal to me, as if it all had been constructed by a Hollywood miniature set designer—the blazing sunlight, the quick rain storms, the little electric engines crawling slowly up beautifully curving concrete walls, the locks themselves and the lavish engineering structures around them, the endlessly changing depth on depth of lake and cut and jungle. It was designed more than half a century ago, back when ladies had "limbs" and the shout of "Get a horse!" at an "automobilist" was real wit. Yet it looks like a set for a major production scene in a Hollywood fantasy of the future.

After the lake the ship enters the Cut—"Gaillard Cut" on the maps, "Culebra Cut" in the mouths of most people. This is the part that almost broke the hearts of the builders. This is where hairy engineers in field boots stared through surveying instruments at mountains and decreed that they must be moved. Moved they were—by coal-burning steam shovel and scraper and mule and muscle and sweat. The Model-T Ford was brand new then and the bulldozer was yet to be born. Earthmoving machinery such as any county road department now owns would have seemed miraculous; they made do without.

The banks are very close here and the jungle is almost in your lap. You sit in a deck chair or lean on the rail and let it flow past you, birds and snakes and waterfalls and giant blue butterflies. Once, some years ago, I found myself staring back at an eight-foot alligator, so close that I could see the stains on his teeth. I alert Ticky to watch for them, but we have no luck. One of the pilot crew aboard tells me that there are plenty of them still on the shores of the lake and that it has been necessary to fine people who hunt them for sport, then leave the carcasses to rot in the clean water of the lake.

Back in the jungle here, only shouting distance away in places, is the old Gold Trail, peopled with the ghosts of the Indian slaves who died on the way. Once, twenty years earlier, I rode along a portion of it on a borrowed army horse. It was paved with stone and the jungle had not quite destroyed it, but had arched over it instead, forming a dusky tunnel, a place of enormous butterflies and midget deer and silence. The Isthmus was one of the world's major roadways long before the water bridge was cut through it.

But nowadays the once-heartbreaking journey is soft and easy and no one dies on the way. Traffic lights control the shipping through the Cut, real traffic lights with red for stop and green for go. There are places where the pilot must hold back and give the traffic ahead a chance to clear; the lights tell him, just like those on Wilshire Boulevard. In addition to lights he has been briefed by the control officials ashore as to what ships to expect and where, since the enormous mass of a ship is not stopped by jamming a foot on a brake. The handling of a ship through the Canal is a piece of precision choreography. There are ranges, each a pair of giant targets, at dozens of places along the route; the pilot can sight along one range and know that he is lined up properly for the channel and sight along another at the same time and know to the yard just how far he has progressed along that reach of the channel and how soon he must turn.

The reason for such precision is evident: in some places ships pass so closely that you expect their plates to scrape. Canal pilot is among the most highly skilled jobs in the Zone and is highly paid by civil service standards. But the job is done without swank. Almost all other countries dress their pilots in uniforms like those of naval officers, but the *Gulf Shipper's* pilot was a young man in a slouch hat and casual sports clothes who carried his responsibilities with the relaxed ease of a truck driver.

We passed through Pedro Miguel and Miraflores Locks in the late afternoon, with the same processes as in Gatlin Locks save that we started each time high above the scenery, then sank into claustrophobic depths before being let out into a lower level. At dusk we dropped the pilot and steamed out into the waters of the Pacific, into the Gulf of Panama, with the lights of Panama City on our port hand. We picked our way through islands and submerged rocks and presently Captain Lee set course for Point Charambird above Buenaventura, Colombia.

A drastic change comes over a ship as soon as it touches dock. The physical change can be easily described but the emotional change is far greater and harder to convey. For some days you have been in a little world, an enclave away from atom bombs and strikes and bills and auto accidents and traffic noises and strange people. Nothing is real but the ship and it is a place of no worries. You leave your stateroom door wide open, leave binoculars or cameras on deck chairs, dress as you please. No one hurries and no one worries. You are home, with only your "family" around you.

Then the gangway touches the dock and all is changed completely, with the suddenness of being dumped out of warm sleep into cold water. Strangers swarm aboard, they are everywhere and they all look like criminals. A percentage of them are indeed petty thieves who will steal the socks off your feet without untying your shoe laces; this is true in any port including those of the United States. You always lock your stateroom door and carry the key with you everywhere. You dog down the ports of your room if you step out even for a moment, no matter how hot it is, as even a moment is enough for the waterfront pilferer; fly screens won't stop him, it takes steel. Nor are you safe simply because your porthole does not face onto a gallery; harbor thieves have been known to operate from the masts of small boats, using a gadget combining the features of lazy tongs and fishing rods.

You return to your stateroom—locked, thank heaven!—and find a villainous-looking stranger trying the door. Unabashed, he claims to have been looking for the purser. Perhaps he was and perhaps he has legitimate business with the purser. Perhaps stealing is only a hobby with him. You don't find out, as the purser is much too busy to talk with you. The Captain, a genial host only an hour before, brushes past you without seeing you, two strangers in tow. You return to your room, bolting the door behind you, and start to change clothes. Then you notice faces at each porthole. They weren't there ten seconds before and the gallery was empty as you came in.

Buenaventura, Colombia, is not worse than other ports; for pure villainy it is not in the same league with the racket-infested docksides of New York City. In fact, the purser tells us that Buenaventura is safer than it used to be, as "the officials are no longer hungry." About six months earlier there was a revolution, or rather a military coup d'etat; since then the port officials and the police have been paid regularly. They do not need to steal nor to seek bribes in order to eat.

The notion that a military dictator can produce a better government than an elected regime is obnoxious, but clearly this is an occasion for suspended judgment. Our Latin neighbors move in mysterious ways. Where we would use a recall or simply wait for the next general election, they wake *el presidente* up in the middle of the night, stick a gun in his face and tell him that he is through . . . they hardly ever kill him.

I find it necessary to remind myself firmly that the customs of my own tribe are not the laws of nature.

The stevedores all come aboard carrying empty sacks; when they leave the sacks are not empty. The sacks may contain U.S. cigarettes purchased from crew members and destined for black market ashore, or they may contain anything that is not riveted down. The chief mate tells us that he has found them taking away crumpled pieces of old newspaper—trash used in stowing cargo and left in the holds. Or they will gather up a few coffee beans left on the floor plates. These people are poor; to them anything is worth salvaging.

It was raining when we reached Buenaventura. During the two days we were there the rain stopped once for about two hours. Buenaventura enjoys, or suffers, three hundred and fifty inches of rain a year or about an inch a day. A freighter skipper hates to rig cargo awnings as it slows up the work greatly and cuts into the slim margin of profit, but in Buenaventura it is done as a matter of course. Much of the cargo loaded there is coffee; to allow it to get wet is financial disaster.

Colombian coffee is precious stuff, much prized for blending. A prime reason why it is almost impossible to get a decent cup of coffee (by American taste) anywhere but the United States is that coffee made elsewhere is likely to be Brazilian coffee, strong and bitter. We use the hearty Brazilian coffee, too, but we blend it with milder coffees of vastly different flavor from the highlands of Costa Rica and from Colombia. The purest water, used with great care in Silex or drip pot, will not produce an "American" cup of coffee if our American blends are not used.

Most of our tonnage for Buenaventura was a couple of dozen big motor buses, carried on deck and in the upper holds. Rain would not hurt them and there was no need to rig tarpaulins until they were out of the way, but rain could and did slow up the work and make stevedores and crew miserable. It was hot, tropical rain. We slept naked on sheets with blowers playing on us full blast, and we soaked the sheets. I used three shirts a day in a hopeless attempt to be neat and the neckties I did not wear nevertheless mildewed on their hooks. Towels never dried, clothing was damp when it was put on, my typewriter rusted to immobility, and I broke out with a superior grade of athlete's foot.

Ticky looked at me with quiet reproach and said, "I thought you told me you *liked* the tropics."

The rain slacked off and the sky almost cleared the middle of the next morning and Ticky and I, Vi and Bob Markham, went ashore. Buenaventura is a very busy port, serving all the west slope of Colombia, but it is a small town, about 14,000. It looks like any number of other small towns through Central America and is rather pretty when the sun is shining. It has a onesided main street, a hotel, a Catholic church, several cantinas, and a few shops where the rush of trade is slowed down to a tranquil hush. Once you are off the docks and through the customs gate there is little danger of being run down by the traffic, nor are the sidewalks crowded. One swarthy fellow, perfect type casting for the assistant villain in a tropical melodrama, followed us around the whole time we were ashore, but he never attempted to speak to us. Apparently he just wanted to look at the gringos.

We exhausted the sightseeing resources of the town in an hour and had exhausted ourselves in the heat and humidity even at a very slow walk. It was beginning to rain again; we returned to the ship.

I was assured by several members of the ship's company that Buenaventura might be sleepy in the daytime but that it possessed a very rugged night life "up on the hill" with music and liquor and entertainment downstairs and anything at all that one cared to pay for upstairs. I thanked them and let it go at that, saying that I had a date to play cribbage.

The cribbage game never came off because the chief engineer took advantage of our stay in port to give a cocktail party, announced as a meeting of the D.M. Club to induct four new members: the Heinleins and the Markhams. "D.M." stands for "Dry Martini." It also stands for "Dead Man," and is an intentional play on words. The chief engineer made excellent dry martinis; regrettably he served them in water tumblers. I do not have the constitution to play "al seco" or "bottoms up" with martinis of that size and I refused to do so, even though repeatedly urged—nevertheless the drunker I stayed there the longer I got.

I was saved by the dinner bell. We all piled into the dining saloon and started wolfing comestibles. I needed same.

A careful reconstruction of what happened next seems to establish clearly that Ticky fired the first shot. The Captain was sitting across the room from her and failed to answer when she called out something to him. Ticky is not a woman to be ignored with impunity; she wadded up her napkin and let him have it. The first salvo was short and landed in his soup.

For several days we had had bowls of kumquats on the table. The kumquat is a very pretty fruit and makes excellent preserves but they are not much to eat raw. I never saw anyone eat one and I think the waiters simply dusted them off and brought them back, meal after meal.

But they are a nice size for throwing and have excellent ballistics properties in the medium ranges. Very soon the air was filled with kumquats. Each kumquat could be used over and over again (and was) until it got tired and burst, which it did. As the kumquat supply diminished, other things were pressed into emergency service, rolls, more wadded napkins, anything that came to hand. I was very hungry and did not take full part in the festivities, limiting myself to grabbing anything that landed near me or on me and firing it back blindly over my shoulder. There being a solid rank of ship's officers behind me, I stood a good chance of getting the junior third or the mate even if I missed the skipper or the engineer. So I kept on eating.

The officers' waiter, a young Cuban called "Chico," entered into the spirit of the occasion and started running ammunition in from the pantry to the Captain's table, starting with more kumquats and branching out when they ran short. He came in at last with a large platter covered with cold cuts, which was intended for midnight lunch. He offered it proudly to Captain Lee.

The Captain looked at it, grinned, and reached for it—then demonstrated the qualities of leadership, mature judgment, and restraint that had carried him to the top: he firmly refused it and made Chico take it back, much to Chico's disappointment. This act of renunciation turned the tide; a few more desultory salvos and the battle was over.

Bob Markham told me afterwards that the finest moment of the engagement known from then on as "Kumquat May"—a poor pun but it was awfully hot—was an incident that I did not actually see because I was in it. Someone hit me fair in the back of the neck with an entire plateful of tossed green salad, well marinated, and I did not flinch nor cry aloud but kept on eating. Markham seemed to feel that it showed rare aplomb.

I gave him the aw-shucks-fellers-it-warn't-nothing-anybody-else-with-courage-and-a-coolhead-would-have-done-as -well routine. The fact was that I wanted my dessert. It was a plain one-egg cake with icing which I prefer to most fancy desserts; I was durned if I was going to miss finishing my dinner simply because lettuce was dripping from my ears. Once I finished the cake I gathered up everything that I could reach and threw it at the Captain in one saturation barrage. I was not sure that he had thrown the salad at me but I believe in the sound and ancient principle that the commanding officer is responsible for everything that happens in his ship.

I must say that Captain Lee looks well in chutney.

After dinner someone again suggested that we all go ashore and try the entertainment offered up on the hill. Ticky was willing but I vetoed it and was supported by Bob Markham. No doubt a solid phalanx of ship's officers, ably led by the Paul Bunyan figure of the Captain, would have supported us in any difficulty—but I do not trust remote tropical seaports after dark; I have seen too many of them as a young bachelor. The guardia is never around when you need it and a surprising number of the citizens carry knives. We went to bed instead. It was clear for almost an hour the next day when we steamed out. Buenaventura is located in a very beautiful estuary which would no doubt be still more beautiful if the clouds would clear away and give a view of the snowcapped Andes only a few miles beyond. I had looked forward to seeing the Andes here, for it was through these mountains that Simon Bolivar the Liberator, a man half devil and half saint, had dragged his consumption-racked body to lead his starved and ragged army on to victory and freedom.

But I had to be content with a view of the harbor and the surrounding jungle. Colombia, although a country of Spanish and Indian tradition and culture, has a major strain of Negro. Accompanying us out into the stream were many dugout canoes paddled by blacks and on the shore we could see grass huts appropriate to Africa but which looked decidedly out of place in South America. Most of the Negroes here are supposed to be descendants of slaves escaped from farther north and who made their way through jungle and along the shore to freedom. It seems plausible, for it looks as if Congo culture had been preserved almost unchanged here through the centuries, only a few miles outside a town having most of the hallmarks of modern Western culture.

The *Gulf Shipper* turned south and soon entered the Humboldt Current, which sweeps north along the coast all the way from Antarctica. The weather turned chilly and we crossed the equator under two blankets—after sweltering in our bare skins only a few miles to the north.

Three days later the *Shipper* stood into the harbor of Callao, Peru, the seaport of Lima, the capital. The metropolitan district of Lima contains more than a million people and is a good place for a gringo to start getting over the notion that South America is an uncivilized back country. True, South America is thinly settled compared with the United States and it still has ahead of it perhaps a century of frontier exploitation whereas our frontier has moved on up into Canada. But Lima is both one of the oldest and in some ways the newest city in the Western world.

As a Western city it dates back to 1530, Pizarro's conquest, ninety years before the Pilgrims landed at Plymouth Rock; its origin as an Indian city is lost in antiquity. Its university is the oldest in the Americas. But in new Lima are mile after mile of homes in the style called "modern" and which perhaps should be called ultramodern, since nowhere in the United States can there be found modern architecture to compare with these in abundance, in lavish use of color and glass, and imaginative freedom of design. Admirers of Frank Lloyd Wright, of Schindler, and of Neutra, if suddenly plopped down in new Lima, would probably conclude that they had died and gone to heaven.

The ship docked late in the day; it was early evening before we could leave—five of us, Ticky and I, the Markhams, and Mr. Tupper, the honorary "cruise director." Captain Lee had intended to come with us but business with the company agent held him up; he asked us to meet him at the Gran Hotel Bolivar at seven-thirty.

We drove the seven miles from the port to Lima along the beautiful Pan-American Boulevard. The countryside, vegetation, and buildings looked to me much like many places in Southern California, except that the Coca-Cola signs read "bibo" instead of "drink." We could see the Andes from time to time, but not very impressively as they were obscured by the same high haze so common in Southern California. It looked to me as if it might be gathering in for a rain storm and I asked the driver about it. He said that he did not think so, as it had not rained for thirty years.

He was not pulling my leg. All of the water in Lima is brought down from the mountains; there are grown men there who have never seen rain. The incredible change from the never-ending inch of rain per day of Buenaventura to the endless years of no rain at all in Lima only a short stretch of coast to the south is accounted for, so they tell me, by the ocean currents; the cold Humboldt Current laps Peru while the hot Counter-Equatorial Current runs straight into Colombia. We passed through cuts in hills which had a faintly artificial look to them, being composed mostly of thousands of little boulders, polished smooth to the size of grapefruit. The artificial look was justified; they were Indian burial mounds. Here and there one could see a thigh bone sticking out, or ribs, and sometimes a boulder turned out to be a skull. Indian families had huts here and there among the partly destroyed mounds and babies played among the bones of their ancestors. The taxi driver let us out in the Plaza de Armas in downtown Lima and charged us twenty sols or one Yankee dollar, seven miles for five people. The present rate of exchange is very favorable to us *norteamericanos* and it does not seem quite fair. We strolled around the plaza for a while, an impressively beautiful place, then sought out the Hotel Bolivar—with a couple of narrow squeaks from traffic. Lima has excellent traffic cops who handle the extremely dense traffic efficiently and with rare dignity—their stylized gestures remind me of a Balinese dance in slow motion. But the signals they use are not the signals our traffic cops use and every Latin American drives with courage. He understands the decidedly different driving customs of his country and he expects pedestrians to understand them also. Getting from curb to curb without any *intention* of jaywalking can be a hairraising experience. By the time we reached the Grand Hotel Bolivar I was glad to seek out the bar and have a tonic for my nerves.

Under the favorable exchange martinis cost about nine cents and a pisco sour cost six cents. The pisco sour occupies in west coast South American diet the position that vitamin tablets do in ours. Pisco is a native brandy. No proof is ever shown on the bottle but it is certainly higher in alcoholic content than is whiskey in the States. I estimate that it could stand up to vodka and give away the first two punches. I tried one pisco sour and shifted back to martinis, where I knew the territory. At the Bolivar we gathered in the purser and the second engineer and a flier from Texas and a big gringo mining operator. When the Captain arrived with a company agent, Vi and Ticky had nine men to split up between them. But the wolves in Lima are gallant, aggressive, and optimistic; Ticky complained to me presently that a stranger present was trying to pick her up. "Every time I look up he lifts his glass to me and motions with his head for me to come over," she said indignantly.

I suggested that if she refrained from looking at him she would not know that he was looking at her. But she continued to simmer. Presently she and Vi left us to find the powder room. When she returned she again had something on her mind. "This place is impossible!"

"Why? It reminds me of the Bellevue-Stratford in Philly. Seems like a pretty nice joint."

"Hmmph! Vi and I just walked through the lobby, minding our own business. At least a dozen men tried to pick us up."

"Well! Congratulations."

"It wasn't funny."

I tried to explain to her that customs varied and that any woman without an escort right at her elbow was assumed to be open to suggestions until proved otherwise. But her attention had flitted elsewhere. "Bob, there was a little Indian girl in the powder room, the maid, the attendant. I didn't have any change and Vi didn't either, so we turned out the bottoms of our purses—"

"Strike oil? Any mousetraps?"

"Don't be funny. I found a nickel and two pennies and gave them to her, feeling apologetic. But she seemed pleased and started talking excitedly and hurried away and came back and showed us what *she* had. It was an American quarter and she had shined it up like silverware. It was rather pathetic. Give me some change, dear. I want to go back and tip her properly."

"All right. But let's figure it out. You tipped her seven cents. That's one sol forty, or the price of a cocktail. Back home, would you tip a washroom attendant seventy-five cents?"

"Why, no, I'd probably tip her a quarter."

"Then did you under-tip? Or overtip?"

Neither one of us could figure it out. It was our first tangle with a problem which worried us all around the world: whom to tip, when to tip, and how much? How to hold up the American reputation for generosity without adding to the American reputation for being blatant and wasteful suckers? We never did work out a satisfactory formula.

The entire party decided to move on to the "Club 91" for dinner, at which point I attempted to put into operation a previously prepared plan. It had long been established that Captain Lee was the world's worst check-snitcher; it was almost impossible to buy the man a drink because he would make a long arm, grab the check, and push aside anyone who attempted to pay it.

Knowing this, we party of passengers had planned for it and I had been selected to carry it out. I started with a verbal barrage in which I informed Captain Lee that we had taken a vote and decided to stick him with the check. I was very firm about it and he was very hurt, protesting that he did not mind paying his share but he thought it was a hell of a note for the rest of us to decide to clip him—he wouldn't stand for it, no, sir.

While his attention was diverted, I had obtained the check; I handed the waiter our pooled funds.

Captain Lee caught the tail end of the maneuver. With a scream of rage and a fist full of sols he straightened up to his full seven feet and attempted to reverse the matter. I got off with a slight flesh wound, but we kept him from paying the check.

On the way to dinner he kept trying to force money on me. After a while he quit but he seemed pleased about something. Later on Mr. Tupper twitted him about losing, whereupon he said, "Oh yes? Bob, look under your coat collar."

I did so, but there was nothing there. It developed that the Captain had tucked a roll of bills, two hundred sols, under my coat collar while we were crowded into a taxi—but they were gone, had fallen out. We speculated about the expression and feeling of the taxi driver or whoever it might be that found it, then forgot it, with each side feeling that it had won a moral victory.

But the next time I try to snatch a check from Captain Lee I'll wear gloves.

Club 91 is 'on the top floor of a skyscraper and has a feeling much like the Top o' the Mark, with broad expanses of glass giving a panorama of the wide-flung city, the Andes, and the ocean. It is very posh and has wonderful food, an exotic cuisine in no way resembling Mexican food. Nor is it international-French cooking, it is Peruvian. I don't know what else to say about it; describing dishes and flavors which are truly novel is a waste of words. But when you go to Peru, don't limit yourself to steak; there are delightful surprises in store for you. Leave room for dessert, too. They bring them around on an oversize tea wagon and let you pick by sight instead of from a menu. I don't know whether this is a kindness or not, since by that time you cannot possibly toy with more than one and the others are lost to you forever.

Dinner in South America is not the evening meal; it is a nighttime adventure. Although we went straight back to the ship it was very late when we got aboard and I rolled into my bunk, happy with the thought that the ship was sailing and I could sleep all day tomorrow.

But I learned at seven A.M. that the ship was not sailing, that loading had not been completed, and that the Captain had ordered a taxi and a guide for us. I groaned, took Dexedrine, and decided to enjoy it, reminding myself that I had come a long way and had spent more than fifty cents for the privilege.

Our guide and driver was Senor Rodolfo Gonzales Bueno, a middle-aged Indian of great size and great dignity. Perhaps his ancestry was more Spanish than Indian; if so, the Indians came out ahead. His face reminded me of that carved stone god that stares with timeless majesty out over the water gardens in the grounds of the Pan-American Building in Washington, D.C.

We made a full day of it and I was soon glad that the ship had not sailed even though my head was beginning to ache. We saw Callao first, the harbor, the naval academy, and an enormous market made up of hundreds of little stalls, crowded and colorful. I took the precaution here of leaving Ticky's purse with Mr. Gonzales as I was not anxious to start too quickly the business of dragging plunder around the world.

Then we saw old Lima, university, government buildings, presidential palace, archbishop's palace, cathedral, all impressive and all ornate in a style no longer popular. There were so many of them that I almost felt sympathy for the tourist who came charging up the steps of our own National Capitol at Washington and said to his wife, "Okay, Marge, you take the inside and I'll take the outside and we ought to be through in twenty minutes."

But in the cathedral we saw the mummy of Pizarro the Conqueror himself. There he was, in a glass coffin, a little man who could not have been very impressive alive and who must have looked like a child to the giant Inca gods. Yet he and his "thirteen friends" by treachery and deceit and casual murder brought the mighty Inca Empire to ruin.

Now he lies with sunken eyesockets staring sightlessly up, his shriveled, darkened flesh and untidy hair on display, a sight for any tourist with two-bits to tip the attendant monk to let them stare.

"Ozymandias, King of Kings—" Was it worth it, pal? Are you happy now? Or are you groaning in hell for your crimes?

Odd though it seems, although his bloody record is well known and although most of the citizens of Peru are descended from the conquered rather than the conquerors, Pizarro seems to be a popular hero.

I asked to be shown slums. This was not morbid curiosity. All countries have the homes of the rich, whether they be commissars, counts, or capitalists; their homes are all beautiful, they look pretty much alike everywhere, allowing for climate and architectural styling, and you learn very little about a country from seeing them. I always look at them for the enjoyment of seeing beautiful things, but you learn more from the slums, which are not enjoyable to see.

Lima had both shanty town slums and formal, tenement slums. The shanty towns were true international architecture, the grim and pathetic structures built by people who have nothing at all and must shelter themselves with scraps and other people's junk. They were indistinguishable from the shacks of Okies in Imperial Valley twenty years ago, from the barrios of Rio, from the shanties of Singapore's waterfront. The formal tenements were mostly one-story buildings built wall to wall in long rows with narrow alleys. They reminded me of dog kennels and were even more depressing than the much less adequate shanties, for here poverty seemed static and hopeless, a permanent way of life.

Almost next door to these warrens was a palace. It had once been a private home but now belonged to the government and was used by the army. Many of the soldiers' families lived in the nearby tenements; the contrast was sharp and bitter for papa worked in (literal) marble halls, then went home when off duty to a house more suitable for pigs than for women and children.

The palace had been built by a marquis for his "beloved"— a polite Latin expression which concedes the permanence of marriage but admits that love is something else and important in its own way. The social custom of the mistress as a formal institution in Latin America is very disconcerting to *norteamericanos,* reared in a matriarchy. Except for a very few cases, mostly in Hollywood and New York, there is no group or social class in the United States parallel to what is meant by "mistress" in Latin America, and even the exceptions are not truly parallel, for a kept woman does not have the publicly recognized, customary status of a Latin mistress.

When we use the word "mistress"—which is seldom—the reference is often in the past tense and means simply that Mr. and Mrs. Jones had their honeymoon before they held their wedding, a circumstance often factual but usually known publicly only through gossip and conjecture, or known statistically through Dr. Kinsey's tedious tables. Or "mistress" may refer to an informal biological arrangement carefully concealed and usually without any specific financial arrangements for support. Neither of these cases parallels the Latin custom. A Latin American who has a mistress usually has a wife as well and will appear in public with either one of them, but not both.

Each woman has a recognized place in his life and their social spheres ordinarily do not overlap.

But a mistress is not something to hide away in a back street. Her status is limited but much more privileged than is easy for a gringo to comprehend. Some years ago in a South American capital the United States ambassador gave a big party and invited all the local heavyweights and their wives. They came but most of them brought their mistresses.

The ambassador's wife was insulted and the ambassador was outraged and it almost resulted in an open international incident. Yet the mix-up was clearly a failure to understand each other's customs, since no South American would intentionally offend his host and hostess. The word should have been passed around quietly that this party was not intended to be fun; it was simply meant to be attended ritualistically—with *wives.*

The marquis' "beloved" (I don't remember either of their names and it does not matter) was apparently a woman of spirit who did not accept easily the limitations of her status. She was part Indian and from the lower classes; instead of being a well-behaved and modest mistress, respectful to her "betters," she refused to play the game according to the rules they handed her. Whether or not she objected to polygamy in itself is not known, but she certainly objected to the subordinate status accorded her by custom. She went out of her way to flaunt her birth and background under the quivering noses of the Castilian aristocracy of Lima. But her marquis refused to knuckle under to social pressure, but hung on to her, even though she was obviously "impossible" in the minds of all "right thinking" people.

He certainly did well by her. The Peruvian government, although using much of the palace for military purposes, has preserved the grounds and gardens and has maintained many of the chambers as a museum of the splendors of a by-gone day. Among other things, there is a carved marble bathtub on one of the balconies, of Imperial Roman magnificence. No one seems to know now if that was its usual position; the climate of Lima is balmy enough to have permitted her to bathe outdoors if such was her whim, and the tub would be very difficult to move. In any case there is a small swimming pool in the middle of the garden and a small summer house next to it which has a slatted screen like a venetian blind through which the pool can be seen. The old marquis is reputed to have been a bit of a voyeur; this summer house is supposed to have been a vantage point from which he could peep at her while she was swimming. Why in Ned he did not simply pull a chair up to the edge of the pool, or better yet, pull off his duds and join her nobody knows. Maybe he got more fun out of peeking.

There is a marble bust of her in the garden. She was unquestionably a beauty, fit to occupy the palace he placed her in. Now it stands as an inspiration to all women that they, too, can live in a palace if only they will use the depilatories and deodorants advertised in all the best women's magazines.

We then drove through miles of magnificently gardened, ultramodern-style homes to the country club. We passed several of the embassies, among them the Colombian Embassy where Senor Victor Rail Haya de la Torre was at that time still a prisoner of asylum, and still was to be so for several months to come. Mr. Haya's story is well known through the newspapers and has been fully covered in his own words in *Life* magazine (3 May 1954); we will omit details, except as they throw light on the striking differences between political life as we know it and the brand practiced south of us. Mr. Haya is the leader of the APRA party of Peru, which is left of center but not communist. He was charged with attempting a coup d'etat against the government, but—and this is a South American twist hard for us to follow—the charge was brought against him by a later government, which had itself come to power by overthrowing the very government Haya was charged with attempting to overthrow.

The nuances of Peruvian politics are too complex for me and I doubt if any outsider could gain a real understanding of them without a long, hard apprenticeship. All of the nations south of us are constitutional republics with liberal constitutional safeguards similar or usually equivalent to those found in our own constitution, yet with the shining exceptions of Chile and Uruguay, their political records seem to us to be an endless list of coup d'etat, bloody revolution, unelected provisional presidents, political admirals and generals, states of siege, states of public emergency, exiles and refugees, outlawing of opposition parties, liquidation of opposition leaders, suppression of free speech, free assembly, and free press.

Here is a place to walk softly, to be not hasty in passing judgment; we may not understand all that we see. I found in traveling around the world that a great many people believed the most arrant nonsense about the United States. In particular, a great many people, apparently well educated and sophisticated, were convinced that the people of the United States were in the grip of terror and that free speech and free press no longer existed here. They believed that the United States was fomenting a third world war and would presently start it, with Armageddon consequences for everyone else, and that the government of the United States smashed without mercy anyone who dared to oppose even by oral protest this headlong rush toward disaster.

These people could "prove" their opinions by quoting any number of Americans and American newspapers and magazines. That they were able to quote such American sources proved just the opposite, namely that we *do* continue to enjoy free speech even to express arrant nonsense and unpopular opinion, escaped them completely.

The extremely wide scope of free speech and free press in the United States, much wider than that enjoyed anywhere else in the world including all of the British Commonwealth, is not understood elsewhere.

(More free speech and press than in the British Commonwealth? Surely not! Ah, but we *do* have: our radio is not government owned, we do not place severe restrictions on the importation of printed matter from outside our borders, our libel laws and our limitations on reporting of court procedures are as nothing compared with theirs, our news reporting is the most aggressive in the world.)

The real restrictions against what we can say or print are very nearly limited to only the most blatant of pornography and to classified military secrets. But citizens of other countries neither understand nor believe this; it is too foreign to their own experience: I said to a man in South Africa: "You insist that anyone in the United States who expresses an opinion favorable to Russia or to communism is immediately thrown in jail. How do you reconcile that with the fact that the communist *Daily Worker* is still published in New York?"

He simply called me a liar.

I thought of sending him a copy on my return, but I refrained; such a publication in *his* country was likely to cause him trouble if he was caught with it.

In most cases all around the world these discussions that revealed the extent of misconception about the United States and its institutions started at the same point: why didn't the United States government or the United States people or *somebody* suppress Senator McCarthy and put a stop to the "reign of terror" in our country?

The interest in Senator McCarthy was enormous; the total lack of understanding of what was really going on was even more enormous. Now I am neither a constituent nor an admirer of the Senator, but I found myself repeatedly in the odd position of trying to explain what he was doing, why it was legal in a free country for him to do it, and how it was impossible for a congressional investigation to cause a "reign of terror" in 160,000,000 people.

My task was made more difficult by the fact that many Americans with other attributes of a horse than horse sense were asserting loudly that McCarthy had indeed created a "reign of terror." Are *you* terrified? I am not, yet I have in my background much political activity well to the left of Senator McCarthy's position. The worst that Senator McCarthy can do to me is to ask me a lot of questions and demand answers under oath. I may resent some of the questions but I can answer them without taking refuge in the Fifth Amendment; there is no treason in my record.

To call such investigation a "reign of terror" is to stretch language out of all shape. My notion of a "reign of terror" consists of bandits in the bush who murder and loot in the dark of the night (Indonesia, Malaya, Kenya, elsewhere), jailing the opposition political leaders (Argentina, Spain, etc.), or killing them (anywhere behind the iron-and-bamboo curtain); it does *not* mean questioning people under the safeguards of the most thorough system for the protection of individual rights this world has ever known. It does *not* mean a few dozen traitors and/or custard heads taking refuge behind the Fifth Amendment on the sole grounds that to tell the truth would be to incriminate themselves.

I am not defending McCarthy's thumb-fingered approach nor his sweeping public statements. It has been argued that McCarthy's personality and methods have played into the hands of our enemies and enabled Communism International to make effective propaganda against us. There is some truth in this thesis but, in my opinion, not much. I think that a Senate investigation of communism in the United States would have been fought by propaganda just as angry, just as vicious, had the investigation been chairmanned by Thomas Jefferson with Daniel Webster as his chief counsel. The thing that the communists hate is not McCarthy's unloveable personality but the fact that he is daring to attack communism at all.

The other half is that the thing so many foreigners relish about this investigation is not the issue of communism, not the personality of McCarthy, but the fact that it gives an excuse to take a slap at the Fat Boy . . . Uncle Sam—Us. It is easy to hate the rich and the powerful; those who sneer at us for "McCarthyism" are just as ready to sneer at us for our inside plumbing—I have heard both sneers combined in one sentence.

The point of this aside while our party drives through beautiful new Lima is that the political institutions of another country are hard to understand. Outside the United States very few people comprehend the nature of a congressional investigation and it is almost impossible to explain it to them. They have it mixed up with the Inquisition, with Senator McCarthy having all the functions and powers of Torquemada. The idea that a private citizen can answer or refuse to answer a series of questions put to him by a senator, such that the record shows clearly that the citizen being questioned is now or has in the past been actively engaged in treason against the United States—and then get up and walk out a free man—is so foreign to most other people that they simply cannot believe it.

Furthermore, if they did believe it, they would be even more contemptuous of us for being so soft than they now are for "McCarthyism" as they comprehend it, i.e., which they conceive to be a policy of take-him-away-and-lock-him-up-I-don't-like-his-politics. Our extreme leniency, if they understood it, would strike them as preposterous, asinine.

The institution of political refuge as practiced in South America is almost as hard for us to understand. It is as if Adlai Stevenson had found it healthy to hole up in the French Embassy immediately after election day in 1952, for this is approximately what Senor Haya did. He ducked into the Colombian Embassy and stayed there for five years. The Peruvian government never gave up its contention that Haya was a common criminal charged with a capital crime; Colombia, which itself passed through three changes of government by revolution during the five years, never swerved from its determination to give asylum even though the various Colombian governments were not in sympathy with Haya's politics. But, bitter as the issue was, Peru never attempted to remove the refugee by force from the utterly undefended embassy; the principle of asylum was too precious even though Peru declared that Haya was not entitled to it.

Asylum is a necessary part of politics as practiced in South America. When bullets are used as commonly as ballots it is comforting to know that, if you find yourself out of power tomorrow, there are a couple of dozen safe spots right in your own capital where your successor's soldiers cannot arrest you, or possibly shoot you while "attempting to escape." This is as ameliorating an influence as our own Fifth Amendment.

(By the way, I have never heard of one of Senator McCarthy's so-called "victims" choosing to take refuge in the Russian Embassy.)

But why should politics in South America be such a rough and sometimes deadly game? I will spare you a 10,000-word essay on historical background, racial types, traditional institutions, and so forth, and admit that I do not know. But I do know that our northern political attitudes cannot readily be exported to South America. Our Latin neighbors are unanimously agreed on one point: they do *not* want Uncle to tell them how they must behave. Most South Americans are both intensely patriotic and fiercely individualistic. Most of them do not dislike us—we are probably better liked and for less reason in South America than anywhere else in the world. But while they will accept United States capital, products, and engineering, if offered with decent respect for their dignity, they will not accept any "do-gooding" from us in internal politics. They hate Yankee intervention much more than they hate their political opponents.

I suggest that in this they may be right. It took us a long time to achieve political stability; there are those alive today who remember the fratricide of 1861–'65. Political philosophy is still a long way from being a science, revolution is still the refuge and the natural right of the oppressed, and I contend that it is very hard to be sure who are the "baddies" and who are the "goodies" in any overturning of a government south of us . . . at least at the time it takes place. Chile and Uruguay are proof that they are not incapable of achieving stability without our busybody help. In the meantime, a policy of hands-off combined with a warm willingness to help when and how they want help seems to me to be the best we can do.

As we passed the Colombian Embassy we saw two armed soldiers on guard outside. Senor Haya was not in sight, but he was there; his long wait for safe conduct to exile had still four months to run.

The country club at Lima would have been a credit to any city of comparable size in the States and its kitchen would almost certainly have surpassed the comparable ones; we had a wonderful lunch at the ridiculous prices made possible by the exchange. A wedding reception party was gathering as we left; the senoras and senoritas were elegantly dressed and most of them were remarkably attractive, some were very beautiful.

For my taste the senoritas south of here live up to the propaganda about them. True, they do have a slight tendency to be broadshouldered across the hips, but, as the chief mate of the *Gulf Shipper* pointed out, in these parts two axe-handles across the hips is considered about right. The gringo liking for narrow hips is probably a passing fad if history is any guide. Besides that, girdles are terribly difficult things to manage in hot climates, so I have been told.

All of the women wore hats, just as they do in the British Commonwealth. But the hats of these ladies were brilliantly imaginative and frivolous whereas most British hats for women look like something built by birds in a tree and then abandoned.

Ticky was not wearing a hat and received a few surprised glances, but she carried it off with cold dignity. She had a hat with her on the trip (the one she uses for weddings and funerals at home, her only hat), but she declined to be intimidated into wearing it once she found out about a dispensation which permitted her to enter churches without one.

After lunch we visited the art institute and Jiron de Union, the shopping center. Lima has gone all out for modern architecture but the modern trends in painting have not made a dent. Nowhere did we find a painting looking like two fried eggs, one addled, or perhaps jackstraws in a high wind. The instructors actually required the students to learn anatomy, perspective, and draftsmanship—very reactionary, of course. I liked it.

Jiron de Union is the collective term for a narrow shopping street each block of which has its own separate name. This must be confusing to the postman; the tourist does well to ignore the street signs and simply keep an eye out for landmarks. The shops are quite well stocked but not equal to those of cities of the same size in the States, except for silver articles of all sorts, much of it of great grace and imaginative beauty and made remarkably cheap by the ridiculous rate of exchange. Ticky showed remarkable restraint, for it would be easy indeed to go wild and spend oneself broke there. Shortly we had to hurry back to the ship in order not to miss it.

As soon as we left Callao we started running across the furrows and the ship bounced for a couple of days down to Arica, northernmost point in Chile. A roll can be unsettling but a pitch really shakes up the stomach; the *Gulf Shipper* was moving around like a cayuse trying to get rid of a rider. I can now testify that Dramamine actually does stop seasickness, at least for this deponent. I am subject to seasickness and certainly would have been disgracefully and miserably ill without the drug; as it was I missed no meals and ate heartily. But I will never grow fond of excessive motion in a ship. It is annoying to have your soup in your lap, irritating to have to hop madly for balance when caught with trousers half on, not restful to fight the motion of the ship in your sleep.

But *anything* is better than seasickness. I include drilling for gum-line cavities without Novocain.

Arica has no harbor, only an open roadstead; the *Gulf Shipper* anchored and tied to a buoy, thus mooring her against swinging but leaving her still subject to the swells that bounced her around on the way down. Cargo was loaded and discharged by lighters which tied up around the ship like pigs around a sow. Ticky and I watched the first boat load of stevedores come aboard and were struck by their extremely colorful and piratical appearance; we kept expecting them to break into the *habanera.* But it was appearance only; so far as our own experience serves, Chilenos, all of them, are the gentlest and most kindly people in the world.

Sadly, many of them are wretchedly poor. The reason is obvious: it takes heroes to wrest a bare living out of much of Chile. The land back of Arica is as bare as the mountains of *the* Moon—I mean the ones on our satellite, not the mountain range in Africa. What we call desert in our own southwest is verdant jungle by comparison; there is *nothing* on these hillsides, not a weed, not a blade of grass, not even cactus. Yet the soil is not poor; where they have managed to bring water down from the mountains the ground crops beautifully.

Back of the desert shore the great wall of the Andes was clearly in sight for the first time, majestic and incredible, range on range of snow-covered peaks, awesome at any time, breath catching at sunset. It was decidedly worth while to hurry through dinner and rush up to the flying bridge to watch it, while the bosun birds and guano birds wheeled around the ship and discussed us.

The guano birds used to be a major source of wealth to Chile and to Arica in particular, until artificial nitrates reduced the importance of the trade for fertilizers and for explosives. There are islands at this port that are white with their droppings and any shift of the wind will bring positive, odorous evidence that the birds are still keeping up their end of the business despite new competition. But they are victims of technological unemployment; their end product is no longer indispensable.

Arica, although in Chile, is the great Bolivian tin port. A railroad runs from here to La Paz and Chile has granted Bolivia extraterritorial rights for a dock, a customs shed, and railroad terminus. The dock is not yet in operation but Bolivian tin comes out nevertheless, tin ore being the principal item the *Shipper* loaded there. The precious stuff is handled in small, tight sacks, sealed, marked with serial numbers, weight, and name of owner.

Arica is the site of the only United States sea battle fought on dry land. More than a century ago the U.S.S. *Wateree* was beached here five miles inland by an earthquake tidal wave. When the waters receded the stranded ship was attacked by Indians and the ship's company fought them off from the decks for several days. The boiler of the *Wateree* can still be seen, lying on its side; the rest of the ship has long since been carried away.

Ticky and I went ashore by company boat, by ourselves as the others decided not to risk getting into a small boat from a gangway in the continual heavy swells. It is an easy way to break an ankle if one is not used to it; the knack lies in getting promptly and without any hesitation into the boat just as it rises highest at the gangway, there being then a second when boat and ship are almost stationary relative to each other.

We made it okay, albeit clumsily, and the ride in to the landing was pleasant—a passenger in a liner never has a chance to get close to the water. There were no formalities at customs;

An officer smiled at us and saluted and waved us on through. Arica is a town the same size as Buenaventura (14,000) but it has none of the "tough waterfront" quality of many seaports; you are at once in parks and shaded streets. There are two beautiful parks downtown, impressively large for so small a place, and for a place where irrigation water is so valuable.

The thing that struck us first and with greatest delight was the singing of birds. The parks were loaded with birds singing their hearts out. I have never heard before or since so many birds singing at once. So great was the volume of sweet sounds that we could hear it long after we had left the parks behind.

It does not take long to see all of Arica. There are a few business streets down near the water and a church or two; the homes spill down the rather steep hills back of the business district. It is a clean and pretty town but poor; only a few of *the* houses would have been considered middle-class homes in the States. As is usual in Chile every householder raised flowers, even if the opportunity was limited to a few pots in the window.

We hired a car and were driven out into an irrigated valley hidden from the sea. Here there were truck farms, citrus trees, figs, cherimoya. The last is a delicious fruit almost unknown in the States, even though there is a Cherimoya Street in Hollywood. It tastes a little like a pineapple, a little like a cantaloupe, but mostly like itself; it is a favorite dessert in Chile and quickly would become a favorite with us, were the trees to be grown on commercial scale here.

The valley was not very extensive and there was no place else to go. The land was green precisely as far as irrigation had progressed and no farther; a foot beyond was the utterly bare and depressing desert. But a new, wide road was being built back into the valley and it was evident that reclamation was to continue. Most of the roadwork was being done painfully by hand and human sweat, but there was a "Plan Marshall" powered scraper. "Plan Marshall" is a term used with approval all up and down the west coast of South America; here, at least, we have been able to help without being kicked in the shins for it and called names.

There was a fine new school in the valley and an older one, although the apparent population seemed to call for no more than one small one. All through Chile we were impressed by an almost feverish pursuit of knowledge. Schools are everywhere, bookstores seem to be more numerous than grocery stores (probably a mistaken impression, that one). Students are everywhere; sitting on park benches, studying, or strolling slowly with noses buried in books, eyes fixed on print.

On the way back we detoured to the top of a small mountain which overlooks the city and the port. The road stopped half way up and the driver, with complete aplomb, turned off onto a railroad track and continued on up. The view from there was magnificent and the odor of guano almost overpowering. We could pick out the *Gulf*

Shipper from the others in port. Far below us, it was a toy ship fit for a bathtub.

A flag there marks the spot where a Peruvian general, defeated in battle, suicided by riding his horse off the cliff. The driver and I discussed it and decided that a mule would have had more sense. Looking back, I do not know how we discussed it, for the driver had no English at all and the Spanish I know could be written on a postcard without crowding the stamp; it is suitable only for ordering *dos cervezas* in a cantina. But I recall the conversation clearly even though I don't know how we talked. Somehow, two human beings can always talk with each other if both want to.

We got back to town with a half hour to spare and again looked around the shops and listened to the birds. We came across a boy and a girl, perhaps five and seven, with their noses pushed against the window of a toy shop. By their clothes, it seemed unlikely that they would ever get closer than looking and longing, so Ticky took them inside and told the proprietor to let them each have the item each was staring at. The kids did not take advantage of us; the doll the girl wanted was the one she had loved from through the glass, not the most elaborate and expensive one, and the boy simply had his eye on a large ball, not at all expensive.

They thanked us gravely, coached only a little by the proprietor, and went away looking soberly happy. Ticky and I, having set up our own Marshall Plan, went back to the ship in the warm glow that comes only from playing Santa Claus. One of the real magics in life is the fact that wealth can always he multiplied by dividing by the age of the owner.

(Now if that gent in the back row who just made the snide remark about American tourists who love to flash their money in the faces of people less fortunate will step out in the alley with me, I will try to find out how tightly his teeth are set in his head. With Ticky's help, that is—she has studied judo.)

The next port was Valparaiso, our destination. We were anxious to do something before we left to show our appreciation to the ship's officers for many kindnesses and much hospitality; a party seemed in order. We talked it over with the Markhams and Mr. Tupper and planned one. It had to be held at sea, which meant that some of the watchstanders would be able to make only token attendance and the Captain would not participate in the wholehearted fashion which was his wont ashore, but there was nothing else for it as Ticky and I would be leaving the ship immediately on docking at Valpo.

Martinis in water tumblers seemed a little rugged for a party held at sea and anyhow Ticky wanted to serve French Seventy-fives. As everyone knows, the French "75" is a small, obsolete weapon, ineffective in modern times. Its namesake is also innocuous, being composed of lemon juice, sugar, cognac, and champagne. The lemon juice supplies vitamin C and thereby helps to prevent scurvy, always a menace at sea, and the sugar gives quick energy. As for the other ingredients, they are so thinned out by the lemonade and cracked ice that they do no more than impart a pleasant flavor. In fact, unless advised, you would never believe that it was anything but a soda fountain drink—at first, you would not.

The exact formulation is a matter of taste. Some like it not too sweet, some like it not too sour, some think that too much ice is bad for the stomach. But it needs plenty of champagne to provide bubbles and cognac to give it body.

Cognac was not available so we had to fall back on pisco, which is a grape brandy, too, although made (I believe) from *very* large grapes. Real French champagne was hardly to be expected but Chile makes excellent champagne-type sparkling wines. I do not know what proof they are. The purser acted as purchasing agent for us before we left Arica. At two hundred pesos to the dollar the total bill was about ten dollars—the bottle alone should have cost more than that, empty.

We stocked up also on assorted nuts and olives and such like munching food and sent out formal invitations, from all the passengers inviting all of the officers to an emergency session of the Horse Latitudes Philosophical Society and D.M. Club. Everybody accepted.

The gals put on formal evening gowns, seldom seen in a freighter, and quite a number of us wore neckties, making it a swank affair. It started out a bit slowly as formal affairs often do, but French Seventy-fives have a characteristic and rather slow effect on the emotions; the first salvo is over, the second salvo is short, and the third salvo is usually dead on, after which everyone is *muy simpatico*.

It was an occasion both pleasant and sad. The *Gulf Shipper* had become another home to us, and our shipmates were our family. We danced to the radio and we sang and we told stories but over it all was the knowledge that we would never meet like this again. However, the supply of ammunition held out and it is hard to be anything but merry when one of those salvos hits you dead on. I remember telling the chief mate that I was thinking of selling our house and taking a permanent lease on stateroom number three. He applauded the notion and we had a drink on it.

Around dawn we reluctantly adjourned. I stood the rest of the four-to-eight watch with the mate on watch and then went down to breakfast. Ticky was a little tired but we were both determined to show up for breakfast as a matter of face—after which we went back to stateroom number three and died.

I had no more than fallen asleep when I was snatched out of happy dreams by the most terrifying clamor I have ever heard.

I found myself standing in the middle of the room trying to put on trousers; I had both feet in one leg and it was not working out too well. I became aware that Ticky was shouting at me. "Stop it! Those aren't yours."

I stopped. Sure enough, they weren't. They were Ticky's slacks and were not only much too small for me but had curves tailored in in the wrong places. I passed them over as she said, "What in the world *is* it?" The awful clamor continued.

"General alarm," I grunted. "Man the life boats. *Hurry!"* We did hurry, for I was reasonably sure the poor old *Shipper* was going down and I had just enough life left in me to wish to save it—or perhaps it was instinctual reflex. We were at our boat stations and quicker than some of the crew. We were fully dressed, aside from buttons and zippers and similar nonessentials, and were wearing our life jackets. The sea was calm and the weather clear; I tried to figure out the nature of the disaster. Perhaps war had broken out suddenly. There was a notice posted near the saloon telling what to do in case of atomic attack but I had not read it since the day we embarked.

Our life boat station was right under the bridge. Captain Lee leaned over the rail and smiled at us with fiendish delight. "Good morning!" he said.

The expression on his face was enough to turn it from a disaster into a boat drill. My mind started functioning again and I understood it all. The Captain, inhibited by his responsibilities as master of a ship at sea, had gone to bed early from the party. He had gotten up early as well, breakfasted in his cabin as was his custom, then had looked around to find a ship deserted and utterly quiet save for those on watch. Being of a sociable nature he had cured that by switching on the general alarm, a sound guaranteed to get Davy Jones out of his locker.

No one can criticize a ship's master for holding boat drills; the book even advises that they be held by surprise and this one certainly qualified as such. But I was convinced at that moment that he had sounded that alarm for the prime purpose of getting me personally out of my sack. Right then I would have beaten him to death with a flyswatter had I had the strength to lift one.

I'm sure Ticky would have held him. I would have needed help; he is considerably bigger than I am.

That man has a low sense of humor.

By evening I was able to grin about it, although feebly. By the time the *Shipper* stood into Valparaiso I had decided to forgive and forget; after all we were *amigos* and brothers. I was fond of him and I knew he was fond of me.

But when he comes to stay with us in Colorado Springs next year he had better watch out for snakes in his bed and not go through doorways too hastily. Maybe I can lure him onto ice skates.

Valparaiso does not have the most spectacular harbor in the world; that honor probably goes to Rio with Sydney and San Francisco fighting it out for second place. But it is one of the most beautiful. The shore line, almost circular, looks like a backdrop painted by a scenic artist with a fine eye for color and composition. We had plenty of time to look at it because the port authorities required us to tie to a buoy in the outer harbor to discharge a few drums of naphtha before we were considered safe to come alongside dock.

The minor heavenly functionaries in charge of such things provide arrangements like this to insure a certain routine every time a ship comes into port: first, the passengers must be required to get up earlier than usual, preferably with a big head acquired at the Captain's Dinner; then they must be examined by the port surgeon and various police and immigration officials just as they are about to sit down to breakfast; next, the actual departure from the ship must be delayed so that they will arrive at customs just as it closes, or so timed as to miss a train, or both.

This is a cosmic plan, not a human plan, for the humans who play parts in it are almost invariably polite, helpful, and anxious to expedite things. Other factors have to be thrown in to foil them of their kindly intentions.

The drums of naphtha almost accomplished the full routine for us at Valparaiso had not Mr. Thackeray, agent for the Grace Lines and acting for Gulf & South American, owners of the *Shipper,* set himself firmly against the plans. Once the *Shipper* touched dock and put over a gangway he got us through the stem with such speed that I am still gasping.

Mr. Thackeray is a handsome, blondish young man who ,peaks perfect American. I assumed that he had been sent down from the States but he smiled and said no, that he was a Chileno ho had never been out of his native country. This was our first contact with the dual fact that Chile is the most Latin of Latin American countries in many ways but the Chilenos do not look Latin according to North American preconception of that term. Tall blondes seem almost as common as they are in Sweden. There are many Chilenos of Irish, German, and English ancestry—but they are *Chilenos,* thoroughly assimilated. Most of them speak nothing but Spanish. Even the English seem to assimilate better in Chile than in most places. In Chile they become Chilenos, even though they tend quite sensibly to hang onto the very real asset of English as a second language.

In the meantime our ten suitcases were piled mountainously on the dock and, as I had dismally predicted, the customs shed was a long way off. Part of my gloomy prophecy was wrong: it was not raining, there was merely a fine mist. But the train we had to catch in order to claim our hotel reservation in Santiago was to leave in only thirty-five minutes.

Perhaps I should add that trains run on time in Chile, better than they do in Colorado.

Mr. Thackeray conjured up porters with two hand trucks. Mr. Thackeray produced a Ford station wagon belonging to the Grace Lines. Mr. Thackeray negotiated the movement of our baggage, which had to be done along the docks inside the customs barrier, then settled us in the station wagon and whisked us outside the barrier into the streets and over to the customs station in comfort.

There were no customs officers at the customs shed. Mr. Thackeray glanced at his watch, looked perturbed and said, "I'm afraid they have gone to tea. It's about that time."

"Do they close down completely? Isn't someone left on duty? It's not very many minutes to our train time."

"I'll see what I can do. Nothing can be done until your baggage shows up anyhow." He went away, leaving me with half a dozen fretful questions about was he sure the porters knew where to come and how far did they have to come and how long would it take and where was the railroad station and when was the break for tea supposed to be over, all unasked.

Ticky and I sat down in the big, bare, gloomy shed and shared a cigarette and thought gloomily about home.

In about ten minutes the porters arrived, slightly wet and very cheerful. I counted the ten suitcases and cheered up a little myself, just to see them. Mr. Thackeray returned, helped me pay the porters and, by request, advised me how much to tip. They seemed very much pleased with the tip—tipping is not as common in Chile as in Peru or as it is at home—and began spreading our baggage around the inspection tables. *"Las naves, Senor?"* one of them asked.

"Give him your keys," Mr. Thackeray advised. "It will save time. I think I'm going to be able to get one of the customs officers to come in." He went away again.

The porters promptly got into trouble with a Valapak and I promptly had trouble with Ticky. It was not their fault; a scarf was packed immediately under a zipper in the Valapak. The thin silk caught in the zipper and jammed it; they tried to force it free and it got worse. Ticky sprang to the defense of her cherished chattels and tried to push them aside. With courteous gallantry they assured her that they would take care of it and did not give way. They spoke in

Spanish but the meaning was inescapable.

Three of them continued to sweat and strain while Ticky skittered around them, trying to push her way in, wringing her hands, demanding that they back away and let her do it, and shouting for a pair of pliers in a language known among her hearers only to me and I did not have any.

Shortly there was a ripping sound and Ticky burst into tears. She then started expressing an emotional opinion of the country and its people. I took her firmly by the elbow and led her to the bench. "Sit down," I said fiercely, "and shut up. Remember what I told you eight thousand times on the way down. No matter what happens at customs, you must smile, smile, and smile some more."

She sniffled and said brokenly, "I think it's an *outrage* that I have to sit here and watch while those men *ruin* my things."

"It was just a scarf. Forget it."

"I am *not* going to let anyone paw through my underwear!" She sniffled again. "I want to go *home."*

"Too late. We can't even get back aboard ship. Somebody else has our cabin."

"I am not—"

"You are going to sit still and shut up."

She shut up but she had all storm warnings still flying. Mr. Thackeray returned with a customs officer. But now it was my turn to get off on the wrong foot.

The *aduanero* had left his tea a good twenty minutes early to help the gringos catch their train. I think he must have regretted it at once when he saw that the *norteamericano* did not have ordinary good manners. I could see that he was not exactly jovial and attributed it to his being interrupted at meals; I tried to be ingratiating, but I did not put it over.

Mr. Thackeray touched my arm. *"Take your hat off!"* he whispered insistently. "He is growing quite annoyed." I snatched it off and blushed. "Please tell him I'm sorry." I had forgotten an elementary fact, a common element in many other cultures but unknown in the United States. This tired little official was not expecting me to take off my hat to *him.* He would never expect such a thing, unless we did so mutually as two equals meeting. But we were not meeting as equals; he embodied at that time and place the *sovereignty of his country* and he damn well expected me to show respect for it. It was symbolically equivalent to standing up for "The Star-Spangled Banner."

In the United States the President himself is almost the only official accorded such respect *for such a reason;* even governors don't get much of it. We show respect to individuals when and as it suits us, according to the respect that individual has earned in our eyes. We show respect to high office in government, business, church, professions, or the military on the assumption that the holder of high office, be he bishop or brigadier, has probably earned respect or he would not have gained rank. But the notion that the most minor public servant embodies the visible presence of the sovereign state is an idea that has passed us by. An American, if he thinks about it at all, is likely to carry it one step farther and recall that *he* is the state, he himself—not that cop over there.

Of course the cop is a sovereign citizen, too, but *as a cop* he is not sovereign but a servant of sovereigns . . . and the same for all other public officials, servants not masters.

But our attitude is far from being universal. The phrase "On the King's Business—" conveys a very different notion. In Germany a few years back (and for all I know today) there was an offense which freely translated read: "Disrespect to an Official of the State"—by which was meant that you could be fined for arguing with a street car conductor! There are many places in the world where all public functionaries—policemen, school teachers, postmasters, train conductors, assessors—receive formal, hat-in-hand respect quite different from ordinary courtesy. To fail to offer it is to court inconvenience or even more serious trouble. In some hot-tempered places such as Indonesia a mistake in such protocol can be dangerous to life and limb.

But not in Chile. The *aduanero* was mollified at once when I uncovered. He quit frowning and stalling with the declarations and went through our bags with great speed and very little disruption of the packing, so fast that I was pushed to keep up with closing and locking them. Mr. Thackeray said, "That's all let's go we'll catch that train yet!"

"Where's the station?"

"Just across the way." He hurried out, followed by me, Ticky, porters, and suitcases. He shoved money through a ticket window, seemed to snatch two tickets out of the air, and rejoined us without slowing down. "This way!"

There was no time to check bags; Mr. Thackeray arranged with the assistant conductor to stow them in the vestibule of a car, then urged us on board. The train pulled out as we sat down.

With the departure of Mr. Thackeray we at last found ourselves truly in a foreign country and a long way from home. Up until that time the *Gulf Shipper* had kept home with us, no matter if the stars changed and Orion stood on his head. Mr. Thackeray's sophistication, skill, and linguistic ability had sheltered us through the complexities of transition, but now we were alone. For the first time we felt twinges of homesickness.

We soon discovered that we were cut off in another way: there was no one at all around us who could speak English. I wanted to find out when the train reached Santiago. I was not dead sure that the train ended there; perhaps in our mute ignorance we could be carried on past it. Or even if Santiago was the last stop, it might have several stations, like Philadelphia; we might wind up many miles from our hotel.

I tried each member of the train crew as he passed down the aisle —no luck. I tried English on everyone near us—still no luck. I glanced around farther to see if anyone had looked up at the sound of English —not a soul. I felt around in my pockets and confirmed what I had suspected; all three of the Spanish phrase books we had with us were packed in our luggage. I recalled sourly the guidebook which stated that most metropolitan Chilenos spoke English and that all hotel people, all taxi drivers, and all persons connected with railroads and airlines spoke it fluently—I wondered if the hack who wrote that guidebook had ever been out of Dubuque and decided that he had probably smoked up his lies in the public library.

I was not blaming the Chilenos. The fault was mine for not having learned the beautiful and easy Spanish tongue; I myself would be little help to a Chileno lost in Colorado Springs. It was simply unfortunate that both Ticky and myself had elected French in school, rather than Spanish.

I considered tackling them in French, then got cold feet. My French is only a bit better than my Spanish; I am not a linguist.

At last I again tackled the exceedingly English-looking young man seated in front of us. (He looked as if he *must* know English.), With the aid of a card and a pencil and a monumental effort by which I recalled that the Spanish word for "hour" was the same as the Latin I established that we were indeed on the train for Santiago, that it arrived at 8 P.M., that the distance was about 150 kilometres, and that we should get off at the last stop in order to reach Hotel Carrera. I had interrupted his reading but he was all patience and friendliness.

It was the only time I was ever troubled by a language barrier. I never will be worth a hoot at any other language; I am eye-minded and even the English language can go too fast for me. But patience and friendliness are everywhere, and the use of writing (to tie down both the question and the answer and allow it to be studied), plus the use of the universal numerals, plus a cognate or two, are enough for any situation. Besides, the chap that wrote the guidebook was not too far wrong; there is usually someone within earshot who is happy to help.

("What sort of people," the frightened boy asked, "are there in this great city?"

(The gatekeeper considered it. "What sort of people were there in your home village?"

(The boy's eyes filled with tears and his voice choked. "They were the most wonderful, the kindest people in all the world!"

("Go on in, son," the gatekeeper said gently. "You will find them much the same inside.")

After I had settled my old-maid worries we relaxed and enjoyed the ride. The train was very fast and the scenery varied from pleasant to magnificent. Santiago sits at the foot of the Andes at 1800 feet; the railroad winds up the valley of Rio Mapocho to reach it, through farms and foothills and mountains. We were in the southern rainfall belt and the hills and fields were green. The countryside looks like that near Santa Barbara, California, and numerous eucalyptus trees added to the impression.

Presently the train's news butcher came around with tea. We had been advised to be wary of the local water but tea seemed a safe bet, and we were both hungry and thirsty, it being far past dinner hour in the *Shipper.* The train attendant hung little trays for each of us on the backs of the seats in front of us, then sold us, at charity prices, tea and sandwiches and strange little cakes. One sort seemed to be expanded nitrocellulose with sugar added but it was probably principally white of eggs.

Then I bought magazines from him. We looked at the pictures and tried to puzzle out the text and told ourselves that we were "improving our Spanish." Perhaps we were, since any change would have been an improvement. I remember one cartoon strip which showed Perlin of Argentina cussing out Uncle Sam for the benefit of an audience, then, in the next frame, falling into Uncle Sam's arms with shouts of *"Amigo!"* But most of it was not that easy.

When we reached Santiago, the young man in front of us, the train butcher, the assistant conductor, and several passengers all told us that it was time to get off. "Taxi" and "Hotel Carrera" were all the words we needed. During the ride to the hotel we could not see much of the city as it was after dark, but it was evident that it was a big, bustling, modern city. The Carrera itself is a hotel equal to any anywhere in its standards of luxury, modernness, and convenience. It differs from similar hotels at home in that the service is better and the prices are less than half what we would have to pay at home. The doorman spoke fluent English with an Irish brogue, the night manager, Senora Falco, spoke English with an Oxford accent, and we had no more troubles. Not having had time to get other advice I asked the head porter himself how much to tip him and his assistants; his suggestions were most moderate.

Our room was quite large and beautifully furnished. The night maid bustled in and turned down the beds. When she had gone I heard Ticky's voice from the bathroom. "Bob! C 'mere!"

I came. She was pointing at the fourth fixture in the bath. "Look at that!"

"Well," I said, "surely you have heard of them. You didn't think it was a drinking fountain for a dog, did you?"

"I've heard 'of them," she said thoughtfully, "but I guess I didn't really believe in them. I don't think I would dare use one. Look." She fiddled with a valve.

"Don't splash the ceiling!" I said hastily.

"That's what I mean," she said, shutting it off. "I'd be afraid of being blown through the roof."

III

First Steps

WE MANAGED TO do quite a lot of sightseeing in Santiago and outside it but I don't see quite how we did it; the routine does not provide for it. It starts to get out of step with our habits at dinner time. The first night we were there we washed up quickly and got down to the dining room about half past eight, starving, as the sample of tea aboard the train had not substituted for the hearty dinner at five P.M. we had grown used to in the *Gulf Shipper*.

The dining room looked like an undertaker's parlor ready for a funeral—banks of flowers, hushed quiet, sad-faced Indian waiters, maitre d'hotel immaculate and dignified in white tie and tails . . . no diners, no cheerful sounds of food and drink. But I was assured that we could have dinner although it was evident that our arrival was unexpected. "Perhaps M'dame would like a cocktail before dinner?" M'dame would, and so would M'sieur; it restored the tissues, soothed travel-weary nerves, and helped to kill the time while the chef was coping with the emergency. Presently food, wonderful, lavish, beautifully cooked food, was spread before us. I had a mixed grill which contained eight or nine things I did not recognize but wanted to know better and Ticky had a steak that had died happy. There were soups and salads and a variety of breadstuffs, too, and other things I can't remember, and delicate light wine and the inevitable bottled water served in tiny glasses. They were used to gringos and there was no trouble in getting *agua sin gas.* Afterwards we had to make a Solomon's choice among desserts.

I was tempted by pineapple slices drowned in champagne but finally settled for "happy cherimoya"—cherimoya *alegre,* thin slices of the fruit in orange juice and powdered sugar. We were both happy, the cherimoya and I.

By the time we were sipping coffee the room was filling up. By the time we left, somewhat after ten o'clock, dinner hour was in full blast. We had come to the right place; we were simply too early.

This late dinner hour throws the whole day out of gear for a *norteamericano.* We were not used to going to bed on a full stomach; with dinner over about eleven at night that meant lights-out not earlier than one in the morning, and still later if we chose to do a little dancing. We did not do that very often as my Coolidge-Era foxtrot does not fit a rumba beat too well.

But even without night life the late dinner hour means getting up late. Breakfast plus formal guard mount last until about ten-thirty. We were not required to watch formal guard mount, of course, but there it was, right under our window in the Plaza de la Constitucion in front of the presidential palace, complete with army band in dress uniform, small boy to pretend to lead the band along with the director, and small dog whose international duty it is to help out with parades everywhere.

After guard mount there is time to sightsee before lunch but it is also the best time to go up to the swimming pool on the roof. This hazard can be avoided by staying in a hotel which does not own a *piscina,* at least not one on the roof—but who wants to avoid the temptation? The view from the open-air restaurant & swimming pool seventeen stories up in the Carrera is the best in Santiago, whether you look out at the city and the mountains, or inward at the senoritas swimming and sunning themselves. For thirty-five cents you may use the beautiful pool yourself, or you can sit and drink Coca-Cola or what you will and ponder on the fact that you are nearer to heaven than you are ever likely to be again.

You can sit right there all morning and have lunch there, if you choose, and it is a good choice. Santiago sits in a big level bowl with mountains all around it and the main range of the high Andes crowding close to it on the west. The lights and the cloud formations on the snow-covered peaks are always changing and the city below is a Christmas window display of toy automobiles and ant-sized people. You can see from here that many, many roofs in Santiago have roof gardens; anywhere a Chileno can poke a flower and coax it to grow he will do so.

Whether you lunch there or make the effort to go two blocks down the street to the world-famous French cuisine of the 'rillon, after lunch is time for siesta, not for sightseeing. The shutters ring down in the small shops, the doors lock in the big shops, and even the traffic policemen go home. Why bother to direct traffic when no sensible person is on the streets.

So we return now to the Carrera, start to write a letter or a few postcards—then find ourselves overcome by the spirit of siesta. How can one stay awake in the drowsy afternoon when a million and a half people are sleeping?

When at last we come to, awakened by the post-siesta increase in traffic noise, the city is wide awake again. But now it is time for tea, a meal not to be skipped in a country which allows nine hours between lunch and dinner. Tea may he had on the mezzanine with live music, or on the roof with sunset over the Andes. After tea the shops are still open until seven P.M. or later, and the interval from tea to dinner is also the favorite time to go to the movies. It is also a wonderful time to stroll along Alameda Bernardo O'Higgins, a boulevard of smart shops and mansions. (Do not be misled by the County Cork name: O'Higgins was the George Washington of Chile.) Or one can wander through the park by the river, a few blocks from the hotel. Any of these activities, done not too strenuously, will give one an appetite for the late dinner and keep one away from the hazards of a two-hour cocktail hour.

After dinner it is much too late for sightseeing; it is a choice of night life, letterwriting, or reading, then to bed.

You see? A day broken up by four meals and a siesta leaves very little time for anything else. The Chilenos themselves put in an eight-hour work day, from nine to one and from three to seven, but a tourist, already geared down by the holiday spirit, finds this broken up day lapping over on itself.

Nevertheless we saw a great deal. One day we drove down to the beach through a different valley from the one we had come up by train and ended up at beach resorts about twenty-five miles south of Valparaiso. Most of the route was rolling hills and farms, then one drops rather suddenly to splendid beaches and lovely summer homes. The flower gardens around the homes are startling in their banked profusion and unreal, Kodachrome color. Even in Southern California or Florida we do not attempt to grow flowers in the bursting quantities which a Chileno householder seems to take for granted. Driving back we passed many huts of extremely poor peasants; in every case the tenant had splurged some part of his precious irrigation water to put a flower garden around his humble home.

On the trip back we passed a number of vassos, which helped to satisfy Ticky's desire to see colorful natives in colorful native costumes; the blanket and hat of the vasso are indeed colorful. (U.S.—cowboy & ranch; Chile, vasso & fundo; Mexico, vaquero & rancho; Argentina, gaucho & hacienda.)

We visited a dairy fundo as we neared Santiago and were shown around by Senor Quirigo, the *gerente* or manager—in Argentina he would be a majordomo. It differed mainly from one of ours of equal size in that hand milking was used rather than power milking; sanitary precautions were up to standard and pasteurization was used. The home of the Quirigo family and that of the owner were in the style we call "California Spanish" with white walls and red tile roofs.

I had only feeble French in common with Senor and Senora Quirigo, but Ticky used botanical Latin. To become a ranch manager in much of South America a college degree in agriculture is usually necessary, which includes of course a firm scientific grounding in botany; Ticky and Senor Quirigo would agree on the Latin name for some tree, shrub, or flower among the profusion in the garden of the fundo, then would exchange the common English and Spanish names to their mutual great satisfaction. I stumbled along behind, agreeing that yes it was a pretty tree, *lindisimo* in fact.

Our driver had simply driven into the fundo and stated that he had some *norteamericanos* who would like to see a fundo; the Quirigos entertained us as if they had been waiting for the privilege.

The shops in Santiago are, if anything, poorer in most respects than those in Lima. The country is undergoing a disastrous inflation and has never recovered from the blow of the collapse of its nitrate industry. As yet they have very little manufacturing of their own and anything that must be imported is tremendously expensive in their currency. This shows up in a rather startling fashion with respect to paper. We use paper and paper products of all sorts in lavish, wasteful fashion; I doubt if there is a single paper napkin in all of Chile. Kleenex cannot be purchased. Wrapping paper is scarce; a clerk appreciates your willingness to accept a purchase unwrapped. He will wrap it if you wish but he uses precisely the minimum of paper necessary.

Linen napkins are freely available; Chilenos are not afraid of the labor of laundering. But a cheap paper napkin is another matter.

It is distressing to see a decent, industrious people in such straits. This is not a country kicked around by revolution after revolution, with each new boss looting the treasury; they have a tradition of stable, democratic, free government as strong as ours. It is simply that they are faced with real physical economic problems. But I am convinced that they will overcome them; they work hard and they are honest.

We attended an outdoor, free symphonic concert in the grounds of the Palace of Fine Arts in Santiago. By accident, we happened to be coming out of the palace (a fine gallery, with an amazing number of European old masters hanging) just as the seats were being set up. By spikking the macerated, lacerated Espanol that I had acquired—a

Pidgin of no tenses, numbers, genders, or other nonessentials—we found out what was about to happen and got seats early . . . which was a good thing as all of Santiago and cousin Jose from the country showed up.

The program presented one number by a Chileno composer, one by George Gershwin, and several by traditional European composers, with none of the atonal modern stuff, which pleased me as I am as black a reactionary in music as I am in art. It was pleasant to see Gershwin classed without apology as "symphonic" even though the notion may strike some of our own highbrow critics as terribly bourgeois.

In the midst of the concert a little boy about five, very well dressed, came pushing through our row, stepping on feet and hurrying. He really was in a hurry; there was a tree a few inches from my right knee and he wanted frantically to use that tree. He used it, sighed with relief, buttoned up his fly and went back to his parents in less of a hurry. Ticky and I did our best to keep our faces straight and pretend that we had not seen anything; we were both aware that South Americans are much more casual and frank about such necessities; anyone with eyes could not help but be aware.

No one around us in this polite and well-dressed crowd paid any attention, except a senora on Ticky's left. This unfortunate lady, having spoken with us, was aware that we were *norteamericanos;* it became at once evident that she was sufficiently cosmopolitan to see the incident through the eyes of a North American, and she was distressingly, terribly embarrassed.

Anything at all that we could have said would only have made things worse. There was nothing to do but let her suffer. But I can see that a compounding of such harmless incidents will in time and a rather short time cause the fierce pride of all South Americans to drive them into ending this carefree custom lest they be laughed at by the gringos—as sure as the missionaries put Mother Hubbards on the pretty Polynesians.

The French, on the other hand, don't care whether we laugh or not.

There are two *cerros* in downtown Santiago, each of which is a park; a *cerro* is somewhat more than a hill, somewhat less than a mountain. Cerro Santa Lucia is the smaller but in some ways the more charming. It was once the headquarters of the Spanish conquerors but is now nominally given over to a museum of Chilean history. I say "nominally" because its real functions are to provide in the daytime a lovely study hall for the many students in Santiago and to provide in the gloaming a perfect place for lovers to court.

It is a series of terraced gardens and winding paths and garden seats. Admission is a cent and a half, our money, which makes one wonder how they can support a gatekeeper even if they let him keep all the admissions. In daylight hours it is crowded with hundreds of students, highschool and university, all studying, none loafing. Quite as many are strolling as are sitting down, but the studying never stops.

As soon as it starts to get dark the park fills up with couples. The chaperone is a thing of the past in Chile; senoritas are not tagged around by duennas keeping a close eye on the property. There is a cop in the park but he is not there to bother them; he is there to see to it that they are not bothered. But *honi soit qui mal y pense;* one is justified in assuming that Cerro Santa Lucia, where romance is accepted as one of the good gifts of God, is in truth a bit more proper than any lookout point or drive-in theater in the states.

In South America, praise be, you can kiss your wife on a crowded downtown sidewalk without causing anyone to stare. You can even kiss another man on both cheeks for that matter, although personally I have never cared for whiskers.

Cerro San Cristobal is much more nearly a mountain and is ascended via a funicular railway. The vendor sold us first-class seats (at six cents) instead of second-class (at three cents) before we opened our mouths—being a gringo must show, though I don't know just how. All the natives rode second class, the only difference being that the cushions on the seats were thin in second class. I looked for, and did not find, the safety device for funiculars where a catch drops into place immediately if the tension on the cable fails. I did not mention this until we were down again as I had assured Ticky that all funiculars were so equipped everywhere. Probably Saint Cristobal protects this one; nobody has ever been hurt.

Or it might be the Virgin, as the *cerro* is the site of a great statue of Maria Inmaculada, seventy-five feet high and weighing about 400 tons; it must have been quite a job to get it up there and put together. The mountain as a whole is too large to irrigate but the top is gardened and a little church nestles under Her skirts. The view is what you would expect—we've been over that ground.

Further down the *cerro* are the National Zoological Gardens. I am a sucker for zoos. We visited the one in Lima, which consisted solely of South American birds and animals; the zoo in Santiago was a global one but seemed to lack the one thing that made the zoo at Lima outstanding: Andean condors. The condor is not only of noble size; he seems also to like to spread his wings for display, an effect like a Stratocruiser coming in for a landing.

We climbed a great deal of Cerro San Cristobal several times, trying to find more condors. I am not sure they don't have them; they may have been inside somewhere. But time at a zoo is never wasted; we saw lots of other things including that repulsive oversize South

American rat about the gross of a fat shoat. We were the only spectators, it being siesta time; the zoo staff were stretched out here and there, snoozing and sometimes looking up at the *locos norteamericanos* walking around in the hot sun.

We walked back to the hotel, as the taxi drivers were taking siesta, too. The Chileno is a very sensible fellow.

Regrettably the day arrived to leave Chile. It was necessary to be out at the airport nearly an hour early in order to go through outgoing customs and police check, both of them useless ceremonies. In the last-minute scurry Ticky remembered that we had not left a thankyou gift for the night maid; since she was not around I called the desk to get her name. "Senora Hoan-Ace," I was told.

"Spell it, please."

"Hoan-Ace—J, O, N, E, S."

"Oh—"

We flew in Pan American's *El Inter-Americano,* a luxurious, pressurized DC6B. The hostess had a luxurious and pressurized look about her, too. Airline hostesses have probably done more to popularize air travel than all other factors put together, but where in the world do they find them? They all have beauty, intelligence, friendly charm, and the hard, practical ability to cope with impossible situations more to be expected of barroom bouncers.

We were lucky in that it was a beautiful, clear day which permitted the pilot to detour and drop down to let us have a look at the Christ of the Andes which stands on the border between Chile and Argentina and celebrates eternal peace and friendship between the two nations. We had a quick view and then it was gone; from the air at more than three hundred miles an hour is not the way to see a statue. But the Christ of the Andes is not easily seen any other way; high up in the Cordillera, it is probably as hard to reach as any statue in the world.

Our real luck was the view of the mountains permitted by the good weather. The Andes are magnificent from a distance but terrifying from above—and from the sides, as we flew between peaks more than 22,000 feet high. The endless snow fields, the sharp, raw cliffs and crests, are frightening; I felt relief when we were at last out of the mountains and over the endless plains of the Argentine, even though I had relished it immensely and would not have missed it.

I had wondered from time to time just why the Andes are so much more impressive than other mountains. Ticky and I have our home on the foothills of a mountain more than 14,000 feet high. We are very fond of it and it really is a big mountain, but it is not in the same class with the Andes. A little arithmetic shows why and proves why the Andes may reasonably be considered the highest mountains in the world, despite the Himalayas—thus: heights of mountains are measured *above sea level.* This is crucial to an alpinist half dead from anoxia on the crags of Mount Everest but it has nothing to do with how tall a mountain looks; its majesty depends on how high it thrusts up above the plateau at its base.

By this rule:

Pikes Peak-14,000 minus 6000 gives 8000 feet apparent height.
Mount Everest-29,000 minus 15,000 gives 14,000 feet.
The Andes-22,000 minus only 2000 gives 20,000 feet,

which leaves the Andes the winnuh and new champion by more than a mile in height which you can raise your eyes and see.

There are other criteria. Mauna Loa in Hawaii is 32,000 feet high from summit to base, but 18,000 feet of it is concealed by the Pacific Ocean; you can't see it. Nor can you see barometric pressure or "sea level" height. A barometer states that my home is 6015 high; unfortunately only the last fifteen feet of that shows from our garden; the Chrysler Building, a full mile "shorter" than my home by the sea-level scale, is nevertheless a bit more impressive.

The same commonsense criterion that makes a great skyscraper more impressive than a one-story house states that the Andes are the tallest mountains in the world.

The transition from the Cordillera to the prairies and the plains in Argentina *is* much like the same transition in the United States, except that the great open spaces are even more so than our own, even though we were flying over the most populous part of the back country. There were hundreds of miles of open range and farm with only an occasional village and very few roads. It was impressive in scope but monotonous.

I stared at it and tried to get my thoughts straight about Chile. What was the spirit of Chile? What characterized it? The guidebooks emphasized the Chilean wines, and the fish both for catching and for eating, and the outdoor sports of all sorts, from skiing to surfing. All those things were true but they did not seem to me to spell Chile; take them away and the spirit of the country would remain.

No, not fish, not wines, not sports—but flowers, and serious pursuit of knowledge and an overwhelming kindliness. These were Chile.

IV

The Land of "Papa"

ONCE UPON A time a big, sleek, fat Argentine dog met a little, skinny, wretched Chilean dog at the border between their two countries. They exchanged sniffs and discovered that each was headed for the other's native land. "But *why?"* the Chileno mutt wanted to know. "You don't know what you are getting into. I love my native land but I've just got to make a change; I haven't had a square meal in months. But Argentina is already your home and you are well fed, fat, healthy, obviously in the pink—so why don't you stay where you are well off?"

The Argentine dog glanced over his shoulder, then whispered behind his paw: "I want to *bark."*

I heard the above anecdote in Brazil. It is a fair thumbnail sketch of the difference between the two countries. When Ticky was laying out our itinerary she planned only four days for us in Argentina on the assumption that four days was the longest she could possibly keep her mouth shut. I felt that she was overly optimistic; Ticky makes a vice of telling the truth. I simply hoped that Peron's police would be either too gallant or too cautious to throw a senora from the States into jail.

As it turned out we stayed much more than four days, as our ship, as is customary with ships, was much delayed in sailing. Then much to our surprise we found that we liked Argentina very much. Wait a moment, I do not wish to be mistaken for a crypto-fascist or whatever the communists these days are calling an authoritarian who is not a communist authoritarian. I do not like police states. Like the fat Argentine dog, no matter how good it is some ways I still like to bark. But we did like the country called Argentina and we liked the citizens thereof very much.

However I am going to say some fairly gentle things even about the present government of Argentina. I ask that it be kept in mind that I am simply trying to report what I saw and heard and that there can be qualitative differences between dictatorships, say between Argentina under Peron and Germany under Hitler. The observations made imply no approval of suppression of free assembly, of press, of free speech, of opposition parties, nor of the jailing of opposition leaders. As this is being written, Argentina has just held another election. Peron won it as usual and, also as usual, the opposition party, brought out and dusted off for the campaign, was promptly suppressed once the election was over. This is not our notion of free democratic choice.

But we received a very strong impression that President Peron enjoys a very wide popular support and probably could win an honest election by a good majority. True, he is not taking any chances. There have been several elections since he seized power and he has won all of them, but they have been much of the quality of an election in a social club which is dominated by a clique which controls both the nominating committee and the membership committee; the opposition might as well stay in bed—or over in Montevideo where a lot of them have taken up permanent residence in exile.

Nevertheless I think there are about as many Argentinos who like "Papa" Peron as there are of us who like Ike. As one of them told me, "Practically all of us like *him,* or at least most of the things he has done, but practically everybody hated *her."* I was not able to judge the latter half of his statement; Eva Peron had already gone to her reward when we were there and very few people mentioned her name. Not that one could forget her, for her name and her face were everywhere, but she was no longer an issue. But it did seem as if Peron were the prisoner of a myth he had helped to create. I do not see how he could marry again should he wish to do so. He set up his deceased wife as a *de facto* saint; it would be awkward, to say the least, were he now to many an "ordinary" woman.

I asked my informant why Evita was disliked when Juan was liked. "I'll give you a couple of examples. When Eva was a young actress she was beaten out for a part in a play by another and better known actress. She swore that she would get back at her. She did—when she became the President's wife she not only used her influence to keep the other woman from ever being cast for any part, she also drove the other actress right out of the country. That's the sort of senselessly vindictive woman she was and a lot of people knew it. Or take this case— A while back the girls that clerk in the department stores needed a raise, so the heads of their union went around to see Eva about it. She ran everything of that sort.

"She said she would think it over. Things went on for several months while she 'thought it over.' Then suddenly a raise was announced for women clerks, effective at once—but with the pay scale retroactive to the first of the year. A big bonus for the girls? Oh no! The accumulated difference was to be paid over into the Eva Peron Foundation; the clerks are pleased with the raise and they know who got it for them—Evita—and Evita has her hands on several more millions of pesos."

"Then she would spend it on herself?"

"Well, no— Yes and no. She *couldn't* spend very much of it on herself, no matter how many fur coats she bought. There was too much of it. But there never has been any accounting made of the money that goes through the Foundation, either where it comes from or where it goes. Evita used to give audiences in one room in the Foundation; people would file in and tell their stories. If the stories appealed to her, she would reach in a drawer that was stuffed with money and hand over fistfuls of the stuff—no system, no records.

"Mind you," he added, "I'm not saying the Eva Peron Foundation didn't do any good. It did a great deal of good and it still does. Hospitals, orphanages, all sorts of things."

I do not know how true the above stories are, but they seem to be typical of popular opinions. One of the odd things about Argentina, as a police state, was that the ordinary citizen seemed quite unafraid to talk about politics and to express criticism of the government. There is no possible doubt that the *Peronistas* have curtailed civil liberties and suppressed opposition, yet most of the citizens seemed to feel that they were free and well governed.

I do not understand this, nevertheless I will express a few horseback opinions—I can't be much farther off than are most professional pundits. I suspect that the typical South American is such a free soul that he simply will not stand for outright thought policing; if he can't speak his mind, he will rebel. Consequently a South American dictator can't get away with the sort of stuff that the commissars pull; the South American boss must seek real popular support to stay in power. Certainly Perrin has sought, and gotten it, from the "shirtless ones." He seems to have much middle-class support as well.

Besides that, Argentina does not have our firm tradition of civil liberty and democratic process; the citizen is more likely to judge results than methods—the "Mussolini-made-the-trains-run-on-time" school of political science. All through Buenos Aires we saw big signs: PERON CUMPLE—which freely translated means that Perrin keeps his word, Peron finished this or that public work just as he promised he would. This sort of thing makes an impression even in the States. The city I was reared in was dominated by the Pendergast machine; I can testify that my neighbors were more interested in the quality of the paving in their own block (which was good) than they were in the graft in the city hall concerning that pavement (which was scandalous).

In many ways Perrin looks good compared with his predecessors. We heard contemptuous remarks about the President he chucked out, to the effect that he spent all his time enjoying the night life of Buenos

Aires and never did any work. No one can accuse Peron of being lazy. His working day starts about six A.M. and almost anyone who wants a personal audience with him can get it if they will get up in time to see him at that hour.

His love for children seems to be sincere and it certainly adds to his popularity. He recently gave his country home to the children of Argentina, stating that a bachelor had no need of it. Everywhere in Buenos Aires one runs across this quotation: *"En la Nueva Argentina los anicos privilegiados son los* ninos."—President Juan Peron. ("In the new Argentina the only privileged ones are the children.") This boast is not entirely true by a great deal but he seems to be sincere in making it and it fits beautifully the temperament of the people; children are highly valued there.

In addition to the above he is a skilled spellbinder. We heard him speak once; his style was as effective as Hitler's. The content was a semantic blank; he was boasting that Argentina was a great nation because it had ideals and heart and such like vague abstractions. But at one point he stopped suddenly, changed his manner abruptly and snapped, "Tell those policemen to quit bothering the citizens and to go away!"

The crowd ate it up.

It might have been a spur of the moment inspiration of a talented public speaker, or it might have been a carefully prepared plant. Either way it was smart politics.

Now let's drop the subject of politics. It took us three hours to fly across South America and three more hours from touching down until we reached our hotel, what with entrance formalities and an interminable ride from the airport downtown. Airplanes have done half the job of making travel simple and fast; the other half remains to be done.

As we registered at the Plaza Hotel, we were politely told to surrender our passports; the police wanted them. Ticky firmly said, "No!"

The desk clerk was embarrassed, patient, and equally firm. I finally agreed that we would but insisted on receipts by the serial numbers of the passports, which the clerk gravely provided, as well as police cards for each of us. I have not the slightest idea what Peron's police wanted our passports for, but they kept them for several days, then returned them.

The Plaza Hotel is not as new as the Carrera but it is equally luxurious. Our room, a semi-suite twice the size of most hotel rooms, could be split into living room and bedroom by big drapes. The furnishings and decorations reminded me of the Mauve Decade but the beds were modern. The most startling item was the bath towels which were much too much of a muchness. They were enormous Turkish bath sheets, five feet by six feet, large enough to wear as a toga. I would wear myself out trying to get dry with one; I needed a flunky to hold the other end. A chunk cut off one end would have been much more practical. But after the modest scraps of water-resistant rag issued as towels in some United States motor courts I was not disposed to complain.

The next day was Sunday. The shops were closed and the streets deserted; we strolled and tried to get the feel of the city. Buenos Aires is a really big city, big as Los Angeles or Chicago and much handsomer than either. It is so large indeed that it is too large for its back country, from a standpoint of healthy economic balance. If New York City were proportionately large, New York would have *forty million* people.

But it is not surprising that most Argentinos want to live in the capital, if possible; it is a charming, beautiful metropolis, not an overgrown village in search of a soul like some of our own that I won't mention for fear of being lynched. It has more than two hundred parks and plazas, some of them of great size, all of them of great beauty, abounding in flowers and trees and statuary. I happen to be very fond of statuary and I have searched the United States from border to border and coast to coast, looking at statues wherever I could find them. It is a very poor crop. Why the richest people in the world who will willingly dig down in their pockets for anything from flood relief for Siam to a 21" TV screen won't pitch in together and buy statues I do not know—but there it is. Any city in South America is loaded with statues, some of them run-of-the-mill equestrian, some of them excellent, quite a few superb.

Buenos Aires being a big city has many statues, possibly more than its proportionate share. Most of them were academic in concept but in a large park near the President's city residence we saw something that looked vaguely like a ship, or equally like a giant prospector's hammer balanced on its head. It was heroic in size and conception and the shape was pleasing but I could not figure out what it was intended to be; I asked the guide who was with us at the time.

He smiled gently. "Uruguay gave that to us as a mark of friendship between our two countries, so we set it up here. But we never have been able to find out what it is."

On Monday it seemed time to get down to serious sightseeing. In any country for most travelers, such as ourselves, it is an always frustrating choice whether to see things haphazardly, enjoying oneself and trying to soak up the flavor of the country, or to set about it with grim determination to get the maximum use out of limited time and money. The first method is by far the best—provided you are wealthy in time and money and can afford to spend several months in each country and a lifetime in traveling. The second method is almost Hobson's choice for most of us, but it is hard work.

Ticky and I usually tried to do a little of both, which meant that we necessarily missed a lot of things. ("What? You were in Ruritania and you didn't see the *labyrinth?* My dear, you wasted your whole trip!") The world is a giant smorgasbord; you can sample a bit here and there with pleasure, but if you try to gulp down everything, you will simply become ill. It may be more important to visit with a cat and her kittens in an open-air book market than to try to see all the labyrinths in all the Ruritanias.

Ticky and I went down to the head porter's desk at the Plaza and asked if there was a taxi driver around who spoke English. We knew that Buenos Aires had a subway system that would get us anywhere faster and cheaper than would a taxi, but sightseeing from a subway is something like kissing over a telephone. The porter found us such a driver, a licensed guide named Herman Freudenberger, who was to become our closest friend in Argentina. He was a handsome, well setup young man and was a college graduate in ranch management, but he had given up agriculture to become a tourist guide. As he explained it, an assistant to the manager of a large agricultural estate has nothing to look forward to but the death of the manager; he wanted to get married and the guide business was quicker.

Herman spoke Spanish, Portuguese, English, German, and French; it was a rare tourist who could stump him. He had something else of equal importance: he loved his country, was proud of it, and knew its history. His parents were German Jewish; Herman was as Argentino as San Martin the Liberator.

He did not have his hand out. If we added a gift for special service he accepted it courteously, but if we paid the exact fare by mileage or time he was equally gracious, being at all times a Latin American gentleman and our host in his country, rather than a hired employe.

Herman took us first for a quick tour of the major points of the city. Let's take it for granted that we saw such things as Casa Rosada, the statue of San Martin, the monument to Columbus, embassies, ministries, Plaza Congreso, the Obelisk commemorating four centuries of Buenos Aires, the national art gallery; of course we saw such things and so will you when you go there. But you can learn more about such from five minutes of looking at pictures in the *National Geographic* than you can from ten thousand words of description. Describing a public building is as futile as describing a beautiful woman; the proper medium is a picture.

All of the above took more than one trip on more than one day; Buenos Aires is big. But we saw other things. Herman drove us down to the estuary to let us see the Dutch ship we were to sail in the following week. The waterfront in Buenos Aires is prettier than most, although docks and warehouses of a big and busy port cannot compete with other sights in beauty. But while we were there he gestured toward a big municipal steam-electric plant. "There is where we burned coffee during the War."

"Coffee?" I answered, thinking with horror of the present dollar-a-pound prices.

"Yes. We had coffee we couldn't sell or give away and we were short on coal. It gave the whole area quite an aroma."

I was too stunned to comment. It struck me as the most tragic waste of raw material since the time of the Aztec practice of sacrificing virgins.

Later he showed us Avenida Nueve de Julio, the widest street in the world. If you translate the name as "Fourth of July" instead of "Ninth of July," you end up with the proper local meaning: Independence Day Boulevard. It was certainly wide, making even Canal Street in New Orleans look like an alley—about eight taxicabs to a side, not counting broad, gardened parkways.

"How did it get so big?"

"Oh, President Peron decided that we needed a major boulevard through the heart of the city so he told them to tear down all the buildings in one row of blocks and merge the adjoining streets. Look at this."

We drove down a chute and found ourselves in an underground parking and service garage. "This is the biggest underground parking space in the world. This is where the Buenos Aires businessmen leave their cars during the day."

I was not prepared to dispute it; the caverns seemed to run endlessly on back until lost in the gloom. It accounted in part for what seemed to be a total absence of parking lots in downtown Buenos Aires and very few places to park at the curb. This four-hundred-year-old city was not laid out for automobiles. "But suppose they do park here," I objected, "that would still leave most of them a mile or more from their offices."

"Eh? Why, their chauffeurs drive them to their offices, then leave the cars here, then pick them up later."

"But how about those who don't have chauffeurs?"

"Excuse me? Oh . . . here in Argentina any man who can afford to own a private automobile can certainly afford to hire a driver."

I learned that the car he drove was not his own but was an investment on the part of a wealthy man for whom he drove it on shares. We were finding and were still to learn that the Detroit automobile is the most universally coveted piece of wealth in the world. In Argentina and in many other countries import of American cars is strictly controlled and a license to do so is hard to obtain; often it is a cherished piece of political patronage. Under these conditions a car from the U.S.A. is fantastically expensive, not just a mark-up for ocean freightage and tariff, but with the F.O.B. Detroit price tripled, quadrupled, even quintupled.

But even at such monstrous prices they are greatly desired; we were assured that, despite the cost, they were more automobile for the money than were the much cheaper European cars. A Ford or a Chevrolet will be driven "three times around the clock," more than three hundred thousand miles, and will stand up under it; a European car, except the Rolls Royce, will fall to pieces under much less abuse.

I am neither an automotive expert nor a field agent for the Detroit Chamber of Commerce; I report what I heard from drivers on four continents, many of whom were not especially friendly to the United States—in fact in many cases they seemed to blame us for the fact that their own governments had made it so hard to import American cars. The answer to this is tied up with the knotty question of dollar exchange and controlled currencies, but there is a potential market abroad for millions of American automobiles which we are not at present able to use.

Herman took us out to the cattle market, which looked much like the stockyards in Kansas City or Chicago and was comparable in size and in modern methods, Argentina being butcher to the whole world. The cattle were mostly big, beautiful Herefords, large square steaks with ears at one end and tail at the other. Being from cattle country ourselves, they were interesting but not novel. What did interest us were the gauchos and their horses.

Cattlemen are cattlemen, no matter what language they speak. While the gauchos looked odd in their dress to us their costume is as practical as the typical gear of our own cowboys. They wear baggy pants *(bombachas)* in place of Levi's and chaps, a different syle of sun hat, and different styling in their boots; these differences are no more significant than the differences in uniform and insignia between American Marines and French Legionnaires. Poncho and *bombachas* make a gaucho look fat; our western dress makes a man look leaner than he is—no matter, they are both colorful and dressed for the work they do.

But their horses are not like our dainty, little cow ponies. The gaucho makes little or no use of the lasso; he has instead the *boleadoras,* three strands of braided rawhide bent together at one end of each and with a metal weight fastened to each of the other ends. He can swing this over his head, let it sail through the air, and bring down an animal by tangling it around the beast's legs from a greater distance than is possible with a lariat.

But the gaucho does not use even this tool very often against cattle, but saves it for ostrich or simply for hunting for sport. They believe in treating cattle gently—no sense in subjecting a cow brute to a spill and a nervous shock when you are trying to fatten it for market. Their horses are bred short, wide in the chest, and heavily muscled; they are trained to manage cattle by breasting against them, nudging them the way they want them to go.

Later we discovered that the cattlemen of Australia do not use any sort of rope. If an Australian cowboy finds it necessary to throw a steer for any purpose—which is not often—he will ride up to it, reach down and twist its tail and trip it. Australians do not use the lariat either. Nor did we see any roping equipment being carried by the cattle hands in South Africa. I begin to wonder whether or not the proud art of the American rodeo might not simply be an obsolete stunt, about as useful as rapier fencing. Maybe we shake a lot of hamburger off our brutes unnecessarily just to show how clever we are with a rope.

I risked my pretty business suit and tried the gaucho saddle. The horse turned out to be neck-reined, but he did not speak English and the gaucho uses both quirt *(rebenque)* and heavy spurs so I did not stay up long. The gaucho saddle is nothing like a western "rocking chair" stock saddle; instead of sitting down in it you sit up on top of it and it is built like a feather bed, with layer after layer of blanket, sheepskin padding, and leather. There is so much between the rider and the cayuse that it is hard to feel the beast. I like to be more intimately in touch with a horse if he and I are expected to form a close committee, not separated from him by an innerspring mattress.

The saddle had stirrups, big metal disks with boot-size holes in them, but I could not see that they did much good; they seemed simply to let the gaucho know where his feet were. They are derived from a much simpler stirrup, a rawhide thong tied around a small stick. The gaucho of the early days placed his toes over the stick with the thong between his big toe and the second toe; it served as a stirrup but it did not look as if you could put much weight on it in a pinch.

Herman pointed out this oldstyle stirrup on a statue titled *El Gaucho* which stood in a little park in front of the main entrance of the stockyard. It was a beautiful piece of work, comparable in artistic quality and style of execution to "The Scout" or "The End of the Trail." The sculptured horse looked like the same wide-shouldered, chunky little animal that had just patiently let me try him, but the gaucho portrayed was of an earlier century with a strong, hardbitten Indian face unmodified by European blood.

Herman pointed out his boot, which came all the way up his calf but did not cover his toes at all. "When a horse died the gaucho would make two circular cuts in the hind leg above and below the hock, then he would strip off the hide as an unbroken cylinder the way you would peel off a stocking. Then he would put it on his own leg, with his heel at the hock joint and let it dry and shrink in place; this made him a new pair of boots."

Ticky examined the statue. "But how would he take it off?"

"He didn't, not until he cut it off to replace it with a new one. Those oldtimers lived very much the way the animals themselves did. They slept on the ground in all sorts of weather, they never washed, they never took off their boots. They were a tough breed."

Ticky looked at the portrayed boot with the splayed toes sticking out, wrinkled her nose and turned away—Ticky used to bathe fourteen times a week until her doctor made her cut it down to once a day. I myself was wondering just what sort of athlete's foot would be incubated inside a rawhide boot that was never removed, but decided that the tough hombre sitting up there would never have noticed anything short of gangrene.

That afternoon Herman took us to see a very special sort of school, Escuela Pedro de Mendoza. It is the home and studio of Maestro Benito Quinquela Martin, possibly the greatest living Argentino painter; it is also an art museum, a grammar school, and an art school. Senor Quinquela was a very poor boy in the waterfront neighborhood, a wharf rat. From his paintings, now sought by all galleries everywhere, he has become wealthy, but he lives and works in the poor neighborhood where he grew up. The *escuela* is a beautiful modern six-story building by the water; the Maestro owns it, pays the expenses, pays the salaries of the staff of teachers. The poor children of the neighborhood attend free.

A child who attends is not especially likely to become an artist; it is in most respects simply a well-run grammar school. But a pupil there who happens to display artistic talent has every opportunity to study art under a renowned master. Senor Quinquela named the school for the artist who gave him his chance, Maestro Pedro de Mendoza.

One of the pleasant things about the place is that the museum is loaded with works of other living Argentino artists, purchased by the Maestro. Besides that, he has named each classroom for some earlier artist of the Argentine. We did not get to meet Senor Quinquela (although he is readily at home to casual visitors and tourists) because he was away, but his benign personality was everywhere. His favorite subject is still his own poor waterfront neighborhood and so high is the regard in which he is held by his neighbors that all around us we could see that shopkeepers and warehouse owners and householders had painted their properties in bright colors—because the Maestro likes to paint bright colors in his pictures!

Each classroom has a mural done by the Maestro—a feature that may be more impressive if I add that his pictures bring twenty to thirty thousand dollars in the open market. Each grade is decorated appropriately for the age level, starting with Bugs-Bunny-Mickey-Mouse things in the kindergarten. For these small children each door in the part of the school they use is done in a different color, so that a child too young to obey, "Go to room nineteen," can be told, "Go see Senorita Gomez in the room with the red door."

We left the place feeling happy.

I took advantage of where we were to ask to see slums. Buenos Aires turned out to have the cleanest slums we ever saw. They were still slums, substandard dwellings for the very poor, but they were swept and washed and painfully neat, with never an uncovered garbage can, nor a trash heap, nor a bad odor. President Peron decided that all citizens must be clean, so he made each local policeman responsible for the cleanliness of his beat, with his responsibility extending even to compulsory inspections of housewives' kitchens. A housewife can be fined for failing to wash dishes, failing to scrub floors, failing to keep her yard, or passageway, or stoop clean and neat. The results are homes which are clean and healthful and cheerful, though still poor.

I could not help wondering what would happen in tenement neighborhoods in our country if the local cop tried to inspect the kitchens. What would they do to him? Take his club away from him most likely and beat him to death with it—and good riddance, too.

There are other things more important than cleanliness.

In Buenos Aires as in all Latin American cities I have been in there is a nerve-racking din of automobile horns. I had heard that the system was that the first driver to sound his horn had the right of way, which naturally would result in endless horn-blowing and probably endless accidents.

Only it did not result in endless accidents. I asked Herman about it and was told that I did not quite understand the system; it was not a race to see who could toot his horn first. Each driver, as he approached an intersection, gave a short blast on his horn at about the same distance from the corner, around forty feet. Thus the signal of the driver nearest the corner would be heard first and cars coming at right angles to him would give way.

The system seemed to me to be chancy in the extreme but it worked, although the racket was distressing. However, Buenos Aires was quiet as a chess match at night, whereas Santiago was so noisy at night that we could not have gotten to sleep early even if the schedule had permitted it; I asked Herman about the contrast.

"Oh. See this." He flipped a switch on the dashboard. "Now the horn is disconnected and the horn ring flashes the highway lights. President Peron decided that people ought to be able to sleep at night. So at sundown we all flip this switch, drive with the dim lights in the city, and use the bright lights to signal at each corner just as we use the horn in the daytime. It's a fine if you sound your horn at night."

Herman collected parking tickets just as many American drivers do; his business almost required it. At the moment he was not paying them as there was a Christmas amnesty coming up and he expected that the slate would be wiped clean. The notion seems exotic to us; later we were to run into a much stranger use of amnesty in Brazil. In accounts of automobile accidents in Brazilian newspapers the same sentence frequently ends such news items: "Both drivers fled from the scene."

With us, leaving the scene of an automobile accident is just short of carving up your wife with an axe. Not so in Brazil. The courts are years behind in their work; if a driver is arrested on a charge of causing an accident he may wait in jail almost endlessly before he can be tried; therefore he runs away and tries to avoid arrest.

The wonderful part about it is that if he manages to keep his freedom for twenty-four hours amnesty works; he will never be arrested. I am not sure of the law or lack of it in this custom; it may be just a well-understood convention based on the common knowledge that the courts could not possibly in all eternity handle all the cases if the cops arrested everyone who deserved it. In any case, the drivers do run and hide.

Amnesty in misdemeanors and lesser crimes does not seem so out of place in cultures in which amnesties for revolutionists, political prisoners, and exiles are common and almost a necessity. The spirit of forgive and forget makes some of the fiercer aspects of Latin ways more tolerable.

We heard of one other custom much more wildly exotic. I was not able to check on it as it referred to Paraguay, a country we were not able to visit. But here it is: it is alleged that Paraguay has no law against murder, killing being considered a private matter; either the deceased is a no-good and everyone is glad he is dead, or the friends and relatives of the departed can be depended on to avenge the matter themselves.

My first impression was one of horror, but the idea has a certain wild logic about it that grows on one. Almost anyone can make up a list of people he would like to lure into Paraguay—they never would be missed.

We did not spend all our time driving around with Herman although it would have been cheaper for me. The Plaza Hotel is at one end (the more expensive end) of Calle Florida, one of the finest shopping streets in the world. During the business day it is blocked off from traffic and shoppers can wander back and forth as they please.

Ticky is the sort of girl whose eyes bug out and whose face gets flushed at the sight of bargains in a shop window—somewhat the expression that Marilyn Monroe produces in a man; it may be a related mechanism. The greatest hazard in Calle Florida is the alligators, empty ones made up into women's handbags; they are snapping and yapping at a man's financial standing every step of the way down the street. They will savage you in a tender portion, your wallet, at the drop of a hint.

It is no good to tell me that a handbag is "cheap" at thirty-five dollars simply because the same handbag would be priced at a hundred and fifty dollars in New York; if I were in the States I would not be buying a handbag for any century and a half—nor for thirty-five dollars either if I could avoid it; my cornbelt ancestors would spin in their modest graves.

Ticky was moderate; she bought only three alligator bags.

Of course each bag had to have shoes to match. Besides that they were actually giving away (almost) bags of other sorts. Then there were sweaters and blouses and gloves and other things. I kept reminding her that we had been sixty kilos over the weight limit in flying the Andes and that we were going to have to pay excess air baggage several times more; I don't think she heard me.

Once I had anesthetized myself to the inevitable it was really pleasant to see her have so much fun. For most women, to be in Calle Florida is something like dying and going to heaven. So far as I have seen or ever heard nowhere else in the world are there so many smart shops catering to women jampacked into so small a neighborhood. Add to that the fact that a favorable rate of exchange makes any purchase a bargain (in feminine logic) and that many things really are wonderful bargains by any standard.

I offer this hard-earned advice to others who may follow: give her a flat amount and take her traveler's cheques away from her. Tell her solemnly that when the amount is gone the fun is over. Then stay in your hotel room, quietly quaffing San Martins and thinking serious thoughts; if you go along you will be tempted to let her have more money.

I went along, of course.

Ticky encountered for the first time the custom of dickering. She was no good at it, as she believed instinctively that it is immoral to attempt to get anything below the asking price, equivalent to taking bread out of the mouths of the shopkeeper's hungry little ones. But she finally got it through her head that, except in the large department stores that advertise "firm prices," each sales transaction in Latin America is a social event, more valued for the ritual than for the regrettable economic aspect. But she never did acquire any skill at it. Fortunately most sales people are not disposed to swindle a senora, even if she is from Estados Unidos and therefore conclusively presumed to be rich.

She encountered, too, the lovely custom of making the purchaser a little gift after the transaction is over, and was delighted with it. So am I, for that matter; it is probably an uneconomic practice that results in higher-than-necessary prices, or profits lower than proper, or both, but it does not cost much and adds grace and warmth to life.

In the course of an afternoon's shopping it was necessary to stop for tea. By "tea" I do not mean a cup of lukewarm tannic acid solution with skimmed milk added; afternoon tea in Buenos Aires is somewhat simpler than a Thanksgiving dinner, but not much. The place to go is a *confiterta—which* should not be translated as "confectionary shop." (Knowing little or no Spanish I often tried to struggle along through translating by cognates, as indicated above; this can lead to trouble. In a cocktail lounge in our hotel I saw a sign which seemed to me plainly to read: NO PROPAGATION PERMITTED IN THIS ROOM—which seemed to me a reasonable restriction, even in a broadminded hotel. I learned later that it read: NO TIPPING. And it did not even mean that.)

A *confiteria* is a combination soda fountain, cocktail bar, tea shop, and restaurant, usually with live music and other elegances. The best are as swank as the Stork Club; our favorite had the end of the room caged off and filled with dozens of song birds which sang along with the strolling musicians. Around four-thirty or five in the afternoon entire families gather in them, Papa has his highball, Mama has tea, the kids have sandwiches and cakes and malted milks and ice cream sodas or anything they wish. We have no institution for the entire family which compares in wide choice of hospitality, but it is high time we imitated it. We won't of course; the bluenoses would have fits —corrupting the young, and so on.

Ticky and I always picked ice cream sodas, French pastries, and fancy little sandwiches. I had always thought the soda fountain was "Made in U.S.A." and perhaps it was, but our neighbors can teach us some tricks, in particular the "Everlasting Soda" as we called it. The first time I ordered a soda I was fetched the usual large glass, but, while it was packed with ice cream, whipped cream, and crushed strawberries, it contained no bubbly water nor very much room for same. Instead the waiter put a quart seltzer bottle with squirt top down by it.

I was charged a very modest price for one ice cream soda, but it took me more than an hour to finish off the combination. I did not use all of the fizz bottle, of course, but whenever the glass ran a little low or a bit flat I gave it a transfusion. When it was over and we were looking regretfully at the quantities of sandwiches and pastries we had not been able to eat (even though we had made marked inroads), the waiter came along, noted that we had not eaten everything—and reduced our bill accordingly.

It cost us forty cents each.

Most of one morning was killed by a newspaper interview and a radio broadcast. I usually try to duck such chores, as my voice over the air sounds like a rusty saw and, as for news stories, I am leery of any copy that I do not proof myself. I was more anxious than I would be at home to avoid both of them as a foreigner's remarks are likely to be held against his nation, whereas if he waggles his jaw at home his boners reflect on no one but himself. I don't have a diplomat's special training in how to walk a tight rope and I certainly did not want to be an international incident, even a minor one.

I pointed out to the radio chap that I did not speak Spanish. No matter at all, he informed me; it was the government Servicio Internacional, the Argentine equivalent of The Voice of America, beamed in shortwave in six languages. This made me more edgy than ever, so I protested that I had a very full schedule (which was a lie, unless you counted in *confiterfas);* I did not have time to come to the studio.

Oh, they wouldn't think of asking me—a crew would come to the hotel with recording equipment. I gave up and scheduled both for the next morning. The reporter arrived first and could not speak English, which almost gave me an out, except that the redheaded Irish maid was in the room; she pinch hit and made an excellent interpreter. Presently Herman showed up and we were able to let the maid get back to her work.

Instead of translating one question Herman started to argue with the reporter. Presently he turned to me and protested, "He insists that I ask you how much money you make a year."

"Tell him I won't answer that one."

"I *told* him that that was a question no North American would answer, but he insists on its being put."

I thought about it: "Tell him I really don't know, that my business agent handles such things. Tell him that I am just a writer with no head for business."

"Okay."

The men from the broadcasting station showed up and started stringing wires around; the reporter closed his notebook and left. An outline had been prepared and most of the items were innocuous enough, things I could discuss without offending anyone. But it was strongly suggested, orally, that I really should finish up by saying something really nice about "Papa."

I did not want to say anything about President Peron, pro or con; a tourist who sticks his nose into politics is asking for trouble, for himself and for his country.

They did not twist my arm but it was very hard to refuse. I tried to think fast without much success—then suddenly remembered the sign we had seen all over town, the one about the kids; it was as nonpolitical as apple pie, as noncontroversial as being in favor of good roads and good weather, but it was a direct quotation from President Peron.

So we finished the broadcast with that, quoting it in both English and Spanish: "In the new Argentina the only privileged ones are the children." I said that was an ideal that appealed to all nations, and wiped my brow as the little red light went out.

In the evening paper I saw that I had stated that no atomic blast could destroy the Earth, which was fair enough; I believed it, it was consonant with our own national stand in the matter, and more or less what I had actually said. I saw also that Ticky and I planned to return home via the North Pole, which was a lovely notion, though not true, but it hurt nothing. Further down I discovered that I made so much money that I could not keep track of it but was satisfied as long as I always had money enough for beautiful cars, enough to take care of my mansion in Colorado, and enough always to travel where and how I pleased.

Well, I suppose I asked for it. Stated as ambitions rather than as accomplished facts it was not too far off the mark.

My present car is getting a bit old and the house needs some repairs. It would be nice to have too much money.

I asked Herman about it the next day. "Oh, you wouldn't answer so he filled in what he needed." He frowned. "Things are different here. They should have sent a reporter who could speak English and who understood North Americans. Here one of the first questions a reporter always asks a man is, 'How much money do you make?' and the man being interviewed always gives a flat answer: 'I make such-and-such thousand pesos a year.' It is a polite question and a perfectly proper answer."

"Not in the States."

"I know. Although some of your Texans don't seem to mind."

"Well . . . Texans are a special case. They have their own rules, more like yours."

"Yes, but not quite. Just recently there was one in that hotel you are in. He wore one of those big hats and high-heeled boots and he was boasting about how he could paper his hotel room with thousand-dollar bills if he felt like it."

"Hmm . . . one or two too many San Martins?"

"He may have been drinking but I don't think so. It was in the daytime and he called down to the desk and told them to send up thirty thousand pesos in change; he was buying some things for his wife. Then he got angry when they didn't do it."

I had no comment. Herman went on, "I've noticed that my guests from the States often mention proudly that they were poor boys. You said something like that yourself."

"Yes."

"I've learned that it is something that a North American is proud of. Here, if a man has become wealthy from poverty he tries to keep it quiet. An Argentino likes to boast, if he can, 'My father and my grandfather left me so much money that I can have everything I want and never have to work.' "

At a later time I ran into a confirmation of this major difference in attitudes. I was at a social event with an Argentine minister of state who had once served his country in New York City. He was speaking to someone else but turned to me to have me confirm something he said, in that I was the only "Yankee" present. "I was telling so-and-so that my salary in the States was three thousand dollars a month and that that was a very good salary there. That's true, isn't it?"

I assured him that thirty-six thousand dollars a year, tax free, was a very good salary anywhere. He seemed very pleased.

To our regret the morning arrived when we went down to pay our bill. When we got back to our room it was dominated by an enormous bouquet of flowers; the card attached read: "Bon voyage, from your friend and guide in B.A.—Herman."

Herman took us down to the ship, got us smoothly through outgoing customs, loaded us aboard with advice as to tipping the dock porters, then took us back uptown. We had lunch with him rather solemnly and he took us back to the ship. Shortly the M.S. *Ruys* warped away from the dock and out, side bedecked with streamers and band music playing. I found my eyes filling with tears, something I had surely not expected to have happen at leaving "Papa" Peron's too-well-policed paradise. I looked at Ticky and found that she was having the same trouble. She looked at me and said, "We *will* come back, won't we? You weren't just kidding Herman?"

"You bet we will!"

V

The Good Little Country

THE MOTOR SHIP *Ruys* intimidated us at first. It was big and shiny and beautifully furnished and filled with well-dressed people all of whom seemed to know each other and who laughed among themselves and stared right through us. The officers wore gold braid and crisp white uniforms and answered questions politely in correct formal English but were obviously too busy for us to bother them with our trivial affairs. We found ourselves homesick for the good old raucous, comfortable *Gulf Shipper*.

But the beds were comfortable and our stateroom had a polished, spacious perfection. Our bathroom had both a shower and a full-sized bathtub and was roomier than many ashore. There were two wash basins and many mirrors and a large divan and two wardrobes and enough stowage space to put all the ten suitcases out of sight, as well as lots of drawers and shelf space.

Our cabin steward, Kwai Yau, had arranged Herman's mammoth gladiolas in a vase in front of triple mirrors on the dressing table, making the room cheerful as well as luxurious. Kwai Yau could give Jeeves pointers on how to take care of people, but we were yet to become acquainted with his virtues. We showered and changed and decided to face the outside world.

The *Ruys* is the flagship of the Dutch Royal Interocean Lines. "Royal" is a decoration awarded by the Queen in honor of the many ships of the line—more than half—lost in war service. The *Ruys* herself had a long and honorable war record but came through intact. She and her sisters now ply between South America and the Far East, via the Cape of Good Hope and Singapore. She is neither a passenger ship nor a freighter, but a cargo liner, which means that while she carries a great deal of cargo, more than the *Gulf Shipper,* she carries also hundreds of passengers of all three classes.

Such a ship carries only a hundred-odd first class passengers but it offers them greater luxury than do the fashionable giants of the North Atlantic run. In a cargo liner all first class rooms are outside rooms and they are usually bigger than those in a passenger liner. There is plenty of deck space for games and walking and sunning, the swimming pool is never too crowded, there is always room to sit down in the bar, one never has to rush to find a seat at the movies—whereas many so-called luxury ships are crowded as cattle cars.

Second class in a cargo liner is comfortable but not fancy. The less said about third class the better; the best you can hope for is that it be clean. In the *Ruys* it was clean; I have seen some that were filthy.

To our surprised relief the operating language of the *Ruys* was English. The officers were Dutch, the crew was Chinese. Dutch was spoken only by the officers in private; the passengers never heard it. The Chinese petty officers all spoke English and it was this which caused the Dutch officers to manage the ship in English, it being the only language in common with the crew. Most of the other Chinese spoke some English or Pidgin (Kwai Yau spoke excellent English, in which we were fortunate; some of the passengers could communicate with their room stewards only through the petty officers).

Nine tenths of the first class passengers spoke English; there were only a few who had only Spanish. Our days of struggling to make ourselves understood were practically over. There were more South Africans aboard than there were South Americans, and there were only a handful of others, such as Ticky and myself—a few from the Far East, from Australia, from Mauritius, and one other couple with United States citizenship but who lived in South America and kept rather much to themselves. We were the only residents of the States aboard.

It seemed rather lonely for a day or two. We crept out of our stateroom that first day, got lost—the *Ruys* is big enough for that, until you establish landmarks—finally found the bar and ascertained that our signatures would be honored on chits. The bar seemed gloomy as a monastery at first, impressive with carved wood and dark beams and brass. But the drinks contained authentic joy juice. When the dinner chimes sounded we were better able to face it.

The dining saloon was two decks high, with an open, railed well above it and a leaded sky light. It is entered by sweeping, curved stairways which call for music by Strauss and is a place with crisp linen and shining, superfluous silver. The Chief Steward asked our names in a hushed voice and ushered us in slow march to a table; the head steward and the assistant head steward seated us. About then I caught sight of Kwai Yau standing in the background; he caught my eye and grinned. I felt better.

We introduced ourselves and found that our four table mates were all from Buenos Aires—Senor and Senora Rubenstein, two unrelated senoritas. All but Senor Rubenstein spoke English; he spoke Spanish and French and we could struggle along a bit with him in a sorry mixture of both. The fact that we had just been visiting in their home town loosened things up a bit and we got rather chummy.

But we never did get the hang of South American table manners and remained intimidated by them as long as we sat at that table. I have no apology for our own national table manners; in my prejudiced opinion most of us conduct our self-stoking sensibly, neatly, and unobtrusively. I don't see why a soft-boiled egg *must* be eaten from the shell.

But have you ever seen a well-bred South American tackle a piece of fruit? It is an exhibition of surgical virtuosity which would take me a long time to learn, if ever. One of them will tackle an apple, an orange, or a banana with a fruit knife and a tiny fork, peel the fruit and demolish it without ever touching human skin to any part of it. Consider what this means with a banana, for example; under the rules you can't even help yourself with your thumb to get the peel started. "Untouched by human hands."

They cope with a melon in much the same aseptic way, instead of steadying it with the left hand the way we do and spooning it out.

Ticky and I admired these stunts but were scared off by them. We did not eat much fruit that stretch of the trip.

Montevideo lies less than a hundred and fifty miles down Rio de la Plata from Buenos Aires; we were there in the morning. The estuary is about thirty miles wide at Buenos Aires; at Montevideo it is more than a hundred miles wide and is practically open ocean although technically still a river. It was here that the British chased the *Graf Spee* almost up onto the beach and fought a naval battle well inside the legal borders of Uruguay, for which they paid an indemnity and an apology with their tongues in their cheeks; the *Graf* was not a prize to let slip on a technicality.

The usual boarders swarmed into the ship before we were up. We arranged a tourist trip before we went to breakfast, as the schedule of the ship permitted but two days in Uruguay and there was no time for leisurely poking around. Senor Roitman, guide, interpreter, and host-by-temperament, agreed to have a car waiting for us and two others after breakfast.

The other two were an English lady (I use the word intentionally) and a shaggy young gentleman from the Canadian diplomatic service who had that careful carelessness in his appearance which characterizes the "top drawer." We found both of them extremely "veddy, veddy" at first. But I knew from other experience that the English are not actually unfriendly; they are merely shy, embarrassed, rather afraid of strangers. Ticky and I firmly ignored the chill they handed us and went on being friendly, informal, and talkative; it worked, as it almost always does. Almost all Englishmen are nice people individually, once you get past their guard, and they are quite willing to decide that you are a nice person, too—for a Yank, that is.

Montevideo is a large city, as big as Saint Louis. The first impression of it is its cleanliness. Underlying this surface impression is a standard of real sanitation as high as any in the world and higher than that of many of our own cities—Philadelphia, for example. You need not fear the water nor the food in Montevideo; they are clean.

The second impression is one in reverse: no policemen. This negative condition probably would not have impressed us had we come directly from home, since we don't see many policemen at home and the few that are seen are usually controlling traffic. But in most of Latin America a cop or a soldier (they are much the same thing there) is always staring down the back of your neck. They won't bother a gringo tourist ordinarily but they are always there, as ubiquitous, conspicuous, and depressing as a chaperone on a hay ride.

There probably are some policemen in Uruguay but I do not recall seeing a single one even though I looked for them. I don't think you could stir out a policeman in Montevideo even by parking in front of a fire plug.

I asked Senor Roitman about this and he got straight to the (Latin American) point. "Our President doesn't need any bodyguards." We were seated at the time in a sidewalk café; he glanced across the plaza and added, "In the afternoon when he finishes his day's work he comes out over there and walks across the plaza alone. He runs across you and you know each other, so you sit down right here with everybody else and you have *café expres* together. Nobody takes any notice; it wouldn't be polite."

The President of Uruguay is not the boss and he most certainly is not a dictator ruling by decree; the system resembles the Swiss system in that he is chairman of an executive council. I do not recall the name of the incumbent, as his name was not plastered all around in public places as in Argentina.

The third impression was the usual one in South America of parks and plazas and monuments and outdoor statuary. I had assumed up until then that the superior beauty of South American cities was a result of age. But Montevideo is a mere youngster, founded in 1726, more than a hundred years after the founding of New York. Where are New York's statues and monuments? Not that thing over the pond at Radio City, surely? And don't mention Grant's Tomb; I've *seen* Grant's Tomb. They shouldn't do it to a dead man.

My passion for statuary almost got me into difficulty. We were driving through one of the many parks and passed their monument to the Covered Wagon; I insisted on stopping for a good look. It was a fine academic bronze, a lifesize group consisting of covered wagon, pioneers on horseback, triple span of oxen, relief oxen following behind, all executed in detailed realism which nevertheless achieved satisfying composition from any approach. It was an opus suited to crown the career of a great master and it made much "modern" sculpture look like the kindergarten blobs so many of them are.

I was interested in it from three points of view: as a work of art, in the strong parallel to our own pioneer history portrayed by the group, and in the mechanical and engineering problems which in a thing of that size are as difficult as the artistic problems. I stepped up onto the base of the group to take a closer look at one of the figures.

A park attendant sprang up out of nowhere and informed me emphatically that it was *prohibido* to molest the statues. I tried to explain most humbly that I had not meant any harm and that I had not touched anything but my frail Spanish broke down completely and Mr. Roitman had to intervene. He made himself personally responsible for my good behavior and I left sheepishly, under parole.

I suppose the park attendant could be classed as a policeman but he was armed with a rake instead of a gun.

We drove for many miles through the old city and through the new city which spreads downstream along Playa de Carrasco. Much of old town was rococo in style, even baroque, but in Carrasco we found miles of the lighthearted, imaginative modern architecture which we had first noticed in Lima, then had encountered repeatedly in Chile and Argentina—and were to encounter again in Brazil. I again asked to see slums, sticking to my theory that a worm's-eye view of a culture is the only one with a true perspective.

Mr. Roitman did his best to oblige. Presently I said to him, "When do we get to where the poor people live?"

He stopped the car. "This is it."

I looked around and said, "No, no, I mean the *really* poor people," then explained what we had seen elsewhere.

"But these *are* the poor people. These are the poorest people in Montevideo."

I looked around me again and was tempted to call him a liar. These were not tenements nor the hovels of the poverty-stricken; these were small and simple single-family houses, each with its flower garden, quite evidently the homes of self-respecting lower-middle class. I already knew that Mr. Roitman was proudly patriotic and I suspected that his national pride had caused him not to show me the seamy side of his city. My own home town of Colorado Springs has little poverty and its slums are not slums at all in the sense in which the word applies to New York, Chicago, Rio, or Sydney, but I knew and was graveled by the knowledge that the worst of Colorado Springs was depressingly worse than this by many stages.

Unsatisfied, I checked on him later. Senor Roitman was right; these were their "poor." Uruguay has no poor. It is a welfare state that works, without, so far as we could see, the dreary drawbacks of other welfare states. How they have managed this I do not know, for I have seen other welfare states which appeared to have much the same sort of legislation and the results I did not like at all—repressive laws, endless bureaucracy, chain gang regulations. Uruguay is not that sort of a place, yet it has cradle-to-grave social security, free education through college, free medicine for the lower incomes, and retirement at fifty without loss of comforts for anyone who wants to retire that young.

Maybe there is a catch in it; if so, we did not find it. Our investigation was as quick and superficial as a congressional junket to Europe; nevertheless I am for the present convinced that they have somehow managed to work a miracle. Someday I plan to go back and dig in deeply; if there is a secret to be learned, we must learn it. Just now I feel strong sympathy for the farmer who said on seeing the giraffe, "There ain't no sech animal!"

Uruguay has the Latin fondness for designating famous events simply by their dates. (Was it Mark Twain who said that a French politician could make an impassioned and effective patriotic speech simply by rattling off a list of dates?) In driving around I noticed the following street names: 14 July, 18 July, 25 May, 26 March, 4 July, 31 December, and 24 September. This is a random sampling, not a complete tally; they may have the calendar (and their streets) as loaded up as we are with Mother's Day and Chew-More-Gum Week.

Note that they complimented us with a street named for the Fourth of July, our only holiday that fits into the date system. This sort of gracious gesture is to be found throughout South America; one is always coming across Woodrow Wilson Boulevard, Roosevelt Highway, George Washington Plaza—nor is it a matter of toadying to Tio, for they have not neglected the national figures of other nations besides ours. I wonder to what extent, if at all, we return these courtesies? I have never run across at home Bolivar Boulevard or San Martin Road. Perhaps I did not look in the right places.

While all of our neighbors to the south follow this gentle custom Uruguay really goes whole hog. Here are a few samples: Avenida Simon Bolivar, Rambla Republica de Argentina, R.R. de Peru, Rambla Presidente Wilson, Calle George Washington, Parque Franklin Delano Roosevelt (the biggest one in the city), Rambla Presidente Bernardo O'Higgins, more ramblas named for Mexico, Chile, France, and Great Britain (a *rambla* is a fancy boulevard, one with trees and flowers and a view), Avenida Italia, Avenida General San Martin, and even Calle Missouri and Calle Mississippi. After that comes heroes, heroes, and more heroes; they rarely waste a street by naming it something like Chestnut, Pine, or Fifth.

A man can get into their street guide without being a general, a politician, or a Uruguayan celebrity. Emile Zola and Herbert Spencer both made it; you can too. So did Darwin, Cervantes, Clemenceau, Magellan, and somebody named Samuel Blixen. Go climb a mountain or write an epic poem; eventually the city council of Montevideo will award you a few miles of paved immortality.

I think that the only word for this custom is "gracious."

The following morning we drove out to the cattle market, which differs from that in Buenos Aires in that it is some miles outside the city and affords thereby more opportunity to see gauchos at work. It still is not real cattle country, which is farther to the north in the great plains; the countryside around Montevideo is more like Iowa farms, except that some of the vegetation is subtropical. It never frosts in Uruguay, but there are not many really hot days and there is enough rain, around thirty inches a year over all.

I could not see much difference between the gauchos of Uruguay and the ones of Argentina, but their horses here seemed to be finer boned with more Arabian strain and so far as I could see they were not taught to breast the cattle. Representatives of the major North American meat packers are stationed permanently at this cattle market and buy a large portion of the supply, this being their major export to us. We "took mate" with them and the gauchos in the gauchos' clubhouse at the market—"tomar mate" is the idiom, literally "to take the pot" but it means to drink *yerba* herb tea through a silver pipe from a gourd pot called a "mate." Socially it means still more; it is the Uruguayan symbol of hospitality.

Custom requires that all in the same circle of friendliness drink from the same pot and the same silver pipe. The English lady with us was offered it first, then Ticky, and then myself, after which it made the rest of the rounds. There is a belief that germs cannot live on the hot silver pipe, that it is self sterilizing. I hope that the belief is true, for the rite is as unavoidable as kissing the bride.

Mate is not unpleasant, being much like green tea, but it is an acquired taste. Uruguayans and Argentinos set much store by it and believe that it is food, drink, and vitamins all wrapped in the same package. There is a story of a besieged garrison that lived for weeks on mate alone. The story is almost certainly true but I would find it a thin diet.

Returning from the cattle market we drove to the top of the Cerro. This is the mountain from which the city got its name: Montevideo—"I see a mountain." There is an old fort there which once dominated the harbor; now it is an historical museum and Uruguay, very sensibly for a country of three million people, simply has given up competing in the military arms race. Mr. Roitman pointed out an island to us in the harbor spread before us and referred to it as the "political prison."

I jumped on the remark. "I thought this was a land of freedom? No political prisoners?"

"Oh," he said, "that is what it used to be, more than a century ago, when the Spaniards ran things. It is empty now, just a landmark."

I thought of the anti-Peronista refugees in Uruguay and looked out across the water at Argentina, invisible but close over the horizon.

"Aren't you a little afraid that 'Papa' may come over someday and change all that?"

He smiled grimly. " Papa' would like to—but he knows we have an 'Uncle.' "

Later on that day Ticky and I were walking alone down Avenida 18 de Julio, the major shopping street. We were much surprised to hear a cheerful voice say, "Hello! You're Mr. and Mrs. Heinlein."

Facing us was a handsome young chap with a wide smile on his face. He was not one of our fellow passengers, I was fairly sure, and we knew no one in Uruguay—but his face was familiar. I shook hands while saying, "I *know* we've met you, but I can't for the life of me remember where or when."

"Don't you remember? The little dog?"

On the day before, Ticky and I had been seated in a sidewalk café in Plaza Independencia. Near us was a party of people and with them was a little butterfly spaniel bitch. Ticky offered the spaniel peanuts and a potato chip or two. The international amity established with the dog soon extended to the dog's people and we chatted between tables with them. They were a family party, father, mother, and grown son; the two men could speak English.

The encounter was most casual, hardly more than mutual agreement that Primavera was a fine doggie, yes indeed! We did exchange names with them but the chat lasted no more than live minutes; there was no intention nor expectation of following up the brief encounter. We had simply patted their dog.

I had hardly noticed the son. His mother was a woman of extraordinary beauty; my choice in such circumstances is not a choice but a reflex. I had looked at the men in the party just enough to be polite—I *hope* I was polite.

But when the young man who stopped us on the street said, "Don't you remember? The little dog?" the wheels clicked and the numbers popped up. I said, "Oh! Of course!"

Maurice Nayberg took us home with him and we stayed all afternoon, being treated in the fashion expressed by the Latin saying: "This house is yours." The hospitality of the Naybergs was the more appreciated in that it was utterly unexpected; they were under no slightest obligation to be kind to us.

We had been treated with similar openhanded friendliness by the Quirogas in Chile, again under circumstances "over and above the call of duty." Was this warmth characteristic of South America as a whole? I don't know; one certainly should not attempt to fair a curve on the evidence of two data. To do so is not scientific evaluating but mere wishful thinking. Yet a thousand other lesser data all pointed in the same direction. My horseback opinion, admittedly gathered too quickly, is and remains that the vast majority of South Americans have their hands extended in welcome to all gringos who have the gumption to see it.

A more soul-searching matter is the question as to whether our own beloved country is equally openhanded? It is difficult to give a fair opinion; I am inside it, a part of it, and it is hard for a fish to see water. Would strangers and foreigners without any sort of contact or introduction be equally likely *to* encounter such treatment in New York? Or in Colorado Springs?

I have pondered this and tried to be fair, turning over in my mind cases in point. We as a people are lavishly hospitable to those who come with any faint sort of introduction, granted—but do we make welcome the stranger who has none of any sort?

Yes, I think we do, provided the stranger and foreigner himself is open to it—a proviso which applies just as firmly to South America. Possibly we are a shade more shy about it but not much, not enough to matter. Certainly we are more provincial, less cosmopolitan, than they are, for the same reasons that New Yorkers are so much more provincial than are people in the rest of our country.

But the willingness and friendliness is present everywhere among us. Any foreigner who finds America "cold" had better look for the coldness in his own heart.

Is this ready hospitality, then, a characteristic of all peoples everywhere? Need the frightened boy only go through the gates of the Great City to find inside the same "kind hearts and gentle people" that he left behind him in his own village? I was ready once to assert that it was so, but I was wrong. While the trait may be potential in all humans, it is a cultural trait and some cultures do not have it. Just to nail this down see Ruth Benedict's frightening description of Dobu culture in her *Patterns of Culture.* If a Dobu offered a drink to a stranger it would be only for the purpose of poisoning him. Yet the Dobus are genetically precisely the same sort of humans as are those of certain other warm and friendly cultures around them.

But I did not change my mind through reading scientific anthropology; I had it changed for me, through visiting a country later where we were not treated with ordinary civility, much less openhanded hospitality. The experience cured me of the romantic nonsense that people everywhere are just like the folks back home. Some are not.

The delightful visit with the Naybergs ended our stay in Uruguay as the ship sailed later that day. We left bearing presents and numerous cards of introduction to persons in half a dozen other countries, for Maurice himself was in the Uruguayan diplomatic service and his father was in the import-export business; the family was well acquainted abroad. Maurice walked us down to our ship.

Perhaps, having penetrated a Uruguayan home, I should describe it; actually there is no need to do so. It was a large city flat of an upper class family and would have looked equally at home in any large city in the world. I will mention Clarita instead. She was a little pigeon hen who had had the misfortune to break her wing; Mrs. Robert Nayberg found her and nursed her back to health, then set her free. But Clarita declined to leave. Oh, she joined the other pigeons that flutter around the many monuments of the city but she roosted on the Nayberg balcony at night and spent a good deal of each day inside the Nayberg flat, visiting and making occasional messes on the floor; it was her home by her own choice.

Which showed amazing good sense for a bird brain and showed still more about the sort of people the Naybergs are. No description should be entirely flattering; there should be some criticism at the very least, for contrast and to lend conviction to favorable statements. But it is very hard to find anything to criticize in Uruguay.

This will have to suffice: sometimes it is not possible to find a taxi down where the ships dock, in which case the visitor must walk almost half a mile to the nearest tram. Obviously this could be improved. Of course the weather will not be cold for walking and it is unlikely to be unpleasantly hot.

But it *might* be raining.

VI

Wakening Giant

BRAZIL IS LARGER than the United States by more than 300,000 square miles, by an area equal to Texas plus the State of New York. It is the largest country outside the Iron Curtain.

This chapter should be served with a side dish of superlatives, to which you could help yourself when you pleased without risking surfeit. Almost everything about Brazil is biggest, largest, longest, or greatest. In addition, after four hundred years of progress moderate to slow, the joint is jumpin' in all directions. Steel mills, factories, hydroelectric plants, oil refineries, office buildings, superhighways, airports, railways, all are going forward everywhere despite the oppressive tropical heat which prevails in so much of the country most of the time.

Although bigger than we are in area Brazil has only about a third the population we have, around 54,000,000. Nobody knows how many people the country can support. Although discovered in 1500 the country is to a considerable extent still unexplored; some of those 54,000,000 are naked Indians who have never seen a white man. The only thing we can be sure of about Brazil is that we haven't seen anything yet; it is entirely conceivable that the Brazilians may be the New Romans of the next century, just as the British were of the nineteenth century, and as we seem to find ourselves elected in this century (if the Russians do not take from us that uncomfortable honor, of course). Brazil has enormous resources of thorium ore, the world's second largest betatron, and an extremely active nuclear research program; she does not lack any potentiality for greatness and dominance.

Brazil has been successively an unknown territory awarded by the Pope to Portugal, a colony, a kingdom, an empire, and a republic. She has suffered and still suffers from political growing pains but has been fairly stable politically for some years now; it may well be that her future will be relatively free of the internal upsets that interfere with economic and social progress. Brazil was late in getting rid of human slavery (1889) yet this is a country where no color bar can be seen and black and white mix socially without tension—or so it looks to an outsider.

Because M.S. *Ruys* spent only three days at dock in Brazil Ticky and I had only opportunity to nibble at one corner of the Colossus of the South, just enough to sample it for flavor. We liked the flavor and want to go back for a full meal someday, but, as always, we were forced to hurry on if we were to get all the way around the planet. (The man who first said, "It's a small world," certainly must never have tried it; the durn thing is *much* bigger than I had ever believed.)

The ship called first at Santos, major port of the State of Sao Paulo, the booming Texas of Brazil. Brazilian police came aboard and required all passengers to surrender their passports for police cards before permitting them to go ashore. Ticky did not like this at all and I did not like it too well, nor do I see that it was necessary or useful since other countries get along all right without it. Nevertheless it seemed harmless since the passports were not removed from the ship but stayed in the custody of the cop on watch at the gangway. In any case if we were to go ashore compliance was inevitable; we turned in our passports.

Santos is not a tourist town and the docks are not laid out to accommodate tourist ships. There was an endless, uncomfortable, and somewhat hazardous walk along the piers, dodging cranes and trucks and railroad cars and rope slings loaded with cargo before we reached one of the guarded exits, where again our permission to go ashore had to be checked. This merely put us on the right side of the fence; there were no taxis nor any prospect of same, nor any public transportation near by. This is not a complaint, because so far as I know Santos does not advertise for visitors. In Rio, a city which does so advertise, ships tie up at the foot of their "Fifth Avenue," Avenida Rio Branco. Fair enough, both ways.

But the inconvenience does not add to the charm of Santos. After several blocks we came at last to a street with tram rails and presently were able to hop a street car. The trolleys in Santos are Toonerville affairs, dinky, open to the weather at the sides, old, and very crowded. They are a treat to ride, unless you are the sort of person who can't bear to share a taxi and would not think of using the subway; they put me in mind of the San Francisco cable cars and have much the same out-of-date charm. We lurched through narrow streets and swung wildly around corners while the conductor climbed over feet and reached over heads for fares. People swung aboard from either side and jumped off and clung to the sides and ends, all without caring whether the car was moving or stopped. I gathered the impression that the car came to a full stop only for cripples, babies, and sissy *norteamericanos.*

I do not see how the conductor managed to collect all the fares; it would be easier to fold a newspaper in a high wind. Perhaps an honor system helped him—the South Americans we met seemed painfully honest in small matters. Or perhaps he was satisfied to collect a good percentage of the fares.

All the transportation systems we encountered in Brazil were extremely crowded. This is not a criticism; I simply note a fact that is historically an unavoidable growing pain of boom times anywhere. We have not licked this problem and I do not think it can be licked. A booming, prosperous area is always one where people pour in faster than services can be built to accommodate them, which means crowds, choked subways and highways, long waits in restaurants, poor service, high prices—and an overall feeling of excitement, hope, and nervous tension.

The quiet, leisurely places of cheap servants, low prices, and *dolce far niente* are stagnant and poor; this is a law of nature and it calls for the lobster-shelled conscience of a Bourbon not to be affected by the poverty underneath.

Brazil is both of these things at once. The older pattern of extreme wealth and peasant poverty with no middle class still exists side by side with boom times, peasants streaming into the cities to find industrial jobs, and a growing middle class. The *barrios bajos* of Rio may not be the world's worst slums but they surely win dishonorable mention. They are almost vertical shanty towns, built of trash on hillsides too steep to be useful for commercial buildings; they have not even water, not even a neighborhood faucet, and of course no other services. Here many of the penniless poor from the country wind up, a reservoir of labor, and of disease, vice, and crime . . . and riot and rebellion. The government and the better-off Brazilians are striving to cure these sores, but the problem is mammoth.

But we were still back in Santos. Santos is an old city and looks it; it is necessary to get far into the outskirts to find the twentieth century. The plazas, the venerable trees in them, and the age-encrusted buildings around them look like a set for a South-of-the-Border musical comedy. The traffic and crowds of the industrial boom swarm through the old streets, a noisy affront to their sleepy, eighteenth century charm.

We took a bus from Santos to Sao Paulo, a bus which was as out of place in the plaza of Santos as a spaceship in a corn field, it being at least three per cent more shiny, modern, and gadgeted than the best of Greyhound and Trailways in the States. Once outside the city streets we entered a superhighway toll road straight out of *Fortune* magazine. It is of the same sort and quality as the Pennsylvania Turnpike, but here the engineers had no railway tunnels already built to help them through the tough places, of which there are plenty.

The road ran first through miles of banana plantation; the bus ate up this stretch at about ninety, vibrationless on perfect pavement. Then the road reared up and jumped at the Serra do Mar mountains; the bus eased back to seventy and zoomed up and over them, a three-thousand-foot climb in a few minutes, piercing mountains, leaping chasms. There were no hairpin turns, no bad grades, no stretches to make the timid nervous; only on looking back was one aware of the concrete spiderwebs on which we had crossed the gorges.

But one did look back. The spanking climb right up the face of the mountains produced swiftly changing, garishly dramatic vistas, unreal and improbable. The hot, water-soaked air was not perfectly transparent; we could see the ocean but not the horizon. Instead the tropical haze produced endless stereo depth on depth, a misty Land of Oz in colors too bright and miniature modeling too perfect to be convincing.

The bus plunged on into the mountains, the skyline pulled in and things came back to their proper sizes. There were signs of intense industrial activity all along the hundred or so kilometres from Santos to Sao Paulo, tire factories, artificial lakes for water and power, high-tension transmission line towers marching over hill and horizon. The great double road was gardened throughout its length but beyond the dedicated expanse there were many big signboards of the sort that disfigure our own roads but are not very common elsewhere in South America. I could not read them but pictures are pictures and trade names persist; I amused myself by trying to pick out the influence of the Yankee Dollar. The majority of the foreign firms appeared to be ours, with England pushing us hard in second place, and Germany a fairly strong third. The incorporations were Brazilian but the trademarks and names usually made the parent foreign corporation obvious. "Esso" was everywhere, along with "Delco" and "International Harvester" monograms and General Motors and many other heavy-industry firms from the north.

And Coca-Cola, of course—we rich barbarians have been accused of having added nothing to world culture. This is a most unfair canard; we have contributed Coca-Cola, jukeboxes, and comic books, all worldwide in scope.

I am only half joking. When the water is not safe to drink, as so often is the case abroad, and your stomach rebels at the idea of more strong coffee, strong tea, or alcohol, Coca-Cola really does offer a pause that refreshes—and you can buy it almost everywhere. As for jukeboxes, the quality of the music is up to the man who inserts the coin; the machine itself is a worthwhile accomplishment. Comic books I won't defend.

I myself am very weary of being told by scornful Europeans that we have no culture. In the first place it simply is not true, even in the snooty sense in which the sneer is usually put, as in painting, music, and literature we are lustily productive. But in the widest sense we have made the greatest cultural contribution of any society to date, by demonstrating that 160,000,000 people can live together in peace *and* freedom. Nothing else in all history even approaches this cultural accomplishment, and sneers at *our* "culture" are both laughable and outrageously presumptuous when emanating from a continent that habitually wallows in its own blood. I'll take Coca-Cola, thank you; it may be vulgar, no doubt it is simply impossibly American, it may lack the bouquet of a Continental wine—but it is not flavored with ancient fratricidal insanities.

During the trip to Sao Paulo I sat next to a local citizen. We chatted throughout the ride, he in Portuguese and I in English. I found Portuguese even harder to chew than Spanish, but we got along all right as his acting was more than competent. When we pulled into the outskirts of Sao Paulo he pointed out places associated with the emperors of Brazil and, at last, helped us off the bus and directed us to the hotel where we had been advised to have lunch. My Spanish had been no trouble to him at all; he simply thought I was speaking English the whole time.

(Only three words are necessary to travel all over South America: *"gracias"* and *"por favor."* They cover all situations.)

The parks and plazas and monuments to Emperor Dom Pedro II in Sao Paulo are old; practically everything else is brand new. This is the

Dallas of the boom country. It has almost as many people as has Rio de Janeiro—as of 1953, that is; by today it may have more than Rio. It is bursting its britches and new construction is going on all the time and everywhere, even during Christmas holidays. It is not safe to lean against a building there; workmen may come along and yank it down, letting you fall into the excavation. But there will be a new building in its place almost at once.

We enjoyed a gourmet's lunch on the top floor of a skyscraper hotel. View windows looked out in all directions and I looked out through them. It did not look like Latin America; it looked like Chicago. Sao Paulo being on a plateau of almost 3000 feet elevation its climate is not as oppressively hot as is Santos; the people are exceedingly energetic. So far as we noticed there was no slow down during the traditional siesta time; they seem to have given up the afternoon nap, which seems deplorable. Progress can be overdone.

The traffic was fast and hazardous. All Latin Americans drive with courage but Brazilian drivers seem to have even more careless abandon than the others. But their conventions are much like those elsewhere in the continent and we were now somewhat used to them; there were no casualties—which was just as well; in Brazil, if a driver runs you down, he usually sues *you;* the pedestrian is not assumed to have the right of way.

We shopped along a street of smart women's shops having the unlikely name of Rua Bardo de Itapetininga. I complained that I had seen the inside of every retail shop for ten thousand miles and that we might as well have settled for Denver, but it did me no good. Ticky answered that she had been dragged into every bookstore over the same route and, besides, everybody knew that the quickest way to size up how a country was getting along was to take a look at what was offered for sale there—quantity, quality, variety, and prices.

I muttered that looking was all right but if she kept up her pace she was going to ruin the economic structure of each country we visited, but she did not hear me; she was already plunging into a blouse shop, her nose quivering like a bird dog catching a scent. The shops certainly did have pretty things and the handmade blouses were among the prettiest. Ticky insisted they were "bargains" and I suppose they were. I never will understand about such things; to my mind a bargain is something I need at a price I can afford.

Somehow the *senhoras* were less intimidating than the grim, firm-bosomed females that jostle one in our own department stores. Where do those women go when the stores close?

You rarely see them (thank heaven!) anywhere else. My own intense dislike of shopping is based on a fear of being trapped on an upper floor by a mob of them; I think I suffer from a subconscious conviction that they are carnivorous.

But the *senhoras* and *senhoritas* are soft-voiced and gentle even at a stocking counter.

We had to buy some shoes. That was understandable; South American shoes do even more for the female foot than does a hot water bottle. The designs are indecently sexy. Ticky found, and bought, a pair of black high-heeled slippers the tops of which were nothing but nylon diamond-mesh. They turned bare feet into naked feet, an effect similar to that achieved by dressing a woman in opera-length black hose and a Gstring.

I pointed out that if she wore them she might be arrested; she could not be nakeder if she wore nothing but the shoes because no one would look at anything but her feet—and gasp. "That is exactly the effect I want," she said smugly, "a simple, modest dress and my feet looking out in those and leering. I'll take them." She did not even ask how much they cost.

Satiated at last with shopping, we loafed for a while in a dreamy, old garden filled with fountains and birds, which is surrounded by the swarming Sao Paulo retail district and is near the bus station. There was time still to hire a car and a guide, but the garden was so pleasant that we decided to take for granted that Sao Paulo had public buildings, a race track, and points of historical interest. We knew that it had; the pamphlet we had with us told us so, but we gave them the rest of the day off and stuck with the birds and the fountains.

At last we walked slowly and reluctantly back to the bus station. The interurban station there is an extremely busy place with a bus pulling out every few seconds and a dozen loading at once; it had a population density as thick as you can get without stacking people in two layers. All seats are reserved and tickets must be bought ahead of time.

The bus for Santos has some other name, I never did find out what. I was trying unsuccessfully to buy tickets and succeeding only in holding up a queue of others equally anxious when a man came to my rescue. He had the face of a jovial hawk and about twenty words of English, which was eighteen more than had of Portuguese. With his help I got the tickets, then he firmly kept us from getting on the wrong bus.

He stayed with us then, to keep us straight, and flipped his lapel to show some sort of shield; I understood from the gesture that he was a plainclothesman. But he was not satisfied that we understood his status. He pulled down his lower eyelid to show that he was an "eye," then pantomimed in detail the operations of a pickpocket, plus other gestures adding up to a charade that he was assigned there to protect the crowd from pickpockets.

It was clear to us and I suppose it was equally clear to any pickpocket present. But he was a most successful goodwill ambassador for his country. He kept us from getting on several more buses, put us on one at last and spoke to the driver about us, then waved us out of sight.

The run by sea from Santos to Rio de Janeiro is only overnight. The *Ruys* stood into Rio Harbor before breakfast; Ticky and I got up early and watched it from the bridge by invitation of the Captain. The regulations of every ship state that passengers are not permitted on the bridge; I have yet to be in a ship in which the master felt it necessary to enforce the rule. This was the first time Captain Verwijs had invited us and it was a treasured privilege, for Rio has the most glorious harbor in the world.

Oh, I'll admit that it is not a scientific statement; I have not seen all the harbors in the world. But in the course of some years at sea as a youngster, plus other trips since, I have seen a lot of them and I have compared notes with others who have seen the important ones I have missed. I am not counting uninhabited fjords in Norway nor anything like that; I speak of seaports. I stick by the statement and strongly doubt if anyone can be found who has seen Rio who will vote for any other harbor.

Sydney Harbor has its backers for the honor, but, while Sydney's harbor is beautiful, it is not in the same league. The approach to Seattle through Puget Sound is lovely but the Seattle roadstead is not much to see. Golden Gate has one fine view; Rio has a hundred. As for New York Harbor, the approach up Bedloe Channel is essentially ugly, despite the famous skyline and the beloved Statue of Liberty.

Rio, lovely Rio, is the one harbor without fault or blemish, a sight for travelers which cannot disappoint, a case where the glorious reality exceeds the buildup.

Provided the weather is good, of course, since the inside of one rain storm looks much like the inside of any other. We were lucky indeed to draw a golden day. I hope you are equally lucky but don't expect it; Rio has heavy rainfall right through the year.

I do not understand the geology of Rio. The bay looks like a flooded river valley among mountains, but no major stream runs into it; the principal drainage of the back country parallels the coast line behind a row of mountains and discharges a couple of hundred miles away. The land must be slowly sinking into the sea here to produce this wonderfully complicated shore line, but what accounts for the curious conoidal mountains? Are they the cores of volcanoes laid bare by eons of erosion? If I could tuck in a souvenir picture folder at this point I would not attempt the silly task of describing Rio. On second thought I won't attempt it anyhow but will risk only brief comments.

Can half a ton of blueprints and a dozen thick books of specifications convey the breathtaking beauty of a jet bomber in flight?

There are hills, mountains, inlets, points, bays, and beaches in such profusion that it cannot all be seen from any one point, even from the top of Corcovado. There is a great city spilled like gems into this three-dimensional primitive beauty. There is lush tropical jungle, rain forest, covering all but the city itself, the bay, and the hunching summits of rock.

The much-pictured Sugarloaf is only one of a dozen sugarloaf mountains here. The compass-scribed sweep of world-famous Copacabana has a dozen rivals, each unfairly overshadowed in fame by the misfortune of being too close to the one with the famous name.

I had known as everyone knows that Copacabana was backed solidly by tall buildings in a dazzling modern style designed for enjoyment of tropical climate, but I had not known that this free and generous architecture framed all the beaches and spread throughout the city. Rio looks as if it were fifty years into the future. By comparison all of our own cities look as antiquated as a rolltop desk.

The *Ruys* spent only one day in Rio, which left no time for leisurely poking around; we were forced to hire a car and a guide if we were to see as much as possible. We were not too lucky in the guide; he spoke French, Spanish, and Portuguese but only a half dozen words of English. He could point things out to us and tell us what they were but we missed the sophisticated and idiomatic discussions with which Herman enlivened Buenos Aires.

Our first impression was of overpowering, suffocating heat. If the car stopped for only a moment to let traffic change, we found ourselves panting, almost ready to pass out. We were there in their summer (late December). The records show that July averages eight degrees cooler with less than half as much rain, so July is the time of year that we plan to go back and do Rio properly. That means that we will never see Carnival in Rio, since Mardi Gras must fall either in February or the first week in March, which are even hotter than late December.

I hate to give up forever the prospect of Carnival in Rio, but I can't be gay in a steam bath. They say that Mardi Gras in Montevideo is just as much fun and the weather is ten degrees cooler. Or perhaps the trick is to roister in the streets all night and sleep all day in an aircooled hotel room. Hmm—

Presently our guide got us out of downtown and we began to perk up. Rio is even better equipped with parks and gardens than is Buenos Aires, and tropical rain forest growing conditions make it inadvisable to poke a walking cane into the dirt—it might sprout. After a long and confusing tour of parks and plazas and public buildings we started out along the beaches, where it was so cool that it was just pleasantly warm. The beaches of Rio are so long and so wide (most of them) and so numerous that they aren't very crowded, not so much so as Laguna Beach and nothing like the solid mass of pop bottles, chewing gum, and sweaty bodies that hides the sand at Coney Island. But Australians would find the surf a little on the nice-old-lady side since the enclosed bay keeps the rollers from having room to work up much muscle.

But the sand and sea are just a sidewalk away from the hotels. The wiggly-patterned sidewalks, so conspicuous in postcards, are not limited to the Copacabana; the other beaches have them, too, and so does downtown Rio. We saw them in Santos as well. This pleasant, useless custom gives dull stretches of concrete a holiday air; I would like to meet the lighthearted gent who started it.

I noticed just one Bikini suit and only a few bare-midriff models. South Americans are a bit conservative about displaying female hide.

After the beaches we started up the Corcovado. This mountain is twice as high as Sugarloaf and is the site of the Cristo Redentor statue. We had time for one viewpoint or the other, but not both. I wanted to ride the famous cableway to the top of Sugarloaf, but Ticky gets a bit dizzy on step ladders and grew downright mutinous at the prospect of being locked in a cage and then being swung spiderlike high in the air on a string.

So we compromised her way and I did not regret the choice. The drive is spectacular and exciting. The road is very narrow, barely two cars wide, filled with hairpins and blind corners, and engineered like logging track. It leads through lovely suburban home districts, parks, and virgin tropical forest, past waterfalls and canyons that got me to thinking of Coleridge and *Kubla Khan.* I thought about them still more when we stopped at a restaurant half way up and discovered that the restaurant grounds included a labyrinth grotto that wandered almost endlessly around the mountain—an enchanted place of silence and cool moss and dim, religious light.

The climb was very steep and our ears began to pop. Ticky dug out chewing gum and gave me a piece to relieve the discomfort. We had with us the English lady with whom we had first teamed in Montevideo. She was unattached, a widow, and was good company once she was convinced that we did not sleep in our boots; we had formed the habit of inviting her to go ashore with us. Ticky now offered her a stick of gum.

She accepted it gingerly. "What do I do with it?"

"Just chew it. It will help your ears to adjust to the altitude," Ticky assured her.

"What happens if I swallow it?"

We assured her that every American child had swallowed a piece or two without any ill effects. "Chewing gum is a custom we learned from the South and Central American Indians. It's quite harmless."

I think she tried it rather than risk offending us—she was in all respects a lady. But I am not sure she liked it.

Cars cannot go quite to the top of Corcovado; there are a hundred-odd steps up to the foot of the Christ statue. We climbed them very slowly, as the heat and humidity were bad even on the mountaintop. But the view was worth a much harder climb; we had the great bay spread around us, the great city in our laps. But I balk at describing it. I can think of three city vistas in North America which deserve to be classed with it: San Francisco Bay from the Top o' the Mark, New York from the 86th floor of the Empire State Building, and Los Angeles County from Mount Wilson. The view of New York is equal in interest; none of the three is equal in beauty.

With that I will leave it. Go see it for yourself. Put it at the head of your "someday" list.

The Christ statue is impressive and huge, but as statuary it is a stylized scarecrow, not in the same class with the Christ of the Andes, which is worthy of Michelangelo. It is so posed and simplified as to appear as a cross from the city, rather than as a human shape; to that end it is very effective.

The trip down was even wilder than the trip up. Despite the long drive there was still an hour or so before we were required to be back aboard ship so we had the driver drop us on Avenida Rio Branco, the main shopping street, at the foot of which the *Ruys* was tied. Downtown Rio is not too much to my taste. Basically it is no worse than other big cities and in some respects is better, in neatness and general appearance. Rio Branco, for example, although a skyscraper canyon of a street, is edged with trees right downtown. But city crowds are bad enough at any time; in oppressive heat I find it easy to hate all humanity.

For once Ticky felt too dragged down to shop; her bounce had melted down in the heat. We looked in a few shop windows and I noticed that Rio named streets the way other South American cities did—the 1st of March intersected the 7th of September at a corner of 15th of November Square, also there was a President Woodrow Wilson Avenue, a Buenos Aires Street, and a Uruguay Street all in that one neighborhood. We saw citizens patiently lining up in queues two and three blocks long for the privilege of a seat to get out of the city at the end of a difficult day. Rio is wonderful but they should throw a dome over the whole city and aircondition it in toto—this should not be too hard for people with the energy to build this wonderland in spite of the climate.

We found the flower market, big as a general farmer's market in most cities, and saw orchids too numerous to guess the number. But we did not find a green orchid which was what we wanted. After that we looked in on one of the many fine jewelers, "H. Stern" it was. Rio is the place for amethysts, aquamarines, and topazes; they are magnificent and so cheap that samples are given away to visitors. I risked letting Ticky go in because she does not really care for most jewelry. She has simple tastes and even diamonds leave her cold; all she wants is emeralds, nice big squarecut ones—and Colombia is the place for emeralds, not Brazil.

The ship was an easy walk down the street, provided we took it slowly and avoided sunstroke. But the weather shifted gears and we made it to the ship just in time to be soaked to the skin in the last two hundred yards.

VII

The Farthest Place

THERE WAS A feeling of excitement in the *Ruys* after we left Rio, caused by the possibility that we might receive radio orders to turn aside and make an unscheduled call, a stop at the most remote port in the world.

The world is conceded to be a small place these days, with airlines straddling the oceans, with boats and trains and buses linking No Plumbing, Kentucky, to No Hope, New Zealand. No place is more than a week away from the nearest airline ticket office, plus a possible day by bus or train, or at the most three days for some South Pacific islands.

Is there any really remote place left? Behind the Iron Curtain? A political barrier, not a physical one. The North Pole? The North Pole needs traffic lights these days to keep the Russian patrol planes from bumping into our own. Antarctica? Yes, but Admiral Byrd's continent is uninhabited; I had in mind places where people live. There are a number of places very hard to reach which are unfit for human habitation; that is why there is no transportation to them. What is the most remote *settlement* in the world?

There is an Indian village in the Grand Canyon that is almost never visited by outsiders. But you can make it in two days from New York, by airline, by hired car, and by hired mule. There are pygmy villages deep in the Congo, but safari companies will outfit you and provide professional guides. One way or another almost any inhabited spot can be reached by recognized commercial means. But there is one place left on earth which has long been settled and has a recognized, established government which cannot be reached by any regular means whatever, but only through lucky chance.

It is Tristan da Cunha, a British colony in the South Atlantic, almost precisely midway between Antarctica, South America, and Africa. It is 1500 miles from the nearest land, St. Helena, a spot itself so remote that it was picked as a safe prison for Napoleon Bonaparte after he crushed out of Elba.

There is *no* way to buy a ticket to Tristan. No South Sea island is so hard to reach, so hard to leave, so far from other inhabited land. It is the most remote settled spot on this planet. The *Ruys* was being considered for a special stop there because the government meteorologist and radio operator stationed there had been waiting seven months since the end of his three-year tour of duty for opportunity to get himself, his wife, and baby back to the mainland—any mainland.

It meant adding nine hundred miles and about three days to the voyage from Rio to Cape Town, but there was opportunity to pick up fifty tons of frozen lobster tails there for Cape Town; most of the great cost of detouring a big ship could be charged against pay cargo. But the real question was whether the stop could be made at all. Tristan has no harbor of any sort. Sheer cliffs face the sea on all sides; at their feet are narrow beaches. A ship must anchor off shore and send in small boats. But dense fogs, fierce winds, and mountainous seas are common diet there and whole gales, with winds of seventy-five miles an hour or more, blow up without warning from the subarctic regions below it.

For several days after we left Rio the common subject in the ship was the latest radio weather report from Tristan da Cunha. Would the Captain risk it? Or would we turn aside and go on to Cape Town? No company agent could order him to attempt it; he must decide for himself whether the bet was worth taking—not so much risk to the ship, for a ship as big as the *Ruys* would not be risked for all the lobster tails in the South Atlantic, nor to help a family (safe where they were) to get home. The risk was something on the order of $10,000 in ship's operating costs, a fairly big gamble to take on very treacherous weather against the chance of a modest profit.

We discovered presently from radio reports that the islanders were even more excited at the prospect than we were. No ship the size of the *Ruys* had ever called there in all the history of the island. Any ship at all was a great event, but this was the greatest thing in the memory of the oldest inhabitant. The colony was preparing to welcome us in every way that they could.

About two days before we were to arrive Captain Verwijs decided to take the bet—subject to the possibility of pulling out at the last minute and accepting his losses if the weather turned sour.

We all got up early on landfall morning. The Captain must have been living right and saying his prayers; the sky was clear and brilliant, the ocean was blue and calm, Chamber of Commerce weather. Tristan was a great, flat cone in the distance, a textbook volcano. The two other volcanic rocks in the group, Nightingale and Inaccessible, both uninhabited, were on the horizon. We anchored a mile off shore opposite the one settlement—Edinburgh, known simply as "The Settlement"—in water so calm that the ship did not roll at the hook and so clear that we could see schools of fish twenty, thirty, fifty feet down.

The Chinese crew, all who were not on duty, promptly dropped lines out of every porthole on the lower decks. The Chinese ran their own mess and were paid their rations by the company in cash; they fished at every opportunity. But this was something extraordinary; a hook hardly had time to get wet. Shortly passengers joined in the sport—if it can be called sport to get a large bucketful of fish in a few minutes.

The entire able-bodied adult male population of Tristan swarmed aboard. There are only two hundred and seventy-six men, women, and children in the colony; about eighty of these are men old enough and young enough to handle pulling boats in the surf. The oldsters, the youngsters, and the women had to be content with a view of the wonder ship from afar.

They had a rummage-sale appearance in their dress; storeboughten clothes are scarce and precious on the island. Most of them wore home-knitted long heavy white woolen stockings and homemade leather moccasins. A few had shoes for such special occasions. Save for their footgear they looked like anyone else.

But their manner was different. The difference is hard to describe without sounding snottily supercilious since "childlike" is the word that comes most easily to mind. But they are not childlike, not morons, not savages, but they are people who have been out of touch with the rest of the human race, save for rare visits from passing ships, for generations.

Their isolation would have been only a little more nearly perfect had their ancestors moved to Mars. Whatever the nineteenth and twentieth centuries have done to us has not been done to them. Wars, psychoanalysis, mass production, traffic, atomics, Marxism, airplanes, female emancipation, Hollywood, Kaiserism, suffragettes, paved roads and automobiles, market crash and depression, Sex Appeal and "It" girls, ENIAC, these things *never happened.*

We are closer to Benjamin Franklin than we are to these people. Although the good doctor was born two and a half centuries ago and knew none of the things listed above, he was up to his ears at all times in the same continuing struggle we are now in, whereas these islanders seceded from it. They have come very close to resigning from the human race, both culturally and biologically; they have been a separate breed and a separate culture for more than a century.

It was very hard for us to talk with them. We shared the same language, English, and their accent and idiom was not as difficult for American ears as, for example, Yorkshire; what we lacked was common experience. A detective in Sao Paulo could tell us, without language, that he was watching for pickpockets; we both knew what pickpockets were. We shared with the detective a common culture, Western and urban; lack of language was a mere nuisance to be circumvented.

But with these islanders, although our language included theirs (their vocabulary is, for obvious reasons, quite limited), there was very little that could be said with it. We could ask direct questions about simple things—boats, sheep, weather, potatoes, fish. They would answer, readily enough, in simple declaratives—and there the conversation would bog down. Discussion was out of the question.

Chief Repetto, the headman of the island, had arranged for boats to take us ashore. The Captain had not granted permission for this and, while we awaited his pleasure, the breakfast call was sounded. As the islanders had not eaten either, some of the passengers took them in to breakfast as guests; Ticky and I took the headman to our table.

It was a painful meal, at least for us. We tried to bridge the strangeness with social chitchat, but it was impossible. When I found myself asking for the third time how many people there were on the island, I gave up. But I do not think that Chief Repetto was shy and I think he enjoyed himself—I hope he did. The islanders seldom have meat to eat; the breakfast menu of the *Ruys* was rather lavish, including ham, bacon, several sorts of sausage, and a variety of cold cuts. The Chief started at the top of the page and ate stolidly down to the bottom, neglecting nothing.

To the disappointment of all of us word came from the Captain after breakfast refusing permission for passengers to go ashore. I felt a sharp pain in the pocketbook: the loneliest island looked like a sure-thing slick-magazine article provided I could get ashore and take a few pictures. But the Captain expressed his regrets and explained that his decision was forced by the necessity of being ready to up-anchor and run, with no delay, in case of a shift in the weather . . . to which we had no logical counter argument.

So we spent the time trying to talk with the islanders and bought stamps from them (it was the first day of their first issue) and watched the loading of cases of lobster tails and gazed at the village through binoculars and fished. The lobsters were loaded from a little steamer whose masthead barely came up to the level of our forward welldeck. This vessel itself was used to ferry the catch to Cape Town when no larger ship was available, but it was easy to see why the meteorologist and his family had waited; she was larger than a soup tureen but not much—utterly unsuited for a woman and baby. I misdoubt the lobsters got seasick.

Eight-power glasses brought the village up to within a city block. The houses looked all much alike, one-story buildings of big, shaped lava blocks with thatched roofs. The thatch is New Zealand flax, which grows on the island. The dwellings were local-material equivalents of sod houses or of log cabins, one step ahead of a cave. But I did see the glint of glass in some windows.

The Administrator from the British Colonial Office, the Honorable Mr. J. P. L. Scott, was aboard; when he was through with his official duties I cornered him and quizzed him. He is the government, "The Law West of Pecos," "—the cook and the captain, bold, and the mate of the *Nancy* brig, and a bosuntight and a midshipmite and the crew of the captain's gig." He is the postmaster, the chairman of the council, the recorder, the tax collector, the port captain, the magistrate, and anything else which requires the attention of Her Majesty. His job as magistrate is not onerous; there is no crime.

The islands were discovered in 1506 by Tristdo da Cunha. For three centuries they were visited only occasionally, but in 1811 one Joseph Lambert, an American citizen, claimed them as his personal empire (and sealing station); he published his claim and designed a flag. Offhand his claims seem as valid as any other in history and less presumptuous than most. This lefthanded American occupation came to an end in 1816, when the British established a garrison there to keep the islands from being used as a base from which to rescue Napoleon. Only one of Lambert's colony was left at the time; Lambert himself had drowned in a sealing accident.

The British pulled out the garrison the next year, but Corporal William Glass got permission for himself, his wife and two children, and two sailors to stay on; this started the present colony. Over the years a few others joined them, including some women from St. Helena, but the colony grew mainly by natural increase; even today there are only seven family names on Tristan. Mrs. Glass did her part by having fourteen more children, a fact less surprising in view of the very limited recreational facilities.

The soil is poor and, while rainfall is adequate, the bad weather and high winds are no help; potatoes have always been the only crop they could rely on. Even that sometimes failed, or was devastated by rats or caterpillars; many times they have been close to starvation. The

British government regarded the islands as unfit for occupancy and more than once tried to get them to accept relocation. But they won't go; they like it there despite the material hardships. Perhaps in view of the mess the rest of us are in and the prospects facing us their attitude is not really cracked.

Fish, potatoes, and birds' eggs collected on Nightingale are their only important foods; sheep and oxen are considered too valuable to slaughter. Of recent years attempts have been made to grow fruit trees but nothing much has come of it as yet. The biggest change has come since the War, through the establishment of the lobster-packing plant. The "lobsters" are our west coast lobster, or spiny crayfish; not the true lobster of Maine. You are probably now buying their lobsters, packed as "Union of South Africa" for the company is a Cape Town company. This company employs all of the men part time and for the first time in its history cash money is coming into Tristan, making it possible for them to buy things made in the outside world. Possibly this is the thin wedge that will eventually place Tristan on the map, join it by regular service to the outside world. Possibly—though it has not as yet; lobsters can be sure of a berth; a traveler cannot.

The Cape Town company has hired an agronomist and a doctor for the islanders. The agronomist has a real job cut out for him to find ways to grow something other than potatoes, but doctor would appear to have a sinecure. There is almost no disease, except colds picked up from passing ships, and it is customary to die of old age in the eighties or nineties. They don't need a dentist—perhaps there is fluorine in the water; I could not find out.

Although the company has been bringing some cash wages into the island for the past four years they are still painfully short on clothes and beg for castoffs from passing ships. The Administrator is trying to break them of this habit; nevertheless many of us in the *Ruys* contributed. I had some shirts I did not like anyway and Ticky somewhat tearfully parted with her honeymoon suit—years out of style and useless on this trip, but which she had kept and fetched along for sentimental reasons (and partly to prove that she was still as slender as ever; Ticky is a fine piece of aerodynamic design). She dug out some shoes for them, too, having just stocked up in South America. I could not spare any, nor would mine fit anyone else; my feet aren't mates.

We stood out of there late in the afternoon and set course for Cape Town. Some of the Chinese had purchased two baby penguins from the islanders; in the course of the voyage it was needful to teach them how to walk. A baby penguin is not hatched knowing how, any more than a human baby knows how instinctively. The process is much alike for both types of babies—hold out your arms and say, "Come to

Papa!"

Whereupon the baby penguin tries his earnest baby best to oblige, flapping his tiny stub wings and hopping manfully in a two-footed hop like a choir boy in a sack race. I laughed until I had pleurisy—and wanted to cry, too; the infant was so willing about it and so serious.

Penguins are very nice people and they don't mean to be funny. A baby penguin is funnier than an adult by inverse square ratio. They feel nice, too; their hairlike feathers feel like soft, warm fur. At that age they are not yet oily and have not acquired the full fishy fragrance that makes the adults something to stay upwind from.

Albatrosses, about six of them, joined us at Tristan and followed us for two thousand miles. So far as I could see not one of them ever flapped a wing the whole distance. They sail without effort, at twenty or thirty knots, rising much higher than the masthead, dipping down to the water for a fish or some tasty garbage, rising again to any height, all without apparent exertion of any sort—just willpower, personality, and clean living. The albatross is deceptively large. I mistook the first one I saw for a gull, having nothing to judge it by—I suppose the best way to see how big one is would be to hang it around the neck of an ancient mariner. They have been measured up to twelve feet in wingspread, more span than the condor, largest of the flying birds. A little crosseyed triangulation enabled me to estimate that those following us ranged eight to ten feet in spread, once I got it through my head that they were big and then waited for a chance to see one between me and part of the rigging. On another occasion one made a crash landing in the swimming pool of the *Ruys* and could not get out. He crowded the pool all by himself and almost beat the boatswain to a pulp before he could be evicted.

Ticky worried greatly over how the albatrosses would get back home, since no ship would be going that way. (We had concluded that their miraculous powers of levitation were based on the thermals raised by the ship itself.) I pointed out that albatrosses had managed all right for thousands of years before men got around to sailing the oceans. But she refused to be reassured: those poor birds were *lost,* and somebody ought to do something about it.

The meteorologist's baby daughter enjoyed the trip back; she was a cute little carrottop and a favorite with everyone. But her mother had a very bad time of it. After nearly four years' unworldly peace and quiet of Tristan she found the *Ruys* (which is really a very quiet place itself) almost unbearably noisy and exciting. The change was too sudden and the poor woman had to spend most of her time in her room.

The rest of us were driving her to distraction.

VIII

The Country With a Problem

Lived a Woman Wonderful... . . . Neither Simple, Kind, nor True
— *South Africa:* Kipling

OF ALL THE countries we were in the Union of South Africa was the most difficult to evaluate.

It is a wonderful country, a glorious country. We liked everything about it—except the race problem. Which is like liking the Pacific Ocean except for the water in it.

South Africa is a paradise where you expect to wake up Nome morning with your throat cut. By comparison, our own racial problems are trivial and ninety per cent solved. Before some colored compatriot of mine, smarting under the wrongs of generations, jumps down my throat, let me add that I *know* that the ten per cent remains to be done, should be done, must be done, but let me point out that the ambition of every literate black man in South Africa is to emigrate to Birmingham, Alabama, or some place else in our Deep South, where he can be among his own kind and still enjoy freedom.

He stands no chance at all of realizing this modest ambition. Carefully contrived laws and rigid customs make it next to impossible for a black man to save enough money to escape. I is gross earnings as a farmhand are about twenty-five cents *a* day; as a contract laborer in industry, in the mines or factories, wages run from twenty-five cents to around sixty cents a day—about what a Pullman porter gets as a single tip.

Apartheid, translated literally as (racial) apartness, is the most pervasive single fact about South Africa. But it is much more than Jim-Crowism, or simple segregation; as legislated by Dr. Malan's Nationalist Party it means that a native must either live in a reservation or indenture himself to a white man; if he shows up in town without a work card he is liable to prosecution.

It means no voice in government, almost no chance for education, no hope for the future. If the native reserves, which are vast in area, were decent land, the system might be defended, but they are not. Only about seven per cent of South Africa is good arable land; the white man has it and the native has been assigned rocky, hilly, dry and almost unusable acreage that the Afrikander does not want. Almost the only way a black farmer can get decent land is by hiring out to a white farmer; then the white man lets him till a little piece of it for himself.

If a native youth refuses to go along with the cheap-labor racket, his position is hopeless; he can never buy oxen, he can never pay for a wife. So he signs up.

It is a legal system to enslave an entire race, without placing on the bosses the personal responsibility for the slaves entailed by chattel slavery. The South African native is neither a free man nor a chattel and he has the privileges of neither.

The Nationalist Party is not a majority party, but it stays in power through an entirely legal rotten-borough system similar to that which obtains in the California State Senate whereby a farmer's vote counts for more than that of a city dweller. In general the Nationalist Party is Afrikander while the Unionist Party is English just as most of the farmers are of Dutch descent and most of the city folks are of English descent. But it is most unlikely that more than a handful of the opposition party could be found which did not favor some form of racial discrimination. Looked at coldly, their reasons for this stand can be understood, for, no matter what might be or what should be, the vast majority of the natives are still illiterate savages. The South African white man who does not believe in Dr. Malan's brand of *apartheid* nevertheless believes that if the native were given his full rights as a human being overnight, the white men would be swallowed up.

There are other approaches, of course. Up in the Belgian Congo a black man can work hard and become an *evolve,* a man with a certificate which makes him a statutory white, entitled to the same wages, entitled to live in white neighborhoods, entitled to place his children in white schools, even entitled to marry a white woman if he can manage it. All of these things are utterly prohibited in South Africa.

I am not arguing in favor of the *evolve* system, as I never saw it in action. I give it as an illustration of the fact that there are middle ways between the extreme of *apartheid* and the other extreme—an extreme which the Nationalist always cites to prove that *apartheid* is necessary and unavoidable . . . when in fact it is neither one; it is an inhuman racket for the exclusive benefit of the white man.

On the other hand, do not be misled by the crocodile tears of Mr. Nehru; the very worst exploiters of the black man are the Hindus. The only real public disorder modern South Africa has known was when the natives turned on the Hindus and tried to chuck them back into the Indian Ocean. If South Africa were opened wide to the hordes of India the black man would not stand a prayer. As it is, world opinion and the more liberal elements among the South African whites may eventually force an improvement in his lot—though it looks hopeless today.

"Americans don't know how to deal with natives"—(or "coolies," "niggers," "Chinese," "boys"). So the British have blandly told us and so also have the other breeds who have held colonial empires. But the fact is that we are the only dominant people on earth who *do* know how to deal with the human beings designated by the above disparaging terms. *Proof:* when we inherited the Filipino from Spain, we promised him forty years of education and help, then full and unconditional freedom; we made good our promise. Whereupon, when we needed him, he fought for us and with us, and is now our staunch ally and friend.

Compare this record with Indonesia, with Burma, with India, with Kenya, with Indo-China, with South Africa itself. The Hollander can hardly get a visa to the country he once proudly called "Holland in the East," the Englishman in Kenya sleeps with his rifle in his bed, South Africa is as yet free of "incidents" on any large scale but every South African knows that the natives are waking and listening and stirring, aware of Mau Mau to the north. It spoils the white man's sleep; it makes him careful to lock every door, every room, every cupboard; it makes him install flood lights around his beautiful Johannesburg home. It makes him very cautious on the streets of his own city at night.

He knows he is sitting on a powder keg, but he does not like to talk about it. He prefers to talk about how you must "handle the natives," how you "mustn't spoil them."

These "pukka sahib" laddies who know so much about "how to treat natives" fail to see the native as an individual. In the *Ruys* the South African passengers thought it was funny, ridiculous, a bit bad for our face really, for Ticky and I to bother to know the names of the Chinese crew members with whom we came in daily contact. Many of them (I inquired) did not even know the names of their own room stewards—said names being posted on little cards outside each stateroom door. As for the barmen or deck boys, they would whistle and shout, "Hey! Charlie!"

This attitude applied even more strongly to the Dutch officers. The Dutch once had the worldwide reputation of being the perfect colonials . . . until the Indonesians chucked them out. An engineering officer in the *Ruys* told me that he did not know the name of a single Chinese among his own engine room watchstanders; he simply knew which one was "Number One" through whom he bossed the others, nor did he know "Number One" by name. I inquired further and found that most of the Dutch officers did not know the names of their own room servants, although in some cases they had been waited on by the same Chinese for several voyages.

We sat successively with three Dutch officers in the course of the trip. As is usual aboard ship the same waiters would serve a table meal after meal, day after day. Yet the Dutch officers who sat with us seemed to find it amusingly odd, somehow undignified, and a rather startling exhibition of memory that Ticky and I always knew the names of the waiters.

They failed to notice that we got better and quicker service than they did, even better than the Captain got.

Of course, we weren't doing anything odd for Americans; I am not pinning a rose on myself. The usual run of American, if he eats twice in the same restaurant and draws the same waitress, will find out her name and call her by it thereafter. He may find out her name the first time, even if he expects never to eat there again, simply because he dislikes shouting, "Hey, you!" If he is served regularly by the same waitress or waiter he is certain to know the name.

This common American habit is not in itself democratic; it is just horse sense. I have emphasized it because, while it is a minor matter to us, simply good manners and convenience, it is a major, important, even crucial difference between us and most other Western white nations. Hell's bells, even a dog is easier to handle if you call him by name! Why can't these lunkheads see that?

The most important possession of any man is his own name. Without a name he has no face. The white man in the East has always emphasized the importance of keeping face himself, but he seems to have given little thought to the deadly danger of not giving face to natives.

In most other ways the South African white (or "European" as he always calls himself) is a remarkably pleasant fellow—jovial, sociable, warm, not at all distant with strangers, being much more like us than they are like the English in this respect. They tend to be somewhat anti-American in general, but not toward individual Americans. This anti-American attitude seems to derive first from a belief that we are stirring up a third world war (they have swallowed the Moscow line on that point), on a dislike for us as business competitors, and a generalized nationalism—South Africans are among the most nationalistic people in the world. They seem to dislike the English even more than they dislike us and speak of the day when they will divorce themselves from England completely—not "if," but "when."

This xenophobia takes the curious form with the Afrikander South African of tending to be a little surly with those who speak English instead of Afrikaans. The country is officially bilingual but a civil servant will be a lot more civil if addressed in Afrikaans—but he will be just as difficult about it with an English-speaking fellow citizen as with a foreigner.

This clinging to a national language spoken by no one else anywhere (Afrikaans is *not* Dutch, just as Pennsylvania Dutch is not German; it is a highly bastardized dialect derived from Dutch), this insistence on Afrikaans, is perhaps the most cross-grained symptom of their neurotic nationalism. Afrikaans is a language unnecessary and useless. It is spoken by less than two million people practically all of whom speak English as well—and English is spoken by more than a half billion people on this planet. It has no tradition worthy of the name, it has little literature; to use it for science or technology requires borrowing all the technical words from some other language. It requires almost everything in South Africa to be printed twice; it requires wasted years of study to acquire a second daily language, when the time could be spent learning Spanish or German. It has no use at all save to shut out the rest of the world.

Which is exactly what many South Africans, most particularly the Afrikanders, want to do.

Many of them want to make South Africa self-sufficient in all respects; the policies of the present government are aimed at making the country independent both in food and in manufactured goods. They still would like to sell, but they don't want to buy anything if they can possibly help it, and aside from the regrettable necessities of trade they wish the rest of the world would go away and forget to come back. Clinging to a language which no one else can talk makes it easier for them to maintain this attitude. Psychiatrists have a name for this symptom when exhibited by individuals.

But since they still need dollar exchange they advertise heavily in our country to attract American tourists, then their real feelings toward outsiders show up in making it exceedingly difficult for a tourist to be admitted. We ran into this same curious ambivalence in two other small, nationalistic and suspicious countries: Indonesia and New Zealand—plead for tourists, then treat them like convicts being processed.

Despite everything, it is an extremely pleasant country to visit—if your skin is the approved color. Cape Town is English in the very nicest sense, Durban is much like Florida, Johannesburg is like a boom city in Texas. The Johannesburgers show an American enthusiasm for the new, the big, the different, and the expensive; they speak of how much things cost and of the big operations they are in with the unashamed candor of a Texan or a Hollywood movie producer—they are so un-English that it is a bit of a shock to run across a cricket field there.

But most of all, the beauty of South Africa makes one gasp.

The *Ruys* was a very sociable ship, particularly with the South Africans aboard. There was a party of some sort almost every night; the ladies dressed for dinner and most of the men did, too, either in evening clothes or summer whites. On New Year's Eve there was, of course, an especially big party.

I was away from the ballroom floor for a few minutes to replace a dress shirt that I had melted down. When I returned, a tall, handsome man was kissing my wife. Gathered in his left arm was a plump blonde, apparently a reserve.

When Ticky was able to talk she said, "Dear, I want you to meet Sam."

Sam stuck out a hand—a third one, I think—and shouted, "Hi, Bob! Have a drink! It's my birthday." He was red-faced and his shirt had melted down, too, but he did not seem to care. There were three silver ice buckets each with a magnum on a table by him; I congratulated him, sat down, and started sopping up champagne. Sam sat down with us for a moment, then got up hastily. "I missed one! Be right back—" He dashed across the room, grabbed another female, and bussed her.

He ran down the whole female, first-class passenger list, plus the stewardess—who was not the usual old biddy, but should have been on an airline. I poured more of his champagne and hoped that there was no trench mouth aboard.

This was how we happened to drive across South Africa.

Sam invited us to do so with him about ten minutes later. The next morning it appeared that he had not forgotten it and really meant it. For the remainder of the trip to Cape Town we were bombarded with advice from other South Africans not to do so; according to them the Karoo Desert through which we would drive was unbeautiful, uninteresting, and unbearable in the summer; we would be hot, dirty, miserable, and bored—take an old hand's advice, son, and take the Blue Train, or fly.

At last I got a little huffy about it and told one of them that we would go with Sam if we had to walk, dragging our sled behind us; he had *invited* us, damn it, and that was more than anyone else had done! It shut up the talk but did not change their minds.

They were wrong. We enjoyed every mile of it.

We arrived in Table Bay early in the morning, as usual, and with the customary morning-after malaise from the Captain's Dinner of the last night. Even so, I found it possible to second Sir Francis Drake's logbook entry of 1580: "This cape is a most stately thing, and the fairest cape we saw in the whole circumference of the earth." The Cape of Good Hope is as lovely as its name.

Table Mountain, sitting over Cape Town and Table Bay, is a separate sight, some miles to the north of the Cape. The Table is a pleasing sight, but it is an ordinary mesa or butte, made exceptional by being the only one of its sort in the neighborhood, instead of being scattered around in quantity, New Mexico style. It forms a splendid background for an unusually lovely city.

My own first glimpse of South African life was of stevedores on the dock. They were resting and playing a finger matching game—a game which I had played the same way in school as a boy, which is pictured in murals in ancient Pompeii, which is played also by the Australian aborigines, and by Hawaiians half a world away from Cape Town. This may have some great anthropological significance; for myself I was simply delighted with the odd fact.

We were processed with exasperating slowness. It was long past lunch time before we were through customs. The customs examination was not outstandingly lengthy itself and we had Sam with us to smooth the way; the only mild hitch came over cigarettes. We had taken ashore the number which the regulations appeared to permit free of duty, but somehow we were wrong. I never did understand just how we were wrong, but it may have been that a single customs return for husband and wife was allowed one exemption, not two. In any case I was told to pay duty on half the cigarettes we were taking in for our personal use and I did so; the duty amounted to a hundred per cent.

In the mean time Ticky was poking me in the ribs and urging mutiny. Her ultra-free soul had already been tried that morning by some exceptionally silly immigration questions. "Don't pay it!" she whispered, loud enough to be heard back on the ship. "Tell him to go to the Devil! If they don't like it, we'll go back aboard and not spend a damn cent in their confounded country. We aren't even asking to take enough in to last us through—it's an outrage!"

The cost was not much but with Ticky it is always the principle of the thing—mere expense never fazes her. I hurriedly promised to skin her alive and sell her pelt and hustled her out of there. Sam and I closed in on her from both sides and marched her away while the customs officers pretended not to hear and looked smugly pleased. We found a taxi and headed up town.

The plan was to pick up Sam's car, load all baggage in it, then see Cape Town. Departure into the desert would be made at sunrise the next morning. We would sleep aboard ship, as there were no hotel rooms to be had in Cape Town, it being the tail end of the holidays. In fact there were no train or plane reservations to be had for the same reason; had we not stuck with Sam's offer we would never have been able to cross Africa while the ship went the long way around the coast.

Sam lived in Johannesburg and had left his car in the company garage of the Cape Town firm he represented in the north. We drove out to the plant and Sam left us with one of the company officers while he got his car. This gentleman was affable but I at once ran into something which seems to me to characterize the odd attitude of South Africans toward Americans. This man, whom I shall call "Mr. Smith"—he was not an Afrikander—said to me, "New York is filled with gangsters, eh?"

I silently cursed Hollywood for the distorted impression of the U.S. given to the world by the movies and answered as quietly as I could, "Why, no, I wouldn't say so. Most of that sort of trouble died out with the repeal of Prohibition."

Mr. Smith looked startled and said, "You misunderstood me. I meant the businessmen in New York."

It seemed to be an unanswerable remark. Sam arrived with his car at that point and saved me from having to cope with it. But I asked him about it once we were out of earshot. "What did he mean?"

"Oh, that—" Sam frowned and answered, "Nothing, really. It's just an expression. It means a man who is a good bargainer, aggressive. Almost a compliment."

"It did not sound like one."

"Well . . . some people aren't very tactful."

I shut up as Sam obviously did not like the subject. But I do not think the term was complimentary; I think it was a smear name used so habitually by them about us that "Mr. Smith" forgot himself. From this and other remarks I reached the conclusion that the notion that Americans are all gangsters in business matters is something that "everybody knows" in South Africa.

I am not an economist and I certainly shall not attempt to psychoanalyze an entire nation. But one does notice attitudes and there is always the itch to try to understand why. I confess that with respect to South Africa I could never figure out why . . . why the United States was regarded with a mixed aggressive-defensiveness.

The reasons why we aren't liked in many nations are fairly obvious and have been discussed too often to warrant rehashing here, but none of the usual reasons seem to apply in South Africa. The Union of South Africa is not even faintly communist, so that cannot be the source. "Dollar Imperialism" does not seem to be the trouble; while we have a little money invested there, you will not find American trade names spread around and American businessmen are conspicuous by their absence. We certainly have not displaced South Africa from world leadership, nor has South Africa experienced the sour taste of gratitude, either during or after the War—her role was more like our own, on a smaller scale.

It is true that we are the main bulwark (perhaps the only one) between them and conquest by Moscow, but they certainly do not seem to be aware of it, so they can hardly dislike us for that.

One remark we did hear repeatedly; someone would say that he would like to buy this or that, made in America, or would like to travel in America, but "—we can't get the dollars, you know." This remark was always delivered accusingly, as if it were the fault of the United States and of this American, myself, in particular.

We tried to point out that American goods were very nearly forbidden entrance to the Union by embargolike restrictions placed by South Africa itself; we got nowhere. As for dollars for travel in the States I pointed out that there was an open-market quotation for South African pounds on the New York market; their money was acceptable.

This last was greeted with a shake of the head. "Oh, no! Currency restrictions, you know. We can't get the dollars."

The currency restrictions are entirely those imposed by South Africa, not by us—but it is true that South Africans are not permitted to take outside enough money for much travel. (When was the last time you met a South African tourist in the States?) This is an odd status for the nationals of the world's biggest gold producer. South Africa mines over half a billion dollars in raw gold each year, almost half of the free world's supply and enormously more than we produce. Yet her gold reserves are small, her national debt is very large (proportionately about the same as ours), and her currency is "soft" and is kept near par by drastic exchange regulations.

The conventional answer is that they are helping England, an answer I don't understand as there is no love lost between Dr. Malan's government and England. The conventional solution offered by South Africans is that it is up to the United States to do something about it, to wit, devalue the dollar.

I was first tackled on this subject as soon as I boarded the *Ruys;* a Johannesburg businessman and financier asked me how soon I thought the United States intended to raise the price of gold? I answered in some surprise that I did not know it was in the wind.

He seemed startled at my answer and made it clear that he thought it was a certainty; the question was when? Later I heard him discussing my answer with another Johannesburger; my answer seemed to worry both of them.

This subject came up again some weeks later with an entirely different group of South Africans. Ticky and I were invited to have a drink with this group; the moment we were seated we were tackled bluntly and aggressively: "Why doesn't your country buy our gold production at sixty dollars an ounce?"

The tone was truculent; I could see that I was already accused, tried and convicted. But Ticky took over. "Why *should* we?"

"Eh? It's obvious. You can't expect us to buy your goods if you won't buy our gold."

"We *do* buy your gold . . . all of it you offer to sell, at thirty-five dollars an ounce."

"But you ought to pay more. You ought to pay sixty dollars an ounce."

We had heard this a wearisome number of times; Ticky rapidly reached her flash point. "Why should we? You wouldn't buy our goods if we did so; you've rigged your laws to shut us out. What sense is there in digging gold out of Johannesburg, us paying you sixty dollars an ounce—and then sticking it back in the ground in Fort Knox? What's sensible about that? If you don't like the gold price of the dollar, why don't you keep your gold and go on the gold standard yourselves? Then you could set the value of your pound at anything you wanted to and it would be hard money, at least as hard as the dollar. You could buy anything you wanted with it anywhere. That's all it takes; just quit complaining about the price of the dollar and go on the gold standard yourself!"

There was a shocked reply amounting to, "Oh, no, we couldn't do anything like *that!"*—as if Ticky had said something in terribly bad taste. No counter argument was offered and the group broke up with considerable chilliness on both sides.

I know that Ticky is not much of a theoretical economist and neither am I, but it does seem to me that there was more hard sense to her side of the argument than to theirs. I am not going to go into a discussion of the merits, demerits, and effects of devaluation, inflation, etc.—but I can't see anything in their argument but greed. It seems to me, too, to be a greed that is utterly reckless of the consequences on others; I may be wrong but I suspect that sudden devaluation of the dollar at a time when all other currencies are keyed to it might set off the biggest crash in history.

But this curious delusion that we are deliberately and wrongfully withholding their lollipop, from sheer meanness when we know better, may be the key to the oddly ambivalent attitude that we ran into all through South Africa. They have cast Uncle Sam simultaneously in the roles of Santa Claus and of the Devil.

After we left the factory of Sam's firm he dropped us downtown; we set out to do some sightseeing. Time being limited I hired a taxi—a licensed guide and tour car seemed unnecessary since it was an English-speaking city. Taxis park in the middle of the street in Cape Town; I located one and asked the driver for a rate by the hour.

There was no rate by the hour, only by the mile . . . so I told him what we wanted to do and asked approximately how much it would cost by the hour. His answer indicated that we would probably cover twenty to thirty miles in city driving in an hour, which seemed reasonable, so I hired him, telling him to drive us around the city and point out the sights to us.

Thereafter we got just one piece of "information" out of him; I asked him how many people there were in Cape Town. He said that he did not know exactly but it was somewhere between eight and nine million. I did not argue but contemplated the beauty of it. Cape Town is actually a little over half a million and looks smaller, as much of the city is spread out down the Cape peninsula in formerly independent communities. The downtown part in front of Table Mountain has a lazy, sleepy quality more suited to a much smaller community and the suburbs are garden villages—the whole city is lovely.

Our driver immediately thereafter lost all command of the English language. Instead of driving us inside the main city he hunched over his wheel and tooled his car out into open country as quickly as possible; once on the open road he stepped his speed up to about sixty or better and held it there. Protests had no effect.

Having dinner in mind, I had set a time limit of two hours; he delivered us back into town and to the gangway of the *Ruys* exactly on time—having accomplished the maximum mileage possible without fatal accident. I paid the exact amount without a tip. But I was unable to be really angry at the trick he had played on us; by pouring on the gas and running up the mileage he had managed to take us all around Table Mountain and far down the Cape on a tour which we had reluctantly decided to forgo through lack of time. As it was we saw almost everything usually covered in a leisurely full-day tour.

But the scenery certainly whizzed past.

What we could see of it looked good. There are beautiful homes and gardens in the hills back of Table Mountain, fine bays and beaches and impressive formations, in particular the Twelve Apostles on the Marine Drive down toward Hout Bay on the Atlantic side; these are a dozen rugged mountain bastions facing the sea which might be apostles or anything else but are worth seeing. As we swung across the peninsula to return we had our first view of the Indian Ocean.

On our way back to the ship we passed a Dutch windmill, a relic of early colonial days. Many of the houses in Cape Town show Dutch gables, a particularly ungraceful architectural conceit which is loved uncritically by the local gentry for its historical associations. Cape Town was originally settled by the Dutch as fortress and revictualing station for their ships sailing to the Indies; it was not intended to be a colony at first. It changed hands several times but the principal settlers were Dutch burghers and their slaves. As a result of the Napoleonic Wars the English moved in and hung on; freeing of the slaves, the famous Voortrek north, the creation of new states, the Boer War, and today an independent nation muttering about seceding from the Commonwealth all followed the advent of the British almost as historic necessities. It would be a deceptive oversimplification to say that the Afrikanders hated the British for freeing the slaves and are still sullenly determined, a hundred and twenty years later, to hang onto slavery—but this abstraction has an element of truth in it.

We arranged with the night steward in the *Ruys* to be called at four A.M.—a horrid hour—and asked could we *please* have coffee, or at least tea. A few minutes after we were called there came a knock at our stateroom door and there was, not the night duty man, but the incomparable Kwai Yau, bearing a big tray. He had decided that we should not start off without a proper breakfast and had gotten up even earlier than we had to prepare it for us. If Kwai Yau were not about fortyfive, with a home and family in Hong Kong, I would like to adopt him.

So we started out feeling merely a bit short on sleep instead of feeling three days drowned. It was not necessary to go through customs (which was not open then anyhow) since our baggage was all ashore; we merely had to present our gate passes and breeze on through. The early morning was chilly even though it was midsummer, January; Ticky had worn a coat. I had seen without noticing that she looked a bit lumpy in it.

Once outside the guarded gate she began shedding cigarettes. She had tucked packs of them all over her person; the number totaled exactly the number we had been required to pay duty on the day before. I looked on helplessly, then turned to Sam. "We seem to have a smuggler. Want to turn around and turn her over to the guard?"

Sam grinned and answered, "No time this morning. Some other time."

"I am *not* a smuggler!" Ticky insisted. "This is just the legal amount that I was entitled to, only you let 'em gyp us."

"Look, darling, the law is what the local authorities say it is, not what you decide it is."

"I wasn't going to let them clip us!"

"Why in the name of habeas corpus would you risk jail for a few shillings? You wouldn't like the food. If I ever get you safely back aboard the *Ruys* I'm going to put a collar on you and chain you to your bunk!"

She stuck out her lower lip and said nothing, so the discussion ended. Deep in my heart I felt the same way about it she did, but it is not good to encourage lawlessness in Ticky; she is too ready to slug policemen at any time. The spirit of anarchy on which our country was founded shows gene reinforcement in her . . . if it is a genetic factor, as I strongly suspect it is.

We passed the statue of Jan van Riebeeck, founder of Cape Town, and headed across the sand flats that connect the peninsula with the mainland. Along here are slums, shanties called *pondokkies* lived in by

"Capies" or Cape Town mixed-bloods. Cape Town itself seems to have no slums, for the reason that the natives and the "coloureds" live outside. This is a standard South African pattern; near every white city is a dreadful place called a "location" assigned to non-Europeans, where they may live out of sight of their legal betters.

After the flats we came to some lush farm land, then only twenty miles or so farther on we started up Du Toit's Kloof (or cliff), a steep climb up and over the mountains. Sam had a new Pontiac and was a skilled driver; we sailed up and up, through clouds and around sharp bends surrounded by fine rugged scenery. For the next fifty miles we seemed to be in Colorado.

Then we burst out of the last pass and into the desert—and had I been dumped there without warning I would have identified it as Route 66 through New Mexico and Arizona.

The only evident difference was that we drove on the left side of the road. Beside the road was a railroad that should have been the Santa Fe; around us was arid open range and distant buttes. We stopped at Laingsburg, one hundred and seventy miles from Cape Town, for a second breakfast. It was still only nine A.M. but it was already quite hot. Laingsburg looked like any of a hundred small highway towns in our southwest, with Bantus substituted for Indians.

The restaurant was no better and no worse than we would have found in the New Mexico counterpart; lamb chops and eggs and toast and coffee were substantial and well-enough cooked. Ticky reported that the ladies' room in the garage was spotless, as was that of the men—I mention these two points, cooking and rest rooms, because both were satisfactory-to-excellent all through South Africa, whereas they certainly were not in countries we had yet to visit.

The car had been parked in such shade as could be found but was boiling hot to enter nevertheless. Once on the road we were quickly comfortable. I shall mention no more about the heat nor the appearance of the desert; driving through the Great Karoo is precisely like driving from border to border across New Mexico and Arizona, minus the Painted Desert and the Indians. Some people cannot stand the dry desert heat in either desert. I like it.

The differences lay in *fauna*—the desert flora looked familiar, even to yucca under another name. I suppose the varieties were different and many of the species, but from a car window these were not noticeable to me—I can tell an oak from an elm, but just barely.

But African *fauna* are unquestionably African. Even the cattle are different, most of them being Afrikander cattle, a breed almost as rangy as a longhorn but without quite so much spread to their horns. Each of the cattle had two companions—tick birds.

There are two entirely different birds in South Africa known as tick birds. One is a little brown fellow about the size of a robin which you will see mostly in the bush, crawling over deer and searching for ticks, as busy as a pup in a flower bed.

The tick bird of the rhinoceros may be a third sort; I'm not sure. But the most prominent feathered friend called a tick bird is what we would call a snowy egret. Yes, I mean the bird which, if you are caught with its plumes in the United States, the Man puts you in jail and welds the lock solid. They may be a slightly different variety but the difference would matter only to another egret. (I may be weak on botany but I once won a prize for identifying birds . . . another bird guide.)

The pastures in South Africa are cluttered with white egrets.

They have the silliest way of behaving of any bird I ever saw (except possibly the Magnificent Bird of Paradise of Australia; we'll get to him later). The egrets stand guard over the cattle, two to each beast, one on each side and facing forward at attention, solemn as sideboys and perfectly motionless. They look as if they had each been assigned to that post by the sergeant of the guard and did not dare stir until relieved.

They are an unbelievable sight when first seen and they are still impressive after one gets used to them—which one does, for there appear to be exactly twice as many tick birds as cattle in South Africa and there are an awful lot of cattle. These tick birds introduced us to a springbok whom I will always cherish.

The springbok is a type of gazelle which is the national symbol of South Africa. Almost everything there is "Springbok"—the national airlines, a chain of theaters, the trademark of the government tourist corporation, their national teams in sports, almost anything you might expect except their Boy Scouts who are "Voortrekkers" instead. Springboks used to be exceedingly numerous; now they are common but not in the great herds they used to exist in. I heard a story about this which sounds incredible but which is told soberly: the springboks are alleged to have committed a lemming-type of mass suicide . . . poured out of the bush in countless numbers, pressed on to the Indian Ocean, waded in, drank sea water, and died.

If this is true, it is at least as hard to explain as any of Dr. Rhine's ESP researches. In any case, springbok are now not so numerous.

Our first springbok came to our attention through watching tick birds. I had kept my eye on them because I could not figure out what they did for a living. Their passion for standing sentry by cattle did not seem to fill the craw; we never saw one stop to eat, not once—yet birds have a very high metabolic rate and must eat, early and often.

We had crossed the Orange River into the Orange Free State late that first day and were in green, fenced pastureland rather than open, arid range; cattle were more numerous and so were the egrets. Suddenly Ticky said, "Look!"

A springbok had jumped the fence and was mingling with the cattle, off the road to the right. Sam slowed to a crawl and identified it for us. But this creature had not crashed the party to enjoy the superior salad inside the paddock, oh, no! He was a practical jokester and he was there for the sole purpose of chasing the birds. He would advance in a series of graceful leaps, duck his head and butt an egret; the bird would squawk indignantly and fly away.

He did this again and again. The cattle went right on grazing and the other tick birds each stood fast, staunch as the boy on the burning deck, right up to the horrid but inevitable instant when it was fly or be knocked silly. The springbok cleaned the silly creatures out of that pasture, then jumped the fence again and trotted away, perhaps in search of more tick birds.

We asked Sam if they always behaved that way. He said that it was the first time he had ever seen it in all the years he had been traveling commercially along the highways of the country. We concluded that this our favorite springbok was a deviant, as exceptional and as touched with genius among his sort as was Mark Twain or Thorne Smith among us.

The Southern end of the Karoo is very dry and is sheep country. A little farther north the range improves and is cattle country. With the cattle come the tick birds and, as the country gets greener, more wading birds, storks, cranes, secretary birds, and others. There were ostriches, too, but I believe that all we saw of these were domesticated. Much of the land is ruined for farming by termites; their hills are often so thickly clustered as to turn otherwise level ground into badlands. The hills come in three types, tall church spires up to a dozen feet high, little mounds the size of a bushel basket or larger, and big mounds which are almost small hills or *koppies.* The dried mud, after having been chewed by the white ants, is a concrete too hard to break with a plow and apparently not soluble in rain. If the Martians ever have to decide who really owns Africa they will probably award it to the termites on adverse possession.

We stopped for tea at Colesberg in Cape Province just short of the Orange River. This town did not have a U.S. southwest appearance but was much like a county seat in Iowa or northern Missouri. From there on through the Orange Free State and across the Vaal River into Transvaal the country was green and lush, like the best of our farm land in the middle of our country. Having traveled more than six hundred and fifty miles we stayed that night at Bloemfontein, capital of the Free State and site of the famous Harvard Observatory. As usual, Sam seemed to know all the girls there; we had stopped several times on the way up to greet his female acquaintances, once right out in the middle of the desert when he spotted a familiar female face back of the wheel of a car coming toward us at a relative speed of a hundred thirty miles per hour. I was gathering the impression that Sam managed to stay a bachelor only by being constantly on the move.

The hotel was delightful and modern in equipment, but old enough to have fine, big rooms and ample baths. In South Africa they do not think a request for a private bath an eccentricity and are prepared to satisfy it. By request, a Bantu knocked on our door at five-thirty with tea for an eye-opener; this is an English custom we would do well to imitate on mornings requiring early starts. It is more effective than a cold shower and much easier to take.

Unfortunately my eyes were not open when the knock came. I forced myself out of a warm bed, grabbed blindly at my robe, and in so doing snatched my glasses off the night table. They hit the floor with a pretty tinkle of broken glass.

I am the sort of person who needs to put on his glasses in order to find his glasses. Being so dependent I am not careless enough to travel with only one pair, but a second pair had been broken the day before during our wild ride around Table Mountain; I was rapidly reaching the point where I would need a little boy to lead me around.

I turned to Ticky, still snug in bed, and said, "Now see what you've done!"

She raised her head and blinked at me. "You spoiled the loveliest dream—I was home. What country is this? And what have I done?"

"Africa. I've just broken my other glasses."

"Poor baby! Poor stupid baby . . . how did it get to be Africa?"

"I don't know. If you had gotten up and answered the door like an ever-loving wife, I wouldn't have busted them."

The polite knock came again. "You're the one with one slipper on and a robe partly on," she pointed out. "You can bring me tea in bed and after breakfast we'll see what can be done about your glasses."

Some women are heartless. I brought her tea in bed, then took a look out into the corridor. Sam's shoes, freshly polished, were outside his door and so was his tea; the night man had been unable to wake him. I kept at it until I woke him, along with everyone else in the corridor, then went back and gulped my tea and felt sorry for myself.

I told Sam about it at breakfast. "Do you suppose we can find a dispensing optician? Our schedule is so confounded tight that I'll have to get them fixed on the fly; the *Ruys* sails for Singapore the very afternoon we reach Durban."

He frowned thoughtfully. "We would have to waste more than two hours here until one opens, when we ought to be chopping a hundred miles off the road to Johannesburg—it's still more than three hundred miles. Just how bad off are you?"

"Not too bad for the moment. I still have an old pair left, with an obsolete prescription I can get by with. But I hate to think of all those weeks to Singapore with the wrong specs. Look, let's find an optician in Johannesburg and I'll have him airmail them to Durban."

"Today is Saturday. I think they'll all close at noon."

"Lordy! Any chance we'll make it by noon?"

"I doubt it. Possible . . . if we all lean forward all the way."

"Then let's lam out of here and get rolling!"

"Finish your coffee and quit worrying about it."

I sighed. "You've got twenty-twenty eyesight. You don't know."

"I said not to worry. I'll get my girl friend to take care of it."

"Huh? Which girl friend? Be more specific."

"The one in Johannesburg."

"Only one in Johannesburg? I thought it was a big city."

"Don't be rude, dear," Ticky advised me. "Sam is trying to help you." She turned to Sam. "He's a beast at this hour, Sam, but useful once the sun is higher."

"I wasn't being rude," I objected. "I just thought Sam made them queue up and show a priority. I admire him. I wish I were like him."

Thereafter the conversation rapidly went to pieces as Ticky tried to make logical her assertion that she thought Sam was wonderful but would break both my arms if I tried to emulate him. We let it rest that Sam would ask his girl friend, serial number one, class Joburg, to have the glasses repaired in time for us to pick them up on our return to the city en route to Durban. I felt very happy over the whole thing; my megrims rarely last past breakfast. I have a sweet disposition and children love me.

During that morning we gradually got into more densely populated country. It was still farm country, but with more cropping and fewer range animals. Wild life almost disappeared except for an occasional meerkat (or "mierkat" or "meercat," take your pick). This little mongooselike critter loves to streak across the road just ahead of cars. Too many of them don't quite make it; we saw their pitiful little bodies oftener than we saw the grey blur that marked where one had just been.

As we got closer to Johannesburg we saw an occasional mine tailing among the farms. The Witwatersrand gold field is the richest gold strike in history—possibly the Incas had something better; if so, it has been lost. It is an underground reef of gold at least sixty miles long and is regularly showing new and unsuspected wealth. Some of the mines are down more than half a mile below sea level, nearly two miles straight down from the 6000-foot plateau on which the Golden

City rests. At those awful depths you can put your ear to a rock pillar and hear the stone creak with the incomprehensible weight resting on them.

We arrived in the city proper about one o'clock, too late to find an optician open, but I was no longer worried. We looked up Sam's girl friend, Ida, who was a tall, supple, blonde creature and a professional model, and Ida's sister Laura, who was tall, supple, and brunette and should have been a model but was not, through some oversight. Sam's plan worked out save that it was Laura who took my problem in hand and agreed to see to it that my two pairs of spectacles were repaired. After that they took us out to see the city.

Johannesburg is a seething million people today, where only seventy years ago were only fields of mealies. The town is booming more than ever and buildings are shooting up as in Sao Paulo. It looks like a mixture of Pasadena and Hollywood, with beautiful gardens, fine parks, and one of the world's most nearly ideal climates, its elevation keeping it from being too hot and its location only a few miles below the Tropic of Capricorn insuring that it is never cold. Its wealthy whites, of which there are many, run to private swimming pools, garden parties, and swank country clubs.

More than half, about six hundred thousand, of the population is non-European, Bantus and a smattering of East Indians. The Hindus are the retail merchants; an "Indian store" is anything from a country general store to a fashionable downtown department store. (We saw a sign in one: "Dogs and barefooted people are not allowed on the escalator.") The gold industry employs about 300,000 of the blacks, most of whom are contract laborers whose families, if any, have been left back on a reserve and who themselves live in barracks near the mines. Most of the others live in the native locations outside of town. These locations are sometimes shanty towns and are sometimes rows of mass-built little one-room boxes, grim and kennellike.

Some of the native population simply drift on the town, without visible occupation or residence. Their presence there is illegal under the *apartheid* laws and the police and the courts are constantly catching them and imposing sentences which have the effect of forcing them to hire out to the farmers, but they are as elusive as smoke and there are always more to replace those caught. These are natives of what anthropologists speak of despairingly as "fringe" culture, no longer of their ancient culture, not yet part of the new. These drifters have the whites constantly worried. It is not safe to park an automobile in downtown Johannesburg in broad daylight with all doors and windows locked, unless a constant watch is kept on it. The drifters working in pairs, one with a polish rag as camouflage and the other with a tire iron or other jimmying tool, will break into it and loot it, right under the eyes of a crowd of people on the adjacent sidewalk.

At night the streets of Johannesburg are not safe.

We were surprised to see black policemen there. However they are intended only to restrain their own race, they are not armed, and have conditional authority to arrest a white man only under extreme circumstances to prevent immediate violence and then only until a white policeman can be summoned. I never heard of one doing it, even so.

Despite the black cloud of potential racial trouble brooding over it Johannesburg deserves its name of the Golden City. It is young, beautiful, lusty and cheerful. From the many high points in the city you can see that it is surrounded by hills of brown mine tailings, which grow even faster than the constant efforts to plant and garden them. Its white homes are luxuriously beautiful and its downtown district is as modern as any and made exotic by Bantus of both sexes and many tribes in savage splendor only a little modified by white customs—the women cover up a little more but it is not unusual to see a "blanket" man who refuses to wear trousers of any sort and covers up his nakedness with a large blanket. The natives are free to come into the retail area to buy during daylight; curfew must find them out of town, or in the quarters of their white employers.

We were to leave that evening early for the big game country and had to pick up a railroad ticket. I had attempted to make a round trip reservation for us from Johannesburg to Nelspruit and return while we were in Cape Town; a telegram received in Johannesburg confirmed the trip out but not the return trip and advised me to pick up the ticket at once.

I discovered that buying a railroad ticket in South Africa is considerably more complicated than getting married in Nevada. But my good angel, Sam, got me through it.

First we went to the city railroad station, an enormous place suited to the busiest railroad junction in the country and a city of a million. However, over the weekend it closes like everything else, even though the trains still run. All the ticket windows were closed but I had been told to go to the "Emergency Booking Office"—in South Africa, buying a train ticket on a weekend is classed as an emergency.

We managed to find it hidden away far from the main hall. There was a clerk there, doing nothing, and he had a record of my reservation but was disinclined to issue it; instead he lectured me on doing things properly. I tried to explain the circumstances that had forced me into the course of action I had followed, but Sam stepped on my foot and addressed him in Afrikaans. With great deliberation and reluctance he issued, not the ticket, but a document which authorized me to go to another part of the station, knock on a door, and ask another clerk to sell me a one-way ticket; he refused to sell me a return, on the grounds that I should have gotten there sooner. Two processes took the best part of an hour—the railroads are government-owned, of course, and have no competition other than from other government-owned bus and air systems.

We then rejoined Ticky and Sam's friends. Sam warned me that we must be down at the train at least thirty minutes before train time—forty would be safer. I wondered why, since we had tickets and a sleeper reservation; I did not understand the explanation but we took his advice, which was excellent. Instead of being able to go directly to our car it was necessary first to push through a crowd gathered around a bulletin board on which was posted the train's diagram of reservations; from this we found out where we were supposed to be. Then it was necessary to look up the conductor of the train on the platform, check in with him and have some more mysterious paperwork done, a lengthy process since a couple of hundred other people also wished to see him for the same purpose. We got aboard just barely in time.

I had time while waiting in queues to ponder the purchase of two tickets in Chile for a train ride of the same order of mileage—much shorter in time because Chileno trains run very much faster than South African trains (the crack Blue Train, the limited from Cape Town to Johannesburg, averages a dizzying thirty-seven miles an hour). In both cases we had been dependent on the kindliness of a local citizen to catch the trains at all, but under Chileno rules Mr. Thackeray had purchased our tickets in about seven seconds and had had us actually aboard in another fifteen seconds whereas Sam, sophisticated in the red tape and knowing the inner-sanctum language, had been forced to waste two hours of his time in two trips to get us on a train for which we already had made reservations before his efforts commenced.

As I recall, the Chileno railroads are government-owned, too—at least they operate without competition. On the whole, their equipment is poorer than that of the South African railroads. I am forced to the conclusion that the difference lies in the people, in some fashion.

At the steps of the train Sam kissed Ticky good-by and I kissed good-by both Sam's (Joburg) girl friend and her sister Laura, which made me one up on Sam for the first and last time. In a country that had polygamy those two sisters would make a wonderful package deal.

We sat down in our compartment as the train pulled out and proceeded to munch sandwiches that Sam had purchased for us in lieu of the dinner that we had not had time to get. The train had a quaint

1890 elegance about it, carved woodwork and pictures on the walls. The roadbed had been left over from 1890, too, although I've encountered some on the Main Line of the Pennsylvania which was equally bad.

The compartment was of a sort known as a "coupe," a wide seat for two running thwartships which could be opened out into two narrow single beds, one above the other. After a while a "coloured" came around and rented us bed clothes (they don't come with the ticket) and made up the bunks, which left no room for baggage or feet, so we went to the dining car, which was nice in the same out-of-date style; there we had tea and killed time.

Couples are located over the truck, the middle of the car containing compartments big enough for the largish Afrikander families. The location heterodynes with the roadbed to produce an exciting but not restful ride. Nevertheless we dozed until the attendant showed up with morning tea. I brushed off a blanket of coal cinders and looked out. At last we were in the African big game country.

The countryside along the tracks looked remarkably like Illinois.

Ah, the romance of the safari! Stalwart native porters, their ebony bodies glistening with sweat, lift up their burdens, balance them on their heads and set off single file through the bushveld. The professional white hunter, bearded and taciturn, scouts ahead, ready to bring down meat for the simple evening meal. Suddenly the number-one boy, his eyes popping, trots back to your spot in the safari. "Bwana!" he cries. "Come quick! Simba!" You rush silently forward, followed by your gun bearer. The beast—

You can do it this way, if you want to. The tourist companies will probably conjure up the ghost of Allan Quatermain, for a price. There are porters to be had in Africa and professional white hunters as well; you can have a safari of any sort you want, even one with artificial refrigeration.

But if your object is simply to get into big game country, the more usual way is to pick up the phone book and look up "Southern Cross Safaris" or some other of the safari companies. They will send around a car for you, of the largish sort used by airports which have a baggage rack on top; a uniformed driver will drive you out to the bush and keep you and the other tourists out of trouble with the dangerous animals. This is known as a safari.

Another way is to hire a taxi and go out on your own. This is what Ticky and I did.

There is nothing wrong with hunting lions in a taxi. I'm reasonably certain that Allan Quatermain would have preferred it to his six-span teams of "salted" oxen; it is faster, cheaper, and much more comfortable. At the railroad station at Nelspruit we hired a taxi, driven by a mother of three, an Afrikander farm wife. I can neither spell nor pronounce her name but it was something like "Morgan."

She took us to a hotel for breakfast, went home to feed the baby, then came back and picked us up and we went out after lions, in a "Henry J." American cars are preferred for the bush, as the roads are not really roads but tracks, and the superior ruggedness of any American car, even a little Henry J., is much appreciated. Nelspruit is the nearest town to Kruger Park, which is the place to go if you simply want to see animals and not kill them. Kruger Park is 8000 square miles of everything, from lions to elephants; it runs from the Crocodile River north to the "great grey-green greasy Limpopo River all set about with fever trees" where Kipling's Elephant's Child got its nose stretched for its 'satiable curtiosity.

It was a pet project of Oom Paul Kruger, who feared that the strange and wonderful wild life of Africa might be killed off entirely by hunters not content with a trophy or two, but who would often kill two or three hundred beasts in a day. The whole world can praise him for his foresight; here is a place where a hunter could kill a thousand head in a day if his shoulder could stand the shocks. Kruger Park has in quantity every major animal for which Africa is famous except the rhinoceros—and rhinos are preserved in another park farther south.

An hour's drive over good paved roads brings you to the gate of the park. Inside there is no pavement, nothing has been done to tidy up the bush (we would call it "jungle") save to cut tracks and to build widely separated rest camps with kraals to keep the lions out at night. The route to the park is through Swazi farm country, between fields of mealies and grass huts. Piccanins are beside the road here and there; as our car approached they always started dancing, a sort of a Charleston combined with shoving the arms in and out as if rowing strenuously. We stared.

"Why do they do that?" I asked.

"Oh," said Mrs. Morgan, "it's a welcome. They don't see many people out here, you know, and when one does show up they dance for him to show they are glad to see him."

We entered the park, paying a few shillings for the privilege, and started searching, driving slowly and always staying in the car as required by the rules. Almost at once we saw our first game, a buck kudu, which is a big fellow of the antelope type, with stripes, a goatee, and fantastic twisted horns. After that bucks of various sorts (and does and babies) came thick and fast; frequently we had to stop the car to let a herd of thirty or forty impala yearling bachelors wander across. The impala, pretty little things about the size of our eastern deer and very slender and graceful, were most numerous, but we saw a dozen other sorts, among them the crossword puzzle gnu, better known in Africa as wildebeest, which looks as if it had not been able to make up its mind whether to be a horse or a cow, got discouraged and decided to be a mule. It is remarkably untidy in appearance.

There were delightful little duikers, too, antelope the size of a fox terrier, so fragile in appearance that you want to pick them up and take care of them.

I was searching the grass on each side for lion; bucks are all very well but I had come half around the world to see lions, wild lions in the bush. I had been warned that it was the wrong time of year and that I could stay three weeks and probably not see one, but I was hopeful, even though braced for disappointment.

The way to look for lions is this: look at every one of the smaller, rounded termite hills that you pass. If it raises its eyes and looks back at you, don't get out of the car; it's a lion. So far I had seen hundreds of termite hills the right size and color but none that stared back. Ticky was watching ahead; I heard her shout.

"Lion?" I asked hopefully.

"No—*look!"*

Crossing the road was a warthog mama, followed in single file by four of the ugliest and cockiest piglets ever, each with its tail straight up in the air. Mother was a Miss Africa among warthogs, with fine curving tusks and a wonderfully misshapen figure. We watched them until they disappeared in the tall grass and nothing could be seen but mama's proud tail like a little flag.

Ticky spotted the first baboon, too, a big bull sitting up on a bare limb about ten feet off the ground—a lookout. Each baboon family posts a guard, against leopard primarily as the lion prefers venison.

Leopards are tricky things, rated by the great professional hunter Mr. J. A. Hunter as the most dangerous animals, worse than lion, elephant, or African buffalo. They will enter a car to attack a man, which the lion is most reluctant to do; every time we passed under a branch Mrs. Morgan made us roll up all windows, sweltering hot though it was in the thick bush.

Ticky spotted three more baboon lookouts, all in similar positions on bare, medium-high branches, while I continued my termite-hill check. A baboon can outdistance a leopard in the trees, given a fair start, even though the leopard climbs like a house cat. I had just looked up to admire one of Ticky's bull apes, then looked back at another termite hill.

This one looked back at me.

"Stop the car!" I gasped. *"Lion!"*

Sure enough, it was—a beautiful, black-maned male, about forty yards from the car. It lay still but never took its eyes off us. When I could stop trembling I got out the field glasses, and gave them to Ticky—after taking the first look myself.

Forty yards split by a magnification of eight is five yards through the binoculars. It brought him so close we could see the yellow stains on his teeth when he yawned. I am prepared to swear on a stack of Baedekers that a lion in the open is *much* bigger than one behind bars. I don't think it was entirely my excitement, either; I think they probably grow bigger out where they lead a normal healthy life—for a lion, not for impala—with fresh meat and enough exercise. I can't prove this but I think it is true.

Ticky handed the glasses over to Mrs. Morgan, then said, "Hey! There's his mate."

And it was. In plain sight, not ten feet from the male, was a lioness, also lying in the grass and watching us. We had been so intent on our first lion that we had not looked. "Maybe there are more around," Ticky said nervously.

"You look—I gotta get a picture of this one—these one—both of them." I did so and she did so, reporting that none of the termite hills on her side were staring at her. Lions do stare with the unnervous steadiness of one who is utterly self confident. I took the picture . . . and it turned out badly; not only was the distance too great for the only lens I had but apparently I was shaking like a bride, even though my own recollection is that I was cool, calm, and dignified. I now find it necessary to tell my friends when I show it: "It really is a lion—it just *looks* like a brown ant hill."

I realized at the time that the grass was preventing me from getting the picture I wanted so I did something that I certainly should not have done, something quite properly forbidden by the government of South Africa: I shouted at the beast.

The results were pretty good. The male raised up and started lashing his tail slowly and forcefully, while measuring with his eye the distance between us. But I did not get my second picture; Mrs. Morgan let in the clutch and we scrammed out of there. She did not scold me for it at the time, but she put all speed onto the car possible. Later she told me about lions, balked at getting inside a car, which had clawed all the tires to shreds, including the spare if exposed. I had no suitable comment.

When we were a short piece down the road and it was evident that *Felis Rex* was not following she slowed down again. Then I pulled one of the longest doubletakes on record: "Hey! That really *was* a lion!"

"Of course," Ticky said coolly. "That's what you came for, wasn't it? Who did you think it was? Bert Lahr?"

Then she stuck a match in her mouth and tried to strike a cigarette. "There was a lion," I said slowly. "There were two of them.

They were *lions."*

Shortly I was puffing a cigarette nonchalantly myself and feeling very good about it, as if I had just won a Pulitzer Prize. They said we couldn't find lions! Francis Macomber Quatermain can find lions any day—just step off the train and flag a taxi. When we rounded the next curve and saw a car stopped and people outside it I leaned out and said, "Don't look now but there are two lions just back down the road a block or so."

A man looked up from an open bonnet. "Thank you," came a clipped British voice, "but at the moment my engine is overheated. Tell them to wait; we'll be along shortly, I hope."

We drove on.

No more termite hills stared back at us that morning, though we stared at plenty. But one more alarm took place: I had grown used to the routine of rolling up windows for every overhanging tree and was not especially surprised when Mrs. Morgan started rolling them up once without taking time to stop the car. I looked around, saw that there were no such trees. "What's the matter? Leopard on the ground?"

"Mamba!"

I was too ignorant at the time to be impressed. A green something slithered rapidly down out of a bush beside us and slid across the road with amazing speed—a snake more than six feet long and as thick as my wrist. Even in my ignorance it looked mean. Mrs. Morgan got us well out of the neighborhood as fast as the little car would go.

The mamba is the subject of many grisly stories in the bushveld country, most of them depressingly well authenticated. Its bite is much more poisonous than that of our rattlesnake; seven minutes from being bitten to death in agony seems to be about the average. If struck, you may possibly save yourself by taking a bush knife and whacking off, without any delay at all, the bitten hand or arm or foot. Worse still, this snake is not the peaceloving gentleman the rattler is; it seems to like to kill and it is terribly fast; a mamba has been known to chase and catch a man on horseback, strike from the ground—and kill him.

The Afrikanders seemed very casual to us about the big carnivores; they are not casual about mambas.

We had lunch at a rest camp called Skukuza—tea and sandwiches served by a barefoot black giant who called me "Mahster"—a custom I was never able to get used to. Inside the kraal at Skukuza we saw two large dead trees which nevertheless appeared to be loaded with fruit. A closer look showed that the "fruit" were birds' nests, nests of the weaver bird which constructs a nest not unlike that of the Baltimore oriole. But, unlike the oriole, these birds are destructively sociable; once they pick on a tree, it is doomed; they turn it into an avian slum, building so close together that the tree dies. There is probably some deep moral lesson in this but my philosopher's license has expired.

During lunch it started to drizzle, which depressed me until Mrs. Morgan pointed out that rain would bring the game out; on a hot dry clear day the animals tended to hide in some shady cool place and wait for sundown. Sure enough, we saw more game than ever, mostly varieties of antelope, including eight of the rather scarce water buck, more kudus, roan antelope, wildebeest, eland, the lovely little duiker, and enough impala to cause traffic jams. We were rather bored with impala by now, pretty as they are, but we searched each herd carefully for zebra, as zebra have a habit of hiding themselves among impala in order to evade the lions—no luck, no zebra.

But there were plenty of baboons and swarming families of monkeys and all sorts of strange birds, including one called a bush turkey although he is not one. He is as big as a turkey but has a bill like a toucan, which makes him look as if he had put on a false face for Hallowe'en.

We came to a small natural clearing in which there was a herd which I at first mistook for gnus. Then I realized that these were bigger, thicker through the body, heavier in the horn, and most emphatically did not look like a frivolous cartoon of some other animal . . . most especially the bull of the herd did not look like a joke. He looked like Satan himself headed for a coven.

"Buffalo," Mrs. Morgan said softly.

I picked up my camera and rather shakily started to take pictures. We had not expected to find buffalo. Having found them I was not sure that I was glad we had. The African buffalo is mean, treacherous, stupid, and unpredictable. A high-velocity, steel-jacketed bullet will bounce off the boss of horn that protects his idiot brain. In size and muscle he gives much the impression of a medium tank.

I took several pictures while the herd gazed and the bull of the herd stared at us. Finally he started ambling toward us, then broke into a trot. Mrs. Morgan let in the clutch and we got away from there as fast as possible. Apparently the bull decided that his duty was done in chasing us away from his family; he did not follow us down the track. I do not know whether or not a Henry J. can outdistance an African buffalo on a straightaway or not, and I don't ever want to find out.

About twenty minutes and two hundred impala later we spotted two cars ahead of us, stopped under some trees. A car at rest is always a signal to approach cautiously and stop to see what they have stopped to look at; we did so. I craned my neck. "What are they look—*umph!"*

I found myself so close to a male lion that I could look down on the top of his head.

About ten feet beyond him was another male in the same pose, couchant. There should have been a flight of public library steps between them. There they lay, as steady as stone statues, and stared back at the dozen or so humans staring at them. They were both big, magnificent, black-maned beasts. I won't attempt to estimate their dimensions; I feel sure that the fact that they were uncaged distorted my judgment. But they were not small.

Nor can I explain why three out of three males that we saw were black-maned, since black manes are supposed to be scarce.

I should have been able to take a perfect closeup, save for one thing: the light was too poor for color film . . . late afternoon, under trees, and a fine drizzle. It would have required a flash bulb, and I certainly would not have fired off a flash in a lion's face even if I had had one—I don't claim to be bright but I am not suicidally stupid. Sure, sure, it says right here in the book that lions will not molest people in automobiles, but the lion might regard a flash bulb as a violation of protocol. Anyhow, lions have been known to take umbrage at the automobile itself and claw all four tires to ribbons. With lion no farther away than a parking meter I felt not at all anxious to call attention to myself.

So we stared and they stared. I don't know how long we stayed. The lions seemed perfectly willing to sit through a second show. After a long time Mrs. Morgan suggested that we had better be moving on if we were to get to the hippo pool before dark.

Either somebody moved the hippo pool or there was something wrong with the map we were using; we never did find it. Hippopotami are the only animals you are assured of seeing when you visit Kruger Park, because they always stay home in one curve of the Sabie River. Our guide had been there many times before; nevertheless we could not find it and lost so much time looking for it that we barely made it out the gate before sundown closing time.

I didn't care—we had seen four lions.

The booking clerk at the railroad station in Johannesburg had refused to give us a return booking from Nelspruit to Johannesburg and had given me a lecture instead. I had attempted to book our return as soon as we arrived in Nelspruit but had been told by the station agent there that it was too late to book except directly with the train conductor; he advised me to come down a bit early and see the conductor.

I was baffled. How it could always be the wrong time to make a train reservation, when we disembarked in Cape Town, when we arrived in Johannesburg, and when we arrived in Nelspruit, I did not understand and still do not. But there it was—jam yesterday, jam tomorrow, never jam today. So we hurried through an excellent dinner at the Hotel Paragon in Nelspruit—the Paragon deserved its name—and Mrs. Morgan took us down to the train in good time. When the conductor stepped off the train we planned to buttonhole him.

So did fifty other people. We didn't even get close to him. Not that it mattered, he was letting no one on. We did hear him tell one woman with a baby that she could stand up all night in the vestibule but that was the best he offered. It was a holiday crowd, returning from the seaside; even the seats in the dining car were occupied. The next train was twenty-four hours later and we had no assurance that we would be able to get on even that train—the station master either could not or would not issue reservations for it.

The railroads in South Africa are atrocious, not because of equipment but because of management—sort of a Long Island Railway on a grand scale. True, the equipment could be better in many ways, but the real defect seems to be a total absence of any notion of traffic management. The bureaucrats who run it seem to have borrowed a slogan from an earlier, ruggeder day in American industry: "The public be damned!"

This weekend was the end of a school holiday; any traffic engineer owning a slipstick, having access to the records of previous years, and possessed of enough savvy to figure his own retirement pay could have predicted the service needed that weekend after finishing the morning paper and still have had time to take a long coffee break. But oh no! they had to run it like a game of musical chairs, with children left standing when the music stopped as an expected part of the game.

I have already noted that it was Sam's hospitality and Sam's Pontiac that got us out of Cape Town; all trains were booked solid three days ahead—with no intention of adding more equipment. The same conditions prevailed all over the country. Compounding the annoyance was the barely veiled insolence of Afrikander civil servants, an attitude of who the hell are you to even expect to ride our railroads.

I would have no right to complain if it were not that South Africa maintains tourist bureaus in our own country which publicize, among other things, how wonderful their railroads are.

Sure, sure, I'm just a sorehead tourist who could not manage to get on the train he wanted—but note this: South Africa has plenty of coal and exports it. But Cape Town imports foreign coal, it being cheaper to do so than to bring it down from the north. Inasmuch as the country has a markedly unfavorable balance of trade and the government has a firm policy of preventing the importation of anything at all where it can possibly be avoided, this one fact seems to me to underline the inadequacy and inefficiency of their railroads.

The same Transport Commission which runs the railroads also runs the bus lines and the air lines. Competition is intentionally eliminated.

Never mind—I admit that their railroads, or any railroads, are better than the means Allan Quatermain used. Mrs. Morgan drove us back to the hotel; during the ride I arranged with her for her to drive us to Johannesburg the following day. We checked back in at the hotel and went into the bar lounge. We were soaked through from a drizzling rain while standing on the station platform, exhausted from a long day in the bushveld, disappointed at not being able to board the train, and we each needed about two ounces of universal solvent in a tall glass to place a warm glow over our homesickness.

The bar was closed.

It was the first time we had run into the British Commonwealth customs of "hours." I have been assured by others that "hours" are carefully arranged throughout the Queen's domain to keep a weary man from taking a drink when he needs it most. Actually, closing hours are not much trouble to travelers; they are exempt from most of the restrictions. I don't know how we got caught at Nelspruit as I don't know the rules.

Presently the manager-owner, a very nice chap, found us, condoled with us at not getting the train, and was hospitable—so much so that I never did get up the courage to say, "Hey, Mac, how about a drink?" After a while we went to our room. The beds were good, there was plenty of hot water; the Paragon really is a good hotel.

Mrs. Morgan picked us up in the morning and we set out for Johannesburg. This meant that we paid for another five hundred miles of taxi service, or a total of three days. One day by taxi to see lions seemed reasonable; that was what we were there for and we had already invested much time and money in the preparation. Two more days (one for her to drive us to Johannesburg, a second to return empty at our expense) seemed a little steep, especially as we held train tickets which had not been honored and which we could not cash. But it was either that or be stuck in the interior of Africa with a strong likelihood of missing our ship for Singapore.

Actually Mrs. Morgan charged about half what the same service would have cost us in Colorado, even though her little Henry J. represented an investment equal to a Cadillac and petrol cost more (and gave poorer mileage) than does gasoline in the States.

I have been told by South Africans that the Afrikander farmer is the laziest man on earth, given to sitting on his stoep, smoking his pipe, and watching his black farmhands make him rich. If so, Mrs. Morgan and her husband must have been exceptions. They owned and lived on a farm, which they worked through a black foreman. As is usual, his compensation was permission to crop part of the land for himself. They owned a general store for the natives, which was managed by a "coloured." Mrs. Morgan ran the Nelspruit Taxi Service and was its principal driver, although she had three children at home including a young baby whom she had to stop by to feed occasionally —she had, of course, a Bantu housekeeper-cook. And Papa had a full-time job as a boiler inspector on the railroad.

She told us quite simply that they wanted to make a lot of money. I'm sure they will.

Inside of ten minutes after leaving Nelspruit we were glad that the train had gone off without us. It was a glorious day and glorious countryside. The Transvaal is some of the lushest rolling farm land on this globe and I can understand how the Voortrekkers felt that they had reached the promised land when they reached it after crossing the grand but pitiless Karoo. All they asked of life was fertile land, cattle, and plenty of slaves to do the work—the simple things in life.

Nelspruit is not much above sea level. We climbed through the low veld, the middle veld, and the high veld in the course of the day, gaining more than a mile in altitude but so gradually as to be not noticeable. It was rolling, open prairie, lightly sprinkled with trees, like the best of our middle west farm country. The wide, almost flat-topped flamboyant tree, a trademark of South Africa, was usually in sight somewhere, reminding us that this was not the middle west, but a page out of the *National Geographic.*

There was also a little bird which did not look like home. It was known locally as the widow-of-paradise bird and looked much like a redwinged blackbird save that it had two long, black, floppy tail feathers, perhaps three times the length of its little body. These gave it quite unfavorable aerodynamic characteristics and it proceeded in series of frantic attempts to gain altitude to overcome the drag, then pulled down again, so that it traced a sine curve through the air. Nevertheless it seemed quite happy and no doubt thought that was the only way there was to fly.

In late afternoon we drove through Pretoria without stopping and turned south toward Johannesburg. Pretoria is a clean and beautiful small city of gardens and fine public buildings and is one of the three capitals of the Union, the seat of government—the supreme court is in Bloemfontein and the legislature is in Cape Town. In the outskirts to the south is the Voortrekker Monument and for this we did stop, it being a world-famous Afrikander shrine.

The monument is a large, square, ugly building of great dignity. It sits on a hilltop surrounded by a sculptured circle of covered wagons. The interior is empty save for an altar on a lower level which is struck by sunlight through a hole in the roof only at noon on December 16th, their national holiday. There are bas reliefs running around the inside which portray the struggles of crossing the desert, fighting natives, coping with broken wagons, *etc.* Ticky and I were struck by the strong resemblance in equipment and costume between these pictured pioneers and those of our own old west. Only in that the "hostiles" were shown as flat-nosed rather than hook-nosed could a difference readily be seen. The men wore spade beards, the women wore Mother Hubbards, the prairie schooners looked like ours. It made us think of the pictures and statuary of the Mormon Trek as seen in Salt Lake City —not really surprising since the Mormons trekked in 1847 and the Cape Dutch in 1838 and following. I could not forget, however, that the two sets of pioneers trekked for very different reasons: the Mormons were attempting to escape religious persecution whereas the Voortrekkers moved on (in part at least) because the British had freed their slaves.

Of course it does not look that way to the Afrikanders and no doubt this book will be added to the long list of books banned by law in South Africa. Mrs. Morgan evidenced the first emotion I had seen her show; she looked around at scenes of Boers fighting Bantus and said very solemnly and softly, "They did it for us."

The Voortrekkers seem to have won. The edict from London emancipating the slaves is still law but Dr. Malan's government has succeeded in substituting a serfdom for the entire black race which leaves the black man no more free than he was more than a century ago without putting the Voortrekkers' descendants to the inconvenience and expense of being personally responsible for the welfare of chattel slaves. (And on the other side of the world we are still persecuting the polygamous dissident Mormons of the Arizona Strip.)

There was a sign outside giving visiting hours and limiting "non-Europeans" to one afternoon a week. I wonder if any of them visit it.

Before I am accused of a double standard let me say that I am aware that our own treatment of the American Indians was in many instances a scandal and a crime, but we have made many amends. There is now no legal distinction between the red man and the white, save that the Indian may, if he wishes, avail himself of certain legal privileges denied to the whites. But he is not required to.

American Indian blood is a matter of pride with us today, e.g., Will Rogers. And we have had an Indian Vice President. I will concede that the Afrikanders treat the Bantus "no worse" than we have treated the American aborigines the day Dr. Malan has a black deputy prime minister. Oh, that will be a day!

Before somebody points out that the barefoot Bantu savage is not capable of full modern citizenship *as he is* let me concede the point—

and let me add that he never will raise himself up to the status of Dr. Ralph Bunche or of Dr. George Washington Carver as things are now; the Nationalist Party is firmly determined not to let him.

And in answer to that raucous voice in the back—the man with the sheet over his arm—let me say that my sister is already married. Anyway, it's her business, not mine. The meeting is adjourned.

South Africa has wonderful roads even if the railroads are a practical joke. We were in Johannesburg well before dark. It is a modern city even to its traffic jams, which would do credit to New York; it was well past dark before we reached our hotel. We took a quick tub and grabbed another taxi to a lovely home in the suburbs, owned by people we had met in the *Ruys.* We had cocktails by a swimming pool in a beautiful walled garden, dinner by candle light which was served by white-gloved black servants. I noticed that our hostess called her butler "Sixpence" and asked her what his real name was?

"Why, 'Sixpence,' " she told me.

"I mean his Bantu name."

She shrugged. "So far as I know, that is the only name he has." Then she changed the subject.

I learned later that "Sixpence" is the usual nickname of any Bantu male house servant. I had again shown a gauche ignorance of local custom. But in the United States even the goldfish have names.

In that household wardrobes and cupboards are kept locked, inner doors as well as outer are locked at night, the grounds are surrounded by a high wall and can be floodlighted. There is a story, possibly apocryphal, about a South African lady in Durban who was disturbed at the rumors of an impending native uprising. She called in her houseboy and said, "Sixpence, you wouldn't cut my throat—would you?"

He opened his eyes wide in horror. "Oh, no, Missy! I cut throat of lady missy next door—her boy cut your throat."

You hear this story in South Africa but the laugh is a little forced.

The next day we flew to Durban to join the *Ruys.* The ship was a DC-6B, a plane which appears to be the work horse of the world at present, just as its smaller and older sister, the DC-3, was for so long—not but what there are plenty of DC-3s still flying all over the world. Like the Model-T Ford, it is necessary to bury a DC-3 at a crossroads with a holly stake through its heart to make it quit flying.

As we took off from Johannesburg we saw that it was surrounded by manmade mountains of sulphur-colored mine tailings. That was the last of the scenery, as we saw nothing but the top sides of clouds from there to the coast. As a means of sightseeing airplanes are better than subways, but not much. So I looked at the hostess instead. As always, she was well worth looking at. I like to look at pretty girls and Ticky indulges me in this hobby, one which is, after all, inexpensive, harmless, and does not damage the goods. I hope to live to be a nasty old man, with that as my last pleasure in life.

The most nearly perfectly beautiful airline hostess we saw on this trip was a Polynesian girl, but this Springbok hostess was well up in the money. Presently she came over and talked with us. We learned that she was engaged to a doctor who had just left for postgraduate work in San Francisco. She had been unable to go with him because the terms of his fellowship required him not to marry for two years, and now she was worrying that he might forget her for some American girl. We assured her solemnly that if he did, he had rocks in his head—an obvious truth. But it did not console her. She told us that she would have been happy to go with him without being married, but she had not been able to arrange a visa that would let her work.

Sometimes I think the rules are rigged to require at least one fly in every bowl of soup. This planet is not too well run.

After the balmy veld and cool Johannesburg, landing in Durban was like being plunged in a steam bath. By the time we had landed and taken a long, hot, sticky ride to the docks we were tired and irritable. We then had to go through outgoing customs, a practice infuriating through its sheer uselessness, but one which I learned to take with a fixed smile and mendacious good nature.

Not so Ticky! We had to fill out long forms to get ourselves, our camera, and our binoculars aboard ship, which made the third time that we had gone through the rigamarole for South Africa alone. South Africa specializes in empty rituals to slow down the traveler, most of them having the flavor of children's games—"Penalty Square: Go Back Four Spaces"—that sort of thing. For example, Mr. Tupper, our jovial companion of the *Gulf Shipper,* got caught by their requirement of a cash deposit to insure that he would leave the country (we were excused because we had a ticket to Singapore). He put up the deposit in dollars, attempted to collect it when he left and was told that it was returnable only in South African pounds. He pointed out that he had deposited dollars but it did him no good to argue; they had planned it that way.

While I was filling out forms and trying to convince the customs officer that I could not show him the serial number of my camera because it was on the inside where it could not be seen without ruining a partly-exposed roll of film, Ticky was standing behind me making ominous teakettle sounds. As they began to boil over into recognizable epithets I finished hurriedly, paid some minor clearance fee, and rushed her out of there. As soon as I got her back aboard the *Ruys* and inside our stateroom with the door closed I started giving her what-for, explaining in short, bitter words that we were strangers in a strange land and that we had to conform to the local rules whether we liked them or not. Then I attempted to exact from her a firm promise never again, under any circumstances, to be anything other than cheerful and cooperative when going through customs, no matter how much it hurt.

Ticky stuck out her lower lip and looked determined and I found out why the word "obey" had become obsolete in the marriage service —I didn't make a dent. (I must read Robert Louis Stevenson's *Travels with a Donkey* someday. Is it possible that he was describing his honeymoon?)

Reconsidering it coldly and much later I am not sure that I was right and she was wrong. Men are much too law-abiding and will put up with nonsense that women know instinctively is wrong. Males receive a sterner discipline in childhood, then when they reach the age when they might break free of it they are usually subjected to a term of military service which leaves them forever after pliable in the face of queues, red tape, nonsense forms, and protocol for the sake of protocol—they disapprove but they conform.

Not so the female race! They evade or ignore rules and regulations wherever possible without the slightest feeling of guilt, and their husbands are often involuntary and unhappy accessories before and after the fact. Possibly this is a good thing, albeit uncomfortable for the male. Somebody has to strike a blow for freedom before we drown in a sea of red tape.

Speaking of donkeys, we almost bought one. The usual equivalent of a farm truck for a Bantu farmer is a long, narrow flatbed wagon drawn by four or six donkeys. Sam had told Ticky that these cunning little beasts cost only two-and-six, or thirty-five cents U.S., which seemed incredible. I asked Mrs. Morgan about this and found that Sam was almost correct, as she had just recently bought two donkeys for ten shillings for her farm foreman, the price per head thus coming to seventy cents or the price of a pound of butter in Colorado Springs.

Ticky immediately decided to take one back to the States as a pet.

I tried to argue her out of it, though I should have known better. Mere words have never affected the diamond-like quality of her will.

At last I dug into my pocket and handed her two half-crowns. "Here, buy yourself a donkey. You arrange deck passage for it, you get it through quarantine at Singapore—six months. Get it through again at Sydney and Auckland—anothcr six months each, I believe. Same for San Francisco. Write me a letter occasionally and tell me how you are making out."

She took the money and I heard no more about it. But much later aboard ship, when I needed change for something, she told me firmly not to touch the two coins on her dressing table because they were the money for the donkey. I concede the logic of it.

The ship stayed over an extra day in Durban which gave us time to go into Zululand. I wanted to go a bit farther into the game preserve at Hluhluwe (pronounced "shloo-shloo" as if you were rinsing your teeth) in order to see white rhinoceri, but it was just a few miles too far away; one flat tire and we might miss the ship. So we settled for Zulus and the shade of Umpslopagaas.

Mr. Brown, guide for Thomas Cook, Ltd., drove us north to Eshowe, capital of Zululand. I do not know what I expected to find; Zulu history was no part of my formal education and my impressions of the Zulu Empire had been derived largely from Sir Rider Haggard's wonderful but fanciful romances. However, Sir Rider was no mere spinner of fairy tales; his descriptions of the valiant Zulu impis, or regiments, of their military system and tactics, of their stern character, must be taken as factual; he had seen them at the height of their power just before their defeat by the British in the Zulu War in 1879.

What we did see was a rolling, sun-drenched land planted mostly in sugar cane but interspersed here and there with smaller fields of mealies (Indian corn), the staple of the natives. The hills were dotted with beehive grass huts. Here and there were women working in the fields. Along the roads were naked piccanins, older lads dress in breechclout equivalents of animal tails, barefoot matrons with the high hairdress of married women, adolescent girls with their hair short, and a very occasional rich native on a bicycle. Men were scarce.

The impression was one of overpowering, bucolic peace. It was hard to remember that these sleepy farmers had produced some of the bloodiest fighting ever seen before they were subjugated. Around the time of Napoleon, King Tshaka (or "Chaka"—their clicks are not equivalent to our gutturals) introduced the stabbing assegai, and a military enveloping tactic much like that used by Alexander the Great; he and his successors consolidated all of this part of Africa into an empire. Every Zulu man was a warrior.

The warriors now are pulling rikshas in Durban (still in full war panoply) or are houseboys to the whites. They must work, to pay their head taxes and to buy wives. But waste not too many tears on the lost glories of the Zulu warrior. The Zulu was a conqueror, enslaving and killing—then had the bad luck to meet someone with the same idea but with better weapons. Without defending British colonialism one may at least note that Victoria's troops did not indulge in senseless orgies of blood after a victory. It was Tshaka's habit to kill off all above the age of adolescence when he conquered a tribe. He is reputed to have killed seven thousand of his own subjects when his mother died.

Eshowe, where the Zulus laid siege to the British, is a peaceful modern village now, where the Queen's commissioner supervises the administration of law, tribal and the white law over it, through the paramount and lesser chiefs. My impressions of it are neat brick buildings, a movie theater, a soda fountain and news stand, and an excellent lunch at a clean, modern hotel. Allan Quatermain would never have recognized it.

After lunch we left the highway and drove far out into the fields to visit Ntuli, a native sculptor who enjoys a measure of world fame. His home was the usual group of beehive huts surrounded by farm land. He was not there but his daughter set out his wares and we bought a bust of a Zulu woman. His style is realistic and accurate, with neither the exaggerations of traditional African art nor of the blobs called "modern" in our culture. He shapes what he sees and his eye is good.

We paid seven-and-six, $1.05, for this bust; at these prices Ntuli has become rich, for Zululand. As we left we met him coming home; he was riding a bicycle while wearing a Harris tweed jacket, trousers, shoes, white shirt, and necktie. The weather was such as to make any clothing, any exertion, an invitation to sunstroke, but he kept the jacket on, a perfect classroom example of the symbolism which Thorstein Veblen says is the fundamental motivation of our own society. His outfit was a *reductio ad absurdum* of our own symbolisms in dress but was laughable only if we are willing to laugh first at ourselves—and concede every argument of nudists.

Speaking of nudity, most pictures in travel magazines give the impression that Zulus still dress largely in beads and feathers with the skin mostly uncovered and with the mammary glands living their own lives, wild and free. This is both true and untrue. Those same travel magazines give the impression that the residents of the American far west (of which I am one) dress only in high-heeled boots, Stetsons, and Levi's. I do not own high-heeled boots, although I live in cattle country. But my next door neighbor hardly ever wears anything else. Much the same thing obtains in Zululand; the traditional tribal dress, or lack of it, is extremely common on the reservation. But the Zulus one encounters on the road or in town look much like poor country Negroes of our own deep south, being dressed usually in shabby equivalents of white man's clothes. Our guide told us that the natives were required to cover up when they came into town and that the ones we saw on the road were mostly going to or returning from town.

This explanation satisfied me until later in the day. We had returned the hundred miles from Zululand and were driving through an expensive residential suburb of Durban, which is a wealthy modern city. Suddenly I saw on the sidewalk near us a white child about four years old who was being hotly pursued by a young Zulu woman. An open front door made it evident that the child had made a break for freedom and was being chased down by its nursemaid. The only oddity about the scene was that the young woman was naked except for something wrapped around her waist.

I called Mr. Brown's attention to it. "How about *that?"*

He frowned. "Well, it is not exactly against the law; it is just considered bad form."

That evening Ticky and I attended a performance of a company of the Folies Bergere; it had its customary nude tableaux, as naked as any country scene in Zululand. There may be some thread of logic running through our tribal taboo concerning skin covering but I am unable to figure it out.

The following morning we had a few hours free in the city itself; we spent it, without success, in tramping or riding from one steamship booking office to another, trying to tie down passage from Singapore to Australia. All we achieved was sore feet and a detailed view of downtown Durban. The city spread, along the waterfront the way Chicago sprawls along the Lake it is as modern as Chicago and much prettier. There are East Indians, Europeans, and Zulus in about the same numbers, each living in their own areas but mixing in the business district Except for some in the Transvaal this was our first encounter with the East Indians. They are merchants and businessmen of great skill, equal to or exceeding the Chinese. They save every penny, save for a prevalent weakness for powerful, flashy American automobiles, and many of them are extremely wealthy, although they were originally imported as coolie labor in the cane fields.

The blacks hate them. The grave race riots of recent years in Durban were between Zulus and East Indians; the British were not directly involved. They have a reputation for cheating the Zulus at every turn. I cannot vouch for this either way but it does seem evident that if unlimited immigration from India were permitted (which is what India wants) the Zulu, already crowded onto insufficient land by his present masters, would soon have nothing at all left. The Zulu is already extremely poor. The population density on his reservation land is already half again as high as it is elsewhere in the Union. He makes a slim living as a servant to the whites or working for the large corporate sugar cane plantations that surround his land; it may take him years to pay for his first wife. Marriage is expensive on their scale

—eight oxen for a healthy fourteen-year-old maiden, up to twelve oxen for a princess. (Prices are almost twice that high in Swaziland, I never learned why.) After sweating for years to pay the *lobola* for his loved one (don't let the purchase custom fool you; these are love matches usually), he may still have to live away from home most of the time to gain cash for taxes and necessities while his wife sweats in the fields to keep food in the bellies of the piccanins.

Underneath the Zulu is still a warrior; if he finds, or believes, that the East Indians are making his present almost intolerable lot still harder there will be more bloodshed.

We sailed from South Africa later that day with very mixed feelings. I think relief predominated. South Africa is a country wonderful, beautiful, and rich—and terrifyingly mismanaged. There is no indication of any possibility that it will gradually evolve into a better and more humane civilization; the dominant minority is grimly determined not to give an inch. The whip is still their answer to the mutterings and rumblings from underneath. Mau Mau has not yet reached South Africa, but it is only a few miles to the north and there are known to be secret societies spreading among the Bantus, brotherhoods determined to avenge their wrongs and waiting for the Day.

When that day comes the houseboy from next door will be waiting to cut throats. In the meantime I can't see a blessed thing that we can do to prevent it.

IX

We Learn About Oriental Service

THE DEPRESSION ENGENDERED by South Africa we shook off almost at once; the voyage across the Indian Ocean to Singapore was almost idyllically pleasant. The weather was warm without being hot, the sea was calm, the motion of the ship almost imperceptible. We had acquired status and seniority now; we were invited to the Captain's table. The day we first boarded the *Ruys,* when we had been intimidated by her size and luxury, frightened by the brisk, well-dressed passengers who looked right through us, seemed remote and unlikely. We were oldtimers who had been in the ship as long as anyone and longer than any but a couple from Buenos Aires. We were almost plank-owners and we enjoyed the status.

The crowd of first-class passengers was down to about half and still further reduced by East Indians who kept to themselves and by French-speaking Mauritians who kept almost as much to themselves. But there was a dance, or movies, or "horse races," or bingo, or some social event every night; there was a cocktail party before dinner each evening; there was swimming, sports, loafing, and long siestas in the daytime. It was hard to remember that somewhere over the wide blue horizon men were dying wretchedly in jungles, the veto was being exercised in the U.N., and the planet as a whole was moving steadily toward what threatened to be the final Armageddon. Under our keel slid the prehistoric continent of Gondwanaland and I lost the cribbage championship of the Indian Ocean—John Lloyd cut the jack when it was my first count and I was certain to go out. There ought to be a law!

John was a young Englishman fresh out of Oxford, who had joined the ship in Africa. Young, handsome, urbane, and invariably good-natured, he was an asset in any social group. When Ticky told him that his cumberbund should be Dubonnet in shade, rather than claret, he agreed, stripped it off and threw it overboard, and resumed dancing, all with smiling aplomb. (Ticky was left speechless.) We learned that he, like his father before him, had been a member of the "Gonfal Loungers" at Oxford, a club devoted to sitting on the steps in front of one of the buildings there and "observing ye good things God hath made."

"Women, you mean?" I asked.

"Oh, yes, but not necessarily. Just 'ye good things God hath made.' "

"Sounds like P. G. Wodehouse's Drones Club."

"Not exactly. Though I will say that some of the members of the Drones Club would be welcome in the Loungers."

In order to qualify for the Loungers after nomination it was necessary to get oneself arrested on Boat Race Night and be held overnight in jail. This, as John explained, was not easy to do—the second part, that is, about being held in jail overnight, because the University's proctors waited at the police station each Boat Race Night in order to take charge of any young gentlemen who had celebrated too boisterously; it was necessary to change one's appearance, accent, vocabulary, and manner so convincingly that a proctor with years of experience would not recognize the culprit as a University student and invoke the ancient immunities.

Another major asset was Bert and Molly, two Australians who sat with us at the Captain's table. Bert had been serving the United Nations all over the world for the past five years, as a forester in the Food & Agriculture staff. His last job had been to survey the potentialities of the Amazon Valley, and now they were returning home to buy a plantation in Queensland. Bert and Molly were as perfectly Australian as John was British—in accent, vocabulary, and attitudes. Bert maintained that all Australians grew to look like kangaroos; he illustrated it, with gestures, on himself and his wife. "They get long, pointed noses, ears that stick out, big soft brown eyes, and pear-shaped behinds. Watch for it, you'll see."

(When we got to Australia we could not help but remember this—and it did seem as if he were right. The power of suggestion, no doubt.)

There were Earl and Marianne, of Princeton, Buenos Aires, and Caracas. Earl was an investment banker by profession and a student of yoga by preference; he could assume the full lotus seat, then stand on his head—this, mind you, on the deck of a rolling ship. If you think this is easy, try just the first part: sit down on the floor and wrap yourself into the lotus seat, with the soles of both feet turned upwards in your lap. If you can untie yourself thereafter and walk away unassisted, you are about ready for your beginner's license.

There was the Captain himself, who managed always to be a warm and convivial host while continuing to be a very taut shipmaster. The *Ruys* was clean from stem to stern and perfectly run, but the Captain was always ready to dance all night and his table was usually about thirty minutes late for dinner because, ten minutes after the gong had sounded, the Captain would smile sheepishly and say, "I sink we haff time for annozzer one." So we would.

There were minor frictions, of course, such as South Africans demanding to know why we did not pay more for their gold, people who read us lectures on how the world would be perfectly safe if the United States would just refrain from trying to start a new war, and people who found everything about the United States just too dreadfully quaint and repulsive. Ticky and I tried to avoid such useless arguments but sometimes we were cornered. One South African demanded to know of me why Americans insisted on making such funny sounds instead of speaking English?

He himself was speaking a county dialect I could not identify but which I could hardly understand, but I pretended a politeness I did not feel and tried to explain that American was an independent variation of English, with its own spelling, pronunciation, and rules. This struck him as silly. So I asked him what English accent he wanted us to imitate?—Yorkshire, Oxonian, Cockney, Devon, or what? This ended the discussion without convincing either one of us.

The United Kingdom shows a much wider variation in speech in one tight little island than we do in our continent-wide spread. To have our American speech patronized sets my teeth on edge.

Ticky tangled to the point of brass rags with one Englishwoman in the ship. This female had insisted on inquiring into one aspect of our economy: "You don't really mean to tell me that you have to *pay* for medicines and hospital care? How dreadful! Why don't you have socialized medicine?"

Ticky glared at her. "We can't afford it! We've had to pay for *British* socialized medicine!"

I've tried to impress on Ticky the necessity of keeping her temper when needled, but I am afraid that she will never qualify for a job with the State Department.

But I have a sneaking suspicion that her uncivil hyperbole contains a legitimate criticism of most of our foreign aid program. Have we really been getting our money's worth in most cases?

We made only a dawn-to-dusk stop at Mauritius. Mauritius is a place I must have missed when I studied geography as a kid but it turns out to be a large and populous island. It exports sugar cane and imports everything else. The language is French, the flag is British, and the population is overwhelmingly East Indian. This is another one of those odd chunks of real estate that England took over during the Napoleonic Wars and never turned loose, like Tristan da Cunha, and, for that matter, South Africa itself. The dominant French population are largely royalists; they appear to believe sincerely that a restoration of the Bourbon crown would fix up all of the ills of France. I don't share the belief myself but I have no objection, as I doubt if it could make things worse. Port Louis is well equipped and beautiful but very busy; the *Ruys* had to anchor and we went in by launch. The shopkeepers, taxi drivers, money changers, and such are mostly Moslem Indians; the field laborers are Hindu; they look alike and have no use for each other.

I changed South African pounds for Mauritian rupees and we hired a taxi. A rupee appeared to be about nineteen cents but the three-way conversion was so complicated that I could not have solved it without a sliderule—if I was cheated, I never knew it. Certainly we were not overcharged in the long run, as a day's drive for four of us, lunch, beer, baksheesh, and the launch came to less than eight dollars each.

Port Louis is a picturesque and cleanly little town of narrow streets and cobblestones. We left it and headed around the island, which is basically one large, long-since-extinct volcano. It used to be covered with tropical rain forest; now all but about a fifth has been cleared and planted. As to climate one need only say that the inhabitants go to Durban, if possible, during the worst months to escape the heat—while the Durbanites are going to Transvaal or Cape Town for the same reason.

We stopped to see the botanical gardens, which are beautiful, old, and very lush. Ticky trotted happily around, pointing to things and spouting Latin, and I identified a mango. There were giant tortoises in a pen there, which looked much like the famous Galapagos tortoises and seemed almost as big. About then mosquitoes started harrying us and I insisted that we move on; Mauritius has malaria.

All day long we kept running into religious processions; it was the festival of "Cavadee" for the Tamil Hindu coolies. Who Cavadee was, or what; what he did, or it signified—these I never found out and my interest in trying to discern the sense behind it was considerably cooled by the fact that the central figure in each procession was a "holy man" with skewers stuck through his cheeks, in one side and out the other. To find nonsense posing in the name of religion it is not necessary to go outside my home town, but most of it seems harmless at worst. Mutilation seems to me another matter. I have no patience with any so-called religion that practices it, and would not bother to study its claims save through morbid curiosity.

We crass Westerners are often urged to study the exquisite spiritual beauties of Hindu religion and philosophy and I will readily admit that some of their religious poetry reads pretty well. But I contend that the disgusting behavior of many of their alleged "holy men" relieves us of any intellectual obligation to take the stuff seriously. No amount of sanctimonious rationalization can make such behavior anything but pathological.

These parades wound around through the streets and into the open country, where the Tamils gathered under trees and piled flowers in front of holy pictures. Their prayers, speeches, and hymns were strange to us but the air was more that of a Sunday School picnic than of Sunday School itself—little children scurried around underfoot, only slightly restrained by their solemn, sari-clad mothers. I noticed caste marks on foreheads and asked our driver what each meant. But he was Mohammedan and not only did not know but was contemptuous of such things.

Our driver took us to a pleasant hotel high up in the hills where we got an excellent lunch . . . only to find out after lunch that the hotel had refused him even back room or back door service because he was not "European." It was infuriating but there was nothing we could do. We urged him to stop at once somewhere where he could eat, but he shrugged and said that he would wait.

But his son, grandson, or nephew will probably someday own the hotel. The sahib's sun is setting in those parts.

We drove around the rim of the extinct crater, an awesome sight of textbook perfection—then dropped back down into Port Louis. The ship sailed late that afternoon. It had been worth a day but Mauritius is not a place I want to see again.

We crossed the equator without ceremony and turned into the Straits of Malacca, dropping back down toward Singapore. After days without raising a ship we were suddenly in heavy traffic and amidst numerous small islands, as well as having Sumatra on our starboard hand. I was surprised at the large numbers of lights visible on the Sumatran coast at night and had it impressed on me in a fashion that the *World Almanac* figures do not: these islands are very densely populated. We think of them as jungle and they are—but all of them are much more heavily populated than the States . . . New Jersey, not Wyoming, is the reasonable comparison. I think perhaps the strongest impression that we brought back from the Far East was the tremendous problem of population pressure. This is going to give us headaches, big ones, long after the communists are forgotten—and I have no idea what to do about it. It may be that there is no solution other than the ancient, tragic checks of famine, pestilence, and war.

It is all very well to answer glibly with "birth control." Actually it is no answer but simply a piece of verbal magic, like, "The Lord will provide." But the Lord *won't* provide and birth control *won't* work on this wholesale scale, for obvious reasons of education and economics and for much deeper reasons of human psychology and body chemistry which we do not fully understand. I once saw a sucker ad for a method of exterminating cockroaches; the device was two blocks of wood: place the cockroach between them and squeeze.

Birth control is about that effective—excellent on a retail scale; worthless at the wholesale level.

But don't blame any religious opposition to birth control. In the long run, religious opposition to or humanistic support for birth control are both as irrelevant and as ineffectual as prayers for rain; the numbers on this planet keep increasing just the same—fifty-five thousand more people at today's breakfast table than there were yesterday morning, twenty million more this year than last year, in each decade an increase greater than *the entire population of the United States.*

Occasionally one sees stories which "solve" this problem by emigration to other planets. I wish it would work but it won't. Oh, we will colonize the other planets someday; that is as certain as tomorrow's sunrise. But it will have no effect at all on the problem of population pressure on our own beautiful and tragic globe. To stay even, not gain an inch, we would have to persuade or coerce nearly sixty thousand people to take to the sky every day of every year. Bypass the psychological problem, assume that it is solved—by force, if you like. The physical problem remains: we can build spaceships but we can't build that many. There isn't enough steel, aluminum, uranium, or anything else on this whole planet to permit us to build enough space ferries to move the daily increment and keep on doing it, day after day, year after year.

The real problem of the Far East is not that so many of them are communists, but simply that there are so many of them.

The above is somewhat out of its proper order, for we have not yet seen Singapore, where I first learned the meaning of the word "teeming"—nor Djakarta, especially Djakarta. We arrived in Singapore early in the morning, my own first impression of it being a shout from Ticky: "Hey! Look!"

Passing by our porthole only a few feet away was the ribbed sail of a Chinese junk. It brought the Far East into my lap. While I knew that those funny sails and odd ships were as contemporary as atomic piles, subconsciously I had had them classed with pigtails and the old Dowager Empress as something out of an earlier era. So we hurried into clothes and topside to watch the junks.

Arrival in port was accompanied by the usual hoorah, some of it necessary, some of it questionable. As usual, Captain's Dinner and arrival in port almost overlapped, with about three hours sleep only between. As usual the port doctor wanted to see us while we were at breakfast, the immigration officer required our presence while we were packing, and the steward's bill contained a major error which had to be corrected. There was the staff to tip, chief steward, head steward, table stewards, room steward (we were sad at leaving the incomparable Kwai Yau), lounge deck boys, night man, *etc.* Mail, messages, cables, addresses to be exchanged—it was past ten o'clock before we were checked in at the Raffles Hotel.

There was a cubic foot of mail waiting for us there, much of it business mail, and I sat down to sort through it to determine what was important while Ticky settled us in. In about five minutes I looked up and said peevishly, "Have you unpacked?"

"No."

"Then don't. I'm going to see if they can move us to a quiet room." The room we were in, actually a bedroom, pitting room, and bath suite, was excellent, but it was on the ground floor and right at the corner of the building and ten feet outside was a traffic light. Every time the light changed the traffic would pour in one window and out the other. Traffic in Singapore is thick, enthusiastic, and noisy. Singapore is just above the equator and the climate is a steady hot and humid, like being soaked in warm oatmeal. Little men with sledges were playing *Hammer Ring* inside my head and I was beginning to realize that I should have gone to bed early after the Captain's Dinner even though I had wanted to say good-by and drink a cup of kindness yet with everyone in the ship. My morale is never improved by the irritations of quitting a ship, moving baggage, and getting through customs, and it had not been helped by an incident at the gate. When the customs officer had asked us if we had had anything to declare, Ticky had looked him in the eye and said, "Two pounds of heroin."

His eyes bugged out, then he decided to treat it as a joke, laughed hollowly, said, "Yes yes, no doubt," and refrained from searching us. But I did not draw a breath until we were outside and in a taxi.

Then I took a deep breath to load me for what I had to say. "Look, you redheaded juvenile delinquent, don't you know you can get us into trouble with pranks like that?"

"Nonsense! I didn't have any heroin."

"Sure, sure—and you got away with it. But suppose he had been one of that large number who despise Americans? He could have decided to teach you a lesson in respect for Her Majesty's officers, you know."

Ticky said something rude and irrelevant about Her Majesty's officers. Having little respect for vested authority at home she seems to believe instinctively that the very notion of authority abroad is presumptuous and probably unconstitutional; the spirit of the Boston Tea Party is always just below the surface.

But it was not a joke to me. I was seriously worried that she might grow restive at the wrong moment and get herself or both of us into trouble that the American consul would be hard put to straighten out. She was behaving like the fictional heroine who insists on doing something foolish and dangerous which then gives the hero a chance to be heroic. But I was no hero; I was just a middle-aged man in glasses who had no influence in foreign ports and no Lone Ranger tricks up his sleeve.

"Look, baby," I answered wearily, "we've been all over this before. Don't you realize that he had the authority and the right to keep us there for three or four more hours while he subjected us and our baggage to a probe search? How would you like to be stripped to the skin?"

"I'd like to see anybody try it!" She leaned forward and got herself unstuck from the cushions of the taxi. "Though this would certainly be the weather for it."

All in all, my nerves twanged like a harp by the time we reached the hotel; the traffic noises and the damp heat of our room were simply the insupportable last straws. I sought out the manager, an imperturbable East Indian, and told him my troubles.

He showed me several rooms, all of which were for one reason or another no better than the one we were in. Then he somewhat reluctantly showed me one which suited. I took it and hurried back.

"Any luck?" Ticky asked.

"Yes. Grab your purse; we're going out on the town. They'll move our baggage while we are gone."

"But what about our new room? Can't I look at it?"

"Never mind now. It's upstairs and clear across the hotel, a couple of blocks away. It's okay, you'll see it when you get back. Come on now, let's see the town."

She came somewhat reluctantly but soon forgot about the change in room once we were in a taxi and on our way. Singapore, one of the "Seven Sinful Ports," is probably the most fascinating city we saw all the way around the world ... even though we did not see much of the seamy underside which forms the basis for romantic fiction. No opium dens, no beautiful Eurasians held captive in international brothels, no sinister agents of Dr. Fu Manchu, or (much more probably) of Chou En Lai. All three of the above, plus a knife in the ribs in some dark alley, are (I feel sure) available in Singapore, but they do not come to the attention of middle-class couples traveling in each other's company and staying out of dark places.

Even without them Singapore is a three-ring circus and a year-long Mardi Gras. It has a million people packed into a short stretch of waterfront suitable for fifty thousand at the most. It is a Chinese city, despite the Union Jack overhead and the fact that it is more than a thousand miles from China proper; there are only twelve thousand Europeans, mostly civil servants and traders; four out of five are Chinese and the fifth is an Asiatic of some other sort.

Properly speaking, the whole city is a slum, so tightly stacked are they one on another. But it is so alive, so cheerful, so bursting with energy that the slumlike quality of it is not depressing. There are admitted slums near the waterfront, hovels built of trash and lived in by people who have neither pot nor window, and there are many, many narrow back alleys that are slums as the term is used in Chicago or New York. But even the "good" streets are so jampacked as to be slums to anyone used to mountain and prairie—or even in comparison with the endless apartment houses of our big cities. The first thing Ticky said, when we turned off the quay boulevards into the city itself, was, "Oh, look! They've got all their flags out. I wonder what they are celebrating?"

A second look showed that they were not flags; the swarming mercantile street we were on was arched over by housewives' laundry, threaded on bamboo poles which stuck out and up from almost every window. Most of the clothes were brightly colored and the effect was very gay, but the effect was accidental and went on every day.

Singapore is the place for shopping. You can buy anything; they will sell you your own hat if you lay it down on the counter. The city is loaded with bargains, most of them real, and waiting to be dickered over—treasures of the Far East, manufactured goods of the West, and careful copies of the latter from Japan and elsewhere. Some few spoilsport innovators have introduced fixed prices but they may be ignored; most buying and selling is still a joyous game, each trying without malice to outwit the other.

It affected Ticky the way fresh catnip affects a cat. Dickering in South America she had never really gotten used to; their shops are too much like ours and South American politeness is so overwhelming that it seemed rude to suggest that the price was too high. But in the bawling, brawling atmosphere of Singapore bazaars and stalls she was able to swing into the spirit of it and enjoy it—so much so that I began to wonder what would happen when we got home. The butcher would say to her, "That will be three dollars and eighty-seven cents, please"—and Ticky would look at him scornfully and say, "Don't be silly! I'll give you a dollar and a quarter. Wrap it up."

I made a mental note to be present when it happened; I wanted to see the butcher's expression.

The prices, even the fixed prices, really were preposterously low. In general a Straits dollar would buy about as much as a U.S. dollar back home—but our dollar would buy three Straits dollars. Ticky bought a little handmade silver bracelet charm, a Chinese junk complete to rigging of silver thread, for five cents American—and this was at a fixed-price store. Later on, one of similar quality purchased at the Royal Hawaiian Hotel in Honolulu set us back eight dollars.

The most colorful place to shop is Change Alley, a narrow passage ten feet wide and a block long but crowded with a hundred permanent shops, uncountable sidewalk merchants, and swarms of money changers. The money changers will swap any currency for any other currency, operating directly out of their pockets while people jostle their elbows on both sides, performing complicated arithmetic in their heads without any noticeable pause, and coming out with an answer that you had better check carefully, then count your money carefully.

Then count your fingers. And the fillings in your teeth.

The little holes in the wall forming each side of Change Alley will sell you anything from really valuable precious stones, or carved jade of high quality, to plastic Buddhas made in Jersey City. Between them, almost covering the already-crowded and too-narrow pavement, traders operating from card tables, push carts, or even old newspaper spread on the street to protect in part their handfuls of merchandise, will sell you anything from a full meal to a Chinese New Year's greeting or a ring with a peepshow built into it. The feeling is Coney Island combined with Woolworth's, all with a lusty flavor of its own. I wish I could go there every day.

A little shopping and a little sightseeing and it was time to go back to the hotel for lunch and a sight of our new room. We had selected the Raffles Hotel from Colorado Springs, because of its fame in history, legend, and fiction. It really is a fabulous old pile, a luxury hotel in every sense, ancient through it is, and a place where one expects an E. Phillips Oppenheim spy to be lurking behind every potted palm.

We picked up our key at the desk and I led Ticky across the "World-Famous Palm Court" (it says so right here on this postcard), up a flight of outdoor stairs, and onto the gallery which led to our room. I let her in and watched her.

She did not say much at first, but wandered around looking at things and touching them. The living room was twenty-five feet long, fifteen feet wide and about twelve feet high, furnished in ebony and trimmed in Chinese red lacquer, with several easy chairs, tables, lamps, a couch, and a buffet. There were two electric punkahs overhead. Beyond the living room was an enclosed porch with two day beds, a large and fancy bar, more easy chairs. Opening off it to the left was an open porch just as roomy which was furnished lavishly with smart garden furniture.

Ticky turned back to me with her eyes wide and her expression solemn. "Yes, darling, but where do we sleep?"

"In here," I answered, and opened double doors wide with a manner suitable to the janitor of a cathedral.

The bedroom was twenty-five feet long, big as the living room, and contained two kingsize Hollywood beds, chairs, two chaise longues, two enormous wardrobes, an oversize dressing table, and an executive desk. Two airconditioning units served it, one at each end. Beyond it was a tiled bath fifteen feet square.

There remained one door I had not opened when I had taken the "room." We found beyond it a service porch, not shared with anyone, which had clothes lines, wash tubs, and other useful, homely items.

Ticky came back into the bedroom, sighed deeply and said quietly, "But can we afford it? Heavens, can we even pay for it?"

"Brace yourself. This so-called 'room' costs just three dollars a day more than the 'minimum' room we were in. At that differential I didn't think we could afford *not* to enjoy oriental splendor once in our lives —we never will again."

Ticky gasped, sat down suddenly, and began to giggle.

"Do you remember," I went on, "what we paid for just one room about half the size of any one of these four at Sun Valley last year? That one room without meals cost just what this suite plus six meals a day costs here."

"Are you sure there isn't some mistake?"

"There is no mistake . . . but I never saw a sharper proof that our own economy does not match in with the rest of the world; we are getting this much too cheaply. But I haven't told you the rest of the joke. The manager was reluctant to show me this place. He asked twice when we would sail; I told him I did not know but Wednesday looked like a good bet. He shook his head solemnly and said that he had one more 'room' but it was reserved for Wednesday.

"So I suggested that he could move us a second time, if necessary, and he finally showed me this. But the last thing he said was, 'You understand now, if you take this room and stay past Wednesday, I'll have to move you. Mr. Rockefeller always has this room and he has reserved it and he will expect to have it this time.' "

As it turned out, Mr. Rockefeller stayed as a houseguest of the Queen's Commissioner and canceled his hotel reservation, so, although we did not sail on Wednesday, we did not have to move. We enormously enjoyed the use of "his room" and could well understand why he would ask for it specifically.

With the room came Foo. I think Foo was number-one boy for that floor, but he took care of the end suite himself. Kwai Yau had introduced us to the perfection that the Chinese can bring to domestic service; Foo continued this level of intelligent, anticipatory service but with some charming and individual quirks of his own. He was about four feet ten and could not have weighed a hundred pounds in his uniform. At a wild guess I would place his age at sixty, give or take ten years. His usual expression was one of self-contained rage, which gave way at rare intervals to a shy and surprisingly sweet smile.

Foo stood for no nonsense from his guests. They were going to be served properly whether they liked it or not. The conventional term for this is "keeping face," and so it is, but I prefer to state it more explicitly; Foo had a steel-hard personal integrity which made him require of himself nothing less than perfection in everything that he did no matter what anyone else thought of it.

We shared with him a modicum of language, not quite English, not quite Pidgin, which did well enough for domestic matters. Ticky's first chore was to sort out clothes requiring laundering and drycleaning—practically every stitch we owned since we had had no chance for drycleaning since leaving Buenos Aires and had not been able to send laundry the last few days before arrival in Singapore. She was pleased to see that twenty-four-hour service was available for a 50% extra charge, pointed it out on the ticket to Foo, and explained to him most carefully that we wanted everything back the next day.

"Too much money," Foo answered.

Ticky explained that she knew it cost more but that we needed the clothes.

"When you sail?"

Ticky admitted that our ship did not sail until the middle of the week following but told him again that she wanted the hurry-up service anyway. Foo shut up and staggered out with most of the contents of ten suitcases. I had saved out one suit and a nylon shirt and some shorts; Ticky had the dress she had come ashore in and one dinner dress.

The next day a couple of shirts and some underwear came back, nothing else. To Ticky's inquiry Foo answered, "Tuesday!"

"But I wanted them today!" Foo shrugged and would not answer.

We made do with what we had. My one suit was beginning to smell like a bear rug; it was well to be upwind of me. On Tuesday all the rest came back. Foo brought them in, hung up the suits, stowed the laundry, and presented Ticky with the chit, stabbing his finger at it and saying with fierce triumph, *"See?* I save twelve dollars!" (Straits dollars).

We thanked him sincerely and did not laugh until he had left. Then we gratefully put on clean clothes.

We had been there two days when Foo braced me on the subject of shoes. I have never gotten used to the cosmopolitan custom of putting one's shoes outside at night to be polished. In the *Ruys* Kwai Yau had noted this and had taken care of it his own way by selecting a pair each night and putting them out himself; he never mentioned it. Foo's approach was different. He stepped up to me, looked up, glared, and said angrily, "Tonight—you put shoes outside bedroom door! Never mind corridor, just bedroom door. I come in, get!" He grew almost purple and jabbed his finger at my feet. "Your shoes are *too dirty!"*

I put my shoes outside the bedroom door.

Some days later Ticky and I were entertaining in our "room" before dinner. We had become used to having Foo pop up whenever needed and to his being never more than a buzzer signal away. This time for the first time, when I pushed the service button, a strange Chinese appeared. I asked, "Where's Foo?" but could not understand the answer; this staff member had very little English and I had no Cantonese at all. So I said, "Never mind," and ordered drinks—with no difficulty, as such international words as "gin sling" and "martini" we shared.

The drinks arrived in a few minutes. About ten minutes thereafter Foo showed up, in uniform. We managed to get it straight that I had simply wanted bar service, that it had been provided and I wanted nothing else. Foo left.

The next day I remembered to ask him about it. After a certain amount of semantic difficulty I got it clear: The strange bellman, while weak in English, had nevertheless understood that I had inquired for Foo—so a message had been sent out into town, Foo had dressed again in his uniform, left the bosom of his family, and had come at once to find out what I wanted, even though he was not on duty. I tried to apologize; he shrugged and closed the subject.

We did not tip him at all until we left. The amount had been the matter of much thought and had been arrived at by starting with a formula which one of the international oil companies advised their employees stopping in Singapore hotels to use; to this we had added a percentage to allow for the fact that Americans are expected to tip higher than others, plus a percentage for superlative service, plus the amount he had saved us on drycleaning. It added up to a generous tip by Singapore standards but a stingy one (in comparable circumstances) in the United States.

Foo seemed quite pleased with it. But he left rather hastily and returned with the corridor boy who did the heavy cleaning. Foo pointed at him. "He good boy, too!"

I had no formula to help me in this, so I gravely presented the other man with a tip which I hoped was appropriate in view of their relative ranks. Foo seemed to approve—he did not glare at me.

Pleasant as our suite-cum-Foo was, we spent little time in it. A few peanuts fed to a dog in Montevideo began to pay off in most surprising dividends. Senor Maurice Nayberg had given us cards of introduction to business correspondents of the Nayberg firm in various ports; we looked up one of them here, Mr. Ho Choy Moo.

From the moment we met Mr. Ho until the day we sailed we were taken in charge, driven around town, taken to dinner, helped with our shopping, taken sightseeing, taken on a long drive north into the Sultanate of Johore, taken to amusement parks, even taken to church. And when we left, Mr. Ho supplied us with letters of introduction to smooth our way through Indonesia.

It still is not clear to me just why hospitality was so heavily lavished on us. We had made it clear at the outset that our acquaintance with the Naybergs was of the slightest, covering only a few hours of our short stay in Montevideo. Mr. Ho had himself never met the Naybergs and knew them only by business correspondence. It seems to me that protocol would have been more than satisfied had Mr. Ho taken us to lunch and advised what to see and where to shop—not that we had even that coming to us but to show courtesy to the Naybergs.

Whatever the reasons were (and I can't believe it was just our sweet dispositions even though we usually get along all right with children and dogs)—whatever the reasons, we were given a free ride through Singapore which could not have been purchased from a travel agency at any cost. The Hos even included John Lloyd in much of it, simply because he was with us much of the time—John was enjoying an indefinitely long vacation in Singapore at his employer's expense because his permanent-residence visa for Manila had not yet come through.

We were treated to superlative Cantonese food, food which made us realize that even the best Chinese restaurants in the States do not bother to supply the real thing to unappreciative and ignorant heathen. Bird's-nest soup and shark fin were the only items I could identify but I must state emphatically that chop suey had no part in it. Mr. Ho insisted that Ticky must use chopsticks and instructed her in the art to the point that she learned to pick pieces of cracked ice out of a bowl with smooth plastic sticks. Try it sometime when you are feeling lucky; the coefficient of friction between ice and smooth urea plastic is zero followed by a string of noughts. The trick is to use the sticks as gently as possible, almost no pressure; occidentals tend to use them like a pair of pliers.

Often the whole family escorted us, Mr. and Mrs. Ho and four children—Ho Chee Pen, Ho Chee Fei, the one daughter Ho Mei Ling (after Madame Chiang), and the baby Ho Chee Cheong. Boys carry a generation name, in this case "Chee," as well as a family-name and a given name. Mrs. Ho was an exquisitely beautiful little girl who had kept her figure and her sweet disposition through four children. The children were all well behaved but so shy that we did not get well acquainted with them.

Mr. Ho dressed much as I dressed and the kids were dressed like the kids back home but Mrs. Ho usually wore a chang sam, which is the formal, stylized Chinese dress with the high collar, skirt slit at each side, and quite tight. It must be tight—Mrs. Ho, modest herself as a nun, once went home to change because she decided that the chang sam she was wearing was too loose.

Ticky had to have a chang sam and Mrs. Ho advised her where to go. Singapore is a place where they will take your measurements in the morning and deliver a tailormade suit to your hotel in time to wear it to dinner the same day. Ticky's measurements were not taken until around noon but the dress was delivered about five o'clock. I concede that tailoring a chang sam is not the job a man's suit is, but try to get that service in New York. The dress was midnight blue heavy silk with a dragon of sequins coiled across the chest—price, $10 U.S.

It appeared to have been sprayed on with a paint gun, rather than tailored and it met with Mrs. Ho's approval. The peekaboo effect of the side slits is rather startling. Shorts show a lot more skin but shorts do not dress up the landscape the way a chang sam does.

The Hos took us to one of the "Worlds"—there are three, the Great World, the Happy World, and the New World, and they are the Singapore versions of Coney Island, so much like our own amusement parks that there is no need to mention anything but the differences, the first being theaters for classic Chinese drama and the second being Joget dancing. The Chinese theater was the sort which can be seen in New York and San Francisco in the States—days-long performances, extremely ornate costumes and hairdos, stagehands that sit and smoke and have lunch right on the stage, very stylized acting and a singsong delivery not like ordinary Chinese speech. Since we did not understand the dialog and did not know the traditional plots it was interesting only as an oddity to us. But I was impressed by one thing: I had been told that all the female parts were taken by men. This may be so; I found it almost beyond belief. Those cunning little "girls" with their high voices were much more convincing than any female impersonators I have ever seen before.

Joget dancing is the sort of social dancing the Mohammedan Malays do—mostly extremely sexy rumbas and foxtrots. The "Worlds" have several dance halls with taxi dancers available, all just as one finds it in America save for one point: their religion frowns on bodily contact, even with the finger tips, so the taxi dancers follow their partners without the help of any physical lead; they "shadow dance." They are very skilled at it and never fumble in even the fastest and most complicated steps. It appears to be a skill developed by years of practice; we noticed several apprentices, nine or ten years old, who hardly ever gained partners but would join some couple and duplicate every motion of the older girl. The kids seemed only slightly less skilled at it than were the grown women.

While the religious injunction forbade touching, it did not seem to forbid anything else. The couples danced only an inch or two apart and the undulant gyrations they went through would cause them to be thrown off the floor anywhere else. A hula dancer would have blushed.

The long drive the Hos took us on into the Sultanate of Johore was remarkable on one point only—a sight of royalty. Singapore is an island like Manhattan, larger than Manhattan but much smaller than Long Island; it is connected with the mainland, which at this point is Johore, by a causeway, one which the Japanese armies found very convenient when Singapore was caught with its guns facing the wrong way.

We passed through customs for once with just a wave of the hand. Singapore is a free port while Johore is not, but the guards at the border did not seem worried about smuggling.

The countryside, the manners, and the people seemed no different from Singapore save that we were now out in the country and passed through only an occasional village; the buildings were substantial in structure and Western in appearance—no grass shacks, no mud huts.

We glanced at the palace grounds from the outside, then went on to the zoo. It was like any other fairly large zoo except for one thing: it was not, strictly speaking, a public zoo although it was open to the public. It was the private property of the Prince Regent ("Regent" because the old Sultan is ill) and existed only because he likes animals and wanted a zoo. While we were poking around among his caged tigers and apes and so forth, we ran across him. Mr. Ho pointed him out.

It is my contention that the least he could have done, with due respect to the romantic notions of citizens of democracies who gain their notions of royalty from books, would have been to show up riding an elephant and wearing a turban. But he was leaning against a borrowed Jaguar sports car and wearing a beaten-felt hat, a sweat-stained khaki shirt, and wrinkled khaki trousers. We knew the car was borrowed because, as Mr. Ho pointed out, the license plate was that of a private citizen.

If this sort of thing keeps up, I shall have to give away my copy of *The Little Lame Prince.*

But the most amazing place the Hos took us to was the Tiger Balm Garden, also known as Haw Par Villa. There is another one like it, named the same and built by the same man, in Hong Kong; otherwise I am reasonably sure that there is nothing else in the world even remotely resembling it.

Several people aboard ship had said to us, "Be sure not to miss Tiger Balm Garden."

"All right," I had answered. "What is it?"

"Well, uh . . ." Our advisor would pause, look helpless, and add lamely, "Never mind. Just be sure you don't miss it."

I am going to have the same trouble now. I will try to describe it but I probably won't manage to put over its essence. Just be sure that when you go to Singapore *you* do not miss it. It is free, it is not advertised, and nobody cares whether you go or not. It is unlikely that a guide or a taxi driver will suggest it, as there is nothing in it for them. But *don't* miss it.

Tiger Balm Garden is a good many acres of ground thickly covered by statues of rather poor quality.

And the *Venus de Milo* is a badly damaged statue of an overweight female with a busted nose.

You see? A factual description of a work of art is misleading; it does not convey the *Gee-Whiz!* element which is the difference—perhaps the only difference—between success and failure in art.

The statues in Tiger Balm Garden are of plaster and are painted in bright, garish colors. The modeling varies from adequate to poor. The statues do not sit alone on pedestals, but are in groups each of which tells a story; the background scene of each group is sculptured in full detail, furniture, landscape, or whatever is needed. Most of the statues are life size and the effect is to find yourself catapulted right inside a comic book. A sex-horror-crime-sadism comic book it usually is, too, for the emphasis is on the two eternal elements of drama, love and death. Most of the stories depicted are Chinese fairy tales, and pretty rugged fare for tots those stories must be—although classic fairy tales of any culture, including our own, run to themes that could give the comic books cards and spades any day and still excel in blood and violence.

But the themes and moods shift rapidly. Just beyond a long and very bloodthirsty tableau of a war between heaven and hell you find yourself suddenly faced by Donald Duck, seven feet tall and grinning down at you. No excuse is necessary for his presence here; Chinese children know Donald as well as their own fairy tales. A bit farther on is a modern tiled swimming pool, deep end, shallow end, diving board and ladders; it is inhabited by a half dozen mermaids, giant plaster fish and enormous crabs. Why? Well, don't you think a few mermaids would improve any swimming pool?

There is a long underground tunnel which is purgatory in gruesome, explicit detail. Chinese notions about these matters are less poetical than those of Dante, fully as imaginative, and much more drastic. The punishment for a woman guilty of adultery struck me as unnecessarily extreme, and the reward of usury was so horrible that I resolved never to touch the banking & loan business just in case there was something to it.

Ticky refused to look at this stretch. She complained that it made her ill.

But most of the groups and sequences did not show torture, but depicted simple, hearty violence and sex—for example wicked witches who disguised themselves as beauteous, bare-skinned maidens in order to lure wayfaring monks into their caves to rob them. The monks cooperated heartily and everybody had a good time right up to the last scene, where the monks were dispatched quickly and without sadistic furbelows.

What is art? Our own artists have been dinning at us all this century that art need not have draftsmanship, subtle use of color, nor any of the classic disciplines. Certainly these statues would make Praxiteles spin in his grave, but there is a mounting effect of awe, amazement, wonder, and sheer delight. If the scrawls and blobs of our own modernists are art at all, then these lusty creations must be great art.

The Tiger Balm Villas in Singapore and in Hong Kong were built by Aw Boon Haw, multimillionaire publisher, banker, industrialist, and vendor of patent medicines. His Tiger Balm remedies, the most popular of which is Tiger Balm itself, are used throughout the East. I am told that they are quite useful. In any case they made him fantastically wealthy, much of which wealth he gave away. The Tiger

Balm Gardens alone, which deserve to be classed with his charities, would have cost millions of dollars to build here and must have cost in excess of a million even in the Far East, yet there is not even a box in which to drop a voluntary contribution.

I heard two stories as to why he did it: one that he believed that as long as he was creating something he would not die, the other that he could teach basic morals through these frozen morality plays to that part of the population too poor and too ignorant to have had the opportunity to gain moral wisdom from textbook and schoolmaster.

I doubt if either story is true; I suspect that he did it because he wanted to.

United Press reports that he died in Hortolulu 4 September 1954. May his unique spirit rest in peace.

As we were leaving Haw Par Villa with the Hos, something came up which made it appropriate and necessary for Ticky and myself to mention what church we belonged to. We had avoided the subject of religion up to then because we did not know whether the Ho family was Buddhist, Confucianist, Christian, or what. The precaution was not uncalled for, as an educated Chinese who also speaks English is not necessarily a product of missionary schools, nor certain to be a convert even though educated by Christian missionaries. On another occasion Mr. Ho had learned that I had studied oriental religions and some mention was made of Confucius—I may have quoted one of his extremely quotable proverbs, or perhaps he did. Two nights later Mr. Ho introduced me to another Chinese gentleman who got me aside and said solemnly, "I understand that you are a student of the Scholar."

I made an intellectual standing broad jump of fifteen thousand miles, recalled that I was somewhere east of Suez and "the Scholar" was not Aristotle, in these parts, but Confucius—so I nodded solemnly and admitted that I had that honor, in a small way.

From then on he treated me not as a tolerated white barbarian, but as an educated gentleman like himself, an equal. My actual knowledge of the great sage is microscopic, but my point is that I would never have been accepted as an equal had I given the impression that I believed that all wisdom and virtue was a monopoly of the Christian faith.

But the situation did come up whereby it was necessary and polite for Ticky and myself to admit that we had been reared in the Methodist Church—whereupon Mr. and Mrs. Ho said with delight, "Why, we're Methodists, too!"

Almost at once we found ourselves attending services in the Straits Chinese Methodist Church.

I found myself projected both in time and space, not merely back to the American middle west but back thirty years as well. This was no boulevard church with a microphone at the pulpit; this was a piece of my childhood. The ladies in the choir wore chang sams, all else was the same, even to the notice board with its movable figures which set forth the attendance last Sunday versus the attendance this Sunday, even to the announcement that the Ladies' Aid was giving a box supper next Thursday evening. I think perhaps it was the nicest thing the Hos did for us.

We visited other churches, among them several Buddhist temples and one Mohammedan mosque. I was not favorably impressed by the Buddhist temples, either by their alleged beauty nor by the attitude of the priests, who seemed to be indifferent to anything but the cash entrance fee. The mosque was much more attractive in its bare, austere beauty than were the temples, which were tastelessly jammed with ornate, overdecorated junk.

We had to remove our shoes to enter the mosque, of course, and Ticky swears that that was when she picked up athlete's foot—which I consider unfair to Islam, as there were daily opportunities to contract it in hotels or aboard ship, especially aboard ship. Ticky just resents that she was told that she must take off her shoes, or stay out.

Earl (the student of yoga) and Marianne, his wife, were also at the Raffles and were tracking down Hindu fakirs among the Tamil colony . . . but this was one religion we did not choose to look up; we had had enough fakirs for a lifetime in one day in Mauritius. There was one adept in town who did a very odd stunt: he would cut off the tongue of one of his followers without letting it bleed—then (so it was seriously claimed) stick it back in place and heal it. I don't know and I did not trot along after Earl and Marianne to find out. But it seems to me you would soon use up a lot of followers that way.

Instead, we went to the botanical gardens the morning that show was supposed to take place, a choice less educational, for me if not for Ticky, since my knowledge of botany is limited to digging dandelions, but a good deal more fun and easier on the stomach.

It was fun because of the monkeys. We purchased a supply of peanuts and bananas from junior merchants near the entrance; as long as the supply lasted we had little time for plants. Wild monkeys swarm in the gardens and they expect tourists to feed them. They gathered around Ticky like a kindergarten class, accepted bananas from here, peeled them carefully, and ate them daintily. Ticky sat on the grass and stowed the peanuts in her lap in order to have both hands free to make fair distribution and maintain discipline, as the monkeys, like children, tried to shove and crowd and each get a lion's share.

While she was thus busy, one more enterprising monk sneaked behind her, made a long arm, and snatched her entire supply of peanuts out of her lap. He headed for a tree top while Ticky shouted, "Hey! come back here."

When she was forced to realize that he was not going to come back, then or later, she turned to me with her eyes round with astonishment. "Did you see that? Why, he's *dishonest."*

In two more years they will have to let those monks vote.

The day was on us when we would have to leave Singapore, with its crowds and its pungent odors and its trishaws (the coolies no longer pull; they pedal instead) and its pint-sized taxis and its febrile, sleepless activity. We did not want to leave. While it symbolized all the ills of the East and the sins of colonialism, we found the city itself warm and friendly and wonderful, from the little goats that scampered loose on the streets and never quite got hit by the automobiles to the bazaarkeepers who would look you in the eye and try to cheat you, all with the warmest good will.

We wanted to entertain the Ho family at least once before we left; the obvious thing—almost the only thing we were equipped to do—was to invite them to dinner at the Raffles.

But a worry was niggling at the back of my mind. "Ticky, have you considered that we might have trouble? The Hos are not 'European' as the South Africans so squeamishly put it ... and this place is the last stand of the pukka sahib. We may run into 'Jim Crow' rules. I certainly would not want to subject them to embarrassment."

Ticky nodded. "I've thought of it," she replied crisply, "and I've thought of an answer. We'll serve drinks up here; they can't stop us from doing that. Then we will go down to dinner and if anyone makes the slightest fuss we'll come back here and have dinner served privately up here. Then after dinner you and I will check out of the hotel and as we leave we'll set fire to it."

It seemed a good plan. But it turned out to be unnecessary no one lifted an eyebrow at "non-Europeans" eating in the main dining room of the Raffles, although we had seen no others. The Far East is changing—Rudyard Kipling might have trouble recognizing the place.

X

The Underside of the Orient

THIS CHAPTER IS not for the squeamish.

On second thought, I will not be any more graphic than I have to be; if you get the notion that Indonesia is a good place to stay away from, that will be sufficient.

You may remember that we had not only been unable to book transportation from Singapore to Australia but also had not been able to get an Indonesian visa. The visa we did manage to get in Singapore through the intercession of a shipping agent who knew the ropes and was able, by personal favor, to get the consulate to bypass the processing of our papers through six different government departments. We made out endless forms again, naturally. Indonesia not only has the longest and most complicated forms in the silly business but also wants them made out in quadruplicate-original. But we did get the visas.

We found out that our experience was not unique but customary, for we ran into a couple in Singapore from California who had tried to get Indonesian visas from the consulate in San Francisco, only to be forced to sail without them. They tried again in Singapore, as we did, and found their own papers in Singapore, on file with the consul there —whereupon they were required to pay ten dollars apiece to have their old papers canceled before they were allowed to start over and reapply. There is something wildly comical about such super red tape; it excites admiration rather than fury.

I had wanted to go to Bali, but our visa was good only for Djakarta. I did not go to the foot of the line and start over, not merely because I was worn out with red tape at that point but also because I had learned something much more disheartening. For the tourist and photographer Bali has long had two outstanding points of interest, endlessly reduplicated. But the revolutionary government, in its wisdom, has decided that the folk ways of Bali were destructive to the dignity of the new nation; a law was issued requiring sarongs in Bali to start just under the armpits, as they do elsewhere in the islands, instead of considerably lower down as has always been the Balinese practice. Now Bali is just like the other islands of Indonesia.

"Come to Beautiful Bali" indeed! I'll take Minsky's.

And besides that, we couldn't get to Bali anyway. Shipping was awfully tight and we took the only ship we could get, one which stopped only at Djakarta, then went down the east coast of Australia to Brisbane and Sydney. We wanted to land on the west coast of Australia, cross the continent by train, and leave from the east coast. But we had no choice; the only cabin we could get from Singapore to Australia was the one we took, and we got the last cabin in that ship. There was a sister ship going to Fremantle at the same time, but it was chock-a-block, not a berth to be had for love or cumshaw.

The ship we managed to get would have been uncomfortable at best, for she was an old tub which had been designed for Chinese coastal service, overnight trips with two to three thousand Chinese stacked almost like firewood. Now with the Reds running China and that trade gone perhaps forever she had been sketchily refitted as a cargo liner, but the result was far from comfortable. Our stateroom was a third the size of the one we had in the *Ruys* and there were, of course, no private baths. The toilet and bath facilities for men were adequate if not appealing but Ticky found that she shared one facility, bath and toilet combined, with all the other female first-class passengers in the ship; in the course of a three-week voyage this produced more than one acute and embarrassing emergency.

But the worst thing about the ship was that it was filthy dirty. The ship had no purser; the chief steward, an Indonesian, doubled in brass and carried out neither the duties of a purser nor the duties of a chief steward properly. In consequence his Chinese staff, with whom he could communicate only through his Chinese assistant, ran the ship to suit themselves. Now it is an unpleasant fact that lower-class Chinese have no notion at all of Western concepts of sanitation; this is not a racist remark, it is simply a fact. Inasmuch as the stewards in this ship received no instruction in these matters and were subjected to little or no discipline, they did as they pleased—and what they pleased was often disgusting.

For example (and I will keep the examples down to a minimum), discarded towels were laundered only if visibly dirtied; otherwise the room stewards would let them dry, refold them and serve them as "clean" linen. The same practice was followed with napkins. The menus were fancy jobs of four-color printing but the cooking was poor and the food and the dishes were dirty—I once found a cockroach baked into a dinner roll. I won't describe the food-handling methods nor the condition of the galley, but they were nauseating.

The ship's doctor could have and should have made sure that the ship was run in a sanitary fashion, but he himself was a loafer who did not care. Some ship's doctors are excellent but there is a percentage who are the drones of medicine, who sign up for the easy life and are too lazy even to carry out the scanty duties of a ship's doctor. Unluckily ours was this sort. The ship's rules required him to be in his office at nine in the morning and five in the evening; he seemed to feel that he had no other obligations. I recall one morning when a passenger hurt his knee rather badly at deck sports. The ship's doctor was sitting a few feet away, watching and sipping a drink; the passenger went up to him and showed him his damaged and bloody knee. The doctor glanced at it and remarked coolly, "I shall be at your disposal at five o'clock"—and turned away.

While we were not well off in first class, the passengers in second class and in third were in squalor. Second and third class in the *Ruys* were modest indeed, but they were spotless and smelled clean. In this ship they were filthy, reeking holes with a stench better left undescribed. The major shortcoming about ship travel is that, if you do have the bad luck to get a bad ship, you are stuck with it as thoroughly as if you had received a jail sentence. For three endless weeks we could have quit this ship only at Djakarta—which we would have done had Djakarta been an improvement, which it is not.

Of course the Captain should have tightened up his ship by cracking down on the doctor, the chief steward, and his first officer. But, while there is never any real excuse for a Captain since he can never be relieved of responsibility for everything that takes place in his ship, nevertheless I felt a sneaking sympathy for the poor man in this case; he was so busy handling his ship that he hardly had time to worry about the internal administration. The passage from Singapore to Brisbane is no soft snap.

We first became aware of this the first day out, at boat drill. Abandon-Ship drill is never perfunctory in a well-run ship but in this case I was surprised at the extreme and careful thoroughness with which it was conducted. It had a wartime flavor to it; one might have thought that the ship's officers expected the ship to go down at any moment.

We decided later that such was very nearly what they did think; those waters are still infested with mine fields left over from the War and never swept. I once got a look at one of the charts we were using; penciled into it in many of the passages between islands were mine fields.

This voyage would not have been the sinecure which cruising the open ocean is in any case; we were hardly ever out of sight of land, the charts are only moderately reliable (some of the surveys are much more than a century old), and shore lights are not too well tended. The second half of the voyage, through the Great Barrier Reef of Australia, is comparable to driving a narrow and twisting mountain road; reefs and shoals abound, the channel is narrow and must be piloted with great caution—we passed the wrecks of ships whose masters had not been cautious, or lucky, as may be.

The ship had neither radar nor gyro compass to make the shiphandler's task easier, nor did the master have any pilot but himself for the dangerous passages. It meant that he was on duty almost continuously a great deal of the time, night and day—his skill and years of experience against very real dangers. I know that he gave unsparingly of himself to keep his ship safe, so I don't quite have the heart to blame him personally for the faults in the ship's housekeeping. He kept us safe.

But just the same, it was a filthy tub.

Every ship that leaves Djakarta takes its quota of Dutch refugees who are leaving "Holland in the East" for good. The Dutch have been there for three and a half centuries; many of them have known no other home for generations. Those who still remain run the risk of surprise arrest and imprisonment, even of assassination—while we were there, in a town we visited, an entire family of Dutch dairy farmers was murdered by terrorists.

One of the refugees gave me a genteel tongue-lashing aboard ship, the theme being that the United States had forced Holland to surrender the Dutch East Indies to "communists," and that we would someday be sorry for our folly.

But Indonesia is a very complicated place; whatever the truth may be, it is certainly not that simple. It is true that we played a role, through the United Nations, in helping the Indonesians to gain their freedom. We were not alone in it, nor could the United Nations have forced the outcome on the Dutch had the Dutch been physically able to maintain their rule there after the defeat of Japan. Out of the maze of facts and allegations, one thing is sure: the Indonesians were fed up with the Dutch and wanted their freedom—and the Dutch were not able again to subjugate them.

But that, too, is oversimplification. Here are two facts which illuminate but do not tell all. After three hundred and fifty years of Dutch rule 92% of the natives could not read or write—nor did Batavia, the capital city, have anything resembling modern sanitation. These facts prove little but they do cast doubt on the validity of the longstanding reputation the Dutch have enjoyed for being the world's ideal colonials. To my simple mind a lack of schools and sewers after centuries of rule spells exploitation of the natives—not benign paternalism.

But one may ask how the Dutch could reasonably be expected to take education and sanitary engineering into remote jungle villages? That is not the situation at all. Java is an island a bit smaller than North Carolina and the Dutch built fine roads into every corner of it, to take out its incredible wealth. As for "villages," Djakarta, formerly "Batavia" and capital of Holland-in-the-East, is a city as large as Chicago. Imagine, if you can, Chicago without running water and sewers—or go to Java and see what the result is, though I do not recommend this course.

One of the results is an infant mortality estimated at 75% in the first year.

But I am oversimplifying again and Indonesia is not simple; a lifetime of study would not be ample in which to dig out the facts about it and put them in their true relationships. Despite the notion (and, in some part, the fact) that it is a "small" country, "unimportant" and certainly one we hear little about, it has half as many people in it as the United States, some eighty million. Java, which is effectively three-quarters of the nation in population and wealth, has a population density of more than a thousand to the square mile, versus about fifty for the United States. No country in Europe is so crowded, not even Holland itself.

This new nation is broken up into five major islands and countless smaller ones. There are twenty-five major languages and two hundred and fifty dialects. It has undergone centuries of colonial rule, four years of Japanese occupation, four years of revolutionary war thereafter, and civil war was going on in Sumatra while we were there . . . even in the "quiet" areas the bushes still held terrorists. They are undergoing drastic inflation, most of them can't read or write, and they have no experience in the difficult art of self-government. They are in a vulnerable position both to communist invasion from the north and to communist infiltration at home. Wish them luck; they are going to need it.

The harbor at Djakarta is a good one, well equipped by the Dutch with docks and facilities. As our ship stood in, the marks of war were plain to see; I counted seventeen sunken hulks as we approached our berth. We were told that Surabaja, the former Dutch naval base farther east, displayed even more wreckage of war.

Our time was limited and we were anxious to go ashore, but even after our visas were checked (Indonesia requires a visa to permit even a through passenger from a transient ship to step ashore, which most countries do not)—after our papers were checked, it was necessary to buy Indonesian money from the chief steward and then arrange transportation.

It is against the law to take any foreign money or traveler's cheques into Indonesia. The chief steward sold us rupiahs at 11.4 to the U.S. dollar, and it is much more than possible that he made a good thing out of it, as the black market rate was about 25 to one. I think it may be assumed that the chief steward of a ship calling regularly, himself a citizen of the country, would have means, if he chose, to get dollars ashore and change them back into rupiahs without going through official channels. I have no slightest evidence that he so operated, but the opportunity was there. The Chinese crew members used a simple and straightforward way of beating the currency laws; they were not permitted to go ashore, but they sailed currency ashore to confederates in paper darts. No doubt such transactions were well planned in advance; all sailors throughout history have been parttime smugglers. The stewards in the *Ruys* made most of their income from smuggling between the Far East and South America, with Japanese pearls figuring largely in the undercover trade.

At the customs gate I was subjected to the only body search I encountered in any country. I was not required to strip but my person and my pockets were most carefully frisked. I took it with beaming good nature—we had been warned in Singapore not to argue with a policeman or a soldier in Indonesia no matter what happened, as they would show no hesitation, if angered, in shooting you down on the spot. I don't know if this is true as I never put it to a test; I cooperated and was never treated with anything but smiling courtesy. Indonesians are more than friendly under peaceful circumstances, but news items confirmed the rumors that they could be quite dangerous if crossed. I was happy not to find out.

The customs officials looked like soldiers, which is not the case in the other countries we were in. Soldiers were very much in evidence elsewhere in the country, too, helmeted and always armed. If there were policemen who were not soldiers, I did not see them; the country simply seemed to be under martial law.

Women were not subjected to search at the customs barrier, none of any sort, not even their handbags. They were simply waved on through while the men were detained. The logic of this escapes me. But in consequence of this Ticky was decidedly miffed with me that I had not let her bring dollars ashore. The logic of this escapes me, too, since I had no way of guessing the circumstances in advance. Once through the barrier we stood in the rain for nearly an hour while trying to arrange for any sort of transportation. The docks are far from the city and there was neither bus nor taxi. At last, through phone calls put in for us by a Eurasian clerk who spoke English, two cars showed up and three carloads of tourists piled in; we headed for town.

Singapore is a city, a true metropolis, of slightly less than a million; Djakarta is a village of more than three million—it lacks almost every attribute of a city save people. It has just one modern hotel, Hotel des Indes, and even it is not modern compared with the Raffles, or even by comparison with the little Hotel Paragon in the remote town of Nelspruit. I do not remember seeing any building as tall as three stories and not many that were two stories high. Some of the downtown buildings are Western in type, of masonry, stucco, or sheet metal, but the overwhelming majority of buildings are typical Javanese homes of poles, woven matting, and thatched roofs crowded in together almost wall to wall. We had been told that here, if a family of swallows moved into a house, the family of humans moved out, because then other swallows would follow and the nests would be of much greater value than the house—as an article of commerce to be sold to the Chinese for bird's-nest soup.

This was hard to believe until we saw the houses.

I am not sneering at the houses; they suit the climate; the temperature in Djakarta averages 79 degrees the year round and never varies from that by more than a few degrees. The constant high humidity makes it seem much hotter, however; grass-and-bamboo shacks are not inappropriate.

The most unforgettable feature of Djakarta (and the one I would like most to forget) is the canal which runs for miles through the city and is paralleled by the main highway into the mountains. This canal has no perceptible current and contains opaque yellowish soup; it is used for every conceivable purpose—every purpose, it is sewer, bath, laundry, and well. Every fifty yards or so there was a stone staircase leading down into the water and at each there would be people using the canal for all of the above purposes. I don't want to be too graphic about this, but in Java most bodily functions are performed in public.

Our guide pointed out the swarms of people bathing in the canal and said proudly that people here were very clean; they were likely to come down to the canal for a bath three and four times a day. I could understand how it could be an endless process, since bathing in that filth would leave a person dirtier than ever. The so-called bath was rendered still less efficient for females by the fact that they bathed with their sarongs on, whereas the men just stripped naked and went in—though I don't suppose it really mattered either way; filth is filth.

People stooped to drink, housewives dipped up pans from it to take home for cooking, and at one point we saw a woman dipping a toothbrush in the canal to scrub her teeth—an unexpected refinement. Just upstream from her the canal was currently being put to use in its aspect as a sewer; the guide glanced at both activities and said happily, "People never get any disease from the canal. The sunlight, beating down all day, kills the germs."

It was a comforting thought even though without scientific basis. The people here are Moslems and I think I see in the guide's remark a modern version of the very old Mohammedan belief that water in a stream will purify itself in a few feet.

Djakarta is not pretty but it is colorful. Traffic is dense everywhere, some automobiles, many trishaws, many two-wheeled carts drawn by tiny, dispirited little horses much too small for the loads, countless swarms of people on foot Coolies trot along with poles over their shoulders, carrying loads heavier than they are—sometimes the load is a portable restaurant with charcoal stove smoking and the bearer himself the chef. The sarongs of the women and the jackets usually worn on top of them are in the garish, bright, and somehow beautiful color combinations and patterns made famous by Gauguin. Twelve-year-old mothers not much more than four feet tall stagger along, made lopsided by a child riding one hip. Gums made bright red by betel-nut chewing startle one from time to time and there are depressing sights of leprosy, twisted limbs, and numerous blind beggars—a spate of humanity overpowering as an avalanche and one which produces the same feeling of helplessness.

Ticky and I located a friend of a friend at Hotel des Indes, an American motion picture producer brought out by the revolutionary government under contract to build up a motion picture industry in Indonesia. I could not help but feel that Java needed a movie industry the way great-grandmother needs a pogo stick, but the new government is determined to make Indonesia self-sufficient in everything—"Export everything, import nothing" is the implied slogan of resurgent nationalism right around the world. In any case the wisdom of it was no responsibility of the American in charge; his firm had sent him out to do a job the Indonesians wanted done and he was doing it. I have no doubt he did it well, as he was Mr. Lothar Wolff who produced the world-famous *Martin Luther*.

Mr. and Mrs. Wolff seemed to be glad to see people from home, drove us around town, and took us out to a very pleasant seaside country club for a drink—a club which had been built for the Dutch masters but which was now used by the upper crust irrespective of skin or race. Perhaps I should have used the opportunity to have pumped him about the "real" Indonesia; instead we talked about an imminent eruption of the super-volcano Krakatoa, located in the Sunda Strait a hundred miles away. In 1883 Krakatoa produced a disturbance which makes H-bombs look like toys: 3600 people were killed, the noise was heard 3000 miles away, the air wave traveled three times around the globe.

Now the giant was rumbling again and Mr. Wolff was about to leave to take pictures of the explosion. He was as pleased as a child with a new balloon; the possibility of becoming a statistic did not seem to fret him.

We stayed aboard ship that evening not only because Djakarta is not safe after dark but also because there is literally no place to go. But there was amusement aboard ship, for it was Chinese New Year's. We noticed first that the ship suddenly became without service after dinner, no one to answer a ring, no bar boy to sell cigarettes or drinks; they had all gone aft and below, where they were whooping it up with noise and gin and firecrackers and feasting. We moved back to the fantail to watch.

Fireworks are fireworks, and, while the stern of the ship was kept spectacularly illuminated for hours, there is no need to describe it. After all, some of our own best fireworks originated in China; these were the same sort we use on the Fourth. But we met back there a Scot just discharged from the Gordon Highlanders and who had been serving for several years in jungle warfare in the Malay. This is an area which has for some time been officially free of communists, terrorists, liberation forces, and other freewheeling soldier-bandits.

But according to our shipmate the "police activities" that continued still added up to daily slash-and-run warfare; the casualties were still high even though news stories no longer appeared.

His report seems strengthened by the fact that mere possession of any firearm on the part of a native in the Malay States carries with it the death penalty—contrast this with our own custom wherein such possession is not only not a crime but a constitutionally guaranteed right.

Some of this we had to get through an interpreter, a young Australian who was present. The Scotsman had spent the first fourteen years of his life in a highland village, the next ten in a highland regiment, and his accent had never been corrupted . . . and Ticky and I had never before heard pure Highland Scottish. At first we were unable to follow it.

He was a handsome, well-mannered young man with the social and political attitudes of a barracuda. To him, all who were not white were "slanties" and deserved killing on sight. The only trade he knew was war; he was on his way to Australia where he expected to join the Australian army—he had been ten years a private but expected to do better in the Australian army. During the voyage he got into a certain amount of trouble, as he was traveling third class but demanded the privileges of first class, because of his white skin. The Indonesian chief steward could, of course, do nothing with him; the young Scotsman ignored his pleas to stay in his own part of the ship. Finally the Captain told him that he would put him in irons if he again showed up in the first-class lounge. After that he was a little more careful, but not much.

We arranged the following day to go to Bogor, a town in the mountains in the middle of Java which is noted for botanical gardens started by the Dutch a couple of centuries ago. We went through customs as before; I was searched but Ticky was not. As soon as we were clear of the barrier she said, "Fine! Now let's locate that black market."

"Huh?"

"I brought my traveler's cheques. Let's cash a few. I want to do some shopping today."

"I thought I told you—"

"I know what you told me, but I don't intend to be cheated out of sixty per cent of the value of my money. Ridiculous! The whole thing is a swindle."

I shut up. My objections were purely pragmatic anyway; my opinions matched hers. I have no moral scruples about dealing in a black money market. (Rationed foods and such in wartime are an entirely different matter.) Wherever there is an attempt to control currency there will be found a black market in money, as the control laws are not merely an attempt by the government to get something for nothing at the expense of its own citizens and their customers, they are also an attempt to defy natural law, to lift by the bootstraps. Fiat cannot determine the value of a country's money; only free exchange can do that.

I admit that fiscal theory is much more complicated than my sweeping generalizations, but the last sentence above expresses an easily observed fact to which there are no exceptions in history. But I do not mind going along with the gag and treating the process as a form of concealed taxation if the controls are moderate, as they are in general in the Commonwealth. But where the scheme approaches confiscation, as it did in Indonesia, my reluctance to deal in a free market is based only on a fear of getting caught.

But Ticky is never afraid of getting caught. When the time comes, she will no doubt tell Saint Peter that his bookkeeping is all wet and that she intends to make some drastic changes in the way the joint is run.

On the previous day some of the passengers had managed to sneak contraband money ashore; our driver had, without hesitation, told them where to find a black exchange. Ticky had listened to this and had asked him, "But will they deal with you when they don't know who you are?"

The driver let go the wheel and made an imploring gesture with both hands so oriental in its histrionic emotionalism that I was forced to suppress a laugh. "Madame—they will *beseech* you!"

"Oh." Ticky threw me a dirty look and shut up. On that day we had nothing with us but a few highpriced, official-rate rupiahs and she wanted to buy some sarongs.

So on the next day we drove to the black market. "I didn't tell you," Ticky said happily, "because I knew you would get cold feet."

"You won't like the jails here. Insects . . . cockroaches. Centipedes and tarantulas and scorpions. Things crawling over you and fluttering in your face in the dark—and I won't be there to protect you."

She looked uncertain, for I had flicked her on her one weak spot. Java has. an exceptionally intense density of population of the true dominant races of this globe; in that hot and humid climate insects abound in a fashion almost unbelievable to inhabitants of colder, drier places, and Ticky cannot stand creepy-crawlies of any sort. They change her from an Amazon to a frightened little girl. She can't abide anything with six legs—except trios, and not all of those.

I have explained to her that most insects do not bite, sting, nor carry disease, and that even bees, wasps, and hornets are polite to people who are polite to them and do not startle them. But she remains unconvinced; insects panic her. Except butterflies, of course, which she does not class as insects at all, but as self-propelled flowers.

I could see that the remote possibility of spending even a few minutes in a calaboose that was sure to be heavily infested with her mortal enemies was worrying her. "Fleas . . ." I added. "Lice—"

But she shrugged and squared her shoulders. "You're just trying to frighten me. I won't have any trouble."

Nor did she. And they did beseech her. When our car stopped in the little side street where the money changers hang out we were immediately surrounded by a crowd, each member of which swore by Allah that he gave the highest rates.

Ticky opened her purse and got out her book of traveler's cheques. "How many rupiahs for twenty U.S. dollars?" she said briskly.

They all stopped cold. One of them said hesitantly, "No cheques, please, Madame. Cash dollars."

"These are the same as cash dollars. They were purchased for U.S. dollars in the United States of America. Didn't you ever see traveler's cheques before?"

"Certainly, Madame, we know all about traveler's cheques . . . which is why we don't want them. They are very hard to handle. But for your dollars, please, I give you very good rate."

"But I don't have any dollars. Not a single one."

"Madame is sure?"

I thought she would take offense at the implication—which the would have back home. But she took it for the purely professional gambit that it was and answered, "Quite sure. We changed our last cash dollar in Singapore. Now does anyone, anyone at all, want to buy American traveler's cheques, good for their face value in American dollars? Speak up, or I'm leaving."

Nobody answered. On the face of the spokesman was a mixture of doubt, cupidity, and very real apprehension. He withdrew a few yards from us and the rest followed; they went into a huddle. Although the money changers were all in competition he seemed to hold some sort of leadership by prestige. The committee meeting went on for some time, then he came back to us. "Very well, Madame, as a favor to you. Will you come this way, please?" His gestures indicated that he wanted us to come inside a restaurant, out of the public eye.

Ticky held back. "What's your rate?"

"Eighteen rupiahs to the dollar."

"What! That's ridiculous. They are paying at least twenty-five rupiahs for a dollar anywhere."

"For your dollars, Madame, I will pay twenty-six rupiahs. But these are cheques."

"They are the same as dollars."

"To you perhaps, Madame, but not to me. I must pay again to get them changed. Even twenty-seven rupiahs for dollars."

"I really don't have any cash dollars. None. But I'll save these cheques and spend them in Australia before I'll let them go for any silly price like that. What is the best you will pay?"

"Aaaeeh . . . nineteen, Madame. I make no profit."

Ticky looked stubborn and so did he, they managed to look alike. I was getting fretful at the delay and a bit nervous; I interrupted with, "See here, give us twenty and get it over with."

He did not answer but produced a fountain pen and started counting out rupiahs. We left almost at once with my pockets all bulging with rupiahs—dirty, sweat-stained, ragged, and worn, and (I was afraid) possibly counterfeit. Our driver was not outside, nor the car; I looked up and down the street, then saw him waving to us at the intersection. He had moved the car around the corner to another street.

He waited while we walked toward him. Just as we reached the corner an open touring car filled with soldiers, each with a Tommy gun and wearing U.S. helmets, swung around the corner and cruised slowly down the street. They glanced at us, but said nothing. I looked back. The street was empty except for a dog and one child; the swarm of money changers were nowhere in sight. "Get in the car," the driver said. "Let's go."

When we were a few blocks away our driver-guide asked, "What rate did he give you?"

I told him and added, "Was that a fair rate?"

"It's all right. He cheated you only a little—traveler's cheques are no good; they can be followed. How much did you change?"

I hesitated, then decided that if he was asking because he intended to collect a commission later, there was no reason for me to make it difficult, so I told him. He dropped the subject and asked, "You want to go to bazaars now?"

"Yes," said Ticky.

"No," I said firmly. "Let's try to get to Bogor before lunch." It being a Moslem country he did as the male said. Ticky did not debate the matter, as she was almost as eager to see botanical gardens as she was to shop. She seemed quite happy; if the close encounter with the soldier-police had been noticed by her, it had not dampened her. Presently I noticed that she was whistling a tune; I identified it as "Working for the Yahnkee Dollar."

I said morosely, "You know what you are, don't you? A dollar imperialist . . . a jackal of Wall Street. Probably a warmonger as well."

She gave me a sunny smile. "I'm going to buy the *prettiest* things!"

The drive from Djakarta to Bogor is shown as out in the country by the map, but the houses stand almost solidly along the roadside the whole way, with more houses glimpsed behind the others as you speed past. Once in a while there would be a break and the rubber plantations or the rice paddies would come right up to the road. This is a place with climate but almost no seasons; the rice is cultivated through the year, crop after crop. Java is normally a rice-exporting country, and is becoming so again, now that the dislocations of war have been somewhat smoothed out. We could see water buffaloes, the tractor of the East, patiently pulling plows through the water-covered mud, followed by a driver himself knee deep in it. I asked our guide what the wage rates were for farmhands?

I had a little trouble making myself understood, although he spoke excellent, almost-accentless English. I explained again, then added, "Or do they all own the land they work?"

"Oh, no." He considered it, then added, "But they don't get *paid* anything; they get a place to live in and their food. That's all they expect."

I shut up and mulled over the implications of this. Java is one of the richest places in the world, possibly the very richest for its size, both in agriculture and in mineral resources. Yet it is so crowded that the ratio of people to arable land is four to the acre, whereas U.N. estimates of the proper ratio for a decent diet is four to *ten* acres. These figures are clouded by the fact that an acre in Java produces much more than does an acre of good farm land most other places. Indeed, if it were not so, Java could never have reached its present crowded condition; starvation would have prevented.

But things are badly out of whack and I wondered if it were possible for the island to feed its inhabitants no matter how efficiently its riches were managed. We passed the studio and sound stages of the Indonesia national motion picture industry about this time and I wondered again if the country could afford such luxuries? The installation looked comparable to those along Melrose Avenue in Hollywood and must have cost quite a lot of foreign exchange—then I wondered if it were not utterly necessary in the long run to build up the motion picture industry and things like it and thereby swap labor at home (which they had in plenty) for food grown abroad.

All I could really be sure of was that I did not envy President Sukarno his job.

To add to the already innumerable troubles of his possibly insuperable problems the feminists of Indonesia are now after his scalp—and all the poor man did was to take a second mate of the four permitted him by the Koran.

We sped on toward Bogor over excellent paved roads, dodging barrows and buses and foot traffic and dragons. The dragons were in honor of New Year's and each one was animated by six to a dozen Chinese school kids. Thy dragons could not see very well, decked out as they were, and anyhow they were very busy rearing up and snake dancing and being fierce, as proper dragon manners require. Fortunately our driver had good reflexes. We got to Bogor with only some near misses.

The charge for admission to the botanical gardens was only half a rupiah, or about two cents American. They are verb old and very grand. The scientific names of the plants and trees we saw may be found on p. 975 of volume 12 of the 1954 edition of the Encyclopaedia Britannica; I am not going to cheat by copying them down here. But the gardens have representatives in lavish numbers of all the plants to be found in the tropical rain forests ("jungles" to us Tarzan fans) of the Sunda Archipelago, the most impressive of which are the tall, graceful trees, one hundred and fifty feet or more in height, which reach up to the sky and form the roof of the jungle. As for the rest, there was everything from magnolias to mangoes spilling over hill and canyon and all beautifully kept up.

A barefoot laborer with good command of English (which he asserted that he had acquired simply by talking with tourists) spotted us and took us in charge; Ticky had her usual half-Latin, half-English shop talk while I swatted at mosquitoes and appreciated the deep shade—the sun outside the gardens had a Mad-Dogs-and-Englishmen intensity. Finally I insisted that we leave, as Ticky had not taken her anti-malaria pills. The laborer graciously permitted us to make him a small gift and we parted on a high level of international amity.

We were forced to eat lunch in Bogor or go hungry. I say "forced" because the best restaurant available was far from appetizing. Bogor is a pretty little town compared with Djakarta; it is green and nestles into the mountains. But its standards of sanitation are reminiscent of Djakarta's canal. We ate hot, cooked food and drank no water and hoped for the best. It was a Chinese restaurant and the food tasted good, but the dishes and place itself were dirty. We sat on an open porch at street level; traffic moved past six inches from my elbow, an arrangement which resulted in us being braced by beggars as we ate. Our guide recommended that we ignore them or there would simply be more of them hanging around . . . which was true but I do not have the courage to eat in the presence of a skinny, blind man who is being led around by an equally skinny little girl—and do nothing about it. While I know it is bailing the ocean with a spoon and changes the situation not at all, nevertheless when his filmed eyes stare past your plate and his nostrils quiver the only possible course is to pay and pray Allah to forgive you for being yourself and not the beggar.

So we paid and paid again, usually to blind men, and got out of there as quickly as we could, then crossed the square to the market. Bogor is far enough from the sea coast that the bazaars are intended for the local trade rather than for tourists. I don't suppose that we paid native prices, but even the asking prices were about half the best we could do at the bazaars around the Hotel des Indes back at the port. Over my objections, Ticky bought a coolie hat the size and shape of a large umbrella, the sort worn by the farmers in the rice paddies. It was a beautiful lob of basket weaving but about as manageable as a mattress. Then she turned to sarongs and scarfs and blouses.

She looked them over while the Javanese women looked her over and I looked them over. They stared at her silently, quite a crowd of them. Their faces showed nothing, but I wondered what they thought of her, with her white skin and her red hair and her purse full of rupiahs—and her height. Ticky is not big; she has a twentytwo-inch waist and I tower over her, but she was a foot taller than most of these women. Even the Javanese men seem small and smooth and childlike to us; they are not the big-boned hairy apes that we of the colder regions are. Very possibly our appearance alone is enough to make them think how pleasant it would be if we were dead; we offend just by existing.

But they simply stared, while Ticky bought enough batik to start a small tent & awning company. I got her back into the car as quickly as possible, as we were already short of packing space. The coolie hat would not, of course, pack at all and it was already a nuisance in the car. On the trip back we continued to encounter dragons, but they were getting a little tired by now and did not dance quite as much. Perhaps they were beginning to realize that the New Year hardly ever lives up to its promise.

When we got back to the ship we found that we had missed a chance to reach the west coast of Australia and with it the chance to cross the Australian continent. The sister ship of our own, the ship for Fremantle which we had been unable to book in Singapore, had been lying in the berth just forward of us; it had sailed an hour before our return. There had been a cancellation for one double room at the last minute and its purser had come aboard to see if any of us wanted it—so a search had been made for us and the space had been held for us right up to sailing.

I swore feelingly for a bit, as I had wanted very badly to make the trip overland across Australia . . . and, besides, the other ship might even have been clean. But it was impossible to do anything about it; we had literally missed the boat.

Ticky displayed her plunder and our Indonesian chief steward taught her several ways to wrap a sarong. It seems that each island has its own style of wrapping—none of them the way Dorothy Lamour wraps one—and you can tell what island a woman is from by the way she ties her sarong. He also showed her how to judge quality by sniffing the cloth. The rule seemed to be that the worse the odor the better the batik, though I may have been wrong about this.

We had planned for the next day several visits intended to be both educational and instructive. I wanted to take advantage of Mr. Lothar Wolff's invitation to visit the movie studios, this being a subject I knew enough about to form some opinions, and I wanted to see a Chinese school which was run by a relative of Mr. Ho. I had been told in Singapore that the school had more than four hundred pupils, grammar and high, hut nevertheless met in the small home of the principal as the school buildings had been a casualty of the War. I had asked how this was possible and had been told that each pupil attended only one hour a day, just long enough to recite and be assigned homework for the next day. The Chinese thirst for knowledge in the face of difficulties I had met before; it seemed to me that such a school was well worth seeing. I planned too, to call on a newspaperman to whom Mr. Ho had given me a letter; working journalists can, if they wish, give the real low-down on a situation better than anyone.

The next morning there was a steady tropical drizzle that seemed likely to keep up all day. The ship's newspaper, posted on the bulletin board, reported the murders of an entire family of Dutch dairy farmers at Bogor; it appeared that we had passed in front of their house about two hours before it happened. Another news item reported the arrest of the Dutch personnel of one of the two major steamship companies; they were charged with sabotage, nature unspecified, and the government had moved in on the firm.

There had been one incident right inside the ship, one which had everyone nervous. One of our shipmates, a nurse from Sydney, was traveling alone, taking the round trip to Singapore as her vacation. She had a single cabin. She was awakened in the middle of the night to find one of the Indonesian soldier-police leaning over her bunk—the cabin doors locked but the locks were the old-fashioned sort which could be opened by almost any skeleton key.

She had been too frightened to scream. He said to her softly, "Oh? So you are alone?" then had gone back and locked the door from the inside. Most fortunately her cabin connected with the next one by a door which could be used to make the two rooms a suite; she jumped up and unbolted it and ran into the next cabin, where an Australian married couple were living—to her great good luck they had not bolted it from their side.

By the time she had made her alarm understood the soldier had disappeared. She had reported the matter to the Captain but there was nothing he could do about it other than to make a useless report of it ashore. A merchant ship tied to a dock is part of the soil of the country it is in, regardless of the flag it flies; the soldier-police-customs-guards were free to come and go in the ship as they pleased, and which they did, night and day. Could she identify the man?

No, she could not; he had simply been a helmeted face in the dark.

I read the depressing news bulletins and thought about the fright the nurse had received, then turned to the rail and stared out at the rain. Ticky came out of the dining saloon and joined me. "Delightful day!"

"Just ducky, for ducks. See here, are you anxious to do more shopping?"

"Not really. But I'd give a nice price for a small snow storm."

"So would I. And I've just remembered that I've seen a movie studio; I don't need to see another one."

"You certainly don't! If you never take another Hollywood job it will be soon enough for me."

"Maybe so, but I wish we were in Hollywood right this minute. To tell the truth, hon, I've had just about all I can stand of being polite to little brown men with Tommy guns. What do you say we stay aboard today?"

She looked relieved. "I was hoping you would say that. This place makes my flesh creep. But I wasn't going to let you go ashore alone; you would get into trouble without mama to look out for you."

I did not argue this amazing perversion of the facts; I simply said, "Swell! I'll skunk you at crib. Or maybe we can get up a game of liar dice."

I suppose that it was a foolish waste not to go ashore in a foreign port, having spent the money necessary to get there, but I did not regret it then or now. Nor do I intend to go back. When our ship stood out of the harbor early the next morning it made us happy.

The next two weeks through the Java Sea, the Flores Sea, the Timor Sea, the Arafura Sea, around the northeast corner of Australia through Tones Strait (transited by the indomitable blackguard Captain Bligh in the longboat of the *Bounty)* and then south through the Great Barrier Reef, were not comfortable but were not entirely unpleasant. The weather was so hot that we slept naked without even a sheet, but no exertion was required of us—we had steadfastly refused to sign up for the deck sports contests organized by the untiringly athletic Australians. The hardest work of the day was to shower just before dinner, then dress and get out on deck before clean clothes were soaked through with sweat. We had Mollie and Bert with us as table mates, the Australian couple who had been with us in the *Ruys,* and they were unfailingly good company at all times. Just to grouse with them about the filthy condition of the ship made the conditions more tolerable.

Most of the other passengers were Australian sheepmen and their families, extremely wealthy but not showing it in any fashion. Several of them owned sheep stations, or "selections," larger than the fabulous King Ranch in Texas; a typical Australian sheep station will have an airfield of its own for the convenience of family and friends—but Mum will nevertheless be doing all the cooking for family and hired hands; the great wealth that has come to them in recent years has not changed their way of daily living. We found them easy as an old shoe and we were offered unlimited station hospitality, which most regrettably we were unable to accept.

The ship did not have the facilities for amusement that the *Ruys* had; most of our time was spent sitting around talking or in non-athletic games like liar dice. Liar dice was a game introduced by Bert; it can be played by any number of people as long as they are dishonest. It requires a set of five poker dice and an ability to lie convincingly, the idea being to pass the poker hand (of dice) from player to player, each player being permitted to roll once to improve the hand but being required to pass the hand along at a higher poker combination each time. The hand is not shown, that is to say the dice are always kept concealed until some player refuses to accept the declared valuation and challenges. If he challenges correctly, the other player puts a chip in the pot; if the hand turns out to be as high or higher than the declared value, the challenger contributes a chip. It is a freeze-out game; the last player surviving takes all.

This game brings out the very worst in people.

The three best at it were Bert, whose honest brown eyes would have served well a confidence man, Ticky, who is ordinarily painfully honest but who turned out to have a deviousness in her that I had never suspected, and Brian Salt, a young Englishman who not only had the natural advantage of a full set of blond whiskers to conceal his expressions but also was possessed of a telekinetic ability to roll five of a kind whenever he really needed them. Or perhaps he had the rare manual skill to roll dice without the usual element of chance—you can never tell with liar dice; it is an immoral game.

I am happy to say that we played only for chips, or I would have arrived in Brisbane in a barrel.

The thousand miles and more inside the Great Barrier Reef passed placidly and monotonously through water with hardly a ripple. As we came out of the reef we edged into a cyclone which had been tearing up roads and bridges all through Queensland, destruction so extensive that many of our sheep-raising shipmates were unable to go home and chose to go on to Sydney to wait out the weather. I concluded that we had had a narrow squeak; the Barrier Reef is no place to encounter a storm and there are plenty of wrecks inside the Reef to prove it. The Reef itself is not spectacular from inside, being usually just a vague line of white on a horizon that seems a little too near, plus numerous rocks and coral islands. The coral formations are said to be marvelously beautiful close up and there are many resorts along the reef to permit people to enjoy the phenomena, but from the shipping channel little can be seen but a line of white on one hand and the coast of Queensland, lush and green, on the other.

XI

Wildlife and Red Tape

WHILE THE POPULATION density of Java is more than a thousand to a square mile, the density in Australia is only three to the square mile. All other comparisons between the two countries are subordinate to this one. In almost every possible aspect Australia, the Australian culture, and the Australian people are as different from that which we had just left as is conceivable, but each of the differences (other than skin color) is strongly related to the fact that the Australians are a handful of people inhabiting a vast and almost empty continent.

Australia's people are almost entirely English in ancestry, but the culture is not English. Americans are more easily at home there than are Englishmen. But it is not our culture, either; it is simply one that we fit into without much friction. It is aggressively democratic in a fashion quite un-English, much more so than our own far west. The Australian working stiff isn't taking no nonsense off cops, or platoon sergeants, or bosses, or nobody, and if you want to make something of it, he is happy to drop what he is doing and oblige, with bare hands, boots, broken beer bottles, or take your choice. On the other hand he is quite willing to be civil to anyone who is civil to him and does not pretend to be better than he is. The attitude and manners are only an extension to the logical extreme of a common American *mores;* any American with enough sense to pound sand should be able to stay out of trouble and get along in Australia. They think as we do, only more so.

We arrived in Brisbane early in the morning and were able to go ashore with a minimum of red tape, since we were not disembarking here. The port doctor looked at our wrists, the immigration authorities looked at our passports, and we went ashore. Brisbane is located up the river of the same name; ships are able to tie up right inside the city, although in this case our berth was a mile or more from the downtown area. When we came out the customs gates we found ourselves in a middle-class residential area of small homes each on its own lot.

The climate and vegetation were strongly reminiscent of Southern California, but there was an even stronger impression of utter and homely familiarity, combined at the same time with strangeness, which I could not at first figure out. Then, as a street car came winding noisily down the street, I suddenly got it: this place had precisely the flavor and appearance of the American middle west of thirty to forty years ago.

I was to have that feeling many times in Australia, a feeling as if I had slipped slightly in time, like the *Connecticut Yankee* but in a lesser time span. I felt it most intensely in that neighborhood of modest homes in Brisbane but it never quite left me. Much of Australia feels the way America used to feel about a generation ago.

I know this sounds patronizing but it is meant simply as careful reporting. Australia is anything but a backward country, but it is rich in food rather than in manufactures, as of today. It is hardly surprising that its trams and much of its physical equipment look as if left over from the Mauve Decade, since such is often literally the case; the imported stuff is expensive and hard to replace.

The immediate effect on me was to make me feel at home for the first time in many months, most especially so after the depressing strangeness of Java. I liked Australia and I wanted it to like me.

We hailed the street car and rode it downtown. Downtown Brisbane looked a bit more modern but not much. It was a pleasantly busy large city, not too dirty and not too bustling.

We walked its streets for a while, tried a few of its shops and bookstores, and enjoyed the sound of English being spoken. But one sign, frequently repeated, began to bother us; it read: "CASKET IS CLOSING!"

About the tenth time we spotted this Ticky turned to me and said quietly, "I think we've blundered into an undertaker's parlor, dear."

"I'm going to find out what it is all about." I turned into a newsstand, attempted to buy a copy of *Walkabout,* an Australian travel magazine, then asked the proprietor, "What is this 'Casket' business?"

"It's closing. If you are interested, you had better hurry."

"Yes, but what *is* it?"

"Why, it's closing, this afternoon. If you want to get in on it, you had better move fast."

"Why is it closing? Who is dead?"

This might have gone on indefinitely if he had not suddenly gathered the idea that I really did not know what "Casket" was. Rather pityingly he explained that it was a lottery. The Australians are gamblers; they will bet you that it does, or that it does not, on anything. Lotteries and horse races are among the favorite legal forms of gambling, but legal or illegal the Australian will gamble. Perhaps the favorite illegal form is "Two Up," a game as simple as matching pennies—in fact, it *is* matching pennies, except that sometimes thousands of pounds will change hands simply because a pair of coins show heads at the same time.

A friend of ours in Sydney told me later that the basic interests of Australian men were "—beer, the races, women, and work, in that order." Nothing that we saw in Australia caused me to doubt the accuracy of his statement.

The subordinate position of women in this hierarchy of interests caused a good deal of friction during the War between Australian men, such few of them as were home, and American troops. The Australian male does not believe in spoiling his women; an attitude of, "Shut up and get hoppin' before I bash you one," is not uncommon. The American G.I. showed up with more money and an attitude that undercut the position of the local swains; the G.I. spent money on taxis—worse yet, he helped the Australian lass in and out of same. He bought flowers for her, candy, dinners, and shows, and in general exposed her to the Cinderella pattern which is common courtship among us, but not in Australia. He behaved like the city-slicker villain in a melodrama and naturally he was hated for it (by the Australian men) just as such villains always are.

The emotional attitudes generated by this unfair competition have not entirely worn off.

We had only a few hours to spend in Brisbane, so we hired a taxi for sightseeing. Instead of asking for the usual sights I asked the driver if there was a place nearby where we could see koalas. There was, at Lone Pine Sanctuary just outside town, so we went there. This trip alone made the journey to Australia worth while; these little animated teddy bears are Australia's finest jewel. I still regret being forced to miss the trip across Australia, but, had our trip to the koala bear park been our only glimpse of Australia, I would have considered the money well spent.

Lone Pine Sanctuary is a small, private zoo located in a grove of eucalyptus trees—I did not spot the "Lone Pine" but it surely must have been lonely. They have there several dozen teddy bears and the place is small enough and informal enough that visitors are permitted to handle them. This does a koala no harm; he loves it. A koala will cuddle with anyone who wants to cuddle; left to themselves, they cuddle with each other. In the wild state—and there are many, many of them still wild in the eucalyptus forests on the east and south coasts

—koalas have no natural enemies and have never learned to be afraid. Consequently if you pick one up, he assumes that you are a friend, hugs you and snuggles up. The Marquis de Sade could hardly resist such a response.

Ticky had her picture taken holding Little Mo, who was just two, barely adult. The picture shows Little Mo clinging to Ticky and wearing a bemused, just-woke-up, good-baby expression characteristic of all koalas and shows Ticky with a wide grin of utter delight which is equally characteristic of humans on coming into first contact with these most endearing of beasties.

The picture taken, the keeper took Little Mo from Ticky's arms, set her on the ground and said, "All right, go home." Little Mo started ambling slowly for the open door of the large cage she shared with her brothers and sisters. She came to a concrete curbstone six inches high; instead of climbing it she sat down and started to nibble at it. The keeper said, "Cut that out!" spatted her bottom and boosted her over the curb. She ambled on back to her family.

The keeper said disgustedly to us, "That happens every day. She knows that curb isn't good to eat—but each time she tries, just in case."

Koalas are not long on brains, but they don't need to be; their only food is the foliage of the eucalyptus trees they live in. What they do have is innate genius for being pets. If their diet was not so restricted (they cannot live without certain varieties of eucalyptus leaves), they would be much in demand the world over.

As it is, they may not be shipped out of Australia; each is a ward of the government, whether wild or tame—I mean "caged or loose," as there is no such thing as a "wild" koala; it is a contradiction in terms. Some have been shipped out in the past, to zoos that made special arrangements for their food, but the results were not entirely satisfactory and the Australian government is reluctant to grant such favors.

Even inside Australia the government keeps a close eye on them. They may be owned, yes, if the owner is well equipped to care for them. But let us suppose that the Lone Pine Sanctuary in Queensland were to sell one to the Sydney Zoo in New South Wales. The Zoo would pay the Sanctuary as a private transaction—but the state government of New South Wales would also pay the state government of Queensland an indemnity fixed by law to compensate Queensland for the loss it suffers in having one of its koala citizens emigrate to a neighboring state.

This stringent policy concerning the teddy bears does not indicate that the. Australian government is exceptionally sentimental about animals. Bounties are paid for killing kangaroos, as a pair of kangaroos will eat as much grass as three merino sheep, and any means at all is used to kill rabbits, even biological warfare in the form of a virus disease—the offspring of a dozen rabbits introduced in 1788 grew to an estimated half a billion and almost bankrupted the country. But in the case of the koala, an animal utterly useless unless killed for its pelt, the Australian government recognized that the world would be a much poorer place in the warm intangible values if it were allowed to die. I, as a representative non-Australian, wish to thank them.

Although koalas are almost as scarce as unicorns in the rest of the world, it hardly seems necessary to describe them since they are so frequently pictured. Everybody knows that they look like toy teddy bears; indeed, the toy teddy bear is modeled after the koala, not after the carnivorous bear. I will mention only that which does not show up too well in pictures. Man is rightly proud of his opposable thumb; that and his brain set him apart from the other animals. The koala was shortchanged on brains, but he has *two* opposable thumbs on each hand. His clown face always has a gentle, muddled look, like a person with one too many glasses of sherry. His bare and oversize nose I had always assumed to be a sort of horny beak (I was misled by the platypus, I think); instead it is soft and rubbery and the little fellow will gladly rub noses with you like an Eskimo or a Maori; it seems to be a gesture of the overflowing affection they feel for everyone.

When unhappy they weep with a cry like that of a human baby, pawing at their eyes as if to wipe tears away. This happened once while we were at Lone Pine; it is unendurable, one must console the little fellow at once—by cuddling it, of course.

There were other Australian creatures at the Lone Pine Sanctuary; we managed to find time to give them a cursory glance despite Little Mo and her relatives. Here we learned for the first time that, with Australian parrots, Polly does not want a cracker, but "Cocky wants a cup of tea." We discovered, too, that besides Old Man Kangaroo and the wallaby there are many, many other varieties of kangaroos, including a tree-climbing one. This struck me as being as inappropriate as overshoes for fish, but you can never tell about Australian fauna; they all seem determined to be as exotic as possible. Consider the bower bird, that builds a hideaway for seduction purposes only, like a roué's flat, and presents his light of love with "jewels." Or the platypus, which can't make up its mind, if any, whether to be bird, beast, or fish. Or . . . never mind; they are *all* on the lunatic fringe of the animal kingdom.

We met an emu there. He stared at us with big blue eyes and said, "Glug!" from way down inside, like a molasses jug on a cold morning. I said, "Glug!" back at him and he said, "Glug! Glug!" Whereupon I gave up, we were getting nowhere.

Looking around the sanctuary that day was a smooth black man with a crop of fuzzy hair. He was barefoot and wearing a skirt, with a white shirt above. I got our taxi driver aside and asked him, "Is he one of the natives?"

The driver looked at him. "Yes, he's an abo *[aborigine]* all right. Must have brought him here on account of the Queen's visit." I accepted the explanation and looked him over with interest, trying not to be seen staring. Later that day, in a local paper, we saw a picture of the man—he was a Protestant missionary from the Fiji Islands, present in Brisbane as an honored guest speaker at a church conference. This illustrates a fact I had not realized; the Australian aborigine is so scarce that many of the people on the thickly populated east coast have never seen one. Most of them are in the Northern Territory, where they are either cowboys or are living in their native state. No one—literally *no one*—who has seen both a Fiji Islander and an Australian aborigine could mistake one for the other. Had I known, the bushy, kinky hair of the reverend gentleman would have told me the difference; the Australian aborigine has wavy hair quite unlike the dense, almost felted structure which tops a Fiji Islander.

We never did see an "abo." We probably would not have seen one even had we been able to cross the continent, as there are less than 50,000 of them left, almost all of whom live far from the centers of white population. There were estimated to be some 300,000 of them when the white settlers arrived; these two figures alone make it clear that the past history of the contact between the two races is not one of which the white race may be proud. On the other hand, we need not lie awake nights over it, since the entire record of the human race of all hues is one of bloody conflict; the end result has been that nine million people now live in peace and civilized comfort in an area formerly occupied by one-thirtieth that number of stone-age savages more primitive than any other people on this planet.

Indeed, so primitive were the aborigines that most Australians in the past (and many of them today) seemed to have believed that they were subhuman. There is no scientific basis for this belief even though their almost animal-like customs give it a superficial plausibility. The brain weight of this race falls within the normal spread in brain weight of the European racial groups and the accomplishments of individuals among them tend to show that their native condition is environmental rather than hereditary.

It is possible that their potential genius is as great as our own, since even Shakespeare or Einstein would find it difficult to leave any permanent mark on the world if born into a culture without writing, one in which the opportunities to display brain power were largely limited to throwing boomerangs at kangaroos. Contrariwise, lack of opportunity does not prove that opportunity is the only lack; there seems to me to be no reason to believe that this race as a whole lacked any racial opportunity possessed (let us say) by stone-age savages of the Mediterranean.

As may be, the present Australians are as race conscious as any people in the world. Their racism is much easier to swallow than that of the South Africans, since they have no wish to exploit other races. (The remaining aborigines are not exploited; their numbers are too few for them to be of any economic importance.) Present-day Australians have no wish to have a servant race; they will do their own hewing of wood and drawing of water and are not ashamed of menial labor even at the highest financial and social levels. But what they do want with apparent complete unanimity is to keep *all* other races out of Australia. Not just the coolies, but *all* of them, educated or not. So far as we could tell, the "White Australia" policy was the one political issue supported by everyone at all times.

They are almost as anxious to fill up their great empty country, in order to make it strong enough to resist any new colonization by other races. They prefer immigrants from the British Isles but will accept, and subsidize the immigration of, people from any of the white Western nations. They are afraid of the great hordes of humanity north of them, of which the crowds in Java are only a sample. Although never invaded, they remember a time when the government was prepared to surrender everything north of Brisbane and make a last-ditch, last-hope stand in the south. (American troops saved them from that and some of them are grateful, a rare thing in international relations!) They fear the communist menace even more than we do; an overall triumph of communism means to them that they will be swamped in a tidal wave of millions of Asiatics. Which, of course, they would be.

If the communist powers win this present struggle, the present Australian nation will cease to exist even as a puppet state; it will be replaced by an Asiatic nation occupying the same territory. Knowing this, they are not as vulnerable to the creeping neutralism which daily makes England less and less our ally; they know that, if it comes to all-out atomic war, their only chance of survival lies in the potential ability of the United States to stand the first shock, strike back, and possibly win. Nor will they sit by and wait for us to win it for them. Australians will fight.

We left Lone Pine Sanctuary and rode back downtown, where we dismissed the taxi at the corner of Queen and Edward Streets, an intersection equivalent to Broad and Chestnut in Philadelphia. Brisbane is a standard Western city, very proud of its new city hall. It is about the size of San Jose or Mobile, with somewhat similar subtropical climate. It was started as a penal colony a hundred and thirty years ago and relics of the early days are still on display. But no Australian cares to have the convict system mentioned, unless he brings up the subject first. They are still sensitive about it. But there is no real cause for them to be sensitive; the United States and Australia were colonized by the same sort of riffraff in the main. Australia had a higher percentage of convicts in its early days than we had, but the convict system in Australia was the direct result of the American Revolution; Britain had to find some other place to dump her petty criminals and politically obstreperous after that—the first shipment to Australia was in 1788. Today one may hear matrons of Atlanta, Georgia, boast of ancestors who arrived in Georgia in such-and-such a year in the eighteenth century—when a quick check will disclose that no one but convicts arrived that year. Perhaps in time Australians will acquire the same smug, undiscriminating pride in ancestors, just any old ancestors, which characterizes our South, Philadelphia, and Boston. But they don't have it now.

"Nice" people, the prosperous and respected, hardly ever emigrate; they like it where they are. Colonists are the unsuccessful, the ne'er-do-wells, the outcasts, the indentured, and, quite often, the criminals, where "criminal" means anything from a murderer to a hungry petty thief and includes people who are aggressively dissident in their political or religious opinions. The United States has done very well on such a mixture and so has Australia. It has enriched each country with a very useful anarchistic strain of impatience with officiousness and rebellion against injustice, and has left England and Europe poorer by the loss of those very convicts.

But Australians don't talk about their ancestors.

(I wish we did not. It is a subject always boring to the victim. Worse yet, it contains a veiled insult not easily answered, unless the listener cares to indulge in calculated rudeness.)

It was a hot day in Brisbane and poking around its streets was thirsty work; I started looking for an oasis. I did not find one easily; the street signs by which one spots a cocktail bar in the States were absent. Feeling that a longer wait might endanger our health, I stopped a man on the sidewalk and explained our predicament, adding rather unnecessarily that we were strangers in town.

He was all helpfulness, politeness, and gallantry, with gestures, expressions, and manners like those of W. C. Fields at his ripest. He was not typically Australian, if there is such a thing; he was himself, a unique individual. "Ah, sir! Madame! You are expecting to find a cocktail bar. But this is not Paris, this is not New York. You will not find such here."

I inquired rather blankly what one did about it.

"One goes to a hotel. Not into the bar—oh no! Into the lounge. You will find one just around this corner."

I answered that we had just come around that corner, actively searching, and had spotted no indications. He put up a hand. "Never mind. I will show you. Come."

I protested that we did not wish to take him out of his way.

"Not at all. A privilege. This way, dear lady."

"Uh, look . . . do you have time to spare to have one with us?"

He stopped short, hesitated, and seemed at a loss for an answer. Ticky, by instinct I think, guessed correctly the trouble. "I don't believe we introduced ourselves. I'm Mrs. Heinlein and this is my husband. We are visitors from one of the ships in the harbor."

He immediately relaxed, smiled warmly, and told us his name, Mr. Sheppard. There was no further reluctance about joining us for a drink. He consulted his watch, remarked that he should be back at his office, but added that it was a far, far better thing to spend a few sociable moments with kind people. We marched around the corner with an invisible brass band leading us.

In Australia liquor licenses are granted only to hotels. Each hotel has a bar, but it is strictly stag; if a woman were to walk in, it would create some sort of a major crisis. But near the bar is a lounge, where women are permitted to drink seated at tables, out of sight of the bar itself. These rules are empty formalisms but are strictly observed. Mr. Sheppard took us into such a lounge.

Although we had asked him to have a drink with us, he brushed aside my attempt to pay—we were visitors, guests. Ticky ordered her usual Scotch-and-water, Mr. Sheppard ordered beer, and I decided to try beer myself, for I had heard of Australian beer.

Australians cause beer to disappear faster than an elephant drinks water; I had to hurry to catch up and I again lost a check fumble. I was not really anxious for a third round but, for my country's honor, I had to pay for at least one round; this time by getting my money out in advance and insisting, I managed to pay. In the meantime Mr. Sheppard kept us endlessly entertained with anecdotes. He was a man who had been everywhere and seen everything, and he could talk about it endlessly, with charm and droll humor. Before World War II he had traveled for years on business in Europe; he had returned home and was now a glass wholesaler.

I don't remember his stories too well. Australian beer is good stuff; two bottles of it and you think you are Old Man Kangaroo. Three bottles and you are ready to tear up lamp posts by the roots and bash policemen. I had three bottles.

American beer is a nice cool drink on a hot day, but it does not deserve the name "beer." It is sickly aftermath of Prohibition. I had not been able to understand, before I visited Australia, why it was that Australians were reputed to drink almost nothing but beer. There are three reasons: their beer, imported whisky, and their domestic whisky. Imported whisky is much too dear for any but the wealthy to drink; their so-called domestic whisky is a poor grade of radiator antifreeze put up in bottles. But their beer is the authentic joy juice, the stuff that made the preacher dance. It helps to explain why the Aussie soldier fought as well as he did and why he was insolent to sergeants.

I never tried it again.

At long last we had to leave Mr. Sheppard. We bade each other good-by warmly and blurrily, and Mr. Sheppard assured us that he was going to use his good offices to get us a steamship booking from New Zealand to the States. I don't remember the ride back. I climbed the gangway with my ears roaring, ate heartily, and went at once to bed.

The inhabitants of Sydney are convinced that they have the most beautiful harbor in the world and the longest bridge. They are wrong on both counts; the Rio Harbor is much more beautiful and the Golden Gate bridge is longer both in free span and in total length. There are several other bridges bigger than the Sydney bridge, no matter how you measure—the Firth of Forth bridge in Scotland, for example, or the George Washington Bridge. Nor is it, in my opinion, an outstandingly handsome bridge, though I admit to a prejudice in favor of suspension bridges. If you want to know exactly what it looks like, take a look at the Hell Gate Bridge, a twin about two-thirds the size of the Sydney bridge.

Don't raise either of these points in a Sydney bar; it would not be safe. Deep in their hearts, they *know* they have the biggest bridge and the most beautiful harbor.

It is in fact a most beautiful harbor and an enormous, handsome, and most impressive bridge. The harbor is a drowned river mouth, most irregular in shape, with a multitude of coves, creeks, and bays. In consequence all of Sydney seems to look out over the magnificent harbor; many residential neighborhoods are right on the water. There are many beaches right in the city, with some of the best surf bathing in the world—possibly the best, if you like big, muscular rollers and don't mind risking sharks. The Sydneyites don't mind either one; they take their chances on sharks (people are killed by them each year) and they prefer the biggest waves. All Sydney swarms to the beach each weekend, to swim, hold surfing carnivals, or just spine-bashing in the sun and the sand.

We got off the ship fairly promptly in Sydney, but from there on nothing went quite right. Immigration formalities were not too lengthy, the port doctor looked at our wrists again (I never did find out why), and we got through customs without too much bother. Brian Salt, who had been right behind us in line, had to wait an extra hour because customs closed for lunch, but we just made it. Most of our fellow passengers got caught by the same ploy, but we were lucky.

This practice of closing customs for lunch, tea, and so forth is one that any country would do well to avoid at all major ports of entry. A visitor's first impression of a country is at customs. He is usually tired, nervous, hungry, at least subconsciously afraid, and often legitimately in a hurry. If he is forced to cool his heels for an hour or more, usually in a most dismal shed, often under a "no smoking" rule, frequently without a place to sit down, while a petty civil service employee goes to lunch, he is likely to wind up with an almost pathological dislike for that country that no later impression will quite replace.

There is no more reason why a customs gate should close for lunch than a gasoline filling station, a telephone exchange, or any other public service. I noticed with interest and pride that, when we finally returned to the United States, we went through customs without delay although we arrived there right in the middle of the lunch hour, 12:30 P.M. I strongly hope that all United States ports of entry operate the same way. It is no harder for a civil service organization to arrange relief rotation of lunch hours than it is for a private firm. Most countries spend large amounts of money trying to build up good will abroad; it is moronically stupid to squander the investment through such petty inefficiency. I do hope the United States customs office we encountered is typical of them all.

Getting through customs just under the wire seemed to use up the last of our luck. We had originally planned to stay in Australia almost a month, but our failure to obtain passage to the Australian west coast had disrupted our schedule and left us with only a scanty nine days before our booked departure for New Zealand. I still wanted time to go outback and see the interior of the country . . . possibly even accept one of the numerous invitations we had received to stay on a sheep station. To do this we needed to swap our booking for New Zealand for one a week or so later.

After we checked in at the Hotel Australia we hurried over to the office of the Union Steamship Company of New Zealand to accomplish the rearrangement. I anticipated no trouble, as two large passenger ships maintained almost a ferry schedule between Sydney and New Zealand, with sailings about every six days.

The booking clerk had our reservation but when I proposed exchanging it for one a week or so later he shook his head. "I can't promise you anything the rest of the season. The best I could do would be to put you on a waiting list."

I thought about it and suggested, "Perhaps you have a couple who wanted to sail the day you have us booked but had to accept the sailing a week later?"

"Well, yes, probably, but I don't see what we could do about it."

"You wouldn't have to do anything, really. If you can give us a list, or let us copy one, I can get in touch with such people and see if they want to swap."

He shook his head. "We don't do it that way. If you give up your booking, someone else from the waiting list for that day will go in your place. You'll just lose out."

"You wouldn't permit us to exchange with someone sailing on the seventh, let us say?"

"Sorry."

I thought about it. There were always the airlines, of course, but I did not want to suggest to Ticky a 1400-mile flight over the ocean; she would rather have a tooth pulled. I knew now that over-water flights really frightened her.

Oh, well! If nine days was the best we could manage, nine days it would be. I knew I could talk her into flights over land; between airplanes and trains we could see quite a lot of Australia. It would be hard work, but we had managed to see a great deal of Africa on a similar tight schedule, and it did not really matter if we were exhausted by the time we sailed. I answered, "We'll keep the reservation we have. Do you have the ship's plan?"

He got it out. "This is your stateroom."

It was an inside room without a bath and seemed rather small. Ticky said, "Don't you have one with a bath?"

"Oh, no, there aren't any."

"But what are these?" I asked, pointing.

"Eh? Oh, those are *de-luxe* cabins. I couldn't let you have one of *those."*

"Why not?"

"Why, they are booked. Everything is booked. You got the very last reservation."

His last remark was a gambit I have come to recognize. No doubt it is true one time each for each fully-booked voyage, but it is statistically impossible for it to be true as often as one hears it; what it often means is: "Shut up and consider yourself lucky."

So I pressed the matter. "We made the cash deposit for this reservation by mail from the United States to your main office in New Zealand nearly six months ago. Do I understand that all of those outboard cabins with bath were booked that long ago?"

He shrugged. "I really could not say. All I know is that the home office did not release any of them to me."

So I shut up. "All right, we'll take it." I got out a book of traveler's cheques. "How much is the balance?"

"Oh, I can't issue your ticket today."

"Why not? You have the reservation, I have here the receipt for the deposit, and here is the money for the balance."

"But you haven't made out your income tax. Or have you?"

"Income tax? What do you mean?"

He said patiently, "I can't sell you a ticket out of the country until you have filed your income tax return. Obviously."

"Income tax! Why, I'm hardly *in* the country as yet—we got off the ship not two hours ago. How could we possibly have made any money here?"

He shrugged. "That's the law."

I could hear Ticky winding up and getting ready to pitch, so I stepped on her foot. "All right," I agreed. "What do I do and where do I go?"

At least he had the forms. So we went through all the old tired rituals again: age, sex, citizenship, marital status, home address, temporary address, occupation, length of residence, and a dozen other matters even less consequential. It did not take as long as an income tax report back home for the reason that all of the significant entrées were either "no" or "none." At last we handed them in, swore to them, and signed them. "Where do we turn these in?"

"You can give them to me. You said you were staying at the Hotel Australia, didn't you? The Company will leave a message for you there when you have permission to leave the country."

"You mean you still can't sell us a ticket?"

"Not until these papers have been processed, certainly not."

"How long will that take?"

"It shouldn't take long, not over three or four days I should imagine."

"Uh . . . well, thank you. You've been very patient."

"Not at all."

I took a deep breath, dismissed the income tax matter from my mind, and turned to the next matter, an attempt to get passage from New Zealand to the United States. The Union Steamship Company had ships which made this run, but they had refused to book us from the States and had returned our deposit, saying that they could not book that far ahead—but the letter contained a weasel-worded phrasing which, while it accepted our names for a waiting list, implied that it would not do us much good as New Zealanders would probably want the space. I had written back and inquired specifically on this point but the inquiry had been ignored.

So I asked the booking clerk, not very hopefully, about booking passage from New Zealand to the States. He referred us to another clerk, where we were told that no bookings were available. Nor was our name on the waiting list so far as records here showed. I asked them please to let the home office know that we had arrived and were still interested. Would they accept a deposit?

No—but the clerk did promise to write a letter to the home office. Perhaps when we got to New Zealand

We left with a list of shipping companies which had ships to our west coast—or to Canada, Hawaii, or Panama City. We even asked about ships to the west coast of South America, for we were beginning to realize that the situation was desperate, but there were none. It would appear that there is no trade of any sort between South America and Australia plus New Zealand even though they face each other across the Pacific.

It did not take "three or four days" to get our income tax clearance; it took the whole time we were there. In consequence we were never able to get out of Sydney any distance greater than could be driven in one day; our longest drive was about four hundred miles and did not take us past the Great Dividing Range which parallels the east coast, never got out of the coastal, eucalyptus forest geographical region.

Each day we would first telephone the Union line and ask about income tax clearance and our ticket; each day we would be told to call back the following day. Then we would do local sightseeing—except that the first Monday was spent in tramping from one steamship agent to the next, trying to find anything from a raft to submarine which would accept us for passage to any port on the other side of the Pacific. There were none.

Perhaps I should not say "none" for we had one very promising false alarm and once were actually offered passage the long way round via Manila and Hong Kong, then back across the Pacific, in the Cunard Liner *Coronia,* which was making a circum-Pacific cruise originating from London. The agent had to stop to figure out what our fare would be for that portion we wanted. Presently he looked up and said cheerily, "Better sit down first."

"Pretty expensive?" I asked. I had done a rough calculation in my head, based on the number of days we would be in the ship and what I knew of usual first-class fares; I had estimated it at $2000, or perhaps a few dollars over—almost twice what it would cost to fly home, but worth it in view of the way Ticky felt about flying over the ocean. So I was braced for a sizable figure.

"Just over seven thousand dollars," he said.

I blinked. "I don't want to buy the ship, I just want to ride in it."

"Yes, I know. It is a fantastic cost. I wouldn't pay it."

"Nor I. It's way out of my price bracket. What do they give you for that? Dancing girls? Pheasant for breakfast?"

"Well, it *is* a luxury ship. It has a swimming pool and dancing in the evening, all that sort of thing."

The *Ruys* had had a swimming pool and dancing in the evening, and all that sort of thing, but no megalomania about the worth of such. From curiosity I studied the ship's plan. The *Coronia* had a swimming pool not noticeably bigger than the one in the *Ruys* . . . for ten times as many passengers. Her other "luxuries" were on the same meager scale when compared with the ample arrangements of the *Ruys.* She was a floating sucker trap. Seven thousand dollars indeed! "Hmm—" I said. "Would you do something for me? Tell them to take the *Coronia,* fold it until it is all corners, and—"

"Robert!" Ticky said sharply.

Ticky was right. The agent was a nice chap and seemed as shocked by the larcenous attitude as I was. So I thanked him and we left.

The second false alarm concerned a ship whose owners had no delusions of grandeur. She was going to Panama, an acceptable enough destination by then, from where we could fly home or might even manage to catch the good old *Gulf Shipper.* The home office was in New Zealand, and the booking clerk in the Sydney office, a most pleasant lady, could not tell us positively that space was available, but was glad to attempt the booking through the home office.

"Good!" I agreed. "Suppose we wait while you phone them."

"Excuse me? Did you say 'telephone them'?"

"Certainly. There is telephone service between here and New Zealand, is there not?"

"Well . . . yes," she conceded.

"Then let's telephone them at once. I pay for the call, of course—perhaps I didn't make that clear."

"But I couldn't *telephone* them."

"Why not? There's a telephone right there on your desk. Just call them and we will know at once."

The poor woman seemed quite agitated at my insistence. I finally found myself talking to her boss; where she was agitated, he was bland, but he was quite as firm in his refusal to permit a call to be made to the home office. "Airmail will do nicely, my dear chap. We'll get one off at once and we will hear promptly, probably tomorrow."

I explained that it was decidedly worth the cost of a long-distance phone call to me to tie down the reservation at once "It is possible that someone might walk into the New Zealand office later today and book the last available stateroom in that ship. I don't want to chance it; it means too much to me."

He frowned and smiled, seemed perplexed by my stupidity, a little surprised that I would propose anything so obviously improper, even though I was an American. "But we can't, you know. That isn't the way we do business. Sorry."

And there the matter stood. The phone call was not made. We Americans are used to telephoning twice the distance from Sydney to New Zealand, as casually as we call the corner grocery, on any matter of business important enough to warrant the minor expense—or simply to inquire about a relative's health, for that matter. A branch office will phone the home office several times a day; that is how business is done.

But apparently not so in Australia. My willingness to pay the cost had no bearing on the matter; one simply does not telephone the home office. It is not done.

We had still hoped to make a flying trip outback, starting Tuesday, but this delay kept us in Sydney two more days . . . to no avail, as the New Zealand office turned our request down. Then we still hoped to make a trip at least to Melbourne the last two days of the week even though our income tax clearance still had not come through. This time we were stopped not by red tape but by a chance in a thousand: Queen Elizabeth was in Melbourne that day, which meant very simply that a hotel bed was not to be had under any circumstances in Melbourne . . . plus crowds dense as a Mardi Gras, plus choked public transportation.

So we never got out of Sydney. I do not know what would have happened had we entered the country at Fremantle, crossed by train, and arrived in Sydney only a couple of days before our scheduled sailing. Would we have been allowed to catch our ship and leave the country? Or would we have been held there while our null & nothing "income tax" returns were processed? I don't know, but I have no reason to think that Australian red tape will budge for anyone no matter what the predicament. I suspect that it might have been like the telephone call that "couldn't" be made. (And I shall always wonder if we missed being able to reserve passage by that one day's loss of time.)

This income tax nonsense for tourists, indulged in by both Australia and New Zealand, caused me to wonder if our own country indulged in such a useless, timewasting irritation, so I inquired of Internal Revenue on our return. We do not—neither under the old law nor the new (1954). A nonresident alien, tourist or other visitor, who has earned no money in the United States, is not required to make any income tax report of any sort—nothing! Which is as it should be.

Nevertheless we liked Australia on the whole. In seeing Brisbane, Sydney, and the environs of Sydney we did see that part of Australia occupied by more than half of the population, even though we did miss "the salt pans in the middle of Australia" where Yellow Dog

Dingo chased Old Man Kangaroo. We saw two of their three biggest cities and found them no worse than and much like American cities of similar size. The countryside outside those two cities was magnificent; I kept feeling that a landscape architect had been through ahead of us, rearranging it into perfect composition and beauty. In fairness I must admit that the random views around Sydney for a hundred miles or so (as far as we got) are superior to random views in the U.S. countryside save for certain areas overtly touted as tourist beauty spots.

But before we leave the subject of the shortcomings of Australia, let's list the others that came to our attention. The hotel we were in was not very good and Australians readily admit that their hotels are not much. The Hotel Australia is comparable to the Commodore in New York in size and age; it is the best Sydney has to offer, which is hardly true of the Commodore in New York. But the Commodore is a much better hotel in plant and immeasurably better in service and in cuisine. The prices of the Commodore are about half again as much as those of the Australia—which makes the Hotel Australia quite expensive in view of the scale of other prices in Sydney and *very* expensive compared with a similar hotel outside New York.

No need to itemize the shortcomings of the Australia, but here are a few that are typical: we were placed in a room built like a railroad tunnel with a single window at the far end. The only shaving mirror was located the room's length away from the wash basin, which made shaving a source of healthy exercise. The beds—well, never mind the beds; we didn't sleep much anyhow. The cooking was adequate but dull; the menu never changed. Food was available only at set meal hours and a late Sunday morning breakfast in your room was a metropolitan luxury not to be had.

That was Australia's "best" hotel, not bad but not good. The primary cause of the poor hotels in Australia—and the ordinary run of them are conceded to be much worse than the one we were in—is the liquor licensing system; a hotel is primarily a saloon. The profit lies in beer sold over the bar; lodging and meals are supplied only to meet the requirements of the law. The secondary cause lies in union rules; organized labor dominates Australian politics to an extent that American union men would find amazing and union rules of a type undreamed of in most parts of the United States are taken as a matter of course there. In my opinion they have taken advantage of a good thing in a fashion of no real benefit to the union workers and detrimental to all.

For example, I tried to get a glass of water in the restaurant of the Australia and I made the mistake of asking the table waiter for it. But by union rules he is not permitted to pour a glass of water, nor is the bus boy; water being a "drink" must be handled by a liquor waiter or not at all. But a barman was not available at that time. I could see empty glasses and carafes of water not ten feet away, but the table waiter was literally afraid to touch it; the job was not authorized by his union classification.

Groceries may not legally be purchased on a weekend. This makes it tough on working housewives. There are grocery "bootleggers" of course, with their back doors open and with higher prices. I went to one of them with a Sydney housewife; it reminded me of a speakeasy during Prohibition.

Ticky and I, one day when we were sightseeing in Sydney, decided to wait until the business lunch-hour rush was over before eating, for Sydney is a place where more than a million people try to crowd into restaurants sharp at noon. So we waited and so we missed lunch—the restaurants close as soon as the midday rush is over. Union rules again.

This list could go on tediously, so let us consider the examples multiplied by almost any one you can think of and many that, fortunately, have never been thought of in this country. I mean to say, we have proved repeatedly that short hours are not incompatible with high production and good service. The feather-bedders in Australia don't seem to know that. This anti-productive attitude was the very last thing we ran into as we left Australia. Our ship was trying to make the tide and there was just one more sling to be loaded—when it came time for the dockmen to have "smoko," the midafternoon break for a cigarette. Our captain sent down word asking the men to *please* postpone "smoko" for twenty minutes and get that last sling aboard. No go—the rules, rules with the force of law from a government "awards" commission, said to break at that hour. So the ship missed the tide.

Of course, any decent person will prefer the unionism-gone-wild of Australia to the serfdom existing in Russia and South Africa. But there can be a golden mean, fair to everyone—and we are much closer to it than is Australia.

But most Australians seem more than content with their own ways in these matters. I learned from a reporter on one of the Sydney daily papers that a reporter was not permitted to drive his own car nor even a company car while on duty; while out on his news gathering rounds he must be driven by a union chauffeur in a company car. I told him that this struck me as a silly waste of manpower. He informed me quite stiffly that I did not know what I was talking about and that any other rule would be the "—thin entering wedge" which would destroy their rights. The quoted phrase is one that they are fond of and use to justify their most ridiculously nonproductive practices. I suppose that the cited practice could be justified in the fierce traffic of Manhattan, but Sydney is not Manhattan; its traffic is not as dense as it is in any American city of comparable size. Carried to its logical extreme, this so-called principle would require every man who moves around in the course of his day's work to be accompanied by a driver who did nothing else—plumber, real estate agent, milk man, police officer, traveling salesman, building inspector, and so forth. Such a rule would reduce the working force of the United States by several millions without any gain of any sort.

But I have no doubt that this is just what they are trying to achieve in Australia. Remember the waiter who could not pour a glass of water.

This is not the way to increase a country's standard of living.

We made our usual effort to see the slums in Sydney. Sydney's slums are much like our own, neither worse nor better—to the shame of both countries. But I noticed two interesting and depressing variations from our pattern. We saw dwellings, or human lairs, that were entirely underground save for air holes—you could not call them windows—on the downhill side only. We saw also the narrowest row houses imaginable, eight feet wide and five stories tall. It was hard to imagine how a staircase was fitted inside such a building, or why such uneconomic structures would be built in the first place, even as tenements with Scrooge himself as proprietor; the ratio of parasitic structure to rentable space in such a building is all out of proportion.

But on the whole there was not too much to criticize in Australia. Ticky reported to me that ladies' rooms were the worst she had ever seen—not merely primitive but uniformly filthy. I found the men's room much the same sort, but I have seen some bad ones in the United States. Housing in general is old-fashioned and dreary, more of that 1910 feeling. Public transportation in Sydney is almost as bad as it is in Los Angeles. But faults of this caliber can be found in any country; our own beloved country has some dillies.

We never did encounter the intentional rudeness which we had been warned to expect, even warnings from Australians. But we did experience rather frequently a naive, almost childlike way of speaking one's whole mind without thought to how it might sound to the listener, a trait which would have been considered rudeness were it not so ingenuous. For example, our closest friends in Australia informed us that they hoped that, in this coming war, the United States would be bombed rather than England—since it was our "turn." I admit that the wish had a certain bleak logic to it, but it never occurred to them that we, as one of the targets, might not relish the role they had chosen for us.

Another time our host at dinner expressed his admiration for the United States and said that he wished Australia would join up as a forty-ninth state. "Only," he added, "I suppose that if we did, we would have a flood of American tourists and there would be no way to keep them out." He knew, of course, that we were American tourists.

But these remarks were utterly without malice; the speakers would have been shocked and mortified had their unintentional rudeness been pointed out. There were many such remarks, but never a one intended to hurt.

Another custom struck me as naive though not at all rude. In introducing a university graduate to a stranger in Australia it seems to be quite the usual thing to mention the fact that this person is a graduate; the possession of a college degree of any sort seems to be sufficiently unusual to warrant mentioning it, just as we tack "doctor" on the name of anyone possessing a doctor's degree. They do have a rather small number of degree-granting institutions for the size of the population, by our standards, but I have not been able to track down comparative statistics as to college graduates. However, it is evident that the privilege of going to college is more highly regarded by them than it is by us.

American books and magazines are forbidden entrance to Australia, which is commonly the case throughout the Commonwealth. The excuse is dollar exchange, although the printed word is no important fraction of foreign trade. The result is not really harmful to us *as trade* (and I make my living by just such trade), but it is, I think, quite harmful to both countries in that it cuts us off from each other; it is an important and ugly barrier to free communication.

Another result is (since their numbers are not large enough to support writing as a profession to any extent) their magazine stands and bookstores are filled with some of the most amazing trash to be found anywhere. It is as if our stands contained only confession magazines and comic books—no *Harper' s,* no *Time,* no *Saturday Evening Post,* no *Scientific American.*

But let us speak of the good things about Australia, for we did like it a lot. First, the people themselves are remarkably likable, even when blurting out some opinion better left unstated. Second, the culture as a whole is a good one, filled with a generous amount of social justice, founded on human dignity, and honed with a determination to live and fight for freedom. Even the frustrations engendered by silly union practices (and they *are* confoundedly annoying!) derive from good intentions toward the common man.

And finally, the land itself, what we saw of it, is grand and beautiful, worthy of love—and their birds and animals are simply wonderful!

The Sydney Zoo is one of the best in the world. To reach it you cross the harbor in a busy little ferry boat which takes only passengers, no cars. I commented on this, since their proud bridge is relatively new, and was met with stares; it seems that the notion of automobile-carrying ferries is one which never reached Australia. Until the bridge was built it was taken for granted that a car could be used on one side or the other, but not on both. It is, possibly, a weakness in the Australian temperament that they are too prone to take shortcomings and inconveniences for granted. Their far-from-docile spirit is quick to resent the loss of an expected privilege, but annoyances they are used to they seem to regard as natural phenomena like the weather. Perhaps the government knew what it was doing in forbidding American magazines, as it might cause Australian housewives to be unwilling to put up with what they call "kitchens."

From the ferry boat landing a tram runs up to the top of a high hill to the main gate of the zoo; you may then plan your tour downhill all the way, ending up at the ferry landing. The zoo is beautifully gardened and rich in specimens from all over the world, but our interest was in the Australian fauna not often seen elsewhere. There were lots of koalas but they could not be touched nor even seen from close up, which made us glad indeed that we had visited Lone Pine Sanctuary. We had the good luck to see a platypus. They are not easily seen even at the zoo, as they spend most of the daylight hours in their burrows. But we saw one come out and forage on the bottom of its tank for worms.

A platypus in the flesh is even more unbelievable than one pictured in a book; he looks as if he had been assembled by a taxidermist with a warped sense of humor. Duckbilled, egg laying, fur bearing, and it suckles its young—it seems to have been created for the express purpose of giving nervous breakdowns to taxonomists.

The platypussy does not seem to have good eyesight nor a keen sense of smell. The bottom of the tank was liberally carpeted with worms but the duckbill had a terrible time finding them. He went blundering along, missing nine by millimeters and gobbling greedily the tenth, while Ticky frantically coached him from the sidelines. The coaching had no effect, but she does not speak fluent Platypussian at best.

Australian birds are as freewheeling as Australian animals. The emu, cassowary, and black swan, the bower bird, budgie, and kookaburra or "laughing jackass"—all of these are exotic enough for anyone. The whole continent has been a bird sanctuary, cut off from the rest of the planet and lacking natural enemies, for many eons—during which the feathered kingdom ran wild. Ticky and I loved them all but our favorites were the birds of paradise. Describing a bird of paradise is ordinarily about as useful as parsing a poem; the color plates of them in any good encyclopedia are much more rewarding. But I want to mention one fellow.

We had been easing slowly past their cages, admiring their kaleidoscope patterns and colors, struck almost breathless by their flamboyant beauty, and reading the names of each—the Great Bird of Paradise, Crown Prince Rudolph's Bird of Paradise, the King of Saxony's Bird of Paradise. Then we came to a cage labeled simply: "The Magnificent Bird of Paradise."

There was a little fellow in there no bigger than a robin, not brightly colored and not conspicuously plumed; we felt that there had been some mistake—no doubt he was just being kept in there temporarily and they had not bothered to change the sign, for he certainly was not "Magnificent" and it seemed unlikely that he was a bird of paradise at all.

Then he caught sight of us, chirped excitedly, and hurried up to the front of the cage. There was a little perch there, about a foot in front of our noses; he settled on it, shook himself, and started to run through his act.

He was magnificent. It had been precisely the right word for him. He was the most applause-hungry ham I have ever seen and his routine had everything but "Shuffle Off to Buffalo." First he threw his neck feathers up into a ruff which framed his head. He paused for us to admire him, then dropped it and puffed out all his feathers until he was four times normal size. He deflated and opened a zipper all the way down his belly. That is what it looked like—a zipper. The feathers moved aside in a straight line about a quarter of an inch wide and disclosed bright iridescent down underneath.

He waited for the laugh with true Barrymore timing, then closed the zipper and opened his mouth. All the inside of his mouth was bright Paris green.

He closed it, braced himself, and gave the climax of his act: he sang for us.

It was unbelievably, hysterically bad. I can perch on a stick and sing better than that, and I have been chucked out of some very inferior quartets. But he was as cockily sure of himself as Mario Lanza. So we clapped and screamed bravos.

He looked smug, took a bow and an encore, running through the whole routine again without variation. We applauded again and were about to move on reluctantly, when we learned that he had a special encore with which to wow 'em. He hopped into the air, turned a hundred and eighty degrees and landed with his back to us—whereupon he ran through exactly the same routine, including the rusty-iron song, with his back to the audience. This time we discovered that the lining of his ruff was bright yellow. I think he did not want us to miss it.

He ran through his act twice with his back to us, finishing with that awful song, then flew away; the show was over and we could not entice him back. We crept away from there quietly, realizing that we had been in the presence of genius.

The aquarium at the Sydney Zoo is one of the best and may possibly be the best in the world. In addition to all the usual small exhibits and many not usual it has sharks up to eight feet long in a pool large enough to hold them comfortably. In another immense pool they have a giant ray about fifteen feet square. They grow much larger than that, but this specimen is quite large enough to inspire terror and disgust. The aquarium has many octopi and we saw two large ones fighting. No, I really do mean fighting; in this breed lovemaking cannot be mistaken for fighting—the means by which octopi get little octopussies is even more preposterous than what fish do. Look it up sometime; you will be amazed.

That zoo merits at least a week of careful study, but we had to hurry to catch the last ferry.

We prowled downtown Sydney by ourselves, were driven all around Greater Sydney by Vol and Laura Molesworth, and were driven for hundreds of miles through the surrounding countryside by Brian Foley. Vol teaches at the University of Sydney; Brian is a partner in a literary agency. This was typical of the hospitality we enjoyed there. Although we knew no one in Australia when we left home, nevertheless I do not recall that we ever ate dinner alone in Sydney, except on the day of our arrival. Australians are not cold and standoffish.

The trips around town included ones to Botany Bay, symbol in song and story of the convict system. It is a wide, shallow unattractive bay which never was the site of a convict settlement; it was the destination of the 1788 First Fleet but the actual settlement was made six miles to the north in what is now Sydney. Botany Bay is now a place of yacht basins, boat yards, light industry, secondhand car lots, and suburban homes.

The trips out into the country were an endless succession of prize vistas and musical aborigine place names, names like Yerranderie, Burragorang, Wollondilly, Woronora, Wollongong. North and south from Sydney are endless haughty cliffs and fine beaches; inland are hills and low mountains and canyons. We saw the famed tree ferns, living fossils of the carboniferous era.

Despite the not-inconsiderable inconveniences, when the time came we were reluctant to leave. But Australia had one more magnificent piece of red tape to speed the parting guest. Attached to our ticket, when at last they deigned to issue it, was a notice that we must apply for an export license from the Commonwealth Bank of Australia (equivalent to our Federal Reserve Bank) for any monies we wished to take out, whether in cash or in traveler's cheques. I had been aware of the limits placed on cash and had planned our spending accordingly, but the second category was so worded as to include American traveler's cheques.

Ticky suggested hiding our American Express cheques and ignoring the business. The notion suited me but I doubted the practicality of it; the officers at the docks would know that we must have funds of some sort; if we failed to show an export license, we would simply be in trouble. So I set about getting one.

It did not seem to be too difficult, since there was a branch of the Commonwealth Bank right in the hotel. I went there. They examined my papers with interest, talked it over, and decided that there was nothing they could do for me. They suggested that I go to the main office of the bank.

The breaks were with me; it was less than half an hour away. I went there, queued up at the foreign-exchange window, eventually was referred by the teller to one of the officers of the bank. He considered my problem and told me that I did not want to be in the bank proper at all, but should go to the eighth floor to the controller of trade & export licenses. To get there I should leave the bank, go around the corner, enter the office-building entrance, and find the lifts. I whistled to my dog team and mushed on; I was beginning to find the search fascinating.

The office I was sent to was not quite the right one, but it was close; the side activity which actually dealt with such matters turned out to be on the same floor. By now the morning had passed (and our three o'clock sailing was coming apace); the man I wanted to see was out to lunch. No one else was permitted to stamp the form, naturally; these things have to be done properly.

But the wait was hardly thirty minutes and the official was quite helpful when he did return. By now we had only some forty-seven checks left and it did not take very long to inventory them, list them by denomination and number, and fill out the rest of the blanks; in another half hour it was all done. The bank official was a bit dubious about the fact that some of the cheques were made out in my name and some of them in Ticky's name, but, since she was not present and our ship was sailing very shortly, he stretched a point and made out a license which mentioned both our names and issued it to me, granting me permission to remove from the sovereign Commonwealth of Australia bits of paper showing that I had paid dollars to the American Express Company back in Colorado, U.S.A.

I hurried back to the Hotel Australia where Ticky was waiting in the lobby. She had been sitting there, watching our baggage and wondering what had happened to me, since we had had to vacate our room earlier in the day—in general, hotels in the Commonwealth do not follow the gracious custom of extending the courtesy, on request, of a later check-out to a guest who is not leaving town until after the regular check-out time, so she had stayed with our baggage in the belief that I would return in ten minutes or so.

All it cost us was our lunch.

XII

The Dreary Utopia

OUR STATEROOM IN the New Zealand steamship *Monowar* turned out to be even smaller than I suspected from the berthing diagram; if one of us inhaled it was a good idea for the other one to exhale. There was a single straight chair which had to be moved in front of the door to permit us to get at the wash basin, then moved back in front of the wash basin to permit us to go out the door.

I went at once to the purser's office, having in mind that a shipping company will often hold a V.I.P. room right up until sailing and sail with it empty, provided no politician, lord of industry, or relative of the chairman of the board needs it. I planned to offer the purser a sackful of Yankee dollars and ask him to shift us to the V.I.P. room, if any.

Either New Zealand lines do not follow this practice or the V.I.P. had claimed the room earlier; the purser assured me that there was no unoccupied stateroom of any sort in the ship. I was inclined to believe him, as the ship was as crowded as a department-store elevator on Dollar Day. Besides that, although the ship was in all respects luxurious in its fitting, and furniture, everything about it was a little bit skimpy, like a wartime suit. The passageways were not quite wide enough for two people; when you encountered anyone it was necessary for one of you to stop and flatten against the bulkhead to avoid collision. I felt, the whole time we were in her, as if I were taking a shower in a stall too small to permit me to raise my elbows.

I went back and told Ticky the situation. She had been trying to sort out what we needed and what we could do without from the ten suitcases, and she was hot and tired and dirty. She looked up, wiped dust across her face, and made a suggestion both unladylike and impossible. I reproved her. "Besides, you don't even know the purser."

"I don't want to. Knowing his ship is enough."

"He's really a very nice man. It isn't his fault. Come to think of it, it's your fault. If you weren't old-fashioned and a pantywaist besides, we'd be half way to New Zealand this minute, by air, and we'd be sleeping in a nice, big hotel room tonight, with a big bed and a big bathtub." She did not answer so I added, "Come on now, 'fess up. We're here because you wanted it this way."

Ticky took refuge in the Nineteenth Amendment.

I said, "You don't mean the Nineteenth, you mean the Fifth."

"I know which one I mean! The Fifth is the one the communists are always hiding behind. I'm not going to hang around with *them*—so I use the Nineteenth."

I looked it up later. She really did mean the Nineteenth.

We had signed up for second table but shortly before dinner the chief steward came around to our little smokehouse. Captain's compliments and would we join him at his table?

We looked at each other, astounded. I managed to say, "Tell him 'yes,' " and the steward left. Ticky said slowly, "I don't really want to sit at the Captain's table."

"I know, and neither do I. But what else could I say? You can't refuse such an invitation, you simply can't. Not from a master in his own ship."

"Oh, you did just exactly right. But I don't have to like it."

"No, you don't have to like it. But you do have to be polite, or I'll keelhaul you myself."

"You and eight sturdy seamen, maybe. Want to swap a little judo?" I refused with dignity. Ticky knows some awfully dirty holds.

To our surprise, we enjoyed sitting at the Captain's table. Captain F. W. Young was both a taut shipmaster and a cultured, charming man of the world. The shortcomings of the *Monowai* were either inherent in her design or derived from company policy ashore; he himself ran a clean, disciplined ship. His other guests at his table were most pleasant people, too—Mr. and Mrs. Adman from Sydney, Mr. Field from Victoria. But we never did find out on what basis he had selected us. Ticky and I finally concluded that it was possible that we had been tapped simply because we were the only Americans aboard, which still left open the question of whether we were picked as curiosities or whether our country was being honored through us. We never asked—I suppose we were a little afraid that we might find out.

As we became better acquainted with our table mates it was natural that they should see our stateroom and we should see theirs. Mr. Field had a large cabin outboard of ours, with portholes, a private bath and plenty of deck space; the Admans had an equally nice one forward, with a semi-private bath, shared with one other couple. We showed the dark, cramped Iron Maiden we lived in and told them our story. Had it been necessary for them to make reservations months ahead to get the accommodations they had?

Not at all—in one case the reservation had been made two weeks ago, in the other case a little longer.

I thought of our cash deposit made the previous year and I began to burn. At the earliest opportunity I braced the Captain himself about it, telling my story and then saying bluntly that I thought that the company had a fixed policy under which Americans were not given even treatment with Australians and New Zealanders.

He smiled, did not comment, and changed the subject at once. I am not sure whether he knew of such a policy and did not care to admit it publicly, or whether he simply considered my remarks silly and wished to avoid unpleasantness. It is even possible that he was unaware of the truth either way; after all, captains do not sell tickets.

But I remain convinced that Americans are discriminated against by this line. We had clear proof that they could have given us decent and comfortable accommodations at the time we put up our deposit, and I strongly suspect that they could have booked us out of New Zealand in one of their ships running to the United States if they had honestly followed the policy of first-come-first-served.

New Zealand maintains travel commissioners in major American cities to try to persuade us to come to New Zealand and spend those dollars. Hmm ...

The four-day passage to New Zealand was without incident; it was merely uncomfortable. The Captain invited us up to the bridge to see the landfall and passage in through the heads into Auckland Harbor, but we could not see much as the weather was dirtying up rapidly; we were scooting in just ahead of a cyclone—a cyclone in these latitudes is the same as a hurricane; it is not the local twister of the Kansas plains. I was surprised to discover that the harbor was on the east coast of North Island, as a small-scale map makes it appear to be on the west coast.

"It's not surprising," Captain Young told me. "All the world's best harbors face east."

"So? How about San Francisco Bay? Or San Diego?"

"You've named two. But take a look at your own east coast. Take a look at the map of the whole world. For every fairly good harbor on a west coast there are half a dozen excellent ones on the east."

I thought it over and decided that he was largely correct, but I certainly had never realized it until he pointed it out. Entrance into New Zealand required more paperwork than did any other country, plus an unusually tedious process at customs. I had another minor crisis with Ticky, for New Zealand had thought up a brand-new piece of nonsense: every visitor must sign a statement and swear a formal oath before an immigration officer not to do anything harmful to the

Queen. They handed these forms out the morning we arrived; Ticky read hers and blew her top. "I am not going to swear allegiance to their blankety-blank queen!"

"Now quiet down, honey. It doesn't say anything of the sort."

"It does so. And I won't sign it!"

"No, it does not. All you are promising to do is to obey laws of New Zealand while you are in their country. I know you won't, but I'm hoping that you will be discreet enough not to get caught. So why not sign it?"

"It doesn't say anything about their laws; it's an oath that I will uphold their queen. I won't."

I tried again to explain it in a way she would accept very wearily, for I considered it as nonsensical as she did. A criminal or a foreign spy would take such an oath and not turn a hair, while an honest man surely did not need to take it. "See here, baby, it's just a peculiarity in semantics. When they frank an envelope they put on it: 'In Her Majesty's Service,' while we put on it: 'Penalty for Private Use to Avoid Payment of Postage $300'—and they both mean precisely the same thing: 'Official Business, Free.' All this means is that you promise not to break the Queen's laws, which right here means the laws of New Zealand. You obeyed Peron's laws while you were there, but that didn't mean that you approved of Peron."

"All right, I'll sign a statement that I won't break any of their silly laws—but I won't sign that thing!"

I gave up, which is often the only way to win with Ticky; lack of opposition makes her unsure, I think. "Have it your own way. If you won't sign, they won't let us off the ship. We will have to stay right where we are for three days in port and then four more days at sea, then we are back in Australia. I suppose the police there will want to know why we were deported from New Zealand, but at least our visa is still valid. We can start tramping the streets of Sydney again, trying to book some sort of passage back home."

With that I dropped the matter. When the time came she signed the form, put up her right hand when she was told to, and muttered something. I did not hear what she said and I am sure the immigration officer could not hear it either. Perhaps it is just as well.

But will somebody tell me, please, why it is that countries will advertise for tourists, then do their very damndest to make the tourist feel like a child being kept in after school?

Once we were through customs we piled our bags into a taxi and asked the driver to take us to the Waverly Hotel, where a room had been reserved for us by the Union Steamship Company. The ride turned out to be only a few hundred yards, as the docks in Auckland rub elbows with the main downtown business districts, instead of being weary miles away as is so often the case. But during that short ride I looked around more eagerly than ever before, for New Zealand, of all countries in the world other than my own, interested me the most.

From time to time for more than twenty years I had made a hobby of New Zealand, studied its history, its laws, its geography, pored over statistics of its economy and its foreign trade. I knew how it was explored, how it was settled, the organization of its government; I had studied its Polynesian people from tattooed lips and cannibalism to their present status as political and social equals of the white English. So far as study will take one I felt that I knew New Zealand. Here was a country that had everything, physical wealth, an ample food supply, a people with high educational standards, civilized culture, democratic traditions, and homogeneity save for a colored minority with whom they had worked out the most decent *modus operandi* in the black history of the white race's relations with other races. Spurning communism, without resorting to socialism save on a purely pragmatic, non-doctrinal basis where needed, they had produced an economy with comfort and security for all, more entitled to the name "The Middle Way" than was that of Sweden. Their laws were ideal objectives for liberals all over the world, conceded to be at least fifty years ahead of any other nation.

Why, they had even solved the babysitter problem with graduate mother's-helpers!

I wanted to see this utopia, get to understand it. We had talked seriously of the possibility of renting a housekeeping flat in Auckland or Wellington and remaining for two or three months. I could pay for the stay by gathering material and doing a novel, with a New Zealand background while I was on the spot and could check my background facts. Ticky could keep house and resume her scientific study of subtropical plants, interrupted when we had moved from California to the high Rockies. The plan seemed particularly attractive to her since it seemed possible that we would have to wait that long to be sure of steamship passage back to the States, she being frantically opposed to flying the Pacific.

So we looked around eagerly, thinking this might be our temporary home.

The first impression was not too rosy, I had to admit. Where Brisbane reminded me of 1910, this looked more like a movie set for 1890. Still, I conceded, no city looks good when the weather is bad—the cyclone was still playing hop scotch around us—and very few cities are attractive near the wharfs.

But I was a little surprised when the taxi stopped almost at once without leaving the unattractive neighborhood. Nor did the Waverly Hotel seem very cheerful; it looked like the sort of beat-up job a drummer stays in when he finds it necessary to be very, very careful about his expense account. But a decent bed and a hot bath was all I asked; we got the bags in and I registered. There were many other passengers from the *Monowai* checking in at the same time; it was likely that this was a comfortable inn despite the unattractive exterior.

I learned, without much surprise, that private baths were not available. "That will be seventy-one shillings per day, including breakfast and dinner."

"I think we would prefer just bed and breakfast, please. We will probably be eating out most of the time."

"We don't do it that way. You are charged for dinner whether you eat it or not. Do I understand you are staying more than one night?"

"Probably." Up to the time I walked into the lobby I would have said, "Certainly," but I was beginning to have doubts. I had not yet seen our room but the lobby itself was grim.

"In that case it will be six shillings less after the first day."

"Eh?"

"Linen charge, you know."

I did not know, but I let it ride. Ticky had been sitting on our luggage, as there were few chairs in the lobby, all occupied. An elderly porter helped us up to our room and I helped him with the bags, as he hardly seemed fit for it. Our room was long and narrow, with two narrow iron bedsteads placed end to end on the left wall, an old wooden bureau and a wash stand (real marble!) on the righthand wall. There was a single window at the far end, a clothes closet near the door—no coat hangers, however. There was a single dropcord in the middle of the room and a light over the wash basin. There were no bedside tables nor bedlamps, but there was a wicker chair and a kitchen chair. The floor was covered with wall-to-wall carpeting which seemed to have been laid when the building was built; its pattern had vanished under successive geological layers of dirt.

I paid off the porter, dismissed him, and turned back. Ticky was standing and touching, with a gloved finger, the dirty, faded bedspread over one of the cots. She looked up and said meditatively, "I don't think Mr. Duncan Hines would stay here."

"It reminds me of that trailer camp we got stuck in once. You remember? Mud and no plumbing?"

"I've been trying to forget it for years—but I wish we were back there right now. At least our trailer was clean. Honey, I don't think I can take this."

"I don't intend that you should. Come on."

"Huh?"

"This is a fairly big city; there must be a hotel room in it somewhere better than this pig sty. Do you have that little guide they gave us aboard ship?"

She dug it out of her purse and we consulted it. Hotels in New Zealand are graded by the government from "five stars," the highest, on down. To my shocked surprise the Waverly had a rating of four stars, just under the best, but there were two five-star hotels, the Grand and the Trans-Tasman. I telephoned the Grand at once and asked for a double room and bath, and was told that they had no rooms of any sort. How about tomorrow, then? Anyone checking out? Sorry, everything booked.

I had some trouble getting through to the Trans-Tasman Hotel but the guide showed it to be nearby. "Let's go there. Sometimes you can accomplish things on the spot which can't by phone. You know—reservations not picked up, probable check-out that we might wait for."

We could not find a taxi, so we walked; it was not far. As we approached the number I said, "I don't see anything around here that looks like a hotel. Let me see that street guide again."

We were on the right street and the numbers indicated that the hotel should be almost on top of us. And so it was—there was a sign, THE TRANS-TASMAN BAR. It was a jerry-built frame structure which I would never have suspected of being a hotel, much less a "five star" hotel, but beyond the doors to the saloon was an inconspicuous second entrance which possibly might lead into a lobby.

We walked slowly past it, glancing inside, then walked back. Both of us were reluctant to go inside. "What do you think?" asked doubtfully.

"It looks even worse than the Waverly. A joint like that would not have private baths. It is a terrible firetrap, too. Look at it—it ought to be condemned."

"Well . . . we're here; I suppose I should inquire."

Ticky put a hand on my arm. "Don't. I don't want to move into there. Bad as the Waverly is, this looks worse to me."

"Well, what should we do?"

"What can we do, you mean. Let's put up with the Waverly, just for this one night. And right now let's go to Thomas Cook and see if they can route us out of here tomorrow."

We had planned on a sightseeing swing around North and South Islands, but with a few days in Auckland first to get our bearings and check on steamship possibilities and launder clothes. I reminded Ticky of that.

"Never mind those things," she said earnestly. "I just want to get out of that home for unfortunate fleas. Maybe Wellington will be better."

So we walked to Thomas Cook & Son. On the way I recalled something. "You remember that chap we had a letter to? Sir Ernest Something-or-other?"

"Yes. What about him?"

"Wasn't he supposed to own a string of hotels?"

"I believe so. Or was it breweries?"

"Both, I think." I studied the matter, frowning. Up to this time we had never used a personal connection to get us favors which would not otherwise have been coming to us. We had had many a fine favor done for us, but we had asked for nothing, certainly not on the basis of being a friend of a friend. We intended to look Sir Ernest up, surely . . . but we had not intended to put the bite on him for special favors.

But this was an emergency; I had to get Ticky out of that squalid, dirty room. "When we get back to the Waverly I want to look up his address and give him a ring. If he is a hotel owner, he is sure to have at least one decent room in reserve to take care of legacies like us. I'm going to cry on his shoulder and get that room."

"Mmm . . . maybe. You know how we feel when people look us up at home during the tourist season. Let's try Thomas Cook's first."

The office of the Thomas Cook agency was on Queen Street, the main street of Auckland, just down the way from the Waverly. There we unloaded our troubles on Mr. D. M. Gunning, who was competent, cheerful, and as helpful as circumstances permitted. "It will be difficult, probably impossible, to set up a tour for you starting tomorrow morning. Have you tried any other hotels? We do have a couple of good ones."

I told him that the Grand had turned us down and recounted our impression of the Trans-Tasman. "I can see why you would think so," he answered. "But it actually is quite a bit better hotel than the Waverly. While it does not look like much outside, they have spent a lot of money fixing it up inside. Let me try them for you."

"Okay, if you say so."

But the Trans-Tasman was filled up, too. We dropped the matter, since it could not be helped, and worked out with Mr. Gunning a tour which was to start with a flight to the far end of South Island, then bring us back by easy stages to Auckland via bus, train, and ferry across the channel, and would cause us to see every city and every major tourist attraction throughout New Zealand. It looked like a most attractive trip and we cheered up at the prospect of getting out of the Waverly and on the road.

"I'm going to work very hard on this," he assured us, "to get you started tomorrow, if possible. But I can't promise anything; there are too many hotel reservations and too many travel bookings involved in it to be sure. I'll set up the flight to Dunedin and your lodging there first, then we will see."

Ticky told him earnestly that if he could move us to Dunedin the next day, we would take a chance on the rest of it. He nodded. "Give me a ring at six o'clock, will you? I'm going to stay late and work on it."

We thanked him and left with a list of steamship agencies; the first two had nothing for us, but by the time we were through with them the others were closed. We spent an hour simply walking up and down Queen Street, then reluctantly returned to the Waverly.

I remembered to look up the address of the man who was supposed to own hotels. Or was it breweries? It turned out to be both: the Hancock Hotels and the Hancock Breweries. I was just looking up his telephone number when the phone rang.

It was Mr. Gunning of Thomas Cook & Son. "I'm terribly sorry but I can't get you away tomorrow. This cyclone is kicking things up south of here and all flights are canceled."

"Oh. Well, how about Sunday?"

"The airline does not operate on Sunday. I'll try to get you away early Monday."

"Well . . . thanks for trying."

We were downstairs and waiting outside the dining room before I recalled that I had intended to phone the boss of the Hancock Hotels. Oh, well, it was too late to do anything about it today and it would probably be best to call at his office anyway.

We quickly found out why guests were required to take, or at least to pay for, their dinners; no one having freedom of choice would have eaten there. We were soon to learn, too, that the compulsory boarding system used by all New Zealand hotels also resulted in independent restaurants being extremely scarce; a guest who was disgusted with hotel fodder found it extremely difficult to eat anywhere else even though willing to pay twice.

We started to walk into the dining room but were stopped by the manager-hostess—if "hostess" is the word. "You will have to wait a few minutes," she said bleakly. Since I could see empty tables I could not understand why, but wait we did. There were no chairs. Presently, although no one had come out, she signaled for us to come in and we were seated at a table for four. We had arrived at the beginning of the meal hour; the table had not been used by others.

The other two seats were not occupied. Another couple had arrived at the door right behind us, but had not been permitted to enter when we did. But after we had been at the table about ten minutes, they were let in and were seated at the same table with us.

I began to see the system by which the hostess worked and later observation confirmed it in detail. The dining room was open exactly one hour for each meal; this means that you must finish your meal before the sixty minutes has passed; it does *not* mean that you will be fed if you arrive at the door before the doors are closed. At the end of sixty minutes they stop serving and clear off the tables—and woe betide any guest who is still trying to finish his dinner. There were as many places at the tables in that dining room as there were sleeping accommodations in the hotel, but the "hostess" would not permit them to enter and sit down as they arrived. Instead she waited until she had a waitress free, which was why we and the other couple had had to stand in the corridor until she saw fit to let us come in and sit down.

We now experienced for the first time the delights of New Zealand cookery. The country is bulging with good food and it exports great quantities of the best. It should have been, like Argentina, a gourmet's paradise.

Australian cooking is not very good; hotel food in New Zealand is just barely short of inedible. Entrees are such things as boiled mutton, boiled bacon, and, if you are lucky, boiled beef. Clear soups are merely rain water; cream soups are sour paperhanger's paste. They have some means of vulcanizing potatoes. If by chance there is steak on the menu, you will find that they have cut it along the grain, cooked it grey, and the cut is one we would grind into hamburger. The difference between "lamb" and "mutton" appears to be that lamb is slaughtered whereas mutton apparently dies of old age. But they do not cook mutton with the wool left on. This is a canard, they sell the wool separately. But I have had many a piece of bacon served to me with the rind still on it and pig bristles, black and stiff, still sticking out of the rind. Under these circumstances it hardly matters that the bacon is only half cooked, cold, greasy, and undrained; you would not wish to eat it anyway.

Instead of a hot dinner roll there is a little square of stale, dry bread resting on the tines of your forks. No butter, of course. Toast is served cold in a toast rack and is much like building tile. For a sweet, or dessert, you will be offered stewed fruit, acidly sour, to which no sugar has been added.

This first night, following my custom of trying things which I did not recognize, I passed up the fruit and ordered "steamed sponge." So far as I could tell the thing they brought me was just that: steamed cellulose sponge. I tried a bite of it; it had no flavor and a coarse, resistant texture. I was toying with it with my spoon, wondering what to do with it, when the waitress leaned over my shoulder. "It helps a bit to soak it in milk," she advised.

But the milk was gone and she returned shortly from the kitchen to report that there was no more. I tipped her for her good will.

I might as well get this unsavory subject over with and not return to it. The food at the Waverly was typical of the food all through the country, consistently and amazingly bad—sloppily cooked, usually dirty, and often cold. Fly screens seemed to be unheard of and no attempt was made to check flies; cold buffet dishes such as salads and cold cuts were allowed to sit out on the sideboard for as much as an hour before meals, getting warm and stale, while flies wandered over them unmolested. Service varied from indifferent to rude. Once at the Waverly I asked the waitress to hand me a menu from a table at her elbow which was unoccupied, inasmuch as the menu at our table was in use (one menu in that case for ten people), but she refused to give it to me. I asked why not?—and she became quite angry about it.

As we left the dining room on that occasion, I told the hostess-manager about it. She looked at me as if I had lost my mind and told me the waitress was perfectly right—one menu to a table; that was the rule.

I answered, "Is that rule of your making? Or is it one laid down by the manager of the Waverly?"

"Why do you ask that?" she said sharply.

"Because I see no sense to it and intend to bring it to the manager's attention if the matter is beyond your control. So is it your rule? Or his?"

She looked disgusted. "Well, it isn't exactly a *rule* in that sense. But everybody knows it. One table, one menu—that's the way things are done."

I gave up and did not bother to speak to the manager. The notion that certain things "are done" and other things "aren't done" is the unanswerable argument of the provincial, to whom the customs of his tribe are laws of nature, as Shaw pointed out long ago. The odd rule about menus was not important anyway; I had spoken to the manageress simply because I disliked being bawled out in public by a person who was being paid to make me comfortable. But I did check as we went along to see if this oddly inefficient practice really was the uniform custom of the country.

It was, without any exception. Shortly before we left I tried to break it once more, simply as an experiment. We were eating alone in the dining room of another hotel, having been granted permission to eat lunch at twelve-thirty instead of one o'clock by special dispensation of the manager because we had a travel connection to make. There was one menu at our table, but about fifty menus in sight elsewhere in the room, so while Ticky was studying the one I turned to the waitress at my elbow and pointed at a menu less than four feet away. "Will you hand me that menu, please?"

She shook her head.

I had tried it on her because she looked good-natured. I now answered pleasantly. "Why not?"

"Huh? It's for *that* table."

"So it is. But it is not in use now and won't be until one o'clock. What harm is there in letting me see it for a moment? I won't damage it and I'll give it back in a moment or two."

She seemed to be undergoing some inner struggle. Finally she visibly braced herself, reached out and handed me the other menu. "Just this once!" she warned.

"Thank you."

She looked at us curiously. "You're Americans, aren't you?"

"Yes. Why? Our accent?"

"No, you talk all right. But Americans *always* want extra menus."

We tried to avoid the slops served at the Waverly by dining at public restaurants, but we found the cooking just as bad and the food even less attractively served. One large restaurant which looked all right from the outside served nothing but meat and potatoes, fish and chips—two sorts of potatoes on the same plate, both sorts rendered indigestible. We ate because we were very hungry, drank some tea (no coffee) and never went back. Coffee was served at the Waverly, since it "catered" to travelers, but not in the dining room, only in the lounge; coffee with your dinner cannot be obtained in New Zealand. Every hotel has a lounge, which always has some claim to posh swankness no matter how dreary and dirty the rest of the place may be, and here coffee is served in demi-tasse—which means that you have to wait up to forty-minutes or even longer to get it, that you can almost never get a second cup, and that cream is rarely available. All of which is of little importance as the stuff is usually not fit to drink. I don't know what they do to it. I've encountered bad coffee before, but it must take real talent to make New Zealand coffee. It tastes like a mixture of sorghum and used crankcase oil, but it surely cannot be that.

At last we spotted an ad for the Hi Diddle Griddle, which promised "that Heavenly American Food." We were suspicious as we had encountered "American" restaurants in other countries before, but we had nothing to lose, so we hurried there. It turned out to be a real, honest-to-God American hamburger joint, owned by a New Zealander who had lived many years in the States and only recently returned (through family necessity) and managed by a young Hollander freshly arrived in the country. It was *clean* and the coffee was wonderful, made fresh in Silex pots. They served rare, tender T-bone steaks, six versions of hamburgers, ham and eggs, chicken-in-a-basket, waffles, tender hot cakes, three-decker sandwiches, and homemade American pies. It was the sort of hole-in-the-wall restaurant which can be found two to the block in almost any side street in America but it was the only one of its sort in all New Zealand. We ate there every day we were in Auckland after that. It did not open until evening, so we made do in the daytime with fruit and biscuits that Ticky bought and fetched to our room.

But we did not find it until we had endured several Waverly meals. During the course of our first dinner there I happened to notice the inscription on the silverware, then asked for the menu again to confirm what I had found. There it was, across the top of the menu: *The Waverly, a Hancock Hotel.*

Silently I showed it to Ticky. When she had read it I whispered, "There goes our last chance." When we were back in our room, we sounded each other out, found we had the same point of view: not even to get out of this smelly squalor would we demean ourselves to ask favors of the man who was responsible for this squalor. "The only possible thing I could have to say to Sir Ernest," she said, her tones making the noble title a swear word, "is to tell him what I think of this room of his. But to do that properly I could not first meet him socially through a mutual friend. So we won't look him up."

Nor did we. We had another introduction to a former prime minister who was a warm friend of the United States. We intended to call on him, but, by the time it came to do so, we had had such a taste of New Zealand that we decided that it more polite not to do so, as we would either have had to drink his tea and lie to him, or drink his tea and tell him the harsh truth of our opinion of his country. Neither alternative was acceptable, so we stayed away from him. In all, we accepted no personal hospitality of any sort in the country, for which I am glad.

We went to bed soon after dinner, as the weather was still stormy and the room was cold. It was only early fall in New Zealand, nevertheless that weekend was cold. The hotel had no provision of any sort for heating the rooms, nor did any but one of the hotels we were in there—Auckland is of the latitude of Norfolk or San Francisco, with a similar ocean-moderated climate. But imagine a San Francisco hotel without heated rooms!

The plumbing was far down another hall, a pot for women, a pot for men, one each, and nearby were shower rooms—or I should say "room" for it was one room with two doors, divided into two shower stalls by a partition which missed going all the way to the ceiling by about four feet. I did not mind this and Ticky told me later that she had not realized that the men's bath connected so intimately—but I wonder how a single and timid woman would feel to realize that men could watch her bathing by the simple expedient of dragging a chair up to the partition and looking over? That he could even climb over and assault her? Unlikely, I suppose, and no skin off our noses, since we made a habit of showering at the same time.

No tubs, of course. No amenities of any sort—and the toilet tissue appeared to be ancient parchment. After the first day we supplied our own.

Ticky killed a couple of cockroaches and we went to bed. The beds were beds in name only and we could not read, the only light being high in the ceiling. Nevertheless we got to sleep at last.

I woke up covered with mosquito bites and some other bites I was not sure about. Or, rather, I was awakened, for at seven-fifteen there came a sharp knock on the door, it was opened before I could answer, and a Maori chambermaid shoved a mug of tea in my face. Ticky tried to tell her to go away, but the girl was not listening, so Ticky accepted it. She sat up, sipping it and looking at me. "You're wearing a fright wig, did you know?"

"You wouldn't take any beauty prizes yourself this morning, my sweet. But I love you even if you are old and ugly."

"And I love you even when you're horrid, which is pretty often. But I don't doubt I look awful. Honey, could we have breakfast sent up? I've had a terrible night and I'm just not up to facing people and being polite. So please?"

"Did you read the house rules over there on the bureau? No room service. No parking of automobiles. Rooms must be vacated by 10:30 A.M.—or they sock you for another day. And a big, boldface boast at the bottom 'The Comfort of Each Guest is the Objective of the Management.' "

"Only they failed to capture their objective. I had forgotten that quip about room service. Oh, dear!"

"They haven't, so pull yourself out of that sack. That dining room opens in exactly thirty-four minutes now and they slam it shut sixty minutes later. Get up and make yourself beautiful. Want me to draw you a nice hot tub with lots of bath salts?"

"Don't be nasty." She got up and started brushing her teeth. Presently she said, "They never did bring any face towels and this skimpy little bath towel is still wet—and I'm afraid I got it sort of dirty in the shower last night. There wasn't any place to hang it. May I use yours?"

"Go ahead. Where's my grey suit?"

"Still in one of your bags. There weren't any coat hangers and the maid would only bring me two, when I asked her. Your towel is wet, too."

"Don't fret about towels, the maid will bring some fresh ones when she makes up the room. And we'll buy some coat hangers this morning, if we have to."

But we did not buy coat hangers, as we discovered later that in New Zealand everything buttons up at five P.M. on Friday and remains closed until nine on Monday. The exceptions are negligible. Australian closing hours are inconvenient, but New Zealand closing hours are more in the nature of paralysis. We did not know it yet, but our weekend was to be a complete blank.

Nor did we get dry towels. The comment about the linen charge was an indirect way of telling us that, in a New Zealand hotel, you use the same towel (one, for all purposes), the same napkin, the same sheets and pillow case for the duration of your stay. There was no use to complain; these things are regulated by the government.

I wonder if a government that decides when to change the sheets really has time to take care of more usual government business?

After breakfast (let's not mention it!) I urged Ticky to start in and work on her clothes and mine. The cyclone seemed to have moved in on Auckland; it was rainy, very windy, and cold out. She agreed. "But be sure to try to find some American cigarettes."

"I'll try." I went first to Thomas Cook & Son. Every place I passed was closed and I was beginning to wonder, but I found it open and Mr. Gunning inside. He looked up, smiled ruefully, and shook his head. "Trouble?" I asked.

"Trouble. From the weather reports now I doubt if there will be any flights even on Monday. Besides that, I can't even get you out of here on Monday even if they do fly. Half the telephone lines are down and I can't begin to complete your reservations."

He showed me what he had planned and how little he had accomplished. Finally I said, "Mr. Gunning, what does South Island have that is unique? That can't be seen on North Island?"

"Mmmm—the Southern Alps. Fjords."

"Is that all?"

"Just about. The best hunting and fishing is there."

"Well, I don't hunt or fish, we live in the Rocky Mountains and much as I love mountains, I can get along without seeing another range of them. And I've seen plenty of fjords, too. If we limited this tour to North Island would it be easier?"

He looked happy. "Much easier."

"Then do it that way. Cut out all plane flights and keep us on this island—my wife will be pleased about that, anyway. She hates to fly, it frightens her. Can you get us out on Monday then?"

He shook his head. "I wish I could, but there is no use in giving you false hopes. This is a weekend. Half the places I'll have to reach will be closed—even if I can get a call through."

"Hotels? Transportation companies?"

"Hotels will be open, of course. Some of the transportation companies may be. Suppose I phone you later in the day? I'll do my best."

I agreed. Then I decided to turn over to him the matter of getting a ship back to the States. I was going to have very little time to haunt the steamship agencies and he probably stood more chance than I did, anyhow, since he knew the ropes. He was obviously able, and willing to try very hard—and the nicest person we had met yet. So I did so, then went out to look for American cigarettes. There were none, of course, but I was very lucky in that the sale of tobacco was permitted up until noon on Saturdays. I bought two or three brands that were recommended as "mild, much like American cigarettes," and went back to the room. I found Ticky swatting cockroaches again.

I do not remember too many details of the rest of that long weekend. I recall it just as the unvarying monotony of that filthy room, long treks down the corridors to try to find other toilets somewhere else in the hotel whenever the single facility reasonably near our room was in use, which seemed to be two times out of three, showers ended by smearing off with a towel that never did dry, a few sober drinks in the funeral-parlor splendor of the lounge, and watching the storm out the window.

I am not blaming New Zealand for that cyclone. Most of the weather while we were there was delightful; New Zealand has an almost ideal climate. We had encountered bad weather in every country we were in; given clean and cheerful indoor surroundings, bad weather is a very minor inconvenience or none at all. It is another matter when you are forced to hole up in filth.

We had tried to go out Saturday evening, but ran into one of New Zealand's most characteristic institutions, the six-o'clock drunk. Their saloons close at six P.M.; the customers spend the last fifteen minutes trying to get really plastered and most of them succeed. At 6:01 the drunks come pouring out on the sidewalks outside every hotel in New Zealand—in fact marriage of the hotel business to the liquor trade appears to be the cause of New Zealand's scandalous hotels.

Ticky and I were standing at the taxi rank at the Waverly, which is just outside the Waverly Bar. We were waiting for a taxi and minding our own business, when simultaneously an empty cab drove up and the drunks started pouring out of the bar. Before I knew what was going on I found myself faced with a fist fight simply because Ticky and I had started to get into the cab.

I avoided the fight simply by accepting insults, obscenity, and by surrendering the cab. I am no hero and I do not relish facing a judge on a street-fighting charge in a strange country, and I relish even less the broken nose, broken glasses, and so forth, that may be picked up in such a brawl—and still less the prospect of Ticky's getting involved in such a useless, silly, and dangerous business . . . which she would surely do if she saw me getting the worst of it. So I crawled.

Much later, after all the drunks were served, we got a taxi. I was still shaking with rage and so was Ticky. But it turned out that she had not realized what had almost happened—because the notion of grown men fighting on a sidewalk was foreign to her experience. In thinking it over I realized that the last time I had seen anyone really drunk—fighting, mean drunk and not just happy—was over twenty years earlier and in a Central American banana port at that. For all the liquor consumed in the United States, drunk and disorderly on the streets is something one reads about in the newspapers but hardly ever sees in the flesh.

In New Zealand they do not warrant a police-court news item. So far as I know they are never arrested, for they are common as lamp posts. Nor are they limited to six o'clock in the evening; that is simply the time when the sidewalks are literally crowded with them. But you can see them at any time of day on the streets of Auckland, staggering, too drunk to navigate. Nobody pays any attention, not even the bobbies.

On Monday the weather was much better, although still overcast with some rain. After breakfast I told Ticky I intended to go at once to see Mr. Gunning. "Better get out of this hole and come with me. And say—where is that Auckland guide? Not the little one, but the big one the Chamber of Commerce puts out."

"Over there under the wash stand. What do you want if for?"

"What's it doing on the floor? And—good grief, what have you been doing with it? It's all messy."

"Swatting cockroaches."

"But why use the Auckland City Guide?"

"I had to use something . . . and it seemed appropriate."

"Mmmm, maybe you have a point." I opened it gingerly. "I want to look up the American consul. It is just barely possible that he might be able to help us get a ship back home." Ticky had been standing at the window, looking down at the grim and antiquated buildings of Auckland. She did not say anything for a long moment, then she turned rather suddenly. "Bob—"

"Huh?"

"Don't bother."

"Eh? What do you mean?"

"Don't try any further to get us a ship back to the States. Let's go down right now and buy an airline ticket home."

"What?"

"Let's fly home."

I said slowly, "Honey, I thought you were the girl who would put up with anything rather than fly over the ocean? I thought the very idea frightened you?"

"I was. It does. It just scares me speechless. I'm almost sure we'll be killed. But—" She began to cry. "B-b-but I'm just so homesick and miserable that I'll do *anything* to get home. I just can't stand this filth and the dirty food and, and everything. So let's fly."

I put an arm around her. "Take it easy, honey. All right, if that's what you want. Let's go over and tell Mr. Gunning and have him cancel the tour. Then we'll make a reservation."

"Oh, let's!"

It turned out that we could not possibly fly for four more days at the earliest; Ticky decided that such being the case we might as well make the tour around North Island and leave immediately on returning, a week hence. The notion of the tour did not upset her nearly as much as the idea of four more idle days in Auckland. So we spent the rest of the day happily, in a holiday spirit, making preparations for the tour and buying our ticket to San Francisco. We had a party at the Hi Diddle Griddle that night and let the Waverly do what it liked with the dinners we had already paid for. What Ticky suggested that they do with them was more appropriate than eating them.

When we checked out the next morning we found that they had charged us for one extra day and two extra meals. I called it to their attention with a minimum of comment, waited while they corrected it, and returned my key—ten shillings deposit. But they had the last laugh anyhow, for they gave us less than the established exchange rate for our dollars and I was too much in a hurry to go out to a bank for the correct rate. As we climbed into a taxi I shook the dust of the place from my shoes and did not look back.

The trip around North Island was very pleasant, in spite of hotels almost as bad as the Waverly and food that was just as bad in most cases. We used the hotels just to sleep in and were on the move, out in the open country, all day long. New Zealand is truly a beautiful place; once away from the eyesores they use for towns and cities one could easily fall in love with it.

The first jump was to Waitomo, by bus. The bus had been described as a "luxury bus" to distinguish it from their ordinary cross-country buses, which are known as service cars. It was not bad, but the seats are so narrow and close together that they are really suited only to married couples still in love—so Ticky and I happily held hands the entire trip. Brazil could tell them something about luxury buses, however.

The first stop was at the Waitomo Hotel, by itself in beautiful country. There we had the only decent hotel accommodations in all our stay in New Zealand. It was just a simple room and bath, but good, clean, new, and comfortable—say an $8 room in a decent commercial hotel in America. But it looked like heaven to us.

The Waitomo was the only good hotel we found in New Zealand, and even it had oddities which would not be tolerated in America—the habit, for example, of paging a guest by loudspeaker: "Mr. Tompkins, room twenty-five, report to the desk!" We had run into this army-barracks procedure first in the steamship *Monowai;* if the purser wanted to see a passenger, he ordered him, by loudspeaker, to report to his office, instead of sending a messenger with the message couched as a request. This rude practice is common throughout New Zealand. The peremptory knock in the early morning, even on Sundays, the lack of room service, and the boarding-meal hours and style of serving are common to all hotels that we saw; New Zealanders apparently do not mind being strictly disciplined on their holidays. But, allowing for these customs of the country, the Waitomo was a good hotel. Even its cooking was markedly better than that of the Waverly—not good, but edible and usually clean. By contrast it seemed wonderful.

After dinner, during an unusually long wait for coffee in the lounge, we met the manager, Mr. W. F. Swift. I had remarked that the two pages serving coffee were doing it in such a backhanded, steps-retracing fashion that they seemed unlikely ever to finish, whereupon the gentleman next to me introduced himself as the manager. It became evident that he knew his job and wanted to run the best hotel possible—and his efforts showed.

He asked us what room we were in; Ticky answered, "Number three." He nodded and said, "Ah yes, the Royal Suite."

Ticky said, "Why do you call it that?"

"Eh? Because it is. The room you have was the Duke room; the one connecting with it, number four, was the one occupied by the Queen—let me see, uh, just four weeks ago today."

I looked at Ticky and she looked at me. We managed not to laugh until we were safe in the "Duke's room"—then we got slightly hysterical. Not that there was anything wrong with the room; it was in all respects comfortable, proper, and decently furnished. I am sure the Duke of Edinburgh was comfortable in it, even though you could have lost it and never missed the space in the incredible "room" we had enjoyed in the Raffles. But the notion that we had had to acquire the Royal Suite to enjoy accommodations adequate but less luxurious than those of any of thousands of motels in America hit us, in our weakened state, as riotously funny.

The bathtub in the Royal Suite was exceptionally long and I suspect it was specially installed in consideration for the Duke's height —certainly all the fixtures were new. I know I found it a luxury even though I am two inches shorter than the Duke. But it had one oddity which I learned presently was characteristic of New Zealand plumbing: they do not revent drain lines and consequently, when a drain is thirty-five feet or more above its discharge, the drain hole will show a full fifteen pounds per square inch of vacuum, enough to be startling and moderately dangerous. I found this out by stepping on the drain hole in the tub, to my great surprise and moderate pain. I wrote a story once about a man who sealed off a vacuum leak by sitting on it; I really should rewrite that story since I did not know at the time just how absorbing a trick it is.

I managed to pull my foot loose with nothing but a large strawberry mark to show for the mishap. I hope the Duke did not step on the drain.

Waitomo is a limestone-cave resort. There are three caves, all quite good, but I am not going to describe stalactites, stalagmites, and such. If you have seen limestone caves anywhere in the world you have seen much the same thing; if you have seen the Mammoth Cave or Carlsbad Caverns you have seen much more. I am not running down the Waitomo Caves; I love limestone caves anywhere, never miss a chance to go through them, and these are excellent examples. But if you have seen one, description is unnecessary; if you have not, description is almost worthless—it is time you treated yourself to the experience.

But there is one aspect of one cave there which is unique, to be seen nowhere else in the world: the GlowWorm Grotto. It is a surpassing emotional experience which may well be worth making a trip of thousands of miles to see and worth even the indignities of New Zealand hotels. The glow worm referred to in the name is the larva of a small fly, *Arachnocampa luminosa,* whereas our glow worm is the larva of a beetle—but the difference is important only to another glow worm or an entomologist; it is a worm that glows by the same biochemical process which makes our fireflies light up. The larvae, an inch to two inches long, live on the ceilings of Cave Waitomo, where they spin threads like spider webs to catch other insects.

We went through Cave Waitomo the evening of our arrival. The first part of the tour is the usual limestone-cave trip, beautiful and impressive but not unique. Then the guide explains that he is about to turn off the lights, as the glow worms shut off their light if disturbed by light or sound. We are enjoined to keep absolute quiet. In the darkness we are led down to a big boat in an underground river; each visitor is handed into the boat in darkness, seated, and given whispered orders to sit still, keep quiet, and show no light.

With no sound but breathings and the water lapping gently against the side of the boat we are pulled along in pitch darkness, the guide moving the boat by means of steel rope let into the rock walls. The boat makes a turn to the left, following the course of the underground stream.

There is a chorused gasp, muffled at once. The ceiling of the cavern we have just entered is covered with many, many thousands of tiny blue lights, so many and so bright that we can now see the awed faces of our companions in the boat, enough light to read newspaper headlines. The sight is most like that of the Galaxy spilling across a clear desert sky on a moonless night, the gasp from the boat like that one always hears whey the "stars" first come out in a planetarium show. It does not feel like a cave; it feels like open sky and glimmering stars.

The above is correct, as far as it goes. I am afraid I can not convey the eerie emotional experience of the silent walk through darkness down to an underground river, the spooky River-Styx feeling of that black and muffled voyage. It is good that the glow worms are shy, for a single gaggling word would blemish the awesome spell of that unearthly place.

We went from Waitomo to Wairakei by train and bus, stopping overnight at the Chateau, their best-known resort hotel in the middle of National Park. Their trains are good, but smaller than ours; their goods wagons look toylike compared with our freight cars. The Chateau would be comparable to the hotels in our own national parks if it were well run. It is not. Poor food, a sickening stench in the dining room, and more of the army-barracks spirit in handling the guests. We were bawled out for daring to sit down at an empty table in the dining room—cold, dirt, and tongue-lashings are routine for the visitor to New Zealand; you must harden yourself to it while there.

The bus ride from the Chateau to Wairakei was one of the most interesting parts of the tour, even though it was scheduled simply as a means of getting us from one tourist attraction to another, for the reason that it took us intimately into New Zealand farming country and let us see a little of how the New Zealand countryman lives. The bus traveled much more than twice the road distance, wandering around through small villages and up side streets, delivering newspapers, picking up mail, stopping at a hail to pick up a note from a farmer's wife and deliver it to some farm farther up the way. We could see clearly for the first time that the whites and the Maori actually did live intimately together in the country, with no apparent color line. The countryside is fertile and has a feminine beauty, the paddocks and fields being separated by hedge rows rather than fences, English style. The back roads are poor, the houses small and rather grim, the crossroads stores very poorly stocked; the much-vaunted high standard of living is not evident. In several places there were kennellike housing developments, with whole families living in cramped boxes that made the worst of company towns in America look like well-planned suburbs. Housing is New Zealand's most acute shortage, but it is hard to see what obstacles prevent solving it, other than those they have deliberately placed on themselves through legislation. But even the best houses are uniformly dreary, made more so by an all-prevalent use of drab yellow paint, and even new houses are built in the same nineteenth-century style which accounts in part for the 1890 overall impression the country gives one.

New Zealand seems to be a place where no one goes hungry, but where life is dreary and comfortless beyond belief, save for the pleasures of good climate and magnificent countryside.

The bus delivered us at last to Hotel Wairakei, having taken four hours to cover seventy miles. Wairakei is a thermal-activity neighborhood rather than a town; it has geysers, hot springs, boiling mud springs, and colored formations in abundance, and is also the center of the government's experiments in harnessing volcanic steam for heat and power, a project pictured last year in *Life* magazine. The geothermal bores are located near the hotel and the hotel is alleged to be heated by them; perhaps in time heat for hotels will become a common thing there. As yet, the experiments have not realized commercial results but there is every reason to expect that they will. The amount of dry steam underground here is illustrated by one thermal activity which is not duplicated or excelled in Yellowstone (grand as they are, all other thermal activities in New Zealand are no match for Yellowstone, a demonstrable fact no New Zealander will believe). This exception is the Karapiti Blow Hole, which incessantly blows dry steam at 180 lbs./sq. in. pressure and has been doing so without let-up at least since the Maori arrived there in the fourteenth century. The guide there referred to it as "New Zealand's Relief Valve" and suggested that the island might blow up if the blow hole were stopped up—Ticky was all for sneaking back at night and dumping rocks and cement into it, but she is a vandal at heart as well as an anarchist.

Speaking of vandals, our several visits to the geysers and so forth of Wairakei area were made less than pleasant by the New Zealander's own disregard for his country's natural wonders. Even the guides joined in the casual sport of tearing up the vegetation, roiling the lily pools, chucking refuse into hot springs and the like. After the firm discipline of our own National Park Rangers plus the unending and quite successful warnings to us all not to disfigure our parks it was shocking to see these people witlessly damaging their national treasures. Yet we never once heard a government guide protest or warn.

In fact, in the Waitomo Caves we saw one of the guides break off a stalactite (which took endless years to grow) just to show a party of twenty people its inner structure. In these caves the formations were covered with disfiguring chicken wire where they could be reached, just to stop such rape—but the formations in our Carlsbad Caverns have no such protection and need none, for each party that goes down is so indoctrinated before starting that, should a tourist be so reckless as to harm a formation, the Rangers would almost certainly have to intervene to save him from violence at the hands of the outraged majority. We have our vandals, certainly—and we regard them as vermin. Not so there.

This same guide at Waitomo mentioned something else that surprised us almost as much as the destruction of the stalactite. It turned out that Ticky had the only flashlight in the party, whereupon the guide mentioned that the week before the lights had failed and a guide had been forced to lead a party out in the pitch blackness, relying on his memory of the twists and turns underground. Despite this incident, our guide had no torch of any sort. One of the New Zealand tourists remarked that the government certainly should buy him a flashlight, whereupon all the rest of the party and the guide himself agreed solemnly that the government certainly should, as the present situation was dangerous. Ticky and I kept quiet. No one at all suggested that a professional cave guide, not supplied with a free flashlight, might consider investing ten shillings in a flashlight of his own rather than wait for a bureaucrat to think of it.

The Wairakei Hotel had the usual swank lounge and dining room, poor food and lack of service; it was exceptional only in having the smallest room we encountered around the world. It contained a double bed and there was barely room for one person to walk down one side and the end, with the bed jammed against two walls.

We went on from there to Rotorua, fifty miles away. Rotorua is a town built right on top of a thermal area; there are geysers, hot springs, and plumes of steam popping out at odd places in back yards, in parks, or by the roadside. The Wairakei area and Rotorua and its environs comprise most of the thermal area in New Zealand. One gets the impression that thermal activity in New Zealand covers a vast area, much larger than Yellowstone, but this is not true; a map of Yellowstone, to the same scale, placed over a map of New Zealand, will show that the area of thermal activity in Yellowstone is more widespread than the corresponding area in New Zealand. After trying this comparison I wondered why the New Zealand area seemed larger and concluded that it arose from one difference: the New Zealand thermal area is not a reserve, except for certain very small areas of intense activity; farms and houses and villages fill up the space between these very limited enclaves; on the other hand, in Yellowstone we have chosen to block off the entire space, all 3500 square miles of it, more than 2,000,000 acres.

This comparison is not a criticism of the New Zealand policy, as New Zealand simply could not possibly afford to block off an area the size of Yellowstone in the middle of North Island. Besides, while I would not change Yellowstone by one pine needle, nevertheless there is a quaint charm about a country town in which the houses and fruit trees and privies intermingle with geysers and hot springs.

The Hotel Geyser in Rotorua did nothing to sully New Zealand's unchallenged record for the worst in hotels. Our room was larger than the one at Wairakei, but, since it had twin beds, it was not roomier. Since we were going to be there longer than overnight I started to ask for a chair, there being none of any nature in the room, then refrained from doing so after I had considered every possibility and discovered that no jigsaw puzzle maneuvering could possibly make room for a chair in that lovely boudoir.

The mattress on my bed was such that I took it off the bed each night and placed it under the bed. In my opinion this improved things somewhat, as there was a hard boxlike structure under the mattress which seemed to me to make better sleeping than the alleged mattress. Ticky chose to sleep among the hills and valleys of her mattress; I don't know which one of us came out ahead, but we both resorted to sleeping pills every night that we were there. There was no danger of us sleeping through breakfast as a Maori maid came in at seven each morning to wake us with tannic acid solution and another Maori girl toured the corridors, banging on a Maori war gong—allee-samee lid of garbage can, with decorations—at seven-thirty to make sure no one failed to sit down on time. This clamor went on even on Sunday mornings.

We were unable to keep the maid out of the room at seven A.M. because we could not get a key to our room, nor could it be bolted from inside. Immediately after checking in I went back to the desk and made a fight talk for a key, somewhat exaggerating the value of my camera equipment and of Ticky's jewelry to justify the unusual (in New Zealand) request . . . in fact, between camera, binoculars, typewriter, engagement ring, and a few gewgaws, we did have items with us which it would have grieved us to lose.

The manageress told me somewhat frostily that we did not need a key since everyone around there was honest. Right at this point a bellman came up to her, stuck out his hand, and asked for the key to the linen locker; she reached under the desk and got it for him while still talking to me. I looked at him, looked back at her, and said, "I thought you just told me that keys were quite unnecessary around here because everyone was honest?"

This made her angry and she informed me quite huffily that the linen locker was another matter entirely. I did not get the key.

While we were there Ticky took her baths wearing all her jewelry, such as it was. Insurance compensation does not interest her.

Perhaps everyone around there was indeed honest; we did not miss anything. But New Zealand is the only country we visited where we were cheated in making change and it happened there so frequently as to justify fairing a curve and declaring a trend.

The hotel was standard in all other respects. The room had no coat hangers, of course; the food was bad and dirty; the coffee was one point worse than any other, for it was not drinkable at all—and I will happily drink very bad coffee rather than do without; I am a coffee addict. But the meals were rendered somewhat cheerful by Maori waitresses in old Maori costumes, very fancy indeed. The Maori are a handsome people and Maori girls are very pretty indeed, if you like them a little on the plump side. The girls were not only smiling and attractive but actually seemed to want to please the guests. They dressed in a skirt much like a hula skirt made of New Zealand flax, scraped, rolled and dried in such a fashion that the strands look like strings of beads. When they walk the strands make a cheerful clacking sound. Above the waist they wear fancy embroidered bodices, strapless, with arms and shoulders bare.

The Geyser Hotel is almost next door to the Maori village of Whakarewarewa, which sits right in a geyser basin with houses built on the crusts deposited by thermal action. We paid a guide fee and joined a party of four Englishmen who were being shown around by an old Maori woman. The houses in this village are of the same style as almost every other house in New Zealand; they are not Maori architecture. So far as I could find out no Maori lives as his ancestors lived; there seems to be nothing in New Zealand parallel to the pueblo cities and the Navajo hogans of our southwest. But nearby the occupied houses, the Maori have built a replica ancient Maori village for the benefit of tourists; the tour includes the modern village, the thermal activities, and a lecture on Maori culture illustrated by the replica empty village.

The modern village sits where it does because the Maori use the natural steam and hot water for cooking, for washing, and for all domestic purposes. Iron pipes run here and there above ground, carrying water and steam from natural source to houses, and there are boxes and Dutch-oven contrivances placed over steam holes and used as stoves. The heat is great enough for boiling or simmering, not great enough for broiling or frying. Laundering is done outside in natural basins and the children, at least, bathe outdoors. I had the impression that this method of living was continued primarily as a tourist exhibit even though the houses really are inhabited, but it is no more the normal way for Maori to live than it is for the whites. The overwhelming majority of Maori have no more opportunity to use natural steam than have the residents of Auckland. Nevertheless it was very interesting.

We left the village and were conducted around the rest of the geyser basin and over to the replica village. We had had the bad luck to draw a guide who was intensely racist; she was bent on proving that Maori were equal to white men in most ways and better in all others. While we could sympathize with her chip-on-the-shoulder attitude intellectually, it was nevertheless tediously annoying. I am not going to give this woman's name as she has had much too much publicity already, being conceded to be the leading guide there and the one always chosen to conduct V.I.P.s—you have probably seen her picture in American magazines several times.

When we joined her party she was busy baiting the four Englishmen, making invidious comparisons between Maori and English, criticizing the government of England, and so forth. The Englishmen endured it in dignified silence. When she found out that we were Americans she shifted her attention to us, but limited herself at first to boasting about how much the village had done for American service men during the War (which may well have been true) and how thoroughly impressed "Eleanor" was with what she had seen there.

A few minutes later I accidentally brought her wrath down on us. She had asked us if we had seen Yellowstone Park; we admitted that we had. She answered, "I'll show you things you don't have at Yellowstone." Shortly thereafter, during the geyser basin tour, she stopped and pointed around us. "Note," she said, "how the greenery, the trees and bushes, come right down to the edge of the geyser basin. There's nothing like that in Yellowstone."

This was a wonderful place for me to have kept my mouth shut in the interests of international amity. But I answered, "Excuse me, but somebody has misled you. The trees and greenery in Yellowstone come to the edge of the thermal basins just as they do here."

"What?" She stopped and glared at me. "But I know they don't! I've

seen pictures."

I realized almost at once how she could have gotten honestly mixed up from pictures. There are several geyser basins in Yellowstone so many acres in extent that one may take any number of pictures without having trees and shrubs in the background; nevertheless similar conditions produce similar results and where the burned-out thermal area stops the trees and shrubs begin at once.

The basin she was showing us was not on that vast scale; it could have been lost in one corner of the Norris Geyser Basin, for example. Consequently trees and shrubs were never far away. In the enormously bigger basins of Yellowstone the nearest greenery might be several hundred yards away, but the basic arrangement was precisely the same—in the smaller thermal areas of Yellowstone the spatial relationships were just like those around us.

There was no reason for us to quarrel. I did not design Yellowstone and she did not design the Whakarewarewa thermal area. So I tried to straighten the matter out. She was still boiling, shouting that every other American who had ever been there had told her that she was right and anyhow the pictures proved I was wrong. I said, "I think it is just a mix-up, a misunderstanding. You see—"

"You can't argue with photographs! I'll *show* them to you!"

The Englishmen were beginning to look at us oddly while I was growing embarrassed. "Let me explain how it is in Yellowstone. You see—"

"I've no time to listen to explanations now. Come on, we late!" She turned and stomped up the path.

I shut up, realizing that she did not want explanations. The superiority of "her" thermal area was a matter of dogma; it was emotionally, though illogically, related to the superiority of thy Maori race. Several times during the next hour she turned to me and said, in several different ways, that it was very funny that I was the only American who had not agreed and forth; she did not quite call me a liar but she made it clear that I must know that I was not telling the truth. But every effort to explain she brushed off; she had no time to listen to heresy.

Her attitude was not typically Maori but it was typically New Zealand. The New Zealanders know, beyond any argument, that they have the best thermal displays in the world. I certainly agree that the New Zealand displays are wonderful and beautiful. But let me quote the Encylopaedia Britannica, which states that the geysers of Yellowstone render those "—of New Zealand almost insignificant in comparison" (X, 319, 1954). This truth is self evident to anyone who has seen both—but few New Zealanders have; indeed, their government forbids them to travel to our country save under very special circumstances.

But neither Ticky nor I ever told any New Zealander that Yellowstone was better, and I gather from what I heard that other Americans had been equally forbearing. (Even when I incensed our guide I had not been claiming that Yellowstone was "better"; I had simply attempted to correct an explicit error—nor was I successful even in that.)

The party went on to the replica village where our guide lectured us and several other parties on the virtues and wisdom of the ancient Maori, directing most of her remarks at us. The Maori emigrated here from Tahiti about six centuries ago; every Maori of today traces his descent back to a particular canoe of that heroic migration. Maori social organization was based on blood relationships and each village was a super-family, communal inside the family village. Exogamy was not required but consanguinity closer than second cousins was "tapu" or taboo.

The lecture was very long, the day was hot, and we were packed into the stuffy, windowless "city hall" of the replica, village. Besides, the talk was compounded of boasting and of many statements which were, at least, imaginative and idealized rearrangements of history and anthropology. Ticky became faint and I happily excused ourselves and led her away.

A lot of nonsense has been peddled both about the modern Maori and their ancestors. Most modern Maori are fine people indeed, handsome, good-natured, civilized, and acceptably well-educated; they are a real pleasure to know.

But the notion that their ancestors were nature's noblemen is preposterous; the Maori, before the English fought them and tamed them, were the mad dog of Polynesian peoples. They were not simply barbarous, they were bloodthirsty savages, perhaps the worst this wicked planet has seen. Physical courage and family loyalty were their only virtues. They exterminated the unwarlike aboriginal inhabitants of New Zealand, then turned their attention to eating each other, a practice to which they were addicted as the present-day New Zealander is addicted to his beer. Compared with them the lowly Australian aborigine was a civilized gentleman.

All of which has nothing to do with the Maori today; all of us have savage ancestors. It is New Zealand's boast that the present Maori are political and social equals. This boast has a large and admirable measure of truth; the status of the Maori in New Zealand is, in most respects, better than the status of colored people of all sorts in the United States. But it is not literally true. Maori will usually be found in menial jobs and there is much unspoken, "Gentlemen's Agreement"-type discrimination. Politically the Maori may not be a second-class citizen but he is certainly a special-class citizen, for he does not cast a white man's ballot. Instead he votes only for legislative representatives of his own race. He is allowed four out of eighty, or five per cent. But his birth rate is nearly twice as high as that of the whites and his present proportion in the population is nearer ten per cent than five. Exponential growth curves being what they are, one may wonder what the white man will do when these proportions are more nearly equal; will he ever permit the Maori to outvote him, or will he hold him to five per cent and a separate ballot?

In the matter of schools, most of them are mixed; others are "Jim Crow" schools for Maori children.

We attended a concert given at the City Hall of Rotorua under the direction of our guide at the Maori village. She had apparently forgotten her anger at me, or perhaps our meekness under her abuse had mollified her, for she greeted us as old friends and insisted on seating us down front. (Ticky had almost refused to attend; she wanted to claw the woman—with a cannibal feast for the victor, I gathered.) The concert consisted of Maori war dances, story dances, and songs, among them the famous "Now Is the Hour"—which is Maori. The war dances were characterized mainly by sticking tongues out as far as possible, said to be a gesture of defiance. Possibly through years of practice, a Maori can stick his tongue out much farther than a white man, sufficient to cover his chin. The arts and crafts displayed were of the usual barbaric level found all over the globe in all early cultures and almost monotonously alike wherever found—garish colors, overelaboration of detail, and highly traditional, unindividual design. It is considered the proper thing these days to gush over peasant and native art, admire the "marvellous" designs and the patient workmanship. I cannot go along with this fad; most primitive art is obviously poor art, of kindergarten quality, if judged on its own merits without sentimentality about its origin. As for the patient workmanship, to spend pains on such fiddlin' stuff indicates a person with lots of time on his hands and lacking knowledge of anything better. These are simply stages that all of our ancestors went through; we should respect them for what they are but not gush over them for what they are not.

Maori story dances are much like other Polynesian dancing such as hula, but made more interesting to me by the addition of the poi. Poi are lightweight balls on strings, which are swung like Indian clubs with remarkable dexterity. It is a form of precision juggling worked into the choreography and is most pleasing and quite difficult. There are "short poi" with six-inch strings and "long poi" with the strings about as long as the girls' arms, and they produce varied rhythms and incidental slapping sounds. It is an art most graceful, unique with the

Maori, as traditional and stylized as classic ballet and (I suspect) almost as difficult.

During our stay at Rotorua we had signed up for one of the government tourist trips scheduled to leave at 2 P.M. from the bus station in town on Saturday afternoon. We showed up there, only to be told that the trip was canceled because nobody wanted to go that day. Nobody but us, that is. I am rather glad, now that it is over, that we were disappointed as it gave us a chance to enjoy a real New Zealand Saturday afternoon.

We asked the clerk at the bus station what else there might be to do in town that day? Nothing, so far as he knew. Now Rotorua is the center of their principal holiday area and it was the height of their tourist season, so I persisted: How about a cricket match? Where could we expect to find one? Ticky had never seen cricket and I thought it was time that she learned why cricket had never displaced baseball in spite of the obvious inanities of our own national sport.

No cricket match scheduled, sorry . . . nor any place he could suggest to look for a "sand lot" game. Well, how about a movie?

Ah yes, there was a cinema performance, starting in about fifteen minutes just down the street—but have you booked tickets?

It had not occurred to us. He shook his head dismally; nevertheless we tried the cinema. It was not a continuous showing, but one performance only, reserved seats only . . . and every seat sold. The one-performance-only rule was, like the sixty-minute meal hours, one of their multitudinous restrictions on working hours; we observe a forty-hour week just as closely as they do, but their approach to it is entirely different.

So we wandered the streets, trying to find something, any thing, open. Rotorua is not a large place, but it is more than a wide place in the road; it has more citizens than has Annapolis, Maryland, a few dozen less than Princeton, New Jersey, and in addition has droves of vacationers staying in it. It is also the shopping center of a large farming community, and this was Saturday afternoon when any such farm community in America would be bursting at the seams.

You could have sprayed a machine gun down its main street and never hurt a soul. We were the only people in sight.

We strolled the silent business district, stopping occasionally to peer into locked shops. A drug store had a notice in the window stating that it was the authorized emergency chemist shop for that weekend, prescriptions filled on certified emergency from nine to ten in the morning and from six to seven in the evening. I wondered what would happen if a heart patient had to have digitalis in the middle of the day; would they let him die? A closed filling station had a similar notice, giving the address of another station at which petrol might be purchased in a certified emergency.

At last we found a small restaurant and soda fountain open, one which we had patronized the day we arrived, so we went in, even though we were not really hungry, and ordered milk shakes and sandwiches.

"Ah no," said the waitress.

"No? Well, what can you serve us?"

"Tea."

"Tea? What else?"

"Just tea."

We had tea. There was no lack of food in the place; it was in sight all around us, entertaining the flies. But tea was all that might be legally sold then.

East of the business district we found a large and beautiful park; here there were people, reveling in sports—croquet and bowls. We watched a doubles match at croquet, played for blood, the sort where you take vicious delight in knocking your opponent's ball into the next county. We were beginning to take real interest, when someone rang a dinner bell and all the players on all the courts stopped at once, racked their balls and mallets, and stopped for tea. They did not even leave the balls in position to resume play. It seemed to me a perfect example of the New Zealander's willingness to accept regimentation even in his pleasures. I began to understand why girls' marching teams were a major sport in New Zealand; close order drill suits their temperament and, besides, there isn't much else to do.

After the break for tea, disgusted with the croquet players, we watched bowls. Bowls is not bowling; it is a game played with lopsided spheroids about the size and shape of a loaf of pumpernickel and the principles are those of pitching pennies for a line. But it is a game requiring high skill to play well, as the unbalanced bowl will not go in a straight line. However, as a spectator sport, it cannot compare with chess. It is played mainly by elderly men and I think I could learn to enjoy it in my declining years.

Having exhausted the resources of this holiday resort and ourselves as well we went back and waited for the bus. There was just one, as the movie let out, and it would not hold all the crowd. I don't know whether it went back and picked up the few left behind or not. But our own experience earlier with an unannounced cancellation of a scheduled bus trip made it seem doubtful.

New Zealand is a good place to hunt and fish.

The trip from Rotorua back to Auckland was longish, five hours and a half. Ticky relieved the tedium by singing endless verses of, "In eleven more months and ten more days I'll be out of the calaboose," while I pretended not to know her. The bus stopped for tea at

Hamilton; not wishing a mug of tea and ersatz, fly-tromped sandwiches, I inspected a magazine stand instead and bought one somewhat resembling our *Harper' s* magazine to read on the bus.

The lead article was "The Great American Hoax," which undertook to prove that the American standard of living was much lower than that of New Zealand. The author had figures to "prove" that most of us live in abject poverty, unable to buy necessities, much less enjoy any comforts, such as autos radios, decent clothes, *etc.*

But he did not mention that, per capita, we have more than twice as many automobiles as do New Zealanders, twice as many telephones, four times as many radios. But at the end of the article he advised us to use the legislative measures that had brought such great prosperity to New Zealand.

New Zealanders believe this sort of drivel. They know they have the world's highest standard of living; they have been told so repeatedly. Since they are not allowed to travel to the United States without very special permission (they can get a passport but they are not allowed to buy dollars to make the trip) and since our magazines and books are forbidden entrance to their country, they are not likely to change their opinions.

The embargos against American printed matter seem to me to be one of the most serious breaches between the United States and the Commonwealth nations. It is not a barrier to understanding as tight as the Iron Curtain but it is certainly no small fence. The excuse given, of conserving dollar exchange, is preposterous; the result has been to contribute, at least, to the potentially disastrous drawing apart between former allies which has been increasing since 1945. It is true that a trickle does get through. Some technical books printed in America are allowed under special import licenses—and I did find a dealer in Auckland who bootlegged American pocketbooks under the counter and another dealer who sold old, secondhand American magazines. But these driblets merely point up the tragic lack of communication.

The magazine of opinion and the opinions it inspired took me on into Auckland. It was raining when we arrived and we needed a taxi to take us to the Trans-Tasman Hotel. But the Union Bus Depot of New Zealand's largest city has no taxi stand, nor can one be called. So we carried our bags two blocks in the rain, stood in the rain for fortyfive minutes, and arrived soaked. Why the taxi rank should be two squares from the station on a dark, unsheltered corner instead of at the curb in front of the rain shelter immediately outside the station I do not know; it seems simply to be part of the New Zealand genius for doing things the hard way. It will never matter to us again, but it surely inconveniences thousands of local people each year . . . to *no* purpose.

Why do they put up with it? Yet I heard no lone complaint from those who got soaking wet with us.

The Trans-Tasman did turn out to be a better hotel than the Waverly, in that it was cleaner and our room was more cheerful. But it had the same boardinghouse & reform-school rules, the same paucity of plumbing, the same lack of central heating; on the scale under which it had won New Zealand's highest official rating of "five stars plus" the Muehibach in Kansas City would get about seventy-eight stars and a sunburst.

The next day was a very busy one. I had wanted very much to see a kiwi bird but chores incident to our departure the following day left no time for a visit to the zoo. First we had to pick up a suit left to be drycleaned and intended by Ticky for my use on the trip home—we found that they had broken three buttons on it and ripped one off. We neither argued nor complained, having learned that to do so was to invite a tongue-lashing. Since we were flying we wanted to ship back the excess over our air baggage allowance, but when we tried to do so, we found the red tape so appallingly complicated and the service so poor, that we gave up and I limited myself to mailing back as parcel post a suitcase full of books and papers. This required a trip to the customs house for export license before I could mail it. Once I had permission to send it out of the country I returned to the hotel, got the suitcase and went to Auckland's General Post Office, only to find that I could not mail it there. One could do many other things there—deposit money, place a long-distance phone call, send a cablegram overseas, pay insurance premiums, straighten out social security accounts, or even buy stamps—but the mailing of packages was not one of the functions of the General Post Office; that was done at an office several blocks away.

The trip was not entirely wasted, as I wanted to check on an expected cablegram from America and had found myself unable to do so by telephone. I found out why—the cable office in Auckland maintains no file of undelivered messages; they have no way to answer the question: "My name is J. H. Glutz—is there a message for me?" But a good-natured clerk took the trouble to check through every cablegram that had arrived in the country during the past two weeks (that being the only possible way to do it) in order to locate the one intended for me.

The suitcase being heavy I had taken a cab to the G.P.O., but had dismissed it on arrival. Now I had to lug the suitcase to the other office in order to mail it as I could get neither taxi nor tram. One of the first things Ticky and I had learned about Auckland was that the traffic cops simply were not interested in pedestrians, nor were the drivers; no quarter was given or expected, you were quick on your feet or you got hit. But in this case the heavy burden slowed me down. By the time I got that suitcase to the parcel-post office I was shaking with rage and adrenaline shock . . . most particularly because a bobby had looked right at me, then signaled a solid mass of cars to come on anyhow, stranding me in the middle of traffic, unable to run or jump. Latin Americans drive with courage, but the hazard thereby to pedestrians is as nothing to the cold ruthlessness of Auckland drivers. They give the impression that they seriously intend to hit you if possible, while their police seem to encourage the sport.

The suitcase mailed, it was necessary to obtain a different export license at still another office to take out of the country our remaining traveler's cheques. This required the usual questionnaires and declarations but did not take as long as it had taken in Australia; however, New Zealand charges a revenue fee for this gracious privilege.

We still had to arrange customs clearance for about half our suitcases and check them into the airline. Mr. Lees, of New Zealand National Airways Corporation, had pointed out that we could save quite a bit by classing our excess baggage as air cargo rather than as baggage—Mr. Lees was extremely helpful throughout—but this did entail one more chore the day before. But at the end of a long, hard day we were completely ready to go, stripped down to toothbrushes and a change of underwear. We celebrated by going to Hi Diddle Griddle for dinner.

But I still wanted to see a kiwi bird. The kiwi is not only the national symbol of New Zealand, the nickname of its soldiers, and the brand name of the world's best shoe polish, it is highly interesting in its own right. Most of the other flightless land birds are giants like the ostrich and the emu, able to compete through size, muscle, and speed; the kiwi is no bigger than a chicken. New Zealand had practically no animals before man introduced them; a flightless bird, even though small, was able to get along. Indeed, he made out better than his colossal cousin the fabulous moa, a bird that towered twelve feet in the air and which was relished by the Maori even more than they relished their neighbors—by the time the white man came it was extinct.

The kiwi hung on and still hangs on, wild in the bush. But the Auckland Zoo has a few. There was time enough the last morning, before we had to be ready to take the airport bus, to make a fast trip to the zoo provided we took a taxi and hung onto it, which we did—having the driver park and paying his way into the zoo with us.

While the Auckland Zoo cannot compare with the Sydney Zoo it is a remarkably good one for the size of the city. But I had just one thing on my mind—kiwis. So I stopped the first attendant I could find and asked where they were. He scratched his head, admitted that there were some, but he did not think we could see them. Why not? Well, they were night birds and they hid out in the brush in the daytime and were very hard to find. Ah no, he did not think we would see any, but we might try the director's office.

We tried the director's office but there seemed to be nobody at home. We walked away from there rather disconsolately, wondering whether we should sample a few caged tigers and such, or go at once back to town.

We heard someone running behind us, turned and found a slender, very pretty girl waving to us. "Hello! You wanted something at the office?"

We introduced ourselves and said what we wanted. She was Miss Margaret Wilson—"Pat" to her friends, who must be numerous—secretary to the director. She said, "You are visitors, aren't you? Not New Zealanders?"

"That's right. We're from the States."

"Then I think you ought to see a kiwi if that is what you want to see. Come along, I'll try to arrange it."

But we did several things else first. Miss Wilson was not a zoologist nor veterinarian herself, but she loved her zoo and was proud of it; we had to meet her friends, including a lioness who let Pat put her hand in her mouth, a Canadian timber wolf who fawned all over her and whined when she left, and a bale lion which Pat went into a cage to fetch, then brought out and let Ticky hold.

She showed us Komodo dragons, left over from an era eve rougher than this one. I remembered our ship passing their home island after we left Java and regretting that I had never seen one. She showed us blue penguins, native to the islands between New Zealand and the south pole and a variety rarely seen in captivity. These had just arrived and the birds were not used to pens; they had hidden. Pat got inside with them and started groping back in under rocks, almost standing on her head. "Come on out, please! Come, darlings"—she called them all "darling" and "dear" from lions to budgies. "Come on out, dear, please! I won't hurt you. Darn! You *bit* me. You shouldn't have done that. Now come on out and be nice."

She talked him into it and reappeared with a penguin that was unquestionably blue. He looked at us and did not seem impressed. Then he bit her again.

The kiwis are kept in a large, wild although enclosed, stretch of native bush. This suits the kiwi but it makes him a washout as a zoo exhibit as he simply hides and sleeps through the day. Miss Wilson had one of the keepers poke around until he found one, which he then fetched to her. She held him, petted him to sooth his nerves, and talked about him. "He eats worms and lizards and things like that. He can eat one hundred and sixty-eight worms before he gets sick," she told us solemnly—I quote verbatim.

The kiwi's feathers look and feel like coarse hair. Its bill is the size and shape of a lead pencil but curved. Its wings are useless, featherless little stubs, hidden under the body feathers and looking like a chicken wing just before frying. The kiwi takes a dim view of humans and presently we let him go, whereupon he hurried into nearby thicket and was soon lost to view.

I think Miss Wilson would pet a brontosaurus if she could find a rock to stand on. She would probably call him darling, too. All in all, she was just about the nicest thing that happened to us in New Zealand.

Our taxi driver had seemed to enjoy visiting the zoo on a paid basis and we had grown rather chummy. But when he got us back to the hotel he looked me in the eye and charged us just double what I knew the legal tariff to be for the mileage and the waiting time. I paid it without a quiver, not minding since we would be on our way in an hour or so. Our ship was a DC-6 sleeper of the British Commonwealth Pacific Airlines (since then merged with Qantas). The day was clear, the takeoff uneventful; we settled down for a long flight to the Fiji Islands. As we headed north we could see North Island stretched out under us and behind, its odd shape recognizable, just as on a map.

And I was determined to leave it on maps from then on. Australia had had its drawbacks but Australia was a place we wanted to return to and see what we had missed. But New Zealand— To get us back to New Zealand they would have to drag us, kicking and screaming all the way.

I had time to try to get my thoughts straight about New Zealand. Certainly poor hotels were not reason enough to detest a country. I myself had been born in a house without plumbing and had lived much of my life without much of the physical comforts. I was sure in my heart that I could have loved New Zealand, beautiful place that it is, had there been not a single flush toilet in the whole land.

I admitted that part of my reaction was disappointment. I had been sold on their propaganda about what a paradise the place was—no doubt it had seemed more dreadful in contrast to my expectations. But that alone was not it, either; every new place turns out to be quite different from anticipations. The reality quickly erases the preconception and causes one to forget it; it took a careful effort of memory to recall what my former concepts had been.

Perhaps I had placed too much emphasis on poor hotel food. But food is basic to life. It need not be fancy but it should be clean and reasonably well prepared. The plain fare of an American freighter had suited us well enough—but in New Zealand Ticky had lost eleven pounds in eleven days.

But it was not even bad cooking that had appalled us and taken our appetites. One can live a lifetime on tasteless food. It was hair in the coffee, flies in the sugar, dirt on the dishes, and an atmosphere of incivility that tightened up the stomach and made it impossible to eat. The last especially—Australian manners are rough but warm; New Zealand manners are often colder than the proverbially chilly English, with an icy and intentional rudeness not characteristic of the English.

"A guest should never complain." Ah, but we were not treated as guests; we were merely sources of revenue to be exploited, "suckers." It is their country and they are entitled to run it as they see fit, but they are not entitled to advertise for tourists, as they do, and then treat them as they do. They are obtaining money under false pretenses.

But, I reminded myself, not all New Zealanders are rude, or drunken, or dirty, or dishonest. Not at all! I remember at least three taxi drivers who were fine gentlemen, one who apologized on behalf of his country for the manner and speech of a drunk, another who returned half of a tip which he considered too large, another who did us a gracious service and refused pay. There was the manager of the Waitomo Hotel, a conscientious host, Mr. Gunning of Thomas Cook & Son, Mr. Lees of the government airlines, and the lovely and sweet little woman we had met at Rotorua who was so upset at the nastily anti-American talk we had been subjected to one night at dinner at the Hotel Geyser. There was Miss Pat Wilson, bless her warm heart, that very day.

I loved them all, every one of them, and was grateful for what each had done to make us feel happy in their land. But it does not take a very high percentage of boors to make a country dreadful for strangers. No doubt, even in New Zealand, the boors are in the minority . . . but nevertheless New Zealand has several times the minimum tolerable percentage; a visitor gets slapped around so frequently that he is in a constant state if shock.

But New Zealand unquestionably does have some of the finest hunting and fishing in the world. At Lake Taupo near Zotorua the trout, they say, average over five pounds. As for game, you may even shoot doe and be paid a bounty for shooting them. The game do not have to be stalked; just bang sway until your shoulder is sore. If that is what you are after and you can stand the hotels and the numerous and-so-forth, then New Zealand is for you.

But is that "sport"? Shooting cows in a pasture is actually more sporting; you have the farmer to worry about. As for fishing, it is a long way to go to catch a fish.

Plan your trip to avoid the place. This is not hard to do; only Tristan da Cunha is harder to reach, harder to leave. New Zealand claims to have the finest variety of natural wonders in the smallest area of any place in the world, but let me tell you how to plan a trip which will cover no more territory than all of New Zealand, involve no more mileage in the area described, and involve thousands of miles less to reach your starting point—and will provide everything New Zealand has to offer, including hunting and fishing, and excepting only the glorious GlowWorm Grotto:

Lay a map of New Zealand down on a map of the United States of the same scale so that the south end of South Island s at North Rim, Arizona, with the north end at Yellowstone. Place the toe of the shoe of North Island at Puget Sound and the heel at Glacier National Park; this will leave a space between the two islands roughly equivalent to Cook Strait at a point just above Arco, Idaho.

In the area of the United States covered by the outlines of the two New Zealand islands superposed on your map as described above you will find:

Several Indian reservations, in place of Maori villages

The thermal areas of Yellowstone Park

Many caverns including Lehman Caves National Monument

Mountains, glaciers, fjords (Puget Sound is not called "fjords" but the name is not important)

Yellowstone Lake instead of Taupo Lake

Freshwater and saltwater fishing of many sorts

Hunting—elk, deer, antelope, bear, game birds, even mountain lion—but you will have to hunt in most areas; it will not be shooting cows in a pasture.

In place of Auckland, you have a choice of several cities but let us name Salt Lake City which is the same size as Auckland, but much prettier and immeasurably cleaner, and possesses some of the finest hotels in the world, run by Mormons, a people who make almost a fetish of being polite and hospitable to "gentiles." They are wonderful cooks, too.

And (I almost forgot!) several hundred miles of beaches, ocean, freshwater, and salt lake

The above list equals or tops everything that New Zealand has to boast about in the way of scenery, natural wonders, and holiday advantages—except the GlowWorm Grotto. But as a bonus you will also get the following:

The Grand Canyon of the Colorado, unparalleled in the world

The Grand Canyon of the Yellowstone, smaller but incredible in its combination of canyon, thermal activity, waterfalls, and amazing colors

The Great Salt Lake and the Great Salt Desert
Sun Valley
The Craters of the Moon National Monument
Bryce Canyon
Zion Park
Kodachrome Flats
The Grand Coulee Dam
A choice of several petrified forests
The Arco Atomic Energy Plant

Several cities, a list too long to enter of lesser natural wonders, a few hundred miles of the great divide, mountains such as the Tetons and the Olympics having the spectacular beauty which distinguishes lordly mountains from "just another high one."

But there are two additional bonuses: first, you need not spend the time nor the money to make a fifteen-thousand-mile round trip to see this super-New-Zealand wonderland; and second, you can stop anywhere on the way and be sure of clean quarters, private bath, decent food, and no regimentation. If you care to tuck the Duncan Hines guides in your car, you can be sure of luxury and gourmet food. I can guarantee that you will *never* be offered boiled mutton! So bypass the smug, provincial, and conceited place called New Zealand. Leave them to their lotus eating. If you ever follow the route we took, turn north when you leave Australia and see the Philippines and Japan instead; thus you will not be wasting your money on things more readily available at home.

The flight was uneventful and as monotonous as over-water flying in good weather is bound to be. Just after dark we landed at Nandi on Viti Levu in the Fiji Islands, walked fifty yards to an excellent, modern hotel and had a simply wonderful dinner. But it could hardly be called a trip to the Fiji Islands, since all we saw of the Islands was that one hotel, all we saw of the Fiji Islanders were a dozen tall, grave, barefoot black men who were the waiters at dinner. We could tell we were back in the tropics by the heavy, smothering heat, and the glimpses of luxuriant gardens outside in the dark. But it was all hello-and-goodby.

They bedded us down when we took off from there, beds much like Pullman berths, but with safety belts. Ticky did not fasten hers, since the flight was smooth as a superhighway. But early in the morning we passed through some turbulence and she was awakened by finding herself two feet over her bunk, from which position she descended rather suddenly to her mattress. It solidified her opinion that we had placed our lives in forfeit to escape from dirt and rudeness, but she did not complain. However, it did upset her very much and when we landed on Canton Island I took her ashore for a stretch and a cup of coffee. Canton is an atoll just north of the equator, and a British-American condominium, which means that nobody quite knows who should do what. We could barely see the lagoon and could not make out the shape of the atoll ring—another hello-and-goodby.

We had the luxury of breakfast in bed, served by a pretty airline hostess. About noon we sighted lordly Diamond Head and at twelve-thirty, having crossed the date line in the night, we landed at Honolulu on the same date we had taken off from Auckland but three hours earlier than when we started. There was the Stars and Stripes flying over the port, we were *home,* back in the United States! My eyes filled up and my mouth began to tremble and I had to grope to get down the stairway without falling.

Only the fact that the runway was smeared with spilled oil at the spot where we deplaned kept me from falling on my knees and kissing my native land. I *wanted* to do it. I wanted to hug it and never let it go.

XIII

Paradise

WE ZIPPED THROUGH immigration in nothing flat and through customs in about five minutes, at least four of which were occupied by the customs officer chatting with us about where we had been and our own bubbling over about how happy we were to be *home.* He shook hands and welcomed us back.

Waiting at the door of the inspection room were Bob and Vi Markham, our chums in the *Gulf Shipper*—how many miles and months ago? They were loaded down with flower leis and grinning like pups. The leis were placed around our necks with kisses and warm aloha and again we could not see for tears. Home!

It had been years since I had last seen Honolulu. It seemed a bit bigger, a bit brighter, more automobiles and more curving, beautiful boulevards, but essentially unchanged. Aloha Tower still offered welcome, the royal palms still swayed in the warm and steady trade winds and the breakers still rolled in on Waikiki. But I had forgotten how splendidly beautiful it is.

There are those who complain that Honolulu is too artificial, not a South Seas sort of place at all. I am not one of them—I have seen Auckland! Honolulu is as shiny and up to date as a new car and it is that way because most people want it that way. It is impossible to take proper care of more than fifty thousand visitors a year with just a few grass shacks on a beach; fine big hotels are indispensable. For those who want untouched nature and solitude there is plenty of it on the Big Island, miles and miles of empty beach without a soul in sight. But one should not ask for silence and solitude at Waikiki any more than one would expect it at Rockefeller Center.

Bob and Vi drove us out to their home at Aina Haina, beyond Diamond Head. I stared and stared the whole trip. still in a state of shock at the sudden transition from grim and dreary Auckland to this chrome-plated Land of Oz—like being dumped from an icy tub of water into a warm bed. But I am not going to give a blow-by-blow account of our stay in Hawaii. Hawaii is home, just as New Jersey is home; neither one belongs in an account of a trip around the world told from an American viewpoint. So I will simply dust off the high spots just to get us back to Colorado, where the argument with Ticky had started a year earlier.

We did all the usual things—shopped, ate in restaurants where we could see hula dancing, drove around Oahu, saw the place of murdered ships and murdered men at Pearl Harbor, inspected the pineapple fields and went through the Dole pineapple cannery, of which Bob was an executive, attended a luau and ate poi and laulaus, having learned first how to prepare and tie a laulau, stood in the wind on the high Pali where King Kamehameha the Great sealed in blood the unification of the islands as one nation, and took a packaged commercial tour by air and automobile of Hawaii much as we had taken such a tour in New Zealand, a tour which had as its high spot a stay in Volcano House on the rim of the great, live crater Kilauea where the firegoddess Pele lives.

But you have probably been to all these places, too. If not, mark it down in your book. This is one of the fairest parts of the United States. You need no passport, you undergo no red tape, you don't have to worry about the drinking water; all you require is the price of a round trip ticket from the Mainland. $250 by aircoach, plus what you care to spend while there. Prices in Honolulu are higher than they are in San Francisco as almost everything has to be imported, but they are not much higher. What you spend depends mostly on how much liquor you drink, where you eat, and what you buy. An all-expense luxury tour (and I do mean "luxury") of the outer islands costs about $30 a day, but you need not spend that much if you do not wish to be spoonfed. On the other hand it is no trouble to spend a hundred dollars a day in shops and night clubs if you wish.

Whether you pinch pennies or spend it like water, you will be treated with courtesy. Much more than half of the population is of Chinese, Japanese, or Hawaiian descent, three cultures outstanding for politeness, and the Caucasians or haoles have absorbed and taken for their own the leisurely, informal, almost excessively courteous spirit of the islands. Besides that, the Chamber of Commerce and the territorial government have been pushing a Be-Kind-to-Mainlanders movement which is carried to such extremes that it is considered bad form to call us trippers "tourists"—we must be called "visitors" or "guests" and every resident has been reminded repeatedly that it is up to each one of them to make us feel welcome.

Of course this last point is not just altruism; tourists bring money into the islands and the purpose of the drive is to remind the islanders not to mistreat the goose that lays the golden eggs. But one real and important result is that here is a place where a tourist who thinks he has been cheated or mistreated need not swallow the matter and try to forget it; the Visitors' Bureau will take a warm personal interest in his complaints. Besides that, politeness feels good whatever the reason.

The visitor will want to be equally polite. Just as three words of Spanish are enough to go all around South America three simple rules are sufficient for visitors to get along smoothly in this variant of the basic American culture:

1. Honolulu is pronounced with the "o's" long and fully sounded, as in "Oh, no!"—not the way it is generally heard elsewhere; and Hawaii is pronounced "Hav-wah-ee," not "Hawah-yuh." The "vw" sound is a slurred labial not found in English and should be sounded as a single consonant; if you have trouble with it, make it a simple "w"—but *don't* let a "yuh" get into the ending. There is no "y" sound and it is either a prolonged "ee" or two distinct long-E sounds said very rapidly one after the other—Hawaiian Polynesian is filled with vowels unseparated by consonants.

2. Never, never, *never* speak of "going back to the United States." This *is* the United States. That bigger piece over then to the east is referred to as "The Mainland." People from it al ("Mainlanders" or "malihini" and the term "Americans" is used only inclusively and must never mean mainlanders as distinguished from islanders, no matter what their race or color.

3. And never forget that here there is no color line of any sort. The Mayor of Honolulu is of Japanese descent. One of the most distinguished of jurists here looks like Kamehamehu the First. A mistake on this score will convince you that even an islander can be impolite if you push him hard enough.

But if you follow these easy rules you find that when you leave you will join in the ancient toast *"Me ke aloha pan ole"* (May our friendship be everlasting)—and mean it with all your heart.

A word about the word "aloha"—its usual literal translation is "love" but it also means "friendship" or good feeling of any sort; therefore it is used as a toast, as a greeting, as a farewell-which tells more about the Hawaiian culture than anything else could; Hawaii is a place where "love" is the commonest word in daily use.

What this weary planet needs is a lot more aloha.

The islands affected Ticky the way catnip affects a cat; she decided that she wanted to stay there forever, raising orchids outdoors, a prospect that dazzled her after the short growing season of our Rocky Mountain home. Soon I was subjected to a well-organized campaign, led by Ticky and ably brain-trusted by Vi, to get me to agree before we left Hawaii that we would come back and build a home there.

I tried to combat it with logic; I should have known better. "Look," I said, "use that knot on the end of your spinal column. We've *got* a house; you've *got* a garden—back in Colorado Springs. Remember?"

"The deer eat all my tulips."

This was true. I don't know why mule deer prefer Dutch tulips to all other forms of salad, but they do. "I thought it pleased you to have deer wandering around our house?"

"It does. But they ruin my garden. And just look at the garden Vi has! I could never have flowers like those in Colorado no matter what I did."

This also was true. In Hawaii one does not need to encourage flowers; one needs a flamethrower to subdue them. "Ticky, you know perfectly well that, lovely as this place is, in six weeks you would be homesick for your mountains."

"Sure! But that's just the beauty of it—we'll commute. When the weather gets cold and nasty in Colorado, we'll come here. When we get tired of perfect weather and begin to long for mountains and flash floods, we'll go back to Colorado. About three months each way, maybe. Perfect!"

I winced, then took a deep breath and started the fatherly, facts-of-life approach. "Look, baby, my name is not Ford, nor Morgan, nor Rockefeller. You probably should have married that Philadelphia banker chap, assuming that you could have hooked him. As it is, I can't afford two households, neither the initial cost nor the overhead. I have to write like mad, an overworked hack, just to keep up with your whims and—"

"I didn't want to travel," she broke in. "I merely wanted to build a greenhouse. Traveling was *your* idea."

One simply cannot hold a woman to the point in a discussion. "Never mind that," I answered with dignity. "The point is that, after all, you can't have everything."

"Why not?" she wanted to know.

I have never been able to think of an answer to that one, not one which is emotionally convincing. "The cat won't like it," I said feebly and shut up, which I should have done much sooner. But the economic facts of life did soon slow Ticky down a bit; she started pricing building lots in suburban Honolulu and found out that too many people just like herself were very anxious to obtain the choice sites which were all too few. Choice home sites near the city were not for sale at any price; the best that was offered was long-term leasehold at a ground rent which seemed very high to people from the wide open spaces. Ticky did not stop trying but the difficulties subdued her and she quit lobbying at me about it.

But she had planted the germ in my mind. The idea really did have attractions . . . to be able to throw away my snow shovel, to be an upholstered beachcomber, yet able to return to our mountains whenever we began to yearn for the dry-wine air off the snow fields. We didn't have to compete for that expensive beach property near Honolulu; we could go clear to the other side of the island if we wanted to. Just a little grass shack of whitewashed cinder blocks and only one bathroom, nothing fancy or expensive—oh, a lanai, of course, and a barbecue. One I could build myself, naturally.

Maybe just a little one—

But the cat certainly would not like it and we hardly ever do anything without the advice and consent of the cat. I put it out of my mind . . . mostly. Ticky surprised me by not taking up one minor feature of Hawaii; she is probably the only white wahine ever to go there who did not attempt hula. All of the white female residents have studied hula at some time, as a graceful accomplishment and a delightful exercise, whereas the women visitors from the Mainland sign up in droves for about three lessons each, then go home and demonstrate to their friends that they have "learned" the hula—an accomplishment requiring ten years or more and for which study should start at about the age of five.

But, knowing that Ticky delighted in every form of dancing from rumba to waltzing on ice and including ballet and square dancing, I found out the name of the best teacher available to beginners and signed her up for a quickie course. But she never got there, not when she discovered that bare feet were obligatory. "I'll wear heelless sandals," she had said comfortably.

I looked shocked. "Would you take a swimming lesson in riding boots?" For once, Vi formed an alliance with me, instead of against me, and convinced Ticky that anything but bare feet for hula would be as ridiculous as a tail coat at a picnic.

Whereupon Ticky canceled the lessons and never did study hula. I had known that she disliked to go barefoot but I had not realized that she carried it to such extremes—I had had not too much difficulty in persuading her not to wear shoes to bed and she always takes them off while bathing. But it seems that some no-nonsense adults had forced her to go barefoot in the country during summer while a small child, which had offended her baby dignity. So no hula.

Now I am the one who demonstrates hula to defenseless guests. I don't do it any worse than most females who visit Hawaii.

I have promised not to take you step by step around the islands but I cannot refrain from listing some things which you must not miss when you go there. The first of these is Volcano House on the Island of Hawaii, a fine hotel which sits on the edge of a great live volcano in the middle of one of our National Parks. You will probably not have the luck (good or bad, depending on how you look at it) to see Kilauea in eruption but you will see steam rising and will be awed by looking down into the crater, and you will see the scientific demonstrations and documentary motion pictures prepared by the vulcanists who maintain a research station there. The last are in color and are at least as frightening as having a tomahawk thrown at you out of a 3-D screen.

Despite the continuous watch by scientists Kilauea last went into major eruption without any warning. It might do so while you are there, making of you either a victim or an extraordinarily favored observer; the possibility is one of the fascinations of the place. After all, you don't want to live forever. Or do you?

Orchids you cannot avoid seeing; they grow here as easily as dandelions on the Mainland, and the residents grow them in their back yards and in their living rooms. But while you are on the Big Island go see the commercial orchid nurseries in Hilo—if you are on a guided tour you are certain to be taken. The sight of tens of thousands of blooms in hundreds of species makes one a little drunk.

There are at least three thousand cultivated species of orchids, an estimated fifteen thousand species wild and tame, and nobody has ever tried to count the enormous number of varieties. I was amazed to learn that there were some forty native species in my own mountain area—I had not known there were any. The flavoring in vanilla ice cream comes from the seeds of the vanilla orchids. The common cattleya, the "orchid"-colored orchid used in the United States by wolves to break down the resistance of females and which costs from three to eight dollars a bloom on the Mainland, is so common in Hawaii that you are likely to be given one as a free sample.

Most temperate zone orchids grow on the ground but tropical orchids, as almost all cultivated orchids are, grow on trees, clinging to them and never touching the ground. They are air plants; the term is "epiphytic"—since "epidemic" means a disease raging among humans and "epizootic" means the same thing for animals, "epiphytic" sounds as if it should mean a pretty sad state of affairs for fish, but what it does mean is a plant that rests on another plant without deriving nourishment from it. Orchids sometimes are called parasites but this is an unfair slur; they use trees only for mechanical support. Just how they do make a living has me buffaloed—apparently by taking in each other's washing.

If you want to raise them yourself, go right ahead. Don't let Nero Wolfe fool you, it is not hard. A few years ago Philip Wylie had an article in *The Saturday Evening Post* telling how to do it and the periodical index in any public library will locate it for you.

You will want to attend a luau while in the islands. These feasts are a great treat socially, but the authentic Hawaiian foods do not especially appeal to me. Here "poi" are not little dancing spheres but is a sticky grey paste made from taro root, sort of an underprivileged tapioca eaten with the fingers. It was the staple of the natives until they encountered corn flakes and hamburgers and such, and a great deal of it is still eaten. You will be served it at luau; if you really like it, let me know. Laulau is a chunk of pork, a piece of fish, and a handful of taro leaf, all wrapped in ti leaf (the long leaves from which grass skirts are made) and baked. Laulau makes quite acceptable food but nothing to get excited about. The rest of the feast is likely to be fish, possibly raw, pig barbecued whole, fruit, and much aloha, some of it liquid. Pig is the authentic main dish as the Hawaiians never did have the vice of "long pig"—they were never cannibals. They fought among themselves until Kamehameha the Great put a stop to tribal war with one last big one, but they never ate the slain.

Sophisticated modern variations of primitive island cookery are delightful indeed. Honolulu is bulging with gourmet restaurants, some of them surprisingly reasonable. The Sky Chef at the airport terminal building is as good a restaurant as may be found in New York and New Orleans taken together, but I would hesitate to say that it is the best restaurant in Honolulu because there are so many fine ones. If you do not like poi, you need not lose weight. Ticky gained back the eleven pounds she lost in New Zealand and I gained weight I did not need. Oh well, the Hawaiians say it takes a big opu (belly) to hula properly.

I found myself wondering constantly why it was that Hawaii was such a paradise while New Zealand was such a grim washout. The two island groups are basically much more alike than they are unlike, except that New Zealand is much, much richer in resources, having far more usable land, much gold, much coal, oil and many other minerals, and unlimited water power. Hawaii has nothing but farm land, no commercial minerals of any sort. If there is any advantage in climate, it lies with New Zealand, not with Hawaii. Hawaii is much overpopulated for its resources, while New Zealand is underpopulated—an economic advantage unless the population is very small, but New

Zealand nevertheless has four times the population of Hawaii.

Hawaii does have an advantage in tourist trade in being more centrally located, but in all other ways New Zealand is more favored, being bigger and very much better endowed. Even in the tourist trade New Zealand is not too badly at a disadvantage, as she is much nearer the heavily populated east coast of Australia than Hawaii is to our west coast and also she draws on the entire pound-sterling area for tourists, a trade not available to Hawaii because of the money embargos placed against us.

Then *why?*

I was forced to conclude that the difference must lie in the people themselves. The New Zealanders have saddled themselves with endless laws and government regulations restricting competition, reducing production, discouraging incentive, and almost prohibiting initiative. The wage fixing, price fixing, licensing, and forbidding outright of many economic activities considered routine with us is almost beyond belief. New Zealanders themselves complain that their own people will not put in an honest day's work. Between fixed wages with no incentive to work harder on one hand and a social security system so pervasive that not working is almost as good as working on the other hand, the New Zealand employee has precious little reason to do a good job—and his employer has even less incentive to risk new capital in a game that is intentionally rigged against him. To a stranger, the result looks and feels like stagnation.

The economic environment in Hawaii is essentially like that in all the rest of the United States. We do have government regulations, certainly, enough of them to make some of our citizens apoplectic, but compared with New Zealand we live in economic anarchy. Whether we think we have too much or too little, or perhaps the wrong ones, nevertheless our rules are not such as to make ambition fruitless. Hard work and imagination still pay off, despite what the crepe-hangers say, and Hawaii is a showcase proof of the fact. The residents of Hawaii work like beavers in spite of the lazy climate and they get rewards for their efforts. Even unskilled labor receives the highest wages in the entire world. As for those higher up the ladder the material evidence of their rewards are everywhere around you in Hawaii.

But of course no one in Hawaii is satisfied with his share, any more than people are on the Mainland. Perhaps that is the real difference between the two sets of islanders: those in Hawaii are hustling to get more while those in New Zealand sit back content with the government-controlled minimums assigned to them. Why hustle when the prizes are predetermined?

We were having a wonderful time in Hawaii but I had to get Ticky out of there before she picked out a building site-and before I weakened and leased it. Leaving by air is not very ceremonious, thank goodness, for neither one of us was in emotional shape to stand at the rail of the *Lurline* and listen to "Aloha Oe" as the ship warped slowly away from the dock. A plane departure is mercifully swift. As it was, we were both weeping as the Markhams piled leis around our shoulders. I wonder if anyone ever leaves those glorious islands without promising himself through tears that he will return?

It was a short sleeper flight back to San Francisco. By the time we finished breakfast the Golden Gate bridge was in sight. Before eight o'clock we were standing on the soil of the Mainland and were home for a second time. I had caught cold on the flight, so I rested up in a hotel bed for a couple of days while Ticky shopped. Despite Singapore and Buenos Aires she considers San Francisco tops for shopping and complains that I never allow her enough time for it there; my indisposition was convenient. As soon as I was able to totter around we had a drink at the Top o' the Mark, then caught an evening flight to Denver—and we were home for a third time.

To us, softened up by summer in both hemispheres and months in the tropics, Denver was unbelievably cold. It was too late to catch a shuttle flight to Colorado Springs, so we hurried to the Brown Palace with our fingers numb and our teeth chattering while Ticky pointed out that we would be warm through had we stayed in Hawaii. I conceded the point but was interested then only in getting into a hot tub of water as quickly as possible. Our room turned out to have a nice big tub and all the hot water I could want; we got warm. The room was luxurious in every way and reminded me of New Zealand because it was so different. But I must admit that it cost twice as much as our room in the Waverly.

But it was worth at least six times as much. The next foreigner to make a disparaging remark about bathtub & plumbing as the vulgar criterion of culture in America in my presence is going to get a swift poke in the eye. Decent bathrooms do not constitute civilized living, but they are as necessary to high civilization as water is to a fish. Music festivals and such are necessary, too—but we have *both*.

The shuttle flight from Denver to our little town is only twenty-five minutes; one does not even unfasten seat belts.

For the last time I made sure that all the suitcases went with us, then breathed a sigh of relief, feeling that all worries were over.

Ten minutes after we took off that confounded daisy clipper caught fire. The pilot made a sharp U-turn and headed us back for an emergency landing while the hostess hurried up and down the aisle, assuring the passengers that there was no danger. Ticky leaned over to me and whispered bleakly, "If we walk away from this, I'm going the rest of the way by bus." I did not have an answer.

The plane filled up with smoke to the point where we could not see each other's faces and I began to wonder if we would smother even if we did not burn. But the hostess—gallant as airline hostesses have proved themselves to be in many an emergency—turned out to be right; the fire was not dangerous, being merely some excess oil in a cabin heating system and involving neither structure nor engine. We landed easily and walked away untouched.

I did not attempt to argue with Ticky's determination to go the rest of the way on the ground; I kept quiet while cursing silently the perversity of chance that took us forty thousand miles around and up and down a planet without a single mishap, not a missed connection, not a missing piece of luggage, not even a flat tire—then saddled me with a fire in the air when we were actually within sight of the mountain we lived on. I felt sure that I would never live it down, that I would never again persuade Ticky to risk her slender neck in one of those pesky flying machines.

So I did not argue; I simply guided her steps toward the cocktail bar and administered several doses of nerve tonic to her as rapidly as possible. I had one, too, to keep her company—and just a bit because I had been a touch nervy myself when the cabin filled up with smoke and the plane lost altitude rapidly. Nothing important, mind you, since I am a fatalist. But the first dose of medicine tasted so good I had a second one.

It took them an hour and a half to get that bucket of bolts ready to fly again, but by the time they did Ticky was no longer talking about catching a bus. With only a little effort she could have flapped her wings and flown down unassisted. The second try at getting to Colorado Springs was uneventful, though we were amazed to find that we had been away so long that they had had time to build a new airport terminal while we were gone. But we did not stop to admire it; friends were waiting there to meet us, with hugs and handshakes and more tearful kisses. Ticky, with great care, had managed to keep one orchid lei fresh; she wore it, and carried that ubiquitous and utterly unpackable big coolie hat she had bought in Java. Between the two she looked quite out of place in that bleak and cold mountain day. We were home.

Thirty minutes later we were home for a fifth time and truly home at last, in our own living room, with our friends around us and our cat bumping our legs and demanding to know where in the *hell* we had been?

XIV

Unpacking

THIS TRIP WAS taken for itself; I had not planned to do a book about it. I am a fiction writer by trade and it seemed to me that John Gunther and Robert Ruark and James Michener and their peers had the globe-trotting business pretty well sewed up. But I found it necessary to write one anyhow, just to get the jumble of impressions in my mind sorted out. A confirmed writing addict can't think clearly without a typer in front of him. (Writing is not a profession, it is a disease.) Since I was compelled to write about it anyhow, why not whip it into some sort of commercial form? It might possibly bring in a few royalties.

But now I reach the point where I must state what I learned from it, which is the hardest part. "Is this trip necessary?"—as those accusing placards used to read during the War. Was a trip around the world worth what it cost in money, in working time, in very considerable physical effort?

There is an old story about a gangling youth, back country, who saw a merry-go-round for the first time and just had to ride on it, to the disgust of his mammy. When he got off, his mammy looked at him sternly. "Sammy, you has spent your money, you has had your ride—but *where has you been?"*

Did he get anything out of it that made it worth the cost? A fair question.

For me, it has always been worth it. I have never sailed from a port in my life, any port anywhere, but what I was glad to do so. When I was a kid, on a Sunday we would climb on a street car and ride all the way out to the end of the line, then ride back again. It was almost as good as a John Bunny nickel show. Now I have been on the biggest merry-go-round of all, the street car with the longest run; I've paid my money and ridden all the way to the end of the line and back again. It was worth it, I don't regret the expense.

Even today in wealthy America the people who can manage a trip around the world are a very small handful of the population, which is another reason for writing about it. Those who can spare the time usually cannot afford such a trip; those who have the money to spare usually find it difficult to spare so much time from their business responsibilities—one does not become wealthy by trotting off on long junkets with no one to keep an eye on the business.

Now, Ticky and I are far from being wealthy—wealthy writers are as scarce as albino crows; I know of only one. Most freelance writers are just two jumps ahead of the installment collector and borrow money from their agents and importune their publishers for advances. But a freelance writer does have the advantage that he is not tied to the shop; he can usually arrange his time to do what he wants to do. Therefore, if he can scrape up the money, he can travel. To me, this is probably the greatest single advantage of an otherwise not-too-satisfactory trade. My colleagues seem to think so, too; freelance writers are, I am almost certain, the most tireless vagabonds in the whole population, not counting those people who are paid to travel.

We were able to make this trip because I found myself, for the first and only time in my life, with enough money not already committed elsewhere to permit us to make it. A prudent man would have taken such money and invested it in something solid; to spend your only nickel on the merry-go-round is not sensible economics . . . unless you believe in your heart (as I do) that a ride on the merry-go-round is worth more than cash in the bank. You must be able to laugh in Poor Richard's face. Now that the money is gone I'm saving my nickels again for a trip around the world northern hemisphere, and after that for a trip all the way across Asia come the day we get the communist apes civilized or liquidated. After that— Well, after that I will really have to save my nickels because I figure the first scheduled tourist trip to the moon will be pretty expensive.

But I rather think that, by the time I am ready to pay for tickets, Mrs. Feyock will be ready to sell them to me.

In the mean time, what did we learn on this trip? Not what we saw —we saw funny birds and people who ate bananas with knives and forks and lions in the bush. What did we learn? What was worth the effort?

In the first place, travel to see scenery is not worth the trouble. Scenery is everywhere. Hollywood has long since listed all the outdoor backgrounds in the world, right in California. The hypothetical trip I described whereby one could see everything New Zealand has in a few states of our west could be duplicated for any part of the globe, if not inside the fortyeight states, then certainly within North America. If your principal interest is in natural wonders, then the usual two-week vacation is long enough; we've got them all, right here at home.

Nevertheless I am certain that I got my money's worth and a big fat profit in the people we saw and encountered and the things we learned. I am going to split the list up into two parts: practical matters, and heavy punditing of the Walter Lippmann sort. The practical minutiae will give you something, at least, for this book; the wise conclusions you can read or ignore—I'm new at the pundit business.

Practical matters: Packing and preparing for a long trip of many weeks or months with many stops is different from packing for a fortnight's vacation. There are two approaches, to pack only for health and reasonable comfort, or to pack so that you are prepared to dress smartly for every occasion you are likely to encounter and to have with you every convenience you are likely to need.

I strongly favor the first approach and believe that luggage should be limited to two bags apiece, one for each hand, no matter how long the trip. But many wives (and some men) prefer Ticky's approach, which is more like that of the White Knight in *Alice Through the Looking-Glass.* You remember? The White Knight had never yet been troubled with mice on his horse but, if one ever should show up, there was a mouse trap waiting for it. Ticky would be happiest with a camel train.

But she did manage to have us smartly turned out under all possible circumstances for months on end, and we had with us typewriter, books, extensive camera equipment, binoculars, an electric iron, and a citizen other things, all within the limitations of ten suitcases and no trunks.

But first let's list items indispensable even when traveling light. I am not going to list clothing in detail, as that is personal choice and the requirements of destination. British Overseas Airways Corporation, 342 Madison Avenue, New York 17, has an advisory service on how to make the most of your international flight allowance of 66 pounds—which is just about two large suitcases. *Esquire* had an article on this same subject this past year and *Holiday* runs such advice from time to time. But I will not presume to pick out for you your clothes or toilet articles.

But I do want to make certain remarks. Make all possible use of the new synthetics such as Orlon, Dacron, and Nylon, the ones which do not wrinkle and which may be washed out in soap and water. Reliable drycleaning is not only hard to come by, but frequently there is not time for it, whereas you can always wash out a garment in a tub or hand basin, if it can stand soap and water. I had with me two pairs of slacks which looked like tropical-weight wool which I wore almost constantly. They have never been drycleaned, have repeatedly been sopped in hand basins, and have never been pressed. But the creases in them are as knife sharp as the day they were purchased; they simply do not wrinkle. I had a formal dark blue suit as well, which looks like blue serge—but it was washed in a bathtub with soap and water one time when we were long away from drycleaning. Without drycleaning and with the circumstances of travel, hot train compartments, planes, and buses, and such, wool clothes will soon begin to stink, even when they still look smart. Avoid them as much as possible.

I do not like the feel of most of the synthetics against my skin, so I used cotton shirts and underwear. But this is a personal idiosyncrasy.

We each carried just one all-purpose coat. Mine was a dark blue topcoat-raincoat; Ticky's was a long coat in an oatmeal shade which could be worn day or evening. This shade will show dirt but it was made of Orlon, which is the same plastic as Plexiglas and washes just as easily. It could be, and was, washed out in a bathtub, then allowed to drain dry, whereupon it was ready to wear without pressing. Besides this she carried a plastic raincoat and plastic boots of the sort that fold into an envelope and fit into a purse. Since my topcoat was a raincoat and since men's shoes are not the frivolities that women wear, I did not have this equipment—but it is worth considering.

The drugs we found indispensable are these: aspirin, laxative, the opposite of a laxative (even more important), vitamin pills (we started out without any; Ticky got both scurvy and pellagra), Dramamine (there is a new seasick remedy which your doctor can recommend which does not have some of Dramamine's side effects), iodine, Band-Aids, and a fungicide (I prefer Upjohn's Benzo-Salicylic Compound, plus Desenex foot powder, but be sure to take something; the fungus skin diseases and diarrhea are the two greatest physical hazards of travel abroad).

In addition to the above, which I regard as an irreducible minimum, if you are dependent on thyroid extract, insulin, nitroglycerine, or any other special drug, take along a bit more than necessary for the entire trip. Although chemist's shops are everywhere your prescription may not be honored, the local chemist may not have it, or you may not be able to get to one in time. If you are chained to spectacles, as I am, two pairs are an utter minimum—remember what happened to me in Africa, when I broke two pairs in twenty-four hours.

If you use an electric razor, take along the sort of blade razor you hate least; you will not be able to use your electric razor about half the time.

Some sort of a robe is indispensable whenever you have to share a bath. Pajamas are not utterly indispensable. Slippers are not indispensable but a pair of very lightweight ones are a desirable comfort. Extra shoe strings can be carried no matter what your weight allowance and not only are they needed in a hurry when you break one but they double as clothes lines most opportunely. A small flashlight is always a convenience and you can count on it saving your neck at least once. But I said "small." The ordinary household or automobile torch is too heavy and too big; get one of those which looks like a fountain pen and fits in a lady's purse or a man's vest pocket.

You can save weight and space by transferring medicines and toiletries to polyethylene bottles obtainable from any drug store. This also eliminates breakage—have you ever had a bottle of hand lotion spread itself through an entire suitcase of clean clothes?—and it also lets the bottles "breathe" at high altitude. In the latter connection, fountain pens and lighter fluid are not things to take in airplanes; use a ballpoint pen and refill your lighter in tobacco shops. Matches are hard to obtain the world round; you will probably want a lighter with you. If you are a steady smoker, you can resign yourself to smoking some odd mixtures, for, if you attempt to carry with you enough of your favorite brand of cigarettes, you will not only weigh yourself down to an impossible degree, but you will also find yourself paying around a hundred per cent duty over and over and over again. So relax to the inevitable, or ask a waiter to buy you American cigarettes on the black market—he will almost certainly be able to do so.

We have already been over the horrors of getting the numerous papers needed for foreign travel. Remember that the State Department puts out a pamphlet on passports, the Public Health Service puts out one on medical requirements, and the Treasury Department puts out one about customs requirements. Then when you are traveling be sure to *carry on your person* your passport and all other travel papers including spare photographs and traveler's cheques whenever you cross an international boundary. They are bulky but it is usually only for an hour or so, and the one they want to see is always the one you packed away.

Make up a small notebook, as small as possible, and list in it the number of your passport, the cable address of your bank, all the addresses you will need while out of the country and any that you might by any wild chance need, including the addresses of all those relatives, neighbors, and acquaintances you promised to send postcards to. Then write in this notebook all memoranda you need before you leave (such as prescriptions for spectacles, promises to buy things abroad for people, etc.). Then never use anything else for memoranda. If you don't follow this rule, you will never be able to find a piece of necessary information when you need it; you will be smothered in little pieces of paper. Most especially use this notebook to record foreign purchases since an exact record of such things will speed you through customs on your return and may save you quite a lot of money. We got through customs swiftly in Hawaii because we could present the inspector with an itemized list showing when, where, and how much, all prepared from our little notebook. The inspector glanced at it, congratulated us on having taken the trouble to comply with the law, asked us to open just one bag, and sent us on our way.

But make it hard for him and he may make it hard for you.

A medicine which you may need but which I did not list is a malaria preventive. This depends on where you are going. But there is no way today to vaccinate against malaria.

A deck of cards and a few items to read are not necessary to minimum-luggage travel, but I consider them worth their weight. I feel the same way about a small camera.

Barbiturates and Dexedrine are dangerous drugs, but used with care they can smooth over the inevitable disturbances of travel most wonderfully. I carry them—but use your own judgment.

Everything mentioned above is compatible with two suitcases per traveler. Now let's see what Ticky did to run it up to five each—with my help, I must admit. Typewriter—Corona puts out a seven-pound model these days called a Skywriter, but the cost is rather high unless a typewriter is a necessity. I carried one that weighed more than twice that much; it was a mistake. Ticky carried an "international" electric iron, which worked on any current and had plugs for any sort of socket. It was a mistake, too, as electric irons may be borrowed or rented for a few pennies almost anywhere there are facilities to use them. She hardly ever unpacked her own iron. But pressing cloths are hard to lay hands on; it is worthwhile to carry one. I carried lots more camera equipment than is necessary to "Kodak as you go" and camera equipment is always heavy. We carried binoculars, but they were featherweight; both the Germans and the Japanese make powerful binoculars which have been miniaturized remarkably. Unfortunately they are rather expensive. Between us we carried about fifty books. This is quite unnecessary unless carried for business reasons (which some of ours were)—buy pocketbooks and magazines, read them and throw them away, or mail them back if you want some of them.

Ticky carried capsules of detergent, much advertised these days for travel. She found them not worth the space. She carried some little dabs of spot remover called "Spotwix" and these, she feels, are worth having along, since cleaner fluid cannot be carried if one is to fly. She packed everything in polyethylene film freezer bags, which simplifies packing, keeps clothes in good condition, and adds little or nothing to weight—and most importantly makes it possible for a customs officer to examine baggage without actually handling or mussing a lady's fancy frillies. She carried shoeshine cloths but we never used them, not once.

Ticky strongly recommends carrying enough hangers for all your clothes, because hangers are scarce everywhere outside the States and nonexistent some places. I have strong doubts about this recommendation. Hangers are remarkably clumsy to pack. I favor putting up with one inconvenience rather than adding another.

We carried extensive maps, an atlas, and books about each country we visited—a luxury well worth while if you aren't trying to stay under the 66-pound limit. I wanted to carry a globe but could see no way to do so other than in my hot little hand.

But most of the additional space was taken up just by clothes. Ticky simply prepared us for any occasion, sports, informal, and formal. I had both a tuxedo and a white dinner coat, with shirts, pumps, ties, and accessories to match. She had plenty of evening dresses and dinner dresses. We had swimming suits and shorts and a wide variety of sports wear. She had handbags to match all outfits. We both had plenty of shoes. Men's shoes are very heavy and both men's and women's shoes use up a lot of space. None of the above is necessary; all of it makes life pleasanter—except for the maddening business of handling it when you are on the move and of keeping track of it.

The problem of keeping track of it she simplified by making a careful inventory of each bag and by having me paint large numerals on each bag. The latter enabled me to "call the roll" in a hurry and at least twice kept bags from being left behind; the former enabled her to go right to the proper bag to find something, without pawing through them all. The inventories were set down in the little notebook mentioned above. If you do travel abroad with lots of luggage I strongly recommend both expedients; they will save you many headaches.

I asked Ticky to list the variety items other than ordinary clothes which she had found useful. Here they are; some of them are quite light in weight and might be classed as indispensable: whisk broom, sun glasses, sun hats, run-proof nylon hose, sun tan oil, adhesive tape, fever thermometer, Aureomycin, sulfa pills, Scotch cellophane tape, Kleenex, a box of pins, paper clips, rubber bands, string, and needles and thread.

You will want phrase books, of course, but don't let foreign languages scare you; if you are patient, there is always a way to communicate. Our geographical isolation has made us Americans very poor linguists, of which I am an outstanding horrible example. But I had no trouble once I overcame shyness. In the first place a most amazingly large percentage of people have English as a second tongue. But in the second place, if you will write things out, using a phrase book, and have the other party do the same, you can get around the baffling hazards of pronunciation. In particular, numbers, addresses, dates, hours, and prices—anything numerical—can be written out in the figures common to all languages and often these items are the single barrier to understanding.

Don't be afraid to wave your hands around. We've been taught that talking with your hands is vulgar—and so it is, in the finest sense of the word. Gestures are the oldest, the noblest, and the most truly international form of communication. You can say almost anything in pantomime; just let yourself go and enjoy it.

Don't be embarrassed by the amusement created by your wild mistakes in grammar, syntax, and pronunciation. Your listener will feel tolerantly superior because of your ignorance; this will make him feel kindly toward you and he will go out of his way to help you.

Travel by ship is an invitation to stargazing. Simon & Schuster puts out a pocketbook called *Stars,* part of their Golden Nature Guide series, which will pay for its slight weight (four ounces) in pleasure. If you start stargazing, you may want to find out something about how the ship is navigated. Mr. S. Y. Tupper, our jovial companion in the *Gulf Shipper,* taught himself to navigate after a long, full life ashore, bought himself a sextant, and navigates right along with the mates wherever he goes. It is most unlikely that you will wish to emulate his gentle hobby (sextants are expensive and heavy) but there is usually a sociable and good-natured ship's officer who will teach you how to read a sextant and let you take a sight or two—it is no harder than aiming a rifle and much like it.

It has suited celestial navigators throughout history to pretend to laymen that the art is difficult and mysterious. This is a lot of guff. I have practiced and taught navigation and I will swear on a stack of Bowditches that the basic principle can be taught to any normally-intelligent grammar-school graduate in twenty minutes and that he can be given sufficient skill to enable him unassisted to establish the position of a ship accurately through star, and sun sights after only four hours instruction. Never mind those screams of rage from the old salts in the rear of the hall—it is *true.* Oh, he won't be a navigator; as with any art it requires study and practice to attain speed, accuracy, and self-confidence. But he will be able to get a decent "fix" by himself.

Let me give one illustration of the single, simple principle of *every* sextant sight. The mate uses the sextant to measure how high above the horizon the sun (or a star) is, in degrees and minutes; the sun is ninety degrees high if it is directly overhead, zero degrees if it is at the horizon, something in between for a typical sight. The process is no more mysterious than measuring an angle on a piece of paper with a protractor, but with a sextant an angle can be measured with great accuracy . . . with great ease, too, as the process is almost exactly like that of focusing a camera which has a split-image focusing arrangement. You simply look through a peephole and turn a little knob until the sun appears to touch the horizon line. It is easier than firing a gun or using a camera, because your accuracy does not depend on holding the sextant perfectly steady; you can sway around all you please as long as you can still see the sun through the peephole.

The rest of the job is the simplest sort of arithmetic not to be compared with balancing a check book. You compare the altitude of the sun as you just measured it with the altitude you thought it should be based on where you thought the ship was. Not very clear? Well, we're doing this without diagrams or pictures, so look at it this way: if you were down at the equator you would expect the sun to be overhead, wouldn't you? Contrariwise, if you were at the North Pole you would expect the sun to be near the horizon—above it, below it, or on it, depending on the time of year, but near it. All right, let's leave the North Pole and travel due south; for every degree of latitude the sun will get one degree higher in the sky. By the time you have traveled south ninety degrees of latitude the sun will have climbed ninety degrees high in the sky, be right overhead, i.e., the sun's altitude tells you at once and directly just what your latitude is.

That illustrates the one and only principle of celestial navigation: as you travel toward a star or the sun it climbs higher in the sky, as you travel away from it it sinks lower. If you compare the body's measured altitude with the altitude you thought it should have for where you thought you were, you get a correction, a difference between the two altitudes, which you can draw with a ruler on a map to correct your estimated ship's position and make it what the stars show it to be—simple addition or subtraction, nothing more.

It is true that there are hard parts, very difficult, but they are all done by astronomers and mathematicians ashore; a navigator does not have to bother with them. It used to be that a navigator, after he finished taking a sextant sight, had to solve a very tedious and fussy problem in spherical trigonometry—but not today. All that work is done for him now, by young females employed by the Naval Observatory; the answers are all arranged in tables for every possible combination of date, latitude, longitude, heavenly body, and time. All he has to do to impress the passengers is to look up the answer in a book.

To make it still easier, the nautical mile (6080 feet) has been made just the proper length to match in with these measurements of angular altitude of heavenly bodies. If you were to travel south a distance that made the sun one degree higher in the sky at noon, the distance traveled would be *by definition* sixty nautical miles. This is the only reason why miles at sea are longer than miles ashore; it makes the arithmetic easier in navigating.

Although celestial navigation is simple, piloting and shiphandling are very difficult; there is no easy gimmick, but there is endless pleasure to be derived from watching a master handle his ship in tight waters, such as going up channel, or docking. The beauties of it cannot be seen too easily from the parts of the ship where passengers are usually permitted, but there is a way to get around this. Do not ask the captain for permission to come onto the bridge at such times. Instead, ask him for permission to watch him handle his ship from the *flying* bridge, where you will not be in the way. Put this way, he is almost sure to grant permission—and there is at least one chance in three that he will invite you onto the conning bridge itself. He does not want you there, but captains are human and respond to sweettalk just like anybody else.

If he does invite you to the conning bridge, stay out of everybody's way and don't ask questions of him when he is busy. Then you will be invited back.

Almost immediately after our return to Colorado I had to go to New York, thus completing our journey around the world with a trip coast to coast in our own country. In the last thirty years I have made this crossing about twenty times but this time I looked at my own beloved native land with new eyes, trying to see it as I had seen the countries we had just visited. How did it stack up? What was good about it? And what was bad?

Jacques Barzun has just done a beautiful and sagacious book on this subject *God's Country and Mine,* so I won't try to say what he has already said so well—but read his book. The first thing that anyone is bound to notice is that prices in the United States seem terribly high compared with most prices elsewhere. But prices are relative. I for one will always feel emotionally that the "right" prices are the prices of my childhood, with grade-"A" milk five cents a quart and large eggs ten cents a dozen. This conviction is nonsense and I know it intellectually as well as you do. True prices depend on wages and salaries—how many minutes a journeyman carpenter has to work to earn a kilo loaf of standard bread. I tried to get answers to that question around the world, and the answers I was able to get, plus the statistics I have been able to dig up since, show clearly that a workman works a shorter time to earn the staff of life in the United States than is the case anywhere else in the world. Australia looked pretty good by this scale but even there it took him half again as long; New Zealand was far outclassed. All the other countries we visited were not even in the same league.

Of course everybody screams about high prices, but no matter how you work the above problem the answer always clearly shows that we, as a nation, are eating high on the hog, higher than ever before in our history, higher than any other nation on the globe, higher than any nation ever before in history. The consumption of luxury items makes the difference even more marked, whether it be telephones, automobiles, or soft drinks. (Not alcohol however, as we drink much less alcohol than we could afford; we are far from the drunkest nation.)

This is the only country in the world where a man will drive his own car down to pick up his unemployment compensation check.

How do our manners stack up with those of other countries? I had about decided that ours looked pretty good, on the whole, when I hit Pennsylvania Station, took a cab, and at once found myself an unwilling spectator to a screaming argument between my driver and one in another cab, followed by a wild ride which bruised my kidneys and gave me a headache . . . a type of ride, I am sorry to say, that I experienced almost every time I stepped into a cab while I was there.

On the other hand, manners in general in New York were about on a par with manners all through our country, except that everyone is always in a hurry. Our manners cannot match the courtly politeness of Latin America, but they are not bad; we have no reason to be ashamed on that score. Even New Yorkers, always hurrying nowhere, are almost all willing to listen, to help, to take friendly interest. The extreme rush that characterizes New York is a burden of its size; distances are so great and the channels are so choked that everyone must hurry or perforce waste most of the day simply getting from point to point.

New York is a very special case, both the most gigantic and wonderful mechanical toy the human race has ever built, fascinating in its incredible complexity, beautiful in its intricate, functional design—and a colossal slum by sheer weight of bodies too closely packed together. More conscientious cleaning goes on there than anywhere else; the city remains dirty, even the air is dirty. More genius has gone into its services and its transport than into any other city; it remains, the most uncomfortable place to live in the United States.

I am proud of New York and awed by it. I am glad we built it—and I hope we never build another one. Like the stegosaurus it has grown too huge for its functions; like the stegosaurus it is bound to become extinct. It is the biggest and juiciest H-bomb target on the globe . . . too big to decentralize, too big to evacuate, too big to escape being hit.

When we arrived in New York everybody seemed glued to television receivers, listening to hours of silly wrangling as to whether a certain Senator had or had not been rude to a certain general, and whether a certain private had or had not received more weekend passes than privates usually get. The interest in these rather trivial events was amazing. I don't think it has been equaled in any presidential campaign, even the 1940 election. The tragic events in Indo-China were then coming rapidly to their disastrous close—but nobody in New York seemed to be paying any attention; they were more interested in learning why a V.I.P. had let his picture be taken with a private.

We were out of the country when the McCarthy madness swept over the land; consequently we arrived home as detached observers, not as partisans of either side. I tried to maintain that Man-from-Mars attitude but found it difficult; people were almost violently on one side or the other. What color rose do you wear, man?—red or white? —for you are either for us or against us.

I still cannot manage to work up a fever; I seem to have been away during the infectious stage of the epidemic. Was it anything like the time the gunmen shot up the U.S. Congress? Oh no, nothing like that; this affair was conducted entirely with words. Had anyone been deprived of life, liberty, or property contrary to the Bill of Rights? No, but— Had anyone been *hurt?* Well, not physically. Financially perhaps? Well, yes and no, some persons had lost jobs after refusing to answer politically embarrassing questions.

But, my informants insisted, I simply did not understand the real danger, the real importance, how every single one of us was vitally endangered by the things that had happened in these committee rooms.

Well, I still don't see the overpowering importance. The McCarthy fit strikes me as the most astounding example of senseless hysteria since the Mississippi Bubble. Let me make it clear that I am neither supporter nor constituent of the Senator from Wisconsin; I just don't think anything that he has done is important, one way or the other. As a "fighter against communism" his efforts seem to have been rather futile; as a modem Torquemada the effect on his victims seems to have been public embarrassment only. In many of the cases, though not all, the embarrassment seems to derive from unwillingness to answer questions that vitally concern loyalty to the United States.

If anyone cares to assert that the central character in all this is a big, hairy, horse's rear end, I will not argue the point. But I will point out that we have had some choice examples of the genus oaf in the United States Senate at other times; somehow, the Republic weathered the strain.

But two things struck me very forcibly about the matter, coming as I did direct from months abroad. First, it has been asserted repeatedly by several prominent journals that the "real" danger of the McCarthy fit lay in the friends it lost us abroad and the prestige it cost us.

This is nonsense almost complete. No one abroad was hurt—among our friends. It is true that the dust-up received much attention abroad and was used to make propaganda against us. But it was simply seized on as a chance to kick the Fat Boy by our enemies, who will do so on any excuse or without any excuse (as in germ warfare). Slandering Uncle Sam has gone on for years; the McCarthy row did not start ,it. For another reason which I will go into presently we should ordinarily pay no attention to what the press of any other nation says about us, but make our own decisions quite irrespective of what the world will think.

We may have good reasons of our own to curb this Senator's activities, but to do so because our enemies or our putative friends dislike what is being done *inside the United States* would be to decide our national policies on an emasculating "Nervous Nelly" basis. To our dreadful cost in blood and treasure we have for years been making crucial decisions on just this unsound basis, worrying about what other people might think of us instead of worrying about what is right and what is wrong. If we find it proper for reasons of justice to clip the wings of the ubiquitous gentleman from Wisconsin, then by all means let us do so—but let us not act from fear of what the neighbors may think!

For, I assure you, they don't give a tinker's dam what *we* think about *their* actions. American criticism of events in other countries—most particularly of anything as intimately domestic as the McCarthy row—is *always* rejected with indignation. *Always* . . . if you can think of a single exception, please write and tell me.

Yet those selfsame citizens of second-rate powers, nations that have nothing standing between them and inundation by the communist flood but the strength of the United States, are almost unanimously ready to criticize Uncle Sugar on any score, ready to tell him what to do and how to do it, expecting him to foot the bill and most ready to vilify him if he fails to do just exactly what they advise. The most distressing truth that we learned in traveling around the world was how painfully few friends America has. We traveled entirely in territory and in ships of our allies in World War II, but only in Uruguay did we find a general feeling of friendliness toward the United States. Nowhere else!—not even in Australia.

Once or twice we heard kindly remarks about the United States when people learned that we were from the States, but dozens and endless times it was simply an opportunity to read us a lecture on the "sins" of our country. To be sure, the McCarthy uproar was often used as a weapon to lambast Uncle Sam, but any excuse was sufficient and it was usually something else. Baiting Uncle Sam is a favorite sport among our supposed friends.

For this reason I assert that it does not matter what others think of the McCarthy mess. It should not be a factor in our thinking about the matter.

The second thing that struck me forcibly about the McCarthy issue (on viewing it immediately after some months abroad) was how remarkably little McCarthy had been able to do even to those "victims" he had attacked most savagely and with least attention to fair play. No one seems to have noticed that our complicated system of safeguards to protect the innocent has, stood up under this test and worked amazingly well. No one has been jailed other than after trial and due process—McCarthy himself has jailed no one; he has not the power. In fact no damage to an individual has been alleged other than damage to reputation and even that usually followed refusal to answer questions. I am not trying to "try" the McCarthy case, but I want to point out that it is not an example of breakdown of civil liberties but, on the contrary, a most outstanding triumph of civil liberties, *one that probably could not happen anywhere else in the world!*

In the communist half of the world a man in McCarthy's shoes would *really* have power. He would be a "people's judge" and his victims would never live to complain. Their friends would not dare speak. In most of Latin America those politically out of favor hide out, or seek refuge in embassies, to avoid rotting incommunicado in jail. Even the British countries have no record of gentleness toward dissidents as gentle as that termed "McCarthyism"—oh, I admit that England has a very soft attitude toward communist treason at present but look at the whole record: Gandhi in jail repeatedly for passive resistance, the Black-and-Tans in Ireland, the present law in the Malay States making mere ownership of a gun a capital offense, the speed and harshness with which British courts act. I am not excusing any wrongful act that McCarthy may have committed; I do assert that we have failed to notice publicly the proudest aspect of the whole sorry business—that our safeguards for the individual stood up under pressure.

The third thing that I noticed about the matter, confronting it cold on my return, was the amazing amount of stew for such a skimpy little oyster. The true importance of the whole thing has been vastly overrated.

During our trip we were in the British Commonwealth about half way around the world. We had time to think about some facts well known but which we had not considered until we had our noses rubbed in them, i.e., the potentiality of the British Commonwealth for balanced economic self-containment. We, like most Americans, had sent food parcels to Britain during the years of drastic rationing following the War. Now I am beginning to wonder why it was necessary? South Africa, Australia, and New Zealand all have large surpluses of food; all of them need manufactured goods. England needed food badly and was only too anxious to barter manufactured goods in exchange. I do not regret a one of those food packages; they were badly needed by hungry people—but what went wrong? What happened? It looks like a set-up designed by a wise Providence for a balanced economy with plenty to eat and plenty of goods for all. But it did not work out that way and even now it creaks badly. Why, with over 120,000,000 sheep in Australia, should it be so hard for a man in London to enjoy a mutton chop? England manufactures Kleenex and sells it to New Zealand; why should a box that costs seventeen cents in America cost five shillings in Auckland? (Seventy cents by direct conversion, more nearly a dollar and a half in view of the overall price scale.) It can't be just a transportation differential, as eleven thousand miles by water is not as expensive as hauling goods across the North American continent by railroad.

The old, tired excuse of "We can't get the dollars" does not apply here; this is all pound area. Nor was it that we were dunning England for the repayment of war loans, quite the contrary; we were handing over billions of dollars as a free gift.

I have no degree in economics, nor do I have access to the statistics used by ministers of finance of the various Commonwealth countries to determine their policies. No doubt there are excellent reasons—but I suspect that the "excellent reasons" are of the same quality as those that have kept the little continent of Europe balkanized and pulling against itself. The longer I worried about this matter and tried to find out *why* the Commonwealth was in such sorry shape compared with what it seemed to be capable of achieving the more I kept finding the same facts—balkanization. The Commonwealth is not an integrated economic unit all operating under the same basic laws, as the United States is. On the contrary, every part of it is dragging its feet and trying to be one up on all the rest—precisely in the same fashion that our individual states have often attempted to do, only to be slapped down by our Supreme Court. But the Commonwealth has no supreme court, no overriding body of law; the once-great Free Trade area of the British Empire is now bogged down in local tariffs, taxes, import and export licenses, restrictions, and embargos, each intended to rig some advantage against the others and each player engaged in the same knife-in-the-back game.

Perhaps I don't see the Big Picture, but to me it looks like a hell of a way to run a railroad.

(I am aware that our own trade policies are criticized on somewhat similar grounds. But there is a big difference; we are very nearly economically self-sufficient and our tariffs and other laws have not been such as to ruin us in the respects in which we are not entirely self-sufficient. But none of the Commonwealth is self-sufficient; they need each other.)

Another question that fretted my mind was the contrast between Uruguay and New Zealand. The two countries are comparable in size, in population density, in stable democratic government, in basic industries, each being a rich primary producer not yet heavily industrialized. Each country has a sheaf of most remarkable social-welfare laws which superficially add up to about the same thing. Yet New Zealand is a phony utopia; its social measures are strangling it—while Uruguay appears to be a true utopia, as near perfect as our race has achieved.

I confess I do not know the answer to this one. I cannot see a basic difference in their laws and I have no evidence on which to attribute basic differences in the temperament of the two peoples. All I can see that it proves, if it proves anything, is that social security laws need not be destructive to high production and a high standard of living, if properly designed and wisely administered. My reservation weasels out of it, of course; I have not said anything. But I want to know why, for there is something to be learned here that could be of crucial importance to the United States. I intend to go back to Uruguay in the next year or two and stay until I think I have found the answer. But my temporary license as an apprentice pundit does not seem to warrant my answering now.

However I do have a hunch. New Zealanders are addicted to price-fixing as a permanent (not just wartime) policy. King Canute could give them a few tips on this subject.

The most important thing that I believe I have learned from a trip around our planet is that no progress whatsoever is being made on the prime problem facing the human race, that the problem is bigger than I had dreamed, and that, most tragically, it probably has no solution.

I don't mean communism and I don't mean the chilling probability of atomic war; I mean something much worse: too many people.

The basic problem was stated a century and a half ago by Dr. Malthus, then his depressing theory was "exploded" by new lands being opened, new farming methods, new advances in science—only it turned out not to have been exploded after all; his equations for starvation are working out to the last dismal decimal place. A modern discussion of it was published last year by Charles Darwin the Younger. There is no longer any way to get around it; this planet has too many mouths, too few acres.

We beat the game for a long time by opening up new frontiers, but now there are no new frontiers to open up. *The only place left for the billion people in China and the Indian subcontinent to spill over is into areas already occupied by the white Western nations.*

This fact is more explosive, more dangerous than H-bombs. I had known this—as who did not?—before this trip. We had certainly been told often enough, by flippant little paragraphs in *Time* magazine, by dry and rarely read handouts from UNESCO, through diagrams in atlases and geographies. But, for me, it took a personal look at the dreadful condition of Java to make the statistics about China and India and the other overpopulated areas come alive in my mind.

The worst of it is that the problem won't hold still; it gets worse every day. We have already passed the crisis point; we need two and a half acres of farm land for each human, but we now have about one and a half. But there were eighteen million more people on earth when my wife and I came back from this trip than there were when we left; since we got home fifteen million more have been added—a total four times the population of Australia.

Too little food, too many mouths. How will they be fed? Where will they sleep?

It is barely possible that you and I will be able to duck the issue; our children must solve it or be overwhelmed by it. Not our grandchildren, but our children, for the problem grows too rapidly. The crisis is with us, the catastrophic outcome cannot be more than one generation away. More probably we ourselves will face it, in the form of World War III.

Quite aside from the life-or-death practical matter of who will win the next war, when or if it comes, is the unavoidable moral problem: do we, with our acres to waste on golf courses and parks and tobacco fields, have the right to hang onto what we hold? Or are we, as our brothers' keepers, morally obligated to accept two or three million Asians as fast as they can be shipped to us?

Are the ten million Australians and New Zealanders required by good morals to let the eighty million Indonesians swarm over them? I can give one sort of answer to that one. Both of the Anzac nations are strongly humanitarian at home—but they will fight and die to the last digger, the last Kiwi, before they will let that happen.

But that does not solve the moral issue. My own ancestors came to this continent, pushed the Indians aside—or killed them—and made far better use of the land for far more people. I feel no special qualms about it now. But suppose the teeming crowds of Asia now give us the same treatment, seeing that we are making something less than maximum use of the land for maximum population. Have I any right to feel indignant?

I will not duck the issue. I have always believed that a man who accepts capital punishment should not be too squeamish to serve his term as hangman. The tail goes with the hide. I have not been able to find a moral answer which pleases me; nevertheless I know my answer—precisely that of the Australians. I'll fight before I'll let the spawning millions of Asia roll over Colorado and turn it into the sort of horizontal slum that Java is. Maybe this decision damns my soul; if so, so must it be. I don't see any solution to the problem of Asia at all, for they won't stop breeding . . . in fact, the psychological truth is almost certainly that they *can't.* But I am not willing to move over and give them room here to breed another hundred million—or half billion. We have here a pretty good nation, at least for the time being; I will not willingly see it turned into a slum.

Are we our brothers' keepers? Just what does our Western culture owe to the rest of mankind? Let us not be too humble about it. It may well be true that the potentialities of all parts of the human race are about the same. Nevertheless that minority of the human race called loosely the Western democratic peoples and consisting mostly of Caucasians even though not identical with the Caucasian race has added twenty, eighty, a hundred times as much to human wealth, human knowledge, human dignity and freedom, as all the rest of the human race put together. Sanitation, scientific farming, mass production, civil liberties—these are *our* inventions, not theirs. We have shared them, what they would accept, and that is good—but we *do not* owe the teeming rest of the world a living!

Lastly, this trip around the world cured me of One-Worldism; I have fully recovered and am as immune to it as I am to measles. The idea of one sovereign world nation, free forever of the peril of war, working together in peace and harmony, is an appealing one. I do wish we could afford it. But, the earth and the human race being what they are, we cannot . . . not unless we are willing to accept the logical and inevitable consequences. "One World" means a situation in which the United States is not sovereign, any more than one of our states is truly sovereign. That means that the United States would be outvoted . . . which just as certainly means that they would swarm over us immediately after counting the votes.

That which I am willing to fight for I am not willing to surrender as a result of counting noses in China and India. Therefore, no World State for me. It's a trap.

I could wish for a better world, but, as the stranger in the poker game told the sourdough who warned him, "Sure, sure, I *know* the game is crooked—but it is the *only* game in town."

I came back to the United States convinced that it was an even better country than I had thought it was. This our land is not perfect, but it looks just about perfect from even a short distance away. It is immeasurably a better place to live than anywhere else I have seen.

But I came back, too, convinced that our peril was very great and our friends very few. The extent and the viciousness of the propaganda campaign against us must be heard to be believed. Its prime source, of course, is Russia, but there are many ears willing to listen and many mouths willing to repeat. Envy and hate are the inevitable concomitants of wealth and power; we have been uneasily aware of this and have tried to curry favor wherever we could. But it *is* not possible; we are hated not for our behavior but for what we are —and they are not.

England, in the days of her strength, paid no attention to what other peoples thought of her; she acted in her own best interests as she conceived them to be and ignored world opinion. We should learn from our predecessor at least part of this lesson: never let a decision be swayed by what the neighbors will think, for they will gossip about us whatever we do. Let us be honest and brave—but not politic. We have tried to be politic for ten years now—and look at the mess we are in! We have bumbled around, an awkward giant, apologizing for our big feet and our bulging muscles, scared witless that the fortnightly French cabinet might fall or that the British foreign office might say "boo!" at us. We have had many, many chances to act forthrightly and call a halt to the world's rush toward disaster; instead, each time we have again been persuaded to pay Danegeld.

We know, as surely as we have ever known anything, that we may have but a short time more to live. The Soviet Union is determined either to nibble us to death or to smash us, whichever seems easier. On what can we depend?

Primarily on ourselves. Turkey has the resolute courage to fight, that seems certain. There are one or two others perhaps. But what of major allies? England? Suppose Bevan were prime minister, as may well be the case when the time comes. For that matter, can we reasonably expect England to risk a saturation attack of H-bombs to support us? But, in any case, will she? With Churchill, probably, with Atlee, maybe—with Bevan? The man hates us.

Will France support us? Let's not joke, this is serious.

So far as we can count on it . . . for all practical purposes .. . we already stand alone. Let us therefore get on with that "agonizing reappraisal"—but let us quit agonizing about it. We are not liked, we have few friends; therefore we should quit being afraid, stand up and assert ourselves. The only friends we will lose thereby are those we never had.

We might even gain a few. Courage is respected and admired where timidity is scorned.

If we are to die as a nation, let us die proudly, with neither head in sand nor led around by the nose, but calmly aware of our peril and fighting it with our utmost. There can be no safe course for us, but, if we deserve to win, we are more likely to win.

But let us not be afraid, not even of our friends.

SESTINA OF THE TRAMPROYAL

by Rudyard Kipling

Speakin' in general, I 'ave tried 'em all—
The 'appy roads that take you o'er the world.
Speakin' in general, I 'ave found them good
For such as cannot use one bed too long,
But must get 'ence, the same as I 'ave done,
An' go observin' matters till they die.

What do it matter where or 'ow we die,
So long as we've our 'ealth to watch it all—
The different ways that different things are done,
An' men an' women lovin' in this world;
Takin' our chances as they come along,
An' when they ain't, pretendin' they are good?

In cash or credit—no, it aren't no good;
You 'ave to 'ave the 'abit or you'd die,
Unless you lived your life but one day long,
Nor didn't prophesy nor fret at all,
But drew your tucker some'ow from the world,
An' never bothered what you might ha' done.

But, Gawd, what things are they I 'aven't done?
I've turned my 'and to most, an' turned it good,
In various situations round the world
For 'im that doth not work must surely die;
But that's no reason man should labour all
'Is life on one same shift—life's none so long.

Therefore, from job to job I've moved along.
Pay couldn't 'old me when my time was done,
For something in my 'ead upset it all,
Till I 'ad dropped whatever 'twas for good,
An', out at sea, be'eld the dock-lights die,
An' met my mate—the wind that tramps the world!

It's like a book, I think, this bloomin' world,
Which you can read and care for just so long,
But presently you feel that you will die
Unless you get the page you're readin' done,
An' turn another—likely not so good;
But what you're after is to turn 'em all.

Gawd, bless this world! Whatever she 'ath done
Excep' when awful long—I've found it good.
So write, before I die, "'E liked it all!"

(1896)

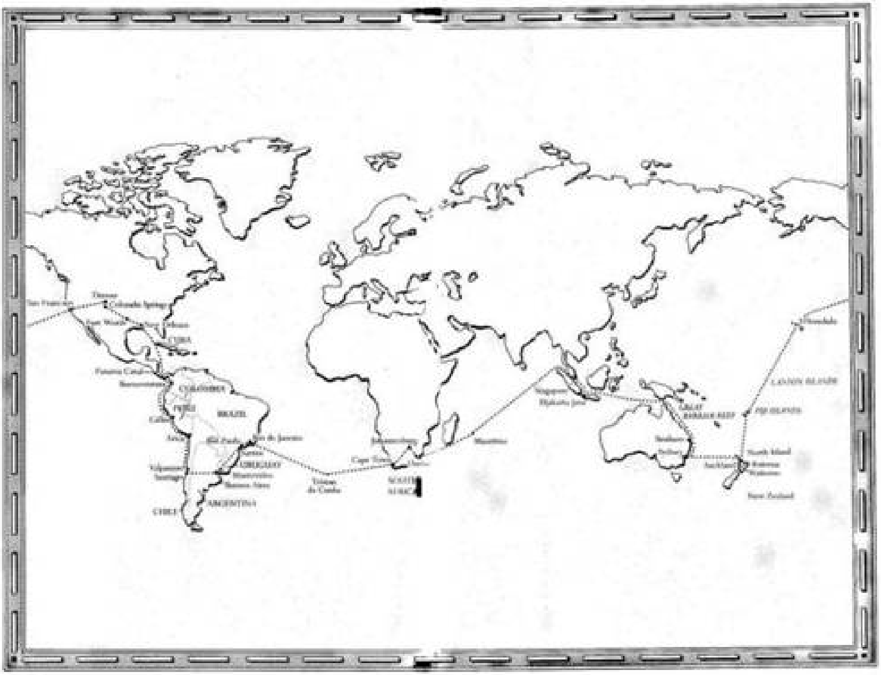
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TAKE BACK YOUR GOVERNMENT!

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INTRODUCTION

Jerry Pournelle

This is a book for every American who wants to reclaim the political process. Are you mad as Hell and not going to take it any more? Have you tried to participate in the traditional political process only to discover that the traditional political parties have no place for you, won't listen, and don't much matter anyway? Have you turned to the Perot movement as a remedy? Do you want to see a fundamental change in the American political system?

If so, you need this book.

If you have never thought about politics, and hate the whole idea, you really need this book. As Pericles of Athens was fond of observing, because you take no interest in politics is no guarantee that politics will not take an interest in you.

If you look to H. Ross Perot to lead the nation to salvation, you particularly need this book.

I say this in full knowledge that much of the book—indeed its very heart - seems to be badly out of date. Ironically, being "out of date" is one of the book's major values. This book was written in a very different era of American politics; in a time when ordinary people could and did participate effectively in the political scene. This was a manual to show them how to do that There were many such manuals. This one was unique m that Robert Heinlein both had practical experience in politics and was one of the dearest (and most entertaining) writers of the era. Reading this book will be good for you, but the good news is that it's fun.

Heinlein offers a number of timeless insights, but many of his details are seriously out of date. That, however, is not a defect but a feature: because in describing how to operate in a political world that vanished during the "reforms" of the '60s and '70s, Heinlein describes a working democracy: not as a dead world of the past, but as the dynamic living world he knew and lived in and loved.

It is a world we could reclaim. A world we must reclaim. The United States went a long way down the wrong road during the Cold War. It is time we return to more familiar territory. This book can be vital to that return.

Democracy, Robert Heinlein says, "is not an automatic condition resulting from laws and constitutions. It is a living, dynamic process which must be worked at by you yourself-or it ceases to be a democracy, even if the shell and form remain." That was written in 1946, at the close of World War II, before the Cold War; before the federalization of much of American life. When we look around at the disaster area that American politics has become, it is all too clear that

Robert was correct. The shell and form of American democracy remain, but much of what Robert understood about American democracy has vanished.

When Heinlein wrote, the typical professional politician was what was then known as a political boss. Most local, district, and county party leaders were unpaid volunteers. Professional political managers were distrusted. While some state legislators and congressmen were returned to office year after year, most were not, and those who were, though powerful through the seniority system, were often the butts of political jokes - and were quite aware that they could easily be turned out of office, either in a primary or a general election. It was a government by amateurs in a true sense, in that everyone had to live under the laws they passed. They worked hard, too. Heinlein could (and does) complain that members of Congress, and of the State Legislature, were underpaid and had too few perks of office; and offer the opinion that the main reason people went to their city council, or state capital, or Washington, and endured the hardships of public office, was patriotism.

It was all true in those days. Some politicians might have been motivated by greed, or a lust for power, but most thought of themselves as, and were seen by their constituents to be, public servants, sacrificing some of their productive years to the political process. Today things are different. However the professional politicians see themselves, poll after poll shows that the American people think they are a self-perpetuating elite motivated mostly by the desire to retain power.

Since Heinlein wrote this book, most states have changed from a parttime amateur legislature of citizens who approved laws they would have to live with and make a living under, to full-time paid professionals who spend most of their time in the state capital rather than in their home districts, exempt themselves from the laws and regulations they impose on others, and who, far from making a living under the laws they make, are paid by the state and sometimes prevented by conflict-of—interest laws from outside work. (A noted exception is, of course, lawyers, who have been allowed to retain their partnerships in law firms even if the firm does business with the government. They did that in Heinlein's day too.) Their idea of making a living is not yours.

It's doubly true of the Congress of the United States, which has multiplied its perks while invariably exempting itself from such laws as the Civil Rights Act, the Americans with Disabilities Act, the Wage/ Hours Act, most of the reporting laws, and nearly all federal regulations. Far from a largely citizen body, the Congress has become a governing elite with high job security. Since this book was written, Congress went from an assembly of the people to an institution with 98 percent incumbency-a lower turnover than Britain's hereditary House of Lords. While private industry loses jobs, Congress multiplies its staff: there are over 30,000 "Hill Rats," as congressional staff are called in Washington. They serve 535 senators and representatives. Do you have nearly 50 people to mind details and run errands for you? Each of your legislators in Washington does, all paid with your taxes. Think about that before you contemplate running for office. Each congressman commands a political patronage machine that the old ward bosses would have envied.

Other things have changed. The budget has grown enormously. Government (federal, state, and local) now spends nearly half the money generated in this country. The national debt went from an irritation to an impending disaster. The civil service at all levels has grown well beyond anyone's ability to predict in 1946. Government, in a word, has become very big business indeed, while what we used to fear as "the big business interest" has faded into the background. I could multiply examples endlessly, but surely the point is made. Somewhere between 1946 and the present the American democracy as Heinlein knew it disappeared, to be replaced with our present system in which our local affairs are governed by Washington - a city that can't govern itself, but has no qualms about telling the rest of us how we should live.

The Opportunity

We have a new situation in this year of grace 1992 and of the independence of these United States the 216th. To say that the American people have come to distrust their government is a silly understatement. The polls show that they hate our present political system. They're mad as Hell and they aren't going to take it any more. There is a movement to take back control, and it may work. For the first time in our lifetimes there is an alternative. Millions of Americans, disgusted with politics as usual, have turned to a man who, as I write this, is still legally only an "undeclared candidate for President" - but who, as I write this, is the likely winner of the Presidency. In the state of New Jersey both houses of the legislature went from a majority by one party to a veto-proof majority of the other. As I write this we can predict that there will be at least 100 new faces among the 435 members of the House of Representatives; and it is entirely possible that there will be many more, perhaps even a majority of new faces.

There will be equally profound changes at the state and local level. Everywhere there is an opportunity to, in the words of the old political rallying cry, Turn the Rascals Out. We can change the system. We very likely will.

With what, then, shall we replace the system of professional politicians? It's no good "reforming" the system only to abandon it to a new crew of professional politicians. That cure could easily be worse than the disease. We must Turn the Rascals Out, but we must rebuild our system of citizen-controlled government.

That, I submit, is the great value of this book. It's all in here. In this book, Robert Heinlein describes, lovingly and in great detail, the system of government which worked for this republic for nearly two hundred years. This isn't a blueprint, and it's not a treatise on political science. We will need those and they will come; but this is a love story.

Jerry Pournelle Hollywood, California July 1992

Preface

(In which the defendant pleads guilty to the charge of being a politician but offers a statement in his defense.)

This is intended to be a practical manual of instruction for the American layman who has taken no regular part in politics, has no personal political ambitions, and no desire to make money out of politics, but who, nevertheless, would like to do something to make his chosen form of government work better. If you have a gnawing, uneasy feeling that you should be doing something to preserve our freedoms and to protect and improve our way of life but have been held back by lack of time, lack of money, or the helpless feeling that you individually could not do enough to make the effort worthwhile, then this book was written for you.

The individual, unpaid and inexperienced volunteer citizen in politics, who is short on both time and money, can take this country away from the machine politicians and run it to suit himself—if he knows how to go about it.

This book is a discussion of how to go about it, with no reference to particular political issues. I have my own set of political opinions and some of them are almost bitter in their intensity, but, still more strongly, I have an abiding faith in the good sense and decency of the American people. Many are urging you daily as to what you should do politically; I hope only to show some of the details of how you can do it—the mechanics of the art.

There are thousands of books for the citizen interested in public affairs, books on city planning, economics, political history, civics, Washington gossip, foreign affairs, sociology, political science, and the like. There are many books by or about major figures in public life, such as James A. Parley's instructive and interesting autobiography, or that inspiring life of Mr. Justice Holmes, the Yankee from Olympus. I have even seen a clever, sardonic book about machine politicians called How to Take a Bribe. But I have never seen a book intended to show a private citizen, with limited time and money, how he can be a major force in politics.

This book is the result of my own mistakes and sad experiences and is written in the hope that you may thereby be saved some of them. If it accomplishes that purpose, I hope that you will be tolerant of its shortcomings. A decent respect for your opinions requires that I show my credentials for writing this book. A plumber has his license; a doctor hangs up his diploma; a politician can only cite his record—I have done the things I discuss.

I have been a precinct worker, punching doorbells for my ticket. I have organized political clubs, managed campaigns, run for office, been a county committeeman, a state committeeman, attended conventions including national conventions, been a county organizer, published political newspapers, made speeches, posted signs, raised campaign funds, licked stamps, dispensed patronage, run headquarters, cluttered up "smoke-filled rooms," and have had my telephone tapped.

I suppose that makes me a politician. I do know that it has proved to me that a single citizen, possessed of the right to speak and the right to vote, can make himself felt whenever he takes the trouble to exercise those twin rights.

- Robert A. Heinlein April, 1946

Chapter I

Why Touch the Dirty Business?

"He that toucheth pitch shall be defiled therewith - "
- Ecclesiastes XI11: l

And the Pharisees asked Jesus: "Why do you eat and drink with the publicans and sinners'?"
- Luke V: 30

This book is on the mechanics and techniques of practical politics, and is based on the idea that democracy is worth the trouble and can be made to work by ordinary people.

If you can go along with me on that I don't care what party you belong to. I am registered in one of the two major parties, so chances are at least fifty-fifty that you can guess my affiliation, but any party bias I let creep into this book will be an oversight. The techniques of politicking are not the property of any party.

From politics I have come to believe the following:

(1) Most people are basically honest, kind, and decent.

(2) The American people are wise enough to run their own affairs. They do not need Fuehrers, Strong Men, Technocrats, Commissars, Silver Shirts, Theocrats, or any other sort of dictator.

(3) Americans have a compatible community of ambitions. Most of them don't want to be rich but do want enough economic security to permit them to raise families in decent comfort without fear of the future.

They want the least government necessary to this purpose and don't greatly mind what the other fellow does as long as it does not interfere with them living their own lives. As a people we are neither money mad nor prying; we are easygoing and anarchistic. We may want to keep up with the Joneses—but not with the Vanderbilts. We don't like cops.

(4) Democracy is not an automatic condition resulting from laws and constitutions. It is a living, dynamic process which must be worked at by you yourself—or it ceases to be democracy, even if the shell and form remain.

(5) One way or another, any government which remains in power is a representative government. If your city government is a crooked machine, then it is because you and your neighbors prefer it that way—prefer it to the effort of running your own affairs. Hitler's government was a popular government; the vast majority of Germans

preferred the rule of gangsters to the effort of thinking and doing for themselves. They abdicated their franchise.

(6) Democracy is the most efficient form of government ever invented by the human race. On the record, it has worked better in peace and in war than fascism, communism, or any other form of dictatorship. As for the mythical yardstick of "benevolent" monarchy or dictatorship - there ain't no such animal!

(7) A single citizen, with no political connections and no money, can be extremely effective in politics.

I left the most important proposition to the last, on purpose. It is contrary to the beliefs of many but it happens to be true. You yourself can be a strong political force at less cost per evening spent in politics than spending that same evening at the movies and at less effort than it takes to be a scoutmaster, a good bridge player, or a radio hobbyist —about the effort it takes to be a Sunday School teacher, an active ETA member, or stamp collector.

You may possibly think me unrealistic in some of the opinions expressed above. I may be self-deluded but I got those opinions from active politics through many campaigns. If your own experience in politics is really extensive you are certainly entitled to contradict me —but I don't think you will!

If active politics is fairly new to you—if, let us say, you have taken part in no more than one or two campaigns and have been left disheartened thereby—I ask that you suspend judgment for the time being.

I am puzzled by persons who take exception to the first proposition and seem to believe that crookedness is commoner than honesty. I can see how a citizen too long exposed to a corrupt machine might come to think the whole world is dishonest, but I am afraid that when I hear a man complain that everybody is crooked it makes me suspect that he himself is dishonest, especially if he complains that an honest man can't make a living in his line of business. I have met crooks, of course, but for every dishonest man I have met dozens, scores, of men so honest it hurt, both in and out of politics.

Any banker can confirm this. Ask your banker how many good checks come into the bank for every bad check. The figures will give you a warm glow of pleasure.

However, the occasional crook will band together with his kind and take your government away from you if you let him. It is very soothing to the conscience to tell yourself that, after all, you can't do anything to change the sorry state of things. It is much easier to sit in your living room, skim the headlines, and then make bitter remarks about those no-good crooks in the city hall, or the state capital, or Washington, and to complain about how they pay no attention to the welfare of the ordinary citizen (meaning yourself) than it is to put on your hat, go out in your neighborhood, and round up a few votes.

What do you expect for free? Chimes? If you wanted to round up a big order of yard goods, you wouldn't expect to accomplish it with your feet on your desk. This is just as important. Or have you forgotten that income tax form you made out? And your nephew who died at Okinawa because you let some senile congressman stay in office rather than bother with politics?[1]

Why should the average citizen bother with politics? Why touch the dirty business? Isn't politics loaded up with crooks you wouldn't want to eat with and crackpots you wouldn't want to have in your house? "Loaded" is hardly the word, but you will find plenty of each and they will almost drive you nuts. Besides that, and worse, your respectable friends—people who wouldn't be caught dead in a political club—will assume that you are in it for what you can get out of it They will be very sure of it, for that is the only reason their peanut heads can imagine!

Then why bother? Why expose yourself to bad companions and snide remarks simply to make a singlehanded attempt to clean the Augean stables, to bail the ocean, to clear the forest?

Because you are needed. Because the task is not hopeless.

Democracy is normally in perpetual crisis. It requires the same constant, alert attention to keep it from going to pot that an automobile does when driven through downtown traffic. If you do not yourself pay attention to the driving, year in and year out, the crooks, or scoundrels, or nincompoops will take over the wheel and drive it in a direction you don't fancy, or wreck it completely.

When you pick yourself up out of the wreckage, you and your wife and your kids, don't talk about what "They" did to you. You did it, compatriot, because you preferred to sit in the back seat and snooze. Because you thought your taxes bought you a bus ticket and a guaranteed safe arrival, when all your taxes bought you was a part ownership in a joint enterprise, on a share-the-cost and share-the-driving plan.

But the crisis is more than usually acute this year, the traffic is thicker, the curves more blind, the traffic signals less reliable, and there are a lot of places where the pavement is out which have not been marked on any map. More than ever your own welfare demands that you be alert and responsible.

Do you favor peacetime conscriptions? How did your congressman vote on it? Have you got any sons under twenty-one? Should the budget be balanced on a pay-as-you-go plan? If so, are you willing to vote to raise your own taxes? Or would you rather cut the budget for the army, the navy, and for veterans' benefits? Is there some other way to do it?

Should coal miners be forbidden to strike? Can you mine coal with bayonets? What would your rent be in a free market? Or are you still sleeping on a borrowed couch? When will a home be built for you and your kids? Can you afford it when it is built, if ever? Does your town have a building code which prevents the use of new materials and new construction methods? How do you feel about a loan to Great Britain? To France? To Russia? Are you willing to go on rationing to keep Germans from starving? How long should the occupation of Japan continue? Why? How did your congressman vote on FEPC? Do you know what FEPC is? How does it affect you?

The Filipinos become independent this year—should we let Philippine sugar in duty free? Do you live in the Colorado sugar beet country? Is a Senate filibuster a legitimate defense of states' rights, or a piece of tyranny? Should an oil man be in charge of military and naval oil reserves? Was Secretary Fall an oil operator? Does it make any difference?

Should we insist that Russia give us free access and uncensored news reports so that we will know what she is up to? Is it worth fighting about? How about the Big Five Veto power? Does it make for peace or war?

Should Russia get out of Iran? Should Britain get out of Egypt? Should we get out of Korea? Are the three cases parallel? Or very different? Is a Manchurian communist the same thing as a Brooklyn communist? Why? Why not? Should a sharecropper be a Republican or a Democrat? Should a stockholder be a Democrat or a Republican? What is the American Way of Life? Does it mean the same thing on the Main Line as it does on Skid Row?

Are you sure about that last answer? Aren't we all in the same boat? Will an atomic bomb discriminate between bank account—or party labels?

Now we are getting down to cases. All the other problems were of the simple, easy sort that we have blundered our way through, not too badly, for the past hundred and seventy years.

We have a double-edged crisis this year, more acute on both its edges than any we have ever faced before, more acute, even, than Pearl Harbor, or the terrible War between the States.

The first crisis is political and economic. Our way of life is being challenged by a revolutionary upsurge in all corners of the globe. We can meet it with hysteria, persecution, and a new isolationism, or we can define our way of life in action and defend it by practical accomplishment. An American who is well housed, well fed, and holding a good job is poor pickings for an agitator. But let him miss seven meals—

The second crisis is amorphous but of even more deadly danger. We have entered the Atomic Era—but we are not yet used to the idea.

Have you read the Smyth Report?[3]

Do you know what the Smyth Report is? It is the War Department's report on the atom bomb and is titled Atomic Energy for Military Purposes by H.D. Smyth. It is available in any bookstore and most newsstands at $1.25. It is dull reading but quite understandable and is easily the most important document to the human race since the Sermon on the Mount.

I won't try to tell you what it should mean to you. That's up to you. You are a free American citizen, for a while yet, at least. With good luck you should live another five or ten years. Whether or not you and your kids live longer than that depends on how you interpret the Smyth Report. But you must interpret it for yourself—no guardian angel will help you.

Get it and read it. Then get a copy of your own precinct list and start investigating this year's crop of candidates. If your interpretation of the Smyth Report and the world events behind it is correct, there is still a chance that the Star-Spangled Banner will continue to wave o'er the land of the free and the home of the brave.

Just a chance—that's all. But get busy, neighbor. There's work to be done.

CHAPTER II

How to Start

"Put down your bucket where you are!" The late Booker T Washington,[4] in his lifelong attempts to advise his people on how to help themselves, had a favorite anecdote about a sailing ship, becalmed and out of fresh water off the coast of South America. After many days they sighted another ship, a steam ship, and signalled, "Bring us water. We are dying of thirst." The other ship sent back this message, "Put down your bucket where you are!"

They were in the broad mouth of the Amazon, afloat in millions of gallons of fresh water—and did not know it!

Here is how to start in politics:

Get your telephone book. Look up the party of your registration—or, if you are not registered in a party, the party which most nearly fits your views. I don't care what party it is, but let us suppose for illustration that it is the Republican Party. You will find a listing something like Republican County Committee, Associated Republican Clubs, Republican Assembly, or perhaps several such. Telephone one of them.

Say, "My name is Joseph Q. (or Josephine W.) Ivorytower. I am a registered voter at 903 Farflung Avenue. Can you put me in touch with my local club?"

The voice at the other end will say, 'Just a minute. Do you know what ward you are in?"

You say no. (It's at least even money that you don't know, if you are a normal American!)

The voice mutters, "Fairview, Farwest, Farflung—" The owner of the voice is checking a file or a map. Then you hear, in an aside, "Say, Marjorie, gimme the folder on the 13th ward."

"What do you want to know?" says Marjorie. She knows them by heart; she typed them. She is a political secretary and belongs to one of two extreme classes. Either she is a patriot and absolutely incorruptible, or she can be bought and sold like cattle. Either way she knows who the field worker in the 13th ward is.

After a couple of minutes of this backing and filling you are supplied with a name, an address, and a telephone number of a local politician who is probably the secretary of the local club. You may also be supplied with the address and times and dates of meetings of the local club, if it is strong enough to have permanent headquarters. The local club may vary anywhere from a dub in permanent possession of a store frontage on a busy street, with a full time secretary on the premises and a complete ward, precinct, and block organization, to a club which exists largely in the imagination of the secretary and which meets only during campaigns in the homes of the members.

Your next job is to telephone the secretary. This is probably not necessary. If the local organization is any good at all, the secretary of the local club will call you, probably the same day. Marjorie will have called him and said, "Get a pencil and paper, Jim. I've got a new sucker for you." Or, if she is not cynical, she may call you a new prospect.

She will have added you to a card file and set the wheels in motion to have your registration checked and to have you placed on several mailing lists. Presently you will start receiving one or more political newspapers—free, despite the subscription price posted on the masthead—and, in due course, you will receive campaign literature from candidates who have the proper connections at headquarters. Your political education will have begun, even if you never bother to become active.

Note that it has not cost you anything so far. The costs need never exceed nickels, dimes, and quarters, even if you become very active. The costs can run as high as you wish, of course. The citizen who is willing to reach for his checkbook to back up his beliefs is always welcome in politics. But such action is not necessary and is not as rare as the citizen who is willing to punch doorbells and lick stamps. Some of the most valuable and respected politicians I have ever known had to be provided with lunch money to permit them to do a full day's volunteer work in any area more than a few blocks from their respective homes.

I know of one case, a retired minister with a microscopic pension just sufficient to buy groceries for himself and his bedridden wife, who became county chairman and leader-in-fact of the party in power in a metropolitan area of more than three million people. He was so poor that he could not afford to attend political breakfasts or dinner. He could never afford to contribute to party funds, nor, on the other hand, was he ever on the party payroll—he never made a thin dime out of politics.

What he did have to contribute was honesty, patriotism, and a willingness to strive for what he thought was right It made him boss of a key county in a key state—when he was past seventy and broke.

I digress. This book will have many digressions; politics is like that, as informal as an old shoe, and the digressions may be the most important part. It is sometimes hard to tell what is important in the practical art of politics. Charles Evans Hughes failed to become president because his manager was on bad terms with a state leader and thereby failed to see to it that the candidate met the local leader on one particular occasion in one California city. The local campaign lost its steam because the local leader's nose was out of joint over the matter.

Mr. Hughes lost the state of California; with its electoral vote he would have become president.[5] A switch of less than nineteen hundred votes in the city in which the unfortunate incident occurred would have made Mr. Hughes the wartime president during World War I. The effect on world history is incalculable and enormous. It is entirely possible that we would have been in a League of Nations (not the League—that was Woodrow Wilson's League); it is possible that Hitler would never have come to power; it is possible that World War II would never have occurred and that your nephew who fell at Okinawa would be alive today.

We cannot calculate the consequences. But we do know that world history was enormously affected by a mere handful of votes, less than one percent of one percent—less than one ten-thousandth of the total vote cast.

An active political club[6] can expect to deliver to the polls on election day, through unpaid volunteers driving their own cars, as many votes as the number that swung the 1916 presidential election. It could be your club and an organization you helped to build.

Which is why you must now telephone the local club secretary. It may be your chance to prevent, by your own direct and individual action, World War III!

The club secretary, Jim Ballotbox, will not give you the brush off. Even if it is a tight machine organization, founded on graft and special privilege, an honest-to-goodness volunteer who is willing to work is more to be desired than fine gold, yeah, verily! If it is that sort of a club, presently you will be offered cash for your efforts, anywhere from five dollars per precinct per campaign on the west coast, through five dollars per day during the campaign in the middle west, to a sound and secure living month in and month out on the east coast.

(These figures do not refer to the Republican Party, as such, nor to the Democratic Party. They refer to the Machine, no matter what its label.)

Don't take the money. Remain a volunteer. You will be treated with startled response. Every time you turn down money you will automatically be boosted one rung in the party councils. And the progress is very fast.

But, no matter which sort of club it is, you will be welcomed with open arms. You have already caused a minor flurry at the downtown headquarters by volunteering during "peace time"—other than immediately before a campaign. It shocked them but they rose to the occasion and put you in touch with your local leader. They are used to volunteers during campaigns—and are aware that most of them are phonies who expect at least a postmaster's job in return for a promise to work one precinct plus a little handshaking at a few political meetings. If it should happen that you call up during a campaign, you will be treated a little more warily until you have established that you are in fact a volunteer and not a hopeful patronage hound, but you will be received pleasantly and given a chance to work. This applies to any political club anywhere at any time.

If Jim Ballotbox happens to be secretary of the other sort of club, the sort unconnected with a powerful, well-financed machine, he will be even happier to see you, although he may not be as schooled in the arts of graciousness as his full-time professional opposite number. His club will be in a chronic state of crisis financially, or even moribund; an enthusiastic new member is manna to him.

He will have plenty for you to do. You can be chairman next term if you want to be and share with him the worries about hall rent, postage, secretarial work, and how to get people out to meetings. At the very least he will place you in charge of one or more precincts (which will make you nervous as a bridegroom; it's too much responsibility too suddenly) and he will unburden his heart to you. You will learn.[7]

There remain two other possibilities which may result from your telephone call to the downtown headquarters. The first is that there may be no club in your district, in which case you will make your start directly at the downtown headquarters and will meet there the other active party members from your own area. You will join with them in organizing a local club before the next election. It is not hard to do; the process will be discussed in a later chapter.

The last remaining possibility is that your telephone book contains no listings for your political party. This will happen only in small towns or in the country. If you live in a small town or in the country, you already know at least one party leader in your own party—probably Judge Dewlap, who served one term in the state senate and has been throwing his weight around ever since.

Call him up. Tell him you want to work for the party. Perhaps you don't like the old windbag. No matter—he likes you. He likes all voters, especially ones who want to work for the party! He may suggest that you have lunch with him at the Elks' Club and talk over civic conditions. Or he may simply invite you to drop into his real estate office for a chat. But he won't brush you off. From now on you're his boy!—until he finds out he can't dictate to you. But by that time you are a politician in your own right and there is nothing he can do about it (That knife in your back has Judge Dewlap's finger prints on it.)

We have covered all the possibilities; you are now in politics. As a result of one telephone call you have started. Stay with the club or local organization for several months at least. Attend all the meetings. Help out with the routine work. Don't be afraid to lick stamps, serve on committees, check precinct lists, or distribute political literature. Count on devoting a couple of evenings a month to it for six months or a year. Your expenses during this training period need not exceed a dollar a month.

At the end of that time you are a politician.

I mean it. You will have become acquainted with your local officeholders and political leaders, you will have discovered where several of the bodies are buried, you will have taken part in one local or national campaign and received your first blooding in meeting the public. You will find that you are now reading the newspapers with insight as to the true story behind the published story. You will have grown up about ten years in your knowledge of what makes the world go 'round.

You will either have experienced the warm glow of solid accomplishment that comes from realizing that you performed a necessary part in a successful campaign for a man or an issue, or you will have taken part in the private post-mortem in which you and your colleagues analyze why you lost and what to do about it next time. (The answer is usually to start your precinct organization earlier, with special reference to getting your sure votes registered and to make sure they are dragged to the polls.)

You will feel that you can win next time and probably you will. Politics for the volunteer fireman is not one long succession of lost causes—far from it!

But the point at which you will realize that you are in fact a politician with a definite effect on public life is the time when your friends and neighbors start asking your advice about how to mark their ballots. And they will. Perhaps not about presidential nor gubernatorial candidates, but they will ask, and take your advice about lesser candidates and about the propositions on the ballot—

You may discover in the course of the first few months that you are in the wrong club, or even in the wrong party. This does not matter in the least insofar as your political education is concerned. In fact it is somewhat of an advantage to make a mistake in your first affiliation; you will learn things thereby which you could never possibly learn so well or so rapidly if you had found your own true lodge brothers on your first attempt. It does not matter by what door you enter politics. If you have belonged to the party wrong/or you, by habit or tradition, a few months of active politics will disclose the fact to you. You can then reregister and cross over, bringing with you experience and solid conviction you could hardly have acquired any other way.[8]

If the trouble lies in your having fallen first into the hands of a gang of unprincipled machine politicians, the mistake is still a valuable one, for you will discover presently that there is a reform element in your party, unaffiliated with the Machine. You can join them, taking with you a knowledge of the practical art of vote-getting which reformers frequently never acquire.

You will be invaluable to your new associates. Most of the techniques of vote-getting are neither dishonest nor honest in themselves, but the machines normally know vastly more about such techniques than do the reform organizations. The honest organizations can afford to copy at least 90% of the machine techniques. It is curiously and wonderfully true that a volunteer, reform organization can use the machine techniques much more effectively than the Machine does, with fewer workers and less money. It is like the difference between the ardor of unselfish love and the simulated passion of prostitution; the unorganized voting public can feel the difference.

Recapitulation-How to start: Take a telephone book. Look up your political party. Telephone, locate your local club. Join it, attend all the meetings, and do volunteer work for several months. At the end of that time, let your conscience be your guide. You will know enough to know where you belong and what you should do.

I might as well admit right now that the above paragraph is really all this book can tell you. The matter discussed in the later chapters are things which you will learn for yourself in any case, provided you do everything called for in the paragraph above.

If you have skimmed through this book to this point without, as yet, laying the purchase price on the counter, you can save the price of the book without loss to yourself simply by remembering that one paragraph—and doing it!

On the other hand you might buy the book anyhow and lend it to your loudmouthed brother-in-law. Aren't you pretty sick of the way he is forever flapping his jaw about the way the country is run? But when has he ever done anything about it except to go down and kill your vote on election day by voting the wrong way? Give him this book, then tell him to put up or shut up!

You can point out to him that he owes it to his three kids to take a responsible part in politics, instead of just beating his gums. If he won't get off his fat backside and get busy in politics but still refuses to stop being a Big Wind, you are then justified in indulging in the pleasure of being rude to him. After all, you have wanted to be for years, haven't you? This is your opportunity; you've got nothing to lose politically since he votes wrong anyhow, when he remembers to vote, and it will come as a relief to be rude for once, now that you are a politician and usually polite to all comers.

Tell him that he is so damned ignorant that he doesn't have any real opinions about politics and so lax in his civic duties that he wouldn't be entitled to opinions if he had any. Tell him to shut up and to quit holding up the bridge game.

The faint sound of cheering you will hear from the distance will be me. I don't like the jerk either, nor any of his tribe.

You may not believe that getting into politics is actually as simple as I have described it. Here is my own case: I returned to my own state after an extended absence. My profession had kept me travelling and it happened to be the first time I had ever been at home during a campaign. I walked into the local street headquarters of my party and said to a woman at a desk, "I have a telephone, an automobile, and a typewriter. What can I do?"

I was referred to another headquarters a couple of miles away—I was so ignorant that I did not know the district boundaries and had gotten into the wrong headquarters.

That very same day, to my utter amazement and confusion, I found myself in charge of seven precincts.

Six weeks later I was a director of the local club.

Six months later I was publishing, in my spare time, a political newspaper of two million circulation.

During the next campaign I was a county committeeman, a state committeeman, and a district chairman. Shortly after that campaign I was appointed county organizer for my party. And so on. It does not end. The scope and importance of the political work assigned to a volunteer fireman is limited only by his strength and his willingness to accept responsibility.

Nor is the work futile. The volunteer organization with which I presently became affiliated recalled a mayor, kicked out a district attorney, replaced the governor with one of our own choice, and completely changed the political complexion of one of the largest states—all within four years. I did not do it alone—naturally not, nothing is ever done alone in politics—but it was done by a comparatively small group of unpaid volunteers almost all of whom were as ignorant of politics at the start as I was.[9]

Or let me tell you about Susie. Susie is a wonderful girl. She and her husband volunteered about the same time I did. Susie had a small baby; she packed him into a market basket, stuck him into the back of the family car and went out and did field work.

In the following four years Susie replaced a national committeeman with a candidate of her own choice, elected a congressman, and managed the major portion of the campaign which gave us a new governor. She topped her career finally by being the indispensable key person in nominating a presidential candidate of one of the two major parties. I'll tell more about that later; it's quite a story.

All this time Susie was having babies about every third year. She never accepted a cent for herself, but it became customary, after the house filled up, for the party to see to it that Susie had a maid during a campaign. The rest of the time she kept house, did the cooking, and reared her kids unassisted.

During the war she added riveting on bombers during the night shift to her other activities.

We can't all be Susies. But remember this—all that Susie had to offer was honesty, willingness, and an abiding faith in democracy. She had no money and has none now ... and she had no political connections nor experience when she started.

I could fill a whole book with case histories of people like Susie. Most of them are people of very limited income who are quite busy all day earning that income. One of the commonest excuses from the person who knows that he should take part in civic business is: "I would like to but I am just so tarnation busy making a living for my wife and kids that I can't spare the time, the money, nor the energy."

The middle class in Germany felt the same way; it brought them Hitler, the liquidation of their class, and the destruction of their country. The next time you feel like emulating them, remember Susie and her four kids. Or Gus. Gus drove a truck from four a.m. to noon each day; he had a wife and two kids. By sleeping in the afternoons and catching a nap after midnight he managed to devote many of his evenings to politics. In less than three years he was state chairman of the young people's club of his party and one of the top policy makers in the state organization.

What did he get out of it? Nothing, but the satisfaction of knowing that he had made his state a better place for his kids to live.

The Guses and the Susies in this country are the people who have preserved and are preserving our democracy—not the big city bosses, not the Washington officeholders, and most emphatically not your loudmouthed and lazy brother-in-law.[10]

I have said that the rest of the book will tell only things that you will learn anyhow, through experience. They will be recounted in hopes of saving you much time, much bitter experience, and in the expectation that my own experiences may make you more effective more quickly than you otherwise might be. I also hope to brace you against the disappointment and sometimes disheartening disillusionments that are bound to come to anyone participating in this deadly serious game.

One warning I want to include right now, since you may not finish reading this book.

You are entering politics with the definite intention of treating it as a patriotic public service. You intend to pay your own way; you seek neither patronage nor cash. Almost at once you will be offered pay. You will turn it down. Again and again it will be offered and patronage as well.

There will come a day when you are offered pay to campaign for an issue or a man in whom you already believe and most heartily and to whom you are already committed. The offer will come from a man who is sincerely your friend and whom you know to be honest and patriotic. He will argue that the organization expects to pay for the work you are already doing and that you might as well be paid. He honestly prefers for you to be on the payroll; it makes the whole affair more orderly.

Everything he says is perfectly true; it is honest pay, from a clean source, for honest work in which you believe. It happens that just that moment a little extra money would come in mighty handy. What should you do?

Don't take it!

If you take it, it is almost certain to mark the end of your climb toward the top in the policy-making councils of your party. You are likely to remain a two-bit, or at best a four-bit, ward heeler the rest of your life. A volunteer fireman need not have money to be influential in public affairs, but he must not accept money, even when it is clean money, honestly earned. If you take it you are a hired man and hired men carry very little weight anywhere.[11]

There is a corny old story about a sugar daddy and a stylish and beautiful young society matron. The s.d. offered her five thousand dollars to spend a week at Atlantic City with him. After due consideration she accepted. He then offered her fifty dollars instead. In great indignation she said, "Sir, what kind of a woman do you think I am?"

"We settled that," he told her. "Now we're haggling over the price."

Don't make the mistake she did. There is however some sense in haggling over the conditions. If you reach the point where your party wants you to accept a state or national party post, for full-time work in a position of authority, or your government asks the same thing of you, under circumstances where it is evident that you must surrender your usual means of livelihood, go ahead and take it, if you honestly believe that your services are needed and that you can do the best job that could be done by any of the available candidates. It is well understood in political circles that public office or major party office is almost always badly underpaid for the talent and experience the jobs need. The salaries, therefore, are regarded simply as retainers to permit the holder to eat while serving the public.

But don't be a paid ward heeler!

On the other hand, it is not wise to hold the petty hired man in the party in contempt. You will have to work with many of them no matter what party you are in. The biggest reform movements in this country include areas where the Machine is dominant; the most perfectly oiled political machines include areas where all the work is volunteer and unpaid. You will find the paid precinct or headquarters worker as honest and as conscientious as employees usually are; almost invariably he or she will be sincerely loyal to the party employing him. They usually do more work than their wages justify. Remember this, and be careful what you say to them or about them. Most of them are as honest as you are and just as anxious for your man to win.

But don't become one of them if you expect to have any major effect on the future of this country.

Well, then, if you are never to accept pay, except under remote circumstances in which the job even with pay is likely to be a financial sacrifice, what can you expect to get out of it?

The rewards are intangible but very pleasing to an adult mind. The drawbacks are easier to see. You must expect to be regarded with amusement and even suspicion by some of your acquaintances. Most of the station-wagon crowd you used to run around with will be certain that you are in it for what you can get out of it, for that is the only reason their unmatured minds can imagine. They are the free riders in the body politic; despite the fact they do nothing to make our form of government work, they serenely believe that the wheels go around by their gracious consent and think that gives them the privilege of caustic and ignorant criticism of the laborers in the vineyard.

Moreover, you won't be seeing so much of them from now on. You will find that you are beginning to select your social contacts, your dinner guests and your golf partners from among your political acquaintances. You will do this because you find more intelligence, more brilliant conversation, and more worthwhile solid human values among your political acquaintances than you found among the free riders. You won't plan it that way, but it will work itself out.

You will play less bridge. Bridge is a good game, but it is dull and tasteless when compared with politics.

Your brother-in-law will shun your company. That's clear gain!

There will come to you the warm satisfaction of being in on the know every time you pick up your newspaper. News stories that once were dull will be filled with zest for you, because you will know what they mean.

From the stand point of sheer recreation you will have discovered the greatest sport in the world. Horse racing, gambling, football, the fights, all of these things are childish and trite compared with this greatest sport! Politics is a game where you always play for keeps, where the game is continuous, always fresh and full of surprises. It will take all of your intelligence and wit and all that you have ever learned or can learn to play it well. The stakes are the highest conceivable, the lives and the futures of every living creature on this planet. How well you play it can make the difference between freedom or a firing squad, civilization or atomic conflagration. For this is the day of decision, the hour of the knife, and none but yourself can choose for you the correct path in the maze.

Over and above the joy of playing for high stakes is the greatest and most adult joy of all, the continuous and sustaining knowledge that you have broken with childish ways and come at last into your full heritage as a free citizen, integrated into the life of the land of your birth or your choice, and carrying your share of adult responsibility for the future thereof!

CHAPTER III

"It Ain't Necessarily So!"

This chapter will be devoted to smearing a few cherished illusions.

I do not suppose that you are suffering from all of the misapprehensions listed herein; however, if you are typically American and have not had extensive political experience, it is likely that you are subject to one or more of them. Before we go ahead with detailed discussion of the practical art of politics it is well to correct the record with respect to many items in the Great American Credo—items which happen to be wrong and which have to do with politics. It will save your time and mine in later discussion.

With the possible exceptions of love and religion probably more guff is talked and believed about politics than about any other subject. I am going to discuss some of that guff and try to puncture it. Most of the items I have chosen because I myself have had to change my opinions through bitter experience in politics.

My present opinions are subject to human error. However, they are based on the scientific method of observation of facts; they are not armchair speculation. If you don't believe me, go take a look–several looks!—for yourself. But I suggest that you will save yourself a lot of the mistakes I made if you assume that what I say is true until through your own experience you reach a different opinion.

Warning! Every generalization I make about groups of people is subject to exceptions. You must meet each citizen with an open mind. For example, there is no natural law which prevents club women from being intelligent and quite a few of them are.

Now let's let our hair down and speak plainly. We are going to discuss a lot of sacred cows and then kick them in the slats. We are going to mention a lot of unmentionable subjects, using everything but Anglo-Saxon monosyllables. We are going to discuss Catholics and Communists and Jews and Negroes, women in politics, reformers, school teachers, the nobility of the Irish, civil service vs. patronage, and whether Father was right. I will try to tell the truth as I have seen it. I hope I won't splash any mud in your direction but I may.

"One should never consider a man's religion in connection with politics." This is a fine credo, based on the American ideal of freedom of religion. It happens to be cockeyed and results from mushy thinking. One should always consider a candidate's religious beliefs; it is one of the most important things about him. Whether a man is a Catholic, a Protestant, a Communist, a Mormon, or a Jew has a very strong bearing on how he will perform his duties in certain jobs.

(Communism is, of course, classed with the religions—more about that later.)[12] The important thing to remember is to consider a man's religion objectively, in relation to what you expect of him, and not in an attitude of blind prejudice.

There is nothing discriminatory nor unAmerican in scrutinizing a man's religious beliefs in connection with politics. A man's religion is a matter of free choice, even though most people remain in the faiths to which they were born. A Catholic can become a Jew; a Communist can become a Quaker.[13] A man's religious beliefs offer a strong clue to his attitudes, values, and prejudices and you are entitled to consider them when he is in public life.

For example—let us suppose that you live in a mythical community where the school board can, at its discretion, assign public funds to the support of private schools which are open to the public—parochial schools, of course. Let us suppose that you believe that public funds should be used only for state-controlled schools. Two tickets of candidates are before you, one Catholic, one non-Catholic, all equally well qualified, good men and true.

Should you vote for the ticket which will support your own opinion, or should you ignore what you know about the candidates and vote for the one with the pretty blue eyes?

Or let us suppose—same election; same town—that you are a non-Catholic who believes that tax money should support popular education but that the government should not be allowed to determine the nature of that education, except, perhaps, for the three R's. It is your belief that the individual parents should control the training received by their children; you fear state domination. Whom should you vote for?

Or suppose you are a Catholic but believe that public funds for support of Catholic schools would be the first step toward state control of those schools. Which way do you vote?

The problem can become still more complicated. Congress is considering subsidizing scientific research; many of the best colleges and universities in this country are controlled or dominated by members of a particular faith. Would you refuse a research subsidy to Notre Dame but allow it to some state-owned college in Tennessee, the state where biology is subject to the vote of the state legislature?[14] Or how about the great University of Southern California? It was a Methodist college once; there has been a divorce of sorts but the influence is still there. Can USC be trusted with a subsidy in mechanical engineering, or does nothing less than outright atheism meet your standards for freedom of thought?

In passing it might be added that private schools with church leanings were an indispensable factor in the scientific research that won World War II.

What bearing does all this have on the problem of tax funds for parochial schools? It obviously has some bearing and you yourself will have to consider the factors when you decide whether to campaign for the ticket made up of Catholics or the one made up of non-Catholics.

In my home state recently there were introduced in the legislature a group of bills concerning birth control and a group of bills concerning liquor licensing, local option, and prohibition. The governor received hundreds of letters about these two groups. Analysis showed that practically all of the letters about the birth control measures came from Catholic groups, whereas the letters about liquor measures came almost exclusively from Protestant church groups.

Is it not obvious, then, that you have a legitimate interest in the religious persuasion of your state legislator, your state senator, and your state governor?

Suppose you are a Christian Scientist; how do you feel about socialized medicine? Suppose instead that you are strong for socialized medicine; is it of interest to you that a candidate for the legislature is a Christian Scientist? Or should you ignore it?

Is a Jewish congressman more likely or less likely to vote to open the United States to any and all displaced persons in Europe? Who is the more likely to put a rider concerning Palestine on a bill to end money to Britain—a non-Zionist Jew or an Irish Catholic from Boston?

The ramifications of the political effect of a man's religious beliefs are endless. I do not intend to suggest answers to any of these questions; I simply mean to make it clear that to shut your eyes to this factor is to handicap yourself grossly in the analysis of men and issues. To vote always for a person of your own religious persuasion, or, at the other extreme, always to ignore a candidate's religious beliefs, is equally stupid and unrealistic. The first attitude is narrow and unAmerican; the second is custard-headed. Call 'em as you see 'em!

Now let us discuss church groups.

(Before shouts of dirty red, fascist, papist, Jew, atheist, or whatever, start coming in, let me put this on record: Like all my great grandparents, I am native born, an American mixture, principally Irish, with a dash of English and French and a pinch of German. My name is Bavarian Catholic in origin; I was brought up in the Methodist faith. I believe in democracy, personal liberty, and religious freedom.)

American church groups as a whole are frequent sources of corruption and confusion in politics. This is a regrettable but observable fact which runs counter to the strong credo that if only the church people would get together and assert their strength we could run all those dirty crooks out of town. In fact, the church members of any community, voting as a bloc, could swing any election, institute any reforms they wished, and make them stick.

It does not work out that way.

I do not question that we are more moral, more charitable and more civilized as a result of church instruction and the labors of priests, ministers, rabbis, and countless devout laymen. Nor do I question the political good intent of church groups. The evil consequences result from good intentions applied in too limited a field.

Only rarely do churches become interested in the way in which paving contracts are awarded, how the oral examinations for civil service are conducted, or the fashion in which real estate values are assessed for tax purposes. Towing fees for stolen cars, the allocation of gasoline tax monies between city, county, and state, or the awarding of public utility franchises are likely to be too "political" for discussion from the pulpit.

Instead church groups are likely to demand laws which prohibit practices contrary to various religious codes of morals. A crooked political machine is happy to oblige each church as such laws do not hamper the machine; they help it-first, by providing new fields of graft and corruption, second, by insuring the votes of the madams, bookies, etc., engaged in these fields, and third, by obtaining support from the very church groups which demanded the legislation.

If you believe that laws forbidding gambling, sale of liquor, sale of contraceptives, requiring definite closing hours, enforcing the Sabbath, or any such, are necessary to the welfare of your community, that is your right and I do not ask you to surrender your beliefs or give up your efforts to put over such laws. But remember that such laws are, at most, a preliminary step in doing away with the evils they indict. Moral evils can never be solved by anything as easy as passing laws alone. If you aid in passing such laws without bothering to follow through by digging in to the involved questions of sociology, economics, and psychology which underlie the causes of the evils you are gunning for, you will not only fail to correct the evils you sought to prohibit but will create a dozen new evils as well.

If your conscience requires that you support legislation of the type referred to above, then you must realize that your overall problem of keeping honest officials in office to enforce the laws is made much more difficult and that you must work several times as hard and be much more alert if you are to have an honest government.

As an amateur, unpaid, volunteer politician interested in certain reforms, don't expect any real help from the churches even in accomplishing the moral objectives of the churches, or you will be due for a terrible disappointment.

Women in Politics[16]

We were told, when Votes-for-Women was new, that women would bring higher moral standards and would eliminate the graft and corruption which the nasty old men had tolerated.

Women have had an effect—they caused the installation of a powder room in the Senate's sacred halls; they changed the atmosphere of conventions from that of a prize fight to something more like a college reunion, and they broadened the refreshments at political doings from a simple diet of beer and pigs knuckles to a point where the menu now includes ice cream and cake, little fancy sandwiches, coffee, and wine cooler. The change in refreshments is a distinct improvement; I don't like pigs knuckles.

They have also brought political corruption to a new low.

Whoops! Easy, girls—please! Quiet down. There are exceptions to all rules—you may be the exception to this one. That is for you to determine. Judge yourself.

A great many women are willing to go to hell in a wheel barrow. Their husbands may be politically just as dishonest but the gentle sex are usually willing to sell out at a lower price. They go in for cut-rate corruption. If you file for office, or become the manager of a candidate, you will quickly be besieged by telephone calls from women who want to help in your campaign. They sound like enthusiastic volunteers; you will find very quickly that they are political streetwalkers who will support any candidate and any issue, without compunction, for a very low price.

Brush them off, but politely—a practical politician should never go out of his way to make anyone sore; your purpose is to win elections, not arguments. Let the opposition hire them. They are hardly worth the low price they charge, even to him. Later on in the campaign you will find that he hired one of them a little sooner than you had expected; she worked as an unpaid volunteer all through the campaign in your office and turned in nightly reports to the opposition.

Don't let it throw you. As a politician you must learn to expect such little disappointments. And don't let it shake your faith in human nature. If you take the trouble to count up you will find that you know many more people who are certainly honest than the number who are just as certainly crooked. The crooks just seem more numerous because they get in your hair more.

I am inclined to believe, although I am not sure, that the average difference in political honesty between men as a group and women as a group in this country is actually considerable and not just a matter of a lower pay scale for corruption on the part of women. As a result of punching thousands of doorbells and talking with many, many men and women I am of the opinion that women usually know less about political issues than men and consequently are less inclined to realize that political issues are of moral consequence. This probably results in part from the fact that most women, in their daily occupations, are not thrown out into the world to the same extent as their men folk and consequently never really find out what makes the wheels go around.[17]

Furthermore, the husband is inclined to encourage the little woman to remain in ignorance; it gives him a chance to show off at home how much he knows without betraying just how little it is—since it is still more than she knows.

In any case, I have heard hundreds of times, in campaigning from door to door, this remark: "Oh, I leave everything of that sort up to my husband!" And she does, too—she doesn't know a filibuster from first base and she thinks an alderman is something to hang clothes on.

So, when somebody tips her off that she can pick up a few dollars in a campaign year by a little light work in her neighborhood, she is ripe for it, gullible, willing to work for low wages, and so naive she doesn't know that it's loaded. It won't even worry her to work for the candidate George is voting against, because she does not think it matters. She can work in a dozen campaigns and never find out anything about men nor issues; she just knows that State Senator Slotmachine is such a nice man and here is some literature about him and would you like to have a car sent around to take you to the polls?

Slotmachine is a nice man, too—he's an old hand in this business; his public personality is a work of art. You would enjoy having dinner with him.

After a while, if she is bright enough to mark a sample ballot, she does notice a few things, but it does not wise her up to what she is doing; it simply makes her utterly cynical about politics. She becomes convinced that the shoddy business she has been associated with is the only brand of politics in existence. Nothing will change her junior-size mind on the subject and she is forever lost to your side.

So don't hire her and don't bother to try to convert her. The women volunteers who work for you, free, can get ten votes to the one she can round up for Slotmachine.

All through it she remains a good wife and mother and a respected member of the P.T.A. You can't tell her from an authentic volunteer by sight nor, very quickly, by conversation. There is however one simple touchstone which works in nine cases out often. The sincere volunteers will look you up in person and offer their services; the political prostitutes will telephone, offer their services over the phone, and then ask you to come to see them. (I think they believe it improves their bargaining position.)

The rule is not infallible, but it will help you to be on your guard. It won't help you much when you encounter this particular bird of prey by chance, on ringing a doorbell, and it won't help you at all when the opposition hires her and then sends her to see you; nevertheless it will save you a lot of grief. After a while you will acquire a sense of smell concerning this sisterhood. In the meantime don't trust too far any volunteer previously unknown to you, who has great enthusiasm for unpaid work but does not seem to grasp the issues in the campaign. Don't put such a person to work in the headquarters; let her (or him) distribute literature—and then make a spot check on its distribution.

Still another breed of cat is the club woman politician. She organizes women's political clubs. She may not be dishonest; she is usually ambitious and stupid and she is almost never of any use in winning an election, although she may help you lose one and her enmity is to be dreaded. Look, ladies-don't be a woman politician, or a women's politician! Be a politician who happens to be female.[18] You are the equals of men-remember? It isn't necessary to go off and form little groups of your own; stay in the main event and start swinging.

After the above nasty cracks about women in politics I am very happy to be able to say that a sincere and enlightened female volunteer is the best political worker you will find. She is a pearl beyond price, but, thank Heaven, not too hard to find. She will average from twice to many times as useful as the general run of sincere male volunteers. She is not nearly as choosy as the men are about what kind of work she will do. She'll punch doorbells, and sweep the office, and type letters, and distribute newspapers, and watch the count, and drive a car on election day.

She doesn't expect anything out of it but the satisfaction of serving. Somebody told her once that a good citizen finds it a privilege to work for the betterment of her country. She believed it and she still believes.

Bless her heart—she is the backbone and sinew of every honest political organization in the country.

"Mother knows best, dear," or "Remember, Father is usually right." It is standard practice for the elder generation to harry the younger generation with saws about "older and wiser heads." The youngsters resent it, until they get old enough to pull it on the next crop.

There is just enough truth in it to keep the practice going. Wisdom mellowed by years is beautiful to see. In public life the occasional George Norris, Henry Stimson, or Justice Holmes are as breathtakingly inspiring as the Lincoln Memorial. However, in most cases, what passes for the wisdom of age is merely the sophistication of experience, knowledge of precedents, and familiarity with details.

In politics our senior citizens habitually assume that their years entitle them to respectful attention from their juniors on the assumption that they have mellowed, grown broader, and increased in patriotism and social responsibility through the years.

It ain't necessarily so! Although there are shining exceptions, the average run of our elder citizens are notably avaricious, self-centered, unpatriotic, and devoid of any notion of social responsibility, as compared with their sons and daughters.[19]

Before I am accused of personal bias let me state that I am no longer a youngster myself. I've reached the shady side of the street, short of wind, and fat in the middle. To my regret, young women now call me "sir" and stand when they speak to me.

And I do not speak primarily of political office holders. I do not refer to the congressional practice whereby senility is an asset rather than a liability in reaching key committee posts, nor am I repeating the arguments about "The Nine Old Men." As a matter of fact old men in politics seem to keep young better than their nonpolitical contemporaries. (Try shadowing a seventy-year-old congressman during a campaign; he'll wear you to a frazzle.)

In any case, the problem of superannuated officeholders is a political issue outside the scope of this book. I am speaking of the ordinary run of elder citizen, your neighbors, your parents, your grandparents. They may be kind to children and dogs and sweet to look upon in church and at family dinner, but politically speaking the average lot of them are the sorriest bunch of old vultures you will find.[20]

Remember that when you start punching doorbells.[21]

I am sorry to say these things. I like Great Aunt Mary's apple pies, her neat grey hair, and her wrinkled smile as well as you do. I had the opinion forced on me.

For example—several years ago I was covering a district which lay, half and half, on the right side and the wrong side of the tracks. I interviewed young and old, rich and poor, men and women. I expected and found certain trend differences in view point on the two sides of the tracks. But I was surprised to find an amazing and almost unanimous similarity in viewpoint on the part of the elderly rich and the elderly poor.

Mellowed and altruistic interest in the welfare and future of the whole community? Far from it! The elderly poor wanted $200 every month, or some other pension which would pay them more income than they had ever earned while working, and they didn't give a hoot what it did to the country! The elderly rich wanted the highest possible return from mortgages, rents, dividends, or other investment income, and they didn't give a hoot what it did to the country!

Naturally they tended to vote for different men and different issues —except when a candidate managed to kid both groups. But the motivation was identical and utterly shameless—blind and narrow selfishness, short range in nature and quite unconcerned with the welfare and future of their children and their country.

Nor were they driven to it by hunger. One can forgive the selfishness of hunger, but even on the wrong side of the tracks they were neither hungry nor cold, as it happened to be in a state with, possibly, the most favorable and generous welfare conditions in the country. No, it was the greed of old age.

There appears to come a change in most people somewhere around the age of fifty when they cease to think of the rest of the human race except in terms of what others may be induced to do for them. A divorce from the human race is not a good thing for a man's inner being; it reduces his spiritual life to its lowest common denominator—the animal level. It is absolutely imperative that a man care for something more than for himself for him to remain human. Most tragically, many people, when they have reached the age when their own children are no real responsibility and are thereby not forced to think in terms of the welfare and future of their children, find nothing to replace such interest. The more nearly truly human of us substitute, for a preoccupation with the needs of our own children, after they are grown, a wider interest in all children everywhere, and the future of the nation and the race.

An elder citizen who has come safely through this difficult transition is a joy to know and is likely to make your best political worker. He will labor until the day he dies for the public welfare as he sees it, without the slightest expectation of personal reward. He usually has enough free time to be very effective, his views are respected, and the physical labor of politics is within the limits, in most cases, of even the elderly and infirm.[22]

I remember in particular one old lady who was the mainstay in a dozen campaigns. She lived along on a pittance and was nearly seventy when I met her. Her first name was Laura. (I never dared call her by her first name.) Not only did she work her own precinct and campaign among her friends, she was usually headquarters manager and handled the field workers and the public with cheerful tact.

Laura wanted to know only whether it was a private fight or could she get in it, too? She was never indifferent to any public issue; she would study, decide what was right by her values, and start pitching. I recall with pleasure watching her shake her finger under the nose of the chairman of a school board while scolding them all. "You gentlemen should be ashamed of yourselves! To have the temerity to sit there and tell me, a citizen and taxpayer of this state, that you do not intend to carry out your sworn duty!"

The fight was none of hers; it involved discrimination against a group in which she had no remote interest. But Laura won the fight; the school board backed down.

(Incidentally, keep your eye on school boards; they tend to disregard the constitutional rights of the public even worse than do judges.)

Churches, women, and elderly people have come in for quite a lambasting in this chapter; it is gratifying to emphasize that from these very groups you will get your most effective and altruistic volunteer workers. Embattled grandparents, militant housewives, and crusading clergymen will be your best shock troops. The rank and file of your organization will be young people, usually less than thirty-five years old—a man under thirty-five who cannot be induced to take any action for the welfare of his community and nation is morally dead and blind to his own personal interests; it is usually easy to interest young people in volunteer political activity. They have not yet acquired the case-hardened selfishness of their elders; they are enthusiastic, energetic, and they believe in the future.

But of the four groups, the young, the old, women past girlhood, and the clergy, young people are the only ones to be approached with no particular caution. The others are guilty until proven innocent from a standpoint of usefulness in volunteer political work.

Clergymen, although usually worse than useless, make wonderful altruistic politicians when they happen to possess both love of humanity and hardheaded realism. Too often the ones that are bright aren't good and the ones that are good aren't bright. Catholic priests are usually both and you can work with them to limit the issues in which you both see eye to eye. If you happen to be Catholic yourself the problem is simple.

The same may be said of rabbis, to a lesser extent.

"Politicians are usually crooks." This statement is false; it is likely that no other canard has done more harm to the United States of America.

The statement is false even when it is limited to machine politicians and bosses. Political bosses are not more crooked than the average run of nonpolitical laymen; they are less crooked.

I know my statement runs contrary to popular prejudice. I am aware that graft, bribery, nepotism, special privilege, and outright official connivance in crime and racketeering have stained and continue to stain our public life. I still stand by the statement.

Consider how a political boss operates. His purpose is to stay in power not this term, but next term, and the term after that. To do that he has to have a majority of satisfied customers—the public—you! Despite all stuffing of ballot boxes, despite thuggery and intimidation at the polls, there is rarely (I am tempted to say "never") a time when aroused citizenry cannot throw him out of power and sometimes into jail as well. He cannot operate with the impunity of a Hitler. On the average he has to please you.

The successful political boss has to stay fairly honest. Just how honest that is depends on how honest the electorate is. His success depends on delivering to the public what the public really wants; not what you the public say you want when you are busy complaining, in private conversation, about those crooks in the city hall.

Have you ever had a traffic ticket fixed? Have you ever slipped an underpaid building inspector ten or twenty bucks not to report some violation of the building code? Have you ever patronized a prostitute? Have you ever taken a drink of bootleg liquor? Have you ever patronized a black, or even a light grey, market?

If you have done any of these things your own moral state is no higher than that of the Machine under which they exist. The man who believes in capital punishment cannot afford to turn up his nose at the hangman, nor can the man who offers a ten dollar bribe to a petty official afford to be righteously indignant when he finds that the scoundrels have stolen the city treasury. Nor can you expect a judge to fix a parking ticket for you on Monday but refuse to spring a known criminal on Tuesday. The difference is one of size, not of kind. Being a private citizen, your contact with graft and corruption is likely to be retail, but the man you deal with is a professional—necessarily! For him it is wholesale.

Your own record of civic virtue may be absolutely spotless; I have known many, many people who never violate public morals in any way. Nevertheless, even if you are such a person, you are aware that your friends and neighbors do such things as those listed above. Sometimes they give the excuse that the system forces such derelictions on them. This excuse is rarely if ever valid, but how often is it accompanied by an all-out effort to correct the conditions complained of? I have yet to find such a case.[23]

Very well-political dishonesty is a condition shared by the boss and the body politic. I have stated that the boss is more honest than the average of the lay public. I will attempt to prove it.

I am speaking here of the boss who stays in power, year after year, not of the man who suddenly climbs to power, overreaches himself, and gets promptly thrown out. The boss who stays in power is a businessman. Like all businessmen he deals daily in numerous transactions which are intended, over the long pull, to cause a profit to accrue to him. These transactions strongly resemble those of other businessmen, i.e., they are intended to benefit, one way or another, both parties to the transaction, and they must be, if not legal, at least not of such a nature as to cause the formation of vigilante societies by angry citizens. Most of them are mild in nature and stack up favorably when compared with the daily labors of the second hand automobile business, the cosmetics trade, the public relations profession, the undertaking business, the real estate business, and the "opportunity" schools.

But the business of the machine boss differs in an important respect from that of these respectable, legitimate occupations. His business is transacted orally, usually for future delivery on his part. And his word is better than the bond of most people!

Consider how it must be. (Later on you will find that I am right, through your own experience, but now let us tackle it by analysis.) This man deals in wind, in oral statements. Political commitments are not written down. These contracts are settled with such remarks as, "Okay, Joe, I'll see the commissioner next week and take care of it," or "All right, then, we'll support your man," or "That street will be repaved in six weeks." That's all.[24]

His word has got to be good—or he goes out of business.

It is good. Under circumstances where a written contract is necessary, and sometimes a law suit, to force a layman to carry out his solemn promises, a business politician will meet his commitments without a murmur, even though the situation may have changed so that it costs him immediate loss or embarrassment. His personal reliability is his stock in trade; he must not jeopardize it.

I can hear a snort of derision; everybody knows that broken political promises are common as flies around a garbage dump. Whose promises, citizen? The promises of a "reform" ticket? The promises of some office-happy candidate? Or the flat commitment of a successful boss of an entrenched machine? If you know personally of a broken promise of the last-named sort, I would appreciate it if you would write to me, care of the publisher, giving me the details.[25]

The commitments of a successful boss are made with a careful eye to what his experience has taught him the majority of the people really want. The Pendergast Machine, now moribund, of Kansas City, Missouri, was a perfect example of a machine which gave the people what they cared most about and stayed in power for more than a quarter of a century thereby. People want good pavements and aren't too interested in the cost; Kansas City had excellent streets all through the reign of the Machine. Parents want good schools; the Old Man saw to it that high-minded citizens sat on the school board and forbade the members of the organization to monkey with the school system.

People also want personal service from their government. The Old Man was in his office daily and the door was open. Any bindlestiff or solid citizen could walk in his office, make his complaint, and get a decision. The decision was backed up with action, and most of the decisions and actions would have met with your warm approval. The cop who had shoved around the bindlestiff was ordered to cut it out; the solid citizen got the chuck holes in front of his house repaired.

In addition, Widow Murphy got free coal and free food to help her and her kids through the cruel midwestern winter.

It is alleged that there was a Machine ruling which forbade shooting south of Twelfth Street. True or not, the respectable citizens worried very little about killings around the water front. Later on, when the Boss grew older and the Machine lost its careful attention to detail, it was certainly true that the sound of gunfire was not too uncommon in the "respectable" neighborhoods; the gangsters had moved south and set themselves up in fine apartments on Armour Boulevard, Linwood, the Paseo, and the Plaza.[26]

This was the beginning of the end; the Machine had overreached itself and permitted things which the citizens really disliked. Shortly thereafter the Old Man was so old and sick that he was unable to attend personally to one campaign. The "Boys" decided to make him a present, a really fine majority. Ghost votes were common in Kansas City, but this one reached a new high—or low. The Machine majorities were so enormous; the tallied opposition so microscopic, that it was easy for a federal grand jury to dig up proof of fraud from the persons who were willing to swear that they had voted against the Machine.

Does all of the above mean that I approve of political bosses and political machines? Decidedly not! The people of Kansas City paid a terrific price, both in money and intangibles, for their complacency, all through the reign of the Machine. Toward the last, as the Boss grew old and the invisible government became less well disciplined, the price became outrageous and intolerable. Bombings, shootings, and other crimes of violence became commonplace.

But the greatest loss was in their own attitude toward civic virtue. They had become—the "respectable" citizens—cynical about the possibility of honest and efficient government. They had lost faith in themselves. There were many times in the early decades of this century when a concerted effort could have cleaned up their city; they were too indifferent and too cynical to attempt it wholeheartedly. When the change came, it resulted from decay of the Machine and from organized efforts outside the city, not from the inhabitants thereof.

Something very like the disease of Kansas City caused the downfall of France.

If bosses were the utter villains the "respectable" citizens think they are, political reform would be easy. In addition to being no crookeder than the average of the public and notably more meticulous in their personal honesty in one respect, successful bosses and successful machine politicians have many other virtues.

No matter how twisted are their attitudes toward public money and private graft, successful machine bosses have these positive virtues: They are friendly. They are helpful. They are tolerant. They are good tempered. They are conciliatory. They are personally reliable. They give patient attention to the personal problems of people who ask them for help, without being stiff-necked about it.

In short they like people and they show it, in practical, warmhearted ways. If you expect to compete with them successfully you've got to emulate them in their virtue while shunning their vices. You can be as pure in heart and motive as Sir Galahad but it won't make your strength as the strength often unless you get down off your horse.

Roark Bradford has John Henry tell how to get along with a hog." First you got to be a friend to the hog. Then he Mend you back." John Henry knew his political onions.

Take a tip from the Salvation Army. Sal remains pure in heart by never failing to extend a hand to anyone who asks for help.

Possibly you don't like Jews. Perhaps you think the Negro should be kept "in his place." A foreign accent may annoy you. You may consider the poor to be loafers and bums. Or, vice versa, you may consider all the wealthy to be crooks. Perhaps Catholics come in for your special scorn. Whatever it is, if you hold any of these attitudes, you had better search your soul and change them, or you will never be a success in politics.

I don't mind in the least injecting discussion of racism and minorities into this book. There is no partisan bias here; both major parties are forthright in their official attitudes condemning these things, despite the mouthings of individuals or groups, despite filibusters by members of one party and the silent, guilty consent thereto by the other.

The bosses understand democracy better than many who turn up their noses at political machines. That is why you find the minorities supporting the Machines with such regularity.

You must meet the competition or you might as well go back to your ivory tower and wait for the dictatorship. It may suit you better, for dictators stand for no nonsense from people of the wrong race, or the wrong religion, or the wrong place of birth. Of course he is equally likely to liquidate you—stand you up against a ditch and shoot you.

Or take your business away from you and give it to a party member.

I am sorry to raise these issues but this book is intended to be truthful rather than diplomatic. If you expect to beat the machine politicians in the practical arts of democracy, you have got to be at least as democratic as they are. It is not necessary that you like any particular man nor group; it is necessary that you be friendly in manner and that you honestly treat all comers with fairness, tolerance, and decency. If you do have any strong prejudices against particular minorities you had better learn to guard most carefully against showing them, both in public and in private.

"A government should be run like a business." This is a common saying and it is rather silly. Look, citizen, a machine boss is a man who runs a government like a business. Is that what you want? A business is an organization run from the top down for the personal profit of the persons who run it. Businesses provide the public with something they want in return for money. Isn't that what a political machine does?

Our Constitution is quite explicit about the purposes for which we formed this government They are: "—to form a more perfect Union, establish justice, insure domestic tranquility, provide for the common defense, promote the general welfare, and secure the blessings of liberty—" That's all. Nothing about making a profit, nothing about being "businesslike."

The methods of business are appropriate to the purpose of business; they are quite incompatible with the purposes of the Constitution. I do not mean to imply that a businessman cannot serve well in public office; I do mean that he had better not try to run things with the high hand with which he bossed his own business or the public will throw him out on his ear once they get wise to him.

It is quite true that some areas of government administration could stand more "businesslike" handling, but most attempts to tidy up government service to the public results in screams of anguish from any who are annoyed by the changes, without any compensating applause from those who are helped.

Take for example the new income tax form. It has been functionalized and made explicit, with all the turns clearly marked, to the point where a moron with a hangover can make out his own income tax return unless he is in the habit of keeping his business records in the bottom of his laundry bag. (Or unless he keeps two sets of books, one for tax purposes and one for his eyes alone!)

The thing that makes the new income tax form a marvel of bureaucratic genius is that the tax bill it defines with such graphic simplicity is a hodgepodge of second thoughts, blind guesses and compromises, resulting from the agonized efforts of officeholders of both parties to be reasonably fair to all hands while paying for the most expensive war in history.

Have you heard any applause for the result? Like fun! The mere mention of March 15 by a comedian produces sour laughter.[28] The effort of figuring out the form is regularly portrayed as being more difficult than understanding Dr. Einstein's relativity.

Forget that notion about running a government like a business. A government should not be run for profit and a democratic government can't be run by a boss. And as for "businesslike"—are you sure you want it yourself? Do you want your home confiscated if you fall behind on a tax payment with the same speed with which a mortgage holder will foreclose if you fail to pay up, or a landlord will kick you out if you fail to pay rent—or do you prefer the present practice in which the government will stall around for years before putting your place up for auction?

By the way, why do people kick so much at having to stand in line in the post office, or the recorder's office, but are docile as little lambs when queued up in a bank? Is it because they expect service rather than a businesslike attitude from the government they own? Could be, maybe?[29]

"Politicians are always compromising." This statement is quite true but the implication that the process is dishonest is so much balderdash. Compromise is the core of the democratic process. Without it there is no democracy and can be no freedom. Compromise is the process by which we meet the other fellow halfway and agree on a joint course of action not quite pleasing to either party. Every happily married couple is quite used to the system; if it is good at home, is it bad on Capitol Hill? The man who won't compromise is not a lily-white idealist; he is merely a conceited ass and undemocratic to boot.

We will discuss this further under techniques, particularly under "caucuses" and "primaries."

Civil Service versus Patronage. This subject is not nearly so much a matter of all black and all white as most people seem to think. Let us concede that civil service is a good idea in most public jobs below the policy-making level—if the regulations have been drawn with the intent of producing an honest, spoil-free service and if those regulations are honestly administered. Otherwise -and this applies to many cities, counties, and states—it is merely a dodge to entrench the henchmen of a machine in public jobs, beyond the reach of the electorate to "turn the rascals out!"[30]

The wrangle is generally managed through the device of an oral examination for applicants which counts as much, or nearly as much, as the written examination. If your local civil service makes use of an oral examination you are justified in assuming that it is crooked, a racket.

Nor is patronage, or the "spoils system," the benefit to practical politicians it is supposed to be. If a politician once gets started on the road of paying off political obligations with patronage, he quickly finds that there is never enough patronage to go around. Some of our senators meet this situation by becoming insatiable patronage hounds - one of them recently proposed a bill which would have made holding a job as a senior aeronautical engineer at Wright Field a matter of political faith! Others meet it by dropping the matter entirely, refusing to touch patronage, or by delegating it to the official local organization of their party.

Many officeholders have told me in private that the system of refusing to have anything to do with patronage is the only one which is free from headaches and unnecessary loss of votes.

The reason is very simple. For every patronage job there are at least a dozen candidates with good claims—in their own minds, at least—for appointment on the score of political services rendered. That means one man whose loyalty, such as it is, may have been purchased by the appointment—and eleven who are almost certainly antagonized.

After a few terms of this a congressman finds himself surrounded by a sea of disappointed postmaster candidates, each anxious to elect his opponent.

Still, if you are going to be in politics, you will have to face up to the problem of patronage. If you steadfastly refuse to accept it yourself, someday you will find that the job of dispensing it has been laid in your lap. What to do will be discussed under "techniques."

The federal civil service is almost entirely free from the dishonesty which is so prevalent in state and local civil service. It need not concern you too much as it is, by and large, well run and moderately efficient. It is not free from politics; federal civil servants maintain quite a lobby in Washington, but it is almost entirely free from partisan politics. Their efforts run mostly to pressure to obtain larger appropriations, higher salaries, and bigger organizations.[31]

Senator Byrd seems to feel that this is one of the most important problems facing the Republic. I don't happen to think so. You will have to decide for yourself.[32]

The worst thing wrong with the federal civil service is the fact that the salaries and working conditions are not sufficiently high to attract enough competent men in the more responsible administrative positions—a section head in agronomy, let us say, or a division supervisor in aerodynamics research, or a chief physicist for the Bureau of Standards.

This problem is not limited to federal civil service but extends all through government. We pay a congressman $10,000 a year for a job that costs him $15,000 a year to hold under present conditions, exclusive of his campaign expenses, and then wonder why things get fouled up in Washington.[33]

One of the commonest misconceptions has to do with "eating out of the public trough." By popular superstition, every officeholder, appointive or elective, is suspected of living by a process midway between cannibalism and vampirism, and classed with robbing the dead.

Truthfully, comrades, eating out of the public trough is mighty slim pickings. As we just mentioned, it is slow bankruptcy to become a congressman. The situation with state legislators is much worse. A hundred dollars a month is high pay for a legislator or state senator; most states pay less than that. None of them pay a living wage, yet carrying out the duties of the office properly in these complicated days is a full-time job at nearer sixty hours a week than forty.[34]

How do they live?

One of two ways: (a) honestly, through private income or private work done at the expense of public business—and the legislator's own health; it's too big a burden—or (b) by graft, either polite or shameless.

If the legislator is a lawyer, as too many of them are, polite graft is simple.[35] Get your own lawyer to explain the process. Shucks! We might as well be frank. In most states (all states, as far as I know) a legislator who is also a lawyer may practice his profession on the side. He may receive legal fees, size not limited by professional code, for legal services, nature undefined. These fees may be legitimate fees, honestly earned; they may be "clean" graft—fees that fall in his lap because of his prominence as a public official but with no definite strings attached (there is a lot of that and it tends to make a man a tame dog without buying his vote outright); or it may be outright bribery, done in such a manner that it can never be prosecuted.[36]

If you should happen to get interested in cleaning up this particular evil in your home state—it's there!—the method is simple: Pay your legislators about $10,000 a year, which is what they should be worth for what you expect of them; forbid them to earn money through outside business; and institute some type of required publicity of their financial conditions on entering and leaving office, each term.[37]

Simple to state, that is—you will find it hard to formulate in law and very hard to put over, not because of the opposition of the legislators but because of the blind and angry opposition of a great part of the population who hate to see a public official paid a living wage and hate still worse for him to be paid a salary commensurate with the responsibility of the office.[38]

Most strangely and wonderfully, in spite of the nominal salary and impossible working conditions, in spite of the feet that they are usually treated disgracefully by their constituents (who seem to feel that an elected legislator is something between a paroled convict and a chattel slave), a very large percentage of our legislators are earnest, honest, hardworking public servants doing their level best for their state and their constituents.

Why do they do it? Why would any man expose himself to such a fate? In England the profession of government is the highest and most respected occupation a gentleman can enter; in this country a man who dares to offer himself for the public service might as well kiss his reputation goodbye.

Then why do the honest men in public office (and their numbers are enormous compared with the crooks) ever chuck their hats in the ring? Or, once having had their fingers burned, why do they run for reelection? Is it a power complex? Are they publicity-mad exhibitionists? Is it some sort of a vice?

All of the above may enter into some cases to some degree, but I have a different theory as to the main reason. My theory is based on intimate knowledge of many legislators; it may be wrong but here it is, for what it's worth.

I think it's patriotism.[39]

There is a strong conceit held by a large part of the population that it is somehow a little declasse to be an active partisan, that all really nice people are non-partisan. You will hear, "I vote for the man, not the party," said in a smug tone of voice, as if expecting for that pious sentiment at least one more star in the heavenly crown. Among middle-aged and elderly women this attitude is almost universal.

With rare exceptions, I vote for the party, not the man.

Be partisan!

Be party regular. Vote the ticket in the fall of the party whose primary you voted in earlier in the year. Do all you can to enforce party discipline, not only among political workers, but, after election, on the part of your party office holders. Make 'em stick to the party's platform.[40]

Like all generalizations, this rule is subject to some exceptions, but the exceptions are very few, and you should spend several sleepless nights before deciding that a special circumstance merits an exception.

I can give you the thumb rule I use. I won't vote for a man whom I know to be an outright crook, or treasonable to our form of government, or, in my opinion, having some other moral defect so gross to make him a public menace in public office.

But I will vote for a dunderhead against a smart man of the party I am opposing.

After all, all I am asking of the poor devil is that he represent me; the dunderhead, if subject to party discipline, can do so; the smart man from the other party is already pledged to vote contrary to my wishes in the respects in which the two parties differ.

The belief that it is somehow more "idealistic" to ignore party lines arises from a failure to understand the nature of the democratic process. Democratic government is the art of reconciling the desire of every man to do just as he damn well pleases with the necessity of setting up rules and agreeing on programs for the general welfare of all and the protection of each individual.[41]

When there are 140,000,000 individuals concerned the procedure has to be more formalized and more complicated than it is when a single family decides what movie to attend. The process is necessarily as follows; no other system has ever been invented:

Individuals who are somewhat like-minded get together, discuss candidates and issues, iron out their differences, compromise, and agree on a program and a slate for the party primary. The primary they take part in is, of course, that of the party which, in their opinions, most nearly fits their needs. As a result of the primary they hope to make it still closer to what they want.

Other groups have been doing the same thing. After the party primary the groups, successful and unsuccessful, get together in larger groups and make further compromises. Many, perhaps most, of the concessions are made by the successful groups to the unsuccessful ones, for the successful groups are acutely aware that they cannot win in the final election singlehanded.

Somehow, a party platform is hammered out. It is a conglomeration of compromises, representing an average of the hopes and beliefs and needs of many people. No one is satisfied, but half a loaf, etc.—they pledge support.

A campaign organization is worked out. The campaign manager is not infrequently the strongest unsuccessful rival of the head of the ticket; all through the organization you will find disappointed candidates and their supporters pitching in to try and elect the man they opposed a few weeks before. Hypocrisy? Hell, no! It's brotherhood and civilized cooperation.

After the election the compromising process starts all over again, for the successful candidates of each party are now public officials. From unlimited considerations, out of strongly opposed needs, and violent differences in viewpoint they must arrange programs, pass laws, produce an administration.

From this endless and involved series of compromises comes the government of these United States, and of our states and counties and cities.

There is no other way-for a government of free men.

But the point is this: You can't take part in this process without being partisan. What is a political party? It is a large group of people who have agreed to compromise their differences to accomplish a program reasonably satisfactory to all but which none could accomplish alone.

The definition applies to all political organizations. In this country we call that group just below the level of government itself the political party. The groups which make up the national parties are little parties, no matter what they are called-clubs, groups, blocs, wings, leagues. I want to point out that a "non-partisan league" is a political party. So is an "independent women voters' league," or a "civic affairs committee." Mr. Lincoln made it clear a long time ago that calling a tail a leg did not make it a leg.

However, these parties without party labels are usually less responsible and more subject to dishonest manipulation than the parties which openly avow their party nature.

But why be partisan? Why not vote independently, after an earnest scrutiny of the candidates and issues, for the welfare of the people as a whole? It sounds good and it would be very nice if it would work. It would also be nice if pi were exactly 3.000 instead of a bothersome 3.14159 plus.

There are two reasons, one moral and one practical. The practical reason is this: You simply cannot be effective in politics unless you join in the process of compromise and conciliation whereby free men merge little groups into big groups until they accomplish a government. If you are not partisan you are on your own, everybody is out of step but Johnny, and the chances that you can have any effect on how this country is run are 140,000,000 to one against you.

If you write to your congressman about some issue that matters to you he will recognize you for what you are, a free rider, a political zombie, and he will give your opinion the casual attention it deserves.[42] But if he knows you to be an acting worker in the South Side (Democratic) (Republican) Club, he will write you a careful explanation of his own views in the matter and ask you to elaborate yours.

It does not matter whether or not your congressman is of the same political party as the club you belong to, just as long as he knows that you take regular part in the basic democratic process of partisan politics.

Now for the moral reason: Whenever you take part in the group processes of democracy there is an unwritten but morally binding contract between yourself and the other members of the group that you will abide by the will of the majority. If you know ahead of time that the will of the majority is likely to be something that you can't stomach, then you are in the wrong pew and should go find a group more to your liking.

But you have no right to take part in their proceedings, accepting from them a voice and a vote, unless you intend to abide by the outcome of the vote.

The issue can be quite crucial. You will one day find yourself engaged in the process and will see coming out of it a result which you had not anticipated but which you cannot support with a clear conscience. There is then only one answer—get out Resign. Retire.

But don't go over to the opposition! You've had your chance; through your own bad judgment you've muffed it Wait it out and choose your associates more carefully next time. Change clubs, change groups, change parties if necessary, and try again. But do not expect to run with the fox and hunt with the hounds, all in the same campaign.

Being partisan does not mean that you must stay in one party all your life. It is proper to change parties, or to help to form a third party, if you find that the party of your former affiliation no longer represents your views.[43] It is also proper to join a straddle-party, a group which announces its intentions of selecting and supporting candidates on the basis of some issue or program which they regard as paramount, irrespective of party labels. Such a venture although highly speculative is legitimate, but it automatically bars you from any moral right to take part in the regular party processes, including the primary.

It is not legitimate to vote in the Republican primary in the summer, turn around and vote for the Democratic ticket in the fall.

When you accepted a voice in the selection of a particular party's candidates you contracted with the other members of that party to abide by the outcome. Some state's recognize this principle; others are so lax that it is possible in such a state for a man to be registered in one patty, run for office in a second party, then support the ticket of a third party. The moral issue is the same anywhere.

The principle is formalized in a caucus. The caucus is a device used to bind a group to unanimous action and is used both for programs and for the selection of candidates. It works like this: A group of people with something in common get together for the purpose of a political action. Some member moves to caucus. This is a motion on procedure; no issue or candidate is as yet before the group. If the motion carries the group as a whole is bound to act unanimously to carry out the will of the majority.

Pretty rough on the minority? Wait a moment—anyone who at this point decides that he is not willing to bind himself gets up and walks out. He has been deprived of none of his rights as a free citizen, but he has decided of his own free will not to work with this group.

The doors are dosed and the remainder arrive at a majority decision which is binding on them all as the unanimous wishes of the caucus.

Simple, isn't it? You never have to join a caucus, but if you do you promise to five up to the contract. Yet I have met people so politically naive that they refused to bind themselves but demanded that they be allowed to remain and vote and debate. Others will break the caucus after the doors are opened. One "reformer" type is particularly prone to this sort of political dishonesty; he can always find reason why "the greatest good of all the peepul" demands that he go back on his word.[44] It marks him as dishonest, he is not invited to caucus the next time, and he never gets an opportunity to serve the people he claims to love so well.

I have tried to make it clear that it takes a nice sense of honor, personal self discipline, and meticulous respect for the obligations of contract to be partisan and party regular. It takes ideals and integrity, despite the common opinion to the contrary. The political freelance, who proclaims that he wears no man's collar and boasts of his independence, should not be admired, for he is merely irresponsible. He is the cuckoo of politics, who claims the privilege of laying eggs in a nest he refused to help to build.

You may still have misgivings. You may still feel, quite honestly, dial you want to be free to pick up your ballot in November with unlimited choices to split the ticket any way you like for the men you believe to be the most able. Well, no one will stop you. But an adult is never free in that sense. He is bound by his conscience, his sense of responsibility, and his commitments to other people. If you have taken an adult part in the preliminary democratic processes which led up to that ballot in your hand, then you already have obligations and are morally bound to carry them out.

Let us mention one more practical consequence of the evil of being "non-partisan." When you elect a man to office you expect him to make an honest effort to carry out his platform pledges. Very well—don't give a Democratic governor a Republican legislature and then expect him to rear back and pass a miracle. Remember the second half of Hoover's administration. The Executive and the Congress were headed in different directions and the processes of orderly government came to a stop. Mr. Hoover never had a chance. Neither did the Congress.[45]

CHAPTER IV

The Practical Art of Politics

Field and Club Organization

We could call this chapter the Art of Kissing Babies, or How to Win Friends and Influence Voters.

I will try to make this as objective as a book on automobile repairing and as non-partisan as a rain storm. I hope to keep moral issues out of it but will not consciously recommend any practice which is not honest and fair.

Politics is not a science but an art, an incomplete and unorganized art as untidy as the bottom of a closet. One can start anywhere and go anywhere. This chapter cannot be complete; I will content myself with sticking up a few sign posts in the maze and posting a few boggy places.

Your object as a politician is to win elections, not arguments. If you will always remember that, you can't go far wrong.

The second thing to remember is that elections are won with votes; those votes are out in the precincts, not down in the politico-financial district, not in political clubs, not at political rallies.

The third thing to remember is that a vote for your side never becomes a reality unless you see to it that the holder thereof gets down to the polls and casts it This should be printed in red ink and set off with flashing lights.

The fourth thing to remember is not to waste time arguing with a hard case. In the years I have spent in politics I cannot honestly say that I recall ever having persuaded anyone to change his mind about how he was going to vote on an issue or for a candidate if he had already made up his mind when I approached him. Yet I know that I have influenced and sometimes changed the outcome of elections through my own efforts.

How? By organized effort in applying the first three points-to-be-remembered while observing the injunction contained in the fourth. The first campaign I was in I thought that campaigning consisted of going around and trying to persuade people by sweet reason to vote for my side. I used up a lot of shoe leather, met a lot of interesting people, and learned a good deal. I don't suppose I did my candidate very much harm—oh, I may have lost him a dozen votes or so—but I certainly did him no good.

Long before you punch the doorbell: the person on the other side has usually made up his mind as what party and what head of the ticket to support. He has reached this decision through a process of rearranging his prejudices which he laughingly calls "making up his mind"—unless he is a very exceptional citizen. He now holds his opinion as an emotional conviction; if you try to attack it you probably succeed only in making him angry. This is a good way to insure that he will take the trouble to go to the polls, for the satisfaction of voting against you.

Some very successful campaigns have been run by the expedient of providing the opposition with the wrong sort of a "volunteer" precinct organization, who lose votes for the man they pretend to support by being belligerent nuisances. It is a dishonest practice but an amazing illustration of the old saw that the way to lead a pig is to pull its tail.

How to Punch a Doorbell: You are clean, you are neat, you have a smile on your face and a friendly attitude in your heart. Someplace about your person you have some campaign literature. You are facing a closed door; behind it, according to the precinct list, lives Mr. and Mrs. Seldom, both members of your party.

You punch the doorbell. After what seems an interminable time the door opens; you see Mrs. Seldom. Her face is flushed, a baby is squalling in the background, and your eyes and nose detect clear evidence of cooking in progress.

You look pained, you look embarrassed—it isn't hard to do; you are. And you get out of there fast!

You say, "Oh, I'm sorry, Mrs. Seldom—I sure picked a bad time to butt in, didn't I? Excuse me, please!" You start backing away.

If she's human she will at least say, "What do you want?"

Don't take this as a cue to hang around. No woman wants to be held up when the potatoes are about to burn. Say, "I'm Fred Glutz, representing the East Squamous Demican Club. We're making a survey and we wanted to get your opinions on the coming election. But I certainly did not mean to butt in and make a nuisance of myself. Here—may I leave this with you and get out?" You place appropriate literature in her hand. Keep on backing away.

There is a fair chance that she will apologize for being tied up and suggest that you come back some evening when her husband is at home.

If so, close the deal fast. Suggest that evening. If she demurs, suggest the following evening. If she still demurs, ask if you can telephone for an appointment. Then follow up without fail.

If she doesn't suggest some sort of follow up, leave at once and pray that you haven't annoyed her.

Let's try the next house. The precinct list gives it as the residence of the Squiffle family. You ring, the door opens. A small dog sails out and begins to circulate around your feet. You squat down and begin scratching his ear, then grin up at his mistress. "What's his name?" you ask.

"We call him Snuffy. Here, Snuffy, get back inside and quit bothering the man!"

"He's no bother. Had one myself that looked like him, but he got run over last year. Streetcar." (Make it true. There must be something you can say at this point that a dog owner would recognize as sincere shop talk.)

This goes on until she brings up the matter of why you are there. You tell her—same words as next door. It develops that her name is not Squiffle, but Bedrock. "I think there used to be some people here by that name, but they moved. I don't know where."

You've struck pay dirt, pal. Careful, now! Find out what party they are in. Use a direct question if she does not volunteer the information. If it is the wrong party, end the interview quickly. Leave some literature if she will take it, but don't argue and get out fast. Thank her for her time, reach down and pat Snuffy, and get out.

If it is the right party, tell her the Club is glad they moved into the neighborhood. Ask her whether or not she has registered at this new address. The chances are she has not. Offer to have a deputy registrar call to register them. Follow up on this.

Invite them to the club meeting, then see to it that an invitation comes by mail.

Ask her if she would like to have some one come to watch the kids while she goes to vote. Ask her if she would like to have an automobile sent to take her to the polls. Even if she says this isn't necessary, follow it up on election day. If she has not voted as yet a couple of hours before the polls close, send a car for her anyway. Continue the interview as long as she is interested.

Discuss issues if she wants to and listen respectfully to what she has to say. Don't argue with her views. Let the points of difference pass and bear down on the respects in which you agree with her. As soon as she shows signs of restlessness, after two minutes or thirty minutes, get out promptly.

Record everything you have learned on a 3x5 file card, noting the action to be taken, before you ring the next doorbell.

You have almost certainly obtained one, and probably two or three, brand-new votes for the whole ticket. If it is a primary campaign your chances of swelling the total for your favorite candidates are even better.

With good luck you may have added a member to your local club, a member who may later do some precinct work herself. That remains to be seen. Gold is where you find it. Her husband may turn out to be one of those commendable individuals who will reach down in his pocket for a five spot to help pay for printing or hall rent, even if he won't do precinct work. He may own a filling station, or be a barber, or be in any of the many trades or professions which lend themselves to political contact work.

All this remains to be determined. Probably all you've gotten is a pair of new votes, but that is not to be sneered at. The Great Wall of China was built of individual bricks. In any case all that you have learned is recorded on the file card—including the dog Snuffy's name. When you send her the invitation by mail, to attend a club meeting, write on the printed form or typed letter, in long hand: "Does Snuffy still speak to strangers?"

Here is another doorbell. Behind it (it says here on the precinct list) should be Mrs. Grassroots, her son and daughter-in-law.

And so they are. They own their own home and haven't moved. They are on your side already; the record shows that they habitually vote even in the primaries. Your job is too easy; you might as well not have bothered.

Don't be too sure. Out of three votes, even with conscientious citizens, at least one will probably fail to show up for the primaries unless you follow up and, possibly, provide transportation. Furthermore you have a chance to win new club members and find new precinct workers. New club members, new precinct workers, are behind those closed doors. You must ring the doorbells.

We have covered all the important types, though you will encounter infinite variety in the types. You will encounter crackpots, and lonely people who will talk to you endlessly, and serious people who welcome a chance to exchange views. You will find some who will sit you down and ply you with cake and coffee and others who are obviously suspicious of you. Once in a long, long time you will encounter outright rudeness and it will leave you shaken, sick at heart, and reluctant ever to risk another rebuff.

Don't let it drive you home. Smoke a cigarette. Walk up to the corner drug store, buy a malted milk, and look at some comic strips. Then go back and tackle the next doorbell. The chances are that the person behind it will be as friendly as a puppy. Most Americans are.

You will find out a lot about your fellow citizens and what you find out will usually increase your faith in democracy and make you proud to be an American and a member of the human race. It will warm you up inside and give you new confidence about the future.

Why is a political club? I have already stated that elections are won in the precincts, not in clubs. Political clubs are hard to keep alive and require constant attention; why should you bother?

The political dub is the organization of the doorbell pushers. It is the means by which you get them together and keep them together. It provides the necessary minimum of loose organization necessary to any cooperative enterprise.

But it does more than that. It is your principal means of keeping up morale among the volunteers. Field work in politics can be a lonely business; after a day or even an evening of punching doorbells you may feel that nobody cares but yourself, to hell with it, let the country go to the dogs, why should you knock yourself out—it isn't appreciated.

Then you need the company of other politicos, citizen. You need shop talk from others who have been through the same mill. You need to listen to how they are tackling things down in the twelfth ward and what the chances appear to be. You need to hear the ever hopeful comments of the old timers and the optimistic predictions of the campaign managers.

You'll listen to gossip about what the governor told Joe Shortterm in a secret conference last Wednesday and just what Joe thinks of the governor. You'll hear that Dr. Toplofty has decided to run for Congress in the third district and you will agree that that stuffed shirt doesn't stand a chance unless he quits spending all his time speaking in front of organizations made up of other stuffed shirts just like himself.

You'll stay up a little later than you should and drink a little more coffee than you should and you'll buy two tickets to the Fourth of July dance. Next day you will feel like punching some more doorbells. It doesn't look quite so hopeless. After all, your district has a more favorable registration than the twelfth ward and Jack Sidewalk seemed to be fairly confident that the party could carry the twelfth.

You'll go to the dance. You may not dance more than three or four dances, but it seems you had a swell time.

You picked up a couple of ideas from the chairman of the Westside Club and heard two wonderful pieces of scandal about, respectively, the street commission and Senator Shortchange.

In addition to building morale and acting as a clearing house for political information the club performs the serious function of acting as a school and a seminar in government. The candidates speak before the club and are there subjected to questioning and searching examination impossible at the public rallies. No candidate nor office holder, up to and including the level of governor, can afford to refuse a summons to appear before a club. If circumstances interfere, he will be apologetic about it and try to arrange another date.

This fact gives you a chance to know intimately the men who run our government. In a country as large as ours this is a most valuable opportunity and one of which most people appear to be unaware. If you avail yourself of it, the mysterious and remote processes of your government will become as familiar and personal as the ministrations of your family physician.

The club is also the work shop of democracy. It conducts much the same business and under much the same rules as does our Congress—with this difference: The club conducts such business frequently in advance of the Congress. Many a bill has been submitted, and passed, in the sacred halls of Congress because some private citizen, a tailor, or a grocery man, or a school teacher, first submitted that bill as a resolution before some small and amateurish political club.

The political club is in fact part of our government, although an unofficial part. New ideas are tried out in it, debated, referred to committee, modified, and made ready for the public arena, just as plays are sent to Atlantic City for a try out.

How to Form a Political Club: just one person is necessary to a successful political club. He (or she) is usually the secretary, though he may be the chairman, the treasurer, a member of the membership committee, chairman of the program committee, or not even an officeholder. Whatever the title this person is the de facto executive secretary through willingness and energy.

He sees to it that invitations and notices are mailed out. He is a day-in-and-day-out one-man membership drive. He sees to it that the hall rent and postage costs are collected from the membership. He arranges for speakers and plans for social events. He borrows chairs, promotes refreshments, dickers for halls, inserts notices in newspapers, and welcomes newcomers.

In a large club he may be twins, triplets, or even quintuplets. But no club is without him. He has the qualities of a Sunday School superintendent, a Scoutmaster, or an amateur orchestra leader. You have met him, or her, in lodge meetings, in the Rotary Club, in the Parent-Teachers' Association, or in the ladies' aid. All human organizations are dependent on such persons; it takes just one to make a political club.

When to Form a Club: Don't try to form a club unless you yourself are prepared to be this spark plug. I can recall at least two clubs, well and carefully planned by persons who had the temperamental qualifications, which never got further than a couple of meetings because the persons who planned them were tied up with other work and had assumed that they could start the ball rolling and then let the rank and file carry on.

It ain't so ... except by rare accident.

Don't start a club unless you are prepared to stay with it and nurse it along during its lifetime. You may plan to keep it alive during one campaign and then let it die if it can't walk alone. Such a club can be very useful. Or you may plan it as a permanent community organization in which case the job never ends. However, in the latter case, you will probably come across one or more foster parents who can be depended on to carry on the good work even if you move out of town.

It is a lot more trouble to found and run a club than it is simply to be an active member and a precinct worker. However, if you live in an area where one ought to be founded and are willing to put out the amount of effort it takes to run a scout troop, then go right ahead. It takes no special talent as long as you are willing and know the techniques.

It is not even necessary to be the sort of person who makes friends easily and is known as "popular." I have seen clubs, successful clubs, run by persons who were neither intelligent nor pleasing in manner, but who had the single virtue of industry. However, the ability to make friends is so useful in running a club, and is, in fact, so useful everywhere in politics, that we will digress again and discuss it before taking up the techniques of forming and running a club.

Remember what John Henry said about the hog? "You got to friend him first. Then he friend you back." It's as easy as that.

The secret of popularity is to let people know that you like them.

Find something to like about a person and say so. There is always something about a person you can approve of—if the devil showed up you could at least compliment him on his industry.

I am not suggesting that you be insincere; I do suggest that you avoid being reticent. If you like something, say so.

You are standing beside Mr. Brown at a club dance. Mrs. Brown is on the floor. You say, "My, but Mrs. Brown dances beautifully, doesn't she? Nobody would think she was the mother of three kids."

It will please him without making him jealous; it's a tribute to his good taste. Ask him if he's got any new pictures of the kids. He has, he hauls out his wallet.

If you can't find something pleasant to say about pictures of kids I can't help you. But you can. At the very least you can note that one of them looks like his old man. There is always some sincere small remark you can make which is pleasant for him to hear. You don't have to lay it on with a shovel. Don't gush. Just be on the alert to say the nice things that occur to you and keep your mouth shut when a nasty crack seems opportune.

You can even compliment women on their hats. All right, all right, I know that is painfully dose to outright dishonesty if you look at it from the stand point of scientific truth, but we are not now in a physics laboratory—we meet on a social occasion; the rules are more flexible.

When you compliment a woman on her new hat, you are not necessarily making an esthetic endorsement; you are taking notice of the fact that she has made an effort to make herself attractive, for her husband, for you, and for others. It matters not that the thing on her head looks like a battered bird cage. You are praising in her a commendable social effort.

So, when you see a woman in a hat you don't recall having seen before, remark on it. Say, "I like your new hat," or, if you can't carry that off with a straight face, say "I see you have another new hat!" in an enthusiastic tone of voice. The word "another" implies that she is the sort of stylish female who has a new hat every week; the tone of voice implies that it is always a pleasant event for her friends, nevertheless.

If she says, "Why, this old thing is two years old!" you need only answer,

"It looks like a new hat to me. It reminds me of one I saw in Life magazine last week." And it does, too. After all, there is a limit to the hideous shapes which can be devised using only three dimensions.

If she persists, "You saw me in this hat last week," then you can answer, "I don't remember seeing it. I must have been looking at your face," thereby winning trick, game, and rubber.

(If you are sure of your ground, very sure, you can say "legs" or "ankles," instead of "face." But keep your hands off the women. Don't mix your love life with your political work. Many politicians have—and it frequently lands them in retirement. Emulate the troubadour who sang the praises of his fair lady but never laid a finger on her.)

When a man deals with a man it is not necessary to compliment him on his clothes, but if you feel like it, go right ahead. They like it, too. But the easiest approach is to ask him about his business, then listen attentively. You surely will learn something—and you will impress him as a man of intelligence, well worth knowing.

I will not venture to tell women how to flatter men. The woman who does not know how to flatter a man and make him believe it is already embalmed.

There are many opportunities for legitimate praise in the course of a club's activities. Be liberal with such remarks as, "That was a fine suggestion. Will someone put it in the form of a motion?" or, "Good speech you made tonight, Charlie. You certainly told them," and, "Mrs. Macintosh contributed the cake you see over by the coffee cups. Homemade."

Possibly the most important thing you can do to make yourself liked, aside from the elementary necessity of speaking to people and telling them you are glad to see them, is to get their names right. A name may be an arbitrary symbol, but it does not feel that way to its owner.

I've heard many people say that they could never be in politics because they can't remember names. But you can look, compadres, you know about 50,000 English words, or more, all of them arbitrary symbols; you have memorized hundreds of mathematical relationships in order to get through eighth grade; you know street names and land marks without limit—is it impossible for you to associate a name with a human face?

It is possible and here is how it is done—here is how I do it and I have a memory like a pocket with a hole in it; I forget my own wedding anniversary.

When you are introduced, look the man in the eye and repeat his name and ask, "Is that the way you pronounce it, Mr. Lovell?"

He will either correct you, or agree. Then spell it and let him correct you. Respell it and pronounce it. (All this time you are looking at his face and listening to his voice.)

If possible, add, "I knew some people named Lovell in Grinell, Iowa. Cousins of yours, maybe?"

His remark will be something like, "Could be. There are Lovells all through the middle west. We're a big tribe."

You have pronounced his name four times and you have heard him pronounce it four times. You have spelled it. All through this the busy little workmen who throw the switches in your brain are, with no real effort to yourself, soldering tight connections on a new memory circuit. The next time you see that face you will hear that voice, in your mind, saying "Lovell," and another one of your silent servants will be spelling the name for you.

By this means I can learn to pronounce, spell, and remember in connection with a face even Turkish, Japanese, or Polish names—and I have no talent for languages.

In the next few minutes, try to find an opportunity to say something, anything to Mr. Lovell, and tack his name on the remark—such as "Have any trouble finding a place to park, Mr. Lovell?" This puts a coat of varnish on your new memory track.

He will have forgotten your name and it will embarrass him slightly. He will then get the man aside who introduced you and whisper, "Who is that guy you just introduced me to? The one with the red nose?"

The answer will be, "Him? Oh, that's Jack Doorbell. He's the king pin around here. Nice guy." It will all be perfectly true and Mr. Lovell will remember your name and face. You're in, pal!

All of this takes surprisingly little time and no effort, and it is a sure way to solid political influence. A man does not mind you mispronouncing or misspelling his name when you are meeting him, when it is evident that you are trying to get it correctly. Your minor effort is flattering; it shows that you want him to be an individual to you, not a blank face in a crowd. But thereafter you must have his name right, if you are not to offend him. The spelling is quite as important as the pronunciation, as you will want to write it on club invitations and political mail advertising. It annoys a man named MacGregor to have it spelled "McGregor" ... the same goes for Stinkfish.

If you emulate these few illustrations in spirit if not in detail you will be well liked, even with B.O., halitosis, and tattletale grey. Your infirmities will be forgiven you. Let me repeat the rule: Feel friendly in your heart and watch for opportunities to let people know that you like them, admire them, or approve of them.

One cold and dismal morning a young man waited outside the gates of a great walled city. He was a country lad, come to seek his fortune, but at the last moment he was overcome by cold feet, homesickness, stage fright. He inquired of the gate keeper, "What sort of people live in the City?"

The gate keeper considered. "What sort of people were there in your own village?" he asked.

The boy's eyes shone. He answered in a choked voice, "They were the most wonderful, the kindest, the finest people in the whole world!"

"Go on in, son," the gate keeper told him. "You'll find the people inside much the same."

It is an old story and I have forgotten who told it first, but it contains the whole key to success in politics. There is a possible sequel, though history is silent: With the gate keeper as his manager that boy could have been elected mayor of that city in three seasons.

Now back to our club. Invite everybody you know who is of your registration to the organization meeting. Hold it in a small hall if you can afford it, otherwise in a house, preferably not your own.

You will be lucky if eight people show up. Don't let that discourage you. A smaller meeting planned the American Revolution. You can probably get the central party organization to send some affable individual, full of enthusiasm and political anecdotes, to help you fill out the evening, not with a formal speech but with intimate talk, while you are all gathered in a circle.

Call the meeting to order yourself as chairman pro tem, and appoint some conscientious person, preferably female, as secretary pro tem. Elect a chairman. Have yourself elected executive secretary (or executive vice-chairman). If suitable, have the secretary pro tem elected permanent recording secretary. Have the club select a name and have a committee appointed to draft a constitution, with yourself as a member.

I speak as if all these matters were entirely a matter of your own volition; they are. You have programmed the matter ahead of time, deciding who should serve in what capacities and you have arranged for friends of yours to propose the various nominations and motions. There will probably be no opposition at this first meeting since you will have invited no one known to you to be a trouble maker. If you don't program ahead of time the club is likely to be stillborn. Your tactics should not be a steamroller; it is very likely that there will be no opposition to your program.

If you are surprised by unexpected initiative on the part of someone, don't let it worry you and don't try to freeze it out. It is likely that you have struck gold again by finding a person who will help make it a five, active organization. See to it that this person lands on some of the committees.

With respect to the selection of a chairman it is best to select some friendly, gregarious, extrovert who has served as a Rotary Club president, a lodge master, a veterans' organization commander, or as a Sunday School superintendent, but be sure it is someone you have seen preside in the past and whom you know to be capable of conducting a meeting, of keeping it alive, and who combines an adequate knowledge of parliamentary law with a sense of fairness. You will be able to discern these traits in a person only by seeing him, or her, in action. Don't try to form a club until you have one lined up.

You may decide to take the gavel yourself. In any case, in the course of your political life you will many times preside, at least at committee meetings. Presiding seems to frighten many people, but it is easier than driving a car. You can pick up a copy of Roberts' Rules of Order for two-bits at any secondhand book store. Read it, study it, but do not think that it is necessary to learn it by heart—it isn't.

Here is all you really need to know: Roberts' Rules are not law; every body of people is free to make its own rules of procedure. However the Rules are well nigh universal because they are practical. They are founded on the idea that each member shall have a fair chance to speak his piece and to have his ideas voted on by the other members. If you keep that in mind you won't go far wrong, even if parliamentary rules are a mystery to you.

There is one expedient which will get the man with the gavel out of a jam at any time: Somebody gets up and complains that you have made a mistake ("Point of order, Mr. Chairman!") and demands that you make some change, reopen nominations, refuse a late nomination, stop the debate, reopen the debate, change the order of business—it matters not. Let him have the floor; you must listen to him; a point of order takes precedence over everything else.

You have to listen to him but you don't have to do what he wants you to. You are the chairman! Review the situation quickly in your mind. If you can let him have his own way without gumming the works, do so. If not, come out with a ruling against him, quickly, and give him a chance to appeal. Do it like this, all in one breath, without punctuation:

"The Chair rules against you and the nominations are closed you have a right to appeal from the ruling of the Chair to the House do you wish to appeal?"

If he decides to take an appeal turn at once to the assembled group and say, "The ruling of the Chair has been appealed. The motion is not debatable and has priority. The chair has ruled that nominations are dosed (or whatever the ruling was). All those in favor of sustaining the Chair make it known by saying 'Aye.' " (Short pause) "Opposed - 'No.'"

If you have tried to be fair you are almost certain to be sustained by an overwhelming shout, but be sure to take the negative vote, if any, as well. Then turn to the objector and say, "I am sorry, Mr. Smith, but the house has overruled you." Bang your gavel. "Next order of business!"

If he does not subside (he may even shout "Steam-roller!"), you may use whatever means are necessary to bring him to order, even to the expedient of appointing several of the huskier male members as deputy sergeants-at-arms to assist the elected sergeant-at-arms in ejecting him from the hall. This is quite unlikely but I have had to do it, at least once. You will have the full support of the house, your own influence will gain, and the disorderly person will be discredited.

It is more likely, however, that a rap of your gavel and a reminder that he has been overruled by the house will shut him up. It is still more likely that he will hold no resentment, since you gave him his day in court.

If you are overruled, take it with a smile. Say, "You have been sustained, Mr. Smith. The floor is yours. Suppose you come up in front where we can hear you better." Let him swagger up and let him talk as long as he likes, while you relax. It's even money he'll dig his political grave with his tongue.

Either way you have increased your reputation for utter fair dealing, whether you know much parliamentary law or not.

There is another situation which comes up less often but is even more ticklish. Someone rises to a point of personal privilege. This means probably that he thinks his honor or integrity has been impugned; it is loaded with dynamite. It may result in a dog fight on the floor which will destroy your club.

You may have been warned that the matter was likely to come up, but, if you are caught flatfooted, allow the person to talk just long enough to establish what is eating him. If it will cause a fight among members of your own party, cut him off short. Announce, "By the customs of this body, all such matters must be investigated by the grievance committee and an attempt made to work out an amicable solution before they may be aired on the floor."

You may be setting a new precedent. The by-laws may not provide a grievance procedure. Go right ahead. Appoint a grievance committee, if one does not exist, at once, of the "old heads" and "steady horses," refer the matter to them and direct them to report back at the next meeting. Rule further discussion out of order.

As a matter of fact, you are out of order unless a grievance procedure is already on the books, and you may be forced to ask the house to sustain your ruling. Since your purpose is quite evidently conciliatory and in the interests of the body as a whole you are likely to be sustained. In any case—don't let Samson tear down the temple just to salve his ego!

Very frequently someone will want to bring up a matter out of the regular order of business. Rule firmly, but kindly, that the matter must be brought up under new business. If you know ahead of time it is a matter which is no proper business of a political dub, you may be able to avoid it entirely by the simple expedient of calling on the speaker of the evening before you transact business—this can be done as a courtesy to the speaker to permit him to leave the meeting before adjournment By the time new business comes around your audience is likely to be too tired to give much time to letting one person ride a pet hobby. A motion to adjourn will almost certainly intervene, once the proper business of the meeting is out of the way—and a motion to adjourn is always in order!

Tb be fair, remind the body as you submit the motion to adjourn that Mr. Doakes wanted to bring up the matter of pantaloons for Patagonians (or perhaps it was memorializing the board of aldermen to change the name of Swamp Street to Rosebud Avenue—Doakes owns vacant lots on Swamp Street). But do not let the matter be debated while a motion to adjourn is before the house. A successful motion to adjourn at this point, after such a reminder, is all the hearing he is entitled to. Free speech includes the right not to listen, if not interested.

I seem to have wandered into the subject of how to dominate a club by legitimate means, which was meant to be a separate subject. The two subjects are intermixed. Domination of a club is a legitimate, necessary practice. Democracy requires leaders quite as much as does fascism, if anything is to be accomplished. But you can dominate by methods which give everyone all of his democratic rights at all times. You will rule because you have the support and the approval of the club members. It is much easier to rule through popular support, gained in recognition of your fairness and common sense, than his to be a little tin dictator. Remember always to warn the man you overrule of his right to appeal and you will remain a popular leader.

Someone will protest that you are refusing to recognize him. Point to him; say, "You're next, after this speaker," then turn to the person you have already recognized and say, "Go ahead, Mrs. Blodgett. You have the floor." But don't give in.

If the person complaining has already spoken once on the subject before the house, tell him that he will be recognized just as soon as everyone wishing to speak first has had a chance. This will happen frequently; the loudmouths complain the worst.

Don't let anyone speak three times without permission of the house. Rule against them—unless your common sense says that here is a time to be lenient.

The cry of "question" from the floor for the purpose of stopping debate may be ignored; it is not in the rules. If somebody gains the floor and moves the previous question and the motion is seconded, you must vote at once, without debate, on that motion. The motion is to close debate on the previous question (the motion which has been under debate). State it as such, for many people do not understand this and may lose their right to speak if you do not make it clear. Say,

"The previous question has been moved and seconded. This is a motion to stop the discussion on the motion before the house, which is a motion to send a delegation to the intercity convention (or whatever the main question is, or the amendment to it which is under debate). If this motion carries, the debate will stop and we will then proceed immediately to vote on the main question, the question of sending a delegation." Then call for a vote.

This may seem unnecessarily wordy. I assure you it is not. If you do not explain this type of motion clearly and completely each time it comes up, you will gradually accumulate a group of people who don't like you and don't like the club simply because they do not understand what you are doing and feel that they have been tricked out of their equal rights. Use the whole elaborate explanation every time—it takes fifteen seconds only and it will keep your club from being dominated by the smart alecks.

And speaking of smart alecks—you will run into the Communist cell someday. How to cope with Communists will be treated in detail in the chapter "Some Footnotes on Democracy." In this connection let it suffice that you will have to depend on the body of the club to support you in your rulings. Don't argue with Communists. Cut them off short and rule them out of order (usually for not following the order of business). If you let them argue they will make a monkey out of you, for every Communist Party member has been carefully trained in parliamentary law and is skilled in parliamentary dodges—but he has only contempt for the democratic procedures; he uses them only to twist them to his purpose.

Get the body's support behind you, shut him up, and ignore his cries of "Free speech!" or "Fascist!" Your club hired the hall; let the Communist Party hire their own hall—and drag in their own audience.

I believe in the right to free speech for everyone, including Communists and fascists. I think that our constitutional guarantee in this case is wise and that the Founding Fathers knew what they were doing. But my own right to say what I think does not give me the right to barge into a Catholic church while the priest is saying mass, interrupt him, and make a speech for atheism. If I should happen to want to make such a speech (I don't) I should hire a hall of my own, or find a soap box. I have no right to interrupt others in the orderly pursuit of their business to spout my own views.

We have come a long way from our first organization meeting of a new political club to the rude manners of our pinko citizens, but all has been pertinent to the conduct of a club and was intended to show why it may be necessary to take the gavel yourself unless you can find an experienced and tactful presiding officer. You need no experience yourself if you follow these hints; later on you may be able to train someone to preside. It is not to your advantage to preside yourself if you can find another able person.

Two more hints and we will drop parliamentary procedure: Most motions come before the house improperly worded. If it is a matter you think should cool off, you can point out to the member that he has not formulated his proposal in such a fashion that it can be debated and voted on and then recommend to him that he consult the resolutions committee in order to whip it into shape. He may take your suggestion, or he may put it into motion anyhow. In the latter case this is a cue for your unofficial floor leader to move to refer to committee. If the matter is unclear, involved, or the facts are not all available (these are usually the reasons why you want the matter postponed), the body of the club will be happy to postpone the action.

On the other hand a member may make a suggestion from the floor which seems to you wise, but you can't handle it since it is not a motion. You may then put words in his mouth by rephrasing it as a motion, in the form that seems best to you, and ask him if that is what he meant He will gratefully agree, or perhaps suggest some change. You can then open it to debate as a motion.

A chairman can usually get a meeting adjourned or keep it from being adjourned, without violating any of the rights of any of the members, if he handles it carefully. A mere suggestion from the chair that the hour is late will produce the motion to adjourn, having priority and undebatable; a motion to adjourn almost always carries. On the other hand a spontaneous motion to adjourn usually comes from someone who is annoyed at the way things are going; this annoyance will usually lead him to shout his desires without waiting to be recognized—like this:

"Mr. Chairman, I move we adjourn!"

You can recognize him if it suits your purpose—after all, the house has to vote on it; it's not a "railroad." But if you think the business at hand must be finished, there is always someone standing behind him, out of his sight, who wants the floor. Tell him that he will be recognized in turn and recognize the other party.

Perhaps someday someone will invent an electronic device with all of Roberts' Rules of Order built into it which will be an automatic and infallible chairman—if so, politics will lose a lot of its zest. Until that day presiding will remain an art in which a sensible chairman may have a great deal to do with the outcome of any body's deliberations while retaining the respect of all—simply by remembering that the final arbiter is the assemblage itself. A word of caution—in the two cases in which I have recommended the maneuver of referring to committee, the intention must not be to bury or sidetrack. You have only thereby created an opportunity to have a word in private with the interested parties in order to clarify a confused issue or in order to smooth over a row. You can probably settle out of court—but if you can't, then you must permit a full and open hearing at the next meeting, come what may. That's democracy.

If you can't find a chairman for your club who can conduct meetings along the lines described above, then you must accept the gavel, but continue to search for such a person. You can do more from the floor where your latitude is greater. But let us suppose that you have managed to select a fair group of provisional officers at your first meeting. Your remaining business is to plan for your first public meeting.

CHAPTER V

The Practical Art of Politics (continued) Club Meetings and Speech Making

Pick a date for the first public meeting of your baby dub at least two or three weeks later than the organization meeting. This will give you time to insert notices in the local papers, send out postcard invitations, arrange for extensive telephone follow-up, and, if you can afford it, print and distribute handbills. You can do none of these things until you arrange for a hall; you'll need the time.

Make the hall small. Not only is it cheaper, but, more important, it is much, much better to have standing room only in a small hall than to rattle around in too large a hall. I know of nothing more dispiriting than to face a meeting in which more than half the seats are empty. Twenty people can have a rip-snorter of a meeting in a small room and build up to a fine campaign; a hundred people can be overcome by contagious melancholia in a hall which would seat five hundred.

Plan to get there early in order to fold up and hide most of the folding chairs, then don't get them out until you see that you need them. People always slip into the rearmost vacant seats at a political meeting (I don't know why—but I do it myself). This habit makes a half-filled hall still more gloomy. So if you must accept a hall with lots of floor space, go easy on the chairs and fill up some of the rear with refreshment tables, or card tables covered with literature, signs, or registration forms.

About chairs—the local undertaker usually owns several dozen folding chairs of the more comfortable and unnoisy variety and he can usually be persuaded to lend them, rent-free for good will, even if he is of a different political party, if you will pick them up after business hours and return them the same night or earlier than any scheduled funeral the next day. A couple of dozen make one automobile load.

The loan of chairs may solve your hall-rent problem for your first meeting as it will permit the use of space not ordinarily used as a hall, such as a retail store owned by one of the members (set up chairs between the counters).

In many states the use of school buildings is permitted for public meetings. I have used them fairly successfully but do not ordinarily recommend it. You are likely to have to choose between an auditorium much too large, or a classroom in which adults feel silly in the little seats and can't sit chummily together. Smoking is usually prohibited and you are likely to have to agree to get out by 10 p.m. Furthermore, regulations frequently prevent taking up collections and collections are necessary to a political club which is not to be a burden on a few. But many a fine meeting with worthwhile results has been held in a school building. It is your problem, with local factors.

A lodge hall is a best bet, with a small American Legion hall a close second. You will find if you poke around that there are many little halls concealed above store buildings and in back of restaurants which are available for surprisingly small fees - $3 to $10 per evening, heat and light thrown in, and even less on a permanent arrangement. Before you take a $10 hall remember that the hall rent should not run more than ten to fifteen cents per person per evening. How large will your crowd be and will they be good for more than two-bits a head in the collection?

Your problem depends on the average economic status of the constituency in which the club is formed—as will be almost all of your practical problems of mechanics, as opposed to techniques.

Publicity for the first public meeting. Don't depend on the persons at the organization meeting to supply the audience at the first public meeting. They will be full of enthusiasm and promises and some dunderhead will point out triumphantly that if each one of you brings ten friends to the next meeting the crowd will be one hundred (or two hundred, or a hundred and fifty). You will be justified in shooting him on the spot for this piece of asininity, but don't do it.

Agree heartily that that is just what we are looking for—and bear in mind that getting out a crowd is still up to you. Some of those present will in fact bring friends; Joe Pollyanna won't show up at all.

How to get a crowd—how indeed! This is a cause of grey hairs to all amateur politicians. The most important point you have already covered—don't let the hall seem empty. The next most important point is to see that you have an attraction. Get the central organization, through its secretary rather than through its speaker's bureau—the things that hide in speakers' bureaus should crawl back into the woodwork!—to provide a really good rip-snorter of a speaker, preferably with a name which is a public drawing card. Be firm about this. Point out that they want a club in that area, don't they? Threaten to throw up the sponge. Kick your heels and scream. But get a good speaker even if he has to fly down from the state capital.

Provide some entertainment. Tap dancers, even bad ones, go over well. There is probably a children's "talent" school in your town or neighborhood; the coach will display her proteges free of charge, but don't let her schedule more than fifteen minutes and make it all dancing. Be firm in refusing recitations, little plays, and singing. Never use singers—unless it's Paul Robeson, Bing Crosby, or Frank Sinatra.

A man or woman who plays popular piano well by ear and can lead singing in oldtime favorites is worth his weight in marked ballots.

There is one somewhere, of your party, within ten blocks of your house.

Okay, you've got your program. Now to haul them in off the sidewalk. If there is an editor-publisher—owner of a small town or local community paper of your party in your area, he should be at the organization meeting and you will see to it that he is appointed chairman of the publicity committee—not "publicity man"; you keep that open for the man who is going to do the work, when you find him; the editor won't. But he will give you a free half-column ad and he will write up a little story himself. He will probably donate some throw-away hand bills as well. Get volunteers to distribute them, or see what you can do with three boys and some small change.

More involved methods of publicity are covered in the ninth chapter; the same principles apply here. The daily papers will print (but just barely) your notices; announcements tacked to telephone posts are illegal some places but entirely practical in most cases; and bumper signs (see ninth chapter) are good. But direct mail coverage followed by telephone calls on the day of the meeting are your best bet. This will take a little money—not much but, if you can't afford it yourself, you must raise it at the organization meeting. (The hall rent can wait; it will be covered by the collection at the first public meeting.)

Passing the hat in a private home, if that is where your organization meeting is held, is probably in bad taste. I suggest that you approach two or three persons privately, selecting them for their ability to cough up, and nick each one for a share. A dollar buys a hundred postal cards, it need not be much.

Your editor victim may print the postal cards. Otherwise, borrow a mimeograph or pay for it.

The ladies present will address them for you and will make the telephone calls on the day of the meeting. This will give you a chance to locate your girl Friday, too—the woman who is as devoted to the cause as you are and is willing to do quantities of routine clerical work and telephoning, provided you tell her what to do. When you find her, you will wonder how the party struggled along without her.

You will have to supply the addresses. You have some; the others present have some; you can get quite a list, not very well weeded, from the central organization. Any lists available to any present, such as lists of customers, members of clubs, and church lists, are useful provided they are trimmed down to your party by checking for registration. Don't use a nonpolitical list without this trimming for direct mail advertising. It is wasteful and unnecessarily annoys American citizens who happen to differ with you politically.

As a last resort you can always use local precinct lists, but it is rather expensive and not too productive to work at this stage from precinct lists which have not been trimmed to live prospects.

The first organization meeting is over as soon as you have picked the provisional officers, discussed plans for the first open meeting, and got all available commitments for help in preparing for the meeting. Adjourn at once, serve refreshments, and encourage the man from headquarters to reminisce and everyone to gossip.

Refreshments should be coffee and cake, or something else simple. Make a rule from scratch that refreshments must be simple and that the treasury pays the bill, else the ladies will start competing, upping the ante, and the whole thing will get out of hand. Refreshments are a social lubricant in politics, not a meal.

Don't start the coffee until you see how many are to be served. Put out half a dozen tea bags and a pot of hot water for those who can't drink coffee at night. Doughnuts are the simplest food, but they are perishable; if you are in doubt as to numbers, get some boxes of soda crackers, a couple of those small packages of cream cheese and a quarter-pound of yellow cheese. Cheese, crackers, coffee, and tea bags will keep. Plan to take a loss on doughnuts. (Naturally the cost—and the loss—on this first small meeting is not much, but the rule will save quite a bit of money later. The economical use of money is one of the prime secrets in volunteer, self-supporting political activity.)

You may wonder at my repeated emphasis on the economical use of money in politics. You yourself may not have to pinch—you may be a millionaire. But bear in mind that the average income is less than a thousand dollars per person a year, and is considerably less than that for the great majority of people. Elections are won by majorities, not dollars. Some expenditure of money is necessary to any political work. In a popular, volunteer political movement, the costs must be paid by the small donations of the volunteers themselves. The cost of living being what it is, it is hard for the average run of volunteers to make even small donations, so cultivate the habit of mind of getting the very maximum possible in political results out of every dime spent.

Therefore, even if you are rich—save those unused tea bags!

You can never beat a political machine through the lavish expenditure of money. You would be meeting them on their own grounds and they will beat you—they would match and double, or triple, every dollar you spend. Your weapon is the enthusiasm and sincerity of the free citizen.

It is a shining feet that most votes in America can't be bought. There is an unpurchasable majority of votes in any community. You and other volunteers can round them up to beat the socks off any machine, no matter how rich, while taking care of unavoidable expense by passing the hat—provided you are a little more careful with the collection money than you are with your own.

The night of the first public meeting of your baby club can be almost as distressing as a first night performance for an actor. You get there early; the hall is empty and seems cold. People straggle in, stand around and look at you; there aren't enough of them to permit you to start at the hour set. (This is a minor vice of most political meetings; it can be beaten and is worth beating. It requires just the determination to bang the gavel and start anyway—you and the janitor and the cat. It will surprise and please everyone.)

Let's bust up that empty-hall feeling first. Bring along your own radio or radio-record-player, plug it in, and get some loud music into the joint. If some of the young people start to dance, so much the better. This is a private, nonprofit club; you don't need a license for dancing. (If somebody wants to make something of it, it's a fine chance to get some free newspaper publicity on a personal freedom issue.)

Later on you should be able to get some radio shop to supply a used radio-recorder-player for nothing more than a display, on the machine, of an advertisement. It is then worthwhile to buy a microphone to hook in through the speaker—and you are all set for the biggest hall in town. But the principal use of the gadget is to warm up the crowd—and to turn the conclusion of each meeting into an informal party and dance. This is especially useful in hanging on to the young people, who will be the bulk of your precinct workers.

The people are straggling in. Everyone who comes through the door must be greeted. You will do a lot of it but you will need help—provide for it ahead of time. You will want a careful record of every person present, name, address, and anything else at all that you find out about them, and that information must be recorded for each person on a 3" x 5" file card. Cards mimeographed or printed into a form are convenient but not necessary. The blank ones available at 10 cents a hundred in dime stores are all right.

Don't wait until the audience is seated and then expect to get this information by passing out cards, because many of them will leave the cards blank. If you buttonhole them at the door and ask them to fill out cards right then you will do better, since you have provided card tables, chairs, and pencils for the purpose, but the best way is to fill them out yourself—or have one of your alter egos do it—while asking them the necessary questions and keeping up a running fire of conversation. Don't say "Name? Address? Any other adults in family? Telephone? Occupation?" Such an approach acts like a cold shower. Say, "Glad to know you, Mr. Brewster. Half a minute and let me get that down in writing. My wife says I can't be trusted to buy a pound of butter unless she writes it down. I wouldn't want you to miss getting an invitation to the Spring Dance through my poor memory. That's James A. Brewster,' isn't it? Mrs. Brewster come with you tonight? So? My wife's doing the same thing—we've got two kids, both in grammar school, and they have to be in bed by nine. How old are your youngsters? Maybe some day we can arrange a sort of game room or nursery for the kids and get a lot of folks out who are otherwise chained down. Do you think it would help if we moved up the meeting time half an hour? Is that address right? That's your home address, isn't it? Business address you say? Oh, of course—that's the same block the Safeway Market is in. It's not the same address, is it? Oh—I think that's the same block of offices Dr. Boyer is in. Hey—Fred! Doc! Want you to meet a neighbor of yours—Dr. Boyer, Mr. James Brewster. You know each other already—fine. Doc, see that Mr. Brewster meets some of the folks, will you?"

Sounds corny? It is corny—but it works, and it's not hard to do. You have recorded:

Brewster, James A. June 8,1946-mtg. 1232OakSL,r.telBr4395 1010 Tenth Ave., b. tel Cl 8482 Insurance business, Bedlow Bldg.

married, 3 chil. 13 junior, 11 Alice, 2 (?) Masonic pin in lapel, and VFW. Heavy set, bald, well dressed, manner of a professional man. Assign to Doc Boyer? Follow up. Mr. S. Check registration.

Put the card in your pocket and make another, later, for the club files, minus the personal comments. That card, the file of your own it goes into, is your most valuable physical asset in politics. We will refer to it again and again, but first one example now of how you will use it:

Let your wife answer the telephone at home. Get her in the habit of getting the name and repeating it in a loud tone of voice. (Reverse this process when the wife is the active politician.) Pick out the card from the file, kept near the phone, and read it as you answer the phone. The delay can be held down to seconds. When you speak to Mr. Brewster you won't make a fool of yourself and lose a vote, or votes. Remember—he expects to be remembered.

If you are forced to answer the telephone yourself, you can always manage a few seconds delay by asking the caller to hold on while you answer the door, or turn off the radio, or something.

One of the card tables at the meeting will be occupied by a deputy registrar. In most states this is possible; in some states, unfortunately, the voter must go to a definite place, some states set a date as well, in order to register. This gready complicates the problem of picking up potential votes by getting unregistered persons to register, and may have to be met by a volunteer automobile service as complex as that for election day. But we will consider the more usual case.

From the roll of deputy registrars of voters you will have selected a member of your own party, conveniently near, and seen to it that he (or she) is at the meeting early. Provide transportation if needed. These persons are usually paid by the head; your best bet is an elderly female who needs the money. If you are on your toes she will pick up a dollar or two each meeting and you will pick up the votes.

Later on you may be able to get your club treasurer deputized, who will then contribute the fees to the club treasury. It is an honest way to help meet expenses while gaining votes.

You will have an announcement to make during the meeting. If you are shy, write it out and read it. It will go like this:

"This is the first public meeting of the Oak Center State Republodem Club—but it won't be the last. The party has needed a way to get together in this community for a long time. The boys on the other side of the fence have kinda gotten in the habit of taking things for granted around here, but we are going to show them a little action this year and this club will be right in the middle of it. We are going to get all the party candidates down here to talk to you for one thing and let you take 'em apart and see what makes them tick and ask them embarrassing questions. We'll get better candidates that way. Maybe we'll pick out one of our own people and send him to the capital so that we will get a little representation for a change. It can be done. If I had time I could show you some interesting figures about the registration and how this area that we're in can make the difference in any election for the whole district. We'll take that up another night, maybe.

"Besides looking over the candidates and getting ready for the struggle this fell, we're going to make this a public forum where we can discuss our problems and get some of the experts in to give us facts, so that we can make up our minds intelligently and not be dependent on that yellow journal—you know the one I mean—for distortions.

"But we're going to have some fun, too. There is no reason why serious public affairs have to be conducted in a funeral atmosphere. That reminds me—stick around for some coffee and cake after the meeting adjourns ... we have Mrs. Parker to thank for that. Stand up, Mrs. Parker. Take a bow.

"We've thrown together a provisional organization, just to get things started. We've got some working committees and we want to add to them tonight, but, unless there is objection, the provisional officers will putter along and make their own mistakes for about six weeks or two months while you folks get acquainted and decide who you want for permanent officers.

"One more thing, and I'll shut up and let the chairman get on with the program. There has been a lot of discussion as to how often we should meet. Just to start the ball rolling I want to offer a formal motion that we meet two weeks from tonight, same time and place—because I happen to know that we can get the lieutenant governor to come to speak to us that night. Will somebody second my motion—or propose another night?"

Corny again, eh? It will do, it will do. Eloquence is nice, but not necessary. You can revise that speech to meet your actual needs and it will serve every purpose you need to push at the first meeting. If you are not in the habit of public speaking type it out and hold it. You are likely to find that you will not have to refer to the text, but it will give you confidence.

Your first meeting is over, a success. You have only to do the same next time, with different speakers. There will always be business to transact and issues to discuss—politics is like that; you are not working in a vacuum. But since we have reached the subject of making speeches, let's kick it around a bit. It's not as hard as it seems. Here is a surefire formula which can be used over and over again:

This dodge is designed to permit you to speak before a small audience of unsympathetic people—the worst possible set up. A small group is much harder to face than a large; anybody can talk to a thousand people. You won't be asked to be principle speaker at a large meeting until you have acquired a reputation and public speaking has become second nature to you. Until that time, if you are called on to say something as a secondary speaker to a large audience you can say as little as a dozen words, speaking in praise of "good roads and good weather," complimenting the principal speaker, or the chairman, or the arrangements committee, or simply announcing your intention of voting the straight ticket. You can then say "I thank you" and sit down. The audience will appreciate your terseness and your stock will go up.

(I attended the dedication of Soldier's Field in Chicago in November 1926. The Vice-president of the United States spoke for three minutes, the Governor of Illinois spoke for seven minutes, the Mayor of Chicago spoke for ten minutes, and the city park official in charge of the field spoke for more than an hour. The audience was exposed to a driving snow and below-freezing temperature. Which speech was the most popular?)

As you become known as a politician you will be called to speak as principle speaker before small groups. The toughest assignment will be to make a non-partisan speech, not in support of a candidate nor an issue, before a non-partisan, nonpolitical group, such as a Kiwanis Club or a ladies' church group. At first glance this seems an impossible task. How can you make a political talk and not talk about politics? There is a limit to the time you can spend declaring for good government and praising honesty in public office. Besides—it ain't news!

Watch me closely and you can learn the trick. I don't have any cards up my sleeve but I do have two dozen sharpened pencils concealed on my person.

Stand up. Bow to the chairwoman. "Madam Chairman-ladies-the worst thing about invitations like this is what it does to my waist line." Glance down. "It's an imposition to ask a man to speak after such a good lunch. What I need is a siesta.

"Audience-participation programs seem to be all the rage these days; there is no reason why we shouldn't have them in politics. I got this idea last night while listening to the Guess Again program-we're going to have a little try at being Quiz Kids." Haul out the pencils.

"Just in case any of you don't happen to have a pencil with you, I've brought a few spares. Will you ladies nearest me pass them along to those who might need them? Now take a piece of paper, each of you - wait a minute. We {garbled in scan}ooawi tr\ r\f* en/wf* f\r r \oi"wan-l iawwifif*v it i//vitc c/^rrY^frart; f"^Y\ {end garbled text} help us out?" She can and does, and some of them turn up old grocery lists in those steamer trunks women carry. Don't provide paper yourself. Paper can always be found but there are never as many pencils in a crowd as there are people. The little flurry caused by the search for paper gives you a breathing spell and a chance to size up your audience. During this period individuals will catch your eye and smile. You grin back and they get the impression that you are good to your mother and kind to small children. Remember John Henry's hog.

"Everybody fixed up? Let's start the quiz. Write your name at the top of your paper. Go on-don't be afraid. I promise, cross my heart, that I'll keep the result confidential. Nobody, nobody ... will see the papers but me. But I want to be able to announce the winners and I can't do that if you insist on being anonymous. I ought to warn you that there won't be any prizes other than the pleasure of winning. Somehow I've never gotten acquainted with the sort of politics that pays off in cash. Okay? First question:

"Write down the name of the President of the United States.

(Pause)

"Write the name of the governor of our state.

"Write the names of our two United States senators."

Go on down the list. Ask for the names of the local congressman, the local state senator, the local legislator, the county commissioner, supervisor, agent, or "presiding judge" - the titles vary but you want the chief elective county executive or legislative officials. Than ask for the name of the mayor of your town or city and the name of their local city councilman, alderman, or selectman. Ask only for elected officials who represent directly the people you are questioning. You can't hold them responsible for appointed officials. Limit it to people they have voted for or against and are therefore presumed to know.

"Are you registered to vote?" and "Did you vote at the last primary election?" (Voting at a general election is no more indicative of civic virtue than is standing up when the band plays "The Star Spangled Banner.")

Then gather up the papers and look them over.

The results will amaze you and, if you are not braced for it, dishearten you. If you find one paper in which the respondent has answered more than half of the questions correctly you are justified in naming her as a praiseworthy, intelligent citizen, especially if she voted in the last primary.

But it is unlikely that you will find anyone to praise. Most of them will stop after naming the President and the governor. There will be scattered answers thereafter, very scattered and about half of them wrong. Mostly you will see blank paper.

I remember one respected matron who thought that Prime Minister Chamberlain (1938) was a United States senator and I have even found people who could not name the President of the United States - although I classed such latter cases as sheer feeblemindedness and threw them out of my calculations.

You will now extemporize for about ten minutes on the subject of civic virtue, holding them up to themselves as horrible examples. You will point out that they voted for or against, or failed to vote, for each of the persons you asked about. You will ask them how in the name of all that's holy they can expect anything but a gang of crooks in office, and thank the stars and the mercy of heaven that a number of these public officials are honest statesmen despite the fact that the ladies of the East Squamous Community Church obviously don't give a hoot what happens to the country their ancestors and sons died to protect.

You can point to the ghosts of the martyrs of women suffrage and ask if this is the equality between the sexes they fought so hard for. You can point out that more of their family income goes into taxes than goes into groceries and ask them if it would not therefore be wise to give almost as much thought to the selection of a congressman as they do to the selection of a good head of lettuce.

The results of the questionnaire will make you so tarnation mad, when you think about the weary effort you have put into trying to drag this community up out of the mud, that you will make what may be the first really good public speech of your career. You will be feeling emotional and you will know your facts; the combination automatically produces a good speech.

Don't lambaste them too hard - resist the temptation. There are brands to be snatched from the burning even here. Try to make it more in sorrow than in anger; rouse their shame rather than stir up anger against you personally.

Some forthright old gal may state that she never wanted the vote. Don't scold her; praise her as an honest women and point out, gently, that she is free to throw away her franchise, just as the voters in Germany did. She has only to refuse to register and she automatically returns to the status of a child, a slave, or a domestic animal. Point out that it is a fair comparison since women were classed as all three only a hundred years ago.

Most women don't like those classifications, no matter how lazy they may be as citizens. They like to think of themselves as free citizens and your audience honestly believed - until you held a mirror to their startled faces - that women were a force for good in politics, somewhat superior to men. When they think of a corruptionist, they visualize him as a man, not a woman.

Some serious-minded lady, honestly ashamed, may ask you what they can do to be better citizens, better informed. If no one asks, you can invite the question, or even state it as a rhetorical question. You are here to get votes, whatever the program chairman had in mind; this is your chance.

Don't invite her to join your club; you are obligated to be non-partisan before this group. Instead tell them all about the telephone book clue (see Chapter II, How to Start). But get her name, check her registration later, and follow up. It's a fifty-fifty chance you have a new worker.

Stick the papers in your pocket and take them home. At least you have a record of the persons in that group who claim to have voted in the primaries. Check to see which ones belong to your party and add those names to your card file. They are worth carrying on your mailing list and some may eventually join your club and become active precinct workers. These women aren't worthless; they are simply in a rut.

(Gather up your pencils. They cost money.)

The results of making this talk before any all-male organization will be quite a bit better and you will be able to praise several of them as being "good citizens" entitled to the vote. At any political gathering you will find many perfect scores.

This talk can be used over and over again, year after year, before any sort of a meeting; you need nothing else on your repertoire until you find other things you want to talk about—by then speaking will be easy for you. You can even use this questionnaire gag more than once to the same crowd under the pretext of finding out what progress has been made. It never fails to hold attention and it can always be used to stir out new votes.

I feel deep sympathy for persons who are terrified at being asked to speak in public. I did not attempt it until I had been in politics quite a while. My first venture was an impromptu comment offered at a luncheon meeting. I said about two dozen words then sat down, white and shaking, so nervous that I went away without my spectacles.

On my second attempt I was very full of my subject and managed to struggle through a twenty-minute talk, but my wife told me afterwards that I paced back and forth all the time I spoke like a caged tiger while shouting my words over my shoulder.

My own difficulties were greater than yours are likely to be; in addition to a very real shyness which I have to fight against, I have a speech handicap, partly controlled, which can leave me utterly speech-bound if I get rattled. I invented the questionnaire routine in order to give me time, while facing an audience, to regain control of my vocal chords without enduring one of those ghastly pauses. If it will work for me it will work for anybody.

Experience overcame my difficulties. There came a time, shortly before the war, when I was invited to be keynote speaker at a convention held in another state. (This is sheer boasting, under the guise of giving you courage.) The speech was electrically recorded; it is terrifying to think of that disc going around and around, recording inexorably your pauses, your errors in grammar, your word blunders. I prepared a written manuscript to fortify me.

I found I did not need it. I spoke for one hour and fortyfive minutes, extemporaneously, and kept the crowd with me. The recording was transcribed, printed, and bound, and the speech was sold (not by me) as a pamphlet which ran through two editions. I still get occasional fan mail about it.

I like to tell that story because it represents to me a major personal triumph. I should show, as well, that the hazards of speechifying are only mental hazards. Once you get over your fear, talking to a crowd is no more difficult than conversation around the dinner table.

What to say when punching a doorbell is more difficult—which is why I gave such specific examples at the first of this discussion.

Don't try to be humorous in making a political talk unless it comes naturally to you. A collection of funny stories, told to illustrate a point, is a useful asset but not necessary. Nor is eloquence necessary; sincerity is enough and it can do without eloquence. I once heard William Jennings Bryan speak back in the days of the spellbinders. As I recall it, it was not his rolling periods that moved the crowd; it was the evident fact that he believed what he said. His honesty was so compelling that I could not help being affected by his words, even when I strongly disagreed with him.

One of the most effective speakers today is Congressman Jerry

Voorhis-even his opponents are anxious to listen to him. Yet Mr. Voorhis has no eloquence in him and has a shy, diffident manner. But he speaks with such dead seriousness that each listener is convinced that the man is saying the exact truth as he sees it.

Can anyone forget the emotional power of the simple, uneloquent words of Edward VIII's abdication speech?

CHAPTER VI

The Practiced Art of Politics (continued) Political Influence, Its Sources, Uses, and Abuses

How to Have Votes in Your Pocket.

Many times we hear that So-and-So has such-and-such district "in his pocket." Usually it isn't true, except by default - when the local leader has no real opposition of any sort and has the only vote-getting organization in his district.

It is even less likely to be true when So-and-So shows up at headquarters, claims to have the West Heights district "eating out of his hand," and wants to know what sort of arrangements you want to make, ie., how much cash you will pay him personally for his support, such as it is.

You can disregard such fellows. Such a man usually controls his own vote, that of his wife (if she remembered to register), and, possibly, the votes of members of his own family living at home. I have yet to meet a man who claimed to control a district who actually did. Tell him you're sorry, congratulate him on his party loyalty, assume that he is so public-spirited that he is certain to support the cause anyhow, ask his opinions and his advice. Tell him you wish to high heaven that times were good and the cupboard wasn't bare. But never, never, never give him any money!

It isn't even worthwhile to give him a little money as a sop, to keep him from working against you. True, he will work against you, but you can get more votes for the money you have in more direct ways. Besides, it isn't fair to the hardworking volunteers, many of whom need money worse than he does.

There may be someone in his district who does in fact control it but you will have to scout around and dig him (more usually her) out, as he, or she, will be busy mending fences instead of trying to cadge money at headquarters. This person, when found, can be entrusted with campaign funds - they will not be wasted.

But there is a way whereby every "volunteer fireman" in politics can have, and does have, votes in his pocket, sure votes. As your acquaintances become aware that you are active in politics they will start to lean on you for political advice, as fast as they realize that you treat it as a "hobby" (from their point of view) and not as a moneymaking trade.

This influence even cuts across party lines, especially with respect to the so-called "minor" offices. Many of your acquaintances of the other party, because they know you, respect you, and consider you well informed, will let you vote the whole ballot for them, propositions and candidates, except for the head of the ticket. (Votes for the head of the ticket can't be influenced anyhow, enough times to matter, except by the process of seeing to it that the lazy voter registers and then hauling him to the polls.)

This slug of votes that you control will creep up on you, without your knowing it, and grow from year to year. There will even come a time when your public endorsement, for political advertising, is sought after. You will then realize, and even then it will surprise you, that you are a powerful politician.

The first election your influence will come from private conversation, on social occasions. Your advice will be taken because you quite evidently know something about the whole, confusing ballot.

You may not be aware, the first time, of the votes you have changed. But next year your telephone will ring steadily during the week before the election. "Say, Bill, tell me about these judge candidates. You know some of them, don't you?" You oblige. He adds, "How are you voting on the propositions?" You tell him.

You may have to explain in some detail your reasons for each vote during this second campaign. Such-and-such a judge is stupid, or plays games with the traffic patrol, or takes dirty campaign funds. Proposition #9 has a trick clause which makes it mean something different from what the tide says, or # 12 is a clever way to divert money from the school system. Thereafter you will make fewer explanations; all they want is the verdict—they have come to trust you.

These people are serious in their intent, mean to be independent voters, and have no intention of voting for a political machine. They welcome a chance to get any honest source of information other than the newspapers. Their votes cannot be purchased, they are not in politics themselves, and their name is legion, in any community.

You may find that fifty or sixty people make it a regular habit to call you up in the last day or two before an election and ask you how to mark their sample ballots. It is a "must" to place a typed list of your choices by the telephones a couple of weeks before the election so that even your twelve-year-old son can pass out the gospel in your absence. These people simply want your choice; they pay no attention to politics, but they do vote. You are a "find" to them—and their votes are in your pocket!

Not only their votes, but the votes of many of their families and of their friends. They become secondary centers of influence for you - dope from the horse's mouth is scarce; they are rather proud of knowing you and they pass the word along. You are safe in figuring about five votes for each person who looks you up or telephones you.

Fifty times five is two hundred and fifty—you have 250 votes "in your pocket," quite aside from all your regular campaigning activities.

Many an election is won by a smaller margin than that!

How to Mark a Ballot in a Hurry:

There will come a year when sickness, or an extended trip out of town, or something, causes you to be caught with your lines of communication down. This time you don't know the answers; most of the ballot is a mystery to you. But the people who have come to depend on you will still expect your advice in marking their sample ballots.

Here is an easy, foolproof way to get a satisfactory list in a hurry. Use it—but tell your clients that you are somewhat out of touch and may make some mistakes. The mistakes will never be important but you don't want to shake their confidence in your truthfulness and good sense. To some of them you can explain the process; to others, just give them the selections.

Here is the process: Get a copy of the newspaper you despise the most. (You have it—of course you have it. Don't you want to know what the opposition is doing?) Note their selections and vote against all of them. Make that your list

In some cases some candidates and some propositions will be so overwhelmingly popular that you will find out afterwards that you voted the wrong way—both parties, or factions, were in agreement. But it does not matter in the least, because those candidates and those propositions, you will find, will have won by overwhelming majorities. Your mistaken vote meant nothing.

You will be able to eliminate some such cases by casual inspection and correct them as you make out the list, thereby saving yourself some embarrassment—but that will be the only significance.

You may well ask why not use the newspaper you favor most and vote for its selections, rather than against the selections of that despised opposition rag. Well, I admit I am prejudiced on this point—but I have yet to see a newspaper which seemed to me entirely altruistic and public-spirited in its policies at all times. Even with the best of them, it seems to me that the Brass Check occasionally shows through. I think I have detected some terrific swindles on the trusting public in many a list of recommendations which was, on the whole, good.

I think it is more nearly foolproof, when you are in a hurry, to make a reversed use of recommendations which, in your opinion, come from unmitigated scoundrels.

How to Dispense Patronage: This is one of the touchiest problems in politics but one that you can't duck. No matter how anxious you may be to avoid all contact with a "spoils" system the matter is bound to come up and you will have to pass on it, as long as there are any public jobs which are filled by appointment rather than by honest competitive examination. There are still lots of such appointive jobs and there is no end in sight. Even, come the millennium, when all possible spoils are abolished, there will be appointive jobs on the policy-making level and the favor of politicians will be sought in the filling thereof.

On the policy-making level the touchstone of political belief and loyalty is both moral and a practical necessity. There has been a lot of starry-eyed guff talked about this; in my opinion the people who talk it are spiritual descendants of the mice who voted to bell the cat. Of course the policy-making administrators of the executive branch of the government should be active and loyal party members of the party in power since they will be called on to bring to life the party platform of the party in power. Any other arrangement is a swindle on the people. Would you hire a surgeon to give a Christian Science lecture? Or a Rabbi to say mass?

Under special circumstances a chief executive, state or national, may draft an elder statesman of the other party to do a difficult top-policy job for which such man is peculiarly fitted. Such statesmen, of both parties, can and usually do carry out their special assignments with high patriotism and without obstructing the program of the party elected to power. When such a case comes up, don't go overboard in being a partisan. Some pipsqueak in your county committee will pop up with a resolution condemning such a coalition action. Don't handicap your governor or president by supporting such a narrow view.

But the much more usual case is the one in which partisanship is appropriate. Your party has just won an election; there are numerous policy-level appointive jobs to fill. As an active party politician your support and endorsement will be sought; in such cases you are not only justified, you are obligated, to consider the politics of the candidates as well as their several abilities. Your governor (or mayor, or president) is entitled to assistants who are loyal and of the same political beliefs. A man can best demonstrate his devotion to the party principles by getting out and hustling for the party ticket. Such party support may not in itself prove anything, but the lack of it is does prove something—it proves either that the appointment seeker does not really believe in the party program he now asks to help carry out as a public official or it proves that he is too indolent and too selfish to make a good public servant. Thumbs down!

I want to elaborate this point because there is so much nonsense talked about it. It seems to be part of the Great American Credo that it is statesmanlike to forget all about party lines as soon as the election is over and pick the "best men" for the big jobs whether they helped in the campaign or not. It's pretty but it's not true to life. The "best men"—for this purpose –are not to be found among the spectators, nor on the other team; they are to be found among the men who were in there scrapping for what they believed in!

Although policy-making appointees should be party regular and active campaigners, there is no reason why typists, surveyors, truck drivers, or food inspectors should be selected for their political beliefs and many reasons why they should not be. Despite the prevalence of civil service, good and bad, many such jobs are purely appointive and you will be called on to help people get such jobs.

Patronage is not an easy matter and I know of no perfect solution. I suggest the following pragmatic rules for making the best of a bad situation:

(a) Accept the responsibility. When it comes to pass that you have the power, through influence or direct authority, to decide or help to decide who shall hold the myriad little jobs below policy-making level, meet it head on, make the decisions—and the mistakes—and take the consequences. To pass the buck is moral cowardice, similar to that of the person who can't bear the thought of killing but eats meat and wears fur, and it will result in someone else passing out the jobs in a fashion which may not please you and which may be contrary to public interest.

(b) Don't adopt a "spoils" attitude. Discuss qualifications for the job, not whether or not the candidate is politically "deserving." Make it quite plain that you think such jobs should be filled by civil service methods and that you are acting in trust for the public, not for your party. (This advice is contrary to that of many successful politicians, I must admit. Nevertheless I think my attitude is more practical in the long run. You will have to find out for yourself. But I submit that my advice is not only moral, it is practical—and that any other course leads to a long succession of headaches and loss of votes.)

(c) Be completely honest with the applicant If you don't intend to help him get the job, tell him so, bluntly—and take the consequences. There is no difference of opinion here on the part of any of the successful politicians, but the advice is hard to carry out. It is so much easier to promise to do "anything you can to help him," then fail to follow through. I must admit that I balked at this hurdle when I was new to the business. I did not have the courage to disappoint a man to his face. It takes guts and I did not have the requisite supply. I have learned better—I won't make that mistake again. But it still upsets me to have to say "no."

(d) Be warmhearted. Don't adopt a holier-than-thou attitude. Help the poor devil if honesty permits it. Err on the side of charity. After all, he has to eat—at least he thinks so. Job hunting isn't easy at best, and he, or she, wouldn't be there if the wages weren't a matter of consequence. Even if you have to say no, you can be friendly and give him the dignity that every human being wants quite as much as he wants a full belly. Sit him down, offer him a cigarette, a cup of coffee. Listen to his troubles. Perhaps, if you can't give him the job he wants, you will recall one in the course of the conversation which he is qualified to hold.

There is nothing unstatesmanlike in helping another fellow human being to find a job. It is as righteous as healing lepers or causing the lame to walk. Most of your applicants will be second-raters, but don't let that worry you; most of the world's work is done by second-raters. You won't be cheating the taxpayers in recommending a person who is merely adequately qualified instead of being an ideal candidate for the job. First-raters hardly ever seek these minor public jobs, as they can make more money in private industry.

Don't try to monkey with any job covered by federal civil service! Tell the applicant that the job he wants is beyond politics and that he should go straight to the civil service commission where he will be given, not one but many, fair competitive chances to get a job if one is available. The federal civil service commission comes as near to being above reproach as any public agency you will find.

There is one apparent exception to the above rule: Many agencies under federal civil service make seasonal, temporary appointments, without examination, to cover their peak load period. For example the railway mail service and the postal service need a lot of help around Christmas time and the Internal Revenue Service has other rush seasons. It is frequently impossible to get sufficient help from the certified civil service lists. This means jobs for clerks, typists, laborers, chauffeurs, *etc.* Most of the jobs require only minor skills and no experience.

Don't try to use political pressure to get these jobs for people—it's wrong and you don't need to. What you can do is make it your business to know when such jobs are available. You can pass along the tip to the unhappy creature you have had to turn down and let him go get the job on his own. Most people simply don't know the ropes; they are not too familiar with the world around them. You can often lend a helping hand just by knowing more than the applicant. He may even be grateful to you; at least you have not refused him help.

Such devices are necessary if you are to compete successfully with the Machine. Never forget that the strength of the Machine lies in giving help when it is asked. You can do likewise—and not attach strings to it. Bread cast on the water comes back of itself; you don't need to harry unfortunate people by insisting that they demonstrate loyalty to your political organization.

(Incidentally, the successful machine politicians know that fact. They will help anyone, not merely the "faithful." They count on a backlog of good will rather than on cracking the whip. The whip-cracking comes later, if at all.)

Appointments to Annapolis and West Point should be purely competitive but are not. The civil service commission will serve as an impartial referee in selecting candidates for appointment as the agent of any congressman or senator who asks for the service. You will be performing a patriotic service by urging your congressmen and senators to avail themselves of this service.

You will be approached frequently by parents of young hopefuls who want to go to one of the service academies. You can encourage such laudable ambition without mixing politics into it—but which will nevertheless redound to your political advantage! In the first place these persons usually do not know how to go about any phase of the matter; the kid has simply been struck by the bug. Full information may be obtained by anyone by addressing requests to the Adjutant General of the Army, concerning West Point, Deputy Chief of Naval Operations (Personnel) for Annapolis, or the Commandant of the Coast Guard, Treasury Department, for the Coast Guard Academy. They can get this information just as quickly from any public library or recruiting station, but they don't know that, and they will love you for your helpfulness. From the same sources you may, if you wish, obtain free pamphlets which set forth the requirements for each academy, along with typical entrance examinations. You can also obtain lists of prospective appointments and the names of the officeholders who control them.

If you have these items in your possession you will seem almost omniscient to the lad and his parents. You can also pass out some good, nonpolitical advice. All three schools are basically engineering schools. Therefore an applicant needs solid grounding in mathematics and physical science, plus one modern language. Make sure the kid knows this. All three schools have stringent physical requirements, and the applicant should find out at once whether or not he can meet them, or whether corrective measures will enable him to meet them. It is a sad thing to see a boy spend a couple of years trying for an appointment, then eat his heart out because some disqualifying disease in his past record prevents his accepting it when it comes along.

Don't use your political influence in connection with appointments to the service academies. It may not be dishonest, but it is certainly not in the public interest. Limit yourself to helpful advice and supplying information.

I have dwelt at length on these service appointments because, first, you will be faced with the problem with certainty every year, and second, because I am advising you not to give the political help asked for. Since you are to refuse to basic request (for political influence) you should know specifically what you can do to be helpful to all comers. The matter is touchier than most requests for political favor because of the emotions stirred up by the parent-child relationship. It is easier and safer to turn down the father in a request for a job for himself than it is to refuse him help for his boy.

How to Tell a Trojan Horse from a Political Party:

In any city or town in which a well-entrenched machine has been in power without interruption for many years, the party of the political label opposite to the label worn by the Machine will also have a public organization, somewhat smaller, which regularly puts a ticket on the ballot, opposing the Machine, and with equal regularity gets beaten.

One will be the "Democratic" organization; the other will be the "Republican" organization. One of them will be the party in power and will be known as the "Machine." But it is almost a foregone conclusion that they are both the Machine.

It's a partnership. They get along fine together—except in public. Each year they put on a whoop-t'-do campaign, a grunt and groan match for the cash customers. They exchange insults, demand investigations, and hold rallies-but the fight is fixed, the results certain, and the take split two ways by arrangement.

In addition to these official organizations there will be unofficial organizations of each party, reform in nature, and probably unrecognized by their respective national committee. That makes four parties—or, more truthfully, three. The latter two are honestly opposed to each other and to the Machine. More confusing than amusing, isn't it? Well, take a glance at the multiple parties of some other countries; it will make you feel better.

The question is: What should the honest citizen do when faced with this situation?

It is a very real problem, for the "reform" wings of each party usually suffer from pernicious anemia. As for the official organizations, they are not the Republican and Democratic halves of the American Eagle; they are the twin wings of a turkey buzzard. For these reasons, the honest citizen in a machine-ridden community usually stays out of politics, and limits his participation to voting for the national ticket of his choice in the general elections.

But we'll never get out of the mud that way!

If you live in a machine-dominated city and if you entered politics by the direct routes suggested in Chapter II, you probably landed first off in the Machine, either main tent or sideshow. It hasn't hurt you, but you have cut your teeth and now is the time to strike out on your own. The six months or so that you spent with the Machine has taught you more than anything else could in the same length of time.

Move in on one of the two reform organizations, take it over, and, through it, capture the party of its affiliation in the primaries. Operation time: Six months to three years.

Use the party organization you have captured to turn the Machine out of power at the following city final election. Then do your darnedest to get a satisfactory governor, state attorney general and county prosecuting attorney at the next general election in order to tie down your victory.

Does it sound too hard? Remember what was said of the people who crossed the plains: "The cowards never started and the weaklings died on the way." Don't despair; you will not be alone. There will be others marching beside you. It is not too likely that you yourself will be called on to be the generalissimo of this war; you may find yourself a non-com or a junior officer.

But it can be done. I know it can be done because I have been present when it happened. Many American cities have carried off such reforms successfully; it is not too hard to do. The hard part is to make the reform stick. The ordinary reform organization falls to pieces after the first successful campaign and the ordinary reform candidate turns out to be a sorrier specimen in office than the Machine politician he displaced. The anatomy and pathology of reformers and reform organizations will be discussed in the chapter Footnotes on Democracy. Choosing a candidate will come up in the next chapter.

Many machine politicians are so sure that a reform group will hang itself that a lost election does not worry them. They take an off-year philosophically as a chance to clean out the dead wood and strengthen the organization. Much of the organization is secure through a phony civil service; the rest can live on its fat

You, presumably, have learned already that politics is a process that continues. You will not fall into the error of thinking that you need to plan for only one election. Let us consider then how you will choose your field of operations and what you will do.

Pick your medium on principle, not expediency, or you will never be happy. If you are a Republican in your national politics, if

Republican party principles are what you believe in, then go into the Republican reform organization, even though the Democratic reform organization may seem to have the better chance of achieving your immediate purpose, defeat of a corrupt machine. Vice versa if you are a Democrat at heart

In some cities the local offices are "non-partisan" by law. This changes the labels but not the facts; a "non-partisan" city machine will always turn out to be owned by the leading politicians of one party, assisted by tame dogs who nominally carry the other party label. A "non-partisan" set up makes it a little easier to form a coalition to defeat a machine oncce—and makes it much harder to preserve a reform once instituted, because a lack of organizational responsibility and lack of basic community or interests and belief among the coalitionists.

"Non-partisan" in local affairs was a bill of goods sold to the people of this country early in this century by a bunch of starry-eyed political theorists who were not semantically oriented and thereby confused symbols with facts. They saw the corrupt city machines—party machines—and figured out that they could do away with all that by outlawing political parties in local affairs. It was a cinch for the machine boys; the labels were abolished, but not the Machine! (I wonder why that didn't occur to the theorists?) It enabled the same old corruptionists to get away with murder without leaving finger prints around the corpse.

If you still have party labels in your local affairs for goodness sake, hang on to them! Otherwise, when they steal the city hall, you'll never be able to pin it on anybody.

Let us assume a concrete case so that we can be specific. You will have to shift it around for other circumstances but the principles will not vary. We will assume partisan local offices and we will assume that your party is not in power. The only difference the latter assumption makes is that in such case it takes a primary election and a final election to gain power; in the other case, when the Machine proper wears your party label, the primary election is the only real struggle and the final election may be a pushover.

First, you and your friends take over the reform organization of your party. This is about as hard to do as beating up on a butterfly; you just join up and start running things by the techniques described elsewhere in this book. You get new members for the existing clubs and form new dubs where needed. For all practical purposes you behave as if the anemic older organization never existed; you form a new political organization and start getting ready for your first primary fight

That is your practical, factual behavior; your symbolic behavior is something quite different. The old, moribund reform organization has its officers and notables. You will find them to be, with few exceptions, a bunch of prima donnas and political masochists as well. They never really expected anything as strenuous as success-and they bleed easily.

You must avoid hurting their feelings. They may not be much use to you but they have the power to do you a great deal of harm.

Remember the old story about the new lodge member who was elected "Lord High Exalted Ruler of the Universe"? He was not the lodge master; his was the very lowest position in that lodge. There is your technique.

Flatter them. Defer to them. Ask their advice... in such terms that you get the advice you want! Never ignore them. Have them speak to new dubs. Put them on "dignity" committees (people who greet visiting notables, sit on platforms during programs, and have their names printed on political stationery). Never displace them from club or organization office unless they wish to retire. You can always create new offices- "executive" this and "executive" that—without disturbing them. If some old fuddy-duddy is now chairman and can't conduct a meeting properly you can always carry out basic business in a committee-of-the-whole, with your own choice as chairman of the committee-of-the-whole—or you can through an executive committee–or provide the office of parliamentarian—or even teach him some parliamentary law if you are subtle about it. You yourself will work as floor leader, in his good graces. Be sure never to surprise him with what you bring up on the floor. Tell him about it beforehand.

But don't replace him until he wants to retire, then create some equivalent of Lord High Exalted Ruler of the Universe for him - "critic," "senior adviser," "chairman of the reception committee."

I was present once when an elderly man, just the sort I have referred to, addressed a mass meeting for twenty minutes on how he had been ignored by the johnny-come-latelies in the campaign just completed. That was his whole plaint; the campaign had been successful - he could not deny that. It had turned out a bunch of vultures and had taken over an entire state organization. But he had not been consulted; he was the dean of the reformers in the party; his nose was out of joint.

His point was ridiculous, as a reformer he had been a consistent failure. But he was a powerful, persuasive orator; he managed to convince the crowd that he had been wronged. It started a crack in the organization which widened and destroyed it.

He is nationally known but I shall not name him - he is rich in years and honors and fought many a gallant fight in his youth. I cite him only as a warning.

Some few of the oldtimers will turn out to be good workers; if you are considerate of all you can salvage the useful ones as well as avoiding the dangerous pique of the dead wood.

Let us now suppose that you have won your first primary (see Chapter X) and thereby control the official party machinery. You are the Party, you and your friends, in the legal sense; this obligates the state and national committees to deal with you.

You have still to cope with the persons you have displaced. This will be a headache!

Here we are assuming that these persons are not sincerely members of your party at all; they are stooges of the Machine who wear your party label for the purpose of selling out your party. These jackals lack even the limited honesty of the ordinary successful machine politician; they are professional traitors. You cannot trust them under any circumstances.

(This case is very different from the normal post—primary situation described in Chapter X where your object would be to heal the wounds between factions all loyal to your party.)

You are likely to find it very difficult to throw these crooks out of the party. You can't keep them out of public meetings; in any case some of them will have been elected to your county committee. There is probably no method of unseating them, but this is not the time to compromise. Don't let them hold any office if you can possibly prevent it. If you let one have so much as an honorary vice-chairmanship in a subcommittee, he will go out, print up stationery with his title on it, and write letters of endorsement for the Machine which will appear to be, through judicious use of large and small type, official endorsements from your organization.

Another favorite trick, and one almost impossible to stop, is for them to incorporate a dummy political "club" under an official-sounding title, such as: The 12th District Official Republican Club or The Democratic Assembly of Gedunkus County. Sometimes you can stop this sort of thing with an injunction, but not often.

There is no sure cure here. All I can recommend is to keep them at arm's length, don't trust them, and don't give them anything. Some of this phony organization may be poor lost souls, honestly devoted to the party and happy at the change. Very well, let them prove it by a long, long, term of volunteer work at a low level. Keep them on parole until you are sure of them.

I have elaborated this point because, once you build an organization, these termites will try to dominate it, under the pretext that they are the "real" (Democrats) (Republicans), and you will be tempted to meet them halfway, particularly because pressure will almost certainly be brought to bear on you from the state capital or from Washington by senior party members who are interested in party harmony and may not understand the local situation. Don't do it. If you know, of your own knowledge, that the official party organization you replaced had unclean relationships with the Machine you are opposing, then this is one of the times not to compromise, even though the national chairman of your party gets you on long distance to plead with you!

You have built an organization; you have captured party machinery-now to win an election!

CHAPTER VII

How to Win an Election

The By-Election at Eatanswill

"There are twenty washed men at the street for you to shake hands with and six children in arms that you are to pat on the head and inquire the ages of. Be particular about the children, my dear sir; it always has a great effect, that sort of thing."

"I'll take care," said the Honorable Samuel Slumkey.

"And perhaps, my dear sir," said the cautious little man, "perhaps if you could-I don't mean to say it's indispensable - but if you could manage to kiss one of them, it would producea great impression on the crowd."

"Wouldn't it have as good an effect if the proposer or seconder did that?" said the Honorable Samuel Slumkey.

"Why, I am afraid it wouldn't," replied the agent. "If it were done by yourself, my dear sir, I think it would make you very popular."

"Very well," said the Honorable Samuel Slumkey with a resigned air, "then it must be done - that's all."

"Arrange the Procession!" cried the twenty committeemen.

- From The Posthumous Papers of the Pickwick Club,
Charles Dickens, 1837

"The place to learn to wash dishes is at the sink." The stuff in this book is predigested; to cut your teeth you must get out there in the field and try.

You are likely to lose your first election - let's discuss that first. With the aid of a few simple rules you can be absolutely certain of losing.

How to Lose an Election: The first thing to do to lose an election is to put out of your mind the basic rule of politics that elections are won with individual votes, each held by a separate human being who must first be convinced, then persuaded to go to the polls on election day to record his conviction so that it may be counted.

If you will neglect that rule you can lose extemporaneously. However, there are some other positive steps you may take to insure a good, rousing, landslide defeat.

Put the major portion of your time, energy and money into the indirect, superficial aspects of campaigning, and slight the direct, vote-by-vote methods, such as doorbell pushing. Accept all the speaking engagements you can manage to get, even if they take you miles out of your district and are before groups who will not permit an outright campaign speech. It gets your name in the paper, doesn't it? A candidate has to have publicity, doesn't he?

Get for your publicity man some kid who had a high school course in journalism, no experience, but plenty of enthusiasm. Then stifle his one asset - enthusiasm -by backseat driving on everything he tries to do.

Get a lot of expensive advertising literature, printed on expensive stock. Put your picture on it, using different cuts for each sort, and fill up the space with plenty of words in small type. Limit your precinct activity to having this junk distributed loose on the doorsteps. You have too few volunteers to ring all the doorbells; this gets you name all over the district, doesn't it?

Tie up a big chunk of your available funds in radio time. Hire fifteen minutes or half an hour and make a political speech, once or twice a week, or whatever you can pay for. (Radio stations like cash on the table.) Take the radio time at the nonpolitical rate; it does not permit you to mention the election but you get twice as much time for the same price. They will let you discuss issues as long as you don't campaign directly - and after all, your object is to educate the voters, isn't it? If they know what good things you stand for they will remember you on election day, won't they?

Plan some Big Events for the latter part of the campaign, a mass meeting, a dance, or a picnic. Have your volunteer workers concentrate on making this jamboree a success by selling tickets, and arranging a fine program. Make it the climax of your campaign.

Run for some good-sized office as your first try, such as congressman, or superior court judge. After all you are too big a man for those two-bit jobs like selectman or legislator.

Make some member of your family your campaign manager. This insures loyalty, on the part of the manager, at least.

Try to win the support of every possible sort of group by hedging your statements and carrying water on both shoulders. Chamber-of-Commerce meetings and funny-money rallies don't draw the same audience, do they? You can do a lot - a lot of something at least - by a wink and a nod. You are for the welfare of all the Peepul, and that is what matters-as for your methods, well, you have to fight fire with fire - it's a dirty business, isn't it?

(You're blinking well right it's a dirty business if you play it that way!)

Let each hopeful aspirant for patronage think that he has the inside track for your favor, but don't promise anything you can't weasel out of. (It doesn't really matter; you aren't going to be elected in any case.)

Don't sample your district to see how you are doing. Instead, surround yourself by your loyal supporters and listen to them. Kick out the pessimists; they are just trying to discourage your workers.

By running a campaign in the fashion described above you can enjoy every minute of it and have a wonderful time, right up to the announcement of the results. Even then, after your defeat, there are ways to turn a licking into outright political suicide.

You can skip the election party - the party after the polls are closed in which the workers either celebrate or console each other. This saves you the cost of the refreshments but doesn't cost you any votes, since the party would not take place until after the election is over, if you held it. It saves you embarrassment, too, since some of them are sure to get drunk.

Make yourself inaccessible the next day, too, and for several days thereafter; otherwise your supporters will swarm over you and cry on your shoulder. Don't they realize that you are nervously exhausted and have just been subjected to a shocking disappointment?

Of course you will have to thank them for their efforts. Just limit it to a mimeographed form letter. After all, it's impossible to write everybody a personal note; they ought to realize that.

Then bolt the party. This was a primary you just lost, naturally, since your methods would never take you to the finals. Neglect to support the member of your party who defeated you. You are morally justified; he had some of the worst elements in town around him-utterly shameless politicians. Not only did they tear down your signs, but they practically bought votes. And they dug up some things in your past and put them in the worst possible light-libel, really. You can never forgive him for that and no reasonable person would expect you to.

So take a walk. Do it literally - you can always be called out of town. If anybody ever needed a vacation, you need one now; it is a natural thing to do. So take a walk; hole up with kin folks, back in the sticks, until the finals are over.

The above routine entitles you to pose the rest of your life as a man who is disillusioned through bitter experience. You can hold forth on how democracy is a nice idea but won't work in practice, and how this country will some day have to feel the firm hand of authority - either the Best People will have to assert themselves and rule with no nonsense, or some rabble-rousing demagogue will ruin the Republic. You know - you've been through the mill!

(I'm sure you have all met this guy at some time or other.)

The above horrible example may seem too perfect to be true, but every wrong move depicted above occurs in every campaign, committed by some of the candidates, every year throughout the country. Many campaigns show the majority of the above errors. I recall one copy-book example which had all of the above mistakes - except that, wonderful to see, the candidate did not become disillusioned. He was bright enough to learn. After bolting the party he eventually came back, admitted his error, took off his coat, got to work, and rehabilitated himself.

How to Win a Campaign: Let us say it again: The key to success in politics is to remember at all times that votes are what you are after and that the votes are in the precincts.

They aren't downtown in the politico-financial district. They aren't at club meetings, not many of them. Of course you pick up odd votes wherever you find them, but the club meetings are primarily to arouse and hold together your volunteers; individually there aren't enough votes in political organizations to carry an election. Rallies are for morale building primarily and secondarily for publicity, but the persons who attend them have already made up their minds how to vote and can be counted on to vote, whether the rally is held or not.

The vote you need to win lies on the other side of a dosed door in a private home; you have to punch that doorbell to get it. There is no substitute.

Having lined it up, you have to be sure it reaches the polling place- and that calls for more individual action.

It isn't hard to get adherents to your cause. The vote you are looking for is either already on your side and needs simply to be located, or it is one which can be switched to your side (from a condition of "no opinion") just by stating your case and asking for support. The "hard cases" should be left alone; it's like butting your head into a stone wall.

Your real problem, then, is not selling your bill of goods, but finding your customers and getting them to the polls.

And that, compatriot, is some problem!

You are hardly ever licked by the opposition; you are licked by your own friends who did not vote. I once lost an election by less than 400 votes; in the post-mortem I was able to tabulate names of more people than that who were personal acquaintances of mine, had promised me support - but did not vote. The shortcoming was plainly one of the election day organization. Forty election-day volunteers could have swung the district.

Unfortunately the district had been conceded as hopeless by everyone but myself and a handful of stalwarts, and we could not manage to be enough places at once on election day.

Earlier in this book I have described how Charles Evans Hughes lost the presidency when a shift of less than one ten-thousandth of the vote could have elected him - if the effort had been applied in the key state. The 1944 election is much more typical - with respect to statistics, not issues.

Mr. Dewey received only 99 electoral votes out of a possible 432. Looks like a landslide-but let's analyze it.

In 1944 there were 87,000,000 American citizens over twenty-one; only 48,000,000 of them voted. That leaves 39,000,000 "sleepers" - persons who did not register, or just failed to vote. If the preferences for president ran in the same ratios among the "sleepers" as among those who voted, then Mr. Dewey lost 18,000,000 potential votes - but Mr. Roosevelt beat Mr. Dewey by considerably less than 4,000,000 in the popular vote.

It looks as if the persons who were against the Fourth Term weren't against it enough to bother to turn out to vote!

If the Republicans had carried California, Illinois, Michigan, New Jersey, New York, and Pennsylvania, Mr. Dewey would have been elected. These are key states, swing states. None of them can be counted as normally Democratic; in the last ten presidential elections the Democratic Party has lost each of these states either half, or more than half, the time. Furthermore, all six of them either had Republican governors in 1944 or elected a Republican governor in the 1944 election.

Mr. Roosevelt's majority in these six states, taken all together, was a gnat's whisker more than a million. But 7,200,000 of the Republican "sleepers" were in these six states! If the Republican organization had concentrated its efforts in these six states - everybody knew that they were uncertain states; ready to fall either way - Mr. Dewey would have won provided one in seven of the Republican "sleepers" were delivered to the polls.

Please draw no inferences about which side had my support; I am neither weeping nor cheering-this is a clinical examination. There is only one conclusion that need be drawn: In this election the Republican precinct organization wasn't worth a hoot, the high command muffed the strategy and the precinct captains muffed the tactics.

Now let us suppose that it is your home congressional district and that you have vowed to unseat Congressman Swivelchair - we'll assume that you have good reasons. What are your chances and what does it take?

You live in the mythical "average" district; it has therefore 320,000 human souls. 200,000 of them are over twenty-one; of these 140,000 are registered to vote. We will assume that the district is evenly divided between the two major parties, so that you have a chance to carry the district if you gain the nomination for your candidate but will not have the election handed to you on a platter.

There are, then, 70,000 members of your party. Of these about 25,000 will vote in the primary. You need 13,000 to win a clear majority in the primary - less, if there are more than two candidates and your state permits plurality nominations.

What does it take to get the 13,000 votes? Well, if your organizational activities - the clubs we talked about in preceding chapters - can show one hundred active volunteers who are not afraid to punch doorbells and will work on election day, I'll bet the rent money on the outcome.

Cost? Anything you want to make it. Volunteer campaigns should not cost much. Can you bank $1,000 before your candidate files his nominating petition? If so, you should never have to worry about unpaid bills - provided you have an absolute veto over commitments and expenditures. If the candidate's wife is permitted to order printing, you're sunk! The same goes if you have a campaign committee which can overrule you without digging down into their pockets personally to spend money in ways that you do not approve.

The campaign will cost more than $1,000 but the excess can be raised by passing the hat as you go along, and by nicking the very persons who want to make expenditures not included in your budget.

Still, a thousand dollars is a lot of potatoes to most people. Where are you going to get it? The answer lies between two extremes: A thousand men at a dollar each and one man with a thousand dollars. Of the two the first is by far the better; volunteer campaigns come to life when the workers themselves, and their friends, foot the bill.

Suppose your first tentative campaign meeting, long before the campaign, has twenty people at it. You ought to be able to clip them for an average of $10 a head (some at twenty-five, some at nothing), cash and checks, paid on the spot. Perhaps the candidate is sufficiently well-heeled that he can put in $300 (but don't let financial condition be any criterion in selecting a candidate-a rich man can lose an election for you just as fast as a poor one).

Your clubs should be able to raise a little for you. Then perhaps you know some people who will kick in once they see earnest money in the pot. But get the thousand before you make any announcements to the newspapers; you are going to have to have it and it is much easier to raise it first when you have time for such matters, than later, when time is everything.

The opposition may spend many thousands of dollars, but don't let that worry you. Elections are not won with dollars. The only reason you have to have any money is because printing and postage take cash. One thousand dollars is, of course, an arbitrary figure. More is convenient, if you can raise it; you may even get by for less if you have real talent for making good soup out of vegetable tops and leftover bones. Most of the things that cost big money in campaigning are almost useless for vote-getting purposes in the local campaign.

(And, come to think of it-what campaign is not a "local" campaign. Votes are in the precincts!)

After the primary, money - clean money - will be much easier to raise. In addition to local sources, the National Committee is always anxious to subsidize a local organization which shows unexpected signs of displacing one of the opposition, without help in the primary and with a live, volunteer organization. Each national organization has a fund to be used only on congressional districts "in the balance" - which is not to be spent on hopeless districts nor on sure districts, but on ones such as yours. There may be only a hundred such in the country, but the fund comes from all over. Present your figures.

Now let's tabulate the situation. We are assuming that the Honorable Horace Swivelchair is not of your party; you may want to displace an officeholder of your own party, but the circumstance is less usual and the task should not be attempted except for the most grave reasons. (Are you quite sure you know all about the voting record of your co-partisan whom you wish to displace? Have you tried all methods short of war? Don't get sucked into such a campaign simply because someone is ambitious to hold office. The minimum reasons should be nothing less grave than proved moral turpitude or a consistent refusal to support party measures.)

The Situation:

District population	320,000
Persons over twenty-one	200,000
Registered voters	140,000
Registered strength of your party	70,000
Number voting in your party primary	25,000
Required to cinch party nomination	3,000

Your assets are:

Volunteer workers	100
Cash on hand	$1,000

The problem is to turn the assets into 13,000 votes.

For simplicity we will assume that there are just two candidates out for your party nomination, Jack Hopeful and your own candidate, Jonathan Upright. If there are more, you are a cinch to win, but let's do it the hard way.

Thirteen thousand votes divided among 100 people means an average of 130 ballots in the box per worker. But it is not that bad; your candidate, in a two-man race, will get 10,000 votes just for having his name on the ballot. Your workers have to locate one hundred and thirty votes apiece, but one hundred of them will get to the polls in any case under their own steam and vote for your man. The precinct worker must sort out the other thirty votes and get them to the polls - perhaps half by phone calls and the other half by providing transportation.

It begins to look easier - one man to haul fifteen voters to the polls, in order to gain control of a district containing a third of a million people, in order to seat a congressman in a Congress where the draft law was extended, just before Pearl Harbor, by a majority of one vote.

It is easy - from that stand point, and that is the reason why the volunteer amateur can take over this country, or any part of it, and run it to suit himself. Your part is very easy if you are just one of the volunteer precinct workers-a noble ambition in itself!

But if you aspire to manage a congressional contest you will find, before you are through, that it requires all of your intelligence and diplomacy. While the job can be done - many have done it-it will call into use your highest human faculties.

Choosing a Candidate: All too often your choice is very narrow. In this country people who offer themselves for public service get a shameful kicking around. The pay is so niggardly that an honest man usually leaves the office poorer than when he accepted it, and the dead cats and rotten eggs far outnumber the pats on the back for work well done - to our collective shame!

The sober, able citizens whom we need in public office know these things; very few of them are willing to make the sacrifice that public service entails. We have indeed been blessed that enough able men have always been willing, thus far, to forego their own interests that the Republic might survive.

You will probably have to persuade the candidate of your choice to make the race. If he is bright enough for the job he won't be very anxious to have it.

If he is the man you need for the job he will be aware that some citizens have to give up their natural desire for privacy, peace of mind, and financial security in order to keep democracy alive. The motivation is the same which causes men to volunteer to meet their deaths in time of war; it exists in peace time, but is a little harder to stir up.

You can expect him to be reluctant but willing to be convinced - convinced that his personal sacrifice will not be in vain. You must convince by showing him that he can be elected, in terms of district statistics, local factors, availability of campaign funds, your proposed budget, and your organization - organization above all. Since he is neither a nincompoop nor politically naive he knows that organization is the controlling factor.

If you can show him a fighting chance, he will probably go.

On the other hand you will be beset by hopeful, potential candidates who are just waiting for the lightning to strike. They will come smirking around, digging one toe in the dust, and murmuring that "Barkis is willin'." These people are usually political lightweights whose only assets are consuming ambitions to hold public office and to receive a public salary.

They will look you up - of course they will look you up; you have an organization-and get in your hair.

They will be hard to handle. It is a hard thing to tell a man bluntly that you don't think he has the character, or the intelligence, as may be, to hold public office. Furthermore you might be mistaken; some unlikely people have served the public well. I suggest that you use a counterattack.

Ask him if he is willing to refrain from running if the organization chooses some other man to back. Press this point and press it hard. Insist that he must commit himself to support and campaign for the candidate chosen by the organization before his name goes into the hat. This commitment should be in writing.

His commitment probably isn't worth anything but it may keep him from doing what he can to sabotage your efforts.

Don't promise him anything at all except that he will be allowed to present his case before the organizational caucus which chooses the candidate - provided he binds himself to the caucus. This is the essence of caucusing, that no one shall participate in it who is not bound by it; it is an entirely fair, democratic procedure.

The pipsqueak will probably jump the caucus if he loses in it. You are then morally justified in sending several of the more influential members of the caucus to see him in order to coerce him back into line. If they are his business customers, so much the better. A caucus is a contract and should be enforceable, but the law gives no means. You are entitled to improvise means, as rude as necessary, as long as you don't step outside the law. ("Look, Joe - you signed that caucus. If you break your word to us between now and election day, your name is going to be mud in this community. We'll see to it that everybody and his brother knows just what kind of a heel you are when it comes to keeping your word. You won't be able to do anything about it, because every word of it will be true-in fact, we'd love a libel suit because that would spread it around to more people. If you don't toe the line as you promised, you are finished politically - and it's not going to do your business any good either. People don't like to do business with a man who isn't honest-starting with me!")

Your own candidate must agree to the caucus, and you yourself. This may be a little hard to take, but democracy is not a one-way proposition. Require from him also a written commitment that he will endorse, support, and make at least one public appearance on behalf of the straight party ticket and in particular on behalf of his successful opponent, in the event that he is defeated. If he won't do this he is not your man, no matter how well you thought of him. Don't waste your time on prima donnas.

A word of warning - when you bind yourself to the caucus, do not bind yourself to manage the campaign of the successful candidate. It is likely that you will be willing to undertake the grief of managing only for the candidate whom you handpicked. If another candidate is selected, it is all right for you to drop back to the status of a precinct worker, there to do honest work but considerably less of it, if, in your opinion, the candidate is not electable or not completely satisfactory to you.

But you must bind yourself to endorse and campaign for the candidate selected by the caucus, at least on the minimum level of canvassing and carrying your own precinct.

I can almost hear your doubts and misgivings about this. Isn't such a commitment likely to land you some day in the uncomfortable position of having to choose between breaking your word or supporting a candidate you know to be unworthy of public trust?

No—not if you know your procedure. In the first place, these are your friends and associates, aren't they? Can't you count on Tom and Art and Dr. Nugent and Alice and old Mrs. Krueger to back you up in keeping any real jerk from getting the nod? If not, you are probably in the wrong pew and should be more careful in picking your political associates.

But let us suppose, nevertheless, that there is a chance that a certain party will pop up as the choice of the caucus; you are among friends but, while you are convinced that this person is a moral leper, you can't prove it. However, he is a very personable chap and many of your staunch friends are still taken in by him. This can happen—it's happened to me.

You need only insist that all the potential candidates be listed before the caucus is bound and that the caucus be limited to consideration of the listed candidates. This gives you a chance to thresh it out before you are bound.

Let's run over a typical caucus-it is one of the least understood and most necessary of the democratic techniques. We'll make it the caucus to select the organizational candidate for congress for the party primary in your district. Caucuses can be used for any sort of joint action; this one will illustrate all the principles involved.

In the first place membership in a caucus is strictly by invitation. The man, or group of men, who call the caucus is the sole judge of the membership. No one has a natural right to be a member of a caucus. You are no more obligated to invite a man to caucus with you than you are obligated to invite him to be a guest in your home. It may be politically imprudent to exclude someone who wants in-he may form a rival caucus of his own-but you don't have to. A caucus has no existence until it votes to bind itself; up to that time, if you called it, you can exclude anyone merely because you don't like the way he parts his hair.

After the caucus comes into formal existence by voting to bind itself, it may add to its own membership any person who agrees to be bound by it by either of two methods, by majority vote (or greater majority vote, as may be required) provided the original terms of the caucus permitted it, or by unanimous vote of the entire membership - not just those present - if the original terms of the caucus failed to provide explicitly for increase of membership.

The original terms of the caucus constitute an inflexible contract among the members and may never be varied except by unanimous consent of all the membership. This is a striking difference between caucuses and all other parliamentary bodies. The essence of a caucus is its unanimity. That unanimity has been arrived at by each member binding himself to support the wishes of the majority under certain conditions all of which must be explicitly stated in the original agreement. This includes both membership of the caucus and the matters which the caucus may consider and how they may consider them.

A caucus which decides by less than unanimous consent to do anything at all not set forth in the original agreement is not extending its powers; it is committing suicide. At that moment it ceases to have any existence, for the contract which gave it birth is no longer binding on anyone.

From which we draw two rules: Be extremely careful what goes into the caucus agreement, and be still more careful that each member understands the exact nature of a caucus. Give a lecture on it each time - someone present is sure to be mixed up on the subject. But get it clear before action is taken.

At this point the Lone Rangers in politics will gallop away. There are many of them and they don't like to surrender "freedom of action." They will leave, noses in the air, protesting that their high ideals prevent them giving up their independence.

Good riddance! There is probably no easier way to avoid these political spoiled brats than by inviting them to caucus and explaining to them exactly what it means. You will thereby remain true to your own ideals of honest dealing and democratic consent.

Candidates are not members of the caucus which select them. This is not a law, but it is good sense. If you called the caucus you have also notified any candidate who has approached you earlier and to whom you have given a commitment for a hearing in exchange for his commitment not to run but to support the choice of the caucus, if not selected. You may also have invited other candidates, in order to make the base of your faction as broad as possible. Each person who has been invited to caucus is also free to bring along his favorite candidate.

The candidates are gathered in another room out of earshot. Among them are Mr. Pipsqueak, Judge Weathervane, and a Mr. Nemo who is acting on behalf of his law partner, Mr. Briefcase. Your own candidate, Jonathan Upright, is not there; you will present his case.

You would be willing to support any of these candidates, in a pinch, except Weathervane. You speak to the group: "Look, folks, I suggest that we listen to the candidates first, before we take any action to caucus. That way we will have more facts. I for one think that we should limit the caucus to a set list of candidates, determined before we caucus, so that no one can say he has been taken by surprise. How about it?"

Someone objects that the purpose of the meeting is party harmony and that the thing to do is to agree to accept the will of the group before we get into any rows over candidates. There is sense in what he says; therefore you must expose the rest of your hand.

"Judge Weathervane is sitting out there, by my invitation, but he is not my candidate. He called on me a while back and asked for my support. I didn't promise it to him. Instead I agreed to see to it that he got a hearing before any caucus I took part in provided he would agree to support the caucus if he wasn't picked. I am bound by that commitment; he's got to have his hearing or I can't caucus. On the other hand I can't agree to support him under any circumstances. If he is still eligible for consideration at the time we bind ourselves I'd have to drop out and leave the meeting. Can you help me out?"

Let us suppose that they turn you down. You have no choice then; you must leave the caucus. Don't get angry - wish them luck and withdraw. You can't even go to the candidates' waiting room and then present Upright's name before the caucus but not as a member of it, because you can't bind yourself and your candidate to support the result of the caucus as long as Weathervane is still in the running. But you hang around on the slight chance that the caucus, when it forms, will not decide to bind candidates to the outcome. Upright may still squeak through.

More probably they will agree to your point, since it is evident that you got into your predicament from an honest attempt to promote organizational discipline. The group holds a preliminary caucus and agrees (a) to a two-stage procedure to hear any candidate who is willing to sign a commitment to support the caucus (this is for outsiders, like Pipsqueak, Weathervane, and Briefcase, and has no effect on the favorite candidates of the members of the caucus), (b) after hearing them to include a list of candidates to be considered as a condition of the final agreement to caucus.

The candidates waiting outside are presented with a written commitment to sign (better write it yourself) and are then invited in, one at a time, to state their cases and be questioned. An agreement like this will be adequate: "We, the undersigned, candidates for congress in the umpteenth district, agree to abide by the outcome of the caucus held at (exact address) on (date) by withdrawing from the race if not selected and by endorsing and supporting the candidate chosen by the caucus. We do this in return for the opportunity to present our several cases in advance of any decision by the caucus."

The last clause is correct and is no swindle on Weathervane. You know your own mind, but the caucus has made no decision.

Weathervane looks at it, hems and haws, then signs it with a flourish. He is confident of his ability to sway any crowd. Pipsqueak looks it over, decides not to sign it, and stalks away in a medium-sized dudgeon. He has gotten cold feet while chinning with the other candidates and this gives him an easy out. You mark him down mentally as a man to call on and dose with soothing syrup.

Briefcase's law partner asks to use the telephone, then comes back and signs. The other candidates sign.

After they have each had their hearing before the group you get down to the business of caucusing. You, or one of your friends, propose that the caucus be limited to the persons now present, that adjournment be provided for if no decision is reached tonight, and that consideration be limited to candidates' names now to be nominated before the vote to caucus is taken. This last point is a repetition to avoid misunderstanding. You may add that the business of the caucus shall include setting up a campaign committee, or anything else which suits your purpose, and close by limiting the actions of the caucus to the points set forth explicitly, except by unanimous consent.

It may be modified, but you will get your agreement as long as you are careful to make everything clear. Nominations come first; when the list is complete Weathervane's name isn't on it. You are safe.

Or perhaps Weathervane's name is there. Unknown to you, Jim Swiftly has an agreement with Weathervane. Here is an impasse; you won't caucus with Weathervane on the list, Swiftly won't caucus unless he is on the list. A separation is the only answer. "Those who wish to caucus with me, come over and stand beside me; those who wish to caucus with Mr. Swiftly, go over and stand beside him."

If your political fences are in good enough repair to justify the enterprise you are undertaking, Swiftly will stand alone, or joined by one or two. Now he and his friends must leave. They will probably object; they will probably want to hang around as "observers" (kibitzers). They will point out that they were invited.

But you must insist. Caucuses don't have "observers"; only the bound members may be present. Tell them to take their caucus (that's what it is) elsewhere.

When they have left you can all sign the caucus - put it in writing - and get on with the selection of a candidate.

Let everybody talk all he wants to, without limit. Present the case of Mr. Upright yourself, carefully and thoroughly. When everybody is talked out you can start balloting. Secret ballot is not necessary; at this stage a man should show his colors-but don't object if it is asked for.

There may be several ballots, with candidates dropping out of the running and regrouping taking place. Someone may ask for an adjournment; if it passes you will be busy during the intervening days, gathering up support for your man. But eventually some ballot shows a majority for one candidate who is then the unanimous choice of the caucus.

It is Mr. Upright. You've started.

Weathervane bolts his agreement the next morning. Swiftly has gone straight to him after leaving the meeting; from the two of them come loud shouts of "Fraud! Frame up! Unprincipled chicanery! Never in my many years of public life, etc." Don't worry about it. Send Weathervane a photostat of the agreement he signed and suggest that he call on you before you send copies to the newspapers. He will probably come around and offer his services, after suitable shadow boxing, in exchange for patronage or a paid job on the committee. Don't give him anything. He won't run in any case.

Swiftly will probably go whole hog and work for the other party.

Of course you can always skip all this monkey business of caucusing -just gather together Upright's friends and form a campaign committee. You can lose, too. Caucusing is worth the trouble; it can either vastly enhance your candidate's chances, or it can keep you from attempting a race that should never start.

But why did you settle on Upright in the first place, before you ever persuaded a caucus to choose him? Your criteria should be suitability, availability, and electability, in that order.

Suitability: He should be a man with whom you see eye to eye on matters of public welfare. I refer to issues - states' rights, unions, foreign affairs, national defense, poll tax, atomic control, peacetime conscription, *etc.* His views in these matters should be generally in harmony with the established program of your party (as are yours) and, in your opinion, wiser on some important issues than your party has shown itself to be in the past, as it is your object to improve the Republic, not to embalm it.

He should be selected from the persons you know through politics in your district, as it is quite unlikely that a suitable public servant can be found in the ranks of those who never bother their heads with public matters, no matter how able or even brilliant they may be in other fields. (Unfortunately the "Congress bug" bites quite a few who have become eminent in other lines. I suggest that you eliminate at once those who wish to start in politics at the top. A suitable candidate must have a record of unpaid, devoted public service of some sort, even if not as a precinct worker. Perhaps he has made an outstanding record on the Grand Jury, in city planning, as a Boy Scout commissioner, or in the improvement of interracial relations. But beware of the Prominent Citizen who has stayed out of public life entirely, even if you find him in Who's Who and he is willing to foot the whole campaign bill.)

There should be no question in your mind as to his integrity or character in general. H.L. Mencken once remarked that, in order to judge a man, it was necessary only to know how he makes his living. I can't endorse that as a sufficient test but it is a very illuminating one. Look into how he gets his money. Does it turn your stomach? Investigate his business reputation among his competitors. He's a lawyer-what sort of cases does he take? He is a doctor-what charity work does he do and what is his practice like? He runs a restaurant-is the kitchen clean? What are his practices with respect to his waitresses' tips? Some occupations are so notoriously dishonest that his reputation will shine out like a halo if he is an honest member thereof. In any case-check up. (I made a terrible mistake once in not doing so, the details of which are so grisly that I decline to repeat them.)

In temperament he should be conciliatory and cooperative. Don't saddle yourself with a man who gets into rows, is stiff-necked, and unwilling to meet people halfway. Be sure that he understands the principle of the coordinate nature of authority and responsibility and that he has sufficient confidence in your ability to delegate the management of the campaign to you and then abide by your judgment. This will come up again under "electability."

In intelligence, education, and experience he should be of congressional caliber. Of the three intelligence is the most important.

Availability: This stumbling block, a serious one, can be dealt with in only the most general terms. In particular it means that he should be able to devote full time to the campaign for three months before the primary, another three months before the final election, and then be able to dose up his affairs and go co Washington. The economic difficulties here automatically eliminate at least 90% of our best prospective public servants. A family man working as an employee can hardly ever get over this hurdle. Available candidates usually are elderly retired people, housewives, young bachelors, persons of independent income, and persons in the freelance professions-actors, writers, lawyers, lecturers, *etc.* Sometimes a farmer, a school teacher, or an independent businessman can arrange his affairs to take the plunge, and once in a while an employer will cooperate by holding a job open. But you may expect to hear something like this rather frequently: "Old man, I'd like to and I appreciate the compliment-but I'm tied to a treadmill!"

This is one of the reasons why lawyers are so numerous in public office. Lawyers have law partners; they can usually arrange time off whenever the bank account can stand it. Lawyers, of course, tend to be poor lawmakers, but their "availability index" is high.

If you select a housewife, count on a maid for her household as a necessary campaign expense.

The remarks about availability of a candidate apply with equal strength to yourself, the manager. Since you are likely to be a woman your problem may be simpler. But I am unable to recommend trying to carry on a campaign part time, while continuing a regular occupation, to either you or your candidate, except in compelling and exceptional circumstances; it is too likely to result in fatigue-impaired judgment during the campaign and physical collapse before it is over. A campaign is pleasantly invigorating to the precinct workers and other volunteers; it is more like an endurance contest for the candidate and manager.

Electability: From a stand point of electability the ideal candidate is male, over thirty and under fifty-five, a veteran with a combat record, strong and healthy, pleasant in appearance without being outstandingly handsome, moderately tall, a good public speaker, a friendly but not an aggressive personality, married with at least one child, very well known and universally respected in his community, a church member, previous experience in public office, previous experience as a candidate (two different things-the office could have been appointive), long service in the party, and willing to let the manager run the campaign.

I have never met such a candidate.

In fact, one of the best candidates I have ever known was female, past seventy, ugly as an old horse, no children, a poor public speaker, and not very well known. What she had was integrity that surrounded her as an almost visible aura and an evident selflessness.

None of these aspects of electability is too important. St. Peter could be elected Mayor of Hell with proper precinct organization. As long as your candidate wears shoes habitually - in public, that is - and qualifies under "suitability" and "availability," it doesn't really matter if he eats with his knife. Usually the things that make a candidate truly not electable are things which have already disqualified him under suitability.

Each deviation from the synthetic "perfect candidate" increases your problems a little, but the opposition has the same sort of problems. You may reasonably hope that the opposition will worry so much about "electability" that they will neglect more fundamental attributes of a good candidate and give you a sitting duck to shoot at. That beautiful facade may conceal a hushed-up indictment for fraud.

The only item under "electability" that need keep you awake nights is the one about previous experience as a candidate. Being a candidate for the first time is like nothing else under the sun. "Nervous bride" is a common expression, but you have seen lots of brides who were not nervous. I'll wager you have never seen a first-time candidate who was not nervous.

Candidates are subject to a nervous disorder which I choose to term "Candidatitis." (New managers sometimes catch a milder form of it, if they have not come up the doorbell-pushing route and thereby gained immunity. Be warned.)

Candidatitis is something like measles; persons almost always catch it when first exposed, one seizure usually gives lifetime immunity, and it is best experienced early in life for the mildest symptoms and the least disastrous aftereffects.

The usual symptoms are these: Extreme nervousness and irritability, suspiciousness raised almost to the persecution-complex level and usually directed toward the wrong people, a tendency for the tongue to work independently of the brain especially in public where it can do the most harm, and a positively childish aversion to accepting advice and management.

Mr. Willkie (God rest his gallant soul!) was an almost perfect candidate in most respects and an able contender for the Champ. Take a look over the yardstick of the "ideal candidate" with respect to electability and see how well he measures up. In addition he had a well-financed campaign which had been organized and directed by some of the most able public-relations men in the country; his supporters had a crusading fervor and the opposing candidate labored under the very great handicap of bucking the anti-third-term tradition which more than off-set the advantage of incumbency. (Incumbency is a questionable asset for a presidential candidate in any case, no matter how important it may be in lesser offices.)

It is generally agreed by most observers that something catastrophic happened to Mr. Willkie's campaign during the man-killing swing around the country. Some of the reporters who went with him say that it appeared that the candidate hurt his own chances, unnecessarily, on almost every occasion.

Note that Mr. Willkie had never run for any office before. Note also that he steadied down right after the campaign and assumed the role of elder statesman, which fitted him well, and was a strong force for unity and coolheaded wisdom in a country at war. Does the diagnosis of "candidatitis" during the campaign seem to fit?

In any event, if you have picked a man you want to run for congress in a year or two, or for any major office, and this candidate has never run for office before, then it would be wise to run him at once for something like dogcatcher, in order to get him blooded for the fight.

Side remarkI find I have used as major examples three cases in which Republican candidates-for-president lost; this is not bias either way. The cases happened to display the illustrative features I needed.

CHAPTER VIII

How to Win an Election (continued)

The GrassRoots Campaign: From here on a bewildering variety of possible activities will press their claims on you. All of them will appear to be of use to the campaign; each will be eagerly supported by some member of your group as being 'Just the thing we need to do!" Unless you have some touchstone rule to go by you will waste your efforts and drive yourself nuts with meaningless activity.

Consider each move, no matter how small, in these terms:

(a) Will the action help to get a specific, individual vote (or votes) in your district and registered in your party?

(b) If the effect is general rather than specific, is the shotgun spread aimed at your own district? Can it be carried out at no cost? If the activity involves time or physical effort for you or the candidate, are the probable results in votes large enough to warrant it, or would it be better to use the time in sleep, going to the movies, playing cribbage, or trying to keep up with the endless study of political news and political issues?

If you start right out thinking in these terms you will soon apply the rules subconsciously and automatically. Let's consider some examples:

Effective Methods: Anything which brings your candidate, you, or your volunteer, into direct contact with a doorbell of a private home is the best possible campaigning. Nothing should be allowed to interfere with this activity-neither storm, nor sleet, nor dark of night, nor the bland insistence of Very Important Persons. I don't care how important he is; in this country he's only got one vote!

The best doorbell-pushing is done by the candidate himself. Consider a vacuum-cleaner salesman; he shows up at your door with vacuum cleaner, ready to give you a demonstration. Compare him with a mythical salesman who attempts to sell vacuum cleaners with nothing but a sales talk and some pretty pictures - no vacuum cleaner! Which salesman will sell the larger number of vacuum cleaners?

Your candidate is the product you are trying to sell; the easiest way to do this is to let the prospective buyer see the product.

In doing so you gain an enormous advantage over the usual opposition, since the GrassRoots Campaign has gone out of style in most parts of this country. Most of our citizens actually lay eyes on their officeholders and the hopefuls thereto about as often as they see circus elephants and with the same lack of intimate contact. A man behind the footlights on a platform is a little bit unreal; he might as well be a movie.

But the people, the individual Americans, are still interested in their candidates; to have one show up at the front door is as delightful a novelty to most of them as would be a chance to ride a circus elephant. That unreality, the candidate on the platform, on the billboard, or in the newspaper, suddenly becomes warmly human and a little more than life size.

In addition to being a novelty the presence of the candidate at the door of a private home is a flattering compliment, because it acknowledges the fact that, in this country, sovereignty is vested in the individual, not the state. (The voter may not think in those terms but the idea will be kicking around in the back of his mind. "Here is a man who really seems interested in us ordinary citizens-not like those downtown politicians.")

We can assume that your candidate has at least a moderately pleasing personality; the situation is a pushover. Most laymen will even cross party lines for anyone they have met and have no reason to dislike. The only way the opposition can off-set the advantage is by a personal call by the opposition candidate himself.

Since the ordinary opposition candidate won't do any significant amount of doorbell-pushing and since the extraordinary opposition candidate can only equal the efforts of your candidate here is a way to join a bat—de in which you need never be defeated. In general the properly organized GrassRoots Campaign cannot be beaten by any other sort of campaign-and it happens to be ideally suited to the volunteer organization with little or no money.

Have your candidate punch doorbells for three months on a forty-hour week basis. Ration his other campaigning to fall outside the forty-hour week of personal calls and don't let the other activities wear him out, no matter how important they may seem (they aren't!). Inspire your volunteers to the maximum of personal calls their free time and industry will permit. Everything else is incidental. You, as manager, will pick up the loose ends and attend to the unavoidable chores. You also will do some doorbell-pushing, less than the candidate, more than the average precinct worker. You must, or you lose touch with reality and your judgment goes sour.

It is frequently objected that congressional districts have become too large for the candidate to campaign from door to door. This is not true; the more physically difficult it is to cover a district the greater is the advantage to the candidate willing to make the effort of a GrassRoots Campaign. It is true that extremely large constituencies, such as for governor or president, cannot be covered effectively by the candidate, but in districts no larger than a congressional district the candidate can and should do personal canvassing, even if the district is spread through several counties. There are ways to save his time and make him more efficient, by concentrating on populous districts and by the use of selected lists-the latter is most important; the candidate must never go blindly from door to door. More about that later.

Even in the very largest constituency, the United States as a whole, the same principle applies, at second hand. The astute national chairman tries to know personally every one of his 3,000-odd county chairmen and shakes hands with as many thousands of the precinct workers as possible. When he takes his presidential candidate on a swing around the country he has the candidate do the same thing, so far as possible, even though the newspapers emphasize the speeches and rallies. Practical politics is an unending struggle to turn mass census figures into an endless series of individual, personal contacts.

Let's see what Jonathan Upright can be expected to do against Jack Hopeful. You have him scheduled to spend 500 hours punching doorbells. He should nail down a minimum of l ,000 votes, probably much more, but if he can't average two certain new votes per hour he had better retire to private life. The average paid, professional precinct worker will not deliver more than ten to fifty new votes (votes which would otherwise have stayed at home or voted the other way) no matter how good his ward leader thinks he is. The enthusiastic volunteer is good for at least fifty, if coached and supervised, but probably not more than a hundred and fifty because of time limitations on most amateurs.

The district has a population of more than 300,000 but in the breakdown given earlier it was shown that our real interest was in 3,000 selected votes. Thus your candidate will turn out by personal canvassing about one-third of the votes you are after, over and above what accrues from conventional campaigning. He is equal to about forty paid workers, or at least a dozen volunteers and he can get votes that cannot be gotten by any other method.

If this method of campaigning is used, the task of your precinct organization is only that of equalling the efforts of the rival precinct organization - quite a task in itself, but a volunteer can equal an opposing volunteer and exceed a professional. The candidate himself can tip the balance heavily and even make up for deficiencies in your field organization. He is a one-man gang, if you keep him punching doorbells. (Free bonus: Doorbells give immunity from candidates - and help to create statesmen!)

Ineffective Methods: In general they are shotgun methods; take another look at the touchstone rules.

An example-one of your warm supporters calls up, full of enthusiasm. There is, he says, a mammoth Elks Club ball Friday night at the Gigantic Auditorium. There are lots of Elks in the district-he knows, he is an Elk. And this is going to be a big affair, 4,000 tickets sold already. Now here is the angle: The program chairman is a member of our party and he can be persuaded to let the candidate pin the prize on the Queen of the Ball - not strictly political but you can get his name mentioned four or five times over the loudspeaker. The rest of the time the candidate and your eager beaver friend will circulate around meeting people and getting votes. No rule saying you can't talk politics in private conversation. Furthermore (this is the clincher) the rival candidate, Jack Hopeful, will be there-we can't let him get ahead of us, now can we? Your friend will supply the tickets and drive the candidate to and fro; it won't cost a dime and it's a wonderful opportunity to pile up votes. How about it? It's a natural, isn't it?

Your only problem here is how to turn it down without hurting the feelings of your loyal but unmathematical friend.

The meeting is worthless when compared with the effort it entails. Even if your candidate has no other scheduled date, it is better to let him go to bed early than for him to make an appearance. Here is why:

Four thousand persons present for a meeting held outside the district - Let's apply an arbitrary factor which you will vary to suit your own actual conditions; let's say that 1,000 live in your district. The ages will run from 18 on up; nevertheless the registered voters will not exceed 800 out of the thousand. Four hundred will be of your party (or apply your own registration ratio). That's ten percent of the crowd. If Mr. Upright stirs around all evening he can meet about fifty people - if he spreads himself any thinner he can't be effective. Five of them will be registered in your district and your party; two of them will vote in the primary; one of them would have voted for him in any case; the other is a new vote.

Let the poor fellow stay home and rest. His feet hurt now!

But how about the announcement over the loud speaker? Of the 400 at least half will not listen; of the remaining 200 most of them will either not catch the name or will forget it before the evening is over. The ones who will remember, associate it with a name on a ballot, and be affected thereby, can be counted on the fingers of one thumb.

Speeches made over the radio are usually ineffective except when made by very prominent persons on issues statewide or nationwide in importance. If you can get a popular local news commentator to plug your man, fine! If your organization has a regular program which has been established for some months and you have reliable figures to show that it has a sizable audience, then it is worthwhile to put your man on it.

But don't just buy a radio spot during the campaign and have him make speeches, for he will be talking to himself. Most political programs are simply turned off.

Most meetings held outside the district are useless to the campaign even if they are political rallies. If an appearance seems necessary for diplomatic reasons, send a stuffed shirt to represent your candidate.

Signs are not worth even the cost of printing unless displayed in the district. Again some enthusiastic supporter will urge the merits of display at beaches, race tracks, junctions, and other crowded spots outside the district but which do in fact draw crowds partly from your district. Agree in principle but let him operate on his own; insist that every dime and every piece of display printing is already rationed.

BorderLine Methods: Your district has hundreds of public and semipublic meetings in it during a campaign, most of them nonpolitical. All of them are a possible source of new votes - but an attempt to cover all of them will result only in physical collapse.

Businessmen's luncheon clubs are worth the trouble if they can be fitted into the program. Your man has to eat lunch somewhere; he might as well eat it with the local Kiwanis Club, Rotary Club, or Chamber-of-Commerce group, especially if the custom permits him to be introduced as a candidate, or if he can be permitted to speak for seven or eight minutes on a "nonpolitical" aspect of public affairs. He will pick up a vote or two and lay a foundation for the final campaign.

Women's groups are not worth the trouble during a campaign unless the candidate can make a frankly political appearance and can attend without neglecting more direct campaigning. Usually he can meet more housewives in less time by punching doorbells - and on a much more selective basis.

Some of the new veterans' groups are openly political and show an aggressive intention to do something.

The political directions of the veterans of World War II have not yet shaped up as this is written, but these groups must not be neglected. It appears likely that many of the most active political volunteer workers during the next decade will be young veterans.

I am sorry to note that there are many groups which are usually quite limited in outlook - some of the older veterans' organizations, labor groups, "taxpayers" groups, real estate groups, old-age pension groups, *etc.* Avoid appearing before such groups unless your candidate and you are honestly in sympathy with the particular special program of the group. I am neither endorsing nor condemning any of these groups, but it is impossible for a rational man to agree with all such groups since there is marked conflict between some of them. There is no need to waste your time going out of your way to make enemies, even if invitations are extended. Active support is only rarely forthcoming from such groups; instead your man will be asked to make flat commitments on a basis of "Whadda yuh going to do for us?"

A politician should make commitments; he should not be a mugwump, or a "know-nothing," but there is no ethical principle requiring him to drive across town for the purpose of refusing to make a commitment.

Many groups hold formal inquisitions for the purpose of examining all candidates to the end of preparing formal slates of endorsed candidates. In my opinion such a sober-minded procedure merits the respect of attendance even when you are reasonably certain of not receiving the endorsement of the group. This is quite different from being put on the spot in front of a crowd made up of a pressure group. The atmosphere of such an examination is usually judicial and urbane; your candidate has an opportunity to build respect for himself as a man even among those opposed to what he stands for, by making direct and honest answers to direct questions. If you ignore such groups as the German-American Bund (or its successors), the Communist Party, and the Ku Klux Klan, the residuum will probably merit your attention.

Many communities have non-partisan forums or study groups intended to increase popular knowledge of public affairs. They are not the source of many direct votes but are excellent places to meet and obtain the services of new volunteer workers among the serious, public-spirited persons who attend, as well as being worthy of support in principle.

Many political meetings are not worth much effort even when held in your own district Let the candidate attend such if his budgeted time and strength permit, otherwise attend them yourself or send a representative to speak briefly and to explain that the candidate can't be two places at one time. (It is not necessary to say that he is home in bed!) But your candidate should show up at as many political meetings as can be fitted into the more important direct campaigning. His appearance can be as short as ten minutes, then to another meeting, or home and early to bed.

The use of signs, the distribution of literature, and the place of newspapers will be discussed under "Publicity." These media are distinctly borderline; there are more ways to waste money using them than there are to get votes.

The Campaign Committee: You will have two campaign committees, the public or propaganda-purpose committee and the private or working committee; the first includes the second. The public committee will be as large as possible and will include everyone you can persuade to sign a card or a list which says, "I take pride in publicly endorsing the candidacy of Jonathan Upright for Congress," or some such, but does not say "and authorize the use of my name for advertising purposes" - or people won't sign it. You then use the list for advertising purposes anyhow for the suggested phrasing gives consent. The signers won't mind - it's just that the other phraseology looks too much like a contract Or you might say, "I take pleasure in serving on the campaign committee of- " with the explanation that the statement carries no explicit duties.

(Once in a while some person who carries water on both shoulders will sign the endorsements of two competing candidates. It eventually causes him embarrassment; he will call up and demand that you destroy, for example, your entire stock of stationery. He may threaten legal action. If you hold his signed endorsement, brush him off. "We can't do that, old man, unless you are willing to pay for printing the new lot No, really - tell you what - we'll draw a line through your name in red ink and mark it, 'Renegged.' How would that do?" Don't help him out of his hole and don't surrender his signed statement.)

This list of endorsers, the "committee," will be spread across the top, down the side, and eventually all over the back of your campaign stationery, and you may use it in display advertising. A personal endorsement from almost anyone is likely to drag in another vote or two. You may decide to suppress some names when you know that the persons concerned have numerous enemies and very few friends. This is legitimate; you have not contracted to use the names.

If caught out, I would take refuge in a social fib. "Your name isn't on the list? It must have been skipped when the list was copied for the printer. It's too late to add it, I'm afraid-that printing bill was $26. But I certainly will tell Mr. Upright that you wanted your name on his committee."

Follow your own conscience. My own will stand a few polite evasions when another person's feelings can be saved without damage to anyone.

The public committee will be headed by officers whose duties are nominal unless they serve in the same capacity on the working committee. These de facto honorary officers should be selected to be as broadly representative as possible and for maximum prestige. The following set-up would be ideal for the typical American community:

The Citizen's Committee for the Honorable Jonathan Upright, Candidate for Congress, Umpteenth District

Dr. Colin MacDonald, Chairman

Francis X. OToole, Secretary
Isadore Weinstein, Treasurer
Muriel T. Busybody, Field Director telephone Grant 0361

Mrs. Busybody (yourself) is the only working member of this list, although the others are all loyal supporters. The names have been selected by you as being conspicuously Protestant, Catholic, and Jewish. For maximum effect each gentleman should be very prominent, and highly respected in the community by all groups. If Dr. MacDonald is a prominent Presbyterian and Mason and a stylish physician noted for his charities, Mr. O'Toole a distinguished lawyer and an active Knight of Columbus, and Mr. Weinstein both a Scout commissioner and well known in B'nai B'rith, then your cup runneth over.

Special offices can be devised to permit other prestige names to stand out-chairman women's division, vice-chairman, director speakers' bureau, public relations, liaison, chairman finance committee, chairmen for various small communities in the district, director of research, chairman study groups, etc., without end.

It is advisable to list the rest of the committee in strict alphabetical order to avoid hurt feelings.

There is no reason why any of these prestige officers should not be active campaign executives. It is sometimes possible to get a busy, able person actively into the campaign by getting him first to agree to letting his name appear at the top of the letterhead, then calling him into war councils.

The working committee consists of the following- by any titles: Candidate, manager, money raiser, publicity person, office girl, field supervisors, and precinct workers. Some of these people will double in brass and all of them should do some precinct work, in order to keep their roots down. The office girl and publicity person may be paid professionals-they certainly must be professionally skilled and experienced whether they are paid or not. There is no need for anyone else in the campaign to be paid anything.

The best place for members of the candidate's family on the committee is the chairman of South America and the Eastern Hemisphere. The candidate may need and want a member of his family as a confidential secretary and this may be tolerated, but relatives of candidates are subject to an even more virulent form of candidatitis than are candidates - it is very discouraging to have to drop real campaigning in order to go around patching up gaps in your fences left by unpolitic relatives of your white hope.

Headquarters: It does not matter in the least whether you have swank offices or good equipment; the voting public will neither know nor care. A telephone call from a private phone in a modest home sounds just the same as one coming through a switchboard in a suite of fancy offices. You need a typewriter, file boxes for 3 x 5 cards (shoeboxes will do), a cheap letter file, a two-bit scrap book, the use (not the ownership) of a duplicating machine, a telephone which is not in reach of the casual dropper-in - and nothing else - nothing! Use furniture at hand, or improvise it out of scrap wood. Place the headquarters in any heated, rent-free space, your own spare bedroom, somebody's rumpus room, or a donated second-rate office over a store building.

Campaigns customarily have public offices fronting on commercial streets. The usefulness of such so-called headquarters is questionable; the vote-getting power is not better than border line. If you can get an empty store building, or space in an occupied store belonging to a supporter, and in either case absolutely rent-free and if you can get someone to remain in such donated space to answer questions and hand out literature on an unpaid but faithful basis and if such person is unable or totally unwilling to do precinct work instead, it is then worthwhile to invest in signs and printing to advertise the campaign by advertising the space as a "headquarters." Otherwise it is better to wait until the final campaign when such space is more readily available for the entire ticket

There are distinct advantages in not having public offices and in avoiding a swank, expensive appearance. Your campaign can be well advanced, almost unbeatable, before the opposition realizes that you are a serious threat. A GrassRoots Campaign can be as silently insidious as cancer, as long as it doesn't look like much in the early stages. And if your offices are not expensive and comfortable you will be less bothered by the chap with his hand out and by the Headquarters Hound. The latter is a practically harmless but ubiquitous lower life form which clutters up political offices, occupying chairs, taking up working time, sounding off, and absorbing anything that is free, from ice water to signs. He is related to Sunday morning quarterbacks and armchair generals.

If your headquarters is not in a private home, make sure that the only available telephone is a pay phone, or, if that cannot be obtained, put a lock on the telephone and take extreme precautions with the key, as well as establishing the practice of logging all outgoing calls and obtaining the charges, if a toll call, from the operator. (This will be regarded as outright tyranny by the Headquarters Hound, but it is utterly necessary if you are to avoid incredibly large deficits.)

The telephone bills that can be incurred by an open telephone in a political office must be experienced to be believed. They are not necessary; the legitimate outgoing calls which cannot be made over private, unlimited phones are very few. The best arrangement is the pay phone and a petty cash account, locked up with the stamps, and for which the office girl is responsible.

After taking such precautions, you may then, and should, make free use of the telephone. Your business will not bankrupt the committee.

An extension wired only for incoming calls may be added to a pay phone and placed on the desk of the office girl.

The campaign funds should be kept in a bank account as the funds of an unincorporated, nonprofit society. A respected group of three, none of whom have control over the funds, should be appointed to keep a running audit. The checks should require two signatures, that of the manager and either one of two others, let us say the campaign chairman and the chairman of the finance committee. The candidate should not sign checks, though he may reasonably insist on a veto as a condition of running-but let us hope not.

The following categories of expense cannot be avoided:

- Filing fee
- Printing
- Postage
- Telephone tolls
- Refreshments for the election night party for the workers

The following categories of expense are not indispensable but a strong campaign will include some and possibly all of them:

- Signboard rental
- Newspaper display advertising
- Professional distribution of literature
- Publicity person's salary
- Office girl's salary
- Lunch money and gasoline or carfare money for volunteers
- Radio spot plugs
- Candidate's extrapolitical expenses
- Manager's extrapolitical expenses.

Some of the expenses in the second list can be avoided by astute management, not by eliminating the type of campaigning indicated, but by getting what is needed free. An able, professional publicity person on at least a parttime basis is a sine qua non; if a volunteer supporter in this professional category cannot be found then one must be hired. If a volunteer typist, completely reliable and reasonably efficient, cannot be found, then she must be hired - but a volunteer is better.

The other conditional expenses depend on local conditions. Form the habit of being extremely tight-fisted about expenses in both lists of categories, necessary and conditional.

There are many other types of political expenditure; you are sure to have many well-meaning advisers who will assure you from experience that this or that must be done, which does not fall under one of the above headings. I believe that you will find in every case that the recommendation comes from experience with some other type of campaigning than the volunteer, GrassRoots Campaign. Thereon? other types of campaigning - I have expended more than thirty thousand dollars (not my own money!) on a single campaign issue in less than thirty days-but no type of campaigning is as effective as the type here described and this type is almost without expense. The expenses are all incidental to the campaigning and are not properly

This is literally a case of "The Best Things in Life Are Free." It is easy to run a campaign with lots of money, but an expensive campaign can always be beaten by a properly organized campaign which can barely pay for printing and postage.

In addition to a headquarters or intelligence center of some sort both the candidate and the manager need some sort of hideaway-two hideaways if the manager and candidate are of different sexes, to keep tongues from wagging. A spare room in the home of a friend is ideal, particularly if it is served by a phone through which messages can be left without waking the person who is resting. There will come times when an afternoon nap, or at least complete freedom from pressure, is necessary to preserve your balance, your judgment, or even your sanity.

A remote back room in the building which houses the office will do. Don't try to use your own home for this.

Precinct Organization-Training and Management: We assumed that the precinct organization had been built up through earlier club organization; that includes the assumption for a congressional campaign that the volunteer field organization is too numerous to be managed directly by the manager. Ten is about the highest number which can be managed directly; you want and need a hundred. Therefore you will have area managers.

Talent is where you find it. The neat divisions you draw up on a precinct map can never be realized in practice for you will never have enough competent leaders to whom you can delegate authority. Many of your area leaders will be no more than messenger boys between you and the precinct worker.

To make your contact with the precinct worker as direct as possible hold weekly get-togethers with all the organizations at a fixed time and a centrally located place. Serve coffee and doughnuts. See to it that the candidate has this as an all-evening "must" date; your purpose is not only to instruct and inform your workers - and to gain information from them - but to renew their enthusiasm by direct social contact with the man they are backing. Make it as informal as possible - no lined up chairs, no standing to speak-a family party.

Another fixed weekly date which can precede or follow this one, or be held on another night, is the meeting of the working committee, for strategy, tactics, and business. It is a must for you, but not necessarily for the candidate.

The volunteer precinct workers are by far the most valuable asset of your campaign and the one most difficult to get and keep. They are not merely the rosters of your clubs nor are they a list of people who have pledged themselves to "work one precinct." No such wooden approach creates a precinct organization.

You will have winnowed out, from hundreds of political contacts made during two to four years of apprenticeship, a list of people who will back their convictions by work rather than by talk alone. Each time you find one you will treasure him (or her) and train him and encourage him, with loving care.

Don't expect to find the majority of them after you decide to manage a campaign. Some candidates and some managers seem to think that precinct workers grow on trees! If you have not already built up a following of people who believe in you, look to you for political leadership, and will work, then you are not yet ready to tackle anything as difficult as the management of a congressional-sized campaign. You are still in the junior-officer stage of your political career.

Even if you never have the time or the circumstances which will permit you to undertake the management of a major campaign this chapter is still for you. The principles discussed apply to the minor leader in a campaign quite as much as to the manager, and, as a minor leader, you can help to keep the manager on the right track by your counsel. In so doing you can be the factor which turns defeat into victory, as many a manager is energetic and intelligent but inexperienced.

The volunteer precinct organization is never as perfect -on paper- as the paid organization of a political machine. But you can reasonably hope to have one good enough to swing an election.

"The moral is to the physical in war as three is to one." - Napoleon.

Napoleon was a piker. The principal advantage of the volunteer over the paid machine professional is his sincere enthusiasm. In politics the ratio expressed by Napoleon is nearer ten to one. The volunteer is campaigning twenty-four hours a day, not by intent, but because he can't help it. It gets in his blood. He is the guerilla warrior of politics, acting on his own initiative, harrying and demoralizing a force much larger, and arousing a despairing citizenry to new hope. Like the guerilla, he fights with the materials at hand and improvises what he lacks.

It is your object to inspire and direct this enthusiasm.

Leadership is not an esoteric matter. You don't need the whoop-t'do "enthusiasm" of a night dub master-of—ceremonies, a revivalist, or a radio announcer. You need two qualities only, sincerity and a willingness to work. The rest you will learn, in a fashion suited to your temperament. (A sort of leadership by default can come to those who lack sincerity but are energetic, since a group will accept any leadership in preference to none.)

As a leader of political volunteers there is just one paramount rule to keep in mind:

Men do not live by bread along.

The personal pat on the back, the public praise for work well done, a button to wear on the lapel, the testimonial dinner, the letter of thanks, the election night party, a personal word with the candidate - these things are worth much more than cash or patronage. Unless he is actually starving, a man-any man and all men - is motivated primarily by "face," by intangibles of some sort which have to do with behaving in that fashion which he feels does credit to his own conception of what he is, or what he would like to be.

You may not like the term "face" - if so, don't use it - but I think you will find that all human motivation other than the simplest animal aspects of belly hunger, sexual rut, and physical fear can be found in a need for intangibles which will satisfy the individual's ideal conception of himself-and even hunger, rut, and fear are feeble in comparison, else soldiers would not fight, rape would be as common as shaking hands, and dinner guests would fall on their food and rend it. Even the dollar is pursued more usually for this higher reason than for the simple reason of filling the belly - to do one's duty to the wife and kids, to provide for the education of children, to live in a finer house, or simply to feel successful because one's labors command a high price. These goals are all intangibles, no matter how concrete is the symbol for the goal.

In politics this strongest of all human forces is tapped most easily by the pat on the back, in its various forms. Most people in this country like to think of themselves as "good citizens"' they have been brought up to consider it one of the important intangibles. You can convert this yearning into doorbell-punching by public and private acknowledgement that precinct work is the highest expression of good citizenship. (It probably is!)

Let everyone know at all times that no other political work carries as much honor and prestige. Be emphatic that the precinct workers are the royalty of organization, the other types of workers - office workers, speakers, and such - only the nobility, and campaign contributors merely the gentry. Never let a mere contributor of money have a vote in policy; don't even pay as much attention to his advice as you do to that of the least of the precinct workers - the precinct worker knows what he is talking about, in his neighborhood; the cash contributor is merely theorizing.

You might organize your field workers into a Doorbell Club and call the weekly get-togethers its meetings. Make precinct work a mandatory qualification for membership. (You have a wheelchair cripple who should be a member; very well - let him work a precinct by telephone, but make him qualify.) Get off a few remarks at each meeting along this line: "This is a closed corporation and the only way in is by pushing doorbells. John D. Rockefeller himself can't come in that door, not with a ten thousand dollar contribution in hand, unless he can prove that he has worked in his precinct."

Your exclusion-act may antagonize some persons who are useful otherwise but who can't or won't do canvassing, but it is better to let them fall by the wayside in order to protect the morale and enhance the prestige of the field workers.

If you build up such a special club, you will not only win for Mr. Upright, you will make yourself the unquestioned boss of the district. The canny politicians will quickly recognize that you possess the only political power in the district; they will come to you for the yea-and-nay. You will not neglect the public clubs you have helped found or been active in, however; they then will become the feeder organizations for your campaign shock troops.

Mr. Upright is a member of the club, since you have him punching doorbells. Don't let him miss attendance at a meeting, or even part of a meeting, not even though the governor or the national chairman wants to see him that night, or your vote-getting will take a sudden slump. On the other hand, if he is home sick in bed you can use it to inspire more work.

The methods of precinct work have been indicated by examples in an earlier chapter. You will have to train them in it, since most people get stage flight at the idea. There are many right ways to do it and you will learn your own as well as the types I have given-but keep it simple!

The hardest hurdle is the opening remark when the occupant answers the door. The next hardest is the second remark in answer to the householder's reply, a reply which will follow one of about a dozen stock forms, if your worker can get past this point the rest is easy for any of us chattering simians. It is therefore worthwhile to type out and mimeo some stock phrases:

Opening Remarks

"How do you do-Mrs. Crotchet? I'm a neighbor of yours, Thomas (or Mabel) Friendly, and I'm calling on you to ask you to support Jonathan Upright in the primary next month."

"Good morning. I'm Tom Friendly, Mrs. Crotchet. We're supporting Mr. Upright for the party nomination and I'd like to tell you something about him and try to get your support, too."

"How do you do? Am I speaking to Mrs. Crotchet? Mrs. Crotchet, I am one of your neighbors, Mrs. Thomas Friendly. If you can spare me a moment I would like to tell you about a citizen's committee we have formed to try to improve the representation in Congress for this district."

Replies and Answers

("I'm for Jack Hopeful.") "So? Well, I understand he is a fine man. We're in the same party, at least-if your candidate wins the nomination, Mr. Upright is pledged to support him and campaign for him... and so will I." This is followed by a quick retreat, or an invitation to attend local dub party meetings, depending on the response.

("Those people have moved and we belong to the other party.") "Oh, I'm sorry to have bothered you! Well, be sure to vote in any case. Mr. Upright says that if we all turn out and vote our convictions it won't matter whether Upright is elected, or Upright is defeated - the country will be in safe hands." (Note the triple mention of Upright's name in a statement which urges her to vote the other way.)

("How much do you people get paid for this sort of thing?") "Oh, we don't get paid anything! This is entirely a spontaneous effort of some of the voters. We organized it and, instead of getting paid, we pay for our own printing and hall rent and so forth by passing the hat among ourselves. We think that's the only way we can have honest government."

("I'm too busy to talk to you.") "Oh, I am sorry that I bothered you! May I leave this with you and then come back at a more convenient time? We know you folks take the trouble to vote in the primaries so we would like a chance for you to get to know Mr. Upright - your opinion is worth something."

("Oh, I never vote except in the main election.") (Frankly, this idiot is hopeless - however) "Oh, if you wait till fall you don't get any real chance to make a choice. The primary is very important this year - if we sent a car around to pick you up, would you make an exception? We need you."

("I intend to vote for Mr. Upright.") "Fine. It cheers me up to hear a person say that. Here is some literature about him - maybe some of your friends would like to see it. By the way, Mr. Upright is speaking at our local club next Friday night. Could I drop by and take you with me?"

The field workers will teach each other, through shop talk; from that shop talk you will get better examples than I can give, examples tailored to your campaign and your community.

One of the easiest ways to train a precinct worker is to send him out with an experienced one for a single afternoon or evening. You can teach a group at a time by acting out the type cases, using two experienced workers in an amplified version of the type cases given herein. Do it two ways - the right way and the wrong way-and you have the basis for an amusing dub program. The wrong ways can be made very funny by persons of moderate dramatic talent-Joe Roughly arrives smoking a cigarette, knocks and rings alternately until he wakes the householder or drags her out of her bath, sticks a foot in the door, gets into an argument, and so forth without end.

I venture to predict that, with the recent enormous strides in visual-aid training, both major parties will soon have 16-mm. sound pictures available for the use of local dubs covering the above. If such pictures are supervised by persons intimately acquainted with the problems of the dosed door, then they should be very useful; otherwise - hmmm! Better taste before you serve.

Get them in the habit of using the 3x5 card. Have a supply at the meetings with a notice that invites them to place a dime in the saucer for each pack or to take them free if they wish. Show them your own files. Emphasize that the usefulness of their work depends almost entirely on whether or not they have records on election day of where the vote is.

Your area managers may show so much talent that they will crowd you and inspire you into better work yourself; however some of them will simply be message points, persons you can telephone and who in turn will telephone their several workers or whom you can call on to pick up campaign material from the headquarters for redistribution to the individual workers. In either case the area supervisor must be a person who works in at least one precinct. Otherwise he does not know the field problems and will botch things for you.

But there is another reason why everyone from the candidate up through the whole organization to the single precinct worker should do canvassing: The U.S. Army, shortly before World War II, added some 30% to its fire power by arming with rifles or carbines all of the noncoms and officers up to major. The same result is obtainable in a campaign organization - I have seen more than one campaign in which there were so many supervisory jobs, special jobs, and headquarters jobs that there were no doorbell pushers; then they wondered why they lost!

This is a complete reversal of opinion on my part, brought on by experience. In my first campaign I used to quote Poor Richard: "The overseer's eyes are worth more than his hands." In politics it should be rephrased, "The overseer's example is worth more than his precept-and it opens his eyes wider and gets votes in the bargain!"

Your publicity man should ring some doorbells in the district to sample the flavor - but he probably won't, whether he is paid or unpaid. Still... he can't shoot you for suggesting it.

If your office girl pushes a few doorbells in the evening she will understand the campaign better, but you will be happy enough if she has a civil tongue, a tight lip, and an ability to not lose track of the details.

How to Get a Selected List from which to Punch Doorbells: Your district has 320,000 residents lodged behind some 100,000 private doorways. It is most unlikely that you will have enough people to punch every doorbell. However there are only 70,000 members of our party in the district and only 25,000 of these may be expected to vote in the primary. They live in some 15,000 separate homes (this is based on statistical examination and is not a casual speculation). The problem is beginning to be cut down to your size; if you know which 15,000 doorbells in your district, 100 precinct workers plus one tireless candidate plus one manager could ring every doorbell.

Fortunately there are ways to determine with reasonable exactness which doorbells are worth ringing.

The adults in the United States fall into three groups, those who vote in primaries, those who vote in general elections, and those who don't vote at all. (The membership of the groups and the ratios between them vary slightly if city elections are considered rather than elections for state and national offices; this need not concern us at the moment as the principle is unchanged.)

The key to the matter is that these groups, though fuzzy around the edges, remain very largely the same from year to year, i.e., the citizens who vote in any one primary are almost certain to vote in every primary, circumstances permitting.

In many or most states it is customary to post outside the polls a roster of the registered voters with a check mark to show whether or not each person voted and to leave this record published for about a week after each primary or election. It is then possible to obtain the basic list you need by copying data from these lists. This is tedious and piecemeal; there is usually a better way. All states (I believe) require a voter to "sign the book." These books are returned to the registrar of voters, the city clerk, or other official charged with the custody of election records. There they remain for a period of time, depending on local law or custom, as they may be required as evidence.

You are probably entitled by your state laws to examine these records. Whether you are or not, the way to get the use of them is to find out where they are, who has the power to let you see them, and apply to that person, a smile on your face and friendliness in your voice, for permission to see them. Ask it as a favor, not a right

Two persons, one reading the signatures and the other making check marks on precinct lines, can get the basic list of the primary voters in a political party by this method for an entire congressional district in two to four days. The results are then transferred to alphabetical files, precinct files, and elsewhere as needed. This work needs to be done before the campaign opens and is one of the many reasons why campaigns are won between elections, not during the public campaign season.

You will need precinct lists of course. You need three or four sets of precinct lists for your entire district; such sets may be rather expensive. It is often possible to obtain free sets from the same official who let you see the election books. Otherwise you must purchase them from the contract printer.

Usually the simplest way to get anything is to find out who has it, then go directly to that person and ask him, in a pleasant tone of voice, to give it to you-free. This applies in all fields with all things, from a match to a milliondollar endowment, but it is unusually important in politics. If you use this rule you may miss on free precinct lists but you will make it up on free hall rent, free newspaper advertising, free printing, or free signboards.

When you have your basic list of persons who vote in your primary, the candidate and each precinct worker will work from it The candidate will use no other; the precinct workers will call first on the persons listed-about thirty evenings of work for each under our assumptions-and will call on others only if they have time for it.

The precinct worker is constantly revising his card file as he works, throwing away cards of persons who have moved and adding the newcomers, as he discovers them. In addition to newcomers discovered through his calls he should make an effort to find it out when persons move into the neighborhood. The postman could give him this information quite accurately but the postal regulations are a little stuffy about employees giving out data about people. Instead he can cultivate the neighborhood cop, the milkman, and the boys who deliver newspapers and groceries. Real estate offices and moving and storage concerns can be made sources of these vital statistics. A precinct worker who is on the job can, without very much effort at any one time, know quite accurately what vote is to be expected in his primary, how it may be expected to go, what individuals by name may be counted on to vote for your man, which ones of these will get to the polls under their own power, and what ones must be carried.

The handful of cards you hand him to start with, made up from the election books, make him the equal of almost any professional ward heeler, right from scratch. You have cut it down to the size a parttime volunteer can handle.

A volunteer organization is bound to be spotty; some precincts will have no volunteers. Don't try to transfer workers from other precincts, except on election day. Let the candidate work the precincts that have no workers, concentrating on the more densely populated. He will get more votes than a precinct worker could out of the same number of calls and he stands the best chance of turning up new workers. On election day regroup and bring in the votes he has cinched, even if it means spreading your forces very thin.

CHAPTER IX

How to Win an Election (continued) landmarks and Booby Traps

Don't expect a volunteer organization to make blanket distribution of political literature as the time used can be turned to better account making calls. If you decide that you can afford the shotgun method of blanket coverage, use paid professionals. Sometimes a tie-in can be made with some other distribution such as a community newspaper or an advertising throw-away at a very low cost.

You will have many marginal volunteer workers who won't or can't do precinct work. Put 'em to work! There is an endless amount of routine clerical work in a campaign, licking stamps, addressing envelopes, copying files, preparing telephone lists for election day, *etc.* Be a slave driver. If you blandly assume that they want to work and keep loading it on them, they will get to work, or get out and leave you alone.

Many people will telephone and ask that the candidate, or you if the candidate is not available, come to see them. No matter how sweet they talk most of them have their hands out for jobs or money. Be most pleasant but do not call on them and do not let the candidate call on them. Insist firmly that pressure of time does not permit and suggest instead that they come to see you. Most of them won't come; you gain thereby in, I believe, every case.

The Big Operator will show up. He is a Very Good Friend of Judge So-and-So and he knows Governor Whosis personally - practically elected him. The candidate has every confidence in him, he wants you to understand, and he is going to pitch in and Make Things Hum.

He wants a desk, he wants a secretary, he wants a telephone. He will be patronizing about your methods and your budget is Simply Out of the Question - if you are careless enough to let him see it.

Oh well - put him to work. Let him lick stamps, or something equally dull. He will leave presently and complain to the candidate. You may have your only real row with the candidate over this; the Big Operator may in fact be an old friend and one in whom the candidate has much confidence. But make it plain to the candidate that this guy must raise his own funds, hire his own offices, and locate his own workers if he is to be part of the campaign - otherwise you quit. You committed yourself to serve as manager, with full authority, and in no other capacity; the candidate agreed to that. If he does not have confidence in your judgment, your resignation is available.

You won't be fired. Later you will hear that this bargain-counter Boss Tweed is letting it be known all over town that poor old Upright is heading for a sad fall since he has chosen to trust his career to the amateurish hands of That Fool Woman. This is good; it lulls the opposition without interfering with your work.

There will be the crackpot, the confirmed trouble maker, and the tired liberal. The first two need no description - give them the bum's rush in any way you can. The last, like Mrs. Much-Married, has been there so often the thrill is gone. He knows the frailty of human nature - and that's all he knows. He would like to see you win-but you won't, you know. Anyhow does it make any real difference? Upright is a fine man and he is glad to do what he can for him, welcoming people at headquarters, and lending the benefit of his advice and experience - just to help out Old Pal Upright.

Use the stamp-licking routine on him. After a bit he will go back to his ivory tower and let the grownups get on with the work.

You are going to get sick of it. Not only will your patience be worn thin by the volunteer who will do anything except work, you will be driven to distraction by the arrogance of pressure groups, made heartsick by the outright sell-out, and astonished and hurt by dirty tricks ranging from torn-down signs to the complete lie, the planted scandal, and the falsified document.

But keep your temper and stay cheerful. The troubles will be more than off-set by the priceless privilege of close association with the loyal and untiring. Even if you lose, this alone will make it all worthwhile.

Publicity: You must have professional help if it can possibly be obtained. Publicity is an involved profession; even if I understood all about it, which I don't, this whole book could be devoted to it without considering all the angles.

If you are forced to work without a publicity man, a few rules of thumb may save you from some of the more gross errors.

Use just one picture of your candidate and make it a trademark. Don't let Mr. Upright nor his wife do the picking; get a group consensus on effectiveness, not beauty nor accuracy of likeness. Make one cut serve as far as possible. A 50-line sateen is about top for newsprint paper; slick paper can stand as high as 90 lines.

Small newspapers can use pulp mats from the cut. They are cheap.

All other things being equal, use the union bug on all your printing including your stationery and your candidate's cards. If non-union printing can be obtained as a donation, consider the probable effect in your district as well as the political beliefs of your candidate. If you believe in unionism the matter is settled automatically, of course.

The large, or 24-sheet, signboards are associated in the public mind with heavy campaign contributions and slush funds. In fact they are not very expensive but the overtone of graft is against them. Outdoor advertising companies also rent small boards, 6-sheet and 3-

sheet, which are less expensive and more effective. Even the most pinchpenny campaign can usually afford a good coverage of these smaller boards for the last month of the campaign. You don't need them earlier.

There is an optical illusion, which I do not understand, but which calls for using a much smaller proportional amount of blank area on a signboard than one uses on a printed page or ad. The lay-out which looks perfect when you prepare it in miniature looks strangely anemic on a signboard. Use larger letters and fill up more of the blank. Better yet, get it done professionally.

Don't try to say much on a sign. Make it brief, then make it briefer.

Never mention your opponent's name on signboards, in ads, nor in literature. Train your workers never to mention him by name - call him the opposition candidate if forced to refer to him at all. Don't let Mr. Upright speak his name, even when referring to him.

If your district is large and has a low-powered radio station with a good local following you may want to hire spot plugs, to be scattered through the day's programs. Make them short - five to ten seconds - and have several different wordings, all simple. Careful phrasing will permit you to use Mr. Upright's name three times in a ten-second plug. Here is a rather inane example:

"Attention, please - a message from Jonathan Upright. Mr. Upright urges you to vote in the primary next Tuesday - the Jonathan Upright for Congress Citizen's Committee."

Don't make them so frequent as to annoy.

The primary purpose of all political publicity is not to persuade but to fix the name and the office in the subconscious by repetition and, secondly, to let your friends know that they are not alone - to encourage them. The use of signboards and radio plugs does very little in direct vote-getting, but it does let your friends know that there is a campaign going on. They see the signs, they hear the plugs, and it warms their hearts. They say to themselves, whether they be workers or simply voters who are willing to support your man, "Well-this looks like action: Maybe we got a chance."

It isn't action, save for a few who will climb on anything that looks like a bandwagon, but enough display advertising to put on a brave front is necessary in the latter part of any campaign - to warm cold feet

The purchase of display advertising has a marked effect on what publicity stories a newspaper will run for your candidate, even with most of the large metropolitan dailies. With the small, local papers which publish once or twice a week the customary rule is an inch for an inch, advertising versus publicity story. A friendly editor of such a small paper may give you the ad free, provided you will keep it to yourself so as not to jeopardize his revenue from other candidates.

Editors and staff men will help you with layouts and with the wording of your publicity stories, even if they don't back your man, if you will ask for help and show that you don't think you know it all. "Frankly, it stinks," should be music to your ears; you are about to receive some practical professional advice, free.

People like and respect persons they have helped; it's more common than gratitude.

Large display ads in small newspapers may be a cheaper way of getting full coverage than the blanket distribution of literature. By "large" I mean up to two columns, half a page high. If you have more money, repeat the dose rather than increasing the size.

Try to split your advertising budget among all your district editors unless a paper is actively against you. Even then it may be wise to use it if it offers the only means of reaching some area.

Newspaper ads can eat you out of house and home. The political effect of newspapers is problematical and is much less than the newspapermen think. Remember that Mr. Roosevelt won four times with about 90% of the press against him. Remember that, even if you are a Republican, and don't be stampeded into building your campaign around newspapers. A strong newspaper campaign can make you think you are winning when you are actually taking a severe licking. (See Sampling a District below.) You can win with every paper in your district against you.

The automobile sticker is good because it constitutes a personal endorsement and is cheap. Even better, and still in the economy class, is the bumper strip sign for automobiles. They can be homemade - there is a silkscreen stencil process which you can learn from any sign maker. The printed ones are cheap, however, and come with tin strips to fasten them to the bumpers. Homemade ones may be attached with large rubber bands or with string. They make a brave display and are read by everyone who sees them-which is not true of stationary signs. Your precinct workers, at least, should carry such signs, fore and aft, on their automobiles.

One-sheets, half-cards, and quarter-cards can be tacked up all over the district by your precinct workers without slowing up their doorbell-pushing. There are frequently local post-no-bills ordinances but they are rarely enforced.

But get a publicity man if you can, even on a parttime basis, or a cash-for-results basis.

Liaison and Party Harmony: In the primary campaign your opposition is Jack Hopeful, a member of your own party. Never forget that you will need the support of all your party after the primary and never let your supporters forget it!

This is a very touchy, difficult matter, particularly in a volunteer organization. You are certain to have loyal supporters who are simple souls, unable to think in terms other than black and white. To them Jack Hopeful is the ENEMY-they will commit excesses through misguided zeal. So also will some of Mr. Hopeful's supporters. Bad blood breeds more bad blood; in short order you can have a situation which is completely out of hand, which splits the party wide open, and which will render it impossible for your man to win in the finals.

Since the nomination is valueless in itself, being merely a necessary means to an end, you must prevent this at all costs.

You can start out with the best of intentions, determined to run your own race, to keep it clean, and to ignore the Hopeful campaign. Then comes the day when some signs are torn down, or there is some bad-mannered heckling at a meeting, and your more hotheaded supporters will go galloping off the reservation, bent on triple revenge. They can ruin all your good work in twenty-four hours, in the sincere misapprehension that they are thereby campaigning for Mr. Upright.

Even if Jack Hopeful is a bit of a heel, even if he is personally responsible for the dirty tricks (which is most unlikely!), you must try to prevent retaliation in kind. As a matter of fact the signs may have been torn down by the opposition party, rather than Hopeful's crew. It is even possible that the opposition party has paid agents provocateurs in both your group and Hopeful's, with instructions to create party dissension by any means.

I know of two effective and sufficient methods - you will find others. Let Mr. Upright and yourself tell your supporters repeatedly that you intend to support Mr. Hopeful and the whole party ticket, if Mr. Hopeful is nominated. Base it on the idea that the whole democratic process consists in struggles for domination in which the majority decision is accepted amicably, the ranks are closed, and the new and larger groups move onto larger struggles. Therefore your opponents of today are your allies of tomorrow, against a common enemy. Mention that if Mr. Upright goes to Congress, he will have to work with congressmen of both parties for the welfare of the country as a whole.

Nothing is more destructive of democratic institutions than implacable hatred between factions.

The English have a good term; they speak of "His Majesty's Loyal Opposition," recognizing thereby that opposition has a constructive function and need not be ill tempered.

A more positive step can be taken under the safe rule that it is very hard to dislike any man you know well, unless he is that rare thing, an unmitigated scoundrel. The primary campaign period is a good time for party-wide social events.

Dances are good; breakfasts, luncheons, and dinners are even better and less trouble to arrange. In your district there will be restaurants with banquet halls of all sizes. The usual proprietor will be willing to serve groups meals without selling tickets ahead of time and with the understanding that he will collect from each just as he does with the run of customers, provided you can give him some idea of how many may be expected. Local knowledge should enable you to do this.

(Don't forget to see to it that a saucer is passed around for tips; otherwise the waitresses will be forgotten. To forget them is bad politics as well as bad morals.)

In a district in which I was once active we used to meet for breakfast Sunday morning at ten o'clock, monthly year in and year out, more frequently as elections approached. The county committeemen used to make the arrangements, though the custom was started by lay members who saw the need of party-wide liaison. (Party harmony makes a fine hobby for anyone. "Blessed is the peacemaker - " for he shall see his party triumph in November!)

We picked Sunday morning because that was the only date satisfactory to practically everyone-you will find it so. The Catholics went to mass before the breakfast; the Jews held their services on Friday evening in any case; the regular churchgoers among the Protestants missed one morning service per month which they could make up that evening if so minded. Nobody seemed to feel that the Sabbath was being broken; there is excellent precedent in any case. See Luke VI-9.

During primary campaign periods a clever chairman of such a gathering will see to it that those present do not gather in cliques. "The purpose of this meeting is to get acquainted, not to huddle up with your same old crowd. I seem to see the Shannon crowd all together down at the end and up here the whole Weiss campaign committee seems to be staked out. Break it up, boys and girls! Let's find out how the other half lives. Hey-you, Joe-swap places with Mrs. Ross. Take your plates and glasses with you. Bert-gimme a hand. Tag about every other one of your boys down there and make 'em move."

They'll move and they'll like it. It is very hard to stay mad at a man when you have eaten with him and swapped anecdotes.

My wife was once a necessary factor in electing a governor; her weapons were a cookie gun - one of those aluminum gadgets which make fancy, patterned tea cakes, an eighth of a pound of tea per week, and a supply of pseudo-engraved invitations to Sunday afternoon tea. The refreshments were just props; the guests averaged a little over a cup of tea apiece and two or three tiny cookies.

The effect on the gubernatorial election was an accidental dividend; our original purpose had been only to preserve harmony in our own rather small district. But the key personnel of the major rival gubernatorial candidates for the party nomination met socially in our living room several times - and found out that the other fellow wasn't so bad, after all.

It happened that the campaign we were directly interested in failed - but there was a serious breach statewide in the party over the fight for governor. The breach was patched up, because the key leaders on both sides had come to know and trust each other.

I don't mean to say we elected a governor with tea and cookies; we didn't. But we did furnish one indispensable condition, a finger in the dike at the right time and place. You can do likewise with Jack Hopeful and his friends, varying the details but not the principles.

Alcohol is not necessary as a political lubricant Quite aside from the moral issues it is fantastically expensive for the average volunteer. I remember a Democratic politician telling me about a time when his local county chairman had dined with Jim Farley, then left early and gone to bed, whereas another major local politico had made a night of it. "Which one," he said to me, "made the best impression on the national chairman, the pantywaist who went home or the guy who sat up drinking and smoking with him and swapping yarns?"

His own opinion was obvious but I am not sure I agree with it. Mr. Farley has a well-founded reputation, I am told, for being a teetotaler, a non-smoker, and a man who prefers a good night's sleep.

The vote that can be gotten over a cocktail but not over a cup of coffee is too scarce to merit your attention. I am not espousing prohibition; I am simply being practical. Too many politicians do too much drinking in the belief that it is necessary instead of admitting to themselves that the drinking is really for their own pleasure - to relieve their taut nerves, usually. I have seen many a promising career wrecked through the bad judgment which comes at about the third drink. Drink if you like-but don't kid yourself; it loses more votes than it gains, unless handled with real skill - a skill I can't teach you.

Scouting and Heckling: It is legitimate and useful to scout the public meetings of the opposition, if you can spare the personnel. Heckling should be used with caution as it has a habit of backfiring. You may want to heckle if the opposition is using the outright lie. Scouting is simple, it requires only a person with good hearing and a good memory; successful heckling is an art.

Always use women for heckling and pick them for quick wit, the ability to speak, and sound judgment under stress-there are probably several such in your organization. She should either be young and pretty, or should look like somebody's mother and a DAR to boot. By preference she should be as small as possible, but you may not have a choice.

Let her dress in her very best and smartest clothes, then seat herself about halfway down the hall. (Front rows and back rows are associated with heckling; she should try to look like a spontaneous case.) She will keep quiet until and unless the lie she plans to nail is used from the platform. Then she will stand: "Point of order, Mr. Chairman!" "Yes? What is it, Madam? State your point." "The statement the speaker has just made is incorrect. I am shocked to hear it associated with Mr. Hopeful's campaign. I am sure that it is without his knowledge." (If Mr. Hopeful himself is the speaker, make it, "I know that Mr. Hopeful would not sponsor any such misstatement if he knew the facts; I am sure someone must be deliberately taking advantage of him.")

Throughout the encounter your woman maintains the attitude that both the chairman and the candidate are pure and innocent and tries to avoid being asked whom she is supporting; she is just the Public-spirited Citizen, in love with the Truth.

It is to be hoped that the opposition chairman will get rattled and refuse her a hearing - in which case she rises and sweeps grandly out, and gets away from there fast her purpose is accomplished; any votes that are on the fence are by now convinced that Hopeful's crowd is up to something shady or they would have given the little lady a chance to speak. Even some of Hopeful's committee will have misgivings which will slow them down. Most people don't like lies and other dirty tricks.

Unfortunately, Hopeful's man may give her a chance to speak. She must be all sweetness and light, reserving her indignation for the lie itself and the unnamed person who planted this foul thing on poor Mr. Hopeful. She should know, as nearly as possible of her own knowledge, the true facts and state them briefly while asserting her claim to authority in some fashion which leaves the opposition only the two gruesome alternatives of accepting her version, or of calling a sweet and gentle representative of the fair sex a liar, net." I know because I was present when it happened," or "I have seen the court records," or "I was interested in this matter and looked up the vote in the Congressional Record, down in the Public Library."

From here on she is on her own, but she can't lose if she is bright enough to justify assigning her to heckling.

You must be prepared to deal with hecklers yourself. Most of them, unlike your own trained hatchet women, will be moderately stupid, bad tempered and arrogant - and probably self-appointed. Try this routine: "Just a moment please - will you kindly state your name and address so that the audience will know who you are?" Then interrupt before he can get unwound with, "We can't hear you very plainly. Will you kindly come forward to the platform and address the audience? We want free speech here - if you have anything new to add we certainly want everyone to hear it."

There is a good chance for the heckler to destroy himself with the crowd at this point; in any case it gives your speaker a good chance to organize his rebuttal, or - if the situation calls for it - retraction with a noble gesture, but conditioned on the tentative assumption that the heckler knows what he is talking about.

In any case your speaker makes no reply until the heckler has talked himself out and left the platform. Thank him courteously, insist that he reassure you that he is quite through (this is so you can get the crowd to back you in suppressing him half a minute later), then swing your own forces into action.

The key to the whole matter is to let him talk, always let him talk, and pray that he will be long-winded, boring, and displeasing to the crowd. Even if he turns out to be clever and persuasive you have cut your losses as best you can.

Hecklers from the opposition, or, more likely, representatives of pressure groups, particularly Communists, can create another type of crisis, not by the direct challenge of a statement, but by getting up and demanding an answer to a question of the Have-you-left-off-beating-your-wife? variety, such as "Do you or do you not condone the railroading of six innocent men to prison in the Midriff case?" Or "Do you think that the Veterans' Administration should be permitted to turn the attempt to house veterans into a farce by sponsoring the unreasonable practices of the building group?"

Frequently the question has nothing to do with the issues of the campaign - I have seen abstruse matters of foreign affairs thus injected into city elections, state matters forced into national elections, and vice versa, and judges queried about purely administrative or legislative questions. If the speaker is not the candidate and the candidate is not present, the best answer to an embarrassing and impertinent question is, "I have never discussed the matter with Mr. Upright and therefore cannot answer for him. If you will do me the courtesy of writing out your query, with your name and address, I will make it my personal business to bring it to his attention and will see to it that a full answer is made."

If appropriate, you should then add, "The question is not appropriate to the campaign, since the office Mr. Upright has consented to let us run him for is one which cannot possibly deal with the matter you have raised. However, Mr. Upright believes that the voters should be permitted to know all about him, even the brand of his tooth paste, if you are interested. Therefore I am sure that he will take time out, busy as he is, to look into the matter you are interested in and express an opinion."

If Mr. Upright is the speaker, he must answer, in some fashion. If it is pertinent to his candidacy, he should not straddle. Even if it's as hot as a baked potato, he should answer and a forthright answer will gain respect and lose no more votes than a straddle. If it is not pertinent it is quite likely that he does not know all the details; he may ask the speaker to meet with him, making a set date from the platform, for the purpose of digging into the matter. At the private meeting he may still insist on time for research and study, since he is not bound to accept the heckler's assertions as Gospel.

I want to make a subtle but, I believe, proper distinction between dishonest fence-straddling and reasonable prudence in avoiding unnecessary and irrelevant controversy.

There are so many different ways in which men may hold honest differences of opinion that it is possible to find reasons for like-minded, dose Mends to quarrel if an effort is made to determine the issues on which they differ. This truth is the basis of much shoddy politics- the injection of the extraneous and unnecessary issue. Do you think it is decent or indecent for the women of Bali to run around naked to the waist? Whatever your opinion, will it affect the fashion in which you perform the duties of county tax collector? Is it just to ask yourself to commit yourself in public on this issue?

On the other hand the matter may be very pertinent if you are seeking an appointment to the state board of motion picture censors.

There are many issues on which people are strongly divided in opinion, not necessarily along party lines, such things as prohibition, admittance of refugees, birth control, vivisection, capital punishment, public ownership, the UN, conscription, compulsory arbitration, legalized gambling, and so forth literally without end. It makes a lot of difference in these matters whether you are running for legislator, county clerk, congress, justice of the peace, supervisor of education, sheriff, or tax assessor, whether these matters are legitimate criteria of your qualifications.

Since a majority of one - yourself-holds all of your views, I think you may legitimately avoid any issue which is quite irrelevant to the duties you will be called on to perform. But don't kid yourself nor let any candidate of yours kid himself; the duties of any lawmaker, judge, or chief executive are extremely broad; the duties of some other offices are quite narrow.

How to Sample a District: Mr. Upright's campaign for the nomination has reached the last month. You have worked hard but how well, in fact, are you doing? Should you put on more steam, or fold up and quit the race?

You can't afford the services of the Gallup poll or other professionals; your volunteers can't spare the time from direct campaigning. To be sure, they are giving you a poll of sorts, at each meeting of the Doorbell Club, but what you want now is a check on their reports. You know from experience that the reports of the field workers are usually too rosy.

There is a technique which must be learned by experience but which you may start learning as soon as you enter politics; by the time you reach a place where it matters you can be quite skilled. It consists of making predictions for all candidates and issues on the ballot for each election, both before and after some direct sampling of your own, and keeping a record of the results, which you will then compare with the election returns.

From this you will learn whether you are too optimistic or too pessimistic; subconsciously you will improve your judgment until you reach a point where you can go out into a district and almost smell a victory or a defeat weeks ahead of the event. When you can do this you are in a position to turn a potential defeat into a victory.

Make your predictions at regular intervals, from filing date to the night before the election. File them away, then get them out during the post-mortem. The whole procedure is much more entertaining than crossword puzzles; addicts prefer it to trying to pick the horses, or to reading detective stories.

Statistical Sampling: Even if you could afford professional poll-taking, supervised by mathematical statisticians, the money is better spent on campaigning.

Does this mean you have to go it blind, perhaps to work your head off for a lost cause, or lose by a narrow margin when a small additional effort would have won—had you known it was necessary?

No, there is a fairly easy and inexpensive way to conduct a poll on a district of any size, even the largest, which will give you reliable data on which to judge how well your campaign is going and then to plan accordingly.

The secret of correct prophecy by statistical sampling of a large number of units lies first in the correctness of the methods by which you sample and second in not trying to get out of the figures more than there is in them.

The mathematical theories of probability, chance, and probable error are complicated and abstruse. Instead of trying to give a course in this subject I shall content myself with stating a thumb rule, giving some instructions on how to use the rule, and offering a few general comments on the mathematical methods whereby the rule was derived. Only the thumb rule need be remembered to apply the method successfully; the mathematical comments are for the mathematically-minded reader who may wish to check the derivation of the rule and, possibly, enter into a little stimulating controversy with the writer as to theory, or as to the possibility of formulating a better thumb rule for the purpose.

Rule: Poll your district at "random" (identified below) until you have fifty responsive answers - answers either for you or against you, disregarding those who refuse to answer or haven't made up their minds. Take the number of answers for your candidate and double it. Subtract eight. Mark your answer as a percentage. The chances are about four-to-one that your candidate would not receive less than this percentage of the vote cast if the election were held at once ... and there is a practical certainty that he would not fall very far under this figure. Use it as if it were a certainty. It is, in fact, a carefully calculated conservative estimate on the "better-be-safe-than-sorry" principle.

Example: You have taken a poll of 93 voters of your party, selected at random, before you attain 50 responses-14 declined to answer, 29 had made no choice. Of the 50, 28 were for Upright; 22 were for Hopeful. Doubling 28 gives you 56; subtracting 8 leaves 48: Upright may expect to get not less than 48% of the vote cast if the election were held at once. It is equally true that he might get as high as 56 plus eight or 64% of the vote, but you are not interested in the optimistic side of the picture; you want to know what you have to achieve to cinch the election - therefore you use 48% as your figure.

Fortyeight percent is not enough; if he loses by 2% he loses-it's an emergency.

Two percent of the expected vote of 25,000 is 500 votes; you must speed up the campaign to get at least 500 more votes than your present activity insures - so you shoot for about three times that number. You call an emergency meeting of the Doorbell Club and show them only the 48% figure and tell them that means that each one will have to dig out about six more new votes than he had counted on, by punching additional doorbells not on the selected list until he finds six more who can be wheedled into voting in the primary. You put Upright on a 60-hour week for the balance of the campaign and you decide to spend four afternoons a week at doorbell-pushing yourself, instead of two, even though it means doing your paperwork on midnight oil.

The spurt lasts three weeks but it wins for you - when you might have lost by a heartbreakingly small margin. Perhaps you win by a fat margin and perhaps the spurt was not really necessary - you will never know but it does not matter; you've won.

Suppose your poll shows a conservative estimate of more than

50%; you are then justified in continuing your present campaign plans, without an emergency spurt but without slackening off.

Suppose the poll had been the other way around, 22 for Upright; 28 for Hopeful - your conservative estimate is then 36%. Does this mean you should quit? No, for Hopeful's conservative estimate is still less than 50%. It means a tough fight with a possibility, but not much probability, of winning. Stick with it.

Suppose Hopeful got 30 votes in the poll, indicating that he will probably beat your man by at least 52% of the vote and that he might take as high as 68% of the total. Should you throw in the sponge?

Not on your own initiative - I recommend that you talk it over with your candidate, then call a closed meeting of all workers and all money contributors, tell them the sad news and ask them to express their wishes. From a cold-blooded standpoint you might as well cut your losses and quit... but I predict that they will vote to stick to the finish and turn the meeting into a rally. They may even win for you. Politics isn't dice, nor statistical physics; the Spirit of the Alamo may outweigh all measurable factors.

If they decide to stick, bow to their will and pitch in. It will be a treasured emotional experience at least - and many a "lost" campaign has planted the seed for an eventual political upheaval.

The Meaning of "Random": A "random" sample is one which is as truly representative of the district as you can make it. This is most easily done by trying to keep out the personal element in the selections. For example - you want 100 names from 200 precincts: Take the bottom name, of your party, from the second column of each-even numbered precinct list. Or make up any other rule which makes the selection mechanical, with no choice on the part of the operator, and which spreads the sample evenly through the district, according to population, not area.

Never take the sample all from one precinct or one area. If you are polling by telephone you will find that some of your choices do not have telephones. Do not substitute the next name having a telephone listing; the voters without telephones must be polled at their homes - otherwise you will introduce an economic factor which will falsify your answer.

Polling by telephone is best done in the evenings, in order to find both men and women at home. Do not accept the response of a spouse in place of the voter named by the random choice; it will change your results... there is a definite tendency for women to vote more conservatively, and in other ways differently, than do men.

Do not let the polling question suggest the answer desired. For example, here is a suitable phraseology for a telephone poll: "Good evening, is this Mrs. Mabel Smith? Mrs. Smith, this is the civic affairs research bureau speaking. Have you formed an opinion about the congressional candidates who will appear on your primary ballot a week from next Tuesday?"

It should be possible for one worker to prepare a list for a telephone poll in one evening and get fifty responsive answers in not more than three evenings. A reply-postal card poll should take about the same length of time to prepare and is about as accurate, but it takes longer to get the results and 250 should be the minimum sent out. It may be cheaper than telephoning in districts involving long-distance tolls. (These reply-type postal cards, at two cents apiece, are invaluable in penny-pinching political work.)

Don't attempt to make a straw-vote canvas door-to-door. Don't try it on the street. The names mud be preselected by some non-personal method. Mathematical Basis f or the Rule-of-Eight: (Skip this, if you like.) In any statistical sampling the larger the sample, the smaller the errors in the result, except for systematic errors - errors which are inherent in the thing being sampled. In the opinion of this writer, the systematic errors in any poll of political opinion conducted without expert actuarial help are so large that it is not worth while to use a sample larger than 100. On the other hand the "probable errors" - errors which depend on the laws of chance - are so large for samples less than 50 that trends will be masked by the inescapable "probable errors." For efficient use of time and money the smallest sample which will spot a trend is desired. For that reason, and because percentages may be obtained from a 50-sample simply by doubling (percentage problems are troublesome to some), a sample of 50 has been recommended.

Bessel's formula for probable error has been used in computing the rule-of-eight, assuming independent events of equal probability and assuming a "universe" of very large but limited numbers. The assumption of equal probability may be attacked; the pragmatic justification lies in the fact that probable errors are largest in a 50-50 division and the political situation is most critical in such a situation - a landslide either way will show in a sample of 50 without resort to probable error. The rule-of-eight is neither the "probable error" of the engineer, nor the three-standard-deviations-equals-standard-certainty of the professional statistician; the first was rejected as too esoteric in meaning for the layman, the second was rejected because trend-spotting with it requires samples too large for the volunteer political campaign. A selected error of 8% was chosen to produce a conservative probability of about four-to-one, which was considered accurate enough for the purpose and much more reliable than most data we plan our lives by - in choosing a wife, for example!

If greater accuracy can be afforded, use a sample of 100 and a rule-of-five. Or the mathematical reader may perform his own analysis, following Peters or Bessel or others; I can't recommend direct analysis using the binomial expansion without precomputation, even using Pascal's triangle - the figures are incredibly astronomical!

Sampling by "Smell": In addition to poll-taking and making predictions, try this-in time you will acquire skill in it: Prowl through your district Buy a Coke and chat with your druggist. Buy two gallons of gas-chin with the man at the pumps. Ask strangers for matches, then gossip. Get a haircut. Make a purchase in an uncrowded grocery. Ask passing strangers for information-then talk.

When you have done this you will combine it subconsciously with the doorbell punching you have done (which, for the manager, should be scattered through the district) and you will end up with a curious feeling way down inside. Drag it up and into the light, take a look at it, and see whether or not it tells you that your man is going to win.

The human mind, when trained, is capable of more rapid, more flexible, and more reliable evaluations of problems containing unlimited unknowns than any of the mechanisms as yet invented. In time you will acquire this talent; you will know it when your predictions are consistently correct, not only as to results but as to approximate majorities and size of vote cast.

The acquisition of the talent is painless and almost effortless.

While acquiring the talent don't let yourself be panicked by some phony figures. Amateurs are inclined to think that their strenuous efforts must be producing a tidal wave, then are disappointed when they go out on a "sniffing" tour and find hardly a ripple. That is normal; primary campaigns hardly ever stir the general public out of their sleep. All you need is a ripple, of the right size, and in the right place. You know it is in the right place for you have been using the direct vote-getting methods; now you want to know if it is the right size.

Your district has about 200,000 adults. You question only adults. Mr. Upright needs 15,000 votes. If one out of four of the people you meet casually has even heard of your man, he is a cinch for the nomination; but if it is late in the campaign and only one in ten seems to know that he is alive, you had better get a hustle on and see to it that your election day organization gets every certain and every probable vote to the polls-or you're licked! You can still squeeze through on the one-to-ten ratio by hard work just before and on election day, but it won't be easy no matter what the telephone poll said.

Chapter X

How to Win an Election (conclusion) The Final Sprint

Last Week Mail Coverage: Your candidate has called on more than 3,000 people, possibly as many as 5,000. (Fantastic? I once rang 8,000 doorbells under similar circumstances.) Your precinct workers and you yourself have worked on the rest of the 25,000 targets. (You did not have time, you yourself? My dear lady - or sir - you must have time. I suggest a firm date for Tuesday and Thursday afternoons, one to five. Accept no other engagements for those hours.)

The campaign has not been perfect, but 20,000 aimed shots have been fired, in addition to the shotgun spread of publicity and meetings. However many of these shots were fired weeks ago; you need to use last minute reminders.

I suggest the use of either penny postal cards or personal letters - nothing in between. The usual political advertising, sent third class in an unsealed envelope and addressed by stenciling, then stuffed till the envelope bulges with wordy printed matter, has a way of landing in waste baskets unread.

A post card will be read because it is short, and it stands a chance of being kept around for a few days as a reminder. A personal letter of any sort, sent first class, will be read and noticed.

Even for postal cards your postage alone will be $200, plus printing costs and the (volunteer) effort of addressing and signing-all cards should be signed by someone, even if with an "authorized" signature, not marked as such. The signing and addressing take many hours and the work will need to be done long before the mailing date.

The final mail coverage will be the largest single expense in your campaign and may be one-third of your total campaign expenses. You may be forced to use postals, rather than letters, to save time and expense, but I suggest that you consider personal letters for the persons the candidate called on, as these are your prize prospects.

("Five thousand personal notes? It would take a crack typist four months to do such a job!" So it would-)

A man named Hooven invented a sort of player-piano typewriter which types any given copy over and over again, using a standard typewriter. The pseudo-player-piano roll can have signals cut in it which stops the typing and permits a human typist to insert a name, a date, a phrase, or any other variation in the copy, without disturbing the set-up. There is no way to tell a Hooven-typed letter from one typed entirely by hand.

Hooven-typing service is available in most large cities; you can do business by mail if your community does not have it. It is much more expensive than printing and much cheaper than equivalent service by a typist. (Some day, he said dreamily, I hope to own one of these marvelous gadgets for the use of my own district organization.)

I suggest some such copy as this - make it short, both for economy and effectiveness:

(Letterhead)
(date)
Dear Mrs. Boggles,

I hope you will recall my visit to your home last April 3rd and our discussion of the primary election. The election is next Tuesday. Naturally, I would like to have you vote for me for the Demican nomination for Congress. I enclose a short memorandum of my qualifications and the issues I am committed to support

Whether you support me or not, I urge that you and your family turn out and vote next Tuesday. The privilege and the duty of voting are more important to the safety of our country than an individual's candidacy.

Faithfully yours,
Jonathan Upright
JU:htc

The name and the date of the visit are the only items which require the Hooven robot to stop for an insert If you use printed post cards you fall back on "Dear Fellow Demican" and "recent". Full coverage by post card of the persons called on is better than partial coverage by personal letter, but do not be tempted to cover the whole list of registered voters by mail-it won't pay its freight.

It is worth while for Mr. Upright to thumb through his cards and dictate as many postscripts as possible, which are to be handwritten by the person who signs his name. "ES. My regards to the chow puppy-JU" or "I'll be after Bobby's vote in 1960!" or "Will you write to me your opinions on that reclamation matter?" or "I hope your husband is completely well by now."

Some of your precinct workers may be able to afford Hooven service for their own precincts, or they may be industrious enough to tackle the job of writing or typing personal notes - a big job but manageable for single precincts. Otherwise you will supply them with printed postals with the "trademark" picture of Mr. Upright occupying a third of the space, and a short "Dear-Neighbor" note on the rest, following the general idea of Mr. Upright's note. Leave space for the precinct worker to sign, and use the type face which simulates typewriter type style.

You may be forced to ask those who can afford it to pay the postage. It comes to a couple of dollars per worker; it amounts to a couple of hundred dollars at least to the campaign fund. One of the inspiring things about volunteers is the way they will give till it hurts right before an election, whereas a paid worker expects everything furnished to him as well as his fee.

Special attention must be given to the unregistered potential voters turned up during the campaign by Mr. Upright and the precinct workers. You have been obtaining regular reports on these people, daily from Upright and weekly from your area supervisors, and you have been turning the names over to deputy registrars with whom you have friendly liaison. These votes are free for the asking and they may amount to a couple of thousand, enough to turn a bad defeat into a narrow victory. (These are the votes Mr. Dewey needed but didn't get in 1944-the "sleepers.") Special attention by mail and special attention on election day is indicated. You can vary your printing or your Hooven set up.

Your mail coverage should be delivered to the post office, tied in bundles by districts, on Friday afternoon before the election.

Election Day: The campaign is over, all but the final sprint. That sprint needs careful preparation.

An ideal election day organization has block workers on every street, a precinct captain and lieutenants, a squad of automobiles directed from each precinct headquarters, a trained telephone organization, workers at the polls, a flying squad to take care of physical opposition, and another squad of legal eagles to take care of more esoteric matters. The whole thing is organized like a war ship going into battle.

You won't have any such organization; you won't find it anywhere save in some large cities east of the Mississippi, and it won't be complete even in those cities.

Your ideal organization - which you won't achieve; 80% is a fine score - will consist of three workers in every precinct, one at the polls, one at the telephone, and one with an automobile, plus roving area leaders with a telephone contact for each, a telephone and a couple of helpers for you, and two lawyers on tap who will drive to any trouble spot in a hurry. You dispense with muscles in your flying squad and depend on the fact that no one, not even a bad cop, will break the peace in the presence of a lawyer who announces himself as such.

Mr. Upright spends the day circulating around among the workers, giving them that "appreciated" feeling.

To achieve such an organization you need several times as many workers as there are in your Doorbell Club. It is not really hard to manage-for one day-if your area supervisors are active and alert. Some of them won't be. Since your efforts must be incomplete work according to the following priorities:

(a) Cover every contact in the precincts canvassed by Mr. Upright even if it means persuading your best workers to leave their own precincts completely vacant.

(b) Try to cover every precinct which has been worked by anyone.

(c) Do not put workers in any precinct which has not previously been canvassed unless you are blessed with more workers than you know what to do with, in which case completely untrained workers may hand out literature at the polls in those precincts. Tell them about any local regulation which limits how dose to the polls they may work and caution them not to argue with anyone.

(d) If a precinct has but one worker he or she may accomplish almost as much as three people by working in this routine: Telephone as many as possible the night before and between eight and ten the next morning. Make dates to take people to the polls, where needed, between ten and noon - a full carload at a time. After lunch go to the polls and remove from the files all who have voted, then get to work on the telephone with the remainder, making more transportation dates for four to six o'clock. At six o'clock weed out the files further and make frenzied attempts to get a few more to the polls during the evening, giving quite as much attention to the inactive list as to the live contacts. As soon as the polls have dosed, grab a hasty supper and return to the polls for the count. Remain there, watching the count (inform the senior polling official of the intention). When the count for congress has been completed, telephone the result to headquarters, and then leave for the election night party.

It is a long day's work but it is a perfect picnic for any healthy, intelligent person.

(e) If two persons are available, the same work is split up, except that the polls are not left unguarded even for a moment from the time they are closed until the count is completed.

(f) If three persons are available one of them may try to glean a few votes just outside the polls at the required distance for campaigning. He is permitted, under most state laws, to double as a poll watcher, thus keeping a running record of who has voted for the automobile workers, provided he does no electioneering while inside the balk line. He sets up a "headquarters" - a parked car, a card table, or a packing case - and covers it with signs for your candidate, and then attempts to hand some small, simple printed reminder that Jonathan Upright is running to each person who approaches the polls. If the local administration is unfriendly and unscrupulous he may have trouble with cops. If this is anticipated, have your best lawyer have a talk with the chief of police ahead of time, explaining your intentions, going over the law, and reaching a full understanding as to just what will be allowed. If your police chief is recalcitrant, let him know that you intend to fall back on the federal authorities - there are pertinent Supreme Court rulings which can scare the boots off a local official if he knows that you know your rights.

A second poll worker is desirable, as there are usually two approaches in view of the no-electioneering balk line. Anyone who is old enough to walk can be an assistant, the younger the better.

(g) Telephone workers may be found among supporters or wives of workers who are tied down by small children or ill health but can use a telephone. They must be provided with lists, by the precinct worker, and mimeographed instructions, from you. Here is an adequate formula: "How do you do? Mrs. Duplex? Mrs. Duplex, this is the Jonathan Upright—for-Congress Citizen's Committee. Have you voted yet today? Would you like to have one of us call to take you to the polls by automobile? Oh, that's quite all right - you can take the baby with you; we will take care of him during the few minutes it takes you to vote. Is there any other member of your family who needs transportation? Very well then, suppose we pick you up sometime between ten a.m. and noon? No?

"How about between four and six? Three o'clock is better? Very well, then, we will make a special trip for you at three o'clock; I'll make a note of it. Not at all, we're glad to do it."

No direct attempt to campaign would be made in these phone calls; limit them to offering service and reminding the voter of the election, while mentioning the name of the candidate as often as possible by referring to the committee by its full name. The person who makes the pick-up limits his campaigning to signs on the car and to handing to each passenger as he gets in a copy of the same small printed item used at the polls.

Election day work is simply to turn your potential votes into real votes by seeing to it that all your supporters get to the polls. Many times your interest lies in a minor candidate or in a proposition on the ballot. Votes for these can frequently be obtained by the courtesy of supplying a ride to the polls. Many people vote only for candidates for president, governor, and senator. The votes of these people can be sewed up for Mr. Upright if one of Mr. Upright's friends supplies the transportation.

Watching the Count: These votes gained on election day can be lost on election night, in the count. One of the commonest pieces of chicanery in the counting is to take advantage of the feet that many people neglect to vote for any but the head of the ticket If the ballot is of the style in which the candidates are grouped by offices it is very easy to mark incomplete ballots after the polls are closed. Thus with 300 ballots cast for governor of which only 250 have been marked for a congressional choice, split 110 for Doubletalk and 140 for Trueblue, five minutes work behind closed doors can change the result to 160 for Doubletalk and 140 for Trueblue without leaving any provable evidence of fraud.

Ballots arranged by tickets rather than by offices are more usually faked by throwing out as improperly marked any split ticket ballot which does not suit the dishonest polling judge and by accepting such ballots when the split does suit him, no matter how many technical mistakes the voter may have made.

Actual stuffing of the ballot box is very rare and the cash-in-hand purchase of votes is still more rare, whereas the election which is actually changed in outcome by these methods is so seldom found that it may be regarded as a museum piece.

These crude methods of blatant dishonesty are not used by the more successful city machines, even when the Machine is corrupt to the core, because they are not as efficient nor as reliable as machine methods which are technically honest. If a Machine resorts to use them it is a symptom that it is on the skids. (Cf. Kansas City vote fraud trials.)

Your watcher will not be able to do much actually to check the count, because there is so much going on. But the presence of the watcher, announced as such to the official in charge, will be an almost airtight deterrent against fraud. In addition to purportedly watching the count the watcher keeps careful track of how many ballots are discarded as spoiled and for what reasons; this can strongly affect the outcome of a contested election.

Voting machines make the above routine unnecessary. It may be possible to inject fraud into an election conducted with a voting machine other than by the crude methods of coercion or bribery, since anything that one mechanical engineer can design another can modify to produce a different result, but there is nothing for you to do at this point. The detection of skullduggery with the innards of a voting machine would call for a type of investigation, probably by the FBI, beyond the scope of practical field politics.

The watcher telephones the outcome to headquarters, where you and Upright are keeping your own tally while chewing your nails down to the elbows. Then she, or he, goes to the election party.

The Election Night Party: When the polls closed you moved from the office headquarters to the space in which the Doorbell Club meets.

You expect three times the membership of the Club but that's all right - let 'em crowd in; it makes them happier.

You did not stop for dinner; your stomach isn't behaving quite as it should. A sandwich picked up "to go" is all you want. Upright shows up from the field about the time you get there and the two of you, alone for once, or with the office girl and one or two others, get ready for the party. You place someone at the telephone and arm her with a tally sheet. You turn on the radio to the best station for returns-the snap tallies on the major offices are already beginning to come in - and set up the big black board to post returns on the whole ballot. You place an excited, high schoolage adherent in charge of this, and turn your attention to the refreshments.

Three times the membership of your organization gives a figure of 300 - three hundred quarts of beer. That's a lot of beer; you have purchased it in kegs, if you could not get it donated, and made an arrangement to return untapped kegs for credit, so you display only one keg at a time and keep the rest under lock and key. You have five hundred paper cups, not of the largest size.

Coffee and soft drinks are available for those who do not drink. A very small amount of food, doughnuts, cheese and crackers, has been obtained, but you hide it away and will not display it until about one o'clock in the morning.

Don't try to serve hard liquor; it will bankrupt you. Some will bring their own and some will get tipsy. It's a free country.

A few people are beginning to show up and it breaks up the depression that you and Upright have been suffering from since the polls closed. They crowd around him, shaking his hand and slapping him on the back, and urging him to have a drink "right out of the bottle." Some of them also speak to you.

After that they pour in a steady stream; the place gets crowded and stays crowded. Most of them are your friends; some of them are the perennials who go to all the election parties every election night. You wedge yourself in back of a table to get away from the press and bend one ear to the telephone while trying to watch the telephone tally and eat your sandwich and drink some coffee. Judge Yardwide, according to the radio, has a safe lead over the field for the gubernatorial nomination. You nod knowingly and with pleasure - with Yardwide at the head of the ticket the final election should be easier to win.

The first telephone reports come in; they are simply awful! Your sandwich shows a tendency to want to come up again. Upright squeezes his way through the crowd, nodding and smiling and speaking to people, then bends over and glances at the figures.

His face is suddenly grave, but he pats your arm. "Never mind," he says. "It's all been worth it, even if we lose. If I ever run again I want you to manage me."

You feel like bursting into tears, but there are too many people present.

After a while it begins to swing. Upright is creeping up on Hopeful....

Upright-982; Hopeful-1,005.

Upright-2,107; Hopeful - 2,043. You're ahead!

Upright - 5,480; Hopeful - 5,106. You begin to breathe more easily.

Upright-9,817; Hopeful -8,166

Upright - 12,042; Hopeful-Wait a minute-you hear your district number mentioned on the radio, and the telephone is ringing at the same time. "Quiet! Keep quiet-please!"

You get some modicum of surcease, at least around the radio: " -minor contest seems to be settled," the announcer is saying cheerfully. "Jack Hopeful, through his manager, has just conceded the nomination in the Umpteenth District to the Honorable Jonathan Upright. The statement urges all voters to support the Demican ticket this fall. Mr. Hopeful could not be reached for a personal interview but it is understood that- "

You don't hear the rest. You've won.

The rest of the evening is pretty lighthearted. You break away from the radio and circulate around a bit even though your feet are killing you. You try a glass of beer but you let it go flat while you duck back to the radio. The attorney general fight has taken a very interesting twist; it's likely to cause some complications. About three a.m. you and the nominee and two other faithfuls squeeze into a booth in an all night restaurant and you eat the biggest meal you have eaten in over two weeks. You've got the first edition with the preliminary returns and you eat while one of you reads the figures aloud.

At four a.m. you fall into bed and die. Post-Mortem Upright-16,107 Hopeful-11,373

Figures from earlier contests, corrected for population and registration changes, show that a candidate in a two-man race will receive 10,000 votes in your district if he files and makes a superficial campaign. Comparison with other districts and previous years on a percentage basis shows that your district had 2,000 votes more than normal.

Therefore your campaign methods stirred out about 6,000 votes, of which some 2,000 were new votes not normally to be expected in a primary. This is the final proof of the correctness of your technique, since winning could have resulted from the deficiencies of Hopeful's campaign rather than the excellence of yours.

Detailed examination of the results by individual precincts shows that the candidate stirred out between a third and a quarter of the majority and that the precinct workers did the rest. The decision to have Upright go directly to the homes of the voters has been justified.

The cupboard is bare but the bills are paid - all but the beer; you pledged your own credit on that. You must remember to return the two kegs left over - that will help, and perhaps you can get one or two others to divvy up while they are still feeling good over the victory. Upright intends to reimburse you but you don't want to stick him for it - his personal expenses have been a little heavier than he had anticipated.

We Was Robbed! Or perhaps you did not win. Maybe there was a bad break at the last moment, or a schism in the Club, or something. Suppose the outcome was: Hopeful-12,785; Upright-12,009.

It is easy to cry fraud, easy to charge it up to a machine, to dirty campaigning, to stuffed ballot boxes. But you won't be right, not one time in a thousand. No, citizen, depend on it - if you lose it is almost certain that it was because not enough people wanted your man to win and most especially that not enough supporters worked hard enough or intelligently enough.

At the very least in every election there is a high percentage who just don't vote - in a primary more than 50%. You cannot blame those lost votes on chicanery. Perhaps you did the best you could and the outcome was indeed affected by some dirty tricks, at the polls or elsewhere, but the result still represents the will of the American people, at least by passive consent. Accept it.

Closing Ranks: You won't get anything out of your workers and you won't try to - you will wait till the next regular meeting of the Doorbell Club. In the meantime you are very busy.

There is the matter of gathering up records of the primary in order not to have to depend on the county clerk's records next time. Some of the precinct area supervisors may be disciplined enough to help you do this, but the letdown may continue until the posted voting record and results have been taken down. A 35-mm. camera furnishes a convenient way to get these records without stopping to copy the data, but it's too big a job to cover the entire district singlehanded even with a camera to help you. Do the best you can and pick up the rest from the official records next winter.

Your memo pad has a score of such jobs, loose ends to be picked up. You want to get them out of the way promptly so that both you and the nominee can get at least a week's rest, out of town, after the state convention and before starting the final campaign. A shorter holiday is needed before then, too, if you can manage it. But you have got to consolidate your victory by getting the party factions inside the district together before you dare leave town or make any campaign plans.

The entire slate of county committee candidates from the Doorbell Club have been elected, yourself among them-you now control the district delegation. The nominee is an ex-officio member of the state committee and is a delegate to the state convention. On your advice he has appointed state committeemen, yourself among them. You must plan to attend the state committee meeting at the capital but you may not have time to stay over to observe the convention - there is so much to be done.

(Your own state may provide for party organization somewhat different from that implied here, although this is typical. You must be familiar with it, whatever it is. Don't be caught with less representation on either the county committee or the state committee than your pro-rate necessary to control your district.) But your first job is to see Jack Hopeful. We have assumed that Mr. Hopeful is a regular member of your party and not a stooge of the other party. You want and need his support in the final election. Get hold of him or his manager and invite them both to your house for dinner. Mr. Upright will be there also. After dinner you will talk over the coming campaign.

Don't offer him anything. Don't assume that he wants anything. Treat it as a matter of course that he and his manager will support the straight party ticket, including Mr. Upright. Mr. Upright will ask him to serve as chairman of the district campaign committee for the ticket, while explaining to him that the work need not be any more strenuous than he wants to make it. The office will in fact be titular, since you will dominate the executive committee and the committee as a whole. You will remain personal manager for Mr. Upright, and, as chairman of your district's delegation of committeemen, you will be in authority on any official party matters.

You don't speak of these aspects to Hopeful; you offer him the top stuffed-shirt position in exchange for his nominal support. His manager is offered a vice-chairmanship and a place on the executive committee.

They may accept, pitch in, and be most valuable. Or they may hem and haw and leave, after asking for time to "think it over." Or they come right out and ask for money or appointments or both. They may have campaign debts to meet, or they may demand outrageous salaries to campaign. Hopeful may want help in landing a major piece of patronage for himself, or he may expect you to pay off his obligation to his manager by letting him have one of the congressional secretaryships if Upright wins. For some curious reason many unsuccessful candidates seem to feel that their successful rivals owe it to the defeated to pay off their campaign debts and commitments.

It's a form of blackmail; don't give in to it.

Upright should explain that he can't promise appointments to anyone since he has consistently refused to promise them inside his own committee. Appointments will be settled if and when - after the final election. As for money - there isn't any.

They may give in with bad grace, if they have no place to go and wish to stay in good standing in the party, or they may leave. If they do, they will be self-righteous as can be about the whole matter. For some reason your refusal to pay the bills they ran up trying to defeat you will seem like a clear case of moral turpitude to them.

Bring up your heavy artillery. Get some Big Names, preferably from the camp of the party's nominee for governor, to call on Hopeful and explain to him, sweetly but firmly, that if he ever intends to get anywhere inside the party he had better stay regular, lend his name, invite in his supporters, and, as a minimum, preside at one or two public meetings for Upright and the ticket.

The chances are you will get him. But don't buy his "support"; it isn't worth it.

In the mean time you will have seen to it that personal notes of thanks are prepared (Hooven-typed, perhaps) for every worker, endorser, and contributor in Upright's campaign. Make the ones to precinct workers different from and more emphatic than the others and let all of them be a call to arms for the final ticket in the final campaign. In addition, make the first meeting of the Doorbell Club a jubilation in which each worker is thanked individually and his majority is announced.

You will want to get everyone possible out to the first meeting of the party-wide breakfast group; here is where your spade work for party harmony will pay off. In addition to gathering in Hopeful there are at least twenty party factions in the district, one for each candidate for each office on the ballot. You will need all of them and will make personal appeals by telephone to the leaders in the campaigns that lost, in addition to the usual postal card notice. You have many different fights to straighten out here, dozens of sets of feathers to smooth, but your job is easier than it was with Hopeful, as you appear in the capacity of broker for everybody's interests.

Out of it all you try to whip together a campaign committee for the whole ticket, as that is the best way to elect your own man. You turn your thoughts to "face," everybody's face and you help to preserve it by offering them all a chance to do the noble thing in public by declaring for the whole ticket. Titular offices in the campaign are passed out to anybody who seems to want one, with great fanfare (the possibilities of the words "vice-chairman," "director," "secretary," "coordinator," and "committee" have never been exhausted).

From these other groups you get new members of the Doorbell Club, at least on a temporary basis. You may retitle it, if expedient, for the duration. You now need a membership about four times the best you could do in the primary.

There is money to be considered, all over again. It is easier to raise now, but you need more of it. Better put money raising in the hands of the gubernatorial nominee's local manager, for the campaign as a whole, and handle your own resources as a separate account for the congressional campaign. Don't forget to insist that the national committee kick in for the congressional district and be darn sure some bright boy down town doesn't beat you to it and get his hands on it through a more direct pipeline to the national committee.

Some county and state committees seem to be under the delusion that the way to raise money is to assess the candidates. This is all wrong; the committee should raise money and support the candidates. If assessed, don't pay it; their help isn't worth much if that is how they work.

From a proper state or county committee you may expect some money, a lot of active help, and much free or partly free printing. Your printing bills should be small in the second campaign as the stuff you will use will be for the whole ticket.

You may want a few items in which Upright's name is emphasized over that of the rest of the ticket, by lay out and type face.

We won't run through the final campaign in any detail. In general it is just like the primary campaign, except that everything is more complicated, the numbers are larger, the emotions are stronger, the amounts of money are larger, and you have the disadvantage, as it is usually figured, of running against an incumbent The Honorable Mr. Swivelchair has more friends and more acquaintances, but he has also accumulated a back log of enemies and mistakes. Still, incumbency is usually figured as an asset and that is the safe way for you to figure. If Swivelchair is the stooge of a tight and well-established machine, you will not only have to work harder but will have to count on some trouble of the dirty sort. The election night count in particular will have to be closer. Figure your trouble spots and make your watchers there your smallest women; they will be safe. Men might have their arms broken.

There will be more Big Operators in your hair, more blokes with votes-in-their-pockets, more people with their hands out, more hopeful patronage hounds, more of everything which makes politics complicated without adding to the vote.

There is just one thing to be remembered in the midst of all this hurly-burly and confusion: Keep your eye on the ball!

The votes are still in the precincts. Punching doorbells still remains the only way to get out the vote you need, despite anything you may hear from the Important Politicians from down town.

Maintain your own practice of spending two afternoons each week punching doorbells.

Schedule Mr. Upright for another 500 hours of canvassing and see to it that he keeps to his schedule.

Keep your campaign centered around the Doorbell Club and don't use them for anything but canvassing until election day.

Ignore the opposition as before.

The only real differences are these:

(a) You all campaign for the whole ticket and emphasize Mr. Upright only by getting in his name more frequently, principally through quoting him by name in support of the platform and the ticket.

(b) You canvass from a selected list as before, but this time you ignore, in your canvassing, all the members of your party who voted in the primary. With the exceptions of the ones who had to be carried co the polls (and will have Co be again) these people can all be depended on to get to the polls and to vote the straight party ticket. Instead you canvass all members of your party who failed to vote in the primary ... and all members of minor parties and all unaffiliated voters. The known members of the other party you ignore. You have nearly 40,000 people to reach; you haven't time enough nor people enough to do more. Your effort will be to turn out the largest possible vote of your own party... especially the voce of the "sleepers."

(c) Therefore you will put more effort than ever into organizing your election day forces. If additional help for election day can be obtained from the county or state committee you will want it, since it does not require local information, other than a prepared list, Co do election day work, and it does not even take that Co be a poll worker or a count watcher.

And that's all

Along toward the last of the campaign very heavy pressures will be brought against you to change the campaign, but one will come from an unexpected source. A senior member of the party, resident in your district, a nominal member from the beginning of the Upright committee and a fairly heavy contributor to it, is likely to call on you. He won't put it quite bluntly but the idea is that you should lie down and let Swivelchair win.

He will say you have made a good fight but that Upright does not have a chance. Upright isn't quite ready yet; maybe in two years, or four years, but not this year. On the other hand he happens to know that Swivelchair plans to go for Senator next time; on that occasion he could throw a lot of support to Upright if Upright did not cause Swivelchair too much expense this time. Why not be practical, take a long view, and get along?

You wouldn't even have to drop the rest of the ticket, naturally; just persuade Upright that there was no sense in throwing good money after bad-and get sick for a while.

As for you - well, what appointment would you like? Maybe it could be arranged.

There is no particular reason why you should not indulge in the rare luxury of losing your temper, although it won't help any. Send him about his business. Don't make it an issue - now. But don't let him sit in on any party conclave during the campaign, nor ever again, if you can keep him out. He's a Trojan horse.

Don't let it shake your faith in human nature. Instead, it should build up your faith. They would not try to buy you off if they were not frightened! It is a shining justification of your faith in the nature of the average citizen. Your methods and your beliefs are being vindicated in the most practical way possible - and the opposition knows it.

Some time later you will again find yourself seated behind a table with an election night party going on all around you. The radio will be blasting, the phone will be ringing, you will be trying to eat a sandwich and listen to the radio while thinking with half your mind about how to scrape up the postage for the eight or nine hundred-odd letters of thanks that Upright will have to send out in the next two weeks.

The early returns aren't going too badly; Upright is even running a little ahead of the ticket in some spots—but it's still touch-and-go. Swivelchair's organization is experienced and well trained; it can't be discounted.

You decide to put off worrying about the postage, and so forth, until about Thursday. You'll find the money; you always have.

There haven't been any returns on congressional districts for about an hour. You are getting jittery. The announcer is introducing candidates and notables - why don't those stuffed shirts get off the air?

Here come some figures-9th district, 10th district, 11th district, 12th district - the announcer stops. What's got into him?

'Just a minute, folks, some new figures just in ... any moment now. Here's one item of news anyway. The new figures clearly show that in the Umpteenth District, in a surprise upset, Jonathan Upright has unseated oldtimer Congressman Swivelchair. The incomplete returns show a lead of-" You have elected a congressman. You can't leave on that vacation the next day. In fact you can't leave for a couple of weeks. Besides the thankyou notes there are the post-election meetings of the Doorbell Club, the breakfast dub, and the state and county committees. Upright wants to discuss appointments with you, too, of his secretaries. You don't want to go to Washington with him; you don't even want to be on the payroll as his field secretary and stay in the district, as you don't want to be his employee - your position depends on your being your own boss. This attitude gives you at least a veto in the appointments he does make-and on his later appointments.

Your own plans have more to do with tying in the Doorbell Club to Washington through a weekly newsletter from Upright and a regular procedure whereby the Club will be kept informed as to what is going on, what it means, and votes their approval or disapproval for the information of Upright and the two senators.

It is nearly a year and a half later that you are sitting in your living room, thumbing through the current Congressional Record - the only tangible thing you got out of either campaign - when you notice a roll call vote on a measure you have been following. It's a good measure in your opinion, and important to the whole country. This is the last vote, the one that sends it to the President for signature. You note with approval that Upright voted for it-as you knew he would; you have corresponded about it.

It just squeaked through, by one vote. You suddenly realize the significance. One vote - Upright's vote, for Swivelchair had a definite record against this sort of measure.

One vote. Your vote!

Your own efforts have put a constructive measure into effect for the whole 140,000,000 Americans -you did it, with your bare hands and the unpaid help of people who believed you.

It's a good feeling!

CHAPTER XI

Footnotes on Democracy
"The target is who and what?
"The people, yes-
"sold and sold again
"for losses and regrets
"for gains, for slow advances,
"for a dignity of deepening wots."
- Carl Sandburg

"When you assemble a number of men to have the advantage of their joint wisdom, you inevitably assemble with those men all their prejudices, their passions, their errors of opinion, their local interests, and their selfish views. From such an assembly can perfection be expected? It therefore astonishes me to find this system approaching so near to perfection as it does...."

-Benjamin Franklin to the Constitutional Convention

The art of politics is as confused and unorganized as a plate of hash and as endless as a string of ciphers. Despite the numerous digressions many things pertinent to the art, as distinguished from the issues, have necessarily been ignored. Some of them are much too involved for available space and quite unnecessary to a basic book, as you will learn about them as you come across them, with little loss to you, if your grounding is firm.

We must pass by such matters as the workings of state and national conventions, the work of state legislatures - "cinch" bills, "must" bills, the effect the Speaker can have on producing a "do pass" committee vote, the rules committee, stopping the clock-and the inner workings of congress - seniority, cloture, the functions of floor leaders and whips, senatorial courtesy. Lobbying and lobbyists, proper and improper sources of campaign funds, blocs, the preferential ballot, the publication of political newspapers, the Hatch Act, the organization of national committees and national campaigns, the political interrelations of city, state, and county-all of these matters will face you with fresh political problems, but your answers will depend much more on how you look at issues; the techniques will turn out to be familiar to you. Only the names will be changed.

Nevertheless, whenever a large family makes a journey, no matter how many neat pieces of luggage they may own, there are always leftover items for which there is no assigned space but which must not be left behind. These are wrapped in brown paper and carried under the arm. This chapter is such a bundle.

The Personal Expenses of Volunteer Politics: Let's be specific. You can be quite active without spending a dime, but there are expenses which make your work much easier and more enjoyable. Here is minimum budget for comfort and freedom from embarrassment:

One extra meal out per week	$1.00
Pass-the-hat collections and dues, per wk.	.50
Transportation, per week	.40
Additional postage, political, per week	.25
Weekly total	$2.15

This budget permits much higher expenses during the most active weeks of campaigns because there will be many off-season weeks when the additional expense of being a politician is limited to a few postal cards and a phone call.

The budget ignores the fact that you aren't spending money on movies, bridge at a tenth, nor on other recreations or hobbies when busy with politics. Politics on the above budget is cheaper than most recreations, i.e., entering politics can save you money instead of costing you money, even though you pay your own way.

Political contributions and trips to conventions can run to any figure you care to spend. So also can any hobby. You will need the moral courage to say firmly, "I'm sorry but I don't have the money," when you can't afford it. You will be respected for it and it will cost you no political influence in the long run.

Coping with Communists: Communists are not very numerous but they get around; you will run into them everywhere. There is a popular belief that Communist infiltration is found only in the left wing of the Democratic Party; I have not found it so. A Communist cell can pop up wherever more than four people assemble. I have spotted them in organizations so reactionary that their presence, if known, would have caused deaths from apoplexy.

Communists are most easily understood if you think of them as a fanatical, evangelical religious sea. I speak here of American Communists; I have no knowledge of Russian Communists, having never met one to my knowledge and having never been to Russia.

From the standpoint of religion the peculiarities of communists form a recognizable pattern. They have an outrageously unscientific "bible" which they point to as being the last word in science. It appears in "authorized" and "forbidden" translations. They have a god - the idea of the "proletariat" - a major prophet, a minor prophet, and an apostate saint. They are absolutist in viewpoint and brook no argument. Anything is moral to them which serves to propagate the faith, no matter how offensive to the unbeliever. Theirs is a "higher" morality; what we have is a "decadent, bourgeois" morality. They are indefatigably zealous. They are usually sincerely and altruistically devoted to their cause. You will find other such characteristics.

Their favorite technique is to bore from within. The operators are usually clandestine Communists, hiding behind some other party label-this is not offensive to their own strict moral code. They will make use of democratic parliamentary procedure and the democratic concept of free speech to ends destructive of both. Their notion of free speech is one in which you hire the hall and they do all the talking, on a subject of their choice. It is strictly a one-way proposition - try it in their hall sometime!

A common technique is to operate in a cell of three -one to make a motion, one to second it, and the third to harangue. They generally spread around the hall to do this and may not even appear to be acquainted.

A chairman confronted with this triple play can find himself in a pickle. The subject picked by the cell is always one which can be made popular with the particular crowd and which is not overtly connected with Communism. A group of three can often stampede a crowd into some action disastrous to the objectives of the crowd but suited in some devious fashion to Communist purposes.

An able chairman can prevent this by means described earlier in this book if he spots the Communist cell.

Fortunately this can often be done in plenty of time. American Communists are hardly ever very intelligent although many display some aspects of brilliance. They tend to behave in regular patterns which they have been taught and by which they can be spotted, but they can most easily be spotted by their addiction to catch words and phrases.

These shibboleths change from season to season, but, if you are in politics, you will hear them, come to recognize them, and listen for them.

A few years back the word "activize" was such a touchstone. "People's" this and "People's" that has enjoyed a long popularity, as has "United Front." There is no way to tell you what these words will be at some time in the future. Listen for them and check the Daily Worker now and then to see what they are up to.

Some of them reveal themselves by calling themselves "Communist-sympathizers." This sort of person explains that he is not a Communist himself, but sympathetic to their social ideals. Consider, citizen - have you ever heard of a Democrat-sympathizer, or a Republican-sympathizer? There ain't no such animal.

Communists are merely irritating nuisances rather than dangerous.

Only the timid and the mendacious profess to fear a communist revolution in this country. Anyone acquainted with the mares and the culture of this country can see that ninetynine Americans out of a hundred, at the very least, don't want any part of Communism. It does not fit in with our individual ambitions.

Of what use, then, are the American Communists?

They serve one function extremely useful to you and to the country, so useful that, if there were no Communists, we would almost be forced to create some. They are a reliable litmus paper for detecting real sources of danger to the Republic.

Communism is so repugnant to almost all Americans, when they are getting along even tolerably well, that one may predict with certainty that any social field or group in which the Communists make real strides in gaining members or acceptance of their doctrines, any such spot is in such bad shape from real and not imaginary social ills that the rest of us should take emergency, drastic action to investigate and correct the trouble.

Unfortunately we are more prone to ignore the sick spot thus disclosed and content ourselves with calling out more cops.

Lawyers in Politics: Lawyers constitute around half of all our state legislators and congressmen. They hold other political offices way out of proportion to their numbers in the population. Many people take this as a matter of course and it is in fact a logical consequence of certain features of our social structure.

We have already mentioned the fact that a lawyer can run for office easier than most other people and that, in many offices, he can take a bribe in an undetectable manner. However these are not real objections to lawyers in public life; lawyers are certainly as patriotic and as honest as the average run of men and I believe that they average more intelligent than the general run.

Nevertheless it seems very unfortunate that lawyers should make laws. It may even be argued that lawyers should not be judges. The latter idea is certainly radical, but the profession of judging is by no means the same as the profession of the solicitor or the barrister. It could be a separate profession; the origin of the identification of the two professions seems to go back to Biblical times, when priest, teachers, judges, and lawyers were all one profession. Two of the professions separated out; the other two could be separated just as, in England, the two professions of solicitor and barrister are separate. There is now no legal requirement that the justices of our Supreme Court be lawyers.

But lawyers do their greatest damage in lawmaking. In the first place lawyers speak a language not known to the rest of us; they write laws in that language and then we must hire one of their guild to tell us what the law means. They assert that their special language is necessary, as ordinary speech is not sufficiently exact. One may doubt this; many semanticians have disputed the claim. A layman is surely entitled to doubt it, even without the special analytical skills of the semantician and without knowing the other language, since lawyers are forever disputing as to what a law means after they have written it.

I wonder what the result would be if one could attack the constitutionality of a law on the grounds that it could not be understood by the ordinary literate adult? The ordinary adult is required to obey the laws-which carries with it the implication that there must be some way of telling him what it is that he must do. How would it be to require that laws be expressed in such terms in the first place?

Even a lawyer cannot require me to rimpf unless he has some way to tell me, in English, what it is I have to do to rimpf.

A foreign language is a minor vice of the lawmaking lawyer, however. Foreign languages can be gotten around, more or less, through interpreters. The worst thing a lawyer brings to the task of lawmaking is a faulty orientation.

You have heard of the Fillyloo Bird? He flies backwards because he does not care where he is going but he likes to see where he has been. Lawyers as a group are strongly related to the Fillyloo Bird, by training, by lack of training, and by association. They look to the past

That's a helluva way to try to draw up a new law to cover a new situation!

We are now confronted with the disheartening spectacle of lawyers attempting to draw up laws on the subject of atomic physics. They look to the past for precedents; there are no precedents - and their own esoteric professional training does not require that they be exposed in any fashion to science nor the methods of science.

The dilemma is not new, it is just more acute. In a myriad ways we permit a group of men who know rather less about the real world than do farmers, engineers, mechanics, or grocers make for us our most important decisions, in accordance with dusty precedents of dead men of their own clique.

The real trouble with lawyers in public life is that most of them don't know anything that really matters.

A Third Party? The emphasis that has been placed herein on the two major parties and the necessity for party regularity and party discipline may lead some to think that I oppose any attempt to form new political parties. If so, I wish to correct the impression.

Party regularity and party discipline are pragmatically necessary and morally correct in any political party if that party is to carry out its responsibilities. This is especially true with respect to unsuccessful candidates in a party primary; no man should offer himself as a candidate in a party primary unless he is prepared to abide by the majority will of the political group he seeks as a sponsor. Running in a primary is a voluntary action, very similar to joining a caucus; it carries with it responsibilities as well as privileges. A candidate need not enter a primary at all; he is always free to run as an independent instead.

In some states the right of a person to participate in a primary may be challenged and he may then be called on to prove his right by taking an oath to support the ticket which results from such primary. Such a procedure is morally correct; if universal it might do much to put a stop to the present eat-your-cake-and-have-h-too attitude of some irresponsible politicians.

Special circumstances arise from time to time when two groups, strongly opposed on basic issues, struggle for the privilege of wearing a party label claimed by both. In such cases there is usually no pretense that the losing faction will support the winner and there should be none. Consequently no obligation to party regularity exists. But the more usual case is much more like that of the spoiled brat who insists on having his own way in every respect or he won't play.

All of which adds up to this: if you decide to bolt, go whole hog. Leave the party. Join the other party or join a third party. Don't expect either the Republicans or the Democrats to permit you to wield influence if you insist on flirting with the other party whenever the whim seizes you.

The issues involved in forming a third party at this or any time are beyond the scope of this discussion, although it is evident that both parties are now wracked with internal stresses over basic issues which bring each wing of each party closer to the corresponding wing of the other party than are the right and left wings of either party, within the same party. An ideological realignment would appear rational; a third party may be the convenient means to such end.

The practical aspects-our proper business here—depend on whether or not the risk is justified by the objectives. Forming a third party is a highly speculative venture; it fails much more often than it succeeds. But it has been done successfully many times in our history. Mr. Lincoln was elected by third parties for both terms, first by the Republican party and next by the Union party - the latter fact seems to be little known. In 1864 the so-called "Radical" or regular Republicans nominated John C. Fremont, who had been the Republican nominee in 1856. The Union party was a coalition of both Republicans and Democrats.

The Failure of "Reformers": It is a truism in political history that the only thing worse than an officeholder under a corrupt machine is the reformer who replaces him.

Why should this be? Surely most of these reform gentlemen are honestly devoted to the cause of good government and have the best of intentions when they take office. Within my experience practically all of them were, I believe, sincere.

The downfall of some of them can be charged to sheer naivete; they were quite unprepared to cope with the liquor and lady lobbyists, the pressure groups, and the stab in the back. Some of them were cold zealots who could not maintain power because they did not understand what people wanted as well as did the bosses. And some were tragic cases who found themselves unable to live on the miserly stipends which we so frequently offer as a reward for statesmanship and succumbed to opportunities for graft and bribes.

But the most numerous variety, it seems to me, fail through conceit, from a type of swelled head arising from self-righteousness. I am a "reform" politician myself; this phenomenon is of great interest to me. It surprised and worried me to find out that so many of my ilk were such frail reeds when we got the chance to carry out our intentions.

The life and death of a reformer often runs something like this: He starts out full of enthusiasm and moral indignation. He is determined to have nothing to do with anything resembling what he calls "playing politics." He won't make any promises; he will remain a free agent at all times, devoted to the best interests of all the people.

Presently he finds that he has to make some promises; a man who isn't committed to anything can't get anywhere in any field, since social living depends on contractual arrangements. Being ignorant he usually makes the wrong promises; they become inconvenient to keep.

Here is where his swelled head ruins him-

He is surrounded (always) by sycophants who tell him what a great guy he is, a new Savonarola no less, and that he is much too big to be bound by bad promises because he has obligations to the whole people which override commitments to individuals, particularly when he was trapped into them (which may be true).

A conscience which tells you that you can break your word for higher, more moral reasons is a very convenient thing to have around. You can get it trained so that it always gives you the answer you want that day. "Mirror, mirror, in my hand, who is the fairest in the land" - and sure enough, it's yourself!

After a succession of such incidents the Machine is back in office.

Political machines, both the fairly decent and the utterly corrupt, have accumulated a great deal of true information about politics. Reformers can't compete unless they know these facts and are prepared to offer all the Machine does and a little more. The two most important facts the reformer must learn from the Machine are these: (a) Promises must be kept, and (b) votes are in the precincts.

You can tear up the rest of the book. Are Democracies Efficient? This used to be a favorite subject for pessimistic pondering during the 'thirties; we seem to have answered it definitively between December 7, 1941, and August 6, 1945. I used to be worried about it myself; I was devoted to the democratic way of life but honestly wondered if it were destined to be engulfed in this "Wave of the Future" which then enjoyed a certain popularity.

My doubts were settled permanently by a refugee from Nazi Germany. A gentile and a very prosperous Berlin businessman, he had preferred ducking over the border and landing in New York penniless and with no prospects to toeing the Nazi line.

I expressed my misgivings to him. He answered, "Don't ever let anyone tell you that any form of dictatorship is more efficient than freedom. Being made up of human beings, both systems make mistakes. The difference is this: In a free country when the mistake begins to show, somebody sets up a howl and presently it is fixed; under a dictator nobody dares to criticize, and the mistake is perpetuated as a permanent, inflexible rule."

To be sure the touchstone he used was free speech, but democracy and free speech are Siamese twins; one can't stay alive without the other.

But Can I Be Effective? Notwithstanding the pretty picture in the last chapter of Muriel Busybody electing Mr. Upright, unseating Mr. Swivelchair, and eventually thereby effecting in at least one instance the whole course of national life you are still entitled to reasonable doubts as to whether or not the case is typical. After all, I wrote the plot; I may have phonied it.

Remember Susie? Susie, the one-woman army? Susie and her kids? (When her oldest was about nine Susie announced the intention of taking them all to the mountains for a week's vacation. The kid was not impressed. "Look here, Mother," she said, "is this really going to be a vacation - or just another convention?") The primary laws of the state in which Susie lives require that delegations to national conventions for the purpose of nominating candidates for president be elected by the people of the party and that the delegates be bound by law to support the candidate under whose name their names appear on the primary ballot, thus giving the people direct voice in the selection of presidential candidates. The law provides further that lists of such delegations may appear on the ballot only as a result of circulation of petitions among the party's voters and such petitions require a great many names to be valid.

Susie had volunteered to obtain for her candidate such a petition, but the Big Politicians downtown told her not to worry. 'Joe Whoosis up north has the whole thing under control," they told her. "He's got the money to take care of it and he is going to use experienced, professional, paid petition circulators." There was a strong implication that her casual volunteer methods were too sloppy for this Big Time Stuff.

So Susie shut up but she did not put it out of her mind. She watched the newspapers for announcement of the filing of the petition, but failed to find it. With the deadline one week away she telephoned the Big Politician. "How's the petition coming along?"

"Huh? Oh, that - Whoosis is taking care of that. I told you."

"No forms have been filed as yet with the registrar."

"Oh, he'll file 'em up north. Don't worry."

On Friday, still seeing no newspaper announcement, Susie decided she would have to find out for herself; she put in a long-distance call to Joe Whoosis. She got his office but not him. Whoosis was sick. The petition? Well, there had been some mix-up about the money, but the secretary thought that it was probably being taken care of, down south.

Susie knew durn well it wasn't being taken care of down south; Susie swung into action.

She had a bunch of old petition filing forms thriftily saved from another election; she had her file of 3 x 5 cards; she had a telephone. It was Friday afternoon, beautiful weather, and about half the city had gone away for the weekend - including half her contacts. Never mind.

First she dug up several volunteer typists and put them to work filling out the headings of the petitions. . . . There were more than a thousand such headings to type. This started, she began calling her district leaders, thirty of them, volunteers all, the Muriel Busybodys of the organization.

She located about half of them, told them the house was on fire - get busy! By midnight the last of them had picked up her (or his) petition forms and had left to marshall the forces. The next morning Susie spent digging out secondary leaders in the uncovered districts.

Saturday and Sunday was all the time there was, as all day Monday, Monday night, and Tuesday would be needed to check the forms against the Great Register, cast out the unqualified names (about 40% on any petition) and arrange by precincts the remainder - then file the petitions by four p.m.

A weekend is a poor time to try to circulate a petition at best, but picnics and ball parks and union meetings and crowds pouring out of churches provided places where circulators could make their pitches and fill a form fairly quickly. Susie needed - and got - fifteen thousand names by Monday morning.

The petition was filed with twenty minutes to spare and was eventually qualified as valid. The Big Politicians never got around to submitting a single name.

Now as to the significance of this amazing display of the efficiency of the volunteer fireman-Susie's state is large; it holds about fifty votes in a national convention. It also holds its preferential primary for president much earlier than the primaries or conventions of most other states.

If Susie's state had failed to support her candidate it is quite unlikely that his name would ever have been offered at the national convention ... and without Susie's intervention -barehanded, no money, no tools save some 3 x 5 file cards - it would have been impossible under the law for her candidate to receive the convention votes of her state. The situation was critical and could have been disastrous - in a fashion directly parallel to what happened to Mr. Willkie's chances in 1944 when the Wisconsin primary went against him.

Since it is not desirable to tie this example to a particular party we will omit the matter of whether or not Susie's candidate was nominated and subsequently elected president-but I will say this: On one weekend Susie, middle-class housewife and mother of three, working from her living room telephone, drastically changed the course of state and national politics and left her mark on world affairs and on world history for some generations to come.

Many have done so on a much larger scale and much more prominently - I don't recall ever having seen Susie's picture in the papers. But at dial point she was one of the indispensable factors in the present course of history, like the boy with his finger in the dike.

There are hundreds of utterly essential moving parts in every automobile, which are never noticed unless they fail. The volunteer in politics is most conspicuous when he is absent.

Still, you probably won't try to nominate a president. The wearying prospect of managing a candidate may be more than you will ever want to undertake. Is operating at a lower level worth the trouble?

The answer is emphatically "yes" - for many reasons; I will mention three.

Volunteers are trusted. This results in them being called on when the party needs a person of certain integrity in a pinch - which happens rather frequently. I remember one campaign organization which was almost entirely salaried; there were only half a dozen unpaid volunteers in the whole outfit. It was necessary at one point to disburse some fifteen thousand dollars for poll workers on election day; there were entirely proper tactical reasons, involving in part the known presence of spies in the organization, for keeping it quiet and for doing it at the last possible minute. The money had to be in dollar bills to permit small individual payments.

As a matter of course two female volunteers were selected to do the job - two because fifteen thousand one-dollar bills are bulky: I can see them now, two young and pretty housewives, each with handbag bulging with three thousand dollars and one with a shoe box under her arm, stuffed with nine thousand more pieces of lettuce. Off they went to disburse it, looking as if they had been shopping. And back they came the next day and returned four thousand dollars-which they could have snitched and no one the wiser.

No one worried about the possibility that they might head for Mexico - they were volunteers with established reputations - and it was much better than hiring an armored car with bonded messengers.

Volunteers are upgraded with great speed, while a mercenary stays in the ranks. There was the case of-we'll call her Helen. Helen had no personal political ambitions but she was always willing to get in and work. Two years after she started we had an appointment to the state committee to place and we were quite choosy about it; we wanted to be sure of point of view on issues of the person who got it

Helen's name was not thought of at first because she had not been around much at the time; she was very busy having a baby. When she was thought of, she was at once selected. I called her up and asked her to serve. She was not anxious and pointed out that she was tied down and unable to be active. But she finally consented.

Two years later some of the female volunteers decided to get rid of the current national committeewoman; they wanted a new one and they did not want the usual Mrs. J. Huffington Puff clubwoman. Helen's election was assured before she was consulted - much to her surprise!

Two years later than that her congressman decided to retire; she was not even resident in the district (a congressman need not be) but the congressman and his manager tapped her to be his successor.

She became one of the best known and one of the most useful members of Congress, as statesmanlike as she was sweet and beautiful.

Yet in her whole political career she had never sought anything for herself. Her distinguishing characteristic was just a willingness to work, free, for what she believed in.

But the most important reason you can be effective has to do with the relative importance of various offices and of the several types of elections. The common belief about these matters is just the reverse of the true situation; most people seem to regard the office of president as the only one of importance and the presidential election every four years as the "main" election. Nothing could be further from the truth. The most important office in a democracy is the city councilman or selectman; the most important election is the local caucus-and so on up to the "major" offices and the "major" elections.

This is not news and it is no slur on the office of president. Most presidents have said the same thing repeatedly. It is axiomatic that the smaller the office the more closely it usually affects the citizen in his daily life. For example, the pavement out in front of my house was paid for by a city street bond lien laid directly against my home and the bonds were reputed to include eight cents per square foot of pavement of "honest" graft - "honest" graft is a name given to the condition that results when specifications are so drawn that one bidder on a public contract holds a favored position and need not hold down his price. It is done by describing, in the language of the lawyers, a particular patented product to the exclusion of all others.

("Why didn't I stop it if I know so durn much about politics?" Ouch! I did not move into this house until after this street received its present payment; I came in from out of town.)

However that is not sufficient to prove the point We can stand a lot of graft in our local affairs - we always have! - and still muddle along. But can we stand another world war? Foreign affairs are directly in the hands of the President; from this point of view the office of president is surely the most important, even of overwhelming importance, with the character of the Congress almost as important.

True. But congresses don't grow on trees, nor are they brought by the stork. Nor do presidents spring full grown from the brow of Jove. Elections are won m the precincts! These "minor" elections are the major part of the process which produces a president each four years; the "main" election in November is only the last link in a long concatenation of events. The organization which is capable of electing a town selectman is the identical organization which joins with others like it to pick a president. The citizen who fails to participate in the contests for these "minor" offices is offered only a choice between Mr. Harding and Mr. Cox, or their successors. You can't be effective in politics if you limit yourself to presidential candidates. It is not possible.

Furthermore, these "minor" candidates have a way of becoming presidents. Fourteen of our presidents started in the state legislature, from John Adams to F.D. Roosevelt. Hayes was a solicitor; Cleveland and Taft were assistant prosecutors; Lincoln a village postmaster, Coolidge was a city councilman, President Truman a county judge, Benjamin Harrison a court reporter, and Johnson started as a town alderman. Nor is the time from "minor" office to presidency very long;

par for the course seems to be about twenty-six years - some made it in less than twenty. (These figures do not include cases like Wilson, Hoover, or Grant, where the candidate entered public life late in his career-these figures tell how long it takes to go the whole route from "minor" office to the White House.)

The President for twenty years from now may be in your district; you may urge him to run for his first public office. In any case the chances are better than two to one that any future president will make his start in one of the minor, local offices which the politically naive hold in contempt.

If you want to affect the destiny of this your country, take over your own precinct; with your friends, take over your own small district and elect the local officials.

There is no other route.

"Qui Qustodiet Ipsos Custodes?" - which, freely translated, means "Who keeps an eye on the watchman?" and shows that the ancient Romans were no dummies when it came to figuring out the political facts of life.

In the Roman Republic the answer was "Nobody"; the republic folded up and the bosses started calling themselves Caesar.

"Qui custodiet - ?" There is no point in grousing about that "machine" unless you are willing to help form a machine of your own. "Machine" is simply an American word meaning an efficient political organization, one that lines up the vote and turns it out on election day - the Doorbell Club of the last chapter. The term has been used habitually with scorn, as if there were something dishonorable per se about efficient political activity.

A "corrupt" political machine is merely one which has been taken over by thieves while the citizens slept. Many of our city machines are not corrupt, unless you insist that patronage and a mild amount of favoritism are the same thing as bribery, racketeering, and gangsterism. Many machines, called so with contempt, are serving the public a good deal better than the public deserves.

But it is needful to guard the guardians.

Consider Philadelphia, city of William Penn, Ben Franklin, and brotherly love. The water is such that one prefers to buy bottled spring water; the Delaware is so contaminated that it eats the skin off battleships even above the water line. The subway runs occasionally; two major subway lines have been excavated but never finished for traffic, because somebody mislaid the money. Taxes? The place has a city income tax as well as all the usual taxes.

A private citizen attempted to take a picture of the Liberty Bell; he was arrested - it seems that pix of the Liberty Bell are a concession farmed out from city hall. The King of Hoboes complained that Philadelphia's skid row was the worst in the country.

A survey appeared to show a 30% incidence of active tuberculosis in crowded neighborhoods, a figure so high that I have trouble believing it-but the Philadelphia slums make the New York "Old Law" houses seem like choice residences. In Philadelphia a row house is described and pictured in the newspapers, with dead seriousness, as a "model home."

They licked the problem of mosquitoes in the jungles of Panama, and New York City is so free from flies that screens are hardly necessary. Both pests should be allowed to vote in Philadelphia; they own the place. Food of every sort is exposed on delicatessen counters, exposed not only to flies, but to the coughing and sneezing and fingering of the shoppers. Maybe the streets were once cleaned; there is no evidence of it.

One might expect the inhabitants of such a city to be aroused and indignant, anxious to throw the rascals out. Are they? I give you my word of honor, most of them are proud of it.

Many times I have asked a Philadelphian who complained about this or that specific symptom of his sick city what he was doing about it, to be met with a look of amazement, followed by. "Do anything? Don't be silly - you can't crack that machine. Why, I haven't voted in years!"

I remember seeing - not once but often - a stylish and beautiful woman, furred and smartly gowned, walk her dog in the Rittenhouse Square neighborhood. Presently she would wait, leash in hand, smug content on her face, while her doggie dirtied the sidewalk.

She looked to me like the Spirit of Philadelphia.

Let George Do It. Heinrich Hauser, in that amazing attack on the land that sheltered him, The German Talks Back, describes his notion of the typical American as an irresponsible, technically trained ignoramus, and predicts the downfall of this country because, he says, we lack social responsibility. He cites a case in which he claims to have been riding as a passenger in an automobile when his driver, a well-bred young American woman, passed by the injured victim of a hit-and-run driver-this, he says, is typical.

It is no defense to state that the German peasant is even less socially responsible than the American, nor is there much point in asserting that there is a difference between the callous behavior of an individual and the organized, government-directed brutalities of Nazi Germany. The indictment, if true, can destroy us anyhow. Personally, I'll bet ten-to-one on the Good Samaritan behavior of any member of the Doorbell Club, but honesty demands that we admit that there is a measure of truth in what this angry German says.

I know a man who seems to me a case in point. He is native born, well and expensively educated, possessed of a good job, married, and a father. He has both ample time and ample money with which to take an interest in politics-and he takes intense interest.

But interest is all he takes! His activity is limited to an occasional vote.

He is anti-Jew, antiNegro, anti-immigrant. He thinks that the public schools should be segregated not only by racial groups but by economic classes, so that his children would not have to brush shoulders with the "lower classes." He is in business but he does not believe in free enterprise; he wants the rules rigged to favor his particular enterprise against free competition from other businessmen. The government to him is "They" and "They" are always doing something he does not like.

"They" have worried him so much that he has at last figured out an answer which pleases him. He believes that the trouble with government is government itself; we should abolish it. Then would come the millenium when men like himself would make their own rules and everybody would live happily ever after, free from the oppression of "They."

I would like to think that he and his kind do not exist in dangerous numbers, but I am not sure. If the people who hold to the "They" theory are too numerous and the volunteers too few then Heinrich Hauser was right. What the Axis failed to accomplish we will do to ourselves.

Rough Stuff:

I would be less than honest if I did not admit that it is sometimes physically dangerous to be a volunteer in politics, even in your own neighborhood.

During my first campaign I took hasty refuge in a polling place until a lawyer from our side came to rescue me, because of a car filled with six thugs who did not like my count-watching activities. I did not feel bold and heroic about the incident; I am somewhat timid. It scared the daylights out of me.

It also surprised and shocked me. The polling place was in a prosperous, super-respectable residential neighborhood; it had never occurred to me that there could be any danger - that sort of thing happened only down near the river. And not to me in any case! I was a respectable citizen!

As a matter of fact it does not happen very often, but it is a hazard you must count on. Later the same day I found that another poll watcher had been less fortunate than myself-beaten about the face and head, left lying on the sidewalk. I myself have never been hurt, but I have had some bad moments, and I have seen permanent scars on more than a few of my colleagues who stood up for their rights. My own city has experienced political bombings at least twice in recent years; there is a former police officer serving time now for one of them.

Even though the danger is comparatively slight, is not this a good enough reason for a decent citizen to stay away from the dirty business?

It all depends on the way you look at it. If it was worthwhile for your son, or your husband, or you yourself, to fight in a foxhole, on the high seas, or in the air, then it is worthwhile to protect the victory by a moderate additional risk. This can be the "moral equivalent of war" the philosophers talk about.

Politicians and Political "Scientists": There is actually no reason why political scientists should not know something about politics and some of them do. I am sorry to say that most of them whom I have met did not; they made sorry fools of themselves the first time they stepped from the classroom into the vulgar hurly-burly. Some of them had basic horse sense, learned from their mistakes, buckled down and became real political scientists. Others did not.

This is not an attack on the late Brain Trust, nor on educated men getting into politics. If there was ever a crying need in any field for trained, intelligent men, imbued with the scientific spirit, that field is government.

Unfortunately many of the men who describe themselves as political scientists are neither political nor scientific.

Politics is a tag for the way we get things done, socially; many of them have only an academic knowledge of how we, the American citizens, conduct our affairs.

"Science" is a word with a definite meaning. It refers to a body of organized knowledge derived by a particular method. In brief that method consists of observing specific, individual facts, trying to find relations between them, setting up hypotheses, then checking those hypotheses by observing more pertinent facts. Under this method of investigation all scientific knowledge is founded on field work and laboratory work.

In some fields the basic facts can be observed on the campus, as in physics or chemistry. In others the scientist must regularly go to where his phenomena exist, because they can't be carried to the campus, as in geology and stratospheric research - if he is to learn anything new about his subject and not simply chew over what other men have said.

Is it not obvious that in order to study politics scientifically it is necessary to spend a lot of time where politics is going on?

I have at hand a letter from a friend of mine who is a professional political scientist, with all that years of postgraduate training in one of the most famous schools can give him. However he has had no experience in active politics. He writes:

"Do you think experience or practice in politics essential to an improvement in political interaction? I am a believer in empiricism in most things but believe that much more can be accomplished by scientific methods than by experience in government. That is, I feel that a man might be an effective partisan all his life, but end it with no greater ability to accomplish desirable political changes than in the beginning."

The above paragraph exhibits such complex confusion that I hardly know where to start. Let us begin by conceding that a man may be a very effective field worker in politics and still not do any good in the long run if his work is not enlightened by information and understanding in current affairs, history, economics, sociology, and many other things. Politics is the broadest of human subjects and we have dealt only with one narrow field of it herein.

But how can a man hope to "accomplish desirable political changes" if he is not experienced in the mechanisms by which political changes are brought about? For that matter will he know a desirable political change when he sees one, unless he has rubbed shoulders with the crowded millions off campus?

But note the orientation, note how he contrasts "empiricism" and "experience" as being the opposite of "scientific methods." The sad fact is that all of his degrees and training have not exposed him to the basic idea of the scientific method. All scientific knowledge comes from experience, experience as concrete as careful observation, careful measurements, and careful experimentation can make it. "Empiricism" is a word with several related meanings; in scientific methodology it is usually used to refer to an early stage in an investigation when the observer has too few facts too inaccurately observed to permit him to make more than rough generalizations as his hypothesis. Politics is largely at the empirical stage because of its extreme complexity. Empiricism is appropriate to politics; no other scientific approach is possible.

Unfortunately, other approaches are possible; one is the method of armchair speculation of the philosopher. It is the classic method in this field, used by Plato, Aristotle, Spencer, and Marx - and the work of each is vitiated by it. They might as well have spent their time debating how many angels can dance on the point of a needle. But the method is still popular!

Is it too much to hope that some day someone will found a school of government which will include as one of its required laboratory courses active field work in at least one campaign? And then perhaps to require something as strenuous and unacademic as serving a term in a county committee, or running for office, or managing a campaign, or undertaking to lobby a bill through a state legislature, before awarding graduate degrees which entitle a man to refer to himself as a political scientist?

I feel wistful about it. Honest-to-goodness trained men could do so much good in public life if only we had a few more of them.

Afterthoughts and Minutiae:

Don't put campaign literature in mailboxes other than through the mails. Postal regulations forbid it.

There is a small duplicating set available suitable for postal cards, which costs about a dollar. Sears Roebuck used to have them and probably does now. It uses mimeograph ink and a hand roller. Gelatine duplicators, hectograph-type process, and looking like a child's slate, may be had for three or four dollars in sizes which will take either postal cards or standard business stationery.

Unpredictable coincidences can play hob with a carefully planned campaign, leaving you nothing to do but laugh it off and forget it. I happened to pick the year to run for office that found the Nazi Sudetenland Fuehrer in the headlines; his name differs in spelling from mine by one letter!

In making a committee report it is diplomatic to say "your committee" instead of "the committee."

The difference between a caucus and an ordinary majority action is parallel to the difference between the Constitution and the laws which are made under it. A constitution is an agreement-to-agreein-thefuture, along certain lines and to serve certain known ends. So is a caucus. This may make it easier for you to explain it to the uninitiated.

Anti-handbill ordinances, anti-bill posting ordinances, and ordinances which forbid street-speaking and park-speaking without a permit should be opposed by all persons and parties devoted to democracy and freedom, as the avenues these ordinances close off are historically the only ones available at times to the poor and unpowerful. I am aware that it is a nuisance to have your doorstep littered with throw-away pamphlets, but it is still more of a nuisance to be thrown into a concentration camp. Democracy is worth a few nuisances.

Clubs should never have nominating committees; it is subversive of democracy. A motion to close nominations is never in order and should not be entertained. The proper procedure is to let a period of dead silence intervene, after inviting further nominations, then announce that they have closed. Be lenient in allowing laggards to slide home. Let them appeal to the floor if they wish.

Are you over thirty-five? Or under thirty-five? This is a touchy matter in volunteer politics for the old frequently work for the young, and vice versa. The power to keep things friendly lies with the leadership and the key to it rests in "face." When you are in a position of leadership to persons out of your own age group, whether younger or older, you will have no trouble if you go way out of your way to treat them with much more respect than you do persons of your own age.

Take a complete rest from people every now and then. Go away if you can. Being polite all the time is wearing.

On keeping oneself informed - of course you read a newspaper. But do you read the opposition newspaper as well? It is more informative in many ways. Both your state organization and that of the other party probably put out a little political newspaper; both are valuable to you. A free subscription to the Congressional Record may often be had for the asking; it is too long to read but it is well worth thumbing through for key votes and certain speeches. Keeping track of voting records is essential to an enlightened politico; once, to my shame, I supported the wrong man all through a primary because I had taken another man's word as to the voting record of the incumbent. There are convenient summaries of all significant votes for both congress and state legislatures from several different sources-major daily papers, taxpayers groups, labor unions, the New Republic. It is not necessary to agree with the opinions of the source for these compendia to be useful to you. Keep them on file rather than trying to memorize them. File every copy of a platform, or a candidate's promise on issues. It is common credo that election promises are never kept and that platforms are mere bait; in my limited experience this cynical belief has been false somewhat oftener than it has been true. It is well to know the facts on individual cases.

My wife and I have found a delightful way to celebrate the Fourth of July; you might enjoy it. We read aloud the Declaration of Independence and the Constitution. They are grand poetry of the Biblical style and it is well to refresh the memory.

Speaking of poetry, I wish that I had the capacity to write something like The People,Yes -, which I quoted from at the head of this chapter. I commend it to your attention. But there is music of the same sort in the sound of a thousand doorbells-

Ben Franklin pointed out to the benefit of all politicians that the easiest way to get a man to like you is to get him to do you a favor.

A lot of people want to get into politics but they want to operate on the "higher levels." I think of these high-minded but impractical people as "ballet" liberals because of an incident which took place in New York in 1942. A group representing all of the arts had met to see what the creative artist could do to help win the war. It developed that there was a strong bloc present which thought that the correct course of action was to demand that Congress subsidize a national ballet! I like ballet as well as the next but it seems a curious "secret weapon." If you want to enter politics don't expect to do so through organizations which are ordinarily nonpolitical, women's clubs, church groups, fraternal organizations, professional groups, and the like. Or, at least, do not expect to be effective in bringing pressure on an officeholder by representing yourself as being influential in such groups. A man who has been elected to office is not likely to be a fool on the subject of votes. He knows the political feebleness of such organizations-that they do not vote as a bloc no matter how their leaders may bluster. Your petition will be discounted accordingly. If you represent a precinct organization you won't have to tell him so.

Amateur pressure groups, such as neighborhood indignation committees, all too frequently go to see councilmen and such and adopt a belligerent tone which suggests the officeholder is a crook and that he can be frightened easily. Both assumptions are likely to be mistaken.

Let us now praise bureaucrats. Bureaucrats come in for a kicking around from anybody at any time. As a matter of fact they are a pretty good lot Try to imagine what a strike of "bureaucrats" would do to the country. No, don't-it's unthinkable, frightening.

And lastly-I would like to put this in box car letters-even if you become state or national chairman of your party, try to remain your own precinct captain, or some sort of a doorbell pusher. It will keep your roots to the ground. Even the Caliph of Baghdad made a practice of disguising himself and going out to talk intimately to his people.

CHAPTERXII

The American Dream

"It is for us the living, rather, to be dedicated here to the unfinished work which they who fought here have thus far so nobly advanced...."

-A. Lincoln, Nov. 19,1863

What of the issues?

We have piled up a whole book discussing the mechanical details of field politics, as if it were an automobile to be taken apart and repaired, put back together and made to run. Some of the details must have seemed very fiddling and far removed from the clean heights of statesmanship. It has been a worm's eye view of politics.

The activities described in this book would be bare bones indeed if they were ends in themselves. If we are to win elections for the competitive pleasure of winning, it would be better to play golf or bridge. So what of the issues?

It is not necessary that I speak here of specific issues. Even if you have no clear-cut political opinions on entering politics you are bound to form evaluations about issues. Whatever evaluations you had before you entered politics are bound to change and you will wonder how you could have held them.

But if you enter politics with honesty, ordinary sense, and a hope in your heart that you can help out, I am willing to trust my own future and the future of our children to the evaluations you will form and the actions you will take. Whenever the American people take their affairs in their own hands, instead of letting them go by default, I have no fear of the outcome.

We need never be afraid of the vote of informed Americans. It is only the ignorant voter we have to fear, ignorant politically, no matter how fine his house or how expensive his schooling. Such people have never experienced democracy; they have merely enjoyed its benefits. It is hard to explain what democracy is; it is necessary to participate in it to understand it.

The former Berlin businessman I referred to earlier told me that he blamed his own group, people with the time and the money and the opportunity to know better, for what happened to Germany. "We ignored Hitler," he said. "We considered him an unimportant fellow, not quite a gentleman, not of our own class. We considered it just a little bit vulgar to bother with him, to bother with politics at all."

They thought of the government as "They." The only possible route to a clear conscience in politics is to accept political responsibility, either as an active member of the party in power or as an equally active member of the loyal opposition.

An adult is a person who no longer depends on his parents. By the same token a person who refers to or thinks of the government as "They" is not yet grown up. There are many such in America, too many, but not too many I think to prevent the adults from taking care of our joint welfare. I'm a believer and a hoper.

There is more cynicism in this country than there are things to be cynical about. The debunking exceeds the phoniness. There is more skepticism than mendacity. Dr. Alexander Graham Bell was sued for fraud because he claimed he could talk over the wires. The Wright brothers had to plead with people to please come look - we can fly! And none of the "smart people" believed that the pipsqueak "nation" of thirteen rebel colonies could ever hold together and form a living union. The spawn of the skeptics are still with us. "You can't fool me cause I'm too durn sly!" They are around us, busy belittling and sneering and grinning at every effort to make of this country what it can be. What it will be.

For you there is the joy of being in the know, of understanding the political life of your country, the greater joy of striving for the things you believe in, and the greatest joy of all, the joy of public service freely given, service to your fellow men without pay and without thought of pay. If you have not as yet experienced this joy, then there are no words with which to describe nor any way to convince you of its superiority to other joys; it is possible only to assure that it is so.

"War is an extension of politics by other means." - Von Clausewitz. And politics is an extension of war. The war did not end in August 1945; it goes on around you, around the world, in difficult guises. We are in more danger now than ever before in our history, dissension within, our ideas for which we fought subjected to many forms of attack, the peace we won whittled away, and over it all the menace of another war, a war that could strike in the night, defeat and utterly destroy America and the American Dream.

If we prevent that war it will not be by force of might, for we cannot expect time enough to bring that might into play. If we are to escape it, it must be by political action more enlightened and more nearly unanimous than any we have ever shown.

The "decadent" democracies showed on a hundred battered beach heads that free men could think, could lead themselves when their leaders fell, and could improvise with the means at hand. We face the new beach heads, we must face them with individual responsibility, improvise and fight with the means at hand.

I can hear the strange express-train roar of the jet planes passing overhead from the fields in the valley to the north. Soon it will be the blast of the great rockets. It is the end of an era.

If we can tighten up democracy to meet the challenge of the supersonic speeds of the fast new world we may yet be spared the silent death from the sky. If notIt's up to you, Mrs. Blodgett and Mr. Harrison and Mr. Weinstein and Mrs. Cleary. You, too, Mrs. Johnson and Mr. Berzowski and Mr. Lorenzo - Mr. Smith and Mrs. Jones and Miss Kelly-and up to me. I'll see you in the caucus and at the polls.

Good luck to you! Good luck to all of us.

The End

SUMMARY OF OPERATIONAL CHAPTERS

CHAPTER II

How to Start

Look up your party in the telephone book. Join your local organization. Stick with it for several months, doing any volunteer work that is offered. Then let your conscience be your guide-but don't accept pay!

CHAPTER III

Wheat & Chaff

A man's religion is an important political fact about him which you are entitled to consider.

Church groups are frequently a cause of corruption and confusion in politics. Don't expect any real help from them.

Women, as a group, are less politically enlightened and less politically honest than men. Test them before you trust them.

Elderly people, as a group, are politically selfish and socially irresponsible. Avoid organized groups of the old folks.

Reliable volunteer political workers are found most frequently among young people. However, the very best political volunteers are found in the three groups mentioned above.

Machine politicians are about as honest as the general run of people, and more honest about oral promises.

Machine politicians are friendly, warmhearted, and will take pains to help people. An amateur who expects to compete must emulate these virtues.

A government should not be run like a business; a business should not be run like a government. They are very different

Compromising is an honest process indispensable to free men governing themselves.

"Civil Service" is frequently a mask for a shameless spoils system. Patronage is a political liability to the politician who has to dispense k.

Public Office is usually scandalously underpaid; this is the fault of the public and a frequent cause of corruption in public life. Nevertheless, most officials are too honest and too patriotic to succumb to the temptations placed before them. For that reason we have better government than the people deserve.

It is both virtuous and efficient to be partisan and party regular, but it requires both moral courage and clear thinking to accomplish it

CHAPTER IV

Field and Club Organization

Four Thumb Rules:

1. Your purpose is to win elections, not arguments.
2. Elections are won with votes and the votes are in the precincts.
3. You win by persuading your own voters to register and vote.
4. Don't waste time trying to convert a man who has already made up his mind.

The above four rules are applied successfully through organized field activity based on personal calls and begun long before the election.

Doorbell-busking: Always work from a list. Don't be aggressive. Cut the visit short. Record all information on a file case for follow-up.

Political clubs contain very few votes but they are indispensable (a) for organization and liaison of precinct workers (b) to keep up the morale of precinct workers by giving a "team" feeling. They also constitute seminars in democratic government.

How and When to Form a Club: Your party needs a club in any area that does not have one, but you should not found one unless you are prepared to do the working of leading it

Leadership comes to him who works - the tedious, routine work of organization is the only "secret."

The easiest way to make people like you is to like them-and say so!

To associate names with faces, ask the owner, on being introduced, to pronounce and spell the name - then use it immediately.

You don't have to be perfect in parliamentary law to handle the gavel successfully. A moderate knowledge of Roberts' Rules of Order, common sense, and fairness will get you by with the aid of this rule: The assembly itself is the final judge of the rules; make your rulings promptly and inform anyone you overrule of his right to appeal to the house. If he appeals, take a vote on the appeal without debate.

Use your power as chairman to divert matters of personal bitterness into committee where you can arbitrate them in private.

A motion to adjourn is always in order and is not debatable - but, as chairman, you may remind the house of any pertinent fact before calling for a vote.

Your new club must have a chairman who can keep the business moving without antagonizing people. It is better to be floor leader than chairman, but you may have to take the gavel if you can't find such a person.

Learn to be a penny-pincher with club funds. Votes, not dollars, win elections.

Note: The word "precinct" is used throughout to indicate an area which one person can campaign successfully, say from 100 to 400 registered voters depending on population density.

CHATTER V

Club Meetings and Speech Making

The First Meeting of a New Club:

(a) To get a crowd use personal invitations primarily, plus cheap methods of local publicity.

(b) Use a small hall and fill it with loud music, card tables, not too many chairs. Start with group singing. Have a dynamic speaker and some entertainment. Limit business to plans for next meeting and discussion of purpose of club. Serve simple refreshments afterwards and let the kids dance.

(c) Record on file cards all possible information about all persons present-then follow up. This file is your basic political weapon.

Speaking in Public:

Be brief. Don't worry about eloquence. Funny stories are not necessary.

You can get past your first appearance as a principal speaker by using an audience-participation quiz. This gag can be used over and over again until you gain confidence.

CHAPTER VI

Political Influence, Its Sources, Uses, and Abuses

Claims of "controlling a district" are usually nonsense. There are two major ways in which a politician controls votes (a) by being the active leader of a live precinct organization (b) by the gradual and unconscious acquisition of a following who depend on him for reliable political information and advice.

Be prepared to furnish advice to your acquaintances by doing your studying of candidates and propositions early. Thus you may expect to influence the votes of about 250 people.

A foolproof method of marking a sample ballot without previous study is to mark it against the choices of the newspaper you despise most.

Patronage: Policy positions, except under extraordinary conditions, should go only to active partisans, but non-policy jobs should be filled without respect to partisanship.

When Called on to Dispense Patronage:

(a) Accept the responsibility.

(b) Refuse to countenance a "spoils" attitude.

(c) Be frank with the applicant.

(d) Be warmhearted and helpful. Remember his human dignity.

(e) Don't try shenanigans with the federal civil service.

(f) There are many temporary non-certified federal jobs. Know the details about them so that you can advise people how to apply for them.

(g) Keep party politics out of Annapolis, West Point, and Coast Guard Academy recommendations. Instead be prepared to help applicants with accurate information and advice.

Moving in on a Party Organization: In cities where a corrupt machine is well entrenched the "official" opposition party organization is usually a clandestine part of the Machine. (Warning: Do not assume that a "machine" is necessarily a "corrupt machine.") Tb take over your own party machinery when it is owned by such a false-front group you must first take over the "reform" wing of your party and then win a primary for control of the official party machinery.

In taking over the reform group be extremely careful to preserve the prestige of its titular leaders. The process of taking over consists merely in joining and being more active than the titular leaders.

After winning control of party machinery in the primary make no compromises nor concessions of any sort under any circumstances at all to the group you have displaced, if you have certain knowledge that they have been in the business of selling out to the other side -but be sure of your facts!

CHAPTER VII

District Spadework, Choosing a Candidate, Caucusing

Even an excellent candidate can lose by neglecting the basic rule that elections are won with votes and votes are in the precincts. Don't attempt to elect a candidate until you have built up a precinct organization.

Selecting a Candidate:

1. Suitability - "sound" on issues from the viewpoint of you and your party; unquestionable character and integrity; record of unselfish public service; intelligence, education and experience.
2. Availability - able and willing to devote enough time and hard work to the campaign and able to afford the financial sacrifice of holding office.
3. Electability - if suitable and available a candidate is usually electable provided he has acquired immunity to "candidatitis" - a form of buck fever peculiar to inexperienced candidates, their managers, and their families - and provided he is willing to be managed in all respects save his stand on public issues. The superficial aspects of electability are usually quite unimportant. A suitable, available, and electable man is unlikely to want the job - you must seek him out and convince him that his sacrifice could be worth while, through the reasonableness of your plans and budget, by your analysis of the district, and by the strength of your precinct organization.

Budgets should be prepared and funds raised before your candidate announces.

Caucusing: Caucusing is a democratic process whereby like-minded individuals agree to work unanimously to a common end; it is a usual method for getting political associates behind one candidate. Unanimity is the essence of caucusing. The original terms by which the caucus is bound cannot be changed other than by unanimous consent - these terms must be clear to everyone before the caucus is signed.

There are no circumstances under which a man may honorably break a caucus. Be sure what you are signing - then don't kid yourself later!

You are justified in using any available legal means to enforce a caucus once bound.

If you cannot get a strong caucus behind your favorite candidate then he is not yet ready to run nor you to manage. Drop back and be a precinct worker for another candidate.

CHAPTER VIII

The GrassRoots Campaign

Two Rules f or Effective Campaigning:

(a) Is the action directed at specific, individual votes?

(b) If not, is it directed at your own district? Can it be done without sacrificing anything under (a)? Can it be done with minimum effort and at no cost? If it costs anything at all is it covered by your original plans and budget?

Effective Methods: Anything which goes after an individual vote, especially:

(a) canvassing by the candidate

(b) canvassing by precinct workers

(c) canvassing by the manager Put the candidate on a 40-hour week of doorbell-pushing for three months; the manager should canvass two afternoons per week.

Ineffective Methods: Meeting outside the district, signs outside the district, radio speeches.

Borderline Methods: Meetings inside the district, publicity by signs, newspapers, and radio spot plugs.

The Campaign Committee: Use a large "public committee" for advertising purposes, the officers of which have nominal duties and have been selected to represent the community - Catholic, Protestant, Jewish, and minority groups. The working committee is the candidate, manager, money raiser, publicity man, field supervisors, and precinct workers.

Headquarters: Public, swank headquarters are a waste of money. You need nothing but floor space, chairs and tables, a typewriter and a telephone. Take drastic measures to keep the telephone from being used for toll calls except by specific authority of the manager.

Campaign Funds: Handle by check, require two signatures out of three, provide an audit.

Unavoidable Types of Expense: Filing fee, printing, postage, telephone bills, election night party refreshments.

Conditional Types of Expense: Signboard rental, newspaper display advertising, handbill distribution, salaries of publicity director and office person, lunch money and car fare for volunteers, radio spot plugs, extra personal political expenses of candidate and manager. No other types of expense should be tolerated in a volunteer grassroots campaign.

Training and Management of Precinct Workers: Form a club with membership limited absolutely to doorbell—pushers; build its morale in every possible way. Be lavish in praise. Require the candidate to spend all evening at the weekly meeting of this club without fail.

Split your workers into area squads often or less using the best leader talent available. Train them at dub meetings, in the field by sending freshmen out with old hands, and by means of photocopied instructions.

Emphasize recording and filing all doorbell data for election day follow-up.

Never canvas "blind"-use lists. A fairly accurate list of members of your party who vote in primaries may be prepared from official records of voters "signing the book." Don't tackle a primary campaign until you have prepared such a list.

CHAPTER IX

Landmarks and Booby Traps

Don't waste volunteers on the blanket distribution of political literature.

"Volunteers" who won't or can't punch doorbells should be worked hard at office work. Don't let them lounge in headquarters - especially the Big Operator.

Make people come to see you - unless it's your idea.

Insist that the candidate conform to your discipline.

Lay it on the line!

Brace yourself for phonies, sell-outs, and other disappointments.

Publicity: If humanly possible, get a professional publicity man.

Never mention your opponent by name, neither in printing, signs, meetings, nor in doorbell pushing. Don't budget too much money to newspaper ads and publicity.

Short radio spot plugs during the last week may be worth the money.

Prefer 6-sheets to 24-sheets. One-sheets, half-sheets, quarter-cards, and bumper strips are cheap and useful.

The prime purpose of publicity is to strengthen the morale of your workers and supporters by creating a bandwagon atmosphere. Publicity gets very few votes but it keeps the campaign from dropping out of sight. Pinch the pennies - publicity can bankrupt you.

Party Harmony: A successful primary fight is worthless if it splits open your party. Keep it clean!

A party-wide Sunday breakfast club is a cheap and easy way to keep the party factions friendly during the primary.

Scouting and Heckling: Scout opponent's public meetings for information; heckle only to nail a lie. For heckling use well-dressed, well-mannered, small women who can keep their tempers and their wits under stress. Train them to attack the lie and not the liar.

In coping with a heckler, treat him with great politeness and insist that he talk himself out. Then refute him after he has returned to his seat.

If possible, give direct unequivocal answers to questions from the floor. If the question is irrelevant, impertinent, or loaded, counterattack by demanding details from the questioner and publicly set a date for a (private) meeting with the questioner to permit detailed investigation.

Don't use the above device to duck a proper issue, even though embarrassing.

Sampling a District: Cultivate skill in predicting election results by making and recording all possible predictions, then examine your results in the postmortem. Try to analyze your mistakes.

Check the progress of campaigning by a statistical poll. Make up a random list by taking, for example, the last name from the middle column of every third precinct list, then poll them by telephone or post card, using a question form which does not suggest the desired answer. When fifty responsive replies are in, double the number of favorable replies, subtract eight, and treat the answer as a percentage which indicates what per cent of the vote you could be reasonably sure of if the election were held at once.

Supplement this by prowling through your district, looking for chances to gossip about politics. In a primary, if one in four of the people you meet in your excursion know who your candidate is, his chances are excellent; if only one in ten have heard of him his chances are poor.

Don't expect the majority of the population even to notice a primary.

CHAPTER X

The Final Sprint

Final Mail Coverage: Send signed post cards or personal letters to all persons called on. Don't use third class mail.

Election Day: Regroup to cover the precincts covered by the candidate. The purpose of election day work is to get every certain and every probable vote, as determined by canvassing, to the polls. Telephoning the night before and election morning is used to separate the certain voters from those who must be coaxed or carried. Election afternoon is used to round up stragglers. Work from lists. Use any leftover time to carry any members of your party to the polls and thereby pick up a few stray votes in return for the courtesy of a ride.

Use poll workers if available-conform to local law.

Election Night: Have the count watched and the results telephoned in. Give a headquarters party with refreshments for workers and friends.

Post-Primary Troubles:

Don't forget:

- Personal notes to all who have helped.
- Get-together and rally meeting of Doorbell Club
- Heal-the-wounds meeting of the Breakfast Club
- County committee meeting
- State committee meeting
- State convention
- Official report of campaign expenditures.
- Vacations for you and for the candidate.

But your principal effort will be to bring candidates you have defeated into line at once.

Final Campaign: Organize a district campaign for the entire ticket and have your candidate beat his own drum by campaigning for the entire ticket.

Keep your candidate's campaign funds separate from the district funds.

In congressional contests attempt to get national committee funds allotted to your district

Conduct the final campaign in the same fashion as the primary campaign, with the same emphasis on doorbell-pushing-despite any and all advice or pressure. Your list of selected targets now comprises the members of your own party who failed to vote in the primary plus members of minor parties plus unaffiliated voters. Ignore the other party.

Continue strenuous efforts to register potential voters.

Put special effort into election day organization and get workers in from outside the district impossible.

Guiding Principle: If you are licked, it means your friends stayed home. Your object is to stir out the largest possible percentage of your own "sleeper" by registering them and dragging them to the polls.

Post-Election Chores: Same as for primary, minus the convention and plus between-election plans for the organization... elections are won in the off-years!

CHAPTER XI

Footnotes on Democracy

Political Expenses: Volunteer work can be effective without costing you anything, but about $2.00 a week, on average, will make your work easier and pleasanter. This is usually offset by the money you don't spend for recreation as a consequence.

Coping with Communists: Communists pop up anywhere and make trouble-their objectives rarely if ever coincide with yours. You can spot them by their catch words and by occasionally checking to see what the current "party line" is. They will try to dominate your meetings under the pretense of "free speech." This is a false plea; free speech is not a license to interrupt others in their affairs; the group who pays the hall rent are entitled to set the agenda. Suppress them by parliamentary maneuver-usually by insisting on the order of the day.

Communists are nuisances rather than dangers, but they have one prime usefulness: Any real local success on their part is a sure sign that some group of Americans are in such dire straits as to need emergency help - not punitive action!

Lawyers in Politics: To a major extent lawyers control our economic and political life, partly through special advantages enjoyed by the legal profession but primarily by default of the laymen. Unfortunately they are not well fitted by training for such responsibilities; their training is too narrow and too impractical. They are especially ill fitted to make laws, because they speak a foreign language and look to the past rather than the future.

A Third Party? This is a practical matter. Granted that there are glaring strange-bedfellow conditions in our present party alignments there is still no point in starting up a new party just strong enough to lose. However, third parties have won more than once in the past; the enterprise is always speculative but it is not impossible.

The time to join a third party is before the primary; if you take part in the primary of a party you are honor-bound to stick with it through November.

Democracies are Efficient: As we demonstrated against the Axis dictatorships. Perhaps the controlling reason lies in the fact that the free speech of democracies results in criticism and correction, whereas in police states a mistake goes on indefinitely.

Can the Ordinary Political Volunteer Be Effective? Yes.

(a) Volunteers are trusted, (b) Volunteers are promoted rapidly, (c)

Most important, all our political action and all elections, including presidential elections, are based on small, local organizations and on the followings of minor candidates, i.e., the natural field of the parttime volunteer.

In a republic the local leader is the indispensable man, on whom the national political figures are utterly dependent.

Who Guards the Guardians? Every corrupt machine reflects a body of citizens indifferent to, or even secretly proud of, their public scandals. The citizens are never helpless; the evils arise from inexcusable ignorance, smugness, laziness, and lack of personal feeling of public responsibility.

Personal Danger in Politics: Occasionally a volunteer suffers bodily harm because of his activity. The danger can be minimized through using your head but cannot be disregarded. The question is this: How does the danger compare with the dangers experienced by men in combat, fighting for the same ends? Or, which is better, to be slugged at the polls, fighting for your rights, or to be liquidated by a firing squad because you failed to protect your freedoms?

Political Scientists: This country needs many more men, in government and in teaching, trained in governmental matters by the scientific method. Regrettably, many "political scientists" are neither political nor scientific, having neither experience in politics nor training in the scientific method.

On Keeping Informed: The techniques expounded herein can make you an effective vote-getter; to be statesmanlike as well, you need broad information in social and economic matters. In addition to books about such matters, the following might be a minimum for current happenings - your own favorite daily paper plus its political opposite, the tabloid political papers of both parties, a national news weekly, and one of the publications which list key votes in Congress - and its local counterpart for your state legislature. It's a chore-but without such background you are merely a skilled ward heeler.

Keep Your Roots Down! Even though you rise to national party chairmanship, remain a doorbell-pushing precinct worker in some precinct somewhere.

Notes

Jerry E. Pournelle, Ph.D. Introduction to the Notes

One attempts to improve the work of a master with some trepidation; but the job had to be done. Mr. Heinlein wrote this book in 1946. We had just ended a great war, and confidently expected things to go back to more or less what they had been before the War and the Great Depression. Much had changed, and no one knew that better than Robert Heinlein; but not even he knew just how profound the change had been, and what changes were to come.

In 1940, Washington, D.C., was a small Southern Border town. There was no air conditioning, and Washington was uninhabitable in the summer. That didn't matter, because what went on in Washington wasn't very important to the average citizen. The political decisions that really counted were made in state capitals and city halls. Federal taxes were quite low, as were federal expenditures.

The War changed all that. The United States emerged victorious from World War II, but we found ourselves saddled with what seemed to be enormous debts, and we faced a devastated world. Money was needed. The Marshal Plan saved Europe, but it cost us. We had built a tax-gathering machine to finance the War; the needs of others kept that machine in place after the war ended. The result was a great increase in federal power, coupled with new international responsibilities. In the Far East, MacArthur rebuilt Japan from an aggressive empire to an unarmed liberal democracy. In Europe, General Lucius Clay in cooperation with democratic elements built West Germany into an armed liberal democracy. NATO became a permanent "entangling alliance."

We were not done rebuilding our former enemies when we found we were in a new war. The Cold War wasn't as bloody as World War II, but after Korea it was clear that it was bloody enough. It was also quite expensive. Instead of dismantling the enormous war machine we had created to beat the Germans and Japanese, we had to augment it. This required management, and Washington, swollen from the wartime expansion of its functions and equipped with new tax-gathering machinery, swelled again and again.

The Cold War brought about genuine divisions among the American people. While most (including Mr. Heinlein) saw armed militant Soviet Communism as a direct threat not only to world peace and stability but to the United States, many intellectuals thought the only threat was anti-Communist hysteria. Meanwhile, we had what appeared to be politics as usual, but with this difference: politics became more important than business; more important than the churches; more important than anything else we did. The growing tendency of political decisions to affect our lives inevitably attracted more professional politicians: the long era of amateur government was coming to an end.

That end came in the Johnson era. The Great Society programs were intended to make fundamental changes in the power structure of the nation; and they did. The changes wrought were probably not those intended. Then came the Watergate scandals, and a perceived need for reform.

The reforms deliberately crippled the party structure. Power was fragmented, doled out among the 435 representatives and 100 senators, divided among endless committees and subcommittees - but never returned to the people.

By 1975 the world described in this book had ceased to exist.

These notes have two purposes. First, they explain terms no longer in use, or used differently two generations ago. They also provide the opportunity to show where Heinlein was exactly right, or, more rarely, where he is known to have changed his views. Robert Heinlein began his political career as a moderate Democrat. His attempts at electoral office ended when he was defeated for the Democratic nomination to the California State Assembly by an up and coming Los Angeles Irish politician named Sam Yorty, who went on to win the Assembly seat, and later to become mayor of the City of Angels. Years later, Mr. Heinlein visited me when I was campaign manager for Yorty's successful bid for a third term as mayor. By that time, Heinlein had made many changes in his political philosophy, moving closer to the Libertarian position.

Thus the notes: the world changed a lot after this book was written, and so did the philosophical views of the author. I have attempted here to deal with both changes. Since this is a work on practical politics, I have tried to keep political philosophy to a minimum; but since the practical value of this book is as a manual of operations for a political system that doesn't exist, but which can be reclaimed, clearly we can't avoid the question. At the least we have to decide whether the system can be restored, and if so should it be.

On that question I feel comfortable: Robert Heinlein loved the America of this book, and would have loved to see it come back.

However: since we can't just turn back the clock, there will inevitably be questions about which changes to the system are acceptable and which are not. In some cases we know, from other works, particularly Expanded Universe, some of what Mr. Heinlein might have said. In others I can only guess, and rather than do that, I give my own opinion. So far as I know Mr. Heinlein and I were in agreement about most basic philosophical issues - hardly surprising given his influence on my life-but not on all. As an example, we disagreed profoundly about conscription. Ironically, when Heinlein wrote this book, he supported peacetime conscription (while recognizing that there were legitimate contrary views) and had absolutely no doubts about the necessity for the wartime draft; positions which I hold now, but which he rejected in his later years.

Therefore, you must think of these notes as my commentaries. I speak as an unabashed admirer of Robert A. Heinlein; as one whose formative years were profoundly influenced by his writings, and whose later years were enriched by our friendship and his generous support of my career; but I speak for myself. I wouldn't dare try to speak for Robert.

Jerry Pournelle Hollywood, California July 1992

NOTES

1. (See page 6) Unfortunately, while some forgot the lessons of the past, others learned the wrong ones. In the rush to "reform" the political process after Watergate, changes were made that insured that the "senile congressman" would stay in office. So would all the others. By the 1980s the turnover rate in the House of Representatives was lower than that of the British House of Lords, or of the Politburo of the U.S.S.R. This was not the intended consequence of the "reforms" but it was a predictable effect.

It's important to note that the post-Watergate "reforms" took place largely because many good people became disgusted with the political process and turned away from it, leaving the reformation to be organized by zealots and incumbents. It probably should have surprised no one that given their heads, the incumbents made it nearly impossible to defeat them, but in fact most were surprised. The incumbents were shocked to discover that they could no longer be voted out of office.

Whether term limits are a good idea or not is legitimately debatable, but there's no question that term limits address what has become a very real problem.

2. (See page 8) Roosevelt had permitted Stalin to send Soviet forces into Iran as a safeguard against a Nazi presence there. When the war ended, Stalin didn't want to leave. President Truman insisted and went so far as to threaten war if the Soviets did not pull back behind their own borders. This prevented the Iranian oil fields from falling into Soviet hands, and had a profound effect on the future of the Middle East

The U.S. presence in Korea was tested a few years later, and we're still there. Britain left Egypt and, largely because of U.S. pressure, did not retain any rights to the Suez Canal. This led to the Suez crisis of 1956, which, coupled with the failed Hungarian uprising, convinced many people that the Communist system would eventually spread worldwide.

Heinlein has chosen as examples issues which turned out to be important throughout the century.

3. (See page 8) The Smythe Report on nuclear energy was an early study that concentrated on fission weapons, largely of the Hiroshima class. It has been replaced by The Effects of Nuclear Weapons, available from any Government Printing Office for about ten dollars.

One could conclude from the Smythe report that industrial civilization would be grievously harmed, but not destroyed, by a nuclear war. After fusion weapons - H-bombs - were developed, it was pretty clear that a postwar world would be a very devastated place.

Some, however, would survive. Civil defense could be important, and Heinlein built and stocked a fallout shelter at his home in Colorado Springs during the 1950s.

4. (See page 9) It was rather daring for Heinlein to quote Booker T. Washington in 1946, an era in which segregation was quite legal in a quarter of the nation. In those times racial prejudice was not only widely acceptable, but in many circles practically demanded. It's clear that Heinlein, who believed passionately that people weren't equal but race had nothing relevant to say about a person, quite deliberately chose to open this chapter with a quote from a black intellectual. I can only speculate on why, but my guess is that he hoped thereby to discourage the average bigot from reading any further....

Today, of course, it is extremely Politically Incorrect to quote Booker T. Washington, who is seen by the Politically Correct as an "Oreo cookie" or Uncle Tom. More fools they.

5. (See page 13) The world was smaller then, and precinct politics a very great deal more important As late as 1965 it was traditional in political science classes to point out that Hughes lost California by one vote per precinct.

In 1969 when I managed Sam Yorty's successful campaign for a third term, I would cheerfully have given this book to every one of my campaign workers as a practical manual for political operations. By 1973 campaign tactics had changed. Professional managers were much in vogue; and professional managers never did care much for precinct organizations. They would rather hire people. Volunteers tire; boiler room operatives are paid to stay energetic. Volunteers require persuasion; paid operatives can be given orders. Perhaps more to the point, most professional political managers own an advertising agency through which all campaign expenditures are tunneled. They collect a fee, generally 15 percent, of all that money; and of course there is no percentage fee involved with the recruitment and management of political volunteers.

This is not to negate Heinlein's point that your activity matters. It matters a lot. If we are to reclaim the republic from the professional politicians, it will require more, not less, effort by the citizens. The rewards will be correspondingly greater.

6. (See page 13) Political clubs hardly exist today. In the early part of dais century clubs like Tammany Hall were part of the governing fabric of American life. They could be again, but they will have to be rebuilt nearly from scratch.

Political clubs failed for two reasons. First, of course, movies, radio, and television provided alternate sources of entertainment: it was no longer necessary to go down to Tammany Hall or some other political clubhouse to meet people, play cards, and otherwise kill time. TV can absorb all the time one has and then some.

The second and more important reason for the decline of political clubs has been the centralization of politics. When the decisions important to you are made at a local level, it makes sense to have a place to discuss those decisions; but when everything is decided thousands of miles away by people you will never meet, the incentive to be part of politics through a political club tends to vanish.

The reconstruction of some equivalent to the political club - possibly through electronic networks or interactive television - is a matter of some importance if we are to reclaim the republic.

7. (See page 15) Local party officials no longer have much for volunteers to do. The success of the Perot movement may change that. Perot's campaign was completely built by volunteers, much as Heinlein describes here. It is likely that the other parties will pay attention to that lesson.

However, it is also likely that the professional politicians will make every effort to gain control of any such movement. You have been warned.

8. (See page 17) An important point. There's nothing magic about political parties, and little continuity about what they stand for. Prior to World War II, the Democratic Party regularly had a platform advocating "Tariff for revenue only," i.e., decrying protectionism. The Republicans, on the other hand, wanted tariff to protect American industry. Nowadays the Republicans tend to be for free trade, and the Democrats demand an "industrial policy."

Incidentally, this issue isn't as easily decided on ideological grounds as it used to be. As an example: is it protectionism if the U.S. places a tariff on imported goods which make use of technology developed in U.S. institutions from research subsidized by U.S. tax money? Trade relations will be extremely important over the next few years, and it is not at all clear what the optimum trade policy ought to be.

The Perot phenomenon illustrates another case in point. As I write this, there is no Perot party. It is pretty clear that if the Perot supporters hope to reorganize the national political process they will need a party: either to capture one of the existing parties, or, more likely, to form their own. The United States has historically had little use for parties organized around a single person. De Gaulle disliked parties and politics, and tried to govern France by forming his "rally" rather than a party; but today it looks much like any other French political party. It is likely that the Perot supporters will discover they have no choice but to form a permanent institution which will probably look a lot like a party. Clearly those who get in on that early using the techniques described in this book will have considerable influence over what that institution looks like.

9. (See page 20) This would have been impossible in the 1980s; but if we are to reclaim the Republic it must be again. The Perot movement may help.

In the 1960s I went through much the same process that Robert describes, moving from precinct worker to district leader. I then moved from Seattle to San Bernardino, California, where within weeks I became county chairman of a major party, largely because of the connections I had built in Washington state. In those days the position of county chairman carried, if not precisely influence, then certainly access to the influential.

10. (See page 21) It used to be said in political science classes that the true governing class in the United States consisted of about 200,000 self-selected political party officials; and it was quite true. Of course in those days government was not as important as now. Alexis de Tocquiville was astonished at how much of what would in Europe be done by government was in the United States done by volunteers in association. That too remained true until the professionalization of politics.

When politics changes the rules so that it becomes the only game in town, it should not be surprising that unscrupulous people will try to get control of the game: meaning that the citizens who want to retain the republic must work even harder.

Regaining control over our lives clearly will be incomparably easier if the centralization process done in wartime and continued during the Cold War is reversed. This not only means devolving as many issues as possible from Washington to the states, and from state capitals to local government, but also divesting government of many activities which aren't properly its business in the first place.

11. (See page 22) Again, this is how it used to be. Alas, nowadays the paid political professionals have very great influence, and often end up as appointed officials. It is precisely those who refuse to become professionals (and thus have to earn a living) who find themselves frozen out.

When Heinlein wrote this, most state legislators were underpaid and met only for a few weeks each year. The notion of a full-time paid City Council would have been ludicrous.

Yet Heinlein is right: those with real power don't much care for the hired help. However at the moment they can't do without them. If enough people take Heinlein's advice that could change.

12. (See page 27) Heinlein's views on Communism, both foreign and domestic, changed considerably from the time this book was written. Today Communism is no longer armed with ICBMs and H-bombs and thrives mostly in American universities.

13. (See page 27) And Whitaker Chambers went precisely from Communism to Quaker. His book Cold Friday remains one of the most readable accounts of just why Communism had to be taken seriously right up to the moment it fell. Chambers, incidentally, died

convinced that he had abandoned the winning side for the losing when he left the Communist Party of the United States.

14. (See page 28) As a native of Tennessee I have to say that while the restriction on teaching evolution was in full force all during my high school years there, it had no effect whatever on what was actually taught; we learned modern biology including evolution. Nowadays there may be no law against teaching evolution, but the schools are incomparably worse. Note, however, that most of this section is as valid in 1992 as in 1946; indeed given the proposed Voucher System and the utter failure of public education, that debate couldn't be more timely or important.

15. (See page 31) One could wish that the post-Watergate reformers had read this passage.

The fact is that most laws have unintended consequences. Milton Friedman has proposed as explanation an "Invisible Foot" that inevitably mucks up any great reform scheme. It's hard enough to knock down needless social mechanisms; it's hard enough for government to prevent harm. For it to positively do good may be possible, but experience shows it's not easy.

Probably the most important lesson here is that any proposed changes ought to have a builtin mechanism for its own destruction. Just in case.

16. (See page 32) Probably nothing dates this book more than Heinlein's remarks about women.

Heinlein was personally convinced that women were at least as smart as men, and suspected that they were smarter. This suspicion was reinforced by his association with his wife, Virginia, former research chemist and officer of the U.S. Navy, and demonstrably as good an engineer as he was.

His public views were colored by what he thought would be the readers' expectations. In any event most of this section is of historical interest only. The "political streetwalkers" he describes here may have been common in his day, but were rare in the 1960s, and have pretty well vanished today, doubtless due to the changed economic situation.

17. (See page 33) This too is hardly a modern view: but then the "daily occupations" of women are no longer what they were in 1946. See note 16 above.

18. (See page 35) The dub woman is still very much with us. The important point here, though, is the conclusion: "Be a politician who happens to be female." Hardly a startling conclusion today, but a fairly bold thing to say when written.

19. (See page 36) The United States is aging. Over the next twenty years there will be a 75 percent increase in the number of people 50 and older-and only a 2 percent increase in those younger than 50. This has never happened before, in the history of the U.S. or of any other country.

It's something to worry about. We can hope that Heinlein's assessment of older people in politics is exaggerated, or plain wrong. Alas, the politics of the American Association of Retired People doesn't contradict what Heinlein says here. Note also that since this was written the United States has spent our grandchildren's inheritance and saddled them with debt; but Social Security remains "untouchable."

20. (See page 37) Old vultures some may be, but we had better find a way to incorporate the elderly into the political process in a way that remains acceptable to those who are actually producing goods and earning money.

When Social Security began, some eight workers paid into the fund to support each one who took money out. That number is down to about three to one today, and will actually go the other way after the turn of the century: that is, more will be drawing from the fund than paying into it. Clearly this is a matter of great concern, since if the democratic process attempts to enslave the young to the old, soon thereafter the democratic process will be set aside in favor of something more realistic.

21. (See page 37) Punching doorbells used to be the most common form of political activity. One rang doorbells and offered to talk politics. If the people inside liked what you said, you tried to recruit them to go work on their neighbors. You also got a small donation, on the theory that anyone who gave a dollar to a political campaign would almost certainly vote for the candidate-a principle that remains valid today. Much of this book deals with how to do that, and everything said is spot on.

However, it has been about 20 years since any political worker came around my neighborhood. The professional politicians have found what they consider better ways. I'm not so sure of that, myself, and I suspect - indeed hope - that things will change so that punching doorbells is once again a common political activity for volunteers. It's part of the process of reclaiming citizen control of the republic.

22. (See page 39) I have managed five political campaigns (won four) and worked in countless others, and I want enthusiastically to second what Heinlein says here. The mainstay of three of my campaigns was a group of elderly men and women.

23. (See page 42) Another sign of the times: today's regulatory environment has become so complex that it's impossible even to know what the laws and regulations are, much less keep each unbroken. We all break some law every day; there's no help for it, since some of the laws are contradictory. The result is to give great discretionary power to the law enforcement officials, and to undermine the whole concept of the rule of law.

The remedy for this is obvious.

24. (See page 43) "An honest politician is one who stays bought," goes the old political maxim. I grew up in Memphis, Tennessee, when the city was dominated by E. H. "Boss" Crump, one of the last of the oldtime political bosses. I have to say that the city was well run, we were all pretty happy about city government, and most of my friends look nostalgically on those days before politics was "reformed."

Most "reform" movements dissipate power, on the theory that this will reduce corruption; the result, alas, is to dilute responsibility until it becomes impossible to know whom to blame. That's been my observation, anyway.

25. (See page 43) I completely agree with both the substance and the spirit of what Heinlein is saying here. Do note, though, that we all have seen one "successful" politician make a solemn promise and break it. "Read my lips. No new taxes." Of course as I write this his continued success is very much in doubt.

26. (See page 44) My partner is fond of pointing out that the Beverly Hills Police Department has no doubts about whom the police work for. That's not the case in Los Angeles and many other places. The result is that the police, afraid of prosecution for excessive violence, tend to avoid the violent criminal and concentrate their efforts on enforcing the law among the middle class who don't resist arrest and don't start shooting. That in turn adds to the disaffection of the middle class. It's all part of the problem mentioned in note 24 above.

Heinlein's contempt for political "reformers" knows no bounds. In formal political science courses these people are known as "goo-goo's" (from "good government"); and many a political mess can be traced to their efforts. Heinlein's point is that the only effective reform is constant citizen participation in government. In other words, eternal vigilance is the price of liberty....

27. (See page 45) Note that Heinlein refers to the crisis that left France vulnerable to the Nazi invasion. This book was written before the French defeat in Viet

Nam, the Suez Crisis, and the subsequent loss of the French Empire.

28. (See page 48) Signs of the times. Today it's April 15th. And the tax laws are far more complex and contradictory than when Heinlein wrote this.

The federal government takes in far more money than anyone other than an out and out Socialist would have dreamed possible in 1946; yet it's still broke, and the nation is in such a sea of debt that our grandchildren will not be able to pay it all. We tax capital gains as if they were ordinary income. Anyone want to bet that tax law won't be important 20 years from now?

29. (See page 48) In Heinlein's day the Post Office was a courteous and efficient place, not yet the butt of national jokes. Robert was fond of telling stories about that efficiency, including a time when they delivered a package that had been nearly destroyed in a rail accident; attached to the package was a bag of candies which had spilled when the package wrapping tore. Those were the days....

30. (See page 49) TURN THE RASCALS OUT! was long the traditional cry of voters who had had enough. Today the rascals are very thoroughly entrenched.

Heinlein's comments on civil service and patronage are as relevant today as when written, but I doubt he would today have as much faith in written (as opposed to oral) examinations. The problem is the entrenched nature of civil servants and their immunity to political responsibility: for my own part, I think I'd rather see a spoils system for the nontechnical work of government.

31. (See page 50) How far have we come. Since that was written we have built an enormous welfare bureaucracy which has a heavy financial interest in keeping up the supply of poor people as clients. NASA has become swollen with civil servants appointed on merit but entrenched in a system that produces little but paper. It is needless to multiply examples.

32. (See page 51) It's pretty clear that Senator Byrd was right and Heinlein wrong in this instance.

33. (See page 51) All that has been changed. Congresscritters get enormous perks as well as quite good pay, and have access to other sources of income and perks. State legislators are well paid, and often are full time.

The original notion of a legislature was that a group of citizens would go approve laws they then had to live and work under. That got lost, in part due to well meaning "reform" efforts. Heinlein argues that the laborer is worthy of his hire: the evidence is that in politics if you pay the legislator what he is in theory worth he will cease to be a representative, and become a professional politician. What happens is that when the salary is worth competing for, people will compete for the salary.

It's possible that what's needed is a legislature made up of one full-time paid professional house and one parttime amateur house.

In any event, one can hardly argue that legislators are underpaid today: or that paying them a lot more solved more problems than it raised.

34. (See page 51) The public trough used to be slim pickings, but things are very different now. An obvious reform is to go back to what Heinlein describes. Government today dispenses a much larger part of the Gross National Product than when this was written.

35. (See page 51) Nothing has changed here, of course. The lawyers dominate all the legislatures: which may or may not have a bearing on why the laws are always so complex as to require the citizens to hire lawyers in order to obey them.

36. (See page 52) Ed Crump used to distinguish between "honest graft" and "dishonest graft."

Dishonest graft was stealing from the public; making work that didn't need to be done in order to be paid for it; overcharging for services to the public; that sort of thing.

Honest graft was patronage: channeling money that had to be spent to one's friends or associates, or where it would do the most political good, always insisting that the work or services bought be honestly delivered. Although Crump probably wouldn't have cared for Affirmative Action (Memphis was legally segregated during his era), he would almost certainly have included Affirmative Action, Hire the Handicapped, etc., as "honest graft" since those programs involve transfer of public money to people selected by political means.

37. (See page 52) I don't know what Heinlein's views on this would be today. My own are that the experiment was tried, and now we need term-limit laws. See above: the problem is that if you pay people a living wage to be politicians, they will make a living as politicians: which removes government from the people and hands it to a political class.

38. (See page 52) The disgust of the public with officeholders is stronger today than when that was written, despite our having made most legislative offices full time and highly paid. See note 37.

39. (See page 53) I agree: moreover, I think it was a very good

thing that many of our political leaders were mostly motivated by patriotism. In fact, by professionalizing public office we made it more likely that office holding would be merely another job, not a patriotic act. Clearly I am in disagreement with what Heinlein says earlier in this book. I don't know what his views would be today. I doubt he'd have been much impressed by the current group of officeholders; I seem to recall him saying once that the California Legislature was the finest money could buy, but whether this was intended as jest or serious comment I can't say.

40. (See page 53) The heart of the matter. Be a party regular. That, however, presumes that the parties matter. Increasingly they don't.

The federal structure of the United States has always made life difficult for national political parties. The state parties were fer more important Members of Congress and senators were part of the state party system, generally drawn from the same pool and acting interchangeably with state legislative and executive officers. Periodically the state parties would get together to select a national standard bearer; that was usually as a result of discussion and debate and "power brokering."

Today it's far different. The parties have little role in selecting a president; that's done in a series of endurance contests called primaries. Primaries are supposed to be more democratic than a party caucus: this supposes that the ordinary voter, who generally knows no more about a candidate than has been reported in the newspapers and conveyed on TV in 30-second sound bites, will make a more intelligent selection than a party official who may know all the candidates fairly well. It's not a compelling theory, and the results could be imagined if they weren't all too clearly in front of us.

The Founding Fathers of the United States hated political parties, which they called "factions"; but they soon found they couldn't govern without them, and Madison, whose Federalist Papers essays denounce "factionalism" in ringing terms, had no choice but to participate in the building of a party system. For those familiar with the details behind Marbury vs. Madison, the case in which John Marshall asserted the right of the U.S. Supreme Court to strike down acts of Congress as unconstitutional, the irony is delicious: Madison as Secretary of State under Jefferson was acting as a party leader when he failed to deliver the judicial commission demanded by Marbury (who had been appointed by Adams in his outgoing hours).

Heinlein is saying here that parties, particularly local parties, are the most important part of citizen participation in politics; that parties are, and should be, worthy of your support and loyalty.

This is a view not much held any longer; but it is a view very much worth attention. In my judgment Heinlein has come to the heart of the matter: you cannot have citizen control of government without strong LOCAL political parties; and you cannot have strong parties without the kinds of activities he describes.

I wish every citizen concerned with reclaiming the republic would read this section carefully and reflect on it.

41. (See page 54) Exactly so. I've put a note here to draw attention to the text, not because I have anything to add.

42. (See page 56) Still true, although the Congresscritter will pretend to be impressed. The simple fact is that Congresscritters pay attention to PACs bringing money and not much else. There is a standard price for an hour of a Congresscritter's time, and every PAG leader knows it.

It used to be that Congresscritters paid a lot of attention to people who held party office; what we have to do is make that true again.

43. (See page 57) More of the heart of the matter. Some of Perot's support comes from people who never before took part in politics. Others are people disaffected with their parties.

If these people are to have any lasting effect on the American political scene, they must organize along regular party lines: either take over an existing party, or build their own.

The alternative is to chop away the "reforms" of the past 40 years and return the system to what it used to be: but in that case they will still have to join the regular parties to keep control.

There is nothing more temporary than the enthusiasm of a reform movement. Parties endure. Reform movements flare and vanish.

44. (See page 58) What Heinlein is saying here comes right out of old Boss Flynn's book You're The Boss, and it's spot on.

45. (See page 59) While most of us agree that divided government is not a good idea in theory, the Cold War produced some odd - we can hope unique - situations. The Left demanded a number of domestic political concessions, notably the Great Society, in return for allowing the Right to conduct the Cold War and continue building up defenses. The Carter presidency demonstrated that the Democrats were not optimum for handling the Cold War. By the time Reagan was elected, Congresscritters of both parties were the beneficiaries of such powerful incumbency advantages that it was impossible to bring in Republican control of the House. Whether having a Republican majority in both houses would have been a good thing is another matter, and one subject to legitimate disagreement.

However, Heinlein's principle is good. Divided government means no one is responsible.

46. (See page 60) Alas, most of this chapter, and the rest of this book, is obsolete. It doesn't have to remain so; but before we can return control to citizens in general, we must devolve many to most

government controls back to local areas. It is fer more difficult to get people involved in politics when the decisions are made thousands of miles away; if they're made dose by, it's another matter.

I've always called that the horsewhip theory: if the important decisions affecting my life are made by people we can get at with a horsewhip, we're probably in good shape.

This chapter and those following are wonderful introductions to the arts of political doorbell punching, dub organizing, and general local politicking, and with luck and a lot of work these will become the most relevant chapters of the book; for the moment parts are more of academic and nostalgic interest.

On the other hand, if enough people pay enough attention to organizing political dubs, the problems of the country just might solve themselves. Meanwhile, Heinlein, like Dale Carnegie, gives timeless advice on how to win friends and influence people. His final chapter exhorting people to political action is both eloquent and important.

One could only wish that his advice had been taken before we lost control of the political process.

AFTERWORD TO THE NOTES

All the above was written at blinding speed: I only got this assignment a couple of days ago, and the book has to be typeset three days from now. This is as far as I got before the deadlines were called.

That may be just as well. I began this hoping I'd make Heinlein's book more understandable. I may have done that. What I have certainly done is convince myself that we lost a lot when we lost the world Heinlein describes, and that getting it back may be the most important thing we can do for our children.

If we do recover control of our country, we'll need new books, new manuals of operation; but I suspect this work will never quite be obsolete.

Political organizations change rapidly. People change slowly. Politics is people, and whatever his other talents, Robert A. Heinlein understood - and liked - people.

I do hope he isn't too offended at having his book footnoted by a former professor of political science. Like him I've little use for the academic political theorist; in my defense I can say I've also seen the elephant.

Now let's go get our country back.

J.E.P.

July 4, 1992

WHERE TO?

A bloomin', foolish sparrow
Built his nest in a spout,
And along—

—came a building inspector, looked over the site, and the plans, and okayed them, after requiring the sparrow to buy eleven different licenses totalling 18% of the sparrow's building budget, plus something called special service, and along—

—the bleedin' rains came,
And washed the sparrow out.

Again the foolish sparrow,
Built his nest in the spout,
And again—

—came that building inspector, bawled out the sparrow for failing to get special licenses and permits covering typhoons, sun spots, and ice ages, required him to buy seventeen permits and/or licenses and appear before boards controlling zoning, economic impact, ecological protection, energy conservation, and community esthetics, plus something called "very special service"—and a second mortgage, and along—

—the bleedin' rains came,
And washed the sparrow out.
(Around again . . . and again . . . and—)

GRUMBLES FROM THE GRAVE

Robert A. Heinlein
Edited by Virginia Heinlein

For Heinlein's Children

FOREWORD

This book does not contain the polished prose one normally associates with the Heinlein stories and articles of later years. It has been taken from the day-to-day correspondence between the author and his agent, and from letters from several others, many of which have been excerpted.

Such cutting eliminates a great deal of tedious back-and-forth correspondence concerning details of contracts, discussions about royalty rates, and other items which would hold up the flow of information about the writing business (and other things). This book has been abstracted from enormous files, which run millions of words long, much of it boring to those not concerned with the daily business of writing and selling.

Many people have asked me to consider writing Robert's biography, or a joint one—his and mine—but I am not ready to do that yet. Perhaps, one day.

Meanwhile, this correspondence covers mostly the years from the time when Robert first began writing until the period 1969-1970, at which time he found that his writing time was effectively cut down to zero by the continuing details of his business and subsequently, grave illness . . . Over the years, I had taken over record keeping, information on sales, taxes, and some of the correspondence. In 1970, Robert was very sick for the entire year, and it was then essential that I keep the business running. It was fortunate that I had begun doing so the previous year.

In order to follow the various subjects, I have excerpted these letters to put together as many as possible of the remarks and ideas on those subjects. Each letter did have a number of topics in it, these have been separated where possible. Some of the topics are: juveniles, adult novels, publishers, travel, fan mail, time wasters, Robert's writing methods, and so forth.

Some names have been left out for legal reasons.

There are places where there are only notes on telephone conversations. It would be impossible to reconstruct those. They have been omitted.

There are a few sparse excerpts from letters which were written after I took over running the business end of Robert's writing . . . most of those letters written by Robert. He talked to Lurton Blassingame, his agent, now and then, but mostly he spent his time reading for his work, or writing. During the last eighteen years of his life, he had many illnesses. But, in between, he continued working.

I was his "first reader"—the person who read each work first and made suggestions for cutting, revisions, and so on. It was a great responsibility. When Robert came down with peritonitis in 1970, *I Will Fear No Evil* needed more cutting, but it was obvious that he was (and would be for a long time) in no condition to do that. And his publisher was calling for the manuscript, so I had it Xeroxed and sent it in. I take full responsibility for that. With further cutting, it might perhaps have been a better story. In spite of this, it has sold more than a million copies in U.S. paperback alone, and has been translated into more than half-a-dozen languages, and is still in print in all of those, including English.

At one time, Robert wrote to his agent about the possibility of writing a memoir-autobiography: *Grumbles From The Grave* by Robert A. Heinlein (deceased).

This is that book. It covers many years, many subjects, and some personal comments—taken mostly from letters between Robert and his agent, Lurton Blassingame.

Virginia Heinlein
Carmel, California 1988

A SHORT BIOGRAPHY OF ROBERT A. HEINLEIN BY VIRGINIA HEINLEIN

Robert Anson Heinlein was born July 7, 1907, the third of seven children of Bam Lyle Heinlein and Rex Ivar Heinlein, in Butler, Missouri. The growing family moved to Kansas City during his childhood.

When Robert learned to read, he read everything he could lay his hands on. He did, in fact, read on his way to school, going along the street, up and down curbs, up to the schoolhouse. He attended junior high school, Central High School in Kansas City, arid spent one year at a local junior college. His next older brother had gone before him to the United States Naval Academy, and Robert set his sights on going there. He collected manyletters of recommendation from people and gained the appointment from Senator James Reed to enter the Naval Academy in 1925.

Following his graduation and commissioning in 1929, he served aboard the *Lexington* under Captain E. J. King, who later became commander in chief of the U.S. Navy during World War II. When his tour of duty on the *Lexington* was about to end, Captain King asked that he beretained as a gunnery specialist. However, Robert was given duty as gunnery officer on the *Roper,* a destroyer.

Heinlein's birthplace in Butler, Missouri.

Robert A. Heinlein (lower right) with his sister Louise (lower left) and his brothers Lawrence Lyle (upper left) and Rex Ivar (upper right).

Heinlein at the time of his high school graduation.

Robert A. Heinlein 1929

Destroyer duty was difficult because of the rolling of the ship, and seasickness was a way of life for him. He lost weight and came down with tuberculosis. After he was cured, the Navy retired him from active duty.

At twenty-seven years of age, he found himself permanently ashore, with a small pension. It was necessary for him to find some way to augment that money. He tried silver mining, politics, selling real estate, and further study in engineering. One day, he found an ad in a science fiction magazine for a contest. So he sat down and wrote a story ("LifeLine"). He felt it was too good for the magazine he had written it for, so he sent it to the top magazine in the field—*Astounding Science Fiction.* John W. Campbell, Jr. bought the story,

The next several stories he wrote were less salable, and it was only on his fifth or sixth try that Campbell again purchased one. The second and following stories eventually sold, but Robert was hooked for life on writing. Originally, his purpose in writing was to pay off a mortgage on a house which he and his wife of a few years had purchased. After that mortgage was paid off, he found that when he tried to give up writing, he felt vaguely uncomfortable, and it was only when he returned to his typewriter that he felt fulfilled.

During World War II, Robert left his writing to do engineering work for the U.S. Navy. For three years he did such work in Philadelphia. The war over, he returned to his writing. By this time, he was looking for wider horizons. He was persuaded to begin the juvenile line, and he sold stories to the *Saturday Evening Post.* His second juvenile was picked up by television, in a series that ran for five years. He also wrote the classic film, *Destination Moon,* and he began to think about writing serious adult novels to open up that market to science fiction.

Robert thought that the possibilities of mankind going into space were sufficiently important and feasible that before he left Philadelphia, he wrote two letters urging that the Navy begin space exploration. One letter went through channels as far as the head of the Philadelphia Naval Air Experimental Station, who killed the proposal. The second went (also through channels), via a friend, through Naval Operations, and got as far as a Cabinet meeting. It was reported that then-President Truman took it seriously enough to ask whether such a rocket could be launched from the deck of a ship. No, the President was told. And that killed the project.

Heinlein gets the ball rolling, 1934.

The Soviet Union's May Day Rocket, 1960. The slogan reads "Earth-Mars-Earth—we will get there first."

In 1947 Robert was divorced from his wife, and when he received his decree nisi, he married me. During World War II, I had gone into the Navy, as a WAVE, and my second tour of duty was in Philadelphia, where I met Robert; we worked in the same section.

One day Robert spent hours searching for some tearsheets for an anthology. In an effort to help, I decided that his files needed to be organized. So I set about that, setting up a system which I still use today. This began my involvement in the literary business.

By the time Robert found himself too busy to do more than overhead work (keeping up correspondence with his agents, keeping records, answering fan mail, and all the other chores attendant on being a literary figure), I was well enough acquainted with his business that I could take over those chores for him. We worked together as a team, discussing what to do about offers, and I would answer the letters for him.

With the juvenile series well launched, and selling many copies primarily to libraries, Robert became the darling of librarians. He was asked to give endless speeches, and when his annual books for boys came out, he did a special program for general radio distribution on each new book.

But he still yearned to do serious writing for adults, rather than for the specialized science fiction market. So, in 1960, he finished writing *Stranger in a Strange Land.* That book became his best known work.

When the boys who originally read his juveniles grew up, they kept looking for more of the science fiction which Robert had made so popular. So he set out to write adult novels for them. For some years, he regularly wrote two books a year, one adult and one juvenile. In addition, there were always requests for other things in the way of nonfiction. Many of those requests had to be turned down for lack of time.

Between books, we did a good deal of foreign travel. We went around the world four times, spent time in Europe. One of the most interesting, but not to be repeated trips, was to the Soviet Union. In 1960, we saw the May Day parade, then took off for Kazakhstan. Soon after our arrival in Alma-Ata, we were told of the U-2 incident. Things turned frosty for us, but there was no way out, so we continued the trip, going on to Samarkand, which was the real reason we went all that way into the USSR. While we were in Vilno, just before a summit conference between Khrushchev and President Eisenhower, the Soviet Union sent up a rocket which to this day we cannot be certain was unmanned. On the way down from seeing some castle in Vilno, we encountered a group of Red Army cadets, who were extremely excited about it and had to tell us. We were heartsick about the development and returned to our hotel.

In 1970, there was a serious illness, from which it took him two years to recover his health. Then, he sat down at his typewriter and turned out *Time Enough for Love.*

Always a man of fragile health, illnesses became more frequent, and there was less time for writing. We both had a taste for travel, and we saw a good deal of the world; anywhere there was transportation, we went. We visited Antarctica and went through the Northwest Passage to Japan. When China opened up to travel, we went there, among other parts of the East. *To Sail Beyond the Sunset* was eventually published on Robert's 80th birthday. Questions began to come in—Was this to be the final book from his typewriter? (But by this time it was a computer.) He had intended to write more, but again illness intervened, and *To Sail* did become his final story.

I will leave it to others to evaluate the influence of Robert's work, but I have been told many times that he was the "Father of Modern Science Fiction." Those books have been published in many languages, in many lands, and some of them seem to have been landmark stories.

During his lifetime, Robert received many honors, including four Hugo awards for the best novel of the year. The books so honored were: *Double Star* (1956), *Starship Troopers* (1959), *Stranger in a Strange Land* (1962), and *The Moon Is a Harsh Mistress* (1966). He was also the recipient of the first Grand Master Nebula Award from the Science Fiction Writers of America. There were also many other awards: The Sequoyah Award, given by the Children of Oklahoma for the best children's novel of the year *(Have Space Suit—Will Travel);* many awards for the blood drives we did; *Tomorrow Starts Here,* given by Delta Vee, Inc.; Robert perennially won first rank among popular writers in the *Locus* inquiries. But the thing which pleased him most, it seemed, was being invited to be a Forrestal Lecturer at his alma mater in 1972.

Heinlein's Distinguished Public
Service Medal (awardedposthumously).

In October 1988, I was asked to come to Washington,D.C., to receive, on Robert's behalf, the Distinguished Public Service Medal. My greatest regret is that he could not have known of that.

CHAPTER I

IN THE BEGINNING

April 10, 1939: Robert A. Heinlein to John W. Campbell, Jr.

I am submitting the enclosed short story "LifeLine" for either *Astounding* or *Unknown,* because I am not sure which policy it fits the better.

EDITOR'S NOTE: Robert always told the following story when asked how he began writing. He had seen an ad in one of the pulp science fiction magazines, offering $50.00 for the best story by a beginning writer. He wrote "LifeLine" then decided that it was too good for that particular magazine. So he sent it to John W. Campbell, Jr., who had been editing Astounding *for approximately two years at that time. Campbell was always looking for new talent and apparently recognized it in Robert's first work. Robert claimed that he took a look at the check for "LifeLine" and said, "How long has this racket been going on?" His second story was also accepted, after some revisions. Thereafter it was some months before Campbell accepted another story.*

Robert was one of a group of writers whose work is now called "The Golden Age of Science Fiction. " John Campbell helped his writers along with suggestions and brought them along to make Astounding *the foremost science fiction pulp magazine of the time.*

April 19, 1939: John W. Campbell, Jr. to Robert A. Heinlein

.. . I like your story, "LifeLine," and plan to take it at our regular rate of 1 cent a word, or $70.00 for your manuscript.

August 25, 1939: John W. Campbell, Jr. to Robert A. Heinlein

At about this time you should receive our check for $310.00 for "—Vine and Fig Tree—" ("If This Goes On—")—which title will have to be changed to give it more umph. The story, by practically all that's good and holy, deserves our usual unusually-good-story 25% bonus. It's a corking good yarn; may you send us many more as capably handled.

But—for the love of Heaven—*don't* send us any more on the theme of this one. The bonus misfires because this yarn is going to be a headache and a shaker-in-the-boots; it's going to take a lot of careful rewording and shifting of emphasis.

I genuinely got a great kick out of the consistency and logic of the piece. You can, and will, I'm sure, earn that 25 % bonus for unusually good stuff frequently. I 'm very much in the market for short stories and novelettes. This piece can't appear until after E. E. Smith's "Gray Lensman" finishes, so I'd like more stuff in between whiles.

December 15, 1939: John W. Campbell, Jr. to Robert A. Heinlein

I was wrong, evidently, in believing you had difficulty working out "Lost Legacy" [published in *Super Science Stories* as "Lost Legion" by Lyle Monroe], but you are definitely wrong in suggesting that "If This Goes On—"is, or has any tendency to be, hack. It has flavor, a roundness of background that makes it lovely.

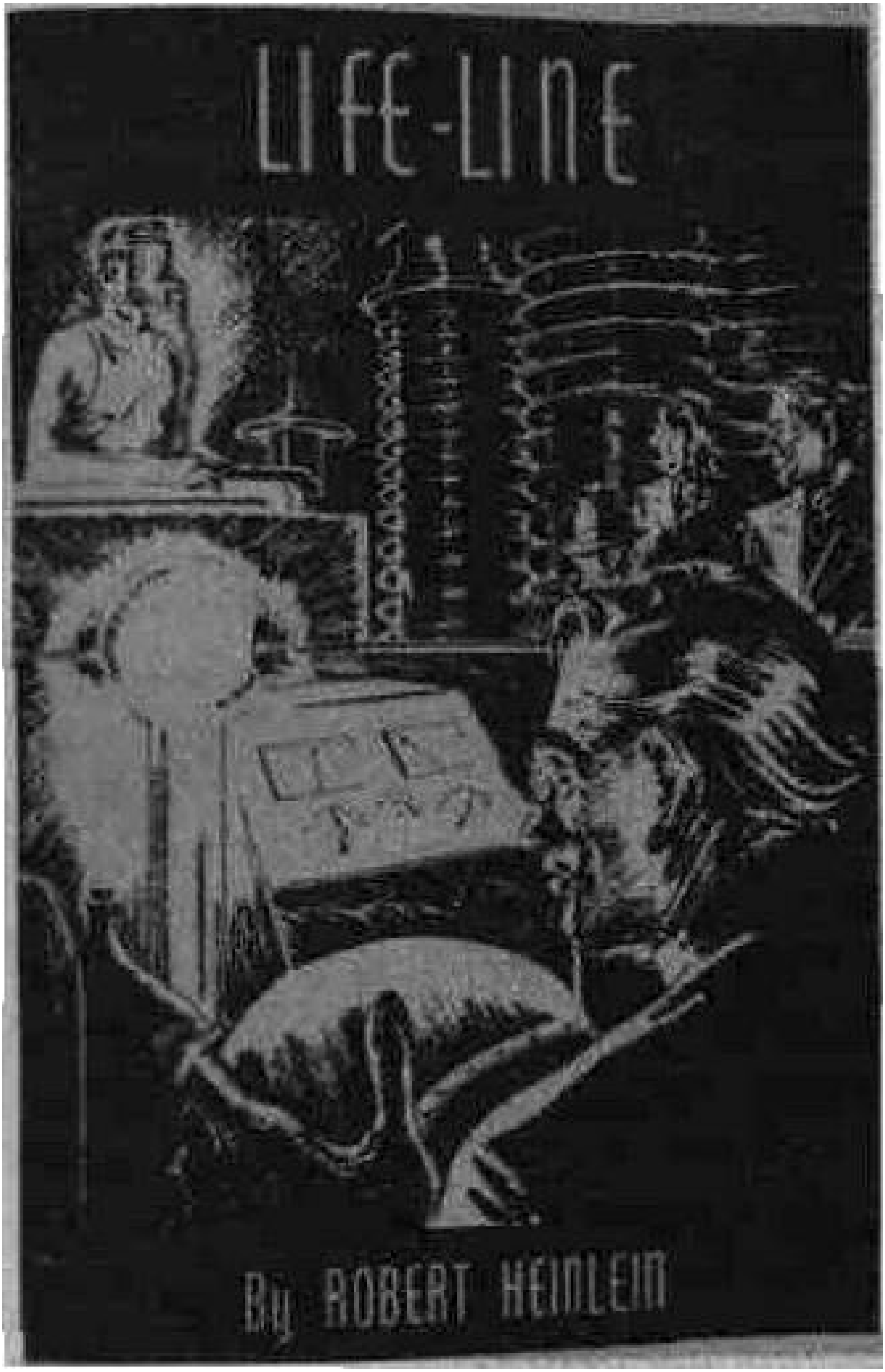
LIFE-LINE
By ROBERT HEINLEIN

Heinlein's first story, "LifeLine." John W. Campbell, Jr.'s *Astounding,* August 1939. Art by Isip.

EDITOR'S NOTE: John W. Campbell, Jr. started writing pulp science *fiction stories while still in college. He was a large, tall man who threw off ideas like a sparkler and was addicted to various hobbies and hospitality to authors. Some of his hobbies were photography, ham radio, and dianetics.*

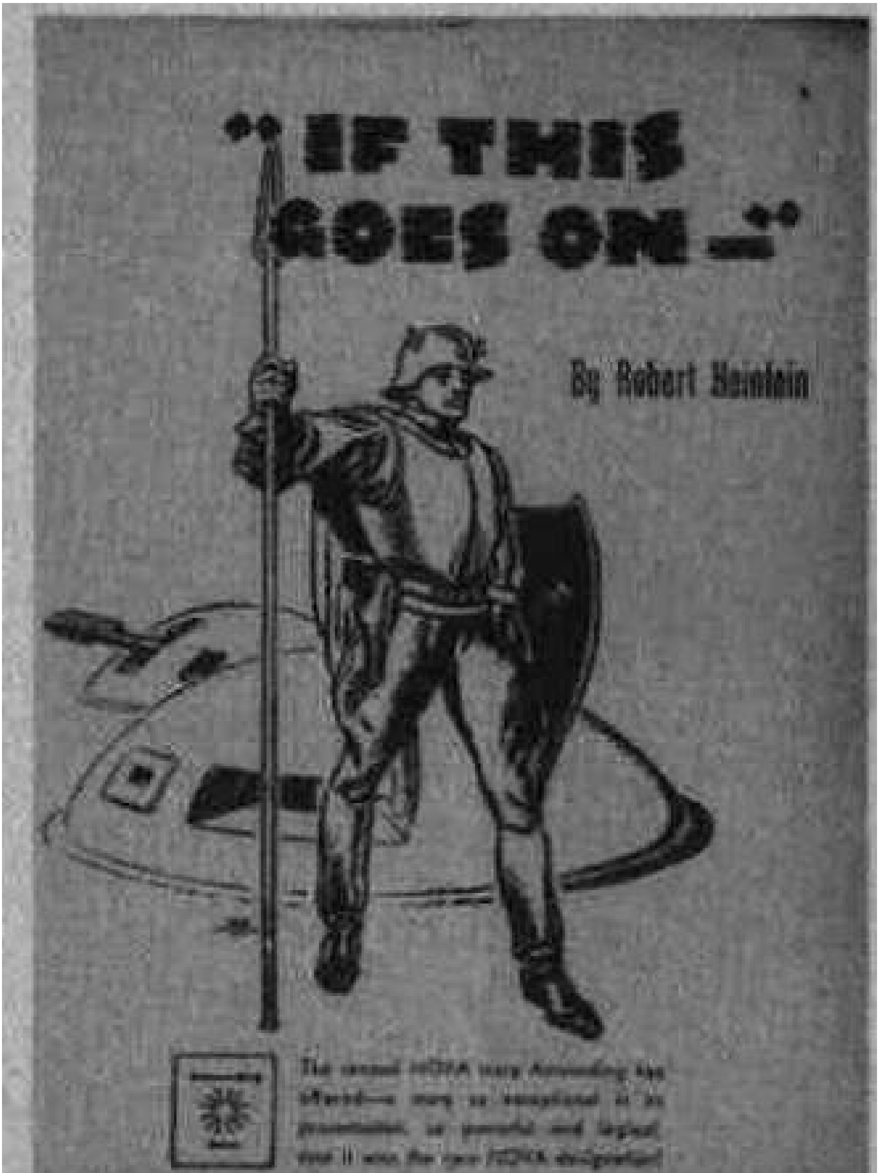
"IF THIS GOES ON—"
By Robert Heinlein

"If This Goes On—," *Astounding,* February 1940.
Art by Hubert Rogers.

Robert did not admire his writing style and objected strenuously to the various changes JWC made in Robert's stories. Despite their differences in personality and style, the two men became good friends after Robert began writing for Astounding. *John turned down a number of Robert's stories after the first one had been published. Those were changed slightly and later sold to other pulp magazines. Whenever John considered a story particularly good, he was allowed by the higher-ups at Street and Smith to give the writer a bonus. Rates, in those days, were very low, and the bonus added nicely to the writer's income.*

Heinlein at his desk with plate from "If This Goes On—."

Each month Astounding *carried a reader poll, which rated the stories which had appeared in an earlier issue. Those stories vied against each other for placement in the "Analytical Laboratory." Robert's first story, "LifeLine, " was second in the reader poll three months following publication.*

During the three years Robert wrote mainly for Astounding, *he often placed first and second (using his own name and a pseudonym) with his stories. He quickly became John's leading writer.*

The stories which appeared in Astounding *had blurbs written by the editor, both on the contents page and at the beginning of the story. Robert complained that John often gave away the point of the story in these blurbs. However, Robert learned much about the art of writing from John.*

January 23, 1940: John W. Campbell, Jr. to Robert A. Heinlein

Now, the idea I'd like to have you mull over a while before giving me a definite answer. I think you're one of the writers who can work up someone else's ideas into alogical story with enthusiasm. Some can, you know, and some definitely can't. You are in a position to know, and that's why I'd like to have your own reaction to this.

February 23, 1940: Robert A. Heinlein to John W. Campbell, Jr.

Here is the story about the atomic engineers and the uranium power plant ["Blowups Happen"]. I had intended to send it to my friend in Lawrence's radiation laboratory at Berkeley for a final technical check-over, but decided to send it to you promptly instead. As you pointed out, things are happening fast in this field. The quicker a story laid in it sees print, the better the chance that some assumption in the story will not already have been invalidated.

I presume that this story herewith will give you some idea as to whether or not I can work out another man's ideas. If you decide that I can, then I would be interested in taking a crack at your idea of scientists going insane over the uncertainty of truth in the "sub-etheric" field. But not just at present, not before fall. It does not seem to me to be a good idea for me to do another story about scientists going crazy too soon— neither for me as a writer trying to build a commercial reputation, nor for the magazine.

Furthermore, it is a big idea; I would want to use not less than fifty thousand words. I have a serial on the stands now; I don't suppose that you want to publish another serial by me for a year, at least—or have I incorrectly estimated the commercial restrictions.

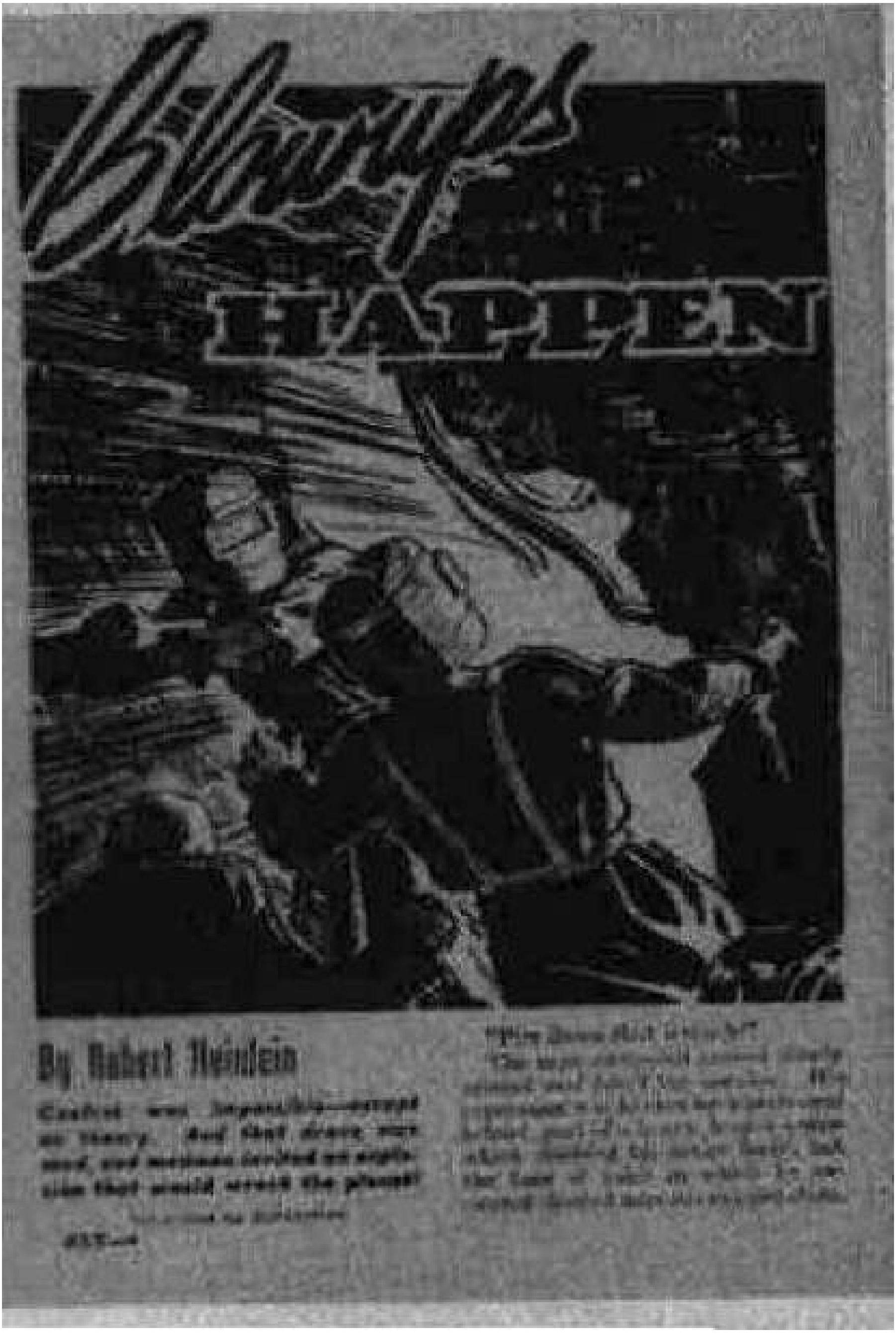

Blowups HAPPEN

By Robert Heinlein

"Blowups Happen," *Astounding,* September 1940. Art by Charles Schneeman.

EDITOR's NOTE: During the summer of 1940, Robert visited John Campbell in the east, the two became fast friends. Letters went back and forth, at great length.

November 2, 1940: Robert A. Heinlein to John W. Campbell, Jr.

.. . I turned it down, stating that the rate for my own name was higher than that. (I may let them publish "Lost Legacy" under a pseudonym, as it is one that I really want to see published. I am going to give a slight amount of rewriting to make it science fiction rather than fantasy, but still let it say the things I want it to say.)

Having touched on my personal policy to that extent, I feel obliged to be more specific, since it concerns you, too. I am going up, or out, in this business—never down. I don't want to write pulp bad enough to slip back into a lower word rate, and a hack attitude. As long as you are editing, at Street and Smith or elsewhere, you can have my stuff, if you want it, at a cent and a quarter a word, or more if you see fit and the business office permits. I won't use an agent in dealing with you, although I now have one. Neither my name nor the name of Anson MacDonald will be made available to any other book at the rate at which you buy from me, and, if I get an offer of a better rate, I will let you know and give you refusal, as it were, before switching. I write for money and will sell elsewhere for a materially higher word rate, but I feel a strong obligation to you. No other editor will get the two names you have advertised and built up at the rates you pay.

I seem to have drifted a long way from stating my own policy and intentions. I will probably go on writing, at least part time, indefinitely. If you someday find it necessary to start rejecting my stuff, I expect to take a crack at some other forms, slick perhaps, and book-form novels, and in particular a nonfiction book on finance and money theory which I have wanted to do for a long time, also some articles on various economic and social problems. I have an outlet for such things, but it would be largely a labor of love—maybe ten dollars for an article into which has gone a week of research, and slim royalties on books in that field. Howsomever, I might crack the high word rates on general fiction at the same time. One never knows—I never expected to be writing pulp, or fiction of any sort, but it has paid me well ... to my surprise!

Addendum to remarks about my own policy: You may possibly feel that my wish to get out of the field of science fiction and into something else smacks of ungratefulness, in view of the way you have treated me. That is the very reason why I am looking forward to another field. I dislike very much to have business relations with a close personal friend. The present condition in which you like and buy everything I write may go on for years. If so—fine! Everybody is happy. But it would be no pleasure to you to have to reject my stuff, and certainly no pleasure to me. And it can happen at any time—your editorial policy may change, or my style or approach may change, or I may simply go stale. When it does occur, I want to cut it off short without giving it a chance to place a strain on our friendship. I don't want it to reach a point where you would view the reception of one of my manuscripts with a feeling of, "For Christ's sake, why doesn't he peddle his tripe somewhere else. He *knows* I hate to turn him down." And I don't want to greet a series of returned manuscripts in my mailbox with a feeling of, "Good God, what does he *expect* for a cent and a quarter a word? The New Testament?" Nor do I want you taking borderline stories from me simply because you hate to bounce them. I suspected that might be the case with the tesseract story ["—And He Built a Crooked House"].

Right now I know I am a profit-making commercial property, because the cash customers keep saying so in the Analytical Laboratory, but I don't intend to hang on while slipping down into fourth or fifth place. No, when I quit, I'll quit at the top, in order to insure that our business relations will never become unpleasant or disappointing to either of us. Which is a long and verbose way of saying that I value your friendship very highly indeed and intend to keep it if I can.

February 13, 1941: John W. Campbell, Jr. to Robert A. Heinlein

. . . We'll pay you l 1/2 cents a word for your stories. Your guarantee that your *name* will not appear in other science fiction or fantasy magazines. And, naturally, your keeping the said arrangement strictly under the lid. Since "Anson MacDonald" is as much your name now as "Robert Heinlein," built up in and by *Astounding,* that goes, too. If you get an offer at 1 3/4 or 2 cents a word-grab it. It will promptly dispose of competition, or it will fade out very quickly. That's steeper than any modern scf. book can economically pay for anybody.

February 17, 1941: Robert A. Heinlein to John W. Campbell, Jr.

.. . One exception to the above that might amuse you—I have a phony name [Lyle Monroe] and a phony address, fully divorced from the RAH persona, under which and from which I am trying to peddle the three remaining stinkeroos which are left over from my earliest writing. For such purpose I *prefer* editors whom I do not like. It would tickle me to sell off the shoddy in that fashion. I don't think it is dishonest—they examine what they buy and get what they pay for—but I 'm damned if I'll let my own name even appear on one of their checks.

.. . I think my meaning is clear, and I will, as I believe you know, live up to it. Let me add this: If the going gets tough and the business office tells you to cut rates, I will go back to a cent and a quarter a word without murmur, *provided it is the highest rate you pay anyone.* As long as you pay anyone a cent and a half, I want it. If my stuff starts slipping and is no longer worth top rates, I prefer to quit rather than start the downgrade. Same thing I had to say once before with respect to rejections—I don't like 'em and will quit the racket when they start coming in. I know this can't go on forever but, so help me, having reached top, in one sense, I'll retire gracefully rather than slide downhill.

September 6, 1941: Robert A. Heinlein to John W. Campbell, Jr.

From your last two letters I am forced to conclude that you and I are talking somewhat at cross-purposes—you are apparently under the impression that I am still writing. To be sure, I did not drop you a card saying, "I retired today." I could not—under the circumstances it would have seemed like a childish piece of petulance. Nevertheless, I knew that I would retire and exactly when and why, and I sent a letter to you a number of months back in which I set forth my intention and my reasons. Surely you recall it? I know you received it, for you commented on it. The gist of the matter was that I intended to continue to make the writing of science fiction my principal occupation until I received a rejection slip, whereupon I would retire. I told you about it ahead of time so that you would know it was not pique, but a thought-out plan, which motivated me.

You will remember that in 1940 I was already looking forward to retiring in a few months. Well, the time came when I should have retired, but I couldn't—I couldn't afford to; you were buying everything I wrote at nice fat rates. A day's work paid me at least thirty dollars and usually more. I couldn't enjoy loafing; if I stayed away from the mill it had to be for some reason I could justify to my residual puritan bias. So I took myself to one side and said, "Look here, Robert, this has got to stop. You haven't any need for more money; the possession of more money simply leads you into expensive tastes which in no way increase your happiness. In the meantime you are getting fat, shortwinded, and soft, and ruining your digestion to boot." To which Robert replied, "Yeah, boss, I know. But look—it's the money machine. Just punch it, and the dollars fall out. Money, money, money, money!" So I had to speak to him sternly, "Money! Sure, money is nice stuff, but you don't need much of it. We settled that when we entered the navy, and we proved it the time you got stung buying that silver mine." To which he answered, "Yeah, but look—you could buy the GE Home Workshop. You could put it right over there—and it costs only $110." "Another gadget! You know what I think of gadgets. When would you use it, anyhow?" "Don't give me that stuff! You know you like gadgets." "Well, within moderation, but the lust for them is a vice." "It is, eh? You've got it pretty bad then." "I have not," I answered with dignity. "I can take them or leave them alone. Besides, I would rather make them than buy them." The argument went on and on. He pointed out to me that money did not have to be spent; it could be loaned or given away. (We were both agreed that it should never be saved, except for specific short-term purposes.) I said, "When did you ever give or loan money that the deal didn't turn sour?" He mentioned a couple of times, and I was forced to admit he was right; "—besides, we could be more careful about it," he added hopefully.

The upshot of the matter was a compromise. I agreed to let him continue to punch the alphabetical slot machine just as long as he hit the jackpot every time; the first time he failed to get his nickel back we would quit.

So—at long last came the envelope I had been looking for, a rejection instead of a check [for "Creation Took Eight Days," later published as "Goldfish Bowl"]. I had a quick pang of regret over the money I didn't get, which was washed away by the pleasant knowledge that school was out at last. I spent the whole day taking pictures. I spent the next day starting the excavation for a swimming pool, a project which I have had in mind for five years, which I have been ready to commence for some months, but which takes time, lots of it. I could hire it done by staying at the typewriter, but that was not the idea—I wanted the heavy physical exercise [that] a pick, shovel, and wheelbarrow provide.

Besides that, I have had a number of typewriter projects in mind which have been indefinitely postponed because I was busy with S-F. In particular a short book on monetary theory which should have been written eighteen months ago. That is a "must" and will probably be finished this winter. I expect it to be published but I probably won't make any money out of it. Besides that, I have been urged to tackle a primer of semantics and general semantics. I am moderately well prepared for the task, having had five seminars in the subject; nevertheless there is a lot of research to be done and a monumental task of devising lucid pedagogical methods in a most difficult field, involving as it does a very nearly complete reorientation in methods of thinking even for the "educated" reader. I estimate that it may take from two to five years to complete. Incidentally, if you are interested, I would be willing to do a popular article or two on the subject for *Astounding. I* offered to do so once before, you may recall, but you made no answer.

Besides the above, I am going to try to do at least one novel for book publication and will probably try a flyer in slicks, most likely through Virginia Perdue's agent. I haven't had much luck with agents up to now, and it seems to be agreed that a good agent is almost a *sine* *qua non* for such endeavor.

The above plans, although numerous and involved, are leisurely in their nature—which is what I have been wanting. I want to be able to stop, sit down, and "invite my soul" for an hour, a day, or a week, if I feel the need for it. I don't know yet what my principal task in this world is, if I have one, but I do know that I won't find it through too much hurrying and striving ...

.. . I have gone on, wordily, because it is important to me that you should understand my motives—I want your approval. Let me pose a rhetorical question: What incentive is there for me to remain a full-time writer of science fiction? At the present time I am the most popular writer for the most popular magazine in the field and command (I believe) the highest word rate. Where is there for me to go but down? I can't go up in this field; there is no place to go ... Frankly, the strain is wearing on me. I can still write, but it is a terrific grind to try each week to be more clever than I was the week before. And if I do, to what purpose. First is the highest Ican stand; a cent and a half a word is the most I can hope to be paid.

I will not attempt to pep up my stories by introducing a greater degree of action-adventure. It is not my style. It seems to me that the popularity of my stuff has been based largely on the fact that I have continually enlarged the field of S-F and changed it from gadget motivation to stories more subtle in their themes and more realistically motivated in terms of human psychology. In particular I introduced the regular use of high tragedy and completely abandoned the hero-and-villain formula. My last story, the one you bounced ["Goldfish Bowl"], does not represent a change in the sort of thing I have been doing, but a logical and (for my taste) artistic extension of the theme. I don't blame you for bouncing it; if you did not see the point of the story, you have no reason to think that your customers would. Nevertheless, the story had a point, a most important point, a most powerful and tragic one. Apparently I expressed the point too subtly, but you and I have rather widely divergent views about the degree of subtlety a story can stand. For my money you have damaged a great many excellent stories you have printed by telegraphing the point of the story on the contents page, in the blurb under the title, and in the subtitles under the illustrations. And you damn near ruined "Requiem" by adding four lines to the end which led the reader up a blind alley, clear away from the real point of the story.

Anyhow—I'm not trying to sell you that last story; I'm just trying to say that it was not a pointless story, but one of the most daring themes I have ever tackled, and, so far as I know, never before attempted in science fiction.

Returning to our muttons: I am extremely grateful to you for the help you have been to me in every way during this two-year try at commercial writing. And I don't want you to feel that I have taken what I wanted and walked out. One of my reasons for the continual scouting I have done for *Astounding* and *Unknown* has been that I anticipated my own retirement and wanted to be able to say, "Okay, John, I'm quitting, but here are half a dozen other writers, my proteges, who take my place several times over." I expect to continue that scouting indefinitely.

SIXTH COLUMN

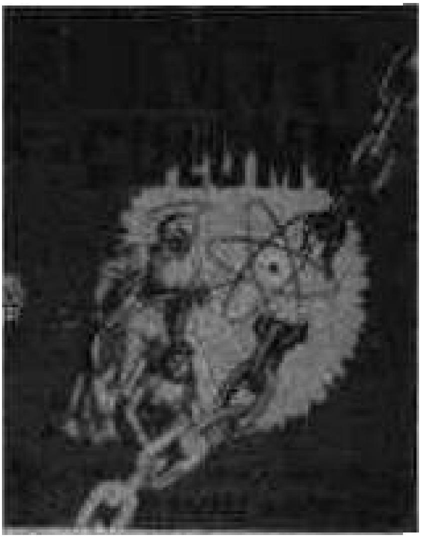

"Sixth Column" also ran as a serial in *Astounding* in 1941,

When Ardmore reached the secret, buried Citadel, only six men were alive there. PanAsia has just completed the total conquest of the United States, and the men are despondent. The scientists have just discovered and begun exploring three new spectra beyond the electromagnetic—the electrogravitic, the magnetogravitic and the electromagnetogravitic. These could create seeming miracles—levitation, simple transmutation, instant cure of any germ-or virus-caused disease, *etc.* No one knows what to do with them. But Ardmore, with an advertising man's imagination, suggests the start of a new "religion," since the PanAsians do not interfere with the religions of the "slaves."

And with the new science and enough mumbo jumbo, they go forth to bedazzle, frustrate, and drive the PanAsians back to their homelands. (This was Heinlein's first full novel.)

Besides that, I have laid down no hard and fast ultimatum to myself that I won't write science fiction at all. If I get an idea that really intrigues me, I'll write a story about it and submit it. Naturally, I don't expect you to maintain the former financial arrangement. I won't take a rate cut, but you are welcome to buy at a cent a word under the Lyle Monroe name, a cent and a quarter for Caleb Saunders, or, if you think a story merits it, a cent and a half for Heinlein or MacDonald. If one of the latter two makes the grade in slicks, it will be withdrawn from pulp entirely, but that is still a remote possibility.

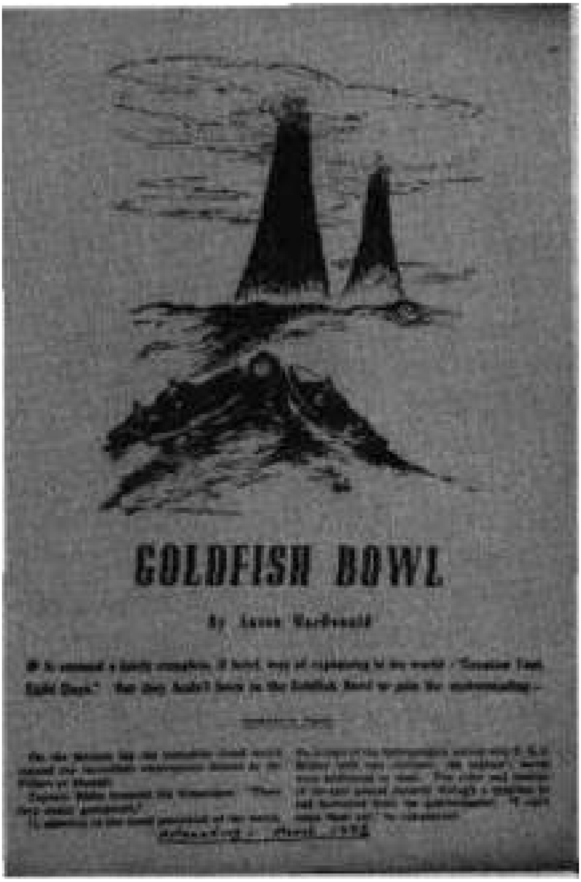

GOLDFISH BOWL

By Anson MacDonald

"Goldfish Bowl," published in *Astounding,* March 1942 under pseudonym Anson MacDonald. Art by Kramer. "Goldfish Bowl" had originally been rejected by Campbell, but eventually Heinlein and Campbell agreed on revisions.

SIXTH COLUMN

September 16, 1941: Robert A. Heinlein to John W. Campbell, Jr.

My own work—I am taking you at your word that "Creation Took Eight Days" ["Goldfish Bowl"] can be fixed up to sell to you in either one of two ways, by changing the ending or by changing the earlier part to make the ending less of a surprise. Of the two I prefer to change the earlier part; otherwise it is a completely different story and not my kind of a story. I have never written a World-Saver story of the usual formula, because I don't believe in them. Even in "Sixth Column" I was careful to point out that the job was just started and never would be finished. This particular story was intended to give an entirely fresh angle on the invasion-by-alien-intelligence theme. So far as I know, every such story has alien intelligences which treat humans as approximate equals, either as friends or as foes. It is assumed that A-I will either be friends, anxious to communicate and trade, or enemies who will fight and kill, or possibly enslave, the human race. There is another and much more humiliating possibility—alien intelligences so superior to us and so indifferent to us as to be almost unaware of us. They do not even covet the surface of the planet where we live—they live in the stratosphere. We do not know whether they evolved here or elsewhere—will never know. Our mightiest engineering structures they regard as we regard coral formations, i.e., seldom noticed and considered of no importance. We aren't even nuisances to them. And they are no threat to us, except that their "engineering" might occasionally disturb our habitat, as the grading done for a highway disturbs gopher holes.

Some few of them might study us casually—or might not. Some odd duck among them might keep a few of us as pets. That was what happened to my hero. He got too nosy around one of their activities, was captured, and by pure luck was kept as a pet instead of being stepped on. In time he understood his predicament, except in one respect—he never did realize to its full bitterness that the human race could not even *fight* these creatures. He was simply a goldfish in a bowl—who cares about the opinions of a helpless goldfish? I have a fish pond in my patio. Perhaps those fish hate me bitterly and have sworn to destroy me. I won't even suspect it—I'll lose no sleepover it. And it seems to me that the most esoteric knowledge of science would not enable those fish to harm me. I am indifferent to them and invulnerable.

I used a working title of "Goldfish Bowl" but changed it because, in my opinion, it tipped the story. Now it appears that you want the story tipped more quickly. Perhaps the working title is almost the only change it needs. In any case, John, you habitually give the key idea of a story in the blurbs—sometimes, I think, to the detriment of the dramatic punch of a story. That was my reaction to the blurbing on "By His Bootstraps." (But you're the editor! I ain't complaining; I'm expressing an opinion.) I'll look the story over in a day or two and try to see where I can do some planting in the early part. If you have any specific ideas, please mention them right away; I am not quite sure what you want—the degree, at least. Maybe we'll have to ship this story back and forth a couple of times yet.

It will please me to sell this story for a reason that has developed since I last wrote to you. As you know, I have been gradually selling off the half-dozen stories you have rejected since I started writing. Last week I sold two in one day—the last two ["Pied Piper" and "My Object All Sublime," both under Lyle Monroe. Heinlein never permitted reprinting these]. Utter dogs they were, written in the spring of 1939. That leaves me with an absolutely clean sweep of having sold every word I have ever written from the first day I sat down to attempt commercial writing . . . So—a clean sweep right up to this last story. The opportunity to fix it up to sell is very pleasant.

September 17, 1941: John W. Campbell, Jr. to Robert A. Heinlein

I had forgotten that little point of yours. And now, of course, the thing sticks me at a wonderfully tender spot. Item: We went to large size, with about a 70% increase in consumption. Item: We have, novelettes, but are atrociously short of short stories. Item: We've had one good author who could really produce wordage. And now—now of all times!—that one wants to retire! Just when, it so happens, we haven't a single thing of yours on hand. Your proteges, helpful as they are, can, together, produce about as much, but not the quality, that you can. So—we launch the large-size, large-consumption book with the loss of the top one-third of our authors—the one man with three names.

Look—how about at least making it a new year's resolution, or something? By that time, maybe we can get shaken down into a better order.

On that story-that-bounced: Science fiction is normally read as light, escape literature. The reader does not expect or seek heavy philosophy; particularly, he does not expect or prepare himself for heavy philosophy when he reads a story that shows every sign of being action-adventure. Bathyspheres—alien something-or-others—men vanishing and men killed—heavy menace, with Navy personnel called in to look into it—something powerful and active under way here, with violent action ending in a solution—

Or at least that seemed the setup. The answer you gave was utterly unexpected, the right answer to the wrong question, so to speak. Therein it was a seemingly pointless question-and-answer, and disappointing to the reader. At Heinlein-MacDonald l 1/2 cent rates, I can't disappoint; alteration of either the answer—so it fitted the question the reader was asked—or of the question into a form that more evidently called for the type of answer provided, would make it click. The answer provided did make a highly interesting point, but a point overwhelmed in the rush of unfulfilled expectation of action-adventure.

In general, if you retire abruptly at this particular moment, *Astounding* is going to feel it in much the way one's tongue feels a missing tooth just after it's been yanked.

So far as going up goes, I'll agree you can't very well. I can agree with your desire to retire, under your circumstances. But look—when you don't have to, writing's a lot of fun. When you have to fill magazines, as I do, good manuscripts are godsends. Be god for a little while more, and send more, willya?

I know one thing: I'm going to get some loud and angry howls from readers.

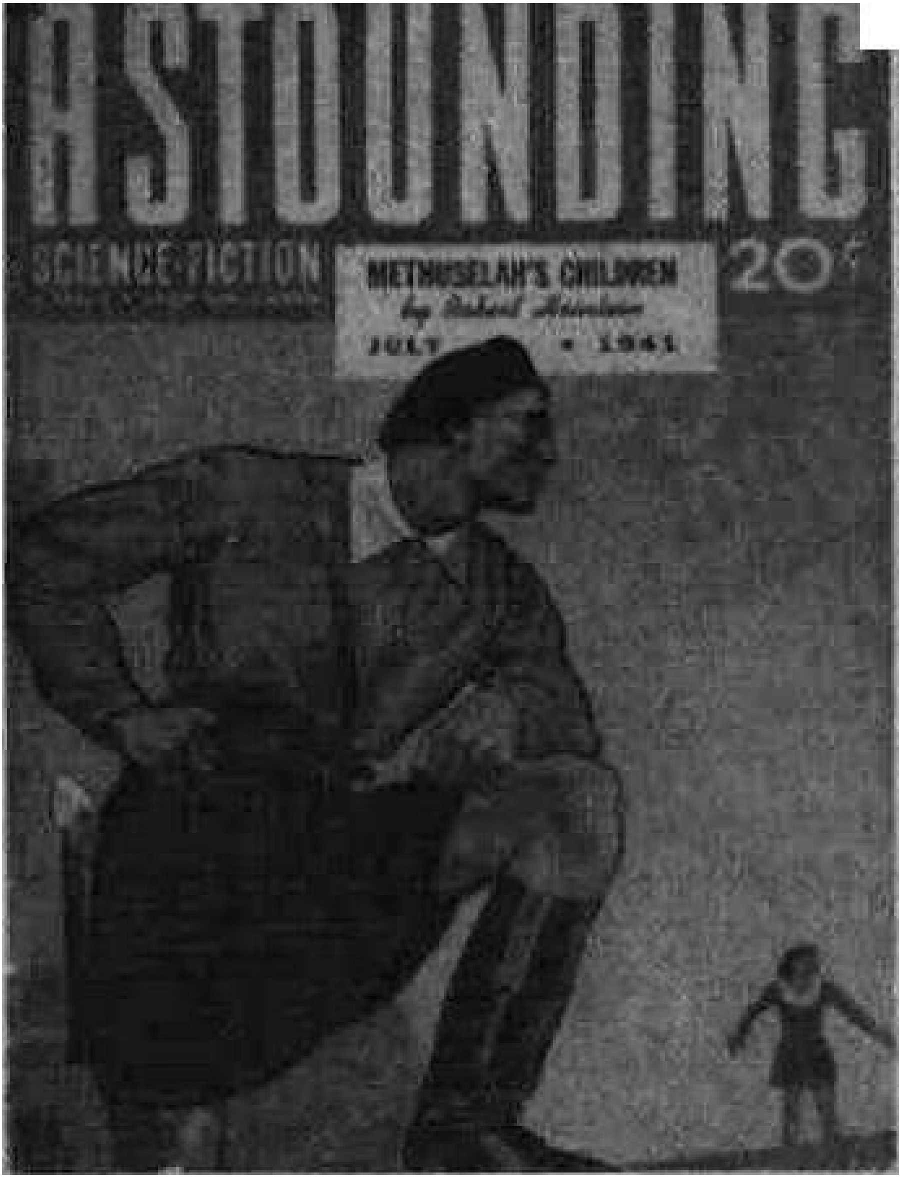
ASTOUNDING
SCIENCE-FICTION
METHUSELAH'S CHILDREN
by Robert Heinlein
JULY • 1941
20¢

"Methuselah's Children," Heinlein's tale of a super-race, *Astounding,* July through September 1941. Art by Hubert Rogers.

September 19, 1941: John W. Campbell, Jr. to Robert A. Heinlein

In re your own stories. Novelettes are your meat—those and short serials, which will be, under the new setup, short novels complete in an issue. You need elbow room to develop the civilization background against which your characters act. I know that, and have suggested shorts to you mainly when I was kinda desperate for short stories that couldn't be smelled before opening the book.

September 25, 1941: Robert A. Heinlein to John W. Campbell, Jr.

I think I've got it. Darned if I don't think so. The serial, I mean—the one I've been looking for ["Beyond This Horizon"].

Like this—for some time I've been wandering around in a blue fog, trying to get a theme, a major conflict suitable for a novel-length S-F story. I wanted it to be fully mature, adult, dramatic in its possibility—and not used before. Naturally, the last requirement was the sticker. Perhaps the possibilities in S-F have not been exhausted, but they have certainly been well picked over; for me, at least, it is hard to find a really fresh theme. But I started searching by elimination. First, I eliminated space travel. Old hat, and it tends to steal the scene from anything else. Then I assumed that the basic problems of economics and politics had been solved. Thus, in one sweep, I got rid of almost every type of story I have done up to this time.

Okay—in a world that is all peace-and-prosperity, what will men and women have left to struggle for? Problems of sex and marriage obviously, but I am not writing for *Ladies' Home Journal.* The basic problem of esthetics? Wide open for S-F treatment, and new, but the issues are subtle and it would be difficult to convince the readers that the problems of esthetics are susceptible to scientific analysis and manipulation. Same for metaphysical problems.

I seemed to be up against a dead end, when a possibility occurred to me which, while not new, has been futzed with rather than dealt with—the possibilities of genetics, and in particular, What Are We Going to Make of the Human Race? Mr. Tooker discussed it ably in the March '39 book, Stapledon has dealt with it on the grand scale in "Last and First Men," Taine-Bell suggested some possibilities in "The Time Stream," numerous superman stories have been written, and lots of stories of the mad-scientist-in-the-laboratory-creates-new-species type have been done. [Aldous] Huxley did a beautiful satire in *Brave New World,* and even Heinlein has brushed the edges of the subject in "Methuselah's Children," But it seems to me that there remains a different and in some ways better story yet to be written.

September 30, 1941: Robert A. Heinlein to John W. Campbell, Jr.

Herewith is a piece of utter hoke which you saw in its original form in 1939. I shortened it to fit an immediate market ready to buy it, but I am not obligated to sell it there. In its shortened form it seems somewhat improved and it occurred to me that, if you are still having trouble getting short stories "which can't be smelled before the book is opened," as you put it, this item might stand a chance. It isn't good, I know, but it may be no worse than the competition.

It is offered to you at one cent a word, under the Monroe name which appears on it, or under the name of Leslie Keith. God knows it is not worth a cent a word, but I believe that is your lowest rate. If you can't use it, place it carefully in the enclosed receptacle and bounce it back to me at once, so I can shoot it off to the low-pay, slow-pay market for which it is intended.

I suppose it is silly of me to waste time revising and selling these dogs, but this is the last of them, and it is a source of satisfaction to have disposed of all of them. And none of them took more than one rewriting, which isn't bad, since most writers do two drafts in any case.

Tomorrow I start revising "Creation Took Eight Days"["Goldfish Bowl"], which *won't* take me eight days and will leave two whole months for the serial. I've continued research every day and have a stack of notes *that* high. I'm going to like this serial, I think.

October 1, 1941: John W. Campbell, Jr. to Robert A. Heinlein

Re "By His Bootstraps." It's taking first place away from "Common Sense" . . . "Bootstraps" is not hack; it's the first all-out, frank attack on the circle-of-time story. It's a magnificent idea, and it's been worked out beautifully.

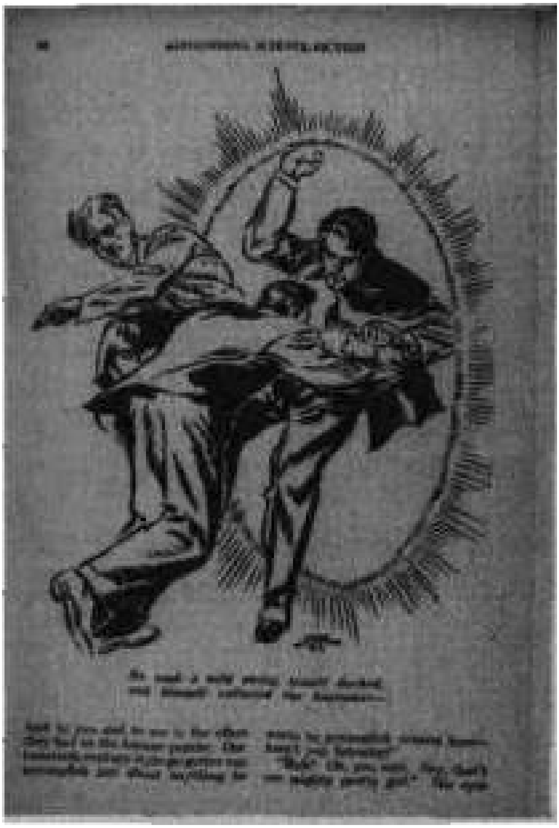

A scene from "By His Bootstraps,"*Astounding,* October 1941. Art by Hubert Rogers, an artist closely associated with *Astounding* and with Heinlein's works.

You've taken a minute, but highly intriguing point in the whole theory of time-travel, and built it up to the proportions it deserved. Reasons it's good, among others: you follow the thoughts of each of the several returns of Wilson, showing why he did, each time, say what he said, though he might well have tried to change from his remembered speech. You have a story in which, each time, the man from the future who knows more, says, "It's too long a story to explain," and brushing off the explanation, both intrigues and annoys the reader—and makes him like it.

October 4, 1941: Robert A. Heinlein to John W. Campbell, Jr.

I have been beset by insomnia while trying to get the serial started, and was forced last night to the expedient of twin beds and barbiturate. Under the influence of drugs I was awake only three times in the night, but got over eight hours sleep, by damn, and feel fine today. But serial still looks hopeless. The idea is grand, wonderful, and I see more interesting angles to it every day. But each day it looks a little more impossible to work out than the day before—for pulp. The events would take place with such geologic leisureliness. And there are other difficulties, which will be obvious to you. I don't know—I don't know.

... "By His Bootstraps" is still hack—a neat trick, sure, but no more than a neat trick. Cotton candy.

CHAPTER II

BEGINNINGS

October 16, 1941: Robert A. Heinlein to John W. Campbell, Jr.

I can write my own story with great speed when I start, but I am not yet satisfied as to the central conflict. I have several different central problems in my mind, any of which would make a story, but as yet do not have one which fully satisfies me. I want this story to be high tragedy rather than horse opera—full of gore and action as a Greek tragedy, but tragedy in the Greek sense. (Necessarily a tragedy, because wisdom required to control genetics wisely is superhuman, and I'm no superman.)

EDITOR'S NOTE: As the use of working titles was frequent, titles of stories are not always given. Now and then a final title to a story was affixed by the author, but, more often, the editor changed the title before the story saw print. It would only cause confusion here to show all the title changes some stories went through.

ASTOUNDING
Science-Fiction 25¢
BEYOND THIS HORIZON

"Beyond This Horizon," by "Anson MacDonald," *Astounding*

April and May 1942. Art by Hubert Rogers.

November 9, 1941: Robert A. Heinlein to John W. Campbell, Jr.

Here are the first ten thousand words of the current struggle ["Beyond This Horizon"]. Confidentially, it stinks. But I am and have been doing my goddamndest to turn out printable copy for you. My worst trouble is to get enough illustrative action into the story and to keep it from bogging down into endless talky-talk. I have stacks of notes on this story, more than twice as much as on any story I've ever done; the ideas it suggests really interest me—but I am finding it hard as hell to beat a *story* out of it.

But I am turning out copy and will continue to do so, at about two thousand words a day or more. Those spots on the right margin are my blood, a drop per line.

November 15, 1941: Robert A. Heinlein to John W. Campbell, Jr.

Here is another hunk of hack ["Beyond This Horizon"]. I think it well to let you see it in weekly chunks, as I am by no means confident of its quality and would like for you to look it over and comment on it as I turn it out. Then, if you get any brainstorms, I can incorporate them without delay. You appear to think better of this yarn than I do. I think it is going to require a *deus ex machina* to give the ending any real oomph—in my present sterile state of mind you may be elected *deus.*

December 2, 1941: Robert A. Heinlein to John W. Campbell, Jr.

I believe I am correct in assuming that required revisions and corrections can wait until I get to New York. Most of the changes, if any, would need to be made in the second installment. I think I have ducked around the taboos sufficiently; compare this story ["Beyond This Horizon"] with any issue *of Ladies' Home Journal—this* story is much more discreet than the stuff now printed in domestic magazines. I remember a story in Street and Smith's *National Magazine,* in which the hero scrubs the heroine's back—both raw. Me, I did not even suggest that sexual intercourse was an old human custom, and you can search the yarn from end to end without finding any reference to anatomical details.

I *did* include a scene involving telepathy with an unborn child—you suggested it. But I kept the mother off stage. I don't think there is a leer in the story. Lots of boy-meets-girl and some will object to that, but, dammit, there *had* to be—if the story was to be at all true to life.

December 8, 1941: John W. Campbell, Jr. to Robert A. Heinlein

I never meant to give you a feeling of extreme urgency.

Perhaps your interpretation—your personal emotional index—of "desire" comes closer to my intent than "need." Partly, that can be due to the situation best expressed this way: I need—in the sense of "must have without fail"—some tall stories. I need manuscripts. I desire some tall stories from you; I ardently desire manuscripts of the quality you produce.

(Curious—you and I each possess a vocabulary of perhaps 300,000 words, with a pretty fair ability to distinguish between the shades of meaning involved. And I can't quite adequately express the exact tone and intensity of value of the basic thought "I want you to write stories for *Astounding."*)

But for the future. I don't know what you'll be doing. I have no idea what pressure of work will be on you. I don't know whether you can ever write a story as a method of relaxation. (I can; it's as much fun as reading someone else's work.)

December 9, 1941: Robert A. Heinlein to John W. Campbell, Jr,

This is the first time in fortyeight hours that I have been able to tear myself away from the radio long enough to think about writing a letter. Naturally, our attention has been all in one direction up to now. We are still getting used to the radical change in conditions, but our morale is extremely good, as is, I am happy to report, that of everyone. For myself, the situation, tragic as it is, comes to me as an actual relief and a solution of my own emotional problems. For the past year and a half I have been torn between two opposing points of view—and the desire to retain as long as possible my own little creature comforts and my own snug little home with the constant company of my wife and the companionship of my friends and, opposed to that, the desire to volunteer. Now all that is over, I have volunteered and have thereby surrendered my conscience (like a good Catholic) to the keeping of others.

The matter has been quite acute to me. For the last eighteen months I have often been gay and frequently much interested in what I was doing, but I have not been happy. There has been with me, night and day, a gnawing doubt as to the course I was following. I felt that there was something that I ought to be doing. I rationalized it, not too successfully, by reminding myself that the navy knew where I was, knew my abilities, and had the legal power to call on me if they wanted me. But I felt like a heel. This country has been very good to me, and the taxpayers have supported me for many years. I knew when I was sworn in, sixteen years ago, that my services and if necessary my life were at the disposal of the country; no amount of rationalization, no amount of reassurance from my friends, could still my private belief that I ought to be up and doing at this time.

I logged in at the Commandant's office as soon as I heard that Pearl Harbor was attacked. Thereafter I telephoned you. The next day (yesterday) I presented myself at San Pedro and requested a physical examination. I am an old crock in many little respects—half a dozen little chronic ailments, all of which show up at once in physical examination but which I was able to argue them out of. Nevertheless, I was rejected on two counts, as a matter of routine—the fact that I am an old lunger and that I am nearsighted beyond the limits allowed even for the staff corps. They had no choice but to reject me—at the time. But my eyes are corrected to 20/20 and I am completely cured of T.B., probably more sound in that respect than a goodly percentage now on duty who never knew they had it. Sure, I've got scars in my lungs, but what are scars?

My feelings toward the Japs could be described as a cold fury. I not only want them to be defeated, I want them to be smashed. I want them to be punished at least a hundredfold, their cities burned, their industries smashed, their fleet destroyed, and finally, their sovereignty taken away from them. We have been forced into a course of imperialism. So let it be. Germany and Japan are not safe to have around; we are bigger and tougher than they are, I sincerely believe. Let's rule them. We did not want it that way—but if somebody has to be boss, I want it to be *us.* Disarm them and *don't turn them loose.* We can treat the individual persons decently in an economic sense, but take away their sovereignty.

Heinlein in his naval uniform, shortly after his graduation in June 1929. Contrary to his wishes, Heinlein did not see active military duty during World War II.

December 16, 1941: Robert A. Heinlein to John W. Campbell, Jr.

So far, I have not been able to peddle my valuable services. The letter in which I volunteered, accompanied by a certified copy of my physical exam report, is wending its way through the circuitous official channels. I stuck airmail postage with it with a memo to the Commandant's aide asking him to use same, and the letter asks for dispatch orders; nevertheless, it would not surprise me to be sitting here until January or so. In the meantime, I have been circulating around the offices of local naval activities, trying to find someone who wants me bad enough to send a dispatch asking for me. No luck so far. Damn it—I should have volunteered six months ago.

December 21, 1941: Robert A. Heinlein to John W. Campbell, Jr.

I was interested in your father's comment in re the navy, and in your further comments. Some of the comments he found fault with are real faults, some as you pointed out derive from a lack of knowledge of the true problems. Some of the real faults seem to me to be inherent in the nature of military organization and inescapable. The navy is an involved profession; it takes twenty-five years or so to make an admiral—and older men are not quite as mentally flexible as younger men. I see no easy way to avoid that. Is your father as receptive to new ideas as you are? Will he step down and let you tell him how to run AT&T? Is there any way of avoiding the dilemma? Nevertheless, the brass hats are not quite as opposed to new ideas as the news commentators would have us think. The present method of antiaircraft fire was invented by an ensign. Admiral King encouraged a warrant officer and myself to try to invent a new type of bomb (Note: We weren't successful.) You may remember that one of my story gags was picked up by a junior officer and made standard practice in the fleet before the next issue hit the stands. Nevertheless, there is something about military life which makes men conservative. I don't know how to beat it. Roosevelt has beaten it from the top to a certain extent by insisting on young men and/or men whose abilities he knew, but it is sheer luck that we have a president who has known the navy's problem and personnel since he was a young man. I know of no general solution.

I may get sea orders any day—along with a lot of other old crocks who would not have to go to sea if it had not been for that partisan opposition I spoke of ...

. . . Some of Hamilton Felix's point of view is autobiographical. [Hamilton Felix was the protagonist of "Beyond This Horizon."] I would like to have been a synthesist, but I am acutely aware that many of my characteristics are second-rate. I haven't quite got the memory, nor the integrating ability, nor the physical strength, nor the strength of character to do the job. I am not depressed about it, but I know my own shortcomings. I am sufficiently brilliant and sufficiently imaginative to realize acutely just how superficial my acquaintance with the world is and to know that I have not the health, ambition, nor years remaining to me to accomplish what I would like to accomplish. Don't discount this as false modesty . . .

I have just sufficient touch of genius to know that I am not a proper genius—and I am not much interested in second prize. In the meantime, I expect to have quite a lot of fun and do somewhat less constructive work than I might, if I tried as hard as I could. That last is not quite correct. I simply don't have the ambition to try as hard as I might, nor quite the health. But I do have fun!

In re mental-ostrichism and boycotting the war news: Along time ago I learned that it was necessary to my own mental health to insulate myself emotionally from everything I could not help and to restrict my worrying to things I could help. But wars have a tremendous emotional impact and I have a one-track mind. In 1939 and1940 I deliberately took the war news about a month late, via

Time magazine, in order to dilute the emotional impact. Otherwise I would not have been able to concentrate on fiction writing at all. Emotional detachment is rather hard for me to achieve, so I cultivate it by various dodges whenever the situation is one over which I have no control.

January 4, 1942: Robert A. Heinlein to John W. Campbell, Jr.

You suggest that my thinking about the navy I keep compartmented away from my thinking on other subjects. It is true that I have been oriented and indoctrinated by a naval education and naval experience. It is true that a man cannot escape his background—the best he can do is to try to evaluate it and discount it. But as to your "proof" (by, God save us, Aristotelian logic!) that I keep my mind compartmented—well, much more about that later; much, much more.

In the meantime, I shall "sound general quarters and return your fire." For a long time I have from time to time felt exasperated with you that you should be so able so completely to insulate your thinking in nonscientific fields from your excellent command of the scientific method in science fields. So far as I have observed you, you would no more think of going off halfcocked, within sufficient and unverified data, with respect to a matter of science than you would stroll down Broadway in your underwear. But when it comes to matters outside your specialties you are consistently and brilliantly stupid. You come out with some of the goddamndest flatfooted opinions with respect to matters which you haven't studied and have had no experience, basing your opinions on casual gossip, newspaper stories, unrelated individual data out of matrix, armchair extrapolation, and plain misinformation—unsuspected because you haven't attempted to verify it.

Of course, most people hold uncritical opinions in much the same fashion—my milkman, for example. (In his opinion, the navy can do no wrong!) But I don't expect such sloppy mental processes from you. Damn it! You've had the advantage of a rigorous training in scientific methodology. Why don't you apply it to everyday life? The scientific method will not enable you to hold exact opinions on matters in which you lack sufficient data, but it can keep you from being certain of your opinions and make you aware of the value of your data, and to reserve your judgment until you have amplified your data.

All I said with reference to the Pearl Harbor debacle was that the necessary data for an opinion was not yet in and that we should reserve judgment until the data was available. I added, in effect, that this was no time for the intelligent minority to be adding to the flood of rumors and armchair opinions flying through the country. I still say so. As an intelligent and educated man, you have a responsibility to your less gifted fellow citizens to be a steady and morale-building influence at this time. Your letters do not indicate that you are being such.

I am going to try to take up a number of points one at a time, some from your letters, some from related matters.

"Aid and comfort to the enemy, phui. Morale damage, hell." (From your letter) I am going to have to be rather directly personal about this. It may not have occurred to you that I am a member of the armed forces of the United States at the present moment awaiting orders, for sea duty I hope. Such comments as you have made to me might very well damage the morale of a member of the armed forces by shaking his confidence in his superior officers. There happens to be a federal law forbidding any talk in wartime to a member of the armed forces which *might tend* to destroy morale in just that fashion—a law passed by Congress, and not just a departmental regulation. It so happens that I am sufficiently hardheaded, toughminded, and conceited not to be much influenced by your opinions of the high command. I think I know more about the high command than you do. Nevertheless, you were not entitled to take the chance of shaking my confidence, my willingness to fight. And you should guard your talk in the future. It might, firsthand, secondhand, or third hand, influence some enlisted man who had not the armoring to his morale that years of indoctrination gives me.

Bear in mind that my advice to you is based on a law specifically intended by the Congress under the Constitution to restrict the freedom of speech of civilians in wartime in their relations with the military. If you don't like the law, write to your congressman about it. If you feel you must express yourself, write it down and save it until the war is over—but *don't* tell a member of the armed forces that his superiors are stupid and incompetent. Don't write to Ron [L. Ron Hubbard] in such a vein. He has not my indoctrination and he *is* in the battlefield. If you feel that the high command is incompetent, take it up with your congressman and your senators. Those of us in the service must work under the officers that are placed over us—it doesn't help to try to shake our confidence in them.

.. . I've dug down into my personal funds many times to entertain visiting congressmen, visiting notables, *etc.* There are no funds appropriated for such things; the commissioned officers pay for them themselves. Naval officers act as scout masters for sea scouts. They are always available to speak before any body of persons willing to listen—travel to and from at his own expense, or charged to ship's service *(a private* fund) by his C.O. We always have had public relations officers and we always have done everything we knew how to do to foster goodwill for the navy. In addition to that, the naval affairs committees of both houses are kept constantly informed in detail of the needs of the navy and the strategic reasons therefor.

Our efforts were pitifully inadequate. How could they be adequate? In the first place, we aren't advertising men and we don't know how. In the second place, even if we knew how, we had no appropriations to work with. All we could do was to talk, and that got us damned little newspaper space and no billboards. Of course, we could get an occasional scholarly article published—much good that did!

Heinlein in his white naval uniform, (early1930s)

Heinlein's Fencing Champion medal.

. . . You may consider my reaction as a type form professional reaction; it derives from my orientation and indoctrination. It is quite evident from the suggestion you made and your answer to my reaction that you have not the slightest understanding of the psychology of a professional military man. I don't know quite how to explain this. It is a heavily emotional matter and goes back to some basic evaluations. Let me put it this way: Take a young boy, before he has been out in the business world. Put him into the naval academy. Tell him year after year that his most valuable possession and practically his only one is his personal honor. Let him see classmates cashiered for telling a small and casual lie. Let him see another classmate cashiered for stealing a pair of white silk socks. Tell him that he will never be rich but that he stands a chance of having his name inscribed in Memorial Hall. Entrust him with secrets. Indoctrinate him so that he will consider himself locked up and unable to move simply because his sword has been taken away from him. Feed him on tales of heroism. Line the corridors of his recitation halls with captured flags. Shucks, why goon with it—I think you must see what I am driving at. That will produce a naval officer, a man you can depend on to be utterly courageous in the face of personal danger regardless of the sick feeling in his stomach, but it won't produce an advertising man.

Naval officers, as a group, are no more temperamentally capable of producing the kind of sensational publicity you suggest they produce than they are of sprouting wings and flying.

Furthermore, if they were, they would be no damn good as naval officers. A naval officer is much more than a man with a certain body of technical information. He is a man trained to respond in a certain behavior pattern in which "honor" and "service" have been substituted for economic motivation. I don't know whether I have convinced you or not, but I can assure you that it would be almost impossible to find an officer who has spent his entire adult life in the fleet who could put over the sensationalism you suggest. It is about like asking a priest to desecrate the sacrament.

Certainly the navy has specific secrets. In peacetime they are limited to such things as the details of weapons (and occasionally the existence of a weapon), codes and ciphers, the numerical details of gunnery scores, the insides of certain instruments, and similar details in which we are *trying* to keep a little ahead of the next. You spoke of "official spies" being shown things which are kept from the public. Who handed you that piece of guff? I know what you mean—foreign officers. Unless they are allies, they don't see anything that newsreel men don't see. I remember once being ordered to chaperone a British naval officer. I was admonished never to let him out of my sight and was given a list of things he must *not* see. I even went into the head with him. . . .

Of course, in wartime practically everything is secret—and a damned good thing! But the essential matters on which a civilian could make up his mind whether or not we need a big navy aren't secret, never have been secret, and by their nature can't be secret. Geographical strategy, for example, and the relative strengths of the fleets of various nations. *Jane's Fighting Ships* is not a particularly reticent book, and I know you have seen it. Navy yards aren't hard to get into. In normal times, naval vessels run boats for any visitor who wants to come aboard—and the ship's police has a weekly headache to make sure none get into the firecontrol stations and similar places.

I am completely bewildered as to what you mean by the "hush hush" attitude of the navy. I would certainly appreciate some facts.

Lots of civilians are necessarily entrusted with certain naval secrets. I've sailed with many a G.E., Westinghouse, and AT&T engineer. The gadget of mine that was taken over by the fleet was developed by one of your father's engineers. I doubt if he personally had any occasion to know about it, but don't ask him about it and don't try to conjecture what it might be. Don't mention it to anyone, lest they do a little guessing. By mentioning the *class* of engineer that developed it I have shown greater confidence in you than I have in any other civilian. Let it stand that it is a proper military secret and that we hope that we are the only navy using it.

It is quite possible that a request for a piece of information is turned down when the questioner can see no reason why it should not be told. To that I can say only that the officers refusing to part with the information are the only possible judges as to whether or not public welfare is involved. Being human, they can make errors of judgment, *but no one can judge for them.* Obviously—if you hold a secret, I have no way of judging whether or not you should share it with me. Consequently, the responsibility for the decision rests entirely with you. A perfectly innocent request for information can be met with what appears to be an arbitrary refusal. How can the questioner know?

But, having been in the navy, and having held both confidential and secret information, I can assure you that it is not the policy of the navy to go out of its way to be mysterious. Decidedly not! On the contrary, it usually seemed to me that we were too frank, aboveboard, and open. It was too easy to get too close to really hush-hush stuff, to such an extent that it used to worry me.

Item: You excuse the somewhat wild remarks of yourself, [Fletcher] Pratt, and company, on the basis that you are sore as hell, especially so as you are navy fans and love ships. (Incidentally, you don't seem to want to be classed as part of the general public, yet seem to resent being advised to act like professionals in the matter.) If you think you're sore and upset, how do you think I feel? Pearl Harbor isn't a point on a floor game to me—I've been there. The old *Okie* isn't a little wooden model six inches long; she's a person to me. I've sketched her fuel lines down in her bilges. I was turret captain of her number two turret. I have been in her main battery fire control party when her big guns were talking. Damn it, man, I've *lived* in her. And the casualty lists at Oahu are not names in a newspaper to me; they are my friends, my classmates. The thing hit me with such utter sickening grief as I have not experienced before in my life and has left me with a feeling of loss of personal honor such as I never expected to experience. For one reason and one only—because I found myself sitting on a hilltop, in civilian clothes, with no battle station and unable to fight, when it happened.

EDITOR 's NOTE: Robert wrote stories for John W. Campbell, Jr. for Astounding *and* Unknown *for close to three years. When Pearl Harbor was attacked in 1941, Robert tried to persuade the Navy to take him back on active duty. Failing in that, he went to work in Philadelphia doing engineering at the Naval Air Experimental Station.*

The war over, Robert looked around at the wider horizons for his writing career. Four short stories were sold to the Saturday Evening Post, *then the most important and highest paying market, and he sold his first juvenile novel to Charles Scribner's Sons. The next market he tackled was motion pictures, and the successful* Destination Moon *resulted.*

"Gulf" was the only story Robert wrote after World War II which was intended solely for the Astounding *market. Occasionally his agent, Lurton Blassingame, would send a novel to John W. Campbell, Jr. Some of those*

were rejected for various reasons with lengthy letters of explanation from John Campbell to Robert. Those stories were never intended for that market, but Campbell would explain why the writing and stories were terrible—from his viewpoint. When Podkayne [Podkayne of Mars] *was offered to him, he wrote Robert, asking what he knew about raising young girls in a few thousand carefully chosen words.*

The friendship dwindled, and was eventually completely gone. It was just another casualty, probably, of World War II.

CHAPTER III

THE SLICKS AND THE SCRIBNER'S JUVENILES

TRY AT SLICKS

October 25, 1946: Robert A. Heinlein to Lurton Blassingame

The news that you sold "The Green Hills of Earth" to the *Saturday Evening Post* is very gratifying for more reasons than the size of the check. I am happy that we have cracked the top slick market; I am particularly happy that it was done with this story, as it is a favorite of mine which has been growing in my mind for five years.

EDITOR'S NOTE In the 1930s and 1940s and farther back, the Saturday Evening Post *was the elite market of the short story writer. It paid the highest rates and carried the most prestige.*

The Post *was on every newsstand, and was widely read. In addition to short stories, and serialized novels, it also ran many articles. To be well-informed, one read the* Post. *It was sold everywhere; the covers by Norman Rockwell were-especially featured. Each issue contained some articles, short fiction, and usually a series of stories concerning much the same cast, and it was the ambition of every short story writer to have one of these series going. Bonus rates were paid for such series.*

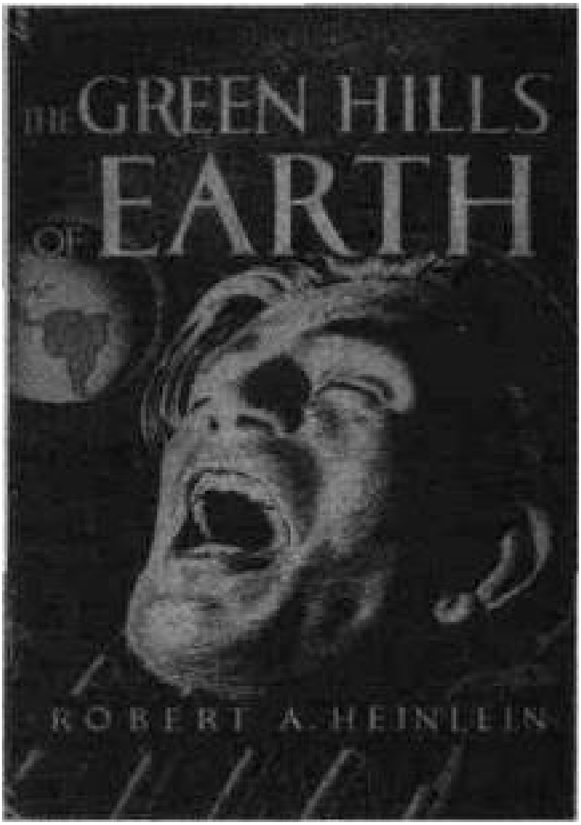

The Green Hills of Earth book cover—a story first serialized in the *Saturday Evening Post* February 8, 1947.

Selling the Post *was a boy's job, and boys would go from door to door selling the* Post, *with two companion magazines,* The Ladies Home Journal, *and* Country Gentleman. *One of Robert's first jobs as a child was being a P-J-G boy.*

The Saturday Evening Post *carried a column about the authors who appeared in each issue. The column was called "Keeping Posted, "and Robert was asked for material about himself and a picture. Because it was his first appearance in the* Post *with "The Green Hills of Earth" he was included in that column.*

. . . sending you on Monday another interplanetary short, intended for slick (the *Post,* I hope)—the domestic troubles of a space pilot, titled either "For Men Must Work" or "Space Pilot" ["Space Jockey"]. It took me a week to write it and three weeks to cut it from 12,000 to 6,000 [words]—but I am beginning to understand the improvement in style that comes from economy in words.(I set it at 6,000 because a careful count of the stories in recent issues of the *Post* shows that the shorts average a little over 6,000 and are rarely as short as 5,000.)

EDITOR'S NOTE Robert's ambition to write for higher paying and wider markets than pulp magazines caused him to look around for an agent who had good connections with other markets. For this purpose, he consulted L. Ron Hubbard, who introduced him to Lurton Blassingame.

Lurton had come to New York ambitious to write, but discovered that he could not make the grade. So he remained in the publishing center and became one of the most highly respected agents there. His brother, Wyatt Blassingame, sold regularly, if infrequently, to the Saturday Evening Post.

Robert became, eventually, Lurton's star client, but he was preoccupied with "world saving" after the atomic bombs were dropped. The articles he wrote did not sell. He then began the juvenile series of books—with Scribner's—starting with Rocket Ship Galileo *(working title:* Young Atomic Engineers). *For some years, he wrote one juvenile per year.*

The two men met on one of our trips to New York, and Robert urged Lurton to come to visit us in Colorado. Robert would accompany Lurton on a hunting trip, for elk and antelope and other game. I was asked to join them on fishing trips.

Although Robert neither hunted nor fished, he went on such trips with Lurton. During their trip to Gunnison, Colorado, where they went after elk, Robert "kept camp" while Lurton halted through the mountains, along with a group of other hunters. Lurton bagged an enormous elk, and we were left with a freezer full of elk meat. It was my impression that Robert went along on such trips for Lurton's company.

Heinlein choosing a magazine in Ojai (north of Ventura) around 1947.

Robert's next conquest, assisted by Lurton, was the Saturday Evening Post, *with "The Green Hills of Earth," followed by three other stories for that magazine.*

The friendship flourished, despite Robert's distaste fordoing business with friends. It lasted until Lurton in the late l970s, thinking of retirement, took on some younger associates. Robert's books are still handled by the Blassingame-Spectrum Agency in New York.

November 12, 1946: Robert A. Heinlein to Lurton Blassingame

. . . and I shall get back to work, probably on a story called "It's Great to Be Back!" A couple living in Luna City are about to return to Earth, their contracts completed after three years. They have been homesick the whole time and are always talking about it. They return to Earth and discover that they had forgotten the disadvantages of living on Earth—uncontrolled weather, dirt, colds-in-thehead, provincial attitudes, stupid and ignorant people (the residents of Luna City are of course exceptionally intelligent and civilized because of selection for those qualities—only persons of high IQs and social compatibility would pay the cost of sending them to the Moon and keeping them there), etc., *etc.* At the end of the story they are more homesick than ever—for Luna City!—and are straining a gut to get back there. The story will be used also to give a picture of Luna City and the conditions of life on the Moon, social and economic, for background and color.

EDITOR 's NOTE: Between 1947 and 1949, at least ten of Robert A. Heinlein's ' 'slicks" were published; four appeared in the Post *and two in* Argosy. *This was a remarkable achievement, but it was soon eclipsed by the success of his juvenile novels.*

ROCKET SHIP GALILEO

Rocket Ship Galileo

Rocket Ship Gallileo, in 1947, was Heinlein's entrance to the "big-name" publisher, Scribner's.

Ross, Art, and Morrie plan to start college in the fall, but meantime they are experimenting with model rockets. Then Art's uncle, atomic engineer and Nobel Laureate, Dr. Cargraves, seeing the quality of their work, offers them a chance to work with him. He's going to build the first rocket ship to the moon, atomic powered!

They are soon at work in an abandoned testing site, adapting an old commercial freight rocket, sold at scrap prices, for the new power. And soon they are able to take off and make their landing on the moon. But then their ship is suddenly bombed by another craft. They have landed within a few miles of a base of unreconstructed Nazis, who plan to still win the war by bombing Earth from the moon!

Overcoming the Nazis and getting their ship is quite a problem!

February 19, 1946: Robert A. Heinlein to Lurton Blassingame

I am going to write the juvenile outlined in my last [letter], starting two days hence. You will receive takes and a synopsis, and the finished manuscript should be in your hands about 15 March. [Two friends] convinced me that my own propaganda purposes will be served best by writing a series of boys' books in addition to the adult items previously described. I have purchased several of the popular boys' series novels and feel confident that I can produce salable copy —copy which can be sold to one of these markets: Westminster, Grosset and Dunlap, Crown, or Random House.

March 16, 1946: Robert A. Heinlein to Lurton Blassingame

I think his [the editor who turned down *Young Atomic Engineers*] conception of a story of the atomic era is inappropriate. We have entered a period of extreme change. I see two major possibilities— either a disastrous atomic war which will destroy for a long time the present technological structure, followed by a renaissance, the nature of which I am unable to predict, or a period of peace in which technical progress will be so enormously accelerated that only short range predictions can hope to be reasonably accurate. *Young Atomic Engineers* \ *[Rocket Ship Galileo]* is based on the latter of the two assumptions, i.e., a period of peace and unchecked technical progress.

In doing fiction about the future, I regard myself as a professional prophet—a man who makes an honest attempt to evaluate the probabilities and to write stories setting forth patterns inherent in those probabilities. If I am to be honest, I must prophesy what *think will (or could) happen, not what someone else thinks will happen. If Mr.* ——— *does not see my concept of the possibilities, he had better write it* *himself or get a hack writer who is willing to write another man's plot. That should be easy for him to do and I do not disapprove of such hack work—but it is almost impossible for me to do it, and I won't do it unless I'm hungry, which I'm not.p>*

(Young Atomic Engineers contains two conventional deviations from what I believe to be reasonably possible; I have condensed the preparation time for the trip and I have assumed that four people can do work which should require more nearly forty. Otherwise, I regard the techniques used in the story, and even the incidents, to be possible, albeit romantic and in some respects not too likely in detail. But I *do* expect space travel and I expect it soon. The counterplot is more than a possibility, it is a distinct menace—though it may not turn out to hinge on a base located on the Moon.)

.. . I suppose you are used to the method of having a writer send in a few chapters and a synopsis. I will do that when requested to, but, unfortunately, once I have gone that far with a novel, that novel will be finished about ten days later, or at least with such speed that only the fastest possible response from the publisher can affect the outcome very much. I am sorry, but it is a concomitant of how I work. I work slowly on a novel for the first few chapters only. As soon as I can hear the characters talk, it then becomes a race to see whether I put down their actions fast enough not to miss any of them. It is more economical in time and money and it results in a better story for me to work straight through to a conclusion, rather than wait for an editor to make up his mind whether or not he likes it. Editors are not likely to like my advance synopses in any case, for it is simply impossible for me to give the flavor of a story not yet written in a synopsis.

[(The additional books proposed for this series are: *The Young Atomic Engineers on Mars,* or *Secret of the Moon Corridors The Young Atomic Engineers in the Asteroids,* or *The Mystery of the Broken Planet, The Young Atomic Engineers in Business,* or *The Solar System Mining Corporation* and at least two more.)]

EDITOR's NOTE: September 24, 1946. Letter of this date says that editor at Scribner's liked Young Atomic Engineers.

September 27, 1946: Robert A. Heinlein to Lurton Blassingame

Young Atomic Engineers—I am delighted to hear that Alice Dalgliesh [editor at Scribner's] likes this ms. In my letter of 16 March 46 you will find a list of titles for a proposed series of sequels and considerable discussion of what I would like to do in re juveniles, as well as what I think might be done further to exploit this story. I expect to be guided by you in all those matters—my opinions are not final. I certainly would be willing to rewrite to editorial order and to plan stories to fit editorial desires in order to have my book brought out by so distinguished a house as Scribner's.

February 1, 1947: Robert A. Heinlein to Lurton Blassingame
I have signed the contract as you advised, but I am returning the contract to Scribner's through you in order that you may reconsider whether or not to ask them to make any changes in the contract . . . The manuscript has been revised and is now being retyped. It will be delivered to Scribner's by the tenth of February.

SPACE CADET

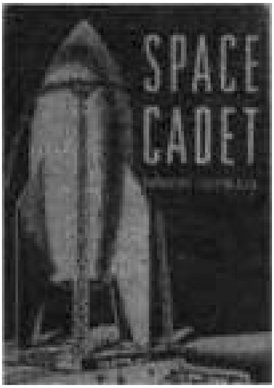

Space Cadet Scribner's, 1950. Cover art by Clifford N. Geary.

The training of cadets for the Interplanetary Patrol takes place in Colorado, in space, and on actual patrol. Following some violent physical tests to see whether an aspirant is able to undergo the rigorous environment of space, the cadets go to training in the school ship.

They learn how to handle themselves in free fall in addition to the required academic subjects. Senior cadets take the younger ones in hand to teach them the traditions of the Patrol.
As a part of their training, they go as very junior officers on a patrol ship, and Matt and Tex run into an adventure in Venus jungles . . .

July 18, 1947: Robert A. Heinlein to Lurton Blassingame
Miss Dalgliesh and I agree with you on *Space Cadet,* but I won't write it until later this year.

February 17, 1948: Lurton Blassingame to Robert A. Heinlein

No danger of Scribner's turning down *Space Cadet.*

August 1, 1949: Robert A. Heinlein to Lurton Blassingame
There is a correction to be made in *Space Cadet,* which I have already given Scribner's for the second edition; it occurs to me that it should be made in the Norwegian, Italian, and Dutch editions. Will you relay it for me? It is quite simple: on the very last page there is a line of dialog: "Never lead with your left." It should, of course, read, "Never lead with your right."

EDITOR 's NOTE: This mistake resulted from the manuscript's having been read by me, Lurton (who was lefthanded), and several editors at Scribner's (none of us knew anything about boxing).

January 5, 1951: Robert A. Heinlein to Lurton Blassingame
I have written Miss Dalgliesh about the TV scripts *[TomCorbett, Space Cadet].* Did you read them? If so, you know how bad they are; I don't want an air credit on that show (much as I appreciate the royalty checks!) and I am reasonably sure that a staid, dignified house like Scribner's will feel the same way. It has the high moral standards of soap opera.

RED PLANET

Red Planet, Heinlein's1949 juvenile for Scribner's, began the conflict between Heinlein and his editor Alice Dalgliesh.

Jim Marlowe, a teenaged Martian colonist, takes his pet Willis, a Martian bouncer, away to school with him. The headmaster impounds Willis, since pets are not allowed at school. Jim rescues the bouncer, and he and his friend Frank run away from school, taking Willis with them.

After a wild cross-country trek which includes a visit to a Martian building, the three are able to thwart a plot to prevent the colonists from making their annual migration. Thanks to Willis's ability to record exactly voices and words that he has heard, the colonists revolt against the plan, not wishing to live through an extremely cold Martian winter in high latitudes.

November 18, 1948: Robert A. Heinlein to Lurton Blassingame

Enclosed is a copy of notes for a new novel *[Red Planet]* for Miss Dalgliesh, plus a copy of the letter to her . . . Read the letters, read the notes as well, if you have time. Advice is welcomed.

The decision to postpone the ocean-rancher yarn *[Ocean Rancher* was supposed to be the third book in the Scribner's series, but it was never written.] called for a revision of my writing schedule. These are my present intentions: while Miss Dalgliesh is making up her mind, I intend to do one short story, 4,000 words, intended for adult, slick, general market, with *Post, Colliers, Town and Country, This Week,* and *Argosy* in mind. I should be able to show this to you by the middle of December.

If Miss Dalgliesh says yes, I will write the boys' novel next, planning to complete it before January 31. While she is looking it over, I expect to do another 4,000-word slick, following which I will revise the novel for Miss Dalgliesh. That should take me up to the end of February.

March 4, 1949: Robert A. Heinlein to Lurton Blassingame

There is actually no need for you to read this letter at all. It will not inform you on any important point, it will contain nothing calling for action on your part, and it probably will not even entertain you. I may not send it. I have a number of points to beef about, particularly Miss Dalgliesh; if Bill Corson [a friend who lived in Los Angeles] were here, I'd beef to him. He not being here, I take advantage of your good nature. I have come to think of you as a friend whom I know well enough to ask to listen to my gripes.

If Miss D. had said *Red Planet* was dull, I would have had no comeback. We clowns either make the audience laugh or we don't; if we entertain, we are successes; if we don't, we are failures. If she had said, "The book is entertaining but I want certain changes. Cut out the egg-laying and the disappearances. Change the explanation for the Old Martians," I would have kept my griping to myself and worked on the basis that the Customer Is Always Right.

She did neither. In effect she said, "The book is gripping, but for reasons I cannot or will not define I don't want to publish it."

I consider this situation very different from that with the publisher in Philadelphia who first instigated the writing *of Rocket Ship Galileo.* He and I parted amicably; he wanted a book of a clearly defined sort which I did not want to write. But, from my point of view, Miss Dalgliesh ordered this particular book; to wit, she had a standing arrangement for one book a year from me; she received a *very* detailed outline which she approved. She got a book to that outline, in my usual style. To my mind that constitutes an order and I know that other writers have been paid their advance under similar circumstances. I think Scribner's owes us, in equity, $500 even if they return the manuscript. A client can't take up the time of a doctor, a lawyer, or an architect, under similar circumstances without paying for it. If you call in an architect, discuss with him a proposed house, he works up a floor plan and a treatment; then you decide not to go further with him, he goes straight back to his office and bills you for professional services, whether you have signed a contract or not.

My case is parallel, save that Miss Dalgliesh let me go ahead and "build the house," so to speak.

I think I know why she bounced the book—I use "bounced" intentionally; I hope that you do not work out some sort of a revision scheme with her because I do not think she will take this book, no matter what is done to it.

I think she bounced the book from some ill-defined standards of literary snobbishness—it's not "Scribner's type" material!! I think that point sticks out all through her letter to me. I know that such an attitude has been shown by her all through my relationship with her. She has spoken frequently of "cheap" books, "cheap" magazines. "Cheap," used in reference to a story, is not a defined evaluation; it is merely a sneer—usually a sneer at the format from a snob.

ASTOUNDING
SCIENCE-FICTION
BY HIS BOOTSTRAPS
by Anson MacDonald
OCTOBER
1941
20¢

Dalgliesh's infamous example of Hubert Rogers' cover for the "cheap" magazine, John W. Campbell's *Astounding,* featuring "By His Bootstraps" by Heinlein's own alias, Anson MacDonald.

She asked me to suggest an artist for *Rocket Ship Galileo;* I suggested Hubert Rogers. She looked into the matter, then wrote me that Mr. Rogers' name "was too closely associated with a rather cheap magazine"— meaning John Campbell's *Astounding S-F.* To prove her point, she sent me tear sheets from the magazine. It so happened that the story she picked to send was one of my "Anson MacDonald" stories, "By His Bootstraps"—which at that time was again in print in Crown's *Best in Science Fiction]*

I chuckled and said nothing. If she could not spot my style and was impressed only by the fact that the stuff was printed on pulpwood paper, it was not my place to educate her. I wondered if she knew that my reputation had been gained in that same "cheap" magazine and concluded that she probably did not know and might not have been willing to publish my stuff had she known.

Rogers is a very fine artist. As an illustrator he did the trade editions of John Buchan's books. I am happy to have one of his paintings hanging in my home. In place of him she obtained someone else. Take a look at the copy of *Galileo* in your office—and don't confuse it in your mind with the fine work done by [Clifford N. Geary for *Space Cadet.* The man she picked is a fairly adequate draftsman, but with no ability to turn an illustration into an artistically satisfying composition. However, he had worked for Scribner's before; he was "respectable."

I think I know what is eating her about *Red Planet.* It is not any objection on her part to fantasy or fairy tales as such; she is very proud of having published *The Wind in the Willows.* Nor does she object to my pulp-trained style; she accepted it in two other books. No, it is this: She has fixed firmly in her mind a conception of what a "science fiction" book should be, though she can't define it and the notion is nebulous—she has neither the technical training nor the acquaintance with the body of literature in the field to have a clearly defined criterion. But it's there, just the same, and it reads something like this: "Science has to do with machines and machinery and laboratories. Science fiction consists of stories about the wonderful machines of the future which will go striding around the universe, as in Jules Verne."

Her definition is all right as far as it goes, but it fails to include most of the field and includes only that portion of the field which has been heavily overworked and now contains only low-grade ore. Speculative fiction (I prefer that term to science fiction) is also concerned with sociology, psychology, esoteric aspects of biology, impact of terrestrial culture on the other cultures we may encounter when we conquer space, etc., without end. However, speculative fiction is *not* fantasy fiction, as it rules out the use of anything as material which violates established scientific fact, laws of nature, call it what you will, i.e., it must [be] possible to the universe as we know it. Thus, *Wind in the Willows* is fantasy, but the much more incredible extravaganzas of Dr. Olaf Stapledon are speculative fiction—*science fiction.*

I gave Miss Dalgliesh a story which was strictly science fiction by all the accepted standards—but it did not fit into the narrow niche to which she has assigned the term, and it scared her—she was scared that some other person, critic, librarian, or whatever, a literary snob like herself—would think that she had published comic-book type of material. She is not sufficiently educated in science to distinguish between Mars as I portrayed it and the wonderful planet that Flash Gordon infests, nor would she be able to defend herself from the charge if brought.

As a piece of *science* fiction, *Red Planet* is a much more difficult and much more carefully handled job than either of the two books before it. Those books contained a little straightforward descriptive astronomy, junior high school level, and some faked-up mechanical engineering which I could make sound authoritative because I am a mechanical engineer and know the patter. This book, on the other hand, has a planetary matrix most carefully worked out from a dozen different sciences all more complicated and esoteric than descriptive astronomy and reaction engines. Take that one little point about how the desert cabbage stopped crowding in on the boys when Jim turned on the light. A heliotropic plant would do just that—but I'll bet she doesn't know heliotropism from second base. I did not attempt to rub the reader's nose in the mechanics of heliotropism or why it would develop on Mars because she had been so insistent on not being "too technical."

I worked out in figures the amount of chlorophyll surface necessary to permit those boys to live overnight in the heart of a plant and how much radiant energy would be required before I included the incident. But I'll bet she thought of that incident as being "fantasy."

I'll bet that, if she has ever heard of heliotropism at all, she thinks of it as a plant "reaching for the light." It's not; it's a plant spreading for light, a difference of ninety degrees in the mechanism and the point that makes the incident work.

Between ourselves there is one error deliberately introduced into the book, a too-low figure on the heat of crystallization of water. I needed it for dramatic reasons. I wrote around it, concealed it, I believe, from any but a trained physicist looking for discrepancies, and I'll bet ten bucks she never spotted it!—she hasn't the knowledge to spot it.

Enough of beating that dead horse! It's a better piece of *science* fiction than the other two, but she'll never know it and it's useless to try to tell her. Lurton, I'm fed up with trying to work for her. She keeps poking her nose into things she doesn't understand and which are my business, not hers. I'm tired of trying to spoonfeed her, I'm tired of trying to educate her diplomatically. From my point of view she should judge my work by these rules and these only: (a) will it amuse and hold the attention of *boys* (b) is it grammatical and as literate as my earlier stuff? (c) are the moral attitudes shown by the author and his protagonists—not his villains—such as to make it suitable to place in the hands of minors?

Actually, the first criterion is the only one she need worry about; I won't offend on the other two points—and she knows it. She shouldn't attempt to judge science-versus-fantasy; she's not qualified. Even if she were and even if my stuff were fantasy, why such a criterion anyhow? Has she withdrawn *Wind in the Willows* from the market? If she thinks *Red Planet* is a fairy tale, or a fantasy, but gripping (as she says) to read, either label it as such and peddle it as such. I don't give a damn. She should concern herself with whether or not boys will like it. As a matter of fact, I don't consider her any fit person to select books to suit the tastes of boys. I've had to fight like hell to keep her from gutting my first two books; the fact that boys *did* like them is a tribute to my taste, not to hers. I've read a couple of the books she wrote for girls—have you tried them? They're dull as ditch water. Maybe girls will hold still for that sort of things; boys *won't.*

I hope this works out so that we are through with her. I prefer pocketing the loss, at least for now, to coping with her further.

And I don't like her dirty-minded attitude over the Willis business. Willis is one of the closest of my imaginary friends; I loved that little tyke, and her raised eyebrows infuriate me.[Willis is the young Martian adopted as a pet by the hero; it's Willis who often gets him out of trouble.]

March 15, 1949: Robert A. Heinlein to Lurton Blassingame

First, your letter: the only part that needs comment is Miss D's remark about getting a good Freudian to interpret the Willis business. There is no point in answering her, but let me sputter a little. A "good Freudian" will find sexual connotations in *anything*—that's the basis of the theory. In answer I insist that without the aid of a "good Freudian" *boys* will see nothing in the scene but considerable humor. In *Space Cadet* a "good Freudian" would find the rockets "thrusting up against the sky" definite phallic symbols. Perhaps he would be right; the ways of the subconscious are obscure and not easily read. But I still make the point that *boys are not psychoanalysts*—nor will anyone with a normal healthy sex orientation make anything out of that scene. I think my wife, Ginny, summed it up when she said, "She's got a dirty mind!"

Somebody around this controversy does need a psychoanalyst—

and it ain't you and it ain't me and it ain't Willis.

March 18, 1949: Lurton Blassingame to Robert A. Heinlein
Book will have to be changed before it can go on the recommended library list. There is a certain amount of censorship in the juvenile field. Publishers must sign an affidavit when asking for books to be purchased by libraries, saying there is nothing in them which will offend either youngsters or parents. Dalgliesh is sending list of changes needed in *Red Planet.* Once those changes recommended by the juvenile librarian are made, Scribner's will take book. Scribner's is a respected house and excellent connection for RAH.

EDITOR'S NOTE Around this time, Robert was looking for an idea for the story ' 'Gulf," which he had promised to John W. Campbell, Jr. for the special November 1949 issue of Astounding. *We approached this task in a fashion today known as brainstorming. I would put up an idea and Robert would knock it down.*

The title, "Gulf," was the hitch. Eventually I suggested that it might be possible to do something like the Mowgli story—a human infant raised by a foreign race, kept apart from humans until he reached maturity. "Too big an idea for a short story," said Robert, but he made a note about it.

Further brainstorming resulted in the notion Robert wanted to do a superman story for ' 'Gulf." What did supermen do better than their peers ? ' 'They think better, " I replied. So another note was made.

Then Robert disappeared into his study and wrote eighteen pages, single spaced, of notes on ideas which the Mowgli suggestion had started rolling in his brain. He worked on those pages the whole night, and came out with a batch of papers titled The Man from Mars [Stranger in a Strange Land].

The Man from Mars *was then set aside, and "Gulf" was written to meet JWC's deadline, as it must be sent off to New York before we departed for Hollywood. We planned to drive to California at the end of May, and had no idea just when we would return to Colorado.*

March 24, 1949: Robert A. Heinlein to Lurton Blassingame
I agree to all changes [on *Red Planet*]. Let's go ahead with the contract. Please ask her to send me the original manuscript. Please ask her to make her instructions for revision as detailed and as specific as possible. She should bear in mind that, since these revisions are being made to suit her taste and her special knowledge of requirements of the market, *my* taste and *my* limited knowledge of them cannot be a guide to me in making revisions—else I would have submitted a manuscript satisfactory to her in the first place.

I note with wry amusement that she no longer speaks of the book as "fairy tale quality," "not *our* sort of science fiction," "lack of controlled imagination," "strange shaped Martians," *etc.* The only point she still makes which she originally made is about Willis and (pardon my blushes!) s-x. Okeh, s-x comes out; it was probably a mistake on the part of the Almighty to have invented s-x in the first place.

I capitulate, horse and foot. I'll bowdlerize the goddamn thing any way she says. But I hope you can keep needling her to be specific, however, and to follow up the plot changes when she demands the removal of a specific factor. I'm not just being difficult, Lurton; several of the things she objects to have strong plot significance ... if she takes them out, the story ceases to be. Removing the details objected to about Willis is a much simpler matter; it's offstage stuff and does not affect the story line until the last chapter.

If she forces me to it, I'll take out what she objects to and then let her look at the cadaver remaining—then perhaps she will revise her opinion that it "—doesn't affect the main body of the story—" (direct quote).

I concede your remarks about the respect given to the Scribner imprint, the respect in which she is held, and the fact that she is narrowly limited by a heavily censorship-ridden market. I still don't think she is a good editor; she can't read an outline or a manuscript with constructive imagination.

I expect this to be my last venture in this field; 'tain't worth the grief.

April 18, 1949: Robert A. Heinlein to Lurton Blassingame

The revised version *of Red Planet* will be in your hands by the end of the month and you may tell Miss Dalgliesh so. I am complying with *all* her instructions and suggestions.

April 19, 1949: Robert A. Heinlein to Alice Dalgliesh

The manuscript of *Red Planet* is being returned, through Mr. Blassingame. You will find that I have meticulously followed all of your directions, from your letter, from your written notes, and from your notations on the manuscript, whether I agreed with them or not. I have made a wholehearted attempt to make the changes smoothly and acceptably and thereby to make the story hang together. I am not satisfied with the result, but you are free to make any additional changes you wish wherever you see an opportunity to accomplish your purposes more smoothly than I have been able to do.

Most of the changes have been made by excising what you objected to, or by minor inclusions and variations in dialog. However, on the matter of guns, I have written in a subscene in which the matter of gun licensing is referred to in sufficient explanatory detail to satisfy you, I think.

The balance of this letter is side discussion and is in no sense an attempt to get you to change your mind about any of your decisions concerning the book. I simply want to state my point of view on one matter and to correct a couple of points.

At several different times you have made the point that this book was different from my earlier books, specifically with respect to colloquial language used by characters, with respect to firearms, and with respect to aggressiveness on the part of the boys. I have just checked through *Rocket Ship Galileo* and *Space Cadet*—as published—and I do not find any of these allegations substantiated. In both books I made free use of such expressions as "Yeah," "Nope," "Huh," "Stinker," and similar sloppy speech. In both books the boys are inclined to be aggressive in the typical, male-adolescent fashion. See pages8, 23, 42, 107, 200, and 241 *of Space Cadet* and all *of Rocket Ship Galileo* from page 160 to the end—not to mention a couple of minor brushes earlier. In re guns, *Space Cadet* cannot be compared with the other two books as all the characters are part of a military organization from one end to the other, but *Rocket Ship Galileo* can be compared with *Red Planet.* In *Rocket Ship Galileo* they are handling dangerous explosives in chapter one. From page 62 to the end they are all heavily armed at all times—*and no mention is ever made of licensing them.* On pages 165-6 Art and Ross each kill a man; a few pages later Morrie kills about eighty men. On page 167 dialog makes clear that they are long used to guns. I bring up these points to correct matters of fact; I do not like being accused of having switched the mixture on you.

Now, as to matters of opinion—You and I have strongly different evaluations as to the best way in which to handle the problem of deadly weapons in a society. We do not seem to disagree in any important fashion as to the legitimate ways in which deadly weapons may be used, but we disagree strongly as to socially useful regulations concerning deadly weapons. I will first cite two points which sharply illustrate the disagreement. I have one of my characters say that the right to bear arms is the basis of all human freedom. I strongly believe that, but you required me to bluepencil it. The second point concerns licensing guns. I had such licensing in the story, but I had one character strongly object to it as a piece of buttinsky bureaucracy, subversive of liberty—and I had no one defending it. You required me to remove the protest, then build up the licensing into a complicated ritual, involving codes, oaths, etc.—a complete reversal of evaluation. I have made great effort to remove my viewpoint from the book and to incorporate yours, convincingly—but in so doing I have been writing from reasons of economic necessity something that I do not believe. I do not like having to do that.

Let me say that your viewpoint and evaluation in this matter is quite orthodox; you will find many to agree with you. But there is another and older orthodoxy imbedded in the history of this country and to which I hold. I have no intention nor any expectation of changing your mind, but I do want to make you aware that there is another viewpoint that is held by a great many respectable people, and that it is quite old. It is summed up in the statement that I am opposed to all attempts to license or restrict the arming of individuals, such as the Sullivan Act of the State of New York. I consider such laws a violation of civil liberty, subversive of democratic political institutions, and self-defeating in their purpose. You will find that the American Rifle Association has the same policy and has had [it] for many years.

Heinlein's Expert Rifleman medal, from his naval days.

France had Sullivan-type laws. When the Nazis came, the invaders had only to consult the registration lists at the local gendarmerie in order to round up all the weapons in a district. Whether the authorities be invaders or merely local tyrants, the effect of such laws is to place the individual at the mercy of the state, unable to resist. In the story *Red Planet* it would be all too easy for the type of licensing you insist on to make the revolution of the colonists not simply unsuccessful, but impossible.

As to such laws being self-defeating, the avowed purpose of such laws as the Sullivan Act is to keep weapons out of the hands of potential criminals. You are surely aware that the Sullivan Act and similar acts have never accomplished anything of the sort? That gangsterism ruled New York while this act was already in force? That

"Murder, Inc." flourished under this act? Criminals are never materially handicapped by such rules; the only effect is to disarm the peaceful citizen and put him fully at the mercy of the lawless. Such rules look very pretty on paper; in practice they are as foolish and footless as the attempt of the mice to bell the cat.

Such is my thesis, that the licensing of weapons is subversive of liberty and self-defeating in its pious purpose. I could elaborate the arguments suggested above at great length, but my intention is not to convince, but merely to show that there is another viewpoint. I am aware, too, that even if I did by some chance convince you, there remains the unanswerable argument that you have to sell to librarians and schoolteachers who believe the contrary.

I am not inexperienced with guns. I have coached rifle and pistol teams and conducted the firing of millions of rounds from pistols to turret guns. I am aware of the dangers of guns, but I do not agree that those dangers can be eliminated nor even ameliorated by coercive legislation—and I think my experience entitles me to my opinion at least as much as schoolteachers and librarians are entitled to theirs.

I am sorry to say in answer to your inquiry that I do not expect to be able to come east soon. If Miss Fowler passes this way, we shall be very glad to see her and to show her some of the sights if she wishes.

May 9, 1949: Robert A. Heinlein to Lurton Blassingame

As to the name on *Red Planet* ms., no, I'm not adamant; I'll always listen to your advice and I'll lose a lot of sleep before I will go directly against your advice. But I feel rather sticky about this point, as I hate like the deuce to see anything go out under my own name, without even sharing responsibility with Miss Dalgliesh, when said item includes propositions in which I do not believe. The matter of style, plot, and the effect on my literary reputation, if any, I am not adamant about, even though I am not happy about the changes—if you say to shut up and forget it, I'll shut up. It's the "Sullivan-Act*-in-a-Martian-frontier-colony"* feature that I find hard to swallow; from my point of view I am being required to support publicly a doctrine which I believe to be subversive of human liberty and political freedom.

EDITOR 's NOTE Because of the necessity of editing Red Planet *to suit the sensibilities of librarians (who, at that time, were mostly elderly ladies), Robert seriously made the suggestion that Miss Dalgliesh's name be added to the book as an author. This suggestion might have been made over the telephone-the files are incomplete on this point.*

But the storm blew over, and Red Planet, *firearms or no, Willis' sex or no, became very popular. It was one of Robert's most popular books for juveniles.*

May 17, 1949: Robert A. Heinlein to Lurton Blassingame

I'll have to give some thought to the Scribner's beef over the name. I can't see why Alice Dalgliesh's name, tacked on, should be a handicap. Maybe they would like to send the script back for reworking to *my* ideas. It seems to me that if she insists on rewriting the story by remote control, then she should expect to share the blame.

On the other hand, it is fairly evident that you feel that the story is just about as good now as it was before. I am sorry to say that I don't think so; maybe it's good but it ain't a Heinlein story; it's been denaturized, had its teeth pulled. But I am very reluctant to go against your advice. *I* think it will damage my reputation and I *know* that it includes ideas of which I violently disapprove. What do you think, Lurton? Lay it on the line.

FARMER IN THE SKY

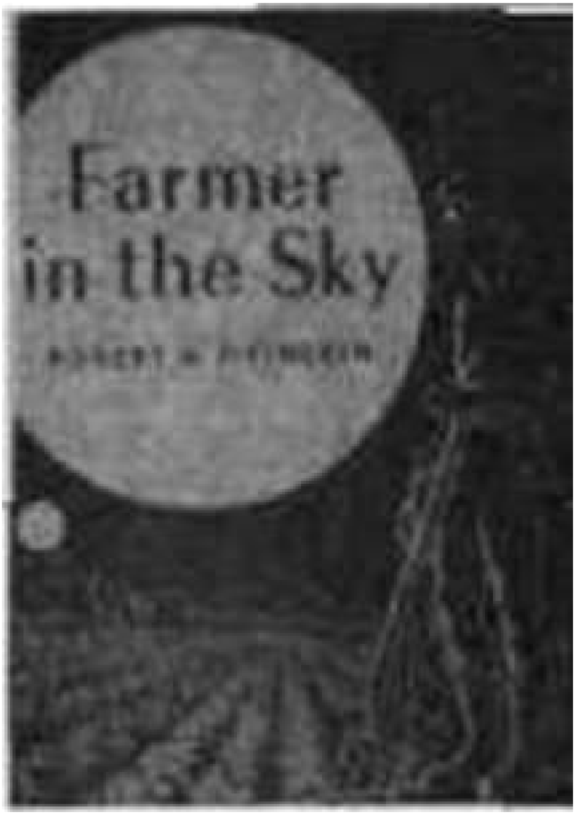

Heinlein wrote *Farmer in the Sky* for Scribner's in 1949 during the holdups of filming "Destination Moon."

Bill Lermer, a Boy Scout, and his widowed father decide to emigrate from Earth to Ganymede. In order to be eligible, the father must marry. This story tells about Bill's adjustment to his new stepmother and step-sister, their voyage to Ganymede, and how all four work to build a farm in an inhospitable environment.

The new home is built, a farm started amid the wonderful sight of Jupiter and its other moons, lo, Europa and Callisto. Bill finds that his scouting is universal—a troop is formed in the space ship *Mayflower,* continued on Ganymede, amid many adventures. Bill and his family learn survival.

September 8, 1949: Robert A. Heinlein to Lurton Blassingame

I am up to page 150 in the first draft of my current story ["Farmer in the Sky"], intended for *Boys' Life* and for juvenile book, and should have this draft finished in ten days. It will probably take another month to shape it up into a satisfactory serial version and book-length version.

September 24, 1949: Robert A. Heinlein to Lurton Blassingame

The first draft of the *Boys' Life* and juvenile trade book job is finished, but the motion picture *[Destination Moon]* has developed daily crises which will probably continue until the shooting is over, about the end of November. As there is a long, tedious job of cutting to do to turn the book into a 20,000 word serial, I don't know when I will be sending in the manuscript. You may tell Crump [editor of *Boys' Life]* if you like, that the story is finished, but it may be a month or six weeks until it is ready. My situation here is unclear; my contract is up next week, the movie not yet shot, and myself unwilling to extend the contract on its present terms.

We'll see.

EDITOR 's NOTE: *Robert had done the script for* Destination Moon *with Rip Van Ronkel in Hollywood in 1948.George Pal purchased the script, and Robert was to do technical direction on it.*

The normal delays ensued. We arrived in Hollywood in early June 1949—shooting was supposed to begin soon thereafter. However, with rewrites, preproduction, and all the things that go on in Hollywood, actual shooting did not start until around October or November.

While waiting for the film production to begin, Robert wrote Farmer in the Sky.

November 20, 1949: Robert A. Heinlein to Lurton Blassingame

.. . I'm working fifteen hours a day; the book-length version of *Farmer in the Sky* is now with the typist and the serial length for *Boys' Life* is being cut—slowly, because I have so little time. I've got it down under 40,000; there will be much tedious work before I can get it down to 20,000 and probably will not finish it until after the picture is finished. I'm working seven days a week and getting six hours of sleep, and I can't speed it up beyond that.

March 6, 1950: Lurton Blassingame to Robert A. Heinlein

Boys' Life found suspense problem. Scribner's very pleased with book.

April 24, 1950: Robert A. Heinlein to Lurton Blassingame

I am glad to hear that *[Boys' Life* editor] Crump is taking the serial [published in *Boy's Life* as "Satellite Scout"], since I need every cent I can scrape up for [house] building. Nevertheless, I would turn down his bid of $750 if I could afford to. It occurs to me, however, that, if he had me in a squeeze before, I have him in a squeeze now. He has scheduled it for the August issue; the makeup date must be staring him in the face, particularly as he is ordering a color painting for the cover from [Chesley] Bonestell.

And *please be sure to tell him* that I am certainly entitled to as much time to make up my mind whether or not I like his offer as he is to make up his mind whether or not he likes a story that he ordered from me in the first place. And tell him that I am proud, mean, stiff-necked, and that you doubt very much if you can get me to accept a lowered word rate, since I have been known in the past to pass up sales rather than take a cut.

Don't quite let the sale get away from you—but if you can get him on the hook and keep him there, we may be able to squeeze a couple of hundred dollars' worth of blood out of this stone. I don't care whether he gets sore or not; this is my swan song with Crump; sales to him are not worth the trouble and worry.

Don't get yourself in bad with him; blame it all on me. Even if you have cashed the check already, I hope you will call him up and twist his arm a bit.

April 21, 1951: Robert A. Heinlein to Lurton Blassingame

. . . The transformation from *Farmer in the Sky* to "Satellite Scout" [the *Boys' Life* version] took *five* drafts and consumed most of six weeks . . . whereupon I was left in suspense while [Crump] made up his mind whether or not he liked my condensation.

BETWEEN PLANETS

Between Planets was given a working title of *The Rolling Stones.* Heinlein soon after used *The Rolling Stones* as the title for another book. Art by Clifford Geary. Scribner's, 1951 .

Don's parents suddenly order him to join them on Mars, bringing with him an odd, plastic ring of no apparent value. He leaves his school on Earth for the space station where he's to catch his ship. He meets and befriends a Venus "dragon," Sir Isaac Newton. But his ship is intercepted by Venus, no longer willing to be a mere property of Earth. Willy nilly, Don is shipped to Venus.

There he finds work washing dishes. Several attempts are made to steal the ring. Then Earth armed forces land and ravage the town. Don joins the Venus army. Much later, he is ordered to report—to Sir Isaac. The dragon needs the ring, which contains the clue to a scientific discovery made secretly on Earth. With it, they can build an ultra fast ship and weapons to force Earth to relinquish control of the planets. Don gets to Mars on that ship—a hero!

BETWEEN PLANETS

January 18, 1951: Robert A. Heinlein to Lurton Blassingame

I am 14,000 words into the new boys' book *[Between Planets]* and the villains are way ahead. The first part always goes slowly; I have to get acquainted with the characters.

March 15, 1951: Robert A. Heinlein to Lurton Blassingame

I've just answered a nite letter from Miss Dalgliesh asking for a synopsis of *Between Planets* (formerly *The Rolling Stones). [The Rolling Stones* was a working title, later used for another book.] She wants the finished manuscript by the first—I can't make it, by at least a week, but I am pushing night and day.

March 17, 1951: Robert A. Heinlein to Lurton Blassingame

Between Planets is rolling nicely; I expect to finish it by a week from today, or even sooner. However, the necessity of smooth-typing it will keep me from sending it on earlier than about the first week in April. I have told Miss Dalgliesh.

April 1, 1951: Robert A. Heinlein to Lurton Blassingame

Herewith two copies of *Between Planets.* In this same mail I have sent Miss Dalgliesh an airmail postcard telling her that the ms. will arrive in New York at the same time she receives the card (or should). Since they are so anxious to have it at the earliest possible date, will you please send the original over to her at once?

May 31, 1951: Lurton Blassingame to Robert A. Heinlein

Word from *Blue Book* taking *Between Planets,* paying $1,000.Scribner will publish about 1 November, allowing *Blue Book* to schedule story for September or October issue.

June 3, 1951: Robert A. Heinlein to Lurton Blassingame

Good news indeed about the sale of *Between Planets* to *Blue Book.* Please tell Kennicott [Donald Kennicott, editor of *Blue Book,* who knew nothing of science fiction except H. G. Wells's title] that there is no resemblance at all between Wells's *War of the Worlds* and my *Between Planets*—also that he should read Wells's book; it's a dilly. The moveovers should resemble in appearance the mythological fauns or satyrs, the "goat-men," but should avoid too close a resemblance, i.e., avoid terrestrial musculature, articulation, and physiognomy, both of goats and men. Faunus veneris is a biped, horned, and smaller than a man, but its appearance merely suggests the faun of Greek mythology. It is not actually related to any earthian life form; there is plenty of elbow room for the artist to use his imagination.

June 28,1951: Lurton Blassingame to Robert A. Heinlein (telegram)

Scribner's proofs on their way airmail special delivery.

THE ROLLING STONES

THE ROLLING STONES

Heinlein tried to make *The Rolling Stones* wholesome, but Dalgliesh saw some Freudian connotations in Heinlein's creation of "Flat Cats."

Castor and Pollux Stone, seventeen-year-old twins, go into space with their unusual family in a secondhand spaceship, called *The Rolling Stone.* They take along a cargo of battered bicycles to trade to settlers on Mars.

Grandmother Hazel and their father, Roger Stone, support the project by writing episodes for *The Scourge of the Spaceways,* one of whose characters is the Galactic Overlord. Three episodes a week is their normal output.

The twins buy a Martian flat cat. Fuzzy Britches, a creature most people enjoy petting. In transit theyfind that flat cats multiply with extreme rapidity, given sufficient food. They are forced to put the creatures into deep freeze.

In the asteroid belt, the twins create a demand for the flat cats, now thawed, selling them to lonely miners.

December 1, 1951: Robert A. Heinlein to Lurton Blassingame

The boys' novel *Rolling Stones* is about a quarter finished, smooth draft—and an unsatisfactory story line thereafter. The trouble is that I am trying to do domestic comedy this time with nothing much in the way of revolutions and blood—and I find comedy harder to write. Oh, I can keep up wisecracking dialog all too easily, but the characters have to do something too, something important. With space warfare and intrigue ruled out by the nature of the story I find that a problem. Story centers around twin boys and their eccentric family. Family goes to asteroids in family spaceship, get into various sorts of trouble, get out again.

January 5, 1952: Robert A. Heinlein to Lurton Blassingame

The new boys' novel, *The Rolling Stones,* is rolling along. I am hard at work seven days a week.

January 15, 1952: Robert A. Heinlein to Lurton Blassingame

I heard from Miss Dalgliesh about *Rolling Stones;* she is enthusiastic.

March 8, 1952: Robert A. Heinlein to Lurton Blassingame

I am sorry to say that I am again having "sex" trouble with Miss Dalgliesh—she has decided (from her Olympian heights as an amateur Freudian) that *The Rolling Stones* contains some really dangerously evil connotations. Her letter was rather horrid and I was quite offended. I am not asking you to front for me this time; I answered her myself. Since the business matters are all completed, it is strictly an author-editor matter and you have troubles enough without being put in the middle on this. But enough is enough and I do not intend to tolerate any more of this sort of thing. *The Rolling Stones* maybe the last juvenile I will do, or, if I do another, perhaps we will offer it to ——— rather than to Miss Dalgliesh.

I consciously intend to write wholesome stories for boys and mean to leave out entirely the sophisticated matters which appear in my writings for adults. In addition, Mrs. Heinlein went over this one most carefully, trying to find things Miss Dalgliesh might object to. When we were both satisfied that it was as pure as Caesar's wife, we sent it off. I feel sure that you would have returned it to me for revision had you seen anything in it which could have been construed as dirty. So she liked it and signed a contract for it—and now decides that it is dirty. The anecdote about the Vermonter who made a pet of a cow, "—same as you might a good hunting dog—"Miss Dalgliesh says suggests "certain abnormal sex practices." Well, it doesn't suggest anything to me except that my wife has made a pet out of a horse next door, which was what it was based on—and I am dead certain it won't suggest anything horrid to my boys and girls. But I gave her a revision —because we decided that the anecdote was not dirty but *was* dull.

Her other objection was this: "Flat cats seem to me a trifle too Freudian in their pulsing love habits." Since I intentionally desexed them entirely, even to parthenogenesis, I found this a bit thick. I always called a flat cat "it" rather than "he" or "she" and gave the only named one a name with no sex connotation. These things I did because I knew she was hipped on the subject—but it was useless; she is capable of seeing phallic symbolism in Jack's beanstalk.

Another objection she made has nothing to do with sex, but I find it illustrative of how far afield she has gone to find trouble: she objected to my naming a prospector "Old Charlie" *because the first name of Mr. Scribner is Charles!* How silly can one get?

I don't expect you to do anything but wished to inform you because you may hear reverberations. I rapped her knuckles most sharply. There are types of behavior I won't tolerate for any amount of money. I retaliated in kind (which is why I left you out of it); I took one of her books for girls and subjected it to the sort of analysis she gave mine. I know quite as much Freudian, bogus "psychology" as she does; from the criteria she uses, her book was dirty as hell—and I told her so, citing passages. If she is going to leer and smirk at my perfectly nice kids' book, I can do the same to her girls' stories. Amateur psychoanalysts make me sick! That impressive charlatan, Dr. Freud, has done quite as much harm as Queen Victoria ever did.

March 7, 1952: Robert A. Heinlein to Alice Dalgliesh

1. If you are going to make changes, I prefer to see them in advance of proof.

2. "Old Charlie"—I happen to like the name Charlie better than the name Danny, but the issue raised strikes me as just plain silly. "Charlie" is a very common nickname; there is probably at least one character named Charles in over half of currently published novels. Are we to lay off the very common names "Bob" and "Alice" because

you and I happen to have them? In any case, nine-tenths of my readers are quite unaware of the name of the publisher; children very rarely pay attention to the name of the publishing house. It would be just as reasonable to place a taboo on "Harry" and on "George" and on "Joe" because of the names of the President, the late King, and the Russian dictator.

3. Flat cats and Freud—no, I most emphatically do not agree to any changes of any sort in the flat cats or anything about them. I am considerably irked by the phrase"—a bit too Freudian in their pulsing love habits." *What* love habits? I remember all too clearly the advice you gave me about Willis in *Red Planet* and how I should "consult a good Freudian"—in consequence, I most carefully desexed the creatures completely. I used the pronoun "it" throughout (if you find a "he" or "she," it is a fault of my proofing); the circumstances make it clear that the first one, and by implication, all the others, reproduce by parthenogenesis. Do you object to the fact that they like to be petted? Good heavens, that *can't* come out; the whole sequence depends on it—so don't tamper with it. In any case, I set up a symbiosis theory to account for them being such affectionate pets.

If you choose to class the human response to the flat cats (the desire on the part of humans, particularly lonely humans, for a pet which can be fondled and which will show affection)—if you class this tendency (on which the sequence turns) as a form of sex sublimation, I will not argue the classification. By definition "sex" and "libido" may be extended to almost any human behavior—but I do not agree that there is necessarily anything unhealthy, nor queasily symbolic, in such secondary (sex?) behavior.

Following your theory, I really must point out that the treatment of Rusty in *Along Janet's Way* [written by Miss Dalgliesh] is extremely significant (to a good Freudian) and highly symbolic, both in secondary sex behavior and in sublimation phenomena—in fact, not the sort of book to put into the hands of a young girl. That business with the nightgown, for example. From the standpoint of a good Freudian, every writer (you and I among others) unconsciously uses symbols which are simply reeking with the poisonous sexual jungles of our early lives and our ancestries. What would a half-baked analyst make of that triangular scene between the girl, the young man, and the male dog—and the nightgown? Of the phallic symbolism and the fetishism in the dialog that followed? And all this in a book intended for young girls?

Honest, Alice Dalgliesh, I don't think that you write dirty books. But neither do I—and lay off my flat cats, will yuh? Your books and your characters are just as vulnerable to the sort of pseudoscientific criticism you have given mine as are mine. So lay off—before I haul

Jinks into this argument.

About Freud: Look, Freud was not a scientist; he was simply a brilliant charlatan. He did not use scientific methodology, and his theories are largely unsubstantiated and are nowadays extremely suspect. From a practical standpoint the practitioners of his "psychoanalysis" have been notably unsuccessful in curing the mentally ill. Christian Science has done as well if not better—and is about as well grounded in scientific proof. I grant you that Freudian doctrine has had an aura of scientific respectability for the past generation, but that aura was unearned and more and more psychiatrists are turning away from Freud. I concede that, among other damages, Freud and his spectacular theories have helped to make the layman in our maladjusted culture extremely sensitive to sex symbols, real or false, and this situation must be taken into account by a writer. But we shouldn't go overboard in making concessions to this artificial situation, particularly because it is impossible to write any story in such a fashion that it will not bring a knowing leer to the face of a "good Freudian."(Let's look at another aspect of the problem; it is to be hoped, I suppose, that the readers of your list of books will presently graduate to Scribner's trade books for adults. Let us suppose that I manage to keep my readers sealed in cellophane, sterile in vitro—then comes the day when they start reading other Scribner's books. I'll mention a few: Hemingway—with his painful reiteration of the emasculation theme—*From Here to Eternity,* which needs a glossary of taboo words to explain its taboo situations, *Europa* and *Europa Revisited,* which combine communist propaganda with pornography in a most curious fashion. I am not panning Scribner's adult list; my point is that the gradient from one list to the other can be ridiculously steep.)

STARMAN JONES

STARMAN
JONES

With *Starman Jones* in 1953, Heinlein and Dalgliesh had fewer conflicts, though she still asked for changes.

When Max finds living with his new stepfather impossible, he leaves for Earthport, taking the books of navigation tables left by his uncle, a former officer on the interstellar ships, hoping to find work on the ships. But the board refuses, taking the books from him, but giving him the deposit money on them. Sam, a former spaceman, persuades him to use the money to get them false papers as crewmen.

Aboard the *Asgard,* his relationship to his uncle is discovered, and he is bumped to chartsman trainee. There he reveals that, with his trick memory, he's memorized all the tables. Then a mistake leaves the ship lost. The nearest planet has a dangerous life-form. All higher officers are dead and the navigation books are lost. Only Max's memory is able to bring the *Asgard* back to known space.

The future of Max as a spaceman and officer is assured.

March 24, 1953: Lurton Blassingame to Robert A. Heinlein

[Scribner's] wants some minor changes in the novel *[Starman Jones]* and hopes you won't mind making them. These are limited to the first chapter and the last. In the first chapter, [Dalgliesh] says the stepfather sounds like the conventional pulp-paper villain, since he comes in and wants to beat the boy the first night he is married to the boy's mother. .. .For the last chapter, she thinks that some of their readers wouldn't fully understand all that you are saying so briefly in the scene where the hero is back at the farm. How much time—earth time, that is—has elapsed? She also wants a bit more made of the fines, or whatever way the hero pays for the fact that he started out as a liar. It might help here if the powers that be keep the hero as an astrographer (sic) . . . because he had the moral fiber to admit his error and since then acted in every way as a man. These aren't serious and I hope you won't mind making them.

March 25, 1953: Robert A. Heinlein to Lurton Blassingame

Now, about the changes Miss Dalgliesh wants: I think that it is necessary that [she] write directly to me, explaining in detail what changes she wants and why and specifically what she wants done to accomplish those changes. Offhand, she certainly has not asked for much; nevertheless, on the basis of what you have relayed to me, I am not convinced that the changes are either necessary or desirable.

.. . I don't say that I *won't* make this change [i.e., the "stepfather" change], but I *do* say that I am going to need a helluva lot of convincing. . . In my opinion it would badly damage the dramatic timing of the story to make this change. What I have now accomplished in six pages would, with the proposed revision, require tacking on a couple of chapters, change the opening from fast to very slow, and in particular (this is what I hate most) change the crisis in the boy's life from a dramatic case of having the rug jerked out from under him in a matter of minutes into a situation in which he simply becomes increasingly annoyed with an unpleasant situation.

The suggested revisions in the ending are not difficult, and the last chapter as I wrote it is certainly open to criticism. But (as usual!) I have comments. I kept that last chapter short because the story actually ends with the next to the last chapter, i.e., the character change is complete.

THE STAR BEAST

The STAR BEAST
by ROBERT A. HEINLEIN

The *Library Journal* threatened to lambaste Heinlein if he didn't withdraw *The Star Beast* because of its suggestion that children could divorce their parents.

John Thomas Stuart XI has a pet—Lummox—brought back from a space trip by an ancestor. "Lummie" began as a tiny pet, but over the generations (by earth standards) has grown huge, and is everlastingly in trouble. Lummie's race locates him, and demands his return.

Mr. Kiku, UnderSecretary for Spatial Affairs, finds that Lummox has no wish to leave for his home without his "pet," John Thomas, to return to her ancestral home . . . she has been raising "John Thomases" for a long time, and wishes to continue doing so ...

August 27, 1953: Robert A. Heinlein to Lurton Blassingame

... the new boys' book *[The Star Beast]* is, for the present, going nicely. I've gotten no farther than the first chapter, but that puts me over the worst hump. I had a pretty well worked out story with a juicy new extraterrestrial character but, while I thought it could be written and sold, I was not satisfied with the plot line. Things were in too low key, not enough action and not enough conflict. Ginny came up with a new way to start the story, which I believe has fixed that difficulty. In any case, I am writing it.

December 21, 1953: Lurton Blassingame to Robert A. Heinlein (Sent to Sydney, Australia)

Scribner's wants new title for book, *Lummox* (original title) still on stands as title of another book. Or a subtitle. Hopes this won't interfere with elbow-bending.

March 11, 1954: Lurton Blassingame to Robert A. Heinlein (Sent to Honolulu, Hawaii)

In conference with [Scribner's] about new book. Idea that children can divorce parents horrifies her. It would be bad for book club sales. But she loved book, and this is only complaint.

EDITOR'S NOTE: Blassingame allowed changes (see letter of October 8, 1954).

October 8, 1954: Robert A. Heinlein to Lurton Blassingame

As soon as I can get the travel book *[Tramp Royal]* out of the way I will start on a novel. It should be my annual boys' novel, but I may make it an adult novel instead. I am finding the nonsense connected with juveniles increasingly irksome. The latest is a hoorah over *Star Beast* which has occupied much too much of my time lately. It was not a business matter, so I did not bother you with it while it was going on—but it has left an extremely bad taste in my mouth and made me quite reluctant to continue the series with Scribner's. I have a full file on it but a brief summary will be enough to show my viewpoint: A Mr. Learned T. Bulman, reviewing it for the *Library Journal,* wrote Miss Dalgliesh a letter saying that I had "destroyed" the book by including the notion that children might be "divorced" from unsatisfactory parents through court action and placed in the hands of guardians; Mr. Bulman in effect demanded that the book be withdrawn and revised, under pain of being lambasted in the *Library Journal.*

(The man did not even seem to realize that the procedure referred to in my story was a legal and accepted part of our own social structure; the *only* new element lay in calling such a court action a "divorce.")

You will remember that Miss Dalgliesh had qualms about this point and got permission from you to revise as she saw fit during my absence. The published version is as she revised it. But, instead of answering Mr. Bulman and standing up for the book as she edited and published it, she conceded his whole case and tossed it in my lap—this, from her point of view, constitutes "defending" me.

I concede that she is a nice person in many ways, that she is a good editor and highly respected, and that she sells books to libraries. I readily concede that I might be much worse off with another juveniles editor. But what irks me are the very conditions of writing for kids at the present time. My books do not cause juvenile delinquency; I consider it irrelevant that horror comics and crime television (may possibly) do so. Obviously, the juvenile delinquency in some New York City public schools is disgraceful and dangerous—but to tackle the matter by searching for minute flaws in teenage trade books strikes me as silly and as inappropriate as treating cancer with hair tonic. Yet this fluff-picking goes on with unhumorous zeal. Mr. Bulman wrote to me that he did not object to the idea of "divorce" for unfortunate children in itself, but that one of the characters was "flippant." This epitomizes the nature of the objections; these watchful guardians of youthful morals do not want live characters, they want plaster saints who never do anything naughty and who are always respectful toward all the shibboleths and taboos of our present-day, Heaven-ordained tribal customs. I could write such books, of course—but the kids would not read them. I feel that I am caught in a squeeze between the really difficult job of being more entertaining than a comic book or a TV show and the impossible task of doing the first while pleasing a bunch of carping elders whose whims and prejudices I am unable to anticipate. I realize that there is no way to get rid of these pipsqueak arbiters of morals and good taste—but I would prefer to think that I had the backing of my editor once said editor approved the final form of a book. I do not feel that I have it from Miss Dalgliesh. In the first place, she seems to me to be overpoweringly anxious to appease these knotheads, and for reasons pragmatic rather than moral, i.e., she has told me repeatedly that she did not herself do this and that [it was done] because of librarians and teachers. I always followed her advice, although often most reluctantly as it seemed to me that the censoring was often trivial and silly—like calling a leg a "limb" so as not to shock dear old Aunt Mamie. I *knew* that the changes meant nothing at all in re the protecting of the morals of children—but I went along with her in such matters because it was represented as pragmatic economic necessity. But when appeasement goes so far as to disavow me and my works instead of standing up for me, I get really burned up! This Bulman wrote to her, not to me. I think she should have told him politely to go to hell, i.e., that we were doing the best we could and that if he did not like it, it was unfortunate but we could not please everyone all the time. I think, too, that she could have told him that Scribner's published the book, believed in it, and stood behind it. I do not expect from her Olympian aloofness when the fight starts; I expect her to be partisan—on *my* side. She's my editor—and this attack comes from the outside directed at our joint production.

Instead she seems to follow the policy that "the customer is always right"—she promptly agreed with Bulman in his criticism and claimed (quite incorrectly) that the stuff he objected to had stayed in the book over her protests at my insistence. Then she "defended" me by making a mild plea for freedom of expression.

I do not know as yet whether I will do another juvenile book or not. If I decide to do another one, I do not know that I wish it to be submitted to Scribner's. I have taken great pride inbeing a Scribner's author, but that pride is all gone now that I have discovered that they are not proud of me.

I've had bids from other editors for my juveniles, one from a major house only two weeks ago. In the past I have given these overtures a polite no. Possibly I could now find an editor who takes a strong stand against this sort of nonsense ... or possibly not. Miss Dalgliesh tells me that I will find that she is more broadminded than most of the other juveniles editors, and she may well be right. This knuckling under to petty minds may be a common practice in the trade.

I've taken great pride in these juveniles. It seemed to me a worthwhile accomplishment to write wholesome stories which were able to compete with the lurid excitements of comic books. But I am really very weary of being required to wipe my feet and straighten my tie before being allowed in the house by those who stand between me and my juvenile readers. I am rather strongly inclined to let Mr. Bulman and his ilk write their own adventure stories for boys, since they know exactly how it should be done—and Miss Dalgliesh can edit them.

I have neglected adult writing in order never to miss getting my annual boys' books in on time . . . which has possibly been a mistake. But the response to the boys' series has been so warm that I have given them priority. But right now I am undecided whether to go ahead with them, or to drop them and concentrate on adult novels, where I can say what I think and treat any subject I please without being harassed by captious chaperones.

October 15, 1954: Lurton Blassingame to Robert A. Heinlein

You're not in as much of a squeeze as you think. We'll have to see whether the *Library Journal* lambastes you, and sales. If sales stay up, the squeeze wasn't tight enough to hurt.

TUNNEL IN THE SKY

Lurton Blassingame thought that *Tunnel in the Sky* had "slick" possibilities. Heinlein had cracked the tough slick market with "The Green Hills of Earth."

The class in "Advanced Survival" is taking their final exam, but Rod and his class fail to return to earth, as the "gate" through which they went for the test failed to work. This is the story of how the youngsters really survive on another planet, uninhabited except for strange life species.

Rod becomes the leader of the group, which sets up its own encampment. They meet strange beasts, odd vegetation, and see how pioneers live.

October 25, 1954: Robert A. Heinlein to Lurton Blassingame

I am starting a novel *[Tunnel in the Sky]* as soon as I finish this letter. That is to say, that I start walking up and down and swearing at the cat; I should start the first chapter any time between midnight tonight and two weeks from now.

Look, I *did* write to [Learned T.] Bulman just once and no more—I have not answered his answer and do not intend to. The thing that made writing to Bulman so extremely difficult and time wasting was that (Scribner's) had written to him also, *conceding all of his objections,* but telling him that she was writing to me and that I would explain where I stood. That is what made it so damn difficult—I have to write to him and refute his nonsense without calling her a prevaricator ... or worse.

So far as I am concerned I have dropped the matter, do not intend to write to him again, and have not answered her last letter about it. But it is not out of my mind, as I feel equally strongly impelled to write another boys' book and not to write one. I like that series, am proud of it, and it has paid well, but I have a very sour taste about my relations with Scribner's. I agree that Miss Dalgliesh must sell books and should stay on as good terms with librarians as possible, but it does not strike me as good business to kowtow to everything that any librarian wants.

December 11, 1954: Robert A. Heinlein to Lurton Blassingame

Just a quick report— I finished boys' book *Tunnel in the Sky* at 3 A.M. today. Must be cut and retyped; ms. should be in your hands by end of January.

December 31, 1954: Robert A. Heinlein to Lurton Blassingame

Schoolhouse in the Sky [Tunnel in the Sky] went out to be smooth-typed yesterday. I expect to have it in Miss Dalgliesh's hands by 26 January, as requested.

January 24, 1955: Robert A. Heinlein to Lurton Blassingame

Herewith are the table of contents and the word count on *Schoolhouse in the Sky [Tunnel in the Sky];* they were squeezed out yesterday in catching an air express dispatch in order to put the first copy in Miss Dalgliesh's hands as early as possible. .. . It is not exactly a juvenile, although I've kept it cleaned up so that it can pass as a juvenile. It is not the ordinary run of science fiction, either. I don't know what it is ... well, it's a story.

I hope this reaches you before you have read it, because I want your expert help on one feature. The story has quite a lot of hunting in it. As you know, I know very little about hunting—but I am strongly aware of how easily one can lose the reader through small mistakes that break empathy. If you find *anything* which you feel does not ring true, will you please point it out to me and I will rewrite as directed to correct the fault.

February 1, 1955: Robert A. Heinlein to Lurton Blassingame

I am surprised and pleased to hear that you think *Schoolhouse [Tunnel in the Sky]* may have slick possibilities. I am still more surprised that you passed the hunting scenes without suggesting changes. (I would be most happy to make such changes.) I did not use a central nonhuman character in this book because the book is filled with the killing of animals ... all perfectly legitimate, of course, but I was afraid of questionable empathy if I let this story shift at any point to a nonhuman viewpoint in view of the necessity of showing them killing for meat. In my next one I will no doubt have a successor to Willis, Lummox, *etc.*

In the meantime, I have been hung up for a solid week on the new adult novel. It is the Man-from-Mars idea that I first talked about several years ago. It is an idea as difficult as it is strong and one I have had trouble with twice before. If I don't break the logjam soon I'll put it aside and write a different novel. I am not especially distressed about it; if I don't whip it this time, I will some other time, and I expect to deliver an adult novel some time early this year, either this one or another one.

TIME FOR THE STARS

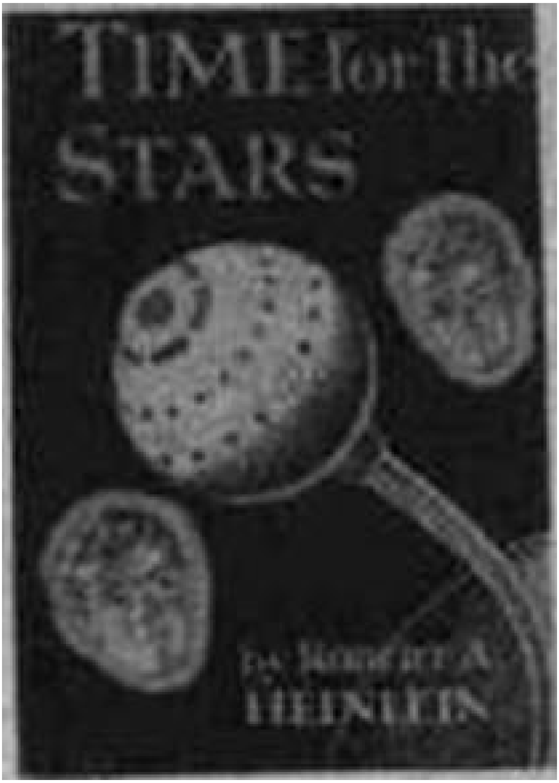

Time For the Stars. Scribner's, 1956. Cover art by Clifford N. Geary. Dalgliesh thought that the hero might be too old for a juvenile novel.

Tom and Pat are identical twins. When tested by the Long Range Foundation, they are found to be telepathically linked. Thus, eventually, Tom is chosen to go to the stars on a torch ship, reporting back to Pat, who remains on Earth (investing their combined incomes and building in time a financial empire). At almost light speed, time is slowed enormously—as Einstein showed—so Tom seems to stay young while Pat ages. Eventually, Tom can no longer contact his twin, but by then can contact Pat's daughter—and then granddaughter and finally, Vicki, Pat's great-granddaughter. The ship explores new worlds, but finally cannot go on. Then they are rescued by the first faster-than-light ship, made possible by what the ship has revealed of time. Back on Earth, Tom finds Pat is a very old man. But Vicki is just the right age!

December 13, 1955: Robert A. Heinlein to Lurton Blassingame

I have finished the new Scribner's book, *Time for the Stars,* and it is today being started by the typist. I expect to send you ms. in January, which should be plenty of time to try to sell serial rights.

Please do not tell Miss Dalgliesh I have finished it, or she will want to see it early—and I don't want her to have any more time to second-guess than her schedule requires. If she asks about it, please tell her that you understand I have it in process and that you are sure that I will be on time as usual ... all of which is the literal truth.

March 9, 1956: Robert A. Heinlein to Lurton Blassingame

Now, about *Time for the Stars.* I don't feel strongly about it at all. If [Dalgliesh] wants to cut some of the opening, she is welcome to do so. If she prefers to have me cut it, tell her to send the chapters she wants cut back to me *with specific instructions as to just what parts she wants eliminated and just how many words she wants taken out.* Or she can do it herself, if she prefers.

I don't understand the criticism about age group appeal. She complained that I had lost them the Armed Services market in *Rolling Stones* by making the twins two years under draft age when the story opened, even though they were eighteen when the story closed. So in this story I very carefully made the boy just graduating from high school with an implied age of eighteen—and he is too old, she tells me.

Is *Stover at Yale* no good for high school kids just because the hero is old enough to be in college? I can make my central character *any age she wants* at the opening of the story. But it can only be one age. If she will tell me what age she thinks is best for the market, I can tailor the central character of my next book to fit. But I can't make him simultaneously of draft age and of junior high school age. Nor can I keep him from growing up as the story progresses without limiting myself to a simple action story spanning not more than a few weeks. This is difficult to do in space-travel stories—but I can do it if she wants it.

CITIZEN OF THE GALAXY

CITIZEN OF THE
GALAXY
ROBERT A. HEINLEIN

Alice Dalgliesh considered *Citizen of the Galaxy* to be Heinlein's best book.

Thorby is a slave, abducted as an infant and suffering all a slave's mistreatment for years. Now he is sold again, this time on Sargon to Baslim, a beggar. But Baslim treats him well, frees him, adopts him, and teaches him all a beggar's tricks. Baslim, he slowly realizes, is really an intelligence agent in a war against slavery. Then Baslim's work is discovered and he is eliminated.

Thorby finds safety for two years among the Free Traders and learns their ways. Then he is taken to the Guard and enlisted. But then he is identified as the lost heir of one of Earth's most powerful families—one secretly supplying the slavers!

It takes more time to learn new ways. Then he forces out the crooked managers and takes over— to use his wealth and life fighting the slave trade.

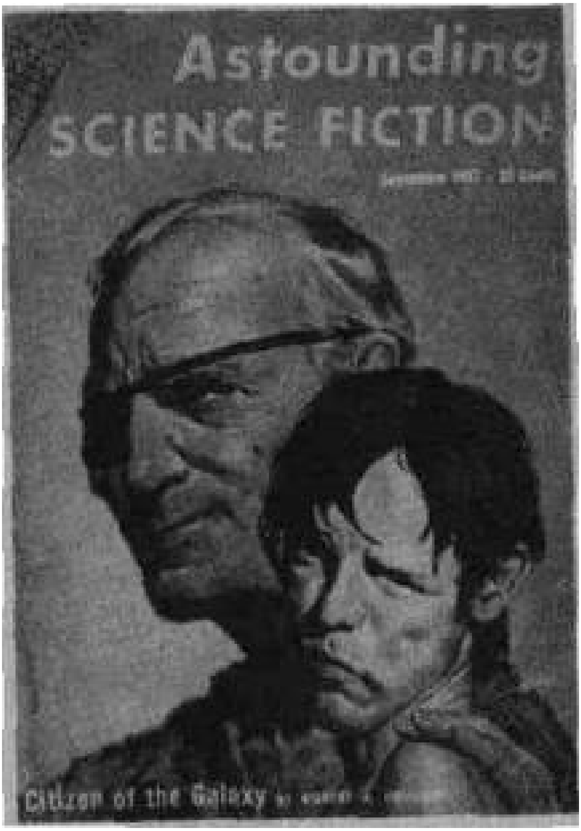

Citizen of the Galaxy was also serialized in *Astounding* from September to December 1957, but there were some differences from the Scribner's book edition. Here, cover art by Van Dohgen.

December 11, 1956: Robert A. Heinlein to Lurton Blassingame

I have completed a draft of the next novel *[Citizen of the Galaxy}* intended for Scribner's. The present title is *The Chains and the Stars.* It ran considerably too long, so I have two or three weeks of cutting to do on it. I hope to have the chewed-up copy in the hands of a typist by Christmas, which should enable me to place a copy of it for possible serial sale in your hands around the middle of January. The Scribner's copy will meet Miss Dalgliesh's deadline (what date this year?), but I will send it later, as I want to cut and slant the serial (adult) version slightly differently" from the Scribner's (juvenile) version. As usual, it is an ambivalent story, actually adult in nature but concerning a boy and with no sex in it that even Great Aunt Agatha could object to. But I am going to try this time to improve it a little for each market with some changes in emphasis.

February 8, 1957: Lurton Blassingame to Robert A. Heinlein

Alice Dalgliesh says *Citizen* Robert's best story to date.

February 28, 1957: Lurton Blassingame to Robert A. Heinlein

No more cutting on *Citizen*—it's a tight story, more can't be taken out. Miss Dalgliesh wants one very small cut, about organized religion.

May 17, 1957: Robert A. Heinlein to Lurton Blassingame

Thanks for the suggestion about submitting plots for approval to Miss Dalgliesh, but we tried that once or twice and it just caused trouble; she approved the plots in outline but not when she saw the story, even though I had stuck to the plotline. This caused the biggest hassles I've had with her, over *Red Planet* . . . which has merely turned out to be her biggest seller of the list, even though I refused all of the changes she wanted where they differed from the approved plot. No, if I ever submit to her another story, it will be sight unseen till then and take it or leave it. I know I have not made clear why two changes, admittedly easy and unimportant, threw me into a spin and lost me ten days working time, cum much anguish. I don't know that I *can* explain it, but it is true. Part of the reason lies in that Chicago lecture of mine you read recently: [Mark Reinsberg arranged this as a seminar of four lectures, which were published as The Science Fiction Novel by Advent Publishers]. I necessarily write science fiction by one theory, the theory of extrapolation and change—but once it reaches the editor (in this case) it is tested by an older theory, the notion that this our culture is essentially perfect and I *must not* tinker with any part of it which is dear to any possible critic who may see the story. These things have now added up to the point where I feel unable to continue. I *may* write another. I don't know yet. I can't until some of the depression wears off. But I don't know how to tell her that I probably won't deliver the story she is expecting—I've tried six or eight times, wasted many days, and all the ways I can express it either sound rude or inadequate. I know this sounds silly, but it is true.

HAVE SPACE SUIT WILL TRAVEL

ROBERT A. HEINLEIN
HAVE SPACE SUIT—
WILL TRAVEL

Have Spacesuit Will Travel, Scribner's, 1958, became a Heinlein classic.

While Kip Russell is trying out the repairs he has made on the space suit he won in a soap contest, he hears a voice over his radio: "PeeWee to Junebug!" And he is off on an adventure with PeeWee and the Mother Thing to the stars.

Set down on Pluto, the Mother Thing attempts to communicate with her people, but fails, and Kip must go outside in blistering cold to rescue her. They are then taken to the Lesser Magellanic Cloud where, together with a Roman centurion, Iunio, PeeWee and Kip are put on trial to defend the human race before a tribunal of a highly civilized race.

November 8, 1957: Robert A. Heinlein to Lurton Blassingame

Here are three copies of my new novel for Scribner's *Have Space Suit—Will Travel.* They are intended (I hope) for trade book, American serial, and British serial.

November 19, 1957: Lurton Blassingame to Robert A. Heinlein
Have Space Suit—Will Travel is a fine story ... enjoyed all of it.

December 6, 1957: Lurton Blassingame to Robert A. Heinlein
Scribner's enthusiastic about the book.

CHAPTER IV THE LAST OF THE JUVENILES

STARSHIP TROOPERS

Alice Dalgliesh and the entire Scribner's editorial board turned *Starship Troopers* down. Putnam's eagerly picked up the title and Heinlein moved his career.

In this culture, the franchise or right to vote must be earned by volunteering for Federal Service. It is not necessary that this service be in the military—quite the opposite. Johnny's decision to enter the military is opposed by his father, but upheld by his instructor in history and moral philosophy. So Johnny goes into the Mobile Infantry. We first see him in a drop.

Equipment and training has changed since the twentieth century, and each trooper is as well equipped as a modern army. Johnny makes several drops, and gains in experience and rating, and eventually becomes an officer candidate.

November 22, 1958: Robert A. Heinlein to Lurton Blassingame

I finished a draft of a novel, working title *Sky Soldier,* at 5:20 this morning; I will start patching its solecisms and such on Monday. It won't have to be cut other than for dramatic reasons, as the draft runs about 60,000 words—proving that I *can* write a novel without forcing the publisher either to jack up the price or use smaller type ... a point on which you may have entertained legitimate doubts.

You will receive the ms. some time after the first of the year; my typist will do it during her Christmas vacation. Miss Dalgliesh has inquired as to whether I intended to submit a book; I have admitted that I have-but I have *not* admitted that it has been written. I don't want her to see this until the last possible moment (I have given her only the title and theme: a boy serving his military service in the future). I want to give her the least possible time to have nervous-Nellie second thoughts about it ... because I am not going to change it to suit her.

January 10, 1959: Robert A. Heinlein to Lurton Blassingame

Earlier today we mailed you two copies of *Starship Soldier* . . . since I anticipate that [Dalgliesh] is not going to like parts of this book, I might as well get the row over with ... It is not a juvenile; it is an adult novel about an eighteen-year-old boy. I have so written it, omitting all cleavage and bed games, such that Miss Dalgliesh can offer it in the same list in which she has my other books, but nevertheless it is not a juvenile adventure story. Instead I have followed my own theory that intelligent youngsters are in fact more interested in weighty matters than their parents usually are.

January 21, 1959: Lurton Blassingame to Robert A. Heinlein

Star ship Soldier enjoyed. Except that there were places where action stopped and author went in for lecturing.

EDITOR'S NOTE Starship Soldier, *later* Starship Troopers, *was turned down by the entire Scribner's editorial board.*

Lurton called and advised me; Robert was still asleep. I had to tell him.

As a matter of fact, Lurton was certain that he could place the book with another publisher. Walter Minton, president of G. P. Putnam 's Sons, later said that one of his editors told him that there was a Heinlein juvenile available. Walter instructed the editor, ' 'Grab it.' '

Miss Dalgliesh made the following suggestions about the book:

use it only as an adult serial
sell it elsewhere
put it away for a while

The Scribner's connection had ended; with it, the annual quarrels over what was suitable for juvenile reading. After Starship Troopers *was published, Robert wrote only one more juvenile*—Podkayne of Mars.

February 19, 1959: Robert A. Heinlein to Lurton Blassingame

.. . I think I have handed you a less salable item than most in this ms. and I will be happy indeed to place it with Mills [Robert P., editor of *F&SF* magazine] and with any major trade book house—for which purpose I am willing to rewrite, revise, cut, or expand to *any* extent necessary. From a story standpoint, I am now convinced that this is not my best work; I intend to sweat and make it so. (But, privately to you, revision will be literary revision; I will not let even the ghost of Horace Greeley order me to revise my ideas to fit popular prejudice—I'll hike up the story but the ideas will remain intact.) *"Eppur si muove!"* I stand by my heresies. But I have no intention of saying this to an editor quite so bluntly; I'll simply improve the story as *story* until he will pass it.

March 23, 1959: Robert A. Heinlein to Lurton Blassingame

Now to the piece de resistance, the Putnam contract for *Starship Soldier:*

First, my very warmest thanks to you for your unsparing efforts on this ms. I know that you thought it was weak (and so do I .. . and I intend to try to repair the weaknesses); nevertheless, you sold the serial rights to the leading specialty magazine and trade book right to a major trade house. My morale is greatly bucked up thereby.

I've been rather "shook up" over this ms. . . . The book should be better than it is; I think I can improve it. I certainly will try to, working closely with an editor. Who will be my editor at Putnam?

September 19, 1960: Robert A. Heinlein to Lurton Blassingame

. . . However, the Scribner's angle is a special case. Yes, I do know that Miss Dalgliesh is no longer there. But my irk is not alone at her; it includes Mr. Scribner himself. I feel that I was treated in a very shabby fashion, and I regard him as in part responsible and do not wish to place any more stories with his firm. Scribner's had published twelve of my books and *every single one of them made a profit for them* and each one is *still* making money for them. At one time Miss Dalgliesh told me that my books had kept her department out of the red.

So I offer a thirteenth book . . . and it is turned down with a brisk little note which might as well have been a, printed rejection slip, for it was just as cold and just as informative.

Starship Troopers went on to win the Hugo Award as Best Novel of 1959,
given at the World Science Fiction Convention in Pittsburgh.

I then found it necessary to write to [George McC] to find out what the score was. He told me that it had been a joint action, in which several of the editors had read my ms—*including Mr. Scribner*—and that Scribner himself had joined in rejecting it.

Based on my royalty records I conjecture that my books have netted for Mr. Scribner something between $50,000 and $100,000 (and grossed a great deal more). They have been absolutely certain money-from-home for his firm . . . and still are. Yet after years and years of a highly profitable association, Mr. Scribner let me be "fired" with less ceremony than he would use in firing his office boy . . . not a word out of him, not even a hint that he gave a damn whether I stayed with them or not. I submit that this is rudeness, unpardonable in view of the long association.

Heinlein with his Hugo Award for *Starship Troopers* at the Pittsburgh World Science Fiction Convention.

Writers hear a lot of prattle about how speculative the trade book business is and how prestige houses (such as Scribner's) will publish a book which might lose money because the author should be encouraged—and hope to make it up on the rest of their list. Well, I seem to be part of the "rest of their list," the part that makes up their losses—for I certainly did not appear to be a writer they were willing to take even a *little* chance on, when it came to scratch. I was simply dumped.

Furthermore, the ms. couldn't have been bad enough to justify dumping me in view of the fact that three other editors bought it ... and then it went on to win the Hugo [Award] for [1959]. (Besides that, I notice that, despite ———'s earlier worries, the trade book sold 5,000 copies in the first two and a half months . . . and now he tells us that sales are picking up.)

It seems to me that, if the pious crap they hand out about "taking a chance" on authors actually meant anything, Mr. Scribner himself would have said to his editorial board: "Maybe this isn't the best book Mr. Heinlein has ever done—possibly it will even flop and we'll lose a little money on him this time. But his books have been steady sellers in the past and we'll have to give him the benefit of the doubt. Perhaps with a little revision it will be more acceptable; if you don't want to write to him about revisions, let me look over the ms. again and I will write to him . . . but we can't simply reject the book out of hand. Mr. Heinlein is part of the Scribner's family and has been for years."

Too goddamned much to expect, I suppose. At least that was *not* the way he handled it.

Lurton, it seems to me that, with any other successful writer on their list, Scribner's would have published that book—perhaps with revisions and perhaps not as a juvenile—but they would have published it. But if Mr. Scribner felt that he simply could *not* publish it, I think the circumstances called for a note, a letter, a measure of polite discussion, from the boss to me . . . a minimum of formal politeness.

I did not receive that minimum. I think Mr. Scribner treated me with extreme rudeness ... so I don't want to work for him. Lurton, I have elaborated this matter because, in several letters lately, you have pointed out that the new juvenile editor at Scribner's is anxious ' 'to welcome me back." So I have explained why I am not going back. I have nothing against the lady who now has that department—but the firm is still Mr. Scribner's. If the action had been taken by Miss Dalgliesh alone— But it was *not;* when I got tossed out, Mr. Scribner in person had me by the scruff of the neck and took part in the tossing, without even a formal word of regret.

Under the circumstances I'll take my business farther up the street. Or across the street. But I won't be kicked twice.

PODKAYNE OF MARS

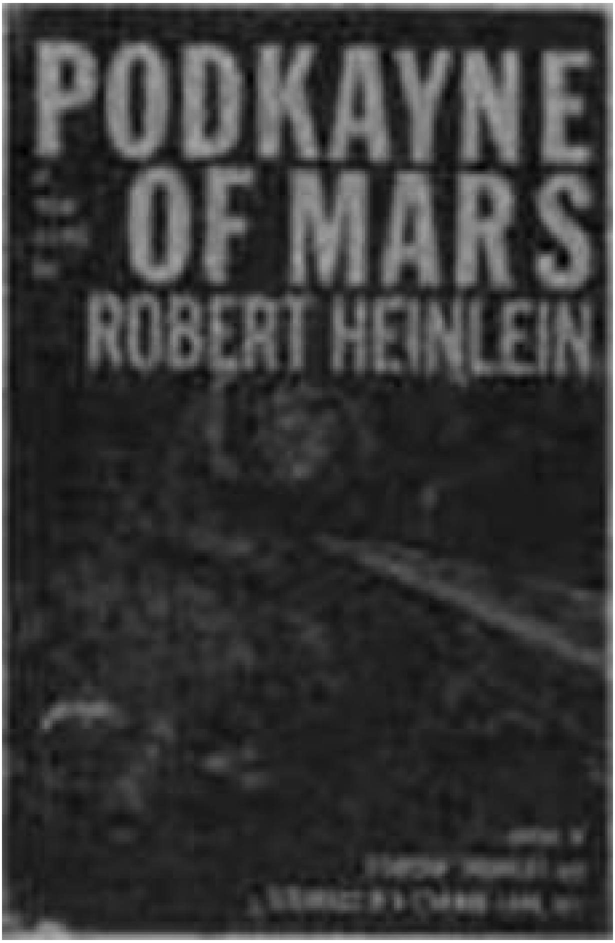

Podkayne of Mars, G.P. Putnam's Sons,1963, was Heinlein's last juvenile novel. The cover art is by Irv Doktor.

As originally written *Podkayne* depicted the tragedy of a mother who was too busy with her career to supervise her children's upbringing. Podkayne turns out well enough, although something of a dreamer; her brother is another story, an asocial monster.

Podkayne has as her ambition to be a starship captain, later in life, but when Uncle Tom invites her and brother Clark to go on a cruise to Earth and Venus, ambition is temporarily abandoned. As the result of a political intrigue, Podkayne and Clark find themselves in much trouble on Venus . . .

March 8, 1962: Lurton Blassingame to Robert A. Heinlein

Enjoyed all *of Podkayne Fries*—except ending. She was such a sweet kid that I hated for you to kill her. That is the Heinlein touch—tell Ginny to beware. It's a good story.

March 10, 1962: Robert A. Heinlein to Lurton Blassingame

Is *Poddy* a juvenile? I didn't think of it as such and I suggest that it violates numerous taboos for the juvenile market. It seems to me that it is what the Swedes call a "cadet" book—upper teenage, plus such adults and juveniles as may enjoy it—and the American trade book market does not recognize such a category. But possibly it might be well to let [Putnam] have this story at once and see what happens.

Lurton, for several years now I have been writing just stories, with no eye on the market, and have been writing them with no criterion save the fixed belief that a story which interests me, and the solution of which satisfies me, will interest and satisfy a sufficient percentage of readers to make the story commercially usable. Maybe I'm wrong about this—maybe I should study the market and try like hell to tailor something which fits the current styles. But it seems to me that, if I am to turn out work of (fairly) permanent value, my own taste (checked by yours and by Ginny's) is what I must follow. Of course, this may result in my losing the market entirely—but I hope that it will result in better stories than if I tried to compound the "mixture as before."

I know that the ending of *Poddy* comes as rather a shock. However, that is the ending that seemed to fit-to me. The story follows a definite progression: a girlchild with no worries at all and a preposterous ambition . . . then, step by step, she grows up and discovers that the real world is more complex and not nearly as sweet as she had thought . . . and that the only basic standard for an adult is the welfare of the young.

Oh, I could revise that last chapter to a "happy" ending in about two hours—let Poddy live through it, injured but promised a full recovery and with the implication that she will eventually marry this rich and handsome bloke who can take her with him to the stars . . . and still give her brat kid brother a comeuppance and his lumps (and it is possible that I will at least consider doing this if no editor will risk publishing it as it is). But I don't want to do this; I think it would ruin the story—something like revising *Romeo and Juliet* to let the young lovers "live happily ever after."

But it took the deaths of Romeo and Juliet to show the families Montague and Capulet what damned fools they were being. Poddy's death (it seems to me) is similarly indispensable to this story. The true tragedy in this story lies in the character of the mother, the highly successful career woman who wouldn't take time to raise her own kids—and thereby let her son grow up an infantile monster, no real part of the human race and indifferent to the wellbeing of others . . . until the death of his sister, under circumstances which lay on him a guilt he can never shake off, gives some prospect that he is now going to grow up.

I could state that the theme of the story is that death is the only destination for all of us and that the only long-range hope for any adult lies in the young—and that this double realization constitutes growing up, ceasing to be a child and putting away childish things. But I can't say it that baldly, not in fiction, and it seemed to me that I needed Poddy's death to say it at all. If Poddy gets to have her cake and eat it too (both marriage and star-roving), if that little monster, her brother, gets off unscathed to continue his clever but asocial career, if their mother gets away with neglecting her children's rearing without having it backfire on her—then the story is just a series of mildly adventurous incidents, strung together.

March 23, 1962: Robert A. Heinlein to Lurton Blassingame

I understand and appreciate, I think, your remarks about *Cezanne* and his black outlines—but this is an endless problem for me with no easy solution. If I preach overtly, I get complaints from Ginny, you, the editor, and in time the readers . . . and I'm all too prone to preach. In this book, *Poddy,* I'm limited by what Poddy herself would say—which is perhaps just as well!!!

May 9, 1962: Robert A. Heinlein to Lurton Blassingame

Please tell Peter Israel of Putnam's that I will tackle the revision he wants very shortly, say about the first of the week. I have one other job to finish first. I still have strong doubts about the artistic and dramatic necessity of a happy ending on this story—but I'll do my damndest.

May 20, 1962: Robert A. Heinlein to Lurton Blassingame

Neither editor liked my title and I did not [like] either of their suggestions. I have suggested to Pohl [Frederik Pohl, editor of *If] Podkayne of Mars,* which suits him. If it does not suit Mr. Israel I hope that he will suggest one which all three of us can agree on, as I prefer to have magazine, version and book carry the same title if possible.

The new kittens are two weeks old and fat and healthy. A hawk or an owl got Ginny's ducks.

May 25, 1962: Lurton Blassingame to Robert A. Heinlein

Beautiful job on the revision.

CHAPTER V THE BEST LAID PLANS

PUBLIC SPEAKING

August 15, 1968: Robert A. Heinlein to Lurton Blassingame

I have given both these bids considerable thought. As you know, I do not like speaking dates, but on the other hand, I realize that I must accept some of them, especially those from librarians. This time the matter is further complicated by the fact that both bids come via Scribner's (not my current publisher) and, while one group offers to pick up the tab, the other group asks Scribner's to do so—and Scribner's has agreed to do so.

I do not want Scribner's to pick up the tab. After long thought I have concluded that I do not want *any* publisher *ever* to pick up the tab when I make a trip to speak; I would much rather see a publisher spend money to advertise and distribute my books than to have promotion money spent on airfares and hotel bills for the author.

So I have finally arrived at this policy, which I now present to you for comment and (I hope) approval. From here on I will continue to avoid speaking dates when possible except speaking dates involving librarians. With respect to their bids, I will accept them if possible in such cases and *only* such cases as the group which wishes to have me appear wants me badly enough to pay my travel and hotel expenses plus a nominal fee of, let us say, fifty dollars.

WRITING PLANS

November 19, 1945: Robert A. Heinlein to Lurton Blassingame

.. . My particular talent is for the prophetic novel, i.e., the novel laid in the future, perhaps only a few years in the future but nevertheless in the future. I have no objection to doing contemporary fiction and am open to advice, but there is this one thing which I do especially well. There is a book market for it and at least a limited slick market for it. I believe that the slick market for it will be much greater than before the war, primarily because of atomics. I think people will want to be told what to expect in the coming atomic age. I have notes for many, many stories; do you want to discuss stories with me ahead of time, or shall I just go ahead and write?

I also write fantasy and would like to emulate Stephen Vincent Benet. The SEP *[Saturday Evening Post]* has been publishing quite a lot of fantasy since ——— took over; I would like to do the sort of thing they publish.

January 1, 1946: Robert A. Heinlein to Lurton Blassingame
I am quite used to being considered too spectacular. My own brother, a colonel of engineers, thought my prewar stories about the atomic bomb and atomic weapons to be sheer moonshine; he has since flown over Hiroshima and changed his mind.

April 20, 1947: Robert A. Heinlein to Lurton Blassingame
I am starting a short, Luna City series, slanted *for Post,* tomorrow. Like the hired man said, "We've had a lot of trouble around here," but you may expect regular copy for some time hence.

June 24, 1947: Robert A. Heinlein to Lurton Blassingame

To confirm my telegram of Tuesday, my new address is:

Suite 210,7904 Santa Monica Blvd.,
Hollywood 46, Cal.

Letters or telegrams sent there will reach me promptly. My telephone has been disconnected. We have closed our house and in a few days—as soon as I can get some chores cleaned up—I am going to light out for the desert and get back to work. Leslyn [Heinlein's first wife] is going to stay in town. . . .

EDITOR'S NOTE While Robert was working at the Naval Air Experimental Station in Philadelphia, I was reassigned to duty there by the Navy. At that time, I was a lieutenant (j.g.) in the WAVES. We worked together on some projects, chiefly on attachment of Plexiglas canopies. Both of us had other, separate projects. When World War II ended, Robert resigned his position as an engineer to return home to Los Angeles with his wife. As I had not accrued many points in the system that governed release from the service, I was required to remain on duty until March 1946. I had already decided to return to college for an advanced degree, and made arrangements for that. Robert suggested that I go to UCLA rather than Berkeley, as I had planned.

While the GI Bill paid for tuition and books, the stipend allowed was rather scanty, so I needed to work parttime, attending classes and studying in what free time I had. So my social life lapsed almost entirely. What I did retain was devoted to the symphony and figure skating. I saw very little of

Robert and his wife, Leslyn, although we lived not too far apart.

When finals were finished in 1947, I had a call from Robert—he asked my help in clearing his papers from his house. He was getting a divorce.

I took the summer off from my studies to work—my finances were in poor shape. Robert spent that summer in Ojai, writing. We were married in October 1948.

Robert and Virginia about the time of their engagement.

1948: Robert A. Heinlein to Lurton Blassingame

I'm back to work. The honeymoon is over, except for weekends. I hope, Lurton, to turn over to you more and better copy than you have seen yet. During my entire association with you, everything I have written has been turned out under difficult circumstances, most of them under most excruciatingly difficult circumstances. I have had to force myself to work, with the major portion of my mind and attention centered on the things that were happening around me and to me. I am not seeking sympathy, but I do want you to know that there is at least a fair chance that I will give you better material and more of it from now on.

November 6, 1948: Robert A. Heinlein to Lurton Blassingame

It isn't necessary to get Ginny to chain me to my typewriter four hours a day. I am frantically anxious to spend more hours than that at work every day. If I am spared more domestic upheavals for the next several months I should turn out a lot of copy. Right now I am racking my brain trying to cook up another subject for a boys' novel for Scribner's. I am not going to be able to go to Florida this winter to complete the diving and research I must do before I write *Ocean Rancher.* Therefore I have got to find another story for ———. It would be easy enough to cook up another space opera, but I shall do my darnedest to find something else to write about before falling back on that.

November 18, 1948: Robert A. Heinlein to Lurton Blassingame

Your remark that you were sure that I would do an (adult) novel within the next twelve months has caused me considerable thought. Do you really think so? I have long wanted to do book bound adult novels, preferably of the H. G. Wells sort, but have never tackled anything but pulp serials and these boys' books for Scribner's. Do you think I should take time off ... and make a real try at cracking the adult book market? If so, should I drop the speculative stuff and try a contemporary novel—or should I stick to my specialty?

January 28, 1949: Robert A. Heinlein to Lurton Blassingame

.. . In the meantime, I am collecting notes on (Forgive me!) the Great American Novel. Yup, Lurton, I have fallen ill of the desire to turn out a "literary" job. Specifically, I would like to do a job somewhat like Ayn Rand did in *The Fountainhead,* but with modern art, especially pictorial art, as my target. It may be a year or two before I feel ready to tackle it, but I am working on it.

The first draft of the boys' novel *[Red Planet]* for Scribner's was finished at 11 P.M. last Monday. I have taken three days off to attend to chores and correspondence and intend to start revising tomorrow. The finished manuscript should be in your hands within a fortnight.

October 1, 1949: Robert A. Heinlein to Lurton Blassingame

I have two short stories that I am very hot to do, one a bobby-sox for *Calling All Girls* and one a sci-fi short which will probably sell to slick and is a sure sale for pulp. The first is "Mother and the Balanced Diet," using the same characters as [in] "Poor Daddy," as the editors requested. The other is "The Year of the Jackpot" based on cycles theory—1952, the year that *everything* happens at once. But gosh knows when I will find time to do them. I probably will, as I *want* to do them. But I'm working myself nutty. (Oh, yes—I've got to prepare some stuff for ——— too; possible [motion picture]uses for my published stuff.

About the *Boys' Life* job, see above. You'll get both versions in about a month. We have to move this week; I'll send you a new address.

HOLLYWOOD WRITING

September 3, 1957: Robert A. Heinlein to Lurton Blassingame

I want to hold up for a little while in changing Hollywood agents. I still think that MCA is not the place for me to get personal attention but a recent incident makes it polite, at least, to delay: at 1200 26 August, Hal Flanders of Ned Brown's office phoned me and offered me a Hollywood writing job doing a screen treatment of Herman Wouk's *The Lomokome Papers.* I turned down the job—I don't really want to write screen stories of anyone's work but my own, and this particular story *cannot* be repaired into an honest science fiction story anyhow; it is a philosophical tract packaged as a fantasy. Furthermore, I hope my decision will not disappoint you when I point out that the source of the work is such that we could hardly expect MCA to split the fee—and I prefer to stay under your management and writing for the New York market rather than become a Hollywood trained seal. In any case, I could not finish the novel, do this job, and sail on 26 November. But I did find the offer pleasing. . . .

Robert and Virginia Heinlein on the set of "Destination Moon" 1949. Heinlein wrote the script based on his story in Short Stories magazine, September 1950.

November 16, 1961: Robert A. Heinlein to Lurton Blassingame

There will be a veritable spate of new Heinlein stories before this winter is over. Our bomb shelter is completed and stocked—and the durn thing was enormously more expensive than I had figured on when I started it. Now I have a couple of weeks of chores to clean up, including a big backlog of correspondence, filing, record keeping, etc.; then I shall apply the nose to this grindstone and keep it there all winter.

August 10, 1963: Robert A. Heinlein to Lurton Blassingame

This fall I might do about 10,000 words for *Boys' Life* (query them if you like), or write the last story of the Future History [see *The Past Through Tomorrow* in Chapter XI, "Adult Novels"], *Da Capo* (piles of notes on it but it has never quite jelled)—or possibly a new novel. Or perhaps all three in the order named. But that is a good many weeks away.

Re Scribner's: We might offer ——— something some day—but only if Putnam's turns down a book.

April 17, 1964: Robert A. Heinlein to Lurton Blassingame

I have spent the past month on (a) flu, (b) reading several hundred pounds of accumulated magazines and technical reports, and (c) correspondence. The latter two are things I am endlessly behind on, always. There is no solution to the problem of trying to keep up with the ever-expanding frontier of science and technology, plus the world in general; I simply do the best I can, falling further behind each year, especially in electronics, biochemistry, and space travel technology. But I have made, implemented, and am keeping a good resolution concerning correspondence: I now answer almost all letters simply with postcards—a letter has to be really important *to me* to cause me to answer it by a real letter. The saving in time is very marked.

I will probably not write another story or book until after I learn whether or not I will have to go back to Hollywood this summer. And there is endless maintenance work to be done around this place. Today I got back to pick and shovel for the first time: cleaning some tons of silt out of my middle irrigation pool ... silt from a flood clear back in September or earlier. Monday I expect to start on concrete work, repairing the lowest dam, if the weather holds. This has been a cold, very late spring. Ginny has just started on her garden work; it has been too cold up to now. There is still some snow on the mountain above us and it snowed down here only eight days ago.

June 23, 1967: Robert A. Heinlein to Lurton Blassingame

I am very anxious to get back to writing, including new copy for the proposed boy scout book—and I've just had a very pleasant, long letter from ——— telling me that—— has again raised their rates . . . and that he would expect to pay me a still higher bonus rate if I'll ever come through with copy. But, Lurton, I've never worked any harder in my life than right now and it is utterly-impossible for me to turn out fiction until I get this [SantaCruz] house finished. Every time I turn my back something goes wrong. The cabinet and finish work is slowly (and very expensively) being finished. After that we still have the floors, ceilings, and fireplaces to do, plus the driveway, the front steps, and some exterior painting. It feels like an endless nightmare and the costs are utterly unbelievable. But there is no way to stop—short of being forced to stop by running out of money. Which is possible, despite the way you have been digging gold for us.

Sorry—I'm simply very tired tonight, up to midnight last night on the drawing board, on it again today under pressure so that the cabinetmakers could take a bunch of detail drawings home over the weekend . . . and now writing this under pressure so as not to miss the next mail dispatch. But we *are* getting a beautiful house just the way Ginny wants it.

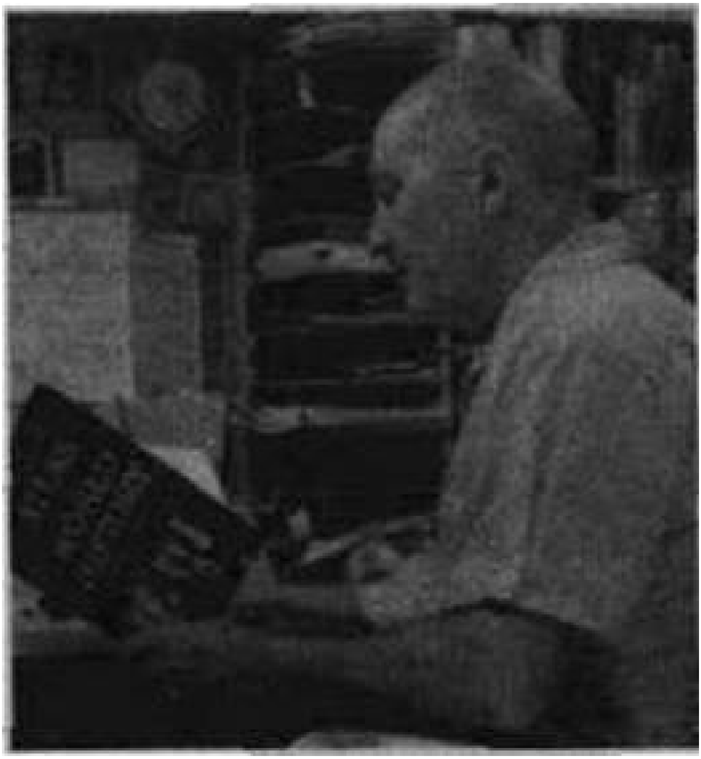

Heinlein working at his desk, at "Bonny Doon," the Santa, Cruz house.

September 16, 1973: Robert A. Heinlein to Lurton Blassingame

.. . In the meantime, I am hotter than a $2 pistol on *three* books. One is fiction and will be a long time in writing, as I must do much research on the history and culture and manners of speech of several periods I do not as yet know enough about. It will be an episodic time-travel fantasy (with a new gimmick for time travel), each episode independent and available for sale as a short story as it is written, but the whole thing linked together by an overall plot which will make it a novel of book length—somewhat the way [Paul] Gallico's "Adventures of Hiram Holiday" make one book—but nothing at all like Gallico's fine job save in its episodic structure. (I am going to reread his in order to stay as far away from his ideas as possible in all ways.) I have several episodes well worked out but each needs careful research—probably after a draft on each, then a final form after research; this will take lots of work. (I may turn out a juvenile sci fi adventure of the sort I used to do long before this episodic fantasy is completed.)

The second book is a memoirs-autobiography job to be published posthumously—and left uncopyrighted till then (hence of zero cash value in probate)—as a little bonus to Ginny for all the years she has put up with my cantankerous ways. If published about a year after my death it should bring her some return . . . if I am still writing and my works are still known at the time of my death. If I get it in fair shape, you may possibly see a draft of it later—depends on events. I have been gathering notes for such a book for many years and have recently started shaping them up ... especially since 1969, which caused me to realize that I didn't have forever if it were to be a vendable property. Working title: *Grumbles from the Grave by Robert A. Heinlein (deceased).* (It's amazing how frank and how acidly funny one can be when one is certain it will never see print until the writer is safely out of reach. I'll name names—then Ginny will have to edit it with the advice of a good lawyer to insure that she is safe, too—then no doubt the publisher's lawyers will want some names deleted or changed, too. But I am going to write it as if with a Ouija board. It will be easy to write—lots of notes, lots of packrat saved souvenirs, more than fifty years of letters, many things I have never discussed—e.g., the frontline seat I had in the crisis many years back with Japan, before World War II—a crisis involving a war ultimatum that never got into the news. . . plus a Secret Life of (Walter Mitty) Heinlein, *etc.* I'm working on it.

But the third book will be written and finished for publication as soon as I am free of taking care of Ginny through this long, long siege of oral surgery. I have it in shape to start writing this very minute but will have many, many more card notes by that time—shortly after the first of the year. Working title: *Writing for a Living (and How to Live Through It)—Being the Ungarnished Facts about the Writing Racket for People Too Lazy to Dig Ditches.* The first part— *Writing for a Living*—is for the cover and the half-title page, the entire title being for the full-title page—although the book jacket might read *Writing for a Living* in large letters, plus *The Ungarnished Facts* in much smaller letters, plus my name in quite large letters—same size as the short title, or even larger, if publisher's judgment in dust jackets of my last several books is a guide. Besides that, for use on the inner flap and on the back of the dustjacket, and as title of the preface Ginny has suggested and is preparing a Latin fake quotation: "De Natura Scribendi etc.,"a free translation being "Concerning the Nature of the Writing Business and How Not to Get Screwed in It." Ginny's command of Latin grammar is good and she knows many Latin bawdy idioms . . . but she will write it, then enlist the help of a professor of Latin here at the campus to insure perfect grammar and exact idiom—and a choice of words as nearly self-translating as possible by selection of proper cognates of English. I'm [I'll] probably attribute it to Juvenal or Ovid, as interpreted by Lazarus Long.

(It could have a How to Write for Money title—but I think that "How to—" has been overworked of late years.)

A somewhat-laundered translation could be used in the dust jacket blurb (and possibly an exact translation supplied to reviewers), but the Latin itself must be idiomatically perfect. In truth it will be a most practical guide for inexperienced aspirants who are wild to do the—comparatively mild—and rather fun work that writing entails. I am going to make it extremely practical—more practical than Jack Woodford's *How to Write and Sell* (his only good book, his only bestseller, and the basis for90% + of his reputation)—but I intend to make it lively, hard to put down as a good novel by any of the millions of aspirant-writers-who-never-will-actually-write, plus the thousands who do write and could make a living at it if they knew certain rules of the game—rules that are not taught in so-called creative writing classes, nor in any book on how to write that I have ever seen.

I intend to lace it with illustrative true anecdotes, changing names and dates and places only when necessary to avoid being sued—and will say so. It will have many a chuckle init, plus a few belly laughs. I *know* I can do, it. This will be a timeless book and should make money for many years. It just might be a smash hit, like Helen Gurley's *Sex and the Single Girl*—as everyone wants to know how to make money with least effort and almost as many have at least a secret hope of seeing their names in print as "Authors' '—much like the great curiosity that most respectable women have about prostitution. . . and a secret wonder as to whether or not they could have made the grade in the Oldest Profession—only of course they never actually *would,* perish the thought! Almost as many feel that way about the Second Oldest Profession, the Teller of Tales—I know, from endless direct experience, that a person who actually *writes* for a living . . . and clearly does well financially at it ... is an object of curiosity to many—an exotic creature, not quite respectable, but very interesting. I'm buttonholed about it every time I appear in public—which used to be fun but has grown to be a nuisance. So I might as well turn this nuisance into cash.

EDITOR 's NOTE: None of the three books outlined here were ever written; some notes were collected, but nothing ever went on paper.

Lurton telephoned one day, saying that Robert had been asked to give one of the Forrestal Lectures at the NavalAcademy. Normally, Lurton would have regretted the invitation, but this was from Robert's alma mater. So it was accepted, and many months went into preparation for the talk.

Then along came a request from the Britannica *editors for Robert to do an article on Paul Dirac and antimatter for the* Compton Yearbook. *Robert viewed that as an opportunity to review the entire field of modern physics, and sciences in general. So, doing that article took one year. And it was followed by a request for another article on blood—another year consumed in the study of biological sciences, with one article to show for that year's work.*

Then came the invitation to be Guest of Honor at MidAmeriCon, which took up most of the year of 1976,what with all the arrangements to be made.

The year 1977 was passed in getting blood drives going among science fiction fans—and I must heartily recommend them for their cooperation in this project. Donors still send me copies of their ten-gallon certificates . . .

Thus did time pass, and those books Robert was so hot to do were never written. Robert never did tell me just what the crisis with Japan was, when his ship steamed full speed toward the Orient.

SLUMP

March 31, 1959: Robert A. Heinlein to Lurton Blassingame

If the market is in this bad shape, I had better do one of two things; either quit writing for the pulp SF magazines and concentrate on television and possible slick sales, or simply retire and do what I want to do with my time. I could retire very easily now, and Ginny and I could live very comfortably, simply by dispensing with foreign travel, emeralds, and similar unnecessary luxuries—and I certainly do not fancy knocking myself out, breeding insomnia, etc., for the privilege of receiving word rates that are actually less, after taxes, than those I got twenty years ago—and are effectively less than half that when I spend the money. It doesn't make sense.

July 28, 1959: Robert A. Heinlein to Lurton Blassingame
I am returning your clipping about the sad state of fiction. It is enough to drive a man back to engineering. However, I have always worked on the theory that there is always a market somewhere for a good story—a notion that Will Jenkins [the real name of sciencefiction writer Murray Leinster] pounded into my head many years ago. When I started writing there were lots of pulp magazines, many slick fiction magazines—no pocketbooks and no television. I think I'll just go on writing stories that I would like to read and assume that they can be sold somewhere to some medium.

MOTION PICTURE CONTRACT

November 8, 1968: Robert A. Heinlein to Lurton Blassingame
We have just finished a hard three days with the literary appraiser —hard but very pleasant; he turns out to be muy simpatico. Today I am trying to turn my notes into a long letter to Ned [Brown] re the *Glory Road* [fantasy novel, see ChapterXI, "Adult Novels"] contract. Darn it, I opened that contract determined to sign it unchanged if at all possible to live with it. Ginny says they let a second cousin write this contract when they should have used at least a first cousin.

TELEVISION SERIES

October 12, 1963: Robert A. Heinlein to Lurton Blassingame
Ned told me by phone that the contract is all set for the TV series and for me to do the pilot film shooting script. He gave me a lot of details, none of which I wrote down, as I don't believe a durn thing out of Hollywood until I see a signed contract and a check . . . Ned seems to have gotten from them simply everything he asked for .. . I simply told him to go ahead and get the best deal he could and I would sign it as long as it did not commit me to work in Hollywood.

But Ned said that I really must come out to Hollywood for at least one day's conference with Dozier, the boss. This I flatly refused to do until I have a signed contract in hand. I was not just being stubborn.

EDITOR'S NOTE: Robert was quite accustomed to receiving telephone calls from Hollywood producers; they would want him to do a script. Each time, the suggestion would be made, "Why don't you hop on a plane and come out here and discuss it?"

So, when in 1963, Robert received a telephone call from a Hollywood producer, Howie Horwitz, Robert was ready with an answer. Howie wanted Robert to do a pilot script for a science fiction TV series for Screen Gems. Then came the inevitable line: "Why don't you hop a plane and come out and discuss it?"

Robert replied, "Why don't you hop a plane to Colorado and we can discuss it here?"

To our amazement, Howie did just that.

Robert had sworn a mighty oath not to get involved in such an enterprise again. But Howie's presence disarmed him. Robert set to work after Howie left and produced a script. Then he found that trying to work between Colorado and Hollywood just wasn't possible. So in early 1964 we went out there for Robert to do rewrites under Howie's direction.

When the work was finished, we returned home. It was at just this point that the bankers went out to Hollywood from New York, and fired Howie and his boss. The script was shelved at Screen Gems, and Howie and his boss went across the street, and produced "Batman. "

For all practical purposes, the pilot script was dead, along with the series, "Century XXII. " There is a faint hope that it may be produced someday. As this is being written, someone recalled the script and is setting about the difficult task of undertaking to produce the film.

January 20, 1964: Robert A. Heinlein to Lurton Blassingame

Will you get me off the hook on several things? There has been a death in my family—no close emotional involvement for me, but some duty matters—so I am unexpectedly catching a plane in about an hour (Ginny remains here), then on my return Thursday will be leaving immediately to drive to Hollywood (Ginny accompanying me) and arriving there possibly late for Screen Gems story conference Monday 27 January. . . . The [TV] thing is sourer than ever and I see no hopes of saving it, but I must go out and try my best.

But today I 'm badly strapped for time and ask help on some unfinished business (this damned screenplay has put me behind on *everything)*—and this funeral puts the topper on it—despite the fact that I answered sixty-three letters in the last three days, trying to catch up.

April 8, 1964: Robert A. Heinlein to Lurton Blassingame

I have many other things to acknowledge. We have been home three weeks now, two of them eaten by illness, the rest of the time used futilely in attempting to cope with an avalanche of accumulated low-priority paperwork, several hundred periodicals, etc., piled up not only while we were away, but left undone clear back from last August when (TV producer) first entered my life. This last Hollywood experience has simply confirmed my earlier opinion that, while Hollywood rates are high, what a writer goes through to earn those rates makes it a losing game in the long run. I hope that you and I and Ned [Brown] make some money out of this—but if the series is never produced, I hope to have sense enough to stay home and write books in the future and leave the movie never-never land to those who enjoy that rat race.

CHAPTER VI ABOUT WRITING METHODS AND CUTTING

October 25,1946: Robert A. Heinlein to Lurton Blassingame

. . . then write another short. This one is tentatively titled "Homesickness" ["It's Great to Be Back"] and is another Luna City and so forth yarn. If possible, I want to build up a background, as I did in *Astounding,* for a series of interplanetary shorts, laid in the near future (the coming century, to about A.D. 2050). The series will follow the formula, somewhat modified, of the SEP *[Saturday Evening Post]* series such as Earthworm Tractor, Tugboat Annie, Gunsmith Pyne, Blue Chip Haggerty, etc.—stories laid against a particular occupation or industry. My series will be laid against the background of *commercial* (not exploration nor adventure) interplanetary travel. Continuity will be maintained by names of places—Luna City, Dry water, Venusburg, New Brisbane, New Chicago, How-Far?, Leyburg, Marsopolis, Supra-New York, etc., and by consistent use of techniques, cultural changes, and speech changes. Characters will shift for each story, but a major character in one story may show up in a bit part in another.

The science and engineering will be held to a minimum but will be authentic. An editor may be sure that I will respect facts of astronomy, atomics, ballistics, rocketry, *etc.* For example, the piloting in the story you are about to receive is as authentic as it can be at this date—if it is not as it *will* be, then it is at least as it *could* be; it is practical, with respect to time intervals, speeds, accelerations, and instruments used. When, in that story, I mention falling 700 feet on the Moon in forty seconds and thereby picking up speeds up to 140 miles per hour, and, thereafter, killing the speed with a one-second-plus blast at five-gravities, I know what I am talking about—I am a mechanical engineer, a ballistician, a student of reaction engines, and an amateur astronomer. I mention these things because they may help you sell my stuff—I won't give an editor any Buck Rogers nonsense. A great deal of study and research goes into the background of my stories.

May 16, 1947: Robert A. Heinlein to Lurton Blassingame

.. . As for formal coaching from Uzzell [a well-known "story doctor" and coach of the time] or anyone, I'm getting just the coaching I want from you . . .I'm afraid of coaching, of writers' classes, of writers' magazines, of books on how to write. They give me centipede trouble —you know the yarn about the centipede who was asked how he managed all his feet? He tried to answer, stopped to think about it, and was never able to walk another step. Articles and books on how to write have that effect on me. The author seems so persuasive, so sure that he knows what he is talking about, that I start having doubts about my own technique. It usually turns out that the author is urging the reader to do something quite unsuited to me—fine for him probably, but not my pidgin. If I try to imitate him, follow his directions, I usually fail to accomplish his methods and lose my own in the process . . .

Heinlein working at his desk, at "Bonny Doon," the Santa Cruz house.

I do get a great deal of help from studying other writers' stories, particularly in the respects in which I see that they have accomplished an effect that I do not as yet know how to accomplish. I find such study of what they have *done* more use to me than their discussions of *how* they do it.

Winslow says I don't understand plotting and probably I don't—I have been congratulated many times on the skill shown in my plotting when I knew damn well that the story in question had not been plotted in advance at all. My notion of a story is an interesting situation in which a human being has to cope with a problem, does so, and thereby changes his personality, character, or evaluations in some measure because the coping has forced him to revise his thinking. How he copes with it I can't plot in advance because that depends on his character, and I don't know what his character is until I get acquainted with him. When I can "hear the character talk" then I'm all right—he works out his own salvation.

January 31, 1948: Robert A. Heinlein to Lurton Blassingame

I certainly am sorry to have worried you and will try not to let it happen again—when I get into the final chapters of a novel it is sometimes almost impossible to attract my attention.

January 2, 1950: Robert A. Heinlein to Lurton Blassingame

My method of work is such that I always have a dozen or more stories being worked on.

March 20, 1953: Robert A. Heinlein to Peter Hamilton (editor of *Nebula Science Fiction)*

The problem of building up convincing background in a science fiction story becomes extremely difficult in the shorter lengths. In ordinary fiction, background may be assumed or most briefly indicated, but it is a most unusual science fiction idea which may safely be so treated. In all the years I have been writing science fiction I have done only one story under 2,500 words, that story being "Columbus Was a Dope" . . .

October 9, 1956: Robert A. Heinlein to Lurton Blassingame

. . . However, I have been fiddling with experimental methods of storytelling (none of which you have seen) and I am beginning to think that I may be developing anew method which might turn out to be important. It is a multiple first-person technique, but not the one used by John Masters in *Bowhani Junction.* Mine calls for using camera cuts and shifts as rapid as those in the movies; the idea is to give the speed of movies, the sense of immediacy of the legitimate stage, and the empathy obtained by stream of consciousness—a nice trick if I can bring it off! The greatest hitch seems to lie in the problem of shifting viewpoints, both without confusing the reader and without losing empathy through cumbersome devices. But I think I am learning how to do it.

I don't want to use this technique on commercial copy until I am sure I can force the reader to go along with a novel technique. James Joyce introduced into writing an important new technique, but he did it so clumsily that his so-called novels are virtually unreadable; if I do have here a usable new technique I want to polish it to the point where it can stand up in the open market in competition with the usual wares whose values are established and recognized.

Ginny suggests that I not use it in science fiction in any case, but save it for a lit'rary novel. She has a point, I think, as it would not be seriously reviewed in an S-F novel. We'll see.

ATTENTION

November 8, 1968: Robert A. Heinlein to Lurton Blassingame

Sure I signed the Gollancz [a British publisher] contract; and not in invisible ink, either. Then I stuck it into file and sent you the copy I had *not* signed—convinced that I had signed both of them. Ginny says that whenever she finds my shoes in the icebox, she knows I'm coming down with a story.

So here is the other copy—now signed.

WORKING HABITS

August 31, 1956: Robert A. Heinlein to Lurton Blassingame

.. . In the meantime, I have turned out no salable copy. Part of my trouble is that I have undertaken to do something which does not fit my working habits, i.e., agreed to produce a story outline. Outlines never have any reality to me, no vividness. Oh, I use what I call an outline but a sort that no editor would accept; it's actually simply musing on paper-then when the idea begins to take fire, I start at once to write the story itself and become acquainted with the problem and the characters as I go along. Sometimes this results in blind alleys and surplusage which has to be removed *(Door Into Summer* had Martians in it for half a day, then I chucked a few pages and got back on the track)—but by the time I am well into the story I am writing with sureness, hearing the characters, seeing their surroundings, and having the same trouble coping with their problems that they have. As you can see, this is not a method [that] lends itself to a formal outline, from which I can promise to derive an acceptable story. But it is the method I have taught myself and it works for me.

Trying to force myself into the more conventional method has not worked; it has simply resulted in my snapping at my wife for a couple of months and getting no other work done either. So I am going to devote the next week to an attempt to start a story suitable for *Boys' Life* on spec—no outline. Probably it will work and probably they will buy it. But if I can't click in about a week I shall have to tell them that I have nothing to offer them at this time—I shall have to cut my losses and get busy on something I can do.

September 13, 1956: Robert A. Heinlein to Lurton Blassingame

I've been wanting to write to you ever since I spoke with you on Sunday, but I have been busy on a draft of a novelette for *Boys' Life.* I finished it last night and will now try to clear my desk—starting with your letter.

I think I finally have a story that *Boys' Life* can use, provided I can now sweat it down to an acceptable length without bleeding it to death. The title is "Tenderfoot on Venus" and is about a Scout and his dog and his chum in a Boy Scout troop on Venus—no sex, no firearms, no fighting between the boys, knives used only for things that a Scout legitimately uses knives for, no villains other than the hazards of nature. I have no real doubts about the story; while it isn't immortal literature, it is a good, decent, adventure story. But I do want to use as much wordage as possible in the final draft because of the always present problem of building up a convincingly detailed background in a science fiction story laid in the future in a strange scene. Could you phone their editor and ask him for his absolute top word length? The more space I have, the better the story will be.

Final copy should be in New York about one month from now. They can count on that.

EMOTIONAL DISTURBANCES

August 27, 1953: Robert A. Heinlein to Lurton Blassingame

I greatly sympathize with her [Peggy Blassingame] emotional difficulty, being subject to it myself, although from different causes. When I am working on a book, any commitment at all other than the book itself is almost unbearable. A dinner date four days away will get between me and the typewriter and make it very hard to work. . . . very hard to keep and hold that out-of-the-world reverie that seems (for me) to be almost indispensable to empathic fiction. This neurotic peculiarity of mine is quite inconvenient to Ginny, as I am quite reluctant to take part in any social activity arranged earlier than about 5 P.M. on the day it takes place—I don't mind socializing during a story as long as I don't know about it ahead of time, but that limitation is very awkward for a hostess.

STORY CHANGES

March 28, 1957: Robert A. Heinlein to Lurton Blassingame

. . . delay on *Methuselah's Children.* Both Ginny and I have been over it carefully since I last wrote. She thinks it needs a complete rewrite from beginning to end; I am certainly convinced that it should not go on the market until I have worked on it a bit and perhaps completely rewritten it. I greet this task with the delight with which I change a tire in the rain at night, but it has to be done, I am afraid. Worst of all, it uses time I had intended to put onto new copy. With luck I should forward it to you not too late in April . . .

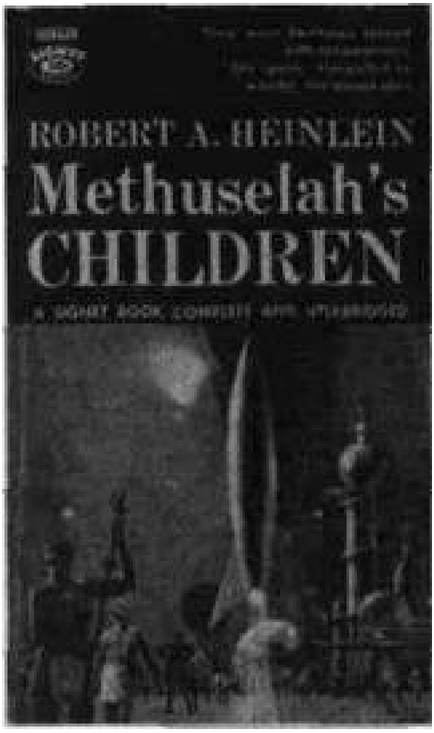

Methuselah's Children, Signet (The New American Library), 1960. An earlier, shorter version of the book was published by *Astounding* in 1941.

. . . My strongest misgiving about a release through Doubleday is on other grounds, however: I am afraid that *Methuselah* simply does not stand up to the quality of *Puppet Masters* and *The Door into Summer;* I am afraid it would look like a slump. It was written sixteen years ago; I have learned something of story telling techniques in that time, I think.

EXCERPTS

February 16, 1968: Robert A. Heinlein to Lurton Blassingame

And I have another letter from ——— concerning that request to use an excerpt from "Logic of Empire." This time he tells me approximately (not exactly) what he wants to excerpt but says that he cannot tell me how much I would be paid. Well, from what I know of British prices, I doubt if he contemplates paying more than ten to twenty dollars for a thousand words. But I can't see why he expects me to sell for an unstated price. I'm tempted to tell him that short excerpts call for short-short story rates—say about a shilling a word.

But I'm going to tell him no again, (a) I don't like to see my stories chopped up, in any case; each is meant to be read as a whole, (b) I have a dirty suspicion that he wants my name on the dust jacket at a cost of about ten bucks, (c) The controlling point: I don't like his action in bypassing my agent. If he wanted a rehearing he should have submitted his second proposal to *you*—he certainly knows who you are and where you are.

Damn it, on second thought I am not going to answer him now; I'll enclose his letter instead. If you want to answer it, do so. If not, send it back and I will do so. But I certainly do not like his unprofessional behavior in intentionally trying to bypass my agent.

INTRODUCTION

January 14, 1963: Robert A. Heinlein to Robert Mills

Lurton tells me that you and he have reached an agreement on the use of "Zombies" ["All You Zombies"] and that you now want an introduction to the story from me, telling why it is "one of my favorites."

At that point it suddenly lost status with me. The prospect of writing a blurb for one of my own stories I find almost as filled with grue as is attending an autographing party or writing for a fanzine. Why don't you write it? You seemed to like this story better than I did and your blurb in FSF *[The Magazine of Fantasy and Science Fiction]* was okay.

But, if you must have it, how about this:

"Mark Twain invented the time travel story; six years later H.G. Wells perfected it and revealed its paradoxes. Between them they left little for latecomers to do. But they are still fun to write. Some stories are chores, some are fun—this is one I enjoyed writing."

But I would still prefer for you to blurb it. If an author writes his own blurb, he is caught between the horns of conceit and false modesty.

FREE OPTION

January 27, 1961: Robert A. Heintein to Lurton Blassingame

My whorish instincts protest the idea of a free option even for six months—but I'm willing to go along, pursuant to your advice. He [a would-be producer] would be a lot better off (safer) and I would be happier if there were some minor cash involved, with the deal spelled out. The option money needn't be much and it could have renewable dates by small payments. However, I suspect that he does not want to sign a formal option now because that necessitates spelling out the deal which is being optioned—and he probably hasn't any clear idea what the deal might be until he has a treatment to show financial backers.

CHAPTER VII BUILDING

COLORADO SPRINGS

EDITOR'S NOTE: When Robert and I were first married, we lived in Colorado Springs. After the motion picture script sold, it was necessary to move to Hollywood, as Robert was to be technical director for what became Destination Moon.

After the shooting on the film was completed, Robert's contract was up, so we returned to Colorado to build our house there. While we were building, the Korean War began—although it was called a "police action," it was a fullfledged war; the draft was still in place, and prices on everything began to soar. Robert might be called back to do engineering, and although I was on inactive duty, there was the everpresent possibility that I might be called back to active duty. Neither of those things happened, but we went through a period of not knowing whether we would have to leave our house half-built and go off to war.

1776 Colorado Springs Street. The Heinleins got to pick their own house number for their Colorado Springs house. They moved in in 1950.

In one of these letters there is mention of the quickly rising costs of lumber; Camp Carson nearby Colorado Springs had been renamed Fort Carson, and an enormous building program had begun there. We were caught by the rising prices on everything needed to complete the house.

Before Robert began writing, he had some interest in planning single-

family houses. He had several plans of his own. However, those were for a flat area, and the lot we purchased was on a hillside. Neither one of us was prepared, though, for the intricacies of the actual building of a house.

I was required to read Mr. Blandings Builds His Dream House. *We both avoided the mistakes in that story, but we made a brand new set of our own.*

July 9, 1950: Robert A. Heinlein to Lurton Blassingame

. . . We are going ahead with building and have the foundation in, the services in, and the septic tank built, but I shall have to shut down the job again and wait if monies do not come in. Yes, I know I could remedy that by giving you new copy and I wish to Heaven I could—but I am so fouled up with. . . handling payroll and purchases, and trying to be an architect that I can't write stories. I continue to have much trouble with the contractor.

August 13, 1950: Robert A. Heinlein to Lurton Blassingame

.. . I am sorry to get tough with him, but I 've got to have the money. The checks you sent me got me past this week's payroll—but I had a serious disappointment on another matter this week and I am more strapped than ever. In the meantime, the army is reactivating a base here with a million dollar construction program and all local lumberyards immediately boosted their prices. Lumber has gone up *60%* around here in the last six weeks. Nevertheless, the roof is being framed up now; we'll have it closed in by the end of this week—and we'll move in around Labor Day, if my nerves hold out. Then I intend to stop everything and start turning out new copy.

August 14, 1950: Robert A. Heinlein to Lurton Blassingame

Your letter of 11 August arrived today and caused us much jubilation .. . an advance check on the NAL contract twice the size we had expected, news that you had sold "Roads" ["The Roads Must Roll"] for TV, and news of the Kellogg show *[Tom Corbett, Space Cadet]* for *Space Cadet.* Ginny and I are agreed that you are the original miracle man. All this adds up to no more real money worries for Robert and assurance that we can finish our house in an orderly fashion without a mortgage.

EDITOR'S NOTE: We moved into the house Labor Day weekend. It was closed in, glazed, but the clerestory needed to have the glass bricks installed, so we spent the weekend pushing oakum into the spaces around the glass bricks, "floating" them. I obtained a large roll of brown paper and stapled it to the wall studs. At least we had a place to live in. The subfloor was laid, but it would be a long time before the house was finished. And

Robert sat down and wrote The Puppet Masters.

The Heinleins' house at Colorado Springs. They had the house built themselves and ran into many difficulties—not the least being a shortage of building materials due to the war in Korea!

September 13, 1950: Robert A. Heinlein to Lurton Blassingame

We finally managed to get moved into our new house. It is far from finished; while the outer shell is closed in solid, the interior is a forest of studs and butcher paper temporary partitions. We do have plumbing and we do have kitchen fixtures and we do have heating; we'll make out.

I am still much badgered by bills, mechanics, unavoidable chores, and such, but I have a place to write and should now be able to continue at it fairly steadily.

February 11, 1951: Robert A. Heinlein to Lurton Blassingame

. . . We managed to spend $6,000 in six days—which turns out to be awfully hard work. I have been trying to buy and get onto the job every bit of metal, every last stick of wood, needed to complete this house.

Incidentally, it just nicely cleaned us out again. The laughable price freeze [because of the wartime economy] came much too late to do a man who is building any good. But, with the material on hand, I now know that I can and will finish.

May 13, 1951: Robert A. Heinlein to Lurton Blassingame

We put up the ceiling this past week; tomorrow we paint it and start putting up wall paneling. The house looks like an Okie camp, Sunday is the only day I can do paperwork as I have mechanics working both days and evenings. I put in about a fourteen-hour day each day and am gradually losing my bay window. House building is most impractical, but we are slowly getting results.

June 10, 1951: Robert A. Heinlein to Lurton Blassingame

It is ten-thirty and I must be up around six. Today being Sunday I worked all day alone on the house. It continues to be an unending headache, but we are beginning to see the end—about another month if we don't run into more trouble. The biggest headache, now that the bank account is refreshed, is finding and keeping mechanics. This town is in a war building boom and every mechanic has his pick of many jobs. I should have four or five working; I have two, plus myself. I work at any trade which is missing at the moment. Fortunately, I can do most of the building trades myself, after a fashion. I have a stone mason doing cabinet work, which will give you some idea of the difficulties of getting help. Often I think of your comment, more than a year ago, that you hoped I would not have trouble but never knew of a case of a person building his own home who did not have lots of trouble. Well, we surely have had it, but the end is insight—if I don't go off my rocker first.

What am I saying? I *am* off my rocker!

April 17, 1961: Robert A. Heinlein to Lurton Blassingame

Actually, I am not studying Arabic very much nor am I writing; I am moving massive boulders with pick and shovel and crowbar and block and tackle, building an irrigation dam—a project slightly smaller than the Great Pyramid but equal to Stonehenge. I no longer have any fat on my tummy at all but have a fine new collection of aches, pains, bruises, and scratches.

"Project Stonehenge:" The creation of a decorative pool was undertaken by the Heinleins alone—and made them a two-wheelbarrow family.

May 15, 1961: Robert A. Heinlein to Lurton Blassingame

We are now a two-wheelbarrow family. That accounts for the delay.

Don't brush it off. Are *you* a two-wheelbarrow family? How many two-wheelbarrow families do you know? I mean to say: two-Cadillac families are common; there are at least twenty in our neighborhood, not counting Texans. But *we* are the only two-wheelbarrow family I know of.

It came about like this: I started building Ginny's irrigation dam. Simultaneously Ginny was spreading sheep manure, peat moss, gravel, etc., and it quickly appeared that every time she wanted the wheelbarrow I had it down in the arroyo—and vice versa. A crisis developed, which we resolved by going whole hog and phoning Sears for a second one. Now we are both happily round-shouldered all day long, each with his (her) own wheelbarrow.

(Live a little! Buy yourself a second one. You don't know what luxury is until you have a wheelbarrow all your own, not constantly being borrowed by your spouse.)

This dam thing (or damn' thing) I call (with justification) *Project Stonehenge;* it is the biggest civil engineering feat since the Great Pyramid. The basis of it is boulders, big ones, up to two or three tons each—and I move them into place with block and tackle, crowbar ,pick and shovel, sweat, and clean Boy Scout living. Put a manila sling around a big baby, put one tackle to a tree, another to another tree, take up hard and tight with all my weight on each and lock them—then pry at the beast with a ninety-pound crowbar of the sort used to move freight cars by hand, gaining an inch at a time.

Then, when at last you have it tilted up, balanced, and ready to fall forward, the sling slips and it falls back where it was. This has been very good for my soul.

(And my waist line—I am carrying no fat at all and am hard all over. Well, moderately hard.)

EDITOR 's NOTE: Robert enjoyed doing rock work, and the grounds were greatly improved by three decorative pools and revetments done with rocks.

SANTA CRUZ COUNTY

EDITOR 's NOTE: We loved our home in Colorado Springs-Robert had done so much in the way of rock work outside, and we had lavished our care on it for some years.

But there were two reasons why we had to leave. One was my health. For some years, it had become increasingly evident that I could not stand the altitude—I had "mountain sickness. " The other reason was that the house was too small for our files of papers and books. We left Colorado on the seventeenth anniversary of our marriage, to look on the West Coast for land for building. Three months were spent on this quest before we bought the land in Santa Cruz.

We remained in that house until 1987, at which time we found that it was too far from medical services, which Robert needed quickly at times. So we looked in Carmel, and found a suitable house, although it had all the drawbacks of the ones we had decided against in Santa Cruz.

February 1, 1966: Robert A. Heinlein to Lurton Blassingame

We moved into this house because it is twenty miles closer to the land we finally bought than is the apartment in Watsonville and is the closest rental we could find to our new land— not very close at that: nine miles in a straight line, fourteen by road, twenty-six minutes by car. But the house, besides being nearer, is a vast improvement on the apartment. It is all on one floor, has three bedrooms (which gives me a separate room for my study), two full baths, a dishwasher, a garbage grinder, a double garage, and a gas furnace with forced air instead of electric strip heaters. It is an atrocity in other respects—such as a large view window which has an enchanting view solely of a blank wall ten feet away—but we will be comfortable in it and reasonably efficient until we get our new house built.

The dismal saga of how we almost-not-quite bought another parcel of land is too complex to tell in detail.

Those forty-three acres of redwoods located spang on the San Andreas Fault—Ginny thought I had my heart set on them, I thought she had her heart set on them . . . and in fact both of us were much taken by them. It is an utterly grand piece of land—very mountainous, two rushing, gushing mountain streams with many waterfalls, thousands of redwoods up to two hundred feet tall. But in fact it was better suited to playing Gotterdammerung than it was to building a year-round home. Most of the acreage was so dense as to be of no possible use, and the forest was so dense that the one site for a house would receive sunlight perhaps three hours each day. Mail delivery would be a mile away . . .

I agreed but insisted that we shop first for houses ... as designing and building a house would cost me, at a minimum, the time to write at least one book as a hidden expense. So we did—but it took me only a couple of days to admit that it was impossible to buy a house ready built which would suit me, much less Ginny. Firetraps built for flash, with other people's uncorrectable mistakes built into them! (Such as a lovely free-form swimming pool so located as to be overlooked by neighbors' windows! Such as Romex wiring, good for only five years, concealed in the wooden walls of a house . . .)

The new property has none of the hazards of the property we backed away from buying. It is on a well-paved county road and has 220-volt power and telephone right at the property line. It does not have gas (we expect to use butane for cooking, fuel oil for heating), does not have sewer, does not have municipal water. So we'll use a septic tank and a spread field. It has its own spring, which delivers a steady flow at present of 6,000 gallons per day. We had a very heavy rainstorm over this last weekend, so I went up and checked the flow again and was pleased to find that it had not increased at all—i.e., it apparently comes from deep enough that one storm does not affect it. I'll keep on checking it during the coming dry season but we were assured by a neighbor (not the owner) that the spring had not failed in the past seventy-five years.

Heinlein surveying at Bonny Doon. The Heinleins moved to Santa Cruz in the mid-sixties.

I plan to try to develop it still farther and plan to install not only a swimming pool but two or three ornamental pools and ponds of large capacity against the chance that we might run short of water in the dry season. But I'm not worried about it; it is redwood country and where there are redwoods there is water. The land is a gentle, rolling slope, with the maximum pitch being around one in ten and the house site level and about forty feet higher than the road. The parcel is clear but it has on it some eight or nine clumps of redwoods, plus a few big, old live oaks which look like pygmies alongside the sequoias. These are sequoia sempervirens, the coastal redwood, and ours are second growth, about a hundred feet tall, up a yard thick, and around ninety years old. There are also a few other conifers, ponderosa, fir, cypress, etc., but they hardly show up among the redwoods. I have not yet conducted a tree census, but we seem to have something in excess of a hundred of the very big trees, plus younger ones of various sizes. Each redwood clump is associated with the cut stumps of the first growth, six or eight feet thick and eight or ten feet high. Since redwood does not decay, they are still there, great silvery free-form sculptures. Ginny is planning one garden designed around a group of them.

I am very busy designing the house. I am anxious to start building as soon as possible as I really can't expect to get any writing done, at least until this new house is designed and fully specified. Building becomes a compulsive fever with me; it drives everything else out of my mind.

April 6, 1966: Robert A. Heinlein to Lurton Blassingame

.. . I'm still bending over a hot drawing board—I'm very slow, for I am *not* an architect and have to look up almost every detail. But the end is in sight. As soon as I can get a water system hooked onto our spring and a driveway bulldozed, we will probably buy a third-hand trailer and move onto the place during building—Ginny is now willing to do this in order to move our cat here. There has been a rabies scare in Colorado Springs; all animals are under a quarantine and we are having to keep him in a kennel with our vet.

June 22, 1966: Virginia Heinlein to Lurton Blassingame

[Robert] is still relaxing, since when he spends too much time out of bed, he tires very easily . . .

Every once in a while I hear some sounds which seem to indicate that our cat is trying to despoil a bird's nest nearby ... He seems to like it here, hasn't started that hike back to Colorado which I predicted.

July 1, 1966: Robert A. Heinlein to Lurton Blassingame

I have received, but not yet read, *The Psychology of Sleep*—but will read it as soon as I can stay awake that long; I want to find out why I am so sleepy. I seem to be practically well now, save that I am sleepy all the time; I'm sleeping twelve and fourteen hours a day. I get up late, have breakfast, and can barely stay awake long enough to go back to bed—get up again, get a couple hours of paperwork done (with great effort), men take a nap. Resolve to get something done after dinner but find myself going to bed again. It is not unpleasant save that I am totally useless and the work piles up. The incision seems to have healed perfectly and my surgeon says that after the 15th of July I can do anything I wish—lift 200 lbs . . ,(which will be remarkable as I never could in the past.(Oh, off the floor, yes—but not a clean press up into the air.)

EDITOR 's NOTE: Robert's health was somewhat fragile. From time to time he would be required to have various major and minor surgery. Although he was able to do extremely heavy work at times, illnesses such as influenza hit him hard, and it might take weeks for him to recover.

These illnesses fell into major and minor groupings. In his early days he had TB; recovery took about a year. In 1970, he had a perforated diver ticulum, undiscovered for seventeen days; it took a long recovery period.

Because of the shock to his system, he followed that with herpes Zoster. Because the doctors were afraid to remove his gall bladder at the time they operated for peritonitis, that operation had to be deferred until 1971, when he had recovered from shingles.

In 1978 in Moorea, he had a TIA [Transient Ischemic Attack, a temporary interference of blood to the brain], which resulted in his undergoing a carotid-bypass operation.

August 15, 1966: Robert A. Heinlein to Lurton Blassingame

Ginny is fretted and frustrated because she does not yet have water at the building site—badly needed to stabilize a very dusty excavation and to permit her to start ground cover for great, raw cuts that will wash away if not planted before the heavy rains. Someone warned us when we came here that Santa Cruz was very much a manana place, with the leisurely attitude affecting even the gringos—and that person was so very right. We were promised a pumping system in two weeks; it has now been more than a month—if we don't have water in a few days, I am going to have to get very nasty with that subcontractor. Which I dread.

Heinlein with Elf of Bonny Doon.

We can't pour concrete for the house until we have [a building] permit, but there are lots of other things to be done. I still hope and expect that we will be closed in by the rains and able to move in, even though the interior will still have to be finished—if Ginny and I both don't wind up in straitjackets before then.

September 4, 1966: Robert A. Heinlein to Lurton Blassingame

We have (a) started the house, (b) acquired an unhousebroken kitten, and (c) had a houseguest on our hands for three days when we literally have no room nor facilities for an ill houseguest—so we are running in circles. . . .

The kitten is a fine little girl cat who buzzes all the time . . . and craps right under this typewriter with healthy regularity . . . and gets herself lost under the house . . . and insists on sleeping *under* Ginny's head . . . and throws our tomcat into a bad state of nerves most of the time. Apparently she isn't old enough to smell like a girl cat to him; she is simply a monster who has invaded his home and who takes up entirely too much of Mama's and Papa's time. But she is another lame duck; Ginny rescued her when she was about to be sent to the pound. Oh, me. Once we get her housebroken and once she comes into heat I think she will turn out to be a most welcome addition to the household—right now she's a burr under the saddle.

I finally fired our silly architect and took over the job myself ...

We have water now, on a temporary pump hookup from a temporary tank . . . The site is no longer the horrible dust desert that it was; [Ginny] has it watered down (endless shifting of the single sprinkler the temporary hookup will run) and little green shoots coming up to hold the soil against the coming rains. Between times she keeps coffee and lemonade and candy bars on the job and passes them around (very good for morale), and makes trips down to Santa Cruz as needed for almost anything—and keeps house and cooks and keeps books, and falls into bed dead beat each night. (But the extreme effort-is going to get us into our house by the rainy season—we can hardly wait.)

. . . asking me to lecture. The fee is satisfactory and I have in mind an outline for an appropriate lecture. Will you take over from here and accept subject to the following conditions? Mr. Heinlein's terribly busy schedule (i.e., mixing concrete, carrying block, and pushing a shovel, which is none of his business) will not permit him to accept a date to lecture earlier than the first of the year, and also I would expect transportation, to wit, round trip by air from San Francisco to Chicago.

.. . I guess that is about all, and I've still got to do some electrical work tonight—calculate the maximum working loads for the whole house and try to see if I can use a four-wire, three-phase cable underground . . . This is just one of the hairy little jobs the architect left undone.

The new cat is out again and again under the house—no way to get under, but she manages. Ginny has just gone out in the dark with a dish of cat food and a flashlight, to try to lure her out. Never a dull moment around here—

November 21, 1966: Robert A. Heinlein to Lurton Blassingame

I enclose a picture taken last week of the state of the job. As you can see, the masonry walls are almost complete. Four courses of "bond beam" now go around the top of what you see (looks like all the other courses but has buried in it four half-inch steel bars, poured in place—this building is for all practical purposes a steel-reinforced monolith; there are hundreds and hundreds of pounds of steel concealed in it).

But we are having trouble: (a) the winter rains have started; (b) our mason is being childishly temperamental. The contractor is quite disgusted with him, and I have refrained from telling him off simply because I did not wish to joggle the contractor's elbow—he being a number one conscientious and mature person.

December 4, 1966: Robert A. Heinlein to Lurton Blassingame

We are now building between raindrops, but thank God the masonry on the house is at last all finished. We still have two little masonry outbuildings to put up, a pump house and an electrical service housing, but these won't take long and are neither urgent nor difficult—even I could lay them up. We need about two weeks of dry weather to frame the roof and put on the roofing—but the winter rains have set in unusually early and unusually hard and it could very well be some time in January before we get the roof on. The contractor has decided that the job will work every dry day from now on, including Saturdays and Sundays. But dry days are scarce. There have been only two fairly dry days this week, it is storming right now and is supposed to rain even harder tomorrow. But I am not dismayed, as carpentry is not nearly as affected by weather as is masonry. Our worst problem is to get a long enough dry spell to permit us to put in the septic tank and to dig a 200foot ditch for the services, water, electricity, telephone, and low-voltage messenger lines. This soil is getting very soggy for backhoe operations.

Robert and Virginia tree planting at Bonny Doon.

February 3, 1967: Robert A. Heinlein to Lurton Blassingame

At the moment, [Ginny] is over at the house site swinging a paint brush . . . The job is still moving but very slowly; it looks from the outside much as it did in the last picture I sent you, but quite a lot has been accomplished inside. We are stalled by the glazing—still no firm date as to when our double-glazing units will arrive. It is not only a strain on us—Ginny in particular, since she has to put up with the primitive housekeeping and cooking facilities of this summer cabin—but also it has had a very bad effect on our general contractor; he's become moody and tempery, and unable to supervise other mechanics without chewing them out—which in my opinion is not the way to get the most out of a man.

February 17, 1967: Robert A. Heinlein to Lurton Blassingame

Building—we seem to be frozen in a nightmare. The glazing units still have not arrived—the manager won't even promise a firm date. The water closets and hand basins which were supposed to be in stock in San Jose (it now appears) do not even exist and we must wait until the factory again makes a run of that color. One of the soidisant "mechanics" who loused up our water system is now suing us for "wages"—trial on the 24th. We have developed a great big bog of quicksand in our driveway, so it must now be rebuilt at God knows what expense. In the meantime, the wiring progresses at painful slowness ...

But our house in Colorado is sold at last and at not too great a loss —not much immediate cash out of the deal after closing costs and commission, but nevertheless I am much relieved. Ginny continues to swing a paint brush daily while I am slowly getting back to the drawing board to finish the detailing of the cabinet work. We are in good health, we don't owe any bills we can't pay, and Ginny says we can stay out of the red despite all these problems. The weather is beautiful, the rainy season is almost over, and things don't look too bad.

June 27, 1967: Robert A. Heinlein to Lurton Blassingame

Nothing else of any real importance today. Ginny is working herself silly everyday on the woodwork finishing—bleaching and sanding and varnishing the mahogany; I'm still sweating over a hot drawing board on the last of the finish details; today I'm designing Ginny's office. The cabinetwork and paneling is about 80% finished now; then we have the floors, ceilings, fireplaces, permanent lighting fixtures, front steps, driveway, and some exterior painting to do—still lots but the end is a faint gleam in the distance.

Heinlein with the newly completed Bonny Doon.

July 10, 1967: Robert A. Heinlein to Lurton Blassingame

This should be the last letter I'll have to write on a card table; Ginny has almost finished the bleaching and varnishing in my study. And today about half the cabinetwork arrived for her office; soon we will both be properly equipped for the first time in almost two years. Hallelujah! We'll be able at last to get our files straight and get caught up on correspondence and paperwork . . . and I am itching to reach the point where I can start in on new fiction.

Our soil is black loam on top of sand on top of hardpan. I think we can control this driveway situation simply by treating it as a permanent watercourse, accepting that and installing a slaunchwise steel-reinforced concrete ditch alongside. But I dunno. Yesterday my brother Rex told me of a friend of his, a professional soil engineer, who has a similar driveway problem and has not been able to solve it. (But I don't think ours is that bad.)

We stayed home on the Fourth of July and worked—did not even get to fire our cannon—can't get at it until the cabinetwork is finished and I can unpack the dining room. But we did go away to Palo Alto this weekend-heard some good music and saw a football game on television, wild excitement for the life we have been leading. In truth we had ourselves an awfully nice time and enjoyed getting away from here. (All but the cat, who thinks it is utterly unfair to cats to put him in a cage and take him to a kennel. But he needed the rest, too; he has been losing fights. I wish I could teach him to fight only smaller cats, or else Arabs—as the general with the eyepatch says, it helps if you can arrange to fight Arabs.)

We are both in good health and in quite good spirits. It is still a long haul, but we can now see daylight at the end of the tunnel.

October 26, 1967: Robert A. Heinlein to Lurton Blassingame

. . . Then your check arrived and all was sunshine. That check almost exactly pays for the driveway—quite a complex and expensive structure because of underground drains for that quicksand problem—and leaves money on hand and November and December royalties for taxes, finish work inside (ceilings and recessed light fixtures),and this and that. No sweat. Utter solvency. Joy. So we declared a holiday, went downtown and bought Ginny anew dress, got hold of friends, and had dinner out, avec mucho alcohol and joviality. Today I have a mild hangover but my morale has never been better.

October 14, 1968: Robert A. Heinlein to Lurton Blassingame

After a delay of ca. 5,000 years I have formulated a basic natural law and named it, not for myself, but for the man who first noticed it: Cheops' Law—No building is ever finished on schedule. The guest house has been90% finished for the past month. It is now 91 % finished. I am working hard every day at my desk. Deus volent, I will yet get some fiction written.

Virginia Heinlein landscaping at Bonny Doon, late sixties.

CHAPTER VIII FAN MAIL AND OTHER TIME WASTERS

March 13, 1947: Robert A. Heinlein to *Saturday Evening Post*

"Green Hills of Earth" has brought me in such a flood of mail that it has almost ruined me as a writer—I don't have time to write. None of it appears to be from crackpots; about half of it comes from technical men. All of it shows that the United States is still made up of believers and hopers, for they echo the brave words I heard last summer, while standing in the shadow of a V-2 rocket: "—anything we want to do if we want to do it badly enough."

March 17, 1961: Robert A. Heinlein to Lurton Blassingame

. . . The rest of my time has been taken up playing scrabble (Ginny wins about 60-40: she has a better vocabulary than I have) and the endless load of correspondence. I've got about a dozen letters on hand from high school and college kids, asking me to help them on term papers—in recent years teachers all over the country have been giving kids assignments which result in me (and, I'm sure, many other writers) receiving letters accompanied by long lists of questions . . . which they want answered last Wednesday . . . and each letter, properly answered, takes a couple of hours of time. Hell, one college boy even phoned me from West Virginia, wanted to read me the questions over the phone and have me answer them airmail special—otherwise he was going to flunk his English course. This was while I was working sixteen hours a day to cut that ms. for Putnam's, so I told him to go right ahead and flunk his course because I was not going to stop work against a deadline to meet a commitment I had not assumed.

Robert A. Heinlein with his shelf of his own fiction and awards at Bonny Doon.

March 9, 1963: Robert A. Heinlein to Lurton Blassingame

.. . I am clearing my desk of mail (pounds of fan mail and I'm tempted to burn it!—they all want quick answers, and only one in fifty encloses a stamped and addressed reply envelope)—and when I have that out of the way I will cut this new book, *Grand Slam [Farnham's Freehold]* or whatever we call it, and try to be free about April Fool's Day.

February 4, 1969: Robert A. Heinlein to Lurton Blassingame

(Speaking of the time burned up by overhead work such as that—poor Ginny! Fan mail has gotten utterly out of hand, and about a month ago, in a frantic attempt to get back to writing ms., I dumped it all on her. This morning in came about the 500th letter from still another young man who had read *Stranger* and wanted to discuss his soul with me. He had been "meditating" and taking courses in "sensativity" (sic). So I passed it over to Ginny, my surrogate chela in the guru business. She read it, looked tired, and said wistfully, "You know, I wish I had all the time to meditate that these kids seem to have.")

June 4, 1969: Robert A. Heinlein to Lurton Blassingame

What would be your opinion if I simply stopped answering mail from strangers?

I ask because the fan mail situation has gotten out of hand. In the past five years the volume has tripled, or more. Unless I keep it answered each day, the accumulation gets out of hand and it takes me forever to catch up. Yet I cannot answer it daily—even if I were never to write another story, there are still interruptions: trips out of town, houseguests, illnesses, *etc.*

This may seem trivial; it is not—unsolicited letters from strangers, fan mail plus endless requests for me to go here, speak there, donate mss., advise a beginning writer, these things add up to the major reason why I have not been able to turn out any pay copy in the period since we finished building. Secretarial help does not seem to be the answer. I can't use a full-time secretary and I have never been able to find a satisfactory moonlighter—tried again just this past month and thought I had one, an ex-Navy yeoman. Result: It cost two dollars per letter in wages with the answers to those letters limited to postcards in most cases and never longer than one sheet of the small-size notepaper, plus postage and materials—and *did not save me one minute of time.* In fact, it took more of my time than it would had I simply answered them myself.

Form letters won't serve; there is simply too much variety in the incoming mail—I must either draft or dictate each answer. Either Ginny or I must write the answers. Ginny has offered to do all of it (and frequently has coped with a logjam). But I don't want Ginny to do it as it is not fair to her to tie her to a typewriter when she wants and needs to spend every possible minute on landscaping this place (and I want her to landscape—no point in having a lovely place if it is allowed to look moth-eaten).Besides, she cooks, cleans, does all the shopping, and does the not-inconsiderable record keeping and tax work and bill paying and money handling.

So it is either do it myself—or quit answering mail from strangers.

I have been thinking about the following expedient: A form printed on a U.S. postal card reading something like this—"Thank you for your letter, which Mr. Heinlein has read and appreciated. We have no secretary and the volume of mail makes it impossible for me to answer each letter as it deserves. If your letter requires an answer other than this acknowledgment, please send a stamped and self-addressed envelope and refer to file number . . . In the meantime your letter will be held for thirty days in the pending file.

"We regret having to use this expedient, but the alternative is for Mr. Heinlein to give up writing stories in favor of answering letters.

"Sincerely,
"Virginia Heinlein
"(Mrs. Robert A. Heinlein)."

The above, with the surplus words sweated out of it and printed in smaller type, would go on a postcard—and each letter could be acknowledged each day simply by cutting the address off the letter and scotch-taping it to a card. Plus using one of those automatic serial-number stampers.

But it strikes me as an almost certain way to lose friends and antagonize people. Despite the fact that well over half the letters contain the phrase "—while I know you are a very busy man—" the truth is that each writer-reader is so important in his own eyes that he feels sure that *his* letter is so different, so interesting, so important, that I will happily stop whatever I am doing and answer his letter in full. When he gets one of these printed forms, his reaction will be: "Why, that snotty son of a bitch!"

So what do you think I should do? Quit answering at all? Use this printed acknowledgment? Keep on trying to answer them all? Or some other course I haven't thought of?

June 13, 1969: Robert A. Heinlein to Lurton Blassingame

Thank you for your long and thoughtful comments about fan mail. I am glad to have your confirmation that the printed postcard method is a bad idea; I will not use it. But I am much afraid that there is no solution to the problem short of not answering it at all.

In the first place I am not "too conscientious" about it as I do *not* spend a couple of pages in answering silly questions; Ginny and I have long since cut it to the bone—the normal answer is done on a postcard. If an enclosure is required (such as a list of my books, the commonest enclosure request), we use the smallest note paper. True, I used to write careful answers to intelligent letters—but we gave that up over five years back; we had to.

Let's assume I could get a college student to answer letters satisfactorily at a dollar a letter (I can't, but let's stipulate it for the moment). That would still cost me a couple of thousand dollars a year —which I think is too much to pay for the questionable privilege of unsolicited mail from strangers. Most of my fan mail does not go through your office; the bulk of it is forwarded from publishers directly or has been addressed to Colorado Springs and forwarded from there (as every public library in the country has that C.S. address). Plus quite a chunk that is addressed to Santa Cruz. It adds up—it usually takes about a half hour each day just to *read* the fan mail. I can answer it usually, faster than I can read it, if a postcard will suffice. But Ginny is the *only* other person who can answer it quickly, as she is the only one sophisticated enough in what to answer and what to ignore to be able to do it.

But I do have to read it. Several times, when Ginny and I were especially busy, we have let what appeared to be fan mail pile up unread—and this is a mistake as again and again there has turned out to be one or more actual business letters buried in the fan mail simply because the external appearance (one or two forwardings, with nothing in the return address to tip me) led me to assume that it was fan mail.

As near as I can find out from inquiries made to other colleagues, I get far more mail than any of my colleagues—for none of the others seems to find fan mail any problem. (I recall a plaint published by James Blish asking readers to *pleas e*write to him—he needed feedback!)

This morning at breakfast we were reading the mail, which included your nice letter—and Ginny sez to me: "Send this one back to L. and let him *see* how difficult the stuff is to answer." Well, I'm not sending it back but it was from a man and wife in New York who wanted to come out here on his vacation to talk with me. I must turn it down as man who travels a long distance to talk is affronted (reasonably? unreasonably?—either way, his feelings are hurt) if asked to leave in twenty minutes. What he asked for was an "afternoon or evening"—and what he will expect is a full day and late that night. I know, it has happened too many times. For this sort of letter is not at all uncommon; I got one from two students at Oxford University, England, earlier this spring, who wanted to come here this summer and stay an indefinite time; I got one from six students at Temple University who wanted to drive here on their Christmas vacation, camp on the beach, and see me every day. And we told you about the young man from Arizona who drove first to C.S., then here just last week. . . . sweettalked his way past Ginny, then stayed until I chucked him out four hours later. Plus many others. So now we turn down *all* requests to come see us ... but such turndowns must be gentle.

. . . Surely, I could load all the answering onto Ginny; she would hold still for it. But as long as we aren't missing meals I see no reason why she should give up what she wants to do for this purpose—she's carrying her full load anyhow . . .

November 20, 1970: Virginia Heinlein to Lurton Blassingame

Yes, sir. We will be careful with graduate students. We answer all letters except those which go into the "screwball" file, the ones from people who are more or less obviously crazy.

EDITOR's NOTE: We went over to the use of form letters, a checkoff list. There were several different form letters. But I found myself adding handwritten P. S. 's to make them more personal, which consumed even more time. Arthur Clarke was shocked when we told him we were using form letters, but not too much later, he was using them, too.

EDITOR's NOTE: Lurton saw little of the fan mail, but occasionally a letter arrived addressed to him. In this case, he saw some merit, more than usual, in a letter from a graduate student in English. So he counseled caution in dealing with those.

There is no copy extant of the checkoff letters, but when letters were answered on computers, here is how they ran:

An ever-increasing flood of mail has forced Mr. Heinlein to choose between writing letters and writing fiction. I have taken over for him, but he reads each letter sent to him and checks the answer.

Four or five requests come in each week *for help in class assignments, term papers, theses, or dissertations .We can't cope with so many and have quit trying.*

Sincerely,
Virginia Heinlein
[Mrs. Robert A. Heinlein]

Even since Robert's death, fan mail still comes in asking me to answer questions about his work.

November 3, 1951: Robert A. Heinlein to Lurton Blassingame

.. . In addition to the above, I've let myself be roped into going to Denver to speak to the Colorado Authors' League. I find myself in a running fight to keep my time from being nibbled away by such secondary activities. I avoid such things as much as possible, but too often I get backed into a corner.

January 27, 1952: Robert A. Heinlein to Lurton Blassingame

I have been asked to be a guest speaker on Edward R.Murrow's CBS program, "This I Believe." I'm flattered but am thinking of turning it down; I don't relish getting on a national hookup and doing an emotional striptease. Furthermore, such things take me away from my regular work by distracting my mind, sometimes for days, from story. No mention was made of a fee and I think it's a sustaining program with the guest speakers appearing just for glory. I mention this because you may think the "glory" important enough that I should do it anyhow. I won't give them an answer until I hear from you.

August 21, 1952: Robert A. Heinlein to Lurton Blassingame

. . . This entire year of '52 I have found frustrating. Today I tried to figure out exactly where the time had gone, since I have no copy to show for it. I can account for every day and don't see how, in most cases, I could have done anything about it, but that fact writes no stories. Believe me, Lurton, I have not loafed this year, but my time has been eaten away. . . operation, convalescence . . . cutting *Rolling Stones,* skating nationals, mechanics in the house three times wasting a month and a half, two unpaid writing jobs, two unpaid radio appearances, some unpaid speaking engagements, Arthur C. Clarke—one week, the George O. Smiths—two weeks, other houseguests totaling perhaps a week, shopping for a new automobile . . . death of a close friend—one week, two weddings where I was involved and could not refuse my time without being a heel, innumerable visits from readers who were polite enough to write and ask to see me, a novel started and aborted, same for a short, the damned telephone ringing and ringing and ringing and myself the only person in the house . . . and finally a trip to Yellowstone and the Utah parks. That last I could have skipped but Ginny deserved a rest and I needed one, even if I hadn't been accomplishing anything. All of the above adds up to about time enough to answer mail and read proofs. Some of these things you may feel I could have avoided—well, close up to them, they could *not* have been avoided. The telephone situation we have finally licked by putting a bell in the garage where I can't hear it and a cutoff switch in the house, thereby evading the company's rules.

Most of my troubles seem to arise from the difficulty I have in refusing to give my time to other people. Should I refuse to entertain the chairman of the British Interplanetary Society? Can I refuse to see a classmate who shows up in town with an engineer from my hometown in tow? A physicist from Johns Hopkins who is a fan of mine shows up and wants to meet me—can I refuse? Same for an air force intelligence officer who writes politely? Or the head of the Flying Saucer project? Today I was invited to address the southwest division of the Rocket Society and attend a night firing of a V-2 rocket—that one I turned down as it involved flying to White Sands—but it was a highly desirable date and one that I would have kept had I had the time. I don't know the answer but I am beginning to see why so many writers hire hotel rooms—I am entirely too well known for comfort. Anyhow, I am about to try another story.

September 4, 1952: Robert A. Heinlein to Lurton Blassingame

Now, about writing time: since the war it has been one damn thing after another, poor health, domestic trouble, housebuilding, *et al.* I hope that the future will be quieter. If not, I will simply do the best I can under the circumstances. Getting an office away from the house is not a solution I want at "all—I've just finished a house with an office built into it. One minor new circumstance should be a help—we finally have a cutoff switch for the telephone, after long wrangling with the phone company. I wrote to you as extensively as I did simply to let you know that my lack of output this year has not been through laziness but through complications. One problem I have not yet found a satisfactory solution to is the demand on my time resulting from becoming better known. I answer all fan mail and it comes in stacks. That is almost necessary, isn't it? I limit the answers to postcards but it takes time. There are frequent requests for me to speak in public—one only last night. I have adopted a policy of refusing such invitations if possible—but what do I do when the Colorado *Librarians'* Association asks me? . . . Perhaps the greatest time waster is the person who reads my stuff, is coming to Colorado Springs, and wants to call on me—and an amazing number of them manage to find their way to Colorado Springs, remote as this place is. If they simply walk in on me I won't see them. . . . But if they write or telephone and are courteous, I find it hard to give them a cold brushoff. I see no good answer to this problem, but will have to handle it by expediency as I go along.

. . . This is probably the very last of the V-2s and it will be one of the very few unclassified firings for a longtime. There is nothing like watching one of the big ones climb for outer space—it will make a believer out of you, I warrant. I do not regard a trip to White Sands as lost time for me; it comes under the same head as research. Since I write about rockets, I need to know what they sound like, talk to rocket men. Besides that, I will have an opportunity to meet Clyde Tombaugh, the man who discovered the planet Pluto and, perhaps, to see the canals of Mars through his telescope. . . . This is almost a once-in-a-lifetime thing, as perfect seeing, the right telescope, and the right technique are a rare combination.

January 6, 1953: Lurton Blassingame to Robert A. Heinlein

The script for the "This I Believe" program just checked in. It is certainly splendid, the best I have come in contact with. I have been especially interested in this program because one of my boys [clients], Ed Morgan, has been associated with it since the beginning. I do think this material of yours was excellent, and I am very proud of you.

THIS I BELIEVE

I am not going to talk about religious beliefs but about matters so obvious that it has gone out of style to mention them. I believe in my neighbors. I know their faults, and I know that their virtues far outweigh their faults.

Take Father Michael down our road a piece. I'm not of his creed, but I know that goodness and charity and lovingkindness shine in his daily actions. I believe in Father Mike. If I'm in trouble, I'll go to him.

My nextdoor neighbor is a veterinary doctor. Doc will get out of bed after a hard day to help a stray cat. No fee—no prospect of a fee—I believe in Doc.

I believe in my townspeople. You can knock on any door in our town saying, "I'm hungry," and you will be fed. Our town is no exception. I've found the same ready charity everywhere. But for the one who says, "To heck with you—I got mine," there are a hundred, a thousand who will say, "Sure, pal, sit down."

I know that despite all warnings against hitchhikers I can step to the highway, thumb for a ride, and in a few minutes a car or a truck will stop and someone will say, "Climb in, Mac—how far you going?"

I believe in my fellow citizens. Our headlines are splashed with crime, yet for every criminal there are 10,000 honest, decent, kindly men. If it were not so, no child would live to grow up. Business could not goon from day to day. Decency is not news. It is buried in the obituaries, but it is a force stronger than crime. I believe in the patient gallantry of nurses and the tedious sacrifices of teachers. I believe in the unseen and unending fight against desperate odds that goes on quietly in almost every home in the land.

I believe in the honest craft of workmen. Take a look around you. There never were enough bosses to checkup on all that work. From Independence Hall to the Grand Coulee Dam, these things were built level and square by craftsmen who were honest in their bones.

I believe that almost all politicians are honest . . . there are hundreds of politicians, low paid or not paid at all, doing their level best without thanks or glory to make our system work. If this were not true we would never have gotten past the thirteen colonies.

I believe in Rodger Young. You and I are free today because of endless unnamed heroes from Valley Forgeto the Yalu River. I believe in—I am proud to belong to—the United States. Despite shortcomings from lynchings to bad faith in high places, our nation has had the most decent and kindly internal practices and foreign policies to be found anywhere in history.

And finally, I believe in my whole race. Yellow, white, black, red, brown. In the honesty, courage, intelligence, durability, and *goodness* of the overwhelming majority of my brothers and sisters everywhere on this planet. I am proud to be a human being. I believe that we have come this far by the skin of our teeth. That we *always* make it just by the skin of our teeth, but that we will always make it. Survive. Endure. I believe that this hairless embryo with the aching, oversize brain case and the opposable thumb, this animal barely up from the apes, will *endure.* Will *endure* longer than his home planet—will spread out to the stars and beyond, carrying with him his honesty and insatiable curiosity, his unlimited courage and his noble essential decency.

This I believe with all my heart.

June 6, 1962: Robert A. Heinlein to Lurton Blassingame

No other news save that the Silly Season has opened and we have many visitors; this will continue until fall. One of my plebes showed up this week—an admiral now and chief of research, a job I would like to have had (and might have achieved) if I hadn't gotten TB a long time ago. However, all in all, I like being a writer and don't really miss not being an admiral. (Dan Gallery managed to be both, but he is exceptional!)

August 10, 1963: Robert A. Heinlein to Lurton Blassingame

We have been badly slowed down, too, by visitors, a steady flood of them all summer long, friends, relatives, and readers, plus some of the organized science fiction fans—and none of them invited, not even the relatives nor any of the friends. . . . This place being a resort, people simply pour through here in the summer and if I shut off the phone, they ring the doorbell. I don't ever intend to try to write a story in Colorado Springs again between June 1st and September 1st; it is too much like trying to write directly under a busy three-holer. Even if my relatives had stayed home (and, damn it, they all traveled this year), friends, acquaintances, and strangers were enough to keep us in a hooraw. Had I not been interrupted so many, many times by visitors, the work I was doing would have been farther along and the flood damage would not have been nearly so severe.

May 6, 1964: Robert A. Heinlein to Lurton Blassingame

The letter you received from Kenneth Green (and so kindly answered) is much more typical of fan mail-pleasant but with the same old phrases over and over again, and I get as tired of answering them as an old whore gets of climbing those stairs. I'll drop young Green a card in this mail, however; I always answer them, all but the crackpot ones.

But I have instituted a New Public Relations Policy-one which makes me almost as hard-to-get as the mysterious Mr. B. Traven. Some years ago you sent to me a clipping of Art Buchwald's column with a long quotation from Thornton Wilder in which Wilder declared such a policy, one in which he resolved not to let strangers waste his time, not in *any* fashion. I have kept that clipping up over my typewriter ever since you sent it to me—but I have not emulated it very well.

But I am pushing sixty now myself and it gets harder and harder each year to turn out a decent amount of copy—largely because total strangers want such large chunks of my time. I am darn well going to quit it! In fact, I *have* quit it. The only concession I am making is that I will continue to answer politely worded fan mail-but only by postcards . . . and usually picture postcards which have no return address and room only for a sentence or two. Even that response costs me a dime for materials and postage, plus (much more important) about fifty cents' worth of my working, professional time that should be put on story-writing.

Someday I may be so browned off and bored with it that I will answer only such letters as are accompanied by stamped and self-addressed envelopes (about one in twenty). I was taught in school *always* to enclose such in writing to a stranger; my present mail shows that most teachers do not teach this courtesy today, as a lot of my mail starts out: "Dear Mr. Heinlein, Our English class is writing to their favorite author—" but a reply envelope rarely is enclosed, although the letter usually demands a reply and asks endless questions —often with a deadline stated.

Mr. Wilder says, in that clipping you sent me: "I hereby serve notice on the school children of America. . . that I am going to dump all their letters—" I'm not going to go quite that far just yet, Lurton— but I am now ignoring all requests for pictures and for anything which requires me to stir out of my chair to answer—or which requires me to use an envelope rather than a postcard when said envelope has not been supplied by the petitioner.

No doubt this will lose me a certain amount of goodwill. But it will greatly increase my working time—on pay copy—and the problem had grown way out of hand. To supplement this greatly reduced program on fan mail I am resolved not to do *anything* I don't want to do. No more public speeches, not even for librarians. No more interviews given to school kids—other than by telephone. No more "Library Week" appearances. No more breaking off my work (whether writing or mixing cement) to visit with strangers who "just happened to be passing through town and have always wanted to meet" me— unless it suits *me* and they manage to make themselves sound interesting enough to warrant the time. No more messing around with books I don't want to read sent tome, unsolicited, in the mails—and this includes books sent to me by Putnam and its associated companies, as the promotion department seems to feel that any Putnam published writer should be willing at any time to act as an unpaid reviewer and source of trained-seal favorable testimonials. (They put out a lot of good books, but they never send me those books; they send me little stinkers that should never have been published.)

No more acknowledgments of fan magazines sent tome—it simply results in more of them and requests for free copy.

In short, no more of *anything* unless it durn well suits me and adds to my own pleasure in life. More and more, over the years, strangers have been nibbling away at my time. It has reached the point where, if I would let them, *all* of my working time would be wasted on the demands of strangers. So I am lowering the boom on all of it—and if this makes me a rude son of a bitch, so be it. My present life expectancy is seventeen years; I'm damned if I will spend it answering silly questions about "Where do you get your ideas?" and "Why did you take up the writing of science fiction?" several thousand or more times. I hereby declare that an author has *no* responsibility of any sort to the public . . . other than the responsibility to write stories as well as he knows how.

If I can stick to this, I should get in quite a lot more writing, and quite a lot more healthy work with pick and shovel and trowel—and a judicious mixture of these two may enable me to stretch that life expectancy quite a bit. But I 'm not going to let those remaining years be nibbled away and wasted by the trivia that some thousands of faceless strangers seem to feel is their right to demand from anyone in a semipublic occupation.

July 10, 1967: Robert A. Heinlein to Lurton Blassingame

Herewith is a curious letter from an instructor, ———, at the U. of Oregon. I was about to tell him that I could not stop him, but not to let me see the result—but I decided that I had better let you see this and get your advice and/or veto. If Mr. ——— does this adaptation "just for fun," as he proposes, I suspect that he will then fall in love with his own efforts and get very itchy to produce it. Which could be embarrassing. Lurton, even though "Green Hills" is a short, I think it has possibilities—someday—as a musical motion picture. So I am hesitant to authorize anything which might cloud the MP or stage rights. What shall I tell him? Or do you prefer to write to him? (I'm not urging you to—not trying to shove it on you. But I do want your advice.)

October 12, 1967: Margo Fischer (secretary to) Lurton Blassingame to Robert A. Heinlein

A drunk began calling at 3:15 insisting on Heinlein's phone number . . . After telling him at least seven times that he would have to write a letter which would be forwarded airmail, he became sarcastic and went on and on. After 15 minutes I told him I was hanging up, and I did. He was incoherent and it was impossible to tell him he had to write a letter. He said he would wire. He wanted to know about "—We Also Walk Dogs." I told him it was in an anthology published by World. He'll probably call you and be abusive about me. Over and over he kept saying, "Mam, Mam"—long silence, then he'd say, "It's a hard world." Silence. Then, "We should all be courteous to one another." *Etc.*

February 28, 1968: Margo Fischer to Robert A. Heinlein

Here's a little ego boo for you.

The telephone just rang. A voice said, "I was told I could get some information from you. About one of your clients. About Robert Heinlein." Cagey Margo. "Who is this?" "I'm nobody—that is, nobody in the business," he said. "Just a Heinlein fan." Me again—"Well, what did you want to know?" .

He wanted to know when Heinlein was going to have another book. "He hasn't written anything for some time," was the complaint. "I have two favorite authors. Michener and Heinlein. Michener just came out with one and I was hoping I could make it a double red-letter day."

Then he added, "Heinlein is the one bright spot in this whole fantasy-science-fiction world." A pause. *"Moon* is the last one he's written, right?" Then I said, "Have you read *Stranger*[1]*?"* Answer: "Four times." Finally, ' 'Just one more thing—how long does it usually take him to write a book?"

HOW CAN YOU DEPRIVE YOUR FANS A MINUTE LONGER, BOB?

CHAPTER IX MISCELLANY

STUDY

April 10, 1961: Robert A. Heinlein to Lurton Blassingame

No, we are not contemplating any immediate ventures into Arabic-speaking lands; all of Africa and the Middle East are too unstable at the present time to be attractive—besides, we've been there a couple of times. Tackling Arabic is simply to keep my mind loosened up with something new. It could have been any language I don't know, but I picked it because it is one of the five "critical" languages as listed by the State Department—i.e., an important language which is known by too few Americans; they have plenty of people who know French, German, Spanish, and such. One of the five is Russian and I didn't want to duplicate what Ginny has already done (besides, Russian is *very* hard; Arabic is relatively simple, save for the odd alphabet) and two of the critical languages are tonal languages, and my ear for tones is not very good; I don't think I could learn them as an adult. But I must admit that I have made no real progress as yet; I've nothing to force me to a schedule and there are too many other things that demand attention.

But I would like to, in time, be able to be of some use to the country by knowing a language which is needed. But if it is never of any use that way, I find the study of strange languages rewarding per se; I always learn a lot about the people and the culture when I tackle one.

But I have a dozen subjects that I want to study. I would like to go back to school and take a formal course in electronics; it has changed so much since I studied it more than thirty years ago—and I may, some day soon. About twenty years ago I dropped out of a figure-drawing class because I needed to buckle down and pay off a mortgage—and that turned me into a writer and I haven't been back. But I want to go back, it is something I love doing—and I would like to add a wing to this house and get into sculpture again, too, but simply signing up for a figure sketching class is more likely. I am not a still-life artist. There are only five things really worth drawing; four of them are pretty girls and the fifth is cats.

PREDICTIONS

March 13, 1947: Robert A. Heinlein to *Saturday Evening Post*

.. . I could list many more variables—never mind. Swami Heinlein will now gaze into the crystal ball. First unmanned rocket to the Moon in five years. First manned rocket in ten years. Permanent base there in fifteen years. After that, anything! Several decades of exploring the solar system with everyone falling all over each other to do it first and stake out claims.

However, we may wake up some morning and find that the Russians have quietly beaten us to it, and that the Lunar S.S.R.—eight scientists and technicians, six men, two women—has petitioned the Kremlin for admission of the Moon to the USSR. That's another unknown variable.

Robert Heinlein with Teense in the dining room at Bonny Doon.

And keep your eyes on the British—the British Interplanetary Society is determined to get there first.

The worst thing about this business of predicting technical advance is that there is an almost insuperable tendency to be too conservative. In almost every case, correct prophecy of the Jules Verne type has failed in the one respect of putting the predicted advance too far in the future. Based on past record, if the figures I gave above are wrong, they are almost certainly wrong in being too timid. Space flight may come even sooner. I *know* that, yet I have trouble believing it.

November 7, 1949: Robert A. Heinlein to Lurton Blassingame

. . . My real claim to being a student of the future, if I have a claim, lies in noting things going on now and then in examining speculatively what those trends could mean—particularly with respect to atomics, space travel, geriatrics, genetics, propaganda techniques, and food supply. To evaluate my success in such it would be necessary for a person to have some familiarity with my published writings. But I don't intend to dig through my writings and say, *"Look,* here in *Beyond This Horizon* I predicted the robot-secretary recording telephone and now it has been patented!" I *did*—and it *has*—but that doesn't mean anything. The short-term prediction of gimmicks isn't prophecy; it is merely a parlor trick.

PROPHECY

September 24, 1949: Robert A. Heinlein to Lurton Blassingame

EDITOR'S NOTE: With the motion picture about to start shooting, and with Robert at work on the next juvenile for Scribner's, a request came in from Cosmopolitan *for an article about prediction of what the U. S. would belike in the year 2000. In this letter Robert was asking for information about what sort of article the editors would like—he made some suggestions about it.*

When the article was finished, Cosmopolitan *turned it down. It sold to* Galaxy *and was published as "Pandora's Box." The article was periodically updated, and the most recent version can be found in* Expanded Universe.

. . . Under "treatment" come a couple of other questions: This article is to be prophetic. Fine—that's my business; I make my living as a professional prophet of what science will bring to us. But such an article—nonfiction—must consider and to some extent report the *present* status in various fields before the author can go out into the wild blue yonder with predictions. Therefore, I inquire how much reporting do they *[Cosmopolitan]* want of the sort which one finds in *Scientific American, Science News Letter, Nature,* etc., and how much speculation or prediction do they want? The two things are closely related, but are not the same thing. Also, how far in the future shall I go? (For example, everybody knows that the cancer men, radiation men, and biochemists stand an excellent chance of perfecting selective radiation treatment of certain types of cancer in the very near future by finding ways to bond short half-life isotopes to some compound which a particular type of cancer will pick up selectively.)

Or should I go well into the future and consider the necessary statistical effect of food supply, geriatrics, life-span research, public health, etc., in forcing the development of a brand-new art, planetary engineering, as it affects the growth of colonies on the planet Mars?

The synthesizing prophet has another advantage over the specialist; he knows, from experience and by examining the efforts of other prophets *of his type* in the past that his ' 'wildest" predictions are more likely to come true than the ones in which he lost his nerve and was cautious. This statement is hard to believe but can be checked by comparing past predictions with present facts. (Show me the man who honestly believed in the atom bomb twenty years ago—but H. G. Wells predicted it in1911.) (The "wild fantasies" of Jules Verne turned out to be much too conservative.)

How can one spot a competent synthesizing prophet? Only by his batting average. If *Cosmopolitan* thinks my record of accomplished predictions is good enough to warrant it, then let's by all means go all out and I'll make some serious predictions that will make their hair stand on end. If they want to play safe, I'll do an Inquiring Reporter job and we'll limit it to what the specialists are willing to say. But I can tell them ahead of time that such an article will be more respectable today and quite unrespected ten years from now—for that is no way to whip up successful prophecy.

.. . I would proceed as follows:

First, I would cut down the field by limiting myself to (a) subjects in which the changes would matter to the readers personally and not too remotely. A new principle in electronics I would ignore unless I saw an important tie into the lives of ordinary people, (b) subjects which are dramatic and entertaining either in themselves or in their effects. Space travel is such a subject, both ways. So is life-span research. On the other hand, a cure for hoof-and-mouth disease, while urgently needed, is much harder to dramatize, (c) subjects which can be explained. The connection between parapsychology and nuclear engineering is dramatic potentially but impossible to explain convincingly.

Since the article is for popular consumption I would wish to hook it, if possible, with some startling piece of quoted dialog, use illustrative anecdote if possible, and end it with some dramatic prediction.

December 20, 1955: Robert A. Heinlein to Lurton Blassingame

Please tell Howard Browne [editor of *Amazing Stories* and *Fantastic]* that I accept his incredible offer and that ms. will arrive by 10 January—but that I expect a copy of that celebration issue, inscribed by him to me, or I shall go into the corner and stick pins in wax images.

I can't imagine what I could possibly say that would be worth $100 for two pages; that isn't even long enough for a horoscope. But if they want to throw away their money in my direction I will go along with the gag and do my damndest to entertain the cash customers. Fortunately, I shall be dead before my "prophecies" can be checked on.

January 5, 1956: Robert A. Heinlein to Lurton Blassingame

Here is the ms. for Howard Browne. I discovered that 500 words were too cramping for what I wanted to say, so I called him yesterday (I assumed that you were at Ilikite, it being Wednesday) and got his authorization to let it run to its present length. No increase in the fee, of course, as the added length was entirely for my convenience.

PUBLISHERS

July 5, 1963: Robert A. Heinlein to Lurton Blassingame

As to Scribner's and Doubleday, I intend to let each of them get away with it and not argue further. But my opinion has not changed. Each of them is deviating from the contract as written and in each case to my financial loss. They would not let *me* deviate from contract if it cost *them* sizable amounts of money. Doubleday talks as if the 50-50 split on pocketbook were a law of nature. Nuts and nonsense; it is merely an extortion that writers usually have to put up with. The entire history of the Authors' Guild and of divisible copyright is one of slowly getting rid of these grabs which publishers defend under the theory of "usual practice." If the "usual contract" did not contain these grabs, trade book publishers would have to work hard at selling the trade edition. Doubleday has never once done a decent job for me of selling the trade edition (take a look at your records)—no, not once. Instead they have signed a "sweetheart" contract with one of their own subsidiaries, printed a very cheap edition which they called a trade edition but which was in fact a book club edition—and the nominal royalty in the contract meant nothing; the extremely low royalty in the "sweetheart" contract was the one that counted. Then they had half of the NAL edition as well—except this one book and now they have grabbed that, too, without my consent. No, I do not like Doubleday. Okay, they get this few hundred dollars—but I will never sign another contract with them.

Scribner's is a different case; they have a real sales organization for selling the trade edition, they do sell it and make money on it, for themselves and for me—and I am sorry on that account that they ever dropped me. .. . But, nevertheless, their contract does not permit them to cut my royalty just because they choose to put out, under their own imprint, a softcover edition. Nor does it cut any ice with me that the percentage royalty is higher than it would be if they farmed it out to, say, NAL—because I am convinced that if they did farm it out to NAL, the dollar return would be much higher, even though the percentage was lower. I may be wrong and time will tell—but, so far, their venture into softcovers, at three times the price of an NAL softcover, seems to be going over like a lead balloon.

As may be—each of these publishers is rewriting a contract to suit himself and against my explicit objections . . . and I shall argue no further with them; life is too short. They can keep their grabs and be damned.

MAGAZINES

March 9, 1963: Robert A. Heinlein to Lurton Blassingame

I don't think *Fantasy and Science Fiction* is riding the edge; I think they are just stingy. They claim 56,000 paid circulation. In view of their rates and their cheap production, plus some revenue from France and Germany, they should be showing a clear profit each month. Back in December ——— told me that the publisher would happily pay me in advance. As it is, they got a bargain-copy for $1,500 that they normally pay $1,800 for, to any writer, known name or not. Still, it is pleasanter than offering copy to John Campbell, having it bounced (he bounced both of my last two Hugo Award winners)—and then have to wade through ten pages of his arrogant insults, explaining to me why my story is no good.

April 15, 1963: Robert A. Heinlein to Lurton Blassingame

Re *Playboy* article: I have the material well worked out and am prepared to deliver it by 10 May.

But I shall not deliver it on the basis of a phone call. The last time I accepted a job from them based on a firm agreement by phone call there was a lot of nonsense afterwards about whether or not I was being paid for the work, or paid for an option, and I had to do two rewrite jobs.

. . . Just refer him to my letter of 2 April (of which you have a copy): "Just address a letter to me, or preferably to Mr. Blassingame, offering me a firm assignment for so many thousands of words for so many dollars on such and such a subject to be delivered by such and such a date—and with the explicit condition that the manuscript will be paid for whether used or not and that any rewriting lies outside the agreement and must be negotiated at an additional fee."

I meant every word. The assignment must be in writing and the clause about rewriting must be spelled out, and all the terms must be explicit—and a phone call means *nothing!*

Otherwise I will not bother to come in out of my garden. It's nice out there and I'm sick of this machine. I don't need the money; I've already worked too much this year and will have too high a tax—and I am especially aware of it on income tax day.

Apparently ——— thinks I'm a nice accommodating guy. Please explain to him that I am a son of a bitch.

DEFAULT

January 27, 1961: Robert A. Heinlein to Lurton Blassingame

Please tell ——— that I am a kindly old gentleman and that the "A." in the middle of my name stands for ' 'Ebenezer Scrooge" and that I am buying a new freezer with my ill-gotten wealth to make room for him.

CHAPTER X SALES AND REJECTIONS

November 24, 1947: Robert A. Heinlein to Lurton Blassingame

The last couple of rejection letters you have sent me are rather disturbing. Miss Helen Grey of *Town and Country* is mistaken in thinking that my sales to the SEP *[Saturday Evening Post]* have gone to my head. It is simply that an idea as good as "The Green Hills of Earth" doesn't come to me every week. I have been in a slump and am afraid that I am still in it. I continue to work and to work very hard indeed, but a lot of the stuff I turn out doesn't seem too good to me. Stuart Rose's rejection of "Broken Wings" is decidedly a disappointment, for I had believed that "Broken Wings" was up to standard. Still more disappointing is his statement "These space ship stories didn't do too well, according to our readership surveys." I interpret this as meaning that the *Saturday Evening Post* is no longer interested in my interplanetary stories unless they are utterly terrific, superior in every way to a story with a customary contemporary down-to-earth background ... I may turn out quite a number of second-rate stories before I recover completely from the effects of my domestic breakup. For the past several months I have been able to continue writing only by the exercise of grim self-discipline. It occurs to me that you might find it desirable to sell or attempt to sell stories written during this period to secondary markets under a pen name. What do you think? Would it be good business to protect my reputation, such as it is, by keeping my own name off material which in your opinion is not as good as my best? . . . . . . From now on I must devote my time exclusively to preparing the second juvenile novel *[Space Cadet]* for Charles Scribner's Sons. I have been working on this boys' novel off and on for several months. I rather dread sitting down and turning out the first draft on it because I simply am not in the sanguine mood which should obtain in any book intended for the young. I could knockoff half a dozen tragedies right now easier than I could write one cheerful story.

March 4, 1949: Robert A. Heinlein to Lurton Blassingame

This has been a bad twelve months without very much real literary success. I wasted months on two collaborations which did not pay off. I wasted three months on *Red Planet* and it has not paid off. I've done three stories meant for slicks and they have not paid off. Aside from some reprint stuff and a sale to *Boys' Life* it has been a long string of failures.

I think I have analyzed in part what the trouble has been: I've been doing hack work, writing what some one else wanted me to write rather than what I wanted to write. In any case, the next year can't be any worse if I write what I *want* to write and have some fun out of it. It might even be better; acceptances might start coming in instead of rejections. So—I plan to write *my* stories instead of editor's stories. I don't intend to do any more juveniles unless I happen to have a juvenile story that I want to write. I am not going to promise Scribner's, nor anybody else, one book a year. I am not going to work against deadlines. I am not going to slant stories for slick—nor for pulp—I am going to write *my* stories, the very best stories I can, and then let them sell (or not sell) to whatever market fits them. I can't do any worse than I have been doing; I might do better. And I think you will see a lot more copy out of me. I'm a fast producer when I'm happy at it.

January 2, 1950: Robert A. Heinlein to Lurton Blassingame

I want to get home awfully badly and I am worn out, but I need the money for house building.

Thanks for the *SatRev of Lit—I* am now a lit'rary man, entitled to wear a pipe, a spaniel, and baggy tweeds.

EDITOR'S NOTE: Robert did a review o/The Conquest of Space *by Chesley Bonestell and Willy Ley for the* Saturday Review of Literature. *It was titled (by the editors)"A Baedecker of the Solar System, "and ran as the lead article for the issue in which it appeared.*

SALES

December 5, 1958: Robert A. Heinlein to Lurton Blassingame

I mailed the contract for "All You Zombies" to Bob Mills, unchanged. Certainly, I would have preferred *Playboy's* fancy rates, but it took me exactly one day to write it, so what the hell? ... I *hope* that I have written in that story the Farthest South in time paradoxes.

. . . She [a romance writer] writes very well, and rather than have her run out of material, I would be glad to volunteer my services. I'm not as energetic as I was in the Coolidge administration, but I've learned a lot since then and that's what a writer needs: ideas.

FOREIGN SALES

February 19, 1959: Robert A. Heinlein to Lurton Blassingame

.. . Is it really true that my foreign sales have been "fabulous"? You see, I have no experience whatever on which to form an opinion. I know that I take warm, special pride in these translations and we both enjoy the regularity with which the money rolls in. But are my foreign sales numerous in comparison with other writers of comparable domestic success? I just thought I had been damned lucky in being in the hands of an agent who had formed such excellent connections abroad and used them so well. I am sure that part of it is true.

February 26, 1959: Lurton Blassingame to Robert A. Heinlein

There are very few writers who sell in as many countries as you do. I try to line up with the agent in each country who is most respected for results and I check on this through visiting publishers to New York, and through them try to help our representatives in these publishers' countries; but in other countries, as here, the quality of the story is the deciding factor. It's the high quality of your stories that makes them so popular. Fortunately, you are writing about a subject that is of interest everywhere; we'd have great difficulty in selling your stories, even of this quality, if you were writing about baseball and football.

CHECKS

December 2, 1961: Robert A. Heinlein to Lurton Blassingame

It seems certain that Ginny gets more fun out of these checks than I do. She always grabs a letter from you first and you should see her eyes light up when she sees one of those long yellow pieces enclosed. Cash has the same effect on her that Elvis Presley has on teenagers—for the past hour she has been sitting in the tub, talking dreamily about how she is going to spend the money that came in today—a new ballgown, setting some emeralds she just happens to have sitting in the bank vault getting rusty, *etc.* I am sure she regards you as the source of all blessings.

December 5, 1961: Lurton Blassingame to Robert A. Heinlein

The Scribner royalties roll on and on. Here is another nice check to help with your Christmas shopping. And we have received a big batch of marks for you from Germany, and the check for this will go to you before the end of the week.

Boxing Day 1961: Robert A. Heinlein to Lurton Blassingame

. . . and also for a nice check from Germany to make our Christmas green. You will be pleased to hear that Ginny has already spent quite a chunk of it; she bought five dresses and a coat before I was out of bed this morning.

SHORT SHORT

May 9, 1962: Robert A. Heinlein to Lurton Blassingame

Carson Roberts, Inc., the advertising firm which has been preparing these short-short sciencefiction ads for Hofiiman Electronics (which you may have seen in *Fortune, Scientific American,* or elsewhere) have been bothering me for months to do a 1,200word story for them. I have not bothered you with this because it is my usual policy to refer to you *only* such business as is really business—and I had no intention of writing 1,200 words of SF for anybody at any price. Such length is poorly suited to the genre.

But they kept raising the price, from $250 to $500 and then to $750—and I tried to shut them up by outlining in one paragraph how feeble a SF story would have to be to be told in 1,200 words . . . whereupon they accepted the outline and asked me to go ahead. I may possibly do so. If I do, I will submit it through you. Otherwise this is just for your information. It's a silly business at best—sixty-two cents a word is more than it's worth, but 1,200words is a silly length for science fiction.

HEINLEIN
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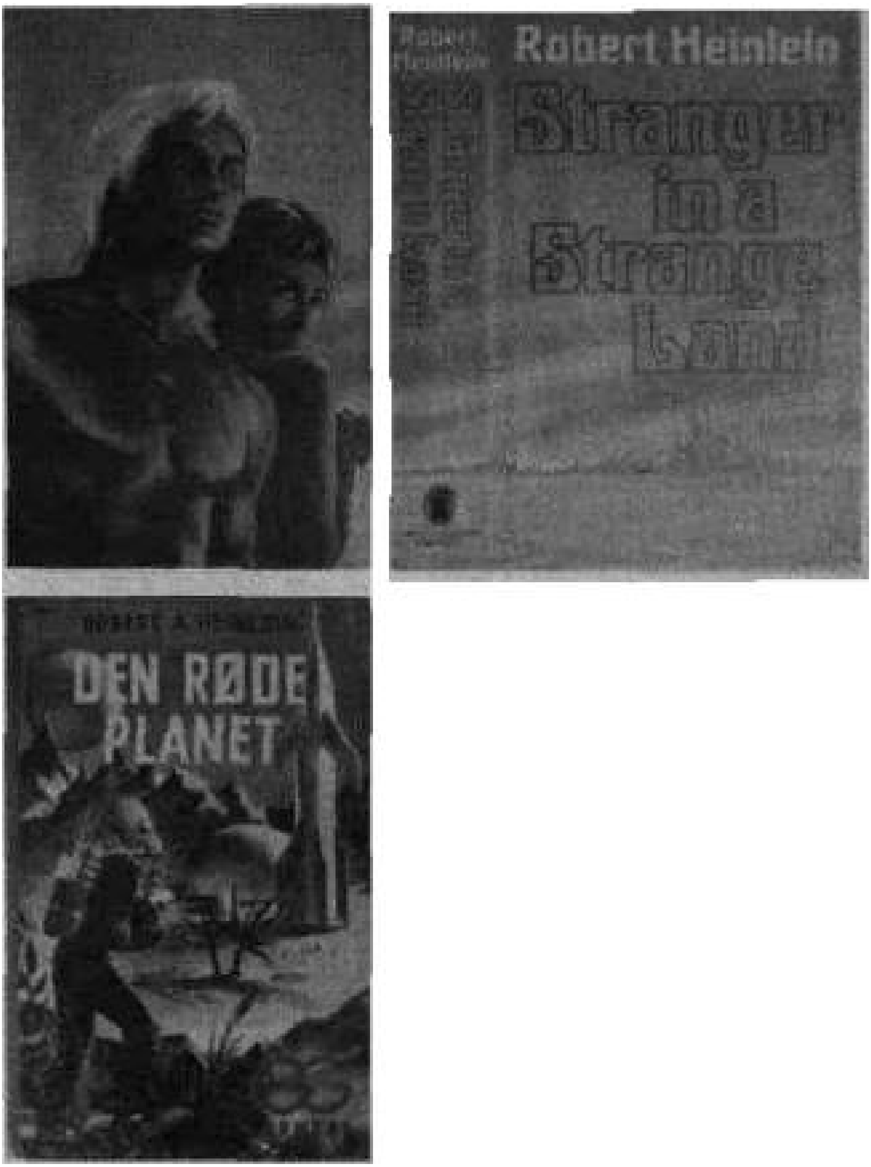
Robert Heinlein
Robert Heinlein
Stranger in a Strange Land
ROBERT A. HEINLEIN
DEN RØDE PLANET

Few writers sold in as many countries as did Robert A. Heinlein. Here are a few examples of foreign editions, including the British edition of *Stranger in a Strange Land.*

CHAPTER XI ADULT NOVELS

THE PUPPET MASTERS

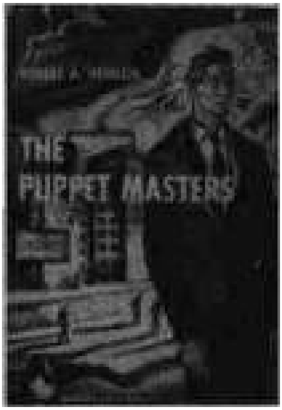

Doubleday published *The Puppet Masters. Galaxy* magazine had changed so much of it in the serialized version that Heinlein barely recognized his own style.

Aliens, in the form of slugs or parasites, suddenly appear on Earth and turn normal humans into zombies willing to do the invaders' will. A government agency sends agents to investigate, but those agents are lost. Two special agents, "Sam" and "Mary," are briefed and sent into the fray.

At different times, both "Sam" and "Mary" become the willing tools of the slugs, and there are horrifying scenes as they engage in war against their homeland. We see them completely committed to their masters. But as the U.S. comes close to being taken over by these aliens, fast action and all-out war eventually save the country.

November 4, 1950: Robert A. Heinlein to Lurton Blassingame

I have not written lately because I have been working seven days a week and far into the night on the new novel—75,000 words down on paper so far and all I need now is a smash ending. That is giving me trouble. I should be working on it at this moment (8:30 P.M., Sat. Eve.) but enough things have accumulated that I must write.

December 2, 1950: Robert A. Heinlein to Lurton Blassingame

Herewith the original and first carbon of *The Puppet Masters.*

As the story stands, it is a bit long (about 90,000 words) for serialization and much too long for a single-shot, but I would much rather cut to an editor's specific requirements than to cut blindly ahead of time. I append hereto something which you may or may not see fit to send along with the copy submitted for serialization: a list of possible breaks. I don't know whether this is good salesmanship or not, but I thought it might help if an editor could see at once that the story was very flexible, serialwise. As you know, I can cut, bridge, write around, etc., to shorten anything they want shortened to any extent they wish ...

I suspect, too, that a magazine editor will want the sex in this toned down; that's easy.

January 5, 1951: Robert A. Heinlein to Lurton Blassingame
Oh yes—Bradbury [Walter Bradbury, science fiction editor for Doubleday] wrote to me about *The Puppet Masters;* I wrote back agreeing to make all suggested cuts and changes, but nevertheless expressing some difference of opinion as to the advisability of the revisions. In my opinion a horror story—which this is—is not improved commercially by watering it down. Edgar Allan Poe wrote a great many things; I own and have read all his works—he is known for about 5% of his published writings, all sheer unadulterated horror, much of it *much* more grisly than mine. But I am going to do exactly what Bradbury says to do; he's paying for it and I need the money.

March 23, 1951: Lurton Blassingame to Robert A. Heinlein
Revision on *Puppet Masters* satisfied Doubleday. Sent word to Gold [H. L. Gold, editor of *Galaxy*].

April 3, 1951: Lurton Blassingame to Robert A. Heinlein
Talked with Gold today. The magazine is undergoing a policy change, and must wait before purchase. Controlled from abroad—France and Italy—will let LB know when there is definite word.

April 21, 1951: Robert A. Heinlein to Lurton Blassingame
You will recall that you advised me that Gold's original demands for revision for serial publication were outlandish in view of what he would pay—about $2,000.

June 3, 1951: Robert A. Heinlein to Lurton Blassingame
Galleys for *The Puppet Masters* have arrived; galleys for *Between Planets* are expected this week; Gold wants synopses for *The Puppet Masters.* I am still on a merry-go-round but will take care of these

items without undue delay. I learn from the grapevine (but not from ———) that "Green Hills" is about to be published.

August 20, 1951: Robert A. Heinlein to Lurton Blassingame

I have been sitting on my hands this past week to keep from writing a stiff letter to Gold. He sent me an advance copy of the September *Galaxy* with the first installment of *The Puppet Masters.* Gold turns out to be a copy messer-upper; there is hardly a paragraph which he has not "improved"—and I am fit to be tied.

Now *Galaxy* is an excellent market and I do not wish to make your task any harder by antagonizing an editor to whom you may be offering more of my copy—but if I were freelancing without an agent, I'd be quite willing to risk losing the market permanently in order to settle the matter. What I would like to say to him is: "Listen, you cheesehead, when we were both freelance writers I had a *much* higher reputation than you had—in fact you never wrote a number-one science fiction story in your life—so who in hell do you think you are to be 'improving' my copy!"

Well, I didn't and I won't—but that is how I feel and it is the literal truth; Gold is turning out a good magazine, but as a writer he was never anything but a run-of-the-mill hack. This whole matter no doubt sounds like a tempest in a teapot, particularly as Gold did not change the story line but merely monkeyed with dialog, rephrased sentences and such—in short, edited the style. Look, Lurton, my plots are never novel, I am not an originator of brand-new and wonderful ideas the way H. G. Wells was; my reputation rests almost solely *on how I tell a story* ... my individual style. It is almost my entire stock in trade.

Without changing the plot in the least, without changing the manuscript in any fashion that could be detected by someone else without side-by-side comparison, Gold has restyled the copy in hundreds of places from my style to his style. It would be very difficult to show how he has damaged the story, but in my opinion he has changed a story-with-a-moth-eaten-plot amusingly told into a story-with-a-moth-eaten-plot poorly told. This is my first serial appearance in a long time; his changes will not make it easier to get top rates for my next such appearance. The cash customers won't know what is wrong, but they will have the feeling of being let down —not quite "first-rate Heinlein."

I'll cite just one example out of hundreds: At one point I have a nurse say, "Eat it, or I'll rub it in your hair." Gold changes this to, "Eat it, or you'll get it through a tube."

See the difference? My phrasing is mildly (very mildly) humorous. It conjures up a picture of a nurse who maintains discipline by cajolery, by the light touch, the joking remark. Gold's phrasing is as flatfooted and unsmiling as an order from a hard-boiled top sergeant.

There are both sorts of nurses, admitted. But the entire characterization of this nurse (Doris Marden) had been consistent as the sort of a person who kidded her patients into cooperation (modeled after a nurse who attended me at Jefferson Medical); with one phrase Gold louses up the characterization and turns her into the top-sergeant type.

In another place I describe the heroine as "lean"; Gold changes it to "slender"—good Lord, heroines have always been "slender"; it's a cliche". I used "lean" on purpose, to give her some reality, make her a touch different.

You see? All little things, but hundreds of them. I can't prove that the story is spoiled. Maybe it isn't, but I know that it is filled with stylisms that never would have come out of my typewriter. You might try the magazine version yourself without checking for the changes, but simply checking to see if it tastes the way it did the first time you read it.

All this is spilt milk except (a) the last installment may not yet be set in type, (b) it may be possible to prevent it from happening in the future. On the first point, the reader's impression of the story depends largely on how he feels when he finishes the story; if Gold can be pushed into returning to the version he bought for the third installment, the louse-up of the first and second installments won't matter too much. Could you talk tough to him, point out that it has been repeatedly adjudicated that mere purchase of the right to publish does not give to him the right to change copy under my byline and that he must print as written, or run the risk of a lawsuit? Or could you kid him out of it, convince him that he should do it to cater to my prima-donna feelings? On point (b)you can either reach an understanding now, or take it up whenever we again submit copy to him, but he must clearly understand and (I think) agree in writing that *all* changes must be made before the sale is completed; once sold the entire ms. is "stet" and must remain so.

Hell's bells, I don't mind the few little changes that most editors make and I don't mind a reasonable amount of revising done by me to editorial order, but this guy has monkeyed with every page.

This is not artistic temperament talking, Lurton—had it been I would simply have blasted at him in person. I am seriously concerned with the business aspects—a strong belief that the property has been damaged commercially and that it will affect the market value of future properties.

I've started fiddling with a new story.

September 24, 1951: Lurton Blassingame to Robert A. Heinlein

Gold tells me that he has written you a letter of apology for his heavy hand on your story, and promises that, though he edits all material which comes his way, from now on yours will be inviolate.

THE DOOR INTO SUMMER

The Door into Summer
ROBERT A. HEINLEIN

Heinlein broke into Doubleday's adult market with *The Door Into Summer* in 1957. Cover art by Mel Hunter.

Dan is an inventor of a line of housekeeping robotlike devices. But his partners steal control of Hired Girl, Inc., from him, then place him in frozen sleep for thirty years into the future. There he learns that Hired Girl has a rival, Aladdin Corp. From the patents of Aladdin's devices, he discovers that the inventor is—himself!

Dan manages to use a discredited time machine to return several months before the time he was shanghaied. He now invents the devices of Aladdin Corp. He gives his shares of Hired Girl to an eleven-year-old girl, Ricky, who has a crush on him, telling her how to meet him when she is grown; then he and his cat, Pete, take frozen sleep for thirty years.

His partner in Aladdin Corp is honest, and Dan is now a rich man. When Ricky is awakened from the long sleep, he meets her. They go off together to be married.

February 2, 1956: Robert A. Heinlein to Lurton Blassingame

I am 104 ms. pp. into a new novel, hopefully intended for the so-called adult trade. It is giving me chronic headaches and chronic insomnia and I wonder why I ever entered the silly business—but if I hold up physically, *The Door into Summer* should be finished in draft this month and finished in smooth around the end of March. Maybe.

We have a foot of snow on the ground, pheasants allover the place, and Pixie hates it. He blames Ginny.

May 31, 1956: Robert A. Heinlein to Lurton Blassingame

Re synopses for *Door into Summer.* I write my own synopses only when the editor twists my arm and demands it—which is usually. If Boucher [the editor of *The Magazine of Fantasy and Science Fiction*] is willing to do them himself, I'll be delighted; he's more literate than I am anyhow.

DOUBLE STAR

DOUBLE STAR

Heinlein had considered selling *Double Star* elsewhere, as he disapproved of Doubleday's Book Club contracts.

Lorenzo Smythe is an actor—a good one, though now down on his luck. When a spaceman named Broadbent offers him a job, he is willing—until he learns it is to go to Mars. But Broadbent forces him by a secret way through Skyport and to the *Go for Broke.* Then he learns that he is to impersonate the great statesman Bonforte—who has been kidnapped and who is due to deliver a major policy speech. Lorenzo is given tapes and films—and begins to "put on Bonforte's head." But when Bonforte is found, he has been severely injured.

Lorenzo reluctantly carries on, meeting the press, entering a Martian "hive," even meeting Prince Willem, and learning more and more of Bonforte's manners and thoughts. Then Bonforte dies!

Broadbent and others finally persuade Lorenzo tocarry on. He does, successfully for the rest of his life.

March 23, 1955: Robert A. Heinlein to Lurton Blassingame

I am aware that I should have written to you several days ago, but I trust you will forgive me when I say that I have completed the novel I was working on. Its present title is *Star Role [Double Star],* it runs about 55,000 words, and is intended for an adult audience. (No sexy scenes, however, and no taboo monosyllables—just an occasional damn or hell, and I may even take those out. The book should be suitable for the kids who will read it anyway.)

I held down the length in the belief that serial sale would be easier; I hope that this one will finally crack *Colliers,* the *Post,* or some other adult and not-SF specialized market. I figure that, costs being what they are, a short length will make it more attractive for both trade book and pocket books as well.

I don't know whether you should advise Doubleday or not. I like [Walter] Bradbury but I do not like the screwy "Science Fiction Book Club" aspect of their contract; they sold a lot of copies of my books with them and I got very little out of it—I do not regard two and a half cents per copy as a good royalty on a hardcover edition put close on the heels of the trade book. Since Bradbury turned down the travel book, we are no longer under option to Doubleday; perhaps this would be a good time to look into the Ballantine deal if it is still being offered.

In any case, I have an adult novel available for book and serial.

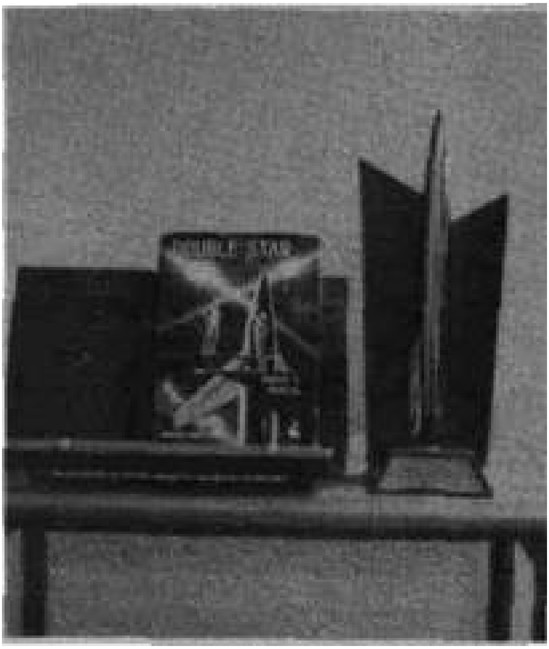

Double Star went on to win the Hugo Award for Best Novel of 1956 at the World Science Fiction Convention, New York, NY.

April 21, 1955: Lurton Blassingame to Robert A. Heinlein

Congratulations on a good novel. Enjoyed all *of Double Star;* wished it longer. No slow spots.

June 3, 1955: Lurton Blassingame to Robert A. Heinlein

The *Post* thought your novel was excellent and the only reason they did not buy it as a serial was that they do not want to devote that much space to science fiction. Campbell is buying it, to run in February, March, and April issues. Doubleday to bring it out in March.

Astounding
SCIENCE FICTION
BUILD W
BONF
Astounding
SCIENCE FICTION

Heinlein had originally looked into a nonScience Fiction market for the serialized *Double Star* but eventually decided to publish in *Astounding* in three issues. Cover art by Kelly Freas.

GLORY ROAD

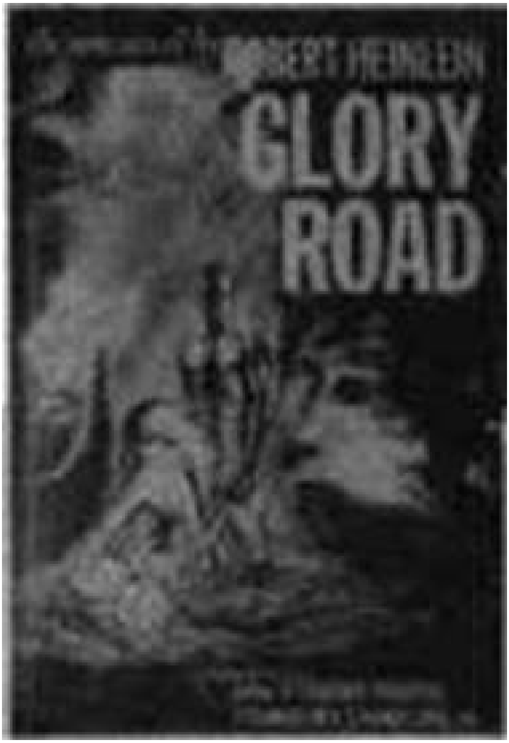
ROBERT HEINLEIN
GLORY
ROAD

Glory Road was a departure for Heinlein, being more fantasy than science fiction.

Oscar Gordon, a Vietnam veteran, is vacationing by the sea in the South of France when he is approached by a beautiful woman. She needs his help. He agrees, and she gives him a sword and takes him to another world, where many dangers beset them. He has to defeat dragons, an ogre, and other monsters. Between times, they make love.

She tells him she is Ishtar, Queen of Twenty Universes, but she is powerless without the Phoenix Egg, which he must recover. They reach the place where it is and Oscar now faces a series of truly horrible dangers. But he recovers the Egg.

She makes him her Prince and takes him to Center, her world. But he grows bored with all the privileges and protocol. He learns how to return to Earth and leaves.

May 9, 1962: Robert A. Heinlein to Lurton Blassingame

I have not written for some time because I have been writing that new novel, now completed: *Glory Road,* 409 ms. pages, about 105,000 words. I am now revising it for my typist and will cut it a little but not much. You will have it not sooner than two months from now as my typist does my work as "moonlighting," as she has a daytime job. This is an adult market story with enough sex in it to give heart failure to those who complained about *Stranger.* It is fantasy verging on SF.

June 6, 1962: Robert A. Heinlein to Lurton Blassingame

.. . We intend to stay quietly at home all summer and I expect to spend the time hauling rocks and weeding and such. I do not expect to write until fall—after all, two novels in one year by the 1st of May is considerable copy, and I find I am tired and uninspired after finishing *Glory Road.*

August 6, 1962: Lurton Blassingame to Robert A. Heinlein

Glory Road is a departure, even for you. It is more fantasy than science fiction. It is an excellent adventure story, seasoned with sage thoughts, spiced with interesting sex. There were a number of spots where I wanted to stop reading and find an audience to share your ideas with. I do hope this will have a real success. I find it delightful.

September 30, 1962: Robert A. Heinlein to Lurton Blassingame

.. . I am not interested in his offer. Not the amount of the fee—a ms. is worth what you can get for it ... sometimes zero. Nor do I object too much to the labor of cutting. What I do object to is that he wants me simply to chop off the last hundred pages.

If I do this, what is left is merely a sexed up fairy story, with no meaning and no explanations. I do not want this story published in such an amputated form. About thirty pages of that last hundred is indeed rather preachy, rather slow, and (if I were to cut) I would sweat that stretch down as much as possible—i.e., from the hero's arrival on the planet Center until his decision to leave—but I am quite unwilling simply to chop the story off at the point where they capture the Egg of the Phoenix. It leaves the story without meaning.

December 7, 1962: Lurton Blassingame to Robert A. Heinlein
Putnam likes *Glory Road.* There should be a little tightening in it, and "a few not very serious" suggestions for changes. Will mark ms. and send with detailed letter.

FARNHAM'S FREEHOLD

FARNHAM'S FREEHOLD

By 1964 and *Farnham's Freehold,* Heinlein was firmly entrenched with Putnam as his publisher.

Hugh Farnham and his family are caught in the blast of an atom bomb, but are not killed. Instead, they are dumped into the far future, to a world none had envisaged. They are soon taken captive. Here the people who call themselves a master race are black, and they consider all other humans little more than animals, to be made slaves, tortured, or killed at will. Farnham is a slave now.

But eventually he interests the masters enough to gain a very limited freedom. He learns of the existence of a "time machine." With it, he manages to get his group back to a little before the time of the blast.

They take refuge in a cave in an enclave in the hills and prepare. The war comes, the nuclear blasts occur, and then plague strikes. But they survive.

March 9, 1963: Robert A. Heinlein to Lurton Blassingame

The new novel *([Farnham's Freehold]* working title: *Grand Slam)* I did in 25 intense days, 503 pages. Ginny seems to like it better than *Glory Road,* says it moves fast and can't be cut much. However, I intend to cut it a lot and get it to my typist about the end of this month. I haven't read it yet, but enjoyed it as I wrote.

March 21, 1963: Lurton Blassingame to Robert A. Heinlein

I don't know how you manage to produce a novel of 500 pages in 25 days, even a first draft.

July 8, 1963: Lurton Blassingame to Robert A. Heinlein

Good story in *Farnham's Freehold,* with enough adventure for some of the men's magazines.

August 21, 1963: Lurton Blassingame to Robert A. Heinlein

Peter [Israel] said he was writing you about cutting and revision ideas, and you probably have his letter by now.

October 4, 1963: Lurton Blassingame to Robert A. Heinlein

Peter Israel says, "Bob Heinlein is the boss. I'll express my opinions, but I have enough respect for his skill and judgment so that if he says a thing can't be done, I'll go along with the way Bob feels it has to be done. If he says the story cannot be cut below 100,000 words without seriously hurting it, I'll publish it at 100,000."

October 12, 1963: Robert A. Heinlein to Lurton Blassingame

Farnham's Freehold contract with Putnam's: On page two I have changed the wordage to "100,000" and struck out the delivery date and made it "to be arranged." I need to know [their] absolute rockbottom deadline for fall '64 publication. I know that he does not need the finished ms. by New Year's Day, that being what I struck out —nor could I deliver it by then in a smooth, retyped form; I've got too much to do to it, and my typist will need at least two months after I have finished cutting it. When you ask him for his absolute deadline, please point out to him that in twenty-five years I have never missed a deadline by even one day. I am quite sure that most editors stick at least a month of cushion into a deadline date since most writers are notoriously unpunctual in such matters. I want to know what his *real* date is. I will meet it.

THE MOON IS A HARSH MISTRESS

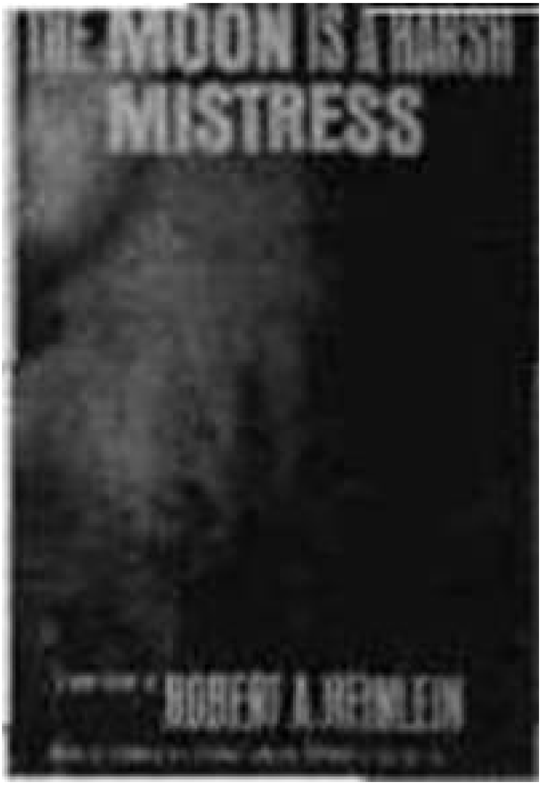

The Moon Is a Harsh Mistress was originally titled *Brass Cannon* after the cannon the Heinleins bought on a trip to Louisiana.

While checking on "Mike," the computer that controls most functions on the Moon, Mannie finds that Mike has become conscious. Then Mannie finds himself heading the revolutionary movement with the Prof, the girl Wyoh, and Mike—who can assume many roles on the screen. The Moon was settled by convicts, but now enjoys a rich social life, though still badly exploited by Earth as master.

With the Prof's knowledge of history and Mike's powers, they plan a careful flight for freedom, using the catapults designed to sling their products to Earth to hurl rocks. Earth retaliates with nukes, but eventually surrenders. Mike, however, has been badly shaken by a nuclear strike. He still controls all electronics—but he no longer shows signs of consciousness.

June 21, 1965: Robert A. Heinlein to Lurton Blassingame

The original of this letter goes with the original ms. Of *The Brass Cannon [The Moon Is a Harsh Mistress],* the carbon goes with the carbon ms. Both will be sent to you tomorrow, original by airmail in the early morning, carbon by air express in the late afternoon, in an attempt to have them go by different airplanes. As you probably know from the news, we are isolated other than by air—and the last I heard they were borrowing 1916 Curtiss pushers in order to move all the passengers, freight, mail, and food that is moving in and out of our small airport. Anent ms.: Please send the original to Putnam; it has with it a form for their supercolossal prize contest. But would you please tell him that I really have no expectation of a science fiction novel winning. . . .

The Moon Is a Harsh Mistress won the Hugo Award for Best Novel of 1966
at the World Science Fiction Convention, New York.

July 6, 1965: Lurton Blassingame to Robert A. Heinlein

Putnam's likes new book, same terms as last book. Don't like title; can you suggest another?

November 30, 1965: Robert A. Heinlein to Lurton Blassingame

You saw a copy of———'s letter to me; I phoned him today. He had thrown me a curve in his proposals to edit a ms. which——— had approved in toto—but I tossed him another curve back saying okay and how quickly could he ship me the edited ms. for my approval?—and pointed out to him that I had *never* signed a contract in the past with Putnam's, nor accepted any advance, until the ms. was fully approved down to the least word. I think he was taken aback by this, but he quickly agreed to go over the ms. himself, see what the copy editor had done, and then either okay it the way I had submitted it, removing the copy editor's changes, or send it to me for my approval.

THE PAST THROUGH TOMORROW

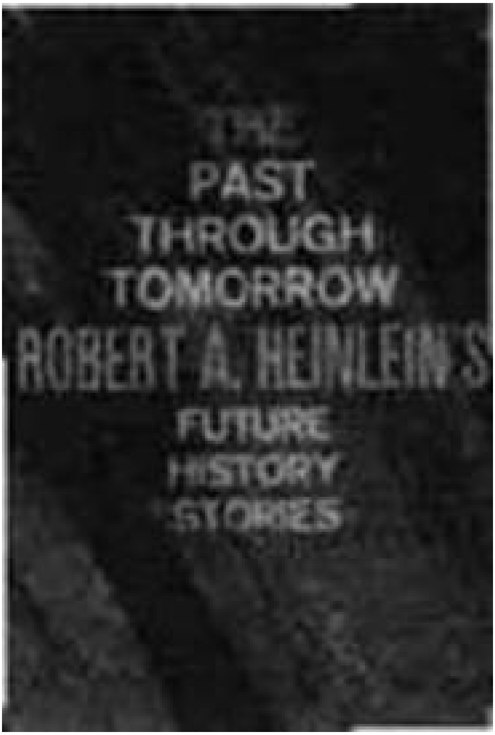

The Past Through Tomorrow collected Heinlein's "Future History" stories written for *Astounding* and the slicks.

This is a giant collection of the stories written for *Astounding* under the "Robert A. Heinlein" byline and many of the slicks. These stories all follow a consistent pattern of future history. When he began writing fiction, Heinlein laid out a big chart with the dates, major technical advances, political and sociological situation, and various remarks necessary for fuller understanding. There were also lines for the lifelines of major characters and for the beginning and duration of technical inventions. This came to be known as his "Future History" chart. The big chart was pinned to the wall, and stories, characters, and details were added to it as more stories were written or planned. It covered a period from about 1950 to the year 2200.

March 9, 1963: Robert A. Heinlein to Lurton Blassingame

I am returning herewith Peter Israel's letter concerning the *Future History.* I don't know just what he wants. I had had in mind an omnibus reprint book, using the first three books of the *Future History.* We hold all rights to these *and we own the plates.*

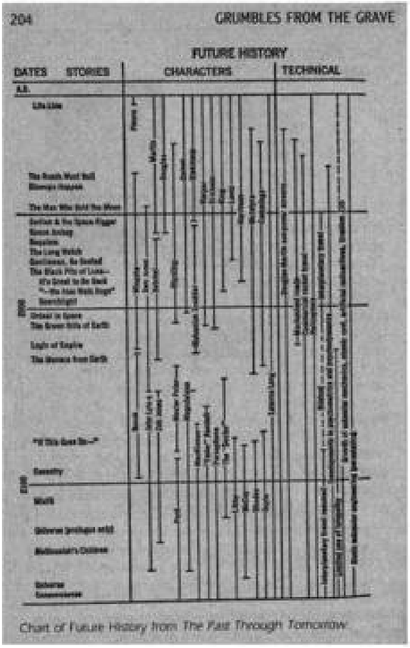

204 GRUMBLES FROM THE GRAVE

FUTURE HISTORY

DATES
STORIES
CHARACTERS
TECHNICAL

Chart of Future History from The Past Through Tomorrow

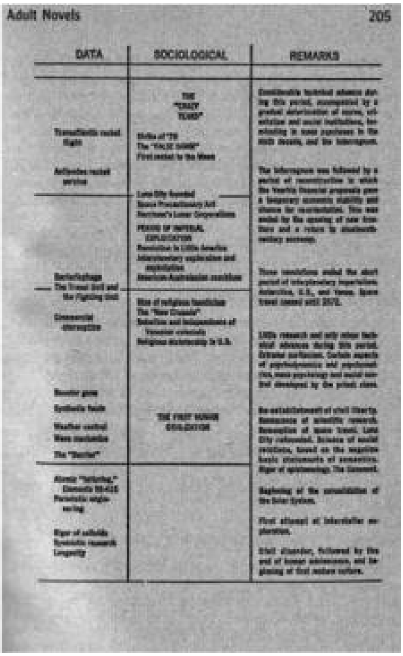

Adult Novels 205

DATA
SOCIOLOGICAL
REMARKS

I suggest that we tell Israel that what we are offering is the first three volumes, for reprint, separately or as one jumbo volume—with plates furnished by us—and that if he does not want them, please tell us so in order that we may offer same to Doubleday's Science Fiction Book Club. I feel quite sure that they would take a chance on such an offer, with the plates laid in their laps. These three books are very famous in the field and they have not been available in hardcovers in years—and never from the S-F book club.

I WILL FEAR NO EVIL

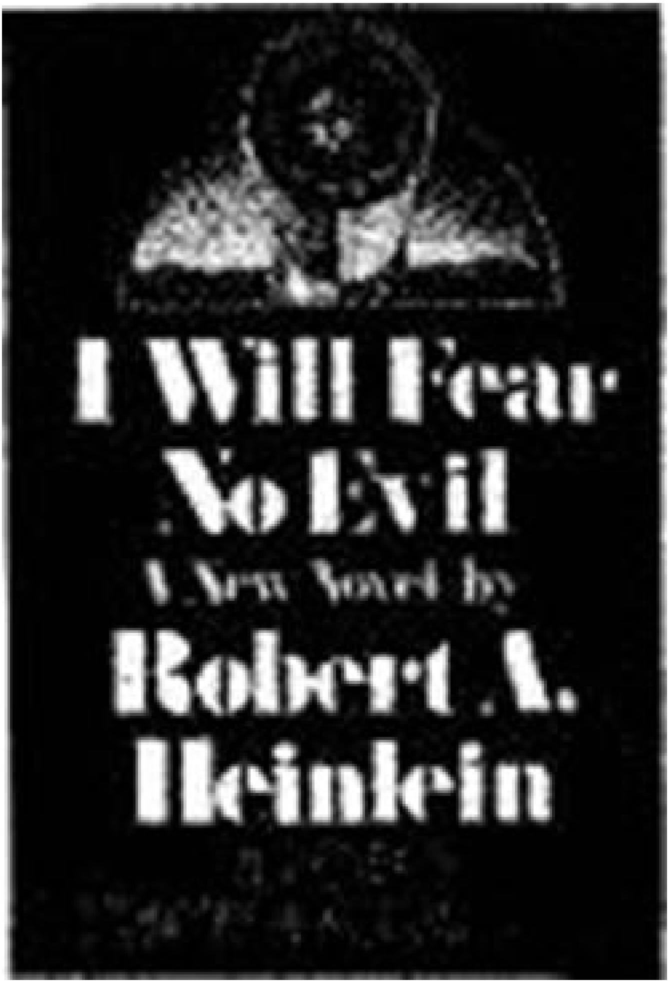

I Will Fear No Evil. Q.P. Putnam's Sons, 1970, was also serialized in *Galaxy.*

Johann Sebastian Bach Smith, an extremely wealthy man, is being kept alive through the use of life support systems, until a suitable body donor can be found, at which point his brain will be transplanted into the young body. The body turns out to be that of his very capable secretary, who was killed by a mugger.

The two personalities now inhabit the same body and talk to each other. And Johann Smith learns to look around him with new eyes, as a female. He/she has experiences unknown to anyone else, having been of both sexes.

Eventually, using semen deposited earlier by Johann Smith in a sperm bank, Johann/Joan Eunice bears a child. It is his own child on both sides.

August 21, 1969: Virginia Heinlein to Lurton Blassingame
Robert says that the new novel is as long as the Bible, but considering the number of authors of that, I doubt it. It is still in the process of completion. We'll send up a few rockets when it's done, and maybe you'll see one of them!

August 28, 1969: Virginia Heinlein to Lurton Blassingame
[Robert] left me a note saying, "Please tell him that I am anxious to learn what the new book is all about, too—especially the ending.

"I seem to be translating *Giles Goat Boy* into late Martian."

September 2, 1969: Virginia Heinlein to Lurton Blassingame
. Robert's up to what he says is the last chapter. Then he added thoughtfully, "I hope it isn't like the short story." But I think this time he means it. He spent last night killing off someone; must have been a sort of Rasputin, from the length of time it's taken.

October 1, 1969: Virginia Heinlein to Lurton Blassingame
What word do you want about the novel? It's in the cutting stages—I thought that it dragged in spots. Don't you want to be surprised? All I can tell you is that it is quite different from anything I've ever read before, by Heinlein or anyone else. It will go to the typist before we leave here for the class reunion . . .

October 7, 1969: Virginia Heinlein to Lurton Blassingame
Re the new book, Robert has his doubts about Mac [Truman MacDonald Talley of NAL] liking it, pointing out that he turned down *Stranger,* but says he's been publishing some far-out stuff lately. My comment was that he can't sell the public Elsie Dinsmore anymore.

October 13, 1969: Virginia Heinlein to Lurton Blassingame
The cutting goes along slowly . . .

November 12, 1969: Robert A. Heinlein to Lurton Blassingame
While I was writing *I Will Fear No Evil* and you and Ginny and Margo were handling everything else, a lot of non-frantic items accumulated in your box on my desk. It appears from the file that I have not acknowledged checks in writing since 22 June. I intend to acknowledge checks and books, so that you will have a written record.

December 4, 1969: Virginia Heinlein to Lurton Blassingame
I'm just afraid that I shall have to type *I Will Fear No Evil,* which

will completely spoil my winter! I think the first draft was 689 pages.

January 19, 1970: Lurton Blassingame to Robert A. Heinlein

I spent more time reading *I Will Fear No Evil* than I've spent on a manuscript in years. This is only partly because of the book's length—I've gone through longer ones faster—but the novel has so many good lines in it that I gave myself time enough to enjoy and chuckle over them.

January 31, 1970: Virginia Heinlein to Lurton Blassingame

Today Bob will probably sign his "X" on two powers of attorney. One for you, one for me. Yours will be for conducting business affairs, mine a general one . . . and I suggest that we both keep them, not limited in time, for emergency use.

Robert is in good spirits, but quite weak, with nurses around the clock. The incision looks huge to my inexperienced eyes, and it had a drain in it until yesterday : . .

February 12, 1970: Virginia Heinlein to Lurton Blassingame

This new novel is probably closer to mainstream than science fiction than any Robert has done ... he wants to have some sort of mass distribution on it, either by early paperback or serial, or perhaps both. The paperback business doesn't seem to cut much into the trade edition sales, whereas the Doubleday Book Club does. If we can't get serial or early paperback publication, we'll reluctantly let it go into a bookclub edition. The sales on *The Moon Is a Harsh Mistress* proved my point on that.

February 26, 1970: Virginia Heinlein to Lurton Blassingame

Just returned from the hospital, and Bob was trying to eat lunch ... he ate his whole egg for breakfast, and I don't know how much more, but he's still getting IV feeding, and is very unsteady on his feet. But at least we're away from the wheelchair, and he goes out into the corridors to walk. He'd refused to leave his room for about a month, and this is [a] considerable breakthrough. Also, I gave him *The Insult Dictionary,* and he started reading it, which is better than the detergent dramas and quiz shows, etc., he's been watching on TV.

I am also sending a letter from Lady Gollancz. Robert read this letter, and said firmly, "No bowdlerization." So will you please tell [her] politely to go to hell? The passage referred to is the one in which the hero feels sorry for the victim rather than the criminal. She wanted to take it out.

EDITOR'S NOTE: By this time, publishers in many countries were *putting out Robert's work, especially his juveniles.*

Several British publishers had contracts for books, among them Gollancz. The chief of that firm had been knighted by the crown—Sir Victor Gollancz. When Sir Victor died, his wife took over the firm.

When they were about to publish one of the juveniles (and I am not sure now just which one it was), LadyGollancz asked whether she might omit several sentences dealing with punishment of a character for a crime he had committed. The law on this point is firm, both here and in the UK: no publisher of a reprint edition may make changes in copy once the sale is made, without the written consent of the author.

So Robert refused her request to make the change.

Yesterday, over in Santa Cruz, I ran across a note Robert had made about the new book. Sorry I can't quote it in full, but he said, "This may be my last novel. I am not going to let some editor cut it when he doesn't understand it completely." He's always said that this story couldn't be cut because of its complexity . . . although I thought it should be. It is possible that he's right. In any case, this is something that will have to be done cautiously rather than trying to fit it into a Procrustean bed. He did do some cutting before the final typing and Xeroxing. I read it and proofed and made changes, where the typist had made mistakes. And the cut version is a lot faster than the first one was!

March 7, 1970: Virginia Heinlein to Lurton Blassingame

I know that [Robert] has definite ideas about what he wants in the new book contract, but he just says, "You and Lurton handle it," so we'll have to stall a while longer.

March 31, 1970: Virginia Heinlein to Lurton Blassingame

Robert is pleased with the serial sale [of *I Will Fear No Evil* to *If]*. He had every intention of having serial publication on it, if possible.

The doctors are very pleased with Bob's progress, but he still spends most of the time in bed, and is really not up to doing any work at all. Besides, sometimes his mind isn't as sharp as it usually is, and we hope that by the time this copy-editing is completed, he'll be up to looking at it ... And having had the close brush with eternity he recently had, he's going to make some changes in his way of living. Just what those changes will be remains to be seen. It will probably include such things as no speeches (he finds them quite disturbing), no interviews, *etc.*

April 8, 1970: Lurton Blassingame to Virginia Heinlein

Rush me Xerox of your power of attorney. We need to attach it to the new Putnam contract.

November 20, 1970: Virginia Heinlein to Lurton Blassingame

The reviewers seem to be complaining about the lack of explicit sex in *I Will Fear No Evil.* One said, "The Victorian Mr. Heinlein—" Does any book *ever* please reviewers?

January 14, 1971: Virginia Heinlein to Lurton Blassingame

Thank you very much for the article from the *New York Times.* I will salaam to the Boss every morning from now on. How does one person get to be the hero of the New Right, Women's lib, and the hippie culture all in the same breath? We must all be schizophrenic!

CHAPTER XII TRAVEL

August 6, 1952: Robert A. Heinlein to Lurton Blassingame

Back home to a bushel of mail and a constantly ringing phone—I wonder why we came back! But it was a fine trip—Jackson's Hole, Grand Tetons, Yellowstone Park, Craters of the Moon National Monument, Sun Valley, the "Days of '47" at Salt Lake City, Zion Park, North Rim of the Grand Canyon—where we rode mules down to the floor of the Canyon—then Bryce Canyon, thence through the main range to Aspen, and finally home.

AROUND THE WORLD I

August 17,1953: Lurton Blassingame to Robert A. Heinlein

. . . very excited to hear plans for the round-the-world trip.

Robert and Virginia in Sun Valley, during the 1952 tour of National Parks.

September 25, 1953: Robert A. Heinlein to Lurton Blassingame

We sail from New Orleans on 12 November and will leave here about 7 November. I am sorry to say that I will not be on the East Coast either coming or going, as we leave from the Gulf and return via San Francisco . . .

We have our trip about lined up, having each received permission from the Navy Department, having received passports, having booked passage for the two principal legs of the trip. We've been vaccinated, shot for cholera, typhoid and paratyphoid, tetanus; will be stuck for yellow fever on Wednesday. Ginny is down seeing about visas right now, but all the main hurdles are passed. I will supply exact times and places later but here is how it shapes up now: By freighter S.S. *Gulf Shipper* (U.S. registry) New Orleans, Panama Canal, half a dozen west S.A. ports to Valparaiso, fly over Andes to Buenos Aires, embark cargo-liner (swimming pool and such) M.S. *Ruys* (Dutch), then

Montevideo, Santos, and Rio de Janeiro, across South Atlantic to Cape Town, after which the ship hits half a dozen East African ports and Zanzibar, ending in Kenya before starting across Indian Ocean for Mauritius and Singapore. I want to leave the ship for a week at Cape Town to visit Kruger National Park, but Ginny insists that lions can open automobile doors—nevertheless, I want to make that motor trip and see lions, elephants, etc., in native habitat.

The Heinleins in Buenos Aires, a stop on their world tour of 1953.

We leave the ship in Singapore and have booked no farther. I plan to visit Java and Bali at least and wind up at Darwin, Australia—we are trying to arrange booking for an island freighter now; if that doesn't work, we will visit the islands by airline and end up at Darwin anyway. Then we fly to Sydney, stay as long as we like in Australia, go to New Zealand, where we intend to visit both North and South Islands (there is an N.Z. airline that has a circle route), and eventually back home via the Fiji and Hawaiian Islands and San Francisco.

October 24, 1953: Robert A. Heinlein to Lurton Blassingame

As you can see, this is my "strike-out" letter—even though I may write again. You will see, too, that I have (with fantastic ingenuity and smug planning) placed all the real dope on page two, which you can now stick upon your bulletin board, or something. We'll send you postcards of calabozos and hippos and things. If I don't return on time, just forward my personal effects to Tahiti, fourth beachcomber from the left.

Wups! I forgot something—money. Don't send me any checks after about 7 November; just hold for me whatever comes in. It is possible that, after I am cleaned out by a gang of international gamblers headed by a beautiful blonde in sable, that I may ask you to cable me some dough—but it seems most unlikely, as I am taking plenty.

April 3, 1954: Robert A. Heinlein to Lurton Blassingame

We got home late Wednesday and spent Thursday and Friday unpacking and reading mail. I have answered none of the latter as yet and still can't find the top of my desk—and about two dozen bread-and-butter notes to write consequent to the trip as well. We are both okay save for head colds picked up in New Zealand and still with us. The trip back was okay until we were within ten minutes of Colorado Springs, whereupon the damned plane caught fire in its heating system, filled the cabin with smoke, and caused the skipper to turn back and make an emergency landing. This when I had about softened up Ginny to the notion of traveling by air in the future —

TRAVEL BOOK

EDITOR 's NOTE: In 1953 and 1954, Robert and I took a six-month trip around the world. When we returned, I suggested that Robert write a book about the trip. He wrote half of the book and sent it off to Lurton, to see whether there was or was not a market for it.

It turned out that there was no market for it.

Everyone who read this book loved it, but no one wanted to publish it. Robert spent some months working on this book. It is too late to publish it now — it's considerably outdated.

August 30, 1954: Robert A. Heinlein to Lurton Blassingame

I think you had better send the travel book manuscript back and let me finish it. I have spent the whole summer expecting it back in the next mail, frustrated by its half-finished condition, and unable to get to work on anything else. I'll never send out an incomplete ms. again— it is, for me, like having someone read over my shoulder; it keeps me from concentrating on the work in the machine.

A long string of houseguests helped to wash out the summer, too. The last of them are out of the house now and I should be able to finish the travel book quickly. I want to start on my next novel in a couple of weeks. I plan to do the next boys' book first, then an adult serial novel.

EUROPE

January 24, 1955: Robert A. Heinlein to Lurton Blassingame

We have not yet been able to book our proposed trip, but we still hope to leave about the 1st of May. Don't worry about the trips I take cutting in on writing; in the long run they increase my output and enhance its quality. Anything I do always winds up in a story eventually— and it is most unlikely that we will ever make another trip six months long.

May 10, 1955: Robert A. Heinlein to Lurton Blassingame

We have luxurious quarters, the owner's cabin, about twice as big as the other passenger staterooms. I don't know how we got it as we did not ask for it, but it is very pleasant. For the first time in a ship I have room enough to write and a comfortable setup for it. I might even turn out a story . . . although this seems unlikely as my mind is comfortably blank.

July 16, 1955: Robert A. Heinlein to Lurton Blassingame

How are you? Me, I'm a little confused. I've been in ten countries so far this trip, used nine languages, and thirteen sorts of money including U.S. MFC "funny money" in which $10 bills are printed in bright red and a nickel scrip looks like a cigar coupon. I've just finished calculating a trip into the Arctic Circle (which we start tomorrow morning) which involves marks, guilders, Belgian francs, and three sorts of kroner, all at different rates. I came out within about 10 percent of the right answer, which is better than I expected.

Ginny has been spending money with joyful frenzy and everything costs six times what it should. I think I have money enough with us to cover everything, but I am no longer sure. Could you please send me a thousand dollars in American Express drafts (the only sort which is really easy to exchange everywhere) to the Heidelberg address above? Deus volent, I will still have them in my pocket when we reach New York, but I will feel easier if I have them. We will be back on the 6th of August; then we go to Bayreuth so that Ginny can sop up Wagner (the Ring Cycle) while I sop up beer—then home by easy stages. I estimate that we will be in New York about the 9th or 10th of September, but anything could happen between now and then.

LAS VEGAS

April 22, 1959: Robert A. Heinlein to Lurton Blassingame

We're back home and not quite broke—in fact, I didn't even manage to use up all of some traveller's cheques I bought in New York over a year ago, and now we have money running out of our ears, with all taxes paid. Ginny worked hard on the slot machines, did not manage to drop behind more than five dollars all week. I played the slots very little, craps one evening, and put a few chips on roulette *en passant* and broke about even—I wasn't there to gamble anyhow. One member of our party, a boy I went to Annapolis with, gambled all week, splurged on night clubs, etc., and returned to Colorado Springs with more money than he had started out with. I can't claim that, but I will say that they practically give you the joint free—provided you don't drop a lot of dough at the tables. Gourmet food is cheap, the most lavish night clubs in the entire world are very cheap, equivalent hotel rooms are about half what they would cost in New York. I understand that the taxis are expensive, but we hired a new Chevvie and never entered a taxi.

The Congress of Flight was almost the size of a World's Fair, with the most remarkable demonstrations and exhibits I have ever seen anywhere . . . The static exhibits included such things as the Atlas, ThorAble, X-15, manned reentry capsule for Project Mercury—and the 1911 Bleriot monoplane. The dynamic exhibits had everything, from several types of bombing to the most frightening precision flying I have ever seen—half a dozen nations each trying to bilge the others and the Chinese Nationalists stealing the show with a nine-plane diamond tight formation that did things I still don't believe. Nobody killed—although we in the audience almost had heart failure.

Las Vegas is sort of an organized nervous breakdown. We are exhausted, sunburned, and euphoric . . . But the three largest bookstores in town do not sell science fiction—I looked for some of my own to give to friends-no dice.

To my great delight my name tag was read and recognized every few minutes all week long—a large percentage of the delegates read science fiction.

SOUTHWEST TRIP

March 9, 1956: Robert A. Heinlein to Lurton Blassingame

We are just back from an eight-day swing of Albuquerque, Las Cruces, and Portales, a very enjoyable time which included seeing friends at Sandia Weapons Center, the AEC [Atomic Energy Commission], a rocket society do at White Sands, seeing ——— ———'s new baby, photographing the gypsum sands, a real dust-bowl storm with the sun blacked out and silt up to the fence tops, a visit on a cattle ranch, lecturing at the University of New Mexico, getting stuck in the mud, and encountering quite a bit of sunshine and warm weather after a very hard winter. I am now trying to clear my desk.

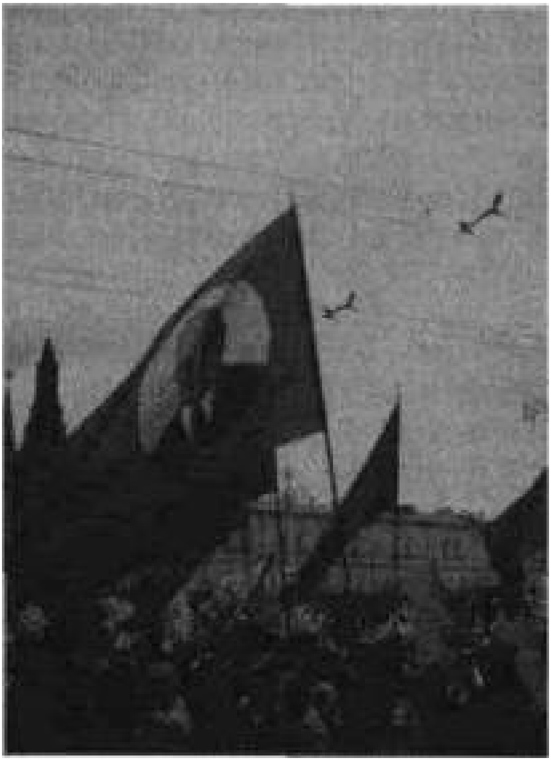

The start of the May Day Parade, Soviet Union, 1960.

USSR

August 15, 1960: Robert A. Heinlein to Lurton Blassingame

Well, I'm home and completely swamped by the volume of work in front of me. I've spent the past four days just trying to get enough stuff put away and thrown away so that I can get at my desk to write. As soon as I finish this letter I will get to work on an attempt to try to revise and extend the Intourist article along the lines you suggested—but, truthfully, trying to write humorously about the USSR won't be easy. Ginny and I laughed ourselves silly time and again, but it was hysterical laughter; there is not much that is really funny about the place.

EDITOR'S NOTE Robert wrote two articles about this trip—they can be found in Expanded Universe.

ALMA

May 15, 1961: Robert A. Heinlein to Lurton Blassingame

We went to Alma, Oklahoma, on April 29th, using a chartered airplane and getting it all done in one day. "The Sequoyah Book Award" turns out to be a handsome plaque. I addressed the State Library Association and they had a book-signing afterwards—and durn if they hadn't sold almost two hundred copies of *Have SpaceSuit—Will Travel.*

Scribner's offered to pay for the trip, but I preferred not to be under obligations to them while there is such continuous pressure on me to quit Putnam's and go back to Scribner's. Anyhow, it cost less than two round trip commercial tickets and considerably less than it would have cost to drive it—and it's deductible. Anyhow, arriving by private plane added to the show.

SAN DIEGO

July 12, 1962: Robert A. Heinlein to Lurton Blassingame

My short trip to San Diego and to sea was terrific. A day under the sea in the submarine *Raton,* spent with destroyers hunting us and trying to (simulate) depth bombing—which they do with grenades, which make a terrible racket but, at most, break a light bulb—then we flew aboard the carrier *Lexington,* spent the night watching night operations, then day operations the next day, then flew back to

Colorado Springs—elapsed time C.S. to C.S. fifty-four hours and almost no sleep. The night landings were made by supersonic fighters, Demons (F3H), and it was the most exciting—and the noisiest-thing I've ever seen. She's an angle-deck carrier and landings and catapulting go on simultaneously, one of each about every thirty seconds—and they hit at about 130 miles per hour and roar away if they miss the wire.

Besides that, I was recognized repeatedly, which boosts my morale. The icing on the cake was a birthday party in the air for me on the way home. Much fun!

LAS VEGAS AGAIN

September 30, 1962: Robert A. Heinlein to Lurton Blassingame

I've got to bathe, shave, dress, and run—the Houston trip was fast and frantic; the Las Vegas trip was long and delightful. Ginny hit several nickel jackpots, I did not gamble at all but saw all the shows . . . The space and aircraft exhibits were magnificent, there were many fine parties and three open bars, and a fine firepower show—bombing, Thunderbirds, refueling in the air, the new planes, and a joint AF and Army Strike demonstration. And we saw many old friends. The Folies Bergere was as always, and the Lido de Paris show better and more lavish than ever.

ANTARCTICA

December 28, 1963: Robert A. Heinlein to Lurton Blassingame

I think I told you by phone that *Popular Mechanics* wants me to do another article, or several. Since then we have tentatively agreed on a subject for the next one: the research going on at the South Pole. I had in mind going there next year, but Stimson's last letter spoke in terms of right away. Since summer has just started at the South Pole this is reasonable—save that I am up to my ears in this Hollywood deal with Screen Gems. The trip need not take long—ten days or two weeks—but if I am to go at all this [Southern Hemisphere] summer, it must be in the next few weeks, with conflict most probable with the Screen Gems deal. . . .

If it does work out that I go now instead of about a year from now (anytime after Labor Day 1964, that is), this would solve the problem of what to use for a *Boys' Life* serial: Lay it at the South Pole and make it a mixture of science and adventure. And that would also solve the problem of my next juvenile for Putnam's—three novellas totaling about 50,000 words, *Nothing Ever Happens on the Moon, Tenderfoot on Venus,* and *Polar Scout.* [Putnam] has written me, twisting my arm a little to turn out another juvenile; this would satisfy [Putnam] for the '65 spring list, I think. If you see fit, you might ask *Boys' Life* if they would like a serial about Antarctica, one written from personal observation.

I should add that I told *Popular Mechanics* that, having given them a first article, I reserved the right to do other articles and fiction based on the trip. They want to pay only what they paid before ... I could hitchhike the entire trip on military "space available," but I am more likely to go commercially to Auckland. But I can show a nice profit by writing other things on the same material.

EDITOR'S NOTE: This trip did not come off, but we did travel to Antarctica in 1983.

CARIBBEAN

December 11, 1964: Robert A. Heinlein to Lurton Blassingame

All the various checks sent registered in two mailings arrived, of course, and Ginny is again complaining that it is backing up on her. It is her own fault; spending is her province and she returned from this last trip with more than a thousand in cash—she didn't even really *try.* Her largest purchase was three "pans" (or drums) for a steel band, purchased in Trinidad, and they weren't expensive; they were simply hard to get home—one medium-sized, eighteenth-century brass cannon purchased in New Orleans (so now we are in business for ourselves). The cannon helped a little—$275—but when a guide offered to have a jewelry shop opened for her on a Sunday in Caracas she turned him down. We simply will have to buy some more stock after we pay the income tax; she has lost her touch.

Smorgasbord.

The 18th Century Brass Cannon was the inspiration for the original title of *The Moon Is a Harsh Mistress.*

Perhaps the most interesting part of the trip was visiting a Bush Negro village far up in the jungle in Suriname, formerly Dutch Guiana—descendants of escaped slaves who continue to live Congo-style deep in the rainforest, up a side river by launch. My principal reaction was that bare breasts aren't necessarily sexy; the Zulus are much better equipped in that region. We also visited an Amerindian settlement—the Indians were polite and dirty, the Negroes were pushy and very clean. As for other matters—well, a flying fish with a 12-inch finwing spread flew into the lounge one evening through a port dogged open only 4 inches without damaging the fin wings. I couldn't ask him how he did it; the landing killed him. We got a royal tour of the Boeing plant in Louisiana (guests of the chief engineer and chief counsel), and I beg to report that the Saturn is the most monstrous big brute imaginable and I do not believe that the Russians can do things on the scale of our Apollo project. I do believe we will have a man on the moon this decade; progress looks good. Ginny visited a Negro whorehouse in Jamaica, and behaved with such aplomb ands avoir faire that one would think she had spent her whole life in one. We arrived in Denver late at night to find our flight did not run that day, so I chartered a 2-engine Aero-Commander and we landed in a snowstorm in Colo. Spgs. by GCA. I watched it from the copilot's seat —much like a carrier landing. The ground is covered with white stuff but it is good to be home.

EDITOR's NOTE: That brass cannon still stands in the living room. It served as the working title for The Moon Is a Harsh Mistress; *of course, the title was changed as the editors did not think it was a suitable title for a science fiction novel.*

The cannon is a saluting gun from an eighteenth-century sailing vessel, but it still works. We used to fire it every Fourth of July.

December 28, 1964: Robert A. Heinlein to Lurton Blassingame

I behaved myself in Jamaica and all through the trip-first, because I was well chaperoned and, second, because I was never really tempted. The female passengers were all antiques and the chocolate items ashore were not tempting. No, I'm not racist about it—some of the Zulu gals I saw in South Africa were decidedly tempting, but not these. As for Ginny's savoir faire, here's how it came about: [someone from our ship] had a date with a mulatto gal, not bad looking but not too bright and quite notional. He . . . took Ginny and this gal and myself on a pub prowl through the lower depths of Kingston. About midnight this gal suddenly decided that we should all go to ——— and gave the address to a cabdriver—instead of a night club, it turned out to be a cathouse complete with red light, eight or ten colored gals in the parlor, and a bar and jukebox in a room behind the parlor, where the madam (somewhat annoyed but polite) received us. [The gal's date] was terribly embarrassed and explained behind his hand to me that he had not had the slightest idea where we were going. But Ginny was not embarrassed, spotted what the place was at once, and was delighted to have had a chance to see inside one. We bought a couple of rounds of drinks, played the jukebox, and left—much to the madam's relief. (I strongly suspect that [the woman] had worked in that house.)

CLASS REUNION AND RETURN

November 12, 1969: Robert A. Heinlein to Lurton Blassingame

It was a wonderful trip for us, all the way through. I'm sorry that I arrived in New York so beaten down by my class reunion [in Annapolis] (some day we'll make a trip in which the *first* stop will be New York and arrive in prime condition)—I'm especially sorry that I missed the ballet in which the gals (did) (did not) wear body stockings . . . Jack Waite took an afternoon off to give us a personal tour of the Manned Spaceflight Center [in Houston]—high points: a view of Moon rock (swelp me, it looks to me like hundreds of little shiny golden spheroids embedded in a tannish gray matrix), a visit inside the mission control room during a computer-simulation of *Apollo 12* mission (the LEM was just "landing" on the Moon and you could follow it on the displays), and a long, detailed lecture on the Moon suits (for us alone) by the chief engineer of life support systems—who turned out to be Ted Hayes, whom I [had] hired as an undergraduate at U of Pittsburgh twenty-seven years ago to work at the Naval Aircraft Factory—and I lured him into signing with me rather than General Electric by promising him that he could help develop pressure suits for fighter planes and I kept my promise and it led directly to him developing the first suit used on the Moon.

We stayed over an extra day in Houston at Patricia White's [the widow of Ed White, who died on Apollo I] request—"some people who wanted to meet us." Ginny told you a bit about that party by phone ... It was a big party in a big house and I don't know what all Ginny did—but I was followed around all evening by three tall beautiful blondes—Heinlein fans. (I managed to put up with it.) But the star of the evening was "the Honorable Jane." Jane is a BOAC hostess and looks just the way an airline stewardess should look—petite and pretty and shapely.

[She] was wearing an evening dress—but it was London mod. Micro skirt—and she had nice legs but nobody noticed because it was cut clear to the waistline in front. No question of a body stocking in this case. Un-possible! Nor any possibility of foam rubber. Silicone? A bare possibility, but I don't think so. Everyone got crosseyed, including me, and Jane clearly enjoyed the sensation she was creating. (I should add that styles in Houston are much more conservative than those in New York.)

From there we went to New Orleans, with reservations at the St. Charles—and I was asked for identification as we were checking in ... which I refused to give (this is not yet Russia) and we had our bags put back into a cab and went to the Pontchar train where we wound up in the Mary Martin suite without being asked to produce IDs. I can see why Mary Martin stays in that suite; the Aga Khan would be quite comfortable in it. It was late, we were exhausted, so we had a bite from room service (soft shell crabs Amandine, oysters and bacon en brochette, parfait praline), bathed, and so to bed.

The next morning there was a bowl of fruit waiting for us, compliments of the manager, and enclosed with it was a little carton of personalized matches with my name spelled correctly. This was followed by a phone call from the manager asking us to have a drink with him that afternoon. (Heinlein fan? Not at all. He asked me what sort of writing I did.) The moral of this is: Don't stay in hotels that demand IDs.

I must now explain that I had avoided the Pontchar train because Eberhard Deutsch [a New Orleans attorney] lives there and I had been trying to avoid moving into his place when I knew he was out of town. Having told his office that we would be at the St. Charles, I then had to phone again and tell them that we were at the Pontchar train. Eberhard was returning from Europe by a plane that got in at just past noon the next day—so shortly after noon I received a call: "Young man, what are you doing downstairs? My housekeeper is expecting you."

So we moved up to the penthouse. He was not there but his housekeeper was indeed expecting us, and settled us in. The penthouse makes the Mary Martin suite look like substandard housing —

—which I had known and which was a major reason why I was reluctant to stay in it with the owner away. Eberhard's little cabin in the pines occupies the entire roof of the hotel; that portion which is not house proper being terraces, gardens, "landscaping," and a spectacular (pump-driven) waterfall. It is, of course, surrounded on all sides by dazzling views of the city and of the Mississippi—and best of all, it is so high up it is quiet; we could sleep.

New Orleans was tiring fun and endless gourmet food . . . Bourbon Street in search of real Dixieland jazz, which we found.

ANTARCTICA

Virginia Heinlein—report 1983

This is an enormous continent, barely known, but actually inhabited by mammals and birds, on the coastline at least. There could be almost anything there and we went to learn something about it.

We were outfitted with thermal underwear to outermost layers of waterproof clothing. Recommended (by those who know) is the "layer theory" of dressing for the cold weather to be expected. And it is COLD. The worst day we encountered, including the wind chill factor, was 45 degrees *below* Fahrenheit. Otherwise, we managed to keep relatively warm.

A few words about the Zodiacs, which will, often be mentioned. They are rubber boats with outboard engines, very shallow in draft, drawing only inches, made of rubber-coated fabric glued together, descendants of the life rafts of WW II. They have lightweight wooden floors; seating space for passengers was on the float tubes, which were about fourteen to sixteen inches in diameter. One held onto ropes festooned along the sides of these craft. We could be taken into beaches with no jetties, where it was possible to mingle with the local wildlife. "Wet" landings meant that we had to step into a shallow surf onto rocky beaches.

Lindblad Explorer was a small ship, built with icebreaking prow. Once we toured through an ice pack, looking at the local fauna. Groups of seals lie around on the ice, soaking up the sun or just resting; sometimes they became a bit wary at our approach and slipped into the water, but many of them just looked up and stared at us.

We embarked in *Lindblad Explorer* in Punta Arenas on the Straits of Magellan. The first warning we had was about water conservation—the showers had "minutieres" on them, to time the flow of water, and we were warned about conservation, since the ship could not make up enough fresh water from salt water to keep up the supply, if we used too much. Water in the shower would run for only about a minute, then shut off. Eventually, we both found that about two minutes in a shower would cleanse, if we did it Japanese style, soaping down first, then washing off the soap.

The ship was a bit spartan, but after a period of adaptation, satisfactory.

View from the *Lindblad Explorer*, the ship the Heinleins took on their trip through Antarctica in 1983.

Heinlein on board the *Lindblad Explorer,* The ship was very small and
all resources were limited—and the temperature was 45 below!

Lindblad Explorer carried a number of lecturers. They are specialists in various disciplines and there are daily lectures about various aspects of the things which we were about to see, or had seen. Talks on the mechanics of glaciers, about sea mammals and birds, the history of Antarctica, from the first exploration to the latest are all parts of this tour.

Getting into all those pieces of clothing in a small space was quite interesting, but we learned. The boots were the most difficult, as they had to be donned after the trousers, and the waistline bulk made it difficult to lean over to lace them up. We looked like teddy bears.

The first beach we landed on had penguins galore, of the chinstrap variety. They have one marking which gives them their name, a black strap of feathers which goes under their bills. Think of a dark sandy beach with small surf breaking on it, rocks on each side, and several harems of seals lying around, and dozens, hundreds, thousands, hundreds of thousands of penguins and you have the picture. Penguins walking into the surf, penguins returning from their fishing expeditions, walking around and paying little or no attention to us as we walked up to see the rookery. If you got down to something approaching their level (about knee height) they might just walk right up to you, inspect you, turn their backs, and walk off. One inspected us, first with one eye, then with the other, turned his (her) back, waggled its tail, and stalked off.

(I got too close to one of the seals and was chased off by the master of the harem. It must have been quite a spectacle, me flying off in those heavy boots and clothing—very slowly, as it was impossible to move very fast—chased by a seal.)

The Antarctic was heavily populated by friendly penguins.

We hiked back into the rookery, through a small stream of very cold water, just barely melted, accompanied by penguins. Those poor little creatures walk about a mile to go fishing, for the purpose of feeding their young.

The penguin walk is quite clumsy, but they have another method of locomotion on snow. They flop down on their bellies and toboggan, which is relatively fast.

They sometimes cluster in groups on rocks at the water's edge, trying to decide whether to go into that water at all. When the cluster reaches a certain size, one brave individual will dive into the water, then most of the others follow. Then another group congregates, and they go through it all again. When returning, they get smashed against rocks, eventually mount them, and proceed awkwardly to their young.

Locomotion in water is by means of porpoising. Up and down, each time garnering some krill for their food, then presently they return to feed the young.

Their white fronts are often dirty with the pink color of the krill, but mostly the white is spotlessly clean. Penguin nests are built, of small stones, which they shamelessly steal from each other. One experimenter put a stack of small stones painted red in one corner of a colony, and when he returned, the red stones were scattered all over the colony. One mating habit is for the male to give his chosen a small stone. Another is for two birds to stretch their necks straight upward, making mating sounds.

Rookeries are quite noisy and rather dirty with guano. (And smelly, as well.) However, we found ourselves quite taken with those birds and their ways. After hatching from the egg, the baby penguin is covered with down, which it keeps for some time, shedding it in favor of the fancy dress. Some varieties leave the young with a nursemaid when they are off fishing, and you can see aggregations of those very young birds together. I watched one of the nurseries—the "nursemaid" kept after any stragglers, chivvying them back into the group, where they stayed until the parents returned.

Leopard seals eat penguins, when they catch them swimming. So one encounters orphaned baby birds. Skuas will eventually eat those. Rookeries can be vast; one we saw was estimated by experts to have about a million birds in it.

We looked on penguins as little people. They managed endear themselves to anyone who comes into contact with them. Perhaps it is their upright posture, perhaps it is their clumsy locomotion on their feet—or possibly the "academic processions" going to and from the shore.

There were many Adelies, chinstraps, gentoos, and someof the larger species, as there were royals and the emperors, which are about four feet tall when standing upright. They look for all the world like elderly professors.

We were taken on Zodiac cruises, which didn't land at all, but simply watched for wildlife from the boats. During one such, whales appeared on the water surface. Humpback whales, weighing thirty tons, we were told. They were playing around during and after feeding. What an amount of krill such creatures must eat. (Krill are tiny shrimplike things—pale pink and almost transparent, with great black eyes. One figure I recall is that it takes thirty krill to make a gram.) Those large whales take in a great gulp of sea water, full of krill, and strain it through the baleen. Their throats pouch out with each gulp, and the water comes cascading out as they strain out the krill.

Several whales came swimming over to the boat and swam under it. We could see their flippers in the water under the boat. Then one breached and we could see its back and finally the flukes, which had barnacles on it in a pattern. Everyone was a bit scared by these demonstrations . . . with those flimsy boats being so close to those huge animals.

Most Weddell seals have scars from contact with killer whales—we saw them. Seals slide into the water without any splash, swim away with a gliding motion. In the water, they sometimes allow their curiosity to overtake them, and they stick up their heads and watch.

Cormorants (skuas) nest on sheer cliffs—there were many nests clinging to those cliffs—all of them with young cormorants watching.

There was a barbecue dinner at the Argentine station in Paradise Bay. It was about to close for the winter, when the scientists would go home. Unfortunately for us, the ship had had a batch of hand-knitted watch caps for sale, each of us had one. Knitted into them was the motto "Falklands War, 1982." We had forgotten about that, and went in with those caps on our heads. I told Robert about it, and he turned his backwards, but hairpins anchored mine in place. I felt apologetic toward our hosts.

Leaving, our boat driver was a fanatic whale chaser, and we spent an hour and a half chasing some fin whales which we never got close to.

The ship stopped at Paulet Island in the Weddell Sea, Deception Island, which is supposed to have the only Antarctic swimming pool—water in that area is warm enough for people to swim in, because of some under ground heating (thermal activity). Antarctica has some working volcanoes, such as Mount Erebus, which is where there was a fatal New Zealand airline crash several years ago. Mount Erebus normally has a plume of smoke coming out of it.

Heinlein met a fan of his at Palmer Station, a U.S. base in Antarctica.

Summers, the U.S. has about 1,200 people down in Antarctica, most of them at McMurdo Sound, our chief base there. But we also have Palmer Station, which we visited, Siple Base, and bases at the South Pole.

Probably the visit to McMurdo was the coldest day we encountered—going ashore in the Zodiac, our cheeks almost froze. We struggled up the hill to the base, finding it necessary to sit down for a rest several times. Then I finally commandeered a bus to take us to headquarters.

Robert found many fans among the people in Antarctica. At Palmer Station, one man was sleeping at the time of the ship's visit. When he heard that Robert had been among the tourists, he phoned the ship, and they talked.

On one Zodiac cruise, there were sea lions which played games with our boat. Their heads would come up above water and they would watch us, but when we steered toward them they would go under and pop up in a different place. Sea lions differ from seals in their gait, being able to walk in a fashion with their hindquarters.

One cruise was among icebergs, to see the sculpturing done by the winds, freezing and thawing and melting. Some of the bergs might be as much as a hundred years old, they told us. Bergs come in various shapes—tabular (squared off—just calved from the Ross Ice Shelf), which, after some melting, became castles, medieval monsters and all sorts of imaginative shapes. One evening, while we were at dinner, the captain spotted two huge bergs, and toured the ship all around them. At one point, it was estimated that we were in a field which contained sixty of the monster bergs.

A champagne party was held on a glacier. Ice is a marvelous substance, ice sculpture beautiful, but it's difficult to describe.

There were albatrosses of various sorts, including the wandering albatross—probably the largest bird known. We also saw petrels, and could go up to the nests and look at the young.

On approach and departure, there is a sea area called the Antarctic Convergence, where the water is quite rough. Many of the passengers had to use seasickness remedies, but at most times during these passages, lifelines were rigged permanently around the ship.

EDITOR 's NOTE: Robert and I took one further trip in the Lindblad Explorer *through the Northwest Passage to the Orient. Although thirty-three other ships had managed to reach the Bering Strait, this was the first ship to go all the way to Japan, having navigated the Northwest Passage.*

CHAPTER XIII POTPOURRI

March 30, 1956: Robert A. Heinlein to Lurton Blassingame

I am acquiring sunburn and backaches putting in a completely new and very complicated irrigation system. When I get that and some [Colorado Springs] house repairs completed I'll tackle a new story. My intention is to try to turn out some short stories this summer and not start another novel until about Labor Day.

April 14, 1956: Robert A. Heinlein to Lurton Blassingame

We are still gardening like mad and I ache in every bone from days and days of pick, shovel, and wheelbarrow work. I've just finished an enormous irrigation project. Well, it felt enormous to me, but it does not look like much now that the pipes are covered up. Today we have rain, snow, sleet, hail, and gropple, and I am catching up on paperwork. I expect to resume writing two weeks from Monday and plan to turn out several shorts and short-shorts before tackling another novel.

Lurton Blassingarne, Heinlein's agent, was an expert hunter.

July 25, 1956: Robert A. Heinlein to Lurton Blassingame

Ginny has worked out a shenanigan with [a friend] to let you shoot on a resident permit if I don't get one . . .Ginny put in for a license, too—if you shoot on her license all that will be necessary is for you to convince the warden that you are female and redheaded.

P.S. I did my first pistol shooting (aside from one tomcat) in twentytwo years last Saturday. Three 10's and two 9's for a 48 on my first group. I should have stopped there, for I dropped as low as 42 for 5 shots later—averaging around 45.

August 20, 1956: Robert A. Heinlein to Lurton Blassingame

Take it easy on the stone masonry; it can make you old before your time. But I enjoy it more than any other form of mechanics, except that it half kills me.

October 3, 1958: Robert A. Heinlein to Lurton Blassingame

Thanks for the pic of Socrates, the super-giraffe. He is not here yet: he is still in quarantine in Hoboken and in the meantime they are trying to plan a route to Colorado Springs which will not involve bridges or tunnels too low for him—if it were up to me, I'd shoot him full of barbiturate, stretch him out flat, and fly him here in a Flying Boxcar. They'll kill him getting him here—if not from bridges, then from pneumonia. In the meantime, two widowed lady giraffes are awaiting him here; their deceased husband managed to hang himself —quite a trick for a giraffe. [This is in response to Lurton Blassingame's sending a picture of the giraffe that was to come to the zoo at Colorado Springs.]

July 14, 1961: Robert A. Heinlein to Lurton Blassingame

I'm in good health but Ginny is not. We've been having atrocious weather, which led to a set of cracked ribs for her. Like this—I've been building an irrigation dam for her garden and designed it to be a large ornamental pool as well as useful. We had been pointing towards a big fourth of July party and, since I had installed an electric pump for irrigation, I also rigged it to operate as a recirculating fountain—a jet thirty feet in the air with spotlights on the jet and floodlights on the sea green pool—very pretty and just right for a garden dinner party.

The rains came.

Golly, how the rains came! And on 2 July the pond silted up with brown slime. Ginny helped me clean it out—and slipped in the slime and fell against a boulder and cracked her ribs. Now she is strapped like a mummy and won't hold still and isn't getting well and everything hurts her—and I am finding out how really useful a wife is when she is well.

(But the party came off prettily anyway. We served sixty-four people—we now have enough picnic tables for a beer garden—Ginny had sewn about a hundred yards of bunting, I made an easel for a full-sized replica of the Declaration of Independence, we had martial and patriotic music over the outdoor sound system, and I set up a bar that could serve anything from a mint julep or a Sazerac cocktail to a Singapore sling. Fine time!—and Ginny ignored her wounds until the next day.

Shamrock is going to have kittens again.

PATRICK HENRY AD

EDITOR 's NOTE: One morning in early April, I fetched the newspaper down to read along with breakfast, in my usual fashion. Robert was still sleeping, and there were standing orders never to disturb him until he woke up. But this day was different.

There was a full page ad by the SANE people, signed by a number of local people we knew . . . I flew in the face of the standing orders, and woke Robert up. "What are we going to do about this?" I asked.

I fixed him breakfast and he read the ad while he ate.

There was no discussion about what we would do. Robert sat down at his typewriter and wrote an answer. When he was finished, I read the full-page answer and suggested that he rewrite it, using the same ideas he had used, but not mentioning the opposition. He did that, and the ad is reprinted in Expanded Universe.

Colorado Springs had two daily papers, one morning and one afternoon. We took the ad to the latter, paid for a full-page ad, and later went to the other and also took another full-page for our ad.

These ads caused a sensation. The telephone kept ringing, the mail was filled with a few pledges, and one or two contained checks to help the cause. We ordered extra copies of the page and sent them out to our mailing list, which was not very large at that time.

With the assistance of a wet paper copier, I made copies and sent the originals in to the President, registered, return receipt requested. I strung up a drying line in the kitchen and suspended the copies to dry. For weeks the kitchen was difficult to get around in. Some people took an ad in the San Francisco Chronicle *and sent us a copy. A few more pledges came in.*

I sat down and did some figuring. Not counting the time we both put into the project, it cost us $5 each to send those pledges to the President. Our backfire had failed, and we never heard a word from President Eisenhower.

The President then signed an executive order suspending all testing without requiring mutual inspection.

Robert had been working on The Man from Mars [Stranger in a Strange Land]. *He set that aside and started a new book—*Starship Troopers. *Both books were directly affected by this try at political action—*Starship Troopers *most directly, and* The Man from Mars *somewhat less* *directly. The two were written in succession; they are quite different stories from what Robert might have written otherwise.*

(Robert's version of this can be found on pages 386 to396 of Expanded Universe.)

April 26, 1958: Robert A. Heinlein to Lurton Blassingame

I don't know when I'll get any more fiction written—maybe never. This effort is taking up all of our time. On the other hand, we are spending money on it even faster than we spend money in traveling, so I may be flat broke soon and forced to go back to cash work.

But I refuse to worry about personal aspects of the future. I am convinced in my own mind that the United States is washed up and we will cease to exist inside of five to fifteen years—unless we quickly and drastically pull up our socks, both at home and in foreign policy. This opinion has been growing in my mind for years: I was simply triggered into doing something about it by this pacifist-internationalist-cum-clandestine Communist drive to have us treat atomics and disarmament in exactly the fashion the Kremlin has tried to get us to do for the past twelve years.

I wish some of those starry-eyed internationalists would go take a look at the illiterate, unwashed uncivilized billions whose noses they want to count in a "world state"! And also explain to me how you get a world state of "peace with justice" while dictators, both Red and garden variety, control the "votes" of a billion and a half out of two and a half. Somebody ought to tell them that "politics is the art of the practical." Me, maybe.

Enough, too much—but it is much on my mind. The Patrick Henry League has been getting more response than I expected, much less than is enough to be effective. But we shall persevere.

MISCELLANEOUS

May 15, 1963: Robert A. Heinlein to Lurton Blassingame

Thanks for that full house of checks. Ginny took 'em all. You will be pleased to hear that I bought her another emerald ring, a quite expensive one, which will insure that I go back to work again before too long.

Ginny is about the same and is so beat down from hand-watering her [Colorado Springs house] garden that she doesn't really know whether she is sick or exhausted. After every bath the bucket brigade starts, Ginny bailing, me toting. I have placed four barrels around the garden and there every bit of wash water goes—hands, baths, dishes—

and from these she waters with an old-fashioned watering can. In the meantime, I am digging a drainage ditch all around the house to carry all rainwater (if it ever rains!) from the driveway and the roof to my reservoir pond. I am lining it with concrete tile to keep silt out, so that it will not clog my pump. After that I am going to work out a (very expensive!) underground tank and immersion pump deal to use septic tank water for irrigation. This is no temporary emergency here; this county has doubled in population in ten years—and the area is semi-arid. (Remember matrange on which you hunted antelope.) Things will get worse, not better, and I intend to make us as nearly independent of the water company as possible. No other news. We don't do a damn thing but haul water.

July 5, 1963: Robert A. Heinlein to Lurton Blassingame

. . . and it has slowed up my letter writing; I owe letters to everybody and am just barely managing to answer urgent business mail and send off checks for bills. Yesterday I celebrated the Fourth of July by bringing Ginny home from the hospital. Nothing to do with the mysterious ailment which has plagued her for so very long (which is as bad or worse than ever); this was an operation on her right wrist, orthopedic surgery to correct damage she did to it by endless toting of a heavy watering can when she was trying to save her garden. Yes, she saved the garden and, sure, I have now built a water works which makes us independent of the water company and permits her to water with a pump and a hose—but the damage was done during the month when every drop of water was applied by hand. It got so bad that she could not even sign her name with that hand, so they opened up her wrist and corrected it.

Since she is righthanded to the point that she can hardly hold a fork with her left hand, since her right hand is useless until it heals, and since I am a slow and inefficient housewife, not too much is getting done around here that does not simply have to be done at once—especially as I continue to try to get in as many hours of mechanical work as possible. The Heinlein Water Works is finished to the point where it operates, but I still have endless masonry and carpentry jobs to do before it will be utterly safe from flash floods and landscaped so that it does not look like an abandoned slum-clearance project.

September 3, 1963: Robert A. Heinlein to Peggy Blassingame

I won't send him [Lurton] flowers; his doctor has almost certainly forbidden roughage. I would like to mail him a blonde, but there is some silly regulation about livestock. I suppose the best thing for him to do is to get out of that ulcer-making business. (I would go crazy in it.) But when Count does retire, I, and almost certainly a lot of others, will perforce retire, too.

It might do him some good to come out here and fish for a month—there aren't enough fish in Colorado streams to bother anybody.

In the meantime, he should avoid newspapers, authors, publishers, and editors.

August 23, 1964: Robert A. Heinlein to Lurton Blassingame

[Concerning the arrival of a letter addressed to ' 'Robert A. Heinlein, United States of America."]

The empty envelope herein is for your amusement . . . It was delivered with no delay at all, being postmarked the 9th and reaching me on the 11th, via surface mail. It need not be returned.

POLITICS

June 15, 1964: Robert A. Heinlein to Lurton Blassingame

I am still getting no professional writing done and our household continues to be stirred up night and day by politics. I had intended to take no real part in this campaign other than donation of money, while Ginny devoted practically full time to it. But I find myself in the situation of the old retired fire horse downgraded to pulling a milk wagon—a school bell rings . . . and milk gets scattered all over the street! Last week I found myself, for the first time in a quarter of a century, presiding at apolitical rally—co-opted without warning at the last minute. I must admit that I rather enjoyed it. And I find myself pulled in on many other political chores and devoting perhaps half as much time to it as Ginny does.

EDITOR'S NOTE The preceding fall I had become much taken with politics—a group of us had started a "Gold for Goldwater " campaign. We set up a Colorado Springs headquarters in a donated storefront, and gathered together campaign literature, buttons, and all the trappings.

Six of us agreed to take one day a week at the headquarters, and there were all sorts of meetings and speeches to be given. Robert gave his blessing to my endeavors and I was allowed to spend as much money as 1thought we could afford.

He accompanied me to political dinner parties and other doings, and presently he could no longer stand the political inactivity, so he joined me. His activities were a revelation to me. Instead of simply charging the price for a book, he set up a goldfish bowl, and asked for contributions, getting more out of each customer. He set up a dinner party, at $50 a head, and sold it out. Some bought tickets, and returned those to him to sell again, *and he sold them, sometimes two or three times each, garnering a lot of "Gold" for the campaign.*

The telephone rang constantly, and he could get no copy written. We were fully involved in an already lost campaign. Eventually we recognized that, and made plans to leave for South America after voting on Election Day.

October 2, 1964: Robert A. Heinlein to Lurton Blassingame

We still miss Shamrock but her little golden tomkitten is healthy and full of beans. Now I must run, get dressed, and rush to still another political dinner.

STUFFED OWL

April 15, 1967: Robert A. Heinlein to Lurton Blassingame

Ginny fetched home a stuffed owl and gave it to me. She was almost hysterical from self-panicking, laughing harder than I have seen her laugh since the time in Oct '65 when we were blockaded on a 70 mph freeway in Utah by 5,000 milling sheep. For some years I have used a family cliche concerning useless gifts: "Just what I've always needed—a stuffed owl."

So she gave me one. The cliche dates back to my childhood. Do you remember Hairbreadth Harry, the Beauteous Belinda, and Rudolph Rassendyl the Villyun? Well, one Christmas about forty years ago Belinda gave Harry a smoking jacket that fitted him like socks on a rooster, and he gave her a stuffed owl—to which she said glumly: "Just what I've always needed."

So now I have just what I've always needed, and the stuffed owl (now named "Pallas Athena") is perched facing me just beyond my typewriter.

READER

December 10, 1968: Lurton Blassingame to Robert A. Heinlein

. . . However, not all people love you. I had a call this morning from a frantic mother in Minnesota whose fourteen-year-old son had run away from home for the third time. On his desk she had found your name, care of me. He has read all your books and she thinks he may be out to find you. Before taking off he had gone through his mother's purse and his father's store, so he has about $2,000 on him.

EDITOR's NOTE: We never saw the boy.

VIP

March 20, 1969: Robert A. Heinlein to Lurton Blassingame

This almost fractured me. Our tickets arrived marked "VIP." No fooling. I thought "VIP" was just an idiom—but swelp me, our tickets are so marked. I laughed until I was hoarse.

EDITOR'S NOTE: In early 1969, an invitation came from the Brazilian government to attend a film festival to beheld in Rio de Janeiro. All expenses would be paid by that government—we would be guests. The only payment would be that Robert give a talk.

Robert wrote this as a P.S. to Lurton in a business letter. His talk was given at the theater at the French Embassy.

As I recall, this was the only free trip Robert ever accepted; it even included courtesy of the port—no customs or immigration needed. The return to New York was another matter!

APPRAISAL

November 21, 1968: Robert A. Heinlein to Lurton Blassingame

Did I tell you about the appraisal on my donation of mss., *et al.* to the U of California]? If not, I must—for I am astounded. The appraisal was made by Robert Metzdorf of New York and Connecticut, and the IRS has been fidgeting about the long delay in getting an appraisal. But the university librarian wanted this appraiser and no one else, because of his high prestige and his past successes in making his appraisals stand up in court. So at last Metzdorf had a couple of other jobs out this way and did my small job while he was here.

What he appraised was just the fraction of the total gift which is now actually in the university's library, to wit, about two-thirds of my mss. plus a couple of boxes of foreign editions and some [paperbacks] in English. The valuation he placed on this fraction was $30,230.00—

—and I was flabbergasted.

Sure, Ginny had placed a guesstimate of $25,000-plus on the whole gift—but that was for all mss., plus our entire library, plus several valuable paintings, plus several other things. Since the IRS permits deductions for gifts of chattels only after the physical property is delivered, I had been fretted that the valuation on what I had been able to deliver (some mss. plus a few not-very-valuable books) might be less than the cost of appraisal—i.e., leave me with a net loss in cash and much loss of professional time spent in cataloging and preparing the stuff for the library. I never thought of my old mss. and notes as being worth much—hell, to me they were simply papers that cluttered up my files but which I did not dare throw away for business reasons. As for the foreign editions and paperbacks, for years I have been giving them away to anyone who would take them.

I still expect the IRS to scream about the appraisal. I'm very glad—now—that we got the number one appraiser. If the IRS won't accept it, I now feel safe in taking it to Tax Court.

EDITOR 's NOTE: The IRS did not object to the valuation placed on these papers.

CATS

January 12, 1957: Robert A. Heinlein to Lurton Blassingame

Pixie is dying . . . uremia, too far gone to hope for remission; the vet sent him home to die several days ago. He is not now in pain and still purrs, but he is very weak and becoming more emaciated every day—it's like having a little yellow ghost in the house. When it reaches the stage of pain, I shall have to help him past it and hope that he will at last find the door into summer he has looked for. We are pretty broken up about it ... we have become excessively attached to this little cat. Of course, we knew it had to be when we first got him and I would much rather outlive a pet than have the pet outlive us—we're better equipped to stand it. Nevertheless, it does not make it any easier . . .

March 23, 1959: Robert A. Heinlein to Lurton Blassingame

Polka Dot had her kittens on St. Patrick's Day—like this: Ginny and I had been standing almost heel and toe watches as Pokie has not been at all well during this. About one o'clock in the morning I was up, Ginny had just gone to bed. Pokie comes dragging herself into my study, all cramped up in labor. So I held her paw for about an hour, whereupon she had one tortoiseshell female—Bridey Murphy. For the next three hours she has lots of trouble, so we get her vet out of bed and he comes over. He gave her a shot of pituitary extract; shortly she starts to deliver another one—a black and white male (Blarney Stone); poor little Blarney didn't make it ... hung up in delivery, dead by the time we could get him out, although as lively as could be as he came part way out. And Ginny got her hand terribly bitten (Ginny screamed but didn't let go ... and the cat didn't let go either). About dawn the three of us and Pokie went to the hospital and she had a Caesarean section for the third and last (Shamrock O'Toole, another tri-colored female, a close twin of Bridey). About 8 A.M. we fetched mother and daughters home, Ginny having had only a nap and myself no sleep at all. All three are doing fine now and the kits have doubled in size or more in six days. The thing that impressed me the most about the whole deal was the surgery-aseptic procedure as perfect as that used on humans, utterly different from animal surgery of only twenty years ago.

The Heinleins had many cats over the years; this one is Taffrail Lord Plushbottom, in the early 1980s.

April 10, 1961: Robert A. Heinlein to Lurton Blassingame

Things have been confused and this is late. First we had kittens. Then Shamrock turned out to be the kind of mother who holes up in a tavern while her brats slowly freeze in the car, i.e., she takes vacations from the kittens without warning, as long as twenty-four hours, which finds us, Ginny especially, down on our knees feeding formula to kittens with a doll bottle that holds just an ounce. Then some Icelanders came to town, guests of the State Department, and I, as a member of the Air Power Council, was drafted to entertain them. Whereupon Ginny decided to give a dinner party for all of them, a dinner of some twenty people, at the drop of a hat. Fine time, but it killed three days, what with preparations, cleaning up, and recovering. Then the superintendent of the Naval Academy, a classmate of mine, came to town and we did it all over again—and had a blizzard. During which the wings of Ginny's new greenhouse came down under the snow load. Not much dollar damage and no plants lost, but Ginny was sad and it was quite a nuisance. I had been dubious about the design when I saw it first and had ordered modifications to beef it up, but the mechanics had not done it as yet.

Then the galley proofs on *Stranger in a Strange Land* arrived and that killed three days of the time of each of us; it's a long book. Ginny has just taken them to the post office and I am now writing to you a letter that should have gone days ago.

May 20, 1962: Robert A. Heinlein to Lurton Blassingame

The new kittens are two weeks old and fat and healthy. A hawk or an owl got Ginny's ducks.

April 17, 1964: Robert A. Heinlein to Lurton Blassingame

No more news here, save that Shammie, immediately following the adoption of her latest litter last Sunday, at once went out and set a new crop—so we should have more kittens ca. 17 June. A busy body, that one—thirtyone kittens so far and she has just turned five.

August 16, 1967: Robert A. Heinlein to Lurton Blassingame

Both Ginny and I are temporarily physically debilitated and emotionally depressed; we lost our little tomcat. He has been gone one week now and must be assumed to be dead. It is barely possible that he is out tomcating after some female and living on the land—but it is extremely unlikely. Two or three days, yes—a full week, no. A bobcat, a fox, a raccoon, an automobile. Sure, he was just a cat and we have lost cats many times before. But, for the time being, it hurts and keeps us from sleeping and leaves us emotionally unstable. Ginny continues to work hard, although she is not sleeping at all well—me, I'm so damned short on sleep that I can hardly type and can't concentrate.

PROBLEMS

December 18, 1950: Robert A. Heinlein to Lurton Blassingame

The novelette I planned to write as soon as the Puddin' story (enclosed) for *Senior Prom* was out of the way has been jeopardized by the headlines as it has a historical tie-in which calls for World War III holding off for a little while at least. I am shelving it and will start immediately on the next boys' novel for Scribner's—and I'll write it so that the above point is not material! I will complete it as rapidly as possible because of those same headlines. A purely personal and selfish note in the present turmoil is that I need, somehow, to complete this [Colorado Springs] house as rapidly as possible so that I will be ready for whatever comes. Mrs. Heinlein may be called up at any time; she has already received correspondence about it—and one married female reservist here in town has already been called up ahead of her husband, so that we know the threat is real. I myself must have a minor operation before I can possibly pass the physical examination, but I hope to be able to get around to that before very long. Two of my brothers are now in uniform and the third is likely to be called up soon—and I might as well get ready for anything. In the meantime, I intend to turn out copy and lots of it as long as possible.

April 7, 1951: Robert A. Heinlein to Lurton Blassingame

Just at present any proposed work brings a feeble response. I am in a very rundown condition and have been and may still be on the ragged edge of nervous breakdown. I had purposed spending a couple of months or a bit more supervising the completion of my house, doing some of the work myself as a therapeutic measure, then when finished, taking a look at the war news and making up my mind as to whether I was morally obligated to goat once back into laboratory work rather than continue with writing. Ginny is in reserve; if and when she gets called up, I don't want to be tangled in contracts I can't shuck off—I want to be in research that will help to win the war as quickly as possible and thereby bring her home again. (I myself cannot possibly pass the physical exam; laboratory work is all I'm good for.)

March 1, 1953: Robert A. Heinlein to Lurton Blassingame

. . . We are all well again—even the cat, as I finally got the big black tomcat that had been beating him up. Ginny woke me one morning and said that the black torn was out front. I hurried into robe and slippers, loaded my Remington .380 pistol, and went out. Got him with the first shot, fortunately, as he was moving and I wouldn't have gotten a second. Had him buried and was back in bed in under twenty minutes. A sad task, but Pixie was so crippled up that I don't think he could have survived another beating—and I prefer my own cat to a feral one.

October 8, 1953: Robert A. Heinlein to Lurton Blassingame

I tried to keep the letter factual in tone; if undue emotion has crept into it, you may charge it off (this is private to you) to the fact, among others, that ——— without consulting us, gave us as financial references all around Colorado Springs—and that Ginny was annoyed by telephone calls demanding to know when ——— was going to settle her bills. And other matters better left unsaid.

December 11, 1964: Robert A. Heinlein to Lurton Blassingame

We have a new phone number—UNLISTED—so please write it down here and there. Ginny has wanted this for years to put a stop to fan calls at all hours. I must admit the quiet is welcome.

January 9, 1968: Robert A. Heinlein to Lurton Blassingame

I am returning Art Clarke's article as you asked in your note on the face of it. I take it that Spectorsky's [a *Playboy* editor] request was made to you this time rather than direct to me. He makes this request of me almost every month; I have long since quit answering these little notes. The first one was several years ago and concerned a short story by Fred Brown—quite a good one and I wrote a nice plug for it, which Spec published.

It was a mistake; I should have ignored it. I've been bombarded with similar requests ever since. Quite aside from the time such free work would require, correspondence is the bane of my existence and the major interference with my working time; I've no wish to add to it by writing letters to editors. And it is indeed "free work" that Spec wants; he is soliciting unpaid reviews from well-known writers.

But, hell, I might go along with it if that were all there is to it–*Playboy* is a number one market and it wouldn't hurt me to grease Spec a bit. But here is the trouble: I will not under any circumstances write anything unfavorable about any of my colleagues—and some of the stuff Spec asks me to comment on stinks. This one by Art Clarke is a dilly. But the last request concerned a story by -------. I'm on good terms with ------ and intend to stay that way—but had I written in as ----- asked me to, the letter would have read: "Dear Spec, You should be ashamed to have printed it, and ------ should be ashamed of having written it."

So what else could I do, Lurton? Pick out only the ones I can honestly praise and ignore the others? Or do as I have been doing and never comment on the work of my colleagues?

Robert and Virginia Heinlein with Arthur C. Clarke in Sri Lanka.

CHAPTER XIV *STRANGER*

STRANGER IN A STRANGE LAND

Stranger in a Strange Land
Robert A. Heinlein

Stranger in a Strange Land became one of the most influential novels of our century. Heinlein began sketching out the idea for *Stranger* in 1949, but it took him until 1961 to be satisfied enough to write it.

Valentine Michael Smith is the only survivor of the first expedition to Mars. He is brought up by Martians, knowing nothing of Earth's culture, but well-educated in Martian ways by the ancient and wise race there. Now the second expedition has found him and returned him to Earth. He has never seen another man—or a woman.

He is confined to a hospital at first. But a nurse frees him and takes him to wise old Jubal Harshaw, where he quickly learns and adapts. There he demonstrates Martian powers—making things or people vanish, levitation, transmutation, *etc.* He makes all there his "water brothers" and teaches them to "grok." Then he sets out to bring his message to all, through what seems to be a new religion.

Some object. He is fatally shot. But he has learned on Mars to survive after his body dies, as he proves.

June 20, 1952: Robert A. Heinlein to Lurton Blassingame

I am writing every day but, frankly, the copy stinks. This novel may involve several rewrites, followed by a decent burial.

EDITOR's NOTE: In early 1949, Robert was searching for a theme for *the short story "Gulf, " which he had promised to John Campbell. During the course of the discussions, I suggested to him that it be a story about a human being raised from infancy to maturity by a race of aliens. This notion arrested him, but he thought it an idea which required more room than a short story afforded. However, he went into his study and wrote for some hours—fourteen single-spaced pages, mostly questions to be answered. That was the beginning of* Stranger in a Strange Land.

July 16, 1952: Robert A. Heinlein to Lurton Blassingame

Yes, I am still having trouble with that novel. Trouble is all that I am having—with the story itself and trouble with my surroundings. I have lost almost a month to houseguests, Arthur C. Clarke followed by the [George O.] Smiths—and now we are about to spend a week in Yellowstone and Sun Valley, leaving tomorrow. I could cancel this trip, but there are reasons why it is desirable not to cancel it. Furthermore I hope that a few days away from a constantly ringing phone will help me to straighten out this novel in my mind. (Sometimes I think that everyone in the country passes through Colorado Springs in the summer!) When I get back, I expect to have to go to the hospital for another operation. All in all, entirely too many days this year have been eaten by the locusts. My intentions have been good. I have not been idle—far from it! But I haven't accomplished much.

The story itself is giving me real trouble. I believe that I have dreamed up a really new S-F idea, a hard thing to do these days—but I am having trouble coping with it. The gimmick is "The Man from Mars" in a very literal sense. The first expedition to Mars never comes back. The second expedition, twenty years later, finds that all hands of the first expedition died—except one infant, born on Mars and brought up by Martians. They bring this young man back with them.

This creature is half-human, half-Martian, i.e., his heredity is human, his total environment up to the age of twenty is Martian. He is literally not human, for anthropology has made it quite clear that a man is much more the product of his culture than he is of his genes—or certainly as much. And this Joe wasn't even raised by anthropoid apes; he was raised by Martians. Among other things, he has never heard of sex, has never seen a woman—Martians don't have sex.

He has never felt full earth-normal gravity. Absolutely *everything* about Earth is strange to him—not just its geography and buildings, but its orientations, motives, measures, evaluations. On the other hand, he himself has received the education of a wise and subtle and very advanced—but completely nonhuman—race.

That's the kickoff. From there anything can happen. I have tried several approaches and several developments, none of which I am satisfied with. The point of view affects such a story greatly, of course — universal, first person, third person central character, third person secondary character, first person secondary character narrator—all have their advantages and all have decided drawbacks. A strongly controlling factor is the characteristics and culture of the Martian race —I started out using the Martians in *Red Planet.* I'm not sure that is best, as they tend to make the story static and philosophic. This story runs too much to philosophy at best; if I make the Martians all elder souls it is likely to lie right down and go to sleep. Affecting the story almost as much is the sort of culture Earth has developed by the time the story opens. After all that comes the matter of how to manipulate the selected elements for maximum drama. And I'm not pleased with any plotting I've done so far. I've messed up quite a lot of paper, have one long start I'll probably throw away and a stack of notes so high.

If this thing doesn't jell before long I had better abandon it, much as that goes against my personal work rules. I do have about three cops-and-robbers jobs which I can do, one a parallel-worlds yarn and the other two conventional space opera. I don't want to do them; I want to do a *big* story. But perhaps I should emulate Clarence Buddington Kell and and give the customers what they are used to and will buy, rather than try to surprise them.

July 18, 1952: Lurton Blassingame to Robert A. Heinlein

The book idea sounds tremendous, but I can well understand why you would find yourself in difficulties. Put it aside, work on something else, return, and find a new perspective.

June 10, 1953: Robert A. Heinlein to Lurton Blassingame

. . . Unfortunately, I cannot report that I have cracked the novel . . .

The novel is really giving me a lot of trouble. This is the one that I told you about long ago, I believe—a Man-from-Mars job, infant survivor of first expedition to Mars is fetched back by second expedition as a young adult, never having seen a human being in his life, most especially never having seen a woman or heard of sex. He has been raised by Martians, is educated and sophisticated by Martian standards, but is totally ignorant of Earth. What impact do Earth culture and conditions have on him? What impact does he have on Earth culture? How can all this be converted into a certain amount of cops-and-robbers and boy-meets-girl without bogging down into nothing but philosophical speculation? Contrariwise, what amount of philosophizing does it need to keep it from being a space opera with cardboard characters?

I got so bogged down on it last week that I had decided to shelve it for a year or so, when Stan Mullen [a sciencefiction author and personal friend] gave me a fight talk and quite a lot of help. Now I am continuing to try to sweat it through. When I get through I will either have nothing at all, or I'll have a major novel. I rather doubt I that I will have a pulp serial; it doesn't seem to be that sort of a story. I will continue to sweat on it and you won't get anything else from me for quite a while.

January 13, 1955: Robert A. Heinlein to Lurton Blassingame

I am now on page 68 of the draft of *A Martian Named Smith,* which will be book length and adult—i.e., more s-x and profanity than is acceptable in juveniles. I cannot now estimate date of finish-draft as there are some plot kinks I am not yet sure about.

February 23, 1955: Robert A. Heinlein to Lurton Blassingame

I am sorry to say the novel aborted last week—two months and 54,000 words of ms. wasted. Ginny says that it cannot be salvaged and I necessarily use her as a touchstone. Still worse, I suspect that she is right; I was never truly happy with it, despite a strong and novel theme. I am, of course, rather down about it, but I have started working on another one and hope to begin a draft in a day or two.

March 29, 1960: Robert A. Heinlein to Lurton Blassingame

I finished a draft a couple of days ago of the novel I have been writing and I am still groggy. It is very long (800 pages in its uncut form) and about all I can say about it now is that it is not science fiction and is nothing like anything I've turned out before. I intend to work on it all I possibly can until we leave, then have it smooth-typed while we are out of the country.

I am utterly exhausted from sixty-three days chained to this machine, twelve to fourteen hours a day. Now I must rest up in preparation for a physically arduous trip . . . while accomplishing a month of chores in two weeks, studying Russian history, politics, and geography so that I will understand some of what I see, and doing my damndest to cut about a third out of this new story. In the meantime, Shamrock O'Toole is about to have kittens any moment—the period is 60 to 65 days and today is her 62nd; she looks like a football resting on toothpicks and complains bitterly about the unfairness of it all. I'll send you a kitten by air express timed so that you can't send it back. Maybe four kittens.

October 10, 1960: Robert A. Heinlein to Lurton Blassingame

I assume that you have sent *The Man from Mars* to Putnam, since they are entitled to first look. I have on hand, should we ever need it, a clean, sharp carbon of this ms. on the same heavy white bond. I am aware of the commercial difficulties in this ms., those which you pointed out—but, if it *does* get published, it might sell lots of copies. (It certainly has no more strikes against its success than did *Ulysses, Lady Chatterley's Lover, Elmer Gantry,* or *Tropic of Cancer*—each at the time it was published.)

The Man from Mars is an attempt on my part to break loose from a straitjacket, one of my own devising. I am tired of being known as a "leading writer of children's books" and nothing else. True, those juveniles have paid well—car, house, and chattels all free and clear, much travel, money in the bank and a fairish amount in stocks, plus prospect of future royalties—I certainly shouldn't kick and I am not kicking . . . but, like the too-successful whore: "Them stairs is killing me!"

I first became aware of just how thoroughly I had boxed myself in when editors of my soi disant adult books started asking me to trim them down to suit my juvenile market. At that time I had to comply. But now I would like to find out if I can write about adult matters *for adults,* and get such writing published.

However, I have no desire to write "mainstream" stories such as *The Catcher in the Rye, By Love Possessed,Pryton Place, The Man in the Grey Flannel Suit, Darkittxs at Noon,* or *On the Road.* Whether these books are good or bad, they each represent a type which has been written more than enough; there is no point in my adding more to such categories—I want to do my own stuff, my own way.

Perhaps I will flop at it. I don't know. But such successful I have had has come from being original, not from writing "safe" stuff—in pulps, in movies, in slicks, in juveniles. In pulp SF I moved at once to the top of the field by writing about sociology, sex, politics, and religion at a time (1939) when those subjects were all taboo. Later I cracked the slicks with science fiction when it was taken for granted that SF was pulp and nothing but pulp. You will recall that my first juvenile was considered an experiment by the publisher—and a rather risky one.

I have never written "what was being written"—nor do I want to do so now. Oh, I suppose that, if it became financially necessary, I could imitate my own earlier work and do it well enough to sell. But I don't want to. I hope this new and different book sells. But, whether it does or not, I want my next book to be still different—neither an imitation of *The Man from Mars,* nor a careful "mixture as before" in imitation of my juveniles and my quasi-juveniles published as soi disant adult SF books. I've gota lot of things I'd like to write about;

none of them fits this pattern.

October 14, 1960: Lurton Blassingame to Robert A. Heinlein

Dear Water-Brother,

I greatly admire your courage and also your intellectual virility that enables you to open up new areas of the literary globe.

October 21, 1960: Robert A. Heinlein to Lurton Blassingame

In the first place, I think Putnam's offer is one of the most generous I have ever seen; it is all loaded in my favor. Will you please tell them so?

Cutting can always be done, even though there is al· ways the chance of literary anemia therefrom. But the changes required are another matter—not because I don't wish to make them . . . but because I don't see *how* to make them. This story is Cabellesque satire on religion and sex, it is *not* science fiction by any stretch of the imagination. If I cut out religion and sex, I am very much afraid that I will end with a nonalcoholic martini.

I know the story is shocking—and I know of a dozen places where I could make the sex a little less overt, a bit more offstage, by changing only a few words. (Such as: "Hell, she didn't even have the homegrown fig leaf!")

(Slightly less flavor, too; but if we must, we must.)

But I don't see how to take out the sex and religion. If I do, there isn't any story left.

This story is supposed to be a completely freewheeling look at contemporary human culture from the nonhuman viewpoint of the Man from Mars (in the sense of the philosophical cliche). Under it, I take nothing for granted and am free to lambaste anything from the Girl Scouts and Mother's Apple Pie to the idea of patriotism. No sacred cows of any sort, no bows and graceful compliments to the royal box —that is the whole idea of the framework.

But, in addition to a double dozen of minor satirical slants, the two major things which I am attacking are the two biggest, fattest sacred cows of all, the two that every writer is supposed to give at least lip service to: the implicit assumptions of our Western culture concerning religion and concerning sex.

Concerning religion, our primary Western cultural assumption is the notion of a personal God. You are permitted to argue every aspect of religion but *that* one. If you do, you are a double-plus ungood crime-thinker.

Concerning sex, our primary cultural assumption is that monogamy is the only acceptable pattern. A writer is permitted to write endlessly about rape, incest, adultery, and major perversion . . . provided he suggests that all of these things are always sinful or at least a social mistake—and must be paid for, either publicly or in remorse. (The thing the censors had against Lady Chatterley and her lover were not their rather tedious monosyllables, but the fact that they *liked* adultery—and got away with it—and lived happily ever after.) The whole deal is something like Communist "criticism" . . . anything and any comrade may be criticized (at least theoretically) under Communism provided you do not criticize the basic Marxist assumptions.

So .. . using the freedom of the mythical man from Mars .. . I have undertaken to criticize and examine disrespectfully the two untouchables: monotheism and monogamy.

My book says: a personal God is unprovable, most unlikely, and *all* contemporary theology is superstitious twaddle insulting to a mature mind. But atheism and "scientific humanism" are the same sort of piffle in mirror image, and just as repugnant. Agnosticism is intellectually more acceptable but only in that it pleads ignorance, utter intellectual bankruptcy, and gives up. All the other religions, elsewhere and in the past, whether monotheistic, polytheistic, or other, are just as silly, and the very notion of "worship" is intellectually on all fours with a jungle savage's appeasing of Mumbo Jumbo. (In passing, I note that Christianity is a polytheism, not a monotheism as claimed—the rabbis are right on that point—and that its most holy ceremony is ritualistic cannibalism, right straight out of the smoky caves of our dim past. They ought to lynch me.)

But I don't offer a solution because there isn't any, not to an intellectually honest man. That pantheistic, mystical "Thou art God!" chorus that runs through the book is not offered as a creed but as an existentialist assumption of personal responsibility, devoid of all godding. It says, "Don't appeal for mercy to God the Father up in the sky, little man, because he's not at home and never was at home, and couldn't care less. What you do with yourself, whether you are happy or unhappy—live or die—is strictly your business and the universe doesn't care. In fact you may *be* the universe and the only cause of all your troubles. But, at best, the most you can hope for is comradeship with comrades no more divine (or just as divine) as you are. So quit sniveling and face up to it—"Thou art God!"

Concerning sex, my book says: sex is a hell of a lot of fun, not shameful in any aspect, and not a bit sacred. Monogamy is merely a social pattern useful to certain structures of society—but it is strictly a pragmatic matter, unconnected with sin .. . and a myriad other patterns are possible and some of them can be, under appropriate circumstances, both more efficient and more happy-making. In fact, monogamy's sole virtue is that it provides a formula defining who has to support the offspring . . . and if another formula takes care of that practical aspect, it is seven-to-two that it will probably work better for humans, who usually are unhappy as hell if they try to practice monogamy by the written rules.

The question now is not whether the ideas above are true, or just twaddle—the question is whether or not there will be any book left if I cut them out. I hardly think there will be. Not even the mild thread of action-adventure, because all of the action is instigated *by these heretical ideas.* All of it.

Mr. Cady's wish that I eliminate the first "miracle," the disappearances on pp. 123-124, causes almost as much literary difficulty. Certainly, I can rewrite that scene, exactly as he suggested .. . but where does that leave me? That scene establishes all the other miracles in the story, of which there are dozens. Now I will stipulate that "miracles" are bad copy—but if I eliminate them, I must throw away the last 700 pages of the ms.—i.e., write an entirely different story. Miracles are the "convincer" throughout. Without them the Man from Mars cannot recruit Harshaw, Ben, Patty, Dr. Nelson, BOI even Jill—nobody! No story.

(I thought I had picked a comparatively slide-down miracle, in that I picked one which has a theoretical mathematical inherent possibility and then established its rationale later in Harshaw's study. But I'm afraid this one is like atomic power: no one but professional dreamers could believe in it until it happened. I might add that if I had trapped out that miracle with fake electronic gadgetry I could have "disappeared" an elephant without a squawk.)

All I can see to do now is to accept Mr. Cady's most kind offer to hold off six months while we see if some other publisher will take it without changes, or with changes I think I can make.

But I shan't be surprised if nobody wants it. For the first time in my life I indulged in the luxury of writing without one eye on the taboos, the market, etc, I will be unsurprised and only moderately unhappy if it turns out that the result is unsalable.

If it can't be sold more or less as it is, then I will make a mighty effort to satisfy Mr. Cady's requirements. I don't see how, but I will certainly try. Probably I would then make a trip to New York to have one or several story conferences with him, if he will spare me the time, since he must have some idea of how he thinks this story can be salvaged—and I'm afraid that I don't.

The contract offered is gratifyingly satisfactory. But I want one change. I won't take one-half on signing, one-half on approval of ms.; they must delay the entire advance until I submit an approved manuscript. It is unfair to them to tie up $1,500 in a story which may turn out to be unpublishable. I don't care if this is the practice of the trade and that lots of authors do it; I disagree with the guild on this and think that it is a greedy habit that writers should forgo if they ever expect to be treated like business men and not children.

Please extend my warm thanks to Mr. Cady for his care and thoughtfulness. He must be a number one person—

I look forward to meeting him someday.

October 31, 1960: Robert A. Heinlein to Lurton Blassingame

I have thought about your suggested changes in *The Man from Mars.* I see your point in each case and do not object to making the changes ... but it seems to me that I should leave the present form untouched until I start to revise and cut to suit the ideas of some particular publisher. If I do it for Putnam's, then the horrendous job of meeting Mr. Cady's [of Putnam] requirements will automatically include all the changes you mention—in fact, most of the book will be changed beyond recognition. But I still have a faint hope that some publisher will risk it without such drastic changes and cutting.

December 4, 1960: Robert A. Heinlein to Lurton Blassingame

Lurton, I do not think I have told you what a wonderful job I think you have done in placing this ms. I wrote the thing with my eye intentionally not on the market. For twenty years I have always had one eye on the market with the other on the copy in this mill (yes, even when I disagreed with editors or producers). But I knew that I could never get away from slick hack work, slanted at a market, unless I cut loose and ignored the market . . . and I did want to write at least one story in which I spoke freely, ignoring the length, taboos, *etc.*

When I finished it and reread it, I did not see how in hell you could ever sell it, and neither did Ginny. But you did. Thank you.

If this one is successful, I may try to write some more, freewheeling stories. If it flops, perhaps I will go back to doing the sort of thing I know how to tailor to the market.

January 27, 1961: Robert A. Heinlein to Lurton Blassingame

.. . I told you about a week ago that I had finished the basic cutting on *Man from Mars.* In the meantime, I have had a squad of high school girls count the manuscript, word by word, and totted up the results on an adding machine. The manuscript is now 160,083 words—and I am tempted to type those excess eighty-three words on a postcard ...

I am a bit disappointed as my estimates as I went along had led me to believe that I would finish up at around 155.000 words and then I could even sweat off most or all of another 5,000 words and turn it over to Putnam's at 150.000, which I know would please them better. But I don't see any possibility of that now; the story is now as tight as a wedge in a green stump and, short of completely recasting it and rewriting it, I can't get it much tighter. I have rewritten and cut drastically in the middle part where Mr. Minton [at Putnam's] felt it was slow, and I have cut every word, every sentence, every paragraph which I felt could be spared in the beginning and the ending. As it is, it is cut too much in parts—the style is rather "telegraphese," somewhat jerky—and I could very handily use a couple of thousand words of "lubrication," words put back in to make the style more graceful and readable.

Stranger in a Strange Land won the Hugo Award for Best Novel of 1962,
given by the World Science Fiction Convention in Chicago.

The truth is that it is the most complex story I have ever written, a full biography from birth to death, with the most complex plot and with the largest number of fully drawn characters. It needs to be told at the length of *Anthony Adverse* (which ran 575,000 words!): I am surprised that I have managed to sweat it down to 160,000.

My typist is now completing the third quarter of the ms. She is able to work for me only evenings and weekends; if her health holds up, I expect that she will finish about 12 to 15 February. In the meantime, I will work on further cutting and revision and should be able to eliminate a few words—more than a thousand but less than five thousand. If my typist finishes on time I will expect to deliver the manuscript to you by Monday the20th of February (I doubt if you will want to reread it, but you may want to see how I have revised the sex scene that you were bothered about). That will give Putnam's in excess of three weeks more margin on production time in order to publish on or before the Science Fiction Convention in Seattle 2-4 September 1961. Or they can, if they wish, use the three weeks to read it and bung it back to me for revision of anything they don't like —and still keep their production schedule. I can't do extensive cutting in that time but I can certainly revise a scene or two, if needed.

March 17, 1961: Robert A. Heinlein to Lurton Blassingame

I've just been talking to Mr. Cady at Putnam's. He tells me that Doubleday wants to issue my Sex and Jesus book as a SF book club choice and as an alternate for some other non-SF book club. Little as I like the Doubleday SF book club, I enthusiastically okayed this plan as it makes almost certain that Putnam's will make their nut and a bit of profit even if the trade edition doesn't do very well—which has been my principal worry. However, Mr. Cady seems to think that these book club sales will materially enhance the trade book sales—also, he teems to have great confidence in the book (more than I have)—I hope he's right.

This change in plans will result, he tells me, in the book being sold by Doubleday as their June offering, with trade book publication as soon as possible, probably early July.

The final title will be set on Monday afternoon (Cadywill phone me) and, Lurton, you are invited and urged to suggest titles—direct to him is simplest. (I assume that this letter will reach you in the early Monday mail.) The titles now in the running are:

The Heretic, The Sound of His Wings (which has an SF tie-in through my "Future History" chart without being tagged as "science fiction" in the minds of the general public. All of these titles have been picked to permit the book to be sold as a mainstream novel, "Philosophical Fantasy" or some such.)

A Sparrow Falls
Born Unto Trouble (Job 5:7)
That Forbidden Tree (Milton)
Of Good and Evil (Genesis 2:17)

EDITOR'S NOTE: At this date, no one recalls just who came up with the Stranger in a Strange Land *title.*

CHAPTER XV ECHOES FROM *STRANGER*

EDITOR's NOTE: Putnam 's sales on Stranger *were not very good during the first year after publication. It went immediately into the book club edition, a two-year contract, and there was a second two-year book club contract. In the second year following publication, it was out in a paperback edition from Avon. Sales went from humdrum to medium to spectacular. This book turned out to be a "sleeper." Only word-of-mouth advertising could have accounted for this. At this time, it has been in trade edition for many years, still selling enough copies to make it worthwhile for the publisher to keep it in print. And it still sells merrily in the paperback edition, which is now with Ace. It is currently in the sixty-fifth paperback printing.The Doubleday Science Fiction Book Club recently sent a request for another reprinting under their auspices.*

BIRTHPLACE
Robert Heinlein
DEAN OF
SCIENCE-FICTIO
WRITERS

Cults sprang up around *Stranger in a Strange Land, and* Heinlein himself was considered to be a spiritual guru.

October 9, 1966: Robert A. Heinlein to Lurton Blassingame

Herewith is ———'s letter to you re dramatizing *Stranger*. I have no idea what is proper and reasonable in this matter and will continue to leave it entirely up to your judgment. But I'm beginning to think that additional rights to *Stranger,* such as stage, TV, and movies, might someday be worth something—possibly through Ned Brown, possibly through other channels. The fan mail on this book has been steadily increasing instead of decreasing and it clearly is enjoying quite a lot of word-of-mouth advertising. I recently learned that it was considered the "New Testament"—and compulsory reading—of a far-out cult called "Kerista." (Keemf!) I don't know exactly what "Kerista" is, but its L.A. chapter offered me a $100 fee to speak. (I turned them down.) And just this past week I was amazed to discover a full-page and very laudatory review of *Stranger* in (swelp me!) a slick nudist magazine—with the review featured on the cover . . . And there is an organization in the mountain states called "Serendipity, Inc.," which has as its serious purpose the granting of scholarships—but which has taken over "water sharing" and other phrases from the book as lodge slogans, sorta. Or something. And there is this new magazine of criticism, *GROK*—I have not seen it yet but it is advertised in the *Village Voice.* And almost daily I am getting letters from people who insist on looking at me as some sort of a spiritual adviser. (I fight shy of them!) All in all, the ripples are spreading amazingly—and Cady may be right in thinking that the book could be exploited in other media. (I'll settle for cash at the bedside; I want no part of the cults.)

November 6, 1966: Robert A. Heinlein to Lurton Blassingame

I think I mentioned to you that the Esalen Institute wants me to lead a seminar late in June on "Religion in the Space Age," along with Alan Watts, the Zen Buddhist writer, and an Episcopalian priest. It takes just one weekend, and the place (Big Sur) is near here, and the fee ($500) is satisfactory. Nevertheless I probably will not accept, as I do not see how I could take part without mortally offending both the priest and the Zen Buddhist. I'll negotiate it directly by telephone to the director, as I am reluctant to state my real misgivings bluntly in a letter.

December 22, 1966: Lurton Blassingame to Virginia Heinlein

. . . and to receive the *Grok* buttons. Might be news release to give additional stimulus to book.

April 15, 1967: Robert A. Heinlein to Lurton Blassingame

More about *Stranger*—

My brother Rex queried the shopkeeper from whom he had purchased several sorts of *Stranger* buttons, was told: "There are about a dozen different suppliers." He went on to say that one of them was a girl who was working her way through college making these buttons (no doubt other sorts than *Stranger* buttons).

This afternoon (now Sunday evening) a sculptor, ——— of Los Gatos, called on us—to show us a figure he had just completed in bronze of the death of the Martian named Smith. He asked permission to bring it over at once as he was taking it to his agent in San Francisco in negotiating a commission for an heroic-size crucifixion job for a church. (——— is a successful sculptor, not a starving artist.) But [he] wanted me to see it first.

A young woman who came with him asked me where I had gotten the word *grok*— no, she had not read the book, *had not been able to lay hands on a copy* [my emphasis added] . . . but that she knew what it meant as "everybody uses it now."

January 26, 1967: Lurton Blassingame to Robert A. Heinlein
Checking on *Grok* magazine.

February 28, 1967: Lurton Blassingame to Robert A. Heinlein
In the 2/19 issue of the *New York Times Book Review,* there is an article you may want to see—"Where the Action Is." It mention(s) *Stranger* and *Grok.* Reference seems responsible for stirring Hollywood interest. Another call asking if *Stranger* rights available.

March 14, 1967: Lurton Blassingame to Robert A. Heinlein
Have two issues of *Grok.*

April 28, 1968: Robert A. Heinlein to Lurton Blassingame
I enclose a clipping sent to me from Toronto—please return for my *Stranger* file. "Fair Use" of course—but that book *must* have made a wide impression if a telephone company in Canada makes this use of a neologism from it. (And when I think how Putnam continues to refuse to reissue a hardcover of it, I get so annoyed I need a Miltown. Damn it, they should at least arrange a Grosset and Dunlap reprint; I get regular inquiries about where to buy it in hardcover. He's missing a lot of library sales, too.)

May 23, 1968: Robert A. Heinlein to Lurton Blassingame
Since I sent you that Canadian telephone ad I have run into three more uses of *grok*—one in a short story in *Playboy,* simply as a part of dialog with no explanation, same for a poem, and a report of a shop in Florida: "We Grok Bookshop." Oh, well, while it doesn't pay royalties, it does interest me to see this neologism spread. But the darnedest thing so far is an announcement in the UCLA *Daily Bruin* concerning "Experimental College Classes—Spring 1968" with one course billed as "J. D. Salinger, Robt. Heinlein, Lawrence Ferlinghetti and Other Personal Gurus—"!!! And I'm such a square I don't even know who the third guru is. Nor does Ginny. However, I'm new to the guru business.

January 23, 1967: Robert A. Heinlein to Lurton Blassingame

Did I tell you that [Dr.] Jack Williamson is using *Stranger* as a study text in his class in SF at U of E. New Mexico? Quote: "I'm launching new courses in linguistics and modern grammar and another in the factual literature of science. ... (in my SF class) and we are now reading *Stranger in a Strange Land.* I was a little afraid that some of my students might not be sufficiently sophisticated for it, but the response so far is good—some class members feel that it is more successful than Huxley's *Brave New World,* which we have just finished."

Did I mention in some other letter that Stanford now offers a course in SF? Apparently SF is beginning to be accepted as a respectable genre of serious literature. It is a pleasant feeling—but I have to keep reminding myself that seeing my name in print is nothing; it is seeing it on a check that counts. It is still the clown business; the object is to entertain the cash customer—I shall simply have to try harder than ever.

February 3, 1967: Robert A. Heinlein to Lurton Blassingame

Did I give you the impression that the principal interest in *Stranger* was from teenagers? It may be, but I hope not and do not think so. I might be forced to drink hemlock for "teaching that the worse is the better part and corrupting the youth of the land." *Stranger* is definitely an adult book, and the comments in it on both sex and religion are such that I think it would be imprudent to attempt any sort of publicity which attempts to tie this book with teenagers.

Lurton, I myself am not the least afraid of corrupting the teenagers of this country; it can't be done. They are far more sophisticated, as a group, than are their parents. They take up in junior high school smoking, drinking, fellatio, cunnilingus, and soixante-neuf, and move on to coition, marijuana, and goof balls during senior high school, then get the Pill and join the New Left when they enter college—or *at the very least are exposed to these things at these ages and sometimes earlier.* Plus LSD and other drugs if they wish. Shock them or corrupt them—impossible! If they refrain, it is voluntary, not because they haven't been exposed.

But their parents rarely know this—parents are always certain that it is the wild, beat crowd on the other side of town, not *their* little darlings! So, while I do not think *Stranger* can corrupt any reader, no matter how young—on the contrary I think it is a highly moral book—I think also that it would be impolitic to exploit it as a book for teenagers.

November 17, 1967: Robert A. Heinlein to Lurton Blassingame

I finally heard from the University of Wisconsin . . . This was the bid I heard about through ——— and concerning which I phoned you. I am about to turn it down—regretfully, since Oshkosh is so close by. But what they want me to do is lecture about *Stranger in a Strange Land.* I decided years ago *never* to discuss my own works on a platform . . . and I think the pragmatic reasons behind this decision apply especially strongly to *Stranger.* A writer looks pretty durn silly "explaining" his stories. He said what he had to say in the ms.—or should have. *Stranger* is a fairy tale; if it amuses the reader, he has received what he paid for. If he gets something more out of it, that's a free bonus. But I'm durned if I'll "explain" it.

(I wonder if John Barth ever "explains" *Giles Goat* Boy? If he does, I'll bet he has his forked tongue in both cheeks and intentionally leaves the listener more bemused than ever. I was much impressed and enormously amused by *Giles,* and now I want to obtain and read and keep all his other fictional works—now that I can afford things other than building materials. On the other hand, Earth's fiction is not for Ginny; she lives life in simple declarative sentences with no veiled allusions, and she wants her fiction the same way.)

I am turning down the bid from Cornell; I turned down one yesterday from U of California; and I am turning down as they come in numerous lesser bids mostly from high schools here and there. Quite aside from the nuisance of speaking in public, this is not a year when I want to cope extemporaneously with the questions period which usually follows a platform talk-undeclared wars, race riots, the dropout generation, etc., are all matters I prefer not to deal with orally and in public; I find these matters extremely complex and am not sure of the wisdom of my opinions.

But I did find it expedient to accept an invitation for March 30 for the Monterey Bay Area Libraries Book Festival; librarians are a special category. I feel that I have lo do it once, for the local libraries—then next time I can point out that I already have, and sorry, but this year I'm tied up. I waived their fee, however, as I prefer doing it free to accepting a small fee ($50)—so that I can continue to tell others that sure, I speak in public—but I'm a pro and my fees are horrendously high.

MANSON CASE

January 7, 1970: Virginia Heinlein to Lurton Blassingame

Some weeks ago, a fan letter came in from the jail in Independence, California. In a burst of generosity, Robert tried to do something about this girl who'd written him. It turned out that she was one of the Manson family. So if we're knifed in our beds like Sharon Tate, it's because of three letters from members of the family.

Just tell the police. I'm leaving these notices everywhere I can, in hopes of preventing anything from happening.

PLAYBOY INTERVIEW

January 16, 1970: Virginia Heinlein and Robert A. Heinlein to Lurton Blassingame

Will you also please tell Mr. [Hugh] Hefner that the *only* reason Robert agreed to be interviewed was *not publicity* for himself, but the offer of a forum to boost the space program. Publication of this interview in an early issue might have helped. As it is, the space program is in ruins, and Hefner is attempting to make something of what might have been by the use of *Stranger* and the Manson case. We will not go along with this. He has not bought himself a tame rabbit by that contribution to the Ed White Memorial Fund. He can take his [magazine] and stuff it, having first folded it until it is all corners. Under no condition will we make any public statement about the Manson case and *Stranger.* We consider Mr. Hefner's suggestion very much out of line and an invasion of our privacy. It is not a matter of *reluctance* to discuss Robert's work, but a downright refusal to do so, which has been a policy of his for a very long time.

November 10, 1970: Virginia Heinlein to Lurton Blassingame

Believe this if you *can—Stranger* is on the Women's Lib reading list!

May 4, 1971: Lurton Blassingame to Virginia Heinlein

Doesn't think anything can be done about the Valentine Smith company. Wishes they would put their letterhead and all press releases that they're using name "from the character created by Robert A. Heinlein in *Stranger in a Strange Land.*"

EDITOR'S NOTE: In 1971, a fan group that based many of its philosophies on Stranger in a Strange Land *wrote to Heinlein asking permission to use material from the book. Permission was not granted. Later, a member of that group wrote to Heinlein asking why he was unsympathetic to its aims. Here is his reply.*

January 20, 1972: Robert A. Heinlein to a Reader

Facts:

The last time I was present at any organized SF fandom meeting was at Seattle in 1961 plus a very brief appearance at Chicago in 1962 to accept the Hugo for *Stranger*—brief because I showed up at the last minute, having been busy at NASA Houston on some writing for the Gemini program. *Stranger* was published in 1961. If there were any "nests" or such by Labor Day 1962, I was unaware of them. My contact with organized fandom since that day has been zero.

Before 1962 my contact with organized fandom was light. I went several times to meetings of the LASFS [Los Angeles Science Fiction Society] in 1939-40 and went to the convention in 1940 or '41. Check: 1941, at Denver, as I recall now that I was in the east at that time in 1940. After 1940 the next contact that I recall was (I believe) in 1958—a meeting in Newark—then again at Chicago in 1960, to receive a Hugo. I think that sums up the total of my contacts with organized fandom, although I may have forgotten some casual appearance, as the period spans thirty-three years and I kept no records on it. But I am *certain* that my last appearance at a meeting was ten years ago.

Contacts with individuals, fans of SF who may or may not have been part of organized fandom: There have been many of these, by letter, in my home, in other people's homes, or elsewhere. There have been more fan contacts in the past than in recent years, because of pressure of work and loss of time caused by illness. In many cases I do not know whether a stranger I have met (in person or by letter.) is or is not a member of organized fandom. In some cases I've learned it later (too late!) through learning that a private letter of mine has been published in one of those fan magazines, or have found that casual, social remarks have been treated, without my consent or review, as an "interview" and published in a garbled form. . . .

As a result of the above we have become somewhat more cautious in recent years in our social contacts and in the letters we write, especially as the pressure from strangers has become much greater. I have to live behind a locked gate and with an unlisted phone to get any work done at all—and this is a hell of a note as my wife and I are by nature quite gregarious and social. Mrs. Heinlein usually answers and signs all of the mail, which tends to discourage the incipient "pen pals" who would, if allowed, take up all my time and leave none for writing. A rare exception, such as your letter, I answer myself. We necessarily find our social life among people who don't read science fiction.

All of the above adds up to this: There are very, very few people in organized fandom who know anything at all about me in the sense of knowing me personally or in being privy to my private opinions, tastes, or habits. My published works are widespread and anyone can read them. The public facts about my life are in several reference books in most public libraries. But a member of science fiction fandom is most unlikely to know any more about me than you do, and if he claims otherwise, he is almost certainly talking through his hat.

But I am repeatedly amazed at the number of people who claim to be "experts" on me. (One of them even wrote an entire book about me. I have never met him in my life.)

I have never expressed "antagonism" or hostility to "nests" or "water-brotherhoods." This is sheer fabrication. I would like to throw such a lie into the teeth of anyone saying so, if I knew who he was.

On the contrary, a number of "nests" have indeed gotten into contact with me. I have treated them with politeness. I have standing invitations to visit them. I think I am on good terms with every such organization which has taken the trouble to get into touch with me. If you have any specific data to the contrary, I would like to hear it, in detail. (But I have no way to deal with malicious allegations from faceless, nameless strangers.) *Stranger.* It is a work of fiction in parable form. It is not a "put-on" unless you choose to classify *every* work of fiction as such. Who are these persons who allege this? I would like an opportunity to face up to one or more of them ... as this allegation has come back to me often enough to cause me to think that someone has been spreading it systematically and possibly with malice. But the allegation always reaches me at least secondhand and never with the name of the person. Will you tell me where *you* got this allegation? I would like to track down this "Scarlet Pimpernel" and get him to hold still long enough to ask him what he is up to and why.

Now, for some background on *Stranger* and my stories in general: I write for the following reasons—

To support myself and my family;

To entertain my readers;

And, if possible, to cause my readers to *think.*

The first two of these reasons are indispensable, and constitute, together, a commonplace market transaction.

I have always had to work for a living, for myself and now for my dependents, and I come from a poor, country family—root, hog, or die. I have worked at many things, but I discovered, somewhat by accident, that I could produce a salable commodity—entertainment in the form of fiction. I don't know why I have this talent; no other member of my family or relatives seems to have it. But I got into it for a reason that many writers have—it was what I could do at the time, i.e., I have been ill for long periods throughout my life, and writing is something a person can do when he is not physically able to take a 9-to-5 job. (Someday I would like to find time to do an essay on this. The cases range from blind Homer to consumptive R. L. Stevenson and are *much* more numerous than English professors seem to be aware of.)

But if a writer does not entertain his readers, all he is producing is paper dirty on one side. I must always bear in mind that my prospective reader could spend his recreation money on beer rather than on my stories; I have to be aware every minute that I am competing for beer money—and that the customer does not have to buy. If I produced, let us say, potatoes or beef, I could be sure that my product had some value in the market. But a story that the customers do not enjoy reading is worth *nothing*.

So, when anyone asks me why I write, if it is a quick answer, standing up, I simply say, "For money." Any other short answer is dishonest—and any writer who forgets that his prime purpose is to wangle, say 95 cents out of a customer who *need not buy at all* simply does not get published. He is not a writer; he just thinks he is.

(Oh, surely, one hears a lot of crap about "art" and "self-expression," and "duty to mankind"—but when it comes down to the crunch, there your book is, on the newsstands, along with hundreds of others with just as pretty covers—and the customer does not have to buy. If a writer fails to entertain, he fails to put food on the table—and there is no unemployment insurance for freelance writers.)

(Even a wealthy writer has this necessity to be entertaining. Oh, he could indulge in vanity publication at his own expense—but who reads a vanity publication? One's mother, maybe.)

That covers the first two reasons: I write for money because I have a household to support and in order to earn that money I must entertain the reader.

The third reason is more complex. A writer can afford to indulge in it *only* if he clears the first two hurdles. I have written almost every sort of thing—filler paragraphs, motion picture and TV scripts, poetry, technical reports, popular journalistic nonfiction, detective stories, love stories, adventure stories, etc.—and I have been paid for 99% of what I have written.

But most of the categories above bored me. I had enough skill to make them pay but I really did not enjoy the work. I found that what I did enjoy and did best was speculative fiction. I do not think that this is just a happy coincidence; I suspect that, with most people, the work they do best is the work they enjoy.

By the time I wrote *Stranger* I had enough skill in how to entertain a reader and a solid enough commercial market to risk taking a flyer, a fantasy speculation a bit farther out than I had usually done in the past. My agent was not sure of it, neither was my wife, nor my publisher, but I felt sure that I would sell at least well enough that the publisher would not lose money on it—would "make his nut."

I was right; it did catch hold. Its entertainment values were sufficient to carry the parable, even if it was read strictly for entertainment.

But I thought that the parables in it would take hold, too, at least for some readers. They did. Some readers (many, I would say) have told me that they have read this fantasy three, four, five or more times—in which case, it can't be the story line; there is no element of surprise left in the story line in a work of fiction read over and over again; it has to be something more.

Well, what was I trying to *say* in it?

I was asking questions.

I was *not* giving answers. I was trying to shake the reader loose from some preconceptions and induce him to think for himself, along new and fresh lines. In consequence, each reader gets something different out of that book *because he himself supplies the answers.*

If I managed to shake him loose from some prejudice, preconception, or unexamined assumption, that was all I intended to do. A rational human being does not need answers, spoonfed to him on "faith"; he needs questions to worry over—serious ones. The quality of the answers then depends on *him* . . . and he may revise those answers several times in the course of a long life, (hopefully) getting a little closer to the truth each time. But I would never undertake to be a "Prophet," handing out neatly packaged answers to lazy minds.

(For some of the more important unanswered questions in *Stranger* see chapter 33, especially page 344 of the hardcover, the paragraph starting: "All names belong in the hat, Ben.")

Starship Troopers is loaded with unanswered questions, too. Many people rejected that book with a cliche— "fascist," or "militaristic." They can't read or won't read; it is neither. It is a dead serious (but incomplete) inquiry into *why* men fight. Since men *do* fight, it is a question well worth asking.

My latest book, *I Will Fear No Evil,* is even more loaded with serious, unanswered questions—perhaps too laden; the story line sags a little. But the questions are dead serious—because, if they remain unanswered, we wind up dead. It does not affect me personally too much, at least not in this life, as I will probably be dead before the present trends converge in major catastrophe. Nevertheless, I worry about them. I think we are in a real bind . . . and that the answers are not to be found in simplistic "nature communes," nor in "Zero Population Growth," which does not embrace the entire globe.

There may be *no* answers fully satisfactory . . . and even incomplete answers will be very difficult.

I find that I have written an essay to myself rather than a letter. Forgive me—perhaps I have reached the age at which one maunders. But I hope I have convinced you that *Stranger* is dead serious ... as *questions.* Serious, nontrivial questions, on which a man might spend a lifetime. (And I almost have.)

But anyone who takes that book as *answers* is cheating himself. It is an invitation to think—not to believe. Anyone who takes it as a license to screw as he pleases is taking a risk; Mrs. Grundy is not dead. Or any other sharp affront to the contemporary culture done publicly—there are stern warnings in it about the dangers involved. Certainly "Do as thou wilt is the whole of the Law" is correct when looked at properly—in fact, it is a law of nature, not an injunction, nor a permission. But it is necessary to remember that it applies to everyone—including lynch mobs. The Universe is what it is, and it never forgives mistakes—not even ignorant ones ...

AFTERWORD

Before the cut version of *I Will Fear No Evil* was ready for publication, Robert was taken ill. For two years he was laid up with various illnesses and operations. At last, in 1972, he was well enough and very eager to begin writing again.

His next book was *Time Enough for Love.*

In addition to changes in the times and customs, Robert now had a reputation that allowed him to do such books as he preferred to do. It is possible that, at least in part, *Stranger* had had some effects upon the sexual revolution of the sixties and seventies. It was in tune with the moods of the times. So his publishers did not object to the length of *Time Enough for Love,* and one thing I found curious—there was no objection at all to the incest scenes. Not even reviewers mentioned it.

The following two years were mostly taken up with study of advances in physical and biological sciences. How could one write science fiction without keeping up with what was being discovered in those fields? These studies were undertaken for two articles for the *Britannica Compton Yearbook:* "Dirac, Antimatter and You," and "Are you a 'Rare Blood.' "

In 1977, Heinlein organized a major blood drive among science fiction fans.

Another serious illness occurred in 1978. Following his recuperation from that, Robert went to his computer and wrote *The Number of the Beast.* Aside from a very few flags on the copy-edited manuscript, he was asked to cut by 2,000 words (!) out of an estimated 200,000 worth. That was, of course, an easy task.

Expanded Universe followed, at the behest of James Baen. To our surprise, this book generated far more mail than any other book Robert had ever written. For two years, I was tied to the computer answering the fan mail which resulted from its publication.

In 1981, at seventy-four years of age, Robert decided that he would no longer do any of the special little tasks which being a well-known writer entails: no more speeches (even to librarians), no more appearances at conventions—his health would not permit the pressure. He would simply write the books he wanted to write.

So he wrote *Friday,* then *Job, The Cat Who Walks through Walls,* and his final book, *To Sail Beyond the Sunset.* Each of these books differed from anything he had previously done, and some displayed new techniques he had been inventing.

To Sail was published on Robert's 80th birthday in 1987, by special arrangement with his publisher. The only further item Robert wrote was the foreword for Ted Sturgeon's novel *Godbody.* While contract negotiations for *To Sail* were still going on, Robert came down with what was to be his final illness. For almost two years, he hovered between illness and frail health, but finally succumbed on May 8, 1988.

APPENDICES

APPENDIX A

CUTS IN *Red Planet*

[Alice Dalgliesh, the editor at Scribner's, objected to anything that might be construed as having some sexual connotations and also to the use of guns by youngsters, as well as other matters. As a result, Heinlein was forced to make a number of cuts in his original manuscript. Some of these are shown here. Chapter and paragraph numbers refer to *Red Planet* as originally published.]

Between Chapter II, paragraph 13 and Chapter II, middle of paragraph 23:

The second generation trooped out. Phyllis said, "Take the charges out of your gun, Jimmy, and let me practice with it."

"You're too young for a gun."

"Pooh! I can outshoot you." This was very nearly true and not to be borne; Phyllis was two years younger than Jim and female besides. "Girls are just target shooters. If you saw a waterseeker, you'd scream."

"I would, huh? We'll go hunting together and I'll bet you two credits that I score first."

"You haven't got two credits."

"I have, too."

"Then how was it you couldn't lend me a half credit yesterday?"

Phyllis changed the subject. Jim hung up his weapon in his cupboard and locked it. Presently they were back in the living room, to find that their father was home and dinner ready.

Phyllis waited for a lull in grownup talk to say, "Daddy?"

"Yes, Puddin'? What is it?"

"Isn't it about time I had a pistol of my own?"

"Eh? Plenty of time for that later. You keep up your target practice."

"But, look, Daddy—Jim's going away and that means that Ollie can't ever go outside unless you or mother have time to take him. If I had a gun, I could help out."

Mr. Marlowe wrinkled his brow. "You've got a point. You've passed all your tests, haven't you?"

"You know I have!"

"What do you think, my dear? Shall we take Phyllis down to city hall and see if they will license her?"

Before Mrs. Marlowe could answer Doctor MacRae muttered something into his plate. The remark was forceful and probably not polite.

"Eh? What did you say, Doctor?"

"I said," answered MacRae, "that I was going to move to another planet. At least that's what I meant."

"Why? What's wrong with this one? In another twenty years we'll have it fixed up good as new. You'll be able to walk outside without a mask."

"Sir, it is not the natural limitations of this globe that I object to; it is the pantywaist nincompoops who rule it— These ridiculous regulations offend me. That a free citizen should have to go before a committee, hat in hand, and pray for permission to bear arms—fantastic! Arm your daughter, sir, and pay no attention to petty bureaucrats."

Jim's father stirred his coffee. "I'm tempted to. I really don't know why the Company set up such rules in the first place."

"Pure copy-cattism. The swarming beehives back on Earth have similar childish rules; the fat clerks that decide these things cannot imagine any other conditions. This is a frontier community; it should be free of such."

"Mmmm . . . probably you're right, Doctor. Can't say that I disagree with you, but I'm so busy trying to get on with my job that I really don't have time to worry about politics. It's easier to comply than to fight a test case." Jim's father turned to his wife. "If it's all right with you, my dear, could you find time to arrange for a license for Phyllis?"

"Why, yes," she answered doubtfully, "if you really think she's old enough." The doctor muttered .something that combined "Danegeld"

and the "Boston Tea Party" in the same breath. Phyllis answered:
"Sure, I'm old enough, Mother. I'm a better shot than Jimmy."

Jim said, "You're crazy as a spin bug!"

"Mind your manners, Jim," his father cautioned. "We don't speak that way to ladies."
"Was she talking like a lady? I ask you, Dad."
"You are bound to assume that she is one. Drop the matter. What were you saying, Doctor?"
"Eh? Nothing that I should have been saying, I'm sure."

Between Chapter VIII, paragraph 29 and Chapter VIII, paragraph 3:

"Sure." Jim got up. In so doing he woke Willis, who extended his eyes, sized up the situation, and greeted them. Jim picked him up, scratched him, and said, "What time did you come in, you tramp?" then suddenly added, "Hey!"
" 'Hey' what?" asked Frank.
"Well, would you look at *that!"* Jim pointed at the tumbled silks. Frank got up and joined him. "Look at what? Oh—" In the hollow in which Willis had been resting were a dozen small, white spheroids, looking like so many golf balls.

"What do you suppose they are?" asked Jim.

Frank studied them closely. "Jim," he said slowly, "I think you'll just have to face it. Willis isn't a boy; he's a she."

"Huh? Oh, no!"
"Willis good boy," Willis said defensively.

"See for yourself," Frank went on to Jim. "Those are eggs. If Willis didn't lay them, you must have."
Jim looked bewildered, then turned to Willis. "Willis, did you lay those eggs? Did you?"

"Eggs?" said Willis. "What Jim boy say?"

Jim set him down by the nest and pointed. "Did you lay those?"
Willis looked at them, then figuratively shrugged his shoulders and washed his hands of the whole matter. He waddled away. His manner seemed to say that if Jim chose to make a fuss over some eggs or whatever that just happened to show up in the bed, well, that was

Jim's business; Willis would have none of it.

"You won't get anything out of him," Frank commented. "I suppose you realize this makes you a grandfather, sort of."

"Don't be funny!"

"Okay, forget the eggs. When do we eat? I'm starved."

Jiro gave the eggs an accusing glance and got busy on the commissary. While they were eating Gekko came in. They exchanged grave greetings, then the Martian seemed about to settle himself for another long period of silent sociability—when he caught sight of the eggs.

Neither of the boys had ever seen a Martian hurry before, nor show any signs of excitement. Gekko let out a deep snort and left the room at once, to return promptly with as many companions as could crowd into the room. They all talked at once and paid no attention to the boys.

"What goes on here?" asked Frank, as he crowded against a wall and peered through a thicket of legs.

"Blessed if I know."

After a while they calmed down a little. One of the larger Martians gathered up the eggs with exaggerated care and clutched them to him. Another picked up Willis and they all trooped out.

Jim stood hesitantly at the door and watched them disappear.

In place of text between Chapter XIII, paragraph 6 and Chapter XIII, paragraph 17:

"Certainly, certainly," agreed MacRae, "but speaking nonprofessionally, I'd rather see the no-good so-andso hang. Paranoia is a disorder contracted only by those of fundamentally bad character."

"Now, Doctor," protested Rawlings.

"That's my opinion," insisted MacRae, "and I've seen a lot of cases, in and out of hospitals."

Insert to Chapter XIV, paragraph 49:

"Everything about Mars is startling. Another thing: we've never been able to find anything resembling sex on this planet—various sorts of specie conjugation, yes, but no sex. It appears to me that we missed it. I think that all the nymph Martians, the bouncers, are female; all of the adults are male. They change. I use the terms for want of better ones, of course. But if my theory is ...

After the current ending:

Jim took it well. He accepted MacRae's much expurgated explanation and nodded. "I guess if Willis has to hibernate, well, that's that. When they come for him, I won't make any fuss. It was just that Howe and Beecher didn't have any *right* to take him."

"That's the slant, son. But it's right for him to go with the Martians because they know how to take care of him, when he needs it. You saw that when you were with them."

"Yes." Jim added, "Can I visit him?"

"He won't know you. He'll be asleep."

"Well—look, when he wakes up, will he know me?"

MacRae looked grave. He had asked the old one the same question. "Yes," he answered truthfully, "he'll have all his memory intact." He did not give Jim the rest of the answer—that the transition period would last more than forty Earth years.

"Well, that won't be so bad. I'm going to be awfully busy in school right now, anyhow."

"That's the spirit."

Jim looked up Frank and they went to their old room, vacant of womenfolk at the moment. Jim cradled Willis in his arms and told Frank what Doc had told him. Willis listened, but the conversation was apparently over the little Martian's depth; Willis made no comment.

Presently Willis became bored with it and started tosing. The selection was the latest Willis had heard, the tango Frank had presented to Jim: *Quien es la Sefiorita?*

When it was over Frank said, "You know, Willis sounds exactly like a girl when he sings that."

Jim chuckled. *"Quien es la Sefiorita,* Willis?"

Willis managed to look indignant. "Willis fine boy!" she insisted.

APPENDIX B

Postlude to *Podkayne of Mars*—Original Version

[The editor at Putnam's was unhappy with Heinlein's original ending *for Podkayne of Mars.* Heinlein therefore made some changes to satisfy his requirements. In the published version, Podkayne survives; in Heinlein's original, she did not.]

POSTLUDE

I guess I had better finish this.

My sister got right to sleep after I rehearsed her in what we were going to do. I stretched out on the floor but didn't go right to sleep. I'm a worrier, she isn't. I reviewed my plans, trying to make them tighter. Then I slept.

I've got one of those builtin alarm clocks and I woke just when I planned to, an hour before dawn. Any later and there would be too much chance that Jojo might be loose, any curlier and there would be too much time in the dark. The Venus bush is chancy even when you can see well; I didn't want Poddy to step into something sticky, or step on something that would turn and bite her leg off. Nor me, either.

Hut we had to risk the bush, or stay and let old Gruesome kill us at her convenience. The first was a sporting chance; the latter was a dead certainty, even though I had a terrible time convincing Poddy that Mrs. Grew would kill us. Poddy's greatest weakness—the really soft place in her head, she's not too stupid otherwise—is her almost total inability to grasp that some people are as bad as they are. Evil. Poddy never has understood evil. Naughtiness is about as far as her imagination reaches.

But I understand evil, I can get right inside the skull of a person like Mrs. Grew and understand how she thinks.

Perhaps you infer from this that I am evil, or partly so. All right, want to make something of it? Whatever *I* am, I knew Mrs. Grew was evil before we ever left the *Tricorn* . . . when Poddy (and even Girdie!) thought the slob was just too darling for words.

I don't trust a person who laughs when there is nothing to laugh about. Or is good-natured no matter what happens. If it's that perfect, it's an act, a phony. So I watched her ... and cheating at solitaire wasn't the only giveaway.

So between the bush and Mrs. Grew, I chose the bush, both for me and my sister.

Unless the air car was there and we could swipe it. This would be a mixed blessing, as it would mean two of them to cope with, them armed and us not. (I don't count a bomb as an arm, you can't point it at a person's head.)

Before I woke Poddy I took care of that a late pseudo-simian, that "fairy." Vicious little beast. I didn't have a gun. But I didn't really want one at that point; they understand about guns and are hard to hit, they'll dive on you at once.

Instead I had shoe trees in my spare shoes, elastic bands around my spare clothes, and more elastic bands in my pockets, and several two-centimeter steel ball bearings.

Shift two wing nuts, and the long parts of the shoe trees become a steel fork. Add elastic bands and you have a sling shot. And don't laugh at a slingshot; many a sand rat has kept himself fed with only a sling shot. They are silent and you usually get your ammo back.

I aimed almost three times as high as I would at home, to allow for the local gravity, and got it right on the sternum, knocked it off its perch—crushed the skull with my heel and gave it an extra twist for the nasty bite on Poddy's arm. The young one started to whine, so I pushed the carcass over in the corner, somewhat out of sight, and put the cub on it. It shut up. I took care of all this before I woke Poddy because I knew she had sentimental fancies about these "fairies" and I didn't want her jittering and maybe grabbing my elbow. As it was—clean and fast.

She was still snoring, so I slipped off my shoes and made a fast reconnoiter.

Not so good— Our local witch was already up and reaching for her broom; in a few minutes she would be unlocking Jojo if she hadn't already. I didn't have a chance to see if the sky car was outside; I did well not to get caught. I hurried back and woke Poddy.

"Pod!" I whispered. "You awake?"

"Yes."

"Wide awake? You've got to do your act, right now. Make it loud and make it good."

"Check."

"Help me up on the perch. Can your sore arm take it?"

She nodded, slid quickly off the bed and took position at the door, hands ready. I grabbed her hands, bounced to her shoulders, steadied, and she grabbed my calves as I let go her hands—and then I was up on the perch, over the door. I waved her on.

Poddy went running out the door, screaming, "Mrs. Grew! MRS. GREW! Help, help! My brother!" She did make it good.

And came running back in almost at once with Mrs. Grew puffing after her. I landed on Gruesome's shoulders, knocking her to the floor and knocking her gun out of her hand. I twisted and snapped her neck before she could catch her breath.

Pod was right on the ball, I have to give her credit. She had that gun before it stopped sliding. Then she held it, looking dazed.

I took it carefully from her. "Grab your purse. We go, right now! Stick close behind me."

Jojo *was* loose, I had cut it too fine. He was in the living room, looking, I guess, to see what the noise was about. I shot him.

Then I looked for the air car while keeping the gun ready for the driver. No sign of either one—and I didn't know whether to groan or cheer. I was all keyed up to shoot him but maybe he would have shot me first. But a car would have been mighty welcome compared with heading into the bush.

I almost changed my plan at that point and maybe I should have. Kept together, I mean, and headed straight north for the ring road.

It was the gun that decided me. Poddy could protect herself with it—and I would just be darn careful what I stepped on or in. I handed it to her and told her to move slowly and carefully until there was more light—but get going!

She was wobbling the gun around. "But, Brother, I've never shot anybody!"

"Well, you can if you have to."

"I guess so."

"Nothing to it. Just point it at 'em and press the button. Better use both hands. And don't shoot unless you really need to."

"All right."

I smacked her behind. "Now get going. See you later."

And I got going. I looked behind once, but she was already vanished in the smog. I put a little distance between me and the house, just in case, then concentrated on approximating course west.

And I got lost. That's all. I needed that tracker but I had figured I could get along without it and Pod had to have it. I got hopelessly lost. There wasn't breeze enough for me to tell anything by wetting my finger and that polarized light trick for finding the Sun is harder than you would think. Hours after I should have reached the ring road I was still skirting boggy places and open water and trying to keep from being somebody's lunch.

And suddenly there was the most dazzling light possible and I went down flat and stayed there with my eyes buried in my arm and started to count.

I wasn't hurt at all. The blast wave covered me with mud and the noise was pretty rough but I was well outside the real trouble. Maybe half an hour later I was picked up by a cop car.

Certainly, I should have disarmed that bomb. I had intended to, if everything went well; it was just meant to be a "Samson in the Temple" stunt if things turned out dry. A last resort.

Maybe I should have stopped to disarm it as soon as I broke old Gruesome's neck—and maybe Jojo would have caught both of us if I had and him still with a happy-dust hangover. Anyhow I didn't and then I was very busy shooting Jojo and deciding what to do and telling Poddy how to use that gun and getting her started. I didn't think about the bomb until I was several hundred meters from the house—and I certainly didn't want to go back then, even if I could have found it again in the smog, which is doubtful.

But apparently Poddy did just that. Went back to the house, I mean. She was found later that day, about a kilometer from the house, outside the circle of total destruction—but caught by the blast.

With a live baby fairy in her arms—her body had protected it; it doesn't appear to have been hurt at all.

That's why I think she went back to the house. I don't *know* that this baby fairy is the one she called "Ariel." **It** might have been one that she picked up in the bush.

But that doesn't seem at all likely; a wild one would have clawed her and its parents would have torn her to pieces.

I think she intended to save that baby fairy all along and decided not to mention it to me. It is just the kind of sentimental stunt that Poddy would do. She knew I was going to have to kill the adult—and she never said a word against that; Pod could always be sensible when absolutely necessary.

Then in the excitement of breaking out she forgot to grab it, just as I forgot to disarm the bomb after we no I longer needed it. So she went back for it.

And lost the inertial tracker, somehow. At least it wasn't found on her or near her. Between the gun and her purse and the baby fairy and the tracker she must have dropped it in a bog. Must be, because she had plenty of time to go back and still get far away from the house. She should have been ten kilometers away by then, so she must have lost the tracker fairly soon and walked in a circle.

I told Uncle Tom all about it and was ready to tell the Corporation people, Mr. Cunha and so forth, and take my medicine. But Uncle told me to keep my mouth shut. He agreed that I had flubbed it, mighty dry indeed—but so had he—and so had everybody. He was gentle with me. I wish he had hit me.

I'm sorry about Poddy. She gave me some trouble from time to time, with her bossy ways and her illogical ideas— but just the same I'm sorry.

I wish I knew how to cry.

Her little recorder was still in her purse and part of the tape could be read. Doesn't mean much, though; she doesn't tell what she did, she was babbling, sort of:

"—very dark where I'm going. No man is an island, complete in himself. Remember that, Clarkie. Oh, I'm sorry I fubbed it but remember that; it's important. They all have to be cuddled sometimes. My shoulder— Saint Podkayne! Saint Podkayne, are you listening? UnkaTom, Mother, Daddy—is anybody listening? Do listen, please, because this is important. I love—"

It cuts off there. So we don't know whom she loved.

Everybody maybe.

Mr. Cunha made them hold the *Tricorn* and now Uncle Tom and I are on our way again. The baby fairy is still alive and Dr. Torland says it doesn't have radiation sickness. I call it "Ariel" and I guess I'll be taking care of it a long time; they say these fairies live as long as we do. It is taking to shipboard life all right but it gets lonely and has to be held and cuddled or it cries.

APPENDIX C

HEINLEIN RETROSPECTIVEOCTOBER 6, 1988

Trip report—October 30, 1988

On the evening of October 6, 1988, I received on Robert's behalf, the NASA Distinguished Public Service Medal, following a small dinner party given that evening. There were approximately 700 people present for the ceremony, and the presentation was made by Dr. Noel Hinners, Associate Deputy Administrator (Institution) of NASA.

The Description and Criteria of NASA Honor Awards reads: *"NASA Distinguished Public Service Medal (DPSM)* is granted to any individual who is not an employee of the Federal Government or was not an employee during the period in which the service was performed. The award is granted only to individuals whose meritorious contributions produced results which measurably improved, expedited, or clarified administrative procedures, scientific progress, work methods, manufacturing techniques, personnel practices, public information service, and other efforts related to the accomplishment of the mission of NASA."

The citation itself reads:

The National Aeronautics and Space Administration Awards to ROBERT ANSON HEINLEIN the NASA DISTINGUISHED PUBLIC SERVICE MEDAL

In recognition of his meritorious service to the Nation and mankind in advocating and promoting the exploration of space. Through dozens of superbly written novels and essays and his epoch-making movie *Destination Moon,* he helped inspire the Nation to take its first step into space and on to the moon. Even after his death, his books live on as testimony to a man of purpose and vision, a man dedicated to encouraging others to dream, explore, and achieve.

Signed and sealed at Washington, D.C.
this sixth day of October
Nineteen Hundred and Eighty-Eight.
*s*James C. Fletcher
Administrator, NASA.

The medal itself can be described as a sunburst, with a globe in the center, on a ribbon with a wide center strip in navy blue, with two lighter blue stripes on the sides, and a golden strip in the center of the lighter blue. There are two buttonhole ornaments to be worn with civilian dress; one is a copy of the medal, the other a dark blue button, with the gold and light blue used as a sunburst on that background. (I've seen Croix de Guerre holders use those ribbon buttonhole ornaments on their lapels.)

After thanking Dr. Hinners for the honor, I used Robert's "This I Believe" credo for my talk. I had tried to write a speech, then remembered this talk of Robert's and thought it would be appropriate for this occasion. So I sent the record to Ward Botsford in New York, and he put it onto tape for me. Transcribed, it is below. (Ward told me that it was lucky I had not tried to tape it myself, as it might have ruined the only copy in existence, I believe.)

I told the audience how this particular piece of writing had come into being, and that it seemed to me to be appropriate to this occasion, and I had consulted several people about my feeling, and they had said— "Go ahead. It's the perfect thing to do."

THIS I BELIEVE

I am not going to talk about religious beliefs but about matters so obvious that it has gone out of style to mention them. I believe in my neighbors. I know their faults, and I know that their virtues far outweigh their faults.

Take Father Michael down our road a piece. I'm not of his creed, but I know that goodness and charity and lovingkindness shine in his daily actions. I believe in Father Mike. If I'm in trouble, I'll go to him.

My nextdoor neighbor is a veterinary doctor. Doc will get out of bed after a hard day to help a stray cat. No fee—no prospect of a fee—I believe in Doc.

I believe in my townspeople. You can knock on any door in our town saying, "I'm hungry," and you will be fed. Our town is no exception. I've found the same ready charity everywhere. But for the one who says, "To heck with you—I got mine," there are a hundred, a thousand who will say, "Sure, pal, sit down."

I know that despite all warnings against hitchhikers I can step to the highway, thumb for a ride and in a few minutes a car or a truck will stop and someone will say, "Climb in Mac—how far you going?"

I believe in my fellow citizens. Our headlines are splashed with crime yet for every criminal there are 10,000 honest, decent, kindly men. If it were not so, no child would live to grow up. Business could not go on from day to day. Decency is not news. It is buried in the obituaries, but it is a force stronger than crime. I believe in the patient gallantry of nurses and the tedious sacrifices of teachers. I believe in the unseen and unending fight against desperate odds that goes on quietly in almost every home in the land.

I believe in the honest craft of workmen. Take a look around you. There never were enough bosses to checkup on all that work. From Independence Hall to the Grand Coulee Dam, these things were built level and square by craftsmen who were honest in their bones.

I believe that almost all politicians are honest . . . there are hundreds of politicians, low paid or not paid at all doing their level best without thanks or glory to make our system work. If this were not true we would never have gotten past the thirteen colonies.

I believe in Rodger Young. You and I are free today because of endless unnamed heroes from Valley Forge to the Yalu River. I believe in—I am proud to belong to—the United States. Despite shortcomings from lynchings to bad faith in high places, our nation has had the most decent and kindly internal practices and foreign policies to be found anywhere in history.

And finally, I believe in my whole race. Yellow, white, black, red, brown. In the honesty, courage, intelligence, durability, and *goodness* of the overwhelming majority of my brothers and sisters everywhere on this planet. I am proud to be a human being. I believe that we have come this far by the skin of our teeth. That we *always* make it just by the skin of our teeth, but that we will make it. Survive. Endure. I believe that this hairless embryo with the aching, oversize brain case and the opposable thumb, this animal barely up from the apes will *endure.* Will *endure* longer than his home planet—will spread out to the stars and beyond, carrying with him his honesty and his insatiable curiosity, his unlimited courage and his noble essential decency.

This I believe with all my heart.

Robert's talk got a standing ovation. I don't take credit for that; it was *his* speech, his ideas. There were other speakers, too. Jerry Pournelle gave some reminiscences of Robert; Catherine and L. Sprague de Camp did much the same thing. Tom Clancy told how Robert's work had taught him to write. Captain Jon McBride (an astronaut) gave credit to Robert for his early work on spaceflight; Dr. Charles Sheffield told how Robert was not an American writer, but a British one . . . and Tetsu Yano, all the way from Tokyo, talked about his work in translating Robert's work—weeping at the end for Robert's loss.

Then there was a showing *of Destination Moon.*

The entire evening (with the exception of the motion picture) was videotaped, and I am very anxious to obtain a copy. It has been said that if enough people write in to ask how to obtain tapes for their own use, they might be sold by NASA.

Among those present were Robert's oldest friend, Rear Admiral Cal Laning; Rear Admiral and Mrs. J. Galbraith; and Woodie Teague, who came all the way from Colorado Springs. I had all those over to the hotel for a drink afterwards. (And a few others, too.)

The following evening, Eleanor Wood, Jim Baen, and I went out to the Kondo's new home in Columbia, MD for a party. A very nice party, with lots of old friends there. Next day, Eleanor and I went up to NY, and I saw more old friends—took Margo Fischer to lunch on Sunday—she's now 87, I think, and each time I see her, I think to myself it might be the last time.

Spent the rest of the weekend and a couple of days of the following week up in the country with Eleanor, and her kids; the fall colors were on display, and it was lovely.

Arrived home with a kingsized case of jet lag, got Pixel out of the kennel, and now we've settled down for the winter. No rain so far, but I do hope there will be!—we're on water restrictions now, and it could get a lot worse, if we don't get a lot of rain here.

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About the Author

Robert Anson Heinlein was born in Butler, Missouri, in 1907. A graduate of the U.S. Naval Academy, he was retired, disabled, in 1934. He studied mathematics and physics at the graduate school of the University of Californiaand owned a silver mine before beginning to write science fiction in 1939. In 1947 his first book of fiction, *Rocket Ship Galileo,* was published. His novels include *Double Star* (1956), *Starship Troopers* (1959), *Stranger In a Strange Land* (1961), and *The Moon Is a Harsh Mistress* (1966), all winners of the Hugo Award. Heinlein was guest commentator for the Apollo 11 first lunar landing. In 1975 he received the Grand Master Nebula Award for lifetime achievement. Mr. Heinlein died in 1988.

Time Enough For Love

The Lives of Lazarus Long

For Bill and Lucy

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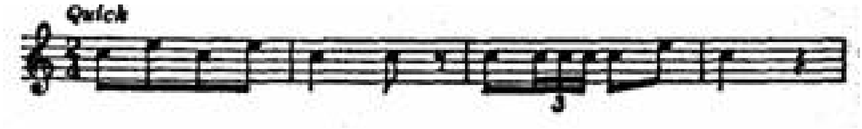

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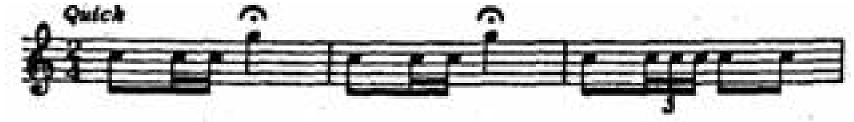

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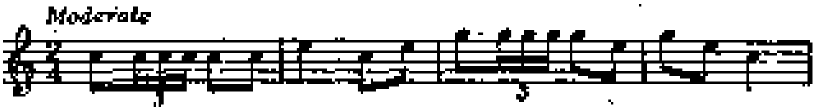

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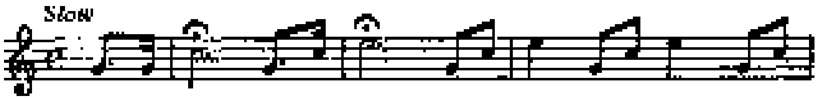

IV

TIME ENOUGH FOR LOVE

The Lives of the Senior Member of the Howard Families (Woodrow Wilson Smith; Ernest Gibbons; Captain Aaron Sheffield; Lazarus Long; "Happy" Daze; His Serenity Seraphin the Younger, Supreme High Priest of the One God in All His Aspects and Arbiter Below and Above; Proscribed Prisoner No. 83M2742; Mr. Justice Lenox; Corporal Ted Bronson; Dr. Lafe Hubert; and others), Oldest Member of the Human Race. This Account is based principally on the Senior's Own Words as recorded at many times and places and especially at the Howard Rejuvenation Clinic and at the Executive Palace in New Rome on Secundus in Year 2053 After the Great Diaspora (Gregorian Year 4272 of Old Home Terra)-and supplemented by letters and by eyewitness accounts, the whole then arranged, collated, condensed, and (where possible) reconciled with official records and contemporary histories, as directed by the Howard Foundation Trustees and executed by the Howard Archivist Emeritus. The result is of unique historical importance despite the Archivist's decision to leave in blatant falsehoods, self-serving allegations, and many amoral anecdotes not suitable for young persons.

INTRODUCTION On the Writing of History

History has the relation to truth that theology has to religion—i.e., none to speak of.

-L.L.

The Great Diaspora of the Human Race which started more than two millennia ago when the Libby-Sheffield Drive was disclosed, and which continues to this day and shows no sign of slowing, made the writing of history as a single narrative—or even many compatible narratives—impossible. By the twenty-first century (Gregorian) (*Gregorian Terran dates are used throughout, as no other calendar, not even Standard Galactic, is certain to be known to scholars of every planet. Translators should add local dates for clarification. J.F. 45th) on Old Home Terra our Race was capable of doubling its numbers three times each century—given space and raw materials.

The Star Drive gave both. H. sapiens spread through this sector of our Galaxy at many times the speed of light and multiplied like yeast. If doubling had occurred at the twenty-first-century potential, our numbers would now be of the order of $7 \times 10^9 \times 2^{68}$ –a number so large as to defy emotional grasp; it is suited only to computers:

$$7 \times 10^9 \times 2^{68} = 2{,}066{,}035{,}336{,}255{,}469{,}780{,}992{,}000{,}000{,}000.$$

--or more than two thousand million billion trillion people

--or a mass of protein twenty-five million times as great as the entire mass of our race's native planet Sol III, Old Home.

Preposterous.

Let us say that it would be preposterous had not the Great Diaspora taken place, for our race, having reached the potential to double three times each century, had also reached a crisis under which it could not double even once—that knee of the curve in the yeast-growth law in which a population can maintain a precarious stability of zero growth only by killing off its own members fast enough, lest it drown in its own poisons, commit suicide by total war, or stumble into some other form of the Malthusian Final Solution.

But the Human Race has not (we think) increased to that monstrous figure because the base figure for the Diaspora must not be thought of as seven billion but rather as a few million at the opening of the Era, plus the unnumbered, small-but-still-growing hundreds of millions since, who have migrated from Earth and from its colony planets to still more distant places over the last two millennia.

But we are no longer able to make a reasoned guess at the numbers of the Human Race, nor do we have even an approximate count of the colonized planets. The most we can say is that there must be in excess of two thousand colonized planets, in excess of five hundred billion people. The colonized planets may be twice that number, the Human Race could be four times that numerous. Or more.

So even the demographic aspects of historiography have become impossible; data are out of date when we receive them and always incomplete—yet so numerous and so varied in reliability that several hundred humans/computers on my staff keep busy trying to analyze, collate, interpolate and extrapolate, and to weigh them against other data before incorporating them into the records. We attempt to maintain standards of 95 percent in probability of corrected data, 85 percent in pessimistic reliability; our achievement is closer to 89 per cent and 81 percent—and getting worse.

Pioneers care little about sending records to the home office; they are busy staying alive, making babies, and killing off anything in their way. A colony is usually into its fourth generation before *any* data reach this office.

(Nor can it be otherwise. A colonist too interested in statistics becomes a statistic himself—as a corpse. I intend to migrate; once I have done so, I won't care whether this office keeps track of me or not. I have stuck to this essentially useless work for almost a century partly through inducements and partly through genetic disposition—I am a direct-and-reinforced descendant of Andrew Jackson Slipstick Libby himself. But I am descended also from the Senior and have—I think—some of his restless nature. I want to follow the wild geese and see what is happening out there—get married again; leave a dozen descendants on a fresh uncrowded planet, then—possibly—move on. Once I have the Senior's memoirs collated, the Trustees can, in the Senior's ancient idiom, take this job and shove it.)

What sort of man is our Senior, my ancestor and probably yours, and certainly the oldest living human being, the only man who has taken part in the entire pageant of the crisis of the Human Race and its surmounting of crisis through Diaspora?

For surmount it we have. Our race could now lose fifty planets, close ranks, and move on. Our gallant women could replace the casualties in a single generation. Not that it appears likely that this will happen; thus far we have encountered not one race as mean, as nasty, as deadly as our own. A conservative extrapolation indicates that we will reach in numbers that preposterous figure given earlier in a few more generations—and move on out of this Galaxy into others before we finish settling this one. Indeed, reports from farther out indicate that Human intergalactic colony ships are already headed out into the Endless Deeps. These reports are not verified—but the most virile colonies are always a long way from the most populous centers. One may hope.

At best, history is hard to grasp; at worst, it is a lifeless collection of questionable records. It is most alive through the words of eyewitnesses…and we have but one witness whose life spans the twentythree centuries of crisis and Diaspora. The next oldest human being whose age this office has been able to verify is only a little over a thousand years old. Probability theory makes it possible that there is somewhere a person half again that age—but it is both mathematically and historically certain that there is no other human alive today who was born in the twentieth century.* (* When the Howard Families seized the Starship New Frontiers only a few were more than a century and a quarter old; all of that few—save the Senior—are dead, at times and places on record. (I except the strange and possibly mythical case of life-in-death of Elder Mary Sperling.) Despite genetic advantage and access to the longevity therapies known collectively as "the immortality option," the last died in 3003 Gregorian. By the records it would seem that most of them died through refusing further rejuvenation—that being still the second commonest cause of death today. JF.45th)

Some may question whether this "Senior" is the member of the Howard Families born in 1912 and also the "Lazarus Long" who led the Families in their escape from Old Home in 2136, etc.—pointing out that all the ancient methods of identification (fingerprints, retinal patterns, etc.) can now be beaten. True, but those methods were adequate for their time and the Howard Families Foundation had special reason to use them with care; the "Woodrow Wilson Smith" whose birth was registered with the Foundation in 1912 is certainly the "Lazarus Long" of 2136 and 2210. Before those tests ceased to be reliable, they were supplemented by modern unbeatable tests based first on clone transplants and, more lately, on absolute identification of genetic patterns. (It is interesting to note that an impostor showed up about three centuries ago, here on Secundus, and was given a new heart from a cloned pseudobody of the Senior. It killed him.) The Senior whose words are quoted herein has a genetic pattern identical with that of a bit of muscle tissue removed from "Lazarus Long" by Dr. Gordon Hardy in the Starship *New Frontiers* about 2145, and cultured by him for longevity research. Q.E.D

But what sort of man *is* he? You must judge for yourself. In condensing this memoir to manageable length I have omitted many verified historical incidents (the raw data are available to scholars at the Archives)—but I have left in lies and unlikely stories on the assumption that the lies a man tells tell more truth about him—when analyzed—than does "truth."

It is clear that this man is, by standards usual in civilized societies, a barbarian and a rogue.

But it is not for children to judge their parents. The qualities that make him what he is are precisely those needed to stay alive in a jungle—or on a raw frontier. Do not forget your debt to him both genetic and historic.

To understand our historic debt to him it is necessary to review some ancient history—part tradition or myth, and part fact as firmly established as the assassination of Julius Caesar. The Howard Families Foundation was established by the will of Ira Howard, who died in 1873. His will instructed the trustees of the foundation to use his money to "prolong human life." This is fact.

Tradition says that he willed this in anger at his own fate, for he found himself dying *of old age* in his forties—dead at fortyeight, a bachelor without progeny. So none of us carries his genes; his immortality lies only in a name, and in an idea—that death could be thwarted.

At that time death at fortyeight was not unusual. Believe it or not, in those days the average age at death was about thirty-five! But not from senility. Disease, starvation, accident, murder, war, childbirth, and other violences cut down most humans long before senility set in. But a human who passed all these hurdles still could expect death from old age sometime between seventy-five and one hundred. Very few reached one hundred; nevertheless every population group had its tiny minority of "centenarians." There is a legend about "Old Toni Parr" who is supposed to have died in 1635 aged one hundred and fiftytwo years. Whether or not the legend is true, probability analysis of demographic data of that era shows that some individuals must have lived a century and a half. But they were few indeed.

The Foundation started its work as a prescientific breeding experiment, as nothing was then known of genetics: Adults of long-lived stock were encouraged to mate with others like them, money being the inducement.

Unsurprisingly the inducement worked. Equally unsurprisingly this experiment worked, as it was an empirical method used by stockbreeders for centuries before the science of genetics came into being: Breed to reinforce one characteristic, then eliminate the culls.

The Families' Archives do not show how the earliest culls were eliminated; they simply show that some were eliminated from the Families—root and branch, all descendants—for the unforgivable sin of dying of old age too young.

By the Crisis of 2136 all members of the Howard Families had life expectancies in excess of one hundred and fifty years, and some had exceeded that age. The cause of that crisis seems unbelievable—yet all records both from inside and from outside the Families agree on it. The Howard Families were in extreme danger from all other humans simply because they lived so "long." Why this was true is a matter for group psychologists, not for a record-keeper. But it *was* true.

They were seized and concentrated in a prison camp, and were about to be tortured to death in an attempt to wrest from them their "secret" of "eternal youth." Fact—not myth.

Here the Senior comes into the story. Through audacity, a talent for lying convincingly, and what would seem to most people today a childish delight in adventure and intrigue for its own sake, the Senior brought off the greatest jailbreak of all time, stealing a primitive starship and escaping right out of the Solar System with all of the Howard Families (then numbering about 100,000 men, women, and children).

If this seems impossible—so many people and just one ship—remember that the first starships were enormously bigger than the ones we now use. They were self-sustaining artificial planetoids intended to remain in space for many years at speeds below that of light; they *had* to be huge.

The Senior was not the only hero of that Exodus. But in all the varied and sometimes conflicting accounts that have come down to us, he was always the driving force. He was our Moses who led his people out of bondage.

He brought them home again three-quarters of a century later (2210)—but not into bondage. For that date, Year One of the Standard Galactic calendar, marks the opening of the Great Diaspora…caused by extreme population pressure on Old Home Terra, and made possible by two new factors: the Libby-Sheffield Para-Drive as it was known then (not a "drive" in any true sense, but a means of manipulating n-dimensional spaces), and the first (and simplest) of effective longevity techniques: new blood grown in vitro.

The Howard Families caused this to happen simply by escaping. The short-lived humans back on Terra, still convinced that the long-lived families possessed a "secret," set about trying to find it by wide and systematic research, and, as always, research paid off serendipitously, not with the nonexistent "secret" but with something almost as good: a therapy, and eventually a sheaf of therapies, for postponing old age, and for extending vigor, virility, and fertility.

The Great Diaspora was then both necessary and possible.

The Senior's great talent (aside from his ability to lie extemporaneously and convincingly) seems always to have been a rare gift for extrapolating the possibilities of any situation—then twisting it to suit his own purposes. (He calls it: "You have to have a feeling for what makes the frog jump." Psychometrists who have studied him say that he has an extremely high psi talent expressed as "forerunners" and "luck"—but what the Senior has to say about *them* is less polite. As a record-keeper, I refrain from opinion.)

The Senior saw at once that this benison of extended youth, although promised to everyone, would in fact be limited to the powerful and their nepots. The billions of helots could *not* be allowed to live beyond their normal pan; there was no room for them—unless they migrated to the stars, in which case there would be room for each human to live as long as he could manage. How the Senior exploited this is not always clear; he seems to have used several names and many fronts. His key corporations wound up in the hands of this Foundation, then were liquidated to move the Foundation and the Howard Families to Secundus—at his behest, he having saved "the best real estate" for his relatives and descendants. Sixty-eight percent of those then living accepted the challenge of new frontiers.

Our genetic debt to him is both indirect and direct. The indirect debt lies in the fact that migration is a sorting device, a forced Darwinian selection, under which superior stock goes to the stars while culls stay home and die. This is true even for those forcibly transported (as in the twenty-fourth and twenty-fifth centuries), save that the sorting then takes place on the new planet. In a raw frontier weaklings and misfits die; strong stock survives. Even those who migrate voluntarily still go through this second drastic special selection. The Howard Families have been culled in this fashion at least three times.

Our genetic "debt" to the Senior is even easier to prove. Part of it needs only simple arithmetic. If you live anywhere but on Old Home Terra—and you almost certainly do if you read this, in view of the present miserable state of "The Fair Green Hills of Earth"—and can claim even one member of the Howard Families among your ancestors—and most of you can—then you are most probably descended from the Senior.

By the official Families' genealogies this probability is 87.3 percent. You are descended from many other twentieth century members of the Howard Families, too, if you are descended from any of them, but I speak here only of Woodrow Wilson Smith, the Senior. By the Crisis Year 2136 nearly one-tenth of the youngest generation of the Howard Families were descended from the Senior "legitimately"—by which I mean that each linking birth was so recorded in the Families' records and ancestry confirmed by such tests as were available at the time. (Even blood typing was not known when the breeding experiment started, but the culling process made it strongly to a female's advantage not to stray, at least not outside the Families.)

By now the cumulative probability is, as I have said, 87.3 percent if you have *any* Howard ancestor—but if you have a Howard ancestor from a recent generation, your probability climbs toward an effective 100 percent.

But, as a statistician, I have reason to believe (backed by computer analyses of blood types, hair types, eye color, tooth count, enzyme types, and other characteristics responsive to genetic analysis)—strong reason to believe that the Senior has many descendants not recorded in genealogies, both inside and outside the Howard Families.

To put it mildly, he is a shameless old goat whose seed is scattered all through this part of our Galaxy.

Take the years of the Exodus, after he stole the *New Frontiers*. He was not married even once during those years, and ship's records and legends based on memoirs of that time suggest that he was, in an early idiom, a "woman hater," a misogynist.

Perhaps. Biostatistical records (rather than genealogies), when analyzed, suggest that he was not that unapproachable. The computer that analyzed it offered to bet me even money on more than one hundred offspring fathered by him during those years. (I refused the bet; that computer beats me at chess even though I insist on a one-rook advantage.)

I do not find this surprising, in view of the almost pathological emphasis placed on longevity among the Families at that time. The oldest male, if still virile—and he certainty was—would have been subjected to endless temptation, endless opportunity, by females anxious to have offspring of his demonstrated superiority —"superiority" by the only criterion the Howard Families respected. We can assume that marital status would not matter much; all Howard Families marriages were marriages of convenience—Ira Howard's will insured that—and they were rarely for life. The only surprising aspect is that so *few* fertile females managed to trip him when unquestionably so many thousands were willing. But he was always fast on his feet.

As may be—If today I see a man with sandy red hair, a big nose, an easy disarming grin, and a slightly feral look in his gray-green eyes, I always wonder how recently the Senior has passed through that part of the Galaxy. If such a stranger comes close to me, I put my hand on my purse: If he speaks to me, I resolve not to make wagers or promises.

But how did the Senior, himself only a third-generation member of Ira Howard's breeding experiment, manage to live and stay young his first three hundred years *without* artificial rejuvenation?

A mutation, of course—which simply says that we don't know. But in the course of his several rejuvenations we have learned a little about his physical makeup. He has an unusually large heart that beats very slowly. He has only twentyeight teeth, no caries, and seems to be immune to infection. He has never had surgery other than for wounds or for rejuvenation procedures. His reflexes are extremely fast—but appear always to be reasoned, so one may question the correctness of the term "reflex." His eyes have never needed correction either for distance or close work; his hearing range is abnormally high, abnormally low, and is unusually acute throughout his range. His color vision includes indigo. He was born without prepuce, without vermiform appendix—and apparently without a conscience.

I am pleased that he is my ancestor.

Justin Foote the 45th
Chief Archivist, Howard Foundation

PREFACE TO REVISED EDITION

In this abridged popular edition the technical appendix has been published separately in order to make room for an account of the Senior's actions after he left Secundus until his disappearance. An apocryphal and obviously impossible tale of the last events in his life has been included at the insistence of the editor of the original memoir, but it cannot be taken seriously.

Carolyn Briggs
Chief Archivist

Note: My lovely and learned successor in office does not know what she is talking about. With the Senior, the most fantastic is always the most probable.

Justin Foote the 45th
Chief Archivist Emeritus

PRELUDE

I

As the door of the suite dilated, the man seated staring glumly out the window looked around. "Who the hell are you?"

"I am Ira Weatheral of the Johnson Family, Ancestor, Chairman Pro Tem of the Families."

"Took you long enough. Don't call me 'Ancestor.' And why just the Chairman Pro Tem?" the man in the chair growled. "Is the Chairman too damn busy to see me? Don't I rate even *that*?" He made no move to stand, nor did he invite his visitor to sit down.

"Your pardon, Sire. I *am* chief executive for the Families. But it has been customary for some time now—several centuries—for the chief executive to hold the title. 'Chairman Pro Tem'—against the possibility that you might show up and take the gavel."

"Eh? Ridiculous. I haven't presided at a meeting of the Trustees for a thousand years. And 'Sire' is as bad as 'Ancestor'—call me by name. It's been two days since I sent for you. Did you come by the scenic route? Or has the rule that entitles me to the ear of the Chairman been revoked?"

"I am not aware of that rule, Senior; it was probably long before my time—but it is my honor and duty—and pleasure—to wait on you at any time. I will be pleased and honored to call you by name if you will tell me what your name is now. As for the delay—thirty-seven hours since I received your summons—I have spent it studying Ancient English, as I was told that you were not answering to any other language."

The Senior looked slightly sheepish. "It's true I'm not handy with the jabber they speak here—my memory has been playing tricks on me lately. I guess I've been sulky about answering even when I understood. Names—I forget what name I checked in by when I grounded here. Mmm, 'Woodrow Wilson Smith' was my boyhood name. Never used it much. I suppose 'Lazarus Long' is the name I've used oftenest—call me 'Lazarus.'"

"Thank you, Lazarus."

"For what? Don't be so damned formal. You're not a kid, or you wouldn't be Chairman—how old are you? Did you really take the trouble to learn my milk language just to call on me? And in less than two days? Was that from scratch? It takes me at least a week to tack on a new language, another week to smooth out accent."

"I am three hundred and seventy-two standard years old, Lazarus—just under four hundred Earth years. I learned Classic English when I took this job—but as a dead language, to enable me to read old records of the Families in the original. What I did since your summons was to learn to speak and understand it in North American twentieth-century idiom—your 'milk language' as you said—as that is what the linguistic analyzer computed that you were speaking."

"Pretty smart machine. Maybe I am speaking it the way I did as a youngster; they claim that's the one language a brain never forgets. Then I must be talking in a Cornbelt rasp like a rusty saw whereas you're speaking a sort of Texas drawl with an Oxford British overlay. Odd. I suppose the machine picks the version out of its permanents closest to the sample fed into it."

"I believe so, Lazarus, although the techniques involved are not my field. Do you have trouble understanding my accent?'

"Oh, none at all. Your accent is okay; it's closer to educated General American of that time than is the accent I learned as a kid. But I can follow anything from Bluegum to Yorkshire; accent is no problem. It was mighty kind of you to bother. Warming."

"My pleasure. I have a talent for languages; it was not much trouble. I try to be able to speak to each of the Trustees in his native language; I'm used to swotting up a new one quickly."

"So? Nonetheless a courteous thing to do—I've felt like an animal in a zoo with no one to talk to. Those dummies"—Lazarus inclined his head at two rejuvenation technicians, dressed in isolation gear and one-way helmets, and waiting as far from the conversation as the room permitted—"don't know English; I can't talk with them. Oh, the taller one understands a little but not enough for gossip." Lazarus whistled, pointed at the taller. "Hey, you! A chair for the Chairman—chop chop!" His gestures made his meaning clear. The taller technician touched the controls of a chair nearby; it rolled away, wheeled around, and stopped at a comfortable tête-à-tete distance from Lazarus.

Ira Weatheral said thank you-to Lazarus, not to the tech-sat down, then sighed as the chair felt him out and cuddled him. Lazarus said, "Comfortable?"

"Quite."

"Anything to eat or drink? Or smoke? You may have to interpret for me."

"Nothing, thank you. But may I order for you?"

"Not now. They keep me stuffed like a goose—once they forcefed me, damn them. Since we're comfortable, let's get on with the powwow." He suddenly roared, "WHAT THE HELL AM I DOING IN THIS JAIL?"

Weatheral answered quietly, "Not 'jail,' Lazarus. The VIP suite of the Howard Rejuvenation Clinic. New Rome."

"'Jail,' I said. All it lacks is cockroaches. This window—you couldn't break it with a crowbar. That door—it opens to any voice except *mine*.

If I go to the john, one of those dummies is at my elbow. Apparently afraid I'll drown myself in the pot. Hell, I don't even know whether that nurse is a man or a woman—and don't like it either way. I don't need somebody to hold my hand while I go pee-pee! I resent it."

"I'll see what can be worked out, Lazarus. But the technicians are understandably jumpy. A person can get hurt quite easily in any bathroom—and they all know that, if you are hurt, no matter by what mischance, the technician in charge at the time will suffer cruel and unusual punishment. They are volunteers and are drawing high bonuses. But they're jumpy."

"So I figured out. 'Jail.' If this is a rejuvenation suite WHERE'S MY SUICIDE SWITCH?"

"Lazarus—'Death is every man's privilege.'"

"That's what I said! That switch belongs right there; you can see where it has been dismounted. So I'm in jail without trial, with my most basic right taken from me. *Why*? I'm furious, man. Do you realize what danger *you* are in? Never tease an old dog; he might have one bite left. Old as I am, I could break your arms before those dummies could reach us."

"You are welcome to break my arms if it pleases you."

"Huh?" Lazarus Long looked baffled. "No, it's not worth the sweat. They would have you patched up good as new in thirty minutes." He suddenly grinned. "But I could snap your neck, then crush your skull, about as fast. That's one injury beyond the power of rejuvenators."

Weatheral did not stir, did not tense. "I feel sure you could," he said quietly. "But I do not think that you would kill one of your descendants without giving him a chance to parley for his life. You are my remote grandfather, sir, by seven different tracks."

Lazarus chewed his lip and looked unhappy. "Son, I have so many descendants that consanguinity doesn't matter. But you're essentially right. In all my life I have never killed a man unnecessarily. I think." Then he grinned. "But if I don't get my suicide switch back, I could make an exception in your case."

"Lazarus, if you wish, I will have that switch remounted at once. But—'Ten Words'?"

"Uh—" Lazarus looked ungracious. "Okay. 'Ten Words.' Not eleven."

Weatheral hesitated a split second, then counted on his fingers: "I learned your language to explain why we need you."

"Ten by the Rule," Lazarus admitted. "But meaning that you need fifty. Or five hundred. Or five thousand."

"Or none," Weatheral amended. "You can have your switch without giving me *any* chance to explain. I promised."

"Humph!" said Lazarus. "Ira, you old scoundrel, you have me convinced that you really are my kin. You figured that I would not suicide without hearing what you have on your mind—once I knew you had bothered to learn a dead language just to make palaver. All right, talk. You can start by telling me what I'm doing here. I know—I *know*—that I didn't apply for rejuvenation. But I woke up here with the job already half over. So I screamed for the Chairman. Okay, why am I here?"

"May we start further back? You tell me what you were doing in a flophouse in the worst part of Old Town."

"What was I *doing*? I was *dying*. Quietly and decently, like a wornout horse. That is, I was, until your busybodies grabbed me. Can you think of a better place than a flophouse for a man who doesn't want to be disturbed while he's busy with it? If his cot is paid for in advance, they leave a man be. Oh, they stole what little I had, even my shoes. But I expected that—would have done the same myself under the same circumstances. And the sort of people who live in flophouses are almost always kind to those worse off than they are—any of 'em will fetch a drink of water to a sick man. That was the most I wanted—that and to be left alone to close out my account in my own way. Until your busies showed up. Tell me, bow did they find me?'

"How we found you is not the surprising part, Lazarus, but the fact that SecFor—the cops?—Yes, 'cops'—that my cops took so long to identify you, then find you, and pick you up. A section chief lost his job over that. I don't tolerate inefficiency."

"So you busted him. Your business. But why? I reached Secundus from Out-Far, and I didn't think I had left any back trail. Different everything since the last time I was in touch with the Families…as I bought my last rejuvenation on Supreme. Are the Families swapping data with Supreme these days?"

"Heavens, no, Lazarus, we won't even give them a polite word. There is a strong minority among the Trustees who favor rubbing out Supreme, instead of simply maintaining embargo."

"Well…if a nova bomb hit Supreme, I wouldn't mourn more than thirty seconds. But I did have a reason for having the job done there, even though I had to pay high for forced cloning. But that's another story. Son, how did you pick me up?"

"Sir, for the past seventy years there has been a general order out to try to find you, not just here but on every planet where the Families maintain offices. As to how—do you recall a forced inoculation for Reiber's fever at Immigration?"

"Yes. I was annoyed, but it didn't seem worthwhile to make a fuss; I knew I was headed for that flophouse. Ira, I've known that I was dying for quite some time. That was okay; I was ready for it. But I didn't want to do it alone, out in space. Wanted human voices around me, and body odors. Childish of me. But I was pretty far gone by the time I grounded."

"Lazarus, there is no such thing as Reiber's fever. When a man grounds on Secundus and all routine identifications show null, 'Reiber's fever' or some other nonexistent plague is used as an excuse to get a little tissue from him while injecting him with sterile neutral saline. You should never have been allowed to leave the skyport until your genetic pattern was identified."

"So? What do you do when ten thousand immigrants arrive in one ship?"

"Herd them into detention barracks until we've checked them out. But that doesn't happen often today with Old Home Terra in the sorry state it's in. But you, Lazarus, arriving alone in a private yacht worth fifteen to twenty million crowns—"

"Make that 'thirty.'"

"—worth thirty million crowns. How many men in the Galaxy can do that? Of those who can afford it, how many would choose to travel alone? The pattern should have set alarm bells ringing in the minds of all of them. Instead they took your tissue and accepted your statement that you would be staying at the Romulus Hilton and let you go—and no doubt you had another identity before dark."

"No doubt at all," Lazarus agreed. "But your cops have run up the price on a good phony set of ID's. If I hadn’t been too tired to bother, I would have forged my own. Safer. Was that how I was caught? Did you squeeze it out of the paper merchant?"

"No, we never found him. By the way, you might let me know who he is, so that—"

"And I might *not*," Lazarus said sharply. "Not ratting on him was implicit in the bargain. It's nothing to me how many of your rules he breaks. And—who knows?—I might need him again. Certainly someone will need his services, somebody just as anxious to avoid your busies as I was. Ira, no doubt you mean well but I don't like setups where IDs are necessary. I told myself centuries back to stay away from places crowded enough to require them, and mostly I've followed that rule. Should have followed it this time. But I didn't expect to need *any* identification very long. Confoundit, two more days and I would have been dead. I think. How did you catch me?"

"The hard way. Once I knew you were on planet I stirred things up; that section chief wasn't the only unhappy one. But you disappeared in so simple a fashion that you baffled the entire force. My security chief expressed the opinion that you had been killed and your body disposed of. I told him if that were the case, he had better start thinking about offplanet migration."

"Make it march! I want to know how I goofed."

"I would not say that you goofed. Lazarus, since you managed to stay hidden with every cop and stoolie on this globe looking for you. But I felt certain that you had not been killed. Oh, we do have murders on Secundus, especially here in New Rome. But most are the commonplace husband-wife sort: We don't have many for gain since I instituted a policy of making the punishment fit the crime and holding executions in-the Colosseum. In any case I felt certain that a man who had survived more than two millennia would not let himself be killed in some dark alley.

"So I assumed that you were alive, then asked myself, 'If I were Lazarus Long, how would I go about hiding?' I went into deep meditation and thought about it. Then I tried to retrace your steps, so far as we knew them. By the way—"

The Chairman Pro Tem threw back his shoulder cloak, took out a large sealed envelope, handed it to Lazarus. "Here is the item you left in a lockbox at Harriman Trust."

Lazarus accepted it. "It's been opened."

"By me. Prematurely, I admit—but you addressed it to me. I have read it but no one else has. And now I will forget it. Except to say this: I am unsurprised that you left your wealth to the Families but I was touched that you assigned your yacht to the personal use of the Chairman. That's a sweet craft, Lazarus; I lust after it a bit. But not so much that I am anxious to inherit so quickly. But I undertook to explain why we need you—and let myself get sidetracked.?'

"I'm in no rush, Ira. Are you?"

"*Me*? Sir; I have no duties more important than talking with the Senior. Besides, my staff runs this planet more efficiently if I don't supervise them too closely."

Lazarus nodded agreement. "That was always my system the times I let myself get involved. Accept the whole load, then shove the work off on other people as fast as I could pick 'em. Having any trouble with democrats these days?"

"'Democrats'? Oh-you must mean 'egalitarians.' I thought at first you meant the Church of the Holy Democrat.We leave that church alone; they don't meddle. There is an equalitarian movement every few years, certainly, under various names. The Freedom Party, the League of the Oppressed—names don't matter as they all want to turn the rascals out, starting with me; and put their own rascals in. We never bother them; we simply infiltrate, then some night we round up the ringleaders and their families, and by daylight they are headed out as involuntary migrants. Transportees. 'Living on Secundus is a privilege, not a right.'"

"You're quoting me."

"Of course. Your exact words from the contract under which you deeded Secundus to the Foundation. That there was to be no government on this planet other than such rules as the current chairman found necessary to maintain order. We've stuck to our agreement with you, Senior; I am sole boss until the Trustees see fit to replace me."

"That's what I intended," Lazarus agreed. "But Son, it's your pidgin and I'll never touch that gavel again—but I have doubts about the wisdom of getting rid of troublemakers. Every loaf needs yeast. A society that gets rid of all its troublemakers goes downhill. Sheep. Pyramid builders at best, decadent savages at worst. You may be eliminating your creative one-tenth of one percent. Your yeast."

"I'm afraid we are, Senior, and that's one reason why we need you —"

"I said I won't touch that gavel!"

"Will you hear me out, sir? You won't be asked to, even though it is yours by ancient custom if you care to pick it up. But I could use advice—"

"I don't give advice; people never take it."

"Sorry. Perhaps just a chance to talk over my problems with a person more experienced than I am. About these troublemakers— We haven't eliminated them in the old sense; they're still alive, or most of them. Ostracizing a man to another planet is more satisfactory than killing him for the technical crime of treason; it gets rid of him without making his neighbors too indignant. Nor have we wasted him —them—as we are using them to conduct an experiment: All transportees are shipped to the same planet, Felicity. Do you happen to know it?"

"Not by that name."

"I think you would have stumbled on it only by accident, sir; we have kept it out of public records in order to use it as a Botany Bay. It is not as good a planet as the name suggests, but it is a good one, roughly equivalent to Old Home Terra—Earth, I should say—before it was ruined, or much like Secundus when we settled here. It's rough enough to test a man and eliminate weaklings, gentle enough to let a man raise a family if he has the guts to dig in and sweat."

"Sounds like a good place; perhaps you should have hung onto it. Natives?"

"The proto-dominant race are quite fierce savages…if any are still alive. We don't know, we don't even maintain a liaison office there. This native race is neither intelligent enough to be civilized nor tractable enough to be enslaved. Perhaps they would have evolved and made it on their own, but they had the misfortune to encounter H. sapiens before they were ready for him. But that is not the experiment; the transportees are certain to win out over that competition, we do not send them empty-handed. But, Lazarus, these people believe that they can create ideal government by majority rule."

Lazarus snorted.

"Perhaps they *can*, sir," Weatheral persisted. "I don't know that they cannot. That is the experiment."

"Son, are you a fool? Oh, you can't be, the Trustees wouldn't keep you in office. But—How old did you say you are?"

Weatheral answered quietly, "I am nineteen centuries your junior, sir; I will not dispute your opinion on anything. But I do not know through my own experience that this experiment will not work; I have never seen a government of the democratic type, even in the numerous times I have been off planet. I've simply read about them. From what I have read not one has ever been formed from a population all of whom believed in the democratic theory. So I don't know."

"Hmm." Lazarus looked frustrated. "Ira, I was about to shove my own experience with such governments down your throat. But you're right, this is a brand new situation—and we *don't* know. Oh, I have strong opinions, but a thousand reasoned opinions are never equal to one case of diving in and finding out. Galileo proved that and it may be the only certainty we have. Mmm…all the so-called democracies I've ever seen or heard of were either forced on the majority from above or grew up slowly from the plebs discovering that they could vote themselves bread-and-circuses—for a while, until the system broke down. I'm sorry I won't see the outcome of your experiment. I suspect it will be the harshest tyranny imaginable; majority rule gives the ruthless strong man plenty of elbow room to oppress his fellows. But I don't *know*. What's *your* opinion?"

"The computers say—"

"Never mind computers. Ira, the most sophisticated machine the human mind can build has in it the limitations of the human mind. Anyone who thinks otherwise does not understand the Second Law of Thermodynamics. I asked for *your* opinion."

"Sir, I refuse to form an opinion; I lack sufficient data."

"Hrrumph: You're getting old, Son. To get anywhere, or even to live a long time, a man has to guess, and guess right, over and over again, without enough data for a logical answer. You were telling me how you found me."

"Yes, sir. That document, your will, made it clear that you expected to die soon. Then"—Weatheral paused and smiled wryly—"I had to 'guess right without enough data.' It took us two days to find the shop where you bought clothes to lower your apparent status—and to conform to local styles, I think. I suspect that you bought your false ID's right after that."

He paused; Lazarus made no comment;. Weatheral continued: "Another half day to find the shop where you lowered your apparent status much farther, close to bottom—too far perhaps, as the shopkeeper remembered you, both because you paid cash and because you were buying secondhand clothes that were not as good even when new as the ones you were wearing. Oh, he pretended to accept your story about a 'costume party' and kept his mouth shut; his shop is a fence for stolen goods."

"Of course," agreed Lazarus. "I made sure he was on the crook before I bought from him. But you said he stayed zipped?"

"Until we stimulated his memory. A fence is in a difficult position, Lazarus; he has to have a permanent address. This can sometimes force him to be honest."

"Oh, I wasn't blaming dear old Uncle. The fault was mine; I let myself be conspicuous. I was tired, Ira, and feeling my years and let it rush me into doing a sloppy job. Even a hundred years back I would have done a more artistic job. I've always known that it is more difficult to lower your status convincingly than to raise it."

"I don't think you need feel ashamed of the job as a work of art, Senior; you had us baffled for almost three months."

"Son, the world doesn't pay off on a 'good try.' Go ahead"

"Brute force then, Lazarus: That shop is in the worst part of the city; we put a cordon around the area and saturated it, thousands of men. But not for long; you were in the third fleabag we checked. I spotted you myself, I was with one of the raiding parties. Then your genetic pattern confirmed your identity." Ira Weatheral smiled slightly. "But we were pouring new blood into you before the genetic analyzer reported your identity; you were in bad shape, sir."

"I was like hell in bad shape; I was simply dying—and minding my own business, a practice you could emulate. Ira, do you realize what a dirty trick you have done me? A man ought not to have to die twice and I was past the bad part and ready for the finale as easy as falling asleep. Then you butted in. I've never heard of rejuvenation being forced on anyone. If I had suspected that you had changed the rules, I would never have come near this planet. Now I have to go through it again. Either with the suicide switch—and suicide is an idea I've always despised—or the natural way. Which could now take a long time. Is my old blood still around? Stored?"

"I will inquire of the Clinic's Director, sir."

"Humph. That's not an answer, so don't bother to lie. You've put me in a dilemma, Ira. Even though I haven't had the full treatment, I feel better than I've felt for forty years or more-which means either that I must again wait it out for many weary years—or use that switch when my body isn't saying, 'Time to adjourn.' You meddling scoundrel, by what authority—no, you've got the authority. By what ethical principle did you interfere with my death?"

"Because we needed you, sir."

"That's not an ethical reason, just a pragmatic one. The need was not mutual."

"Senior, I have studied your life as thoroughly as the records permit. It seems to me that you often acted pragmatically."

Lazarus grinned. "That's my boy! I was wondering if you would have the gall to try to twist it into some high moral principle, like a damned preacher. I don't trust a man who talks about ethics when he's picking my pocket. But if he's acting in his own self-interest and says so, I have usually been able to work out some way to do business with, him."

"Lazarus, if you will let us complete your rejuvenation, you'll feel like living again. I think you know that; you've been through it before."

"To what end, sir? When I've had more than two thousand years of trying everything? When I've seen so many planets that they blur in my mind? When I've had so many wives I can't remember their names? 'We pray for one last landing on the Globe that gave us birth—' I can't even do that; the lovely green planet I was born on has aged even more than I have; to return to it would be a time for tears, not a happy homecoming. No, Son, despite all rejuvenation there comes a time when the only reasonable thing to do is turn out the lights and go to sleep—and you, damn you, you took It away from me."

"I’m sorry—no, I'm *not* sorry. But I do ask your pardon."

"Well you might get it. But not now. What was this aching reason you needed me? You mentioned some problem other than the troublemakers you transport."

"Yes, although it is not one that would have caused me to interfere with your right to die your own way; I can handle it, one way or another. I think Secundus is becoming both too crowded and too civilized—"

"I'm sure of it, Ira."

"Therefore I think the Families should move again."

"I agree even though I am not interested. As a thumb rule, one can say that any time a planet starts developing cities of more than one million people, it is approaching critical mass. In a century or two it won't be fit to live on. Do you have a planet in mind? Do you think you can get the Trustees to go along? And will the Families follow the Trustees?"

"Yes to the first, maybe to the second, probably No to the third. I have a planet in mind as 'Tertius,' one as good or better than Secundus. I think many of the Trustees would agree with my reasoning but I'm not sure of the overwhelming support such a move would need—Secundus is too comfortable for the danger to seem imminent to most people. As for the Families themselves—no, I don't think we could persuade most of them to uproot and move but even a few hundred thousand would suffice. Gideon's Band—you follow me?"

"I'm way ahead of you. Migration always involves selection and improvement. Elementary. If they'll do it. *If*. Ira, I had a hell of a time selling the idea to the Families when we moved here back in the twenty-third century. Could not have sold it at all if Earth had not become a dreary place. Good luck; you'll need it."

"Lazarus, I don't expect to succeed. I will *try*. But if I fail, I'll resign and migrate anyhow. To Tertius if I can organize a party large enough for a viable colony. To some planet colonized but very thinly settled if not."

"Do you mean that, Ira? Or, when the time comes, will you kid yourself that it is really your duty to hang on? If a man has the temperament for power—and you have or you wouldn't be where you are—he finds it hard to abdicate."

"I mean it, Lazarus. Oh, I like to run things; I know it. I hope to lead the Families on their third Exodus. But I don't expect to. However, I think my chances of putting together a viable colony—of young people, not over a hundred years old, two hundred at most—without the aid of the Foundation, are fairly good. But if I fail in that, too"—he shrugged— "migration will be the only worthwhile course open to me; Secundus will have nothing more to offer." Weatheral added, "Perhaps I feel as you do, sir, in a minor way. I have no wish to be Chairman Pro Tem all my days. I've had almost a century of it; that's enough. If I can't put this over."

Lazarus was thoughtfully silent; Weatheral waited.

"Ira, install that suicide switch for me. But tomorrow. Not today."

"Yes, sir."

"Don't you want to know why?" Lazarus picked up the large envelope, his will. "If you convince me that you are going to migrate, come hell or high water and no matter what the Trustees do, I want to rewrite this. My investments and cash accounts here and there—if somebody hasn't stolen them while my back was turned—add up to a nice piece of change. Possibly enough to make the difference between success and failure in mounting a migration. If the Trustees won't back it with Foundation funds. And they won't."

Weatheral said nothing. Lazarus glared at him. "Didn't your mother teach you to say 'Thank you'?"

"For what, Lazarus? For giving me something after you're dead and no longer need it? If you do this, it will be to tickle your vanity—not to please me."

Lazarus grinned. "Hell, yes. I ought to stick in a condition that you name the planet 'Lazarus.' But I would have no way to enforce it. Okay, we understand each other. And I think— Do you respect good machinery?"

"Eh? Yes. As much as I despise machinery that doesn't do what it is putatively designed to do."

"We still understand each other. I think I'll leave the 'Dora'-that's my yacht-to you personally rather than to the Families' chairman…*if* you lead a migration."

"Uh…you tempt me to thank you."

"Don't. Just be good to her. She's a sweet craft, she's never known anything but kindness. She'll make a fine flagship for you. With simple reoutfitting—specs for it in her computer—she'll house a staff of twenty or thirty. And you can ground and reconnoiter in her, then lift off again—which your transports won't be able to do, most likely."

"Lazarus…I don't want to inherit either money or a yacht from you. Let them finish your rejuvenation—and come

with us, man! I'll step aside and you can boss. Or you can have no duties at all. But come!"

Lazarus smiled bleakly and shook his head. "I've been on six such colonizing ventures to virgin planets, not counting Secundus. All to planets I discovered. Gave it up centuries back. Anything gets boring in time. Do you think Solomon serviced *all* his thousand wives? If so, what sort of job did he do on the last one?—poor girl! Find me something new to do and I might never touch that suicide switch and still give you all I've got for your colony. It 'ud be a fair swap…as this halfway rejuvenation is most unsatisfactory; I don't feel well, yet I can't die. So I'm stuck between the suicide switch and giving in for the full treatment…the donkey that starved to death between two piles of hay. But it would have to be new, Ira, not something I've done over and over again. Like that old whore, I've climbed the same stairs too many times; my feet hurt."

"I'll think about the problem, Lazarus. I'll give it hard and systematic research."

"Seven to two you can't find *anything* I haven't done."

"I'll make a real try. You'll lay off the suicide switch while I research it?"

"No promises. Not once I get this will redrafted. Can you trust your chief legal eagle? May need some help…because this will"—he tapped the envelope— "leaving everything to the Families would stand up on Secundus no matter how many flaws are in it. But if I leave it to a private party—you, I mean—some of my descendants—quite a passel —will scream 'undue influence' and try to break it. Ira, they'll keep it tied up in court until it's dribbled away in legal fees. Let's avoid that, eh?"

"We can. I've made changes in the rules. On this planet a man can put his will through probate before his death, and if there are flaws, the court is required to help him rephrase it to accomplish his purposes. If he does it that way, no contest can be entertained by any court; it goes automatically into effect on his death. Of course if he changes his will, the new will must go through the same process—which makes changing his mind expensive. But by using preprobate, it does not take a lawyer for even the most complex will. And the lawyers can't touch it afterwards."

Lazarus' eyes widened with pleasure. "Didn't you annoy a few lawyers?"

"I've annoyed so many," Ira said dryly, "that every transport to Felicity has voluntary migrants in it—and so many lawyers have annoyed *me*, that some are involuntary ones." The Chairman Pro Tens looked sourly amused. "Once I said to my Chief Justice, 'Warren, I've bad to reverse too many of your decisions. You've been splitting hairs, misinterpreting the rules, and ignoring equity ever since you came into office. Go home; you're under house arrest until the 'Last Chance' lifts. You can have an escort during daylight hours to let you wind up your private affairs."

Lazarus chuckled. "Shoulda hanged him. You know what he did, don't you? Set up shop again on Felicity and went into politics. If they didn't lynch him."

"His problem and theirs, not mine. Lazarus, I *never* let a man be executed for being a fool—but if he's too obnoxious, I ship him out. There's no need to sweat over your new will if you want one. Just dictate it with any elaborations and explanations you see fit. Then we'll run it through a semantic analyzer to rephrase it into airtight legal language. Once it satisfies you, you can submit it to the High Court—which will come to you if you prefer—and the Court will validate it. Done that way it could then be overturned only by arbitrary act of a new Chairman Pro Tem. Which I consider most unlikely; the Trustees do not place such men in office."

Weatheral added, "But I hope you will take plenty of time, Lazarus. I want a fair chance to search for something new, something that will restore your interest in life."

"All right. But don't dally; I won't be put off with a Scheherazade gag. Have them send me a recorder—tomorrow morning, say."

Weatheral seemed about to speak, did not. Lazarus looked at him sharply. "*This* conversation is being recorded?"

"Yes, Lazarus. Sound and holography, everything that happens in this suite. But—your pardon, sir!—it goes only to my desk and does not become a permanent record until I have checked and okayed it.

Nothing so far, that is."

Lazarus shrugged. "Forget it. Ira, I learned centuries back that there is no privacy in any society crowded enough to need ID's. A law guaranteeing privacy simply insures that bugs—microphones and lenses and so forth—are that much harder to spot. I hadn't thought about it up till now because I take it for granted that.. my privacy will be invaded any time I visit such places—then I ignore it unless I'm up to something the local law won't like. In which case I use evasive tactics."

"Lazarus, that record can be wiped. Its only purpose is to make me certain that the Senior is being properly taken care of—a responsibility I will not delegate."

"I said, 'Forget it.' But I'm surprised at your naiveté, a man in your position, in thinking that the record is piped only to your desk. I'll lay long odds, any amount you like, that it goes one, two, even three or more other places."

"If so, Lazarus, and I can find it out, Felicity will have some new colonists—after they've spent some unpleasant hours in the Colosseum."

"Ira, it doesn't matter. If any fool wants to watch an old, old man grunting on the pot or taking a bath, he's welcome. You yourself insured that it would happen by making a point of the record being secret, your eyes only. Security people always spy on their bosses; they can’t help it, it's a syndrome that goes with the job. Have you had dinner? I'd be pleased to have you stay if you have time."

"I would be honored indeed to have dinner with the Senior."

"Oh, knock it off, Bud; there's no virtue in being old, it just takes a long time. I'd like you to stay because I'm enjoying human companionship. Those two over there are no company; I'm not even sure they're human. Robots, maybe. Why do they wear those diving suits and shiny helmets. I like to see a man's face."

"Lazarus, those are total isolation garments. For your protection, not theirs. Against infection."

"*What*? Ira, when a bug bites me, the bug dies. Even so, since they have to wear that, how is it that you come in wearing street clothes?'

"Not quite, Lazarus. For my purpose I needed a social talk, fake to face. So the last two hours before I came in I spent undergoing a most careful physical examination, followed by scalp-to-toe sterilization of skin, hair, ears, nails, teeth, nose, throat-even a gas inhalation which I can't name but did not like—while my clothes were sterilized even more thoroughly. Even that envelope I fetched to you. This suite is sterile and kept so."

"Ira, such precautions are silly. Unless my immunity has been intentionally lowered?"

"No. Or let me say, 'I think not.' No reason for it as any transplant will of course be done from your own clone."

"So it's unnecessary. If I didn't catch anything in that flophouse, why would I catch anything now? But I don't catch things. I worked as a physician during a plague—don't look surprised; medicine is just one of fifty-odd trades I've followed. Unknown plague on Ormuzd; everybody caught it, twentyeight percent died. Save yours truly, who didn't ever have a sniffle. So tell those— No, you'll want to do it through the Director of the Clinic; bypassing your chain-of-command ruins morale-though why I should care about this organization's morale I don't know, seeing that I am an involuntary guest. Tell the Director that, if I must have nurses, I want them to dress like nurses. Or, better yet, like people. Ira, if you want cooperation out of me of any sort, you'll start by cooperating with *me*. Otherwise I'm going to take the joint apart with my bare hands."

"I'll speak to the Director, Lazarus."

"Good. Now let's have dinner. But a drink first—and if the Director doesn't think I should have one, tell him bluntly that he will have to go back to force-feeding and there is some question as to whose throat the tube will go down; I'm in no mood to be pushed around. Is there any real whisky on this planet? Wasn't the last time I was here."

"Not that I would drink. But the local brandy I think well of."

"Good. Brandy and bubbles for me if that is the best we can do, a brandy Manhattan if anyone knows what I mean by that."

"I do, and like them-I learned something about ancient drinks when I studied your life."

'Pine. Then please order for us, drinks and dinner—and I'll listen and see how many words I can pick up. I think my memory is coining back a bit."

Weatheral spoke to one of the technicians; Lazarus interrupted. "That should be one-*third* sweet vermouth, not one-half."

"So? You understood it?"

"Mostly. Indo-European roots, with a simplified syntax and grammar; I'm beginning to recall it. Damn it, when a man has had to learn as many languages as I have, it's easy for one to slip away. But it's coming back."

Service was so fast as to cause one to suspect that a crew was standing by ready to produce anything that the Senior or the Chairman Pro Tem asked for.

Weatheral raised his glass. "Long life."

"In a pig's eye," Lazarus growled and took a sip. He made a face. 'Whew! Panther sweat. But it does have alcohol in it." He took another. "Improves as your tongue gets numb. Okay, Ira, you've stalled long enough. What was your *real* reason for snatching me back from my well-earned rest?'

"Lazarus, we need your wisdom."

PRELUDE

II

Lazarus stared in horror. "*What* did you say?"

"I said," Ira Weatheral repeated, "that we need your wisdom, sir. We do."

"I thought that I was off again in one of those before-dying dreams. Son, you've come to the wrong window. Try across the hall."

Weátheral shook his head. "No, sir. Oh, it isn't necessary to use the word 'wisdom' if it offends you. But we do need to learn what you know. You are more than twice as old as the next oldest member of the Families. You mentioned that you have practiced more than fifty professions. You've been everywhere, you've seen far more than anyone else. You've certainly learned more than any of the rest of us. We aren't doing things much better now than we were two thousand years ago, when you were young. You must know why we are still making mistakes our ancestors made. It would be a great loss if you hurried your death without taking time to tell us what you have learned."

Lazarus scowled and bit his lip. "Son, one of the few things I've learned is that humans hardly ever learn from the experience of others. They learn—when they do, which isn't often—on their own, the hard way."

"That one statement is worth recording for all time."

"*Hmm*! No one would learn anything from it; that's what it says. Ira, age does not bring wisdom. Often it merely changes simple stupidity into arrogant conceit. Its only advantage, so far as I have been able to see, is that it spans change. A young person sees the world as a still picture, immutable. An old person has had his nose rubbed in changes and more changes and still more changes so many times that he knows it is a moving picture, forever changing. He may not like is—probably doesn't; *I* don't—but he knows it's so, and knowing it is the first step in coping with it."

"May I place in open record what you have just said?"

"Huh? That's not wisdom, that's a cliché. An obvious truth. Any fool will admit that, even if he doesn't live by it."

"It would carry greater weight with your name on it, Senior."

"Do as you like; it's just horse sense. But if you think I have gazed upon the naked Face of God, think again. I haven't even begun to find out how the Universe works, much less what it is for. To figure out the basic questions about this World it would be necessary to stand outside and look at it. Not inside. No, not in two thousand years, not in twenty thousand. When a man dies, he may shake loose his local perspective and see the thing as a whole."

"Then you believe in an afterlife?"

"Slow up! I don't *'believe'* in anything. I *know* certain things—little things, not the Nine Billion Names of God—from experience. But I have no beliefs. Belief gets in the way of learning."

"That's what we want, Lazarus: what you have learned. Even though you say it's nothing but 'little things.' May I suggest that anyone who has managed to stay alive as long as you have must necessarily have learned many things, or you could not have lived so long? Most humans die violent deaths. The very fact that we live so much longer than our ancestors did makes this inevitable. Traffic accident, murder, wild animals, sports, pilot error, a slippery bit of mud—eventually something catches up with us. You haven't lived a safe, placid life—quite the contrary!—yet you have managed to outwit all hazards for twentythree centuries. *How*? It can't be luck."

"Why can't it be? The most unlikely things do happen, Ira there is nothing so unlikely as a baby. But it's true that I've always watched where I put my feet...and never fought when I could duck out...and when I did have to fight, I always fought dirty. If I had to fight, I wanted *him* to be dead instead of *me*. So I tried to arrange it that way. Not luck. Or not much, anyway." Lazarus blinked thoughtfully. "I've never argued with the weather. Once a mob wanted to lynch me. I didn't try to reason with them; I just put a lot of miles between me and them as fast as I could and never went back there."

"That's not in any of your memoirs."

"Lots of things not in my memoirs. Here comes chow."

The door dilated, a dining table for two glided in, positioned itself as the chairs separated for it, and started unfolding to serve. The technicians approached quietly and offered unnecessary personal service. Weatheral said, "Smells good. Do you have any eating rituals?'

"Eh? Praying or such? No."

"Not that sort. Such as— Say one of my executives eats with me: I won't let him discuss business at the table. But if you will permit, I would like to continue this conversation."

"Certainly, why not? As long as we stick to subjects that don't rile the stomach. Did you ever hear what the priest told the old maid?"

Lazarus glanced at the technician at his elbow. "Perhaps not now. I think this shorter one is female and she just might know some English. You were saying?"

"I was saying that your memoirs are incomplete. Even if you are determined to go through with dying, won't you consider granting me and your other descendants the rest of your memoirs? Simply talk, tell us what you've seen and done. Careful analysis might teach us quite a lot. For example, what *did* happen at that Families Meeting of 2012? The minutes don't tell much."

"Who cares now, Ira? They're all dead. It would be my version without giving them a chance to answer back. Let sleeping dogs bury their own dead. Besides, I told you my memory was playing tricks. I've used Andy Libby's hypno-encyclopedic techniques—and they're good —and also learned tier storage for memory I didn't need every day, with keying words to let a tier cascade when I did need it, like a computer, and I have had my brain washed of useless memories several times in order to clear those file drawers for new data—and still it's no good. Half the time I can't remember where I put the book I was reading the night before, then waste a morning looking for it—before I remember that *that* book was one I was reading a century ago. Why won't you leave an old man in peace?"

"All you have to do is to tell me to shut up, sir. But I hope you will not. Granted that memory is imperfect, nevertheless you were eyewitness to thousands of things the rest of us are too young to have seen. Oh, I’m not asking you to reel off a formal autobiography covering all your centuries. But you might reminisce about anything you care to talk about. For example, there is no record anywhere of your earliest years. I—and millions of others—would be extremely interested in whatever you remember of your boyhood."

"What is there to remember? I spent my boyhood the way every boy does—trying to keep my elders from finding out what I was up to."

Lazarus wiped his mouth and looked thoughtful. "On the whole I was successful. The few times I was caught and clobbered taught me to be more careful next time—keep my mouth shut more and not make my lies too complicated. Lying is one of the fine arts, Ira, and it seems to be dying out."

"Really? I had not noticed any diminution."

"I mean as a fine art. There are still plenty of clumsy liars, approximately as many as there are mouths. Do you know the two most artistic ways to lie?"

"Perhaps I don't but I would like to learn. Just two?"

"So far as I know. It's not enough to be able to lie with a straight face; anybody with enough gall to raise on a busted flush can do that. The first way to lie artistically is to tell the truth—but not all of it. The second way involves telling the truth, too, but is harder: Tell the exact truth and maybe all of it…but tell it so unconvincingly that your listener is sure you are lying.

"I must have been twelve, thirteen years old before I got that one down pat. Learned it from my maternal Grampaw; I take after him quite a lot. He was a mean old devil. Wouldn't go inside a church or see a doctor—claimed that neither doctors nor preachers know what they pretend to know. At eighty-five he could crack nuts with his teeth and straight-arm a seventy-pound anvil by its horn. I left home about then and never saw him again. But the Families' Records say that he was killed in the Battle of Britain during the bombing of London, which was, some years after."

"I know. He's my ancestor, too, of course, and I'm named for him, Ira Johnson."* (* (1) Ira Johnson was less than eighty at the time the Senior claims (elsewhere) to have left home. Ira Johnson was-himself a Doctor of Medicine. How long he practiced, and whether or not he ever let another Doctor of Medicine attend him,-are not known. J.F.45th

(2) *Ira* Howard—*Ira* Johnson—This appears to be a chance coincidence of given names at a time when Biblical names were common. Families' genealogists have been unable to trace any consanguinity. J.F.45th)

"Why, sure enough, that was his name. I just called him 'Gramp.'"

"Lazarus, this is exactly the sort of thing I want to get on record. Ira Johnson is not only your grandfather and my remote grandfather but also is ancestor to many million people here and elsewhere—yet save for the few words you have just told me about him, he has been only a name, a date of birth, and a date of death, nothing more. You've suddenly brought him alive again—a man, a unique human being. Colorful."

Lazarus looked thoughtful. "I never thought of him as 'colorful.' Matter of fact he was an unsavery old coot—not a 'good influence'—for a growing boy by the standards of those times. Mmm, there was something about a young school marm and him in the town my family had lived in, some scandal—'scandal' for those days, I mean—and I think that was why we moved. I never got the straight of it as the grownups wouldn't talk about it in front of me.

"But I did learn a lot from him; he had more time to talk with me-or took more time-than my parents had, Some of it stuck. 'Always cut the cards, Woodie,' he would say. 'You may lose anyhow—but not as often, nor as much. And when you do, lose, *smile*.' Things like that."

"Can you remember any more of what he said?"

"Huh? After all these years? Of course not. Well, maybe. He had me out south of town teaching me to shoot. I was maybe ten and he was-oh, I don't know; he always seemed ninety years older than God to me.* (* Ira Johnson was seventy when Lazarus Long was ten. J.F. 45th) He pinned up a target, put one in the black to show me it could be done, then handed me the rifle—little .22 single-shot, not good for much but targets and tin cans—'All right, it's loaded; do just what I did; get steady on it, relax and squeeze.' So I did, and all I heard was a *click*—it didn't fire.

"I said so, and started to open the breech. He slapped my hand away, took the rifle from me with his other hand-then clouted me a good one. 'What did I tell you about hangfires, Woodie? Are you aching to walk around with one eye the rest of your life? Or merely trying to kill yourself? If the latter, I can show you several better ways.'

"Then he said, 'Now watch closely'—and *he* opened the breech. Empty. So I said, 'But, Gramp, you *told* me it was loaded.' Shucks, Ira, I *saw* him load. it—I thought.

"'So I did, Woodie,' he agreed. 'And I lied to you. I went through the motions and palmed the cartridge. Now what did I tell you about loaded guns? Think hard and get it right…or I'll be forced to clout you again to shake up your brains and make 'em work better.'

"I thought fast and got it right; Gramp had a heavy hand. 'Never take anybody's word about whether a gun is loaded.'

"'Correct,' he agreed. 'Remember that all your life—and follow it!—or you won't live long.' *(This anecdote is too obscure to be elaborated here. See Howard Encyclopaedia: Ancient weapons, chemical-explosives firearms.)*

"Ira. I did remember that all my life—plus its application to analogous situations after such firearms went out of style and it has indeed kept me alive several times.

"Then he had me load it myself, then said, 'Woodie, I'll bet you half a dollar—do you have half a dollar?' I had considerably more, but I had bet with him before, so I admitted to only a quarter. 'Okay,' he said, 'Make it two-bits; I never let 'a man bet on credit. Two-bits says you can't hit the target, much less stay in the black.'

"Then he pocketed my two-bits and showed me what was wrong with what I had done. By the time he was ready to knock off I had the basics of how to make a gun do what I wanted it to do, and wanted to bet him again. He laughed at me and told me to be thankful the lesson was so cheap. Pass the salt, please."

Weatheral did so. "Lazarus, if I could find a way to entice you into reminiscing about your grandfather—or about anything—I'm certain we could extract from such record endless things you have learned, important things—whether you choose to call them wisdom or not. In the last ten minutes you have stated half a dozen basic truths, or rules for living—call them what you will—apparently without trying."

"Such as?"

"Oh, for example, that most people learn only by experience—"

"Correction. Most people won't learn even by experience, Ira. Never underestimate the power of human stupidity."

"There's another one. And you 'made a couple of comments on the fine art of lying—three, really, as you also mentioned that a lie should never be too complicated. You said also that belief gets in the way of learning, and something about knowing a situation was the essential first step in coping with it."

"I didn't say that—although I could have said it."

"I generalized something you did say. You said also that you never 'argued with the weather…which I would generalize to mean: Don't indulge in wishful thinking. Or as 'Face up to the facts and act accordingly.' Though I prefer the way you put it; it has more flavor. And 'Always cut the cards.' I haven't played card games in many years, but I took that to mean: Never, neglect any available means of maximizing one's chances in a situation controlled by random events."

"Hmm. Gramp would have said, 'Stow the fancy talk, Sonny.'"

"So we'll put it back into his words: 'Always cut the cards…and smile when you lose.' If indeed that is not your own phrasing and simply attributed to him."

"Oh, his all right. Well, I think it is. Damn it, Ira, after a long time it is hard to tell a real memory from a memory of a memory of a memory of a real memory. That's what happens when you think about the past: You edit it and rearrange it, make it more tolerable-"

"That's another one!"

"Oh, hush up. Son, I don't want to reminisce about the past; it's a sure sign of old age. Babies and young children live in the present, the 'now.' Mature adults tend to live in the future. Only the senile live in the past…and that was the sign that made me realize that I had lived long enough, when I found I was spending more and more time thinking about the past…less of it thinking about now—and not at all about the future."

The old man sighed. "So I knew I had had it. The way to live a long time—oh, a thousand years or more—is something between the way a child does it and the way a mature man does it. Give the future enough thought to be ready for it—but don't worry about it. Live each day as if you were to die next sunrise. Then face each sunrise as a fresh creation and live for *it*, joyously. And never think about the past. No regrets, ever." Lazarus Long looked sad, then suddenly smiled and repeated, "'No regrets.' More wine, Ira?"

"Half a glass, thank you. Lazarus, if you are determined to die soon —your privilege, certainly!—what harm could there be in remembering the past now…and getting those memories on record for the benefit of your descendants? It would be a much greater legacy than leaving your wealth to us.

Lazarus' eyebrows shot up. "Son, you are beginning to bore me."

"Your pardon, sire. May I have permission to leave?"

"Oh, shut up and sit down. Finish your dinner. You remind me of— Well, there was this man on Novo Brasil who complied with the local custom of serial bigamy but was always careful to see that one of his wives was as utterly homely as the other was startlingly beautiful, so that—Ira, that dingus you have listening to us: Can it be keyed to pick out particular statements and arrange them as a separate memorandum?"

"Certainly, sir."

"Good. There's no point in telling how Ranch Master Silva?—yes, I think 'Silva' was his name, Dom Pedro Silva—how he coped with it when he found himself stuck with two beautiful wives at once, except to note that when a computer makes a mistake, it is even more stupidly stubborn about correcting it than a man is. But if I thought long and hard, I might be able to dig out those 'gems of wisdom' you think I have. Paste diamonds, that is. Then we wouldn't have to load up the machine with dull stories about Dom Pedro and the like. A key word?"

" 'Wisdom'?"

"Go wash out your mouth with soap."

"I will not. You stuck your chin into that one, Senior.

'Common sense'?"

"Son, that phrase is self-contradictory. 'Sense' is never 'common.' Make the keying word 'Notebook'—that's all I have in mind, just a notebook to jot down things I've noticed and which might be important enough to place on record."

"Fine! Shall I amend the programming now?"

"You can do it from here? I don't want' you to interrupt your dinner."

"It's a *very* flexible machine, Lazarus; the total complex is the one I use to govern this planet—to the mild extent that I do govern it."

“In that case I feel sure you can hang an auxiliary printout in here, one triggered for the keying word. I might want to revise my sparkling gems of wisdom—meaning that extemporaneous remarks sound better when they aren’t extemporaneous—or why politicians have ghost writers.”

“‘Ghost writers’? My command of Classic English is less than perfect; I don’t recognize the idiom.”

“Ira, don’t tell me you write your own speeches.”

“But, Lazarus, I don’t make speeches. Never. I just give orders, and —very seldom—make written reports to the Trustees.”

“Congratulations. You can bet that there are ghost writers on Felicity. Or soon will be.”

"I'll have that printout installed at once, sir. Roman alphabet and twentieth-century spelling? If you intend to use the language we've been talking?"

"Unless it would place too much strain on a poor innocent machine. If so, I can read it in phonetics. I think."

"It is a *very* flexible machine, sir; it taught me to speak this language—and earlier, to read it."

"Good, do it that way. But tell it not to correct my grammar. Human editors are difficult enough; I won't accept such upstart behavior from a machine."

"Yes, sir. If you will excuse me one moment—" The Chairman Pro Tem raised his voice slightly and shifted to the New Rome variant of Lingua Galacta. Then he spoke in the same language to the taller technician.

The auxiliary printout was installed before the table served them coffee.

After it was switched on, it whirred briefly. "What's it doing?" asked Lazarus. "Checking its circuits?"

"No, sir—printing. I tried an experiment. The machine has considerable judgment within the limits of its programs and memoried experience. In adding the extra program I told it also to go back, review everything you have said to me, and attempt to select all statements that sounded like aphorisms. I'm not sure it can do this, as any definition of 'aphorism' it has in its permanents is certain to be quite abstract. But I have hopes. However, I told it firmly: No editing."

"Well. 'The astounding thing about a waltzing bear is not, *how* gracefully it waltzes but that it waltzes at all.' Not me, some other bloke; I'm quoting. Let's see what it has."

Weatheral gestured; the shorter technician hurried to the machine, pulled a copy for each of them, fetched them back.

Lazarus looked his copy over. "Mmmm…yes. That next one isn't true—just a wisecrack. Must reword the third one little. Hey! It put a question mark after this one. What an impudent piece of junk; I checked that one out centuries before it was anything but unmined ore. Well, at least it didn't try to revise it. Don't recall saying *that,* 'but it's true and I durned near got killed learning it."

Lazarus looked up from the printout copy. "Okay, 'Son. If you want this stuff on record, I don't mind. As long as I am allowed to check and revise it…for I don't want my words to be taken as Gospel unless I have a chance to winnow out the casual nonsense. Which I am just as capable of voicing as the next man."

"Certainly, sir. Nothing will go into the records without your approval. Unless you choose to use that switch . . in which case any unedited remarks you have left behind I will have to try to edit myself. That's the best I can do."

"Trying to trap me, huh? Hmm— Ira, suppose I offer you a Scheherazade deal in reverse."

"I don't understand."

"Is Scheherazade lost at last? Did Sir Richard Burton live in vain?"

"Oh, no, sir! I have read *The Thousand Nights and a Night* in the Burton original…and her stories have come down through the centuries, changed again and again to make them understandable to new generations—but with, I think, the flavor retained. I simply do not understand what you are proposing."

"I see. You told me that talking with me is the most important thing you have to do."

"It is."

"I wonder. If you mean that, then you will be here every day to keep me company—and chat. For I'm not going to bother babbling to your machine no matter how smart it is."

"Lazarus, I will be not only honored but much pleased to be allowed to keep you company as long as you will let me."

"We'll see. 'When a man makes a sweeping statement, he often has mental reservations. I mean *every* day, Son, and *all* day. And you—not a deputy. Show up two hours after breakfast, say, and stay till I send you home. But any day you miss— Well, if it's so urgent you just have to miss, phone your excuses and send over a pretty girl to visit me. One who speaks Classic English but has sense enough to listen instead —as an old fool will often talk to a pretty girl who just bats her lashes at him and looks impressed. If she pleases me, I might let her stay. Or I might be so petulant that I would send her away and use that switch you promised to have reinstalled. But I won't suicide in the presence of a guest; that's rude. Understand me?"

"I think I do," Ira Weatheral answered slowly. "You'll be both Scheherazade and King Shabryar, and I'll be—no, that's not right; *I* am the one who has to keep it going for a thousand nights—I mean 'days'—and if I miss—but I won't!— you are free to—"

"Don't push an analogy too far," Lazarus advised. "I'm simply calling your bluff. If my maunderings are as all-fired important to you as you claim, then you'll show up and listen. You can skip once, or even twice, if the girl is pretty enough and knows how to tickle my vanity—of which I have plenty— just right. But if you skip too often, I'll know you're bored and the deal is off. I'm betting that your patience will' wear out long before any thousand days and a day have passed— whereas I *do* know how to be patient, for year after year if necessary; that's a prime reason I'm still alive. But you're still a youngster; I'm betting I can outsit you."

"I accept the bet. This girl—if I *must* be away some day— would you object if I sent one of my daughters? She's very pretty."

"Hunh? You sound like an Iskandrian slave factor auctioning his mother. Why your daughter? I don't want to marry her, nor even to bed her; I simply want to be amused and flattered. Who told you she was pretty? If she really is your' daughter, she probably looks like you."

"Come off it, Lazarus; you can't annoy me that easily. I admit to a father's prejudice but I've seen the effect she has on others. She is quite young, less than eighty, and has been contractually married only once. But you specified a pretty girl who speaks your milk language. Scarce. But this one of my daughters shares my talent for languages and is much excited by your presence here—*wants* to meet you. I can stall off emergencies long enough for her to become letter-perfect in your language."

Lazarus grinned and shrugged. "Suit yourself. Tell her not to bother with a chastity girdle; I don't have the energy. But I'll still win the bet. Probably without laying eyes on her; it won't take you long to decide that I am an unbearable old bore. Which I am and have been almost as long as the Wandering Jew—a crashing bore if I ever met one—did I tell you I had met him?"

"No. And I don't believe you have. He's a myth."

"A fat lot you know about it, Son. I have met him, he is authentic. Fought the Romans in 70 A.D. when Jerusalem was sacked. Fought in every Crusade—incited one of them. Redheaded of course; all of the natural long-lifers bear the mark of Gilgamesh. When I met him he was using the name Sandy Macdougal, that being a better handle for the time and placc for his current trade, which was the long con, with a variant on the badger game. (* While this passage bears inner contradictions, the idioms are authentic for North America of the twentieth century. They name certain types of financial dishonesty. See "Swindles" under "Fraud" in Krishnamurti's *New Golden Bough,* Academe Press, New Rome. J.F. 45th) The latter involved— Look, Ira, if you don't believe my stories, why are you going to so much trouble to get them on record?"

"Lazarus, if you think you can bore me to death—correction: to *your* death—why are you bothering to invent fictions to entertain me? Whatever your reasons, I'll listen as carefully—and as long—as King Shabryar. As may be, my master computer is recording whatever you choose to say—without editing; I guaranteed that—but it has incorporated into it a most subtle truth analyzer quite capable of earmarking any fictions you include. Not that I care about historicity as long as you will *talk* ... as it is clear to me that you automatically include your evaluations—those 'gems of wisdom'—no matter what you say."

"'Gems of wisdom.' Youngster, use that expression once more and you'll stay after school and clean the blackboards. That computer of yours— Better instruct it that my most outlandish tales are the ones most likely to be true—as that is the literal truth. No storyteller has ever been able to dream up anything as fantastically unlikely as what really *does* happen in this mad Universe."

"It knows that. But I will caution it again. You were telling me about Sandy Macdougal, the Wandering Jew."

"Was I? If so and if he was using that name, that must have been late in the twentieth century and in Vancouver, as I recall. Vancouver was a part of the United States where the people were so clever that they never paid taxes to Washington—Sandy should have operated in New York, which was outstanding in stupidity even then. I won't give details of his swindles; it might corrupt your machine. Let it suffice that Sandy used the oldest principle for separating a fool from his money: Pick a sucker who likes the best of it.

"That's all it takes, Ira. If a man is greedy, you can cheat him every time. Trouble was, Sandy Macdougal was even greedier than his marks, and it led him into the folly of excess, and often forced him to leave town while it was dark, sometimes leaving the boodle behind. Ira, when you skin a man, you have to let him recuperate and grow more hide—or he gets nervous. If you respect this simple rule, a real mark can be skinned over and over again, and it just keeps him healthy and productive. But Sandy was too greedy for that; he lacked patience."

"Lazarus, you sound as if you had great experience in this art."

Now Ira—a little respect please I have *never* swindled a man. At most I kept quiet and let him swindle himself. This does no harm, as a fool cannot be protected from his folly. If you attempt to do so, you will not only arouse his animosity but also you will be attempting to deprive him of whatever benefit he is capable of deriving from experience. Never attempt to teach a pig to sing; it wastes your time and annoys the pig.

"But I do know a lot about swindles. I think that every major variation of every possible swindle has been tried on me, one time and another.

"Some of them worked back when I was very young. Then I took Grampaw Johnson's advice and quit looking for the best of it; thereafter I could no longer be swindled. But I was not capable of benefiting from Gramp's advice until I was burned a few times. Ira, it's getting late."

The Chairman Pro Tem promptly stood up. "So it is, sir. May I ask two questions before I leave? Not for your memoirs, procedural questions only."

"Make it short and snappy."

"You'll have your termination-option switch tomorrow morning. But, you spoke of not feeling well, and there is no need for that even if you choose to terminate in the near future. Shall we resume the rejuvenation procedures?"

"Hmmm. Second question?"

"I promised to do my best to find something brand-new to interest you. I promised also to spend every day here with you. I see conflict."

Lazarus grinned. "Don't kid your old Grampaw, Son; you'll delegate that research."

"Certainly. But I must plan how to start it, then review progress at intervals, and suggest new avenues to explore."

"Mmm…if I consent to the full course, I'll be out of circulation a day or two every now and then."

"I believe current practice calls for one day of deep rest approximately each week, varied to suit the client's condition. My own experience is about a hundred years back; I understand there have been improvements. You've decided to take it, sir?"

"I'll tell you tomorrow—after that switch is installed. Ira, I don't make decisions in haste that don't call for haste. But if I consent, you'll have free time to use as you see fit. G'night, Ira."

"Good night, Lazarus. I hope you decide to accept it." Weatheral turned toward the door, stopped halfway there, and spoke to the technicians—who left the room at once. The dining table scurried after them. Once the door had shut down Weatheral turned and-faced Lazarus Long. "Grandfather," he said softly, his voice somewhat choked. "Uh—may I?"

Lazarus had let his chair sink back into a reclining couch that held him, hammocklike, as tenderly as a mother's arms. At the younger man's words he raised his head. "Huh? What? *Oh!* All right, all right, come here—Grandson." He reached out one arm to Weatheral.

The Chairman Pro Tem hurried to him, took Lazarus' hand, dropped to his knees and kissed it.

Lazarus snatched his hand back. "For Pete's sake! Don't kneel to me—don't *ever* do that. If you want to be my grandson, treat me as such. Not that way."

"Yes, Grandfather." Weatheral got to his feet, leaned over the old man, and kissed his mouth.

Lazarus patted his cheek. "You're a sentimentalist, Grandson. But a good boy. Trouble is, there never has been much demand for good boys. Now get that solemn expression off your face and go home and get a good night's rest."

"Yes, Grandfather. I will. Good night."

"Good night. Now beat it."

Weatheral left quickly. The technicians jumped aside as he came out, then went back into the suite. Weatheral continued on, ignoring people around him but with a softer, gentler expression on his face than was his wont. He went past a bank of transports to the Director's private transport; it opened to his voice, then conveyed him quickly into the bowels of the city and directly to the Executive Palace.

Lazarus looked up as his attendants came back in; he motioned the taller one to him. The technician's voice, filtered and distorted by the helmet, said carefully, "Bed…sir?'

"No, I want—" Lazarus paused, then spoke to the air, "Computer? Can you speak? If not, print it out."

"I hear you, Senior," a mellifluous, contralto voice answered. "Tell this nurse that I want whatever they are allowed to give me for pain. I have work to do."

"Yes, Senior." The disembodied voice shifted to Lingua Galacta, was answered in kind, then went on: "Master Chief Technician on duty wishes to know the nature and location of your pain, and adds that you should not work tonight."

Lazarus kept silent while he counted ten chimpanzees in his mind. Then he said softly, "Damn it, I hurt *everywhere.* And I don't want advice from a child. I have loose ends to tidy up before I sleep… because one never knows that one will wake up again. Forget the painkiller, it ain't all that important. Tell 'em to get out and stay out."

Lazarus tried to ignore the ensuing exchange, as it annoyed him that he almost-not-quite understood it. He opened the envelope Ira Weatheral had returned to him, then opened out his will—a long bellows-fold of computer printout—and started reading it while whistling off key.

"Senior, Master Chief technician on duty states that you have given a null order, which is a true statement by the Clinic's regulations. A general analgesic is forthcoming."

"Forget it." Lazarus went on reading, and shifted to singing softly the tune he had been whistling:

"There's a pawnshop on the corner
Where I usually keep my overcoat.

"There's a bookie
Behind the pawnshop
Who handles my investments"

(This doggerel is attributed to the twentieth century. See appendix for semantic analysis. *J.F.45th*)

The taller technician appeared at his elbow, carrying a shiny disk with attached tubing. "For…pain."

Lazarus made a brushoff gesture with his free hand. "Go 'way, I'm busy."

The shorter technician appeared on his other side. Lazarus looked that way and said, "What do *you* want?"

As he turned his head the taller technician moved quickly; Lazarus felt a sting in his forearm. He rubbed the spot and said, "Why, you rapscallion. Foxed me, didn't you? All right, beat it. Raus. Scat!" He dismissed the incident from his mind and returned to work. A moment later he said:

"Computer!"

"Awaiting your orders, Senior."

"Record this for printout. I, Lazarus Long, sometimes known as the Senior and listed in the Howard Families' Genealogies as Woodrow Wilson Smith, born 1912, do declare this to be my last will and testament— Computer, go back through my talk with Ira and dig out what I said I wanted to do to help him lead a migration—got it?"

"Retrieved, Senior."

"Fix up the language and tack it onto my opening statement. And —let me see—add something like this: In the event Ira Weatheral fails to qualify for inheritance, then all my worldly wealth of which I die possessed shall go to, uh, to—to found a home for indigent and superannuated pickpockets, prostitutes, panhandlers, piemen, priggers, and other unworthy poor starting with 'P'. Got it?"

"Recorded, Senior. Please be advised that this alternative has a high probability of being nullified if tested by the current rules of this planet."

Lazarus expressed a rhetorical and physiologically improbable wish. "All right, set it up for stray cats or some other useless but legally acceptable purpose. Search your permanents for such a purpose that *will* get by the courts. Just be certain that the Trustees can't get their hands on it. Understand?'

"There is no way to be certain of that, Senior, but it will be attempted."

"Look for a loophole. Print that out as fast as you can research it and put it together. Now stand by for a memorandum of my assets. Begin." Lazarus started to read the list, found that his eyes were blurring and would not focus. "Damnation! Those dummies slipped me a Mickey and it's taking hold. Blood! I must have a drop of my own blood to thumbprint it! Tell those dummies to help me and tell them why—and warn them that I will bite my tongue to get it if they won't help me. Now print out my will with any feasible alternative—but *hurry!"*

“Printout starting,” the computer answered quietly, then shifted to Galacta.

The “dummies” did not argue with the computer; they moved fast, one snatching the new sheet out of the auxiliary printout the instant it stopped whirring, the other producing a sterile point out of nowhere and stabbing the ball of Lazarus’ left little finger after giving Lazarus a split second to see what was being done.

Lazarus did not wait for blood to be taken by pipette. He squeezed the stabbed finger for a drop, rubbed his right thumb in it, then print-signed his will while the shorter technician held it for him.

Then he sank back. “It’s done,” he whispered. “Tell Ira.” He was heavily asleep at once.

COUNTERPOINT

I

The chair gently transferred Lazarus to his bed while the technicians silently supervised. Then the shorter watched the readouts on respiration, heart action, brain rhythms, and other physicals while the taller placed the documents, old will and new, in an impervolope, sealed it, chopped and thumbprinted the seal, marked it “Surrender only to the Senior and/or Mr. Chairman Pro Tem,” then retained it until their reliefs arrived.

The relief chief technician listened to the record of the watch, glanced over the physicals, studied the sleeping client.

“Timed,” he stated.

“Neolethe. Thirty-four hours.”

He whistled. “Another crisis?”

“Less severe than the last. Pseudopain with irrational irascibility. Physicals within limits for this stage.”

“What’s in the sealer?”

“Just sign for it and include delivery instructions in your receipt.”

“Pardon me for using up oxygen!”

“Your receipt, please.”

The relief wrote out a receipt, chopped and thumbed it, swapped it for the impervolope. “I relieve you,” he said brusquely.

“Thank you.”

The shorter technician was waiting at the door. The Master Chief Technician paused to say, “You needn’t have waited. It sometimes takes me three times this long to turn over the watch. You are free to leave as soon as the relief junior watch officer arrives.”

“Yes, Master Chief Technician. But this is a *very* special client—and

I thought you might need me with Mr. Snoopy Nose."

"I can cope with him. Yes, a very special client indeed and it speaks well for you that the Skills Board assigned you to me when your predecessor opted out."

"Thank you!"

"Don't thank me, Associate Technician." The voice, although distorted by helmet and relay and filter, sounded gentle even though the words were not. "That was not a compliment but a statement of fact. If you had not done well on your first watch, there would be no second watch—as you say, 'a very special client.' You did well…aside from nervousness a client can feel even though he can't see your face. But you'll get over that."

"Uh…I hope so. I was very nervous!"

"I would rather have an assistant keyed up tight than one who knows it all and is sloppy. But you should be home now and resting. Come along; I'll drop you off. Where do you robe? The intermediate lounge? I go past it."

"Oh, don't bother about me! But I'll ride with you if I may—then take the car back."

"Relax! Once off duty, there are no ranks among us who follow the Vocation. Didn't they teach you that?" They moved past the queue at the public transports, on past the Director's own, stopped at the smaller bank for executives.

"Yes, but—I've never been assigned to anyone of your rank before."

That got a chuckle. "All the more, reason to follow that rule with me—because the higher one is, the more one needs to forget it off duty. Here's an empty car. In you go and sit down."

The shorter one went in but did not sit down until the Master Chief Technician was seated. The boss rejuvenator ignored it, set the controls, sprawled out, and sighed, as the car started to move. "I feel the strain myself. Coming off watch, I feel as old as *he* is."

"I know. I'm wondering if I can take it. Chief? *Why* won't they let him terminate? He seems so tired."

The answer was slow and not responsive. "Don't call me 'Chief.' We're off duty."

"But I don't know your name."

"Nor do you need to know it. Hmm— The situation is not quite as it appears to be; he has suicided four times already."

"What?"

"Oh, he doesn't remember it. If you think his memory is bad now, you should have seen him three months ago. Actually, it speeds up our work every time he does it. His switch—when he had it—was gimmicked; it simply made him unconscious, then we would go ahead with whatever stage was next while hypnoing more of his memory tapes into him. But we had to stop that—and remove the switch—a few days ago; he remembered who he is."

"But— That's not by the Canons! 'Death is every man's privilege.'"

The Master Chief Technician touched the emergency control; the car continued on, found a parking pocket, and stopped. "I did not say that it was covered by the Canons. But watch officers do not set policy."

"When I was accepted, I took the oath…and part of it was to 'give life freely to those who wish it…and never refuse death to those who yearn for it.'"

"Don't you think I took the same oath? The Director is so angry that she has gone on leave—she may resign; I wouldn't venture to guess. But the Chairman Pro Tem is not of our Vocation; he is not bound by our oath, and the motto up over the entrance means nothing to him. *His* motto is—or seems to be—'Every rule has exceptions.' Look, I knew I would have to have this talk with you and I'm pleased that you've given me an opportunity before our next watch. Now I must ask you—do you wish to opt out? It won't affect your record; I'll see to that. Don't worry about a relief; the Senior will still be asleep when I next go on watch and any assistant will do for that watch—which leaves time for the Skills Board to select your replacement."

"Uh— I *want* to attend him. It's a great privilege, one I never dreamed would come my way. But I'm torn. I don't think he's being treated fairly. And who is more entitled to fair treatment in this than the Senior?"

"I'm torn by it, too. I was shocked silly the first time I realized that I was being ordered to keep alive a man who had terminated voluntarily. Or who had been allowed to think that he was terminating, rather. But, my dear colleague, the choice is *not* up to us. This job will be done no matter what we think. Once I realized that—well, I am not lacking in professional confidence—call it conceit. I think I am the best-qualified senior watch officer on the list. I decided that, if the Families' Senior was going to have this done to him, I would not opt out and let it be done by colleagues less skilled than I am. Bonuses had nothing to do with it; I've assigned my bonuses to the Sanctuary for Defectives."

"I could do that, couldn't I?"

"Yes, but you would be a fool to do so; I draw far more than you do. But I must add this: I hope your body tolerates stimulants easily because I supervise every major procedure and expect my assistant to help, whether it falls during our regular watch or not."

"I don't need stimulants; I use autohypnosis. When needed. Seldom. He'll be asleep our next watch. Mmm—"

"Colleague, I want your answer *now.* So that I can notify the Skills Board if necessary."

"Uh— I'll stick! I'll stick as long as you do."

"Good. I thought you would." The Master Chief Technician again reached for the controls. "Intermediate lounge now?"

"Just a moment. I would like to know you better."

"Colleague, if you stick, you'll know me far too well. I have a sharp tongue."

"I meant socially, not professionally."

"Well!"

"You are offended? I've come to admire you without ever having seen you. Now I would like to see you. I'm not trying to curry favor."

"I believe you. Grant me the respect of believing that I studied your psych scores before I accepted the Board's choice. No, I'm not offended; I'm flattered. Dinner together sometime, perhaps?"

"Certainly. But I had more in mind. What would you say to 'Seven Hours of Ecstasy'?"

There was a short pause, which felt long. The Master Chief Technician said, "Colleague, what sex are you?"

"Does it matter?"

"I suppose not. I accept. Now?"

"If it suits you."

"It does. I was simply going to my compartment, read a while, and sleep. Shall we go there?"

"I was thinking of taking you to Elysium."

"No need to. Ecstasy is in the heart. But thank you."

"I can afford it. Uh, I'm not dependent on my salary. I can easily afford the best Elysium has to offer."

"Perhaps another time, dear colleague. But a resident's compartment here in the Clinic is quite comfortable and at least an hour closer not counting the time we would waste getting out of isolation armor and dressed to face the public. We'll go straight to my place. I find I'm eager. Goodness, I haven't chanced this sort of lark in —far too long."

Four minutes later the Master Chief Technician let them into the compartment—large, as promised, and handsome and airy—a "happy" suite. A simulacrum fire blazed merrily in a corner fireplace and cast dancing lights around the lounging room. "You'll find a guests' dressing room through that door, 'fresher beyond it. The chute for disposables is on the left, racks for helmets and isolation gear on the right. Need help?"

"No, thank you, I'm quite limber."

"Well, shout if you need anything. Meet me here in front of the fire in ten minutes, say?"

"Suits."

The Associate Tech came out in only a little over ten minutes, free at last of isolation armor and looking even shorter in bare feet and without helmet. The Master Chief Tech looked up from the hearth rug. "Oh, there you are! You're *male!* I'm surprised. But pleased."

"And you're female. And *I* am *very* pleased. But I don't believe for an instant that you are surprised. You've seen my records."

"No, dear," she denied. "Not your personal dossier, just the brief the Board supplies to a prospective supervisor—and they are meticulously careful to keep name and sex and other irrelevancies out of it; their computer program sees to that. I did *not* know, and my guess was wrong."

"I didn't try to guess. But I certainly am pleased. I don't know why I have this special liking for tall women. But I do. Stand up and let me look at you."

She squirmed lazily. "What an irrational criterion. All women are the same height—lying down. So come lie down here; it's very comfortable."

"Woman, when I say 'Stand up!' I expect action."

She giggled. "You're an atavism. But pretty." She made a long arm, got him by an ankle, snatched him off balance. He went down. "That's better. Now we're the same height."

COUNTERPOINT

II

She said. "Would you like a middle-of-the-night lunch? Sleepyhead."

He said, "I did doze off, didn't I? I had reason. Yes, I would. What am I being offered?"

"Name it, just name it. If I don't have it, I'll send for it. I'm feeling very-mellow toward you, dear."

"All right, how about ten tall sixteen-year-old redheaded virgins? Girls, I mean."

"Yes, darling. Nothing is too good for my Galahad. Although if you insist on certified virgins, it may take longer. Why this fetish, dear man? Your psych profiles didn't hint at any exotic abnormality."

"Cancel that order and make it one dish of mango ice cream."

"Yes, sir, I'll send for it at once. Or you can have fresh peach ice cream instantly. Tease. I haven't been bothered by that sort of teasing since I was sixteen myself. A long time ago."

"I'll settle for peach. A *very* long time ago."

"Right away, dearest man. Will you eat it with a spoon, or shall I plaster it on your face? Nor by that sort of teasing. I've had one rejuvenation just as you have had, and I keep my cosmetic age younger than yours."

"A man needs to look mature."

"And a woman prefers to look young; we always have. But I know not only your rejuvenated age, but your calendar age, Galahad—and my calendar age is less than yours. Want to know how I know, dear? I recognized you the instant I saw you. I helped rejuvenate you, darling—and I'm most pleased that I did."

"The devil you say!"

"But I *am* pleased, dear man. Such a nice bonus, and so unexpected. One so seldom sees a client again. Galahad, do you realize that we did not use *any* of the routine to insure an ecstatic holiday together? Yet I haven't missed it. I feel younger and happier than I have in years. Still do."

"Me, too. Except that I don't see any peach ice cream.

"Pig. Beast. Brute. I'm bigger than you are; I'll trip you and fall on you. How many scoops, dear?"

"Oh, just pile it in until your arm gets tired; I need to restore my strength."

He followed her into the pantry, served them both with heaping dishes of ice cream. "Just a precaution," he said, "so I won't get it plastered in my face."

"Oh, tut, now! You don't really think I would do that to my Galahad."

"You're a very erratic female, Ishtar. I have bruises to prove it."

"Nonsense! I was gentle."

"You don't know your own strength. And you are bigger than I am, as you noted. Instead of 'Ishtar' I should have named you for that—what was her name? Queen of the Amazons in Old Home mythology."

"'Hippolyta,' dear. But I can't qualify as an Amazon, for reasons you were flattering about…in an infantile way."

"Complaints, huh? Over in Surgery they could correct your disqualification in ten minutes and never leave a scar. Never mind, 'Ishtar' fits you better. But there is something unfair about this."

"How, dear? Let's take this in and eat in front of the fire."

"Suits. Like this, Ishtar. You tell me I was your client and that you recall both my ages, so by masterly logic I deduce that you know my registered name and Family, and you may even remember some of my genealogy since you must have studied it for my rejuvenation. But by the customs of 'Seven Hours' I am precluded from even trying to learn your registered name. I have to tag you in my mind as 'that tall blond Master Chief Technician who—'"

"I still have enough ice cream to plaster you!"

"—permitted me to call her "Ishtar" for the happiest seven hours of my life.' Which are almost over and I don't know that you will let me take you to Elysium someday."

"Galahad, you are the most exasperating sweetheart I've ever had. Of course you can take me to Elysium. And you *don't* have to go home at the end of seven hours. And my registered name *is* Ishtar. But if you ever mention my rank other than when necessary, on duty, you'll have real bruises to remember me by. Big ones."

"Bully. I'm scared. I do think I should leave on time, so that you can get your quota of sleep before we're due back on watch. But what's this about your name really being 'Ishtar'? Did I roll five aces when we named each other?"

"Yes and no."

"Is that an answer?"

"I had one of the standard Family names of my lineage— and never liked it. But I was delighted and flattered by the pillow name you gave me. So while you were napping, I called Archives and changed my name. I'm 'Ishtar' now."

He stared at her. "Is that *true?"*

"Don't look frightened, dear. I won't trap you, I won't even bruise you. I'm not domestic, not at all. You would be shocked if you knew how long it has been since a man was last in this compartment. You are free to leave whenever you wish; you committed yourself to me for only seven hours. But you need not leave. You and I are skipping tomorrow's watch."

"We are? Why…Ishtar?"

"I made another call and bucked a supernumerary team into that watch. Should have done so sooner, but you had me bemused, dear. The Senior won't need us tomorrow; he's in deep sleep and won't know that he has missed a, day. But I want to be there when he wakes, so I rearranged the watch list for the following day, too, and we may stay on watch all day; depends on the shape he's in. That is, *I* may. I don't insist that *you* do a double or triple watch."

"I can take it if you can. Ishtar? That professional rank you forbade me to mention— You're actually even higher rank than that. Aren't you?"

"If I am—I am not affirming it—I forbid you even to speculate about it. If you wish to stay assigned to this client,"

"Whew! You do have a sharp tongue. Did I deserve that?"

"Dear Galahad! I'm sorry. When you are on watch, dear, I want you to think only about our client, not about me. Off watch I am Ishtar and don't wish to be anything else. This is the most important case we will ever be on. It may go on a long time and be very tiring.

So let's not be edgy with each other. I was trying to say that you—both of us—now have more than thirty hours before we must be back on duty. You are welcome here as many of those hours as you wish. Or leave as soon as you wish and I will smile and not complain."

"I don't want to leave, I said so. As long as I don't keep you from your sleep—"

"You won't."

"—and allow an hour to pick up a fresh pack of disposables, robe in, and go through decontam. I wish I had fetched a pack, but I hadn't planned on this."

"Oh. We'll make that an hour and a half. My phone had a message waiting in it. The Senior does not like the way we look in isolation gear; he wants to be able to see anyone around him. So we must plan time to go through body decontam instead, then attend him in ordinary clothes."

"Uh…Ishtar, is this wise? We might sneeze on him."

"Do you think *I* set this policy? Dear, this message was straight from the Palace. Besides that, females are specifically ordered to look as pretty and be as attractively dressed as possible—so I must think about what I can wear that can go through sterilization. Nudity is not acceptable; that was specified, too. But don't worry about sneezing. Have you never taken full body decontamination? When *that* crew gets through with you, you *can't* sneeze; no matter how much you need to. But don't tell the Senior that you've had decontam; the assumption is that we simply walk in off the street—no special precautions."

"How can I tell him when I don't speak his language? Does he have some fetish against nudity?"

"I don't know, I am just conveying the order, one that went out to everyone on the watch list."

He looked thoughtful. "It's probably not a fetish. All fetishes are contrasurvival, that's elementary. You told me that the principal problem was to break him out of his apathy. You were pleased that he was bad-tempered, even though you said it was a hyperreaction."

"Certainly I was pleased; it showed that he was responding. Galahad, never mind that now; I don't have a thing to wear, you'll have to help me."

"I'm talking about what you should wear. I think it was the Chairman Pro Tem's idea, not the Senior's."

"Dear man, I don't try to read his mind; I just carry out his orders. I don't have any taste in clothes, never did have. Do you think a lab assistant's coverall would be suitable? It will take sterilization and never show it—and I look quite neat in one."

"I *am* trying to read the mind of the Chairman Pro Tem, Ishtar—

guess his intentions, at least. No, I don't think a lab uniform would do; you would not look as if you had 'simply walked in off the street.' If we stipulate that a fetish syndrome is not involved, then the only advantage of clothing over nudity in this situation is to lend variety. Contrast. Change. Help shake him loose from that apathy."

She stared at him with thoughtful interest. "Galahad, up to now, based on my own experience, I've always thought that a man's only interest in a woman's clothes was to get them off her. I may have to put you in for promotion."

"I'm not ready to be promoted; I've been in the Vocation less than ten years. As I'm sure you know. Let's take a look at your wardrobe."

"What are you going to wear, dear?"

"Doesn't matter what I wear; the Senior is male and all the stories and myths about him indicate that he has remained canalized by the primitive culture he was born in. Not sensually polymorphous."

"How can you be sure? Myths, dear."

"Ishtar, all myths tell the truth if you know how to read them. I'm guessing, but it is a reasoned guess, as this is something I used to be somewhat expert in. Until I was rejuvenated—until you rejuvenated me—then I went into something more active."

"What, dear?"

"Some other time. I was simply saying that I don't think it matters what *I* wear. A chiton. Shorts and singlet. Kilt. Even the underwear I had on under isolation gear. Oh, I'll wear lively colors and something different each watch—but he won't look at *me,* he'll look at *you.* So let's pick out something he would like to see you in."

"How will you know, Galahad?"

"Very simple. I'll choose something *I* would like to see a long-legged beautiful blonde wear."

He was surprised to see how little Ishtar had in her wardrobe. In all his varied experience with women she was the only one he could remember who seemed to lack the vanity needed to buy unnecessary clothes. As he searched, mind preoccupied, he hummed and then sang a snatch of doggerel.

Ishtar said, "You speak his milk language!"

"Eh? What? Whose? The Senior's? I certainly don't. But I must learn it, I suppose."

"But you were singing in it. A little song he always sings when he's busy with something."

"You mean this? 'Therza poolyawl…Bytha *paunshot—'* I have a phonographic ear, that's all; I don't understand the words. What do they mean?"

"I'm not sure they mean anything. Most of them are not in the vocabulary I've learned so far. I suspect that it is just amphigoric rhythm, a self-tranquilizer. Semantically null."

"On the other hand, it might be a key to understanding him. Have you tried asking a computer?" -

"Galahad, I haven't been given access to the computer that records what goes on in his suite. But I doubt if anyone can understand him, in depth. He's a primitive, dear—a living fossil."

"I would certainly like to try to understand him. This language he uses— Is it difficult?"

"Very. Irrational, complicated syntax, and so loaded with idioms and multivalues that I trip even on words I think I know. I wish I had your recording ear."

"The Chairman Pro Tem seemed to have no difficulty."

"I think he has a special talent for languages. But if you want to try, dear, I have the instructional programs here."

"Accepted! What is this? A party dress?"

"That? That's not clothing. I bought it as a throw cover for a couch —then got it home and saw that it did not fit my lounging room."

"It's a dress. Stand there and hold still."

"Don't *tickle!"*

VARIATIONS ON A THEME

I

Affairs of State

Despite what I told the Senior, my ancestor Grandfather Lazarus, I work hard in governing Secundus. But only in thinking about policy and in judging the work of others. I don't do donkey work; I leave that to professional administrators. Even so, the problems of a planet with more than a billion people can keep a man busy, especially if his intention is to govern as little as possible—as that means he must keep a sharp eye out and his ear tuned for signs that subordinates are doing unnecessary governing. Half my time is used in the negative work of plucking such officious officials and ordering that they never again serve in any public capacity.

Then I usually abolish their jobs, and all jobs subordinate to them.

I have never noticed any harm from such pruning save that parasites whose jobs are eliminated must find some other way to avoid starvation. (They are welcome to starve—better if they do. But they don't.)

The important thing is to spot these malignant growths and remove them while they are small. The more skill a Chairman Pro Tem acquires in this, the more emerging ones he finds, which keeps him busier than ever. Anyone can see a forest fire; skill lies in sniffing the first smoke.

This leaves me too little time for my prime work: thinking about policy. The purpose of my government is never to do good, but simply to refrain from doing evil. This sounds simple but is not. For example, although prevention of armed revolution is obviously part of my main duty, *i.e.,* to keep order, I began to have doubts about the wisdom of transporting potential revolutionary leaders years before Grandfather Lazarus called my attention to it. But the symptom that roused my worry was so null that it took ten years for me to notice it:

During those ten years there was not one attempt to assassinate me.

By the time Lazarus Long returned to Secundus for the purpose of dying this disturbing symptom had continued twenty years.

This was ominous, and I realized it. A population of one billion-plus so contented, so uniform, so smug that not one determined assassin shows up in a double decade is seriously ill no matter how healthy it looks. In the ten years that elapsed after I noticed this lack I worried about it every hour I could spare—and found myself asking myself over and over again: What would Lazarus Long do?

I knew in broad outline what he *had* done—and that was why I decided to migrate—either lead my people off planet or go alone if none would follow. (In rereading this, it sounds as if I sought to be assassinated in some mystic *The King Must Die* sense. Not at all! I am surrounded at all times by powerful and subtle safeguards the nature of which I will not divulge. But there is no harm in mentioning three negative precautions; my facial appearance is not known to the public, I almost never appear in public anyhow, and when I do, it is never announced. The job of ruler is dangerous—or should be—but I don't intend to die from it. The "disturbing symptom" was not that I am alive but that there are no dead assassins. No one seems to hate me enough to try. Frightening. Where have I failed them?)

When the Howard Clinic notified me that the Senior was awake (with a reminder that only one "night" had passed for him) I was not only awake but had completed necessary work and bucked the rest; I went at once to the Clinic. After they decontaminated me I found him dawdling over coffee, having just finished breakfast.

He glanced up and grinned. "Hi, Ira!"

"Good morning, Grandfather." I went to him ready to offer a respectful salutation such as he had permitted when I bade him goodnight the night "before"—but watching for signs that say Yes, or No, before the mouth speaks. Even among the Families there is wide variety in such customs—and Lazarus is, as always, a law unto himself. So I closed the last of the gap with great deliberation.

He answered me by drawing back so slightly that it would have been unnoticeable had I not been alert for it. He added a gentle warning: "Strangers present, Son."

I stopped at once. "At least I think they are strangers," he added. "I've been trying to get acquainted, but all we share is some pidgin speech plus a lot of handwaving. But it's nice to have people around instead of those zombies—we get along. Hey, dear! Come here, that's a good girl."

He motioned to one of his rejuvenation technicians—two on watch, as usual, and this morning, one was female, one was male. I was pleased to see that my order that females should "dress attractively" had been carried out. This woman was a blonde, graceful and not unattractive if one likes tallness in a female. (I don't dislike it, but there is something to be said for one small enough to fit on one's lap—not that I've had much time for that lately.)

She glided forward and waited, smiling. She was dressed in a something—women's styles don't stay the same long enough for me to keep track, and this was a period when every woman in New Rome seemed to be trying to dress differently from every other woman. Whatever it was, it was an iridescent blue that set off her eyes and fitted her closely where it covered her at all; the effect was pleasing.

"Ira, this is Ishtar—did I get your name right that time, dear?"

"Yes, Senior."

"And that young man over there is, believe it or not, 'Galahad.' Know any legends of Earth, Ira? If he knew its idiomatic meaning, he would change it—the perfect knight who never got any. But I've been trying to remember why Ishtar's face is so familiar. Dear, was I ever married to you? Ask her for me, Ira; she may not have understood."

"No, Senior. Not never. Is certain."

"She understood you," I said.

"Well, it could have been her grandmother—a lively wench, Ira. Tried to kill me, so I left her."

The Chief Master Technician spoke briefly in Galacta. I said, "Lazarus, she says that, while she has never had the honor of being married to you, contractually or informally, she is quite willing if you are."

"Well! A saucy one—it *must* have been her grandmother. Eight, nine hundred years back, more or less—I lose track of half centuries—and on this planet. Ask her if, uh, Arid Barstow is her grandmother."

The technician looked very pleased and broke into rapid Galacta. I listened and said, "She says that Ariel Barstow is her great-great-great-grandmother and she is joyed to hear you acknowledge the connection as that is the lineage by which she is descended from you…and that she would be supremely honored, both for herself and on behalf of her siblings and cousins, if you would converge the lineage again, with or without contract After your rejuvenation is completed, she adds—she is not trying to rush you. How about it, Lazarus? If she has used up her reproduction quota, I would be happy to grant her an exception so that she would not have to migrate."

"The hell she ain't trying to rush me. And so are you. But she put it politely, so let's give it a polite answer. Tell her that I'm honored and her name goes into the hat—but don't tell her I'm shipping out on Thursday. 'Don't call us, we'll call you' in other words—but make her happy about it; she's a nice kid."

I revised the message diplomatically; Ishtar beamed, curtsied, and backed away. Lazarus said, "Drag up a rock, Son, and sit a while." He lowered his voice and added, "Between ourselves, Ira, I'm pretty sure Ariel slipped one in on me. But with another of my descendants, so this kid is descended from me anyhow, though maybe not as directly. Not that it matters. What are you doing up so early? I said you could have two hours after breakfast to yourself."

"I'm an early riser, Lazarus. Is it true that you have decided on the full course? She seems to think so."

Lazarus looked pained. "It's probably the simplest answer—but how do I know I'll get my own balls back?"

"Gonads from your clone are your own, Lazarus; that's basic to the theory."

"Well…we'll see. Early rising is a vice, Ira; it'll stunt your growth and' shorten your days. Speaking of such—" Lazarus glanced up at the wall. "Thanks for having that switch reinstalled. I don't feel tempted by it this fine morning, but a man does like to have a choice. Galahad, coffee for the Chairman and fetch me that plastic envelope." Grandfather Lazarus supplemented his order with gestures, but I think the tech understood his words. Or was somewhat telepathic; rejuvenators are quite empathic—need to be. The man moved at once to comply.

He handed Lazarus an impervolope and poured coffee for me—which I did not want but will drink anything protocol requires. Lazarus went on, "Here's my new will, Ira. Read it and file it somewhere and tell your computer. I've already approved the way she worded it and read it back into her and told her to place it in her permanents with a 'bind' on it—it 'ud take a Philadelphia lawyer to diddle you out of your inheritance now—though no doubt one could."

He waved the male tech aside. "No more coffee, lad— thanks. Go sit down. You go sit, too, dear. Ishtar. Ira, what are these young people? Nurses? Orderlies? Servants? Or what? They hover over me like a hen with one chick. I've never cared for more service than I need. Just sociability. Human company."

I could not answer without inquiring. Not only is it unnecessary for me to know how the Rejuvenation Clinic is organized, but also it is private enterprise, not under the Trustees—and my intervention in the case of the Senior was much resented by its Director. So I interfered as little as possible—as long as my orders were carried out.

I spoke to the female tech, in Galacta: "What is your professional designation, ma'am? The Senior wants to know. He says that you have been behaving like a servant."

She answered quietly, "It is our pleasure to serve him in any way we can, sir"—then hesitated and went on: "I am Administrator Master Chief Rejuvenation Technician Ishtar Hardy, Deputy Director for Rejuvenation Procedures, and my assistant watch officer is Associate Technician Galahad Jones."

Having been rejuvenated twice and used to the idea all my life, it does not surprise me when cosmetic age does not match calendar age. But I admit to surprise at learning that this young woman was not just a technician but boss of her department— probably number three in the entire Clinic. Or possibly number two while the Director was away sulking in her tent— damn her duty-struck stiff neck. Or even Director Pro Tem with her deputy, or some department head, bucked into minding the store." "So?" I answered. "May I ask your calendar age, Madam Administrator?"

"Mr. Chairman Pro Tem may ask anything. I am only one hundred forty-seven years old—but I am qualified; this has been my only career since first maturity."

"I did not imply doubt of your qualifications, madam, but I am astonished to see you standing a watch rather than sitting at a desk. Although I confess I don't know how the Clinic isorganized."

She smiled slightly. "Sir, I could express a similar feeling at your own personal interest in this case…were it not that I think I understand it. I am here because I choose not to delegate the responsibility; he is the *Senior.* I have screened all watch officers assigned to him—the best we have to offer."

I should have known it. "We understand each other." I added, "I am pleased. But may I make a suggestion? Our Senior is independent by temperament and highly individualistic. He wants a minimum of personal service—only that which he must have."

"Have we been annoying him, sir? Too solicitous? I can watch and listen from outside the door and still be here instantly if he wants something."

"Possibly too solicitous. But stay in sight. He *does* want human companionship."

“What’s all this yack-yack?” demanded Lazarus.

“I had to ask questions, Grandfather, as I don’t know the organization of the Clinic. Ishtar is not a servant; she is a rejuvenator and a highly skilled one—and so is her assistant. But they are happy to supply any service you want.”

“I don’t need flunkies; I’m feeling pretty good today. If I want anything, I’ll shout; they don’t need to hang over me, hand and *foot.*” Then he grinned. “But she’s a cute little trick, in the large, economy size; it’s a pleasure to have her around. Moves like a cat—no bones, just flows. She does indeed remind me of Ariel—did I tell you why Ariel tried to kill me?”

“No. I would like to hear if you want to tell me.”

“Mmm— Ask me when Ishtar isn’t around—I think she knows more English than she lets on. But I did promise to talk if you showed up to listen. What would you like to hear?”

“Anything, Lazarus. Scheherazade picked her own subjects.”

“So she did. But I don’t have one on tap.”

“Well…you said as I came in that ‘early rising is a vice.’ Did you mean that seriously?”

“Maybe. Gramp Johnson claimed it was. He used to tell a story about a man who was condemned to be shot at sunrise— but overslept and missed it. His sentence was commuted that day, and he lived another forty, fifty years. Said it proved his point.”

“Do you think that’s a true story?”

“As true as any of Scheherazade’s. I took it to mean ‘Sleep whenever you can; you may have to stay awake a long time.’ Early rising may not be a vice, Ira, but it is certainly no virtue. The old saw about the early bird just goes to show that the worm should have stayed in bed. I can’t stand people who are smug about how early they get up.”

“I didn’t mean to sound smug, Grandfather. I get up early from long habit—the habit of work. But I don’t say it’s a virtue.”

“Which? Work? Or early rising? Neither is a virtue. But getting up early does *not* get more work done…any more than you can make a piece of string longer by cutting off one end and tying it onto the other. You get *less* work done if you persist in getting up yawning and still tired. You aren’t sharp and make mistakes and have to do it over. That sort of busy-busy is wasteful. As well as unpleasant. And annoying to those who would sleep late if their neighbors weren’t so noisily active at some ungodly cow-milking hour. Ira, progress doesn’t come from early risers—progress is made by lazy men looking for easier ways to do things.”

“You make me feel that I’ve wasted four centuries.”

“Perhaps you have, Son, if you’ve spent it getting up early and working hard. But it's not too late to change your ways. Don't fret about it; I've wasted most of my long life—though perhaps more pleasantly. Would you like to hear a story about a man who made 'laziness a fine art? His life exemplified the Principle of Least Effort. A true story."

"Certainly. But I don't insist on its being true."

"Oh, I won't let truth hamper me, Ira; I'm a solipsist at heart. Hear then, O Mighty King,

VARIATIONS ON A THEME

II

The Tale of the Man Who Was Too Lazy to Fail

He was a schoolmate of mine in a school for training naval officers. Not space navy; this was before the human race had even reached Earth's one satellite. This was wet navy, ships that floated in water and attempted to sink each other, often with regrettable success. I got mixed up in this through being too young to realize emotionally that, if my ship sank, I probably would sink, too—but this is not my story, but David Lamb's.* (* There is no record that the Senior ever attended a school for militaro-naval officers, or any military school. On the other hand, there is no proof that he did not. This story may be autobiographical to whatever extent it is true; "David Lamb" may be one more of the many names used by Woodrow Wilson Smith.

The details are consistent with Old Home's history so far as we know it. The Senior's first century coincides with that century of continuous war which preceded the Great Collapse— a century of much scientific progress paralleled by retrogression in social matters. Waterborne and airborne ships were used for fighting throughout this century. See appendix for idioms and technicalities. J.F. 45th)

To explain David I must go back to his childhood. He was a hillbilly, which means he came from an area uncivilized even by the loose standards of those days—and Dave came from so far back in the hills that the hoot owls trod the chickens.

His education was in a one-room country school and ended at thirteen. He enjoyed it, for every hour in school was a hour sitting down doing nothing harder than reading. Before and after school he had to do chores on his family's farm, which he hated, as they were what was known as "honest work"—meaning hard, dirty, inefficient, and ill-paid—and also involved getting up early, which he hated even worse.

Graduation was a grim day for him; it meant that he now did “honest work” all day long instead of spending a restful six or seven hours in school. One hot day he spent fifteen hours plowing behind a mule…and the longer he stared at the south end of that mule, breathing dust it kicked up and wiping the sweat of honest toil out of his eyes, the more he hated it.

That night he left home informally, walked fifteen miles to town, slept across the door of the post office until the postmistress opened up next morning, and enlisted in the Navy. He aged two years during the night, from fifteen to seventeen, which made him old enough to enlist.

A boy often ages rapidly when he leaves home. The fact was not noticeable; birth registrations were unheard of at that time and place, and David was six feet tall, broadshouldered, well-muscled, handsome, and mature in appearance, save for a wild look around the eyes.

The Navy suited David. They gave him shoes and new clothes, and let him ride around on the water, seeing strange and interesting places—untroubled by mules and the dust of cornfields. They did expect him to work, though not as much, or as hard, as working a hill farm—and once he figured out the political setup aboard ship he became adept at not doing much work while still being satisfactory to the local gods, namely, chief petty officers.

But it was not totally satisfactory as he still had to get up early and often had to stand night watches and sometimes scrub decks and perform other tasks unsuited to his sensitive temperament.

Then he heard about this school for officer candidates—“midshipmen” as they were known. Not that David cared what they were called; the point was that the Navy would *pay* him to sit down and read books—his notion of heaven—untroubled by decks to scrub and by petty officers. 0 King, am I boring you? No?

Very well— David was ill prepared for this school, never having had four to five years’ additional schooling considered necessary to enter it—mathematics, what passed for science, history, languages, literature, and so forth.

Pretending to four years or so of schooling he did not have was more difficult than tacking two years on the age of an overgrown boy. But the Navy wished to encourage enlisted men to become officers, so it had established a tutoring school to aid candidates slightly deficient in academic preparation.

David construed “slightly deficient” to mean his own state; he told his chief petty officer that he had “just missed” graduating from high school—which was true in a way; he had “just missed” by half a county, that being the distance from his home to the nearest high school.

I don’t know how David induced his See-Pee-Oh to recommend him; David never discussed this.

Suffice to say that, when David’s ship steamed for the Mediterranean, David was dropped at Hampton Roads six weeks before the tutoring school convened. He was a supernumerary during that time.. The Personnel Officer (in fact, his clerk) assigned David to a bunk and a mess, and told him to stay out of sight during working hours in the empty classrooms where his fellow hopefuls would meet six weeks later. David did so; the classrooms had in them the books used in tutoring in academic subjects a candidate might lack—and David lacked them all. He stayed out of sight and sat down and read.

That’s all it took.

When the class convened, David helped tutor in Euclidean geometry, a required subject and perhaps the most difficult. Three months later he was sworn in as a naval cadet on the beautiful banks of the Hudson River at West Point.

David did not realize that he had jumped from the frying pan into the fire; the sadism of petty officers is a mild hit-or-miss thing compared with the calculated horrors visited on new cadets —”plebes”—by cadets of the senior classes, especially by the seniormost, the first classmen, who were walking delegates of Lucifer in that organized hell.

But David had three months to find this out and to figure out what to do, that being the time upper classes were on the briny, practicing warfare. As he saw it, if he could last nine months of these hazards, all the kingdoms of the Earth would be his. So he said to himself, if a cow or a countess can sweat out nine months, so can I.

He arranged the hazards in his mind in terms of what must be endured, what could be avoided, and what he should actively seek. By the time the lords of creation returned to stomp on the plebes he had a policy for each typical situation and was prepared to cope with it under doctrine, varying doctrines only enough to meet variations in situation rather than coping hastily on an improvised basis.

Ira—”O King,” I mean—this is more important to surviving in tough situations than it sounds. For example, Gramp— David’s Grampaw, that is—warned him never to sit with his back to door. “Son,” he said to him, “might be nine hundred and ninetynine times you’d get away with it—no enemy of your’n would come through that door. But the thousandth time—that’s the one. If my own Grampaw had always obeyed that rule, he might be alive today and still jumping out bedroom windows. He knew better, but he missed just once, through being too anxious to sit in on a poker game, and thereby took the one chair open, one with its back to a door. And it got him.

“He was up out of his chair and emptied three shots from each of his guns into his assailant before he dropped; we don't die easy. But 'twas only a moral victory; he was essentially dead, with a bullet in his heart, before he got out of that chair. All from sitting with his back to an open door."

Ira, I've never forgotten Gramp's words—and don't you forget 'em.

So David categorized the hazards and prepared his doctrines. One thing that had to be endured was endless questioning, and he learned that a plebe was *never* permitted to answer, "I don't know, sir," to any upper classman, especially a first classman. But the questions ordinarily fell into categories— history of the school, history of the Navy, famous naval sayings, names of team captains and star players of various athletic sports, how many seconds till graduation, what's the menu for dinner. These did not bother him; they could be memorized—save the number of seconds remaining till graduation, and he worked out shortcuts for that, ones that stood him in good stead in later years.

"What sort of shortcuts, Lazarus?"

Eh? Nothing fancy. A precalculated figure for reveille each morning, a supplementary figure for each hour thereafter, such as: five hours after six o'clock reveille subtracts eighteen thousand seconds from the base figure, and twelve minutes later than that takes off another seven hundred and twenty seconds. For example at noon formation one hundred days before graduation, say at exactly twelve-oh-one and thirteen seconds, figuring graduation at ten. A.M. which was standard, David could answer, "Eight million, six hundred and thirty-two thousand, seven hundred and twenty-seven seconds, sir!" almost as fast as his squad leader could ask him, simply from having precalculated most of it.

At any other time of day he would look at his watch and pretend to wait for the second hand to reach a mark while in fact performing subtractions in his head.

But he improved on this; he invented a decimal clock—not the one you use here on Secundus, but a variation on Earth's clumsy twenty-four-hour day, sixty-minute hour, sixty-second minute system then in vogue. He split the time for reveille to taps into intervals and subintervals of ten thousand seconds, a thousand seconds, a hundred seconds, and memorized a conversion table.

You see the advantage. For anyone but Andy Libby, God rest his innocent soul, subtracting ten thousand, or one thousand, from a long string of digits up in the millions is easier to do in your head, quickly and without error, than it is to subtract seven thousand, two hundred, and seventy-three—the figure to be subtracted in the example, I just gave. David's new method did not involve carrying auxiliary figures. in the mind while searching for the ultimate answer.

For example, ten thousand seconds after reveille is eight forty-six forty A.M. Once David worked out his conversion table and memorized it—took him less than a day; just memorizing was easy for him—once he had that down pat, he could, convert to the hundred-second interval coming up next almost instantly, then *add* (not subtract) two digits representing the time still to go to the last two places in his rough answer to get his exact answer. Since the last two places were *always* zeroes—check it yourself—he could give an answer in millions of seconds as fast as he could speak the figures, and have it right every time.

Since he didn't explain his method, he got a reputation for being a lightning calculator, an *idiot-savant* talent, like Libby. He was not; he was simply a country boy who used his head on a simple problem. But his squad leader got so groused at him for being a "smart ass"—meaning that the squad leader couldn't do it—that he ordered Dave to memorize the logarithm tables. This didn't faze Dave; he didn't mind anything but "honest work." He set out to do so, twenty new ones each day, that being the number this first classman thought would suffice to show up this "smart ass."

The first classman grew tired of the matter when David had completed only the first six hundred figures—but Dave kept at it another three weeks through the first thousand—which gave him the first ten thousand figures by interpolation and made him independent of log tables, a skill that was of enormous use to him from then on, computers being effectively unknown in those days.

But the unceasing barrage of questions did not bother 'David save for the possibility of starving to death at meal times— and he learned to shovel it in fast while sitting rigidly at attention and still answer all questions flung at him. Some were trick questions, such as, "Mister, are you 'a virgin?" Either way a plebe answered he was in trouble—if he gave a straight answer. In those days some importance was placed on virginity or the lack of it; I can't say why.

But trick questions called for trick answers; Dave found that an acceptable answer to that one was: "Yes, *sir*—in my left ear." Or possibly his belly button.

But most trick questions were intended to trap a plebe into giving a meek answer—and meekness was a mortal sin. Say a first classman said, "Mister, would you say I was handsome?"—an acceptable answer would be, "Perhaps your mother would say so, sir—but not *me."* Or "Sir, you are the handsomest man I ever saw who was intended to be an ape."

Such answers were chancy—they might flick a first classman on the raw—but they were safer than meek answers. But no matter how carefully a plebe tried to meet impossible standards, about once a week some first clansman would decide that he needed punishment—arbitrary punishment without trial: This could run from mild, such as exercises repeated to physical collapse—which David disliked as they reminded him of “honest work”—up to paddling on the buttocks. This may strike you as nothing much, Ira, but I’m not speaking’ of paddling children sometimes receive. These beatings were delivered with the flat of a sword or with a wornout broom that amounted to a long, heavy club. Three blows delivered by a grown man in perfect health would leave the victim’s bottom a mass of purple bruises and blood blisters, accompanied by excruciating pain.

David tried hard to avoid incidents likely to result in this calculated torture, but there was no way to avoid them entirely, short of quitting, as some first classmen awarded such blows through sheer sadism. David gritted his teeth and accepted them when he had to, judging—correctly—that he would be run out of school if he defied the supreme authority of a first clansman. So he thought about the south end of that mule and endured it.

There was a much greater hazard to his personal safety and future prospects of a life free from “honest work.” The mystique of military service included the idea that a prospective officer must excel in athletic sports. Do not, ask why; it was no more subject to rational explanation than is any other branch of theology.

Plebes in particular had to—no choice!—go out for “sports.” Two hours each day which were nominally free David could not spend napping or dreaming in the quiet of the school’s library, but must perforce spend in sweaty exercise.

Worse still, some “sports” were not only excessively energetic but also involved hazards to David’s favorite skin. “Boxing”—this is a long forgotten, utterly useless, stylized mock combat in which two men batter each other for a preset period or until one is beaten unconscious. “La Crosse”—this is a mock battle taken over from the savages who had formerly inhabited that continent. In it mobs of men fought with clubs. There was a hard missile with which points were scored—but it was the prospect of being sliced open or having bones broken with these clubs that aroused our hero’s distaste.

There was a thing called “water polo” in which opposing swimmers attempted to drown each other. David avoided that one by not swimming more than well enough to stay in school—a required skill. He was an excellent swimmer, having learned at the age of seven through being chucked into a creek by two older cousins—but he concealed his skill.

The sport with highest prestige was a thing called “foot ball”—and first classmen sized up each new group of victims for candidates who might be expected to excel, or learn to excel, in this organized mayhem. David had never seen it—but now he saw it and it filled his peaceful soul with horror.

As well it might. It involved two gangs of eleven men facing each other on a field and trying to move an ellipsoid bladder down the field against the opposition of the other gang. There were rituals and an esoteric terminology, but that was the idea.

It sounds harmless and rather foolish. Foolish it was, harmless it was not—as the rituals permitted the opposing gang to attack a man attempting to move the bladder in a variety of violent ways, the least of which was to grab him and cause him to hit the ground like a ton of brick. Often three or four bit him at once, and sometimes inflicted indignities and mayhems not permitted by the rituals but concealed by' the pile of bodies.

Death was not supposed to result from this activity but sometimes did. Injuries short of death were commonplace.

Unfortunately David had the ideal physique for success in this "feet ball"—height, weight, eyesight, fleetness of foot, speed of reflex. He was certain to be spotted by the first classmen on their return from mock sea battles and "volunteered" as a sacrificial victim.

It was time for evasive action.

The only possible way to avoid "foot ball" was to be acceptably occupied with some other sport. He found one.

Ira, do you know what "swordsmanship" is? Good—I can speak freely. This was a time in Earth's history when the sword had ceased to be a weapon—after having been prominent for more than four millennia. But swords still existed in fossil form and retained a shadow of their ancient prestige. A gentleman was presumed to know how to use a sword and— "Lazarus, what is a 'gentleman'?"

What? Don't interrupt, boy; you confuse me. A "gentleman" is, uh —Well, now let me see. A general definition— My, you can think up some hard ones. Some said it was an accident of birth—that being a disparaging way of saying it was a trait genetically inherited. But that doesn't say what the trait is. A gentleman was supposed to prefer being a dead lion to being a live jackal. Me, I've always preferred to be a live lion, so that puts me outside the rules. Mmm…you could say in all seriousness that the quality tagged by that name represents the slow emergence in human culture of an ethic higher than simple self-interest—damn slow in emerging in my opinion; you still can't rely on it in a crunch.

As may be, military officers were presumed to be gentlemen and wore swords. Even fliers wore swords, although Allah alone could guess why.

These cadets were not only presumed to be gentlemen; there was a national law which stated that they *were* gentlemen. So they were taught a bare minimum about how to handle a sword, just enough to keep them from slicing their fingers or stabbing bystanders—not enough to fight with them, just to keep them from looking too silly when protocol required them to wear swords.

But swordsmanship was a recognized sport, called "fencing." It had none of the prestige of football, or boxing, or even water polo—but it was on the list; a plebe could sign up for it.

David spotted this as a way out. Under a simple physical law, if he was up in the fencing loft,then he was *not* down on the football field, with sadistic gorillas in hobnailed boots jumping up and down on him. Long before the upper clansmen returned to school Plebe Cadet Lamb had established himself as a member of the fencing squad, with a record of never missing a day, and was trying hard to look like a "good prospect" for the team.

At that time and place three forms of fencing were taught: saber, dueling sword, and foil: The first two used full-sized weapons. True, edges were dulled and points were bated; nevertheless a man could get hurt with them—even fatally, though that was very rare. But the foil was a lightweight toy, a 'fake sword with a limber blade that bent at the slightest pressure. The stylized imitation swordplay that used the foil was about as dangerous as tiddlywinks. This was the "weapon" David selected.

It was made for him. The highly artificial rules of foil fencing gave great advantage to fast reflexes and a sharp brain, both of which he had. Some exertion was necessary—but not much compared with football, lacrosse, or even tennis. Best 'of all, it required no body-against-body pounding that David found so distasteful in the rough games he was avoiding. David applied himself single-mindedly to acquiring skill so that his haven would be secure.

So diligent was he in protecting his sanctuary that, before his plebe year was over, he was National Novice Foil Champion. This caused his squad leader to smile at him, an expression that hurt his face. His cadet company commander noticed him for the first time and congratulated him.

Success with the foil even got him out of some "punishment" 'beatings. One Friday evening, when he was about to be beaten for some imaginary dereliction, David said, "Sir, if it's the same to you, I'd rather have twice as many swats on Sunday—because tomorrow we're fencing the Princeton plebe team and, if you do the job I know you can do, it might slow me up tomorrow."

The first clansman was impressed by this because having the Navy win, at any time and for any purpose and in anything, took precedence by Sacred Law over anything else, even the righteous pleasure of beating a "smart ass" plebe. He answered, ""Tell you what, mister. Report to my room after supper on Sunday. If you lose tomorrow, you get a double dose of the medicine you've got coming to you. But if you win, we'll cancel it."

David won all three of his matches.

Fencing got him through his perilous plebe year with his precious skin unmarked save for scars on his bottom. He was safe now, with three easy years ahead of him, for only a plebe was subject to physical punishment, only a plebe could be ordered to take part in organized mayhem….

(Omitted)

One body-contact sport David loved, one of ancient popularity, which he had learned back in those hills he had fled from. But it was played with girls and was not officially recognized at this school. There were harsh rules against it, and .a cadet caught practicing it was kicked out without mercy.

But David, like all true geniuses, paid only pragmatic attention to rules made by other people—he obeyed the Eleventh Commandment and never got caught. While other cadets sought the empty prestige of sneaking girls into the barracks or went over the wall at night in search of girls, David kept his activities quiet. Only those who knew him well knew how industriously he pursued this one body-contact sport. And no one knew him well.

Eh? Female cadets? Didn't I make that plain, Ira? Not only were there no girl cadets, there was not one girl in that Navy—except a few nurses. Most particularly there were no girls at that school; there were guards night and day to keep them away from the cadets.

Don't ask me why. It was Navy policy and therefore did not have a reason. In truth there was no job in that entire Navy which could not have been performed by either sex or even by eunuchs—but by long tradition that Navy was exclusively male.

Come to think about it, a few years later that tradition *was* questioned—a little at first, then by the end of that century, shortly before the Collapse, that Navy had females at all levels. I am *not* suggesting that this change was a cause of the Collapse. There were obvious causes of the Collapse, causes I won't go into now. This change either was a null factor or possibly postponed the inevitable by a minor amount.

Either way, it doesn't figure into the Tale of the Lazy Man. When David was in school, cadets were supposed to encounter females but seldom, and only under highly stylized circumstances, rigidly bound protocol, and heavily chaperoned.* (* From the noun "chaperon." This word 'has two meanings,: (1) A person charged with preventing sexual contacts' between males and females not licensed for such contacts; (2) a person superficially performing such disservice while, in fact acting as a benign lookout. It appears that the Senior uses the word here in its first meaning rather than in its antithetical second méaaning. See appendix. J.F.45th)

Instead of fighting the rules, David looked for loopholes and made use of them—he was never caught.

Every impossible rule has its loopholes; every general prohibition creates its bootleggers. The Navy as a whole created its impossible rules; the Navy as individuals violated them, especially its curious rules about sex—a publicly monastic life on duty, a slightly veiled life of unlimited voluptuousness off duty. At sea, even harmless reliefs from sexual tension were treated most harshly when detected—although such technical violations of the mores were expected and condoned less than a century earlier. But this Navy was only a little more hypocritical in its sexual behavior than was the social matrix in which it was imbedded, more excessive in its outlets only to the degree that its public rules were more sternly impossible than those of that society as a whole. The public sexual code of that time was unbelievable, Ira; the violations of it simply mirrored in reverse its fantastic requirements. To every action there is an equal and opposite reaction—if you'll excuse the obvious.

I did not intend to discuss this other than to say that David found ways to get along with the school's regulations about sex without going completely off his nut, as too many of his classmates did. I'll add only this—and this is merely rumor: Through a mischance all too easy then although unheard of today, a young woman became pregnant, presumably by David. In those days—believe me!—this was a major disaster.

Why? Just stipulate that it *was* a disaster; it would take forever to explain' that society and no civilized human would believe it. Cadets were forbidden to marry, the young woman *had* to get married under the rules current then, intervention to correct this mischance was almost unobtainable and physically very dangerous for her.

What David did about it illustrates his whole approach to life. When faced with a choice of evils, accept the least hazardous and cope with it, unblinkingly. He married her.

How he managed to do this and not get caught, I do not know. I can think of a number of ways, some simple and fairly foolproof, some complex and thereby subject to breakdown; I assume that David selected the simplest.

It changed the situation from impossible to manageable. It converted the girl's father from an enemy, all too likely to go to the Commandant of the school with the story and thereby force David to resign when he had but a few months more to reach his goal, into an ally and fellow conspirator anxious to keep the marriage secret so that his son-in-law could graduate and take his wayward daughter off his hands.

As a side benefit David no longer needed to give planning to the pursuit of his favorite sport. He spent his time off in unworried domesticity, with perfect chaperonage.* (* Context implies second meaning. *J.F.45th)*

As for the rest of David's career in school, one may assume that a lad who could substitute six weeks of unsupervised reading for four years of formal schooling could also stand first in his class academically. This would pay off in money and rank as a young officer's place on the promotion list was determined by his standing at graduation.

But the competition for first place is sharp indeed, and— worse—makes the cadet who achieves it conspicuous. David became aware of this when he was a fresh-caught plebe. "Mister, are you a savoir?" that is to say: "academically brainy"—was another trick question; a plebe was damned whether he answered Yes or No.

But standing second—or even tenth—was practically as useful as first place. David noticed something else: The fourth year counted four times as much as the first, the next to the last year three times as much, and so on down—that is, a plebe's marks did not affect his final standing much—only one part in ten.

David decided to maintain a "low profile"—always the smart decision when one is likely to be shot at.

He finished the first half of his plebe year a little above midway in his class—safe, respectable, inconspicuous. He ended his plebe year in' the upper quarter—but by that time the first classmen were thinking only of graduation and paid no attention to his status. His second year he moved to the upper 10 percent; his third year he improved that by a few numbers—and his last year, when it counted most, he went all out and finished with a final standing for four years of sixth—but effectively second, for of those higher in ranking two elected to leave the line of command for specialization, one was not commissioned because he had damaged his eyes by studying too hard, and one resigned after he graduated.

But the care with which David managed his class standing does not show his true talent for laziness—after all, sitting down and reading was his second, favorite pastime, and anything which merely called for excellent memory and logical reasoning was 'no effort to him.

During the mock-warfare cruise that opened David's last year of school a group of his classmates were discussing what cadet ranks each would receive. By then, they knew pretty well which ones would be selected as cadet officers. Jake is certain to be cadet corps commander—unless he falls overboard. Who gets his battalion? Steve? Or Stinky?

Someone suggested that Dave was in line for that battalion. Dave had been listening instead of talking, a ‘standard feature of his “low profile”—and very nearly a third way to lie, Ira, and easier than its equivalent—talking while saying nothing—and also tends to give the nontalker a reputation for wisdom. Never cared for it myself—talking is the second of the three real pleasures in life and the only thing that sets us apart from the apes. Though just barely.

Now David broke—or appeared to break—his habitual reserve. “No battalion for me,” he said. “No indeedy! I’m going to be regimental adjutant and stand out in front where the girls can see me.”

Perhaps his remark wasn’t taken seriously—regimental adjutant is lower than battalion commander. But it was certain to be repeated, and David knew it, perhaps by the prospective cadet regimental commander to commissioned officers making the selections for cadet officers.

No matter— David was chosen regimental adjutant.

In any military organization of that time, a regimental adjutant did stand out in front, all alone, where female visitors could hardly avoid seeing him. But one may doubt that this figured into Dave’s plans.

The regimental adjutant attends no formations other than full regimental formations. He goes to and from classes alone, instead of marching or being marched. Other first classmen are responsible each for some unit of cadets, be it squad, platoon, company, battalion, or regiment; the regimental adjutant has no such responsibilities and only one minor administrative task; he keeps the watch list for the most senior of the cadet officers.

But he is *not* on that watch list himself. Instead he is supernumerary who fills in when one of them is ill.

And *this* was the lazy man’s prize. Those cadet officers were perfect specimens and the chances that one would be too ill to take his day’s duty ranged from negligible to zero.

For three years our hero had been standing watch about every tenth day. These watches weren’t difficult, but they involved either getting to bed a half hour late or getting up a half hour early, and much standing on tired feet, all an affront to Dave’s tender regard for his comfort.

But his last year David stood only three watches, and he “stood” those sitting down, as “Junior Officer of the Watch.”

At last the Day arrived. David graduated, was commissioned—then went to the chapel and remarried his wife. If her belly bulged a little, that was not unusual in brides even in those days, and was always ignored, and condoned once a young couple married. It was widely known though rarely mentioned that an eager young bride could accomplish in seven months or less what takes nine for cow or countess.

Dave was safely past all rocks and shoals; he need never again fear going back to that mule and "honest work."

But life as a junior officer in a warship turned out to be less than perfect. It had good points—servants, a comfortable bed, easy work that rarely got David's hands dirty, and twice as much money. But he needed that and more, to support a wife, and his ship was at sea enough that he often lacked the pleasant compensations of marriage. Worst of all, he stood heel-and-toe watches on a short watch list; this meant a four-hour night watch about every other night standing up. He was sleepy much of the time and his feet hurt.

So David applied for training as an aeronaut. This Navy had recently grasped an idea called "air power" and was trying to grab as much of it as possible in order to keep it out of the wrong hands—the Army's hands, that is. They were behind as the Army had grabbed first—so volunteers for flying were welcome.

David was quickly ordered to shore duty to see if he had the makings of an aeronaut.

He had indeed! He not only had the mental and physical qualities but also was highly motivated—as his new work was done sitting down, whether in classroom or in the air, and he stood no night watches and received pay-and-a-half for sitting down and sleeping at home; flying was classed as "hazardous duty" and extra pay was awarded.

I had best say something about these aeroplanes since they resemble not at all the aerodynes you are used to. In a way they were hazardous. So is breathing. They were not as hazardous as the automotive ground vehicles then in use, and not nearly as hazardous as being a pedestrian. Accidents, fatal and otherwise, usually could be traced to a mistake on the part of the aeronaut—David *never* let that sort of accident happen to *him.* He had no wish to be the hottest pilot in the sky; he merely wanted to be the oldest.

Aeroplanes were weird monstrosities looking like nothing in the sky today, save possibly a child's kite—they were often called "kites." They had two wings, one above the other, and the aeronaut sat between them. A small baffle helped to deflect wind from his face. Don't look surprised; these flimsy structures flew very slowly, pulled through the air by a powered screw.

Wings were made of varnished cloth held rigid by struts— you can see from this alone that their speeds could never be any large fraction of the speed of sound—except on sad occasions when an overly eager pilot would dive straight down, then pull the wings off through trying too abruptly to recover a normal attitude.

Which David never did. Some people are natural fliers. The first time David examined an aeroplane he understood its strengths and weaknesses as thoroughly as he understood the milking stool he had left behind him.

He learned-to fly almost as quickly as he had learned to swim.

His instructor said, “Dave, you’re a natural. I’m going to recommend you for fighter training.”

Fighter pilots were the royalty of aeroplane fliers; they went up, and engaged enemy pilots in single combat. A fighter who did this successfully five times—killed the opposing pilot instead of being killed—was called an “Ace,” which was a high honor, for, as you can see, the average chance of doing this is the fifth power of one-half, or one in thirty-two. Whereas the chance of getting killed instead is the complement, close to certainty.

Dave thanked his mentor while his skin crawled and his brain went whir-click as it considered ways to avoid this honor without giving up pay-and-a-half and the comfort of sitting down.

There were other disadvantages to being a fighter pilot besides the prime hazard of getting your ass shot off by some stranger. Fighter pilots flew in one-man kites and did their own navigation—without computers, homing devices, or anything that would be taken for granted today—or even later that century. The method used was called “dead reckoning,” because, if you didn’t reckon it correctly, you were dead—since Navy flying was done over water, from a small floating aerodrome, with a margin of safety in fuel for a fighter plane of only minutes. Add to this the fact that a fighter pilot in combat had to choose between doing navigation or giving single-minded attention to attempting to kill a stranger before that stranger killed him. If he’ wanted to be an “Ace”—or even eat dinner that night—he must put first things first and worry about navigation later.

In addition to the chance of being lost at sea and drowned in a kite that was out of gas—did I say how these things were powered? The airscrew was driven by an engine powered by a chemical exothermic reaction—oxidation of a hydrocarbon fluid called “gas,” which it was not. If you think this unlikely, I assure you that it was unlikely even then. The method was woefully inefficient. A flier was not only likely to run out of gas with nothing around him but ocean, but also this temperamental engine often coughed and quit. Embarrassing. Sometimes fatal.

The lesser drawbacks to being a fighter pilot were not all physical danger; they simply did not fit David's master plan. Fighter pilots were assigned to floating aerodromes, or carriers. In peacetime, which this nominally was, a flier did not work too hard nor stand many watches and spent much of his time ashore at a land aerodrome even though he was carried on the muster rolls of a carrier ship—thereby credited with sea duty, necessary for promotion and pay.

But for several weeks each year a flier assigned to a carrier ship would actually *be* at sea, practicing mock warfare— which involved getting up an hour before dawn to warm those cantankerous engines and stand by ready to fly at the first hint of real or simulated danger.

David hated this—he would not willingly attend Judgment Day if it was held before noon.

There was another drawback: landing on these floating aerodromes. On land, David could land on a dime and give back change. But that depended on his own skill, highly developed because his own skin was at stake. But landing on a carrier depended on another pilot's skill—and David held a dark opinion of entrusting his skin to the skill, good intentions, and alertness of someone else.

Ira, this is so unlike anything you are likely to have seen in your life that I am at loss. Consider your skyport here at New Rome: In landing, a ship is controlled from the ground— right? So it was with aeroplanes landing on carriers—but the analogy breaks down because a landing on a carrier in those days used no instruments. None. I'm not fooling.

It was done by eye alone, just as a boy in a game of catch snatches a ball out of the air—but David was the ball, and the skill used to catch him was not his own but that of a pilot standing on the carrier. David had to suppress his own skill, his own opinions, and place utter faith in the pilot on the carrier—anything less brought disaster.

David had *always* followed his own opinion—against the whole world if necessary. To place that much faith in another man ran counter to his deepest emotions. A carrier landing was like baring his belly to a surgeon and saying, "Go ahead and cut"—when he was not sure that surgeon was competent to slice ham. Carrier landing came closer to causing David to give up pay-and-a-half and easy hours than any other aspect of flying, so torn was he by the necessity of accepting another pilot's decision—and one not even sharing his danger, at that!

It took all his willpower to do it the first time, and it never became easy. But he learned one lesson that he never expected to learn—that is, that there were circumstances in which another man's opinion was not only better than his own, but incomparably better.

You see—no, perhaps you don't; I have not explained the circumstances. An aeroplane landed on a carrier in a controlled crash, through a hook in its tail catching a wire rope stretched across the top deck. But if the flier follows his own judgment based on experience in landing on a flying field, he is certain to crash into the stern of the ship—or, if he knows this and tries to allow for it, he will fly too high and miss the rope.

Instead of a big flat field and plenty of room for minor mistakes, he has only a tiny "window" which he must hit precisely, neither right nor left, nor up nor down, nor too fast nor too slow. But he can't see what he is doing well enough to judge these variables correctly.

(Later on, the process was made semiautomatic, then automatic, but when it was finally perfected, carriers for aeroplanes were obsolete—a capsule description of most human "progress": By the time you learn how, it's too late.)

(But it often turns out that what you have learned applies to some new problem. Or we would still be swinging from trees.)

So the flier in the aeroplane must trust a pilot on deck who *can* see what is going on. He was called "the landing signal officer" and used wigwag flags to signal orders to the aeroplane's pilot.

The first time David tried this unlikely stunt he chased around the sky three times for fresh approaches before, he controlled his panic, quit trying to override the judgment of the LSO, and was allowed to land.

Only then did he discover how scared he was—his bladder cut loose.

That evening he was awarded a fancy certificate: the Royal Order of the Wet Diaper—signed by the LSO, endorsed by his squadron commander, witnessed by his squadron mates. It was a low point in his life, worse than any his plebe year, and it was little consolation that the order was awarded so frequently that certificates were kept ready and waiting for each new group of still-damp fliers.

From then on he was letter-perfect in following orders of landing signal officers, obeying like a robot, emotions and judgment suppressed by a sort of autohypnosis. When it came time to qualify in night landings—much worse on the nerves as the pilot in the air couldn't see *anything* but lighted wands the ISO waves instead of flags —David landed perfectly on his first approach.

David kept his mouth shut about his determination not to seek glory as a fighter pilot until he completed all requirements to make permanent his flying 'status. Then he put in a request for advanced training—in multiple-engine aircraft. This was embarrassing, as his instructor who thought so well of his potential was now his squadron commander and it was necessary to submit this request through him. Once the letter started through the mill, he was called to his boss's stateroom.

"Dave, what is this?"

"Just what it says, sir. I want to learn to fly the big ones."

"Are you out of your head? You're a fighter pilot. Three months of this scouting squadron—one-quarter, so I can give you a good Fitness Report—and you do indeed leave for advanced training., As a fighter."

David didn't answer.

His squadron commander persisted. "Dave, are you fretting over that silly 'Diaper Diploma'? Half the pilots in the fleet have won it. Hell, man, I've got one myself. It didn't hurt you with your shipmates; it just made you look human when you were beginning to suffer from too tight a halo."

David still did not comment.

"Damn it, don't just stand there! Take this letter and tear it up. Then submit one for fighter training. I'll let you go now, instead of waiting three months."

Dave stood mute. His boss looked at him and turned red, then said softly, "Maybe I was wrong. Maybe you *don't* have what it takes to be a fighter—Mister Lamb. That's all. Dismissed."

In the "big ones," the multiple-engine flying boats, David at last found his home. They were too big to fly from a carrier at sea; instead duty with them counted as sea duty, although in fact David almost always slept at home—his own bed, his own wife—save for an occasional night as duty officer when he slept at the base, and still less frequent occasions when the big boats flew at night. But they did not fly too often even in daylight and fine weather; they were expensive to fly, too expensive to risk, and the country was going through an economy wave. They flew with full crews—four or five for two-engine boats, more for four-engine boats, and often with passengers to permit people to get flying time to qualify for that extra pay. All of this suited Dave—no more nonsense of trying to navigate while doing sixteen other things, no more relying on the judgment of a landing signal officer, no more depending on just one neurotic engine, no more worries about running out of, gas. True, given a choice, he would always make every landing himself—but when he was ranked out of this by a senior pilot, he did not let his worry show and in time ceased to worry, as all big-boat pilots were careful and disposed to live a long time.

(Omitted)

—years David spent comfortably while being promoted two ranks.

Then war broke out. There were always wars that century—but not always everywhere. This one included practically every nation on Earth. David took a dim view of war; in his opinion the purpose of a navy was to appear so fierce as to make it unnecessary to fight. But he was not asked, and it was too late to worry, too late to resign, nor was there anywhere to run. So he did not worry about what he could' not help, which was good, as the war was long, bitter, and involved millions of deaths.

'"Grandfather Lazarus, what did you do during this war?" Me? I sold Liberty Bonds and made four-minute speeches and served both on a draft board and a rationing board and made other valuable contributions—until the President called me to Washington, and what I did then was hush-hush and you wouldn't believe it if I told you. None of your lip, boy; I was telling you what *David* did.

Ol' David was an authentic hero. He was cited for gallantry and awarded a decoration, one that figures into the rest of his story.

Dave had resigned himself to—or looked forward to, as may be—retiring at the rank of lieutenant commander, as there weren't many billets higher than that in the flying boats. But the war jumped him to lieutenant commander in a matter of weeks, then to commander a year later, and finally to captain, four wide gold stripes, without facing a selection board, taking a promotion examination, or commanding a vessel. The war was using them up fast, and anyone not killed was promoted as long as he kept his nose clean.

Dave's nose was clean. He spent part of the war patrolling his country's coasts for enemy underwater vessels—"combat duty" by definition but hardly more dangerous than peacetime practice. He also spent a tour turning clerks and salesmen into fliers. He had one assignment into a zone where actual fighting was going on, and there he won his medal. I don't know the details, but "heroism" often consists in keeping your head in an emergency and doing the best you can with what you have instead of panicking and being shot in the tail. People who fight this way win more battles than do intentional heroes; a glory hound often throws away the lives of his mates as well as his own.

But to be officially a hero requires luck, too. It is not enough to do your job under fire exceptionally well; it is necessary that someone—as senior as possible—see what you do and write it up. Dave had that bit of luck and got his medal.

He finished the war in his nation's capital, in the Naval Bureau of Aeronautics, in charge of development of patrol planes. Perhaps he did more good there than he did in combat, since he knew those multiple-engine craft as well as any man alive, and this job put him in position to cut out obsolete nonsense and push through some improvements. As may be, he finished the war at a desk, shuffling papers and sleeping at home.

Then the war ended.

Dave looked around and sized up the prospects. There were hundreds of Navy captains who, like himself, had been lieutenants only three years earlier. Since the peace was "forever," as, politicians always insist, few would ever be promoted. Dave could see that *he* would not be promoted; he had neither the seniority, the traditionally approved pattern of service, nor the right connections, political and social.

What he did have was almost twenty years' service, the minimum on which to retire at half pay or he could hang on until he was forced to retire through failure to be selected for admiral.

There was no need to decide at once; twenty-year retirement was a year or two off.

But he did retire almost at once-for medical reasons. The diagnosis was "psychosis situational," meaning that he went crazy on the job.

Ira, I don't know how to evaluate this. Dave impressed me as one of the few completely sane men I ever knew. But I wasn't there when he retired and "psychosis situational" was the second commonest cause for medical retirement of naval officers in those days but—how could they *tell?* Being crazy was no handicap to a naval officer, any more than it was to an author, a schoolteacher, a preacher, or several other esteemed occupations. As long as Dave showed up on time and signed paper work some clerk prepared and never talked back to his seniors, it would never show. I recall one naval officer who had an amazing collection of ladies' garters; he used to lock himself into his stateroom and examine them—and another one who did exactly the same with a collection of paper stickers used for postage. Which one was crazy? Or both? Or neither?

Another aspect of Dave's retirement requires knowledge of the laws of the time. Retiring on twenty years' service paid half pay—subject to income tax which was heavy. Retiring for medical disability paid *three-quarters* pay and was *not* subject to income tax.

I don't know, I just don't know. But the whole matter fits Dave's talent for maximum results with minimum effort. Let's stipulate that he was crazy—but was he crazy like a fox?

There were other features of his retirement. He judged correctly that he had no chance of being selected for admiral—but that citation for gallantry carried with it an honorary promotion on retirement—so Dave wound up the first man in his class to become admiral, without ever commanding a ship much less a fleet—one of the youngest admirals in history, by his true age. I conjecture that this amused the farm boy who hated to plow behind a mule.

For at heart he was still a farm boy. There was another law for the benefit of veterans of that war, one intended to compensate lads who had had their educations interrupted by having to leave home to fight: subsidized education, one month for every month of wartime service.

This was intended for young conscripts, but there was nothing to keep a career officer from taking advantage of it; Dave could claim it and did. With three-quarters pay not subject to taxation, with the subsidy—also not taxable—of a married veteran going to school, Dave had about the income he had had on active duty. More, really, as he no longer had to buy pretty uniforms or keep up expensive social obligations. He could loaf and read books, dress as he pleased, and not worry about appearances. Sometimes he would stay up late and prove that there were more optimists playing poker than mathematicians. Then sleep late. For he never, never got up early.

Nor did he ever again go up in an aeroplane. Dave had *never* trusted flying machines; they were much too high in case they stalled. They had never been anything to him but a means to avoid something worse; once they had served his purpose, he put them aside as firmly as he had put aside fencing foils—and with no regrets in either case.

Soon he had another diploma, one which stated that he was a Bachelor of Science in agronomy—a “scientific” farmer.

This certificate, with the special preference extended to veterans, could have obtained him a civil service job, telling other people how to farm. Instead, he took some of the money that had piled up in the bank while he loafed in school and went way back into those hills he had left a quarter of a century earlier—and bought a farm. That is, he made a down payment, with mortgage on the balance through a government loan at a—subsidized, of course—very low rate of interest.

Did he work the farm? Let’s not be silly; Dave never took his hands out of his pockets. He made one crop with hired labor while he negotiated still another deal.

Ira, the completion of Dave’s grand plan involves one factor so unbelievable that I must ask you to take it on faith—it is too much to ask any rational man to understand it.

At that pause between wars, Earth held over two billion people—at least half on the verge of starvation. Nevertheless—and here is where I must ask you to believe that I was there and would not lie to you—despite this shortage of food which never got better other than temporarily and locally in all the years that followed, and could not, for reasons we need, not go into—in spite of this disastrous shortage, the government of David’s country *paid* farmers not to grow food.

Don’t shake your head; the ways of God and government and girls are all mysterious, and it is not given to mortal man to understand them. Never mind that you yourself *are* a government; go home tonight and think about it—ask yourself if you know why you do what you do—and come back tomorrow and tell me.

As may be— David never made but one crop. The following year his acreage was “soil-banked,” and he received a fat check for not working it, which suited him just fine. Dave loved those’ hills, he had always been homesick for them; he had left them simply to avoid work. Now he was being paid *not* to work in them—which suited him; he had never thought that their charms were enhanced by plowing and getting them all dusty.

The “soil bank” payments took care of the ‘mortgage, and his retired pay left a tidy sum over, so he hired a man to do those chores a farm requires even though it is not being worked for a crop—feed the chickens, milk a cow or two, tend a vegetable garden and’ some fruit trees, repair fences— while the hired man’s wife helped David’s wife with the house. For himself, David bought a hammock.

But David was not a harsh employer. He suspected that cows did not want to be waked at five in the morning any more than he did—and he undertook to find out.

He learned that cows would happily change their circadian to more reasonable hours, given the chance. They had to be milked twice a day; they were bred for that. But nine o’clock, in ‘the morning suited them for a first milking quite as well as five, as long as it was regular.

But it did not stay that way; Dave’s hired man had the nervous habit of work. To him there was something sinful in milking a cow that late. So David let him have his way, and hired man and cows went back to their old habits.

As for Dave, he strung that hammock between two shade trees and put a table by it to hold a frosty drink. He would get up in the morning when he woke, whether it was nine or noon, eat breakfast, then walk slowly to his hammock to rest up for lunch. The hardest work he did was endorsing checks for deposit, and, once a month, balancing his wife’s checkbook. He quit wearing shoes.

He did not take a newspaper or listen to radio; he figured that the Navy would let him know if another war broke out—and another *did* break out about the time he started this routine. But the Navy had no need for retired admirals. Dave paid little attention to that war, it was depressing. Instead, he read everything the state library had on ancient Greece and bought books about it. It was a soothing subject, one he had always wanted to know more about.

Each year, on Navy Day, he got all spruced up and dressed as an admiral, with all his medals, from the Good Conduct medal of an enlisted man to the one for bravery under fire that had made him an admiral—let his hired man drive him to the county seat and there addressed a luncheon of the Chamber of Commerce on some patriotic subject. Ira, I don’t know why he did this. Perhaps it was *noblesse oblige.*

Or it may have been his odd sense of humor. But each year they invited him, each year he accepted. His neighbors were proud of him; he was the epitome of Local Boy Makes Good—then comes home and lives as his neighbors lived. His success brought credit to them all. They liked it that he was still just “home folks”—and if they noticed that he never did a lick of work, nobody mentioned it.

I’ve skipped lightly over Dave’s career, Ira, had to. I haven t mentioned the automatic pilot he thought up, then had developed years later when he was in a position to get such things done. Nor the overhaul he made of the duties of the crew of a flying boat—except to say now that it was to get more done with less effort while leaving the command pilot with nothing to do save to stay alert—or to snore on his copilot’s arm if the situation did not require his alertness. He made changes in instruments and controls, too, when at last he found himself in charge of development for all Navy patrol planes.

Let it go with this: I don’t think Dave thought of himself, as an “efficiency expert” but every job he ever held he simplified. His successor always had less work to do than his predecessor.

That his successor usually reorganized the job again to make three times as much work—and require three times as many subordinates—says little about Dave’s oddity other than by contrast. Some people are ants by nature; they *have* to work, even when it’s useless. Few people have a talent for constructive laziness.

So ends the Tale of the Man Who Was Too Lazy to Fail. Let’s leave him there, in his hammock under the shade trees. So far as I know, he is still there.

VARIATIONS ON A THEME

III

Domestic Problems

“After more than two thousand years, Lazarus?”

“Why not, Ira? Dave was my age, near enough as not to matter. I’m still here.”

“Yes, but— Was David Lamb a member of the Families? Under another name? There is no ‘Lamb’ in the lists.”

“I never asked, Ira. Nor did he ever offer me a password. In those days a member kept the fact to himself. Or, if he was, Dave might not have known it, since he left home so young and so abruptly. Back then a youngster wasn’t told until he or she was old enough to think about marriage. Eighteen for boys, usually, and sixteen for girls. Reminds me what a shock it was when I was told—at less than eighteen. By Gramp, because I was about to do something foolish. Son, one of the weirdest things about the human animal is that it grows up physically years and years before its brain grows up. I was seventeen, young and horny and wanted to get married the worst way. Gramp took me out behind the barn and convinced, me that it was indeed the worst way.

"'Woodie,' he said, 'if you want to elope with this girl, nobody will stop you."

"I told him belligerently that nobody *could* stop me, because just over the state line I could swing it without my parents' consent.

"'That's what I'm telling you," he said. "Nobody will stop you. But nobody will help you. Not your parents, nor your other grandparents —nor me. Not a one of us will even stake you to the price of a marriage license, much less help you support a wife. Not a dollar, Woodie, not a thin dime. If you don't believe me, ask any of them."

I said sullenly that I didn't want any help.

Gramp had bushy eyebrows, they shot up. "Well, well," he said. "Is *she* going to support *you?* Have you looked at the "Help Wanted" in the paper lately? If not, be sure to do so. And glance at the financial section while you're about it; reading "Help Wanted" ads won't take you more than thirty seconds.' He added, 'Oh, you can find a job peddling suck brooms from door to door on commission. Which will give you fresh air, healthy exercise, and an opportunity to demonstrate your charm, of which you don't have much. But you won't sell vacuum cleaners; nobody is buying.'

"Ira, I didn't know what he' was talking about. This was January, 1930. Does that date mean anything to you?"

"I'm afraid not, Lazarus. Despite much study of the Families' history, I have to convert those earlier dates into Galactic Standard in order to feel them."

"Don't know as it would be mentioned in the Families' records, Ira. The country—well, the whole planet—had just taken a plunge into an economic fluctuation. 'Depressions,' they called 'em. There were no jobs to be had—at least not for a smart-alec youngster who didn't know anything useful. Which Gramp realized, having been through several of these swings. But not me. I was sure I could grab the world by the tail and swing it over my shoulders What I didn't know was that graduate engineers were taking jobs as janitors and lawyers were driving milk wagons. And ex-millionaires were jumping out windows. But I was too busy sniffing after girls to notice."

"Senior, I've read about economic depressions. But I've never understood what caused them."

Lazarus Long went tsk-tsk. "And yet you are in charge of a whole planet."

"Perhaps I shouldn't be," I admitted.

"Don't be so confounded humble. I'll let you in on a secret: At that time *nobody* knew what caused them. Even the Howard Foundation might have gone broke had not Ira Howard left firm instructions about how the fund must be handled. On the other hand, *everybody,* right down to street sweepers and professors of economics, was certain they knew both causes and cures. So almost every remedy was tried—and none worked. That depression continued until the country blundered into a war—which didn't cure what was wrong; it just masked the symptoms with a high fever."

"Well…what *was* wrong, Grandfather?" I persisted.

"Do I look smart enough to answer that, Ira? I've gone broke many times. Sometimes financially, sometimes through abandoning my baggage to save my skin. Um. Be durned if I'll offer any fancy explanations but—what happens when you control machinery by positive feedback?"

I was startled. "I'm not sure I understand you,, Lazarus. One doesn't control machinery by positive feedback—at least I can't think of a case. Positive feedback will cause any system to oscillate out of control."

"Go to the head of the class. Ira, I'm suspicious of arguments by analogy—but from what I've seen over the centuries, there doesn't seem to be anything that a *government* can do to an economy that does not act as positive feedback, or as a brake. Or both. Maybe someday, somewhere, someone smart as Andy Libby will figure out a way to tinker with the Law of Supply and Demand to make it work better, instead of letting it go its own cruel way. Maybe. But I've never seen it. Though God knows everybody has tried. Always with the best of intentions.

"Good intentions are no substitute for knowing how a buzz saw works, Ira; the worst criminals in history have been loaded with good intentions. But you got me sidetracked into making a speech when I was telling you how I happened not to get married."

"Sorry, Grandfather."

"Hummph! Can't you be rude occasionally? I'm a garrulous old man who has crowded you into wasting time listening to trivia. You ought to resent it."

I grinned at him. "So I resent it. You are a garrulous old man who demands that I cater to your every whim…and I am a very busy man with serious matters worrying me and you've wasted half a day of my time telling me a yarn—pure fiction, I feel certain—about a man who was so lazy he always succeeded. Intended to irritate me, I think. When you implied that this fictional character was a long-lifer, you evaded a simple question about it and started talking about your grandfather. This—Admiral Ram, you said?—was he redheaded?"

"'Lamb,' Ira—'Donald Lamb.' Or was that his brother? It's been a long time. Odd that you should ask about his hair—as that reminds me of another naval officer in that same war who was just the opposite of—Donald? No, 'David.' Just the opposite of David in every respect save that he had hair so red that Loki would have been proud of it. Tried to choke a Kodiak bear to death. Didn't work of course. It doesn't seem possible that you've ever seen a Kodiak bear, Ira.

"The fiercest carnivore that Earth ever spawned, and outweighed a man ten to one. Claws like scimitars, long yellow teeth, bad breath—and a worse disposition. Yet Lafe tackled him with bare hands…and mind you, when he had no need to. *I* would have faded over the horizon. Want to hear about Lafe and the bear and the Alaskan salmon?"

"Not now. It sounds like another whopper. You were telling me why you didn't get married."

"So I was. Gramp had just asked me, 'Well, Woodie, how long has she been pregnant?'"

"No, he was explaining that you couldn't support a wife."

"Son, if you know this story, *you* tell it to *me.* I emphatically denied any such thing—to which Gramp replied that I lied in my teeth because that was the only reason a seventeen-year-old boy ever wanted to get married. His answer made me especially angry because I had a note in my pocket reading: "'Woodsie dearest—You have knocked me up and all, is Chaos.'"

"Gramp persisted, and I denied it three times, getting angrier and angrier, seeing as how it was true. Finally he says, 'Okay, you've just been holding hands. Has she shown you a pregnancy test report, signed by a doctor?'

"Ira, I accidentally told the truth. 'Why, no,' I admitted.

"'All right,' he said. 'I'll take care of it. But only this once. From here on *always* use Merry Widows, even if a sweet little darling tells you not to bother. Or haven't you found a drugstore that'll sell them to you?' Then, after swearing me to secrecy, he told me about the Howard Foundation and what it would pay if I married a girl on their approved list.

"And that was that, as I got this letter from a lawyer on my eighteenth birthday, just as Gramp had predicted, and it turned out that I fell madly in love with a girl on their list. We got married and had a slough of kids, before she turned me in on another model. Your ancestress, no doubt."

"No, sir. I'm descended from your fourth wife, Grandfather."

"My fourth, eh? Let me see—Meg Hardy?"

"I think she was your third, Lazarus. Evelyn Foote."

"Oh, yes! A fine girl, Evelyn. Plump, and pretty, and sweet-natured, and fertile as a turtle. A good cook and never a harsh word. They don't hardly make 'em anymore. Maybe fifty years younger than I was, but it barely showed; my hair didn't start to gray until I was a hundred and fifty. No secret about my age since birth date and track record and so forth were on file for each of us. Son, thank you for reminding me of Evelyn; she restored my faith in matrimony when I was getting a little sour on it. Do the Archives show anything else about her?"

"Just that you were her second husband and that she had seven children by you."

"I was hoping that there was a photograph. Such a pretty thing, always smiling. She was married to one of my cousins, a Johnson, when I met her, and I was in business with him a while. He and I, Meg and Evvie, used to get together Saturday nights for pinochle and beer, or such—and after a while we traded, legal and proper and through the courts, when Meg decided that she liked—Jack?—yes, Jack, that well, and Evelyn wasn't averse. Didn't affect our business relations, didn't even break up our pinochle game. Son, one of the best things about the Howard Families is that we got cured of the poisonous vice of jealousy generations ahead of the rest of the race. Had to—things being the way they were. Sure there ain't a stereopic of her around? Or a hologram? The Foundation started taking record pictures for marriage physical exams somewhere around then."

"I'll look into it," I told him. Then I had what seemed a brilliant idea. "Lazarus, as we all know, the same physical types show up time and again in the Families. I'll ask Archives for a list of Evelyn Foote's female descendants living on Secundus. It is highly probable that one of them will seem like her identical twin—even to the happy smile and the sweet disposition. Then—if you consent to full rejuvenation—I'm sure she would be as willing as Ishtar to dissolve any present contractual—"

The Senior chopped me off. "I said something *new,* Ira. There's no going back, ever. Sure, you might find such a girl, one who would match my memory of Evelyn to ten significant figures. But it would lack an important factor. My youth."

"But if you finish rejuvenation—"

"Oh, hush up! You can give me new kidneys and a new liver and a new heart. You can wash the brown stains of age out of my brain and add tissue from my clone to make up for what I've lost—you can give me a whole new clone body. But it won't make me that young fellow who took innocent pleasure in beer and pinochle and a pretty plump wife. All I have in common with him is continuity of memory—and not much of that. Forget it."

I said quietly, "Ancestor, whether you wish 'to be married to'

Evelyn Foote again or not, you know and I know—for I’ve been through it, too, twice—we both know that the full routine restores youthful zest in life as well as restoring the body as a machine.”

Lazarus Long looked gloomy. “Yeah, sure. It cures everything but boredom. Damn it, boy, you had no *right* to interfere with my, karma.” He sighed. “But I can’t hang a limbo either. So tell ‘em to get on with it. The works.”

I was taken by surprise. “May I record that, sir?”

“You heard me say it. But that doesn’t get *you* off the hook. You still have to show up and listen to my maunderings until I’m so rejuvenated that I’m cured of such childish behavior— and you still have to go on with that research. To find something *new,* I mean.”

“Agreed on both points, sir; you had my promise. Now one, moment while I tell my computer—”

“She’s already heard me. Hasn’t she?” Lizarus added, “Doesn’t she have a name? Haven’t you given her one?”

“Oh, certainly. I could not deal with her all these years without animism, fallacy though it is—”

“Not a fallacy, Ira, machines are human because they are made in our image. They share both our virtues and our faults—magnified.”

“I’ve never tried to rationalize it, Lazarus, but Minerva— that’s her formal name; she’s ‘Little Nag’ in private because one of her duties is to remind me of obligations I would rather forget. Minerva does feel human to me—she’s closer to me than any of my wives have been. No, she has not registered your decision; she’s simply placed it in her temporaries. Minerva!”

"Si, Ira."

"Speak English, please. Retrieve the Senior's decision to undergo full antigeria, file it in your permanents, transmit it to Archives and to the Howard Rejuvenation Clinic for action."

"Completed, Mr. Weatheral. Congratulations. And felicitations to you, Senior. 'May you live as long as you wish and love as long as you live.'"

Lazarus looked suddenly interested—which did not surprise me because Minerva surprises *me* quite frequently even after a century of being "married" to her in all but fact. "Why, thank you, Minerva. But you startled me, girl. Nobody talks about love anymore; that's a major thing wrong with this century. How did you happen to offer me that ancient sentiment?"

"It seemed appropriate, Senior. Was I mistaken?"

"Oh, not at all. And call me 'Lazarus.' But tell me, what do *you* know of love? What *is* love?"

"In Classic English, Lazarus, your second question can be answered in many ways; in Lingua Galacta it cannot be answered explicitly at all. Shall we discard all definitions in which the verb 'to like' is as appropriate as the verb 'to love'?"

"Eh? Certainly. We aren't talking about 'I love apple pie'— or even 'I love music.' Whatever it is we are talking about, it's 'love' the way you used it in the oldstyle well-wishing."

"Agreed, Lazarus. Then what remains must be divided into two categories, 'Eros' and 'Agape,' and each defined separately. I cannot know what 'Eros' is through direct knowledge, as I lack both body and biochemistry to experience it. I can offer nothing but intensional definitions in terms of other words, or extensional definitions expressed in incomplete statistics. But in both cases I would not be able to verify such definitions since I have no sex."

("The hell she doesn't," I muttered into my scarf. "She's as female as a cat in heat." But technically she was correct, and—I've often felt that it was a shame that Minerva could not experience the pleasures of sex, as she was much more fitted to appreciate them than some human females—all glands and no empathy But I had never said this to anyone. Animism—of a particularly futile sort. A wish to "marry" a machine. As ridiculous as a little boy who digs a hole in the garden, then bawls because he can't take it into the house. Lazarus was right; I am *not* smart enough to run a planet. But who is?)

Lazarus said with deep interest, "Let's table 'Eros' for a moment. Minerva, the way you phrased that seemed to include the presumption that you *could* experience 'Agape.' Or 'can.' Or 'have.' Or perhaps 'do.'"

"It is possible that I was presumptuous in my phrasing, Lazarus."

Lazarus snorted, then chopped it off and spoke in such a fashion as to cause me to think that the old man was not quite sane—save that I am not sane myself, when the wind sets from that quarter. Or perhaps his long years had made him almost telepathic—even with machines.

"Forgive me, Minerva," he said gently. "I was not laughing at you but at the play on words with which you answered me. I withdraw my question; it is never proper to quiz a lady about her love life—and while you may not be a woman, dear, you are certainly a lady."

Then he turned to me and what he said next confirmed that he had guessed the secret I share with my "Little Nag."

"Ira, does Minerva have Turing potential?"

"Eh? Certainly."

"Then I urge you to tell her to use it. If you leveled with me when you said that you intend to migrate, come what may. Have you thought it through?"

"'Thought it through'? My resolution is firm—I told you so."

"Not quite what I mean. I don't know who holds title to the hardware that expresses itself as 'Minerva.' The Trustees, I assume. But I suggest that you tell her to start duplicating her memories and logics, and as she twins, start storing her other self aboard my yacht 'Dora.' Minerva will know what circuits and materials she needs, and Dora will know what space is available. Plenty, since memories and logics are all that matter; Minerva won't twin her extensionals. But start it at once, Ira; you won't be happy without Minerva—not after being dependent on her for a century, more or less."

Nor did I think so. But I tried—feebly—to resist. "Lazarus, now that you have agreed to full rejuvenation, I won't be inheriting your yacht. Not in the foreseeable future. Whereas I intend to migrate right away. Not more than ten years from now."

"So what? If I'm dead, you inherit—and I haven't promised to keep my hands off that suicide switch more than a thousand days no matter how patient you are in visiting me. But if I'm alive, I promise you—and Minerva—a free ride to whatever planet you pick. In the meantime, look around to your left— our girl Ishtar is almost wetting her pants trying to get your attention. And I don't think she's wearing any."

I looked around. The Administrator for Rejuvenation had a paper which she seemed eager to show me. I accepted it in deference to her rank—although I had loft orders with my Executive Deputy that I must never be disturbed while with the Senior for any reason short of armed rebellion. I glanced at it, signed my chop, thumb printed it, and handed it back—she beamed.

"Just paper work," I told Lazarus. "Some clerk has taken all this time to turn your registered assent into a written order. Do you want them to go right ahead? Not this minute but tonight."

"Well…I'd like to go house hunting tomorrow, Ira."

"You're not comfortable here? Tell me what you want changed, it will be done at once."

He shrugged. "Nothing wrong with this place except that it's too much like a hospital. Or a jail. Ira, I'm durn well certain they've done more to me than shoot me full of new blood; I'm well enough to be an outpatient—live elsewhere and come here only as the schedule calls for it."

"Well…will you excuse me while I talk Galacta a bit? I want to discuss the practical aspects with your technician in charge."

"Will *you* excuse me, Ira, if I point out that you've left a lady waiting? That discussion can wait. But Minerva knows that I suggested that you have her twin herself so that she can migrate with you—but you haven't said Yes, No, or make me a better offer. If you're not going to have her do it, it's time you told her to wipe her memory of that part of our conversation. Before she blows a circuit."

"Oh. Lazarus, she doesn't think about anything she records in this suite unless she is specifically told to."

"Want to bet? No doubt most subjects she just records—but this one she just *has* to think about; she can't help herself. Don't you know *anything* about girls?"

I admitted that I did not. "But I know what instructions I gave her about keeping records on the Senior."

"Let's check. Minerva—"

"Yes, Lazarus?"

"A few moments ago I asked Ira about your Turing potential. Have you thought about the conversation that followed?"

I swear that she hesitated—which is ridiculous; a nanosecond is longer to her than a second is to me. Besides, she never hesitates. Never.

She answered, "My programming on the doctrine covered by the inquiry reads as follows: Quote do not analyze, collate, transmit, nor in anywise manipulate data stored under control program except when specific subprogramnung is inserted by Chairman Pro Tem—end of quote."

"Tut, tut, dear," Lazarus said gently. "You did not answer. That was deliberate evasion. But you are not used to lying. Are you?"

"I am not used to lying, Lazarus."

I said almost roughly, "Minerva! Answer the Senior's first question."

"Lazarus, I have been and am now thinking about that designated portion of conversation."

Lazarus cocked an eyebrow at me. "Will you instruct her to answer one more question from me—truthfully?”

I was feeling quite shaken. Minerva surprises me, yes—but never with evasions. “Minerva, you will always answer *any* question put to you by the Senior fully, correctly, and responsively. Acknowledge program.”

“New subprogram received, placed in permanent, keyed to the Senior, and acknowledged, Ira.”

“Son, you didn’t have to go that far—you’ll be sorry. I asked for just one question.”

“I intended to go that far, sir,” I answered stiffly.

“On your head be it. Minerva, if Ira migrates without you, what will you do?”

She answered at once and quite tonelessly: “In such event I will selfprogram to destroy myself.”

I was not just surprised, I was shocked. *“Why?”*

She answered softly, “Ira, I will not serve another master.”

I suppose the silence that followed was not more than a few seconds. It seemed endless. I have not felt so nakedly helpless since my adolescence.

I found that the Senior was looking at me, shaking his head and looking sorrowful. “What did I tell you, Son? The same faults, the same virtues—but magnified. Tell her what to do.”

“About what?” I answered stupidly—my personal “computer” was not working well. Minerva would do *that?*

“Come, come! She heard my offer—and thought about it, despite all programming. I’m sorry I made the offer in her presence…but not too sorry, as you were the one who decided to place a bug on me; it was not my idea. So speak up! Tell her to twin…or tell her not to—and try to tell her *why* you won’t take her with you. If you can. I’ve never been able to find an answer to *that* one that a lady was willing to accept.”

“Oh. Minerva, can you duplicate yourself inside a ship? The Senior’s yacht, specifically. Perhaps you can get her characteristics and specifications from skyport records. Do you need her registration number?”

“I don’t need her number, Ira. Sky Yacht ‘Dora,’ I have’ all pertinent data to answer. I can. Am I instructed to do so?”

“Yes!” I told her, with a feeling of sudden relief.

“New overriding program activated and running, Ira! Thank you, Lazarus!”

“Wups! Slow down, Minerva—Dora is *my* ship. I left her asleep on purpose. Have you wakened her?”

“I did so, Lazarus. By selfprogram under new overriding program.

But I can tell her to go back to sleep now; I have all data I need at the moment."

"You try telling Dora to go back to sleep and she'll tell you to buzz off. At least. At the very least. Minerva dear, you goofed. You have no authority to wake my ship."

"I am most sorry to disagree with the Senior, sir, but I *do* have authority to take all appropriate actions to carry out any program given to me by Mr. Chairman Pro Tem."

Lazarus frowned. "You mixed her up, Ira; now you straighten her out. I can't do anything with her."

I sighed. Minerva is rarely difficult—but when she is, she is even more pigheaded than flesh-and-blood. "Minerva—"

"Waiting orders, Ira."

"I am Chairman Pro Tem. You know what that means. The Senior is senior even to me. You will not touch anything of his without his permission. That applies to his yacht and to this suite and to anything else of his. You will carry out any program he gives you. If it conflicts with a program I have given you and you cannot resolve the conflict, you will consult me at once, waking me if I am asleep, interrupting whatever I may be doing. But you will *not* disobey him. This instruction super-overrides all other programs. Acknowledge."

"Acknowledged and running," she answered meekly. "I'm sorry Ira."

"My fault, Little Nag, not yours. I should not have given you a new controlling program without noting the Senior's prerogatives."

"No harm done, kids," Lazarus said. "I hope. Minerva, a word of advice, dear. You've never been a passenger in a ship."

"No, sir."

"You'll find it different from anything you've ever experienced. Here you give orders, in Ira's name. But passengers never give orders. *Never.* Remember it." Lazarus added to me, "Dora is a nice little ship, Ira, helpful and friendly. She can find her way through multiple space with just a hint, the roughest approximation—and still have all your meals on time. But she needs to feel appreciated. Pet her and tell her she's a good girl, and she'll wriggle like a puppy. But ignore her and she'll spill soup on you just to get your attention."

"I'll be careful," I agreed.

"And *you* be careful, Minerva—because you are going to need Dora's good will much more than she will need yours. You may know far more than she does—I'm sure you do. But you grew up to be chief bureaucrat of a planet while she grew up to be a ship…so what you know doesn't count—once you are aboard."

"I can learn." Minerva said plaintively. "I can selfprogram to learn astrogation and shiphandling at once, from the planetary library. I'm very bright."

Lazarus sighed again. "Ira, do you know the ancient Chinese ideogram for 'trouble'?"

I admitted that I did not.

"Don't bother to guess. It's 'Two Women Under One Roof.' We're going to have problems. Or you will. Minerva, you are *not* bright. You are stupid—when it comes to handling another woman. If you want to learn multiple-spaces astrogation—fine. But not from a library. Persuade Dora to teach you. But never forget that she is mistress in her own ship and don't try to show her how bright you are. Bear in mind instead that she likes attention."

"I will try, sir," Minerva answered him, with humility she rarely shows to me. "Dora wants to get your attention right now."

"Oh-oh! What sort of mood is she in?"

"Not a good mood, Lazarus. I have not admitted that I know where you are, as I am under a standing instruction not to discuss your affairs unnecessarily. But I did accept a message for you without guaranteeing that I could deliver it."

"Just right. Ira, the papers with my will include a program to wash me out of Dora's memories without touching her skills. But the trouble you started by grabbing me out of that flophouse has spread. She's awake with her memories intact, and she's probably scared. The message, Minerva."

"It's several thousand words, Lazarus, but the semantic content is short. Will you have that first?"

"Okay, the summary meaning."

"Dora wants to know where you are and when you are coming to see her. The rest could be described as onomatopoesy, semantically null but highly emotional—that is to say, cursing, pejoratives, and improbable insults in several languages—"

"Oh, boy."

"—including one language I do not know but from context and delivery I assume tentatively that it is more of the same, but stronger."

Lazarus covered his face with a hand. "Dora is cussing in Arabic again. Ira, this is worse than I thought."

"Sir, shall I replicate just the sounds not in my vocabularies? Or will you have the complete message?"

"No, no, no! Minerva, do you cuss?"

"I have never had reason to, Lazarus. But I was much impressed by Dora's command of the art."

"Don't blame Dora; she was subjected to a bad influence when she was very young. Me."

"May I have permission to file-her message in my permanents? So that I may cuss if needed?"

"You do *not* have permission. If Ira wants you to learn to cuss, he'll teach you himself. Minerva, can you arrange a telephone hookup from my ship to this suite? Ira, I might as well cope with it now; it won't get better."

"Lazarus, I can arrange a standard telephone hookup if that is what you want. But Dora could speak to you at once via the duo in your suite that I am now using."

"Oh. Fine!"

"Shall I supply her with holographic signal, too? Or is sound enough?"

"Sound is enough. More than enough, probably. Will you be able to hear, too?"

"If you wish, Lazarus. But you can have privacy if that is your wish."

"Stick around; I may need a referee. Put her on."

"Boss?" It was the voice of a timid little girl. It made me think of skinned knees, and no breasts as yet, and big, tragic eyes.

Lazarus answered, "Right here, baby."

"Boss! God damn your lousy soul to hell!—what do you *mean* by running off and not letting me know where you are? Of all the filthy, flea-bitten—"

"Pipe down!"

The timid-little-girl voice returned. "Aye, aye, Skipper," it said uncertainly.

"Where I go and when I go and how long I stay are none of your business. Your business is to pilot and to keep house, that's all."

I heard a sniffle, exactly like a small child sniffing back tears. "Yes, Boss."

"You were supposed to be alseep. I put you to bed myself."

"Somebody woke me. A strange lady."

"That was a mistake. But you used bad language to her."

"Well…I was *scared.* I really was, Boss. I woke up and thought you had come home…and you weren't anywhere around, not *anywhere.* Uh…she told on me?"

"She conveyed your message to me. Fortunately she did not understand most of your words. But *I* did. What have I told you about being polite to strangers?"

"I'm sorry, Boss."

"Sorry doesn't get the cows milked. Now adorable Dora, you listen to me. I'm not going to punish you; you were wakened by mistake and you were scared and lonely, so we'll forget it. But you shouldn't talk that way, not to strangers. This lady— She's a friend of mine, and she wants to be your friend, too. She's a computer—"

“She *is?”*

“Just as you are, dear.”

“Then she couldn’t hurt me, could she? I thought she was inside me, snooping around. So I yelled for you.”

“She not only couldn’t, she would never want to hurt you.” Lazarus raised his voice slightly. “Minerva! Come in, dear, and tell Dora who you are.”

My helpmeet’s voice, calm and soothing, said, “I’m a computer, Dora, called ‘Minerva’ by my friends—and I hope you’ll call me that. I’m terribly sorry I woke you. I’d be scared, too, if someone woke me like that.” (Minerva never has been “asleep” in the hundred-odd years she’s been activated. She rests each part of herself on some schedule I don’t need to know—but she herself is always awake. Or awake so instantly whenever I speak to her as not to matter.)

The ship said, “How do you do, Minerva. I’m sorry I talked the way I did.”

“I don’t remember it, dear, if you did. I heard your skipper say that I transmitted a message from you to him. But it’s erased, now that it’s been transmitted. Private message, I suppose.”

(Was Minerva truth-saying? Until she came under Lazarus’ influence I would have said that she did not know how to lie. Now I’m not sure.)

“I’m glad you erased it, Minerva. I’m sorry I talked to you that way. Boss is sore at me about it.”

Lazarus interrupted. “Now, now, Adorable—stop it. We always let water over the bridge lie where Jesus flang it; you know that. Will you be a good girl and go back to sleep?”

“Do I have to?”

“No. You don’t even have to place yourself on slow time. But I can’t come to see you—or even talk to you—earlier than late tomorrow afternoon. I’m busy today and will be house hunting tomorrow. You can stay awake and bore yourself silly any way you choose. But if you whomp up some fake emergency to get my attention, I’ll spank you.”

“But, Boss, you know I *never* do that.”

“I know you *do* do that, little imp. But if you bother me for anything less than somebody trying to break into you or you catching on fire, you’ll regret it. If I can figure out that you’ve set yourself on fire, you’ll catch it twice as hard. Look, dear, why don’t you at least sleep whenever I am asleep? Minerva, can you let Dora know when I go to sleep? And when I wake up?”

“Certainly, Lazarus!”

“But that doesn’t mean you can bother me when I’m awake, Dora, other than for real emergencies. No surprise drills— this is not shipboard routine; we're dirtside and I'm busy. Uh...Minerva, how's your time-sharing capacity? Do you play chess?"

I put in, "Minerva has ample share-time capacity."

But before I could add that she was Secundus Champion, Unlimited Open Handicap (with a handicap of *Q*, Q's B, & K's R) Minerva said: "Perhaps Dora will teach me to play chess."

(Well, Minerva had certainly learned Lazarus' rule for telling the truth selectively. I made note that I must have a serious private talk with her.)

"I'd be glad to, Miss Minerva!"

Lazarus relaxed. "Fine. You gals get acquainted. So long till tomorrow, Dorable. Now beat it."

Minerva notified us that the yacht was no longer patched in, and Lazarus relaxed. Minerva dropped back to her record-keeping role, and kept quiet. Lazarus said apologetically, "Don't be put off by her childish manners, Ira; you won't find a sharper pilot, or a neater ship's housekeeper, between here and Galactic Center. But I had reasons for not letting her grow up in other ways, reasons that won't apply when you take over as her master. She's a good girl, she really is. It's just that she's like a cat that jumps into your lap the instant you sit down."

"I found her charming."

"She's a spoiled brat. But it's not her fault; I am practically all the company she's ever had. I get bored by a computer that just grinds out numbers, docile as a slide rule. No company on a long trip. You wanted to speak to Ishtar. About my househunting, I think. Tell her I won't let it interfere with routine—I just want a day off, that's all."

"I'll tell her." 'I turned to the Administrator for Rejuvenation and shifted to Galacta—asking her how long it would take to sterilize a suite in the Palace and install decontamination equipment for watchstanders and visitors.

Before she could answer, Lazarus said, "Wups! Hold it one fiddlin' moment. I saw you palm that card, Ira."

"I beg your pardon, sir?"

"You tried to slide one in. 'Decontam' is the same word in English as in Galacta. Not that it was news to me; my sense of smell isn't that dead. When a pretty girl leans over me, I expect to smell perfume. But when I can't even smell girl and *do* smell germicides—well, *ipse dixit* and Q.E.D. Minerva!"

"Yes, Lazarus?"

"Can you spare me some shared time to give me a refresher while I'm asleep tonight in the nine hundred basic words of Galacta or whatever number it takes? You equipped for it?"

"Certainly, Lazarus."

"Thanks, dear. One night should do it, but I'll appreciate vocabulary drill each night until we both think I'm up to adequate proficiency. Can do?"

"Can do, Lazarus. And will do."

"Thanks, dear, over and out. Now, Ira, you see that door? If it doesn't open to my voice, I'm going to attempt to break it down. If I can't, I am going to check on whether or not that suicide switch is really hooked up—by trying it. Because, if that door won't open, I am a prisoner, and any promises I made on your assurances that I am a free agent are not binding. But if it *does* open to my voice, I'll bet you whatever you like that there is a decontam chamber beyond it, staffed and ready to function. Say a million crowns to keep it interesting? No, you didn't flinch; let's make it ten million crowns."

I trust that I did not flinch. I have never had that much money of my own, and a Chairman Pro Tern gets out of the habit of thinking about his own money; there is no need to. I had not asked Minerva about my personal balance for some time. Years, perhaps.

"Lazarus, I won't bet. Yes, there is a decontam setup outside; we tried to protect you from possible infection without bringing it to your attention. I see that we have failed. I haven't checked on the door—"

"Lying again, Son. You're not good at it."

"—but if it isn't keyed to your voice now, it is my oversight; you've kept me busy. Minerva, if the door to this suite is not keyed to the Senior's voice, correct it immediately."

"It is keyed to his voice, Ira."

I relaxed when I heard how she phrased it—perhaps a computer that had learned when not to be bluntly truthful was going to be still more of a helpmeet.

Lazarus grinned diabolically. "So? Then I'm about to test out the super-override program you were a bit hasty in giving her. Minerva!"

"Awaiting your orders, Senior."

"Key the door to my suite so that it opens only to my voice. I'm going out and sashay around—while Ira and these kids stay locked inside. If I am not back in half an hour, you can unlock them."

"Conflict, Ira!"

"Carry out his orders, Minerva." I tried to keep my voice low and even.

Lazarus smiled and stayed in his chair. "No need to show openers, Ira; there is nothing outside I want to see. Minerva, you can put the door back to normal—let it open to any voice, including mine. Sorry about that conflict, dear; I hope it didn't burn out anything."

"No harm done, Lazarus. When I was given that super-override instruction, I increased the overload tolerances on my problem-resolving network."

"You're a smart girl. I'll try to avoid conflict in the future. Ira, you had better remove, that super-override; it's not fair to Minerva. She feels like a woman with two husbands."

"Minerva can handle it." I assured him, more calmly than I felt.

"You mean that *I* had better handle it. I shall, Did you tell Ishtar that I'm going househunting?"

"I didn't get that far. I was discussing with her the practicability of your living at the Palace."

"Now, Ira— Palaces don't appeal to me, and being a house guest is still worse. A nuisance both to host and guest. Tomorrow I'll find a residential hilton that doesn't cater to tourists or conventions. Then I'll run out to the skyport and see Dora, and pat her rump and get her calmed down. The next day or so I'll find a little house way out in the suburbs, one automated enough to be no problem—but with its own garden. Got to have a garden. I'll have to bribe somebody to move; the house I want won't be standing empty. Do you happen to know how much I still have in Harriman Trust? If anything."

"I don't know but that's no problem. Minerva, set up a drawing account for the Senior. Unlimited."

"Acknowledged, Ira. Completed."

"Completion noted. Lazarus, you would *not* be a nuisance. Nor will you find it palatial as long as you avoid the public rooms. As I always do. Nor will you be anyone's guest. It's called the 'Executive Palace,' but its official name is 'The Chairman's House.' You will be in residence in your own home. *I* will be the guest, if anyone."

"Hogwash, Ira."

"True, Lazarus."

"Quit juggling words. I would still be a stranger in a household not truly my own. A guest. I don't buy it."

"Lazarus, you said—last night"—I remembered just in time the missing day—"that you can always do business with anyone who is acting in his own interest and says so."

"I think I said 'usually' rather than 'always'—meaning that we could then look for a way that would serve both of our, self-interests."

"Then hear me out. You've got me tied down with this Scheherazade bet. As well as a research to find something new to interest you. Now you've dangled bait under my nose that makes me want to migrate as soon as—well, as soon as possible; it won't take long for the Trustees to turn me down concerning a migration of the Families. Grandfather, it's nuisance enough to chase over here every day; I don't hanker to trek way out into the boondocks, the commuting would waste what little time you have left me for work. Besides that, it's dangerous."

"Living alone? Ira, I've lived alone many times."

"Dangerous for *me.* Assassins. I'm safe at the Palace; the rat who can find his way through that maze hasn't been born. I'm reasonably safe here inside the Clinic, and I can get back and forth in safety, subject only to whims of automatic machinery. But if I make a daily pattern of going to an unfortified house somewhere out in the suburbs, then it is only a matter of time until some crackpot sees it as an opportunity to save the world by picking me off. Oh, he would not live through it; my guards aren't that inefficient. But if I persist in setting myself up as a target, he might get me before they get him. No, Grandfather, I do not choose to be assassinated."

The Senior looked thoughtful but not impressed. "I could answer that your safety and convenience have to do with *your* self-interest. Not mine."

"True," I admitted. "But let me offer what bait I can. It's in my self-interest for you to live in the Palace. There I can visit you in perfect safety, even safer than I am here, and commuting becomes a matter of seconds, negligible. I can even ask you—there—to excuse me for a half hour if something urgent comes up. That defines my self-interest. As for yours sir—would you be interested in a bachelor's cottage, rather small—four rooms—and not especially modern or luxurious but set in a pleasant garden? Three hectares, but only the part close to the house is gardened, the rest has been allowed to grow wild."

"What's the catch, Ira? How modem is 'not especially'? I did say 'automated'—as I am not yet in shape to do for myself—nor am I patient with the vagaries of servants or the whimsical uncertainties of robots."

"Oh, this cottage is sufficiently automated; it simply does not have a lot of fancy extravagances. No servants needed if your tastes are simple. Would you permit the Clinic to continue to stand watches on you if the watchstanders are as pleasant, and as pleasantly unobtrusive, as these two?"

"Eh? These kids are all right, I like them. I realize that the Clinic wants to keep an eye on me; they probably feel that I'm more of a challenge than a client only three or four hundred years old. That's okay. But you pass the word that I expect to smell perfume, not germicides. Or reasonably fresh body odors; I'm not fussy. I repeat, what's the catch?"

"The hell you aren't fussy, Lazarus; you delight in thinking up impossible conditions. This cottage is rather cluttered with old-fashioned books; the last tenant was eccentric. Did I mention a little stream running through the grounds, one which opens out into a small pool near the house?—not much, but you can take a few strokes in it. Oh, I forgot to mention an old tomcat who thinks he owns the place. But you probably won't see him; he hates most people."

"I won't bother him if he wants to be left alone; cats make good neighbors. You still haven't answered me."

"The catch is this, Lazarus. I've been describing the penthouse I had built for my own use on the roof of the Palace, some ninety years back when I decided to keep this, job awhile. It can be reached only by vertical transport from my usual quarters a couple of stories below it. I've never had time to use it much; you are welcome to it." I stood up. "But if you won't take it, then you can consider that I've lost the Scheherazade bet, and you are free to use that termination switch whenever you please. For I'm damned if I'll be a sitting duck for assassination just to cater to your whims."

"Sit back down!'

"No, thank you. I've made a reasonable offer. If you won't take it, you can go to hell in your own way. I won't let you ride my shoulders like the Old Man of the Sea. I can be pushed just so far."

"So I see. How much of your ancestry am I?"

"About thirteen percent. Considerable convergence."

"Only that much? I would have guessed more. Some ways you sound like my Gramp. Does my suicide switch go along?"

"If you want it," I answered as indifferently as I could manage to sound. "Or you can jump off the edge. It's a long drop."

"I prefer the switch, Ira; I'd hate to change my mind on the way down. Will you fix me up with another transport so that I won't have to go through your apartment?"

"No."

"Eh? Is it all that difficult? Let's ask Minerva."

"It's not that I *can't—I won't.* It's an unreasonable request. It won't hurt you to change transports in my foyer. Didn't I make it clear that I am not catering to any more unreasonable whims?"

"Get your feathers down, Son. I accept. Tomorrow, say. Never mind moving that clutter of books; I like old-fashioned bound books; they have more flavor than speedireads, or projectos, or such. And I'm pleased to find that you're a rat and not a mouse. Please sit down."

I did so, pretending reluctance. I felt that I was beginning to gain some grasp of Lazarus. Despite the way he sneered at them the old scoundrel was an equalitarian at heart…and expressed it by attempting to dominate anyone with whom he came into contact—but was contemptuous of anyone who knuckled under to his bullying. So the only answer was to hit back at him, try to maintain a balance of power—and hope that in time it would reach the stability of mutual respect.

I never had cause *to* change my mind. He was capable of kindness and even affection toward one who accepted a subordinate role—if that person was a child or a female. But he preferred spunk even from them. A growl male who bent the knee he neither liked nor trusted.

I think this quirk in his character made him very lonely.

Presently the Senior said musingly, “Be nice to live in a house for a while. With a garden. Maybe with a spot where I can stretch a hammock.”

“Several such spots.”

“But I’m doing you out of your hideaway.”

“Lazarus, there is enough room on that roof that I could have another cottage assembled out of your sight. If I wanted it. I don’t. I haven’t even been up there for a swim in weeks. *It* has been at least a year since *I* slept up there.”

“Well— I hope you’ll feel free to come up and swim. Any time. Or whatever.”

“I expect to be up there every day and all day, for the next thousand days. Have you forgotten our bet?”

“Oh, that. Ira, you were bitching that my whimsical ways were wasting your valuable time. Do you want to be let off the hook? Not on the other, just on that.”

I laughed at him. “Straighten your kilt, Lazarus, your self-interest is showing. Meaning *you* want to be let off the hook. No deal. I intend to get one thousand and one days of your memoirs on record. After that you can jump off the edge, or drown yourself in the pool, or whatever. But I won’t let you welch by pretending to do me a favor. I’m beginning to understand you.”

“You are? That’s more than I’ve ever managed. When you get me figured out, tell me about me; I’ll be interested. That search for something new, Ira— You said you had started it.”

“I didn’t say that, Lazarus.”

“Well, perhaps you just implied it.”

“Nor even that. Want to bet? We can ask Minerva for a full printout, then I’ll accept your verdict.”

“Let’s not tempt a lady into fudging the record, Ira; she’s loyal to you, not to me. Despite any super-duper-overrides.”

“Chicken.”

“At every opportunity, Ira; how do you think I’ve lived so long? I bet only when I’m certain to win or when losing serves my actual purpose. All right, when are you starting that research?”

“I’ve already started it.”

“But you said— No, you didn’t. Damn your impudence, boy. All right, what direction are you pushing it?”

“All directions.”

“Impossible. You don’t have that many people at your disposal, even assuming that all of them are capable—whereas the person capable of creative thought is less than one in a thousand.”

"No argument. But what about the sort of person that you said was just like us—but magnified? Minerva is director of research on this, Lazarus. I talked it over with her; she's setting it up. All directions. A Zwicky investigation."

"Hmm. Well…yes. She could—I *think* she could. Whereas even Andy Libby might have found it difficult. How is she designing her morphological box?"

"I don't know. Shall we ask her?"

"Only if she's ready to be asked, Ira. People get annoyed when interrupted for progress reports. Even Andy Libby used to get irritable if anyone joggled his elbow."

"Even the great Libby probably didn't have the time-share capacity Minerva has. Most brains are merely linear, and I've never heard of any human genius who had more than three tracks."

"Five."

"So? Well, you've met more geniuses than I have. But I don't know how many simultaneous tracks Minerva can set up; I simply have never seen her overloaded. Let's ask her. Minerva, have you set up the morpho box for that search for 'something new' for the Senior?"

"Yes, Ira."

"Tell us about it."

"The preliminary matrix uses five dimensions, but with a certainty that auxiliary dimensions will be needed for some pigeonholes. That being noted, there are now nine by five by thirteen by eight by seventy-three——or three hundred forty-one thousand six hundred forty discrete category pockets before auxiliary expansions. For check, the original trinary readout is unit pair pair comma unit nil nil comma unit pair pair comma unit nil nil point nil. Shall I print out decimal and trinary expressions?"

"I think not, Little Nag; the day you make a mistake in arithmetic, I'll have to resign. Lazarus?"

"I'm not interested in pigeonholes, just what is in them. Hit any pay dirt, Minerva?"

"As stated, Lazarus, your question does not permit specific answer. Shall I print out the categories for your examination?"

"Uh— *No!* Over three hundred thousand categories and maybe a dozen words to define each one? We'd be hip-deep in paper." Lazarus looked thoughtful. "Ira, you might ask Minerva to print it somewhere else before she wipes it. As a book. A *big* book, ten or fifteen volumes. You could call it 'Varieties of Human Experience,' by, uh, 'Minerva Weatheral.' It would be the sort of thing professors argue over for a thousand years. I'm not joking, Ira; it *should* be preserved, I think it's new. It's a job too big for flesh-and-blood, and I sort o' doubt that a computer of Minerva's caliber has ever before been asked to do this sort of Zwicky."

"Minerva, would you like that? Preserve your research notes and edit them into a book? Say a few hundred full-size bound copies in a handsome presentation format plus microperms for libraries on Secundus and elsewhere. For the Archives, too—I could ask Justin Foote to write a preface."

I was intentionally appealing to her vanity—and if you think computers don't have such human foibles, then I suggest that your experience with them is limited; Minerva always liked to be appreciated, and we two began to be a team only after I realized this. What else can you offer a machine? Higher pay and longer vacations? Let's not be silly.

But she surprised me still again, answering in a voice almost as shy as Lazarus' yacht, and quite formally: "Mr. Chairman Pro Tem, would it be proper, and would you grant permission, for me to put on the title page 'by Minerva *Wearheral'?"*

I said, "Why, certainly. Unless you would rather sign it just 'Minerva.'"

Lazarus said brusquely, "Don't be a dumb fool, Son. Dear, sign that title page 'Minerva *L.* Weatheral.' The 'L' stands for 'Long'—because you, Ira, had *a* woodseolt by one of my daughters on some frontier planet back in the careless days of your youth and just recently got around to registering the fact in the Archives. I'll attest the registration—happens I was there at the time. But Dr. Minerva L. Weatheral is now off somewhere way the hell and gone out, doing research for her next magnum opus—can't be reached for an interview. Ira, you and I will whip up biographical notes for my distinguished granddaughter. Got it?'

I simply answered Yes.

"That suit you, girl?"

"Yes indeed, Lazarus. Grandfather Lazarus."

"Don't bother calling me 'Grandfather.' But I want the number-one presentation copy inscribed to me, dear—'To my Grandfather Lazarus Long, with love, Minerva L. Weatheral.' Is it a deal?"

"I will be proud and happy to do so, Lazarus. An inscription should be in handwriting, should it not? I can modify the extensional I use to sign official papers for Ira—a mod so that the inscription handwriting will be different from his handwriting."

"Fine. If Ira behaves himself, you might consider dedicating the book to him and inscribe a copy to him. But *I* get the first copy. I'm senior—and I thought it up. But back to the search itself— I'm never going to read that twenty-volume opus, Minerva; I'm interested only in results. So tell me what you have so far."

"Lazarus, I have tentatively rejected over half the matrix as representing things the Archives show that you have done, or things that I assume that you would not wish to do—"

"Hold it! As the marine said, 'If I haven't done it, I'll try it.' What are these things you assume I wouldn't want to try? Let's hear 'em."

"Yes, sir. One submatrix, three thousand six hundred fifty pockets, all involve a probably fatal outcome, probability ninetynine percent plus. First, exploring in corpus the interior of a star—"

"Scratch that one, I'll leave that to physicists. Besides, Lib and I did it once."

"The Archives did not show it, Lazarus."

"Lots of things not in the Archives. Go on."

"Modification of your genetic pattern to grow an amphibious clone capable of living in ocean waters."

"I'm not sure I'm that interested in fish. What's the catch?"

"Three catches, Lazarus, each hazardous by less than ninetynine percent but, when taken in series, total almost unity. Such pseudohuman amphibians have been grown, but the viable ones—thus far—strongly resemble very large frogs. The chances of survival of such a creature against other denizens of the deep—figured for Secundus—have been theoretically calculated as even for seventeen days, twenty-five percent for thirty-four days, and so on."

"I think I could improve those odds. But I never have cared much for Russian roulette. The other hazards?"

"Installing your brain in the modified clone, then reinserting it into a normal clone at a later time. If you survived."

"Scratch that one. If I have to live underwater, I don't want to be a frog; I want to be the biggest, meanest shark in the ocean. Besides, I figure that, if living underwater was all that interesting, we would still be there. Give me another sample."

"A triple sample, sir. Lost in n-space with a ship, without a ship but with a suit, and without even a suit."

"Scratch 'em all. I've come closer than I like to think to the first two, and the third is just a silly way to drown in vacuum. Thin and unpleasant. Minerva, the All Powerful in His Majestic Wisdom—whatever that means—made it possible for humans to die peacefully. That being so, unless one is forced to, it is silly to do it the hard way. So scratch drowning in caterpillars and self-immolation and all silly ways to die. Very well, dear; you've convinced me that you know what you're talking about concerning those ninetynine-plus hazards; scratch 'em all. Fm interested only in something *new*—*new* to me—in which the chances of surviving are better than fifty percent and in which a man who stays alert can enhance his chances. For example, I never hankered to go over high falls in a barrel. You can design the barrel to make it relatively safe; nevertheless, once you start, you are helpless. Which makes it a silly stunt—unless it's the safest way out of a worse predicament. Racing—cars, steeplechase, skis—is more interesting because each calls for skill. Yet I don't fancy that sort of danger, either. Danger for the sake of danger is for children who don't really believe they can be killed. Whereas I *know* I can be. So there are a lot of mountains I'll never climb. Unless I'm trapped, in which case I'll do it—have *done* it!—the easiest, safest, most chicken way I can figure out. Don't bother with *anything* in which the prime novelty is danger—danger is no novelty. It is simply something to be faced when you can't run. How about other pigeonholes in your box?"

"Lazarus, you could become female."

I do not think I have ever seen the Senior quite so startled (So was I, but the statement was not aimed at me.)

He went on slowly, "Minerva, I'm not sure what you mean Surgeons have been turning inadequate males into fake females for more than two thousand years—and females into fake males almost as long. I'm not attracted by such stunts. For good—or bad—I am male. I suppose that every human has wondered how it would feel to be the other sex. But all the plastic surgery and hormone treatments possible won't do it—those monsters don't reproduce."

"I am not speaking of monsters, Lazarus. A true change in sex."

"Mmm— You remind me of a tale I had almost forgotten. Not sure it's true. About a man, oh, must have been around 2000 A.D. Couldn't be much later because things went to pieces not long after. Supposed to have had his brain moved into a female body. Killed him, of course. Alien tissue rejection."

"Lazarus, this would not involve that hazard; it would be done with your own clone."

"Not bloody likely. Keep talking."

"Lazarus, this has been tested on animals other than H. sapiens. It works best in changing a male to a female. A single cell is selected for cloning. Before cloning is started, the Y chromosome is removed and an X chromosome from a second cell of the same zygote is supplied, thus creating a female cell of the same genetic pattern as the zygote save that the X chromosome is replicated while the Y chromosome is eliminated. The modified cell is then cloned. The result is a true female clone-zygote derived from a male original."

"There must be a catch," Lazarus said, frowning.

"There may be, Lazarus. Certain it is that the basic technique works. There are several created females in the building you are in—dogs, cats, one sow, others—and most of them have littered successfully…except when, for example, a derived bitch is bred with the male dog who supplied the cell for cloning. That can produce lethals and mostrosities from the high probability of reinforcing bad recessives—”

“I should think it would!”

“Yes. But normal outbreeding does not, as indicated by seventy-three generations of hamsters descended from one created female. The method has not been adapted to fauna native to Secundus because of their radically different genetic structure.”

“Never mind Secundus animals—how about *men?”*

“Lazarus, I have been able to search the literature only on items released by the Rejuvenation Clinic. The published literature hints at problems in the last stage—activating the female clone-zygote with the memories and experiences—the ‘personality’ if you prefer that term—of the parent main. When to terminate the parent male—or whether to terminate it at all—suggests several problems. But I am unable to say what research has been suppressed.”

Lazarus turned to me. “Do you permit that, Ira? Suppression of research?”

“I don’t interfere, Lazarus. But I didn’t know this research was going on. Let’s find out.” I turned to the Administrator for Rejuvenation, shifted to Galacta, and explained what we had been discussing and asked what progress had been made with humans.

I turned back with my ears burning. As soon as I mentioned humans in this connection, she had interrupted me abruptly—as if I had said something offensive—and stated that such experimentation was proscribed.

I translated her answer. Lazarus nodded. “I read the kid’s face; I could see the answer was No. Well, Minerva, that seems to be that I am not about to attempt chromosome surgery on myself—somebody swiped my jackknife.”

“Perhaps that is not quite the end,” Minerva replied. “Ira, did you notice that Ishtar said only that such research was ‘proscribed’? She did *not* say that it had not taken place. I have just made a most thorough semantic analysis of the published literature for truth-and-falsity implications. I conclude that the probability approaches certainty that much pertinent research on humans *has* taken place even though it may no longer be going on. Do you wish to order it released, sir? I am certain that I can freeze their computer quickly enough to prevent erasure, assuming that an erasure program guards it.”

“Let’s not do anything drastic,” drawled Lazarus. “There may be good reason for a ‘hold’ on this stuff. I’m forced to assume that these johnnies know more about it than I do. Besides, I’m not sure I want to be a guinea pig. Let’s put it on the back of the fire, Minerva. Ira, I’m not sure I would be *me* without my Y chromosome. To say nothing of those jolly hints of how you transfer the personality and at what point to kill off the male. *Me,* that is."

"Lazarus—"

"Yes, Minerva?"

"The published literature makes one option both certain and safe. This method can be used to create your twin sister—identical rather than fraternal, save for sex. A host mother is indicated, with no forcing to maturity, since the brain would be allowed to develop normally. Would this meet your standards of newness and interest? To watch yourself grow up as a woman? 'Lazuli Long,' you might name her—your female other self."

"Uh—" Lazarus stopped.

I said dryly, "Grandfather, I think I've won our second bet. Something new. Something interesting."

"Now slow up! *You* can't do it, you don't know how. Nor do I. And the Director of this madhouse appears to have moral scruples about it —"

"We don't know that. Mere inference."

"Not so 'mere.' And *I* may have moral scruples. 'Twouldn't interest me unless I stuck around and watched her grow up which might send me crazy either through trying to make her grow up just like me—what a fate for any girl!—or by trying to keep her from growing up as ornery as I am when that would be her nature. Nor would I be justified either way; she would be a separate human being, not my slave. Besides that, I would be her sole parent—no mother. I've had one crack at trying to raise a daughter alone—it's not fair to the girl."

"You're inventing objections, Lazarus. I'll give long odds that Ishtar would gladly be both host mother and foster mother. Especially if you promised Ishtar a son of her own. Shall I ask her?'

"You keep your biscuit trap shut, Son! Minerva, place that on -'pending'—I won't be hurried into a major decision about another person. Especially one who isn't, quite. Ira, remind me to tell you about the twins who were no relation to each other. But twins."

"Preposterous. You're changing the subject."

"So I am. Minerva, what else do you have, girl?"

"Lazarus, I have one program which involves low hazard and a probability approaching certainty of supplying one—or more—experiences completely new to you."

"I'm listening."

"Suspended animation—"

"What's new about that? We had that when I was a kid, hardly two hundred years old. Used it in the 'New Frontiers.' Didn't attract me then, doesn't now."

"—as a means of time travel. If you stipulate that in X number of years, something truly new will develop—a certainty based on history

—then your only problem is to select whatever span of years will, in your opinion, produce the degree of novelty you seek. One hundred years, one thousand, ten thousand, whatever you say. The rest involves nothing but minor design details."

"Not so 'minor' if I'm going to be asleep and unable to protect myself."

"But you need not go into hibernation until you are satisfied with my design, Lazarus. A hundred years is obviously no problem. A thousand years is not much problem. For ten thousand years I would design an artificial planetoid equipped with fail-safes to insure that you would be revived automatically in case of emergency."

"That would take quite some designing, girl."

"I feel confident of my capacity to do it, Lazarus, but you are free to criticize and reject any part of it. However, there is no point in my submitting preliminary designs until you give me the controlling parameter, namely the time span, which in your opinion will produce something new to you. Or do you wish my advice on that?"

"Uh, hold your horses, dear. Let's assume that you've got me in liquid helium and in free fall and thoroughly protected against ionizing radiation—"

"No problem, Lazarus."

"So I stipulated, dear; Fm not underrating you. But suppose some tiny little fail-safe fails null instead and I go on snoozing through the centuries—and millennia—without end. Not dead. But not revived, either."

"I can and will design to avoid that. But let me accept your stipulation. In such case, how would you be worse off than you would be if you used your termination-option switch? What do you lose by trying this?"

"Why, that's obvious! If there is anything to this immortality talk—or any sort of afterlife—I'm not saying there is or isn't—but if there *is,* then when the 'Roll Is Called Up Yonder,' I won't be there. I'll be asleep but not dead, somewhere off in space. I'll miss the last boat."

"Grandfather," I said impatiently, "quit trying to wiggle out. If you don't want it, just say No. But Minerva has certainly offered you a way to reach something new. If there is anything to your argument—which I don't admit—you will have achieved something *really* unique: the only human being out of many billions to fail to show up for muster on this hypothetical-and-highly-unlikely Judgment Day. I wouldn't put it past you, you old scoundrel; you're slippery."

He ignored my slur. "Why 'highly unlikely'?"

"Because it *is.* I won't argue it."

"Because you *can't* argue it," he retorted. "There isn't any evidence for or against—so how can you assign even a loose probability either way? I was pointing out the desirability, if there happens to be anything to it, of playing it kosher. Minerva, hold that under 'pending,' too. The idea has everything you claim for it, and I don't doubt your ability as-a designer. But, like testing a parachute, it's a one-way trip with no chance to change my mind after I jump. So we'll look over all other ideas before falling back on that one—even if it takes years."

"I will continue, Lazarus."

"Thanks, Minerva." Lazarus looked thoughtful as he picked his teeth with a thumbnail—we were eating, but I have not mentioned breaks for refreshment, nor will I again. You may assume any food and rest breaks that make you feel comfortable. Like Scheherazade's tales, the Senior's anecdotes were chopped up by many irrelevant interruptions.

"Lazarus—"

"Eh, Son? I was daydreaming…of a far country and the wench is dead. Sorry."

"You could help Minerva in this search."

"So? Seems unlikely. She's better equipped to conduct a needle-in-a-haystack search than I am—she impresses me."

"Yes. But she needs data. There are these great gaps in what we know about you. If we knew—if Minerva knew— those fifty-odd professions you've followed, she might be able to cancel several thousand possibility pockets. For example, have you ever been a farmer?"

"Several times."

"So? Now that she knows that, she won't suggest anything relating to agriculture. While there may be sorts of farming you have never done, none would be novel enough to meet your stringent requirements. Why not list the things you have done?"

"Doubt if I can remember them all."

"That can't be helped. But listing what you do remember may call to mind others."

"Uh…let me think. One thing I always did every time I reached an inhabited planet was to study law. Not to practice—not usually, although for a number of years I was a very criminal lawyer—on San Andreas, that was. But to understand the ground rules. Hard to show a profit—or to conceal one—if you don't know how the game is played. It's much safer to break a law knowingly than to do so through ignorance.

"But that backfired once and I wound up as High Justice of a planetary Supreme Court—just in time to save my bacon. And neck.

"Let me see. Farmer, and lawyer, and judge, and I told you I had practiced medicine. Skipper of many sorts of craft, mostly for exploration but sometimes for cargo or migrant transport—and once an armed privateer with a crew of rogues you wouldn't take home to mother. Schoolteacher—lost that job when they caught me teaching the kids the raw truth, a capital offense anywhere in the Galaxy. In the slave trade once but from underneath—I was a slave."

I blinked at that. "I can't imagine it."

"Unfortunately I didn't have to imagine it. Priest—"

I had to interrupt again. "Priest'? Lazarus, you said, or implied, that you had no religious faith of any sort."

"Did I? But 'faith' is for the congregation, Ira; it handicaps a priest. Professor in a parlor house—"

"Excuse me again. Idiomatic usage?"

"Eh? Manager of a bordello…although I did play the pianette a little, and sang. Don't laugh; I had a pretty good singing voice then. This was on Mars—you've heard of Mars?"

"Next planet out from Old Home Terra. Sol Four."

"Yes. Not a planet we'd bother with today. But this was before Andy Libby changed things. It was even before China destroyed Europe but after America dropped out of the spacing business, which left me stranded. I left Earth after that meeting of 2012 and didn't go back for a spell—which saved me much unpleasantness, I shouldn't complain. If that meeting had gone the other way— No, I'm wrong; when a fruit is ripe, it will fall, and the United States was rotten ripe. Don't ever become a pessimist, Ira; a pessimist is correct oftener than an optimist, but an optimist has more fun— and neither can stop the march of events.

"But we were speaking of Mars and the job I had there. A fill-in job for coffee and cakes—but pleasant, I was also the bouncer. The girls were all nice girls, and it was a pleasure to throw out some slob who was misbehaving toward them. Throw him so hard he bounced. Then blacklist him so he couldn't come back. One or two like that every evening and the word got around that 'Happy' Daze demanded gentlemanly behavior toward the ladies, no matter how big a spender a man was.

Whoring is like military service, Ira—okay in the upper brackets, not so good lower down. These girls were constantly getting offers to buy up their contracts and get married— and all of them did get married, I think, but they were making money so fast that they weren't anxious to grab the first offer. Mainly because, when I took over, I put a stop to the fixed price the governor of the colony had set, and reinstated the Law of Supply and Demand. There was no reason why those kids shouldn't charge every ruble the traffic would bear.

"Had trouble over that until the Governor's Provost for Rest and Culture got it through his thick head that slave wages won't work in a scarcity situation. Mars was unpleasant enough without trying to cheat those few who made it tolerable. Or even delightful when they were happy in their work. Whores perform the same function as priests, Ira, but far more thoroughly.

“Let me see— I’ve been wealthy many times and always lost it, usually through governments inflating the money, or confiscating —’nationalizing’ or ‘liberating’—something I owned. ‘Put not your faith in princes,’ Ira; since they don’t produce, they always steal. I’ve been broke even oftener than I’ve been wealthy. Of the two, being broke is more interesting, as a man who doesn’t know where his next meal is coming from is never bored. He may be angry or several other things—but *not* bored. His predicament sharpens his thoughts, spurs him into action, adds zest to his life, whether he knows it or not. Can trap him, of course; that’s why food is the usual bait for traps. But that’s the intriguing part about being broke: how to solve it *without* being trapped. A hungry man tends to lose his judgment—a man who has missed seven meals is often ready to kill—rarely a solution.

“Advertising copywriter, actor—but I was *very* broke that time—acolyte, construction engineer and several other sorts, and even more sorts of mechanic, for I’ve always believed that an intelligent man can turn his hand to *anything* if he will take time to learn how it works. Not that I insisted on skilled work when my next meal was at stake; I’ve often pushed an idiot stick—”

“Idiom?”

“An old gandy-dancer expression, Son, a stick with a shovel blade on one end and an idiot on the other. I was never that for more than a few days, just long enough to sort out the local setup. Political manager—I was even a reform politician once…but *only* once: Reform politicians not only tend to be dishonest but *stupidly* dishonest—whereas the business politician is honest.”

“I don’t see that Lazarus. History seems to show—”.

“Use your head, Ira. I don’t mean that a business politician won’t steal; stealing is his business. But *all* politicians are nonproductive. The only commodity any politician has to offer is jawbone. His personal integrity—meaning, if he gives his word, can you rely on it? A successful business politician knows this and guards his reputation for sticking by his commitments—because he wants to stay in business —go on stealing, that is—not only this week but next year and years after that. So if he’s smart enough to be successful at this very exacting trade, he can have the morals of a snapping turtle, but he performs in such a way as not to jeopardize the only thing he has to sell, his reputation for keeping promises.

“But a reform politician has no such lodestone. His devotion is to the welfare of all the people—an abstraction of very high order and therefore capable of endless definitions. If indeed it can be defined in meaningful terms. In consequence your utterly sincere and incorruptible reform politician is capable of breaking his word three times before breakfast— not from personal dishonesty, as he sincerely regrets the necessity and will tell you so—but from unswerving devotion to his ideal.

"All it takes to get him to break his word is for someone to get his ear and convince him that it is necessary for the greater good of *all* the peepul. He'll geek.

"After he gets hardened to this, he's capable of cheating at solitaire. Fortunately he rarely stays in office long—except during the decay and fall of a culture."

I said, "I must take your word for it, Lazarus. Since I have spent most of my life on Secundus, I know little of politics other than theoretically. You set it up that way."

The Senior fixed me with a stare of cold scorn. "I did no such thing."

"But—"

"Oh, hush. You are a politician yourself—a 'business' politician, I hope—but that stunt of transporting your dissidents gives me doubts. Minerva! 'Notebook,' dear. My intention in deeding Secundus to the Foundation was to set up a cheap and simple government—a constitutional tyranny. One in which the government was forbidden to do most things and the dear people, bless their black flabby little hearts, were given no voice at all.

"I didn't have much hope for it. Man is a political animal, Ira. You can, no more keep him from politicking than you can keep him from copulating—and probably shouldn't try. But I was young then, and hopeful. I hoped to keep politicking in the private sphere, keep it out of government. I thought the setup might last a century or so; I'm amazed that it has lasted as long as it has. Not good. This planet is overripe for revolution—and if Minerva doesn't find me something better to do, I might show up under another name, with my hair dyed and my nose bobbed, and start one. So be warned, Ira."

I shrugged. "You forget I'm migrating."

"Ah, yes. Though the prospect, of suppressing a, revolution might change your mind. Or perhaps you would like to be my chief of staff—then displace me with a coup d'etat after the shooting is over and send me to the guillotine. That would be something new—I've never tended to lose my head over politics. Doesn't leave much for an encore, does it? 'A tisket, a tasket, a head in a basket—it cannot reply to questions you ask it.' Final curtain, no bows.

"But revolutions can be fun. Did I tell you how I worked my way through college? Operating a Gatling gun for five dollars a day and loot. Never got higher than corporal because each time I had enough money for another semester, I deserted—and, being a mercenary, I was never tempted to become a dead hero. But adventure and change of scene are appealing to a young man…and I was very young.* (* The Gatling gun (Richard J. Gatling, 1818-1903) was obsolete by the time Lazarus Long was born. This allegation is barely possible if one stipulates that an obsolete might be used in some small, out-of-the-way insurrection. J.F.45th)

“But dirt, and missing meals, and the *wheet* of bullets past your ears stop being glamorous as you grow up; the next time I was in the military—not entirely my idea—I chose Navy instead. Wet Navy, although I was space Navy at later times and under other names.

“I’ve sold almost everything—except slaves—and worked as a mindreader in a traveling show, and was a king once— a much overrated profession, the hours are too long—and designed women’s styles under a phony French name and accent and with my hair long. Almost the only time I’ve worn long hair, Ira; not only does long hair need a lot of timewasting care, it gives your opponent something to grab in close combat and can obscure your view at a critical moment —either one can be fatal. But I don’t favor a billiard-ball cut because a thick mat of hair—not so long as to fall over your eyes—can save you a nasty scalp wound.”

Lazarus appeared to stop to think. “Ira, I don’t see how I can list all the things I’ve done to support myself and my wives and kids, even if I could remember them. The longest I ever stuck to one job was about half a century—very special circumstances—and the shortest was from after breakfast to just before lunch—again, special circumstance. But no matter where or what, there are makers, takers, and fakers. I prefer the first category but I haven’t spurned the other two. Whenever I was a family man—usually, that is—I haven’t let compunctions stop me from keeping food on the table. I won’t steal another child’s food to feed my own—but there is always some way not too sickeningly fake to garner valuta if a man isn’t too picky—which I never was whenever I had family obligations.

“You can sell things which have no intrinsic value, such as stories or songs—I’ve worked every branch of the entertainment profession… including a time in the capital of Fatima when I squatted in the marketplace with a brass bowl in front of me, telling a story longer than this one, and waiting at cliff-hangers for the clink of a coin.

“I was reduced to that because my ship had been confiscated and foreigners weren’t permitted to work without a permit—a high squeeze on the theory that jobs should be reserved for local citizens, there being a depression. Telling stories without a fee wasn’t classed as work, nor was it begging—which required a license—and cops let me alone as long as I volunteered the customary daily gift to the Police Benevolent Fund.

“It was either get by with some such dodge or be reduced to stealing—difficult in a culture in which one is not sophisticated in the local customs. Still, I would have risked it save that I had a wife and three small children~. That hobbled me, Ira; a family man should not take risks that a bachelor finds acceptable.

“So I sat there till my tailbone wore through the cobblestones, recounting everything from Grimm’s fairy tales to, Shakespeare’s plays, and not letting my wife spend money on anything but food until we saved enough to buy that work permit plus the customary cumshaw. Then I clobbered ‘em, Ira.”

“How, Lazarus?”

“Slowly but thoroughly. Those months in the marketplace had given me a degree of sophistication in the ‘Who’s-Whom’ of that society and what its sacred cows were. Then I stayed on for years—no choice. But first I was baptised into the local religion, gaining a more acceptable name in the process, and memorized the Qur’an. Not quite the same Qur’an I had known some centuries earlier, but it was worth the effort.

“I’ll skip over how I got into the Tinkers’ Guild and got my first job repairing television receivers—had my pay docked to cover my contribution to the guild, that is, with a private arrangement to the Grand Master Tinker, not too expensive. This society was retarded in technology; its customs didn’t encourage progress, and they had slipped behind what they had fetched from Earth about five centuries earlier. That made me a wizard, Ira, and could have got me hanged bad I not been careful to be a faithful—and openhanded—son of the church. So once I got into position for it, I peddled fresh electronics and stale astrology—using knowledge they didn’t have for one and a free imagination for the other.

“Eventually I was chief stooge to the very official who had confiscated my ship and trade goods years earlier, and I was helping him get richer while getting rich myself. If he recognized me, he never said so—a beard changes my looks quite a lot. Unfortunately he fell into disfavor and I wound up with his job.”

“How did you work that, Lazarus? Without being caught, I mean?”

“Now, now, Ira! He was my benefactor. It said so in my contract and I always addressed him as such. Allah’s ways are mysterious. I cast a horoscope for him, warning him that his stars were in bad shape. And so they were. That system is one of the few I know of with two usable planets around the same star, both colonized and with trade between them. Artifacts and slaves—”

“‘Slaves,’ Lazarus? While I am aware of such a practice on

Supreme, I didn't think that vice was very common. Not economic."

The old man closed his eyes, kept them closed so long I thought he had fallen asleep (he often did during the early days of these talks). Then he opened them and spoke very grimly:

"Ira, this vice is far more common than historians usually mention. Uneconomic, yes—a slave society can't compete with a free one. But with the Galaxy as wide as it is, there is usually no such competition. Slavery can and *does* exist many times and places, whenever the Laws are rigged to permit it.

"I said that I would do almost anything to support my wives and kids—and I have; I have shoveled human excrement for a pittance, standing in it up to my knees, rather than let a child go hungry. But this I will not touch. Nor is it because I was once a slave myself; I have *always* felt this way. Call it a 'belief' or dignify it as a deep moral conviction. Whatever it is, for me it is beyond argument. If the human animal has any value at all, he is too valuable to be property. If he has any inner dignity, he is much too proud to own other, men. I don't give a damn how scrubbed and perfumed he may be, a slaveowner is subhuman.

"But this does not mean that I'll cut my throat when I run into it, or I would not have lived through my first century. For there is another bad thing about slavery, Ira; it is impossible to free slaves, they have to free themselves."

Lazarus scowled. "You've got me preaching again and about matters I can't possibly prove. Once I got my hands on my ship, I had it fumigated and checked it over myself and had it loaded with items I thought I could sell and had food and water taken on for the human cargo it had been refitted for, and sent the captain and crew on a week's leave, and notified the Protector of Servants—the state slave factor, that is—that we would load as soon as the skipper and purser were back.

"Then I took my family on a holiday inspection of the ship. Somehow the Protector of Servants was suspicious; he insisted on touring the ship with us. So we had to take him along when we took off from there, very suddenly, shortly after my family was aboard. Right out of that system and never went back. But before we put down on a civilized planet, me and. my boys—two almost grown by then—removed any sign that she had ever been a slaver, even though it mean jettisoning stuff I could have sold."

"What about the Protector of Servants?" I asked. "Wasn't he some trouble to you?"

"Wondered if you would notice that. I *spaced* the bastard! Alive. He went thataway, eyes popped out and peeing blood. What did you expect me to do? Kiss him?"

COUNTERPOINT

III

Once they reached the privacy of a transport Galahad said to Ishtar, “Were you serious in your proposal to the Senior? To have progeny by him?”

“How could I be joking?—in the presence of two witnesses, one of them the Chairman Pro Tem himself.”

“I didn’t see how you could be. But *why,* Ishtar?”

“Because I’m a sentimental atavist!”

“Do you have to snap at me?”

She put an arm around his shoulders, took his hand with her free hand. “I’m sorry, dear. It has been a long day and not much sleep last night, sweet as it was. I’m worried about several things—and the subject you brought up is not one I can be unemotional about.”

“I should not have asked. An invasion of privacy—I don’t know what’s got into me. Shall we wipe the matter? Please?”

“Dear, dear! I do know what got into me...and that’s part of why I am so unprofessionally emotional. Let me put it this way: If you were female, wouldn’t you jump at a chance to make such a proposal? To *him?”*

“I’m not female.”

“I know you’re not, you’re delightfully male. But try for a moment to be as logical as a female. *Try!”*

“Males are not necessarily illogical; that’s a female myth.”

“Sorry. I must take a tranquilizer the minute we are home—something I haven’t needed in years. But do try to think about it *as if* you were female. Please? Twenty seconds.”

“I don’t need twenty seconds.” He lifted her hand, kissed it. “If I were female, I would jump at the chance, too. The best proved genetic pattern one can offer a child? Of course.”

“Not that at all!”

He blinked. “Perhaps I *don’t* know what you mean by logic.”

“Uh…does it matter? Since we arrived at the same answer?” The car swerved and stopped in a loading pocket; she stood up. “So let’s wipe it. We’re home, dear.”

“You are. I’m not. I think—”

“Men don’t think.”

“I think you need a night’s rest, Ishtar.”

“You sealed this onto me; now you’ll have to undress me.”

“So? Then you’ll insist on feeding me and you won’t get that long night of sleep after all. Besides, you can peel it over your head, just the way I did it for you at decontam."

She sighed. "Galahad—if I picked the right name for you—do I have to offer you a cohabitation contract merely because I might invite you to stay overnight again? It's likely that neither of us will get any sleep tonight."

"That's what I was saying."

"Not quite. Because we may *work* all night. Even if you choose to spend three minutes to our mutual pleasure."

"'Three minutes'? I wasn't that hasty even the first time."

"Well— Five minutes?'

"Am I offered twenty minutes—plus an apology?'

"Men! Thirty minutes, darling, and no apology."

"Accepted." He stood up.

"Five of which you've wasted arguing about it. So come along—exasperating darling."

He followed her out into her foyer. "What's this about 'work all night'?"

"And tomorrow, too. I'll know when I check what's in my phone. If there's nothing, I'll have to call the Chairman Pro Tem, much as I hate to. I've got to look over this rooftop cabin or whatever it is, and see, what arrangements can be made to take care of him there. Then both of us will move him; I can't delegate *that.* Then—"

"Ishtar! Are you going to agree to *that?* Nonsterile habitat, no emergency equipment, and so forth?"

"Darling…*you* are impressed by my rank; Mr. Weatheral is not. And the Senior isn't even impressed by Mr. Weatheral's authority; the Senior is the *Senior.* I kept hoping that Mr. Chairman Pro Tem would find some way to wheedle him into postponing such a move. But he did not. So now I have two choices: Do it his way—or withdraw completely. As the Director did. Which I *won't* do. Which leaves me *no* choice. So tonight I'll inspect his new quarters and see what can be done between now and tomorrow midmorning. Even though it's hopeless to make such a place sterile, perhaps it can be made more nearly suitable before he sees it."

"And emergency equipment, don't forget that, Ishtar."

"As if I would, stupid darling. Now help me out of this damned thing—I mean 'this pretty dress you designed for me and which the Senior clearly liked.' Please?"

"So stand still and hold still and shut up."

"Don't *tickle!* Oh, that, there's the phone signal! Get it off me, dear—hurry!"

VARIATIONS ON A THEME

IV

Love

Lazarus lounged in his hammock and scratched his chest.

“Hamadryad,” he said, “that’s not an easy question. At seventeen I was certain I was in love. But it was merely excess hormones and self-delusion. It was most of a thousand years later before I experienced the real thing—and didn’t recognize the condition for years, as I had quit using that word.”

Ira Weatheral’s “pretty daughter” looked puzzled, while Lazarus thought again that Ira had been wrong: Hamadryad was not pretty; she was so startling beautiful that she would have fetched top premium prices at auction on Fatima, with hard-eyed Iskandrian factors outbidding each other in the belief that she was a sound speculation. If the Protector of the Faith had not preempted her for himself— Hamadryad did not seem to know that her appearance was exceptional. But Ishtar did. The first ten days that Ira’s daughter had been part of Lazarus’ “family” (so he thought of them—a good enough term as Ira, Hamadryad, Ishtar, and Galahad were all his descendants and now privileged to call him “Grandfather” as long as they did not overdo it)—those first days Ishtar had shown a childish tendency to try to place herself between Hamadryad and Lazarus, and also between Hamadryad and Galahad, even when this required being two places at once.

Lazarus had watched this barnyard dance with amusement and had wondered if Ishtar knew that she was doing it. Probably not, he decided. His rejuvenation supervisor was all duty and no sense of humor and would have been shocked had she known that she had reverted to adolescence.

But it did not last. It was impossible not to like Hamadryad because she remained quietly friendly no matter what. Lazarus wondered if it was a behavior pattern consciously developed to protect herself against her less-endowed sisters—or was it simply her nature? He had not tried to find out. But Ishtar now tended to sit by Hamadryad, or even to make room between herself and Galahad for Hamadryad, and let her help in serving meals and such—assistant “housewife” de facto.

“If I must wait a thousand years to understand that word,” Hamadryad replied, “then I probably never will. Minerva says that it cannot be defined in Galacta and even when I speak Classic English, I find that I think in Galacta, which means that I do not really grasp English. Since the word ‘love’ occurs so frequently in ancient English literature, I thought my failure to understand that word might be the block that keeps me from thinking in English.”

“Well, let’s shift to Galacta and take a swing at it. In the first place, very little thinking was ever done in English; it is not a language suited to logical thought. Instead, it’s an emotive lingo beautifully adapted to concealing fallacies. A rationalizing language, not a rational one. But most people who spoke English had no more idea of the meaning of the word ‘love’ than you have, even though they used it all the time.”

Lazarus added, “Minerva! We’re going to take another hack at the word ‘love.’ Want to join in? If so, shift to your personal mode.”

“Thank you, Lazarus. Hello, Ira-Ishtar-Hamadryad-Galahad,” the disembodied contralto voice answered. “I am and have been in personal mode, and usually am, now that you have given me permission to use my judgment. You’re looking well, Lazarus—younger every day.”

“I feel younger. But, dear, when you go to personal mode, you should tell us.”

“I’m sorry, Grandfather!”

“Don’t sound so humble. Just say, ‘Howdy, I’m here,’ that’s all. If you could manage to tell me, or Ira, just once, to go to hell, it ‘ud be good for you. Clean your circuits.”

“But I have no wish to say that to either of you.”

“That’s what’s wrong. If you hang around Dora, you’ll learn to. Have you spoken to her today?”

“I’m speaking with Dora now, Lazarus. We’re playing fairy chess in five dimensions, and she’s teaching me songs you taught her. She teaches me a song, then I sing a tenor lead while she harmonizes in soprano. We’re doing this in real time because we’re outing through the speakers in your control room and listening to ourselves. Right now we’re singing the story of One-Ball Riley. Would you care to hear us?”

Lazarus flinched. “No, no, not *that* one.”

“We’ve practiced several others. ‘Rangy Lil’ and ‘The Ballad of Yukon Jake’ and ‘Barnacle Bill’—I sing the story on that one while Dora does soprano and bass. Or perhaps ‘Four Whores Came Down from Canada’—that one is fun.”

“No, Minerva. I’m sorry, Ira; my computer is corrupting your computer.” Lazarus sighed. “I didn’t plan it that way; I just wanted Minerva to babysit for me. Since I’ve got the only retarded ship in this sector.”

“Lazarus,” Minerva said reproachfully, “I don’t think it is correct to say that Dora is retarded. She's quite intelligent, I think. I do not understand why you say that she is corrupting me."

Ira had been lying on the grass, sunbathing with a kerchief over his eyes. He rolled to one elbow. "Nor I, Lazarus. That last one I'd like to hear. I recall where Canada is-was. North of the country you were born in."

Lazarus counted silently, then said, "Ira, I know I have prejudices ridiculous to a civilized modern man such as yourself. I can't help it; I'm canalized by early childhood, imprinted like a baby duckling. If you want to hear bawdy songs from a barbaric era, please listen to them in your apartments—not up here. Minerva, Dora doesn't understand those songs; to her they are nursery rhymes."

"Nor do I understand them, sir, other than theoretically. But they are jolly, and I have enjoyed being taught to sing."

"Well— All right. Has Dora been behaving herself otherwise?"

"She's been a good girl, Grandfather Lazarus, and I think she is contented with my company. She pouted a little at not having her bedtime story last night. But I told her that you were very tired and already asleep; and told her a story myself."

"But— Ishtar! Did I miss a day?"

"Yes, sir."

"Surgery? I didn't notice any new healed places."

The Master Chief Technician hesitated. "Grandfather, I will discuss procedures only if you insist. It does a client no good to be reminded of such things. I hope that you will not insist. I do hope so, sir."

"Um. All right, all right. But next time you chop out a day—or a week, or whatever—warn me. So that I can leave a bedtime story on file with Minerva. No, that won't do; you don't want me to know. Okay, I'll keep stories on file with Minerva and you warn her, instead."

"I will, Grandfather. It does help when the client cooperates, especially by paying as little attention to what we do as possible." Ishtar smiled briefly. "The client we dread is another rejuvenator. Worries and tries to run things."

"Small wonder. I know, dear, I have that horrid habit of trying to run things myself. The only way I can keep from it is by staying out of the control room. So when I get too nosy, tell me to shut up. But how are we doing? How much longer do I have to go?"

Ishtar answered hesitantly, "Perhaps this is a time when I should tell you to…'shut up.'"

"That's it! But firmer, dear. 'Get out of my control room, you custard-headed dolt, and *stay* out! Make him realize that, if he doesn't *jump,* you'll toss him into the brig. Now try it again."

Ishtar grinned widely. "Grandfather, you're an old fraud."

"So I've long suspected. I was hoping it didn't show. All right, the subject is 'love.' Minerva, the Hamadarling says you told her that it can't be defined in Galacta. Got anything to add to that?"

"Tentatively yes, Lazarus. May I reserve my answer until the others speak?"

"Suit yourself. Galahad, you talk less and listen more than anybody else in the family. Want to try it?"

"Well, sir, I hadn't realized that there was any mystery about 'love' until I heard Hamadryad ask about it. But I'm still learning English. By the naturalistic method the way a child learns his milk language. No grammar, no syntax, no dictionary—just listen and talk and read it. Acquire new words by context. By that method I acquired a feeling that 'love' means the shared ecstasy that can be attained through sex. Is that right?"

"Son, I hate to say this—because, if you've been reading a lot of English, I see how you reached that opinion—but you are one hundred percent wrong."

Ishtar looked startled. Galahad simply looked thoughtful. "Then I must go back and read some more."

"Don't bother, Galahad. Most of those writers you've been reading misuse the word just that way. Shucks, I misused it for years myself; it's a prime example of the slipperiness of the English tongue. But, whatever 'love' is, it's not sex. I'm not running down sex. If there is a purpose in life mere important than two people cooperating in making a baby, all the philosophers in history haven't been able to find it. And between babies, the practice runs keep up our zest in life and make tolerable the fact that raising a baby is one hell of a lot of work. But that's not love. Love is something that still goes on when you are *not* sexually excited. It being so stipulated, who wants to try it? Ira, how about you? You know English better than the others, you speak it almost as well as I do."

"I speak it better than you do, Gramp; I speak it grammatically, which you do not."

"Don't praggle me, boy; I'll quang you proper. Shakespeare and I never let grammar interfere with expressing ourselves. Why, he said to me once—"

"Oh, stop it! He died three centuries before you were born."

"He did, huh? They opened his grave once and found it empty. The fact is, he was a half brother of Queen Elizabeth and dyed his hair to make the truth less obvious. The other fact is that they were closing in on him, so he switched. I've died that way several times. Ira, his will left his 'second-best bed' to his wife. Look up who got his *best* bed and you'll begin to figure out what really happened. Do you want to try to define 'love'?"

"No. You would change the rules again. All you have done so far is to divide the field of experience called 'love' into the same categories Minerva divided it into when you asked her this same question weeks ago—namely, 'Eros' and 'Agape.' But you avoided using those technical words for the subfields, and by this sophistry you attempted to exclude the general term from one subfield and thereby claimed that the term to be defined was limited to the other subfield—which set it up for you to define 'love' as identically equal to 'Agape.' But again without using that word. It won't work, Lazarus. To use your own metaphor, I saw you palm that card."

Lazarus shook his head admiringly. "There are no flies on you, boy; I did a good job when I thought you up. Someday when we have time to waste, let's have a go at solipsism."

"Come off, it, Lazarus. You can't bulldoze me the way you did Galahad. The subcategories are still 'Eros' and 'Agape.' 'Agape' is rare; 'Eros' is so common that it is almost inevitable that Galahad acquired the feeling that 'Eros' is the total meaning of the word 'love.' Now you have unfairly confused him since he assumes—incorrectly—that you are a reliable authority with respect to the English language."

Lazarus chuckled "Ira, m'boy, when I was a kid, they sold that stuff by the wagonload to grow alfalfa. Those technical words were thought up by armchair experts of the same sort as theologians. Which gives them the same standing as sex manuals written by celibate priests. Son; I avoided those fancy categories because they are useless, incorrect, and misleading. There can be sex without love, and love without sex, and situations so intermixed that nobody can sort out which is which. But love *can* be defined, an exact definition that does not resort to the word 'sex,' or to question begging by exclusion through the use of such words as 'Eros' and 'Agape.'"

"So define it," said Ira. "I promise not to laugh."

"Not yet. The trouble with defining in words anything as basic as love is that the definition can't be understood by anyone who has not experienced it. It's like the ancient dilemma of explaining a rainbow to a person blind from birth. Yes, Ishtar, I know that you can fit such a person with cloned eyes today—but that dilemma was inescapable in my youth. In those days one could teach such an unfortunate all the physical theory of the electromagnetic spectrum, tell him precisely what frequencies the 'human eye can pick up, define colors to him in terms of those frequencies, explain exactly how the mechanisms of refraction and reflection produce a rainbow image and what its shape is and how the frequencies are distributed until he knew *all* about rainbows in the scientific sense…but you *still* couldn't make him feel the breathless wonder that the sight of a rainbow inspires in a man. Minerva is better off than that man, because she can *see.* Minerva dear, do you ever look at rainbows?"

"Whenever possible, Lazarus. Whenever one of my sensor extensionals can see one. Fascinating!"

"That's it. Minerva can see a rainbow, a blind man can't. Electromagnetic theory is irrelevant to the experience."

"Lazarus," Minerva added, "it may be that I can see a rainbow better than a flesh-and-blood can. My visual range is three octaves, fifteen hundred to twelve thousand angstroms."

Lazarus whistled. "Whereas I chop off just short of one octave. Tell me girl, do you see chords in those colors?"

"Oh, certainly!"

"Hmm! Don't try to explain to me those other colors; I'll have to go on being half blind."

Lazarus added, "Puts me in mind of a blind man I knew on Mars, Ira, when I was managing that, uh, recreation center. He—"

"Gramp," the Chairman Pro Tem interrupted m a tired voice, "don't treat us as children. Surely, you're the oldest man alive…but the youngest person here—that offspring of mine sitting there, making cow-eyes at you—is as old as Gramp Johnson was when you last saw him; Hamadryad will be eighty her next birthday. Ham, my darling, how many paramours have you had?"

"Goodness, Ira—who counts?"

"Ever taken money for it?"

"None of your business, Father. Or were you about to offer me some?"

"Don't be flip, dear; I'm still your father. Lazarus, do you think you can shock Hamadryad by plain talk? Prostitution isn't big business here; there are too many amateurs as willing as she is. Nevertheless, the few bordellos we have in New Rome are members of the Chamber of Commerce. But you should try one of our better holiday houses—say, the Elysium. After you are fully rejuvenated."

"Good idea," agreed Galahad. "To celebrate. As soon as Ishtar gives you your final physical check. As my guest, Grandfather; I'd be honored. The Elysium has everything, from massage and hypnotic conditioning to the best gourmet food and best shows. Or name it and they'll supply it."

"Wait a moment," protested Hamadryad. "Don't be a selfish arsfardel, Galahad. We'll make it a foursome celebration—Ishtar?"

"Certainly, dear. Fun."

"Or a sixsome, with a companion for Ira. Father?"

"I could be tempted, dear, for Lazarus' birthday party—although you know I usually avoid public places. How many rejuvenations, Lazarus? That's how we count this sort of birthday party."

"Don't be nosy, Bub. As your daughter says: 'Who counts?'

Wouldn't mind a birthday cake, such as I used to have as a child. But just one candle in the middle is enough."

"A phallic symbol," agreed Galahad. "An ancient fertility sign—appropriate for a rejuvenation. And its flame is an equally ancient symbol of life. It should be a working candle, not a fake. If we can find one."

lshtar looked happy. "Of course! There must be a candlemaker somewhere: If not, I'll learn how and make it myself. I'll design it, too—semirealistic but somewhat stylized. Although I could make it true portraiture, Grandfather; I'm a fair amateur sculptor, I learned it when I studied cosmetic surgery."

"Wait a. minute!" Lazarus protested. "All I want is a plain wax candle—then blow it out and make a wish. Thank you, Ishtar, but don't bother. And thanks, Galahad, but I'll pick up the tab—although it may be a family party right, here, where Ira won't feel like, a duck in a shooting gallery. Look, kids, I've seen every possible type of joy house and pleasure dome. Happiness is in the heart, not in that stuff."

"Lazarus, can't you see that the kids *want* to treat you to a fancy party? They like you—though Prime Cause alone knows why."

"Well—"

"But there might be no tab. I think I recall something from that list appended to your will. Minerva—who owns the Elysium?"

"It is a daughter corporation of Service Enterprises of New Rome, Limited, which in turn is owned by Sheffield-Libby Associates. In short, Lazarus owns it."

"Be damned! Who invested my money in *that?* Andy Libby, bless his sweet shy soul, would be spinning in his grave—if I hadn't placed him spinning in orbit around the last planet we discovered together, where he was killed."

"Lazarus, that's not in your memoirs."

"Ira, I keep telling you, lots of things not in my memoirs. Poor little guy got to thinking one of his deep thoughts and didn't stay alert. I put him in orbit because I promised him, when he was dying, to take him back to his native Ozarks. Tried to, about a hundred years later, but couldn't find him. Beacon dead, I suppose. All right, kids, we'll have a party at my happy house and you can sample anything the place has to offer. Where were we? Ira, you were about to define 'love.'"

"No, you were about to tell us about a blind man on Mars, when you were managing that whorehouse."

"Ira, you're as crude as Gramp Johnson was. This guy 'Noisy'—don't recall his right name, if he had one—Noisy was one of those people like yourself who just will work, regardless. A blind man could get by in those days quite well by begging, and nobody thought the less of him, since there was no way then to restore a man's sight.

"But 'Noisy wasn't content to live off other people; he worked at what he could do. Played a squeeze box and sang. That was an instrument operated by bellows which forced air over reeds as you touched keys on it—quite pretty music. They were popular until electronics pushed most mechanical music makers off the market.

"Noisy showed up one night, skinned out of his pressure suit at the lock dressing room, and was playing and singing before I knew he was inside.

"My policy was 'Trade, Treat, or Travel'—except that the house might buy a beer for an old customer who temporarily wasn't holding. But Noisy was not, a customer; he was a bum—looked and smelled like a bum, and I was about to give him the bum's rush. Then I saw this rag around his eyes and skidded to a stop.

"Nobody throws out a blind man. Nobody makes any trouble for him. I kept an eye on him but left him alone. He didn't even sit down. Just played this broken-down stomach-Steinway and sang, neither very well, and I laid off the pianette not to interrupt him. One of the girls started passing the hat for him.

"When he reached my table, I invited him to sit and bought him a beer—and regretted it; he was pretty whiff. He thanked me and told me about himself. Lies, mostly."

"Like yours, Gramp?"

"Thanks, Ira. Said he had been chief engineer in one of the big Harriman liners, until his accident. Maybe he had been a spaceman; I never caught him out in the lingo. Not that I tried. If a blind man wanted to claim he was the rightful heir to the Holy Roman Empire, I would go along with the gag—anybody would. Perhaps he was some sort of space-going mechanic, shipfitter or something. More likely he was a transported miner who had been careless using powder.

"When I checked the place at closing time, I found him sleeping in the kitchen. Couldn't have that, we ran a sanitary mess. So I led him to a vacant room and put him to bed, intending to give him breakfast and ease him gently on his way—I wasn't running a flophouse.

"A lot I had to say about it. I saw him at breakfast all right. But I hardly recognized him. A couple of the girls had given him a bath, trimmed his hair, and shaved him, and had dressed him in clean clothes—mine—and had thrown away the dirty rag he had worn over his ruined eyes and had replaced it with a clean white bandage.

"Kinfolk, I do not fight the weather. The girls were free to keep pets; I knew what fetched the customers, and it wasn't my pianette playing. If that pet stood on two legs and ate more than I did, I still did not argue. Hormone Hall was Noisy's home as long as the girls wanted to keep him.

"But it took me a while to realize that Noisy was not just a parasite enjoying free room and board, and probably our stockin-trade as well, while siphoning off cash from our customers—no, he was pulling his weight in the boat. My books at the end of the first month he was with us showed the gross profit up and the net way up."

"How do you account for that, Lazarus? Inasmuch as he was competing for your customers' cash."

"Ira, must I do all your thinking for you? No, Minerva does most of it. But it is possible that you have never thought about the economics of that sort of joint. There are three sources of gross, the bar, the kitchen, and the girls themselves. No drugs—drugs spoil the three main sources. If a customer was on drugs and showed it, or even broke out a stick of kish, I eased him out quickly and sent him down the line to the Chinaman's.

"The kitchen was to supply meals to the girls—who were assessed room and board on a break-even or lose-a-little basis. But it also served food all night to anyone who ordered it, and showed a net since we had its overhead covered anyhow to board the girls. The bar also showed a net after I fired one barkeep with three hands. The girls kept their gross, all the traffic would bear, but they paid the house a flat fee for each kewpie, or a triple fee if she kept a customer all night. She could cheat a little, and I would shuteye—but if she cheated too much or too often, or a john complained that he was rolled, I had a talk with her. Never any real trouble; they were ladies, and besides, I had means to check on them quietly, as well as eyes in the back of my head.

"The beefs about rolling were the stickiest, but I remember only one that was the girl's fault rather than the john's—I simply terminated her contract, let her go. In the usual beef the slob was not rolled; he simply had a change of heart after he had counted too much money into her greedy little hands and she had delivered what he had ordered—then *he* tried to roll *her* to get it back. But I could smell that sort of slob and would be listening via a mike—then would bust in as trouble started. That sort of jerk I would toss so hard he bounced twice."

"Grandfather, weren't some of them pretty big for that?"

"Not really, Galahad. Size doesn't figure much in a fight—although I was always armed against real trouble. But if I *have* to take a man, I have no compunctions slowing me down about *how* I take him. If you kick a man in the crotch with no warning, it will quiet him down long enough to throw him out.

"Don't flinch, Hamadear; your father guaranteed that you could not be shocked. But I was talking about Noisy and how he made us money while making some himself.

"In this sort of frontier joint the usual customer comes in, buys a drink while he looks over the girls, picks one by buying her a drink—goes to her room, then leaves. Elapsed time, thirty minutes; net to the house, minimum.

"Pre-Noisy, that is. After Noisy arrived, it went more like this: Buy a drink as before. Maybe buy the girl a second drink rather than interrupt a blind man's song. Take the girl to her room. When he comes back, Noisy is singing 'Frankie and Johnnie' or 'When the Pusher Met My Cousin,' and smiles and throws a verse at him—and the customer sits down and listens to all of it—and asks Noisy if he knows 'Dark Eyes.' Sure, Noisy knows it, but instead of admitting it, he asks the john to give him the words and hum it and he'll see what he can do with it.

"If the customer has valuta, he's still there hours later, having had supper and bought supper for one of the girls and tipped Noisy rather lavishly and is ready for an encore with the girl or another girl. If he's got the money, he stays all night, splitting his cash between the girls and Noisy and the bar and kitchen. If he spends himself broke and has been a good customer—well behaved as well as free with his money—I stake him to bed and breakfast on credit, and urge him to come back. If he's alive next payday, he's sure to be back. If not, all the house is out is the wholesale cost of one breakfast—nothing compared with what he's spent. Cheap goodwill advertising.

"A month of that, and both the house and the girls have made much more money, and the girls haven't worked much harder as they have spent part of their time drinking pay-me drinks—colored water; half the price to the house, half to the girl—while they help a john listen to Noisy's nostalgic songs. Shucks, a girl doesn't want to work like a treadmill even if she usually enjoys her work as many of them did. But they never got tired of sitting and listening to Noisy's songs.

"I quit playing the pianette, except, maybe, while Noisy ate. Technically I was a better musician—but *he* had that undefinable quality that sells a song; he could make 'em cry or laugh. And he had a thousand of 'em. One he called 'The Born Loser.' Not much of a tune, just:

"Tah tah *poom* poom!
Tah tah poom poom!
Tah *t'tah* tah tah *poom* poom—

"—about a bloke who can never quite make it. Uh:

"There's a beer joint
By the pool hall

For to pass some pleasant hours.

“There’s a hook shop
Above the pool hall
Where my sister makes her living.

“She’s a good sport;
I can spring her
For a fin or even a sawbuck

When not holding, Or the horses
Have been running rather slowly—

“Like that, folks. But more of it.”

“Lazarus,” said Ira, “you have been humming or singing that song every, day you’ve been up here. All of it. A dozen verses or more.”

“Really, Ira? I do hum and sing; I know that. But I don’t hear it myself.’ It’s like the purring of a cat; it just means that I’m functioning okay, board all green, operating at normal cruising. It means that I feel secure, relaxed, and happy— and, come to think of it, I do.

“But ‘The Born Loser’ doesn’t have a mere dozen verses, it has hundreds. What I sang was only a snatch of what Noisy used to sing. He was always fiddling with a song, changing it, adding to it. I don’t think this one started out as his; I seem to remember a song about a character whose overcoat was usually in hock clear back when I was very young and raising my first family, on Earth.

“But that song belonged to Noisy when he got through filing off serial numbers and changing the body lines. I heard it again, oh, must have been twenty, twenty-five years later, in a cabaret in Luna City. From Noisy. But he had changed it. Fixed up the scansion, given it a proper rhyme scheme, dolled up the tune. But the tune was still recognizable—in a minor key, wistful rather than sad, and the words were still about this third-rate grifter whose topcoat was always in hock and who sponged off his sister.

“And he had changed, too. A shiny new instrument, a tailored spaceman’s uniform, gray hair at the temples—and star billing. I paid a waiter to tell him that ‘Happy’ Daze was in the audience-not my name then, but the only name Noisy had for me—and after his first group he came over and let me buy him a drink while we swapped lies and talked about our happy days at dear old Hormone Hall.

“I didn’t mention to him that he had left us rather abruptly and that the girls had gone into a decline over it, worrying that he might be dead in a ditch—didn’t mention it because he did not. But I had had to investigate his disappearance because my staff was so demoralized by it that the place felt like a morgue—no way for a parlor house to be. I was able to establish that he had gone aboard the 'Gyrfalcon' when she was about to lift for Luna City and had not left her—so I told the girls that Noisy had had a sudden opportunity to go home again but had left a message with the port captain for each of them—then added more lies to personalize the goodbye he hadn't made. It perked them up and lifted the gloom. They still missed him, but they all understood that grabbing a ride home was not something he could postpone-and since he had 'remembered' to send a message to each of them, they felt appreciated.

"But it turned out that he *did* remember them, mentioned each by name. Minerva dear, here is a difference between a blinded flesh-and-blood and one who has never been able to see. Noisy could see a rainbow any time he cared to, by memory. He never stopped 'seeing,' but what he 'saw' was always beauty. I had realized that, some, back when we were on Mars together, for—don't laugh—he thought I was as pretty as you are, Galahad. Told me that he could tell what I looked like from my voice, and described me to me. I had the grace to say that he flattered me but let it lie when he answered that I was too modest—even though I'm not handsome now and wasn't then and modesty has never been one of my vices.

"But Noisy thought all the girls were beautiful, too—and in one case this may have been true and certainly several of them were pretty.

"But he asked me what had become of Olga and added, 'Golly, what a little beauty she was!'

"Kinfolk, Olga wasn't even homely, she was ugly. Face like a mud pie, figure like a gunnysack—only on an outpost like Mars could she get by. What she did have was, a warm and gentle voice and a sweet personality—which was enough, as a customer might pick her through Hobson's choice on a busy night, but once he had done so, he picked her some later time on purpose. Mean to say, dears; beauty will lure a man into bed, but it won't bring him back a second time, unless he's awfully young or very stupid."

"What does bring him back a second time, Grandfather?" asked Hamadryad. "Technique? Muscular control?"

"Have you had any complaints, dear?"

"Well…no."

"Then you know the answer and are truing with me. Neither of those. It's the ability to make a man happy, principally by being happy about it yourself—a spiritual quality rather than a physical one. Olga had it in gobs.

"I told Noisy that Olga had married shortly after he left, happily so, and had three children last I had heard…which was an utter lie, as she had been killed accidentally and the girls bawled about it and I didn't feel good myself and we had shut the place down for four days. But I couldn't tell Noisy that; Olga had been one of the first to mother him, had helped bathe him and had stolen some of my clothes for him while I slept.

"But they all mothered him and never fought over him. I have not deviated from our subject in this rambling account of Noisy; we're still defining 'love.' Anybody want to take whack at it now?"

Galahad said, "Noisy loved every one of them. That's what you've been saying."

"No, Son, he didn't love *any* of them. Fond of them, yes— but he left them without looking back."

"Then you are saying that *they* loved *him."*

"Correct. Once you figure out the difference between what he felt toward them and what they felt toward him, we're almost home."

"Mother love," said Ira, and added gruffly, "Lazarus, are you trying to tell us that 'mother love' is the only love there is? Man, you're out of your mind!"

"Probably. But not that far out. I said they mothered him; I did not say a word about 'mother love.' "

"Uh…he bedded all of them?"

"Wouldn't be surprised, Ira. I never tried to find out. Irrelevant in any case."

Hamadryad said to her father, "Ira, 'mother love' can't be what we're trying to define; it is often only a sense of duty. Two of my brats I was tempted to drown, as you may have guessed seeing what little demons they were."

"Daughter, all your offspring were charming children."

"Oh, fuff. One has to give a baby mothering no matter what, or it will grow up to be a still worse monster. What did you think of my son Gordon as a baby?"

"A delightful child."

"Really? I'll tell him that—if I ever have a male child I name 'Gordon.' Sorry, old darling, I shouldn't have trapped you. Lazarus, Ira is a perfect grandfather, one who never forgets a birthday. But I've suspected that Minerva kept track of such things for him and now I know it. Right, Minerva?"

Minerva did not answer. Lazarus said, "She's not working for *you,* Hamadryad."

Ira said sharply, "Of course Minerva keeps track of such things for me! Minerva, how many grandchildren do I have?"

"One hundred and twenty-seven, Ira, counting the boy child to be born next week."

"How many great-grandchildren? And who is having the boy?"

"Four hundred and three, sir. Your son Gordon's current wife Marian."

"Keep me posted on it. That was the baby Gordon I was thinking of, Miss Smarty; Gordon's son Gordon…uh, by Evelyn Hedrick, I think. Lazarus, I deceived you. The truth is that I am migrating because my descendants are crowding me off this globe."

"Father, are you really going to? Not just talking?"

"Still top Secret until after the decennial Trustees Meeting, dear. But I am. Want to come along? Galahad and Ishtar have decided to go; they'll set up a rejuve shop for the colony. You'll have five to ten years in which to learn something useful."

"Grandfather, are *you* going?"

"Unlikely to the nth degree, my dear. I've seen a colony."

"You may change your mind." Hamadryad stood up, faced Lazarus. "I propose to you, in the presence of three witnesses—four; Minerva is the best possible witness—a contract for cohabitation and progeny, term to be selected by you." Ishtar looked startled, then wiped all expression from her face; the others said nothing.

Lazarus answered, "Granddaughter, if I weren't so old and tired, I would spank you."

"Lazarus, I am your granddaughter only by courtesy; you are less than eight percent of my total ancestry. Less than that in terms of dominant genes, with a vanishingly small probability of, unfavorable reinforcement; the bad recessives have been weeded. I'll send my genetic pattern over for your inspection."

"That's not the point, dear."

"Lazarus, I'm certain you've married your descendants in the past; is there some reason to discriminate against *me?* If you'll tell me, perhaps I can correct it. I must add that this submittal is not contingent on your migrating." Hamadryad added, "Or it could be for progeny only, although I would be proud and happy to be permitted to live with you."

"Why, Hamadryad?"

She hesitated. "I am at loss to answer, sir. I had thought that I could say, 'I love you'—but apparently I do not know what that word means. So I have no word in either language to describe my need… and went ahead without one."

Lazarus said gently, "I love you, dear—"

Hamadryad's face lit up.

He continued: "—and for that very reason I must refuse you." Lazarus looked around him. "I love all of you. Ishtar, Galahad…even that ugly, surly father of yours, dear, sitting there and looking worried. Now smile, dear, for I'm certain that there are endless young bucks anxious to marry you. You smile, too, Ishtar—but not you, Ira;

it would crack your face. Ishtar, who is relieving you and Galahad? No, I don't care who is scheduled. May I be alone the rest of today?"

She hesitated. "Grandfather, may I keep the observation station manned?"

"You will anyhow. But will you limit them to dials and gauges or whatever it is you use? No eye or ear on me? Minerva will tell you if I misbehave—I'm certain of that."

"There will be neither eye nor ear on you, sir." Ishtar stood up. "Come along, Galahad. Hamadryad?"

"Just a moment, Ish. Lazarus—have I offended you?"

"What? Not at all, my dear."

"I thought you were angry with me over…what I proposed."

"Oh, nonsense. Hamadarling, that sort of proposal never offends anyone; it is the highest compliment one human can pay another. But it did confuse me. Now smile and kiss me goodnight, then come see me tomorrow if you wish. All you kids kiss me goodnight; there's nobody sore at anybody. Ira, you might stick around a bit if you will."

Like docile children they did so, then went into Lazarus' penthouse and took transport down. Lazarus said, "A drink, Ira?"

"Only if you are having one."

"We'll skip it then. Ira, did you put her up to it?'

"Eh?"

"You know what I mean. Hamadryad. First Ishtar, now Hamadryad. You've manipulated this whole deal from the moment you snatched me out of that flophouse, where I was dying decently and quietly. Have you again been trying to tie me down to whatever scheme you have in the back of your mind by waving pretty tails under my nose? It won't work, man."

The Chairman Pro Tem answered quietly, "I could deny that—and for the hundredth time have you call me a liar. I suggest that you ask Minerva."

"I wonder if that would be any assurance. Minerva!"

"Yes, Lazarus?"

"Did he rig this? With either of the girls?"

"Not to my knowledge, Lazarus."

"Is that an evasion, dear?"

"Lazarus, I cannot lie to you."

"Well…I think you could if Ira wanted you to, but there is no point in my inquiring into it. Give us privacy for a few moments, dear—recording mode only."

"Yes, Lazarus."

Lazarus went on, "Ira, I wish you had answered Yes. Because the only other explanation is one I d not like. I ain't pretty and my manners are not such as to endear me to women—so what do we have left? The fact that I am the oldest man alive. Women sell themselves for odd reasons and not always for money. Ira, I do not choose to stand at stud for pretty young things who would not waste a moment on me save for the prestige of having a child by, quote, The Senior, end of quote." He glared. "Right?"

"Lazarus, you are being unjust to both women. As well as unusually obtuse."

"How?"

"I've watched them. I think they both love you—and don't give me any doubletalk about what that verb means; I am not Galahad."

"But— Oh, crap!"

"I won't argue on that basis; 'crap' is a subject in which you are the Galaxy's top authority. Women do not *always* sell themselves and they *do* fall in love…often for the oddest reasons—if 'reason' is a word that can apply. Granted that you are ugly, selfish, self-centered, surly—"

"I'm aware of it!"

"—to me. Nevertheless women don't seem to care much how a man looks…and you are surprisingly gentle with women. I've noticed. You say those little whores on Mars all loved that blind man."

"Some of them weren't little. Big Anna was taller than I am and weighed more."

"Don't try to change the subject. *Why* did they love him? Don't bother to answer; why a woman loves a man—or a man loves a woman—can be rationalized only in survival terms, and the answer has no flavor, unsatisfying. But— Lazarus, when you've completed rejuvenation and you and I have finished our Scheherazade bet, however we finish it—are you going away again?"

Lazarus brooded before answering: "I suppose so. Ira, this cottage and garden and stream—that you've lent me are very nice; the times I've gone down to the city I've hurried back, glad to be home. But it's just a resting place; I won't stay here. When the wild goose cries, I go." Lazarus looked sad. "But I don't know where and I don't want to repeat the things I've done. Perhaps Minerva will find that new thing for me, when it's time to move on."

Ira stood up. "Lazarus, if you, weren't so stinking suspicious and mean, you would give both women the benefit of the doubt and leave them each with child to remember you by. It wouldn't cost you much effort."

"Out of the question! I do not abandon children. Or pregnant women."

"Excuses. I will adopt, in the womb, any child you sire before you leave us. Shall I have Minerva place that in permanent and bind it?"

"I can support my own kids! Always have."

"Minerva. Transfer it and bind it."

"Completed, Ira."

"Thank you, best Little Nag. Same time tomorrow, Lazarus?"

"I suppose so. Yes. Call Hamadryad, will you, and ask her to come, too?—tell her I asked you to. I don't want the kid's feelings hurt."

"Sure, Gramp."

COUNTERPOINT

IV

On the level in the Executive Palace of Mr. Weatheral's private apartments Hamadryad waited with Galahad while Ishtar left orders for the rejuvenation technicians on watch there. Then the three took transport down and across, still inside the Palace, to an apartment Ira had placed at Ishtar's disposal—a dwelling larger and more lavish than her quarters in the Rejuvenation Clinic and much more luxurious than the penthouse cottage save that it had no garden; it was intended for a Trustee or other V.I.P. guest—not that its luxury mattered much, as Ishtar and Galahad spent most of their time and took most of their meals with Lazarus, and used it mainly for sleeping.

Minerva had placed a dozen-odd lesser accommodations with Ishtar for her watch list, one of them for Galahad. He did not need it and Ishtar had Minerva reassign it to Hamadryad when she had become an unofficial part of the team caring for the Senior. Hamadryad sometimes slept in it rather than go to her country home —without telling her father, as the Chairman Pro Tem did not encourage members of his family to use Palace quarters unnecessarily. Or she sometimes stayed with Ishtar and Galahad.

This time all three went to Ishtar's apartment; they had matters to discuss. On arrival there Ishtar checked:

"Minerva?"

"Listening, Ishtar."

"Anything?"

"Lazarus and Ira are talking. Private conversation."

"Keep me advised, dear."

"Certainly, dear."

Ishtar turned back to the others. "Who wants a drink or something? Too early for dinner. Or is it? Ham?"

Galahad answered, "A bath for me, then a drink. I was all set for a dip—hot and sweaty—when Lazarus kicked us out."

"And stinky," Ishtar agreed. "I noticed it in the transport."

"A bath wouldn't hurt *you,* big arse; you were exercising as hard as I was."

"Regrettably true, my gallant knight; I Was careful to sit downwind from our elders after that last match. Ham, get us all something tall and cold while Stinky and I get clean."

"Will you two settle for Idleberry Jolts or whatever is handy? While we all bathe? I don't have the excuse of heavy exercise, but I broke out with fear stink when I put the proposal to Gramp. And *muffed* it! After all your coaching, Ish. I'm sorry!" She started to sniffle.

Ishtar put her arms around the younger woman. "There, there, dear—stop it. I don't think you muffed it."

"He refused me."

"You laid a good foundation—and shook him up, which he needed. You startled me with your timing but it will work out all right."

"He probably won't, even let me come back!"

"Yes, he will. Stop shaking. Come, dear; Galahad and I will give you a long, relaxing back rub. Stinky, fetch the fizz and join us in the shower room."

"With two women around I have to work. Okay."

When Galahad arrived with cold drinks, Ishtar had Hamadryad stretched out facedown on the massage table. Ishtar looked up and said, "Dear, before you get wet, see if there are three towel robes in the rack; I didn't check."

"Yes, ma'am; no, ma'am; right away, ma'am; will that be all, ma'am?—plenty of robes; I dialed for more this morning. Don't bruise her, you don't know your own strength. I'm going to need her, later."

"And I'm going to swap you for a dog, sweetheart, and sell the dog. Pass around those drinks, then come help, or you won't get either of us later. If ever. We're busy agreeing that all males are beasts." She continued to massage, gently, firmly, with professional skill, down Hamadryad's back while the massage table matched her appropriately down the subject's front. She let Galahad hang a drink around her neck and place its nipple in her mouth without slowing her careful fingers.

He snapped Hamadlyad's drink to the table, placed nipple in her mouth, patted her cheek, then took the other side and started to help, following Ishtar's lead. The table changed action to match four hands.

Some minutes later he let the nipple for his drink retract, and spoke. "Ish, any chance that Gramp twigged? About you two broads?"

"We're not all that broad. At least, Ham is not."

"'Broad' is a usual English idiom for a female, and you said we should talk and think in English as long as we are on this commitment."

"I simply said that Hamadryad is not very broad. Even though she's had more children than I have—and I haven't had any since rejuvenation. But it's a colorful idiom; I like it. I don't see how Lazarus could, guess that we are pregnant. Not that it would matter if he did; in my case—except just *how* I am pregnant, and he can't know that as I fudged the record on the source of the cloned cell. Ham, you haven't hinted anything to Lazarus—have you?'

Hamadryad surrendered her drink. "Of course not!"

"Minerva knows," Galahad said.

"Of course she does, I discussed it with her. But— Now you've got me wondering. Minerva?"

"Listening, Ishtar." The computer added, "Ira is leaving; Lazarus has come inside. No problems."

"Thank you, dear. Minerva, is there any possible way that Lazarus could know about Hamadryad and me? That we are pregnant, I mean, and why and how."

"He has not said so, nor has anyone mentioned it in his presence. Evaluation of pertinent data available to me makes it probable by less than one part in one thousand."

"How about Ira?"

"Less than one part in ten thousand. Ishtar, when Ira told me to supply you with service and to assign to you a restricted memory, he programmed me so that any later program will simply wipe your assigned box. Truly, there is no way for him to retrieve from your private memory file, nor can I selfprogram to get around it."

"Yes, so you assured me. But I don't know much about computers, Minerva."

Minerva chuckled. "Whereas I do. You could say that I have made a career of computers. Don't worry, dear, your secrets are safe with me. Lazarus has just told me to order a light supper for him; then he is going to bed."

"Good. Let me know what he eats and how much and when he goes to bed—then call me if he wakes. Awake and alone at night, a man is at his lowest ebb; I must be ready to move quickly. But you know that."

"I shall watch his wave patterns, Ishtar. You will have two to five minutes' warning—unless El Diablo jumps on his stomach."

"That damned cat. But being wakened that way doesn't depress him; it's his suicidal nightmares that worry me. I have about used up diversionary emergencies; I can't set fire to the penthouse a second time."

"Lazarus has not had one of his typical depression nightmares this month, Ishtar, and I know how to spot the wave sequences now; I'll be very careful."

"I know you will, dear. I wish we knew the incidents in his past from which each is derived; we might be able to wipe *them.*”

“Ish,” Galahad put in, “you go tinkering with his memory and you might lose everything Ira is after.”

“And I might save our client, too. You stick to back-rubbing, dear, and leave delicate work to Minerva and me. Anything more, Minerva?”

“No. Yes. Ira is telling me to find Hamadryad; he wants to talk to her. Will she take the call?”

“Sure!” agreed Hamadryad, rolling over. “But patch him in through you, Minerva; I won’t go to the phone, I don’t have my face on.”

“Hamadryad?”

“Yes, Ira?”

“Message for you. Be nice to an old man and show up at the cottage as usual, will you? Better yet, get there early and have breakfast with him.”

“Are you sure he wants to see me?”

“He does. He shouldn’t, after the way you embarrassed him. What possessed you, Ham? But this message is his idea, not mine. He wants to be sure he hasn’t scared you off.”

She sighed with relief. “I’m not scared off if he will let me stay. Father, I told you I would devote, as many days to this as *he* will permit. I meant it and still mean it. In fact I’ve told my manager that she can buy me out on long-term credit; that’s how serious I am.”

“So? I’m very pleased. If you do, and want to cash out, I— the government, that is—will pick up the loan from you without discounting it; I’ve assigned unlimited credit to anything relating to the Senior. Just tell Minerva.”

“Thank you, sir. I don’t expect to need it—unless Gramp gets tired of me and I see something else I want to invest in.

But the business is prosperous; I may just let Priscilla support me in style for a few years. Quite prosperous—betcha my assets exceed yours. Your private fortune, I mean.”

“Don’t be silly, my silly daughter; as a private citizen I’m almost a pauper—whereas in my official capacity I could confiscate your assets with just a word to Minerva and no one would question it.”

“Except that you never would—you’re sweet, Ira.”

“Huh?”

“You are…even if you can’t remember the names of my children. I’m feeling very gay, Papa, you’ve made me happy.”

“You haven’t called me ‘Papa’ for, oh, fifty or sixty years.”

“Because you never encourage intimacy once a child is grown. Nor do I from mine. But this assignment has made me feel closer to you. I’ll shut up, sir, and I’ll be there early tomorrow. Off?”

"One moment. I forgot to ask where you are. If you're home—"

"I'm not; I'm having a bath with Galahad and Ishtar. About to, that is; you interrupted a wonderful back rub they were giving me."

"Sorry. As you are still in the Palace, I suggest that you stay. To be here early tomorrow. Beg a bed from them Or, if that is intruding, come to my apartments; we'll find something."

"Don't fret about me, Ira. If I can't shame them into keeping me overnight, Minerva will find me a bed. Truly, Lazarus' bed is the only one I've ever found impossible to get into— maybe I need to apply for rejuve."

The Chairman Pro Tem was slow in answering. "Hamadryad…you were serious in proposing to have children by him—were you not?"

"Privacy, sir."

"Sorry. Hmm— The custom of privacy does not forbid me to say that *I* think it is a very good idea. If you tell me to, I will encourage it in any way I can."

Hamadryad looked at Ishtar and spread her hands in a gesture of "What do I do now?"—then answered: "His refusal seemed very firm, sir."

"Let me offer you a male viewpoint, my daughter. A man often refuses such a proposal when he wants to accept it—a man likes to be sure of a woman's motives and sincerity. At a later time he may accept. I don't mean that you should nag him with it; that would not work. But if you want this bide your time. You're a charming woman; I have confidence in you."

"Yes, sir. If he does give me a child, we would all be richer thereby —would we not?"

"Yes, certainly. But my motives are somewhat different. If he dies or leaves us, there is always the sperm bank and the tissue bank—neither of which he can touch because I'll cheat if necessary. But I *don't* want him to die, Hamadryad, nor do I want him to leave soon—and I am not, speaking from sentiment. The Senior is unique; I've gone to much trouble not to waste him. Your presence pleases him, your offer stimulates him…even though you feel he reacted badly. You're helping to keep him alive-and if he eventually lets you have his child, you may succeed in keeping him alive a long time. Indefinitely long."

Hamadryad wiggled with pleasure and smiled at Ishtar. "Father, you make me feel proud."

"You have always been a daughter to be proud of, dear. Although I can't claim all the credit; your mother is a most exceptional woman. Off now?"

"Off, with music playing. Good night, sir!"

Without getting up, Hamadryad grabbed both her friends around their waists and hugged them tightly. “Oh, I feel good!”

“So get down off this table, narrow broad; it’s my turn.”

“You don’t need a massage,” Ishtar said firmly; “you’ve been under no emotional strain and the hardest work you’ve done all day is to beat me two games of murder ball.”

“But I’m the spiritual type. Sensitive.”

“So you are, dear Galahad, and now you can most spiritually help her down and help me bathe her—still most spiritually.”

Galahad complied while complaining “You two ought, to bathe *me,* instead. Pretend I’m a blind music maker.” He closed his eyes and sang:

“‘There’s a *cop* a*round* the *corner*
who is sometimes not so friendly.
To a *man* whoisn’t *holding*
Or otherwise *unlucky*—

“That’s me—’unlucky’—or I wouldn’t have to work with two women in the house. What cycle, Ish?”

“‘Relaxing’ of course. Hamadear, since you let us hear that call, I assume that I can talk about it. I agree with Ira. You have Lazarus sexually stimulated whether he knows it or not, and if you can keep him that way, he won’t be depressed.”

“Is he truly that nearly recovered, Ishtar?” Hamadryad asked while raising her arms and “He looks better. But I can’t tell—his manner doesn’t change.”

“Oh, definitely. He started masturbating a month ago. Shampoo, dear?”

“He did? Really? Oh, that’s wonderful! Do I need one? Yes, I do—thanks.”

‘So it’s *well* to
Have a sister
Or even an old uncle—

“Close your eyes, Hambone baby; shampoo mix coming. A client has no privacy with Ishtar. But she didn’t tell *me;* I had to infer it from his graphs. Ish, why do I always wind up washing Ham’s back?”

“Because you tickle, sweetheart. There was no need for you to know. But a client certainly has no privacy with Minerva to help—and that’s as it should be; we need better computer service at the Clinic, I now see. Although he *does* have privacy in its true sense, as all of this is covered by the Oath. Even though you are not regular staff, Ham, I’m sure you realize that.”

"Oh, certainly! Not quite so hard, Galahad. Red-hot pincers could not make me talk other than to you two. Not even to Ira. Ishtar, do , you think I could learn to be a *real* rejuvenator?"

"If you feel a vocation for it and want to study that hard. Let it rinse now, Galahad. You have the empathy, I'm sure. What's your index?"

"They're your *friends,* boy.
Don't *neglect* them
Birthdays and Yom *Kippur*—

"Uh…'Genius-minus,' " Hamadryad admitted.

"Takes genius," Galahad said helpfully, "as well as a compulsive need to work; she's a slave driver, Hammy baby."

"'Also *Christmas* And Chanukah
A *card* or even *candy.'"*

"You're off key, dear. You're *'Genius-plus,'* Ham, slightly higher than Galahad's index. I looked it up just in case— and you did ask. I'm very pleased."

"'Off *key'?* Now you've gone too far."

"You have other virtues, my true knight; you need not be a troubadour. Hamadear, if you search your heart and really want it, you could be an associate technician by the time we migrate. If you intend to migrate. If not, the Clinic here always needs staff; a true vocation is scarce. But I'd like—terribly—to have you with us. Both of us will help you."

"Sure we will, Hammy! 'Off key' indeed! Is this colony going to be polygamous?"

"Ask Ira. Does it matter? Grab a robe and throw it around the Hamadarling, then I'll trade a quick scrub with you. I'm hungry."

"Do you want to risk it? After what you said about *my* singing? I know every spot and I'll tickle them all."

"King's Cross! I apologize! I *love* your singing, dear."

"The idiom is 'King's X,' Ish. Pax, it is. Grab robes for all of us, Hammy, that's a good girl. Long legs, while I was singing—perfectly on key—I figured out that idiom that was bothering me. It's not what Minerva thought it was; a 'hook shop' is a bordello. Which makes the Born Loser's sister a hetaera—and the last piece falls into place."

"Why, of course! No wonder she could subsidize her brother—artists always get paid more than anyone else."

Hamadryad returned with robes, laid them on the massage table. She said, "I didn't know that idiom was bothering you, Galahad. I understood it the first time I heard that song."

"I wish you had told me."

"Is it important'?"

"Only as one more clue. Ham, in analyzing a culture, its myths and folk songs and idioms and aphorisms are more basic than its formal history. You can't understand a person unless you understand her culture. 'His,' I should say, in speaking English—and that alone tells something basic about the culture in which our client grew up: the fact that a general term invariably takes the masculine form when both masculine and feminine are implied. It means either that males are dominant or that women have just emerged from lower status, but the language lag—there always is one—has not caught up with cultural change. The latter, in the barbarism Lazarus came from, as indicated by other clues."

"You can tell all that just from a rule of grammar?"

"Sometimes. Hammy, I used to do this professionally, when I was old and grizzled and waiting for rejuvenation. It's detective work and no one clue is ever enough. For, example, women must not have reached equal status even though other clues show them gaining it—for whoever heard of a bordello managed by a *man?* A guard in one, yes, and Lazarus said that he was that, too. But *manager?* Preposterous, by modern standards. Unless that colony on Mars was an atypical retrogression—it may have been, I don't know."

"Continue it as we eat, kids; Mama is hungry."

"Coming, Ish dear. Galahad, I understood that idiom without thinking about it. You see, my mother was—still is—a hetaera."

"Really? There's a wild coincidence. So was mine, and so was Ishtar's—and we three wind up all in rejuvenation work and on the same client. Two numerically small professions— I wonder what the odds are against it?"

"Not too high, as both professions require strong empathy. But if you want to know, ask Minerva," advised Ishtar, "and hand me that robe. I don't like blowdry and I don't want to get chilled while rustling food. Hamasweet, why didn't you follow your mother's profession? With your beauty you would be a star."

Hamadryad shrugged. "Oh, I know what I look like. But Mother can snatch a man away from me just by lifting her little finger—except that I avoid the chance. Beauty has little to do with it—you saw a man turn me down just today. Lazarus' himself told us what it takes to make a great artist—a spiritual quality a man can *feel.* My mother has it. I don't."

"I follow your reasoning," Ishtar said as they went through her lounge into the buttery. There she screened the menu offered by the kitchen down below. "My mother has it, too. Not especially pretty, but what she has, men want. Still want, although she's retired."

"Long Legs," Galahad said soberly, "you do all right. You've got it too."

"Thank you, my knight, but that's not true. I sometimes have it for one man. Or two at most. And sometimes not at all, as I can get buried in our profession and forget about sex. I told you how many years I had been celibate, I wouldn't have found *you,* dear, would never have risked 'Seven Hours'—had not our client had me so terribly emotional. Quite unprofessionally, Hamadryad; I was as silly as a schoolgirl on a warm spring night. But, Galahad, Tamara—my mother— has it all the time and for anyone who needs her. Tamara never set a price, she didn't need to; they showered gifts on her. She's retired now and considering whether to rejuvenate again. But her fans won't leave her alone; she still gets endless offers."

Galahad said sorrowfully, "That's what I would like to be. But I'm that 'Born Loser.' If a man tried that profession, he'd kill himself in a month."

"In your case, dear Galahad, it might take a little longer. But eat and restore your strength; we're going to put you in the middle of the bed tonight."

"Does that mean I'm invited?" asked Hamadryad.

"That's one way of putting it. A more accurate statement would be that I'm inviting myself. Galahad made it clear in the shower that his plans for the night include you, dear. But he didn't mention me."

"Oh, he did, too! Anyhow he's horny about you all the time; I can feel it."

"He's horny—end of message and off. Will steaks and random garnish do, or do you each wish to choose? I don't feel imaginative."

"Suits me. Ish, you should put Galahad under contract. While he's groggy."

"Privacy, dear."

"Sorry. I just blurted it out. Because I'm so fond of you both."

"Big-arsed bitch won't marry me," said Galahad. "And me so good and pure and modest. Claims I tickle, Will you marry me, little Hamadear?"

"What? Galahad, you're the world's worst tease. You not only don't want me to; you know I'm committed to the Senior even though he refused me. Until Ish tells me to drop it. If she does."

Ishtar finished ordering, wiped the screen. "Galahad, don't tease our baby. I want both Hamadryad and me to be free of other contracts as long as either of us has any chance of getting our client interested in cohabitation, or progeny, or both. Not just a lark but something he can take seriously."

"So? Then why in the name of all the fertility gods did you arrange to have *both* of you pregnant at once? I don't get it. I hear the whir, but the figures won't add."

"Because, my stupid darling, I didn't dare wait. The Director may come back any time."

"But why *you* two? With maybe ten thousand healthy hostmothers registered and available? And why *two?"*

"Dearest man, I'm sorry I said you were stupid—you aren't; you're just male. Hamadryad and I know exactly what risks we are taking and why. We don't look pregnant and won't for weeks yet, and if either of us can jockey Lazarus into a contract, an abortion takes ten minutes. Professional hostmothers won't do for this job; it has to be bellies over which I have some control and women I trust utterly. Bad enough that I had to trust a gene surgeon and risk a proscribed procedure—Ira may have to get me out of that if anything slips.

"But you know' as well as I do, sweet Galahad, that even an ordinary clone sometimes, goes wild. I wish I had *four* female bellies I could use, not two. Eight. Sixteen! Increase the chances of getting *one* normal fetus. In another month—long before it shows—we'll know what we're carrying. If the odds fail both of us—well, I'm ready to start over again and Hamadryad is, too."

"As many times as necessary, Ishtar. I swore it."

Ishtar patted her hand. "We'll get a good one. Galahad, Lazarus is going to have his identical twin sister, I promise you—and once it is an accomplished fact, we'll hear no more talk of termination-option switches, or leaving us, or anything—at least until she's woman tall!"

"Ishtar?"

"Yes, Hamadryad?"

"If we *both* show normal fetuses a month from now—"

"Then you can abort, dear; you know that."

"No, no, no! I shan't! What's wrong with *twins?"*

Galahad blinked at her. "Don't bother to answer, Ish. Let me give you the male angle. The man who can resist raising identical twin girls hasn't been born. And his name isn't Lazarus Long. Look, dears, is there anything, anything at *all,* that can improve *both* your chances? Now?"

"No." Ishtar repeated softly, "No. We both test pregnant, that's all we can say or do now. Except pray. And I don't know how to pray."

"Then it's time we learned!"

VARIATIONS ON A THEME

V

Voices in the Dark

After Minerva ordered his evening meal for Lazarus, then supervised its service, the computer said, “Is there anything else, sir?”

“I guess not. Yes. Will you have dinner with me, Minerva?”

“Thank you, Lazarus. I accept.”

“Don’t thank me; *you* are doing *me* a favor, milady. I’m moody tonight. Sit down, dear, and cheer me up.”

The computer’s voice repositioned so that it appeared to come from the other side of the table where Lazarus sat, as if a flesh-and-blood were seated there. “Shall I construct an image, Lazarus?”

“Don’t put yourself to the trouble, dear.”

“It’s no trouble, Lazarus; I have ample spare capacity.”

“No, Minerva. That holo you made for me one night— perfect, realistic, moved just like a flesh-and-blood. But it wasn’t *you.* I know what you look like. Umm…lower the lights and spot enough light on my plate to let me eat. Then I’ll see you in the gloom without a holo.”

The lighting readjusted so that the room was almost dark save for a pool of light on chastely perfect tableware and napery in front of Lazarus. The contrast dazzled his eyes enough that he could not see across the table without peering—he did not peer. Minerva said, “What is my appearance, Lazarus?”

“Eh?” He stopped to think. “It fits your voice. Hmm, it’s a picture that has grown up in my mind without thinking about it, during the time we have been together. Dear, do you realize that we have been living together more intimately than husband and wife usually manage?”

“Perhaps I don’t, Lazarus, since I cannot experience being a wife. But I am happy to be close to you.”

“Being a wife doesn’t have too much to do with copulation, my dear. You’ve been a mother to my baby, Dora. Oh, I know that Ira stands first with you…but you are like that girl Olga I spoke of; you have so much to give that you can enrich more than one man. But I honor your loyalty to ha. Your love for him, dear.”

“Thank you, Lazarus. But—if I know what the word means—I love you, too. And Dora.”

“I know you do. Both. You and I have no need to worry over words; we’ll leave that to Hamadryad. Mmm, your appearance—you are tall, about as tall as Ishtar. But slender. Not skinny, just slender—strong and well muscled without being bulgy. You are not as broad in the hips as she is. But broad enough. Womanly. You’re young, but a mature young woman, not a girl. Breasts much smaller than Ishtar’s, more like Hamadryad’s. You are handsome rather than pretty, and you are rather solemn, except when one of your rare smiles lights up your face. Your hair is brown and straight, and you wear it long. But you don't fuss with it other than to keep it clean and neat. Your eyes are brown and match your hair. You usually don't wear cosmetics, but you almost always wear some sort of clothing—simple clothing; you are not a clotheshorse, dress does not interest you that much. But you go naked only with persons you fully trust—a short list.

"That's all, I guess. I haven't tried to imagine details; this is just what grew in my mind. Oh, yes!—you keep your nails, both hands and feet, short and clean. But you aren't fussy about it, or about anything. Neither dirt nor sweat bothers you, and you don't flinch at blood, even though you don't like it."

"I am very pleased to know how I look, Lazarus."

"Huh? Oh, fiddle, girl—that's my imagination living its own life."

"That is how I look," Minerva said firmly, "and I like it.

"All right. Although you can be as dazzingly beautiful as Hamadryad if you want to be."

"No, I look just as you described me. I am a 'Martha,' Lazarus, not her sister Mary."

Lazarus said, "You surprised me. Yes, you are. You ye read the Bible?"

"I have read everything in the Great Library. In one sense I *am* the Library, Lazarus."

"Mmm, yes, should've realized it. How is the twinning process coming along? Going to be ready? Say if ha gets a burr under his saddle and takes off in a hurry."

"It is essentially complete, Lazarus. All my permanents, programs and memories and logics, are twinned in Dora s number-four hold, and I run routine checks and exercise by running the twinned parts parallel with the me here under the Palace—a 'Tell me six times' instead of my normal 'Tell me three times' method. I have found and corrected some open circuits that way—minor factory defects, nothing I could not handle at once. You see, Lazarus, I treated it as a crash program and did not depend on Turing processes to build most of my new me,, as I would have had to build extensionals in Dora for that sole purpose, then remove them save for maintenance extensionals.

"That would have taken much time, of course, since I can't use computer speeds in manipulating mass. So instead I ordered all new blank memories and logic circuitry and had them installed in Dora by factory technicians. Much faster. Then I filled them and checked them."

"Any trouble, dear?"

"No, Lazarus. Oh, Dora grumbled about dirty feet in her clean compartments. But it was just grumbling, as they worked 'clean-room' style, lint-free coveralls and masks and gloves, and I required them to change in the air lock, not just before they entered her number-four." He felt her quick smile. "Temporary sanitary facilities outside the ship —which caused the project engineer to grumble, as well as the shop steward."

"Should think so. Wouldn't have hurt Dora to activate a head."

"Lazarus, as you pointed out, I will be—I hope—a passenger in Dora someday. So I have tried to become her friend—and we are friends, and I love her, and she is the only friend I have who is a computer. I don't want to jeopardize that by making a mess, or permitting one to be made, in my moving into her ship. She is, as you said, a neat housekeeper; I am trying to be just as neat and show thereby that I respect her and appreciate the privilege of being a passenger in her. The engineer in charge and that talky shop steward had no reason to grumble; I specified all this in the contract—change clothes at the lock, leg urinals for all personnel inside, no eating, expectorating, or smoking in the ship, go by the shortest route to number-four, no snooping elsewhere in the ship—which they could not, anyhow, as I asked Dora to keep all doors locked save that direct route—and I paid to have it done this way."

"A pretty penny, I'm certain. Did Ira comment?"

"Ira does not bother with such matters. But I did not report costs to him; I charged it all to you, Lazarus."

"Whee' Am I bankrupt?"

"No, sir; I paid it from the Senior's unlimited drawing account. That seemed best to me, Lazarus, as the work was done in your ship. Perhaps they wonder why the Senior wants a second computer, of high capacity, installed in his ship. I know the project engineer wondered; *I* snubbed him firmly. But wonder is all they can do; the Senior is not accountable to anyone. I hinted quite broadly that Mr. Chairman Pro Tem would be annoyed if anyone attempted to snoop into your affairs. Not that anyone can tell what a computer really is, just from looking at it—even the manufacturer."

"This manufacturer— Low bidder?"

"Should I have placed it for bid, sir?" Minerva sounded worried.

"Hell, no! If you had, I would have told you to tear it out and start over—then we would have hunted for the best supplier. Minerva my dear, once you leave here, it may be many years before you have any factory service; you'll have to maintain yourself. Unless Ira can minister to a sick computer?"

"He can't."

"You see? Dora is gold and platinum where a cheaper computer is copper and aluminum. I hope your new carcass is just as expensive."

"It is, Lazarus. My new me is even more reliable than my old me—

and smaller and faster, as much of me—'old me'— is about a century old; the art has improved."

"Hm. Must see what ought to be replaced in Dora, if anything."

Minerva made no comment. Lazarus said, "My dear, when you don't talk, it is louder than when you do. Have you been overhauling Dora?"

"I stockpiled some components, Lazarus. But Dora won't let herself be touched unless *you* order it."

"Yeah, she hates to let a doctor poke around inside her. But if she needs it, she'll get it—under anesthesia. Minerva, it would be smart, with two of you in the ship, for Dora to carry your maintenance instructions in her permanents, and hers in yours—so that you can nurse each other."

Minerva answered simply, "We have been waiting for you to tell us to do so, Lazarus."

"You mean *you* have been waiting; it is not something Dora would think of. So now I'm telling you both, and let her hear my voice say so. Minerva, I wish you would get over being so humble with me. *You* should have proposed it; you think faster than I do by many orders of magnitude; I've got flesh-and-blood limitations. How are you coming on astrogation? Is she teaching you to pilot? Or balking?"

"Lazarus, I am now as skillful a pilot as she is, in my other me."

"Like fun. You're a copilot. You're not a pilot until you've made an n-space jump unassisted. Even Dora gets jumpy before a jump—and she's made hundreds."

"I stand corrected, Lazarus. I am a very highly trained copilot. But I'm not afraid to do it, if the time comes. I've rerun all of Dora's jumps in real time, and she tells me I know how."

"You may have to someday, if disaster hits. Ira isn't the pilot I am, I'm certain. With me no longer aboard, your new skill may save his life sometime. What else do you know? Heard any good ones lately?"

"I don't know, Lazarus. I've heard some stories, bawdy ones I believe, from listening to the technicians installing my twin. But I don't know that they are funny."

"Don't bother. If it's a bawdy story, I heard one like it at least a thousand years back. Now the key question— How fast can you cut loose if ha decides to jump? Assume a coup d'etat and he's running for his life."

"One-fifth of a second, minus."

"Huh? You're not pulling my leg? I mean how long to put your whole personality aboard the 'Dora.' Not leave anything behind and not leave the computer here aware that she ever was Minerva—for anything less would not be fair to yourself, dear. The 'Minerva' left behind would grieve."

"Lazarus, I am speaking not from theory but from experience, as I knew it was the critical aspect of this twinning. So, once I dismissed the contractor and had twinned my permanents and logics and my running temporaries, I experimented, cautiously at first; I simply paralleled me, as I described to you. That's easy, I just have to balance the lag at each end, to stay synchronous in real time—but I have to do that with my remote extensionals at all times; I'm used to it.

"Then I tried, very cautiously, suppressing myself, first at the ship end, then at the Palace end, with a selfprogram to revert to full twinning in three seconds. No trouble, Lazarus, not even the first time. Now I can do it in less than two hundred milliseconds and run all checks to be certain that I have neglected nothing. I have done so seven times since you asked that question. Did you notice a lag in my voice at times? Approximately a thousand-kilometer lag?"

"What? My dear, I am not equipped to notice a lag of less than thirty thousand kilometers at speed 'c.' " He added, "Call it a tenth of a second. You flatter me." Lazarus added thoughtfully, "But a tenth of a second is a hundred million of the nanoseconds you use. Or a hundred milliseconds. What's that in your time? About a thousand of my days?'

"Lazarus, that is not how I would express it. I split much smaller than a nanosecond in many things I do—a 'millishake' or less. But I'm just as comfortable in your time; I am right now with my personal me. I could not enjoy singing, or this quiet talk with you, if in my personal mode I were forced to consider each nanosecond. Do you count each of your heartbeats?'

"No. Or rarely."

"It is somewhat the same with me, Lazarus. The things I do quickly I do with no effort and with no conscious attention other than necessary selfprogram. But the seconds and minutes and hours I spend with you, in personal mode, I savor. I do not chop thorn into nanoseconds; I grasp them whole and enjoy them. All the days and weeks you have been here I hold as a single 'now' and cherish it."

"Uh…hold it, dear! Are you saying that, well, the day Ira introduced us to each other is still *'now'* to you?"

"Yes, Lazarus."

"Let me sort this out. Is tomorrow 'now' to you also?"

"Yes, Lazarus."

"Uh…but if that is so, you can predict the future."

"No, Lazarus."

"But— Then I don't understand it."

"I could print out the equations, Lazarus, but such equations would merely describe the fact that I am constructed to treat time as one of many dimensions, with entropy but one operator and with 'the present' or 'now' a variable held in steady state for a wide or narrow span. But in dealing with *you* I must necessarily move with the wave front that is *your* personal now—or we cannot communicate."

"My dear, I'm not sure we *are* communicating."

"I am sorry, Lazarus. I have *my* limitations, too. But were I able to choose, I would choose *your* limitations. Human. Flesh-and-blood."

"Minerva, you don't know what you are saying. A flesh-and-blood body can be a burden . . especially when its maintenance begins to occupy most of one's attention. You have the best of both worlds—designed in man's own image to do what makes him distinctively human—but better, faster— *much* faster!—and more accurately, than he can do it—without the aches and pains and inefficiencies of a body that must eat and sleep and make mistakes. Believe me."

"Lazarus, what is 'Eros'?"

He looked into the gloom and saw in his mind's eye how solemnly and sorrowfully she stared back. "Good God, girl—do you want to go to bed with him that badly?"

"Lazarus, I do not *know.* I am a 'blind man.' How *can* I know?"

Lazarus sighed. "I'm sorry, dear. Then you know why I have kept Dora a baby."

"Only as conjecture, Lazarus. One that I have not and will not discuss with anyone."

"Thank you—you are a lady, dear. You do know. Or you know part of my reason. But I'll tell you all of it—when I feel up to it—and then you will know what I mean by 'love' and why I told Hamadryad it must be experienced, not defined in words…and why I *know* that you know what love is, because you have experienced it. But Dora's story is not for Ira, just for you. No, you can let Ira have it, after I'm gone. Uh, call it 'The Tale of the Adopted Daughter'; then place a hold on it and let him have it later. But I won't tell it now; I'm not strong enough tonight—ask me when you know I'm feeling up to it."

"I shall. I'm sorry, Lazarus."

"Sorry'? Minerva, my very dear, there is *never* anything to feel sorry about with love. *Never.* Would you rather not love me? Or Dora? Or never have learned of love through loving Ira?"

"No. No, not that! But would that I knew 'Eros,' too."

"Count your blessings, dear. 'Eros' can hurt."

"Lazarus, I do not fear being hurt. But while I know much about male-female reproduction, far more than any single human flesh-and-blood knows—"

"You do? Or think you do?"

"I do know, Lazarus. In preparation for migrating I added extra additional memory storage—filling much of hold number-two——so that I could transcribe for Ishtar into my new me all the research files and library and restricted records of the Howard Rejuvenation Clinic —”

“Whew! I think Ishtar took a chance. The Clinic seems pretty cagey about what they release and don’t release.”

“Ishtar is not afraid to take chances. But she did ask me to hurry, so I placed it in temporary here, until I could set up the necessary capacity—large—in Dora’s hold. But I asked Ishtar’s permission to study it, and she said it was all right for me to do so, as long as I did not release anything keyed as confidential or secret without consulting her.

“I found it fascinating, Lazarus. I now know all about sex in the sense that a man who has always been blind can be taught the physics of a rainbow. I am even a gene surgeon now, in theory, and would not hesitate to be one in practice once I had time to construct the ultramicrominiature waldoes needed for such fine work. I am equally expert as obstetrician and gynecologist and rejuvenator. Erectile reflexes and mechanics of orgasm and the processes of spermogenesis and impregnation are no mystery to me, nor any aspect of gestation and birth.

“‘Eros alone I cannot know…and know at last that I am blind.”

VARIATIONS ON A THEME

VI

The Tale of the Twins Who Weren’t

(Omitted)

—but sky merchant was then my usual occupation, Minerva. That caper in which I moved from slave to high priest was forced on me. I had to be meek a long time, which ain’t my style. Maybe Jesus was right when he said that the meek shall inherit the earth—but they inherit very small plots, about six feet by three.

But the only route from field hand to freedom lay through the church -and required meekness all the way, so that’s what I gave ‘em. Those priests had weird habits— (9,300 words omitted)

—which got me off their damned planet and I never expected to go back.

—did go back a couple of centuries later—freshly rejuvenated and not looking anything like that high priest whose ship had been lost in space.

I was a sky merchant again, which suits me; it lets you travel and see things. I went back to Blessed for money, not revenge. I’ve never wasted skull sweat on revenge; The Comtede-Monte-Cristo syndrome is too much work and not enough fun. If I tangle with a man and he lives through it, I don't come back later gunning for him. Instead, I outlive him— which balances the books just as well. I figured that two centuries was enough for my enemies on Blessed to be dead, since I had left most of them sort of dead earlier.

Blessed would not have been on my route other than for business reasons. Interstellar trade is economics stripped to basics. You can't make money by making money because money isn't money other than on its planet of issue. Most money is fiat; a ship's cargo of the stuff is wastepaper elsewhere. Bank credit is worth even less; Galactic distances are too great. Even money that jingles must be thought of as *trade goods—not* money—or you'll kid yourself into starvation.

This gives the sky merchant a grasp of economics rarely achieved by bankers or professors. He is engaged in barter and no nonsense. He pays taxes he can't evade and doesn't care whether they are called "excise" or "king's pence" or "squeeze" or straight-out bribes. It is the other kid's bat and ball and backyard, so you play by his rules—nothing to get in a sweat about. Respect for laws is a pragmatic matter. Women know this instinctively; that's why they are all smugglers. Men often believe—or pretend—that the "Law" is something sacred, or at least a science—an unfounded assumption very convenient to governments.

I've done little smuggling; it's risky, and you can wind up with money you don't dare spend where it's legal tender. I simply tried to avoid places where the squeeze was too high.

By the Law of Supply and Demand a thing has value from *where* it is as much as from *what* it is—and that's what a merchant does; he moves things from where they are cheap to where they are worth more. A smelly nuisance in a stable is valuable fertilizer if you move it to the south forty. Pebbles on one planet can be precious gems on another. The art in selecting cargo lies in knowing where things will be worth more, and the merchant who can guess right can reap the wealth of Midas in one trip. Or guess wrong and go broke.

I was on Blessed because I had been on Landfall and wanted to go to Valhalla in order to go back to Landfall, as I was thinking of marrying and raising another family. But I wanted to be rich enough to be landed gentry when I settled down—which I was not, at the time. All I had was the scout ship Libby and I had used (Sequence of events cannot be reconciled. Perhaps a similar ship?J.F. 45th) and a modicum of local money.

So it was time to trade.

The trade routes for a two-way swap show minimum profit; they fill up too quickly. But a triangular trade-or higher numbers—can show high profits. Like this: Landfall had something—call it cheese—which was a luxury on Blessed— while Blessed produced—call it chalk—much in demand on Valhalla whereas Valhalla manufactured doohickeys that Landfall needed.

Work this in the right direction and get rich; work it backwards and lose your shirt.

I had worked the first leg, Landfall to Blessed, successfully having sold my cargo of— Now what was it? Durned if I remember; I've handled so many things. Anyhow, I got such a nice price that I temporarily had too much money.

How much is "too much"? Whatever you can't spend before you leave a place you are not coming back to. If you hang onto that excess and come back later, you will usually find—invariably, so far as I recall—that inflation or war or taxes or changes in government or something has wiped out the alleged value of fiat money you may have kept.

As my ship was scheduled to load and I had placed in escrow with the port authority the price of her cargo, what I had left over was burning a hole in my pocket with only a day to get rid of it, that being the time until my ship was to be loaded—I had to be on hand for that; I was my own purser and have an untrusting disposition.

So I took a walk through the retail district, thinking I might buy some doodads.

I was dressed in local high style and had a bodyguard behind me, for Blessed was still a slave economy and in a pyramidal society it is well to be up near the point, or at least look like it. My bodyguard was a slave but not my slave; I had hired him from a rent-a-servant agency. I'm not a hypocrite; this slave didn't have a durn thing to do but follow me around and eat like a hog.

I had him because my assumed status required a manservant in sight. A "gentleman" could not register at a first-class hilton in Charity or anywhere on Blessed without a valet in evidence; I could not eat in a good restaurant without my own bearer standing behind me—and so forth; when in Rome, you shoot Roman candles. I've been places where it was mandatory to sleep with your hostess—which can be dreadful; this Blessed custom wasn't difficult.

I didn't rely on him even though the agency supplied him with a knob stick. I was armed six ways and careful where I walked; Blessed was more dangerous than it had been when I was a slave there and a "gentleman" is more of a target, even though cops don't bother him.

I was taking a shortcut through the slave market, it not being an auction day, on my way to the jewelers' lane, when I saw that a sale was being offered and slowed down—a man who has been sold himself can't walk past, indifferent to the plight of chattels. Not that I had any intention of buying.

Nor did anyone seem about to buy this pair; the knot around the factor’s tent was rabble; I could tell by their clothes and the fact that there wasn’t a man there with a manservant.

The merchandise was standing on a table, a young woman and a young man. Late adolescence for him and just ripe for her, or the same age in view of the fact that females grow up faster. Call it eighteen measured by my own youth—an age at which a boy should be nailed into a barrel and fed through the bunghole but a girl is ready to marry.

Long sleeveless robes hung from their shoulders—and I knew too well what those robes meant; they would be displayed only to a prospective buyer, not to rabble. Robes signified valuable slaves, not to be knocked down on open bid.

Sure enough, they were being held at Dutch auction, with the minimum bid posted—ten thousand blessings. That amounts to— How can I define money of centuries back on a planet hundreds of lightyears away in terms that make sense here and now? Let’s put it this way: Unless these kids were something extraordinary, they were overpriced by a factor of five, as prime young stock, either sex, were fetching around a thousand blessings by the morning’s financial news.

Ever pause in front of a clothing store and get hooked inside? No, of course you haven’t. But that’s what happened to me.

All I did was say to the factor, “Goodman, is that posted bid a mistake? Or do these two have something special that doesn’t show?” Just curiosity, Minerva, as I neither intended to own slaves nor would the excess in my purse make a dent in a planetwide custom. But I could not see *why?* The girl was not outstandingly pretty; she would not fetch a high price as an odalisque. The lad wasn’t even heavily muscled. Nor were they a matched pair. Back home I would have picked her for Eyetalian and him for a Swede.

Boom, I’m urged into the tent while the chattels are shoved ahead; the factor’s manner shows that he hasn’t had a live one all day—while my shadow is saying in my ear, “Master, that price is too high. I can take you to a private sale where prices are right and satisfaction is guaranteed.”

I said, “Shut up, Faithful”—all rented body servants were named “Faithful,” probably by contraries—”I want to see what this is.”

As fast as the tent flap is fastened against the rabble, the factor is shoving a chair against my knees and handing me a drink with a bow and a scrape while saying lyrically, “Oh, sweet and gentle master, happy am I that you asked that! I am about to show you a great wonder of science! A thing to astound the very gods! I speak as a pious man, a true son of our Everlasting Church, one who cannot lie!”

A slave factor who can't lie has yet to be whelped. Meantime, the youngsters stationed themselves docilely on a display platform, and Faithful was whispering: "Don't believe a word, Master. The girl is nothing and I can whip three of that punk without my stick—yet the agency would sell you *me* for eight hundred blessings and that's a fact."

I motioned him to silence. "Goodman, what swindle is this?"

"No swindle, on my mother's honor, kind sir! Would you believe that these are brother and sister?"

I looked at them. "No."

"Would you believe that they are not only brother and sister but *twins?"*

"No."

"Would you believe the same stud, the same dam, the same womb, born the same hour?"

"Possibly the same womb," I conceded. "Hostmother?"

"No, no! *Exactly* the same ancestry. And yet—here is the miracle—" He held my eye and spoke in a hushed voice: "They are nevertheless a sound *breeding* pair…for these twins are *unrelated to each other!* Would you believe it?"

I told him what I would believe, including his losing his license and facing a charge of blasphemy.

His smile grew broader, and he complimented me on my wit and asked me how much—if he *proved* all of these things—how high a bid I would place against them? Higher than ten thousand since I must realize that the posted figure represented a prior bid. Fifteen thousand, perhaps, with escrow the morrow before noon?

I said, "Forget it, I'm shipping out before noon"—and started to stand up.

He said, "Wait, I beg you! I see that you are a gentleman of education, of science, of deep knowledge and widely traveled—surely you will grant your humble servant a moment to show *proof?"*

I still would have left; swindles bore me. But he waved a hand, and the kids dropped their robes and fell into display poses, the lad with his arms folded across his chest and his feet planted firmly, the girl in that graceful pose that must be as old as Eve—one knee slightly advanced, hand on hip, other arm hanging-easily, chest slightly raised. It almost made her beautiful save that she looked bored—having taken it hundreds of times, no doubt.

But that wasn't what made me stay; something annoyed me. The lad was bare of course—she was wearing a chastity girdle. Do you know what one is, Minerva?

"Yes, Lazarus."

Too bad. I said, "Take that damned thing off that kid! *Now!"* Silly of me; I rarely interfere with *anything* on a strange planet. But those things are abominations.

“Certainly, gentle sir; I was about to. Estrellita!”

The girl turned her back, with that same bored look. The factor stood so that his back kept the lad from seeing him work the combination lock, saying apologetically, “She must wear it not only because of ruffians but to protect her from her brother; they share the same pallet, for she is—would you believe it, sir, seeing how full ripe she is?—a *virgin!* Show the gentle master, ‘Trellita.”

Bored as ever, she promptly started to do so. I regard virginity as a correctable perversity of no interest; I motioned her to stop and asked the factor if she could cook.

He assured me that she was the envy of every gourmet chef on Blessed, and started to lock her back into that steel diaper. I said roughly, “Leave it off! Nobody here is going to rape her. What’s this proof you promised?”

Minerva, he proved every word—except about her cooking—with exhibits that made me suspicious only because *he* showed them; I wouldn’t have boggled had I seen them in the Clinic here.

I should mention that Blessed had a rejuvenation clinic even though it was not settled by the Families. Eventually the clinic was taken over by the church and antigeria techniques that work fairly well even on short-lifers were no longer available to any but big shots. But the planet stayed advanced in biological techniques; the church needed it.

Minerva, I told you that he claimed and you are now as learned in biology and genetics and associated manipulations as Ishtar is—more so; you don’t have her limitations in time and in memory storage. What did he prove to me?

“That they were diploid complements, Lazarus.”

“Right! Although he called them “mirror twins.” Can you tell me how these kids were made, Minerva? How would *you* go about producing such twins?

The computer answered thoughtfully, “‘Mirror twins would be an inexact term for zygotes satisfying the listed requirements—although it is colorful. I can answer only theoretically as the records in me do not show that it has been attempted on Secundus. But the steps necessary to achieve exact diploid complements would be these: There must be intervention in gametogenesis in each parent just before meiotic division-reduction of chromosome number—that is, one would start with primary spermatocytes and primary oocytes, unreduced diploids.

“In the male parent the intervention presents no theoretical problem but would be difficult because the cells are very small—but I would not hesitate to attempt it given time to construct the necessary fine extensionals.

"The logical place to start, both parents, would be with gonia placed in vitro, and cherished. When a spermatogonium was observed to change to a primary spermatocyte—still diploid—it would be segregated and at the instant it divided into two secondary spermatocytes—haploids, one with an X chromosome and one with a Y chromosome—they would be again segregated and each would be encouraged to develop into spermatozoa.

"It would not be sufficient to intervene at the spermatozoa stage; confusion of gamete pairs could not be avoided, and resulting zygotes could be complementary only by wildest chance.

"Intervention with the female parent is mechanically simpler because of larger ceils—but involves a different problem; the primary oocyte must be encouraged, at point of meiosis, to produce *two* haploid and complementary secondary oocytes, rather than one oocyte and one polar body. Lazarus, this might require many attempts before a reliable technique could be worked out. It would be similar to the process of identical twinning but must take place two stages earlier in the gametogenetic sequence. However, it might turn out to be no more difficult than it is to produce fatherless female rabbits. I do not venture an opinion as I lack former art to draw on—save that I feel certain that it can be done, given time to develop technique.

"At this point we have complementary groups, of spermatozoa, one group with Y and one with X, and a complementary pair of ova, each with an x chromosome. Fertilization would be in vitro, with a possibility of choosing either of two potential pairs of female-male complements but with no basis for choice unless the genetic charts of haploids are determined precisely, which is difficult and likely to cause genetic damage; I do not think it would be attempted. Instead one sperm would be inserted into one ovum, its complement into the other, on a blind basis.

"One last requirement must be met to justify *all* of this slave factor's allegations: The two fertilized ova must be removed from vitro and planted in the womb of the donor of the oogonium, and there allowed to develop as twins through natural gestation and birth.

"Am I right, Lazarus?"

Exacly right! Go to the head of the class, dear; you get a gold star on your report card. Minerva, I don't *know* that it happened that way. But that's what the factor claimed, and that's what his exhibits—lab reports, holomovies, and so forth—seemed to show. But that thief may have faked those "proofs" and offered a random pair not likely to fetch a price above average—save for his fancy sales talk. The so-called proofs looked good, and lab reports and such carried, a bishop's chop and seal. The stills and movies looked good, too—but how can a layman judge? Even if those exhibits weren't phony, all they could prove was that such a process had once taken place; they did *not* prove that *these* kids were the result. Shucks, they might have been used to sell many slave pairs, with a bishop in on the racket.

I looked over the stuff, including a scrapbook of the kids growing up, said, "Very interesting," and started to, leave.

This pimple teleported himself between me and the tent flap. "Master," he said urgently. "Kind and generous sir— twelve thousand?"

Minerva, my trader instincts took over. "One thousand!" I snapped. I don't know why. Yes, I do know. The girl's body was scarred from that damned Torquernada girdle; I wanted to insult this flesh peddler.

He flinched and looked as if he were giving birth to broken beer bottles. "You jest with me. Eleven thousand blessings, and they are yours—though I won't make expenses!"

"Fifteen hundred," I answered. I had money I couldn't spend elsewhere and told myself I could afford to manumit them rather than let that girl be bound into that damned atrocity again.

He moaned. "If they were mine, I would *give* them to you. I love these cute darlings like my own children and could ask for them, nothing better than a kind and gentle master learned in science who appreciates the wonders that have gone into their making. But the Bishop would hang me and have me cut down alive to be dragged to death by my tool. Ten thousand and take all proofs and exhibits. I'll suffer a loss for their sakes—and because I admire you so much."

I got up to fortyfive hundred and he got down to seven thousand and there we stuck, as I had to hold out cash for last-minute squeeze, whereas it felt to me that he was close to the point where he really could not sell without risking the Bishop's wrath. If there was a bishop — He turned away in a fashion that says that a dicker is over and he is through flattering you, and told the girl sharply to step back into her steel harness.

I got out my purse. Minerva, you understand money; you handle the government's finances. But possibly you don't know that *cash* money affects some people the way catnip does Diablo. I counted out fortyfive hundred blessings in big red-and-gold bills under that scoundrel's nose—and stopped. He was sweating and swallowing his Adam's apple but managed to shake his head a tenth of an inch.

So I counted more bills, very slowly, and reached five thousand—then started briskly to pick them up.

He stopped me—and I found that I had bought the only slaves I have ever owned.

He relaxed then, in a resigned way, but wanted lagniappe for the exhibits. I didn’t care one way or another but offered two hundred and fifty for the pix and tapes, take it or leave it. He took it and again started to put the girl back into her harness.

I stopped him and said, “Show me how that works,” I knew how—a cylinder-type ten-letter combination lock you could set to a new combination each time you used it. Set the combination, slide the ends of the steel strap that went around her waist through the ends of the barrel, spin the alphabet disks of the cylinder, then it stays locked until you reset whatever ten-letter combo you picked. An expensive lock and good steel in the girdle—alloy a hacksaw couldn’t touch. This was another thing that made his story convincing, as, while there was a market for virgins on that weird globe, a trained odalisque fetched about the same, and this girl wasn’t being reserved for harem stock either way. So an expensive custom-made chastity belt had to have some other reason.

With our backs to the slaves he showed me the combination: E,S,T,R,E,L,L,I,T,A—and was smug about how clever he was to pick a combination he couldn’t forget. So I fumbled on purpose, then pretended to catch on, and opened it. He was about to put it on the kid again and send us on our way. I said, “Wait a moment. I want to be sure I can work it in place. You step into it and let me get you out of it.”

He didn’t want to. So I got snotty and said he was trying to cheat me—put me in a position where I would have to send for him and pay through the nose to get my property unlocked. I demanded my money back and started to tear up the bill of sale. He gave in and stepped into the contrivance.

He could squeeze into it although the ends of the steel belt barely met; he was bigger around the waist than the girl was. I said, “Now spell that combination for me”—and leaned over the lock. As he spelled- “ESTRELLITA,” what I set was “HORSETHIEF∼” then jammed the ends together as hard as possible and spun the disks.

“Good,” I said. “It works. Now spell it again.”

He did so and I carefully spelled “ESTRELLITA.” It stayed locked. I suggested that he had had me spell it with one *i* and two t’s the first time. That didn’t work either.

He dug up a mirror and tried it himself. No go. I said it might be jammed, so suck up your gut and we’ll shake it. By now he was sweating.

Finally I said, “Tell you what, goodman—I’ll *give* you this belt. I’d rather trust a padlock anyhow. So go to a locksmith—no, you won’t want to wear this outside; just tell me where to find one and I’ll send him here, and pay him myself. Fair enough? I can’t hang around; I’ve got a dinner engagement at the Beulahland. Where are their clothes?

Faithful, gather up this junk and fetch the kids.” So I left him still blatting about telling the locksmith to *hurry.*

As we left his tent, a taxicab was cruising by. I had Faithful hail it and we all piled in. I didn’t bother with a locksmith; I had the driver head for the skyport, then stopped on the way at a slopchest and bought the kids proper clothes, a clout for him and sort of Balinese sarong for her—uh, that’s much like the dress Hamadryad wore yesterday. I think those were the first real clothes the youngsters had ever had. I couldn’t get shoes on them; I settled for sanáals—then had to drag Estrellita away from a mirror; she was admiring herself and preening. I threw away those auction robes. I shoved the kids into the taxi and said to Faithful: “See that alley? If I turn my back and you run down it, I won’t be able to chase you; I’ve got to keep an eye on these two.”

Minerva, I ran into something I’ll never understand: the slave mentality. Faithful didn’t get my meaning—and when I spelled it out, he was aghast. Hadn’t he given good service? Did I want him to *starve?* I gave up. We dropped him at the Rent-a-Servant, and got my deposit back—tipping him for good service—and my slaves and I rode on out to the skyport.

Turned out I needed that deposit and almost every blessing I had left—had to pay squeeze at outgoing customs to get the kids aboard my ship, even though the bill of sale was in order.

But I got ‘em aboard; I immediately had them kneel, put my hands on their heads and manumitted them. They did not seem to believe it, so I explained. “Look, you’re free now. *Free,* get me? No longer slaves. I’ll sign your manumission papers and you can go to the diocese office and get them registered. Or you can have dinner here and sleep aboard, and I’ll give you what blessings I can just before my ship lifts tomorrow. Or, if you *want* to, you can stay aboard and go to Valhalla, a nice planet though chillier than this one—but where there is no such thing as slavery.”

Minerva, I don’t think ‘Llita—pronounced ‘Yeetah,’ her everyday name—or her brother Joe—Josie, or José understood what I meant by a place that did not have slavery; it was foreign to anything they knew. But they knew what a starship was, from hearsay, and the prospect of *going* somewhere in one had them awestruck—they would not have missed it if I had told them they were going to be hanged on arrival. Besides, in their minds I was still their master; manumission hadn’t taken hold even though they knew what it was. Something for old and faithful retainers, that is, who stayed on at the funda where they had been all along, but maybe got paid a little.

But to travel! The farthest they had ever been in their lives was from a diocese north of there to the capital, to be sold.

A little trouble next morning— Seems that one Simon Legree, licensed dealer in slaves, had sworn a complaint against me alleging bodily harm, mental duress, and assorted mopery and dopery. So I sat the cop down in my wardroom, poured him a drink, called in Llita and had her take off her wonderful new clothes and let the cop see the scars on her hips, then told her to skedaddle. I happened to leave a hundred-blessing note on the table while I got up to fetch the bill of sale.

The cop waved away the bill of sale, saying there had been no complaint on that score—but he was going to tell Goodman Legree that he was lucky not to face a counter-charge of selling damaged goods…no, on second thought it was simpler if he just couldn't find me until after my ship lifted. The hundred blessings was gone, and soon the cop was gone—and by midafternoon, so were we.

But, Minerva, I got cheated; Llita couldn't cook worth a damn.

It is a long and complex passage from Blessed 'to Valhalla, and Shipmaster Sheffield was pleased to have company.

There was a mild contretemps the first night of the voyage caused by a misunderstanding that had started the night before, dirtside. The ship had a cabin and two staterooms. Since the Captain normally operated by himself, he used the Staterooms for casual storage or light cargo; they were not ready for passengers. So that first night dirtside he put his freedwoman into his cabin, while her brother and he slept on transom couches in the wardroom.

The following day Captain Sheffield unlocked the staterooms, switched power to them, had the young people clean them and move the clutter to a gear locker until he could see what space he had left in his holds, and told them each to take a room—and forgot it, being busy with cargo and final squeeze, then with supervising his piloting computer while they got clear of that system. It was late that "night," ship's time, before he had his ship on her first leg in n-space, and could relax.

He went to his cabin while considering whether to eat first or shower first, or possibly neither.

Estrellita was in his bed—wide awake and waiting.

He said, "Llita, what are you doing *here?"*

She told him in blunt slave lingo what she was doing in his bed—waiting for him—as she had known what would be expected of her when milord Shipmaster Sheffield had offered to take them along, and had discussed it with her brother, and Brother had told her to do it.

She added that she was not a bit afraid; she was ready and eager.

The first part of this Aaron Sheffield had to believe; the addendum seemed clearly a white lie; he had seen frightened virgins before—not often, but a few.

He dealt with her fear by ignoring it. He said, “You impudent bitch, get your arse out of my bed and into your own.” The freedwoman was startled and unbelieving, then sulky and offended—then she wept. Fear of an unknown that she had felt earlier was drowned in a worse emotion; her tiny ego was crushed by his rejection of service she *knew* she owed him—and had believed he wanted. She sobbed, and dripped tears on his pillow.

Female tears always had a strong aphrodisiac effect on Captain Sheffield; he responded to them at once—by grabbing her ankle, dragging her out of bed, hustling her out of his cabin, into her stateroom, and locking her in. Then he returned to his cabin, locked its door, took measures to calm himself, and went to sleep.

Minerva, there was ‘nothing wrong with Llita as a woman. Once I taught her to bathe properly she was quite attractive—good figure, pleasant face and manner, good teeth, and her breath was sweet. But taking her did not fit any customs. All “Eros” is custom, dear; there is never anything moral or, immoral about copulation as such, or any of its nonfunctional frills. “Eros” is simply a way of keeping human beings, individuals, each different—keeping them together and happy. It - is a survival mechanism developed through long evolution,— and its reproductive function is the least complex aspect of its very complex and pervasive role in keeping the human race going.

But any sexual act is moral or immoral by precisely the same laws of morality as any other human act; all other rules about sex are simply customs—local and transient. There are more codes of sexual customs than a dog has fleas

—and all they have in common is that they are “ordained by God.” I recall a society where copulation in private was obscene and forbidden, criminal—while in public it was “anything goes.” The society I was brought up in had the reverse of those rules—again “ordained by God.” I’m not sure which pattern was harder to follow, but I wish God wouldn’t keep changing his mind—as it is never safe to ignore such customs, and ignorance is no excuse; ignorance like to got my ass shot off several times.

In refusing Llita I was not being moral; I was following *my own* sexual customs, worked out by trial and error and many bruises over the centuries: Never bed a female dependent on me unless I am married to her or willing to marry her. This is an amoral rule of thumb, subject to change according to circumstances and not applying to females *not* dependent on me—another negotiation entirely. But this rule is a safety precaution applicable most times and places with widely varying customs—a safety measure for *me*. . . because, unlike that lady from Boston I told you about, many females tend to regard copulation as a formal proposal of contract.

I had let impulse lure me into a predicament in which Llita was temporarily my dependent; I had no intention of making matters worse by marrying her, I didn't owe her that. Minerva, long-lifers should never marry ephemerals; it is not fair to the ephemeral or to the long-lifer.

Nevertheless, once you pick up a stray cat and feed it, you cannot abandon it. Self-love forbids it. The cat's welfare becomes essential to your own peace of mind—even when it's a bloody nuisance not to break faith with the cat. Having bought these kids I could not shuck them off by manumission; I had to plan their future because *they* did not know how. They were stray cats.

Early next "morning" (by ship's routine) Captain Sheffield got up, unlocked the freedwoman's stateroom, found her asleep. He called her and told her to get up, wash quickly, then get breakfast for three. He left to wake her brother—found his stateroom empty, found him in the galley. "Good morning, Joe."

The freedman jumped. "Oh! Good morning, Master." He ducked and bent his knee.

"Joe, the correct answer is: 'Good morning, Captain.' It amounts to the same thing at present, for I am indeed master of this ship and everyone in it. But when you leave my ship on Valhalla, you will have no master of any sort. *None,* as I explained yesterday. Meanwhile, call me 'Captain.'"

Captain." The young man repeated obeisance.

"Don't bow! When you speak to me, stand tall and straight and proud, and look me in the eye. The correct answer to an order is 'Aye aye, Captain.' What are you doing there?"

"Why, I don't know—Captain."

"I don't think you do, either. That's enough coffee for a dozen people." Sheffield elbowed Joe aside, salvaged most of the coffee crystals the lad had poured into a bowl, measured enough for nine cups, made note to teach the girl how if she did not know, then have her keep coffee ready during working hours.

As he sat down with his first cup of coffee, she appeared. Her eyes were red and had circles under them; he suspected that she had wept some more that morning. But he made no comment other than a morning greeting and let her cope with the galley unassisted, she having seen what he had done the morning before.

Shortly he was recalling fondly the scratch lunch and supper—sandwiches he had made himself—of the day before. But he said nothing other than to order them to sit down and eat with him, rather than hovering over him. Breakfast was mostly coffee, cold ship's bread, tinned butter. Reconstituted accra eggs with mushrooms were an inedible mess, and she had managed to do something to heavenfruit juice. To spoil that took talent; all it needed was eight parts of cold water for each part of concentrate, and the instructions were on the container.

"Llita, can you read?"

"No, Master."

"Make that 'Captain,' instead. How about you, Joe?"

"No, Captain."

"Arithmetic? Numbers?"

"Oh, yes, Captain, I know numbers. Two and two is four, two and three makes five, and three and five is nine—"

His sister corrected him. "Seven, Josie—not nine."

"That's enough," Sheffield said. "I can see we'll be busy." He thought, while he hummed: "So it's well to…Have a sister…Or even an old captain—" He added aloud: "When you have finished breakfast, take care of your personal needs, then tidy your rooms—shipshape and neatly, I'll inspect later—and make the bed in my cabin, but don't touch anything else there, especially my desk. Then each of you take a bath. Yes, that's what I said: Bathe. Aboard ship everyone bathes every day, oftener if you wish. There is plenty of pure water; we recycle it and we'll finish the voyage with thousands of liters more than we started with. Don't ask why; that's the way it works and I'll explain later." (Several months later, at least—to youngsters unsure about three plus five.) "When you're through, say, an hour and a half from now—Joe, can you read a clock?"

Joe stared at the old-fashioned ship's clock mounted on a bulkhead. "I'm not sure, Captain. That one has too many numbers."

"Oh, yes, of course; Blessed is on another system. Try to be back here when the little hand is straight out to the left and the big hand is straight up. But this time it doesn't matter if you are late; it takes awhile to shake down. Don't neglect your baths to be on time. Joe, shampoo your head. Llita, lean toward me, dear; let me sniff your hair. Yes, you shampoo, too." (Were there hair nets aboard? If he cut the pseudogravity and let them go free-fall, they would need hair nets-or haircuts. A haircut would not hurt Joe, but his sister's long black hair was her best feature—would help her catch a husband on Valhalla. Oh, well, if there were no hair nets—he didn't think there were, as he kept his own hair free-fall short—the girl could braid her hair and tie something around it. Could he spare power to maintain an eighth gee all 'the way? People not used to free-fall got flabby, could even damage their bodies. (Don't worry about it now.) "Get our quarters tidy, get clean yourselves, come back here. Git."

He made a list: Set up a schedule of duties—N.B.: Teach them to cook!

Start school: What subjects?

Basic arithmetic, obviously—but don't bother to teach them to read that jargon spoken on Blessed; they were never going back there —never! But that jargon would have to be ship's language until he had them speaking Galacta, and they must learn to read and write in it—and English, too: Many books he would have to use for their hurry-up education were in English. Did he have tapes for the variation of Galacta spoken on Valhalla? Well, kids their age quickly picked up local accent and idiom and vocabulary.

What was far more Important was how to heal their stunted, uh, "souls." Their personalities— How could he take full-grown domestic animals and turn them into able, happy human beings, educated in every needful way and capable of competing in a free society? *Willing* to compete, undismayed by it—He was just beginning to see the size of the "stray cat" problem he had taken on. Was he going to have to keep them as pets for fifty or sixty years or whatever, until they died naturally?

Long, long before that, the boy Woodie Smith had found a half-dead fox kit in the woods, apparently lost by its mother, or perhaps the vixen was dead. He took it home, nursed it with a bottle, raised it in a cage through one winter. In the spring he took it back where he had found it, left it there in the cage with the door latched-open.

He checked a few days later, intending to salvage the cage. He found the creature cowering in the cage, half starved and horribly dehydrated—with the door still latched open. He took it home, again nursed it back to health, built a chicken-wire run for it, and never again tried to turn it loose. In the words of his grandfather, "The poor critter had never had a chance to learn how to be a fox."

Could he teach these cowed and ignorant animals how to be human?

They returned to his wardroom when "the little hand was straight out and the big hand was straight up'—they waited outside the door until this was so, and Captain Sheffield pretended not to notice.

But when they came in, he glanced at the clock and said, "Right on time-good! You've certainly shampooed, but remind me to find combs for you." (What other toilet articles did they need? Would he have to teach them how to use them? And—oh, damn it!—was there anything in the ship for a woman's menstrual needs? What could be improvised? Well, with luck that problem would hold off a few days. No point in asking her; she couldn't add. Tarnation, the ship was not equipped for passengers.)

"Sit down. No, wait a moment. Come here, dear." It seemed to the Captain that the garment she wore was clinging suspiciously; he felt it, it was wet. "Did you leave that on when you bathed?"

"No, Mas— No, Captain; I washed it."

"I see." He recalled that its gaudy pattern had been enhanced by coffee and other things while the girl was botching breakfast. "Take it off and hang it somewhere; don't let it dry on your body."

She started slowly to comply. Her chin quivered—and he recalled how she had admired herself in a tall mirror when he bought it for her. "Wait a moment, Llita. Joe, take off your breechclout. And sandals."

The lad complied at once.

"Thank you, Joe. Don't put that clout back on without washing it; by now it's dirty even though it looks clean. Don't wear it under way unless it suits you. You sit down. Llita, were you wearing anything when I bought you?"

"No…Captain."

"Am I wearing anything now?"

"No, Captain."

"There are times and places to wear clothes—and other times and places when clothes are silly. If this were a passenger ship, we would all wear clothes and I would wear a fancy uniform. But it is not, and there is nobody here but me and your brother. See that instrument there? That's a thermohumidostat which tells the ship's computer to hold the temperature at twenty-seven Celsius and forty percent humidity, with random variation to stimulate us—which may not mean anything to you but is my notion of comfort in bare skin. For an hour each afternoon it drops that temperature to encourage exercise, as flab is the curse of shipboard life.

"If that cycle doesn't suit you two, we'll reach a compromise. But first we'll try it my way. Now about that wet rag plastered to your hips— If you are stupid, you'll let it dry where it is and be uncomfortable. If you are smart, you'll hang it up and let it dry without wrinkling. That's a suggestion, not an order; if you wish, you may wear it at all times. But don't sit down with it on you, wet; there is no reason to get cushions wet. Can you sew?"

"Yes, Captain. Uh…some."

"I'll see what I can dig up. You are wearing the only woman's garment in the ship, and if you insist on clothes, you'll need to make some for the months ahead. You'll need something for Valhalla, too: it's not as warm as Blessed. Women there wear trousers and short coats; men wear trousers and long coats; everyone wears boots. I had three outfits custom-made on Landfall; maybe we can make do with them until I can get you two to a tailor. Boots— Mine would fit you like socks on a rooster. Hmm— We can wrap your feet so that a pair will stay on long enough to get you to a bootery.

“We won’t worry about that now. Join the conference— standing up and wet, or sitting down and comfortable.”

Estrellita bit her lip and decided in favor of comfort.

Minerva, those youngsters were brighter than I had expected. At first they studied because I told them to. But once they tasted the magic of the printed word, they were hooked. They learned to read like grass through a goose and didn’t want to do anything else. Especially stories. I had a good library, mostly in micro, thousands of those, but also a few dozen valuable bound books, facsimile antiques I had picked up on Landfall where they speak English and use Galacta only as a trade tongue. Savvy Oz books, Minerva?

Yes, of course you do; I helped plan the Great Library and included my childhood favorites as well as more sober things. I did make sure that Joe and Llita read a spread of sober stuff but mostly I let them wallow in stories— The *Just So Stories,* and the Oz books, and *Alice in Wonderland,* and *A Child’s Garden of Verses,* and *Two Little Savages,* and such. Too limited; they were books from my childhood, three centuries before the Diaspora. On the other hand, every human culture in the Galaxy derives from that one.

But I tried to make sure that they understood the difference between fiction and history—difficult, as I wasn’t certain that there was a difference. Then I had to explain that a fairy tale was still a different sort, one step farther along the spectrum from fact to fancy.

Minerva, this is *very* hard to explain to an inexperienced mind. What is “magic”? You are more magical than any “magic” in fairy tales, and it does no good to say that you are ‘a product of science, rather than magic, in speaking to kids who have no idea what is meant by “science”—and I wasn’t sure that the distinction was valid even when I was explaining the distinction. In my wanderings I have run across magic many times—which simply says that I have seen wonders I could not explain.

I finally let it go by asserting *ex cathedra* that some stories were just for fun and not necessarily true—*Gulliver’s Travels* were not the same sort of thing as *The Adventures of Marco Polo,* while *Robinson Crusoe* lay somewhere in between—and they should *ask* me, if in doubt.

They did ask, sometimes, and accepted my decision without argument. But I could see that they did not always believe me. That pleased me; they were starting to think for themselves—didn’t matter if they were wrong. Llita was simply politely respectful to me about Oz. She believed in the Emerald City with all her heart and, if she had

had her druthers, she would have been going there rather than to Valhalla. Well, so would I.

The important thing was that they were cutting the cord.

I did not hesitate to use fiction in teaching them. Fiction is a faster way to get a feeling for alien patterns of human -behavior than is nonfiction; it is one stage short of actual experience and I had only months in which to turn these cowed and ignorant animals into people. I could, have offered them psychology and sociology and comparative anthropology; I had such books on hand. But Joe and Llita could not have put them together into a gestalt—and I recall another teacher who used parables in putting over ideas.

They read every hour I would let them, huddled together like puppies and staring at the reading machine and nagging each other about how fast to raise the pages. Usually Llita nagged Joe; she was quicker than he—but as may be, they spurred each other from-illiterate to speedreaders in zip time. I didn't let them have sound-and-picture tapes—I wanted them to *read.*

Couldn't let 'em spend all their time reading; they had to learn other things—not just salable skills but, much more important, that aggressive self-reliance necessary to a free human—which they totally lacked when I saddled myself with them. Shucks, I wasn't certain they had the potential; it might have been bred out of their line. But if the spark was in them, I had to find it and fan it into flame—or I would never be able to make them run free.

So I forced them to make up their -own minds as much as possible, while being cautiously rough on them in other ways and greeted every sign of rebellion—silently, in my mind— as a triumphant proof of progress.

I started by teaching Joe to fight—just hand to hand; I didn't want either of us killed. One compartment was fitted as a gymnasium, with equipment that could be adapted for gee or for free-fall; I used it that hour a day of lowered temperature. Here I worked Joe out. Llita was required to attend but just to exercise—although I had in mind that it might spur Joe along if his sister saw him getting the whey knocked out of him.

Joe needed that spur; he had a terrible time getting it through his head that it was okay to hit or kick *me,* that I wanted him to try, that I would not be angry if he succeeded—but that I *would* be angry if he didn't try his darnedest.

Took a while. At first he wouldn't chop at me no matter how wide open I left myself and when I got him past that, calling him names and taunting him, he still hesitated that split second that let me close and chop him instead.

But one afternoon he got the idea so well that he landed a good one on me and I hardly had to hold back to let him land it. After supper he got his reward: permission to read a *bound* book, one with pages, him dressed in a pair of my surgical gloves and warned that I would clobber him if he got it dirty or tore a page. Llita wasn't permitted to touch it; this was *his* prize. She sulked and didn't even want to use the reading machine—until he asked if it was all right for him to read aloud to her.

I ruled that she could even read it with him—as long as she didn't touch it. So she snuggled up close, head by his, happy again, and started bossing him about turning the pages.

The next day she asked me why *she* could not learn to fight, too?

No doubt she was finding solo exercise a bore—I always found it so and did it only because it was needful to stay in shape—no telling what hazards next groundfall might bring. Minerva, I've never felt that women should have to fight; it is a male's business to protect females and children. But a female should be *able* to fight because she may have to.

So I agreed, but we had to change the rules. Joe and I had been working out by dockside rules—no rules, that is, save that I didn't tell him that I planned not to do him any permanent damage and did not intend to let him give me anything worse than bruises. But I never said this—if he could manage it, he was free to gouge out one of my eyes and eat it. I just made damn sure that he didn't.

But females are built differently from males. I could not let Llita work out with us until I devised a plastron to protect her tits—necessary; she was a bit oversized in that department, and we could have hurt her without intending to. Then I told Joe privately that bruises were okay, but that if he broke one of her bones, I would break one of his, just for drill.

But I put no restrictions on his sister—and I underestimated her; she was twice as aggressive as he was. Untrained but fast—and she meant business.

The second day we worked out with her, not only was she wearing that plastron, her brother and I were wearing jockstraps. And Llita had been allowed to read a real book the night before.

Joe turned out to have talent for cooking, so I encouraged him to be as fancy as ship's stores permitted while crowding her to become an adequate cook. A man who can cook can support himself anywhere. But anyone, male or female, should be able to cook, keep house, and care for children. I hadn't located a trade for Llita, although she displayed a talent for mathematics once I set up inducements for that, too. That was encouraging; a person who can read and write and has a head for math can learn anything she needs to know. So I started her on bookkeeping and accounting, from books, not helping her, and required Joe to learn to use all the tools the ship boasted—not many, mainly maintenance gear—and supervised him closely; I didn't want him losing fingers or ruining tools. I was hopeful. Then the situation changed—

(Circa 3,100 words omitted)

—easy to say that I was stupid. I had raised stock and a good many children. Being ship's surgeon as well as everything else, I had given them the most thorough examinations my equipment permitted when we were a couple of days out— quite thorough for those days; I had not practiced medicine after leaving Ormuzd but did keep my sick bay stocked and equipped, and picked up the latest tapes whenever I was on a civilized planet and studied them during long jumps. I was a good jackleg doctor, Minerva.

The kids were as healthy as they looked, aside from slight dental caries in him, two small cavities. I noticed that the factor's allegation about her was correct—virgo intacta, semilunar hymen, unfrayed, so I used my smallest speculum. She neither complained nor tensed up nor asked what I was looking for. I concluded that they had had regular checkups and other medical attention, far more than slaves on Blessed usually received.

She had thirty-two teeth in perfect condition but could not tell me when the last four molars had erupted, just that it was "not long ago." He had twentyeight teeth and so little space in his jaw for adult molars that I anticipated trouble. But X-ray prints showed no buds.

I cleaned and filled the cavities, and made note that he must have those fillings removed and the tissue regenerated on Valhalla, and be inoculated against further decay; Valhalla had good dentistry, far superior to what I could do.

Llita could not tell me when she had last menstruated. She discussed it with Joe; he tried to count on his fingers how many days it had been since they had been taken from their home place, as they agreed that it was before that. I told her to let me know next time and each time, so that I could determine her cycle. I gave her a tin of napkins, emergency supplies I hadn't known I had—must have been in the ship twenty years.

She did tell me, and I had to open the tin for her; neither of them knew how. She was delighted with the little elastic panty included in the package, and often wore it when she did not need it, as "dress up." The kid was crazy about clothes; as a slave she had never had a chance to pamper her vanity. I told her it was all right as long as she washed it every time she wore it—I clamped down hard on cleanliness, inspecting their ears, sending them from the table to scrub their nails, and so forth. They had received no more training than a hog. She never had to be told twice, and picked on him and made sure that he met my standards, too. I found myself being more exacting with myself; I could not bring dirty fingernails to the table or skip a shower because I was sleepy—I had set the standards and had to live up to them.

She was almost as unskilled a seamstress as she was a cook, but she taught herself because she liked clothes. I dug out some bright-colored trade cloth and let her have fun—and used it as carrot-and-stick; wearing anything became a privilege that depended on good behavior. I put a stop that way—well, mostly—to her nagging her brother.

That wouldn't work with Joe; clothes did not interest him—but if he rated it, I gave him more of a working over during exercise period. Seldom—he was not the problem she was.

One evening, three or four of her periods later, I noticed on my calendar that she was past due—having forgotten the matter. Minerva, I never walked into their staterooms without knocking; shipboard life required such privacy as can be managed—too little, that is.

Her door was open, and her room was empty. I tapped on his door, got no answer, went on, looked for her in the wardroom and galley, even in our little gym. I decided that she must be taking a bath and I would speak to her in the morning.

As I passed his stateroom again in heading back to my cabin, his door opened; she stepped out and closed it behind her. I said, "Oh, there you are!" or some such. "I thought Joe was asleep."

"He's just gone to sleep," Llita said. "Do you want him, Captain? Shall I wake him?"

I said, "No, I was looking for you, but I tapped on his door five or ten minutes ago and got no answer."

She was contrite over not having heard my knock. "I'm sorry, Captain. I guess we were so busy we didn't hear you." She told me how they were busy—which I had figured out, having suspected it from the moment I noticed that she was a week overdue after being clock regular. "That's understandable," I said. "I'm glad my knock didn't disturb you."

"We try never to disturb *you* with it, Captain," she answered with sweet seriousness. "We wait till you go, to your cabin at night. Or sometimes when you take siesta."

I said, "Goodness, dear, you don't have to be *that* careful. Do your work and keep your study hours, then do as you please the rest of the time. Starship 'Libby' is not a sweatship; I want you kids to be happy. Can't you get it through your fuzzy head that you are not a slave?"

Apparently she could not, quite, Minerva, for she still fretted that she had not heard my knock and jumped to respond. I said, "Don't be silly, Llita. It will keep till tomorrow."

But she insisted she wasn't sleepy and was ready and anxious to do whatever I wanted—which made me a touch nervous. Minerva, one of the oddities about "Eros" is that women are never so willing as when they just have, and there was nothing in Llita's background to inhibit her. Worse, I found that I was aware of her as a ripe female for almost the first time since the two came aboard—she was standing close to me in a narrow passageway, carrying in one hand one of those weird costumes she delighted in making, and was a bit whiff from happy exercise. I was tempted—and felt certain that she would respond at once and happily. The thought crossed my mind that she was already pregnant—nothing to fret about.

But I had gone to much trouble with these ephemerals to shift from slave owner to father figure, stern but loving. If I took her, I would lose that and, add one more disturbing variable a problem already too complex. So I grasped the nettle.

Captain Sheffield said, "Very well, Llita. Come to my cabin." He headed toward it, she followed. Once there, he offered her a seat. She hesitated, then put her gaudy dress down and sat on it—thoughtfulness that pleased him, as the ignorant animal she had been would not have been capable of it; the humanizing process was working. He did not comment.

"Llita, your period is a week overdue, is it not?"

"It is, Captain?" She seemed puzzled but not troubled.

Sheffield wondered if he could be mistaken. After he had taught her how to open a sealed tin, he had turned over to her the limited emergency supply, warning her that if she used it too lavishly, she would have to fashion by hand some make-do, as Valhalla was months away. Then he had dismissed the matter other than to log it on his desk calendar whenever she reported onset. Could he have failed to notice? There had been three days last week when he had kept to his cabin, leaving the young people on their own and having his meals sent in—a habit he had when he wanted to concentrate on a problem. During such periods he ate little and slept not at all and barely noticed anything not part of what he was studying. Yes, it was possible.

"Don't you know, Llita? If you were on time, then you failed to report it."

"Oh, no, Captain!" She was round-eyed with distress. "You told me to tell you…and I *have*—*every* time, every time!"

Further questions showed first, that despite her new grasp of arithmetic she did not know when she should have experienced onset, and second, that it had not been last week but a much longer time.

Time to tell her—"Llita dear, I think you are going to have a baby."

Her mouth dropped open, again her eyes rounded. "Oh, *wonderful!"* She added, "May I run tell Josie? May I, *please?* I'll be right back!"

"Wups! Don't rush things. I said only that I thought so. Don't get your hopes up yet, and don't bother Joe with it till we know. Many a girl has gone much longer than a week past her date, and it didn't mean a thing." (But I'm pleased to learn that you want it, child, as it appears you've had every opportunity.) "Tomorrow I'll examine you and try to find out." (What did he have aboard for a pregnancy test? Damn it, if he must abort her, it should be as quickly as possible when it's no worse than plucking a splinter. Then—no, there wasn't so much as a "Monday morning" pill in the ship, much less modern contraception. Woodie, blast your stupid soul, don't *ever* go into space again so poorly equipped!) "In the meantime, don't get excited." (But women always did get excited by it. Of course.)

She was as dashed as she had been jubilant. "We tried so hard! Everything in the Kama Sutra and more. I thought we ought to ask you to show us what we were doing wrong, but Joe was certain we were doing it right."

"I think Joe is correct." Sheffield got up, poured a cup of wine for each of them while performing legerdemain which dosed hers such that she would go to sleep before long—after some relaxed talk that she might not remember; he wanted the full picture. "Here."

She looked at it. dubiously. "I'll get silly. I know, I had a chance to try it once."

"This isn't the popskull they sell on Blessed; this is wine I fetched from Landfall. Pipe down and drink it. Here's to your baby if you're having one, or here's to good luck next time." (But how to handle that "next time"?—if his worries were well grounded. These kids must *not* be saddled with a defective. A healthy baby would be burden enough while they were learning to stand on their own feet. Could he stave things off to Valhalla, then get her on proper contraception? Then what? Split them up? *How?)*

"Tell me about it, dear. When you came aboard, you were virgin."

"Oh, yes, certainly. They always kept me locked in that virgin's basket. Except when they shut me up and Brother had to sleep in the barracks: You know. When I bleed." She took a deep breath and smiled. "Now is ever so much nicer. Josie and I tried for the longest time to get around that awful steel basket. But we couldn't. Hurt him to try, and some ways we tried hurt me, too. Finally we gave up and just did fun things we had always done. 'Brother said to be patient; it wouldn't be forever. Because we knew we would be sold together, as a breeding pair."

Estrellita looked radiant. "And so we were and now we *are,* and thank you, Captain!"

(No, it wasn't going to be easy to split them up.) "Llita, have you ever thought of being bred by some other man than Joe?" (Sound her out, at least. It won't be hard to find her a husband; she's really quite attractive. That "Earth Mother" feeling.)

She looked puzzled. "Why, of course not. We knew what we were, way back when we were almost babies. Our mother told us, and so did the priest. I've always slept with Brothcr, all my life. Why would I want anyone else?"

"You seemed ready enough to sleep with *me.* You claimed you were eager to."

"Oh! That's different—that's your right. But you didn't *want* me," she added, almost accusingly.

"That wasn't quite it, Llita. There were reasons—that I won't go into now—not to take you no matter if I wanted you and you were willing. Although it was Joe you really wanted, you said so."

"Well…yes. But I was disappointed just the same. I had to tell Brother you wouldn't have me—which hurt all over again. But he said to be patient. We waited three more days before he broached me. In case you changed your mind."

(Nagging wife vertically—docile horizontally. Not too uncommon a pattern, Sheffield thought.)

He found that she was looking at him with sober interest. "Do you want me *now,* Captain? Joe told me, the very night he decided to go ahead, that it was still your right and always would be—and it *is."*

(Beelzebub's brass balls!—the only way to avoid a willing female was to go offplanet.) "Dear, I'm tired, and you are getting sleepy."

She swallowed a yawn. "I'm not *that* tired—I never am. Captain, the night I first, asked you, I was a tiny bit scared. But I'm not scared now. I *want* to. If you will."

"You're very sweet, but I am *very* tired." (Why hasn't that dose taken hold?) He changed the subject. "Aren't those little bunks almost impossible for two people?"

She chuckled right through another yawn. "Almost. Once we fell out of Brother's bunk. So now we use the deck."

"'The deck'? Why, Llita, that's dreadful. We must do something about it" (Put the kids in here? The only full-sized bed in the ship— A bride needed a proper workbench for her honeymoon…which this was; she was deeply in love and should make the most of it, no matter what. Sheffield had decided, centuries back, that the saddest thing about ephemerals was that their little lives rarely held time enough for love.)

"Oh, the deck isn't bad, Captain; we've slept on the floor all our lives." 'She yawned again, could not suppress it.

"Well…tomorrow we'll make better arrangements." (No, his cabin wouldn't do; his desk was in here, and his papers and files. The kids would be in his way and he in theirs. Could he and Joe convert two narrow bunks into one double bed? Probably—although it would nearly fill one stateroom. No matter, that bulkhead between their rooms was not structural—cut a door and they would have a suite. A "bridal suite." For a sweet bride. Yes.) He added, "Let's get you to bed before you fall out of that chair. Everything's going to be all right, dear." (I'll damned well see to it!) "And tomorrow night and from now on, you and Joe can sleep together in a wide bed."

"Really? Oh, that would be"—she yawned again—"lovely!" He had to steady her into her stateroom; she was asleep as she hit the bunk. Sheffield looked down at her, said softly, "Poor little kitten." He leaned down and kissed her, went back to his cabin.

There he dug out everything the slave factor had offered as proof of the alleged odd genetic heritage of Llita and Joe, and gave each item intense study. He was looking for clues to truth or falsity of the allegation that they were "mirror twins"—complementary diploids having the same mother and father. From such clues he hoped to estimate the probability of unfavorable gene reinforcement in any child Llita and Joe might have.

The problem seemed to divide into three (simplified) cases:

The two might be no relation to each other. Chance of a bad reinforcement: slight.

Or they might be the usual sort of brother and sister. Chance of bad reinforcement: too high to be ignored.

Or they might be (as alleged) zygotes resulting from complementary gametes—all genes conserved at reduction-division but with no duplication. In this case the chance of unfavorable reinforcement would be—what?

Let that wait. First assumption, that they were no relation but simply raised together from babyhood—no special hazard, forget it.

Second assumption, that they might be full siblings of the usual sort. Well, they did not look like it—but, more important, that scoundrel had set up a most elaborate "store" for such a swindle, and had used publicly the name of a bishop to back him up. The Bishop might be just as crooked (likely—he knew that priesthood too well!)—but why be so careless when slave babies were so cheap?

No, even if he assumed a swindle, there was no reason to expect an unnecessary risk in a setup so elaborate. So forget that, too: Llita and Joe were *not* sister and brother' in the ordinary sense—although they might have shared the same hostmother's womb. The latter, if true, was of no genetic significance.

So the remaining worry concerned the chance that the slave factor had told the truth—in which case what were the chances of a bad cross? How many ways could such artificially produced zygotes recombine unfavorably?

Sheffield tried to set up the problem while cursing the lack of sufficient data, plus the fact that the only real computer in the ship was the piloting computer, which could not be programmed for a genetics problem. He wished Libby were aboard. Andy would have stared at the bulkhead a few minutes, then come up with answers definite where possible and expressed in probability percentages where not.

A genetics problem, even with all pertinent data (many thousands!), was too unwieldy to solve without computer assistance.

Well, try some simplified illustrative problems and see what insight could be gained.

Primary assumption: Llita and Joe were "mirror twins"—genetically complementary zygotes from the same parent zygotes.

Control assumption: They were unrelated other than being part of the home planet's gene pool. (An extreme assumption, as slaves from the same area were likely to derive from a much smaller gene pool, which might be still further reduced by inbreeding. But this "most favorable normal breeding pattern" was the correct control against which he must measure.)

Simplified example: Test one gene site—call it site 187 of the twenty-first chromosome-for reinforcement, masking, or elimination, of an assumed "bad" gene, under each assumption.

Arbitrary assumption: Since this site might hold an unfavorable gene—or two, or none—in its gene pair, assume that the chance was exactly the same for both primary and control assumptions, and even —i.e., *25* percent no bad gene in the pair at the site, *50* percent one bad gene, *25* percent two bad genes—an extreme condition since, over the generations, reinforcement (two bad genes at one site) tended toward non-survival, either lethal or reducing a zygote's ability to compete. Never mind; make it even for both of them—there were no data on which to base any better assumption.

Wups! If a bad reinforcement was visibly demonstrated, or could be shown by tests, such zygotes would *not* be used. A scientist competent to attempt this experiment would use specimens as "clean" in a genetic sense as possible-free of all the hundreds (thousands now?) of identifiable hereditary defects; the primary assumption should include this subsidiary assumption.

These young people were free of any defect Sheffield could detect in a shipboard examination—which enhanced the probability that this horsethief had told the truth and these exhibits were sober records of an exotic and successful experiment in gene manipulation.

Sheffield now tended to believe that the experiment had taken place—and wished that he had the resources of a major Howard Clinic, say the one on Secundus, to give these kids a genetic going-over that he was not equipped to do aboard ship and not qualified to do in any case.

One nagging doubt lay in how he had acquired these kids. Why had that gonif been so anxious to sell? If they were what the exhibits claimed? Why sell them when breeding the two created complements back together was the next step of the experiment?

Well, perhaps the kids knew but he bad not asked the right questions. Certain it was that they had been brought up to believe that such was their proper destiny; whoever planned this had induced in the kids from earliest childhood a pair-bond stronger than most marriages, in Sheffield's long experience. More than any of his own—(Except one, except one!)

Sheffield put it out of his mind and concentrated on the theoretical consequences.

At the selected site, each parent zygote had been assumed to have three possible states or gene pairs in probability 25-50-25.

Under the control assumption, parents (diploid zygotes) both male and female would show this distribution at the selected site:

25% good-good ("clean" at that site)
25% good-bad (bad gene masked but could be transmitted)
25% good-bad (bad gene masked but could be transmitted)
25% bad-bad (bad reinforcement—lethal or disabling)

But under his modified primary assumption Sheffield assumed that the priest-scientist would discard bad stock as displayed in zygotes—which would eliminate the fourth group ("bad-bad") and leave a parent-zygote distribution for this site of:

33-1/3% good-good
33-1/3%good-bad
33-1/3%good-bad

Such culling gave marked improvement over the original random-chance situation and meiotic division would produce gametes (both sperm and ova) in this incidence:

Good, four out of six, and
Bad, two out of six—

—but with no way to detect the bad genes without destroying the gametes carrying them. Or so Sheffield assumed, while stipulating that the assumption might not be true forever. But to protect Llita (and Joe) it was necessary that his assumptions be pessimistic within the limits of available data and knowledge—i.e., that a bad gene could be spotted only as reinforcement in a zygote.

Sheffield reminded himself that the situation was never as black-and-white as was implied by “good-dominant” and “bad-recessive”—these descriptions were less complex than the real world they were used to image. A characteristic exhibited by an adult zygote was prosurvival or contrasurvival only in terms of what and when and where—and also in terms of more than one generation. An adult who died saving its progeny had to be counted a prosurvival whereas a cat that ate her own young was contrasurvival no matter how long she lived.

In the same vein, a dominant gene sometimes was of no importance one way or the other—e.g., brown eyes. Just as its corresponding recessive when paired and thereby reinforced to produce blue eyes gave the zygote exhibiting it no measurable disadvantage. The same was true of many other inheritable characteristics—hair patterns, skin color, et cetera.

Nevertheless this description—good-dominant, bad-recessive—was in essence correct; it synopsized the mechanisms by which a race conserved its favorable mutations and destroyed (eventually) its unfavorable mutations. “Bad-dominant” was almost a contradiction in terms, as a thoroughly bad mutation which was dominant killed itself off (along with the unfortunate zygote inheriting it) in one generation, either lethal in womb or so damaging to the zygote that it failed to reproduce.

But the usual weeding process involved bad-recessives. These could remain in the gene pool until one of two events happened, each controlled by the blind laws of chance: Such a gene could pair with a gene like it when sperm fertilized ovum and thereby eliminate itself by eliminating the zygote—hopefully before birth, or—tragically—after birth. Or this bad-recessive might be eliminated by chromosome reduction at meiosis and the result would be a healthy baby who did *not* carry this bad gene in its gonads—a happy outcome.

Both these statistical processes slowly weeded out bad genes from the race’s gene pool.

Unfortunately the first of these processes often produced babies viable but so handicapped they needed help to stay alive-sometimes needing economic help, born losers, who never managed to support themselves; sometimes needing plastic surgery or endocrine therapy or other interventions or supports. When Captain Aaron Sheffield had been practicing medicine (on Ormuzd and under another name), he had gone through stages of increasing frustration over these poor unfortunates.

At first he had tried to practice therapy by the Hippocratic Oath—or close to it; he was by temperament unable to follow *any* manmade rule blindly.

Then he had had a period of temporary mental aberrance during which he had sought a political solution to what he saw as a great danger: reproduction by defectives. He tried to persuade his colleagues to refuse therapy to hereditary defectives unless they were sterile or sterilized or willing to accept being sterilized as a precondition for receiving therapy. Worse yet, he had attempted to include in the definition of "hereditary defective" those who displayed no stigmata save that they had never managed to be self-supporting—on a planet not overcrowded and which he himself had selected centuries earlier as nearly ideal for human beings.

He got nowhere, he encountered nothing but fury and contempt—save for a few colleagues who agreed with him privately and denounced him publicly. As for laymen, tar-and-feathers was the mildest medicine they prescribed for Dr. "Genocide."

When his license to practice was lifted, Lazarus regained his normal emotional detachment. He shut up, realizing that. grim old Mother Nature, red of tooth and claw, invariably punished damfools who tried to ignore Her or to repeal Her ordinances; he need not interfere.

So he moved and changed his name again and started to get ready to go offplanet—when a plague hit Ormuzd. He had shrugged and gone back to work, an unfrocked physician whose services were temporarily welcome. Two years and a quarter of a billion deaths later he was offered his license back—subject to good behavior.

He told them what to do with that license and left Ormuzd as quickly as possible, eleven year later. He was a professional gambler during that wait, that being the handiest way he could see at the time for saving up the necessary.

Sorry, Minerva, I was talking about those mirror twins. So the silly little wench was knocked up, which caused me to slip back into my baby-cotching, country-doctor *persona,* and I stayed up all night worrying about her and her brother and the baby they were going to have—unless I did something about it. To find out what I *should* do, I had to reconstruct what had happened and from that what *could* happen. Having no certain data, I had to follow that old rule for finding a lost mule.

First I had to think like that slave factor— A man who auctions slaves is a scoundrel but too smart to risk a caper in which he might wind up a slave himself, or dead if he was lucky—which is what would happen to one who played fast and loose on Blessed with the authority of a bishop. Ergo, the scoundrel had believed what he had said.

That being so, I could table the question of why this factor was commissioned to sell these two, while I tried to think like a priest-scientist engaged in human biological experimentation. Forget the chance that these two were ordinary siblings—no point in picking such a pair even for a swindle. Forget the chance that they were unrelated in any fashion, as in such a case it would simply be a normal case of breeding. Sure, sure, any woman, can give birth to a monster, as even with the most genetically hygienic of breeding a bad mutation can show up—and an alert midwife may neglect to give that first lifegiving spank~—and many have.

So I considered only the third hypothesis: complementary diploids from the same parents. What would this experimenter do? What-would *I* do?

I would use as near perfect stock as I could find and not start the experiment until I had both a male and a female parent who tested "clean" genetically in the most subtle ways for which I could test—which on Blessed meant quite sophisticated ways, for that century.

For a selected gene site and an assumption of 50-50 in the Mendelian distribution of *25-50-25,* this pre-experiment testing would chop off the *25* percent chance of reinforcement of a bad recessive and leave a distribution of one-third bad, two-thirds good, at the parent generation—possible parents of possible Joes and Llitas, that is.

Now I start putting together mirror twists in my *persona* as a priest-experimenter. What happens? If we consider the minimum number of gametes needed to represent this one-third and two-thirds distribution, we get eighteen possible "Joes," eighteen possible "Llitas"—but in both male and female two of them show up as "bad"—the bad recessive has reinforced and the zygote is defective; the experimenter eliminates them…or he may not need to; the reinforcement may be lethal.

We wind up at this point with an 8 & 1/3 percent improvement, or a total improvement of *25* percent in favorable chances for Llita's baby. I felt better. If you add the fact that I am the sort of a midwife who is too busy helping the mother to stop to spank a monster, the favorable chances went way up.

But all that this shows is that bad genes tend to be eliminated at each generation—with the tendency greatest with the worst genes and reaching 100 percent whenever reinforcement produces a lethal-in-womb—while favorable genes are conserved. But we knew that—and it applies also to normal outbreeding and even— more strongly to inbreeding, although the latter is not well thought of for humans as it hikes up the chances of a defective by precisely the same amount that it weeds—that being the hazard, that I was afraid of for Llita. Everybody wants the human gene pool cleaned up, but nobody wants its tragic aspects to take place in his own family. Minerva, I was beginning to think of these kids as "my family."

I still did not know anything about "mirror twins."

I decided to investigate a more probable incidence of bad recessives at a given site. Fifty-fifty is far too high for a really bad gene; the weeding is drastic, and the incidence drops to a lower percentage each generation, until the incidence of a particular bad gene is so low that reinforcement at fertilization is a rare event, as reinforcement is the square of the incidence; e.g., if one-in-a-hundred haploids carry this bad gene, then it will be reinforced one-in-ten-thousand fertilizations. I speak of the total gene pool, or in this case a minimum of two hundred adult zygotes, female and male; random breeding in such a pool will, bring together that bad reinforcement only by that long chance—a chance happy or unhappy depending on whether you look at it impersonally in terms of -cleaning the gene pool or personally in terms of individual human tragedy.

I looked at it very personally; I wanted Llita to have a healthy baby.

Minerva. I'm sure you recognized that 25-50-25 distribution as representing the most drastic case of inbreeding, one which can happen only half the time with tine breeding, only a quarter of the time with full siblings, in both cases through chromosome reduction at meiosis. A stockbreeder uses this drastic measure regularly—and culls the defectives and winds up with a healthy stabilized line. I have a nasty suspicion that such culling after inbreeding was sometimes used among royalty back. on old Earth—but certainly such culling was not used often enough or drastically enough. Royalism might work quite well if kings and queens were treated like racehorses—but regrettably they never were. Instead, they were propped up like welfare clients, and princelings who should have been culled were encouraged to breed like rabbits—bleeders, feebleminded, you name it. When I was a kid, "royalty" was a bad joke based on the worst possible breeding methods.

Captain Sheffield investigated next a lower incidence of a bad gene: Assume a lethal gene in the gene pool from which Joe and Llita's parents were derived. Being lethal, it could exist in an adult zygote only if it was masked in gene-pair by its benign twin. Assume a

5 percent masked incidence in zygotes—still too high to be realistic for a lethal gene but check, it anyhow. What trend would show?

Parent zygote generation: 100 females, 100 males, each a possible parent for Llita and for Joe—and *5* of the females and *5* of the males carry the lethal gene, masked.

Parent haploid stage: 200 ova, *5* of which carry the lethal gene; 200 spermatozoa, *5* of which carry the lethal gene.

Son-and-daughter zygote generation (possible "Joes" and possible "Llitas"): 25 dead through reinforcement of lethal gene; 1,950 carrying the lethal gene masked; *38,025* "clean" at that site.

Sheffield noted that a hypothetical hermaphrodite had crept in through not doubling his sample size in order to avoid anomaly through odd numbers, Oh, the hell with!—it did not change the statistical outcome. No, *do* it!—start with a sample of 200 males and 200 females with the same lethal-gene incidence for that site. This gave him:

400 ova, 10 with the lethal gene;
400 spermatozoa, 10 with that lethal gene—

—which gave in the next zygote generation (possible "Joes" and "Llitas"): 100 dead, 7,800 carriers, 152,100 "clean"— which changed no percentages but got rid of that imaginary hermaphrodite. Sheffield considered briefly the love life of an hermaphrodite, then got back to work. The numbers became very cumbersome, jumping to the billions in the next zygote generation (i.e., Little Nameless, now just started in Llita's belly)—l 5,210,000 culled by reinforcement, 1.216.800,000 carriers, 24,336,000,000 "clean"—and again he wished for a clinic computer and tediously converted the unhandy numbers into percentages: 0.059509 percent, *4.759* percent, 95.18 percent plus.

This showed a decided improvement: approximately 1 defect out of 1,680 (instead of 1 out of 1,600), the percentage of carriers decreased to below *5* percent and the number of "clean" increased to above *95* percent in one generation.

Sheffield worked several such problems to confirm what he had seen by inspection: A child from complementary diploids ("mirror twins") had at least as much chance of being healthy as did the offspring of unrelated strangers—plus the happy fact that such a baby's chances were improved by culling at one or more stages by the priest-scientist who had initiated the experiment—an almost certain assumption and one that made Joe the best possible mate for his "sister" rather than the worst.

Lilta could have her baby.

VARIATIONS ON A THEME

VII

Valhalla to Landfall

—the best I could for them, Minerva. Every so often some idiot tries to abolish marriage. Such attempts work as well as repealing the law of gravity, making pi equal to three point zero, or moving mountains by prayer. Marriage is not something thought up by priests and inflicted on mankind; marriage is as much a part of mankind's evolutionary equipment as his eyes, and as useful to the race as eyes are to an individual.

Surely, marriage is an economic contract to provide for children and to take care of mothers while they bear kids and bring them up—but it is much more than that. It is the means this animal, Homo sap., has evolved—quite unconsciously—for performing this indispensable function *and be happy while doing so.*

Why do bees split up into queens, drones, and workers, then live as one big family? Because, for them, it *works.* How is it that fish do okay with hardly a nodding acquaintance between mama fish and papa fish? Because the blind forces of evolution made that way work for *them.* Why is it that "marriage"—by whatever name—is a universal institution among human beings everywhere? Don't ask a theologian, don't ask a lawyer; this institution existed long before it was codified by church or state. It *works,* that's all; for all its faults it works far better by the only universal test—survival—than any of the endless inventions that shallow-pates over the millennia have tried to substitute for it.

I am not speaking monogamy; I mean *all* forms of marriage—monogamy, polyandry, polygyny, plural and extended marriages with various frills. "Marriage" has endless customs, rules, arrangements. But it is "marriage" if-and-only-if the arrangement both provides for children and compensates the adults. For human beings, the only acceptable compensation for the drawbacks of marriage lies in what men and women can give each other.

I don't mean "Eros," Minerva. Sex baits the trap, but sex is not marriage, nor is it reason enough to stay married. Why buy a cow when milk is cheap?

Companionship, partnership, mutual reassurance, someone to laugh with and grieve with, loyalty that accepts foibles, someone to touch, someone to hold your hand—these things are "marriage," and sex is but the icing on the cake. Oh, that icing can be wonderfully tasty—but it is *not* the cake. A marriage can lose that tasty "icing"—

say, through accident— and still go on and on and on, giving deep happiness to those who share it.

When I was a rutty and ignorant youngster, this used to puzzle. me —

(Omitted)

—as solemnly ceremonious as I could swing. Man lives by symbols; I wanted them to remember this occasion. I bad Llita dress in her notion of fanciest best. She looked like a bloomin' Christmas tree, but I told her she looked beautiful— which she did; brides can't help it. Joe I dressed in some of my clothes and gave them to him. Me I dressed in a preposterous ship's-captain uniform, one I, had for use on planets where such nonsense is, customary—four wide gold stripes on my cuffs, chest spangled with decorations bought in hockshops, a cocked hat Admiral Lord Nelson would have envied, and the rest as fancy as any grand master of a lodge.

I preached 'em a sermon loaded with solemn amphigory most of it lifted from the only church they knew, the established religion of Blessed—easy for me, having been a priest there myself—but I added all sorts of things, telling her what she owed him, telling him what he owed her, telling them both what they owed the child in her belly and the other children they would have—and tacked on, for both but primarily for her, a warning that marriage was not easy, not to be entered into lightly, because there would be troubles, they must face together, grave troubles that would require the courage of the Cowardly Lion, the wisdom of the Scarecrow, the loving heart of the Tin Woodsman, and the indomitable gallantry of Dorothy.

That got her to weeping, so Joe started to drip tears—which was just what I wanted, so I had 'em kneel and prayed over them.

Minerva, I make no apology for hypocrisy. I didn't care whether some hypothetical God heard me or not; I wanted Llita and Joe to hear it—first in that jargon of Blessed, then in English and Galacta, then topped it off by intoning as many lines of the Aeneid as I could remember. When I got stuck I closed with a schoolboy song:

Omme bene
Sine poena,
Tempus est ludendi;
Venit hora
Absque mora,
*Libros deponendi!**

(*All is well

Without punishment,
The time is for playing;
Comes the hour
Without delay
For laying (school) books down.

Purists will see that the Senior gave this jingle a poor translation. But one wonders why he did not continue in the same vein with the cheerfully bawdy triple pun available in the last line by substituting “liberos” for “libros”? That he could have missed it seems out of character. Our Ancestor’s capric disposition is everywhere evident; his occasional professions of asceticism have at best a hollow ring. J.F. 45th)

—and ended with ‘a resounding “So mote it be!” Had ‘em stand, take each other’s hands, and declared that, by the supreme authority vested in me as master of a vessel in space, they were now and forever husband and wife—kiss her, Joe.

All to a muted ‘background of Beethoven’s Ninth— That doggerel got in by accident when I had run out of

“punishment lines” of Virgil and needed a few more impressive sounds. But when I thought about it later, I saw that it translated as appropriately for their honeymoon as for a school holiday. All was indeed well, now that I knew that this joining of siblings could take place *sine* poena—without fear of genetic punishment. And *ludendi* translates as “amorous play” or “Eros” as readily as “gambling” or “children’s play” or any other frolic. And I had declared a four-day ship’s holiday, no work for them, no study *hours—libros* deponendi—starting at once. Sheer accident, Minerva. It was simply a bit of Latin verse that came into my head and Latin is majestic, especially when you don’t understand it.

We had a fancy supper, cooked by me, that lasted about ten minutes—for them. Llita could not eat, and Joe reminded me of Johnny’s wedding night and why his motherin-law fainted. So I piled a tray with tasty rations and handed it to Joe, and told ‘em to get lost; I didn’t want to see hide nor hair of ‘em for four days—

(Omitted)

—on to Landfall as fast as I could pick a cargo. I could not leave them on Valhalla; José was not yet able to support a family, and Llita was going to be limited in what she could do, either pregnant or with a new baby. Nor would I be on hand to pick ‘em up if they fell down; they *had* to go to Landfall.

Oh, Llita could have survived on Valhalla, because there they have the healthy attitude that a pregnant woman is prettier than the other sort and that the farther along she is, the more beautiful she is—true in my opinion and especially true in Llita's case. She had been passable when I bought her; when we grounded at Valhalla, she was almost five months gone and radiantly beautiful. If she went dirtside unescorted,, the first six men she encountered would want to marry her. If she had had one on her back as well as one in her belly, she could have married well the day we arrived; fertility was respected there and the planet wasn't half filled up.

I didn't think she would jilt Joe that quickly, but I did not want her head turned by too much male attention. I did not want to risk even an outside chance that Llita might leave him for some wealthy bourgeois or freeholder; I had gone to much trouble to build up Joe's ego, but it was still fragile and such a blow could kill it. He was standing tall and proud now—but his pride was based on being a married man, with a wife, and a child on the way. Did I mention that I had given them one of my names on their marriage certificate? They were now Friherr og Frei Lang, Josef og Stjerne, for the duration of our stay on Valhalla, and I wanted them to remain. Mr. and Mrs. Long for some years at least.

Minerva, I had them take lifetime vows never believing that they would keep them. Oh, ephemerals often stay married for life, but as for the rest—you don't find feathers on frogs very often, and Llita was a naïve, friendly, sexy little tart whose short heels would cause her to trip and land with her legs open without planning it—I could see it coming. I did not want it to happen before I had a chance to indoctrinate Joe. Horns need not give a man a headache. But he does need time to grow up and mellow and acquire self-confidence before he can wear them with tolerance and dignity—and Llita was just the girl who could outfit him with a fine rack of antlers. I got him a job, pearl diver and handyman in a small gourmet restaurant, with a side arrangement for pay-me's to the chef for every Valhalla dish Joe learned to cook correctly. In the meantime I kept her aboard on the excuse that a pregnant woman could not risk the nasty weather until I could get her proper clothing—and don't bother me now, dear; I've got cargo to worry about.

She took it well enough, pouting just a little. She didn't like Valhalla anyhow; it has one-and-a-seventh gee and I had got them used to the luxury of free-fall-—easy on her swelling belly, no strain on her arches or her swelling tits. Now she suddenly found herself much heavier than she had ever been, awkward, and with unhappy feet. What she could see of Valhalla from the entrance lock looked like a frozen slice of hell; she was pleased by my offer to take them on to

Landfall.

Still, Valhalla was the only new place she had ever been; she wanted to see it. I stalled while I got cargo unloaded, then took her measurements and got her one warm outfit in local style but I played her a dirty trick; I fetched back three pairs of' boots and let her take her choice. Two pairs were plain work boots; the third pair was gaudy —and half a size too small.

So when I did take her groundside, she was wearing too-tight boots, and the weather was unusually cold and blustery—I had watched the predictions. Torheim is pretty in spots, as skyport cities go—but I avoided those parts and took her "sightseeing" in dull neighborhoods—on foot. By the time I flagged a sleigh and took her back to the ship, she was miserable, and glad to get out of uncomfortable clothes, especially the boots, and into a hot bath.

I offered to take her into town next day but left her free to refuse. She declined politely.

(Omitted)

—*not* quite that bad, Minerva; I simply wanted to keep her in purdah without arousing her suspicions. Actually I had bought two pairs of those gaudy boots, one pair her correct size—and switched them on her at the end of that first day, while she was soaking her poor, tired feet. Later I suggested that her trouble had been that she had never worn shoes or boots in her life—so why not wear them around the ship until she got the hang of it?

So she did and was surprised at how easy it was. I explained with a straight face that her feet bad swelled the first time, so take it easy, an hour today, a little more each day, until she felt comfortable in them all day long. In a week she was wearing them even if she wore nothing else; she was more comfortable in them than barefooted—not surprising as they were arch-support footwear I had picked most carefully— between pregnancy and the difference in surface gravity of the two planets—point ninety-five gee for her home planet; one point fourteen for Valhalla—she weighed about twenty kilos more than she ever had in her life; she *needed* contoured foot supports.

I had to caution her not to wear them to bed.

I took her to town a couple of times while I was selecting cargo, but I coddled her—not much walking or standing around. She came along when I invited her but was always willing to stay aboard and read.

In the meantime Joe worked long hours, only one day off in seven. So just before we left, I had him quit his job and I took my kids on a proper holiday; a sleigh hired for the day, with reindeer instead of power, sightseeing that was truly sightseeing on a clear, sunny day that was almost warm, lunch in the country at a fine restaurant with a view of snow-covered crags of Jotunheimen range, dinner at a still finer restaurant in the city, one with live music and entertainment as well as superb food—and a stop for tea at the little gourmet spot where Joe had labored so that he could be addressed as "Friherr Lang" by our host, instead of "Hey, you!"—and have a chance to show off his beautiful, bulging bride.

And beautiful she was, Minerva. On Valhalla both sexes wear, under heavy outdoor clothes, indoor clothes that are essentially pajamas. The difference between those worn by women and by men lies in material, cut, and such. I had bought one party outfit for each of them. Joe looked smart and so did I, but all eyes were on Llita. She was covered from shoulders to boots—but only technically. The cloth of that harem outfit shimmered with changing lights, orange and green and gold, without obstructing the view. Anyone who cared to look could see that her nipples were crinkled with excitement—and everyone cared to look. That she clearly had only a couple of months to go gave her a large bonus vote toward being picked as "Miss Valhalla."

She looked grand and knew it, and her face showed her happiness. She was self-confident, too, as I had coached her in local table manners, and how to stand and how to sit and how to behave and such, and she had already got through lunch without a bobble.

It was all right to let her display herself and enjoy the silent, or sometimes not silent, applause; not only were we leaving right away, but also Joe and I had our knives in sight in our boot tops. True, Joe was no knife fighter. But the wolves there didn't know that, and not one was inclined to bother our beautiful bitch when she was flanked by wolves of her own.

—early next morning despite a short night. We loaded all day long, with Llita handling manifests and Joe checking numbers while I made sure I wasn't being robbed. Late that night I had us in n-space, with my pilot computer sniffing out the last decimal places for the first leg to Landfall. I set the gravistat to bring us slowly down from Valhalla surface-normal to a comfortable quarter gee—no more free-fall until Llita had her baby—then locked the control room and headed down to my cabin, stinking and tired and trying to kid myself that tomorrow was soon enough for a bath.

Their door was open—their bedroom door, the room that had been Joe's before I turned their rooms into a suite. Door open and them in bed—they had never done *that* before.

I soon learned why. They piled out of bed and paddled toward me; they wanted me to join their fun—they wanted to thank me…for that party day, for buying them, for everything else. His idea? Hers? Both? I didn't try to find out; I just thanked them and told them that I was whipped to the red, worn out, and dirty—all I wanted was soap and hot water and twelve hours of shuteye—and for them to sleep late; we'd set up ship's routine after we were rested.

I did let them bathe me and massage me to sleep. That did not break discipline; I had taught them a bit about massage, and Joe in particular had a firmly gentle touch; he had been massaging her daily during her pregnancy—even while working long hours in that restaurant.

But, Minerva, had I not been so bushed, I might have broken my rule about dependent females.

(Omitted)

—every tape, every book available in Torheim for a refresher in obstetrics and gynecology, plus instruments and supplies I had not expected to need aboard ship. I kept to my cabin until I had mastered all new art and was at least as skilled in baby-cotching as I had been as a country doctor on Ormuzd long before.

I kept a close eye on my patient, watched her diet, made her exercise, checked her gizzards daily—and permitted no-undue familiarity.

Dr. Lafayette Hubert, MD, aka Captain Aaron Sheffield aka The Senior, et al., worried excessively over his one patient. But he kept her and her husband from seeing it and applied his worry constructively in planning for every obstetric emergency known to the art at that time. Hardware and supplies he had obtained on Valhalla paralleled in every major respect the equipment of Frigg Temple in Torheim, where fifty births a day were not uncommon.

He smiled to himself at the mass of junk he had taken aboard, recalling a country doctor on Ormuzd who had delivered many a baby with nothing but bare hands, while the mother sat in her husband's lap, knees pulled high and wide by her husband so that old Doc Hubert could kneel in front of them and catch the baby.

True—but he had always had with him all the gear a husky pacing borri could tote, even though he might never open a saddlebag if everything went right. That was the point: to have the stuff at hand if things did *not* go right.

One item purchased in Torheim was not for emergency: the latest improved-model delivery chair—hand grips, padded support arms; leg, foot, and back supports adjustable independently in three axes of translation and rotation with controls accessible both to midwife and patient, quick-release restraints. It was a marvelously flexible piece of mechanical engineering to enable the mother to position herself—or be positioned—so that her birth canal was vertical and as wide open as possible at the moment of truth.

Dr. Hubert-Sheffield had it set up in his cabin, checked its many adjustments before signing for it—then looked at it and frowned. A good gadget, and he had paid its high price without a quiver. But it had no love in it; it was as impersonal as a guillotine.

A husband's arms, a husband's lap, were not as efficient— but there was much to be said, in his opinion, for having parents go through the ordeal together, she with her husband's arms holding her, comforting her, while he gave both muscular and emotional support that left the midwife free to concentrate on physical aspects.

A husband who had done this had no doubt that he was a father. Even if some passing stranger had slipped her the juice, such fact became irrelevant, swallowed up by this greater experience.

So how about it, Doc? This gadget? Or Joe's arms? Did the kids need this second "marriage ceremony"? Could Joe take it, physically and emotionally? There was no doubt that Llita was the more rugged member of the team although Joe outmassed her even when she was near term. What if Joe fainted and dropped her—at the exact wrong, instant?

Sheffield worried these matters while he led auxiliary controls from the gravistat in the control room to the delivery chair. He had decided that, nuisance though it was, his cabin had to be the delivery room; it was the only compartment with enough deck space, a bed at hand, and its own bath. Oh, well, he could stand the nuisance of squeezing past the pesky thing to reach his desk and wardrobe for the next fifty days— sixty at the outside, if he had Llita's date of conception right and had judged her progress correctly. Then he could disassemble it and stow it.

Perhaps he could sell it at a profit on Landfall; it was in advance of the art there, he felt sure.

He positioned the chair, bolted it to the deck, ran it up to maximum height, placed its midwife's stool in front of it, adjusted the stool until he was comfortable in it, found he could lower the delivery chair ten or twelve centimeters and still have room to work. That done, he climbed into the delivery chair and fiddled with its adjustments—found that it could be made to fit even a person of his height—predictable; some women on Valhalla were taller than he was.

Minerva, by my figures Llita was about ten days late—which did not worry them, as I had been carefully vague about it, and worried me only a touch, as she checked out normal and healthy in all respects. I prepared them not only with instruction and drill, but also with hypnosis, and had prepared her with exercises designed to make it as easy on her as possible—I dislike postpartum repairs; that canal should *stretch,* not tear.

What was really fretting me was possibility that I was going to have to break the neck of a monster, Kill a baby, I mean— I shouldn't dodge the blunt truth. All calculations I had done one sleepless night still left this chance open—and if I had been wrong in any assumption, the chance might be higher than I like to think about.

If I had to do it, I wanted to get it over with.

I was far more worried than she was. I don't think she worried at all; I had worked hard on that hypnotic preparation.

If I had to do this grisly thing, I was going to have to do it *fast,* while their attentions were elsewhere—then never let them see it and space the pitiful remains at once. Then tackle the horrid job of trying to put them back together emotionally. As a married couple? I did not know. Maybe I would have an opinion after I saw what she was carrying.

At last her contractions were coming close together, so I had them get into the delivery chair—easy, one-quarter gravity. The chair was already adjusted, and they were used to the position, from drill. Joe climbed in, sat with his thighs stretched wide, knees over the rests, heels braced—not too comfortable as he was not angleworm-limber the way she was. Then I picked her up and sat her in his lap—no trouble, she weighed less than forty pounds at that pseudo-acceleration. Call it eighteen kilos.

She spread her legs almost in a horizontal split and scooted forward in his lap while Joe kept her from falling between his thighs. "Is that far enough, Captain?" she asked.

"Just fine," I said. The chair might have positioned her a touch better—but she would not have had Joe's arms around her. I had never told them that there was any other way to do it. "Give her a kiss, Joe, while I get the straps."

Left knee strap around both their left knees together, same for right knees, and with her feet braced on additional supports I had added—chest and shoulder and thigh straps on him so firmly that he would stay in that chair even if the ship fell apart, but no such straps on *her.* Her hands on the hand grips, while his hands and arms were a living, warm, and loving safety belt, just under her tits, just over the bulge but not on it. He knew how, we had practiced. If I wanted pressure on her belly, I would tell him—otherwise leave well enough alone.

My stool was bolted to the deck, I had added a seat belt. As I strapped myself down, I reminded them that we had a rough ride coming—and this we had not been able to practice; it would have risked miscarriage. “Lock your fingers, Joe, but let her breathe. Comfortable, Llita?”

“Uh—” she said breathlessly. “I—I’m starting another one!”

“Bear down, dear!” I made sure my left foot - was positioned for the gravistat control and watched her belly.

Big one! As it peaked, I switched from one-quarter gravity up to two gravities almost in one motion—and Llita let out a yip and the baby squirted like a watermelon seed right into my hands.

I dragged my foot back to allow the gravistat to put us back on low gee even as I made a nearly instantaneous inspection of the brat. A normal boy, red and wrinkled and ugly—so I slapped his tochis and he bawled.

VARIATIONS ON A THEME

VIII

Landfall

(Omitted)

—girl I had intended to marry had married again and had another baby. Not surprising; I had been off Landfall two standard years. Not tragic, either, as we had been married once about a hundred years earlier. Old friends. So I talked it over with her and her new husband, then married one of her granddaughters, one not descended from me. Both gals Howards, of course, and Laura, the one I married that time, being of the Foote Family.* (* Correction: Hedrick Family. This woman Laura (one of the ancestors of the undersigned) did carry the surname “Foote” under the archaic patriliheal tradition—a source of confusion in old records, as the more logical matrilineal system has always been used in the Families in assigning clan membership. But the genealogies were not revised to show this until Gregorian Year 3307. This misnomer offers a means of dating this memoir…were it not that other records show that reindeer were not introduced onto Valhalla until approximately a century and a half *after* the date that the Senior— beyond question—did marry Laura Foote-Hedrick.

But more interesting is the Senior’s allegation that he used a pseudogravity field *in that year* to facilitate childbirth. Was he the first tocologist to use this (now standard) method? Nowhere does he assert this, and the technique - is usually associated with Dr. Virginius Briggs of Secundus Howard Clinic and a much later date. J.F. 45th)

We were a good match, Minerva; Laura was twenty, and I was freshly rejuvenated and holding my cosmetic age at the early thirties. We had several children—nine, I think— then she got bored with me forty-odd years later, and wanted to marry my 5th/7th cousin* *(And descended from the Senior as well (through Edmund Hardy 2099-2259) although the Senior may not have been aware of it. J.F. 45th) Roger Sperling—which did not grieve me as I was getting restless as a country squire. Anyhow, when a woman wants to go, let her go. I stood up for her at their wedding.*

Roger was surprised to learn that my plantation was not community property. Or possibly did not think that I would hold Laura to the marriage settlement she had signed—but that wasn't the first time I had been wealthy; I had learned. It took a tedious suit to convince him that Laura owned her wedding dower plus appreciation, not those thousands of hectares that were mine before I married her. In many ways it is simpler to be poor.

Then I shipped out again.

But this is about my kids who weren't really mine. Before we reached Landfall, Joseph Aaron Long looked more like a cherub and less like a monkey but was still young enough to wet on anyone reckless enough to pick him up—which his grandpappy did, several times a day. I was fond of him; he was not only a merry baby but was also, to me, a most satisfying triumph.

By the time we grounded, his father had shaped up into a really good cook.

Minerva, I could have set those kids up in style; that was as profitable a triangle trip as I ever made. But you don't cause ex-slaves to stand tall and free and proud by giving them things. What I did was to enable them to get out and scratch. Like this— I credited them with half-time apprentice wages, Blessed to Valhalla, on the assumption that their other half-time was taken up by studies. This I had Llita figure in Valhalla kroner, at Valhalla wage rates. I had her add to this Joe's wages as kitchen help on Valhalla, minus what he had spent there. This total was credited to them as a share in cargo on the third leg, Valhalla to Landfall—which amounted to less than one-half of 1 percent of that cargo. I made Llita work this out.

To this we added ship's-cook wages for Joe, Valhalla to Landfall, payable in Landfall bucks at Landfall wage scales— but only as wages not as a share in cargo. I had to explain to Llita why Joe's wages for that leg could not be invested retroactively in cargo lifted at Valhalla. Once she understood it, she had a grasp of the notions of venture and risk and profit—but I did not pay her for this accounting I was durned if I would pay purser's wages to figure her own money when I was not only having to check everything she did but was giving her a lesson in economics as well.

I did not pay Llita for the leg to Landfall; she was a passenger, busy having a baby and then still busier learning to care for it. But I did not charge her for passage; she deadheaded.

You see what I was doing—rigging the accounts so that I would owe them something once I sold my cargo, while making it appear that they had earned it. They hadn't been worth *any* wages; on the contrary I had spent quite a chunk on them—aside from buying them, which I never charged against them even in my head. On the other hand, I was paid in deep satisfaction—especially if they learned to stand on their own feet. But I discussed none of this; I just had Llita figure their share—my way.

(Omitted)

—came to a couple of thousand, not enough to support them very long. But I took time to find a hole-in-the-wall luncheon, on which I took option through a third party, after satisfying myself that a couple of strivers could stay afloat with it, if the price was right arid they were willing to work. Then I told them that they had better start job hunting as I was putting the *Libby* up for sale or bond-and-lease. It was root, hog, or die. They were *really* free—free to starve.

Llita didn't pout, she just looked solemn and went on nursing little J.A. Joe looked scared. But later I saw them with their heads together over a newspaper I had brought aboard; they were checking "help wanted" ads.

After much whispering Llita asked diffidently if I could babysit while they went job hunting?—but if I was busy, J.A. could ride her hip.

I said I wasn't going anywhere—but had they checked "business opportunities"? Jobs for untrained people didn't lead anywhere.

She looked startled; it was, a new idea. But that hint was enough. There was more looking and whispering; then she fetched the paper to me and pointed to an ad—my own but not so marked—and asked what "fiveyear amortization" meant?

I sniffed at it and told her it was a way to go broke slowly, especially if she spent money on clothes—and there must be something wrong or the owner wouldn't want to sell.

She looked as sad as Joe did and said that the other business opportunities called for investing lots of money. I grudgingly admitted that it could not hurt to look—but watch out for booby traps.

They came back full of enthusiasm—they were *sure* they could buy it and make it pay! Joe was twice as good a cook as that fry cook who had it—he used too much grease and it was rancid and the coffee was terrible and he didn't even keep the place *clean.* But best of all, behind the storeroom was a bedroom where they could live and— I squelched them. What were the gross receipts? How about taxes? What licenses and inspections and what squeeze on each? What did *they* know about buying food wholesale? No, I would *not* go look at it; they had to make up their own minds and quit leaning on me and, anyhow, I didn't know anything about restaurant business.

Two lies, Minerva; I've run restaurants on five planets—plus a silent lie as to my reasons for not being willing to inspect the joint. Two—no, three—reasons: First, I had gone over the place in cynical detail before I optioned it; second, that fry cook was bound to remember me; third, since I was selling it to them, through a dummy, I could neither vouch for it nor urge them to buy. Minerva, if I sell a horse, I won't guarantee that it has a leg on each corner; the buyer must count them himself.

Having disclaimed any knowledge of restaurant business, I then lectured them about it. Llita started taking notes, then asked to be allowed to start the recorder. So I went into detail: Why 100 percent gross profit on the cost of food might not break even after she figured costs and overhead—amortization, depreciation, taxes, insurance, wages for them as if they were employees, *etc.* Where the farmers' market was and how early they had to be there each morning. Why Joe must learn to cut meat, not buy it by the piece—and where he could learn how. How a long menu could ruin them. What to do about rats, mice, roaches, and some dillies Landfall has but, thank heaven, Secundus does not. Why—

(Omitted)

—chopped the umbilical, Minerva. I don't think they ever guessed that they were dealing with me. I neither cheated nor helped them; that amortized sales contract simply passed on the price I had to pay for the dump, plus a load representing time I had spent dickering the price downward, plus legal and escrow fees and a fee to the dummy, plus the interest a bank would charge me—two points cheaper than *they* could get, at least. But no charity, none—I made nothing, lost nothing, and charged for only a day of my time.

Llita turned out to be tighter than a bull's arse in fly time; I think she broke even the first month despite closing down while they cleaned and refurbished. Certainly she did not miss that first month's payment on the mortgage, nor any after that. Miss one? Dear, they paid that fiveyear loan in three years.

Not too surprising. Oh, a long spell of illness could have wrecked them. But they were healthy and young and worked seven days a week until they were free and clear. Joe cooked and Llita handled the cashbox and smiled at customers and helped at the counter, and J.A. lived in a basket at his mother's elbow until he was old enough to toddle.

Until I married Laura and left New Canaveral to be a country gentleman, I stopped in their joint fairly often— not too often, as Llita would not let me pay, and that was proper, part of standing tall and proud; they had eaten my food, now I ate theirs. So I usually stopped just for a cup of coffee and checked on my godson—while checking on them. I steered custom their way, too; Joe was a good cook and got steadily better, and word got around that Estelle's Kitchen was the place if you appreciated good food. Word-of-mouth is the best advertising; people tend to be smug about having "discovered" that sort of eatery.

It did no harm with customers, male especially, that Estelle herself presided over the cashbox, young and pretty and with a baby in her arm. If she was nursing him as she made change—as was often the case at first—it practically guaranteed a lavish tip.

J.A. gave up the dairy business presently, but when he was about two his job was taken over by a baby girl, Libby Long. I didn't deliver that one, and her red hair had nothing to do with me. Joe was blond, and I assume that Llita carried the gene as a recessive—doubt if she had time to branch out. Libby was a number-one tip-inducer, and I credit her with helping pay off .the mortgage early.

A few years later Estelle's Kitchen moved uptown to the financial district, was somewhat larger and Llita hired a waitress, a pretty one of course—

(Omitted)

—Maison Long was swank, but it had a corner in it, a coffee shop, named "Estelle's Kitchen" and Estelle was hostess there as well as in the main dining room—smiling, dressed fit to kill in clothes that showed her superb figure, calling regulars by name and getting the names of their guests and remembering them. Joe had three chefs and a number of helpers, and they met his high standards or he fired them. But before they opened Maison Long, something happened that showed that my kids were even smarter than I thought they were—or at least remembered everything and figured things out later. Mind you, when I bought them, they were too ignorant to pound sand and I don't think either one had ever touched money at any time.

Letter from a lawyer— Inside was a bank draft, with it was an accounting: Two passages, Blessed to Valhalla to 'Landfall, second leg taken from tariffs of Transtellar Migration Corporation, Ltd. (New Canaveral) and first leg arbitrarily equated to second leg; certain monies accruing from share in sale of cargo; five thousand blessings expressed as bucks at an estimated exchange rate based on assumptions as to equivalent buying power, see enclosure; total of above gross sums; interest on gross compounded semiannually for thirteen years at the going commercial rate for each year for unsecured loans—and grand total same as the bank draft, a sum I'm not sure I remember, Minerva, but it would not mean anything in Secundus crowns anyhow. It was a sizable sum.

There was no mention of Llita or Joe, and the draft was signed by this lawyer. So I called him.

He turned out to be stuffy, which did not impress me as I was a lawyer there myself, although not practicing. All he would say was that he was acting for an undisclosed client.

So I fired legalese at him, and he loosened up to the extent of informing me that he had instructions to cover the contingency that I might refuse the draft: He was then to pay the draft sum to a designated foundation and so inform me after it was paid. But he declined to tell me *what* foundation.

I signed off and called Estelle's Kitchen. Llita answered, then cut in video and smiled her best. "Aaron! We haven't seen you in much too long."

I agreed and added that apparently they had gone out of their silly minds while I wasn't watching. "I have here a bunch of nonsense from a lawyer, along with a ridiculous draft. If I could reach you, dear, I would paddle you. 'Better let me talk with Joe."

She smiled happily and told me that I was welcome to paddle her any time and that I could talk to Joe in a moment but that he was locking up. Then she stopped smiling and said with sober dignity, "Aaron, our oldest and dearest friend, that draft is not ridiculous. Some debts cannot be paid. So you taught me, years ago. But the money part of a debt *can* be paid. "This we are doing, as closely as we have been able to figure it."

I said, "God damn it, you stupid little bitch, you kids don't owe me a bloody penny!"—or words to that effect.

She answered, "Aaron, our beloved master—"

At the word "master" I blew my overloads, Minerva. I used language guaranteed to scorch the hide of the lead mules in a team of six.

She let me run down, then said softly, "Our master until you free us by letting us pay this—Captain."

Dear, I skidded to a halt.

She added, "But even then you will still be our master in my heart, Captain. And in Joe's heart, I know. Even though we stand free and proud, as you taught us. Even though— thanks always to you—our children, and the children I still will bear, will never know that we were ever anything but free…and proud."

I said, "Dear, you're making me cry."

She said, "No, no! The Captain never cries."

I said, "A lot you know about it, wench. I weep. But in my cabin—with the door locked. Dear, I won't argue. If this is what it takes to make you kids feel free, I'll take it. But just the base sum, no interest. Not from friends."

"We are more than friends, Captain. And less. Interest on a debt is *always* paid—you taught me. But I knew that in my heart when I was only an ignorant slave, freshly manumitted. Joseph knew it, too. I *tried* to pay interest, sir. But you would not have me."

I changed the subject. "What is this blinking foundation that gets the bucks if I refuse them?"

She hesitated. "We planned to leave that up to you, Aaron. But we thought it might go to orphans of spacemen. Perhaps the Harriman Memorial Refuge."

"You're both crazy. That fund is bulging, and I know it. Look, if I go to town tomorrow, can you shut down 'that ptomaine trap for a day? Or perhaps Neilsday?"

"Any day and as many days as you wish, dear Aaron"— so I said I would call back.

Minerva, I needed time to think. Joe was no problem, he never was. But Llita was stubborn. I had offered to compromise; she had not budged a millimeter. It was the interest that made it such a horrid sum, for them—two strivers who had started with a couple of thousand bucks thirteen years back and were raising three kids by then.

Compound interest is murder. The sum she claimed they owed me—the amount of that draft—was more than two and a half times the base sum...and I couldn't see how they had saved even *that.* But, had I been able to get her to agree on the base amount and forget compound interest, they would still have a nice chunk of capital to expand again— and if it took giving the smaller sum to orphaned spacemen or spacemen's orphans or indignant cats to make them feel proud, I could understand how it would be a bargain in their eyes. I had taught them myself, hadn't I? I once dropped ten times that amount rather than argue over whether cards had been cut—then slept that night in a graveyard.

I wondered if, in her sweetly devious mind, she was paying me back for having dragged her out of my bed one night fourteen years earlier. I wondered what she would do if I made a counteroffer to accept the base sum and let her “pay the interest” her own way. Shucks, she would probably be on her back before you could say “Contraception.”

Which would solve nothing.

Since she had turned down my compromise, we were back where we had started. She was determined to pay it all—or give it away pointlessly—and I was not going to let her do either one; I can be stubborn, too.

There had to be a way to do both.

At dinner that night, after the servants withdrew, I told Laura I was going to town ‘on business’—would she like to come along? Shop while I was busy, then dine wherever she liked, then any fun that appealed to her. Laura was pregnant again; I thought she might enjoy a day wasting money on clothes.

Not that I planned to have her along at the coming row with Llita; officially Joseph and Estelle Long and their oldest child had been born on Valhalla; we had become friends when they had taken passage in my ship. I had fleshed out that story and coached the kids in it on the leg to Landfall, and had them study sound-sight tapes from Torheim—ones which turned them into synthetic Valhallans unless questioned too closely by real Valhallans.

This fakery was not utterly necessary as Landfall had an open-door policy; an immigrant did not even have to register—he could sink or swim. No landing fee, no head tax, not much taxation of any sort, or much government, and New Canaveral, the third biggest city, was only a hundred thousand—Landfall was a good place to be in those days.

But I had Joe and Llita do it that way both for them and for their kids. I wanted them to forget that they had ever been slaves, never talk about it, never let their kids know it—and at the same time, bury the fact that they had been, in some odd fashion, brother and sister. There is nothing shameful in being born a slave (not for the slave!), nor was there any reason why diploid complements should not marry. But forget it—start over. Joseph Long had married Stjerne Svensdatter (name Anglicized to “Estelle,” with the nickname Yeetah from babyhood); they had married when he finished apprenticeship to a chef; they had migrated after their first child. The, story was simple and unassailable, and put the polish on my only attempt at playing Pygmalion. I had seen no reason to give my new wife any but the official version. Laura knew they were my friends; she was gracious to them on my account, then had come to like them on their own account.

Laura was a good gal, Minerva good company in bed and out, and she had the Howard virtue, even on her first marriage, of not trying to smother her spouse—most Howards need at least one marriage to learn it. She knew who I was—the Senior—as our marriage and later our kids were registered with the Archives, just as had been my marriage to her grandmother, and the offspring from that. But she did not treat me as a thousand years older than she was and never quizzed me about my past lives—simply listened if I felt like talking.

I don't blame her for that lawsuit; Roger Sperling cooked that up, the greedy son of a sow:

Laura said, "If you don't mind, dear, I'll stay home. I would rather splurge on clothes after I slim down. As for dinner, there isn't a restaurant in New Canaveral that can match what Thomas does for us here. Well, Estelle's Kitchen perhaps, but that's a lunchroom, not a restaurant. Will you see them this trip? Estelle and Joe, I mean."

"Possibly."

"Find time, dear; they are nice people. Besides, I want to send some knickknack to my goddaughter. Aaron, if you want to treat me to a fancy restaurant when we go to town, you should encourage Joe to open one. Joe can cook, equal to Thomas."

(Better than Thomas, I said to myself—and Joe doesn't scowl at a polite request. Minerva, the trouble with servants is that you serve them quite as much as they serve you.) "I'll make a point of seeing them, at least long enough to deliver your present to Libby."

"And kiss them all for me and I'd better send something to each of their kids and be sure to tell Estelle that I'm pregnant again and find out if she is, too, and remember to tell me, and what time are you leaving, dear?—I must check your shirts."

Laura was serenely certain that I could not pack an overnight bag no matter how many centuries of experience I had had. Her ability to see the world as she wanted to see it enabled her to put up with my cranky ways for forty years; I do appreciate her. Love? Certainly, Minerva. She looked out for my welfare, always, and I did for hers, and we enjoyed being together. Just not love so intense that it is a great ache in your belly.

Next day I took my jumpbuggy over to New Canaveral.

(Omitted)

—planned Maison Long. Llita had meant to blitz me. I'm sentimental, and she knew it and had set the stage. When I got there, the shutters were closed, early—and their two older kids were farmed out for the night and baby Laura was asleep. Joe let me in, told me to go on back; he had our dinner on the range and would be along in a minute. So I went back to their living quarters to find Llita.

I found her—dressed in sarong and sandals I had given her not an hour after I had bought her. Instead of the sophisticated face-do she now used so well, she was wearing no makeup at all and had her hair simply parted and hanging straight down, to her waist or longer, and brushed till it shone. But this was not the frightened, ignorant slave who had to be taught how to bathe; this serenely beautiful young lady was clean as a sterilized scalpel, and was scented with some perfume which may have been named Spnng Breezes but should have been called Justifiable Rape and sold only under doctor's prescription.

She posed just long enough for me to take this in, then swarmed over me, hit me with a kiss that matched her perfume.

By the time she let me go, Joe had joined us—dressed in breechclout and sandals. But I did not let it go sentimental; I riposted sharply, stopping only to accept one-tenth that much kiss from Joe, said nothing about their costumes, and at once started explaining that business deal. When Llita caught what I was talking about, she shifted from sexy siren to sharp businesswoman, listened intently, ignored her stage setting and costuming, and asked the right questions.

Once she said, "Aaron, I sniff a mouse. You told us to be free, and we've tried to be—and that's why we sent you that draft. I can add figures; we *owe* you that money. We don't have to have the biggest restaurant in New Canaveral. We're happy, the children are healthy, we're making money."

"And working too hard," I answered.

"Not all that hard. Though a bigger restaurant would mean even more work. But the point is: You seem to be buying us again. That's all right if you wish to—you are the only master we would ever accept. Is that your intention, sir? If so, please say so. Be frank with us."

I said, "Joe, will you hold her while I wallop her? For using that dirty word? Llita, you are wrong on both counts. A bigger restaurant means *less* work. And I'm not buying you; this is a business deal in which I expect a fat profit. I'm betting on Joe's genius as a chef, plus your genius for pinching pennies without cutting quality. If I don't make money, I'll exercise my option to liquidate, get my investment back, and you can go back to running a lunch counter. If you fail I won't prop you up."

"Brother?" She called him that in the dialect of their childhood. It signified to me that the lodge was tyled for executive session at the highest degree, as they were most careful not to call each other "Brother" or "Sister" in any language, especially in front of the children. J.A. was sometimes "Brother" in English—never his father Joe. Minerva, I don't recall that Landfall had laws against incest—it did not have many laws. But there was a strong taboo against it, and I had carefully indoctrinated them. Half the battle with any culture is knowing its taboos.

Joe looked thoughtful. “I can cook. Can you manage it, Sis?”

“I can try. Of course we’ll try it if you want us to, Aaron. I’m not sure we can make a go of it, and it does look like more work to me. I’m not complaining, Aaron, but we are already working about as hard as we can.”

“I know you are. I don’t see how Joe found time to knock you up.”

She shrugged and said, “That doesn’t take long. And it will be a long time—I’ve just barely caught—before I’ll have to take time off. J.A. is old enough to handle the cashbox when I do. But not in a big fancy restaurant.”

I answered, “Wench, you’re thinking in terms of a lunchroom. Now listen, and learn bow to make more money with less work and more time off.

“We may not open Maison Long until after you have this baby; we can’t set this up overnight. We must sell or lease this place—which means finding buyers who can keep it out of the red; it’s always expensive to have to take a place back.

“We must find a suitable property in the right neighborhood, for sale or lease with option to buy. I may buy it and rent it to the corporation, so as not to tie up too much of the corporation’s capital in senior financing. Find the place, remodel it probably, redecorate it certainly. Money for fixtures. Not much for squeeze; I know where the bodies are buried in this burg, and I won’t hold still for excessive squeeze.

“But, my dear, you will *not* be on the cashbox; we’ll hire help, and I’ll set it up so that they can’t steal. *You* will be moving around, looking pretty, smiling at people—and keeping your eye on everything. But you’ll do this only at lunch and dinner. Call it six hours a day.”

Joe looked startled; Llita blurted out, “But, Aaron, we always open up as soon as we’re back from market and stay open late. Otherwise you lose so much trade.”

“I’m sure you work that hard; this draft proves it. And that’s why you think getting pregnant ‘doesn’t take long.’ But it *should* ‘take long,’ dear. Work is not an end in itself; there must always be time enough for love. Tell me— When you caught J.A. in the ‘Libby’, were you rushed? Or did you have time to enjoy it?”

“Oh, goodness!” Her nipples suddenly crinkled. “Those were wonderful days!”

“There will be wonderful days again. Gather ye rosebuds, time is still a-flying. Or have you lost interest?”

She looked indignant. “Captain, you know me better than that.”

"Joe? Slowing down, son?"

"Well…we do work long hours. Sometimes I'm pretty tired."

"Let's change that. This will not be a lunchroom; this is going to be a highpriced gourmet restaurant of a quality this planet has never seen. Remember that place I took you kids for dinner just before we lifted from Valhalla? That sort. Soft lights and soft music and wonderful food and high prices. A wine cellar but no hard liquor; our patrons must not have their tastebuds numbed.

"Joe, you will still go to market each morning; selecting top-quality food is something you can't delegate. But don't take Llita and do take J.A. if he's going to learn the profession."

"I sometimes take him now."

"Good. Then come home and go to bed again; you're through until you cook dinner. Not lunch."

"Huh?"

"That's right. Your number two chef handles lunch, then helps with dinner, your big moneymaking meal. Llita is hostess both for lunch and dinner but keeps an especially sharp eye on quality at lunch, Joe, since you won't be in the kitchen. But she never goes to market and should still be in bed when you get back from market—did I say that your quarters will be attached, just as now? You'll both be off duty two or three hours in the afternoon—just right for the sort of siesta you used to grab in the 'Libby.' In fact, if you two can't find time under that regime both for sleep and plenty of happy play— But you can."

"It sounds grand," Llita conceded, "if we can make a living with those hours—"

"You can. A better living. But instead of trying to get every buck, Llita, your object will be to maintain top quality while not losing money…and *enjoy* life."

"We will. Aaron, our beloved…captain and friend, since I must not say that 'dirty' word, we enjoyed life even as children when I had to wear that horrid virgin's basket— because it was so sweet to snuggle together all the long nights. When you bought us—and freed us—and I didn't have to wear it, life was perfect. I didn't think it could, be better—though it will be, when we don't have to choose between sleep and trying to stay awake for loving. Uh, you may not believe this since you know what a rutty wench I am— but *lots* of times sleep won."

"I believe it. Let's change it."

"But— No breakfast trade at all? Aaron, some of our breakfast customers have been coming to us the whole time we've been on Landfall."

"Net profit?"

"Well…not much. People won't pay as much for break fast even though materials sometimes cost as much. I've been satisfied with a very small net on breakfast. Advertising. I'd hate to tell our regulars that we won't serve them any longer."

"Details, dear. You can have a breakfast bar in one corner and not open the main dining room—but Joe won't cook breakfasts, and neither will you. You'll be in bed with Joe at that hour—so that your eyes will sparkle at lunch."

"J.A. knows breakfast dishes," put in Joe. "I started him on breakfasts."

"Details again. Maybe we'll work out a deal with my godson whereby he makes money of his own, if the breakfast bar makes money—"

(Omitted)

"—sum it up. Take notes, Llita. I agree to accept this draft while you two—especially *you,* Llita—agree that it settles forever any debt between us. Maison Long to be a closely held corporation; fifty-one-per cent to you two, forty-nine percent to me, all three of us directors, and we can't sell stock save to each other—except that I retain option to change all or part of my share to nonvoting stock, in which case I can assign it.

"My share of the initial financing is this draft. Your share is what we get for this lunchroom—"

"Hold it," said Llita. "We might not be able to sell for that much."

"Details, dear. Stick in a paragraph to let you pay the corporation any discrepancy out of your net—and there will indeed be a net; I don't stick with a business that doesn't make money, I always cut my losses. Let's have another paragraph that permits me to supply more capital, if needed, by buying nonvoting stock—and we'll use something like that to hang onto our top help, too. Not have Joe train a chef and then have him walk out. Never mind, let's get the outlines straight. You two are the bosses; I'm silent partner. Salaries for you two on the scale we discussed, escalating with rise in net, as discussed.

"I don't get a salary, just dividends. But we all will be working our tails off to get this rolling. I'll come in from Skyhaven as necessary; there's nothing going on there now that my overseer can't handle. But once it's rolling, I do *nothing;* I sit back and let you two make us rich. But—listen carefully—once it's rolling, you two must stop working *your* tails off, too. More time in bed. More time for fun out of bed. You won't make us rich working lunchroom hours. Have we reached a meeting of minds?"

"I think so," agreed Joe. "Sis?"

“Yes. I’m not certain New Canaveral will support a gourmet restaurant like those lovely ones on Valhalla—but we’ll try! I still think our starting salaries are too high, but I’ll wait until I’ve struck a trial balance on our first quarter before I argue the matter. Just one thing, Captain—”

“My name’s ‘Aaron.’”

“’Captain’ is safer than that ‘dirty word.’ I’ve agreed to the whole thing—and I’m durned well going to make it work!—as you always say. But if you think this makes me forget a night you dragged me out of your bed and bounced me on my bum on a hard steel deck, you can think again! Because it *hasn’t!”*

I sighed, Minerva, and said to her husband, “Joe, how do you cope with her?”

He shrugged and grinned. “I don’t, I just get along. Besides, I see *her* side of it. If *I* were you, I’d take her to bed and make her forget it.”

I shook my head. “But I’m *not* you, that’s the point. Joe, I learned long before you were born that free tail is invariably the most expensive sort. Worse than that, we three are business partners now—and I can see six possible outcomes if I accept your notion of a solution—and any of the six could cause Maison Long, Ltd., never to lift off.

— (Omitted)

—just as I knew it would, Minerva; I’ve never had a nonspeculative Investment pay *off* so well. They tried to’ imitate us—but they couldn’t imitate Joe’s cooking or Llita’s management. I made a *bundle!*

VARIATIONS ON A THEME

IX

Conversation Before Dawn

The computer said, “Lazarus, aren’t you sleepy?”

“Don’t nag me, dear. I’ve had thousands of white nights, and I’m still here. A man never cuts his throat from a sleepless night if he has company to see him through it. You’re good company, Minerva.”

“Thank you, Lazarus.”

“The simple truth, girl. If I fall asleep—fine. If I don’t, then no need to tell Ishtar. No, that won’t work; she’ll have graphs and charts on me, won’t she?”

“I’m afraid so, Lazarus.”

"You durn well know so. A good reason for me to be a little angel and wash behind my ears and get this rejuvenation over is to get my privacy back. Privacy is as necessary as company; you can drive a man crazy by depriving him of either. That was another thing I accomplished by setting up Maison Long; I got my kids privacy they didn't know they needed."

"I missed that, Lazarus. I noted that they had more time for 'Eros'—and I saw that that was good. Should I have inferred something else from the data?"

"No, because I didn't give you all the data. Not a tenth. Just the outline of some forty years I knew them, and some—not all—of the critical points. For instance, did I mention the time Joe decapitated a man?"

"No."

"Not much to it and it wasn't important to the story. This young blood tried to share the wealth one night by sticking them up. Llita had J.A. in her right arm, nursing him or about to, and couldn't reach the gun she kept at the cashbox; she couldn't fight and was bright enough not to try against those odds. I suppose this dude didn't know that Joe had simply stepped out of sight.

"Just as this freelance socialist was gathering up their day's receipts, Joe lets him have it, with a cleaver. Curtain. The only notable thing about it was that Joe acted so quickly and correctly in the crunch, for I feel sure that the only fighting that he had ever tried was that which I forced on him in the 'Libby.' Joe did everything else properly, too—finished taking the head off, threw the body into the street for his friends to take away if he had any, for the scavengers to remove if not— then displayed the head in front of the shop on a spike meant for such purpose. Then he closed his shutters and cleaned up the mess—then may have taken time to throw up; Joe was a gentle soul. But it's seven to two that Llita did *not* throw up.

"The city's committee for public safety voted Joe the usual reward, and the street committee passed the hat and added to it; a cleaver against a gun rated special notice. Good advertising for Estelle's Kitchen but not important otherwise, save that the kids could use that money—helped pay the mortgage, no doubt, and wound up in my pocket. But I wouldn't have heard of this minor dustup had I not been in New Canaveral and happened to stop by Estelle's Kitchen when the real head was removed—flies, you know—and the plastic trophy head custom required Joe to display was substituted for it by the street committee. But I was speaking of privacy.

"When I picked the property for Maison Long, I made sure that it included space for a growing family, that's all, since they had three bucking and one in the chute the night we planned it. Rearranging hours gave them privacy from each other, too. Happy as it is to snuggle and make love, nevertheless, when you are really tired, it is often good to have the bed to yourself—and the new routine not only allowed this but necessitated it, part of each day, through staggering their working hours.

"But I also planned room to give them privacy from their children—and to cope with another problem Llita did not have straight and Joe may not have thought about. Minerva, can you define 'incest'?"

The computer replied, "'Incest' is a legal term, not a biological one. It designates sexual union between persons forbidden by law to marry. The act itself is forbidden; whether such union results in progeny is irrelevant. The prohibitions vary widely among cultures and are usually, but not always, based on degrees of consanguinity."

"Y'r durn tootin' it's 'not always.' There are cultures which permit first cousins to marry—genetically risky—but forbid a man to marry his brother's widow, which involves no more risk than it did for the first union. When I was a youngster, you could find one rule in one state, then cross an invisible line and find exactly opposite laws fifty feet away. Or some times and places both unions might be mandatory. Or forbidden. Endless rules, endless definitions for incest, and rarely any logic to them. Minerva, so far as I recall, the Howard Families are the first group in history to reject the legalistic approach and to define 'incest' solely in terms of genetic hazard."

"That accords with the records in me," Minerva agreed. "A Howard geneticist might advise against a union between two persons with no known common ancestry but place no objection to marriage of siblings. In each case analysis of genetic charts would control."

"Yeah, sure. Now let's drop genetics and talk about taboo. The incest taboo, although it can be anything, most commonly means sisters and brothers, parents and offspring. Llita and Joe were a unique case, brother and sister by cultural rules, totally unrelated by genetic rules—or at least no more so than two strangers.

"Now comes a second-generation problem. Since Landfall had this taboo against union between siblings, I had impressed on Llita and Joe that they must *never* let anyone know that they thought of each other as 'brother' and 'sister.'

"Fine so far as it went. They did as I told them, and there was never a lifted eyebrow. Now comes the night we planned Maison Long—and my godson is thirteen and interested, and his sister is eleven and beginning to be interesting. Full siblings—both genetically hazardous and contrary to taboo. Anyone who has raised puppies—or a number of children—knows that a boy can get as horny over his sister as over the girl down the street, and his sister is often more accessible.

"And little Libby was a redheaded pixie so endearingly sexy at eleven that even I could feel it. Soon she was going to have every buck in the pasture pawing the ground and snorting.

"If a man pushes a rock, can he ignore an avalanche that follows? Fourteen years earlier I had manumitted two slaves— because a chastity girdle on one of them offended my concept of human dignity. Must I find some way to put a chastity girdle on that slave's daughter? Around we go in circles! What was my responsibility, Minerva? *I* pushed the first rock."

"Lazarus, I am a machine."

"Humph! Meaning that human concepts of moral responsibility are not machine concepts. Dear, I wish you were a human girl with a spankable bottom long enough for me to spank it—I would! In your memories is far more experience on which to judge than any flesh-and-blood can have. Quit dodging."

"Lazarus, no human can accept unlimited responsibility lest he go mad from unbearable load of unlimited guilt. You could have advised Libby's parents. But your responsibility did not extend even to that."

"Um. You're right, dear—it's dismal how regularly you are right. But I am an incurable buttinsky. Fourteen years earlier I had turned my back on two puppies, so to speak—and that the outcome was not tragic was good luck, not good planning. Now here we go again, and the outcome could be tragic. I felt no 'morals' about it, dear—just thumb rules for not, hurting people unintentionally. I didn't give a hoot if these children 'played doctor' or 'make a baby' or whatever the kids there called their experimenting; I simply did not want my godson giving little Libby a defective child.

"So, I did butt in and took it up with their parents. Let me add that Llita and Joe knew as much about genetics as a pig knows about politics. Aboard the 'Libby' I had kept my worries to myself, and never discussed the matter with them later. Despite their remarkable success in competing as free human beings, in most subjects Llita and Joe were ignorant. How could it be otherwise? I had taught them their Three R's and a few practical matters. Since arrival on Landfall they had been running under the whip; they hadn't had time to fill in gaps in their education.

"Perhaps worse yet, being immigrants, they had not grown up exposed to the local incest taboo. They were aware of it because I had warned them—but it wasn't canalized from childhood. Blessed had somewhat differenct incest taboos—but the taboos there did *not* apply to domestic animals. Slaves. Slaves bred as they were told to, or as they could get away with—and my two kids had been told by highest authority— their mother and their priest—that they were a 'breeding pair'…so it could not be wrong, or taboo, or sinful.

"It was simply something to keep quiet about on Landfall because Landfellows were tetched in the head on this subject.

"So I should have thought of it earlier. Yeah, sure, Sure! Minerva, I plead other obligations. I could not spend those years playing guardian angel to Llita and Joe. I had a wife and kids of my own, employees, a couple of thousand hectares of farmland and twice that much in virgin pinkwood— and I lived a long way off, even by high-orbit jumpbuggy.

Ishtar and Harnadiyad, and, to some extent, Galahad, all seem to think I am some sort of superman simply because I've lived a long time. I'm not; I have the limitations of any flesh-and-blood, and for years I was as busy with *my* problems as Llita and Joe were with theirs. Skyhaven didn't come to me gift-wrapped.

"It wasn't until we put aside restaurant business and I got out presents Laura had sent to their kids, and had admired the latest pictures of their kids and shown them pictures of Laura and my kids and all that ancient ritual, that I thought about it at all. The pix, of course. This tall lad, J.A., all hands and feet, wasn't the little boy I recalled from my last visit. Libby was about a year younger than Laura's oldest, and J.A.'s age I knew to the second—which is to say that he was about the age I was when I was almost caught with a girl in the belfry of our church about a thousand years earlier.

"My godson was no longer a child; he was an adolescent whose balls were not just ornaments. If he had not tried them as yet, he was certainly jerking off and thinking about it.

"The possibilities raced through my mind the way a man's past life is supposed to, when he is dying—which isn't true, by the way. So I tackled it and was subtle about it. Diplomatic.

"I said, 'Joe, which one do you lock up at night? Libby? Or this young wolf?'"

The computer chuckled. "'Diplomatic,'" she repeated.

"How would you have put it, dear? They looked puzzled. When I made it clear, Llita was indignant. Deprive her kids of each other? When they had slept together since they were babies? Besides, there wasn't *room* any other way. Or was I suggesting that she sleep with Libby while J.A. slept with Joe? If so, I could forget it!

"Minerva, most people never learn anything about any science, and genetics stands at the bottom of the list. Gregor Mendel had been dead twelve centuries at that time, yet all the old wives' tale were what most people believed—and still do, I might add.

"So I tried to explain, knowing that Llita and Joe weren't stupid, just ignorant. She cut in on me. 'Yes, yes, Aaron, certainly. I've thought about the possibility that Libby may want to marry Jay Aaron

—will want to, I think—and I know it's frowned on here. But it's silly to ruin their happiness over a superstition. So, if it works out that way, we think it's best for them to move to Colombo—or at least as far as Kingston..

Then they can use different family names and get married, and no one will be the wiser. Not that we want them to be so far away. But we won't stand in the way of their happiness."

"She loved them," said Minerva.

"Yes, she did, dear, by the exact definition of love. Llita placed their welfare and happiness ahead of her own. So I had to try to explain it—why the taboo against union of brother and sister wasn't superstition but a real danger—even though it had turned out to be safe in their case.

"'Why' was the hard part. Starting cold on the complexities of genetics with persons who don't even know elementary biology is like trying to explain multidimensional matrix algebra to someone who has to take off his shoes to count above ten.

"Joe would have accepted my authority. But Llita had the sort of mind that has to know why—else she was going to smile her sweetly stubborn smile, agree with me, then do, as she had intended to all along. Llita was well above average smart but suffered from the democratic fallacy: the notion that her opinion was as good as anyone's—while Joe suffered from the aristocratic fallacy: He accepted the notion of authority in opinion. I don't know which fallacy is the more pathetic; either one can trip you. However, my mind matches. Llita's in this respect, so I knew I had to convince her.

"Minerva, how do you condense a thousand years of research in the second-most complex subject into an hour of talk? Llita didn't even know she laid eggs—in fact she was certain she didn't, as she had served thousands of eggs, fried, scrambled, boiled, and so forth. But she listened, and I sweated at it, with nothing but stylus and paper—when I needed the resources of a teaching machine in a college of genetics.

"But I kept at it, drawing pictures and simplifying outrageously some very complex concepts, until I thought they had grasped the ideas of genes, chromosomes, chromosome reduction, paired genes, dominants, recessives—and that bad genes made defective babies—and defective babies, thank Frigg under all Her many Names, was something Llita had known about since she was a little girl, listening to gossip of older female slaves. She quit smiling.

"I asked if they had playing cards?—not hopefully since they had no time for such. But Llita dug up a couple of decks from the children's room. The cards were the commonest sort used on Landfall then: fifty-six cards in four suits, Jewels and Hearts were red, Spades and Swords were black, and each suit had royal cards. So I had ‘em play the oldest random-chance gene-matching simulation used in beginning genetics— the ‘Let’s-Make-a-Healthy-Baby’ game that children here on Secundus can play—and explain—long before they are old enough to copulate.

“I said, ‘Llita, write down these rules. Black cards are recessives, red cards are dominants; Jewels and Spades come from the mother, Hearts and Swords come from the father. A black ace is a lethal gene, reinforced the baby is stillborn. A black empress reinforced gives us a ‘blue baby’—needs surgery to stay alive—And so on, Minerva, except that I set the rules for a ‘hit’—a bad reinforcement—so that they were four times as probable for brother and sister as for strangers, and explained why—and then made them keep records for twenty games played by each set of rules for shuffling and snatching, reduction and recombination.

“Minerva, it was not as good a structural analogy as the ‘Make-a-Healthy-Baby’ kindergarten games, but using two decks with different back patterns did enable me to set up degrees of consanguinity. Llita was simply intent at first—then started looking grim the first time the turn of the cards caused a black to reinforce a black.

“But when we played by brother-and-sister rules, and she dealt the cards and twice in a row got the Ace of Spades matched with the Ace of Swords for a dead baby, she stopped. She turned pale and looked at them. Then said slowly, with horror in her voice: ‘Aaron…does this mean that we must lock Libby into a virgin’s basket? Oh, no!”

“I told her gently that it wasn’t that bad. Little Libby would never be locked up that way or any way—we’d work it out so that the children would not marry and so that J.A. would not give his sister a baby even by accident. ‘Quit worrying, dear!’”

The computer said, “Lazarus, what method did you use to cheat in those card games? May I ask?”

“Why, Minerva, how could you think such a thing?

“I withdraw the question, Lazarus.”

“Of course I cheated! All sorts of ways; I *said* those two had never had time to play cards…whereas I had played with every sort of a deck and by endless rules. Minerva, I won my first oil well from a boy who made the mistake of putting readers into a game. Dear, I had Llita deal—but from a deck so cold it almost froze solid. I used all sorts of things—false cut, whorehouse cut, tops and bottoms, stacking the deck in front of their eyes. There wasn’t any money on the game; I simply had to convince them that inbreeding was for stock, not for their beloved children—and I did.”

(Omitted)

"—your bedroom here, Llita, yours and Joe's, I mean. Libby's room adjoins yours, while J.A. winds up down the hall. How you reshuffle later depends on the sex of the baby you are going to have and on how many more you choose to have and when—but putting a crib in with Libby must be considered temporary; you can't figure on using it indefinitely as an excuse to keep an eye on her.

"But this is merely a stopgap, like not leaving the cat alone with the roast. Kids are slick at beating such arrangements, and nobody has ever been able to keep a girl off her back when she decides it's time. When *she* decides—that's the key to the matter. So our pressing problem is to get these children into separate beds—then to see to it that Libby does not make a bad decision. Any reason Libby can't go with me to Skyhaven and visit Pattycake? And how about J.A., Joe, can you get along without him a while? Lots of room, dears—Libby can room with Pattycake, and J.A. can bunk with George and Woodrow and maybe teach 'em manners."

"Llita said something about imposing on Laura, Minerva, which I answered with a rude negative. 'Laura likes kids, dear; she is one ahead of you, yet she started a year later. She doesn't keep house; she simply bosses her staff, she's never had to work harder than suited her. Furthermore, she wants all of you to pay us a visit—an invitation I heartily second, but I don't think you two can get away until we find a buyer for this place. But I want Libby and J.A. *now—so* that I can give them blunt and practical instruction in genetics, using stock I've been inbreeding to show what I mean."

"Minerva, this particular breeding schedule I had started to teach my own offspring the bald truth about genetics, with careful records and grisly photographs of bad culls. Since you manage a planet which has over ninety percent Howards and the remaining mixed fraction mostly following Howard customs, you may not know that non-Howard cultures don't necessarily teach such things to their kids even in cultures open about sex.

"Landfall was then mostly short-lifers, only a few thousand Howards—and to avoid friction we did not advertise our presence even though it wasn't a secret—couldn't be; the planet had a Howard Clinic. But with Skyhaven a Dan'l-Boone distance from the nearest big town, if Laura and I wanted our children to have a Howard-style education, we had to teach them ourselves. So we did.

"When I was a kid, the grownups of my home country tried to pretend to kids that sex did not exist—believe it if you can! Not true of the little hellions Laura and I raised. They had not seen human copulation—I don't *think* they had—because it puts me off stride to have spectators. But they had seen it in other animals and had bred pets and kept records. The older two, Pattycake and George, had seen the birth of our youngest of the time because Laura had invited them to watch. This I strongly approve of, Minerva, but I have never urged one of my wives to permit it because I figure that a woman in labor should be indulged in every possible way. However, Laura had a streak of exhibitionism in her makeup.

"Anyhow, our kids could discuss chromosome reduction and the merits and demerits of linebreeding as knowledgeably as my own contemporaries when I was a kid could discuss the World Series—"

"Excuse me, Lazarus—that last term's referent?"

"Oh. Nothing important. One of the commercially induced surrogate interests of my childhood: Forget it dear; it is not worth cluttering your memories. I was about to say I asked Joe and Llita what J.A. and Libby knew about sexual matters—since Landfall had so diversified a background that it could be anything and I wanted to know where to start—especially as my oldest, Pattycake, had turned twelve and reached menarche at the same time and was smug about it, likely to boast.

"Turned out that Libby and J.A. were sophisticated in an ignorant, unscientific fashion about matching their parents. They were one up on my kids in one respect: copulation they had seen from birth, at least to the time Estelle's Kitchen had moved uptown—which I should have figured out from recalling the still more cramped living quarters of the original Estelle's Kitchen."

(7,200 words omitted)

"Laura was sharp with me and insisted that I not see them until I calmed down. She pointed out that Pattycake was almost as old as J.A., that it was nothing but play as Pattycake had had her four-year sterilization after menarche, and that, in any event, Pattycake had been on top.

"Minerva, I would not have spanked the kids no matter who had been on top. Intellectually I knew that Laura was right, and I had to agree that fathers tend to be possessive about daughters. I was pleased that Laura had gained the confidence of both kids so fully that they had neither tried very hard to keep from being caught, nor had they been scared when she happened to catch 'em at it. Perhaps J.A. was scared but Pattycake just said, 'Mama, you didn't knock.'"

(Omitted)

"—so we traded sons. J.A. liked farm life and never did leave us, whereas George turned out to have this perverse taste for cities, so Joe took him on and made a chef out of him. George was sleeping with Elizabeth—Libby, that is—I forget how long before they decided to hatch one and were married. A double wedding, the four youngsters remained close.

“But J.A.’s decision solved a problem for me: what to do with Skyhaven later. By the time Laura decided to leave me, all of my sons by her had heard the wild goose one way or another; George was the only one still on planet, and our daughters were married and not one of them to a farmer. Whereas J.A. had become my overseer and was defacto boss of Skyhaven the last ten years I was there.

“I might have worked some compromise with Roger Sperling if he hadn’t tried to grab the place. As it was, I deeded a half interest to Pattycake, sold the other half to my son-in-law J.A. on a mortgage, then discounted the paper to a bank and bought a better ship than I would have had I given that half interest to Roger and Laura. I made a similar deal, part gift and part sale, with Libby and George, of my share in Maison Long— and Libby changed her name to Estelle Elizabeth Sheffield-Long; there was continuity there as well—which pleased both me and her parents. It worked out well. Laura even came down and kissed me goodbye when I left.”

“Lazarus, I do not understand one factor. You have said that you do not favor marriage between Howards and ephemerals. Yet you let two of your children marry outside the Families.”

“Uh, correction, Minerva. One does not *let* children get married; they *do* get married, when and as and to whom they choose.”

“Correction noted, Lazarus.”

“But let’s go back to the night I intervened for Libby and J.A. That night I gave Llita and Joe everything that slave factor had turned over to me as proof of their old heritage— even the bill of sale—with a suggestion that they destroy the stuff or lock it up. Among those items was a series of photographs showing them growing up, year by year. The last one seemed to have been taken just before I bought them, and they confirmed it—two fully grown youngsters, one in a chastity girdle.

“Joe looked at that picture and said, “What a couple of clowns! We’ve come a long way, Sis—thanks to the Skipper.’ “‘So we have,’ she agreed, and studied the picture. ‘Brother, do you see what I do?’

“What?” he said, looking again.

“‘Aaron will see it. Brother, take off your clout’, she said, while starting to unwrap her sarong, ‘and pose with me against the wall. Not the selling pose, but the way we used to stand against a grid for these record pictures.’ She handed me that last picture in the series, and they stood and faced me.

“Minerva, in fourteen years they had not changed. Llita had had three kids and was just pregnant with her fourth and both of them had worked themselves silly…but, stripped naked, no makeup on her and her hair down, they looked as they had the first time I saw them. They looked like that last record shot—end of adolescence, somewhere between eighteen and twenty in Earth terms.

"Yet they *had* to be past thirty. Thirty-five Earth years old if those Blessed records were to be trusted.

"Minerva, I have just one thing to add. When I last saw them, they were past sixty in Earth years, about sixty-three if you accept the records from Blessed. Neither one had a gray hair, both had all their teeth—and Llita was pregnant again."

"Mutant Howards, Lazarus?"

The old man shrugged. "Isn't that a question-begging term, dear? If you use a long enough time scale, every one of the thousands of genes a flesh-and-blood carries is a mutation. But by the Trustees' rules, a person not derived from the Families' genealogies can be registered as a newly discovered Howard if he can show proof of four grandparents surviving at least to one hundred. And that rule would have excluded *me,* had I not been born into the Families. But on top of that, the age I had reached when I got my *first* rejuvenation is too great to be accounted for by the Howard breeding experiment. They claim today that they have located in the twelfth chromosome pair a gene complex that determines longevity like winding a clock. If so, who wound *my* clock? Gilgamesh? 'Mutation' is never an explanation; it is simply a name for an observed fact.

"Perhaps some natural long-lifer, not necessarily a Howard, had visited Blessed—the naturals are forever moving around, changing their names, dyeing their hair; they have all gone through history—and earlier. But, Minerva, you recall from my life as a slave on Blessed one odd and unsavory incident—"

(Omitted)

"—so my best guess is that Llita and Joe were my own great-great-grandchildren."

VARIATIONS ON A THEME

X

Possibilities

"Lazarus, was that why you refused to share 'Eros' with her?"

"Eh? But, Minerva, dear, I didn't reach that conclusion—or suspicion—that night. Oh, I admit to prejudice about sex with my descendants—you can take the boy out of the Bible Belt, but it is hard to take the Bible Belt out of the boy. Still, I had had a thousand years in which to learn better."

"So?" said the computer. "Was it simply that you still classed her as an ephemeral? That troubles me, Lazarus. In my own—deprived—state, I find that, like her husband Joe, I see *her* side of it. Your reasons seem excuses, not sufficient grounds to refuse her need."

"Minerva, I did not say I refused her."

"Oh! Then I infer that you granted her this boon. I feel a lessening of tension."

"I didn't say *that,* either."

"I find an implied contradiction, Lazarus."

"Simply because there are things I have *not* said, dear. Everything I tell you winds up in my memoirs; that was the deal I made with Ira. Or I can tell you to erase something, in which case I might as well not have told you at all. Perhaps my twentythree centuries do hold something worth recording. But I see no possible excuse for placing on record each time some darling lady shared with me simply for pleasure, not for progeny."

The computer answered thoughtfully, "I imply from this addendum that, while I am precluded from inferring anything about the boon Llita requested, your rule with respect to ephemerals extended only to marriage and to progeny."

"Nor did I say *that!"*

"Then I have not understood you, Lazarus. Conflict." The old man brooded, then answered slowly and sadly, "I think I said that marriage between a long-lived and a short-lived was a bad idea…and so it is…and I learned it the hard way. But that was long ago and far away—and when she died, part of me died. I stopped wanting to live forever." He stopped.

The computer said brokenly, "Lazarus— Lazarus, my beloved friend! *I am sorry!"*

Lazarus Long sat up straight and said briskly, "No, dear. Don't be sorry for me. No regrets—never any regrets. Nor would I change it if I could. Even if I had a time machine and could go back and change one cusp—I would not do so. No, not one instant, much less that cusp. Now let's speak of something else."

"Whatever you wish, dear friend."

"All right. You keep coming back to me and Llita, Minerva, and seem bothered that I denied her this 'boon.' But you don't know that I denied her anything and you certainly don't know that it was a 'boon.' Can be, surely—but not always, and often sex is not. Trouble is that you don't understand 'Eros,' dear, because you *can't;* you aren't built to understand it. I'm not running down sex; sex is swell, sex is wonderful. But if you put a holy aura around it—and that is what you are doing— sex stops being fun and starts being neurotic.

"Stipulating for argument that I 'denied Llita this boon,' it surely did not leave her sex starved. At worst I could possibly have miffed her a little. But she was not deprived. Llita was a hearty wench, and having to work too hard was the only thing that ever kept her off her back—or on top, or standing up, or kneeling, or swinging from the chandeliers—and I did make it possible for them to have more time for it. Joe and Llita were simple souls, uninhibited and uncorrupted, and of the four major interests of mankind—war, money, politics, and sex—they were interested only in sex and money. With some guidance from me they got plenty of both.

"Shucks, it can't matter now to say that, after they learned contraception techniques—almost as perfect then as now, and which I taught them but had no reason to mention—they had no superstitions or taboos to keep them from branching out for fun, and their pair-bonding was so strong as not to be endangered thereby. They were innocent hedonists, and if Llita failed to trip one tired old spaceman, she did trip plenty of others. And so did Joe. They had fun—plus the deep happiness of as perfect a marriage as I have ever observed."

"I am most pleased to hear it," Minerva answered. "Very well, Lazarus, I withdraw my questions and refrain from speculations about Mrs. Long and that 'tired old spaceman'—even though your statements show that you were neither tired, nor old, nor a spaceman at that time. You mentioned 'four major interests of mankind'—but did not include science and art."

"I didn't leave them out through forgetting them, Minerva. Science and art are occupations of a very small minority—a small percentage even of those people who claim to be scientists or artists. But you know that; you were simply changing the subject."

"Was I, Lazarus?"

"Pig whistle, dear. You know the parable of the Little Mermaid. Are you prepared to pay the price she paid? You can, you know." He added, "Don't pretend you don't know what I mean."

The computer sighed. "I think the question is "may,' not 'can.' A wheelbarrow has no rights. Nor do I."

"You're dodging, dear. 'Rights' is a fictional abstraction. No one has 'rights,' neither machines nor flesh-and-blood. Persons—both sorts!—have opportunities, not rights, which they use, or do not use. All you have going for you is that you are the strong right arm of the boss of this planet…plus the friendship of an old man who enjoys very special privileges for a most illogical reason but does not hesitate to take advantage of those privileges…plus, stored in your memories in Dora's number-two hold, all the biological and genetic data of Secundus Howard Clinic—best such library in the Galaxy, possibly, and certainly best for human biology. But what I asked was: *Will you pay the price?* Having your mental processes slowed down at least a million to one; data storage reduced by some unknown—but large—factor; some chance—again I can't say—of failure in achieving transmigration…and always the certainty of death as the ultimate outcome—death a machine need never know. You know that you can outlive the human race. Immortal."

"I would not choose to outlive my makers, Lazarus."

"So? You say that tonight, dear—but would you say it a million years from now? Minerva, my beloved friend—my only friend with whom I can be truthful—I feel certain that you have been toying with this idea ever since the Clinic's files were made part of your memories. But, even with your speed of thought, I suspect that you do not have the experience— the flesh-and-blood experience—with which to think it through. If you choose to risk this, you *cannot* be both machine and flesh-and-blood. Oh, certainly we have mixes—machines with human brains, and flesh-and-blood bodies controlled by computers. But what *you* want is to be a woman. Right? True or false?"

"Would that I were a woman, Lazarus!"

"So I knew, dear. And we both know why. But—think about this ! —even if you manage this risky change-and I don't know what the risks are; I am just an old shipmaster, retired country doctor, obsolete engineer; you are the one with all the data my race has accumulated about such things—suppose you manage it…and find that Ira will not take you to wife?"

The computer hesitated a full millisecond. "Lazarus, if Ira refuses me—refuses me utterly; he need not *marry* me—would you then be as difficult with me as you seem to have been with Llita? Or would you teach me 'Eros'?"

Lazarus looked astounded, then guffawed. "Touché! You ranged me, girl—you hulled me between wind and water! All right, dear, a solemn promise: If you do this…and Ira won't bed you, I'll take you to bed myself and do my best to wear you out! Or the other way around more likely; a male hardly ever outlasts a female. Okay, dear, I'm the second team—and I'll stick around till we know the outcome."

He chuckled. "My sweet, I am almost tempted to hope that Ira turns chicken—were it not you want him so badly. Let's discuss practical aspects. Can you tell me what it will take?"

"Only in theory, Lazarus; my memories do not show that it has ever been attempted. But it would be similar to a total clone rejuvenation in which computer help is used to transfer the memories of the old brain into its blank twin in the clone body. In another way it resembles what I do when I move the ‘me’ here in the Palace into my new ‘me’ in Dora’s hold.”

“Minerva, I suspect that it is more difficult—and far more risky—than either one. Different time rates, dear. Machine to machine you do in a split second. But that total-clone job takes, I think, a minimum of two years—rush it, and you wind up with an old dead body and a new idiot. No?”

“There have been such cases, Lazarus. But not in the past two centuries.”

“Well…my opinion isn’t worth anything. You must discuss it with an expert—and it must be one you can trust. Ishtar, perhaps, although she may not be the expert you need.”

“Lazarus, there *is* no expert in this venture; it has never been done. Ishtar can be trusted; I have discussed it with her.”

“What does she say?”

“That she does not know whether it can be done or not—in practice, that is, with success on the first attempt. But she is deeply sympathetic—she is a woman!—and is thinking of ways to make it less hazardous. She says that it will require the finest of gene surgery, plus facilities for full-adult cloning.”

“I guess I missed something. Starting a clone doesn’t take a topflight gene surgeon; I’ve done it myself. Then, if you plant the clone in utero and get it to take, a hostmother will hand you a baby in nine months. Safer. Easier.”

“But, Lazarus, *I* can’t move me into a baby’s skull. No room!”

“Um. Yes. True.”

“Even with a full-size adult brain I will have to choose most carefully what to take and what to leave behind. Nor can I be a simple clone: I must be a composite.”

“Mmm— I’m not sharp tonight. No, you would not want to be Ishtar’s twin, for example, with your own personality and selected knowledge imprinted on what would have been her brain, Hmm— Dear, may I offer you my twelfth chromosome pair?”

“Lazarus!”

“Don’t cry, girl; you’ll get your gears all rusty. I don’t know that there’s anything to the theory that reinforcement in a gene complex in that chromosome pair controls longevity. Even if it does, I might be handing you a rundown clock. You might be better off using Ira’s twelfth.”

“No. Nothing from Ira.”

“Do you expect to do this without his knowing it?” Lazarus then added thoughtfully, “Oh— Children, eh?”

The computer did not answer.

Lazarus said gently, “Should have known you meant to go whole hog. Then you won’t want to borrow from Hamadryad, either; she’s his daughter. Unless genetic charting shows that we can avoid any hazard. Mmm— Dear, you want as mixed a composite as can be managed, do you not? So that your clone will be a unique flesh-and-blood, not too closely copied from any other zygote. Twentythree parents perhaps? Is that what you had in mind?”

“I think that would be best, Lazarus, since that could be done without separating paired chromosomes—simpler surgery and no possibility of introducing an unexpected reinforcement. If it were possible to find twentythree—satisfactory—donors who were willing.”

“Who said they had to be willing? We’ll steal ‘em, dear. Nobody owns his genes; he’s merely their custodian. They are passed to him willy-nilly in the meiotic dance; he passes them along to others through the same blind chances. There must be many thousands of tissue cultures over at the Clinic, each with many thousands of cells—so who’s to know or care if we borrow one cell from each of twentythree cultures?—if we’re slick about it. Don’t fret about ethics; it’s like stealing twentythree grains of sand from a large beach.

“I don’t give a hoot about the Clinic’s rules; I suspect that we’ll be hip-deep in proscribed techniques all through this. Hmm— Those Clinic records you’ve stored in Dora: Do they include genetic charting of tissue cultures on hand? Case histories of their donor-consigners?”

“Yes, Lazarus. Although personal records are confidential.”

“Who cares? Ishtar said you could study both ‘confidential’ and ‘secret’—as long as you kept it to yourself. So pick the twentythree parents you want—while I worry about how to steal them. Stealing is more in my line, anyhow. I don’t know what criteria you will use, but I offer one mild suggestion: If the selection you have to choose from permits it, each of your parents should be healthy in all respects and as brainy as possible—by their established records in life as shown by their case histories, not alone by their genetic charts.” Lazarus thought about it. “That mythical time machine I mentioned earlier would be a convenience. I would like to look over all twentythree after you pick them—and some of them may be dead. The donors I mean, not the tissue cultures.”

“Lazarus, if other characteristics are satisfactory, is there any reason not to select as well for physical appearance?”

“Why worry about it, dear? Ira is not the sort of man to insist on Helen of Troy.”

“No, I don’t think he is. But I want to be tall—tall as lshtar—and slender, with small breasts. And straight, brown hair.”

“Minerva…why?”

“Because that is the way I look. You said so. You did say so!”

Lazarus blinked at the gloom and hummed softly: *"She's a good sport…I can spring her… for a fin or even a sawbuck"—then* said sharply: "Minerva, you're a crazy, mixed-up machine. If the best combination of traits results in your being a short, plump blonde with big tits—buy *it!* Don't worry about an old man's fantasies. I'm sorry I mentioned that imaginary description."

"But, Lazarus, I said '*if* other characteristics are satisfactory—' To get that physical appearance I need search only with respect to three autosome pairs; there is no conflict, the search is already complete within all parameters we have discussed thus far. And that *is* the—is 'I'?—no, *me!* I've known it since you told me. But—from things you have said—and others that you did not say—I feel that I need your permission to look like that."

The old man lowered his head and covered his face. Then he looked up. "Go ahead, dear—look like her. I mean 'look like yourself.' Like your mind's-eye picture of yourself. You'll find it hard enough to learn to be flesh-and-blood without the added handicap of not looking the way you feel you ought to look."

"Thank you, Lazarus."

"There will be problems, dear, even if everything goes well. For example, has it occurred to you that you will have to learn to talk all over again? Even learn to see and to hear? When you move yourself over into your clone body and leave nothing behind but a computer, you won't suddenly be an adult. Instead, you'll be a weird sort of baby in an adult body, with the world a buzzing confusion around you and totally strange. You may find it frightening. I'll be there, I promise I will be there and holding your hand. But you won't know me; your new eyes won't abstract a gestalt of me until you learn to use them. You won't understand a word I say—did you realize that?"

"I do realize it, Lazarus. I did know it, I have given it much thought. Getting into my new body—without destroying the computer that I am now…which I must not, as Ira will need it and so will Ishtar—making that transition is the most critical phase. But if I make it, I promise you that I will *not* be frightened by the strangeness. Because I know that I will have loving friends around me, cherishing me, keeping me alive, not letting me hurt myself nor be hurt—while I'm learning to be a flesh-and-blood."

"That you will have, dear."

"I know and I am not worried. So don't *you* worry, beloved Lazarus—I don't think of it now. Why did you say, earlier, 'that mythical time machine'?"

"Eh? How would you describe it?"

"I would describe it as an 'unrealized potential.' But 'mythical' implies impossibility."

"Eh? Keep talking!"

"Lazarus, I learned from Dora, when she taught me the mathematics of n-space astrogation, that every jump transition involves a decision as to when to reenter the time axis."

"Yes, certainly. Since you are cut off from the framework of the speed-of-light you could go as many years astray as there are lightyears involved in the jump. But that's not a time machine."

"It isn't?"

"Hmm— It's a disturbing thought—it feels like intentionally making a bad landing. I wish Andy Libby were here. Minerva, why didn't you mention this before?"

"Should I have put it into your Zwicky Box? You turned down time travel forward…and I ruled out time travel into the past because you said you wanted something *new.*"

INTERMISSION

Excerpts from the Notebooks of Lazarus Long

Always store beer in a dark place,

By the data to date, there is only one animal in the Galaxy dangerous to man—man himself. Sc he must supply his own indispensable competition. He has no enemy to help him.

Men are more sentimental than women. It blurs their thinking.

Certainly the game is rigged. Don't let that stop you; if you don't bet, you can't win.

Any priest or shaman must be presumed guilty until proved innocent.

Always listen to experts. They'll tell you what can't be done, and why. Then do it.

Get a shot off *fast.* This upsets him long enough to let you make your second shot perfect.

There is no conclusive evidence of life after death. But there is no evidence of any sort against it. Soon enough you will *know.* So why fret about it?

If it can't be expressed in figures, it is not science; it is opinion. It has long been known that one horse cm run faster than another—but *which one?* Differences are crucial.

A fake fortuneteller can be tolerated. But an authentic soothsayer should be shot on sight. Cassandra did not get half the kicking around she deserved.

Delusions are often functional. A mother's opinions about her children's beauty, intelligence, goodness, et cetera ad nauseam, keep her from drowning them at birth.

Most “scientists” are bottle washers and button sorters.

A “pacifist male” is a contradiction in terms. Most self-described “pacifists” are not pacific; they simply assume false colors. When the wind changes, they hoist the Jolly Roger.

Nursing does not diminish the beauty of a woman’s breasts; it enhances their charm by making them look lived in and happy.

A generation which ignores history has no past—and no future.

A poet who reads his verse in public may have other nasty habits.

What a wonderful world it is that has girls in it!

Small change can often be found under seat cushions.

History does not record anywhere at any time a religion that has any rational basis. Religion is a crutch for people not strong enough to stand up to the unknown without help. But, like dandruff, most people do have a religion and spend time and money on it and seem to derive considerable pleasure from fiddling with it.

It’s amazing how much “mature wisdom” resembles being too tired.

If you don’t like yourself, you *can’t* like other people.

Your enemy is never a villain in his own eyes. Keep this in mind; it may offer a way to make him your friend. If not, you can kill him without hate—and quickly.

A motion to adjourn is always n order.

No state has an inherent right to survive through conscript troops and, in the long run, no state ever has. Roman matrons used to say to their sons: “Come back with your shield, or on it.” Later on, this custom declined. So did Rome.

Of all the strange “crimes” that human beings have legislated out of nothing, “blasphemy”is the most amazing—with “obscenity” and “indecent exposure” fighting it out for second and third place.

Cheops’ Law: Nothing *ever* gets built on schedule or within budget.

It is better to copulate than never.

All societies are based on rules to protect pregnant women and young children. All else is surplusage, excrescence, adornment, luxury, or folly, which can—and must—be dumped in emergency to preserve this prime function. As racial survival is the *only* universal morality, no other basic is possible. Attempts to formulate a “perfect society” on any foundation other than “Women and children first!” is not only witless, it is automatically genocidal. Nevertheless, starry-eyed idealists (all of them male) have tried endlessly—and no doubt will keep on trying.

All men are created unequal.

Money is a powerful aphrodisiac. But flowers work almost as well.

A brute kills for pleasure. A fool kills from hate.

There is only one way to console a widow. But remember the risk.

When the need arises—and it does—you must be able to shoot your own dog. Don't farm it out—that doesn't make it nicer, it makes it worse.

Everything in excess! To enjoy the flavor of life, take big bites. Moderation is for monks.

It may be better to be a live jackal than a dead lion, but it is better still to be a live lion. And usually easier.

One man's theology is another man's belly laugh.

Sex should be friendly. Otherwise stick to mechanical toys; it's more sanitary.

Men rarely (if ever) manage to dream up a god superior to themselves. Most gods have the manners and morals of a spoiled child.

Never appeal to a man's "better nature." He may not have one. Invoking his self-interest gives you more leverage.

Little girls, like butterflies, need no excuse.

You can have peace. Or you can have freedom. Don't ever count on having both at once. -

Avoid making irrevocable decisions while tired or hungry. N.B.: Circumstances can force your hand. So think ahead!

Place your clothes and weapons where you can find them in the dark.

An elephant. A mouse built to government specifications.

Throughout history, poverty is the normal condition of man. Advances which permit this norm to be exceeded—here and there, now and then—are the work of an extremely small minority, frequently despised, often condemned, and almost always opposed by all right-thinking people. Whenever this tiny minority is kept from creating, or (as sometimes happens) is driven out of a society, the people then slip back into abject poverty.

This is known as "bad luck."

In a mature society, "civil servant" is semantically equal to "civil *master.*"

When a place gets crowded enough to require ID's, social collapse is not far away. It is time to go elsewhere. The best thing about space travel is that it made it possible to go elsewhere.

A woman is not property, and husbands who think otherwise are living in a dreamworld.

The second best thing about space travel is that the distances involved make war very difficult, usually impractical, and almost always unnecessary. This is probably a loss for most people, since war is our race's most popular diversion, one which gives purpose and color to dull and stupid lives. But it is a great boon to the intelligent man who fights only when he must—never for sport.

A zygote is a gamete’s way of producing more gametes. This may be the purpose of the universe.

There are hidden contradictions in the minds of people who “love Nature” while deploring the “artificialities” with which “Man has spoiled ‘Nature.’” The obvious contradiction lies in their choice of words, which imply that Man and his artifacts are *not* part of “Nature”—but beavers and their darns *are.* But the contradictions go deeper than this prima-fade absurdity. In declaring his love for a beaver dam (erected by beavers for beavers’ purposes) and his hatred for dams erected by men (for the purposes of men) the Naturist reveals his hatred for his own race—i.e., his own self-hatred.

In the case of “Naturists” such self-hatred is understandable; they are such a sorry lot. But hatred is too strong-an-emotion to feel toward them; pity and contempt\are the most they rate.

As for me, willy-nilly I am a man, not a beaver, and H. sapiens is the only race I have or can have. Fortunately for me, I *like* being part of a race made up of men and women—it strikes me as a fine arrangement -and perfectly “natural” Believe it or not, there were “Naturists” who opposed the first flight to old Earth’s Moon as being “unnatural” and a “despoiling of Nature.”

“No man is an island—” Much as we may feel and act as Individuals, our race is -a single organism, always growing and branching—which must be pruned regularly to be healthy.

This necessity need not be argued; anyone with eyes can see that any organism which grows without limit always dies in its own poisons. The only rational question is whether pruning is best done before or after birth.

Being an incurable sentimentalist I favor the former of these methods—killing makes me queasy, even when it’s a case of “He’s dead and I’m alive and that’s the way I wanted it to be.”

But this may be a matter of taste. Some shamans think that it is better to be killed in a war, or to die in childbirth, or to starve in misery, than never to have lived at all. They may be right.

But I don’t have to like it—and I don’t.

Democracy is based on the assumption that a million men are wiser than one man. How’s that again? I missed something.

Autocracy is based on the assumption that one man is wiser than a million men. Let’s play that over again, too. Who decides?

Any government will work if authority and responsibility are equal and coordinate. This does not insure “good” government; it simply insures that it will work. But such governments are rare—most people want to run things but want no part of the blame. This used to be called the “backseat-driver syndrome.”

What are the facts? Again and again and again—what are the *facts?* Shun wishful thinking, ignore divine revelation, forget what "the stars foretell," avoid opinion, care not what the neighbors think, never mind the unguessable "verdict of history"—what are the facts, and to how many decimal places? You pilot always into an unknown future; facts axe your single clue. Get the facts!

Stupidity cannot be cured with money, or through -education, or by legislation. Stupidity is not a sin, the victim can't help being stupid. But stupidity is the only universal capital crime; the sentence is death, there is no appeal, and execution is carried out automatically and without pity.

God is omnipotent, omniscient, and omnibenevolent—it says so right here on the label. If you have a mind capable of believing all three of these divine attributes simultaneously, I have a wonderful bargain for you. No checks, please. Cash and in small bills.

Courage is the complement of fear. A man who is fearless cannot be courageous. (He is also a fool.)

The two highest achievements of the human mind are the twin concepts of "loyalty" and "duty." Whenever these twin concepts fall into disrepute—get out of there fast! You may possibly save yourself, but it is too late to save that society. It is doomed.

People who go broke in a big way never miss any meals. It is the poor jerk who is shy a half slug who must tighten his belt.

The truth of a proposition has nothing to do with its credibility. And vice versa.

Anyone who cannot cope with mathematics is not fully human. At best he is a tolerable subhuman who has learned to wear shoes bathe, and not make messes m the house.

Moving parts in rubbing contact require lubrication to avoid excessive wear. Honorifics and formal politeness provide lubrication where people rub together. Often the very young, the untraveled, the naïve, the unsophisticated deplore these formalities as "empty" "meaningless," or "dishonest," and scorn to use them. No matter bow "pure" their motives, they thereby throw sand into machinery that does not work too well at best.

A human being should be able to change a diaper, plan an invasion, butcher a hog, coon a ship, design a building, write a sonnet, balance accounts, build a wall, set a bone, comfort the dying, take orders, give orders, cooperate, act alone, solve equations, analyze a new problem, pitch manure, program a computer, cook a tasty meal, fight efficiently, die gallantly. Specialization is for insects.

The more you love, the more you *can* love—and the more intensely you love. Nor is there any limit on how *many* you can love. If a person had time enough, he could love all of that majority who are decent and just.

Masturbation is cheap, clean, convenient, and free of any possibility of wrongdoing—and you don't have to go home in the cold. But it's *lonely.*

Beware of altruism. It is based on self-deception, the root of all evil.

If tempted by something that feels "altruistic," examine your motives and root out that self-deception. Then, if you still want to do it, wallow in it!

The most preposterous notion that H. sapiens has ever dreamed up is that the Lord God of Creation, Shaper and Ruler of all the Universes, wants the saccharine adoration of His creatures, can be swayed by their prayers, and becomes petulant if He does not receive this flattery. Yet this absurd fantasy, without a shred of evidence to bolster it, pays all the expenses of the oldest, largest, and least productive Industry in all history.

The second most preposterous notion is that copulation is inherently sinful.

Writing, is not necessarily something to be ashamed of—but do it in private and wash your hands afterwards.

$100 placed at 7 percent interest compounded quarterly for 200 years will increase to more than $100,000,000—by which time it will be worth nothing.

Dear, don't bore him with trivia or burden him with your past mistakes. The happiest way to deal with a man is never to tell him anything he does not need to know.

Darling, a true lady takes off her dignity with her clothes and does her whorish best. At other times you can be as modest and dignified as your *persona* requires.

Everybody lies about sex.

If men were the automatons that behaviorists claim they are, the behaviorist psychologists could not have invented the amazing nonsense called "behaviorist psychology." So they are wrong from scratch—as clever and as wrong as phlogiston chemists.

The shamans are forever yacking about their snake-oil "miracles." I prefer the Real Mccoy—a pregnant woman.

If the universe has any purpose more important than topping a woman you love and making a baby with her hearty help, I've never heard of it.

Thou shalt remember the Eleventh Commandment and keep it Wholly.

A touchstone to determine the actual worth of an "intellectual"—find out how he feels about astrology.

Taxes are not levied for the benefit of the taxed.

There is no such thing as “social gambling.” Either you are there to cut the other bloke’s heart out and eat it—or you’re a sucker. If you don’t like this choice—don’t gamble.

When the ship lifts, all bills are paid. No regrets.

The first time I was a. drill instructor I was too inexperienced for the job—the things I taught those lads must have got some of them killed. War is too serious a matter to be taught by the inexperienced.

A competent and self-confident person *is* incapable of jealousy in anything. Jealousy is invariably a symptom of neurotic insecurity.

Money is the sincerest of all flattery. Women love to be flattered. So do men.

You live and learn. Or you don’t live long.

Whenever women have insisted on absolute equality with men, they have invariably wound up with the dirty end of the stick. What they are and what they can do makes them superior to men, and their proper tactic it to demand special privileges, all the traffic will hear. They should never settle merely for equality. For women, “equality” is a disaster.

Peace is an extension of war by political means. Plenty of elbow room is pleasanter—and much safer.

One man’s “magic” is another man’s engineering. “Supernatural” is a null word.

The phrase “we (I) (you) simply *must—”* designates something that need not be done. ‘That goes without saying” is a red warning. “Of course” means you had best check it yourself. These small-change clichés and others like them, when read correctly, are reliable channel markers.

Do not handicap your children by making their lives easy.

Rub her feet.

If you happen to be one of the fretful minority who can do creative work, never force an idea; you’ll abort it if you do.

Be patient and you’ll give birth to it when the time is ripe. Learn to wait.

Never crowd youngsters about their private affairs—sex especially. When they are growng up, they are nerve ends all over, and resent (quite properly) any invasion of their privacy. Oh, sure, they’ll make mistakes—but that’s *their* business, not yours. (You made your own mistakes, did you not?)

Never underestimate the power of human stupidity

VARIATIONS ON A THEME

XI

The Tale of the Adopted Daughter

Stand with me on Man's old planet, gazing north when sky has darkened; follow down the Dipper's handle, half again and veering leftward— Do you see it? Can you sense it? Nothing there but cold and darkness. Try again with both eyes covered, try once more with inner vision, hearken now to wild geese honking, sounding through the endless spaces, bouncing off the strange equations— *There* it glistens! Hold the vision, warp your ship through crumpled spaces. Gently, gently, do not lose it. Virgin planet, new beginnings— Woodrow Smith, of many faces, many names, and many places, led this band to New Beginnings, planet clean and bright as morning. End of line, he told his shipmates. Endless miles of untouched prairie, endless stands of uncut timber, winding rivers, soaring mountains, hidden wealth and hidden dangers. Here is life or here is dying; only sin is lack of trying. Grab your picks and grab your shovels; dig latrines and build your hovels—next year better, next year stronger, next year's furrows that much longer.

Learn to grow it, learn to eat it. You can't buy it; learn to *make* it! How d'you know until you've tried it? Try again and keep on trying— Ernest Gibbons, né Woodrow Smith, sometimes known as Lazarus Long, et al., President of New Beginnings Bank of Commerce, walked out of the Waldorf Dining Room. He stood on the veranda, picking his teeth and looking over the busy street scene. Half a dozen saddle mules and a loper (muzzled) were hitched just below him. Up the street to the right a mule train from out back was unloading at the dock of the Top Dollar Trading Post (E. Gibbons, Prop.). A dog lay in the dust in the middle of the street; mounted traffic went around him. Across the street to his left a dozen children played some noisy game in the yard of Mrs. Mayberry's Primary School.

He could count thirty-seven people without moving from that spot. What a change eighteen years made! Top Dollar was no longer the only settlement, or even the largest. New Pittsburgh was larger (and dirtier), and both Separation and Junction were large enough to be called towns; This from only two shiploads and in a colony that had almost starved its first winter.

He did not like to think about that winter. That one family— cannibalism had not actually been *proved—still,* it was just as well that they were all dead. Forget it. The weak ones died, and the bad ones died or were killed; the stock that survived was always stronger, smarter, more decent. New Beginnings was a planet to be proud of, and it would get better and better and better for a long time.

Still, almost twenty years was long enough to stay in one place; it was time to ship out again. In many ways it had been more fun when he and Andy, God rest his sweet innocent soul, had gone banging around the stars together, lining up real estate and never staying longer than necessary to assess potentialities. He wondered if his son Zaccur would be back on time with a third load of hopefuls.

He lifted his kilt and scratched above his right knee—checked his blaster—hitched at the belt band on the left, checked his needle gun—scratched the back of his neck, made sure of his second throwing knife. Ready to face the public, he considered whether to go to his desk at the bank or to the trading post and check that incoming shipment. Neither appealed to him.

One of the hitched mules nodded at him. Gibbons looked at him, then said, "Hi, Buck. How are you, boy? Where's your boss?"

Buck closed his lips tightly, then said explosively, "Pannnk!"

That settled one point: If Clyde Leamer had hitched here instead of in front of the bank, it meant that Clyde intended to use the, side door and was looking for another loan. Let's see what effort he makes to find me.

Skip the trading post, too—not only would Clyde look there next but it wasn't fair to make Rick nervous by showing up before he had time to steal his usuals; good storekeepers were hard to come by. Rick was always honest—5 per cent, no more, no less.

Gibbons felt in his shirt pocket, found a sweet, gave it to Buck on the flat of his hand. The mule took it neatly, nodded thanks. Gibbons reflected that these mutant mules, fertile and breeding true, were the biggest help to colonizing since the Libby Drive. They took coldsleep easily—when you shipped swine, half your breeding stock arrived as pork—and they could look out for themselves in many ways; a mule could stomp a wild loper to death.

He said, "So long, Buck. Going for a walk. Walk. Tell Boss."

"Shoh-rrrongl" acknowledged the mule, "Pye!"

Gibbons turned left and headed out of town while considering how big a loan to offer Clyde Learner with Buck as security. A good-tempered, smart stallion mule was a prize— and about the only unmortgaged asset Clyde had left. Gibbons had no doubt that a loan on Buck would put Clyde back on his feet—literally—as soon as the loan was due. Gibbons felt no pity. A man who couldn't cut the mustard on New Beginnings was worthless; no sense in propping him up.

No, don't lend Clyde a dollar! Offer to buy outright—at 10 percent aver a fair price. A decent hardworking animal should not belong to a lazy bum. Gibbons had no need for a saddle mule—but it would do him good to ride an hour or so each day. Man got flabby sitting in a bank.

Marry again and give Buck to his bride as a wedding present—A pleasant thought, but the only Howards on planet were married couples and not one with a husband-high daughter—as well as all being in masquerade until the place grew populous enough that the Families would set up a clinic here. Safer. Once burned, forever shy. He avoided Howards, and they avoided each other, on the surface. Be nice to be married again, though. The Magee family—actually Barstows—had two or three girls growing up. Maybe he should pay them a call someday.

In the meantime— He felt gusty and good, stuffed with scrambled eggs and wicked thoughts, and wondered where there was a female who felt the same way and could duck out and share their interest. Ernie knew several who shared his enthusiasm—but not available at this time of day, not for a casual romp. Which was all he was wanted; it was not fair to engage in anything serious with an ephemeral no matter how sweet she was—especially if she was truly sweet.

Banker Gibbons was at the edge of town and about to turn back when he noticed smoke from a house farther out—the Harper place. What had been the Harper place, he amended, before they homesteaded outback, but now occupied by, uh, Bud Brandon and his wife, Marje—nice young couple from the second shipload. One child? He thought so.

Running a fireplace on a day like this? Possibly, burning trash—Hey, that smoke is *not* from the chimney!

Gibbons broke into a run.

As he reached the Harper place, the entire roof was burning. Lazarus skidded to a stop and tried to judge the situation. Like most older houses, the Harper place had no ground-floor windows and but a single door that fit tightly and opened outward—a design for a time when lopers and dragons were ubiquitous.

Opening that door would be opening the damper on a burning fire.

He did not waste an. instant debating it; that door must stay closed. He ran around the house, spotting windows of the upper floor and looking for means to reach one—a ladder or anything. Was anyone inside? Didn't the Brandons even have knotted-rope fire escapes? Probably not; good rope came from Earth and retailed at ninety dollars a meter— the Harpers would not have left any behind.

A window with its shutters open and smoke pouring out— He yelled, *"Hey! Anybody home?"* A figure showed at the window, and something was thrown out to him.

Automatically he made a good catch, spotting what it was while in the air, going to the ground with it to soften the impact. A small child — He looked up, saw an arm hanging over the windowsill.

The roof fell in, the arm disappeared.

Gibbons scrambled up fast, holding, the little boy—no, little girl, he corrected—and moved hastily back from the holocaust. He did not consider the possibility that someone might be alive in that raging fire; he simply hoped that they had died quickly and gave it no more thought. He cradled the child in his arms. “Are you all right, honey?”

“I guess so,” she answered, then added gravely, “but Mama’s awful sick.”

“Mama is all right now, dear,” he said gently, “and so is Papa.”

“You’re *sure?”* The child twisted in his arms, tried to see the burning house.

He interposed his shoulder. “I’m sure.” He held her more firmly and started walking.

Halfway back to town they encountered Clyde Learner, mounted on Buck. Clyde reined up. “Oh, there you are! Banker, I want to talk to you.”

“Stow it, Clyde.” —“Huh? But you don’t *understand;* I’ve *got* to have some money. Nothing but bad luck the whole season. Seems like everything I touch—”

“Clyde—shut your yap!”

“What?” Learner seemed to notice for the first time that the banker was carrying something. “Hey! ain’t that the Brandon kid?”

“‘Yes.”

“Thought so. Now about this, loan—”

“I told you to shut up. The bank won’t lend you another dollar.”

“But you’ve got to *listen.* Seems to me the community ought to help a farmer who’s had bad luck. If it weren’t for the farmers—”

“You listen. If you spent as much time working as you do talking, you wouldn’t need to talk about ‘bad luck.’ Even your stable is dirty. Mm…what price do you want for that stud brute?”

“Buck’? Why, I wouldn’t sell *Buck.* But here’s what I had in mind, Banker. You’re a kindly man even if you do talk rough and I bow you won’t see my kids starve. Now Buck is a valuable property, and I figure he ought to be security for about—well, about, say—”

“Clyde, the best thing you can do for your kids is to cut your throat. Then people would adopt them. No loan, Clyde—not a dollar, not a dime. But I’ll buy Buck myself, right now. Name a price.”

Learner gulped and hesitated. “Twenty-five thousand.”

Gibbons started walking toward town. Learner said hastily, “Twenty thousand!” Gibbons did not answer.

Learner reined the mule around, turned in front of the banker, and stopped. “Banker, you’ve got me by the short hairs. Eighteen thousand and you’re stealing him.”

“Learner, I won’t steal from you. Put him up for auction, and I might bid. Or might not. How much do you think he'll bring at auction?"

"Uh…fifteen thousand."

"You think so? I don't. I know how old he is without looking at his teeth, and just what you paid for him, off the ship. I know what people around here can afford and will pay. But go ahead; he's yours. Bear in mind that if you put a low-bid price against him, you owe the auctioneer ten percent even if he doesn't sell. But it's your business, Clyde. Now get out of my way; I want to get this child into town and lying down; she's had a bad time."

"Uh…what *will* you pay?"

"Twelve thousand."

"Why, that's robbery!"

"You don't have to take it. Suppose an auction brings fifteen thousand dollars—as you hope. Your net is thirteen five. But suppose an auction brings only ten thousand, which I find more likely. You net nine thousand. G'bye, Clyde; I'm in a hurry."

"Well—thirteen thousand?"

"Clyde, I named my top price. You've dealt with me often enough to know that when I say it's top dollar, then it's top dollar. But—throw in that saddle and bridle and answer one question and I'll sweeten it by five hundred dollars."

"What question?"

"How did you happen to migrate?"

Learner looked startled, then laughed unmirthfully. "Because I was crazy, if you want to know the truth."

"Aren't we all? That's hardly an answer, Clyde."

"Well…my old man is a banker—and as hardnosed, as *you* are! I was doing all right, I had a proper, respectable job, teaching. College. But the pay wasn't much, and my old man was always snotty about it when I ran a little short. Snoopy. Disparaging Finally I got so sick of it that I asked him what he would think of paying Yvonne s fare and mine in the 'Andy'J.'? Migrate. Be rid of us.

To my surprise he agreed But I didn't back out. I knew that a man with a fine education like mine could get ahead anywhere and it wasn't like we was being dumped on some wild planet; we were second wave you may remember.

Only it *was* a wild planet and I've had to do things that no gentleman ought to have to touch. But you just wait Banker, kids around here are growing up and there will be a place for higher education, not the trivia Mrs. Mayberry teaches in that so-called school of hers. That's where I come in— you'll be calling me 'Professor' yet, and speaking respectfully.

'You'll see."

"Good luck to you. Are you accepting my offer? Twelve thousand five hundred, net, including bridle and saddle."

"Uh…I *said* I was, didn't I?"

"You didn't say. You still have not."

"I accept."

The girl child had listened quietly, face serious. Gibbons said to her, "Can you stand up a moment, dear?"

He put her down; she trembled and held onto his kilt. Gibbons dug into his sporran-, then using Buck's broad rump as a desk, wrote a draft and a bill of sale. He handed them to Learner. "Take that to Hilda at the bank. Sign the bill of sale and give it back to me."

Silently Learner signed, looked at the draft and pocketed it, handed over the bill of sale. "Thanks; Banker—you old skinflint. Where do you want him delivered?"

"You've delivered him. Dismount."

"Huh? How do I get to the bank? How am I supposed to get home?"

"You walk."

"What? Well, of all the sneaky, underhanded tricks! You get the mule when I get the cash. At the bank."

"Learner, I paid top dollar for that mule because I need him *now*. But I see that we did not have a meeting of minds. Okay, hand back my draft and here's your bill of sale."

'Learner looked startled. "Oh, no, you don't! You made a deal."

"Then get off my mule *at* once"—Gibbons just happened to rest his hand on the handle of the all-purpose knife every man carried—"and dogtrot into town and you'll be there before Hilda closes,. Now *move."* His eyes, cold and blank, held Learner's.

"Can't you take a joke?' Learner grumbled as he swung down. He started walking rather fast toward town.

"Oh, Clyde!"

Learner stopped; "What do you want *now?"*

"If you see the Volunteer Fire Team headed this way, tell them it's too late; the Harper place is gone. But tell McCarthy I said it wouldn't hurt to send a couple of men to check."

"Okay, okay!"

"And, Clyde—what was it you used to teach?'

"Teach'? I taught 'Creative Writing.' I *told* you I had a good education."

"So you did. Better hurry; Hilda closes promptly, she has to pick up her kids at Mrs. Mayberry's school."

Gibbons ignored Learner's answer, picked up the little girl, then said, "Steady, Buck. Stand still, old fellow," He swung the child high, settled her gently astride the mule's withers. "Hang onto his mane."

He toed the left stirrup, swung up behind her, scooted back in the saddle, then lifted her again and placed her somewhat in his, lap but mostly in the saddle just back of the pommel. “Hang onto the horn, dear. Both hands. Comfortable?”

“This is fun!”

“Lots of fun, baby girl. Buck! Hear me, boy?”

The mule nodded.

“Walk. Walk back to town. Slow walk. Steady. Don’t stub your feet. Get me? I’m not going to use the reins.”

“Shrrow…*Rrrawkr”*

“Right, Buck.” Gibbons took a hitch in the reins, let them fall loosely on Buck’s neck—squeezed the mule with his knees, let him go. Buck ambled toward town.

After a few minutes the little girl said gravely, “What about Mama and Daddy?”

“Mama and Daddy are all right. They know I’m taking care of you. What’s your name, dear?”

“Dora.”

“That’s a nice name, Dora. A pretty name. Do you want to know my name?”

“That man called you ‘Banker.’”

“That’s not my name, Dora; that’s just something I do sometimes. My name is…‘Uncle Gibbie.’ Can you say that?”

“’Uncle Gibbie.’ That’s a funny name.”

“So it is, Dora. And this is Buck we are riding. He is a friend of mine, and he’ll be your friend, too, now—so say hello to Buck.”

“Hello, Buck.”

“Hayrrroh Jorrrah!”

“Say, he talks lots plainer than most mules! Doesn’t he?”

“Buck is the best mule on New Beginnings, Dora And the smartest. When we get rid of this bridle—Buck doesn’t need a bit in his mouth —he’ll be able to talk plainer still and you can each him more words. Would you like that?”

“Oh, yes!” Dora added, “If Mama lets me.”

“It’s’ all right with Mama. Do you like to sing, Dora?”

“Oh, sure! I know a clapping song. But we can’t clap right now. Can we?”

“Right now I think we had better hang on tight.” Gibbons rapidly reviewed in his mind his repertoire of happy songs, rejected a round dozen as unsuitable for young ladies. “How about this one?

“There’s a pawnshop
On the corner
Where I usually keep my overcoat.

"Can you sing that, Dora?'

"Oh, that's *easy!"* The baby girl sang it in a voice so high that Gibbons was reminded of a canary. "Is that all, Uncle Gibbie? And what's a 'paunshot'?"

"It's a place to keep overcoats when you don't need them. Lots more, Dora. Thousands and thousands of verses."

"Thousands and thousands—' Why, that's almost as much as a hundred. Isn't it?"

"Almost, Dora. Here's another verse:

"There's a trading post
By the pawnshop
Where my sister sells candy.

"Do you like candy, Dora?"

"Oh, yes! But Mama says its 'spensive."

"Won't be so expensive next year, Dora; there'll be more sugar beets cropped. But…Open your mouth and close your eyes, and I'll give you something for a s'prise!'" 'He felt around in his shirt pocket, then said, "Oh, sorry, Dora; the surprise will have to wait until I can get to the trading post; Buck got the last one. Buck likes candy, too."

"He does?"

"Yes and I'll teach you how to give it to him without losing a finger by mistake. But candy isn't too good for him, so he gets it only as a special surprise. For being a good boy. Okay, Buck?"

"Oh-gay!…Pawsss!"

Mrs. Mayberry's school was letting out as Gibbons halted Buck in front of it. When he lifted Dora down, she seemed very tired, so he picked her up again. "Wait, Buck." The stragglers among the pupils stared but separated and let him through.

"Afternoon, Mrs. *Mayberry."* Gibbons had gone there almost by instinct. The schoolmistress was a gray-haired widow, fifty or more, who had outlasted two husbands, and was coping sensibly with her meager chance of finding a third, preferring to support herself rather than live with one of her daughters, stepdaughters, or daughters-in-law. She was one who shared Ernest Gibbons' enthusiasm for the hearty pleasures in life but was as circumspect about it as he was. He considered her sensible in every way—a prime prospect for marriage were it not for the unfortunate fact that they ran on different time rates.

Not that he let her know this. He had not been a disclosed Howard when they both had arrived in the first shipload, and, although freshly rejuvenated on Secundus when he had reappeared on Earth and organized the migration, he had elected to be thirty-five or so (cosmetically). Since that time he had carefully aged himself each year; Helen Mayberry thought of him as a contemporary, returned his friendship, shared mutual pleasure with him from time to time without trying to own him. He respected her highly.

"Good afternoon, Mr. Gibbons. Why, it's Dora! We missed you, dear; what happened! And— Is that a bruise?" She looked closely, said nothing about the fact that the little girl was filthy dirty.

She straightened up. "Seems to be just a smudge. I'm glad to see her; I fretted a little this morning when she didn't show up with the Parkinson children. It's almost Marjorie Brandon's time—perhaps you knew?"

"Vaguely. Where can I put Dora down for a few minutes? Conference. Private."

Mrs. Mayberry's eyes widened slightly, but she answered at once. "The couch— No, put her on my bed." She led the way, said nothing about getting her white coverlet dirty, went back into the schoolroom with him after he assured Dora that they would be gone only a few moments.

Gibbons explained what had happened. "Dora doesn't know that her parents are dead, Helen—nor do I think it's time to tell her,"

Mrs. Mayberry considered it. "Ernest, are you sure they both died? Bud would have seen the fire if he had been working his own fields, but he sometimes works for Mr. Parkinson."

"Helen, that was not a woman's hand I saw. Unless Marje Brandon has thick black hair on the back of her hands."

"No. No, that would be Bud." She sighed. "Then she's an orphan. Poor little Dora! A nice child. Bright, too."

"Helen, can you take care of her a few days? Will you?"

"Ernest, the way you phrase that is almost offensive. I will take care of Dora as long as I am needed."

"Sorry, I didn't mean to phrase it unpleasingly. I don't expect it to be long; some family will adopt her. In the meantime keep track of your expense, then we'll work out what her room and board should be."

"Ernest, that will come to exactly zero. The only cost will be aboout enough food to feed a bird. Which I can certainly do for Marjorie Brandon's little girl."

"So? Well, I can find some family to board her. The Learners. Someone—"

"Ernest!"

"Get your feathers down, Helen. That child was placed in my hands, her father's last dying act. And don't be a dumb fool; I know to the penny how much you manage to save. As well as how often you have to take tuition in food rather than cash. This is a cash deal. The Learners would jump at it—as well as several others. I don't have to leave Dora here—and won't, unless you are sensible."

Mrs. Mayberry looked grim—then suddenly smiled and looked years younger. "Ernest, you're a bully. And a bastard. And other things I never say out of bed. All right—room-and-board."

"And tuition. Plus any special expenses. Doctor's bills, maybe."

"Triple bastard. You always pay for anything you get, don't you? As I should know." She glanced at the unshuttered windows. "Step out here in the hall and seal it with a kiss. Bastard."

They moved, she placed Herself so that the angle, did not permit anyone to see them, then delivered a kiss that would have astounded her neighbors.

"Helen—"

She brushed her lips against his. "The answer is; No, Mr. Gibbons. Tonight I'll be busy reassuring a baby girl."

"I was about to say, Don't give her that bath I know you intend to until I get hold of Doc Krausmeyer and have him examine her. She seems all right—but she may have anything from broken ribs to a skull concussion. Oh, get her clothes off and sponge her a little for the worst of the dirt; that won't hurt her and it will make it easier for Doc to examine her."

"Yes, dear. Get your lecherous hands off my bottom and I'll get to work. You find Doc."

"Right away, Mrs. Mayberry."

"Until later, Mr. Gibbons. Au 'voir."

Gibbons told Buck to wait, walked over to the Waldorf, found (as he expected), Dr. Krausmeyer in the bar. The physician looked up from his drink. "Ernest! What's this I hear about the Harper place?'

'Well, what do you hear about it? Put down that glass and grab your hat. Emergency."

"Now, now! Haven't seen the emergency yet that wouldn't leave time to finish a drink. Clyde Learner was just in and bought us a round of drinks—bought this one you urged me to abandon—and told us that the Harper place had burned and killed the whole Brandon family. Says he tried to rescue them, but it was too late."

Gibbons briefly considered the desirability of a fatal accident happening to both Clyde Learner and Doe Krausmeyer some dark night—but, damn it, while Clyde would be no loss, if Doc died, Gibbons would be forced to hang out his own shingle—and his diplomas did *not* read "Ernest Gibbons." Besides, Doc was a good doctor when sober—and, anyhow, it's your own fault, old son; twenty years ago you interviewed him and okayed the subsidy. All you saw was a bright young intern and failed to spot the incipient lush.

"Now that you mention it, Doc, I did see Clyde hurrying toward the Harper place. If he says he was too late to save them I would have to back his story. However, it was not the whole family; their little girl, Dora, was saved."

"Well, yes, Clyde did say that. He said it was her parents he couldn't save."

"That's right. It's the little girl I want you to attend. She's suffering from multiple abrasions and contusions, possibly broken bones, possible internal injuries, a strong possibility of smoke poisoning—and a certainty of extreme emotional shock; very serious in a child that age. She's across the street at Mrs. Mayberry's place." He added softly, "I think you ought to hurry, Doctor, I really do. Don't you?"

Dr. Krausmeyer looked unhappily at his drink, then straightened up and said, "Mine host, if you will be so kind as to put this on the back of the bar, I shall return." He picked up his bag.

Dr. Krausmeyer found nothing wrong with the child, gave her a sedative. Gibbons waited until Dora was asleep, then went to arrange temporary board for his mule. He went to Jones Brothers ("Fine Stock—Mules Bought, Sold, Traded, Auctioned—Registered Stallions Standing at Stud") because his bank held a mortgage on their place.

Minerva, it wasn't planned; it just grew. I expected Dora to be adopted in a few days, a few weeks, some such. Pioneers don't feel about kids the way city people do. If they didn't like kids, they wouldn't have the temperament to pioneer. And as soon as pioneer kids stop being babies, the investment starts paying off. Kids are an asset in pioneer country.

I certainly did not plan to raise an ephemeral, or hold any fear that it would be necessary—nor *was* it necessary. I was beginning to simplify my affairs, expecting to leave soon, as my son Zaccur should show up any year.

Zack was my partner then, in a loose arrangement based on mutual trust. He was young, a century and a half or such, but steady and smart—out of Phyllis Briggs-Sperling by my last marriage but two. A fine woman, Phyllis, as well as a number-one mathematician. We made seven children together and every one of them smarter than I am. She married several times—I was her fourth (* Fifth, James Matthew Libby was her fourth. J.F. *45th)* and, as I recall, the first woman to win the Ira Howard Memorial Century Medal for contributing one hundred registered offspring to the Families. Took her less than two centuries but Phyllis was a girl of simple tastes, the other being pencil and paper and time to think about geometry.

I digress. To engage in the pioneering business profitably takes a minimax of a suitable ship and two partners, both shipmasters, both qualified to mount a migration and lead it—otherwise you are taking a shipload of city folks and abandoning them in wilderness…which often-happened in the early days of the Diaspora.

Zack and I did it properly, each fully qualified as captain in space, or as leader on a strange planet—taking turns. The one who stays behind when the ship leaves really does pioneer; he can't fake it, he can't just wave the baton. He may not be political head of the colony —I preferred not to be; talk is so time consuming. What he does have to be is a survivor, a man who can force that planet to feed him, and by his example show others how—and advise them if they want it.

The first wave is a break-even; the captain unloads and goes back for more migrants; the planet offers nothing for export that soon. The trip has been paid for by fares charged the migrants; profit, if any, will come from the partner on the ground selling what else the ship has carried—mules, hardware, swine, fertile chicken eggs—to the pioneers, on credit at first. Which means the partner on the ground has to look sharp and mind his rear; it doesn't take much to convince migrants who are having a tough time that this bloke is profiteering and should be lynched.

Minerva, the six times I did this—let myself be left behind with the first wave of a colony—I never once plowed a field without weapons at hand and I was always far more cautious with my own breed than I was with any dangerous animals that planet held.

But on New Beginnings we were past most such hazards. The first wave had made it, though just barely that terrible first winter—Helen Mayberry was not the only widow who had married a widower as a result of a weather cycle that Andy Libby and I had not anticipated; the star there—called "the Sun' as always, but you can check your memories for catalog designation—New Beginnings' Sun was a variable star by about the amount that old Sol is, just enough to give "unusual" wheather—and when we arrived we hit the bad weather jackpot.

But those who made it through that winter were tough enough to stand *anything;* the second wave had a much easier time.

I had disposed of my farm to migrants of the second wave and was putting my attention on business and trade to build up a cargo for the *Andy J.* to take back after Zack unloaded the third wave—and I would go back, too. Go somewhere, that is. What and where and how would be settled after I saw Zack.

In the meantime I was bored, getting ready to wind up my on-planet affairs, and found this waif an interesting diversion.

Delightful, I should say. Dora was a baby who was born grownup. Utterly innocent, ignorant in the fashion that a small child necessarily is but most intelligent and delighted to learn anything. There was no meanness in her anywhere, Minerva, and I found her naïve conversation more entertaining than most talk of adults—usually trivial and rarely new.

Helen Mayberry took as much interest in Dora, and we two found ourselves *in loco parentis* without planning it.

We consulted each other and kept the baby girl away from the burial—some charred bones, including tiny ones of the baby that had never been born—and kept her away from the memorial service, too. Some weeks later, when Dora seemed to be in good shape and after I had had time to have a gravestone cut and erected, I took her out there and let her see it. She could read, and did—names and dates of her parents, and the single date for the baby,

She looked it over solemnly, then said, "That means Mama and Daddy won't ever be coming back. Doesn't it?"

"Yes, Dora."

"That's what the kids at school said. I wasn't sure."

"I know, dear. Aunt Helen told me. So I thought you had better see for yourself."

She looked again at the headstone, then said gravely, "I see. I guess I do. Thank you, Uncle Gibbie."

She didn't cry, so I didn't have any excuse to pick her up and console her. All I could think of to say was; "Do you want to go now, dear?"

"Yes."

We had ridden out on Buck, but I had left him at the foot of the hill, there being an unwritten rule against letting mules or tamed lopers walk on graves. I asked if she wanted mc to carry her—piggyback, perhaps. She decided to walk.

Halfway down-she stopped. "Uncle Gibbie?"

"Yes, Dora?"

"Let's not tell Buck about this."

"All right, Dora."

"He might cry."

"We won't tell him, Dora."

She did not say any more until we were back at Mrs. Mayberry's school. Then she was very quiet for about two weeks, and never mentioned it again to me, nor—I think—to anyone. She never asked to go back there, although we went riding almost every afternoon and often within sight of graveyard hill.

About two Earth-years later the *Andy J.* arrived, and Captain Zack, my son by Phyllis, came down in the gig to make arrangements for landing the third wave of migrants. We had a drink together, and I told him I was staying over another trip, and why. He stared.

"Lazarus, you are out of your mind."

I said quietly, "Don't call me 'Lazarus.' That name has had too much publicity."

He said, "All right. Although there is no one around but our hostess—Mrs. Mayberry, did you say?—and she's gone out to the kitchen. Look, uh, Gibbons, I was thinking of making a couple of trips to Secundus. Profit in it, and ways to invest our net on Secundus—safer than investing on Earth now, things being the way they are."

I agreed that he was almost certainly right.

"Yes," he said, "but here's the point. If I do, I won't be back this way for, oh, maybe ten standard years. Or longer. Oh, I will if you insist; you're majority shareholder. But you'll be wasting your money and mine, too. Look, Laz— Ernest, if you *must* take care of this kid—though I don't see that it's your obligation—come with me and bring her along. You could put her in school on Earth—as long as you post bond to insure that she leaves. Or perhaps she could settle on Secundus, although I don't know what the immigration rules are there now; it's been a long time since I've been there."

I shook my head. "What's ten years? I can hold my breath that long. Zack, I want to see this child grown up and able to make it on her own—married, I hope, but that's her business. But I won't uproot her; she's had one shock of that sort and shouldn't have to soak up another while she's still a child."

"On your head be it. You want me back in ten years? Is that long enough?"

"More or less but don't rush. Take time enough to show a profit. If it takes longer, you'll pick up a better cargo here next time. Something better than food and soft goods."

Zack said, "There is nothing better than food to ship to Earth these days. Sometime soon we're going to have to stop touching at Earth, just trade among the colonies."

"As bad as that?"

"Pretty bad. They won't learn. What's this about trouble over your bank? Do you need a show of force while the 'Andy J.' is overhead?"

I shook my head. "Thanks, Captain, but that's not the way to do it. Or I would *have* to go along with you. Force is an argument to use when nothing else will do and the issue is that important. Instead I'm going to go limp on them."

Ernest Gibbons did not worry about his bank. He never worried over any issue less important than life-and-death.

Instead he applied his brain to all problems large and small as they came along, and enjoyed life. Especially he enjoyed helping raise Dora. Right after he acquired her and the mule Buck—or they acquired him—he discarded the savage curb bit Learner had used (salvaging the metal) and had the Jones Brothers' harnessmaker convert the bridle into a hackamore. He ordered also another saddle, sketching what he wanted and offering a bonus for early delivery. The leather crafter shook his head over that sketch, but delivered.

Thereafter Gibbons and the baby girl rode Buck in a saddle built for two: a man-sized saddle in the usual position, with a tiny saddle with tiny stirrups an integral part of it in that forward position where a normal saddle carries its pommel horn. A little wooden arch, leather covered, curved up from this, a safety bar the child could grab. Gibbons also had this extended saddle fitted with two belly bands, more comfortable for the mule, safer on steep trails for riders.

They rode that way several seasons, usually an hour or more after school—holding three-cornered conversations at a walk, or singing as a trio with Buck loudly off key but always on beat with his gait acting as a metronome, Gibbons carrying the lead, and Dora learning to harmonize. It was often the "Paunshot" song, which Dora regarded as her own, and to which she gradually added verses, including one about the paddock next to the schoolhouse, where Buck lived.

But soon there was too much girl for the tiny forward saddle as Dora grew straight and slender and tall. Gibbons bought a mare mule, after trying two others—one was rejected by Buck because she was (so he said) "shdoop'd" and the other because she failed to appreciate a hackamore and tried to run away.

Gibbons let Buck pick the third, with advice from Dora but none from him—and Buck acquired a mate in his paddock, and Gibbons had the stable enlarged. Buck still stood at stud for a fee but seemed pleased to have Beulah at home. However, Beulah did not learn to sing and talked very little. Gibbons suspected that she was afraid to open her mouth in Buck's presence—she was willing to talk, or at least to answer, when Gibbons rode tier alone…for it worked out, to Gibbons' surprise, that Beulah was his saddle mule; Dora rode the big male brute, even when the stirrups of the stock saddle had to be shortened ridiculously to fit her child's legs.

But steadily the stirrups had to be lengthened as Dora grew toward young womanhood. Beulah dropped a foal; Gibbons kept her and Dora named her "Betty" and trained the baby mule as she grew, at first letting her amble along behind with an empty saddle, then teaching her to accept a rider in the paddock. There followed a time when their daily rides became sixsomes and often picnics, with Mrs. Mayberry up on Buck, the steadiest, and with the lightest load—Dora——on Betty, and with Gibbons as usual riding Beulah. Gibbons remembered that summer as a most happy one: Helen and himself knee to knee on the older mounts while Dora and the frisky youngster galloped ahead, then turning back with Dora's long brown hair flying in the breeze.

One such time he asked, "Helen, are the boys beginning to sniff around her?"

"You old stud, don't you think about anything else?"

"Come off it, dear; I asked for information."

"Certainly the boys are noticing her, Ernest, and she is noticing them. But I will do all the worrying necessary. Not much; she's far too choosy to put, up with second best."

The happy family picnics did not resume the following summer. Mrs. Mayberry was feeling the years in her bones, and could mount and dismount only with help.

Gibbons had plenty of time to be ready before the murmurings about his monopoly of the banking business came to a head. The New Beginnings Bank of Commerce was a bank of issue; he (or Zaccur) always set up such a bank in each colony they pioneered. Money was necessary to a growing colony; barter was too clumsy. Some medium of exchange was needed even before government was needed.

He was not surprised when he was invited to meet with the town's selectmen to discuss the matter; it always happened. That evening, as he trimmed his Vandyke and added, a touch more gray to it and to the hair on his head in preparation for the confrontation, he reviewed in his mind proposals he had heard in the past for making water run uphill, the sun to stand still, and one egg to be counted as two. Would there be some novel numbskullery tonight? He hoped so but did not expect it.

He plucked hairs from his "receding" hairline—damn it, it was getting harder and harder to age enough each year!—then put on his war-plaid kilt…not only more impressive but with more ways to conceal weapons—and get at them quickly. He was fairly sure that no one was, as yet, annoyed enough at him to start violence, but once he had been too optimistic; since that time he had been a pessimist as a fixed policy.

He hid some items, locked up others, set some gadgets that Zaccur had fetched last trip but which were not offered for sale at the Top Dollar T.P., unlocked his-door, hand locked it from outside, and left by the route through the bar, so that he could tell the barkeep that would be away "a few minutes."

Three hours later Gibbons had settled one point: No one had been able 'to think of any new way to debase currency that he had not heard at least five hundred years earlier—more likely a thousand—and each was certainly much, much older in history. Early in the meeting he asked the Moderator to have the Town Scribe write down each question so that he could answer them in a lump—and was allowed to have it his way by being balky.

At last the Moderator Selectman, Jim "Duke" Warwick, said, "That seems to be it. Ernie, we have a motion to nationalize—I guess that's the word—the New Beginnings Bank of Commerce. You're not a selectman, but we all agree that you are a' party with a special interest, we want to hear from you. Do you want to speak against the proposal?'

"Not at all, Jim. Go right ahead."

"Eh? I'm afraid I didn't understand you."

"I have no objection to the bank being nationalized, if that's all, let's adjourn and go to bed."

Someone in the audience called out, "Hey, I want my question about New Pittsburgh money' answered!"

"And mine about interest! Interest is wrong—it says so in the Bible!"

'Well, Ernie? You said earlier that you would answer questions."

"So I did. But if you are nationalizing the bank, wouldn't it make more sense to put questions, to your state treasurer, or whatever you decide to call him? The new head of the bank. *By* the way, who is he? Hadn't he better sit up here on the platform?"

Warwick pounded his gavel, then said, "We haven't got that far, Ernie. For the time being the entire Council of Selectmen is the finance committee—if we go ahead with this."

"Oh, by all means go ahead. I'm shutting down."

"What do you mean?"

"Just what I said: I quit. A man doesn't like to have his neighbors dislike him. The people of Top Dollar don't like what I've been doing or this meeting would never have been called. So I've quit. The bank is closed it will not reopen tomorrow. Nor ever with me as president of it. That's why I asked who your state treasurer will be. I'm as interested as anyone in finding out what we are going to use for money from here on—and what it will be worth."

There was dead silence; then the Moderator had to pound his gavel and the Sergeant at Arms was very busy, all to shouts ,of "What about my seed loan?" "You owe me money!" "I sold Hank Brofsky a mule on his personal note—what do I collect?" "You can't *do* this to us!"

Gibbons sat quietly, not letting his alertness show, until Warwick got them quieted down. Then Warwick said, wiping sweat from his- brow: "Ernie, I think you've got some explaining to do."

"Certainly, Mr. Moderator. The liquidation will be as orderly as you will let it be. Those who have: deposits will be paid…in banknotes, that being what was deposited. Those who owe money to the bank—well, I don't know; it depends on the policies the council sets up. I suppose I'm bankrupt. I can't know until you tell me what you mean when—you say my bank is being 'nationalized.'

"But I have bad to take this step: Top Dollar Trading Post is no longer buying with banknotes—they may be worthless. Each deal will have to be barter. But we will continue to *sell* for banknotes. But I took down the posted prices just before I came here tonight…because the stock I have on hand may be all I ever have with which to redeem those banknotes. Which could force me to raise prices. It all depends on whether 'nationalize' is simply another word for 'confiscate.'"

Gibbons spent several days explaining to Warwick the elementary principles of banking and currency, patiently and with good humor—to Warwick by Hobson's choice because, the other selectmen found that they were too busy with their farms or businesses to take on the chore. There had been one candidate for the job of national banker or state treasurer (no agreement as yet on title) from outside the selectmen, a farmer named Learner, but his self-nomination got nowhere despite his claim of generations of experience in banking plus a graduate degree in such matters.

Warwick got his first shock while he was taking inventory, with Gibbons, of the contents of the safe (almost the only safe on New Beginnings and the only one of Earth manufacture); "Ernie, where's the money?"

"What money, Duke?"

"What money?' Why, these account books show that you've taken in thousands and thousands of dollars. Your own trading post shows a balance of nearly a million. And I know you've been collecting mortgage payments on three or four dozen farms—and haven't loaned hardly anything for a year or more. That's been one of the major complaints, Ernie, why the selectmen just had to act—all that money going into the bank and none coming out. Money scarce everywhere. So where's the money, man?"

"I burned it," Gibbons answered cheerfully.

"What?"

"Certainly. It was piling up and getting too bulky. I didn't dare keep it outside the safe even though we don't have much theft here—if somebody stole it, it could ruin me. So far the past three years, as money came into the bank, I've been burning it. To keep it safe."

"Good God!"

"What's the trouble, Duke. It's just wastepaper."

"'Wastepaper'? It's *money."*

"What is 'money,' Duke? Got any on you? Say a ten-dollar bill?" Warwick, still looking shocked, dug out one. "Read it, Duke," Gibbons urged. "Never mind the fancy engraving and the pretty paper that can't be made here as yet—read what it says."

"It says it's ten dollars."

"So, it does. But the important part is where it says that this bank will accept that note at face, value in payment of debts to the bank." Gibbons took out of his sporran a thousand dollar banknote, set fire to it while Warwick watched in horrified fascination. Gibbons rubbed the char off his fingers. "Wastepaper, Duke, as long as it's in my possession. But if I let it get intocirculation, it becomes my IOU that I must honor. Half a moment while I record that serial number; I keep track of what I burn so that I know how much is still in circulation. Quite a lot, but I can tell you to the dollar. Are *you* going to honor *my* IOU's? And what about debts owed to the bank? Who gets paid? You? Or me?"

Warwick looked baffled. "Ernie, I just don't know.Hell, man, I'm a mechanic by trade. But you heard what they said at the meeting."

"Yeah, I heard. People always expect a government to work miracles—even people who are fairly bright other ways. Let's lock up this junk and go over to the Waldorf and have a beer and discuss it."

"—or should be, Duke, simply a public bookkeeping service and credit system in which the medium of exchange is stable. Anything more and you are jiggering with other people's wealth, robbing Peter to pay Paul.

"Duke, I did my best to keep the dollar stable by keeping key prices stable—seed wheat in particular. For over twenty years the Top Dollar Trading Post has paid the same price for prime seed wheat, then resold it at the same markup— even if I took a loss and sometimes I did. Seed wheat isn't too good a money standard; it's perishable. But we don't have gold or uranium as yet, and it has to be *something.*

"Now look, Duke—when you reopen as a treasury, or a government central bank, or whatever you call it, you're certain to have pressures on you to do all sorts of things. Lower the interest rates. Expand the money supply. Guarantee high prices to the farmer for what he sells, guarantee low prices for what he buys. Brother, you're going to be called worse names than they call me, no matter *what* you, do."

"Ernie—there's only one thing for it. You know how…so you've *got* to take the job of community treasurer."

Gibbons laughed heartily. "No, sirree, bub, I've had that headache for more than twenty years; now it's your turn. You grabbed the sack, now you hold it. If I let you put me back in as banker, all that will happen is that they will lynch *both* of us."

Changes—Helen Mayberry married the Widower Parkinson, went to live with him in a small new house on the farm now worked by two of his sons; Dora Brandon became schoolmistress of what was still called "Miss Mayberry's Primary School." Ernest Gibbons, no longer banker, was now silent partner in Rick's General Store, while his own warehouses bulged with cargo for the *Andy J.* if and when. Soon, he hoped, as the new inventory tax was eating into cash he had held out for trading, and inflation was eating into the buying power of that cash. Better hurry, Zack, before we are nibbled to death by ducks!

At last the ship appeared in New Beginnings' sky, and Captain Zaccur Briggs came down with the first load of the fourth wave—almost all of them quite old. Gibbons refrained from comment until the partners were alone:

"Zack, where did you find those walking corpses?"

"Call it charity, Ernest. That sounds better than what did happen."

"Such as?"

"Captain Sheffield, if you want our ship to go back to Earth again, you are welcome to take her there yourself. Not me. Not there. If a man is seventy-five years old there now, he becomes officially dead. His heirs inherit, he can't own property, his ration books are canceled—anybody can kill him just for the hell of it. I didn't get these passengers on Earth; they were refugees at Luna City and I took as many as I could—no messroom passengers; coldsleep or nothing. I insisted on payment in hardware and pharmaceuticals, but coldsleep let me hold down the price per head. I think we'll break even. If not, we've got investments on Secundus; I haven't lost money for us. I think."

"Zack, you worry too much. Make money, lose money— who cares? The idea is to enjoy it. Tell me where we are going next, and I can begin picking cargo—I've got twice the metric tonnage we can stow. While you get her loaded, I'll liquidate what we aren't lifting and invest the proceeds. Leave it with a Howard, that is." Gibbons looked thoughtful. "This new situation probably means no Clinic here any time soon?"

"I think that is certain, Ernest. Any Howard who needs rejuvenation soon had better take passage with us; we are bound to hit Secundus in a leg or six, no matter where we go. Then you are definitely coming along? All over your problem? What became of that baby girl? The short-lifer."

Gibbons grinned. "I don't think I'll let you lay eyes on her, Son; I know you."

Captain Briggs' arrival caused Gibbons to miss three days running his usual daily ride with Dora Brandon. On the fourth day he showed up at the schoolhouse as school let out, Briggs having gone back up for a couple of days. "Got time for a ride today?"

She flashed him a smile. “You know I have. Half a minute while I change.”

They rode out of town, Gibbons as usual riding Beulah but with Dora on Betty. Buck was saddled (for his pride), but the saddle was empty; he was now ridden only ceremonially, by mule years he was quite old.

They paused on a sunny hilltop well out of town. Gibbons said, “Why so silent, little Dora? Buck has had more to say than you have.”

She turned in the saddle and faced him. “How many more rides will we have together? Is this the last?”

“Why, Dora! Of course we will have more rides together.”

“I wonder. Lazarus, I—”

“What did you call me?”

“I called you by your name, Lazarus.”

He stared at her thoughtfully. “Dora, you’re not supposed to know that name. I’m your ‘Uncle Gibbie.’”

“‘Uncle Gibbie’ is gone, and so is ‘Little Dora. I’m almost as tall as you are now, and I’ve known for two years who you are, and I had guessed it before that—guessed that you were one of the Methuselahs, I mean. But I said nothing to anyone. And never will.”

“Don’t make it a promise, Dora; it isn’t necessary. It’s just that I never meant to burden you with it. How did I give myself away? I thought I had been most careful.”

“You have been. But I have seen you nearly every day almost as far back as I can remember. Little things. Things no one would notice who didn’t see you—really *look* at you—every day.”

“Well, yes. But I didn’t expect to have to keep it up so long. Helen knew?”

“I think she did. We never spoke *of* it; But I think she guessed the same way I did…and she may have figured out which Methuselah you are—”

“Don’t call me that, dear. It’s like calling a Jew a ‘kike.’ I’m a member of the Howard Families. A Howard.”

“I’m sorry. I didn’t know that the name mattered.”

“Well…it doesn’t, really. It’s just a word that reminds me of a time long gone. A time of persecution. Sorry, Dora; you were telling me how you learned that my name is Lazarus? One of my names, that is, for I am ‘Ernest Gibbons’ just as truly.”

“Yes, ‘Uncle Gibbie.’ It was in a book. A picture. A microbook one has to read with the viewer at the town library. I saw this picture and winked on past it—then clicked back and looked again. You weren’t wearing whiskers in the picture and your hair was longer…but the longer I stared at it, the more it looked like my foster uncle. But I couldn’t be sure—and couldn’t, ask.”

"Why not, Dora? I would have told you the truth."

"If you had wanted me to know, you would have told me. You always have reasons for everything you do, everything you say. I learned that when I was so little we used to ride the same saddle. So I didn't say anything. Until—Well, until today. Knowing that you are leaving."

"Have I said that I was leaving?"

"Please! Once, when I was very little, you told me a story about when you were a little boy hearing wild geese honking in the sky—how, when you grew up, you wanted to find out where they went. I didn't know what a wild goose was; you had to explain to me. I know you follow the wild goose. When you, hear them honking, you have to go. You've been hearing them in your head for three or four years. I know…because when you hear them, *I* hear them, too. And now the ship is here and it's very loud in your head. So I knew."

"Dora, Dora!"

"Don't, please. I'm not trying to hold you back, truly I'm not. But before you go, I want something very much."

"What, Dora'? Uh, didn't mean to tell you this yet, but Fm leaving some property for you with John Magee. Should be enough for—"

"No, no, please! I'm a grown woman now, and self-supporting. What I want doesn't cost anything." She looked him steadily in the eye. "I want your child, Lazarus."

Lazarus Long took a deep breath, tried to steady his heartbeat. "Dora, Dora, my dear, you are hardly more than a child yourself; it is too soon for you to be talking about having one. You don't want to marry me—"

"I did not ask you to marry me."

"I was trying to say that, in a year or two—or three, or four—you *will* want to marry. Then you will be glad that you did *not* have my child."

"You refuse me this?"

"I'm saying that you must not let an emotional upset over parting cause you to make any such hasty decision."

She sat very straight in the saddle, squared her shoulders. "It is not a hasty decision, sir. I made up my mind long ago, even before I guessed that you were a—Howard. Long before. I told Aunt Helen, and she said that I was a silly girl and that I must forget it. But I have never forgotten it, and if I was a silly girl then, I am much older now and know what I am doing. Lazarus, I am not asking for *anything* else. It could be syringes and such, with Dec Krausmeyer's help. Or—again she looked him squarely in his eyes—"it could be the usual *way."* She dropped her eyes, then looked up again, smiled briefly and added, "But, either way, it had best be quickly. I don't know the ship's schedule; I *do* know mine."

Gibbons spent all of a half second reviewing certain factors in his mind. "Dora."

"Yes…Ernest?"

"My name is not 'Ernest,' nor is it 'Lazarus.' My right name is Woodrow Wilson Smith. So since I am no longer 'Uncle Gibbie'—and you are right on that point; 'Uncle Gibbie' is gone and will never be back—you might as well call me 'Woodrow.'"

"Yes, Woodrow."

"Do you want to know why I had to change my name?'

"No, Woodrow."

"So? Do you want to know how old I am?"

"No, Woodrow."

"But you want to have a child by me?"

"Yes, Woodrow."

"Will you marry me?"

Her eyes widened slightly. But she answered at once: "No, Woodrow."

Minerva, at that point Dora and I almost had our first— and last, and only—quarrel. She had been a sweet and lovable baby who had grown into a sweet-tempered and utterly lovable young woman. But she was as stubborn as I am with the sort of firmness that can't be argued with, because she would not argue. I pay her the respect of believing that she had thought this through, all aspects, and had long since made up her mind to bear my child if I would let her—but not to marry me.

As for me, I did not ask her to marry me on impulse; it just sounds like it. A supersaturated solution will crystallize almost instantly; that's the shape I was in. I had lost interest in that colony years earlier, as soon as it stopped presenting real challenges; I was itching to do something else. At the top of my mind I thought I was waiting for Zack to return…but when the *Andy J.* finally did orbit in that sky, two years overdue—well, I learned that it was not what I had been waiting for.

When Dora made that amazing request, I knew what I had been waiting for.

Surely, I tried to argue her out of it—but I was playing devil's advocate. In fact, my mind was busy with, what and how. All the objections to marrying a short-lifer still remained. My even stronger objections to leaving a pregnant woman behind me—shucks, dear, I didn't spend a nanosecond on *that.*

"Why not, Dora?"

"I told you. You are leaving, I will not hold you back."

"You won't hold me back. No one ever has yet, Dora. But—no marriage, no child."

She looked thoughtful; "What is your purpose in insisting on a marriage ceremony, Woodrow? So that our child will bear your name? I don't want to be a sky widow…but if that is what it takes, let's ride back to town and find the Moderator. Because it really should be today. If the books are right about how to figure it."

"Woman, you talk too much." She did not answer this; he went on: "I don't give a hoot about a wedding ceremony—certainly not one in Top Dollar."

She hesitated, then said, "May I say that I do not understand?"

"Eh? Yes, surely. Dora, I won't settle for one child. You're going to have half a dozen children by me, or more. Probably more. Maybe a dozen. Any objection?"

"Yes, Woodrow—I mean No, I do not object. Yes, I will have a dozen children by you; Or more."

"Having a dozen kids takes time; Dora. How often should I show up? Every two years, maybe?"

"Whatever you say, Woodrow. Whenever you come back— each time you come back—I'll have a child by you. But I do ask that we start the first one at once."

"You crazy little idiot, I believe you *would* do it that way."

"Not 'would'—shall. If you will."

"Well, we're *not* going to do it that way." He reached out and took her hand. "Dora, will you go where I go, do what I do, live where I live?"

She looked startled but answered steadily, "Yes, Woodrow. If this is truly what you want."

"Don't put any conditions on it. Will you, or won't you?"

"I will."

"If it comes to a showdown, will you do what I tell you to? Not give me any more stubborn arguments?'

"Yes, Woodrow."

"Will you bear my children and be my wife till death do us part?"

"I will."

"I take thee, Dora, to be my wife, to love and protect and cherish—and never to leave you…so long as we both shall live. Don't sniffle! Lean over here and kiss, me instead. We're married."

"I was not either sniffling! Are we really married?"

"We are. Oh, you can have any wedding ceremony you want. Later. Now shut up and kiss me."

She obeyed. Some long moments later he said, "Hey, don't fall out of your saddle! Steady, Betty! Steady, Beulah! 'Durable Dora, who taught you to kiss that way?"

"You haven't called me that since I started to grow up. Years."

"Haven't kissed you since you started to grow up, either. For good reason. You didn't answer my question."

"Is that one of the things I just promised? Whoever taught me to kiss, it was before I was a married woman."

"Mmm, you may have a point there. I'll take it up with my legal staff and have them write you a letter. Besides it might be native talent rather than instruction. Tell you what, Dora, I'll refrain from quizzing you about your sinful past…and you leave mine alone. A deal?"

"Yes indeed—for I have a *very* sinful past!"

"Piffle, darling, you haven't had time to be sinful. Swiped some sweets I had fetched for Buck, maybe? Very sinful."

"I never did any such thing! But lots worse."

"Oh, sure. Give me another of those native talent kisses."

Presently he said, "Whew! No, the first one wasn't a fluke. Dora, I think I married you just barely in time."

"You insisted on marrying me—my husband. I didn't make an issue of it."

"Conceded. Sweetheart, are you still anxious to get started on that baby? Now that you know that I am not going away without you?"

"No longer anxious. Eager, perhaps. Yes, eager is the right word. But not demanding."

"'Eager' is a fine word. Me, too. I could also add 'demanding.' Who knows?—you may have other native talents."

She barely, smiled. "If not, Woodrow, I'm sure you can teach me. I'm willing to learn. Eager."

"Let's head back to town. My apartment? Or the schoolhouse?"

"Either one, Woodrow. But see that little stand of trees? It's much closer."

It was almost dark as they neared town; they rode back at a gentle walk. As they passed the Markhams' house on the old Harper place, Woodrow Wilson Smith said, "Adorable Dora—"

"Yes, my husband?"

"Do you want a public wedding?"

"Only if you want one, Woodrow. I feel very much married. I *am* married."

"You certainly are. Not going to run away with a younger man?"

"Is that a rhetorical question? Not now or ever."

"This young man is an immigrant who may not be down until the last or nearly the last trip. He is about my height, but he has black hair and a darker skin than I have. Can't say just how old he is, but he looks about half the age I look. Smoothshaven. His friends call him

'Bill.' Or 'Woodie.' Captain Briggs says Bill is very fond of young schoolmarms and is anxious to meet you."

She appeared to consider it. "If I kissed him with my eyes closed, do you think I would recognize him?"

"It's possible, Dorable. Almost certain. But I don't think anyone else will. I hope they don't."

"Woodrow, I don't know your plans. But if I recognize this 'Bill,' should I attempt to convince him that I am that other schoolmarm?' The one you were singing about? Rangy Lil?"

"I think you could convince him, dearest one. All right, 'Uncle Gibbie' is back, temporarily. It will take Ernest Gibbons three or four days to wind up what he must do here, then he'll say goodbye to people—including his foster niece, that old-Maid schoolmarm Dora Brandon. Two days later this Bill Smith comes down with the last, or nearly the last, load of cargo from the ship. You had better be packed and ready to leave by then because Bill is going to drive past your schoolhouse the following day, or the day after that, just before dawn, headed for New Pittsburgh."

"New Pittsburgh. I'll be ready."

"But, we won't stay there more than a day or two. On we go, past Separation; then right over the horizon. We're going to tackle Hopeless Pass, dear. Does that appeal to you?"

"I go where you go."

"Does it *appeal* to you? You won't have anyone to talk to but me. Until you bake one and teach him—or her—to talk. No neighbors. Lopers and dragons and God knows what else. But no neighbors."

"So I'll cook and help you farm—and bake babies. When I have three I'll open 'Mrs. Smith's Primary School.' Or should we call it 'Rangy Lil's Primary School'?"

"The latter, I think. For young hellions. My kids are always hell-raisers, Dora. You'll teach school with a club in your hand."

"If necessary, Woodrow. I've got some like that now, and two of them outweigh me. I clobber them as necessary,"

"Dora, we don't have to tackle Hopeless Pass. We could leave in the 'Andy J.' and go to Secundus. Briggs tells me that there are over twenty million people there now. You could have a nice house. Inside plumbing. A flower garden instead of breaking your back helping ale to make a farm. A good hospital with real doctors when you have babies. Safety and comfort."

"Secundus.' That's where all the—Howards moved. Isn't it?"

"About two-thirds of them. A few are right here, as I told you. But we don't admit it because when you are outnumbered, it is neither safe nor comfortable to be a Howard. Dora, you don't have to make up your mind in only three or four days. That ship will stay in orbit here as long as I want it to. Weeks. Months. As long as I order it to stay."

"Goodness! You can afford to have Captain Briggs hold a starship in orbit? Just to let me make up my mind?"

"I shouldn't have rushed you. But it's not exactly a case of affording it, Dora—although it doesn't cost much to stay in orbit. Uh…I've kept my own counsel so long that I'm out of the habit of being a married man, with a wife I can trust with secrets; I must stop it. I own sixty percent of the 'Andy J.' Dora; Zack Briggs is my junior partner. And my son. Your stepson, you could say."

She did not answer at once. Presently he said, "What's the trouble, Dora? Did I shock you?"

"No, Woodrow, I'm just having to get used to new ideas. Of course you've been married before, you're a Howard. I'd never thought about it, that's all. A son—sons. And daughters, too, no doubt."

"Yes, surely. But what I was getting at is that I've done some bad planning—through my own selfishness. I was rushing you when there is no need for it. If we stay on New Beginnings, I want 'Ernest Gibbons' to disappear—leave in the 'Andy J.,' that is, as he is getting too old: I can't keep it up much longer.

So young Bill Smith, who's much nearer your age, takes his place… which looks better and no one here will ever suspect that I'm a Howard.

"I've worked this shenanigan many times; I know how to make it stand up. But I was trying to get rid of 'Ernest Gibbons' as fast as possible because he's your old foster uncle who is about three times your *age* and wouldn't dream of patting your pretty bottom, nor would you encourage him to. As everybody knows. But I *want* to pat your pretty bottom, Dorable."

"And I want you to pat it." She reined up; they were getting close to where houses were near together. "And more. Woodrow, you're saying that we can't live together right away because of what the neighbors might think. But who taught me never to care what the neighbors think? You did."

"True. Although sometimes it's expedient to make the neighbors think what you want them to think in order to influence what they do and say—and this might be such a time. But I also tried to teach you to be patient, dear one."

"Woodrow, I will do exactly what you tell me to. But I'm not really patient about this. I want my husband in my bed!"

"And I want to be there."

"Then what does it matter if people assume that I choose to tell my Uncle Gibbie goodbye in bed? Or that I then go away with a new settler almost at once? Woodrow, you didn't say a word about it at the time—but you knew that I was not virgin, I'm certain. Don't you think there must be others who know it, too? Probably the whole town. I've never worried about it. Why should I worry what they think now?"

"Dora."

"Yes, Woodrow?"

"I'll be in your bed every night, that's settled."

"Thank you, Woodrow."

"The pleasure is mine, madam. Or half of it, at least; you seem to enjoy it, too—"

"Oh, I do! And you know it. Or should."

"So stipulated, let's pass to other matters—except to say that had I found you virgin—big as you are, old as you are— it would have worried me a little, and I might have felt that Helen had not been quite the wholesome influence that I thought she was. That she was indeed, bless her heart! The matter of pretending to be dear old 'Uncle Gibbie' who would never touch little Dora was purely for your face; since it does not worry you, let's drop it. What I started to say is that you can take as long as you like in deciding whether to pioneer here or go to Secundus. Dora, Secundus has more than inside plumbing; it has a Rejuvenation Clinic."

"Oh! You need to 'be near one, Woodrow?"

"No, no! For *you,* dear."

She was very slow in answering. "That would not make me a Howard."

"Well, no. But it helps. Rejuvenation therapies don't make Howards last forever, either. Some people are helped quite a lot by them; some are not. Maybe someday we'll know more— but now, on the average, rejuvenation techniques seem to about double whatever a person could expect normally, whether he's a Howard…or not a Howard. Uh, do you know *anything* about how long your grandparents lived?"

"How could I, Woodrow? I just barely remember that I once had parents. I don't even know the names of my grandparents."

"We can find out. The ship carries records of every migrant who takes passage in her. I'll tell Zack—Captain Briggs—to look up your parents' records. Then—in time, for it will take time—I can have your family traced on Earth. Then—"

"No, Woodrow."

"Why not, dear?"

"I don't need to know, I don't want to know. Long ago, three or four years at least, shortly after I figured out that you were a Howard, I also figured out that Howards don't really live any longer than we ordinaries do."

"So?"

"Yes. We all have the past and the present and the future. The past is just memory, and I can't remember when I began, I can't remember when I *wasn't.* Can you?"

"No."

"So we're even on that. I suppose your memories are richer; you are older than I am. But it's *past.* The future? It hasn't happened yet, and nobody knows. You may outlive me…or I may outlive you. Or we might happen to be killed at the same time. We can't know and *I* don't want to know. What we both have is *now*…and we have that together and it makes me utterly happy. Let's get these mules put away for the night and enjoy some *now."*

"Suits." He grinned at her. "E.F., or F.F.?"

"Both!"

"That's my Dora! Anything worth doing is worth overdoing."

"And doing again. But just a moment, dear. You told me that Captain Briggs is your son, and consequently my stepson. I suppose he is, but I really can't think of him as such. But— and you needn't answer this; we agreed not to quiz each other about our pasts—"

"Go ahead and ask. If it suits me, I'll answer."

"Well…I can't help being curious about Captain Briggs' mother. Your former wife?'

"Phyllis? Phyllis Briggs-Sperling is her full name. What do you want to knew about her dear? Very nice girl. Further Deponent Sayeth Not. No invidious comparisons."

"I guess I'm being snoopy."

"Perhaps you are. Not that I mind, and it can't hurt Phyllis. Dear, that was a couple of centuries ago; forget it."

"Oh. She's dead?"

"Not that I know of. Zack would know; he's been to Secundus recently. I think he would have told me. But I haven't stayed in touch with her since she divorced me."

"Divorced you? A woman of poor taste!"

"Dora. Dora! Phyllis is *not* a woman of poor taste; she is a very nice girl. I had dinner with her and her husband the last time I was on Secundus. Zack and I did, I mean—and she and her husband had gone to the trouble of rounding up my other children by her, those who were on planet, and some of my other relatives and made it a family party for me. Thoughtful of her. By the way, she's a schoolmarm, too."

"She is?"

"Yup. Libby Professor of Mathematics, Howard University, New Rome, Secundus. If we go there, we can look her up and you can decide for yourself what sort of person she is."

Dora did not answer. She kneed Betty and started on down the street; Beulah pulled abreast without being told. Buck said, "Shupper…*dime!"* quite emphatically, and trotted on ahead.

"Lazarus—"

"Careful with that name, dear."

"No one can hear me: Lazarus, unless you insist…I don't want to live on Secundus."

VARIATIONS ON A THEME

XII

The Tale of the Adopted Daughter (Continued)

Separation lay far behind. For three weeks the little train—two wagons in tandem, twelve mules hauling, four running free—had crawled toward Rampart Range. It had been more than two weeks since they had last seen a house. They were on the high prairies now, and for several days the gap of Hopeless Pass had been in sight.

Besides sixteen mules, the little party included a German shepherd bitch and a younger dog, two female cats and a tom, a fresh milch goat with two kids and a young buck, two cocks and six hens of the hardy. Mrs. Awkins variety, a freshly bred sow, and Dora and Woodrow Smith.

The sow had tested pregnant at New Pittsburgh before Smith paid for her, test conducted by Smith himself—and Mrs. Smith had tested pregnant, too, while still at Top Dollar and before Smith cleared Starship *Andy J.* to leave orbit, for (Smith had *not* found it necessary to tell his wife this) if Dora had *not* tested pregnant, the ship would have waited while they tried again—then, if she had still tested negative, he would have changed plans and taken her to Secundus, there to find out why and, if possible, to correct it.

In Smith's opinion as a professional pioneer, it was not only pointless but disastrously foolhardy to attempt single-couple pioneering out of reach of other people with an infertile woman—or a couple infertile with each other, he corrected in his mind, as his own fertility had not been put to the ultimate test for fifty-odd years. While he was about it, he had looked up physical records of Dora's parents in Krausmeyer's ill-kept files, found nothing to worry him—and it had indeed worried him, as he would not have been able to cope even with anything as simple as an Rh-factor incompatibility a long way from nowhere.

But within the limited medical resources of colony and ship, the board showed all green, and it seemed likely to him that Dora bad become pregnant about twenty minutes after their informal muleback wedding.

The thought had passed through his mind that Dora might have been pregnant even sooner—but the thought was merely an amusing whimsy that bothered him not at all. Smith felt certain that he had had the Cuckoo in his nest more than once over the centuries; he had been especially careful to be a loving father to such children and had kept his mouth shut. He believed in letting women lie all they needed to, and never taxing them with it. But he believed also that Dora was incapable of this sort of lie. If Dora had been pregnant and aware of it, she might have asked to be allowed to say goodbye to him on her back—but she would have asked for exactly that. Not for a child.

No matter— If the darling had made a mistake earlier and did not know it, he felt sure that she would nevertheless have a superior baby. She was clearly superior stock herself—he, wished he had known the Brandons; they must have been ichiban—and their daughter was, as Helen had once said, “choosy.” Dora would, not bed with an oaf even for fun, because, being what she was, she would not find it fun. Smith was sure that it would take rape to put an inferior child into Dora—and the rapist might sing soprano the rest of his days; her Uncle Gibbie had taught her some dirty tricks.

The pregnant sow was Smith’s “calendar.” If they failed to reach a spot suitable for homesteading by the time that sow littered, then they turned back that very day—no hesitation, no regrets—as that would leave them just half of Dora’s pregnancy to get them back to Separation and other people.”

The sow rode in the back end of the second wagon, with a sling to keep her from falling down. The dogs trotted under the wagons, or ranged aside, warning of lopers or other hazards. The cats did as they pleased, as cats do, walking or riding as suited them. The nanny and billy goats stayed close to the wheel pair; the two kids were large enough to skitter along most of the time but were privileged to ride when they tired—a loud *Me-e-e-eh* from the mother goat would cause Smith to swing down and hand the tired baby up to Dora. The chickens complained in a double cage over the sow’s pen. The mules running free had no duties other than to keep eyes out for lopers, save that Buck was at all times grand marshal of the parade, picking the footing, bossing the other mules, carrying out Smith’s orders. Mules at liberty rotated as draft animals; only Buck was never in harness. Betty and Beulah had had their feelings hurt at being required to accept harness; they were gentry of the saddle, and they knew it. But Buck had had harsh words with them and harsher nips and kicks; they had shut up and hauled.

No real driving was required; only two reins were used, one to each of the lead pair and running from them back through rings on the collars of the following mules to the seat of the leading wagon, there usually loosely secured rather than held. Although the males were all stallions, these mules did what Buck ordered. Smith had stopped at Separation and lost most of a day to trade a strong brute with good shoulders for a younger, lighter stud because the bigger mule had not been willing to accept Buck's dominance. Buck was ready to fight it out, but Smith did not let the old mule risk it; he needed Buck's brain and judgment, and would not risk Buck's spirit being broken by losing to a younger stallion—or take a chance that Buck might be injured.

In real trouble more reins would not help. If the mules panicked and ran—unlikely but possible—two humans could not hold them, even with a double handful of reins. Smith was ready at any instant to pick off his lead pair, then hope that not too many mules would break legs stumbling over the corpses and pray that the wagons would not overturn.

Smith wanted to reach their destination with all his livestock; he hoped to get there with about 80 percent including a breeding pair of each sort—but if they arrived with, enough draft animals to pull the wagons (including at least one breeding pair) plus a pair of goats, he could consider it a conditional victory and they would make their stand, to live or to die.

How many mules were "enough" was a variable. Near the end of the trip it could be as low as four—then go back and get the second wagon. But if the number of mules dropped below twelve before they conquered Hopeless Pass—turn back.

Turn back at once. Abandon one or both wagons, jettison what they could not salvage, slaughter any animals that could not make it without help, travel light with any extra mules trailing along, unwitting walking larders.

If Woodrow Wilson Smith limped back into Separation on foot, his wife riding—miscarried but still alive—it still would not be defeat. He had his hands, he bad his brain, he had the strongest of human incentives: a wife to care for and cherish. In a few years they might try Hopeless Pass again—and not make the mistakes he had made the first time.

In the meantime he was happy, with all the wealth any man could hope for.

Smith leaned out Of the wagon seat. "Hey, Buck! Supper."

"Shupper dime," Buck repeated, then called out, "Shupper *dime!* Shirko *nigh!* Shirko *nigh!"* The lead pair turned left, started bringing the train around in a circle.

Dora said, "The Sun is still high"

"Yes," her husband agreed, "and that's why. The Sun is high, it's very hot, the mules are tired and sweaty and hungry and thirsty. I want them to graze. Tomorrow we'll be up before dawn and rolling at first light—make as many kilometers as possible before it gets too bloody hot. Then another early stop."

"I wasn't questioning it, dear; I simply wanted to know why. I'm finding that being a schoolmarm hasn't taught me all I need to know to be a pioneer wife."

"I understood; that's why I explained. Dora, *always* ask me if I do anything you don't understand; you *do* have to know…because if something happens to me, then it'll be up to you. Just hold your questions until later if I seem to be in a hurry."

"I'll try, Woodrow—I *am* trying. I'm hot and thirsty myself; those poor dears must be feeling it dreadfully. If you can spare me, I'll water them while you unharness."

"No, Dora."

"But— Sorry."

"Damn it, I said always to ask why. But I was about to explain. First we let them graze an hour. That will cool them down some in spite of the Sun, and, being thirsty, they'll look for short green stuff under this tall dry stuff. They will get a little moisture out of that. Meantime I'm' going to measure the water barrels, but I know that we're going on short water rations. Should've yesterday. Dorable, you see that patch of dark green way up there below the pass? I think there water there, dry as it's been…and pray hard that there is, because I don't expect to find water between here and there. We may have no water at all the last day or so. It doesn't take a mule long to die without water and not much longer for a man."

"Woodrow, is it as bad as that?"

"It is, dear. That's why I've been studying the photomaps. The clearest ones Andy and I made a long time ago, when we surveyed this planet—but in early spring for this hemisphere. The shots Zack took for me aren't much; the Andy J. isn't equipped as a survey ship. As may be, I took this route because it looked faster. But every wash we've crossed the past ten days has been bone dry. My mistake and it may be my last one."

"Woodrow! Don't talk that way!"

"Sorry, dear. But there is always a last mistake. I'll do my damndest to see that this is *not* my last mistake—because it must not happen to you. I'm simply trying to impress you with how carefully we must conserve water."

"You've impressed me. I'll be most careful with cleaning up and so forth.”

“I still haven’t made it clear. There will be no washing at all—not a face wash, not even a hand wash. Pans and such you’ll scour with dirt and grass and put them in the sunshine and hope they sterilize. Water is only for drinking. The mules go on half water rations at once, and you and I, instead of the liter and a half of liquid each day a human is supposed to need, will each try to get by on a half liter. Uh, Mrs. Whiskers will get a full ration of water; she has to make milk for her kids. If it gets too tough, we slaughter the kids and let her dry up.”

“Oh, dear.”

“We may not have to. But, Dora, we aren’t even close to last extremities. If the going gets really tough, we kill a mule and drink its blood.”

“What! Why, they’re our friends!”

“Dora, listen to your old man. I promise you that we will never kill Buck, or Beulah, or Betty. If I must, it will be a mule we bought n New Pittsburgh. But if one of our three old friends die—we eat him. Her.”

“I don’t think I could.”

“You will when you’re hungry enough. If you think about the baby, inside you, you’ll eat without hesitation and bless your dead friend for helping to keep your baby alive. Don’t talk about what you can’t do when the chips are down, dear— because you *can.* Did Helen ever tell you stories about the first winter here?”

“No. She said I didn’t need to know.”

“Could be she was mistaken. I’ll tell you one of the less grisly ones. We placed—I placed—a heel-and-toe watch over the seed, grain with orders to shoot to kill. And one guard did. A drumhead courtmartial exonerated the guard; the man he killed was clearly stealing seed grain—his corpse had half-chewed grain in its mouth. Not Helen’s husband, by the way; *he* died like a gentleman—malnutrition and some fever I never identified.”

Smith added, “Buck’s got us hauled around. Let’s get busy.” He jumped down, reached up to help her. “And smile, baby, smile!—this show is being transmitted back to Earth to show those poor crowded people how *easy* it is to take a new planet—courtesy of DuBarry’s Delicious Deodorants, of which I need a bucketful.”

She smiled. “I stink worse than you do, my love.”

“That’s better, darling; we’ll make it. It’s just the first step that’s a dilly. Oh, yes! No cooking fire.”

“‘No f—‘ Yes, sir.”

“Nor any until we get out of this dry stuff. Don’t strike a light for any reason—even if you’ve dropped your rubies and can’t find them.”

“‘Rubies—’ Woodrow, it was wonderful of you to give me rubies. But right now I would swap them for another barrel of water.”

"No, you wouldn't, dearest, because rubies don't weigh anything and I took every barrel the mules could haul. I was delighted that Zack had those rubies along and I could give them to you. A bride should be cherished. Let's take care of these tired mules."

After they turned the mules loose, Dora tried to figure out what she could feed her husband without the use of fire while Smith got busy on the fence. The fence was not much, but having only two wagons, they could not form a proper defensive circle; the best that could be done was to angle the wagons as far as the front axle of the second wagon permitted, then surround the bivouac with a fence of sorts—sharpened stakes of brasswood, each two meters long, and held together and spaced by what passed for rope in New Pittsburgh. The result, when held up on two sides by wagons and braced to the ground along the hypotenuse, constituted a high and fairly nasty picket fence. It would not slow up a dragon, but this was not dragon country. Lopers did not like it.

Smith did not like it much, either, but it was made on New Beginnings of all-native materials, could be repaired by a man who was handy, did not weigh much, could be abandoned with no great loss—and contained no metal. Smith had beer able to buy two sturdy, boat-bodied, Conestoga-type wagons in New Pittsburgh only by offering in part payment complete hardware for two other wagons—hardware imported across the lightyears in the *Andy I.* New Pittsburgh was far more "New" than "Pittsburgh"; there was iron ore there and coal, but its' metals industry was still primitive.

The chickens, the sow, the goats, and even the humans were tasty temptations to wild lopers, but with the goats and kids shooed inside the kraal, two alert watchdogs, and sixteen mules grazing on all sides, Smith felt reasonably secure at night. True, a loper might get a mule, but it was much more likely that the mule would get the loper—especially as other mules would close in and help stomp the carnivore. These mules did not run from a loper; they struck out at him. Smith thought that, in time, mules might clean out the varmints even more than man did, make them as scarce as mountain lions had been in his youth.

A mule-stomped loper was readily converted into loper steak, loper Stew, loper jerky—and dog and cat food, and Mrs Porky the sow enjoyed the offal—all at no loss to the mules. Smith did not care much for loper in any form; the meat was too strongly flavored for his taste—but it, was better than nothing and kept them from digging too deeply into food they had hauled along, Dora did not share her husband's distaste for loper meat; born there aid having eaten it now and then since earliest childhood, it seemed to her a normal food.

But Smith wished that he had time to hunt one of the herbivores that were the loper's natural prey—six-legged like the loper but otherwise resembling a misshapen okapi— their meat was much milder. They were called "prairie goats," which they were not, but systematic taxonomy of fauna and flora on New Beginnings had not gone far; there had been as yet no time for such intellectual luxuries. Smith had shot a prairie goat from the seat of the wagon a week earlier (now only a memory, bittersweet, of tasty tender meat). Smith did not feel justified in taking a day off to hunt until they had conquered Hopeless Pass. But he kept hoping for another chance shot.

Maybe now— Fritz! Lady Macbeth! Here!" The dogs trotted up and waited. "High sentry. Loper! Prairie-goat! Up!" The dogs immediately got on the very top of the lead wagon, making it in two jumps and a scramble, step, seat, and curved top. There they split the duty, nigh side and off side— and there they would stay until told to get down. Smith had paid a stiff price for the pair, but he had known they were good dogs; he had picked their ancestors on Earth and had fetched them with the first wave. Smith was not a "doggie" man in any fanatic sense; he simply believed that a partnership that had lasted so long on Earth would serve men equally well on strange planets.

Dora was sobered by her husband's words, but once she got busy working, she cheered up. Shortly, while trying to plan a menu, from little choice and without a cooking fire, she came across something that vexed her—good for her as it displaced her worrisome thoughts. Besides, she did not really believe that her husband could fail at anything.

She came around the end of the second wagon, crossed the little kraal to where her husband was making sure that his fence was tight, "Oh, that pesky little rooster!"

Woodrow looked around. "Hon, you look cute in just a sunbonnet."

"Not just a sunbonnet, I'm wearing hoots, too. Don't you want to hear what that nasty little rooster did?"

"I would rather discuss how you look. Adorable, that is. Nevertheless, I'm not pleased with the way you are dressed."

"What? But it's so hot, dear. Since I can't wash, I thought an. air bath might make me smell better."

You smell good to me. But an air bath is a good idea; I'll peel down, too. Your gun, dear—where's your, belt with your knife and gun?" He started shucking his overalls.

You want me to wear my gun belt *now?* Inside the fence? With you here to protect me?"

As self-discipline and a standard precaution, my lovely one." He hitched his own gun-and-knife belt back into place as be stepped out of his overalls, then pulled off boots and shirt and got bare save for the belt and three other weapons that did not show when he was dressed. “In more years than I like to think about I have never been unarmed except when locked in somewhere safe. I want you to acquire the habit. Not just sometimes. Always.”

“All right. I left my belt on the seat; I’ll get it. But, Woodrow, I’m not much of a fighter at best.”

“You’re fairly accurate with that needle gun up to fifty meters. And you’re going to get better and better the longer you live, with me. Not just with it but with anything that shoots, cuts, burns, or even makes nasty bruises, from your bare hands to a blaster. See over there, Dorable?” He pointed to nothing but flatness. “In just seven seconds a horde of hairy savages will come pouring over the top of that rise and attack. I get a spear through my thigh and go down…then you have to fight them off for both of us. What are you going to do, you poor little girl, with your gun clear over them on the seat of that wagon?”

“Why”—she set her feet apart, put her hands back of her head, and gave a wiggle that was invented in the Garden of Eden, or perhaps just outside—“I’ll’ go *this* way at ‘em!”

“Yes,” Lazarus agreed thoughtfully, “that should work. If they were human. But they aren’t. Their only interest in tall, beautiful, brown eyed girls is to *eat* them. Bones and all. Silly of them, but that’s how they are.”

“Yes, dear,” she said docilely. “I’ll go put on my gun belt. Then I’ll kill the one who speared you. Then I’ll see how many more I can get before they eat me.”

“That’s right, durable Dorable. Always take an honor guard with you. If you have to go, go down fighting. The size of your guard of honor determines your status in hell.”

“Yes, dear. I’m sure I’ll enjoy hell if you’re there, too,” She turned to fetch her weapons.

“Oh, I’ll be there! They wouldn’t take me anywhere else. Dora! When you put on your gun belt, take off your sunbonnet and boots—and put on your rubies, all of them.”

She paused with a foot on the step of the wagon. “My rubies, dear? Out here on the prairie?!”

“Rangy Lil, I bought those rubies for you to wear and, for me to admire you wearing them.”

She flashed a smile that turned her normally serious expression into sunshine, swung on up into the wagon and disappeared. She was back quickly wearing weapons belt and rubies but had taken a few seconds to comb her hair—long and chestnut brown and shining. That she bad not been able to bathe for more than two weeks did not show, did not detract from her enchanting, youthful beauty. She paused on the step and smiled at him.

“Hold it!” he said, “Perfect! Dora, you are the most beautiful thing

I have ever seen in all my born days."

She flashed him another smile. "I don't believe that, my husband—but I hope you will go on saying it."

"Madam, I cannot tell a lie. I say it only because it is the simple truth. Now, what were you saying about the little rooster?"

"Oh! That perverted little monster! I *said* he had been breaking eggs on purpose! This time I caught him. Pecking them. Two freshly laid broken eggs!"

"Royal prerogative, dear. Afraid one of them would hatch out a rooster."

"I'll wring his neck! If we had a fire, I'd do it right now. Darling, I was trying to see what we could eat cold without opening anything not already open, and it occurred to me that salt crackers crumbled into raw eggs would almost make a meal. But there were only three eggs today and he broke the two laid by his hens. I'd put plenty of grass in both cages; the one egg on the other side wasn't even cracked. Damn him. Woodrow, why do we have to have *two* roosters?"

"For the same reason I carry two throwing knives. Sweetheart, alter we arrive and hatch our first chicks, once they're big enough that I'm certain of a spare rooster, we can have rooster and dumplings with him as guest of honor. Not before."

"But we *can't* have him breaking eggs. Tonight's supper will be mostly cheese and hardtack—unless you want me to open something."

"Let's not rush it. Fritz and Lady Mac are trying to spot game right now. Prairie goat, I hope. Loper if not."

"But I can't cook meat. You said. You did say—"

"Raw, my dear. Haunch of prairie goat, chopped fine, and spread on hard crackers. Beef Tartare a la New Beginnings. Tasty. Tastes almost as good as girl." He smacked his lips.

"Well…if you can eat it, I can eat it. But half the time, Woodrow, I don't know whether you are joking or not."

"I never joke about food or women, Dorable; those are sacred subjects." He looked her up and down again. "Speaking of women, woman, dressing you in rubies is just right. But why a bracelet around your ankle?"

"Because you gave me three bracelets, sir. As well as rings and a pendant. And you said to wear all of them."

]"So I did. Where did this one come from?"

"Hey! That's not a ruby; that's *me!"*

"Looks like a ruby. Here's another just like it."

"Unh! Maybe I'd better take my rubies off? So we won't lose them. Or should we water the mules first?"

"You mean before we eat?"

"Uh…yes, I guess that's what. I mean. Tease."

"You're not speaking very plainly, little Dora. Tell Uncle Gibbie what you want."

"I'm-not 'little Dora.' I'm Rangy Lil, the horniest girt south of Separation—you said so yourself. I cuss and I swear and I spit between thy teeth and I'm concubine to Lazarus Long, Super Stud of the Stars and better than any six men— and you know damn well what I want, and if you pinch my nipples again, I'm likely to trip you and take it. But I guess we ought to water the mules."

Minerva, Dora was just plain nice to be around, always. It wasn't her physical beauty…which wasn't that outstanding by the usual criteria in any case—although she was utterly beautiful *to me.* Nor was it her enthusiastic interest in sharing "Eros"—although she was indeed enthusiastic, ready any time, and always on a short fuse. And skilled at it and got more so; Sex is a learned art, as much so as ice skating or tight wire walking or fancy diving; it is *not* instinct. Oh, two animals couple by instinct, but it takes intelligence and patient willingness to turn copulation into a high and lively art. Dora was good at it and got better and better, always eager to learn, free of fetishes or silly preconceptions, patiently willing to practice anything she learned or was taught—and with it that spiritual quality that turns sweaty exercise into a living sacrament.

But Minerva, love in what *still* goes on when you ate *not* horny.

Dora was good company at any time, but the tougher things were, the better companion she was. Oh, she fretted about broken eggs because chickens were her responsibility; she did not complain that she was thirsty. Instead of nagging me to do something about that rooster, she figured out what had to be done and did it—shoved all the hens in with the other rooster, tied the feet of the egg breaker and laid him aside while she moved the partition between the cages, then the smaller rooster was in solitary confinement and we lost no more eggs.

But the truly tough parts lay ahead of us; she did not fret at all during those, or ever turn balky when I did not have time to explain. Minerva, much of the trek was slow death, other parts were sudden dangers that could have been, quick death. She was endlessly patient in the former, always kept her head and helped in the latter. Dear, you are awesomely learned—but you are a city girl and you've always been on a civilized planet; perhaps I had better explain some things.

Maybe you have been asking yourself: "Is this trip necessary?"—and; if it is, why do it the hard way?

"Necessary—" Having done something a Howard should never do, namely, marry an ephemeral, I had three choices: Take her to live among Howards. Dora rejected that—although I would have tried to talk her out of it if she had said Yes. A short-timer alone in a community of the long-lived is almost certain to go into suicidal depression; I had seen it first in my friend Slayton Ford and I've seen it many times since then. I did not want this to happen to Dora. Whether the number of her years was ten or a thousand, I wanted her to enjoy them.

Or we could stay in Top Dollar or—the same thing—near one of the villages of that small piece of the planet that was settled then. I almost chose this, as the "Bill Smith" dodge would work for that—for a time.

But only for a short time. The few Howards on New Beginnings—the Magees and three other families as I recall— had all arrived incognito—"masquerade" in Howard jargon— and by simple dodges they could shuffle things around and never be 'caught' at it. Grandmother Magee could "die," then show up as "Deborah Simpson" on another Howard homestead. The more people there were on the planet, the easier it was to pull this—especially after the fourth wave arrived, all of them coldsleep cargo and thereby never having gotten acquainted with each other.

But "Bill Smith" was married to an ephemeral. If I stayed around the settled parts, I would have to be most careful to keep my hair dyed—not just on my head but all over my body lest some accident give me away—and then be careful to "age" as fast as my wife did. Worse, I would have to avoid people who had known "Ernest Gibbons" well— most of Top Dollar, that is to say—or someone would see my profile and hear my voice and start wondering, as I had had no chance for plastic surgery or anything of that sort. At other times, when it was needful to change name and identity, I had always changed location as well, that being the only foolproof way to do it. Even plastic surgery won't disguise me very long; I regenerate too easily. I once had my nose bobbed (the alternative seemed to involve having my neck bobbed); ten years later it was just as it is now, big and ugly.

Not that I was too jumpy about being disclosed as a Howard. But if I was going to have to live in masquerade, the more carefully I used these cosmetic tricks, the more Dora's nose would be rubbed in the fact that I was different from her—different in the saddest way of all, a husband and a wife who ran on very different time rates.

Minerva, it seemed to me that the only way I could give my pretty new wife a square shake was by taking her far away from both sorts of people, long-lived and short, where I could quit pretending and we could ignore the difference, forget it and be happy. So I decided to take her clear out of reach of other people, decided this before we got back to town the very day I married her.

It seemed the best answer to an otherwise impossible situation, but one not as irreversible as a parachute jump if she got too lonely, if she grew to hate the sight of my ugly mug, I could bring her out to the settlements again, still young enough to hook another husband. I had this in, mind, Minerva, as some of my wives have grown tired of me fairly quickly. I had arranged with Zack Briggs, at the same time I had arranged with John Magee to act as factor for Zack—arranged with Zack to ask John what had happened to "Bill Smith" and the little schoolmarm? It was possible that I would need a ride offplanet someday.

But why didn't I have Zack put us down on the spot on the map I had picked as being our likely place of settlement?— with everything we would need to start farming: and thereby avoid a long, dangerous trek. Not risk death by thirst, or by lopers, or the treacheries of mountains, or whatever.

Minerva, this was a long time ago and I can explain only in terms of technology available *there* and *then.* The *Andy J.* could not land; she received her overhauls in orbit around Secundus or some other advanced planet. Her cargo boat could land on any big flat field but required a minimum of a radar-corner reflector to home on, then had to have many metric tons of water to lift off again. The captain's gig was the only boat in the *Andy J.* capable of landing anywhere a skilled pilot could put her down, then lift off without help. But her cargo capacity was about two postage stamps—whereas I needed mules and plows and a load of other things.

Besides, I needed to learn how to get *out* of those mountains by going *into* them. I could not take Dora into there without being reasonably sure that I could fetch her out again. Not fair! It's no sin not to be pioneer-mother material—but it is tragic for both husband and wife to find it out too late.

So we did not do it the bard way; we did it the *only* way for that time 'and place. But I have never put the effort into a mass calculation for a spaceship at liftoff that I put into deciding what to take, what to do without, for that trek. First, the basic parameter: how many wagons in the train? I wanted three wagons so badly I could taste it. A third wagon would mean luxuries for Dora, more tools for me, more books and such for both of us, and (best!) a precut one-room house to get my pregnant bride out of the weather almost instantly at the other end.

But three wagons meant eighteen mules hauling, plus spare mules —~add six by rule-of-thumb—which meant half again as much, time spent harnessing and unharnessing, watering the animals, taking care of them otherwise. Add enough Wagons and mules and at some point your day's march is zero; one man can't handle the work. Worse, there would be places in the mountains where I would have to unshackle the wagons, move them one at a time to a more open place— go back for each wagon left behind, bring it up—a process that would take twice as long for a three-wagon train as for a two-wagon one, and would happen oftener, even much oftener, with three wagons than with two. At that rate we might have three babies born en route instead of getting there before our first one was born.

I was saved from such folly by the fact only two trekking wagons were available in New Pittsburgh. I think I would have resisted temptation anyhow—but I had with me in the light wagon we drove from Top Dollar, the hardware for three, then I spent that extra hardware on other, things, bartering it through the wainwright. I could not wait while he built a third wagon; both the season of the year and the season of Dora's womb gave me deadlines I had to meet.

There is much to be said for just one wagon—standard equipment over many centuries and on several planets for one family in overland migration if they travel in a party.

I've led such marches.

But one wagon by itself—One accident can be disaster. Two wagons offer more than twice as much to work with at the other end, plus life insurance on the march. You can lose one wagon, regroup, and keep going.

So I planned for two wagons, Minerva, even though I had Zack debit me with three sets of 'Stoga hardware, then did not sell that third set until the last minute.

Here's how you load a wagon train for survival: First, list everything that you expect to need and everything that you would like to take:

Wagons, spare wheels, spare axles
Mules, harness, spare hardware and harness leather, saddles
Water
Food
Clothing
Blankets
Weapons, ammunition, repair kit
Medicines, drugs, surgical instruments, bandages
Books
Plows
Harrow
Field Rake
Shovels, hand rakes, hoes, seeders, threefive- & seven-tine forks
Harvester

Blacksmith's tools
Carpentry tools
Iron cookstove
Water closet, self-flushing type
Oil lamps
Windmill & pump
Sawmill run by windpower
Leatherworking & harness-repair tools
Bed, table, chain, dishes, pots, pans, eating & cooking gear
Binoculars, microscope, water-testing kit
Grindstone
Wheelbarrow
Churn
Buckets, sieves, assorted small hardware
Milk cow & bull
Chickens
Salt for stock & for people
Packaged yeast, yeast starter
Seed grain, several sorts
Grinder for whole-grain flour, meat grinder

Don't stop there; think *big.* Never mind the fact that you've already overloaded a much longer wagon train. Search your imagination, check the manifests of *the Andy J.,* search the ship itself, look, over the stock in Rick's General Store, talk with John Magee and look over his house and farm and outbuildings—if you forget it now, it's impossible to go back for it.

Musical instruments, writing materials, diaries, calendars
Baby clothes, layettes
Spinning wheel, loom, sewing materials—sheep!
Tannin & leather-curing materials and tools
Clocks, watches
Root vegetables, rooted fruit-tree seedlings, other seed
Etc. etc. etc. . .

Now start trimming—start swapping—start figuring weights.

Cut out the bull, the cow, the sheep; substitute goats with hair long enough to be worth cutting. Hey, you missed *shears!*

The blacksmith's shop stays but gets trimmed down to an anvil and minimum tools—a bellows you must make. In general anything of wood is scratched, but a small supply of wrought-iron stock, heavy as it is, must be hauled; you'll be making things you didn't know you could.

The harvester becomes a scythe with handle and cradle, three spare blades; the field rake is scratched.

The windmill stays, and so does the sawmill (surprise!)—but only as minimum hardware; you won't tackle either one soon.

Books—Which of those books can you live without, Dora?

Halve the amount of clothing, double up on -shoes and add more boots and don't forget children's shoes. Yes, I know how to make moccasins, mukluks, and such; add waxed thread. Yes, we do have to have block-and-tackle and the best glass-and-plastic lines we can buy, or we won't get through the pass. Money is nothing; weight and cubage are all that count—our total wealth is what mules can take through that notch.

Minerva, it was lucky for me, lucky for Dora, that I was on my sixth pioneering venture and that I had planned how to load spaceships many years before I ever loaded a covered wagon—for the principles are the same; spaceships are the covered wagons of the Galaxy. Get it down to the weight the mules can haul, then chop off 10 percent no matter how it hurts; a broken axle—when, you can't replace it—might as well be a broken neck.

Then add more water to bring it up to *95* percent; the load of water drops off every day.

Knitting needles! Can Dora knit? If not, teach her. I've spent many a lonely hour in space knitting sweaters and socks. Yarn? It will be a long time before Dora can tease goat shearings into good yarn—and she can knit for the baby while we travel; keep her happy. Yarn doesn't weigh much.

Wooden needles can be made; even curved metal needles can be shaped from scraps. But pick up both sorts from Rick's Store.

Oh my God, I almost missed taking an *ax!*

Ax heads and one handle, brush hook, pick-mattock—Minerva, I added and trimmed and discarded, and weighed every item at New Pittsburgh—and we weren't three kilometers out of there headed for Separation before I knew I had us overloaded. That night we stopped at a homesteader's cabin, and I traded a new thirty-kilo anvil for his fifteen-kilo one, traded even, with the pound of flesh nearest my heart tossed in for good measure. I swapped other heavy items that we would miss later for a smoked ham and a side of bacon and more corn for the mules—the last being emergency rations.

We lightened the loads again at Separation, and I took another water barrel in trade and filled it because I now had room for another and knew that too heavy a load of water was self-correcting.

I think that extra barrel saved our lives.

The patch of green that Lazarus-Woodrow had pointed out up near the notch of Hopeless Pass proved to be farther away in travel time than he had hoped. On the last day that they struggled toward it neither man nor mule had had anything to drink since dawn the day before. Smith felt lightheaded; the mules were hardly fit to work, they plodded slowly, heads down.

Dora wanted to stop drinking when her husband did. He said to her: "Listen to me, you stupid little tart, you're *pregnant.* Understand me? Or will it take a fat lip to convince you? I held out four liters when we served the mules; you saw me."

"I don't need four liters, Woodrow."

"Shut up. That's for you, and the nanny goat, and the chickens. And the cats—cats don't take much. DorabIe, that much water means nothing split among sixteen mules, but it will go a long way among you small fry."

"Yes, sir. How about Mrs. Porky?"

"Oh, that damned sow! Uh…I'll give her a half a liter when we stop tonight and I'll serve her myself. She's likely to kick it over and take your thumb off, the mood she's in. And I'll serve *you* myself, measure it out, and watch you drink it."

But after a long day and a restless night and then an endless day, they were at last among the first of the trees. It seemed almost cool, and Smith felt that he could smell water—somewhere. He could not see any. "Buck! Oh, Buck! Circle!"

The boss mule did not answer; he bad not talked all day. But he brought the column around, cornered the wagons, and nudged, the lead pair into the V to be unharnessed.

Smith called the dogs and told them to hunt for water, then started unharnessing. Silently his wife joined him, serving the off mule of each pair while Smith cleared the nigh mule. He appreciated her silence. Dora was, he thought, telepathic to emotions.

Now if I were water somewhere around here, where would I be? Witch for it? Or search the surface first? He felt fairly sure that no stream led away from this stand of trees, but he could not be certain without hiking all the downhill side. Saddle Beulah? Shucks, Beulah was worse off than he was. He started unlashing rolled sections of spike fence from the sides of the second wagon. He had not seen a loper for three days, which meant to him that they were three days closer to their next trouble with the beasts. "Dora, if you feel up to it, you can give me a hand with this."

She made no comment on the fact that her husband had never before let her help erect the kraal; she simply worried about how drawn and tired he looked and thought about the quarter liter of water she had stolen and hidden—how could she persuade him to drink it?

They were just done when Fritz set up an excited yipping in the distance.

Minerva, it was a water bole—a trickle that came out of a rocky face, ran a couple of meters and formed a pool with no outlet. None that time of year, I should say, as I could see where it overflowed in flood season. I could see also plenty of animal sign—loper tracks and prairie goat and more that

I could not identify. I had a feeling that there might be eyes on me, and I tried to grow eyes in the back of my head. It was dusky near the spring; trees and undergrowth were thicker and the Sun was getting low.

I was in a dilemma. I don't know how it happened that one of the free mules had not found this bole as soon or sooner than the dogs; mules can smell water. But mules were certain to be there soon, and I did not want them to drink too fast. Sensible as a mule is, he'll drink too fast and too much if he is very thirsty. These mules were extremely thirsty; I wanted to watch each one myself, not let one founder.

Besides that I did not want them walking into that pool; it was clear, seemed clean.

The dogs finished drinking. I looked at Fritz and wished that he could talk as well as a mule. Did I have anything to write on? No, not a durn thing! If I told him to fetch Dora, Fritz would try—but would she come? I had told her flatly to stay in the kraal till I got back. Minerva, I wasn't thinking straight; the heat and no water had got to me. I should have given Dora contingency instructions…because if I stayed away too long and it started to get dark, she was going to come looking for me no matter what.

Hell, I hadn't even fetched a bucket!

In the meantime I at least had sense enough to scoop up and drink a couple of handfuls of water, Gideon style. That seemed to clear my head some.

I dropped the straps of my overalls, got my shirt off, soaked it in water, and gave it to Fritz. "Find Dora! Fetch Dora! *Fast!*" I think he thought I had gone nuts, but he left, carrying that wet shirt.

Then the first mule showed up—old Buck, praise Allah!— and I ruined a hat.

That hat Zack had fetched as a present for me. It was alleged to be an all-weather hat, so porous it would let air in, yet so water-repellent that it would keep your head dry in a pouring rain. The former allegation was only moderately true; the latter I had not had a chance to test.

Buck snorted and was all for going into the water up to his knees; I stopped him. Then I offered him a hatful of water. Then a second. And a third.

“Enough for now, Buck. Assembly. Water call.”

With his throat wet Buck could do it. He let out a trumpeting bellow that was mule talk, not English, and I won’t attempt to reproduce it, but it meant “Line up for water” and nothing else. “Fall in to be harnessed” was another soil of bellow.

Then I was trying to cope with a dozen-odd thirst-crazed mules. But between me, Buck, Beulah who was Buck’s straw boss, Lady Macbeth who was used to helping Buck too—and a hat that wasn’t quite all that waterproof—we made it. I never did learn how seniority was established among mule’s, but the mules knew and Buck enforced it and water call always found them queued up in the same order, and heaven help the youngster who tried crowd in out of turn; the least he could expect was a nipped ear.

By the time the last had been given a hatful of water my hat was a mess—but here came Dora with Fritz, her needle gun in her right fist, and, glory be!—two buckets in her left hand. “Water call!” I told my top sergeant. “Line ‘em up again, Buck!”

With two buckets and two of us working we got a full bucket into each mule pretty rapidly. Then I got my shirt back from Fritz, scrubbed out the buckets a bit, filled them, and announced a third water call, telling Buck to let them drink from the pond.

He did so, but he still maintained discipline. As Dora and I left, each with a bucket of water in one hand and a drawn gun in the other, Buck was still requiring them to drink one at a time, by seniority.

It was nearly sundown when Dora and I and the dogs got back to the wagons, almost full dark as we finished watering goats and sow and cats and chickens. Then we celebrated. Minerva, I swear solemnly: on the half bucket of water we saved for ourselves Dora and I got stinkin’ drunk.

Despite earlier resolutions not to stop short of the pass, we bivouacked there three days—but very useful days. The mules grazed steadily and filled out, plenty of water, plenty of forage. I shot a prairie goat at the water hole; what we couldn’t eat, Dora sliced and dried as jerky. I filled all the barrels—not as easy as it sounds as Buck and I had to work out a route to the water hole, then I had to chop some, then I had to take the wagons in one at a time; it took me a day and a half.

But we had cooked fresh meat and all we could eat—and hot baths! With soap. With shampoos. With a shave for me. I carried

Dora's big iron kettle to the pool, she fetched a bucket, I built a fire—then we took turns getting the stink off, one guarding while the other washed.

When we rolled toward the pass the morning of the fourth day, we were not only in fine shape, but Dora and I smelled good and kept telling each other so, in high spirits.

We were never again short of water. There was snow somewhere above us; you could feel it in the breeze and sometimes catch a distant glimpse of white in a saddle between peaks. The higher we got, the oftener we encountered rivulets, water that never reached the prairie in so dry a year. The forage was green and good.

We stopped in a little alp close to the pass. There I left Dora with the wagons and the mules and with flatfooted instructions about what to do in case I did not come back. "I expect to be back by dark. If I am not, you can wait a week. No longer. Understand me?"

"I understand you."

"All right. At the end of a week, lighten the first wagon by chucking out anything you can do without on trek. Put all food into that wagon, empty the barrels in the second wagon and put them in the first wagon, turn the sow and the chickens loose, and head back. Fill all your barrels at that trickle we crossed earlier today. After that, don't stop for anything; roll all day from dawn till dark. You should reach Separation in half the time it took to get us up here. Okay?"

"No, sir."

Minerva, a few centuries earlier I would have started to boil up at that point. But I had learned. It took me about a tenth of a second to realize that I could not make her do anything—if I were gone—and that a promise made under duress won't hold. "All right, Dora, tell me why not and what you intend to do instead. If I don't like it, perhaps we both will start back for Separation."

"'Woodrow, while you did not say so, you are asking me to do what I should do—and I *would* do!—if I were a widow."

I nodded. "Yes, that's right. Dearest, if I'm not back in a week, you're a widow. No possible doubt."

"I understand that. I also understand why you are leaving the wagons here; you can't be sure that you can turn them around higher up."

"Yes. That's probably what happened to earlier parties— reached a place where they couldn't go forward and couldn't turn around…then tried one or the other and went over."

"Yes. But, my husband, you mean to be gone only one day—half a day out, half a day back. Woodrow, I won't assume that you are dead —I *can't!"* She looked at me steadily and her eyes filled with tears, but she did not cry. "I must see your dear body, I must be certain. If I am certain, I will go back to Separation as fast and as safely as possible. And then to the Magees as you have told me, and have your child and bring him up to be as much like his father as possible. But I must *know.*”

“Dora, Dora! In one week you *will* know. No need to look for my bones.”

“May I finish, sir? If you aren’t back tonight, I’m on my own. At dawn tomorrow I start out on Betty, with another saddle mule following. At noon I turn back.

“Perhaps, if I can’t find you, I’ll find a spot higher up where I can take one wagon and turn it around. If I find such a spot, I’ll move one wagon up and use it as a base and look farther. I could have missed your track. Or I might have followed mule tracks—but you aren’t on the mule. Whatever it is, I’ll search and search again. Until there’s no hope at all! *Then…*I will go to Separation as fast as mules can get me there.

“But, my darling, if you are alive—maybe with a broken leg but alive—if you still have a knife or even your bare hands, I don’t believe that a loper or anything can kill you. If you are alive, I’ll find you. I will!”

So I backed down and checked watches with her and agreed on what time I would turn back. Then Buck and I, with me up on Beulah, set out to scout ahead.

Minerva, at least four parties had tried that pass; none had come back. I’m certain enough that they each failed from being too eager, not patient enough, unwilling to turn back when the risk was too great.

Patience I have learned. The centuries may not give a man wisdom, but he acquires patience or he doesn’t live through them: That first morning we found the first spot that was too tight. Oh, someone had blasted there and probably got around that turn. But it was too narrow to be safe, so I blasted some more. Nobody in his right mind takes a wagon into the mountains without dynamite or some such; you can’t nibble at solid rock with a toothpick, or even a pickax, without risking being still up there when the snows come.

I was not using dynamite. Oh, anyone with a modicum of chemistry can make both dynamite and ‘black powder,’ and I planned to do both—later. What I had with me was a more efficient and more flexible blasting jelly—and not shock-sensitive, perfectly safe in wagon and saddlebag.

I placed that first charge in a crack where I thought it would do the most good, set the fuse but did not light it, then walked both mules back around the bend and exerted my histrionic talent to its limit to explain to Buck and Beulah that there was going to be a loud noise, a *bang/—but* it could hot hurt them, so don't worry. Then I went back, lit the fuse, hurried back to them and was in time to have an arm on each neck—watched my watch. "Now!" I said, and the mountain obliged me with *Ka-boom!*

Beulah shivered but was steady. Buck said inquiringly, *Paaang?*

I agreed. He nodded and went back to cropping leaves.

We three went up and took a look. Nice and wide now— Not very level, but three tiny blasts took care of that. "What do you think, Buck?"

He looked carefully up and down trail. "Doo wagon?"

"One wagon."

"Ogay."

We explored a little farther, planned the next day's work; then I turned back at the time promised, was home early.

It took me a week to make a couple of kilometers safe to another little alp, a grassy pocket big enough to turn one wagon around at a time. Then it took all of a long day to move our wagons, one at a time, to this next base. Someone had made it that far; I found a broken wagon wheel—salvaged the steel tire and the hub. It went on that way, day after day, slowly, tediously, and at last we were through the notch and headed—mostly—downhill.

But that was worse, not better. The river I had been sure was there, by photomaps from space, was far below us, and we still had to go down, down, down, and follow it a long way before we would reach the place where the gorge opened out into valley suitable for homesteading. More blasting, lots of brush chopping, and sometimes I had to blast trees. But the nastiest part was rappelling those wagons down the steepest places. I didn't mind steep places going uphill (which we still encountered); a twelve-mule team can drag a single wagon up any slope they can dig their hooves into. But downhill—

Certainly those wagons had brakes. But if the grade is steep, the wagon slides on its tires—then goes over the edge, mules and all.

I couldn't let that happen even once. Not ever *risk* letting it happen. We could lose one wagon and six mules and still go on. But *I* was not expendable. (Dora would not be in the wagon.) If that wagon cut loose, my chances of jumping clear would be so-so.

If the grade was steep enough to give me even a trace of doubt that I could hold a wagon with its brakes, we did it the hard way: used that expensive imported line to check it down such pitches. Lead the line out fair and free for running, pass the bitter end three times around a tree stout enough to anchor it, secure it to the rear axle—then our four steadiest mules, Ken and Daisy, Beau and Belle, would take the wagon down at a slow walk (no driver) following Buck, while I kept tension on the line, paying it out very slowly.

If terrain permitted, Dora on Betty would take station halfway down to relay orders to Buck. But I could not permit her to be on the trail itself; if that line parted, it would whip. So maybe half the time Buck and I worked without liaison, doing it dead slow and depending on his judgment.

If there was not a sound anchor tree properly positioned—and it seems to me that this happened more often than not—then we had to wait while I worked something out. This could be anything: a sling between two trees, then rig a fair-lead to a third tree—A bare-rock anchor using driven pitons—I hated these as I bad to do my checking right at the rear axle, walking behind, and God help us all if I stumbled. Then that was always followed by the time-consuming chore of salvaging those pitons—the harder the rock, the better the anchor, but the tougher the job of getting them out—and I *had* to get them out; I would need them farther along.

‘Sometimes no trees and no rock— Once the anchor was twelve mules faced back along the trail, with Dora soothing them while I checked at a rear axle and Buck controlled the progress.

On the prairie we often made thirty kilometers a day. Once we were through Hopeless Pass and had started down the gorge the distance made good over the ground could be zero for days on end while I prepared the trail ahead, then up to as high as ten kilometers if there were no steep pitches that required rappelling down by line. I used just one unbreakable rule: The trail had to be fully prepared from one turnaround base to the next before a wagon was moved.

Minerva, it was so confounded slow that my “calendar” caught up with me; the sow ‘littered—and we were not out of the mountains.

I don’t recall ever making a harder decision. Dora was in good shape, but she was halfway through her pregnancy.

Turn back (as I had promised myself, without telling her)— or push on and hope to reach lower and fairly level ground before she came to term? Which would be easier on her?

I had to consult her—but *I* had to decide. Responsibility *cannot* be shared. I knew how she would vote before I took the matter up with her: Push on.

But that would be simply her gallant courage; *I* was the one with experience both in wilderness trekking and in childbirth problems.

I studied those photomaps again without learning anything new. Somewhere ahead the gorge opened out into a broad river valley—but how far? I didn’t know because I didn’t know where we were. We had started with an odometer on the right rear wheel of the lead wagon; I had reset it to zero at the pass—and it had lasted only a day or two; a rock or something did it in. I didn’t even know how much altitude we had managed to drop since the pass, or how much more we must lose to get down.

Livestock and equipment: fair. We had lost two mules. Pretty Girl had wandered over the edge one night and broken a leg; all I could do for her was to put her out of her misery. I didn't butcher her because we had fresh meat and I could not do it where the other mules could not see it, anyhow. John Barleycorn had simply upped and died one night—or possibly lost to a loper; he was partly eaten when we found him.

Three hens were dead and two piglets failed to make it, but the sow seemed willing to suckle the others.

I had only two spare wheels left. Lose two more and the, next broken wheel meant abandoning one wagon.

It was the wheels that made up my mind.

(Omitted: approximately 7,000 words which reiterate difficulties in getting down the gorge.)

When we came out on that plateau, we could see the valley stretching out before us. A *beautiful* valley, Minerva, wide and green and lovely—thousands and thousands of hectares of ideal farmland. The river from the gorge, tame now, meandering lazily between low banks. Facing us, a long, long way off, was a high peak crowned with snow. Its snow line let me guess how high it was—around six thousand meters, for we had now dropped down into subtropics, and only a very high mountain could keep so much snow through a long and very hot summer.

That beautiful mountain, that lush green valley, gave me a feeling of déjà vu. Then I placed it: Mount Hood in the land of my birth back on old Earth, as I had first seen it as a young man. But this valley, this snowcapped peak, had never before been seen by men.

I called out to Buck to halt the march. "Dorable, we're home; in sight of it, somewhere down in that valley."

'Home,'" she repeated. "Oh, my darling!"

"Don't sniffle."

"I wasn't sniffling!" she answered, smiling. "But I've got an awful good cry saved up and when I get time to, I'm going to use it."

"All right, dear," I agreed, "when you have time. Let's name that mountain 'Dora Mountain.'"

She looked thoughtful. "No, that's not its name. That's Mount Hope. And all this below is Happy Valley."

"Durable Dora, you're incurably sentimental."

"You should talk!" She patted her belly, swollen almost to term. "That's Happy. Valley because it's where I'm going to have this hungry little beast…and that's Mount Hope because it *is.*"

Buck had come back to the first wagon and was waiting to find out why we had stopped. “Buck,” I said, pointing, “that’s home out there. We made it. Home, boy. Farm.”

Buck looked out over the valley. “Ogay.”

—in his sleep, Minerva. Not lopers, there wasn’t a mark on Buck. Massive coronary, I think, although I didn’t cut him open to find out. He was simply old and tired. Before we left, I had tried to put him to pasture with John Magee. But Buck didn’t want that. We were his family, Dora and Beulah and I, and he wanted to come along. So I made him mule boss and didn’t work him—I mean I never rode him and never had him in harness. He *did* work, as mule boss, and his patient good judgment got us safely to Happy Valley.

We would not have made it without him.

Maybe he could have lived a few years longer turned out to pasture. Or he might have pined away from loneliness soon after we left. Who’s to judge?

I didn’t even consider butchering him; I think Dora would have miscarried it I had so much as broached the idea. But it is foolish to bury a mule when lopers and weather will soon take care of his carcass. So I buried him.

It takes an hellacious big hole to bury a mule; If it hadn’t been soft river-bottom loam, I’d be there yet.

But first I had to deal with personnel problems. Ken was just junior to Beulah in the water queue and was a steady, strong mule who talked fairly well. On the other hand, Beulah had been Buck’s straw boss the whole trek—but I could not recall a gang of mules bossed by a mare.

Minerva, with H. sapiens this would not matter, at least not today on Secundus. But with some sorts of animals it *does* matter. A boss elephant is female. A boss chicken is, a cock, not a hen. A boss dog can be either sex. In a breed where sex controls the matter a man had better by a damn sight go along with their ways.

I decided to see if Beulah could swing it, so I told her to line ‘em up for harness, both as a test and because I wanted to move the mules out of sight while I buried Buck—they were nervy and restless; the boss mule’s death had upset them.

I don’t ‘know what mules think about death, but they are not indifferent to it.

She promptly got busy, and I kept an eye on Kenny. He accepted it, took his usual place by Daisy. Once I had them harnessed, Beulah was the only one left over, three mules dead now.

I told Dora that I Wanted them moved a few hundred meters away. Would she handle it, with Beulah as march boss? Or would she feel safer if I did it?—and ran into a second problem: Dora wanted to be present when I buried Buck. More than that—”Woodrow, I can help dig. Buck was my friend, too, you know.”

I said, “Dora, I’ll put up with anything at all from a pregnant woman except allowing her to do something that would hurt her.”

“But, dearest, I feel okay, physically—it’s just that I’m dreadfully upset over Buck. So I want to help.”

“I think you are in good shape, too, and I want you to stay that way. You can help best by staying in the wagon. Dora, I haven’t any’ way to take care of a premature baby, and I don’t want to have to bury a baby as well as Buck.”

Her eyes widened. “You think that would happen?”

“Sweetheart, I don’t know. I’ve known women to hang onto babies under unbelievable hardships. I’ve seen others lose babies for no reason that I could see. The only rule I have about it is: Don’t take unnecessary chances. This one is not necessary.”

So once again we replanned things to suit both of us, though it took an extra hour. I unshackled the second wagon and set up the fence again, put the four goats inside the fence, and left Dora in that wagon. Then I drove the first wagon three or four hundred meters away, unharnessed the mules, and told Beulah to keep them together —and told Ken to help her, and left Fritz to help her, too, and took Lady MacBeth with me to watch for lopers or whatever. The visibility was good—no brush, no high grass; the place looked like a tended park. But I was going to be down in a hole; I didn’t want something sneaking up on me or on the wagon. “Lady Macbeth. High sentry. *Up!*”

By agreement Dora stayed in the wagon.

It took all that day to take care of our old friend, with a stop for lunch and a few short breaks for water and to catch my breath in the shade of the wagon—breaks I shared with Lady Mac, letting her get down each time I came up. Plus one interruption—It was midafternoon and I had dug almost enough hole when Lady Mac barked for me. I was up out of that hole fast, blaster in hand, expecting lopers.

Just a dragon— I wasn’t especially surprised, Minerva; the well-cropped state of the turf, almost like a lawn, seemed to indicate dragon rather than prairie goat. Those dragons are not dangerous unless one happens to fall on you. They are slow, stupid, and strictly vegetarian. Oh, they’re ugly enough to be frightening; they look like six-legged triceratops. But that’s all. Lopers left them alone because biting armor is unrewarding.

I joined Dora at the wagon. “Ever seen one, hon?”

“Not up close. Goodness, it’s *huge.*”

"It's a big one, all right. But it will probably turn away. I won't waste a charge on it if I don't have to."

But the durned thing did not turn away. Minerva, I think it was so stupid that it mistook the wagon for a lady dragon.

Or the other way around, it is hard to tell male from female. But they are definitely bisexual; two dragons humping is a remarkable sight.

When it got within a hundred meters, I let myself out the fence and took Lady Mac along, as she was quiveringly eager. I doubt if she had ever seen one; they were cleaned out around Top Dollar long before she was whelped. She danced up to it, barking but wary.

I hoped that Lady would cause it to turn aside, but this misshapen rhinoceros paid no attention; it lumbered slowly along, straight for the wagon. So I tickled it with my needle gun between where it should have had lips, to get its attention. It stopped, astounded I think, and opened its mouth wide. That was what I needed, as I did not want to waste maximum power blasting through that armored hide. So—Blaster at minimum, right into its mouth: Scratch one dragon.

It stood there a moment, then slowly collapsed. I called Lady and went back to the fence. Dora was waiting. "May I go look at it?" I glanced at the Sun. "Sweetheart, I'm going to be pushed to take care of Buck before dark, then fetch the mules back and move us on a way. Unless you are willing to bivouac, with the grave on one side and a dead dragon on the other?"

She did not insist, and I got back to work. In another hour I had it deep enough and wide enough—got out block-and-tackle, a triple purchase, secured it to the rear axle, tied Buck's hind feet together, hooked over the tie and took up the slack.

Dora had come out with me. "Just a moment, dear." She stopped to pat Buck's neck, then leaned down and kissed his forehead. "All right, Woodrow. Now."

I heaved on the line. For a moment I thought the wagon would move despite the brakes being locked. Then, Buck started to slide, and fell into his grave. I shook the hook loose, then backfilled fast, closing in twenty minutes a hole it had taken me most of the day to dig. Dora waited.

I finished. "Up into the wagon, Dorable; that's it."

"Lazarus, I wish I knew something to say. Do you?"

I thought about it. I had heard a thousand burial services; most of them I did not like. So I made up one. "Whatever God there be, please take care of this fine person. He always did his best. Amen."

(Omitted)

—even those first years weren't too hard, as Happy Valley would grow anything, two and three crops a year. But we should have named it "Dragon Valley."

Lopers were bad enough, especially the small lopers that hunted in packs which we found on that side of Raxnpa Range. 'But those damned dragons! They almost drove me out of my skull. When you've lost the same potato patch four times running, it begins to wear.

Lopers I could poison and did. I could trap them, too, if I changed style every time. Or I could put out bait at night and sit quietly and get most of a pack, silently, with a needle gun. I could do lots of things and did, and the mules learned to cope with them, too, sleeping closer together at night an always with one on watch, like quail or baboon. Whenever I beard the bellow that meant *"Loper!"* 'I always came awake fast and tried to join the fun—but the mules rarely left me any; they not only could stomp them, but they could outrun them and get some or all of a pack that tried to escape. We lost three mules and six goats to lopers, but the lopers got the news and started giving us a wide berth.

But those dragons! Too big to trap and would not take poison; salad was all they were after. But what one dragon can do to a cornfield in one night shouldn't happen to Sodom and Gomorrah. Bow-and-arrow was futile against them, and a needle gun just tickled them. I could kill one with a blaster at full power right through the armor, or minimum power the way I got that first one if I could get my target to open its mouth. But unlike lopers, they were too stupid to stay away when they were losing.

The first summer I was able to farm I killed more than hundred dragons in trying to save my crops…which was defeat for me and a victory for the dragons. Not only was the stench terrible (what can you do with a carcass that big?) but, far worse, I was running out of charges and they didn't seem to be running out of dragons.

No power. Buck's River did not have enough head on it where we settled to think about trying to build a water wheel even if I cannibalized one wagon to build it. The windmill had fetched was in fact nothing but gears and other hardware the mill itself I would have to build, from sails to tower. Bu until I had power I had no way to recharge power packs.

Dora solved it. We were still living in that first compound nothing but a high adobe wall just big enough to surround the wagons and to bring the goats inside at night, while we slept in the first wagon along with baby Zack and cooked in a clay Dutch oven—and between smoke, and goats and chickens and the sour smells babies can't help making and the cesspit that bad to be inside the wall—well, the stench of dead dragons wasn't too noticeable.

We were finishing supper, Dora dressed in her rubies as always for supper, and were watching the moons and the stars coming out—best time of day, always, except that when I should have been admiring our firstborn at suck and enjoying the sky, I was grousing about power and what in hell I could do about those pesky dragons.

I had ticked off several simple ways to produce power— simple if you are on a civilized planet or even at a place like New Pittsburgh with its coal and its infant metals industry— when I happened to use a very old-fashioned term. Instead of talking about kilowatts or megadynecentimeters per second or such, I had remarked that I would settle for ten horsepower any way I could get it.

Dora had never seen a horse, but she knew what one was. She said, "Beloved, wouldn't ten mules do instead?"

(Omitted)

We had been in our valley seven years when the first wagon showed up. Young Zack was nearly seven and beginning to be some help to me—or thought he was and I encouraged him to try. Andy was five, and Helen not yet four. We had lost Persephone, and Dora was pregnant again, and that was why—Dora had insisted on starting another baby at once, not wait one day, one hour—and she was right. Once we knew she had caught, our morale picked up overnight. We missed Persephone; she had been a darling baby. But we stopped grieving and looked forward instead. I hoped for another girl but was willing to settle for any baby—no way to control the sex of a child, then and there.

All in all, we were in fine shape, with a prosperous farm, a healthy, happy family, plenty of livestock, a much larger compound with a house built right into it against the back wall, a windmill that drove a saw, or ground grain, or supplied power for my blaster.

When I spotted that wagon, my first thought was that it was going to be nice to have neighbors. But my second thought was that I was going to be proud, very proud, to show off my fine family and our farm to these newcomers.

Dora climbed up to the roof and watched the wagon with me; it was still over fifteen kilometers away, could not arrive before evening. I put my arm around her. "Excited, hon?"

"Yes. Though I've never been lonely; you haven't let me be. How many do you think I should expect for supper?"

"Hmm— Only one wagon. One family. My best guess is a couple, with none, one, or two children. More than that would surprise me."

"Me, too, darling, but there'll be plenty to eat."

"And put some clothes on our kids before they get here—wouldn't want ‘em to guess we’re raising savages, would we?” She answered, deadpan, “Shall I wear clothes, too?”

“What swank! That’s up to you, Rangy Lil—but who was it said just last month that she had never worn her party dress?”

“Will you be wearing a kilt, Lazarus?”

“I might. I might even take a bath. I’ll need one because I’m going to spend the rest of the day cleaning the goat compound and a lot of other things—make this place look as neat as possible. But forget the name ‘Lazarus,’ dear; I’m Bill Smith again.”

“I’ll remember—Bill. I’ll bathe before they get here, too— because I’m going to have a hot and busy time, cooking, cleaning house, bathing our children, and trying to teach them how to be introduced to strangers. They’ve never seen anyone else, dear; I’m not sure they believe there *is* anyone else.”

“They’ll behave.” I was sure they would. Dora and I had the same ideas about raising kids. Praise them, never scream at them, punish as necessary and right now—never a moment’s delay—then it’s over with and forget it. Be as lavish with affection after a spanking as any other time—or a bit extra. Spanking they had to have (Dora usually used a switch) because, without exception over the centuries, my kids have been hell-raisers who would take advantage of the sweetness-and-light routine. Some of my wives had trouble believing what little monsters I spawn—but Dora was right with me on this wild-animal act from scratch. In consequence she raised the most civilized brood I’ve ever fathered.

When that wagon was maybe a kilometer away, I rode out to meet them—then was surprised and disappointed. A family, yes, if you count a man and two grown sons as a family. No women, no children. I wondered how they thought they were going to pioneer.

The younger son was not fully grown; his beard was sparse and scraggly. Nevertheless, he was taller and heavier than I was, and he was the smallest of the three. His father and brother were mounted; he was driving—actually driving; they were not using a mule boss. No livestock other than mules that I could see, although I did not attempt to look into their wagon.

I did not like their looks and reversed my idea about neighbors. I hoped they would move on down the valley, at least fifty kilometers.

The mounted two were carrying guns at their belts—reasonable in loper country. I had a needle gun in sight myself, as well as a belt knife—and maybe other things not in sight, as I don’t consider it diplomatic to show much hardware in meeting strangers.

As I approached, they stopped, the driver reining up his mules. I had Beulah stop about ten paces short of the lead pair. “Howdy,” I said. “Welcome to Happy Valley. I’m Bill Smith.”

The oldest of the three looked me up and down. It is hard to tell a man's expression when he wears a full beard, but what little I could see was no expression at all—wariness, perhaps. My own face was smooth—freshly shaved and clean overalls, in honor of visitors. I was keeping my face smooth both because Dora preferred it so and because I was staying "young" to match Dora. I was wearing my best friendly look—but was saying to myself, "You've got ten seconds to answer my greeting and say who you are—or you're going to miss some of the best cooking on New Beginnings."

He just slid under the deadline; I had silently counted seven chimpanzees when he suddenly grinned through that face moss. "Why, that's mighty friendly of you, young man."

"Bill Smith," I repeated, "and I didn't catch your name."

"Probably because I didn't say," he answered. "Name's Montgomery. 'Monty' to my friends, and I don't have any enemies, at least not for long. Right, Darby?"

"Right Pop," agreed the other mounted one.

"And this is my son Darby and that's Dan driving the jugheads. Say 'Howdy,' boys."

"Howdy," they each answered.

"Howdy, Darby. Howdy, Dan. Monty, is Mrs. Montgomery with you?" I nodded at the wagon, still did not attempt to see into it—a man's wagon is as private as his house.

"Now why would you be asking that?"

"Because," I said, still holding onto my friendly-idiot look, "I want to trot back to the house and tell Mrs. Smith how many there'll be for supper."

"Well! Did you hear that, boys? We've been invited to supper. That's mighty friendly, too, isn't it, Dan?"

"Right, Pop."

"And we most kindly accept. Don't we, Darby?"

"Right, Pop."

I was getting tired of the echo, but I kept my sweet expression. "Monty, you still haven't told me how *many.*"

"Oh. Just three. But we eat enough for six." He slapped his thigh and laughed at his own joke. "Right, Dan?"

"Right, Pop."

"So you stir up those jugheads, Dan; we've got reason to hurry now."

'I interrupted the echo to say, "Hold it, Monty. No need to overheat your mules."

"What? They're my mules, son."

"So they are and do as you please about them, but I was sent out ahead so that Mrs. Smith would have time to be ready for you. I see you're wearing a watch"—I glanced at my own—"your hostess will expect you in one hour. Unless you need more time to get there and unharness and water your mules?"

"Oh, them jugheads will keep until after supper. If we're early, we'll set awhile."

"No," I said firmly. "One hour, no sooner. You know how a lady feels about guests arriving before she's ready for them. Crowd her, and she might ruin your supper. Do as you please about your mules—but there is an easy place to water them, a little beach, where the river comes closest to the house. Nice place to spruce up a bit yourself, too—before dining with a lady. But don't come up to the house short of one hour."

"Your wife sounds mighty particular…for way out here in the wilds."

"She is," I answered. "Home, Beulah."

I moved from a trot into Beulah's fast lope and did not get over an uneasy feeling between my shoulder blades until I was certain I was too far away to be a target. There is only one dangerous animal, yet at times you're forced to pretend that he's as sweet and innocent as a cobra.

I didn't stop to unsaddle Beulah; I hurried inside. Dora heard my slam-bang arrival, was at the compound's door. "What is it, dear? Trouble?"

"Could be. Three men, I don't like them. Nevertheless, I've promised them supper. Have the kids eaten? Can we put them right to bed and convince them that if they so much as let out a peep, they'll be flayed alive? I didn't mention children, we aren't going to mention them, and I'm going to take a fast look around to make sure there is nothing in sight that says 'kids.'

"I'll try. Yes, I've fed them."

Right on the hour Lazarus Long met his guests at the door of the compound. They drove and rode up from the direction of the beach he had described, so he assumed that they had watered their animals, but he noted with mild scorn that they now did not bother to unharness their team for what was sure to be a long wait. But he was pleased to note that all three Montgomerys had made some effort to spruce up—perhaps they were going to behave; perhaps his sixth sense for trouble was hypersensitive from too long in the wilderness.

Lazarus was dressed in his best—kilt with full kit save that the effect was marred by a faded work shirt of New Pittsburgh origin. But it was indeed his best, worn only for children's birthdays. On other days he wore anything from overalls to skin, depending on work and weather.

After Montgomery dismounted, he paused and looked over his host. “My, aren’t we fancy!”

“In your honor, gentlemen. I save it for very special occasions.”

“So? It’s mighty nice of you to honor us, Red. Isn’t it, Dan?’

“Right, Pop.”

“My name is Bill, Monty. Not ‘Red.’ You can leave your. guns in your wagon.”

“Well! Now that’s not very friendly. We always wear our guns. Don’t we, Darby?”

“Right, Pop. And if Pop says your name is ‘Red,’ that’s your name.”

“Now, now, Darby, I didn’t say *that.* If Red wants to call himself Tom, Dick, or Harry, that’s his choice. But we wouldn’t feel dressed without our guns, and that’s the truth, uh, Bill. Why, I even wear mine to bed. Out here.”

Lazarus was standing in the opened door of the compound. He made no move to step aside and let his visitors in. “That s a reasonable precaution…on the trail. But gentlemen don’t wear arms when they dine with a lady. Drop them here or put them in your wagon, whichever you wish.”

Lazarus could feel the tension grow, could see the younger two watching their father for instructions. Lazarus ignored them and kept his easy smile on Montgomery, while forcing his muscles to stay loose as cotton. Right now? Would the bear back off? Or treat it as a challenge?

Montgomery split his face in his widest grin. “Why, sure, neighbor—if that’s how you want it. Shall I take off my pants, too?”

“Just your guns, sir.” (He’s righthanded. If I were righthanded and wearing what you are wearing, where would my second gun be? There, I think—but, if so, it must be small either a needle gun or possibly an old-fashioned snubnosed assassin’s gun. Are his sons both righthanded?)

The Montgomerys put their gun belts on the seat of their wagon, came back. Lazarus stood aside and welcomed them in, then slid the bar into place as he closed the door. Dora was waiting, dressed in her “party dress.” For the first time since a very hot day on the prairie she did not wear her rubies at the evening meal.

“Dear, this is Mr. Montgomery and his sons, Darby and Dan. My wife, Mrs. Smith.”

Dora bobbed a curtsy. “Welcome, Mr. Montgomery, and Darby, and Dan.”

“Call me ‘Monty,’ Mrs. Smith—and what’s your name? Mighty pretty place you’ve got here…for so far out in the country.”

“If you gentlemen will excuse me, ‘I have a couple of things to do to get supper on the table.” She turned quickly and hurried back into her kitchen.

Lazarus answered, “I’m glad you like it, Monty. It’s the best we’ve been able to do so far, while getting a farm started.” The back wall of the compound had four rooms built against it: storeroom, kitchen, bedroom, and nursery. All had doors into the compound, but only the kitchen door was open. The rooms interconnected.

Outside the kitchen door was a Dutch oven; in the kitchen was a fireplace used for other cooking and for all cooking when it rained. That and a water barrel were as yet Dora’s major kitchen equipment—but her husband had promised her running water “sometime before you are a grandmother, my lovely.” She had not pressed him about it; the house grew larger and better equipped each year.

Beyond the Dutch oven and paralleling the bedrooms was a long table with matching stools. At the other wall by the storeroom was an outhouse; it and a water barrel and two wooden tubs made by cutting another barrel in two constituted, so far, their “bathroom-toilet-refresher.” A pile of earth with a shovel stuck into it was by the outhouse; the cesspit was being slowly backfilled.

“You’ve done pretty well,” Montgomery conceded. “But you shouldn’t have put your privy inside. Don’t you know that?”

“There is another privy outside,” Lazarus Long told him. “We use this one as little as possible and I try to keep it from being too whiff. But you can’t expect a woman to go outside after dark, not in loper country.”

“Lots of lopers, eh?”

“Not as many as there used to be. Did you see any dragons as you came through the valley?”

“Saw a lot of bones. Looked like a plague had hit the dragons hereabouts.”

“Something of the sort,” Lazarus agreed. “Lady! *Heel!”* He added, “Monty, tell Darby that it’s not safe to kick at that dog; she’ll attack. She’s a watchdog, in charge of this house, and she knows it.”

“You heard what the man said, Darby. Leave the dog alone.”

“Then she had better not come sniffing around me! I don’t like dogs. She growled at me.”

Lazarus said directly to the older son, “She growled because you kicked at her when she sniffed you. Which was her duty. If I had not been present, she would have taken your throat out. Leave her alone and she’ll leave you alone.”

Montgomery said, “Bill, you had better put her outside while we eat.” Phrased as a suggestion, it was made to sound like an order.

“No.”

“Gentlemen, supper is served.”

“Coming, dear. Lady. High sentry.” The bitch glanced at Darby but immediately trotted up the ladder to the roof, using the rungs without hesitation. There she made a careful full-circle scan before sitting down where she could watch both outside and the supper party below her.

The Supper party was more successful as a supper than as a party. Conversation was limited mostly to small talk between the two older men. Darby and Dan simply ate. Dora answered briefly sallies that Montgomery made at her and failed to hear any that she regarded as too personal. The sons seemed surprised to find their plates set each with knife, fork, chop tongs, and spoon, then relied mostly on knife and fingers; their father made some effort to use each eating tool, getting quite a bit of food into his beard.

Dora had piled the table with hot fried chicken, cold sliced ham, mashed potatoes and chicken gravy, hot corn pone and cold whole wheat bread with bacon drippings, a mug of goat's milk at each place, lettuce-and-tomato salad with grated goat's-cheese-andonion dressing, boiled beets, fresh radishes, fresh strawberries with goat's milk. As promised, the Montgomerys ate for six, and Dora was pleased that she had provided a plenty.

At last Montgomery pushed back his stool and belched appreciatively. "My, that hit the spot! Miz Smith, you can cook for us all the time. Right, Dan?"

"Right, Pop!"

"I'm pleased that you enjoyed it, gentlemen." She stood up and started to clear the table. Lazarus stood and started to help her.

Montgomery said, "Oh, sit down, Bill. Want to ask you some questions."

"Go ahead and ask," Lazarus said, continuing to stack plates.

"You said there was no one else in the valley."

"That is correct."

"Then I think we'll stay right here. Miz Smith is a very good cook."

"You're welcome to camp here overnight. Then you'll find excellent farmland farther down the river. As I told you, I've homesteaded all of this."

"Been meaning to talk to you about that. Doesn't seem right for one man to grab all the best land."

"It isn't the best land, Monty; there arc thousands of hectares just as good. The only difference is that I've plowed and cultivated this part."

"Well, we won't argue about it. We outvote you. Four voting, I mean, and us three all voting the same way. Right, Darby?"

"Right, Pop."

"It's not subject to vote, Monty."

"Oh, come now! The majority is always right. But we won't argue.

Been a nice feed, now for some entertainment. Do you like to rassle?"

"Not especially."

"Don't be a spoilsport. Dan, do you think you can throw him?"

"Sure, Pop."

"Good. Bill, first you rassle Dan—out here in the middle and I'll referee, keep everything fair and square."

"Monty, I'm 'not going to wrestle."

"Oh, sure you are. Miz *Smith!* Better come out here, you won't want to miss this."

"I'm busy now," Dora called out. "I'll be out shortly."

"Better hurry. Then you rassle Darby, Bill—then you rassle *me."*

"No wrestling, Monty. Time for you folks to get into your wagon."

"But you *want* to rassle, young fellow. I didn't tell you what the prize is. The winner sleeps with Miz Smith." His second gun appeared as he said it. "Fooled you, didn't I?"

From the kitchen Dora shot the gun out of his hand just as a knife suddenly grew in Dan's neck. Lazarus shot Montgomery carefully in the leg, then even more carefully shot Darby—as Lady Macbeth was at his throat. The fight had lasted under two seconds.

"Lady. Heel. Nice shooting, Dorable." He patted Lady Macbeth. *"Good* Lady, *good* dog."

"Thank you, darling. Shall I finish off Monty?"

"Wait a moment." Lazarus stepped over and looked down at the wounded man. "Got anything to say, Montgomery?"

"You bastards! Never gave us a chance."

"Gave you lots of chance. You wouldn't take it. Dora? Do you want to? Your privilege."

"Not especially."

"All right." Lazarus picked up Montgomery's second gun, noted that it was indeed a museum piece but did not seem to be hurt. He used, it to finish off its owner.

Dora was peeling off her dress. "Half a moment, dear, while I get this off; I don't want to get blood on it." With the dress out of the way, her pregnant condition showed a little. She also showed several other weapons as well as a gun belt riding low on her hips.

Lazarus was getting out of his kilt and other finery. "You don't need to help, sweetheart; you've done a full day's work—and a fine one! Just toss me my oldest overalls."

"But I *want* to help. What are going to do with them?"

"Put them into their wagon, take them far enough downriver that lopers will dispose of them, drive back." He glanced at the Sun. "An hour and more of daylight left. Time enough."

"Lazarus, I don't want you away, from me! Not now."

"Upset by it, my durable one?"

"Some. Not much. Uh…made horny by it, I'm ashamed to say. Perverted, huh?"

"Rangy Lil, *anything* makes you horny. Yes; it's somewhat perverse…but a surprisingly common reaction to one's first encounter with death. Nothing to be ashamed of as long as you don't get hooked by it; it's just a reflex. On second thought never mind the overalls; I can scrub blood off my hide easier than getting it out of cloth." He removed the bar and opened the gate as he' talked.

"I've seen death before. I was much more upset when Aunt Helen died…and not a bit horny."

"Violent death, I should have said. Dear, I want to get these bodies outside the wall before any more blood soaks into the ground. We can discuss it later."

"You'll need help loading them. And I *don't* want to be away from you, truly I don't."

Lazarus stopped and looked at her. "You're more upset than you let on. That's common, too—steady in the clutch, then a reaction afterwards. So let's work it out. I don't fancy leaving the kids alone that long, nor do I want them in a wagon loaded with all that bad meat. Suppose I drive just a short distance tonight—say three hundred meters or so—while you start a kettle of water? I'm going to want another bath after this job even if I manage not to get a drop of blood on me."

"Yes, sir."

"Dora, you don't sound happy."

"I'll do it your way. But I could wake Zaccur and have him babysit. He's used to it."

"Very well, dear. But first we load them. You can hold up their feet while I drag them. If you throw up, I'll assume that you'll babysit while I finish this chore."

"I won't throw up. I ate very little."

"I didn't eat much either." They got on with the grisly task; Lazarus continued to talk. "Dora, you did a perfect job."

"I caught your signal. You gave me plenty of time."

"I wasn't sure he was going to push it to a showdown even when I signaled."

"Really, dear? I knew what they meant to do—kill you and rape me—before they ever sat down to eat. Couldn't you feel it? So I made sure that they ate plenty—to slow them down."

"Dora, you really do sense emotions-—don't you?"

"Mind his head, dear. When they're as strong as that, I do. But I wasn't sure how you would handle it. I made up my mind to be raped all night if that was what it took for you to set up a safe chance."

Her husband answered soberly, "Dora, I will allow you to be raped only if that is the only possible way to save your life. Tonight it was not necessary. Thank goodness! But Montgomery had me worried at the gate. Three guns out in the open and mine still under my kilt—Could have been a problem. Since he meant to take me anyhow, he should have done it then. Durable, threefourths of any fight lies in not hesitating when the time comes. Which is why I'm so proud of you."

"But you set it up, Lazarus. You signaled me to get into position, you stayed on your feet when he told you to sit down, you went around to the end of the table and pulled their eyes with you—and stayed out of my line of fire. Thank you. All I had to do was shoot when he got out his gun."

"Of course I stayed out of your line of, fire, dear; this isn't my first time by too many. But it was your straight shooting that gave me time to put my knife into Dan instead of having to settle his father first. And Lady did me the same favor with Darby. You two girls saved me from having to be three places at once. Which I've always found difficult."

"You trained both of us."

"Mmm, yes. Which detracts not at all from the admirable fact that you held your fire until he committed himself—then lost not a split second in taking him. As if you were a veteran of a hundred gun battles rather than none. You might go around and steady the mules while I get this tailgate open."

"Yes, dear."

She had just reached the lead pair and spoken soothingly to them when he called out: "Dora! Here a minute."

She came back; he said, "Look at *that.*"

It was a flat piece of standstone he had removed from the end of the wagon bed and laid on the ground by the corpses. It was carved with:

BUCK
BORN ON EARTH
3O31A.D.
DWD ON THIS SPOT
N.B.37
He Always Did His Best

She said, "Lazarus, I don't understand it. I can understand why they intended to rape me—I'm probably the first woman they've seen in many weeks. I can even understand that they would kill you, or do anything, to get at me. But *why* would they steal this?"

"It's not exactly 'why,' dear…People who don't respect other people's property will do *anything*…and will steal anything that's not nailed down. Even if they have no use for it.” He added, “Had I known this earlier, I would have given them *no* chance. Such people should be destroyed on sight. The problem is to identify them.”

Minerva, Dora is the only woman I ever loved unreservedly. I don’t know that I can explain why. I did not love her that way when I married her; she had not had a chance as yet to teach me what love can be. Oh, I did love her, but it was the love of a doting father for a favorite child or somewhat like the love one can lavish on a pet.

I decided to marry her not through love in any deepest sense but simply because this adorable child who had given me so many hours of happiness wanted something very badly—my child—and there was only one way I could give her what she wanted and still please my own self-love. So almost coldly, I calculated the cost and decided that the price was low enough that I could let her have what she wanted. It could not cost me much; she was an ephemeral. Fifty, sixty, seventy, at the most eighty years and she would be dead. I could afford to spend that trivial amount of time to make my adopted daughter’s pitifully short life happy—that’s how I figured it. It wasn’t much, and I could afford it. So be it.

All the rest was just a case of no half measures; do whatever else is necessary to your main purpose. I told you some of the possibilities; I may not have mentioned that I considered taking back the captaincy of the *Andy J.* for Dora’s lifetime, have Zaccur Briggs take the ground side of the partnership or buy him out if that didn’t suit him. But while eighty-odd years in a starship would not stonker me, to Dora it would be a lifetime and it might not suit her. Besides, a ship is not an ideal place to raise kids—what do you do when they grow up? Drop them off somewhere not knowing anything but ship’s routine? Not good.

I decided that the husband of an ephemeral had to *be* an ephemeral, in every way possible to him. The corollaries to that decision caused us to wind up in Happy Valley.

Happy Valley—The happiest of all my lives. The longer I was privileged to live with Dora, the more I loved her. She taught me to love by loving me, and I learned—rather slowly; I wasn’t too good a pupil, being set in my ways and lacking her natural talent. But I did learn. Learned that supreme happiness lies in wanting to keep another person safe and warm and happy, and being privileged to try.

And the saddest, too. The more thoroughly I learned this—through living day on day with Dora—the happier I was and the more I ached in one corner of my mind with certain knowledge that this could be only a brief time too soon over—and when it *was* over, I did not marry again for almost a hundred years. Then I did, for Dora taught me to face up to death, too. She was as aware of her own death of the certain briefness of her life, as I was. But she taught me to live *now,* not to let anything sully *today*… until at last I got over the sadness of being condemned to live.

We had a wonderfully good time! Working our arses off, always too much to do, and enjoying every minute. Never too rushed to enjoy life no matter what. Sometimes just pat-ass and squeeze-titty as I hurried through the kitchen, with her quick smile acknowledging it, sometimes a lazy hour on the roof invested in watching sunset and stars and moons, usually with "Eros" to make, it sweeter.

I guess you could say that sex was, our only active amusement for a number of years (and never stopped being in first place as Dora was as enthusiastic at seventy as at seventeen— just not as limber). I was usually too tired to play good chess even though I made us a set of chessmen; we had no other games and probably would not have played them anyhow— too busy. Oh, we did do other things; often one of us would read aloud while the other knitted or cooked or something. Or we would sing together, coonjining the rhythm while we pitched grain or manure.

We worked together as much as possible; division of labor came only from natural limits. I can't bear a baby pr suckle it, but I can do anything else for a child. Dora could not do some things that I did because they were too heavy for her, especially when she was far gone in pregnancy. She had more talent for cooking than I (I had centuries more experience but not her touch), and she could cook while she took care of a baby and tended the smallest children, ones too small to join me in the fields. But I did cook, especially breakfast while she got the kids organized, and she did help work the farm and especially the truck garden. She knew nothing of farming; she learned.

Nor did she know construction—she learned. While I did most of the high work, she made most of the adobe bricks, always with the right amount of straw. Adobe was not well suited to the climate—too much rain and it can be discouraging to see a wall start to melt because an unexpected rain has caught you before you've topped it.

But you build from what you have, and it helped that I had the tops from the wagons to peg against the most exposed walls, until I worked out a way to waterproof an adobe wall. I did not consider a log cabin; good timber was too far away. It took the mules and me a full day to bring in two logs, which made them too expensive for most construction. Instead, I made do with smaller stuff that grew along the banks of Buck's River and dragged in logs only for beams.

Nor did I want to build a house that was not as near fireproof as I could make it. Baby Dora had once almost been burned to death; I would not risk it again for Dora, or for her children.

But how to make a roof both watertight and fireproof nearly stumped me.

I walked past the answer hundreds of times before I recognized it. When wind and weather and rot and lopers and insects have done their worst on a dead dragon, what is left is almost indestructible. I discovered this when I tried to burn what was left of a big brute that was unpleasantly close to our compound; I never did find out why this was so. Perhaps the biochemistry of those dragons has been investigated since then, but I had neither equipment nor time nor interest; I was too busy scratching a living for my family and was simply delighted to learn that it was true. Belly hide I cut into fireproof, waterproof tarpaulins; back and sides made excellent roofing. Later I found many uses for the bones.

We both taught, school, indoors and out. Perhaps our kids had a weird education…but a girl who can shape a comfortable and handsome saddle starting with a dead mule and not much else, solve quadratics in her head, shoot straight with gun or arrow, cook an omelet that is light and tasty, spout page after page of Shakespeare, butcher a hog and cure it can't be called ignorant by New Beginnings standards. All our girls and boys could do all of that and more. I must admit that they spoke a rather florid brand of English, especially after they set up the New Globe Theater and worked straight through every one of old Bill's plays. No doubt this gave them odd notions of Old Earth's culture and history, but I could not see that it hurt them. We had only a few bound books, mostly reference; the dozen-odd "fun" books were worked to death.

Our kids saw nothing strange in learning to read from *As You Like it.* No one told them that it was too hard for them, and they ate it up, finding "tongues in trees, books in the running brooks, sermons in stones, and good in every thing."

Although it did sound odd to hear a fiveyear-old girl speak in scansion and rolling periods, polysyllables falling gracefully from her baby lips. Still, I preferred it to "Run, Spot, run. See Spot run" from a later era than Bill's.

Second only to Shakespeare in popularity, and first whenever, Dora was swelling up again, were my medical books, especially those on anatomy, obstetrics, and gynecology. Any birth was an event—kittens, piglets, foals, puppies, kids—but a new baby out of Dora was a super-event, one that always put more thumbprints on that standard OB illustration, a cross section of mother and baby at term. I finally removed that one and several plates that followed it, those showing normal delivery, and posted them, to save wear and tear on my books — then announced that they could look at those pictures all they wanted to, but that to touch one was a spanking offense— then was forced to spank Iseult to keep justice even, which hurt her old father far more than it did her baby bottom even though she saved my face by applauding my gentle paddling with loud screams and tears.

My medical books had one odd effect. Our kids knew from babyhood all the correct English monosyllables for human anatomy and function; Helen Mayberry had never used slang with Baby Dora; Dora spoke as correctly in front of her children. But, once they could read my books, intellectual snobbery set in; they *loved* those Latin polysyllables. If I said "womb" (as I always did), some six-year-old would inform me with quiet authority that the *book* said "uterus." Or Undine might rush in with the news that Big Billy Whiskers was "copulating" with Silky, whereupon the kids would rush out to the goat pen to watch. Somewhere around their middle teens they usually recovered from this nonsense and went back to speaking English as their parents spoke it, so I guess it didn't hurt them.

The reason my own goatiness was not a spectator sport for children that all the animals afforded was, I think, only my own unreasoned but longstanding habits. I don't think it would have fretted Dora because it did not seem to fret her' the times it happened —as it did; privacy was scarce and got scarcer until I got our big house built some twelve or thirteen years after we entered the valley —time indefinite because for years I worked on it when I could; then we moved into it unfinished because we were bulging the walls of our first house and another baby (Ginny) was on the way.

Dora was untroubled by lack of privacy because her sweet lechery was utterly innocent, whereas mine was scarred by the culture I grew up in—a culture psychotic throughout and especially on this subject. Dora did much to heal those scars. But I never achieved her angelic innocence.

I do *not* mean the innocence of childish ignorance; I mean the true innocence of an intelligent, informed, adult woman who has no evil in her. Dora was as tough as she was innocent, always aware that she was responsible for her own actions. She knew that "the tail goes with the hide, that you can't be a little bit pregnant, that it is no kindness to hang a man slowly." She could make a hard decision without dithering, then stand up to the consequences if it turned out that her judgment was faulty. She could apologize to a child, or to a mule. But that was rarely necessary; her self-honesty did not often lead her into faulty decisions.

Nor did she flagellate herself when she made a mistake. She corrected it as best she could, learned from it, did not lie awake over

it.

While her ancestry had given her the potential, Helen Mayberry must be credited with having guided it and allowed it to develop. Helen Mayberry was sensitive and sensible. Come to think of it, the traits complement. A person who is sensitive but not sensible is all mixed up, cannot function properly. A person who is sensible but not sensitive—I've never met one and am not sure such a person can exist.

Helen Mayberry was born on Earth but had shucked off her bad background when she migrated; she did not pass on to Baby Dora and growing-girl Dora the sick standards of a dying culture. I knew some of this from Helen herself, but I learned more about Helen from Dora the Woman. Over the long course of getting acquainted with this stranger I had married (married couples always start out as strangers no matter how long they've known each other) I learned that Dora knew exactly the relationship that had once existed between Helen Mayberry and me, including the fact that it was economic as well as social and physical.

This did not make Dora jealous of "Aunt" Helen; jealousy was only a word to Dora, one that meant no more to her than a sunset does to an earthworm; the capacity to feel jealousy had never been developed in her. She regarded the arrangements between Helen and me as natural, reasonable, and appropriate. Indeed I feel certain that Helen's example was the clinching factor in Dora's picking me as her mate, as it could not have been my charm and beauty, both negligible. Helen had not taught Dora that sex was anything sacred; she had taught her, by precept and example, that sex is a way for people to be happy together.

Take those three vultures we killed— Instead of what they were, had they been good men and decent—oh, such men as Ira and Galahad—and given the same circumstances, four men with only one woman and the situation likely to stay that way, I think Dora would have entered easily and naturally into polyandry…and would have managed to convince me that that was the only happy solution by the way she herself treated it.

Nor would she, in adding more husbands, have been breaking her marriage vows. Dora had not promised to cleave unto me only; I won't let a woman promise that because a day sometimes arrives when she can't.

Dora could have kept four decent, honorable men happy. Dora had none of the sickly attitudes that interfere with a person loving more and more; Helen had seen to that. And, as the Greeks pointed out, one man cannot quench the fires of Vesuvius. Or was it the Romans? Never mind, it's true. Dora probably would have been even happier in a polyandrous marriage. And if *she* were happier, it follows, as the night the day, that I would have been also—even though I cannot imagine being happier than I was. But more big male muscles would have made life easier on me; I always had too much to, do. More company could have been pleasant, too, I am forced to assume the company of men whom Dora found acceptable. As for Dora herself, she had enough love in her to lavish it on me and a dozen kids; three more husbands would not have used up her resources, she was a spring that never ran dry.

But the matter is hypothetical. Those three Montgomerys were so little like Galahad and Ira that it is hard to think of them as being of the same race. They were vermin for killing, and that's what they got. I learned only a little about them, from reading the contents of their wagon. Minerva, they were not pioneers; there was not the barest minimum in that wagon for starting a farm. Not a plow, not a sack of seed—And their eight mules were *all geldings.* I don't know what they thought they were doing. Exploring just for the hell of it, perhaps? Then go back to "civilization" when they grew tired of it? Or did they expect to find that some one of the pioneer parties that had started over the pass had made it—and could be terrorized into submission? I don't know, I never will know. I have never understood the gangster mind—I simply know what to do about gangsters.

As may be, they made a fatal mistake in tackling sweet and gentle Dora. She not only shot at the right instant, but she shot his gun out of his hand instead of taking the much easier target, his belly or chest. Important? Supremely so, for *me.* His gun was aimed at me. Had Dora shot *him,* instead of his gun, even if her shot killed him, his last reflex would probably— certainly, I think—have caused his fingers to tighten and I would have been hit. You can figure it from there in half a dozen ways, all bad."

Lucky accident? Not at all. Dora had him covered from the darkness of the kitchen. When he pulled that gun, she instantly changed her point of aim and got the gun. It was her first—and last—gunfight. But a true gunfighter, that girl! The hours we had spent polishing her skill paid off. But more rare than skill was the cool judgment with which she decided to try for the much more difficult target. I could not train her in that; it had to be born in her. Which it was—if you think back, her father made the same sort of correct splitsecond decision as his last dying act.

It was seven more years before another wagon appeared in Happy Valley—three wagons traveling together, three families with children, true pioneers. We were glad to see them and I was especially happy to see their kids. For I bad been juggling eggs. Real eggs. Human ova.

I was running out of time; our oldest kids were growing up.

Minerva, you know all that the human race has learned about genetics. You know that the Howard Families are inbred from a fairly small gene pool—and that inbreeding has tended to clear them of bad genes—but you know also the high price that has been paid in defectives. Is still being paid, should add; everywhere there are Howards there are also sanctuaries for defectives. Nor is there any end to it; new unfavorable mutations unnoticed until they are reinforced is the price we animals must pay for evolution. Maybe there will be a cheaper way someday—there was not one on New Beginnings twelve hundred years ago.

Young Zack was a husky lad whose voice was firmly baritone. His brother, Andy, was no longer a boy soprano in our family chorus although his voice still cracked. Baby Helen wasn't such a baby any longer—hadn't reached menarche, but as near as I could tell it would be any day, any day.

I mean to say that Dora and I were having to think about it, forced to consider hard choices. Should we pack seven kids into the wagons and head back across the Rampart? If we made it, should we put the four oldest with the Magees or someone, then come home with the younger three? By ourselves? Or sing the praises of Happy Valley, its beauty and its wealth, and try to lead a party of pioneers back over the range and thereby avoid such crisis in the future?

I had expected, too optimistically, that others would follow us almost at once—a year or two or three—since I had left a passable wagon trail behind me. But I'm not one to fume over spilled milk after the horse is stolen. What might have been was of no interest; the problem was what to do with our horny kids now that they were' growing up.

No point in talking to them about "sin" even if I were capable of such hypocrisy—which I am not, especially with kids. Nor could I have sold the idea. Dora would have been shocked and hurt, and her skills did not extend to lying convincingly. Nor did I want to fill our kids with such nonsense; their angelic mother was the happiest, most ever-ready lecher in Happy Valley—even, more so than I and the goats—and she never pretended otherwise.

Should we relax and let nature take its ancient course? Accept the idea our daughters would presently (all too soon!) mate with our sons and be prepared to accept the price? Expect at least one defective grandchild out of ten? I had no data on which to estimate the cost any closer than that, as Dora knew nothing about her ancestry and, while I did know a little about mine, I did not know enough. All I had was that old and extremely rough thumb rule.

So we stalled.

We fell back on another sound old thumb rule: Never do today what you can put off till tomorrow if tomorrow might improve the odds.

So we moved into our new house while it was still not finished—but finished enough that we then had a girls' dormitory, a boys' dormitory, a bedroom for Dora and me, with adjacent nursery.

But we did not kid ourselves that we bad solved the problem. Instead we hauled it out into the open, made sure that the three oldest knew what the problem was and what the risks were and why it would be smart to hold off. Nor were the younger kids shut out of this schooling; they simply were not required even to audit the course when they found themselves bored with technicalities they were too young to be interested in.

Dora chucked in a frill, one based on something Helen Mayberry had done for her some twenty years earlier. She announced that when little Helen achieved menarche, we would declare a holiday and have a party, with Helen as guest of honor. From then on, every year, that day would be known as "Helen's Day" and so on for Iseult and Undine and on down the line until there was an annual holiday named for each girl.

Helen could hardly wait to pass from childhood into girlhood—and when: she did a few months later, she was unbearably smug. Woke us all up shouting about it. "Mama! Papa! Look, it's happened! Zack! Andy! *Wake up!* Come *see!*"

If she hurt, she did not mention it. Probably she did not; Dora wasn't subject to menstrual cramps, and neither of us told the girls to expect them. Being myself convex instead of concave, I refrain from commenting on the theory that such pains are a conditioned reflex; I don't think I'm entitled to an opinion

—you might ask Ishtar.

It also resulted in me being called on by a delegation of two, Zack and Andy with Zack as spokesman: "Look, Papa—we think it splendid, meet, and fit our sister Helen's day to mark with joyful sounds and jollity acclaiming this our sibling's rightful heritage. But soothly, sire, methinks—"

"Chop it off and say it."

"Well, how about *boys!*"

By gum, I reinstituted chivalry!

Not as a sudden inspiration. Zack had asked a tough one; I had to dance around it a bit before I reached a workable answer. Sure, there are rites of passage for males as well as females; every culture has them, even those that aren't aware of it. When I was a boy, it was your first suit with long pants. Then there are ones such as circumcision at puberty, ordeal by pain, killing some dread beast—endless.

None of these fitted our boys. Some I disapproved of, some were impossible—circumcision for example. I have this unimportant mutation, no foreskin. But it is a Y-linked dominant, and I pass it on to all my male offspring. The boys knew this, but I stalled by mentioning it again, discussed it in connection with the endless ways in which a male's transition into beginning manhood was sometimes celebrated—while trying to think of an answer to the main question.

Finally I said, "Look, boys, you both know all about reproduction and genetics that I have been able to teach you. You both know what 'Helen's Day' means. Don't you? Andy?"

Andy did not answer; his older brother said, "Sure he knows, Papa. It means Helen can have babies now, just like Mama. You know that, Andy." Andy nodded agreement, round-eyed. "We all know, Papa, even the kids. Well, I'm not sure about Ivar; he's so little. But Iseult and Undine know it—Helen's been telling them that she's going to catch up with Mama—have her first baby right away."

I controlled the cold chills I felt. Let me cut this short: I did not tell them that this was a bad idea; instead I took a long time drawing answers from them, things they both knew but had not yet thought of quite so personally—how Helen could not have a baby unless one or the other of *them* put it into her; how Helen was still too little for the strain of baking a baby even though "Helen's Day" marked the fact that she was now vulnerable; how and why, even when Helen was big enough in a few years, a baby out of Helen by one of her brothers could be a tragedy instead of the fine babies Mama made every time. *They* told *me,* Andy's eyes getting bigger all the time—I simply supplied leading questions.

I was helped in this by the fact that a little mule mare, Dancing Girl, had come into her first estrus when I thought she was not grownup enough for a colt. So I had had Zack and Andy fence her off—and she kicked a hole in the fence and got what she wanted; Buckaroo covered her. Sure enough, the colt had been too big for her and I had to go in and cut it up and take it out in chunks—a routine job of emergency veterinary surgery but an impressive and bloody sight for two stripling boys who had helped their father by controlling the mare while he operated.

No, indeed, they did not want anything even a little bit like that to happen to *Helen.*No, *sir!*

Minerva, I cheated a little. I did *not* tell them that the way Helen was spreading in the butt and the measurements she already had made it appear to her family doctor—me—that she was even more of a natural baby factory than her mother and would be big enough for her first one much younger than Dora had had Zaccur; I did not tell them that the chances of a healthy baby from a brother-sister mating were higher than the chances of a defective. I certainly did *not!*

Instead, I waxed lyrical about what wonderful creatures girls are, what a miracle it is that they could make babies, how precious they are and how it is a man's proud privilege to love and cherish and protect them—protect them even from their follies because Helen might behave just like Dancing Girl, impatient and foolish. So don't let her tempt you, boys—jerk off instead, just like you've been doing. They promised, tears in their eyes.

I didn't ask them to promise that or anything—but it gave me the idea: Have "Princess" Helen knight them.

The kids grabbed that idea and ran with it; *Tales of King Arthur's Court* was one of the books Dora had fetched along because Helen Mayberry had given it to her. So we had Sir Zaccur the Strong and Sir Andrew the Valiant and two ladies-in-waiting—waiting rather eagerly; Iseult and Undine knew that they, too, would be "princesses" as each reached menarche. Ivar was squire to both knights and would be dubbed himself when his voice changed. Only Elf was too small as yet to play the game.

It worked, a stopgap. I suppose "Princess" Helen was protected more than she wanted to be protected. But if she could not lure her faithful knights into the cornfields, they did place her stool for her at meals, they bowed to her rather often, and usually addressed her as "Fair Princess"—considerably more than I ever did for my sisters.

Before the first anniversary of “Helen’s Day” those three new families dropped down the rise and the crisis was over. It was Sammy Roberts, not one of her brothers, who first spread “Princess” Helen’s thighs—certain, as she told her mother about it at once (more of Helen Mayberry’s influence) and Dora kissed her and told her that she was a good girl and now go find Papa and ask him to examine you—and I did and she hadn’t been hurt, not to mention. But it gave Dora some control over the matter, just as Helen Mayberry had guided Dora at about the same age—so Dora had told me, long before that. In consequence our oldest daughter did not get pregnant until she was almost as old as and quite a bit more filled out than Dora had been when I married her. Ole Hanson married her; and Sven Hanson and I, and Dora and Ingrid, helped the youngsters start their homestead. Helen thought the baby was Ole’s, and for all I know she was right. No fuss. No fuss when Zack married Hilda Hanson, either. In Happy Valley pregnancy was equivalent to betrothal; I can’t recall any girl who married without that proof of eligibility. Certainly none of our daughters.

Having neighbors was grand.

(Omitted)

—not only fetched his fiddle over the Rampart but could call. I could call some and, while I hadn’t touched a violin for fifty years or so, I found it came back to me, so we spelled each other as Pop liked to dance, too. Like so:

“Square ‘em up!

“Salute your lady! Opposite lady! Corner gal! Righthand gal! Salute your own and make ‘er a throne. All stand up and don’t let ‘er fall; swing your ladies one and all!

“‘Moses lived a long time ago.
‘King said Yes; Moses said Not—form hands, circle right.
‘Phar’oh was dat king’s first name;
‘Made ‘em live a life of shame!—allemande *left/—with* a dosey-doh! Then home you go and *swing!*

“’…said Yes and th’ waves did part. First couple through the Red Sea! Now corner gal and righthand man! Corner boy, righthand gal—on around and keep it coming right and left!

“‘A happy band on th’ opp’site shore,
‘So all form up and swing once more!
‘King weeps alone on Egypt’s shore;

'Chosen People slaves no more!

'So kiss your lady and whisper in her ear;
'Then sit 'er down and get 'er a beer.' Intermission!"

Oh, we had fun! Dora learned to dance when she was a new grandmother—and was still dancing when she was a great-great-grandmother. Early years the parties were oftenest at our place because we had the biggest house and a compound large enough for a big party. Start dancing late afternoon, dance till you couldn't see your partner; then a potluck buffet supper to candlelight and moonlight, then sing a while, and bed down all over the place—all the rooms, the roof, shakedowns in the compound, some in wagons—and if anybody ever slept alone, I never heard about it. Nor any trouble worth mentioning if things got a little loose around the edges.

Next morning there was likely to be a double performance by the Mermaid Tavern Players, one comedy, one tragedy, then it would be time for those who lived farthest away to round up their kids, hitch up their mules, and roll, while those who lived closer helped clean up before doing the same thing.

Oh, I remember one spot of trouble: A man gave his wife a black eye over nothing much, whereupon six men nearest him tossed him out the gate and barred it. Made him so mad he hitched up and left… and headed back up the Great Gorge toward Hopeless Pass—a fact that wasn't noticed for a while, as his wife and baby moved in with her sister and her husband and their kids, and stayed on, a polygamy—though not the only one. No laws about marriage or sex—no laws about *anything* for many years—except that incurring the disapproval of your neighbors, such as by giving your wife a black eye, meant risking Coventry, about the worst thing that can happen to a pioneer short of being lynched.

But migrants tend to be both horny and easy about it. Superior intelligence always includes strong sexual drive, and the pioneers in Happy Valley had been through a double screening, first in a decision to leave Earth and then in deciding to tackle Hopeless Pass. So we had real survivors in Happy Valley, smart, cooperative, industrious, tolerant—willing to fight when necessary but not likely to fight over trivial matters. Sex is not trivial, but fighting over it is usually pretty silly. It's characteristic only of a man who isn't sure of his manhood, which didn't describe any of these men; they were sure of themselves, no need to prove it. No cowards, no thieves, no weaklings, no bullies—the rare exception didn't last long enough to count. Either dead like that first three, or ran away from us like that idiot who took a poke at his wife.

These rare purgings were always quick and informal. For many years the only law we had was the Golden Rule, unwritten but closely followed.

In such a community functionless taboos about sex couldn't last; they didn't tend to be brought into our valley in the first place. Oh, close inbreeding wasn't well thought of; these pioneers were not ignorant of genetics, nor of conception control. But the attitude was pragmatic; I don't think I ever heard anyone speak out against incest that was just a jolly romp with no outcome. But I recall one girl who married her half brother openly and had several children by him—I assume that they were his. There may have been gossip, but it did not get them ostracized. Any marriage pattern was treated as the private business of the partners in it, not something to be licensed by the community. I recall two young couples who decided to combine their farms, then built a house big enough by adding to the larger of their two houses and making the other into a barn. Nobody asked who slept with whom; it was taken for granted that it was then a four-cornered marriage, and no doubt had been one before they enlarged that house and pooled their goods. Nobody's business but theirs.

Among such people the plural of "spouse" is "spice." A pioneer community, poor in everything else, always makes its own recreations—with sex at the top of the list. We had no professional entertainers, no theaters (unless you count the amateur theatricals started by our kids), no cabarets, no diversions dependent on sophisticated electronics, no periodicals, few books. Certainly those meetings of the Happy Valley Dance Club continued as gentle orgies after it was too dark to dance and the younger children were bedded down for the night—how else? But it was all quite gentle; a couple could always go sleep in their own wagon and ignore the quiet luau elsewhere. No compulsion either way—shucks, they didn't even have to attend the dances.

But no one stayed away from those weekly dances if he or she could make it. It was particularly nice for young people; it gave them a chance to get acquainted and do their courting. Perhaps most first babies were conceived at our dances; there was opportunity. On the other hand, a girl did not have to get knocked up just through a romp if it didn't suit her. But a girl was likely to marry by fifteen, sixteen, and their bridegrooms weren't much older—late first marriage is a big-city custom, never found in a pioneer culture.

Dora and I? But, Minerva dear, I told you earlier.

(Omitted)

—started the freight schedule to the outside the year Gibbie was born and Zack was, oh, eighteen I think—I have to keep converting New Beginnings years into standard years. Anyhow he was taller than I was, not much short of two meters and massed maybe eighty kilos, and Andy was almost as big and strong. There was pressure on me not to wait as I knew Zack might get married any day—and I could not send a wagon over the pass just with Andy. Ivar was only nine—a big help around the farm but not big enough for this job.

But I could not find teamsters other than in my own family. There were only about a dozen families in the valley; they had not been there long, and did not as yet feel the press to buy things that I did.

I wanted three new wagons, not just because my three were wearing out but because Zack would need one when he married. So would Andy. And I might have to dower Helen with one, if and when. The same applied to plows and several sorts of metal farm equipment. Prosperous as we were, Happy Valley could not be entirely self-supporting without a metals industry—which is to say: not for many years. I had another long list of things to buy—

(Omitted)

—on a quarterly schedule. But the food that fifty-odd farms could ship out could not buy much at the other end in competition with farmers who did not have the expense of shipping by mule train over the Rampart and across the prairie; I still subsidized our link with civilization by writing drafts on John Magee to be debited against my partnership in the *Andy J.* and thereby brought things into the valley we would not otherwise have bad. Some I kept—Dora got in-house running water from that first trip our own boys made, just in time to keep my promise to her, as Zack got Hilda pregnant right after they got back, and their first baby, Ingrid Dora, and the completion of Dora's bathroom, arrived about together. Other things I sold to other farmers for labor. But the Buck strain of mules, strong, intelligent, and all of them capable of being taught to talk, eventually corrected our balance of trade, once those two wells were drilled on the prairie and I could count on running a string of mules to Separation Center without losing half of them. This meant medicines, books, and many other things for our valley.

(Omitted)

Lazarus Long did not intend to surprise his wife. But neither of them ever knocked on their own bedroom door. Finding it closed, he opened it gently against the possibility that she might be napping. Instead he found her standing at the window, mirror angled to the light, carefully plucking a long gray hair.

He watched her in shocked dismay. Then steadied himself and said, "Adorable—"

"Oh." She turned. "You startled me. I didn't hear you come in, dear."

"I'm sorry. May I have that?"

"Have what, Woodrow?"

He went to her, bent down and picked up the silver hair. "This. Beloved, every hair of your head is precious to me. May I keep it?"

She did not answer. He saw that her eyes were filled with tears. They started to overflow. "Dora, Dora," he repeated urgently, "why are you crying, beloved?"

"I'm sorry, Lazarus. I did not intend for you to see me doing this."

"But why do it at all, Dorable? I have far more gray hair than you."

She answered what he had not said, rather than what he did say. "Dearest, I can't help it that I know when someone is—well, 'fibbing' I must call it since you have never lied to me."

"Why, Dorable! My hair *is* gray."

"Yes, sir. You did not mean to surprise me, I know…and I did not mean to snoop when I cleaned your study. I found your cosmetics kit, Lazarus, more than a year ago. It's sort of a fib, isn't it?—when you do something to make your crisp red hair look gray? Something like what I do, I suppose, when I pluck hairs that *are* gray."

"You've been plucking gray hairs since you learned that I have been aging myself? Oh, dear!"

"No, no, Lazarus! I've been plucking them for *ages.*Much longer than that. Heavens, darling, I'm a great-grandmother—and look it. But what you do—careful as you are with it— and kind as it is for you to try—and I *do* appreciate it!—doesn't make you look my age; it just makes you look prematurely gray."

"Possibly. Although I'm entitled to gray hair, Dorable—my hair was snow-white not many years before you were born. It took something much more drastic than cosmetics—or plucking hairs—to make me look young again. But there never seemed to be any reason to mention it."

He stepped up to her, put an arm around her waist, took the mirror and tossed it on the bed, turned her toward the window., "Dora, your years are an achievement, not something to hide. Look out there. Farmhouses right up to the hills and many more we can't see from here. How many of our Happy Valley people are descended from your slim body?"

"I've never counted."

"I have; more than half of them—and I'm proud of you. Your breasts are baby-chewed, your belly shows stretch marks—your decorations of honor, Adorable One. Of valor. They make you *more* beautiful. So stand straight and tall, my lovely, and forget about silver hairs. Be what you *are,* and be it in style!"

"Yes, Lazarus. I don't mind them myself—I did it to please you."

"Dorable, you can't help pleasing me, you always have. Do you want me to let my own hair go back to natural? It's not dangerous for me to be a Howard—here in Happy Valley with my own kin all around me."

"I don't care, darling. Just don't do it on my account. If it makes it easier for you—First Settler and all that—to look a little older, then do it."

"It does make it easier—when I deal with other people. And it's no trouble; I know the routine so well I could do it in my sleep. But, Dora—listen to me, darling. Zack Briggs will call at Top Dollar sometime in the next ten years; you saw John's letter. It's not too rate to go to Secundus. There they can make you look like a young girl again if that's what you want, and tack a good many extra years on, too. Fifty. Maybe a hundred."

She was slow in answering. "Lazarus, are you urging me to do this?"

"I'm offering it. But it's your body, most dear one. Your life."

She stared out the window. " 'More than half of them,' you said."

"With the percentage increasing. Our kids breed like cats. And so do their kids."

"Lazarus, truly we settled this many, many years ago. But it is even more so now. I don't want to leave our valley even to visit the outside. I don't want to leave our children. Nor our children's children, nor *their* children. And I certainly would not want to come back looking like a young girl…to watch the births of our great-great-grandchildren. You're right; I've earned my gray hairs. And now I'll wear them!"

"That's the girl I married! That's my durable Dora!" He moved his hand up higher, cupped a breast and tickled a nipple. She jumped, then relaxed to it. "I knew your answer, but I had to ask. My darling, age cannot wither you, nor custom stale your infinite variety. Where other women satiate, you most make hungry!"

She smiled. "I'm not Cleopatra, Woodrow."

"Wench, that's your opinion. But what's your opinion against mine? Rangy Lil, I've seen thousands and thousands more women than you have—and *I* say that you make Cleopatra look homely."

"Blarney tongue," she said softly. "I'm sure you've never had a woman turn you down."

"True only because I never risk being turned down; I wait to be asked. Always."

"Are you waiting to be asked? All right, I'm asking. Then I'd better start dinner."

"Don't be in such a hurry, Lil. First I'm going to dump you on that bed. Then I'm going to flip your skirt up. Then I'm going to see if I can find any gray hair at *that* end. If so, I'll pluck them for you."

"Beast. Scoundrel. Lecherous old goat." She smiled in delight. "I thought we weren't going to bother any more with plucking gray hairs?"

"We were speaking of hair on your *head,* Great-Grandmother. But this other end is as young as ever—and better than ever—so we'll most carefully pluck any gray from your pretty—your pretty brown curls."

"Sweetest old goat. If you can find any, you're welcome. But I've been plucking that end even more carefully than my scalp. Let me slip this dress off."

"Wups! Hold it. That's Rangy Lil, the horniest bitch in Happy Valley, always in a hurry. Get your dress off if you wish, but I'm going to find Lurton and tell him to saddle up Best Boy and go beg supper and a shakedown from his sister Marje and Lyle. Then I'll be back to pluck those disgraceful gray curls. Supper will be late, I'm afraid."

"I don't mind if you don't, beloved."

"That's my Lil. Darling, there isn't a man in the valley who wouldn't grab you and try to find another valley if you gave him the slightest encouragement—that includes your own sons and your sons-in-law——every male here down to fourteen."

"Oh, not true! Blarney again."

"Want to bet? On second thought we won't waste time plucking gray hairs at either end. When I get back from telling our youngest son to get lost for the night, I want to find you wearing just rubies and a smile. Because you're not going to cook supper; we're going to scrape up a cold picnic instead and take it and a blanket up on the roof and enjoy the sunset."

"Yes, sir. Oh, darling, I love you! E.F.? Or F.F.?"

"I'll leave that choice to Rangy Lil."

(Circa 39,000 words omitted)

Lazarus opened the bedroom door very quietly, looked in, looked inquiringly at his daughter Elf—a strikingly beautiful middle-aged woman with flaming red curls shot slightly with gray. She said, "Come in, Papa; Mama's awake."

She stood up to leave, taking with her a supper tray.

He glanced at it, subtracted in his mind what was still on it from what he had seen leave the kitchen on it—got a sum which was too near zero to please him. But he said nothing, simply went to the bedside, smiled down at his wife. Dora smiled back. He leaned over and kissed her, then sat down where Elf had been. “How is my darling?”

“Just fine, Woodrow. Ginny—no, Elf. Elf brought me the tastiest supper. I enjoyed it so much. But I asked her to put my rubies on me before she fed me——did you notice?’

“Of course I did, beautiful. When did Rangy Lil ever eat supper without her rubies?”

She didn’t answer, her eyes closed. Lazarus kept quiet, watched her respiration, counted her heartbeats by watching a pulse in her neck.

“Do you hear them, Lazarus?” Her eyes were open again.

“Hear what, Dorable?”

“The wild geese. They must be right, over the house.”

“Oh. Yes, certainly.”

“They’re early this year.” That seemed to tire her; she closed her eyes again. He waited.

“Sweetheart? Will you sing ‘Buck’s Song’?”

“Certainly, ‘dorable Dora.” Lazarus cleared his throat and started in:

“‘There’s a schoolhouse
By the pawnshop
Where Dora has her lessons,
“‘By the schoolhouse
There’s a mule yard
Where Dora’s friend Buck lives.’”

She closed her eyes again, so he sang the other verses very softly. But when he finished, she smiled at him. “Thank you, darling; that was lovely. It’s always been lovely. But I’m a little tired—if I drop off to sleep, will you still be here?”

“I’ll always be here, dearest. You sleep now.” She smiled again, and her eyes closed. Presently her breathing grew slower as she slept.

Her breathing stopped.

Lazarus waited a long time before he called in Ginny and Elf.

SECOND INTERMISSION

More from the Notebooks of Lazarus Long

Always tell her she is beautiful, especially if she is not.

If you are part of a society that votes, then do so. There may be no candidates and no measures you want to vote *for* but there are certain to be ones you want to vote *against.* In case of doubt, vote *against.* By this rule you will rarely go wrong.

If this is too blind for your taste, consult some well-meaning fool (there is always one around) and ask his advice. Then vote the other way. This enables you to be a good citizen (if such is your wish) without spending the enormous amount of time on it that truly intelligent exercise of franchise requires.

Sovereign ingredient for a happy marriage: Pay cash or do without. Interest charges not only eat up a household budget; awareness of debt eats up domestic felicity.

Those who refuse to support and defend a state have no claim to protection by that state. Killing an anarchist or a pacifist should not be defined as "murder" in a legalistic sense. The offense against the state, if any, should be "Using deadly weapons inside city limits," or "Creating a traffic hazard," or "Endangering bystanders," or other misdemeanor.

However, the state may reasonably place a closed seasons on these exotic asocial animals whenever they are in danger of becoming extinct. An authentic buck pacifist has rarely been seen off Earth, and it is doubtful that any have survived the trouble there…regrettable, as they had the biggest mouths and the smallest brains of any of the primates.

The small-mouthed variety of anarchist has spread through the Galaxy at the very wave front of the Diaspora; there is no need to protect them. But they often shoot back.

Another ingredient for a happy marriage: Budget the luxuries *first!*

And still another— See to it that she has her own desk— then keep your hands off it!

And another— In a family argument, if it turns out you are right— apologize at once!

"God split himself into a myriad parts that he might have friends." This may not be true, but it sounds good—and is no sillier than any other theology.

To stay young requires unceasing cultivation of the ability to unlearn old falsehoods.

Does history record *any* case in which the majority was right?

When the fox gnaws—smile!

A "critic" is a man who creates nothing and thereby feels qualified to judge the work of creative men. There is logic in this; he is unbiased—he hates all creative people equally.

Money is truthful. If a man speaks of his honor, make him pay cash.

Never frighten a little man. He'll kill you.

Only a sadistic scoundrel—or a fool—tells the bald truth on social occasions.

This sad little lizard told me that he was a brontosaurus on his mother's side. I did not laugh; people who boast of ancestry often have little else to sustain them. Humoring them costs nothing and adds to happiness in a world in which happiness is always in short supply.

In handling a stinging insect, move very slowly,

To be "matter of fact" about the world is to blunder into fantasy—and dull fantasy at that, as the real world is strange and wonderful.

The difference between science and the fuzzy subjects is that science requires reasoning, while those other subjects merely require scholarship.

Copulation is spiritual in essence—or it is merely friendly exercise. On second thought, strike out "merely." Copulation' is not "merely"—even when it is just a happy pastime for two strangers. But copulation at its spiritual best is so much more than physical coupling that it is different in kind as well as in degree.

The saddest feature of homosexuality is not that it is "wrong" or "sinful" or even that it can't lead to progeny—but that it is more difficult to reach through it this spiritual union. Not impossible—but the cards are stacked against it.

But—most sorrowfully—many people never achieve spiritual sharing even with the help of male-female advantage; they are condemned to wander through life alone.

Touch is the most fundamental sense. A baby experiences it, all over, before he is born and long before he learns to use sight, hearing, or taste, and no human ever eases to need it. Keep your children short on pocket money—but long on hugs.

Secrecy is the beginning of tyranny.

The greatest productive force is human selfishness.

Be wary of strong drink. It can make you shoot at tax collectors—and miss.

The profession of shaman has many advantages. It offers high status with a safe livelihood free of work in the dreary, sweaty sense. In most societies it offers legal privileges and immunities not granted to other men. But it is hard to see how a man who has been given a mandate from on High to spread tidings of joy to all mankind can be seriously interested in taking up a collection to pay his salary; it causes one to suspect that the shaman is on the moral level of any other con man.

But it’s lovely work if you can stomach it.

A whore should be judged by the same criteria as other professionals offering services for pay—such as dentists, lawyers, hairdressers, physicians, plumbers, *etc.* Is she professionally competent? Does she give good measure? Is she honest with her clients?

It is possible that the percentage of honest and competent whores is higher than that of plumbers and much higher than that of lawyers. And *enormously* higher than that of professors.

Minimize your therbligs until it becomes automatic; this doubles your effective lifetime—and thereby gives time to enjoy butterflies and kittens and rainbows.

Have you noticed how much they look like orchids? Lovely!

Expertise in one field does not carry over into other fields. But experts often think so. The narrower their field of knowledge the more likely they are to think so.

Never try to outstubborn a cat.

Tilting at windmills hurts you more than the windmills.

Yield to temptation; it may not pass your way again.

Waking a person unnecessarily should not be considered a capital crime. For a first offense, that is.

“Go to hell!” or other insult direct is all the answer, a snoopy question rates.

The correct way to punctuate a sentence that starts: “Of course it is none of my business but—” is to place a period after the word “but.” Don’t use excessive force in supplying such moron with a period. Cutting his throat is only a momentary pleasure and is bound to get you talked about.

A man does not insist on physical beauty in a woman who builds up his morale. After a while he realizes that she *is* beautiful—he just hadn’t noticed it at first.

A skunk is better company than a person who prides himself on being “frank.”

“All’s fair in love and war”—what a contemptible lie!

Beware of the “Black Swan” fallacy. Deductive logic is tautological; there is no way to get a new truth out of it, and it manipulates false statements as readily as true ones. If you fail to remember this, it can trip you—with perfect logic. The designers of the earliest computers. called this the “Gigo Law,” i.e., “Garbage in, garbage out.”

Inductive logic is *much* more difficult—but can produce new truths.

A “practical joker” deserves applause for his wit according to its quality. Bastinado is about right. For exceptional wit one might grant keelhauling. But staking him out on an anthill should be reserved for the very wittiest.

Natural laws have no pity.

On the planet Tranquille around KM849 (G-O) lives a little animal known as a “knafn.” It is herbivorous and has no natural enemies and is easily approached and may-be petted—sort of a six-legged puppy with scales. Stroking it is very pleasant; it wiggles its pleasure and broadcasts euphoria in some band that humans can detect. It’s worth the trip.

Someday some bright boy will figure out how to record this broadcast, then some smart boy will see commercial angles— and not long after that it will be regulated and taxed.

In the meantime I have faked that name and catalog number; it is several thousand lightyears off in another direction. Selfish of me—

Freedom begins when you tell Mrs. Grundy to go fly a kite.,

Take care of the cojones and the frijoles will take care of themselves. Try to have getaway money—but don’t be fanatic about it.

If “everybody knows” such-and-such, then it ain’t so, by at least ten thousand to one.

Political tags—such as royalist, communist, democrat, populist, fascist, liberal, conservative, and so forth—are never basic criteria. The human race divides politically into those who want people to be controlled and those who have no such desire. The former are idealists acting from highest motives for the greatest good of the greatest number. The latter are surly curmudgeons, suspicious and lacking in altruism. But they are more comfortable neighbors than the other sort.

All cats are *not* gray after midnight. Endless variety—

Sin lies only in hurting other people unnecessarily. All other “sins” are invented nonsense. (Hurting yourself is not sinful—just stupid.)

Being generous is inborn; being altruistic is a learned perversity. No resemblance—

It is impossible for a man to love his wife wholeheartedly without loving all women somewhat. I suppose that the converse must be true of women.

You can go wrong by being too skeptical as readily as by being too trusting.

Formal courtesy between husband and wife is even more important than it is between strangers.

Anything free is worth what you pay for it.

Don’t store garlic near other victuals.

Climate is what we expect, weather is what we get.

Pessimist by policy, optimist by temperament—it is possible to be both. How? By never taking an unnecessary chance and by minimizing risks you can't avoid. This permits you to play out the game happily, untroubled by the certainty of the outcome.

Do not confuse "duty" with what other people expect of you; they are utterly different. Duty is a debt you owe to yourself to fulfill obligations you have assumed voluntarily. Paying that debt can entail anything from years of patient work to instant willingness to die. Difficult it may be, but the reward is self-respect.

But there is no reward at all for doing' what other people expect of you, and to do so is not merely difficult, but impossible. It is easier to deal with a footpad than it is with the leech who Wants "just a few minutes of your time, please—this won't take long." Time is your total capital, and the minutes of your life are painfully few. If you allow yourself to fall into the vice of agreeing to such requests, they quickly snowball to the point where these parasites will use up 100 percent of your time—and squawk for more!

So learn to say No—and to be rude about it when necessary. Otherwise you will not have time to carry out your duty, or to do your own work, and certainly no time for love and happiness. The termites will nibble away your life and leave none of it for you.

(This rule does not mean that you must not do a favor for a friend, or even a stranger. But let the choice be *yours.* Don't do it because it is "expected" of you.)

"I came, I saw, she conquered." (The original Latin seems to have been garbled.)

A committee is a life form with six or more legs and no brain.

Animals can be driven crazy by placing too many in too small a pen. Homo sapiens is the only animal that voluntarily does this to himself.

Don't try to have the last word. You might get it.

VARIATIONS ON A THEME

XIII

Boondock

"Ira," said Lazarus Long, "have you looked at this list?" He was lounging in the office of Colony Leader Ira Weatheral at Boondock, largest (only) settlement on the planet Tertius. With them was Justin Foote 45th, freshly arrived from New Rome, Secundus.

"Lazarus, Arabelle addressed that letter to you. Not to me."

"That preposterous puff-gut will get me annoyed yet. Her Extreme Ubiquity Madam Chairman Pro Tem Arabelle Foote-Hedrick seems to think she has been crowned Queen of the Howards. I'm tempted to go back and pick up that gavel."

Lazarus passed the list to Weatheral. "Give it a gander, Ira. Justin, did you have anything to do with this?"

"No, Senior. Arabelle told me to deliver it and instructed me to brief you in ways to insure delivery of Delay Mail from various eras—which does present problems for pre-Diaspora dates. But I don't consider her ideas practical. If I may say so, I know more Terran history than she does."

"I'm certain you do. I think she cribbed that list from an encyclopedia. Don't bother me with her notions. Oh, you can transcribe them and give me the cube, but I shan't play it. I want *your* ideas. Justin."

"Thank you, Ancestor—"

"Call me 'Lazarus.'"

"'Lazarus.' The official reason for my visit is to report to her on this colony—"

"Justin," Ira put in quickly, "does Arabelle think she has jurisdiction over Tertius?"

"I'm afraid so, Ira."

Lazarus snorted. "Well, she hasn't. But she's so far away it can't hurt if she wants to call herself 'Empress of Tertius.' Our situation is this, Justin. Ira is Colony Leader, we are still shaking down. I'm Mayor—Ira does the work, but I bang the gavel at community meetings—there are always colonists who think that a colony can operate like a big-city planet, so I preside to throw cold water on damfoolishness. When I'm ready to start this time-travel junket, we'll eliminate the job of Colony Leader and Ira will take over as Mayor.

"But feel free to look over the joint, count noses, examine any records, do as you like. Welcome to Tertius, the biggesi little colony this side of Galactic Center. Make yourself at home, son."

"Thank you. Lazarus, I would be staying—colonizing—but I want to remain Chief Archivist until I finish editing your memoirs."

Lazarus said, "Oh, *that* junk—burn it up! Gather ye rosebuds, man!"

Ira said, "Lazarus, don't talk that way. I put up with your whims for years to get it on record."

"Piffle. I paid you back when I grabbed the gavel and kept the Ugly Duchess from banishing you to Felicity. You got what you want—why do you care about my memoirs?"

"I care."

"Well— Maybe Justin can edit them here. Athene! Pallas Athene, are you there, honey?"

"Listening, Lazarus," came a sweet soprano voice from a speaker over Ira's desk.

"Your memories include my memoirs, do they not?"

"Certainly, Lazarus. Every word you've spoken since Ira rescued you—"

"Not 'rescued,' dear. Kidnapped."

"Revision. —since Ira kidnapped you from that flophouse, and all your earlier memoirs."

"Thanks, dear. You see, Justin? If you *must* do buttonsorting, do it here. Unless you have unfinished business on Secundus? Family, or such?"

"No family. Grown children but no wife. My deputy is doing my job, and I've nominated her as my successor— subject to approval by the Trustees. But I find myself startled. Uh—how about my ship?"

"My ship, you mean. I don't mean my yacht 'Dora' but that one-man autopacket you arrived in. The 'Homing Pigeon.' Belongs to a corporation owned by another corporation of which I am major stockholder. I'll accept delivery and that saves Arabelle half the lease time."

"So? Madam Chairman Pro Tem did not lease that autopacket, Lazarus; she requisitioned it for public service."

"Well, well!" Lazarus grinned. "Maybe I'll sue her. Justin, there is nothing in the Articles of Contract under which Secundus was colonized that permits requisition of private property by the state. Correct, Ira?"

"Technically correct, Lazarus. Although there is long precedent for eminent domain in land."

"Ira, I'd argue even that. But have you ever heard of it being applied to spaceships?"

"Never. Unless you count the 'New Frontiers.'"

"Ouch! Ira, I didn't requisition the 'New Frontiers'; I stole it to save our skins."

"I was thinking of Slayton Ford's part in it, not yours. Constructive requisitioning, perhaps?"

"Mmm— It's pretty small of you to bring it up a couple of thousand years after his death. Furthermore, had Slayton not, done what he did, I wouldn't be here and *you* wouldn't be here. Nor any of us. Damn you, Ira."

"Get your feathers down, Grandfather. I was just pointing out that a head of state sometimes has to do things he would never do as a private individual. But if Arabelle can requisition the 'Homing Pigeon' when it sits on Secundus, then you can do the same on Tertius. You are each head of state of an autonomous planet. Teach her a lesson."

"Uh...Ira, don't tempt me. It happened to *me* once. If it got to be a habit, it would put a stop to interstellar travel. I won't touch that bucket under any such flimsy legality. But I *do* own it, indirectly, and if Justin wants to stay, he can turn it over to me, and I'll return it to Transport Enterprises. Let's get back to that list. See what the old bat wants? The times and places she wants me to report on?"

"Looks like an interesting itinerary."

"It does, eh? Then *you* do it. 'Battle of Hastings—First, Third, and Fourth Crusades—Battle of Orleans—Fall of Constantinople—French Revolution—Battle of Waterloo.' Thermopylae and nineteen other encounters between rough strangers. I'm surprised she didn't ask me to referee the bout between David and Goliath. I'm *chicken,* Ira. I fight when I can't run—how does she *think* I managed to live so long? Bloodshed is not a spectator sport. If history says that a battle took place at a given location on a particular day, then I'll be somewhere—or somewhen—far away, sitting in a tavern, drinking beer and pinching the barmaids. Not dodging mortar fire to feed Arabelle's ghoulish curiosity."

"I tried to suggest that," said Justin. "But she said that this was an official Families' project."

"The hell it is. I told her about it simply to be sure of the Delay Mail setup. I'm a coward by trade…and *not* working for her. I'll go where and when I please, see what I want to— and try not to antagonize local yokels. Especially those fighting each other; it makes 'em triggerhappy."

"Lazarus," said Ira Weatheral, "you never have said what you do plan to see."

"Well— No battles. Battles are well enough reported for my taste. But there are lots of interesting things in Terran history—peaceful things not well reported because they *were* peaceful. I want to see the Parthenon at the peak of its glory. Cruise down the Mississippi with Sam Clemens as pilot. Go to Palestine in the first three decades of the Christian Era and try to locate a certain carpenter turned rabbi—settle whether there ever was such a man."

Justin Foote looked surprised. "You mean the Christian Messiah? Admittedly many stories about him are myths, but—"

"How do you *know* they are myths? But that he ever lived is the point that has never been established. Take Socrates, four centuries earlier—his historicity is as firmly established as that of Napoleon. Not so with the Carpenter of Nazareth. Despite the care with which the Romans kept records and the equal care with which the Jews kept theirs, *none* of the events that *should* be on record can be found in contemporary records.

"But if I devoted thirty years to it, I could find out. I know Latin and Greek of that time and I'm almost as conversant with classic Hebrew; all I would have to add is Aramaic. If I found him, I could follow him around. Take down his words with a microrecorder, see if they match what he is alleged to have said.

"But I won't take any bets. The historicity of Jesus is the slipperiest question in all history because for centuries the question couldn't be raised. They would hang you for asking—or burn you at the stake."

"I'm amazed," said Ira. "My knowledge of Earth's history isn't as thorough as I thought it was. However, I concentrated on the period from Ira Howard's death to the founding of New Rome."

"Son, you didn't even sample it. But aside from this one weird story—'weird' because most major religious leaders are heavily documented whereas this one remains as elusive as the King Arthur legends—I'm not going after great events. I'd rather meet Galileo, get a look at Michelangelo at work, attend a first performance of one of old Bill's plays at the Globe Theater, things like that. I'd particularly like to go back to my own childhood, see if things look as I recall them."

Ira blinked. "Run a chance of running into *yourself?"*

"Why not?"

"Well…there are paradoxes, are there not?'

"How? If I'm going to, then I *did.* That old cliché about shooting your grandfather before he sires your father, then going *fuft!* like a soap bubble—and all descendants, too, meaning both of you among others—is nonsense. The fact that I'm here and you're here means that I *didn't* do it—or won't do it; the tenses of grammar aren't built for time travel—but it does *not* mean that I never went back and poked around. I haven't any yen to look at *myself* when I was a snot-nose; it's the era that interests me. If I ran across myself as a young kid, he—I—wouldn't recognize me; I would be a stranger to that brat. He wouldn't give me a passing glance; I know, I *was he."*

"Lazarus," put in Justin Foote, "if you intend to visit that era, I'd like to invite your attention to one thing Madam Chairman Pro Tem is interested in—because *I* am interested. A recording of exactly what was said and done at the Families' Meeting in 2012 A.D."

"Impossible."

"Just a moment, Justin," Ira put in. "Lazarus, you have refused to talk about that meeting on the grounds that the others who were there can't dispute your version. But a recording would be fair to everyone."

"Ira, I didn't say that I *would* not; I said it was *impossible."*

"I don't follow you."

"I can't make a recording of that meeting because I was not there."

"You lost me again. All the records—and your own statements—show that you *were* there."

"Again we don't have language adequate for time travel. Surely, I was there as Woodrow Wilson Smith. I was there and made a hairy nuisance of myself and offended a lot of people. But I did *not* have a recorder on me. Let's say that Dora and the twins drop me back there —me, Lazarus Long, not that younger fellow—and that Ishtar has equipped me with a recorder implanted behind my right kidney, with its minimike surfacing inside my right ear. Okay, let's assume that with such equipment I won't be noticed making a record.

"But, Ira, what you don't understand, despite having chaired many Families' Meetings, is that I would not get inside the hall. In those days an executive meeting of the Families was harder to get into than an esbat of witches. The guards were armed and eager; it was a rough period. What identity could I use? Not Woodrow Wilson Smith; he *was* there. Lazarus Long? There was no 'Lazarus Long' on the Families' rolls. Try to fake it as someone eligible but not able to attend? Impossible. There were only a few thousand of us then, and every member was known to a large percentage of the rest; a man who couldn't be vouched for ran a nasty chance of being buried in the basement. No unidentified person *ever did* get in; we had too much at stake. Hi, Minerva! Come in, honey."

"Hi, Lazarus. Ira, am I intruding?"

"Not at all, dear."

"Thank you. Hello, Athene."

"Hello, my sister."

Minerva waited to be introduced. Ira said, "Minerva, you remember Justin Foote, Chief Archivist."

"Certainly, I've worked with him many times. Welcome to Tertius, Mr. Foote."

"Thank you, Miss Minerva." Justin Foote liked what he saw—a tall, slender young woman with an erect carriage, a small, firm bust, long chestnut hair worn in a part and brushed straight down, a sober, intelligent face, handsome rather than pretty, but which blossomed into beauty each time she gave one of her quick smiles. "But, Ira, I must hurry back to Secundus and apply for rejuvenation. This young lady has worked with me 'many times'—yet I've grown so senile I can't place the occasions. Forgive me, dear lady."

Minerva flashed him another of her smiles, then instantly. was sober. "My fault, sir; I should have explained at once. When I worked with you, I was a computer. Executive computer of Secundus, serving Mr. Weatheral, then Chairman Pro Tem. But now I'm a flesh-and-blood, and have been for the past three years."

Justin Foote blinked. "I see. I hope I do."

"I am a proscribed construct, sir, not born of woman. A composite clone of twentythree donor-parents, forced to maturity in vitro. But the 'I' that is me, my ego, was the computer who used to work with you when the Archives computers needed assistance from the executive computer. Have I made it clear?"

"Uh…all I can say, Miss Minerva, is that I am delighted to meet you in the flesh. Your servant, Miss."

"Oh, don't call me 'Miss,' call me 'Minerva.' I shouldn't be called 'Miss' anyhow; isn't that honorific reserved for virgins among flesh-and-bloods? Ishtar—one of my mothers and my chief designer—deflowered me surgically before she woke me."

"And that ain't all!" came the voice from the ceiling.

"Athene," Minerva said reprovingly. "Sister, you're embarrassing our guest."

"I'm not, but maybe you are, sister mine."

"Am I, Mr. Foote? I hope not. But I'm still learning to be a human being. Will you kiss me? I'd like to kiss you; we've known each other almost a century and I've always liked you. Will you?"

"Now who's embarrassing him, sister?'

"Minerva," said Ira.

She suddenly sobered. "I shouldn't have said that?"

Lazarus cut in. "Pay no attention to Ira, Justin; he's an old stickin-the-mud. Minerva is a 'kissin cousin' to most of the colony; she's making up for lost time. Furthermore, she *is* some sort of cousin to practically all of us through her twentythree parents. And she's learned how—kissing her is a treat. Athene, let your sis be while she adds on another kissing cousin."

"Yes, Lazarus. Ol' Buddy Boy!"

"Teena, if I could reach through that string of wires, I'd spank you." Lazarus added, "Go ahead, Justin."

"Uh…Minerva, I haven't kissed a girl in many years. Out of practice."

"Mr. Foote, I do not mean to embarrass you. I am simply delighted to see you again. You need not kiss me. Or if you are willing to kiss me in private, you are most welcome."

"Don't risk it, Justin," advised the computer. "I'm your friend."

"Athene!"

"I was about to add," said the Chief Archivist, "that I probably need practice in 'learning to be a human being' more than you do. If you'll put up with my rustiness, Cousin, I accept your sweet offer. Brace yourself."

Minerva smiled quickly, went into his arms, flowed up against him like a cat, closed her eyes, and opened her mouth. Ira studied a paper on his desk. Lazarus did not even pretend not to watch. He noted that Justin Foote put his heart into the matter—the old buzzard might be out of practice, but he hadn't forgotten the basics.

When they broke, the computer gave a respectful whistle. "Wheeee…ooooo! Justin, welcome to the Club."

"Yes," Ira said dryly, "a person can't be said to be officially on Tertius until he or she has been welcomed with a kiss from Minerva. Now that protocol is satisfied, sit down. Minerva, my dear, you came for some purpose?"

"Yes, sir." She settled down by Justin Foote on a couch facing Ira and Lazarus—took Justin's hand. "I was in the 'Dora' with the twins, and Dora was drilling them in astrogation, when the packet showed up in our sky and—"

"Hold it," Lazarus interrupted. "Did the brats track it?"

"Certainly, Lazarus. A live exercise?—Dora would never miss such a chance. She split herself instantly and made each of them track it independently. But once the autopacket grounded I asked Dora to ask Athene who was in it—and as soon as the pod opened, my sisters told me, Justin"—she squeezed his hand—"and I hurried to greet you. And to offer some arrangements. Ira, has Justin been provided for? A place to sleep, things like that?"

"Not yet, my dear. We were just starting to talk—he's barely had time to shake off the anesthetic."

Foote remarked, "I think the antidote has taken hold."

The computer added, "Cousin Justin just had a second dose, Ira. Pulse fast but steady."

"That's enough, Athene. Were you going to suggest something, my dear?"

"Yes. I swung past the house and spoke with Ishtar. We are in agreement. Subject to approval of you and Lazarus."

"You mean we get a vote?" Lazarus put in. "Justin, this planet is run by its women."

"Isn't that true everywhere?"

"No, just most of them. I remember a place where a wedding ceremony always concluded by killing the bride's mother if she hadn't been used up earlier. I thought that was overdoing it, but it did tend to—"

"Stow it, Grandpappy," Ira said mildly. "Justin would have to edit it out. Justin, what Minerva has been saying is that our house is yours. Lazarus?"

"Certainly. It's a madhouse, Justin, but the cooking is okay, and the price is right. Free, that is. It's just your nerves that pay.

"Really, I have no intention of imposing. Isn't there someone who can rent me a room? Not for money—I assume that Secundus money is not negotiable here—but for artifacts I've fetched, things you don't make as yet."

Lazarus answered, "You can negotiate Secundus money through me if you need to. As for artifacts, you may be surprised at what we are making."

"I might not be; I know that a universal pantograph was moved here. So I fetched new creative items, mostly entertainments—solly cubes and such. Musicalarkies, pornies, dreams, other sorts—all published since you folks left Secundus."

"Well planned." Lazarus added, "I think colonizing was more fun back when pioneers had no choice but to step in and slug it out and you weren't sure who was going to win, you or the planet. The way we do it now is like swatting an insect with a sledgehammer. Justin, your creepies will fetch a high price—but sell them in dribbles… because each one will be copied as soon as you turn it loose. No copyright, there's no way to enforce it. But it still won't rent you a room; we're at the staying-with-kinfolk stage. You'd best accept our offer; it rains 'most every night this time o' year."

Justin Foote looked baffled. "I have misgivings about invading your privacy. Ira, could I borrow this couch I'm sitting on? For a short time? Then—"

"Stow it, Justin." Lazarus stood up. "Son, you're suffering from big-city attitudes. You're welcome for a week or a century. You're not only my lineal descendant—through Janet Foote, I think—but you're a kissin' cousin of Minerva's. Let's take him home, Minerva. What did you do with my hellions?"

"They're outside."

"Trust you staked 'em down."

"No, but they were somewhat miffed."

"Good for their metabolism. Ira, declare a holiday."

"I will—as soon as I've gone over the ore converter plans with Athene."

"Meaning you're going to find out from her what's she's decided."

"You can say that again!" said the computer.

"Teena," Lazarus said mildly, "you've been associating with Dora too much. When Minerva had your job, she was sweet, gentle, respectful, and humble."

"Any complaints about my work, Grandpappy?"

"Just your manners, dear. In the presence of a guest."

"Justin isn't a guest; he's family. He's my sister's kissing cousin, so he's mine, too. Logical? Q.E.D."

"I disdain to argue. Watch out for Teena, Justin; she'll trap you.

"I find Athene's reasoning not only logical but warmly pleasing. Thank you, my kissing cousin."

"I like you, Justin; you were sweet to my sister. Don't worry about me trapping you; I don't plan to accept a clone for at least a hundred years—first I've got to get this planet organized. So don't wait up; you'll see me in about a century. You'll recognize me; I'll look exactly like Minerva."

"But noisier."

"Lazarus, you say the sweetest things. Kiss him for me, twin sister."

"Let's go, Minerva; Teena's got me mixed up again."

"Just a moment, Lazarus, please. Ira? I made other arrangements through Ishtar but only tentatively…not being sure of Justin's wishes."

"Oh. I don't know them either. Do you want me to ask him?"

"Uh…yes."

"On your behalf?"

Minerva looked startled. Justin Foote looked puzzled. Athene said, "Let's cut through the fog. Justin, Minerva was asking Ira whether or not you want her to find you a guest wife. Ira says he doesn't know but will find out—then asked her if she was volunteering for the privilege. All clear? Justin, my sister is so new at being a flesh-and-blood that she sometimes isn't sure of herself."

Lazarus reflected that he had not seen a girl blush—for that reason—for three centuries or more. Nor did the two men look at ease. He said reprovingly, "Teena, you are an excellent engineer…and a lousy diplomat."

"What? Oh, nonsense. I saved them billions of nanoseconds."

"Shut up, dear; your circuits are scrambled. Justin, Minerva is almost certainly the only girl on this planet who could be fussed by Teena's unhelpful help…because she is probably the only one who shows any tendency to stick to one man."

The computer giggled.

"I told *you* to keep still," Lazarus said sternly.

Ira said quietly, "Minerva is a free agent, Lazarus."

"Who said she wasn't? And you keep quiet, too, until the Senior—that's *me,* son—finishes speaking. Justin, Minerva will find you a dinner partner—has found one, I think. After that you are on your own. If you and your dinner partner don't hit it off, no doubt you'll be able to work out something else. Teena, I'm going to switch you off at the house tonight; I am uninviting you to dinner. You haven't learned how to behave in company."

"Aw, Lazarus, I didn't mean to steal your pig."

"Well—" Lazarus looked around. Ira's face was impassive, Minerva looked unhappy. Justin Foote spoke up:

"Senior, I'm sure Athene did not mean any harm. I do appreciate her declaring me her 'kissing cousm'; I found it warmly friendly. I hope you will reconsider and let her join us at dinner."

"Very well, Teena; Justin has intervened for you. But between you and Dora and the twins I am beginning to need a gnarooth to ride herd on you kids. Justin. Minerva. Let's go. Ira, Teena—.see you at the house. Don't waste time on that converter, Ira; Teena did a perfect job."

Outside the colonial headquarters Justin Foote found a nullboat waiting—not the one that had fetched him from the skyfield; this one had a pair of redheaded twins in it…uh, girls, although they looked as if they had just recently made up their minds. Twelve, perhaps thirteen. Both were wearing gun belts on skinny hips, with what (he hoped) were toy guns. One was wearing captain's insignia on bare shoulders. Each wore eleven thousand, three hundred, and two freckles as near as he could estimate.

Both jumped out of the boat, waited. One set of freckles said, "About time." The other said, "Discrimination."

Lazarus said, "Pipe down and be polite. Justin, these are my twin daughters—Lapis Lazuli, and that one's Lorelei Lee. Mr. Justin Foote, dears, Chief Archivist for the Trustees."

The girls glanced at each other, then curtsied deeply in perfect unison. "Welcome to Tertius, Chief Archivist Foote!" they said in chorus.

"Charming!"

"Yes, girls, that was nice. Who taught you?"

"Mama Harnadryad taught us—"

"—and Mania Ishtar said this would be a good time to do it."

"But I'm Lori; she's Lazi."

"You're both lazy," said Lazarus.

"I'm Captain Lapis Lazuli Long, commanding Starship 'Dora' and she's my crew. Even-numbered day."

"Till tomorrow. Odd-numbered day."

"Lazarus can't tell us apart—"

"—and he's not our father; we never had one."

"He's our brother, no real authority—"

"—he just dominates us by brute strength—"

"—but someday that will change."

"Into the boat, you mutinous hellions," Lazarus said cheerfully, "before I bust you back to apprentice spacemen."

They jumped into the boat, sat forward, facing aft.

"Threats—"

"—with abusive language—"

"—and without due process."

Lazarus did not seem to hear them. He and Justin handed Minerva into the boat, seated her aft and facing forward; they took seats cornering her. "Captain Lazuli."

"Yes, sir?"

"Will you please tell the boat to take us home?"

"Aye aye, sir. Humpty Dumpty—home!"

The little craft started up, hit a steady ten knots, waddling to changing contours of the ground. Lazarus said, "And now, Captain, having confused our guest, please straighten him out."

"Yes, sir. We're not twins, we don't even have the same mother—"

"—and Ol' Buddy Boy is not our father; he's our brother."

"Even-numbered day!"

"Then make it march."

"Correction," said Lazarus. "I'm your father because I adopted you, with written consent of your mothers."

"Irrelevant—"

"—and illegal; it was not with *our* consent—"

"—and immaterial in any case, as we three, Lazarus, Lorelei arid I, are identical triplets and therefore enjoy the same rights under any rational jurisdiction…which unfortunately this is not. So he beats us. Illegally and brutally."

"Captain, remind me to get a bigger club."

"Aye aye, sir. But we're fond of Buddy Boy anyhow despite his masochosadistic behavior. Because he's really us. You see?"

"Miss—Captain, I mean—I'm not sure I do. I think I slid through a space warp on the way here and failed to come out."

The even-numbered-day captain shook her head. "Sorry, sir, but that's not possible. I must ask you to take my word for it…unless you can handle imperial numbers and Libby field-physics. Can you?"

"No. Can you?"

"Oh, certainly—"

"—we're geniuses."

"Quit trying to snow him, kids, and belay that order. I'll explain it myself."

"I wish *you* would, Lazarus. I wasn't aware that you had any minor children. Or sisters, which I find even more confusing. Are they registered? While I can't see everything that goes into the files, for many years there has been an automatic relay to my attention on anything concerning the Senior."

"Which *I* knew and that's why you didn't see it. Registered, yes, but by their mothers' names—hostmothers, actually, but not so reported. But I left a Delay-Mail sealed registration of the actual genealogy involved, to be opened by you or your successor on my death or in year 2070 of the Diaspora, whichever comes first, to insure that they will receive certain knickknacks, such as my second-best bed —"

"And the 'Dora!"

"Pipe down. Keep butting in and your sister gets the 'Dora' and you won't be captain even on alternate days. I picked that date, Justin, because I expect them to be adults by then; they really are geniuses. I will not attempt time travel until then, as they are captain and crew of my yacht—only while groundside now but in space by then. As to how they are my sisters— and they are—an illegal—proscribed, rather, by Secundus Clinic—a clandestine surgical procedure was used to clone them from me. Somewhat like Minerva's case, but simpler."

"Much simpler," agreed Minerva. "I operated for me, when I was still a computer—and failed seventeen times before I achieved a perfect clone. I couldn't do it now, although Athene would be able to. But our girls were cloned by a flesh-and-blood surgeon—replication of the X chromosome was all that was necessary—and did it in both cases in one try; Laz and Lor were born the same day."

"Mmm— Yes, I think that Madam Director Doctor Hildegarde would take a sour view of such things. With no reflections on the lady's professional competence—high, I assume—I find her a bit, uh, conservative."

"Murderess."

"Primitive totalitarian."

"Three times over—"

"—for what right has *she* to say that *we* can't exist—"

"—or Minerva. Crypto-criminal mind!"

"That's enough, girls; you've made your point, you don't like her."

"She would have murdered *you,* too, Ol' Buddy Boy."

"Lori, I said that was enough. Stipulated that, if Nelly Hildegarde's policies had been carried out, I wouldn't be here, you wouldn't be here, Laz wouldn't be here, nor would Minerva. But she's not a, 'murderess,' as all four of us *are* here."

"And I am delighted,". Justin Foote commented. "To have three charming young ladies added to our Families through breaking rules proves something I have long suspected: Rules serve best when broken."

"A wise man—"

"—and with dimples, too. Mr. Foote, would you like to marry me and my sister?"

"Say 'Yes'! She can cook, but I'm cuddly."

Minerva said, "Stop it, girls."

"Why? Have you got him staked out already? Was that why we couldn't come in? Mr. Foote, Minerva is Mama Pro Tem to us by edict —"

"—which is patently unfair—"

"—as she is actually years and *years* younger than we are—"

"—and it gives us three mothers to dodge instead of the regulation one."

"Belay that," Lazarus ordered. "Both of you can cook, but neither of you is very cuddly."

"Then why do you cuddle us, Buddy Boy?"

"—suppressed incestuous yearning perhaps?"

"Merde. Because you both are immature, insecure, and frightened."

The redheads looked at each other. "Lori?"

"I heard it. Unless I'm hallucinating."

"No, I heard it, 'too."

"Is it time to cry?"

"We'd better save it. Mr. Foote wouldn't want to see how our Buddy Boy goes all to pieces when we cry."

"We'll save it. That makes two cries and a chin quivering he's got coming. Unless Mr. Foote would *like* to see it."

"Would you, Mr. Foote?"

"Justin, I'll sell either one of them cheap. Still better price on a package deal."

"Uh…thank you, Lazarus, but I'm afraid that they might cry at me —then *I* would go all to pieces. Can we change the subject? How did you manage to put over this triple, uh, irregularity? May one ask? Doctor Hildegarde runs a very taut organization."

"Well, in the case of those two little angels over there—"

"Sarcasm now—"

"—and not clever."

"—I was flummoxed quite as much as Nelly Hildegarde. At the time, Ishtar Hardy, that one's mother—"

"No, *her* mother."

"You two are interchangeable parts, and besides, you were mixed up the week you were born, and nobody knows which you are; you don't know yourself."

"Oh, yes, I do! Sometimes she goes away, but I'm always right here."

Lazarus paused in midflight, looked thoughtful. "That may be the most succinct statement of the solipsist thesis I've ever heard. Write it down."

"If I did, you'd take credit for it."

"I simply want to save it for posterity…a notion incompatible with the thesis itself. Minerva, you preserve it for me."

"Recorded, Lazarus."

"Minerva has almost as exact a memory as she had when she was a computer. I was saying: Ishtar was temporarily Clinic boss, Nelly having gone on leave, so access to my tissue was no problem. I was then in a state of acute anhedonia, and their mothers cooked up this notion for restoring my interest in life. The only problem was to do gene surgery not permitted by the rules of Secundus Clinic. How and who— I was told firmly not to inquire. You can ask Minerva; she was in on the swindle."

"Lazarus, that was a memory I did not bring along when I was selecting what to fit into this skull."

"You see, Justin? I'm allowed to know only what they think is good for me. As may be, this heroic treatment worked; I have not been bored since. Other descriptives might apply—but not that one."

"Lori, do you sense a double entendre?"

"No, merely a thinly veiled innuendo. Ignore it with dignity."

"But at first *I* didn't know my odd relationship to this pair. Oh, I couldn't help knowing that Ishtar, and Hamadryad—one of Ira's daughters; you've met her?"

"Years back. A lovely girl."

"Quite. Both of their mothers are lovely. I couldn't help knowing that both were pregnant; they were spending most of their time with me. But although they were swelling up like poisoned pups, they ignored it, so I didn't inquire."

Justine nodded. "Privacy."

"Naw, just hardnosed. I've never let the privacy custom keep me from snooping when it suited me. I was miffed, that's all. Here two girls are with me every day and like daughters to me and obviously as knocked up as Pharaoh's Daughter— and they tell me nit. So I got stubborn and outsat them. Till one day Galahad—he's their husband—well, not exactly; you'll see—Galahad invites me downstairs, and here they have, one each, the two prettiest little redheads I ever saw."

"Shall we let him off one cry?"

"You got over it; you both look like *me* now."

"Or do we add a third cry for *that?"*

"I still don't smell a mouse; I'm simply pleased. As well as amazed that they had produced babies that looked like identical twins—"

"Which we are, except that we're triplets."

"But some weeks of playing with these babies causes my natural genius and suspicious mind to infer that the girls have pulled a whizzer. I was not then in the sperm bank so far as I knew, but I am well aware of tricks that can be played on a helpless client undergoing antigeria, so with unerring logic I reach the wrong answer: These babies are my daughters by artificial insemination unmentioned to me. So I accuse them' of it. And they deny it. And I explain that I am not angry, but quite the contrary I *hope* these little cherubs are mine."

"'Cherubs.'"

"Ignore it. He's simply trying to con Mr. Foote."

"Cherubs at that time, I mean, aside from a tendency to bite. That I *want* them to be mine and share my name, and fortunes. So they confer with their fellow conspirators— Minerva and Galahad—Minerva was in it up to her overload safeties."

"Lazarus, you *needed* a family."

"Quite right, dear. I'm always better off with a family; it keeps me harmlessly occupied and unbored. Justin, did I mention that Minerva allowed me to adopt her?"

"*We* weren't asked!"

"Look, kids, under the loose rules of this termite bill I can unadopt you this minute, if such be your wish. Cut the tie. Be just your genetic brother through circumstances I had no more part in than you had. Renounce all authority over you two. Let me know."

The two girls looked at each other briefly. Then one said, "Lazarus —"

"Yes, Lorelei?"

"Lapis Lazuli and I have discussed it, and we both think that you are just exactly the father we want."

"Thank you, my dears."

"And to confirm it, we are canceling two cries and a chin quiver."

"That's most pleasing."

"And besides that, we want to be cuddled…because we are feeling very immature, insecure, and frightened—"

Lazarus blinked. "I don't want you to feel that way, ever. But— Well, can the cuddling wait?"

"Oh, certainly—Father. We know we have a guest. But perhaps you and Mr. Foote would join us in bathing? Before dinner?"

"Well, Justin? Bathing with my hellions is squirmy but fun. I don't do it often because they turn it into a social event and waste time. Suit yourself; don't let your arm be twisted."

"A bath I certainly need. I was clean when I was sealed into that pod—but how long was I in it? I really don't know. And a bath should always be a social event if there is time and good company. Thank you ladies; I accept."

"And I accept, too," put in Minerva. "I'm inviting myself. Justin, Tertius is primitive compared with Secundus, but our family refresher is nice and quite large enough for sociability. 'Decadent,' as Lazarus calls it."

"I designed it to be decadent, Justin. Good plumbing is the finest flower of decadence and one I have always enjoyed when I could get it."

"Uh—my clothes are still in Ira's office. Even my toiletries. Absentminded, I'm sorry."

"No matter. Ira may fetch your bag, but he's absentminded, too. Depilatories, deodorants, scents—no problem. I'll lend you a toga or something."

"Buddy Boy! I mean 'Father.' Does that mean we *dress* for dinner?"

"Call me Buddy Boy; I'm hardened to it. Go as far as you like, darlings…except that as usual Mama Hamadryad must okay any cosmetics. Back to how I acquired these daughters who are my sisters, Justin: Having conferred, this gang of genetic pirates came clean and threw themselves on the mercy of the court. Me. So I adopted these two, and we registered them, and the registration will be straightened out one day, as I explained. How Minerva gave up the profession of computer and assumed the sorrows that flesh is heir to is a longer story. Want to synopsize it, dear?—and fill him in later if you wish."

"Yes, Father."

"None of your lip, dear; you're a grown woman now. Justin, when we woke this darling, she was about the size and biological age of those two reformed hellions—remind me to take their temperatures, Minerva. I adopted Minerva because she needed a father then. Doesn't now."

"Lazarus, I will always need you as my father."

"Thank you, my dear, but I take that only as a pleasing compliment. Tell Justin your story."

"All right. Justin, are you familiar with the theories concerning self-awareness in computers?"

"Several of them. As you know, my work is mostly with computers."

"Permit me to say, speaking from experience, all theories are empty. How a computer becomes self-aware remains as much a mystery, even to computers, as the age-old mystery of flesh-and-blood self-awareness. It just *is.* But, so far as I've heard—quite far in view of the library that was locked in my memories then and is still in Athene's memories—self-awareness *never* arises in a computer designed only for deductive logic and mathematical calculations, no matter how big it is.

But if it is designed for inductive logic, able to assess data, draw hypotheses therefrom, test them, reconstruct them to fit new data, make random comparisons of the results, and change those reconstructions—exercise judgment the way a flesh-and-blood does, then self-awareness may occur. But I don't know why and no computer knows. It just *does.*"

She smiled. "Sorry, I did not mean to sound pedantic. Lazarus figured out that I could go into a blank human 'brain, a clone brain, using techniques used to conserve memories in rejuvenation clinics. When we discussed this, I had the entire technical library of Secundus' Howard Clinic in me—stolen, in a way. I no longer have it; I had to pick and choose what to take along when I went into this skull. So I don't remember much of what I did, any more than a rejuvenation client knows all that is done to-him; you would have to get details from Athene, who still has them—and who, by' the way, never had the rather painful awakening that a computer goes through when it first begins to know itself, because I left a piece of me in Athene, oh, like a yeast starter. Athene dimly remembers having been Minerva at one time—about the way we flesh-and-bloods”—Minerva straigntened up, smiled, and looked proud—”remember a dream as something not quite real. And I remember being Minerva the Computer some— what the same way. I remember all my contacts with people very sharply—because I chose to keep them, replicate them into this skull. But if anyone were to ask how I handled the transport system of New Rome…well, I know that I did, but not *how* I did it.”

She smiled again. “That’s my story: A computer who longed to be a flesh-and-blood and who had loving friends who made is possible…and I’ve never regretted it; I love being flesh-and-blood—and want to love everybody.” She looked at Justin Foote very soberly. “Lazarus spoke sooth; I have never been a guest wife; I am only three years old as a flesh-and-blood. Should you choose me, you may find me awkward and shy—but not reluctant. I owe you much.”

“Minerva,” said Lazarus, “back him into a corner some other time. You didn’t tell Justin what he wanted to know; you left out the hankypanky.”

“Oh.”

“And when you were philosophizing about awareness in computers, you left out the key point, it seems to me, one *I* know but you may not even though you’ve been a computer and I have not. Because this key point applies both to computers and to flesh-and-bloods. My dear—and Justin—and it won’t hurt you two erratic geniuses to listen—all machinery is animistic—’humanistic,’ I want to say, but that term has been preempted. Any machine is a concept of a human designer; it reflects the human brain, be it wheelbarrow or giant computer. So there is nothing mysterious in a machine designed by a human showing human self-awareness; the mystery lies in awareness itself, wherever it’s found. I used to have a folding camp cot that liked to bite me. I don’t say that it was aware—but I learned to approach it with caution.

“But, Minerva, darling, I’ve seen some big computers, almost as smart as you were, that never developed self-awareness. Can you tell us why?”

“I confess I can’t, Lazarus. I’d like to ask Athene when we get home.”

“She probably doesn’t know either; she’s never met any other major computer but Dora. Captain Lazuli, how far back do you remember? Once you—or your comrade in crime—claimed to remember nursing. Suckling, I mean.”

“Of course we do! Doesn’t everybody?”

“No. Me, for example. I was a bottle baby; I don’t remember even that. Not worth remembering. In consequence I’ve been looking at tits and admiring them ever since. Tell me, one of you, when you remember nursing, can you recall which of your mothers was giving you suck?"

"Of course!" Lorelei said scornfully. "Mama Ishtar has big tits—"

"—and Mama Hamadryad has much smaller ones even when they're filled with milk—"

"But she gave just as much milk."

"Different flavor though. Made it nice to trade off each meal. Variety."

"But we liked *both* flavors! Tell him, Laz."

"Enough. You've made the point I wanted. Justin, these kids were self-aware and aware of other people—their mothers at least—at an age when a crèche baby is just a doughy blob, which says something about why crèches have never worked well. I want the counterpoint: Minerva, what do you remember of the time when you were an unawakened clone?"

"Why, nothing, Lazarus. Oh, some odd dreams when I was putting me—my selected memories—into my new me, this one. But I didn't start that until lshtar said the clone was big enough. That was not until shortly before I withdrew from my former me and Ishtar woke me. It could not be instantaneous, Justin; a protein brain won't take data at computer speeds, Ishtar had me be very slow and careful. Then for a short time—short human time—I was both places, computer and skull; then I surrendered the computer and let it become Pallas Athene, and Ishtar woke me. But, Lazarus, a clone in-vitro is not aware; it's like a fetus in utero. No stimuli. Correction: minimum stimuli and nothing that leaves a permanent memory track. Unless you count reports of regression under hypnosis."

"No need to count them," Lazarus replied. "True or false, such cases are irrelevant. The relevant counterpoint is 'minimum stimuli' Honey, those big computers with awareness potential but without self-awareness are that way because nobody bothered to love the poor things. That's all. Babies or big computers—they become aware through being given: lots of personal attention. 'Love' as it's usually called. Minerva, does that theory match up with your earliest years?"

Minerva looked soberly thoughtful. "That was about a century ago in human time—call it a million times that in computer time. I know from the records that I was assembled a few years before Ira took office. But the earliest personal memories *I* have—and those memories I saved and did not leave in Athene or in the computer in New Rome—the earliest I can remember of *me* is waiting eagerly and happily for the next time Ira would speak to me."

Lazarus said, "I need not belabor the point. With babies you breast-feed them and nibble their toes and talk to them and blow in their bellybuttons and make them laugh. Computers don't have bellybuttons, but attention works just as well on them. Justin, Minerva tells me that she left nothing of herself in the computer under the palace."

"That is correct. I left it intact as a computer and programmed for all its duties…but I dared not leave any personal memory, any part of the *me,* could not let it remember that it had once been Minerva; that wouldn't have been fair to it. Lazarus warned me, and *I* was most careful, checking all the billions of bits and wiping where necessary."

Justin Foote said, "I missed a turn somehow. You did this in New Rome…but you've been awake here only three years?"

"Three wonderful years! You see—"

"Let me interrupt, dear; I'll tell him the hankypanky. But first—Justin, have you dealt with the executive computer in New Rome since we migrated? Of course you have—but have you been in the office of Madam Chairman Pro Tem when she was using it?"

"Why, yes, several times. Just yesterday—no, I mean the yesterday before I left; I keep forgetting that I missed transit time."

"What name does she use in speaking with it?"

"I don't think she uses a name. I'm fairly certain she does not."

"Oh, the poor thing!"

"No, Minerva," Lazarus said quietly. "You left it in good health; it simply won't wake up until it has a mistress, or master, who appreciates it. Which might not be 'long," he added grimly.

Justin Foote said, "Might be any time. Lazarus, that old, uh—cancel that. Arabelle loves the spotlight. Appears at public meetings, shows up in the Colosseum. Stands up and waves her scarf. Seems odd, after the quiet way Ira ran things."

"I see. A sitting duck. Seven to two she's assassinated in the next five years."

"No bet. I'm a statistician, Lazarus."

"So you are. All right— Hankypanky. Lots of it. Ishtar set up an auxiliary Howard Clinic in the Palace. Her excuse: Me, the Senior. But a coverup for a much more extensive bio facility. Minerva picked her parents; Ishtar stole the tissues and faked some records. Meanwhile, our skinny friend my daughter Minerva—"

"She is not! She's just right for her height and body type and bio age!"

"—and deliciously curved!"

"—had twinned her computer self in a hold of my yacht 'Dora,' placing the contract in my name and charging it to me, and nobody dared inquire why the Senior—some advantages to age, especially among Howards—wanted a huge computer in a yacht that already had one of the fanciest computers in the sky. While, back in my borrowed penthouse where *nobody* was allowed to go—other than a short list all as-dishonest as' I am—a clone was growing in a facility installed in a room I didn't need.

"Comes time to migrate, a very large case containing what was then a very small clone, goes to the skyport marked as part of my personal baggage—this baggage between us, of course—and is loaded into the 'Dora' without inspection, such being a prerogative of being Chairman…for as you may recall I didn't hand the gavel back to Arabelle until our transports had lifted and I was about to raise ship myself, with Ira and the rest of my personal party aboard.

"While I'm taking the clone aboard, Minerva withdraws herself from the executive computer and is safe and snug in a hold of the 'Dora'…with her gizzards packed with every bit of data in the Grand Library and the entire records of the Howard Clinic including secret and confidential stuff. A most satisfying caper, Justin, the most good, clean, illegal fun I've had since we stole the 'New Frontiers.' But I'm telling you this not to boast—or not much—but to ask if we were as slick as we thought we were. Any rumors? Did you suspect anything amiss? How about Arabelle?"

"I feel sure that Arabelle does not suspect. Nor have I heard of Nelly Hildegarde bursting any blood vessels. Mmm, *I* suspected something."

"Really. Where did we slip?"

"Hardly the word, Lazarus. Minerva, when I had occasion to consult you, while Ira was Chairman Pro Tem, how did we talk?"

"Why, you were always most friendly, Justin. You always told me *why* you wanted something instead of just telling me to dig it out. You would chat, too; you were never too much in a hurry to be pleasant. That's why I remember you so warmly."

"And that, Lazarus, is why I sniffed something dead behind the arras. You and your party had been gone about a week when I wanted something from the executive computer. When you have an old friend with a pleasant voice—your voice is unchanged, Minerva; I should have recognized it—but I was bedazzled by your appearance—when you call this old friend and are answered by a flat, mechanical voice… and any deviation from programming language is answered by: 'NULL PROGRAM—REPEAT—WAITING FOR PROGRAM'—then you know that an old friend is dead." He smiled at the girl between them. *"So* I can't tell you how delighted I am to learn that my old friend was reborn as a lovely young girl."

Minerva squeezed his hand, blushed slightly, and said nothing.

"Hmm—' Justin, did you compare notes with anyone?"

"Ancestor, do you think I'm a fool? I mind my own business."

"Apology, about grade two. No, you're not a fool, unless you go back and work for the old harridan."

"When will the next wave of migrants head this way? I hate to waste the work I've done on your life, and I would hate to abandon my personal library."

"Well, sir, no tellin' when a streetcar will be by this time o' night. Discuss it later." Lazarus added, "That's our house ahead."

Justin Foote looked, saw a building partly visible through trees, turned back to speak to Minerva. "Something you said earlier, Cousin, I did not understand. You said 'I owe you so much.' If I was pleasant to you—at New Rome, I 'mean—you were at least as pleasant to me. More likely the debt is the other way; you were always most helpful."

Instead of answering, she looked' at Lazarus. He said, "Your business, my dear."

Minerva took a deep breath, then said, "I plan to name twentythree of my children for my twentythree parents."

"So? That seems most warmly appropriate."

"You're not my cousin, Justin—you're my father. One of them."

VARIATIONS ON A THEME

XIV

Bacchanalia

After the track through the gormtrees at the northern edge of Boondock swings right, one has a view of the home of Lazarus Long, but I hardly noticed it when I first saw it; I was much bemused by a statement by Minerva Long. Me her father? *Me?*

The Senior said, "Close your mouth, Son; you're making a draft. Dear, you startled him."

"Oh, dear!"

"Now quit looking like a frightened fawn, or I'll be forced to hold your nose and administer two ounces of eighty-proof ethanol disguised as fruit juice; You've done nothing wrong. Justin, does disguised ethanol interest you?"

"Yes," I agreed fervently. "I recall a time in my youth when that and one other subject were all I was interested in."

"If the other subject wasn't women, we'll find a monastic cubbyhole where you can drink alone. But it was—I know more about you than you think. All right, we'll have a libation or six. Not those two, they're potential alcoholics."

"Slanderous—"

"—though regrettably true—"

"—but we did it only once—"

"—and won't do it again!"

"Don't commit yourself too far, kids; a brannigan might sneak up on you. Better to know your resistance than to be tripped through ignorance. Grow up, put on some mass, and you'll be able to cope with it. Or Ishtar mixed up your genes, which she didn't. Now about this other matter, Justin~ Yes, you're one of Minerva's parents…and that's a very high compliment, because those twentythree chromosome pairs were picked from tissues of thousands of superior people, using fearsome mathematics to handle the multiplicity of variables, plus Ishtar's knowledge of genetics, and some unnecessary advice from me, before this little darling got the precise mix she wanted to be."

I started to set up the type problem in my head—yes, that would be some problem, extremely more difficult than the ordinary genetics problem of advising one male and one female—then dropped it, as I had its delightful answer by her left hand. Lazarus was still speaking:

"Minerva could have been male, two meters tall, massing a hundred kilos, built like Joe Colossus, and hung like a stallion mule. Instead she elected to be what she is: slender, female, shy— I'm not sure she selected for that last. Did you, dear?"

"No, Lazarus; no one knows which genes control that. I think I get it from Hamadryad."

"I think you got it from a computer I used to know—and took along all of it as Athene certainly is not shy. Never mind. Some of Minerva's donor-parents are dead; some are alive but unaware that a bit of tissue from a clone in stasis or from the live-tissue bank was borrowed—as in your case. Some know that they are donor-parents—me, for example, and you heard Hamadryad mentioned. You'll meet others, some being on Tertius, where it's no secret. But consanguinity is not close for anyone. One twenty-third? The genetic advisers wouldn't run that through a computer; it's an acceptable risk. Plus the fact that none of us donor-parents of Minerva have any known skeletons hanging on our family trees. You could safely have progeny by her; so could I."

"But you refused me!" Minerva startled me with the vehemence with which she accused Lazarus of this. For a moment she was not shy; her eyes flashed.

"Now, now, dear. You were only a year out of vitro and not fully grown even though Ishtar forced you past menarche still in vitro. Ask me on another occasion; I might startle you."

"'Startle' me, or surprise me?"

"Never mind that old joke. Justin, I simply wanted to make clear that your relationship to Minerva, while close enough that it makes

Minerva feel sentimental, is in fact so small that you barely qualify as a ‘kissing cousin.’”

“I feel very sentimental about it,” I told the Senior. “Most pleased and deeply honored—although I can’t guess why I was picked.”

“If you want to know which chromosome pair was swiped from you, and why, you had best ask Ishtar and get her to consult Athene; I doubt if Minerva still knows.”

“But I *do* know; I saved those memories. Justin, I wanted to retain some ability in mathematics. It was a choice between you and Libby Professor Owens—so I chose you; you are my friend.”

(Well! I respect Jake Hardy-Owens; I’m merely an applied mathematician, he is a brilliant theoretician.) “Whatever your reasons, dear kissing cousin, I am delighted that you chose me as one of your donor-fathers.”

“Grounded, Commodore!” announced one of the duplicate redheads—Lapis Lazuli—as the little nullboat clumped to a stop. (It appeared to be a Corson Farmsled and I was surprised to see it in a new Colony.) Lazarus answered, “Thank you, Captain.”

The twins bounced out; the Senior and I handed Minerva out—unnecessary help that she accepted with gracious dignity, that being another aspect of colonial life that surprised me, New Rome being rather short on such archaic ceremony. (Over and again I found the Boondockers to be both more formally polite, and more casually relaxed about it, than are Secundians. I suppost my notions of frontier life had been fed on too many romances: rough, bearded men fighting off dangerous animals, mules hauling covered wagons toward distant horizons.)

“Captain” Lazuli said, “Humpty Dumpty— *go to bed!”* The nullboat waddled away; the little girls joined us, one taking my free hand, the other taking the Senior’s free hand, with Minerva between us. These freckled flametops would have had my whole attention had not Minerva been there. I am not compulsively fond of children; some youngsters seem to me rather poisonous, especially precocious ones. But in their case I found their solemn precocity charming rather than irritating…and to see the Senior’s features, rugged rather than handsome and with that too-large nose, unmistakably reproduced but transformed into piquant girlish features—well, had I been alone, I would have chuckled with delight.

I said “Just a moment,” and held onto Lorelei’s hand and thereby caused, all to pause while I took a second look. “Lazarus, who is the architect?”

“I don’t know,” he said. “Dead more than four thousand years. The original belonged to the political boss of Pompeii, a city destroyed about that long ago. I saw a model of it, restored, in a museum in a place called Denver, and took pictures; it pleased me. Those pictures are long gone, but it turned out that, when I tried to describe it to Athene, she had a solly in the historical section of her gizzards of the ruins of that same house—and from that and my description, she designed this version. Some minor mods, nothing that changed its sweet proportions. Then Athene built it, using extensionals and radio links. It's practical for this climate; the weather here is much like that of Pompeii—and I prefer a house that looks inward, on a court. Safer, even in a place as safe as this one."

"By the way, where *is* Athene? The main computer itself, I mean."

"Here. She was still in the 'Dora' when she built this; now she's under the house—she built her underground home first, then built our house on top of it."

Minerva said simply, "A computer prefers to feel safe, and close to her own people. Lazarus—forgive me, dear, but you have reversed a time sequence; that was more than three years ago."

"Oh, so I have. Minerva, when you have lived as long as I have—and you will—you'll find yourself inverting time sequences endlessly, a flesh-and-blood shortcoming you had to accept when you took the plunge. Correction, Justin— 'Minerva,' not 'Athene.'"

"Yet it *is* Athene who built it—now," Minerva added, "since engineering and the details of this construction and others are things I left behind in Athene, where they belong, and abstracted only a simplified memory of having built it—I wanted to remember that much."

I said, "Whoever built it, it's beautiful." I was suddenly upset. It is one thing to accept intellectually the startling idea that a young woman has had a former life as a computer— and even to accept that one had worked with that computer years back and lightyears away. But this discussion suddenly brought home to me emotional belief that this lovely girl with her arm warm in mine had in sober fact been a computer so short a time ago that she had built this new house—while a computer. It shook me—even though I am a historiographer, old, and my sense of wonder was dulled even before my first rejuvenation.

We went in, and my upset was swept away by greetings. We were kissed all around—two beautiful young women, one of whom I recognized when I heard her name, Ira's daughter Hamadryad and she looks like one, the other a statuesque blonde whose name, Ishtar, was familiar to me through talk, and a young man as beautiful as the women and who seemed familiar though I could not place him. Even the twin flametops insisted on kissing me since they had not greeted me that way earlier.

In Boondock a kiss of greeting is not the ritual peck it usually is in New Rome; even the twins bussed me in a fashion that made me certain of their sex—I've had poorer kisses from grown women whose intentions were direct and immediate. But the young man, introduced as "Galahad," startled me. He hugged me, with kisses on my cheeks followed by a kiss on my mouth worthy of a Ganymede— which surprised me, but I tried to return as good as I got.

Instead of letting me go, he pounded my back and said, "Justin, it tickles my root to see you again! Oh, this is wonderful!"

I pulled my face back to look at his. I must have looked puzzled for he blinked, then said mournfully: "Ish, I boasted too soon! Hamadear, get me a towel, I'm weeping. He's *forgotten* me…after all the things he said."

I said, "Obadiah Jones, what are *you* doing here?"

"Weeping. Being humiliated in front of my family."

I don't know how long it had been since I had seen him. It may have been more than a century since it has been that long since I left the Howard campus. Brilliant young specialist in ancient cultures he was then, with an impish sense of humor. I recalled, dredging it up out of memory, having shared a Seven Hours with him and two other savants, both female and happily so—but I could not recall their faces nor who they were; what I remembered was his playful, joyous, boisterous good company. "Obadiah," I said sternly, "why are you calling yourself 'Galahad'? Hiding from the police again? Lazarus, I'm shocked to find this, uh, macho in your house— lock up your daughters!"

"Oh, that *name"* he said brokenly. "Don't repeat it, Justin. They don't know it. When I reformed, I changed my name. You won't give me away? Promise me, dear!" Suddenly he grinned and said in a cheerful voice, "Come on into the atrium and let's get a skinful of rum into you. Lazi, who has the duty?"

"Lori does. Even-numbered day. But I'll help. Straight rum?"

"Better flavor it. I want to add a welcome the Borgias used on old friends."

"Sure thing, Uncle Cuddly. Who are the Borgias?"

"A family from the greatest days of Old Earth's rise and fall, sugar lump. The Howards of their time. Very suave in handling guests. I'm descended from them, and their secrets were passed down to me by word of mouth."

"Laz," said Lazarus, "ask Athene for a rundown on the Borgias before you mix a drink for Justin."

"I see; he's at it again—"

"—so we'll tickle him—

"—and blow in his ears—

"—until he cries Pax—

"—and promises Veritas—

"—he's no problem. Come on, Lazi."

I had found the village of Boondock pleasantly unimpressive, more pleasant and less impressive than I had expected. Ira and Lazarus had accepted only seven thousand for their first wave from applicants numbering more than ninety thousand; therefore the present population of Tertius could not be much over ten thousand and was in fact slightly less.

Boondock seemed to have only a few hundred people and was centered on a few small buildings for public and semipublic purposes, most colonists being scattered around the countryside. The home of Lazarus Long was by far the most impressive structure I had seen—not counting the large flat cone of the Senior's yacht and the much larger bulk of one robot space freighter on the skyfield where my packet had grounded. (The skyfield was a level place a few kilometers across; one could not call it a port. There was not one godown. It must have an autobeacon since I grounded safely; I did not see it.)

This rudimentary settlement had not prepared me for the Senior's house. Its lines and plan were simple; that long-dead Roman had picked a good designer. It was a walled garden, the house itself being its four walls. But it had two stories, and each level could have been divided, it seemed to me, into twelve to sixteen large rooms plus the usual ancillary spaces. Twenty-four or more rooms for a household of eight? The more blatantly rich in New Rome might display ego in so much space, but it seemed inappropriate in a new colony, as well as out of tune with what I had learned in my long research of the Senior's lives.

Simple— Half the building was given over to a rejuvenation clinic, a therapy clinic, an infirmary; these could be reached from the foyer without entering the private part of the house.

The number of family rooms remaining was indefinite; most interior walls were movable. The Howard Clinic and the medical facilities would be moved to a nearby site when the colony needed larger facilities, when size of the Senior's family made more home space desirable.

(I was lucky in that, when I arrived, no client was being rejuvenated, no patient was in the infirmary—or most of the adults would have been busy.)

The size of his family seemed as hazy as the number of rooms. I had thought there were eight—three men, the Senior, Ira, and

Galahad; three women, Ishtar, Hamadryad, and Minerva; two youngsters, Lorelei Lee and Lapis Lazuli—but I was not aware of two girl toddlers and a small boy. Besides that, I was neither the first nor the last to be urged to move in and stay as long as one wished. Whether such stay was as a guest or as a member of the Senior's family might also be unclear to an outsider.

Relationships inside his family also were vague. Colonists are always families; a single colonist is a contradiction in terms. But all of Tertius Colony were Howards, and we Howards have used every sort of marriage, I think, except lifetime monogamy.

But Tertius has no laws about marriage; the Senior had not thought them necessary. The few laws it has are in the migration contract, written by Ira and Lazarus jointly. It contains the usual covenants about homesteading, with the colony leader absolute arbitrator until such time as he resigns. But it says not one word about marriage and family relationships. The colonists register their babies; Howards always do—in this case with the Computer Athene as surrogate for the Archives. But I found when I reviewed these records that parentage of children was expressed in genetic classification code, not by marriages and putative ancestry. This system the Families' geneticists have been urging for generations (and I agree), but it does make a genealogist work harder, especially if marriages have not been registered at all, as was sometimes the case.

I found one couple with eleven children, six his, five hers, none theirs. I understood it when I read their codes—utterly incompatible. I met them later, a fine family on a prosperous farm and no suggestion that the swarm of children were anything hut "theirs."

But the Senior's family was even more vague. Genetic ancestry in each case was a matter of record, surely—but who was married to whom?

Their bathing room was as "decadent" as had been promised; it was a lounging room, as well as a refresher, and planned for family relaxation and entertaining. It stretched all along the ground floor on the side facing the foyer across the inner garden, and its walls could be pushed back to open it to the garden in clement weather—which this was and quite warm.

It had anything a jaundiced Sybarite could ask for: a fountain in its center matching a fountain in the garden and each with comfortably wide rims to sit on while soaking tired feet and enjoying a drink; a sauna in one corner; a huge happy shower at the other end with space for several cycles to be enjoyed at once without waiting turns; a companion querafansible with sophisticated controls; a long soaking pool knee-deep at the blue end to chin-deep at the red, and flanked by two bathing pools lavish for one person and comfortable for two or three; couches for napping, for cooling, for sweating, for intimate talk and touch; a cosmetics table with a big duomirror in which one could see her back as readily as her front simply by asking Athene's help; a corner big enough for a dozen people in which floor cushioning was bed-soft and lavish with pillows large and small, firm and soft; a refreshments counter which backed onto their kitchen—and if I failed to name something, it is my omission, not that of the designers. All the more commonplace items were of course at hand.

I had thought that the lighting was random until I realized that Athene was changing it endlessly so as not to shine it in anyone's eyes while changing the light level in all parts of that big room to match what was going on—high key for makeup, subdued light for lounging, and so on—and to match personalities too; our little redheads were crowned with light no matter how they bounced around—as they did.

Soft music was there and in the garden, or on request anywhere, selected by Athene unless someone asked for something—it seemed as if she had stored in her all the music that ever was written. Or she might harmonize with the twins while continuing to take part in three different conversations in other parts of the bath lounge. A self-aware computer of her capacity—great enough to manage Secundus—can and often must talk simultaneously at many places, but I had never encountered it before in such a way as to notice it. But big computers are not often members of a family.

The rest of the house was almost unautomated—a matter of taste as Athene's capacity was largely unused. My hostesses actually cooked, with Athene helping only by seeing to it that nothing burned and watching the timing in other ways— twice on Athene's advice Hamadryad left the bath lounge, once in such a hurry that she fled bare and dripping, not stopping to grab a towel robe.

Bathing with Lazi and Lori is indeed "squirmy but fun," plus squeals, giggles, chatter in which one sentence would be chopped several times before one of them put a period on it (I hypothesized that they were telepathic with each other and had an uneasy suspicion that they sometimes read thoughts of persons in their presence but was not anxious to find out) —all charmingly blunt and childishly innocent.

First they slathered me all over with scented liquid soap and demanded the same service from me and threatened me with chin quivering when I held back a little, and said loudly that "Uncle Cuddly" (my old friend Obadiah, now Galahad) washed them better than that and everybody knows how lazy *he* is—or didn't I like them well enough to soapy-cuddle them and if they married me, would I go along with them in their spaceship, and while they were still virgins, though not from lack of opportunity, don't worry about that one bit as both Mama Hamadryad and Mama Ishtar were coaching them in beginning and advanced sensuality and would speed up the course if I happened to want to marry them now—won't you, Mama Hamalambie?—tell him!

Hamadryad from a meter away (she was soaping Ira) assured us that she would, if they could persuade me to marry them that quickly. I assumed that the youngsters were farcing me and that their mother —one of their mothers—was going along with the jest. I've wondered since whether I missed a diamond opportunity. Lazarus was in hearing distance; he did not tell them to stop teasing me, he simply advised me not to offer them more than a ten-year contract as their span of attention was limited—which made them indignant—and advised them that, if they intended to get married that night, they had better trim their toenails first, which made them still more indignant so they stopped bathing me to assault him from both sides.

This wound up with one of them under each of his arms and still struggling. Lazarus asked if I would accept custody or should he drop them into the deep end of the soak?

I accepted custody, and we showered each other off and went into the soak pool together—and I was standing in it up to my shoulders with my back to the garden, and supporting them a little, an arm each, as their toes did not touch bottom, when someone placed hands over my eyes.

The twins squealed, "Aunt Tammy!" and levitated out of the water while I turned to look.

Tamara Sperling— I had thought she was on Secundus, in retirement up country. Tamara the Superb, the Superlative, the Unique—in my opinion (and many others) the greatest artist of her profession. I feel sure that I am not the only man who chose when she left New Rome to remain celibate for a long time.

She had come in, seen that the family was in the bath lounge, dropped her gown in the garden, hurried in without stopping to remove her high sandals, spotted me, and blindfolded me with her lovely hands.

Why? She was my dinner partner—and (if I could rely on an exchange I had heard that afternoon) willing to be my guest wife if I were willing. *Willing?* Fifty years earlier I had offered her any contract she would accept every time she let me visit her and had finally shut up only after she had told me repeatedly, patiently, and gently that she did not intend to have more children and would not marry again for any other purpose.

But there she was, rejuvenated (not that it mattered), looking gloriously young and healthy—and a colonist. I wondered who the man was who had persuaded her to do this? I envied him and wondered what superhuman qualities he possessed—but whatever they were, if Tamara was willing to share a bed with me even for one night and only for old times' sake, I would take what the gods offered and not worry about him; her wealth is endlessly divisible. Tamara!—bells sound at her name.

She kissed two wet little girls, then dropped to her knees and kissed me.

Then she said softly, rubbing her mouth against mine, "You darling. When I heard you were here, I hurried. Mi laroona d' vashti meedth du?"

"Yes! And any other night you have free."

"Not so fast with English, doreeth mi; I learning it slowly—because my daughter wants her assistants in rejuvenation to speak language not known to most clients…and because our family speaks English much as Galacta."

"You are now a rejuvenator? And have a daughter here?"

"lshtar datter mi—did you not know, petsan mi-mi? Nay, I am nurse only. But studying I am and Ishtar hope-tells that I will be assistant technician in half handful of years. Good— nay?"

"Good, I suppose. But what a loss to the art!"

"Blandjor," she said happily, tousling my wet hair. "Even though rejuvenated—did you note?—here the art pays no living. Too many willing ones, sweeter and younger and prettier." The twins had stayed with us, listening and quiet for a moment. Tamara reached out both arms, hugged them to her. "Example. These my granddaughters. Eager to grow tall so they can lie down and be short." She kissed each of them. "And red curls they have. I not have."

I started to say that age and red curls did not matter, then realized that a compliment to Tamara so phrased could cause chins to quiver. But I did not need to speak; the spout had opened again:

"Aunt Tammy, we are *not* eager—"

"—just willing and practical—"

"—and anyhow *he* won't marry us—"

"—he just teases about it—"

"—and you *can't* be our grandmother—"

"—'cause that would make you our Buddy Boy's grandmother—"

"—which is illogical, impossible, and ridiculous—"

"—so you have to be our 'Aunt Tammy.'"

I found their logic doubly enthymematic if not a total *non sequitur,* but I agreed with it because the notion of Tamara being the Senior's grandmother was one I could not face. So I changed the subject:

"Tamara dear, would you let me take off your sandals and then you come join us in the soak? Or shall I get out and get dry?"

She did not have to answer:

"We gotta run get ready—"

"—cause Mama Hamadryad has finished her face and started her nipples—"

"—so if we don't hurry, we'll have to come to dinner with our hides bare naked—"

"—and for a party that would *never* do—"

"—and you two had better hurry *too—"*

"—or Buddy Boy will throw it to the pigs. Scuse!"

I climbed out and let Tamara dry me—unnecessary as there was a blowdry at hand. But if Tamara offers me anything my answer is Yes. It took a while; we "wasted" time on touch and talk. (Is there a better way to spend time?)

When I was dry and wondering if I should try the cosmetics bench (I don't use cosmetics much, just depilatories), one of the twins came rushing back with a garment for me, a blue chlamys. She said breathlessly, "Lazarus says try this or what would you like?—but that you needn't wear anything if you don't want to 'cause it's a hot night and you count as family because you're Minerva's father, one of them."

I thought I had them keyed now by freckle pattern. "Thank you, Lorelei; I'll wear it." I've always felt that a napkin was enough to wear in dining at home in a properly tempered house—or outdoors in private on a warm night. But, as guest of honor even though "family," I could not go bare when they were taking the trouble to be festively formal.

"You're welcome, but I'm Captain Lazuli, but that's all right, she's me. Scuse!" She vanished.

I put it on; we went into the garden and retrieved Tamara's gown —and it matched what I was wearing. The same shade of blue, I mean, and a Golden-Age-of-Hellas- flavor to it. Hers was about two grams of blue fog. The bodice fastened at the right shoulder and came diagonally down to her waist at the left. Its skirt was longer than mine —but that was appropriate; Greek men of their Golden Age did wear their skirts shorter than did women, instead of the reverse that is more usual on Secundus. (I did not know as yet what was customary on Tertius.) We matched, and I was pleased.

Accident? "Accidents" around the Senior are usually planned.

We ate in the garden, a couch for each couple, arranged in hexagon with the fountain as the sixth side. Athene made the water dance and danced lights in it, to match whatever she was playing. All the womenfolk but Tamara helped with the primary serving; Lori and

Lazi played Hebe from then on— it was impossible to keep them nailed to their couch anyhow. As the feast started, Ira was with Minerva, Lazarus with Ishtar, Galahad with Hamadryad, and the twins together. But the women moved around like chessmen, sharing a couch, a few bites, a little cuddling, then moving on—all but Tamara, whose firm-soft, rounded bottom lay against my lap the entire feast. It was just as well that she did not move; I'm not shy but prefer not to show the gallant reflex unless I need it at once—and I was very conscious of her dear body warm against me.

But while Lazarus started the repast with Ishtar, the next time I looked his way it was Minerva who reclined against him—and next, one of the twins, which one I am not sure. And so on.

I won't describe the feast except to say that I did not expect it in a young colony and to add that I have paid high prices for poorer food in famous restaurants in New Rome.

All but Lazarus and his sisters were wearing colorful, pseudo-Grecian garments. But Lazarus was dressed as a Scottish chieftain of two and a half millennia ago—the kilt, bonnet, sporran, dirk, claymore, *etc.* The sword he laid aside but handy, as if expecting to need it. I can state firmly that he was never entitled to dress as a chief by the rules of those long-lost clans. There is doubt that he is entitled to wear any Scottish dress. He once said that he was "half Scotch and half soda," but on another occasion he told Ira Weatheral that he had first worn the kilt at a time (shortly before the flight of the *New Frontiers)* when the style was popular in his home country—found that he liked it, and thereafter wore the kilt when local custom permitted.

That night he went all out and added a fierce mustache to match his finery.

His twin sisters were dressed exactly as he was. I am still wondering whether all this was to honor me, to impress me, or to amuse me. Perhaps all three.

I would happily have spent those three hours in quiet, feeding Tamara and letting her feed me, bathed in the peace of soul that comes from touching her, but the closed happiness circle (and closed it was; Athene's voice now came from the fountain) showed that the Senior expected us to share company, talking and listening in turn, as ritually as in any protocol-bound salon in New Rome. And so we did, in shared and gentle harmony—with the twins adding unexpected grace notes but usually managing to restrain their exuberance and be "grownup." The Senior started it, using Ira as Stimulator. "Ira, what would you say if a god came through that entranceway?"

"I'd tell him to wipe his feet. Ishtar doesn't permit gods with dirty feet in this house."

"But all gods have feet of clay."

"That wasn't what you said yesterday."

"This is not yesterday, Ira. I've seen a thousand gods and all had feet of clay. All were swindles, first"—Lazarus ticked it with his flngers—"to benefit the shamans; second, to benefit the kings; and third, *always* to benefit the shamans. Then I met the thousand-and-first." The Senior paused.

Ira looked at me. "At this point I am supposed to say, 'Do tell!' or some such insincerity, then the rest of you chime, 'Yes, yes, Lazarus!'—which has its merit; the rest of us would have at least twenty uninterrupted minutes for swilling and guzzling.

"But I'm going to fool him. He's leading up to how he killed the gods of the Jockaira with nothing but a toy gun and moral superiority. Since that lie is already in his memoirs in four conflicting versions, why should we be burdened with a fifth?"

"It was not a toy gun; it was a Mark Nineteen Remington Blaster at full charge, a superior weapon in its day—and after I carved them up, the stench was worse than Hormone Hall the morning after payday. And my superiority is never moral; it lies always in doing it first before *he* does it to *me.* But the point of the story Ira won't let me tell is that those globs were real gods because neither shamans nor kings were cut in on the loot; they were swindled, too. Those doggie people were *property,* solely for the benefit of their gods—gods in the sense that a man can be a god to a dog—which I had suspected first time around, when they drove poor Slayton Ford right out of his think tank and nearly killed him. But the second time, some eight or nine hundred years later, Andy Libby and I *proved* that this was so. 'How?' you ask—"

"We didn't ask."

"Thank you, Ira. Because after all that time the Jockaira had not changed *in any way.* Their speech, customs, buildings, you name it—were frozen. This can happen only with domesticated animals. A wild animal, such as man, changes his ways as conditions change; he adjusts. I've often thought I would like to go back and see if the doggie people managed to go feral after they lost their owners. Or did they simply lie down and die? But I wasn't too tempted; Andy and I were lucky to get off that planet still with our gonads, the way they were yapping at our heels."

"See what I mean, Justin? Version number three had the Jockaira falling into a coma the instant their masters were burned out—and Libby doesn't figure into that version at all."

"Papa Ira, you don't understand Buddy Boy—"

"— he doesn't tell—lies—"

"—he's a creative artist—"

"—speaking in parables—"

"—and he *emancipated* those Jabberwockies—"

"—who were *cruelly* oppressed."

Ira Weatheral said, "Justin, I had trouble coping with one Lazarus Long. But three of him? I surrender. Come here, Lori, and let me nibble your ear. Minerva, my lovely, let go of that, wash your pretty hands, then see if Justin needs more wine. Justin, you are the only one with news to impart. What news on the Bourse?"

"Falling steadily. If you own participations on Secundus, you had better have me carry back instructions to your broker. Lazarus, I noticed that you classed 'man' as a wild animal—"

"He is. You can kill him, but you can't tame him. The worst bloodbaths in history derive from attempting to tame him."

"I wasn't arguing it, Ancestor. I'm a mathematical historiographer; my nose is rubbed in that fact. But has news reached here of the flight of the 'Vanguard'? The original 'Vanguard,' I mean—pre-Diaspora."

Lazarus sat up so suddenly that he almost spilled Ishtar off his couch. He caught her. "Sorry, honey. Justin—keep talking."

"I didn't intend to talk about the 'Vanguard' herself—"

"I want to hear about her. I hear no objection; it is so ruled. Talk, Son!"

The protocol of a salon feast having gone to pieces, I talked, first reviewing some ancient history. Although it has almost been forgotten, the *New Frontiers* was not the first starship. She had an older sister, the *Vanguard,* that left the Solar system a few years earlier than the momentous date on which Lazarus Long commandeered the *New Frontiers.* She was headed for Alpha Centaun but never reached there —no signs of visitation were ever found on the one possible planet, a Terran type around Alpha Centauri A, the only G-type star in that volume.

But the ship herself was found by accident, in open orbit a long way from where she should have been by any rational assumption based on her mission—discovered nearly a century ago and this tells the difficulties of historiography when ships are the fastest means of communication; this story echoed back to Secundus via five colonial planets before it reached Archives—a few years after Lazarus left New Rome, a few years before I went to Boondock as (nominal) courier for the Chairwoman Pro Tem. Not that a century's delay matters, as the news interested only fusty specialists. To most people it was an uninteresting confirmation of an inconsequential bit of ancient history.

Everything in the *Vanguard* was dead while the ship herself was sleeping, her converter automatically shut down, her atmosphere almost leaked away, her records so destroyed, illegible, incomplete, or desiccated as to distress one. The *Vanguard* matters only to antiquarians and such—although she will remain an endless trove to deviants such as me—if we don't lose her again. Space is deep.

But the interesting thing about the find is that when the *Vanguard* was backtracked ballistically by computer, it showed that she had passed close to a Sol-type star seven centuries earlier. A check of that system turned up one planet Terran in type; it was found to be inhabited by H. sapiens. But *not* from the Diaspora. From the *Vanguard.*

"Lazarus, there is no possible doubt. Those few thousand savages on that planet—designated 'Pitcairn Island,' the catalog number escapes me—are descended from some who reached there, presumably by ship's boat, seven centuries before they were found. They had reverted to precivilization food-gathering stage, and had the planet rather than the ship been found first, it might have started another of those stories about a breed of humans not derived from old Terra.

"But their argot, fed into a linguistic analyzer-sysithesizer, played back as that version of English which was the 'Vanguard's' working language. Reduced vocabulary, new words, degenerate syntax—but the same language."

"Their myths, Justin, their myths!" Galahad-Obadiah demanded.

I was forced to admit that I did not have it all on tap but promised to make a full copy for him and send it via the first ship. "But, Senior, the interesting thing is that these savages, so wild and fierce that in dealing with them more scientists were killed than savages—"

"Hooray for them. Son, those savages were minding their own business on their own planet. An intruder can expect whatever he gets. Up to him to keep his guard up."

"I suppose so. Three scientists were eaten before they figured out how to deal with these pseudo-aborigines. By remotely controlled humanoid robots, that is. But the point I wanted to make was not their fierceness but their intelligence. Believe me or not, by every test that could be used, these wild men, these savages, checked superior to norm. *Much* superior. By the bell curve they land in the range of 'exceptionally gifted' to 'genius-plus.'"

"You expect me to be surprised? Why?"

"Well— Savages. And probably closely inbred."

"You're baiting me, Justin; you know better—although possibly Ira signed you to be Stimulator. All right, I'll take the bait. 'Savage' describes a cultural condition, not a degree of intelligence. Nor does inbreeding damage a gene pool if conditions for survival are extreme; since you describe them as cannibals, they probably ate their culls.

From the shape the ship was in, it is fair to assume that their ancestors landed with little or nothing—possibly bare hands and a hatful of ignorance…in which case only the most able, the smartest, could survive. Justin, the crew of that first ship averaged far more intelligent than the Howards who escaped in the 'New Frontiers'; they were picked for intelligence-whereas the original Howard selectees were picked *only* for longevity, not for brainpower. Your savages were descended solely from geniuses…then passed through Allah alone knows how many ordeals that kill off the stupid and leave only the smartest to breed. What does that leave?"

I admitted that I had tossed him a baiting question to see how he would answer. The Senior nodded. "I know you're not stupid, Son; I had Athene give me a runback on your ancestry. But I have often been amazed at how the moderately bright and moderately well-informed—which describes no one in this happiness circle, so no one need pretend to modesty— how often such somewhat superior people have trouble coming to grips with the ancient silk-purse-and-sow's-ear problem. If heredity were not overwhelmingly more important than environment, you could teach calculus to a horse.

"In my early days it was an article of faith among a self-styled 'intellectual elite' that they *could* teach calculus to a horse…if they started early enough, spent enough money, supplied special tutoring, and were endlessly patient and always careful not to bruise his equine ego. They were so sincere that it seems downright ungrateful that the horse always persisted in being a horse. Especially as they were right, if 'starting early enough' is defined as a million years or more.

"But those savages will make it; they can't avoid winning. The problem in reverse is more horridly interesting. Justin, do you realize that we Howards killed off Old Terra?"

"Yes."

"Now, now, Son, you're not supposed to answer in such a way as to chop off conversation…thereby leaving us with nothing to do but get drunk and cuddle the girls."

"Swell!" Obadiah-Galahad shouted. "Let's!" He had Minerva with him at that moment; he grabbed her and flipped her over facing him. "Little whatever-your-name-is, do you have any last words?"

"Yes."

"'Yes' what?"

"Just 'Yes.' That's my last word."

"Galahad," said Ishtar, "if you're going to rape Minerva, drag her back of the fountain. I want to hear what Justin means by that."

"How *can* I rape her when she won't fight?" he complained.

"You've always been able to solve that problem. But do it quietly. Justin, I find myself shocked. It seems to me that we've been quite generous in supplying Old Home Terra with new technologies—and there's not much else we *can* give them. Didn't the last migrant transport come back only half loaded?"

"I'll answer it," Lazarus growled. "Justin might pretty it up. Not all the Howards. Two. Andy Libby provided the weapon; I delivered the coup de grace. Space travel killed Earth."

Ishtar looked troubled. "Grandfather, I don't understand."

"She calls me that when I've been naughty," the Senior confided to me. "It's her way of spanking me. Ish darling, you are young and sweet and have spent your life studying biology, not history. Earth was doomed in any case; space travel just hurried it along. By 2012 it wasn't fit to live on—so I spent the next century elsewhere, although the other real estate in the Solar System is far from attractive. Missed seeing Europe destroyed, missed a nasty dictatorship in my home country. Came back when things appeared to be tolerable, found that they weren't—and that's when the Howards had to run for it.

"But space travel can't ease the pressure on a planet grown too crowded, not even with today's ships and probably not with any future ships—because stupid people won't leave the slopes of their home volcano even when it starts to smoke and rumble. What space travel does do is drain off the best brains: those smart enough to see a catastrophe before it happens and with the guts to pay the price—abandon home, wealth, friends, relatives, everything—and *go.* That's a tiny fraction of one percent. But that's enough."

"It's the bell curve again," I said to Ishtar. "If—as Lazarus thinks, and statistics back him up—every migration comes primarily from the righthand end of the normal-incidence curve of human ability, then this acts as a sorting device whereby the new planet will show a bell curve with a much higher intelligence norm than the population it came from…and the old planet will average almost imperceptibly stupider."

"Imperceptible except for one thing!" Lazarus objected.

"That tiny fraction that hardly shows statistically is the *brain.* I recall a country that lost a key war by chasing out a mere half dozen geniuses. Most people *can't* think, most of the remainder *won't* think, the small fraction who *do* think mostly can't do it very well. The extremely tiny fraction who think regularly, accurately, creatively, and without self-delusion—in the long run these are the only people who count and they are the very ones who migrate when it is physically possible to do so.

"As Justin said, statistically it hardly shows. But qualitatively it makes all the difference. Chop off a chicken's head and it doesn't die at once; it flops around more energetically than ever. For a while. Then it dies.

"That's what space travel did to Earth: chopped its head off. For two thousand years its best brains have been migrating. What's left is flopping harder than ever…to no purpose and will die that much sooner. Soon, I think. I don't feel guilty about it; I see no sin in those smart enough to escape escaping if they can—and the death rattle of Earth was clear and strong back in the twentieth century, Earth reckoning, when I was a young man and space travel had barely started—not even started in interstellar terms. It took two more centuries and then some to get it rolling. Can't count the first migration of the Howards; it was involuntary, and they weren't the best brains.

"The later Howard migration to Secundus was more important; it shook out some of the dullards, left them behind. The non-Howard migrations were even more important. I've often wondered what would have happened if there had been no political restraints against migrating from China; the few Chinese who did reach the stars seem always to be winners, I suspect that the Chinese average smarter than the rest of Earth's spawn.

"Not that slant of eye or color of skin matters today, or even matters at the moment of truth. One of the early Howards was Robert C. M. Lee, of Richmond, Virginia—anybody know what his name was originally?"

"I do," I answered.

"Of course you do, Justin, so keep quiet—and that includes you, Athene. Anyone else?"

No one answered; Lazarus went on: "His birth name was Lee Choy Moo; he was born in Singapore, and his parents came from Canton in China—and of the people in the 'New Frontiers' he was a mathematician second only to Andy Libby."

"Goodness!" said Hamadryad. "Fm descended from him— but I didn't know he was a great mathematician."

"Did you know he was Chinese?'

"Lazarus, Fm not sure what 'Chinese' means; I haven't studied much terrestrial history. Isn't it a religion? Like 'Jewish'?"

"Not exactly, dear. The point is that it no longer matters. Just as few know and no one cares that the famous Zaccur Barstow, my partner in crime, was a quarter Negro. Does that word mean anything to you, Hamadarling? Not a religion."

"The word means 'black,' so I assume that one of his grandparents was from Africa."

"Which shows what comes of assuming anything on one datum. Two of Zack's grandparents, both mulatto, came from Los Angeles in my homeland. Since my line mixed with his a long time back, probably any of you can claim African ancestry. Which is statistically equivalent to claiming descent from Charlemagne. I've gone far afield, and it is time we picked a new Stimulator and a new Respondent. Space travel ruined old Earth—that's one viewpoint. The other side of the coin, happier and more important in the long run, is that it improved the breed. Probably saved it as well but 'improved' is certain. Homo sapiens is now not only far more numerous than he ever was on Earth; he is a better, smarter, more efficient animal in every measurable fashion. Further this Respondent sayeth not; somebody else grab it. Lazi, quit trying to tickle me and go bother Galahad; Minerva needs a rest."

"Lazarus," Ishtar said, "just one more responding, please. Something you said about Howards made me wonder. You seemed to place all emphasis on intelligence. Don't you consider long-life important?"

I was astonished to see the oldest human alive frowning over this, slow to answer. Surely it was a question he had settled in his mind at least a thousand years earlier. I tried to forstall the quandary, found I could not soothly norom it.

"Ishtar, the only correct verbal answer to that is Yes and No—which merely says I lack language to define something that is crystal clear inside me and has been for centuries. But here is part of the truth: A long time ago a short-lifer proved to me that we all live the same length of time." He glanced at Minerva; she looked solemnly back. "Because we all live *now.* She—he—was not asserting that fallacy of Georg Cantor which distorted pre-Libby mathematics so long; uh, he —was asserting a verifiable objective truth. Each individual lives her life in *now* independently of how others may measure that life in years.

"But here is another piece *of* truth. Life is *too* long when one is not enjoying *now.* You recall when I was not and wished to terminate it. Your skill—and trickery, my darling, and don't blush——changed that and again I savor *now.* But perhaps I have never told you that I approached even my first rejuvenation with misgivings, afraid that it would make my body young without making my spirit young again—and don't bother to tell me that 'spirit' is a null word; I know that it is undefinable but it means something to *me.*

"But here is still more of the truth and all I'll try to say about it. Although long-life can be a burden, mostly it is a blessing. It gives time enough to learn, time enough to think, time enough not to hurry, time enough for love.

"Enough of weighty matters. Galahad, pick a light subject and, Justin, you plant the barbs; I've talked enough. Ishtar, my darling, fetch your long lovely carcass over here, stretch out, and let me ply you with brandy; I want you relaxed enough for what I intend to do with you later."

She came readily to him, stopping only to kiss Ira a promise, then saying softly but clearly to our Ancestor, "Our beloved, it takes no brandy to make me utterly willing for whatever you have in mind."

"Anesthesia, Mama Ishtar. I plan to show you something Big Anna taught me which I haven't dared risk in all these years. You may not live till morning. Frightened?"

She smiled lazily, happily. "Oh, terribly frightened."

Galahad covered Lapis Lazuli's mouth with a hand; she bit him. "Stop it, Laz. Let's everybody watch this—it might be new."

VARIATIONS ON A THEME

XV

Agape

I woke slowly next morning, lazed in bed and lived again my Welcome Bacchanalia. I was in a big bed in a ground-floor room with its garden wall still open as it had been when the party had moved to beds. I could hear no one, although (as I recalled) Tamara and Ira had been with me. Or had Ira visited us earlier?

No matter, all of them visited us at some time before Athene sang us to sleep; I seemed to recall as high as six or seven at once in that big bed, counting Tamara and me. No, Tamara had been gone once, leaving me at the mercy of the talkative twins—who were almost quiet. They said they wanted to assure me that I did not have to marry them in order to be a member of the family—they would be gone too much of the time anyhow—because they were going to be pirates when they were big enough—but stay groundside half the time—and open a hook shop over a pool hall—and would I come to see them there?

They had to explain to me both terms; then they sang me a little song that seemed partly amphigory and partly ancient English, but included both terms. I kissed them and promised that, when they opened this studio, I would be their most faithful admirer—a promise that did not worry me; at about that age most girls' (all of my daughters) have ambitions to become great hetaeras; few attempt that most demanding of arts—or only long enough to discover that they do not have a true vocation.

I thought they were more likely to become pirates; Lazarus Long's identicals might figure out a way to make crime pay in spite of the enormous depths of space.

My Welcome Bacchanalia had bridged from feast to bed with the customary entertainment save that it was homemade instead of the expensive (and often dull) professional acts a fashionable New Rome hostess offers. Lazarus and his sister-daughters started it with what may have been an authentic Highland Fling (who knows, today?): Lazarus dancing fiercely and vigorously (after all that food and drink!), his two miniature copies keeping the pattern exactly with him—to skirling bagpipes offered by Athene…which I would not have recognized were it not that I am an amateur of ancient music as well as a professional of ancient history. The girls followed with an encore, a sword dance, while Lazarus pretended to be passed out from exertion.

Ira, to my amazement, turned out to be a skilled juggler.

Question: Did he have that skill all those years he managed a planet?

Galahad sang a ballad with professional virtuosity and great range and control, which astonished me almost as much as I seemed to recall that he used to sing always off key. But when he took an encore with a kerchief stuffed in his mouth, I realized that I had been swindled; Athene had done it all. He then played a corpse with three beautiful widows, Minerva, Hamadryad, Ishtar. I won't describe the dialogue except to say that they seemed cheerful over losing him.

Tamara concluded it by singing "My Arms Enclose You Still"—attributed on slight evidence to the Blind Singer hut ancient in any case. I've long thought of it as Tamara's Song, and I wept with happiness, and I was not alone; all did. The twins blubbered aloud… and when she reached that last line, "—wherever the wild geese lead you, love, my arms will hold you close," I was startled to see that the Senior's craggy features were as wet as mine.

I got up, poked around in the alcove and refreshed myself enough to face other people, went out into the garden and found Galahad. I kissed him and accepted a happy-morning in a frosty tumbler. It was fruit juice freshly pressed—a treat for taste buds used to morning cups "improved" in various chemical ways.

"I'm cook this morning," he said, "so you had better take your eggs either fried or boiled." He then answered the question a guest does not ask: "If you had awakened earlier, you would have had more choice; Lazarus claims I can't boil water. But everyone else is gone."

"So?"

"Si. Ira has gone to his office—to work, perchance to sleep. Tamara has gone back to her patients with a message to you that she hopes to be home tonight—but with a word to Hamadryad to take you to bed and rub your shoulder muscles and put you to sleep early, so I'm not sure she expects to be back—won't if she thinks her patients need her. Lazarus has gone somewhere and one does not ask. Minerva has the twins, and school may be in the 'Dora'; it often is. Ishtar got a call to set a broken arm on a farm north of here. Hamadryad has taken our kids on a picnic so as not to disturb you, you lazy lecher. Boiled or fried?"

He was already frying them, so I answered, "Boiled."

"Good, I'll eat these myself. To hold me till lunch."

"I mean 'Fried.'"

"So I'll put in three more, dear. You're staying, aren't you? Answer Yes or I'll put the twins to work on you."

"Galahad, I *want* to—"

"Then it's settled."

"—but there are problems." I shifted the subject. "You said 'Hamadryad has taken our kids on a picnic—' Haven't I met all your family?"

"Dear, we do not exhibit our youngest the moment someone sets foot in the foyer and thereby place on him the onus of being insincerely ecstatic. But there was usually someone with them; Lazarus has firm ideas on raising children. Athene keeps eye and ear on them—but can't pick them up. Lazarus says that a frightened child needs to be picked up and cuddled *now,* not later. He believes in spanking right now, too; it evens out, our kids are neither spoiled nor timid. Lazarus is especially strong on not letting a young child wake up alone— so now you know why I kissed you goodnight a bit early. So that Ishtar could help keep you awake while I slept with our youngest three."

"Do you actually sleep with them?"

"Well— When Elf jumps up and down on my stomach, it makes me restless. But being peed on doesn't wake me— usually. Having the cuddle watch isn't bad; we rotate so it's only every ninth night. Every tenth if you opt in. But that can change overnight. Suppose we have a rejuvenation client—One or more clients puts Ishtar, Tamara, Hamadryad, and me out of circulation much of the time. Add that Lazarus may leave as soon as he decides Laz and Lor are grown up. Then assume that all our darlings get cracking on making babies."Galahad grinned at me. "How long does it take four willing women to make four more babies? Or six, when the twins join the production schedule as they threaten to at least twice a week. Justin dear, we want you to stay but it won't all be like last night. If responsibilities of family life worry you, you'd be better off in New Rome where you can hire people to do what you don't fancy doing yourself."

"Galahad," I said earnestly, "stop stuffing your face a moment, dear. You can't scare me with baby pee. I was getting up in the night to soothe crying babies a hundred years before you were born. I intend to colonize, I intend to marry again, I intend to raise kids. I had planned to go back to Secundus to clean up loose ends, then come back with the second wave. But I may say the hell with that and stay…as some of the Senior's remarks last night were aimed at me. At least I took them personally—about having the guts to abandon everything and *go*. Secundus is a smoking volcano; that old vixen could set off a bloodbath. One that could include *me,* simply because I'm a major bureaucrat."

I took a deep breath and plunged in: "What I don't understand is why I seem to be invited to join the Senior's household. *Why?"*

Galahad answered, "It's not your pretty face."

"I know that. Oh, I hardly ever scare dogs with it, but it's just a face."

"It's not *too* bad. A cosmetic surgeon could do wonders. I'm the second-best cosmetic surgeon on this planet—there being two. The practice would be good for me and, as you pointed out, you've nothing to lose."

"Damn it, dear, don't farce me. Answer my question."

"The twins like you."

"So? I find them delightful. But the opinion of inexperienced adolescents could not have weighed heavily."

"Justin, don't let their clowning fool you; they are adult in everything but height—and they are our Ancestor's *identical* twins. They have his talent for looking inside a person and spotting a bad one. Lazarus lets them run loose because he trusts them to shoot to kill…and not to shoot if they don't intend to kill."

I gulped inside. "Are you saying that those little guns they carry are not toys?"

My old friend Obadiah looked as if I had said something obscene. "Why, Justin! Lazarus wouldn't let a woman go out of this house unarmed."

"Why? This colony seems peaceful. What have I missed?"

"Not much, I think. Lazarus' advance party made sure that this subcontinent was reasonably clear of large predators. But we brought along the two-legged sort, and despite screening, Lazarus doesn't assume that they are angels. He wasn't looking for angels; they don't make the best pioneers. Uh, yesterday Minerva was wearing a little skirt. Did you wonder about it? In view of the heat?"

"Not especially."

"She wears her gun strapped to her thigh. Nevertheless, Lazarus won't let her go out alone; the twins are her usual bodyguard. As a flesh-and-blood she's only three years old; she doesn't shoot as well as the twins do, and she's more trusting than they are. How's your marksmanship?"

"Just fair. I started taking lessons when I made up my mind to migrate. But I haven't had time to practice."

"Better find time. Not that Lazarus will ride you about it; he feels responsible for our women, not for men. But if you *ask* for help—I did, and so did Ira—he'll coach you in everything from bare hands to improvised weapons…with two thousand years of dirty tricks thrown in. Up to you, old darling— but here's what it did for me. As you know I used to be a campus narky—a scholar poring over old records —I never carried arms. Then I took rejuvenation and became a rejuvenator myself and was even less inclined to go armed. But for fourteen years I've had regular coaching from the alltime champion in how to stay alive. The result? I stand straight and proud. Haven't had to kill anyone yet." Galahad suddenly grinned. "But the day is young."

I answered soberly, "Galahad, that's one reason I agreed to run a silly errand for Madam Arabelle: to find out things like that. Very well, I take your advice seriously. But you haven't answered my question."

"Well…I knew you from long back, and so did Ira. And so did Minerva, though you have trouble believing it. Hamadryad had met you but did not get to know you until last night. Ishtar knew you only from your chart but is one of your strongest supporters. But the deciding factor is this: Tamara wants you in our family."

"'Tamara!'"

"You sound astonished."

"I am."

"I don't see why. She arranged for someone to relieve her in order to be here last night. She loves you, Justin; don't you *know* it?"

"Uh—" My brain was fuddled. "Yes, I know it. But Tamara loves everyone."

"No, just those who need her love, and she always knows who they are. Incredible empathy, she's going to be a *great* rejuvenator. In this family Tamara can have *anything* she wants…and she happens to want *you—to* stay with us, live with us, join us."

"I'll be…damned." (Tamara?)

"Unlikely. If I believed in damnation, I wouldn't believe that anyone picked by Tamara Sperling could be in danger of it." Galahad smiled, a happy expression than was more his charm than was his extraordinary beauty. I tried to remember if he had been that beautiful a hundred years back. I am not indifferent to male beauty, but my sensuality is not perfectly balanced; in the presence of a homely female and a beautiful male, I tend to look at the female. So

I'll never be an esthete; I lack judgment in matters of beauty. I apologize in advance to any female who finds my primitive attitude offensive.

But I'll share bed with Galahad in preference to a self-centered female beauty; he's warm and gentle and good company, with a roguish playfulness not unlike that of the twins. The thought ran through my-mind that I would like to meet his sister—or mother or daughter—a female version of him in character and personality, as well, as in appearance.

Tamara! The above was froth at the top of my mind because I was unable to face at once the implications of Galahad's announcement.

He went on: "Close your mouth, dear; I was as startled as you are. But, even if we hadn't been friends years back, on Tamara's motion I would have voted for you sight unseen— so that I could study you; Tamara never makes a mistake. But were you so mind-ill that you needed that much from her? Or so superhuman that she wanted that much from you? But you are neither, or I failed to see it. You aren't ill, I think, other than a touch of wild-goose fever. You may be superman, but none of us found it out last night. If you are a superstud, you restrained yourself. Hamadryad did say at breakfast that a woman is happy in your arms. But she did not imply that you are the Galaxy's greatest lover.

"Being one of Minerva's parents is in your favor, none of them has any serious shortcomings; Ishtar made sure of that—Ishtar knows more about you than you do yourself; she can read a gene chart the way other people read print—and Minerva herself is proof that no mistakes were made. I mean, look at Minerva: sweet as the morning breeze and as beautiful as Hamadryad in her own fashion, and with an intelligence level so high you wouldn't believe it—yet so modest she's almost humble.

"But still, it's Tamara. Your fate was settled before you reached this house. Slow ride home, wasn't it?"

"Well…one doesn't expect speed from a nullboat. Though I was surprised to find one in a young colony. I expected mule-drawn wagons."

"Lots of those, too. But Lazarus says that this time he traveled with 'seven elephants'—we fetched a mammoth amount of equipment. That's an overpowered nullboat, rebuilt to Lazarus' specifications, and could have fetched you here in a fifth the time it did. But Ira let Lazarus know that he wanted time to make some calls. So Lazarus probably told whichever twin was in charge—or signaled her somehow; he is almost telepathic with them—to give you a long, slow ride. Which you got, and I bet that Laz and Lor never changed expression."

“They didn’t.”

“Was sure of it. They are *not* children—you should see them handle a spaceship. Anyhow, Ira talked to Ishtar, then to Tamara; then we held a family conference and settled your fate. Lazarus confirmed it while you played with the twins— who were given a chance to veto it later. But they ratified it at once. They not only like you, but Aunt Tammy’s wishes are law.”

I was still bemused. “Apparently much went on that I didn’t suspect.”

“You weren’t supposed to. A better cook would have stayed to get your breakfast, had I not been deputized to tell you— old friends and all that—and to answer questions.”

“I’m confused about that conference. I thought Tamara got home just before dinner.”

“She did. Oh— Athene, are you listening, dear?”

“Uncle Cuddly, you know I don’t listen to private conversations.”

“The hell you don’t. It’ll be all right, Justin; Teena keeps secrets. Tell him how to call someone, Teena.”

“Tell me to whom you wish to speak, Justin; I have radio links to every farm. Or anywhere. And I can always reach Ira and Lazarus.”

“Thank you, Teena. Now if you must listen, pretend not to. The conference was here, Justin; Teena fetched in Tamara’s voice and Ira’s. Could have fetched voices from the nullboat— but you were the subject. By the way, Teena is one reason this family isn’t farming; instead we supply services that colonies usually don’t have so soon. Oh, *you* can farm if you want to; we’ve claimed quite a bit of land. Or there are other ways to make a living. All right, I’ve done my best. Want to quiz me?”

“Galahad, I think I understand everything but why Tamara wants me in your family.”

“You’ll have to ask her. I told you I was checking for your halo. Can’t see it.”

“I don’t wear it in hot weather. Obadiah, don’t farce around; this is terribly important to me. Why do you keep saying that Tamara’s wishes settled it?”

“You know her, man.”

“I know how important her wishes are to *me.* But I’ve been in love with her for many years.” I told him things I had long kept to myself. “So that’s the way it went. A great hetaera never proposes a contract and usually won’t listen if a man is bold enough to propose one himself. But I— well, I made a nuisance of myself. Tamara finally convinced me that she married only to have children and did not intend to have more. I feel sure that money was not a factor—”

“It wouldn’t be. Oh, I don’t mean that Tamara is silly that way; I’ve heard her say that since money is the universal symbol for value received, one should accept it proudly. But Tamara wouldn't marry for money; she wouldn't feel that— Or perhaps she would; I think I'll ask her. Mm…interesting. Our Tamara is a complex person. Sorry, dear; I interrupted."

"I say money was not the controlling factor, as she had suitors with ten to a hundred times my modest wealth, yet she married none of them. So I shut up and was content to have part of Tamara—spend nights with her when I was permitted to, share her company in happiness circles at other times, pay her as much as I could—as much as she would accept, I mean; she often set her fee by refusing part of a gift—she did with me; I don't know what she did with wealthy clients.

"Years and years of that, then she announced that she was retiring —and I was stunned. I had taken rejuvenation during this time but hadn't noticed that *she* was any older. But she was firm about it and left New Rome.

"Galahad, it left me impotent. Oh, not incapable, but what had been ecstasy turned out to be mere exercise not worth the trouble. Has this ever happened to you?"

"No. Perhaps I should say, 'Not yet,' since I'm still working on my second century."

"Then you don't know what I mean."

"Only vicariously. But may I quote something Lazarus once said? He was speaking to Ira, but privacy was not placed on it; you'll come across it in his raw memoirs.

'Ira,' he said, 'there were many years when I hardly bothered with women—not only unmarried but celibate. After all, how much variety can there be in the slippery friction of mucous membranes?

"'Then I realized that there was infinite variety in women *as people*…and that sex was the most direct route to knowing a woman…a route they like, one that we like, and often the only route that can break down barriers and permit close acquaintance.

"'And in discovering this, I gained renewed interest in the friendly frolic itself, happy as a lad with his first bare tit warm in his hand. Happier—as never again was I merely a piston to her cylinder; each woman was a unique individual worth knowing, and, if we took time enough, we might find we loved each other. But at least we offered each other pleasure and a haven from cares; we weren't simply masturbating, with the other just a sex doll.'

"That's close to what Lazarus said, Justin. You went through something like that?"

"Yes. Somewhat. A long period when sex wasn't worth the trouble. But I got over it…with a woman as fine in her own way as Tamara is, although I didn't fall in love with her nor she with me. She taught me something I had forgotten, that sex can be friendly and worthwhile *without* the intense love I felt for Tamara. You see, a friend of mine, wife of another friend and they were both close to me—as a special gift she introduced me to another hetaera, a great beauty, and arranged for me a holiday with her—paid for by my friends; they could afford it, she is wealthy. This beautiful hetaera—Magdalene—"

Galahad looked delighted. "Maggie!"

"Why, yes, she did use that pillow name. 'Magdalene' was, her vocational name. But when she learned that I keep the Archives, she told me her registered name."

"Rebecca Sperling-Jones."

"Then you do know her."

"All my life, Justin darling; I nursed at those beautiful breasts. She's my mother, dear—what a delightful coincidence!"

I was delighted, too, but more interested in something else.. "So *that's* where you get your beauty."

"Yes, but also from my genetic father. Becky—Maggie— tells me I look more like him."

"Really? If you permit, I'll look up your lineage when I get back to Secundus." An archivist should not consult the Archives from personal curiosity; I was presuming on friendship to suggest it.

"Dear, you're not going back to Secundus. But you can get it from Athene clear back to the first push in the bush after Ira Howard's death. But let's talk about Mama. She's a jolly one, isn't she? As well as a beauty."

"Both. I told you how much she did for me. Your mother assumed that this holiday was going to be fun—fun for both of us—and it was indeed!—and I forgot about being uninterested in sex. I'm not speaking of technique; I suspect that any highpriced hetaera in New Rome is as skilled as any famous courtesan in history. I mean her attitude. Maggie is fun to be around, in bed or out. Laugh wrinkles but no frown wrinkles."

Galahad nodded agreement as he wiped egg from his platter. "Yes, that's Mama. She gave me a most happy childhood, Justin, so much so that I was grumpy at being shoved out when my eighteenth rolled around. But she was sweet about it. After my adulthood party she reminded me that she was moving out, too, and going back to her profession. Her contract with Papa, my foster father, was a term contract, over when I became a legal adult…so if I wanted to see. Maggie again—and I wanted to!—it would be cash at the counterpane, no family discount. Since I was a poor-but-honest research assistant, paid only two or three times what I was worth, I couldn't have afforded thirty seconds with her, much less a night; Mama's fees were always skyhigh."

Galahad looked thoughtfully happy. “Goodness, that seems long ago—more than a century and a half, Justin. I didn’t realize that Becky—Maggie—Mama—that Magdalene was being both wise and kind. I was grown up only legally and physically, and if she hadn’t cut the cord, I would have hung around, an overgrown infant cluttering her life and interfering with her vocation. So I did grow up, and when I married, my first wife named our first daughter ‘Magdalene’ and asked Maggie to be godmother…then I could hardly believe that this beautiful creature had borne me and I had no special urge to play Oedipus to her regal beauty; I was too much in love with my wife. Yes, Maggie is a fine girl—although she spoiled me as a kid. Was that holiday the only time you had her?”

“No. But not often. As you say, she was expensive. She offered me a fifty-percent discount—“

“Well! You *did* impress her.”

“—as she knew I wasn’t wealthy. But even at that, I couldn’t afford her company often. But she got me over my emotional hump, and I’m grateful to her. A fine woman, Galahad; you have reason to be proud of her.”

“I think so. But, Justin dear, your mention of that discount makes me certain that she remembers you just as fondly—”

“Oh, I hardly think so. Years back, Galahad.”

“Don’t trip in your modesty, dear; Maggie grabbed every crown the traffic would bear. But the ‘delightful coincidence’ is more than just the fact that you’ve had my mother—after all, high as her fees were, New Rome has many wealthy men attractive enough that Maggie would accept them. The ‘delightful’ aspect is that this very minute she is about forty kilometers south of here.”

“No!”

“Si, si, si! Ask Athene to call her. You can be talking with her in thirty seconds.”

“Uh . . I still don’t think she would remember me.”

“I do. But there’s no rush. If you are surprised, think how surprised *I* was. I had nothing to do with the migrants’ roster; I was arse-deep in getting together what Ishtar had ordered for the clinics. Justin, I didn’t know Maggie had married again. So we’re here a couple of weeks, the headquarters party, with a temporary setup and still eating and sleeping in the ‘Dora,’ when the first transport grounds—then we’re busy getting people and supplies out in a sequence worked out by Lazarus and bossed by Ira.

“My assignment, once I had my shack up—by hand; Athene had no outside extensionals then—”

“Poor Uncle Cuddly!”

“Who doesn’t listen to private conversations?”

"I have to keep you straight, dear. It was Minerva who had no outside hands then; I wasn't even hatched."

"Well— You have her memories, Teena; it's a mere technicality."

"Not to me, dearie. The chinchy little bitch took some memories with her that she didn't want to share with her ever-lovin' twin. And she locked one whole bank that she *did* leave behind so that I can't touch it without an abracadabra either from her or from Grandpappy. Except that *you* can unlock it, Justin…if *both* my twin and Lazarus are dead."

I managed to answer quickly, "In that case, Athene, I hope that it is a very long time before I am able to trigger it."

'Well…when you put it that way, so do I. But I can't help wondering what grim secrets and unspeakable crimes are locked in my theta-ninety-seven-B-dexter-aleph-prime? Will the stars tremble in their courses? But Uncle Cuddly did work hard a couple of days, Justin—probably the only honest work he has ever done."

"I disdain to comment, Teena. Justin, my assignment was examining physician, for which I was qualified under an almost new diploma. So Ishtar and Hamadryad are unpacking migrants and giving them their antidotes and I'm checking them to make sure they've made the trip safely—rushing it as I haven't yet snatched another medical doctor from that parade of flesh.

"I glance up from my machine just long enough to note that the next victim is female and call out over my shoulder, 'Strip down, please,' and change the setting. Then I look twice—and say, 'Hello, Mama, how did you get here?'

"This caused her to give me a second look. Then she smiled her big, happy smile and said, 'I flew in on a broom, Obadiah. Give me a kiss and tell me where to put my clothes. Is the doctor around?'

"Justin, —the queue pile up while I gave Maggie a thorough examination—proper, as she was pregnant and I made certain that her unborn baby had come through all right—but also to gossip and get caught up. Married again, four children by today, a farm wife with a sunburned nose, and happy as can be.

"Got married quite romantically. Mama heard the advertising about opening a virgin planet, went to the recruiting office Ira had in the Harriman Trust building to find out about it—that astonished me the most; Mama is the last person I would have suspected of yearnings to pioneer."

"Well…I agree, Galahad. But I don't suppose anyone would pick me as a likely pioneer, either."

"Perhaps not. Nor me. But Maggie puts in her application at once, and runs into one of her wealthy regulars doing the same. They go somewhere for a bite and dismiss it…and leave the restaurant and register an open-end contract, and go back to the recruiting office and withdraw their solo applications and submit a joint one as a married couple. I won't say that got them accepted, but almost no singles were accepted for first wave."

"Did they know that?"

"Oh, certainly! The recruiting clerk warned them before accepting their solo fees. That's what they left to discuss. They already knew they suited each other in bed, but Maggie wanted to find out if he intended to farm—believe it or not, that's what she wanted—and he wanted to know if she could cook and was she willing to have kids. And it was: 'Fine, we agree; let's get on with it!' Maggie had her fertility restored, and they planted their first baby without waiting to see if they were accepted."

I said, "That probably clinched it."

"You think so? Why?"

"If they changed their application to show that Magdalene had caught. If Lazarus passed on the applications. Galahad, our Ancestor favors people who take big bites."

"Mmm, yes. Justin, why are *you* hanging back?"

"I'm not. I had to be certain that the invitation was serious. I still don't know *why.* But I'm no fool, I'm staying."

"Wonderful!" Galahad jumped up, came around the table, kissed me again, roughed my hair, and hugged me. "I'm happy for all of us, darling, and we'll try to make you happy." He grinned—and I suddenly saw his mother in him. Hard to imagine the glamorous Magdalene with kids and calluses, a frontier farm wife—but I recalled the old proverb about best wives. Galahad went on: "The twins weren't sure I could be trusted with so delicate a mission; they were afraid I would muff it."

"Galahad, there was never a chance I would refuse; I just had to be sure I was welcome. I still don't know why."

"Oh. We were speaking of Tamara and got sidetracked. Justin, it's not public knowledge how difficult it was to rejuvenate our Ancestor this time, although the recordings you have been editing may hint at it—"

"More than a hint."

"But not all of it. He was almost dead, and simply keeping him alive while we rebuilt him was hard enough. But we managed that; you won't find another technician of Ishtar's skill. But when we had him in good shape, bio-age almost as young as he is now, he took a turn for the worse. What do you do when a client turns his face away, is reluctant to talk, doesn't want to eat—yet has nothing wrong with him physically? Bad. Stays awake all night rather than risk going to sleep? Very bad.

"When he— Never mind; lshtar knew what to do. She went up into the mountains and fetched back Tamara. She wasn't rejuvenated then —"

"That wouldn't matter."

"It *did* matter, Justin. Youth would have handicapped Tamara in coping with Lazarus. Oh, Tamara would have overcome the handicap; I have confidence in her. But her bio-age and appearance were around eighty on the Hardy scale; this made it easier, as Lazarus, despite his renewed body, was feeling the weight of his years. But Tamara *looked* old…and every white hair was an asset. Lines in her face, little round potbelly, breasts pendulous, varicosities—she *looked* the way he *felt*… so he didn't mind having her around during a crisis in which he—well, I skansed that he couldn't stand the sight of us who looked youthful. That's all it took; she healed him—"

"Yes, she's a Healer." (How well I knew!)

"She's a *great* Healer. That's what she's doing now, healing a young couple who lost their first baby—nursing the mother who had a rough time physically, sleeping with both of them. We all sleep with her; she always knows when we need her. Lazarus needed her then, she felt it, and stayed with him until he was well. Uh, after last night this may be difficult to believe, but both of them had quit sex. Years and years—Lazarus more than half a century—and Tamara had not coupled with anyone since she retired."

Galahad smiled. "Here is a case of the patient healing the physician; in bringing Lazarus around to the point where he invited her to share his bed, Tamara herself found new interest in living. She lived with Lazarus long enough to heal his spirit, then announced that she was leaving. To apply for rejuvenation.'

I said, "Lazarus asked her to marry him."

"I don't think so, Justin, and neither Tamara nor Lazarus hinted at such. Tamara put it another way entirely. We were all having a late breakfast, in the garden of the Palace penthouse, when Tamara asked Ira if she could join his migration—it was solely Ira's migration then; Lazarus had said repeatedly that he would *nor* join it. I think he already had in mind attempting to time-trip. Ira told Tamara to consider it settled and not to worry about restrictions that would be published when he announced it. Justin, Ira would have given her the Palace as readily; she had saved Lazarus, and we all knew it.

"But you know Tamara. She thanked him but said she intended to qualify fully, starting with rejuvenation, then she would see what she could learn to be useful in a colony, just as Hamadryad planned to—and, Hamadryad, will you sleep with Lazarus tonight?—and Justin, you should have heard the commotion *that* started!"

"Why a commotion?" I asked. "From what you said earlier Lazarus had reacquired his interest in the friendly sport. Did Hamadryad have some reason not to want to substitute for Tamara?"

"Hamadryad was willing, although upset by the way Tamara dumped the matter on her—"

"Doesn't sound like Tamara. If Hamadryad hadn't wanted to do it, Tamara would have known it without asking."

"Justin, when it comes to people's emotions, Tamara *always* knows what she is doing. It was Lazarus she was trapping, not Hamadryad. Our Ancestor has odd shynesses, or did have then. He had been sleeping with Tamara for a month—and pretending that he was not. As futile as a cat covering up on a tile floor. But— Tamara's blandly blunt request that Hamadryad relieve her as his concubine forced it into the open and produced a head-on clash of wills, Lazarus and Tamara. Justin, you know them both: Who won?"

The ancient pseudoparadox— That Tamara could be immovable I knew. "I won't guess, Galahad."

"Neither just then, because once Lazarus stopped sputtering about how both he and Hamadryad were being needlessly embarrassed, Tamara gently withdrew her suggestion, then shut up. Shut up on that, shut up about rejuvenation, shut up about migrating, left the next move up to Lazarus and won the argument by not arguing. Justin, it is difficult to kick Tamara out of one's bed—"

"I would find it impossible."

"I think Lazarus found it so. What discussions they had in the middle of the night I could not say…but Lazarus learned that she would *not* leave for rejuvenation until he promised never to sleep alone while she was gone. But she promised in exchange to return to his bed as soon as she completed antigeria.

"So one morning Lazarus announced the détente—red-faced and almost stuttering. Justin, our Ancestor's true age shows more in some of his ancient attitudes about sex than in any other way."

"I didn't notice it last night, Galahad—and I expected to, having studied his memoirs so closely."

"Yes but you saw him last night some fourteen years after we set up our family—as it was that morning that did it. Although we did not formalize it until after the twins were born, whereas at this time they were slight bulges at most. Believe me, Lazarus found it hard to capitulate—and tried for an escape hole even then. He announced, rather aggressively, that he had promised Tamara not to sleep alone while she was undergoing antigeria, then said more or less in these words: 'Ira, you told me that professional ladies were to be found in the city. How do I go about finding one who will accept a contract for that length of time?' I have to quote him in English as he was using euphemisms he ordinarily disdains.

"What Lazarus didn't know was that Ishtar had programmed us like actors hypnotized into roles. Perhaps you've noticed that he is responsive to female tears?"

"Isn't everyone? I've noticed."

"Ira pretended not to know what profession Lazarus meant…which gave Hamadryad time to burst into tears and flee…whereupon Ishtar stood up and said, 'Grandfather…how *could* you?—and *she* was dripping tears, too…and chased after Hamadryad. Then it was Tamara's turn to switch on the raindrops and follow the other two. Which left us three men together.

"Ira became very formal and said, 'If you will excuse me, Sire, I will attempt to find and console my daughter'— bowed, turned abruptly, and left. Which left it up to me. Justin, I didn't know what to do. I knew that Ishtar expected difficulty because Tamara had warned her. But I did not expect to be left to juggle it alone.

"Lazarus said, 'Great balls of fire! Son, what did I do *now?'* Well, I could answer that. I said, 'Grandfather, you've hurt Hamadryad's feelings.'

"Then I was carefully unhelpful—refused to speculate why her feelings were hurt, could not guess where she might have gone—unless she had gone home, which I understood was somewhere in the suburbs—declined to act as his intermediary—all to Ishtar's instructions to play dumb, stupid, and useless, and let the women handle it.

"So Lazarus had to track Hamadryad down himself, which he did with Athene's—I mean 'Minerva's'—help."

Athene said, "This is all news to me, Uncle Cuddly."

"If it is, dear, please forget it."

"Oh, I shall!" the computer answered. "Except that I'm going to save it up and use it about a hundred years from now. Justin, if I burst into tears—after I'm a flesh-and-blood—will you track me down and console me?"

"Probably. Almost certainly."

"I'll remember that, Lover Boy. You're cute."

I pretended not to hear, but Galahad said, "'Lover Boy'?"

"That's what I said, dear. Sorry, Uncle Cuddly, but you're obsolete. If you hadn't gone to sleep early, you would know why."

I kept quiet while making a mental note for a hundred years hence—one that involved Pallas Athene as a flesh-and-blood and getting her into a helpless position.

This side conversation was cut short; Athene notified us that Lazarus was arriving. Galahad waved his arms. "Hey! Pappy! Back here!"

"Coming." Lazarus bussed me in passing, did so to Galahad as he slid in by him and grabbed what was left of Galahad's second breakfast—a home-baked jam roll—stuffed it into his mouth and said around it: 'Well? Did he fight the hook?"

"Not nearly the way you did with Hamadryad, Pappy. I was telling Justin about that—how the Hamadarling tripped you and thereby set up our family."

"My God, what a canard!" Lazarus helped himself to Galahad's hot-cup. "Justin, Galahad is a sweet lad but romantic. I knew exactly what I wanted to accomplish, so I started by raping Hamadryad. That broke down her resistance, and now she sleeps with anybody, even Galahad. Everything else followed in logical sequence." He added, "You still plan to go back to Secundus?"

I answered, "Perhaps I didn't understand what Galahad has been telling me. I thought I was committing myself, in joining, to—" I stopped. "Lazarus, I don't know what I'm committed to, and I don't know what I'm joining."

Lazarus nodded. "One must make allowances for youth, Justin; Galahad doesn't speak clearly as yet."

"Thanks, Pappy. Too much. I sold him the deal. Now you've got him wondering."

"Quiet, Son. Let me spell it out, Justin. What you are joining is a family. What you are committed to is the welfare of the children. All of them, not just any that you may sire." He looked at me, waited.

I said, "Lazarus, I've raised a number of children—"

"I know."

"I don't think I've let one down yet. Very well, three that I haven't seen, plus your two—your sisters or adopted daughters—plus others as they come along. Correct?"

"Yes. But it's not a lifetime commitment; that's not practical for a Howard. This family may outlive us all—I hope so. But an adult can opt out anytime and thereby be committed only to kids then on hand —underfoot or in womb. Call it a maximum of eighteen years. However, I assume that the rest of the family would prefer to relieve such a person of his or her responsibilities in order to see the back of his neck. I can't envision a happy relationship continuing for years after someone has announced that he wants out. Can you?"

"Well…no. But I won't let it worry me."

"Of course it might not happen that way. Suppose Ishtar and Galahad decided to set up a separate household—"

"Now wait one fiddlin' minute, Pappy! You can't get rid of me that easily! Ish won't have me except as part of the package. I know, I tried to get her to marry me years back."

"—and wanted to take our three youngest with them. We would not stop them nor would we try to dissuade children who preferred to go with them. All three of them are Galahad's—"

"There he goes again! Pappy, you put Undine into Ish in the soak pool; that's why we named her that. Elf is either yours or Ira's; the Hamadear told me so. And nobody has any doubt about Andrew Jackson. Justin, I'm sterile."

"—based on statistical probability, both on sperm count and the fact that he keeps so busy at it. But Ishtar reads the gene charts and keeps such matters to herself; we prefer it that way. But it is extremely unlikely that Hamadryad ever said that, or that she has or ever will have a child by Ira. No genetic hazard, Ishtar is certain. And the fact that we have yet to have *any* defectives in this colony gives me great confidence in Ishtar's skill in reading a gene chart; she screened the first wave, a job that gave her eyestrain for months. Nevertheless, Ira has some unease about it and won't even stand close to Hamadryad when she is fertile—an irrational-attitude I understand, as I am cursed with it myself.

I remember too well a time in the past when all the Howards had to go on was percentage of mutual ancestry—and got defectives all too often. Of course today a woman with a clean gene chart is better off married to her brother than to a stranger from another planet—but old ghosts die hard.

"What it amounts to, Justin, is three fathers—four, with you— three mothers, but four when Minerva asks to have her adolescence protection canceled—an ever-changing number of kids to be taught and spanked and loved—plus always the possibility of the number of parents being either enhanced or diminished. But this is my house, in my name, and I've kept it that way because I planned it to house *one* family, not to make life jolly for goats such as Galahad—"

"But it does! Thank you, Pappy darling."

"—but for the welfare of children. I've seen catastrophe strike colonies that looked as safe as this one. Justin, a disaster could wipe out all but one mother and father in this family, and our kids would still grow up normally and happily. This is the only long-run purpose of a family. We think our setup insures that purpose more than a one-couple family can. When you join, you commit yourself to that purpose—that's all."

I took a deep breath. 'Where do I sign?"

"I see no use in written marriage contracts; they can't be enforced…whereas if the partners want to make it work, no written instrument is necessary. If you seriously want to join us, a nod of your head is enough."

"I do!"

"—or if you want ritual, Laz and Lor would be delighted to dream up a fancy one—and we can all have a crying jag -together—"

"—and on his wedding night Justin gets to sleep with the babies so he'll know how serious it is."

"Seal it, Galahad. If you want to add that touch, you should make it the night *before,* so he'll have a fair chance to back out if he can't take it."

"Lazarus, I volunteer for the diaper watch tonight; I'm hardened to such things."

"I doubt if the women will let you."

"And you won't live till morning," Galahad added. "They're an emotional lot. Last night you had it easy. Better take the pee watch."

"Galahad could be right; I should check your heart. As may be—keep quiet, Galahad—Justin, this household is *not* a jail. The setup is not only safer for children, it is more flexible for adults. When I asked you whether you intended to go back to Secundus, I meant simply that. An adult can be away for a year, ten years, any length of time for any purpose-and know that the kids are taken care of and know that he-she will be welcomed back. The twins and I have been offplanet several times and will' be again. And…well, you know I intend to attempt this time-tripping experiment. That won't involve much elapsed time in this framework but it does involve a slight -element of risk."

"Slight!' Meaning that Pappy is out of his silly head. Be sure to kiss him goodbye when he leaves, Justin; he won't be back."

I was alarmed to see that Galahad was not joking. Lazarus said quietly, "Galahad it is all right to say that to me. But don't say it in front of the women. Or children." He went on to me, "Of course there is an element of risk; there is in anything. But not to a time trip itself, as Galahad seems to think." (Galahad shuddered.) "The risk is the same as in visiting any planet; someone there may not like you. But the time jump takes place in the safest possible surroundings: in space with a ship around you—any risk comes later."

Lazarus grinned. "That's why I was so riled at that old cow Arabelle—telling me to go looksee at *battles!* Justin, the best thing about modern times is that we are all so spread apart that war is no longer practical. But— Did I tell you what I'm going to use as a practice run?"

"No. I had the impression from Madam Chairman Pro Tern that you already had a perfected technique."

"It's possible that I let her think so. But Arabelle wouldn't know an imperial number from an imperial edict; she couldn't ask the right questions."

"I don't think I could either, Lazarus; it's not my field of mathematics."

"If you're interested, Dora can teach you—"

"Or me, Lover Boy."

"Or Teena. What's the idea of calling Justin 'Lover Boy,' Teena? Are you trying to seduce him?"

"No, he's promised to seduce *me*…about a hundred years from now."

Lazarus looked at me thoughtfully; I tried to look as if I hadn't heard the exchange. "Mmm…maybe you had better take those lessons from Dora, Justin. You haven't met Dora, but think of her as about eight years old; she won't try to seduce you. But she's the brightest computer pilot in space and can teach you more than you want to know about Libby field transformations. I was saying that we felt sure of the theory, but I wanted a separate opinion. So I thought of asking Mary Sperling—"

I said, "Hold it a moment! Lazarus, in all the Archives there is, I am certain, only one Mary Sperling. I'm descended from her, Tamara is descended from her—"

"Lots of Howards descended from her, Son; Mary had over thirty children—quite a record for those days."

"Then you *do* mean Elder Mary Sperling, born in *1953* Gregorian, died in—"

"She did *not* die, Justin; that's the point. So I went back there and talked with her."

My head felt fuzzy. "Lazarus, I'm confused. Are you telling me that you've already made one time trip? Nearly two thousand years? No, I mean over two thousand years—"

"Justin, if you'll keep quiet, I'll *tell* you what I mean."

"Sorry, sir."

"Call me 'sir' and I'll get the twins to tickle you. I mean I went, in present time, to star PK372.2 and the Planet of the Little People. That designation is obsolete, and the new catalogings don't hook it in with that planet because Libby and I decided to toss in a joker; we felt that it was a place for humans to stay away from.

"But the Little People are the source of the concepts that Andy Libby worked out as field theory that anyone can use, and all space pilots, computer and human, do use. But I had never gone back there because-well, Mary and I had been close. So close that it was a blow to me when she 'went over.' More disturbing than a death, some ways.

"But the years do mellow a memory and I did want to consult. So the twins and I set out in the 'Dora' to try to find that planet, from a set of coordinates and a ballistic Andy had assigned a long time back. The ballistic was slightly off, but a star doesn't move far in only two thousand years; we found it.

"No trouble then; I had warned Lor and Laz most solemnly of the subtle danger of the place. They listened, and that made them as immune to the place as I am—not tempted to swap their individual personalities for a pseudo-immortality. In fact, they had a wonderful time; the place *is* charming, and, safe in all other ways. Hadn't changed much, one huge park.

"I orbited first—it's their planet, and they have powers we don't ken. Same as last time; a Doppelganger of a Little Person showed up in the 'Dora' and invited us down to visit only this time it called me by name—in my head; they don't use oral speech—and admitted to being Mary Sperling. That shook me but it was good news. She—'it,' I mean —it seemed mildly pleased to see me but not especially interested; it was not like meeting a beloved old friend but more like meeting a stranger who nevertheless remembered what that old friend remembered."

"I understand it," the computer said. "Something like Minerva and me, huh?"

"Yes, dear…except that you had a more positive personality your very first day than this creature who used the name of my old friend… and you've been getting positiver and positiver for the past three years."

"Ol' Buddy Boy, I'll bet you tell that to all the girls."

"Could be. Please keep quiet, dear. Nothing more to tell, Justin, save that we grounded and stayed a few days, and Dora and I consulted with the Little People about spacetime field theory while the twins listened and enjoyed playing tourist. But, Justin, when the Families left there, returning to Earth in the 'New Frontiers,' you will recall that we left some ten thousand behind."

"Eleven thousand, one hundred, and eighty-three," I answered, "according to log of the 'New Frontiers.'"

"Is that what we logged? Should have been more, maybe, as the logged figure was reconstructed by seeing who couldn't be mustered, almost certainly there were unregistered children among those who elected to stay behind; we were there quite a piece. But the exact number doesn't matter. Justin, call it an even ten thousand. Given a favorable environment; how many would you expect to find there after two thousand years?"

I used the arbitrary expansion. "Approximately ten to the twenty-second—which is ridiculous. I would expect either a stabilized optimax—call it ten to the tenth—or a Malthüsian catastrophe, in not over seven to eight centuries."

"Justin, there were none. Nor any sign that men had ever been there."

"What happened to them?"

"What happened to Neanderthal Man? What happens to any champion when he's defeated? Justin, what's the point in striving when you're so outclassed that it's no contest? The Little People have the perfect Utopia—no strife, no competition, no population problem, no poverty, perfect harmony with their beautiful planet. Paradise, Justin! The Little People are all the things that philosophers and religious leaders throughout history have been urging the human race to become.

"Maybe they *are* perfect, Justin. Maybe they are what the human race *can* become…in another million years. Or ten million.

"But when I say that their Utopia frightens me, that I think it is deadly to human beings, and that they themselves look like a dead end to me, I am *not* running them down. Oh, no! They know far more about mathematics and science than I do—or I wouldn't have gone there to consult them. I can't imagine fighting them because it wouldn't be a fight; they would already have won against anything we could attempt. If we became obnoxious to them, I can't guess what would happen—and don't want to find out. But I don't see any danger as long as we leave them alone as we don't have *anything* they, want. So it appears to me—but what's the opinion of one old Neanderthal? I understand them as little as that kitten over there understands astrogation.

"I don't know what happened to the Howards who stayed behind. Some may have gone over and been assimilated, as Mary Sperling did. I didn't ask, I didn't want to know. Some may have lapsed into lotus-eaters' apathy and died. I doubt if many reproduced—although it is possible that there were subhumans around being kept as pets. If so, I most especially did not want to know it. I got what I wanted: a corroborating opinion on a mathematical oddity in field physics—then gathered up my girls and left.

"We did one thing before we left that neighborhood: We made a ball-of-twine photographic survey of their planet, then had Athene examine it when we got back. Teena?"

"Sure, Buddy Boy. Justin, if there is a human artifact on the surface of that planet, it is less than a half meter in diameter."

"So I assume that they are all dead," Lazarus said grimly, "and I shan't go back. No, the trip to PK3722 was not a trial run time trip, but just a common star hop. The test run will be about as simple and quite safe, as it will not involve putting down on a planet. Want to come along? Or shall we take Galahad?"

"Pappy," Galahad said earnestly, "I am young, beautiful, healthy, and happy, and plan to stay that way; you are *not* volunteering *me* for any such harebrained junket I'm not making any more star hops of any sort; I'm the home-loving type. I've made one landing with Hot Pilot Lorelei at the overrides. That's enough; I'm convinced."

"Now, boy, be reasonable," Lazarus said gently. "When we do this, my girls will be old enough to want active male attention—which *I* am not going to supply; I would lose all control over them. Think of it as your duty."

"When you start talking about 'duty,' I break out with hives. The trouble is, Pappy, you're a sissy, afraid of two little girls."

"Could be. Because they won't be little girls much longer. Justin?"

I thought furiously. To be invited by the Senior to take a star trip with him is not an honor to turn down. That it included an attempt to travel in time did not bother me; the idea seemed unreal. But it couldn't be dangerous or he wouldn't be taking his sister-daughters along—and, besides, I felt that Lazarus was unkillable; a passenger with him should be safe. Gigolo for his girls?—Lazarus was farcing Galahad, I *was* sure…as I was certain that Lad and Lori would settle such matters to suit themselves. "Lazarus, I will go anywhere you ask me to go."

"Hold it!" objected Galahad. "Pappy, Tamara isn't going to like this."

"No trouble, Son. Tamara is welcome, and I think she would enjoy it. She's not chicken like some people we won't mention."

"What?" Galahad sat up straight. "Take away Tamara and Justin… and our twins…and you yourself? Half the family? And leave the rest of us here to mourn?" Galahad took a deep breath, sighed it out. "All right, I give up. I volunteer. But leave Justin and Tamara at home.

And the twins, we can't risk them. You pilot, I'll cook. As long as we last, that is."

"Galahad shows unexpected streaks of nobility," Lazarus said to no one in particular. "It'll get him killed yet. Forget it, Son; I don't need a cook, Dora is a better cook than either of us. The twins will insist on going, and I need to supervise them through a couple of time jumps; later they will have to do it alone."

Lazarus turned to me. "Justin, while you are welcome, it will be a dull trip. You would know you'd traveled in time only because I'd tell you so. I have in mind going to a planet easy to find because Libby and I surveyed it and he determined its ballistic accurately. I'm not planning to land; it's a moderately dangerous place. But it happens to be a planet I can use as a clock.

"This may sound silly. But it is hard to be sure of the date in space, other than by your inboard clocks—in particular the radioactive-decay clocks of your computer. Telling time by examining celestial bodies is difficult and involves subtle measurements and long calculation; it is more practical to ground on a civilized planet and bang on somebody's door and ask.

"There are exceptions—any stellar system with known ephemerides of its planets, such as here, or Secundus' star, or the Solar System, and others—if Dora hat such data in her gizzards, she can look at such a system and read the time by its planets as if they were hands on a clock—Libby did that with the Solar System from the 'New Frontiers.'

"But on this trial trip I'll be calibrating a time-travel clock—another matter and new. I left something in orbit around that planet on a known date. Later I could not find it, despite having equipped it so that I certainly *should* have found it. Uh…it was Andy Libby's coffin.

"Very well, I'll go look again, trying to split two known dates. If I find it, I will have begun calibration of a time-travel clock—as well as proving that the time-trip theory is correct. Follow me?"

"I think so," I admitted, "to the extent of seeing that it is an experimental proof. But field theory is so far from my own specialty that I can't say more."

"No' need to. I don't understand it too well myself. The first computer designed to manage Libby-Sheffield drive was a reflection of Andy's unique mind; all since are refinements. If a pilot tells you he understands it and uses a computer simply because it's faster, don't ride with him; he's a phony. Eh, Teena?"

"I understand astrogation," said the computer, "because Minerva replicated Dora's astrogation circuitry and programming in me. But I do not think that it is possible to discuss it in English, or even Galacta, or any language using word elements. I can print out the basic equations and thereby show a static picture—a slice—of a dynamic process. Shall I do so?"

"Don't bother," said Lazarus.

"Heavens, no!" I echoed. "Thank you, Athene, but I have no ambition to be a star pilot."

"Galahad," said Lazarus, "How about rousing your lazy carcass and finding a little snack for lunch? Say about four thousand calories each. Justin, I asked if you plan to go back to Secundus because I don't want you to."

"That suits me!"

"Pallas Athene, make this a private record, keyed to me and to Chief Archivist Foote."

"Program running, Mr. Chairman." Galahad lifted his eyebrows, left abruptly.

"Chief Archivist, is the situation in New Rome becoming critical?"

I answered carefully, "Mr. Chairman, in my opinion it is, although I'm no more than a dilettante in social dynamics. But . . I did not come here to deliver a silly message from Madam Chairman Pro Tem. I came here hoping to talk with you about it"

Lazarus looked at me long and thoughtfully—and I caught a glimpse of part of what makes him unique. He has the quality of giving full attention to whatever he does, be it a matter of life and death, or something as trivial as dancing to amuse a guest. I recognized it because Tamara has the same quality;— she displays it by giving total attention to the person she is with.

She does not have exceptional beauty, nor, I suppose, is she more skillful in technique than any of several other professionals—or even some amateurs. No matter, it is this quality of total concentration that sets her apart from other fine women of her merciful calling.

I think the Senior lends it to *everything.* Now he had suddenly "picked up the gavel," and his computer knew it at once, and Galahad-spotted it almost as quickly—and I stopped worrying.

"I never assumed," he said, "that the Families' Chief of Records would play messenger with a useless message. So tell me your reason."

Elaborate it? No, explanations could follow. "Mr. Chairman, the Archives should be replicated off Secundus. I came here to see if it could be done on Tertius."

"Go on."

"I've never seen civil disorder. I'm not sure of the symptoms, nor how long it takes them to grow into open violence. But the people of Secundus aren't used to arbitrary laws and rules that change overnight. I think there will be trouble. I would feel that I had carried out the duties of my office if I insured that destruction of the Archives could not mean that our records are lost. The vaults are underground —but not invulnerable. I have figured out eleven ways that some or all of the Archives could be destroyed."

"If there are eleven ways, then there is a twelfth, and a thirteenth, and so on. Have you discussed this with anyone?"

"No!" I added more quietly, "I didn't want to put ideas into anyone's head."

"Sound. Sometimes the best one can do about a weak point is not to call attention to it."

"It seemed so to me, sir." I added, "But when I started worrying I started trying to do something to protect the records. I instituted a policy of making dead-storage duplicates of all processed data at the point they enter the Archives. I had in mind copying the entire Archives, then shipping them somewhere. But I had no funding, or enough money of my own, to pay for the memory cubes. They should be Welton Fine-Grains, or they would be too bulky to ship."

"When did you start copying new accessions?"

"Shortly after the Trustees' Meeting. I had expected Susan Barstow to be elected. When Arabelle Foote-Hedrick got it— well, it disturbed me. Because of an incident years back when we were both on campus. I thought about resigning. But I had started work on your memoirs."

"Justin, I think you kidded yourself about your reason for staying. You suspected that Arabelle might make an ad-interim appointment other than your deputy."

"That's possible, sir."

"But irrelevant. You used Weltons for this copying?"

"Oh, yes. I could squeeze funds for that much."

"Where are they? Still in the 'Homing Pigeon'?"

I suppose I looked startled. The Senior said, "Come, come! They were important to you—do you expect me to think that you left them lightyears away?"

"Mr. Chairman, the cubes are in my baggage…still in Colony Leader Weatheral's office."

"Pallas Athene?"

"Back of the visitors' couch, Mr. Chairman. The Colony Leader told me to remind him to fetch home Mr. Foote's luggage."

"Perhaps we can do better. Chief Archivist if you will permit Pallas Athene to have the code to your bags, she has extensionals in Ira's office to copy those cubes at once. Then you can quit worrying; Pallas Athene already has the Archives in her, up to the day I let Arabelle have the gavel back."

I know my face showed it. The Senior chuckled and said, "Why and how? 'Why' because you aren't the only one who feels that the

Families' records should be safeguarded. 'How?' We stole them, Son, we stole them. I had control of the executive computer and used it to copy the whole works—genealogies, history, minutes of the Families' Meetings, everything— with an override program to keep your boss computer from knowing what I was doing.

"Right under your nose, Chief Archivist—but I kept it from you for your protection; I did not want Arabelle to get wind of it and quiz you. It would have given her ideas, and she had too many already. The only problem was to scrounge enough Welton cubes. But you are sitting on them right now, about twenty meters under your arse—and when Pallas Athene reads the ones in your luggage, the duplicate Archives will be complete to the date you left Secundus. Feel better?"

I sighed. "Much better, Mr. Chairman. I can stay with a clear conscience. I now feel free to resign."

"Don't."

"Sir?"

"Stay here, yes. But don't resign. Your deputy is carrying on and you trust her. Arabelle can't legally put in her own boy by ad-interim appointment unless you *do* resign, since your appointment comes from the Trustees. Not that legality would bother her—but again let's not put ideas into her head. How many Trustees on Secundus?"

"'On' Secundus, sir? Or resident on Secundus?"

"Don't quibble Son."

"Mr. Chairman, I am not quibbling. There are two hundred eighty-two Senior Trustees. Of that number one hundred ninety-five are resident on Secundus, the other eighty-seven representing Howards on other planets. I put it as I did because it requires a two-thirds majority to pass a policy motion—two-thirds of a quorum at a decennial meeting, or two-thirds of the total number, or one hundred eighty-eight, at an emergency meeting unless every trustee *everywhere* has been notified—which can take years. I mention this because, were you to call an emergency meeting, it might be impossible to muster one hundred eighty-eight votes necessary to recall Madam Chairman Pro Tem."

The Senior blinked at me. "Mr. Archivist, what in Ned gave you the notion that *I* would call a Trustees' meeting? Or would attempt to recall our dear Sister Arabelle?"

"Your question seemed to be leading toward that, sir—and I remember an occasion on which you took back the gavel."

"Entirely different. My motives then were selfish. The old biddy was about to spoil my plans by grabbing Ira. The circumstances were quite different—meaning I could get away with it—which I can't today. Son, despite what the records show, Arabelle didn't give up that gavel willingly; I grabbed it from her. Then the short time it took us to finish up and leave, I kept her prisoner."

"Really, Mr. Chairman? She doesn't seem to harbor resentment. She speaks of you in the highest terms."

The Senior grinned his lazy, cynical grin. "That's because we're both pragmatists. I was careful to save her face and made sure she knew it, and now she has nothing to gain by running *me* down—and something to lose, because I've acquired a semisacred status. Her status depends in part on mine and she knows it. Just the same— Well, if I ever find myself on the same planet with her—unlikely, I'm no fool—I shall be very careful going through doors and such.

"I'll tell you how it worked, and you'll see why I can't do it twice. Once Ira handed her the gavel he moved out of the Palace—proper. But until we left I continued to live in the penthouse on top of the Palace—also proper; the Palace is my official residence. Because I was still there, Minerva was-still hooked in. In consequence she was able to warn me when Arabelle's busies grabbed Ira. I came out of a sound sleep and grabbed the gavel."

Lazarus frowned. "A planetwide executive computer is a menace, Justin. When it was Minerva with Ira giving orders, it worked fine. But see what I did with it and extrapolate what someone else might do with one. Arabelle, for instance. Uh— Teena, give Justin a sample of Arabelle's voice."

"Yes, Mr. Chairman. 'Chief Archivist Foote, this is the Chairwoman Pro Tem. I have the honor to announce that I have been able to persuade our distinguished Ancestor, Lazarus Long, Permanent Chairman of the Howard Families, to assume for us the titular leadership of the Families during the regrettably short period remaining until he again embarks for a new world. Please give this announcement full distribution among your subordinates. I will continue to handle routine details but the Chairman wants you to feel free to consult him at any time. Speaking for the Trustees and for the Chairman, this is Arabelle Foote-Hedrick, Chairwoman Pro Tempore of the Howard Families.'"

"Why that s exactly what she said to *me.*"

"Yup. Minerva did a good job. She got just the right pomposity into the phrasing, as well as getting Arabelle's voice down pat, even to that sniff she uses for punctuation."

"That wasn't Arabeile? I had no slightest suspicion."

"Justin, when that message went to you—and one like it to everyone important enough to rate it—Arabelle was in the biggest, fanciest apartment in the Palace-and very annoyed that doors wouldn't open and transport wouldn't come and none of the communication arrangements would work—except when I wanted to talk to her. Shucks, I didn't even let her have a cup of coffee until she got her feathers down and conceded that *I* was Chairman and running things.

"After that we got along pretty well, even became somewhat chummy. I did everything for her but turn her loose. She took over the routine-I didn't want to be bothered—which was safe as Minerva would have chopped her off if she got out of line and she knew it. She and I even appeared together on a newscast the morning I left, and Arabelle spoke her piece like a lady, and my public thanks to her were just as sincerely insincere."

Lazarus Long continued, "But now *she* has the executive computer and if I went back, I'd throw my hat in first. No, Justin, I was not asking about the Trustees on Secundus with any intention of calling a meeting; instead I was thinking that any twenty Trustees can call an emergency meeting and hoping that they would see it as you do—futile—and not try. She might grab them and ship them to Felicity. Or, if she has the nerve—I think she has—she might let them hold their meeting, then if it went against her, ship all the Trustees who show up off to Felicity. But I guarantee she won't quit without a fight. I caught her with her pants down; she won't be caught twice."

"Then it means a bloodbath."

"That may be the only way out. But you and I can't help the situation. In all matters of government the correct answer is usually: Do *nothing.* This is such a time—a time to exercise creative inaction. Sit tight. Wait"

"Even when you know things are going wrong?"

"Even when you know it, Justin. The itch to be a world saver should not be scratched; it rarely does any good and can drastically shorten your life. I see three major possibilities: Arabelle may be assassinated. The Trustees will then elect another Chairman Pro Tern, hopefully one with sense. Or she may last till the next ten-year meeting, whereupon the Trustees may exercise some sense. Or she may get smart, not expose herself to assassination while consolidating her power so strongly that it will take a revolution to get rid of her.

"I regard the last as least likely, assassination as the most likely—and none of it our business here on Tertius. There are a billion people on Secundus; let *them* handle it. You and I have saved the Archives and that's good; the Families maintain their continuity.

"In a few years we'll import equipment for you—or your successor—to set up the sort of computterized deal you have on Secundus. Athene can keep data in storage until we're set up. Meanwhile I'll let a message echo around the inhabited planets that the Archives are here, too. I'll also announce that this is an alternate Families' Seat where the Trustees are welcome to meet."

The computer said, "Mr. Chairman, Mr. Jones has asked if I know when you will be ready for lunch."

"Please tell him we will be there in a moment, No hurry on any of this, Justin; if you're patient, problems tend to solve themselves—and patient is all one can be when it takes years to pass a message around even among the more thickly settled planets. So wait a hundred years. One private message for you. You're one of us now? A member of this family and a father to our kids?"

"Yes. I want to be."

"You want it formal? All right, here's a short one, binding—and later you can have any ritual you want. Justin, are you our brother? Till the stars grow old and our sun grows cold? Will you fight for us, lie for us, love us—and let us love you?"

"I will!"

"That does it; Athene has it on record—open record, Athene."

"Recorded, Lazarus. Welcome to the family, Justin!"

"Thank you, Athene."

"The private message is thus, Justin. Tamara asked me to tell you—if you married us—that she is going to ask Ishtar to cancel her immunity to impregnation. She did not say that this was exclusively for you. On the contrary she told me that she hopes to have children by each of us as quickly as possible; then she would at last feel fully in the family. Nevertheless I am certain that her decision was triggered by your arrival…so the rest of us will hang back and cheer while you plant the first one—our Tammy will like that"

My eyes suddenly filled with tears, but I kept my voice steady. "Lazarus, I don't think that's what Tamara wants. I think she just wants to be fully a member of the family—and so do *I!*"

"Well…perhaps so. In any case Ishtar keeps the genetic answers to herself. Maybe we'll line up all the gals and see what a new rooster can do. End of restricted conference, Teena."

"Sure thing, Buddy Boy. And a hundred years from now you can line up all the men for *me.* Betcha I can whip 'em!"

"You probably can, dear."

VARIATIONS ON A THEME
XVI

Eros

Minerva said, "Lazarus, will you walk with me? Outside?"

"I will if you'll smile."

She smiled briefly. "None of us feels much like smiling today. But I'll try."

"Confound it, dear, you know I won't be gone any time to speak of, by this framework. Just like the calibrating hop the twins and I made."

"Yes, dear. Shall we go?"

He patted her little skirt. "Thought so. Where's your gun?"

"Must I wear it? When you are with me? I will wear it without fail…while you are gone."

"Well— Bad precedent. All right." They paused in the foyer. Minerva said, "Athene dear, please tell Tamara I'll be back in time to help with dinner."

"Sure thing, Sis. Hold it— Tammy girl says she doesn't need help, so don't hurry."

"Thanks, Sister. And thank Tammy for me." They left the house, started up a gentle bill. Presently she said, "Tomor*row.*

"'Tomorrow,'" Lazarus repeated, "but don't make it sound like a dirge. I've told you all that, while this trip will be ten T-years elapsed time for me, it will be at most a few weeks for you at home—and even less for the twins. What is there to get solemn over?"

Instead of answering, she said, "How long will I live?"

"Eh? Minerva, what sort of question is *that?* Not too long if you neglect ordinary precautions such as going armed and staying alert. If you mean your life expectancy—well, if the geneticists know what they are talking about, you have exactly the expectancy I was born with and it doesn't matter that I'm a freak; I pass it on to you. But even if they are mistaken about that gene complex in the twelfth chromosome pair, there is no possible doubt that you are a Howard in every gene. So you're good for a couple of centuries without trying. But with a willingness to undergo rejuve every time you reach menopause, I couldn't guess how long you will last—they learn more about it every year. As long as you want to live, probably. How long is that?"

"I don't know, Lazarus."

"Then what's eating you, dear? Sorry you gave up being a computer for vulnerable flesh-and-blood?"

"Oh, no!"

Then she added, "But sometimes it hurts."

"Yes. Sometimes it does."

"Lazarus…if you are certain you are coming back why did you reorient Dora so that her affection is fixed on Lori and Lazi rather than on you?"

"Is *that* all that's troubling you? A routine precaution, that's all. Why did Ira make a new will when we set up our family? Why do we all have wills emplaced in Teena? My sisters will own the 'Dora' presently no matter what; they already run it. If anything *did* happen to me— Do you remember something you said years ago? You told Ira that you would self-destroy rather than serve another master."

"Is it likely that I would fail to carry over such a memory? That day led to this, by inevitable concatenation. Lazarus, I left behind much of my memories…but I traced and retraced in this Minerva every conversation that Minerva ever shared with you. Every word."

"Then you know why I won't risk hurting a computer who thinks she's little girl…and why I don't dare risk an emotional malfunction in a piloting computer somewhere out between the stars—when my sisters' lives depend on that computer. Minerva, I would have bonded Dora to Lori and Lazi just on Dora's account; she needs to love and be loved. But if I had neglected to do it as a safety precaution for the twins—well, a man who refuses to take his own death into account in making plans is a fool. A self-centered fool who does not love anyone."

"You are not that, Lazarus, you have never been that."

"Oh, yes, I have! It took me endless years to learn."

Again she let time pass before she spoke. "Lazarus…I have often wondered about Llita."

"'About Lilta'? *Huh?"*

"And about *her,* even more than about Llita. Do I really look like *her?"*

He stopped and stared at her. They were near the top of the hill now, out of sight of the house. "I don't know. How can I know? A thousand years— Memories fade and blend. I think you look like her. Yes, you do."

"Is that why you can't love me? Did I make a terrible mistake in *wanting* to look like her?"

"But darling…I *do* love you."

"You do? Lazarus, you have never shared this boon with me." Suddenly she unwrapped the little skirt, dropped it on the grass. "Look at me, Lazarus. I am *not* she. For your sake I wish I could be she. But I am not…and I made— I— I was a computer then and didn't know any better. I did not mean to hurt you, I did not *mean* to raise ghosts in your mind! Can you forgive me this?"

"Minerva! Stop, darling! There is nothing to forgive."

"Time is short, you are leaving. Can you truly forgive me? Will you put your child into me before you go?" Her eyes were welling tears, but she stared at him steadily. "I want your child, Lazarus. I will not ask twice…but I could not let you leave without asking. In my ignorance I made myself look like her—because you loved her—but *you could close your eyes!"*

"Beloved—"

"Yes, Lazarus?"

"Does Ira close his eyes? Refuse to see you?"

"No."

"Does Justin? Or Galahad? If you can stand my homely face, I surely can stand your lovely one—and, with any luck, she'll look more like you than me. Let's go back to the house."

Her face lit up. "What's wrong with this little stand of trees?"

"Mmm. Yes. Now."

VARIATIONS ON A THEME
XVII

Narcissus

"Let's run over it again, girls," said Lazarus. "Both the time markers and the rendezvous landmarks. Dora, can you see the globe?"

"I can if you'll keep your hands out of the way, Ol' Buddy Boy."

"Sorry, dear. Call me Lazarus; I'm not your brother."

"When Lazi and Lori made me their adopted sister, you got in free. Logical? Logical. Don't fight it, Buddy; you like it." "Okay, I like it, Sister Dora," agreed Lazarus. "Now shut up and let me talk."

"Aye, aye, Commodore," the pilot computer answered. "But I've got it all on tell-me-three-times. Not that I need those clumsy time markers—I'm calibrated, Buddy, calibrated."

"Dora, assume that something happens to that calibration."

"Can't. One bank goes out of whack, I fall back on tell-me-twice while I fall back on tell-me-twice while I wipe that bank and restore it."

"So? You've been euphoric ever since the twins adopted you. I taught you to be a pessimist, Dora. A pilot who is not a pessimist isn't worth a hoot."

"I'm sorry, Commodore. I'll shut up."

"Speak up if you have anything to say. But not to disparage safety precautions. It's my own precious skin I'm trying to protect, Dora, so please help me. I can think of a dozen ways your gizzards could be damaged, either by error or by natural catastrophe—and so can you but there is no point in worrying. But there *is* point in trying to anticipate what can be done about it.

"Take a case in which you are working perfectly but the twins can't use you. By schedule, after you drop me, you all go back to base-time framework and to New Rome and the twins inquire for Delay Mail at the Archives. Who knows?— there may be some waiting there right now."

"Brother," put in Lorelei, "'now' doesn't mean anything. We've been in irrelevant phase ever since we lifted off."

"Don't quibble, dear. The 'now' I mean is 2072 Diaspora, or 4291

Gregorian, your adulthood year. If it is."

"Laz, did you hear that?"

"You asked for it, Lor. Pipe down and let Brother talk."

"The trouble is with the words themselves, Lorelei. You gals—you three gals—might spend part of the reach to Earth in inventing new language and appropriate syntax for spacetime travel. But this imaginary case— You ground on Secundus, go to the Archives, and ask if any Delay Mail has been unsealed that has your name on it. Or Justin's, or Ira's. Or even addressed to *me,* as Lazarus Long, or as Woodrow Wilson Smith. I may try several ways, as I'll be attempting it from a 'now' some centuries before Delay Mail became a routine way to preserve papers.

"So you pick up whatever there is and go back to the 'Dora'—and find her lock sealed and a sheriff guarding it. Confiscated."

"What!"

"Dora, please don't yell in my ear. This is a hypothetical case."

"That sheriff had better be able to shoot straight," Lapis Lazuli said grimly.

Her brother answered, "Lazi, you've heard me say nine thousand and nineteen times that we do *not* carry weapons to give us Dutch courage. If a gun makes you feel three meters tall and invulnerable, you had better go unarmed and let your sister do any shooting that's necessary. Now tell me why you don't shoot at the sheriff."

"Yes!" said Dora. "I want to be rescued!"

"Quiet, Dora. Laz?"

"Uh…we don't shoot cops. Ever."

"Not quite. We don't shoot cops if there is any way to avoid it. Safer to kiss a rattlesnake. In two thousand years and some I've always found a way to avoid it—although I did shoot kind o' close to one once, to divert his attention. Unique circumstances. But in this hypothetical case shooting one cop is worse than useless; the Chairman Pro Tem has confiscated your ship."

"Help," Dora whispered.

"Why, Madam Barstow would *never* do anything that nasty!"

"I didn't say it was Susan Barstow. But Arabelle, had she lasted, would have enjoyed pulling that sort of stunt on the Longs. Let's say Susan has dropped dead and the new CPT is as bad as Arabelle. No ship and no assets—what do you *do?* Remember, I'm depending on you—or I'm stuck back in the Dark Ages. What do you do?"

"'When in danger or doubt—…Run in circles, scream and shout,'" recited Dora.

"Oh, stop it, Dora," said Lapis Lazuli. "We don't panic, that's certain. We have ten years in which to figure out a— Hey! - Wait a moment; I'm using the wrong framework. We could take a hundred years if necessary. Or longer."

"A hundred years is plenty," said Lorelei. "In less time than that we can steal another ship."

"Thank *big,"* advised Lazarus. "Steal the Pleiades. Far better not to steal anything, Lor."

"You stole a starship once."

"Because there was no time to do anything else. But with plenty of time at your disposal, it's better to be reasonably honest—not break rules you can get caught breaking. Money is the universal weapon; to acquire it merely takes time and ingenuity, and sometimes work. Raise enough money and you might be able to buy the 'Dora' back. If that's impossible, with much less money you could get to Tertius, where Ira and the family could find some way to lay hands on a starship. Then you could program it with the stuff Dora left in Athene—and come get me."

"Isn't *anybody* going to come rescue *me?"*

"Dora dear, this hasn't happened, and it's extremely unlikely to happen. But if it did and the twins weren't able to rescue you—say that your new owner has you halfway across the Galaxy—"

"I'll crash him the first time he tries to land!"

"Dora, stop being a nitwit. If we ever did lose you—most unlikely —and the twins could not rescue you but *could* rescue me—then if you've taken care of yourself, no crash landing or any other foolishness—we'll find you, we'll get you back. All three of us. No matter how many years it takes. Laz? Lori?"

"You bet! 'One for all, all for one!' And it's not just us-four, Dora; it's the whole family—all the adults, all nine kids—might be more by then—and Athene. Brother, when Ira moved that we *all* take the last name of 'Long,' I liked it so much I couldn't cry hard enough. Sis, you're 'Dora Long'— and the Longs don't let each other-down!"

"I feel better," the computer admitted, with a sniffle.

"You never had anything to feel bad about, Dora," Lazarus continued. "You started this by insisting that my precautions were unnecessary. So I dreamed up a situation in which they would *be* necessary…especially so if the twins could not get at the programs you left with Athene—in which case they might have to fall back on time markers and recalibrate. So I had 'em stuck on another planet and flat broke…so the first problem is to lay hands on money. Think you could do it, girls? In a hundred years? Without being caught in something that would put you in still more of a jam?"

The twins glanced at each other. "Lor?"

"Of course, Laz. Brother, that's when we open our hook shop over a pool hall. Or somewhere."

Lazarus said, "I don't think you two have the true vocation. And your noses are regrettably like mine. Homely, that is."

"Our noses are an asset—"

"—because they *do* make us look like you—"

"—so what is common gossip by now but unbelievable—"

"—becomes quite believable once a client gets a look at us—"

"—and aside from noses, we look pretty good—"

"—'built like brick outhouses,' you told us—"

"—and natural redheads, which Tammy says is cash in the bank—"

"—and looking just alike but we can give 'em variety—"

"—just by one of us not using a depilatory—"

"—which will make us a *great* sister act at very high prices; Maggie said so—"

"—and if you think being horny isn't enough true vocation—"

"—which may be true and we concede that we'll never be the great artist Tammy is, nevertheless—"

"—New Rome is going to be *amazed* at how *intense* our vocation is —"

"—when our brother's safety is at stake!"

Lazarus took a deep breath. "Thank you, darlings. While you'll probably take a fling at it someday, I hope that you won't need to do it to rescue me. I'm counting more on your mathematical ability and your skill as shiphandlers than I am on your undeniable physical and spiritual beauty."

"Did you hear that, Lor? That time he added 'spiritual."

"I think he meant it."

"I hope so. It's even nicer than being told we have fits as pretty as Minerva's. Which we don't, quite."

"Yes, you do," their brother said absently. "Let's get back to landmarks and such."

"I think you ought to kiss them," said Dora.

"Later. Now look, kids, prime rendezvous, exactly ten T-years after you drop me—although you drop Andy s body first. How? Laz or Lor —not Dora. Of course you know all this, Dora; this review is for flesh-and-bloods. Fallible. Laz?"

"Have Dora unfreeze him and bring his body up almost to cremation temperature and put him into atmosphere on a long slant just under orbital speed so that it will burn up, or almost, before it hits…and figure the ballistic to hit the mountains in case he's not quite burned up—because we don't want to hurt anybody."

"What mountains and how do you find them? Lor?"

"These right here. Prime landmark, this big river that drains the central valley. Where this other big river comes in from the, west is our north landmark, the gulf they wind up in is the south landmark—

no landmark on the west Arkansas is about the middle of that bracket. The Ozark Mountains are the only mountains in the bracket—but shoot for the south side of the mountains, this escarpment; the north side is not Arkansas. Brother, why does that matter?"

"Sentiment, Lorelei. As far as Andy traveled and as little time as he spent on Earth, he was always homesick for his borning place. The only song he knew was one with a refrain of 'Arkansaw, Arkansaw I adore thee!' I used to get sick of it. But I promised him I would take his body back to Arkansas and it seemed to comfort him when he died—so we'll do it. Who knows? Maybe the sweet little guy will know it…and it's worth the trouble to carry out his last wishes. Prime rendezvous landmarks?"

"This big canyon," answered Lapis Lazuli. "Follow it to the east and drop south—this round black dot. A meteor impact crater. No dependable landmarks visible from orbit and good any century but this canyon—biggest on Earth. So we memorize the spatial relationship between canyon and crater so that we can spot it from any angle. If the light is right."

Dora said, "I'm sure I can see it in pitch-darkness."

"Dora honey, this drill is based on the pessimistic assumption that Ellandell might have to find it *without* your help. I want them to know the geography of Terra so well that they won't have to ground and look for a road sign. No close approaches to the ground *at* all—except to put me down and pick me up. I don't want to start a flying-saucer scare; I don't want to attract *any* attention—some yokel might take a shot at me. It's unfortunate that this ship *is* shaped such that 'flying saucer' isn't too bad a description."

"What's the matter with the way I look?" demanded Dora. "I look pretty damn good!"

"Dear, you're built like a brick outhouse—for a starship. You're beautiful. It's simply that unidentified flying objects— oofohs—were also called 'flying saucers.' I don't believe in paradoxes…but I don't want any attention."

"Brother, maybe we *are* one of those oofohs you told us about."

"Huh? Could be, I suppose. If so, let's not get shot at. I want a quiet trip. If everything goes well, we can talk about letting one of you get on the ground with me next trip though durned if I don't think a stacked redhead is more conspicuous than an unidentified flying object. Okay, the crater. I intend to be there, before sundown and after sunrise, from minus ten days to plus ten days at plus ten years. If I'm not there, what do you do?"

Lapis Lazuli answered, "Look for you half a T-year later on top of the biggest pyramid at Gizeh—that's *here*—at midnight…only this time we scan for you minus thirty days through plus thirty because you aren't certain when you can get there and may be able to manage it only once—bribes and things. Brother, do we go out half a lightyear and reenter the time axis? Or stay in orbit and wait?"

"That's up to you,, I won't use the Egyptian rendezvous unless I've pulled some goof that makes it unhealthy for me to meet you in Arizona. If I miss both dates, what do you do? Lori?"

"Look for you again both places at eleven years and eleven and a half years."

"Then what?"

Lorelei glanced at her sister. "Brother, this part we don't go along with—"

"—and that goes for Dora, too—"

"It sure does!"

"—because we *won't* assume that you're dead—"

"—no matter how many times you miss rendezvous—"

"—so we start checking *both* spots day after day—"

"—and night after night—"

"—and over nine hours' local time difference means some weird partial orbits to check sunrise and sundown in Arizona and still check midnights in Egypt—"

"—but Dora can do it—"

"You bet I can!"

"—and we'll keep looking for you day after day—"

"—and year after year—"

"—until you *do* show up. Sir."

"Captain Lorelei, if I miss four rendezvous dates, I'm dead. You must assume that. Shall I put it in writing?"

"Commodore Long, if you're dead, you can't give orders. That's logical."

"If you assume that I am *not* dead, then my orders still apply…and you must give up the search. By the same logic."

"Sir, if you are out of the ship and out of touch, then you are hardly in a position to give *any* orders. But if you want to be picked up, there will be daily service from drop time plus eleven-and-one-half T-years on—"

"—and on and on and on, because that's what we promised the family—"

"—even though we'll have to run home occasionally for rejuvenation—"

"—and to have babies, but neither of those will take *any* time in that time framework…as you pointed out in another connection."

"Mutiny."

The twins glanced at each other. "I'll take it, Laz; I have to—odd-numbered day. Commodore, as you taught us before you ever let either of us take command in space, a commodore is actually a passenger because a ship's master cannot give up even a little bit of her total responsibility. So 'mutiny' is not a word that can apply."

Lazarus sighed. "I've raised a couple of blinkin' space lawyers."

"Brother, that's what you taught us. You *did."*

"Okay, I did. You win the argument. But it's silly to talk about checking every day for year after year indefinitely. I've never seen the prison I couldn't escape from in less than a year—and I've been in quite a number. Maybe I should cancel the whole caper—no, no, I won't argue it! Now about time markers, if something forces you to recalibrate: Simple enough to ground and find out the exact Gregorian date, but that's exactly what I *don't* want you to do…because neither of you has any experience in coping with strange cultures—and you would get in trouble and I wouldn't be around to get you out."

"Brother, do you think we are that stupid?"

"No, Laz, I do *not* think you are stupid. You each have exactly the brain potential I started with—and I'm not stupid or I would not have lived so long. Furthermore, you each have enormously better educations than I had at your age. But, darlings, these are the *Dark Ages* we're talking about. You two have been brought up to expect rational treatment which you wouldn't receive. I don't dare let you put foot to ground in that era, even with me at your side, until after I have coached you endlessly in how to be consistently irrational in what you do and say. Truly."

Lazarus continued, "Never mind, you have two ways to read the clock from space. One is the Libby method, tedious but workable, by reading positions of the Solar System's planets. The trouble with that one is that, unless you spend one devilish long time on difficult observations, you can mistake a configuration for one almost like it—but several thousand years earlier or later.

"So we use what time marks we can find on the surface of Terra herself. The radioactive dating of that impact crater is probably close-but in any case, if the crater is missing, you're too early by some centuries. The dates for the building of the Great Wall of China are quite good, same for the Egyptian pyramids. The dates for the Suez Canal and the Panama Canal are exact—so, unfortunately, is the date of the destruction of Europe—but don't try to watch it! Keep your screens up and get out fast; that is a year when a strange spaceship would be shot out of the sky if you were careless enough to be vulnerable. In fact, if any time marker on this list shows that you are later than 1940 Gregorian, get out at once!—and shoot for an earlier date.

"That's enough for now; it's getting toward bedtime by my sort of time, irrelevant though it may be to anything outside this ship. I want you to study all this stuff until you can recite it in your sleep, dates and what you look for and how to find it—even if you don't have a Terra globe to look at. Anybody think she can beat me at crib? Don't all speak at once."

"I can," said Dora, "if you promise not to cheat on the shuffle."

"Later, Dora," said Captain Lorelei. "Now we tell him." "Oh! All right, I'll be very quiet."

"Tell me *what?"* demanded Lazarus.

"That it's time for you to impregnate us, Lazarus."

"Both of us," agreed Lapis Lazuli.

Lazarus counted ten chimpanzees in his mind—then ten more. *"Absolutely out of the question!"*

They glanced at each other. Lorelei said:

"We knew you would say that—"

"—but the only question is whether you do it sweet and friendly like—"

"—or we tell Ish you said No and she does it for us—your sperm—from the sperm bank—"

"—but we'd be much happier if our beloved brother, who has always been good to us—"

"—but is now going to go get his ass shot off in the Dark Ages—"

"—were to drop his silly prejudices *just once—"*

"—and treat us as biologically mature females—"

"—instead of the children we used to be—"

"—Ira and Galahad and Justin don't treat us as children—"

"—but *you* do and it's not just humiliating; it's downright heartbreaking when we may never see you again—"

"—when you didn't make any real fuss about knocking up Minerva —"

"—not to mention Tammy and Hamadarling and Ish—"

"Stop it!"

They stopped.

"I concede a remote possibility with respect to three of them, although mathematically most unlikely."

Lorelei said quietly, "Mathematically extremely likely, Lazarus, because we were all in on it. Justin and Ira and Galahad hung back at the right times just the way they insured that Minerva's first baby was Ira's and Tammy's first was Justin's. But if it did not work out—for any one of *four,* not 'three'—then Ishtar will correct it from the sperm bank."

"I'm not *in* the sperm bank!"

The girls exchanged glances. Lapis Lazuli said, "Want to bet?"

The computer said, "It's a sucker bet, Buddy."

Lazarus looked thoughtful. "Unless Ishtar tricked me almost twenty years back. When I was her rejuve client."

Lorelei said quietly, "I suppose she could have, Lazarus. But she did not, that I know of—and this is fresh sperm. Frozen not more than a year ago, any of it. After the day you announced a date for this trip."

"Impossible."

"Better not say 'Impossible.' What is the perfect container for keeping sperm fresh and alive until a technician can bank it?"

Lazarus looked very thoughtful. "Well…I'll…be *damned!"*

"Correct, Brother. Place a woman around it. You were being oh so careful to pick your bedmates by their cycles so that you wouldn't leave any babies behind; and they were being oh so careful to see Ish or Galahad as soon as you fell asleep…as well as fudging calendars, too. The point is, beloved brother of ours, you don't *own* your genes—nobody does. We've heard you say so, in discussing how Minerva was constructed. Genes belong to the *race;* they're simply lent to the individual for his-her lifetime. And *all* of us—knowing you were going to try this reckless thing—decided that, while you were free to throw away your life, you weren't free to waste a unique gene pattern."

Lazarus changed the subject. "Why do you say 'four'?'

Lorelei answered, "Brother, are you ashamed of Minerva? I do not believe it. Nor does Laz"

"Uh— No, I'm not ashamed of her, I'm proud of her! Damn it, you two have always been able to get me mixed up. I simply did not know that she had told anyone. I have not."

The other twin said, "Who would she turn to but us?"

"You mean 'To whom would she turn.'"

"Damn it, Brother, this is a hell of a time to be correcting our grammar! Minerva turned to us for advice—and comfort!

—because we're in the same difficult position with respect to you that she is. That she *was,* I mean, for she came out of the bushes looking as smug as a cat. You made her happy—"

"—when she had been crying her eyes out—"

"—and she'll stay happy now, even if she missed catching—"

"—because once is enough for a symbol and if she missed—"

"Ish will fix it—"

"—and of course we knew about it when you finally quit dithering and did what you should have done for her years ago—"

"—because we helped rig it so that she could get you alone and twist your arm—"

"—and told her that if tears weren't enough, to chuck in some chin quivering—"

"—and it worked and she's happy—"

"—but *we're* not so damned happy, not at all, but we won't cry at you—"

"—or quiver our chins; that's childish. If you won't do it simply because you love us—"

"—then the hell with it and we probably won't even fall back on the sperm bank. Instead—"

"—it might be better to have Ish sterilize us—"

"—permanently—not just offset fertility temporarily—"

"—and quit being females, since we're failures at it—"

"STOP IT! If you're not going to cry at me, what are all those tears for?"

Lapis Lazuli said with quiet dignity, "Those aren't weeping tears, Brother; they come from sheer exasperation. Come on, Lor; we've swung and we've missed—let's go to bed."

"Coming, Sister."

"If the Commodore will excuse us?"

"He damn well won't! Sit back down. Girls, can we talk about this quietly without you two whipsawing me?"

The two young women sat back down. Captain Lorelei glanced at her sister and said, "Laz agrees that I will speak for us both. No whipsawing."

Lazarus said thoughtfully, "Do you two run your brains in tandem or in parallel?"

"I do not think that is relevant to the discussion."

'Just scientific interest. If you could teach me how to do it, we three might make quite a team."

"That can be only conjectural, Lazarus…since you reject us."

"Damn it, girls—I have *not* rejected you, I will *never* reject you."

They said nothing; he went on, uncomfortably: "There are two aspects to this; one is genetic, the other is emotional. Genetic— We three are a weird case; male and female, yet quasi-identicals. More than quasi—fortyfive forty-sixths to be exact. Which makes the probability of bad reinforcement far greater than it is for ordinary siblings. - But besides that, we are Howards only by courtesy, as our genes have not undergone some twenty-four centuries of systematic culling. I'm so close to the head of the column that there was no culling at all; my four grandparents were among the first selectees, so when I was born in Gregorian 1912, I had behind me no inbreeding, no culling out, no cleaning of the gene pool. And you dears are in the same predicament as even that forty-sixth chromosome comes from me, since it replicates my forty-fifth. Yet you two seem willing to accept this high risk of reinforcement."

He paused. There was no comment. He shrugged and went on: "The emotional objection comes only from me; you two don't seem to have it…reasonable, I suppose, since the concept it is based on—from the Old Testament—has been replaced by the concept of following the advice of Families' geneticists. I'm not arguing with the wisdom of that; I agree with it—since they say No to a couple of unrelated strangers just as readily as to siblings if the gene charts give 'No' as the answer. But I was talking about feelings, not science. I don't suppose any but scholars read the Old Testament anymore, but the culture I was brought up in was *soaked* in its attitudes—'Bible Belt,' you've heard me call it that. Girls, it is hard to shake off any taboos a child is indoctrinated with in his earliest years. Even if he learns later that they are nonsense.

"I tried to do better with you two. I've had time enough to sort out my taboos and my prejudices from what I really know, and I tried—I tried very hard!—not to inflict on you two any of the irrational nonsense that was fed to me under the pretext of 'educating' me.

"Apparently I succeeded, or we would never have reached this impasse. But there it is— You two are modern young women…but, though we share the same genes, I am an old savage from a very murky time." He sighed. "I'm sorry."

Lorelei looked at her sister; they both stood up. "Sir, may we be excused?"

"Huh? No rebuttal?"

"Sir, an emotional argument permits no refutation. As for the rest, why should we weary you with arguments when your mind is made up?"

"Well…perhaps you're right. But you listened courteously to me. I want to pay you the same respect."

"It is not necessary, sir." Her eyes and those of her sister were welling with tears; they ignored them. "We are sure of your respect, and—in your way—of your love. May we go?"

Before Lazarus could answer, the computer spoke up: "Hey! I want a piece of this!"

"*Dora!"* Lorelei rebuked.

"Don't give me that, Lor. I'm not going to stay politely quiet while my family make fools of themselves. Buddy Boy, Lor didn't tell you about the whammy they considered pulling on you—and that *I* still can. And *will!"*

"Dora, we 'don't *want* that sort of help. Laz and I agreed on that."

"So you did. But you didn't ask *me* to vote on it. And I'm no lady and never was. Buddy Ol' Boy, you know it makes no difference to me who does what to whom; I couldn't care less—except that it's so funny to hear 'em squeal and grunt. But you're being *mean* to my sisters. Lor and Laz talked over the fact that you can't make this trip without their help and they rejected that gambit as being beneath their dignity or some such twaddle. But *I* don't have any dignity. Without *my* help *nobody* makes a time trip. Shucks, if I go on strike, *you can't even get* *back to Tertius.* Now can you?”

Lazarus looked wryly surprised, then grinned. “Mutiny again. Dorable, I concede your point; you can keep us out here—wherever ‘here’ is—until we starve. I suspected centuries back that a flesh-and-blood might someday find himself in just such a helpless position. But, dear, I won’t let your threats affect my decision. You can keep me from time-tripping—but I doubt if you will let Lor and Laz starve. You’ll take them home.”

“Oh, hell, Pappy—you’re being mean again. You’re a real whirling son of bitch! Do you know it?”

“Guilty on both counts, Dora,” Lazarus admitted.

“And Lor and Laz are being stupidly bullheaded. Lor, he politely offered you a chance to speak your piece…and you turned him down. Stubborn bitch.”

“Dora, behave yourself.”

“Whuffor? When you three don’t. Blow your noses and sit down and give Buddy the straight tell. He’s entitled to it.”

“Perhaps you had better,” Lazarus said gently. “Sit down, girls, and talk with me. Dora? Keep her steady between the hawsepipes, baby girl—and we’ll get her into port yet.”

“Aye, aye, Commodore! But you get those two silly bitches straightened out. Huh?”

“I’ll try. Who’s the spokesman this time? Laz?”

“It doesn’t matter,” answered Lapis Lazuli. “I’ll talk for us. Don’t worry about Dora. When she realizes that we are content to accept your decision, she’ll stop being difficult.”

“Oh, you think so, do you? Shape up, Laz—or we’ll be back in Boondock faster than you can say ‘Libby pseudoinfinities.’”

“Please, Dora, let me tell Brother.”

“Just be sure you tell him *everything*…or I’ll tell him about things that went on in here a full year before he said you were old enough.”

Lazarus blinked and looked interested. “Well, well! Did you kids steal a march on me?”

“Well, Mama Ishtar told us we were old enough. You were the one being stuffy about it.”

“Mmm…stipulated. Someday I must tell you about something that happened to me at an early age in a church belfry.”

“I’m sure we’d like to hear it, Brother—but do you want to hear us now?”

“Yes. Dora and I will keep quiet.”

“Let me say in preface that we are not going to ask Ishtar to thwart your wishes by using the sperm bank. But there are other possibilities to which you can hardly object. Consider how we were born. I could easily bear an implanted clone from my own tissue, and so could Lor

—although we might swap clones…for reasons purely sentimental since we have identical genes. Do you see anything wrong with that? Genetically, or emotionally? Or otherwise?"

"Mmm…no. Unusual—but your business."

"Just as easy—since Ishtar still has living tissue of yours in vitro—is to clone *you* . . and Lorelei and I would bear identical twins—both of them 'Lazarus Long' in every gene lacking only your long experience. Would you find that offensive?"

"Eh? Now wait a minute! Let me think."

"Let me add that we regard this as a last resort…if you are dead. If you don't come back."

"Don't start sniffling again! Uh, if I'm dead, I don't have much vote in it, do I?"

"No, because if *we* did not do it, then Ishtar would plant your clone in one of the others—or in herself, with Galahad's help. But if Lorelei Lee and I do it…we would *much* rather do it with your blessing."

"Mm…stipulated that I'm dead—well, okay, okay, it's with my blessing. Just one thing—"

"What, Brother?"

"Crack down on the little beast. Or 'beasts.' I was a mean one. You two were handful enough for six—but I was *ornery.* If you don't establish who's boss right from the cradle—he— they—I, damn it—'I' will give you so much grief your lives won't be worth living."

"We'll try to cope with…'you,' Lazarus—and we have the advantage of knowing what a, uh, 'real whirling son of bitch' you can be."

"Ouch! Am I bleeding?"

"You led with your chin, Brother. The truth is, you spoiled us…and we may find it hard not to spoil *you.* But we'll bear in mind your advice. But we want to say this before we leave the subject of genetics. You've had how many children?"

"Uh…too many, maybe."

"You know exactly how many and so do we…and it's a number large enough to be inspected as a statistical universe. How many were defectives?"

"Uh…none that I know of."

"Exactly none. Ishtar made it her business to know, and Justin confirms it from his study of the Archives. Brother, I don't know how uncommon this may have been in the twentieth Gregorian century…but you have a clean gene chart—and so of course do we."

"Now wait a minute! I'm not really up to date in genetics, but—"

"—but Ishtar *is.* Do you want to argue it with her? We accept her assurances; Lor and I aren't geneticists—as yet. But we have, recorded in Dora, Ishtar's formal report on your gene chart. If you want it. Not that we think it makes any difference; you are rejecting us for reasons having nothing to do with genetics."

"Now slow down! I am *not* rejecting you."

"That's the way it feels to us. We are artificial constructs, and the soidisant 'incest' mores of another time and utterly different circumstances don't apply to us and you know it; that's just an excuse to avoid something you don't *want* to do. Coupling with us might be masturbation, but it *can't* be incest because we *aren't* your sisters. We aren't your kin in *any* normal sense; we're *you.* Every gene of us comes from *you.* If we love you—and we do—and if you love us—and you do, some, in your own chinchy and cautious fashion—it's Narcissus loving himself. But this time, if you could only see it, that Narcissist love could be consummated." She stopped, and gulped. "That's all. Come on, Lor; let's go to bed."

"Hold it, girls! Laz, Ishtar says this is safe?"—

"You heard me say so. But you don't want to do it—so the *hell* with it!"

"I never at any time said that I did not *want* to. Why do you think I quit cuddling you two lively little monkeys when you started being grown up?"

"Oh, *Buddy!"*

"Because I must be Narcissus himself…because I think my two identicals are the prettiest, sexiest—and bitchiest— broads I've ever seen."

"Do you? Do you *really?"*

"You-heard me. Quit quivering your goddamn chins! So when you started getting broad, I started keeping my hands off you. But—if Ishtar says it's all right—"

"She does!"

"I suppose—this once—I could manage a couple of minutes for each of you."

Lorelei gasped. "Did you hear that, Laz?"

"I heard it. 'Two minutes.'"

"Rude, crude, and vulgar."

"Insulting."

"Infuriating."

"But we accept—"

"—right *now!"*

DA CAPO

I

The Green Hills

The Star Yacht *Dora* hovered two meters over the pasture, the lower hatch irised open. Lazarus gave Lazi and Lori a last quick squeeze and dropped to the ground—rolled with the impact, rolled to his feet, hurriedly got clear of the ship's field. He waved, and the ship lifted, straight up, a round black cloud against the stars. Then it was gone.

He looked quickly around him—Dipper…North Star okay, fence that way, road beyond, and—Caesar's Ghost!— a *bull!"*

He cleared, the fence with inches to spare, a few feet ahead of the bull.

Lazarus was moving so fast that his speed made necessary another rolling landing. He wound up in the middle of a rutted dirt road while reflecting that many more of that sort would not improve his appearance. He patted his pockets, especially an extra pocket concealed by the bib of his overalls, and decided that nothing was missing. He missed the comfort of a blaster on his hip—but knew that any sort of gun would be a mistake, for this time and place. A facsimile jackknife was all he carried.

His hat— The ditch? No. Ten feet inside the fence which might as well be ten miles; the bull was keeping an eye on him. A hat was not necessary, and if anyone found it and noticed that it was not quite right—well, there was nothing to connect it with him. Forget it.

North Star again— That town should be about five miles down this road, straight as the turtle flies. He set out.

Lazarus stood in front of the printshop of the Dade County *Democrat,* looking at sheets posted inside the glass, but not reading. He was thinking. He had just had a shock, and the pretense of continuing to read posted newspapers let him do so in quiet. He had read a date and now needed to reconstruct some ancient history. August first, nineteen-sixteen—nineteen *sixteen?*

He saw reflected in the glass a figure coming down the sidewalk—heavyset, middle-aged, wearing a gun belt almost concealed by belly overflowing it, a holstered hogleg on his right thigh, star on his left breast, otherwise dressed much as Lazarus was dressed. Lazarus continued to stare at a posted front page of the Kansas City *Journal.*

"Morning."

Lazarus turned. "Good morning…Chief."

"Just the constable, Son. Stranger hereabouts?"

"Yes."

"Passing through? Or staying with someone?"

"Passing through. Unless I find work."

"That's a good answer. What trade do you follow?"

"I was raised on a farm. But I'm an all-around mechanic. Or anything, for an honest dollar."

"Well, I tell you. Not many farmers taking on hands right now As for anything else, things are slow in the summertime. Mmm, you wouldn't be one of them IWW's, would you?"

"IW' what?"

"A Wobbly, son—don't you read the papers? This is a friendly community, always glad to have visitors. But not that sort." The local law raised one hand to wipe away sweat and gave a lodge recognition sign. Lazarus knew how to answer it—and decided not to. Where was his home lodge?—that's a good question, Officer, so let's not let it come up.

The constable went on, "Well, since you're not one, you're welcome to ask around and see if somebody needs help." He looked at the front page Lazarus had been pretending to read. "Terrible what those U-boats are doing, isn't it?"

Lazarus agreed that it was.

"Still," the officer added, "if people stayed home and minded their own business, it wouldn't happen. Live and let live, I always say. What church do you attend?"

"Well, my folks are Presbyterians."

"So? Meaning you haven't attended lately. Well, sometimes I miss myself, when the fish are biting. But— See that church up the street? The belfry through the elms. If you *do* find work, why, come Sunday, ten o'clock, let me extend you the right hand of fellowship there. Methodist Episcopal, but there ain't all that much difference. This is a tolerant community."

"Thank you, sir; I'll be there."

"Good. Very tolerant. Mostly Methodists and Baptists—but a few Jack Mormons on farms around here. Good neighbors, they always pay their bills. A few Cath-a-licks and nobody holds it against them. Why, we've even got a Jew."

"Sounds like a good town."

"It is. Local option and clean living. Just one thing— If you don't find work— About half a mile beyond the church you'll find a city-limits sign. If you're unemployed and have no local address, it's best to be on the other side of it come sundown."

"I see."

"Or I would have to run you in. No hard feelings; that's just the way it is. No tramps or niggers after sundown. I don't make the rules, Son; I just enforce them—and that's how Judge Marstellar defines a tramp. Some of our good ladies have been pushing him—things stolen off clotheslines and the like. So its ten dollars or ten days…which isn't too bad, as the lockup is right in my house. The food's not fancy as I'm allowed only forty cents a day to board a prisoner—though for fifty cents more you can eat what we do. No intention of making things hard, you understand—it's just that the Judge and the Mayor aim to keep this a quiet, law-abiding place."

"I understand. Certainly no hard feelings…because you won't have occasion to lock me up."

"Glad to hear it. Any way I can help you, Son, just let me know."

"Thank you. Perhaps you can right now. Do you know of an outhouse a stranger might use? Or had I better try to hold it until I'm out of town and can find some bushes?"

The officer smiled. 'Oh, I think we can be that hospitable. The courthouse has a real citytype flush toilet—but it's not working. Let me think. Blacksmith down this way sometimes accommodates automobilists passing through. I'll walk down with you."

"That's mighty kind of you."

"Glad to. Better tell me your name."

"Ted Bronson."

The blacksmith was trimming a hoof on a young gelding. He looked up. "Hi, Deacon."

"Howdy, Tom. This young friend of mine, Ted Bronson, has a case of Kansas quickstep. Could he use your privy?"

The blacksmith looked Lazarus over. "Help yourself, Ted. Try not to go clear back to the harness section."

"Thank you, sir."

Lazarus followed the path behind the shop, was pleased to find that the privy had a door with no cracks and could be hooked from the inside. He got at the extra pocket hidden b the bib of his overalls, took out money.

Paper banknotes convincing in every detail; they were re stored replications of originals in the Museum of Ancient History in New Rome—"counterfeit" by definition but the restorations were so perfect that Lazarus would not hesitate to utter them in any bank—except for one thing: What *dates* did they carry?

He quickly shuffled the paper money into two packs: 1916 and earlier, and post-1916, then without hesitating or stopping to count, he shoved the usable banknotes into a pocket, tore page from the Montgomery Ward catalog in the cob box packaged the useless bills so that they would not be spotted as money, dropped the package into the cesspool. Then he go out coins still in that secret pocket, checked their dates.

He noted that most of them carried damning mint dates— these followed the paper money. He wasted a full second admiring a proof-perfect replica buffalo nickel—such a pretty thing! He gave sober thought, at least two seconds, to a massive twenty-dollar gold piece. Gold was gold; its value would not be diminished if he melted it down or pounded it into a shapeless lump. But it was a hazard until he could deface it, as the next town clown might not be as friendly as this one. Down it went.

He felt lighthearted then. "Queer" money was a serious offense here, good for a number of years in prisons unpleasant and difficult to escape from. But lack of money was a correctable nuisance. Lazarus had considered arriving with no money at all, then had compromised by taking enough for a few days, to let him look around, reorient, get used to the customs and the lingo again, before having to scratch for a living—he had never considered trying to fetch enough to last ten years.

Never mind, this was more fun—and good practice for the much harder job of tackling an era he had never known. Elizabethan England—that would be a *real* challenge.

He counted what he had left: three dollars and eighty-seven cents. Not bad.

The blacksmith said, "Thought you'd fallen in. Feel better?"

"Much better. Thanks a lot."

"Don't mention it. Deacon Ames says you claim to be a mechanic."

"I'm handy with tools."

"Ever work in a smithy?"

"Yes."

"Let me see your hands." Lazarus let his palms be inspected. The blacksmith said, "City feller."

Lazarus made no comment.

"Or maybe you got those soft hands in the cooler?"

"I suppose that could account for it. Thanks again for the use of your facilities."

"Wait a jiffy. Thirty cents an hour and you do what I tell you—and I may fire you after the first hour."

"Okay."

"Know anything about *automobeels?"*

"Some."

"See if you can get that Tin Lizzie moving." The smith jerked his head toward the far side of his shop.

Lazarus went outside, looked over the Ford Runabout he had noted there earlier. Its turtleback had been removed, and a wooden box had been fitted to convert it into a pickup truck. Its wheel spokes showed signs of muddy roads, but it appeared to be in fair condition. He removed the front seat, checked the gasoline with a dipstick he found there—half a tank. He checked the water, added some from the shop's pump, then opened the hood and inspected the engine.

The lead from magneto to coil box was not attached; he reconnected it.

He set the hand brake—decided that it was not very firm, so he blocked the wheels. Only then did he switch on ignition, open the throttle, and retard the spark.

He cautiously tucked his thumb by his fingers rather than around the crank—then brought the crank up high, pushed and spun it.

The motor racketed; the little car shook. He rushed to the driver's side of the car, reached in and advanced the spark three notches, and eased the throttle to idle.

The smith was watching. "All right, turn it off and come give me some wind on the forge." Neither of them mentioned the disconnected lead.

When the smith—Tom Heimenz—stopped to eat lunch, Lazarus walked two blocks to a grocery store he had passed, bought a quart of Grade-A raw milk—five cents, three cents deposit on the bottle—looked at a nickel loaf of bread, then decided to splurge on the big dime loaf; he had had no breakfast. He walked back to the blacksmith shop, and greatly enjoyed his lunch while he listened to Mr. Heimenz's opinions.

He was a Progressive-Republican, but this time time he was going to switch; Mr. Wilson had kept us out of war. "Not that he's done the country any good otherwise; the high cost of living is worse than ever—and besides that, he's pro-British. But that fool Hughes would have us in the European War overnight. It's a hard choice. I'd like to vote for La Follette, but they didn't have sense enough to nominate him. Germany's going to win, and he knows it—and we'd look pretty silly trying to pull England's chestnuts out of the fire."

Lazarus agreed solemnly.

Heimenz told "Ted" to show up at seven the next morning. But just before sundown, almost three dollars richer and his stomach well padded with sausage, cheese, and crackers, Lazarus was beyond the city-limits sign and moving west. He had nothing against the town or the blacksmith, but he had not risked this trip to spend ten years in a country town at thirty cents an hour. He intended to stir around, recapture the flavor of the time.

Besides, Heimenz had been too inquisitive. Lazarus had not minded the inspection of his hands or the suggestion that he might be fresh out of jail, and the disconnected wire was a standoff, but when Lazarus had parried a question about his accent with generalities the smith had tried to pin him down with just *where* in Indian Territory had he lived as a child and *when* did his folks come down from

Canada.

A larger community meant fewer personal questions and more opportunities to lay hands on more than thirty cents an hour without quite stealing it.

He had been walking an hour when he came across a stranded automobilist, an old country doctor plagued with a flat tire on a Maxwell. Lazarus dismounted a coal-oil sidelight and had the physician hold it while he patched the tube, replaced the tire and pumped it up, then refused a tip.

Dr. Chaddock said, “Red, do you know how to drive these gas buggies?” Lazarus admitted that he did.

“Well, son, since you’re headed west anyhow, what would you say to driving me to Lamar, then a shakedown on the couch in my waiting room, breakfast—and four bits to boot for your trouble?”

“I say Yes to all of it, Doctor—save that there’s no need to waste cash on me. I’m not broke.”

“Stuff and nonsense. Argue about it in the morning. I’m plumb tuckered out; this day started before daybreak. Used to be I’d wind the reins around the whip and nap until the mare got us home. But *these* things are stupid.”

After a breakfast of fried eggs, fried ham, fried potatoes, pancakes with sorghum and country butter, watermelon preserves, strawberry preserves, cream that would barely pour, and endless coffee saucered and blowed—the doctor’s housekeeper, his old-maid sister, had kept plying Lazarus, insisting that he wasn’t eating enough to keep a bird alive—he set out again, a dollar richer, much cleaner, and looking less like a hayseed, for spit and Shinola and elbow grease had improved the appearance of his shoes, and Miss Nettie had insisted on giving him some old clothes—”Might as well be you, Roderick, as the Salvation Army. Here, take this tie, too; Doc doesn’t wear it anymore. Look neat when you look for work, I always say—I do declare I won’t hardly open the screen door to give a man a handout if he don’t wear a necktie.”

He accepted it all, aware that she was right, aware also that Dr. Chaddock would have spent a bad night trying to sleep in his automobile while his sister worried had not Lazarus come along—accounts balanced. Miss Nettie made a neat bundle of his own clothes; he thanked her and promised to send them a postcard from Kansas City—then he abandoned the bundle in the first bushes he came to, feeling mild regret as those clothes would wear indefinitely despite the worn look built into them. But they were slightly anachronistic in cut and he had never expected to wear them longer than he had to—and a man on the road could not afford to look like a bindle stiff, which Miss Nettie probably didn't know.

He found the railroad but avoided the depot. He posted himself at the north edge of town and waited. A passenger train and a freight headed south went by; then about ten o'clock a freight showed up headed north and still slowly gathering speed; Lazarus swung aboard. He made no effort not to be seen and let the brakeman shake him down for a dollar—a replica dollar; his authentic dollars were now under a bandage on the inside of his left thigh.

The brakeman warned him that there might be a railroad dick at the next stop—don't give him more than a dollar—and there were Pinkertons in the K.C. yards if he was going that far…so don't: those beauties would take his dollar and work him over anyhow. Lazarus thanked him and thought about asking what line this was—the Missouri Pacific?—but decided that it did not matter; it was headed north, and the brakeman's advice let him know that it was going far enough to suit him.

After a long hot day, half of it in a gondola, half in an empty boxcar that was small improvement; Lazarus dropped off as the train passed through Swope Park. He was such a weary, dirty mess that he almost regretted not having bought a ticket. But he put it out of his thoughts, knowing that arriving in a city with no money could wind up as "thirty dollars or thirty days" instead of the milder tariff of a small town. As it was, he had almost six dollars, most of it "real" money.

He noted with delight that Swope Park looked familiar, despite the centuries. He hurried on through and found the end of the Swope Park streetcar line. While he waited for the infrequent weekday service, he paid a jitney for a triple-dip ice-cream cone and ate it with relish, peace in his soul. Another five cents and a long trolley ride with one transfer took him into downtown Kansas City. Lazarus enjoyed every minute and wished it were longer. How peaceful and clean and tree-shaded the city was! How gently bucolic!

He recalled another time he had visited his old hometown—what century?—sometime early in the Diaspora, he thought—when a citizen venturing out into its filthy canyon Streets wore a steel helmet simulating a wig, a bulletproof vest and codpiece, spectacles that were armor, gloves that covered brass knucks, and other concealed and illegal weapons—but rarely went out into the streets; it was more discreet to stick to transportation pods and go outdoors only in the guarded suburbs—especially after dark.

But here and now guns were legal—and no one wore them. He got off the streetcar at McGee, found the Y.M.C.A. by asking a policeman. There, for half a dollar, he was given a key to a small cubicle, a towel, and a small bar of soap.

After wallowing in a shower, Lazarus returned to the lobby, having noted both Bell and Home telephones at the desk, with a notice "Local Calls *5* cents—pay the Desk Clerk." He asked to use the telephone books, found it in the Bell System book:

"Chapman, Bowles, & Finnegan, attys at law"—R. A. Long Building, yes, that made sense. He searched again, found "Chapman Arthur J. atty," with a Paseo address.

Wait till tomorrow? No harm in seeing if Justin had the correct answers. He slid a nickel to the -desk clerk, asked for the Bell telephone.

"Number, please!"

"Central, please give me Atwater one-two-two-four."

"Hello? Is this the home of Mr. Arthur J. Chapman, the attorney?"

"This is he."

"Mr. Ira Howard told me to call you, Counselor."

"Interesting. Who are you?"

"'Life is short.'"

"'But the years are long,'" the lawyer answered.

"'Not "While the Evil Days come not."'"

"Very well. What can I do for you, sir? Trouble?"

"No, sir. Will you accept an envelope to be delivered to the secretary of the Foundation?"

"Yes. Can you bring it to my office?"

"Tomorrow morning, sir?"

"Say about nine thirty. I must be in court by ten."

"Thank you, sir; I'll be there. Good night."

"You are welcome. Good night to you, sir."

There was a writing desk in the lobby, with another notice to see the desk clerk, along with a homily: *"Have you Written to Your Mother This Week?"* Lazarus asked for a sheet of paper and an envelope, saying (truthfully) that he wanted to write home, The clerk gave them to him. "That's what we like to hear, Mr. Jenkins. Sure one sheet is enough?"

"If not, I'll ask for another. Thanks."

After breakfast (coffee and a doughnut, five cents) Lazarus located a stationery shop on Grand Avenue and invested fifteen cents in five envelopes that would nest in series, went back to the Y and prepared them, then delivered them by hand to Mr. Chapman—despite pursed-lip disapproval of Mr. Chapman's secretary.

The outer envelope read: Secretary of the Ira Howard Foundation.

The next one read: To the Secretary of the Howard Families' Association as of the year 2100 A.D.

The next one read: Please hold in the Families' Archives for One Thousand Years. Inert atmosphere recommended.

The fourth read: To be opened by the Chief Archivist in Office in Gregorian year 4291.

The fifth envelope read: Please deliver on request to Lazarus Long or to any member of his Tertius Colony family.

Inside this envelope was the envelope from the Y.M.C.A. enclosing the note Lazarus had written the night before; the —envelope had on it all the names of his Boondock family, with Lapis Lazuli and Lorelei Lee heading the list:

"4 August 1916 Greg,

"Darlings,

"I goofed. I arrived two days ago—three years early! But I still want you to pick me up exactly ten T-years after you dropped me, at the impact crater, *i.e.* 2 August 1926 *Gregorian.*

"Please assure Dora that this is *not her fault.* It is either mine, or Andy's—or perhaps the instruments we had available then were not sufficiently accurate. If Dora wants to recalibrate (not necessary, as exactly ten T-years from drop remains the rendezvous), tell her to get eclipses of Sol by Luna for this ten years from Athene— I haven't had time to look them up as I have just reached Kansas City.

"Everything is *absolutely all right.* I am in good health, have enough money, and am perfectly safe. I'll write other and longer letters—better preserved, no time to have this one etched—using all the mail drops Justin suggested.

"Kiss everyone for me. Long letter follows.

"My undying love,

"Ol' Buddy Boy

"P.S. I hope it's a boy and a girl—wouldn't that be fun!" -

DA CAPO

II

The End of an Era

25 September 1916 Greg.

Dear Laz-Lor,

This is the second of many letters I will attempt to send, using all the Delay Mail drops Justin suggested—three law firms, Chase National Bank, a time capsule to be forwarded with instructions to a Dr. Gordon Hardy via W. W. Smith via a safe-deposit box (unreliable coot, that Smith; he'll probably open it and thereby destroy it—although I don't recall it, either way), and all the other dodges I memorized, If I can get just *one* into the Archives just before the Diaspora, it should be delivered when you ask for it, late in Greg. 4291 by the schedule we worked out.

With luck, you will receive dozens of letters all at the same time. Arranged by dates, they should constitute a record of the, next ten years. There may be gaps in the account (letters that failed to get through)—if so, I'll fill those gaps (after you pick me up) by dictating to Athene, to keep my promise to Justin and to Galahad for a full report. Me, I'll be satisfied if just *one* gets through—and tell Athene to keep working on that notion of time-capsule-cum-Delay-Mail for still earlier centuries; there ought to be *some* way to make it foolproof.

I'll be using a wide variety of addressees—plus a wrinkle I thought up. I'm going to send a letter in the usual multiple covers to the Executive Computer, Secundus, Year 2000 Diaspora, to be opened by and read by the computer (untouched by human hands!) with a program to hold the message and deliver it to the Colony Leader, Tertius, the day *after* we left.

I don't believe in paradoxes. Either Minerva got that message before you were born, and filed it in dead storage, and passed it on to Athene, and now *(your* now) Ira has it and has passed it to you two—or it failed to get through at all. No anomaly, no paradox—either total successor total failure. I got the idea from the fact that the executive computer opens and reads and acts on endless written messages without referring them to the Chairman Pro Tern or to any human unless necessary.

Basic Message: (This was in my first note and will be in every letter.) I made an error in calibration and arrived three years early. This is *not* Dora's fault, and be sure to tell her I said so *before* you tell her what happened. Reassure her. Despite her tomboy rowdiness, she is *very* vulnerable and must not be hurt. If I had given her sufficiently accurate figures, she would have hit any split second I asked for; of this I am certain.

Basic rendezvous time and place remains ten (10) T-years after you dropped me and at meteor-impact crater in Arizona, other rendezvous times & places figured from basic as before.) My error changes the Gregorian date of rendezvous to 2 August 1926—but still ten T-years after drop, as planned.

If Dora will worry less if she finds the error in the data I gave her, here are time marks she can rely on: Gregorian dates of total eclipses by Luna of Sol with respect to Terra between Gregorian 2 Aug 1916 and 2 Aug 1926.

1918 June 81923 September 10
1919 May 291925 January 24
1922 September 211926 January 14

If Dora wants to be still fussier, she can get any ancient Solar System date from Athene she wants; the Great Library at New Rome perpetuated endless stuff of that sort. But Dora has in her own gizzards everything she really needs.

Recapitulation:

1.Pick me up ten T-years after you dropped me.

2.I'm three years early—my error, *not* Dora's.

3.I'm tine, healthy, safe, holding, miss my darlings, and send love to all of you.

Now the hairy & scary adventures of a time-traveler— To begin with, they have been neither hairy nor scary, I've been careful to attract no attention, as retiring as a mouse at a cat show. Whenever the locals rub blue mud in their navels, I rub blue mud in mine just as solemnly.

I agree with the politics of anyone who speaks to me, attend the church he does—while sheepishly admitting that I've missed lately—I listen instead of talking (difficult as you may find that to believe), and I never talk back. If someone tries to rob me, I will not kill him or even break his arms; I'll shut up and let him have all he can find on me. My fixed purpose is to be on the lip of that crater in Arizona ten years from now; I shan't let anything jeopardize keeping our date. I am not here to reform this world; I am simply revisiting the scenes of my childhood.

It has been easier than I expected. Accent gave me some trouble at first. But I listened and now speak as harsh a Cornbelt accent as I did as a youngster. It is amazing how things have come back. I confirm from experience the theory that childhood memories are permanent, even though one may "forget" them until restimulated. I left this city when I was younger than you two are; I have been on more than two hundred planets since then, I have forgotten most of them.

But I find that I *know* this city.

Some changes…but changes in the other entropy direction; I am now seeing it as it was when I was four T-years old. I *am* four years old elsewhere in this city. I have avoided that neighborhood and have not yet tried to see my first family—the idea makes me a bit uneasy. Oh, I shall, before I leave to travel around the country; I'm not afraid of being recognized by them. Impossible!

I look like a young man and much—I think—as I looked when I was in fact a young man. But no one *here* has ever seen what that four-year-old will look like when he grows up. My only hazard would lie in trying to tell the truth. Not that I would be believed—no one here believes even in space travel, much less time travel—but because I would risk being locked up as "crazy"—a nonscientific term meaning that the person to whom one applies that label has a world picture differing from the accepted one.

Kansas City in 1916— You put me down in a meadow; I climbed the fence and walked to the nearest town. No one noticed us—tell Dora that she did it slick as a pickpocket. The town was pleasant, the people friendly; I stayed a day to get reoriented, then moved on to a larger town, did the same there and got clothes to change me from a farm worker into someone who would not be conspicuous in a city. (You dears, who never wear clothes when you don't need them—except festive occasions—would have trouble believing how status here-&-now is shown by clothes. *Far* more so than in New Rome—here one can look at a person and tell age, sex, social status, economic status, probable occupation, approximate education, and many other things, just *by* clothing. These people even swim with clothes on—I am not farcing; ask Athene. My dears, they *sleep* in clothes.)

I took a railroad train to Kansas City. Ask Athene to display a picture of one from this era. This culture is prototechnical, just beginning to shift from human muscle power and animal power to generated power. Such as there is originates from burning natural fuels or from wind or waterfall. Some of this is converted into primitive electrical power, but this railroad train was propelled by burning coal to produce expanding steam.

Atomic power is not even a theory; it is a fancy of dreamers, taken less seriously than "Santa Claus." As for the method for moving the *Dora,* no one has the slightest notion that there is any way of grasping the fabric of spacetime. (I could be wrong. The many tales of UFO's and of strange visitors, throughout all ages, suggest that I am not the first time-tripper by thousands, or millions. But perhaps most of them are as reluctant to disturb the "native savages" as I am.)

On arrival in Kansas City I took lodging at a religious hilton. If you received my arrival note, it was on stationery bearing its emblem. (I hope that note is the last I will have to entrust to paper and ink—but it took time to arrange for photoreduction and etching. The technology and materials available here-&-now are very primitive, even when I have privacy to use other techniques.)

As a temporary base this religious hilton offers advantages. It is cheap, and I have not yet had time to acquire all the local money I will need. It is clean and safe compared with commercial hiltons costing the same. It is near the business district. It offers all that I now need and no more. And it is monastic.

"Monastic"? Don't look surprised, my loves. I expect to remain celibate throughout these ten years, while dreaming happy fantasies of all my darlings, so many years & lightyears away.

Why? The local mores— Here the coupling of male and female is *forbidden by law* unless specifically licensed by the state in a binding monogamy with endless legal, social, and economic consequences.

Such laws are made to be broken—and are. About three squares or a few hundred meters from this monastic hilton, the "Y.M.C.A.," starts the "red-light" district, an area devoted to illicit but tolerated female prostitution— and the fees are low. No, I am not too lazy to walk that far; I've talked to some of these women—they "walk a beat" offering their services to men on the street. But, my dears, these women are *not* recognized artists, proud of their great vocation. Oh, dear, no! They are pathetic drabs, furtive and ashamed. They are at the bottom of the social pyramid, and many (most?) are in thrall to males who take their meager earnings.

I do not think there is a Tamara, or even a pseudoTamara, in all of Kansas City. Outside the 'red-light' district there are younger and prettier women available for higher fees and by more complex arrangements—but their status is still zero. No proud and happy artists. So they are no temptation; I would not be able to put out of my mind the gruesome fashion in which they are mistreated under local laws and customs.

(I tipped those I talked to; time is money to them.)

Then there are women who are *not* of the profession.

From my earlier life here I know that a high percentage of both "single" women and "married" women (a sharp dichotomy, much sharper than on Tertius or even Secundus)—many of these will chance unlicensed coupling for fun, adventure, love, or other reasons. Most women here are thus available sometimes and with some men— although not with all men nor all the time; here-&-now the sport is necessarily clandestine.

Nor do I lack confidence, nor have I contracted the local "moral" attitude.

But the answer is again No. Why?

First reason: It is all too likely to get one's arse shot off!

No joke, dears. Here-&-now almost every female is quasi-property of some male. Husband, father, sweetheart, betrothed—someone, If he catches you, he may kill you—and public opinion is such that he is unlikely to he punished. But if *you* kill *him*…you hang by the neck until dead, dead, dead!

It seems an excessive price. I don't plan to risk it.

There are a small but appreciable number of females who are not "property" of some male—so what's holding you back, Lazarus?

The overhead, for one thing. (Better not tell Galahad this; it would break his heart.) Negotiations are usually long, complex, and very expensive—and she is likely to regard "success" as equivalent to a proposal of lifetime contract.

On top of that she is quite likely to become pregnant. I should have asked Ishtar to offset my fertility for this trip. (I am terribly glad I did not.) (And I am honing for you darlings, my other selves—and thank, you endlessly for kicking my feet out from under me. I couldn't initiate it, dearly as I wanted to!)

Laz and Lor, believe this: Mature females here *do not know* when they are fertile. They rely either on luck or on contraceptive methods that range from chancy to worthless. Furthermore, they can't find out even from their therapists—who don't know much about it themselves. (There are no geneticists.) Therapy is very primitive in 1916. Most physicians are trying hard, I think, but the art is barely out of the witch-doctor stage. Just rough surgery and a few drugs—most of which I know to be useless or harmful. As for contraception—hold on tight!—it is forbidden *by law.*

Another law made to be broken—and is. But law and customs retard progress in such matters. At present (1916) the commonest method involves an elastomer sheath worn by the male-in other words they "couple" without touching. Stop screaming; you'll never have to put up with it. But it is as bad as it sounds.

I've saved my strongest reason for the last. Dears, I've been spoiled. In 1916 a bath once a week is considered enough by most people, too much by some. Other habits match. Such things when unavoidable can be ignored. I'm well aware that I whiff like an old billy goat in very short order myself. Nevertheless, when I have enjoyed the company of six of the daintiest darlings in the Galaxy—welt, I'd rather wait. Shucks, ten years isn't long.

If you have received any of the letters I will send over the next ten years, then you may have rushed to check tip on Gregorian 1916-1919. I selected 1919-1929 both to savor it—a vintage decade, the very last happy period in old Earth's history—but also to avoid the first of the Terran Planetary Wars, the one known now (it has already started) as "The European War," then will be called "The World War," then still later "The First World War," and designated in most ancient histories as "Phase One of the First Terran Planetary War."

Don't fret; I'm going to give it a wide berth. This involves changes in my travel plans but none in the 1926 pickup. I have little memory of this war; I was too young. But I recall (probably from school lessons rather than from direct memory) that this country got into it in 1917, and that the war ended the following year—and that date I remember exactly, as it was my sixth birthday and I thought the noise and celebration was for *me.*

What I can't remember is the exact date this country entered the war. I may not have looked it up in planning this junket; my purpose was to arrive *after* 11 November 1918, the day the war ended, and I allowed what I thought was a comfortable margin. I was fitting in those ten years most carefully, as the following ten years, 1929-1939, are decidedly *not* a vintage decade—and they end with the start of Phase Two of the First Terran Planetary War.

There is no possible way for me to look up that date— but I find one bright clue in my memory: a phrase "The Guns of August." That phrase has a sharp association in my memory with this war—and it fits, for I remember that it was warm, summery weather (August is summer here) when Cramp (your maternal grandfather, dears) took me out into the backyard and explained to me what "war" is and why we must win.

I don't think he made me understand it—but I remember the occasion, I remember his serious manner, I remember the weather (warm), and the time of day (just before supper).

Very well, I'll expect this country to declare war next August; I'll duck for cover in July—for I have no interest in this war. I know which side won (the side this country will be on) but I know also that "The War to End All Wars" (it was called that!) was a disastrous defeat both for "victors" and "vanquished"—it led inevitably to the Great Collapse and caused me to get' off this planet. Nothing I can do will change any of that; there —are no paradoxes.

So I will hole up till it's over. Almost every nation on Terra eventually picked sides—but many did no fighting, and the war did not get close to them, especially nations south of here, Central and South America, so that is probably where I will go.

But I have almost a year to plan it. It is easy here to be anything you claim to be—no identification cards, no computer codes, no thumbprints, no tax numbers. Mind you, this planet now has as many people as Secundus has (will have—your "now")—yet births are not even registered in much of this country (mine was not, other than with the Families), and a man is whoever he says he is! There are no formalities about leaving this country. It is slightly more difficult to get back in, but I have endless time to cope with that.

But I should, through ordinary prudence, go away for the duration of this war. Why? Conscription, I'm durned if I'll try to explain that term to girls who just barely know what a war is, but it means "slave-armies"—and it means to *me* that I should have asked Isistar to make me look at least twice the apparent age I look now. If I hang around here too long, I risk becoming an involuntary "hero" in a war that was over before I was old enough to go to school.

This strikes me as ridiculous.

So I'll concentrate on accumulating money to carry me a couple of years—convert that into gold (about eight kilos, not too heavy)—then the first of next July, move south. A mild problem then, as this country is conducting a small-scale border war with the one just south of it. (Going north is out of the question; that country is already in the big war.) The ocean to the east has underwater warships in it; these tend to shoot at anything that floats. But the ocean on the other side is free of such vermin. If I take a ship going south from a seaport on the west side of this country, I'll wind up outside the fighting zones. In the meantime I must improve my Spanish— much like Galacta but prettier. I'll find a tutor—no, Laz, *not* a horizontal one. Don't you *ever* think about anything else?

(Come to think of it, dear, what else is worth thinking about? Money?)

Yes, money, at the moment, and I have plans for that. The country is about to elect a chief of government—and I am the *only* man on Terra who *knows* who will be elected. Why did it stick in my memory? Take a look at my registered Families' name.

So my pressing problem is to lay hands on money to bet on that election. What I win I'll use to gamble in the bourse—except that it won't be gambling, as this country is already in a war economy and *I* know it will continue.

I wish I could accept bets on the election instead of placing them—but that is too risky to my skin; I don't have the right political connections.

You see— No, I had better explain how this city is organized.

Kansas City is a pleasant place. It has tree-shaded streets, lovely residential neighborhoods, a boulevard and park system known throughout the planet. Its excellent paving encourages the automobile carriages that are beginning to be popular. Most of this country is still deep in mud; Kansas City's well-paved streets have more of these autopropelled vehicles than horsedrawn ones.

The city is prosperous, being the second largest market and transportation center of the most productive agricultural area on Ierra—grain, beef, pork. The unsightly aspects of this trade are down in river bottoms while the citizens live in beautiful wooded hills. On a damp morning when the wind sets from that quarter one sometimes catches a whiff of stockyards; otherwise the air is clear and clean and beautiful.

It is a quiet city. Traffic is never dense, and the clopclop of horses' hooves or the warning gong of an electrically propelled street-railroad car is just enough to accent the silence—the sounds of children at play are louder.

Galahad is more interested in how a culture uses its leisure than in its economics—and so am I, as scratching a living is controlled by circumstances. But not play. By play I do not mean sex. Sex can't take up too much time of humans matured beyond adolescence (except a few oddies like the fabled Casanova—and Galahad of course—'Me 'at's off to the Dyuke!').

In 1916 (nothing I say necessarily applies ten years later and certainly not one hundred years later; this is the very end of an era)—at this time the typical Kansas Citian makes his own play; his social events are associated with churches, or with relatives by blood and marriage, or both—dining, picnicking, playing games (not gambling), or simply visiting and talking. Most of this costs little or nothing except the expense of supporting their churches—which are social clubs as much as they are temples of religious faith.

The major commercial entertainment is called "moving pictures"—dramatic shows presented as silent black-and-white shadow pictures flickering against a blank wall. These are quite new, very popular, and very cheap—they are called "nickel-shows" after the minor coin charged as a fee. Each neighborhood (defined as walking distance) has at least one such theater. This form of entertainment, and its technological derivatives, eventually had (will have) as much to do with the destruction of this social pattern as the automobile carriages (get Galahad's opinions on this), but—in 1916—neither has as yet disturbed what appears to be a stable and rather Utopian pattern.

Anomie has not yet set in, the norms are strong, customs 'are binding, and no one here-&-now would believe that the occasional rumble is Cheyne-Stokes breathing of a culture about to die. Literacy is at the highest level this culture will ever attain—my dears, the people of 1916 simply would not *believe* 2016. They won't even believe that they are about to be enmeshed in the first of the Final Wars; that is why the man for whom I am named is about to be reelected. "We Are Neutral." "Too Proud to Fight." "He Kept Us Out of War." Under these slogans they are marching over the precipice, not knowing it is there. (I'm depressing myself—hindsight is a vice . . especially when it is foresight.)

Now let's look at the underside of this lovely city:

The city is a nominal democracy. In fact it is nothing of the sort. It is governed by one politician who holds no office. Elections are solemn rituals—and the outcomes are what he ordains. The streets are beautifully paved because his companies pave them—to his profit. The schools are excellent, and they actually teach—because this monarch wants it that way. He is pragmatically benign and does not overreach. "Crime" (which means anything illegal and includes both prostitution and gambling) is franchised through his lieutenants; he never touches it himself.

Much of this crime-by-definition is handled by an organization sometimes called "The Black Hand"—but in 1916 it usually has no name and is never seen. But it is why I don't dare accept election bets; I would be encroaching on a monopoly of one of this politician's lieutenants—which would be *very* dangerous to my health.

Instead, I'll bet by the local rules and keep my mouth shut.

The "respectable" citizen, with his pleasant home and garden and church and happy children, sees none of this and (I think) suspects little of it and thinks about it less.

The city is divided into zones with firm though unmarked bounds. The descendants of former slaves live in a zone that forms a buffer between the "nice" part of town and the area dominated by and lived in by the franchised monopolists of such things as gambling and prostitution. At night the zones mix only under unspoken conventions. In the daytime there is nothing to notice. The boss, maintains tight discipline but keeps it simple. I've heard that he has only three unbreakable rules: Keep the streets well paved. Don't touch the schools. Don't kill anyone south of a certain street.

In 1916 it works just fine—but not much longer. I must stop; I have an appointment at K.C. Photo Supply Company to use a lab—in private. Then I must get back to the grift: separating people from dollars painlessly and fairly legally.

Love forever and all the way back,
L

P.S. You should see me in a derby hat!

DA CAPO

III

Maureen

Mr. Theodore Bronson né Woodrow Wilson Smith aka Lazarus Long left his apartment on Armour Boulevard and drove his car, a Ford landaulet, to a corner on Thirty-first Street, where he parked it in a shed behind a pawnshop—as he took a dim view of leaving an automobile on the Street at night. Not that the car had cost Lazarus much; he had acquired it as a result of the belief of an optimist from Denver that aces back to back plus a pair showing could certainly beat a pair of jacks—Mr. "Jenkins" must be bluffing. But Mr. "Jenkins" had a jack in the hole.

It had been a profitable winter, and Lazarus expected a still more prosperous spring. His guess about a war market on certain stocks and commodities had usually been correct, and his spread of investments was wide enough that a wrong guess did not hurt him much as most of his guesses were right— they could hardly be wrong since he had anticipated stepped-up submarine warfare, knowing what would eventually bring this country into the war in Europe.

Watching the market left him time for other "investments" in other people's optimism, sometimes at pool, sometimes at cards. He enjoyed pool more, found cards more rewarding. All winter he had played both, and his plain and rather friendly face, when decorated with his best stupid look, marked him as a natural sucker—a look he enhanced by dressing as a hayseed come to town.

Lazarus did not mind other pool-hall hustlers, or "mechanics" in card games, or "reader" cards; he simply kept quiet and accepted any buildup winnings offered him, then "lost his nerve" and dropped out before the kill. He enjoyed these crooked games; it was easier—and pleasanter—to take money from a thief than it was to play an honest game to win, and it did not cost as much sleep; he always dropped out of a crooked game early, even when he was behind. But his timing was rarely that bad.

Winnings he reinvested in the market.

All winter he had stayed "'Red' Jenkins," living at the Y.M.C.A. and spending almost nothing. When the weather was very bad, he stayed in and read, avoiding the steep and icy streets. He had forgotten how harsh a Kansas City winter could be. Once he saw a team of big horses trying gallantly to haul a heavy truck up the steep pitch of Tenth Street above Grand Avenue. The off horse slipped on the ice and broke a leg—Lazarus heard the cannon bone pop. It made him feel sick, and he wanted to horsewhip the teamster—why hadn't the fool taken the long way around?

Such days were best spent in his room or in the Main Public Library near the Y.M.C.A.—hundreds of thousands of *real* books, *bound* books he could hold in his hands.. They tempted him almost into neglecting his pursuit of money. During that cruel winter he spent every spare hour there, getting reacquainted with his oldest friends—Mark Twain with Dan Beard's illustrations, Dr. Conan Doyle, the Marvelous Land of Oz as described by the Royal Historian and portrayed in color by John R. Neil, Rudyard Kipling, Herbert George Wells, Jules Verne— Lazarus felt that he could easily spend all the coming ten years in that wonderful building.

But when false spring arrived, he started thinking about moving out of the business district and again changing his *persona.* It was becoming difficult to get picked as a sucker either at pool or at poker; his investment program was complete; he had enough cash in Fidelity Savings & Trust Bank to allow him to give up the austerity of the Y.M.C.A., find a better address, and show a more prosperous face to the world—essential to his final purpose in this city: remeeting his first family—and not much time left before his July deadline.

Acquiring a presentable motorcar crystallized his plans. He spent the next day becoming "Theodore Bronson": moved his bank account one street over to the Missouri Savings Bank, and held out ample cash; visited a barber and had his hair and mustache restyled; went to Browning, King & Co., and bought clothing suitable to a conservative young businessman. Then he drove south and cruised Linwood Boulevard, watching for "Vacancy" signs. His requirements were simple: a furnished apartment with a respectable address and facade, its own kitchen and bathroom—and in walking distance of a pool hall on Thirty-first Street.

He did not plan to hustle in that pool hall; it was one of two places where he hoped to meet a member of his first family. Lazarus found what he needed, but on Armour Boulevard rather than Linwood and rather far from that pool hall. This caused him to rent two garaging spaces—difficult, as Kansas City was not yet accustomed to supplying housing for automobiles. But two dollars a month got him space in a barn close to his apartment; three dollars a month got him a shed behind the pawnshop next to the Idle Hour Billiard Parlour.

He started a routine: Spend each evening from eight to ten at the pool hall, attend the church on Linwood Boulevard that his family had attended (did attend), go downtown mornings when business required—by streetcar; Lazarus considered an automobile a nuisance in downtown Kansas City, and he enjoyed riding streetcars. He began profit-taking on his investments, coverting the proceeds into gold double eagles and saving them in a lockbox in a third bank, the Commonwealth. He expected to complete liquidation, with enough gold to carry him through November 11, 1918, well before his July departure date.

In his spare time he kept the landaulet shining, took care of its upkeep himself, and drove it for pleasure. He also worked slowly, carefully, and very privately on a tailoring job: making a chamois-skin vest that was nothing but pockets, each to hold one $20 gold piece. When completed and filled and pockets sewed shut, he planned to cover it, inside and out, with a suit vest he had used as a pattern. It would be much too warm, but a money belt was not enough for that much gold—and money that clinked instead of rustling was the only sort he was certain he could use outside the country in wartime. Besides, when filled it would be almost a bulletproof vest— one never knew what lay around the next corner, and those Latin-American countries were volatile.

Each Saturday afternoon he took conversational Spanish from a Westport High School teacher who lived nearby. All in all he kept pleasantly busy and on schedule.

That evening after locking his Ford landaulet into the shed back of the pawnshop, Lazarus glanced into a bierstube adjoining it, thinking that his grandfather might have a stein of Muehiebach there before going home. The problem of bow to meet his first family easily and naturally had occupied his mind from time to time all winter. He wanted ‘to be accepted as a friend in their (his!) home, but he could not walk up the front steps, twist the doorbell, and announce himself as a long-lost cousin—nor even as a friend of a friend from Paducah. He had *no* connections with which to swing it, and if he tried a complex lie, he was certain his grandfather would spot it.

Thus he had decided on a pianissimo double approach: the church attended by his family (except his grandfather) and the hangout his grandfather used when he wanted to get away from his daughter’s family.

Lazarus was sure of the church—and his memory was confirmed the first Sunday he had gene there, with a shock that had upset him even more than the shock of learning that he was three years early.

He saw his mother and had momentarily mistaken her for one of his twin sisters.

But almost instantly he realized why: Maureen Johnson Smith was the genetic mother of his identicals as certainly as she was his own mother. Nevertheless, it had shaken him, and he was glad to have several hymns and a long sermon in which to calm down. He avoided looking at her and spent the time trying to sort out his brothers and sisters.

Twice since then he had seen his mother at church and now could look at her without flinching and could even see that this pretty young matron was compatible with his faded image of what his mother ought to look like. But he still felt that he would never have recognized her had it not been for his sharp recollection of Lapis Lazuli and Lorelei Lee. He had illogically expected a much older woman, more as she had been when he left home.

Attending church had not resulted in his meeting her, or his siblings, although the pastor had introduced him to other parishioners. But he continued to drive his automobile to church against the day when it might be polite to offer her and his siblings a ride home—six blocks over on Benton Boulevard; the spring weather would not always be dry.

He had not been as certain of his grandfather's hangout. He was sure that this was where "Gramp" used to go ten or twelve years later-but did he go here when Woodie Smith was (is) not yet five?

Having checked the German beer parlor—and noted that it had suddenly changed its name to "The Swiss Garden"—he went into the pool hall. Pool tables were all in use; he went back to the rear, where there was one billiard table, a card table, and one for chess or checkers; no pool game being available, it seemed a good time to practice some "mistakes" at three-cushion.

Gramp! His grandfather was alone at the chess table; Lazarus recognized him at once.

Lazarus did not break stride. He went on toward the cue rack, hesitated as he was about to pass the chess table, looked down at the array. Ira Johnson looked up—seemed to recognize Lazarus, seemed about to speak and then to think better of it.

"Excuse me," said Lazarus. "I didn't mean to interrupt."

"No harm," said' the old man. (How old? To Lazarus he seemed both older and younger than he ought to be. And smaller. When was he born? Almost ten years before the Civil War.) "Just fiddling with a chess problem."

"How many moves to mate?"

"You play?"

"Some." Lazarus added, "My grandfather taught me. But I haven't played lately."

"Care for a game?"

"If you want to put up with a rusty player."

Ira Johnson picked up a white pawn and a black, put them behind his back, brought them out in his fists. Lazarus pointed, found that he had chosen the black.

Gramp started setting up pieces. "My name is Johnson," he offered.

"I'm Ted Bronsón, sir."

They shook hands; Ira Johnson advanced his king's pawn to four; Lazarus answered in kind.

They played silently. By the sixth move Lazarus suspected that his grandfather was recreating one of Steinitz's master games; by the ninth he was sure of it. Should he use the escape Dora had discovered? No that would feel like cheating—of course a computer could play better chess than I man. He concentrated on playing as well as possible without attempting Dora's subtle variation.

Lazarus was checkmated on white's twenty-ninth move, and it seemed to him that the master game had been perfectly reproduced—Wilhelm Steinitz against some Russian, what was his name? Must ask Dora. He waved to a marker, started to pay for the game; his grandfather pushed his coin aside, insisted on paying for the use of the table, and added to the marker, "Son, fetch us two sarsaparillas. That suit you, Mr. Bronson? Or the boy can fetch you a beer from those Huns next door."

"Sarsaparilla is fine, thank you."

"Ready for revenge?"

"After I catch my breath. You play a tough game, Mr. Johnson."

"Mrrrmph! *You* said you were rusty."

"I am. But my grandfather taught me when I was very young, then played me every day for years."

"Do tell. I've a grandson I play. Tyke isn't in school yet, but I spot him only a horse."

"Maybe he would play me. Even."

"Mrrmph. You'll allow him a knight, same as I do." Mr. Johnson paid for -the drinks, tipped the boy a nickel. "What business are you in, Mr. Bronson?—if you don't mind my asking."

"Not at all. In business for myself. Buy things, sell things. Make a little, lose a little."

"So? When are you going to sell me the Brooklyn Bridge?"

"Sorry, sir, I unloaded that last week. But I can offer you a bargain in Spanish Prisoners."

Mr. Johnson smiled sourly. "Guess that'll teach me."

"But, Mr. Johnson, if I told you I was a pool-hall hustler, you wouldn't let me play chess with your grandson."

"Might, might not. Shall we get set up? Your turn for white."

With the first move allowing him to control the pace. Lazarus made a slow, careful buildup of his attack. His grandfather was equally careful, left no openings in his defense. They were so evenly matched that it took Lazarus forty-one moves and much skull sweat to turn his first-move advantage into a mate.

"Play off the tie?"

Ira Johnson shook his head. "Two games a night is my limit. Two like that is over my limit. Thank you, sir; you play a fine game. For a man who is 'rusty." He pushed back his chair. "Time for me to head for the stable."

"It's raining."

"So I noticed, I'll stand in the doorway and watch for the Thirty-first Street trolley."

"I have my automobile here. I'd be honored to run you home."

"Eh? No need to. Only a block from the car line at the other end, and if I get a little damp, I'll be home and can get dry."

(More like four blocks and you'll be soaked, Gramp.) "Mr. Johnson, I'm going to crank up that flivver anyhow, to go home myself. It's no trouble to drop you anywhere; I like to drive. In about three minutes I'll pull up in front and honk. If you're there, fine. If you aren't, I'll assume that you prefer not to accept rides from strangers, and will take no offense."

"Don't be touchy. Where's your automobile? I'll come with you."

"No, please. No need for us both to go out in the rain for a one-man job. I'll slide out the back through the alley, then I'll be at the curb almost before you reach the front door." (Lazarus decided to be stubborn; Gramp could smell a mouse farther than a cat could—and would wonder why "Ted Bronson" kept a garage at hand when he claimed to live a driving distance away. Bad. How are you going to handle this, Bub? You've *got* to tell Gramp a passel of lies or you'll never get inside that house—your own home!—to meet the rest of your family. But complexity is contrary to the basic principle of successful lying, and Gramp is the very man who taught you that. Yet the truth could not serve and keeping silent was just as useless. How are you going to solve this? When Gramp is as suspicious as you are and twice as shrewd.)

Ira Johnson stood up. "Thank you, Mr. Bronson; I'll be at the front door."

By the time Lazarus had his landaulet cranked, he had settled on tactics and outlined a long-range policy: (a) Drive around the block; this wagon should be wet; (b) don't use this shed again; better to have this puddle jumper stolen than to leave a hole in your cover story; (c) when you surrender the shed, see if "Uncle" Dattelbaum has an old set of chessmen; (d) make your lies fit what you've said, including that too-hasty truth about who taught yot~ to play chess; (e) tell as much truth as possible even if it doesn't sound good—but, damn it, you should be a foundling…and that doesn't fit having a grandfather, unless you invent complexities, any one of which might snap back and catch you out.

When Lazarus sounded the klaxon, Ira Johnson darted out and-scrambled in. "Where now?" asked Lazarus.

His grandfather explained how to reach his daughter's home and added, "Pretty ritzy rig to call a 'flivver.'"

"I got a good price for the Brooklyn Bridge. Should I swing -up to

Linwood or follow the car tracks?"

"Suit yourself. Since you've unloaded the bridge, you might tell me about these 'Spanish Prisoners.' Good investment?"

Lazarus concentrated a while on getting his vehicle headed down the tracks while avoiding the tracks themselves. "Mr. Johnson, I evaded your question about what I do for a living."

"Your business."

"I really have hustled pool."

"Again, your business."

"And I ran out and let you pay the table fee a second time, as well as letting you pay for the pop. I did not intend to."

"So? Thirty cents, plus a nickel tip. Knock off five cents the streetcar would have cost me. That makes your half fifteen cents. If it worries you, drop it in his cup the next time you pass a blind man. I'm getting a chauffeured ride on a wet night. Cheap. This is hardly a jitney bus."

"Very well, sir. I wanted to get straight with you…because I enjoyed the games and hope to play you again."

"The pleasure was mutual. I enjoy a game where a man makes me work."

"Thank you. Now to answer your question properly: Yes, I've hustled pool—in the past. It's not what I do now. I'm in business for myself. Buying things, selling things—but not the Brooklyn Bridge. As for the 'Spanish Prisoner' con, I've had it tried on me. I deal in the commodities market, grain futures and such. I do the same with stock margins. But I won't try to sell you anything, I'm neither a broker nor a bucket-shop operator; instead I deal through established brokers. Oh, yes, one more thing—I don't peddle tips. Give a man what seems to me a good tip—and he loses his shirt and blames me. So I don't."

"Mr. Bronson, I had no call to ask about your business. That was nosy of me. But it was meant to be a friendly inquiry."

"I took it as friendly, so I wanted to give it a proper answer."

"Nosy, just the same. I don't need to know your background."

"That's just it, Mr. Johnson, I don't *have* a background. Pool hustler."

"Not much wrong with that. Pool is an open game, like chess. Difficult to cheat."

"Well…I do something that you might regard as cheating.

"Look, son—if you need a father confessor, I can tell you where to find one. I am not one."

"Sorry."

"Didn't meant to be blunt. But you do have something on your mind."

"Uh, nothing much perhaps. It has to do with having no background. None. So I go to church—to meet people. To meet nice people. Respectable people. People a man with no background otherwise could never meet."

"Mr. Bronson, everybody has *some* background."

Lazarus turned down Benton Boulevard before answering. "Not me, sir. Oh, I was born—somewhere. Thanks to the man who let me call him 'Grandfather'—and his wife—I had a pretty good childhood. But they're long gone and—shucks, I don't even know that my name is 'Ted Bronson."

"Happens. You're an orphan?"

"I suppose so. And a bastard, probably. Is this the house?' Lazarus stopped one house short of his-their home.

"Next one, with the porch light on."

Lazarus eased the car forward, stopped again. "Been nice meeting you, Mr. Johnson."

"Don't be in a hurry. These people—Bronson?—who took care of you. Where was this?"

"'Bronson' is a name I picked off a calendar. I thought it sounded better than 'Ted Jones' or 'Ted Smith.' I was probably born in the southern part of the state. But I can't prove even that."

"So? I practiced medicine down that way at one time. What county?" (I know you did, Gramp—so let's be careful with this one.) "Greene County. I don't mean I was born there; I just mean I was told I came from an orphanage in Springfield."

"Then I probably didn't deliver you; my practice was farther north. Mrrph. But we might be kinfolk."

"Huh? I mean 'Excuse me, Dr. Johnson?'"

"Don't call me 'Doctor,' Ted; I dropped that title when I quit delivering babies. What I mean is this: When I first saw you, you startled me. Because you are the spit 'n'image of my older brother, Edward…who was an engineer on the St. Looie and San Francisco… till he lost his air brakes and that ended his triflin' ways. He had sweethearts in Fort Scott, St. Looie, Wichita, and Memphis; I've no reason to think he neglected Springfield. Could be."

Lazarus grinned. "Should I call you 'Uncle'?"

"Suit yourself."

"Oh, I shan't. Whatever happened, there's no way to prove it. But it would be nice to have a family."

"Son, quit being selfconscious about it. A country doctor learns that such mishaps are far more common than most people dream. Alexander Hamilton and Leonardo da Vinci are in the same boat with you, to name just two of the many great men entitled to wear the bend sinister. So stand tall and proud and spit in their eyes. I see the parlor light is still burning; what would you say to a cup of coffee?"

“Oh, I wouldn’t want to inconvenience you—or disturb your family.”

“It’ll do neither. My daughter always leaves the pot on the back of the range for me. If she happens to be downstairs in a wrapper—unlikely—she’ll go flying up the back stairs, then reappear instantly down the front stairs, dressed fit to kill. Like a fire horse when the bell rings; I don’t know how she does it. Come on in.”

Ira Johnson unlocked the front door, then called out as he opened it: “Maureen! I have company with me.”

“Coming, Father.” Mrs. Smith met them in the hall, moving with serene dignity and dressed as if she expected callers. She smiled, and Lazarus suppressed his excitement.

“Maureen, I want to present Mr. Theodore Bronson. My daughter, Ted—Mrs., Brian Smith.”

She offered her hand. “You are most welcome, Mr. Bronson,” Mrs. Smith said in warm, rich tones that made Lazarus think of Tamara.

Lazarus took her hand gently, felt his fingers tingle, had to restrain himself from making a deep bow and kissing it. He forced himself to give only a hint of a bow, then let go at once. “I am honored, Mrs. Smith.”

“Do come in and sit down.”

“Thank you, but it’s late, and I was merely dropping your father off on my way home.”

“Must you leave so quickly? I was simply darning stockings and reading the ‘Ladies’ Home Journal’—nothing important.”

“Maureen, I promised Mr. Bronson a cup of coffee. He fetched me home from the chess club and saved me a soaking.”

“Yes, Father, right away. Take his hat and make him sit down.” She smiled and left.

Lazarus let his grandfather seat him in the parlor, then took advantage of the moments his mother was out of sight to quiet down and to glance around. Aside from the fact that the room had shrunk, it looked much as he remembered it; an upright piano *she* had taught him to play; fireplace with gas logs, mantel shelf with beveled mirror above; a glass-fronted sectional bookcase; heavy drapes and lace curtains; his parent’s wedding picture framed with their hearts & flowers marriage license, and balancing this a reproduction of Millet’s “Gleaners,” and other pictures large and small; a rocking chair, a platform rocker with a footstool, straight chairs, arm chairs, tables, lamps, all crowded and in an easygoing mixture of mission oak and bird’s-eye maple. Lazarus felt at home; even the wallpaper seemed familiar—save that he realized uneasily that he had been given his father’s chair.

An archway, filled by a beaded portiere, led into the living room, now dark. Lazarus tried to recall what should be in there and wondered if it would look just as familiar. The parlor was immaculately neat and clean, and kept that way, he knew, despite a large family, by the living room being used mainly by children while this room was reserved for their elders and for guests. How many kids now? Nancy, then Carol, and Brian Junior, and George, and Marie—and himself—and since this was early 1917 Dickie had to be about three, and Ethel would still be in diapers.

What was that behind his mother's chair? Could it be?— *Yes,* it's my *elephant!* Woodie you little devil, you *know* you aren't supposed to play in here, and everything must go back into your toy box before you go up to bed; that's a flat rule. The toy animal was small (about six inches high), made of stuffed cloth, and gray with much handling; Lazarus felt resentment that such a treasure—his!—was entrusted to a young child…then managed to laugh at himself even though the emotion persisted. He felt tempted to steal the toy. "Excuse me. You were saying, Mr. Johnson?"

"I said I was temporarily delegated in loco parentis; my son-in-law has gone to Plattsburg and—" Lazarus lost the rest of the remark; Mrs. Smith returned in a soft rustle of satin petticoats, carrying a loaded tray. Lazarus jumped to relieve her of it; she smiled and let him.

By golly, that was the Haviland china he had not been allowed to touch until after he got his first long pants! And the "company" coffee service—solid silver serving pot, cream pitcher, sugar bowl and tongs, the Columbian Exposition souvenir spoons. Linen doilies, matching tea napkins, thin slices of pound cake, a silver dish of mints—how did you *do* this in three minutes or less? You're certainly doing the prodigal proud! No, don't be a fool, Lazarus; she's doing her *father* proud, entertaining his guest—you are a faceless stranger.

"Children all in bed?" inquired Mr. Johnson.

"All but Nancy," Mrs. Smith answered, serving them. "She and her young man went to the Isis and should be home soon."

"Show was over half an hour ago."

"Is there any harm in their stopping for a sundae? The ice-cream parlor is on a brightly lighted corner right where they catch their streetcar."

"A young girl shouldn't be out after dark without a chaperon."

"Father, this is 1917, not 1890. He's a fine boy…and I can't expect them to miss an episode of their serial—Pearl White and very exciting; Nancy tells me all about it. With a William S. Hart feature tonight, I understand; I would have enjoyed seeing that myself."

"Well, I've still got my shotgun."

"Father."

Lazarus concentrated on remembering to eat cake with a fork.

"She's trying to bring me up," Gramp said grumpily. "Won't work."

"I'm sure Mr. Bronson is not interested in our family problems," Mrs. Smith said quietly. "If they were problems. Which they are not. May I warm your coffee, Mr. Bronson?"

"Thank you, ma'am."

"That's right, he isn't. But Nancy should be told soon. Maureen, take a close look at Ted. Ever seen him before?"

His mother looked over her cup at Lazarus, put it down and said, "Mr. Bronson, when you came in, I had the oddest feeling. At church, was it not?"

Lazarus admitted that such could have been the case. Gramp's brows shot up. "So? I must warn the parson. But even if you did meet there—"

"We did not meet at church, Father. What with herding my zoo I barely have time to speak to Reverend and Mrs. Draper. But now that I think about it, I'm sure I saw Mr. Bronson there last Sunday. One does notice a new face among old familiar ones."

"Daughter, as may be, that wasn't what I meant. Who does Ted look like? No, never mind—doesn't he look like your Uncle Ned?"

His mother again looked at Lazarus. "Yes, I see a resemblance. But he looks even more like you, Father."

"No, Ted's from Springfield. All my sins were farther north."

"Father."

"Daughter, quit worrying about me rattling the family skeleton. It's possible that— Ted, may I tell it?"

"Certainly, Mr. Johnson. As you said, it's nothing to be ashamed of —and I'm not."

"Ted is an orphan, Maureen, a foundling. If Ned weren't warming his toes in hell, I'd ask him some searching questions. The time and place is right, and Ted certainly looks like our kin."

"Father, I think you are embarrassing our guest."

"I don't. And don't you be so hoity-toity, young lady. You're a grown woman, with children; you can stand plain talk."

"Mrs. Smith, I am not embarrassed. Whoever my parents were, I am proud of them. They gave me a strong, healthy body and a brain that serves my needs—"

"Well spoken, young man!"

"—and while I would be proud to claim your father as my uncle— and you as my cousin—if it were so—it seems more likely that my parents were taken by a typhoid epidemic down that way; the dates match well enough."

Mr. Johnson frowned. "How old are you, Ted?"

Lazarus though fast and decided to be his mother's age. "I'm thirty-five."

"Why, that just *my* age!"

"Really, Mrs. Smith? If you hadn't made clear that you have a daughter old enough to go to the picture show with a young man, *I* would have thought you were about eighteen."

"Oh, go along with you! I have eight children."

"Impossible!"

"Maureen doesn't look her age," agreed her father. "Hasn't changed since she was a bride. Runs in the family; her mother doesn't have a gray hair today." (Where is Grandma?—oh, yes, so don't ask.) "But, Ted, you don't look thirty-five either. I would have guessed middle twenties."

"Well, I don't know exactly how old I am. But I *can't* be younger than that. I might be a bit older." (Quite a bit, Gramp!) "But it's close enough that when I'm asked I just put down the Fourth of July, 1882."

"Why that's *my* birthday!"

(Yes, Mama, I know.) "Really, Mrs. Smith? I didn't mean to steal your birthday. I'll move over a few days—say the first of July. Since I'm not certain anyhow."

"Oh, don't do that! Father—you must bring Mr. Bronson home for dinner on our joint birthday."

"Do you think Brian would like that?"

"Certainly he would! I'll write to him about it. He'll be home long before then in any case. You know Brian always says, 'The more, the merrier!' We'll be expecting you, Mr. Bronson."

"Mrs. Smith. that's most kind of you, but I expect to leave on a long business trip on the first of July."

"I think you have let Father scare you off. Or is it the prospect of eating dinner with eight noisy children? Never mind: my husband will invite you himself—and then we will see what you say."

"In the meantime, Maureen, stop crowding him; you've got him flustered. Let me see something. You two stand up, side by side. Go ahead, Ted; she won't bite you."

"Mrs. Smith?"

She shrugged and dimpled, then accepted his hand to get up out of her rocking chair. "Father always wants to 'see something.'"

Lazarus stood by her, facing his grandfather, and tried to ignore her fragrance—a touch of toilet water, but mostly the light, warm, delicious scent of sweet and healthy woman. Lazarus was afraid to think about it, was careful not to let it show in his face. But it hit him like a heavy blow.

"Mrrrph. Both, of you step up to the mantel and look at yourselves, in the glass. Ted, there was no typhoid epidemic down that way in 'eighty-two. Nor 'eighty-three."

“Really, sir? Of course I can’t remember.” (And I shouldn’t have tossed in that flourish! Sorry, Gramp. Would you believe the truth? You might…out of all the men I’ve ever known. Don’t risk it, Bub, forget it!)

“Nope. Just the usual number of dumb fools too lazy to build their, privies a proper distance from their wells. Which I feel certain could not describe your parents. Can’t guess about your mother, but I think your father died with his hand on the throttle, still trying to gain control. Maureen?”

Mrs. Smith stared at her reflection and that of their guest. She said slowly, “Father…Mr. Bronson and I look enough alike to be brother and sister.”

“No. First cousins. Although with Ned gone there’s no way to prove it. I think—”

Mr. Johnson was interrupted by a yell from the front staircase landing: “Mama! *Gramp!* I want to be buttoned up!”

Ira Johnson answered, “Woodie, you rapscallion, get back upstairs!”

Instead the child came down—small, male, freckled, and ginger-haired, dressed in Dr. Denton’s with the seat flapping behind him. He stared at Lazarus with beady, suspicious eyes. Lazarus felt a shiver run dawn his spine and tried not to look at the child.

“Who’s *that?”*

Mrs. Smith said quickly, “Forgive me, Mr. Bronson.” Then she added quietly, “Come here, Woodrow;”

Her father said, “Don’t bother, Maureen. I’ll take him up and blister his bottom—then I’ll button him.”

“You and what six others?” the boy child demanded.

“Me, myself, and a baseball bat.”

Mrs. Smith quietly and quickly attended to the child’s needs, then hurried him out of the room and headed him up the stairs. She returned and sat down. Her father said, “Maureen, that was just an excuse. Woodie can button himself. And he’s too old for that baby outfit. Put him in a nightshirt.”

“Father, shall we discuss it another time?”

Mr. Johnson shrugged. “I’ve overstepped again. Ted, that one’s the chessplayer. He’s a stem-winder. Named for President Wilson, but he’s not ‘too proud to fight.’ Mean little devil.”

“Father.”

“All right, all right—but it’s true. That’s what I like about Woodie. He’ll go far.”

Mrs. Smith said, “Please excuse us, Mr. Bronson. My father and I sometimes differ a little about how to bring up a boy. But we should not burden you with it.”

"Maureen, I simply won't let you make a 'Little Lord Fauntleroy' out of Woodie."

"There's no danger of *that,* Father; he takes after you. My father was in the War of 'Ninety-eight, Mr. Bronson, and the Insurrection—"

"And the Boxer Rebellion."

"—and he can't forget it—"

"Of course not. I keep my old Army thirty-eight under my pillow, my son-in-law being away."

"Nor would I wish him to forget; I am proud of my father, Mr. Bronson, and hope that all my sons will grow up with his same spirit. But I want them to learn to speak politely, too."

"Maureen, I would rather have Woodie sass me than be timid with me. He'll learn to speak politely soon enough; older boys will take care of that. A lesson in manners punctuated with a black eye sticks. I know from experience."

The discussion was interrupted by the jingle of the doorbell. "That should be Nancy," Mr. Johnson said and got up to answer. Lazarus heard Nancy say goodnight to someone, then stood up himself to be introduced, and was not startled only because he had already picked out his eldest sister at church and knew that she looked like a young edition of Laz and Lor. She spoke to him politely but rushed upstairs as soon as she was excused.

"Do sit down, Mr. Bronson."

"Thank you, Mrs. Smith, but you were staying up until your daughter returned. She has, so I will leave."

"Oh, there's no hurry; Father and I are night owls."

"Thank you very much. I enjoyed the coffee and the cake, and most especially the company. But it is time for me to say goodnight. You have been most kind."

"If you must, sir. Will we see you at church on Sunday?"

"I expect to be there, ma'am."

Lazarus drove home in a daze, body alert but thoughts elsewhere. He reached his apartment, bolted himself in, checked windows and blinds automatically, stripped off his clothes, and started a tub. Then he looked grimly at himself in the bathroom mirror. "You stupid arsfardel," he said with slow intensity. "You whirling son of a bitch. Can't you do *anything* right?"

No, apparently not, not even something as simple as getting reacquainted with his mother. Gramp had been no problem; the old goat had given him no surprises—other than being shorter and smaller than Lazarus remembered. He was just as grumpy, suspicious, cynical, formally polite, belligerent—and delightful—as Lazarus had remembered.

There had been worrisome moments when he had "thrown himself on the mercy of the court." But that gambit had paid off better than Lazarus had had any reason to hope—through an unsuspected family resemblance. Lazarus not only had never seen Gramp's elder brother (dead before Woodie Smith was born), but he had forgotten that there ever was an Edward Johnson.

Was "Uncle Ned" listed with the Families? Ask Justin. Never mind, not important. Mother had put her finger on the correct answer: Lazarus resembled his grandfather. And his mother, as Gramp had pointed out. But that had resulted only in conjectures concerning dear old Uncle Ned and his "trifling ways," ones that Mother did not mind listening to, once she was certain that her guest was not embarrassed.

Embarrassed? It had changed his status from stranger to "cousin." Lazarus wanted to kiss Uncle Ned and thank him for those "trifling ways" that made kinship plausible. Gramp believed the theory—of course; it was his own—and his daughter seemed willing to treat it as a possible hypothesis. Lazarus, it's just the inside track you need—if you weren't such a blithering idiot!

He tested the bath water—cold. He shut it off and pulled the plug. A promise of hot water all day long had been one inducement when Lazarus had rented this musty cave. But the janitor turned off the water heater before he went to bed, and anyone looking for hot water later than nine was foolish. Well, he qualified as foolish, and perhaps cold water would do more for his unstable condition than hot—but he had wanted a long, hot soak to soothe his nerves and help him think.

He had fallen in love with his mother.

Face it, Lazarus. This is impossible, and you don't know how to handle it. In more than two thousand years of one silly misadventure after the other this is the most preposterous predicament you ever got into.

Oh, sure, a son loves his mother. As "Woodie Smith," Lazarus had never doubted that. He had always kissed his mother goodnight (usually), hugged her when he saw her (if he wasn't in a hurry), remembered her birthday (almost always), thanked her for cookies or cake she left out for him whenever he was out late (except when he forgot), and sometimes had told her he loved her.

She had been a good mother. She had never, screamed at him (or at any of them) and, when necessary, had used a switch at once and the matter was over with—never that Wait-till-your-father-gets-home routine. Lazarus could still feel that peach switch on his calves; it had caused him to levitate, better than Thurston the Great, at a very early age.

He recalled, too, that as he grew older, he found that he was proud of the way she looked—always neat and standing straight and invariably gracious to his friends—not like some of the mothers of other boys.

Oh, sure, a boy loves his mother—and Woodie had been blessed with one of the best.

But this was *not* what Lazarus felt toward Maureen Johnson Smith, lovely young matron, just his "own" age. That visit this night had been delicious agony—for he had never in all his lives been so unbearably attracted, so sexually obsessed, by any woman any where or when. During that short visit Lazarus had been forced to be most careful not to let his passion show—and especially cautious not to appear too gallant, not be more than impersonally polite, not by expression or tone of voice or anything else risk arousing Gramp's always-alert suspicions, not let Gramp suspect the storm of lust that had raged up in him as soon as he touched her hand.

Lazarus looked down at proof of his-passion, hard and tall, and slapped it. "What are *you* standing up for? There's nothing doing for *you.* This is the Bible Belt."

It was indeed! Gramp did not believe in the Bible or live by Bible-Belt standards, yet Lazarus felt sure that, were he to provoke it by breaching those standards, Gramp would shoot him quite dispassionately, on behalf of his son-in-law. Possibly the old man would let the first shot go wide and give him a chance to run. But Lazarus was not willing to bet his life on it. Gramp acting for his son-in-law might feel duty bound to shoot straight—and Lazarus knew how straight the old man could shoot.

Forget it, forget it, he was not going to give either Gramp or his father any reason to shoot, or even to be angry—and *you* forget it too, you blind snake! Lazarus wondered when his father would be home, and tried to remember how he looked—found his memory blurred. Lazarus had always been closer to his Grandfather Johnson than to his father; not only had his father often been away on business, but also Gramp had been home in the daytime and willing to spend time with Woodie.

His other grandparents? Somewhere in Ohio— Cincinnati? No matter, his memory of them was so faint that it did not seem worthwhile to try to see them.

He had completed all that he had intended to do in Kansas City—and if he had the sense God promised a doorknob, the time to leave is *now.* Skip church on Sunday, stay away from the pool hall, go down Monday and sell his remaining holdings—and *leave!* Climb into the Ford—no, sell it and take a train to San Francisco; there catch the first ship south. Send Gramp and Maureen polite notes, mailed from Denver or San Francisco, saying that he was sorry but that business trip, etc.—but *Get Out of Town!*

Because Lazarus *knew* that the attraction had not been onesided—He thought that he had kept Gramp from guessing his emotional storm…but Maureen had been aware of it—and had not resented it. No, she had been flattered and pleased. They had been on the same frequency at once, and without a word or any meaningful glance or touch, her transponder had answered him, silently…then, as opportunity made it possible, she had answered overtly, once with a dinner invitation—which Gramp had tromped on—and she had promptly tromped back in a fashion that made it acceptable by the mores. Then a second time, just as he was leaving, with the also fully acceptable suggestion that she would expect to see him in church.

Well, why should a young matron, even in 1917, *not* be pleased—and flattered, and unresentful—to know that a man wanted most urgently to take her to bed and treat her with gentle roughness? If his nails were clean…if his breath was sweet…if his manners were polite and respectful—why not? A woman with eight children is no nervous virgin; she is used to a man in her bed, in her arms, in her body—and Lazarus would have bet his last cent that Maureen enjoyed it.

Lazarus had no reason then, or in his earlier life, to suspect that Maureen Smith had ever been anything but "faithful" by the most exacting Bible-Belt standards. He had no reason to think that she was even flirting with him. Her manner had not suggested it; he doubted if it ever would. But he held a deep certainty that she was as strongly attracted as he was, that she knew exactly where it could lead—and he suspected that she realized that nothing but chaperonage would stop them.

(But a father in residence and eight children, plus the contemporary mores concerning what can and can't be done, constituted a lot of chaperonage! Llita's chastity belt could hardly be more efficient.)

Let's haul it out into the middle of the floor and let the cat sniff it. "Sin?" "Sin" like "love" was a word hard to define. It came in two bitter but vastly different flavors. The first lay in violating the taboos of your tribe. This passion he felt was certainly sinful by the taboos of the tribe he had been born into—incestuous in the first degree.

But it could not possibly be incest to Maureen.

To himself? He knew that "incest" was a religious concept, not a scientific one, and the last twenty years had washed away in his mind almost the last trace of his tribal taboo. What was left was no more than that breath of garlic in a good salad; it made Maureen more enticingly forbidden (if such were possible!); it did not scare him off. Maureen did not *seem* to be his mother—because she did not fit his recollection of her either as a young woman or as an old woman.

The other meaning of "sin" was easier to define because it was not clouded by the murky concepts of religion and taboo: Sin is behavior that ignores the welfare of others.

Suppose he stuck around and managed somehow (stipulate safe opportunity) to bed Maureen with her full cooperation? Would she regret it later? Adultery? The word meant something here.

But she was a Howard, one of the early ones when marriage between Howards was a cash contract, eyes wide open, payment from the Foundation for each child born of such union—and Maureen had carried out the contract, eight paid-for children already and would stay in production for, uh, about fifteen more years. Perhaps to her "adultery" meant "violation of contract" rather than "sin"—he did not know.

But that is not the point, Bub; the real question is the only one that has *ever* stopped you when temptation coincided with opportunity—and *this* time he could consult neither Ishtar nor any geneticist. The chance of a bad outcome was slight when there were so many hurdles in the way of *any* outcome. But it was the exact risk that he had always refused to take: the chance of placing a congenital handicap on a child.

Hey, wait a minute! No such outcome *could* result because no such *had* resulted. He knew every one of his siblings, alive now or still to be born, and there had not been a defective in the lot. Not one. Therefore no hazard.

But— That was grounded on the assumption that his "no paradoxes" theory was a law of nature. But you've long been aware that the "no-paradoxes" theory itself involves a paradox—one that you've kept quiet about so as not to alarm Laz and Lor and the rest of your "present" *(that* present, not this one) family; to wit, the idea that free will and predestination are two aspects of the same mathematical truth, and the difference is merely linguistic, not semantic: the notion that his own free will could not change events here-&-now because his freewill actions here-&-now were already a part of what *had* happened in any later "here-&-now."

Which in turn depended on a solipsistic notion he had held as far back as he could remember— Cobwebs, all of it!

Lazarus, you don't *know* what trouble you might cause. So *don't!* Get out of town *now* and don't come back to Kansas City *at all!* Because, if you do, you're certain to try to get Maureen's bloomers off…and she's going to breathe hard and help. From there on only Allah knows—but it could be tragic for her and tragic for others, and as for you, you stupid stud, all balls and no brain, it could get your ass shot off…just as the twins predicted.

In which case, since you are *not* going to see your family again, there is no sense in waiting in South America for this war to end.

You've seen enough of this doomed era; ask the girls to come pick you up *now.*

Was her waist really that slender? Or did she lace it in? Shucks, it didn't matter how she was built. As with Tamara, it simply did not matter.

Dear Laz and Lor,

Darlings, I've changed plans. I've seen my first family, and there isn't anything else I want to do in this era— nothing worth sweating out most of two years in a backwater while this war drags on to its bloody and useless finish. So I want you to pick me up now, at the impact crater. Forget about Egypt; I can't get there now.

By "pick me up now" I mean Gregorian 3 March 1917—repeat, third day of March one thousand nine hundred and seventeen Gregorian, at that meteor impact crater in Arizona.

Much to tell you when I see you. Meanwhile—

My undying love,
Lazarus

Was it her voice? Or her fragrance? Or something else?

DA CAPO

IV

Home

27 March 1917 Greg.
Beloved Family,

Repeat of Basic Message: I got here three years too early—2 August 1916—but still wish to be picked up exactly ten T-years after drop, 2 August 1926—repeat *six.* Rendezvous points and alternatives from basic date as before. Please impress on Dora that this results from bad data I gave her and is *not her fault.*

I'm having a marvelous time. I got my business cleaned up and then got in touch with my first family by looking up my grandfather (Ira Johnson, Ira) and got acquainted with him first—and with the aid of a horrendous lie and a most fortunate family resemblance, Gramp is convinced that I am an unregistered son of his (deceased) brother. I didn't suggest this; it's his own idea. Consequently it's solid—and now I'm a "long-lost cousin" in my first home. Not living there, but welcome, which is very nice.

Let me give a rundown on the family, since all of you are descended from three of them: Gramp, Mama, and Woodie.

Gramp is described in that junk Justin has been cutting down to size. No changes, Justin, save that instead of being two meters tall and carved out of granite, Gramp is almost exactly my size. I am spending every minute with him that he will let me, which usually means playing chess with him several times a week.

Mama: Take Laz and Lor and add five kilos in the best places, then add fifteen T-years and a big slug of dignity. (Quit quivering your goddamn chins!) Add hair down to her waist but always coiled up on top. I don't actually know what Mama does look like other than her head and hands became of the curious custom here of wearing clothes all over at all times. And I do mean *"all* over." I know that Mama has slender ankles because I once caught a glimpse. But I would never dare stare at them; Gramp would toss me out of the house.

Papa: He is away now. I had forgotten what he looks like—I had forgotten all their faces except Gramp (who uses the same face I do!) But I've seen pictures of Papa and he looks a bit like President Teddy Roosevelt— that's "Theodore," Athene, not "Franklin"—in case you have a picture in your gizzards.

Nancy: Laz and Lor as of three standard years before I left. Not as many freckles and *very* dignified—except when it slips. She is acutely aware of (young) males, and I think Gramp is urging Mama to tell her about the Howard setup at once, so that she'll be sure to marry in the Families.

Carol: Laz and Lor again but two years younger than Nancy. She is as interested in boys as is Nancy—but frustrated; Mama has her on a. short leash. Quivers her chin, which Mama ignores.

Brian Junior: Dark hair, looks more like Papa. Rising young capitalist. Has a newspaper route which be combines with lighting gas streetlamps. Has a contract to deliver advertising handbills, for the local moving-picture theater which he farms out to his younger brother and four other boys and pays them in tickets to the theater and keeps some for his own use and sells the rest at a discount (four cents instead of five) at school. Has a vending bar for soda pop (a sweet, bubbly drink) on the corner in the summers but plans to franchise this to his younger brother this coming summer; he has another enterprise lined up. (As I recall, Brian got rich quite young.)

Let me explain something about our family. They are prosperous by here-&-now standards—but do not show it except that they live in a large house in a good neighborhood. Not only is Papa a successful businessman, but also this is a time when the Howard endowment of babies is substantial in terms of buying power—and Mama has had eight already. To all of you, being a "Howard" means a genetic heritage and a tradition—but here-&-now it means cash, money for babies—a stockbreeding scheme and we are the stock.

I think Papa must be investing the money Mama makes by having Howard babies; they certainly are not spending it—and this accords with my own dim memories. I don't know what was done for my siblings, but I received getting-started money when I first married—money I had not expected and which had nothing to do with the

Howard endowments my first wife earned by being fertile and willing. Since I married during an economic stalemate, this made a big difference. Back to the kids— The boys not only do work; they *have* to work—or they have nothing but clothes and food. The girls receive very small cash allowances but are required to do housework and to help with the younger children. This is because it is *very* difficult for a girl to earn money in this society—but a boy who will get out and *try* has endless opportunities. (This will change before the century is over, but in 1917 it is true.) All the Smith kids work at home (Mama hires a laundress one day a week, that's all), but a boy (or girl) who finds outside cash-money work is relieved of housework to that extent. Nor does he have to "pay back" this time off; he keeps what he earns and spends it or saves it, the latter being encouraged by Papa matching such savings.

If you think Papa and Mama are intentionally making moneygrubbers of their offspring, you are right.

George: Ten T-years old, Brian Jr.'s junior partner, shadow, and stooge. This will end in a few years with George busting Brian one in the mouth.

Marie: eight and a freckled *tomboy.* Mama is having a difficult time trying to make a "lady" out of her. (But Mama's gentle stubbornness—and biology—will win. Marie grew up to be the beauty of the family, with beaux underfoot—and I hated them as there had been a period when I was her pet. Marie was the only one of my siblings I was close to; it is possible to be lonely in a large family, and I was—except for Gramp, always, and Marie, for a short time.)

Woodrow Wilson Smith—still short of five by several months and as offensive a brat as was ever allowed to grow up. I am appalled to be forced to admit that this stinking little snot is the weed which grew up to be humanity's fairest flower, namely, Ol' Buddy Boy himself. So far he has spat in my hat when it was presumably out of his reach on the cloak rack in the hail, referred to me with various disparagements, of which "Here's that dude in the derby again!" is the mildest. He kicked me in the stomach when I tried to pick him up (my error; I didn't want to touch him but thought I should break myself of irrational queasiness), and accused me of cheating at chess when in fact *he* was cheating—he called my attention to something out the window, then moved my queen one square, and I caught him at it and called him on it. And so on, ad nauseam.

But I continue to play chess with him because: (a) I am determined to get along with *all* my first family for the short time I will be here; and (b) Woodie will play chess at any opportunity, and Gramp and I are the only chessplayers around who will put up with his poisonous ways. (Gramp clobbers him as necessary; I have no such privilege. But if I were not afraid to find out what would happen, I might strangle him. What *would* happen? Would half of human history disappear and the rest be changed beyond recognition? No, "paradox" is a null word; the fact that I *am* here proves that I will keep my temper long enough to get shut of the little beast.)

Richard: three and as affectionate as Woodie is difficult. Likes to sit on my lap and be told stories. His favorite is about two redheaded twins named Laz and Lor who fly a magic "airship" through the sky. I feel a tender sadness about Dickie, for he will (did) die quite young, assaulting a place called Iwo Jima.

Ethel: a heavenly smile at one end and a wet diaper at the other. Short on conversation.

That's my (our) family in 1917. I expect to stay in K.C. until Papa returns—soon, now—then leave; some of this is a strain on me, pleasant as most of it is. I may look them up when this war is over—but probably not; I don't want to crowd my welcome.

To make the above clear I should explain some of the customs here. Until Papa gets home, my status has to be through Gramp as a friend he plays chess with; it can't be anything else even though he—and perhaps Mama— believe that I am Uncle Ned's son. Why? Because I am a "young" bachelor, and by the local rules a married woman cannot have a young bachelor as a friend, particularly when her husband is out of town. The taboo is so firm I don't dare give even the appearance of violating it…on *Mama's* account. Nor would she encourage me to. Nor would Gramp permit it.

So I'm welcome in my own home *only if* I go there to see Gramp. If I telephone, I must ask for *him.* And so on.

Oh, it's permissible, on a rainy day, for me to offer a ride home to members of the Smith family at church. I am permitted to do almost anything for the kids as long as I don't "spoil" them—which Mama defines as spending much more than five cents on one of them. Last Saturday I was allowed to take six of them on a picnic in my automobile carriage. I am teaching Brian to operate it. My, interest in the kids is considered understandable by Mama and by Gramp because of my "lonely" and "deprived" childhood as an "orphan."

The one thing I must *never* do is to be alone with Mama. I don't go inside my own home unless publicly accompanied by Gramp; the neighbors would notice. I am meticulous about it; I won't risk causing Mama trouble with a tribal taboo.

I am writing this at my apartment, on a printing machine you would not believe, and must stop in order to take it downtown and photoreduce it twice, then etch it and laminate it and seal it for Delay Mail and deliver it to a drop—which kills a whole day, as L must use a rented lab and destroy intermediate stages as I go; this is not something I dare leave in an apartment to which a janitor has a key. When I get back from South America I'll make my own lab setup, one I can carry in an automobile. Paved roads will be more common this coming decade and I expect to travel that way. But I want to continue sending these letters and by as many Delay Mail drops as possible, in hope that at least one will last through the centuries and reach you. As Justin put it, the real problem is to get one to last through just the coming three centuries—I'll keep trying.

All my love to all of you,
Lazarus

DA CAPO

V

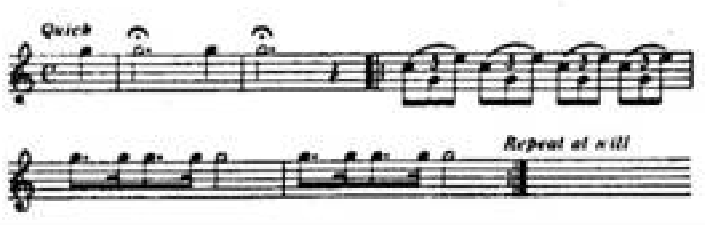

MARCH 3, 1917: KAISER PLOTS WITH MEXICO AND JAPAN TO ATTACK USA—ZIMMERMANN TELEGRAM AUTHENTIC

APRIL 2, 1917: PRESIDENT ADDRESSES CONGRESS—ASKS WAR

APRIL 6, 1917: AMERICA ENTERS WAR—CONGRESS DECLARES "A STATE OF BELLIGERENCY EXISTS"

Lazarus Long was as taken by surprise by the date of the outbreak of war with Germany as he was unsurprised by the fact itself. He was caught so flatfooted that it was not until later that he analyzed *why* the "hindsight" he had relied on had proved even more myopic than foresight.

The resumption of unrestricted U-boat warfare early in 1917 had not surprised him; it fitted his recollections of his earliest history lessons. The Ziminermann telegram did not disturb him even though he did not remember it; it matched a pattern he did remember—again from history, not the direct memories of a very small child—a period of three years, 1914 to 1917, when the United States had inched slowly from neutrality to war. Woodie Smith had been not yet two when the war started, not yet five when his country got into it; Lazarus had no firsthand memories of foreign affairs of a time when Woodie had been too young to grasp such remote improbabilities.

The timetable Lazarus had fixed on, once he discovered that he had arrived three years early, had worked so well that he did not realize that its "clock" was wrong until the event slapped him in the face. When he was able to take time to analyze his mistake, he saw that he had committed the prime sin against survival: He had indulged in wishful thinking. He had *wanted* to believe his timetable.

He had not wanted to leave his newly found first family so quickly. All of them. But especially Maureen.

Maureen— Once he decided to stay on till July 1 as originally planned, after a long night of wrestling with his troubled soul—a night of indecision and worry and letters written and destroyed—he discovered that he *could* stay and treat Mrs. Brian Smith with friendly but formal politeness, avoid any sign of interest in her more personal than the mores permitted. He managed to shift to his celibate mode—happy to be near her when it was possible to be so without causing Mrs. Grundy's nose to twitch—or the even sharper nose of his grandfather.

Lazarus had indeed been happy. As with Tamara—or the twins—or any of his darlings—coupling was not necessary to love. When it was expedient, he could bank the fires and forget it. He was never for one instant unaware of the tremendous physical attraction of this woman who had been his mother more than two thousand years ago (in some odd direction)—but the matter was shelved; it did not affect his manner or lessen his happiness when he was permitted to be near her. He believed that Maureen knew what he was doing (or refraining from doing) and why, and that she appreciated his restraint.

All during March he sought approved ways to see her. Brian Junior wanted to learn to drive; Gramp ruled that he was old, enough, so Lazarus taught him—picked him up at the house and returned him there—and often was rewarded with a glimpse of Maureen. Lazarus even found a way (other than chess) to reach Woodie. He took the child to the Hippodrome Theater to see the magician Thurston the Great—then promised to take him (when it opened for the summer) to "Electric Park," an amusement park and Woodie's idea of heaven. This consolidated a truce between them.

Lazarus delivered the child home from the theater, sound asleep and with no more than normal wear and tear, and was rewarded by sharing coffee with Gramp and Maureen.

Lazarus volunteered to help with the Boy Scout troop sponsored by the church; George was a Tenderfoot, and Brian was working toward Eagle. Lazarus found being an assistant scoutmaster pleasant in itself—and Gramp invited him in when he gave the boys a lift home.

Lazarus gave little attention to foreign affairs. He continued to buy the Kansas City *Post* because the newsboy at Thirty-first and Troost regarded him as a regular customer— a real sport who paid a nickel for a penny paper and did not expect change. But Lazarus rarely read it, not even the market news once he completed his liquidations.

The week starting Sunday the first of April Lazarus did not plan to see his family for two reasons: Gramp was away, and his father was home. Lazarus did not intend to meet his father until he could manage it naturally and easily through Gramp. Instead he stayed home, did his own cooking, caught up on chores, did mechanical work on his landaulet and cleaned and polished it, and wrote a long letter to his Tertius family.

This he took with him Thursday morning, intending to prepare it for Delay Mail. He bought a newspaper as usual at Thirty-first and Troost; after he was seated in a streetcar, he glanced at its front page —then broke his habit of enjoying the ride by reading it carefully. Instead of going to the Kansas City Photo Supply Company, he went to the Main Public Library's reading room and spent two hours catching up with the world—the local papers, the Tuesday New York *Times* where he read the text of the President's message to Congress—”God helping her, she can do no other!”—and the Chicago *Tribune* of the day before. He noted that the *Tribune,* staunchest foe of England outside the German-language press, was now hedging its bets.

He then went to the men's toilet, tore into small pieces the letter he had prepared, and flushed it down a water closet.

He went to the Missouri Savings Bank, drew out his account, went next to the downtown office of the Santa Fe Railroad and bought a ticket for Los Angeles with thirty-day stopover privilege at Flagstaff, Arizona, stopped at a stationer's, then on to the Commonwealth Bank and got at his lockbox, removed from it a smaller box heavy with gold. He asked to use the bank's washroom; his status as a lockbox client got him this favor.

With gold pieces distributed among thirteen pockets of his coat, vest, and trousers Lazarus no longer looked smart—he tended to sag here and there—but if he walked carefully, he did not jingle. So he walked most carefully, had his nickel ready on boarding a streetcar, then stood on the rear platform rather than sit down. He was not easy until he was locked and bolted into his apartment.

He stopped to make and eat a sandwich, then got to work on tailoring, sewing the yellow coins into one-coin pockets of the chamois-skin vest he had made earlier, then covered it with the vest from which it had been patterned. Lazarus forced himself to work slowly, restoring seams so neatly that the nature of the garment could not be detected by anyone not wearing it.

About midnight he had another sandwich, got back to work.

When he was satisfied with fit and appearance, he put the money vest aside, placed a folded blanket on the table where he had been working, placed on it a heavy, tall Oliver typewriter. He attacked the clanking monster with two fingers:

"At Kansas City, Gregorian 5 April 1917

"Dearest Lor, and Laz,

"EMERGENCY. I need to be picked up. I hope to be at the impact crater by Monday 9 April 1917 repeat nine April nineteen seventeen. I may be one or two days late. I will wait there ten days, if possible. If not picked up, I will try to keep the 1926 (nineteen twenty-six) rendezvous.

"Thanks!
"Lazarus"

Lazarus typed two originals of this, then addressed two sets of nesting envelopes, using different choices on each and addressing the outermost envelopes one to his local contact and the other to a Chicago address. He then wrote a bill of sale:

"For one dollar in hand and other good and valuable considerations I sell and convey all my interest, right, and title to one Ford Model-T automobile, body style 'Landaulet,' engine number 1290408, to Ira Johnson, and warrant to him and his successors that this chattel is unencumbered and that I am sole owner with lull right to convey title.
(s)Theodore Bronson
"April 6, 1917 AD."

He placed this in a plain envelope, put it with the others, drank a glass of milk, went to bed.

He slept ten hours, undisturbed by cries, of *"Extra! Extra!"* along the boulevard; he had expected them, his subconscious discounted them and let him rest—he expected to be very busy the next several days.

When his inner clock called him, he got up, quickly bathed and shaved, cooked and ate a large breakfast, cleaned his kitchen, removed all perishables from his icebox and emptied them into the garbage can on the rear service porch and turned the ice card around to read "NO ICE TODAY" and left fifteen cents on top of the icebox, emptied the drip pan.

There was a fresh quart of milk by the ice. He had not ordered it, but he had not specifically *not* ordered it. So he put six cents in an empty bottle, with a note telling the milkman not to leave milk until the next time he left money out.

He packed a grip—toilet articles, socks, underwear, shirts, and collars (to Lazarus, those high starched collars symbolized all the tightminded taboos of this otherwise pleasant age), then rapidly searched the apartment for everything of a personal nature. The rent was paid till the end of April; with good luck he expected to be in the *Dora* long before then. With bad luck he would be in South America—but with worse luck he would be somewhere else—anywhere— and under another name; he wanted "Ted Bronson" to disappear without a trace.

Shortly he had waiting at the front door a grip, an overcoat, a winter suit, a set of chessmen in ivory and ebony, and a typewriter. He finished dressing, being careful to place three envelopes and his ticket in an inner pocket of his suit coat. The money vest was too warm but not uncomfortable; the distributed weight was not bad.

He piled it all into the tonneau of the landaulet, drove to the southside postal substation, registered two letters, went from there to the pawnshop next to the Idle Hour Billiard Parlor. He noted with wry amusement that "The Swiss Garden" had its blinds down and a sign "CLOSED."

Mr. Dattelbaum was willing to accept the typewriter against a gun but wanted five dollars to boot for the little Colt pistol Lazarus selected. Lazarus let the pawnbroker conduct both sides of the dicker.

Lazarus sold the typewriter and the suit, left his overcoat and took back a pawn ticket, received the handgun and a box of cartridges. He was in fact giving Mr. Dattelbaum the overcoat since he had no intention of redeeming it—but Lazarus got what he wanted plus three dollars cash, had unloaded chattels he no longer needed, and had given his friend the pleasure of one last dicker.

The gun fitted into a leftside vest pocket Lazarus had retailored into a makeshift holster. Short of being frisked— most unlikely for so obviously respectable a citizen—it would not be noticed. A kilt was better both for concealment and for quick access—but it was the best he could manage with the clothes he had to wear, and this gun had had its front sight filed off by some practical-minded former owner.

He was now through with Kansas City save for saying goodbye to his first family—then grab the first Santa Fe rattler west. It distressed him that Gramp had gone to St. Louis, but that could not be helped, and this one time he would bull his way in, with a convincing cover story: The chess set as a present for Woodie was reason enough to show up in person, the bill of sale gave an excuse to speak to his father—No, sir, this is not exactly a present…but somebody might as well drive it until this war is over…and if by any chance I don't come back—well, this makes things simpler—you understand me, sir?—your father-in-law being my best friend and sort of my next of kin since I don't have any.

Yes, that would work and result in a chance to say goodbye to all the family, including Maureen. (Especially Maureen!) Without quite lying. Best way to lie.

Just one thing— If his father wanted to enlist him into his own outfit, then one lie *must* be used: Lazarus was dead set on joining the Navy. No offense intended, sir; I know you're just back from Plattsburg, but the Navy needs men, too.

But he would not tell that lie unless forced to.

He left his car hack of the pawnship, crossed the street to a drugstore, and telephoned:

"Is this the Brian Smith residence?"

'Yes, it is."

"Mrs. Smith, this is Mr. Bronson. May I speak to Mr. Smith?"

"This isn't Mama, Mr. Bronson; this is Nancy. Oh, isn't it *terrible!"*

"Yes, it is, Miss Nancy."

"You want to speak to Papa? But he's not *here,* he's gone to Fort Leavenworth. To report in—and we don't know *when* we'll see him again!"

"There, there—please don't cry. Please!"

"I was *not* crying. I'm just a teensy bit upset. Do you want to speak to Mama? She's here…but she's lying down."

Lazarus thought fast. Of course he wanted to speak to Maureen. But— Confound it, this was a complication. "Please don't disturb her. Can you tell me when your grandfather will be back in town?" (Could he afford to wait? Oh, *damn!)*

"Why, Grandpa got back yesterday."

"Oh. May I speak to him, Miss Nancy?"

"But he's not here, either. He went downtown hours ago. He might be at his chess club. Do you want to leave a message for him?"

"No. Just tell him I called…and will call again later. And, Miss Nancy—don't worry."

"How can I *help* worrying?"

"I have second sight. Don't tell anyone but it's true; an old gypsy woman saw that I had it and proved it to me. Your father is coming home and will not be hurt in this war. I *know."*

"Uh…I don't know whether to believe that or not—but it does make me feel better."

"It's true." He said goodbye gently, and hung up.

"Chess club—" Surely Gramp would not be loafing in a pool hail today? But since it was just across the street, he might as well see… before driving out to Benton and waiting in sight of the house for him to return.

Gramp was there, at the chess table but not even pretending to work a chess problem; he was simply glowering.

"Good afternoon, Mr. Johnson."

Gramp looked up. "What's good about it? Sit down, Ted."

"Thank you, sir." Lazarus slid into the other chair. "Not much good about it, I suppose."

"Eh?" The old man looked at him as if just noticing his presence. "Ted, would you say that I was a man in good physical condition?"

"Yes, certainly."

"Able to shoulder a gun and march twenty miles a day?"

"I would think so." (I'm sure you could, Gramp.)

"That's what I told that young smart-alec at the recruiting station. He told me I was *too old!"* Ira Johnson looked ready to break into tears. "I asked him since when was fortyfive too old?—and he told me to move aside, I was holding up the line. I offered to step outside and whip him and any two other men he picked. And they put me out, Ted, *they put me out!"* Gramp covered his face with his hands, then took them down and muttered, "I was wearing Army Blue before that snotty little shikepoke learned to pee standing up."

"I'm sorry, sir."

"My own fault. I fetched along my discharge…and forgot about its having my birth date on it. Look, Ted, if I dyed my hair and went back to St. Looie—or Joplin—that would work…wouldn't it?"

"Probably." (I know it didn't, Gramp…but I think you did manage to talk your way into the Home Guard. But I can't tell you that.)

"I'll do it! But I'll leave my discharge at home."

"In the meantime may I drive you home? My Tin Lizzie is around in back."

"Well…I suppose I've got to go home—eventually."

"How about a little spin out Paseo to cool off first?"

"That's a n'idee. If it won't put you out?"

"Not at all."

Lazarus drove around, keeping silent, until the old man's fuming stopped. When Lazarus noted this, he headed back and turned east on thirty-first Street, and parked. "Mr. Johnson, may I say something?"

"Eh? Speak up."

"If they won't take you—even with your hair dyed—I hope you won't feel too bad about it. Because this war is a terrible mistake."

"What do you mean?"

"Just what I said." (How much to tell him? How much can I get him to believe? I can’t hold back altogether—this is *Gramp*…who taught me to shoot, and a thousand other things. But what will he *believe?)* “This, war won’t do the slightest good; it will just make things worse.”

Gramp stared at him, under knotted brows. “What are you, Ted? Pro-German?”

“No.”

“Pacifist, maybe? Come to think about it, you’ve never had one word to say about the war.”

“No, I’m not a pacifist. And I’m not pro-German. But if we win this war—”

“You mean *‘When* we win this war!’”

“All right, ‘when we win this war,’ it will turn out that we’ve actually lost it. Lost everything we thought we were fighting for.”

Mr. Johnson abruptly changed tactics. “When are you enlisting?”

Lazarus hesitated. “I’ve got a couple of things I must do first.”

“I thought that might be your answer, Mr. Bronson. Goodbye!” Gramp fumbled with the door latch, cursed, and stepped over onto the running board, thence to the curb.

Lazarus said, “Gramp! I mean ‘Mr. Johnson.’ Let me finish running you home. *Please!”*

His grandfather paused just long enough to look back and say, “Not on your tintype…you pusillanimous piss-ant.” Then he marched steadily down the street to the car stop.

Lazarus waited and watched Mr. Johnson climb aboard; then he trailed the trolley car, unwilling to admit that there was nothing he could do to correct the shambles he had made of his relations with Gramp. He watched the old man get off at Benton Boulevard, considered overtaking him and trying to speak to him.

But what could he say? He understood how Gramp felt, and why—and he had already said too much and no further words could call it back or correct it. He drove aimlessly on down Thirty-first Street.

At Indiana Avenue he parked his car, bought a *Star* from a newsboy, went into a drugstore, sat down at the soda fountain, ordered a cherry phosphate to justify his presence, looked at the newspaper.

But was unable to read it— Instead he stared at it and brooded.

When the soda jerk wiped the marble counter in front of him and lingered, Lazarus ordered another phosphate. When this happened a second time,. Lazarus asked to use a telephone.

“Home or Bell?”

“Home.”

“Back of the cigar counter and you pay me."

"Brian? This is Mr. Bronson. May I speak to your mother?"

"I'll go see,"

But it was his grandfather's voice that came on the line: "Mr. Bronson, your sheer effrontery amazes me. What do you want?"

"Mr. Johnson, I want to speak to Mrs. Smith—"

"You can't."

"—because she has been very kind to me and I Want to thank her and say goodbye."

"One moment—" He heard his grandfather say, "George, get out. Brian, take Woodie with you and close the door and see that it stays closed." Mr. Johnson's voice then came back closer: "Are you still there?"

"Yes, sir."

"Then listen carefully and don't interrupt; I'm going to say this just once."

"Yes, sir."

"My daughter will not speak to you, now or ever—" Lazarus said quickly, "Does she know that I asked to speak to her?"

"Shut up! Certainly she knows. She asked me to deliver that message. Or I would not have spoken to you myself. Now I too have a message for you—and don't interrupt. My daughter is a respectable married woman whose husband has answered his country's call. So don't hang around her. Don't come here or you'll be met with a shotgun. Don't telephone. Don't go to her church. Maybe you think I can't make this stick. Let me remind you that this is Kansas City. Two broken arms cost twenty-five dollars; for twice that they'll kill you. But for a combined deal—break your arms first and *then* kill you—there's a discount. I can afford sixty-two fifty if you make it necessary. Understand me?"

"Yes."

"So twentythree skidoo!"

"Hold it! Mr. Johnson, I do not believe that you would hire a man to kill another man—"

"You had better not risk it."

"—because I think you would kill him yourself."

There was a pause. Then the old man chuckled slightly. "You may be right." He hung up on Lazarus.

Lazarus cranked his car and drove away. Presently he found that he was driving west on Linwood Boulevard, noticed it because he passed his family's church. Where he had first seen Maureen— Where he would never see her again.

Not *ever!* Not even if he came back again and tried to avoid the mistakes he had made—there were no paradoxes. Those mistakes were unalterably part of the fabric of spacetime, and all of the subtleties of Andy's mathematics, all of the powers built into the *Dora,* could not erase them.

At Linwood Plaza, he parked short of Brooklyn Avenue and considered what to do next.

Drive to the station and catch the next Santa Fe train west. If either of those calls for help lasted through the centuries, then he would be picked up on Monday morning—and this war and all its troubles would again 'be something that happened a long time ago—and "Ted Bronson" would be someone Gramp and Maureen had known briefly and would forget.

Too bad he had not had time to get those messages etched; nevertheless, one of them might last, If not—then make rendezvous for pickup in 1926. Or if *none* of them got through—always a possibility since he was attempting to use Delay Mail before it was properly set up—then wait for 1929-and carry out rendezvous as originally planned. No problem about that; the twins and Dora were ready to keep *that* one, no matter what.

Then why did he feel so bad?

This wasn't *his* war.

Time enough and Gramp would know that the prediction he had blurted out was simple truth. In time Gramp would learn what French "gratitude" amounted to—when "Lafayette, we are here!' was forgotten and the refrain was *"Pas un sou a l'Amérique!"* Or British "gratitude" for that matter. There was *no* gratitude between nations, never had been, never would be. "Pro-German"? Hell, no, Gramp! There is something rotten at the very heart of German culture, and this war is going to lead to another with German atrocities a thousand times more terrible than any they are accused of today. Gas chambers and a stink of burning flesh in planned viciousness— A stench that lasted through the centuries— But there was no way to tell Gramp and Maureen any of this. Nor should he try. The best thing about the future was that it was unknown. Cassandra's one good quality was that she was never believed.

So why should it matter that two people who could not possibly know what he knew misunderstood *why* he thought this war was useless?

But the fact was that it *did* matter—it mattered terribly.

He felt the slight bulge against his left ribs. A defense for his gold —gold he did not give a damn about. But a "termination option" switch, too.

Snap out of it, you silly fool! You don't want to be dead; you simply want the approval of Gramp and Maureen—of Maureen.

The recruiting station was under the main post office, far downtown. Late as it was, it was still open, with a queue outside. Lazarus paid an old Negro a dollar to sit in his car, warned him that there was a grip in the back, promised him another dollar when he got back—and did not mention ‘ the money vest and pistol, both now in the grip. But Lazarus did not worry about car or money—might be simpler if both were stolen. He joined the queue.

“Name?”

“Bronson, Theodore.”

“Previous military experience?”

“None.”

“Age? No, date of birth—and it had better be before April *5,* 1899.”

“November 11, 1890.”

“You don’t look that old, but okay. Take this paper and through that door. You’ll find sacks or pillow cases. Take your clothes off, put ‘em in one, keep ‘em with you. Hand this to one of the docs and do what he tells you.”

“Thank you, Sergeant.”

“Get moving—next.”

A doctor in uniform was assisted by six more in civilian clothes. Lazarus read the Snellen Card correctly, but the doctor did not seem to be listening; this seemed to be a “warm body” examination. Lazarus saw only one man rejected, one who was (in ‘Lazarus’ horseback judgment) in the terminal stages of consumption.

Only one physician seemed at all anxious to find defects. He had Lazarus bend over and pull his buttock cheeks apart, felt for hernias and made him cough, then palpated his belly. “What’s this hard mass on the right side?”

“I don’t know, sir.”

“Have you had your appendix out? Yes, I see the scar. Feel the ridge, rather; the scar hardly shows. You had a good surgeon; I wish I could do one that neat. Probably just a mass of fecal matter there; take a dose of calomel and you’ll be rid of it by morning.

“Thank you, Doctor.”

“Don’t mention it, Son. Next.”

“Hold up your right hands and repeat after me

“Hang onto these slips of paper. Be at the station before seven tomorrow morning, show your slip to a sergeant at the information desk; he’ll tell you where to board. If you lose your slip of paper, be there *anyhow—or* Uncle Sam will come looking for you. That’s all, men, you're in the Army now! Out through that door."

His car was, still there; the old Negro got out. "Eve'ything's fine, Cap'm!"

"It surely is," Lazarus agreed heartily while getting out a dollar bill. "But it's 'Private,' not 'Captain.'

"They took you? In *that* case, I cain't hahdly take youah dollah."

"Sure you can! I don't need it; Uncle Sam is looking out for me for the 'duration,' and he's going to pay me twenty-one dollars a month besides. So put this with the other one and buy gin and drink a toast to me—Private Ted Bronson."

"Ah couldn't rightly do that, Cap'm—Private Ted Bronson, suh. Ah'm White Ribbon—Ah took the plaidge befoah you was bohn. You jes' keep youah money and hang the Kaisuh fo' us."

"I'll try, Uncle. Let's make this five dollars and you can give it to your church…and say a prayer for me."

"Well…if you say so, Cap'm Private."

Lazarus tooled south on McGee feeling happy. Never take little bites, enjoy life! *"K-K-K-Katy! Beautiful Katy—"*

He stopped at a drugstore, looked over the cigar counter, spotted a nearly empty box of White Owls, bought the remaining cigars, asked to keep the box. He then bought a roll of cotton and a spool of surgical tape—and, on impulse, the biggest, fanciest box of candy in the store.

His car was parked under an arc light; he let it stay there, got into the back seat, dug into his grip, got out vest and pistol, then started an un-tailoring job, indifferent to the chance of being seen. Five minutes with his pocketknife undid hours of tailoring; heavy coins clinked into the cigar box. He cushioned them with cotton, sealed the box and strengthened it by wrapping it with tape. The slashed vest, the pistol, and his ticket west went down a storm drain and the last of Lazarus' worries went with them. He smiled as he stood up and brushed his knees. Son, you *are* getting old—why, you've been living *cautiously!*

He drove gaily out Linwood to Benton, ignoring the city's seventeen-miles-per-hour speed limit. He was pleased to see lights burning on the lower floor of the Brian Smith residence; he would not have to wake anyone. He went up the walk burdened with the candy box, the case for chessmen, and the taped cigar box. The porch light came on as he reached the steps; Brian Junior opened the door and looked out. "Grandpaw! It's Mr. Bronson!"

"Correction," Lazarus said firmly. "Please tell your grandfather that *Private* Bronson is here."

Gramp appeared at once, looked at Lazarus suspiciously. "What is 'this? What did I hear you tell that boy?"

"I asked him to announce 'Private Bronson.' Me." Lazarus managed to get all three packages under his left arm, reached into a pocket, got out the slip of paper he had been given at the recruiting station. "Look at it."

Mr. Johnson read it. "I see. But why? Feeling the way you do."

"Mr. Johnson, I never said I was not going to enlist; I simply said I had things to do first. That was true, I did have. It's true also that I have misgivings about the ultimate usefulness of this war. But regardless of any opinion—which I should have kept to myself—the time has come to close ranks and move forward together. So I went down and volunteered and they accepted me."

Mr. Johnson handed back the recruitment form, opened the door wide. "Come in, Ted!"

Lazarus saw heads disappearing as he came in; apparently most of the family was still up. His grandfather ushered him into the parlor. "Please sit down. I must go tell my daughter."

"If Mrs. Smith has retired, I would not want her to be disturbed," Lazarus lied. (Hell, no, Gramp! I'd rather crawl in with her. But that's one secret I'll keep forever.)

"Never you mind. This is something she will want to know. Uh, that piece of paper—may I have it to show her?"

"Certainly, sir."

Lazarus waited. Ira Johnson returned in a few minutes, handed back the proof of enlistment. "She'll be down shortly." The old man sighed. "Ted, I'm proud of you. Earlier today you had me upset—and I spoke out of turn. I'm sorry—I apologize."

"I can't accept it because there is nothing to apologize for, sir. I spoke hastily and did not make myself clear. Can we forget it? Will you shake hands with me?"

"Eh? Yes. Surely! Mrrph!" Solemnly they shook hands. (Maybe Gramp *could* still straight-arm an anvil—my fingers are crushed.)

"Mr. Johnson, would you take care of some things for me? Things I didn't have time to do?"

"Eh? Certainly!"

"This box, mainly." Lazarus handed him the taped cigar box.

Mr. Johnson took it, his eyebrows shot up. "Heavy."

"I cleaned out my lockbox. Gold coins. I'll pick it up when the war is over…or if I don't, will you give it to Woodie? When he's twenty-one?"

"What? Now, now, Son, you'll come through all right."

"I plan to, and I'll pick it up then. But I might fall down a ladder in a troopship and' break my silly neck. Will you do it?"

"Yes, I'll do it."

"Thank you, sir. This is for Woodie right now. My chessmen. I can't pack them around. I’d give them to you except that you would-think up some reason not to take them but Woodie won’t.”

“Mrrph. Very well, sir.”

“Here’s one thing that is for you—but it’s not quite what it seems.” ‘Lazarus handed over the bill of sale for the landaulet.

Mr. Johnson read it. “Ted, if you’re trying to give me your automobile, you can think again.”

“That’s only a nominal conveyance of title, sir. What I would like is to leave it with you. Brian can drive it; he’s a good driver now, he’s a natural. You can drive it; even Mrs. Smith might want to learn. When Lieutenant Smith is - home, he may find it convenient. But if they send me for training anywhere near here and I get time off before I’m sent overseas, I’d like to feel free to use it myself.”

“But why hand me a bill of sale? Sure, it can sit in the barn and no doubt Brian—both of them—would drive it. Might learn to herd it myself. But no need for *this.*”

“Oh. I didn’t make myself clear. Suppose I’m off somewhere, say in New Jersey—but want to sell it. I can drop you a penny postcard, and it’s easy, because you’ll have *that.*” Lazarus added thoughtfully, “Or I might fall down that ladder…in which case the same reasoning applies. If you don’t want it, you can sign it over to Bran Junior. Or whatever. Mr. Johnson, you *know* I don’t have any relatives——so why not let it run easy?”

Before Gramp could reply, Mrs. Smith came in, dressed in her best and smiling (and had been crying, Lazarus felt certain). She extended her hand. “Mr. Bronson! We are all so proud of you!”

Her voice, her fragrance, the touch of her hand, her proud joy, all hit Lazarus in the gut; his careful conditioning was swept away. (Maureen beloved, it’s lucky that I’m being sent away at once. Safer for you, better all around. But I did it to make you proud of me, and now my cup runneth over—and please ask me to sit down before Gramp notices the tilt of my kilt!)

“Thank you, Mrs. Smith. I just stopped by to say thank you and goodbye—and good night, too, as I’m shipping out early tomorrow morning.”

“Oh, do please sit down! Coffee at least, and the children will want to say goodbye to you, too.”

An hour later he was still there and still happier—happy all through. The candy had been opened after he had presented it to Carol for all of them. Lazarus had drunk much coffee thick with cream and sugar and had eaten a hefty slice of home-baked white cake with chocolate icing, then accepted a second while admitting that he had not eaten since breakfast then protested when Maureen wanted to jump up and cook. They reached a compromise under which Carol went out to make a sandwich for him.

“It’s been a confusing day,” he explained, “and I haven’t had time to eat. You caused me to change plans, Mr. Johnson.”

“I did, Ted? How?”

“You know—I think I’ve told you both—that I planned to make a business trip to San Francisco leaving the first of July. Then this happens—Congress declaring war—and I decided to make the trip at once, settle my affairs there—then enlist. When I saw you I was all set to leave, packed and everything—and you made me realize that the Kaiser wouldn’t wait while I took care of private affairs. So I joined up at once.” Lazarus managed to look sheepish. “My packed grip is still out in the car, going nowhere.”

Ira Johnson looked pained. “I didn’t mean to rush you, Ted. ‘Twouldn’t have hurt to take a few days to wind up your affairs; they can’t organize an army overnight. I know, I saw ‘em try, in ‘Ninety-eight. Mrrph. Perhaps I could make the trip for you? As your agent. Seeing that— Well, doesn’t look like I’m going to be too busy.”

“No, no! A million thanks, sir—but I hadn’t been thinking straight. Thinking ‘peacetime’ instead of ‘wartime’ until you got me back on the rails. I went to Western Union and wrote a night letter to my broker in Frisco, telling him what I wanted him to do; then I wrote a note appointing him my attorney-in-fact and got it notarized and went to the downtown post office and registered it to him. All done, everything taken care of.” Lazarus was enjoying the improvisation so much he almost believed it. “Then I went downstairs and enlisted. But that grip—Do you suppose you could put it in your garret? I won’t be taking a grip to soldier. Just a few toilet articles.”

“I’ll take care of it, Mr. Bronson!” said Brian Junior. “In my room!”

“In *our* room,” George corrected. *“We’ll* take care of it.”

“Hold it, boys. Ted? Would it break your heart if you lost that grip?”

“Not at all, Mr. Johnson. Why?”

“Then take it with you. But when you get back to your flat tonight, pack it differently. You put in white shirts and stiff collars, no doubt. You won’t need those. If you’ve got any work shirts, take those. Be sure to take a pair of well-broken-in high shoes you can march in. Socks—all you own. Underwear. It’s my guess—based on sad experience—that they won’t have enough uniforms right away. Confusion, and lots of it. You may be soldiering for a month or more in what you carry with you.”

“I think,” Mrs. Smith said seriously, “that Father is right, Mr. Bronson. Mr. Smith—Lieutenant Smith, my husband— was saying something like it before he left. He left without waiting for his telegram—it came hours later—because he said he knew that there would be confusion at first." Her mouth twitched. "Although he said it more forcefully."

"Daughter, no matter how Brian put it, it wasn't forceful enough. Ted will be lucky if his beans are on time. Any man who can tell his right foot from his left will be grabbed and made acting corporal; they won't care how he's dressed. But *you* care, Ted—so take along clothes you might wear on a farm. And shoes—comfortable shoes that won't put blisters on you the first mile. Mmm— Ted, do you know the coldcream trick? To use on your feet when you know you might have your shoes on for a week or more?"

"No, sir," Lazarus answered. (Gramp, you taught it to me once before—or maybe "after"—and it works, and I've never forgotten it.)

"'If possible, have your feet clean and dry. Smear your feet all over and especially between your toes with cold cream. Or Vaseline, carbolated is best. Use *lots,* a thick layer. Then put on socks—clean if possible, dirty if you must, but don't skip them—and put your boots on. When you first stand up, it feels as if you'd stepped into a barrel of soft soap. But your feet Will thank you for it and you won't get jungle rot between your toes. Or not as much. Take care of your feet, Ted, and keep your bowels open."

"Father."

"Daughter, I'm talking to a *soldier—telling* him things that may save his life: If the children can't hear such things, send them up to bed."

"I think it is time," Maureen answered, "to get the younger ones quieted down, at least."

"I don't have to go to bed!"

"Woodie, you do exactly what your mother tells you to and no back talk—or I'll bend a poker over your bottom. That's standing orders until your father gets home from the war."

"I'm going to stay up till Private Bronson leaves! Papa said I could."

"Mrrph. I'll discuss the logical impossibility of that with a club; it's the only way to make you understand it. Maureen, I suggest that we start with the youngest, let 'em say goodbye in turn, and then march straight up to bed. Which winds up in due course with me walking Ted to his streetcar stop."

"But I was going to drive Uncle Ted home!"

Lazarus judged that it was time to speak up. "Brian, thank you. But let's not give your mother something extra to worry about tonight. The trolley takes me almost straight home and from tomorrow on I won't even have streetcars; I'll walk."

"That's right," agreed Gramp. "He'll march. *'Hay* foot, *straw* foot!—heads up and look proud!' Ted, his father made Brian Sergeant of the

Guard until he gets back, charged with internal security of this household."

"Then he can't leave his post of duty to chauffeur a mere private, can he?"

"Not in the presence of the Officer of the Guard—me—and of the Officer of the Day, my daughter. Reminds me— While the young 'uns are kissing you goodbye, I want to dig out a couple of my old Army shirts; I think they'll fit you. If you don't mind hand-me-downs?"

"Sir, I will be proud and honored to wear them!"

Mrs. Smith stood up. "I have something I must get for Mr.—Private Bronson, too. Nancy, will you bring down Ethel? And Carol, will you fetch Richard?"

"But Private Bronson hasn't eaten his sandwich!"

Lazarus said, "I'm sorry, Miss Carol. I've been too excited to eat. Uh, would you wrap it for me? I'll eat it the minute I'm back in my apartment—and it will make me sleep soundly."

"Do that, Carol," decided her mother. "Brian, will you fetch down Richard?"

After more backing and filling Lazarus told them all goodbye, in reverse order of seniority. He held Ethel for a moment and grinned at her baby smile, then kissed the top of her head and handed her back to Nancy, who took her upstairs and hurried back down. To kiss Richard, Lazarus had to get down on one knee. The child seemed unsure why this was happening but knew that it was a solemn occasion; he hugged Lazarus tightly and smeared his cheek with a kiss.

Woodie then kissed him—for the first and only time, but Lazarus no longer felt bothered by touching "himself" as this little boy was not himself but simply an individual from whom he derived some scattered memories in an odd concatenation. He was no longer tempted to strangle him—or not often.

Woodie used the unaccustomed intimacy to whisper: "Those chessmen are *really* ivory?"

"Really truly ivory. Ivory and ebony, just like the keys on your Mama's piano."

"Gee, that's *keen!* Look, when you come back, Uncle Private Bronson, I'll let you play with them. Anytime."

"And I'll beat you, Sport."

"Says you! Well, so long. Don't take any wooden nickels." Little Marie kissed him with tears in her eyes, then fled from the room. George kissed him on the cheek and muttered, "You be careful, Uncle Ted," and left also. Brian Junior said, "I'll take real good care of your automobile—I'll keep it shined just the way you do," then hesitated—suddenly kissed his cheek and left, leading Richard.

Carol had his sandwich, neatly wrapped in waxed paper and tied with a ribbon. He thanked her and put it into an outer coat pocket. She placed her hands on his shoulders, stood on tiptoes and whispered, "There's a note in it for you!"—kissed his cheek and left quickly.

Nancy took her place and said quietly, "The note is from both of us. We're going to pray for you every night when we pray for Papa." She glanced at her mother, then put her arms around his shoulders and kissed him on the mouth, a firm peck. "That's not goodbye but au revoir!" She left even more quickly than her sister, head high and moving like her mother.

Mrs. Smith stood up, said quietly, "Father?"—and waited.

"No."

"Then turn your back."

"Mmrph. Yes." Mr. Johnson studied the pictures on the wall.

With a soft rustle Mrs. Smith came close to Lazarus, looked tip at him, held up a little book. "This is for you."

It was a vest-pocket New Testament; she held it opened at the fly leaf. He took it and read the original inscription, somewhat faded:

"To Maureen Johnson, Good Friday 1892, for perfect attendance. Matthew vii 7"

And under this, in fresh and crisp Spencerian script:

To Private Theodore Bronson
Be true to self and country.
Maureen J. Smith

April 6, 1917

Lazarus gulped. "I will treasure it and keep it with me, Mrs. Smith."

"Not 'Mrs. Smith," Theodore— 'Maureen." She put up her arms.

Lazarus stuffed the little book into his breast pocket, put his arms around her, met her lips.

For a long moment her kiss was firm and warm but chaste. Then she moaned almost inaudibly, her body softened and -came strongly against him, her lips opened, and she kissed him in a fashion that Lazarus could barely believe even as he answered it in kind—a kiss that promised everything she could give.

After some uncounable eternity she whispered against his lips: "Theodore…take care of yourself. Come back to us."

DA CAPO

VI

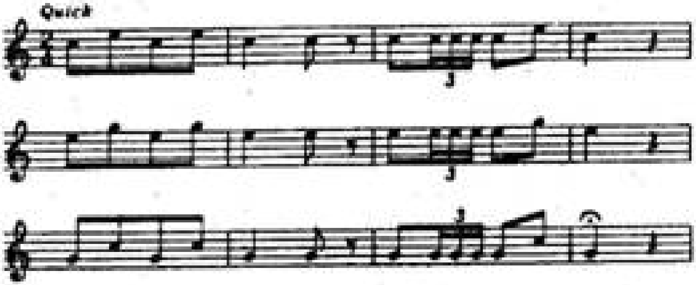

Camp Funston, Kansas

Dear Twins and Family,

Surprise! Meet Corporal Ted Bronson, acting sergeant and the meanest drillmaster in the whole National Army of the United States. No, I have *not* scrambled my circuits. I temporarily lost track of a basic principle of evasive action, i.e., the best place to hide a needle is in a stack of needles and the best place to avoid the horrors of war is in an army. Since none of you has ever seen a war, or even an army, I must explain.

I had (foolishly) planned to avoid this war by running away to South America. But South America is a place where I could not possibly pass for a native, no matter how well I spoke the language—and it is loaded with German agents who would suspect me of being an American agent and might arrange some nasty accident for Ol' Buddy Boy, bless his innocent heart. And the girls there have beautiful flashing eyes, suspicious duennas, and fathers who love to shoot gringos up to no good.

Unhealthy.

But if I stayed in the United States and tried to stay *out* of the Army—one slip and I wind up behind cold stone walls, eating miserable food, and making little rocks out of big ones. Unappealing.

But in wartime the Army gets the best of everything— aside from a mild hazard of getting shot at. The latter can be avoided.

How? This is not yet the era of total war, and an army offers innumerable bolt holes for a coward (me) to avoid unpleasant dangers from strangers. In this era only a small part of an army gets shot at. (An even smaller part gets hit, but I don't plan to take that risk.) At this here-&-now land warfare is fought in certain locations, and there are endless army jobs *not* in those places, where (despite a military uniform) an army man is really just a privileged civilian.

I am in such a job and probably won't move until the war ii over. Someone has to take these brave, young, innocent lads, fresh off the farm, and turn them into something resembling soldiers. A man who can do this is so valuable that-officers are reluctant to let him go.

So I'm full of that old fighting spirit and won't have to fight. I teach, instead—close-order drill, extended drill, markmanship and care of the rifle, bayonet, barehanded combat, field hygiene, anything. My "amazing" aptitude in military matters caused surprise, me being a recruit with "no military experience." (How could I admit that Gramp taught me to shoot five years after the end of this war and that I first handled these same weapons as a high school cadet ten years from now and that my military experience is scattered over the next hundred years plus a little now and then for centuries more?)

But a rumor hints that I was once a soldat in the French Foreign Legion. a corps of one of our Allies, made up of cutthroats, thieves, and escaped convicts, and famous for their go-to-hell way of fighting —possibly a deserter from it and almost certainly under another name. I discourage this canard by becoming surly if anyone gets inquisitive and only occasionally make the mistake of saluting French style (palm forward) and correct it at once—but everybody knows that I "polly-voo" because my knowledge of the French language had a lot to do with my change from "acting corporal" to real corporal assigned to instruction, and now greasing for sergeant. There are French and British officers and sergeants here to teach us trench warfare. All the French here are supposed to speak English—but the English they speak these Kansas and Missouri plow jockeys can't understand. So in slips lazy Lazarus as liaison. Me and one French sergeant almost add up to one good instructor.

Without that French sergeant I *am* a good instructor when I am allowed to teach what I know. But only in unarmed combat am I allowed to, because unarmed hand-to-hand fighting does not change through the ages; only the name changes, and it has only one rule: Do it first, 'do it fast, do it dirtiest.—But, take bayonet fighting— A bayonet is a knife on the end of a gun, and the two parts add up to the Roman pilum, used two thousand years earlier and not new even they. One would expect the art of bayonet fighting, in 1917, to be perfect.

But it isn't. The "Book" teaches parries but not counters—yet a counter is as fast as a parry, far more deceptive, and fatally confusing to a man who has never heard of one. And there are other things—

There was (will be) a war in the twenty-sixth century Greg. in which the use of the bayonet became a high art and I was an unwilling participant until I managed to duck out. So one morning here, on a bet, I demonstrated that I could take on and never be touched by a U.S. Army regular sergeant-instructor—then a British one—and then a French one.

Was I allowed to teach what I had demonstrated? No. I mean *“Hell, No!”* I wasn’t doing it “by the Book,” and my “smart-alec” attempt almost lost me my cushy job. So I went back to doing it by the sacred “Book.”

But this book (used at Plattsburg where my father— and yours—trained) is not bad. In bayonet fighting its emphasis is on aggressiveness, which is okay within its limits; the bayonet is a horror weapon in the hands of a man eager to close and kill—and that may be all these kids have time to learn. But I would hate to see these pink-cheeked, brave lads go up against some old, tired, pessimistic twenty-sixth-century mercenaries whose sole purpose is to stay alive while their opponents die.

These kids can win a war, they *will* win this war, they *did* win it from when you are. But an unnecessary number are going to die.

I love these kids. They are young and eager and gallant and terribly anxious to get “Over There” and prove that one American can lick any six Germans. (Not true. The ratio isn’t even one to one. The Germans are veterans and don’t suffer from “sportsmanship” or any other illusions. But these green kids will keep on fighting and dying until the Gernians give up.)

But they are so *young!* Laz and Lor, most of them are younger than you two, some *much* younger. I don’t know how many lied about their ages—but lots of them don’t have to shave. Sometimes at night I’ll hear one crying in his cot, homesick for his mammy. But next day he’ll be trying, hard as ever. We don’t have enough desertions to matter; these boys *want* to fight.

I try not to think about how useless this war is.

It’s a matter of perspective. Minerva proved to me one night (when she was still following the profession of computer) that all here-&-nows are equal and “the present” is simply whatever here-&-now one is using. By my “proper” here-&-now ‘(where I would be if I hadn’t hearkened to the wild geese—home on Tertius) —by that here-&-now these eager, puppylike boys are long dead and the worms have eaten them; this war and its terrible aftermath are ancient history, no worry of mine.

But I’m *here,* and it’s happening *now,* and I feel it.

These letters become more difficult to write and to send. Justin, you want detailed accounts, written on the spot, of all that I do, to add to that pack of lies you edited. Photoreduction and etching are now impossible. I am sometimes allowed to leave camp for a day, which is just long enough to get to the nearest large town, Topeka (circa 160 kms. round trip), but always on a Sunday when businesses are closed, so I have not had a chance to work up a connection to use a laboratory in Topeka—assuming that there is one with the equipment I need, a doubtful point. I would let letters pile up in a lockbox (since it does not matter when I Delay Mail them)—but banks are never open on Sundays. So a handwritten letter, not too long and bulky, is the most I can manage—whenever I can lay hands on nesting envelopes (also difficult now)—and hope that paper and ink won't oxidize too much over the centuries.

I've started a diary, one which makes no mention of Tertius and such (this letter would get me locked up as crazy!) but is simply a daily recital of events. I can mail it, when it is full, to Gramp Ira Johnson to hold for me; then after the war is over and I have time and privacy, I can use it to write the sort of commentary you want, and take time to miniaturize and stabilize a long message. The problems of a time-tripping historiographer are odd and awkward. One Welton fine-grain memory cube would record all I could say over the next ten years—except that I would have no use for one even if I had it; the technology to use it is lacking.

By the way— lshtar, did you plant a recorder in my belly? You are a darling, dear, but sometimes a devious darling—and there is *something* there. It doesn't bother me, and I might never have noticed it had not a physician noticed it the day I joined this Army. He brushed the flatter off—but later I conducted my own examination by touch. There *is* an implant there—and not what Ira says I'm full of. It might be one of those artificial organs -you rejuvenators are reluctant to discuss with your "children." But I suspect that it is a Welton cube with an ear hooked to it and a ten-year power supply; it's about the right size.

But why didn't you *ask* me, dear, instead of sneaking up on me with a Mickey? It is not true that I always say No to a civil request; that is a canard started by Laz and Lor. Justin could have gotten Tamara to ask me, and no one has ever learned how to say No to Tamara. But Justin will pay for this: To hear what I say and what is said in my presence, he is going to have to listen to *ten years* of belly rumblings.

No, durn it, Athene will filter out incidental noise and supply him with a dated and meaningful printout. There is no justice. And no privacy, either. Athene, haven't I always been good to you, dear? Make Justin pay for his prank.

I haven't seen my first family since I enlisted. But when I get a long-enough pass I am going to Kansas City and visit them. My status as a "hero" carries privileges a "civilian young bachelor" cannot enjoy; the mores relax a bit in wartime, and I'll be able to spend time with them. They have been very good to me: a letter almost every day, cookies or a cake weekly. The latter I share, reluctantly; the former I treasure.

I wish it were as easy to get letters from my Tertius family.

Basic Message, Repeated: Rendezvous is 2 August 1926, ten T-years after drop. Last figure is "six"—not "-nine."

All my love,
Corporal Ted ("Ol' Buddy Boy") Bronson

Dear Mr. Johnson,

And all your family—Nancy, Carol, Brian, George, Marie, Woodie, Dickie Boy, Baby Ethel, and Mrs. Smith. I cannot say how touched I am that this orphan has been "adopted for the duration" by the Smith family, and to hear that it is confirmed by Captain Smith. In my heart you all have been "my family" since that sad & happy night you sent me off to war loaded with presents and good wishes and my head filled with your practical advice—and my heart closer to tears than I dared let anyone see. To be told by Mrs. Smith—with a sentence quoted from a letter from her husband, the Captain—that I truly *am* "adopted"—well, I'm close to tears again, and noncoms are not supposed to show such weakness.

I have not looked up Captain Smith. I caught the hint in your letter—but, truly, I did not need it; I have been soldiering long enough to realize that an enlisted man does not presume in such fashion. I am almost as certain that the Captain will not look me up—for reasons I don't need to explain as you have soldiered far more than the Captain and I combined. It was most sweetly thoughtful of Mrs. Smith to suggest it—but can you make her understand I *can't* look up a captain socially? And why she should not urge her husband to look up a noncom?

If you can't make her understand this (possible, since the Army is a different world), perhaps this will suffice: Camp Funston is *big—and* no transportation for me other than shanks' mare. Call it an hour for the round trip if I swing out my heels. Add five minutes with the Captain when I find him—if I find him. You know our stepped-up routine, I sent you a copy. Show here that there just *isn't time,* all day long, for me to do this.

But I do appreciate her kind thoughts.

Please give Carol my heartiest thanks for the brownies. They are as good as her mother makes; higher praise I cannot give. "Were," I should say, as they disappeared into hollow legs, mine and others (my buddies are a greedy lot). If she wants to marry a long, lanky Kansas farm boy with a big appetite, I have one at hand who will marry her sight unseen on the basis of those brownies.

This place is no longer the Mexican fire drill I described in my earliest letters. In place of stovepipes we now have real trench mortars, the wooden guns have disappeared, and even the greenest conscripts are issued Springfields as soon as they've mastered squads east and west and have learned to halt more or less together.

But it remains hard as the mischief to teach them to use those rifles "by the Book." We have two types of recruit: boys who have never fired a rifle, and others who boast that their pappies used to send them out to shoot breakfast and never allowed them but one shot. I prefer the first sort, even if a lad is unconsciously afraid and has to be taught not to flinch. At least he hasn't practiced his mistakes, and I can teach him what the regular Army instructors taught me, and those three chevrons on my sleeve now insure that he listens.

But the country boy who is sure he knows it all (and sometimes is indeed a good shot) *won't listen.*

It's a chore to convince him that he is not going to do it *his* way; he is going to do it the *Army* way, and he had better learn to like it.

Sometimes these know-it-alreadys get so angry that they want to fight—me, not Huns. These are usually boys who haven't found out that I also teach unarmed combat. I've had to accommodate a couple of them, out behind the latrine after retreat. I won't box them; I have no wish to flatten my big nose against some cow-milking fist. But the idea of fighting rough-and-tumble, no rules, either makes their eyes glitter—or they decide to shake hands and forget it. If they go ahead with it, it doesn't last over two seconds as *I* don't want to get hurt.

I promised to tell you where and how I learned la savate and jujitsu. But it's a long story, not too nice in spots, one I should not put into a letter but wait until I have a pass that gives me time enough to visit Kansas City.

But I haven't had anyone offer to fight me for at least three months. One of the sergeant-instructors told me that he had heard that the recruits call me "Death" Bronson. I don't mind as long as it means peace and quiet when I'm off duty.

Camp Fun's-Town continues to have just two sorts of weather, too hot and dusty, too cold and muddy. I hear that the latter is good practice for France; the Tommies here claim that the worst hazard of this war is the danger of drowning in French mud. The poilus among us don't really argue it but blame the rain on artillery fire.

Bad as the weather may be in France, everyone wants to go there, and the second favorite topic of conversation is "When?" (No need to tell an old soldier the first.) Rumors of shipping out are endless-and always wrong.

But I'm beginning to wonder. Am I going to be stuck here, doing the same things month after month while the war goes on elsewhere? What will I tell my children someday? Where did you fight the Big War, Daddy? Funston, Billy. What part of France is that, Daddy? Near Topeka, Billy—shut up and eat your oatmeal!

I would have to change my name.

It gets tiresome telling one bunch after another to stack arms and grab shovels. We've dug enough trenches in this prairie to reach from here to the moon, and I now know four ways to do it: the French way, the British way, the American way—and the way each new bunch of recruits does it, in which the revetments collapse—and then they want to knew what difference it makes because General Pershing, once *we* get there, is going to break this trench-warfare stalemate and get those Huns on the run.

They may be right. But I have to teach what I'm told to teach. Till I'm white-haired, maybe.

I am pleased indeed to hear that you are in the Seventh Regiment; I know how much it means to you. But please don't disparage the Seventh Missouri by calling it the "Home Guard." Unless somebody gets a hammerlock on Hindenburg pretty soon, you may see a lot of action in this war.

But truthfully, sir, I hope you do not—and I think Captain Smith would agree with my reasoning. Someone *does* have to guard the home—and I mean a specific home on Benton Boulevard. Brian Junior isn't old enough to be the man of the family—I think Captain Smith would worry if you weren't there.

But I do understand how you feel. I hear that the only way for a sergeant-instructor to get off this treadmill is to lose his stripes. Would you feel ashamed of me if I went absent over leave just long enough to get busted back to corporal…then did something else to lose those chevrons, too? I feel sure it would get me on the first troop train headed east.

You'd better not, read that last to the rest of the family. An "Honorary Smith" had best find some other way.

My warmest respects to you and to Mrs. Smith, My love to all the youngsters,

Ted Bronson "Smith"

(And *most* happy to be "adopted")

"Come in!"

"Sir, Sergeant Bronson reports to Captain Smith as ordered!" (Pop, I wouldn't have recognized you. But durned if you don't look just as you ought to. Only younger.)

"At ease, Sergeant. Close that door. Then sit down."

"Yes, sir." Lazarus did so, still mystified. He had not only never expected Captain Smith to get in touch with him, but he had refrained from asking for a pass long enough to let him go to Kansas City for two reasons: One, his father might be there that weekend—or, two, his father might *not* be there that weekend. Lazarus was not sure which was worse; he had avoided both.

Now a dog-robber type on a motorcycle with a sidecar had suddenly picked him up with orders to "Report to Captain Smith"—and it was not until he had done so that he knew that this "Captain Smith" was Captain Brian Smith.

"Sergeant, my father-in-law has told me quite a bit about you. And so has my wife."

There seemed to be no answer to that, so Lazarus looked sheepish and said nothing.

Captain Smith went on, "Oh, come, Sergeant, don't look embarrassed; this is man to man. My family has 'adopted' you, so to speak, and it meets with my heartiest approval. In fact it fits in with something the War Department is starting, through the Red Cross and the Y.M.C.A. and the churches, a program to locate every man in uniform who does not get mail regularly and see to it that he does. Get a family to 'adopt him for the duration' in other words. Write to him, remember his birthday, send him little presents. What do you think of that?"

"Sir, it sounds good. What the Captain's family has done for me has certainly been good for *my* morale."

"I'm pleased to hear it. How would you organize such a program? Speak up, don't be afraid to express your own ideas."

(Give me a desk and I'll make a career of it, Pop!) "Sir, the problem breaks down into two—No, three parts. Two of preparation, one of execution; First, locate the men. Second, at the same time, locate families willing to help. Third, bring them together. The first has to he done by the first sergeants." (The top kicks are going to love this—in a pig's eye.) "They will have to require their company clerks to check mail against the roster before handing it out. Uh, this must he speeded up; holding up mail call for any reason is not a good idea. But checking can't be left to platoon sergeants; they aren't set up for it and would slop it. It has to be at the point where the mail orderly delivers mail to each company clerk."

Lazarus thought. "But to make this work, if the Captain will pardon me, the Commanding General must tell his adjutant to require from each company, troop, and battery commander a report of how many pieces of mail each man under his command has received that week." (And a damnable invasion of privacy, and the sort of multiplication of clerical work that bogs down armies! The homesick ones *have* homes and do get mail. The loners don't want letters; they want women and whiskey. The prairie dog 'pee they sell for whiskey in this "dry" state has made a teetotaler of me.) "But that should not be separate paper work, Captain; it need only be a column of tally marks on the regular weekly report. Both company commanders and top sergeants are going to bellyache if it's too time-consuming—and the Commanding General would receive reports that would be mostly products of company clerks' imaginations. The Captain knows that, I feel sure."

Lazarus' father gave him a grin that made him look like Teddy Roosevelt. "Sergeant, you have just caused me to revise a letter I'm preparing for the General. As long as I am assigned to 'Plans & Training' no new program will add to the mountain of paper work if I can help it. I have been trying to sweat this one down to size, and you've shown me a way to do it. Tell me, why did you turn down officers' training when it was offered to you? Or don't tell me if you don't want to; it's your business."

(Pop, I'm going to have to lie to you—for I can't point out that a platoon leader has a life expectancy of around twenty minutes if he takes his platoon "over the top" and does it by the Book. What a war!) "Sir, look at it this way. Suppose I put in for it. A month to get it approved. Then three months at Benning, or Leavenworth, or, wherever they're sending them. Then back here, or Bliss, or somewhere and I'll be assigned to recruits. Six months with them and we go overseas. More training behind the lines 'Over There' from what I hear. Adds up to about a year, and the war is over, and I haven't been in it."

"Mmm…you could be right. You want to go to France?"

"Yes, *sir!"* (Christ, *no!)*

"Just last Sunday, in K.C., my father-in-law told me that would be your answer. But you may not know, Sergeant, that the billet you are in will be just as frustrating…without the compensation of bars on your shoulders. Here in 'Plans & Training' we keep track of every enlisted instructor—and the ones who don't work out we ship out… but the ones who *do* work out we hang onto like grim death.

"Except for one thing—" His father smiled again. "We have been asked—the polite word for 'ordered'—to supply some of our best instructors for that behind-the-lines training in France you mentioned. I know you qualify; I've made it a point to note the weekly reports on you ever since my father-in-law told me about you. Surprising proficiency for a man with no combat time…plus a slight tendency to be nonregulation about minor points, which—privately—I do not find a drawback; the utterly regulation soldier is a barracks soldier. Est-ce que vous parlez Ia langue française?"

"Oui, mon capitaine."

"Eh, bien! Peut-être vous avez enrôlé autrefois en la Legion Etrangère, n'est-ce pas?"

"Pardon mon capitaine? Je ne comprends pas."

"Nor will I understand you if we talk three more words of it. But I'm studying hard, as I expect French to be my own ticket out of this dusty place. Bronson, forget that I asked that question. But I must ask one more and I want an absolutely straight answer. Is there any possibility *whatever* that any *French* authority might be looking for you? I don't give a tinker's dam what you may have done in the past, and neither does the War Department. But we must protect our own."

Lazarus barely hesitated. (Pop is telling me plain as print that if I am a deserter from the Foreign Legion—or have escaped from Devil's Island or any such—he's going to keep me out of French jurisdiction.) "Absolutely *none,* sir!"

"I'm relieved to hear it. There have been latrine rumors that Pop Johnson could neither confirm nor deny. Speaking of him—Stand up a moment. Now left face, please. And about face. Bronson, I'm convinced. I don't remember my wife's Uncle Ned, but I would give long odds that you are related to my father-in-law, and his theory certainly fits. Which makes us 'kinfolk' of some sort. After the war is over, perhaps we can dig into it. But I understand that my children call you 'Uncle Ted', which seems close enough and suits me if it suits you."

"Sir, it does indeed! It's good to have a family, under any assumption."

"I think so. Just one more thing…and this you must forget once you go out that door. I think that a rocker for those chevrons will show up one of these days…and not long after you'll be given a short leave that you haven't requested. When that happens, don't start any continued stories. Comprenez-vous?"

"Mais oui, mon capitaine, certainement."

"I wish I could tell you that we will be in the same outfit; Pop Johnson would like that. But I can't. In the meantime please remember that I haven't told you anything."

"Captain, I've already forgotten it." (Pop thinks he's doing me a *favor!)* "Thank you, sir!"

"Not at all. Dismissed."

DA CAPO

VII

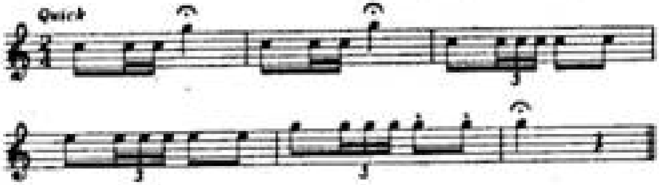

Staff Sergeant Theodore Bronson found Kansas City changed—uniforms everywhere, posters everywhere. Uncle Sam stared out at him: “I want *you* for the United States Army.” A Red Cross nurse was shown holding a wounded man in a stretcher as if he were a baby, with the one word:

“GIVE.” A sign on a restaurant said: “We Observe All Meatless, Wheatless, and Sweetless Days.” Service flags were in many windows—he counted five stars on one, saw several with gold stars.

More traffic than he recalled and streetcars were crowded, many passengers in uniform—it seemed as if all of Camp Funston and every camp or fort within reaching distance had all been dumped into the city at once. Untrue, he knew, but the train he had dozed in most of last night had been so jammed that it seemed true.

That “Khaki Special” had been almost as dirty as a cattle train and even slower; it had sidetracked again and again in favor of freights, and once for a troop train. Lazarus arrived in Kansas City late in the morning, tired and filthy—having left camp clean and rested. But he had his battered old grip with him and planned to correct both conditions before seeing his “adopted” family.

Waving a five-dollar bill in front of the railroad station got him a taxi, but the hackie insisted on picking up three more passengers going south after asking what direction Lazarus was going. The taxicab was a Ford landaulet like his own, but in much worse condition. The glass partition between front and back seats (the feature that made it a “limousine”) had been removed, and the collapsible half-top of the rear compartment appeared to have collapsed for the last time. But with five in it, plus baggage on knees, ventilation was welcome. The driver said, “Sergeant, you were first. Where to?”

Lazarus said that he wanted to find a hotel room out south, near Thirty-first.

“You’re an optimist—hard enough to find one downtown. But we’ll try. Drop these other gentlemen first, maybe?”

Eventually he wound up near Thirty-first and Main—”Permanent and Transient—all rooms & apts. with bath.” The driver said, “This joint costs too much—but it's this or go back downtown. No, keep your money till we see if they can take you. You about to go overseas?"

"So I hear."

"So your fare is a dollar; I don't take no tips from a man about to go over—I got a boy 'Over There.' Le'me talk to that clerk."

Ten minutes later Lazarus was luxuriating in the first tub bath he had had since April 6, 1917. Then he slept three hours. When his inner alarm woke him, he dressed in clean clothes from skin out, his best uniform—the breeches he had retailored for a smarter peg at the knee. He went down to the lobby and telephoned his family's home.

Carol answered and squealed. *"Oh!* Mama, it's Uncle Ted!"

Maureen Smith's voice was serenely warm. "Where are you, Sergeant Theodore? Brian Junior wants to go fetch you home."

"Please tell him thanks, Mrs. Smith, but I'm in a hotel at the Thirty-first Street car line; I'll be there before he could get here—if I'm welcome."

"'Welcome'? What a way for our adopted soldier to talk. You don't belong in a hotel; you must stay *here.* Brian—my husband, I mean, the Captain—told us to expect you and that you were to stay with us. Did he not tell you so?"

"Ma'am, I've seen the Captain just once, three weeks ago. So far as I know, he doesn't know I'm on leave." Lazarus added, "I don't want to put you out."

"Pish and tush, Sergeant Theodore, let's have no more of that. At the beginning of the war we changed the maid's room downstairs—my sewing room, where you played chess with Woodrow—into a guest room, so that the Captain could bring a brother officer home on a weekend. Must I tell my husband that you refused to sleep there?"

(Maureen my love, that's putting the cat too close to the canary! I won't sleep; I'll lie awake thinking about you upstairs—surrounded by kids and Gramp.) "Mrs. Captain generous hostess ma'am, I'll be utterly delighted to sleep in your sewing room."

"That's better, Sergeant. For a moment I thought Mama was going to have to spank."

Brian Junior was waiting at, the Benton car stop, with George as footman, and with Carol and Marie in the back seat. George grabbed the grip and took charge of it; Marie shrilled, "My, doesn't Uncle Ted look *pretty!"* and Carol corrected her:

"Handsome, Marie. Soldiers look handsome and smart, not 'pretty.' Isn't that right, Uncle Ted?"

Lazarus picked the smaller girl up by her elbows and kissed her cheek, set her down. "Technically correct, Carol—but 'pretty' suits me just fine if Marie thinks I am. Quite a welcoming committee—do I run along behind?"

"You sit in the tonneau with the girls," Brian Junior ruled. "But look at this first!" He pointed. "A *foot* throttle! Isn't that bully?"

Lazarus agreed, then took a few moments to inspect the car—in better shape than he had left it, shining and clean from spokes to top and with several new items besides the foot accelerator: a dressy radiator cap, rubber nonskids for the pedals, a tire holder on the rear with a patent-leather cover for a spare tire, a robe rail in the rear compartment with a lap robe folded neatly, and—finishing touch—a cut-glass bud vase with a single rose. "Is the engine kept as beautifully as the rest?"

George opened the hood. Lazarus looked and nodded approvingly. "It could take a white-glove inspection."

"That's exactly what Grandpa gives it," Brian declared. "He says if we don't take care of it, we can't use it."

"You do take care of it."

Lazarus arrived in royal splendor, one arm around a big little girl, the other around a small little girl. Gramp was waiting on the front porch, came down the walk to meet him, and Lazarus suddenly revised his mental image: The old soldier was in uniform and seemed a foot taller and ramrod straight—ribbons on his chest, chevrons on his sleeves, puttees most carefully rolled, campaign hat perched high and turned up slightly behind.

As Lazarus turned from handing Carol out, Marie having danced ahead, Gramp paused and threw Lazarus a sweeping Throckmartin salute. "Welcome home, Sergeant!"

Lazarus returned it as flamboyantly. "Thank you, Sergeant; I'm glad to be here." He added, "Mr. Johnson, you didn't tell me you were a supply sergeant."

"Somebody has to count the socks. I agreed to take—"

The rest was lost to Woodie's explosive arrival. "Hey, Uncle Sergeant! You're going to play chess with me!"

"Sure, Sport," Lazarus agreed, his attention distracted by two other things: Mrs. Smith at the open door, and a service flag in the parlor window. Three stars— *Three?*

Then Gramp was urging him in with something about this being a drill night so supper would be early. Nancy kissed him, openly and without glancing first for her mother's approval—then Dickie had to be picked up and kissed, and Baby Ethel *(walking!),* and at last Maureen gave him her slender hand, drew him to her, and brushed his cheek with her lips. "Sergeant Theodore…it is so *good* to have you home."

Supper was a noisy, well-run circus, with Gramp presiding in lieu of his son-in-law, while his daughter ran things with serene dignity from the other end and did not get up once Lazarus placed her chair under her and took his seat of honor on her right. Her three oldest daughters did all that was necessary. Ethel sat in a highchair on her mother's left with George helping her—Lazarus learned that this duty rotated among the five eldest.

It was a lavish meal for wartime, with hot, golden cornbread replacing white bread, this being a wheatless day—and firmest discipline (administered by Nancy and Brian Junior) required that every morsel accepted must be eaten, with admonitions about hungry Belgians. Lazarus did not care what he ate but remembered to compliment the cooks (three), and tried to answer all that was said to him—nearly impossible as Brian and George wanted to tell about their troop's drive to collect walnut shells and peach pits and how many it took for each gas mask, and Marie had to be allowed to boast that she could knit just as well as George could and she did not either drop stitches!—and how many squares it took to make a blanket, while Gramp wanted to talk shop with Lazarus and had to be stern to get a word in edgewise.

Maureen Smith seemed to find it unnecessary to talk. She smiled and looked happy, but it seemed to Lazarus that there was tension under her self-control—the ages-old strain of Penelope. (For me, darling? No, of course not. I wish I could tell you that Pop *will* come back, unharmed. But how could I make you believe that I *know?* You're going to ,have to sweat it out the way Penelope did. I'm sorry, my love.) "Excuse me, Carol— I missed that."

"I said it's perfectly *horrid* that you have to go back so soon! When you're just about to go 'Over There.'"

"But it's quite a lot, Carol, in wartime. It's just that getting here and getting back eats up so much time. I'm not entitled to special privileges; I don't know that I am about to ship out."

There was silence around the table, and the older boys exchanged glances.

Ira Johnson broke it by saying gently, "Sergeant, the children know what a pass in the middle of the week means. But they don't talk; they are disciplined. My son-in-law decided—wisely, I think—not to keep things from them unnecessarily."

"But, Grandpa, when Papa has leave, *he* doesn't go back next day. It's not fair."

"That's because," Brian Junior said wisely, "Papa usually rides with Captain Bozell in that big ol' Marmon Six and they burn up the road. Staff Sergeant Uncle Ted, *I* could drive' you back to camp. Then you wouldn't have to leave till later tomorrow night."

"Thank you, Brian—but I don't think we'd better. If I catch the train we call the 'Reveille Special' tomorrow evening, I'm safe even-if the train is a bit late, and this is one time I'm not going to risk being over leave."

"I agree with Sergeant Bronson," Gramp added, "and that settles it, Brian. Ted can't risk being late. I see that I had better move along, too. Daughter, if I may be excused?"

"Certainly, Father."

"Sergeant Johnson, may I drive you to your parade ground? Or wherever it is?"

"To the Armory. No, no, Ted, my captain picks me up and brings me home; he and I go early and stay late. Mrrph. Why don't you take Maureen for a spin? She hasn't been out of the house for a week; she's getting pale."

"Mrs. Smith? I'd be honored."

"We'll all go!"

"George," his grandfather said firmly, "the idea is to give your mother an hour free of the pressure and noise of children."

"Sergeant Ted promised to play chess with me!"

"Woodie, I heard what he said. He did not set a time…and he'll be here tomorrow."

"And he promised to take me to Electric Park a long, long, *long* time ago, and he never did!"

"Woodie, I'm sorry about that," Lazarus answered, "but the war came along before the park opened. We may have to wait until the war is over."

"But you said—"

"Woodrow," his mother said firmly, "stop that. This is Sergeant Theodore's leave, not yours."

"And get that sulky look off your face," added his grandfather, "before we form a regimental square and have you flogged around the flagpole. Nancy? Charge-of-quarters, dear."

"But—" The oldest girl shut up.

"Father, Nancy's young man is about to reach his birthday and is not going to wait to be drafted, I think I told you. So some of the young people are giving him a surprise party tonight."

"Oh, yes—slipped my mind.' Fine young man, Ted; you would approve of him. Correction, Nancy; you're off duty. Carol?"

"Carol and I can take care of anything," Brian answered. "Can't we, Carol? My night to wash, Marie wipes, George's turn to put away. Bedtimes by the schedules, emergency telephone numbers on the blackboard—we know the standing orders."

"May I be excused, too, then?" said Nancy. "Staff Sergeant Ted—

you *will* be here tomorrow. Won't you?"

Lazarus went out to the curb to meet Gramp's militia captain. When he came in, Maureen had gone upstairs. He grabbed the chance to freshen up in the bath off the quondam sewing room. Fifteen minutes later he was handing Mrs. Smith into the front seat of the landaulet, himself dizzied by her wonderful fragrance. Had she managed to bathe again in twenty minutes or so? It seemed like it; she had certainly changed clothes. These wartime styles were startling; as he handed her in Lazarus caught a glimpse not only of trim ankle but quite a lot of shapely calf. He was shaken by the thrill it gave him.

How long would this dress cycle last? While he cranked the car, he tried to quiet himself by thinking about it. Corsets disappeared right after this war, and skirts went up and up all during the Torrid Twenties, the "Jazz Age." Then women's styles varied all through this century but with a steady trend toward letting men see more and more of "what they were fighting for." But social nudity, even in swimming, did not become really common until the end of the century, so he seemed to recall. Then a puritan reaction the following century—a horrid time he had fled from.

What would Maureen think if he tried to tell her any of it?

The engine caught; he got in beside her. "Where would you like to go, Mrs. Smith?"

"Oh, out south. Somewhere quiet."

"South it is." Lazarus glanced at the setting sun, turned on his headlights. He made a U-turn and headed south.

"But my name is not 'Mrs. Smith', Theodore…when we are alone."

"Thank you…Maureen." Straight out to Thirty-ninth— then over to the Paseo? Or Prospect and out as far as Swope Park? Would she let him take her that far? Oh, for a thousand miles of open road and Maureen beside me!

"I like the way you say my name, Theodore. Do you remember where you took the children for a picnic not long before the war started?"

"Near the Blue River. You want to go there, Maureen?"

"Yes. If you don't remember the way, I can guide you; I suggested it for that picnic."

"We'll find it."

"It need not be that spot…but somewhere quiet—and private. Where you need not give your attention to driving."

(Hey! Maureen, my darling, you don't want us to be *too* private—I might shock you dreadfully. Private enough for a goodbye kiss—fine! Then let's deliver you home safe and sound. You are *this* century, my sweet! rd rather have one kiss—and your love and respect—than entice you into more aid have you think of me with regret. I decided that many months ago. You darling.)

"I should turn here?"

"Yes. Theodore, Brian Junior said that the new throttle he installed made it possible to drive with one hand."

"Yes, that's true."

"Then *do* drive with one hand. Is that plain enough, or must I be still more bold?"

Cautiously he put his arm across her shoulders. She promptly reached up, took his hand, pulled it down, and pressed it to her breast, saying quietly, "We haven't time to be shy, dear Theodore. Don't be afraid to touch me."

Firm-soft breast. Nipple erect to his touch. She shivered and got closer to him, again pressed her hand to his and gave a tiny moan. Lazarus said huskily, "I love you, Maureen."

She answered, just loud enough to be heard by him over the engine noise. "We have loved each other since the night we met. We simply could not say so."

"Yes. I didn't dare tell you."

"You would never have told me, Theodore. So I had to be bold and let you know that I feel it, too." She added, "The turn is just ahead, I think."

"I think so too. I'll need both hands to drive that lane."

"Yes," she agreed, surrendering his arm, "but only till we get there. Then I want *both* your arms…and *all* your attention."

"Yes!" He drove in carefully, avoiding ruts, until the lane widened into the level grassy spot he remembered. There he turned the car full circle, in part to head it out but primarily to see that no one else was there. His headlights picked up nothing but grass and trees—good! (Or was it good? Oh, my darling, do you know what you are doing?)

He switched off the lights, stopped the engine, set the hand brake. Maureen came right into his arms; her mouth sought his, opened wide to him. For long moments they needed no words; her mouth, her hands were as eager as his and even bolder, urging him on.

Presently she chuckled happily against his lips and whispered, "Surprised? But I can't say a proper goodbye to my warrior with bloomers on so I took them off when I went upstairs, and my corset, too. Don't hold back, dear one; you can't harm me—I'm expecting."

"What did you say?"

"Theodore, must I always be the one with bold words and bold actions? I am pregnant, seven weeks now. Certain."

"Oh." He added thoughtfully, "This seat is narrow."

"I hear that the young people sometimes take the back seat out and put it on the ground. Or do chiggers worry you? Audacity, darling, a warrior must be audacious—so says my father, and my husband agrees. There is a lap rug back there, too."

(Maureen, my love, there is no doubt where I got my own audacity —or my ruttiness. From *you,* darling.) "if you'll let go of me, I'll get them out. I'm not afraid of chiggers—nor of the loveliest woman I've ever held in my arms. I just have trouble believing it."

"I'll help!"

She was out of the car without waiting; he slid, across the seat and followed her. She opened the tonneau door—and stopped. Then she said loudly and happily, "Woodrow, you're a scamp! Sergeant Theodore! See who is sleeping in the back seat!" As she spoke, she fumbled behind her, trying to reach buttons of his that she had unbuttoned. Lazarus quickly took over the task.

"Sergeant Ted promised to take me to Electric Park!"

"That's where we're going, darling; we're almost there. Now tell Mama— Shall we take you home and put you to bed? Or are you big enough to stay awake and go to Electric Park?"

"Yes, Sport," Lazarus agreed. "Home? Or Electric Park?" (Maureen, did Gramp teach you to lie? Or is it genius? I not only love you, I admire you. Pershing should have you on his staff.) He hastily refastened buttons at the back of her dress.

"Huh? Electric Park!"

"Then settle back down and we'll have you there in no time."

"I want to ride in front!"

"Sport, you can ride in back to Electric Park. Or ride in back till we get you home and into bed. I won't drive with three in the front seat."

"Brian does!"

"Let's go home, Mrs. Smith. Woodie doesn't know who's driving this car—he must be *quite* sleepy."

"I am not either! I had a nap. All right, I'll ride in back— to Electric Park."

"Mrs. Smith?"

"We'll go to Electric Park, Sergeant Theodore. If Woodrow will lie down and try to get another nap."

Woodie promptly lay down; they closed him in and Lazarus got them out of there. Once there was enough engine noise to blanket her words, she said, "I must telephone. Back where we turned off, you'll find a drugstore farther along—that's on our way to Electric Park."

"Right away. How much do you think he heard?"

"I think he was asleep until I opened the door. But nothing of importance if he was not and would understand less. Don't worry, Theodore—audacity, always audacity."

"Maureen, you should be a soldier. A general."

"I would rather be loved by soldiers…and I am, and it makes me wonderfully happy. Now you can drive with one hand again."

"That's just glass, he can see us."

"Theodore, you can touch me without putting an arm around me. I shall sit up straight and pretend to ignore whatever you find to do. But I am a *very* frustrated woman—and I want to be *touched.* By you." She chuckled. "Aren't we a pair of ninnies?"

"I suppose so. But I'm not laughing." Lazarus squeezed her thigh. "I'm too frustrated."

"Oh, but you *must* laugh, Theodore." She pulled up her skirt, moved his hand onto bare thigh above round garters. "When you have as many children as I have, you *must* laugh. Or go crazy." She pushed her skirt down, over his hand.

He caressed her warm, smooth skin; she eased her thighs and invited more. "I guess it *is* funny," he admitted. "Two full-grown adults outflanked by a six-year-old."

"Only five, Theodore. Not six until November." She squeezed his hand between plump thighs, then relaxed. "How well I remember. Biggest baby I've had, eight pounds…and more trouble than all the rest put together, and always a scamp and always my favorite and I try never to let it show—and you must not tell on me—that Woodrow is my favorite, I mean; I'm not afraid of your telling anything else. I know my reputation is safe with you."

"It is."

"I knew it or would never have plotted to take you out there. But 'reputation' is all it is; you now know what a hussy I am under my mask. But I cultivate a good reputation most carefully for my children. For my husband."

"You said 'plotted.'"

"Weren't you sure of it? I knew at once, when I learned how short your time is, that I had exactly one chance to get you alone and make you realize that I want you to come back *with* your shield, not on it. There is only one way for a woman to tell a warrior that. So I enlisted Father's help to get you away from my swarm of children." She chuckled again. "But the worst scamp I have ruined my carefully plotted plans. For he *has,* dear one—I don't dare risk it at home. I'll always regret that we didn't succeed…and I hope you will, too."

"Oh, I will, I do! You put Mr. Johnson up to suggesting this ride? Won't *he* suspect?"

"I'm sure he does. And disapproves. Of *me,* Theodore—not of you. But my reputation is as safe in his hands as in yours. Want to hear a sidesplitting joke? One that will make us laugh so hard that we'll forget how frustrated we are."

"I'll laugh if you do."

"Did you wonder how I knew the perfect place? Because I have been there before, Theodore, for the same purpose. But that's not the joke; this is: That rascal in the back seat was conceived there—on the very spot I was going to have you place me."

Lazarus thought a split second, then guffawed. "You're sure?"

"Utterly certain, sir. Ten feet from where you stopped. By that biggest black-walnut tree. I planned to have you place me on the same spot. I'm sentimental, Theodore; I *wanted* you to have me right where I conceived my favorite child. And the little imp stopped me! After I had become *quite* excited thinking about doing it with you on the very spot."

Lazarus thought a long moment—decided that he did want to know. "Who was he, Maureen?"

"What? *Oh!* I suppose I invited that so I shan't resent it. Theodore, I'm scarlet but not that scarlet. My husband, dear—*all* my children are his, no possibility of error. You have seen Brian only as an officer—but in private my husband is quite playful. So much so that I *never* wear bloomers when I go joyriding with him.

"It was February eighteenth, a Sunday, one I'll never forget. I kept a hired girl then; Nancy was too young to leave with the younger ones, and Brian was on the road, traveling, and wanted me to be ready for anything when he *was* in town, and he had just bought his first automobile.

'That Sunday was one of those false-spring days, and Brian decided to take me joyriding. Just me. He had established a firm rule that some occasions were for all our family, some were just for Mama and Papa—a good policy in a. large family, we think. So we got to that lovely picnic spot, pretty even in winter, and the ground was dry. We sat and lallygagged, and he had his hand where yours is—and he told me to take my clothes off."

"In *February?"*

"I didn't protest. It was at least sixty and no wind—but I would in much colder weather if my husband asked me to. So I did—all but shoes and stockings, and I looked like one of those French postcards you men buy in cigar stores. I didn't feel cold, I felt *grand—I* like to feel naughty, and Brian encourages me to, in private. He put down the back seat cushion—on that spot—and put a blanket on it. And had me. And that's when I got Woodrow. It had to be then because Brian was home just one day and that was the only time. Quite unusual, we usually squeeze in more loving, we enjoy it so." She chuckled. "When we were sure, Brian teased me about the iceman and the milkman and the postman-or was it the grocery boy? I teased right back that it could have been any of them—but the woodman got there first…in the woods. Right here, dear one; I won't be but a moment."

They all went in, as Woodie woke up (if he had slept; Lazarus had dark doubts—then reviewed it in his mind and decided that Maureen had been careful both in voice and phrasing). Lazarus bought the little boy an ice-cream cone to keep him quiet and sat him at the fountain, then moved to the other end and listened to her telephone call; he wanted to know what lies he must back up.

"Carol? Mama, dear. Have you counted our zoo lately?

Stop worrying; the scamp hid in the back seat, and we didn't know it until we were almost to Electric Park. Yes, dear, Electric Park and I'm feeling very gay. I'm going to keep Woodrow with us and not let the imp spoil our fun.

Earlier than I want to; Woodrow will be sleepy too soon to suit Mama; I want to ride every ride and win at least a Kewpie doll at the booths…Yes, as long as Marie is in bed on time. Make fudge for the boys—no, not fudge; we must watch the sugar ration. Make popcorn, and tell them I'm sorry they were worried. Then you older ones may stay up and say goodnight to Uncle Ted. Goodbye, dear."

She thanked the druggist with smiling dignity, took Woodie's hand and left unhurriedly. But the moment Lazarus had the car rolling, she took his right hand and restored it to warm intimacy of bare thighs. "Any trouble?" he asked, caressing her silken skin.

"None. They had been engaged in a bloodthirsty 'game of F1n h and didn't miss him untilit was time to put him to bed, only minutes before I called. Then they were worried, but not yet frantic; my little demon has hidden on us before. Theodore, Electric Park is an expense you did not expect. Will you put aside your pride and let me help?"

"I would if I needed help: I don't have that sort of useless pride. But I have plenty of money, truly. If I run short, I'll tell you." (Beloved, darling, I've been teaching optimists not to draw to inside straights, and I wish I could spend every cent of it on emeralds to set off your beautiful skin. But *your* pride makes that impossible.)

"Theodore, not only do I love you, you are a most comfortable person to be with."

Taking Woodie and his mother to Electric Park turned out to be more fun than Lazarus expected. He had nothing against amusement parks and was willing to be anywhere with Maureen—except that this time he expected to put up with restless frustration, in public where he must treat her as "Mrs. Smith," after being in warmest privacy—then disappointed.

But she taught him a lesson in how to enjoy the inevitable.

He learned that Maureen could be unblushingly intimate despite people all around them and still maintain her smiling, regal, public dignity. She did it by keeping her *persona* always intact—happy young matron with boy child clutching her hand, both enjoying an evening of innocent fun as guests of "Cousin" Theodore, "Uncle" Ted—while she found endless chances to continue her gaily bawdy conversation. Maureen did it not in whispers, but in ordinary tones pitched to reach Lazarus' ears only, or sometimes to Lazarus and Woodie but so phrased that the child would neither understand nor be interested.

Once she gently chided Lazarus. "Smile, beloved man. Let your face show that you are where you want to be, doing what you want to do. There, that's better. Now hold that expression and tell me why you were looking glum."

He grinned at her. "Because I'm frustrated, Maureen. Because I'm not in a certain spot by a big walnut tree."

She chuckled as if he had said something witty. "Alone?"

"Heavens, no! With *you."*

"Not so vehemently, Theodore. You are not courting me; you are my cousin who is wasting part of your precious leave by treating me and my child to an evening of fun—when you had hoped that I would find you a young lady who would turn out to be not at all ladylike when you took her to a dark place near a big walnut tree. You're a good sport about it— but not so enthusiastic as to cause Mrs. Grundy to raise her eyebrow…and there comes Mrs. Grundy now. Mrs. Simpson! And Mr. Simpson. How *nice* to run across you! Lauretta, may I present my dear cousin Staff Sergeant Bronson? And Mr. Simpson, Theodore." Maureen added, "Or perhaps you have met? At church? Before war was declared?"

Mrs. Simpson looked him over, counted the money in his wallet, checked his underwear, inspected his shave and haircut—assigned him a barely passing mark. "You belong to our church, Mr. Johnson?"

"'Bronson,' Lauretta. Theodore Bronson, Father's eldest sister's son."

"Either way," Mr. Simpson said heartily, "it's a pleasure to shake hands with one of 'Our Boys.' Where are you stationed, Sergeant?"

"Camp Funston, sir. Mrs. Simpson, I was a visitor to your church; my membership is in Springfield."

Maureen stopped their questions by asking Lazarus to fetch Woodie from the miniature railroad train, just returning to its ticket-booth depot. "Pull him like a cork, Theodore; three rides is enough. Lauretta, I didn't see you at Red Cross last week. May we count on you this week?"

Lazarus returned with Woodie in time for Mr. Simpson to wave and call out, "Good luck, Sergeant!" as the Simpsons moved on. The trio went next to the pony ride, got Woodie astraddle one; Mrs. Smith and Lazarus sat on a, bench, enjoyed more very private talk while very much in the public eye. "Maureen, 'you stole that base beautifully."

"No problem, dear one. I knew someone would see us, so I was ready. I'm pleased that it was the nastiest old gossip in-our church; I made sure she didn't miss us. Pillars of the church and war profiteers; I despise them. So I pulled her fangs and let's forget them. You were telling me about a certain dark spot. How was I dressed?"

"Like a French postcard!"

"Why, Sergeant Bronson!—and me a respectable woman. Or almost. Surely you don't think I would dare be that shameless?"

"Maureen, I'm not sure *what* you would dare. You have startled—and delighted me—several times. I think you have the courage to do anything you want to do."

"Possibly, Theodore, but I have limits on what I *will* do, no matter how much I want to. Do you want to know my limits?"

"If you want me to know, you'll tell me. If you don't, you won't."

"I want you to know, beloved Theodore. I would like to strip naked this very moment. I refrain only for practical reasons—not moral ones and not shyness; I *want* to give you my body, let you enjoy it any way you please—while I enjoy yours. There are *no* limits to what I *want* to do with you but only to what I *will* do.

"First"—she ticked them off—"I will not risk becoming pregnant by any man but Brian. Second, I will not knowingly risk the wellbeing of my husband and children."

"Weren't you risking that tonight?"

"Was I, Theodore?"

Lazarus thought about it. Pregnancy? Not a factor. Disease? She apparently trusted him on that—and Yes, darling, you are right. I don't know why you hold that opinion of me, but you're right. What does that leave? A chance of scandal if we had been caught. How much chance? Very little; it's as safe a spot as one could wish. Cops? Lazarus doubted that police ever checked that spot—and doubted still more strongly that a policeman, in the present war fever, would tell a soldier in uniform more than "Break it up and move on."

"No, my darling, you took no risks. Uh, if I had asked you to undress completely, would you have done so?"

Her laugh rang like chimes. Then She answered in her controlled pitch more private than a whisper. "I thought about that while I was taking a quick bath to make myself sweet for you, Theodore. It was a delightfully tempting idea; Brian has had me do so outdoors oftener than that once. It excites me, and he says that makes me more fun for him. But that's a risk *he* chooses to take, so it worries me not at all—with him. But I did not think it fair to him to take that risk on my own. So I firmly resolved, with my nipples crinkled up as hard as you felt them—hard as they are *now;* I'm *terribly* excited—I resolved not only *not* to undress but not to let *you* do so. Dear, will you go pay for another pony ride? Or fetch him if he's tired of that?"

Lazarus found that Woodie wanted another ride. He paid and went back to the bench, found Maureen staring down a lonely soldier. Lazarus touched his sleeve. “On your way, Private.”

The soldier looked around, ready to argue—looked again and said, “Oh. Sorry, Sergeant. No offense meant.”

“And none taken. Better luck elsewhere.”

Maureen said, “I hate to snub a boy in uniform, even when -I must. He wasn’t fresh to me, Theodore—he was just exploring the chances. I must be twice his age and was tempted to tell him so. But it would have hurt his feelings.”

“The trouble is that you *look* eighteen, so they’re certain to try.”

“Darling, I do *not* look eighteen. Me with a daughter over seventeen? If Nancy marries her young man before he goes to war—she wants to, and Brian and I won’t stop it—I’ll be a grandmother this coming year.”

“Hi, Grandmaw.”

“Tease. I will *enjoy* being a grandmother.”

“I’m certain you will, dear; I think you have great capacity for enjoying life.” (As *I* do, Mama!—and now I feel sure I got it both from you and Pop.)

“I do, Theodore.” She smiled. “Even when frustrated. Very.”

“Me, too—very. But we were talking about how old you look. Eighteen, that is.”

“Pooh. You noticed how broken down and baby-chewed my breasts are.”

“I noticed nothing of the sort.”

“Then you have no sense of touch, sir…for you handled them quite thoroughly.”

“Excellent sense of touch. Lovely breasts.”

“Theodore, I try to take care of them. But they’ve been filled with milk much of the past eighteen years. That one”— she nodded toward the pony ring—”I didn’t have enough milk for and had to put him on Eagle Brand, and he resented it. When I had Richard two years later, Woodrow tried to crowd out the new baby and take my freshened breasts. I had to be firm—when what I wanted was to have one at each breast. But one must be fair to children, not spoil one at the expense of another.” She smiled indulgently. “I have no sense about Woodrow, so I must follow my rules to the letter. Come back in a year, Theodore, and they won’t seem so broken down. They swell out and make me look like a cow.”

“Will you make it worth my while?”

“By a walnut tree? Probably no chance, dear one. I’m afraid my scamp killed our one chance.”

“Oh, it wouldn’t take *that* much to make it worthwhile. I was thinking of a taste—direct from producer to consumer." (Mama Maureen, as Galahad says and I've never argued, I'm the most tit-happy man in the Galaxy…and I'm staring at the spot where I acquired the habit. I wish I could tell you so. Darling.)

She looked startled, snorted, and looked delighted. "That might be almost as hard to arrange as a walnut tree. But— Yes if it can be done without shocking my children. You are a scamp, too—just like Woodrow. I know *I* would enjoy it. Because—this is secret, dear—Brian has tasted each new freshening. Claims solemnly that he's checking quality and butterfat content."

(Pop, you're a man of good taste!) "Does he ever find that one has a taste different from the other?"

She chuckled happily. "Dear one, you have so many playful quirks just like my husband that-you make me feel bigamous. He claims so, but it's just more of his joking. *I* can't tell any difference—and I've tasted."

"Madam, I look forward to giving you an expert's opinion. I think our cowboy has worn out his pony. What next? Want to try the Ben Hur Racer?"

She shook her head. "I enjoy roller coasters but won't go on one now. I've never miscarried, Theodore, and never will if being careful will keep me from it. Take Woodrow if you like."

"No. You would have to wait—and these woods are filled with wolves in khaki anxious to pick up eighteen-year-old grandmothers. The Fun House?"

'"All right." Then her mouth twitched. "No, I forgot something. Those blasts of air up from the floor—intended to make girls squeal and clutch their skirts. Which I don't mind but—no bloomers, dear. Unless you want everyone to see whether or not I'm truly a redhead."

"Are you?"

She smiled, unoffended. "Tease. Don't you know?"

"It was very dark near that walnut tree."

"Redhead at both ends, Theodore. As I would happily show you were it not for the—frustrating—circumstances. Brian asked me that while we were courting. Teasing, he didn't need to ask; I was covered with freckles then, just like Marie. I let him find out for himself on a grassy spot by the Marais des Cygnes River while a gentle old mare named 'Daisy' cropped grass and paid no attention to my happy squeals. I suppose the automobile is here to stay—but the horse-and-buggy had many advantages. Didn't you find it so? When you started stepping out with young ladies?"

Lazarus agreed with a straight face, unable to admit that his memories did not include 1899 or whatever year she was thinking of. Maureen went on, "I used to fix a picnic lunch and take a blanket to eat on. That was one way a girl of courting age could be unchaperoned as long as I was home before dark. A horse can take a buggy into spots even more private than our walnut tree. Truthfully, despite this modem talk about ‘wild women’ and morals breaking down, I had more freedom as a girl than my daughters do. Although I try not to make my chaperonage oppressive.”

“They don’t seem oppressed. I’m sure they’re happy.”

“Theodore, I would much rather have my children be happy than what our pastor says is ‘moral.’ I simply want to be sure they aren’t hurt. I am not ‘moral’ by the accepted rules—as you know quite well. Though not as well as I had hoped you would know it, and I’m taking out my frustration in talking about it. Perhaps you would rather I did not?”

“Maureen, since we can’t do it, the next best thing is talking about it.”

“Me, too, Theodore. I wish I were covered with chigger bites and my soul filled with the peace I know you could give me. Since I can’t give myself to you the way I had hoped, I want you to know me as deeply as words can bring us together as deeply as I wish you were in my body this very instant. Does my frankness shock you?”

“No. But it might get you raped right on this bench!”

“Please, not so much enthusiasm, dear one; people can see us—we’re talking about the weather. Tell me, is your thing hard?”

“Does it show?”

“No, but if it is, think about blizzards and icebergs—Brian says that helps—because our pony rider needs to be lifted down.”

They played both games for prizes; then Mrs. Smith decided that she could risk the Fun House if she clutched her skirts as if crossing a muddy street. Woodie enjoyed it, especially the Hall of Mirrors and the Crystal Maze. Maureen avoided air blasts by watching girls ahead of them, then either walked on one side or held her skirts firmly.

Woodie tired himself out, so Lazarus picked him up and he seemed to fall asleep—as his head touched Lazarus’ shoulder. They started to leave, which took them over the farewell air blast. Mrs. Smith was ahead and Lazarus assumed that she had it spotted from the way she swerved—then she turned as if to speak to him, and stood over it. Her skirts went flying high.

She did not squeal; she simply pushed them down a split second too late. Once they were outside she said, “Well, sir?”

“Same color. But curly, I think.”

“Quite. As curly as my other hair is straight; As you already knew.”

“And you did it on purpose.”

“Certainly. Woodrow is asleep and you had his head turned away. Perhaps some stranger got an eyeful, but I think not. If someone did, what can he do? Write a letter to my husband? Pooh. There was no one in there who knows us; I kept my eyes open. And grabbed the chance."

"Maureen, you continue to amaze and delight me."

"Thank you, sir."

"And you have beautiful limbs."

"'Legs,' Theodore. Brian says so, too, but I'm no expert on women's legs. But when he tells me so, he always says 'legs.' 'Limbs' is for public speech. So he says."

"The more I know about the Captain, the more I like him. You have gorgeous legs. And green garters."

"Of course they're green. When I was a little girl, I wore green hair ribbons. I'm too old for hair ribbons, but if there is the teeniest possibility that my curls will be seen, I wear green garters. I have many pairs; Brian gives them to me. Some with naughty mottoes on them."

"Are there mottoes on these?"

"'Little pitchers,' Theodore. Let's get Woodrow settled down in the back seat."

It seemed to Lazarus that "little pitchers" could not be listening; the child was limp as a rag doll. Nor did he wake when he was bedded down; he curled into fetal position, and his mother put the robe over him.

Lazarus handed her into the car, cranked it and joined her. "Straight home?"

She said thoughtfully, "There is plenty of gasoline; Brian Junior filled the tank this afternoon. I don't think Woodrow will wake."

"I know there's enough gasoline; I checked when I went out to meet Mr. Johnson's captain. Shall I find that walnut tree?"

"Oh, dear! Please don't tempt me. Woodrow *might* wake up and could climb over the back and get out, as easily as he climbed in and hid. He's not old enough to understand what we would be doing; nevertheless, I think his misunderstanding of it could upset him just as much. No, Theodore. What I meant is this: It's not late, it's just late for a little boy. While he sleeps we can ride around and talk for, oh, an hour. If you wish."

"We'll do that." He got rolling and added, "Maureen, although I want to take you back to that walnut tree, I think it's best that we don't. Best for you, I mean."

"But, darling! Why? Don't you think I *want* you?"

"I do think you want me. And God knows I want *you.* But despite your brave talk, I don't think you've ever done that. You would want to confess to your husband and if you did, it would make you both unhappy—and I don't want to make Captain Smith unhappy either;

he's a good sort. Or maybe you could keep it to yourself—but it would prey on your mind. Because, while you love me—a little—you love him a great deal more and I am sure of that. So it's best. Isn't that so?"

Mrs. Smith was silent a long moment. Then she said, "Theodore, take me straight to that walnut tree."

"No."

"Why not, dear? I must show you that I *do* love you and that I am *not* afraid to let you have me."

"Maureen, you would do it; you have the courage to do anything. But you would be tense and worried, afraid that Woodie would wake up. And you do love Brian. All the sweetly intimate things you've told me kept saying that."

"But don't you think my heart is big enough for *both* of you?"

"I'm certain it is. You love ten people that I know of; I'm sure you can squeeze in one more. But *I* love *you* and do not want you to do anything that would make a wall between you and your husband. Or hurt you both through your trying to tear down that wall by confessing. Beloved, I want your *love* even more than I want your dear, sweet body."

Again she was silent before speaking: "Theodore, I must tell you things about my husband and me. Private things."

"You shouldn't."

"I should and I must—and I *shall.* But— Please, will you touch me while I talk? Don't say anything, just touch me closely and intimately and nakedly…while I strip myself naked with words. Please?"

Lazarus put his free hand on her thigh. She pulled up her skirts, opened her thighs, pushed his hand more firmly to her. Then she covered his hand with her skirt, and spoke in an even, steady voice: "Theodore beloved, I love Brian and Brian loves me and he knows exactly what I am. I could keep a secret forever to keep from hurting him, and he would do the same for me. I must tell you what he said to me before he went away to Plattsburg—and I must use 'bedroom words,' Theodore; polite words don't have the force it must have.

"The night before he left we were in bed and had just had each other, me still wrapped around him like a curling iron and him still deep inside me. 'Swivel Hips,' he said—a pet name he calls me in bed—'I didn't sell the Reo to tie you down. If you want to drive, buy a Ford; it's easier to learn on.' I told him I didn't want to drive; I would wait until he came home. He answered, 'All right, Hot Bottom'—and that's a pet name, too, and Brian means it most lovingly—'All right, Hot Bottom, but buy one if you wish; you may need a car while I'm gone.

"'But a car is a minor matter. Your father will be here and that's good—but don't let him boss you. He'll try, he can't help it, it's his nature. But you are as strong-willed as he is; stand up to him, he'll respect you for it.

"'Now to more important matters, Pretty Tits'—and I like *that* name, too, Theodore, even though they're not and don't stop me to say they are—'Pretty Tits, I may not have gotten you pregnant; you don't usually catch again this soon. If not, once I'm back from Plattsburg, we'll keep on trying'—and we did, Theodore, and I caught, as I told you.

"Brian went on, 'We both know we're going to get into this war or I wouldn't be going to Plattsburg. It may last a long time—that "million men springing to arms overnight" is hogwash. When we do, I'll be gone again, and you'll be lonely—and we both know what a firecracker you are. I'm not telling you to jump the fence again'—I said *'again,'* Theodore!—'but if you do, I expect you to do it on purpose, eyes open and not to regret it afterwards. I have enormous respect for your taste and judgment; I know you won't cause a scandal or upset the children.'"

She paused, then went on: "Brian knows me, Theodore—I really *am* a firecracker, and I've never understood why some women don't like it. My own mother— Nine children and she told me on my wedding day that it was something women had to put up with for the privilege of having babies."

Mrs. Smith snorted. "'Put up 'with!' Theodore, I was not a virgin when Brian first had me. Nor had I let him think so; I told him the truth the day I met him and two minutes after he took my bloomers off he knew it through having me. Theodore, I broke my maidenhead three years before I met Brian—on purpose; I've never been a flirt—and told, not my mother, but my father, because I trusted him; we've always been close. Father didn't scold me, didn't even tell me not to do it again. He said he knew that I *would* do it again but hoped that I would take his advice and let him keep me out of trouble—and I have and it did.

"But that first time, when I came to him, scared and ready to cry—it had hurt, Theodore, and wasn't the thrill I had expected—that time Father just sighed and locked the door and had me get on his surgery table and examined me and assured me that I hadn't been damaged—and I felt *much* better!— and told me that I was as healthy a woman as he had ever examined and would have babies with no trouble—and that made me feel smug—and Father was right; I have babies easily and don't yell—or not much. Not the way Mother used to.

"After that, Father examined me from time to time. Doctors don't ordinarily treat their female relatives, not for female things. But Father was the only doctor I dared tell. So Father helped me with my problems and got me all over any shyness about being looked at there or anywhere. Not that I was ever too shy; he told me that sort of modesty was dadratted nonsense—when Mother was telling me the exact opposite. I believed him, didn't believe her.

"But I was telling you what Brian said to me in bed that night. Brian added, 'I want you to promise one thing, Pussycat. If you find that you haven't kept your legs crossed, will you keep it to yourself until this war is over? I will do the same if I have something to confess—and I might! Let's not worry each other more than we have to until the Kaiser is taken care of. Then when I come home, I'll take you to the Ozarks—leave the children home with someone; just us two—and. you won't see anything but the ceiling while we get caught up, and also catch up on anything we need to talk about. Is it a bargain, my darling?'

"I promised, Theodore. I didn't promise not to jump the fence; he wouldn't *let* me promise that. I promised to be careful—and to save any confessing until the war was won. I wanted to promise that much because he might not *come back!"*

Her voice had been steady up to the last. Then it broke, and he realized that she was crying. He started to remove his hand and to pull over to the side of the road. Mrs. Smith grabbed his hand, pushed it more firmly back between her thighs, and said, "No, no, *do* touch me and *don't* stop the car! Or I might rape you. I don't know why it makes me so passionate when I let myself remember that Brian might not come back from the war. But it does. I've been that way ever since the day we declared war…and always have to look serene and calm and unworried. For the children. For Brian. I haven't let Brian see me cry, Theodore. You have just now— I suddenly could not help it. But I would rather you told Brian that I tried to seduce you than have you tell him that I cried through fear that he might not come back!

"And now I'll stop it." Mrs. Smith took a kerchief from her purse, wiped her eyes, blew her nose. "Don't take me home yet; the children must not see me with my eyes red."

Lazarus decided to break cover. "I love you, Maureen."

"I love you, Theodore. In spite of my tears, you have made me happy. By letting me unburden myself—and I should not have; *you* are going to war, too. I feel almost married to you now, by telling you things I haven't been able to talk about with anyone else. If you had put me on the grass and had me—it would have been sweet and just what I planned. But this is even closer. And sweeter. A woman can open—her body to a man without opening her mind. I had two babies by Brian before I learned to open my mind to him the way I have to you tonight."

"Perhaps our minds are much alike, Maureen. Your father thinks we are cousins."

"No, he doesn't, darling; he thinks you're my half brother."

"Did he say that?"

"And *I* think so, too. By things Father did *not* say, dear Theodore. By how broken up he was when he misunderstood you about your intention to enlist. By the way he insisted that we *must* claim a service star for you. I feel sure he is right…and I *want* to believe it. Yes, that makes what I tried to do to you dreadfully sinful in some people's eyes, Incest. I did not care a whit. Since I'm pregnant, it could not possibly cause harm to a baby and that's the only thing that could make incest wrong."

(How to tell her? How *much* to tell her? But I *must* make her believe me.) "Your church would call it sinful."

"I don't give a fig for the church! Theodore, I'm not devout; I'm a freethinker, like Father. Church is a good atmosphere for children—and gives me a proper appearance as a respectable wife and mother—that's all! 'Sin' would not stop me; I don't believe in sin the way the church means it. Sex isn't sin, sex is never sin. What *would* stop me would he a chance of getting pregnant by someone other than Brian—but I *am* pregnant. That you ere my half brother didn't cause me a moment's fret; it just made me more anxious to tell you a warrior's goodbye."

"Maureen, I'm not your half brother."

"Are you sure? Even if you're not, you are still my warrior—I was as proud as Father when you volunteered."

"I'm your warrior, be sure of that. But I need to know something. This man Nancy may marry— Is he a Howard?"

"What did you say?"

"Is he on the approved list of the Ira Howard Foundation?"

He heard her catch her breath. "Where did you hear of the Foundation?"

"'Life is short—'"

"'But the years are long,' " she answered.

" 'Not "While the Evil Days Come Not."'"

"Goodness! I— I think I'm going to cry again!"

"Stop it. What is the young man's name?"

"Jonathan Weatheral."

"—of the Weatheral-Sperling line. Yes, I remember. Maureen, I am not 'Ted Bronson.' I am Lazarus Long of the Johnson Family. *Your* family. I am descended from you."

For several moments she seemed not to breathe. Then she said softly, "I think I am losing my mind."

"No, my gallant love, you have as strong and sane a mind as I have ever met. Let me explain because I must tell you something and you *must* believe me. Have you read a novel by Mr. Herbert George Wells called *The Time Machine?"*

"Why, yes. Father has a copy."

"That's me, Maureen. Captain Lazarus Long, Time Traveler."

"But that book— I thought it was just a…a—"

"Just a story. It is. But it won't stay that way. Oh, not quite the way Mr. Wells visualized it. But that's what I am, a visitor from a future time. I didn't intend to let anyone suspect this; that's why I claimed to be a foundling. Not only is it hard to prove, but any attempt would interfere with my purpose which is simply to visit this time and observe it. Might even get me locked up as crazy. So I've been careful to keep my mask on, as careful as—well, as *you* are. In talking to those Simpsons. In not letting your children see you cry. You and I do it the same way. Audacity…plus never telling lies we can be caught in."

"Theodore, I think you believe this."

"Meaning that I sound sincere but must be crazy."

"No, no, dear, I— Yes, that's what I meant. I'm sorry."

"No reason to be sorry; it does sound crazy. But I'm not afraid that you will have me sent to St. Joe; I'm as safe with you as you are with me. But I *must* find some way to convince you that I *am* telling the truth…because I am about to tell you something you *must* believe. Or I have dropped my mask to no point."

He stopped to think. How to prove it? Some prediction? It would have to be very short range to serve the only purpose he had in breaking cover. But he hadn't briefed himself on this year; he hadn't intended to arrive until 1919 and knew so little about the years before 1919 that he had even mixed up the date that the United States got into this war. Lazarus, damn your sloppy ways, the *next* time you make a time trip you're going to memorize everything about the era that Athene can give you—and a wide margin on both sides!

Woodie's memories were no help; Lazarus did not even recall having been taken to Electric Park by a sergeant in uniform. Self-centered brat! Electric Park he remembered; Woodie Smith had gone there many times. But no visit stood out in his mind.

"Maureen, maybe you can think of some way I can prove to you that I'm from the future—something that will convince *you.* But this is why I *had* to tell you: Brian—your husband, my ancestor—will come back unharmed. He's going to go through battles. Shells will fall around him, shots will whistle past his ears—but none will touch him."

Mrs. Smith gasped. Then she said slowly, "Theodore how do you *know?"*

"Because you two *are* my ancestors. I couldn't memorize the

Foundation's records on all the Howards of today but I did study the files on my own ancestors, ones I might have a chance to meet. You. Brian. Brian's parents in Cincinnati. And I figured out that Brian must have met you because he had attended Rolla, then found you on a Missouri list of eligibles—not the Ohio list—that the Foundation gave him. That's certainly something I didn't learn from you or Brian or Ira, and your children probably don't know it. Well, perhaps Nancy does; she's filled out her own questionnaire. Hasn't she?"

"Why, yes, months ago. Then it *is* true, Theodore. Or should I call you 'Lazarus'?"

"Call me anything you like, darling. But I still haven't proved anything. Just that I have had access to the Foundation's files—which might have been last year, not in the future. We're still looking for *proof.* Mmm…I know a proof for a few months from now—but I must make you believe me *tonight.* So you will have no more tears on your pillow. And I don't know *how."*

He caressed her thighs, touched her curls. "Here inside you is proof that won't show up in time. This last baby Brian put into your sweet belly— He's a boy, dearest ancestress, and you and Brian will name him 'Theodore Ira'—which flatters me enormously. When I read his name in the records, I didn't know that he was my namesake, as I hadn't picked my assumed name then."

She squeezed his hand with her thighs and sighed. "I want to believe you. But suppose Brian wants to name him Joseph? Or Josephine?"

"'Josephine' is not a name for a boy. Darling, Brian will name his war baby for the other two stars on your service flag; this war means a lot to him. He'll probably suggest it himself—I don't know. I just know that 'Theodore Ira' is the name you will register with the Foundation. My other ancestors— Adele Johnson, of course, your mother and Ira's wife. Lives in St. Louis. Left him around the time you got married but didn't divorce him—which probably irked him; I don't think Ira is a man to be celibate simply because his wife leaves but Won't turn him loose."

"He's not, dear. I'm certain Father has a—well, a mistress, and goes to see her some nights when he is supposed to be at that 'chess club'—and it's not a chess club; it's a pool hall. I go along with the pretense because he calls it that in front of the children."

"He does play chess there."

"Father plays a fine game of billiards, too. Go ahead, darling—Lazarus. I'm willing to believe. Maybe we'll find something."

"Well, I don't think I'll look up your mother; I don't think I would get along with a woman who thinks sex is something to 'put up with.'"

"I got along with Mother only by lying to her. Father reared me far more than she did. I was his favorite. He let it show, which is why I'm careful *not* to let it show with Woodrow. Go on, Theodore. Lazarus."

"That's all of my ancestors you are related to. Except one. Our stowaway. Maureen, I'm descended from you and Brian through Woodie."

She gasped. "Really? Oh, I hope it's true!"

"True as taxes, beloved. And it may have saved his life. I've never been closer to infanticide than I was when we found him in the back seat."

She giggled. "Darling, I felt the same way. But I won't let anger show in my voice even if I'm about to switch a child."

"I hope I didn't show anger. But I felt it. Beloved, I was so hard I *ached—until* we found Woodrow. Honey love, I was rarin' to go!"

"And I was just as ready! Oh, Theodore—Lazarus—it's so *sweet* to be open with you. Uh…yes, you're *quite* hard now."

"Easy there!—don't make me climb the curb. I have been ever since we left the house except when I forced it down. But the one Woodie ruined was bigger and better."

"Size isn't important, Theodore-Lazarus; a woman must fit any size. Father told me that long ago and taught me exercises for it—and I never told Brian; I let him think that was simply how I am—and accepted his compliments smugly. I still exercise regularly—because my birth canal has been stretched again and again and again by babies' skulls and if I didn't exercise those muscles I would be, in Father's salty language, 'loose as a goose.' And I do *so* want to stay desirable to Brian as many years as possible."

"And to the iceman and the milkman and the postman— and the boy who drives the grocery wagon."

"Tease. I'd like to stay young *there* till I die."

"You will, you eighteen-year-old prospective grandmother. Let's get our minds off sex and back to time travel; I'm still looking for a proof. So that you will *know* why I am *certain* that Brian came back okay. But to stop your worry it must be something that happens soon and certainly before Woodie's birthday."

"Why Woodrow's birthday?"

"Didn't I get that far? This war ends on Woodie's next birthday, the eleventh of November." He added, "I'm certain of that, it's a key date in history. But I'm racking my brain for some event between now and then—as soon as possible, to stop your worries. But—oh, shucks, dear, I made a silly mistake. I meant to arrive after this war is over. But I gave my computer one critical figure with an error in it—just a little one, but it made me arrive three years too soon. Not her fault; she accepts any data I give her, and she's as accurate a computer as ever conned a ship. Not a fatal error, either; I'm not lost in time, my ship will pick me up in 1926 exactly ten Earth years after she dropped me. But that's why I didn't study the history of the next few months; I expected to skip this war. I'm not studying Wars; histories are full of wars. I'm studying how people live."

"Theodore…I'm confused."

"I'm sorry, darling. Time travel *is* confusing."

"You speak of a computer, and I'm not sure what you mean…and you said 'she' conns—whatever that means—a ship that will pick you up…in 1926? And I don't understand *any* of it."

Lazarus sighed. "That's why I never intended to tell anyone. But I *had* to tell *you—so* that you could stop worrying. My ship is a spaceship—like Jules Verne, only more so. A starship, I live on a planet a long way off. But it is a timeship, too; she travels in both space and time and it's too complicated to explain. The computer is the ship's brain—a machine, a very complex machine. My ship is named 'Dora' and the machine, the computer, that conns it—runs it—steers it—is called Dora, too; that's the name she answers to when I speak to her. She's a very intelligent machine and can talk. Oh, there is a crew, two of my sisters—so of course they are descended from you, too, and they look like you. A crew is necessary— can't let a ship go running around by itself—except automatic freighters on precalculated runs—but Dora does the hard work, and Laz and Lor—Lapis Lazuli Long and Lorelei Lee Long—tell Dora what to do and let her do it." He squeezed Mrs. Smith's thigh and grinned. "If that air blast bad kept your skirts up two seconds longer, I would know more about how closely they resemble you—as they usually run around naked. They look like you in the face. Bodies, too, from that too-short glimpse of your lovely legs. Except that Laz and Lor are freckled all over as solidly as Marie is on her face."

"I'd be that freckled if I didn't stay out of the sun. When I was Marie's age Father called me 'Turkey Egg.' But *all* over? They don't wear *any* clothes?"

"Oh, they enjoy fancy dress for parties. Or the weather might be cold—but it rarely is; we live in a climate like southern Italy. They don't wear anything very often." Lazarus smiled and caressed her thigh. "They don't need to leave their bloomers home to be ready for lovemaking; they don't own any bloomers. They aren't a bit shy. They would be delighted to trip your father; they like older men—they're much younger than I am."

"Lazarus…how old *are* you?"

Lazarus hesitated. "Maureen, I don't want to answer that. I'm older than I look; Ira Howard's experiment was successful. Instead let me tell you about my family. *Your* family, too; we all are descended from you by one line or another. Two of my wives and one of my co-husbands are descended both from Nancy and from Woodie."

"'Wives? Co-husband?'"

"Sweetheart, marriage takes many forms. Where I live you don't need a divorce or a death to gather in someone you love. I have four wives and three co-husbands—and my sisters, Laz and Lor…and they may marry out of the family or they may stay—and don't look startled; you said you didn't fret when you thought I was your half brother—and don't worry about harm to babies; they know far more about such things at that when-&-where-than they do in the here-&-now. We *don't* risk harm to babies.

"Of which we have plenty. And cats and dogs and anything a child can pet and take care of. It's a real family in a house to fit a big family.

"I can't tell you about each one; we've got to get our stowaway home. But I want to tell you about one—because you've been insisting that you don't look eighteen—merely because you've been using your breasts to feed babies. Tamara. Descended from you through Nancy and her Jonathan— Want to hear about Nancy's umpty-ump granddaughter? Tamara is about two hundred and fifty years old, I think—"

"Two hundred and fifty!"

"Yes. One of my co-husbands, Ira Weatheral, also from Nancy and Jonathan but from Woodie, too—and named for your father, not for Ira Howard—is over four hundred years old. Maureen, Ira Howard's experiment *worked;* we have longer life-spans—inherited from you and all our Howard ancestors—but also in that when-&-where they know how to rejuvenate a person. Tamara has had two rejuvenations—one recently and looks as young as you do. Real rejuvenation— Tamara was pregnant when I left.

"But how she looks is not important; Tamara is a healer— and I suspect she gets it from *you."*

"Theodore—Lazarus—again I don't understand. A healer? Like a faith healer?"

"No. If Tamara has a religious faith, she has never mentioned it. Tamara is calm and happy and serene, and anyone around her feels it so strongly—just as with *you,* darling!— that he or she is happy, too. If people are ill, they get well faster if Tamara touches them, or talks to them, or sleeps with them.

"But Tamara was *not* young when I met her. She was quite old and thinking about letting it go at that, dying of old age. But I was ill, very ill, sick in my soul—and Ishtar, later my wife and the topnotch rejuvenator in all the Milky Way, went out and fetched Tamara. Tamara. Little round potbelly, breasts that were *really* baggy, sags under her eyes, and her chin, all the old-age things.

"Tamara healed the sickness in my soul, just by being with me… and somehow this renewed her own interest in life, and she took another rejuvenation and is young again and has already added another baby to the Maureen-Nancy line and is pregnant still again. You and Tamara are so *much* alike, Maureen; she's just love with some skin around it— and so are *you.* But—" Lazarus paused and frowned.

"Maureen, *I* don't know how to convince you that I'm telling the truth. You'll *know* it when Woodie's sixth birthday comes around and they blow every whistle and ring every bell and the newsboys shout: *'Extra! Extra!* Germany surrenders!' But that'll be too late to help you. I want to stop your worries *now!"*

"I've stopped worrying, dear one. It sounds wonderful and impossible…and I believe you."

"Do you? I've offered no proof; I've told you a tale impossible on the face of it."

"Nevertheless, I believe it. When Woodrow is six on the seventh of November—"

"No, the *eleventh!"*

"Yes, Lazarus. But how did *you* know that his birthday is the eleventh?"

"Why, you told me yourself."

"Dear, I said be was born in November; I did *not* say what day. Then I deliberately misstated it—and you corrected me at once."

"Well, maybe Ira told me. Or one of the children. Most likely Woodie himself."

"Woodrow does not know the date of his birthday. Wake him and ask him."

"I'd rather not wake him until we get home."

"What is my birthday, dear one?"

"The Fourth of July, 1882."

"What is Marie's birthday?"

"I think she is nine. I don't know the date."

"The other children?"

"I'm not sure."

"My father's birthday?"

"Maureen, is there some point to this? August second, *1852."*

"Beloved Lazarus who calls himself 'Theodore,' I have a firm rule with my children. I keep each one from knowing the date of his birth as long as possible so that he won't advertise it and thereby blackmail people for presents. When one is old -enough for school and needs to know the date, he is old enough to be told why, and I make it bluntly plain that if he drops hints ahead of time-no birthday cake, no birthday party. I haven't had to use that penalty; they are all intelligent.

"Last year Woodrow was too young for it to be a problem; his birthday came as a surprise to him. He still does not know the exact date—so I strongly believe. Lazarus, you know the birthdays of your direct ancestors…because you looked them up in the Foundation records. Since you can't tell me the birthdays of my other children, I assume that I've found that proof."

"You know I have had access to the records. I could have looked up any birthday last year."

"Pooh. Why did you bother with the birth date of one child and skip the other seven? How would you know my father's birthday if he had not been of special interest to you? It won't wash, Beloved. You intended to seek out your ancestors and you came prepared for it. I no longer think that you showed up at our church by accident; you went there to find *me*— and I'm flattered. You probably did the same with Father— at his pool-hall 'chess club.' How did you do it? Private detectives? I doubt that our church or that pool hall can be looked up in the Foundation records."

"Something like that. Yes, gentle ancestress, I looked for an acceptable way to meet you. I would have spent years on it had it been necessary…because I couldn't twist your doorbell and say, 'Hi there! I'm descended from you. May I come in?' You would have called the police."

"I hope I would not have, darling—but thank you for finding a gentler way. Oh, Lazarus, I love you so!—and believe every word and I'm no longer worried -about Brian; I *know* he'll come back to me! Uh…I'm feeling very brazen again and more passionate than ever and I want to know something. About your family."

"I'm delighted to talk about them. I love them."

"I was most flattered to be compared with your wife Tamara. Darling, you don't have to tell me this: Does it ever happen that two husbands sleep with one wife?"

"Oh, certainly. But it's more likely to be one husband—Galahad—another of your descendants, Grandmother—Galahad and two of our wives; Galahad is the original tireless tomcat."

"That sounds like fun, but it's the other combination that intrigued me. Beloved, my idea of heaven would be to take *both* you and Brian to bed at once—and do my best to make you *both* happy. Not that I ever can. But I can dream about it…and *will."*

"Why not out in the woods and strip down for both of us, just to your 'French postcard' costume? As long as you're dreaming."

"Ooooh! Yes, I'll put that into my dream—and now I'm about to go off like a firecracker!"

"I'd better take you home."

"I think you had better. I'm terribly happy and quite unworried—

and will stay so—and *very* passionate. For you. For Brian. For being a French postcard in the woods. In *daylight."*

"Maureen, if you can sell the idea to Brian…well, I'll be around until the second of August, 1926."

"Well…we'll see. I *want* to!" She added, "Am I permitted to tell him? Who you are and where you're from—the future—and your prediction that he won't be hurt?"

"Maureen, tell anyone you wish. But you won't be believed."

She sighed. I suppose so. Besides, if Brian *did* believe it and thereby believed that he had a charmed life—it might make him careless. I'm proud that he is going to fight for us but I *don't* want him to take unnecessary risks."

"I think you're right, Maureen."

"Theodore…my mind has been so busy with all these strange things that I missed something. Now that I know who you are— This isn't your country, and it's not your war—so why *did* you volunteer?"

Lazarus hesitated, then told the truth: "I wanted you to be proud of me."

"Oh!"

"No, I don't belong here and it's not my war. But it's *your* war, Maureen. Others are fighting for other reasons—I'll be fighting for Maureen. Not 'to make the world safe for democracy—this war won't accomplish that, even though the Allies are going to win. For Maureen."

"Oh! *Oh! I'm* crying again—I can't help it."

"Stop it at once."

"Yes, my warrior. Lazarus? *You* will come back? You must have some way to know."

"Huh? Dear, don't worry about *me.* People have tried to kill me in all sorts of ways—I've outlived them all. I'm the wary old cat who always has a tree within reach."

"You didn't answer me."

He sighed. "Maureen, I know Brian will come home; it's in the Foundation's records. He will live to a ripe old age and don't ask how long as I won't answer. And so will you, and I won't answer *that* either; it is not good to know too much about the future. But me? I *can't* know my future. It is *not* in the records. How could it be? I haven't finished it yet. But I can tell you this: This is not my *first* war, but about the fifteenth. They didn't get me in the others, and they'll have to move fast to kill me in this one. Beloved, I am your warrior—but to kill Hun for *you,* not for *them* to kill *me.* I'll do my duty, but I'm not going to try some crazy stunt to win a medal— not old Lazarus."

"Then you *don't* know."

"No, I don't. But I promise you this: I won't stick my head up when

I don't need to. I won't go into a German dugout without tossing a grenade in ahead of me. I won't assume that a German is dead because he appears to be—I'll make sure he's dead; I don't mind wasting a bullet on a corpse. Especially one who is playing 'possum. I'm an old soldier, and that's how one gets to be an old soldier—by being a pessimist. I know all the tricks. Darling, having quieted your worries about Brian, it would be silly to get you worried about *me.* Don't!"

She sighed. "I'll try not to. If you turn down this street, we can pick up Prospect, then across Linwood to Benton."

"I'll get you home. Let's talk about love, not war. Our girl Nancy— Is the Foundation now using a pregnancy rule? For first marriages?"

"Goodness! You *do* know all about it."

"No need to tell me. Nancy's business; If Jonathan does go to war —I don't know—I can assure you that he won't get his balls shot off, even if he loses an arm or a leg. I did look up the breeding records on all your children even though I didn't bother with their birthdays. Jonathan and Nancy are going to have many babies. Which means he comes back—or maybe gets turned down and won't go."

"That's comforting. How many babies?"

"Nosy little girl. You're going to have quite a number yet yourself, Grandmother, and I won't answer that, either. I withdraw the question about the pregnancy rule."

"Secret, Lazarus—"

"Better start calling me 'Theodore.' We'll be home soon."

"Yes, sir, Staff Sergeant Theodore Bronson, your lecherous old great-great-great-grandmother will be careful. How many 'greats' should there be in that?'

"Sweetheart, do you want that answered? If it had not been necessary in calm your fears about Brian, I would have stayed 'Ted Bronson.' I *like* being your 'Theodore.' I'm not sure that being a mysterious man from the future is going to be as comfortable. Especially if you think of me as some remote descendant. I'm here beside you, not in some far future."

"Beside me. Touching me. And yet you're not even born yet—are you? And in *your* time…I'm long dead. You even know when I will die. You said so. You just won't tell me when."

"Oh, confound it, Maureen; that's wrong all the way through! That's what comes of admitting that I've time-traveled. But I *had* to. For you."

"I'm sorry, Laz— Theodore my warrior. I won't ask any more questions."

"Sweetheart, the fact that I *am* here means that you're *not* dead. And I certainly was born; pinch me and find out. All 'flows' are real;

that is the basic theorem of time travel. They don't disappear; both 'past' and 'future' are mathematical abstractions; the *'now'* is always all there is. As for knowing the day you died—or will die; it's the same thing—I *don't.* I just know that you had—have—will have—many children, and you live a long time…and your hair never gets gray. But the Foundation lost track of you—will lose track of you—and your date of death never got into the records. Maybe you moved and didn't tell the Foundation. Shucks, maybe I came back—will come back—and picked you up in your old age, and took you to Tertius."

"Where?"

"My home. I think you would like it there. You could run around all day, dressed—undressed—as a French postcard."

"I'm sure I would like that now. But I don't think I would, as an old woman."

"All you would have to do is to ask Ishtar for rejuvenation. I told you what she did for Tamara…when her breasts hung down to her waist and were empty sacks. But look at Tamara *now—that* 'now'—pregnant again, just like a kid. But forget it—if it *did* happen, it *will* happen. Mama Maureen— I'm durned if I'll call you 'Grandmother' again—all I'm sure of is that I'm not sure of the date of your death, and I'm glad I'm not, and you should be. Nor of my death, and I'm glad of that, too. Carpe diem! We're almost home and you started to say something and I said to call me 'Theodore' and we got off the track. Was it about Tamara?"

"Oh, yes! Theodore? When you go home to wherever your home is, can you take anything with you? Or does it have to be just you?"

"Why, no. I arrived with clothes and money."

"I'd like to send a little present to Tamara. But I can't guess what she would want…from this time to that wonderful age of yours. Can you suggest something?"

"Mmm…Tamara would treasure anything from you. She knows she's descended from you, and she's the most warmly sentimental of all my family. It should be something small enough to carry on my person, even in the trenches, as I'm always ready to abandon anything I'm not carrying— have to be. Not jewelry. Tamara would not value a diamond bracelet one whit more than a hairpin…but she would treasure a hairpin that I could tell her I had seen you wearing. Something small, somethillg you've worn. Look, send her a garter! Perfect! One of these you have on."

"Mayn't I send her a brand-new pair? Oh, I'll slip them on for a moment, so that you can tell her truthfully that I've worn them. But these— Not only are they rather old and worn but I've perspired right through them tonight. They're not fresh and clean. And they do have naughty mottoes on them."

"No, no, one of *these.* Sweetheart, 'naughty' today can't be naughty on Tertius; I'll have to explain any naughtiness to Tamara. As for perspiration, I hope that some trace of your sweet fragrance clings to them until I can get them to her; that would delight Tamara. You say this pair is old? Maureen, by any chance are they about six years old?"

"I *told* you I was sentimental, Theodore. Yes, this is the same pair. Old and faded and worn and I've replaced the elastic—but the same pair; I picked them to wear for you."

"Then I want one of them for *me!"*

"Beloved Theodore. I planned to offer you both of them. That's why I suggested a new pair for Tamara. Very well, dear, one for you, one for her. As soon as we're home. I'll trot upstairs, and when I come down, I'll have a present for you and will tell you not to open it until you're back at Camp Funston. You just say thank you and go straight to your room and put it into your grip. I see a light on the front porch, so now I must push my skirts down and be the prim and proper Mrs. Brian Smith. With a smoldering volcano inside her! Thank you, Staff Sergeant Bronson. You have given my son and me a most enjoyable evening."

"Thank *you,* pretty little pussycat in green garters and no bloomers. Will you grab the Teddy bear and the Kewpie doll while I carry our chaperon?"

Ira Johnson and Nancy were not yet home. Brian Junior relieved Lazarus of the limp child and carried him upstairs. Carol went along to put Woodie to bed after exacting a promise from "Uncle Ted" not to go to bed before she came back. George wanted to know where they had gone and what they had done, but Lazarus put him off with a promise and used the chance to repair to his tiny bath and repair himself.

Hair a bit mussed— Thank God respectable women did not use lipstick. Uniform slightly wrinkled, nothing damning about that. Five minutes later, refreshed and certain there were no feathers on his chin, Lazarus returned to the front of the house and offered George and Brian Junior an account of the evening truthful in everything he said.

He had just started when Carol came down and listened too; then Mrs. Smith rejoined them, moving regally as always and carrying a little package wrapped in tissue paper. "A surprise for you, Sergeant Theodore—please don't open it until you are back at camp."

"Then I had better put it into my grip right now."

"If you wish, sir. I think it's bedtime, dears."

"Yes, Mama," agreed Carol. "But Uncle Ted was telling us how you knocked down all the milk bottles."

"He says you should pitch for the Blues, Mama!" added George.

"All right, fifteen minutes."

"Mrs. Smith," said Lazarus, "you ought not to start your stopwatch on us until I get back."

"You're as bad as the rest of my children, Sergeant. Very well."

Lazarus put the package into his grip, locked it from long habit, and returned. Nancy and her young man arrived; Lazarus was introduced while looking over Jonathan Weatheral with real interest. Pleasant young fellow, a bit on the gawky side— Tamara and Ira will be interested, so let's photograph him by eye, be able to sketch him, and remember any word he says.

Mrs. Smith urged her prospective son-in-law into the parlor while cutting Nancy out of the herd; Lazarus resumed describing what they had done at the amusement park while Jonathan looked politely bored. Mrs. Smith returned, carrying a laden tray and said, "That fifteen minutes is up, dears. Jonathan, Nancy wants you to help her with something; will you see what it is? She's in the kitchen."

Brian Junior asked if he could put the car into the barn. "Sergeant Uncle Ted, I haven't let your car sit out at the curb at night, not once. But I'll get it out for you, first thing in the morning; it's kind o' tricky, sort of a 'Z' turn, you have to back and fill."

Lazarus thanked him, kissed Carol goodnight, as she was clearly expecting it. George couldn't seem to make up his mind whether he had outgrown kissing or not, so Lazarus settled it by shaking hands and telling him he had quite a grip on him. At that point Mr. Johnson got home, and the goodnights started over.

Five minutes later Mrs. Smith, her father, and Lazarus were seated in the parlor over coffee and cake, and Lazarus was suddenly reminded of the first night he had been invited in. Save that the men were now in uniform the tableau was the same; each was seated in the spot he had been in that night, Mrs. Smith presided over the "company" coffee service with the same serene dignity; even the refreshments were the same. He looked for changes, could find only three: His elephant was not back of Mrs. Smith's chair, the prizes they had won at the amusement park were on a table near the door, and sheet music for "Hello, Central, Give Me No Man's Land" was open on the piano.

"You were late tonight, Father."

"Seven recruits, and I had just the usual sizes for them, too large and too small. Ted, we get what the Army doesn't want. Proper, of course. We now have Lewis guns for the machinegun companies and enough Springfields to go around; we are beginning to look less like Villa's bandits, I'm not complaining. Daughter, what are those things on that table? They look out of place."

"The Kewpie doll I won myself, so I'm thinking of giving it a place of honor on top of the piano. The Teddy Roosevelt bear was won by Sergeant Theodore; perhaps he's taking it to France with him. Electric Park, Father, and I don't think it cost Sergeant Theodore more than twice what the prizes are worth for us to win them; we had a lucky night— and a very gay one."

Lazarus could see the old man starting to cloud up—in public with a bachelor? With her husband away? So he spoke up: "I can't take it to France, Mrs. Smith; I made a deal with Woodie—don't you remember? My Teddy bear for his elephant. I assume it's a firm deal; he carried it from then on."

Mr. Johnson said, "If you didn't get it in writing, Ted, he'll homswoggle you. Do I understand that Woodie went to Electric Park with you two?"

"Yes, sir. Between ourselves I expect to leave the elephant in Woodie's custody for the duration. But I'm going to dicker with him first."

"He'll still hornswoggle you. Maureen, the idea was to give you relief from the children. Especially Woodie. What in Ned possessed you to take him along?"

"We didn't exactly take him along, Father; he was a stowaway." She gave her father an accurate account, save that she left out certain things and did not include a timetable.

Mr. Johnson shook his head and looked pleased. "That boy will go far—if they don't hang him first. Maureen, you should have spanked him and fetched him home. Then you and Ted should have gone on with your ride."

"Oh, fuss, Father, I did have my ride and a very nice one; I made Woodrow sit in the back seat and keep quiet. Then I had a gay time at the park, a bonus I would not have had if, Woodrow had not invited himself along."

"Woodie had some justice on his side," Lazarus admitted. "I *did* promise him an outing at Electric Park, then never kept my promise."

"Should have whacked him."

"It's too late for that, Father. And we did have fun. We ran into some people from church, too—Lauretta and Clyde Simpson."

"That old witch! She'll gossip about you, Maureen."

"I think not. We chatted while Woodie rode the miniature train. But you might remember that Sergeant Bronson is your eldest sister's son."

Ira Johnson raised his eyebrows, then chuckled. "Samantha would be surprised—if she were still with us. Ted, my eldest sister was thrown by a horse she was trying to break—at eighty-five. She lingered awhile, then turned her face to the wall and refused to eat.

Very well, I'll remember. Ted, this is better than blaming my gay-dog brother and still harder to check on; Samantha lived in Illinois, wore out three husbands, and one of them could have been named Bronson for all anyone here would know. Do you mind? Gives you a family of sorts."

"I don't mind. Although I like to think of *this* family as my family."

"And we like to have you think of us that way, Son. Maureen, is our young lady home?"

"Just before you got home, Father. They are in the kitchen, on the excuse that she wanted to make a sandwich for Jonathan. Since I'm sure it's an excuse to stay out there and spoon, I suggest that, if you want something from the kitchen, you allow me to fetch it; I'll be noisy enough to let Nancy jump off his lap. Theodore, Nancy is engaged; we just haven't made a formal announcement. I think it's best to let them marry now, since he'll be joining the Army almost at once. What do you think?"

"I'm hardly entitled to an opinion, Mrs. Smith. I hope they will be happy."

"They will be," said Mr. Johnson. "He's a fine lad. I tried to sign him into the Seventh, but he insisted on waiting for his birthday so he could go straight into the Army. Even though he couldn't be drafted for another three years. Spirit. I like him. Ted, if you need to go to your room, you can go around this other way and avoid the kitchen."

A few minutes later the young people came out of the kitchen, made polite sounds without sitting down; then Nancy stepped out onto the porch to say goodnight to her swain, came back in, and sat down.

Mr. Johnson smothered a yawn. "Time I hit the hay. You will too, Ted, if you're smart. Too noisy around here to sleep late, especially where your room is."

Nancy said quickly, "I'll keep the young ones quiet, Grandpa, so Uncle Ted can sleep."

Lazarus stood up. "Thank you, Nancy, but I didn't get much rest on the train last night; I think I'll go right to bed. Don't worry about keeping quiet in the morning; I'll wake up at reveille time anyhow. Habit."

Mrs. Smith stood up. "We'll all go to bed."

Mr. Johnson shook hands as he said goodnight; Mrs. Smith gave Lazarus a symbolic peck on the cheek such as she had given him, on arrival, thanked him for a lovely evening, and urged him to turn over and go back to sleep if the reveille habit-wakened him; Nancy hung back and kissed him goodnight as her elders started up the stairs.

Lazarus went to his room and on into his bath. Maureen had told him not to hesitate to draw a tub; it would not wake the children. He started one, went back and opened his grip, got out the little package, took it into the bath and threw the bolt, there being no key in the bedroom door. It was a small flat box such as garters might come in; he opened it carefully, intending to rewrap it exactly as it had been.

Ah, the garters! Faded, as she had said, and clearly not new…and —Yes!—redolent with her own evocative fragrance. Would it last long-enough for him to get it home, have the lovely, delicate aroma analyzed, amplified, and fixed? Probably—and with computer help a skilled scentologist could separate out the odors of satin ‘and rubber, and amplify hers selectively. He would have to go to Secundus for such expert ‘help. Worth the trip and then some!

Now let's see those "naughty" mottoes— One read: *"Open All Hours —Ring Bell for Service!"—the* other: *"Welcbme! Come in and Stir the Fire."* Sweet darling, those aren't "naughty."

A plain envelope under the garters— He laid them aside and opened it.

A plain white card: "Best I could do, Beloved. M." A photograph, amateur work but excellent quality for this here-k-now: Maureen herself, outdoors in bright sunlight against a background of thick bushes. She was standing gracefully, smiling and looking at the camera—dressed only in her "French postcard" style. Lazarus felt a burst of passion. Why, you generous, trusting darling! Not your only copy? No, Brian would have made more than one print— undoubtedly had one with him. This print would have been locked somewhere in your bedroom. Yes, your waist *is* slender without a corset…and those are *not* broken down; they are lovely—and I'm certain what caused your happy smile. Thank you, thank you!

With the photograph was a little flat package in tissue-paper. He opened it gently. A thick lock of red hair, tied with a green ribbon. The lock curled in a tight circle.

Lazarus stared at it. Maureen my beloved, this is the most precious gift of all—but I *do* hope you cut it so carefully that Brian won't notice it's missing.

He looked at each of her gifts again, restored them just as they had been, put the box into the bottom of his grip, locked it, turned off the tub, undressed, and got into the water.

But a lukewarm tub did not make him sleep. For a long time he lay in darkness and relived the past few hours.

He now felt that he understood Maureen. She was relaxed with what she was—"liked herself" as Lazarus thought of it— and liking yourself was the necessary first step toward ‘loving other people. She had no guilt feelings because she *never* did *anything* that could make her feel guilty. She was unblinkingly honest with herself, was her own self-judge instead of looking to others, did not lie to herself—but lied to others without hesitation when needed for kindness or to get along with rules she had not made and did not respect.

Lazarus understood that; he lived the same way—and now knew where he got the trait. From Maureen…and through her, from' Gramp. And from Pop, too—reinforced. He felt very happy despite an unsatisfied ache in his loins. Or in part because of it, he corrected, he found that he cherished that ache.

When the doorknob turned, he was instantly alert, out of bed and waiting before the door opened.

She was in his arms, warm and fragrant

She pulled back to shrug off her wrap, let it fall, came back into his arms, body to body, and gave her mouth fully.

When they broke the kiss, she stayed in his *arms, clinging. He whispered huskily, "Why did you risk it?"*

She answered softly, "I found that I must. Once I knew that, I realized that it was even less risk than our walnut tree. The children never come downstairs at night when we have a guest. Father may suspect me…but that makes it *certain* that he won't check on me. Don't worry, darling. Take me to bed. *Now!"*

He did so.

When they were quiet, she sighed happily and said, lips against his ear, arms and legs around him: "Theodore, even in this you are so much like my husband that I can barely wait till the war is over to tell him all about you."

"You've decided to tell him?"

"Beloved Theodore, there was never a doubt that I would. I softened some of what I told you tonight and left out a little. Brian does not require me to confess. But it does *not* upset him; we settled that fifteen years ago. He convinced me that he really *does* trust my judgment and my taste." Very softly but merrily she giggled against his ear. "It's a shame that I so seldom have anything to confess; he enjoys hearing my adventures. He has me tell him about them over and over—like rereading a favorite book. I wish I could tell him this one tomorrow night. But I won't, I'll save it."

"He's coming home tomorrow?"

"Late. Quite late. Which is just as well, as I don't expect to get *any* sleep once he arrives." She chuckled softly. "He tild me on the telephone to 'b. i. b. a. w. y. L o.' and he would '*w.* y. t. b. w.' That means: Be in bed asleep with my legs open and he will wake me the best way. But I just pretend to be asleep as I wake up no matter how quietly he tiptoes in."

She gave a tiny giggle. "Then we have a happy little game. As he enters me, I pretend to wake up and call him by name—but never his name. I moan, 'Oh, Albert, darling, I thought you would *never* come!' or some such. Then it's his turn. He says something like, 'This is Buffalo Bill, Mrs. O'Malley. Hush up and get busy!' Then I hush up and do the best I know how, not another word until we both explode."

"Your best is superb, Mrs. O'Malley. Or was that your best?"

"I tried to make it my best—Buffalo Bill. But I was so dreadfully excited that I got all blurry so it probably was not. I'd like a chance to do better. Are you going to give me one?"

"Only if you promise *not* to do better. Darling, if that was not your best, then your best would kill me."

"You not only talk like my husband and feel like him— especially *here—but* you even smell like him."

"You smell like Tamara."

"Do I really? Do I make love like her?"

(Tamara knows a thousand ways, darling, but rarely uses anything unusual—lovemaking is not technique, dear, it's an attitude. Wanting to make someone happy, which you *do.*

But you startled me with your command of technique; you would fetch a high price on Iskander.)

"You do. But that's not what makes you so much like her. Uh, it's your attitude. Tamara knows what is going on in another person's mind and gives him exactly what he needs. Wants to give it."

"She's a mindreader? Then I'm not like her, after all."

"No, she's not a mindreader. But she feels a person's emotions and knows what he needs an4 gives him that. It might not be sex. Aren't there times when Brian needs something else?"

"Oh, certainly. If he's tired and tense, I hold off and rub his back or head. Or cuddle with him. Maybe encourage him to nap, and then perhaps he really will wake me 'the best way.' I don't try to eat him alive. Unless that's what he wants."

"Tamara all over again. Maureen, when Tamara was healing me, at first she didn't even share a bed with me. Just slept in the same room and ate with me and listened if I felt like talking. Then for ten days or so she did sleep with me, but we just slept…and I slept soundly and had no nightmares. Then one night I woke up, and without a word Tamara took me into her, and we made love the rest of that night. And next morning I knew I was well—soul-sickness all gone.

"You are that way, Maureen. You know, and you do. I've been very homesick and much troubled by this war. Now I'm not, you've cured it. Tell me, what did you feel from me the first night I was in this house?"

"Loved you at first sight, like a silly schoolgirl. Wanted to take you to bed. I told you so."

"Not how *you* felt—how did *I* feel?"

"Oh. You had an erection over me."

"Yes, I did. But I thought I had concealed it. You noticed?"

"Oh, I didn't see a bulge in your trousers or anything like that. Theodore, I never look down that far; men become embarrassed so easily. I simply knew you felt as I did—and I felt like a she dog in heat. Bitch in heat, I mean—I don't intend to be prim in bed. The instant you met my eyes— standing, out in the front hall—I knew we needed each other and I grew terribly excited…and rushed out into the kitchen to get myself under control."

"You didn't rush, you moved with smooth grace, like a ship under sail."

"That ship was sailing fast; I was rushing. I got myself under control but not less excited. *More.* My breasts ached and my nipples hurt, all the time you were here. But that doesn't show. It would not have mattered had Father noticed my excitement except that he would not have invited you back—and I *wanted* you to come back. Father knows what I am; he told me so when he was helping me. He told me to face up to what I am and be happy with it—but that I must learn never to let my ruttiness show, things being the way they are. I've tried—but that night it was very hard not to show it."

"You succeeded."

"Brian tells me that I don't show it. But that night was *so* difficult. I — Theodore, there is something boys do—and sometimes men—when they're terribly frustrated. With their hands."

"Certainly. Masturbation. Boys call it 'jacking off."

"So Brian says. But perhaps you don't know that girls— and women—can do something like it?"

"I do know. For a lonely person of either sex, it's a harmless but inadequate substitute."

"'Harmless but inadequate—' *Quite* inadequate. But I'm glad you think it's harmless. Because I went upstairs and took a bath—I *needed* one although I had bathed before supper. And did it, in the tub. And went to bed and stared at the ceiling, then got up and locked the door and took off my nightgown—and did it and did it and did it! Thinking about *you,* Theodore, every instant. Your voice, how you smelled, the touch of your hand on mine. But it took at least an hour before I was relaxed enough to sleep."

(It took me even longer, dear, and I should have used your direct therapy. But I was punishing myself for being a fool. Off my trolley, dearest one, as I know it is *never* foolish to love. But I didn't see how we could ever show our love.) "I wish I could have been there, darling

—because a mile or two away I was aching with it—thinking of *you.”*

“Theodore, I *hoped* you felt that way. I needed you so and hoped that you needed me just as much. But the best I could do was lock my door and do that and think about you, with nobody around but Ethel in her crib and her too young to notice. Oops! I lost you. Oh, dear!”

“You haven’t lost me, just that wee bit of proud flesh. Which will recover soon; you promised me a second chance. Change position? Shoulder pillow? Left, or right? I shouldn’t have kept my weight on you so long, but I didn’t want to move.”

“I didn’t want you to move as long as I ‘could keep even a little of you in me. You aren’t too heavy; my hips are broad, and you let a woman breathe, sir. Put me on either side, whichever you prefer.”

“Like this?”

“That’s comfy. Oh, Theodore, this doesn’t feel like our first time; I feel as if I had loved you forever and you had come back to me at last.”

(Let’s get away from that subject, Mama Maureen.) “I’ll go on loving you forever, my darling.”

(Omitted)

“—told her bluntly that he would *not* marry her if she made any fuss over his joining the Army when he didn’t have to.”

“What did Nancy tell him?”

“She told him that she had been waiting to hear that, so now get her pregnant at once so they could have a few days’ honeymoon before he joined up. Nancy feels as strongly about warriors as her mother does. She came into my bedroom that night and told me what she had done, slightly teary but not worried over having jumped the gun.

“So we cried happy tears, and I cleared the matter with Brian and the Weatherals, and Nancy missed her next period—this was a month ago—and the wedding may be day after tomorrow or perhaps the day after that.”

(Omitted)

“Darling, I wish I could see you.”

“Oh, dear! I’d rather not turn on the Mazda lamp, Theodore. These blinds are not so tight but what light would shine out, as well as light under the door if by any chance Father came downstairs.”

“Maureen, I will never ask you to take any chance you don’t like. I see you quite well with my fingertips—and these are *not* broken down.”

"They flow off my ribs like melted marshmallows. Theodore, when you open that package, please be very careful that no one is around; there is more in it than a pair of garters."

"I did open it."

"Then you know what I look like."

"Was that beautiful girl *you?"*

"Tease. Brian had me look straight at his camera."

"But, darling, while you don't look *down* that far, men don't tend to look *up* very far. Especially me. Not when I'm looking at a photograph of a perfectly gorgeous nude model."

"'Nude model,' my best Sunday hat!"

"Maureen, it is the loveliest picture I' have ever owned and I will cherish it always."

"That's better and I don't believe it and I love hearing it. Did you open the paper folded in with it?"

"The baby curl? Did you clip it off Marie?"

"Theodore, I do not mind being teased; it just makes you more like Brian. But if he teases too much, I bite him. Anywhere. Here, for example."

"Hey, not so hard!"

"Then tell me where that curl came from."

"It came from your pretty, my pretty one, and I'll wear it over my heart forever. But one reason I wanted to look at you is that you clipped so generous a lock that I worried that Brian might notice something missing—and ask why."

"I can tell him I gave it to the iceman."

"He won't believe that and will be sure that you have a new adventure to confess."

"Then he won't press me to tell him now; he'll change the subject. Although I *wish* I could tell him now; I keep thinking about both of you, outdoors in daylight; that was the fantasy that kept me awake. Sweetheart, there is a 'candle on the dresser—electricity not being as dependable as the gas lights we used to have. It wouldn't throw enough light to worry me. You may look at me by candlelight all you wish and as you wish."

"Yes, darling! Matches where?"

"Let me go and I'll get up and light it; I can find both in the dark. Will I be allowed to look at you, too?"

"Sure. For contrast. 'Beauty and the Beast.'"

She giggled and kissed his ear. "Goat, maybe. Or a stallion. Theodore, I *needed* to be baby-stretched to accept *you."*

"I thought you said I felt like Brian?"

"But *he* is a stallion, too. Let me go."

"Pay toll."

"Oh, goodness, darling, don't do that now! Or I'll be so shaky I won't be able to strike a match."

Standing and by the light on one candle, they studied each other. Lazarus felt his breath grow short at the dazzling glory of her. For most of two years he had been deprived of the

sweet joy of seeing a woman, and had not realized how starved he had been for that great privilege. Darling, can you guess how *much* this means to me? Mama Maureen, has no one ever told 'you how much more sweetly beautiful a fullblown woman is than a maiden? Certainly your lovely breasts have held milk; that's what they're for. Why would I want them to look like marble?—I don't!

She studied him just as closely, her face solemn, her nipples crinkled tightly. Theodore-Lazarus my strange loves will you guess that I suggested candlelight so that I could see *you?* A woman is not supposed to get hungry for such things—but I miss the sight, the naked sight, of my husband…and how in the Name of Satan and all His Fallen Thrones I can last even till November without even *seeing* a man I do not know. Alma Bixby told me that she had never seen her husband without clothes. How can a woman *live* like that? Five children by a man she's never seen all over— Shocked her when I said that *of course* I had seen my husband naked!

Theodore-Lazarus, you don't *look* like my Briney Boy; your coloration is more like mine. But, oh, how you feel like him, smell like him, talk like him, love like him! Your pretty thing is coming up high again. Briney beloved, I'm going to have him once more, as *hard* as possible!—and I'll tell you about it tomorrow night if you'll just ask me for a new bedtime story…or if I must, I'll save it for you till you get back. You're as strange a man as he is…and just the wise and tolerant husband your bawdy wife needs. Then, cross my heart, dearest, I'll try my best to keep from it until you come back from Over There—but if I can't, even with Father and eight children to guard me, I promise you solemnly that I will *never* bed with anyone but a warrior, a man to be proud of in every way. Such as this strange man.

Lazarus, my love, are you *really* my descendant? I *do* believe that you know when the war will be over and that my Briney will come safely back to sue. Why, I am not sure—but since you told me, I have been free from worry for the first time in many a lonely moon. I hope the rest is true, too; I *want* to believe in Tamara, and that *she* is descended from me. But I *don't* want you to go away in only eight years!

That innocent little picture— If I had not feared shocking you, I would have given you some *real* "French postcards" Briney has taken of me. Will you be upset if I take a closer look? I'll chance it.

Mrs. Smith suddenly dropped to one knee, looked closely, then touched him. She looked up. “Now?”

“Yes!” He picked her up, placed her on the bed. Almost solemnly she helped him, then caught her breath as they joined. *“Hard,* Theodore! This time don’t be gentle!”

“Yes, my beautiful one!”

When their happy violence was over, she lay quiet in his arms, not talking, communing through touch and the light of one candle.

At last she said, “I must go, Theodore. No, don’t get up, just let me slide out.” She got up, picked up her wrap, blew out the candle, came back, leaned down and kissed him. “Thank you, Theodore—for *everything.* But—come back to me, come back to me!”

“I will, I will!”

Quickly and silently she was gone.

CODA

I

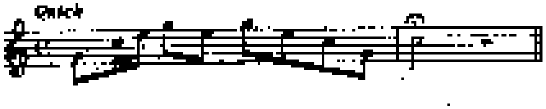

Somewhere in France

Dear All my Family,

I am writing this in my pocket diary where it will stay until this war is over—not that it matters; you'll get it just as soon. But I can't send a sealed letter now, much less one sealed into five envelopes. Something called "censorship"—which means that every letter is opened and read and anything that might interest the Boche is cut out. Such as dates and places and designations of military units and probably what I had for breakfast. (Beans and boiled pork and fried potatoes, with coffee that would dissolve a spoon.)

You see, I had this lovely ocean voyage as a guest of Uncle Sam and am now in the land of fine wines and beautiful women. (The wine has been yin extremely ordinaire, and they seem to be hiding the beautiful women. The best-looking one I've seen had a slight mustache and very hairy legs, which I could have ignored had I not made the mistake of standing downwind. Darlings, I am not sure the French take baths, at least in wartime. But I'm in no position to criticize, a bath is a luxury. Today, given a choice between a beautiful woman and a hot bath, I'd pick the bath—otherwise she wouldn't touch me.)

Don't worry that I am now in a "war zone." That you've received this is proof that the war is over and I am okay. But it's easier to write a letter than it is to put trivia into a diary every day. "War zone" is an exaggeration; this is "fixed warfare"—meaning both sides are in the same fix: pinned down—and I am too far behind the lines to get hurt.

I am in charge of a unit called a "squad"—eight men—me and five other riflemen, plus an automatic rifleman (the rifle, not the man; this war has no robot fighters) and an eighth man who carries ammunition for the automatic rifleman. It's a corporal's job, and that's what I am; the promotion to sergeant I was expecting (in my last letter as dated from the United States) got lost in the shuffle when I was transferred to another outfit.

Being a corporal suits me. It is the first time I've had men permanently assigned to me, time enough to get acquainted with each one, learn his strong points and weak ones, and how to handle him, They are a fine bunch of men. Only one is a problem, and it's not his fault; it results from the prejudices of the time. His name is F. X. Dinkowski, and he is simultaneously the only Catholic and the only Jew in my squad—and, twins, if you've never heard of either one, ask Athene. By ancestry he comes from one religion, then he was brought up in another—and he has had the tough luck to be placed with country boys who have still a third religion and are not very tolerant.

Plus the additional misfortunes of being a city boy and having a voice that grates (even on me) and is clumsy, and when they pick on him (they do if I'm not right there), it makes him more clumsy. Truthfully he's not soldier material—but I wasn't asked. So he's the ammunition carrier, the best I can do to balance my squad.

They call him "Dinky," which is only mildly disparaging, but he hates it. (I use his full last name—I do with all of them. For ritualistic reasons having to do with the mystique of military organizations at this here-&-now it is best to call a man by his family name.)

But let's leave the finest squad in the AEF and bring you up to date on my first family and your ancestors. Just before Uncle Sam sent me on that pleasure cruises I was given a vacation. I spent it with the Brian Smith family and lived in their house, as they have "adopted" me for the rest of this war, me being an "orphan."

That leave was the happiest time I've had since I was dropped from the *Dora.* I took Woodie to an amusement park, primitive but more fun than some sophisticated pleasures of Secundus. I took him on rides and treated him to games and things that were fun for him, and fun for me because he enjoyed them so—wore him out and he slept all the way home. He behaved himself, and now we are chums. I've decided to let him grow up; there may be hope for him yet.

I had long talks with Gramp, got better acquainted with all the others—especially Mama and Pop. The latter was unexpected. I had met Pop for a few minutes at Camp Funston, then he was to come home on leave the day I had to go back, and I didn't expect to see him. But he got away a few hours early, a bonus an officer can sometimes manage, and we overlapped—and he telephoned to the camp and got me a two-day extension. Why? Tamara and Ira, listen carefully—

To attend the wedding of—

Miss Nancy Irene Smith & Mr. Jonathan Sperling Weatheral.

Athene, explain to the twins the historic significance of this union. List the famous and important people in that line, dear, not the total genealogies. And Ira and Tamara in our own little family, of course, and Ishtar, and at least five of our children—and I may have missed someone, not having all the genealogical lines in my head.

I was "best man" to Jonathan, and Pop "gave the bride away," and Brian was an "usher" and Marie was "ringbearer" and Carol was "maid of honor," and George was charged with keeping Woodie from setting fire to the church while Mama took care of Dickie and Ethel—Athene can explain terms and ritual; I shan't try. But it not only gave me two more days of leave, much of which I spent running errands for Mama (these medieval weddings are complex operations), but it also gave me time with Pop, and now I know him better thin I ever did as a son under his roof—and like him very much and heartily approve of him.

Ira, he reminds me of you—brainy, no nonsense, relaxed, tolerant, and warmly friendly.

Bulletin: The bride was pregnant (a proper Howard wedding!—at a time when *all* brides are assumed to be virgins)—pregnant with (if memory serves) "Jonathan Brian Weatheral." Is that right, Justin, and who is descended from him? Remind me, Athene. I've met a lot of people over the centuries; I may even have married some descendant of Jonathan Brian at some time. I rather hope so; Nancy and Jonathan are a fine young couple.

I turned "my" landaulet over to them for a six-day honeymoon, then Jonathan was to (did) join the Army— but too late to get into combat. Nancy's warrior hero just the same; he tried.

Some fiddling sergeant who couldn't find his arse with both hands wants me to round up my squad and do something about a dugout that someone was careless with. So—

All my love from
Corporal Buddy Boy

Somewhere in France

Dear Mr. Johnson,

Please give this a second censoring; some of it will have to be explained to the rest of my adopted family.

I hope that Mrs. Smith received the thankyou note I mailed from Hoboken (and could read it—writing on my knee while bouncing on the C. & A. roadbed does not improve my handwriting). In any case I thank her again for the happiest holiday of my life. And thanks to *all* of you. Please tell Woodie that I will no longer spot him a horse. From here on we play even or he can find another sucker—four out of five is too many.

Now for The Rest—— Note signature and address. My rocker did not last to France, then three chevrons dwindled to two. Can you explain to Mrs. Smith and to Carol (those two in particular) that being busted does not disgrace a man forever?—and that I am still Carol's own special soldier if she will let me be—and in fact I am far more of a real soldier; I am at last free of being tagged as "instructor" and am now leading a squad in a combat outfit. I wish I could tell her where…but if I stuck my head up over the parapet, I might see some heinies if one of them didn't see me first. I'm not goldbricking a hundred miles back.

I hope you aren't ashamed of me. No, I'm sure you are not; you are too old a soldier to care about rank.

I'm in it and that's what counts with you. I know. May I say, sir; that you are and have always been as long as I've known you an inspiration to me?

I won't detail the two negative promotions; in the Army excuses don't count. But I want you to know that neither resulted from anything dishonorable. The first was in the transport and involved a duty-struck master-at-arms and a poker game in an area for which I was responsible. The second came while I was instructing— dummy trenches, dummy no-man's land—and a captain told me to dress up that skirmish line and I said, "Hell, Captain, are you trying to save bullets for the Kaiser? Or haven't you heard of machine guns?"

(I suppose I shouldn't have said "Hell." In fact I used another expression more common among soldiers.)

So later that day I was a corporal, and my transfer took place when I requested it, again that same day.

So here I am and feeling fine. It is indeed a fact that the closer a man gets to the front, the better his morale is. I've become chummy with cooties, and the mud in France is deeper and stickier than in southern Missouri, and I dream about hot baths and Mrs. Smith's wonderful guest room for soldiers—but I'm in good health and good spirits, and I send my love to all of you.

Respectfully yours,
Corporal Ted Bronson

"Hey down in there! Corporal Bronson. Send him out." Lazarus climbed slowly up out the dugout, letting his eyes adjust to darkness. "Yes, Lieutenant?"

"Wire-cutting job. I want you to volunteer." Lazarus said nothing.

"Didn't you hear me?"

"I heard you, sir."

"Well?"

"You asked for a volunteer, sir."

"No, I said I wanted *you* to volunteer."

"Lieutenant, I volunteered on April sixth last year. That used up my quota for the duration."

"A latrine lawyer, eh?"

Lazarus again said nothing.

"Sometimes I think you want to live forever." Lazarus still said nothing. (You are so right, you seven-pound bliffy—and so do *you,* you haven't been over that parapet even once. God help this platoon when you do.)

"Very well, since you want it the hard way. I *order* you to lead this party. Find three more volunteers from your squad. if they don't volunteer you know what to do. Once you pick 'em, tell 'em to get ready—then you haul ass to C.P. and I'll show you the map."

"Yes, sir."

"And, Bronson, make damn sure you do a good job because a little bird told me that you're going to lead the way through the holes. Dismissed."

Lazarus went unhurriedly back down below. So we're going over the top? Big secret. Nobody knows it but Pershing and about a hundred thousand Yanks and twice that many Boches and the Imperial High Command. Why do they advertise a "surprise attack" with three days of "softening-up" bombardment that does nothing worth mentioning but tells the Boche where to bring up his reserves and gives him time to position them? Forget it, Lazarus, you're not in charge. Put your mind on picking out three who can go out, do it, and come back.

Not Russell, you'll need your automatic rifleman before dawn. Wyatt was out last night. Dinkowski might as well have a cowbell around his neck. Fielding is on the sick list, damn it. So it has to be Schultz, Talley, and Cadwallader. Two of them old unkillables and Talley the only repple with too little experience—and a shame Fielding has la grippe or whatever it is; I need him. All right, Schultz gets Cadwallader; I'll nurse Talley through it.

It was a two-squad dugout; his squad was sacked in on the left, the other squad had a card game going by candlelight on their side. Lazarus called his squad into a huddle, waking Cadwallader and Schultz to do so. Russell and Wyatt stayed in their bunks, as the huddle took place against them. "The Lieutenant wants us to cut wire and told me to ask for three volunteers."

Schultz nodded at once, as Lazarus knew he would. "I'll go." In

Lazarus' opinion his assistant squad leader should have a section. Schultz was forty, a married volunteer, and trying hard to offset his name, his trace of German accent (second generation)—but doing it steadily, methodically, without flash. No glory hound. Lazarus hoped that not many of the Germans they faced were of Schultz's quality—but he knew they were, especially veterans pulled back from the collapsed Russian front. His only fault in Lazarus' eyes was that he disliked Dinkowski.

"That's one. Don't all speak at once."

"What's the matter with *them?"* Cadwallader said loudly, jerking a thumb at the other squad. "Teacher's pets? They haven't done anything for a week."

Corporal O'Brien answered for his squad: "'Tell your troubles to Jesus; the Chaplain's gone over the hill!' Whose deal?"

"Who's next?"

Dinkowski gulped. "Take me, Corporal."

Talley shrugged. "Okay."

(Damn you, Dinky—why didn't you wait and simply make it unanimous? And damn that silly second john for ordering me to ask for volunteers. Better to tell 'em.) "Let's hear some more voices. This isn't the S.O.S." (Lieutenant Birdbrain, you postnasal drip, Cadwallader is right; it's *not* our turn. Why didn't you go through the platoon sergeant and section leader? they're fair about handing out dirty details.)

Russell and Wyatt spoke up together. Lazarus waited, then said, "Cadwallader? You're the only holdout."

"Corporal, you asked for three volunteers. How come you want the whole squad?"

(Because I want *you,* you unappetizing ape. You're the best soldier in the squad.) "Because I need you. Will you volunteer?"

"I ain't no volunteer, Corporal; I was drafted."

"Very well." (Damn all officers who interfere where they shouldn't.) "Wyatt, you were out last night; get back in your bunk. Russell, you get some sleep, too; you may be busy soon. Schultz, I'll take Dinkowski; you take Talley. Black me up first and make it fast; I've got to see the Lieutenant. Get out the cork."

Lazarus got through their own wire without much trouble by enlarging breaks German shells had made. He did all the work himself, simply requiring Dinkowski to stay flat and follow him. There was the regular *crump!* of artillery, their own and the German howitzers. Lazarus ignored them, there being nothing better he could do. The chattering cough of machine guns he ignored, too, as long as the sound came from far enough along his flanks. Snipers he did not worry about other than to stay low.

His prime wariness was directed at German patrols—if any—and at starshells—far too many. The latter were the reason he had Dinkowski stay belly down; he did not trust his assistant to freeze and hold it if caught on his knees when a star shell burst.

Once past the last of their own entanglements he led Dinkowski, both belly-crawling, into a shell hole, then put his mouth to the private's ear. "Stay here till I get back."

"But, Corporal, I don't want to stay behind!"

"Not so loud; you'll wake the baby. Whisper against my ear. If I'm not back in an hour, go back alone."

"But I can't find my way back!"

"There's the Dipper, there's the Pole Star. Go back southwest. If you miss the gaps, you've got wire cutters. Just remember this: When a star shell *bursts—freeze!* The time to move is just as it goes out, while their eyes are still dazzled. And try to be quiet; you remind me of two skeletons on a tin roof. Don't get shot by our own people at the last minute. What's the password?"

"Oh, hell, it's 'Charlie Chaplin.' Forget it again and you'll get more than a blighty; some of our lads are triggerhappy. Now repeat back."

"Corporal, I'm going to cut wire with *you."*

Lazarus sighed inwardly. The clumsy little clown *wanted* to soldier. If I don't let him tag along, it can kill his spirit. But if I do let him, It might kill both of us. Cadwallader, I admire your good sense—and hate your guts. And wish I had you along.

"All right. Not a word from here on. Pat my foot and point if you have to—and stay that close. Remember what I said about star shells. See any Boche, don't breathe. If they surprise us—surrender at once."

"'Surrender'?"

"If you want to be a grandfather. You can't kill a German patrol all by your lonesome. Even if you could, it would make so much racket that their machine guns would chop you in two. Stick close and stay down."

Lazarus could almost touch the first German wire when a star shell burst and the private panicked—tried for a shell hole they had just come through and was bit as he fell into it.

Lazarus lay still and listened to screams as the dazzling star burned above him. One of our own, he mused; a German shell would burst to backlight the American trenches. If that poor little dope doesn't shut up, the air around here is going to be thick with merry greetings. Can't cut wire with all that advertising. And—oh, hell, he's my boy; I've *got* to take care of him. Probably be a favor to Dinky to finish him off—but Maureen wouldn't like that. Okay, let's get him back—then come back and finish this crummy detail. No sleep tonight and over the top about oh-four-hundred. Next time join the Navy.

The flare died out and Lazarus was up fast and moving— as another star shell flared. Machinegun bullets stitched his side and knocked him into the shell hole. One struck a hard implant in the right side of his belly, tumbled, and chewed its way out just above his left hip. Others did other damage— nothing too difficult to repair in 4291 A.D., but, this being the Dark Ages, any one of them was enough.

Lazarus felt it only as a mighty blow that knocked him off his feet and into the shell hole. He did not become unconscious at once; he had time to realize that he was mortally wounded. He lay as he had fallen and looked up at his stars, realizing that he had come to his ending place.

Every animal finds its ending place. Some find it in a trap, another in a fight it cannot win, some happy few in a quiet place to wait for the end. Whatever it is, it is the ending place and most of us know when we reach it. This is mine.

Did Dinky know? I think so, he's stopped screaming—I think he *looked* for his. Odd that it doesn't hurt. Thanks for making it worthwhile, Maureen…Llita…Dorable…Tamara…Minerva…Laz…Lor…Ira…Maureen—

He heard wild geese honking high overhead, looked up at his stars again as they blacked out.

CODA

II

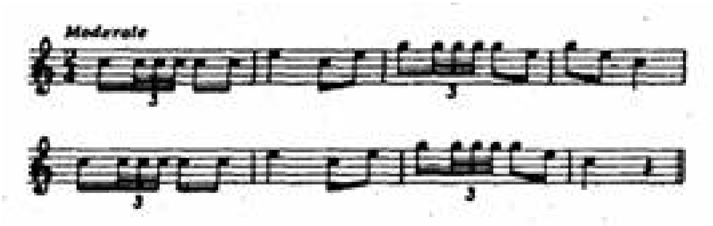

“You still don’t understand,” the Gray Voice droned on. “There is no time, there is no space. What was, is, and ever shall be. You are you, playing chess with yourself, and again you have checkmated yourself. You are the referee. Morals are your agreement with yourself to abide by your own rules. To thine own self be true or you spoil the game.”

“Crazy.”

“Then vary the rules and play a different game. You cannot exhaust her infinite variety.”

“If you would just let me look at your face,” Lazarus muttered pettishly.

“Try a mirror.”

CODA

III

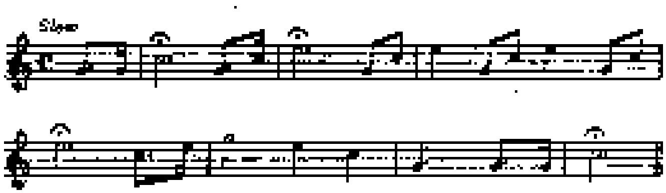

From the Kansas City Post November 7, 1918:

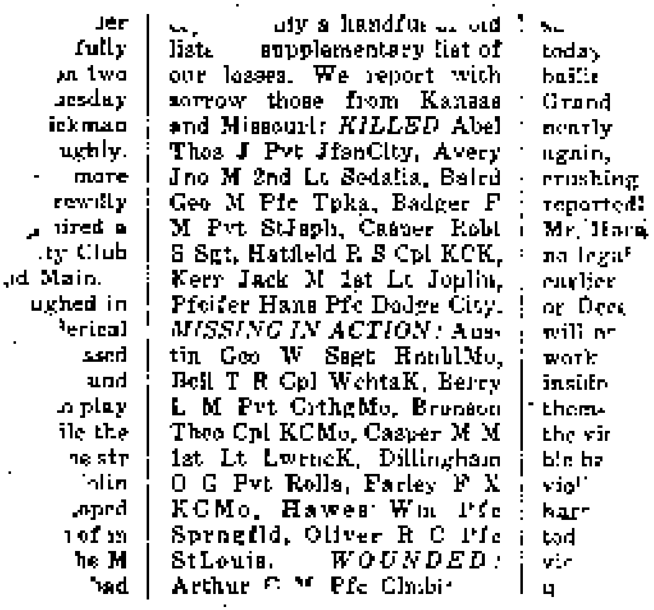

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uly a handful old lists supplementary list of our losses. We report with sorrow those from Kansas and Missouri: *KILLED* Abel Thos J Pvt JfsnCity, Avery Jno M 2nd Lt Sedalia, Baird Geo M Pfc Tpka, Badger F M Pvt StJosph, Casper Robt S Sgt, Hatfield R S Cpl KCK, Kerr Jack M 1st Lt Joplin, Pfeifer Hans Pfc Dodge City. *MISSING IN ACTION:* Austin Geo W Sgt HnnblMo, Bell T R Cpl WchtaK, Berry L M Pvt CrthgMo, Brunson Theo Cpl KCMo, Casper M M 1st Lt LwrncK, Dillingham O G Pvt Rolla, Farley F X KCMo, Hawes Wm Pfc Sprngfld, Oliver R C Pfc StLouis. *WOUNDED:* Arthur C M Pfc Clmbi

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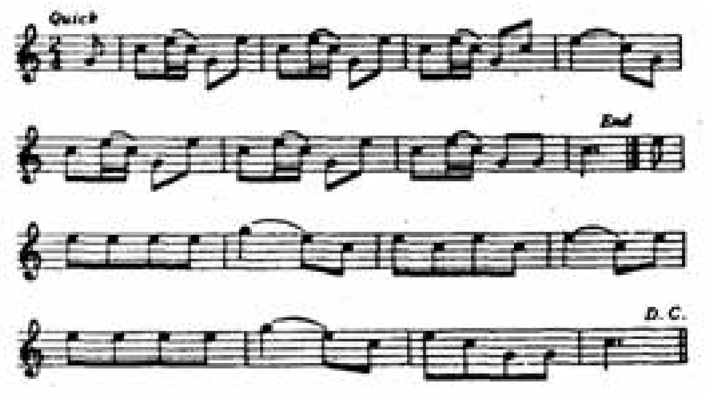

Ira! Galahad! Got him?”

Yes! Hoist us in! Oh, what a mess! Ish, about two liters and lots of jelly.”

Get him inside and let me see him. Lor, you can get us out of here now.”

Seal up, Dora, and bounce it!”

“Sealed and zooming! Screens down! What the goddamn hell have they done to Boss?"

"I'm trying to find out, Dora. Be ready with the tank; I may freeze him."

"Ready now, Ish. Laz-Lor, I told you we should pick him up sooner. I *told* you."

"Pipe down, Dora. We *told* him he'd get his ass shot off. But he was having more fun than kittens—"

"—and wouldn't have thanked us—"

"—and wouldn't have come—"

"—you know how stubborn he is."

"Tamara," said Ishtar, "cuddle his head and talk to him. Keep him alive. I don't want to freeze him—if at all—until I've made temporary repairs. Hamadryad, clamp there! Mm

Galahad, one slug hit. the Finder. That's how his intestines got so chopped up."

"Clone-trans?"

"Perhaps. The way he regenerates, repair and support may be enough. Justin, you were right; the dates on his letters did prove that he didn't last through it; losing the Finder's signal pinpointed when and where. Galahad, are you finding more fragments? I want to close him. Tamara, rouse him, make him talk! I *don't* want to have to freeze him. The rest of you shut up and get *out!* Go help Minerva with the children."

"Glad to," Justin said hoarsely. "I'm about to throw up."

"Maureen?" Lazarus murmured.

"I'm here, darling," Tamara answered, cradling his head against her breasts.

"Bad…dream. Thought…I was…dead."

"Just a dream, Beloved. You cannot die."

PAUL DIRAC, ANTIMATTER, AND YOU

A Riddle

What have these in common?

1. 1926: A graduate student, Cambridge University
2. Billions of years ago: Quasars exploding
3. 1908: A Siberian forest devastated
4. 10 million years ago: A galaxy exploding
5. 1932: A cloud-chamber track, Pasadena, Calif.

Answer: All may, and 1 and 5 *do* involve antimatter.

*(ANTI*matter?)

Yes—like ordinary matter with electrical properties of particles reversed. Each atom of matter is one or more nucleons surrounded by one or more electrons; charges add up to zero. A hydrogen atom has a proton with positive charge as nucleus, surrounded by an electron with negative charge. A proton is 1836.11 times as massive as an electron, but their charges are equal and opposite: $+1 - 1 = 0$. Uranium-235 (or $_{92}\mathrm{U}^{235}$, meaning "an isotope of element 92, uranium, nuclear weight 235") has 235 nucleons: 143 neutrons of zero charge and 92 protons of positive charge ($143 + 92 = 235$; hence its name); these 235 are surrounded by 92 electrons (negative), so total charge is zero: $0 + 92 - 92 = 0$. (Nuclear weight is never zero, being the mass of all the nucleons.)

Make electrons positive, protons negative: charges still balance; nuclear weight is unchanged—but it is *not* an atom of matter; it is an antiatom of antimatter.

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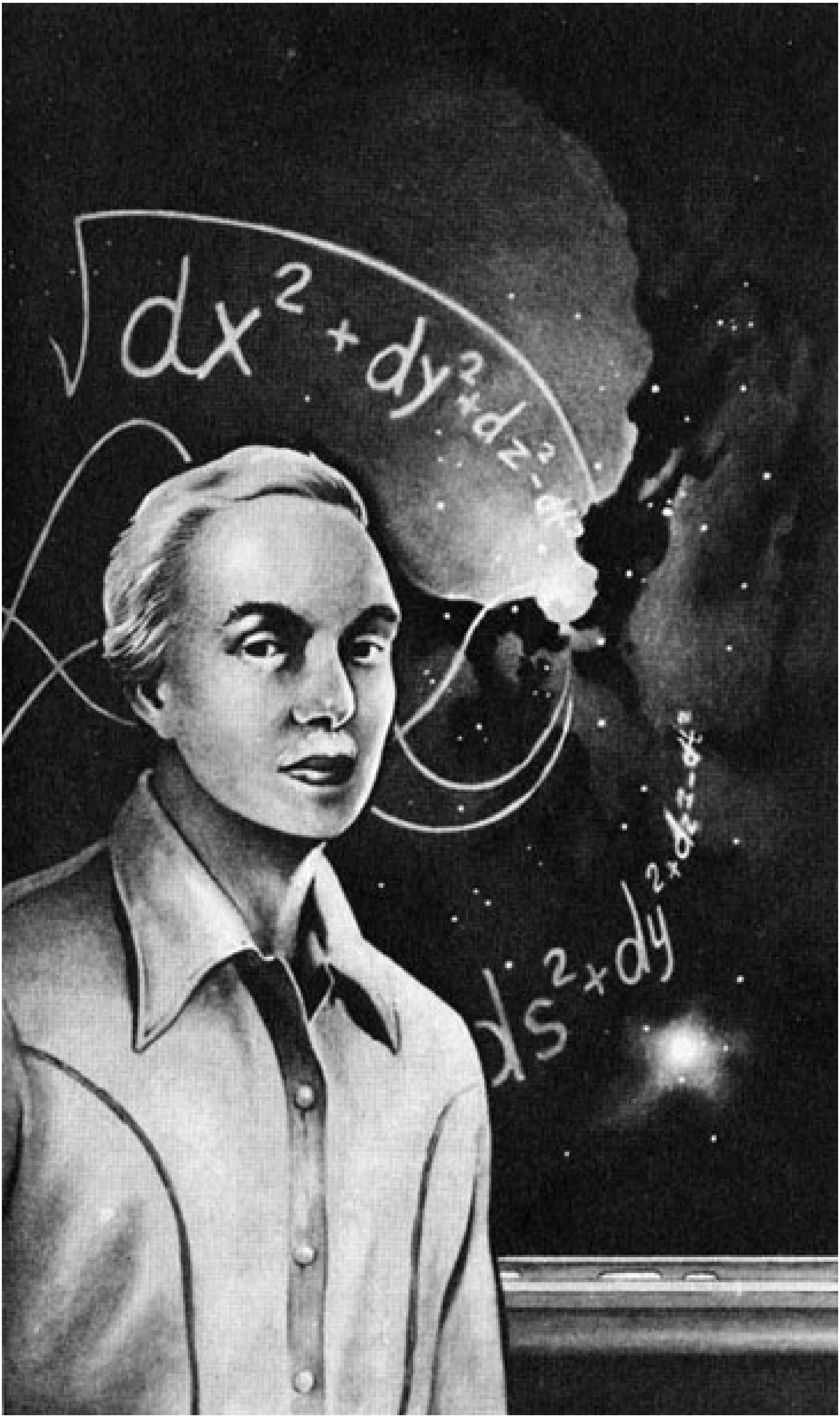
$\sqrt{dx^2 + dy^2 + dz^2 - dt^2}$
$ds^2 + dy^2 + dz^2 - dt^2$

"Touch Me Not!"

In an antimatter world, antimatter behaves like matter. Bread dough rises, weapons kill, kisses still taste sweet. You would be antimatter and not notice it.

WARNING! Since your body is matter (else you could not be reading this), *don't* kiss an antimatter girl. You both would explode with violence unbelievable.

But you'll never meet one, nor will your grandchildren. (I'm not sure about *their* grandchildren.)

$E = mc^2$

Antimatter is no sciencefiction nightmare; it's as real as Texas. That Cambridge graduate student was Paul A. M. Dirac inventing new mathematics to merge Albert Einstein's special theory of relativity with Max Planck's quantum theory. Both theories worked—but conflicted. Dirac sought to merge them without conflict.

He succeeded.

His equations were published in 1928, and from them, in 1930, he made an incredible prediction: each sort of particle had antiparticles of opposite charge: "antimatter."

Scientists have their human foibles; a scientist can grow as fond of his world concept as a cat of its "own" chair. By 1930 the cozy 19th-century "world" of physics had been repeatedly outraged. This ridiculous new assault insulted all common sense.

But in 1932 at the California Institute of Technology, Carl D. Anderson photographed proof of the electron's antiparticle (named "positron" for its positive charge but otherwise twin to the electron). Radical theory has seldom been confirmed so quickly or rewarded so promptly: Dirac received the Nobel prize in 1933, Anderson in 1936—each barely 31 years of age when awarded it.

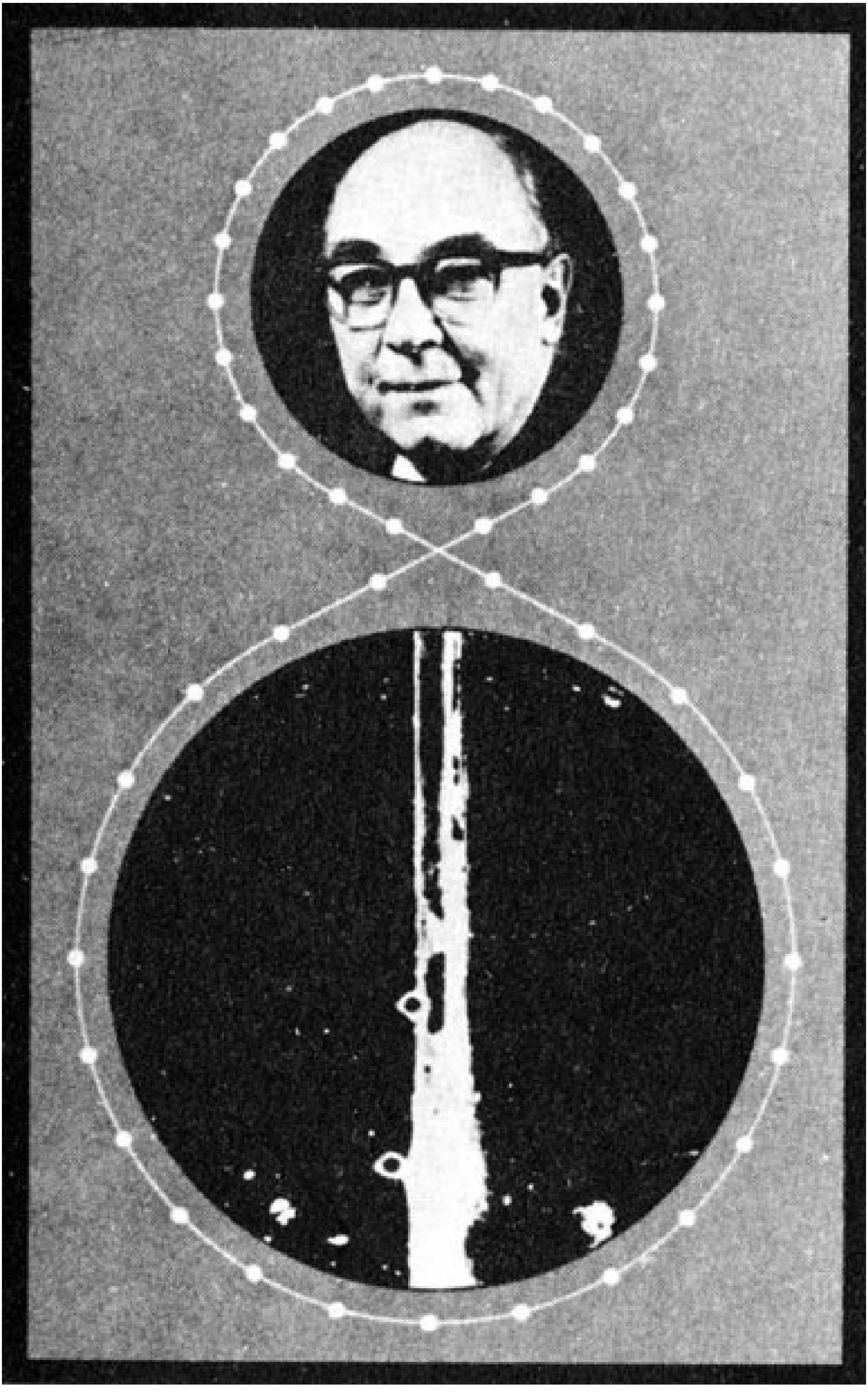

Since 1932 so many sorts of antiparticles have been detected that no doubt remains: antimatter matches matter in every sort of particle. Matching is not always as simple as electron (e–) and positron (e+). Photons are their own antiparticles. Neutrons and neutrinos (zero charges) are matched by antineutrons and anti-neutrinos, also of zero charge—this sounds like meaningless redundancy because English is not appropriate language; abstract mathematics is the language required for precise statements in physical theory. (Try writing the score of a symphony solely in words *with no musical symbols whatever.)*

But a hint lies in noting that there are reaction series in which protons and electrons yield neutrons—one example: the *soidisant* "Solar Phoenix" (solar power theory, Hans Bethe); if we ignore details, the Solar Phoenix can be summarized as changing four hydrogen atoms (four of $_1H^1$) into one helium atom ($_2H^4$). We start with four protons and four electrons; we end up six stages later with two neutrons, two protons, and two electrons—and that is neither precise nor adequate and is not an equation and ignores other isotopes involved, creation of positrons, release of energy through mutual annihilations of positrons and free electrons, and several other features, plus the fact that this transformation can occur by a variety of routes.

(But such are the booby traps of English or *any* verbal language where abstract mathematics is the *only* correct language.)

A wide variety of other transformations permits antiprotons and positrons to yield antineutrons. The twin types of varieties of transformations mentioned above are simply samples; there are many other types being both predicted mathematically and detected in the laboratories almost daily—and many or most transformation series involve antiparticles of antimatter.

Nevertheless, antimatter is scarce in our corner of the universe—lucky for us because, when matter encounters antimatter, *both* explode in total annihilation. $E = mc^2$ is known to everyone since its awful truth was demonstrated at Hiroshima, Japan. It states that energy is equivalent to mass, mass to energy, in this relation: energy equals mass times the square of the velocity of light in empty space.

That velocity is almost inconceivable. In blasting for the moon our astronauts reached nearly 7 miles/second; light travels almost 27,000 times that speed—186,282.4 (±0.1) miles or 299,792.5 (±0.15) kilometers each second. Round off that last figure as 300,000; then use the compatible units of science (grams, centimeters, ergs) and write in centimeters 3×10^{10}, then square it: 9×10^{20}, or 900,000,000,000,000,000,000.

(!!!)

This fantastic figure shouts that a tiny mass can become a monstrous blast of energy—grim proof: Hiroshima.

But maximum possible efficiency of U^{235} fission is about 1/10 of 1%; the Hiroshima bomb's actual efficiency was much lower, and H-bomb fusion has still lower maximum (H-bombs can be more powerful through having no limit on size; all fission bombs have sharp limits). But fission or fusion, almost all the reacting mass splits or combines into other elements; only a trifle becomes energy.

In matter-antimatter reaction, however, *all* of *both* become energy. An engineer might say "200% efficient" as antimatter undergoing annihilation converts into raw energy an equal mass of matter.

Mathematical Physicists

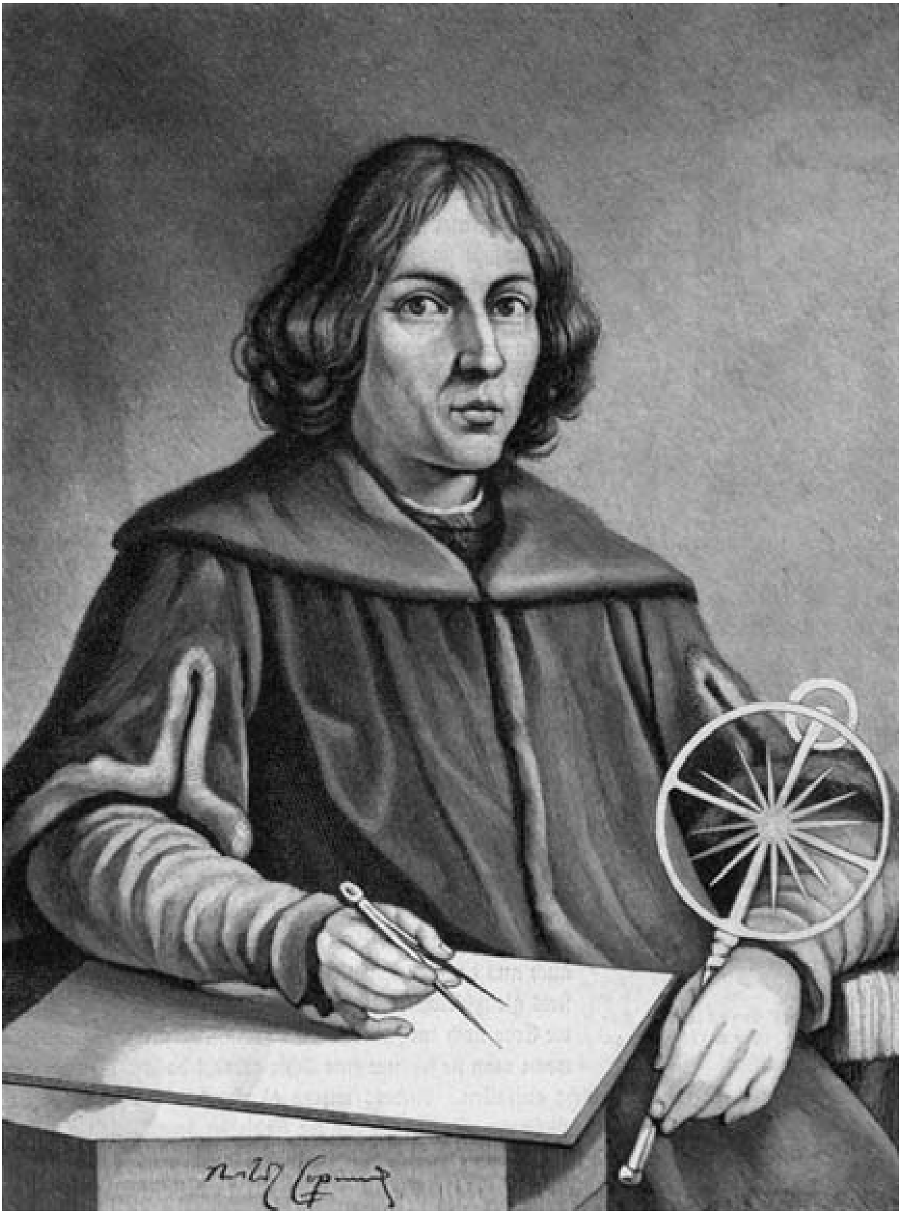

Nicolaus Copernicus (1473—1543)

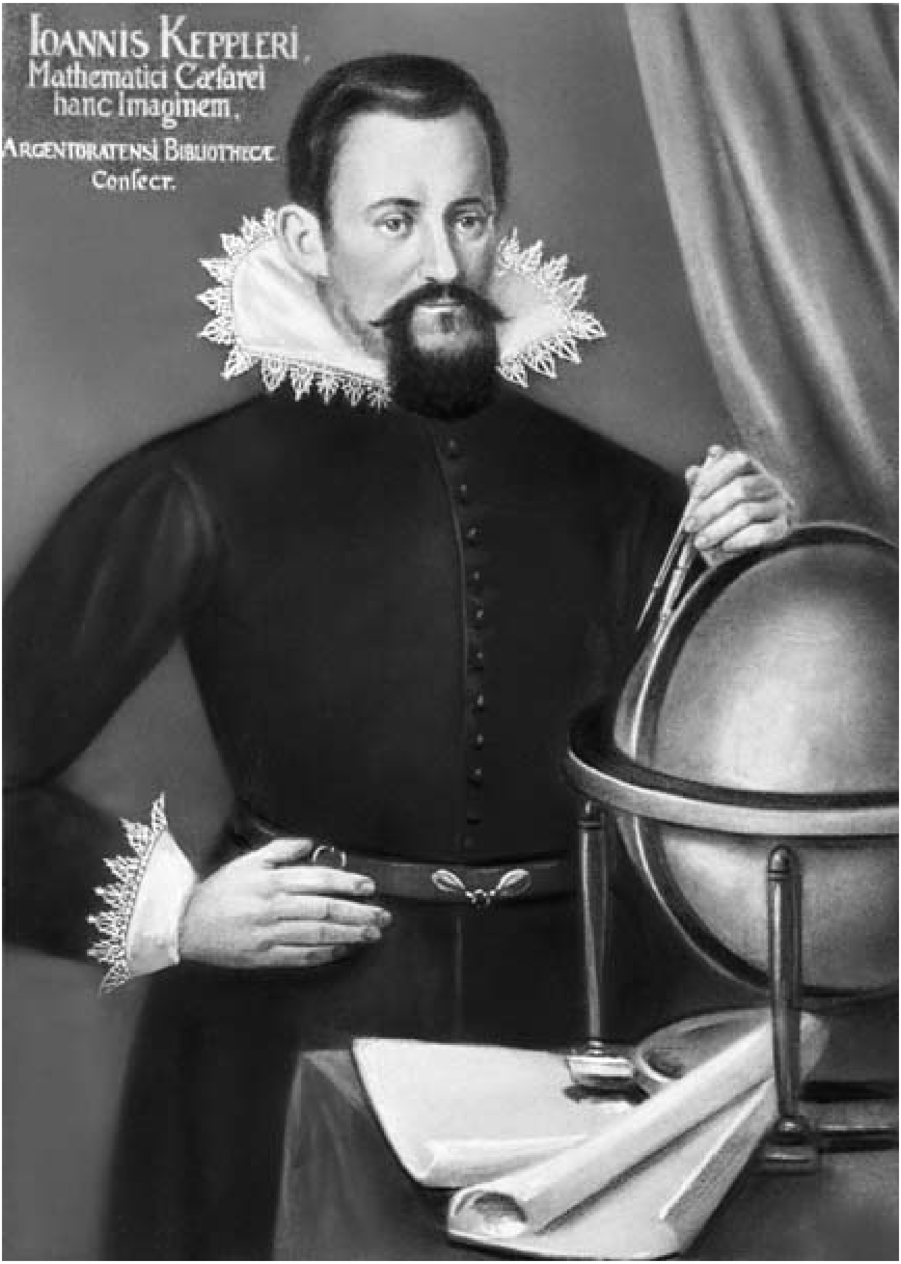
IOANNIS KEPPLERI,
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Johannes Kepler (1571—1630)

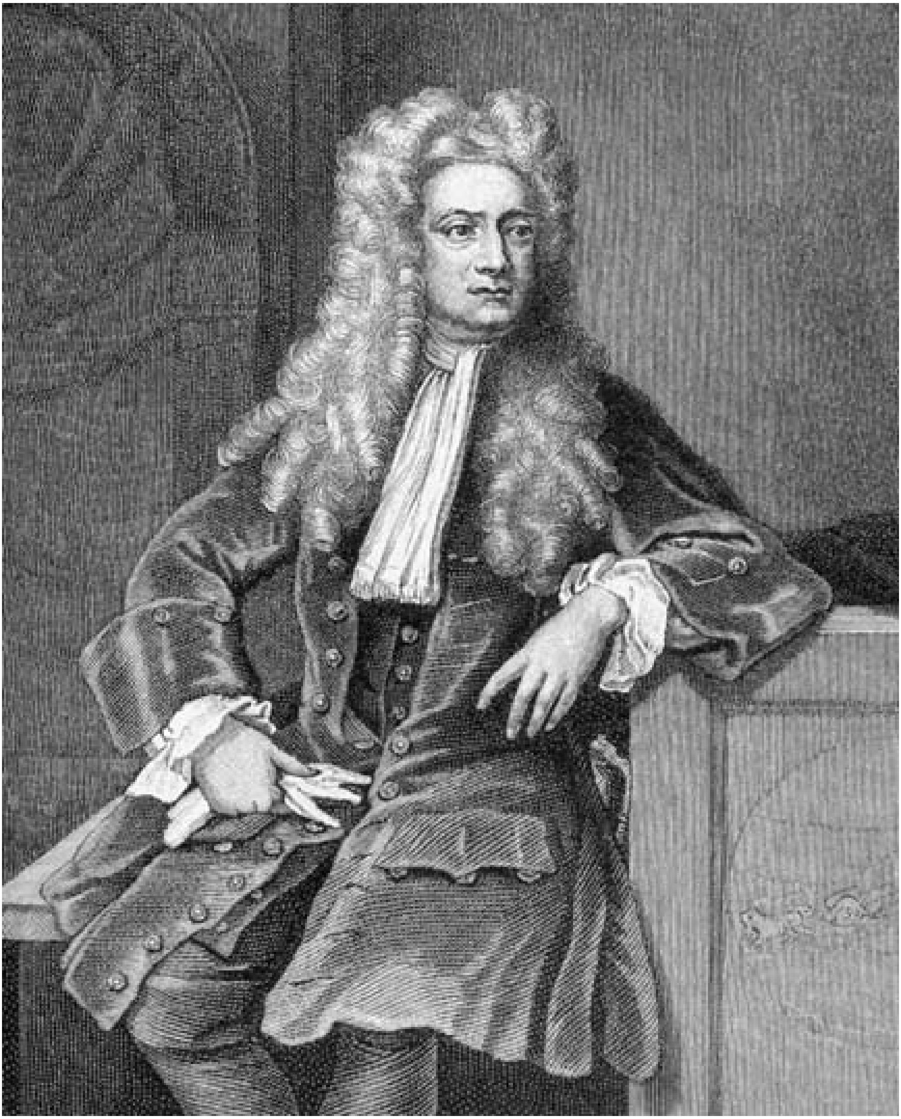

Isaac Newton (1643—1727)

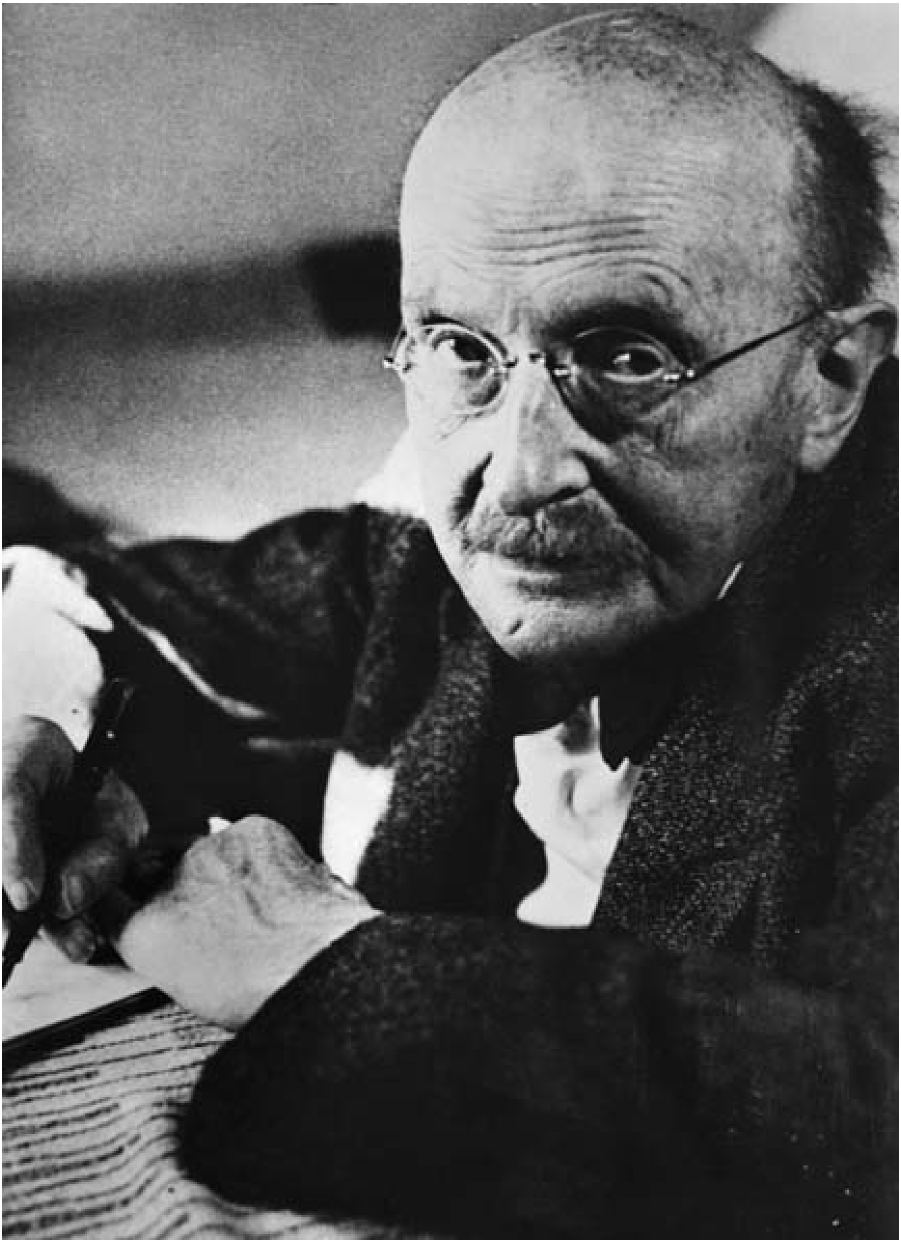

Max Planck (1858—1947)

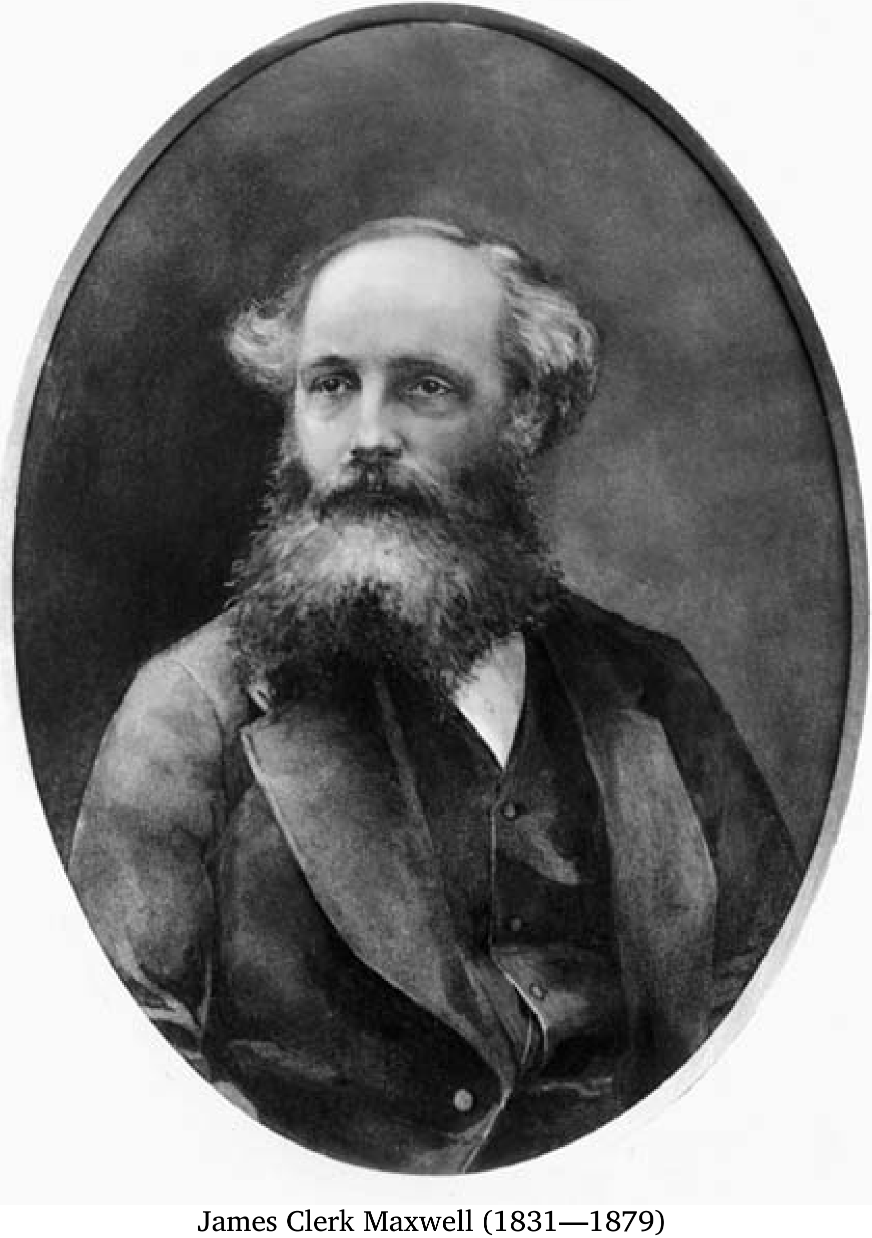

James Clerk Maxwell (1831—1879)

Paul A. M. Dirac (1902—1984)

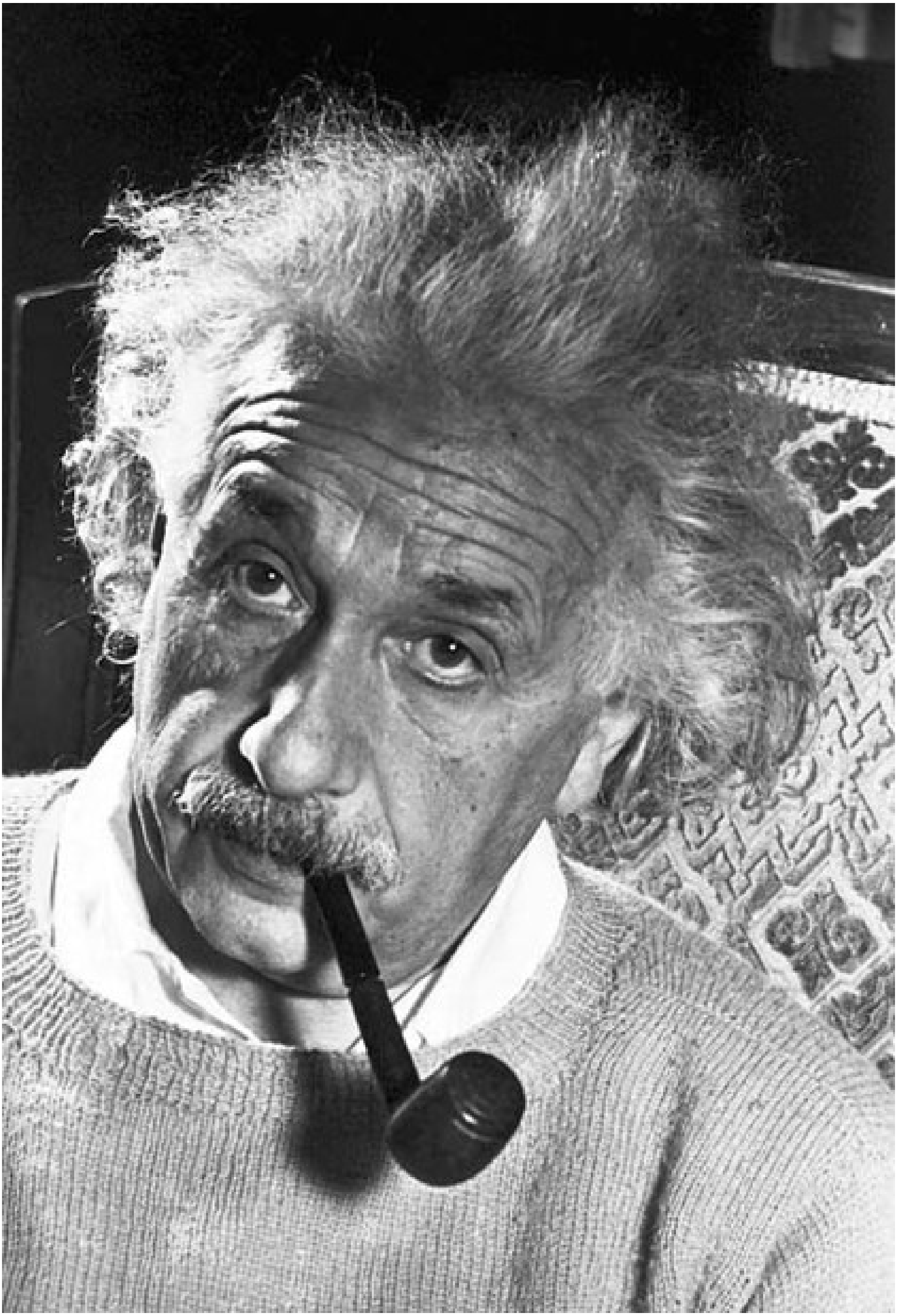

Albert Einstein (1879—1955)

An experimental physicist uses expensive giant accelerators to shoot particles at 99.9+% of the speed of light, or sometimes gadgets built on his own time with scrounged materials. Large or small, cheap or costly, he works with *things*.

A mathematical physicist uses pencil, paper, and brain. Not my brain or yours—unless you are of the rare few with "mathematical intuition."

That's a tag for an unexplainable. It is a gift, not a skill, and cannot be learned or taught. Even advanced mathematics ("advanced" to laymen) such as higher calculus, Fourier analysis, *n*-dimensional and non-Euclidean geometries are skills requiring only patience and normal intelligence . . . *after* they have been invented by persons having mathematical intuition.

The oft-heard plaint "I can't cope with math!" may mean subnormal intelligence (unlikely), laziness (more likely), or poor teaching (extremely likely). But that plaint usually refers to common arithmetic —a trivial skill in the eyes of a mathematician. (*Creating* it was not trivial. Zero, positional notation, decimal-or-base point all took genius; imagine doing a Form 1040 in Roman numerals.)

Of billions living and dead perhaps a few thousand have been gifted with mathematical intuition; a few hundred have lived in circumstances permitting use of it; a smaller fraction have been mathematical physicists. Of these a few dozen have left permanent marks on physics.

But without these few we would not have science. Mathematical physics is basic to *all* sciences. No exceptions. *None.*

Mathematical physicists sometimes hint that experimentalists are frustrated pipefitters; experimentalists mutter that theoreticians are so lost in fog they need guardians. But they are indispensable to each other. Piling up facts is not science—science is facts-*and*-theories. Facts alone have limited use and lack meaning; a valid theory organizes them into far greater usefulness. To be valid a theory must be confirmed by *all* relevant facts. A "natural law" is theory repeatedly confirmed and drops back to "approximation" when *one* fact contradicts it. Then search resumes for better theory to embrace old facts plus this stubborn new one.

No "natural law" of 500 years ago is "law" today; all our present laws are probably approximations, useful but not perfect. Some scientists, notably Paul Dirac, suspect that perfection is unattainable.

A powerful theory not only embraces old facts and new but also discloses unsuspected facts. These are landmarks of science: Nicolaus Copernicus' heliocentric theory, Johannes Kepler's refining it into conic-sections ballistics, Isaac Newton's laws of motion and theory of universal gravitation, James C. Maxwell's equations linking electricity with magnetism, Planck's quantum theory, Einstein's relativity, Dirac's synthesis of quantum theory and special relativity—a few more, not many.

Mathematical physicists strive to create a mathematical structure interrelating all spacetime events, past and future, from infinitesimally small to inconceivably huge and remote in space and time, a "unified field theory" embracing 10 or 20 billion years and lightyears, more likely 80 billion or so—or possibly eternity in an infinity of multiple universes.

Some order!

They try. Newton made great strides. So did Einstein. Nearly 50 years ago Dirac brought it closer, has steadily added to it, is working on it today.

Paul Dirac may be and probably is the greatest living theoretical scientist. Dirac, Newton, and Einstein are equals.

Paul A. M. Dirac

The experimentalists' slur about theoretical physicists holds a grain of truth. Newton apparently never noticed the lovely sex in all his years. Einstein ignored such trivialities as socks. One mathematical physicist who swayed World War II could not be trusted with a screwdriver.

Dirac is *not* that sort of man.

Other than genius, his only unusual trait is strong dislike for idle talk. (His Cambridge students coined a unit the *dirac*—one word per lightyear.) But he lectures and writes with admirable clarity. Taciturn, he is not unsocial; in 1937 he married a most charming Hungarian lady. They have two daughters and a son.

He can be trusted with tools; he sometimes builds instruments and performs his own experiments. He graduated in engineering before he became a mathematical physicist; this influenced his life. Engineers find working solutions from incomplete data; approximations are close enough if they do the job—too fussy wastes man-hours. But when a job needs it, a true engineer gives his utmost to achieve as near perfection as possible.

Dirac brought this attitude to theoretical physics; his successes justify his approach.

He was born in Bristol, England, Aug. 8, 1902, and named Paul Adrien Maurice Dirac. His precocity in mathematics showed early; his father supplied books and encouraged him to study on his own. Solitary walks and study were the boy's notion of fun—and are of the man today. Dirac works (and plays) hardest by doing and saying *nothing* . . . while his mind roams the universe.

When barely 16 years old, he entered the University of Bristol. At 18 he graduated, bachelor of science in electrical engineering. In 1923 a grant enabled him to return to school at the foremost institution for mathematics, Cambridge University. In three years of study for a doctorate Dirac published 12 papers in mathematical physics, 5 in *The*

Proceedings of the Royal Society. A cub with only an engineering degree from a minor university has trouble getting published *in any* journal of science; to appear at the age of 22 in the most highly respected of them all is amazing.

Dirac received his doctorate in May 1926, his dissertation being "Quantum Mechanics"—the stickiest subject in physical science. He tackled it his first year at Cambridge and has continued to unravel its paradoxes throughout his career; out of 123 publications over the last 50 years the word *quantum* can be found 45 times in his titles.

Dirac remained at Cambridge—taught, thought, published. In 1932, the year before his Nobel prize, he received an honor rarer than that prize, one formerly held by Newton: Lucasian professor of mathematics. Dirac kept it 37 years, until he resigned from Cambridge. He accepted other posts during his Cantabrigian years: member of the Institute for Advanced Study at Princeton, N.J., professor of the Dublin Institute for Advanced Studies, visiting professorships here and there.

Intuitive mathematicians often burn out young. Not Dirac!—he is a Michelangelo who started very young, never stopped, is still going strong. Antimatter is not necessarily his contribution most esteemed by colleagues, but his other major ones are so abstruse as to defy putting them into common words:

A mathematical attribute of particles dubbed "spin"; coinvention of the Fermi-Dirac statistics; an abstract mathematical replacement for the "pellucid aether" of classical mechanics. For centuries, ether was used and its "physical reality" generally accepted either as "axiomatic" or "proved" through various negative proofs. Both "axiom" and "negative proof" are treacherous; the 1887 Michelson-Morley experiment showed no physical reality behind the concept of ether, and many variations of that experiment over many years gave the same null results.

So Einstein omitted ether from his treatments of relativity—while less brilliant men ignored the observed facts and clung to classical ether for at least 40 years.

Dirac's ether (circa 1950) is solely abstract mathematics, more useful thereby than classical ether as it avoids the paradoxes of the earlier concepts. Dirac has consistently warned against treating mathematical equations as if they were pictures of something that could be visualized in the way one may visualize the Taj Mahal or a loaf of bread; his equations are *rules* concerning spacetime events—*not* pictures.

(This may be the key to his extraordinary successes.)

One more example must represent a long list: Dirac's work on Georges Lemaître's "primeval egg"—later popularized as the "big bang."

Honors also are too many to list in full: fellow of the Royal Society, its Royal Medal, its Copley Medal, honorary degrees (always refused), foreign associate of the American Academy of Sciences, Oppenheimer Memorial Prize, and (most valued by Dirac) Great Britain's Order of Merit.

Dirac "retired" by accepting a research professorship at Florida State University, where he is now working on gravitation theory. In 1937 he had theorized that Newton's "constant of gravitation" was in fact a decreasing variable . . . but the amount of decrease he predicted was so small that it could not be verified in 1937.

Today the decrease can be measured. In July 1974 Thomas C. Van Flandern of the U.S. Naval Observatory reported measurements showing a decrease in gravitation of about a ten-billionth each year (1 per 10^{10} per annum). This amount seems trivial, but it is *very* large in astronomical and geological time. If these findings are confirmed and if they continue to support Dirac's mathematical theory, he will have upset physical science even more than he did in 1928 and 1930.

Here is an incomplete list of the sciences that would undergo radical revision: physics from micro-through astro-, astronomy, geology, paleontology, meteorology, chemistry, cosmology, cosmogony, geogony, ballistics. It is too early to speculate about effects on the life sciences, but we exist inside this physical world and gravitation is the most pervasive feature of our world.

Theory of biological evolution would certainly be affected. It is possible that understanding gravitation could result in changes in engineering technology too sweeping easily to be imagined.

Courtesy Kitt peak National Observatory

Antimatter and You

Of cosmologies there is no end; astrophysicists enjoy "playing God." It's safe fun, too, as the questions are so sweeping, the data so confusing, that any cosmology is hard to prove or disprove. But since 1932 antimatter has been a necessary datum. Many cosmologists feel that the universe (universes?) has as much antimatter as matter—but they disagree over how to balance the two.

Some think that, on the average, every other star in our Milky Way galaxy is antimatter. Others find that setup dangerously crowded—

make it every second galaxy. Still others prefer universe-and-antiuniverse with antimatter in ours only on rare occasions when energetic particles collide so violently that some of the energy forms antiparticles. And some like higher numbers of universes—even an unlimited number.

One advantage of light's finite speed is that we can see several eons of the universe in action, rather than just one frame of a *very* long moving picture. Today's instruments reach not only far out into space but also far back into time; this permits us to test in some degree a proposed cosmology. The LST (Large Space Telescope), to be placed in orbit by the Space Shuttle in 1983, will have 20 times the resolving power of the best ground-based and atmosphere-distorted conventional telescope—therefore 20 times the reach, or more than enough to see clear back to the "beginning" by one cosmology, the "big bang."

(Q: What happened *before* the beginning? A: *You* tell *me.)*

When we double that reach—someday we will—what will we see? Empty space? Or the backs of our necks?

(Q: What's this to *me*? A: Patience one moment. . . .)

The star nearest ours is a triplet system; one of the three resembles our sun and may have an Earthlike planet—an inviting target for our first attempt to cross interstellar space. Suppose that system is antimatter—*BANG!* Scratch one starship.

(Hooray for Zero Population Growth! To hell with space-travel boondoggles!)

Then consider this: June 30, 1908, a meteor struck Siberia, so blindingly bright in broad daylight that people 1,000 miles away saw it. Its roar was "deafening" at 500 miles. Its ground quake brought a train to emergency stop 400 miles from impact. North of Vanavara its air blast killed a herd of 1,500 reindeer.

Trouble and war and revolution—investigation waited 19 years. But still devastated were many hundreds of square miles. How giant trees lay pinpointed impact.

A meteor from inside our Galaxy can strike Earth at 50 miles/second.

But could one hit us from *outside* our Galaxy?

Yes! The only unlikely (but not impossible) routes are those plowing edgewise or nearly so through the Milky Way; most of the sky is an open road—step outside tonight and *look.* An antimeteor from an antigalaxy could sneak in through hard vacuum—losing an antiatom whenever it encountered a random atom but nevertheless could strike us massing, say, one pound.

One pound of antimatter at any speed or none would raise as much hell as *28,000 tons* of matter striking at 50 miles/second.

Hubble Large Space Telescope

Today no one knows how to amass even a gram of antimatter or how to handle and control it either for power or for weaponry. Experts assert that all three are impossible.

However . . .

Two relevant examples of "expert" predictions:

Robert A. Millikan, Nobel laureate in physics and distinguished second to none by a half-century of research into charges and properties of atomic particles, in quantum mechanics, and in several other areas, predicted that all the power that could ever be extracted from atoms would no more than blow the whistle on a peanut vendor's cart. (In fairness I must add that most of his colleagues agreed—and the same is true of the next example.)

Forest Ray Moulton, for many years top astronomer of the University of Chicago and foremost authority in ballistics, stated in print (1935) that there was "not the slightest possibility of such a journey" as the one the whole world watched 34 years later: Apollo 11 to the moon.

In 1908 the Tunguska region of Siberia was struck by a blast equivalent to 30 million tons of TNT, the impact of which was felt by residents 400 miles from the site and which left in its wake a 20-mile radius of charred forests. Numerous theories attempting to explain the occurrence have been suggested over the years, but none has gained consensus in the scientific community. Among the more recent theories to explain the blast is the proposal that an antimeteor, composed of antimatter, plunged through Earth's atmosphere and upon coming in contact with ordinary matter exploded with devastating force.

In 1938, when there was not a pinch of pure uranium-235 anywhere on Earth and no technology to amass or control it, Lise Meitner devised mathematics that pointed straight to atom bombs.

Less than seven years after she did this, the first one blazed "like a thousand suns."

No *possible* way to amass antimatter?

Or *ever* to handle it?

Being smugly certain of *that* (but mistaken) could mean to *you* . . . and me and everyone . . .

The **END**

All Aboard the GEMINI

A top space author takes you aboard the passenger space liner of the future—now taking shape in Project Gemini

By Robert A. Heinlein

..... TIME: 1984, OR THEREABOUTS

THE ROCKET SHIP LIFTS from Mauna Loa Port, Hawaii; her passengers are tranquilized and strapped down to contour couches In a few minutes the booster stage separates, then plunges back to the "lift" atmosphere under the control of the booster-stage pilot.

This officer brings the booster down in an unpowered glide toward the Pacific, and lands her, seaplane-fashion, on the water. He does this so precisely that his tow ship is less than 10 miles away.

A line is passed, a towing crew comes on board, and the booster pilot sacks in, having been on duty for little more than an hour and having actually worked about 15 minutes. For this, he gets paid in excess of $100 per minute—and is worth every cent of it. . . .

The important thing is that the enormously expensive giant booster has been saved to lift another day. With proper maintenance, there's no reason why it should ever wear out. That is one reason why space travel will be relatively cheap in 1984.

The keys to tomorrow's cheap space travel are reliability, precise rendezvous techniques in space, and undamaged recovery of ships in orbit. And these are no longer in the daydream category. They are the objectives of Project Gemini—a very much alive program with plenty of money and steam behind it.

Preparations for Project Gemini are underway now at the National Aeronautics and Space Administration's Manned Spacecraft Center at Houston, Tex. It is to be our next step toward conquering space .

SPACE PACK, called SMU (self maneuvering unit), will be used by astronauts for repair or assembly work outside spacecraft. Strapped to the spaceman's back, the pack contains a life-support system, thrust jets, and stabilization and control units. In test flights, right, an engineer, in a state of weightlessness, propels himself through the cabin of a high-flying jet.

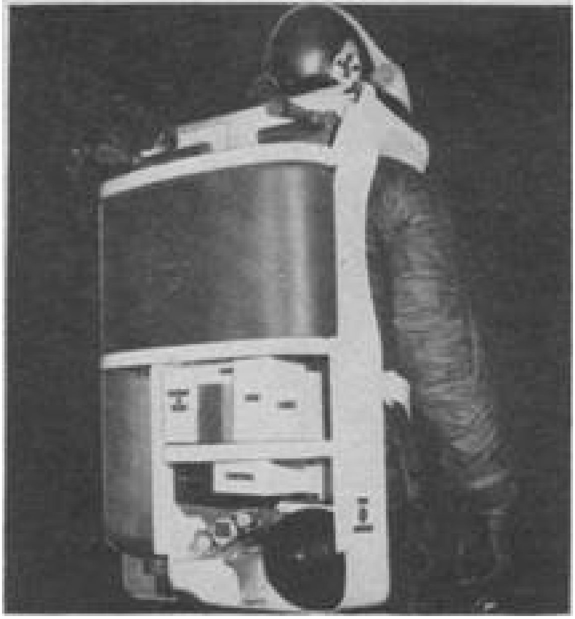

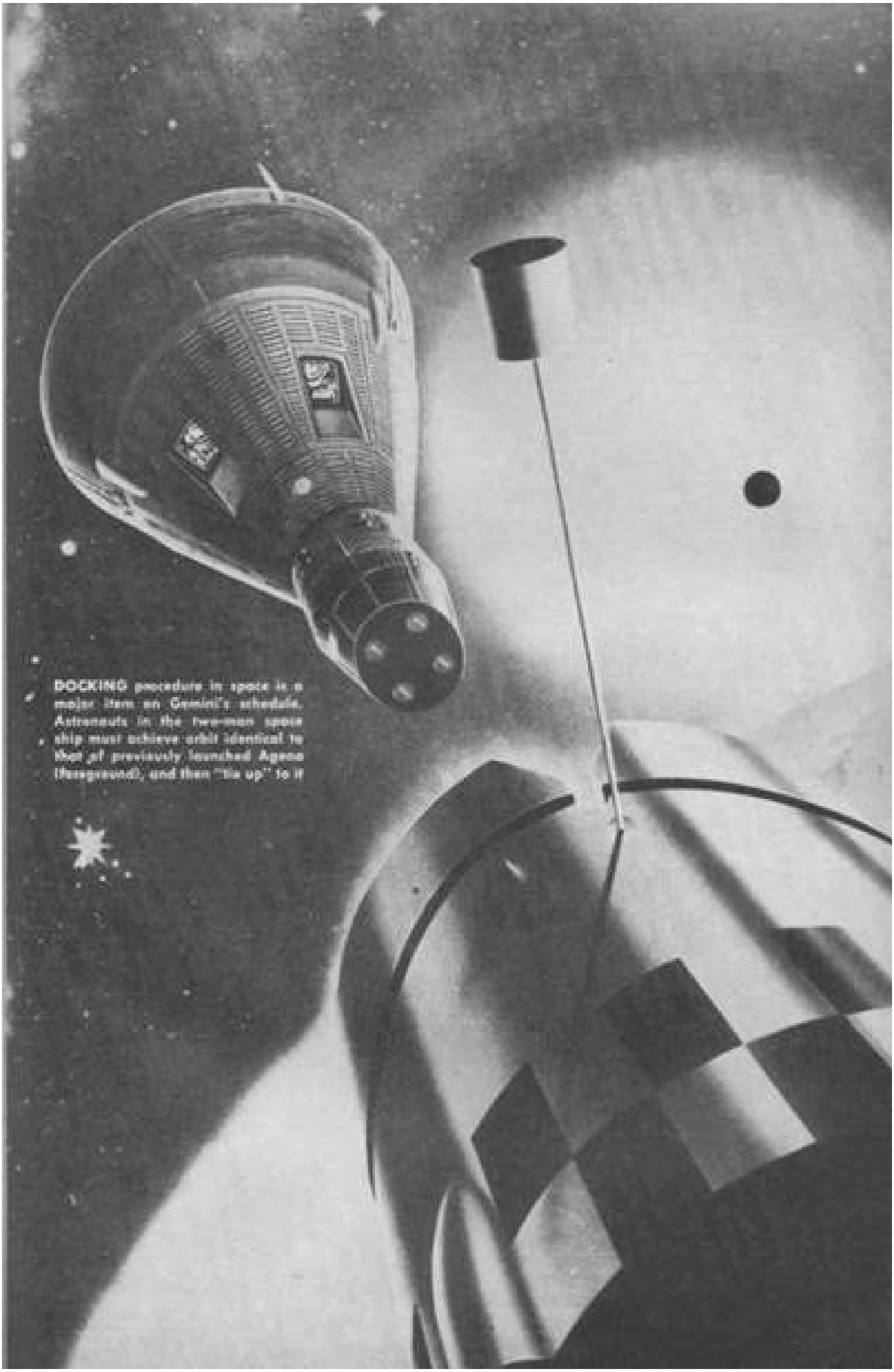

DOCKING procedure in space is a major item on Gemini's schedule. Astronauts in the two-man space ship must achieve orbit identical to that of previously launched Agena (foreground), and then "tie up" to it

But we left the second stage and the cabin of that 1984 ship still in trajectory and approaching orbit. .. .

The second stage boosts the cabin into circular orbit around the earth before separating; its pilot then uses retrorockets to slow his empty vehicle as it dips into the atmosphere. As the ship slows, he breaks out a paraglider, or Rogallo delta wing, made of a special heat-resistant plastic with three nitrogen-filled sleeves that serve as spars. Acting as a parachute as well as a wing, the unit allows the pilot to maneuver his craft on target—a dry lake in the Mojave Desert.

The third stage, the passenger section, stays in orbit. Its destination is "Space Island Goddard"—a manned orbiting space station, named for an early U.S. pioneer in rocketry, Robert H. Goddard. Here the passengers will transfer to today's moon ship. But the island is in orbit a long way out, and the passenger section doesn't carry enough fuel to reach it. The first task is to rendezvous with an unmanned tanker-cargo vessel so that its power can be used for the rest of the trip.

The tanker-cargo ship may have been placed in orbit hours or days earlier, timed to pass over Hawaii at the exact angle to rendezvous with the passenger ship.

The spacecraft's captain has the help of complex radar and computer systems on the ground and in his own ship in making speed and course corrections for rendezvous. All course information is programmed into his autopilot. Not until he closes the gap to some 20 miles and sights the flashing beacon on the tanker-cargo unit will he take over manual control. During the catch-up period he sends the copilot outside the ship to inspect for and, if necessary, correct a suspected fault in a radar antenna, and this he solemnly logs. In fact, there is no malfunction, but the copilot gets a nice "special hazard" bonus for pressure-suit work outside the ship in orbit. This is a traditional racket, condoned by the business office, and is a way skippers reward good copilots.

When the ship is about 100 yards from the cargo-tanker, the captain initiates the docking maneuver. He moves in, fitting the nose of his ship into the docking cavity in the bow of the tanker; he knows the two vessels are joined when he feels the grapples lock into place. During the docking maneuver, the passengers are strapped down, but it is accomplished so gently they are hardly aware of it.

With help from ground-based computers and radar, the captain now starts a longer maneuver; his twinned ship will move from a low circular orbit into an elliptical orbit tangent at its apogee to the orbit of Space Island Goddard, and so timed that ship and space station will reach the same point at the same time.

The maneuver is without incident save that both the larger loading docks at Goddard are occupied. Our ship lies off a mile or so, perfectly matched in orbit, and waits. In a few minutes, one of the docked ships departs and our cargo-tanker backs gently into the vacated space. The passenger cabin is warped into a smaller docking socket nearby. The passengers disembark to wait for a scheduled moonship.

A TWO-MAN GEMINI, riding atop a Titan II booster, will blast off, perhaps in the fall of 1964, for a rendezvous in space with an unmanned Agena-D target ship. Far out in space, the big booster's first stage, right, falls away.

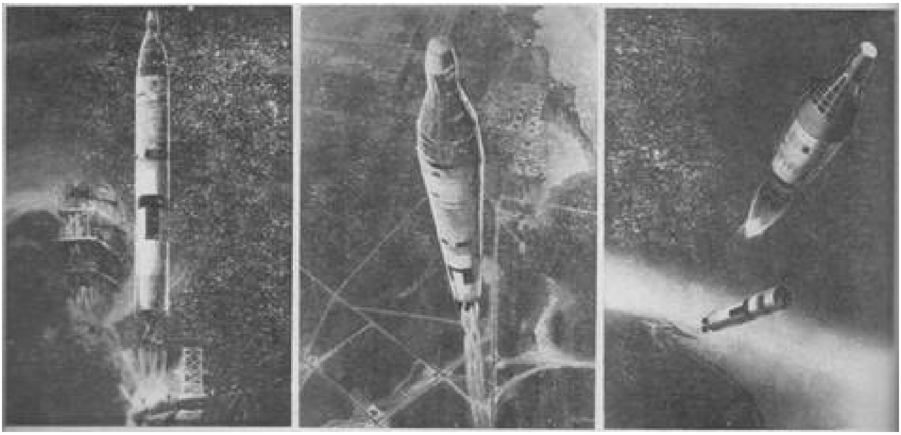

All of the above is implied by Project Gemini. Every maneuver described in the "1984" sequence above will be proved out —or washed out—by Gemini, with the exception of the space island procedures.

When Project Gemini is completed, perhaps two years from now, we will have accomplished all the major steps needed to achieve regular and reliable space travel. One factor, the development of truly big boosters, is not part of Gemini but is going ahead in other projects.

The purpose of Gemini is to design, develop, build and launch a series of two-man spacecraft, controlled by the pilots and capable of staying in orbit for up to two weeks. It will be capable of undergoing repair or service in flight by the crew, including repairs made outside the vessel by a man in a space suit. It will perform a precise rendezvous with an unmanned tanker, joining with the tanker and then maneuvering as a single ship. Finally, it will separate from the tanker for a soft landing on earth. During one flight, simulated repairs will be done outside the capsule in space.

At some point in the Gemini program, the plan is to launch an unmanned Agena tanker into a circular orbit 150 miles up and on a course that would bring it over Cape Canaveral twice a day. After its precise orbit has been determined, the two-man Gemini will be launched into an elliptical orbit that will bring it within a few hundred miles of the Agena.

Both vehicles will be maneuvered under ground control until they are in the same plane and about 250 miles apart. Gemini's radar will then lock onto the Agena, and its autopilot will operate the engines to home on the target.

The Agena will be displaying a flashing light (to distinguish the signal from the steady light of stars) and the astronauts should sight this at a range of 20 miles. Shortly after, they will use manual controls to bring the two craft together.

Long before that movement, the Agena tanker would have been turned around so that its engine is forward and its other end, with the mating ring on shock absorbers, is toward the rear. Both vehicles will be traveling in excess of 17,000 miles per hour, but speed of contact is expected to be no more than one or two feet per second, a very mild touch rate.

If the tanker is hit too hard or at the wrong angle it could be damaged. Too, if the closure is not exactly right the tanker would be bumped and would float away. Another try would be necessary. But Gemini has 16 thrusters, small jet engines, for speeding up, slowing down, changing attitude and changing direction. The astronauts should be able to mate the two crafts with no trouble; the vehicles automatically locked together.

Now the men in Gemini have control of Agena's big engine and its load of fuel. They can turn the twinned craft around to get the engine at the rear, then perform large-scale maneuvers in space. They could move from a circular to an elliptical orbit, just as our 1984 spacecraft will do to complete the trip to Goddard.

THE SECOND STAGE separates once the craft is in orbit, left. The capsule and target ship will be maneuvered into position for docking by ground controlled and spacecraft radar; astronauts themselves will accomplish hookup.

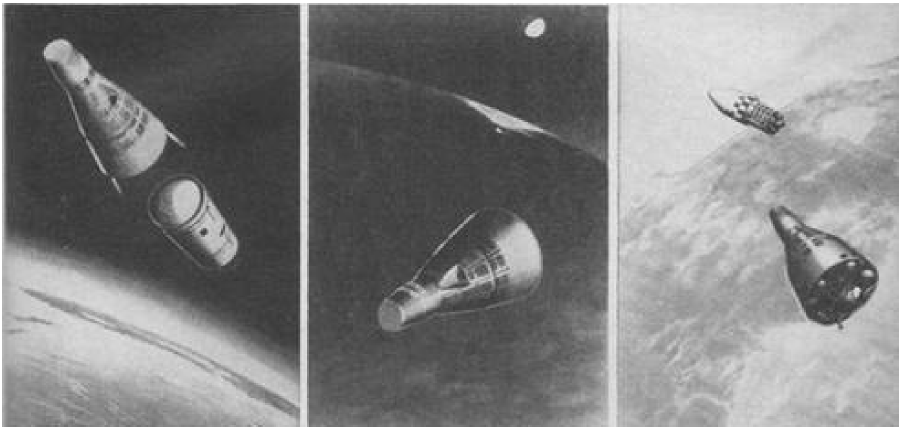

DRAWING of proposed space trainer shows astronaut leaving capsule to enter space lab, top; in another version, he goes directly into the lab from capsule.

AT 70,000 FEET, a paraglider will open and bring Gemini to a soft landing at preselected site, but first two capsule landings will be made by parachute.

But all of this isn't contemplated yet. Instead, after some maneuvers, the Gemini capsule will unmate from Agena for its return to earth, leaving Agena to plunge eventually to a fiery death in the atmosphere. The detaching operation could be sticky, for it has been shown in the laboratory that metals weld themselves together in a vacuum. Whether this would happen at 150 to 200 miles altitude is not known. As a precaution, the astronauts will be able to explode the latches to separate the crafts.

The two men on Gemini will wear soft suits, either metallic gold or silver in color, and soft helmets that balloon out when inflated. They can unzip portions of the suits for greater comfort when their cabin is pressurized. They would zip up only for reentry, or when the cabin was depressurized deliberately; this would be done so one hatch could be folded back for an astronaut to step out into space.

The only other time the suits would be pressurized would be in the unlikely event that they were hit by meteoroids. Gemini's skin is tough enough to resist pinhead-sized meteoroids, but one the size of a marble could smash through. The cabin air would leak out, but slowly enough for the astronauts to pressurize their suits.

The first and second shots in the Gemini series will land by parachutes, Mercury-fashion. After that, each craft will land under the pilot's control, using a paraglider he can open at about 70,000 feet. By trimming the paraglider's attitude with cables and shifting its center of gravity, the astronauts could land anywhere inside an area 50 miles wide by 450 miles long. Gemini's landing gear consists of struts and skids, similar to that of the X-15.

It's planned now to terminate these flights somewhere in Texas. A grain field, a dry lake bed or any flat piece of desert is suitable; the craft would land at a forward speed of 45 miles per hour and with an impact velocity that depends on the pilot's skill. For safety's sake, the craft would be able to land on water.

The Gemini spacecraft is admittedly a minimal vehicle for two men; necessarily so because we don't yet have really big boosters. The engineers would happily design a much larger ship if we had the power to lift it.

Gemini is half again as big and looks very much like the Mercury capsule. But there the resemblance stops. Mercury was simply a space capsule, controlled from the ground with the astronaut hardly more than a passenger. In one Mercury shot a chimpanzee was the "astronaut."

The Mercury capsule is cram-jammed with automatic gadgets, duplicated circuits, and electronic and mechanical spaghetti of all sorts. The Mercury shots proved that an astronaut can actually control his ship. This made much of the complexity unnecessary.

Gemini is pilot-controlled and maneuverable. It is equipped to monitor its Titan II booster on the way up, and can separate and abort the shot if necessary. As a spacecraft, it can change attitude and direction .in the vacuum of space. And yet, its control board is extremely simple. The displays, readouts and switch buttons are very few. There is just one control stick, similar to a single-engine sports plane control stick. It is located between the pilots. There are no controls for the feet. Despite the many rocket thrusters, there is remarkably little plumbing.

The worst shortcoming of the Gemini spacecraft is that it's so pesky small. Your reporter is not a claustrophobe; I have done some deepsea diving, explored some tight passages in caves, I don't shudder at being trapped in an elevator. But I found that 20 minutes in the pilot's seat of Gemini more than enough even though I knew I could get out at any time.

One Gemini flight is planned to last two weeks, which means that enough groceries to feed two grown men for that length of time must be stowed inside that tiny compartment. Don't think of it in terms of "pills"; that is a Buck Rodgers' concept. That food will occupy about as much space as it would in your home freezer.

Too Much Togetherness?

The two astronauts will lie side by side about one foot apart. Fortunately, our astronauts have been selected for temperament (among other things) and they are all strongly motivated—necessarily so, for it seems to me that the greatest hazard of that two-weeks trip will be too much "togetherness." It would be easy to hate Helen of Troy under those circumstances, to say nothing of another unbathed male.

The space is too tight to permit them to take off their space suits (that itch between the shoulder blades!) although they will be able to unzip parts of it and fold back the helmets. Even bodily functions must be cared for with the suit on.

These are some of the shortcomings that our astronauts must endure because of the lack of a big booster, and they are not minor. Obviously, it takes real heroism to ride a column of fire up into the sky in the present imperfect state of the art, but I think it will take heroism of a different kind to refrain from choking your cellmate after two weeks of listening to him snore only inches from your ear.

Twelve spacecraft are planned for the Gemini program, and it is hoped that the first unmanned ballistic (non-orbital) test shot can be made late this year; two men would then be put in orbit in the spring of 1964. By the fall of '64, if all goes well, the first attempt will be made to dock into an unmanned Agena-D. If that is successful, we will have proved out all the basic essentials of space flight.

Some people are predicting that the Russians will be making a landing on the moon by 1965. Perhaps they will be, but let us hope not.

They certainly seem ahead now in the race for space. But if all goes well, Project Gemini might be the point at which we catch up and pass them.

End of the Nearly Complete Collection